



Full wwPDB X-ray Structure Validation Report ⓘ

Feb 20, 2016 – 02:04 AM GMT

PDB ID : 5EL5
Title : Structure of T. thermophilus 70S ribosome complex with mRNA and tRNA^{Lys} in the A-site with a U-U mismatch in the second position
Authors : Rozov, A.; Demeshkina, N.; Khusainov, I.; Yusupov, M.; Yusupova, G.
Deposited on : 2015-11-04
Resolution : 3.15 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.
We welcome your comments at validation@mail.wwpdb.org
A user guide is available at
<http://wwpdb.org/validation/2016/XrayValidationReportHelp>
with specific help available everywhere you see the ⓘ symbol.

The following versions of software and data (see [references ⓘ](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.7.1 (RC1), CSD as537be (2016)
Xtriage (Phenix) : 1.9-1692
EDS : rb-20026982
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)
Refmac : 5.8.0135
CCP4 : 6.5.0
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : rb-20026982

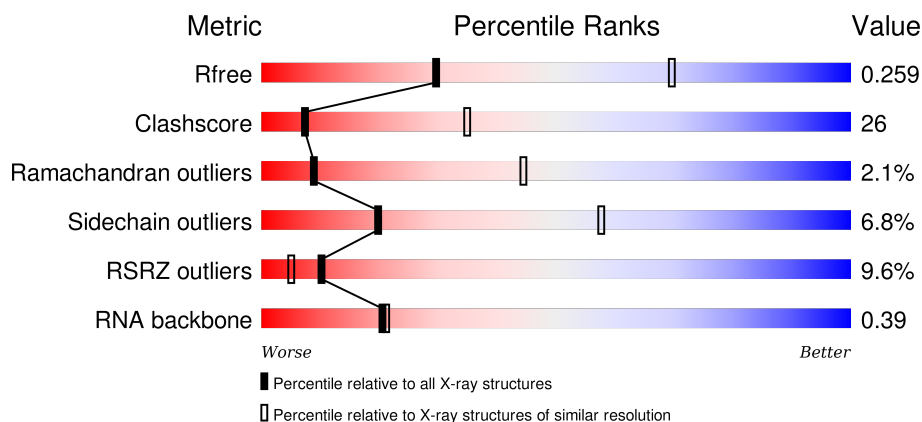
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.15 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	91344	1112 (3.20-3.12)
Clashscore	102246	1249 (3.20-3.12)
Ramachandran outliers	100387	1222 (3.20-3.12)
Sidechain outliers	100360	1221 (3.20-3.12)
RSRZ outliers	91569	1117 (3.20-3.12)
RNA backbone	2183	1046 (3.62-2.70)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments on the lower bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	13	1522	
1	1G	1522	
2	12	256	
2	1E	256	

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Mol	Chain	Length	Quality of chain
3	22	239	
3	2E	239	
4	32	209	
4	3E	209	
5	42	162	
5	4E	162	
6	52	101	
6	5E	101	
7	62	156	
7	6E	156	
8	72	138	
8	7E	138	
9	82	128	
9	8E	128	
10	1A	105	
10	1I	105	
11	2A	129	
11	2I	129	
12	3A	132	
12	3I	132	
13	4A	126	
13	4I	126	
14	5A	61	
14	5I	61	
15	6A	89	

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Mol	Chain	Length	Quality of chain
15	6I	89	
16	7A	88	
16	7I	88	
17	8A	105	
17	8I	105	
18	9A	88	
18	9I	88	
19	AA	93	
19	AI	93	
20	BA	106	
20	BI	106	
21	1B	27	
21	1F	27	
22	1K	76	
23	2K	77	
23	2L	77	
24	3K	76	
25	4K	27	
25	4L	27	
26	14	2912	
26	1H	2912	
27	16	122	
27	1J	122	
28	7I	229	
29	11	276	

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Mol	Chain	Length	Quality of chain
29	19	276	
30	21	206	
30	29	206	
31	31	210	
31	39	210	
32	41	182	
32	49	182	
33	51	180	
33	59	180	
34	61	148	
34	69	148	
35	15	140	
35	58	140	
36	25	122	
36	68	122	
37	35	150	
37	78	150	
38	45	141	
38	88	141	
39	55	118	
39	98	118	
40	65	112	
40	A8	112	
41	75	146	
41	B8	146	

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Mol	Chain	Length	Quality of chain
42	85	118	
42	C8	118	
43	95	101	
43	D8	101	
44	A5	113	
44	E8	113	
45	B5	96	
45	F8	96	
46	C5	110	
46	G8	110	
47	D5	206	
47	H8	206	
48	E5	85	
48	I8	85	
49	F5	98	
49	J8	98	
50	G5	72	
50	K8	72	
51	H5	60	
51	L8	60	
52	M8	71	
53	J5	60	
53	N8	60	
54	L5	49	
54	P8	49	

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Mol	Chain	Length	Quality of chain
55	M5	65	
55	Q8	65	
56	1L	76	
57	3L	76	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	13	1601	-	-	-	X
58	MG	13	1610	-	-	-	X
58	MG	13	1611	-	-	-	X
58	MG	13	1614	-	-	-	X
58	MG	13	1620	-	-	-	X
58	MG	13	1631	-	-	-	X
58	MG	13	1638	-	-	-	X
58	MG	13	1639	-	-	-	X
58	MG	13	1642	-	-	-	X
58	MG	13	1643	-	-	-	X
58	MG	13	1648	-	-	-	X
58	MG	13	1651	-	-	-	X
58	MG	13	1657	-	-	-	X
58	MG	13	1658	-	-	-	X
58	MG	13	1659	-	-	-	X
58	MG	13	1671	-	-	-	X
58	MG	13	1672	-	-	-	X
58	MG	13	1682	-	-	-	X
58	MG	13	1686	-	-	-	X
58	MG	14	3005	-	-	-	X
58	MG	14	3008	-	-	-	X
58	MG	14	3009	-	-	-	X
58	MG	14	3011	-	-	-	X
58	MG	14	3014	-	-	-	X
58	MG	14	3016	-	-	-	X
58	MG	14	3017	-	-	-	X
58	MG	14	3021	-	-	-	X
58	MG	14	3027	-	-	-	X
58	MG	14	3043	-	-	-	X
58	MG	14	3044	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	14	3054	-	-	-	X
58	MG	14	3059	-	-	-	X
58	MG	14	3065	-	-	-	X
58	MG	14	3071	-	-	-	X
58	MG	14	3072	-	-	-	X
58	MG	14	3074	-	-	-	X
58	MG	14	3076	-	-	-	X
58	MG	14	3081	-	-	-	X
58	MG	14	3088	-	-	-	X
58	MG	14	3093	-	-	-	X
58	MG	14	3095	-	-	-	X
58	MG	14	3097	-	-	-	X
58	MG	14	3106	-	-	-	X
58	MG	14	3108	-	-	-	X
58	MG	14	3111	-	-	-	X
58	MG	14	3116	-	-	-	X
58	MG	14	3118	-	-	-	X
58	MG	14	3119	-	-	-	X
58	MG	14	3121	-	-	-	X
58	MG	14	3125	-	-	-	X
58	MG	14	3127	-	-	-	X
58	MG	14	3129	-	-	-	X
58	MG	14	3130	-	-	-	X
58	MG	14	3145	-	-	-	X
58	MG	14	3152	-	-	-	X
58	MG	14	3155	-	-	-	X
58	MG	14	3158	-	-	-	X
58	MG	14	3166	-	-	-	X
58	MG	14	3172	-	-	-	X
58	MG	14	3173	-	-	-	X
58	MG	14	3182	-	-	-	X
58	MG	14	3187	-	-	-	X
58	MG	14	3191	-	-	-	X
58	MG	14	3193	-	-	-	X
58	MG	14	3195	-	-	-	X
58	MG	14	3200	-	-	-	X
58	MG	14	3202	-	-	-	X
58	MG	14	3214	-	-	-	X
58	MG	14	3215	-	-	-	X
58	MG	14	3216	-	-	-	X
58	MG	14	3218	-	-	-	X
58	MG	14	3219	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	14	3224	-	-	-	X
58	MG	14	3232	-	-	-	X
58	MG	14	3233	-	-	-	X
58	MG	14	3237	-	-	-	X
58	MG	14	3239	-	-	-	X
58	MG	14	3245	-	-	-	X
58	MG	14	3246	-	-	-	X
58	MG	14	3250	-	-	-	X
58	MG	14	3251	-	-	-	X
58	MG	14	3254	-	-	-	X
58	MG	14	3255	-	-	-	X
58	MG	14	3258	-	-	-	X
58	MG	14	3269	-	-	-	X
58	MG	14	3271	-	-	-	X
58	MG	14	3279	-	-	-	X
58	MG	14	3282	-	-	-	X
58	MG	14	3287	-	-	-	X
58	MG	14	3289	-	-	-	X
58	MG	14	3290	-	-	-	X
58	MG	14	3297	-	-	-	X
58	MG	14	3308	-	-	-	X
58	MG	14	3316	-	-	-	X
58	MG	14	3317	-	-	-	X
58	MG	14	3321	-	-	-	X
58	MG	14	3332	-	-	-	X
58	MG	14	3334	-	-	-	X
58	MG	14	3335	-	-	-	X
58	MG	14	3341	-	-	-	X
58	MG	14	3363	-	-	-	X
58	MG	1G	1606	-	-	-	X
58	MG	1G	1613	-	-	-	X
58	MG	1G	1615	-	-	-	X
58	MG	1G	1616	-	-	-	X
58	MG	1G	1619	-	-	-	X
58	MG	1G	1625	-	-	-	X
58	MG	1G	1626	-	-	-	X
58	MG	1G	1627	-	-	-	X
58	MG	1G	1634	-	-	-	X
58	MG	1G	1640	-	-	-	X
58	MG	1G	1649	-	-	-	X
58	MG	1G	1667	-	-	-	X
58	MG	1G	1669	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1G	1673	-	-	-	X
58	MG	1G	1676	-	-	-	X
58	MG	1H	3001	-	-	-	X
58	MG	1H	3002	-	-	-	X
58	MG	1H	3006	-	-	-	X
58	MG	1H	3007	-	-	-	X
58	MG	1H	3008	-	-	-	X
58	MG	1H	3015	-	-	-	X
58	MG	1H	3018	-	-	-	X
58	MG	1H	3023	-	-	-	X
58	MG	1H	3028	-	-	-	X
58	MG	1H	3030	-	-	-	X
58	MG	1H	3034	-	-	-	X
58	MG	1H	3041	-	-	-	X
58	MG	1H	3045	-	-	-	X
58	MG	1H	3048	-	-	-	X
58	MG	1H	3053	-	-	-	X
58	MG	1H	3057	-	-	-	X
58	MG	1H	3064	-	-	-	X
58	MG	1H	3068	-	-	-	X
58	MG	1H	3069	-	-	-	X
58	MG	1H	3071	-	-	-	X
58	MG	1H	3075	-	-	-	X
58	MG	1H	3076	-	-	-	X
58	MG	1H	3078	-	-	-	X
58	MG	1H	3079	-	-	-	X
58	MG	1H	3083	-	-	-	X
58	MG	1H	3085	-	-	-	X
58	MG	1H	3088	-	-	-	X
58	MG	1H	3090	-	-	-	X
58	MG	1H	3091	-	-	-	X
58	MG	1H	3092	-	-	-	X
58	MG	1H	3097	-	-	-	X
58	MG	1H	3098	-	-	-	X
58	MG	1H	3101	-	-	-	X
58	MG	1H	3103	-	-	-	X
58	MG	1H	3104	-	-	-	X
58	MG	1H	3111	-	-	-	X
58	MG	1H	3117	-	-	-	X
58	MG	1H	3124	-	-	-	X
58	MG	1H	3126	-	-	-	X
58	MG	1H	3127	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1H	3130	-	-	-	X
58	MG	1H	3136	-	-	-	X
58	MG	1H	3139	-	-	-	X
58	MG	1H	3143	-	-	-	X
58	MG	1H	3148	-	-	-	X
58	MG	1H	3150	-	-	-	X
58	MG	1H	3164	-	-	-	X
58	MG	1H	3165	-	-	-	X
58	MG	1H	3171	-	-	-	X
58	MG	1H	3175	-	-	-	X
58	MG	1H	3179	-	-	-	X
58	MG	1H	3185	-	-	-	X
58	MG	1H	3190	-	-	-	X
58	MG	1H	3194	-	-	-	X
58	MG	1H	3197	-	-	-	X
58	MG	1H	3202	-	-	-	X
58	MG	1H	3214	-	-	-	X
58	MG	1H	3221	-	-	-	X
58	MG	1H	3222	-	-	-	X
58	MG	1H	3225	-	-	-	X
58	MG	1H	3226	-	-	-	X
58	MG	1H	3227	-	-	-	X
58	MG	1H	3235	-	-	-	X
58	MG	1H	3236	-	-	-	X
58	MG	1H	3237	-	-	-	X
58	MG	1H	3239	-	-	-	X
58	MG	1H	3242	-	-	-	X
58	MG	1H	3244	-	-	-	X
58	MG	1H	3254	-	-	-	X
58	MG	1H	3255	-	-	-	X
58	MG	1H	3257	-	-	-	X
58	MG	1H	3261	-	-	-	X
58	MG	1H	3267	-	-	-	X
58	MG	1H	3282	-	-	-	X
58	MG	1H	3283	-	-	-	X
58	MG	1H	3284	-	-	-	X
58	MG	1H	3286	-	-	-	X
58	MG	1H	3290	-	-	-	X
58	MG	1H	3296	-	-	-	X
58	MG	1H	3308	-	-	-	X
58	MG	1H	3333	-	-	-	X
58	MG	1H	3340	-	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
58	MG	1H	3398	-	-	-	X
58	MG	1H	3408	-	-	-	X
58	MG	1H	3433	-	-	-	X
58	MG	1H	3443	-	-	-	X
58	MG	1H	3457	-	-	-	X
58	MG	29	302	-	-	-	X
58	MG	29	303	-	-	-	X
58	MG	2K	101	-	-	-	X
58	MG	2L	101	-	-	-	X
58	MG	35	201	-	-	-	X
58	MG	45	201	-	-	-	X
58	MG	85	202	-	-	-	X
58	MG	C8	201	-	-	-	X
58	MG	E5	101	-	-	-	X
58	MG	Q8	101	-	-	-	X
59	SF4	32	302	-	-	X	-

2 Entry composition

There are 61 unique types of molecules in this entry. The entry contains 292607 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a RNA chain called 16S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	13	1493	Total	C	N	O	P	0	0	0
			32097	14286	5951	10367	1493			
1	1G	1496	Total	C	N	O	P	0	0	0
			32152	14311	5953	10392	1496			

- Molecule 2 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	1E	231	Total	C	N	O	S	0	0	0
			1874	1199	334	336	5			
2	12	206	Total	C	N	O	S	0	0	0
			1695	1082	305	304	4			

- Molecule 3 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	2E	205	Total	C	N	O	S	0	0	0
			1605	1011	313	280	1			
3	22	194	Total	C	N	O	S	0	0	0
			1529	967	296	265	1			

- Molecule 4 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	3E	207	Total	C	N	O	S	0	0	0
			1696	1062	338	289	7			
4	32	208	Total	C	N	O	S	0	0	0
			1702	1066	339	290	7			

- Molecule 5 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	4E	149	Total	C	N	O	S	0	0	0
			1142	722	216	200	4			
5	42	149	Total	C	N	O	S	0	0	0
			1136	716	216	200	4			

- Molecule 6 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	5E	100	Total	C	N	O	S	0	0	0
			837	528	154	152	3			
6	52	101	Total	C	N	O	S	0	0	0
			842	531	155	153	3			

- Molecule 7 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	6E	151	Total	C	N	O	S	0	0	0
			1229	763	247	213	6			
7	62	138	Total	C	N	O	S	0	0	0
			1110	689	221	194	6			

- Molecule 8 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	7E	138	Total	C	N	O	S	0	0	0
			1115	705	215	192	3			
8	72	137	Total	C	N	O	S	0	0	0
			1107	700	214	191	2			

- Molecule 9 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	8E	126	Total	C	N	O		0	0	0
			1000	634	196	170				
9	82	105	Total	C	N	O		0	0	0
			820	523	158	139				

- Molecule 10 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	1I	72	Total	C	N	O	S	0	0	0
			593	373	115	104	1			

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	1A	60	Total	C	N	O	0	0	0
			474	298	91	85			

- Molecule 11 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	2I	111	Total	C	N	O	0	0	0
			823	512	154	154			
11	2A	113	Total	C	N	O	0	0	0
			835	520	156	156			

- Molecule 12 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
12	3I	122	Total	C	N	O	0	0	0
			956	603	193	159			
12	3A	121	Total	C	N	O	0	0	0
			947	597	191	158			

- Molecule 13 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
13	4I	119	Total	C	N	O	0	0	0
			942	582	194	164			
13	4A	111	Total	C	N	O	0	0	0
			893	552	183	156			

- Molecule 14 is a protein called 30S ribosomal protein S14 type Z.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
14	5I	60	Total	C	N	O	0	0	0
			491	312	104	71			
14	5A	48	Total	C	N	O	0	0	0
			388	245	82	57			

- Molecule 15 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	6I	87	Total	C	N	O	0	0	0
			729	457	146	124			
15	6A	87	Total	C	N	O	0	0	0
			729	457	146	124			

- Molecule 16 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	7I	80	Total	C	N	O	S	0	0	0
			671	427	132	111	1			
16	7A	84	Total	C	N	O	S	0	0	0
			705	446	140	118	1			

- Molecule 17 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	8I	100	Total	C	N	O	S	0	0	0
			834	534	155	143	2			
17	8A	99	Total	C	N	O	S	0	0	0
			823	528	151	142	2			

- Molecule 18 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	9I	67	Total	C	N	O	0	0	0
			544	349	104	91			
18	9A	67	Total	C	N	O	0	0	0
			544	349	104	91			

- Molecule 19 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	AI	81	Total	C	N	O	S	0	0	0
			654	417	122	113	2			
19	AA	36	Total	C	N	O	S	0	0	0
			283	182	49	51	1			

- Molecule 20 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	BI	97	Total	C	N	O	S	0	0	0
			746	461	157	126	2			
20	BA	98	Total	C	N	O	S	0	0	0
			757	467	161	127	2			

- Molecule 21 is a protein called 30S ribosomal protein Thx.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
21	1F	23	Total	C	N	O	0	0	0
			199	122	48	29			
21	1B	23	Total	C	N	O	0	0	0
			204	126	49	29			

- Molecule 22 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
22	1K	69	Total	C	N	O	P	S	0	0	0
			1477	662	257	488	69	1			

- Molecule 23 is a RNA chain called tRNA^{fMet}.

Mol	Chain	Residues	Atoms						ZeroOcc	AltConf	Trace
23	2K	77	Total	C	N	O	P	S	0	0	0
			1646	735	298	535	77	1			
23	2L	77	Total	C	N	O	P	S	0	0	0
			1646	735	298	535	77	1			

- Molecule 24 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	3K	76	Total	C	N	O	P	0	0	0
			1611	721	281	534	75			

- Molecule 25 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	4K	20	Total	C	N	O	P	0	0	0
			439	197	91	131	20			
25	4L	17	Total	C	N	O	P	0	0	0
			373	167	76	113	17			

- Molecule 26 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
26	1H	2830	Total	C	N	O	P	0	0	0
			60960	27129	11403	19598	2830			
26	14	2861	Total	C	N	O	P	0	0	0
			61630	27429	11535	19806	2860			

There are 14 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1H	161	U	UNK	conflict	GB 55771382
1H	654A	A	G	conflict	GB 55771382
1H	654E	C	G	conflict	GB 55771382
1H	654P	G	C	conflict	GB 55771382
1H	654T	A	C	conflict	GB 55771382
1H	1058	U	G	conflict	GB 55771382
1H	1080	A	C	conflict	GB 55771382
14	158	U	UNK	conflict	GB 55771382
14	654A	A	G	conflict	GB 55771382
14	654E	C	G	conflict	GB 55771382
14	654P	G	C	conflict	GB 55771382
14	654T	A	C	conflict	GB 55771382
14	1058	U	G	conflict	GB 55771382
14	1080	A	C	conflict	GB 55771382

- Molecule 27 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
27	16	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			
27	1J	122	Total	C	N	O	P	0	0	0
			2617	1166	486	844	121			

- Molecule 28 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	71	135	Total	C	N	O	S	0	0	0
			1050	662	197	190	1			

- Molecule 29 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	11	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			
29	19	273	Total	C	N	O	S	0	0	0
			2120	1338	421	358	3			

- Molecule 30 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	21	203	Total	C	N	O	S	0	0	0
			1558	985	298	269	6			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	29	203	Total	C	N	O	S	0	0	0
			1558	985	298	269	6			

- Molecule 31 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	31	202	Total	C	N	O	S	0	0	0
			1585	1011	297	275	2			
31	39	204	Total	C	N	O	S	0	0	0
			1602	1022	299	279	2			

- Molecule 32 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	41	179	Total	C	N	O	S	0	0	0
			1457	931	265	257	4			
32	49	179	Total	C	N	O	S	0	0	0
			1457	931	265	257	4			

- Molecule 33 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	51	171	Total	C	N	O	S	0	0	0
			1312	832	246	233	1			
33	59	69	Total	C	N	O		0	0	0
			539	339	109	91				

- Molecule 34 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	61	145	Total	C	N	O	S	0	0	0
			1131	723	200	207	1			
34	69	145	Total	C	N	O	S	0	0	0
			1131	723	200	207	1			

- Molecule 35 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	58	138	Total	C	N	O	S	0	0	0
			1104	712	206	182	4			
35	15	137	Total	C	N	O	S	0	0	0
			1096	707	205	181	3			

- Molecule 36 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	68	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			
36	25	122	Total	C	N	O	S	0	0	0
			932	588	171	169	4			

- Molecule 37 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	78	147	Total	C	N	O	S	0	0	0
			1122	698	229	192	3			
37	35	148	Total	C	N	O	S	0	0	0
			1130	704	230	193	3			

- Molecule 38 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	88	141	Total	C	N	O	S	0	0	0
			1113	709	210	187	7			
38	45	138	Total	C	N	O	S	0	0	0
			1099	702	208	183	6			

- Molecule 39 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	98	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			
39	55	118	Total	C	N	O	S	0	0	0
			967	604	203	159	1			

- Molecule 40 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
40	A8	111	Total	C	N	O	0	0	0
			881	556	176	149			
40	65	110	Total	C	N	O	0	0	0
			876	553	175	148			

- Molecule 41 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	B8	135	Total	C	N	O	S	0	0	0
			1123	699	230	193	1			
41	75	136	Total	C	N	O		0	0	0
			1133	705	233	195				

- Molecule 42 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	C8	115	Total	C	N	O	S	0	0	0
			950	603	199	147	1			
42	85	116	Total	C	N	O	S	0	0	0
			959	608	201	149	1			

- Molecule 43 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	D8	101	Total	C	N	O	S	0	0	0
			778	501	142	134	1			
43	95	99	Total	C	N	O		0	0	0
			766	494	140	132				

- Molecule 44 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	E8	110	Total	C	N	O	S	0	0	0
			876	552	171	151	2			
44	A5	110	Total	C	N	O	S	0	0	0
			876	552	171	151	2			

- Molecule 45 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
45	F8	95	Total	C	N	O	0	0	0
			740	480	134	126			
45	B5	94	Total	C	N	O	0	0	0
			735	477	133	125			

- Molecule 46 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	G8	104	Total	C	N	O	S	0	0	0
			788	507	149	127	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	C5	105	Total	C	N	O	S	0	0	0
			799	513	153	128	5			

- Molecule 47 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	H8	148	Total	C	N	O	S	0	0	0
			1218	779	220	217	2			
47	D5	130	Total	C	N	O	S	0	0	0
			1064	685	191	186	2			

- Molecule 48 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	I8	76	Total	C	N	O	S	0	0	0
			606	376	128	101	1			
48	E5	78	Total	C	N	O	S	0	0	0
			616	381	130	104	1			

- Molecule 49 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
49	J8	94	Total	C	N	O	S	0	0	0
			737	463	146	127	1			
49	F5	94	Total	C	N	O	S	0	0	0
			737	463	146	127	1			

- Molecule 50 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	K8	68	Total	C	N	O	S	0	0	0
			568	352	115	100	1			
50	G5	67	Total	C	N	O	S	0	0	0
			563	349	114	99	1			

- Molecule 51 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
51	L8	58	Total	C	N	O	0	0	0
			459	293	89	77			
51	H5	58	Total	C	N	O	0	0	0
			459	293	89	77			

- Molecule 52 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M8	47	Total	C	N	O	S	0	0	0
			366	234	61	66	5			

- Molecule 53 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	N8	48	Total	C	N	O	S	0	0	0
			369	229	75	60	5			
53	J5	56	Total	C	N	O	S	0	0	0
			434	272	87	70	5			

- Molecule 54 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	P8	47	Total	C	N	O	S	0	0	0
			401	246	99	54	2			
54	L5	45	Total	C	N	O	S	0	0	0
			391	240	97	52	2			

- Molecule 55 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	Q8	64	Total	C	N	O	S	0	0	0
			516	331	102	81	2			
55	M5	64	Total	C	N	O	S	0	0	0
			516	331	102	81	2			

- Molecule 56 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	1L	74	Total	C	N	O	P	0	0	0
			1570	702	271	523	74			

- Molecule 57 is a RNA chain called tRNA^{Lys}.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	3L	76	Total	C	N	O	P	0	0	0
			1611	721	281	534	75			

- Molecule 58 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

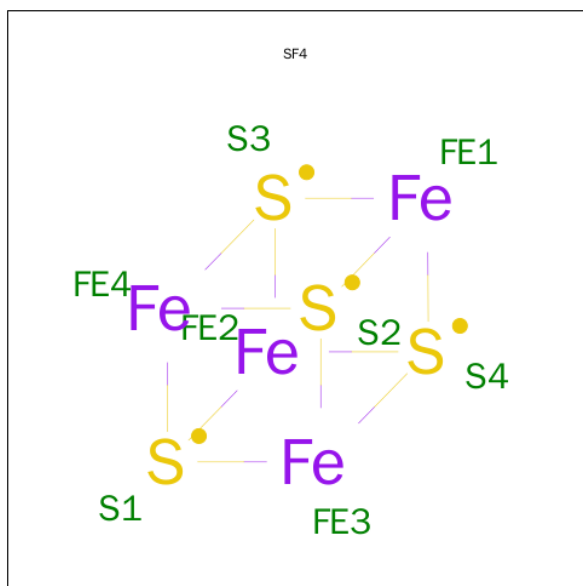
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
58	45	3	Total 3 Mg 3	0	0
58	P8	1	Total 1 Mg 1	0	0
58	85	2	Total 2 Mg 2	0	0
58	32	1	Total 1 Mg 1	0	0
58	C5	1	Total 1 Mg 1	0	0
58	13	141	Total 141 Mg 141	0	0
58	1J	6	Total 6 Mg 6	0	0
58	5I	1	Total 1 Mg 1	0	0
58	35	1	Total 1 Mg 1	0	0
58	C8	1	Total 1 Mg 1	0	0
58	16	12	Total 12 Mg 12	0	0
58	21	2	Total 2 Mg 2	0	0
58	2K	3	Total 3 Mg 3	0	0
58	Q8	1	Total 1 Mg 1	0	0
58	3I	1	Total 1 Mg 1	0	0
58	I8	1	Total 1 Mg 1	0	0
58	L5	1	Total 1 Mg 1	0	0
58	5E	2	Total 2 Mg 2	0	0
58	29	3	Total 3 Mg 3	0	0
58	7A	1	Total 1 Mg 1	0	0
58	78	1	Total 1 Mg 1	0	0
58	J8	2	Total 2 Mg 2	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
58	1G	78	Total 78	Mg 78	0	0
58	11	1	Total 1	Mg 1	0	0
58	1H	488	Total 488	Mg 488	0	0
58	E5	1	Total 1	Mg 1	0	0
58	88	1	Total 1	Mg 1	0	0
58	14	420	Total 420	Mg 420	0	0
58	55	1	Total 1	Mg 1	0	0
58	41	1	Total 1	Mg 1	0	0
58	2L	3	Total 3	Mg 3	0	0

- Molecule 59 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe₄S₄).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
59	3E	1	Total 8	Fe 4	S 4	0	0
59	32	1	Total 8	Fe 4	S 4	0	0

- Molecule 60 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
60	C5	1	Total	Zn	0	0
			1	1		
60	5A	1	Total	Zn	0	0
			1	1		
60	G8	1	Total	Zn	0	0
			1	1		
60	5I	1	Total	Zn	0	0
			1	1		

- Molecule 61 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	13	148	Total	O	0	0
			148	148		
61	3E	2	Total	O	0	0
			2	2		
61	3I	2	Total	O	0	0
			2	2		
61	5I	1	Total	O	0	0
			1	1		
61	6I	1	Total	O	0	0
			1	1		
61	1K	1	Total	O	0	0
			1	1		
61	4K	6	Total	O	0	0
			6	6		
61	1H	670	Total	O	0	0
			670	670		
61	16	18	Total	O	0	0
			18	18		
61	11	9	Total	O	0	0
			9	9		
61	21	5	Total	O	0	0
			5	5		
61	31	6	Total	O	0	0
			6	6		
61	58	2	Total	O	0	0
			2	2		
61	78	3	Total	O	0	0
			3	3		
61	B8	1	Total	O	0	0
			1	1		

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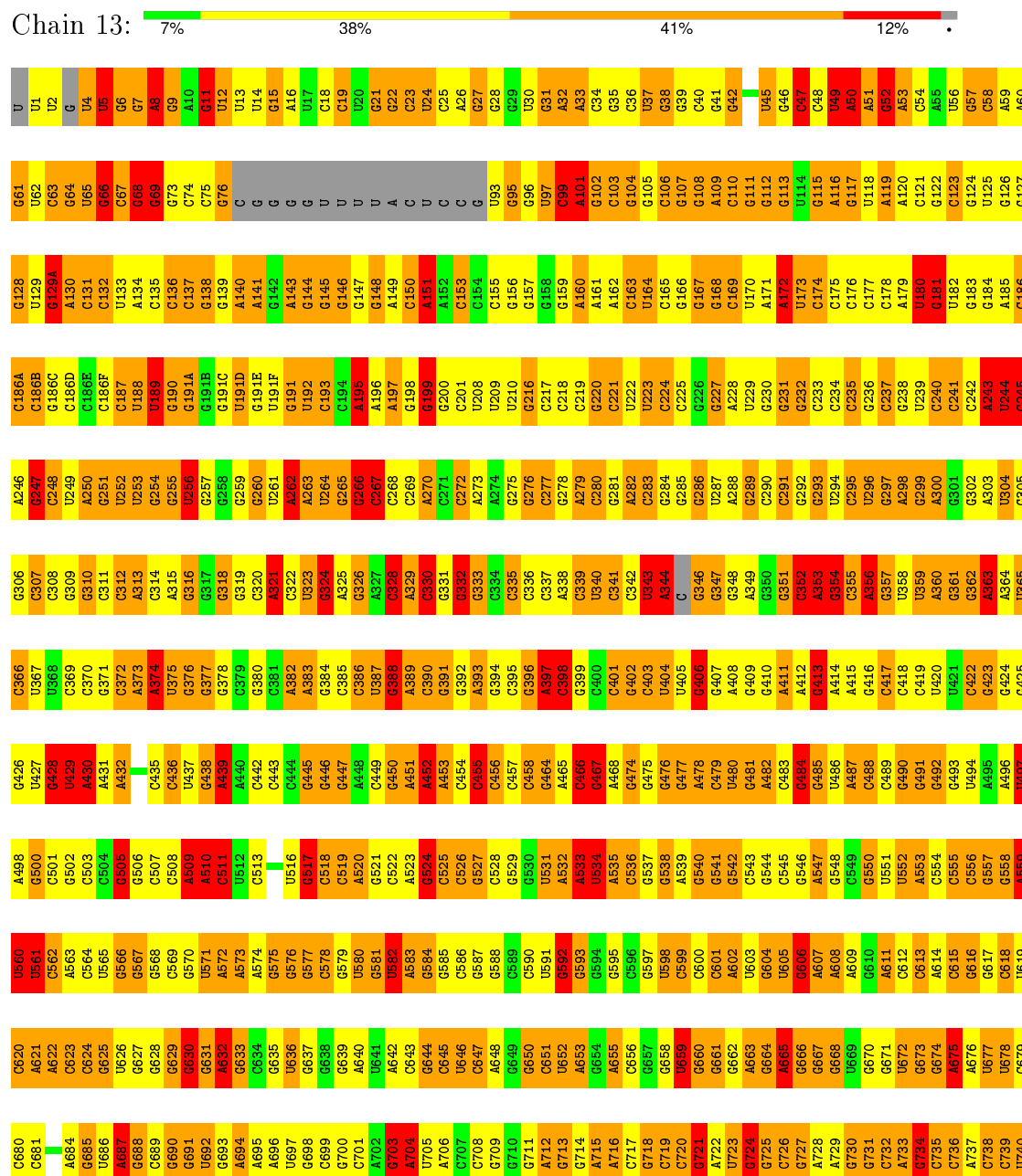
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
61	D8	1	Total 1	O 1	0	0
61	E8	1	Total 1	O 1	0	0
61	G8	1	Total 1	O 1	0	0
61	I8	1	Total 1	O 1	0	0
61	Q8	1	Total 1	O 1	0	0
61	1G	44	Total 44	O 44	0	0
61	5A	3	Total 3	O 3	0	0
61	BA	1	Total 1	O 1	0	0
61	14	411	Total 411	O 411	0	0
61	1J	11	Total 11	O 11	0	0
61	19	4	Total 4	O 4	0	0
61	29	3	Total 3	O 3	0	0
61	39	8	Total 8	O 8	0	0
61	35	2	Total 2	O 2	0	0
61	55	1	Total 1	O 1	0	0
61	E5	1	Total 1	O 1	0	0
61	F5	2	Total 2	O 2	0	0
61	L5	1	Total 1	O 1	0	0
61	M5	2	Total 2	O 2	0	0

3 Residue-property plots

These plots are drawn for all protein, RNA and DNA chains in the entry. The first graphic for a chain summarises the proportions of errors displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and electron density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: 16S ribosomal RNA



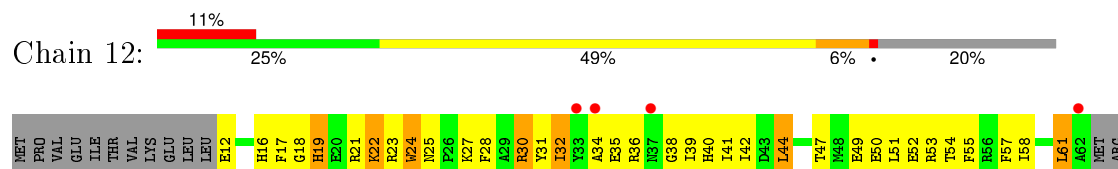
U	G1476	G1410	A1350	G1280	A1229	A1169	G1108	G1047	G988	G928	C868	U801	G741
C	C1477	C1411	U1351	G1291	C1230	A1170	G1109	G1048	C989	G929	G869	A802	G742
U	C1478	C1412	G1352	U1292	U1231	G1171	A1110	U1049	C990	C930	U870	A803	G743
C	C1479	A1413	G1353	G1293	U1232	C1172	A1111	G1050	U991	G931	U871	U804	C744
U	G1480	U1414	C1354	G1294	G1233	G1173	C1112	C1051	U992	G932	A872	C805	G745
U	U1481	U1415	G1355	G1295	C1234	G1174	C1113	U1052	G993	G933	A873	C806	G746
U	G1482	G1416	G1356	C1296	U1235	G1175	G1114	G1053	A994	G934	G874	A807	C747
C	A1483	G1417	A1357	C1297	U1236	G1176	C1115	G1054	A995	A935	C875	C808	C748
U	C1484	A1418	U1358	C1298	U1237	G1177	C1116	A1055	A996	G936	G876	C809	C749
G	U1485	G1419	A1359	A1299	A1238	G1178	G1117	U1056	U997	A937	C877	C810	G750
U	G1486	C1420	G1360	G1300	A1239	A1179	C1118	G1057	G998	A938	C878	C811	G751
U	G1487	G1421	G1361	U1301	U1240	A1180	G1119	G1058	G999	G939	C879	C812	G752
U	G1488	C1422	C1362	U1302	G1241	G1181	G1120	C1059	C880	C940	C880	U813	A753
U	G1489	G1423	C1362A	G1303	C1242	G1182	U1121	C1060	G881	G941	G881	A814	C754
U	C1490	U1424	A1363	G1304	C1243	A1183	U1122	G1061	C882	G942	C882	A815	G755
U	G1491	U1425	G1364	G1305	C1244	A1184	A1123	U1062	C883	U943	C883	A816	C756
U	A1492	C1426	G1365	A1306	A1245	G1185	A1124	C1063	U884	G944	U884	C817	U757
U	A1493	U1427	C1366	U1307	G1253	G1186	U1125	G1064	C1007	G945	G885	G818	G758
U	G1494	A1428	C1367	U1308	U1248	G1187	U1126	U1065	C1008	A946	G886	A819	A759
U	U1495	C1429	G1368	G1309	C1249	A1188	G1127	U1066	C887	G947	G887	U820	G760
U	C1496	C1430	C1369	G1310	A1250	C1189	C1128	A1067	G888	G948	C888	G821	G761
U	G1497	C1431	G1370	G1311	A1251	G1190	C1129	G1068	A889	A949	C889	C822	C762
U	U1498	G1432	G1371	G1312	A1252	A1191	A1130	C1069	U890	U950	U890	G823	G763
U	A1499	A1433	U1372	U1313	G1253	C1192	G1131	U1070	G951	G951	U891	C824	G764
U	A1500	G1434	G1373	C1314	C1254	G1193	C1132	C1071	A1013	U952	A892	G825	G765
U	C1501	G1435	A1374	U1315	G1255	U1194	G1133	G1072	A1015	G953	C893	C826	A766
U	A1502	U1436	A1375	C1316	A1256	C1195	G1134	U1073	A1016	G954	G894	U827	A767
U	A1503	C1437	G1376	G1317	U1257	U1196	U1135	G1074	G895	U955	A895	A828	A768
U	G1504	G1438	A1377	A1318	G1258	G1197	U1136	C1075	C896	U956	C896	G829	G769
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U	U1506	C1440	G1379	G1320	C1260	U1199	G1138	G1077	G898	A958	G898	U831	G771
U	A1507	G1441	U1380	C1321	A1261	C1200	G1139	U1078	C899	A959	C899	C832	U772
U	A1508	G1442	U1381	C1322	C1262	A1201	G1140	G1079	A900	U960	A900	U833	G773
U	C1509	A1443	G1382	G1323	C1263	C1141	G1142	U1080	G961	U961	A901	C834	G774
U	U1510	A1446	G1383	A1324	C1264	C1203	G1143	G1081	U1025	G962	A902	U835	G775
U	G1511	G1447	G1385	G1325	G1265	A1204	G1143	G1082	G963	G963	G903	G836	G776
U	U1512	C1448	G1386	C1326	G1266	U1205	G1144	U1083	A964	A964	C904	G837	A777
U	A1513	C1449	G1387	C1327	C1267	G1206	C1145	G1084	A965	A965	U905	G838	G778
U	C1514	U1450	C1388	C1328	A1268	G1207	A1146	U1085	C1028A	G966	G906	U841	C779
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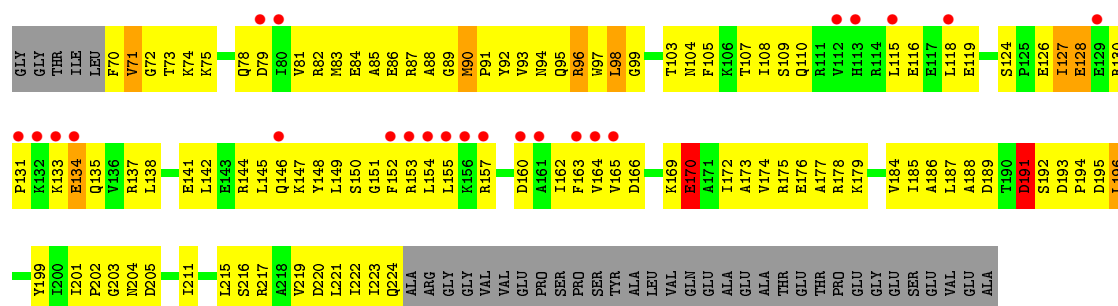
• Molecule 1: 16S ribosomal RNA



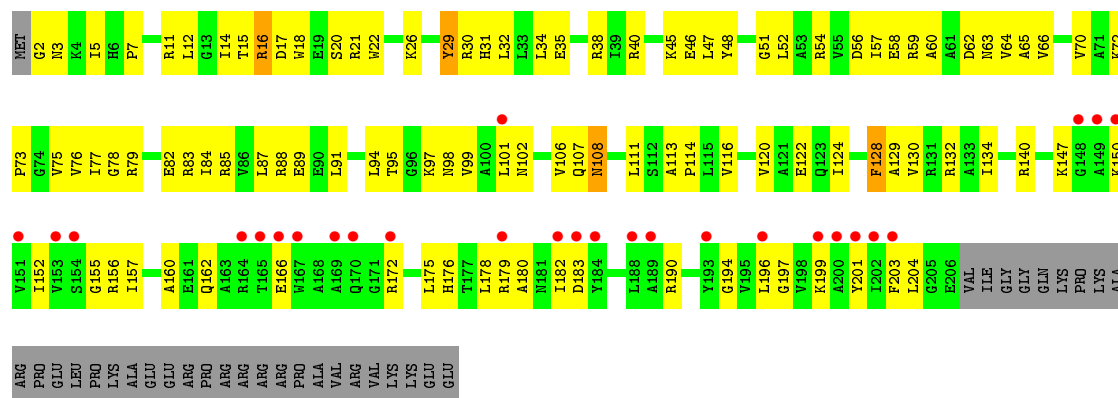
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C1007	C948	G887	U820	C760	G629	C569	A509	C435	A373	C312	A250	C186E	G127	A60
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G1009	U950	A889	G822	G762	G631	U571	C511	U437	U375	C314	G252	C187	U129	U62
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G1011	U952	G891	C824	G764	G633	A573	C513	A439	G377	G316	G254	U189	A130	G64
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G1017	A958	C897	G830	C770	G639	G579	C519	U446	G385	C322	G260	G191E	C136	G73
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G1022	G963	G903	G837	G775	C647	A584	G524	A451	C390	A327	G265	C194	G78	G78
G1023	A964	G904	A648	G776	A648	G585	C525	A452	G391	C328	G266	A195	G144	G79
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G1026	C967	G906	G842	C779	C651	G588	C528	C455	G394	G331		G198	G147	U82
C	A968	A907	U843	A780	U652	G589	G529	C456	C395	G332	A270	G199	G148	U
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G	A974	A913	G853	C726	U659	G595	A535	C467	C401	A338	C277	G216	C155	C90
A	A975	A914	G854	A727	G660	C596	C536	A468	G402	C339	G278	C217		C91
G	G976	G915	G855	U788	G661	G597	G537	C469	C403	U340	A279	C218	G158	G92
G	A977	G916	C856	A729	G662	U598	G538	G475	U404	C341	C280	C219	G159	U93
G	A978	G917	G857	A790	A663	C599	A539	G476	U405	C342	G281	G220	A160	G95
C	C979	A918	G858	G731	G664	C600	G540		G406			C221	A161	G96
A	G980	A792	A859	C732	A665	C601	G541	U480	G407	C345	G284	U222	A162	U97
G1036	U981	U920	A860	G733	G666	A602	G542	A481	A408	C346	G285	U223	C163	C99
C1037	U982	U921	G861	G734	G667	U603	C543	A482	G409	G347	G286	C224	U164	A101
C1038	A983	G922	C862	C735	G668	G604	G544	C483	G410	G348	U287	C225	C165	G102
C1039	C984	A923	U863	C736	G669	U605	G545	G484	A411	A349	A288	G226	G166	C103
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G1042	G987	G926	C866	C739	G674	A608	G548	A487	A414	C352	C291	U229	C169	C106
C1043	U988	G927	G867	U740	A675	A609	C549	C488	A415	A353	G292	G230	U170	G107
A1044	C989	G928	C868	U801	A676	G610	G550	C489	G416	G354	G293	G231	A171	G108
G1045	C990	G929	G869	A802	U677	A611	U551	G490	C417	C355	U294	G232	A172	A109
A1046	U991	C930	U870	G742	U678	C612	U552	G491	C418	A356	C295	G233	U173	C110
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G1048	G993	C932	A872	C744	C680	A614	C554	G493	U420	U358	G297	C235	C175	G112
G1049	A994	G933	A873	A746		C615	C555	U494	U421	U359	A298	G236	C176	G113
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C1051	A996	A935	C875	C808	G683	G617	G557	A496	G423	G361	A300	G238		G115
U1052	U997	G936	G876	G748	U686	C618	G558	U497	G424	G362	G301	U239	U180	A116
G1053	G998	A937	C877	C749	U687	U619	A559	A498	G425	A363	G302	C240	G181	G117
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A1055	U999	G939	C879	G812	G688	A621	U561	C501	U427	U365	U304	C242	G183	A119
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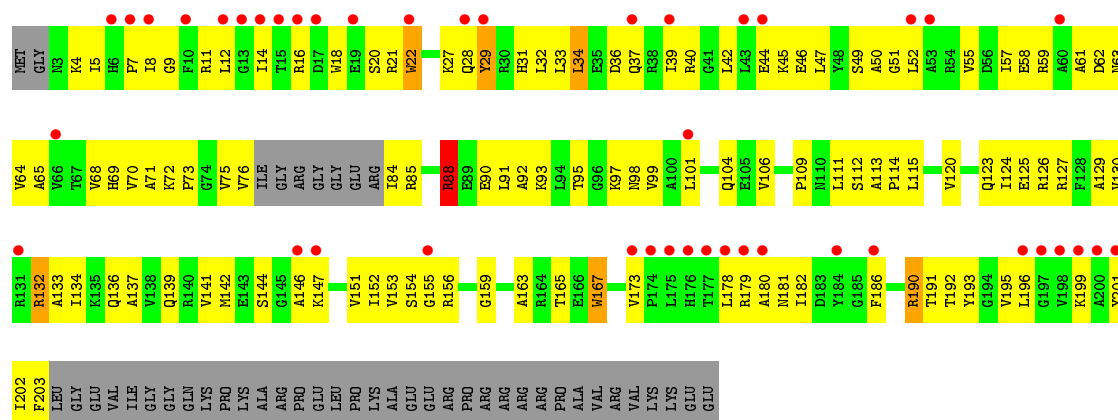




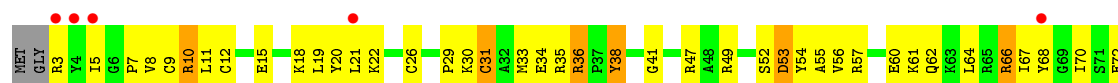
• Molecule 3: 30S ribosomal protein S3

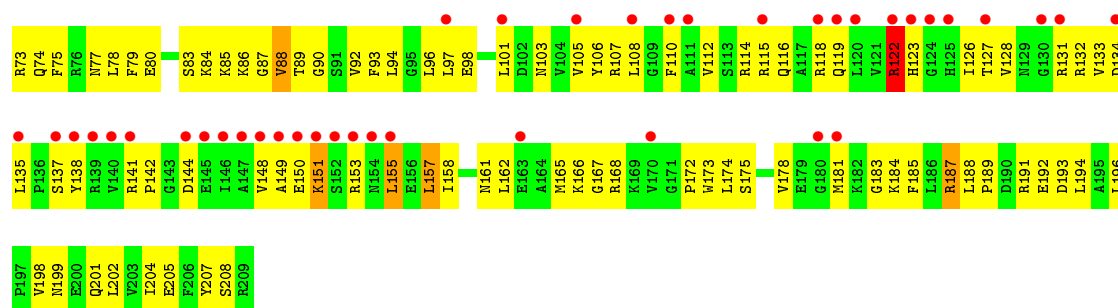


• Molecule 3: 30S ribosomal protein S3

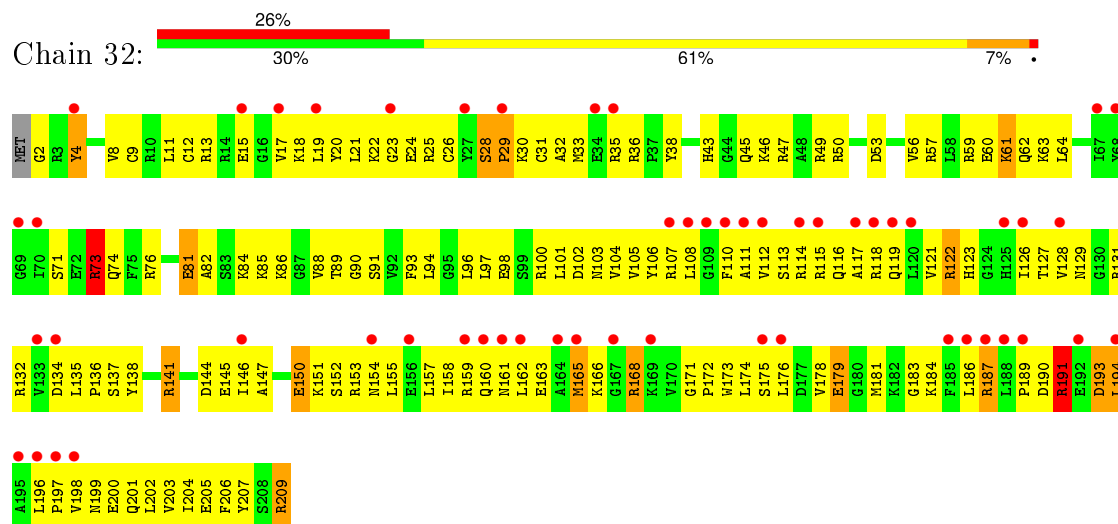


• Molecule 4: 30S ribosomal protein S4

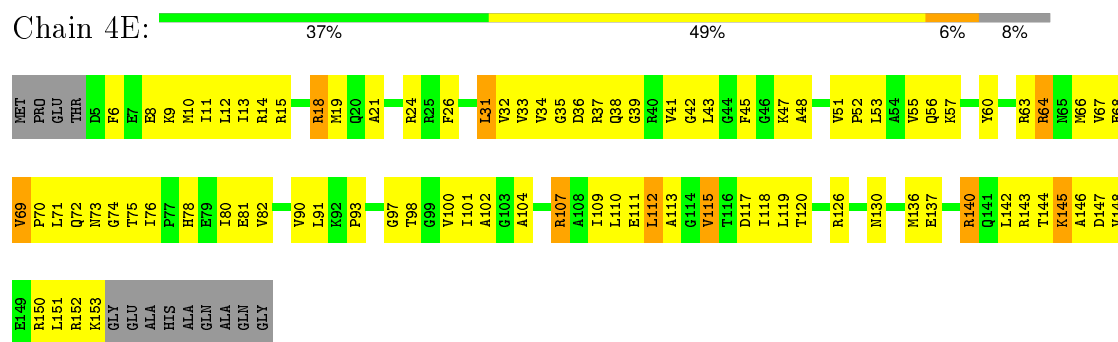




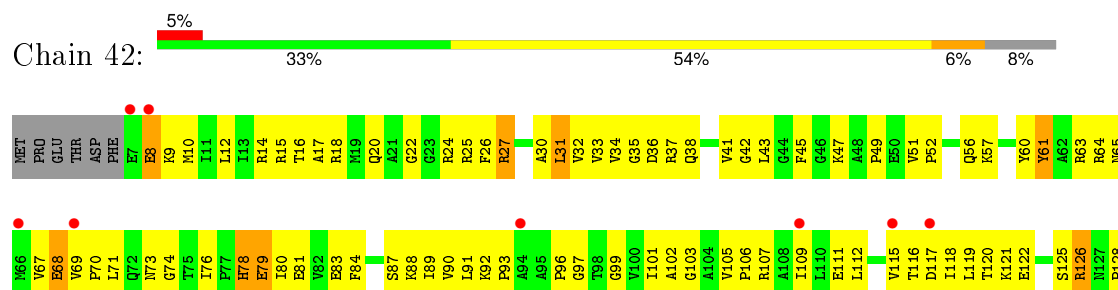
• Molecule 4: 30S ribosomal protein S4



• Molecule 5: 30S ribosomal protein S5

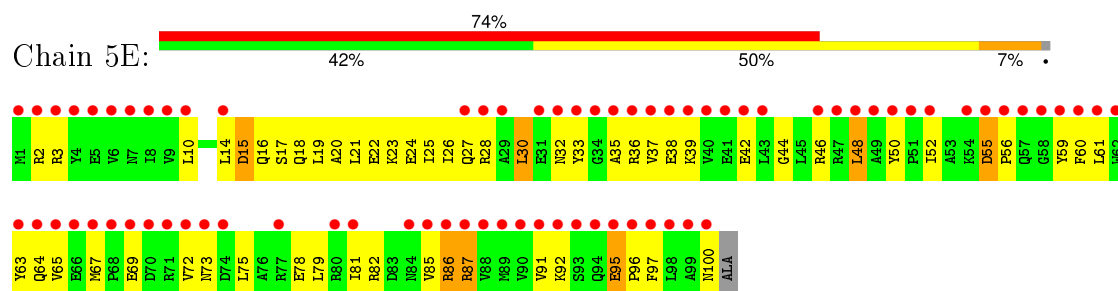


• Molecule 5: 30S ribosomal protein S5

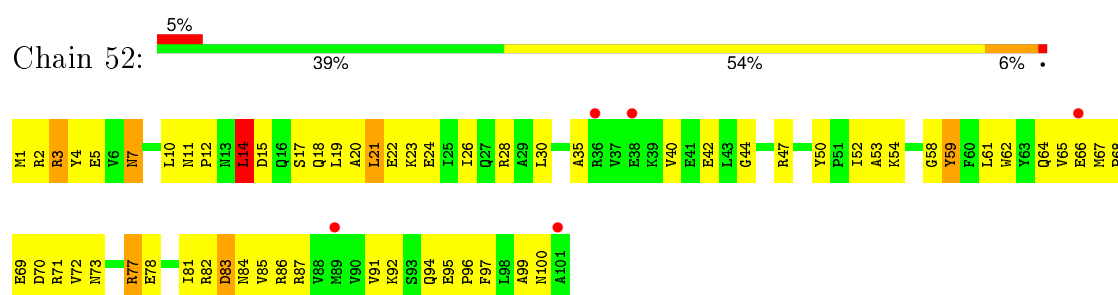




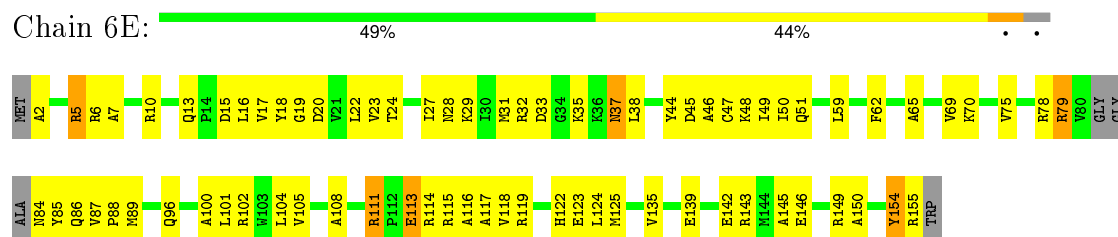
• Molecule 6: 30S ribosomal protein S6



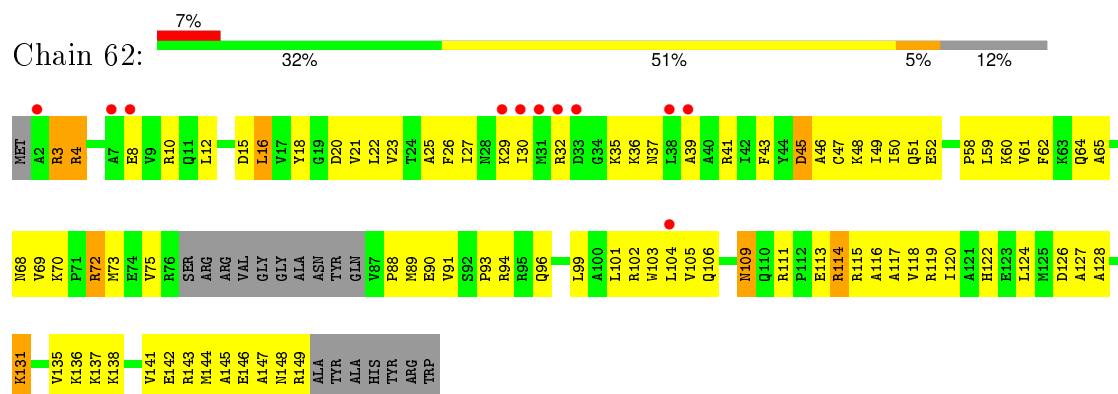
• Molecule 6: 30S ribosomal protein S6



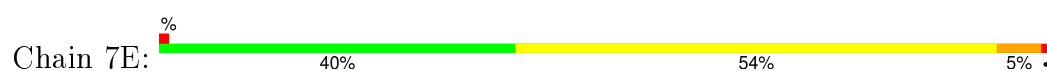
• Molecule 7: 30S ribosomal protein S7

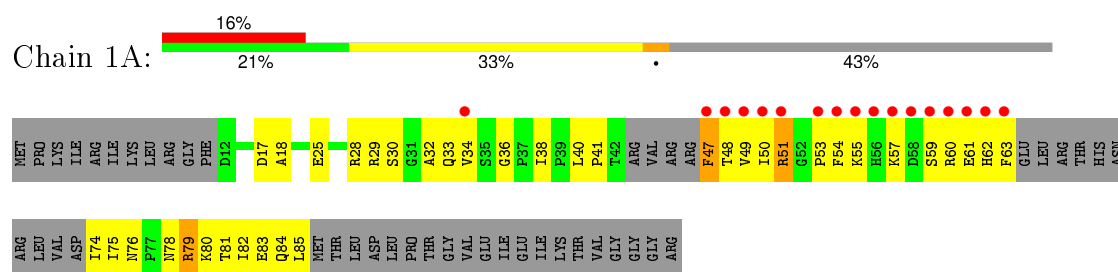


• Molecule 7: 30S ribosomal protein S7

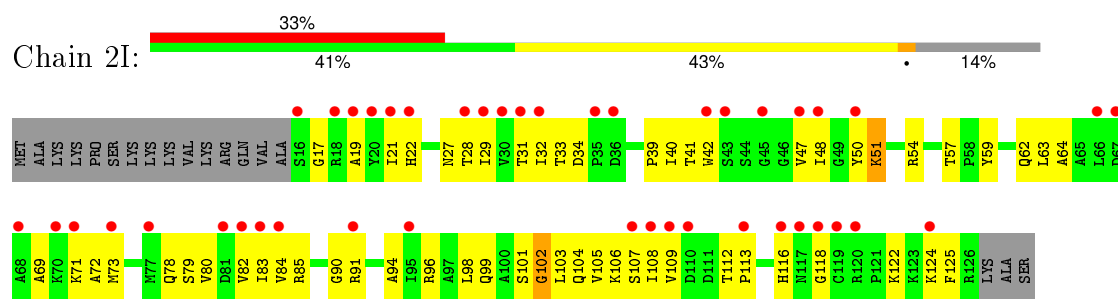


• Molecule 8: 30S ribosomal protein S8

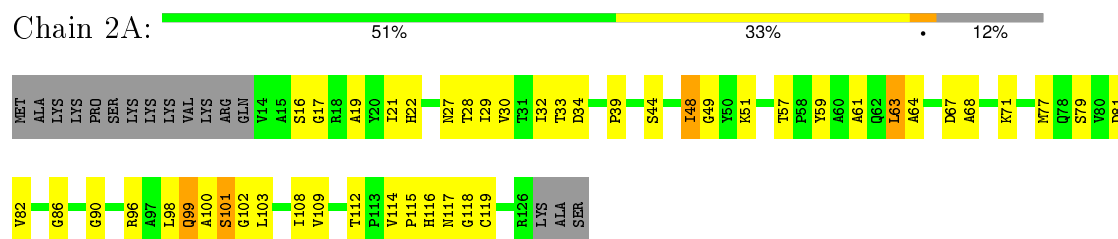




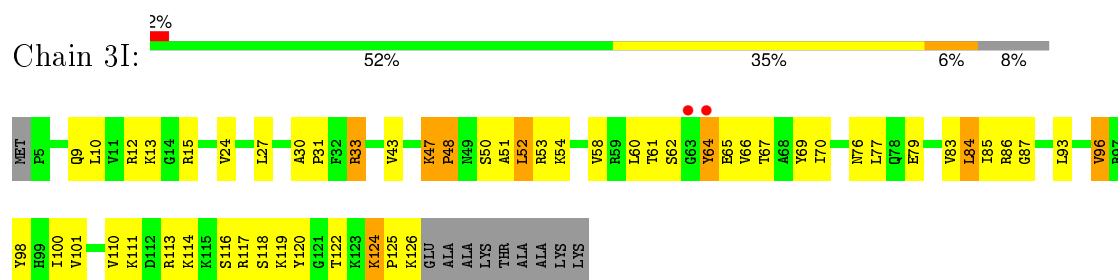
- Molecule 11: 30S ribosomal protein S11



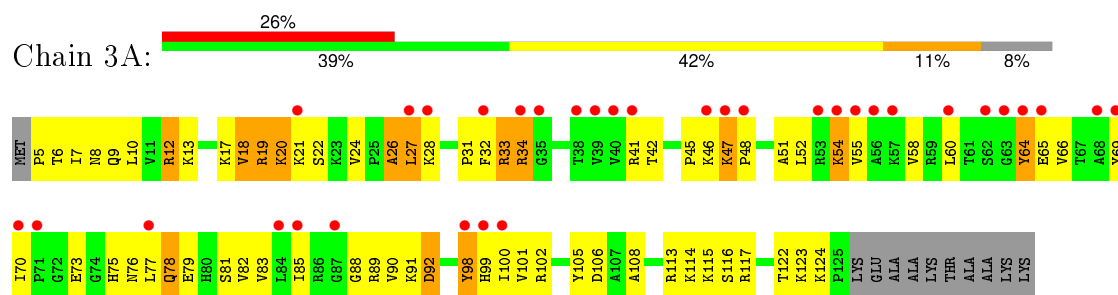
- Molecule 11: 30S ribosomal protein S11



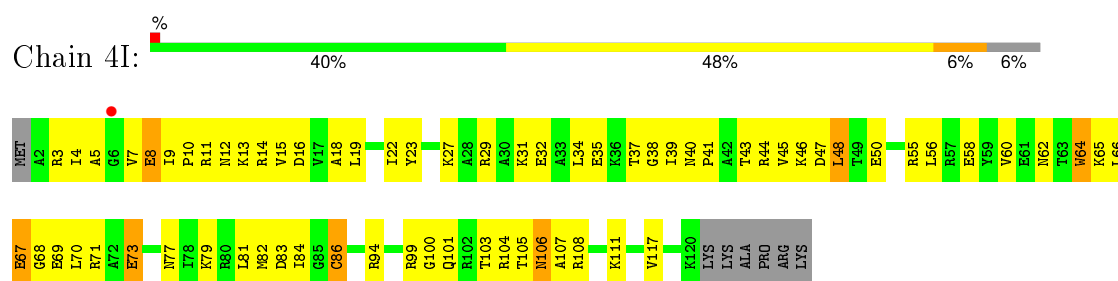
- Molecule 12: 30S ribosomal protein S12



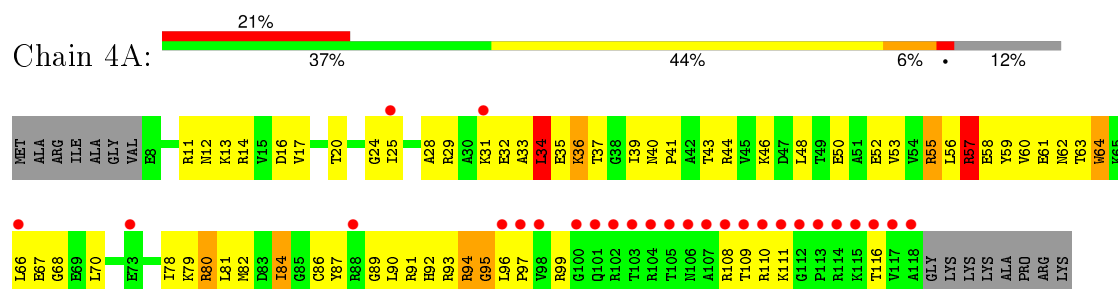
- Molecule 12: 30S ribosomal protein S12



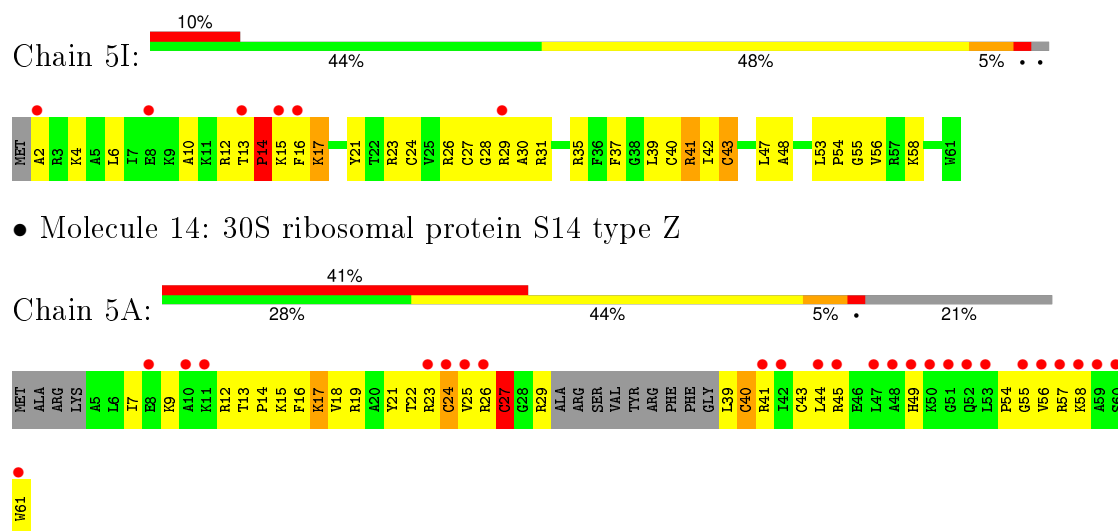
- Molecule 13: 30S ribosomal protein S13



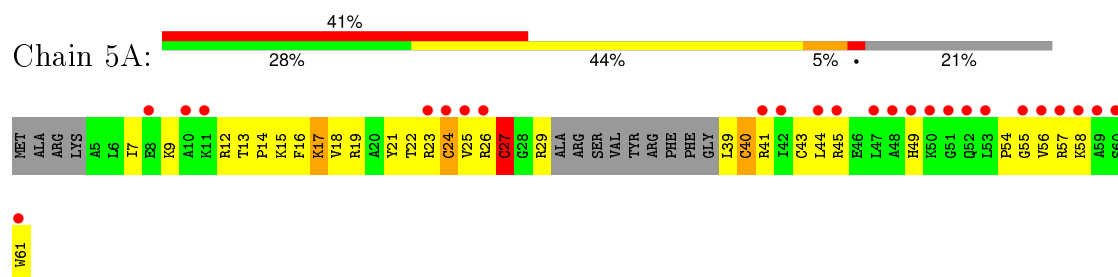
• Molecule 13: 30S ribosomal protein S13



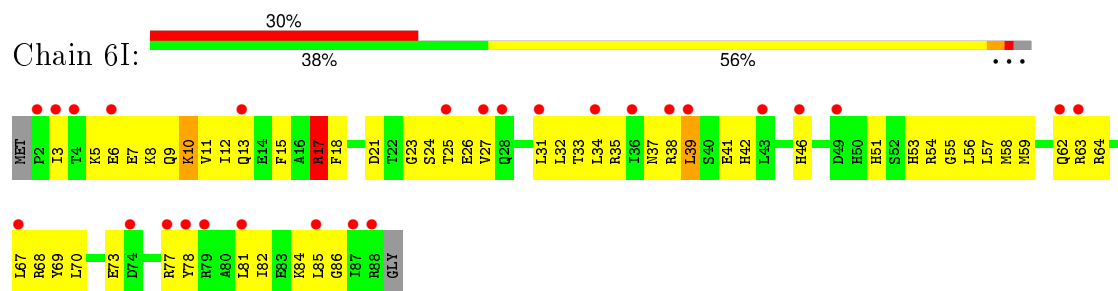
• Molecule 14: 30S ribosomal protein S14 type Z



• Molecule 14: 30S ribosomal protein S14 type Z



• Molecule 15: 30S ribosomal protein S15



• Molecule 15: 30S ribosomal protein S15





- Molecule 16: 30S ribosomal protein S16



- Molecule 16: 30S ribosomal protein S16



- Molecule 17: 30S ribosomal protein S17

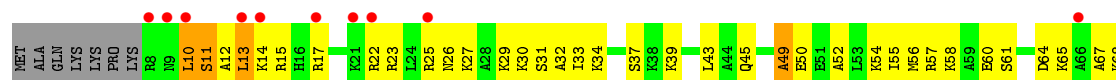


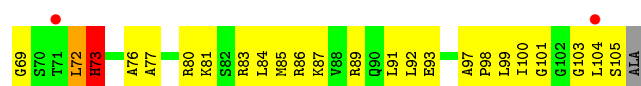
- Molecule 17: 30S ribosomal protein S17



- Molecule 18: 30S ribosomal protein S18



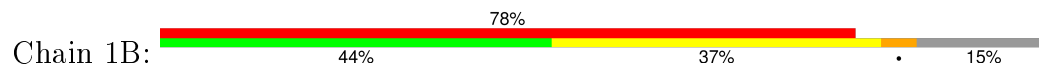




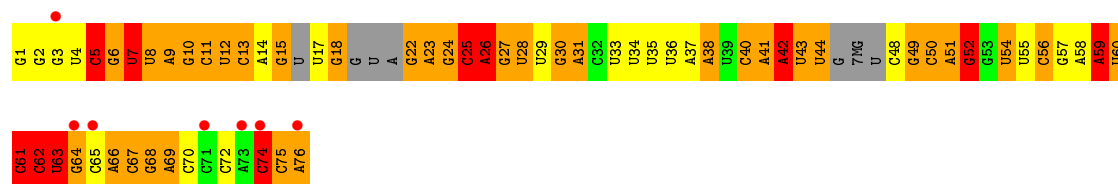
- Molecule 21: 30S ribosomal protein Thx



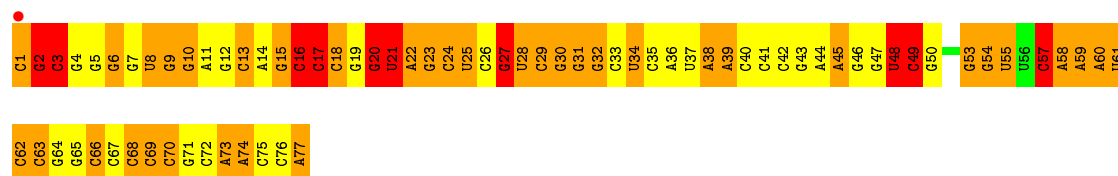
- Molecule 21: 30S ribosomal protein Thx



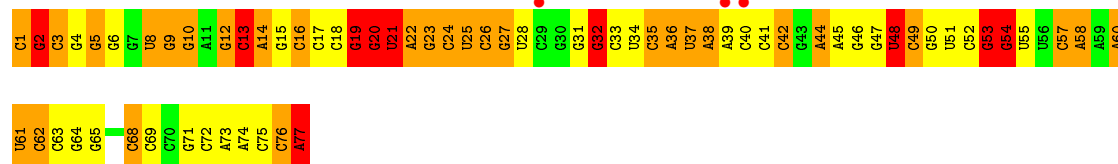
- Molecule 22: tRNA^{Lys}



- Molecule 23: tRNA^{fMet}

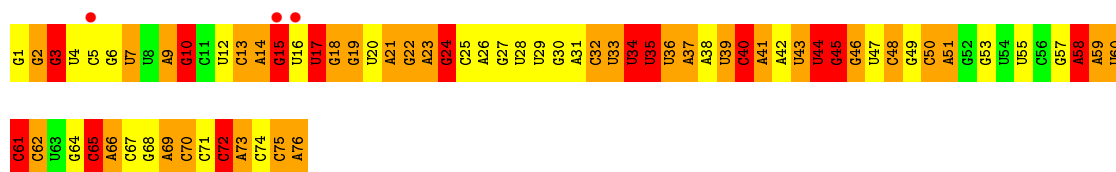


- Molecule 23: tRNA^{fMet}

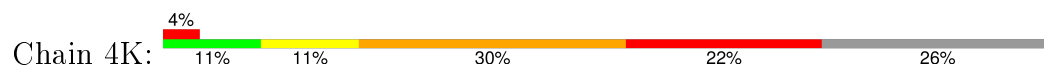


- Molecule 24: tRNA^{Lys}

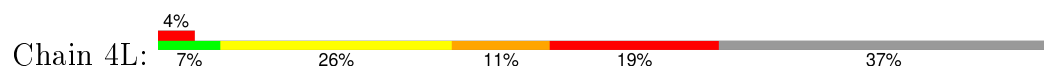




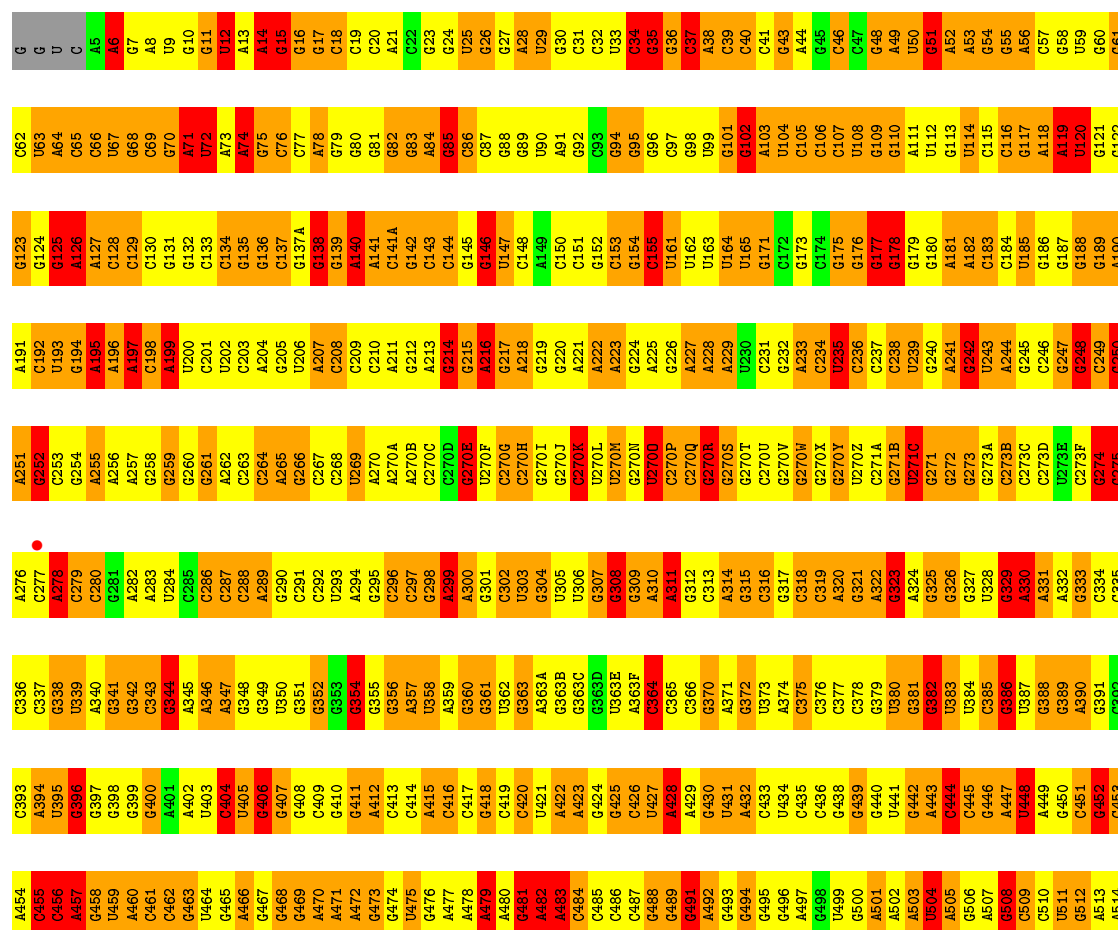
• Molecule 25: mRNA



• Molecule 25: mRNA

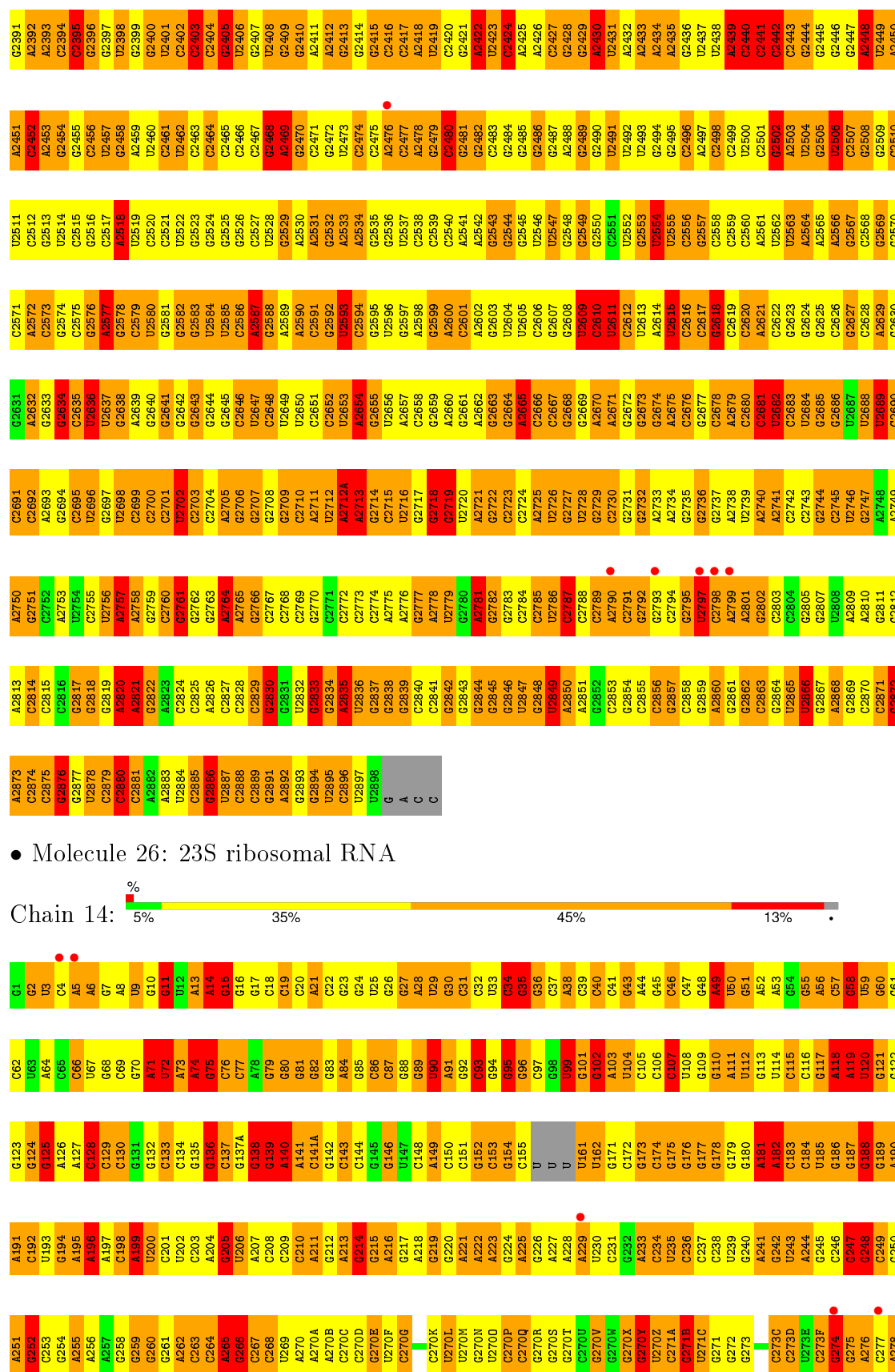


• Molecule 26: 23S ribosomal RNA





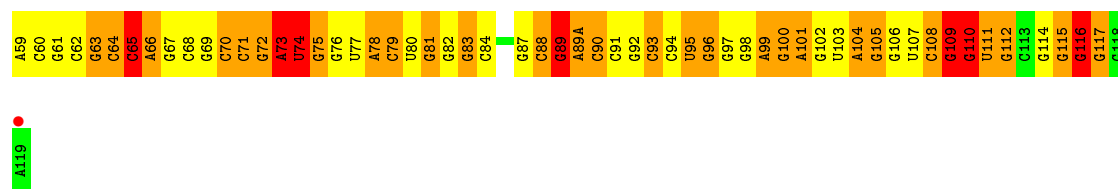
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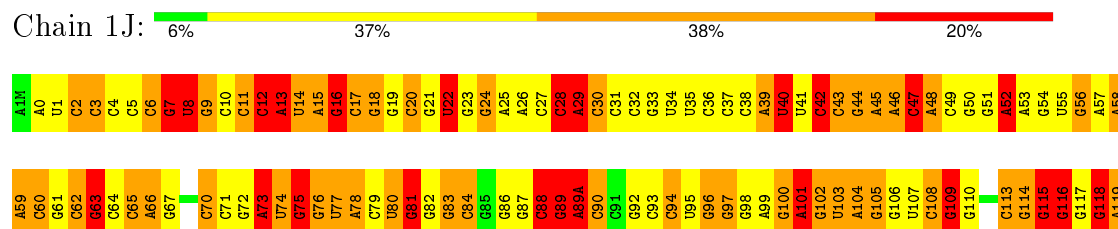
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G1170	G1107	G1047	A988	A926	C865	G805	G745	G684	A646	U588	A526	G465	U402	G344	U284
G1171	U1108	G1048	A989	G928	A866	C806	A746	A685	G647	C589	G527	A466	U403	A345	C285
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G1176	G1112	C1052	C992	G932	A870	U810	A750	A689	G651	U593	A470	G470	G407	G349	A289
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G1181	G1117	A1057	G997	U937	G875	C815	C755	U694	G654B	G598	A536	U475	A412	G354	A294
A1182		C876	C998	G938	U877	C816	C756	G695	G654C	G599	C537	U476	C413	G355	G295
G1183	G1120	U1058	U999	G939	U878	G817	U757	G696	C	G601	G540	A477	C414	G356	C296
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C1185	G1122	U1061	A1001	A941	G879	A819	G759	C698	C	A603	C542	A479	C416	A359	G298
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A1189	A1127	U	C1005	A945	G	G823	G763	G702	A	C546	G546	A483	A422	G363	C302
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G1191	G1129	A	C1007	G947	C	C825	G765	G704	G	A608	A548	C485	G424	G363B	G304
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G1193	G1131	A1069	A1009	C949	A	A827	U767	A706	G	G609A	G549	C487	A426	G363D	U306
A1194	A1132	A1070	A1010	G950	C	U828	G768	G707	C	C610	G550	G488	U427	G363E	G307
G1195	U1133	G1072	G1011	C951	C	A829	G769	C708	A	C611	G551	G489	A428	A363F	G308
C1196	G1135	C1072	U1012	G952	A	G830	G770	U709	C	G612	G552	A491	A429	C364	G309
G1197	G1136	A1073	A953	A953	G	G831	G771	G710	C	U613	U553	A492	G430	C365	A310
U1198	G1137	G1074	U1014	G954	C	G832	C772	G711	G654R	U614	U554	G493	U431	G366	A311
U1199	G1138	C1075	C955	C955	C	U833	U773	G712	A654I	G615	G556	G494	A432	G370	G312
C1200	G1139	G1076	U1016	G956	U	C834	A774	G715	A654U	A616	U557	G495	C433	A371	C313
G1201	C1140	A	G1017	A957	C	A835	G775	A716	A654V	G617	G558	G496	U434	G372	A314
C1202	U1141	U	C1018	U958	C897	G836	G776	A717	A655	G618	G559	A497	C435	U373	G315
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A1204	A1142A	A	A1020	A960	A899	C838	G778	A718	U857	G619	G561	U499	G438	G375	G317
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G1206	G1144	U	G1022	G962	A901	C840	G780	C720	C659	A621	G563	A501	G440	C377	C319
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G1212	G1151	A1088	A1028	G968	U907	C846	C786	G726	G665	A627	U569	A507	G446	U383	G325
A1213	C1152	C908	U1029	U969	C908	U847	U787	A727	G666	G628	G570	G508	A447	U384	G326
G1214	G1153	U1030	G1030	C970	A909	G848	A788	G728	U667	G629	A571	C509	U448	G385	G327
G1215	G1154	G1031	A910	C971	A910	A849	A789	G729	G668	G630	A572	C510	A449	G386	U328
G1216	A1155	C1032	A1032	G972	A911	C850	C790	C730	G669	A631	G573	U511	G450	U387	G329
G1217	A1156	G1093	U1033	A973	C912	U851	C791	C731	A670	A632	C574	G512	C451	G388	G330
G1218	G1157	U	G1034	G974	U913	G852	G792	C732	C671	A633	A575	A513	G452	G389	A331
G1219	C1158	A	U1035	C974A	C914	G853	A793	G733	C672	C634	U576	A514	C453	A390	A332
A1220	U1159	A	G1036	G854	C915	G854	G794	A734	C673	G635	G577	A515	A454	G391	G333
G1221	G1160	U	G1037	G855	G916	G855	C795	A735	G674	G636	A578	C516	C455	C392	C334
C1222	C1161	A1098	C1038	G978	A917	C856	C796	C736	A675	A637	G579	C517	C456	C393	C335
C1223	G1162	G1099	G1039	G979	A918	C857	C797	C737	A676	G638	C580	G518	A457	A394	G336
G1224	G1163	A1100	A980	G980	G919	U858	G798	G738	A677	G639	C581	U519	G458	U395	C337
C1225	G1164	U1101	C1041	A981	G920	G859	G799	G739	C678	C640	G582	G520	U459	G396	G338
G1226	U1165	C1102	G1042	C982	G921	U860	A800	U740	C679	C641	G583	G521	A460	G397	U339

U2096	C2036	U1976	A1916	A1847	A1787	U1706	C1646	A1587	G1527	G1466	U1406	G1346	A1286	A1227
G2037	A1848	A1977	U1917	A1848	C1788		G1647	C1588	A1528	C1467	C1407	G1347	A1287	G1228
C2038	A1918	A1978	A1918	G1849	A1789	C1710	C1648	C1589	A1529	C1468	C1408	A1348	A1288	G1229
G2039	G1850	C1979	C1711	G1850	U1590	C1711	G1649	U1590	G1530	A1469	C1409	A1349	C1289	G1229A
C2040	G1901	G1851	C1712	U1851	A1791	C1712	G1650	G1591	C1531	G1470	G1410	C1350	C1290	C1230
U2041	C1952	C1921	U1716	G1651	G1792	U1716	A1652	G1592	C1532	A1471	C1411	C1351	C1291	G1231
A2042	A1853	C1922	G1717	G1653	C1793	G1717	G1652	G1593	C1533	A1472	G1412	U1352	U1292	G1232
C2043	U1854	U1794	G1718	G1653	C1794	G1718	G1653	C1594	C1534	G1473	G1413	A1353	C1293	G1233
C2044	G1955	G1923	G1725	A1654	C1795	G1725	A1654	G1595	U1535	C1474	G1414	A1354	U1294	U1234
C2045	G1856	C1924	G1726	A1655	U1796	G1726	A1655	A1596	G1536	G1475	U1415	G1355	C1295	G1235
C2107	G1857	C1925	U1727	G1656	A1597	U1727	G1656	A1597	C1537	C1476	G1416	G1356	G1296	G1236
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G2210	G1860	C1800	U1730	U1659	C1600	U1730	U1659	C1600	G1540	G1479	A1419	A1359	G1299	G1239
C2211	G1861	G1801	G1731	C1660	U1602	G1731	C1660	U1602	U1541	G1480	U1420	A1360	U1300	U1240
A2051	G1862	A1802	A1732	G1661	G1602	A1732	G1661	G1602	G1542	A1482	G1421	G1361	A1301	A1241
G2213	U1863	A1803	G1733	C1662	A1603	G1733	C1662	A1603	A1543	G1483	G1422	C1362	G1302	A1242
A2114	G1864	C1804	C1734	C1663	G1604	C1734	C1663	G1604	C1544	G1484	G1423	G1363	G1303	G1243
G2115	G1865	U1805	G1735	A1664	C1605	G1735	A1664	C1605	A1545	G1485	G1424	G1364	C1304	G1244
C2116	C1870	C1806	C1741	A1665	G1606	C1741	A1665	G1606	A1545A	A1486	G1425	A1365	C1305	G1245
A2117	A1871	G1807	C1742	G1666	C1607	C1742	G1666	C1607	C1546	G1487	G1426	A1366	C1306	G1246
U2118	A1872	U1808	G1743	C1667	A1608	G1743	C1667	A1608	C1547	G1488	A1427	A1367	A1307	A1247
A2119	G1878	A1809	G1746	A1668	C1609	G1746	A1668	C1609	C1548	G1489	C1428	G1368	A1308	G1248
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G2061	C1881	A1812	C1752	U1671	C1612	C1752	U1671	C1612	C1551	G1492	U1431	G1371	G1311	C1251
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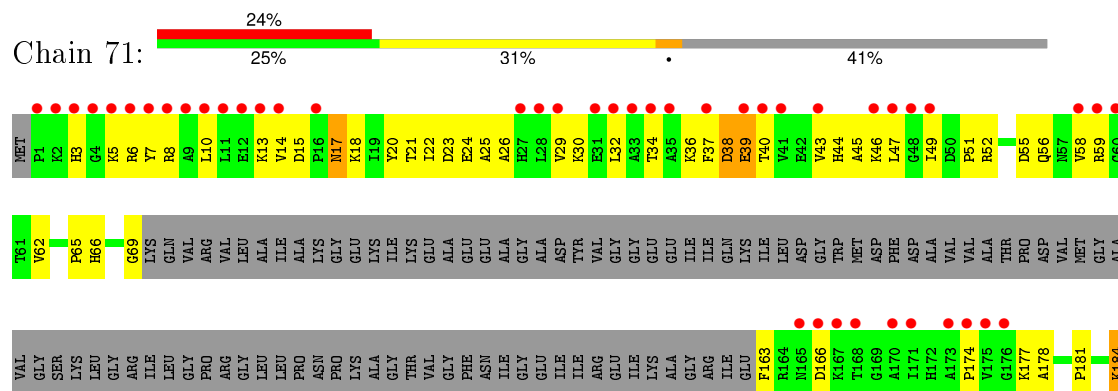




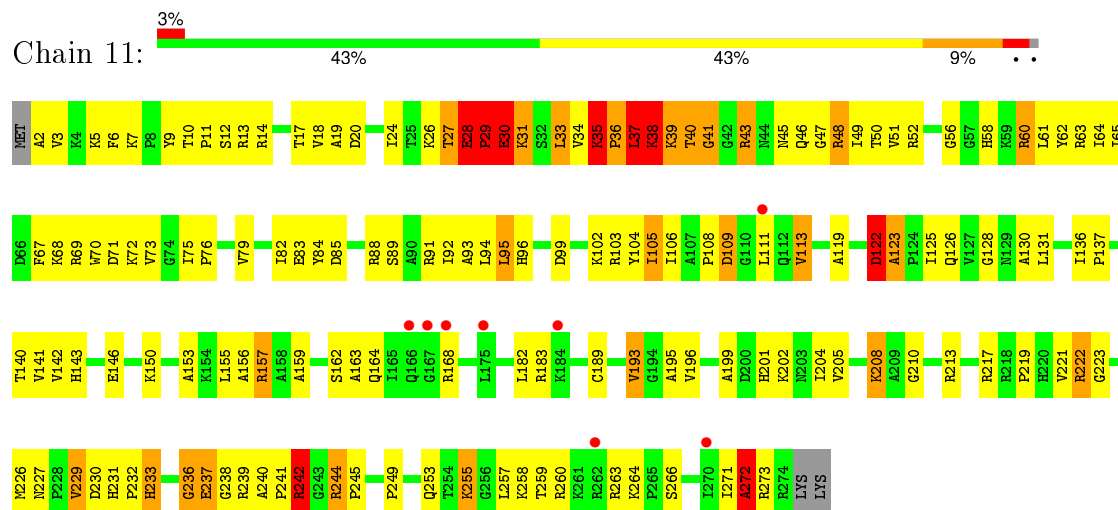
• Molecule 27: 5S ribosomal RNA



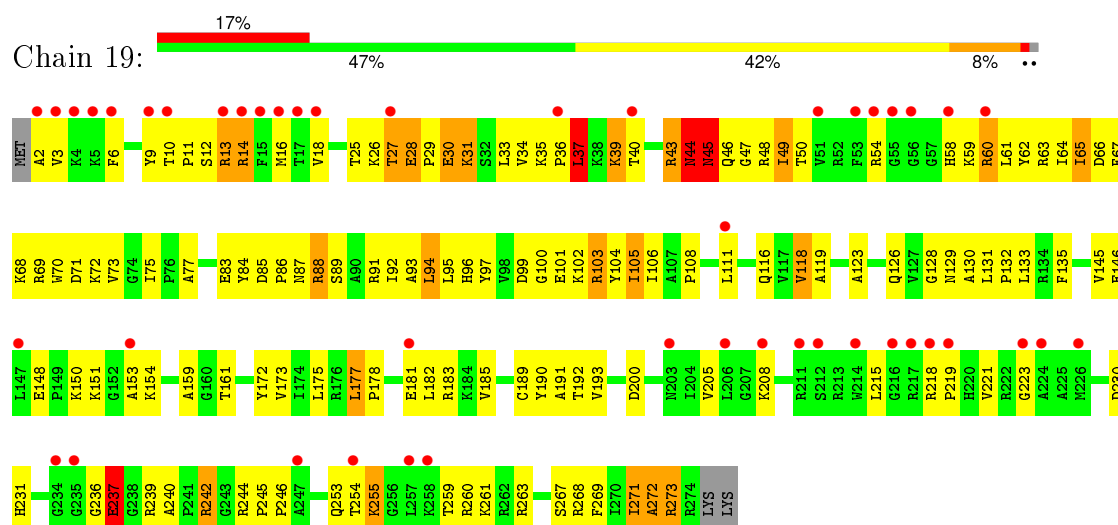
• Molecule 28: 50S ribosomal protein L1



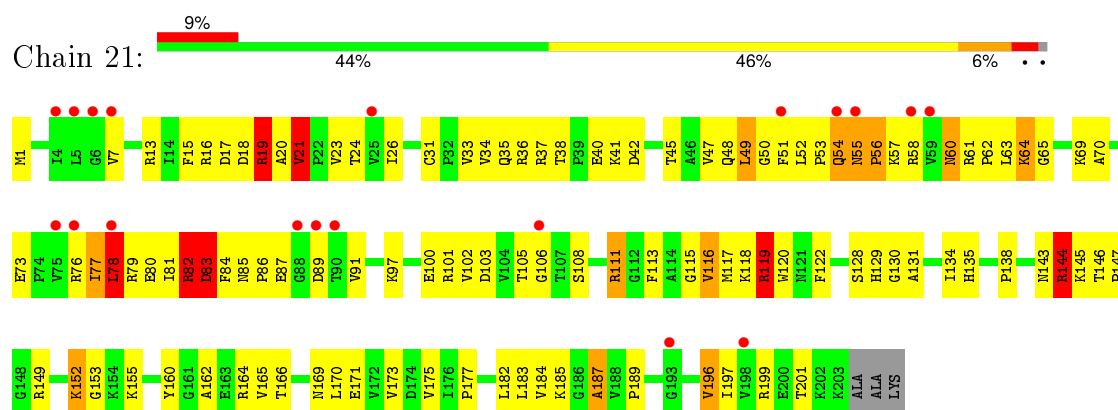
• Molecule 29: 50S ribosomal protein L2



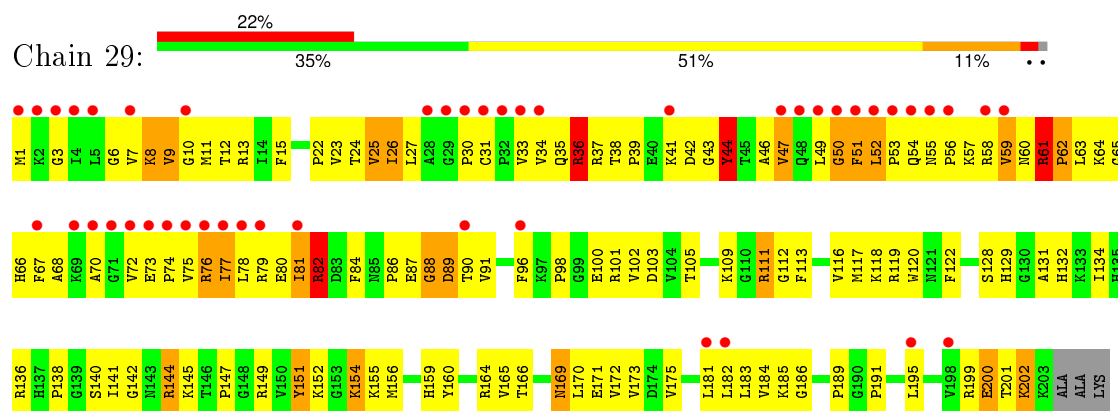
• Molecule 29: 50S ribosomal protein L2



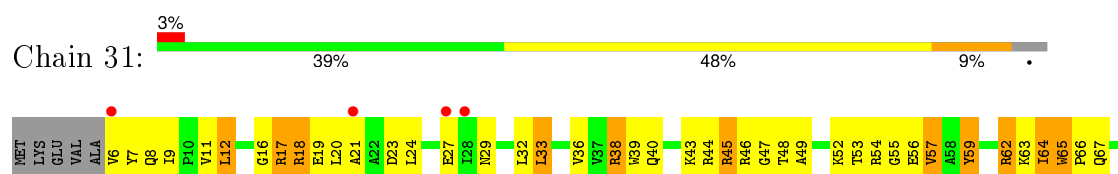
• Molecule 30: 50S ribosomal protein L3

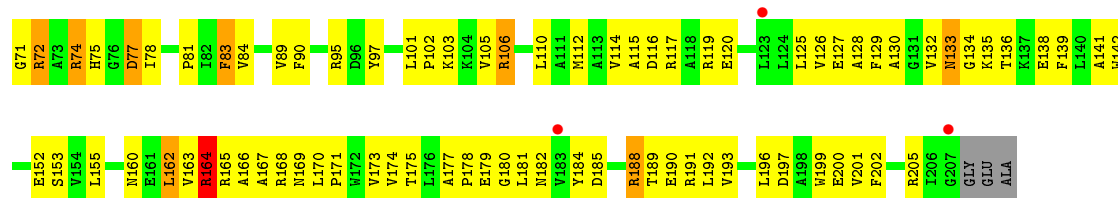


• Molecule 30: 50S ribosomal protein L3

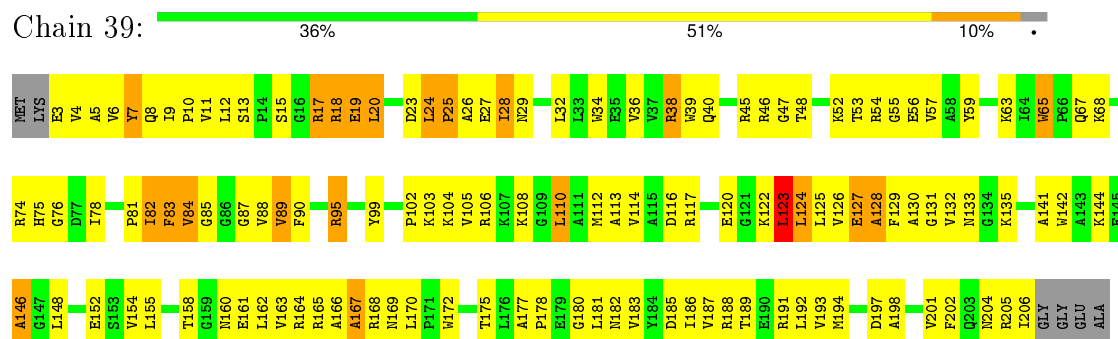


• Molecule 31: 50S ribosomal protein L4

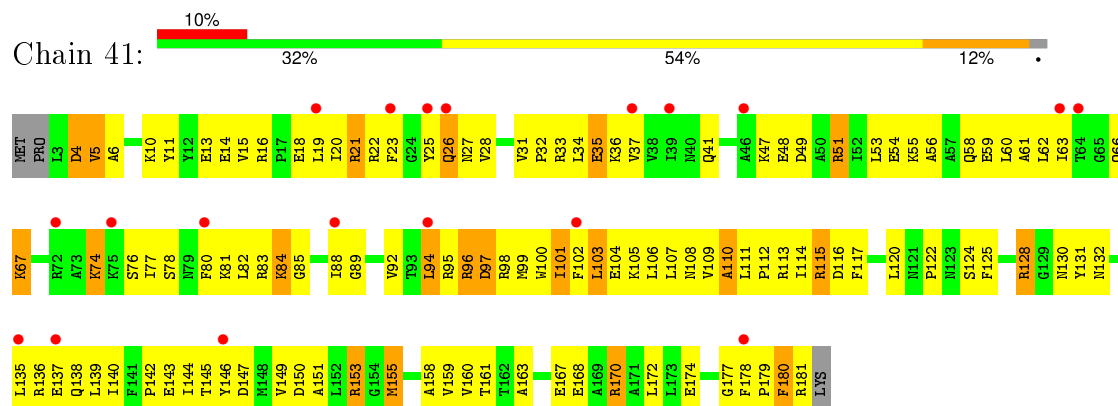




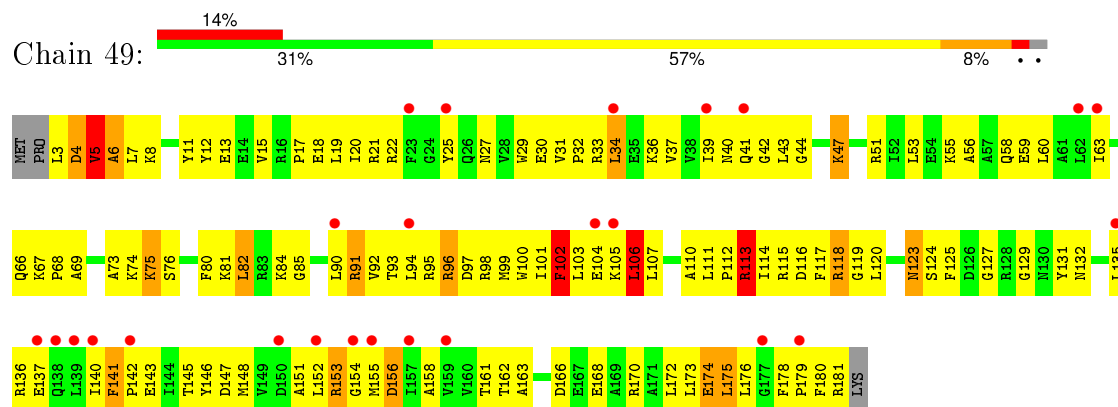
• Molecule 31: 50S ribosomal protein L4



• Molecule 32: 50S ribosomal protein L5

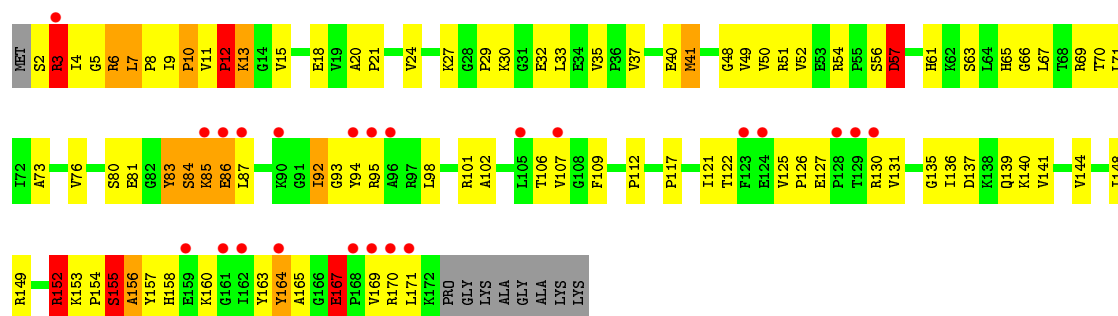


• Molecule 32: 50S ribosomal protein L5

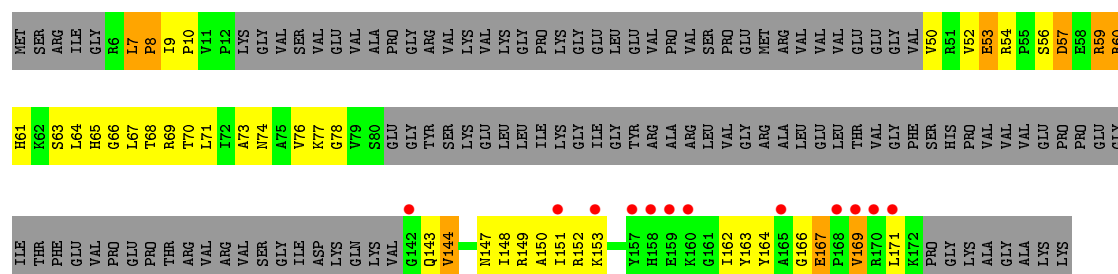


• Molecule 33: 50S ribosomal protein L6

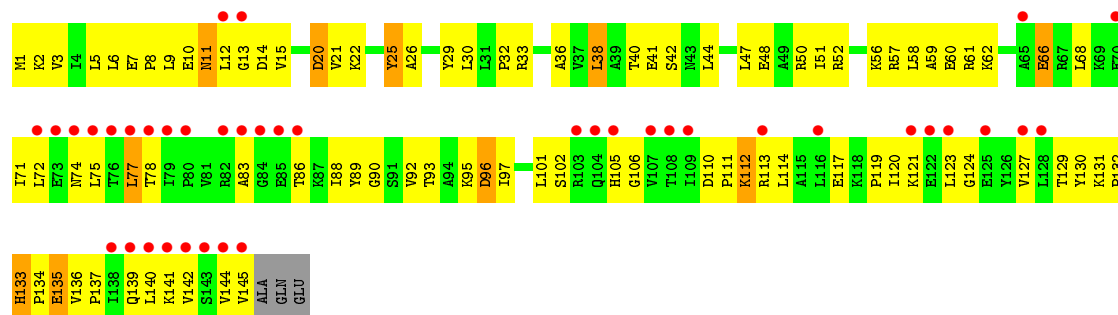




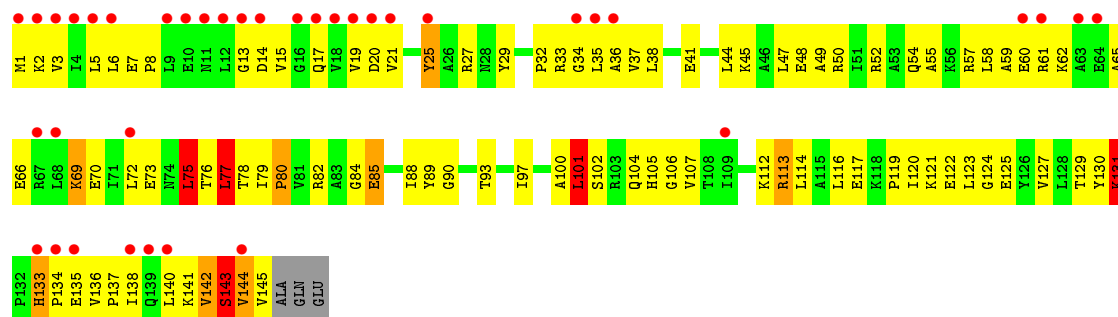
• Molecule 33: 50S ribosomal protein L6



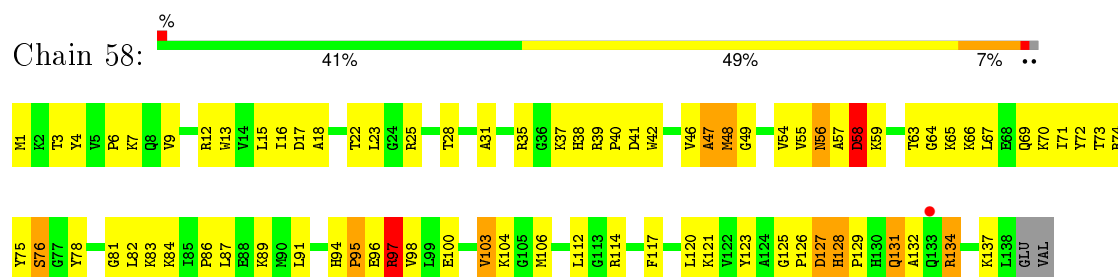
• Molecule 34: 50S ribosomal protein L9



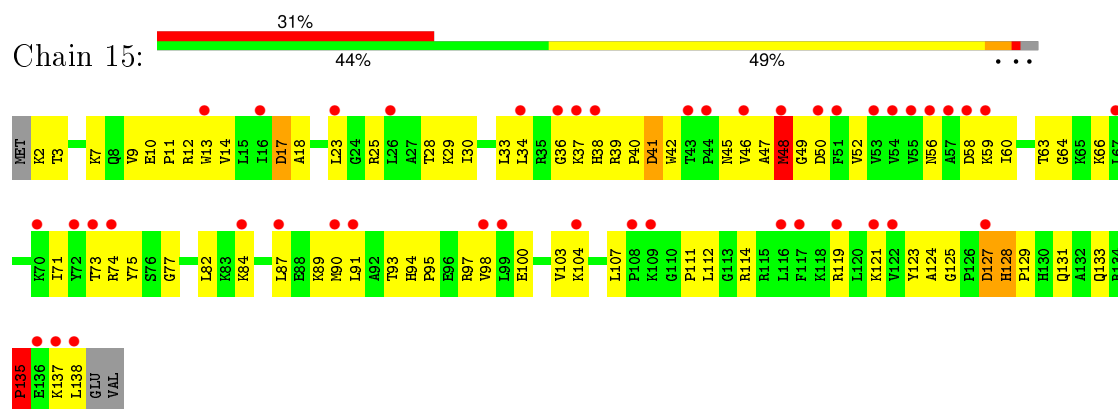
• Molecule 34: 50S ribosomal protein L9



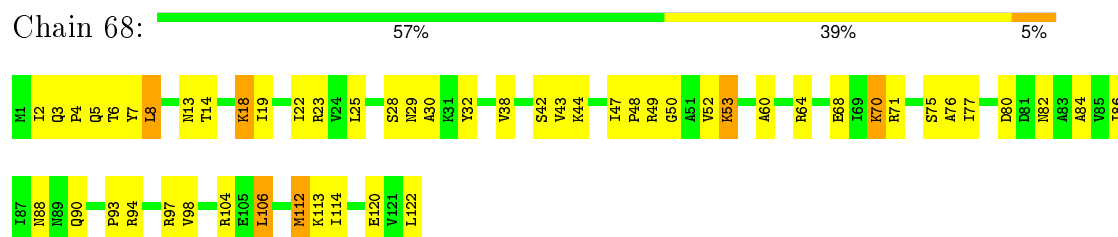
- Molecule 35: 50S ribosomal protein L13



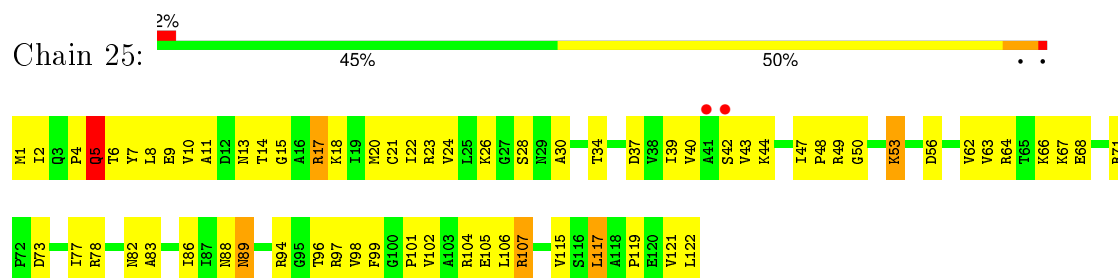
- Molecule 35: 50S ribosomal protein L13



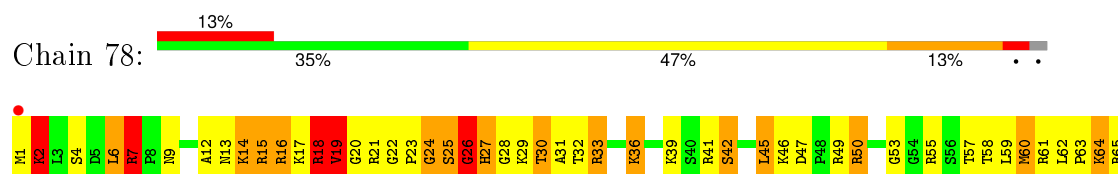
- Molecule 36: 50S ribosomal protein L14

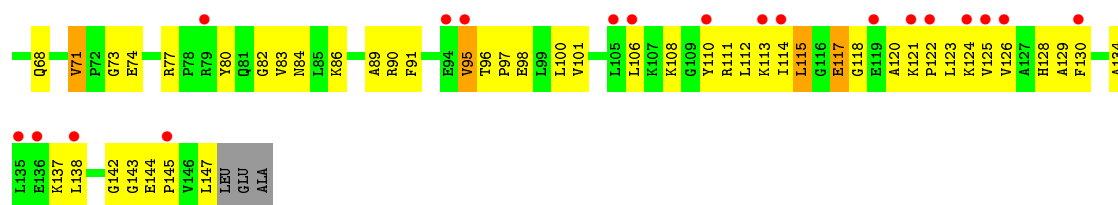


- Molecule 36: 50S ribosomal protein L14

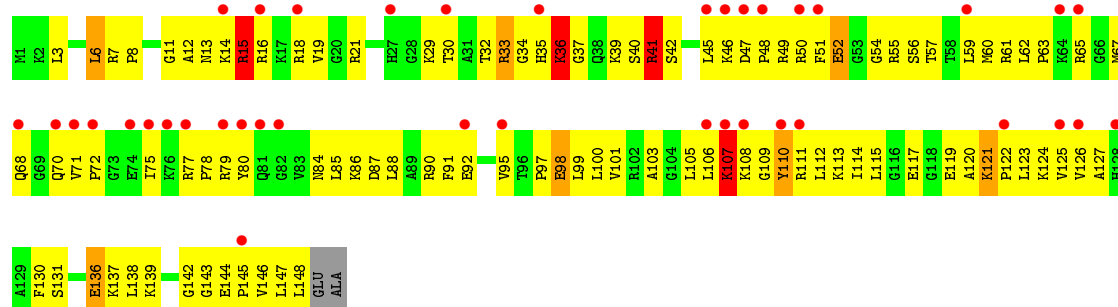


- Molecule 37: 50S ribosomal protein L15

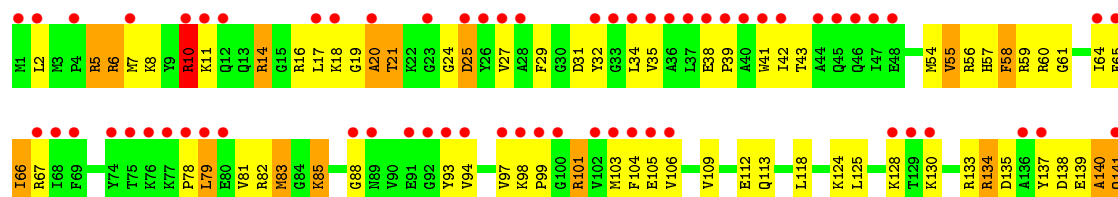




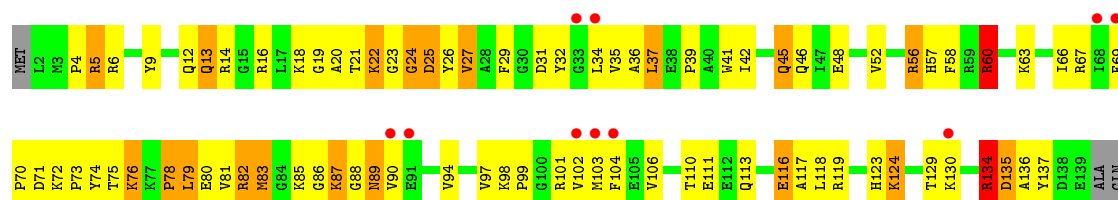
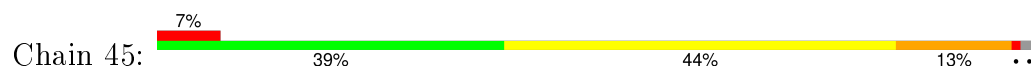
- Molecule 37: 50S ribosomal protein L15



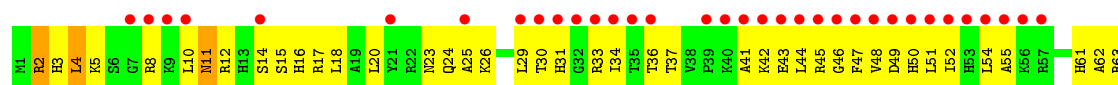
- Molecule 38: 50S ribosomal protein L16

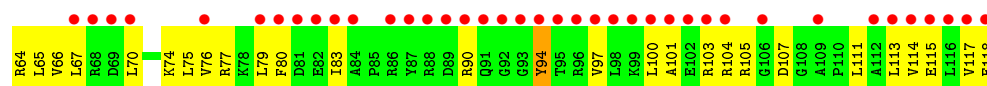


- Molecule 38: 50S ribosomal protein L16

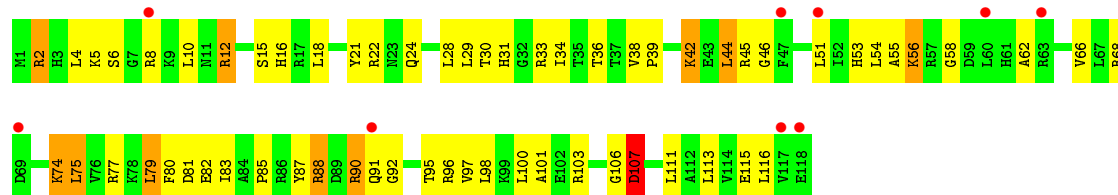


- Molecule 39: 50S ribosomal protein L17

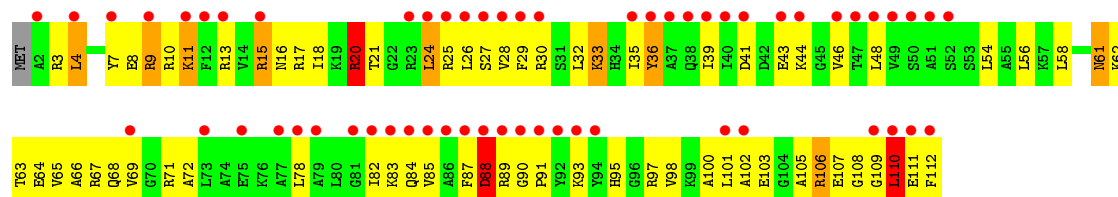




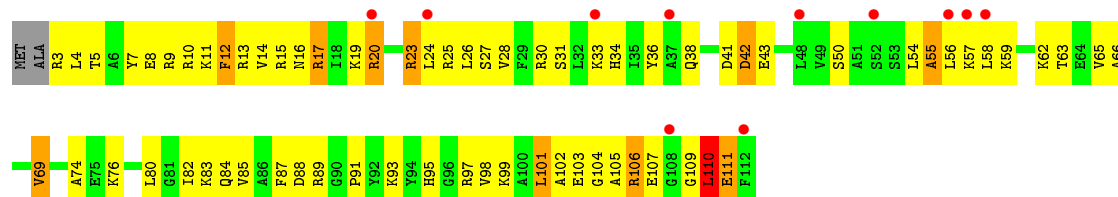
- Molecule 39: 50S ribosomal protein L17



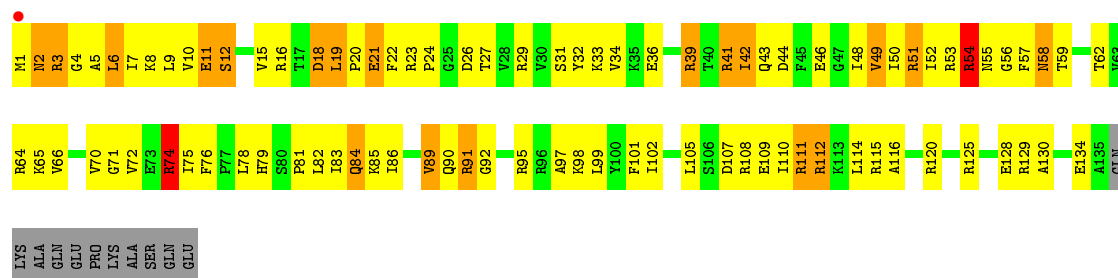
- Molecule 40: 50S ribosomal protein L18



- Molecule 40: 50S ribosomal protein L18

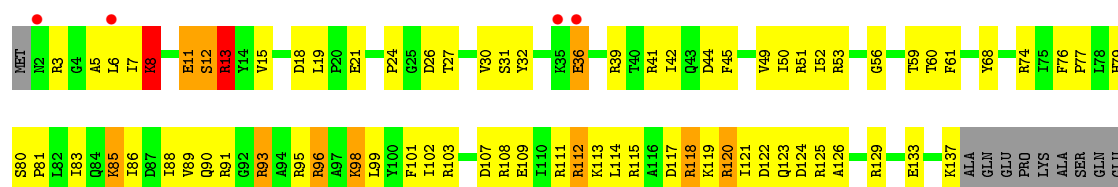


- Molecule 41: 50S ribosomal protein L19

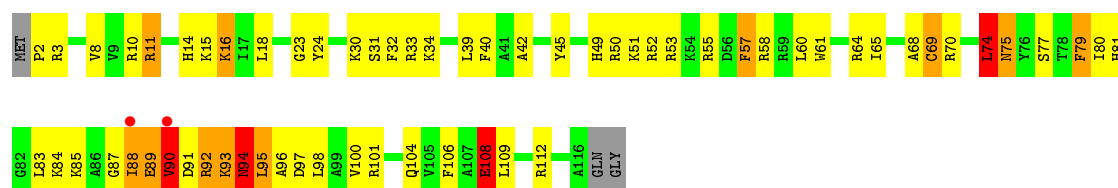


- Molecule 41: 50S ribosomal protein L19

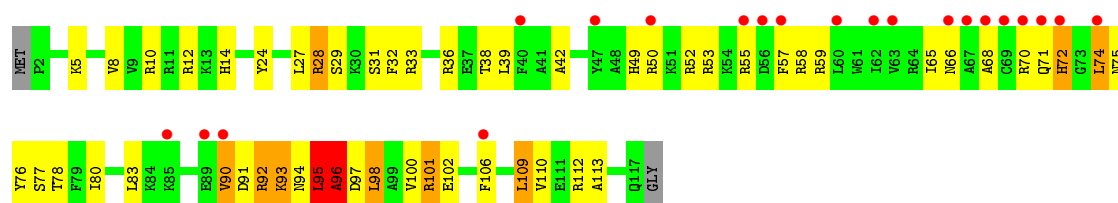




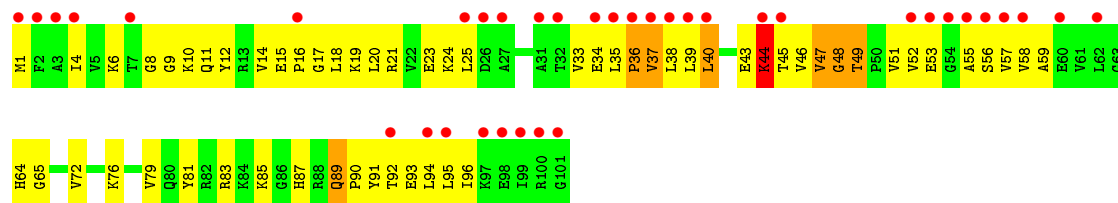
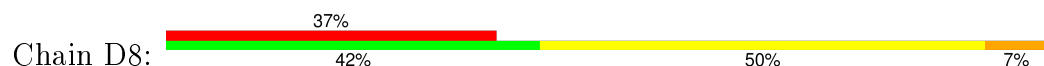
• Molecule 42: 50S ribosomal protein L20



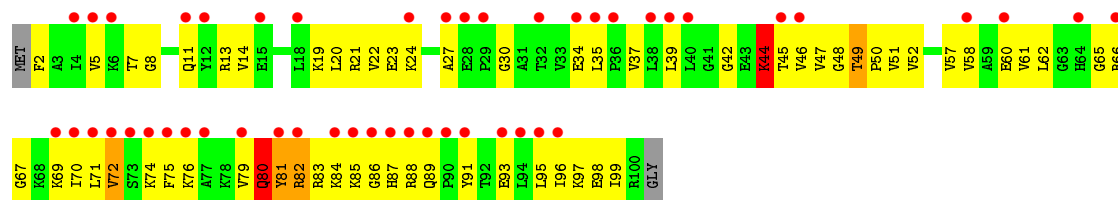
• Molecule 42: 50S ribosomal protein L20



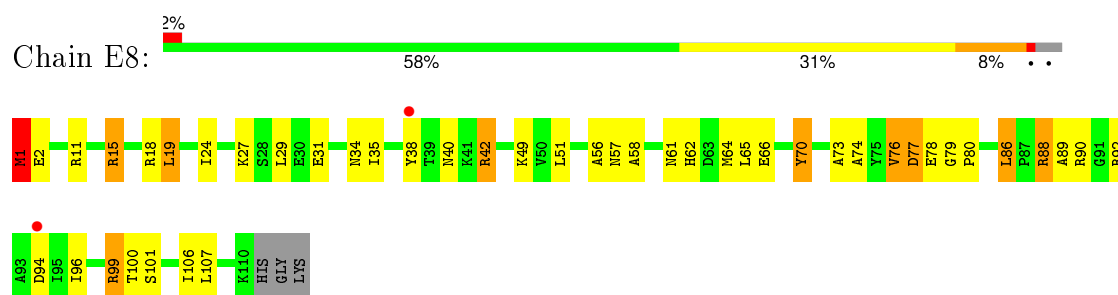
• Molecule 43: 50S ribosomal protein L21



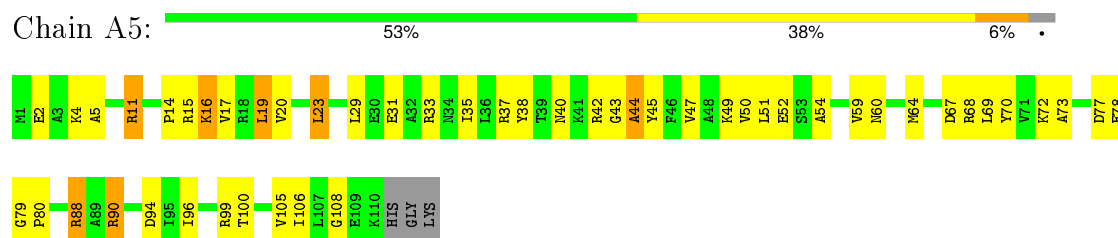
• Molecule 43: 50S ribosomal protein L21



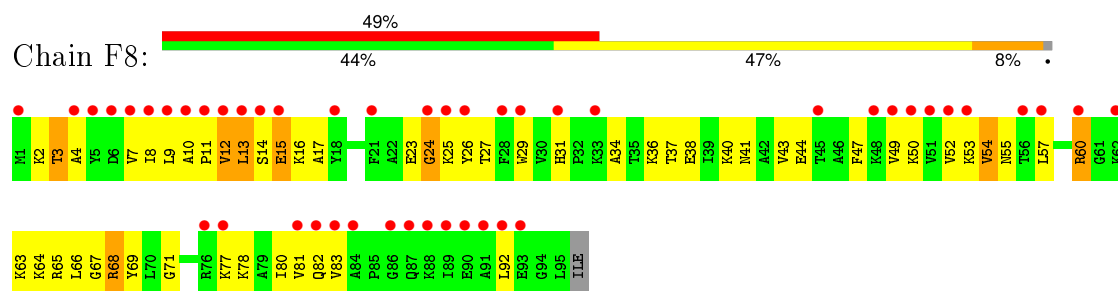
• Molecule 44: 50S ribosomal protein L22



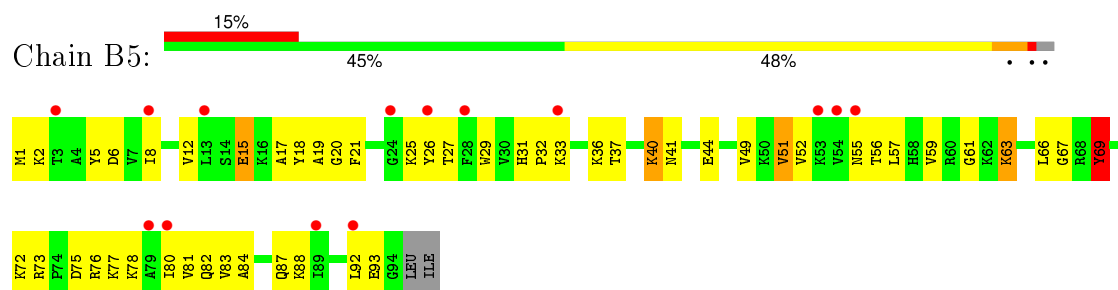
- Molecule 44: 50S ribosomal protein L22



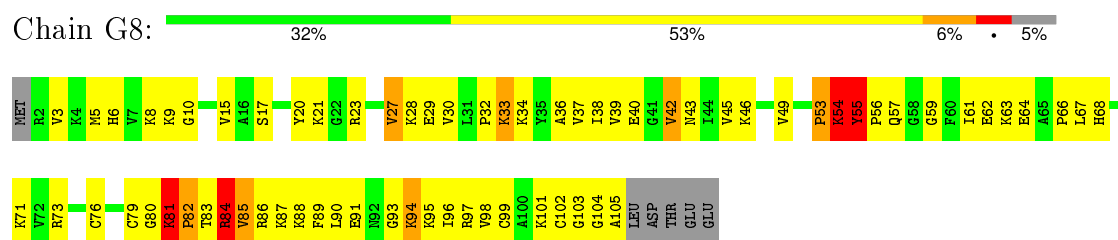
- Molecule 45: 50S ribosomal protein L23



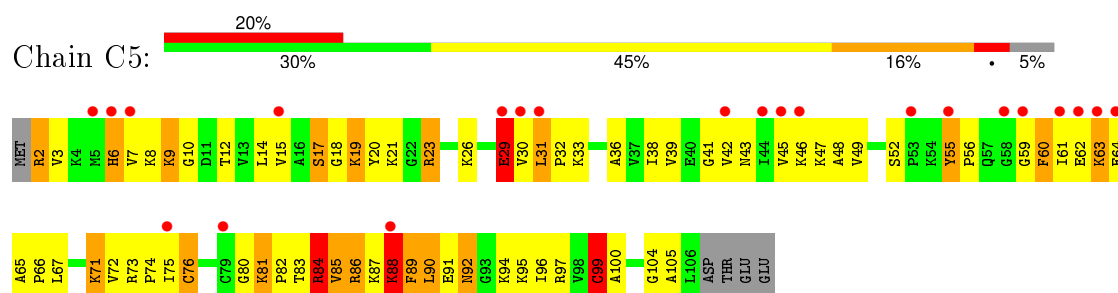
- Molecule 45: 50S ribosomal protein L23



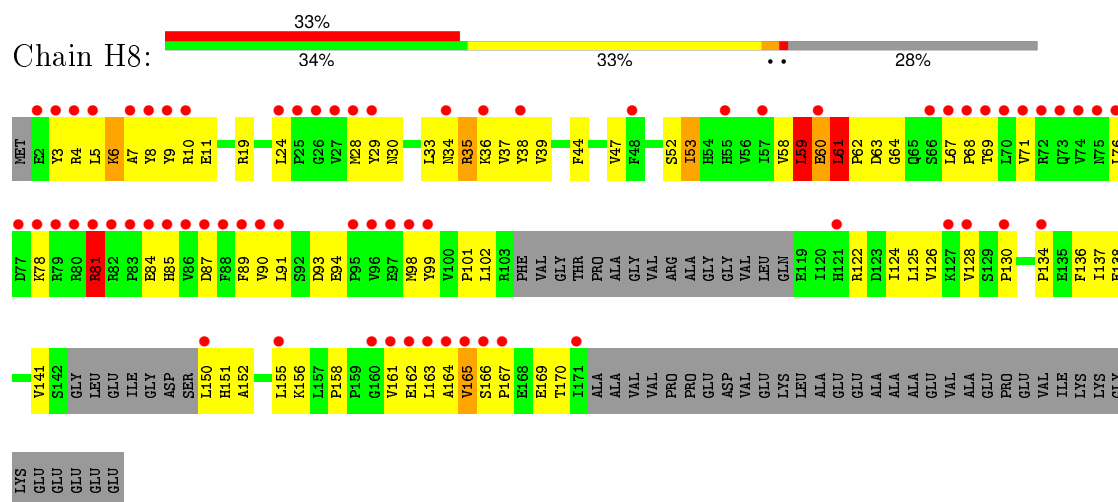
- Molecule 46: 50S ribosomal protein L24



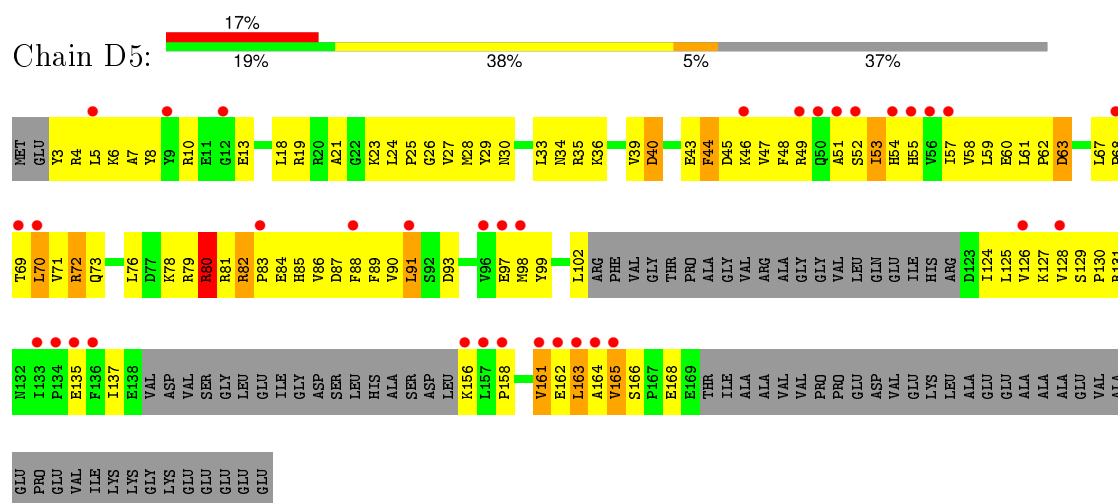
- Molecule 46: 50S ribosomal protein L24



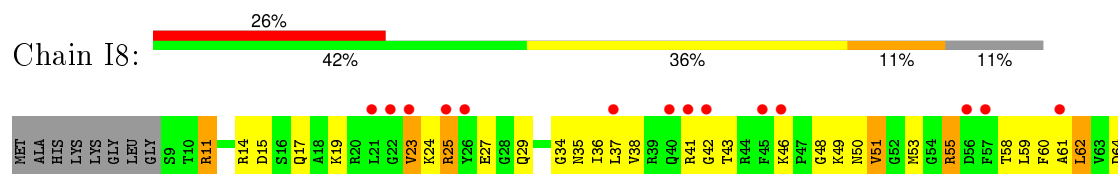
- Molecule 47: 50S ribosomal protein L25

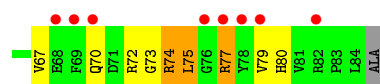


- Molecule 47: 50S ribosomal protein L25

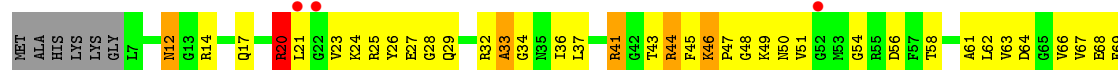


- Molecule 48: 50S ribosomal protein L27

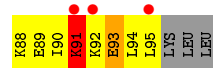




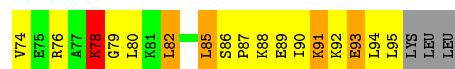
- Molecule 48: 50S ribosomal protein L27



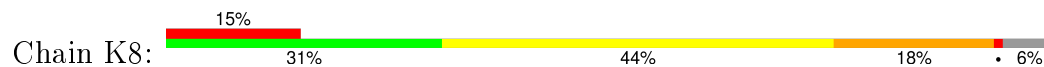
- Molecule 49: 50S ribosomal protein L28



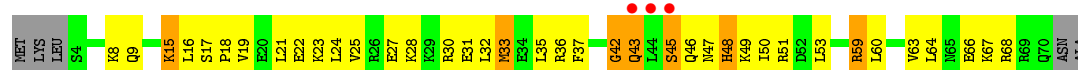
- Molecule 49: 50S ribosomal protein L28



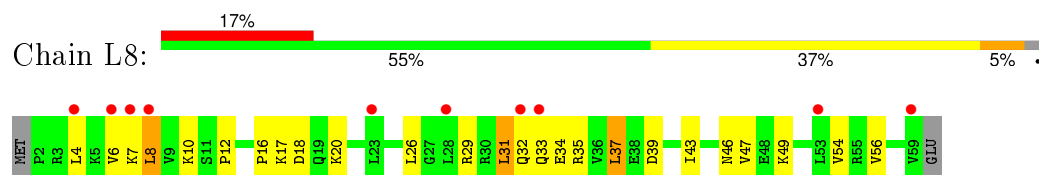
- Molecule 50: 50S ribosomal protein L29



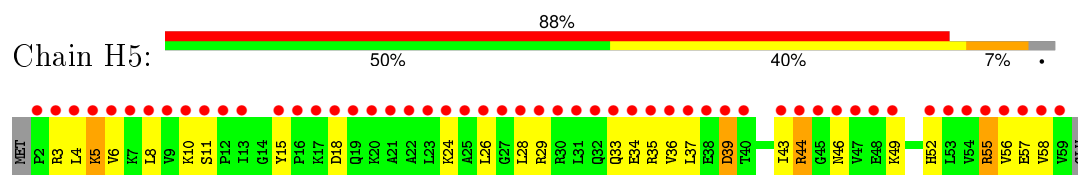
- Molecule 50: 50S ribosomal protein L29



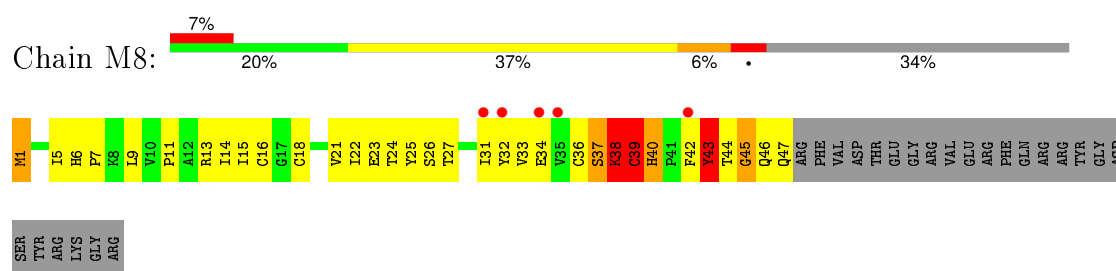
- Molecule 51: 50S ribosomal protein L30



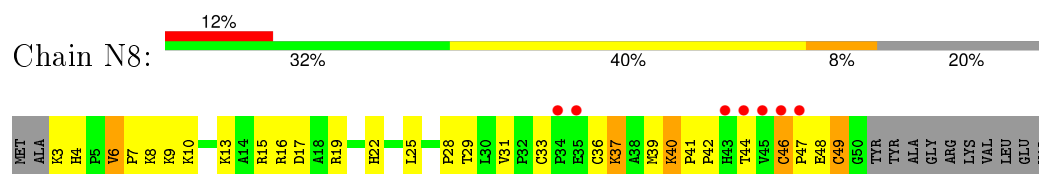
- Molecule 51: 50S ribosomal protein L30



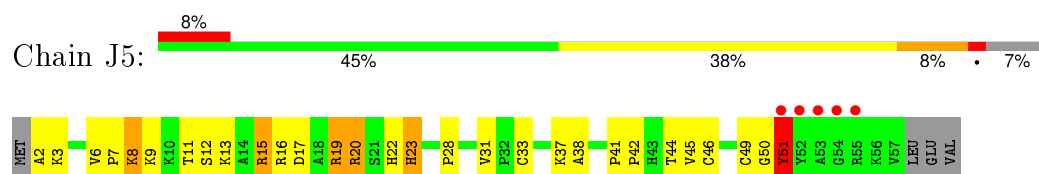
- Molecule 52: 50S ribosomal protein L31



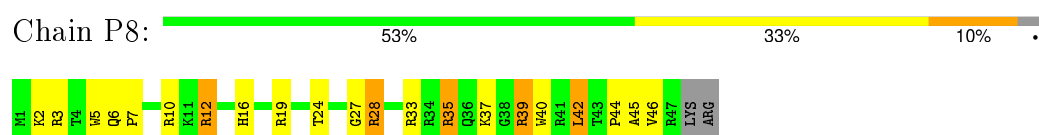
- Molecule 53: 50S ribosomal protein L32



- Molecule 53: 50S ribosomal protein L32

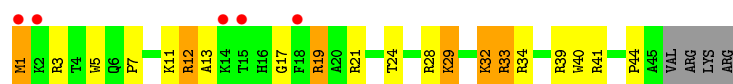


- Molecule 54: 50S ribosomal protein L34

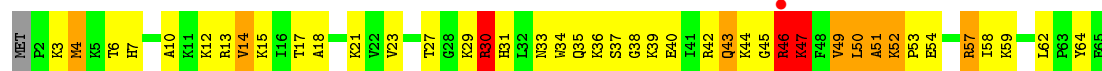


- Molecule 54: 50S ribosomal protein L34

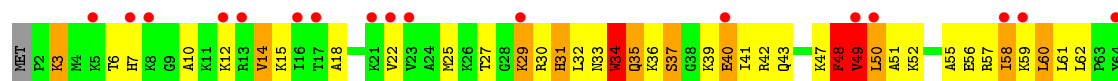




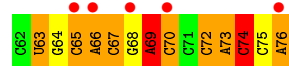
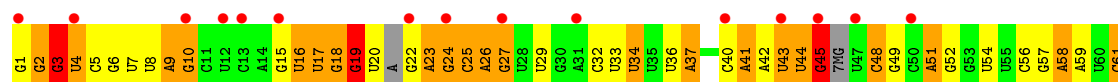
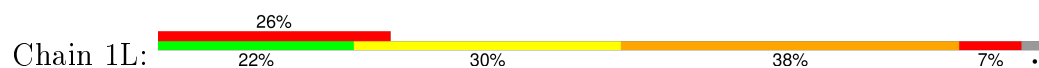
- Molecule 55: 50S ribosomal protein L35



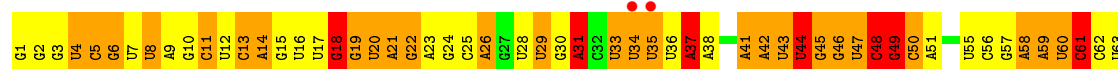
- Molecule 55: 50S ribosomal protein L35



- Molecule 56: tRNA^{Lys}



- Molecule 57: tRNA^{Lys}



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	208.40 Å 447.10 Å 616.90 Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	152.44 – 3.15 152.44 – 3.15	Depositor EDS
% Data completeness (in resolution range)	100.0 (152.44-3.15) 92.0 (152.44-3.15)	Depositor EDS
R_{merge}	0.23	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.63 (at 3.13 Å)	Xtriage
Refinement program	PHENIX	Depositor
R, R_{free}	0.198 , 0.254 0.200 , 0.259	Depositor DCC
R_{free} test set	2000 reflections (0.22%)	DCC
Wilson B-factor (Å ²)	106.7	Xtriage
Anisotropy	0.213	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.25 , 87.4	EDS
Estimated twinning fraction	No twinning to report.	Xtriage
L-test for twinning ²	$\langle L \rangle = 0.43$, $\langle L^2 \rangle = 0.25$	Xtriage
Outliers	0 of 982379 reflections	Xtriage
F_o, F_c correlation	0.95	EDS
Total number of atoms	292607	wwPDB-VP
Average B, all atoms (Å ²)	131.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.46% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.375 respectively for untwinned datasets, and 0.333, 0.2 for perfectly twinned datasets.

5 Model quality ⓘ

5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: 5MU, OMC, ZN, U8U, G7M, SF4, MG, 4SU, T6A, PSU

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	13	1.35	176/35927 (0.5%)	2.42	3309/56065 (5.9%)
1	1G	1.15	83/35987 (0.2%)	2.10	2179/56159 (3.9%)
2	12	0.54	2/1726 (0.1%)	0.74	0/2324
2	1E	0.60	0/1908	0.80	2/2573 (0.1%)
3	22	0.50	1/1552 (0.1%)	0.72	2/2093 (0.1%)
3	2E	0.80	0/1629	0.87	2/2195 (0.1%)
4	32	0.72	1/1732 (0.1%)	0.89	3/2318 (0.1%)
4	3E	0.86	2/1726 (0.1%)	0.90	3/2310 (0.1%)
5	42	0.75	3/1151 (0.3%)	0.76	1/1549 (0.1%)
5	4E	0.85	1/1158 (0.1%)	0.91	1/1559 (0.1%)
6	52	0.75	0/855	0.85	2/1154 (0.2%)
6	5E	0.77	1/850 (0.1%)	0.97	4/1147 (0.3%)
7	62	0.66	1/1122 (0.1%)	0.78	1/1500 (0.1%)
7	6E	0.64	0/1245	0.72	0/1666
8	72	0.57	1/1127 (0.1%)	0.74	1/1517 (0.1%)
8	7E	0.94	4/1135 (0.4%)	0.93	3/1527 (0.2%)
9	82	0.64	1/835 (0.1%)	0.84	1/1120 (0.1%)
9	8E	0.61	0/1019	0.77	0/1367
10	1A	0.56	0/482	0.73	0/647
10	1I	0.73	0/602	0.84	1/806 (0.1%)
11	2A	0.70	1/850 (0.1%)	0.80	1/1150 (0.1%)
11	2I	0.71	0/838	0.88	0/1133
12	3A	0.69	0/963	0.95	3/1290 (0.2%)
12	3I	0.99	2/972 (0.2%)	1.12	2/1301 (0.2%)
13	4A	0.61	0/903	0.87	2/1211 (0.2%)
13	4I	0.79	2/952 (0.2%)	0.89	2/1277 (0.2%)
14	5A	0.63	1/393 (0.3%)	0.91	1/521 (0.2%)
14	5I	0.83	1/500 (0.2%)	0.98	1/664 (0.2%)
15	6A	0.75	2/740 (0.3%)	0.81	0/987
15	6I	0.81	1/740 (0.1%)	0.87	0/987
16	7A	0.77	0/721	0.90	0/970
16	7I	0.74	1/687 (0.1%)	0.86	0/925

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
17	8A	0.65	0/836	0.75	0/1117
17	8I	0.85	3/847 (0.4%)	0.89	0/1131
18	9A	0.80	0/549	0.81	1/732 (0.1%)
18	9I	0.68	0/549	0.88	0/732
19	AA	0.54	0/288	0.90	1/388 (0.3%)
19	AI	0.80	0/668	0.93	0/899
20	BA	0.64	0/759	0.86	1/1000 (0.1%)
20	BI	0.57	0/748	0.80	0/986
21	1B	0.57	0/208	0.76	0/272
21	1F	0.56	0/203	0.79	0/266
22	1K	1.14	11/1516 (0.7%)	1.96	70/2350 (3.0%)
23	2K	1.63	25/1721 (1.5%)	2.75	223/2682 (8.3%)
23	2L	1.15	2/1721 (0.1%)	2.03	86/2682 (3.2%)
24	3K	1.13	5/1799 (0.3%)	1.94	76/2801 (2.7%)
25	4K	1.74	7/494 (1.4%)	2.28	40/767 (5.2%)
25	4L	1.44	3/420 (0.7%)	2.11	26/654 (4.0%)
26	14	1.58	825/69023 (1.2%)	2.76	8688/107740 (8.1%)
26	1H	1.84	1510/68273 (2.2%)	3.14	11225/106575 (10.5%)
27	16	1.49	22/2928 (0.8%)	2.87	390/4568 (8.5%)
27	1J	1.26	10/2928 (0.3%)	2.37	253/4568 (5.5%)
28	71	0.68	0/1073	0.78	0/1447
29	11	1.14	8/2170 (0.4%)	1.34	30/2926 (1.0%)
29	19	1.05	3/2170 (0.1%)	1.24	22/2926 (0.8%)
30	21	1.06	9/1591 (0.6%)	1.16	8/2146 (0.4%)
30	29	0.99	5/1591 (0.3%)	1.13	5/2146 (0.2%)
31	31	1.11	8/1620 (0.5%)	1.23	15/2194 (0.7%)
31	39	0.88	2/1637 (0.1%)	1.08	6/2218 (0.3%)
32	41	0.85	4/1481 (0.3%)	1.01	3/1994 (0.2%)
32	49	0.63	0/1481	0.91	4/1994 (0.2%)
33	51	0.96	2/1337 (0.1%)	1.17	6/1809 (0.3%)
33	59	0.67	1/548 (0.2%)	0.82	0/738
34	61	0.70	0/1146	0.89	0/1551
34	69	0.70	2/1146 (0.2%)	0.89	3/1551 (0.2%)
35	15	0.78	0/1123	0.93	2/1515 (0.1%)
35	58	0.90	1/1131 (0.1%)	1.00	3/1525 (0.2%)
36	25	0.90	0/942	1.00	1/1269 (0.1%)
36	68	0.97	0/942	1.11	4/1269 (0.3%)
37	35	1.11	1/1147 (0.1%)	1.16	6/1525 (0.4%)
37	78	1.08	3/1139 (0.3%)	1.33	14/1514 (0.9%)
38	45	0.98	4/1120 (0.4%)	1.06	2/1498 (0.1%)
38	88	1.13	6/1134 (0.5%)	1.22	7/1519 (0.5%)
39	55	0.89	1/981 (0.1%)	1.20	10/1312 (0.8%)
39	98	0.81	0/981	1.13	4/1312 (0.3%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
40	65	0.76	1/886 (0.1%)	1.04	4/1180 (0.3%)
40	A8	0.95	1/891 (0.1%)	1.26	6/1187 (0.5%)
41	75	0.98	4/1147 (0.3%)	1.10	3/1532 (0.2%)
41	B8	1.10	7/1137 (0.6%)	1.11	5/1519 (0.3%)
42	85	0.83	0/977	1.01	4/1301 (0.3%)
42	C8	1.02	4/968 (0.4%)	1.08	2/1289 (0.2%)
43	95	1.01	4/777 (0.5%)	1.02	0/1042
43	D8	0.93	1/789 (0.1%)	1.08	1/1057 (0.1%)
44	A5	1.05	1/886 (0.1%)	1.15	6/1189 (0.5%)
44	E8	1.03	1/886 (0.1%)	1.21	8/1189 (0.7%)
45	B5	1.08	2/749 (0.3%)	1.09	2/1007 (0.2%)
45	F8	1.17	5/754 (0.7%)	1.27	6/1014 (0.6%)
46	C5	1.09	5/812 (0.6%)	1.08	4/1083 (0.4%)
46	G8	1.33	8/801 (1.0%)	1.34	6/1069 (0.6%)
47	D5	0.84	4/1088 (0.4%)	0.85	2/1473 (0.1%)
47	H8	0.78	1/1244 (0.1%)	0.96	3/1683 (0.2%)
48	E5	0.87	0/624	1.08	1/832 (0.1%)
48	I8	1.12	1/614 (0.2%)	1.28	8/819 (1.0%)
49	F5	0.94	2/744 (0.3%)	1.09	3/989 (0.3%)
49	J8	1.09	4/744 (0.5%)	1.18	5/989 (0.5%)
50	G5	0.80	0/565	0.99	1/748 (0.1%)
50	K8	1.09	0/570	1.43	11/755 (1.5%)
51	H5	0.80	0/464	0.90	0/623
51	L8	0.92	1/464 (0.2%)	1.13	1/623 (0.2%)
52	M8	0.77	0/375	1.08	3/507 (0.6%)
53	J5	0.92	2/448 (0.4%)	1.08	4/606 (0.7%)
53	N8	1.02	1/381 (0.3%)	1.08	0/516
54	L5	0.99	0/399	1.23	3/526 (0.6%)
54	P8	1.17	0/409	1.62	9/540 (1.7%)
55	M5	1.10	5/524 (1.0%)	1.18	4/691 (0.6%)
55	Q8	1.13	1/524 (0.2%)	1.41	9/691 (1.3%)
56	1L	0.76	1/1683 (0.1%)	1.38	20/2615 (0.8%)
57	3L	0.96	7/1777 (0.4%)	1.72	50/2767 (1.8%)
All	All	1.39	2845/315237 (0.9%)	2.39	26956/472471 (5.7%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
2	12	0	6

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Mol	Chain	#Chirality outliers	#Planarity outliers
2	1E	0	3
3	22	0	2
3	2E	0	2
4	32	0	4
4	3E	0	1
5	4E	0	1
7	6E	0	1
9	82	0	1
9	8E	0	1
11	2A	0	1
11	2I	0	1
12	3A	0	1
12	3I	0	5
13	4A	0	2
13	4I	0	3
14	5A	0	1
14	5I	0	1
15	6A	0	1
16	7I	0	1
17	8I	0	1
19	AA	0	1
19	AI	0	2
20	BA	0	4
20	BI	0	1
26	14	0	1
28	71	0	1
29	11	0	6
29	19	0	6
30	21	0	11
30	29	0	6
31	31	0	3
31	39	0	11
32	41	0	3
32	49	0	6
33	51	0	3
33	59	0	3
34	61	0	4
34	69	0	6
35	15	0	4
35	58	0	3
37	35	0	4
37	78	0	7

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Mol	Chain	#Chirality outliers	#Planarity outliers
38	45	0	7
38	88	0	3
40	A8	0	2
41	75	0	2
41	B8	0	4
42	85	0	5
42	C8	0	3
43	95	0	3
43	D8	0	4
44	A5	0	1
45	B5	0	2
45	F8	0	2
46	C5	0	1
46	G8	0	6
47	D5	0	1
47	H8	0	2
48	E5	0	1
49	F5	0	3
49	J8	0	2
50	G5	0	4
50	K8	0	4
52	M8	0	5
54	P8	0	1
55	M5	0	3
55	Q8	0	2
All	All	0	209

All (2845) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	35	121	LYS	C-N	22.50	1.76	1.34
26	1H	783	A	N3-C4	-21.39	1.22	1.34
26	1H	676	A	N9-C4	-19.81	1.25	1.37
26	14	783	A	N9-C4	-18.75	1.26	1.37
26	1H	2346	A	N3-C4	-16.77	1.24	1.34
26	1H	774	A	N9-C4	-16.34	1.28	1.37
26	1H	2430	A	N9-C4	-16.30	1.28	1.37
26	1H	783	A	N9-C4	-16.25	1.28	1.37
26	1H	1786	A	N9-C4	-16.11	1.28	1.37
26	1H	71	A	N9-C4	-15.16	1.28	1.37
26	14	676	A	N9-C4	-14.62	1.29	1.37
26	1H	698	C	N1-C6	-14.52	1.28	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2476	A	N9-C4	14.38	1.46	1.37
4	3E	36	ARG	C-N	-14.27	1.07	1.34
26	14	774	A	N9-C4	-14.02	1.29	1.37
26	1H	1614	A	N9-C4	-13.97	1.29	1.37
26	14	1950	G	C2-N3	13.70	1.43	1.32
26	1H	693	C	N3-C4	-13.68	1.24	1.33
26	1H	138	G	N9-C8	13.65	1.47	1.37
26	14	783	A	N7-C5	-13.64	1.31	1.39
26	1H	676	A	N9-C8	13.62	1.48	1.37
26	14	2518	A	N9-C4	-13.42	1.29	1.37
26	1H	955	C	N1-C6	-13.11	1.29	1.37
26	14	676	A	N9-C8	12.93	1.48	1.37
26	1H	2346	A	N9-C4	-12.88	1.30	1.37
26	14	74	A	N9-C4	-12.63	1.30	1.37
26	1H	783	A	C5-C6	-12.58	1.29	1.41
26	1H	2764	A	N9-C4	-12.39	1.30	1.37
26	14	783	A	C5-C6	-12.00	1.30	1.41
26	1H	2287	A	N9-C4	-12.00	1.30	1.37
26	1H	772	C	N1-C6	-11.98	1.29	1.37
26	1H	2503	A	C5-C6	-11.85	1.30	1.41
8	7E	102	ARG	CZ-NH2	-11.78	1.17	1.33
26	1H	768	G	N9-C8	-11.77	1.29	1.37
26	1H	378	C	N1-C6	-11.64	1.30	1.37
26	1H	2502	G	N3-C4	-11.57	1.27	1.35
26	14	1142(A)	A	N3-C4	-11.51	1.27	1.34
26	14	2430	A	N9-C4	-11.44	1.30	1.37
26	1H	1142(A)	A	N9-C4	-11.35	1.31	1.37
26	1H	1836	C	N3-C4	-11.32	1.26	1.33
26	1H	140	A	C5-C6	-11.30	1.30	1.41
5	4E	69	VAL	C-N	-11.23	1.12	1.34
47	D5	80	ARG	NE-CZ	-11.21	1.18	1.33
26	1H	247	G	C6-N1	-11.20	1.31	1.39
26	1H	2280	G	C6-O6	11.11	1.34	1.24
26	14	1605	C	N1-C6	-11.08	1.30	1.37
26	1H	472	A	N3-C4	-11.07	1.28	1.34
26	14	1900	A	N3-C4	-11.01	1.28	1.34
26	14	2506	U	N1-C2	11.01	1.48	1.38
26	1H	2713	A	N9-C4	-10.96	1.31	1.37
26	14	1616	A	N9-C4	-10.95	1.31	1.37
26	1H	2561	A	N9-C4	-10.94	1.31	1.37
5	42	79	GLU	CD-OE1	-10.91	1.13	1.25
8	7E	102	ARG	CZ-NH1	-10.82	1.19	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1698	A	N9-C4	-10.69	1.31	1.37
26	1H	621	A	N9-C4	-10.64	1.31	1.37
26	1H	140	A	N9-C4	-10.63	1.31	1.37
26	1H	1784	A	N7-C5	10.62	1.45	1.39
26	1H	197	A	N9-C4	-10.54	1.31	1.37
26	1H	2392	A	N9-C4	-10.51	1.31	1.37
26	1H	1950	G	N9-C8	10.51	1.45	1.37
26	14	462	C	N1-C6	-10.48	1.30	1.37
26	14	2346	A	N3-C4	-10.47	1.28	1.34
26	14	738	G	N7-C5	-10.46	1.32	1.39
26	1H	2721	A	N9-C4	-10.46	1.31	1.37
26	1H	2377	A	N9-C4	-10.43	1.31	1.37
26	14	774	A	C5-C6	-10.40	1.31	1.41
26	1H	2429	G	N7-C5	-10.36	1.33	1.39
26	1H	1786	A	C5-C6	-10.30	1.31	1.41
26	1H	996	A	N3-C4	-10.24	1.28	1.34
26	1H	330	A	N9-C4	-10.17	1.31	1.37
26	1H	1971	A	C5-C4	-10.17	1.31	1.38
26	1H	2044	C	N1-C6	-10.16	1.31	1.37
26	14	1773	A	N9-C4	-10.15	1.31	1.37
23	2K	38	A	N3-C4	-10.12	1.28	1.34
47	D5	80	ARG	CZ-NH1	-10.07	1.20	1.33
26	14	786	C	N3-C4	-10.07	1.26	1.33
26	14	1307	A	N3-C4	-10.05	1.28	1.34
26	14	1786	A	N3-C4	-10.04	1.28	1.34
26	1H	676	A	C5-C4	10.03	1.45	1.38
26	1H	71	A	C5-C6	-10.01	1.32	1.41
26	14	2287	A	N9-C4	-9.99	1.31	1.37
38	45	76	LYS	C-N	9.99	1.57	1.34
26	1H	2392	A	C5-C4	9.98	1.45	1.38
26	1H	1271	G	N9-C8	-9.97	1.30	1.37
26	14	528	A	N9-C4	-9.96	1.31	1.37
26	1H	2336	A	N9-C4	9.94	1.43	1.37
26	14	746	A	N3-C4	-9.93	1.28	1.34
46	G8	84	ARG	CG-CD	9.92	1.76	1.51
26	14	1977	A	N3-C4	-9.92	1.28	1.34
26	1H	777	A	N3-C4	-9.90	1.28	1.34
26	1H	2247	A	C6-N1	-9.88	1.28	1.35
26	1H	774	A	N7-C5	-9.88	1.33	1.39
26	1H	527	C	N1-C6	-9.81	1.31	1.37
26	14	471	A	N9-C4	-9.80	1.31	1.37
26	1H	1698	A	N9-C4	-9.79	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	73	A	C5-C4	-9.79	1.31	1.38
26	1H	1786	A	N7-C5	-9.76	1.33	1.39
26	1H	1968	G	C8-N7	-9.74	1.25	1.30
26	14	945	A	C5-C6	-9.71	1.32	1.41
26	1H	197	A	N3-C4	-9.71	1.29	1.34
26	14	1629	U	C4-O4	9.71	1.31	1.23
26	1H	2430	A	N3-C4	-9.67	1.29	1.34
26	14	1583	A	N3-C4	9.64	1.40	1.34
26	1H	503	A	N9-C4	-9.64	1.32	1.37
26	14	974(A)	C	C4-C5	9.63	1.50	1.43
26	1H	829	A	N9-C4	-9.63	1.32	1.37
26	14	2062	A	C6-N1	9.62	1.42	1.35
26	14	768	G	N7-C5	-9.60	1.33	1.39
26	1H	2062	A	N9-C4	9.59	1.43	1.37
26	14	2247	A	C6-N1	-9.58	1.28	1.35
26	1H	828	U	N3-C4	-9.54	1.29	1.38
26	14	1678	G	N9-C4	-9.51	1.30	1.38
26	1H	835	A	N3-C4	-9.48	1.29	1.34
26	1H	794	G	N9-C8	-9.47	1.31	1.37
26	14	1698	A	N7-C5	-9.47	1.33	1.39
26	1H	74	A	N9-C4	-9.46	1.32	1.37
26	1H	783	A	N7-C5	-9.46	1.33	1.39
26	14	1780	A	C6-N1	-9.44	1.28	1.35
26	1H	2246	G	N9-C8	-9.44	1.31	1.37
26	1H	503	A	N3-C4	-9.43	1.29	1.34
26	1H	1950	G	C2-N3	9.42	1.40	1.32
41	B8	74	ARG	CZ-NH1	-9.42	1.20	1.33
26	1H	1021	A	N9-C4	-9.37	1.32	1.37
26	1H	2490	G	N9-C8	9.37	1.44	1.37
26	1H	2506	U	N1-C2	9.36	1.47	1.38
26	1H	945	A	N7-C5	-9.35	1.33	1.39
26	1H	2330	G	N9-C4	-9.34	1.30	1.38
26	1H	2575	C	N1-C6	-9.34	1.31	1.37
26	1H	2430	A	N7-C5	-9.33	1.33	1.39
26	1H	2688	U	N3-C4	-9.32	1.30	1.38
26	1H	775	G	N7-C5	-9.32	1.33	1.39
26	14	676	A	C5-C6	-9.32	1.32	1.41
47	D5	80	ARG	CZ-NH2	-9.29	1.21	1.33
26	1H	863	A	N3-C4	9.26	1.40	1.34
26	1H	465	G	C6-O6	9.24	1.32	1.24
26	1H	2432	A	N9-C4	-9.24	1.32	1.37
26	1H	71	A	N3-C4	-9.23	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1810	A	C5-C4	-9.23	1.32	1.38
26	14	1786	A	N9-C4	-9.23	1.32	1.37
26	14	1950	G	N9-C4	9.22	1.45	1.38
26	1H	116	C	N1-C6	-9.20	1.31	1.37
38	88	124	LYS	C-N	-9.18	1.12	1.34
26	1H	780	G	N7-C5	-9.15	1.33	1.39
26	1H	2518	A	N9-C4	-9.15	1.32	1.37
26	1H	2280	G	C8-N7	-9.14	1.25	1.30
26	1H	2248	C	N3-C4	-9.13	1.27	1.33
26	14	1780	A	N3-C4	-9.11	1.29	1.34
26	1H	1313	U	N1-C6	-9.10	1.29	1.38
26	1H	1698	A	N3-C4	-9.10	1.29	1.34
31	31	57	VAL	CB-CG1	-9.09	1.33	1.52
26	14	2392	A	C5-C4	9.08	1.45	1.38
26	14	1142(A)	A	N9-C4	-9.07	1.32	1.37
1	1G	1473	A	N9-C4	-9.07	1.32	1.37
26	14	2599	G	C6-N1	-9.06	1.33	1.39
26	14	1950	G	N3-C4	9.05	1.41	1.35
26	14	2873	A	N9-C4	-9.05	1.32	1.37
26	14	1903	G	N9-C8	-9.04	1.31	1.37
26	1H	138	G	C8-N7	9.03	1.36	1.30
26	1H	1967	C	N1-C6	-9.02	1.31	1.37
26	1H	530	G	N9-C8	8.99	1.44	1.37
26	14	1332	G	C5-C4	8.98	1.44	1.38
26	14	1698	A	C5-C6	-8.98	1.32	1.41
26	1H	800	A	N3-C4	-8.96	1.29	1.34
29	19	30	GLU	CG-CD	8.94	1.65	1.51
26	1H	1349	A	N9-C8	8.94	1.44	1.37
26	1H	2713	A	C5-C4	8.94	1.45	1.38
26	1H	201	C	N1-C6	-8.93	1.31	1.37
30	21	119	ARG	CZ-NH2	-8.93	1.21	1.33
30	21	21	VAL	CB-CG2	8.92	1.71	1.52
49	J8	93	GLU	CG-CD	8.92	1.65	1.51
26	1H	1308	A	N3-C4	-8.91	1.29	1.34
26	1H	2242	G	C5-C4	-8.90	1.32	1.38
26	1H	1627	G	N9-C8	-8.90	1.31	1.37
26	1H	830	G	N7-C5	-8.89	1.33	1.39
27	1J	89(A)	A	N9-C4	8.89	1.43	1.37
26	1H	996	A	N9-C4	-8.89	1.32	1.37
26	1H	2761	G	N9-C4	-8.87	1.30	1.38
26	14	955	C	N3-C4	-8.85	1.27	1.33
26	1H	1957	C	N3-C4	-8.84	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	2K	12	G	C5-C4	-8.84	1.32	1.38
22	1K	74	C	N1-C2	8.83	1.49	1.40
26	1H	2781	A	N9-C4	-8.83	1.32	1.37
26	1H	2331	G	N9-C4	-8.82	1.30	1.38
26	1H	2246	G	C8-N7	-8.81	1.25	1.30
26	1H	2452	C	N1-C6	-8.79	1.31	1.37
26	1H	2578	G	C5-C4	-8.77	1.32	1.38
26	1H	945	A	N9-C4	-8.75	1.32	1.37
26	1H	122	G	N9-C4	-8.75	1.30	1.38
26	14	1950	G	C5-C6	8.74	1.51	1.42
26	1H	1612	C	N1-C6	-8.73	1.31	1.37
26	1H	1158	C	N3-C4	-8.73	1.27	1.33
26	1H	1784	A	C6-N1	-8.72	1.29	1.35
26	14	1890	A	N9-C4	-8.72	1.32	1.37
26	14	2330	G	C2-N3	8.71	1.39	1.32
26	1H	774	A	N3-C4	-8.71	1.29	1.34
26	1H	330	A	N3-C4	-8.70	1.29	1.34
27	16	81	G	N9-C8	8.70	1.44	1.37
26	1H	2028	U	C4-O4	8.70	1.30	1.23
26	1H	2665	A	C5-C6	-8.70	1.33	1.41
23	2K	38	A	C6-N1	-8.68	1.29	1.35
29	11	30	GLU	CG-CD	8.68	1.65	1.51
26	1H	1616	A	C5-C6	-8.67	1.33	1.41
26	1H	2509	G	C5-C4	-8.66	1.32	1.38
26	1H	1616	A	N7-C5	-8.65	1.34	1.39
26	1H	1202	C	N1-C6	-8.64	1.31	1.37
26	1H	826	U	C2-N3	8.62	1.43	1.37
26	1H	245	G	N9-C8	-8.61	1.31	1.37
26	1H	127	A	N9-C4	-8.61	1.32	1.37
26	14	775	G	N7-C5	-8.61	1.34	1.39
26	14	471	A	N3-C4	-8.60	1.29	1.34
26	1H	425	G	C5-C4	-8.60	1.32	1.38
26	1H	122	G	N7-C5	-8.60	1.34	1.39
26	1H	1950	G	C6-N1	8.59	1.45	1.39
26	1H	1989	G	N3-C4	-8.59	1.29	1.35
26	14	2051	A	N3-C4	-8.59	1.29	1.34
26	1H	1769	G	C6-O6	8.58	1.31	1.24
26	1H	945	A	C5-C4	8.57	1.44	1.38
41	B8	74	ARG	CZ-NH2	-8.56	1.22	1.33
26	1H	2450	A	N3-C4	-8.55	1.29	1.34
26	1H	57	C	N3-C4	-8.55	1.27	1.33
26	1H	2327	A	N7-C5	8.55	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
29	11	229	VAL	CB-CG1	-8.53	1.34	1.52
26	14	1767	C	N3-C4	-8.52	1.27	1.33
17	8I	101	ARG	CZ-NH1	-8.52	1.22	1.33
26	1H	2068	U	C2-N3	-8.52	1.31	1.37
26	1H	1638	C	N1-C6	-8.52	1.32	1.37
26	1H	2447	G	C5-C4	-8.51	1.32	1.38
26	14	1977	A	C6-N1	-8.50	1.29	1.35
26	1H	211	A	N9-C4	-8.49	1.32	1.37
26	14	1780	A	N9-C4	-8.48	1.32	1.37
26	14	90	U	N1-C2	8.47	1.46	1.38
26	14	1289	C	N1-C6	-8.47	1.32	1.37
26	1H	931	G	N9-C8	-8.47	1.31	1.37
26	14	1681	G	N9-C4	-8.47	1.31	1.38
26	14	2589	A	N9-C4	-8.47	1.32	1.37
1	13	1502	A	C5-C6	-8.46	1.33	1.41
26	1H	1915	U	C2-N3	-8.46	1.31	1.37
26	1H	1203	G	N9-C4	8.45	1.44	1.38
26	1H	2250	G	C8-N7	8.44	1.36	1.30
26	14	1558	A	N9-C4	-8.44	1.32	1.37
26	14	140	A	C5-C6	-8.44	1.33	1.41
26	14	1784	A	N3-C4	-8.44	1.29	1.34
26	1H	2505	G	N1-C2	-8.42	1.31	1.37
26	1H	820	A	C6-N1	-8.41	1.29	1.35
26	1H	2451	A	C6-N1	-8.40	1.29	1.35
26	1H	2552	U	N1-C6	-8.40	1.30	1.38
26	14	2326	C	N1-C6	-8.40	1.32	1.37
30	21	119	ARG	CZ-NH1	-8.40	1.22	1.33
26	1H	1159	U	N1-C2	8.38	1.46	1.38
26	1H	1984	G	C6-N1	-8.38	1.33	1.39
26	14	1950	G	C5-C4	8.38	1.44	1.38
26	14	71	A	N9-C4	-8.38	1.32	1.37
31	39	65	TRP	CB-CG	-8.37	1.35	1.50
26	14	1762	A	C5-C4	8.37	1.44	1.38
26	1H	1951	U	C4-O4	8.37	1.30	1.23
5	42	79	GLU	CD-OE2	-8.36	1.16	1.25
26	1H	225	A	N9-C4	-8.36	1.32	1.37
26	1H	2609	U	N1-C6	-8.36	1.30	1.38
26	1H	628	G	C5-C4	-8.36	1.32	1.38
26	14	2607	G	C6-O6	8.36	1.31	1.24
26	1H	129	C	N1-C6	-8.33	1.32	1.37
26	1H	739	G	C5-C4	-8.33	1.32	1.38
26	1H	1417	C	N1-C6	-8.33	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
46	G8	84	ARG	CB-CG	8.32	1.75	1.52
26	1H	1621	U	N1-C6	-8.31	1.30	1.38
26	1H	2360	A	N9-C4	-8.30	1.32	1.37
26	14	1776	G	N3-C4	-8.30	1.29	1.35
26	14	929	G	N1-C2	8.29	1.44	1.37
26	14	1806	C	N1-C6	-8.26	1.32	1.37
26	1H	467	G	C5-C4	-8.26	1.32	1.38
26	1H	735	A	N7-C5	-8.26	1.34	1.39
30	21	116	VAL	CB-CG2	-8.26	1.35	1.52
26	1H	1799	G	N3-C4	8.25	1.41	1.35
26	1H	2448	A	N9-C4	-8.25	1.32	1.37
26	14	1583	A	C6-N1	8.25	1.41	1.35
23	2L	77	A	N9-C4	-8.25	1.32	1.37
26	1H	1157	G	N7-C5	-8.23	1.34	1.39
1	13	801	U	C2-N3	-8.23	1.31	1.37
26	14	1187	G	N3-C4	-8.23	1.29	1.35
26	1H	2311	A	N7-C5	-8.22	1.34	1.39
26	1H	2582	G	N7-C5	-8.22	1.34	1.39
26	14	1785	A	N7-C5	-8.21	1.34	1.39
26	1H	204	A	N3-C4	-8.21	1.29	1.34
26	1H	1616	A	N9-C4	-8.21	1.32	1.37
26	1H	1966	A	N9-C4	-8.20	1.32	1.37
26	1H	1823	G	C2-N3	-8.20	1.26	1.32
1	13	1400	C	N3-C4	8.20	1.39	1.33
26	1H	2557	G	N1-C2	-8.20	1.31	1.37
26	1H	1379	A	C6-N1	8.19	1.41	1.35
26	14	751	A	N9-C4	-8.19	1.32	1.37
26	14	1772	G	N7-C5	-8.19	1.34	1.39
26	1H	2311	A	N3-C4	-8.18	1.29	1.34
33	59	53	GLU	C-N	8.18	1.52	1.34
1	13	1408	A	N3-C4	-8.18	1.29	1.34
26	1H	1375	C	N1-C6	-8.18	1.32	1.37
26	1H	2073	C	C5-C6	-8.18	1.27	1.34
26	1H	759	G	N3-C4	-8.15	1.29	1.35
26	14	737	C	N1-C6	-8.15	1.32	1.37
26	1H	2392	A	N7-C5	-8.15	1.34	1.39
26	14	945	A	N9-C4	-8.14	1.32	1.37
26	14	1977	A	N9-C4	-8.14	1.32	1.37
26	1H	34	C	N1-C6	8.13	1.42	1.37
26	1H	2775	A	N3-C4	-8.13	1.29	1.34
26	14	74	A	N3-C4	-8.13	1.29	1.34
26	14	2581	G	N7-C5	-8.13	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	783	A	C6-N1	-8.12	1.29	1.35
26	1H	2033	A	C6-N6	-8.12	1.27	1.33
26	1H	2444	G	N7-C5	-8.12	1.34	1.39
26	14	1829	A	N7-C5	-8.12	1.34	1.39
26	1H	933	A	C6-N1	-8.11	1.29	1.35
26	1H	2297	C	N1-C6	-8.11	1.32	1.37
26	1H	2552	U	C2-N3	8.08	1.43	1.37
1	13	696	A	N9-C4	-8.07	1.33	1.37
26	1H	1011	G	N7-C5	-8.06	1.34	1.39
26	1H	1210	A	N9-C4	-8.06	1.33	1.37
1	13	1408	A	N9-C4	-8.06	1.33	1.37
26	1H	1678	G	N9-C4	-8.05	1.31	1.38
1	13	780	A	N9-C4	-8.05	1.33	1.37
1	13	47	C	N1-C6	-8.05	1.32	1.37
1	13	1500	A	N3-C4	-8.03	1.30	1.34
26	1H	844	C	N1-C6	-8.03	1.32	1.37
26	14	751	A	N3-C4	-8.02	1.30	1.34
26	1H	2242	G	N9-C8	-8.02	1.32	1.37
26	1H	2241	A	C6-N1	-8.01	1.29	1.35
26	1H	2575	C	N3-C4	-8.01	1.28	1.33
26	14	753	C	N1-C6	-8.01	1.32	1.37
26	1H	1689	A	N9-C4	-8.01	1.33	1.37
26	14	2725	A	N9-C4	-8.00	1.33	1.37
47	D5	80	ARG	CD-NE	-8.00	1.32	1.46
26	14	2593	U	C4-O4	7.99	1.30	1.23
26	14	821	A	N7-C5	-7.98	1.34	1.39
26	14	1983	C	N1-C6	-7.98	1.32	1.37
26	14	578	A	N9-C4	-7.98	1.33	1.37
26	14	2502	G	N3-C4	-7.97	1.29	1.35
26	1H	138	G	C6-N1	7.96	1.45	1.39
26	14	2346	A	N9-C4	-7.95	1.33	1.37
26	1H	471	A	N9-C4	-7.94	1.33	1.37
26	1H	1331	A	N9-C4	-7.94	1.33	1.37
26	1H	1161	C	N1-C6	7.93	1.42	1.37
26	1H	74	A	N7-C5	-7.93	1.34	1.39
46	G8	55	TYR	CB-CG	-7.92	1.39	1.51
1	13	1523	G	C5-C4	-7.92	1.32	1.38
26	1H	1904	G	C5-C4	-7.92	1.32	1.38
26	1H	776	G	N3-C4	-7.91	1.29	1.35
26	1H	2569	G	N3-C4	-7.91	1.29	1.35
26	14	204	A	C5-C4	-7.90	1.33	1.38
26	14	1422	G	N9-C4	-7.90	1.31	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1225	C	N1-C6	-7.90	1.32	1.37
29	11	122	ASP	CB-CG	7.90	1.68	1.51
38	45	124	LYS	C-N	-7.89	1.16	1.34
26	14	1999	C	N1-C6	-7.88	1.32	1.37
1	13	1434	A	N9-C4	-7.88	1.33	1.37
26	14	682	G	C6-N1	-7.88	1.34	1.39
26	1H	2336	A	N3-C4	7.87	1.39	1.34
26	14	324	A	C6-N1	-7.87	1.30	1.35
26	1H	122	G	C5-C6	-7.87	1.34	1.42
26	1H	2032	G	N9-C4	-7.86	1.31	1.38
26	14	756	C	N1-C6	-7.85	1.32	1.37
26	1H	2501	C	N1-C6	-7.84	1.32	1.37
26	14	1809	A	N9-C4	-7.84	1.33	1.37
26	1H	2392	A	N9-C8	7.84	1.44	1.37
26	1H	1130	U	C2-N3	-7.83	1.32	1.37
1	13	1474	G	N3-C4	-7.83	1.29	1.35
26	1H	140	A	N7-C5	-7.83	1.34	1.39
26	1H	1949	G	N3-C4	-7.83	1.29	1.35
26	1H	1788	C	N1-C6	-7.81	1.32	1.37
31	31	56	GLU	CD-OE1	-7.81	1.17	1.25
23	2L	19	G	N9-C4	-7.81	1.31	1.38
26	1H	871	U	C2-N3	7.80	1.43	1.37
26	1H	74	A	C5-C4	7.79	1.44	1.38
46	C5	84	ARG	CZ-NH2	-7.79	1.23	1.33
26	14	2062	A	N3-C4	7.79	1.39	1.34
26	1H	1237	A	C6-N1	-7.79	1.30	1.35
26	1H	1792	G	C6-N1	-7.79	1.34	1.39
26	1H	788	A	C6-N6	7.78	1.40	1.33
26	1H	1989	G	C6-O6	7.78	1.31	1.24
26	14	1816	G	N3-C4	7.78	1.40	1.35
26	1H	2062	A	N3-C4	7.76	1.39	1.34
26	1H	739	G	N3-C4	-7.76	1.30	1.35
26	1H	2070	G	N9-C8	-7.76	1.32	1.37
8	7E	102	ARG	NE-CZ	-7.75	1.23	1.33
22	1K	59	A	N9-C4	7.75	1.42	1.37
1	13	974	A	N9-C4	-7.75	1.33	1.37
26	14	676	A	C5-C4	7.74	1.44	1.38
26	1H	2070	G	N3-C4	7.74	1.40	1.35
26	14	1853	A	N9-C4	-7.73	1.33	1.37
26	1H	73	A	N9-C8	-7.73	1.31	1.37
26	1H	2518	A	N7-C5	-7.73	1.34	1.39
26	1H	1689	A	N3-C4	-7.73	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1258	C	N1-C6	-7.72	1.32	1.37
26	1H	2577	A	N3-C4	-7.72	1.30	1.34
26	1H	2311	A	N9-C4	-7.72	1.33	1.37
55	M5	56	GLU	CG-CD	7.72	1.63	1.51
31	31	65	TRP	CB-CG	-7.71	1.36	1.50
26	14	2629	A	N9-C4	7.71	1.42	1.37
26	14	2444	G	C6-N1	-7.71	1.34	1.39
26	1H	1899	G	N9-C4	-7.70	1.31	1.38
26	1H	1799	G	N9-C4	7.70	1.44	1.38
1	13	760	G	N7-C5	-7.68	1.34	1.39
26	1H	777	A	N9-C4	-7.68	1.33	1.37
26	1H	2502	G	C8-N7	7.68	1.35	1.30
26	1H	2572	A	N3-C4	-7.66	1.30	1.34
26	14	947	G	C6-O6	7.66	1.31	1.24
26	14	30	G	N7-C5	-7.66	1.34	1.39
26	1H	952	G	C5-C6	-7.65	1.34	1.42
30	29	151	TYR	CE2-CZ	7.64	1.48	1.38
26	14	330	A	C5-C4	7.64	1.44	1.38
26	14	2068	U	C2-O2	7.63	1.29	1.22
26	14	2452	C	N1-C6	-7.62	1.32	1.37
1	13	1500	A	C6-N1	-7.62	1.30	1.35
29	11	30	GLU	CB-CG	7.62	1.66	1.52
26	1H	2572	A	C6-N1	-7.62	1.30	1.35
26	1H	2280	G	C5-C6	7.61	1.50	1.42
1	13	694	A	N3-C4	-7.61	1.30	1.34
26	14	2358	G	N7-C5	7.61	1.43	1.39
26	14	2448	A	N9-C4	-7.61	1.33	1.37
26	1H	1829	A	C5-C4	-7.61	1.33	1.38
26	1H	988	A	N7-C5	-7.60	1.34	1.39
26	1H	2280	G	N9-C8	-7.60	1.32	1.37
27	1J	89(A)	A	N3-C4	7.60	1.39	1.34
26	1H	2296	U	C2-N3	7.60	1.43	1.37
26	1H	2689	U	N3-C4	-7.59	1.31	1.38
26	1H	1979	C	N3-C4	-7.58	1.28	1.33
26	1H	615	G	C6-N1	7.58	1.44	1.39
26	14	2424	C	N3-C4	-7.58	1.28	1.33
26	1H	866	A	N3-C4	7.58	1.39	1.34
26	14	529	A	N3-C4	-7.57	1.30	1.34
26	1H	628	G	C6-N1	-7.57	1.34	1.39
26	14	755	C	C4-C5	-7.56	1.36	1.43
26	14	483	A	N3-C4	-7.56	1.30	1.34
26	14	759	G	N3-C4	-7.55	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	503	A	N3-C4	-7.55	1.30	1.34
26	1H	729	G	N7-C5	-7.55	1.34	1.39
26	1H	2346	A	C5-C4	7.54	1.44	1.38
26	1H	2243	U	N1-C6	-7.53	1.31	1.38
26	1H	1786	A	C5-C4	7.52	1.44	1.38
26	1H	1658	C	C2-N3	7.52	1.41	1.35
26	14	674	G	N7-C5	7.51	1.43	1.39
26	1H	2790	A	N9-C4	7.50	1.42	1.37
26	1H	473	G	C6-N1	-7.50	1.34	1.39
26	1H	966	G	N9-C8	-7.50	1.32	1.37
26	1H	2573	C	N1-C6	-7.50	1.32	1.37
26	1H	766	C	N1-C6	-7.50	1.32	1.37
26	1H	1241	A	N9-C4	-7.49	1.33	1.37
26	1H	705	A	C5-C6	-7.49	1.34	1.41
26	14	863	A	N9-C4	7.49	1.42	1.37
26	1H	735	A	C5-C4	-7.48	1.33	1.38
26	1H	1973	G	N1-C2	-7.47	1.31	1.37
26	14	1308	A	N3-C4	-7.47	1.30	1.34
26	14	929	G	N7-C5	-7.47	1.34	1.39
43	95	81	TYR	CE1-CZ	-7.46	1.28	1.38
26	1H	1812	A	C6-N1	-7.45	1.30	1.35
26	14	472	A	N3-C4	-7.45	1.30	1.34
26	14	1026	U	C2-N3	7.45	1.43	1.37
26	14	2724	C	N1-C6	-7.45	1.32	1.37
26	1H	2607	G	C6-O6	7.45	1.30	1.24
26	1H	2459	A	N3-C4	-7.44	1.30	1.34
26	1H	2069	G	N9-C8	-7.43	1.32	1.37
26	1H	676	A	C5-C6	-7.43	1.34	1.41
26	1H	939	G	N3-C4	-7.43	1.30	1.35
26	1H	735	A	N9-C4	-7.42	1.33	1.37
1	13	810	C	N1-C6	-7.42	1.32	1.37
26	1H	251	A	C6-N1	-7.42	1.30	1.35
26	1H	587	C	N1-C6	-7.42	1.32	1.37
26	14	1392	A	N9-C8	-7.42	1.31	1.37
26	14	2495	G	C2-N3	-7.42	1.26	1.32
26	1H	828	U	C2-O2	7.42	1.29	1.22
26	14	1283	G	N9-C8	-7.42	1.32	1.37
26	14	1309	G	C2-N3	-7.40	1.26	1.32
26	1H	1623	G	N9-C8	-7.39	1.32	1.37
26	1H	1301	A	C6-N6	7.39	1.39	1.33
26	1H	1789	A	N3-C4	-7.39	1.30	1.34
26	1H	2688	U	C2-N3	-7.39	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1621	U	N1-C2	-7.38	1.31	1.38
26	1H	1698	A	C5-C6	-7.38	1.34	1.41
26	1H	1972	A	N9-C8	-7.38	1.31	1.37
26	14	2873	A	N3-C4	-7.38	1.30	1.34
26	1H	395	U	C2-N3	-7.37	1.32	1.37
26	1H	1670	C	N1-C6	-7.37	1.32	1.37
26	14	2445	G	N9-C8	-7.36	1.32	1.37
26	14	911	A	N7-C5	-7.36	1.34	1.39
26	14	959	A	N3-C4	7.36	1.39	1.34
26	1H	629	G	C6-N1	-7.35	1.34	1.39
26	14	2289	G	N7-C5	7.35	1.43	1.39
1	1G	1523	G	N3-C4	-7.35	1.30	1.35
26	1H	824	A	N9-C4	-7.35	1.33	1.37
26	1H	1786	A	N9-C8	7.34	1.43	1.37
26	1H	1814	G	N7-C5	-7.33	1.34	1.39
26	1H	2065	C	N3-C4	-7.33	1.28	1.33
26	14	879	G	N9-C4	7.33	1.43	1.38
26	1H	616	A	N9-C4	-7.33	1.33	1.37
26	1H	1195	G	N7-C5	7.33	1.43	1.39
26	14	1950	G	C6-N1	7.33	1.44	1.39
26	1H	1765	C	N3-C4	-7.32	1.28	1.33
26	1H	704	G	N3-C4	-7.32	1.30	1.35
26	1H	1829	A	C6-N1	-7.32	1.30	1.35
26	1H	551	G	N3-C4	-7.32	1.30	1.35
26	14	2510	C	N1-C6	-7.31	1.32	1.37
26	14	1904	G	N9-C8	-7.31	1.32	1.37
26	1H	933	A	C5-C4	-7.30	1.33	1.38
26	1H	774	A	N1-C2	7.30	1.41	1.34
26	1H	939	G	C6-N1	-7.30	1.34	1.39
26	1H	1807	G	N7-C5	-7.30	1.34	1.39
26	1H	1021	A	C5-C4	7.30	1.43	1.38
16	7I	20	VAL	CB-CG1	-7.30	1.37	1.52
26	1H	141	A	N9-C8	7.29	1.43	1.37
41	75	13	ARG	CD-NE	-7.29	1.34	1.46
26	14	1624	G	N7-C5	-7.29	1.34	1.39
57	3L	34	U	N1-C2	7.29	1.45	1.38
55	M5	34	TRP	CB-CG	7.29	1.63	1.50
26	1H	1349	A	C5-C4	7.28	1.43	1.38
26	1H	2611	U	C2-N3	-7.28	1.32	1.37
26	1H	1274	A	N7-C5	-7.27	1.34	1.39
26	1H	735	A	C5-C6	-7.27	1.34	1.41
26	14	782	A	N9-C4	7.27	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	28	A	C5-C6	-7.26	1.34	1.41
26	1H	1946	U	C2-N3	-7.26	1.32	1.37
26	1H	556	G	C6-N1	-7.26	1.34	1.39
1	13	742	G	N9-C4	-7.26	1.32	1.38
26	1H	945	A	C2-N3	7.25	1.40	1.33
26	1H	473	G	N1-C2	-7.25	1.31	1.37
26	14	2288	A	N9-C4	7.24	1.42	1.37
30	21	119	ARG	NE-CZ	-7.24	1.23	1.33
26	1H	765	G	N3-C4	-7.24	1.30	1.35
26	14	2690	C	N1-C6	-7.24	1.32	1.37
26	1H	2503	A	N7-C5	-7.23	1.34	1.39
1	13	938	A	N9-C4	-7.23	1.33	1.37
23	2K	17	C	C2-N3	7.23	1.41	1.35
26	14	1638	C	N1-C6	-7.23	1.32	1.37
26	1H	530	G	N7-C5	7.22	1.43	1.39
26	1H	2065	C	C2-N3	-7.22	1.29	1.35
26	1H	669	G	C6-N1	-7.22	1.34	1.39
26	14	204	A	N3-C4	-7.22	1.30	1.34
26	1H	581	C	N1-C2	-7.22	1.32	1.40
26	1H	1563	G	C6-N1	-7.21	1.34	1.39
1	13	520	A	N9-C4	-7.21	1.33	1.37
25	4K	12	A	N9-C4	7.21	1.42	1.37
26	14	2839	G	N7-C5	-7.21	1.34	1.39
26	1H	1783	A	N9-C8	-7.21	1.31	1.37
26	1H	735	A	N9-C8	-7.20	1.31	1.37
26	14	2506	U	C2-N3	7.20	1.42	1.37
26	14	211	A	C5-C6	-7.20	1.34	1.41
26	14	1393	A	N3-C4	-7.20	1.30	1.34
26	1H	1787	A	C6-N1	-7.19	1.30	1.35
26	1H	474	G	N3-C4	-7.19	1.30	1.35
26	1H	533	G	C6-N1	-7.19	1.34	1.39
26	1H	443	A	N3-C4	7.19	1.39	1.34
26	1H	608	A	N3-C4	-7.18	1.30	1.34
26	1H	909	A	N3-C4	-7.18	1.30	1.34
26	14	1763	G	N7-C5	7.17	1.43	1.39
1	1G	117	G	C6-N1	7.17	1.44	1.39
26	14	729	G	C6-N1	7.17	1.44	1.39
26	14	1347	G	C5-C4	-7.17	1.33	1.38
23	2K	38	A	N9-C4	-7.15	1.33	1.37
26	1H	2055	C	C2-N3	-7.14	1.30	1.35
26	1H	132	G	C5-C4	7.14	1.43	1.38
26	14	1802	A	N9-C4	-7.14	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2584	U	N3-C4	-7.13	1.32	1.38
26	14	695	G	C8-N7	-7.13	1.26	1.30
25	4K	14	A	N9-C4	7.13	1.42	1.37
26	14	1633	G	N7-C5	-7.13	1.34	1.39
26	1H	1289	C	N1-C6	-7.12	1.32	1.37
26	1H	1623	G	C6-N1	-7.12	1.34	1.39
26	1H	1602	U	C4-O4	7.12	1.29	1.23
26	1H	2256	G	N1-C2	-7.12	1.32	1.37
26	1H	1610	A	C8-N7	-7.12	1.26	1.31
26	1H	2019	A	C5-C6	-7.11	1.34	1.41
26	1H	2427	C	C2-O2	-7.11	1.18	1.24
26	1H	2351	G	C6-N1	-7.10	1.34	1.39
26	14	2256	G	N1-C2	-7.10	1.32	1.37
26	1H	1285	G	C6-O6	7.10	1.30	1.24
26	1H	399	G	N3-C4	-7.10	1.30	1.35
26	1H	528	A	N9-C8	7.09	1.43	1.37
26	1H	1332	G	C5-C6	-7.09	1.35	1.42
26	14	252	G	C6-N1	-7.09	1.34	1.39
26	14	1613	G	C6-N1	-7.09	1.34	1.39
26	1H	739	G	C2-N3	-7.09	1.27	1.32
26	14	1313	U	C2-O2	-7.09	1.16	1.22
26	1H	297	C	N1-C6	-7.08	1.32	1.37
1	13	867	G	C5-C6	7.08	1.49	1.42
26	1H	793	A	N7-C5	-7.08	1.34	1.39
26	14	270	A	N9-C4	-7.08	1.33	1.37
26	14	1302	A	C6-N1	-7.08	1.30	1.35
26	1H	2506	U	C2-O2	7.08	1.28	1.22
31	31	56	GLU	CD-OE2	-7.08	1.17	1.25
41	75	13	ARG	NE-CZ	-7.08	1.23	1.33
26	1H	1553	A	C5-C4	-7.08	1.33	1.38
26	14	2490	G	N9-C8	7.07	1.42	1.37
55	Q8	14	VAL	CB-CG2	-7.07	1.38	1.52
1	13	543	C	N1-C6	-7.06	1.32	1.37
26	14	428	A	N9-C4	7.06	1.42	1.37
23	2K	17	C	N1-C6	7.06	1.41	1.37
26	1H	2590	A	C6-N1	-7.06	1.30	1.35
26	1H	751	A	C5-C4	-7.06	1.33	1.38
42	C8	90	VAL	CB-CG2	7.06	1.67	1.52
26	1H	1336	A	C6-N1	-7.06	1.30	1.35
26	14	432	A	C5-C6	-7.06	1.34	1.41
26	1H	2578	G	N1-C2	-7.06	1.32	1.37
26	1H	1617	C	N1-C6	-7.05	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	94	G	C6-N1	7.05	1.44	1.39
26	1H	616	A	N3-C4	-7.05	1.30	1.34
26	14	1619	G	C5-C4	-7.05	1.33	1.38
26	1H	1003	G	N9-C8	-7.04	1.32	1.37
1	13	760	G	C6-N1	7.04	1.44	1.39
2	12	170	GLU	CD-OE2	-7.04	1.18	1.25
26	14	2595	G	N9-C4	-7.04	1.32	1.38
26	1H	446	G	N3-C4	7.04	1.40	1.35
26	1H	458	G	N3-C4	-7.03	1.30	1.35
26	1H	461	C	N1-C6	-7.03	1.32	1.37
26	1H	1399	C	N1-C6	7.03	1.41	1.37
26	1H	850	C	N1-C6	-7.03	1.32	1.37
26	14	1316	U	C2-N3	-7.03	1.32	1.37
26	1H	698	C	C5-C6	-7.02	1.28	1.34
26	1H	1639	U	C2-O2	-7.02	1.16	1.22
26	1H	2561	A	N3-C4	-7.01	1.30	1.34
26	14	2447	G	N9-C8	-7.01	1.32	1.37
22	1K	76	A	C5-C4	7.01	1.43	1.38
26	14	2776	A	N9-C4	7.00	1.42	1.37
26	14	1785	A	N9-C8	-7.00	1.32	1.37
1	13	715	A	N3-C4	-7.00	1.30	1.34
24	3K	76	A	C5-C6	-7.00	1.34	1.41
26	14	2461	C	N1-C6	-7.00	1.32	1.37
26	14	252	G	C5-C4	-6.99	1.33	1.38
26	14	739	G	N3-C4	-6.99	1.30	1.35
26	14	792	G	C6-N1	-6.99	1.34	1.39
26	14	2329	G	C2-N3	6.99	1.38	1.32
26	14	1285	G	N9-C8	-6.98	1.32	1.37
26	1H	1908	C	N1-C6	-6.98	1.32	1.37
26	1H	2713	A	N7-C5	-6.98	1.35	1.39
26	14	2490	G	C5-C4	6.98	1.43	1.38
26	1H	1332	G	C5-C4	6.97	1.43	1.38
26	1H	2453	A	N7-C5	-6.97	1.35	1.39
32	41	14	GLU	CG-CD	6.97	1.62	1.51
26	1H	1649	G	N7-C5	-6.97	1.35	1.39
1	13	439	A	N9-C4	-6.97	1.33	1.37
26	1H	690	G	C8-N7	-6.97	1.26	1.30
26	1H	472	A	N9-C4	-6.96	1.33	1.37
26	1H	1108	U	P-O5'	6.96	1.66	1.59
26	14	1966	A	N9-C8	-6.96	1.32	1.37
26	1H	1968	G	N9-C8	-6.96	1.32	1.37
26	1H	663	G	N3-C4	-6.96	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1843	C	N3-C4	-6.96	1.29	1.33
26	1H	2409	G	C5-C6	-6.95	1.35	1.42
26	14	2049	G	N9-C4	-6.95	1.32	1.38
26	14	1697	G	N9-C4	-6.95	1.32	1.38
26	1H	271(C)	U	N1-C2	6.95	1.44	1.38
41	B8	74	ARG	NE-CZ	-6.95	1.24	1.33
26	1H	2019	A	N7-C5	-6.94	1.35	1.39
26	14	739	G	C2-N3	-6.94	1.27	1.32
26	14	2448	A	N3-C4	-6.94	1.30	1.34
26	1H	420	C	N1-C6	-6.93	1.32	1.37
26	14	1913	A	N3-C4	6.93	1.39	1.34
26	1H	1286	A	C5-C4	-6.92	1.33	1.38
26	1H	1021	A	C5-C6	-6.92	1.34	1.41
26	1H	2023	G	N3-C4	-6.92	1.30	1.35
26	1H	2432	A	N3-C4	-6.92	1.30	1.34
26	1H	1662	C	N1-C6	-6.92	1.33	1.37
26	14	1346	G	C5-C4	-6.92	1.33	1.38
26	14	2723	C	N3-C4	-6.92	1.29	1.33
26	1H	2320	A	N9-C4	6.91	1.42	1.37
1	1G	894	G	N3-C4	-6.91	1.30	1.35
26	1H	2012	G	C5-C4	-6.90	1.33	1.38
26	1H	783	A	N9-C8	6.90	1.43	1.37
30	29	44	TYR	CG-CD1	-6.89	1.30	1.39
26	1H	2430	A	C6-N1	6.89	1.40	1.35
26	1H	2581	G	N7-C5	-6.89	1.35	1.39
46	C5	84	ARG	NE-CZ	-6.89	1.24	1.33
26	1H	1142(A)	A	N3-C4	-6.88	1.30	1.34
26	1H	1964	G	N9-C8	-6.88	1.33	1.37
26	14	1558	A	N3-C4	-6.88	1.30	1.34
1	13	575	G	C6-N1	-6.88	1.34	1.39
26	1H	213	A	N7-C5	6.88	1.43	1.39
1	13	733	A	C5-C4	-6.87	1.33	1.38
26	1H	35	G	C6-N1	-6.87	1.34	1.39
26	1H	945	A	N1-C2	6.87	1.40	1.34
26	1H	1027	A	P-O5'	6.87	1.66	1.59
26	14	1021	A	N9-C4	-6.87	1.33	1.37
26	1H	1128	A	C6-N6	-6.86	1.28	1.33
26	1H	695	G	N3-C4	-6.86	1.30	1.35
26	1H	1185	C	N1-C6	-6.86	1.33	1.37
26	1H	2062	A	N7-C5	6.86	1.43	1.39
26	1H	2017	U	N1-C2	-6.86	1.32	1.38
26	14	690	G	N9-C8	-6.86	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1325	G	N7-C5	-6.85	1.35	1.39
26	1H	258	G	C6-N1	-6.85	1.34	1.39
26	1H	2713	A	C5-C6	-6.85	1.34	1.41
26	1H	780	G	N9-C8	-6.85	1.33	1.37
26	1H	2693	A	N9-C4	6.85	1.42	1.37
26	1H	2490	G	N9-C4	-6.84	1.32	1.38
26	14	461	C	N1-C6	-6.84	1.33	1.37
1	13	1401	G	N3-C4	-6.84	1.30	1.35
26	1H	2031	A	C6-N1	6.84	1.40	1.35
26	14	190	A	N9-C4	-6.84	1.33	1.37
26	14	1792	G	N7-C5	-6.83	1.35	1.39
26	1H	35	G	N1-C2	-6.83	1.32	1.37
26	14	1952	A	C6-N6	-6.83	1.28	1.33
26	1H	1910	G	C6-N1	-6.83	1.34	1.39
26	1H	2287	A	C5-C6	-6.82	1.34	1.41
1	13	1416	G	C6-N1	-6.82	1.34	1.39
26	14	547	A	N9-C4	6.82	1.42	1.37
26	14	1999	C	C2-N3	-6.82	1.30	1.35
26	1H	1553	A	N9-C8	-6.82	1.32	1.37
26	1H	1197	G	N9-C8	-6.82	1.33	1.37
26	14	2518	A	C5-C6	-6.82	1.34	1.41
26	1H	26	G	N7-C5	-6.81	1.35	1.39
26	1H	71	A	N7-C5	-6.81	1.35	1.39
26	1H	663	G	N9-C8	-6.81	1.33	1.37
1	13	1502	A	N9-C4	-6.80	1.33	1.37
26	1H	132	G	C6-O6	6.80	1.30	1.24
26	1H	502	A	N3-C4	-6.80	1.30	1.34
26	1H	227	A	N3-C4	-6.80	1.30	1.34
26	1H	332	A	N9-C4	-6.80	1.33	1.37
1	1G	117	G	C6-O6	6.79	1.30	1.24
23	2K	9	G	C6-N1	6.79	1.44	1.39
26	14	704	G	N9-C4	-6.79	1.32	1.38
26	1H	2561	A	C6-N1	-6.78	1.30	1.35
26	1H	2450	A	C6-N1	-6.78	1.30	1.35
26	1H	1624	G	C5-C4	-6.78	1.33	1.38
1	13	500	G	N3-C4	6.78	1.40	1.35
26	1H	607	U	C2-N3	-6.78	1.33	1.37
26	1H	1422	G	N7-C5	-6.78	1.35	1.39
26	1H	703	U	C2-O2	-6.77	1.16	1.22
26	14	1961	C	N1-C6	-6.77	1.33	1.37
26	14	73	A	N9-C8	-6.77	1.32	1.37
26	14	186	G	C6-N1	-6.77	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	386	G	C6-N1	-6.77	1.34	1.39
26	14	1616	A	C5-C6	-6.77	1.34	1.41
26	1H	627	A	N9-C4	-6.76	1.33	1.37
26	1H	1566	A	N9-C4	-6.76	1.33	1.37
26	14	2818	G	N9-C4	-6.76	1.32	1.38
26	1H	2614	A	N7-C5	6.76	1.43	1.39
46	C5	84	ARG	CZ-NH1	-6.76	1.24	1.33
22	1K	64	G	N9-C4	6.76	1.43	1.38
26	1H	322	A	N9-C4	-6.76	1.33	1.37
26	14	352	G	C5-C4	6.76	1.43	1.38
26	1H	1311	G	N9-C8	-6.75	1.33	1.37
26	1H	1992	G	N3-C4	6.75	1.40	1.35
26	1H	842	G	N9-C4	-6.75	1.32	1.38
26	1H	1888	G	N9-C4	6.75	1.43	1.38
26	1H	195	A	C6-N1	6.75	1.40	1.35
26	1H	447	A	C6-N1	-6.74	1.30	1.35
26	14	1261	C	N3-C4	-6.74	1.29	1.33
26	1H	1829	A	N3-C4	-6.74	1.30	1.34
26	14	444	C	N1-C6	-6.74	1.33	1.37
26	1H	2404	C	N1-C6	-6.74	1.33	1.37
31	31	59	TYR	CD1-CE1	-6.74	1.29	1.39
26	1H	1192	G	C6-N1	-6.73	1.34	1.39
26	14	795	C	N3-C4	-6.73	1.29	1.33
26	1H	1110	G	P-O5'	6.73	1.66	1.59
26	1H	2448	A	N3-C4	-6.73	1.30	1.34
26	14	587	C	N1-C6	-6.73	1.33	1.37
26	1H	836	G	C6-O6	6.73	1.30	1.24
26	1H	1278	A	N9-C8	-6.73	1.32	1.37
26	1H	2579	C	N1-C6	-6.73	1.33	1.37
38	88	140	ALA	CA-CB	6.73	1.66	1.52
26	1H	1996	C	N1-C6	-6.72	1.33	1.37
26	1H	2065	C	N1-C6	-6.72	1.33	1.37
26	1H	1332	G	N9-C4	-6.72	1.32	1.38
26	1H	252	G	N9-C8	-6.72	1.33	1.37
26	1H	690	G	N9-C8	-6.72	1.33	1.37
26	1H	2689	U	C4-C5	6.72	1.49	1.43
26	14	74	A	C5-C6	-6.72	1.35	1.41
26	14	2083	G	N3-C4	-6.72	1.30	1.35
26	1H	808	G	N7-C5	-6.72	1.35	1.39
26	1H	1556	C	N1-C6	-6.72	1.33	1.37
26	1H	808	G	N9-C4	-6.71	1.32	1.38
26	1H	805	G	N9-C8	-6.71	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1121	C	N3-C4	-6.71	1.29	1.33
46	G8	55	TYR	CG-CD1	-6.71	1.30	1.39
26	14	53	A	N3-C4	-6.71	1.30	1.34
26	14	328	U	N1-C6	-6.71	1.31	1.38
26	1H	829	A	N9-C8	-6.71	1.32	1.37
26	1H	2457	U	C4-O4	-6.71	1.18	1.23
26	1H	2259	G	C5-C4	-6.71	1.33	1.38
1	1G	482	A	N3-C4	-6.71	1.30	1.34
1	13	965	A	C6-N1	6.70	1.40	1.35
26	1H	1121	C	N1-C6	-6.70	1.33	1.37
45	B5	15	GLU	CG-CD	6.70	1.61	1.51
1	13	439	A	N3-C4	-6.70	1.30	1.34
1	13	1392	G	N3-C4	-6.70	1.30	1.35
26	1H	1678	G	N9-C8	6.70	1.42	1.37
26	1H	1889	A	N9-C4	-6.70	1.33	1.37
26	14	2249	U	C4-O4	6.69	1.29	1.23
41	B8	74	ARG	CD-NE	-6.69	1.35	1.46
26	14	810	U	C2-N3	6.69	1.42	1.37
26	1H	55	G	C8-N7	-6.69	1.26	1.30
26	1H	2333	A	N9-C4	6.68	1.41	1.37
26	1H	1354	A	N9-C4	-6.68	1.33	1.37
26	14	2009	G	N3-C4	-6.68	1.30	1.35
26	1H	1822	G	C2-N3	-6.68	1.27	1.32
30	29	200	GLU	CB-CG	6.67	1.64	1.52
26	1H	2080	G	N9-C8	-6.67	1.33	1.37
26	1H	18	C	N1-C2	-6.67	1.33	1.40
26	1H	1901	A	N9-C4	6.67	1.41	1.37
26	1H	2685	G	C6-O6	6.67	1.30	1.24
26	1H	860	U	N1-C2	6.67	1.44	1.38
26	1H	1108	U	C4'-C3'	6.67	1.60	1.53
26	1H	862	G	C6-N1	-6.67	1.34	1.39
26	14	774	A	N9-C8	6.67	1.43	1.37
26	1H	1108	U	O3'-P	6.66	1.69	1.61
30	29	44	TYR	CB-CG	-6.66	1.41	1.51
26	1H	690	G	C2-N3	6.66	1.38	1.32
26	1H	727	A	C6-N1	-6.66	1.30	1.35
26	1H	911	A	C6-N1	-6.66	1.30	1.35
26	1H	1167	U	N1-C2	-6.66	1.32	1.38
26	14	1332	G	C2-N3	6.66	1.38	1.32
26	1H	479	A	N9-C4	-6.65	1.33	1.37
26	14	2361	A	N9-C4	-6.65	1.33	1.37
26	14	2385	C	N3-C4	6.65	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	2595	G	C5-C6	-6.65	1.35	1.42
26	1H	18	C	N1-C6	-6.65	1.33	1.37
26	1H	2073	C	C2-N3	-6.65	1.30	1.35
26	1H	104	U	N1-C2	-6.64	1.32	1.38
26	14	1800	C	N1-C6	-6.64	1.33	1.37
33	51	167	GLU	CD-OE1	-6.64	1.18	1.25
1	1G	1469	G	C5-C4	6.64	1.43	1.38
26	1H	411	G	C6-N1	-6.64	1.34	1.39
26	1H	933	A	N9-C8	-6.64	1.32	1.37
26	1H	1313	U	C4-C5	-6.64	1.37	1.43
26	1H	2469	A	C5-C6	-6.63	1.35	1.41
26	1H	74	A	N3-C4	-6.63	1.30	1.34
26	1H	478	A	C5-C4	-6.63	1.34	1.38
26	1H	928	G	N9-C4	-6.63	1.32	1.38
26	14	2243	U	N1-C6	-6.63	1.31	1.38
26	1H	140	A	N3-C4	-6.62	1.30	1.34
26	14	326	G	C6-O6	6.62	1.30	1.24
26	14	1789	A	N3-C4	-6.62	1.30	1.34
26	1H	1309	G	N3-C4	-6.62	1.30	1.35
26	1H	2390	U	C4-C5	-6.62	1.37	1.43
37	78	19	VAL	CB-CG2	6.62	1.66	1.52
26	14	1789	A	C5-C4	-6.62	1.34	1.38
26	1H	1939	U	C2-N3	-6.62	1.33	1.37
26	1H	849	A	N3-C4	-6.61	1.30	1.34
26	1H	1241	A	C5-C6	-6.61	1.35	1.41
26	1H	1332	G	N9-C8	6.61	1.42	1.37
26	14	909	A	C5-C4	-6.61	1.34	1.38
26	1H	1945	G	C6-N1	-6.61	1.34	1.39
26	1H	2055	C	N3-C4	-6.61	1.29	1.33
26	1H	2361	A	N3-C4	-6.61	1.30	1.34
26	1H	2509	G	N9-C8	-6.61	1.33	1.37
26	14	1989	G	N3-C4	-6.61	1.30	1.35
26	14	1349	A	N9-C8	6.60	1.43	1.37
26	1H	564	C	N1-C6	-6.60	1.33	1.37
26	1H	2296	U	N3-C4	6.60	1.44	1.38
26	1H	2584	U	C4-C5	6.60	1.49	1.43
26	1H	1647	G	N1-C2	-6.60	1.32	1.37
38	45	60	ARG	NE-CZ	-6.59	1.24	1.33
26	1H	1109	C	P-O5'	6.59	1.66	1.59
27	1J	102	G	N7-C5	6.59	1.43	1.39
1	13	1429	C	N1-C6	-6.59	1.33	1.37
26	1H	390	A	N3-C4	-6.59	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	621	A	C5-C6	-6.59	1.35	1.41
26	14	129	C	N1-C6	-6.59	1.33	1.37
26	14	2621	A	N9-C4	-6.59	1.33	1.37
26	1H	768	G	C5-C4	-6.58	1.33	1.38
14	5A	43	CYS	CB-SG	-6.58	1.71	1.82
26	1H	1321	A	N9-C4	-6.58	1.33	1.37
26	1H	2064	C	N3-C4	-6.58	1.29	1.33
26	1H	2451	A	N3-C4	-6.58	1.30	1.34
26	14	21	A	N3-C4	-6.58	1.30	1.34
26	14	215	G	N9-C8	-6.58	1.33	1.37
26	1H	2346	A	N7-C5	-6.58	1.35	1.39
26	1H	1826	G	C8-N7	-6.58	1.27	1.30
26	1H	1829	A	N9-C4	-6.57	1.33	1.37
26	1H	838	C	N1-C6	-6.57	1.33	1.37
26	14	125	G	N7-C5	6.57	1.43	1.39
26	1H	429	A	N3-C4	-6.57	1.30	1.34
26	1H	1331	A	N3-C4	-6.57	1.30	1.34
26	1H	2469	A	N9-C4	-6.57	1.33	1.37
26	1H	2518	A	C5-C6	-6.57	1.35	1.41
1	1G	293	G	C6-N1	-6.57	1.34	1.39
26	14	788	A	N3-C4	6.56	1.38	1.34
26	14	1655	A	C5-C4	-6.56	1.34	1.38
26	14	2252	G	C6-N1	-6.56	1.34	1.39
26	1H	2288	A	N3-C4	6.56	1.38	1.34
26	14	71	A	C5-C4	6.56	1.43	1.38
1	13	1125	U	C2-N3	6.56	1.42	1.37
26	1H	691	C	N1-C6	-6.55	1.33	1.37
26	14	2555	U	N1-C2	-6.55	1.32	1.38
1	1G	231	G	N3-C4	-6.55	1.30	1.35
26	14	2327	A	N9-C4	-6.55	1.33	1.37
26	1H	1644	C	N3-C4	-6.55	1.29	1.33
26	1H	1950	G	C2-N2	6.55	1.41	1.34
26	14	2267	A	N9-C4	6.55	1.41	1.37
26	1H	749	C	N1-C6	-6.54	1.33	1.37
26	14	2434	A	N3-C4	-6.54	1.30	1.34
26	14	2878	U	C4-O4	6.54	1.28	1.23
1	1G	482	A	N9-C4	-6.54	1.33	1.37
1	13	1486	G	N9-C4	-6.54	1.32	1.38
26	1H	1158	C	C2-N3	-6.54	1.30	1.35
26	1H	2052	G	N9-C8	-6.53	1.33	1.37
26	1H	2373	G	N9-C8	-6.53	1.33	1.37
26	1H	2510	C	N3-C4	-6.53	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	447	A	C6-N1	-6.53	1.30	1.35
26	1H	448	U	N1-C6	-6.53	1.32	1.38
1	13	570	G	N3-C4	-6.53	1.30	1.35
26	14	810	U	C4-O4	6.53	1.28	1.23
26	1H	675	A	C6-N1	-6.53	1.30	1.35
26	1H	245	G	N7-C5	-6.52	1.35	1.39
26	14	1355	G	N7-C5	-6.52	1.35	1.39
26	1H	474	G	C2-N3	-6.52	1.27	1.32
26	1H	528	A	C5-C4	6.52	1.43	1.38
26	1H	2226	C	N3-C4	-6.52	1.29	1.33
26	1H	798	G	N9-C4	-6.52	1.32	1.38
1	13	1432	G	C6-O6	6.52	1.30	1.24
26	1H	1681	G	N7-C5	6.52	1.43	1.39
26	1H	1286	A	N9-C8	-6.52	1.32	1.37
26	1H	1311	G	N7-C5	-6.52	1.35	1.39
26	1H	1496	A	C6-N1	6.52	1.40	1.35
26	1H	2542	A	N9-C4	-6.51	1.33	1.37
26	14	215	G	N3-C4	6.51	1.40	1.35
26	1H	432	A	C5-C6	-6.51	1.35	1.41
26	14	1607	C	N3-C4	6.51	1.38	1.33
26	1H	120	U	N3-C4	-6.51	1.32	1.38
26	1H	2046	G	C5-C4	-6.51	1.33	1.38
26	1H	1026	U	C2-N3	6.51	1.42	1.37
26	1H	1156	A	C6-N1	-6.51	1.30	1.35
26	1H	2819	G	C5-C4	-6.50	1.33	1.38
26	1H	2057	A	N3-C4	-6.50	1.30	1.34
26	1H	676	A	N3-C4	-6.50	1.30	1.34
26	1H	2059	A	N3-C4	-6.50	1.30	1.34
1	13	1418	A	N9-C4	-6.50	1.33	1.37
26	1H	54	G	C8-N7	-6.50	1.27	1.30
26	1H	695	G	C6-N1	-6.49	1.35	1.39
26	1H	1973	G	C6-N1	-6.49	1.35	1.39
26	1H	1190	G	N9-C4	-6.49	1.32	1.38
26	1H	1945	G	C5-C4	-6.49	1.33	1.38
26	1H	1968	G	C5-C4	-6.49	1.33	1.38
26	14	808	G	N9-C8	-6.49	1.33	1.37
26	14	483	A	N9-C4	-6.49	1.33	1.37
26	14	1346	G	C6-N1	-6.48	1.35	1.39
26	1H	140	A	N9-C8	6.48	1.43	1.37
26	1H	2611	U	N3-C4	-6.48	1.32	1.38
26	1H	1354	A	N3-C4	-6.47	1.30	1.34
26	1H	2025	C	N3-C4	-6.47	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	775	G	N9-C8	-6.47	1.33	1.37
23	2K	21	U	N1-C2	6.47	1.44	1.38
26	1H	1668	A	N1-C2	-6.47	1.28	1.34
26	1H	1402	C	C4-C5	-6.47	1.37	1.43
26	1H	2452	C	C2-O2	6.47	1.30	1.24
26	1H	1701	A	N9-C4	-6.46	1.33	1.37
26	14	2244	U	N1-C2	-6.46	1.32	1.38
26	1H	577	G	C6-N1	-6.46	1.35	1.39
26	1H	787	U	C2-O2	-6.46	1.16	1.22
1	1G	352	C	N1-C6	-6.46	1.33	1.37
26	14	1379	A	N9-C8	6.46	1.43	1.37
26	1H	665	C	N1-C6	-6.46	1.33	1.37
26	1H	1948	G	C6-N1	-6.46	1.35	1.39
26	1H	1215	G	N7-C5	-6.45	1.35	1.39
4	32	191	ARG	NE-CZ	-6.45	1.24	1.33
26	1H	1918	A	N9-C4	-6.45	1.33	1.37
1	13	1498	U	N1-C2	6.45	1.44	1.38
26	1H	138	G	C5-C4	6.45	1.42	1.38
26	1H	270(R)	G	C5-C4	6.45	1.42	1.38
26	1H	778	G	N7-C5	-6.45	1.35	1.39
26	1H	947	G	C2-N3	-6.45	1.27	1.32
26	1H	1803	A	N3-C4	6.44	1.38	1.34
24	3K	44	U	N1-C2	6.44	1.44	1.38
26	1H	1191	G	N9-C8	-6.44	1.33	1.37
26	1H	2051	A	N9-C4	-6.44	1.33	1.37
26	1H	2390	U	N1-C6	-6.44	1.32	1.38
45	F8	15	GLU	CG-CD	6.44	1.61	1.51
26	14	1845	G	N3-C4	-6.44	1.30	1.35
26	1H	1652	A	N3-C4	-6.44	1.30	1.34
26	1H	2518	A	C6-N1	6.44	1.40	1.35
26	14	1952	A	N9-C4	-6.44	1.33	1.37
26	14	2454	G	C5-C6	-6.44	1.35	1.42
34	69	85	GLU	CD-OE1	-6.44	1.18	1.25
26	1H	1828	G	C6-N1	6.44	1.44	1.39
26	1H	2502	G	N7-C5	6.44	1.43	1.39
26	14	71	A	N3-C4	-6.44	1.30	1.34
26	1H	480	A	N9-C4	-6.43	1.33	1.37
26	14	1786	A	N7-C5	-6.43	1.35	1.39
26	14	1802	A	N3-C4	-6.43	1.30	1.34
26	14	2246	G	C8-N7	-6.43	1.27	1.30
26	1H	2863	C	N3-C4	-6.43	1.29	1.33
26	14	2041	U	N1-C6	-6.43	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	252	G	N1-C2	-6.43	1.32	1.37
26	1H	1251	C	N1-C6	-6.43	1.33	1.37
26	14	1354	A	N3-C4	-6.43	1.30	1.34
1	13	1407	C	N3-C4	-6.43	1.29	1.33
26	1H	51	G	C5-C4	-6.43	1.33	1.38
26	1H	229	A	N9-C4	6.42	1.41	1.37
26	1H	1309	G	C6-O6	6.42	1.29	1.24
26	1H	1626	G	C2-N3	-6.42	1.27	1.32
26	1H	2607	G	C2-N3	-6.42	1.27	1.32
1	13	1407	C	C2-N3	-6.42	1.30	1.35
26	1H	124	G	C5-C4	-6.42	1.33	1.38
26	1H	799	G	C5-C4	-6.42	1.33	1.38
26	14	73	A	N7-C5	-6.41	1.35	1.39
26	1H	294	A	C5-C4	-6.41	1.34	1.38
26	14	458	G	C8-N7	6.41	1.34	1.30
26	1H	197	A	N7-C5	-6.41	1.35	1.39
26	1H	508	G	N9-C8	6.41	1.42	1.37
26	1H	2484	G	N9-C8	-6.41	1.33	1.37
26	1H	2578	G	N9-C8	-6.41	1.33	1.37
26	1H	2772	C	N1-C6	-6.40	1.33	1.37
26	1H	1272	A	C8-N7	6.40	1.36	1.31
26	1H	1351	C	N3-C4	-6.40	1.29	1.33
26	1H	1401	G	N9-C4	6.40	1.43	1.38
26	1H	1678	G	N3-C4	-6.40	1.30	1.35
26	1H	728	G	C6-O6	6.39	1.29	1.24
26	14	2352	A	N9-C4	-6.39	1.34	1.37
26	1H	1948	G	N1-C2	-6.39	1.32	1.37
26	14	2045	C	N1-C6	-6.39	1.33	1.37
26	1H	2670	A	N3-C4	-6.39	1.31	1.34
23	2K	75	C	N1-C6	-6.38	1.33	1.37
26	1H	1556	C	N3-C4	-6.38	1.29	1.33
27	16	29	A	N9-C4	6.38	1.41	1.37
26	1H	1806	C	N1-C6	-6.38	1.33	1.37
26	14	2672	G	C6-N1	-6.38	1.35	1.39
26	14	562	U	C2-O2	-6.38	1.16	1.22
26	14	1599	C	N1-C6	-6.38	1.33	1.37
26	1H	1938	A	N3-C4	-6.38	1.31	1.34
26	1H	2438	U	C2-N3	-6.37	1.33	1.37
26	1H	942	G	N3-C4	-6.37	1.30	1.35
26	1H	2252	G	N3-C4	-6.37	1.30	1.35
26	1H	2454	G	N3-C4	-6.37	1.30	1.35
26	1H	258	G	C5-C4	-6.36	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	845	G	C2-N3	6.36	1.37	1.32
41	B8	89	VAL	CB-CG2	-6.36	1.39	1.52
3	22	173	VAL	C-N	6.36	1.46	1.34
26	14	265	A	C5-C6	-6.36	1.35	1.41
26	14	2551	C	N3-C4	-6.36	1.29	1.33
26	1H	659	C	N1-C6	-6.36	1.33	1.37
26	1H	1624	G	N9-C4	-6.36	1.32	1.38
51	L8	10	LYS	CE-NZ	6.36	1.65	1.49
26	1H	1965	C	C2-N3	-6.36	1.30	1.35
1	13	694	A	N9-C4	-6.36	1.34	1.37
26	1H	1671	U	N1-C2	-6.36	1.32	1.38
26	14	816	C	C2-O2	6.36	1.30	1.24
26	14	1792	G	C2-N2	-6.36	1.28	1.34
1	13	244	U	C2-O2	6.35	1.28	1.22
26	1H	2398	U	N3-C4	-6.35	1.32	1.38
26	1H	1661	G	C5-C4	-6.35	1.33	1.38
29	11	7	LYS	C-N	-6.35	1.22	1.34
43	95	80	GLN	CG-CD	6.35	1.65	1.51
1	13	5	U	C2-N3	6.34	1.42	1.37
1	13	1502	A	N7-C5	-6.34	1.35	1.39
26	14	575	A	C6-N1	-6.34	1.31	1.35
26	14	2618	G	C6-O6	6.34	1.29	1.24
40	65	69	VAL	CB-CG2	-6.34	1.39	1.52
26	1H	251	A	N9-C4	6.34	1.41	1.37
26	1H	536	A	N3-C4	-6.34	1.31	1.34
31	31	59	TYR	CD2-CE2	-6.34	1.29	1.39
26	14	1460	A	N3-C4	6.34	1.38	1.34
26	14	398	G	N3-C4	-6.34	1.31	1.35
26	1H	2600	A	C6-N1	-6.33	1.31	1.35
26	14	1326	U	C2-O2	-6.33	1.16	1.22
26	1H	2004	G	N3-C4	-6.33	1.31	1.35
26	1H	2330	G	N3-C4	-6.33	1.31	1.35
26	1H	2062	A	C5-C4	6.33	1.43	1.38
27	16	78	A	N3-C4	-6.33	1.31	1.34
26	1H	2764	A	N3-C4	-6.33	1.31	1.34
26	14	669	G	N3-C4	-6.33	1.31	1.35
26	14	698	C	N1-C6	-6.33	1.33	1.37
26	1H	258	G	N1-C2	-6.33	1.32	1.37
26	1H	297	C	C2-N3	-6.33	1.30	1.35
26	1H	1353	A	N3-C4	-6.33	1.31	1.34
26	1H	1634	A	N9-C8	-6.33	1.32	1.37
26	1H	1241	A	N7-C5	-6.32	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	39	38	ARG	CZ-NH1	-6.32	1.24	1.33
26	14	238	C	N3-C4	-6.32	1.29	1.33
26	14	2392	A	N9-C8	6.32	1.42	1.37
26	1H	2282	G	C2-N3	-6.32	1.27	1.32
26	14	2488	A	N3-C4	-6.32	1.31	1.34
26	1H	1605	C	N1-C6	-6.32	1.33	1.37
26	1H	1965	C	N1-C2	-6.32	1.33	1.40
26	1H	2287	A	N3-C4	-6.32	1.31	1.34
26	14	981	A	C6-N1	-6.32	1.31	1.35
26	14	1816	G	C5-C6	6.32	1.48	1.42
1	13	1513	A	C5-C4	-6.32	1.34	1.38
26	14	6	A	N9-C4	6.32	1.41	1.37
1	13	903	G	N9-C8	-6.31	1.33	1.37
26	14	1978	A	N7-C5	-6.31	1.35	1.39
26	1H	619	G	N9-C8	-6.31	1.33	1.37
26	1H	1967	C	N3-C4	-6.31	1.29	1.33
26	1H	2603	G	N7-C5	-6.31	1.35	1.39
26	14	252	G	N9-C8	-6.31	1.33	1.37
26	14	835	A	C5-C4	-6.31	1.34	1.38
26	14	1525	G	N9-C8	-6.31	1.33	1.37
26	14	1613	G	N1-C2	-6.31	1.32	1.37
38	45	60	ARG	CZ-NH1	-6.31	1.24	1.33
26	1H	1606	G	C5-C4	-6.31	1.33	1.38
49	F5	4	VAL	CB-CG1	-6.31	1.39	1.52
26	1H	2521	C	N1-C6	-6.30	1.33	1.37
26	14	1807	G	N9-C8	-6.30	1.33	1.37
26	1H	860	U	C5-C6	-6.30	1.28	1.34
26	1H	729	G	C5-C6	-6.30	1.36	1.42
26	14	1676	A	N3-C4	-6.30	1.31	1.34
26	14	2713	A	C5-C4	6.30	1.43	1.38
26	1H	425	G	N9-C8	-6.30	1.33	1.37
26	1H	800	A	N7-C5	-6.30	1.35	1.39
26	1H	1697	G	N7-C5	-6.30	1.35	1.39
26	1H	1843	C	N1-C6	-6.30	1.33	1.37
26	14	2601	C	C4-N4	-6.30	1.28	1.33
26	1H	1263	U	C4-O4	-6.29	1.18	1.23
26	1H	1815	A	C6-N1	-6.29	1.31	1.35
26	1H	2590	A	N9-C4	-6.29	1.34	1.37
26	1H	1616	A	N9-C8	6.29	1.42	1.37
26	1H	1696	G	C6-N1	-6.29	1.35	1.39
25	4K	25	A	C5-C4	6.29	1.43	1.38
26	1H	1623	G	N1-C2	-6.29	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1668	A	C5-C4	-6.29	1.34	1.38
26	14	1158	C	N3-C4	-6.29	1.29	1.33
26	14	2441	C	N3-C4	-6.29	1.29	1.33
26	1H	346	A	N9-C4	-6.29	1.34	1.37
26	14	1308	A	C6-N1	-6.28	1.31	1.35
26	1H	799	G	N3-C4	-6.28	1.31	1.35
26	14	1945	G	C6-N1	-6.28	1.35	1.39
26	1H	621	A	N3-C4	-6.27	1.31	1.34
26	1H	1255	U	C4-O4	6.27	1.28	1.23
26	1H	2845	G	N3-C4	-6.27	1.31	1.35
26	1H	2453	A	C6-N6	-6.27	1.28	1.33
26	14	199	A	N3-C4	6.27	1.38	1.34
26	14	981	A	N3-C4	-6.27	1.31	1.34
26	1H	699	A	C5-C4	-6.27	1.34	1.38
26	14	770	G	C5-C4	-6.27	1.33	1.38
26	1H	2069	G	C5-C4	-6.27	1.33	1.38
26	1H	1815	A	C6-N6	-6.26	1.28	1.33
26	1H	2597	G	C5-C6	-6.26	1.36	1.42
26	14	1342	A	C5-C6	-6.26	1.35	1.41
26	1H	593	G	N3-C4	-6.26	1.31	1.35
26	1H	1326	U	C2-N3	-6.26	1.33	1.37
26	1H	1783	A	N7-C5	-6.26	1.35	1.39
26	1H	1695	G	C8-N7	-6.26	1.27	1.30
26	14	1812	A	N3-C4	-6.26	1.31	1.34
26	1H	1263	U	C4-C5	-6.25	1.38	1.43
1	13	755	G	C6-O6	6.25	1.29	1.24
1	13	1404	C	N1-C6	6.25	1.41	1.37
1	1G	1469	G	C6-O6	6.25	1.29	1.24
14	5I	43	CYS	CB-SG	-6.25	1.71	1.82
26	1H	1618	A	N7-C5	-6.25	1.35	1.39
26	1H	1271	G	C4'-C3'	-6.25	1.46	1.53
1	13	1403	C	N1-C2	-6.25	1.33	1.40
26	1H	1366	A	N3-C4	-6.25	1.31	1.34
26	1H	2421	G	C5-C4	-6.25	1.33	1.38
26	14	1829	A	C5-C4	-6.25	1.34	1.38
26	14	2304	G	C5-C4	6.25	1.42	1.38
26	1H	183	C	N1-C6	-6.24	1.33	1.37
1	13	670	G	N7-C5	-6.24	1.35	1.39
26	1H	955	C	N3-C4	-6.24	1.29	1.33
26	1H	2049	G	C2-N3	-6.24	1.27	1.32
26	14	621	A	N9-C8	6.24	1.42	1.37
26	1H	718	A	C5-C6	-6.24	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1670	C	C2-N3	6.24	1.40	1.35
26	14	2606	C	N3-C4	-6.24	1.29	1.33
26	1H	2383	G	C6-O6	-6.24	1.18	1.24
26	1H	1889	A	N3-C4	-6.24	1.31	1.34
1	1G	781	A	N9-C4	6.24	1.41	1.37
26	1H	2373	G	C6-O6	6.24	1.29	1.24
26	14	1297	C	N3-C4	-6.23	1.29	1.33
26	14	1776	G	C6-N1	-6.23	1.35	1.39
4	3E	31	CYS	CB-SG	-6.23	1.71	1.82
26	14	2577	A	N3-C4	-6.23	1.31	1.34
26	14	2618	G	C5-C6	6.23	1.48	1.42
26	14	210	C	N1-C6	-6.23	1.33	1.37
26	1H	913	U	C2-N3	-6.22	1.33	1.37
26	1H	1247	A	N7-C5	-6.22	1.35	1.39
26	14	211	A	C5-C4	-6.22	1.34	1.38
26	1H	1330	C	N1-C6	-6.22	1.33	1.37
1	13	544	G	N7-C5	-6.22	1.35	1.39
26	1H	2250	G	N9-C4	6.22	1.43	1.38
26	1H	2412	A	N3-C4	-6.22	1.31	1.34
26	1H	2426	A	C6-N1	-6.22	1.31	1.35
26	14	2772	C	N1-C6	-6.22	1.33	1.37
26	1H	584	C	C2-N3	6.22	1.40	1.35
26	14	1379	A	C5-C6	-6.22	1.35	1.41
23	2K	24	C	N3-C4	-6.21	1.29	1.33
26	1H	1419	A	N9-C4	-6.21	1.34	1.37
27	16	42	C	N1-C6	-6.21	1.33	1.37
26	1H	1472	A	N3-C4	-6.21	1.31	1.34
26	1H	458	G	C2-N3	-6.21	1.27	1.32
26	1H	832	G	C6-N1	-6.21	1.35	1.39
26	14	2826	A	N7-C5	-6.21	1.35	1.39
26	1H	957	A	C6-N6	6.20	1.39	1.33
26	14	1429	G	N9-C8	-6.20	1.33	1.37
1	13	961	U	C2-N3	-6.20	1.33	1.37
26	14	1802	A	C6-N6	-6.20	1.28	1.33
26	1H	1992	G	N7-C5	-6.20	1.35	1.39
26	1H	1992	G	C6-O6	-6.20	1.18	1.24
26	1H	2051	A	N7-C5	-6.20	1.35	1.39
26	1H	2267	A	C6-N1	-6.20	1.31	1.35
26	1H	252	G	N9-C4	-6.20	1.32	1.38
26	14	1393	A	N1-C2	-6.20	1.28	1.34
26	1H	189	G	C5-C4	-6.20	1.34	1.38
26	1H	2392	A	N1-C2	6.20	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	789	A	N9-C4	-6.19	1.34	1.37
26	14	1300	U	C4-O4	6.19	1.28	1.23
39	55	21	TYR	CD2-CE2	-6.19	1.30	1.39
26	14	447	A	N3-C4	-6.19	1.31	1.34
26	1H	2826	A	N9-C8	-6.19	1.32	1.37
26	14	1346	G	N1-C2	-6.19	1.32	1.37
26	1H	1496	A	N9-C8	6.19	1.42	1.37
26	1H	2250	G	C2-N3	-6.18	1.27	1.32
27	16	87	G	N9-C4	-6.18	1.33	1.38
26	14	613	U	N1-C2	6.18	1.44	1.38
26	1H	2781	A	C6-N1	-6.18	1.31	1.35
26	1H	2781	A	C5-C6	-6.18	1.35	1.41
26	14	195	A	C6-N1	6.18	1.39	1.35
26	14	2258	C	N1-C6	-6.18	1.33	1.37
26	14	2448	A	C6-N1	-6.18	1.31	1.35
26	1H	144	C	N1-C6	-6.18	1.33	1.37
26	14	530	G	C2-N3	6.17	1.37	1.32
26	1H	2595	G	N1-C2	-6.17	1.32	1.37
26	1H	746	A	N3-C4	-6.17	1.31	1.34
26	1H	1768	U	N1-C2	-6.17	1.33	1.38
26	14	1311	G	C6-N1	-6.17	1.35	1.39
26	1H	1952	A	N3-C4	-6.17	1.31	1.34
26	1H	32	C	N3-C4	-6.16	1.29	1.33
26	1H	449	A	N3-C4	-6.16	1.31	1.34
26	14	334	C	N1-C6	-6.16	1.33	1.37
1	13	364	A	N3-C4	-6.16	1.31	1.34
1	13	606	G	N9-C4	6.16	1.42	1.38
26	1H	67	U	C2-N3	-6.16	1.33	1.37
26	1H	1229(A)	G	N9-C4	-6.16	1.33	1.38
26	1H	539	G	C6-O6	6.16	1.29	1.24
26	14	1899	G	N9-C8	6.16	1.42	1.37
26	14	2578	G	N9-C8	-6.15	1.33	1.37
26	1H	252	G	C5-C4	-6.15	1.34	1.38
26	1H	1904	G	N9-C8	-6.15	1.33	1.37
26	1H	1784	A	C5-C4	6.15	1.43	1.38
26	14	114	U	C2-N3	-6.15	1.33	1.37
26	1H	996	A	C6-N1	-6.15	1.31	1.35
26	14	2048	G	C5-C6	6.15	1.48	1.42
26	1H	189	G	N1-C2	6.15	1.42	1.37
26	1H	2079	U	C4-C5	-6.15	1.38	1.43
26	1H	2259	G	N3-C4	-6.15	1.31	1.35
26	14	101	G	N9-C4	6.15	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
41	75	13	ARG	CZ-NH2	-6.15	1.25	1.33
1	13	1518	A	N9-C8	-6.14	1.32	1.37
26	1H	605	C	N1-C6	-6.14	1.33	1.37
26	14	1821	A	N3-C4	-6.14	1.31	1.34
26	14	2246	G	N9-C8	-6.14	1.33	1.37
26	1H	2639	A	C5-C6	-6.14	1.35	1.41
26	1H	1614	A	C5-C6	-6.14	1.35	1.41
26	1H	2409	G	C5-C4	-6.14	1.34	1.38
26	1H	746	A	C8-N7	6.14	1.35	1.31
26	14	783	A	N3-C4	-6.14	1.31	1.34
26	14	1606	G	C6-N1	-6.14	1.35	1.39
26	1H	1836	C	C2-N3	-6.14	1.30	1.35
26	14	1756	G	N3-C4	-6.14	1.31	1.35
26	1H	1982	C	C2-O2	6.13	1.29	1.24
26	1H	911	A	N7-C5	-6.13	1.35	1.39
1	13	548	G	N7-C5	-6.13	1.35	1.39
26	1H	2252	G	C6-N1	-6.13	1.35	1.39
5	42	79	GLU	CG-CD	-6.13	1.42	1.51
26	1H	744	G	C6-N1	-6.13	1.35	1.39
1	1G	795	C	N1-C6	-6.13	1.33	1.37
26	1H	56	A	C6-N1	-6.12	1.31	1.35
26	1H	244	A	N9-C4	-6.12	1.34	1.37
26	1H	772	C	C2-O2	6.12	1.29	1.24
26	1H	1654	A	N9-C8	-6.12	1.32	1.37
26	1H	2494	G	C2-N3	-6.12	1.27	1.32
26	14	582	G	N7-C5	-6.12	1.35	1.39
1	13	1433	A	N3-C4	-6.12	1.31	1.34
26	1H	1683	C	N3-C4	-6.11	1.29	1.33
26	14	621	A	C5-C4	6.11	1.43	1.38
26	1H	407	G	C6-N1	-6.11	1.35	1.39
26	14	1646	C	N1-C6	-6.11	1.33	1.37
26	1H	1001	A	C6-N1	-6.11	1.31	1.35
26	1H	1244	G	N9-C4	-6.11	1.33	1.38
26	1H	2557	G	C5-C4	-6.11	1.34	1.38
26	1H	399	G	N7-C5	6.10	1.43	1.39
26	1H	1472	A	N9-C4	-6.10	1.34	1.37
26	1H	2070	G	C2-N2	-6.10	1.28	1.34
26	14	181	A	N9-C4	-6.10	1.34	1.37
26	1H	638	G	N7-C5	-6.10	1.35	1.39
26	1H	1829	A	N9-C8	-6.10	1.32	1.37
26	1H	372	G	C6-N1	-6.10	1.35	1.39
26	1H	533	G	N1-C2	-6.10	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1807	G	C5-C6	-6.10	1.36	1.42
1	13	1403	C	N3-C4	-6.10	1.29	1.33
27	16	46	A	N9-C4	-6.10	1.34	1.37
26	14	828	U	N3-C4	-6.09	1.32	1.38
26	14	1819	A	N7-C5	-6.09	1.35	1.39
26	14	2315	G	N9-C4	6.09	1.42	1.38
26	1H	2311	A	C5-C6	-6.09	1.35	1.41
26	1H	2564	A	N7-C5	-6.09	1.35	1.39
26	14	1762	A	N9-C8	6.09	1.42	1.37
26	1H	1248	G	C6-O6	6.09	1.29	1.24
29	11	193	VAL	CB-CG2	-6.09	1.40	1.52
1	1G	576	G	C5-C4	6.09	1.42	1.38
26	14	183	C	C2-N3	-6.09	1.30	1.35
26	1H	196	A	C5-C6	-6.08	1.35	1.41
26	1H	284	U	N1-C2	-6.08	1.33	1.38
26	1H	1815	A	C5-C6	-6.08	1.35	1.41
26	1H	1323	U	C4-O4	6.08	1.28	1.23
27	1J	36	C	N3-C4	6.08	1.38	1.33
26	1H	184	C	N3-C4	-6.08	1.29	1.33
26	1H	1125	G	N3-C4	-6.08	1.31	1.35
26	1H	2063	C	N1-C6	-6.08	1.33	1.37
26	1H	2082	A	N3-C4	-6.08	1.31	1.34
26	1H	1977	A	C6-N1	-6.07	1.31	1.35
31	31	84	VAL	CB-CG1	-6.07	1.40	1.52
26	14	2586	C	N3-C4	6.07	1.38	1.33
26	1H	1815	A	N9-C4	-6.07	1.34	1.37
26	14	1556	C	N3-C4	-6.07	1.29	1.33
26	1H	473	G	N9-C8	-6.06	1.33	1.37
26	1H	792	G	N7-C5	-6.06	1.35	1.39
26	14	1986	A	N7-C5	-6.06	1.35	1.39
26	1H	199	A	C5-C4	-6.06	1.34	1.38
26	14	746	A	N9-C4	-6.06	1.34	1.37
26	1H	1918	A	C8-N7	-6.06	1.27	1.31
26	1H	2461	C	N3-C4	-6.06	1.29	1.33
26	1H	1427	A	N7-C5	-6.05	1.35	1.39
26	14	188	G	C2-N3	6.05	1.37	1.32
26	1H	2025	C	C4-C5	-6.05	1.38	1.43
26	14	2740	A	N9-C4	-6.05	1.34	1.37
26	1H	1120	G	C6-N1	6.05	1.43	1.39
26	1H	1528	A	N7-C5	-6.05	1.35	1.39
26	1H	497	A	C5-C4	-6.05	1.34	1.38
26	1H	1674	G	N7-C5	-6.05	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1G	630	G	N9-C4	6.05	1.42	1.38
26	1H	188	G	C6-O6	-6.05	1.18	1.24
26	1H	2053	G	C5-C4	-6.05	1.34	1.38
26	14	2443	C	N1-C6	-6.05	1.33	1.37
26	1H	915	C	C4-N4	6.04	1.39	1.33
26	1H	977	G	C6-N1	-6.04	1.35	1.39
26	14	191	A	C5-C6	-6.04	1.35	1.41
26	14	1247	A	C6-N1	-6.04	1.31	1.35
26	14	1285	G	C5-C4	-6.04	1.34	1.38
26	1H	229	A	N3-C4	6.04	1.38	1.34
26	14	2345	G	N3-C4	-6.04	1.31	1.35
26	14	452	G	C2-N3	-6.04	1.27	1.32
26	14	1496	A	C5-C6	-6.04	1.35	1.41
26	1H	1235	G	N7-C5	-6.04	1.35	1.39
26	14	1285	G	N7-C5	-6.04	1.35	1.39
26	1H	763	G	N3-C4	-6.03	1.31	1.35
26	14	123	G	N3-C4	-6.03	1.31	1.35
26	1H	2247	A	N3-C4	-6.03	1.31	1.34
23	2K	39	A	C5-C4	-6.03	1.34	1.38
26	14	2324	C	C2-O2	6.03	1.29	1.24
1	13	741	G	N9-C4	-6.03	1.33	1.38
26	14	1616	A	N7-C5	-6.03	1.35	1.39
26	14	2597	G	C6-O6	6.03	1.29	1.24
27	16	46	A	N3-C4	-6.02	1.31	1.34
26	1H	1304	C	C4-N4	-6.02	1.28	1.33
26	1H	2251	G	N9-C8	-6.02	1.33	1.37
1	13	237	C	N3-C4	-6.02	1.29	1.33
26	14	74	A	N7-C5	-6.02	1.35	1.39
26	1H	813	U	N1-C6	-6.02	1.32	1.38
26	1H	2329	G	N7-C5	6.02	1.42	1.39
1	13	671	G	C5-C4	-6.02	1.34	1.38
26	14	1274	A	N3-C4	-6.02	1.31	1.34
26	1H	805	G	C5-C6	-6.01	1.36	1.42
26	1H	1203	G	N3-C4	6.01	1.39	1.35
57	3L	76	A	N9-C8	6.01	1.42	1.37
26	14	548	A	N9-C4	6.01	1.41	1.37
26	14	1982	C	N1-C6	-6.01	1.33	1.37
26	14	2718	G	N3-C4	-6.01	1.31	1.35
26	1H	1910	G	N3-C4	-6.01	1.31	1.35
26	1H	2015	A	N9-C4	-6.01	1.34	1.37
26	1H	2537	U	N3-C4	-6.01	1.33	1.38
26	1H	260	G	C5-C4	-6.01	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	2288	A	N3-C4	6.01	1.38	1.34
26	1H	551	G	N9-C4	-6.01	1.33	1.38
26	1H	789	A	N7-C5	-6.01	1.35	1.39
26	1H	1966	A	N3-C4	-6.01	1.31	1.34
26	1H	2072	G	C5-C4	-6.00	1.34	1.38
26	14	1827	C	N3-C4	-6.00	1.29	1.33
26	14	1158	C	N1-C6	-6.00	1.33	1.37
26	1H	116	C	N3-C4	-6.00	1.29	1.33
26	1H	2229	C	C4'-C3'	-6.00	1.46	1.52
26	1H	298	G	N9-C4	-6.00	1.33	1.38
1	13	795	C	N1-C6	-5.99	1.33	1.37
26	1H	381	G	N9-C8	-5.99	1.33	1.37
26	1H	621	A	N9-C8	5.99	1.42	1.37
26	1H	2453	A	N9-C4	-5.99	1.34	1.37
1	13	965	A	C6-N6	5.99	1.38	1.33
26	1H	1204	A	N9-C4	-5.99	1.34	1.37
26	1H	2428	G	C6-O6	5.99	1.29	1.24
1	1G	1469	G	N1-C2	5.99	1.42	1.37
26	14	51	G	N9-C8	-5.99	1.33	1.37
26	14	2426	A	C5-C6	-5.99	1.35	1.41
26	1H	1817	G	C5-C6	5.99	1.48	1.42
30	21	196	VAL	CB-CG2	-5.99	1.40	1.52
1	13	1205	U	C4-O4	5.99	1.28	1.23
26	1H	698	C	C2-O2	5.98	1.29	1.24
26	1H	652	C	C2-N3	5.98	1.40	1.35
57	3L	42	A	N9-C4	5.98	1.41	1.37
26	1H	718	A	N7-C5	-5.98	1.35	1.39
26	1H	1762	A	N3-C4	5.98	1.38	1.34
26	14	1378	A	N7-C5	5.98	1.42	1.39
26	1H	2438	U	C4'-C3'	-5.98	1.46	1.52
26	14	945	A	N7-C5	-5.98	1.35	1.39
26	1H	933	A	N7-C5	-5.98	1.35	1.39
22	1K	74	C	C2-O2	5.97	1.29	1.24
26	1H	441	U	C5-C6	-5.97	1.28	1.34
26	14	1606	G	C5-C4	-5.97	1.34	1.38
26	1H	2422	A	N7-C5	-5.97	1.35	1.39
26	14	2377	A	N9-C4	-5.97	1.34	1.37
26	14	2070	G	N7-C5	-5.96	1.35	1.39
26	1H	2199	A	N9-C4	5.96	1.41	1.37
26	1H	1243	G	N9-C4	-5.96	1.33	1.38
26	1H	1931	U	C2-N3	-5.96	1.33	1.37
26	14	388	G	C2-N3	-5.96	1.27	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1967	C	C2-N3	-5.96	1.30	1.35
26	1H	1907	G	N3-C4	-5.96	1.31	1.35
26	1H	2291	U	C4-O4	5.96	1.28	1.23
26	1H	1810	A	N3-C4	-5.96	1.31	1.34
26	1H	2346	A	N9-C8	5.96	1.42	1.37
26	14	204	A	N9-C4	-5.96	1.34	1.37
26	1H	917	A	C5-C4	5.95	1.43	1.38
26	1H	2392	A	N3-C4	-5.95	1.31	1.34
26	1H	2599	G	N9-C8	-5.95	1.33	1.37
26	1H	768	G	N7-C5	-5.95	1.35	1.39
26	1H	2826	A	C5-C4	-5.95	1.34	1.38
26	1H	1302	A	N3-C4	-5.95	1.31	1.34
26	1H	1630	G	N7-C5	5.95	1.42	1.39
26	14	1783	A	N7-C5	-5.95	1.35	1.39
26	1H	74	A	N9-C8	5.95	1.42	1.37
26	1H	1785	A	N3-C4	5.95	1.38	1.34
26	14	578	A	N3-C4	-5.95	1.31	1.34
26	1H	413	C	N1-C2	-5.95	1.34	1.40
26	1H	402	A	N3-C4	-5.95	1.31	1.34
26	1H	796	C	C5-C6	-5.95	1.29	1.34
26	14	1951	U	C4-O4	5.95	1.28	1.23
1	13	767	A	N3-C4	-5.94	1.31	1.34
26	14	2690	C	N3-C4	-5.94	1.29	1.33
26	14	1268	A	C5-C4	-5.94	1.34	1.38
26	14	2873	A	C5-C6	-5.94	1.35	1.41
26	1H	2643	G	N9-C4	-5.94	1.33	1.38
1	1G	1402	C	N1-C6	-5.94	1.33	1.37
26	14	1490	A	C6-N1	5.94	1.39	1.35
1	1G	117	G	N7-C5	-5.94	1.35	1.39
26	1H	1639	U	C2-N3	-5.94	1.33	1.37
26	14	979	G	C6-O6	5.94	1.29	1.24
26	14	2248	C	N3-C4	-5.94	1.29	1.33
26	1H	2404	C	N3-C4	-5.94	1.29	1.33
26	14	466	A	N9-C4	5.94	1.41	1.37
1	1G	1483	A	N9-C4	-5.93	1.34	1.37
26	14	123	G	C6-N1	-5.93	1.35	1.39
26	14	1359	A	N3-C4	5.93	1.38	1.34
26	14	1638	C	N3-C4	-5.93	1.29	1.33
26	14	1784	A	N7-C5	5.93	1.42	1.39
26	14	2610	C	C2-O2	5.93	1.29	1.24
26	1H	1988	C	N3-C4	-5.93	1.29	1.33
26	1H	2072	G	C6-N1	-5.93	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1G	314	C	N1-C6	-5.93	1.33	1.37
26	14	1641	A	C5-C4	-5.93	1.34	1.38
26	1H	1616	A	N1-C2	5.93	1.39	1.34
26	14	751	A	N9-C8	-5.93	1.33	1.37
26	14	772	C	N1-C6	-5.93	1.33	1.37
26	14	1903	G	C5-C4	-5.93	1.34	1.38
1	13	1483	A	N9-C4	-5.92	1.34	1.37
26	14	769	G	C6-N1	-5.92	1.35	1.39
26	14	752	A	C5-C4	-5.92	1.34	1.38
26	14	1525	G	N7-C5	-5.92	1.35	1.39
26	14	562	U	N3-C4	-5.92	1.33	1.38
26	14	689	A	C5-C4	-5.92	1.34	1.38
26	14	1628	G	N1-C2	-5.92	1.33	1.37
26	1H	212	G	C5-C4	-5.92	1.34	1.38
26	1H	863	A	N9-C4	5.92	1.41	1.37
26	1H	2330	G	C2-N3	5.92	1.37	1.32
26	1H	2387	U	C4-C5	5.92	1.48	1.43
1	1G	1483	A	C5-C4	-5.92	1.34	1.38
26	1H	94	G	C6-O6	5.91	1.29	1.24
26	1H	593	G	N9-C4	-5.91	1.33	1.38
26	14	745	G	N9-C8	-5.91	1.33	1.37
1	13	1493	A	N3-C4	-5.91	1.31	1.34
27	16	66	A	N9-C4	5.91	1.41	1.37
26	14	1001	A	N9-C4	-5.91	1.34	1.37
26	1H	1897	G	N7-C5	-5.91	1.35	1.39
26	1H	2079	U	C4-O4	-5.91	1.19	1.23
26	1H	762	U	C2-O2	5.91	1.27	1.22
1	1G	1408	A	N3-C4	-5.91	1.31	1.34
26	1H	1310	G	C6-N1	5.91	1.43	1.39
38	88	55	VAL	CB-CG2	-5.91	1.40	1.52
26	14	120	U	C2-N3	-5.91	1.33	1.37
1	13	769	G	C8-N7	-5.90	1.27	1.30
26	1H	190	A	N9-C4	-5.90	1.34	1.37
26	1H	1210	A	N7-C5	-5.90	1.35	1.39
26	1H	1765	C	C2-N3	-5.90	1.31	1.35
26	14	1397	U	C2-N3	-5.90	1.33	1.37
15	6A	62	GLN	CD-OE1	-5.90	1.10	1.24
26	1H	682	G	N1-C2	-5.90	1.33	1.37
1	1G	1503	A	N9-C4	5.90	1.41	1.37
26	1H	779	U	C4-O4	-5.90	1.19	1.23
26	1H	1109	C	O3'-P	5.90	1.68	1.61
26	1H	1346	G	C6-N1	-5.90	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2713	A	N1-C2	5.90	1.39	1.34
26	14	2490	G	N1-C2	5.90	1.42	1.37
26	1H	1271	G	C8-N7	-5.90	1.27	1.30
26	1H	1619	G	N1-C2	-5.90	1.33	1.37
26	1H	548	A	N3-C4	5.89	1.38	1.34
26	1H	1128	A	C5-C6	-5.89	1.35	1.41
26	14	1358	G	C6-N1	-5.89	1.35	1.39
26	14	1020	A	N9-C4	-5.89	1.34	1.37
23	2K	9	G	N1-C2	5.89	1.42	1.37
26	1H	247	G	N1-C2	-5.89	1.33	1.37
26	14	1762	A	C6-N1	5.89	1.39	1.35
26	1H	208	C	N1-C6	-5.88	1.33	1.37
1	13	120	A	C6-N1	5.88	1.39	1.35
1	13	894	G	N9-C8	-5.88	1.33	1.37
26	1H	1435	G	C6-N1	-5.88	1.35	1.39
26	14	1216	G	N9-C4	5.88	1.42	1.38
26	14	1899	G	C6-N1	-5.88	1.35	1.39
26	14	2267	A	C5-C4	-5.88	1.34	1.38
26	1H	637	A	C6-N6	5.87	1.38	1.33
26	1H	952	G	C5-C4	-5.87	1.34	1.38
26	1H	1892	C	N1-C6	-5.87	1.33	1.37
26	14	186	G	N7-C5	5.87	1.42	1.39
26	1H	990	A	C6-N1	-5.87	1.31	1.35
26	1H	1303	G	C6-N1	-5.87	1.35	1.39
26	1H	2246	G	C5-C4	-5.87	1.34	1.38
22	1K	64	G	N3-C4	5.87	1.39	1.35
26	1H	508	G	C2-N2	5.87	1.40	1.34
26	1H	1333	C	C4-C5	-5.87	1.38	1.43
26	14	2006	C	C2-O2	5.87	1.29	1.24
26	1H	212	G	C6-N1	-5.86	1.35	1.39
26	1H	258	G	N9-C8	-5.86	1.33	1.37
26	14	2076	U	N1-C2	-5.86	1.33	1.38
1	13	884	U	C2-O2	5.86	1.27	1.22
26	1H	109	G	C6-N1	-5.86	1.35	1.39
26	1H	2768	C	N1-C6	-5.86	1.33	1.37
26	1H	2465	C	N1-C6	-5.86	1.33	1.37
26	1H	2600	A	N3-C4	-5.86	1.31	1.34
26	1H	678	C	C4-N4	-5.86	1.28	1.33
26	1H	2025	C	N1-C6	-5.86	1.33	1.37
26	1H	2082	A	C5-C4	-5.86	1.34	1.38
26	1H	2252	G	C5-C4	-5.86	1.34	1.38
26	14	1966	A	N7-C5	-5.86	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	2287	A	N3-C4	-5.86	1.31	1.34
26	1H	2588	G	N7-C5	-5.85	1.35	1.39
26	14	564	C	N1-C6	-5.85	1.33	1.37
26	14	21	A	N9-C4	-5.85	1.34	1.37
26	14	2602	A	N7-C5	5.85	1.42	1.39
26	1H	196	A	N3-C4	5.85	1.38	1.34
26	1H	777	A	N7-C5	-5.85	1.35	1.39
26	14	1330	C	N1-C6	-5.85	1.33	1.37
26	1H	1676	A	N9-C4	-5.84	1.34	1.37
26	1H	1789	A	C5-C4	-5.84	1.34	1.38
26	1H	2530	A	C5-C6	-5.84	1.35	1.41
26	14	122	G	N9-C4	-5.84	1.33	1.38
26	1H	212	G	N9-C8	-5.84	1.33	1.37
26	1H	1767	C	N1-C6	-5.84	1.33	1.37
26	1H	2469	A	N7-C5	-5.84	1.35	1.39
26	14	929	G	C6-N1	5.84	1.43	1.39
41	B8	49	VAL	CB-CG1	-5.84	1.40	1.52
26	1H	1378	A	N9-C4	-5.84	1.34	1.37
26	1H	2376	A	N9-C4	-5.84	1.34	1.37
26	14	810	U	N3-C4	5.84	1.43	1.38
26	14	2623	G	C5-C4	-5.84	1.34	1.38
1	13	427	U	N1-C2	5.83	1.43	1.38
26	14	320	A	N3-C4	-5.83	1.31	1.34
1	13	1491	G	N9-C4	-5.83	1.33	1.38
26	1H	199	A	N9-C4	5.83	1.41	1.37
26	1H	1785	A	N7-C5	-5.83	1.35	1.39
26	1H	841	A	N9-C4	-5.83	1.34	1.37
26	14	1309	G	N3-C4	-5.83	1.31	1.35
26	1H	1823	G	N9-C8	-5.83	1.33	1.37
26	1H	575	A	N7-C5	5.83	1.42	1.39
1	1G	327	A	N9-C8	-5.83	1.33	1.37
26	14	819	A	N9-C4	5.83	1.41	1.37
26	14	2447	G	N7-C5	-5.83	1.35	1.39
1	13	1401	G	C2-N3	-5.82	1.28	1.32
26	1H	964	C	N1-C6	-5.82	1.33	1.37
57	3L	42	A	N3-C4	5.82	1.38	1.34
26	14	1819	A	N9-C8	-5.82	1.33	1.37
26	1H	2280	G	C5-C4	-5.82	1.34	1.38
26	1H	701	G	N3-C4	-5.82	1.31	1.35
26	14	2782	G	N3-C4	-5.82	1.31	1.35
26	14	691	C	N1-C6	-5.82	1.33	1.37
26	14	187	G	N9-C4	-5.82	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	57	C	N1-C2	-5.82	1.34	1.40
1	1G	715	A	N9-C4	-5.81	1.34	1.37
23	2K	24	C	N1-C6	-5.81	1.33	1.37
26	14	2326	C	N3-C4	-5.81	1.29	1.33
26	1H	869	G	C6-N1	-5.81	1.35	1.39
26	14	1608	A	C5-C4	-5.81	1.34	1.38
1	13	1233	G	C6-N1	-5.81	1.35	1.39
26	1H	133	C	N1-C6	-5.81	1.33	1.37
26	1H	450	G	N9-C8	-5.81	1.33	1.37
26	1H	1569	A	N9-C4	-5.81	1.34	1.37
26	1H	1570	A	N9-C4	-5.81	1.34	1.37
26	14	1844	C	C4-C5	-5.81	1.38	1.43
1	13	1517	G	N9-C4	-5.80	1.33	1.38
23	2K	77	A	C5-C6	-5.80	1.35	1.41
26	1H	1628	G	C5-C4	-5.80	1.34	1.38
48	I8	51	VAL	CB-CG1	-5.80	1.40	1.52
26	1H	1489	U	C2-N3	-5.80	1.33	1.37
26	1H	2847	U	N1-C2	-5.80	1.33	1.38
1	1G	117	G	N1-C2	5.80	1.42	1.37
26	14	2088	G	N3-C4	-5.80	1.31	1.35
26	14	1986	A	N3-C4	-5.80	1.31	1.34
27	16	24	G	N9-C4	5.80	1.42	1.38
26	14	2495	G	N3-C4	-5.79	1.31	1.35
26	14	1637	A	C6-N1	-5.79	1.31	1.35
26	1H	1602	U	C2-O2	-5.79	1.17	1.22
26	1H	2224	G	N9-C4	-5.79	1.33	1.38
42	C8	69	CYS	CB-SG	-5.79	1.72	1.81
26	14	2326	C	N1-C2	-5.79	1.34	1.40
1	13	766	A	N9-C4	-5.79	1.34	1.37
17	8I	101	ARG	CZ-NH2	-5.79	1.25	1.33
26	1H	1623	G	C5-C6	5.79	1.48	1.42
26	1H	2234	G	N9-C4	-5.79	1.33	1.38
46	G8	79	CYS	CB-SG	5.79	1.92	1.82
26	1H	189	G	C6-N1	5.79	1.43	1.39
26	1H	1675	C	N1-C6	-5.79	1.33	1.37
26	1H	2519	U	N1-C2	-5.79	1.33	1.38
26	14	1138	G	C5-C6	-5.79	1.36	1.42
26	1H	745	G	N7-C5	-5.79	1.35	1.39
26	1H	88	G	N7-C5	-5.79	1.35	1.39
26	14	2464	C	C2-O2	5.79	1.29	1.24
26	1H	526	A	N3-C4	-5.78	1.31	1.34
26	14	324	A	N3-C4	-5.78	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1189	A	N9-C4	-5.78	1.34	1.37
26	1H	1906	G	C6-N1	-5.78	1.35	1.39
26	1H	2429	G	C6-O6	5.78	1.29	1.24
26	14	211	A	N9-C4	-5.78	1.34	1.37
26	14	861	A	N9-C4	5.78	1.41	1.37
26	14	1807	G	C5-C4	-5.78	1.34	1.38
26	1H	1568	G	N7-C5	5.78	1.42	1.39
22	1K	76	A	N9-C8	5.78	1.42	1.37
26	1H	414	C	N1-C6	-5.78	1.33	1.37
26	1H	138	G	N3-C4	5.77	1.39	1.35
26	1H	17	G	N1-C2	-5.77	1.33	1.37
26	1H	1343	G	C8-N7	-5.77	1.27	1.30
26	1H	1899	G	N3-C4	-5.77	1.31	1.35
9	82	83	ARG	CZ-NH2	-5.77	1.25	1.33
26	14	2021	C	C4-C5	-5.77	1.38	1.43
26	14	2058	A	N3-C4	-5.77	1.31	1.34
26	14	2303	G	C5-C4	5.77	1.42	1.38
1	13	1128	C	N1-C2	5.77	1.46	1.40
26	1H	1950	G	C5-C4	5.77	1.42	1.38
26	1H	2456	C	N1-C6	-5.76	1.33	1.37
26	14	223	A	N7-C5	-5.76	1.35	1.39
26	1H	332	A	N3-C4	-5.76	1.31	1.34
26	1H	1046	A	N9-C4	5.76	1.41	1.37
26	1H	1262	A	N9-C4	-5.76	1.34	1.37
26	1H	2031	A	N9-C4	5.76	1.41	1.37
26	14	2082	A	C5-C4	-5.76	1.34	1.38
1	13	1482	G	C6-N1	5.75	1.43	1.39
26	1H	467	G	C8-N7	-5.75	1.27	1.30
49	J8	25	LYS	CD-CE	5.75	1.65	1.51
26	14	1275	A	N9-C4	-5.75	1.34	1.37
26	14	2268	A	N7-C5	-5.75	1.35	1.39
26	14	2490	G	N3-C4	5.75	1.39	1.35
26	14	2681	C	N3-C4	-5.75	1.29	1.33
1	1G	1464	G	C6-O6	5.75	1.29	1.24
26	14	794	G	N9-C8	-5.75	1.33	1.37
26	1H	2252	G	N9-C4	-5.75	1.33	1.38
49	J8	4	VAL	CB-CG2	-5.75	1.40	1.52
26	14	691	C	C2-O2	-5.75	1.19	1.24
26	1H	1434	A	N9-C4	-5.75	1.34	1.37
26	1H	20	C	N1-C6	-5.75	1.33	1.37
29	19	205	VAL	CB-CG1	-5.75	1.40	1.52
26	1H	1899	G	N7-C5	-5.74	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1G	22	G	N7-C5	5.74	1.42	1.39
26	1H	119	A	C6-N1	-5.74	1.31	1.35
26	1H	946	G	N3-C4	-5.74	1.31	1.35
49	J8	93	GLU	CB-CG	5.74	1.63	1.52
26	14	559	G	C6-O6	5.74	1.29	1.24
26	1H	751	A	N3-C4	-5.74	1.31	1.34
26	1H	2269	A	N9-C4	-5.74	1.34	1.37
26	1H	2393	A	N9-C8	-5.74	1.33	1.37
26	1H	2494	G	N3-C4	-5.74	1.31	1.35
26	1H	194	G	C5-C4	-5.74	1.34	1.38
26	1H	1219	G	C6-N1	-5.74	1.35	1.39
26	1H	1566	A	C8-N7	5.74	1.35	1.31
26	14	1354	A	C5-C4	-5.73	1.34	1.38
1	13	712	A	C6-N1	-5.73	1.31	1.35
26	14	2020	A	N3-C4	-5.73	1.31	1.34
26	1H	1130	U	N1-C6	-5.73	1.32	1.38
26	1H	1823	G	N7-C5	-5.73	1.35	1.39
26	1H	2373	G	N9-C4	-5.73	1.33	1.38
26	1H	150	C	N3-C4	-5.73	1.29	1.33
26	1H	2578	G	C8-N7	-5.73	1.27	1.30
1	1G	1428	A	N3-C4	-5.73	1.31	1.34
26	14	2587	A	N9-C8	-5.73	1.33	1.37
26	1H	768	G	C6-N1	-5.73	1.35	1.39
45	F8	12	VAL	CB-CG2	-5.73	1.40	1.52
26	1H	259	G	C6-O6	5.72	1.29	1.24
26	1H	1427	A	N3-C4	-5.72	1.31	1.34
57	3L	76	A	C5-C4	5.72	1.42	1.38
26	1H	669	G	N1-C2	-5.72	1.33	1.37
26	14	1637	A	N3-C4	-5.72	1.31	1.34
26	14	1853	A	N3-C4	-5.72	1.31	1.34
26	14	2822	G	N9-C4	-5.72	1.33	1.38
26	1H	781	A	C5-C4	-5.72	1.34	1.38
26	1H	2438	U	N1-C6	-5.72	1.32	1.38
26	1H	2713	A	N9-C8	5.72	1.42	1.37
26	14	2845	G	N9-C4	-5.72	1.33	1.38
27	16	21	G	C6-N1	5.72	1.43	1.39
27	16	50	G	N7-C5	-5.72	1.35	1.39
26	14	1441	G	C5-C4	-5.72	1.34	1.38
26	1H	1369	G	C6-O6	5.71	1.29	1.24
26	14	2518	A	N7-C5	-5.71	1.35	1.39
26	1H	452	G	N1-C2	-5.71	1.33	1.37
26	1H	1210	A	C5-C6	-5.71	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2380	C	C4-C5	5.71	1.47	1.43
26	1H	1993	U	C2-O2	-5.71	1.17	1.22
1	1G	1502	A	N9-C4	-5.71	1.34	1.37
26	1H	110	G	N9-C8	-5.71	1.33	1.37
26	1H	261	G	N9-C8	-5.71	1.33	1.37
26	1H	1128	A	N7-C5	-5.71	1.35	1.39
26	1H	1905	C	N1-C2	-5.71	1.34	1.40
26	1H	2727	G	N7-C5	-5.71	1.35	1.39
26	14	36	G	C6-N1	-5.71	1.35	1.39
26	1H	2070	G	N7-C5	-5.71	1.35	1.39
26	1H	2230	G	N3-C4	-5.71	1.31	1.35
26	1H	2500	U	C4-O4	-5.71	1.19	1.23
26	1H	2695	C	N1-C6	-5.71	1.33	1.37
26	14	16	G	N3-C4	-5.71	1.31	1.35
26	14	567	A	N9-C4	-5.71	1.34	1.37
26	14	1658	C	N1-C6	-5.70	1.33	1.37
26	1H	297	C	N3-C4	-5.70	1.29	1.33
26	1H	1786	A	N3-C4	-5.70	1.31	1.34
1	13	778	G	C6-O6	5.70	1.29	1.24
1	1G	87	A	N9-C4	5.70	1.41	1.37
26	14	783	A	C5-C4	5.70	1.42	1.38
26	1H	390	A	C5-C6	-5.70	1.35	1.41
26	1H	1375	C	C4-C5	-5.70	1.38	1.43
26	1H	2230	G	N9-C4	-5.70	1.33	1.38
26	1H	2318	G	N9-C8	5.69	1.41	1.37
23	2K	58	A	N3-C4	-5.69	1.31	1.34
26	1H	1840	G	N9-C4	-5.69	1.33	1.38
26	1H	1892	C	N1-C2	-5.69	1.34	1.40
26	1H	2576	G	C8-N7	-5.69	1.27	1.30
26	14	44	A	C6-N6	5.69	1.38	1.33
26	1H	848	G	N3-C4	-5.69	1.31	1.35
26	1H	1393	A	N9-C4	-5.69	1.34	1.37
26	1H	737	C	O3'-P	-5.69	1.54	1.61
1	13	1199	U	C2-N3	-5.68	1.33	1.37
1	13	1434	A	N3-C4	-5.68	1.31	1.34
26	1H	2280	G	N3-C4	-5.68	1.31	1.35
26	1H	678	C	C4'-C3'	-5.68	1.46	1.52
1	13	1455	G	N9-C4	-5.68	1.33	1.38
26	1H	1931	U	N3-C4	-5.68	1.33	1.38
26	14	1662	C	N1-C6	-5.68	1.33	1.37
26	14	32	C	N1-C6	-5.67	1.33	1.37
26	14	1450	C	N1-C6	-5.67	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1937	A	N7-C5	-5.67	1.35	1.39
26	14	2488	A	N9-C4	-5.67	1.34	1.37
26	14	70	G	N1-C2	-5.67	1.33	1.37
26	14	516	C	N1-C6	-5.67	1.33	1.37
26	14	2280	G	C6-O6	5.67	1.29	1.24
26	1H	1929	G	N1-C2	-5.67	1.33	1.37
1	13	397	A	N3-C4	-5.67	1.31	1.34
26	1H	309	G	N9-C4	5.67	1.42	1.38
26	1H	929	G	N9-C4	-5.67	1.33	1.38
26	1H	27	G	N7-C5	-5.66	1.35	1.39
26	1H	573	G	C8-N7	-5.66	1.27	1.30
1	1G	108	G	C6-N1	5.66	1.43	1.39
26	1H	257	A	N7-C5	-5.66	1.35	1.39
26	14	251	A	N3-C4	-5.66	1.31	1.34
26	14	796	C	C4-N4	-5.66	1.28	1.33
1	13	1486	G	C6-O6	5.66	1.29	1.24
26	1H	1376	C	N1-C6	-5.66	1.33	1.37
26	14	68	G	N7-C5	-5.66	1.35	1.39
1	13	535	A	C6-N1	-5.66	1.31	1.35
26	14	1653	G	N9-C4	5.66	1.42	1.38
55	M5	49	VAL	CA-CB	5.65	1.66	1.54
26	1H	839	U	N1-C2	-5.65	1.33	1.38
26	1H	1599	C	C2-N3	-5.65	1.31	1.35
26	14	770	G	C6-N1	-5.65	1.35	1.39
26	14	2217	G	C6-N1	5.65	1.43	1.39
26	1H	669	G	N3-C4	-5.65	1.31	1.35
26	1H	1779	U	N1-C6	-5.65	1.32	1.38
26	1H	1827	C	P-O5'	-5.65	1.54	1.59
26	14	2502	G	C6-N1	-5.65	1.35	1.39
32	41	14	GLU	CB-CG	5.65	1.62	1.52
1	1G	576	G	N9-C4	5.65	1.42	1.38
26	14	770	G	C4'-C3'	-5.65	1.47	1.52
26	1H	1941	C	N1-C6	-5.64	1.33	1.37
26	1H	2622	C	N3-C4	-5.64	1.30	1.33
26	14	264	C	N1-C6	-5.64	1.33	1.37
26	1H	2233	U	N1-C2	-5.64	1.33	1.38
26	1H	2588	G	N9-C8	-5.64	1.33	1.37
26	14	2323	G	C6-N1	5.64	1.43	1.39
26	14	265	A	N9-C4	-5.63	1.34	1.37
26	14	2600	A	N7-C5	-5.63	1.35	1.39
1	13	1401	G	N9-C4	-5.63	1.33	1.38
26	14	607	U	C2-N3	-5.63	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	13	1304	G	C6-O6	5.63	1.29	1.24
26	1H	640	C	N3-C4	-5.63	1.30	1.33
1	1G	770	C	N1-C6	-5.63	1.33	1.37
26	14	2445	G	N7-C5	-5.63	1.35	1.39
26	1H	1106	G	N9-C4	5.63	1.42	1.38
26	1H	1807	G	N9-C8	-5.63	1.33	1.37
26	1H	2644	G	N3-C4	-5.63	1.31	1.35
26	1H	586	A	N3-C4	5.63	1.38	1.34
26	14	2445	G	C2-N2	-5.63	1.28	1.34
26	14	2506	U	N3-C4	5.62	1.43	1.38
26	1H	1810	A	N9-C4	-5.62	1.34	1.37
1	1G	263	A	N9-C4	-5.62	1.34	1.37
26	1H	1110	G	C4'-C3'	5.62	1.59	1.53
1	1G	823	G	N9-C4	-5.62	1.33	1.38
7	62	91	VAL	C-N	5.62	1.47	1.34
26	1H	330	A	C5-C4	5.62	1.42	1.38
26	1H	1210	A	C5-C4	5.62	1.42	1.38
26	14	773	U	N3-C4	-5.62	1.33	1.38
1	13	1473	A	N3-C4	-5.62	1.31	1.34
26	1H	2599	G	C2-N2	-5.62	1.28	1.34
26	14	1578	U	N3-C4	-5.62	1.33	1.38
26	14	2422	A	N3-C4	5.62	1.38	1.34
26	1H	372	G	N3-C4	-5.61	1.31	1.35
26	1H	764	A	C6-N1	-5.61	1.31	1.35
26	1H	2604	U	N1-C2	-5.61	1.33	1.38
26	14	56	A	C6-N1	-5.61	1.31	1.35
26	1H	909	A	C5-C4	-5.61	1.34	1.38
1	1G	621	A	N9-C4	-5.61	1.34	1.37
25	4L	14	A	N9-C4	5.61	1.41	1.37
27	1J	52	A	N7-C5	5.61	1.42	1.39
26	1H	2068	U	N3-C4	-5.61	1.33	1.38
26	1H	2331	G	C5-C6	-5.61	1.36	1.42
26	1H	795	C	N3-C4	-5.60	1.30	1.33
26	1H	191	A	N9-C4	5.60	1.41	1.37
26	1H	325	G	C6-N1	-5.60	1.35	1.39
26	1H	1332	G	N3-C4	-5.60	1.31	1.35
26	1H	1826	G	N9-C4	5.60	1.42	1.38
43	95	81	TYR	CG-CD2	-5.60	1.31	1.39
26	1H	782	A	N3-C4	-5.60	1.31	1.34
26	14	1925	C	N3-C4	-5.60	1.30	1.33
26	1H	441	U	C2-N3	-5.60	1.33	1.37
26	1H	871	U	N3-C4	5.60	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1348	G	C8-N7	-5.60	1.27	1.30
26	1H	2429	G	N9-C8	-5.60	1.33	1.37
26	14	1758	G	N3-C4	-5.60	1.31	1.35
26	14	2029	G	C6-N1	-5.60	1.35	1.39
26	14	2033	A	N9-C4	-5.60	1.34	1.37
17	8I	24	GLU	CG-CD	5.60	1.60	1.51
26	14	941	A	N7-C5	-5.59	1.35	1.39
26	14	1645	G	C6-N1	-5.59	1.35	1.39
41	75	8	LYS	CB-CG	-5.59	1.37	1.52
26	1H	805	G	N7-C5	-5.59	1.35	1.39
26	1H	1204	A	N7-C5	-5.59	1.35	1.39
26	1H	1884	A	N9-C4	-5.59	1.34	1.37
26	1H	2267	A	N7-C5	-5.59	1.35	1.39
26	14	2320	A	N3-C4	5.59	1.38	1.34
26	14	575	A	N7-C5	5.59	1.42	1.39
26	14	584	C	N1-C6	-5.59	1.33	1.37
26	1H	566	U	C2-O2	5.59	1.27	1.22
26	1H	2762	G	C6-N1	-5.59	1.35	1.39
26	1H	52	A	N9-C4	5.59	1.41	1.37
26	1H	1291	C	C4-N4	-5.59	1.28	1.33
26	1H	1838	C	C4-N4	-5.59	1.28	1.33
26	1H	1987	G	C2-N3	-5.59	1.28	1.32
26	14	1342	A	N3-C4	-5.59	1.31	1.34
26	14	2772	C	N3-C4	-5.59	1.30	1.33
26	1H	1793	C	N1-C6	-5.58	1.33	1.37
26	1H	2038	G	C5-C4	-5.58	1.34	1.38
26	1H	2041	U	N1-C6	-5.58	1.32	1.38
1	13	132	C	N1-C6	-5.58	1.33	1.37
26	1H	771	G	C2-N3	-5.58	1.28	1.32
26	14	2873	A	N7-C5	-5.58	1.35	1.39
46	C5	84	ARG	CD-NE	-5.58	1.36	1.46
26	14	946	G	N9-C4	-5.58	1.33	1.38
26	14	974(A)	C	N1-C6	5.58	1.40	1.37
26	14	2087	G	C6-N1	-5.58	1.35	1.39
26	1H	567	A	N9-C4	-5.58	1.34	1.37
26	14	2637	U	C2-N3	5.58	1.41	1.37
1	13	539	A	N3-C4	-5.58	1.31	1.34
26	1H	470	A	C6-N6	-5.57	1.29	1.33
26	14	1788	C	N3-C4	-5.57	1.30	1.33
26	14	2019	A	N9-C4	-5.57	1.34	1.37
26	1H	1849	G	N3-C4	-5.57	1.31	1.35
26	14	755	C	N1-C2	-5.57	1.34	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1031	G	C6-N1	-5.57	1.35	1.39
26	1H	1419	A	N3-C4	-5.57	1.31	1.34
26	1H	2503	A	C5-C4	-5.57	1.34	1.38
26	1H	1614	A	N7-C5	-5.57	1.35	1.39
22	1K	35	U	N1-C2	5.57	1.43	1.38
26	1H	774	A	C5-C6	-5.57	1.36	1.41
26	14	2238	G	N7-C5	5.57	1.42	1.39
26	1H	2267	A	C5-C4	-5.56	1.34	1.38
26	1H	478	A	N9-C8	-5.56	1.33	1.37
26	1H	1244	G	N3-C4	-5.56	1.31	1.35
26	1H	2675	A	N7-C5	-5.56	1.35	1.39
44	E8	76	VAL	CB-CG1	-5.56	1.41	1.52
26	1H	1313	U	C2-N3	5.56	1.41	1.37
26	1H	1379	A	C5-C4	5.56	1.42	1.38
26	1H	476	G	C2-N3	-5.56	1.28	1.32
26	14	1608	A	C6-N1	-5.56	1.31	1.35
26	1H	802	A	C6-N1	-5.55	1.31	1.35
26	1H	439	G	N3-C4	-5.55	1.31	1.35
26	14	773	U	C2-N3	-5.55	1.33	1.37
26	1H	1903	G	C6-N1	-5.55	1.35	1.39
1	1G	1474	G	N7-C5	-5.55	1.35	1.39
26	14	2071	A	N7-C5	-5.55	1.35	1.39
26	1H	1914	C	C4-C5	5.55	1.47	1.43
26	1H	805	G	C6-N1	-5.55	1.35	1.39
26	1H	666	G	N9-C4	-5.54	1.33	1.38
26	1H	722	A	N9-C4	-5.54	1.34	1.37
26	1H	871	U	C4-O4	5.54	1.28	1.23
26	1H	385	C	N1-C2	-5.54	1.34	1.40
26	14	17	G	N7-C5	-5.54	1.35	1.39
26	14	1772	G	C5-C6	-5.54	1.36	1.42
26	1H	550	G	N9-C4	-5.54	1.33	1.38
26	1H	1828	G	N7-C5	-5.54	1.35	1.39
1	13	918	A	N7-C5	-5.54	1.35	1.39
1	1G	1524	C	N1-C6	-5.54	1.33	1.37
26	14	487	C	N1-C6	-5.54	1.33	1.37
26	14	1264	G	C6-O6	5.54	1.29	1.24
26	14	2327	A	N3-C4	-5.54	1.31	1.34
26	1H	138	G	N7-C5	5.54	1.42	1.39
26	1H	1570	A	C5-C6	-5.54	1.36	1.41
46	C5	71	LYS	CD-CE	-5.54	1.37	1.51
26	1H	141	A	C5-C4	5.53	1.42	1.38
26	1H	675	A	N7-C5	5.53	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1603	A	N7-C5	-5.53	1.35	1.39
53	J5	51	TYR	CD1-CE1	5.53	1.47	1.39
26	1H	479	A	N3-C4	-5.53	1.31	1.34
26	14	2251	G	N9-C4	-5.53	1.33	1.38
38	88	21	THR	CB-CG2	5.53	1.70	1.52
1	13	977	A	N9-C4	5.53	1.41	1.37
26	1H	389	G	C8-N7	-5.53	1.27	1.30
26	14	330	A	N9-C8	5.53	1.42	1.37
26	1H	1937	A	N9-C8	-5.53	1.33	1.37
26	14	71	A	N9-C8	5.53	1.42	1.37
27	1J	36	C	N1-C6	5.53	1.40	1.37
26	1H	552	G	N3-C4	-5.52	1.31	1.35
26	1H	2030	A	C6-N1	5.52	1.39	1.35
26	1H	1313	U	N1-C2	-5.52	1.33	1.38
26	1H	347	A	N9-C4	-5.52	1.34	1.37
1	13	1432	G	C6-N1	5.52	1.43	1.39
26	1H	666	G	N9-C8	-5.52	1.33	1.37
26	1H	1844	C	N1-C6	-5.52	1.33	1.37
1	1G	1428	A	N7-C5	-5.52	1.35	1.39
26	14	1906	G	C2-N3	-5.52	1.28	1.32
26	1H	649	G	N3-C4	-5.52	1.31	1.35
26	1H	2581	G	N1-C2	-5.52	1.33	1.37
1	1G	887	G	C5-C6	-5.52	1.36	1.42
26	14	1266	G	N7-C5	5.52	1.42	1.39
26	1H	1351	C	N1-C6	-5.51	1.33	1.37
26	1H	1946	U	N3-C4	-5.51	1.33	1.38
26	14	1783	A	N9-C4	5.51	1.41	1.37
26	1H	1668	A	N3-C4	-5.51	1.31	1.34
57	3L	3	G	C6-N1	5.51	1.43	1.39
26	1H	615	G	N3-C4	5.51	1.39	1.35
26	14	464	U	C4-O4	-5.51	1.19	1.23
26	1H	1219	G	N3-C4	-5.51	1.31	1.35
26	1H	2072	G	C8-N7	-5.51	1.27	1.30
33	51	167	GLU	CD-OE2	-5.51	1.19	1.25
26	14	199	A	N9-C4	5.51	1.41	1.37
26	1H	2489	G	N9-C8	-5.51	1.33	1.37
27	16	102	G	N7-C5	5.51	1.42	1.39
1	13	975	A	N9-C4	-5.51	1.34	1.37
25	4K	14	A	N3-C4	5.51	1.38	1.34
13	4I	8	GLU	CG-CD	5.50	1.60	1.51
26	1H	1987	G	N3-C4	-5.50	1.31	1.35
26	14	2198	A	N9-C4	-5.50	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	2449	U	C2-O2	5.50	1.27	1.22
26	1H	2322	A	N7-C5	5.50	1.42	1.39
1	1G	144	G	N9-C4	5.50	1.42	1.38
26	14	517	C	N3-C4	-5.50	1.30	1.33
26	14	689	A	N7-C5	-5.50	1.35	1.39
26	14	2091	U	C2-N3	-5.50	1.33	1.37
26	14	2585	U	N1-C2	5.50	1.43	1.38
26	14	1695	G	N3-C4	-5.50	1.31	1.35
8	72	135	CYS	CB-SG	-5.50	1.72	1.81
11	2A	99	GLN	CD-OE1	-5.50	1.11	1.24
26	1H	214	G	N7-C5	-5.50	1.35	1.39
26	1H	906	G	C6-N1	5.50	1.43	1.39
26	14	621	A	C5-C6	-5.50	1.36	1.41
26	1H	1613	G	C6-N1	-5.50	1.35	1.39
1	13	1512	U	C2-N3	-5.49	1.33	1.37
26	1H	2640	G	N3-C4	-5.49	1.31	1.35
26	14	1465	G	N9-C4	-5.49	1.33	1.38
26	1H	59	U	C4-O4	5.49	1.28	1.23
26	1H	1937	A	C5-C4	-5.49	1.34	1.38
31	31	83	PHE	CD2-CE2	-5.49	1.28	1.39
26	14	1773	A	N3-C4	-5.49	1.31	1.34
26	14	2725	A	N3-C4	-5.49	1.31	1.34
26	1H	772	C	C2-N3	5.49	1.40	1.35
34	69	85	GLU	CD-OE2	-5.49	1.19	1.25
1	13	830	G	C6-O6	5.49	1.29	1.24
26	1H	1428	C	C4-C5	5.49	1.47	1.43
26	1H	636	G	C8-N7	-5.48	1.27	1.30
26	1H	1109	C	C5'-C4'	5.48	1.57	1.51
26	14	34	C	N1-C2	5.48	1.45	1.40
26	14	2459	A	N3-C4	5.48	1.38	1.34
1	13	891	U	P-OP2	5.48	1.58	1.49
26	1H	1616	A	C6-N1	5.48	1.39	1.35
26	14	752	A	C8-N7	-5.48	1.27	1.31
26	1H	1354	A	C5-C6	-5.48	1.36	1.41
26	1H	591	C	N1-C6	-5.48	1.33	1.37
26	1H	770	G	C6-O6	5.48	1.29	1.24
26	1H	2822	G	C5-C6	-5.48	1.36	1.42
26	1H	1324	G	C2-N3	-5.48	1.28	1.32
26	14	1241	A	N9-C4	-5.48	1.34	1.37
26	1H	298	G	C6-N1	5.47	1.43	1.39
26	1H	527	C	C5-C6	-5.47	1.29	1.34
2	12	170	GLU	CD-OE1	-5.47	1.19	1.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1970	A	N7-C5	-5.47	1.35	1.39
26	1H	465	G	C6-N1	5.47	1.43	1.39
26	14	2579	C	N3-C4	-5.47	1.30	1.33
26	1H	788	A	C6-N1	5.47	1.39	1.35
26	1H	1630(A)	C	N3-C4	-5.47	1.30	1.33
26	1H	1265	A	N7-C5	-5.47	1.35	1.39
26	1H	146	G	N9-C4	-5.47	1.33	1.38
26	1H	2071	A	N7-C5	-5.47	1.35	1.39
1	13	352	C	C4-C5	-5.46	1.38	1.43
26	1H	1335	U	C3'-C2'	-5.46	1.46	1.52
26	14	1906	G	N7-C5	-5.46	1.35	1.39
26	1H	621	A	N1-C2	5.46	1.39	1.34
26	1H	1817	G	N9-C8	-5.46	1.34	1.37
13	4I	117	VAL	CB-CG2	5.46	1.64	1.52
26	1H	710	G	N3-C4	-5.46	1.31	1.35
26	1H	842	G	C6-N1	5.46	1.43	1.39
26	1H	1626	G	N3-C4	-5.46	1.31	1.35
26	1H	2375	G	C8-N7	5.46	1.34	1.30
26	14	1260	G	N7-C5	-5.46	1.35	1.39
26	1H	1677	A	N9-C8	-5.46	1.33	1.37
1	1G	319	G	N9-C4	-5.46	1.33	1.38
26	1H	1696	G	N7-C5	-5.46	1.35	1.39
23	2K	28	U	C2-N3	5.46	1.41	1.37
26	1H	1782	C	C2-O2	5.46	1.29	1.24
26	14	457	A	C6-N1	-5.45	1.31	1.35
26	1H	2234	G	N3-C4	-5.45	1.31	1.35
26	1H	2324	C	C2-O2	5.45	1.29	1.24
26	1H	669	G	C5-C6	-5.45	1.36	1.42
26	14	1696	G	N3-C4	-5.45	1.31	1.35
1	13	325	A	N3-C4	5.45	1.38	1.34
1	1G	238	G	N9-C4	-5.45	1.33	1.38
26	14	1696	G	N1-C2	-5.45	1.33	1.37
26	1H	71	A	C6-N6	-5.44	1.29	1.33
26	1H	836	G	N9-C4	5.44	1.42	1.38
26	14	2302	G	N9-C4	5.44	1.42	1.38
26	1H	195	A	C5-C6	-5.44	1.36	1.41
26	1H	2020	A	N7-C5	-5.44	1.35	1.39
26	14	1983	C	C4-C5	-5.44	1.38	1.43
37	78	64	LYS	CB-CG	5.44	1.67	1.52
26	14	2637	U	C4-O4	5.44	1.27	1.23
26	1H	202	U	C2-N3	-5.43	1.33	1.37
26	1H	1184	G	C2-N3	-5.43	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1349	A	C5-C4	5.43	1.42	1.38
23	2K	28	U	C4-O4	5.43	1.27	1.23
26	1H	1204	A	C5-C6	-5.43	1.36	1.41
1	1G	111	G	N3-C4	-5.43	1.31	1.35
26	14	194	G	C6-N1	5.43	1.43	1.39
1	13	244	U	C2-N3	5.43	1.41	1.37
26	14	2557	G	C8-N7	-5.43	1.27	1.30
26	1H	41	C	C2-N3	-5.43	1.31	1.35
26	1H	977	G	C2-N3	-5.43	1.28	1.32
26	1H	252	G	N3-C4	-5.42	1.31	1.35
26	1H	2490	G	C6-O6	5.42	1.29	1.24
15	6I	17	ARG	CZ-NH2	-5.42	1.25	1.33
26	1H	2053	G	N1-C2	-5.42	1.33	1.37
1	1G	739	C	C2-N3	5.42	1.40	1.35
26	14	2289	G	C6-N1	5.42	1.43	1.39
1	13	915	A	N3-C4	-5.42	1.31	1.34
26	1H	2446	G	N9-C8	-5.42	1.34	1.37
56	1L	37	A	N3-C4	5.42	1.38	1.34
26	14	213	A	N9-C4	-5.42	1.34	1.37
26	1H	744	G	N7-C5	-5.42	1.35	1.39
1	1G	253	U	N1-C2	-5.42	1.33	1.38
26	1H	964	C	N3-C4	-5.42	1.30	1.33
1	1G	1530	G	C6-N1	5.42	1.43	1.39
26	14	2249	U	C2-N3	5.42	1.41	1.37
26	1H	88	G	C6-N1	-5.42	1.35	1.39
26	1H	1052	C	N1-C6	5.42	1.40	1.37
26	14	802	A	N3-C4	-5.42	1.31	1.34
27	16	108	C	N1-C6	-5.41	1.33	1.37
26	1H	1823	G	C6-N1	-5.41	1.35	1.39
1	13	239	U	C4-O4	5.41	1.27	1.23
1	13	733	A	N9-C8	-5.41	1.33	1.37
26	1H	1347	G	C5-C4	-5.41	1.34	1.38
26	1H	1950	G	N7-C5	-5.41	1.36	1.39
26	14	2520	C	C2-N3	-5.41	1.31	1.35
23	2K	39	A	N3-C4	-5.41	1.31	1.34
26	1H	809	G	C5-C6	-5.41	1.36	1.42
26	1H	1697	G	N9-C8	-5.41	1.34	1.37
1	1G	730	G	C5-C6	5.41	1.47	1.42
26	14	1257	C	N3-C4	-5.41	1.30	1.33
26	14	676	A	C6-N6	-5.41	1.29	1.33
26	1H	457	A	N3-C4	5.41	1.38	1.34
26	1H	2278	A	N3-C4	-5.41	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2599	G	N1-C2	-5.41	1.33	1.37
26	14	693	C	C2-N3	-5.41	1.31	1.35
26	14	866	A	N3-C4	5.41	1.38	1.34
26	14	1465	G	N3-C4	-5.41	1.31	1.35
26	1H	2371	G	C2-N3	5.40	1.37	1.32
26	14	1369	G	C4'-C3'	-5.40	1.47	1.52
26	14	774	A	N7-C5	-5.40	1.36	1.39
26	14	783	A	N1-C2	5.40	1.39	1.34
26	1H	1436	G	C5-C4	-5.40	1.34	1.38
26	1H	2871	C	N3-C4	-5.40	1.30	1.33
26	14	2331	G	C2-N3	5.40	1.37	1.32
27	1J	102	G	C5-C6	5.40	1.47	1.42
26	1H	1950	G	N1-C2	5.40	1.42	1.37
26	1H	2359	C	N3-C4	-5.40	1.30	1.33
26	14	970	C	N1-C6	5.40	1.40	1.37
26	14	1378	A	N3-C4	5.40	1.38	1.34
1	1G	331	G	C6-N1	5.40	1.43	1.39
26	14	1945	G	N1-C2	-5.40	1.33	1.37
26	1H	422	A	N9-C4	-5.39	1.34	1.37
26	14	675	A	C8-N7	-5.39	1.27	1.31
23	2K	11	A	N9-C4	-5.39	1.34	1.37
26	1H	962	G	N1-C2	-5.39	1.33	1.37
23	2K	17	C	C2-O2	5.39	1.29	1.24
26	1H	2585	U	N1-C2	5.39	1.43	1.38
45	F8	16	LYS	CB-CG	5.39	1.67	1.52
26	14	2686	G	N3-C4	5.39	1.39	1.35
1	13	696	A	N3-C4	-5.39	1.31	1.34
26	1H	2425	A	N3-C4	-5.39	1.31	1.34
26	14	2627	G	N9-C4	-5.39	1.33	1.38
1	13	1064	G	N9-C8	-5.39	1.34	1.37
26	1H	52	A	N3-C4	5.39	1.38	1.34
26	1H	2312	U	C2-N3	5.39	1.41	1.37
26	14	1229(A)	G	N9-C4	-5.39	1.33	1.38
46	G8	55	TYR	CG-CD2	-5.38	1.32	1.39
26	14	1285	G	C8-N7	-5.38	1.27	1.30
26	14	1833	U	C2-O2	-5.38	1.17	1.22
26	14	1933	G	N9-C8	-5.38	1.34	1.37
26	14	1950	G	C2-N2	5.38	1.40	1.34
26	14	2392	A	N7-C5	-5.38	1.36	1.39
26	14	2594	C	N1-C2	-5.38	1.34	1.40
26	14	1348	G	C8-N7	-5.38	1.27	1.30
26	14	2611	U	N1-C6	-5.38	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2607	G	N3-C4	-5.38	1.31	1.35
26	14	567	A	C5-C4	-5.38	1.34	1.38
26	14	1996	C	N1-C6	-5.38	1.33	1.37
26	1H	2237	G	N3-C4	5.38	1.39	1.35
26	1H	848	G	N9-C8	-5.38	1.34	1.37
26	1H	1282	U	N1-C6	-5.38	1.33	1.38
26	1H	2219	G	N9-C4	-5.38	1.33	1.38
26	14	2552	U	C2-N3	-5.38	1.33	1.37
22	1K	26	A	N9-C4	5.38	1.41	1.37
26	1H	2665	A	N7-C5	-5.38	1.36	1.39
26	14	196	A	C6-N1	-5.38	1.31	1.35
26	14	2359	C	N1-C6	-5.38	1.33	1.37
26	14	2697	G	N9-C8	-5.38	1.34	1.37
32	41	35	GLU	CG-CD	5.38	1.60	1.51
26	1H	210	C	N1-C6	-5.37	1.33	1.37
26	1H	1192	G	C5-C4	-5.37	1.34	1.38
26	1H	1494	A	C6-N1	-5.37	1.31	1.35
26	1H	2699	C	C2-O2	5.37	1.29	1.24
26	14	1930	G	C5-C6	5.37	1.47	1.42
26	14	2625	G	N7-C5	-5.37	1.36	1.39
1	13	690	G	C5-C6	-5.37	1.36	1.42
26	1H	316	C	N3-C4	-5.37	1.30	1.33
26	14	2248	C	N1-C6	-5.37	1.33	1.37
26	1H	621	A	C5-C4	5.37	1.42	1.38
26	1H	1295	C	N3-C4	-5.37	1.30	1.33
26	14	2693	A	N9-C4	-5.37	1.34	1.37
26	1H	196	A	C2-N3	-5.37	1.28	1.33
26	1H	2430	A	N9-C8	5.37	1.42	1.37
26	1H	2059	A	C5-C4	-5.36	1.34	1.38
1	1G	518	C	N1-C6	-5.36	1.33	1.37
1	1G	535	A	N9-C8	-5.36	1.33	1.37
26	14	1309	G	C6-O6	5.36	1.28	1.24
1	13	977	A	C5-C6	5.36	1.45	1.41
26	1H	680	G	N7-C5	-5.36	1.36	1.39
26	1H	1185	C	C4-C5	-5.36	1.38	1.43
26	1H	1810	A	C5-C6	-5.36	1.36	1.41
26	1H	205	G	C2-N3	5.36	1.37	1.32
26	14	80	G	C6-N1	-5.36	1.35	1.39
26	14	1633	G	N9-C8	-5.36	1.34	1.37
26	1H	1701	A	C6-N1	-5.36	1.31	1.35
26	14	508	G	N7-C5	5.36	1.42	1.39
26	14	494	G	N7-C5	-5.36	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1792	G	N9-C8	-5.36	1.34	1.37
26	14	2873	A	C5-C4	5.36	1.42	1.38
26	1H	516	C	C4-C5	-5.35	1.38	1.43
26	1H	1913	A	N9-C4	5.35	1.41	1.37
26	1H	2581	G	C5-C6	-5.35	1.36	1.42
26	1H	1321	A	N7-C5	5.35	1.42	1.39
26	1H	1401	G	C6-O6	5.35	1.28	1.24
26	1H	2259	G	N9-C4	-5.35	1.33	1.38
26	1H	702	G	N3-C4	-5.35	1.31	1.35
26	1H	2436	G	N9-C8	-5.35	1.34	1.37
1	13	800	G	N3-C4	-5.35	1.31	1.35
26	1H	180	G	N9-C4	-5.35	1.33	1.38
26	1H	2198	A	N9-C4	-5.35	1.34	1.37
26	14	1270	C	N3-C4	-5.35	1.30	1.33
26	14	1288	U	C2-N3	-5.35	1.34	1.37
26	1H	785	G	C2-N2	-5.35	1.29	1.34
1	1G	232	G	N3-C4	-5.35	1.31	1.35
26	14	2459	A	N9-C4	5.35	1.41	1.37
1	13	767	A	N9-C4	-5.34	1.34	1.37
1	13	1199	U	C2-O2	-5.34	1.17	1.22
26	1H	2061	G	C6-N1	-5.34	1.35	1.39
26	1H	2440	C	N1-C6	-5.34	1.33	1.37
26	14	213	A	N7-C5	5.34	1.42	1.39
26	1H	1543	A	C5-C6	-5.34	1.36	1.41
26	14	2324	C	N3-C4	5.34	1.37	1.33
26	1H	692	C	C5-C6	-5.34	1.30	1.34
26	1H	2246	G	N1-C2	-5.34	1.33	1.37
1	1G	1467	G	C6-O6	5.34	1.28	1.24
26	1H	1229	G	N9-C8	-5.34	1.34	1.37
1	1G	1196	U	N1-C2	5.34	1.43	1.38
26	14	125	G	C2-N2	5.34	1.39	1.34
26	14	216	A	N9-C4	-5.34	1.34	1.37
26	14	2827	C	N1-C6	-5.34	1.33	1.37
26	1H	330	A	C6-N1	-5.34	1.31	1.35
26	1H	2007	C	C3'-C2'	-5.34	1.46	1.52
26	1H	938	G	N9-C4	-5.34	1.33	1.38
26	1H	1161	C	C2-N3	5.34	1.40	1.35
1	1G	332	G	N9-C4	-5.34	1.33	1.38
26	14	177	G	N9-C8	-5.34	1.34	1.37
26	1H	442	G	N1-C2	-5.33	1.33	1.37
26	1H	1324	G	N1-C2	5.33	1.42	1.37
25	4K	9	G	N9-C4	5.33	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	776	G	C2-N3	-5.33	1.28	1.32
26	1H	1939	U	C5-C6	-5.33	1.29	1.34
26	14	1393	A	C5-C4	-5.33	1.35	1.38
26	1H	570	G	N3-C4	-5.33	1.31	1.35
26	1H	1698	A	C5-C4	5.33	1.42	1.38
26	1H	2604	U	N3-C4	-5.33	1.33	1.38
26	14	571	A	N9-C4	5.33	1.41	1.37
26	1H	1601	G	C8-N7	-5.33	1.27	1.30
26	14	1630	G	C6-N1	-5.33	1.35	1.39
37	78	71	VAL	CB-CG1	-5.33	1.41	1.52
26	1H	1752	C	N1-C6	-5.33	1.33	1.37
1	13	1486	G	N3-C4	-5.33	1.31	1.35
26	1H	2517	C	N3-C4	-5.33	1.30	1.33
26	14	2276	G	N3-C4	-5.33	1.31	1.35
1	13	910	C	N1-C6	-5.32	1.33	1.37
38	88	85	LYS	N-CA	-5.32	1.35	1.46
26	1H	1778	U	C2-N3	-5.32	1.34	1.37
26	14	2509	G	N9-C8	-5.32	1.34	1.37
26	1H	390	A	N9-C4	-5.32	1.34	1.37
26	1H	1268	A	N9-C4	-5.32	1.34	1.37
26	1H	2436	G	C2-N2	-5.32	1.29	1.34
1	13	1488	G	C6-N1	-5.32	1.35	1.39
26	14	701	G	N9-C8	-5.32	1.34	1.37
26	14	1621	U	N1-C2	-5.32	1.33	1.38
23	2K	25	U	C2-N3	-5.32	1.34	1.37
26	1H	1607	C	N3-C4	5.32	1.37	1.33
26	14	1377	G	C6-O6	5.32	1.28	1.24
26	14	1787	A	N3-C4	5.32	1.38	1.34
26	1H	1902	C	N1-C2	-5.31	1.34	1.40
35	58	103	VAL	CB-CG1	-5.31	1.41	1.52
26	1H	1549	C	C2-N3	-5.31	1.31	1.35
26	14	682	G	C5-C4	-5.31	1.34	1.38
26	1H	796	C	C2-O2	5.31	1.29	1.24
26	1H	1423	G	C6-N1	-5.31	1.35	1.39
26	14	1287	A	C8-N7	-5.31	1.27	1.31
1	13	1053	G	C5-C4	-5.31	1.34	1.38
1	1G	366	C	N1-C6	-5.31	1.33	1.37
26	1H	188	G	C5-C6	-5.31	1.37	1.42
1	13	151	A	N9-C4	5.30	1.41	1.37
26	1H	74	A	C5-C6	-5.30	1.36	1.41
26	1H	1989	G	N9-C8	-5.30	1.34	1.37
26	1H	2301	C	N3-C4	-5.30	1.30	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1979	C	C4-N4	-5.30	1.29	1.33
26	14	2854	G	C6-N1	-5.30	1.35	1.39
26	14	675	A	N7-C5	5.30	1.42	1.39
26	14	1678	G	N9-C8	5.30	1.41	1.37
53	N8	6	VAL	CB-CG2	-5.30	1.41	1.52
26	14	2082	A	N7-C5	-5.30	1.36	1.39
1	13	1419	G	C6-O6	5.30	1.28	1.24
26	1H	2610	C	C2-O2	5.30	1.29	1.24
1	13	1280	A	N9-C4	-5.30	1.34	1.37
26	1H	514	A	C5-C4	-5.30	1.35	1.38
23	2K	31	G	C6-O6	5.29	1.28	1.24
26	1H	43	G	C6-N1	-5.29	1.35	1.39
26	1H	986	C	N1-C6	5.29	1.40	1.37
26	1H	2077	A	C6-N6	-5.29	1.29	1.33
27	16	42	C	N1-C2	-5.29	1.34	1.40
23	2K	75	C	N3-C4	-5.29	1.30	1.33
26	1H	692	C	N1-C6	-5.29	1.33	1.37
46	G8	27	VAL	CB-CG2	-5.29	1.41	1.52
26	14	562	U	C2-N3	-5.29	1.34	1.37
26	1H	2679	A	N9-C4	-5.29	1.34	1.37
40	A8	46	VAL	CB-CG1	-5.29	1.41	1.52
26	14	1278	A	C6-N6	-5.29	1.29	1.33
26	1H	2476	A	O3'-P	5.29	1.67	1.61
1	13	790	A	C6-N1	5.29	1.39	1.35
26	1H	1704	G	N7-C5	-5.29	1.36	1.39
1	13	1516	G	N3-C4	5.29	1.39	1.35
26	1H	344	G	C6-N1	-5.29	1.35	1.39
26	14	472	A	N9-C4	-5.29	1.34	1.37
26	14	947	G	C5-C6	5.29	1.47	1.42
26	14	2386	C	N1-C6	-5.29	1.33	1.37
23	2K	43	G	C6-N1	-5.28	1.35	1.39
1	13	904	C	N3-C4	-5.28	1.30	1.33
26	1H	410	G	N9-C4	-5.28	1.33	1.38
1	1G	790	A	C5-C6	5.28	1.45	1.41
26	1H	694	U	C5-C6	5.28	1.39	1.34
26	1H	996	A	C5-C4	-5.28	1.35	1.38
26	1H	2541	A	C5-C4	-5.28	1.35	1.38
26	1H	2621	A	N7-C5	5.28	1.42	1.39
47	H8	24	LEU	C-N	-5.28	1.24	1.34
26	14	603	A	N9-C4	-5.28	1.34	1.37
26	14	1578	U	C2-N3	-5.28	1.34	1.37
30	29	200	GLU	CG-CD	5.28	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1788	C	C4-N4	-5.28	1.29	1.33
26	1H	1905	C	N1-C6	-5.28	1.33	1.37
1	1G	894	G	N9-C4	-5.28	1.33	1.38
27	1J	89	G	N3-C4	5.28	1.39	1.35
26	1H	23	G	N7-C5	5.27	1.42	1.39
26	14	1328	G	C5-C6	-5.27	1.37	1.42
26	14	1772	G	N9-C4	-5.27	1.33	1.38
26	1H	2502	G	C6-N1	-5.27	1.35	1.39
26	14	1900	A	C6-N1	-5.27	1.31	1.35
26	1H	294	A	N9-C8	-5.27	1.33	1.37
26	1H	701	G	C6-N1	-5.27	1.35	1.39
26	1H	1264	G	C6-O6	5.27	1.28	1.24
26	14	2371	G	N1-C2	5.27	1.42	1.37
26	1H	573	G	C5-C6	5.27	1.47	1.42
26	1H	645	C	N1-C2	5.27	1.45	1.40
26	1H	2516	G	N3-C4	-5.27	1.31	1.35
26	14	969	U	C2-N3	-5.27	1.34	1.37
26	14	2060	A	N3-C4	5.27	1.38	1.34
26	14	2777	G	N9-C8	-5.27	1.34	1.37
1	13	691	G	N9-C4	-5.27	1.33	1.38
26	1H	71	A	C5-C4	5.27	1.42	1.38
26	1H	2083	G	N3-C4	-5.26	1.31	1.35
27	16	45	A	C5-C4	5.26	1.42	1.38
26	14	1383	C	C2-N3	5.26	1.40	1.35
26	14	1888	G	C6-N1	5.26	1.43	1.39
26	1H	729	G	C5-C4	-5.26	1.34	1.38
1	13	885	G	N3-C4	-5.26	1.31	1.35
26	1H	326	G	C6-N1	5.26	1.43	1.39
26	1H	2761	G	N3-C4	-5.26	1.31	1.35
1	13	761	G	C6-N1	-5.26	1.35	1.39
26	1H	2555	U	N1-C2	-5.26	1.33	1.38
1	1G	1204	A	N9-C4	5.26	1.41	1.37
26	1H	1593	G	C8-N7	-5.26	1.27	1.30
26	1H	2584	U	C4-O4	5.26	1.27	1.23
26	14	1275	A	N7-C5	-5.26	1.36	1.39
26	1H	846	C	N1-C6	-5.26	1.33	1.37
26	14	1698	A	N1-C2	5.26	1.39	1.34
26	14	2330	G	C5-C4	5.26	1.42	1.38
26	14	2515	C	N1-C6	-5.25	1.33	1.37
26	1H	661	C	N1-C6	-5.25	1.33	1.37
26	1H	2271	G	N3-C4	-5.25	1.31	1.35
26	1H	2599	G	C2-N3	-5.25	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	606	U	N3-C4	-5.25	1.33	1.38
26	1H	1655	A	N7-C5	-5.25	1.36	1.39
43	D8	37	VAL	CA-CB	5.25	1.65	1.54
1	1G	573	A	N9-C4	5.25	1.41	1.37
26	14	1627	G	C6-O6	5.25	1.28	1.24
26	1H	609	A	C5-C6	-5.25	1.36	1.41
26	1H	1966	A	C6-N1	-5.25	1.31	1.35
26	1H	2418	A	N1-C2	-5.25	1.29	1.34
26	14	2371	G	C6-N1	5.25	1.43	1.39
26	1H	1216	G	C5-C4	-5.25	1.34	1.38
26	1H	2383	G	C6-N1	-5.25	1.35	1.39
26	1H	2645	G	C5-C4	5.25	1.42	1.38
25	4L	20	U	N1-C2	5.25	1.43	1.38
1	13	976	G	C6-O6	5.25	1.28	1.24
1	13	1126	U	N1-C2	5.25	1.43	1.38
26	1H	128	C	C4-N4	-5.25	1.29	1.33
1	13	518	C	N1-C6	-5.25	1.34	1.37
26	1H	142	G	N9-C4	-5.25	1.33	1.38
26	14	812	C	N1-C6	-5.25	1.34	1.37
26	14	1948	G	N9-C4	-5.24	1.33	1.38
26	1H	1426	G	C8-N7	5.24	1.34	1.30
8	7E	102	ARG	CD-NE	-5.24	1.37	1.46
26	1H	691	C	N1-C2	-5.24	1.34	1.40
26	1H	1231	G	N9-C4	-5.24	1.33	1.38
25	4L	19	A	N9-C4	5.24	1.41	1.37
26	14	756	C	C4-C5	-5.24	1.38	1.43
26	1H	111	A	N9-C4	-5.24	1.34	1.37
26	1H	774	A	C5-C4	5.24	1.42	1.38
26	1H	1646	C	N1-C6	-5.24	1.34	1.37
45	F8	54	VAL	CB-CG1	-5.24	1.41	1.52
26	14	768	G	C2-N2	-5.24	1.29	1.34
23	2K	38	A	C5-C4	-5.24	1.35	1.38
26	1H	449	A	N9-C4	-5.24	1.34	1.37
26	14	1697	G	N3-C4	-5.24	1.31	1.35
26	14	2433	A	N3-C4	-5.24	1.31	1.34
26	1H	14	A	N3-C4	5.24	1.38	1.34
26	1H	1156	A	N9-C4	-5.24	1.34	1.37
26	1H	1346	G	N1-C2	-5.24	1.33	1.37
26	1H	2711	A	N3-C4	5.24	1.38	1.34
26	14	305	U	C4-O4	5.24	1.27	1.23
26	14	1815	A	C5-C6	-5.24	1.36	1.41
1	13	511	C	N1-C6	-5.23	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1340	U	C2-N3	5.23	1.41	1.37
27	16	72	G	N9-C4	-5.23	1.33	1.38
30	21	73	GLU	CG-CD	5.23	1.59	1.51
26	14	479	A	N3-C4	-5.23	1.31	1.34
26	14	521	G	C5-C6	-5.23	1.37	1.42
26	14	1664	A	N3-C4	-5.23	1.31	1.34
26	14	2063	C	N1-C6	-5.23	1.34	1.37
26	1H	1161	C	N3-C4	5.23	1.37	1.33
26	1H	1704	G	N9-C8	-5.23	1.34	1.37
26	1H	1899	G	N9-C8	5.23	1.41	1.37
26	14	703	U	N1-C2	-5.23	1.33	1.38
26	14	1690	A	N9-C4	-5.23	1.34	1.37
26	1H	182	A	C5-C6	-5.23	1.36	1.41
26	1H	458	G	C5-C6	5.23	1.47	1.42
26	1H	472	A	C5-C4	-5.23	1.35	1.38
26	14	791	C	C4-N4	-5.23	1.29	1.33
26	14	974(A)	C	C4-N4	5.23	1.38	1.33
26	1H	242	G	C5-C4	-5.23	1.34	1.38
26	1H	1586	A	N7-C5	-5.23	1.36	1.39
26	14	1991	U	C2-N3	-5.23	1.34	1.37
26	1H	793	A	C5-C4	-5.22	1.35	1.38
26	1H	2557	G	C2-N3	-5.22	1.28	1.32
26	1H	2818	G	C2-N3	-5.22	1.28	1.32
26	14	512	G	N9-C4	-5.22	1.33	1.38
26	14	1321	A	N9-C8	-5.22	1.33	1.37
1	13	1183	A	N9-C4	-5.22	1.34	1.37
26	1H	2512	C	C2-N3	-5.22	1.31	1.35
26	14	2839	G	C6-N1	-5.22	1.35	1.39
26	1H	199	A	N1-C2	-5.22	1.29	1.34
26	14	1695	G	N7-C5	-5.22	1.36	1.39
26	1H	1854	A	N7-C5	5.22	1.42	1.39
55	M5	14	VAL	CB-CG1	-5.22	1.41	1.52
26	1H	806	C	C4-C5	-5.22	1.38	1.43
26	1H	821	A	N7-C5	-5.22	1.36	1.39
26	14	82	G	N9-C8	-5.22	1.34	1.37
26	14	1769	G	N9-C4	5.22	1.42	1.38
24	3K	35	U	P-O5'	5.21	1.65	1.59
26	1H	127	A	C5-C6	-5.21	1.36	1.41
26	14	194	G	N1-C2	5.21	1.42	1.37
26	14	2454	G	C5-C4	-5.21	1.34	1.38
26	1H	629	G	N9-C4	-5.21	1.33	1.38
26	1H	1346	G	C5-C4	-5.21	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1G	688	G	C6-N1	-5.21	1.35	1.39
26	1H	308	G	N1-C2	-5.21	1.33	1.37
26	1H	787	U	C2-N3	-5.21	1.34	1.37
26	1H	940	G	N3-C4	-5.21	1.31	1.35
26	1H	1569	A	C5-C6	-5.21	1.36	1.41
1	1G	1432	G	C5-C4	5.21	1.42	1.38
26	1H	1384	A	C5-C4	-5.21	1.35	1.38
26	1H	1993	U	N1-C2	-5.21	1.33	1.38
26	1H	2527	C	C2-O2	5.21	1.29	1.24
27	16	45	A	N9-C4	5.21	1.41	1.37
26	14	1302	A	N7-C5	5.21	1.42	1.39
26	14	2610	C	C5-C6	-5.21	1.30	1.34
26	1H	1029	A	C5-C6	-5.20	1.36	1.41
26	1H	1626	G	N7-C5	-5.20	1.36	1.39
26	1H	1982	C	N1-C6	-5.20	1.34	1.37
26	1H	2005	A	C6-N6	5.20	1.38	1.33
26	14	738	G	N9-C8	-5.20	1.34	1.37
26	14	2073	C	N3-C4	-5.20	1.30	1.33
26	1H	2581	G	C2-N2	-5.20	1.29	1.34
26	1H	79	G	N7-C5	-5.20	1.36	1.39
26	1H	1366	A	N9-C4	-5.20	1.34	1.37
26	1H	2632	A	N9-C4	-5.20	1.34	1.37
26	14	101	G	N3-C4	5.20	1.39	1.35
26	14	695	G	C6-O6	5.20	1.28	1.24
26	14	834	C	N1-C6	-5.20	1.34	1.37
26	1H	1190	G	C4'-C3'	-5.20	1.47	1.52
26	1H	1383	C	N1-C2	5.20	1.45	1.40
26	14	193	U	C4'-C3'	-5.20	1.47	1.52
26	14	1379	A	C8-N7	5.20	1.35	1.31
26	14	2304	G	N9-C4	5.20	1.42	1.38
26	14	2444	G	C5-C4	-5.20	1.34	1.38
1	13	16	A	N3-C4	-5.20	1.31	1.34
26	14	2612	C	N1-C2	5.20	1.45	1.40
26	1H	1111	A	P-O5'	5.20	1.65	1.59
26	1H	2503	A	C6-N1	5.20	1.39	1.35
26	14	2826	A	N3-C4	-5.20	1.31	1.34
57	3L	3	G	N3-C4	5.19	1.39	1.35
12	3I	96	VAL	CB-CG1	-5.19	1.42	1.52
26	1H	1129	A	C6-N1	-5.19	1.31	1.35
26	1H	1776	G	C8-N7	-5.19	1.27	1.30
26	1H	1935	G	C2-N3	-5.19	1.28	1.32
26	1H	2089	U	N1-C6	-5.19	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1G	1060	C	N1-C6	5.19	1.40	1.37
26	14	2239	G	N7-C5	5.19	1.42	1.39
26	14	2515	C	N3-C4	-5.19	1.30	1.33
26	1H	931	G	N7-C5	-5.19	1.36	1.39
26	1H	2705	A	C6-N1	5.19	1.39	1.35
26	14	2818	G	C5-C6	-5.19	1.37	1.42
1	13	1503	A	C5-C6	5.19	1.45	1.41
26	1H	72	U	N1-C2	5.19	1.43	1.38
26	1H	1971	A	C6-N6	-5.19	1.29	1.33
26	14	929	G	C5-C6	-5.19	1.37	1.42
1	13	1417	G	N7-C5	5.19	1.42	1.39
26	1H	859	G	N9-C4	-5.19	1.33	1.38
26	1H	2248	C	C4-N4	-5.19	1.29	1.33
26	14	265	A	C5-C4	5.19	1.42	1.38
1	13	886	G	N3-C4	-5.18	1.31	1.35
1	13	1512	U	C4-O4	5.18	1.27	1.23
26	1H	815	C	C5-C6	-5.18	1.30	1.34
26	1H	824	A	C6-N6	-5.18	1.29	1.33
55	M5	49	VAL	CB-CG1	5.18	1.63	1.52
26	1H	1377	G	N3-C4	-5.18	1.31	1.35
26	14	2819	G	N9-C4	-5.18	1.33	1.38
26	1H	240	G	N3-C4	-5.18	1.31	1.35
26	14	1828	G	C5-C6	5.18	1.47	1.42
26	14	2706	G	N9-C4	-5.18	1.33	1.38
1	13	362	G	N9-C4	-5.18	1.33	1.38
26	14	1384	A	C5-C4	-5.18	1.35	1.38
1	13	765	G	N9-C8	5.18	1.41	1.37
26	14	1203	G	C6-O6	5.18	1.28	1.24
26	1H	1661	G	C6-N1	-5.18	1.35	1.39
26	1H	2442	C	N1-C6	-5.18	1.34	1.37
26	1H	2572	A	C5-C4	-5.18	1.35	1.38
26	14	2028	U	C2-N3	5.18	1.41	1.37
26	1H	249	C	N1-C6	-5.17	1.34	1.37
26	1H	1985	G	P-OP2	5.17	1.57	1.49
32	41	13	GLU	CB-CG	5.17	1.61	1.52
1	1G	559	A	N9-C4	-5.17	1.34	1.37
26	14	2444	G	N3-C4	-5.17	1.31	1.35
1	13	1055	A	N3-C4	-5.17	1.31	1.34
26	1H	736	C	N3-C4	5.17	1.37	1.33
1	13	785	G	C2-N3	-5.17	1.28	1.32
26	1H	763	G	C6-N1	-5.17	1.35	1.39
26	1H	2622	C	N1-C6	-5.17	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
30	21	119	ARG	CD-NE	-5.17	1.37	1.46
26	14	1568	G	N9-C4	-5.17	1.33	1.38
26	14	1815	A	N7-C5	-5.17	1.36	1.39
26	1H	1193	G	N3-C4	-5.17	1.31	1.35
26	1H	265	A	N9-C4	-5.17	1.34	1.37
26	1H	1334	G	C8-N7	-5.17	1.27	1.30
26	1H	2053	G	C2-N3	-5.17	1.28	1.32
26	1H	2427	C	N1-C6	-5.17	1.34	1.37
26	14	781	A	N9-C4	5.17	1.41	1.37
1	13	521	G	C5-C4	-5.17	1.34	1.38
25	4K	21	A	N9-C4	-5.17	1.34	1.37
26	1H	348	G	C6-N1	-5.17	1.35	1.39
26	1H	786	C	C4'-C3'	-5.17	1.47	1.52
26	1H	819	A	C6-N6	-5.17	1.29	1.33
26	1H	2433	A	C8-N7	-5.17	1.27	1.31
26	1H	669	G	N9-C4	-5.17	1.33	1.38
26	1H	2066	C	C5-C6	-5.17	1.30	1.34
26	1H	2708	G	N9-C4	-5.17	1.33	1.38
26	1H	755	C	N1-C6	-5.16	1.34	1.37
26	1H	2274	A	N7-C5	-5.16	1.36	1.39
26	1H	2477	C	O3'-P	5.16	1.67	1.61
26	14	1819	A	C5-C4	-5.16	1.35	1.38
26	14	2600	A	N9-C8	-5.16	1.33	1.37
26	1H	721	C	N1-C2	-5.16	1.34	1.40
26	1H	982	C	C4-C5	-5.16	1.38	1.43
26	1H	1224	G	N7-C5	5.16	1.42	1.39
26	1H	26	G	C8-N7	-5.16	1.27	1.30
26	1H	2248	C	C4-C5	-5.16	1.38	1.43
26	14	676	A	N3-C4	-5.16	1.31	1.34
26	14	1634	A	C6-N1	-5.16	1.31	1.35
26	1H	1364	G	C5-C4	-5.16	1.34	1.38
26	14	72	U	C2-N3	-5.16	1.34	1.37
26	14	2058	A	C5-C4	-5.16	1.35	1.38
26	14	2313	C	N1-C2	5.16	1.45	1.40
53	J5	51	TYR	CE1-CZ	5.16	1.45	1.38
26	1H	71	A	N1-C2	5.16	1.39	1.34
26	1H	739	G	N9-C8	-5.16	1.34	1.37
26	1H	696	G	N3-C4	5.16	1.39	1.35
26	14	784	A	N9-C4	-5.16	1.34	1.37
26	14	2009	G	N1-C2	-5.15	1.33	1.37
26	1H	567	A	N7-C5	-5.15	1.36	1.39
26	1H	819	A	N3-C4	5.15	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2038	G	N1-C2	-5.15	1.33	1.37
26	14	16	G	C6-O6	5.15	1.28	1.24
26	14	809	G	N7-C5	-5.15	1.36	1.39
26	1H	476	G	C6-O6	5.15	1.28	1.24
26	1H	2277	G	N9-C8	-5.15	1.34	1.37
26	14	16	G	C6-N1	5.15	1.43	1.39
1	13	893	C	C4'-C3'	-5.15	1.47	1.52
26	1H	518	G	C6-N1	-5.15	1.35	1.39
26	1H	862	G	N9-C4	5.15	1.42	1.38
26	1H	1974	C	C3'-C2'	-5.15	1.47	1.52
26	14	53	A	N9-C4	-5.15	1.34	1.37
26	14	1216	G	C6-O6	5.15	1.28	1.24
26	14	2402	C	N1-C6	5.15	1.40	1.37
26	1H	51	G	N9-C8	-5.15	1.34	1.37
26	1H	1623	G	N7-C5	5.14	1.42	1.39
1	1G	529	G	N3-C4	5.14	1.39	1.35
26	14	2441	C	C4-N4	-5.14	1.29	1.33
29	19	242	ARG	CG-CD	-5.14	1.39	1.51
22	1K	36	U	N1-C2	5.14	1.43	1.38
26	1H	2031	A	C8-N7	5.14	1.35	1.31
12	3I	43	VAL	C-N	-5.14	1.22	1.34
26	1H	202	U	N1-C2	-5.14	1.33	1.38
26	1H	452	G	C2-N3	-5.14	1.28	1.32
26	1H	2460	U	N1-C2	-5.14	1.33	1.38
26	14	681	G	C2-N2	-5.14	1.29	1.34
1	13	760	G	N1-C2	5.14	1.41	1.37
24	3K	76	A	N9-C4	-5.14	1.34	1.37
26	1H	2071	A	C5-C6	-5.14	1.36	1.41
26	14	2217	G	C6-O6	5.14	1.28	1.24
26	14	2839	G	N9-C8	-5.14	1.34	1.37
26	1H	2084	C	N1-C6	-5.14	1.34	1.37
1	1G	890	G	C5-C6	5.14	1.47	1.42
26	14	2257	U	C2-N3	-5.14	1.34	1.37
1	13	956	U	C2-O2	-5.13	1.17	1.22
26	1H	128	C	C2-O2	5.13	1.29	1.24
26	1H	770	G	C8-N7	-5.13	1.27	1.30
27	16	76	G	N9-C4	-5.13	1.33	1.38
30	21	83	ASP	CB-CG	5.13	1.62	1.51
26	14	469	G	C6-O6	-5.13	1.19	1.24
26	14	1431	U	C4-O4	-5.13	1.19	1.23
26	14	1999	C	N3-C4	-5.13	1.30	1.33
26	14	2009	G	C6-N1	-5.13	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	2069	G	N9-C8	-5.13	1.34	1.37
26	1H	557	U	C2-N3	-5.13	1.34	1.37
26	14	1845	G	C2-N3	-5.13	1.28	1.32
26	1H	262	A	N9-C8	-5.13	1.33	1.37
26	1H	2559	C	N1-C6	-5.13	1.34	1.37
26	14	1903	G	C2-N3	-5.13	1.28	1.32
26	1H	968	G	N7-C5	-5.13	1.36	1.39
26	14	775	G	N9-C8	-5.13	1.34	1.37
26	14	2029	G	N1-C2	-5.13	1.33	1.37
1	13	765	G	N3-C4	-5.13	1.31	1.35
26	14	1649	G	N3-C4	-5.13	1.31	1.35
24	3K	65	C	N1-C6	5.12	1.40	1.37
26	1H	821	A	N9-C8	-5.12	1.33	1.37
26	1H	917	A	C2-N3	-5.12	1.28	1.33
26	1H	2077	A	N9-C4	-5.12	1.34	1.37
1	13	33	A	N3-C4	-5.12	1.31	1.34
25	4K	13	A	N9-C4	5.12	1.41	1.37
26	1H	306	U	C2-N3	-5.12	1.34	1.37
26	1H	778	G	C6-O6	5.12	1.28	1.24
26	1H	1025	G	N7-C5	-5.12	1.36	1.39
26	1H	1980	G	N7-C5	5.12	1.42	1.39
26	1H	2781	A	C6-N6	-5.12	1.29	1.33
1	1G	1139	G	N9-C4	-5.12	1.33	1.38
26	14	475	U	C4-C5	-5.12	1.39	1.43
26	14	2610	C	N1-C6	-5.12	1.34	1.37
26	1H	597	U	C2-N3	-5.12	1.34	1.37
26	1H	1972	A	N7-C5	-5.12	1.36	1.39
26	14	414	C	N3-C4	-5.12	1.30	1.33
1	13	1288	A	N3-C4	-5.12	1.31	1.34
26	1H	1922	G	C5-C4	-5.12	1.34	1.38
26	1H	2345	G	N3-C4	-5.12	1.31	1.35
27	16	98	G	C5-C6	-5.12	1.37	1.42
1	1G	1523	G	C6-O6	5.12	1.28	1.24
26	14	247	G	N9-C8	-5.12	1.34	1.37
26	14	445	C	N1-C2	-5.12	1.35	1.40
26	1H	137(A)	G	C8-N7	5.12	1.34	1.30
26	1H	728	G	N9-C8	-5.12	1.34	1.37
26	1H	1216	G	N9-C8	-5.12	1.34	1.37
26	1H	1899	G	C5-C6	-5.12	1.37	1.42
1	1G	1502	A	N3-C4	-5.12	1.31	1.34
26	1H	2580	U	C4-O4	5.12	1.27	1.23
26	14	1260	G	N9-C8	-5.12	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	14	1783	A	N9-C8	-5.12	1.33	1.37
26	14	2594	C	N1-C6	-5.12	1.34	1.37
1	13	808	C	N1-C6	-5.11	1.34	1.37
26	1H	2509	G	N7-C5	-5.11	1.36	1.39
26	14	575	A	N3-C4	-5.11	1.31	1.34
26	1H	117	G	C6-O6	-5.11	1.19	1.24
26	1H	432	A	C6-N6	-5.11	1.29	1.33
26	1H	1475	G	C2-N3	-5.11	1.28	1.32
26	1H	2236	C	N1-C6	-5.11	1.34	1.37
29	11	28	GLU	CB-CG	5.11	1.61	1.52
1	1G	19	C	N3-C4	-5.11	1.30	1.33
26	14	265	A	N7-C5	-5.11	1.36	1.39
1	13	608	A	N9-C4	-5.11	1.34	1.37
26	1H	1697	G	N3-C4	5.11	1.39	1.35
26	1H	669	G	C5-C4	-5.11	1.34	1.38
26	1H	762	U	N1-C2	5.11	1.43	1.38
27	16	81	G	C5-C4	5.11	1.42	1.38
26	14	1845	G	N9-C4	-5.11	1.33	1.38
27	1J	82	G	N9-C4	-5.11	1.33	1.38
46	G8	84	ARG	CD-NE	5.11	1.55	1.46
26	14	1241	A	N7-C5	-5.11	1.36	1.39
1	13	715	A	N9-C4	-5.10	1.34	1.37
26	1H	1598	C	N1-C2	5.10	1.45	1.40
26	1H	1786	A	N1-C2	5.10	1.39	1.34
26	1H	2713	A	N3-C4	-5.10	1.31	1.34
26	14	1130	U	N1-C2	-5.10	1.33	1.38
26	14	2426	A	N9-C4	-5.10	1.34	1.37
26	14	2697	G	C8-N7	-5.10	1.27	1.30
26	14	450	G	N9-C8	-5.10	1.34	1.37
26	14	2820	A	C5-C4	5.10	1.42	1.38
26	1H	1930	G	N7-C5	5.10	1.42	1.39
26	14	2437	U	N3-C4	-5.10	1.33	1.38
26	1H	1534	G	N9-C4	5.10	1.42	1.38
26	1H	2737	G	C5-C6	-5.10	1.37	1.42
26	14	1937	A	N9-C4	-5.10	1.34	1.37
26	1H	2623	G	N1-C2	-5.10	1.33	1.37
26	1H	692	C	N3-C4	-5.09	1.30	1.33
26	1H	2247	A	N9-C4	-5.09	1.34	1.37
26	1H	2298	A	C5-C4	-5.09	1.35	1.38
1	1G	598	U	N1-C2	-5.09	1.33	1.38
15	6A	62	GLN	CD-NE2	-5.09	1.20	1.32
43	95	80	GLN	CB-CG	5.09	1.66	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	188	G	N9-C4	-5.09	1.33	1.38
1	13	664	G	N9-C4	-5.09	1.33	1.38
26	1H	217	G	C5-C6	5.09	1.47	1.42
26	1H	693	C	N1-C6	-5.09	1.34	1.37
26	1H	2277	G	N7-C5	-5.09	1.36	1.39
1	13	186	C	N1-C6	5.09	1.40	1.37
1	13	581	G	C5-C6	-5.09	1.37	1.42
1	13	1470	G	N9-C4	-5.09	1.33	1.38
26	1H	1922	G	N9-C8	-5.09	1.34	1.37
26	1H	2449	U	N1-C6	-5.09	1.33	1.38
26	14	1570	A	N3-C4	-5.09	1.31	1.34
26	14	1764	G	C6-N1	-5.09	1.35	1.39
26	14	2584	U	N1-C2	5.09	1.43	1.38
26	1H	780	G	N9-C4	-5.08	1.33	1.38
26	1H	917	A	C8-N7	5.08	1.35	1.31
26	1H	1392	A	N9-C4	5.08	1.41	1.37
45	F8	63	LYS	CD-CE	5.08	1.64	1.51
1	13	260	G	N9-C8	-5.08	1.34	1.37
26	1H	1765	C	C4'-C3'	-5.08	1.47	1.52
26	1H	413	C	N1-C6	-5.08	1.34	1.37
26	1H	599	G	N9-C8	-5.08	1.34	1.37
26	1H	613	U	N3-C4	-5.08	1.33	1.38
26	1H	801	G	C6-N1	-5.08	1.35	1.39
1	1G	304	U	C4-O4	5.08	1.27	1.23
26	14	758	C	C2-O2	-5.08	1.19	1.24
26	1H	2678	C	N1-C6	-5.08	1.34	1.37
26	14	608	A	N3-C4	-5.08	1.31	1.34
26	1H	1597	A	N9-C8	-5.08	1.33	1.37
26	14	43	G	N7-C5	-5.08	1.36	1.39
26	14	1337	G	N7-C5	5.08	1.42	1.39
26	14	1579	A	N9-C4	-5.08	1.34	1.37
26	14	1644	C	N1-C6	-5.08	1.34	1.37
27	1J	88	C	N1-C6	5.08	1.40	1.37
26	1H	765	G	N7-C5	5.08	1.42	1.39
26	1H	911	A	N9-C8	-5.08	1.33	1.37
26	1H	2464	C	N1-C6	-5.08	1.34	1.37
26	1H	2495	G	C2-N3	-5.08	1.28	1.32
26	14	1596	A	C6-N1	-5.08	1.31	1.35
1	13	117	G	C5-C6	-5.07	1.37	1.42
1	13	946	A	N7-C5	5.07	1.42	1.39
26	1H	593	G	C6-N1	-5.07	1.35	1.39
26	1H	919	G	C6-N1	-5.07	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	2341	G	C6-O6	5.07	1.28	1.24
26	14	2242	G	N7-C5	5.07	1.42	1.39
1	1G	900	A	N9-C4	-5.07	1.34	1.37
26	14	1978	A	C6-N1	-5.07	1.31	1.35
42	C8	108	GLU	CD-OE1	-5.07	1.20	1.25
26	14	1811	G	N9-C4	-5.07	1.33	1.38
26	1H	115	C	N3-C4	5.07	1.37	1.33
26	1H	478	A	N3-C4	-5.07	1.31	1.34
26	1H	2844	G	C6-N1	-5.07	1.36	1.39
26	14	2049	G	N7-C5	-5.07	1.36	1.39
26	14	2500	U	C2-N3	-5.07	1.34	1.37
26	1H	386	G	C5-C6	-5.06	1.37	1.42
26	1H	771	G	C5-C4	-5.06	1.34	1.38
1	13	794	A	N7-C5	-5.06	1.36	1.39
26	1H	513	A	N7-C5	-5.06	1.36	1.39
26	1H	675	A	N3-C4	-5.06	1.31	1.34
26	1H	2259	G	N9-C8	-5.06	1.34	1.37
1	1G	331	G	C6-O6	5.06	1.28	1.24
26	14	657	U	C2-N3	-5.06	1.34	1.37
26	14	1495	A	N3-C4	-5.06	1.31	1.34
26	14	2525	G	N9-C4	-5.06	1.33	1.38
26	14	2586	C	C4-C5	-5.06	1.39	1.43
26	1H	858	U	C2-N3	-5.06	1.34	1.37
26	1H	1335	U	N3-C4	-5.06	1.33	1.38
26	1H	1624	G	N3-C4	-5.06	1.31	1.35
26	1H	2533	A	N7-C5	5.06	1.42	1.39
1	1G	338	A	N9-C4	-5.06	1.34	1.37
26	14	1393	A	C6-N1	-5.06	1.32	1.35
1	13	606	G	N3-C4	5.06	1.39	1.35
26	1H	2431	U	N1-C2	-5.06	1.33	1.38
26	1H	2644	G	N9-C4	-5.06	1.33	1.38
26	1H	2378	A	C6-N6	5.06	1.38	1.33
26	1H	2049	G	C2-N2	-5.05	1.29	1.34
1	1G	804	U	C2-N3	-5.05	1.34	1.37
26	14	1294	U	N1-C2	-5.05	1.34	1.38
26	14	2396	G	C5-C6	-5.05	1.37	1.42
1	13	712	A	N7-C5	5.05	1.42	1.39
26	14	459	U	C2-N3	-5.05	1.34	1.37
26	14	1269	A	C6-N1	-5.05	1.32	1.35
26	14	2688	U	C2-N3	-5.05	1.34	1.37
1	13	47	C	N3-C4	-5.05	1.30	1.33
1	13	1400	C	C2-N3	5.05	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1189	A	C2-N3	5.05	1.38	1.33
26	1H	2261	C	N1-C6	5.05	1.40	1.37
26	14	2719	G	N7-C5	-5.05	1.36	1.39
29	11	28	GLU	CD-OE1	5.05	1.31	1.25
6	5E	86	ARG	CB-CG	-5.05	1.39	1.52
26	1H	1324	G	N3-C4	-5.05	1.31	1.35
1	1G	1434	A	N9-C4	-5.05	1.34	1.37
26	1H	2227	A	N9-C4	-5.04	1.34	1.37
26	14	2571	C	C2-O2	-5.04	1.20	1.24
26	1H	592	G	N3-C4	-5.04	1.31	1.35
26	14	248	G	N7-C5	-5.04	1.36	1.39
26	14	2376	A	N3-C4	5.04	1.37	1.34
26	1H	946	G	N9-C4	-5.04	1.33	1.38
26	14	802	A	C6-N1	-5.04	1.32	1.35
26	14	2821	A	N9-C4	-5.04	1.34	1.37
26	14	1293	C	C5-C6	-5.04	1.30	1.34
26	1H	536	A	C5-C4	-5.04	1.35	1.38
26	1H	1109	C	C3'-O3'	5.04	1.49	1.42
26	1H	2486	G	C5-C4	-5.04	1.34	1.38
26	14	1842	G	N9-C8	-5.04	1.34	1.37
26	1H	630	G	N1-C2	5.04	1.41	1.37
26	1H	800	A	N9-C4	-5.04	1.34	1.37
26	14	113	G	C2-N3	5.04	1.36	1.32
26	14	1601	G	N1-C2	-5.04	1.33	1.37
1	13	575	G	C5-C4	-5.04	1.34	1.38
26	1H	1628	G	C6-O6	5.04	1.28	1.24
26	1H	1981	A	N9-C4	-5.04	1.34	1.37
26	14	1791	A	N9-C4	-5.04	1.34	1.37
26	1H	1443	G	N3-C4	-5.03	1.31	1.35
26	14	1229(A)	G	N3-C4	-5.03	1.31	1.35
1	13	1467	G	N3-C4	-5.03	1.31	1.35
22	1K	74	C	N3-C4	5.03	1.37	1.33
26	1H	120	U	N1-C2	5.03	1.43	1.38
26	1H	1936	A	C5-C6	-5.03	1.36	1.41
27	16	72	G	N3-C4	-5.03	1.31	1.35
26	14	2581	G	N9-C8	-5.03	1.34	1.37
1	13	1408	A	N7-C5	-5.03	1.36	1.39
26	1H	460	A	C6-N1	5.03	1.39	1.35
26	1H	1821	A	N7-C5	-5.03	1.36	1.39
26	1H	1825	A	C6-N6	-5.03	1.29	1.33
42	C8	94	ASN	CB-CG	5.03	1.62	1.51
1	1G	1073	U	C2-N3	5.03	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	1G	1462	G	N9-C4	-5.03	1.33	1.38
26	14	530	G	C5-C6	-5.03	1.37	1.42
26	14	1950	G	N9-C8	5.03	1.41	1.37
1	13	959	A	N3-C4	5.03	1.37	1.34
26	1H	389	G	N9-C8	-5.03	1.34	1.37
26	1H	664	C	N1-C6	-5.03	1.34	1.37
1	13	749	C	N1-C6	5.03	1.40	1.37
26	14	1476	C	N1-C2	-5.03	1.35	1.40
44	A5	77	ASP	CB-CG	5.03	1.62	1.51
26	1H	795	C	N1-C2	-5.03	1.35	1.40
26	1H	1775	U	N1-C6	-5.03	1.33	1.38
26	1H	1787	A	C4'-C3'	-5.03	1.47	1.52
26	14	1827	C	N1-C2	5.03	1.45	1.40
1	13	369	C	N1-C6	-5.02	1.34	1.37
1	13	513	C	C4-C5	-5.02	1.39	1.43
1	13	1435	G	C6-O6	5.02	1.28	1.24
26	1H	326	G	C2-N3	-5.02	1.28	1.32
26	14	1346	G	N9-C8	-5.02	1.34	1.37
26	14	2713	A	N9-C8	5.02	1.41	1.37
26	1H	126	A	C6-N6	5.02	1.38	1.33
26	1H	799	G	N9-C4	-5.02	1.33	1.38
1	13	581	G	N3-C4	-5.02	1.31	1.35
26	1H	500	G	N3-C4	-5.02	1.31	1.35
26	1H	913	U	C2-O2	-5.02	1.17	1.22
27	16	81	G	C6-O6	-5.02	1.19	1.24
26	14	1816	G	N7-C5	5.02	1.42	1.39
49	F5	5	CYS	CB-SG	-5.02	1.73	1.81
26	14	677	A	N3-C4	-5.02	1.31	1.34
26	1H	1638	C	N3-C4	-5.02	1.30	1.33
26	14	826	U	C4-O4	5.02	1.27	1.23
26	14	2391	G	C8-N7	5.02	1.33	1.30
26	1H	188	G	N7-C5	-5.01	1.36	1.39
26	1H	188	G	C6-N1	-5.01	1.36	1.39
26	1H	802	A	N7-C5	5.01	1.42	1.39
26	14	228	A	N9-C4	-5.01	1.34	1.37
26	14	574	C	P-O5'	-5.01	1.54	1.59
1	13	810	C	N3-C4	-5.01	1.30	1.33
26	1H	1284	A	N9-C8	5.01	1.41	1.37
26	1H	1846	G	N9-C8	-5.01	1.34	1.37
1	13	1299	A	N7-C5	-5.01	1.36	1.39
26	1H	615	G	C5-C6	5.01	1.47	1.42
26	1H	745	G	C8-N7	-5.01	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	1H	1376	C	C4-C5	-5.01	1.39	1.43
26	1H	1579	A	N7-C5	-5.01	1.36	1.39
26	1H	2476	A	C5-C4	5.01	1.42	1.38
26	1H	2709	G	N3-C4	-5.01	1.31	1.35
45	B5	69	TYR	CB-CG	5.01	1.59	1.51
26	1H	205	G	N3-C4	5.01	1.39	1.35
26	1H	1161	C	C3'-C2'	-5.01	1.47	1.52
1	1G	706	A	N3-C4	-5.01	1.31	1.34
26	14	1605	C	N3-C4	-5.01	1.30	1.33
26	1H	1021	A	N7-C5	-5.01	1.36	1.39
26	1H	2246	G	C2-N2	-5.01	1.29	1.34
26	1H	2436	G	N9-C4	-5.01	1.33	1.38
38	88	93	TYR	CB-CG	-5.01	1.44	1.51
1	1G	577	G	C5-C4	-5.01	1.34	1.38
26	1H	563	G	C2-N3	-5.00	1.28	1.32
26	1H	975	G	N9-C4	-5.00	1.33	1.38
41	B8	3	ARG	CB-CG	5.00	1.66	1.52
1	13	1386	G	C6-N1	5.00	1.43	1.39
26	14	320	A	N9-C4	-5.00	1.34	1.37

All (26956) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	783	A	C2-N3-C4	-38.22	91.49	110.60
26	1H	783	A	C2-N3-C4	-32.53	94.33	110.60
26	1H	1899	G	C2-N3-C4	-29.93	96.93	111.90
26	1H	676	A	C2-N3-C4	-28.68	96.26	110.60
26	14	929	G	N1-C6-O6	25.84	135.40	119.90
26	14	1698	A	N1-C6-N6	25.22	133.73	118.60
26	14	2363	C	C6-N1-C2	24.94	130.28	120.30
26	1H	2287	A	C2-N3-C4	-24.86	98.17	110.60
26	1H	1616	A	N1-C6-N6	24.81	133.49	118.60
26	1H	783	A	C5-N7-C8	-24.65	91.58	103.90
26	14	676	A	C5-N7-C8	-23.93	91.93	103.90
26	1H	676	A	C5-N7-C8	-23.87	91.97	103.90
26	14	2324	C	C6-N1-C2	23.80	129.82	120.30
26	1H	195	A	N1-C6-N6	23.69	132.82	118.60
26	14	74	A	C2-N3-C4	-23.39	98.90	110.60
26	1H	2713	A	C2-N3-C4	-23.24	98.98	110.60
26	1H	133	C	C6-N1-C2	22.98	129.49	120.30
26	1H	1950	G	N7-C8-N9	22.94	124.57	113.10
26	1H	774	A	C2-N3-C4	-22.64	99.28	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	783	A	C5-C6-N1	-22.48	106.46	117.70
26	1H	698	C	C6-N1-C2	22.39	129.25	120.30
26	1H	1786	A	C5-N7-C8	-22.38	92.71	103.90
26	14	133	C	C6-N1-C2	22.25	129.20	120.30
26	1H	2552	U	N1-C2-O2	-22.12	107.32	122.80
26	1H	1616	A	C5-N7-C8	-22.10	92.85	103.90
26	1H	140	A	N1-C6-N6	22.10	131.86	118.60
26	1H	1698	A	C2-N3-C4	-21.85	99.68	110.60
26	1H	2518	A	N1-C6-N6	21.75	131.65	118.60
26	1H	389	G	C8-N9-C4	21.75	115.10	106.40
26	1H	621	A	C2-N3-C4	-21.69	99.75	110.60
26	1H	1950	G	C8-N9-C4	-21.67	97.73	106.40
26	1H	140	A	C5-N7-C8	-21.43	93.19	103.90
26	14	783	A	C5-N7-C8	-21.37	93.21	103.90
26	1H	1950	G	C5-N7-C8	-21.35	93.62	104.30
26	14	1967	C	O5'-P-OP2	-21.32	85.11	110.70
26	14	1647	G	O5'-P-OP2	-21.31	85.13	110.70
26	1H	676	A	N3-C4-C5	21.23	141.66	126.80
26	1H	1332	G	C6-C5-N7	-21.22	117.67	130.40
26	14	945	A	N1-C6-N6	21.15	131.29	118.60
26	1H	1332	G	C4-C5-N7	20.95	119.18	110.80
26	1H	389	G	O5'-P-OP1	-20.82	85.72	110.70
26	14	74	A	C5-C6-N1	-20.82	107.29	117.70
26	1H	2490	G	N3-C4-N9	-20.81	113.52	126.00
26	1H	796	C	C6-N1-C2	20.63	128.55	120.30
26	1H	2688	U	N3-C4-O4	-20.60	104.98	119.40
26	1H	783	A	C8-N9-C4	-20.56	97.58	105.80
26	1H	783	A	N1-C2-N3	20.39	139.50	129.30
24	3K	76	A	N1-C6-N6	20.37	130.82	118.60
26	1H	144	C	C6-N1-C2	20.32	128.43	120.30
26	1H	1332	G	C5-N7-C8	-20.28	94.16	104.30
1	1G	117	G	N1-C6-O6	20.13	131.98	119.90
26	14	774	A	C2-N3-C4	-20.07	100.56	110.60
26	1H	1626	G	N3-C2-N2	-20.05	105.86	119.90
26	1H	2490	G	C8-N9-C4	-20.01	98.40	106.40
26	1H	2329	G	C8-N9-C4	19.91	114.37	106.40
26	1H	2392	A	C5-C6-N1	-19.86	107.77	117.70
26	1H	1136	G	O5'-P-OP2	-19.84	86.90	110.70
26	1H	783	A	N7-C8-N9	19.82	123.71	113.80
26	1H	210	C	C6-N1-C2	19.79	128.22	120.30
26	14	783	A	N3-C4-C5	19.78	140.64	126.80
26	1H	2006	C	C6-N1-C2	19.75	128.20	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1021	A	C2-N3-C4	-19.73	100.73	110.60
1	13	1502	A	C5-N7-C8	-19.71	94.05	103.90
27	16	13	A	O5'-P-OP2	-19.70	87.07	110.70
26	1H	2271	G	C5-C6-O6	-19.62	116.83	128.60
26	1H	621	A	N1-C6-N6	19.55	130.33	118.60
26	1H	1332	G	C2-N3-C4	-19.54	102.13	111.90
26	1H	2689	U	C5-C4-O4	19.54	137.62	125.90
26	1H	389	G	N9-C4-C5	-19.54	97.58	105.40
26	1H	2700	C	C6-N1-C2	19.51	128.10	120.30
26	14	528	A	C2-N3-C4	-19.48	100.86	110.60
26	14	917	A	O5'-P-OP1	-19.47	87.34	110.70
26	14	929	G	C6-C5-N7	-19.41	118.76	130.40
26	1H	676	A	N3-C4-N9	-19.41	111.88	127.40
26	1H	942	G	N9-C4-C5	19.36	113.14	105.40
26	14	676	A	C4-C5-N7	19.33	120.36	110.70
26	1H	1786	A	C2-N3-C4	-19.32	100.94	110.60
26	1H	138	G	C4-C5-N7	19.30	118.52	110.80
26	1H	783	A	C6-C5-N7	-19.24	118.83	132.30
26	1H	863	A	O5'-P-OP2	-19.22	87.63	110.70
26	14	454	A	O5'-P-OP2	-19.20	87.66	110.70
26	1H	952	G	C4-C5-N7	19.20	118.48	110.80
26	1H	140	A	C4-C5-N7	19.14	120.27	110.70
26	1H	2430	A	C5-N7-C8	-19.14	94.33	103.90
26	1H	1616	A	C4-C5-N7	19.08	120.24	110.70
26	1H	974	G	O5'-P-OP2	-19.05	87.84	110.70
26	1H	1698	A	N1-C6-N6	19.04	130.03	118.60
26	1H	71	A	C2-N3-C4	-19.01	101.09	110.60
26	1H	74	A	C2-N3-C4	-19.01	101.09	110.60
26	14	1816	G	O5'-P-OP1	-19.00	87.90	110.70
26	1H	1616	A	C5-C6-N6	-18.95	108.54	123.70
26	1H	2346	A	N1-C2-N3	18.92	138.76	129.30
26	1H	1950	G	C4-C5-N7	18.91	118.37	110.80
26	1H	1899	G	N3-C4-N9	-18.89	114.67	126.00
26	1H	138	G	C5-N7-C8	-18.85	94.87	104.30
26	1H	828	U	C5-C4-O4	18.85	137.21	125.90
1	1G	110	C	C6-N1-C2	18.76	127.81	120.30
26	1H	2490	G	N3-C4-C5	18.74	137.97	128.60
26	14	945	A	C4-C5-N7	18.74	120.07	110.70
26	1H	1614	A	C2-N3-C4	-18.71	101.24	110.60
26	1H	2392	A	C2-N3-C4	-18.71	101.25	110.60
26	14	676	A	C2-N3-C4	-18.69	101.25	110.60
26	1H	2688	U	C5-C4-O4	18.68	137.11	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2264	C	C6-N1-C2	-18.68	112.83	120.30
26	14	2464	C	C6-N1-C2	18.66	127.77	120.30
26	1H	71	A	N1-C6-N6	18.65	129.79	118.60
26	14	140	A	N1-C6-N6	18.63	129.78	118.60
26	14	783	A	N1-C6-N6	18.59	129.76	118.60
26	1H	71	A	C5-N7-C8	-18.59	94.61	103.90
26	1H	2503	A	N1-C6-N6	18.51	129.70	118.60
26	1H	942	G	C8-N9-C4	-18.49	99.01	106.40
26	1H	1006	C	O5'-P-OP1	-18.40	88.61	110.70
26	1H	710	G	N1-C6-O6	18.40	130.94	119.90
26	1H	1817	G	C5-C6-O6	18.38	139.63	128.60
1	13	1517	G	O5'-P-OP2	-18.38	88.64	110.70
26	1H	1616	A	C6-C5-N7	-18.31	119.48	132.30
26	14	2430	A	C2-N3-C4	-18.29	101.45	110.60
26	14	1984	G	O5'-P-OP2	-18.29	88.75	110.70
26	1H	942	G	N3-C2-N2	-18.28	107.10	119.90
26	1H	1647	G	O5'-P-OP1	-18.28	88.77	110.70
26	1H	2085	C	O5'-P-OP2	-18.25	88.80	110.70
26	1H	2430	A	C2-N3-C4	-18.21	101.50	110.60
26	1H	1614	A	N1-C6-N6	18.21	129.53	118.60
26	1H	1899	G	N3-C4-C5	18.19	137.70	128.60
26	14	1607	C	C5-C4-N4	-18.18	107.47	120.20
26	1H	831	G	C8-N9-C4	18.16	113.67	106.40
26	14	810	U	N3-C4-O4	18.16	132.11	119.40
26	1H	2584	U	C5-C4-O4	18.15	136.79	125.90
1	13	965	A	N1-C6-N6	18.11	129.46	118.60
26	1H	690	G	C8-N9-C4	18.09	113.64	106.40
26	1H	2490	G	N7-C8-N9	18.06	122.13	113.10
26	14	562	U	N1-C2-N3	18.03	125.72	114.90
26	14	783	A	C4-C5-N7	18.03	119.72	110.70
26	14	2873	A	C2-N3-C4	-18.02	101.59	110.60
26	1H	62	C	C6-N1-C2	18.01	127.50	120.30
26	1H	945	A	N1-C6-N6	17.99	129.39	118.60
26	1H	1662	C	C6-N1-C2	17.96	127.48	120.30
26	14	783	A	C6-C5-N7	-17.94	119.74	132.30
26	14	2287	A	C2-N3-C4	-17.92	101.64	110.60
26	1H	839	U	O5'-P-OP2	-17.91	89.21	110.70
26	1H	2017	U	N1-C2-O2	-17.91	110.27	122.80
26	1H	691	C	C6-N1-C2	17.85	127.44	120.30
26	1H	945	A	C6-C5-N7	-17.82	119.83	132.30
26	14	802	A	O5'-P-OP2	-17.80	89.34	110.70
26	1H	2490	G	C2-N3-C4	-17.79	103.01	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2829	C	C6-N1-C2	17.77	127.41	120.30
26	1H	115	C	C5-C4-N4	-17.73	107.79	120.20
26	1H	774	A	C5-C6-N1	-17.73	108.84	117.70
26	14	1558	A	C2-N3-C4	-17.73	101.74	110.60
26	1H	1899	G	N1-C2-N3	17.71	134.53	123.90
26	1H	122	G	N1-C6-O6	17.61	130.47	119.90
26	14	945	A	C5-N7-C8	-17.60	95.10	103.90
26	1H	945	A	C2-N3-C4	-17.56	101.82	110.60
26	1H	783	A	N1-C6-N6	17.55	129.13	118.60
26	14	1786	A	C2-N3-C4	-17.55	101.83	110.60
26	1H	2507	C	C6-N1-C2	-17.54	113.28	120.30
26	14	2502	G	O5'-P-OP1	-17.53	89.66	110.70
26	14	2503	A	O5'-P-OP2	-17.52	89.68	110.70
26	14	465	G	O5'-P-OP2	17.52	131.72	110.70
26	14	2326	C	O5'-P-OP1	-17.49	89.72	110.70
26	14	1698	A	C2-N3-C4	-17.47	101.86	110.60
26	1H	1518	C	O5'-P-OP1	-17.46	89.75	110.70
26	14	2346	A	C2-N3-C4	-17.42	101.89	110.60
26	1H	2311	A	C2-N3-C4	-17.34	101.93	110.60
26	1H	1210	A	C5-N7-C8	-17.33	95.23	103.90
26	14	2005	A	O5'-P-OP2	-17.33	89.90	110.70
26	1H	2476	A	C8-N9-C4	-17.31	98.88	105.80
1	13	690	G	C6-C5-N7	-17.29	120.02	130.40
26	1H	1616	A	N7-C8-N9	17.27	122.44	113.80
26	1H	2710	C	C6-N1-C2	17.26	127.20	120.30
26	1H	2689	U	N3-C4-O4	-17.24	107.33	119.40
26	14	1558	A	C5-C6-N1	-17.24	109.08	117.70
26	1H	1786	A	N7-C8-N9	17.21	122.41	113.80
26	1H	2698	U	O5'-P-OP2	-17.20	90.06	110.70
26	1H	1942	C	C4-C5-C6	-17.19	108.80	117.40
26	14	676	A	N3-C4-C5	17.16	138.81	126.80
26	1H	1373	A	O5'-P-OP2	-17.15	90.12	110.70
22	1K	74	C	N1-C2-O2	17.15	129.19	118.90
26	14	1277	G	C8-N9-C4	17.14	113.25	106.40
23	2K	77	A	C5-C6-N6	-17.13	110.00	123.70
26	14	2258	C	O5'-P-OP1	-17.12	90.15	110.70
26	14	945	A	C2-N3-C4	-17.07	102.06	110.60
26	1H	783	A	C5-C6-N1	-17.06	109.17	117.70
26	1H	2030	A	O5'-P-OP2	-17.06	90.23	110.70
26	1H	774	A	O5'-P-OP2	-17.05	90.24	110.70
26	14	2579	C	O5'-P-OP2	-17.04	90.25	110.70
26	14	1332	G	C6-C5-N7	-17.04	120.18	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2030	A	C5-C6-N6	-17.04	110.07	123.70
26	14	621	A	N1-C6-N6	17.00	128.80	118.60
26	1H	2346	A	C2-N3-C4	-16.99	102.11	110.60
26	14	2827	C	C6-N1-C2	16.94	127.08	120.30
1	13	1502	A	C4-C5-N7	16.92	119.16	110.70
26	14	330	A	C2-N3-C4	-16.90	102.15	110.60
26	1H	945	A	C4-C5-C6	16.86	125.43	117.00
1	1G	1469	G	C5-C6-N1	-16.85	103.08	111.50
26	1H	1271	G	C8-N9-C4	16.82	113.13	106.40
26	1H	1496	A	C5-N7-C8	-16.80	95.50	103.90
26	1H	1794	U	O5'-P-OP2	-16.79	90.55	110.70
26	1H	609	A	N1-C6-N6	16.78	128.67	118.60
26	1H	195	A	C5-C6-N6	-16.76	110.29	123.70
1	13	977	A	N1-C6-N6	-16.75	108.55	118.60
26	1H	2603	G	O5'-P-OP1	-16.73	90.62	110.70
26	1H	2029	G	O5'-P-OP1	-16.72	90.63	110.70
26	1H	682	G	O5'-P-OP2	-16.72	90.64	110.70
26	1H	2280	G	C4-C5-N7	-16.72	104.11	110.80
26	1H	628	G	N1-C6-O6	-16.71	109.87	119.90
26	1H	1817	G	C4-C5-N7	-16.71	104.12	110.80
26	14	863	A	C8-N9-C4	-16.70	99.12	105.80
26	1H	2490	G	C5-N7-C8	-16.70	95.95	104.30
26	1H	566	U	C6-N1-C2	16.70	131.02	121.00
26	14	774	A	N1-C6-N6	16.65	128.59	118.60
26	1H	1915	U	N3-C2-O2	-16.65	110.55	122.20
26	1H	2591	C	O5'-P-OP2	-16.63	90.73	105.70
26	14	2062	A	C8-N9-C4	16.61	112.44	105.80
26	14	1698	A	C4-C5-N7	16.59	118.99	110.70
26	1H	2430	A	C8-N9-C4	-16.55	99.18	105.80
26	1H	2503	A	C5-C6-N6	-16.51	110.49	123.70
26	14	1899	G	C2-N3-C4	-16.51	103.64	111.90
26	1H	2331	G	C2-N3-C4	-16.51	103.65	111.90
1	13	690	G	N1-C6-O6	16.50	129.80	119.90
26	1H	1300	U	N1-C2-N3	16.49	124.80	114.90
26	1H	1332	G	N1-C6-O6	16.49	129.79	119.90
26	14	74	A	N1-C6-N6	16.47	128.48	118.60
26	1H	391	G	N1-C6-O6	16.47	129.78	119.90
26	14	2617	C	C6-N1-C2	16.47	126.89	120.30
26	1H	2331	G	N1-C6-O6	16.46	129.78	119.90
26	1H	2392	A	N7-C8-N9	16.43	122.02	113.80
26	1H	1321	A	C8-N9-C4	16.43	112.37	105.80
26	1H	1021	A	C5-C6-N1	-16.42	109.49	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1786	A	C4-C5-N7	16.40	118.90	110.70
26	14	2430	A	N1-C6-N6	16.39	128.44	118.60
26	1H	2392	A	C5-N7-C8	-16.38	95.71	103.90
26	1H	2286	A	O5'-P-OP2	-16.38	90.96	105.70
26	1H	1698	A	C5-C6-N1	-16.37	109.52	117.70
26	14	1698	A	C5-N7-C8	-16.35	95.72	103.90
26	1H	124	G	C8-N9-C4	16.35	112.94	106.40
26	14	140	A	C5-N7-C8	-16.33	95.73	103.90
26	1H	593	G	O5'-P-OP2	-16.32	91.01	105.70
26	1H	2593	U	C6-N1-C2	-16.32	111.21	121.00
26	1H	2713	A	N1-C6-N6	16.30	128.38	118.60
26	14	2438	U	O5'-P-OP2	-16.30	91.03	105.70
26	14	1616	A	N1-C6-N6	16.30	128.38	118.60
26	1H	128	C	N3-C4-C5	16.26	128.41	121.90
26	1H	698	C	C5-C6-N1	-16.25	112.87	121.00
26	1H	74	A	N7-C8-N9	16.25	121.92	113.80
27	1J	114	G	C8-N9-C4	16.23	112.89	106.40
26	1H	2458	G	N3-C2-N2	-16.21	108.55	119.90
26	1H	847	U	N3-C2-O2	-16.21	110.85	122.20
26	1H	2698	U	C5-C6-N1	-16.21	114.59	122.70
26	14	929	G	C5-C6-N1	-16.20	103.40	111.50
26	14	1698	A	C6-C5-N7	-16.20	120.96	132.30
26	1H	2552	U	C4-C5-C6	16.19	129.42	119.70
26	1H	1975	G	C5-C6-O6	-16.19	118.89	128.60
26	1H	2507	C	N3-C4-C5	-16.18	115.43	121.90
26	1H	1989	G	N1-C6-O6	16.18	129.61	119.90
26	14	510	C	O5'-P-OP2	-16.12	91.19	105.70
26	1H	2430	A	N7-C8-N9	16.12	121.86	113.80
26	1H	1021	A	C5-N7-C8	-16.11	95.84	103.90
26	1H	2607	G	C5-C6-N1	-16.10	103.45	111.50
26	14	1379	A	N1-C6-N6	16.10	128.26	118.60
26	1H	1826	G	C5-N7-C8	16.09	112.35	104.30
1	13	1435	G	C2-N3-C4	-16.08	103.86	111.90
1	13	1493	A	O5'-P-OP1	-16.07	91.24	105.70
26	1H	952	G	C5-C6-O6	-16.07	118.96	128.60
26	14	2033	A	O5'-P-OP2	-16.07	91.24	105.70
26	14	774	A	N3-C4-C5	16.05	138.04	126.80
26	1H	1162	G	C8-N9-C4	-16.05	99.98	106.40
26	1H	203	C	C5-C4-N4	-16.04	108.97	120.20
26	1H	2552	U	N3-C4-O4	15.99	130.59	119.40
26	1H	676	A	N7-C8-N9	15.98	121.79	113.80
26	1H	71	A	C6-C5-N7	-15.97	121.12	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	140	A	C4-C5-N7	15.97	118.68	110.70
26	14	1616	A	C5-N7-C8	-15.96	95.92	103.90
26	14	921	G	C8-N9-C4	-15.96	100.02	106.40
26	1H	2430	A	N1-C6-N6	15.95	128.17	118.60
26	1H	1324	G	N3-C2-N2	-15.94	108.74	119.90
26	14	1767	C	N3-C2-O2	-15.93	110.75	121.90
26	14	1187	G	C8-N9-C4	-15.92	100.03	106.40
26	1H	2430	A	N3-C4-N9	-15.91	114.67	127.40
26	14	2592	G	O5'-P-OP2	-15.90	91.39	105.70
26	14	2595	G	C5-C6-O6	-15.89	119.06	128.60
26	1H	783	A	C4-C5-N7	15.88	118.64	110.70
26	1H	2447	G	C6-N1-C2	-15.88	115.57	125.10
26	14	129	C	C5-C6-N1	-15.87	113.06	121.00
26	1H	746	A	O5'-P-OP2	15.87	129.74	110.70
26	1H	2319	G	O5'-P-OP2	-15.87	91.42	105.70
26	1H	2417	C	O5'-P-OP2	-15.87	91.42	105.70
26	1H	1399	C	C6-N1-C2	-15.85	113.96	120.30
27	16	32	C	N1-C2-O2	15.82	128.39	118.90
26	1H	1836	C	N3-C4-N4	-15.81	106.93	118.00
26	14	783	A	N1-C2-N3	15.80	137.20	129.30
26	14	828	U	N3-C2-O2	-15.81	111.14	122.20
26	1H	189	G	N1-C6-O6	15.80	129.38	119.90
26	1H	1771	C	C6-N1-C2	-15.80	113.98	120.30
26	14	2518	A	C2-N3-C4	-15.78	102.71	110.60
26	14	1302	A	N1-C6-N6	-15.78	109.13	118.60
26	1H	74	A	C5-N7-C8	-15.77	96.01	103.90
26	14	1681	G	N3-C4-C5	15.76	136.48	128.60
26	1H	1984	G	O5'-P-OP2	-15.76	91.52	105.70
26	14	205	G	C8-N9-C4	15.76	112.70	106.40
26	1H	815	C	C6-N1-C2	15.73	126.59	120.30
26	1H	683	C	C2-N3-C4	-15.72	112.04	119.90
26	14	530	G	C6-C5-N7	-15.70	120.98	130.40
26	1H	2592	G	O5'-P-OP2	-15.69	91.58	105.70
26	1H	2713	A	C5-C6-N1	-15.69	109.86	117.70
26	1H	510	C	O5'-P-OP2	-15.68	91.59	105.70
26	1H	140	A	C6-C5-N7	-15.67	121.33	132.30
26	1H	1241	A	N1-C6-N6	15.65	127.99	118.60
26	1H	2403	C	C6-N1-C2	-15.65	114.04	120.30
26	1H	683	C	C5-C6-N1	-15.65	113.18	121.00
26	1H	1313	U	N3-C4-O4	15.64	130.34	119.40
1	13	1327	C	C6-N1-C2	15.62	126.55	120.30
1	13	783	C	C6-N1-C2	15.60	126.54	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2685	G	C5-C6-N1	-15.60	103.70	111.50
26	14	252	G	N1-C6-O6	-15.58	110.55	119.90
26	1H	2483	C	O5'-P-OP1	-15.57	91.68	105.70
26	1H	386	G	C5-C6-O6	-15.57	119.26	128.60
26	1H	2518	A	C5-C6-N6	-15.57	111.24	123.70
1	13	553	A	C8-N9-C4	-15.54	99.59	105.80
26	1H	74	A	C8-N9-C4	-15.53	99.59	105.80
26	1H	662	G	O5'-P-OP2	-15.52	91.73	105.70
26	1H	445	C	C6-N1-C2	-15.52	114.09	120.30
26	14	1930	G	C4-C5-N7	-15.50	104.60	110.80
26	14	2023	G	O5'-P-OP2	-15.49	91.76	105.70
26	1H	678	C	C6-N1-C2	15.48	126.49	120.30
26	1H	2518	A	C5-N7-C8	-15.48	96.16	103.90
26	1H	225	A	C8-N9-C4	15.48	111.99	105.80
26	1H	796	C	N3-C4-C5	15.47	128.09	121.90
26	1H	1992	G	C5-C6-N1	15.47	119.24	111.50
26	1H	1413	G	C8-N9-C4	-15.47	100.21	106.40
26	1H	1603	A	C8-N9-C4	-15.47	99.61	105.80
26	1H	1617	C	O5'-P-OP1	-15.46	91.79	105.70
26	1H	1678	G	C2-N3-C4	-15.43	104.19	111.90
26	1H	1528	A	C8-N9-C4	-15.42	99.63	105.80
26	1H	1931	U	C5-C6-N1	-15.41	114.99	122.70
26	1H	783	A	N3-C4-N9	-15.41	115.07	127.40
26	14	796	C	N3-C4-C5	15.40	128.06	121.90
26	1H	683	C	N3-C4-C5	15.39	128.06	121.90
26	1H	2584	U	N3-C2-O2	-15.38	111.43	122.20
26	14	265	A	C2-N3-C4	-15.37	102.91	110.60
26	1H	140	A	C5-C6-N6	-15.37	111.41	123.70
26	14	1965	C	C6-N1-C2	15.36	126.44	120.30
26	1H	1767	C	O5'-P-OP1	-15.36	91.88	105.70
26	1H	1052	C	C6-N1-C2	-15.34	114.16	120.30
26	14	1950	G	N3-C4-C5	-15.34	120.93	128.60
26	14	2870	C	C6-N1-C2	-15.34	114.17	120.30
1	13	1502	A	N7-C8-N9	15.33	121.47	113.80
26	1H	691	C	N3-C2-O2	15.32	132.63	121.90
26	1H	1623	G	N1-C6-O6	-15.32	110.70	119.90
26	14	1630(A)	C	N1-C2-O2	-15.32	109.70	118.90
26	14	2603	G	O5'-P-OP1	-15.31	91.92	105.70
26	1H	1614	A	C5-N7-C8	-15.31	96.24	103.90
26	1H	2451	A	N1-C6-N6	-15.31	109.41	118.60
26	14	308	G	O5'-P-OP2	-15.29	91.94	105.70
26	14	462	C	O5'-P-OP2	-15.28	91.95	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1525	G	C8-N9-C4	15.27	112.51	106.40
1	1G	117	G	C5-C6-N1	-15.26	103.87	111.50
26	1H	1548	C	O5'-P-OP2	-15.26	91.97	105.70
26	1H	1387	C	O5'-P-OP1	-15.25	91.98	105.70
26	1H	1004	C	N3-C4-C5	-15.23	115.81	121.90
26	1H	144	C	C5-C6-N1	-15.23	113.39	121.00
26	1H	2287	A	C5-C6-N1	-15.22	110.09	117.70
26	14	665	C	N3-C4-C5	15.21	127.98	121.90
26	1H	2710	C	C5-C6-N1	-15.20	113.40	121.00
26	14	675	A	N9-C4-C5	-15.20	99.72	105.80
26	1H	1698	A	C5-N7-C8	-15.19	96.31	103.90
26	14	2000	G	O5'-P-OP1	15.18	128.92	110.70
26	14	1816	G	N1-C6-O6	-15.17	110.80	119.90
26	1H	676	A	C5-C6-N1	-15.17	110.12	117.70
26	14	1379	A	C5-N7-C8	-15.14	96.33	103.90
1	13	760	G	N1-C6-O6	15.13	128.98	119.90
26	1H	140	A	N7-C8-N9	15.13	121.36	113.80
26	14	2873	A	C5-N7-C8	-15.13	96.34	103.90
26	1H	138	G	N7-C8-N9	15.12	120.66	113.10
26	1H	735	A	C8-N9-C4	15.12	111.85	105.80
26	14	148	C	C6-N1-C2	15.11	126.34	120.30
26	1H	788	A	N1-C6-N6	15.11	127.67	118.60
26	1H	2022	U	O5'-P-OP2	-15.10	92.11	105.70
26	1H	1767	C	C2-N3-C4	-15.10	112.35	119.90
26	14	1266	G	C8-N9-C4	15.10	112.44	106.40
26	14	1950	G	C2-N3-C4	15.10	119.45	111.90
26	14	1826	G	C4-C5-N7	-15.09	104.76	110.80
26	1H	1404	C	C6-N1-C2	15.09	126.34	120.30
26	1H	685	A	O5'-P-OP2	-15.08	92.12	105.70
26	14	1681	G	C2-N3-C4	-15.05	104.37	111.90
26	1H	918	A	O5'-P-OP1	-15.04	92.17	105.70
26	1H	330	A	C2-N3-C4	-15.02	103.09	110.60
26	1H	1639	U	N3-C2-O2	-15.01	111.69	122.20
26	1H	815	C	N3-C4-C5	15.01	127.90	121.90
26	14	1678	G	N3-C4-C5	14.99	136.09	128.60
26	1H	1969	A	O5'-P-OP2	14.98	128.68	110.70
26	1H	198	C	N3-C4-C5	14.98	127.89	121.90
27	16	81	G	C4-C5-N7	14.98	116.79	110.80
26	14	2424	C	O5'-P-OP1	-14.97	92.23	105.70
26	1H	1784	A	N1-C6-N6	-14.96	109.62	118.60
26	1H	2346	A	N1-C6-N6	14.96	127.58	118.60
26	1H	2600	A	N1-C6-N6	-14.96	109.62	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1955	U	N1-C2-N3	14.95	123.87	114.90
26	14	2595	G	C4-C5-N7	14.94	116.78	110.80
1	13	816	A	C8-N9-C4	-14.94	99.82	105.80
26	1H	1569	A	C5-C6-N1	-14.91	110.24	117.70
26	1H	1428	C	C5-C6-N1	-14.91	113.54	121.00
26	1H	2019	A	N1-C6-N6	14.91	127.55	118.60
1	13	867	G	N1-C6-O6	-14.88	110.97	119.90
26	1H	859	G	N3-C4-C5	14.88	136.04	128.60
26	14	252	G	O5'-P-OP2	-14.87	92.32	105.70
26	14	675	A	C8-N9-C4	14.87	111.75	105.80
26	1H	2392	A	C8-N9-C4	-14.86	99.85	105.80
26	1H	2700	C	N3-C4-C5	14.85	127.84	121.90
1	1G	1474	G	N1-C6-O6	14.85	128.81	119.90
26	14	2297	C	O5'-P-OP1	-14.84	92.35	105.70
26	1H	789	A	O5'-P-OP1	-14.84	92.35	105.70
26	14	945	A	C6-C5-N7	-14.83	121.92	132.30
26	14	684	G	O5'-P-OP2	-14.82	92.36	105.70
26	1H	1376	C	O5'-P-OP1	-14.82	92.36	105.70
26	1H	2022	U	O5'-P-OP1	14.81	128.47	110.70
26	1H	676	A	C4-C5-N7	14.81	118.10	110.70
26	14	2062	A	N9-C4-C5	-14.79	99.88	105.80
1	13	328	C	O5'-P-OP1	-14.79	92.39	105.70
26	1H	122	G	C5-C6-O6	-14.79	119.72	128.60
26	14	1496	A	N1-C6-N6	14.79	127.47	118.60
26	1H	2699	C	C6-N1-C2	14.78	126.21	120.30
1	13	570	G	N1-C6-O6	14.78	128.77	119.90
26	14	2374	C	C6-N1-C2	14.77	126.21	120.30
1	13	1486	G	N1-C6-O6	14.77	128.76	119.90
26	1H	1698	A	C6-C5-N7	-14.76	121.97	132.30
26	1H	710	G	C6-C5-N7	-14.76	121.55	130.40
26	1H	1496	A	N7-C8-N9	14.76	121.18	113.80
26	1H	1752	C	C6-N1-C2	14.75	126.20	120.30
26	1H	691	C	N1-C2-O2	-14.74	110.06	118.90
26	1H	1446	C	C6-N1-C2	-14.74	114.40	120.30
26	14	2610	C	C6-N1-C2	14.73	126.19	120.30
26	14	2461	C	O5'-P-OP2	-14.72	92.45	105.70
26	1H	1021	A	N1-C6-N6	14.72	127.43	118.60
26	1H	1496	A	C4-C5-N7	14.72	118.06	110.70
26	1H	2346	A	C8-N9-C4	-14.72	99.91	105.80
26	1H	2830	G	C8-N9-C4	-14.72	100.51	106.40
26	14	2329	G	C8-N9-C4	14.71	112.28	106.40
26	1H	621	A	C5-C6-N1	-14.70	110.35	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1829	A	N1-C6-N6	-14.69	109.79	118.60
26	1H	977	G	C5-C6-O6	14.68	137.41	128.60
26	1H	1497	U	C5-C4-O4	-14.68	117.09	125.90
26	14	2510	C	C2-N3-C4	-14.68	112.56	119.90
26	1H	141(A)	C	O5'-P-OP1	-14.67	92.49	105.70
26	14	1332	G	N7-C8-N9	14.67	120.44	113.10
26	14	2392	A	C8-N9-C4	-14.67	99.93	105.80
26	1H	728	G	C5-C6-N1	-14.66	104.17	111.50
26	1H	1624	G	C8-N9-C4	14.66	112.27	106.40
1	13	972	C	OP1-P-OP2	-14.66	97.61	119.60
26	1H	952	G	N9-C4-C5	-14.66	99.54	105.40
26	1H	690	G	N7-C8-N9	-14.64	105.78	113.10
26	1H	1528	A	N7-C8-N9	14.63	121.12	113.80
26	1H	199	A	C2-N3-C4	14.63	117.91	110.60
1	13	1203	C	C6-N1-C2	-14.62	114.45	120.30
26	1H	730	C	O5'-P-OP1	14.62	128.25	110.70
26	14	1786	A	C8-N9-C4	-14.62	99.95	105.80
26	1H	1404	C	O5'-P-OP2	-14.61	92.55	105.70
26	1H	1210	A	N1-C6-N6	14.60	127.36	118.60
27	16	42	C	N1-C2-O2	-14.59	110.15	118.90
26	14	195	A	N1-C6-N6	14.59	127.35	118.60
26	14	621	A	C5-N7-C8	-14.59	96.61	103.90
26	1H	1623	G	C5-C6-O6	14.58	137.35	128.60
26	1H	2390	U	N3-C4-O4	14.58	129.60	119.40
26	14	133	C	C5-C6-N1	-14.58	113.71	121.00
26	1H	1333	C	C4-C5-C6	-14.57	110.11	117.40
26	1H	1803	A	N1-C2-N3	-14.57	122.01	129.30
26	1H	1332	G	N7-C8-N9	14.56	120.38	113.10
26	1H	1193	G	O5'-P-OP2	-14.55	92.61	105.70
26	14	1629	U	N3-C4-C5	-14.54	105.88	114.60
26	1H	831	G	N9-C4-C5	-14.53	99.59	105.40
26	1H	1978	A	N1-C6-N6	-14.53	109.88	118.60
26	14	783	A	N7-C8-N9	14.52	121.06	113.80
26	1H	945	A	N7-C8-N9	14.51	121.05	113.80
26	14	1627	G	C5-C6-N1	-14.49	104.26	111.50
26	1H	422	A	C2-N3-C4	-14.49	103.36	110.60
26	1H	2018	G	C8-N9-C4	-14.48	100.61	106.40
26	1H	1818	U	O5'-P-OP2	-14.48	92.67	105.70
26	1H	2307	G	O5'-P-OP2	-14.48	92.67	105.70
26	1H	2358	G	N1-C6-O6	-14.47	111.22	119.90
26	1H	2296	U	N3-C4-O4	14.47	129.53	119.40
26	14	199	A	C2-N3-C4	14.46	117.83	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	736	C	N3-C2-O2	14.46	132.02	121.90
26	1H	2272	U	O5'-P-OP2	-14.46	92.69	105.70
26	1H	704	G	C8-N9-C4	-14.45	100.62	106.40
26	1H	2272	U	O5'-P-OP1	14.46	128.05	110.70
27	16	81	G	C5-N7-C8	-14.43	97.08	104.30
26	1H	2351	G	N1-C6-O6	-14.43	111.24	119.90
26	1H	1403	C	O5'-P-OP2	-14.42	92.72	105.70
26	1H	1979	C	C6-N1-C2	-14.42	114.53	120.30
26	1H	2280	G	C5-C6-N1	-14.41	104.29	111.50
26	14	494	G	N1-C6-O6	14.41	128.55	119.90
26	14	793	A	O5'-P-OP2	-14.41	92.73	105.70
26	14	1378	A	N1-C2-N3	-14.39	122.11	129.30
26	1H	848	G	O5'-P-OP2	-14.38	92.75	105.70
26	1H	189	G	C5-C6-O6	-14.38	119.97	128.60
26	1H	945	A	N1-C2-N3	14.37	136.49	129.30
26	14	774	A	C4-C5-N7	14.36	117.88	110.70
26	14	774	A	C5-N7-C8	-14.36	96.72	103.90
26	1H	2327	A	C8-N9-C4	14.35	111.54	105.80
26	1H	1914	C	C6-N1-C2	-14.34	114.56	120.30
26	1H	1930	G	O5'-P-OP2	-14.34	92.79	105.70
26	1H	815	C	C2-N3-C4	-14.34	112.73	119.90
26	1H	1800	C	O5'-P-OP2	14.33	127.90	110.70
26	14	935	C	C6-N1-C2	14.33	126.03	120.30
26	1H	1204	A	C5-N7-C8	-14.32	96.74	103.90
26	14	783	A	N3-C4-N9	-14.32	115.94	127.40
26	1H	2600	A	N9-C4-C5	14.32	111.53	105.80
26	1H	678	C	N3-C4-C5	14.31	127.63	121.90
26	14	16	G	N3-C2-N2	-14.31	109.88	119.90
26	1H	2430	A	N3-C4-C5	14.31	136.82	126.80
26	14	2325	G	N3-C2-N2	-14.31	109.89	119.90
26	1H	189	G	C8-N9-C4	14.30	112.12	106.40
1	13	319	G	C8-N9-C4	14.29	112.12	106.40
26	14	566	U	C5-C6-N1	-14.29	115.55	122.70
26	14	676	A	N7-C8-N9	14.29	120.95	113.80
26	14	2873	A	N7-C8-N9	14.28	120.94	113.80
26	1H	246	C	C6-N1-C2	14.28	126.01	120.30
26	14	1585	C	N1-C2-O2	14.27	127.46	118.90
26	1H	120	U	N3-C2-O2	-14.26	112.22	122.20
26	1H	2374	C	C5-C6-N1	-14.25	113.87	121.00
1	13	521	G	C8-N9-C4	14.24	112.10	106.40
26	1H	2464	C	C5-C4-N4	-14.24	110.23	120.20
1	13	712	A	N1-C6-N6	-14.24	110.06	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	329	G	O5'-P-OP2	-14.24	92.89	105.70
26	14	786	C	O5'-P-OP2	-14.24	92.89	105.70
27	16	100	G	C8-N9-C4	14.23	112.09	106.40
26	14	2068	U	O5'-P-OP1	-14.23	92.90	105.70
1	13	1486	G	O5'-P-OP2	-14.22	92.90	105.70
26	14	2068	U	N1-C2-N3	-14.21	106.37	114.90
26	1H	1556	C	O5'-P-OP1	-14.21	92.91	105.70
26	14	1380	G	C8-N9-C4	14.21	112.08	106.40
26	1H	797	C	C5-C6-N1	-14.21	113.90	121.00
26	1H	928	G	N3-C4-C5	14.21	135.70	128.60
26	1H	1769	G	C5-C6-N1	-14.19	104.40	111.50
26	1H	347	A	C5-C6-N1	-14.19	110.61	117.70
1	13	690	G	C2-N3-C4	-14.18	104.81	111.90
27	16	115	G	C4-C5-N7	14.18	116.47	110.80
26	14	827	U	N3-C2-O2	14.18	132.12	122.20
1	13	1335	C	C6-N1-C2	14.17	125.97	120.30
1	13	733	A	C8-N9-C4	14.17	111.47	105.80
26	1H	1393	A	O5'-P-OP2	-14.16	92.95	105.70
26	1H	1204	A	O4'-C1'-N9	14.15	119.52	108.20
22	1K	76	A	N7-C8-N9	14.15	120.88	113.80
26	1H	2503	A	N1-C2-N3	-14.15	122.22	129.30
26	1H	915	C	N1-C2-O2	14.13	127.38	118.90
1	13	668	G	O5'-P-OP1	-14.13	92.98	105.70
26	14	2392	A	N7-C8-N9	14.12	120.86	113.80
26	1H	1670	C	C4-C5-C6	14.10	124.45	117.40
26	1H	966	G	N1-C6-O6	-14.10	111.44	119.90
26	1H	2447	G	C5-C6-N1	14.10	118.55	111.50
26	14	2593	U	N3-C4-C5	-14.10	106.14	114.60
26	1H	1616	A	C8-N9-C4	-14.09	100.16	105.80
26	14	530	G	C4-C5-N7	14.09	116.44	110.80
26	1H	1324	G	C5-C6-N1	-14.08	104.46	111.50
1	1G	366	C	C6-N1-C2	14.08	125.93	120.30
26	1H	774	A	N3-C4-C5	14.07	136.65	126.80
26	1H	1989	G	N3-C2-N2	-14.07	110.05	119.90
26	14	2441	C	C5-C6-N1	-14.06	113.97	121.00
26	14	974(A)	C	C5-C4-N4	14.05	130.04	120.20
26	1H	1210	A	N7-C8-N9	14.04	120.82	113.80
26	14	2038	G	OP1-P-OP2	-14.04	98.53	119.60
26	1H	1203	G	N1-C6-O6	-14.04	111.48	119.90
26	1H	71	A	C4-C5-N7	14.04	117.72	110.70
26	1H	1303	G	N1-C6-O6	-14.03	111.48	119.90
26	1H	2009	G	C8-N9-C4	14.02	112.01	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1678	G	C5-N7-C8	-14.02	97.29	104.30
26	14	2268	A	C8-N9-C4	-14.02	100.19	105.80
27	16	32	C	N3-C2-O2	-14.02	112.09	121.90
26	14	665	C	C6-N1-C2	14.01	125.90	120.30
26	14	691	C	N1-C2-O2	-14.01	110.50	118.90
23	2K	6	G	C8-N9-C4	14.00	112.00	106.40
1	1G	117	G	C6-C5-N7	-14.00	122.00	130.40
26	14	795	C	N1-C2-O2	14.00	127.30	118.90
26	14	666	G	C8-N9-C4	14.00	112.00	106.40
26	1H	2346	A	N7-C8-N9	13.98	120.79	113.80
26	1H	514	A	O5'-P-OP2	-13.98	93.12	105.70
26	1H	2311	A	N1-C2-N3	13.98	136.29	129.30
26	14	2346	A	C5-C6-N1	-13.98	110.71	117.70
1	13	1502	A	N1-C6-N6	13.97	126.98	118.60
26	14	750	A	C8-N9-C4	-13.97	100.21	105.80
26	1H	617	G	C8-N9-C4	13.96	111.98	106.40
26	1H	1623	G	C4-C5-N7	-13.96	105.22	110.80
26	1H	443	A	O5'-P-OP2	-13.96	93.14	105.70
26	14	1939	U	C5-C6-N1	-13.96	115.72	122.70
26	1H	2830	G	N7-C8-N9	13.95	120.08	113.10
1	1G	331	G	N1-C6-O6	13.95	128.27	119.90
1	13	867	G	C5-C6-O6	13.95	136.97	128.60
57	3L	76	A	C5-N7-C8	-13.95	96.93	103.90
26	14	2338	G	O5'-P-OP1	-13.95	93.15	105.70
26	14	2386	C	C5-C6-N1	-13.95	114.03	121.00
26	1H	1948	G	N1-C6-O6	-13.94	111.54	119.90
26	1H	793	A	N1-C6-N6	13.94	126.96	118.60
26	1H	2376	A	C8-N9-C4	13.93	111.37	105.80
1	13	878	G	C8-N9-C4	13.93	111.97	106.40
26	1H	794	G	C8-N9-C4	13.93	111.97	106.40
27	16	47	C	C6-N1-C2	13.92	125.87	120.30
26	14	2510	C	C5-C6-N1	-13.92	114.04	121.00
26	1H	516	C	C6-N1-C2	-13.91	114.73	120.30
54	P8	39	ARG	NE-CZ-NH2	-13.91	113.34	120.30
1	13	1412	C	C6-N1-C2	13.90	125.86	120.30
26	14	1661	G	C8-N9-C4	13.90	111.96	106.40
26	14	1342	A	N1-C6-N6	13.89	126.93	118.60
26	14	1520	U	C5-C4-O4	13.89	134.23	125.90
26	1H	2490	G	C5-C6-N1	-13.88	104.56	111.50
26	14	2700	C	C6-N1-C2	13.88	125.85	120.30
26	1H	1939	U	N3-C4-C5	13.87	122.92	114.60
26	14	2542	A	O5'-P-OP2	-13.87	93.22	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	211	A	C2-N3-C4	-13.86	103.67	110.60
26	1H	451	C	N1-C2-O2	-13.85	110.59	118.90
26	1H	783	A	N3-C4-C5	13.84	136.49	126.80
26	1H	1808	U	C5-C4-O4	-13.84	117.60	125.90
26	14	211	A	N1-C6-N6	13.83	126.90	118.60
26	1H	1661	G	C8-N9-C4	13.83	111.93	106.40
27	16	105	G	C8-N9-C4	-13.83	100.87	106.40
26	14	1643	G	O5'-P-OP1	-13.83	93.25	105.70
26	14	1336	A	N1-C6-N6	-13.82	110.31	118.60
1	13	1369	C	O5'-P-OP2	-13.82	93.26	105.70
57	3L	76	A	N7-C8-N9	13.82	120.71	113.80
26	1H	1204	A	N1-C6-N6	13.81	126.89	118.60
26	1H	2364	C	O5'-P-OP2	-13.81	93.27	105.70
26	14	16	G	N1-C6-O6	13.81	128.19	119.90
26	14	1607	C	N3-C4-N4	13.80	127.66	118.00
26	1H	683	C	C6-N1-C2	13.80	125.82	120.30
26	1H	1950	G	C6-C5-N7	-13.80	122.12	130.40
26	1H	2713	A	C5-N7-C8	-13.80	97.00	103.90
26	1H	659	C	C6-N1-C2	13.79	125.82	120.30
26	1H	2374	C	C6-N1-C2	13.79	125.82	120.30
26	1H	2603	G	C8-N9-C4	-13.79	100.89	106.40
26	1H	2665	A	N1-C6-N6	13.78	126.87	118.60
26	1H	2295	C	C6-N1-C2	-13.78	114.79	120.30
26	14	2249	U	N3-C4-C5	-13.77	106.34	114.60
26	1H	474	G	C8-N9-C4	-13.77	100.89	106.40
26	1H	1915	U	N3-C4-C5	13.76	122.86	114.60
26	1H	1602	U	C4-C5-C6	13.75	127.95	119.70
26	1H	1120	G	N1-C6-O6	13.74	128.15	119.90
26	1H	1356	G	O5'-P-OP1	-13.73	93.34	105.70
26	1H	2585	U	N1-C2-O2	13.73	132.41	122.80
26	1H	474	G	N9-C4-C5	13.73	110.89	105.40
26	14	2612	C	N1-C2-O2	13.72	127.13	118.90
26	14	1602	U	O5'-P-OP2	13.72	127.16	110.70
26	1H	458	G	C5-C6-O6	13.71	136.83	128.60
26	1H	651	G	C8-N9-C4	-13.71	100.92	106.40
26	1H	138	G	C5-C6-N1	13.71	118.35	111.50
26	1H	1823	G	C2-N3-C4	-13.70	105.05	111.90
26	1H	2390	U	O5'-P-OP1	-13.69	93.38	105.70
1	13	577	G	N1-C6-O6	13.69	128.11	119.90
26	14	1786	A	N7-C8-N9	13.69	120.64	113.80
26	14	2287	A	C5-C6-N1	-13.68	110.86	117.70
26	1H	2330	G	N1-C6-O6	13.68	128.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	774	A	N3-C4-N9	-13.66	116.47	127.40
26	1H	2054	A	C8-N9-C4	-13.66	100.34	105.80
26	14	2346	A	N1-C2-N3	13.66	136.13	129.30
1	13	353	A	C8-N9-C4	-13.66	100.34	105.80
26	1H	1244	G	N1-C6-O6	13.65	128.09	119.90
26	1H	2503	A	C4-C5-N7	13.65	117.53	110.70
26	14	687	C	O5'-P-OP1	-13.65	93.41	105.70
26	14	2443	C	O5'-P-OP2	13.65	127.08	110.70
26	14	2619	C	C6-N1-C2	13.65	125.76	120.30
26	1H	1428	C	C6-N1-C2	13.64	125.76	120.30
26	14	2610	C	N1-C2-O2	13.64	127.08	118.90
1	13	827	U	N3-C2-O2	-13.63	112.66	122.20
26	14	2365	G	N1-C6-O6	13.63	128.08	119.90
26	1H	793	A	C5-C6-N6	-13.63	112.80	123.70
26	1H	930	U	C5-C4-O4	13.62	134.07	125.90
26	1H	2688	U	C5-C6-N1	-13.62	115.89	122.70
26	14	1616	A	C4-C5-N7	13.62	117.51	110.70
26	14	2217	G	N1-C6-O6	13.60	128.06	119.90
26	14	71	A	C5-N7-C8	-13.60	97.10	103.90
26	1H	621	A	C4-C5-N7	13.60	117.50	110.70
1	13	776	G	O5'-P-OP1	-13.59	93.47	105.70
26	1H	2424	C	N1-C2-O2	13.59	127.05	118.90
26	1H	966	G	C5-C6-O6	13.58	136.75	128.60
26	1H	2509	G	C5-C6-O6	-13.58	120.45	128.60
26	1H	530	G	N3-C2-N2	13.58	129.41	119.90
26	1H	2690	C	N3-C4-C5	-13.58	116.47	121.90
26	1H	1833	U	N3-C2-O2	-13.58	112.70	122.20
26	1H	2225	A	N1-C6-N6	-13.58	110.45	118.60
26	14	1779	U	C5-C6-N1	-13.58	115.91	122.70
26	1H	621	A	C5-N7-C8	-13.57	97.11	103.90
26	1H	122	G	C2-N3-C4	-13.57	105.11	111.90
27	16	61	G	O5'-P-OP1	-13.57	93.49	105.70
26	1H	2070	G	C2-N3-C4	-13.56	105.12	111.90
26	1H	2006	C	N3-C4-C5	13.56	127.32	121.90
26	1H	864	G	C2-N3-C4	13.56	118.68	111.90
26	14	955	C	O5'-P-OP2	-13.55	93.50	105.70
26	14	660	G	C5-C6-N1	-13.54	104.73	111.50
26	1H	107	C	C6-N1-C2	13.53	125.71	120.30
26	14	672	C	O5'-P-OP2	-13.53	93.53	105.70
26	1H	842	G	N3-C4-C5	13.51	135.35	128.60
26	14	2441	C	N3-C2-O2	-13.51	112.44	121.90
26	1H	2543	G	N1-C6-O6	-13.51	111.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2363	C	C5-C6-N1	-13.50	114.25	121.00
26	1H	676	A	C6-N1-C2	13.50	126.70	118.60
26	1H	2271	G	C6-N1-C2	-13.49	117.00	125.10
23	2K	77	A	C5-C6-N1	13.49	124.45	117.70
26	14	621	A	C2-N3-C4	-13.48	103.86	110.60
23	2K	62	C	C6-N1-C2	-13.48	114.91	120.30
26	1H	347	A	C2-N3-C4	-13.48	103.86	110.60
27	16	29	A	C8-N9-C4	-13.48	100.41	105.80
26	1H	141	A	C5-N7-C8	-13.47	97.17	103.90
26	14	409	C	C6-N1-C2	13.46	125.69	120.30
26	1H	917	A	N1-C6-N6	13.46	126.68	118.60
26	1H	1496	A	N1-C6-N6	13.46	126.68	118.60
26	14	856	C	O5'-P-OP1	-13.46	93.58	105.70
26	1H	203	C	C2-N3-C4	-13.45	113.17	119.90
26	1H	400	G	C8-N9-C4	-13.45	101.02	106.40
26	14	2710	C	C6-N1-C2	13.45	125.68	120.30
26	14	2598	A	C5-C6-N6	-13.44	112.94	123.70
26	1H	1642	G	O5'-P-OP1	-13.44	93.60	105.70
26	1H	658	C	O5'-P-OP2	-13.44	93.60	105.70
26	14	2386	C	C6-N1-C2	13.43	125.67	120.30
26	1H	621	A	C6-C5-N7	-13.43	122.90	132.30
26	1H	2684	U	C5-C6-N1	-13.43	115.98	122.70
26	1H	1191	G	C8-N9-C4	13.43	111.77	106.40
26	14	1933	G	C8-N9-C4	13.43	111.77	106.40
26	1H	1402	C	C5-C6-N1	13.43	127.71	121.00
26	1H	530	G	N1-C2-N2	-13.42	104.12	116.20
26	14	74	A	C5-N7-C8	-13.42	97.19	103.90
1	13	869	G	N1-C6-O6	13.41	127.95	119.90
26	1H	115	C	C6-N1-C2	13.41	125.66	120.30
26	14	2363	C	N3-C4-C5	13.40	127.26	121.90
26	14	2607	G	C5-C6-N1	-13.40	104.80	111.50
26	14	2426	A	C5-N7-C8	-13.40	97.20	103.90
26	14	1379	A	C4-C5-N7	13.39	117.39	110.70
26	1H	1413	G	N7-C8-N9	13.38	119.79	113.10
26	14	2700	C	C5-C6-N1	-13.38	114.31	121.00
23	2L	40	C	C6-N1-C2	-13.37	114.95	120.30
26	1H	1614	A	C4-C5-N7	13.37	117.38	110.70
26	14	1221	C	C6-N1-C2	13.37	125.65	120.30
26	1H	2291	U	C5-C4-O4	13.36	133.92	125.90
26	14	2219	G	C8-N9-C4	13.36	111.75	106.40
26	1H	655	A	N1-C6-N6	13.36	126.62	118.60
26	1H	1971	A	C5-C6-N1	13.36	124.38	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	945	A	C5-N7-C8	-13.34	97.23	103.90
26	14	2873	A	C5-C6-N1	-13.34	111.03	117.70
26	1H	683	C	C5-C4-N4	-13.34	110.86	120.20
26	1H	132	G	C5-C6-N1	-13.34	104.83	111.50
26	1H	2679	A	O5'-P-OP2	-13.32	93.71	105.70
26	1H	205	G	O5'-P-OP2	-13.32	93.71	105.70
26	14	2492	U	O5'-P-OP2	13.32	126.68	110.70
26	14	265	A	C5-N7-C8	-13.31	97.24	103.90
26	1H	2484	G	C8-N9-C4	13.30	111.72	106.40
26	14	684	G	C8-N9-C4	-13.30	101.08	106.40
26	1H	1287	A	O5'-P-OP2	-13.30	93.73	105.70
26	1H	1304	C	N3-C4-C5	13.30	127.22	121.90
26	14	1659	U	O5'-P-OP2	-13.30	93.73	105.70
26	1H	977	G	N1-C6-O6	-13.30	111.92	119.90
26	1H	2506	U	N1-C2-O2	13.30	132.11	122.80
26	14	1309	G	C5-C6-N1	-13.29	104.85	111.50
1	13	1512	U	O5'-P-OP2	-13.29	93.74	105.70
26	1H	786	C	C5-C4-N4	13.29	129.50	120.20
26	1H	1253	A	N1-C2-N3	-13.29	122.65	129.30
26	1H	1430	C	C6-N1-C2	-13.29	114.98	120.30
26	1H	1373	A	O5'-P-OP1	13.29	126.64	110.70
26	1H	1628	G	O5'-P-OP1	13.29	126.64	110.70
26	14	621	A	C5-C6-N1	-13.29	111.06	117.70
1	1G	232	G	C5-C6-N1	-13.28	104.86	111.50
26	1H	1161	C	C6-N1-C2	-13.28	114.99	120.30
26	14	773	U	N1-C2-N3	13.28	122.87	114.90
26	14	2587	A	O5'-P-OP1	-13.28	93.75	105.70
26	14	1645	G	N1-C6-O6	-13.28	111.93	119.90
26	1H	1241	A	C5-C6-N1	-13.28	111.06	117.70
26	1H	1271	G	N7-C8-N9	-13.27	106.47	113.10
26	1H	1629	U	O5'-P-OP2	13.26	126.62	110.70
26	1H	858	U	N3-C4-O4	-13.26	110.12	119.40
26	1H	942	G	N1-C2-N2	13.26	128.13	116.20
26	1H	141	A	N7-C8-N9	13.26	120.43	113.80
26	1H	576	U	C6-N1-C2	13.26	128.95	121.00
26	1H	1602	U	N1-C2-N3	13.26	122.85	114.90
26	1H	409	C	C6-N1-C2	13.25	125.60	120.30
26	1H	690	G	C5-N7-C8	13.25	110.92	104.30
26	1H	2331	G	C4-C5-N7	13.25	116.10	110.80
26	1H	1473	G	O5'-P-OP2	-13.23	93.79	105.70
26	1H	2518	A	C6-C5-N7	-13.23	123.04	132.30
26	14	1379	A	C5-C6-N6	-13.23	113.12	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1514	U	O5'-P-OP1	-13.22	93.80	105.70
26	1H	2577	A	N1-C6-N6	-13.22	110.67	118.60
26	1H	2521	C	C6-N1-C2	13.21	125.58	120.30
1	13	740	U	O5'-P-OP2	-13.21	93.81	105.70
26	1H	1363	C	O5'-P-OP2	-13.21	93.81	105.70
26	1H	1333	C	C5-C4-N4	-13.20	110.96	120.20
26	1H	756	C	N1-C2-O2	-13.20	110.98	118.90
26	14	621	A	N7-C8-N9	13.20	120.40	113.80
26	1H	1333	C	N3-C4-C5	13.19	127.18	121.90
26	1H	71	A	N1-C2-N3	13.19	135.90	129.30
26	1H	1803	A	N9-C4-C5	-13.18	100.53	105.80
26	14	2092	U	N1-C2-N3	13.18	122.81	114.90
1	13	892	A	N1-C6-N6	13.17	126.50	118.60
26	1H	928	G	C4-C5-N7	13.17	116.07	110.80
26	1H	1786	A	C5-C6-N1	-13.17	111.11	117.70
26	1H	2665	A	C4-C5-N7	13.17	117.28	110.70
26	14	828	U	N1-C2-N3	13.17	122.80	114.90
26	14	562	U	N3-C2-O2	-13.16	112.99	122.20
26	14	2392	A	C5-C6-N1	-13.16	111.12	117.70
26	14	2610	C	N3-C4-C5	13.16	127.17	121.90
26	14	2441	C	C2-N3-C4	-13.16	113.32	119.90
26	14	741	G	C5-C6-O6	-13.15	120.71	128.60
26	1H	917	A	C2-N3-C4	-13.15	104.03	110.60
26	1H	189	G	N7-C8-N9	-13.14	106.53	113.10
26	1H	52	A	O5'-P-OP2	-13.13	93.88	105.70
26	1H	2346	A	C5-N7-C8	-13.13	97.33	103.90
26	1H	294	A	C8-N9-C4	13.12	111.05	105.80
26	14	507	A	OP1-P-OP2	-13.12	99.91	119.60
26	14	133	C	N3-C4-C5	13.12	127.15	121.90
1	13	300	A	O5'-P-OP1	-13.12	93.90	105.70
26	1H	693	C	N3-C4-N4	-13.12	108.82	118.00
26	14	788	A	N9-C4-C5	-13.12	100.55	105.80
26	14	1319	G	O5'-P-OP1	-13.12	93.90	105.70
26	1H	1784	A	C5-C6-N6	13.10	134.18	123.70
26	1H	2030	A	N1-C6-N6	13.10	126.46	118.60
26	1H	217	G	C4-C5-N7	-13.10	105.56	110.80
26	1H	1942	C	C5-C6-N1	13.09	127.55	121.00
26	1H	2857	G	O5'-P-OP1	-13.09	93.92	105.70
26	14	921	G	N7-C8-N9	13.09	119.64	113.10
26	14	1816	G	C2-N3-C4	13.09	118.44	111.90
26	1H	330	A	N1-C2-N3	13.09	135.84	129.30
26	1H	446	G	N9-C4-C5	-13.09	100.17	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1558	A	O5'-P-OP1	-13.09	93.92	105.70
26	1H	473	G	O5'-P-OP2	-13.08	93.93	105.70
26	14	768	G	C6-C5-N7	-13.08	122.55	130.40
26	1H	2409	G	C5-C6-O6	-13.08	120.75	128.60
26	1H	1803	A	C8-N9-C4	13.07	111.03	105.80
1	13	260	G	C4-C5-N7	-13.07	105.57	110.80
23	2K	77	A	C4-C5-N7	13.06	117.23	110.70
26	1H	20	C	C2-N3-C4	-13.06	113.37	119.90
26	1H	693	C	C5-C4-N4	13.06	129.34	120.20
26	1H	1254	A	N9-C4-C5	-13.05	100.58	105.80
26	14	1930	G	O5'-P-OP1	-13.05	93.95	105.70
26	1H	1614	A	C5-C6-N1	-13.05	111.17	117.70
26	1H	1614	A	C6-C5-N7	-13.05	123.17	132.30
26	1H	2226	C	N3-C4-N4	-13.05	108.87	118.00
26	14	2038	G	O5'-P-OP2	13.05	126.36	110.70
1	13	30	U	O5'-P-OP1	-13.04	93.96	105.70
1	13	965	A	C5-C6-N1	-13.04	111.18	117.70
26	1H	1658	C	N1-C2-O2	-13.04	111.07	118.90
26	1H	2287	A	N3-C4-C5	13.04	135.93	126.80
26	14	676	A	N3-C4-N9	-13.04	116.97	127.40
26	14	2595	G	C5-N7-C8	-13.04	97.78	104.30
26	14	1603	A	C8-N9-C4	-13.04	100.58	105.80
26	1H	2584	U	N1-C2-N3	13.03	122.72	114.90
27	1J	81	G	C4-C5-N7	13.02	116.01	110.80
26	14	1298	C	N3-C4-C5	-13.01	116.69	121.90
26	14	1786	A	N1-C2-N3	13.01	135.81	129.30
26	1H	265	A	C2-N3-C4	-13.01	104.10	110.60
24	3K	76	A	C6-C5-N7	-13.00	123.20	132.30
26	1H	1244	G	N3-C2-N2	-13.00	110.80	119.90
26	14	199	A	C5-C6-N1	13.00	124.20	117.70
26	1H	2690	C	C4-C5-C6	13.00	123.90	117.40
26	14	528	A	N1-C2-N3	12.99	135.80	129.30
26	1H	1626	G	C8-N9-C4	-12.99	101.20	106.40
26	14	1807	G	O5'-P-OP1	-12.99	94.01	105.70
26	14	2873	A	C6-C5-N7	-12.98	123.21	132.30
26	1H	528	A	C6-N1-C2	12.98	126.39	118.60
26	1H	1230	C	C6-N1-C2	12.98	125.49	120.30
26	1H	1627	G	C8-N9-C4	12.98	111.59	106.40
26	1H	1786	A	N3-C4-C5	12.97	135.88	126.80
26	1H	2586	C	N3-C4-C5	12.97	127.09	121.90
26	14	786	C	C5-C6-N1	-12.96	114.52	121.00
26	14	121	G	C5-C6-O6	-12.96	120.82	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2281	C	C5-C4-N4	-12.96	111.13	120.20
26	1H	1826	G	N7-C8-N9	-12.96	106.62	113.10
26	14	1772	G	O5'-P-OP2	-12.96	94.04	105.70
26	1H	1754	C	N1-C2-O2	12.96	126.67	118.90
1	13	227	G	C8-N9-C4	12.95	111.58	106.40
26	1H	842	G	N3-C2-N2	-12.95	110.83	119.90
26	14	2505	G	C5-C6-N1	-12.95	105.03	111.50
26	14	1692	U	C5-C6-N1	-12.94	116.23	122.70
1	1G	1465	C	C6-N1-C2	-12.94	115.12	120.30
26	14	676	A	N1-C6-N6	12.94	126.36	118.60
1	13	333	G	C5-C6-N1	-12.93	105.03	111.50
26	1H	1321	A	N7-C8-N9	-12.93	107.34	113.80
26	1H	113	G	N1-C6-O6	12.92	127.65	119.90
26	1H	1617	C	N1-C2-O2	-12.92	111.15	118.90
1	13	1412	C	C5-C6-N1	-12.92	114.54	121.00
26	14	1300	U	O5'-P-OP2	-12.92	94.07	105.70
1	13	1502	A	C6-C5-N7	-12.92	123.26	132.30
26	1H	391	G	C2-N3-C4	-12.92	105.44	111.90
26	1H	2424	C	C2-N3-C4	12.91	126.36	119.90
26	1H	2281	C	N3-C4-N4	12.91	127.03	118.00
26	14	835	A	C8-N9-C4	12.90	110.96	105.80
26	14	2622	C	C5-C6-N1	-12.90	114.55	121.00
26	1H	478	A	C6-N1-C2	-12.90	110.86	118.60
26	1H	347	A	N1-C6-N6	12.90	126.34	118.60
26	1H	1678	G	N3-C4-C5	12.90	135.05	128.60
26	1H	2398	U	C5-C4-O4	12.90	133.64	125.90
26	14	2518	A	N3-C4-C5	12.89	135.82	126.80
26	14	2697	G	C8-N9-C4	12.89	111.56	106.40
26	1H	211	A	N1-C6-N6	12.89	126.33	118.60
26	1H	2247	A	C2-N3-C4	-12.89	104.16	110.60
26	14	2365	G	C5-C6-O6	-12.88	120.87	128.60
26	1H	2259	G	OP1-P-OP2	-12.88	100.28	119.60
26	1H	115	C	N1-C2-O2	-12.88	111.17	118.90
26	14	2446	G	O5'-P-OP2	-12.88	94.11	105.70
26	1H	530	G	N1-C6-O6	-12.86	112.18	119.90
26	1H	2701	C	C2-N3-C4	-12.86	113.47	119.90
26	14	129	C	C4-C5-C6	12.86	123.83	117.40
26	1H	247	G	C5-C6-O6	12.85	136.31	128.60
26	1H	2561	A	N1-C6-N6	-12.85	110.89	118.60
26	1H	2600	A	C4-C5-N7	-12.85	104.28	110.70
26	14	1614	A	N1-C6-N6	12.85	126.31	118.60
26	1H	2079	U	C5-C4-O4	-12.85	118.19	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	35	U	N3-C2-O2	-12.84	113.21	122.20
26	1H	141	A	C8-N9-C4	-12.84	100.67	105.80
26	1H	1204	A	N7-C8-N9	12.84	120.22	113.80
26	14	571	A	N1-C6-N6	12.84	126.30	118.60
1	13	956	U	C6-N1-C2	-12.83	113.30	121.00
26	1H	115	C	N3-C4-N4	12.83	126.98	118.00
26	1H	2256	G	O5'-P-OP2	-12.83	94.16	105.70
26	1H	2250	G	N9-C4-C5	12.82	110.53	105.40
26	1H	2360	A	C2-N3-C4	-12.82	104.19	110.60
26	1H	2464	C	C6-N1-C2	12.82	125.43	120.30
1	13	1435	G	N1-C6-O6	12.82	127.59	119.90
26	1H	863	A	O5'-P-OP1	12.81	126.08	110.70
26	1H	1408	C	N1-C2-O2	-12.81	111.21	118.90
26	1H	2469	A	N1-C6-N6	12.81	126.29	118.60
26	1H	74	A	N1-C2-N3	12.81	135.70	129.30
26	1H	1786	A	C8-N9-C4	-12.80	100.68	105.80
26	1H	581	C	C2-N3-C4	12.80	126.30	119.90
26	1H	2028	U	N3-C4-C5	-12.80	106.92	114.60
26	14	2712	U	C2-N3-C4	-12.80	119.32	127.00
26	14	464	U	C2-N3-C4	-12.80	119.32	127.00
26	1H	628	G	OP1-P-OP2	12.80	138.80	119.60
26	1H	1427	A	N9-C4-C5	12.79	110.92	105.80
26	1H	2030	A	C8-N9-C4	12.79	110.92	105.80
26	14	2072	G	OP1-P-OP2	-12.79	100.41	119.60
26	1H	1810	A	C5-C6-N1	12.79	124.09	117.70
26	1H	1678	G	C5-N7-C8	-12.78	97.91	104.30
26	1H	179	G	N1-C6-O6	12.78	127.57	119.90
27	1J	114	G	N7-C8-N9	-12.78	106.71	113.10
26	14	1804	C	C6-N1-C2	-12.78	115.19	120.30
26	1H	138	G	C8-N9-C4	-12.77	101.29	106.40
26	1H	1324	G	N1-C6-O6	12.77	127.56	119.90
26	1H	1830	C	N3-C4-C5	12.77	127.01	121.90
26	1H	115	C	N3-C2-O2	12.77	130.84	121.90
26	1H	2409	G	C4-C5-N7	12.77	115.91	110.80
26	14	1827	C	N3-C2-O2	-12.77	112.96	121.90
1	13	623	C	C6-N1-C2	-12.76	115.19	120.30
26	1H	735	A	N1-C6-N6	12.76	126.26	118.60
1	13	974	A	C2-N3-C4	-12.76	104.22	110.60
26	1H	2070	G	N1-C2-N2	-12.76	104.72	116.20
27	16	45	A	C8-N9-C4	-12.76	100.70	105.80
1	13	1494	G	C5-C6-N1	12.76	117.88	111.50
26	1H	2490	G	C5-C6-O6	12.75	136.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	71	A	N7-C8-N9	12.75	120.18	113.80
26	1H	122	G	C6-C5-N7	-12.75	122.75	130.40
26	1H	2380	C	C2-N3-C4	-12.75	113.52	119.90
26	14	1780	A	N9-C4-C5	12.75	110.90	105.80
26	1H	452	G	N1-C6-O6	-12.75	112.25	119.90
26	1H	2357	U	O5'-P-OP2	-12.74	94.23	105.70
26	14	1899	G	N1-C2-N2	-12.74	104.73	116.20
1	13	1435	G	C5-C6-N1	-12.74	105.13	111.50
26	1H	541	C	N3-C4-C5	-12.74	116.81	121.90
26	1H	2628	C	C6-N1-C2	12.74	125.40	120.30
26	1H	1241	A	C5-N7-C8	-12.74	97.53	103.90
26	14	1627	G	C5-C6-O6	12.74	136.24	128.60
26	14	140	A	N7-C8-N9	12.73	120.17	113.80
26	1H	1662	C	C5-C6-N1	-12.73	114.64	121.00
26	14	2048	G	C5-C6-O6	12.73	136.24	128.60
26	14	2365	G	C6-C5-N7	-12.73	122.76	130.40
26	14	1340	U	C6-N1-C2	12.72	128.63	121.00
26	1H	491	G	O5'-P-OP1	-12.72	94.25	105.70
26	1H	736	C	C6-N1-C2	12.72	125.39	120.30
26	1H	1838	C	C5-C4-N4	-12.72	111.30	120.20
26	1H	1595	G	O5'-P-OP1	-12.71	94.26	105.70
26	1H	1823	G	N1-C2-N3	12.71	131.53	123.90
26	1H	1975	G	N1-C6-O6	12.71	127.53	119.90
26	1H	2271	G	C5-C6-N1	12.71	117.86	111.50
26	14	2268	A	N7-C8-N9	12.71	120.15	113.80
26	14	666	G	C2-N3-C4	-12.70	105.55	111.90
26	14	947	G	C5-C6-N1	-12.70	105.15	111.50
1	13	738	C	C6-N1-C2	-12.70	115.22	120.30
26	14	1605	C	C4-C5-C6	12.70	123.75	117.40
1	13	774	G	C5-C6-O6	-12.69	120.99	128.60
26	1H	1647	G	O5'-P-OP2	12.69	125.92	110.70
26	1H	138	G	C2-N3-C4	12.68	118.24	111.90
26	14	1554	A	C8-N9-C4	-12.68	100.73	105.80
26	1H	2845	G	C5-C6-N1	-12.67	105.16	111.50
26	1H	237	C	N1-C2-O2	-12.67	111.30	118.90
26	1H	2518	A	N7-C8-N9	12.67	120.13	113.80
26	1H	2681	C	N3-C2-O2	-12.67	113.03	121.90
27	16	7	G	C8-N9-C4	12.67	111.47	106.40
26	1H	1698	A	C4-C5-N7	12.66	117.03	110.70
26	1H	2502	G	C6-N1-C2	-12.66	117.50	125.10
26	1H	386	G	N1-C6-O6	12.65	127.49	119.90
26	1H	1215	G	C5-C6-O6	-12.65	121.01	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1300	U	C2-N3-C4	-12.65	119.41	127.00
26	1H	1942	C	N1-C2-O2	12.65	126.49	118.90
26	1H	2331	G	C6-C5-N7	-12.65	122.81	130.40
26	14	1826	G	C5-N7-C8	12.65	110.62	104.30
26	1H	2429	G	C8-N9-C4	-12.64	101.34	106.40
26	14	759	G	N3-C2-N2	-12.64	111.05	119.90
26	14	1648	C	C6-N1-C2	-12.64	115.24	120.30
26	1H	263	C	O5'-P-OP2	-12.64	94.33	105.70
27	16	65	C	O5'-P-OP1	-12.62	94.34	105.70
26	1H	1948	G	C5-C6-O6	12.62	136.17	128.60
26	1H	1345	C	C4-C5-C6	-12.62	111.09	117.40
26	14	737	C	N1-C2-O2	-12.62	111.33	118.90
26	14	747	U	C6-N1-C2	12.62	128.57	121.00
26	14	915	C	C6-N1-C2	-12.61	115.26	120.30
26	14	2518	A	C5-N7-C8	-12.61	97.59	103.90
26	14	140	A	C6-C5-N7	-12.61	123.47	132.30
26	14	1332	G	C4-N9-C1'	12.61	142.89	126.50
26	14	941	A	C8-N9-C4	-12.61	100.76	105.80
26	14	1658	C	N3-C4-C5	-12.61	116.86	121.90
26	14	1379	A	N7-C8-N9	12.60	120.10	113.80
26	14	1332	G	C5-N7-C8	-12.60	98.00	104.30
26	14	1277	G	N9-C4-C5	-12.60	100.36	105.40
26	14	1281	G	C4-C5-N7	12.60	115.84	110.80
26	1H	1210	A	C4-C5-N7	12.59	117.00	110.70
26	1H	2051	A	C2-N3-C4	-12.59	104.30	110.60
26	1H	2822	G	N1-C6-O6	12.59	127.45	119.90
26	1H	124	G	N7-C8-N9	-12.59	106.81	113.10
26	14	1646	C	O5'-P-OP1	-12.59	94.37	105.70
26	1H	2330	G	C5-C6-O6	-12.59	121.05	128.60
26	14	2069	G	O5'-P-OP1	-12.59	94.37	105.70
27	1J	30	C	C6-N1-C2	-12.59	115.27	120.30
26	14	2362	G	C8-N9-C4	12.58	111.43	106.40
26	14	1466	G	O5'-P-OP1	-12.58	94.38	105.70
26	1H	1306	C	N3-C4-C5	12.57	126.93	121.90
26	14	469	G	C5-C6-N1	12.57	117.79	111.50
26	1H	467	G	O5'-P-OP2	-12.57	94.39	105.70
1	13	644	G	C8-N9-C4	12.56	111.43	106.40
26	14	2387	U	C5-C6-N1	-12.56	116.42	122.70
26	1H	474	G	N3-C2-N2	-12.56	111.11	119.90
1	13	974	A	N1-C6-N6	12.56	126.13	118.60
26	1H	736	C	N1-C2-O2	-12.55	111.37	118.90
26	1H	2247	A	N1-C2-N3	12.55	135.57	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1158	C	N3-C4-N4	-12.54	109.22	118.00
26	1H	194	G	C5-C6-O6	-12.54	121.08	128.60
26	14	704	G	N1-C6-O6	12.54	127.42	119.90
26	14	205	G	N9-C4-C5	-12.54	100.39	105.40
26	14	1692	U	C2-N1-C1'	-12.54	102.66	117.70
26	1H	2387	U	C5-C6-N1	-12.53	116.44	122.70
26	1H	1702	G	C8-N9-C4	12.53	111.41	106.40
26	14	2554	U	O5'-P-OP1	-12.53	94.43	105.70
1	13	893	C	N3-C4-C5	12.52	126.91	121.90
26	1H	1829	A	O5'-P-OP1	-12.52	94.43	105.70
26	1H	828	U	N3-C4-O4	-12.52	110.64	119.40
26	14	530	G	N1-C6-O6	12.52	127.41	119.90
1	13	548	G	O5'-P-OP2	-12.52	94.44	105.70
26	1H	772	C	N3-C4-N4	12.52	126.76	118.00
26	14	2079	U	O5'-P-OP1	-12.52	94.44	105.70
26	1H	1190	G	O5'-P-OP1	-12.51	94.44	105.70
26	14	2463	C	C6-N1-C2	12.51	125.30	120.30
26	14	2598	A	N1-C6-N6	12.51	126.11	118.60
26	14	1613	G	N1-C6-O6	-12.51	112.40	119.90
26	1H	1931	U	N1-C2-N3	12.50	122.40	114.90
26	14	1187	G	N7-C8-N9	12.50	119.35	113.10
26	1H	138	G	C5-C6-O6	-12.50	121.10	128.60
26	14	205	G	N3-C2-N2	12.50	128.65	119.90
26	1H	704	G	N7-C8-N9	12.49	119.35	113.10
26	1H	1610	A	N1-C6-N6	12.49	126.10	118.60
26	1H	2040	C	C6-N1-C2	12.49	125.30	120.30
26	1H	1332	G	C5-C6-N1	-12.49	105.25	111.50
26	14	2092	U	C5-C4-O4	12.49	133.39	125.90
26	1H	389	G	N3-C2-N2	12.48	128.64	119.90
26	1H	1437	C	C6-N1-C2	-12.48	115.31	120.30
1	13	1433	A	O5'-P-OP1	-12.48	94.47	105.70
26	1H	326	G	N3-C2-N2	-12.48	111.16	119.90
26	1H	2291	U	N3-C4-C5	-12.48	107.11	114.60
26	1H	692	C	C2-N3-C4	-12.47	113.66	119.90
26	14	1939	U	C2-N3-C4	-12.47	119.52	127.00
26	14	1304	C	C6-N1-C2	12.47	125.29	120.30
1	13	1518	A	C8-N9-C4	12.47	110.79	105.80
26	1H	2552	U	N1-C2-N3	12.47	122.38	114.90
26	1H	2830	G	C5-N7-C8	-12.47	98.07	104.30
26	14	2558	C	C6-N1-C2	12.47	125.29	120.30
26	14	1348	G	O5'-P-OP2	12.46	125.66	110.70
26	1H	2346	A	O4'-C1'-N9	12.46	118.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1021	A	N7-C8-N9	12.46	120.03	113.80
26	1H	2447	G	N3-C4-C5	-12.46	122.37	128.60
1	1G	1522	U	N1-C2-N3	12.46	122.37	114.90
26	1H	945	A	C8-N9-C4	-12.45	100.82	105.80
26	1H	1563	G	N1-C6-O6	-12.45	112.43	119.90
26	14	746	A	O5'-P-OP2	12.45	125.64	110.70
26	1H	1957	C	O5'-P-OP2	-12.45	94.50	105.70
26	14	201	C	C5-C6-N1	-12.45	114.78	121.00
26	1H	1829	A	C6-N1-C2	-12.44	111.14	118.60
1	13	1205	U	N1-C2-O2	-12.44	114.10	122.80
1	13	1486	G	C5-C6-N1	-12.43	105.28	111.50
26	14	745	G	C8-N9-C4	12.43	111.37	106.40
26	14	770	G	OP1-P-OP2	-12.43	100.96	119.60
26	1H	1528	A	C5-N7-C8	-12.43	97.69	103.90
1	13	732	C	N1-C2-O2	12.42	126.35	118.90
26	1H	1021	A	C4-C5-N7	12.42	116.91	110.70
26	1H	1340	U	C5-C4-O4	-12.42	118.45	125.90
26	1H	1806	C	O5'-P-OP2	-12.42	94.53	105.70
26	14	1379	A	C8-N9-C4	-12.41	100.83	105.80
26	1H	2251	G	C4-C5-N7	-12.41	105.83	110.80
26	1H	606	U	O5'-P-OP2	-12.41	94.53	105.70
26	14	74	A	N3-C4-C5	12.41	135.49	126.80
26	1H	2373	G	N1-C6-O6	12.40	127.34	119.90
1	13	1412	C	N3-C4-C5	12.40	126.86	121.90
26	14	1658	C	N1-C2-O2	-12.40	111.46	118.90
1	13	186	C	C6-N1-C2	-12.39	115.34	120.30
26	14	1332	G	N1-C2-N2	-12.39	105.05	116.20
26	1H	1569	A	C2-N3-C4	-12.38	104.41	110.60
26	14	1969	A	O5'-P-OP1	-12.39	94.55	105.70
26	14	55	G	C5-C6-N1	12.38	117.69	111.50
26	14	1966	A	C6-N1-C2	-12.38	111.17	118.60
26	1H	2028	U	N3-C4-O4	12.38	128.06	119.40
26	1H	698	C	C4-C5-C6	12.38	123.59	117.40
26	14	247	G	C2-N3-C4	-12.38	105.71	111.90
26	14	929	G	C5-C6-O6	-12.38	121.17	128.60
26	14	2323	G	C8-N9-C4	12.37	111.35	106.40
26	14	2820	A	C2-N3-C4	-12.38	104.41	110.60
26	1H	1029	A	N1-C6-N6	12.37	126.02	118.60
26	1H	1879	C	C6-N1-C2	-12.37	115.35	120.30
26	1H	1302	A	O5'-P-OP1	-12.37	94.57	105.70
26	1H	436	C	C6-N1-C2	12.37	125.25	120.30
26	14	1021	A	C2-N3-C4	-12.36	104.42	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2019	A	C6-C5-N7	-12.35	123.65	132.30
26	14	1308	A	N1-C2-N3	12.35	135.48	129.30
26	1H	2360	A	N1-C6-N6	12.35	126.01	118.60
26	14	400	G	N1-C6-O6	12.35	127.31	119.90
26	14	988	A	N1-C6-N6	12.35	126.01	118.60
26	1H	1309	G	N1-C6-O6	12.35	127.31	119.90
26	1H	1601	G	OP1-P-OP2	-12.34	101.09	119.60
26	1H	1618	A	O5'-P-OP1	-12.34	94.60	105.70
26	1H	600	G	N1-C6-O6	12.34	127.30	119.90
26	14	665	C	C4-C5-C6	-12.34	111.23	117.40
26	14	122	G	C8-N9-C4	12.33	111.33	106.40
26	1H	569	U	C5-C6-N1	-12.32	116.54	122.70
26	14	1977	A	N1-C2-N3	12.32	135.46	129.30
26	14	786	C	N3-C4-N4	-12.32	109.38	118.00
26	14	1772	G	N1-C6-O6	12.32	127.29	119.90
26	1H	815	C	C5-C6-N1	-12.31	114.84	121.00
26	1H	37	C	C2-N3-C4	12.31	126.05	119.90
26	14	524	U	N3-C2-O2	-12.31	113.59	122.20
26	14	1780	A	N1-C2-N3	12.30	135.45	129.30
26	14	765	G	C8-N9-C4	-12.30	101.48	106.40
26	14	1762	A	C6-N1-C2	12.30	125.98	118.60
26	1H	1814	G	O5'-P-OP2	-12.30	94.63	105.70
26	1H	2439	A	O5'-P-OP2	-12.30	94.63	105.70
26	1H	2380	C	C5-C6-N1	-12.29	114.85	121.00
26	14	2270	G	C8-N9-C4	-12.29	101.48	106.40
26	14	2542	A	C8-N9-C4	12.29	110.72	105.80
26	14	1816	G	C5-C6-N1	12.29	117.64	111.50
26	1H	299	A	C8-N9-C4	-12.29	100.89	105.80
26	1H	659	C	C5-C6-N1	-12.29	114.86	121.00
26	14	457	A	N1-C6-N6	-12.29	111.23	118.60
1	13	492	G	N1-C6-O6	12.28	127.27	119.90
26	1H	1939	U	C4-C5-C6	-12.28	112.33	119.70
26	1H	1161	C	C5-C6-N1	12.28	127.14	121.00
26	1H	2430	A	C5-C6-N1	-12.28	111.56	117.70
27	16	8	U	O5'-P-OP1	12.28	125.43	110.70
23	2K	27	G	C5-C6-O6	-12.27	121.24	128.60
26	1H	1955	U	N1-C2-N3	12.27	122.26	114.90
26	14	1162	G	O5'-P-OP1	-12.27	94.66	105.70
26	14	755	C	C5-C6-N1	12.26	127.13	121.00
26	14	2441	C	N3-C4-N4	-12.26	109.42	118.00
26	1H	420	C	C6-N1-C2	12.25	125.20	120.30
26	14	428	A	C8-N9-C4	-12.25	100.90	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2337	G	C8-N9-C4	-12.25	101.50	106.40
26	1H	773	U	C5-C6-N1	-12.24	116.58	122.70
27	16	45	A	N7-C8-N9	12.24	119.92	113.80
1	13	880	C	C6-N1-C2	12.24	125.20	120.30
27	16	81	G	N7-C8-N9	12.24	119.22	113.10
26	1H	1162	G	N7-C8-N9	12.23	119.22	113.10
26	1H	2543	G	C5-C6-N1	12.23	117.61	111.50
26	14	621	A	C4-C5-N7	12.22	116.81	110.70
26	1H	533	G	N1-C6-O6	-12.22	112.57	119.90
26	14	436	C	N3-C4-C5	12.22	126.79	121.90
26	14	2345	G	N1-C2-N3	12.22	131.23	123.90
1	13	354	G	O5'-P-OP2	-12.22	94.70	105.70
26	1H	575	A	C8-N9-C4	12.22	110.69	105.80
26	14	773	U	N3-C2-O2	-12.21	113.66	122.20
26	14	2595	G	O5'-P-OP1	-12.20	94.72	105.70
26	1H	452	G	C2-N3-C4	12.20	118.00	111.90
1	13	1386	G	N1-C6-O6	12.20	127.22	119.90
26	1H	110	G	C8-N9-C4	12.20	111.28	106.40
26	1H	2585	U	N3-C4-O4	-12.20	110.86	119.40
1	1G	230	G	C2-N3-C4	-12.19	105.80	111.90
26	1H	919	G	N1-C6-O6	-12.19	112.59	119.90
26	14	929	G	C4-C5-C6	12.19	126.11	118.80
26	1H	74	A	C6-C5-N7	-12.19	123.77	132.30
26	14	2766	G	N1-C6-O6	12.19	127.21	119.90
26	1H	85	G	O5'-P-OP1	12.18	125.32	110.70
26	14	828	U	C5-C4-O4	12.18	133.21	125.90
26	1H	944	G	C6-N1-C2	12.18	132.41	125.10
26	1H	190	A	N1-C6-N6	12.18	125.91	118.60
26	1H	2311	A	C5-C6-N1	-12.18	111.61	117.70
26	14	137	C	C6-N1-C2	-12.18	115.43	120.30
26	1H	685	A	OP1-P-OP2	12.18	137.87	119.60
26	1H	1590	U	O5'-P-OP1	-12.18	94.74	105.70
26	1H	2707	G	C8-N9-C4	12.18	111.27	106.40
26	1H	2710	C	C2-N3-C4	-12.17	113.81	119.90
26	1H	2449	U	C6-N1-C2	-12.17	113.70	121.00
1	13	966	G	C5-C6-O6	-12.16	121.31	128.60
1	13	789	U	N1-C2-N3	12.15	122.19	114.90
26	14	24	G	C2-N3-C4	-12.15	105.83	111.90
26	14	972	G	C8-N9-C4	-12.14	101.54	106.40
1	13	1433	A	N1-C2-N3	12.14	135.37	129.30
26	14	1698	A	C5-C6-N6	-12.14	113.99	123.70
26	1H	1616	A	OP1-P-OP2	12.14	137.80	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	67	U	N3-C2-O2	-12.13	113.71	122.20
26	14	863	A	N9-C4-C5	12.13	110.65	105.80
26	1H	845	G	C4-C5-N7	12.13	115.65	110.80
26	14	212	G	O5'-P-OP2	-12.13	94.78	105.70
27	16	77	U	C5-C4-O4	-12.13	118.62	125.90
26	14	324	A	N1-C6-N6	-12.13	111.32	118.60
26	1H	2237	G	N3-C2-N2	12.13	128.39	119.90
26	14	664	C	C6-N1-C2	12.12	125.15	120.30
26	1H	105	C	C6-N1-C2	-12.12	115.45	120.30
26	1H	759	G	N3-C2-N2	-12.12	111.42	119.90
26	14	2394	C	O5'-P-OP2	-12.12	94.79	105.70
1	1G	508	C	C6-N1-C2	12.12	125.15	120.30
26	14	1608	A	N1-C6-N6	-12.12	111.33	118.60
26	1H	68	G	N3-C2-N2	-12.12	111.42	119.90
26	1H	774	A	C5-N7-C8	-12.12	97.84	103.90
26	1H	835	A	C6-N1-C2	-12.12	111.33	118.60
26	1H	2518	A	C4-C5-N7	12.12	116.76	110.70
26	14	1662	C	C4-C5-C6	12.11	123.46	117.40
26	14	2505	G	C5-C6-O6	12.11	135.87	128.60
26	1H	128	C	C6-N1-C2	12.11	125.14	120.30
26	1H	1624	G	N7-C8-N9	-12.11	107.05	113.10
26	1H	2584	U	C5-C6-N1	-12.11	116.65	122.70
26	1H	2311	A	C6-C5-N7	-12.11	123.83	132.30
27	16	7	G	N9-C4-C5	-12.11	100.56	105.40
26	1H	858	U	O5'-P-OP2	-12.10	94.81	105.70
26	1H	2392	A	O5'-P-OP1	-12.10	94.81	105.70
26	14	2873	A	N1-C6-N6	12.10	125.86	118.60
26	1H	2559	C	O5'-P-OP2	-12.10	94.81	105.70
22	1K	76	A	C8-N9-C4	-12.10	100.96	105.80
26	1H	2666	C	C6-N1-C2	-12.10	115.46	120.30
26	1H	194	G	N1-C6-O6	12.10	127.16	119.90
26	1H	197	A	C2-N3-C4	-12.09	104.55	110.60
26	1H	863	A	C5-C6-N1	12.09	123.75	117.70
26	1H	1142(A)	A	C2-N3-C4	-12.09	104.55	110.60
1	1G	483	C	C6-N1-C2	12.09	125.14	120.30
26	14	2464	C	N3-C4-C5	12.09	126.73	121.90
26	14	707	G	C5-C6-N1	-12.08	105.46	111.50
26	14	2365	G	C4-C5-N7	12.08	115.63	110.80
26	1H	1786	A	C6-C5-N7	-12.08	123.84	132.30
26	1H	189	G	N3-C2-N2	-12.08	111.44	119.90
1	13	516	U	N3-C2-O2	-12.08	113.75	122.20
1	13	811	C	C5-C6-N1	-12.08	114.96	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	640	C	O5'-P-OP2	-12.08	94.83	105.70
26	1H	2241	A	N1-C6-N6	-12.08	111.35	118.60
26	1H	2311	A	N1-C6-N6	12.07	125.84	118.60
26	1H	1285	G	O5'-P-OP1	-12.07	94.83	105.70
26	1H	2708	G	C8-N9-C4	12.07	111.23	106.40
26	1H	328	U	C6-N1-C2	-12.07	113.76	121.00
26	1H	2238	G	O5'-P-OP2	-12.07	94.84	105.70
1	1G	1416	G	C5-C6-N1	-12.07	105.47	111.50
1	1G	898	G	C8-N9-C4	12.06	111.23	106.40
26	14	1972	A	O5'-P-OP2	-12.06	94.84	105.70
26	14	2084	C	N1-C2-O2	-12.06	111.66	118.90
26	1H	94	G	N1-C6-O6	12.06	127.14	119.90
26	14	223	A	C8-N9-C4	-12.06	100.98	105.80
26	14	2873	A	N1-C2-N3	12.05	135.32	129.30
26	1H	862	G	N1-C6-O6	-12.05	112.67	119.90
26	1H	180	G	C8-N9-C4	12.04	111.22	106.40
26	14	2430	A	C5-C6-N1	-12.04	111.68	117.70
26	1H	198	C	C6-N1-C2	12.04	125.12	120.30
26	1H	2070	G	N3-C2-N2	12.04	128.33	119.90
1	1G	1496	C	O5'-P-OP2	-12.04	94.86	105.70
26	14	1326	U	N1-C2-N3	12.04	122.12	114.90
26	14	1605	C	C5-C6-N1	-12.04	114.98	121.00
24	3K	76	A	C5-N7-C8	-12.03	97.88	103.90
1	1G	1495	U	O5'-P-OP1	-12.03	94.87	105.70
26	1H	196	A	C6-N1-C2	12.03	125.81	118.60
1	1G	416	G	C5-C6-N1	-12.02	105.49	111.50
26	14	1496	A	C5-N7-C8	-12.02	97.89	103.90
22	1K	76	A	C5-N7-C8	-12.02	97.89	103.90
26	14	179	G	OP1-P-OP2	12.02	137.63	119.60
26	14	333	G	C5-C6-O6	-12.02	121.39	128.60
26	1H	1525	G	O5'-P-OP2	-12.02	94.89	105.70
26	1H	2779	U	N3-C2-O2	-12.02	113.79	122.20
26	1H	2469	A	C5-N7-C8	-12.01	97.89	103.90
26	1H	2009	G	N1-C6-O6	12.01	127.11	119.90
26	1H	2539	C	O5'-P-OP2	-12.01	94.89	105.70
26	1H	328	U	O5'-P-OP2	-12.01	94.89	105.70
26	1H	710	G	N7-C8-N9	12.01	119.10	113.10
26	1H	2688	U	N3-C2-O2	-12.01	113.80	122.20
1	13	123	C	O5'-P-OP2	-12.01	94.89	105.70
26	1H	1640	C	C6-N1-C2	12.01	125.10	120.30
26	14	1930	G	N1-C6-O6	-12.01	112.70	119.90
26	1H	2441	C	N1-C2-O2	12.00	126.10	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	140	A	C8-N9-C4	-12.00	101.00	105.80
26	14	929	G	N7-C8-N9	12.00	119.10	113.10
26	1H	739	G	N7-C8-N9	-11.99	107.10	113.10
26	14	972	G	N9-C4-C5	11.99	110.20	105.40
26	1H	945	A	C5-C6-N1	-11.99	111.71	117.70
26	1H	859	G	N3-C4-N9	-11.98	118.81	126.00
26	1H	2280	G	C5-N7-C8	11.98	110.29	104.30
1	13	1401	G	N3-C2-N2	-11.98	111.52	119.90
26	1H	1274	A	C8-N9-C4	-11.97	101.01	105.80
26	1H	2499	C	C2-N3-C4	-11.97	113.92	119.90
26	1H	1285	G	N1-C6-O6	11.96	127.08	119.90
27	16	32	C	N3-C4-N4	-11.96	109.63	118.00
26	1H	246	C	C5-C6-N1	-11.96	115.02	121.00
26	1H	2351	G	C5-C6-O6	11.96	135.78	128.60
26	1H	259	G	N1-C6-O6	11.96	127.08	119.90
1	1G	623	C	C6-N1-C2	-11.96	115.52	120.30
26	1H	35	G	N1-C6-O6	-11.96	112.73	119.90
26	1H	1302	A	OP1-P-OP2	11.96	137.53	119.60
27	16	60	C	C5-C6-N1	11.96	126.98	121.00
26	1H	1931	U	C2-N3-C4	-11.95	119.83	127.00
26	1H	2600	A	C5-C6-N6	11.95	133.26	123.70
26	14	1959	G	N1-C6-O6	-11.95	112.73	119.90
26	1H	963	U	OP1-P-OP2	-11.95	101.67	119.60
26	1H	1559	G	N3-C4-C5	11.95	134.57	128.60
26	14	2740	A	C8-N9-C4	11.95	110.58	105.80
26	1H	1346	G	N1-C6-O6	-11.95	112.73	119.90
26	1H	2478	A	O5'-P-OP1	-11.95	94.95	105.70
26	14	298	G	N1-C6-O6	11.95	127.07	119.90
26	1H	2449	U	N3-C4-O4	11.94	127.76	119.40
26	14	641	C	C6-N1-C2	11.94	125.08	120.30
26	1H	1989	G	C5-C6-N1	-11.94	105.53	111.50
26	14	74	A	C6-C5-N7	-11.94	123.94	132.30
27	16	89	G	O5'-P-OP2	11.94	125.02	110.70
26	14	1279	G	N1-C6-O6	-11.94	112.74	119.90
26	1H	420	C	C5-C6-N1	-11.93	115.04	121.00
26	1H	1919	A	O5'-P-OP1	-11.93	94.97	105.70
57	3L	76	A	C8-N9-C4	-11.93	101.03	105.80
27	1J	70	C	C6-N1-C2	-11.93	115.53	120.30
26	14	2247	A	N1-C6-N6	-11.92	111.44	118.60
26	14	2304	G	C8-N9-C4	-11.92	101.63	106.40
26	14	1382	G	C4-C5-N7	11.92	115.57	110.80
26	14	835	A	N7-C8-N9	-11.91	107.84	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1779	U	C2-N3-C4	-11.91	119.85	127.00
26	1H	1829	A	N1-C2-N3	11.91	135.26	129.30
26	14	1681	G	N1-C6-O6	11.91	127.05	119.90
26	1H	2287	A	N1-C6-N6	11.91	125.75	118.60
26	14	2712	U	C5-C6-N1	-11.91	116.74	122.70
1	13	731	G	C8-N9-C4	-11.91	101.64	106.40
26	1H	516	C	C5-C6-N1	11.91	126.95	121.00
26	14	1302	A	OP1-P-OP2	11.91	137.46	119.60
26	1H	1599	C	N1-C2-O2	11.91	126.05	118.90
26	14	834	C	N1-C2-O2	-11.91	111.75	118.90
26	1H	1520	U	C6-N1-C2	-11.91	113.86	121.00
26	1H	626	U	N1-C2-O2	-11.90	114.47	122.80
26	1H	2331	G	N9-C4-C5	-11.90	100.64	105.40
26	14	2518	A	C4-C5-N7	11.90	116.65	110.70
26	14	1408	C	N1-C2-O2	-11.90	111.76	118.90
26	1H	1271	G	C5-N7-C8	11.90	110.25	104.30
26	14	2578	G	N3-C2-N2	-11.90	111.57	119.90
26	14	1001	A	N1-C6-N6	-11.90	111.46	118.60
26	14	1378	A	C4-C5-C6	-11.89	111.05	117.00
1	13	47	C	N1-C2-O2	-11.89	111.77	118.90
26	14	1788	C	N1-C2-O2	11.89	126.03	118.90
26	14	2365	G	N9-C4-C5	-11.89	100.64	105.40
1	1G	789	U	C6-N1-C2	-11.88	113.87	121.00
26	14	791	C	N3-C4-C5	11.88	126.65	121.90
1	13	893	C	C6-N1-C2	11.88	125.05	120.30
26	1H	1443	G	C5-C6-N1	-11.88	105.56	111.50
26	1H	1915	U	C2-N3-C4	-11.88	119.87	127.00
26	1H	623	G	O5'-P-OP2	-11.88	95.01	105.70
26	1H	1661	G	N7-C8-N9	-11.88	107.16	113.10
26	1H	2331	G	N3-C4-C5	11.88	134.54	128.60
26	14	1336	A	O5'-P-OP2	-11.88	95.01	105.70
26	14	1678	G	C4-C5-N7	11.87	115.55	110.80
1	13	1478	C	C6-N1-C2	11.87	125.05	120.30
26	1H	2539	C	C6-N1-C2	11.87	125.05	120.30
26	1H	1303	G	C5-C6-O6	11.87	135.72	128.60
26	1H	1263	U	O5'-P-OP2	-11.86	95.02	105.70
27	16	105	G	N7-C8-N9	11.86	119.03	113.10
23	2L	19	G	N3-C4-C5	11.86	134.53	128.60
1	13	1435	G	C6-C5-N7	-11.85	123.29	130.40
26	1H	688	U	O5'-P-OP2	-11.84	95.04	105.70
26	14	1604	C	O5'-P-OP1	-11.84	95.04	105.70
26	14	2352	A	C2-N3-C4	-11.84	104.68	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	527	G	N1-C6-O6	-11.84	112.80	119.90
26	14	2577	A	C5-C6-N1	-11.84	111.78	117.70
26	14	650	C	C6-N1-C2	-11.84	115.56	120.30
26	14	2290	G	N3-C2-N2	-11.84	111.62	119.90
26	1H	247	G	C2-N3-C4	-11.83	105.98	111.90
26	1H	2532	G	N1-C6-O6	11.83	127.00	119.90
1	1G	1096	C	C6-N1-C2	-11.83	115.57	120.30
26	14	265	A	N7-C8-N9	11.82	119.71	113.80
26	14	315	G	C8-N9-C4	11.82	111.13	106.40
26	14	1328	G	C5-C6-O6	-11.82	121.51	128.60
27	1J	102	G	C5-C6-O6	11.82	135.69	128.60
26	1H	225	A	C2-N3-C4	-11.82	104.69	110.60
26	14	2067	G	O5'-P-OP1	-11.82	95.06	105.70
26	1H	2412	A	C6-N1-C2	-11.81	111.51	118.60
26	14	270(Y)	G	C5-C6-O6	11.81	135.69	128.60
26	1H	1352	U	C5-C4-O4	-11.81	118.81	125.90
26	1H	464	U	N3-C4-C5	-11.81	107.51	114.60
26	14	1930	G	N9-C4-C5	11.81	110.12	105.40
26	1H	913	U	O5'-P-OP2	-11.80	95.08	105.70
26	1H	930	U	N3-C4-O4	-11.80	111.14	119.40
26	1H	1951	U	N3-C4-C5	-11.80	107.52	114.60
26	1H	2261	C	C6-N1-C2	-11.80	115.58	120.30
26	14	1951	U	C6-N1-C2	-11.80	113.92	121.00
26	1H	203	C	O5'-P-OP2	11.80	124.86	110.70
26	1H	1611	C	C2-N3-C4	-11.80	114.00	119.90
26	14	1826	G	N7-C8-N9	-11.80	107.20	113.10
26	1H	2525	G	C8-N9-C4	11.80	111.12	106.40
26	14	2820	A	C5-C6-N1	-11.80	111.80	117.70
1	13	1404	C	N3-C4-C5	11.79	126.62	121.90
26	1H	2620	C	C6-N1-C2	11.79	125.02	120.30
26	14	783	A	O5'-P-OP2	-11.79	95.09	105.70
26	14	1681	G	C5-N7-C8	-11.79	98.40	104.30
26	1H	2049	G	N3-C2-N2	-11.78	111.65	119.90
26	14	188	G	OP1-P-OP2	11.78	137.27	119.60
26	1H	2501	C	C6-N1-C2	11.78	125.01	120.30
26	1H	535	C	O5'-P-OP2	-11.77	95.10	105.70
26	14	330	A	C5-C6-N1	-11.77	111.81	117.70
26	14	2244	U	N1-C2-O2	-11.77	114.56	122.80
26	14	945	A	C5-C6-N1	-11.77	111.82	117.70
26	1H	2447	G	N3-C2-N2	-11.76	111.67	119.90
26	14	810	U	C6-N1-C2	-11.76	113.94	121.00
26	1H	1399	C	C5-C6-N1	11.76	126.88	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	386	G	C4-C5-N7	11.76	115.50	110.80
26	1H	828	U	N1-C2-O2	11.76	131.03	122.80
26	14	800	A	N1-C6-N6	-11.76	111.55	118.60
26	1H	1303	G	N1-C2-N2	-11.76	105.62	116.20
26	14	1308	A	N1-C6-N6	-11.75	111.55	118.60
23	2K	73	A	C8-N9-C4	11.75	110.50	105.80
26	1H	2075	U	C5-C6-N1	-11.75	116.83	122.70
26	1H	513	A	C8-N9-C4	-11.75	101.10	105.80
26	1H	626	U	N1-C2-N3	11.75	121.95	114.90
26	1H	944	G	C5-C6-N1	-11.75	105.63	111.50
26	1H	600	G	C8-N9-C4	11.74	111.10	106.40
26	1H	2449	U	N1-C2-N3	11.74	121.95	114.90
26	14	2374	C	C5-C6-N1	-11.74	115.13	121.00
26	1H	987	G	C8-N9-C4	-11.74	101.70	106.40
26	1H	1299	G	O5'-P-OP2	11.74	124.79	110.70
26	1H	1571	A	O5'-P-OP2	-11.74	95.14	105.70
26	1H	1626	G	O5'-P-OP2	11.74	124.78	110.70
26	1H	674	G	C8-N9-C4	11.73	111.09	106.40
26	1H	1160	G	C8-N9-C4	-11.73	101.71	106.40
26	1H	2446	G	O5'-P-OP2	-11.73	95.14	105.70
26	1H	2584	U	N3-C4-O4	-11.73	111.19	119.40
26	14	607	U	O5'-P-OP2	-11.73	95.14	105.70
1	13	575	G	N1-C6-O6	-11.73	112.86	119.90
26	1H	1623	G	N1-C2-N2	-11.72	105.65	116.20
1	13	1338	G	C5-C6-O6	11.72	135.63	128.60
26	1H	2331	G	C8-N9-C4	11.72	111.09	106.40
1	13	570	G	N3-C2-N2	-11.72	111.70	119.90
26	1H	1278	A	N1-C2-N3	11.72	135.16	129.30
26	1H	2012	G	C5-C6-N1	11.72	117.36	111.50
26	14	2273	A	O5'-P-OP2	-11.72	95.16	105.70
26	1H	104	U	N1-C2-O2	-11.71	114.60	122.80
26	1H	2392	A	C6-N1-C2	11.71	125.63	118.60
26	1H	613	U	N3-C2-O2	-11.71	114.00	122.20
26	1H	1254	A	C8-N9-C4	11.71	110.48	105.80
26	1H	842	G	N1-C6-O6	11.71	126.92	119.90
26	1H	180	G	C2-N3-C4	-11.71	106.05	111.90
1	13	481	G	C5-C6-N1	-11.70	105.65	111.50
26	1H	2869	G	C8-N9-C4	-11.70	101.72	106.40
26	1H	629	G	C8-N9-C4	11.70	111.08	106.40
26	1H	566	U	N3-C4-C5	11.70	121.62	114.60
26	14	1820	U	C5-C6-N1	-11.70	116.85	122.70
26	14	2868	A	N1-C6-N6	11.70	125.62	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2607	G	C2-N3-C4	-11.70	106.05	111.90
26	14	524	U	C6-N1-C2	-11.70	113.98	121.00
26	1H	928	G	N1-C6-O6	11.70	126.92	119.90
26	1H	2713	A	N3-C4-C5	11.69	134.99	126.80
26	1H	2827	C	N1-C2-O2	-11.69	111.88	118.90
26	14	2779	U	C2-N1-C1'	11.69	131.73	117.70
1	13	516	U	C6-N1-C2	-11.69	113.99	121.00
26	1H	2503	A	N9-C4-C5	-11.69	101.12	105.80
26	14	1309	G	O5'-P-OP1	11.68	124.72	110.70
26	1H	795	C	O5'-P-OP2	-11.68	95.19	105.70
26	1H	942	G	C4-C5-N7	-11.68	106.13	110.80
26	1H	2017	U	N3-C2-O2	11.68	130.37	122.20
26	14	51	G	C8-N9-C4	11.68	111.07	106.40
26	14	2313	C	C6-N1-C2	-11.68	115.63	120.30
1	13	1354	C	C6-N1-C2	-11.67	115.63	120.30
26	1H	2313	C	C6-N1-C2	-11.67	115.63	120.30
26	1H	734	A	O5'-P-OP2	-11.67	95.20	105.70
26	1H	2509	G	C5-C6-N1	11.67	117.33	111.50
1	1G	117	G	C4-C5-C6	11.67	125.80	118.80
26	1H	445	C	N3-C4-C5	-11.67	117.23	121.90
26	1H	1628	G	O5'-P-OP2	-11.66	95.20	105.70
26	1H	463	G	N3-C2-N2	11.66	128.06	119.90
26	14	2447	G	N1-C6-O6	11.66	126.90	119.90
27	16	100	G	N3-C2-N2	11.66	128.06	119.90
1	1G	1479	C	C6-N1-C2	-11.66	115.64	120.30
26	1H	871	U	N3-C4-O4	11.65	127.56	119.40
26	14	945	A	N9-C4-C5	-11.65	101.14	105.80
26	14	1304	C	O5'-P-OP2	-11.65	95.21	105.70
27	16	16	G	N1-C6-O6	11.65	126.89	119.90
26	14	2068	U	N3-C2-O2	11.65	130.35	122.20
1	13	1478	C	C5-C6-N1	-11.65	115.18	121.00
26	1H	1975	G	N9-C4-C5	-11.65	100.74	105.40
26	1H	2408	U	C2-N3-C4	-11.65	120.01	127.00
26	1H	199	A	C5-C6-N1	11.64	123.52	117.70
26	1H	2401	U	C5-C6-N1	11.64	128.52	122.70
1	1G	730	G	O5'-P-OP1	-11.64	95.23	105.70
22	1K	36	U	N1-C2-O2	11.63	130.94	122.80
26	1H	122	G	N9-C4-C5	-11.64	100.75	105.40
26	14	576	U	C5-C4-O4	-11.64	118.92	125.90
26	1H	1603	A	N7-C8-N9	11.63	119.62	113.80
26	14	428	A	N9-C4-C5	11.63	110.45	105.80
26	1H	972	G	N1-C6-O6	-11.63	112.92	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2005	A	N1-C6-N6	-11.63	111.62	118.60
1	13	122	G	N1-C6-O6	11.63	126.88	119.90
26	1H	1022	G	C6-N1-C2	-11.63	118.12	125.10
26	1H	220	G	N1-C6-O6	11.62	126.87	119.90
26	14	2374	C	O5'-P-OP2	-11.62	95.24	105.70
26	14	178	G	C8-N9-C4	-11.62	101.75	106.40
26	14	129	C	C6-N1-C2	11.62	124.95	120.30
1	13	892	A	C2-N3-C4	-11.61	104.79	110.60
26	14	1790	C	N1-C2-O2	-11.61	111.93	118.90
1	1G	697	U	C5-C6-N1	-11.61	116.89	122.70
26	14	699	A	N1-C6-N6	-11.61	111.63	118.60
26	1H	2708	G	C5-C6-O6	-11.61	121.64	128.60
26	14	2644	G	N3-C4-N9	-11.61	119.03	126.00
26	1H	844	C	C4-C5-C6	11.61	123.20	117.40
26	1H	71	A	C5-C6-N6	-11.61	114.42	123.70
26	1H	1658	C	O5'-P-OP1	-11.61	95.25	105.70
26	1H	2700	C	C5-C6-N1	-11.60	115.20	121.00
26	1H	676	A	O4'-C1'-N9	11.60	117.48	108.20
26	1H	1568	G	C8-N9-C4	11.60	111.04	106.40
1	13	574	A	C8-N9-C4	11.60	110.44	105.80
26	1H	201	C	C6-N1-C2	11.60	124.94	120.30
1	1G	809	G	O5'-P-OP2	-11.60	95.26	105.70
26	14	1763	G	C8-N9-C4	11.59	111.04	106.40
26	1H	793	A	C6-N1-C2	-11.59	111.64	118.60
1	1G	232	G	N1-C6-O6	11.59	126.85	119.90
26	14	1733	G	N1-C6-O6	11.59	126.85	119.90
1	13	833	U	C5-C4-O4	11.59	132.85	125.90
23	2K	77	A	N1-C6-N6	11.58	125.55	118.60
26	1H	775	G	C2-N3-C4	-11.58	106.11	111.90
1	13	961	U	N3-C4-O4	-11.58	111.30	119.40
26	1H	2528	U	C5-C6-N1	-11.58	116.91	122.70
1	13	481	G	N1-C6-O6	11.58	126.85	119.90
26	1H	1698	A	N1-C2-N3	11.58	135.09	129.30
26	14	265	A	N1-C6-N6	11.57	125.54	118.60
26	1H	710	G	C5-N7-C8	-11.57	98.52	104.30
26	1H	735	A	N7-C8-N9	-11.57	108.02	113.80
26	1H	2552	U	N3-C2-O2	11.57	130.30	122.20
24	3K	76	A	C4-C5-N7	11.57	116.48	110.70
26	14	974(A)	C	C4-C5-C6	11.56	123.18	117.40
26	14	1373	A	C8-N9-C4	11.56	110.42	105.80
26	1H	217	G	C5-C6-O6	11.56	135.53	128.60
26	1H	190	A	C5-C6-N6	-11.55	114.46	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1802	A	C6-N1-C2	-11.55	111.67	118.60
26	14	2045	C	C5-C6-N1	-11.55	115.22	121.00
26	1H	1159	U	N3-C2-O2	-11.55	114.11	122.20
26	1H	2012	G	C5-C6-O6	-11.55	121.67	128.60
1	13	623	C	C5-C6-N1	11.55	126.77	121.00
26	1H	621	A	N3-C4-C5	11.55	134.88	126.80
26	1H	1036	G	C8-N9-C4	11.55	111.02	106.40
26	1H	210	C	N3-C4-C5	11.54	126.52	121.90
26	1H	613	U	N1-C2-N3	11.54	121.83	114.90
26	1H	964	C	N1-C2-O2	-11.54	111.97	118.90
26	1H	1822	G	N3-C2-N2	-11.54	111.82	119.90
26	14	265	A	C5-C6-N1	-11.55	111.93	117.70
26	1H	2494	G	C5-C6-O6	11.54	135.53	128.60
26	1H	330	A	C5-N7-C8	-11.54	98.13	103.90
26	1H	1286	A	C6-N1-C2	-11.54	111.67	118.60
26	1H	608	A	O5'-P-OP1	11.54	124.55	110.70
26	1H	965	C	OP1-P-OP2	11.53	136.90	119.60
26	1H	2030	A	C5-C6-N1	11.53	123.47	117.70
26	14	1612	C	N1-C2-O2	-11.53	111.98	118.90
26	14	1678	G	N3-C4-N9	-11.53	119.08	126.00
26	14	2683	C	N3-C4-C5	-11.53	117.29	121.90
26	1H	701	G	N9-C4-C5	11.53	110.01	105.40
26	14	1806	C	O5'-P-OP1	-11.53	95.33	105.70
26	14	530	G	N9-C4-C5	-11.53	100.79	105.40
26	1H	936	C	C6-N1-C2	11.52	124.91	120.30
26	14	810	U	N3-C4-C5	-11.52	107.69	114.60
26	14	1284	A	O5'-P-OP2	-11.52	95.33	105.70
26	14	1950	G	C4-N9-C1'	11.52	141.47	126.50
26	14	2581	G	C2-N3-C4	-11.52	106.14	111.90
1	13	866	C	N1-C2-O2	-11.51	112.00	118.90
26	1H	1497	U	N3-C4-O4	11.51	127.45	119.40
26	14	2048	G	N9-C4-C5	11.50	110.00	105.40
1	13	280	C	C6-N1-C2	11.50	124.90	120.30
26	1H	1021	A	N3-C4-C5	11.50	134.85	126.80
26	1H	409	C	N3-C4-C5	11.50	126.50	121.90
26	14	400	G	C4-C5-N7	11.50	115.40	110.80
26	14	1257	C	N1-C2-O2	-11.50	112.00	118.90
26	14	1328	G	N9-C4-C5	-11.50	100.80	105.40
26	1H	1148	A	N1-C6-N6	-11.49	111.70	118.60
26	1H	2346	A	C6-C5-N7	-11.49	124.26	132.30
1	1G	1328	C	C6-N1-C2	11.49	124.90	120.30
1	13	625	G	C8-N9-C4	-11.49	101.80	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	815	C	C5-C4-N4	-11.49	112.16	120.20
26	1H	1228	G	N1-C2-N3	11.49	130.79	123.90
26	14	1955	U	C2-N3-C4	-11.49	120.11	127.00
1	13	952	U	N3-C2-O2	-11.49	114.16	122.20
26	1H	2713	A	C6-C5-N7	-11.49	124.26	132.30
1	1G	1469	G	N1-C6-O6	11.49	126.79	119.90
26	14	348	G	C8-N9-C4	11.49	111.00	106.40
26	14	1294	U	N3-C2-O2	11.49	130.24	122.20
26	14	2777	G	N3-C2-N2	-11.49	111.86	119.90
26	1H	1204	A	C6-C5-N7	-11.48	124.26	132.30
1	13	1519	A	O5'-P-OP2	-11.48	95.37	105.70
26	14	1662	C	C5-C6-N1	-11.48	115.26	121.00
26	1H	860	U	C2-N3-C4	-11.47	120.12	127.00
26	1H	1989	G	C4-C5-C6	11.47	125.68	118.80
1	13	758	G	N1-C6-O6	11.47	126.78	119.90
26	1H	218	A	C2-N3-C4	-11.47	104.87	110.60
26	1H	1229	G	C8-N9-C4	11.47	110.99	106.40
26	1H	2367	G	C8-N9-C4	-11.47	101.81	106.40
27	16	114	G	C8-N9-C4	11.46	110.99	106.40
26	14	1359	A	C8-N9-C4	11.47	110.39	105.80
26	14	2433	A	O5'-P-OP2	11.46	124.46	110.70
1	13	733	A	N7-C8-N9	-11.46	108.07	113.80
26	1H	826	U	C4-C5-C6	11.46	126.58	119.70
26	1H	1605	C	C2-N3-C4	-11.46	114.17	119.90
26	1H	710	G	C5-C6-N1	-11.45	105.77	111.50
26	1H	814	C	C6-N1-C2	11.45	124.88	120.30
26	14	400	G	C5-N7-C8	-11.45	98.57	104.30
26	14	1827	C	C2-N3-C4	-11.45	114.17	119.90
23	2K	62	C	O5'-P-OP2	-11.45	95.40	105.70
26	14	2581	G	C5-C6-N1	-11.45	105.78	111.50
26	14	2818	G	C8-N9-C4	11.45	110.98	106.40
26	1H	1606	G	C8-N9-C4	11.44	110.98	106.40
26	1H	2453	A	O5'-P-OP1	11.44	124.43	110.70
26	14	121	G	N1-C6-O6	11.44	126.77	119.90
26	1H	2550	G	C5-C6-O6	-11.44	121.74	128.60
26	14	1348	G	C5-C6-O6	-11.44	121.74	128.60
26	14	2491	U	N3-C2-O2	11.44	130.21	122.20
26	1H	2572	A	O5'-P-OP2	-11.44	95.41	105.70
26	14	491	G	C5-C6-O6	11.44	135.46	128.60
26	14	788	A	C8-N9-C4	11.44	110.37	105.80
26	14	2595	G	N1-C6-O6	11.44	126.76	119.90
26	1H	743	G	O5'-P-OP1	-11.43	95.41	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1336	A	C2-N3-C4	11.43	116.31	110.60
26	1H	1308	A	N1-C2-N3	11.43	135.01	129.30
26	14	945	A	N3-C4-C5	11.43	134.80	126.80
26	14	1334	G	N1-C6-O6	11.43	126.76	119.90
26	1H	37	C	N3-C4-C5	-11.42	117.33	121.90
26	1H	624	C	C6-N1-C2	11.42	124.87	120.30
26	1H	2877	G	C5-C6-N1	-11.42	105.79	111.50
1	13	976	G	C5-C6-N1	-11.42	105.79	111.50
26	14	1283	G	OP1-P-OP2	11.42	136.72	119.60
26	1H	1769	G	O5'-P-OP2	-11.41	95.43	105.70
26	14	326	G	C5-C6-N1	-11.41	105.79	111.50
26	14	2000	G	O5'-P-OP2	-11.41	95.43	105.70
26	1H	129	C	C5-C6-N1	-11.41	115.30	121.00
26	14	750	A	N7-C8-N9	11.41	119.50	113.80
26	1H	328	U	N3-C4-C5	-11.41	107.76	114.60
26	1H	2557	G	C5-C6-N1	11.41	117.20	111.50
26	14	1962	C	N3-C4-C5	11.40	126.46	121.90
1	1G	1433	A	O5'-P-OP1	-11.40	95.44	105.70
26	14	1339	G	O5'-P-OP1	-11.40	95.44	105.70
1	13	667	G	N3-C2-N2	-11.40	111.92	119.90
26	14	1950	G	N3-C4-N9	11.40	132.84	126.00
26	1H	1817	G	N1-C6-O6	-11.40	113.06	119.90
26	1H	974(A)	C	N3-C4-C5	-11.39	117.34	121.90
26	1H	2469	A	C4-C5-N7	11.39	116.40	110.70
26	14	2542	A	N7-C8-N9	-11.39	108.10	113.80
29	11	60	ARG	NE-CZ-NH2	-11.39	114.60	120.30
26	14	1817	G	C5-C6-O6	11.39	135.44	128.60
26	14	2301	C	C6-N1-C2	-11.39	115.74	120.30
26	1H	774	A	N1-C6-N6	11.39	125.43	118.60
26	1H	1021	A	C6-C5-N7	-11.39	124.33	132.30
26	14	2518	A	N1-C6-N6	11.39	125.43	118.60
1	13	377	G	C8-N9-C4	11.38	110.95	106.40
26	1H	1198	U	C2-N3-C4	-11.38	120.17	127.00
26	14	1378	A	C8-N9-C4	11.38	110.35	105.80
26	1H	1244	G	C5-C6-O6	-11.38	121.77	128.60
26	1H	2271	G	C4-C5-N7	11.38	115.35	110.80
26	1H	2424	C	OP1-P-OP2	11.38	136.67	119.60
26	14	1559	G	C5-C6-N1	-11.38	105.81	111.50
26	1H	815	C	O5'-P-OP1	11.38	124.36	110.70
26	1H	1002	G	C5-C6-O6	11.38	135.43	128.60
26	1H	2330	G	C2-N3-C4	-11.38	106.21	111.90
23	2K	41	C	N3-C4-C5	11.38	126.45	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1162	G	N9-C4-C5	11.37	109.95	105.40
26	1H	1915	U	N1-C2-O2	11.37	130.76	122.80
26	14	2591	C	N1-C2-O2	-11.37	112.08	118.90
26	14	2821	A	C2-N3-C4	-11.37	104.92	110.60
26	1H	344	G	N1-C6-O6	-11.36	113.08	119.90
1	13	529	G	C5-C6-O6	-11.36	121.78	128.60
1	13	755	G	C4-C5-N7	-11.36	106.26	110.80
26	1H	928	G	C5-N7-C8	-11.35	98.62	104.30
26	1H	2760	C	N3-C4-C5	11.35	126.44	121.90
26	14	247	G	C8-N9-C4	11.35	110.94	106.40
26	1H	772	C	N3-C2-O2	11.35	129.84	121.90
26	1H	1660	C	N3-C4-C5	11.35	126.44	121.90
26	1H	122	G	C4-C5-N7	11.35	115.34	110.80
26	1H	1672	C	C6-N1-C2	11.35	124.84	120.30
26	14	265	A	C6-C5-N7	-11.35	124.36	132.30
26	1H	2447	G	C5-C6-O6	-11.34	121.80	128.60
26	14	1603	A	N7-C8-N9	11.34	119.47	113.80
26	1H	780	G	N1-C6-O6	11.34	126.70	119.90
26	1H	2451	A	N9-C4-C5	11.34	110.34	105.80
26	1H	2757	A	O5'-P-OP2	-11.34	95.49	105.70
26	14	1241	A	O5'-P-OP1	-11.34	95.50	105.70
26	1H	808	G	C2-N3-C4	-11.34	106.23	111.90
26	1H	1379	A	N7-C8-N9	11.34	119.47	113.80
26	1H	1602	U	N3-C4-C5	-11.34	107.80	114.60
1	1G	598	U	N1-C2-O2	-11.34	114.87	122.80
26	14	1239	G	N1-C6-O6	11.34	126.70	119.90
22	1K	36	U	N3-C2-O2	-11.33	114.27	122.20
26	1H	580	C	C6-N1-C2	-11.33	115.77	120.30
26	1H	1022	G	C5-C6-N1	11.33	117.17	111.50
26	1H	1836	C	C5-C4-N4	11.33	128.13	120.20
1	13	1482	G	N1-C6-O6	11.33	126.70	119.90
1	13	778	G	C5-C6-N1	-11.33	105.84	111.50
1	13	1516	G	OP2-P-O3'	11.33	130.12	105.20
26	14	746	A	C6-N1-C2	-11.33	111.80	118.60
26	1H	1678	G	C4-C5-N7	11.32	115.33	110.80
26	1H	1278	A	C6-N1-C2	-11.31	111.81	118.60
26	1H	1547	C	N3-C2-O2	-11.31	113.98	121.90
26	14	826	U	N1-C2-N3	11.31	121.69	114.90
1	13	545	C	C6-N1-C2	11.31	124.82	120.30
26	1H	1643	G	O5'-P-OP1	-11.31	95.52	105.70
26	14	2392	A	C5-N7-C8	-11.31	98.24	103.90
26	14	1130	U	N1-C2-N3	11.31	121.69	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1821	A	N1-C2-N3	11.31	134.95	129.30
26	14	315	G	O5'-P-OP2	-11.30	95.53	105.70
26	14	1476	C	N1-C2-O2	-11.30	112.12	118.90
26	1H	673	C	O5'-P-OP1	11.30	124.26	110.70
26	1H	2251	G	C5-C6-O6	11.30	135.38	128.60
26	14	1381	G	C8-N9-C4	11.30	110.92	106.40
26	14	2244	U	C2-N1-C1'	-11.30	104.14	117.70
1	1G	738	C	N3-C4-C5	-11.30	117.38	121.90
26	1H	205	G	C8-N9-C4	11.30	110.92	106.40
26	1H	786	C	N3-C4-N4	-11.30	110.09	118.00
26	1H	1367	A	N1-C2-N3	11.30	134.95	129.30
27	16	102	G	N1-C6-O6	-11.30	113.12	119.90
26	1H	2277	G	C5-C6-O6	11.29	135.38	128.60
26	1H	195	A	C4-C5-N7	11.29	116.35	110.70
26	1H	984	A	O5'-P-OP2	-11.29	95.54	105.70
26	14	22	C	N3-C4-C5	11.29	126.42	121.90
26	1H	776	G	N3-C2-N2	-11.29	112.00	119.90
1	1G	1502	A	C5-N7-C8	-11.29	98.25	103.90
26	1H	2728	U	N3-C2-O2	-11.29	114.30	122.20
26	14	2461	C	C6-N1-C2	11.29	124.81	120.30
26	1H	1973	G	C5-C6-O6	11.28	135.37	128.60
26	1H	2713	A	N7-C8-N9	11.28	119.44	113.80
26	14	1323	U	N3-C2-O2	11.28	130.10	122.20
26	1H	923	C	C6-N1-C2	-11.28	115.79	120.30
26	1H	247	G	N1-C6-O6	-11.28	113.13	119.90
26	1H	2239	G	O5'-P-OP1	-11.28	95.55	105.70
26	1H	825	C	C4-C5-C6	11.28	123.04	117.40
26	1H	1609	A	N1-C6-N6	-11.28	111.83	118.60
26	14	130	C	C6-N1-C2	11.28	124.81	120.30
26	1H	1807	G	C5-C6-O6	-11.27	121.84	128.60
26	14	826	U	N1-C2-O2	-11.27	114.91	122.80
26	14	2048	G	C8-N9-C4	-11.27	101.89	106.40
26	1H	2418	A	C2-N3-C4	11.27	116.23	110.60
26	1H	2491	U	O5'-P-OP1	-11.27	95.56	105.70
27	16	29	A	N7-C8-N9	11.26	119.43	113.80
24	3K	76	A	C2-N3-C4	-11.26	104.97	110.60
26	1H	1996	C	C5-C6-N1	-11.26	115.37	121.00
1	1G	1467	G	C5-C6-N1	-11.26	105.87	111.50
1	13	760	G	C6-C5-N7	-11.25	123.65	130.40
26	1H	458	G	N9-C4-C5	11.25	109.90	105.40
26	14	2766	G	C5-C6-O6	-11.25	121.85	128.60
1	1G	1205	U	C5-C6-N1	11.25	128.33	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	120	U	C5-C4-O4	11.25	132.65	125.90
26	14	2724	C	C4-C5-C6	11.25	123.02	117.40
26	1H	2503	A	OP1-P-OP2	-11.24	102.73	119.60
1	13	1400	C	C5-C4-N4	-11.24	112.33	120.20
26	1H	513	A	N1-C6-N6	-11.24	111.86	118.60
26	1H	1767	C	C5-C6-N1	-11.24	115.38	121.00
26	1H	1819	A	O5'-P-OP1	-11.24	95.58	105.70
26	1H	2392	A	N3-C4-C5	11.24	134.67	126.80
26	14	204	A	C5-C6-N6	-11.24	114.71	123.70
26	14	1336	A	C5-C6-N1	11.24	123.32	117.70
26	14	2430	A	N1-C2-N3	11.24	134.92	129.30
26	14	2495	G	O5'-P-OP2	-11.24	95.58	105.70
26	1H	458	G	N1-C6-O6	-11.24	113.16	119.90
26	1H	628	G	C5-C6-N1	11.24	117.12	111.50
26	1H	2258	C	O5'-P-OP1	-11.23	95.59	105.70
26	14	1824	G	N3-C2-N2	-11.23	112.04	119.90
26	14	2585	U	O5'-P-OP2	11.23	124.18	110.70
26	1H	700	G	C8-N9-C4	-11.23	101.91	106.40
26	1H	1670	C	C2-N3-C4	-11.23	114.28	119.90
26	1H	2575	C	C4-C5-C6	11.23	123.01	117.40
26	1H	122	G	C8-N9-C4	11.22	110.89	106.40
26	14	769	G	N1-C6-O6	-11.22	113.17	119.90
1	13	1412	C	C2-N3-C4	-11.22	114.29	119.90
26	1H	1927	A	O5'-P-OP2	-11.22	95.60	105.70
26	14	1356	G	O5'-P-OP1	-11.22	95.60	105.70
26	14	1332	G	C2-N3-C4	-11.21	106.29	111.90
26	14	1496	A	N7-C8-N9	11.21	119.41	113.80
26	1H	835	A	N9-C4-C5	11.21	110.28	105.80
26	1H	2360	A	C5-C6-N1	-11.21	112.09	117.70
26	14	1312	U	O5'-P-OP1	-11.21	95.61	105.70
26	1H	2250	G	C8-N9-C4	-11.21	101.92	106.40
26	1H	1443	G	N1-C6-O6	11.20	126.62	119.90
26	1H	982	C	C5-C6-N1	11.20	126.60	121.00
26	1H	2000	G	C5-C6-O6	-11.20	121.88	128.60
26	1H	2685	G	C2-N3-C4	-11.20	106.30	111.90
1	13	244	U	N1-C2-N3	-11.19	108.18	114.90
26	1H	1496	A	C8-N9-C4	-11.19	101.32	105.80
26	14	2539	C	C6-N1-C2	11.19	124.78	120.30
26	1H	797	C	C4-C5-C6	11.19	123.00	117.40
26	1H	1157	G	C6-C5-N7	-11.19	123.69	130.40
26	1H	2321	G	O5'-P-OP2	-11.19	95.63	105.70
26	1H	2598	A	C8-N9-C4	11.19	110.27	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	360	A	C8-N9-C4	11.19	110.28	105.80
26	14	639	U	C5-C4-O4	11.19	132.61	125.90
26	1H	1224	G	N1-C2-N3	-11.18	117.19	123.90
1	13	767	A	C5-C6-N1	-11.18	112.11	117.70
26	1H	964	C	C6-N1-C2	-11.18	115.83	120.30
26	14	864	G	C8-N9-C4	-11.18	101.93	106.40
26	1H	316	C	N3-C4-C5	11.18	126.37	121.90
26	14	298	G	C5-N7-C8	-11.18	98.71	104.30
26	1H	2055	C	N3-C2-O2	-11.18	114.08	121.90
26	1H	2516	G	O5'-P-OP1	11.18	124.11	110.70
26	1H	1210	A	C6-C5-N7	-11.17	124.48	132.30
26	1H	2271	G	N3-C4-N9	11.17	132.70	126.00
26	1H	1200	C	C2-N3-C4	-11.17	114.32	119.90
26	1H	2346	A	C4-C5-C6	11.17	122.58	117.00
26	1H	2458	G	N1-C6-O6	11.17	126.60	119.90
26	14	2056	G	N1-C6-O6	11.17	126.60	119.90
26	14	2588	G	C5-C6-O6	11.17	135.30	128.60
26	1H	1904	G	O5'-P-OP2	-11.17	95.65	105.70
27	1J	54	G	C8-N9-C4	-11.17	101.93	106.40
54	P8	35	ARG	NE-CZ-NH1	-11.16	114.72	120.30
1	1G	1416	G	C2-N3-C4	-11.16	106.32	111.90
26	1H	1310	G	N1-C6-O6	11.16	126.60	119.90
26	1H	1427	A	C8-N9-C4	-11.16	101.34	105.80
26	14	1835	G	C8-N9-C4	11.16	110.86	106.40
1	1G	1470	G	O5'-P-OP1	-11.16	95.66	105.70
26	14	2056	G	C5-C6-O6	-11.16	121.91	128.60
26	1H	217	G	N1-C6-O6	-11.15	113.21	119.90
26	1H	664	C	C6-N1-C2	11.15	124.76	120.30
26	1H	950	G	N1-C6-O6	-11.15	113.21	119.90
26	14	1695	G	C6-C5-N7	-11.15	123.71	130.40
26	14	1026	U	C6-N1-C2	-11.15	114.31	121.00
27	1J	74	U	C5-C4-O4	11.15	132.59	125.90
1	13	585	G	C8-N9-C4	11.15	110.86	106.40
26	14	563	G	C5-N7-C8	-11.15	98.72	104.30
26	1H	464	U	C5-C4-O4	11.15	132.59	125.90
26	14	1930	G	C6-C5-N7	11.15	137.09	130.40
26	1H	410	G	O5'-P-OP1	-11.15	95.67	105.70
26	14	621	A	C6-C5-N7	-11.15	124.50	132.30
26	14	675	A	N1-C2-N3	-11.15	123.72	129.30
26	14	1628	G	O5'-P-OP2	-11.15	95.67	105.70
26	1H	676	A	OP1-P-OP2	11.14	136.32	119.60
26	14	1350	C	C6-N1-C2	11.14	124.76	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	778	G	C5-C6-O6	11.14	135.29	128.60
26	14	1816	G	C6-C5-N7	11.14	137.09	130.40
26	1H	1241	A	C4-C5-N7	11.14	116.27	110.70
26	1H	2822	G	C5-C6-O6	-11.14	121.92	128.60
26	14	665	C	N3-C4-N4	-11.14	110.20	118.00
26	14	1767	C	N1-C2-O2	11.14	125.58	118.90
26	14	1939	U	N1-C2-N3	11.14	121.58	114.90
26	1H	1013	C	N1-C2-O2	-11.13	112.22	118.90
26	14	462	C	C4-C5-C6	11.13	122.97	117.40
26	1H	20	C	C5-C6-N1	-11.13	115.44	121.00
26	1H	772	C	N1-C2-O2	-11.13	112.22	118.90
26	1H	793	A	O5'-P-OP2	-11.13	95.69	105.70
26	1H	2070	G	C5-C6-O6	11.13	135.28	128.60
26	1H	1933	G	C8-N9-C4	-11.12	101.95	106.40
26	1H	2665	A	C6-C5-N7	-11.12	124.51	132.30
26	1H	2737	G	N1-C6-O6	11.12	126.58	119.90
26	1H	2539	C	OP1-P-OP2	11.12	136.28	119.60
26	1H	2365	G	C5-C6-O6	-11.12	121.93	128.60
26	1H	2822	G	C4-C5-N7	11.12	115.25	110.80
26	1H	2312	U	O5'-P-OP1	-11.12	95.70	105.70
26	14	1857	G	C5-C6-N1	-11.12	105.94	111.50
26	14	2593	U	N3-C4-O4	11.12	127.18	119.40
26	1H	780	G	N1-C2-N3	11.11	130.57	123.90
1	13	881	G	OP1-P-OP2	-11.11	102.93	119.60
26	1H	1710	C	C6-N1-C2	11.11	124.75	120.30
26	1H	197	A	N1-C2-N3	11.11	134.85	129.30
1	1G	232	G	C4-C5-C6	11.11	125.47	118.80
1	1G	1464	G	C5-C6-N1	-11.11	105.95	111.50
26	14	788	A	N1-C6-N6	11.11	125.26	118.60
26	1H	391	G	N3-C2-N2	-11.10	112.13	119.90
26	1H	839	U	N1-C2-O2	-11.10	115.03	122.80
26	1H	2502	G	O5'-P-OP1	-11.10	95.71	105.70
26	14	1602	U	C4-C5-C6	11.10	126.36	119.70
1	13	172	A	C8-N9-C4	-11.10	101.36	105.80
26	14	179	G	N1-C6-O6	11.10	126.56	119.90
26	1H	1844	C	C6-N1-C2	11.10	124.74	120.30
26	14	791	C	C6-N1-C2	11.09	124.74	120.30
1	13	1485	U	N1-C2-N3	11.09	121.55	114.90
26	1H	127	A	N9-C4-C5	-11.09	101.36	105.80
26	1H	1338	G	C2-N3-C4	11.09	117.44	111.90
26	1H	2038	G	C8-N9-C4	11.09	110.83	106.40
1	13	1273	G	C8-N9-C4	11.08	110.83	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	810	U	C5-C6-N1	11.08	128.24	122.70
1	13	541	G	OP1-P-OP2	-11.08	102.98	119.60
26	1H	23	G	C5-C6-O6	11.08	135.25	128.60
1	13	767	A	C2-N3-C4	-11.08	105.06	110.60
1	13	1502	A	C2-N3-C4	-11.08	105.06	110.60
26	1H	701	G	C8-N9-C4	-11.08	101.97	106.40
26	14	1271	G	O5'-P-OP2	-11.08	95.73	105.70
26	1H	1643	G	N1-C6-O6	-11.08	113.25	119.90
26	1H	2299	G	N1-C6-O6	11.08	126.55	119.90
26	14	918	A	C8-N9-C4	-11.08	101.37	105.80
26	1H	140	A	C2-N3-C4	-11.07	105.06	110.60
26	1H	581	C	C6-N1-C2	-11.07	115.87	120.30
26	14	1946	U	O5'-P-OP2	-11.07	95.74	105.70
1	13	503	C	N3-C4-C5	-11.07	117.47	121.90
23	2K	77	A	C5-N7-C8	-11.07	98.37	103.90
26	1H	199	A	N1-C2-N3	-11.07	123.77	129.30
26	1H	2247	A	O5'-P-OP1	-11.07	95.74	105.70
26	14	226	G	C5-C6-N1	-11.07	105.97	111.50
26	1H	1241	A	C6-C5-N7	-11.07	124.55	132.30
1	13	413	G	N1-C6-O6	-11.06	113.26	119.90
26	1H	788	A	N9-C4-C5	-11.06	101.37	105.80
1	13	789	U	C5-C4-O4	11.06	132.54	125.90
26	1H	948	G	N1-C6-O6	11.06	126.54	119.90
26	14	2005	A	C5-C6-N6	11.06	132.55	123.70
1	13	766	A	N9-C4-C5	-11.06	101.38	105.80
26	1H	2287	A	N1-C2-N3	11.06	134.83	129.30
26	1H	783	A	C4-C5-C6	11.06	122.53	117.00
1	13	392	G	N1-C6-O6	11.06	126.53	119.90
26	1H	306	U	N3-C2-O2	-11.05	114.46	122.20
23	2K	77	A	N1-C2-N3	-11.05	123.77	129.30
26	1H	1965	C	O5'-P-OP1	-11.05	95.75	105.70
26	1H	2082	A	C6-N1-C2	-11.05	111.97	118.60
26	1H	399	G	O5'-P-OP2	-11.05	95.75	105.70
26	14	1934	C	C6-N1-C2	11.05	124.72	120.30
26	1H	1029	A	C5-C6-N6	-11.05	114.86	123.70
1	13	1236	A	C5-C6-N1	-11.04	112.18	117.70
26	1H	1345	C	N3-C4-C5	11.04	126.32	121.90
1	13	692	U	C5-C6-N1	-11.04	117.18	122.70
27	16	111	U	C5-C6-N1	-11.04	117.18	122.70
26	1H	1428	C	O5'-P-OP1	-11.04	95.77	105.70
26	1H	2543	G	O5'-P-OP1	-11.04	95.77	105.70
26	14	388	G	N3-C4-N9	-11.04	119.38	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	722	A	C2-N3-C4	-11.04	105.08	110.60
26	14	2545	G	C5-C6-N1	-11.04	105.98	111.50
26	14	1822	G	N3-C2-N2	-11.03	112.18	119.90
1	1G	328	C	N3-C2-O2	-11.03	114.18	121.90
26	14	1197	G	C5-C6-O6	11.03	135.22	128.60
26	1H	348	G	N1-C6-O6	-11.03	113.28	119.90
1	1G	556	C	O5'-P-OP1	-11.03	95.77	105.70
26	1H	805	G	O5'-P-OP2	-11.03	95.78	105.70
1	1G	811	C	N1-C2-O2	-11.03	112.28	118.90
26	1H	736	C	C5-C4-N4	-11.03	112.48	120.20
26	14	2741	A	N1-C6-N6	11.02	125.21	118.60
26	1H	734	A	OP1-P-OP2	11.02	136.13	119.60
1	13	894	G	C8-N9-C4	11.02	110.81	106.40
26	1H	258	G	N1-C6-O6	-11.02	113.29	119.90
26	1H	822	U	N3-C2-O2	-11.02	114.49	122.20
26	1H	1331	A	N1-C2-N3	11.02	134.81	129.30
26	1H	1779	U	O5'-P-OP1	-11.02	95.78	105.70
26	1H	1964	G	O5'-P-OP2	-11.02	95.78	105.70
26	14	2819	G	C8-N9-C4	11.02	110.81	106.40
1	13	1455	G	N3-C4-C5	11.02	134.11	128.60
26	14	738	G	O5'-P-OP2	-11.02	95.79	105.70
1	1G	230	G	C5-C6-N1	-11.01	105.99	111.50
26	14	2618	G	C5-C6-O6	11.01	135.21	128.60
26	1H	593	G	N1-C2-N3	11.01	130.50	123.90
26	1H	1142(A)	A	C5-N7-C8	-11.01	98.40	103.90
26	14	669	G	O5'-P-OP1	11.01	123.91	110.70
26	14	1197	G	C5-C6-N1	-11.01	106.00	111.50
26	1H	1191	G	N7-C8-N9	-11.00	107.60	113.10
26	1H	1342	A	O5'-P-OP1	-11.00	95.80	105.70
26	1H	989	G	N1-C6-O6	11.00	126.50	119.90
26	1H	2001	A	C8-N9-C4	-11.00	101.40	105.80
26	1H	2070	G	C8-N9-C4	11.00	110.80	106.40
26	14	197	A	C2-N3-C4	-11.00	105.10	110.60
26	14	1985	G	C8-N9-C4	11.00	110.80	106.40
26	1H	208	C	C6-N1-C2	11.00	124.70	120.30
26	14	2829	C	N3-C4-C5	11.00	126.30	121.90
26	1H	829	A	C2-N3-C4	-11.00	105.10	110.60
26	1H	933	A	O5'-P-OP2	-11.00	95.80	105.70
26	1H	1984	G	C8-N9-C4	11.00	110.80	106.40
26	1H	2490	G	C6-N1-C2	11.00	131.70	125.10
26	14	2084	C	C5-C6-N1	-11.00	115.50	121.00
1	13	569	C	N1-C2-O2	10.99	125.50	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2585	U	O5'-P-OP2	10.99	123.89	110.70
26	14	952	G	C8-N9-C4	-10.99	102.00	106.40
26	14	1304	C	N3-C4-C5	10.99	126.30	121.90
1	13	741	G	O5'-P-OP2	-10.99	95.81	105.70
26	1H	391	G	N1-C2-N3	10.99	130.49	123.90
26	1H	618	G	C8-N9-C4	10.99	110.80	106.40
26	1H	1333	C	N3-C2-O2	10.99	129.59	121.90
26	1H	1340	U	N3-C4-O4	10.99	127.09	119.40
26	1H	2618	G	C4-C5-N7	-10.99	106.40	110.80
1	1G	585	G	N3-C4-C5	-10.99	123.11	128.60
26	1H	213	A	C8-N9-C4	10.99	110.19	105.80
26	1H	1563	G	C5-C6-O6	10.99	135.19	128.60
26	14	684	G	N7-C8-N9	10.99	118.59	113.10
26	14	527	C	C2-N1-C1'	10.98	130.88	118.80
26	14	584	C	C5-C4-N4	-10.98	112.51	120.20
26	14	1790	C	C5-C4-N4	-10.98	112.51	120.20
1	13	542	G	O5'-P-OP1	-10.98	95.82	105.70
26	1H	1823	G	C5-C6-N1	-10.98	106.01	111.50
26	14	1449	A	O5'-P-OP2	-10.98	95.82	105.70
29	11	229	VAL	CG1-CB-CG2	-10.98	93.33	110.90
26	14	1121	C	C6-N1-C2	10.98	124.69	120.30
26	1H	2450	A	N1-C6-N6	-10.97	112.02	118.60
26	14	2724	C	C5-C6-N1	-10.97	115.51	121.00
26	1H	1303	G	N3-C2-N2	10.97	127.58	119.90
26	1H	444	C	C6-N1-C2	-10.97	115.91	120.30
26	1H	2502	G	N3-C2-N2	-10.96	112.22	119.90
26	14	1977	A	C2-N3-C4	-10.97	105.12	110.60
26	1H	847	U	N1-C2-O2	10.96	130.47	122.80
26	1H	1312	U	O5'-P-OP1	-10.96	95.83	105.70
1	1G	267	C	O5'-P-OP1	-10.96	95.83	105.70
26	1H	1598	C	OP1-P-O3'	10.96	129.31	105.20
26	14	915	C	N3-C4-C5	-10.96	117.52	121.90
1	13	1113	C	C6-N1-C2	-10.95	115.92	120.30
23	2K	39	A	N1-C6-N6	-10.95	112.03	118.60
26	1H	2331	G	C5-C6-O6	-10.95	122.03	128.60
1	13	690	G	C4-C5-N7	10.95	115.18	110.80
26	1H	468	G	OP1-P-OP2	-10.95	103.17	119.60
26	1H	1333	C	C5-C6-N1	10.95	126.47	121.00
26	14	929	G	C5-N7-C8	-10.95	98.83	104.30
1	1G	390	C	C5-C6-N1	-10.95	115.53	121.00
26	14	1396	U	N3-C2-O2	-10.94	114.54	122.20
26	1H	1761	C	N3-C2-O2	10.94	129.56	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1189	A	C5-C6-N6	-10.94	114.95	123.70
1	13	1209	C	C6-N1-C2	10.94	124.67	120.30
26	14	544	C	C6-N1-C2	-10.94	115.92	120.30
1	13	867	G	C4-C5-N7	-10.94	106.42	110.80
1	13	1512	U	O5'-P-OP1	10.94	123.82	110.70
26	1H	385	C	O5'-P-OP1	-10.94	95.86	105.70
26	1H	1669	A	C5-N7-C8	-10.94	98.43	103.90
26	1H	1975	G	C4-C5-N7	10.94	115.17	110.80
26	1H	2646	C	O5'-P-OP2	-10.94	95.86	105.70
26	1H	1519	G	O5'-P-OP1	-10.94	95.86	105.70
26	14	521	G	C4-C5-N7	10.94	115.17	110.80
1	13	1524	C	N3-C4-C5	10.93	126.27	121.90
26	14	769	G	OP1-P-O3'	10.93	129.25	105.20
26	14	2045	C	C6-N1-C2	10.93	124.67	120.30
26	1H	34	C	O5'-P-OP2	10.93	123.82	110.70
26	1H	51	G	N7-C8-N9	-10.93	107.64	113.10
26	1H	2739	U	O5'-P-OP1	-10.93	95.86	105.70
26	1H	2358	G	C4-C5-N7	-10.93	106.43	110.80
26	1H	2845	G	C4-C5-N7	-10.92	106.43	110.80
1	1G	611	A	C8-N9-C4	10.92	110.17	105.80
26	14	671	C	C2-N3-C4	-10.92	114.44	119.90
26	14	1681	G	C4-C5-N7	10.92	115.17	110.80
26	14	2495	G	N3-C2-N2	-10.92	112.25	119.90
26	14	2546	U	OP1-P-OP2	10.92	135.99	119.60
26	1H	468	G	N1-C6-O6	10.92	126.45	119.90
26	1H	968	G	C8-N9-C4	-10.92	102.03	106.40
26	1H	1513	C	C6-N1-C2	-10.92	115.93	120.30
26	14	2619	C	N3-C4-C5	10.92	126.27	121.90
26	1H	20	C	C4-C5-C6	10.92	122.86	117.40
26	1H	463	G	N9-C4-C5	-10.92	101.03	105.40
26	1H	1640	C	N3-C4-N4	-10.92	110.36	118.00
26	14	1328	G	N1-C6-O6	10.92	126.45	119.90
1	13	781	A	C5-C6-N6	-10.91	114.97	123.70
26	14	527	C	N1-C2-O2	10.91	125.45	118.90
26	1H	647	G	OP1-P-OP2	-10.91	103.24	119.60
26	14	1332	G	C4-C5-C6	10.91	125.34	118.80
26	14	2495	G	C5-C6-N1	-10.90	106.05	111.50
26	1H	2722	G	N1-C6-O6	-10.90	113.36	119.90
26	1H	1383	C	N1-C2-O2	10.90	125.44	118.90
26	1H	2426	A	N1-C6-N6	-10.90	112.06	118.60
26	14	566	U	C6-N1-C2	10.90	127.54	121.00
26	1H	383	U	C5-C4-O4	10.90	132.44	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	803	U	C5-C6-N1	-10.90	117.25	122.70
1	13	1355	G	C8-N9-C4	-10.89	102.04	106.40
26	1H	1394	U	C5-C6-N1	10.89	128.15	122.70
26	14	1772	G	C5-C6-O6	-10.89	122.06	128.60
26	1H	1559	G	C2-N3-C4	-10.89	106.46	111.90
26	1H	1589	C	O5'-P-OP2	10.89	123.77	110.70
26	1H	1931	U	N3-C2-O2	-10.89	114.58	122.20
26	14	1960	A	N1-C6-N6	-10.89	112.07	118.60
26	1H	2311	A	N7-C8-N9	10.89	119.24	113.80
26	1H	2698	U	C6-N1-C2	10.88	127.53	121.00
26	14	972	G	C5-C6-O6	10.89	135.13	128.60
26	14	929	G	C2-N3-C4	-10.88	106.46	111.90
26	14	1950	G	N3-C2-N2	10.88	127.52	119.90
26	14	1281	G	C5-N7-C8	-10.88	98.86	104.30
26	1H	28	A	N1-C6-N6	10.88	125.12	118.60
1	13	1468	A	C5-C6-N6	-10.87	115.00	123.70
26	1H	2256	G	N1-C6-O6	-10.88	113.38	119.90
26	1H	2491	U	N1-C2-N3	-10.88	108.38	114.90
1	13	1500	A	N1-C2-N3	10.87	134.74	129.30
1	1G	1483	A	C5-C6-N1	10.87	123.13	117.70
26	14	1325	G	O5'-P-OP2	-10.87	95.92	105.70
1	13	1424	C	C6-N1-C2	10.87	124.65	120.30
26	1H	2430	A	C4-C5-N7	10.87	116.13	110.70
1	13	1525	G	N7-C8-N9	-10.86	107.67	113.10
26	14	1807	G	C8-N9-C4	10.86	110.75	106.40
26	14	2766	G	O5'-P-OP2	-10.86	95.93	105.70
26	14	2879	C	O5'-P-OP2	10.86	123.73	110.70
26	14	2586	C	C5-C4-N4	-10.86	112.60	120.20
26	1H	148	C	C6-N1-C2	10.85	124.64	120.30
26	1H	917	A	N1-C2-N3	10.85	134.73	129.30
26	1H	921	G	C8-N9-C4	-10.85	102.06	106.40
26	14	1941	C	O5'-P-OP1	-10.85	95.93	105.70
26	14	2007	C	N1-C2-O2	-10.85	112.39	118.90
26	1H	1218	C	O5'-P-OP2	-10.85	95.94	105.70
1	1G	45	U	C6-N1-C2	10.85	127.51	121.00
26	1H	1979	C	C4-C5-C6	10.85	122.82	117.40
26	14	528	A	C5-C6-N1	-10.85	112.28	117.70
26	14	2519	U	O5'-P-OP2	-10.85	95.94	105.70
26	1H	1992	G	C5-C6-O6	-10.85	122.09	128.60
26	14	1698	A	C5-C6-N1	-10.85	112.28	117.70
26	1H	1241	A	C2-N3-C4	-10.84	105.18	110.60
26	1H	1700	A	O5'-P-OP2	-10.84	95.94	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	519	U	O5'-P-OP2	-10.84	95.94	105.70
25	4K	16	A	C8-N9-C4	10.84	110.14	105.80
1	1G	730	G	C4-C5-N7	-10.84	106.47	110.80
26	1H	389	G	N1-C2-N2	-10.84	106.45	116.20
26	1H	2068	U	N3-C4-O4	-10.84	111.81	119.40
26	14	1695	G	N1-C6-O6	10.84	126.40	119.90
26	14	201	C	C6-N1-C2	10.84	124.63	120.30
23	2K	17	C	O5'-P-OP1	-10.83	95.95	105.70
26	1H	729	G	C6-C5-N7	-10.83	123.90	130.40
26	1H	2007	C	O5'-P-OP2	-10.83	95.95	105.70
26	14	50	U	C6-N1-C2	10.83	127.50	121.00
26	14	380	U	C6-N1-C2	-10.83	114.50	121.00
26	14	2014	A	C8-N9-C4	10.83	110.13	105.80
26	14	1630(A)	C	N3-C2-O2	10.83	129.48	121.90
1	13	567	G	O5'-P-OP1	-10.82	95.96	105.70
26	1H	124	G	C5-C6-O6	-10.82	122.11	128.60
26	1H	232	G	N1-C6-O6	10.82	126.39	119.90
1	1G	111	G	C5-C6-N1	-10.82	106.09	111.50
26	14	2514	U	C5-C6-N1	-10.82	117.29	122.70
26	1H	1204	A	C4-C5-N7	10.82	116.11	110.70
1	1G	1484	C	OP1-P-OP2	10.81	135.82	119.60
26	14	55	G	N1-C6-O6	-10.81	113.41	119.90
26	14	561	G	C8-N9-C4	-10.81	102.08	106.40
1	1G	769	G	C5-C6-O6	-10.81	122.11	128.60
26	1H	926	A	C8-N9-C4	-10.81	101.48	105.80
26	1H	1291	C	N3-C2-O2	-10.81	114.33	121.90
26	1H	667	U	C5-C4-O4	-10.80	119.42	125.90
26	1H	918	A	O5'-P-OP2	10.80	123.67	110.70
26	1H	661	C	C6-N1-C2	10.80	124.62	120.30
26	14	336	C	C6-N1-C2	10.80	124.62	120.30
26	1H	692	C	C5-C6-N1	-10.80	115.60	121.00
26	1H	816	C	C6-N1-C2	10.80	124.62	120.30
26	1H	1669	A	C8-N9-C4	-10.80	101.48	105.80
26	1H	1915	U	N3-C4-O4	-10.80	111.84	119.40
26	14	911	A	C8-N9-C4	-10.80	101.48	105.80
26	1H	452	G	C6-C5-N7	10.79	136.88	130.40
26	1H	1422	G	C8-N9-C4	-10.79	102.08	106.40
1	1G	305	G	C5-C6-O6	10.79	135.07	128.60
26	14	2726	U	C5-C4-O4	10.79	132.37	125.90
1	13	1382	C	N1-C2-O2	10.79	125.37	118.90
26	1H	476	G	C5-C6-N1	-10.79	106.11	111.50
26	1H	2041	U	OP1-P-OP2	10.79	135.78	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2454	G	C4-C5-N7	10.79	115.11	110.80
26	1H	1626	G	N1-C2-N2	10.79	125.91	116.20
1	1G	666	G	N1-C6-O6	10.79	126.37	119.90
26	14	758	C	O5'-P-OP2	-10.79	95.99	105.70
26	1H	1959	G	N1-C6-O6	-10.78	113.43	119.90
26	14	828	U	C5-C6-N1	-10.79	117.31	122.70
26	14	2084	C	C2-N3-C4	-10.78	114.51	119.90
26	1H	2311	A	C5-N7-C8	-10.78	98.51	103.90
26	1H	2392	A	N3-C4-N9	-10.78	118.78	127.40
26	14	929	G	C4-C5-N7	10.78	115.11	110.80
26	14	2525	G	C2-N3-C4	-10.78	106.51	111.90
26	1H	2677	G	C8-N9-C4	10.78	110.71	106.40
26	1H	1634	A	C4-C5-C6	10.78	122.39	117.00
26	14	32	C	O5'-P-OP2	-10.78	96.00	105.70
26	14	270(B)	A	N1-C6-N6	10.77	125.06	118.60
26	14	751	A	C8-N9-C4	10.77	110.11	105.80
26	1H	1592	C	N3-C4-C5	10.77	126.21	121.90
26	14	2426	A	C4-C5-N7	10.77	116.08	110.70
26	14	2848	G	C5-C6-N1	-10.77	106.11	111.50
1	13	503	C	C6-N1-C2	-10.77	115.99	120.30
26	1H	801	G	N1-C2-N3	10.77	130.36	123.90
26	14	729	G	C5-C6-O6	-10.77	122.14	128.60
1	13	974	A	C5-C6-N1	-10.76	112.32	117.70
1	13	1205	U	N3-C4-C5	-10.76	108.14	114.60
1	1G	110	C	C5-C6-N1	-10.76	115.62	121.00
26	1H	1323	U	OP1-P-OP2	-10.76	103.46	119.60
26	1H	2610	C	C6-N1-C2	10.76	124.61	120.30
26	1H	267	C	N3-C4-C5	10.76	126.20	121.90
26	1H	1971	A	C2-N3-C4	10.76	115.98	110.60
26	14	2726	U	N3-C4-O4	-10.76	111.87	119.40
1	1G	569	C	C6-N1-C2	-10.75	116.00	120.30
26	14	1830	C	N3-C4-C5	10.75	126.20	121.90
26	14	2586	C	N3-C2-O2	10.75	129.42	121.90
26	1H	1021	A	C6-N1-C2	10.74	125.05	118.60
26	1H	1429	G	C5-C6-O6	10.74	135.05	128.60
26	1H	2329	G	N9-C4-C5	-10.74	101.10	105.40
26	14	186	G	N1-C6-O6	-10.74	113.45	119.90
26	14	809	G	C8-N9-C4	-10.74	102.10	106.40
26	1H	1268	A	C2-N3-C4	-10.74	105.23	110.60
26	1H	2379	G	C8-N9-C4	10.74	110.70	106.40
1	13	830	G	C5-C6-N1	-10.74	106.13	111.50
1	13	742	G	C8-N9-C4	10.73	110.69	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	206	U	C6-N1-C2	10.73	127.44	121.00
27	1J	81	G	C6-C5-N7	-10.73	123.96	130.40
26	14	2570	G	N1-C6-O6	10.73	126.34	119.90
26	14	816	C	O5'-P-OP2	-10.73	96.04	105.70
26	1H	1605	C	C4-C5-C6	10.73	122.76	117.40
26	14	2001	A	N1-C6-N6	10.73	125.03	118.60
26	14	2339	G	O5'-P-OP2	-10.72	96.05	105.70
1	13	569	C	N3-C2-O2	-10.72	114.39	121.90
23	2K	2	G	C8-N9-C4	10.72	110.69	106.40
26	1H	1988	C	N3-C4-N4	-10.72	110.49	118.00
26	14	699	A	C5-N7-C8	10.72	109.26	103.90
26	1H	1763	G	O5'-P-OP2	-10.72	96.05	105.70
26	1H	2494	G	C5-C6-N1	-10.72	106.14	111.50
1	13	346	G	N7-C8-N9	10.72	118.46	113.10
27	1J	89	G	C4-C5-N7	10.72	115.09	110.80
26	14	2057	A	C8-N9-C4	10.72	110.09	105.80
26	1H	1489	U	C5-C4-O4	10.71	132.33	125.90
26	1H	1013	C	N3-C2-O2	10.71	129.40	121.90
26	1H	2597	G	C5-C6-O6	-10.71	122.17	128.60
26	14	685	A	O5'-P-OP1	-10.71	96.06	105.70
1	13	362	G	N3-C4-C5	10.71	133.95	128.60
26	1H	465	G	C5-C6-N1	-10.71	106.15	111.50
26	14	1786	A	C5-C6-N1	-10.71	112.35	117.70
26	14	1817	G	C5-C6-N1	-10.71	106.14	111.50
26	14	1955	U	C5-C6-N1	-10.71	117.34	122.70
1	13	545	C	N3-C4-C5	10.71	126.18	121.90
26	1H	539	G	C5-C6-N1	-10.71	106.15	111.50
26	1H	2681	C	C6-N1-C2	-10.71	116.02	120.30
26	14	333	G	N1-C6-O6	10.70	126.32	119.90
26	1H	795	C	O5'-P-OP1	-10.70	96.07	105.70
26	14	1470	G	N1-C6-O6	10.70	126.32	119.90
26	14	2392	A	C2-N3-C4	-10.70	105.25	110.60
26	14	1828	G	C4-C5-N7	-10.70	106.52	110.80
27	1J	32	C	C6-N1-C2	10.70	124.58	120.30
26	1H	704	G	C5-N7-C8	-10.70	98.95	104.30
26	14	372	G	C5-C6-N1	10.70	116.85	111.50
26	1H	185	U	C5-C6-N1	-10.69	117.35	122.70
26	1H	2544	G	C5-C6-O6	-10.69	122.19	128.60
26	1H	1443	G	N3-C2-N2	-10.69	112.42	119.90
26	1H	1548	C	N1-C2-O2	10.69	125.31	118.90
26	1H	2502	G	N9-C4-C5	10.69	109.67	105.40
26	14	951	C	N1-C2-O2	10.69	125.31	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1393	A	C5-C6-N1	10.69	123.04	117.70
26	1H	456	C	OP1-P-OP2	10.68	135.62	119.60
26	1H	661	C	N3-C4-C5	10.68	126.17	121.90
26	1H	1313	U	N3-C4-C5	-10.68	108.19	114.60
1	1G	1432	G	C5-C6-N1	-10.68	106.16	111.50
26	1H	613	U	C5-C4-O4	10.68	132.31	125.90
26	1H	2233	U	C5-C6-N1	-10.68	117.36	122.70
26	1H	2296	U	C5-C4-O4	-10.67	119.50	125.90
1	13	481	G	C4-C5-C6	10.67	125.20	118.80
26	1H	1544	C	C6-N1-C2	10.67	124.57	120.30
26	14	2289	G	C2-N3-C4	10.67	117.24	111.90
26	1H	1586	A	N1-C6-N6	10.67	125.00	118.60
26	1H	2022	U	N3-C4-C5	10.67	121.00	114.60
26	1H	2449	U	N3-C4-C5	-10.67	108.20	114.60
26	14	777	A	C6-N1-C2	-10.67	112.20	118.60
26	14	2449	U	C5-C4-O4	-10.67	119.50	125.90
26	1H	866	A	O4'-C1'-N9	-10.67	99.67	108.20
26	1H	2465	C	C6-N1-C2	10.66	124.57	120.30
26	14	247	G	C5-C6-N1	-10.66	106.17	111.50
26	14	1569	A	O5'-P-OP2	-10.66	96.10	105.70
26	14	1388	G	O5'-P-OP2	-10.66	96.11	105.70
26	1H	1834	U	O5'-P-OP1	-10.66	96.11	105.70
26	1H	679	C	N3-C4-N4	-10.65	110.54	118.00
26	1H	874	G	O5'-P-OP2	-10.65	96.11	105.70
26	1H	1614	A	N3-C4-C5	10.65	134.26	126.80
26	1H	1754	C	O5'-P-OP2	-10.65	96.11	105.70
26	14	1351	C	C6-N1-C2	10.65	124.56	120.30
26	1H	1786	A	N3-C4-N9	-10.65	118.88	127.40
26	14	1616	A	N7-C8-N9	10.64	119.12	113.80
26	1H	59	U	C6-N1-C2	-10.64	114.62	121.00
26	1H	528	A	C5-C6-N1	-10.64	112.38	117.70
26	1H	2028	U	C6-N1-C2	-10.64	114.62	121.00
26	1H	2330	G	C8-N9-C4	10.64	110.66	106.40
26	14	1332	G	O5'-P-OP2	-10.64	96.12	105.70
27	16	67	G	N1-C6-O6	10.64	126.28	119.90
1	13	569	C	C6-N1-C2	-10.63	116.05	120.30
26	14	1786	A	C5-N7-C8	-10.63	98.58	103.90
26	1H	1350	C	C6-N1-C2	10.63	124.55	120.30
26	14	1696	G	O5'-P-OP2	-10.63	96.13	105.70
26	1H	2419	U	N3-C4-O4	10.63	126.84	119.40
26	1H	143	C	C6-N1-C2	10.63	124.55	120.30
26	14	1977	A	C5-C6-N6	10.63	132.20	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	294	A	N7-C8-N9	-10.62	108.49	113.80
26	1H	1123	C	N1-C2-O2	-10.62	112.53	118.90
1	13	505	G	C5-C6-O6	-10.62	122.23	128.60
26	1H	2322	A	O5'-P-OP1	-10.62	96.14	105.70
26	14	200	U	O5'-P-OP1	-10.62	96.14	105.70
1	13	286	G	O5'-P-OP1	-10.62	96.15	105.70
26	1H	375	C	N3-C4-C5	10.61	126.15	121.90
26	1H	1434	A	C8-N9-C4	10.61	110.05	105.80
26	1H	2018	G	N9-C4-C5	10.61	109.64	105.40
26	1H	1158	C	N3-C4-C5	10.61	126.14	121.90
26	1H	1344	G	N1-C6-O6	10.61	126.27	119.90
26	1H	1366	A	N1-C2-N3	10.61	134.61	129.30
26	1H	1379	A	C5-N7-C8	-10.61	98.59	103.90
57	3L	76	A	C4-C5-N7	10.61	116.00	110.70
26	1H	581	C	C5-C6-N1	10.61	126.31	121.00
26	14	2427	C	C6-N1-C2	10.61	124.54	120.30
1	13	1236	A	N1-C6-N6	10.61	124.97	118.60
26	1H	337	C	C6-N1-C2	10.61	124.54	120.30
26	14	197	A	N1-C6-N6	10.61	124.97	118.60
26	1H	86	C	C6-N1-C2	10.61	124.54	120.30
26	1H	2689	U	C5-C6-N1	-10.61	117.40	122.70
26	14	736	C	N3-C2-O2	10.61	129.32	121.90
26	14	1617	C	O5'-P-OP2	-10.61	96.15	105.70
1	13	264	U	C5-C4-O4	-10.60	119.54	125.90
26	1H	2427	C	O5'-P-OP2	10.60	123.42	110.70
1	13	1304	G	C5-C6-N1	-10.60	106.20	111.50
26	1H	850	C	C6-N1-C2	10.60	124.54	120.30
26	1H	1432	C	C6-N1-C2	10.60	124.54	120.30
26	14	666	G	N9-C4-C5	-10.60	101.16	105.40
26	14	947	G	C5-C6-O6	10.60	134.96	128.60
26	14	2249	U	C2-N3-C4	10.60	133.36	127.00
26	1H	98	G	N1-C6-O6	10.60	126.26	119.90
26	14	1653	G	C2-N3-C4	10.60	117.20	111.90
26	14	195	A	C5-C6-N6	-10.60	115.22	123.70
26	14	1978	A	C2-N3-C4	-10.60	105.30	110.60
26	1H	127	A	N1-C6-N6	10.60	124.96	118.60
26	14	35	G	C8-N9-C4	-10.60	102.16	106.40
26	14	122	G	C5-C6-O6	-10.60	122.24	128.60
26	1H	52	A	O5'-P-OP1	-10.59	96.17	105.70
26	1H	844	C	C5-C6-N1	-10.59	115.70	121.00
26	1H	1473	G	C8-N9-C4	10.59	110.64	106.40
26	14	1819	A	C6-N1-C2	-10.59	112.24	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1469	A	O5'-P-OP1	-10.59	96.17	105.70
26	1H	1466	G	C4-C5-N7	-10.58	106.57	110.80
26	1H	678	C	C2-N3-C4	-10.58	114.61	119.90
26	14	1614	A	C2-N3-C4	-10.58	105.31	110.60
26	14	2596	U	N3-C4-O4	-10.58	111.99	119.40
26	1H	736	C	O5'-P-OP2	10.58	123.39	110.70
26	1H	2208	U	N3-C2-O2	10.58	129.60	122.20
26	1H	2311	A	C4-C5-C6	10.58	122.29	117.00
27	16	6	C	C6-N1-C2	10.57	124.53	120.30
26	14	2208	U	C5-C6-N1	-10.57	117.41	122.70
26	14	226	G	N1-C6-O6	10.57	126.24	119.90
26	1H	569	U	C2-N3-C4	-10.57	120.66	127.00
26	1H	1863	G	O5'-P-OP1	-10.57	96.19	105.70
26	1H	2006	C	N3-C2-O2	10.57	129.30	121.90
26	14	1296	G	O5'-P-OP1	10.57	123.38	110.70
26	1H	195	A	C6-C5-N7	-10.57	124.90	132.30
26	1H	1929	G	N1-C6-O6	-10.57	113.56	119.90
26	1H	2390	U	C5-C4-O4	-10.57	119.56	125.90
26	1H	2665	A	C5-N7-C8	-10.56	98.62	103.90
26	14	1234	U	C5-C4-O4	10.56	132.24	125.90
26	1H	2312	U	N3-C2-O2	10.56	129.59	122.20
26	14	667	U	N3-C2-O2	10.56	129.59	122.20
1	13	353	A	N7-C8-N9	10.56	119.08	113.80
26	1H	744	G	N3-C4-C5	-10.56	123.32	128.60
26	1H	836	G	C5-C6-O6	10.56	134.94	128.60
26	1H	1406	U	C5-C6-N1	10.56	127.98	122.70
26	14	68	G	N1-C6-O6	10.56	126.24	119.90
1	13	319	G	N3-C4-C5	10.56	133.88	128.60
1	13	333	G	C2-N3-C4	-10.56	106.62	111.90
23	2K	38	A	N1-C2-N3	10.56	134.58	129.30
1	13	827	U	C5-C4-O4	10.55	132.23	125.90
26	14	912	C	C6-N1-C2	-10.56	116.08	120.30
23	2K	25	U	N3-C4-O4	-10.55	112.01	119.40
26	1H	1313	U	C2-N1-C1'	10.55	130.37	117.70
26	1H	1639	U	N1-C2-N3	10.55	121.23	114.90
26	1H	650	C	C6-N1-C2	-10.55	116.08	120.30
26	1H	1307	A	O5'-P-OP1	-10.55	96.20	105.70
26	1H	2264	C	N3-C4-C5	-10.55	117.68	121.90
26	1H	115	C	C2-N3-C4	-10.55	114.63	119.90
26	1H	909	A	O5'-P-OP2	-10.55	96.21	105.70
26	14	660	G	C5-C6-O6	10.55	134.93	128.60
26	14	689	A	O5'-P-OP2	-10.55	96.21	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	708	C	N3-C2-O2	-10.55	114.52	121.90
26	14	1822	G	N1-C6-O6	10.55	126.23	119.90
1	1G	1469	G	C2-N3-C4	-10.54	106.63	111.90
1	1G	1479	C	N3-C2-O2	-10.54	114.52	121.90
26	14	1328	G	C4-C5-N7	10.54	115.02	110.80
26	14	2452	C	C6-N1-C2	10.54	124.52	120.30
26	14	1308	A	N9-C4-C5	10.54	110.02	105.80
26	14	2362	G	C5-C6-O6	-10.53	122.28	128.60
26	14	2778	A	O5'-P-OP2	-10.53	96.22	105.70
26	1H	1402	C	C5-C4-N4	-10.53	112.83	120.20
26	1H	1698	A	N7-C8-N9	10.53	119.06	113.80
26	14	189	G	C8-N9-C4	10.53	110.61	106.40
26	14	703	U	C5-C4-O4	10.53	132.22	125.90
25	4K	19	A	N1-C6-N6	10.53	124.92	118.60
26	1H	1814	G	OP1-P-OP2	10.53	135.39	119.60
1	1G	584	G	N1-C6-O6	10.53	126.22	119.90
26	1H	482	A	C8-N9-C4	-10.52	101.59	105.80
26	1H	298	G	C5-C6-O6	-10.52	122.29	128.60
26	14	1695	G	C5-C6-N1	-10.52	106.24	111.50
26	14	270	A	C2-N3-C4	-10.52	105.34	110.60
26	1H	2494	G	O5'-P-OP1	-10.52	96.24	105.70
27	1J	55	U	O5'-P-OP1	-10.52	96.23	105.70
1	13	112	G	C5-C6-O6	-10.51	122.29	128.60
1	13	538	G	C8-N9-C4	10.51	110.61	106.40
1	13	664	G	O5'-P-OP2	-10.51	96.24	105.70
26	14	1029	A	O5'-P-OP2	-10.51	96.24	105.70
26	14	2240	C	N3-C4-C5	-10.51	117.69	121.90
26	1H	2053	G	C2-N3-C4	10.51	117.16	111.90
26	1H	2639	A	C4-C5-N7	10.51	115.96	110.70
26	14	613	U	N3-C2-O2	-10.51	114.84	122.20
26	14	2386	C	C2-N3-C4	-10.51	114.64	119.90
26	14	2722	G	C5-C6-O6	-10.51	122.29	128.60
26	1H	2688	U	C2-N3-C4	-10.50	120.70	127.00
27	16	98	G	N9-C4-C5	-10.50	101.20	105.40
26	14	1332	G	C5-C6-N1	-10.50	106.25	111.50
26	1H	2295	C	OP1-P-OP2	-10.50	103.85	119.60
26	1H	2296	U	N3-C2-O2	10.50	129.55	122.20
1	13	406	G	O5'-P-OP1	-10.50	96.25	105.70
26	1H	1254	A	C5-C6-N6	-10.50	115.30	123.70
26	1H	534	U	OP2-P-O3'	10.50	128.29	105.20
26	1H	568	U	C5-C6-N1	-10.50	117.45	122.70
26	1H	2525	G	N9-C4-C5	-10.50	101.20	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	51	G	O5'-P-OP1	-10.49	96.26	105.70
26	1H	203	C	N3-C4-N4	10.49	125.34	118.00
26	1H	581	C	N3-C4-C5	-10.49	117.70	121.90
26	1H	2002	G	C6-N1-C2	-10.49	118.81	125.10
26	1H	1786	A	C6-N1-C2	10.49	124.89	118.60
26	1H	212	G	C8-N9-C4	10.49	110.59	106.40
26	1H	389	G	N7-C8-N9	-10.48	107.86	113.10
26	1H	1672	C	N3-C2-O2	10.48	129.24	121.90
26	1H	46	C	C6-N1-C2	-10.48	116.11	120.30
26	1H	2435	A	C5-C6-N6	10.48	132.09	123.70
26	14	1138	G	C4-C5-N7	10.48	114.99	110.80
26	1H	2707	G	C5-C6-O6	-10.48	122.31	128.60
26	14	2584	U	O5'-P-OP1	10.48	123.28	110.70
26	14	774	A	N3-C4-N9	-10.48	119.02	127.40
26	1H	296	C	C5-C6-N1	-10.48	115.76	121.00
26	1H	2358	G	C5-C6-O6	10.48	134.89	128.60
26	14	681	G	N1-C2-N3	10.48	130.19	123.90
26	14	2625	G	N1-C6-O6	10.48	126.19	119.90
26	14	2818	G	N9-C4-C5	-10.48	101.21	105.40
26	1H	1899	G	C5-C6-N1	-10.47	106.26	111.50
26	1H	2490	G	C4-C5-N7	10.47	114.99	110.80
26	1H	2577	A	C5-C6-N6	10.47	132.08	123.70
27	16	74	U	C5-C4-O4	10.47	132.19	125.90
26	14	2441	C	N3-C4-C5	10.47	126.09	121.90
26	14	2615	U	C5-C4-O4	-10.47	119.62	125.90
26	1H	1402	C	C4-C5-C6	-10.47	112.17	117.40
26	1H	775	G	N1-C2-N3	10.47	130.18	123.90
26	1H	2689	U	C2-N1-C1'	-10.47	105.14	117.70
26	14	2688	U	N3-C2-O2	-10.47	114.87	122.20
1	13	377	G	N7-C8-N9	-10.47	107.87	113.10
26	14	460	A	N1-C6-N6	10.47	124.88	118.60
26	1H	220	G	OP1-P-OP2	-10.47	103.90	119.60
26	1H	243	U	N1-C2-O2	10.47	130.13	122.80
26	1H	573	G	C2-N3-C4	10.46	117.13	111.90
26	1H	942	G	N3-C4-N9	-10.47	119.72	126.00
26	1H	797	C	C2-N3-C4	-10.46	114.67	119.90
26	1H	2299	G	C2-N3-C4	-10.46	106.67	111.90
26	14	252	G	O5'-P-OP1	10.46	123.26	110.70
26	14	679	C	N1-C2-O2	-10.46	112.62	118.90
1	1G	416	G	N1-C6-O6	10.46	126.18	119.90
26	14	2502	G	N3-C2-N2	-10.46	112.58	119.90
26	1H	133	C	C5-C6-N1	-10.46	115.77	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	207	A	C5-C6-N6	-10.46	115.33	123.70
26	1H	772	C	C6-N1-C2	10.46	124.48	120.30
1	1G	873	A	N1-C6-N6	-10.46	112.32	118.60
26	14	459	U	O5'-P-OP2	-10.46	96.29	105.70
26	1H	207	A	N1-C6-N6	10.46	124.88	118.60
26	14	704	G	C2-N3-C4	-10.46	106.67	111.90
26	1H	576	U	N3-C2-O2	10.46	129.52	122.20
1	13	1519	A	C5-C6-N6	10.46	132.06	123.70
1	13	1276	G	O5'-P-OP1	-10.45	96.29	105.70
26	1H	141	A	C4-C5-N7	10.46	115.93	110.70
26	14	1998	G	C2-N3-C4	-10.46	106.67	111.90
26	1H	1382	G	O5'-P-OP1	10.45	123.25	110.70
26	14	871	U	O5'-P-OP2	10.45	123.25	110.70
26	1H	776	G	N9-C4-C5	10.45	109.58	105.40
26	1H	1680	U	C5-C4-O4	-10.45	119.63	125.90
26	1H	2764	A	C2-N3-C4	-10.45	105.38	110.60
26	1H	2330	G	C6-C5-N7	-10.45	124.13	130.40
26	14	1951	U	C5-C6-N1	10.45	127.92	122.70
26	1H	330	A	N7-C8-N9	10.45	119.02	113.80
26	1H	2779	U	N1-C2-N3	10.45	121.17	114.90
26	14	2581	G	N1-C2-N3	10.45	130.17	123.90
26	14	37	C	C6-N1-C2	-10.45	116.12	120.30
26	14	1688	U	N1-C2-O2	-10.44	115.49	122.80
26	14	2854	G	C8-N9-C4	-10.44	102.22	106.40
1	13	768	A	N1-C2-N3	10.44	134.52	129.30
1	13	1502	A	O5'-P-OP2	-10.44	96.31	105.70
26	1H	2286	A	O5'-P-OP1	10.44	123.23	110.70
26	1H	1310	G	O5'-P-OP2	10.43	123.22	110.70
26	14	565	C	C6-N1-C2	10.43	124.47	120.30
26	1H	758	C	N3-C4-N4	-10.43	110.70	118.00
26	1H	1993	U	N1-C2-O2	-10.43	115.50	122.80
26	14	1629	U	C2-N3-C4	10.43	133.26	127.00
1	13	1381	U	N3-C2-O2	-10.43	114.90	122.20
26	1H	1760	A	C8-N9-C4	-10.43	101.63	105.80
26	1H	2392	A	C6-C5-N7	-10.43	125.00	132.30
26	14	414	C	N3-C2-O2	-10.43	114.60	121.90
26	14	1688	U	N1-C2-N3	10.43	121.16	114.90
26	1H	1955	U	C2-N3-C4	-10.43	120.74	127.00
26	14	2281	C	C5-C4-N4	-10.43	112.90	120.20
26	14	2333	A	N7-C8-N9	-10.43	108.59	113.80
26	14	2549	G	C5-C6-N1	-10.43	106.29	111.50
26	14	2426	A	N1-C6-N6	10.42	124.85	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	231	G	C5-C6-N1	-10.42	106.29	111.50
26	1H	2265	U	O5'-P-OP1	-10.42	96.32	105.70
1	13	346	G	C5-N7-C8	-10.42	99.09	104.30
1	13	762	C	C6-N1-C2	10.42	124.47	120.30
26	14	1789	A	C6-N1-C2	-10.42	112.35	118.60
26	1H	999	U	C5-C4-O4	10.41	132.15	125.90
26	1H	2491	U	C4-C5-C6	-10.41	113.45	119.70
1	1G	305	G	N1-C6-O6	-10.41	113.65	119.90
26	14	1251	C	OP1-P-OP2	10.41	135.22	119.60
1	1G	219	C	C6-N1-C2	-10.41	116.14	120.30
26	14	1496	A	C6-C5-N7	-10.41	125.01	132.30
26	1H	2083	G	C5-C6-N1	-10.41	106.30	111.50
26	14	1806	C	O5'-P-OP2	-10.41	96.33	105.70
1	13	954	G	N1-C6-O6	10.40	126.14	119.90
26	1H	1249	U	N1-C2-O2	-10.40	115.52	122.80
27	16	71	C	N3-C4-C5	-10.40	117.74	121.90
26	14	793	A	C2-N3-C4	-10.40	105.40	110.60
26	1H	916	G	O5'-P-OP2	10.40	123.18	110.70
26	1H	1840	G	C2-N3-C4	-10.40	106.70	111.90
26	1H	2429	G	OP1-P-OP2	-10.40	104.00	119.60
26	1H	2554	U	C5-C4-O4	-10.40	119.66	125.90
1	1G	284	G	N1-C6-O6	10.40	126.14	119.90
26	14	1780	A	N1-C6-N6	-10.40	112.36	118.60
26	14	2365	G	N3-C4-N9	10.40	132.24	126.00
1	13	1126	U	N3-C2-O2	-10.40	114.92	122.20
1	1G	442	C	C6-N1-C2	-10.40	116.14	120.30
26	14	1977	A	N1-C6-N6	-10.40	112.36	118.60
26	1H	1313	U	C4-C5-C6	10.40	125.94	119.70
26	14	1790	C	C2-N3-C4	-10.40	114.70	119.90
26	1H	2240	C	N3-C2-O2	10.39	129.18	121.90
26	1H	132	G	C2-N3-C4	-10.39	106.70	111.90
26	1H	1324	G	N1-C2-N2	10.39	125.55	116.20
26	1H	1669	A	N7-C8-N9	10.39	119.00	113.80
26	14	116	C	C6-N1-C2	-10.39	116.14	120.30
26	14	1648	C	N3-C4-C5	-10.39	117.74	121.90
26	14	2782	G	N1-C6-O6	10.39	126.13	119.90
26	1H	968	G	C5-C6-O6	10.39	134.83	128.60
26	1H	1553	A	C5-N7-C8	10.39	109.09	103.90
1	1G	519	C	C6-N1-C2	10.39	124.46	120.30
26	1H	1926	U	O5'-P-OP2	-10.39	96.35	105.70
26	1H	74	A	C5-C6-N1	-10.38	112.51	117.70
1	13	529	G	N1-C6-O6	10.38	126.13	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	576	U	C5-C6-N1	-10.38	117.51	122.70
26	14	71	A	C2-N3-C4	-10.38	105.41	110.60
26	14	2713	A	C5-N7-C8	-10.38	98.71	103.90
26	14	225	A	C8-N9-C4	10.37	109.95	105.80
26	1H	131	G	C5-C6-O6	-10.37	122.38	128.60
26	1H	1622	G	N1-C2-N3	10.37	130.12	123.90
26	14	89	G	C8-N9-C4	10.37	110.55	106.40
26	14	1853	A	O5'-P-OP1	-10.37	96.37	105.70
26	1H	386	G	C6-C5-N7	-10.37	124.18	130.40
26	1H	1128	A	C8-N9-C4	-10.37	101.65	105.80
26	1H	2572	A	O5'-P-OP1	10.37	123.14	110.70
26	14	1277	G	N7-C8-N9	-10.37	107.92	113.10
26	14	829	A	O5'-P-OP1	-10.36	96.37	105.70
26	14	1592	C	N3-C4-C5	-10.36	117.75	121.90
26	14	974(A)	C	C5-C6-N1	-10.36	115.82	121.00
26	14	2249	U	C6-N1-C2	-10.36	114.78	121.00
26	1H	1301	A	C5-C6-N1	-10.36	112.52	117.70
26	1H	1950	G	O4'-C1'-N9	10.36	116.49	108.20
26	14	492	A	O5'-P-OP2	-10.36	96.38	105.70
1	13	1400	C	N3-C4-N4	10.36	125.25	118.00
26	1H	938	G	C8-N9-C4	10.36	110.54	106.40
1	13	553	A	N7-C8-N9	10.36	118.98	113.80
1	13	1516	G	N1-C6-O6	-10.36	113.69	119.90
26	1H	1279	G	N1-C6-O6	-10.36	113.69	119.90
26	14	191	A	N1-C6-N6	10.36	124.81	118.60
26	14	1294	U	N1-C2-O2	-10.36	115.55	122.80
1	13	1327	C	C5-C6-N1	-10.35	115.82	121.00
26	1H	1203	G	N3-C2-N2	10.35	127.15	119.90
26	14	2426	A	N7-C8-N9	10.35	118.98	113.80
26	14	324	A	C5-C6-N6	10.35	131.98	123.70
26	14	1200	C	N3-C4-C5	-10.35	117.76	121.90
26	14	2430	A	N3-C4-C5	10.35	134.04	126.80
26	1H	2593	U	C5-C6-N1	10.35	127.87	122.70
1	1G	690	G	N3-C4-N9	-10.35	119.79	126.00
26	14	1306	C	O5'-P-OP1	-10.35	96.39	105.70
26	1H	1003	G	C5-C6-N1	-10.34	106.33	111.50
26	14	768	G	O5'-P-OP2	-10.34	96.39	105.70
26	14	2332	U	C5-C6-N1	-10.34	117.53	122.70
1	13	31	G	C5-C6-O6	-10.34	122.40	128.60
26	1H	1254	A	N1-C6-N6	10.34	124.80	118.60
1	13	1482	G	O5'-P-OP2	-10.34	96.39	105.70
27	16	32	C	C5-C4-N4	10.34	127.44	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	563	G	C4-C5-N7	10.34	114.94	110.80
26	14	2326	C	N3-C4-C5	-10.34	117.76	121.90
26	14	397	G	N1-C6-O6	10.34	126.10	119.90
26	14	2581	G	C4-C5-C6	10.34	125.00	118.80
26	14	828	U	C4-C5-C6	10.33	125.90	119.70
26	14	2377	A	C2-N3-C4	-10.33	105.44	110.60
26	1H	1257	C	C4-C5-C6	10.33	122.56	117.40
26	1H	2247	A	C5-C6-N6	10.33	131.96	123.70
26	1H	1224	G	C4-C5-C6	-10.32	112.61	118.80
26	1H	1829	A	N9-C4-C5	10.32	109.93	105.80
26	1H	2476	A	N3-C4-C5	-10.32	119.57	126.80
26	14	2766	G	C4-C5-N7	10.32	114.93	110.80
26	1H	593	G	C2-N3-C4	-10.32	106.74	111.90
26	14	2593	U	C4-C5-C6	10.32	125.89	119.70
26	14	1787	A	OP1-P-OP2	-10.32	104.12	119.60
26	1H	1314	C	N1-C2-O2	10.32	125.09	118.90
26	14	747	U	N1-C2-N3	-10.32	108.71	114.90
26	1H	796	C	C2-N1-C1'	-10.31	107.45	118.80
26	1H	1184	G	N3-C2-N2	-10.31	112.68	119.90
26	1H	146	G	C4-C5-N7	10.31	114.92	110.80
1	1G	1512	U	O5'-P-OP2	-10.31	96.42	105.70
26	14	1357	U	C4-C5-C6	10.31	125.89	119.70
26	14	2779	U	C5-C4-O4	-10.31	119.71	125.90
26	1H	773	U	C4-C5-C6	10.31	125.89	119.70
26	14	2078	C	O5'-P-OP2	10.31	123.07	110.70
26	14	786	C	C4-C5-C6	10.31	122.55	117.40
26	14	1409	C	O5'-P-OP2	-10.31	96.42	105.70
26	14	2741	A	C8-N9-C4	10.30	109.92	105.80
1	13	398	C	N1-C2-O2	10.30	125.08	118.90
26	1H	2428	G	C5-C6-O6	10.30	134.78	128.60
26	1H	1969	A	O5'-P-OP1	-10.30	96.43	105.70
1	13	582	U	C5-C6-N1	-10.30	117.55	122.70
26	1H	770	G	C2-N3-C4	-10.30	106.75	111.90
27	16	33	G	N9-C4-C5	-10.30	101.28	105.40
1	1G	332	G	C8-N9-C4	10.30	110.52	106.40
1	1G	232	G	C6-C5-N7	-10.30	124.22	130.40
26	14	922	U	O5'-P-OP1	-10.30	96.43	105.70
26	1H	676	A	C8-N9-C4	-10.30	101.68	105.80
26	1H	747	U	O5'-P-OP1	-10.30	96.43	105.70
26	1H	805	G	C8-N9-C4	10.30	110.52	106.40
26	1H	832	G	O5'-P-OP2	-10.29	96.44	105.70
1	1G	1474	G	C5-C6-N1	-10.29	106.35	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1334	G	N3-C2-N2	-10.29	112.69	119.90
26	1H	501	A	N1-C6-N6	-10.29	112.42	118.60
26	1H	503	A	C8-N9-C4	10.29	109.92	105.80
26	1H	1238	G	N1-C6-O6	-10.29	113.72	119.90
26	1H	1931	U	C4-C5-C6	10.29	125.88	119.70
26	1H	2329	G	N7-C8-N9	-10.29	107.95	113.10
26	14	1953	A	O5'-P-OP2	10.29	123.05	110.70
1	13	1338	G	N1-C6-O6	-10.29	113.73	119.90
26	1H	777	A	N1-C2-N3	10.29	134.44	129.30
26	14	1355	G	C8-N9-C4	-10.28	102.29	106.40
1	1G	326	G	C5-C6-N1	-10.28	106.36	111.50
26	14	179	G	C5-C6-O6	-10.28	122.43	128.60
1	1G	816	A	C8-N9-C4	-10.28	101.69	105.80
1	13	890	G	N1-C6-O6	-10.28	113.73	119.90
1	13	1485	U	C5-C4-O4	10.28	132.07	125.90
1	13	1486	G	N3-C4-C5	10.28	133.74	128.60
26	14	2352	A	N1-C2-N3	10.27	134.44	129.30
26	14	2394	C	C6-N1-C2	10.27	124.41	120.30
26	1H	306	U	N1-C2-N3	10.27	121.06	114.90
26	1H	528	A	N3-C4-C5	10.27	133.99	126.80
26	1H	973	A	C2-N3-C4	-10.27	105.47	110.60
26	14	913	U	O5'-P-OP2	-10.27	96.46	105.70
26	14	1935	G	O5'-P-OP1	10.27	123.02	110.70
26	14	1945	G	N1-C6-O6	-10.27	113.74	119.90
26	1H	2584	U	C4-C5-C6	10.26	125.86	119.70
1	13	1462	G	O5'-P-OP2	-10.26	96.47	105.70
26	1H	763	G	C2-N3-C4	-10.26	106.77	111.90
26	1H	514	A	C6-N1-C2	-10.26	112.45	118.60
26	1H	735	A	C2-N3-C4	-10.26	105.47	110.60
26	1H	915	C	C2-N3-C4	10.26	125.03	119.90
1	1G	1060	C	C6-N1-C2	-10.26	116.20	120.30
1	13	893	C	N1-C2-O2	10.26	125.05	118.90
26	14	843	G	N1-C6-O6	10.26	126.05	119.90
26	1H	955	C	C4-C5-C6	10.25	122.53	117.40
26	1H	1630	G	C5-C6-N1	10.25	116.63	111.50
26	1H	2392	A	C4-C5-N7	10.25	115.83	110.70
26	1H	2674	G	N1-C2-N3	10.25	130.05	123.90
26	1H	691	C	C5-C4-N4	-10.25	113.03	120.20
26	1H	2226	C	N3-C4-C5	10.25	126.00	121.90
26	14	1496	A	C4-C5-N7	10.25	115.83	110.70
1	13	555	C	C6-N1-C2	-10.25	116.20	120.30
26	1H	458	G	C4-C5-N7	-10.25	106.70	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2639	A	C5-N7-C8	-10.25	98.78	103.90
26	14	728	G	O5'-P-OP2	-10.25	96.48	105.70
1	13	319	G	N9-C4-C5	-10.24	101.30	105.40
26	1H	26	G	N1-C6-O6	10.24	126.05	119.90
26	1H	859	G	C2-N3-C4	-10.24	106.78	111.90
26	1H	2054	A	N7-C8-N9	10.24	118.92	113.80
26	14	690	G	C5-N7-C8	10.24	109.42	104.30
26	1H	2619	C	O5'-P-OP2	-10.24	96.49	105.70
26	1H	2352	A	O5'-P-OP1	-10.23	96.49	105.70
26	14	462	C	C2-N3-C4	-10.23	114.78	119.90
26	14	2033	A	OP1-P-OP2	10.23	134.95	119.60
26	1H	487	C	O5'-P-OP1	-10.23	96.49	105.70
1	13	267	C	O5'-P-OP1	-10.23	96.49	105.70
26	14	1925	C	C6-N1-C2	-10.23	116.21	120.30
26	1H	710	G	C8-N9-C4	-10.23	102.31	106.40
26	1H	796	C	C5-C6-N1	-10.23	115.89	121.00
26	1H	2441	C	N3-C2-O2	-10.23	114.74	121.90
27	16	101	A	C8-N9-C4	10.23	109.89	105.80
26	1H	2593	U	N3-C4-C5	-10.23	108.46	114.60
1	1G	236	G	C5-C6-N1	-10.23	106.39	111.50
26	14	558	G	C8-N9-C4	10.23	110.49	106.40
26	14	1655	A	N7-C8-N9	-10.22	108.69	113.80
26	14	1694	C	C6-N1-C2	10.22	124.39	120.30
26	14	2440	C	C6-N1-C2	10.22	124.39	120.30
1	13	581	G	C4-C5-N7	10.22	114.89	110.80
26	14	1195	G	N1-C6-O6	-10.22	113.77	119.90
26	14	1616	A	C6-C5-N7	-10.22	125.15	132.30
1	13	945	G	O5'-P-OP2	-10.22	96.50	105.70
26	1H	199	A	C4-C5-C6	-10.22	111.89	117.00
26	1H	613	U	N3-C4-O4	-10.22	112.25	119.40
26	1H	1765	C	C5-C6-N1	-10.22	115.89	121.00
1	1G	108	G	C5-C6-O6	-10.22	122.47	128.60
26	14	179	G	C8-N9-C4	10.22	110.49	106.40
26	1H	2311	A	C8-N9-C4	-10.22	101.71	105.80
1	13	1404	C	N3-C4-N4	-10.21	110.85	118.00
26	1H	2040	C	O5'-P-OP1	-10.21	96.51	105.70
26	1H	627	A	C8-N9-C4	10.21	109.88	105.80
1	1G	311	C	N3-C4-N4	10.21	125.14	118.00
1	13	909	A	C8-N9-C4	10.20	109.88	105.80
26	1H	2722	G	C5-C6-N1	10.20	116.60	111.50
27	16	33	G	C8-N9-C4	10.20	110.48	106.40
26	14	464	U	N1-C2-N3	10.20	121.02	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1309	G	N3-C2-N2	-10.20	112.76	119.90
26	14	308	G	N1-C6-O6	10.20	126.02	119.90
26	14	400	G	C6-C5-N7	-10.20	124.28	130.40
26	14	2229	C	N1-C2-O2	-10.20	112.78	118.90
1	13	394	G	C5-C6-N1	-10.20	106.40	111.50
26	1H	788	A	C5-C6-N1	-10.20	112.60	117.70
1	1G	585	G	N1-C6-O6	-10.20	113.78	119.90
26	14	2728	U	N1-C2-O2	-10.20	115.66	122.80
26	1H	684	G	OP2-P-O3'	10.19	127.62	105.20
26	1H	1339	G	O5'-P-OP2	10.19	122.93	110.70
27	16	115	G	N9-C4-C5	-10.19	101.32	105.40
26	14	74	A	N7-C8-N9	10.19	118.90	113.80
26	14	1278	A	N1-C6-N6	-10.19	112.49	118.60
1	13	405	U	C5-C6-N1	10.19	127.80	122.70
1	13	884	U	O5'-P-OP2	-10.19	96.53	105.70
26	1H	625	G	C5-C6-N1	10.19	116.59	111.50
26	1H	1802	A	C6-N1-C2	-10.19	112.49	118.60
26	1H	212	G	N7-C8-N9	-10.19	108.01	113.10
26	14	704	G	N3-C4-C5	10.19	133.69	128.60
26	1H	871	U	N3-C4-C5	-10.19	108.49	114.60
26	1H	377	C	C6-N1-C2	10.18	124.37	120.30
26	1H	1280	G	OP1-P-OP2	-10.18	104.33	119.60
26	1H	1158	C	N3-C2-O2	-10.18	114.78	121.90
26	1H	1843	C	C5-C6-N1	-10.18	115.91	121.00
26	1H	1936	A	C5-C6-N6	-10.18	115.56	123.70
26	14	527	C	C6-N1-C1'	-10.18	108.58	120.80
26	14	2249	U	C5-C6-N1	10.18	127.79	122.70
1	13	581	G	C2-N3-C4	-10.18	106.81	111.90
26	14	1602	U	C5-C6-N1	-10.17	117.61	122.70
26	1H	514	A	C5-C6-N1	10.17	122.78	117.70
1	1G	733	A	N1-C6-N6	10.17	124.70	118.60
26	14	909	A	C5-C6-N1	10.17	122.78	117.70
26	1H	919	G	N1-C2-N3	10.17	130.00	123.90
1	1G	921	U	O5'-P-OP1	10.17	122.90	110.70
26	14	2586	C	N3-C4-N4	10.17	125.12	118.00
26	14	1602	U	N3-C4-C5	-10.17	108.50	114.60
26	1H	1516	U	N3-C4-O4	-10.16	112.28	119.40
1	1G	909	A	C8-N9-C4	10.16	109.87	105.80
26	14	946	G	C2-N3-C4	-10.16	106.82	111.90
27	1J	98	G	N1-C6-O6	10.16	126.00	119.90
26	1H	625	G	N3-C4-C5	-10.16	123.52	128.60
26	14	1955	U	C4-C5-C6	10.16	125.80	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	425	G	C5-C6-N1	10.16	116.58	111.50
26	14	1373	A	N7-C8-N9	-10.16	108.72	113.80
26	1H	466	A	N1-C6-N6	10.16	124.69	118.60
1	1G	1242	C	C6-N1-C2	10.16	124.36	120.30
26	14	2604	U	O5'-P-OP1	-10.16	96.56	105.70
1	13	1356	G	C8-N9-C4	-10.15	102.34	106.40
26	1H	860	U	C5-C6-N1	-10.15	117.62	122.70
26	1H	2264	C	C5-C6-N1	10.15	126.08	121.00
26	14	2265	U	C5-C6-N1	10.15	127.78	122.70
26	14	2448	A	N1-C6-N6	-10.15	112.51	118.60
26	14	2736	G	C5-C6-N1	-10.15	106.42	111.50
1	13	1407	C	N3-C4-C5	10.15	125.96	121.90
26	1H	663	G	C6-C5-N7	-10.15	124.31	130.40
26	14	2775	A	O5'-P-OP1	-10.15	96.56	105.70
1	13	966	G	C8-N9-C4	10.15	110.46	106.40
26	1H	744	G	C8-N9-C4	-10.15	102.34	106.40
26	1H	1376	C	N3-C4-N4	10.15	125.10	118.00
26	1H	2324	C	C6-N1-C2	10.15	124.36	120.30
26	1H	2690	C	C6-N1-C2	-10.15	116.24	120.30
27	16	81	G	C8-N9-C4	-10.15	102.34	106.40
26	14	530	G	N3-C2-N2	10.14	127.00	119.90
26	14	1559	G	C2-N3-C4	-10.14	106.83	111.90
26	14	1930	G	C5-N7-C8	10.14	109.37	104.30
26	1H	801	G	O5'-P-OP2	-10.14	96.57	105.70
24	3K	76	A	C5-C6-N1	-10.14	112.63	117.70
26	1H	2871	C	N3-C4-N4	-10.14	110.90	118.00
27	16	74	U	N3-C4-O4	-10.14	112.30	119.40
26	14	998	C	N1-C2-O2	10.14	124.98	118.90
26	14	2337	G	N7-C8-N9	10.14	118.17	113.10
26	1H	760	G	N3-C2-N2	-10.14	112.80	119.90
26	1H	2436	G	C4-C5-N7	-10.14	106.75	110.80
1	1G	304	U	N3-C4-C5	-10.14	108.52	114.60
27	1J	113	C	C6-N1-C2	10.14	124.36	120.30
26	1H	862	G	C5-C6-O6	10.13	134.68	128.60
26	14	827	U	N1-C2-O2	-10.13	115.71	122.80
26	1H	1595	G	O5'-P-OP2	10.13	122.86	110.70
26	14	2072	G	O5'-P-OP2	10.13	122.86	110.70
26	1H	372	G	N1-C6-O6	-10.13	113.82	119.90
26	14	84	A	C8-N9-C4	10.13	109.85	105.80
26	1H	148	C	C5-C6-N1	-10.13	115.94	121.00
26	14	741	G	N3-C2-N2	-10.13	112.81	119.90
26	1H	1349	A	O5'-P-OP1	-10.13	96.59	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2871	C	C5-C4-N4	10.13	127.29	120.20
1	13	581	G	C6-C5-N7	-10.13	124.33	130.40
26	1H	386	G	C5-N7-C8	-10.12	99.24	104.30
1	13	789	U	C6-N1-C2	-10.12	114.93	121.00
26	1H	528	A	C5-N7-C8	-10.12	98.84	103.90
26	14	203	C	N1-C2-O2	-10.12	112.83	118.90
26	14	2255	G	N1-C6-O6	-10.12	113.83	119.90
1	13	1518	A	C5-C6-N1	-10.12	112.64	117.70
1	13	1522	U	C5-C6-N1	-10.12	117.64	122.70
26	1H	28	A	C5-C6-N6	-10.12	115.61	123.70
26	1H	528	A	C2-N3-C4	-10.12	105.54	110.60
26	14	1892	C	C6-N1-C2	-10.12	116.25	120.30
26	1H	1204	A	C2-N3-C4	-10.11	105.54	110.60
26	1H	1818	U	OP1-P-OP2	10.11	134.77	119.60
26	1H	381	G	C8-N9-C4	10.11	110.44	106.40
26	1H	1274	A	N7-C8-N9	10.11	118.86	113.80
26	1H	1290	C	C6-N1-C2	10.11	124.34	120.30
26	1H	67	U	O5'-P-OP2	10.10	122.82	110.70
26	14	1965	C	O5'-P-OP1	-10.10	96.61	105.70
26	1H	345	A	O5'-P-OP2	-10.10	96.61	105.70
26	1H	2700	C	C2-N3-C4	-10.10	114.85	119.90
26	1H	259	G	C5-C6-N1	-10.10	106.45	111.50
26	1H	730	C	OP1-P-OP2	-10.10	104.45	119.60
26	1H	743	G	OP1-P-OP2	10.10	134.75	119.60
26	14	1761	C	N1-C2-O2	-10.10	112.84	118.90
26	1H	866	A	N9-C4-C5	-10.10	101.76	105.80
26	14	2882	A	C8-N9-C4	10.10	109.84	105.80
26	1H	2561	A	C5-C6-N6	10.09	131.78	123.70
26	1H	409	C	C4-C5-C6	-10.09	112.35	117.40
26	1H	481	G	N1-C6-O6	10.09	125.95	119.90
26	1H	2070	G	N9-C4-C5	-10.09	101.36	105.40
26	1H	263	C	N1-C2-O2	10.09	124.95	118.90
26	1H	222	A	C8-N9-C4	10.09	109.83	105.80
26	1H	1167	U	N3-C2-O2	10.09	129.26	122.20
26	1H	2033	A	N1-C6-N6	-10.09	112.55	118.60
1	13	1355	G	N7-C8-N9	10.09	118.14	113.10
26	1H	1167	U	N1-C2-O2	-10.08	115.74	122.80
26	14	678	C	C6-N1-C2	10.08	124.33	120.30
26	14	2688	U	N3-C4-O4	-10.08	112.34	119.40
26	1H	1950	G	N3-C2-N2	10.08	126.96	119.90
26	1H	2439	A	OP1-P-O3'	10.08	127.37	105.20
1	13	975	A	O5'-P-OP1	-10.08	96.63	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	872	A	O5'-P-OP1	-10.08	96.63	105.70
26	14	543	C	N1-C2-O2	10.08	124.95	118.90
26	14	1966	A	N1-C2-N3	10.07	134.34	129.30
26	14	2818	G	C4-C5-N7	10.07	114.83	110.80
26	1H	1759	A	O5'-P-OP1	-10.07	96.63	105.70
26	1H	584	C	N3-C2-O2	10.07	128.95	121.90
26	1H	2019	A	C5-C6-N6	-10.07	115.64	123.70
26	14	1594	G	C8-N9-C4	-10.07	102.37	106.40
26	1H	716	A	O5'-P-OP1	-10.07	96.64	105.70
26	1H	1677	A	C5-C6-N1	-10.07	112.67	117.70
26	1H	2556	C	N3-C4-C5	10.07	125.93	121.90
1	13	905	U	N3-C4-O4	-10.06	112.35	119.40
26	1H	842	G	N3-C4-N9	-10.06	119.96	126.00
1	1G	1523	G	C5-C6-N1	-10.06	106.47	111.50
26	1H	127	A	C4-C5-N7	10.06	115.73	110.70
26	1H	476	G	N3-C2-N2	-10.06	112.86	119.90
26	1H	2822	G	N9-C4-C5	-10.06	101.38	105.40
26	14	673	C	N1-C2-O2	10.06	124.93	118.90
26	1H	831	G	N7-C8-N9	-10.06	108.07	113.10
26	14	70	G	N1-C6-O6	-10.05	113.87	119.90
26	14	1653	G	N3-C4-C5	-10.05	123.57	128.60
26	1H	2246	G	N3-C4-C5	-10.05	123.57	128.60
26	1H	463	G	C4-C5-N7	10.05	114.82	110.80
26	1H	1900	A	C2-N3-C4	10.05	115.63	110.60
26	14	500	G	C5-C6-N1	-10.05	106.47	111.50
26	14	863	A	C2-N3-C4	10.05	115.62	110.60
26	14	1266	G	N9-C4-C5	-10.05	101.38	105.40
1	13	527	G	C5-C6-O6	10.04	134.63	128.60
26	1H	633	A	N1-C6-N6	10.04	124.63	118.60
26	1H	2561	A	N9-C4-C5	10.04	109.82	105.80
1	1G	1471	G	O5'-P-OP2	-10.04	96.66	105.70
1	13	326	G	C4-C5-N7	-10.04	106.78	110.80
1	13	1504	G	O5'-P-OP1	-10.04	96.66	105.70
26	1H	620	G	O5'-P-OP2	-10.04	96.66	105.70
26	1H	623	G	O5'-P-OP1	10.04	122.75	110.70
26	1H	1253	A	C2-N3-C4	10.04	115.62	110.60
26	1H	1316	U	N3-C2-O2	-10.04	115.17	122.20
26	1H	2346	A	C5-C6-N1	-10.04	112.68	117.70
26	14	795	C	O5'-P-OP2	-10.04	96.66	105.70
26	14	1692	U	N3-C4-O4	-10.04	112.37	119.40
26	1H	128	C	C2-N3-C4	-10.04	114.88	119.90
26	1H	1390	U	C5-C4-O4	10.04	131.92	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1678	G	N1-C6-O6	10.04	125.92	119.90
26	1H	1779	U	C5-C6-N1	-10.04	117.68	122.70
26	1H	2374	C	N3-C4-C5	10.04	125.92	121.90
26	1H	2525	G	O5'-P-OP2	-10.04	96.67	105.70
26	14	676	A	O4'-C1'-N9	10.04	116.23	108.20
26	14	600	G	N1-C6-O6	10.04	125.92	119.90
26	14	2509	G	O5'-P-OP1	-10.03	96.67	105.70
26	1H	2432	A	C2-N3-C4	-10.03	105.58	110.60
26	1H	2555	U	O5'-P-OP1	-10.03	96.67	105.70
26	1H	2609	U	C4-C5-C6	10.03	125.72	119.70
26	14	2525	G	C5-C6-N1	-10.03	106.48	111.50
26	1H	127	A	C8-N9-C4	10.03	109.81	105.80
26	1H	472	A	C6-N1-C2	-10.03	112.58	118.60
26	1H	690	G	C4-C5-N7	-10.03	106.79	110.80
26	1H	1653	G	N3-C2-N2	10.03	126.92	119.90
26	1H	2500	U	N3-C4-C5	10.03	120.62	114.60
1	1G	883	C	O5'-P-OP1	-10.03	96.67	105.70
26	14	936	C	C6-N1-C2	10.03	124.31	120.30
26	14	178	G	N7-C8-N9	10.03	118.11	113.10
1	13	1502	A	C8-N9-C4	-10.03	101.79	105.80
26	1H	474	G	N3-C4-N9	-10.03	119.98	126.00
1	13	1279	A	N1-C6-N6	10.02	124.61	118.60
26	1H	328	U	N1-C2-N3	10.02	120.91	114.90
26	1H	404	C	C6-N1-C2	10.02	124.31	120.30
26	1H	827	U	O5'-P-OP2	-10.02	96.68	105.70
26	1H	2640	G	C5-C6-N1	-10.02	106.49	111.50
26	14	1349	A	N1-C6-N6	10.02	124.61	118.60
26	14	512	G	O5'-P-OP1	-10.02	96.68	105.70
26	14	606	U	C5-C4-O4	10.02	131.91	125.90
26	1H	140	A	O4'-C1'-N9	10.02	116.22	108.20
26	1H	217	G	C6-C5-N7	10.02	136.41	130.40
26	1H	57	C	C5-C4-N4	10.02	127.21	120.20
26	1H	679	C	C2-N1-C1'	-10.02	107.78	118.80
26	1H	2552	U	N3-C4-C5	-10.02	108.59	114.60
27	16	81	G	C6-C5-N7	-10.02	124.39	130.40
26	1H	464	U	C4-C5-C6	10.01	125.71	119.70
26	1H	1618	A	C5-N7-C8	-10.01	98.89	103.90
26	14	1977	A	N9-C4-C5	10.01	109.81	105.80
26	14	2224	G	C5-C6-O6	-10.01	122.59	128.60
26	1H	51	G	C8-N9-C4	10.01	110.40	106.40
26	1H	1128	A	C5-C6-N6	-10.01	115.70	123.70
26	1H	1203	G	N3-C4-C5	-10.01	123.60	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2644	G	N3-C4-N9	-10.01	120.00	126.00
26	14	691	C	C4-C5-C6	10.01	122.40	117.40
1	13	221	C	C6-N1-C2	-10.00	116.30	120.30
26	1H	1449(A)	G	C5-C6-O6	10.00	134.60	128.60
26	1H	2645	G	C2-N3-C4	-10.00	106.90	111.90
26	14	327	G	C5-C6-N1	-10.00	106.50	111.50
26	14	194	G	OP1-P-OP2	-10.00	104.60	119.60
26	14	1332	G	N1-C6-O6	10.00	125.90	119.90
26	14	265	A	C4-C5-N7	10.00	115.70	110.70
1	13	346	G	C4-C5-N7	10.00	114.80	110.80
26	1H	2699	C	N3-C4-C5	10.00	125.90	121.90
26	1H	2246	G	C4-C5-N7	-10.00	106.80	110.80
26	14	571	A	C6-C5-N7	-9.99	125.30	132.30
1	13	690	G	C4-C5-C6	9.99	124.80	118.80
26	14	2510	C	C4-C5-C6	9.99	122.40	117.40
1	13	1429	C	C5-C6-N1	-9.99	116.00	121.00
23	2K	6	G	N9-C4-C5	-9.99	101.40	105.40
26	14	1342	A	C2-N3-C4	-9.99	105.60	110.60
1	13	528	C	C6-N1-C2	9.99	124.30	120.30
26	1H	505	A	C5-C6-N6	-9.99	115.71	123.70
26	14	1340	U	N1-C2-N3	-9.99	108.91	114.90
26	1H	2785	C	C6-N1-C2	-9.99	116.31	120.30
26	1H	501	A	C5-C6-N6	9.99	131.69	123.70
26	1H	2006	C	N1-C2-N3	-9.99	112.21	119.20
26	14	1934	C	N1-C2-O2	9.99	124.89	118.90
26	14	1554	A	N7-C8-N9	9.99	118.79	113.80
26	14	2326	C	C6-N1-C2	-9.99	116.31	120.30
26	1H	1934	C	C6-N1-C2	9.98	124.29	120.30
26	14	2020	A	N1-C6-N6	-9.98	112.61	118.60
1	13	1240	U	N1-C2-N3	-9.98	108.91	114.90
23	2K	69	C	C6-N1-C2	9.98	124.29	120.30
26	14	660	G	C2-N3-C4	-9.98	106.91	111.90
26	14	2358	G	N1-C6-O6	-9.98	113.91	119.90
1	13	27	G	C5-C6-O6	9.98	134.59	128.60
26	1H	138	G	N1-C2-N3	-9.98	117.91	123.90
26	1H	270(Z)	U	N3-C2-O2	-9.98	115.21	122.20
26	14	2253	G	O5'-P-OP2	-9.98	96.72	105.70
26	1H	755	C	C4-C5-C6	9.98	122.39	117.40
26	14	137(A)	G	N1-C6-O6	9.98	125.89	119.90
26	1H	383	U	C5-C6-N1	-9.98	117.71	122.70
26	1H	1815	A	C2-N3-C4	-9.98	105.61	110.60
26	14	786	C	C5-C4-N4	9.98	127.19	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2828	C	O5'-P-OP2	-9.98	96.72	105.70
26	14	2779	U	C6-N1-C1'	-9.98	107.23	121.20
1	13	690	G	C5-C6-N1	-9.97	106.51	111.50
26	1H	1211	U	N1-C2-N3	-9.97	108.92	114.90
26	1H	1647	G	C5-C6-O6	9.97	134.58	128.60
26	14	27	G	O5'-P-OP2	-9.97	96.72	105.70
26	14	808	G	C5-C6-O6	9.97	134.59	128.60
26	1H	59	U	N3-C4-C5	-9.97	108.62	114.60
26	1H	2063	C	C6-N1-C2	9.97	124.29	120.30
26	1H	2263	C	N3-C4-C5	-9.97	117.91	121.90
26	1H	1189	A	N1-C6-N6	9.96	124.58	118.60
26	14	1359	A	N1-C2-N3	-9.97	124.32	129.30
26	1H	2737	G	N3-C4-C5	9.96	133.58	128.60
27	16	98	G	OP1-P-OP2	9.96	134.55	119.60
26	14	2084	C	C5-C4-N4	-9.96	113.22	120.20
26	1H	1640	C	N3-C4-C5	9.96	125.89	121.90
26	14	2286	A	N1-C6-N6	9.96	124.58	118.60
26	14	1404	C	N1-C2-O2	9.96	124.88	118.90
26	1H	1210	A	C8-N9-C4	-9.96	101.82	105.80
26	1H	1286	A	N1-C2-N3	9.96	134.28	129.30
26	1H	1965	C	C4-C5-C6	-9.96	112.42	117.40
27	16	109	G	C8-N9-C4	-9.96	102.42	106.40
1	1G	337	C	C5-C6-N1	9.96	125.98	121.00
26	1H	1400	G	O5'-P-OP1	9.96	122.65	110.70
26	1H	2329	G	OP1-P-OP2	9.95	134.53	119.60
26	14	2079	U	C4-C5-C6	9.95	125.67	119.70
26	1H	2373	G	C4-C5-C6	9.95	124.77	118.80
26	14	756	C	N3-C4-N4	9.95	124.97	118.00
26	14	1397	U	C5-C4-O4	9.95	131.87	125.90
26	14	2570	G	C2-N3-C4	-9.95	106.92	111.90
26	14	2688	U	C5-C4-O4	9.95	131.87	125.90
1	13	1361	G	C5-C6-N1	9.95	116.47	111.50
26	1H	625	G	C2-N3-C4	9.95	116.88	111.90
26	1H	936	C	N3-C4-C5	9.95	125.88	121.90
26	1H	2665	A	C2-N3-C4	-9.95	105.63	110.60
1	1G	114	U	O5'-P-OP2	-9.95	96.75	105.70
26	14	1681	G	C5-C6-N1	-9.95	106.53	111.50
26	1H	1379	A	N1-C6-N6	9.95	124.57	118.60
26	1H	1691	C	C6-N1-C2	-9.95	116.32	120.30
23	2K	11	A	N1-C6-N6	-9.95	112.63	118.60
26	1H	770	G	N3-C4-C5	9.95	133.57	128.60
26	14	1379	A	C6-C5-N7	-9.95	125.34	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	998	C	C6-N1-C2	-9.94	116.32	120.30
26	1H	1950	G	C4-N9-C1'	9.94	139.43	126.50
26	14	1004	C	C2-N3-C4	9.94	124.87	119.90
1	13	1446	A	O5'-P-OP1	9.94	122.63	110.70
26	1H	1446	C	C5-C6-N1	9.94	125.97	121.00
26	14	1302	A	C5-C6-N6	9.94	131.66	123.70
26	1H	829	A	C8-N9-C4	9.94	109.78	105.80
26	1H	1015	G	O5'-P-OP1	9.94	122.63	110.70
27	16	111	U	C5-C4-O4	9.94	131.86	125.90
26	14	115	C	C5-C6-N1	-9.94	116.03	121.00
26	14	678	C	C2-N3-C4	-9.94	114.93	119.90
26	1H	205	G	N9-C4-C5	-9.94	101.42	105.40
26	1H	663	G	N1-C2-N3	9.94	129.86	123.90
26	1H	871	U	N1-C2-O2	-9.94	115.84	122.80
26	14	2092	U	C4-C5-C6	9.94	125.66	119.70
26	1H	1264	G	C5-C6-O6	9.93	134.56	128.60
26	1H	1941	C	O5'-P-OP1	-9.93	96.76	105.70
26	14	879	G	N3-C4-C5	-9.93	123.63	128.60
26	1H	2721	A	C2-N3-C4	-9.93	105.63	110.60
1	13	333	G	N1-C2-N3	9.93	129.86	123.90
26	1H	72	U	C2-N3-C4	-9.93	121.04	127.00
26	1H	2232	U	C5-C4-O4	9.93	131.86	125.90
24	3K	29	U	N3-C2-O2	-9.93	115.25	122.20
26	1H	109	G	N1-C2-N3	9.93	129.86	123.90
27	16	102	G	C5-C6-O6	9.93	134.56	128.60
26	14	579	G	N3-C2-N2	-9.93	112.95	119.90
26	14	632	A	N1-C6-N6	9.93	124.56	118.60
27	1J	40	U	N1-C2-O2	-9.93	115.85	122.80
26	1H	270(R)	G	C5-C6-N1	-9.93	106.54	111.50
1	13	741	G	OP1-P-OP2	9.93	134.49	119.60
26	1H	2271	G	C6-C5-N7	-9.93	124.44	130.40
26	14	932	G	C5-C6-O6	9.93	134.56	128.60
26	14	1001	A	N9-C4-C5	9.93	109.77	105.80
26	1H	2447	G	C2-N3-C4	9.92	116.86	111.90
1	13	523	A	N9-C4-C5	-9.92	101.83	105.80
26	14	2755	C	C2-N1-C1'	9.92	129.71	118.80
26	1H	1752	C	N3-C2-O2	9.92	128.84	121.90
26	1H	2698	U	OP1-P-OP2	9.92	134.48	119.60
26	14	2578	G	N1-C6-O6	9.92	125.85	119.90
1	13	305	G	C8-N9-C4	9.92	110.37	106.40
26	1H	1311	G	C2-N3-C4	-9.92	106.94	111.90
26	1H	1554	A	C4-C5-C6	9.92	121.96	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2276	G	C4-C5-N7	-9.92	106.83	110.80
26	1H	1363	C	N3-C4-N4	-9.92	111.06	118.00
26	1H	2458	G	C5-C6-O6	-9.92	122.65	128.60
26	14	1311	G	C5-C6-O6	9.92	134.55	128.60
26	14	1323	U	N1-C2-O2	-9.92	115.86	122.80
1	13	690	G	N1-C2-N3	9.91	129.85	123.90
26	1H	1262	A	O5'-P-OP2	-9.91	96.78	105.70
57	3L	34	U	N1-C2-O2	9.91	129.74	122.80
26	1H	1311	G	N1-C6-O6	9.91	125.85	119.90
26	14	2021	C	C6-N1-C2	-9.91	116.33	120.30
26	14	2321	G	C8-N9-C4	-9.91	102.43	106.40
26	1H	475	U	N3-C4-O4	9.91	126.34	119.40
26	1H	1765	C	N3-C2-O2	-9.91	114.96	121.90
26	14	1682	G	C5-C6-N1	-9.91	106.54	111.50
26	1H	2497	A	C6-N1-C2	-9.91	112.65	118.60
26	1H	2590	A	C2-N3-C4	-9.91	105.64	110.60
26	1H	826	U	N1-C2-O2	-9.91	115.86	122.80
26	14	985	C	N1-C2-O2	9.91	124.84	118.90
1	13	728	A	C8-N9-C4	-9.91	101.84	105.80
26	1H	2009	G	C5-C6-O6	-9.91	122.66	128.60
26	1H	2364	C	O5'-P-OP1	9.91	122.59	110.70
31	31	64	ILE	CG1-CB-CG2	-9.91	89.61	111.40
57	3L	44	U	C5-C6-N1	9.91	127.65	122.70
26	14	1342	A	OP1-P-OP2	-9.91	104.74	119.60
26	1H	508	G	O5'-P-OP1	-9.90	96.79	105.70
26	1H	508	G	C4-C5-N7	9.90	114.76	110.80
23	2K	58	A	O5'-P-OP2	9.90	122.58	110.70
26	1H	963	U	O5'-P-OP2	9.90	122.58	110.70
26	1H	1279	G	C5-C6-O6	9.90	134.54	128.60
26	1H	1982	C	O5'-P-OP1	-9.90	96.79	105.70
26	1H	391	G	C6-C5-N7	-9.90	124.46	130.40
26	1H	1264	G	O5'-P-OP1	-9.90	96.79	105.70
25	4L	16	A	C8-N9-C4	9.90	109.76	105.80
26	14	1027	A	C8-N9-C4	9.90	109.76	105.80
1	13	880	C	N3-C4-C5	9.89	125.86	121.90
1	13	977	A	C5-C6-N6	9.89	131.62	123.70
26	1H	1993	U	O5'-P-OP1	-9.89	96.80	105.70
1	1G	906	G	C5-C6-O6	-9.89	122.66	128.60
1	1G	972	C	O5'-P-OP2	-9.89	96.80	105.70
26	14	805	G	O5'-P-OP1	-9.89	96.80	105.70
1	1G	721	G	C5-C6-N1	-9.89	106.55	111.50
26	14	1660	C	N3-C4-N4	-9.89	111.08	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	599	G	C5-N7-C8	9.89	109.25	104.30
26	1H	956	G	O5'-P-OP2	-9.89	96.80	105.70
26	1H	84	A	C8-N9-C4	9.89	109.75	105.80
26	1H	870	A	OP1-P-O3'	9.89	126.95	105.20
26	1H	194	G	C8-N9-C4	9.88	110.35	106.40
26	14	793	A	C8-N9-C4	9.88	109.75	105.80
26	14	1382	G	N1-C6-O6	9.88	125.83	119.90
26	14	2394	C	C5-C6-N1	-9.88	116.06	121.00
26	14	1293	C	N3-C4-C5	9.88	125.85	121.90
1	13	581	G	N1-C2-N2	-9.88	107.31	116.20
26	1H	2239	G	C4-C5-N7	9.88	114.75	110.80
26	1H	1914	C	N1-C2-N3	9.88	126.11	119.20
26	1H	2374	C	O5'-P-OP2	-9.88	96.81	105.70
26	14	949	C	N1-C2-O2	-9.88	112.97	118.90
26	14	1767	C	N3-C4-N4	-9.88	111.09	118.00
26	1H	209	C	N3-C4-C5	9.88	125.85	121.90
26	14	1347	G	OP1-P-O3'	9.88	126.93	105.20
26	1H	1325	G	OP1-P-OP2	-9.87	104.79	119.60
26	1H	2297	C	OP1-P-OP2	9.88	134.41	119.60
26	1H	2562	U	C5-C6-N1	-9.87	117.76	122.70
26	14	465	G	C5-C6-O6	9.88	134.53	128.60
1	13	1488	G	N1-C6-O6	-9.87	113.98	119.90
26	1H	508	G	C5-N7-C8	-9.87	99.36	104.30
26	1H	958	U	O5'-P-OP1	-9.87	96.82	105.70
26	1H	1610	A	N9-C4-C5	-9.87	101.85	105.80
26	14	768	G	N1-C6-O6	9.87	125.82	119.90
26	14	2600	A	N1-C6-N6	-9.87	112.68	118.60
1	13	740	U	OP1-P-OP2	9.87	134.40	119.60
26	1H	1204	A	C8-N9-C4	-9.87	101.85	105.80
26	1H	2737	G	C4-C5-N7	9.87	114.75	110.80
1	13	1202	G	C2-N3-C4	-9.87	106.97	111.90
26	1H	1808	U	N3-C4-O4	9.87	126.31	119.40
26	1H	1985	G	N1-C6-O6	-9.87	113.98	119.90
54	P8	39	ARG	NE-CZ-NH1	9.87	125.23	120.30
26	1H	379	G	C5-C6-N1	9.87	116.43	111.50
26	1H	1566	A	O5'-P-OP2	-9.87	96.82	105.70
26	1H	1904	G	N1-C2-N3	-9.87	117.98	123.90
26	1H	1427	A	N1-C2-N3	9.87	134.23	129.30
26	1H	2038	G	N7-C8-N9	-9.86	108.17	113.10
26	14	1973	G	C5-C6-O6	9.87	134.52	128.60
26	14	2081	C	N1-C2-O2	9.87	124.82	118.90
26	14	2769	C	C6-N1-C2	-9.86	116.35	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	892	A	N1-C2-N3	9.86	134.23	129.30
26	1H	344	G	C2-N3-C4	9.86	116.83	111.90
26	1H	2677	G	N7-C8-N9	-9.86	108.17	113.10
26	1H	2028	U	C4-C5-C6	9.86	125.62	119.70
26	14	2495	G	N3-C4-C5	9.86	133.53	128.60
26	1H	952	G	O5'-P-OP2	9.86	122.53	110.70
26	1H	2002	G	N3-C2-N2	-9.86	113.00	119.90
26	1H	508	G	C5-C6-O6	-9.86	122.69	128.60
26	1H	767	U	O5'-P-OP2	-9.86	96.83	105.70
26	14	2048	G	N1-C6-O6	-9.86	113.99	119.90
26	1H	1204	A	C5-C6-N1	-9.85	112.77	117.70
26	1H	1368	G	N3-C2-N2	-9.85	113.00	119.90
26	1H	1904	G	C8-N9-C4	9.85	110.34	106.40
26	1H	2394	C	N3-C4-C5	9.85	125.84	121.90
26	14	669	G	N9-C4-C5	9.85	109.34	105.40
26	14	2386	C	C4-C5-C6	9.85	122.33	117.40
1	13	60	A	O5'-P-OP1	9.85	122.52	110.70
26	1H	74	A	N1-C6-N6	9.85	124.51	118.60
26	1H	1693	U	O5'-P-OP1	-9.85	96.83	105.70
26	1H	739	G	C8-N9-C4	9.85	110.34	106.40
26	1H	1828	G	C2-N3-C4	-9.85	106.98	111.90
26	1H	2713	A	C4-C5-N7	9.85	115.62	110.70
26	1H	397	G	C2-N3-C4	-9.85	106.98	111.90
26	1H	1259	G	C5-C6-O6	9.85	134.51	128.60
26	14	2622	C	C4-C5-C6	9.85	122.32	117.40
1	13	492	G	C8-N9-C4	-9.84	102.46	106.40
26	1H	1052	C	C5-C6-N1	9.84	125.92	121.00
1	1G	858	G	N1-C6-O6	9.84	125.81	119.90
26	14	971	C	N3-C4-C5	-9.84	117.96	121.90
26	1H	2033	A	C5-C6-N1	9.84	122.62	117.70
26	14	974(A)	C	N1-C2-N3	9.84	126.09	119.20
1	13	941	G	N1-C6-O6	-9.84	114.00	119.90
26	1H	1829	A	C4-C5-N7	-9.84	105.78	110.70
26	14	267	C	N1-C2-O2	9.84	124.80	118.90
26	1H	1807	G	N1-C6-O6	9.84	125.80	119.90
26	14	478	A	O5'-P-OP1	-9.84	96.85	105.70
26	1H	1599	C	N3-C4-C5	9.83	125.83	121.90
26	1H	2766	G	C6-C5-N7	-9.83	124.50	130.40
1	1G	413	G	C6-C5-N7	9.83	136.30	130.40
26	14	1135	C	N1-C2-O2	9.83	124.80	118.90
1	13	816	A	N7-C8-N9	9.83	118.72	113.80
26	14	562	U	C4-C5-C6	9.83	125.60	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2612	C	N3-C4-C5	9.83	125.83	121.90
26	14	2700	C	C2-N3-C4	-9.83	114.98	119.90
26	14	83	G	C2-N3-C4	-9.83	106.99	111.90
1	13	781	A	N1-C6-N6	9.82	124.49	118.60
26	1H	23	G	C5-C6-N1	-9.82	106.59	111.50
27	16	29	A	OP1-P-OP2	-9.82	104.86	119.60
26	14	1155	A	C8-N9-C4	-9.82	101.87	105.80
1	13	1517	G	C5-N7-C8	-9.82	99.39	104.30
26	1H	2004	G	C5-N7-C8	-9.82	99.39	104.30
26	1H	2544	G	N1-C6-O6	9.82	125.79	119.90
26	14	2389	G	C8-N9-C4	-9.82	102.47	106.40
1	13	774	G	C2-N3-C4	9.82	116.81	111.90
26	14	1674	G	C8-N9-C4	9.82	110.33	106.40
26	14	2602	A	N1-C6-N6	-9.82	112.71	118.60
26	1H	120	U	C4-C5-C6	9.82	125.59	119.70
1	1G	890	G	C4-C5-N7	-9.82	106.87	110.80
26	14	115	C	C6-N1-C2	9.82	124.23	120.30
26	14	829	A	OP1-P-OP2	9.82	134.32	119.60
26	1H	98	G	OP1-P-OP2	9.81	134.32	119.60
26	1H	196	A	C5-C6-N1	-9.81	112.79	117.70
26	1H	208	C	OP1-P-OP2	9.81	134.32	119.60
26	1H	2609	U	C5-C6-N1	-9.81	117.79	122.70
26	14	2006	C	C6-N1-C2	9.81	124.23	120.30
26	14	774	A	C5-C6-N1	-9.81	112.79	117.70
1	13	956	U	N3-C2-O2	-9.81	115.33	122.20
26	1H	1779	U	C4-C5-C6	9.81	125.59	119.70
26	1H	1553	A	C4-C5-N7	-9.81	105.80	110.70
26	14	488	G	C5-C6-O6	-9.81	122.71	128.60
26	1H	2726	U	C5-C4-O4	9.81	131.78	125.90
26	1H	667	U	N3-C4-O4	9.81	126.27	119.40
26	1H	1914	C	C5-C4-N4	9.81	127.06	120.20
26	1H	2674	G	N1-C2-N2	-9.81	107.37	116.20
27	16	100	G	N7-C8-N9	-9.81	108.20	113.10
1	1G	452	A	C8-N9-C4	9.81	109.72	105.80
26	14	544	C	C5-C6-N1	9.81	125.90	121.00
26	14	2333	A	C5-N7-C8	9.81	108.81	103.90
26	14	988	A	O5'-P-OP1	-9.80	96.88	105.70
26	14	1837	C	O5'-P-OP2	9.80	122.46	110.70
26	14	1559	G	N3-C4-C5	9.80	133.50	128.60
26	1H	1599	C	C6-N1-C2	9.80	124.22	120.30
1	1G	14	U	C5-C6-N1	9.80	127.60	122.70
26	14	2340	G	C8-N9-C4	9.80	110.32	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	66	C	C2-N3-C4	9.80	124.80	119.90
26	1H	2000	G	N1-C6-O6	9.80	125.78	119.90
26	1H	2824	C	C6-N1-C2	9.80	124.22	120.30
26	14	2766	G	C6-C5-N7	-9.80	124.52	130.40
26	1H	728	G	O5'-P-OP2	-9.80	96.88	105.70
26	1H	805	G	N9-C4-C5	-9.79	101.48	105.40
26	1H	929	G	O5'-P-OP1	-9.79	96.89	105.70
26	14	1268	A	N7-C8-N9	-9.79	108.90	113.80
26	1H	423	A	C8-N9-C4	9.79	109.72	105.80
26	1H	950	G	N3-C4-C5	-9.79	123.70	128.60
26	1H	966	G	C4-C5-N7	-9.79	106.88	110.80
26	1H	1284	A	C5-N7-C8	-9.79	99.00	103.90
26	1H	1386	C	N1-C2-O2	-9.79	113.03	118.90
27	16	36	C	C6-N1-C2	9.79	124.22	120.30
1	13	251	G	C5-C6-O6	-9.79	122.73	128.60
1	13	774	G	C5-C6-N1	9.79	116.39	111.50
26	1H	2250	G	C5-C6-O6	9.79	134.47	128.60
26	1H	2436	G	N3-C2-N2	-9.79	113.05	119.90
26	14	187	G	C4-C5-N7	9.79	114.72	110.80
26	14	2490	G	C6-N1-C2	9.79	130.97	125.10
26	1H	2440	C	C2-N3-C4	9.79	124.79	119.90
27	16	11	C	N1-C2-O2	9.79	124.77	118.90
26	1H	696	G	O5'-P-OP2	9.78	122.44	110.70
26	1H	990	A	C2-N3-C4	-9.78	105.71	110.60
26	14	1605	C	C2-N3-C4	-9.78	115.01	119.90
26	14	2512	C	C6-N1-C2	9.78	124.21	120.30
1	13	798	G	C5-C6-N1	-9.78	106.61	111.50
26	1H	203	C	N1-C2-O2	-9.78	113.03	118.90
26	1H	2819	G	N3-C2-N2	-9.78	113.06	119.90
1	13	622	A	N1-C6-N6	-9.78	112.73	118.60
26	1H	842	G	N1-C2-N2	9.78	125.00	116.20
26	1H	1520	U	N3-C2-O2	-9.78	115.36	122.20
26	14	1896	G	O5'-P-OP1	-9.77	96.90	105.70
26	14	2692	C	O5'-P-OP1	-9.77	96.90	105.70
1	13	219	C	C6-N1-C2	-9.77	116.39	120.30
26	1H	1837	C	C4-C5-C6	-9.77	112.52	117.40
26	1H	2280	G	N9-C4-C5	9.77	109.31	105.40
26	1H	1197	G	C4-C5-N7	-9.77	106.89	110.80
26	1H	2570	G	N1-C6-O6	9.77	125.76	119.90
26	14	179	G	N9-C4-C5	-9.77	101.49	105.40
27	16	87	G	N3-C4-C5	9.77	133.48	128.60
26	14	1276	A	C5-N7-C8	-9.77	99.02	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	919	G	C5-C6-O6	9.77	134.46	128.60
26	1H	2575	C	N1-C2-N3	9.77	126.04	119.20
26	14	471	A	C2-N3-C4	-9.77	105.72	110.60
26	14	1244	G	C5-C6-O6	-9.77	122.74	128.60
26	14	1762	A	C5-C6-N1	-9.77	112.82	117.70
26	14	1610	A	N1-C6-N6	9.76	124.46	118.60
1	13	14	U	O5'-P-OP1	-9.76	96.92	105.70
26	1H	639	U	C5-C4-O4	9.76	131.76	125.90
26	1H	1972	A	N1-C6-N6	9.76	124.46	118.60
26	14	18	C	N1-C2-O2	-9.76	113.04	118.90
26	14	2094	G	O5'-P-OP2	-9.76	96.92	105.70
26	14	2247	A	O5'-P-OP1	-9.76	96.92	105.70
23	2K	58	A	OP1-P-OP2	-9.76	104.97	119.60
26	14	130	C	N1-C2-O2	-9.76	113.05	118.90
26	14	856	C	C6-N1-C2	-9.76	116.40	120.30
26	1H	1828	G	N1-C6-O6	9.75	125.75	119.90
26	1H	2032	G	C2-N3-C4	-9.75	107.02	111.90
26	14	2495	G	N1-C6-O6	9.75	125.75	119.90
1	13	1493	A	O5'-P-OP2	9.75	122.40	110.70
26	1H	1786	A	OP1-P-O3'	9.75	126.66	105.20
27	16	115	G	C2-N3-C4	-9.75	107.03	111.90
26	1H	739	G	C5-C6-N1	-9.75	106.62	111.50
26	1H	2369	A	N1-C6-N6	-9.75	112.75	118.60
26	1H	2516	G	O5'-P-OP2	-9.75	96.93	105.70
26	14	685	A	O4'-C1'-N9	9.75	116.00	108.20
26	14	1367	A	C5-N7-C8	-9.75	99.03	103.90
1	13	956	U	N3-C4-C5	-9.75	108.75	114.60
26	1H	830	G	C8-N9-C4	-9.75	102.50	106.40
26	1H	834	C	O5'-P-OP2	-9.75	96.93	105.70
26	14	562	U	C2-N3-C4	-9.75	121.15	127.00
1	1G	905	U	C5-C6-N1	-9.75	117.83	122.70
26	1H	917	A	C5-C6-N1	-9.74	112.83	117.70
26	14	211	A	C5-C6-N6	-9.74	115.91	123.70
26	1H	1296	G	N1-C6-O6	-9.74	114.06	119.90
26	14	1342	A	C6-C5-N7	-9.74	125.48	132.30
26	14	2873	A	C8-N9-C4	-9.74	101.90	105.80
1	13	277	C	O5'-P-OP1	-9.74	96.93	105.70
26	1H	1992	G	N3-C4-C5	-9.74	123.73	128.60
26	1H	2618	G	C5-C6-O6	9.74	134.44	128.60
1	1G	866	C	C6-N1-C2	-9.74	116.40	120.30
1	1G	1462	G	N3-C4-C5	9.74	133.47	128.60
26	14	1961	C	C6-N1-C2	9.74	124.20	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	475	U	N1-C2-O2	-9.74	115.98	122.80
26	1H	802	A	O5'-P-OP2	-9.74	96.94	105.70
26	1H	2267	A	C2-N3-C4	-9.74	105.73	110.60
26	1H	2827	C	N3-C4-N4	9.74	124.82	118.00
1	1G	818	G	C5-C6-N1	-9.74	106.63	111.50
26	1H	1922	G	C8-N9-C4	9.74	110.29	106.40
26	14	855	G	C8-N9-C4	-9.74	102.50	106.40
26	1H	1411	C	O5'-P-OP2	-9.73	96.94	105.70
26	1H	86	C	C5-C6-N1	-9.73	116.13	121.00
26	1H	1942	C	N3-C4-C5	9.73	125.79	121.90
26	14	1940	U	N3-C4-O4	9.73	126.21	119.40
26	14	16	G	C8-N9-C4	-9.73	102.51	106.40
26	14	941	A	N7-C8-N9	9.73	118.66	113.80
26	14	1956	U	O5'-P-OP2	-9.73	96.95	105.70
26	14	2854	G	C5-C6-O6	9.73	134.44	128.60
27	16	89	G	O5'-P-OP1	-9.72	96.95	105.70
26	1H	1969	A	OP1-P-OP2	-9.72	105.02	119.60
23	2K	60	A	N1-C6-N6	-9.72	112.77	118.60
1	13	570	G	C6-C5-N7	-9.72	124.57	130.40
1	13	904	C	N3-C4-C5	9.72	125.79	121.90
23	2K	42	C	O5'-P-OP2	-9.72	96.95	105.70
26	1H	1784	A	O4'-C1'-N9	-9.72	100.42	108.20
26	14	23	G	C8-N9-C4	9.72	110.29	106.40
27	1J	103	U	C5-C6-N1	-9.72	117.84	122.70
1	13	1239	A	C2-N3-C4	-9.72	105.74	110.60
27	16	115	G	C6-C5-N7	-9.72	124.57	130.40
23	2L	19	G	N3-C4-N9	-9.72	120.17	126.00
26	14	983	A	OP1-P-OP2	-9.72	105.02	119.60
26	14	130	C	N3-C4-C5	9.72	125.79	121.90
26	14	2329	G	N1-C2-N2	-9.72	107.46	116.20
1	13	605	U	N1-C2-O2	-9.71	116.00	122.80
26	1H	393	C	C6-N1-C2	9.71	124.19	120.30
26	1H	624	C	N3-C2-O2	9.71	128.70	121.90
26	1H	1559	G	N1-C6-O6	9.71	125.73	119.90
26	1H	2380	C	C6-N1-C2	9.71	124.19	120.30
26	14	621	A	C8-N9-C4	-9.71	101.92	105.80
26	1H	708	C	O5'-P-OP2	-9.71	96.96	105.70
26	1H	2445	G	C8-N9-C4	-9.71	102.52	106.40
26	14	765	G	N7-C8-N9	9.71	117.96	113.10
26	14	1559	G	N1-C6-O6	9.71	125.73	119.90
26	14	1683	C	C6-N1-C2	-9.71	116.42	120.30
26	14	2463	C	C2-N3-C4	-9.71	115.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1255	U	N3-C2-O2	9.71	129.00	122.20
26	14	110	G	N1-C6-O6	9.71	125.72	119.90
26	1H	475	U	N3-C4-C5	-9.71	108.78	114.60
26	1H	609	A	N9-C4-C5	-9.70	101.92	105.80
26	1H	808	G	N1-C2-N3	9.71	129.72	123.90
26	1H	950	G	C4-C5-N7	-9.71	106.92	110.80
26	1H	2451	A	C5-C6-N6	9.71	131.46	123.70
26	14	411	G	O5'-P-OP2	-9.71	96.97	105.70
26	14	1282	U	N1-C2-N3	9.71	120.72	114.90
1	1G	508	C	N3-C4-C5	9.70	125.78	121.90
26	14	1788	C	N3-C2-O2	-9.70	115.11	121.90
26	1H	741	G	C6-N1-C2	-9.70	119.28	125.10
1	13	1429	C	C2-N3-C4	-9.70	115.05	119.90
26	1H	1031	G	N1-C6-O6	-9.70	114.08	119.90
26	1H	1237	A	C2-N3-C4	-9.70	105.75	110.60
26	1H	2697	G	OP1-P-OP2	9.70	134.15	119.60
26	14	74	A	C6-N1-C2	9.70	124.42	118.60
26	14	375	C	O5'-P-OP2	-9.70	96.97	105.70
1	13	766	A	N1-C6-N6	9.70	124.42	118.60
1	13	1019	C	C6-N1-C2	-9.70	116.42	120.30
26	1H	1554	A	N1-C2-N3	9.70	134.15	129.30
26	1H	1672	C	OP1-P-OP2	-9.70	105.05	119.60
26	1H	621	A	N1-C2-N3	9.69	134.15	129.30
26	1H	2841	C	C6-N1-C2	9.69	124.18	120.30
1	1G	558	G	C5-C6-O6	9.69	134.42	128.60
1	1G	1395	C	O5'-P-OP1	-9.70	96.97	105.70
26	14	585	G	C5-N7-C8	-9.70	99.45	104.30
26	14	1351	C	C5-C6-N1	-9.70	116.15	121.00
1	13	904	C	N3-C2-O2	-9.69	115.12	121.90
1	13	1321	C	N3-C4-C5	-9.69	118.02	121.90
26	1H	2767	C	N1-C2-O2	9.69	124.72	118.90
26	14	71	A	N7-C8-N9	9.69	118.65	113.80
26	1H	2688	U	N1-C2-N3	9.69	120.71	114.90
27	16	72	G	OP1-P-OP2	9.69	134.14	119.60
26	14	2827	C	C5-C6-N1	-9.69	116.15	121.00
26	1H	1159	U	C4-C5-C6	9.69	125.51	119.70
26	1H	1349	A	C2-N3-C4	-9.69	105.75	110.60
26	14	2385	C	C6-N1-C2	9.69	124.17	120.30
26	14	2565	A	C5-C6-N1	9.69	122.54	117.70
26	1H	2627	G	N1-C2-N2	-9.68	107.48	116.20
26	14	17	G	C8-N9-C4	-9.68	102.53	106.40
26	14	1999	C	C6-N1-C2	9.68	124.17	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1177	G	C8-N9-C4	9.68	110.27	106.40
26	1H	446	G	C8-N9-C4	9.68	110.27	106.40
26	1H	845	G	C5-N7-C8	-9.68	99.46	104.30
1	1G	111	G	N3-C4-C5	9.68	133.44	128.60
26	1H	2299	G	C5-N7-C8	-9.68	99.46	104.30
27	1J	103	U	O5'-P-OP1	9.68	122.32	110.70
26	1H	1952	A	C6-N1-C2	-9.68	112.79	118.60
26	14	2074	U	O5'-P-OP1	-9.68	96.99	105.70
1	13	1205	U	C6-N1-C2	-9.68	115.19	121.00
26	1H	252	G	O5'-P-OP1	9.68	122.31	110.70
26	1H	1410	G	C8-N9-C4	9.68	110.27	106.40
26	1H	1496	A	C5-C6-N6	-9.68	115.96	123.70
1	1G	232	G	C2-N3-C4	-9.68	107.06	111.90
26	1H	1304	C	C4-C5-C6	-9.67	112.56	117.40
1	1G	402	G	C8-N9-C4	9.67	110.27	106.40
26	14	1641	A	C6-N1-C2	-9.67	112.80	118.60
1	13	580	U	C5-C6-N1	-9.67	117.86	122.70
26	1H	1678	G	N3-C4-N9	-9.67	120.20	126.00
1	13	776	G	N1-C6-O6	9.67	125.70	119.90
1	1G	1196	U	C6-N1-C2	-9.67	115.20	121.00
26	14	499	U	N3-C2-O2	-9.67	115.43	122.20
26	14	664	C	C5-C6-N1	-9.67	116.17	121.00
26	14	1821	A	N1-C6-N6	9.67	124.40	118.60
1	13	906	G	C5-C6-O6	-9.67	122.80	128.60
26	1H	638	G	O5'-P-OP1	-9.67	97.00	105.70
26	1H	1275	A	O5'-P-OP1	-9.67	97.00	105.70
26	14	698	C	OP1-P-OP2	9.67	134.10	119.60
26	1H	1817	G	C6-C5-N7	9.66	136.20	130.40
1	1G	789	U	N3-C4-C5	-9.66	108.80	114.60
26	14	452	G	C8-N9-C4	-9.66	102.53	106.40
26	14	494	G	N3-C2-N2	-9.66	113.14	119.90
26	14	729	G	N1-C2-N2	9.66	124.90	116.20
26	1H	1658	C	N3-C4-N4	9.66	124.76	118.00
1	13	1519	A	N9-C4-C5	9.66	109.66	105.80
26	14	298	G	C4-C5-N7	9.66	114.66	110.80
26	14	1819	A	N1-C2-N3	9.66	134.13	129.30
26	1H	2609	U	O5'-P-OP2	-9.66	97.01	105.70
26	1H	212	G	N1-C6-O6	-9.66	114.11	119.90
26	1H	590	A	C8-N9-C4	-9.66	101.94	105.80
26	14	1135	C	C6-N1-C2	9.66	124.16	120.30
26	1H	1838	C	N3-C4-C5	9.66	125.76	121.90
26	14	1200	C	C6-N1-C2	-9.66	116.44	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1248	G	O5'-P-OP1	9.66	122.29	110.70
27	16	96	G	C5-C6-O6	-9.65	122.81	128.60
26	1H	1244	G	C8-N9-C4	9.65	110.26	106.40
26	14	188	G	O5'-P-OP1	-9.65	97.02	105.70
26	1H	1683	C	C2-N3-C4	-9.65	115.08	119.90
26	14	465	G	C5-C6-N1	-9.65	106.68	111.50
26	14	826	U	C4-C5-C6	9.65	125.49	119.70
26	14	1298	C	C2-N3-C4	9.65	124.72	119.90
26	1H	1253	A	N9-C4-C5	-9.65	101.94	105.80
26	1H	2101	G	C5-C6-N1	-9.65	106.68	111.50
26	1H	2449	U	C4-C5-C6	9.65	125.49	119.70
26	14	2840	C	C5-C6-N1	-9.65	116.18	121.00
26	1H	687	C	O5'-P-OP1	-9.64	97.02	105.70
26	1H	466	A	C5-C6-N6	-9.64	115.98	123.70
26	1H	834	C	C4-C5-C6	9.64	122.22	117.40
26	1H	2011	U	N3-C2-O2	9.64	128.95	122.20
26	1H	995	C	O5'-P-OP2	9.64	122.27	110.70
26	1H	2408	U	N3-C4-C5	9.64	120.39	114.60
26	1H	2465	C	N3-C4-C5	9.64	125.76	121.90
26	14	1682	G	O5'-P-OP2	-9.64	97.02	105.70
26	1H	1450	C	C6-N1-C2	9.64	124.16	120.30
26	14	270(T)	G	C5-C6-N1	-9.64	106.68	111.50
26	14	397	G	C5-C6-O6	-9.64	122.82	128.60
1	13	766	A	C6-N1-C2	9.64	124.38	118.60
26	14	1378	A	C2-N3-C4	9.64	115.42	110.60
26	14	2470	G	C8-N9-C4	-9.64	102.55	106.40
1	13	972	C	N1-C2-O2	9.63	124.68	118.90
1	1G	769	G	N1-C6-O6	9.63	125.68	119.90
26	1H	1672	C	O5'-P-OP2	9.63	122.26	110.70
26	14	828	U	OP1-P-OP2	9.63	134.05	119.60
26	14	945	A	N7-C8-N9	9.63	118.62	113.80
1	13	260	G	C5-N7-C8	9.63	109.11	104.30
26	1H	44	A	C8-N9-C4	-9.63	101.95	105.80
1	13	388	G	OP1-P-OP2	-9.63	105.16	119.60
1	13	532	A	C5-N7-C8	-9.63	99.09	103.90
1	1G	63	C	C6-N1-C2	-9.63	116.45	120.30
26	14	685	A	C8-N9-C4	-9.63	101.95	105.80
26	14	2862	G	N1-C6-O6	9.63	125.68	119.90
1	13	1455	G	C8-N9-C4	9.62	110.25	106.40
26	1H	280	C	N1-C2-O2	9.62	124.67	118.90
26	1H	445	C	N3-C2-O2	-9.62	115.16	121.90
26	1H	692	C	N3-C4-C5	9.62	125.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1354	A	C5-N7-C8	-9.62	99.09	103.90
26	14	2521	C	O5'-P-OP1	-9.62	97.04	105.70
26	1H	55	G	C6-N1-C2	-9.62	119.33	125.10
26	1H	2419	U	N3-C4-C5	-9.62	108.83	114.60
26	14	133	C	C2-N3-C4	-9.62	115.09	119.90
27	1J	74	U	N3-C4-O4	-9.62	112.67	119.40
26	14	914	C	N1-C2-O2	9.62	124.67	118.90
26	14	1698	A	N3-C4-C5	9.62	133.53	126.80
26	1H	2459	A	N9-C4-C5	9.62	109.65	105.80
26	1H	2761	G	C5-C6-O6	9.62	134.37	128.60
26	14	776	G	C8-N9-C4	9.62	110.25	106.40
26	1H	400	G	N7-C8-N9	9.61	117.91	113.10
26	1H	2503	A	O5'-P-OP1	9.61	122.23	110.70
26	1H	829	A	O5'-P-OP2	-9.61	97.05	105.70
1	1G	112	G	N3-C2-N2	-9.61	113.17	119.90
26	14	2363	C	C2-N3-C4	-9.61	115.09	119.90
26	14	547	A	C8-N9-C4	-9.61	101.96	105.80
26	1H	591	C	N1-C2-O2	-9.61	113.14	118.90
26	1H	1939	U	N3-C4-O4	-9.61	112.67	119.40
26	1H	2582	G	C8-N9-C4	-9.61	102.56	106.40
26	14	2434	A	C5-C6-N6	9.61	131.39	123.70
26	14	372	G	C4-C5-N7	9.61	114.64	110.80
26	14	1202	C	N1-C2-O2	-9.61	113.14	118.90
1	13	1060	C	C5-C6-N1	9.60	125.80	121.00
26	14	1187	G	N9-C4-C5	9.60	109.24	105.40
26	1H	1617	C	C6-N1-C2	-9.60	116.46	120.30
26	1H	737	C	N1-C2-O2	-9.60	113.14	118.90
26	1H	2517	C	C5-C6-N1	-9.60	116.20	121.00
26	14	2634	G	C8-N9-C4	9.60	110.24	106.40
23	2K	21	U	N3-C2-O2	-9.60	115.48	122.20
1	13	967	C	C5-C4-N4	-9.60	113.48	120.20
26	1H	1404	C	O5'-P-OP1	-9.60	97.06	105.70
26	1H	1820	U	C5-C6-N1	-9.60	117.90	122.70
26	14	1779	U	C5-C4-O4	-9.60	120.14	125.90
1	1G	529	G	C5-C6-O6	-9.60	122.84	128.60
1	1G	741	G	N1-C6-O6	9.60	125.66	119.90
26	14	2497	A	O5'-P-OP2	9.60	122.22	110.70
1	13	135	C	N1-C2-O2	-9.59	113.14	118.90
26	1H	566	U	N1-C2-N3	-9.59	109.14	114.90
26	1H	1210	A	C2-N3-C4	-9.59	105.80	110.60
26	1H	1764	G	C5-C6-O6	9.59	134.36	128.60
26	1H	1985	G	C5-C6-N1	9.59	116.30	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2469	A	C6-C5-N7	-9.59	125.58	132.30
26	1H	2871	C	N3-C2-O2	-9.59	115.19	121.90
26	14	1332	G	C8-N9-C4	-9.59	102.56	106.40
1	13	1518	A	N7-C8-N9	-9.59	109.00	113.80
26	1H	593	G	N1-C2-N2	-9.59	107.57	116.20
26	1H	1332	G	N1-C2-N2	-9.59	107.57	116.20
26	1H	1827	C	C6-N1-C2	-9.59	116.46	120.30
26	14	1332	G	C8-N9-C1'	-9.59	114.53	127.00
26	14	1568	G	N1-C6-O6	9.59	125.66	119.90
26	14	1598	C	C5-C4-N4	-9.59	113.49	120.20
26	14	2250	G	O5'-P-OP1	-9.59	97.07	105.70
26	1H	26	G	C6-C5-N7	-9.59	124.65	130.40
26	1H	840	C	C5-C6-N1	-9.59	116.21	121.00
26	1H	1400	G	C8-N9-C4	-9.59	102.56	106.40
26	1H	2618	G	N9-C4-C5	9.59	109.23	105.40
26	1H	2698	U	C4-C5-C6	9.59	125.45	119.70
26	1H	1517	G	OP1-P-O3'	9.59	126.29	105.20
26	1H	2423	U	C6-N1-C2	9.59	126.75	121.00
26	1H	2845	G	N1-C2-N3	9.59	129.65	123.90
1	13	502	G	N3-C2-N2	-9.58	113.19	119.90
1	13	976	G	N1-C6-O6	9.58	125.65	119.90
26	1H	127	A	C5-C6-N6	-9.58	116.03	123.70
26	14	572	A	C5-C6-N6	-9.58	116.03	123.70
26	1H	46	C	N3-C4-N4	9.58	124.71	118.00
26	14	72	U	C5-C6-N1	-9.58	117.91	122.70
26	14	2067	G	N3-C2-N2	-9.58	113.19	119.90
1	13	746	A	N1-C6-N6	-9.58	112.85	118.60
1	13	906	G	N1-C6-O6	9.58	125.65	119.90
26	1H	265	A	C5-C6-N1	-9.58	112.91	117.70
26	1H	808	G	OP1-P-OP2	9.58	133.97	119.60
26	1H	1183	G	C5-C6-O6	-9.58	122.85	128.60
26	1H	802	A	O5'-P-OP1	9.58	122.19	110.70
26	1H	1912	A	N1-C6-N6	-9.58	112.85	118.60
26	14	678	C	N3-C4-C5	9.58	125.73	121.90
26	14	731	C	N1-C2-O2	-9.58	113.15	118.90
26	14	1380	G	N9-C4-C5	-9.58	101.57	105.40
26	14	1474	C	C6-N1-C2	-9.58	116.47	120.30
26	1H	842	G	C5-C6-O6	-9.58	122.85	128.60
26	1H	2197	U	N1-C2-N3	9.58	120.65	114.90
1	1G	789	U	N1-C2-N3	9.58	120.65	114.90
26	14	1128	A	N1-C6-N6	-9.58	112.86	118.60
26	14	879	G	C8-N9-C4	-9.57	102.57	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2681	C	N3-C4-N4	-9.57	111.30	118.00
26	1H	2684	U	C6-N1-C2	9.57	126.74	121.00
26	1H	2377	A	C2-N3-C4	-9.57	105.81	110.60
26	14	559	G	C5-C6-N1	-9.57	106.72	111.50
26	14	1965	C	N3-C4-C5	9.57	125.73	121.90
26	1H	326	G	N1-C2-N2	9.57	124.81	116.20
26	1H	452	G	N9-C4-C5	9.57	109.23	105.40
26	14	204	A	C6-N1-C2	-9.57	112.86	118.60
26	14	494	G	C5-C6-N1	-9.57	106.72	111.50
26	14	2325	G	OP1-P-OP2	9.57	133.95	119.60
1	13	442	C	C6-N1-C2	-9.56	116.47	120.30
26	1H	436	C	N1-C2-N3	-9.56	112.50	119.20
26	1H	2604	U	C6-N1-C2	-9.56	115.26	121.00
26	1H	2779	U	C5-C6-N1	-9.56	117.92	122.70
26	14	271(A)	C	N3-C4-C5	-9.56	118.07	121.90
1	13	553	A	N9-C4-C5	9.56	109.62	105.80
26	1H	812	C	N1-C2-O2	-9.56	113.16	118.90
26	1H	1974	C	O5'-P-OP2	-9.56	97.09	105.70
26	14	946	G	C8-N9-C4	9.56	110.22	106.40
26	14	488	G	N1-C6-O6	9.56	125.64	119.90
26	14	575	A	C8-N9-C4	9.56	109.62	105.80
26	1H	154	G	N1-C6-O6	9.56	125.64	119.90
26	1H	1466	G	N9-C4-C5	9.56	109.22	105.40
26	1H	2575	C	N1-C2-O2	-9.56	113.16	118.90
1	13	492	G	N7-C8-N9	9.56	117.88	113.10
23	2K	28	U	N1-C2-O2	-9.56	116.11	122.80
26	1H	746	A	OP1-P-OP2	-9.56	105.26	119.60
26	1H	2608	G	C8-N9-C4	-9.56	102.58	106.40
26	1H	2713	A	N1-C2-N3	9.56	134.08	129.30
26	14	521	G	C5-C6-O6	-9.56	122.86	128.60
26	1H	1547	C	N1-C2-O2	9.55	124.63	118.90
26	14	1641	A	C5-C6-N1	9.55	122.48	117.70
26	14	2598	A	C4-C5-N7	9.55	115.48	110.70
26	14	1188	U	OP1-P-OP2	-9.55	105.27	119.60
26	14	1408	C	C6-N1-C2	-9.55	116.48	120.30
1	13	730	G	C4-C5-N7	-9.55	106.98	110.80
27	1J	102	G	C4-C5-N7	-9.55	106.98	110.80
26	1H	232	G	C6-C5-N7	-9.55	124.67	130.40
26	14	2620	C	C5-C6-N1	-9.55	116.23	121.00
27	1J	60	C	C6-N1-C2	-9.55	116.48	120.30
1	1G	573	A	N1-C6-N6	-9.55	112.87	118.60
26	1H	120	U	C5-C6-N1	-9.54	117.93	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	122	G	N3-C4-C5	9.54	133.37	128.60
26	14	236	C	C6-N1-C2	9.54	124.12	120.30
26	14	1624	G	C5-C6-O6	-9.54	122.88	128.60
26	1H	510	C	OP1-P-OP2	9.54	133.91	119.60
27	16	115	G	C5-N7-C8	-9.54	99.53	104.30
26	14	807	U	C4-C5-C6	9.54	125.42	119.70
26	14	1465	G	C2-N3-C4	-9.54	107.13	111.90
1	1G	231	G	C2-N3-C4	-9.54	107.13	111.90
1	13	1233	G	N1-C6-O6	-9.54	114.18	119.90
26	1H	557	U	O5'-P-OP2	-9.54	97.12	105.70
26	1H	594	U	C5-C6-N1	-9.54	117.93	122.70
26	1H	834	C	C2-N3-C4	-9.54	115.13	119.90
26	1H	860	U	N3-C2-O2	-9.54	115.53	122.20
26	1H	2263	C	C5-C4-N4	9.54	126.87	120.20
1	1G	191(B)	G	O5'-P-OP2	-9.54	97.12	105.70
26	1H	1344	G	C5-C6-O6	-9.53	122.88	128.60
26	1H	1920	C	C4-C5-C6	-9.53	112.63	117.40
26	1H	461	C	O5'-P-OP1	-9.53	97.12	105.70
26	1H	1241	A	C6-N1-C2	9.53	124.32	118.60
26	1H	1337	G	N1-C6-O6	-9.53	114.18	119.90
26	1H	2279	G	N1-C6-O6	-9.53	114.18	119.90
26	1H	468	G	C6-C5-N7	-9.53	124.68	130.40
26	1H	691	C	C5-C6-N1	-9.53	116.23	121.00
26	1H	471	A	C8-N9-C4	9.53	109.61	105.80
26	1H	1207	C	O5'-P-OP1	-9.53	97.12	105.70
1	1G	274	A	C8-N9-C4	9.53	109.61	105.80
26	14	70	G	N3-C2-N2	9.53	126.57	119.90
26	1H	39	C	N1-C2-O2	-9.53	113.18	118.90
26	1H	131	G	C4-C5-N7	9.53	114.61	110.80
26	1H	1647	G	N1-C6-O6	-9.53	114.18	119.90
26	1H	2018	G	N7-C8-N9	9.53	117.86	113.10
26	1H	51	G	OP1-P-OP2	9.52	133.88	119.60
26	1H	862	G	N3-C2-N2	9.52	126.57	119.90
26	1H	1997	G	N3-C4-N9	-9.52	120.29	126.00
26	14	1907	G	O5'-P-OP1	-9.52	97.13	105.70
26	1H	2252	G	N3-C4-N9	-9.52	120.29	126.00
26	14	911	A	N3-C4-C5	-9.52	120.14	126.80
26	14	2275	C	N3-C2-O2	-9.52	115.23	121.90
26	1H	395	U	N3-C2-O2	-9.52	115.54	122.20
26	1H	1857	G	C5-C6-N1	-9.52	106.74	111.50
26	1H	1614	A	N9-C4-C5	-9.52	101.99	105.80
26	14	2297	C	OP1-P-OP2	9.52	133.88	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	971	C	C6-N1-C2	-9.52	116.49	120.30
26	1H	2626	C	C4-C5-C6	-9.52	112.64	117.40
26	14	140	A	C2-N3-C4	-9.52	105.84	110.60
26	1H	839	U	C4-C5-C6	9.51	125.41	119.70
26	1H	1839	G	C5-C6-O6	9.51	134.31	128.60
26	1H	2031	A	C2-N3-C4	9.51	115.36	110.60
1	1G	619	U	C5-C4-O4	9.51	131.61	125.90
26	1H	138	G	C4-C5-C6	-9.51	113.09	118.80
26	1H	1973	G	N1-C6-O6	-9.51	114.19	119.90
26	1H	2236	C	N3-C4-N4	9.51	124.66	118.00
26	14	566	U	C2-N3-C4	-9.51	121.29	127.00
26	14	690	G	N7-C8-N9	-9.51	108.34	113.10
26	14	693	C	OP2-P-O3'	9.51	126.12	105.20
26	1H	1794	U	N1-C2-N3	9.51	120.60	114.90
26	1H	2067	G	C6-N1-C2	-9.51	119.40	125.10
26	14	956	G	O5'-P-OP2	-9.51	97.14	105.70
26	1H	1310	G	C5-C6-O6	-9.50	122.90	128.60
26	1H	2476	A	N7-C8-N9	9.50	118.55	113.80
1	13	934	C	N1-C2-O2	-9.50	113.20	118.90
27	16	100	G	N9-C4-C5	-9.50	101.60	105.40
26	14	574	C	N3-C4-C5	9.50	125.70	121.90
26	14	2873	A	C4-C5-N7	9.50	115.45	110.70
23	2K	40	C	C5-C4-N4	-9.50	113.55	120.20
26	1H	517	C	N1-C2-O2	9.50	124.60	118.90
26	1H	1199	U	N1-C2-O2	-9.50	116.15	122.80
26	14	571	A	C5-C6-N6	-9.50	116.10	123.70
26	14	2062	A	N1-C6-N6	9.50	124.30	118.60
1	13	1205	U	N1-C2-N3	9.50	120.60	114.90
26	1H	282	A	N1-C6-N6	-9.50	112.90	118.60
26	1H	2739	U	C5-C6-N1	-9.50	117.95	122.70
26	14	2247	A	C5-C6-N6	9.50	131.30	123.70
27	16	56	G	O5'-P-OP2	-9.49	97.16	105.70
26	1H	399	G	OP1-P-OP2	9.49	133.84	119.60
26	1H	806	C	N3-C4-C5	9.49	125.70	121.90
26	1H	2622	C	C4-C5-C6	9.49	122.15	117.40
26	14	810	U	C5-C4-O4	-9.49	120.20	125.90
1	1G	55	A	C8-N9-C4	-9.49	102.00	105.80
26	14	2440	C	N1-C2-O2	9.49	124.59	118.90
26	1H	234	C	C2-N3-C4	-9.49	115.16	119.90
26	1H	809	G	C5-C6-O6	-9.49	122.91	128.60
26	14	314	A	N1-C6-N6	-9.49	112.91	118.60
26	14	970	C	N1-C2-O2	-9.49	113.21	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1376	C	N3-C4-C5	-9.49	118.11	121.90
26	14	1387	C	C6-N1-C2	-9.49	116.50	120.30
26	14	2581	G	C6-C5-N7	-9.49	124.71	130.40
1	13	122	G	C5-C6-N1	-9.48	106.76	111.50
1	13	617	G	N1-C6-O6	9.48	125.59	119.90
26	1H	2510	C	N3-C4-N4	-9.48	111.36	118.00
26	1H	1249	U	C2-N3-C4	-9.48	121.31	127.00
1	1G	1380	U	C5-C6-N1	-9.48	117.96	122.70
26	14	600	G	C5-C6-O6	-9.48	122.91	128.60
26	14	787	U	O5'-P-OP1	9.48	122.08	110.70
26	14	1469	A	C8-N9-C4	-9.48	102.01	105.80
26	14	1266	G	C5-C6-N1	9.48	116.24	111.50
26	1H	624	C	C5-C4-N4	-9.48	113.56	120.20
26	1H	826	U	N3-C4-C5	-9.48	108.91	114.60
26	1H	1348	G	C5-C6-O6	-9.48	122.91	128.60
26	1H	1376	C	N3-C4-C5	-9.48	118.11	121.90
1	1G	910	C	N3-C4-C5	9.48	125.69	121.90
26	14	606	U	N3-C4-O4	-9.48	112.76	119.40
1	13	812	C	N1-C2-O2	-9.48	113.21	118.90
26	1H	468	G	C4-C5-C6	9.48	124.49	118.80
26	1H	2374	C	OP1-P-OP2	9.48	133.82	119.60
26	14	125	G	C5-C6-N1	9.48	116.24	111.50
26	14	1229(A)	G	C2-N3-C4	-9.48	107.16	111.90
26	14	2383	G	OP1-P-OP2	9.48	133.82	119.60
26	14	488	G	N9-C4-C5	-9.48	101.61	105.40
26	14	676	A	C4-C5-C6	-9.48	112.26	117.00
26	1H	97	C	O5'-P-OP1	-9.47	97.17	105.70
26	1H	763	G	O5'-P-OP2	-9.47	97.17	105.70
1	1G	495	A	C8-N9-C4	9.47	109.59	105.80
1	1G	1060	C	C5-C6-N1	9.47	125.74	121.00
26	14	391	G	N1-C6-O6	9.47	125.58	119.90
26	14	2558	C	N3-C4-C5	9.47	125.69	121.90
26	14	2589	A	C2-N3-C4	-9.47	105.86	110.60
26	14	19	C	C6-N1-C2	9.47	124.09	120.30
26	1H	566	U	C5-C6-N1	-9.47	117.97	122.70
26	1H	716	A	O5'-P-OP2	9.47	122.06	110.70
26	1H	2543	G	C6-N1-C2	-9.47	119.42	125.10
1	1G	46	G	N1-C6-O6	9.47	125.58	119.90
26	14	2779	U	N3-C2-O2	-9.47	115.57	122.20
26	1H	211	A	C5-C6-N1	-9.47	112.97	117.70
26	1H	1611	C	C5-C6-N1	-9.47	116.27	121.00
22	1K	76	A	C6-C5-N7	-9.46	125.67	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1825	A	N1-C6-N6	-9.46	112.92	118.60
26	14	1422	G	N3-C4-C5	9.46	133.33	128.60
1	13	542	G	N1-C6-O6	9.46	125.58	119.90
26	1H	1606	G	N7-C8-N9	-9.46	108.37	113.10
26	1H	2464	C	N3-C4-N4	9.46	124.62	118.00
26	14	456	C	C6-N1-C2	9.46	124.08	120.30
26	14	2447	G	N3-C2-N2	-9.46	113.28	119.90
26	1H	427	U	C5-C6-N1	9.46	127.43	122.70
26	1H	2618	G	N1-C6-O6	-9.46	114.22	119.90
1	13	768	A	C6-N1-C2	-9.46	112.92	118.60
26	1H	129	C	C2-N3-C4	-9.46	115.17	119.90
26	14	2588	G	C8-N9-C4	-9.46	102.62	106.40
26	1H	1238	G	C4-C5-N7	-9.46	107.02	110.80
26	1H	1698	A	N3-C4-C5	9.46	133.42	126.80
26	1H	2541	A	O5'-P-OP1	-9.46	97.19	105.70
26	14	1839	G	C8-N9-C4	9.46	110.18	106.40
26	1H	447	A	N1-C6-N6	-9.46	112.93	118.60
26	1H	562	U	N1-C2-O2	9.46	129.42	122.80
26	1H	1607	C	N3-C4-N4	9.45	124.62	118.00
26	1H	2392	A	O5'-P-OP2	9.46	122.05	110.70
26	14	122	G	C6-N1-C2	-9.46	119.43	125.10
26	14	1681	G	N3-C4-N9	-9.46	120.33	126.00
26	14	2874	C	C6-N1-C2	9.45	124.08	120.30
26	1H	2262	U	O5'-P-OP1	9.45	122.04	110.70
26	14	1698	A	N7-C8-N9	9.45	118.53	113.80
26	1H	1345	C	C6-N1-C2	9.45	124.08	120.30
26	1H	1424	G	O5'-P-OP1	-9.45	97.19	105.70
26	14	2549	G	C2-N3-C4	-9.45	107.17	111.90
26	1H	1781	C	C5-C6-N1	9.45	125.72	121.00
1	1G	411	A	O5'-P-OP2	-9.45	97.19	105.70
26	14	2782	G	C5-C6-N1	-9.45	106.78	111.50
26	14	476	G	O5'-P-OP2	-9.45	97.20	105.70
26	14	1694	C	N3-C4-C5	9.45	125.68	121.90
26	1H	195	A	C5-N7-C8	-9.45	99.18	103.90
26	1H	825	C	N3-C4-N4	9.45	124.61	118.00
40	A8	24	LEU	CA-CB-CG	9.45	137.03	115.30
26	1H	1205	U	N1-C2-N3	9.44	120.57	114.90
1	13	1128	C	C6-N1-C2	-9.44	116.52	120.30
26	1H	2622	C	C5-C6-N1	-9.44	116.28	121.00
26	14	2512	C	C2-N3-C4	-9.44	115.18	119.90
1	1G	1502	A	N1-C6-N6	9.44	124.26	118.60
26	14	2366	A	O5'-P-OP2	-9.44	97.20	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1496	C	O5'-P-OP2	-9.44	97.21	105.70
26	1H	846	C	C6-N1-C2	9.44	124.08	120.30
26	1H	920	G	C8-N9-C4	9.44	110.17	106.40
26	14	85	G	C8-N9-C4	9.44	110.17	106.40
26	14	90	U	N1-C2-O2	9.44	129.41	122.80
26	14	2315	G	C5-C6-N1	9.44	116.22	111.50
26	1H	387	U	C2-N3-C4	-9.44	121.34	127.00
26	1H	463	G	N1-C2-N2	-9.43	107.71	116.20
26	14	704	G	C5-C6-N1	-9.43	106.78	111.50
26	1H	651	G	N7-C8-N9	9.43	117.81	113.10
1	13	874	G	N1-C6-O6	-9.43	114.24	119.90
26	1H	664	C	C5-C6-N1	-9.43	116.28	121.00
26	14	389	G	C5-C6-N1	9.43	116.22	111.50
1	13	801	U	N1-C2-O2	9.43	129.40	122.80
26	1H	537	C	O5'-P-OP1	9.43	122.01	110.70
26	14	808	G	C4-C5-N7	-9.43	107.03	110.80
26	14	2644	G	C2-N3-C4	-9.42	107.19	111.90
26	14	2840	C	C4-C5-C6	9.42	122.11	117.40
26	1H	182	A	C8-N9-C4	9.42	109.57	105.80
26	1H	2025	C	C6-N1-C2	-9.42	116.53	120.30
1	1G	585	G	C2-N3-C4	9.42	116.61	111.90
26	14	2448	A	C6-N1-C2	-9.42	112.95	118.60
26	1H	794	G	N9-C4-C5	-9.42	101.63	105.40
26	1H	1930	G	C2-N3-C4	9.42	116.61	111.90
26	14	1949	G	C5-N7-C8	9.42	109.01	104.30
26	14	1579	A	N1-C6-N6	9.41	124.25	118.60
1	13	766	A	C4-C5-N7	9.41	115.41	110.70
26	1H	67	U	N1-C2-O2	9.41	129.39	122.80
26	1H	1569	A	C6-N1-C2	9.41	124.25	118.60
26	1H	1837	C	C5-C6-N1	9.41	125.71	121.00
26	14	974(A)	C	N3-C4-N4	-9.41	111.41	118.00
26	1H	195	A	OP1-P-OP2	-9.41	105.48	119.60
26	1H	1147	C	O5'-P-OP2	-9.41	97.23	105.70
26	14	1026	U	N3-C4-O4	9.41	125.99	119.40
26	14	1594	G	O5'-P-OP2	9.41	121.99	110.70
26	14	1644	C	O5'-P-OP1	9.41	121.99	110.70
26	14	2053	G	C4-C5-N7	-9.41	107.04	110.80
26	1H	1379	A	C8-N9-C4	-9.41	102.04	105.80
26	1H	1430	C	OP1-P-O3'	9.41	125.90	105.20
26	1H	2599	G	O5'-P-OP2	-9.41	97.23	105.70
1	1G	690	G	N3-C4-C5	9.41	133.30	128.60
26	1H	808	G	N1-C2-N2	-9.40	107.74	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	74	A	C4-C5-N7	9.40	115.40	110.70
26	14	567	A	C8-N9-C4	9.40	109.56	105.80
26	14	675	A	C4-C5-N7	9.40	115.40	110.70
26	14	768	G	OP1-P-OP2	9.40	133.71	119.60
26	14	2030	A	O5'-P-OP2	-9.40	97.23	105.70
26	14	2428	G	N1-C6-O6	-9.40	114.26	119.90
26	1H	528	A	N7-C8-N9	9.40	118.50	113.80
26	1H	827	U	N1-C2-O2	-9.40	116.22	122.80
26	14	698	C	O5'-P-OP2	-9.40	97.24	105.70
1	13	760	G	C5-C6-O6	-9.40	122.96	128.60
26	1H	1299	G	OP1-P-OP2	-9.40	105.50	119.60
1	13	869	G	N3-C2-N2	-9.40	113.32	119.90
1	1G	1235	U	C5-C6-N1	9.40	127.40	122.70
26	1H	203	C	N3-C4-C5	9.40	125.66	121.90
26	14	330	A	N1-C6-N6	9.40	124.24	118.60
26	1H	1278	A	N1-C6-N6	-9.39	112.96	118.60
26	14	35	G	N9-C4-C5	9.39	109.16	105.40
26	14	2022	U	N1-C2-N3	-9.39	109.26	114.90
26	1H	123	G	N1-C2-N3	9.39	129.54	123.90
26	1H	1477	A	O5'-P-OP2	-9.39	97.25	105.70
26	1H	2713	A	N3-C4-N9	-9.39	119.89	127.40
26	14	2049	G	C5-N7-C8	-9.39	99.60	104.30
26	1H	787	U	O5'-P-OP1	9.39	121.97	110.70
26	1H	609	A	C5-C6-N6	-9.39	116.19	123.70
26	1H	738	G	N1-C2-N2	-9.39	107.75	116.20
26	1H	1297	C	C6-N1-C2	-9.39	116.55	120.30
26	1H	1906	G	O5'-P-OP2	-9.39	97.25	105.70
26	1H	2327	A	N7-C8-N9	-9.39	109.11	113.80
26	1H	2371	G	C8-N9-C4	9.39	110.16	106.40
26	1H	2429	G	N9-C4-C5	9.39	109.16	105.40
26	1H	2665	A	C5-C6-N6	-9.39	116.19	123.70
26	14	380	U	N3-C2-O2	-9.39	115.63	122.20
26	14	499	U	N1-C2-N3	9.39	120.53	114.90
26	14	664	C	N3-C4-N4	-9.39	111.43	118.00
26	14	2447	G	N1-C2-N3	9.39	129.53	123.90
1	13	394	G	N3-C2-N2	-9.38	113.33	119.90
26	1H	505	A	C5-N7-C8	-9.38	99.21	103.90
26	1H	1238	G	C5-C6-O6	9.39	134.23	128.60
26	1H	2603	G	N7-C8-N9	9.39	117.79	113.10
26	14	459	U	C5-C6-N1	-9.38	118.01	122.70
26	14	2777	G	N1-C6-O6	9.38	125.53	119.90
22	1K	61	C	C5-C6-N1	9.38	125.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	988	A	C5-C6-N6	-9.38	116.20	123.70
1	13	333	G	C4-C5-N7	-9.38	107.05	110.80
26	1H	1941	C	N3-C4-C5	-9.38	118.15	121.90
1	1G	859	A	C8-N9-C4	-9.38	102.05	105.80
26	14	863	A	N1-C6-N6	-9.38	112.97	118.60
26	14	2076	U	O5'-P-OP2	-9.38	97.26	105.70
26	14	2534	A	N1-C6-N6	9.38	124.23	118.60
26	14	2854	G	N1-C6-O6	-9.38	114.27	119.90
27	1J	102	G	N1-C6-O6	-9.38	114.27	119.90
23	2K	40	C	N3-C4-N4	9.38	124.56	118.00
26	1H	124	G	N9-C4-C5	-9.38	101.65	105.40
26	1H	821	A	C2-N3-C4	-9.38	105.91	110.60
26	1H	1197	G	C5-N7-C8	9.38	108.99	104.30
27	16	105	G	C5-N7-C8	-9.38	99.61	104.30
26	14	199	A	N1-C2-N3	-9.38	124.61	129.30
26	14	694	U	N3-C2-O2	-9.38	115.64	122.20
26	14	810	U	C2-N1-C1'	9.38	128.95	117.70
26	1H	1129	A	OP1-P-OP2	9.37	133.66	119.60
26	14	2727	G	C8-N9-C4	9.38	110.15	106.40
1	13	813	U	C5-C4-O4	-9.37	120.28	125.90
26	1H	85	G	O5'-P-OP2	-9.37	97.27	105.70
26	1H	681	G	O5'-P-OP2	9.37	121.95	110.70
26	14	1372	U	N1-C2-O2	-9.37	116.24	122.80
26	14	2329	G	N7-C8-N9	-9.37	108.41	113.10
1	13	307	C	O5'-P-OP2	-9.37	97.27	105.70
1	13	954	G	OP1-P-OP2	-9.37	105.55	119.60
26	1H	817	C	OP1-P-OP2	-9.37	105.55	119.60
26	14	2335	A	O4'-C1'-N9	9.37	115.69	108.20
1	13	1195	C	C6-N1-C2	-9.37	116.55	120.30
26	1H	1771	C	N1-C2-N3	9.37	125.76	119.20
26	1H	2502	G	C5-N7-C8	-9.37	99.62	104.30
26	14	2280	G	C5-C6-N1	-9.37	106.82	111.50
26	14	1277	G	N1-C6-O6	9.36	125.52	119.90
26	1H	1991	U	OP1-P-OP2	-9.36	105.56	119.60
26	1H	649	G	N1-C6-O6	9.36	125.52	119.90
1	1G	11	G	C5-C6-N1	-9.36	106.82	111.50
26	14	2335	A	N1-C6-N6	-9.36	112.98	118.60
26	1H	116	C	N3-C4-C5	-9.36	118.16	121.90
26	1H	575	A	N9-C4-C5	-9.36	102.06	105.80
26	1H	1287	A	C8-N9-C4	-9.36	102.06	105.80
26	1H	2218	G	N1-C6-O6	9.36	125.52	119.90
1	1G	1465	C	N3-C2-O2	-9.36	115.35	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	64	A	C5-C6-N6	-9.36	116.21	123.70
26	14	1294	U	C6-N1-C2	9.36	126.62	121.00
27	1J	81	G	C5-N7-C8	-9.36	99.62	104.30
1	13	332	G	O5'-P-OP1	-9.36	97.28	105.70
26	1H	1211	U	C6-N1-C2	9.36	126.61	121.00
26	1H	1047	G	C8-N9-C4	9.35	110.14	106.40
1	13	300	A	C8-N9-C4	-9.35	102.06	105.80
26	1H	536	A	C6-N1-C2	-9.35	112.99	118.60
26	1H	821	A	N1-C2-N3	9.35	133.98	129.30
26	1H	2561	A	N1-C2-N3	9.35	133.97	129.30
1	1G	1259	C	C6-N1-C2	-9.35	116.56	120.30
26	14	1656	C	N1-C2-O2	-9.35	113.29	118.90
26	1H	263	C	N3-C2-O2	-9.35	115.36	121.90
26	1H	1761	C	N1-C2-O2	-9.35	113.29	118.90
26	1H	151	C	N3-C4-N4	-9.35	111.46	118.00
1	1G	1314	C	C6-N1-C2	-9.35	116.56	120.30
1	13	523	A	N1-C6-N6	9.35	124.21	118.60
26	1H	1224	G	C6-C5-N7	9.35	136.01	130.40
26	14	632	A	OP1-P-OP2	-9.35	105.58	119.60
23	2K	21	U	N1-C2-O2	9.34	129.34	122.80
26	1H	406	G	C8-N9-C4	-9.34	102.66	106.40
26	1H	1381	G	N3-C2-N2	-9.34	113.36	119.90
26	1H	2600	A	C5-N7-C8	9.34	108.57	103.90
26	14	2236	C	C5-C6-N1	-9.34	116.33	121.00
26	14	2451	A	N1-C2-N3	9.34	133.97	129.30
1	13	47	C	C4-C5-C6	9.34	122.07	117.40
26	1H	1443	G	C2-N3-C4	-9.34	107.23	111.90
26	14	2618	G	N9-C4-C5	9.34	109.14	105.40
26	1H	129	C	C4-C5-C6	9.34	122.07	117.40
26	1H	800	A	C6-N1-C2	-9.34	113.00	118.60
26	1H	328	U	C5-C4-O4	9.34	131.50	125.90
26	1H	1658	C	N3-C2-O2	9.34	128.44	121.90
26	1H	2373	G	C5-C6-N1	-9.34	106.83	111.50
26	1H	2379	G	N9-C4-C5	-9.34	101.67	105.40
26	1H	779	U	C5-C4-O4	-9.33	120.30	125.90
1	13	1533	C	C2-N1-C1'	9.33	129.07	118.80
26	1H	97	C	OP1-P-OP2	9.33	133.60	119.60
26	1H	242	G	N1-C6-O6	9.33	125.50	119.90
26	1H	250	G	C2-N3-C4	-9.33	107.23	111.90
26	1H	1378	A	C2-N3-C4	-9.33	105.93	110.60
26	14	315	G	N7-C8-N9	-9.33	108.43	113.10
1	13	880	C	C5-C4-N4	-9.33	113.67	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	461	C	N1-C2-O2	-9.33	113.30	118.90
26	1H	533	G	C5-C6-O6	9.33	134.20	128.60
26	1H	1802	A	N1-C2-N3	9.33	133.97	129.30
26	1H	1952	A	C8-N9-C4	-9.33	102.07	105.80
26	1H	2429	G	N3-C2-N2	-9.33	113.37	119.90
26	14	1127	A	C5-C6-N1	9.33	122.36	117.70
26	14	2362	G	N9-C4-C5	-9.33	101.67	105.40
1	13	117	G	N1-C6-O6	9.33	125.50	119.90
26	1H	767	U	C5-C6-N1	-9.33	118.04	122.70
26	1H	1036	G	N7-C8-N9	-9.33	108.44	113.10
26	1H	1799	G	N3-C4-N9	9.33	131.60	126.00
27	16	64	C	C6-N1-C2	9.33	124.03	120.30
26	14	2235	G	C5-C6-O6	-9.33	123.00	128.60
1	13	803	G	C5-C6-O6	9.32	134.19	128.60
26	1H	458	G	C6-C5-N7	9.32	136.00	130.40
26	1H	729	G	C5-C6-O6	-9.32	123.00	128.60
26	1H	2075	U	C2-N3-C4	-9.32	121.41	127.00
26	14	2016	U	C4-C5-C6	9.32	125.29	119.70
1	13	853	G	C2-N3-C4	-9.32	107.24	111.90
26	1H	1344	G	N3-C2-N2	-9.32	113.37	119.90
26	1H	1422	G	N7-C8-N9	9.32	117.76	113.10
26	14	270(Y)	G	C5-C6-N1	-9.32	106.84	111.50
26	14	1475	G	C8-N9-C4	-9.32	102.67	106.40
26	1H	1700	A	OP1-P-OP2	9.32	133.58	119.60
26	1H	2030	A	C6-N1-C2	-9.32	113.01	118.60
26	14	2499	C	C6-N1-C2	-9.32	116.57	120.30
26	14	1906	G	N7-C8-N9	9.32	117.76	113.10
1	13	402	G	O5'-P-OP2	-9.32	97.31	105.70
1	1G	1528	U	C5-C6-N1	-9.32	118.04	122.70
26	14	2700	C	C4-C5-C6	9.32	122.06	117.40
26	1H	840	C	N3-C4-N4	-9.31	111.48	118.00
26	1H	1553	A	N1-C6-N6	-9.31	113.01	118.60
26	1H	1676	A	C2-N3-C4	-9.31	105.94	110.60
26	14	2284	C	C6-N1-C2	9.31	124.03	120.30
26	14	2525	G	N3-C4-C5	9.31	133.26	128.60
26	1H	1937	A	N1-C2-N3	9.31	133.96	129.30
26	14	2072	G	C8-N9-C4	9.31	110.12	106.40
26	1H	2022	U	OP1-P-OP2	-9.31	105.64	119.60
26	1H	2442	C	C5-C4-N4	-9.31	113.68	120.20
26	14	2818	G	N3-C4-C5	9.31	133.25	128.60
26	1H	2384	G	C2-N3-C4	9.31	116.56	111.90
26	14	1300	U	N1-C2-O2	-9.31	116.28	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	142	G	N3-C2-N2	-9.31	113.39	119.90
26	1H	1324	G	N3-C4-N9	-9.31	120.42	126.00
26	1H	2645	G	C6-C5-N7	-9.30	124.82	130.40
26	14	129	C	C2-N3-C4	-9.31	115.25	119.90
26	14	1021	A	C5-C6-N1	-9.30	113.05	117.70
26	14	1547	C	N3-C2-O2	-9.31	115.39	121.90
26	14	1812	A	O5'-P-OP2	-9.30	97.33	105.70
26	14	234	C	N1-C2-O2	9.30	124.48	118.90
26	14	720	C	C6-N1-C2	9.30	124.02	120.30
26	14	1403	C	OP1-P-OP2	9.30	133.56	119.60
26	14	1406	U	C5-C4-O4	-9.30	120.32	125.90
26	14	1763	G	C6-C5-N7	9.30	135.98	130.40
22	1K	61	C	C6-N1-C2	-9.30	116.58	120.30
26	1H	153	C	N3-C4-N4	9.30	124.51	118.00
26	1H	1760	A	O5'-P-OP2	-9.30	97.33	105.70
26	1H	663	G	C4-C5-C6	9.30	124.38	118.80
26	1H	955	C	N3-C4-C5	-9.30	118.18	121.90
26	1H	2327	A	C5-C6-N1	9.30	122.35	117.70
26	1H	195	A	O5'-P-OP1	9.30	121.86	110.70
26	1H	806	C	C4-C5-C6	-9.30	112.75	117.40
26	1H	566	U	C5-C4-O4	-9.30	120.32	125.90
26	1H	728	G	C4-C5-C6	9.30	124.38	118.80
26	14	1815	A	C8-N9-C4	-9.30	102.08	105.80
26	14	2396	G	C5-C6-O6	-9.30	123.02	128.60
1	13	583	A	O5'-P-OP1	-9.29	97.33	105.70
26	1H	2567	G	O5'-P-OP1	-9.29	97.33	105.70
26	14	2250	G	C2-N3-C4	9.29	116.55	111.90
26	14	1650	G	O5'-P-OP2	-9.29	97.34	105.70
26	1H	26	G	O5'-P-OP2	-9.29	97.34	105.70
26	1H	1156	A	O5'-P-OP1	9.29	121.85	110.70
26	1H	2017	U	N3-C4-O4	9.29	125.91	119.40
1	1G	586	C	C6-N1-C2	-9.29	116.58	120.30
26	14	2324	C	N3-C2-O2	9.29	128.41	121.90
26	14	2588	G	N9-C4-C5	9.29	109.12	105.40
26	14	613	U	C2-N1-C1'	9.29	128.85	117.70
26	14	1260	G	N3-C2-N2	-9.29	113.40	119.90
26	1H	806	C	C6-N1-C2	9.29	124.02	120.30
26	1H	964	C	N1-C2-N3	9.29	125.70	119.20
26	14	755	C	C6-N1-C2	-9.29	116.58	120.30
26	14	2618	G	C5-C6-N1	-9.29	106.86	111.50
26	1H	679	C	C5-C4-N4	9.29	126.70	120.20
50	K8	59	ARG	NE-CZ-NH1	-9.28	115.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	800	G	C5-C6-N1	-9.29	106.86	111.50
26	14	2010	G	O5'-P-OP1	-9.29	97.34	105.70
26	1H	391	G	C5-C6-O6	-9.28	123.03	128.60
26	14	690	G	C2-N3-C4	-9.28	107.26	111.90
26	1H	1888	G	C8-N9-C4	-9.28	102.69	106.40
26	1H	2009	G	N9-C4-C5	-9.28	101.69	105.40
1	1G	305	G	C4-C5-N7	-9.28	107.09	110.80
26	14	1272	A	N1-C6-N6	9.28	124.17	118.60
1	13	748	C	C6-N1-C2	-9.28	116.59	120.30
26	1H	1442	G	C5-C6-N1	-9.28	106.86	111.50
26	14	2463	C	N3-C4-C5	9.28	125.61	121.90
24	3K	65	C	C6-N1-C2	-9.28	116.59	120.30
26	1H	2285	C	C4-C5-C6	-9.28	112.76	117.40
26	14	1831	G	N3-C4-C5	-9.27	123.96	128.60
26	1H	574	C	OP1-P-OP2	9.27	133.51	119.60
26	1H	2824	C	N1-C2-O2	9.27	124.46	118.90
25	4L	14	A	O4'-C1'-N9	9.27	115.62	108.20
26	14	458	G	C5-N7-C8	-9.27	99.66	104.30
26	1H	2453	A	O5'-P-OP2	-9.27	97.36	105.70
27	16	98	G	C8-N9-C4	9.27	110.11	106.40
26	14	2446	G	OP2-P-O3'	9.27	125.59	105.20
26	1H	1368	G	C6-N1-C2	-9.27	119.54	125.10
26	1H	2285	C	N3-C4-N4	-9.27	111.52	118.00
26	1H	258	G	C8-N9-C4	9.26	110.11	106.40
27	16	45	A	O5'-P-OP2	-9.26	97.36	105.70
26	14	2713	A	N1-C6-N6	9.26	124.16	118.60
1	13	863	U	C5-C4-O4	9.26	131.46	125.90
26	1H	46	C	O5'-P-OP1	-9.26	97.37	105.70
1	1G	562	C	N1-C2-O2	9.26	124.46	118.90
1	1G	596	C	C6-N1-C2	9.26	124.00	120.30
1	13	1310	G	O5'-P-OP2	-9.26	97.37	105.70
26	1H	1933	G	N7-C8-N9	9.26	117.73	113.10
1	13	547	A	N1-C6-N6	-9.26	113.05	118.60
26	14	35	G	N1-C6-O6	-9.26	114.35	119.90
26	14	2224	G	N1-C6-O6	9.26	125.45	119.90
26	14	2618	G	C8-N9-C4	-9.26	102.70	106.40
1	13	965	A	C6-C5-N7	-9.25	125.82	132.30
26	1H	142	G	N3-C4-C5	9.25	133.23	128.60
26	1H	265	A	N7-C8-N9	9.25	118.43	113.80
26	1H	458	G	N3-C4-N9	-9.25	120.45	126.00
26	1H	1370	C	N1-C2-O2	-9.25	113.35	118.90
26	1H	2208	U	N1-C2-O2	-9.25	116.32	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2302	G	C5-C6-O6	9.25	134.15	128.60
1	13	878	G	N9-C4-C5	-9.25	101.70	105.40
26	1H	779	U	N3-C4-C5	9.25	120.15	114.60
26	1H	821	A	C5-C6-N1	-9.25	113.08	117.70
26	1H	1611	C	N3-C4-C5	9.25	125.60	121.90
26	1H	2055	C	N1-C2-O2	9.25	124.45	118.90
26	14	770	G	C5-C6-N1	9.25	116.12	111.50
26	1H	55	G	C5-C6-O6	-9.25	123.05	128.60
26	1H	88	G	C8-N9-C4	-9.25	102.70	106.40
26	1H	1022	G	N3-C4-C5	-9.25	123.98	128.60
26	1H	1291	C	N3-C4-N4	-9.25	111.53	118.00
26	14	113	G	C5-C6-N1	9.25	116.12	111.50
26	14	2041	U	N1-C2-N3	9.25	120.45	114.90
26	14	2236	C	C4-C5-C6	9.25	122.02	117.40
1	13	1333	A	C6-N1-C2	-9.24	113.05	118.60
26	1H	119	A	N9-C4-C5	9.24	109.50	105.80
26	1H	483	A	C5-C6-N1	-9.24	113.08	117.70
26	1H	1263	U	C4-C5-C6	-9.24	114.15	119.70
26	1H	2442	C	N3-C4-N4	9.24	124.47	118.00
26	14	2420	C	O5'-P-OP1	-9.24	97.38	105.70
26	1H	535	C	C6-N1-C2	9.24	124.00	120.30
26	1H	1905	C	N3-C4-N4	9.24	124.47	118.00
26	1H	813	U	C5-C6-N1	-9.24	118.08	122.70
26	14	130	C	C2-N3-C4	-9.24	115.28	119.90
26	14	770	G	C8-N9-C4	9.24	110.10	106.40
22	1K	40	C	N3-C2-O2	-9.24	115.43	121.90
26	1H	443	A	OP1-P-OP2	9.24	133.45	119.60
26	1H	514	A	N1-C6-N6	-9.24	113.06	118.60
26	1H	527	C	C6-N1-C2	9.24	124.00	120.30
26	14	2591	C	N3-C4-C5	-9.24	118.21	121.90
1	13	853	G	C8-N9-C4	9.23	110.09	106.40
26	1H	1785	A	OP2-P-O3'	9.23	125.52	105.20
26	1H	2226	C	N1-C2-O2	9.23	124.44	118.90
26	14	213	A	C8-N9-C4	9.23	109.49	105.80
1	13	1519	A	N1-C6-N6	-9.23	113.06	118.60
26	1H	1516	U	C5-C4-O4	9.23	131.44	125.90
26	1H	1934	C	O5'-P-OP2	-9.23	97.39	105.70
26	1H	347	A	C5-N7-C8	-9.23	99.28	103.90
26	1H	1955	U	C5-C6-N1	-9.23	118.08	122.70
26	1H	2848	G	N1-C6-O6	-9.23	114.36	119.90
1	1G	249	U	O5'-P-OP2	-9.23	97.39	105.70
26	14	428	A	N3-C4-C5	-9.23	120.34	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
4	32	191	ARG	NE-CZ-NH1	-9.23	115.69	120.30
26	14	1469	A	N7-C8-N9	9.23	118.42	113.80
26	14	1596	A	N1-C6-N6	-9.23	113.06	118.60
1	13	1475	G	N3-C2-N2	-9.23	113.44	119.90
26	1H	64	A	N1-C6-N6	-9.23	113.06	118.60
26	1H	303	U	C6-N1-C2	-9.23	115.46	121.00
26	1H	483	A	C2-N3-C4	-9.23	105.99	110.60
26	1H	834	C	C5-C6-N1	-9.23	116.39	121.00
26	14	2362	G	N1-C6-O6	9.23	125.44	119.90
26	14	71	A	C4-C5-N7	9.23	115.31	110.70
26	14	2068	U	C2-N3-C4	9.23	132.53	127.00
26	1H	599	G	N7-C8-N9	-9.22	108.49	113.10
27	16	87	G	C8-N9-C4	9.22	110.09	106.40
26	14	196	A	N1-C6-N6	-9.22	113.07	118.60
26	14	944	G	O5'-P-OP1	-9.22	97.40	105.70
26	1H	1313	U	N1-C2-O2	-9.22	116.35	122.80
26	1H	1826	G	C5-C6-N1	-9.22	106.89	111.50
26	14	22	C	N3-C4-N4	-9.22	111.55	118.00
26	14	123	G	C2-N3-C4	-9.22	107.29	111.90
26	14	2243	U	OP1-P-OP2	9.22	133.43	119.60
26	14	2423	U	C6-N1-C2	9.22	126.53	121.00
26	1H	512	G	O4'-C1'-N9	9.22	115.58	108.20
26	14	609	A	C2-N3-C4	9.22	115.21	110.60
26	14	2264	C	C6-N1-C2	-9.22	116.61	120.30
26	1H	2761	G	N1-C2-N3	9.22	129.43	123.90
26	14	2447	G	C4-C5-C6	9.22	124.33	118.80
24	3K	43	U	C6-N1-C2	9.22	126.53	121.00
26	1H	1992	G	C6-N1-C2	-9.21	119.57	125.10
26	1H	2287	A	N3-C4-N9	-9.22	120.03	127.40
26	14	706	A	C2-N3-C4	-9.21	105.99	110.60
26	14	2000	G	C8-N9-C4	9.21	110.09	106.40
1	13	346	G	C8-N9-C4	-9.21	102.72	106.40
1	13	1072	G	N1-C6-O6	-9.21	114.37	119.90
24	3K	39	U	C5-C6-N1	9.21	127.31	122.70
26	1H	2253	G	C4-C5-N7	9.21	114.48	110.80
1	1G	324	G	C5-C6-O6	9.21	134.13	128.60
26	14	1271	G	C2-N3-C4	-9.21	107.30	111.90
1	13	1089	G	N1-C6-O6	9.21	125.43	119.90
1	13	300	A	N7-C8-N9	9.21	118.40	113.80
26	1H	917	A	C6-C5-N7	-9.21	125.86	132.30
26	1H	1354	A	C4-C5-N7	9.21	115.30	110.70
26	1H	2583	G	N1-C2-N2	-9.21	107.91	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1210	A	C5-N7-C8	-9.21	99.30	103.90
26	14	1826	G	C2-N3-C4	9.21	116.50	111.90
1	13	789	U	C4-C5-C6	9.21	125.22	119.70
1	13	826	C	C6-N1-C2	-9.21	116.62	120.30
26	1H	1768	U	C2-N3-C4	9.21	132.52	127.00
26	14	2555	U	O5'-P-OP1	-9.21	97.42	105.70
26	1H	1157	G	N1-C2-N3	9.20	129.42	123.90
26	1H	2374	C	C2-N3-C4	-9.21	115.30	119.90
1	1G	1476	G	C8-N9-C4	9.21	110.08	106.40
26	14	744	G	C2-N3-C4	-9.21	107.30	111.90
27	1J	109	G	C8-N9-C4	-9.20	102.72	106.40
1	13	577	G	C5-N7-C8	-9.20	99.70	104.30
26	1H	705	A	N1-C6-N6	9.20	124.12	118.60
26	1H	915	C	N3-C4-C5	-9.20	118.22	121.90
26	14	1627	G	C2-N3-C4	-9.20	107.30	111.90
26	1H	2871	C	O5'-P-OP2	-9.20	97.42	105.70
26	1H	411	G	N3-C4-C5	-9.20	124.00	128.60
26	1H	1300	U	C4-C5-C6	9.20	125.22	119.70
26	14	1004	C	C5-C6-N1	9.20	125.60	121.00
26	14	1316	U	N3-C4-O4	-9.20	112.96	119.40
26	1H	873	G	C8-N9-C4	-9.19	102.72	106.40
26	1H	2226	C	N3-C2-O2	-9.19	115.46	121.90
1	1G	1522	U	C6-N1-C2	-9.20	115.48	121.00
26	14	1332	G	C4-C5-N7	9.20	114.48	110.80
27	1J	40	U	N3-C2-O2	9.19	128.63	122.20
26	1H	46	C	N3-C4-C5	-9.19	118.22	121.90
26	1H	1623	G	N3-C2-N2	9.19	126.33	119.90
23	2K	41	C	N3-C4-N4	-9.19	111.57	118.00
26	1H	356	G	N1-C6-O6	9.19	125.41	119.90
26	1H	1321	A	N1-C2-N3	9.19	133.89	129.30
26	1H	2330	G	C4-C5-N7	9.19	114.48	110.80
1	1G	357	G	O5'-P-OP1	-9.19	97.43	105.70
26	14	1130	U	N1-C2-O2	-9.19	116.37	122.80
26	14	2016	U	N1-C2-N3	9.19	120.41	114.90
26	1H	1623	G	C5-N7-C8	9.19	108.89	104.30
26	1H	1912	A	C5-C6-N1	9.19	122.29	117.70
26	1H	2544	G	C6-N1-C2	-9.19	119.59	125.10
1	1G	858	G	C5-C6-O6	-9.19	123.09	128.60
26	1H	1368	G	N3-C4-C5	-9.18	124.01	128.60
26	1H	2297	C	O5'-P-OP1	-9.18	97.44	105.70
1	1G	111	G	N1-C6-O6	9.18	125.41	119.90
1	1G	833	U	N3-C2-O2	-9.18	115.77	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	623	G	C5-C6-O6	-9.18	123.09	128.60
26	14	1889	A	O5'-P-OP1	-9.18	97.44	105.70
26	1H	605	C	O5'-P-OP1	-9.18	97.44	105.70
26	1H	1696	G	C2-N3-C4	-9.18	107.31	111.90
27	16	64	C	OP1-P-O3'	9.18	125.40	105.20
1	13	720	C	N3-C2-O2	-9.18	115.48	121.90
1	13	988	G	N3-C4-C5	-9.18	124.01	128.60
26	1H	586	A	C2-N3-C4	9.18	115.19	110.60
26	1H	1516	U	O5'-P-OP2	-9.18	97.44	105.70
1	1G	328	C	N1-C2-O2	9.18	124.41	118.90
26	14	380	U	O5'-P-OP2	-9.18	97.44	105.70
26	1H	870	A	C5-C6-N1	9.17	122.29	117.70
26	1H	2701	C	N1-C2-N3	9.17	125.62	119.20
55	Q8	50	LEU	CA-CB-CG	-9.17	94.20	115.30
1	1G	114	U	N3-C2-O2	-9.17	115.78	122.20
26	14	687	C	N3-C4-C5	9.17	125.57	121.90
26	14	2329	G	C5-C6-N1	9.17	116.09	111.50
1	13	952	U	N1-C2-N3	9.17	120.40	114.90
26	1H	695	G	C5-C6-O6	9.17	134.10	128.60
1	1G	1486	G	C8-N9-C4	9.17	110.07	106.40
26	14	659	C	N1-C2-O2	-9.17	113.40	118.90
26	1H	813	U	OP1-P-OP2	9.17	133.35	119.60
26	14	741	G	N1-C6-O6	9.17	125.40	119.90
26	14	952	G	OP1-P-OP2	-9.17	105.85	119.60
26	14	1332	G	N1-C2-N3	9.17	129.40	123.90
26	14	1802	A	C5-C6-N1	9.17	122.28	117.70
26	14	2385	C	C5-C4-N4	-9.17	113.78	120.20
26	1H	2581	G	C2-N3-C4	-9.17	107.32	111.90
27	16	112	G	O5'-P-OP1	-9.17	97.45	105.70
26	14	136	G	O5'-P-OP1	-9.17	97.45	105.70
1	13	333	G	C4-C5-C6	9.17	124.30	118.80
26	1H	420	C	C2-N3-C4	-9.17	115.32	119.90
26	1H	729	G	C4-C5-N7	9.17	114.47	110.80
26	14	745	G	N7-C8-N9	-9.17	108.52	113.10
26	14	1658	C	C4-C5-C6	9.17	121.98	117.40
26	14	1787	A	O5'-P-OP1	-9.17	97.45	105.70
26	1H	787	U	C5-C6-N1	-9.17	118.12	122.70
26	1H	844	C	N1-C2-O2	-9.17	113.40	118.90
26	14	1906	G	C5-N7-C8	-9.17	99.72	104.30
26	14	2261	C	O5'-P-OP1	9.17	121.70	110.70
26	1H	58	G	C8-N9-C4	-9.16	102.73	106.40
26	1H	199	A	N1-C6-N6	-9.16	113.10	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1253	A	C8-N9-C4	9.16	109.47	105.80
26	14	2570	G	C5-C6-N1	-9.16	106.92	111.50
1	13	1209	C	N3-C2-O2	9.16	128.31	121.90
26	1H	182	A	N9-C4-C5	-9.16	102.14	105.80
26	1H	387	U	C5-C6-N1	-9.16	118.12	122.70
26	1H	389	G	C2-N3-C4	-9.16	107.32	111.90
27	16	60	C	C2-N3-C4	9.16	124.48	119.90
1	13	1323	G	O5'-P-OP2	9.16	121.69	110.70
26	1H	104	U	O5'-P-OP1	9.16	121.69	110.70
26	1H	1237	A	N1-C2-N3	9.16	133.88	129.30
26	1H	807	U	OP1-P-OP2	9.16	133.34	119.60
1	1G	722	A	N1-C6-N6	9.16	124.09	118.60
26	14	1762	A	OP2-P-O3'	9.16	125.34	105.20
26	1H	123	G	C6-N1-C2	-9.15	119.61	125.10
26	1H	782	A	N9-C4-C5	9.15	109.46	105.80
26	1H	1257	C	N1-C2-O2	-9.15	113.41	118.90
54	P8	12	ARG	NE-CZ-NH1	-9.15	115.72	120.30
1	1G	324	G	O5'-P-OP2	-9.15	97.46	105.70
26	14	1806	C	OP1-P-OP2	9.15	133.33	119.60
1	13	1416	G	N1-C2-N3	9.15	129.39	123.90
26	14	1653	G	C5-N7-C8	9.15	108.88	104.30
1	13	1311	G	C8-N9-C4	9.15	110.06	106.40
26	1H	50	U	C5-C6-N1	-9.15	118.12	122.70
1	1G	1422	G	N1-C6-O6	-9.15	114.41	119.90
26	1H	72	U	C5-C4-O4	-9.15	120.41	125.90
26	1H	483	A	O5'-P-OP1	-9.15	97.47	105.70
26	1H	1294	U	N1-C2-O2	-9.15	116.40	122.80
26	1H	2761	G	O5'-P-OP2	-9.15	97.47	105.70
26	14	1381	G	O5'-P-OP1	-9.15	97.47	105.70
26	14	1382	G	C5-N7-C8	-9.15	99.72	104.30
26	14	2272	U	O5'-P-OP1	9.15	121.68	110.70
26	1H	735	A	N9-C4-C5	-9.15	102.14	105.80
1	1G	1484	C	O5'-P-OP2	-9.15	97.47	105.70
26	14	237	C	C6-N1-C2	9.15	123.96	120.30
26	1H	52	A	C2-N3-C4	9.14	115.17	110.60
26	1H	1187	G	C5-C6-O6	-9.14	123.11	128.60
1	1G	790	A	N1-C6-N6	-9.14	113.11	118.60
26	14	1376	C	O5'-P-OP1	-9.14	97.47	105.70
26	14	571	A	C8-N9-C4	-9.14	102.14	105.80
1	13	736	C	N3-C4-C5	9.14	125.56	121.90
26	1H	35	G	C5-C6-O6	9.14	134.08	128.60
26	14	124	G	O5'-P-OP2	-9.14	97.47	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	247	G	N3-C4-C5	9.14	133.17	128.60
1	13	790	A	C2-N3-C4	9.14	115.17	110.60
26	14	1300	U	N3-C4-C5	-9.14	109.12	114.60
26	14	2299	G	O5'-P-OP2	9.14	121.67	110.70
1	13	1404	C	C4-C5-C6	-9.14	112.83	117.40
1	1G	789	U	N3-C4-O4	9.14	125.80	119.40
27	1J	115	G	C8-N9-C4	9.14	110.06	106.40
26	1H	919	G	C4-C5-N7	-9.13	107.15	110.80
26	1H	2448	A	C5-N7-C8	-9.14	99.33	103.90
26	14	2512	C	N3-C4-C5	9.13	125.55	121.90
26	1H	1626	G	N9-C4-C5	9.13	109.05	105.40
26	1H	2400	G	N9-C4-C5	9.13	109.05	105.40
26	14	1472	A	O5'-P-OP1	-9.13	97.48	105.70
26	1H	62	C	C5-C6-N1	-9.13	116.44	121.00
26	1H	1327	C	N1-C2-O2	-9.13	113.42	118.90
26	1H	1463	C	C6-N1-C2	-9.13	116.65	120.30
26	1H	1920	C	N3-C4-C5	9.13	125.55	121.90
1	1G	26	A	O5'-P-OP2	-9.13	97.48	105.70
26	1H	2649	U	C5-C6-N1	-9.13	118.14	122.70
26	14	252	G	C5-C6-N1	9.13	116.06	111.50
26	1H	17	G	O5'-P-OP2	-9.13	97.49	105.70
27	16	31	C	N3-C4-N4	-9.13	111.61	118.00
26	14	1318	C	O5'-P-OP2	9.13	121.65	110.70
26	14	1806	C	C5-C6-N1	-9.13	116.44	121.00
22	1K	74	C	N3-C2-O2	-9.12	115.51	121.90
26	1H	1904	G	OP2-P-O3'	9.12	125.27	105.20
26	14	974	G	O5'-P-OP2	-9.12	97.49	105.70
26	14	1187	G	C5-N7-C8	-9.12	99.74	104.30
26	14	1779	U	C6-N1-C2	9.12	126.47	121.00
1	13	790	A	C5-C6-N6	-9.12	116.41	123.70
26	14	2259	G	N1-C6-O6	9.12	125.37	119.90
1	13	1407	C	C4-C5-C6	-9.12	112.84	117.40
24	3K	43	U	N1-C2-N3	-9.12	109.43	114.90
26	1H	1421	G	C5-C6-N1	-9.12	106.94	111.50
26	1H	1728	G	C4-C5-N7	9.12	114.45	110.80
1	1G	558	G	C4-C5-N7	-9.12	107.15	110.80
26	1H	1459	G	C8-N9-C4	9.12	110.05	106.40
26	1H	473	G	N1-C2-N2	-9.12	108.00	116.20
26	1H	326	G	C8-N9-C4	-9.11	102.75	106.40
1	1G	9	G	OP1-P-OP2	-9.12	105.93	119.60
1	1G	108	G	C2-N3-C4	9.12	116.46	111.90
26	14	2578	G	C8-N9-C4	9.12	110.05	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	553	A	C8-N9-C4	-9.11	102.16	105.80
26	14	51	G	O5'-P-OP2	-9.11	97.50	105.70
26	1H	1215	G	C6-C5-N7	-9.11	124.93	130.40
26	1H	2611	U	N3-C4-O4	-9.11	113.02	119.40
26	14	679	C	C5-C4-N4	-9.11	113.82	120.20
26	1H	439	G	N1-C2-N3	9.11	129.37	123.90
1	1G	858	G	C4-C5-N7	9.11	114.44	110.80
1	13	40	C	N3-C4-C5	-9.11	118.26	121.90
26	1H	528	A	N3-C4-N9	-9.11	120.11	127.40
26	1H	1231	G	C5-C6-O6	-9.11	123.14	128.60
26	1H	1314	C	N3-C2-O2	-9.11	115.53	121.90
26	14	2477	C	N1-C2-O2	9.11	124.36	118.90
1	13	904	C	N3-C4-N4	-9.11	111.62	118.00
26	1H	1159	U	N1-C2-O2	9.11	129.18	122.80
26	1H	2052	G	N3-C4-C5	-9.11	124.05	128.60
26	14	1027	A	C5-C6-N1	9.11	122.25	117.70
26	1H	1817	G	N9-C4-C5	9.11	109.04	105.40
26	1H	2368	C	O5'-P-OP1	-9.11	97.50	105.70
26	14	2208	U	C2-N1-C1'	-9.11	106.77	117.70
1	13	1359	C	C6-N1-C2	9.10	123.94	120.30
26	1H	120	U	N1-C2-O2	9.10	129.17	122.80
26	1H	316	C	N3-C4-N4	-9.10	111.63	118.00
26	1H	1381	G	N1-C2-N2	9.10	124.39	116.20
26	1H	2772	C	C6-N1-C2	9.10	123.94	120.30
26	14	2287	A	N3-C4-C5	9.10	133.17	126.80
26	1H	2019	A	C4-C5-C6	9.10	121.55	117.00
26	14	1840	G	N3-C2-N2	-9.10	113.53	119.90
26	14	2463	C	C5-C6-N1	-9.10	116.45	121.00
26	14	1705	G	C8-N9-C4	9.10	110.04	106.40
1	13	300	A	O5'-P-OP2	9.10	121.62	110.70
26	1H	2273	A	N1-C6-N6	-9.10	113.14	118.60
26	1H	2561	A	C2-N3-C4	-9.10	106.05	110.60
29	11	37	LEU	CA-CB-CG	-9.10	94.37	115.30
1	1G	573	A	C4-C5-N7	-9.10	106.15	110.70
1	13	253	U	O5'-P-OP2	9.10	121.61	110.70
1	13	1305	G	C5-C6-N1	-9.10	106.95	111.50
1	1G	336	C	N1-C2-N3	-9.10	112.83	119.20
26	14	913	U	N1-C2-N3	-9.10	109.44	114.90
26	14	1336	A	N9-C4-C5	9.10	109.44	105.80
1	13	244	U	C5-C6-N1	9.09	127.25	122.70
26	1H	617	G	N7-C8-N9	-9.09	108.55	113.10
26	1H	1617	C	C2-N3-C4	-9.09	115.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	573	A	N9-C4-C5	9.09	109.44	105.80
1	13	59	A	O5'-P-OP1	-9.09	97.52	105.70
1	13	1194	U	C5-C4-O4	9.09	131.35	125.90
26	1H	665	C	C6-N1-C2	9.09	123.94	120.30
1	1G	789	U	N1-C2-O2	-9.09	116.44	122.80
26	14	1547	C	C6-N1-C2	-9.09	116.66	120.30
26	14	2329	G	N9-C4-C5	-9.09	101.76	105.40
26	1H	208	C	C5-C6-N1	-9.09	116.46	121.00
26	1H	632	A	C8-N9-C4	-9.09	102.17	105.80
26	1H	952	G	C5-C6-N1	9.09	116.04	111.50
26	1H	1806	C	OP1-P-OP2	9.09	133.23	119.60
26	14	1300	U	N3-C4-O4	9.09	125.76	119.40
26	14	1616	A	C2-N3-C4	-9.09	106.06	110.60
26	14	2569	G	C8-N9-C4	9.09	110.03	106.40
26	1H	1478	G	O5'-P-OP2	-9.09	97.52	105.70
26	1H	1916	A	N1-C2-N3	9.09	133.84	129.30
27	16	115	G	N1-C2-N2	-9.09	108.02	116.20
26	14	1403	C	O5'-P-OP1	-9.09	97.52	105.70
26	14	1762	A	N3-C4-C5	9.09	133.16	126.80
26	14	1930	G	C5-C6-O6	9.09	134.05	128.60
26	1H	280	C	N3-C2-O2	-9.08	115.54	121.90
26	1H	938	G	N7-C8-N9	-9.08	108.56	113.10
26	1H	2440	C	N3-C4-C5	-9.08	118.27	121.90
1	1G	114	U	N1-C2-N3	9.08	120.35	114.90
1	13	823	G	OP1-P-OP2	-9.08	105.98	119.60
26	1H	1543	A	N1-C6-N6	9.08	124.05	118.60
26	14	462	C	C5-C6-N1	-9.08	116.46	121.00
26	14	2457	U	OP2-P-O3'	9.08	125.18	105.20
1	1G	528	C	C6-N1-C2	9.08	123.93	120.30
26	14	2546	U	N3-C4-C5	-9.08	109.15	114.60
26	1H	774	A	N7-C8-N9	9.08	118.34	113.80
26	1H	1193	G	C8-N9-C4	9.08	110.03	106.40
26	1H	1680	U	OP1-P-OP2	-9.08	105.99	119.60
26	1H	2502	G	C5-C6-N1	9.08	116.04	111.50
1	1G	784	C	C6-N1-C2	9.08	123.93	120.30
26	14	2396	G	C4-C5-N7	9.08	114.43	110.80
1	13	130	A	N1-C6-N6	9.07	124.05	118.60
26	1H	1759	A	N1-C2-N3	9.07	133.84	129.30
40	A8	110	LEU	CA-CB-CG	9.07	136.17	115.30
26	14	1158	C	C5-C6-N1	-9.07	116.46	121.00
26	14	1647	G	C8-N9-C4	-9.07	102.77	106.40
1	13	753	A	O5'-P-OP1	-9.07	97.53	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	570	G	C5-C6-N1	-9.07	106.96	111.50
26	1H	2424	C	N1-C2-N3	-9.07	112.85	119.20
26	1H	2432	A	O5'-P-OP1	-9.07	97.54	105.70
26	1H	74	A	C4-C5-N7	9.07	115.23	110.70
26	14	2085	C	C5-C6-N1	-9.07	116.47	121.00
1	13	950	U	N3-C2-O2	9.06	128.54	122.20
26	1H	1298	C	N1-C2-O2	9.06	124.34	118.90
26	1H	1786	A	N1-C6-N6	9.06	124.04	118.60
26	1H	1618	A	C4-C5-N7	9.06	115.23	110.70
26	1H	2367	G	N7-C8-N9	9.06	117.63	113.10
26	1H	2485	G	C8-N9-C4	9.06	110.03	106.40
26	1H	1767	C	N3-C2-O2	-9.06	115.56	121.90
26	1H	2486	G	C6-N1-C2	-9.06	119.66	125.10
26	14	462	C	N1-C2-N3	9.06	125.54	119.20
26	14	2853	C	N3-C2-O2	-9.06	115.56	121.90
26	1H	2580	U	N3-C4-O4	9.06	125.74	119.40
26	1H	698	C	OP1-P-OP2	9.06	133.19	119.60
26	1H	2394	C	N3-C4-N4	-9.06	111.66	118.00
26	1H	1183	G	N1-C6-O6	9.06	125.33	119.90
26	1H	2045	C	N3-C4-N4	-9.06	111.66	118.00
26	1H	2613	U	N3-C2-O2	9.06	128.54	122.20
26	14	2387	U	C6-N1-C2	9.06	126.44	121.00
26	14	2782	G	C6-C5-N7	-9.06	124.97	130.40
26	1H	69	C	N3-C2-O2	-9.05	115.56	121.90
26	1H	220	G	C5-C6-O6	-9.06	123.17	128.60
26	14	398	G	C5-C6-N1	-9.06	106.97	111.50
26	14	736	C	O5'-P-OP1	-9.06	97.55	105.70
26	1H	1158	C	C2-N3-C4	-9.05	115.37	119.90
1	1G	730	G	C5-C6-O6	9.05	134.03	128.60
26	14	130	C	N3-C2-O2	9.05	128.24	121.90
26	14	1463	C	C6-N1-C2	-9.05	116.68	120.30
26	1H	508	G	N7-C8-N9	9.05	117.63	113.10
26	1H	1486	A	N1-C6-N6	9.05	124.03	118.60
1	1G	336	C	C2-N3-C4	9.05	124.43	119.90
26	1H	2527	C	C5-C6-N1	9.05	125.53	121.00
26	14	2679	A	C8-N9-C4	9.05	109.42	105.80
26	1H	110	G	O5'-P-OP2	-9.05	97.56	105.70
26	1H	1630	G	N1-C6-O6	-9.05	114.47	119.90
26	1H	1854	A	N1-C6-N6	-9.05	113.17	118.60
1	1G	538	G	O5'-P-OP1	-9.05	97.56	105.70
1	1G	1486	G	O5'-P-OP1	9.05	121.56	110.70
26	14	1253	A	C2-N3-C4	9.05	115.12	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2278	A	O5'-P-OP2	-9.05	97.56	105.70
26	14	2644	G	N3-C4-C5	9.05	133.12	128.60
1	13	1279	A	C6-C5-N7	-9.05	125.97	132.30
26	1H	827	U	N3-C2-O2	9.05	128.53	122.20
1	1G	1478	C	O5'-P-OP2	-9.05	97.56	105.70
26	14	1432	C	N1-C2-O2	-9.05	113.47	118.90
26	14	2078	C	C6-N1-C2	-9.05	116.68	120.30
26	1H	2699	C	C5-C6-N1	-9.04	116.48	121.00
26	1H	817	C	C6-N1-C2	-9.04	116.68	120.30
26	1H	2556	C	O5'-P-OP2	-9.04	97.56	105.70
26	1H	2574	G	C5-C6-N1	9.04	116.02	111.50
26	1H	234	C	N3-C4-C5	9.04	125.52	121.90
26	1H	1202	C	N1-C2-O2	-9.04	113.48	118.90
26	1H	662	G	N1-C6-O6	-9.04	114.48	119.90
26	1H	982	C	C2-N3-C4	9.04	124.42	119.90
26	1H	1153	C	C5-C4-N4	9.04	126.53	120.20
26	14	199	A	C5-C6-N6	-9.04	116.47	123.70
26	14	571	A	C4-C5-C6	9.04	121.52	117.00
26	14	761	A	N1-C6-N6	-9.04	113.18	118.60
26	14	2413	G	N1-C6-O6	9.04	125.32	119.90
23	2K	62	C	C5-C6-N1	9.04	125.52	121.00
26	1H	2268	A	N9-C4-C5	-9.04	102.19	105.80
1	1G	1483	A	C4-C5-C6	-9.04	112.48	117.00
1	1G	1487	G	O5'-P-OP1	9.04	121.54	110.70
26	14	444	C	C6-N1-C2	9.04	123.91	120.30
26	14	2048	G	C4-C5-N7	-9.04	107.19	110.80
1	13	792	A	C5-C6-N1	9.03	122.22	117.70
26	14	121	G	C6-C5-N7	-9.03	124.98	130.40
26	14	1429	G	C8-N9-C4	-9.03	102.79	106.40
1	13	577	G	C4-C5-N7	9.03	114.41	110.80
26	1H	952	G	C6-C5-N7	-9.03	124.98	130.40
26	1H	1129	A	O5'-P-OP2	-9.03	97.57	105.70
26	1H	1258	C	C6-N1-C2	9.03	123.91	120.30
26	1H	2598	A	OP2-P-O3'	9.03	125.06	105.20
25	4L	12	A	N1-C6-N6	9.03	124.02	118.60
26	14	1277	G	C5-C6-O6	-9.03	123.18	128.60
26	14	1856	G	N1-C6-O6	9.03	125.32	119.90
26	14	2741	A	N9-C4-C5	-9.03	102.19	105.80
1	13	392	G	N3-C2-N2	-9.03	113.58	119.90
26	1H	970	C	N3-C4-C5	-9.03	118.29	121.90
26	1H	2395	C	C6-N1-C2	9.03	123.91	120.30
26	1H	2559	C	C2-N3-C4	-9.03	115.39	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	911	A	C6-N1-C2	-9.03	113.18	118.60
26	14	2502	G	C5-C6-O6	-9.03	123.18	128.60
26	1H	1574	C	O5'-P-OP2	-9.03	97.58	105.70
27	1J	54	G	N7-C8-N9	9.03	117.61	113.10
26	1H	601	C	C6-N1-C2	9.02	123.91	120.30
26	1H	1244	G	N1-C2-N2	9.02	124.32	116.20
1	1G	690	G	C5-N7-C8	-9.02	99.79	104.30
26	14	988	A	C5-C6-N6	-9.02	116.48	123.70
26	14	2434	A	C5-C6-N1	-9.02	113.19	117.70
26	1H	732	C	N1-C2-O2	-9.02	113.49	118.90
26	1H	815	C	O5'-P-OP2	-9.02	97.58	105.70
26	1H	1478	G	C8-N9-C4	-9.02	102.79	106.40
26	1H	2280	G	C5-C6-O6	9.02	134.01	128.60
26	1H	1364	G	C5-C6-O6	-9.02	123.19	128.60
26	1H	2387	U	C2-N3-C4	-9.02	121.59	127.00
26	14	729	G	C2-N3-C4	9.02	116.41	111.90
27	1J	101	A	N1-C6-N6	9.02	124.01	118.60
26	1H	34	C	O5'-P-OP1	-9.02	97.59	105.70
26	1H	64	A	C5-N7-C8	9.02	108.41	103.90
26	1H	478	A	N1-C2-N3	9.02	133.81	129.30
26	1H	1165	U	N3-C2-O2	-9.02	115.89	122.20
26	1H	2645	G	C5-C6-N1	-9.02	106.99	111.50
46	G8	81	LYS	C-N-CD	-9.02	100.77	120.60
1	1G	1527	C	C5-C6-N1	-9.02	116.49	121.00
26	14	815	C	O5'-P-OP1	9.02	121.52	110.70
26	14	530	G	C2-N3-C4	-9.02	107.39	111.90
26	14	1583	A	N1-C6-N6	9.02	124.01	118.60
26	14	2848	G	C2-N3-C4	-9.02	107.39	111.90
1	13	532	A	N7-C8-N9	9.01	118.31	113.80
26	1H	85	G	C5-C6-O6	-9.01	123.19	128.60
26	1H	188	G	C4-C5-N7	9.01	114.41	110.80
26	1H	447	A	O5'-P-OP1	-9.01	97.59	105.70
26	1H	1595	G	N1-C6-O6	9.01	125.31	119.90
26	1H	1297	C	OP1-P-O3'	9.01	125.02	105.20
26	14	116	C	N3-C4-C5	-9.01	118.30	121.90
26	1H	1618	A	N1-C6-N6	9.01	124.01	118.60
26	1H	2261	C	OP2-P-O3'	9.01	125.02	105.20
26	14	1630(A)	C	C5-C4-N4	-9.01	113.89	120.20
26	14	1769	G	N3-C4-C5	-9.01	124.09	128.60
1	13	245	C	N3-C4-C5	9.01	125.50	121.90
1	13	904	C	C2-N3-C4	-9.01	115.40	119.90
26	1H	106	C	O5'-P-OP2	-9.01	97.59	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2824	C	N1-C2-O2	-9.01	113.50	118.90
26	1H	2585	U	N3-C2-O2	-9.01	115.90	122.20
1	1G	413	G	C4-N9-C1'	-9.01	114.79	126.50
26	14	221	A	O5'-P-OP1	-9.01	97.60	105.70
26	1H	593	G	OP1-P-OP2	9.00	133.11	119.60
26	14	464	U	C5-C6-N1	-9.00	118.20	122.70
1	13	805	C	OP2-P-O3'	9.00	125.00	105.20
26	1H	439	G	C8-N9-C4	-9.00	102.80	106.40
1	1G	721	G	O5'-P-OP1	9.00	121.50	110.70
26	14	808	G	O5'-P-OP1	-9.00	97.60	105.70
26	14	1822	G	C5-C6-N1	-9.00	107.00	111.50
26	14	2457	U	N3-C2-O2	-9.00	115.90	122.20
26	14	2511	U	N3-C2-O2	-9.00	115.90	122.20
26	1H	425	G	C2-N3-C4	9.00	116.40	111.90
26	1H	2509	G	C6-N1-C2	-9.00	119.70	125.10
1	1G	312	C	C4-C5-C6	9.00	121.90	117.40
26	1H	51	G	C5-N7-C8	9.00	108.80	104.30
26	1H	186	G	C5-C6-O6	-9.00	123.20	128.60
26	1H	1754	C	N3-C2-O2	-9.00	115.60	121.90
26	14	855	G	C5-C6-N1	-9.00	107.00	111.50
26	14	1596	A	C5-C6-N6	9.00	130.90	123.70
23	2K	7	G	N1-C6-O6	9.00	125.30	119.90
26	1H	127	A	C5-N7-C8	-9.00	99.40	103.90
26	1H	837	C	C5-C6-N1	9.00	125.50	121.00
26	1H	845	G	N1-C6-O6	9.00	125.30	119.90
26	1H	1648	C	N1-C2-O2	-9.00	113.50	118.90
26	1H	2246	G	C5-N7-C8	9.00	108.80	104.30
26	1H	2485	G	O5'-P-OP2	-9.00	97.60	105.70
26	14	2219	G	N9-C4-C5	-9.00	101.80	105.40
26	14	2333	A	C8-N9-C4	9.00	109.40	105.80
1	1G	1527	C	C2-N3-C4	-8.99	115.40	119.90
26	14	812	C	O5'-P-OP1	-8.99	97.60	105.70
26	14	2067	G	N3-C4-C5	-8.99	124.10	128.60
26	1H	378	C	C2-N3-C4	-8.99	115.40	119.90
26	1H	932	G	O5'-P-OP2	-8.99	97.61	105.70
26	1H	1630(A)	C	O5'-P-OP1	-8.99	97.61	105.70
26	1H	2291	U	C6-N1-C2	-8.99	115.61	121.00
26	1H	2737	G	C5-C6-O6	-8.99	123.20	128.60
26	1H	526	A	N1-C6-N6	-8.99	113.21	118.60
26	1H	541	C	C6-N1-C2	-8.99	116.70	120.30
26	1H	1436	G	C5-C6-N1	8.99	116.00	111.50
26	1H	2228	G	C2-N3-C4	-8.99	107.41	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2261	C	OP1-P-O3'	-8.99	85.42	105.20
26	14	403	U	C5-C6-N1	-8.99	118.20	122.70
26	14	1568	G	N3-C2-N2	-8.99	113.61	119.90
26	1H	681	G	C8-N9-C4	8.99	109.99	106.40
26	1H	903	C	N3-C4-C5	8.99	125.50	121.90
26	1H	1546	C	C6-N1-C2	-8.99	116.70	120.30
26	1H	1617	C	O5'-P-OP2	8.99	121.48	110.70
26	1H	2036	C	C6-N1-C2	-8.99	116.70	120.30
1	13	1098	C	C6-N1-C2	-8.98	116.71	120.30
26	1H	787	U	O5'-P-OP2	-8.98	97.61	105.70
26	1H	648	G	C4-C5-N7	-8.98	107.21	110.80
26	1H	950	G	C5-N7-C8	8.98	108.79	104.30
26	1H	2450	A	N1-C2-N3	8.98	133.79	129.30
27	1J	89	G	C5-C6-O6	-8.98	123.21	128.60
26	1H	600	G	C5-C6-O6	-8.98	123.21	128.60
26	1H	2592	G	C2-N3-C4	-8.98	107.41	111.90
1	1G	41	G	C8-N9-C4	8.98	109.99	106.40
26	1H	928	G	N9-C4-C5	-8.98	101.81	105.40
26	1H	2012	G	C6-N1-C2	-8.98	119.71	125.10
26	1H	2271	G	N1-C6-O6	8.98	125.29	119.90
26	14	2240	C	O5'-P-OP1	8.98	121.47	110.70
26	14	2829	C	N1-C2-N3	-8.98	112.91	119.20
26	1H	778	G	C5-C6-N1	-8.98	107.01	111.50
26	1H	1767	C	N3-C4-C5	8.98	125.49	121.90
26	1H	231	C	N3-C4-C5	-8.97	118.31	121.90
26	1H	422	A	N1-C2-N3	8.97	133.79	129.30
26	1H	2024	G	N3-C2-N2	-8.97	113.62	119.90
26	14	2829	C	C2-N1-C1'	-8.97	108.93	118.80
26	14	1595	G	N1-C6-O6	8.97	125.28	119.90
26	14	1949	G	C4-C5-N7	-8.97	107.21	110.80
26	1H	1198	U	C5-C6-N1	-8.97	118.21	122.70
1	13	553	A	N1-C6-N6	-8.97	113.22	118.60
26	1H	845	G	C2-N3-C4	-8.97	107.42	111.90
26	1H	1309	G	N3-C2-N2	-8.97	113.62	119.90
1	1G	1313	U	C6-N1-C2	-8.97	115.62	121.00
23	2K	27	G	N3-C2-N2	-8.97	113.62	119.90
27	1J	81	G	C2-N3-C4	-8.97	107.42	111.90
26	1H	1402	C	N3-C4-N4	8.97	124.28	118.00
26	1H	1616	A	O4'-C1'-N9	8.97	115.37	108.20
26	1H	1617	C	N1-C2-N3	8.97	125.48	119.20
1	1G	910	C	N1-C2-O2	8.97	124.28	118.90
26	14	1800	C	N1-C2-O2	-8.97	113.52	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1851	U	C6-N1-C2	-8.97	115.62	121.00
26	14	1999	C	C2-N3-C4	-8.97	115.42	119.90
26	14	2526	G	N3-C4-C5	8.97	133.08	128.60
23	2K	77	A	C2-N3-C4	8.97	115.08	110.60
26	1H	864	G	N1-C2-N3	-8.97	118.52	123.90
26	14	2612	C	C6-N1-C2	8.97	123.89	120.30
1	13	698	G	C5-N7-C8	-8.96	99.82	104.30
1	13	1433	A	C4-C5-N7	-8.96	106.22	110.70
1	1G	915	A	C6-N1-C2	-8.96	113.22	118.60
26	14	1950	G	C8-N9-C4	-8.96	102.81	106.40
26	1H	599	G	C8-N9-C4	8.96	109.98	106.40
1	1G	1091	U	C5-C6-N1	8.96	127.18	122.70
27	1J	70	C	C5-C6-N1	8.96	125.48	121.00
26	1H	536	A	N9-C4-C5	8.96	109.38	105.80
26	1H	673	C	N1-C2-O2	-8.96	113.52	118.90
26	1H	1782	C	OP1-P-OP2	8.96	133.04	119.60
26	1H	2015	A	O5'-P-OP2	8.96	121.45	110.70
26	14	1187	G	N3-C4-N9	-8.96	120.62	126.00
26	14	1225	C	O5'-P-OP1	-8.96	97.64	105.70
1	13	748	C	C5-C6-N1	8.96	125.48	121.00
1	13	803	G	C5-C6-N1	-8.96	107.02	111.50
1	13	1299	A	C8-N9-C4	-8.96	102.22	105.80
26	1H	400	G	N1-C6-O6	8.96	125.28	119.90
26	1H	1193	G	N7-C8-N9	-8.96	108.62	113.10
26	1H	1340	U	N3-C2-O2	8.96	128.47	122.20
26	1H	1280	G	O5'-P-OP2	8.96	121.45	110.70
26	1H	2502	G	C8-N9-C4	-8.96	102.82	106.40
1	1G	972	C	C6-N1-C2	-8.96	116.72	120.30
1	13	521	G	N7-C8-N9	-8.96	108.62	113.10
26	14	1592	C	C6-N1-C2	-8.96	116.72	120.30
1	13	1069	C	C5-C6-N1	8.95	125.48	121.00
26	1H	710	G	OP1-P-OP2	-8.96	106.17	119.60
26	14	270(Z)	U	N3-C2-O2	-8.95	115.93	122.20
1	13	953	G	C8-N9-C4	-8.95	102.82	106.40
1	13	1299	A	C5-N7-C8	-8.95	99.42	103.90
25	4K	18	G	N9-C4-C5	8.95	108.98	105.40
26	1H	136	G	N3-C2-N2	-8.95	113.63	119.90
26	1H	2377	A	C4-C5-N7	8.95	115.18	110.70
26	1H	2419	U	C4-C5-C6	8.95	125.07	119.70
26	1H	780	G	C2-N3-C4	-8.95	107.42	111.90
26	1H	2252	G	C5-C6-O6	8.95	133.97	128.60
1	1G	30	U	N3-C2-O2	-8.95	115.93	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1432	C	N3-C2-O2	8.95	128.17	121.90
26	1H	1128	A	O5'-P-OP2	-8.95	97.65	105.70
26	14	2443	C	C4-C5-C6	8.95	121.88	117.40
26	1H	1839	G	N1-C2-N2	-8.95	108.15	116.20
26	14	2033	A	C5-C6-N1	8.95	122.17	117.70
26	14	2607	G	O5'-P-OP1	8.95	121.44	110.70
26	14	2611	U	C5-C6-N1	8.95	127.17	122.70
24	3K	76	A	C5-C6-N6	-8.95	116.54	123.70
26	1H	2635	C	N3-C2-O2	8.95	128.16	121.90
1	1G	689	C	O5'-P-OP1	-8.95	97.65	105.70
26	14	1397	U	N3-C4-O4	-8.95	113.14	119.40
26	14	2293	C	N1-C2-O2	8.95	124.27	118.90
1	1G	886	G	C8-N9-C4	8.94	109.98	106.40
26	14	406	G	N1-C6-O6	8.95	125.27	119.90
26	14	2014	A	N7-C8-N9	-8.95	109.33	113.80
1	13	713	G	N1-C6-O6	-8.94	114.53	119.90
1	13	1403	C	N1-C2-O2	-8.94	113.53	118.90
1	13	1202	G	C5-C6-N1	-8.94	107.03	111.50
26	1H	80	G	O5'-P-OP1	-8.94	97.65	105.70
26	1H	502	A	N1-C2-N3	8.94	133.77	129.30
26	14	2489	G	N1-C6-O6	8.94	125.27	119.90
26	1H	196	A	C2-N3-C4	-8.94	106.13	110.60
26	1H	618	G	N7-C8-N9	-8.94	108.63	113.10
1	1G	413	G	N7-C8-N9	-8.94	108.63	113.10
26	14	2237	G	OP1-P-OP2	8.94	133.01	119.60
23	2K	6	G	C2-N3-C4	-8.94	107.43	111.90
26	1H	1681	G	C4-C5-N7	8.94	114.38	110.80
26	1H	2299	G	C6-C5-N7	-8.94	125.04	130.40
1	1G	562	C	N3-C4-C5	8.94	125.47	121.90
26	14	843	G	N9-C4-C5	-8.94	101.83	105.40
26	14	2448	A	N1-C2-N3	8.94	133.77	129.30
26	14	2252	G	O5'-P-OP2	-8.94	97.66	105.70
26	1H	807	U	C2-N3-C4	-8.93	121.64	127.00
1	1G	1502	A	C6-C5-N7	-8.93	126.05	132.30
26	14	32	C	C6-N1-C2	8.93	123.87	120.30
26	14	1691	C	N3-C4-C5	-8.93	118.33	121.90
26	14	1558	A	N3-C4-C5	8.93	133.05	126.80
26	14	2324	C	C5-C6-N1	-8.93	116.53	121.00
26	14	2346	A	N1-C6-N6	8.93	123.96	118.60
23	2K	11	A	O5'-P-OP2	-8.93	97.66	105.70
26	1H	2314	C	N3-C2-O2	-8.93	115.65	121.90
26	1H	2593	U	C5-C4-O4	8.93	131.26	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	80	G	N1-C2-N3	8.93	129.26	123.90
26	14	1733	G	C5-C6-N1	-8.93	107.03	111.50
1	1G	180	U	C5-C6-N1	8.93	127.16	122.70
26	14	530	G	N1-C2-N2	-8.93	108.16	116.20
26	14	2503	A	O5'-P-OP1	8.93	121.42	110.70
26	1H	1106	G	C8-N9-C4	-8.93	102.83	106.40
26	14	2249	U	N3-C4-O4	8.93	125.65	119.40
26	14	2417	C	O5'-P-OP2	-8.93	97.67	105.70
26	1H	1627	G	N7-C8-N9	-8.93	108.64	113.10
13	4A	95	GLY	N-CA-C	8.93	135.41	113.10
26	14	762	U	C5-C6-N1	8.93	127.16	122.70
26	14	1914	C	C5-C6-N1	8.93	125.46	121.00
26	14	2267	A	OP1-P-OP2	8.93	132.99	119.60
1	13	667	G	N9-C4-C5	8.92	108.97	105.40
26	14	2084	C	C6-N1-C2	8.92	123.87	120.30
26	1H	971	C	N1-C2-N3	8.92	125.44	119.20
1	1G	331	G	C6-C5-N7	-8.92	125.05	130.40
26	14	675	A	C4-C5-C6	-8.92	112.54	117.00
26	1H	2689	U	C6-N1-C1'	8.92	133.69	121.20
26	14	74	A	N3-C4-N9	-8.92	120.27	127.40
26	14	330	A	C5-N7-C8	-8.92	99.44	103.90
26	14	468	G	OP1-P-OP2	-8.92	106.22	119.60
26	14	1685	C	N3-C4-C5	8.92	125.47	121.90
26	1H	2379	G	OP1-P-OP2	8.92	132.98	119.60
1	13	47	C	N1-C2-N3	8.92	125.44	119.20
26	1H	28	A	N9-C4-C5	-8.92	102.23	105.80
26	1H	1764	G	N1-C2-N3	8.92	129.25	123.90
1	1G	413	G	C4-C5-N7	-8.92	107.23	110.80
1	1G	889	A	O5'-P-OP1	-8.92	97.67	105.70
1	1G	1139	G	N3-C4-C5	8.92	133.06	128.60
26	14	140	A	N9-C4-C5	-8.92	102.23	105.80
26	14	613	U	O5'-P-OP1	8.92	121.40	110.70
26	14	769	G	C5-C6-O6	8.92	133.95	128.60
26	14	1525	G	C6-N1-C2	-8.92	119.75	125.10
26	14	1899	G	N1-C2-N3	8.92	129.25	123.90
26	14	1949	G	C4-C5-C6	8.92	124.15	118.80
1	13	1468	A	N1-C6-N6	8.91	123.95	118.60
26	1H	116	C	C4-C5-C6	8.91	121.86	117.40
1	13	1517	G	C5-C6-N1	8.91	115.96	111.50
26	1H	815	C	N1-C2-O2	-8.91	113.55	118.90
26	1H	1215	G	N1-C6-O6	8.91	125.25	119.90
26	1H	1396	U	N3-C4-O4	-8.91	113.16	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2026	C	O5'-P-OP2	-8.91	97.68	105.70
26	1H	1369	G	C4-C5-N7	-8.91	107.23	110.80
26	1H	1758	G	OP1-P-OP2	-8.91	106.23	119.60
26	1H	2779	U	C5-C4-O4	8.91	131.25	125.90
26	14	2390	U	C6-N1-C2	-8.91	115.65	121.00
1	13	863	U	N1-C2-O2	-8.91	116.56	122.80
1	13	881	G	C8-N9-C4	8.91	109.96	106.40
1	1G	1502	A	N7-C8-N9	8.91	118.26	113.80
1	13	1323	G	N1-C6-O6	8.91	125.25	119.90
26	1H	1798	U	C2-N3-C4	-8.91	121.65	127.00
26	1H	2239	G	N9-C4-C5	-8.91	101.84	105.40
26	14	1308	A	C5-C6-N6	8.91	130.83	123.70
26	14	2037	G	N1-C6-O6	-8.91	114.55	119.90
26	14	2607	G	C5-C6-O6	8.91	133.94	128.60
26	14	35	G	C5-C6-O6	8.91	133.94	128.60
26	14	472	A	C5-C6-N1	-8.91	113.25	117.70
26	14	685	A	N7-C8-N9	8.91	118.25	113.80
26	14	1482	U	C5-C4-O4	8.91	131.25	125.90
1	13	961	U	C5-C4-O4	8.90	131.24	125.90
1	13	1455	G	N1-C6-O6	8.90	125.24	119.90
26	14	528	A	N3-C4-C5	8.90	133.03	126.80
26	1H	2501	C	C5-C6-N1	-8.90	116.55	121.00
26	14	784	A	C2-N3-C4	-8.90	106.15	110.60
26	14	1412	A	N1-C2-N3	-8.90	124.85	129.30
26	14	1411	C	O5'-P-OP2	-8.90	97.69	105.70
26	14	2304	G	N7-C8-N9	8.90	117.55	113.10
26	1H	2500	U	C2-N3-C4	-8.90	121.66	127.00
1	1G	853	G	C8-N9-C4	-8.90	102.84	106.40
1	13	523	A	C8-N9-C4	8.90	109.36	105.80
26	1H	144	C	N3-C4-N4	-8.90	111.77	118.00
26	1H	867	C	C6-N1-C2	8.90	123.86	120.30
26	1H	2006	C	C4-C5-C6	-8.90	112.95	117.40
26	1H	2595	G	C4-C5-N7	8.90	114.36	110.80
1	1G	52	G	O5'-P-OP2	-8.90	97.69	105.70
26	14	1734	C	C6-N1-C2	-8.90	116.74	120.30
46	G8	84	ARG	NE-CZ-NH1	8.89	124.75	120.30
26	1H	265	A	C5-N7-C8	-8.89	99.45	103.90
26	1H	298	G	N1-C6-O6	8.89	125.24	119.90
26	1H	1442	G	N1-C6-O6	8.89	125.24	119.90
26	14	115	C	C2-N3-C4	-8.89	115.45	119.90
26	14	452	G	N7-C8-N9	8.89	117.55	113.10
26	14	458	G	O4'-C1'-N9	8.89	115.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1583	A	N1-C2-N3	-8.89	124.85	129.30
26	14	1777	U	N3-C4-O4	8.89	125.63	119.40
23	2K	14	A	C2-N3-C4	-8.89	106.16	110.60
26	1H	853	G	O5'-P-OP1	8.89	121.37	110.70
26	1H	947	G	N3-C2-N2	-8.89	113.68	119.90
26	1H	1702	G	N3-C4-C5	8.89	133.04	128.60
26	1H	2083	G	C2-N3-C4	-8.89	107.45	111.90
26	14	527	C	O5'-P-OP1	-8.89	97.70	105.70
26	14	1480	G	C2-N3-C4	-8.89	107.45	111.90
26	14	1999	C	N3-C4-C5	8.89	125.46	121.90
26	14	2364	C	C6-N1-C2	8.89	123.86	120.30
26	1H	2581	G	N1-C2-N2	-8.89	108.20	116.20
1	13	533	A	C5-N7-C8	-8.89	99.46	103.90
26	1H	474	G	N7-C8-N9	8.89	117.54	113.10
26	1H	640	C	C4-C5-C6	8.89	121.84	117.40
26	1H	1888	G	N3-C4-C5	-8.89	124.16	128.60
26	1H	2280	G	OP1-P-OP2	-8.89	106.27	119.60
26	14	1382	G	C5-C6-O6	-8.89	123.27	128.60
26	14	1899	G	C5-C6-O6	8.89	133.93	128.60
26	14	979	G	C5-C6-N1	-8.89	107.06	111.50
26	1H	1417	C	N1-C2-O2	-8.89	113.57	118.90
26	1H	2827	C	N3-C2-O2	8.89	128.12	121.90
26	14	1770	G	O5'-P-OP2	8.89	121.36	110.70
1	13	1486	G	C2-N3-C4	-8.88	107.46	111.90
26	1H	130	C	C5-C4-N4	-8.88	113.98	120.20
27	16	42	C	N3-C2-O2	8.88	128.12	121.90
1	13	623	C	N3-C4-N4	8.88	124.22	118.00
1	1G	507	C	O5'-P-OP1	-8.88	97.71	105.70
26	1H	2336	A	C5-N7-C8	8.88	108.34	103.90
26	14	2279	G	C5-C6-O6	8.88	133.93	128.60
26	1H	839	U	N3-C4-C5	-8.88	109.27	114.60
26	1H	922	U	N3-C4-O4	8.88	125.61	119.40
26	1H	1272	A	N1-C6-N6	-8.88	113.27	118.60
26	1H	2321	G	O5'-P-OP1	8.88	121.35	110.70
1	13	824	C	C5-C6-N1	8.87	125.44	121.00
26	1H	141(A)	C	OP1-P-O3'	-8.87	85.68	105.20
26	1H	995	C	C5-C4-N4	8.87	126.41	120.20
26	1H	988	A	N1-C6-N6	8.87	123.92	118.60
26	1H	1032	A	C8-N9-C4	8.87	109.35	105.80
26	1H	1369	G	C5-C6-N1	-8.87	107.06	111.50
26	1H	1948	G	N3-C2-N2	8.87	126.11	119.90
26	1H	1229(A)	G	C2-N3-C4	-8.87	107.47	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1489	U	N3-C4-O4	-8.87	113.19	119.40
26	14	571	A	N7-C8-N9	8.87	118.23	113.80
26	14	1754	C	O5'-P-OP2	-8.87	97.72	105.70
26	1H	1762	A	C8-N9-C4	8.87	109.35	105.80
26	1H	1781	C	C4-C5-C6	-8.87	112.97	117.40
26	14	606	U	N1-C2-N3	8.87	120.22	114.90
26	14	768	G	N1-C2-N3	8.87	129.22	123.90
26	14	1339	G	C2-N3-C4	-8.87	107.47	111.90
26	14	2277	G	C8-N9-C4	8.87	109.95	106.40
1	13	364	A	N1-C2-N3	8.87	133.73	129.30
26	1H	845	G	C6-C5-N7	-8.87	125.08	130.40
26	1H	1028	A	C8-N9-C4	8.86	109.35	105.80
26	1H	1361	G	C8-N9-C4	8.87	109.95	106.40
26	1H	2643	G	C8-N9-C4	8.87	109.95	106.40
26	14	777	A	C5-C6-N6	-8.87	116.61	123.70
26	14	863	A	N3-C4-C5	-8.87	120.59	126.80
26	14	1915	U	N3-C2-O2	-8.86	116.00	122.20
1	13	1340	A	N1-C6-N6	8.86	123.92	118.60
26	1H	710	G	C4-C5-C6	8.86	124.12	118.80
26	1H	710	G	C5-C6-O6	-8.86	123.28	128.60
26	1H	2280	G	C4-C5-C6	8.86	124.12	118.80
26	1H	1413	G	O5'-P-OP2	8.86	121.33	110.70
23	2K	16	C	N3-C2-O2	-8.86	115.70	121.90
26	1H	300	A	C8-N9-C4	-8.86	102.26	105.80
26	1H	808	G	O5'-P-OP1	-8.86	97.73	105.70
26	1H	2299	G	C4-C5-N7	8.86	114.34	110.80
26	14	563	G	N7-C8-N9	8.86	117.53	113.10
26	14	1961	C	O5'-P-OP2	-8.86	97.73	105.70
26	1H	425	G	C6-N1-C2	-8.86	119.79	125.10
26	1H	451	C	N3-C2-O2	8.86	128.10	121.90
26	1H	823	G	N3-C2-N2	-8.86	113.70	119.90
26	14	568	U	C5-C6-N1	-8.86	118.27	122.70
26	14	2273	A	N1-C6-N6	-8.86	113.29	118.60
26	14	2345	G	C6-N1-C2	-8.86	119.79	125.10
26	14	2561	A	O5'-P-OP2	-8.86	97.73	105.70
1	13	1495	U	N1-C2-O2	8.85	129.00	122.80
26	1H	225	A	C5-C6-N1	-8.85	113.27	117.70
26	1H	273(A)	G	N1-C6-O6	8.85	125.21	119.90
26	1H	1255	U	N1-C2-O2	-8.85	116.60	122.80
26	1H	2066	C	N1-C2-O2	8.85	124.21	118.90
26	14	1266	G	N7-C8-N9	-8.85	108.67	113.10
26	14	2443	C	O5'-P-OP1	-8.85	97.73	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	956	G	C5-C6-O6	8.85	133.91	128.60
26	14	1331	A	O5'-P-OP1	-8.85	97.73	105.70
26	14	1465	G	N1-C6-O6	8.85	125.21	119.90
26	14	1496	A	C8-N9-C4	-8.85	102.26	105.80
26	14	1784	A	C6-N1-C2	-8.85	113.29	118.60
26	14	2544	G	N1-C6-O6	8.85	125.21	119.90
27	1J	7	G	C8-N9-C4	8.85	109.94	106.40
1	13	601	C	C6-N1-C2	-8.85	116.76	120.30
1	13	801	U	N3-C2-O2	-8.85	116.00	122.20
26	1H	301	G	O5'-P-OP1	-8.85	97.74	105.70
1	1G	503	C	N3-C4-N4	8.85	124.19	118.00
26	14	791	C	N3-C2-O2	8.85	128.09	121.90
1	1G	570	G	C8-N9-C4	-8.85	102.86	106.40
26	14	2708	G	C8-N9-C4	8.85	109.94	106.40
26	1H	611	C	C6-N1-C2	8.85	123.84	120.30
26	1H	1854	A	N7-C8-N9	-8.85	109.38	113.80
26	1H	2040	C	N3-C4-C5	8.85	125.44	121.90
26	14	843	G	N3-C4-C5	8.85	133.02	128.60
26	14	947	G	C4-C5-N7	-8.85	107.26	110.80
26	14	1311	G	C4-C5-N7	-8.85	107.26	110.80
26	14	1382	G	C2-N3-C4	-8.85	107.48	111.90
26	14	1410	G	N1-C6-O6	-8.85	114.59	119.90
26	14	2845	G	O5'-P-OP2	-8.85	97.74	105.70
26	1H	2391	G	O5'-P-OP1	-8.85	97.74	105.70
26	1H	1443	G	N3-C4-N9	-8.84	120.69	126.00
26	1H	1798	U	C5-C4-O4	-8.84	120.59	125.90
26	1H	2278	A	N1-C6-N6	8.84	123.91	118.60
26	14	1402	C	C6-N1-C2	-8.84	116.76	120.30
26	14	2227	A	C2-N3-C4	-8.84	106.18	110.60
26	14	2609	U	C5-C4-O4	-8.84	120.59	125.90
1	13	755	G	C5-N7-C8	8.84	108.72	104.30
26	1H	710	G	C4-C5-N7	8.84	114.34	110.80
26	14	343	C	C6-N1-C2	8.84	123.84	120.30
26	14	867	C	O5'-P-OP1	-8.84	97.74	105.70
26	1H	264	C	C4-C5-C6	-8.84	112.98	117.40
26	1H	465	G	C6-N1-C2	8.84	130.40	125.10
26	1H	948	G	N3-C2-N2	-8.84	113.71	119.90
26	1H	1554	A	O5'-P-OP2	-8.84	97.75	105.70
26	14	46	C	N3-C4-C5	8.84	125.44	121.90
26	14	1220	A	N1-C6-N6	-8.84	113.30	118.60
26	1H	1404	C	OP1-P-OP2	8.84	132.86	119.60
26	1H	1787	A	O4'-C1'-N9	-8.84	101.13	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	660	G	C8-N9-C4	8.84	109.94	106.40
1	13	322	C	C6-N1-C2	-8.84	116.77	120.30
23	2K	43	G	N1-C2-N2	-8.84	108.25	116.20
26	1H	225	A	N9-C4-C5	-8.84	102.27	105.80
26	14	492	A	C5-C6-N6	-8.84	116.63	123.70
26	14	1316	U	N3-C2-O2	-8.84	116.01	122.20
26	14	1968	G	C8-N9-C4	-8.84	102.86	106.40
26	1H	459	U	O5'-P-OP2	-8.84	97.75	105.70
26	1H	2333	A	C2-N3-C4	8.84	115.02	110.60
26	1H	2389	G	C5-C6-O6	8.84	133.90	128.60
26	1H	2710	C	N3-C4-C5	8.84	125.43	121.90
26	14	828	U	N3-C4-O4	-8.84	113.22	119.40
26	14	2058	A	C6-N1-C2	-8.84	113.30	118.60
27	1J	75	G	N9-C4-C5	-8.84	101.87	105.40
1	13	1533	C	N1-C2-O2	8.83	124.20	118.90
26	1H	142	G	C2-N3-C4	-8.83	107.48	111.90
26	1H	1230	C	N3-C4-C5	8.83	125.43	121.90
26	1H	2278	A	C5-C6-N6	-8.83	116.63	123.70
26	14	630	G	C8-N9-C4	8.83	109.93	106.40
23	2K	7	G	C4-C5-N7	8.83	114.33	110.80
26	1H	952	G	N3-C4-N9	8.83	131.30	126.00
26	1H	2640	G	O5'-P-OP2	-8.83	97.75	105.70
26	14	1142(A)	A	C2-N3-C4	-8.83	106.19	110.60
26	14	2294	C	OP1-P-OP2	-8.83	106.36	119.60
1	13	664	G	C8-N9-C4	8.83	109.93	106.40
1	1G	1119	C	C6-N1-C2	-8.83	116.77	120.30
26	14	298	G	C5-C6-O6	-8.83	123.30	128.60
26	14	2318	G	N1-C6-O6	8.83	125.19	119.90
1	13	966	G	N9-C4-C5	-8.82	101.87	105.40
26	1H	244	A	C5-N7-C8	-8.82	99.49	103.90
26	1H	2278	A	N1-C2-N3	8.82	133.71	129.30
26	14	125	G	C5-C6-O6	-8.82	123.31	128.60
26	14	1640	C	N1-C2-O2	8.82	124.19	118.90
26	1H	471	A	N9-C4-C5	-8.82	102.27	105.80
1	13	660	G	O5'-P-OP2	8.82	121.29	110.70
26	1H	835	A	O5'-P-OP1	8.82	121.28	110.70
26	1H	1992	G	C2-N3-C4	8.82	116.31	111.90
26	1H	1338	G	N1-C2-N3	-8.82	118.61	123.90
26	1H	1346	G	N7-C8-N9	-8.82	108.69	113.10
26	1H	1846	G	N3-C2-N2	-8.82	113.73	119.90
27	1J	103	U	O5'-P-OP2	-8.82	97.76	105.70
23	2K	5	G	C8-N9-C4	8.82	109.93	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	686	G	OP1-P-OP2	8.82	132.83	119.60
1	13	892	A	C4-C5-C6	8.82	121.41	117.00
26	1H	1704	G	O5'-P-OP2	-8.82	97.77	105.70
26	14	918	A	N7-C8-N9	8.82	118.21	113.80
26	14	1861	G	N1-C6-O6	8.82	125.19	119.90
26	1H	1918	A	C4-C5-C6	-8.81	112.59	117.00
26	14	1268	A	C8-N9-C4	8.81	109.33	105.80
26	14	1294	U	C5-C6-N1	-8.81	118.29	122.70
1	1G	109	A	C5-C6-N1	8.81	122.11	117.70
1	1G	1350	A	C8-N9-C4	-8.81	102.28	105.80
26	1H	1156	A	C5-N7-C8	-8.81	99.49	103.90
26	1H	2376	A	N7-C8-N9	-8.81	109.39	113.80
1	13	789	U	N3-C4-C5	-8.81	109.31	114.60
26	1H	2695	C	N1-C2-O2	-8.81	113.61	118.90
26	14	974(A)	C	N3-C2-O2	-8.81	115.73	121.90
26	14	2244	U	C5-C6-N1	-8.81	118.29	122.70
26	14	1352	U	O5'-P-OP2	-8.81	97.77	105.70
26	14	2256	G	N1-C2-N2	-8.81	108.27	116.20
26	1H	580	C	C4-C5-C6	8.81	121.80	117.40
26	1H	759	G	N9-C4-C5	8.81	108.92	105.40
26	1H	802	A	C5-N7-C8	-8.81	99.50	103.90
26	1H	1672	C	N1-C2-O2	-8.81	113.62	118.90
26	1H	2377	A	N1-C6-N6	8.81	123.89	118.60
26	1H	2381	C	N1-C2-O2	-8.81	113.62	118.90
26	14	1575	C	N1-C2-O2	8.81	124.19	118.90
26	14	2500	U	O5'-P-OP2	-8.81	97.77	105.70
1	13	816	A	N9-C4-C5	8.81	109.32	105.80
1	13	965	A	C4-C5-C6	8.81	121.40	117.00
26	1H	456	C	N3-C4-N4	8.81	124.16	118.00
26	1H	786	C	C5-C6-N1	-8.81	116.60	121.00
26	14	1120	G	C8-N9-C4	8.81	109.92	106.40
1	13	502	G	N1-C6-O6	8.80	125.18	119.90
26	1H	556	G	C5-C6-O6	8.80	133.88	128.60
26	1H	327	G	N3-C2-N2	-8.80	113.74	119.90
26	1H	858	U	C6-N1-C2	8.80	126.28	121.00
26	1H	1203	G	C5-C6-O6	8.80	133.88	128.60
26	1H	1474	C	N1-C2-O2	8.80	124.18	118.90
26	14	1276	A	N7-C8-N9	8.81	118.20	113.80
26	14	2008	C	N1-C2-O2	-8.80	113.62	118.90
1	1G	884	U	C6-N1-C2	-8.80	115.72	121.00
26	14	529	A	C2-N3-C4	-8.80	106.20	110.60
26	14	564	C	N3-C4-N4	8.80	124.16	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	608	A	N1-C2-N3	8.80	133.70	129.30
26	14	2848	G	N1-C2-N3	8.80	129.18	123.90
54	L5	21	ARG	NE-CZ-NH2	-8.80	115.90	120.30
1	13	1085	U	O5'-P-OP1	-8.80	97.78	105.70
26	1H	528	A	O4'-C1'-N9	-8.80	101.16	108.20
26	1H	577	G	OP1-P-OP2	-8.80	106.40	119.60
26	1H	34	C	N1-C2-O2	8.80	124.18	118.90
26	1H	2285	C	N3-C4-C5	8.80	125.42	121.90
27	1J	113	C	N1-C2-O2	8.80	124.18	118.90
1	13	1432	G	N1-C6-O6	8.80	125.18	119.90
1	13	769	G	N1-C6-O6	-8.80	114.62	119.90
26	1H	2869	G	N7-C8-N9	8.80	117.50	113.10
26	1H	1817	G	C5-N7-C8	8.80	108.70	104.30
26	14	1449(A)	G	N1-C6-O6	8.79	125.18	119.90
26	14	2457	U	N3-C4-O4	-8.79	113.25	119.40
1	13	738	C	N3-C4-C5	-8.79	118.38	121.90
26	14	1821	A	C5-C6-N6	-8.79	116.67	123.70
26	14	2454	G	N9-C4-C5	-8.79	101.88	105.40
26	1H	96	G	N1-C6-O6	8.79	125.17	119.90
26	1H	2030	A	N7-C8-N9	-8.79	109.40	113.80
1	13	260	G	C5-C6-O6	8.79	133.87	128.60
1	13	1416	G	C5-C6-O6	8.79	133.87	128.60
26	1H	530	G	C5-C6-O6	8.79	133.87	128.60
26	1H	2817	G	C8-N9-C4	-8.79	102.89	106.40
26	1H	1951	U	C5-C4-O4	8.79	131.17	125.90
26	1H	1518	C	C6-N1-C2	-8.78	116.79	120.30
26	1H	2498	C	C6-N1-C2	-8.79	116.79	120.30
26	1H	2701	C	N3-C4-C5	8.78	125.41	121.90
1	1G	120	A	N1-C6-N6	8.79	123.87	118.60
26	14	127	A	C5-C6-N6	-8.79	116.67	123.70
26	1H	2597	G	O4'-C1'-N9	-8.78	101.17	108.20
26	14	146	G	C8-N9-C4	8.78	109.91	106.40
26	1H	131	G	C5-N7-C8	-8.78	99.91	104.30
26	1H	225	A	N1-C6-N6	8.78	123.87	118.60
26	1H	1315	C	N3-C2-O2	-8.78	115.75	121.90
1	1G	390	C	C2-N3-C4	-8.78	115.51	119.90
26	14	1669	A	C6-N1-C2	-8.78	113.33	118.60
1	13	1202	G	N3-C4-C5	8.78	132.99	128.60
26	1H	1821	A	C2-N3-C4	-8.78	106.21	110.60
26	14	1950	G	C8-N9-C1'	-8.78	115.59	127.00
26	14	2383	G	O5'-P-OP2	-8.78	97.80	105.70
26	14	2610	C	N1-C2-N3	-8.78	113.06	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	821	A	OP1-P-OP2	8.78	132.76	119.60
1	13	543	C	C4-C5-C6	8.78	121.79	117.40
26	1H	299	A	N7-C8-N9	8.78	118.19	113.80
26	1H	1626	G	N1-C6-O6	8.78	125.17	119.90
26	1H	1662	C	C2-N3-C4	-8.78	115.51	119.90
49	J8	41	ARG	NE-CZ-NH1	8.78	124.69	120.30
1	1G	138	G	N1-C6-O6	8.78	125.17	119.90
1	13	363	A	C8-N9-C4	8.77	109.31	105.80
26	1H	1300	U	N1-C2-O2	-8.77	116.66	122.80
26	1H	2606	C	C4-C5-C6	8.77	121.79	117.40
27	16	99	A	OP1-P-OP2	8.77	132.76	119.60
26	14	669	G	N3-C2-N2	-8.77	113.76	119.90
26	1H	2306	C	C6-N1-C2	8.77	123.81	120.30
26	1H	2675	A	O5'-P-OP1	8.77	121.22	110.70
26	14	1692	U	C6-N1-C2	8.77	126.26	121.00
1	13	1081	G	N1-C6-O6	-8.77	114.64	119.90
26	1H	556	G	N1-C6-O6	-8.77	114.64	119.90
26	1H	1500	G	C4-C5-N7	8.77	114.31	110.80
1	1G	1467	G	O5'-P-OP2	-8.77	97.81	105.70
26	14	738	G	C8-N9-C4	-8.77	102.89	106.40
26	14	1396	U	N1-C2-O2	8.77	128.94	122.80
26	14	2291	U	C5-C4-O4	8.77	131.16	125.90
26	14	2613	U	O5'-P-OP2	-8.77	97.81	105.70
26	1H	1938	A	O5'-P-OP1	-8.77	97.81	105.70
1	13	726	C	C6-N1-C2	-8.77	116.79	120.30
26	14	1640	C	N3-C4-C5	-8.77	118.39	121.90
26	1H	810	U	C2-N3-C4	-8.76	121.74	127.00
26	1H	906	G	C5-C6-O6	-8.76	123.34	128.60
26	1H	1803	A	C4-C5-C6	-8.76	112.62	117.00
26	14	944	G	N3-C2-N2	-8.76	113.77	119.90
26	14	1293	C	N1-C2-O2	8.76	124.16	118.90
26	14	2294	C	C6-N1-C2	-8.76	116.80	120.30
1	13	529	G	C4-C5-N7	8.76	114.30	110.80
1	13	651	C	C6-N1-C2	-8.76	116.80	120.30
26	14	1786	A	N3-C4-N9	-8.76	120.39	127.40
26	14	2263	C	N1-C2-O2	8.76	124.16	118.90
1	1G	304	U	N1-C2-N3	8.76	120.15	114.90
26	1H	828	U	N3-C2-O2	-8.76	116.07	122.20
26	1H	952	G	N1-C2-N3	-8.76	118.65	123.90
1	13	1192	C	N1-C2-O2	8.75	124.15	118.90
26	1H	960	A	N1-C6-N6	-8.75	113.35	118.60
26	1H	738	G	N9-C4-C5	-8.75	101.90	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	930	U	C5-C6-N1	-8.75	118.32	122.70
26	14	2017	U	C5-C4-O4	-8.75	120.65	125.90
22	1K	76	A	O4'-C1'-N9	8.75	115.20	108.20
26	1H	2278	A	C6-N1-C2	-8.75	113.35	118.60
26	1H	705	A	C5-C6-N6	-8.75	116.70	123.70
26	1H	2392	A	N1-C6-N6	8.75	123.85	118.60
26	1H	2838	G	O5'-P-OP1	-8.75	97.83	105.70
1	1G	666	G	C6-C5-N7	-8.75	125.15	130.40
1	13	1506	U	N3-C4-O4	8.75	125.52	119.40
26	14	252	G	C2-N3-C4	8.75	116.27	111.90
26	14	428	A	N1-C6-N6	-8.75	113.35	118.60
23	2K	57	C	C6-N1-C2	8.75	123.80	120.30
26	1H	407	G	N1-C6-O6	-8.75	114.65	119.90
1	13	768	A	C4-C5-N7	-8.74	106.33	110.70
26	1H	2031	A	C5-C6-N6	-8.74	116.70	123.70
26	14	211	A	C4-C5-N7	8.74	115.07	110.70
26	1H	241	A	O5'-P-OP2	-8.74	97.83	105.70
26	1H	810	U	N3-C4-C5	8.74	119.85	114.60
26	1H	1160	G	N7-C8-N9	8.74	117.47	113.10
26	1H	1186	G	C2-N3-C4	8.74	116.27	111.90
26	14	2622	C	C2-N3-C4	-8.74	115.53	119.90
1	1G	1344	C	C6-N1-C2	-8.74	116.80	120.30
26	14	1142(A)	A	N1-C2-N3	8.74	133.67	129.30
26	1H	271(B)	G	N1-C6-O6	-8.74	114.66	119.90
26	1H	977	G	N9-C4-C5	8.74	108.90	105.40
26	1H	1978	A	N9-C4-C5	8.74	109.30	105.80
26	14	1899	G	N3-C2-N2	8.74	126.02	119.90
26	14	2357	U	O5'-P-OP2	-8.74	97.83	105.70
26	14	2637	U	N3-C4-O4	8.74	125.52	119.40
26	1H	2593	U	N1-C2-N3	8.74	120.14	114.90
26	14	219	G	C4-C5-N7	-8.74	107.31	110.80
26	14	1601	G	N1-C6-O6	-8.74	114.66	119.90
1	13	761	G	N1-C2-N2	-8.74	108.34	116.20
26	1H	1618	A	C5-C6-N6	-8.74	116.71	123.70
26	1H	2358	G	N9-C4-C5	8.74	108.89	105.40
1	1G	117	G	C2-N3-C4	-8.74	107.53	111.90
26	14	1221	C	C5-C6-N1	-8.74	116.63	121.00
26	1H	913	U	OP1-P-OP2	8.73	132.70	119.60
1	1G	1380	U	C6-N1-C2	8.73	126.24	121.00
26	1H	2025	C	N3-C4-N4	8.73	124.11	118.00
1	1G	1077	G	C8-N9-C4	8.73	109.89	106.40
26	14	1528	A	C5-N7-C8	-8.73	99.53	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1578	U	C5-C4-O4	8.73	131.14	125.90
26	14	2444	G	C6-N1-C2	-8.73	119.86	125.10
1	13	1111	A	N1-C6-N6	-8.73	113.36	118.60
26	1H	1520	U	C5-C4-O4	8.73	131.14	125.90
26	14	1656	C	OP2-P-O3'	8.73	124.41	105.20
27	1J	114	G	C5-N7-C8	8.73	108.67	104.30
1	13	19	C	C6-N1-C2	-8.73	116.81	120.30
26	1H	446	G	C4-C5-N7	8.73	114.29	110.80
1	1G	831	U	C5-C6-N1	8.73	127.06	122.70
57	3L	76	A	N1-C6-N6	8.73	123.84	118.60
26	1H	197	A	C4-C5-C6	8.73	121.36	117.00
26	14	1842	G	O5'-P-OP2	-8.73	97.85	105.70
1	13	1260	C	C6-N1-C2	-8.72	116.81	120.30
26	1H	338	G	OP1-P-OP2	8.72	132.69	119.60
26	14	2004	G	N3-C2-N2	-8.72	113.79	119.90
26	1H	2015	A	O5'-P-OP1	-8.72	97.85	105.70
26	1H	2607	G	N1-C6-O6	8.72	125.14	119.90
26	14	678	C	N1-C2-O2	-8.72	113.67	118.90
26	14	1405	U	N3-C2-O2	-8.72	116.09	122.20
1	13	1128	C	N3-C2-O2	-8.72	115.79	121.90
22	1K	40	C	N1-C2-O2	8.72	124.13	118.90
22	1K	76	A	N1-C6-N6	8.72	123.83	118.60
26	1H	2583	G	N3-C2-N2	8.72	126.00	119.90
1	1G	946	A	O5'-P-OP1	-8.72	97.85	105.70
26	14	180	G	C8-N9-C4	8.72	109.89	106.40
26	14	731	C	N3-C2-O2	8.72	128.00	121.90
1	13	1203	C	O5'-P-OP2	-8.72	97.85	105.70
26	14	246	C	N1-C2-O2	-8.72	113.67	118.90
26	1H	137(A)	G	N9-C4-C5	8.72	108.89	105.40
26	1H	690	G	C2-N3-C4	-8.72	107.54	111.90
26	1H	1625	C	C6-N1-C2	8.72	123.79	120.30
26	1H	2837	G	N7-C8-N9	8.72	117.46	113.10
26	1H	1670	C	C5-C6-N1	-8.71	116.64	121.00
1	1G	597	G	C8-N9-C4	8.71	109.89	106.40
26	14	699	A	C6-N1-C2	-8.71	113.37	118.60
1	13	394	G	C2-N3-C4	-8.71	107.54	111.90
1	13	954	G	N3-C2-N2	-8.71	113.80	119.90
26	1H	1373	A	C8-N9-C4	8.71	109.28	105.80
26	1H	2701	C	C5-C6-N1	-8.71	116.64	121.00
26	14	782	A	O5'-P-OP1	-8.71	97.86	105.70
26	14	1951	U	N3-C4-C5	-8.71	109.37	114.60
26	14	1308	A	C4-C5-N7	-8.71	106.34	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1367	A	N1-C6-N6	8.71	123.83	118.60
1	13	571	U	N3-C4-O4	8.71	125.50	119.40
26	1H	462	C	O5'-P-OP2	-8.71	97.86	105.70
26	1H	679	C	C5-C6-N1	-8.71	116.65	121.00
26	1H	2387	U	N1-C2-N3	8.71	120.12	114.90
23	2L	27	G	C8-N9-C4	8.71	109.88	106.40
26	14	2776	A	C8-N9-C4	-8.71	102.32	105.80
1	13	1455	G	C2-N3-C4	-8.71	107.55	111.90
26	1H	328	U	OP1-P-OP2	8.71	132.66	119.60
26	1H	2416	C	OP2-P-O3'	8.70	124.35	105.20
1	13	172	A	N7-C8-N9	8.70	118.15	113.80
26	1H	217	G	N9-C4-C5	8.70	108.88	105.40
26	1H	2428	G	N9-C4-C5	8.70	108.88	105.40
26	14	2374	C	C2-N3-C4	-8.70	115.55	119.90
26	14	2434	A	N9-C4-C5	8.70	109.28	105.80
26	14	2609	U	O5'-P-OP2	-8.70	97.87	105.70
26	1H	2667	C	N1-C2-O2	-8.70	113.68	118.90
26	14	1907	G	C8-N9-C4	8.70	109.88	106.40
26	1H	1125	G	C4-C5-N7	-8.70	107.32	110.80
1	13	63	C	C6-N1-C2	-8.70	116.82	120.30
1	13	1239	A	C8-N9-C4	8.70	109.28	105.80
26	14	1914	C	C2-N1-C1'	8.70	128.37	118.80
26	1H	198	C	C2-N3-C4	-8.70	115.55	119.90
26	1H	702	G	C2-N3-C4	-8.70	107.55	111.90
26	1H	1332	G	N3-C4-C5	8.70	132.95	128.60
27	16	6	C	N3-C4-C5	8.70	125.38	121.90
50	K8	59	ARG	NE-CZ-NH2	8.70	124.65	120.30
1	1G	294	U	O5'-P-OP1	-8.70	97.87	105.70
26	14	1999	C	C5-C6-N1	-8.70	116.65	121.00
26	14	2272	U	O5'-P-OP2	-8.70	97.87	105.70
26	1H	1513	C	N3-C4-N4	8.70	124.09	118.00
26	1H	1638	C	OP1-P-OP2	8.70	132.65	119.60
26	1H	2269	A	C2-N3-C4	-8.70	106.25	110.60
1	1G	909	A	N9-C4-C5	-8.70	102.32	105.80
26	14	1783	A	C8-N9-C4	-8.70	102.32	105.80
26	14	2443	C	C6-N1-C2	-8.70	116.82	120.30
26	14	2377	A	C5-C6-N1	-8.69	113.35	117.70
1	13	513	C	C5-C4-N4	-8.69	114.11	120.20
26	1H	513	A	N9-C4-C5	8.69	109.28	105.80
26	1H	1790	C	C2-N3-C4	-8.69	115.55	119.90
23	2L	12	G	C8-N9-C4	-8.69	102.92	106.40
1	1G	1397	C	C6-N1-C2	-8.69	116.82	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	194	G	N1-C6-O6	8.69	125.11	119.90
26	14	1607	C	C6-N1-C1'	-8.69	110.37	120.80
1	13	690	G	O4'-C1'-N9	8.69	115.15	108.20
26	1H	193	U	N1-C2-N3	8.69	120.11	114.90
26	1H	1157	G	C2-N3-C4	-8.69	107.56	111.90
26	1H	1197	G	N7-C8-N9	-8.69	108.75	113.10
26	1H	2641	G	N3-C2-N2	8.69	125.98	119.90
26	14	523	C	C6-N1-C2	-8.69	116.82	120.30
26	14	1597	A	C8-N9-C4	8.69	109.28	105.80
26	14	1627	G	C6-N1-C2	8.69	130.31	125.10
1	13	377	G	C5-N7-C8	8.69	108.64	104.30
26	1H	2476	A	N9-C4-C5	8.69	109.28	105.80
26	14	53	A	N1-C6-N6	-8.69	113.39	118.60
26	14	83	G	C5-C6-N1	-8.69	107.16	111.50
26	14	592	G	C5-C6-O6	-8.69	123.39	128.60
26	14	1926	U	N1-C2-N3	8.69	120.11	114.90
26	14	2079	U	N3-C4-O4	8.69	125.48	119.40
26	1H	1305	C	N3-C2-O2	-8.68	115.82	121.90
26	1H	1658	C	C5-C4-N4	-8.68	114.12	120.20
26	1H	2427	C	N1-C2-N3	8.68	125.28	119.20
26	14	699	A	C4-C5-N7	-8.68	106.36	110.70
26	14	1772	G	C6-C5-N7	-8.68	125.19	130.40
26	14	2068	U	C6-N1-C2	8.68	126.21	121.00
26	14	2279	G	N3-C2-N2	8.68	125.98	119.90
1	13	401	C	C5-C6-N1	-8.68	116.66	121.00
27	1J	74	U	C5-C6-N1	-8.68	118.36	122.70
1	13	811	C	C6-N1-C2	8.68	123.77	120.30
1	13	894	G	OP2-P-O3'	8.68	124.29	105.20
26	1H	69	C	N1-C2-O2	8.68	124.11	118.90
26	14	1790	C	N3-C2-O2	8.68	127.98	121.90
26	1H	856	C	N1-C2-O2	-8.68	113.69	118.90
26	1H	1299	G	N7-C8-N9	8.68	117.44	113.10
1	1G	413	G	C8-N9-C4	8.68	109.87	106.40
1	13	758	G	N3-C2-N2	-8.68	113.83	119.90
26	1H	1232	G	N1-C6-O6	8.68	125.11	119.90
27	16	98	G	C4-C5-N7	8.68	114.27	110.80
26	1H	1951	U	C2-N3-C4	8.68	132.21	127.00
26	14	140	A	C5-C6-N1	-8.68	113.36	117.70
26	14	271(A)	C	C6-N1-C2	-8.68	116.83	120.30
26	14	2873	A	C4-C5-C6	8.68	121.34	117.00
27	1J	109	G	N7-C8-N9	8.68	117.44	113.10
26	14	2512	C	C5-C6-N1	-8.67	116.66	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	987	G	N9-C4-C5	8.67	108.87	105.40
26	1H	1641	A	O5'-P-OP2	8.67	121.11	110.70
26	1H	2260	C	OP2-P-O3'	8.67	124.28	105.20
1	13	963	G	C8-N9-C1'	-8.67	115.73	127.00
26	1H	193	U	C5-C6-N1	-8.67	118.36	122.70
26	1H	2544	G	N1-C2-N3	8.67	129.10	123.90
1	1G	1507	A	N1-C2-N3	8.67	133.63	129.30
26	14	486	C	N1-C2-O2	-8.67	113.70	118.90
26	14	694	U	C5-C4-O4	8.67	131.10	125.90
26	14	2607	G	C4-C5-C6	8.67	124.00	118.80
26	14	264	C	N3-C4-N4	8.67	124.07	118.00
1	13	833	U	N3-C4-O4	-8.67	113.33	119.40
26	14	2249	U	O5'-P-OP1	-8.67	97.90	105.70
26	1H	471	A	O5'-P-OP2	8.66	121.10	110.70
26	1H	773	U	N1-C2-N3	8.66	120.10	114.90
26	1H	1248	G	C5-C6-N1	-8.66	107.17	111.50
26	14	1704	G	C5-C6-N1	-8.66	107.17	111.50
26	14	1763	G	N3-C4-C5	8.66	132.93	128.60
1	13	982	U	C5-C4-O4	-8.66	120.70	125.90
1	13	1488	G	C5-C6-N1	8.66	115.83	111.50
26	1H	1342	A	C5-N7-C8	-8.66	99.57	103.90
26	1H	2078	C	N3-C2-O2	-8.66	115.84	121.90
26	1H	2435	A	C5-C6-N1	-8.66	113.37	117.70
26	14	1790	C	C6-N1-C2	8.66	123.77	120.30
26	1H	1191	G	OP1-P-OP2	8.66	132.59	119.60
26	1H	1227	A	C8-N9-C4	8.66	109.26	105.80
26	1H	1311	G	C6-C5-N7	-8.66	125.20	130.40
1	1G	45	U	C5-C6-N1	-8.66	118.37	122.70
26	14	1462	C	C6-N1-C2	-8.66	116.84	120.30
26	14	560	C	N3-C4-C5	8.66	125.36	121.90
26	14	915	C	C2-N3-C4	8.66	124.23	119.90
26	14	1755	A	N1-C6-N6	-8.66	113.41	118.60
1	13	576	G	C5-C6-N1	-8.66	107.17	111.50
26	1H	304	G	C5-C6-N1	-8.66	107.17	111.50
26	1H	2256	G	N3-C2-N2	8.66	125.96	119.90
23	2L	3	C	C6-N1-C2	8.66	123.76	120.30
26	14	68	G	C5-C6-N1	-8.66	107.17	111.50
26	14	203	C	C2-N1-C1'	-8.66	109.28	118.80
26	14	795	C	N3-C2-O2	-8.66	115.84	121.90
26	14	737	C	C4-C5-C6	8.66	121.73	117.40
26	14	2445	G	C4-C5-N7	-8.66	107.34	110.80
1	13	778	G	N1-C6-O6	8.65	125.09	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1494	G	C2-N3-C4	8.65	116.23	111.90
26	1H	1352	U	N1-C2-O2	-8.65	116.74	122.80
26	1H	750	A	N9-C4-C5	-8.65	102.34	105.80
26	1H	1586	A	C6-C5-N7	-8.65	126.24	132.30
26	1H	2645	G	N9-C4-C5	-8.65	101.94	105.40
1	1G	158	G	N1-C6-O6	8.65	125.09	119.90
26	14	2854	G	N9-C4-C5	8.65	108.86	105.40
26	1H	860	U	C2-N1-C1'	8.65	128.08	117.70
1	13	785	G	C2-N3-C4	-8.65	107.58	111.90
26	1H	144	C	N3-C4-C5	8.65	125.36	121.90
26	1H	269	U	C5-C4-O4	-8.65	120.71	125.90
26	1H	1128	A	C5-C6-N1	8.65	122.03	117.70
26	1H	2557	G	C2-N3-C4	8.65	116.23	111.90
26	14	1253	A	N1-C2-N3	-8.65	124.97	129.30
26	14	1836	C	OP1-P-O3'	8.65	124.23	105.20
26	14	2217	G	C6-C5-N7	-8.65	125.21	130.40
26	14	2572	A	O5'-P-OP1	-8.65	97.91	105.70
26	1H	615	G	C2-N3-C4	8.65	116.22	111.90
26	1H	2253	G	C5-N7-C8	-8.65	99.97	104.30
1	13	108	G	C4-C5-N7	8.65	114.26	110.80
1	13	1057	G	N1-C2-N2	-8.65	108.42	116.20
26	1H	51	G	OP2-P-O3'	8.65	124.22	105.20
26	1H	684	G	OP1-P-O3'	-8.65	86.17	105.20
26	1H	1923	U	N1-C2-O2	-8.65	116.75	122.80
26	14	2617	C	O5'-P-OP2	-8.65	97.92	105.70
26	1H	1726	G	C8-N9-C4	8.65	109.86	106.40
26	1H	2881	C	O5'-P-OP1	-8.65	97.92	105.70
1	13	956	U	C5-C4-O4	8.64	131.09	125.90
26	1H	408	G	C8-N9-C4	8.64	109.86	106.40
26	1H	586	A	N1-C2-N3	-8.64	124.98	129.30
1	1G	887	G	C5-C6-O6	-8.64	123.41	128.60
27	1J	14	U	OP1-P-OP2	8.64	132.57	119.60
26	1H	337	C	O5'-P-OP1	-8.64	97.92	105.70
26	1H	576	U	C2-N3-C4	-8.64	121.81	127.00
26	1H	1627	G	O5'-P-OP2	-8.64	97.92	105.70
26	14	1001	A	C5-C6-N6	8.64	130.61	123.70
26	14	729	G	N1-C6-O6	8.64	125.08	119.90
26	14	922	U	C5-C6-N1	8.64	127.02	122.70
1	1G	244	U	N1-C2-N3	-8.64	109.72	114.90
1	13	50	A	C8-N9-C4	-8.64	102.34	105.80
1	13	889	A	C2-N3-C4	-8.64	106.28	110.60
1	13	970	C	N1-C2-O2	8.64	124.08	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1518	A	C5-N7-C8	8.64	108.22	103.90
26	1H	775	G	C6-C5-N7	-8.64	125.22	130.40
26	14	465	G	O5'-P-OP1	-8.64	97.93	105.70
26	14	1616	A	N3-C4-C5	8.64	132.85	126.80
26	14	2315	G	N1-C6-O6	-8.64	114.72	119.90
26	1H	391	G	C5-C6-N1	-8.64	107.18	111.50
26	14	270(Y)	G	C4-C5-N7	-8.64	107.34	110.80
26	14	311	A	N1-C6-N6	8.64	123.78	118.60
26	1H	748	G	C5-C6-O6	-8.63	123.42	128.60
26	1H	1834	U	C6-N1-C2	-8.63	115.82	121.00
26	14	2329	G	N3-C2-N2	8.63	125.94	119.90
26	14	2561	A	OP1-P-OP2	8.63	132.55	119.60
1	13	937	A	OP1-P-OP2	-8.63	106.65	119.60
26	1H	1247	A	N1-C2-N3	8.63	133.62	129.30
26	1H	924	C	C6-N1-C2	8.63	123.75	120.30
26	14	2339	G	C5-C6-O6	8.63	133.78	128.60
26	1H	1895	C	N1-C2-O2	-8.63	113.72	118.90
1	1G	890	G	C5-C6-O6	8.63	133.78	128.60
26	14	2304	G	N3-C4-C5	-8.63	124.28	128.60
1	13	7	G	O5'-P-OP2	-8.63	97.94	105.70
26	1H	826	U	OP1-P-O3'	-8.63	86.22	105.20
26	1H	902	C	C6-N1-C2	8.63	123.75	120.30
26	1H	2001	A	N9-C4-C5	8.63	109.25	105.80
26	1H	2586	C	C4-C5-C6	-8.63	113.09	117.40
26	1H	2837	G	C8-N9-C4	-8.63	102.95	106.40
26	14	584	C	C6-N1-C2	8.63	123.75	120.30
26	14	675	A	N1-C6-N6	8.63	123.78	118.60
27	1J	63	G	C8-N9-C4	8.63	109.85	106.40
26	14	1307	A	C2-N3-C4	-8.63	106.29	110.60
26	14	1754	C	N1-C2-O2	8.63	124.08	118.90
26	14	2051	A	N1-C2-N3	8.63	133.61	129.30
1	13	1054	C	N1-C2-O2	8.62	124.08	118.90
26	1H	1528	A	O5'-P-OP1	-8.62	97.94	105.70
26	1H	1942	C	C2-N3-C4	8.63	124.21	119.90
26	1H	2270	G	N1-C2-N3	8.63	129.08	123.90
26	1H	2427	C	O5'-P-OP1	-8.63	97.94	105.70
26	1H	2678	C	N1-C2-O2	-8.63	113.72	118.90
26	1H	2575	C	C5-C6-N1	-8.62	116.69	121.00
26	14	1300	U	C4-C5-C6	8.62	124.87	119.70
27	1J	101	A	C8-N9-C4	8.62	109.25	105.80
1	13	1209	C	C5-C4-N4	-8.62	114.16	120.20
26	1H	1198	U	C5-C4-O4	-8.62	120.73	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1675	C	N3-C4-C5	-8.62	118.45	121.90
1	1G	1517	G	O5'-P-OP2	-8.62	97.94	105.70
26	1H	1366	A	C2-N3-C4	-8.62	106.29	110.60
26	1H	2520	C	O5'-P-OP1	8.62	121.05	110.70
26	1H	2552	U	C2-N3-C4	-8.62	121.83	127.00
1	13	1242	C	C6-N1-C2	8.62	123.75	120.30
26	1H	1633	G	N3-C4-C5	-8.62	124.29	128.60
26	1H	2828	C	C6-N1-C2	8.62	123.75	120.30
26	1H	799	G	C8-N9-C4	8.62	109.85	106.40
1	1G	632	A	C8-N9-C4	8.62	109.25	105.80
26	14	1307	A	N1-C2-N3	8.62	133.61	129.30
26	14	2740	A	O5'-P-OP2	-8.62	97.94	105.70
26	14	2827	C	O5'-P-OP2	-8.62	97.94	105.70
1	13	894	G	C2-N3-C4	-8.62	107.59	111.90
26	1H	146	G	N3-C4-C5	8.62	132.91	128.60
26	1H	2242	G	N7-C8-N9	-8.62	108.79	113.10
26	1H	2525	G	C2-N3-C4	-8.62	107.59	111.90
1	13	481	G	C6-C5-N7	-8.61	125.23	130.40
1	13	919	A	N1-C6-N6	-8.61	113.43	118.60
26	1H	205	G	N3-C4-N9	8.61	131.17	126.00
26	1H	133	C	N3-C4-C5	8.61	125.34	121.90
26	1H	263	C	O5'-P-OP1	8.61	121.03	110.70
26	1H	837	C	C4-C5-C6	-8.61	113.09	117.40
26	1H	1895	C	N3-C4-N4	8.61	124.03	118.00
25	4K	9	G	N3-C4-C5	-8.61	124.30	128.60
26	1H	1397	U	N3-C4-O4	8.61	125.43	119.40
26	14	1964	G	N3-C2-N2	8.61	125.93	119.90
26	14	2729	G	C5-C6-O6	-8.61	123.44	128.60
27	1J	88	C	C6-N1-C2	-8.61	116.86	120.30
1	1G	183	G	N1-C6-O6	8.61	125.06	119.90
26	14	130	C	C5-C4-N4	-8.61	114.17	120.20
26	1H	186	G	N9-C4-C5	-8.61	101.96	105.40
26	14	1696	G	N1-C6-O6	-8.61	114.74	119.90
26	14	2241	A	OP1-P-OP2	-8.61	106.69	119.60
25	4K	18	G	N1-C6-O6	-8.60	114.74	119.90
26	1H	1381	G	OP2-P-O3'	8.60	124.13	105.20
26	1H	2542	A	C8-N9-C4	8.60	109.24	105.80
26	14	2283	C	N3-C4-N4	8.60	124.02	118.00
1	13	523	A	O5'-P-OP2	8.60	121.02	110.70
26	1H	1187	G	C8-N9-C4	8.60	109.84	106.40
26	1H	1967	C	O5'-P-OP2	-8.60	97.96	105.70
26	1H	2550	G	C8-N9-C4	-8.60	102.96	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	745	G	N9-C4-C5	-8.60	101.96	105.40
1	13	956	U	N1-C2-N3	8.60	120.06	114.90
26	1H	800	A	N1-C2-N3	8.60	133.60	129.30
26	1H	1881	C	N1-C2-O2	-8.60	113.74	118.90
26	1H	2845	G	C4-C5-C6	8.60	123.96	118.80
26	14	1482	U	N3-C4-C5	-8.60	109.44	114.60
26	1H	379	G	C6-N1-C2	-8.60	119.94	125.10
26	1H	2004	G	C8-N9-C4	-8.60	102.96	106.40
27	16	114	G	N3-C4-C5	8.60	132.90	128.60
1	1G	106	C	N1-C2-O2	-8.60	113.74	118.90
1	13	419	C	O5'-P-OP1	-8.59	97.97	105.70
1	13	1305	G	C2-N3-C4	-8.59	107.60	111.90
1	13	1385	G	N1-C6-O6	8.59	125.06	119.90
26	1H	710	G	C2-N3-C4	-8.59	107.60	111.90
26	1H	831	G	C2-N3-C4	-8.59	107.60	111.90
26	1H	2254	C	O5'-P-OP2	8.59	121.01	110.70
26	14	2363	C	N3-C2-O2	8.59	127.92	121.90
26	14	609	A	N1-C2-N3	-8.59	125.00	129.30
26	1H	301	G	OP1-P-OP2	8.59	132.49	119.60
26	14	819	A	C2-N3-C4	8.59	114.89	110.60
26	1H	1157	G	C4-C5-C6	8.59	123.95	118.80
1	1G	925	G	C8-N9-C4	8.59	109.83	106.40
26	14	2707	G	O5'-P-OP2	-8.59	97.97	105.70
26	14	2876	G	C8-N9-C4	8.59	109.83	106.40
1	13	112	G	C8-N9-C4	-8.59	102.97	106.40
1	13	235	C	C6-N1-C2	8.59	123.73	120.30
26	1H	1052	C	N3-C4-C5	-8.59	118.47	121.90
26	14	802	A	C5-C6-N6	8.59	130.57	123.70
26	1H	1827	C	N1-C2-O2	8.58	124.05	118.90
26	1H	928	G	C2-N3-C4	-8.58	107.61	111.90
26	1H	952	G	N3-C2-N2	8.58	125.91	119.90
26	1H	1017	G	C2-N3-C4	8.58	116.19	111.90
26	1H	1294	U	O5'-P-OP1	-8.58	97.98	105.70
1	1G	376	G	C5-C6-N1	-8.58	107.21	111.50
26	14	298	G	N7-C8-N9	8.58	117.39	113.10
26	14	921	G	N9-C4-C5	8.58	108.83	105.40
25	4K	13	A	O4'-C1'-N9	8.58	115.06	108.20
26	1H	2004	G	N7-C8-N9	8.58	117.39	113.10
26	1H	1766	U	N3-C2-O2	8.58	128.21	122.20
1	13	439	A	N1-C2-N3	8.58	133.59	129.30
26	1H	694	U	O5'-P-OP2	-8.58	97.98	105.70
26	1H	1203	G	C2-N3-C4	8.58	116.19	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2644	G	C5-C6-N1	-8.58	107.21	111.50
26	1H	2540	C	C6-N1-C2	8.58	123.73	120.30
1	1G	278	G	N1-C6-O6	8.58	125.05	119.90
1	1G	815	A	C8-N9-C4	8.58	109.23	105.80
1	1G	1502	A	C4-C5-N7	8.58	114.99	110.70
26	14	1399	C	C5-C6-N1	8.58	125.29	121.00
26	1H	123	G	C5-C6-O6	-8.57	123.45	128.60
26	1H	920	G	N1-C2-N2	-8.57	108.48	116.20
26	1H	678	C	C5-C6-N1	-8.57	116.71	121.00
26	1H	739	G	C5-N7-C8	8.57	108.59	104.30
26	1H	2872	G	O5'-P-OP2	-8.57	97.98	105.70
26	14	1348	G	N1-C6-O6	8.57	125.04	119.90
27	1J	88	C	C2-N1-C1'	8.57	128.23	118.80
26	1H	893	C	C6-N1-C2	-8.57	116.87	120.30
26	1H	1241	A	N7-C8-N9	8.57	118.09	113.80
26	1H	1520	U	O5'-P-OP2	-8.57	97.98	105.70
26	14	140	A	C5-C6-N6	-8.57	116.84	123.70
1	13	1433	A	C5-C6-N6	8.57	130.56	123.70
26	1H	2494	G	N9-C4-C5	8.57	108.83	105.40
26	14	2033	A	C4-C5-C6	-8.57	112.72	117.00
26	1H	1513	C	C5-C6-N1	8.57	125.28	121.00
26	14	1908	C	C6-N1-C2	-8.57	116.87	120.30
26	1H	1610	A	C5-C6-N6	-8.57	116.85	123.70
26	1H	1955	U	C4-C5-C6	8.57	124.84	119.70
26	1H	2299	G	N7-C8-N9	8.57	117.38	113.10
26	1H	788	A	C8-N9-C4	8.56	109.23	105.80
1	13	1533	C	C6-N1-C2	-8.56	116.88	120.30
26	1H	1705	G	C2-N3-C4	-8.56	107.62	111.90
26	1H	409	C	N1-C2-N3	-8.56	113.21	119.20
26	1H	411	G	N1-C6-O6	-8.56	114.76	119.90
26	1H	584	C	N1-C2-O2	-8.56	113.76	118.90
26	1H	628	G	C6-C5-N7	8.56	135.54	130.40
26	1H	774	A	C6-C5-N7	-8.56	126.31	132.30
26	14	219	G	N3-C2-N2	-8.56	113.91	119.90
26	14	256	A	C2-N3-C4	-8.56	106.32	110.60
26	14	1142(A)	A	N9-C4-C5	8.56	109.22	105.80
26	14	1629	U	C6-N1-C2	-8.56	115.86	121.00
1	13	397	A	N1-C2-N3	8.56	133.58	129.30
26	1H	250	G	C5-C6-N1	-8.56	107.22	111.50
26	1H	1573	G	OP1-P-O3'	-8.56	86.37	105.20
26	1H	2055	C	N3-C4-C5	-8.56	118.48	121.90
26	1H	2242	G	C8-N9-C4	8.56	109.82	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2826	A	C6-N1-C2	-8.56	113.46	118.60
1	1G	690	G	N7-C8-N9	8.56	117.38	113.10
26	14	921	G	C5-N7-C8	-8.56	100.02	104.30
26	14	1138	G	C5-N7-C8	-8.56	100.02	104.30
26	14	2022	U	O5'-P-OP2	-8.56	98.00	105.70
1	13	1519	A	C4-C5-N7	-8.55	106.42	110.70
26	1H	41	C	O5'-P-OP2	-8.55	98.00	105.70
26	1H	412	A	N1-C6-N6	-8.56	113.47	118.60
26	14	2841	C	C6-N1-C2	8.56	123.72	120.30
1	13	859	A	O5'-P-OP1	-8.55	98.00	105.70
26	1H	536	A	O5'-P-OP2	-8.55	98.00	105.70
26	1H	652	C	N3-C4-N4	8.55	123.99	118.00
26	1H	2472	G	N1-C6-O6	8.55	125.03	119.90
26	1H	2594	C	O5'-P-OP2	-8.55	98.00	105.70
1	1G	1528	U	C6-N1-C2	8.55	126.13	121.00
1	13	260	G	N1-C2-N3	8.55	129.03	123.90
1	13	405	U	C6-N1-C2	-8.55	115.87	121.00
1	13	570	G	C8-N9-C4	-8.55	102.98	106.40
1	13	692	U	C4-C5-C6	8.55	124.83	119.70
1	13	1299	A	N7-C8-N9	8.55	118.08	113.80
26	1H	1142(A)	A	N3-C4-C5	8.55	132.79	126.80
26	1H	1313	U	O5'-P-OP2	8.55	120.96	110.70
26	14	1569	A	O4'-C1'-N9	8.55	115.04	108.20
26	14	2584	U	OP1-P-OP2	-8.55	106.78	119.60
26	1H	1366	A	C6-N1-C2	-8.55	113.47	118.60
26	1H	2333	A	C5-N7-C8	8.55	108.17	103.90
26	1H	2538	C	C6-N1-C2	8.55	123.72	120.30
26	1H	2712	U	N1-C2-N3	8.55	120.03	114.90
26	14	306	U	C5-C4-O4	8.55	131.03	125.90
26	14	1026	U	C5-C6-N1	8.55	126.97	122.70
26	14	1339	G	O5'-P-OP2	8.55	120.96	110.70
1	13	263	A	O5'-P-OP2	8.55	120.95	110.70
1	13	286	G	O5'-P-OP2	8.55	120.96	110.70
23	2K	31	G	C5-C6-N1	-8.54	107.23	111.50
26	1H	1251	C	OP1-P-OP2	8.54	132.42	119.60
26	1H	1733	G	C8-N9-C4	8.55	109.82	106.40
26	14	1658	C	C6-N1-C2	-8.55	116.88	120.30
26	14	2076	U	OP1-P-OP2	8.54	132.42	119.60
26	1H	2412	A	N1-C2-N3	8.54	133.57	129.30
26	14	2590	A	C8-N9-C4	8.54	109.22	105.80
1	13	386	C	C6-N1-C2	8.54	123.72	120.30
1	13	575	G	C5-C6-O6	8.54	133.72	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	57	C	N3-C4-N4	-8.54	112.02	118.00
26	1H	1397	U	C4-C5-C6	8.54	124.83	119.70
26	14	1600	C	C6-N1-C2	8.54	123.72	120.30
26	1H	310	A	C5-C6-N6	-8.54	116.87	123.70
26	1H	389	G	N3-C4-N9	8.54	131.12	126.00
26	1H	638	G	C6-C5-N7	-8.54	125.28	130.40
26	1H	1415	U	C5-C4-O4	8.54	131.02	125.90
26	14	774	A	C6-N1-C2	8.54	123.72	118.60
26	14	958	U	O5'-P-OP2	8.54	120.94	110.70
26	14	2029	G	N1-C6-O6	-8.54	114.78	119.90
26	14	2315	G	C2-N3-C4	8.54	116.17	111.90
26	1H	55	G	C5-C6-N1	8.54	115.77	111.50
26	1H	811	U	C4-C5-C6	8.54	124.82	119.70
26	1H	827	U	O5'-P-OP1	8.54	120.94	110.70
26	1H	1142(A)	A	N1-C6-N6	8.54	123.72	118.60
26	1H	2236	C	N3-C4-C5	-8.54	118.49	121.90
26	1H	2611	U	N1-C2-O2	8.53	128.77	122.80
26	14	1849	G	N3-C2-N2	-8.53	113.93	119.90
1	13	801	U	N3-C4-O4	-8.53	113.43	119.40
26	1H	820	A	N1-C6-N6	-8.53	113.48	118.60
26	1H	845	G	N9-C4-C5	-8.53	101.99	105.40
26	1H	1660	C	C2-N3-C4	-8.53	115.63	119.90
26	1H	1777	U	C4-C5-C6	8.53	124.82	119.70
26	1H	2236	C	N1-C2-O2	-8.53	113.78	118.90
26	1H	2442	C	N1-C2-O2	-8.53	113.78	118.90
26	1H	537	C	O5'-P-OP2	-8.53	98.02	105.70
26	1H	700	G	N7-C8-N9	8.53	117.36	113.10
26	1H	704	G	C6-C5-N7	-8.53	125.28	130.40
26	1H	2507	C	C2-N3-C4	8.53	124.17	119.90
26	1H	2869	G	N9-C4-C5	8.53	108.81	105.40
1	13	542	G	C4-C5-N7	8.53	114.21	110.80
26	1H	642	G	N3-C4-N9	-8.53	120.89	126.00
26	1H	717	G	C8-N9-C4	-8.53	102.99	106.40
26	14	676	A	C6-N1-C2	8.53	123.72	118.60
26	1H	1675	C	C6-N1-C2	-8.52	116.89	120.30
26	1H	2397	G	N3-C2-N2	-8.52	113.93	119.90
26	14	2628	C	N3-C4-C5	8.52	125.31	121.90
26	1H	227	A	N1-C2-N3	8.52	133.56	129.30
26	1H	263	C	C5-C6-N1	-8.52	116.74	121.00
26	14	1476	C	N3-C2-O2	8.52	127.86	121.90
26	14	523	C	C5-C6-N1	8.52	125.26	121.00
26	14	1592	C	C2-N3-C4	8.52	124.16	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2368	C	O5'-P-OP1	-8.52	98.03	105.70
1	13	251	G	N1-C6-O6	8.52	125.01	119.90
1	13	811	C	C2-N3-C4	-8.52	115.64	119.90
26	1H	776	G	OP1-P-OP2	8.52	132.38	119.60
26	1H	945	A	N9-C1'-C2'	8.52	125.07	114.00
26	1H	1904	G	N7-C8-N9	-8.52	108.84	113.10
26	14	672	C	C6-N1-C2	-8.52	116.89	120.30
26	1H	926	A	N7-C8-N9	8.52	118.06	113.80
26	1H	1398	C	C6-N1-C2	8.52	123.71	120.30
26	14	1318	C	OP1-P-OP2	-8.52	106.82	119.60
26	1H	820	A	C5-C6-N6	8.52	130.51	123.70
26	1H	988	A	C6-N1-C2	-8.52	113.49	118.60
26	1H	1625	C	N1-C2-O2	8.52	124.01	118.90
29	11	39	LYS	C-N-CA	8.52	142.99	121.70
26	14	1796	U	O5'-P-OP1	-8.52	98.03	105.70
26	1H	2228	G	C5-C6-N1	-8.52	107.24	111.50
26	14	945	A	C5-C6-N6	-8.52	116.89	123.70
26	14	1960	A	N9-C4-C5	8.52	109.21	105.80
26	14	2678	C	C2-N3-C4	-8.52	115.64	119.90
27	1J	81	G	N1-C6-O6	8.51	125.01	119.90
26	1H	125	G	C5-C6-N1	8.51	115.76	111.50
1	1G	284	G	N9-C4-C5	-8.51	102.00	105.40
26	1H	1765	C	N3-C4-N4	-8.51	112.04	118.00
26	14	2416	C	C6-N1-C2	8.51	123.70	120.30
1	13	769	G	C5-C6-N1	8.51	115.75	111.50
26	1H	188	G	N9-C4-C5	-8.51	102.00	105.40
26	1H	1298	C	C5-C6-N1	8.51	125.25	121.00
26	1H	2712	U	O4'-C1'-N1	8.51	115.01	108.20
1	1G	1355	G	N1-C6-O6	8.51	125.00	119.90
26	1H	995	C	C2-N3-C4	8.51	124.15	119.90
26	1H	1291	C	C5-C4-N4	8.51	126.15	120.20
26	1H	1336	A	N1-C6-N6	-8.51	113.50	118.60
26	14	479	A	N7-C8-N9	-8.51	109.55	113.80
26	14	592	G	N1-C6-O6	8.51	125.00	119.90
26	14	2579	C	C6-N1-C2	-8.51	116.90	120.30
26	14	2885	C	N3-C4-C5	8.51	125.30	121.90
26	1H	1705	G	OP1-P-OP2	-8.50	106.84	119.60
1	13	1058	G	N9-C4-C5	-8.50	102.00	105.40
26	1H	618(A)	C	C5-C4-N4	-8.50	114.25	120.20
26	1H	1815	A	C8-N9-C4	8.50	109.20	105.80
26	1H	1869	G	N1-C6-O6	8.50	125.00	119.90
26	1H	2539	C	C5-C6-N1	-8.50	116.75	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	148	C	C5-C6-N1	-8.50	116.75	121.00
1	13	522	C	O5'-P-OP2	-8.50	98.05	105.70
1	13	1399	C	O5'-P-OP1	-8.50	98.05	105.70
26	1H	801	G	C2-N3-C4	-8.50	107.65	111.90
26	1H	2330	G	N9-C4-C5	-8.50	102.00	105.40
31	31	74	ARG	NE-CZ-NH1	8.50	124.55	120.30
26	14	702	G	C2-N3-C4	-8.50	107.65	111.90
26	14	946	G	N3-C4-C5	8.50	132.85	128.60
26	1H	2490	G	OP1-P-O3'	8.50	123.89	105.20
26	1H	811	U	C5-C6-N1	-8.50	118.45	122.70
26	1H	1386	C	C5-C6-N1	8.50	125.25	121.00
26	1H	2447	G	N9-C4-C5	8.50	108.80	105.40
26	14	2387	U	C2-N3-C4	-8.50	121.90	127.00
26	14	840	C	N1-C2-O2	-8.50	113.80	118.90
26	14	1670	C	O5'-P-OP1	8.50	120.90	110.70
26	1H	674	G	N9-C4-C5	-8.49	102.00	105.40
26	1H	1323	U	N3-C4-O4	8.49	125.35	119.40
26	14	2755	C	C6-N1-C2	-8.49	116.90	120.30
1	13	21	G	C4-C5-N7	-8.49	107.40	110.80
1	13	302	G	O5'-P-OP2	-8.49	98.06	105.70
1	13	1472	U	N3-C2-O2	-8.49	116.25	122.20
24	3K	36	U	C5-C4-O4	8.49	131.00	125.90
22	1K	42	A	N9-C4-C5	-8.49	102.40	105.80
23	2K	28	U	N3-C4-C5	-8.49	109.50	114.60
26	1H	465	G	O5'-P-OP2	8.49	120.89	110.70
26	1H	952	G	N1-C6-O6	8.49	125.00	119.90
26	14	2869	G	N1-C6-O6	8.49	125.00	119.90
26	14	16	G	N1-C2-N2	8.49	123.84	116.20
26	14	459	U	C2-N3-C4	-8.49	121.91	127.00
26	14	577	G	OP1-P-OP2	-8.49	106.86	119.60
26	1H	77	C	C5-C4-N4	-8.49	114.26	120.20
26	1H	186	G	C4-C5-N7	8.49	114.19	110.80
26	1H	197	A	C5-C6-N1	-8.49	113.46	117.70
26	1H	248	G	N1-C2-N3	8.49	128.99	123.90
26	1H	1332	G	N9-C4-C5	-8.49	102.00	105.40
26	1H	2662	A	C8-N9-C4	-8.49	102.41	105.80
26	14	1322	A	OP2-P-O3'	8.49	123.87	105.20
26	14	1828	G	N9-C4-C5	8.49	108.80	105.40
1	13	522	C	N3-C2-O2	8.48	127.84	121.90
26	1H	2503	A	C6-C5-N7	-8.48	126.36	132.30
26	1H	298	G	N1-C2-N3	-8.48	118.81	123.90
26	14	53	A	N1-C2-N3	8.48	133.54	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2K	71	G	C8-N9-C4	8.48	109.79	106.40
26	1H	1386	C	C6-N1-C2	-8.48	116.91	120.30
26	1H	2072	G	C8-N9-C4	8.48	109.79	106.40
1	1G	244	U	C5-C4-O4	-8.48	120.81	125.90
26	14	2565	A	O5'-P-OP2	8.48	120.88	110.70
26	14	1401	G	C8-N9-C4	-8.48	103.01	106.40
26	14	1933	G	N7-C8-N9	-8.48	108.86	113.10
26	14	2869	G	N3-C2-N2	-8.48	113.96	119.90
1	13	237	C	C5-C4-N4	8.48	126.13	120.20
1	13	520	A	C2-N3-C4	-8.48	106.36	110.60
1	13	768	A	C5-N7-C8	8.48	108.14	103.90
26	1H	1680	U	N3-C2-O2	8.48	128.13	122.20
26	14	305	U	N3-C4-C5	-8.48	109.51	114.60
26	14	1284	A	N1-C6-N6	8.48	123.69	118.60
26	14	2787	C	N3-C4-C5	-8.48	118.51	121.90
26	1H	1547	C	C5-C4-N4	8.48	126.13	120.20
26	1H	2092	U	C6-N1-C2	-8.48	115.92	121.00
26	14	748	G	C5-C6-N1	8.48	115.74	111.50
26	14	2764	A	C5-C6-N1	-8.48	113.46	117.70
26	14	1620	G	OP1-P-OP2	-8.48	106.89	119.60
26	14	2253	G	C2-N3-C4	-8.48	107.66	111.90
26	14	2518	A	N9-C4-C5	-8.48	102.41	105.80
26	1H	2250	G	C4-C5-N7	-8.47	107.41	110.80
26	14	121	G	C4-C5-N7	8.47	114.19	110.80
26	1H	618(A)	C	N3-C4-C5	8.47	125.29	121.90
26	1H	1833	U	N1-C2-N3	8.47	119.98	114.90
26	1H	2000	G	C6-C5-N7	-8.47	125.31	130.40
26	14	478	A	C8-N9-C4	8.47	109.19	105.80
26	14	575	A	O5'-P-OP2	8.47	120.87	110.70
26	1H	725	G	N1-C6-O6	8.47	124.98	119.90
26	1H	990	A	N7-C8-N9	8.47	118.04	113.80
26	1H	2276	G	N3-C2-N2	-8.47	113.97	119.90
1	13	577	G	C2-N3-C4	-8.47	107.67	111.90
26	1H	1558	A	C2-N3-C4	-8.47	106.36	110.60
26	1H	1764	G	C4-C5-N7	-8.47	107.41	110.80
26	1H	2505	G	O5'-P-OP1	8.47	120.86	110.70
26	1H	2552	U	C5-C4-O4	-8.47	120.82	125.90
26	1H	2644	G	N3-C4-C5	8.47	132.84	128.60
57	3L	3	G	C8-N9-C4	8.47	109.79	106.40
26	14	545	G	N1-C6-O6	-8.47	114.82	119.90
26	1H	288	C	C6-N1-C2	-8.47	116.91	120.30
26	1H	786	C	C4-C5-C6	8.47	121.63	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1979	C	N1-C2-N3	8.47	125.13	119.20
26	1H	2009	G	N7-C8-N9	-8.47	108.87	113.10
26	1H	2496	C	C2-N3-C4	-8.47	115.67	119.90
26	14	146	G	N1-C6-O6	8.47	124.98	119.90
26	14	2689	U	N1-C2-O2	-8.47	116.87	122.80
26	1H	1413	G	C5-N7-C8	-8.47	100.07	104.30
26	1H	2083	G	N1-C2-N3	8.47	128.98	123.90
26	1H	2418	A	N1-C2-N3	-8.47	125.07	129.30
26	14	770	G	N1-C6-O6	-8.47	114.82	119.90
27	16	43	C	N1-C2-O2	8.47	123.98	118.90
26	14	639	U	N3-C2-O2	-8.47	116.27	122.20
26	14	2502	G	N1-C6-O6	8.47	124.98	119.90
23	2K	76	C	C6-N1-C2	-8.46	116.91	120.30
26	1H	2069	G	N3-C2-N2	-8.46	113.97	119.90
26	1H	2700	C	C5-C4-N4	-8.46	114.27	120.20
1	1G	529	G	C4-C5-N7	8.47	114.19	110.80
26	14	2001	A	C5-C6-N6	-8.47	116.93	123.70
1	1G	784	C	N3-C2-O2	8.46	127.83	121.90
1	13	1403	C	N3-C4-N4	-8.46	112.08	118.00
1	13	1517	G	C4-C5-N7	8.46	114.19	110.80
26	1H	80	G	C4-C5-N7	-8.46	107.42	110.80
26	1H	305	U	N3-C4-C5	-8.46	109.52	114.60
26	1H	2281	C	C6-N1-C1'	-8.46	110.65	120.80
1	1G	1474	G	C6-C5-N7	-8.46	125.32	130.40
26	1H	580	C	N1-C2-N3	8.46	125.12	119.20
45	F8	3	THR	C-N-CA	8.46	142.85	121.70
26	14	497	A	C5-N7-C8	-8.46	99.67	103.90
26	14	1026	U	N3-C4-C5	-8.46	109.52	114.60
1	1G	366	C	C5-C6-N1	-8.46	116.77	121.00
26	14	436	C	C4-C5-C6	-8.46	113.17	117.40
26	14	1610	A	C4-C5-C6	8.46	121.23	117.00
39	55	12	ARG	NE-CZ-NH1	-8.46	116.07	120.30
26	14	1606	G	C5-C6-N1	8.46	115.73	111.50
1	13	967	C	N3-C4-C5	8.46	125.28	121.90
26	1H	1629	U	OP1-P-OP2	-8.46	106.92	119.60
26	1H	2022	U	C5-C4-O4	-8.46	120.83	125.90
26	1H	2070	G	C5-C6-N1	-8.46	107.27	111.50
26	14	121	G	C5-N7-C8	-8.46	100.07	104.30
26	14	2409	G	C6-C5-N7	-8.46	125.33	130.40
26	14	2423	U	C5-C6-N1	-8.46	118.47	122.70
1	13	586	C	N1-C2-O2	-8.46	113.83	118.90
23	2K	77	A	C4-C5-C6	-8.46	112.77	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2407	G	O5'-P-OP2	-8.46	98.09	105.70
27	1J	29	A	N1-C6-N6	8.46	123.67	118.60
26	1H	1278	A	C4-C5-N7	-8.45	106.47	110.70
27	16	55	U	O5'-P-OP1	-8.45	98.09	105.70
1	1G	1504	G	N1-C6-O6	-8.45	114.83	119.90
26	14	1856	G	C5-C6-N1	-8.46	107.27	111.50
26	14	2880	C	C6-N1-C2	-8.45	116.92	120.30
26	1H	399	G	C8-N9-C4	8.45	109.78	106.40
26	1H	768	G	C8-N9-C4	8.45	109.78	106.40
26	1H	2644	G	C2-N3-C4	-8.45	107.67	111.90
1	1G	495	A	N1-C6-N6	-8.45	113.53	118.60
1	1G	1473	A	N1-C6-N6	8.45	123.67	118.60
27	1J	79	C	C6-N1-C2	-8.45	116.92	120.30
1	13	1382	C	N3-C4-C5	8.45	125.28	121.90
23	2K	16	C	N1-C2-O2	8.45	123.97	118.90
26	1H	68	G	C5-C6-N1	-8.45	107.28	111.50
26	1H	2023	G	C8-N9-C4	-8.45	103.02	106.40
26	1H	2266	A	C6-N1-C2	-8.45	113.53	118.60
26	1H	2518	A	C8-N9-C4	-8.45	102.42	105.80
26	1H	2606	C	N1-C2-O2	-8.45	113.83	118.90
26	14	491	G	N1-C6-O6	-8.45	114.83	119.90
26	14	2237	G	N1-C6-O6	-8.45	114.83	119.90
1	13	1313	U	C5-C6-N1	8.45	126.92	122.70
26	1H	189	G	C5-N7-C8	8.45	108.52	104.30
26	1H	691	C	N3-C4-N4	8.45	123.91	118.00
26	1H	1381	G	OP1-P-O3'	-8.45	86.62	105.20
1	13	782	A	N1-C6-N6	8.44	123.67	118.60
26	1H	1983	C	OP1-P-OP2	8.45	132.27	119.60
1	1G	106	C	N3-C4-C5	-8.45	118.52	121.90
1	1G	707	C	O5'-P-OP2	-8.44	98.10	105.70
1	1G	1422	G	C5-C6-O6	8.45	133.67	128.60
26	14	1309	G	C2-N3-C4	-8.45	107.68	111.90
26	14	1564	C	C5-C4-N4	8.45	126.11	120.20
26	14	2574	G	C5-C6-N1	8.44	115.72	111.50
26	14	499	U	C2-N3-C4	-8.44	121.94	127.00
26	14	783	A	C6-N1-C2	8.44	123.67	118.60
26	14	828	U	C2-N3-C4	-8.44	121.93	127.00
26	14	2838	G	N3-C2-N2	-8.44	113.99	119.90
26	1H	947	G	C5-C6-N1	-8.44	107.28	111.50
26	1H	1381	G	O5'-P-OP2	8.44	120.83	110.70
26	1H	788	A	C6-N1-C2	8.44	123.66	118.60
26	1H	1762	A	N1-C2-N3	-8.44	125.08	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	747	U	N3-C2-O2	8.44	128.11	122.20
26	14	2285	C	N3-C4-C5	8.44	125.28	121.90
1	13	878	G	N7-C8-N9	-8.44	108.88	113.10
1	13	959	A	C8-N9-C4	8.44	109.17	105.80
26	1H	2766	G	N1-C6-O6	8.44	124.96	119.90
26	14	1914	C	C6-N1-C2	-8.44	116.92	120.30
26	1H	219	G	C8-N9-C4	-8.44	103.03	106.40
26	1H	1588	C	OP1-P-O3'	8.44	123.76	105.20
26	1H	2242	G	N3-C2-N2	-8.44	114.00	119.90
27	16	18	G	N1-C6-O6	8.44	124.96	119.90
26	14	1777	U	N1-C2-N3	8.44	119.96	114.90
26	14	2681	C	C5-C4-N4	8.44	126.11	120.20
26	14	2707	G	C5-C6-O6	-8.44	123.54	128.60
1	13	802	A	N1-C6-N6	8.43	123.66	118.60
1	13	1422	G	O5'-P-OP2	-8.43	98.11	105.70
26	1H	1315	C	C5-C4-N4	8.43	126.10	120.20
26	1H	2489	G	N1-C2-N3	8.43	128.96	123.90
1	1G	337	C	C6-N1-C2	-8.43	116.93	120.30
26	14	1367	A	N7-C8-N9	8.43	118.02	113.80
26	14	1399	C	OP2-P-O3'	8.43	123.76	105.20
26	14	2429	G	N3-C2-N2	-8.43	114.00	119.90
1	13	767	A	N1-C2-N3	8.43	133.51	129.30
1	13	1158	C	N1-C2-O2	8.43	123.96	118.90
22	1K	75	C	N3-C2-O2	-8.43	116.00	121.90
23	2K	6	G	N7-C8-N9	-8.43	108.88	113.10
26	1H	148	C	C2-N3-C4	-8.43	115.69	119.90
26	1H	1908	C	N3-C4-C5	-8.43	118.53	121.90
26	14	1528	A	N7-C8-N9	8.43	118.01	113.80
26	14	1678	G	C2-N3-C4	-8.43	107.69	111.90
26	1H	830	G	N1-C2-N3	8.43	128.96	123.90
26	1H	684	G	N3-C4-C5	-8.43	124.39	128.60
26	1H	908	C	O5'-P-OP2	-8.43	98.12	105.70
26	1H	1125	G	C5-C6-O6	8.43	133.66	128.60
26	1H	1391	U	C2-N1-C1'	8.43	127.81	117.70
26	14	1382	G	N3-C4-C5	8.43	132.81	128.60
26	14	1906	G	C8-N9-C4	-8.43	103.03	106.40
1	13	8	A	OP1-P-OP2	-8.42	106.97	119.60
26	1H	270(R)	G	C8-N9-C4	-8.42	103.03	106.40
1	13	878	G	O5'-P-OP2	-8.42	98.12	105.70
44	E8	99	ARG	NE-CZ-NH2	-8.42	116.09	120.30
1	1G	1372	U	C6-N1-C2	-8.42	115.95	121.00
26	14	1528	A	C8-N9-C4	-8.42	102.43	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	51	G	N1-C6-O6	-8.42	114.85	119.90
26	14	1692	U	C5-C4-O4	8.42	130.95	125.90
26	1H	279	C	C6-N1-C2	-8.42	116.93	120.30
26	1H	943	U	O5'-P-OP1	-8.42	98.12	105.70
26	1H	1263	U	N1-C2-O2	8.42	128.69	122.80
26	1H	1627	G	C8-N9-C1'	-8.42	116.05	127.00
26	1H	1445	C	O5'-P-OP1	-8.42	98.12	105.70
26	1H	2685	G	N1-C6-O6	8.42	124.95	119.90
1	1G	230	G	N3-C4-C5	8.42	132.81	128.60
26	14	192	C	N3-C4-C5	8.42	125.27	121.90
26	14	1583	A	N9-C4-C5	-8.42	102.43	105.80
26	14	487	C	C6-N1-C2	8.42	123.67	120.30
26	14	691	C	N3-C4-N4	8.42	123.89	118.00
26	14	1602	U	O5'-P-OP1	-8.42	98.12	105.70
26	1H	528	A	O5'-P-OP1	8.42	120.80	110.70
26	1H	744	G	C6-N1-C2	-8.42	120.05	125.10
26	14	2617	C	N3-C4-C5	8.42	125.27	121.90
1	13	740	U	C5-C6-N1	-8.41	118.49	122.70
1	13	1487	G	N3-C2-N2	-8.41	114.01	119.90
26	1H	852	G	OP2-P-O3'	8.41	123.71	105.20
26	1H	1122	G	N9-C4-C5	-8.41	102.03	105.40
1	13	1210	C	C6-N1-C2	8.41	123.67	120.30
26	1H	1930	G	C5-C6-N1	8.41	115.71	111.50
26	14	856	C	C5-C6-N1	8.41	125.21	121.00
26	14	1698	A	N9-C4-C5	-8.41	102.44	105.80
26	1H	645	C	C6-N1-C2	-8.41	116.94	120.30
26	1H	657	U	O5'-P-OP2	-8.41	98.13	105.70
26	1H	1022	G	N9-C4-C5	8.41	108.76	105.40
26	1H	1034	G	N1-C6-O6	8.41	124.94	119.90
26	1H	1147	C	C5-C6-N1	-8.41	116.80	121.00
26	1H	1429	G	N1-C2-N2	-8.41	108.63	116.20
26	14	1965	C	N1-C2-N3	-8.41	113.31	119.20
1	13	1309	G	C8-N9-C4	8.41	109.76	106.40
26	1H	506	G	C4-C5-N7	8.41	114.16	110.80
26	1H	2263	C	C2-N3-C4	8.41	124.10	119.90
1	1G	738	C	C6-N1-C2	-8.41	116.94	120.30
26	14	1899	G	N7-C8-N9	8.41	117.30	113.10
26	1H	2450	A	C5-C6-N6	8.41	130.43	123.70
26	14	667	U	N3-C4-O4	8.41	125.28	119.40
26	14	952	G	N7-C8-N9	8.41	117.30	113.10
27	1J	75	G	N1-C6-O6	8.41	124.94	119.90
26	1H	1401	G	C8-N9-C4	-8.40	103.04	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2279	G	C5-C6-O6	8.40	133.64	128.60
27	16	11	C	N3-C2-O2	-8.40	116.02	121.90
26	1H	576	U	C5-C4-O4	-8.40	120.86	125.90
26	1H	925	C	O5'-P-OP2	-8.40	98.14	105.70
26	14	2720	U	O5'-P-OP1	-8.40	98.14	105.70
1	13	5	U	C5-C6-N1	8.40	126.90	122.70
1	13	120	A	N1-C6-N6	8.40	123.64	118.60
1	13	881	G	O5'-P-OP1	8.40	120.78	110.70
23	2K	4	G	OP1-P-OP2	8.40	132.20	119.60
26	1H	847	U	OP1-P-OP2	8.40	132.20	119.60
30	21	144	ARG	NE-CZ-NH1	-8.40	116.10	120.30
1	1G	909	A	N1-C6-N6	8.40	123.64	118.60
1	1G	1474	G	C2-N3-C4	-8.40	107.70	111.90
26	14	656	G	N1-C6-O6	8.40	124.94	119.90
26	14	1407	C	C5-C4-N4	-8.40	114.32	120.20
1	13	191	G	C8-N9-C4	-8.40	103.04	106.40
26	1H	493	G	N3-C2-N2	-8.40	114.02	119.90
26	1H	1123	C	C5-C6-N1	-8.40	116.80	121.00
26	1H	1600	C	OP1-P-O3'	8.40	123.68	105.20
26	1H	2577	A	N9-C4-C5	8.40	109.16	105.80
1	1G	1259	C	C5-C6-N1	8.40	125.20	121.00
1	13	578	C	OP2-P-O3'	8.40	123.67	105.20
26	1H	203	C	O5'-P-OP1	-8.40	98.14	105.70
26	1H	1783	A	N1-C2-N3	8.40	133.50	129.30
26	14	1858	G	OP1-P-OP2	-8.40	107.00	119.60
26	1H	2519	U	N3-C2-O2	8.40	128.08	122.20
27	16	100	G	N3-C4-N9	8.40	131.04	126.00
26	14	562	U	C6-N1-C2	-8.40	115.96	121.00
26	14	1202	C	C5-C6-N1	-8.40	116.80	121.00
26	14	1603	A	C5-N7-C8	-8.40	99.70	103.90
26	14	2021	C	C5-C4-N4	-8.40	114.32	120.20
26	1H	585	G	N1-C2-N3	8.39	128.94	123.90
26	1H	1603	A	N9-C4-C5	8.39	109.16	105.80
26	1H	1705	G	C5-C6-N1	-8.39	107.30	111.50
26	14	1949	G	C5-C6-N1	-8.39	107.30	111.50
26	1H	2251	G	OP1-P-O3'	8.39	123.67	105.20
26	14	2346	A	C4-C5-C6	8.39	121.20	117.00
1	13	1486	G	N3-C4-N9	-8.39	120.97	126.00
26	1H	236	C	C5-C6-N1	-8.39	116.80	121.00
26	1H	583	G	OP1-P-O3'	8.39	123.66	105.20
26	1H	2350	C	N3-C4-C5	-8.39	118.54	121.90
1	13	766	A	C8-N9-C4	8.39	109.16	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	786	C	C2-N3-C4	-8.39	115.71	119.90
26	14	1015	G	C8-N9-C4	-8.39	103.05	106.40
26	14	1844	C	C5-C6-N1	8.39	125.19	121.00
1	13	690	G	C4-N9-C1'	8.39	137.40	126.50
26	1H	1311	G	N9-C4-C5	-8.38	102.05	105.40
26	1H	1817	G	C5-C6-N1	-8.38	107.31	111.50
26	1H	2751	G	C5-N7-C8	-8.38	100.11	104.30
31	31	44	ARG	NE-CZ-NH1	-8.39	116.11	120.30
1	1G	352	C	N1-C2-O2	8.38	123.93	118.90
57	3L	31	A	C8-N9-C4	-8.38	102.45	105.80
26	14	1331	A	N1-C6-N6	-8.39	113.57	118.60
26	1H	1219	G	C2-N3-C4	-8.38	107.71	111.90
26	1H	1553	A	C6-N1-C2	-8.38	113.57	118.60
26	1H	2358	G	C6-N1-C2	-8.38	120.07	125.10
26	1H	196	A	O4'-C1'-N9	8.38	114.90	108.20
26	1H	1600	C	N1-C2-O2	8.38	123.93	118.90
26	1H	2456	C	O5'-P-OP1	-8.38	98.16	105.70
1	1G	915	A	N9-C4-C5	8.38	109.15	105.80
27	16	77	U	C2-N3-C4	-8.38	121.97	127.00
31	31	38	ARG	NE-CZ-NH2	-8.38	116.11	120.30
26	14	768	G	C4-C5-C6	8.38	123.83	118.80
26	14	960	A	O5'-P-OP1	-8.38	98.16	105.70
27	1J	30	C	N3-C4-C5	-8.38	118.55	121.90
1	13	1385	G	C4-C5-N7	8.38	114.15	110.80
26	14	2678	C	N3-C4-C5	8.38	125.25	121.90
26	14	2852	G	O5'-P-OP2	-8.38	98.16	105.70
1	13	1481	U	N3-C4-C5	-8.38	109.57	114.60
23	2K	25	U	C5-C4-O4	8.38	130.93	125.90
26	1H	179	G	C5-C6-O6	-8.38	123.57	128.60
26	1H	2610	C	O5'-P-OP1	-8.38	98.16	105.70
26	1H	1002	G	C8-N9-C4	-8.38	103.05	106.40
26	1H	1377	G	N1-C2-N3	8.38	128.93	123.90
26	1H	2708	G	N1-C6-O6	8.38	124.93	119.90
26	14	1975	G	C5-C6-O6	-8.38	123.57	128.60
1	1G	125	U	C5-C4-O4	8.38	130.93	125.90
26	14	2456	C	N3-C4-N4	8.38	123.86	118.00
26	14	2506	U	N1-C2-O2	8.38	128.66	122.80
26	14	2555	U	C6-N1-C2	8.38	126.03	121.00
1	13	326	G	C5-N7-C8	8.38	108.49	104.30
1	13	697	U	C5-C6-N1	-8.38	118.51	122.70
26	1H	1930	G	N1-C6-O6	-8.38	114.87	119.90
26	1H	2373	G	C2-N3-C4	-8.38	107.71	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	505	G	O5'-P-OP2	8.38	120.75	110.70
26	14	974(A)	C	N3-C4-C5	-8.38	118.55	121.90
26	14	1678	G	N7-C8-N9	8.38	117.29	113.10
26	14	1728	G	C2-N3-C4	8.38	116.09	111.90
26	1H	25	U	C2-N3-C4	-8.37	121.97	127.00
26	1H	1197	G	OP1-P-OP2	8.37	132.16	119.60
1	1G	916	G	C2-N3-C4	8.37	116.09	111.90
26	14	400	G	C2-N3-C4	-8.38	107.71	111.90
26	14	961	C	C2-N3-C4	-8.37	115.71	119.90
26	14	1361	G	C8-N9-C4	8.38	109.75	106.40
26	14	2228	G	C6-C5-N7	-8.38	125.38	130.40
27	1J	76	G	O5'-P-OP1	8.38	120.75	110.70
26	1H	136	G	N1-C6-O6	8.37	124.92	119.90
26	1H	1282	U	OP1-P-OP2	-8.37	107.04	119.60
26	1H	2403	C	N1-C2-N3	8.37	125.06	119.20
26	1H	1142(A)	A	N3-C4-N9	-8.37	120.70	127.40
37	78	33	ARG	NE-CZ-NH1	-8.37	116.11	120.30
1	13	1498	U	P-O3'-C3'	8.37	129.74	119.70
26	1H	1493	C	N1-C2-O2	8.37	123.92	118.90
26	14	197	A	N1-C2-N3	8.37	133.48	129.30
26	14	2735	G	C2-N3-C4	-8.37	107.72	111.90
26	1H	2428	G	C4-C5-N7	-8.37	107.45	110.80
26	1H	2846	G	C5-C6-N1	-8.37	107.32	111.50
26	14	210	C	C5-C6-N1	-8.37	116.82	121.00
26	14	1415	U	C5-C6-N1	-8.37	118.52	122.70
26	14	1727	U	C5-C4-O4	8.37	130.92	125.90
1	13	1340	A	C2-N3-C4	-8.37	106.42	110.60
1	13	35	G	C5-C6-N1	-8.36	107.32	111.50
23	2K	11	A	C5-C6-N1	8.37	121.88	117.70
26	1H	1438	U	N3-C4-O4	8.37	125.26	119.40
26	1H	1884	A	C5-C6-N1	-8.36	113.52	117.70
26	1H	2705	A	C8-N9-C4	8.36	109.15	105.80
26	14	2679	A	N7-C8-N9	-8.37	109.62	113.80
1	13	346	G	N1-C6-O6	8.36	124.92	119.90
26	1H	411	G	C8-N9-C4	-8.36	103.06	106.40
26	1H	1482	U	N1-C2-N3	8.36	119.92	114.90
26	1H	2032	G	N1-C6-O6	8.36	124.92	119.90
26	1H	2350	C	C6-N1-C2	-8.36	116.95	120.30
26	1H	2416	C	N1-C2-O2	-8.36	113.88	118.90
26	14	2567	G	C8-N9-C4	8.36	109.74	106.40
26	14	2700	C	C5-C4-N4	-8.36	114.35	120.20
26	14	2712(A)	A	O5'-P-OP1	-8.36	98.17	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2K	58	A	N1-C2-N3	8.36	133.48	129.30
26	1H	1480	G	N7-C8-N9	8.36	117.28	113.10
1	13	377	G	C4-C5-N7	-8.36	107.46	110.80
27	16	30	C	C6-N1-C2	-8.36	116.96	120.30
1	1G	386	C	C5-C6-N1	-8.36	116.82	121.00
26	14	2690	C	C5-C6-N1	-8.36	116.82	121.00
1	1G	580	U	C5-C4-O4	8.36	130.91	125.90
1	1G	1224	G	C8-N9-C4	-8.36	103.06	106.40
1	13	516	U	N1-C2-N3	8.36	119.91	114.90
26	1H	2514	U	C5-C6-N1	-8.36	118.52	122.70
57	3L	34	U	C2-N1-C1'	8.36	127.73	117.70
26	14	1277	G	O5'-P-OP2	-8.36	98.18	105.70
26	14	2495	G	C2-N3-C4	-8.36	107.72	111.90
26	1H	2329	G	C2-N3-C4	-8.35	107.72	111.90
1	1G	1301	U	C2-N1-C1'	8.35	127.72	117.70
26	14	1227	A	N1-C6-N6	-8.35	113.59	118.60
26	14	1380	G	N7-C8-N9	-8.35	108.92	113.10
1	13	766	A	C5-N7-C8	-8.35	99.72	103.90
1	13	771	G	N3-C4-N9	-8.35	120.99	126.00
26	1H	189	G	N1-C2-N2	8.35	123.72	116.20
26	1H	915	C	N3-C2-O2	-8.35	116.06	121.90
26	1H	990	A	C5-N7-C8	-8.35	99.72	103.90
26	1H	1546	C	O5'-P-OP1	-8.35	98.18	105.70
1	1G	576	G	C5-C6-N1	-8.35	107.32	111.50
26	14	204	A	C5-C6-N1	8.35	121.88	117.70
26	14	1192	G	O5'-P-OP2	-8.35	98.18	105.70
26	14	1475	G	N7-C8-N9	8.35	117.28	113.10
1	13	1190	G	C5-C6-N1	-8.35	107.33	111.50
26	1H	826	U	OP2-P-O3'	8.35	123.57	105.20
26	1H	1457	A	N1-C6-N6	8.35	123.61	118.60
26	1H	640	C	C6-N1-C2	-8.35	116.96	120.30
26	1H	1852	C	O5'-P-OP2	-8.35	98.19	105.70
26	1H	2358	G	N1-C2-N3	8.35	128.91	123.90
27	16	33	G	C4-C5-N7	8.35	114.14	110.80
26	14	741	G	N1-C2-N2	8.35	123.72	116.20
26	14	2443	C	N3-C4-N4	8.35	123.84	118.00
1	13	952	U	C6-N1-C2	-8.35	115.99	121.00
1	13	1382	C	C5-C4-N4	-8.35	114.36	120.20
26	1H	180	G	OP1-P-OP2	8.35	132.12	119.60
26	1H	411	G	N9-C4-C5	8.35	108.74	105.40
26	1H	558	G	C2-N3-C4	-8.35	107.73	111.90
26	1H	1546	C	OP1-P-OP2	8.35	132.12	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2639	A	C2-N3-C4	-8.35	106.43	110.60
26	14	433	C	N1-C2-O2	-8.35	113.89	118.90
26	14	1419	A	C8-N9-C4	8.35	109.14	105.80
26	14	2237	G	O5'-P-OP2	-8.35	98.19	105.70
1	13	513	C	C4-C5-C6	-8.34	113.23	117.40
1	13	570	G	C5-C6-N1	-8.34	107.33	111.50
1	13	1392	G	C2-N3-C4	-8.34	107.73	111.90
26	1H	243	U	N3-C2-O2	-8.34	116.36	122.20
1	1G	112	G	N1-C2-N2	8.34	123.71	116.20
26	1H	477	A	N1-C2-N3	8.34	133.47	129.30
26	1H	762	U	N3-C4-C5	8.34	119.61	114.60
26	14	837	C	O5'-P-OP1	-8.34	98.19	105.70
26	1H	1623	G	N3-C4-C5	-8.34	124.43	128.60
26	14	1975	G	N1-C6-O6	8.34	124.91	119.90
1	13	869	G	C5-C6-O6	-8.34	123.59	128.60
26	1H	805	G	OP1-P-O3'	8.34	123.55	105.20
1	13	1199	U	C5-C4-O4	8.34	130.90	125.90
26	1H	446	G	N3-C2-N2	8.34	125.74	119.90
26	1H	835	A	C8-N9-C4	-8.34	102.46	105.80
26	1H	2253	G	O5'-P-OP2	-8.34	98.19	105.70
26	1H	2576	G	C5-C6-N1	-8.34	107.33	111.50
26	14	1956	U	C2-N3-C4	-8.34	122.00	127.00
26	14	2047	U	OP1-P-OP2	-8.34	107.09	119.60
26	14	2264	C	N3-C4-C5	-8.34	118.56	121.90
26	1H	1310	G	N3-C2-N2	-8.34	114.06	119.90
23	2K	7	G	C2-N3-C4	-8.34	107.73	111.90
26	1H	1905	C	O5'-P-OP1	8.34	120.70	110.70
26	1H	1284	A	N7-C8-N9	8.34	117.97	113.80
26	1H	2053	G	C8-N9-C4	-8.34	103.06	106.40
26	1H	2685	G	C4-C5-C6	8.34	123.80	118.80
26	14	507	A	C2-N3-C4	8.34	114.77	110.60
26	14	1660	C	N3-C4-C5	8.34	125.23	121.90
26	14	1854	A	OP1-P-OP2	8.34	132.10	119.60
26	14	2062	A	N3-C4-C5	8.34	132.63	126.80
26	14	2306	C	C5-C6-N1	8.34	125.17	121.00
26	1H	2365	G	C8-N9-C4	8.33	109.73	106.40
26	14	579	G	C8-N9-C4	-8.33	103.07	106.40
26	1H	2580	U	C6-N1-C2	-8.33	116.00	121.00
26	14	951	C	C2-N3-C4	8.33	124.07	119.90
1	13	577	G	C6-C5-N7	-8.33	125.40	130.40
23	2K	4	G	C8-N9-C4	8.33	109.73	106.40
26	1H	1957	C	N3-C4-N4	-8.33	112.17	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1798	U	O5'-P-OP2	-8.33	98.20	105.70
26	1H	974(A)	C	C4-C5-C6	8.33	121.56	117.40
26	1H	1835	G	N3-C2-N2	8.33	125.73	119.90
26	14	966	G	C8-N9-C4	8.33	109.73	106.40
27	16	98	G	C6-C5-N7	-8.33	125.40	130.40
27	1J	46	A	C8-N9-C4	8.33	109.13	105.80
1	13	427	U	C6-N1-C2	-8.33	116.00	121.00
26	1H	267	C	C6-N1-C2	8.33	123.63	120.30
1	13	1492	A	OP1-P-OP2	-8.33	107.11	119.60
26	1H	1125	G	N1-C2-N3	8.33	128.90	123.90
26	1H	1372	U	C4-C5-C6	8.33	124.70	119.70
26	1H	1547	C	N3-C4-N4	-8.33	112.17	118.00
27	16	78	A	N9-C4-C5	8.33	109.13	105.80
1	1G	1469	G	C4-C5-C6	8.33	123.80	118.80
26	14	508	G	O5'-P-OP1	-8.33	98.20	105.70
1	13	1442	G	N3-C4-N9	-8.32	121.01	126.00
27	1J	47	C	OP1-P-O3'	8.32	123.52	105.20
1	13	1497	G	C4-C5-N7	-8.32	107.47	110.80
26	1H	1551	C	N3-C4-C5	-8.32	118.57	121.90
26	1H	1596	A	C5-C6-N1	8.32	121.86	117.70
26	1H	2469	A	C2-N3-C4	-8.32	106.44	110.60
27	16	78	A	N1-C2-N3	8.32	133.46	129.30
26	14	1956	U	C5-C4-O4	-8.32	120.91	125.90
1	13	1407	C	N3-C4-N4	-8.32	112.17	118.00
1	13	1430	C	C5-C6-N1	-8.32	116.84	121.00
26	1H	71	A	C4-C5-C6	8.32	121.16	117.00
26	1H	652	C	C5-C6-N1	8.32	125.16	121.00
26	14	932	G	N1-C6-O6	-8.32	114.91	119.90
26	1H	760	G	N1-C6-O6	8.32	124.89	119.90
26	1H	1427	A	C4-C5-C6	8.32	121.16	117.00
27	16	105	G	C6-C5-N7	-8.32	125.41	130.40
26	1H	1782	C	C5-C4-N4	-8.32	114.38	120.20
26	14	1264	G	C4-C5-N7	-8.32	107.47	110.80
1	13	690	G	C8-N9-C1'	-8.32	116.19	127.00
1	13	1273	G	N7-C8-N9	-8.32	108.94	113.10
26	1H	436	C	N1-C2-O2	8.32	123.89	118.90
26	1H	1328	G	C6-N1-C2	-8.32	120.11	125.10
26	1H	2826	A	N1-C2-N3	8.32	133.46	129.30
26	1H	2840	C	N3-C2-O2	-8.32	116.08	121.90
1	1G	898	G	C2-N3-C4	-8.32	107.74	111.90
26	14	632	A	O5'-P-OP2	8.32	120.68	110.70
26	14	972	G	C4-C5-N7	-8.32	107.47	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2565	A	C8-N9-C4	8.32	109.13	105.80
1	13	332	G	OP1-P-OP2	8.31	132.07	119.60
26	1H	115	C	N3-C4-C5	8.31	125.23	121.90
26	1H	988	A	C8-N9-C4	-8.31	102.47	105.80
26	14	767	U	C5-C4-O4	8.31	130.89	125.90
26	14	2510	C	C6-N1-C2	8.31	123.63	120.30
26	14	2455	G	OP2-P-O3'	8.31	123.49	105.20
26	1H	242	G	C8-N9-C4	8.31	109.72	106.40
26	1H	664	C	N3-C4-C5	8.31	125.22	121.90
26	14	252	G	N9-C4-C5	8.31	108.72	105.40
26	14	1594	G	N7-C8-N9	8.31	117.25	113.10
26	1H	99	U	N3-C2-O2	-8.31	116.39	122.20
26	1H	664	C	C2-N3-C4	-8.31	115.75	119.90
26	1H	2634	G	O5'-P-OP2	-8.31	98.22	105.70
26	1H	2766	G	C4-C5-N7	8.31	114.12	110.80
26	14	708	C	N1-C2-O2	8.31	123.88	118.90
26	1H	415	A	C6-N1-C2	-8.31	113.62	118.60
26	1H	958	U	O4'-C1'-N1	8.31	114.84	108.20
1	1G	505	G	OP1-P-OP2	-8.31	107.14	119.60
26	14	1391	U	O5'-P-OP2	8.31	120.67	110.70
26	1H	211	A	C6-C5-N7	-8.30	126.49	132.30
26	1H	488	G	C5-C6-N1	-8.30	107.35	111.50
26	1H	869	G	C5-C6-O6	8.30	133.58	128.60
26	1H	2007	C	C4-C5-C6	8.30	121.55	117.40
26	1H	2250	G	N3-C4-N9	-8.30	121.02	126.00
1	13	863	U	N1-C2-N3	8.30	119.88	114.90
27	16	21	G	N1-C2-N2	8.30	123.67	116.20
1	1G	108	G	N1-C2-N3	-8.30	118.92	123.90
1	1G	903	G	C2-N3-C4	-8.30	107.75	111.90
1	13	464	G	N1-C6-O6	8.30	124.88	119.90
26	14	1828	G	N3-C4-C5	-8.30	124.45	128.60
26	1H	2824	C	N3-C4-C5	8.30	125.22	121.90
26	14	572	A	C2-N3-C4	8.30	114.75	110.60
26	14	827	U	C5-C4-O4	-8.30	120.92	125.90
26	14	1430	C	O5'-P-OP1	-8.30	98.23	105.70
1	13	1500	A	C6-N1-C2	-8.30	113.62	118.60
22	1K	25	C	N1-C2-O2	8.30	123.88	118.90
22	1K	35	U	N1-C2-O2	8.30	128.61	122.80
26	1H	52	A	N1-C2-N3	-8.29	125.15	129.30
26	1H	964	C	O5'-P-OP1	-8.29	98.24	105.70
26	1H	986	C	C6-N1-C2	-8.29	116.98	120.30
26	14	467	G	O5'-P-OP2	-8.29	98.24	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	835	A	C2-N3-C4	8.29	114.75	110.60
26	14	2277	G	N1-C6-O6	-8.29	114.92	119.90
26	14	2452	C	C5-C4-N4	-8.29	114.39	120.20
1	13	1504	G	O5'-P-OP2	8.29	120.65	110.70
26	14	1789	A	N1-C2-N3	8.29	133.45	129.30
26	14	2046	G	C5-C6-N1	8.29	115.65	111.50
26	1H	1313	U	C6-N1-C2	-8.29	116.03	121.00
26	1H	2761	G	N1-C6-O6	-8.29	114.93	119.90
26	1H	2379	G	C5-C6-O6	-8.29	123.63	128.60
1	1G	786	G	C5-C6-N1	8.29	115.64	111.50
26	14	1397	U	N3-C2-O2	-8.29	116.40	122.20
26	14	2004	G	C5-C6-O6	-8.29	123.63	128.60
26	14	1202	C	C4-C5-C6	8.29	121.54	117.40
26	14	1320	C	N3-C4-C5	-8.29	118.58	121.90
26	14	2502	G	C6-N1-C2	-8.29	120.13	125.10
26	14	2545	G	N1-C6-O6	8.29	124.87	119.90
26	1H	845	G	N3-C4-C5	8.29	132.74	128.60
26	1H	858	U	N3-C4-C5	8.29	119.57	114.60
1	1G	46	G	C2-N3-C4	-8.29	107.76	111.90
26	14	736	C	N1-C2-O2	-8.29	113.93	118.90
26	14	2437	U	OP1-P-OP2	8.29	132.03	119.60
1	13	231	G	N3-C2-N2	-8.28	114.10	119.90
26	1H	928	G	C5-C6-O6	-8.28	123.63	128.60
26	1H	1022	G	O5'-P-OP2	-8.28	98.24	105.70
26	1H	1318	C	N3-C4-N4	8.29	123.80	118.00
26	1H	1993	U	C5-C6-N1	-8.29	118.56	122.70
26	1H	2360	A	C6-C5-N7	-8.28	126.50	132.30
1	1G	1473	A	O5'-P-OP2	-8.28	98.24	105.70
26	1H	871	U	N3-C2-O2	8.28	128.00	122.20
26	1H	308	G	N3-C2-N2	8.28	125.70	119.90
26	1H	1364	G	O4'-C1'-N9	8.28	114.83	108.20
26	1H	1557	C	O5'-P-OP2	-8.28	98.25	105.70
29	11	242	ARG	NE-CZ-NH1	-8.28	116.16	120.30
1	1G	602	A	C5-N7-C8	-8.28	99.76	103.90
26	14	428	A	C2-N3-C4	8.28	114.74	110.60
26	14	1142(A)	A	C8-N9-C4	-8.28	102.49	105.80
26	14	1411	C	O5'-P-OP1	8.28	120.64	110.70
26	14	1597	A	N7-C8-N9	-8.28	109.66	113.80
26	1H	841	A	N1-C6-N6	8.28	123.57	118.60
26	1H	1899	G	C8-N9-C1'	8.28	137.76	127.00
26	14	1677	A	OP2-P-O3'	8.28	123.42	105.20
26	1H	2476	A	C2-N3-C4	8.28	114.74	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	330	C	N1-C2-O2	8.28	123.87	118.90
26	1H	632	A	O5'-P-OP2	8.28	120.63	110.70
26	1H	941	A	OP2-P-O3'	8.28	123.41	105.20
26	1H	2712	U	C2-N3-C4	-8.28	122.03	127.00
26	14	125	G	C8-N9-C4	8.28	109.71	106.40
26	14	1237	A	C8-N9-C4	-8.28	102.49	105.80
26	14	2506	U	C2-N1-C1'	8.28	127.63	117.70
26	1H	2580	U	C5-C6-N1	8.28	126.84	122.70
26	14	970	C	N3-C2-O2	8.28	127.69	121.90
26	14	1205	U	N1-C2-N3	8.28	119.86	114.90
26	14	1986	A	N1-C2-N3	8.28	133.44	129.30
26	14	2239	G	C8-N9-C4	8.28	109.71	106.40
26	14	2598	A	OP2-P-O3'	8.28	123.40	105.20
1	13	1058	G	C8-N9-C4	8.27	109.71	106.40
26	1H	508	G	N1-C2-N3	-8.27	118.94	123.90
26	14	1598	C	N3-C4-C5	8.27	125.21	121.90
26	1H	622	G	N1-C6-O6	-8.27	114.94	119.90
26	1H	1189	A	C6-N1-C2	-8.27	113.64	118.60
26	1H	1631	A	O5'-P-OP2	-8.27	98.25	105.70
26	1H	1984	G	N7-C8-N9	-8.27	108.96	113.10
1	1G	875	C	N3-C2-O2	-8.27	116.11	121.90
26	1H	2002	G	C8-N9-C4	-8.27	103.09	106.40
26	14	1967	C	OP1-P-OP2	8.27	132.01	119.60
27	1J	6	C	C6-N1-C2	8.27	123.61	120.30
1	13	27	G	O5'-P-OP2	8.27	120.62	110.70
1	13	130	A	C5-C6-N6	-8.27	117.08	123.70
1	13	1516	G	N3-C2-N2	8.27	125.69	119.90
26	1H	121	G	C5-C6-N1	8.27	115.63	111.50
26	1H	505	A	C5-C6-N1	8.27	121.83	117.70
26	1H	693	C	N1-C2-N3	8.27	124.99	119.20
26	1H	2083	G	N1-C6-O6	8.27	124.86	119.90
26	1H	2594	C	C6-N1-C2	-8.27	116.99	120.30
26	1H	2704	C	C6-N1-C2	8.27	123.61	120.30
26	1H	2763	G	N1-C2-N2	-8.27	108.76	116.20
26	14	2239	G	N3-C2-N2	8.27	125.69	119.90
1	13	6	G	C2-N3-C4	8.27	116.03	111.90
26	14	909	A	C6-N1-C2	-8.27	113.64	118.60
26	1H	2044	C	N3-C4-N4	8.27	123.78	118.00
35	58	76	SER	C-N-CA	-8.27	104.94	122.30
26	14	784	A	OP1-P-O3'	8.27	123.39	105.20
26	14	1136	G	C8-N9-C4	8.27	109.71	106.40
26	14	1643	G	OP2-P-O3'	8.27	123.38	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2262	U	OP1-P-OP2	-8.27	107.20	119.60
1	1G	1490	C	N3-C2-O2	-8.26	116.11	121.90
26	1H	1803	A	C4-C5-N7	8.26	114.83	110.70
26	1H	201	C	C5-C6-N1	-8.26	116.87	121.00
26	1H	1142	U	O5'-P-OP1	8.26	120.61	110.70
26	1H	1840	G	C5-C6-N1	-8.26	107.37	111.50
26	1H	1950	G	N1-C2-N3	-8.26	118.94	123.90
26	1H	2404	C	C6-N1-C2	8.26	123.60	120.30
1	1G	808	C	C5-C4-N4	8.26	125.98	120.20
26	14	226	G	C6-C5-N7	-8.26	125.44	130.40
26	14	226	G	C2-N3-C4	-8.26	107.77	111.90
26	14	690	G	C8-N9-C4	8.26	109.70	106.40
26	14	1827	C	C5-C6-N1	-8.26	116.87	121.00
26	1H	771	G	C8-N9-C4	8.26	109.70	106.40
26	1H	1193	G	N3-C2-N2	-8.26	114.12	119.90
26	1H	1377	G	C8-N9-C1'	-8.26	116.27	127.00
26	14	2070	G	OP2-P-O3'	8.26	123.37	105.20
26	1H	310	A	C5-C6-N1	8.26	121.83	117.70
26	1H	704	G	C5-C6-N1	-8.26	107.37	111.50
26	14	1924	C	N1-C2-O2	-8.26	113.95	118.90
1	13	1273	G	O5'-P-OP2	-8.25	98.27	105.70
26	14	773	U	C6-N1-C2	-8.25	116.05	121.00
26	14	2615	U	N3-C4-C5	8.25	119.55	114.60
26	14	1951	U	OP1-P-OP2	-8.25	107.22	119.60
1	13	120	A	O5'-P-OP1	-8.25	98.27	105.70
26	1H	271(B)	G	C5-C6-N1	8.25	115.63	111.50
26	1H	832	G	O5'-P-OP1	8.25	120.60	110.70
26	1H	941	A	O5'-P-OP2	-8.25	98.27	105.70
26	1H	2647	U	C5-C6-N1	-8.25	118.58	122.70
26	14	223	A	N7-C8-N9	8.25	117.92	113.80
26	14	1427	A	N1-C6-N6	-8.25	113.65	118.60
26	14	2628	C	N3-C2-O2	-8.25	116.12	121.90
27	1J	96	G	N1-C6-O6	8.25	124.85	119.90
26	1H	1394	U	O5'-P-OP2	8.25	120.60	110.70
1	13	37	U	C5-C6-N1	8.25	126.82	122.70
1	13	1203	C	C5-C6-N1	8.25	125.12	121.00
26	1H	604	G	O5'-P-OP1	-8.25	98.28	105.70
26	1H	2020	A	C2-N3-C4	-8.25	106.48	110.60
1	1G	620	C	N1-C2-O2	8.25	123.85	118.90
1	1G	630	G	N3-C4-C5	-8.25	124.48	128.60
26	14	141	A	OP2-P-O3'	8.25	123.34	105.20
1	13	1361	G	C2-N3-C4	8.24	116.02	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2572	A	C8-N9-C4	8.24	109.10	105.80
1	1G	906	G	N1-C6-O6	8.24	124.85	119.90
26	14	821	A	OP1-P-OP2	8.24	131.97	119.60
26	14	1564	C	N3-C4-N4	-8.24	112.23	118.00
26	1H	110	G	N7-C8-N9	-8.24	108.98	113.10
26	1H	425	G	N3-C2-N2	-8.24	114.13	119.90
26	1H	1569	A	OP1-P-OP2	8.24	131.96	119.60
26	1H	1771	C	N3-C4-C5	-8.24	118.60	121.90
26	1H	2429	G	OP2-P-O3'	8.24	123.33	105.20
26	14	470	A	O5'-P-OP1	-8.24	98.28	105.70
1	13	972	C	N3-C2-O2	-8.24	116.13	121.90
26	1H	772	C	C5-C4-N4	-8.24	114.43	120.20
26	14	149	A	C4-C5-C6	8.24	121.12	117.00
26	14	414	C	N3-C4-N4	-8.24	112.23	118.00
26	1H	1829	A	C5-N7-C8	8.24	108.02	103.90
26	1H	2083	G	C4-C5-C6	8.24	123.74	118.80
26	1H	821	A	C5-C6-N6	8.24	130.29	123.70
26	1H	1576	U	C6-N1-C2	-8.24	116.06	121.00
26	14	1427	A	C5-C6-N6	8.24	130.29	123.70
1	13	680	C	N1-C2-O2	8.23	123.84	118.90
26	1H	2735	G	N1-C6-O6	-8.23	114.96	119.90
1	13	1392	G	N1-C2-N3	8.23	128.84	123.90
26	1H	124	G	N3-C4-C5	8.23	132.72	128.60
26	1H	347	A	N3-C4-C5	8.23	132.56	126.80
26	1H	474	G	C6-N1-C2	-8.23	120.16	125.10
26	1H	860	U	C6-N1-C1'	-8.23	109.67	121.20
26	1H	1771	C	C4-C5-C6	8.23	121.52	117.40
27	16	47	C	N3-C2-O2	8.23	127.67	121.90
26	14	2628	C	N1-C2-O2	8.23	123.84	118.90
26	1H	2537	U	N1-C2-N3	8.23	119.84	114.90
26	1H	2666	C	O5'-P-OP1	-8.23	98.29	105.70
26	1H	2708	G	N7-C8-N9	-8.23	108.98	113.10
26	14	979	G	C6-N1-C2	8.23	130.04	125.10
26	14	2381	C	C2-N1-C1'	-8.23	109.74	118.80
26	1H	305	U	N1-C2-N3	8.23	119.84	114.90
26	1H	1403	C	C6-N1-C2	-8.23	117.01	120.30
26	1H	782	A	N1-C2-N3	8.23	133.41	129.30
26	1H	906	G	C8-N9-C4	-8.23	103.11	106.40
26	1H	968	G	O5'-P-OP2	-8.23	98.29	105.70
26	1H	989	G	C6-C5-N7	-8.23	125.46	130.40
26	1H	1254	A	C4-C5-N7	8.23	114.81	110.70
26	1H	2384	G	N1-C2-N3	-8.23	118.96	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	292	C	C6-N1-C2	8.23	123.59	120.30
1	13	1060	C	C4-C5-C6	-8.23	113.29	117.40
26	1H	79	G	N3-C2-N2	-8.23	114.14	119.90
26	1H	1142(A)	A	C5-C6-N1	-8.23	113.59	117.70
26	1H	1400	G	N1-C6-O6	-8.23	114.96	119.90
26	1H	2004	G	OP1-P-OP2	8.23	131.94	119.60
26	1H	2045	C	N3-C4-C5	8.23	125.19	121.90
26	1H	2270	G	C8-N9-C4	8.23	109.69	106.40
26	14	771	G	C8-N9-C4	8.23	109.69	106.40
26	14	1616	A	C5-C6-N6	-8.23	117.12	123.70
26	1H	400	G	N3-C2-N2	-8.23	114.14	119.90
1	1G	121	C	N1-C2-O2	8.23	123.84	118.90
26	14	739	G	C5-C6-N1	-8.23	107.39	111.50
27	1J	6	C	C5-C6-N1	-8.23	116.89	121.00
1	13	1219	U	N1-C2-N3	8.22	119.83	114.90
1	13	18	C	N1-C2-O2	8.22	123.83	118.90
1	13	593	G	C5-C6-N1	-8.22	107.39	111.50
1	13	1368	G	N1-C6-O6	-8.22	114.97	119.90
1	13	1513	A	C8-N9-C4	8.22	109.09	105.80
26	1H	2685	G	N1-C2-N3	8.22	128.84	123.90
26	14	2251	G	O5'-P-OP1	-8.22	98.30	105.70
23	2K	73	A	N7-C8-N9	-8.22	109.69	113.80
26	1H	1836	C	C4-C5-C6	-8.22	113.29	117.40
26	1H	2421	G	N7-C8-N9	-8.22	108.99	113.10
1	1G	108	G	C4-C5-N7	8.22	114.09	110.80
26	14	2414	G	C5-C6-O6	8.22	133.53	128.60
26	14	76	C	C6-N1-C2	-8.22	117.01	120.30
26	14	268	C	N3-C2-O2	8.22	127.66	121.90
26	14	387	U	N1-C2-O2	8.22	128.55	122.80
26	14	2549	G	N3-C4-C5	8.22	132.71	128.60
26	14	2596	U	O5'-P-OP2	-8.22	98.30	105.70
26	14	2618	G	C4-C5-N7	-8.22	107.51	110.80
27	1J	81	G	N9-C4-C5	-8.22	102.11	105.40
29	19	44	ASN	C-N-CA	8.22	142.25	121.70
1	13	644	G	N9-C4-C5	-8.22	102.11	105.40
26	1H	131	G	C8-N9-C4	-8.22	103.11	106.40
26	1H	248	G	N3-C2-N2	-8.22	114.15	119.90
26	1H	578	A	O5'-P-OP2	-8.22	98.30	105.70
26	1H	764	A	O5'-P-OP2	-8.22	98.30	105.70
26	1H	1228	G	C2-N3-C4	-8.22	107.79	111.90
26	1H	1515	C	N1-C2-O2	8.22	123.83	118.90
26	1H	2207	C	N1-C2-O2	-8.22	113.97	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1435	G	C2-N3-C4	-8.22	107.79	111.90
26	14	178	G	O5'-P-OP1	-8.22	98.30	105.70
26	14	214	G	O5'-P-OP1	8.22	120.56	110.70
26	14	1326	U	C6-N1-C2	-8.22	116.07	121.00
26	14	2253	G	C4-C5-N7	8.22	114.09	110.80
1	13	27	G	N1-C6-O6	-8.21	114.97	119.90
25	4K	14	A	C5-C6-N1	8.22	121.81	117.70
1	1G	1091	U	C6-N1-C2	-8.22	116.07	121.00
26	14	37	C	C5-C6-N1	8.22	125.11	121.00
1	13	498	A	C8-N9-C4	-8.21	102.52	105.80
27	16	7	G	C4-C5-N7	8.21	114.09	110.80
26	14	671	C	N1-C2-N3	8.21	124.95	119.20
26	14	1881	C	N1-C2-O2	8.22	123.83	118.90
26	1H	1778	U	C6-N1-C2	8.21	125.93	121.00
26	1H	2252	G	OP1-P-OP2	8.21	131.92	119.60
26	1H	621	A	N9-C4-C5	-8.21	102.52	105.80
26	1H	1643	G	C4-C5-N7	-8.21	107.52	110.80
26	1H	1943	U	O5'-P-OP2	-8.21	98.31	105.70
26	1H	2507	C	N3-C2-O2	-8.21	116.15	121.90
26	1H	2592	G	C5-C6-N1	-8.21	107.39	111.50
1	1G	416	G	C4-C5-C6	8.21	123.73	118.80
26	14	1029	A	O5'-P-OP1	8.21	120.56	110.70
26	14	1781	C	N3-C4-C5	8.21	125.19	121.90
26	14	2041	U	C4-C5-C6	8.21	124.63	119.70
26	1H	528	A	C8-N9-C4	-8.21	102.52	105.80
26	1H	2012	G	C8-N9-C4	8.21	109.68	106.40
26	14	311	A	C5-C6-N1	-8.21	113.60	117.70
26	14	401	A	N1-C2-N3	8.21	133.40	129.30
26	1H	188	G	C2-N3-C4	-8.20	107.80	111.90
26	1H	783	A	N9-C1'-C2'	-8.21	102.97	112.00
26	1H	2686	G	OP1-P-OP2	8.21	131.91	119.60
27	16	5	C	C6-N1-C2	8.21	123.58	120.30
1	1G	935	A	C8-N9-C4	8.21	109.08	105.80
26	14	62	C	C4-C5-C6	-8.21	113.30	117.40
26	14	499	U	C5-C6-N1	-8.21	118.60	122.70
26	14	2391	G	N1-C6-O6	-8.20	114.98	119.90
26	14	2874	C	O5'-P-OP1	-8.21	98.32	105.70
1	13	1089	G	N3-C4-C5	8.20	132.70	128.60
26	1H	1565	C	C4-C5-C6	-8.20	113.30	117.40
26	1H	2433	A	O5'-P-OP2	8.20	120.54	110.70
1	1G	786	G	C8-N9-C4	8.20	109.68	106.40
26	1H	2645	G	C4-C5-N7	8.20	114.08	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	231	G	N3-C2-N2	-8.20	114.16	119.90
1	1G	690	G	C8-N9-C4	-8.20	103.12	106.40
1	13	584	G	C6-N1-C2	-8.20	120.18	125.10
26	1H	1463	C	C5-C6-N1	8.20	125.10	121.00
26	14	737	C	C2-N3-C4	-8.20	115.80	119.90
26	14	2324	C	N1-C2-N3	-8.20	113.46	119.20
26	1H	109	G	C5-C6-O6	8.20	133.52	128.60
26	1H	318	C	N3-C4-N4	8.20	123.74	118.00
26	1H	609	A	C4-C5-N7	8.20	114.80	110.70
26	1H	1655	A	C5-C6-N6	-8.20	117.14	123.70
26	14	809	G	N9-C4-C5	8.20	108.68	105.40
26	14	1264	G	O5'-P-OP1	-8.20	98.32	105.70
1	13	690	G	C5-C6-O6	-8.19	123.69	128.60
26	1H	2247	A	N1-C6-N6	-8.19	113.69	118.60
1	1G	135	C	N3-C2-O2	8.19	127.64	121.90
1	1G	1334	G	O5'-P-OP1	-8.19	98.33	105.70
26	14	56	A	C5-C6-N6	8.19	130.25	123.70
26	14	211	A	C6-C5-N7	-8.19	126.57	132.30
26	14	2434	A	OP1-P-OP2	8.19	131.89	119.60
1	13	792	A	C6-N1-C2	-8.19	113.69	118.60
26	1H	508	G	C8-N9-C4	-8.19	103.12	106.40
26	1H	683	C	C6-N1-C1'	-8.19	110.97	120.80
26	1H	2458	G	N1-C2-N3	8.19	128.81	123.90
26	1H	2485	G	N1-C2-N3	8.19	128.81	123.90
26	1H	2506	U	OP1-P-OP2	-8.19	107.31	119.60
26	14	1558	A	N1-C6-N6	8.19	123.51	118.60
26	14	2683	C	OP1-P-OP2	8.19	131.88	119.60
26	14	2470	G	N7-C8-N9	8.19	117.19	113.10
26	1H	127	A	O5'-P-OP2	-8.19	98.33	105.70
26	1H	770	G	N1-C6-O6	8.19	124.81	119.90
26	1H	839	U	C5-C6-N1	-8.19	118.61	122.70
26	1H	1341	U	O5'-P-OP2	8.19	120.52	110.70
26	1H	1775	U	O5'-P-OP2	-8.19	98.33	105.70
26	1H	2318	G	C5-N7-C8	-8.19	100.21	104.30
26	14	2433	A	C5-C6-N1	-8.19	113.61	117.70
26	1H	1936	A	N1-C6-N6	8.18	123.51	118.60
26	14	561	G	O5'-P-OP1	-8.18	98.33	105.70
26	14	700	G	N9-C4-C5	8.18	108.67	105.40
1	13	1252	A	N1-C6-N6	-8.18	113.69	118.60
1	13	352	C	N1-C2-N3	-8.18	113.47	119.20
1	13	548	G	C5-C6-O6	-8.18	123.69	128.60
1	13	720	C	N1-C2-O2	8.18	123.81	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	16	66	A	C2-N3-C4	8.18	114.69	110.60
26	14	1279	G	C5-C6-O6	8.18	133.51	128.60
1	13	853	G	C5-C6-N1	-8.18	107.41	111.50
26	14	1248	G	O5'-P-OP2	-8.18	98.34	105.70
26	14	2268	A	C5-N7-C8	-8.18	99.81	103.90
26	1H	735	A	C4-C5-C6	8.18	121.09	117.00
1	1G	274	A	N7-C8-N9	-8.18	109.71	113.80
26	14	90	U	C5-C4-O4	-8.18	120.99	125.90
26	14	207	A	O5'-P-OP2	-8.18	98.34	105.70
30	29	36	ARG	NE-CZ-NH2	-8.18	116.21	120.30
26	1H	345	A	C8-N9-C4	-8.18	102.53	105.80
26	14	1791	A	OP1-P-OP2	-8.18	107.33	119.60
1	13	1356	G	C5-C6-N1	-8.18	107.41	111.50
26	1H	1438	U	C5-C6-N1	8.18	126.79	122.70
26	1H	1500	G	C5-N7-C8	-8.18	100.21	104.30
26	1H	2432	A	C5-C6-N1	-8.18	113.61	117.70
26	1H	1559	G	C8-N9-C4	8.18	109.67	106.40
1	1G	18	C	C5-C6-N1	8.18	125.09	121.00
26	14	16	G	C4-C5-C6	8.18	123.70	118.80
26	1H	1223	C	N1-C2-O2	-8.17	114.00	118.90
26	1H	1918	A	N1-C2-N3	-8.17	125.21	129.30
26	1H	2421	G	C8-N9-C4	8.17	109.67	106.40
26	14	2062	A	C6-N1-C2	8.17	123.50	118.60
26	14	1143	A	N1-C6-N6	-8.17	113.70	118.60
26	1H	1264	G	N3-C4-N9	-8.17	121.10	126.00
26	1H	1359	A	OP1-P-OP2	8.17	131.85	119.60
26	1H	1467	C	OP1-P-OP2	-8.17	107.34	119.60
26	1H	2590	A	O5'-P-OP1	8.17	120.50	110.70
26	14	574	C	C6-N1-C2	8.17	123.57	120.30
26	14	2775	A	C2-N3-C4	-8.17	106.52	110.60
1	13	769	G	C2-N3-C4	8.17	115.98	111.90
26	1H	768	G	OP1-P-OP2	8.17	131.85	119.60
26	1H	1153	C	C6-N1-C2	-8.17	117.03	120.30
26	1H	1435	G	C8-N9-C4	-8.17	103.13	106.40
26	1H	2762	G	N1-C2-N2	-8.17	108.85	116.20
56	1L	37	A	N1-C2-N3	-8.17	125.22	129.30
26	1H	2520	C	OP1-P-OP2	-8.17	107.35	119.60
1	1G	6	G	C5-C6-O6	-8.17	123.70	128.60
26	14	1614	A	C6-C5-N7	-8.17	126.58	132.30
26	1H	818	G	N3-C2-N2	-8.16	114.19	119.90
26	1H	534	U	N1-C2-O2	-8.16	117.09	122.80
26	1H	998	C	N3-C2-O2	-8.16	116.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2241	A	C5-C6-N6	8.16	130.23	123.70
1	1G	102	G	C8-N9-C4	-8.16	103.14	106.40
26	14	1359	A	N7-C8-N9	-8.16	109.72	113.80
26	14	2403	C	O5'-P-OP1	-8.16	98.35	105.70
26	1H	144	C	C2-N3-C4	-8.16	115.82	119.90
26	1H	456	C	O5'-P-OP2	-8.16	98.36	105.70
26	1H	2418	A	C8-N9-C4	-8.16	102.54	105.80
26	1H	2822	G	C6-C5-N7	-8.16	125.50	130.40
26	14	821	A	O5'-P-OP1	-8.16	98.36	105.70
26	14	1683	C	N1-C2-O2	-8.16	114.00	118.90
26	14	2391	G	O5'-P-OP2	-8.16	98.36	105.70
1	13	507	C	C6-N1-C2	-8.16	117.04	120.30
1	13	513	C	C5-C6-N1	8.16	125.08	121.00
1	13	577	G	N3-C4-C5	8.16	132.68	128.60
1	13	1301	U	C2-N1-C1'	8.16	127.49	117.70
26	1H	920	G	N3-C2-N2	8.16	125.61	119.90
27	16	19	G	N1-C6-O6	8.16	124.80	119.90
1	1G	893	C	O5'-P-OP2	-8.16	98.36	105.70
26	14	2865	U	C6-N1-C2	-8.16	116.11	121.00
26	1H	1939	U	C6-N1-C2	8.16	125.89	121.00
26	1H	2845	G	N3-C2-N2	-8.16	114.19	119.90
1	13	1236	A	N9-C4-C5	-8.15	102.54	105.80
26	1H	2019	A	C4-C5-N7	8.15	114.78	110.70
26	1H	2444	G	N3-C4-C5	-8.15	124.52	128.60
26	1H	2606	C	C5-C6-N1	-8.15	116.92	121.00
1	13	897	C	C6-N1-C2	8.15	123.56	120.30
26	1H	1255	U	N3-C4-O4	8.15	125.11	119.40
26	1H	1566	A	O5'-P-OP1	8.15	120.48	110.70
26	1H	2041	U	O5'-P-OP1	-8.15	98.36	105.70
26	14	1614	A	C5-C6-N1	-8.15	113.62	117.70
1	13	1379	G	C8-N9-C4	8.15	109.66	106.40
26	1H	234	C	O5'-P-OP2	-8.15	98.36	105.70
26	1H	422	A	C5-C6-N1	-8.15	113.62	117.70
26	1H	439	G	C4-C5-C6	8.15	123.69	118.80
26	14	694	U	O5'-P-OP2	-8.15	98.36	105.70
26	14	834	C	C5-C6-N1	-8.15	116.92	121.00
26	14	2632	A	C8-N9-C4	8.15	109.06	105.80
26	1H	6	A	C8-N9-C4	-8.15	102.54	105.80
26	1H	1152	C	N1-C2-O2	-8.15	114.01	118.90
26	1H	1398	C	O5'-P-OP2	8.15	120.48	110.70
26	1H	2042	A	C2-N3-C4	-8.15	106.53	110.60
26	14	218	A	O5'-P-OP2	-8.15	98.37	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	681	G	C2-N3-C4	-8.15	107.83	111.90
26	14	189	G	N9-C4-C5	-8.15	102.14	105.40
26	14	783	A	C8-N9-C4	-8.15	102.54	105.80
26	14	2424	C	OP1-P-OP2	8.15	131.82	119.60
1	13	760	G	C4-C5-N7	8.14	114.06	110.80
1	13	1233	G	C5-C6-N1	8.14	115.57	111.50
23	2K	28	U	N3-C4-O4	8.14	125.10	119.40
26	1H	711	G	C8-N9-C4	-8.14	103.14	106.40
26	1H	348	G	N1-C2-N3	8.14	128.79	123.90
26	1H	680	G	C2-N3-C4	-8.14	107.83	111.90
26	1H	2066	C	N3-C2-O2	-8.14	116.20	121.90
26	14	81	G	N1-C6-O6	8.14	124.79	119.90
26	14	480	A	N1-C6-N6	-8.14	113.71	118.60
26	14	1358	G	N1-C2-N3	8.14	128.79	123.90
26	14	1367	A	C4-C5-N7	8.14	114.77	110.70
26	14	609	A	C5-C6-N1	8.14	121.77	117.70
1	13	884	U	N1-C2-N3	-8.14	110.02	114.90
1	13	968	A	N1-C6-N6	8.14	123.48	118.60
26	1H	513	A	N3-C4-C5	-8.14	121.10	126.80
26	1H	1660	C	C6-N1-C2	8.14	123.56	120.30
26	14	101	G	C2-N3-C4	8.14	115.97	111.90
26	14	236	C	C5-C6-N1	-8.14	116.93	121.00
26	14	676	A	C8-N9-C4	-8.14	102.54	105.80
26	1H	16	G	O5'-P-OP2	-8.14	98.38	105.70
26	1H	627	A	N7-C8-N9	-8.14	109.73	113.80
27	16	100	G	C8-N9-C1'	-8.14	116.42	127.00
26	14	2433	A	C2-N3-C4	-8.14	106.53	110.60
26	14	2519	U	OP1-P-OP2	8.14	131.81	119.60
26	14	2713	A	N7-C8-N9	8.14	117.87	113.80
27	1J	80	U	C6-N1-C2	-8.14	116.12	121.00
1	13	906	G	N3-C2-N2	-8.14	114.20	119.90
26	1H	971	C	C4-C5-C6	8.14	121.47	117.40
26	1H	1300	U	C5-C6-N1	-8.14	118.63	122.70
1	13	319	G	C2-N3-C4	-8.13	107.83	111.90
26	1H	559	G	C5-C6-N1	-8.13	107.43	111.50
26	1H	996	A	O5'-P-OP1	-8.13	98.38	105.70
26	1H	1366	A	N1-C6-N6	8.13	123.48	118.60
26	1H	2484	G	N1-C6-O6	8.13	124.78	119.90
1	1G	312	C	N3-C4-C5	-8.14	118.65	121.90
26	14	2768	C	N1-C2-O2	-8.14	114.02	118.90
1	1G	902	G	OP1-P-OP2	-8.13	107.40	119.60
26	14	118	A	O5'-P-OP1	-8.13	98.38	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1428	C	C5-C6-N1	-8.14	116.93	121.00
26	14	2267	A	C5-N7-C8	8.14	107.97	103.90
26	1H	453	C	N1-C2-O2	-8.13	114.02	118.90
26	1H	1202	C	N3-C4-C5	-8.13	118.65	121.90
26	1H	1781	C	C2-N3-C4	8.13	123.97	119.90
26	1H	2275	C	OP1-P-O3'	8.13	123.09	105.20
27	16	31	C	C5-C4-N4	8.13	125.89	120.20
1	1G	180	U	C6-N1-C2	-8.13	116.12	121.00
23	2L	13	C	C6-N1-C2	-8.13	117.05	120.30
26	14	251	A	N1-C6-N6	-8.13	113.72	118.60
26	14	525	U	C6-N1-C2	-8.13	116.12	121.00
26	14	2023	G	C5-N7-C8	-8.13	100.23	104.30
1	13	1435	G	N1-C2-N3	8.13	128.78	123.90
1	13	1518	A	O5'-P-OP2	-8.13	98.39	105.70
26	1H	640	C	N1-C2-N3	8.13	124.89	119.20
1	1G	1096	C	N3-C2-O2	-8.13	116.21	121.90
26	1H	371	A	C8-N9-C4	-8.13	102.55	105.80
26	1H	1222	C	O5'-P-OP2	8.13	120.45	110.70
26	14	775	G	N1-C2-N2	-8.13	108.88	116.20
26	14	55	G	C2-N3-C4	8.13	115.96	111.90
26	14	2728	U	N3-C2-O2	8.13	127.89	122.20
1	13	551	U	C5-C6-N1	-8.12	118.64	122.70
25	4K	14	A	C2-N3-C4	8.13	114.66	110.60
26	1H	2496	C	N3-C4-C5	8.13	125.15	121.90
26	14	215	G	N3-C4-N9	8.13	130.88	126.00
26	1H	734	A	C2-N3-C4	-8.12	106.54	110.60
26	1H	1701	A	C2-N3-C4	-8.12	106.54	110.60
26	1H	2058	A	N1-C6-N6	8.12	123.47	118.60
26	1H	2550	G	C2-N3-C4	8.12	115.96	111.90
26	14	388	G	N3-C2-N2	-8.12	114.21	119.90
26	14	613	U	N1-C2-O2	8.12	128.49	122.80
26	14	1605	C	N1-C2-N3	8.12	124.89	119.20
26	1H	2530	A	C4-C5-N7	8.12	114.76	110.70
26	14	271(A)	C	N3-C4-N4	8.12	123.69	118.00
1	13	1515	C	C6-N1-C2	8.12	123.55	120.30
26	1H	798	G	O5'-P-OP2	8.12	120.44	110.70
1	1G	673	G	N3-C4-C5	8.12	132.66	128.60
26	14	1311	G	N7-C8-N9	-8.12	109.04	113.10
26	14	2546	U	C5-C4-O4	8.12	130.77	125.90
1	13	1485	U	C4-C5-C6	8.12	124.57	119.70
26	1H	655	A	C6-C5-N7	-8.12	126.62	132.30
26	1H	1126	A	N1-C2-N3	8.12	133.36	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1980	G	C2-N3-C4	8.12	115.96	111.90
1	1G	155	C	N1-C2-O2	8.12	123.77	118.90
26	14	327	G	C2-N3-C4	-8.12	107.84	111.90
26	14	1239	G	C5-C6-N1	-8.12	107.44	111.50
26	14	2009	G	O5'-P-OP2	-8.12	98.39	105.70
1	13	792	A	C5-C6-N6	-8.12	117.21	123.70
26	1H	2458	G	C6-N1-C2	-8.12	120.23	125.10
1	1G	938	A	OP1-P-OP2	-8.12	107.42	119.60
26	1H	2586	C	C6-N1-C2	8.12	123.55	120.30
26	1H	2693	A	C5-N7-C8	8.11	107.96	103.90
26	14	444	C	C5-C6-N1	-8.12	116.94	121.00
1	13	377	G	O5'-P-OP2	-8.11	98.40	105.70
22	1K	64	G	C2-N3-C4	8.11	115.96	111.90
26	1H	196	A	C4-C5-N7	8.11	114.76	110.70
26	1H	1278	A	C5-N7-C8	8.11	107.96	103.90
26	1H	2291	U	N1-C2-N3	8.11	119.77	114.90
26	1H	2377	A	N3-C4-C5	8.11	132.48	126.80
26	14	767	U	N3-C2-O2	-8.11	116.52	122.20
1	1G	331	G	C5-C6-N1	-8.11	107.44	111.50
26	14	2600	A	C4-C5-N7	-8.11	106.64	110.70
42	85	28	ARG	NE-CZ-NH1	-8.11	116.24	120.30
1	13	880	C	N1-C2-N3	-8.11	113.52	119.20
26	1H	785	G	N3-C2-N2	-8.11	114.22	119.90
26	1H	1286	A	C4-C5-N7	-8.11	106.64	110.70
26	1H	1895	C	C5-C4-N4	-8.11	114.52	120.20
26	1H	2646	C	O5'-P-OP1	8.11	120.43	110.70
26	1H	541	C	C4-C5-C6	8.11	121.45	117.40
26	1H	2069	G	C5-C6-O6	-8.11	123.74	128.60
1	13	798	G	N7-C8-N9	8.11	117.15	113.10
1	13	966	G	C2-N3-C4	8.11	115.95	111.90
1	13	1401	G	C2-N3-C4	-8.11	107.85	111.90
26	1H	2023	G	N9-C4-C5	8.11	108.64	105.40
26	1H	2464	C	N3-C4-C5	8.11	125.14	121.90
1	1G	342	C	C6-N1-C2	-8.11	117.06	120.30
1	1G	980	C	N3-C2-O2	-8.11	116.23	121.90
57	3L	76	A	C6-C5-N7	-8.11	126.63	132.30
1	13	428	G	N3-C4-C5	8.10	132.65	128.60
1	13	1426	C	N3-C4-N4	8.10	123.67	118.00
26	14	1960	A	C8-N9-C4	-8.10	102.56	105.80
26	14	2690	C	C2-N3-C4	-8.10	115.85	119.90
1	13	726	C	N1-C2-O2	8.10	123.76	118.90
26	1H	939	G	N1-C2-N3	8.10	128.76	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1634	A	N1-C2-N3	8.10	133.35	129.30
26	1H	976	C	N3-C4-C5	-8.10	118.66	121.90
26	1H	1428	C	C4-C5-C6	8.10	121.45	117.40
26	1H	1559	G	O5'-P-OP1	-8.10	98.41	105.70
26	14	2053	G	C5-N7-C8	8.10	108.35	104.30
26	14	2428	G	C5-C6-O6	8.10	133.46	128.60
26	14	2600	A	OP2-P-O3'	8.10	123.02	105.20
26	14	16	G	C5-C6-N1	-8.10	107.45	111.50
1	13	391	G	N1-C6-O6	-8.10	115.04	119.90
26	1H	783	A	O4'-C1'-N9	8.10	114.68	108.20
26	1H	923	C	N3-C2-O2	-8.10	116.23	121.90
26	1H	1004	C	C6-N1-C2	-8.10	117.06	120.30
26	1H	1496	A	C6-C5-N7	-8.10	126.63	132.30
1	1G	111	G	C6-N1-C2	8.10	129.96	125.10
26	14	545	G	N3-C4-C5	-8.10	124.55	128.60
26	14	1934	C	N1-C2-N3	-8.10	113.53	119.20
26	14	2683	C	C6-N1-C2	-8.10	117.06	120.30
1	13	884	U	C2-N3-C4	8.10	131.86	127.00
25	4K	16	A	N1-C6-N6	8.10	123.46	118.60
26	1H	938	G	N1-C6-O6	-8.10	115.04	119.90
26	1H	1200	C	C5-C6-N1	-8.10	116.95	121.00
26	1H	1415	U	N3-C4-O4	-8.10	113.73	119.40
26	1H	1992	G	N3-C4-N9	8.10	130.86	126.00
26	1H	2651	C	C2-N3-C4	-8.10	115.85	119.90
1	13	1523	G	N7-C8-N9	-8.09	109.05	113.10
26	1H	380	U	N3-C2-O2	-8.09	116.53	122.20
26	1H	1309	G	C5-C6-O6	-8.09	123.74	128.60
26	1H	2495	G	C5-C6-N1	-8.09	107.45	111.50
26	1H	2591	C	N1-C2-O2	-8.09	114.05	118.90
26	1H	2614	A	C2-N3-C4	8.09	114.65	110.60
26	1H	2644	G	C5-C6-N1	-8.09	107.45	111.50
26	14	1350	C	N3-C2-O2	8.09	127.56	121.90
26	14	1961	C	C5-C6-N1	-8.09	116.95	121.00
26	14	1972	A	C2-N3-C4	8.09	114.65	110.60
1	13	569	C	O5'-P-OP1	-8.09	98.42	105.70
1	13	1227	A	N7-C8-N9	8.09	117.84	113.80
26	1H	1650	G	N1-C6-O6	8.09	124.75	119.90
26	1H	2741	A	C8-N9-C4	8.09	109.04	105.80
26	14	2344	U	N3-C2-O2	-8.09	116.54	122.20
26	14	530	G	C5-N7-C8	-8.09	100.26	104.30
26	14	788	A	C5-C6-N6	-8.09	117.23	123.70
26	14	2550	G	C5-C6-O6	-8.09	123.75	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	4K	16	A	N7-C8-N9	-8.09	109.76	113.80
26	1H	272	G	C2-N3-C4	-8.09	107.86	111.90
26	1H	1840	G	N1-C6-O6	8.09	124.75	119.90
26	1H	2262	U	C4-C5-C6	8.09	124.55	119.70
26	14	2276	G	OP1-P-OP2	-8.09	107.47	119.60
26	1H	779	U	C2-N3-C4	-8.09	122.15	127.00
26	1H	839	U	C5-C4-O4	8.09	130.75	125.90
26	1H	1421	G	N1-C6-O6	8.09	124.75	119.90
26	1H	1649	G	C6-C5-N7	-8.09	125.55	130.40
26	1H	2343	C	C6-N1-C2	8.09	123.53	120.30
27	16	53	A	C5-N7-C8	-8.09	99.86	103.90
26	14	781	A	C5-C6-N1	8.09	121.74	117.70
26	14	1899	G	C5-N7-C8	-8.09	100.26	104.30
26	14	2526	G	C2-N3-C4	-8.09	107.86	111.90
1	13	783	C	N3-C4-C5	8.08	125.13	121.90
24	3K	2	G	N1-C6-O6	8.08	124.75	119.90
26	1H	391	G	C4-C5-C6	8.08	123.65	118.80
26	1H	496	G	C8-N9-C4	8.08	109.63	106.40
26	14	1209	G	O5'-P-OP2	-8.08	98.42	105.70
26	1H	748	G	C5-C6-N1	8.08	115.54	111.50
26	1H	2068	U	N1-C2-O2	8.08	128.46	122.80
26	14	56	A	C2-N3-C4	-8.08	106.56	110.60
26	14	516	C	N3-C4-N4	8.08	123.66	118.00
26	14	383	U	O5'-P-OP2	8.08	120.40	110.70
26	14	2339	G	N1-C6-O6	-8.08	115.05	119.90
1	13	1321	C	C4-C5-C6	8.08	121.44	117.40
23	2K	43	G	C2-N3-C4	-8.08	107.86	111.90
26	1H	478	A	C5-C6-N1	8.08	121.74	117.70
26	1H	954	G	N3-C4-C5	-8.08	124.56	128.60
26	1H	1555	G	O5'-P-OP1	-8.08	98.43	105.70
26	1H	1696	G	N1-C2-N3	8.08	128.75	123.90
26	1H	1633	G	C4-C5-N7	-8.08	107.57	110.80
26	1H	2604	U	N1-C2-N3	8.08	119.75	114.90
26	14	2331	G	OP1-P-OP2	8.08	131.72	119.60
23	2K	2	G	N9-C4-C5	-8.08	102.17	105.40
26	1H	574	C	C5-C6-N1	8.08	125.04	121.00
26	1H	1314	C	N3-C4-C5	8.08	125.13	121.90
26	1H	1398	C	C5-C6-N1	-8.08	116.96	121.00
1	1G	1511	G	C8-N9-C4	-8.08	103.17	106.40
26	14	330	A	N1-C2-N3	8.08	133.34	129.30
26	14	428	A	C6-N1-C2	-8.08	113.75	118.60
26	14	864	G	OP1-P-OP2	-8.08	107.49	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	945	A	C4-C5-N7	8.07	114.74	110.70
26	1H	1792	G	O5'-P-OP1	-8.07	98.43	105.70
26	1H	2572	A	N7-C8-N9	-8.07	109.76	113.80
1	1G	326	G	C5-C6-O6	8.07	133.44	128.60
1	1G	328	C	C5-C4-N4	8.07	125.85	120.20
1	1G	903	G	N1-C2-N3	8.07	128.75	123.90
26	14	990	A	O5'-P-OP1	-8.07	98.43	105.70
26	14	1551	C	C5-C6-N1	-8.07	116.96	121.00
1	13	801	U	C5-C4-O4	8.07	130.74	125.90
26	1H	308	G	C5-C6-N1	8.07	115.54	111.50
26	1H	864	G	C5-C6-N1	8.07	115.54	111.50
26	1H	1184	G	N1-C2-N2	8.07	123.47	116.20
26	1H	1573	G	OP2-P-O3'	8.07	122.96	105.20
26	1H	1734	C	N3-C4-N4	-8.07	112.35	118.00
23	2K	62	C	N3-C2-O2	-8.07	116.25	121.90
26	1H	2024	G	N1-C2-N2	8.07	123.46	116.20
1	1G	60	A	C8-N9-C4	8.07	109.03	105.80
26	1H	2645	G	N3-C2-N2	8.07	125.55	119.90
1	1G	159	G	N1-C6-O6	-8.07	115.06	119.90
1	1G	266	G	O5'-P-OP2	-8.07	98.44	105.70
1	1G	481	G	N3-C4-C5	-8.07	124.56	128.60
26	14	667	U	N1-C2-O2	-8.07	117.15	122.80
26	14	228	A	C2-N3-C4	-8.07	106.56	110.60
26	1H	131	G	C6-C5-N7	-8.07	125.56	130.40
26	1H	257	A	C8-N9-C4	-8.07	102.57	105.80
26	1H	649	G	C5-C6-O6	-8.07	123.76	128.60
26	1H	1386	C	N3-C2-O2	8.07	127.55	121.90
26	14	2697	G	N7-C8-N9	-8.07	109.07	113.10
26	1H	250	G	N7-C8-N9	8.07	117.13	113.10
26	1H	1301	A	OP1-P-OP2	8.07	131.70	119.60
26	1H	2258	C	OP1-P-O3'	8.07	122.95	105.20
26	1H	2501	C	C2-N3-C4	-8.07	115.87	119.90
26	14	2590	A	O5'-P-OP2	8.07	120.38	110.70
26	14	1251	C	N1-C2-O2	-8.07	114.06	118.90
26	14	2489	G	C4-C5-N7	8.07	114.03	110.80
26	1H	920	G	C2-N3-C4	-8.06	107.87	111.90
26	1H	2264	C	OP1-P-O3'	8.06	122.94	105.20
26	14	1332	G	N3-C2-N2	8.06	125.55	119.90
1	13	1260	C	C5-C6-N1	8.06	125.03	121.00
26	1H	1567	A	OP1-P-O3'	8.06	122.94	105.20
26	14	1826	G	N9-C4-C5	8.06	108.63	105.40
26	14	609(A)	G	O5'-P-OP2	-8.06	98.44	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1277	G	C2-N3-C4	-8.06	107.87	111.90
26	14	1374	G	C6-C5-N7	-8.06	125.56	130.40
26	14	1616	A	O4'-C1'-N9	8.06	114.65	108.20
26	14	2275	C	P-O3'-C3'	8.06	129.38	119.70
1	13	1321	C	C6-N1-C2	-8.06	117.08	120.30
26	14	1653	G	N3-C4-N9	8.06	130.84	126.00
26	1H	218	A	C5-C6-N1	-8.06	113.67	117.70
26	1H	945	A	C4-N9-C1'	8.06	140.81	126.30
26	1H	1266	G	N9-C4-C5	-8.06	102.18	105.40
26	1H	1428	C	C2-N3-C4	-8.06	115.87	119.90
26	1H	1778	U	OP2-P-O3'	8.06	122.93	105.20
26	1H	1905	C	N3-C4-C5	-8.06	118.68	121.90
26	1H	1933	G	N9-C4-C5	8.06	108.62	105.40
26	1H	2205	C	O5'-P-OP2	-8.06	98.45	105.70
1	13	36	C	C6-N1-C2	-8.06	117.08	120.30
26	1H	112	U	N3-C2-O2	8.06	127.84	122.20
26	1H	240	G	O5'-P-OP1	8.06	120.37	110.70
26	1H	1489	U	N3-C2-O2	-8.06	116.56	122.20
26	1H	2079	U	N3-C4-O4	8.06	125.04	119.40
26	1H	2621	A	OP1-P-OP2	-8.06	107.51	119.60
26	14	667	U	OP1-P-OP2	-8.06	107.51	119.60
26	14	754	C	C5-C6-N1	8.06	125.03	121.00
26	14	784	A	C5-C6-N6	8.06	130.15	123.70
26	14	2002	G	C4-C5-N7	8.06	114.02	110.80
26	14	2547	U	N1-C2-O2	-8.06	117.16	122.80
26	14	2585	U	N1-C2-O2	8.06	128.44	122.80
1	13	1253	G	C8-N9-C4	8.06	109.62	106.40
26	1H	145	G	C5-C6-N1	-8.06	107.47	111.50
26	1H	1158	C	C5-C6-N1	-8.06	116.97	121.00
26	1H	1879	C	N3-C2-O2	-8.06	116.26	121.90
1	1G	1200	C	C6-N1-C2	-8.06	117.08	120.30
1	13	533	A	N7-C8-N9	8.05	117.83	113.80
26	1H	574	C	C5-C4-N4	8.05	125.84	120.20
26	1H	1381	G	OP1-P-OP2	-8.05	107.52	119.60
26	1H	802	A	C5-C6-N1	8.05	121.73	117.70
26	1H	1193	G	O5'-P-OP1	8.05	120.36	110.70
26	1H	1971	A	N7-C8-N9	-8.05	109.77	113.80
26	14	140	A	C6-N1-C2	8.05	123.43	118.60
26	1H	1620	G	C5-C6-N1	-8.05	107.47	111.50
26	1H	2510	C	C5-C4-N4	8.05	125.84	120.20
26	14	252	G	C4-C5-N7	-8.05	107.58	110.80
26	14	1963	U	C5-C6-N1	8.05	126.73	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2444	G	N3-C2-N2	-8.05	114.26	119.90
26	14	2500	U	N3-C4-O4	-8.05	113.76	119.40
26	1H	698	C	N3-C4-N4	8.05	123.64	118.00
26	1H	1681	G	C5-N7-C8	-8.05	100.27	104.30
26	1H	2035	G	O5'-P-OP2	-8.05	98.45	105.70
26	1H	2226	C	C5-C6-N1	-8.05	116.97	121.00
26	14	801	G	C4-C5-N7	-8.05	107.58	110.80
26	14	1027	A	C5-C6-N6	-8.05	117.26	123.70
26	1H	239	U	C5-C6-N1	-8.05	118.68	122.70
1	13	60	A	OP1-P-OP2	-8.05	107.53	119.60
26	1H	465	G	OP1-P-OP2	-8.05	107.53	119.60
26	1H	975	G	N1-C2-N2	8.05	123.44	116.20
26	1H	1342	A	C2-N3-C4	-8.05	106.58	110.60
26	1H	2469	A	C5-C6-N6	-8.05	117.26	123.70
1	1G	50	A	C4-C5-N7	-8.05	106.67	110.70
27	16	16	G	C5-N7-C8	-8.05	100.28	104.30
27	16	76	G	C4-C5-N7	-8.05	107.58	110.80
26	14	409	C	C5-C4-N4	-8.05	114.57	120.20
26	14	1281	G	C5-C6-O6	-8.05	123.77	128.60
26	14	2290	G	N1-C2-N2	8.05	123.44	116.20
26	14	2766	G	C5-N7-C8	-8.05	100.28	104.30
26	1H	2506	U	N3-C2-O2	-8.05	116.57	122.20
26	1H	2510	C	O5'-P-OP2	-8.05	98.46	105.70
26	14	2711	A	C2-N3-C4	-8.05	106.58	110.60
26	1H	406	G	N9-C4-C5	8.04	108.62	105.40
26	1H	662	G	N3-C4-C5	-8.04	124.58	128.60
26	1H	1120	G	C5-C6-N1	-8.04	107.48	111.50
26	14	1326	U	C5-C4-O4	8.05	130.73	125.90
26	1H	1599	C	N3-C2-O2	-8.04	116.27	121.90
1	1G	27	G	N3-C2-N2	-8.04	114.27	119.90
27	1J	56	G	C5-C6-O6	-8.04	123.77	128.60
1	13	633	G	C4-C5-N7	8.04	114.02	110.80
26	1H	2405	G	OP1-P-OP2	8.04	131.66	119.60
1	13	237	C	N1-C2-N3	8.04	124.83	119.20
1	13	1419	G	C5-C6-N1	-8.04	107.48	111.50
26	1H	961	C	O4'-C1'-N1	8.04	114.63	108.20
26	1H	974	G	OP1-P-OP2	8.04	131.66	119.60
26	1H	2737	G	N9-C4-C5	-8.04	102.18	105.40
1	1G	970	C	N1-C2-O2	8.04	123.73	118.90
26	14	1133	U	C2-N3-C4	-8.04	122.17	127.00
26	14	1970	A	O4'-C1'-N9	-8.04	101.77	108.20
26	14	2755	C	N1-C2-O2	8.04	123.73	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	16	101	A	N7-C8-N9	-8.04	109.78	113.80
26	14	48	G	C8-N9-C4	-8.04	103.18	106.40
26	14	707	G	N3-C2-N2	-8.04	114.27	119.90
26	14	1899	G	C8-N9-C4	-8.04	103.18	106.40
1	13	300	A	C5-N7-C8	-8.04	99.88	103.90
1	13	1434	A	O5'-P-OP2	-8.04	98.46	105.70
26	1H	119	A	N1-C6-N6	-8.04	113.78	118.60
26	1H	131	G	N1-C6-O6	8.04	124.72	119.90
26	1H	263	C	OP1-P-OP2	8.04	131.66	119.60
26	1H	1852	C	N1-C2-O2	-8.04	114.08	118.90
26	1H	2252	G	O5'-P-OP1	-8.04	98.46	105.70
26	1H	248	G	C6-N1-C2	-8.04	120.28	125.10
26	1H	1180	C	C6-N1-C2	8.04	123.52	120.30
26	1H	1769	G	C8-N9-C4	-8.04	103.18	106.40
26	1H	2528	U	C4-C5-C6	8.04	124.52	119.70
1	1G	292	G	OP1-P-OP2	8.04	131.66	119.60
26	14	1995	U	N3-C4-C5	-8.04	109.78	114.60
26	14	862	G	C8-N9-C4	-8.04	103.19	106.40
26	14	1412	A	C2-N3-C4	8.04	114.62	110.60
26	14	2071	A	C5-C6-N1	8.04	121.72	117.70
26	14	1558	A	N1-C2-N3	8.04	133.32	129.30
26	1H	505	A	C4-C5-N7	8.04	114.72	110.70
26	1H	1445	C	C6-N1-C2	-8.04	117.09	120.30
26	1H	2878	U	C6-N1-C2	-8.04	116.18	121.00
1	1G	890	G	N1-C6-O6	-8.04	115.08	119.90
26	1H	1271	G	C4-C5-N7	-8.03	107.59	110.80
26	14	793	A	N9-C4-C5	-8.04	102.59	105.80
26	14	1939	U	N1-C2-O2	-8.04	117.17	122.80
26	14	2004	G	N1-C6-O6	8.04	124.72	119.90
26	14	2409	G	C5-C6-O6	-8.04	123.78	128.60
1	13	320	C	C6-N1-C2	8.03	123.51	120.30
1	13	346	G	C6-C5-N7	-8.03	125.58	130.40
26	1H	110	G	OP1-P-OP2	8.03	131.65	119.60
26	1H	1376	C	C6-N1-C2	-8.03	117.09	120.30
26	1H	2001	A	N7-C8-N9	8.03	117.82	113.80
1	1G	1313	U	C5-C6-N1	8.03	126.72	122.70
26	14	1164	G	N3-C4-C5	8.03	132.62	128.60
26	14	1943	U	N3-C4-O4	8.03	125.02	119.40
26	14	2067	G	O5'-P-OP2	8.03	120.34	110.70
26	14	2829	C	C4-C5-C6	-8.03	113.38	117.40
27	1J	37	C	C6-N1-C2	-8.03	117.09	120.30
26	1H	796	C	C2-N3-C4	-8.03	115.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1762	A	N9-C4-C5	-8.03	102.59	105.80
26	14	115	C	N3-C4-C5	8.03	125.11	121.90
26	14	399	G	C8-N9-C4	8.03	109.61	106.40
26	14	1602	U	N1-C2-N3	8.03	119.72	114.90
26	14	2265	U	C6-N1-C2	-8.03	116.18	121.00
26	14	2346	A	O5'-P-OP1	-8.03	98.47	105.70
26	14	2405	G	C8-N9-C4	-8.03	103.19	106.40
26	1H	838	C	N1-C2-O2	-8.03	114.08	118.90
26	1H	2281	C	OP2-P-O3'	8.03	122.86	105.20
26	14	2413	G	C5-C6-O6	-8.03	123.78	128.60
1	13	585	G	O5'-P-OP2	-8.03	98.48	105.70
1	13	948	C	OP1-P-O3'	8.03	122.85	105.20
26	14	204	A	N1-C6-N6	8.03	123.42	118.60
26	14	573	G	N3-C4-C5	-8.03	124.59	128.60
26	14	831	G	N3-C2-N2	8.03	125.52	119.90
1	13	492	G	C5-C6-N1	-8.02	107.49	111.50
26	1H	2297	C	O5'-P-OP2	-8.02	98.48	105.70
26	1H	2374	C	N1-C2-O2	8.02	123.71	118.90
26	1H	1224	G	C4-N9-C1'	-8.02	116.07	126.50
26	1H	1294	U	C5-C6-N1	-8.02	118.69	122.70
26	1H	1671	U	N1-C2-O2	-8.02	117.18	122.80
26	1H	2299	G	C5-C6-N1	-8.02	107.49	111.50
1	1G	1431	C	C6-N1-C2	-8.02	117.09	120.30
26	14	561	G	N7-C8-N9	8.02	117.11	113.10
26	14	2441	C	O5'-P-OP1	-8.02	98.48	105.70
1	1G	576	G	C4-C5-C6	8.02	123.61	118.80
26	14	124	G	C4-C5-N7	-8.02	107.59	110.80
26	14	746	A	N1-C2-N3	8.02	133.31	129.30
26	14	2416	C	N3-C4-C5	8.02	125.11	121.90
1	13	1096	C	C6-N1-C2	-8.02	117.09	120.30
26	1H	92	G	N1-C6-O6	8.02	124.71	119.90
26	1H	966	G	N1-C2-N2	-8.02	108.98	116.20
26	1H	1683	C	N3-C2-O2	-8.02	116.29	121.90
26	1H	2572	A	C2-N3-C4	-8.02	106.59	110.60
26	14	832	G	N1-C6-O6	-8.02	115.09	119.90
26	14	1960	A	N1-C2-N3	8.02	133.31	129.30
26	14	2620	C	N1-C2-O2	-8.02	114.09	118.90
26	1H	584	C	N3-C4-N4	8.02	123.61	118.00
26	1H	637	A	C5-C6-N1	-8.02	113.69	117.70
26	1H	989	G	N1-C2-N3	8.02	128.71	123.90
26	1H	989	G	C2-N3-C4	-8.02	107.89	111.90
26	1H	1346	G	C5-N7-C8	8.02	108.31	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2291	U	C4-C5-C6	8.02	124.51	119.70
26	14	329	G	OP1-P-OP2	8.02	131.63	119.60
26	1H	2494	G	N3-C4-N9	-8.02	121.19	126.00
26	1H	2707	G	N1-C6-O6	8.02	124.71	119.90
26	14	456	C	C5-C6-N1	-8.02	116.99	121.00
26	14	1289	C	N1-C2-O2	-8.02	114.09	118.90
26	14	2409	G	N1-C6-O6	8.02	124.71	119.90
26	1H	115	C	C5-C6-N1	-8.01	116.99	121.00
26	1H	762	U	C5-C4-O4	-8.01	121.09	125.90
26	1H	859	G	C4-N9-C1'	-8.01	116.08	126.50
26	1H	1888	G	C2-N3-C4	8.01	115.91	111.90
1	1G	925	G	C5-C6-N1	-8.01	107.49	111.50
26	14	2439	A	P-O3'-C3'	8.01	129.32	119.70
26	14	34	C	C2-N1-C1'	8.01	127.61	118.80
38	45	83	MET	CB-CG-SD	8.01	136.44	112.40
1	13	889	A	O5'-P-OP1	-8.01	98.49	105.70
26	1H	754	C	C2-N3-C4	-8.01	115.89	119.90
1	1G	536	C	C6-N1-C2	-8.01	117.09	120.30
26	14	674	G	O5'-P-OP2	8.01	120.31	110.70
26	14	2701	C	N3-C2-O2	-8.01	116.29	121.90
26	1H	835	A	C5-C6-N1	8.01	121.70	117.70
26	1H	1646	C	O5'-P-OP1	-8.01	98.49	105.70
26	1H	2076	U	C5-C6-N1	-8.01	118.69	122.70
26	14	911	A	N9-C4-C5	8.01	109.00	105.80
1	13	698	G	N7-C8-N9	8.01	117.10	113.10
26	1H	508	G	C2-N3-C4	8.01	115.90	111.90
26	1H	607	U	C5-C4-O4	8.01	130.71	125.90
26	1H	774	A	C8-N9-C4	-8.01	102.60	105.80
26	1H	2530	A	N9-C4-C5	-8.01	102.60	105.80
26	1H	2730	C	O5'-P-OP1	-8.01	98.49	105.70
26	14	1405	U	OP1-P-OP2	8.01	131.61	119.60
1	13	1313	U	C6-N1-C2	-8.01	116.20	121.00
26	1H	258	G	N7-C8-N9	-8.01	109.10	113.10
26	1H	646	A	C8-N9-C4	-8.01	102.60	105.80
26	1H	962	G	N3-C2-N2	8.01	125.50	119.90
26	1H	1014	U	N3-C2-O2	8.01	127.80	122.20
26	1H	1453	A	N1-C6-N6	8.01	123.40	118.60
26	1H	1979	C	N3-C4-C5	-8.01	118.70	121.90
1	1G	1394	A	C8-N9-C4	-8.01	102.60	105.80
26	14	348	G	N7-C8-N9	-8.01	109.10	113.10
26	14	1348	G	N9-C4-C5	-8.01	102.20	105.40
26	14	2838	G	N1-C6-O6	8.01	124.70	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1299	A	N1-C6-N6	8.00	123.40	118.60
1	13	1401	G	N3-C4-N9	-8.00	121.20	126.00
26	1H	793	A	N1-C2-N3	8.00	133.30	129.30
26	1H	919	G	N3-C4-C5	-8.00	124.60	128.60
27	16	23	G	N3-C4-C5	8.00	132.60	128.60
1	1G	978	A	C8-N9-C4	-8.00	102.60	105.80
1	1G	1353	G	N1-C6-O6	-8.00	115.10	119.90
26	14	1899	G	C5-C6-N1	-8.00	107.50	111.50
26	14	1958	C	N3-C2-O2	8.00	127.50	121.90
1	13	185	A	C8-N9-C4	-8.00	102.60	105.80
1	13	1183	A	C8-N9-C4	8.00	109.00	105.80
26	1H	194	G	N7-C8-N9	-8.00	109.10	113.10
26	1H	1005	C	C2-N3-C4	-8.00	115.90	119.90
26	1H	1680	U	C6-N1-C2	8.00	125.80	121.00
26	14	966	G	N1-C6-O6	-8.00	115.10	119.90
1	13	1048	G	N1-C6-O6	8.00	124.70	119.90
1	13	1529	G	N3-C2-N2	-8.00	114.30	119.90
26	1H	303	U	N3-C2-O2	-8.00	116.60	122.20
26	1H	2491	U	C6-N1-C2	8.00	125.80	121.00
1	1G	887	G	C4-C5-N7	8.00	114.00	110.80
26	14	2005	A	C4-C5-N7	-8.00	106.70	110.70
26	14	2062	A	N1-C2-N3	-8.00	125.30	129.30
26	1H	952	G	C5-N7-C8	-8.00	100.30	104.30
1	13	810	C	O5'-P-OP1	-8.00	98.50	105.70
26	1H	839	U	N1-C2-N3	8.00	119.70	114.90
26	1H	2318	G	N7-C8-N9	8.00	117.10	113.10
1	13	102	G	C2-N3-C4	7.99	115.90	111.90
1	13	295	C	O5'-P-OP2	-7.99	98.51	105.70
26	1H	325	G	C5-C6-O6	7.99	133.40	128.60
26	1H	1029	A	N9-C4-C5	-7.99	102.60	105.80
26	1H	1161	C	N3-C4-N4	7.99	123.59	118.00
26	1H	1549	C	O5'-P-OP2	7.99	120.29	110.70
26	1H	2598	A	N9-C4-C5	-7.99	102.60	105.80
26	14	2374	C	OP1-P-OP2	7.99	131.59	119.60
26	14	2490	G	N1-C2-N3	-7.99	119.10	123.90
1	1G	688	G	N1-C6-O6	-7.99	115.11	119.90
26	1H	74	A	C4-C5-C6	7.99	121.00	117.00
26	1H	2238	G	OP1-P-OP2	7.99	131.59	119.60
1	1G	623	C	C5-C6-N1	7.99	125.00	121.00
26	14	530	G	C5-C6-O6	-7.99	123.81	128.60
26	14	1450	C	N3-C4-C5	-7.99	118.70	121.90
26	14	2338	G	OP1-P-OP2	7.99	131.59	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	231	G	C8-N9-C4	-7.99	103.20	106.40
1	13	741	G	C2-N3-C4	-7.99	107.91	111.90
26	1H	214	G	C8-N9-C4	-7.99	103.20	106.40
26	1H	701	G	C5-C6-O6	7.99	133.39	128.60
26	1H	1905	C	N1-C2-O2	-7.99	114.11	118.90
1	1G	264	U	C5-C4-O4	-7.99	121.11	125.90
26	14	1376	C	C6-N1-C2	-7.99	117.11	120.30
26	1H	1423	G	N1-C6-O6	-7.99	115.11	119.90
26	1H	2024	G	C2-N3-C4	7.99	115.89	111.90
26	14	2428	G	C4-C5-N7	-7.99	107.61	110.80
1	13	633	G	N1-C6-O6	7.99	124.69	119.90
23	2K	6	G	N1-C6-O6	7.99	124.69	119.90
26	1H	729	G	N3-C4-N9	7.99	130.79	126.00
26	1H	753	C	N1-C2-O2	7.99	123.69	118.90
26	1H	1231	G	N3-C2-N2	-7.99	114.31	119.90
26	1H	2033	A	C6-N1-C2	-7.99	113.81	118.60
1	1G	47	C	C6-N1-C2	-7.99	117.11	120.30
26	14	254	G	OP1-P-OP2	7.99	131.58	119.60
26	14	762	U	C5-C4-O4	-7.99	121.11	125.90
26	14	830	G	C5-C6-O6	-7.99	123.81	128.60
26	14	2074	U	N1-C2-N3	7.99	119.69	114.90
26	14	2597	G	N3-C2-N2	7.99	125.49	119.90
1	13	386	C	C5-C6-N1	-7.98	117.01	121.00
26	14	2087	G	O5'-P-OP2	-7.98	98.51	105.70
1	13	492	G	C6-C5-N7	-7.98	125.61	130.40
1	13	518	C	N3-C4-N4	7.98	123.59	118.00
26	1H	20	C	N1-C2-N3	7.98	124.79	119.20
26	1H	141	A	O5'-P-OP2	-7.98	98.52	105.70
26	1H	1666	G	C5-C6-O6	7.98	133.39	128.60
25	4K	9	G	N3-C4-N9	7.98	130.79	126.00
26	1H	143	C	OP2-P-O3'	7.98	122.76	105.20
26	1H	226	G	OP1-P-O3'	7.98	122.76	105.20
26	14	952	G	O5'-P-OP2	7.98	120.28	110.70
26	1H	2296	U	N1-C2-O2	-7.98	117.22	122.80
26	1H	2672	G	O5'-P-OP1	7.98	120.28	110.70
26	14	380	U	N1-C2-N3	7.98	119.69	114.90
1	13	892	A	C6-C5-N7	-7.98	126.72	132.30
26	1H	533	G	N1-C2-N2	-7.98	109.02	116.20
26	1H	1643	G	C5-C6-O6	7.98	133.39	128.60
26	1H	1698	A	C4-C5-C6	7.98	120.99	117.00
26	1H	109	G	N1-C6-O6	-7.98	115.11	119.90
26	1H	868	U	C4-C5-C6	7.98	124.49	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2626	C	C6-N1-C2	7.98	123.49	120.30
26	1H	2312	U	N3-C4-O4	7.97	124.98	119.40
1	1G	64	G	OP1-P-OP2	-7.97	107.64	119.60
26	14	1239	G	N3-C2-N2	-7.97	114.32	119.90
1	13	1512	U	C5-C4-O4	7.97	130.68	125.90
26	1H	2623	G	C8-N9-C4	-7.97	103.21	106.40
26	14	252	G	C5-C6-O6	7.97	133.38	128.60
26	14	1634	A	N1-C6-N6	-7.97	113.82	118.60
26	14	1661	G	N9-C4-C5	-7.97	102.21	105.40
26	14	2276	G	C5-C6-N1	-7.97	107.51	111.50
26	14	2835	A	C5-C6-N1	7.97	121.69	117.70
1	13	577	G	C5-C6-N1	-7.97	107.51	111.50
26	1H	741	G	C5-C6-O6	-7.97	123.82	128.60
26	1H	1602	U	C5-C6-N1	-7.97	118.72	122.70
26	1H	1625	C	C5-C6-N1	-7.97	117.01	121.00
26	14	1343	G	N1-C6-O6	7.97	124.68	119.90
26	14	1525	G	O5'-P-OP1	-7.97	98.53	105.70
1	13	738	C	C5-C6-N1	7.97	124.98	121.00
23	2K	41	C	N1-C2-O2	7.97	123.68	118.90
27	16	96	G	N1-C2-N3	-7.97	119.12	123.90
26	14	469	G	C2-N3-C4	7.97	115.88	111.90
26	14	702	G	C5-C6-N1	-7.97	107.52	111.50
1	13	398	C	N3-C2-O2	-7.97	116.32	121.90
26	1H	130	C	N3-C4-C5	7.97	125.09	121.90
26	14	376	C	N3-C4-C5	-7.97	118.71	121.90
26	14	424	G	OP1-P-OP2	-7.97	107.65	119.60
26	14	805	G	N3-C4-N9	7.97	130.78	126.00
26	14	2418	A	O5'-P-OP1	7.97	120.26	110.70
26	1H	205	G	N7-C8-N9	-7.97	109.12	113.10
26	1H	2556	C	O5'-P-OP1	7.97	120.26	110.70
1	1G	882	C	O5'-P-OP1	-7.97	98.53	105.70
26	14	776	G	O4'-C1'-N9	-7.97	101.83	108.20
26	14	1554	A	C5-N7-C8	-7.97	99.92	103.90
26	14	1918	A	OP1-P-OP2	-7.97	107.65	119.60
26	1H	1282	U	C5-C4-O4	-7.96	121.12	125.90
26	1H	639	U	O5'-P-OP2	-7.96	98.53	105.70
26	1H	1031	G	N1-C2-N2	-7.96	109.03	116.20
26	1H	1516	U	N1-C2-O2	7.96	128.37	122.80
26	1H	2605	U	C5-C4-O4	7.96	130.68	125.90
26	14	1349	A	C5-N7-C8	-7.96	99.92	103.90
26	14	2277	G	C5-C6-O6	7.96	133.38	128.60
26	14	2878	U	N3-C4-C5	-7.96	109.82	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2K	28	U	N3-C2-O2	7.96	127.77	122.20
26	1H	1156	A	N7-C8-N9	7.96	117.78	113.80
26	14	2045	C	C2-N3-C4	-7.96	115.92	119.90
1	13	1504	G	N1-C2-N3	7.96	128.68	123.90
26	1H	410	G	O5'-P-OP2	7.96	120.25	110.70
26	1H	1815	A	N1-C2-N3	7.96	133.28	129.30
1	1G	306	G	N3-C4-N9	-7.96	121.22	126.00
26	14	669	G	C8-N9-C4	-7.96	103.22	106.40
26	1H	655	A	C5-C6-N1	-7.96	113.72	117.70
26	1H	1373	A	C5-C6-N1	7.96	121.68	117.70
26	1H	2603	G	O5'-P-OP2	7.96	120.25	110.70
1	1G	53	A	C5-N7-C8	-7.96	99.92	103.90
26	14	2392	A	O5'-P-OP2	7.96	120.25	110.70
26	1H	539	G	O5'-P-OP1	-7.96	98.54	105.70
26	1H	1435	G	N1-C6-O6	-7.96	115.13	119.90
27	16	16	G	C4-C5-N7	7.96	113.98	110.80
26	1H	625	G	N3-C4-N9	7.95	130.77	126.00
26	1H	638	G	N1-C6-O6	7.95	124.67	119.90
26	1H	656	G	N3-C4-C5	-7.95	124.62	128.60
26	1H	662	G	N1-C2-N2	-7.95	109.04	116.20
27	16	58	A	C8-N9-C4	-7.95	102.62	105.80
26	14	458	G	C4-C5-N7	7.95	113.98	110.80
26	14	621	A	N3-C4-C5	7.95	132.37	126.80
26	1H	239	U	C6-N1-C2	7.95	125.77	121.00
26	1H	1295	C	C5-C4-N4	7.95	125.77	120.20
26	14	1817	G	C4-C5-N7	-7.95	107.62	110.80
26	1H	609	A	C6-C5-N7	-7.95	126.73	132.30
26	1H	821	A	C4-C5-C6	7.95	120.97	117.00
26	1H	2557	G	C4-C5-C6	-7.95	114.03	118.80
1	1G	281	G	OP1-P-OP2	-7.95	107.67	119.60
26	14	59	U	C5-C4-O4	7.95	130.67	125.90
1	13	47	C	C2-N3-C4	-7.95	115.92	119.90
1	13	581	G	N3-C2-N2	7.95	125.46	119.90
26	1H	491	G	C2-N3-C4	-7.95	107.93	111.90
26	1H	1911	U	C6-N1-C2	-7.95	116.23	121.00
26	1H	2262	U	N1-C2-N3	7.95	119.67	114.90
27	16	50	G	C8-N9-C4	-7.95	103.22	106.40
26	14	187	G	N9-C4-C5	-7.95	102.22	105.40
1	13	362	G	N3-C4-N9	-7.95	121.23	126.00
26	1H	298	G	N3-C4-C5	7.95	132.57	128.60
26	1H	347	A	C6-C5-N7	-7.95	126.74	132.30
26	1H	670	A	C5-C6-N6	-7.95	117.34	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	51	149	ARG	NE-CZ-NH2	-7.95	116.33	120.30
26	14	739	G	N3-C4-N9	-7.95	121.23	126.00
26	14	1564	C	N3-C2-O2	-7.95	116.34	121.90
26	14	1821	A	C6-N1-C2	-7.95	113.83	118.60
26	14	1906	G	C5-C6-N1	-7.95	107.53	111.50
26	14	14	A	C5-N7-C8	-7.94	99.93	103.90
1	13	1435	G	C4-C5-N7	7.94	113.98	110.80
26	1H	250	G	N3-C4-C5	7.94	132.57	128.60
26	1H	649	G	O5'-P-OP2	-7.94	98.55	105.70
26	1H	843	G	O5'-P-OP2	7.94	120.23	110.70
26	1H	1143	A	O5'-P-OP2	-7.94	98.55	105.70
26	1H	1266	G	N3-C4-N9	7.94	130.77	126.00
26	1H	2339	G	C8-N9-C4	7.94	109.58	106.40
26	1H	788	A	OP1-P-O3'	-7.94	87.73	105.20
26	1H	2618	G	N3-C4-C5	-7.94	124.63	128.60
26	1H	2620	C	C5-C4-N4	-7.94	114.64	120.20
1	1G	733	A	N9-C4-C5	-7.94	102.62	105.80
26	14	385	C	OP1-P-OP2	7.94	131.51	119.60
26	14	476	G	OP1-P-OP2	7.94	131.51	119.60
26	14	2281	C	N3-C4-N4	7.94	123.56	118.00
1	13	1333	A	C5-C6-N1	7.94	121.67	117.70
26	1H	474	G	C5-N7-C8	-7.94	100.33	104.30
26	14	1598	C	N1-C2-O2	7.94	123.66	118.90
26	14	2432	A	N1-C2-N3	-7.94	125.33	129.30
1	13	1360	A	C5-C6-N1	7.94	121.67	117.70
26	1H	270(O)	U	C2-N1-C1'	7.94	127.22	117.70
26	1H	920	G	N9-C4-C5	-7.94	102.22	105.40
26	1H	1987	G	OP1-P-O3'	7.94	122.66	105.20
26	1H	2254	C	N1-C2-O2	-7.94	114.14	118.90
26	1H	2294	C	N1-C2-O2	7.94	123.66	118.90
26	1H	1314	C	N3-C4-N4	-7.94	112.44	118.00
1	13	904	C	C5-C6-N1	-7.93	117.03	121.00
26	1H	828	U	C5-C6-N1	-7.93	118.73	122.70
26	1H	1620	G	C2-N3-C4	-7.93	107.93	111.90
26	1H	2766	G	N7-C8-N9	7.93	117.07	113.10
26	14	270(T)	G	N1-C6-O6	7.93	124.66	119.90
26	14	807	U	C5-C6-N1	-7.93	118.73	122.70
26	14	1016	G	N1-C6-O6	7.93	124.66	119.90
26	14	1840	G	C5-C6-O6	-7.93	123.84	128.60
26	14	2217	G	C4-C5-C6	7.93	123.56	118.80
1	13	819	A	N1-C6-N6	-7.93	113.84	118.60
26	1H	2345	G	OP1-P-O3'	7.93	122.65	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2377	A	C5-N7-C8	-7.93	99.93	103.90
26	1H	2412	A	C5-C6-N1	7.93	121.67	117.70
26	1H	2559	C	N3-C2-O2	-7.93	116.35	121.90
26	1H	2751	G	C4-C5-N7	7.93	113.97	110.80
1	1G	239	U	C6-N1-C2	-7.93	116.24	121.00
26	14	84	A	N7-C8-N9	-7.93	109.83	113.80
26	14	1296	G	O5'-P-OP2	-7.93	98.56	105.70
26	14	2087	G	C8-N9-C4	7.93	109.57	106.40
26	14	2333	A	C4-C5-N7	-7.93	106.73	110.70
26	14	2081	C	O5'-P-OP2	-7.93	98.56	105.70
26	1H	1001	A	N1-C6-N6	-7.93	113.84	118.60
26	1H	1760	A	N7-C8-N9	7.93	117.77	113.80
27	16	111	U	C4-C5-C6	7.93	124.46	119.70
26	14	465	G	C8-N9-C4	-7.93	103.23	106.40
26	14	489	G	C4-C5-N7	7.93	113.97	110.80
26	14	1968	G	C5-N7-C8	-7.93	100.33	104.30
26	1H	300	A	O5'-P-OP2	-7.93	98.56	105.70
1	1G	230	G	N3-C4-N9	-7.93	121.24	126.00
1	13	67	C	C6-N1-C2	-7.93	117.13	120.30
24	3K	44	U	N3-C2-O2	-7.93	116.65	122.20
26	1H	1400	G	C5-C6-O6	7.93	133.35	128.60
26	1H	1524	G	O5'-P-OP1	-7.93	98.57	105.70
27	16	16	G	C5-C6-O6	-7.93	123.84	128.60
1	1G	1438	G	C8-N9-C4	7.93	109.57	106.40
26	14	28	A	C5-N7-C8	-7.93	99.94	103.90
26	14	2197	U	O5'-P-OP1	-7.93	98.57	105.70
1	13	1386	G	N3-C4-C5	7.92	132.56	128.60
26	1H	2417	C	C5-C4-N4	7.92	125.75	120.20
26	1H	397	G	N1-C6-O6	7.92	124.65	119.90
26	1H	1639	U	C5-C6-N1	-7.92	118.74	122.70
26	14	178	G	C5-N7-C8	-7.92	100.34	104.30
26	1H	772	C	C4-C5-C6	7.92	121.36	117.40
26	1H	814	C	N3-C4-C5	7.92	125.07	121.90
26	1H	1728	G	C5-C6-O6	-7.92	123.85	128.60
26	14	242	G	C8-N9-C4	7.92	109.57	106.40
26	14	1765	C	O5'-P-OP2	-7.92	98.57	105.70
26	14	1772	G	OP1-P-OP2	7.92	131.48	119.60
27	1J	90	C	N3-C4-C5	7.92	125.07	121.90
26	1H	1697	G	N1-C2-N2	-7.92	109.07	116.20
26	14	228	A	C5-C6-N1	-7.92	113.74	117.70
1	13	1520	G	N9-C4-C5	-7.92	102.23	105.40
26	1H	706	A	N1-C6-N6	7.92	123.35	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1128	A	C6-C5-N7	-7.92	126.76	132.30
26	1H	1231	G	N1-C6-O6	7.92	124.65	119.90
26	1H	1907	G	N3-C2-N2	-7.92	114.36	119.90
26	1H	2389	G	N1-C6-O6	-7.92	115.15	119.90
26	1H	2715	C	N1-C2-O2	7.92	123.65	118.90
26	1H	2738	A	C4-C5-C6	-7.92	113.04	117.00
26	14	953	A	O5'-P-OP2	7.92	120.20	110.70
26	14	1496	A	C5-C6-N6	-7.92	117.36	123.70
26	14	2762	G	C6-C5-N7	-7.92	125.65	130.40
26	1H	780	G	C6-C5-N7	-7.92	125.65	130.40
26	1H	2237	G	N1-C2-N2	-7.92	109.07	116.20
26	14	2386	C	N1-C2-O2	-7.92	114.15	118.90
26	1H	566	U	OP1-P-O3'	7.92	122.61	105.20
26	1H	869	G	N1-C2-N2	-7.92	109.08	116.20
26	1H	1219	G	N1-C2-N3	7.92	128.65	123.90
26	14	675	A	C5-C6-N6	-7.92	117.37	123.70
26	14	775	G	N3-C4-C5	-7.92	124.64	128.60
26	1H	1214	A	C8-N9-C4	7.91	108.97	105.80
26	1H	1286	A	C5-N7-C8	7.91	107.86	103.90
26	1H	1336	A	C5-C6-N1	7.91	121.66	117.70
26	1H	1977	A	O5'-P-OP2	-7.91	98.58	105.70
26	14	138	G	O4'-C1'-N9	7.91	114.53	108.20
26	14	1995	U	C4-C5-C6	7.91	124.45	119.70
26	1H	1592	C	C6-N1-C2	7.91	123.47	120.30
26	14	1900	A	C6-N1-C2	-7.91	113.85	118.60
26	14	1903	G	C8-N9-C4	7.91	109.56	106.40
27	1J	9	G	OP1-P-OP2	-7.91	107.73	119.60
1	13	50	A	N9-C4-C5	7.91	108.97	105.80
1	13	557	G	N3-C2-N2	7.91	125.44	119.90
26	1H	962	G	N3-C4-N9	7.91	130.75	126.00
26	14	947	G	N3-C4-N9	-7.91	121.25	126.00
26	1H	270(Q)	C	C6-N1-C2	-7.91	117.14	120.30
26	1H	465	G	N1-C2-N3	-7.91	119.16	123.90
26	1H	707	G	O5'-P-OP1	7.91	120.19	110.70
26	1H	800	A	O5'-P-OP2	7.91	120.19	110.70
27	16	106	G	N9-C4-C5	-7.91	102.24	105.40
26	14	691	C	N3-C4-C5	-7.91	118.74	121.90
26	14	1193	G	C8-N9-C4	7.91	109.56	106.40
26	14	2270	G	N7-C8-N9	7.91	117.06	113.10
26	1H	1855	G	C5-C6-N1	7.91	115.45	111.50
1	1G	47	C	N3-C2-O2	-7.91	116.36	121.90
1	1G	1270	C	C5-C6-N1	7.91	124.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	722	A	C5-C6-N1	-7.91	113.75	117.70
26	1H	960	A	O5'-P-OP1	-7.91	98.58	105.70
26	1H	1191	G	C4-C5-N7	-7.91	107.64	110.80
26	1H	2060	A	P-O3'-C3'	7.91	129.19	119.70
26	1H	2445	G	N9-C4-C5	7.91	108.56	105.40
26	1H	2675	A	C8-N9-C4	-7.91	102.64	105.80
26	14	863	A	N7-C8-N9	7.91	117.75	113.80
1	13	673	G	C8-N9-C4	-7.90	103.24	106.40
1	1G	924	C	C4-C5-C6	7.90	121.35	117.40
26	1H	68	G	N1-C6-O6	7.90	124.64	119.90
26	1H	531	C	C5-C4-N4	-7.90	114.67	120.20
26	1H	613	U	C2-N3-C4	-7.90	122.26	127.00
26	1H	784	A	N1-C6-N6	-7.90	113.86	118.60
26	1H	1705	G	N1-C2-N3	7.90	128.64	123.90
26	1H	1844	C	C5-C6-N1	-7.90	117.05	121.00
26	14	1311	G	N1-C6-O6	-7.90	115.16	119.90
26	14	1500	G	N1-C6-O6	7.90	124.64	119.90
1	1G	1527	C	C4-C5-C6	7.90	121.35	117.40
26	14	373	U	C6-N1-C2	7.90	125.74	121.00
26	14	2625	G	C5-C6-O6	-7.90	123.86	128.60
26	1H	782	A	C4-C5-N7	-7.90	106.75	110.70
27	16	115	G	C5-C6-O6	-7.90	123.86	128.60
1	1G	800	G	C4-C5-C6	7.90	123.54	118.80
26	14	252	G	N3-C4-C5	-7.90	124.65	128.60
26	14	2901	C	C6-N1-C2	-7.90	117.14	120.30
26	1H	942	G	N7-C8-N9	7.90	117.05	113.10
26	14	2576	G	C5-C6-N1	7.90	115.45	111.50
26	1H	661	C	C2-N3-C4	-7.89	115.95	119.90
26	1H	750	A	C8-N9-C4	7.89	108.96	105.80
26	1H	961	C	OP1-P-OP2	7.89	131.44	119.60
26	1H	1546	C	C5-C6-N1	7.89	124.95	121.00
26	14	1334	G	C8-N9-C4	-7.89	103.24	106.40
26	14	2593	U	OP1-P-OP2	-7.89	107.76	119.60
1	13	766	A	N3-C4-C5	7.89	132.32	126.80
26	1H	917	A	C4-C5-N7	7.89	114.65	110.70
26	14	1835	G	N7-C8-N9	-7.89	109.15	113.10
1	13	1375	A	N1-C6-N6	-7.89	113.86	118.60
24	3K	2	G	N9-C4-C5	-7.89	102.24	105.40
26	1H	1348	G	N1-C6-O6	7.89	124.64	119.90
26	1H	1426	G	C6-C5-N7	-7.89	125.67	130.40
27	16	9	G	O5'-P-OP2	-7.89	98.60	105.70
26	1H	2435	A	O5'-P-OP1	-7.89	98.60	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2627	G	N3-C2-N2	7.89	125.42	119.90
1	1G	6	G	N1-C6-O6	7.89	124.63	119.90
26	14	210	C	C4-C5-C6	7.89	121.34	117.40
26	14	1336	A	C6-N1-C2	-7.89	113.87	118.60
26	14	1427	A	N1-C2-N3	7.89	133.25	129.30
26	14	2072	G	N9-C4-C5	-7.89	102.24	105.40
26	1H	634	C	O5'-P-OP2	-7.89	98.60	105.70
26	14	2370	G	C8-N9-C4	7.89	109.56	106.40
1	13	966	G	N1-C2-N3	-7.89	119.17	123.90
1	13	994	A	C8-N9-C4	-7.89	102.64	105.80
26	1H	697	C	C5-C4-N4	-7.89	114.68	120.20
1	1G	860	A	C8-N9-C4	-7.89	102.64	105.80
26	14	2050	C	O5'-P-OP2	-7.89	98.60	105.70
26	14	2199	A	O5'-P-OP1	-7.89	98.60	105.70
26	1H	221	A	C6-N1-C2	-7.88	113.87	118.60
26	1H	717	G	C6-C5-N7	-7.88	125.67	130.40
26	1H	939	G	C2-N3-C4	-7.88	107.96	111.90
1	1G	392	G	O5'-P-OP1	7.88	120.16	110.70
1	1G	905	U	C4-C5-C6	7.88	124.43	119.70
23	2L	71	G	N3-C4-C5	7.88	132.54	128.60
57	3L	61	C	C5-C6-N1	7.88	124.94	121.00
26	14	2021	C	C5-C6-N1	7.88	124.94	121.00
26	14	779	U	C5-C4-O4	-7.88	121.17	125.90
26	1H	1321	A	C2-N3-C4	-7.88	106.66	110.60
26	14	674	G	C8-N9-C4	7.88	109.55	106.40
26	14	1936	A	O5'-P-OP2	7.88	120.16	110.70
1	13	1500	A	N1-C6-N6	-7.88	113.87	118.60
26	14	74	A	N1-C2-N3	7.88	133.24	129.30
26	14	2083	G	OP1-P-OP2	-7.88	107.78	119.60
1	13	36	C	N1-C2-O2	-7.88	114.17	118.90
1	13	776	G	C5-C6-O6	-7.88	123.87	128.60
26	1H	610	C	C5-C6-N1	-7.88	117.06	121.00
26	1H	1003	G	C4-C5-N7	-7.88	107.65	110.80
1	1G	886	G	O5'-P-OP2	-7.88	98.61	105.70
26	14	1851	U	O5'-P-OP1	-7.88	98.61	105.70
26	14	2642	G	O5'-P-OP2	-7.88	98.61	105.70
1	13	915	A	C5-C6-N6	7.88	130.00	123.70
26	1H	1296	G	O5'-P-OP2	-7.88	98.61	105.70
26	1H	2779	U	C4-C5-C6	7.88	124.43	119.70
26	1H	2611	U	N3-C2-O2	-7.88	116.69	122.20
26	14	790	C	N3-C2-O2	-7.88	116.39	121.90
26	14	2580	U	C4-C5-C6	7.88	124.42	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	785	G	C6-N1-C2	-7.87	120.38	125.10
26	1H	1602	U	N1-C2-O2	-7.87	117.29	122.80
26	1H	2363	C	C6-N1-C2	7.87	123.45	120.30
26	14	704	G	C5-N7-C8	-7.87	100.36	104.30
1	13	974	A	N3-C4-C5	7.87	132.31	126.80
1	13	1487	G	N1-C2-N3	7.87	128.62	123.90
26	1H	64	A	N7-C8-N9	-7.87	109.86	113.80
26	1H	468	G	C5-C6-N1	-7.87	107.56	111.50
26	1H	851	U	C5-C6-N1	-7.87	118.76	122.70
1	1G	276	G	C8-N9-C4	7.87	109.55	106.40
1	1G	711	G	C2-N3-C4	-7.87	107.96	111.90
26	14	204	A	C5-N7-C8	-7.87	99.96	103.90
26	14	2217	G	C5-C6-O6	-7.87	123.88	128.60
1	13	757	U	O5'-P-OP2	-7.87	98.62	105.70
26	1H	1959	G	C6-C5-N7	7.87	135.12	130.40
26	14	191	A	N9-C4-C5	-7.87	102.65	105.80
26	1H	25	U	C5-C4-O4	-7.87	121.18	125.90
26	1H	1332	G	N1-C2-N3	7.87	128.62	123.90
26	1H	1674	G	C5-C6-O6	-7.87	123.88	128.60
26	14	184	C	N1-C2-O2	-7.87	114.18	118.90
26	1H	619	G	C8-N9-C4	7.87	109.55	106.40
26	1H	2340	G	N3-C4-C5	7.87	132.53	128.60
1	1G	800	G	C8-N9-C4	-7.87	103.25	106.40
1	1G	1280	A	C8-N9-C4	7.87	108.95	105.80
1	13	436	C	C5-C6-N1	7.87	124.93	121.00
26	1H	1777	U	N3-C4-C5	-7.87	109.88	114.60
26	1H	1826	G	C8-N9-C4	7.87	109.55	106.40
26	14	234	C	N3-C4-C5	7.87	125.05	121.90
26	14	2025	C	O5'-P-OP1	-7.87	98.62	105.70
26	1H	1210	A	C5-C6-N1	-7.86	113.77	117.70
26	1H	1843	C	C2-N3-C4	-7.86	115.97	119.90
26	1H	2627	G	C2-N3-C4	-7.86	107.97	111.90
1	1G	1499	A	C8-N9-C4	7.86	108.95	105.80
26	14	1911	U	C5-C6-N1	7.86	126.63	122.70
26	14	2422	A	N7-C8-N9	7.86	117.73	113.80
27	1J	94	C	C5-C6-N1	7.86	124.93	121.00
26	1H	760	G	C4-C5-C6	7.86	123.52	118.80
26	1H	1669	A	C4-C5-N7	7.86	114.63	110.70
26	14	150	C	C2-N3-C4	-7.86	115.97	119.90
26	14	1195	G	C5-C6-O6	7.86	133.32	128.60
26	1H	1234	U	C5-C6-N1	-7.86	118.77	122.70
26	1H	1633	G	C8-N9-C4	-7.86	103.26	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	11	30	GLU	N-CA-C	-7.86	89.78	111.00
1	1G	237	C	N3-C4-N4	-7.86	112.50	118.00
26	14	21	A	N1-C2-N3	7.86	133.23	129.30
26	14	736	C	O5'-P-OP2	7.86	120.13	110.70
26	14	747	U	N3-C4-C5	7.86	119.32	114.60
26	14	1429	G	N7-C8-N9	7.86	117.03	113.10
26	14	2625	G	N3-C2-N2	-7.86	114.40	119.90
26	1H	186	G	C8-N9-C4	7.86	109.54	106.40
26	14	694	U	N1-C2-O2	7.86	128.30	122.80
26	14	773	U	C4-C5-C6	7.86	124.42	119.70
1	13	53	A	N1-C6-N6	7.86	123.31	118.60
1	13	1226	C	C4-C5-C6	7.86	121.33	117.40
26	1H	963	U	C5-C4-O4	-7.86	121.19	125.90
26	1H	1373	A	N7-C8-N9	-7.86	109.87	113.80
26	1H	1596	A	C6-N1-C2	-7.86	113.89	118.60
26	14	862	G	C5-C6-O6	7.86	133.31	128.60
1	13	573	A	C8-N9-C4	-7.86	102.66	105.80
26	1H	630	G	N3-C2-N2	-7.86	114.40	119.90
26	14	489	G	C5-N7-C8	-7.86	100.37	104.30
26	14	1558	A	N3-C4-N9	-7.86	121.12	127.40
26	1H	856	C	O5'-P-OP1	-7.85	98.63	105.70
26	14	494	G	C6-C5-N7	-7.85	125.69	130.40
26	14	993	G	OP1-P-OP2	-7.85	107.82	119.60
26	1H	264	C	C5-C6-N1	7.85	124.93	121.00
26	1H	1400	G	N9-C4-C5	7.85	108.54	105.40
26	1H	2586	C	C5-C4-N4	-7.85	114.70	120.20
31	31	74	ARG	NE-CZ-NH2	-7.85	116.37	120.30
1	1G	331	G	C4-C5-C6	7.85	123.51	118.80
1	1G	817	C	C6-N1-C2	7.85	123.44	120.30
26	14	1338	G	N9-C4-C5	-7.85	102.26	105.40
26	14	2235	G	C6-N1-C2	-7.85	120.39	125.10
26	14	2279	G	N1-C6-O6	-7.85	115.19	119.90
23	2K	35	C	O5'-P-OP1	7.85	120.12	110.70
26	14	572	A	N1-C6-N6	7.85	123.31	118.60
1	13	31	G	C8-N9-C4	-7.85	103.26	106.40
26	1H	179	G	C2-N3-C4	-7.85	107.98	111.90
26	1H	774	A	N1-C2-N3	7.85	133.22	129.30
26	14	137(A)	G	N3-C2-N2	-7.85	114.41	119.90
26	14	2358	G	C5-C6-O6	7.85	133.31	128.60
26	1H	1978	A	C8-N9-C4	-7.85	102.66	105.80
1	1G	304	U	C6-N1-C2	-7.85	116.29	121.00
1	1G	392	G	C5-C6-N1	-7.85	107.58	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	814	A	C5-N7-C8	7.85	107.82	103.90
26	14	494	G	C2-N3-C4	-7.85	107.98	111.90
26	14	663	G	C5-C6-N1	-7.85	107.58	111.50
26	14	840	C	N3-C2-O2	7.85	127.39	121.90
26	14	1024	G	C5-C6-N1	-7.85	107.58	111.50
26	14	1281	G	N7-C8-N9	7.85	117.02	113.10
1	1G	30	U	N1-C2-N3	7.85	119.61	114.90
26	14	2848	G	C5-C6-O6	7.85	133.31	128.60
26	1H	591	C	C4-C5-C6	7.84	121.32	117.40
26	1H	2330	G	C5-N7-C8	-7.84	100.38	104.30
1	1G	306	G	N3-C4-C5	7.84	132.52	128.60
26	14	528	A	N3-C4-N9	-7.84	121.12	127.40
1	13	687	A	P-O3'-C3'	7.84	129.11	119.70
23	2K	40	C	C5-C6-N1	7.84	124.92	121.00
26	1H	125	G	N3-C2-N2	7.84	125.39	119.90
26	1H	1656	C	C5-C6-N1	7.84	124.92	121.00
26	1H	1768	U	OP2-P-O3'	7.84	122.45	105.20
26	14	684	G	OP1-P-OP2	7.84	131.37	119.60
1	13	1435	G	N1-C2-N2	-7.84	109.14	116.20
26	1H	1125	G	N7-C8-N9	-7.84	109.18	113.10
26	1H	2089	U	C5-C6-N1	-7.84	118.78	122.70
26	14	690	G	N1-C2-N3	7.84	128.60	123.90
26	14	1320	C	N3-C4-N4	7.84	123.49	118.00
26	1H	758	C	C5-C4-N4	7.84	125.69	120.20
26	1H	2469	A	N7-C8-N9	7.84	117.72	113.80
1	1G	46	G	C5-C6-O6	-7.84	123.90	128.60
1	1G	1464	G	N1-C6-O6	7.84	124.60	119.90
26	14	806	C	C6-N1-C2	7.84	123.44	120.30
26	14	1330	C	C5-C4-N4	-7.84	114.71	120.20
26	1H	1344	G	C8-N9-C4	-7.84	103.27	106.40
26	1H	2264	C	C2-N3-C4	7.84	123.82	119.90
26	1H	2415	G	N1-C6-O6	7.84	124.60	119.90
26	1H	2777	G	C8-N9-C4	-7.84	103.27	106.40
1	1G	231	G	N1-C2-N3	7.84	128.60	123.90
1	1G	326	G	C4-C5-C6	7.84	123.50	118.80
26	14	71	A	O5'-P-OP2	7.84	120.10	110.70
26	14	526	A	C8-N9-C4	-7.84	102.67	105.80
26	14	537	C	C6-N1-C2	-7.84	117.17	120.30
1	13	532	A	N1-C6-N6	7.83	123.30	118.60
26	1H	1487	G	OP1-P-OP2	-7.83	107.85	119.60
26	1H	2689	U	OP1-P-O3'	7.83	122.44	105.20
26	14	1592	C	C5-C6-N1	7.83	124.92	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2K	13	C	OP1-P-OP2	-7.83	107.85	119.60
26	1H	432	A	C5-N7-C8	-7.83	99.98	103.90
26	1H	1325	G	C6-C5-N7	-7.83	125.70	130.40
26	14	464	U	N1-C2-O2	-7.83	117.32	122.80
26	14	1777	U	C5-C4-O4	-7.83	121.20	125.90
26	14	1992	G	P-O3'-C3'	7.83	129.10	119.70
26	14	2610	C	OP1-P-OP2	-7.83	107.85	119.60
26	14	2845	G	OP1-P-OP2	7.83	131.35	119.60
26	1H	762	U	N1-C2-N3	-7.83	110.20	114.90
26	1H	868	U	N3-C2-O2	-7.83	116.72	122.20
26	1H	1001	A	C8-N9-C4	-7.83	102.67	105.80
26	1H	1517	G	C2-N3-C4	-7.83	107.98	111.90
26	1H	1996	C	C6-N1-C2	7.83	123.43	120.30
1	1G	730	G	N9-C4-C5	7.83	108.53	105.40
26	14	805	G	N3-C2-N2	7.83	125.38	119.90
26	14	1202	C	C2-N3-C4	-7.83	115.98	119.90
26	14	1589	C	O5'-P-OP2	7.83	120.10	110.70
1	13	1455	G	C5-C6-N1	-7.83	107.58	111.50
26	14	1603	A	C6-C5-N7	-7.83	126.82	132.30
1	13	27	G	O5'-P-OP1	-7.83	98.65	105.70
1	13	532	A	C4-C5-N7	7.83	114.61	110.70
1	13	570	G	C5-C6-O6	-7.83	123.90	128.60
1	13	941	G	C2-N3-C4	7.83	115.81	111.90
23	2K	24	C	N3-C4-C5	7.83	125.03	121.90
26	1H	104	U	N3-C2-O2	7.83	127.68	122.20
26	1H	1251	C	O5'-P-OP1	-7.83	98.65	105.70
26	1H	1320	C	C5-C6-N1	-7.83	117.09	121.00
27	16	54	G	N3-C2-N2	-7.83	114.42	119.90
26	14	201	C	C2-N3-C4	-7.83	115.99	119.90
26	14	534	U	N1-C2-O2	-7.83	117.32	122.80
27	1J	61	G	O5'-P-OP1	-7.83	98.66	105.70
26	14	457	A	C5-C6-N6	7.83	129.96	123.70
26	14	1310	G	N1-C6-O6	7.83	124.60	119.90
26	14	1890	A	C8-N9-C4	7.83	108.93	105.80
26	1H	1328	G	C5-C6-N1	7.83	115.41	111.50
26	1H	2767	C	OP1-P-OP2	7.83	131.34	119.60
37	78	42	SER	C-N-CA	-7.83	105.86	122.30
1	1G	1422	G	O5'-P-OP2	-7.83	98.66	105.70
26	14	391	G	N7-C8-N9	7.83	117.01	113.10
26	14	1210	A	N7-C8-N9	7.83	117.71	113.80
26	14	1399	C	C4-C5-C6	-7.83	113.49	117.40
26	1H	919	G	OP1-P-OP2	7.82	131.33	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	16	G	N9-C4-C5	7.82	108.53	105.40
26	14	568	U	C4-C5-C6	7.82	124.39	119.70
26	14	1311	G	N1-C2-N3	7.82	128.59	123.90
26	14	2061	G	N1-C6-O6	-7.82	115.21	119.90
26	1H	2445	G	O5'-P-OP2	-7.82	98.66	105.70
26	14	1142	U	C2-N1-C1'	7.82	127.09	117.70
1	13	730	G	C5-N7-C8	7.82	108.21	104.30
26	1H	6	A	N7-C8-N9	7.82	117.71	113.80
26	1H	2707	G	N9-C4-C5	-7.82	102.27	105.40
26	14	380	U	OP1-P-OP2	7.82	131.33	119.60
26	14	979	G	C5-C6-O6	7.82	133.29	128.60
26	14	2246	G	N3-C2-N2	-7.82	114.42	119.90
26	14	2571	C	N1-C2-O2	-7.82	114.21	118.90
26	14	2755	C	C5-C6-N1	7.82	124.91	121.00
26	1H	81	G	O5'-P-OP2	-7.82	98.66	105.70
26	1H	1767	C	C4-C5-C6	7.82	121.31	117.40
1	1G	232	G	N1-C2-N3	7.82	128.59	123.90
26	14	2065	C	N3-C2-O2	-7.82	116.43	121.90
1	1G	239	U	C5-C6-N1	7.82	126.61	122.70
26	14	432	A	N1-C6-N6	7.82	123.29	118.60
26	14	1308	A	C6-N1-C2	-7.82	113.91	118.60
26	14	1811	G	C5-C6-O6	-7.82	123.91	128.60
26	14	1901	A	OP1-P-OP2	7.82	131.33	119.60
1	13	417	C	N3-C4-N4	-7.82	112.53	118.00
1	13	741	G	C8-N9-C4	7.82	109.53	106.40
26	14	2612	C	N1-C2-N3	-7.82	113.73	119.20
26	14	1393	A	N1-C6-N6	-7.81	113.91	118.60
26	14	1617	C	C2-N3-C4	-7.81	115.99	119.90
26	14	2276	G	N3-C2-N2	-7.81	114.43	119.90
1	13	1359	C	O5'-P-OP1	-7.81	98.67	105.70
26	1H	210	C	C5-C6-N1	-7.81	117.09	121.00
26	1H	2599	G	N1-C2-N3	7.81	128.59	123.90
1	1G	390	C	C6-N1-C2	7.81	123.42	120.30
26	14	15	G	C2-N3-C4	-7.81	107.99	111.90
26	14	246	C	N3-C2-O2	7.81	127.37	121.90
26	14	563	G	C8-N9-C4	-7.81	103.28	106.40
26	14	1645	G	C5-C6-O6	7.81	133.29	128.60
26	14	1893	C	N1-C2-O2	-7.81	114.21	118.90
26	14	2556	C	C5-C4-N4	-7.81	114.73	120.20
26	1H	1436	G	OP1-P-O3'	7.81	122.38	105.20
26	1H	2067	G	N3-C4-C5	-7.81	124.69	128.60
23	2L	37	U	O5'-P-OP1	-7.81	98.67	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1671	U	C6-N1-C2	7.81	125.69	121.00
26	14	1960	A	C5-C6-N6	7.81	129.95	123.70
1	13	356	A	N1-C6-N6	-7.81	113.92	118.60
1	13	555	C	N3-C2-O2	-7.81	116.43	121.90
1	13	644	G	O5'-P-OP2	-7.81	98.67	105.70
1	13	966	G	C5-C6-N1	7.81	115.41	111.50
25	4K	18	G	C8-N9-C4	-7.81	103.28	106.40
26	1H	244	A	C4-C5-N7	7.81	114.61	110.70
26	1H	509	C	N3-C2-O2	-7.81	116.43	121.90
26	1H	1109	C	C2-N1-C1'	7.81	127.39	118.80
26	1H	1779	U	N3-C4-O4	7.81	124.87	119.40
1	1G	323	U	N3-C2-O2	7.81	127.67	122.20
1	1G	556	C	N3-C2-O2	7.81	127.37	121.90
1	1G	923	A	C2-N3-C4	-7.81	106.69	110.60
26	14	191	A	C4-C5-N7	7.81	114.60	110.70
26	14	2314	C	N3-C2-O2	-7.81	116.43	121.90
1	13	561	U	N3-C4-O4	7.81	124.86	119.40
1	13	1072	G	C5-C6-O6	7.81	133.28	128.60
26	1H	745	G	C2-N3-C4	-7.81	108.00	111.90
26	1H	2002	G	OP2-P-O3'	7.81	122.38	105.20
26	1H	2051	A	N1-C2-N3	7.81	133.20	129.30
26	1H	2642	G	N3-C2-N2	7.81	125.36	119.90
27	16	14	U	OP1-P-OP2	7.81	131.31	119.60
1	1G	1071	C	C6-N1-C2	-7.81	117.18	120.30
26	14	584	C	N3-C4-N4	7.81	123.47	118.00
26	14	1433	U	N3-C2-O2	7.81	127.67	122.20
26	14	2316	C	O5'-P-OP1	-7.81	98.67	105.70
26	14	2882	A	N7-C8-N9	-7.81	109.90	113.80
26	14	681	G	C8-N9-C4	7.81	109.52	106.40
1	13	1195	C	C5-C6-N1	7.80	124.90	121.00
1	13	1237	C	C6-N1-C2	-7.80	117.18	120.30
26	1H	128	C	C5-C4-N4	-7.80	114.74	120.20
26	1H	423	A	N7-C8-N9	-7.80	109.90	113.80
26	1H	1139	G	N7-C8-N9	-7.80	109.20	113.10
26	1H	2845	G	N9-C4-C5	7.80	108.52	105.40
26	14	819	A	C4-C5-N7	-7.80	106.80	110.70
26	14	1844	C	OP1-P-OP2	-7.80	107.89	119.60
26	14	2429	G	C5-C6-O6	-7.80	123.92	128.60
26	1H	463	G	C8-N9-C4	7.80	109.52	106.40
26	1H	2502	G	N1-C2-N3	7.80	128.58	123.90
26	14	2466	C	OP2-P-O3'	7.80	122.37	105.20
1	13	1239	A	C5-C6-N1	-7.80	113.80	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2061	G	N1-C6-O6	-7.80	115.22	119.90
26	14	217	G	O5'-P-OP1	-7.80	98.68	105.70
26	14	2033	A	C2-N3-C4	7.80	114.50	110.60
26	1H	205	G	C5-C6-O6	-7.80	123.92	128.60
26	1H	1298	C	C6-N1-C2	-7.80	117.18	120.30
1	1G	28	G	C8-N9-C4	-7.80	103.28	106.40
26	1H	2534	A	N1-C6-N6	7.80	123.28	118.60
1	13	952	U	C5-C4-O4	7.80	130.58	125.90
1	13	1097	C	N3-C2-O2	-7.80	116.44	121.90
26	1H	1271	G	C8-N9-C1'	-7.80	116.86	127.00
26	14	1780	A	C6-N1-C2	-7.80	113.92	118.60
26	14	1793	C	C6-N1-C2	-7.80	117.18	120.30
26	1H	1974	C	N1-C2-O2	7.79	123.58	118.90
26	1H	2456	C	C4-C5-C6	7.79	121.30	117.40
1	13	692	U	N1-C2-N3	7.79	119.58	114.90
26	1H	856	C	N3-C2-O2	7.79	127.36	121.90
26	1H	2256	G	C5-C6-O6	7.79	133.28	128.60
1	1G	894	G	C5-C6-N1	-7.79	107.60	111.50
26	14	1294	U	C5-C4-O4	-7.79	121.22	125.90
27	1J	29	A	C5-N7-C8	-7.79	100.00	103.90
26	1H	25	U	C5-C6-N1	-7.79	118.80	122.70
26	1H	28	A	C4-C5-N7	7.79	114.59	110.70
26	1H	576	U	N3-C4-C5	7.79	119.28	114.60
26	1H	740	U	C5-C6-N1	-7.79	118.80	122.70
26	1H	1438	U	C6-N1-C2	-7.79	116.33	121.00
26	1H	1766	U	N1-C2-O2	-7.79	117.34	122.80
26	1H	2218	G	C5-C6-O6	-7.79	123.92	128.60
26	1H	2224	G	N3-C2-N2	-7.79	114.45	119.90
26	1H	2623	G	N3-C4-C5	-7.79	124.70	128.60
1	13	811	C	N3-C4-N4	-7.79	112.55	118.00
26	1H	142	G	C4-N9-C1'	-7.79	116.37	126.50
26	1H	2701	C	N3-C4-N4	-7.79	112.55	118.00
1	13	1224	G	O5'-P-OP1	7.79	120.05	110.70
1	13	1356	G	N7-C8-N9	7.79	117.00	113.10
26	1H	702	G	C5-C6-N1	-7.79	107.61	111.50
26	1H	1685	C	C2-N3-C4	-7.79	116.01	119.90
1	1G	584	G	N3-C4-C5	7.79	132.50	128.60
26	14	690	G	C5-C6-N1	-7.79	107.61	111.50
26	14	2243	U	O5'-P-OP1	-7.79	98.69	105.70
26	14	2595	G	N9-C4-C5	-7.79	102.28	105.40
26	1H	470	A	C4-C5-N7	7.79	114.59	110.70
26	1H	415	A	O5'-P-OP2	-7.79	98.69	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1929	G	C8-N9-C4	7.79	109.51	106.40
26	1H	2295	C	N3-C2-O2	-7.79	116.45	121.90
27	16	96	G	C2-N3-C4	7.79	115.79	111.90
26	14	25	U	N3-C4-O4	7.79	124.85	119.40
26	14	121	G	C6-N1-C2	-7.79	120.43	125.10
26	14	332	A	O5'-P-OP2	-7.79	98.69	105.70
26	14	1808	U	C5-C4-O4	-7.79	121.23	125.90
26	14	2421	G	N1-C6-O6	-7.79	115.23	119.90
26	14	2446	G	N1-C6-O6	-7.79	115.23	119.90
26	1H	136	G	N1-C2-N2	7.78	123.20	116.20
26	1H	138	G	N3-C2-N2	7.78	125.35	119.90
26	1H	1686	C	C5-C6-N1	-7.78	117.11	121.00
26	14	197	A	C4-C5-N7	7.78	114.59	110.70
26	14	679	C	C2-N3-C4	-7.78	116.01	119.90
26	14	1284	A	N9-C4-C5	-7.78	102.69	105.80
26	14	1702	G	C2-N3-C4	-7.78	108.01	111.90
26	14	1817	G	C6-N1-C2	7.78	129.77	125.10
26	14	2862	G	C5-C6-O6	-7.78	123.93	128.60
1	13	232	G	C5-C6-N1	-7.78	107.61	111.50
1	13	477	G	N3-C4-C5	7.78	132.49	128.60
26	14	974	G	C5-C6-N1	7.78	115.39	111.50
26	1H	990	A	C6-N1-C2	7.78	123.27	118.60
26	1H	1125	G	C5-N7-C8	7.78	108.19	104.30
26	1H	1329	U	N3-C4-C5	-7.78	109.93	114.60
1	1G	977	A	C2-N3-C4	7.78	114.49	110.60
1	1G	1502	A	C2-N3-C4	-7.78	106.71	110.60
26	14	707	G	N1-C6-O6	7.78	124.57	119.90
26	1H	946	G	OP1-P-OP2	-7.78	107.93	119.60
26	1H	2729	G	N1-C2-N3	7.78	128.57	123.90
26	1H	436	C	C2-N3-C4	7.78	123.79	119.90
26	1H	567	A	C8-N9-C4	-7.78	102.69	105.80
26	1H	866	A	C8-N9-C4	7.78	108.91	105.80
26	1H	1284	A	OP1-P-OP2	7.78	131.27	119.60
26	1H	1451	C	C6-N1-C2	7.78	123.41	120.30
26	1H	1768	U	N1-C2-N3	-7.78	110.23	114.90
26	1H	2082	A	N1-C2-N3	7.78	133.19	129.30
26	1H	2490	G	N9-C4-C5	7.78	108.51	105.40
26	14	301	G	OP1-P-OP2	7.78	131.27	119.60
26	14	1957	C	N3-C2-O2	7.78	127.34	121.90
26	14	2248	C	N3-C4-C5	-7.78	118.79	121.90
1	13	492	G	N3-C2-N2	-7.78	114.46	119.90
1	13	1388	C	N3-C2-O2	7.78	127.34	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2351	G	N3-C2-N2	7.78	125.34	119.90
26	14	215	G	N9-C4-C5	-7.78	102.29	105.40
26	14	250	G	O5'-P-OP1	-7.78	98.70	105.70
26	14	774	A	C6-C5-N7	-7.78	126.86	132.30
26	14	1655	A	C5-N7-C8	7.78	107.79	103.90
26	14	2432	A	C4-C5-N7	7.78	114.59	110.70
27	1J	47	C	C6-N1-C2	7.78	123.41	120.30
1	13	1430	C	C4-C5-C6	7.77	121.29	117.40
26	1H	629	G	N7-C8-N9	-7.77	109.21	113.10
26	1H	632	A	N7-C8-N9	7.77	117.69	113.80
1	1G	678	U	C5-C6-N1	-7.77	118.81	122.70
26	1H	833	U	N1-C2-O2	-7.77	117.36	122.80
26	1H	842	G	C5-N7-C8	-7.77	100.41	104.30
26	1H	860	U	C4-C5-C6	7.77	124.36	119.70
26	1H	910	A	N1-C6-N6	7.77	123.26	118.60
26	1H	1191	G	C5-N7-C8	7.77	108.19	104.30
26	1H	2219	G	N1-C6-O6	7.77	124.56	119.90
26	1H	2550	G	C5-N7-C8	-7.77	100.41	104.30
26	1H	2660	A	OP1-P-OP2	-7.77	107.94	119.60
26	1H	2889	C	N1-C2-O2	-7.77	114.24	118.90
26	1H	347	A	C6-N1-C2	7.77	123.26	118.60
26	1H	704	G	N9-C4-C5	7.77	108.51	105.40
26	1H	1397	U	N3-C4-C5	-7.77	109.94	114.60
26	1H	1477	A	OP2-P-O3'	7.77	122.30	105.20
26	1H	1999	C	C5-C6-N1	-7.77	117.11	121.00
26	14	1687	G	N3-C4-C5	7.77	132.49	128.60
26	14	2570	G	C6-C5-N7	-7.77	125.74	130.40
1	13	9	G	C4-C5-N7	7.77	113.91	110.80
1	13	908	A	N9-C4-C5	7.77	108.91	105.80
1	13	1269	A	C5-C6-N1	7.77	121.58	117.70
26	1H	705	A	C4-C5-N7	7.77	114.58	110.70
26	1H	727	A	O5'-P-OP1	-7.77	98.71	105.70
26	1H	1381	G	N3-C4-N9	-7.77	121.34	126.00
26	1H	1553	A	N3-C4-C5	-7.77	121.36	126.80
26	14	381	G	OP1-P-OP2	7.77	131.25	119.60
26	14	951	C	OP1-P-O3'	7.77	122.29	105.20
26	1H	1352	U	N3-C2-O2	7.77	127.64	122.20
26	1H	1823	G	N7-C8-N9	7.77	116.98	113.10
26	1H	1967	C	N3-C2-O2	-7.77	116.46	121.90
22	1K	76	A	C4-C5-N7	7.77	114.58	110.70
26	1H	944	G	OP1-P-OP2	7.77	131.25	119.60
26	1H	2271	G	N3-C4-C5	-7.77	124.72	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1276	A	C8-N9-C4	-7.77	102.69	105.80
26	14	2676	C	N3-C4-C5	7.77	125.01	121.90
26	14	2685	G	C8-N9-C4	7.77	109.51	106.40
1	13	878	G	N3-C2-N2	7.76	125.33	119.90
1	13	1351	U	N1-C2-O2	-7.76	117.36	122.80
26	1H	325	G	N1-C6-O6	-7.76	115.24	119.90
26	1H	535	C	C2-N1-C1'	-7.76	110.26	118.80
26	1H	576	U	N1-C2-O2	-7.76	117.37	122.80
26	1H	706	A	OP1-P-OP2	-7.76	107.95	119.60
26	1H	1247	A	N1-C6-N6	7.76	123.26	118.60
26	1H	2545	G	N1-C6-O6	-7.76	115.24	119.90
26	1H	2561	A	N3-C4-N9	-7.76	121.19	127.40
27	16	90	C	C6-N1-C2	-7.76	117.19	120.30
26	14	1369	G	C5-N7-C8	7.76	108.18	104.30
26	14	1449(A)	G	O5'-P-OP2	-7.76	98.71	105.70
26	14	1776	G	N1-C2-N3	7.76	128.56	123.90
26	14	1950	G	O4'-C1'-N9	7.76	114.41	108.20
1	13	417	C	N1-C2-O2	7.76	123.56	118.90
26	1H	127	A	OP1-P-OP2	7.76	131.24	119.60
1	1G	18	C	N3-C4-N4	7.76	123.43	118.00
26	14	2365	G	N3-C2-N2	7.76	125.33	119.90
1	13	338	A	N1-C6-N6	7.76	123.26	118.60
26	1H	1429	G	N3-C2-N2	7.76	125.33	119.90
26	1H	2026	C	C5-C6-N1	-7.76	117.12	121.00
26	1H	80	G	N1-C6-O6	-7.76	115.25	119.90
26	1H	402	A	N1-C2-N3	7.76	133.18	129.30
26	1H	1346	G	C5-C6-O6	7.76	133.25	128.60
26	1H	1455	G	O5'-P-OP2	-7.76	98.72	105.70
26	1H	2530	A	N1-C6-N6	7.76	123.25	118.60
26	14	1701	A	C5-C6-N1	7.76	121.58	117.70
1	13	762	C	N3-C4-C5	7.76	125.00	121.90
26	1H	2820	A	O5'-P-OP2	-7.76	98.72	105.70
27	16	102	G	N7-C8-N9	-7.76	109.22	113.10
1	1G	535	A	N1-C6-N6	-7.76	113.95	118.60
1	1G	1408	A	N9-C4-C5	7.76	108.90	105.80
26	14	559	G	C8-N9-C4	7.76	109.50	106.40
26	14	1813	G	C4-C5-N7	-7.76	107.70	110.80
26	14	2438	U	C5-C6-N1	-7.76	118.82	122.70
1	13	966	G	N3-C4-N9	7.75	130.65	126.00
27	16	48	A	C5-C6-N1	7.75	121.58	117.70
26	14	1827	C	N1-C2-O2	7.75	123.55	118.90
26	1H	288	C	N3-C4-N4	7.75	123.43	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1436	G	C2-N3-C4	7.75	115.78	111.90
26	1H	1922	G	N7-C8-N9	-7.75	109.22	113.10
26	1H	2312	U	N1-C2-O2	-7.75	117.37	122.80
1	1G	53	A	C4-C5-N7	7.75	114.58	110.70
26	14	25	U	N3-C2-O2	7.75	127.63	122.20
26	14	578	A	OP2-P-O3'	7.75	122.26	105.20
26	14	785	G	N9-C4-C5	7.75	108.50	105.40
26	14	1292	U	O5'-P-OP2	-7.75	98.72	105.70
26	14	1695	G	C4-C5-C6	7.75	123.45	118.80
1	13	628	G	C5-C6-N1	-7.75	107.62	111.50
26	1H	910	A	C5-C6-N1	-7.75	113.82	117.70
26	1H	931	G	N3-C4-N9	7.75	130.65	126.00
26	1H	2573	C	C2-N3-C4	-7.75	116.03	119.90
1	1G	911	U	C5-C4-O4	7.75	130.55	125.90
26	14	1136	G	N9-C4-C5	-7.75	102.30	105.40
26	14	2489	G	C5-C6-O6	-7.75	123.95	128.60
26	1H	250	G	C5-N7-C8	-7.75	100.42	104.30
26	1H	524	U	C5-C6-N1	-7.75	118.83	122.70
26	1H	2277	G	N1-C6-O6	-7.75	115.25	119.90
1	1G	352	C	N3-C2-O2	-7.75	116.47	121.90
26	14	666	G	N7-C8-N9	-7.75	109.22	113.10
1	13	1290	G	C8-N9-C4	-7.75	103.30	106.40
26	1H	2071	A	N1-C6-N6	7.75	123.25	118.60
26	1H	2272	U	C6-N1-C2	7.75	125.65	121.00
26	1H	2325	G	O5'-P-OP1	-7.75	98.73	105.70
26	14	481	G	O5'-P-OP2	-7.75	98.73	105.70
26	14	1619	G	C6-N1-C2	-7.75	120.45	125.10
26	14	1762	A	C4-C5-N7	7.75	114.58	110.70
26	14	1986	A	C4-C5-C6	7.75	120.87	117.00
26	14	2603	G	N3-C2-N2	7.75	125.32	119.90
44	A5	77	ASP	CB-CG-OD1	7.75	125.27	118.30
26	1H	399	G	N7-C8-N9	-7.75	109.23	113.10
26	1H	663	G	N1-C6-O6	7.75	124.55	119.90
26	1H	1463	C	N1-C2-O2	-7.75	114.25	118.90
26	1H	1637	A	C2-N3-C4	7.75	114.47	110.60
26	1H	2089	U	N1-C2-O2	-7.75	117.38	122.80
26	14	2777	G	C5-C6-N1	-7.75	107.63	111.50
1	13	1533	C	N3-C2-O2	-7.74	116.48	121.90
26	1H	1625	C	N3-C4-N4	-7.74	112.58	118.00
26	1H	2538	C	O5'-P-OP2	-7.74	98.73	105.70
26	14	405	U	N1-C2-O2	7.74	128.22	122.80
26	14	821	A	N1-C2-N3	7.74	133.17	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1187	G	N3-C2-N2	-7.74	114.48	119.90
1	13	1524	C	C2-N3-C4	-7.74	116.03	119.90
26	1H	431	U	N3-C4-O4	7.74	124.82	119.40
26	1H	2643	G	C5-C6-O6	-7.74	123.95	128.60
26	1H	2747	G	C4-C5-N7	7.74	113.90	110.80
27	16	60	C	N1-C2-O2	7.74	123.55	118.90
26	14	435	C	OP1-P-OP2	7.74	131.21	119.60
26	14	2387	U	O5'-P-OP2	-7.74	98.73	105.70
1	13	21	G	C5-C6-N1	-7.74	107.63	111.50
1	13	227	G	N3-C4-C5	7.74	132.47	128.60
26	1H	328	U	N1-C2-O2	-7.74	117.38	122.80
26	1H	1182	A	N1-C6-N6	7.74	123.24	118.60
26	1H	2495	G	C2-N3-C4	-7.74	108.03	111.90
27	16	109	G	O5'-P-OP1	-7.74	98.73	105.70
1	1G	913	A	C6-N1-C2	-7.74	113.96	118.60
26	14	2067	G	C4-C5-C6	7.74	123.44	118.80
26	14	2226	C	N1-C2-O2	7.74	123.55	118.90
26	14	2459	A	O5'-P-OP2	-7.74	98.73	105.70
26	1H	335	C	N3-C4-C5	-7.74	118.81	121.90
1	1G	858	G	C5-N7-C8	-7.74	100.43	104.30
26	14	340	A	N1-C6-N6	-7.74	113.96	118.60
26	1H	1449(A)	G	C4-C5-N7	-7.74	107.70	110.80
26	1H	1861	G	C4-C5-N7	-7.74	107.70	110.80
1	1G	1507	A	C6-N1-C2	-7.74	113.96	118.60
26	1H	273(A)	G	C2-N3-C4	-7.74	108.03	111.90
26	1H	379	G	N3-C4-C5	-7.74	124.73	128.60
26	1H	501	A	O5'-P-OP2	-7.74	98.74	105.70
26	1H	772	C	N3-C4-C5	-7.74	118.81	121.90
26	1H	2611	U	C5-C4-O4	7.74	130.54	125.90
26	1H	2699	C	C2-N3-C4	-7.74	116.03	119.90
25	4L	14	A	C5-C6-N1	7.74	121.57	117.70
26	14	1145	C	C6-N1-C2	-7.74	117.21	120.30
26	14	1305	C	C2-N3-C4	-7.74	116.03	119.90
26	14	2324	C	N3-C4-C5	7.74	125.00	121.90
26	1H	1787	A	C2-N3-C4	-7.73	106.73	110.60
26	14	1554	A	O5'-P-OP2	-7.73	98.74	105.70
26	14	2371	G	C8-N9-C4	7.73	109.49	106.40
1	13	547	A	C5-C6-N1	7.73	121.57	117.70
26	1H	1352	U	N3-C4-C5	7.73	119.24	114.60
26	1H	1378	A	C8-N9-C4	7.73	108.89	105.80
26	1H	2373	G	C6-C5-N7	-7.73	125.76	130.40
1	1G	760	G	O5'-P-OP2	-7.73	98.74	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	486	C	N3-C4-N4	7.73	123.41	118.00
26	14	2739	U	OP1-P-OP2	7.73	131.20	119.60
26	1H	102	G	OP1-P-O3'	7.73	122.21	105.20
26	1H	2409	G	C6-C5-N7	-7.73	125.76	130.40
57	3L	2	G	N3-C4-C5	7.73	132.47	128.60
26	14	208	C	OP1-P-OP2	7.73	131.20	119.60
26	14	251	A	N9-C4-C5	7.73	108.89	105.80
26	14	564	C	N1-C2-O2	-7.73	114.26	118.90
26	14	699	A	N7-C8-N9	-7.73	109.94	113.80
26	14	1980	G	C5-C6-N1	7.73	115.37	111.50
26	1H	54	G	N7-C8-N9	7.73	116.96	113.10
26	1H	250	G	C4-C5-N7	7.73	113.89	110.80
26	1H	146	G	N9-C4-C5	-7.73	102.31	105.40
26	14	759	G	N1-C2-N2	7.73	123.15	116.20
26	14	1252	G	C5-C6-N1	7.73	115.36	111.50
26	1H	805	G	C2-N3-C4	-7.73	108.04	111.90
26	1H	1618	A	C6-C5-N7	-7.73	126.89	132.30
26	1H	1885	A	C8-N9-C4	7.73	108.89	105.80
26	1H	2408	U	C5-C6-N1	-7.73	118.84	122.70
26	14	1357	U	O5'-P-OP1	-7.73	98.75	105.70
26	1H	258	G	C5-C6-N1	7.72	115.36	111.50
26	1H	752	A	N1-C2-N3	7.72	133.16	129.30
26	1H	2339	G	C5-C6-O6	7.72	133.23	128.60
26	1H	2345	G	C2-N3-C4	-7.72	108.04	111.90
26	14	1229(A)	G	N1-C2-N3	7.72	128.53	123.90
26	14	1517	G	C8-N9-C4	-7.72	103.31	106.40
26	14	1689	A	C2-N3-C4	-7.72	106.74	110.60
1	13	305	G	O4'-C1'-N9	-7.72	102.02	108.20
26	1H	188	G	C8-N9-C4	7.72	109.49	106.40
26	1H	406	G	C5-C6-O6	7.72	133.23	128.60
26	1H	2266	A	OP1-P-OP2	-7.72	108.02	119.60
26	1H	2625	G	C8-N9-C4	7.72	109.49	106.40
1	1G	809	G	C4-C5-N7	7.72	113.89	110.80
1	13	925	G	C4-C5-C6	7.72	123.43	118.80
26	1H	658	C	C5-C6-N1	-7.72	117.14	121.00
23	2K	7	G	C5-N7-C8	-7.72	100.44	104.30
26	1H	659	C	C2-N3-C4	-7.72	116.04	119.90
26	14	1633	G	O5'-P-OP1	-7.72	98.75	105.70
26	14	2376	A	C8-N9-C4	7.72	108.89	105.80
1	1G	969	A	O5'-P-OP2	-7.72	98.75	105.70
26	14	2208	U	C6-N1-C2	7.72	125.63	121.00
26	1H	1496	A	N1-C2-N3	-7.72	125.44	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1636	C	N1-C2-O2	-7.72	114.27	118.90
26	1H	1667	G	O5'-P-OP1	-7.72	98.76	105.70
26	1H	2597	G	N1-C6-O6	7.72	124.53	119.90
26	14	426	C	N3-C2-O2	-7.72	116.50	121.90
26	14	562	U	C5-C6-N1	-7.72	118.84	122.70
26	14	1597	A	O5'-P-OP2	-7.72	98.76	105.70
26	14	2452	C	N3-C2-O2	7.72	127.30	121.90
26	14	2457	U	OP1-P-O3'	-7.72	88.22	105.20
26	1H	574	C	N3-C4-C5	-7.71	118.81	121.90
26	1H	1609	A	C8-N9-C4	7.71	108.89	105.80
26	1H	2484	G	N9-C4-C5	-7.71	102.31	105.40
27	16	14	U	C5-C6-N1	-7.71	118.84	122.70
26	14	388	G	O5'-P-OP2	-7.71	98.76	105.70
26	14	600	G	C6-C5-N7	-7.71	125.77	130.40
26	14	732	C	N1-C2-O2	-7.71	114.27	118.90
26	14	785	G	N1-C6-O6	-7.71	115.27	119.90
26	14	1252	G	N7-C8-N9	-7.71	109.24	113.10
26	14	1309	G	O5'-P-OP2	-7.71	98.76	105.70
26	1H	2466	C	C6-N1-C2	7.71	123.39	120.30
1	1G	1449	C	C2-N1-C1'	7.71	127.28	118.80
1	13	481	G	C2-N3-C4	-7.71	108.05	111.90
1	13	503	C	N3-C4-N4	7.71	123.40	118.00
1	13	517	G	O5'-P-OP2	-7.71	98.76	105.70
26	1H	996	A	N1-C2-N3	7.71	133.16	129.30
26	1H	2023	G	N1-C2-N3	7.71	128.53	123.90
1	13	690	G	O5'-P-OP1	-7.71	98.76	105.70
26	1H	26	G	C5-C6-N1	-7.71	107.64	111.50
26	1H	1337	G	C8-N9-C4	-7.71	103.32	106.40
26	1H	1373	A	N1-C6-N6	-7.71	113.97	118.60
26	1H	2844	G	C8-N9-C4	-7.71	103.32	106.40
27	16	77	U	N3-C4-C5	7.71	119.23	114.60
26	14	1342	A	O4'-C1'-N9	7.71	114.37	108.20
26	14	1629	U	N3-C4-O4	7.71	124.80	119.40
1	13	521	G	N9-C4-C5	-7.71	102.32	105.40
26	1H	1252	G	O4'-C1'-N9	-7.71	102.03	108.20
26	14	373	U	N1-C2-N3	-7.71	110.28	114.90
26	14	1929	G	OP1-P-OP2	7.71	131.16	119.60
1	13	294	U	OP2-P-O3'	7.71	122.15	105.20
26	1H	1670	C	N3-C4-N4	7.71	123.39	118.00
26	1H	2234	G	C2-N3-C4	-7.71	108.05	111.90
26	1H	36	G	C4-C5-N7	-7.70	107.72	110.80
26	1H	1823	G	C6-C5-N7	-7.70	125.78	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2242	G	C5-C6-O6	-7.70	123.98	128.60
26	1H	2416	C	O5'-P-OP2	-7.70	98.77	105.70
26	14	1431	U	N3-C4-C5	7.70	119.22	114.60
26	14	2244	U	C6-N1-C1'	7.70	131.99	121.20
26	1H	2057	A	O5'-P-OP2	-7.70	98.77	105.70
26	14	1446	C	N3-C2-O2	-7.70	116.51	121.90
1	13	869	G	C6-C5-N7	-7.70	125.78	130.40
1	13	892	A	C5-C6-N1	-7.70	113.85	117.70
26	1H	137(A)	G	N3-C2-N2	-7.70	114.51	119.90
26	1H	975	G	N3-C2-N2	-7.70	114.51	119.90
26	14	1338	G	OP1-P-OP2	-7.70	108.05	119.60
26	14	1612	C	N3-C4-N4	7.70	123.39	118.00
26	14	1784	A	N1-C2-N3	7.70	133.15	129.30
26	14	2336	A	N1-C6-N6	-7.70	113.98	118.60
26	14	2392	A	C6-N1-C2	7.70	123.22	118.60
1	13	362	G	C5-N7-C8	-7.70	100.45	104.30
26	1H	767	U	OP1-P-OP2	7.70	131.15	119.60
26	1H	768	G	O5'-P-OP2	-7.70	98.77	105.70
26	1H	1394	U	C2-N3-C4	7.70	131.62	127.00
26	1H	1681	G	N1-C2-N3	-7.70	119.28	123.90
26	1H	1708	C	C6-N1-C2	7.70	123.38	120.30
26	1H	2297	C	N3-C4-C5	-7.70	118.82	121.90
26	1H	2879	C	OP1-P-OP2	-7.70	108.05	119.60
26	1H	835	A	N1-C6-N6	-7.70	113.98	118.60
26	1H	1678	G	N1-C2-N3	7.70	128.52	123.90
1	1G	24	U	O5'-P-OP1	-7.70	98.77	105.70
26	14	488	G	C8-N9-C4	7.70	109.48	106.40
26	14	2006	C	C5-C4-N4	-7.70	114.81	120.20
26	14	2718	G	N3-C2-N2	-7.70	114.51	119.90
1	13	863	U	C4-C5-C6	7.70	124.32	119.70
26	1H	140	A	OP2-P-O3'	7.70	122.13	105.20
26	1H	840	C	C6-N1-C2	7.70	123.38	120.30
26	1H	1162	G	C5-N7-C8	-7.70	100.45	104.30
26	1H	2819	G	N7-C8-N9	-7.70	109.25	113.10
26	14	213	A	N3-C4-C5	7.70	132.19	126.80
26	14	630	G	O5'-P-OP2	-7.70	98.77	105.70
26	14	1836	C	O5'-P-OP2	-7.70	98.77	105.70
27	1J	8	U	O5'-P-OP2	-7.70	98.78	105.70
27	1J	48	A	O5'-P-OP2	7.70	119.93	110.70
26	1H	500	G	N9-C4-C5	7.69	108.48	105.40
26	1H	820	A	C2-N3-C4	-7.69	106.75	110.60
26	1H	1734	C	C5-C6-N1	-7.69	117.15	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	304	U	C4-C5-C6	7.69	124.32	119.70
27	1J	39	A	C8-N9-C4	-7.69	102.72	105.80
26	1H	32	C	O5'-P-OP2	-7.69	98.78	105.70
26	1H	211	A	OP1-P-O3'	-7.69	88.28	105.20
26	1H	216	A	N1-C2-N3	7.69	133.15	129.30
26	1H	427	U	C6-N1-C2	-7.69	116.39	121.00
26	1H	428	A	OP1-P-O3'	7.69	122.12	105.20
26	1H	581	C	C5-C4-N4	7.69	125.58	120.20
26	1H	2083	G	C8-N9-C4	-7.69	103.32	106.40
27	16	7	G	N1-C2-N2	-7.69	109.28	116.20
26	14	440	G	O5'-P-OP1	-7.69	98.78	105.70
26	14	1210	A	N1-C6-N6	7.69	123.22	118.60
26	14	1583	A	C5-C6-N6	-7.69	117.55	123.70
26	14	2423	U	C2-N3-C4	-7.69	122.39	127.00
40	65	110	LEU	CB-CG-CD2	7.69	124.08	111.00
1	13	1402	C	C5-C4-N4	7.69	125.58	120.20
26	1H	130	C	C6-N1-C2	7.69	123.38	120.30
26	14	122	G	N7-C8-N9	-7.69	109.25	113.10
26	14	447	A	N1-C6-N6	-7.69	113.99	118.60
26	14	758	C	OP1-P-O3'	7.69	122.12	105.20
26	14	1970	A	N1-C6-N6	7.69	123.22	118.60
26	14	2447	G	C5-C6-O6	-7.69	123.99	128.60
1	13	843	U	C2-N1-C1'	7.69	126.93	117.70
26	1H	1827	C	N3-C2-O2	-7.69	116.52	121.90
26	14	182	A	OP2-P-O3'	7.69	122.12	105.20
26	1H	110	G	N9-C4-C5	-7.69	102.33	105.40
26	1H	2083	G	C6-C5-N7	-7.69	125.79	130.40
23	2L	77	A	C8-N9-C4	7.69	108.88	105.80
26	14	1344	G	N1-C6-O6	7.69	124.51	119.90
26	14	1805	U	OP2-P-O3'	7.69	122.11	105.20
26	14	2287	A	N3-C4-N9	-7.69	121.25	127.40
26	1H	1693	U	N1-C2-O2	7.68	128.18	122.80
26	1H	2740	A	N1-C6-N6	7.68	123.21	118.60
36	68	106	LEU	CB-CG-CD2	-7.68	97.94	111.00
26	14	915	C	N1-C2-O2	7.68	123.51	118.90
26	14	2313	C	C5-C6-N1	7.68	124.84	121.00
1	13	1427	U	OP2-P-O3'	7.68	122.10	105.20
26	1H	195	A	N9-C4-C5	-7.68	102.73	105.80
26	1H	1363	C	C5-C4-N4	7.68	125.58	120.20
26	14	1024	G	N1-C6-O6	7.68	124.51	119.90
26	1H	202	U	C5-C4-O4	-7.68	121.29	125.90
26	1H	1380	G	OP1-P-OP2	7.68	131.12	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1571	A	N7-C8-N9	-7.68	109.96	113.80
26	14	2639	A	C8-N9-C4	7.68	108.87	105.80
1	13	1276	G	C8-N9-C4	-7.68	103.33	106.40
26	1H	217	G	O5'-P-OP1	-7.68	98.79	105.70
26	1H	478	A	N3-C4-C5	-7.68	121.42	126.80
1	1G	191(F)	U	C6-N1-C2	-7.68	116.39	121.00
26	14	1769	G	N3-C4-N9	7.68	130.61	126.00
27	1J	18	G	C5-C6-N1	-7.68	107.66	111.50
26	1H	318	C	OP1-P-O3'	7.68	122.09	105.20
26	1H	2449	U	N1-C2-O2	-7.68	117.43	122.80
26	14	834	C	O5'-P-OP2	-7.68	98.79	105.70
1	13	442	C	C5-C6-N1	7.68	124.84	121.00
1	1G	250	A	N1-C6-N6	7.68	123.21	118.60
26	14	218	A	OP1-P-OP2	7.68	131.12	119.60
26	14	479	A	C8-N9-C4	7.68	108.87	105.80
26	14	1216	G	C4-C5-C6	7.68	123.41	118.80
26	14	2685	G	N3-C4-C5	7.68	132.44	128.60
1	13	305	G	C5-N7-C8	7.67	108.14	104.30
1	13	674	G	O5'-P-OP1	-7.67	98.79	105.70
26	1H	532	A	OP1-P-OP2	7.67	131.11	119.60
26	1H	684	G	C5-C6-N1	7.67	115.34	111.50
23	2K	38	A	C2-N3-C4	-7.67	106.76	110.60
26	14	430	G	O5'-P-OP1	-7.67	98.79	105.70
26	14	594	U	OP2-P-O3'	7.67	122.08	105.20
1	13	666	G	C4-C5-N7	7.67	113.87	110.80
1	13	678	U	N3-C2-O2	7.67	127.57	122.20
26	1H	1043	C	C6-N1-C2	-7.67	117.23	120.30
26	14	1463	C	OP1-P-OP2	7.67	131.11	119.60
1	13	1279	A	C2-N3-C4	-7.67	106.77	110.60
26	1H	107	C	N3-C2-O2	7.67	127.27	121.90
26	1H	1274	A	C6-C5-N7	-7.67	126.93	132.30
1	1G	244	U	C6-N1-C2	7.67	125.60	121.00
26	14	1568	G	C5-C6-O6	-7.67	124.00	128.60
1	13	542	G	C5-C6-O6	-7.67	124.00	128.60
26	1H	1344	G	C5-N7-C8	-7.67	100.47	104.30
26	1H	1356	G	C5-C6-O6	-7.67	124.00	128.60
26	1H	2251	G	C5-N7-C8	7.67	108.13	104.30
26	14	2443	C	N3-C4-C5	-7.67	118.83	121.90
26	14	2612	C	C4-C5-C6	-7.67	113.57	117.40
1	13	777	A	C8-N9-C4	-7.67	102.73	105.80
26	1H	271	G	O5'-P-OP1	-7.67	98.80	105.70
26	1H	453	C	N3-C2-O2	7.67	127.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1926	U	N3-C2-O2	-7.67	116.83	122.20
26	1H	2224	G	C5-N7-C8	-7.67	100.47	104.30
26	14	149	A	OP1-P-OP2	-7.67	108.10	119.60
26	14	2039	C	N1-C2-O2	7.67	123.50	118.90
26	1H	13	A	N1-C6-N6	7.67	123.20	118.60
26	1H	87	C	C6-N1-C2	-7.66	117.23	120.30
26	1H	197	A	OP2-P-O3'	7.66	122.06	105.20
26	1H	1929	G	C5-C6-O6	7.66	133.20	128.60
26	1H	1969	A	N1-C6-N6	-7.66	114.00	118.60
26	14	843	G	C8-N9-C4	7.66	109.47	106.40
26	14	919	G	N3-C4-C5	-7.66	124.77	128.60
26	14	1282	U	C5-C6-N1	-7.66	118.87	122.70
26	14	1759	A	OP1-P-OP2	7.66	131.09	119.60
26	14	2416	C	O5'-P-OP2	-7.66	98.80	105.70
1	13	554	C	C5-C6-N1	7.66	124.83	121.00
23	2K	12	G	C5-C6-N1	7.66	115.33	111.50
23	2K	45	A	N1-C6-N6	7.66	123.20	118.60
26	1H	2197	U	C6-N1-C2	-7.66	116.40	121.00
1	1G	521	G	C8-N9-C4	7.66	109.47	106.40
1	13	973	G	C8-N9-C4	-7.66	103.34	106.40
1	13	1471	G	N1-C2-N2	7.66	123.09	116.20
22	1K	42	A	N1-C6-N6	7.66	123.20	118.60
26	1H	506	G	N3-C4-C5	7.66	132.43	128.60
26	1H	799	G	C6-N1-C2	-7.66	120.50	125.10
26	1H	1891	G	N1-C6-O6	7.66	124.50	119.90
1	1G	360	A	N9-C4-C5	-7.66	102.74	105.80
26	14	1646	C	O5'-P-OP2	7.66	119.89	110.70
1	13	359	U	C5-C6-N1	-7.66	118.87	122.70
1	13	426	G	C5-C6-O6	7.66	133.19	128.60
1	13	623	C	O5'-P-OP1	7.66	119.89	110.70
26	1H	224	G	O5'-P-OP2	-7.66	98.81	105.70
26	1H	2484	G	C5-C6-N1	-7.66	107.67	111.50
26	14	2680	C	N3-C4-C5	7.66	124.96	121.90
26	1H	2581	G	C6-C5-N7	-7.66	125.81	130.40
26	14	447	A	N9-C4-C5	7.66	108.86	105.80
26	14	1348	G	C4-C5-N7	7.66	113.86	110.80
26	1H	332	A	N1-C6-N6	-7.66	114.01	118.60
26	1H	529	A	N1-C6-N6	7.66	123.19	118.60
26	1H	1957	C	C5-C6-N1	-7.66	117.17	121.00
26	14	2255	G	C4-C5-N7	-7.66	107.74	110.80
26	1H	1449	A	O5'-P-OP2	-7.65	98.81	105.70
26	14	2673	G	C2-N3-C4	-7.65	108.07	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	973	G	C4-C5-C6	7.65	123.39	118.80
26	1H	589	C	N3-C2-O2	-7.65	116.54	121.90
26	1H	738	G	C2-N3-C4	-7.65	108.07	111.90
26	1H	1226	G	C5-C6-O6	7.65	133.19	128.60
26	14	937	U	N1-C2-O2	-7.65	117.44	122.80
1	13	500	G	O5'-P-OP2	-7.65	98.81	105.70
1	13	798	G	C5-C6-O6	7.65	133.19	128.60
23	2K	27	G	N1-C6-O6	7.65	124.49	119.90
26	1H	265	A	C8-N9-C4	-7.65	102.74	105.80
26	1H	795	C	OP1-P-OP2	7.65	131.08	119.60
26	1H	2055	C	C4-C5-C6	7.65	121.23	117.40
26	1H	2055	C	C5-C4-N4	7.65	125.56	120.20
36	68	112	MET	CB-CG-SD	7.65	135.35	112.40
1	1G	6	G	N3-C2-N2	-7.65	114.55	119.90
26	14	947	G	N9-C4-C5	7.65	108.46	105.40
26	14	2042	A	O5'-P-OP2	-7.65	98.81	105.70
26	14	2525	G	C8-N9-C4	7.65	109.46	106.40
26	14	2870	C	N1-C2-N3	7.65	124.56	119.20
26	14	484	C	OP1-P-OP2	-7.65	108.13	119.60
26	14	1952	A	N1-C2-N3	7.65	133.12	129.30
1	13	251	G	C4-C5-N7	7.65	113.86	110.80
26	1H	718	A	N1-C6-N6	7.65	123.19	118.60
26	1H	845	G	N3-C2-N2	7.65	125.25	119.90
1	1G	400	C	C5-C6-N1	-7.65	117.18	121.00
1	1G	619	U	N3-C4-O4	-7.65	114.05	119.40
26	14	527	C	N3-C2-O2	-7.65	116.55	121.90
26	14	1827	C	N3-C4-C5	7.65	124.96	121.90
26	14	1842	G	C4-C5-N7	-7.65	107.74	110.80
26	14	2292	C	C5-C6-N1	-7.65	117.18	121.00
26	1H	917	A	N9-C4-C5	-7.65	102.74	105.80
26	1H	1329	U	C5-C4-O4	7.65	130.49	125.90
26	1H	1598	C	N1-C2-O2	7.65	123.49	118.90
26	14	2056	G	C6-C5-N7	-7.65	125.81	130.40
26	1H	775	G	C4-C5-C6	7.64	123.39	118.80
26	1H	1695	G	O5'-P-OP1	-7.64	98.82	105.70
26	1H	1816	G	C2-N3-C4	7.64	115.72	111.90
26	14	267	C	N3-C2-O2	-7.64	116.55	121.90
26	14	400	G	N7-C8-N9	7.64	116.92	113.10
26	14	2344	U	C5-C4-O4	7.64	130.49	125.90
1	13	305	G	C4-C5-N7	-7.64	107.74	110.80
1	13	817	C	C5-C6-N1	-7.64	117.18	121.00
1	13	856	C	C6-N1-C2	-7.64	117.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1246	A	OP1-P-OP2	7.64	131.06	119.60
26	1H	2240	C	N3-C4-N4	7.64	123.35	118.00
26	1H	2366	A	N9-C4-C5	7.64	108.86	105.80
26	1H	2406	U	O4'-C1'-N1	-7.64	102.09	108.20
26	1H	2550	G	N7-C8-N9	7.64	116.92	113.10
26	14	252	G	C6-C5-N7	7.64	134.99	130.40
26	14	630	G	N7-C8-N9	-7.64	109.28	113.10
26	14	1341	U	O5'-P-OP1	-7.64	98.82	105.70
26	14	2428	G	N9-C4-C5	7.64	108.46	105.40
26	14	2479	G	C8-N9-C4	-7.64	103.34	106.40
26	14	2506	U	N3-C2-O2	-7.64	116.85	122.20
41	75	93	ARG	NE-CZ-NH1	7.64	124.12	120.30
26	1H	1370	C	O5'-P-OP2	7.64	119.87	110.70
26	1H	1626	G	N7-C8-N9	7.64	116.92	113.10
26	14	2278	A	O5'-P-OP1	7.64	119.87	110.70
1	13	732	C	N3-C2-O2	-7.64	116.55	121.90
1	13	873	A	N9-C4-C5	7.64	108.86	105.80
26	1H	182	A	N1-C6-N6	7.64	123.18	118.60
26	1H	1197	G	C6-C5-N7	7.64	134.98	130.40
26	1H	1342	A	C4-C5-N7	7.64	114.52	110.70
26	14	1896	G	N1-C6-O6	-7.64	115.32	119.90
26	1H	1291	C	N1-C2-O2	7.64	123.48	118.90
26	14	51	G	N7-C8-N9	-7.64	109.28	113.10
26	14	189	G	C5-C6-O6	-7.64	124.02	128.60
26	14	541	C	C6-N1-C2	-7.64	117.25	120.30
26	1H	27	G	N1-C2-N2	-7.64	109.33	116.20
26	1H	481	G	OP2-P-O3'	7.64	122.00	105.20
26	1H	503	A	N7-C8-N9	-7.64	109.98	113.80
26	1H	729	G	N3-C4-C5	-7.64	124.78	128.60
26	1H	1871	A	C8-N9-C4	7.64	108.86	105.80
1	13	1202	G	C5-C6-O6	7.63	133.18	128.60
26	1H	647	G	C2-N3-C4	7.63	115.72	111.90
26	1H	1298	C	O5'-P-OP2	7.63	119.86	110.70
26	1H	1968	G	N3-C4-N9	7.63	130.58	126.00
26	1H	2310	A	C5-C6-N6	-7.63	117.59	123.70
26	1H	2679	A	N1-C6-N6	7.63	123.18	118.60
26	14	6	A	N1-C6-N6	-7.63	114.02	118.60
26	14	768	G	C8-N9-C4	-7.63	103.35	106.40
26	14	789	A	O5'-P-OP1	-7.63	98.83	105.70
26	14	801	G	O5'-P-OP2	-7.63	98.83	105.70
26	14	1987	G	N1-C6-O6	7.63	124.48	119.90
26	14	2192	G	N1-C6-O6	7.63	124.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2764	A	C5-N7-C8	7.63	107.72	103.90
26	1H	747	U	OP1-P-OP2	7.63	131.05	119.60
26	1H	2042	A	C5-C6-N1	-7.63	113.88	117.70
26	1H	2409	G	N1-C6-O6	7.63	124.48	119.90
26	1H	2728	U	N1-C2-O2	7.63	128.14	122.80
26	1H	2740	A	OP1-P-OP2	7.63	131.05	119.60
26	14	248	G	C5-C6-N1	7.63	115.32	111.50
26	14	819	A	N3-C4-C5	-7.63	121.46	126.80
26	1H	796	C	O5'-P-OP2	-7.63	98.83	105.70
26	1H	2283	C	C6-N1-C2	-7.63	117.25	120.30
26	1H	2711	A	C8-N9-C4	7.63	108.85	105.80
26	14	388	G	N3-C4-C5	7.63	132.41	128.60
26	14	663	G	N3-C2-N2	-7.63	114.56	119.90
26	14	1653	G	C6-N1-C2	-7.63	120.52	125.10
1	13	362	G	C2-N3-C4	-7.63	108.09	111.90
1	13	739	C	N3-C2-O2	7.63	127.24	121.90
1	13	798	G	C8-N9-C4	-7.63	103.35	106.40
1	13	827	U	N1-C2-O2	7.63	128.14	122.80
26	1H	247	G	N3-C4-C5	7.63	132.41	128.60
26	1H	1247	A	C2-N3-C4	-7.63	106.79	110.60
27	16	110	G	C8-N9-C4	-7.63	103.35	106.40
26	14	1762	A	C5-N7-C8	-7.63	100.09	103.90
26	14	1807	G	N1-C2-N3	-7.63	119.32	123.90
26	14	2578	G	C5-C6-O6	-7.63	124.02	128.60
1	13	1511	G	C2-N3-C4	-7.63	108.09	111.90
26	1H	1285	G	C5-C6-O6	-7.63	124.02	128.60
27	16	13	A	N1-C6-N6	-7.63	114.02	118.60
1	1G	317	G	O5'-P-OP1	-7.63	98.83	105.70
26	14	205	G	N1-C2-N2	-7.63	109.34	116.20
26	14	443	A	C8-N9-C4	-7.63	102.75	105.80
1	13	299	G	C5-C6-N1	-7.62	107.69	111.50
1	13	568	G	O5'-P-OP1	-7.62	98.84	105.70
26	1H	325	G	C4-C5-N7	-7.62	107.75	110.80
26	1H	524	U	N1-C2-N3	7.62	119.47	114.90
26	1H	563	G	N3-C2-N2	-7.62	114.56	119.90
26	14	819	A	N9-C4-C5	7.62	108.85	105.80
26	1H	237	C	C5-C6-N1	-7.62	117.19	121.00
26	1H	733	G	O5'-P-OP2	-7.62	98.84	105.70
26	1H	1595	G	N3-C2-N2	-7.62	114.56	119.90
26	1H	1958	C	OP1-P-O3'	7.62	121.97	105.20
26	1H	2331	G	C5-N7-C8	-7.62	100.49	104.30
26	1H	2557	G	OP2-P-O3'	7.62	121.97	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1264	G	C5-C6-O6	7.62	133.17	128.60
26	14	2401	U	C5-C4-O4	-7.62	121.33	125.90
1	13	139	G	C8-N9-C4	-7.62	103.35	106.40
1	13	798	G	C2-N3-C4	-7.62	108.09	111.90
26	1H	201	C	C2-N3-C4	-7.62	116.09	119.90
1	1G	132	C	C6-N1-C2	-7.62	117.25	120.30
26	14	308	G	N3-C2-N2	-7.62	114.56	119.90
26	14	1216	G	C5-C6-N1	-7.62	107.69	111.50
26	14	1322	A	C8-N9-C4	7.62	108.85	105.80
26	14	1602	U	C5-C4-O4	7.62	130.47	125.90
26	1H	196	A	C5-N7-C8	-7.62	100.09	103.90
26	1H	307	G	OP1-P-O3'	7.62	121.96	105.20
26	1H	1229	G	N7-C8-N9	-7.62	109.29	113.10
27	16	9	G	O5'-P-OP1	7.62	119.84	110.70
1	13	1277	C	C6-N1-C2	-7.62	117.25	120.30
26	1H	36	G	N1-C6-O6	-7.62	115.33	119.90
26	1H	957	A	C8-N9-C4	-7.62	102.75	105.80
26	1H	2224	G	N1-C6-O6	7.62	124.47	119.90
1	1G	688	G	C5-C6-O6	7.62	133.17	128.60
26	14	1277	G	N3-C4-C5	7.62	132.41	128.60
26	14	2219	G	C2-N3-C4	-7.62	108.09	111.90
26	1H	931	G	C6-N1-C2	-7.62	120.53	125.10
26	1H	2574	G	N1-C6-O6	-7.62	115.33	119.90
27	16	111	U	N1-C2-N3	7.62	119.47	114.90
1	1G	630	G	C2-N3-C4	7.62	115.71	111.90
1	1G	826	C	N1-C2-O2	7.62	123.47	118.90
26	14	210	C	O5'-P-OP1	7.62	119.84	110.70
26	14	1839	G	N9-C4-C5	-7.62	102.35	105.40
1	13	1371	G	O5'-P-OP2	7.62	119.84	110.70
1	13	1481	U	C4-C5-C6	7.62	124.27	119.70
26	1H	75	G	OP1-P-OP2	7.62	131.02	119.60
26	14	2315	G	N3-C2-N2	7.62	125.23	119.90
1	13	439	A	C2-N3-C4	-7.61	106.79	110.60
1	13	1432	G	OP1-P-OP2	7.61	131.02	119.60
26	1H	618(A)	C	C4-C5-C6	-7.61	113.59	117.40
26	1H	797	C	N3-C2-O2	-7.61	116.57	121.90
26	1H	1825	A	C5-N7-C8	7.61	107.71	103.90
26	1H	2129	C	C6-N1-C2	-7.61	117.25	120.30
26	1H	2251	G	N9-C4-C5	7.61	108.45	105.40
26	14	384	U	O5'-P-OP1	-7.61	98.85	105.70
26	14	471	A	C8-N9-C4	7.61	108.85	105.80
26	14	2280	G	N1-C6-O6	7.61	124.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	871	U	N3-C2-O2	-7.61	116.87	122.20
26	1H	2401	U	O5'-P-OP1	-7.61	98.85	105.70
26	1H	2689	U	N1-C2-N3	7.61	119.47	114.90
26	14	458	G	OP1-P-OP2	7.61	131.02	119.60
26	14	1355	G	N3-C4-C5	-7.61	124.79	128.60
1	13	1344	C	O5'-P-OP2	-7.61	98.85	105.70
26	1H	628	G	N7-C8-N9	-7.61	109.29	113.10
26	1H	1480	G	C8-N9-C4	-7.61	103.36	106.40
26	1H	1927	A	C8-N9-C4	-7.61	102.76	105.80
26	1H	2000	G	N9-C4-C5	-7.61	102.36	105.40
26	1H	2319	G	N3-C2-N2	7.61	125.23	119.90
26	1H	2497	A	N1-C2-N3	7.61	133.10	129.30
26	14	329	G	C6-N1-C2	-7.61	120.53	125.10
26	14	659	C	C2-N3-C4	-7.61	116.09	119.90
26	14	2373	G	N3-C2-N2	-7.61	114.57	119.90
26	14	2542	A	C5-N7-C8	7.61	107.70	103.90
26	1H	85	G	N1-C6-O6	7.61	124.47	119.90
26	14	2312	U	O5'-P-OP1	-7.61	98.85	105.70
1	13	318	G	O5'-P-OP2	-7.61	98.85	105.70
26	1H	756	C	N3-C2-O2	7.61	127.22	121.90
26	1H	1933	G	N3-C2-N2	-7.61	114.57	119.90
26	1H	2218	G	N3-C2-N2	-7.61	114.57	119.90
26	1H	2467	C	O5'-P-OP1	7.61	119.83	110.70
26	14	2070	G	O5'-P-OP2	-7.61	98.85	105.70
26	14	2549	G	C5-C6-O6	7.61	133.16	128.60
26	1H	275	G	C8-N9-C4	7.61	109.44	106.40
26	1H	780	G	C4-C5-C6	7.61	123.36	118.80
26	1H	1443	G	C8-N9-C4	-7.61	103.36	106.40
26	1H	1939	U	C2-N1-C1'	-7.61	108.57	117.70
26	1H	1971	A	OP1-P-O3'	7.61	121.93	105.20
26	1H	2089	U	C2-N3-C4	-7.61	122.44	127.00
26	14	1310	G	N3-C2-N2	-7.61	114.58	119.90
26	14	1313	U	C2-N1-C1'	7.61	126.83	117.70
23	2K	32	G	O5'-P-OP2	7.60	119.83	110.70
26	1H	551	G	N3-C4-C5	7.60	132.40	128.60
1	1G	617	G	N1-C6-O6	7.60	124.46	119.90
26	1H	237	C	N3-C2-O2	7.60	127.22	121.90
26	1H	771	G	O5'-P-OP1	-7.60	98.86	105.70
26	1H	843	G	N3-C2-N2	-7.60	114.58	119.90
26	1H	1571	A	O5'-P-OP1	7.60	119.82	110.70
26	1H	1792	G	O5'-P-OP2	7.60	119.82	110.70
26	1H	2628	C	N3-C4-C5	7.60	124.94	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2443	C	N1-C2-O2	-7.60	114.34	118.90
1	13	250	A	O5'-P-OP2	7.60	119.82	110.70
26	14	2712	U	N1-C2-N3	7.60	119.46	114.90
1	13	294	U	N1-C2-N3	7.60	119.46	114.90
1	13	918	A	N1-C6-N6	7.60	123.16	118.60
1	13	921	U	O5'-P-OP2	-7.60	98.86	105.70
26	1H	1426	G	N1-C6-O6	7.60	124.46	119.90
26	1H	2430	A	N1-C2-N3	7.60	133.10	129.30
26	14	270(Q)	C	N3-C4-C5	-7.60	118.86	121.90
26	14	312	G	C4-C5-N7	7.60	113.84	110.80
26	14	830	G	N1-C6-O6	7.60	124.46	119.90
26	14	1433	U	N1-C2-O2	-7.60	117.48	122.80
26	14	2032	G	C5-N7-C8	-7.60	100.50	104.30
26	14	2411	A	O5'-P-OP1	-7.60	98.86	105.70
1	13	1201	A	N1-C6-N6	7.60	123.16	118.60
26	1H	176	G	N1-C6-O6	7.60	124.46	119.90
26	1H	622	G	N3-C4-C5	-7.60	124.80	128.60
26	1H	1466	G	N3-C2-N2	-7.60	114.58	119.90
26	14	123	G	N1-C2-N3	7.60	128.46	123.90
26	14	809	G	C5-C6-O6	7.60	133.16	128.60
26	14	2084	C	N3-C2-O2	7.60	127.22	121.90
26	14	2430	A	N3-C4-N9	-7.60	121.32	127.40
26	14	2552	U	N3-C4-C5	7.60	119.16	114.60
1	13	574	A	N9-C4-C5	-7.59	102.76	105.80
26	1H	735	A	C6-C5-N7	-7.59	126.98	132.30
26	1H	2762	G	N1-C2-N3	7.59	128.46	123.90
26	1H	2772	C	OP2-P-O3'	7.59	121.91	105.20
26	14	458	G	N7-C8-N9	7.59	116.90	113.10
26	14	1671	U	N1-C2-N3	-7.59	110.34	114.90
26	14	2067	G	N1-C2-N3	7.59	128.46	123.90
27	1J	29	A	C4-C5-N7	7.59	114.50	110.70
26	1H	2724	C	N3-C4-C5	-7.59	118.86	121.90
26	14	2005	A	C5-N7-C8	7.59	107.70	103.90
26	14	2447	G	OP1-P-OP2	-7.59	108.21	119.60
27	1J	102	G	C6-C5-N7	7.59	134.96	130.40
1	13	867	G	N3-C4-C5	-7.59	124.80	128.60
1	13	925	G	C5-C6-N1	-7.59	107.70	111.50
26	1H	30	G	N1-C2-N2	-7.59	109.37	116.20
26	1H	214	G	N7-C8-N9	7.59	116.90	113.10
26	1H	1122	G	C8-N9-C4	7.59	109.44	106.40
26	1H	1408	C	C2-N3-C4	-7.59	116.10	119.90
26	1H	1594	G	OP1-P-O3'	7.59	121.90	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1612	C	N3-C4-C5	-7.59	118.86	121.90
26	1H	1620	G	N1-C6-O6	7.59	124.45	119.90
26	1H	1624	G	N1-C6-O6	-7.59	115.34	119.90
1	1G	970	C	C4-C5-C6	-7.59	113.60	117.40
1	1G	1223	C	C5-C6-N1	7.59	124.80	121.00
26	14	2876	G	N9-C4-C5	-7.59	102.36	105.40
26	1H	2415	G	C6-C5-N7	-7.59	125.85	130.40
1	1G	809	G	N9-C4-C5	-7.59	102.36	105.40
26	1H	1751	C	C6-N1-C2	7.59	123.33	120.30
26	1H	2463	C	N3-C4-C5	7.59	124.94	121.90
26	14	2724	C	O5'-P-OP2	-7.59	98.87	105.70
1	13	1386	G	N1-C2-N2	7.59	123.03	116.20
1	13	1484	C	C6-N1-C2	-7.59	117.27	120.30
26	1H	467	G	C2-N3-C4	7.59	115.69	111.90
26	1H	753	C	N3-C2-O2	-7.59	116.59	121.90
26	1H	1368	G	OP1-P-OP2	7.59	130.98	119.60
26	1H	2773	C	C6-N1-C2	7.59	123.33	120.30
1	1G	249	U	C6-N1-C2	7.59	125.55	121.00
1	1G	1205	U	C6-N1-C2	-7.59	116.45	121.00
1	1G	1527	C	N1-C2-N3	7.59	124.51	119.20
26	14	422	A	C5-C6-N1	-7.59	113.91	117.70
26	14	440	G	N1-C6-O6	7.59	124.45	119.90
26	14	641	C	O5'-P-OP2	7.59	119.80	110.70
26	14	2278	A	C8-N9-C4	-7.59	102.77	105.80
26	14	2416	C	C2-N3-C4	-7.59	116.11	119.90
26	14	2486	G	N1-C6-O6	7.59	124.45	119.90
27	1J	89	G	O5'-P-OP1	-7.59	98.87	105.70
26	1H	179	G	N3-C2-N2	-7.58	114.59	119.90
26	1H	190	A	N9-C4-C5	-7.58	102.77	105.80
26	1H	700	G	N9-C4-C5	7.58	108.43	105.40
26	1H	1681	G	C4-C5-C6	-7.58	114.25	118.80
26	1H	2751	G	N7-C8-N9	7.58	116.89	113.10
26	14	1620	G	O5'-P-OP2	7.58	119.80	110.70
1	1G	266	G	O4'-C1'-N9	-7.58	102.13	108.20
26	14	512	G	C2-N3-C4	-7.58	108.11	111.90
26	14	2885	C	C5-C4-N4	-7.58	114.89	120.20
1	13	552	U	O5'-P-OP1	7.58	119.80	110.70
1	13	656	C	C6-N1-C2	-7.58	117.27	120.30
26	1H	411	G	N1-C2-N3	7.58	128.45	123.90
26	1H	696	G	OP1-P-OP2	-7.58	108.23	119.60
26	1H	859	G	C8-N9-C4	7.58	109.43	106.40
26	1H	1287	A	O5'-P-OP1	7.58	119.80	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1345	C	N1-C2-N3	-7.58	113.89	119.20
26	14	596	G	C8-N9-C4	-7.58	103.37	106.40
26	14	1322	A	C5-C6-N1	7.58	121.49	117.70
26	1H	2462	U	O5'-P-OP2	-7.58	98.88	105.70
26	14	1984	G	C2-N3-C4	-7.58	108.11	111.90
1	13	1437	C	C6-N1-C2	7.58	123.33	120.30
26	1H	389	G	C4-C5-N7	7.58	113.83	110.80
26	1H	982	C	C6-N1-C2	-7.58	117.27	120.30
26	1H	1548	C	N3-C2-O2	-7.58	116.59	121.90
26	1H	1978	A	C5-C6-N6	7.58	129.76	123.70
1	1G	1529	G	N3-C4-C5	-7.58	124.81	128.60
26	14	1383	C	N3-C4-N4	7.58	123.31	118.00
26	14	1968	G	N7-C8-N9	7.58	116.89	113.10
27	1J	18	G	N3-C4-N9	-7.58	121.45	126.00
26	14	481	G	C4-C5-N7	-7.58	107.77	110.80
26	14	834	C	C4-C5-C6	7.58	121.19	117.40
26	14	2638	G	C5-C6-O6	7.58	133.15	128.60
26	1H	411	G	C5-C6-O6	7.58	133.15	128.60
26	1H	625	G	C5-C6-O6	-7.58	124.06	128.60
26	1H	1630	G	O5'-P-OP1	-7.58	98.88	105.70
26	1H	2002	G	N9-C4-C5	7.58	108.43	105.40
1	1G	529	G	N1-C6-O6	7.58	124.44	119.90
1	13	483	C	C6-N1-C2	7.57	123.33	120.30
1	13	1386	G	C5-C6-N1	-7.57	107.71	111.50
26	1H	381	G	C6-N1-C2	-7.57	120.56	125.10
26	14	527	C	C5-C4-N4	-7.57	114.90	120.20
26	1H	146	G	C5-N7-C8	-7.57	100.51	104.30
26	1H	418	G	C8-N9-C4	7.57	109.43	106.40
26	14	64	A	N1-C6-N6	7.57	123.14	118.60
26	14	736	C	C5-C4-N4	-7.57	114.90	120.20
26	14	1283	G	N3-C4-C5	-7.57	124.81	128.60
23	2K	13	C	O5'-P-OP2	7.57	119.78	110.70
26	1H	585	G	C2-N3-C4	-7.57	108.11	111.90
26	1H	1030	G	O5'-P-OP1	7.57	119.78	110.70
26	1H	1331	A	C2-N3-C4	-7.57	106.81	110.60
26	1H	2366	A	C8-N9-C4	-7.57	102.77	105.80
1	1G	416	G	C6-C5-N7	-7.57	125.86	130.40
26	14	843	G	C4-C5-N7	7.57	113.83	110.80
26	14	921	G	OP1-P-OP2	-7.57	108.24	119.60
26	14	2607	G	C5-N7-C8	7.57	108.08	104.30
26	14	2029	G	C5-C6-O6	7.57	133.14	128.60
26	1H	533	G	C8-N9-C4	7.57	109.43	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	372	G	C5-N7-C8	-7.57	100.52	104.30
26	14	460	A	C5-C6-N6	-7.57	117.64	123.70
26	14	910	A	OP1-P-O3'	-7.57	88.55	105.20
26	14	1326	U	N3-C4-C5	-7.57	110.06	114.60
26	14	1391	U	O5'-P-OP1	-7.57	98.89	105.70
26	14	1933	G	C5-C6-O6	7.57	133.14	128.60
26	14	1950	G	N1-C6-O6	-7.57	115.36	119.90
26	14	2429	G	OP2-P-O3'	7.57	121.85	105.20
27	1J	16	G	N7-C8-N9	7.57	116.88	113.10
26	1H	799	G	N7-C8-N9	-7.57	109.32	113.10
26	1H	2453	A	C5-N7-C8	-7.57	100.12	103.90
1	1G	450	G	C8-N9-C4	7.57	109.43	106.40
1	1G	537	G	C5-C6-O6	-7.57	124.06	128.60
1	1G	789	U	C4-C5-C6	7.57	124.24	119.70
26	14	776	G	C5-C6-O6	7.57	133.14	128.60
26	1H	1263	U	OP1-P-OP2	7.56	130.95	119.60
1	1G	573	A	C5-N7-C8	7.56	107.68	103.90
26	14	439	G	C6-C5-N7	-7.56	125.86	130.40
26	14	1998	G	N1-C2-N3	7.56	128.44	123.90
26	1H	466	A	OP2-P-O3'	7.56	121.84	105.20
26	1H	659	C	O5'-P-OP1	7.56	119.78	110.70
26	1H	1346	G	C8-N9-C4	7.56	109.42	106.40
26	1H	1972	A	OP1-P-OP2	-7.56	108.25	119.60
26	14	2723	C	N3-C4-N4	-7.56	112.71	118.00
1	13	863	U	N3-C4-C5	-7.56	110.06	114.60
26	1H	1823	G	N3-C2-N2	-7.56	114.61	119.90
1	13	731	G	C2-N3-C4	7.56	115.68	111.90
26	1H	1313	U	N1-C2-N3	7.56	119.44	114.90
26	1H	1553	A	N9-C4-C5	7.56	108.82	105.80
26	1H	1996	C	O5'-P-OP1	-7.56	98.90	105.70
26	1H	2251	G	N1-C6-O6	-7.56	115.36	119.90
26	14	205	G	N7-C8-N9	-7.56	109.32	113.10
26	14	1230	C	C6-N1-C2	7.56	123.32	120.30
26	14	1831	G	N3-C4-N9	7.56	130.54	126.00
26	14	2325	G	C5-C6-N1	-7.56	107.72	111.50
1	13	1237	C	N3-C4-C5	-7.56	118.88	121.90
1	13	1521	G	N1-C2-N3	7.56	128.43	123.90
26	1H	298	G	C5-N7-C8	-7.56	100.52	104.30
26	1H	805	G	N3-C2-N2	7.56	125.19	119.90
26	1H	1545(A)	A	O5'-P-OP2	7.56	119.77	110.70
26	1H	2669	G	C8-N9-C4	7.56	109.42	106.40
1	1G	322	C	N3-C2-O2	7.56	127.19	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	266	G	N1-C6-O6	7.56	124.43	119.90
26	14	567	A	N9-C4-C5	-7.56	102.78	105.80
26	14	935	C	C5-C6-N1	-7.56	117.22	121.00
26	14	1945	G	N1-C2-N2	-7.56	109.40	116.20
26	1H	773	U	C2-N3-C4	-7.55	122.47	127.00
26	1H	950	G	C2-N3-C4	7.55	115.68	111.90
26	1H	1431	U	C5-C6-N1	7.55	126.48	122.70
26	1H	2441	C	C5-C4-N4	7.55	125.49	120.20
26	1H	2654	A	O5'-P-OP1	-7.55	98.90	105.70
1	1G	452	A	N7-C8-N9	-7.55	110.02	113.80
26	14	666	G	N3-C4-C5	7.55	132.38	128.60
26	14	704	G	C4-C5-N7	7.55	113.82	110.80
1	1G	1402	C	C2-N3-C4	-7.55	116.12	119.90
26	14	1976	U	O5'-P-OP1	-7.55	98.90	105.70
1	13	108	G	N9-C4-C5	-7.55	102.38	105.40
1	13	953	G	C5-C6-O6	7.55	133.13	128.60
26	1H	635	C	N3-C2-O2	-7.55	116.61	121.90
26	1H	755	C	C6-N1-C2	-7.55	117.28	120.30
26	1H	995	C	N3-C4-N4	-7.55	112.71	118.00
26	1H	1157	G	N1-C2-N2	-7.55	109.40	116.20
26	1H	1602	U	N3-C4-O4	7.55	124.69	119.40
26	1H	1891	G	N3-C2-N2	-7.55	114.61	119.90
26	1H	2333	A	N3-C4-C5	-7.55	121.51	126.80
26	1H	2665	A	N9-C4-C5	-7.55	102.78	105.80
1	1G	32	A	C8-N9-C4	-7.55	102.78	105.80
1	1G	359	U	O5'-P-OP2	-7.55	98.90	105.70
1	1G	1449	C	C6-N1-C1'	-7.55	111.74	120.80
26	14	729	G	N3-C2-N2	-7.55	114.61	119.90
26	14	922	U	C6-N1-C2	-7.55	116.47	121.00
1	13	1476	G	C5-C6-O6	7.55	133.13	128.60
26	1H	988	A	O5'-P-OP1	-7.55	98.91	105.70
26	1H	1422	G	C5-N7-C8	-7.55	100.53	104.30
26	14	621	A	C6-N1-C2	7.55	123.13	118.60
26	14	771	G	N7-C8-N9	-7.55	109.33	113.10
26	14	1219	G	C8-N9-C4	7.55	109.42	106.40
1	13	241	C	N1-C2-O2	-7.55	114.37	118.90
26	1H	462	C	OP1-P-OP2	7.55	130.92	119.60
26	1H	2603	G	C4-C5-N7	7.55	113.82	110.80
1	1G	1416	G	O5'-P-OP2	-7.55	98.91	105.70
26	14	1312	U	O5'-P-OP2	7.55	119.76	110.70
26	14	2390	U	C5-C6-N1	7.55	126.47	122.70
26	1H	1435	G	C6-N1-C2	-7.55	120.57	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1840	G	C6-C5-N7	-7.55	125.87	130.40
26	1H	1993	U	N1-C2-N3	7.55	119.43	114.90
26	1H	2281	C	C4-C5-C6	7.55	121.17	117.40
26	1H	2360	A	C5-N7-C8	-7.55	100.13	103.90
26	14	388	G	N1-C2-N2	7.55	122.99	116.20
26	14	1964	G	N1-C2-N2	-7.55	109.41	116.20
26	14	2679	A	C5-C6-N1	7.55	121.47	117.70
26	14	1474	C	C5-C6-N1	7.54	124.77	121.00
1	13	1089	G	C2-N3-C4	-7.54	108.13	111.90
26	1H	1312	U	O5'-P-OP2	7.54	119.75	110.70
26	1H	2380	C	N1-C2-O2	-7.54	114.37	118.90
26	1H	2686	G	C8-N9-C4	-7.54	103.38	106.40
26	14	35	G	N3-C4-N9	-7.54	121.47	126.00
26	14	128	C	C5-C4-N4	-7.54	114.92	120.20
26	14	468	G	N1-C2-N3	7.54	128.43	123.90
26	14	707	G	C2-N3-C4	-7.54	108.13	111.90
26	14	1307	A	OP1-P-OP2	7.54	130.92	119.60
26	14	1494	A	C8-N9-C4	-7.54	102.78	105.80
26	1H	914	C	C2-N1-C1'	-7.54	110.50	118.80
26	1H	1607	C	O5'-P-OP2	-7.54	98.91	105.70
1	1G	386	C	C6-N1-C2	7.54	123.32	120.30
1	13	186	C	C5-C6-N1	7.54	124.77	121.00
26	1H	432	A	C5-C6-N1	7.54	121.47	117.70
26	1H	2692	C	O4'-C1'-N1	7.54	114.23	108.20
1	13	579	G	N1-C6-O6	7.54	124.42	119.90
26	1H	265	A	O4'-C1'-N9	7.54	114.23	108.20
26	1H	290	G	N3-C2-N2	7.54	125.18	119.90
26	1H	968	G	N1-C2-N2	-7.54	109.42	116.20
26	1H	1654	A	O5'-P-OP1	-7.54	98.92	105.70
26	1H	1980	G	N3-C2-N2	-7.54	114.62	119.90
26	14	1515	C	O5'-P-OP1	-7.54	98.92	105.70
1	13	977	A	C2-N3-C4	7.54	114.37	110.60
26	1H	381	G	N1-C2-N3	7.54	128.42	123.90
26	1H	704	G	N3-C4-N9	-7.54	121.48	126.00
26	1H	840	C	N1-C2-O2	-7.54	114.38	118.90
26	1H	1768	U	C5-C6-N1	7.54	126.47	122.70
26	1H	1984	G	C2-N3-C4	-7.54	108.13	111.90
26	1H	2318	G	N3-C2-N2	7.54	125.18	119.90
26	1H	2487	G	N3-C2-N2	-7.54	114.62	119.90
1	1G	810	C	C2-N3-C4	-7.54	116.13	119.90
26	14	2268	A	C6-C5-N7	-7.54	127.02	132.30
23	2K	6	G	N3-C4-C5	7.54	132.37	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1006	C	N3-C2-O2	7.54	127.17	121.90
26	1H	1769	G	C4-C5-C6	7.54	123.32	118.80
26	1H	1981	A	C5-N7-C8	-7.54	100.13	103.90
26	1H	2623	G	N1-C6-O6	-7.54	115.38	119.90
26	14	835	A	O5'-P-OP1	7.54	119.74	110.70
26	1H	36	G	N9-C4-C5	7.53	108.41	105.40
26	1H	190	A	C4-C5-N7	7.53	114.47	110.70
26	1H	214	G	C6-C5-N7	-7.53	125.88	130.40
26	1H	318	C	C5-C6-N1	7.53	124.77	121.00
26	1H	992	C	OP1-P-O3'	7.53	121.77	105.20
26	1H	2012	G	N3-C4-N9	7.53	130.52	126.00
26	1H	2219	G	C5-N7-C8	-7.53	100.53	104.30
26	1H	2465	C	C5-C6-N1	-7.53	117.23	121.00
26	14	688	U	O5'-P-OP2	-7.53	98.92	105.70
26	14	804	A	C5-N7-C8	7.53	107.67	103.90
26	14	862	G	N9-C4-C5	7.53	108.41	105.40
26	14	1423	G	C2-N3-C4	-7.53	108.13	111.90
26	14	2602	A	C5-C6-N6	7.53	129.73	123.70
26	14	586	A	N1-C2-N3	-7.53	125.53	129.30
1	13	12	U	O5'-P-OP1	-7.53	98.92	105.70
26	1H	228	A	N7-C8-N9	7.53	117.56	113.80
26	1H	344	G	C5-C6-N1	7.53	115.27	111.50
26	1H	1321	A	O5'-P-OP1	-7.53	98.92	105.70
26	1H	2249	U	C6-N1-C2	-7.53	116.48	121.00
26	14	113	G	C8-N9-C4	7.53	109.41	106.40
26	14	301	G	O5'-P-OP1	-7.53	98.92	105.70
26	14	189	G	C4-C5-N7	7.53	113.81	110.80
26	1H	491	G	C8-N9-C4	7.53	109.41	106.40
26	1H	762	U	N1-C2-O2	7.53	128.07	122.80
26	1H	807	U	N3-C4-C5	7.53	119.12	114.60
26	1H	1990	C	C4-C5-C6	7.53	121.16	117.40
1	1G	1342	C	C5-C6-N1	7.53	124.76	121.00
1	13	1424	C	N3-C4-C5	7.53	124.91	121.90
1	13	1472	U	C5-C4-O4	7.53	130.41	125.90
26	1H	425	G	N7-C8-N9	-7.53	109.34	113.10
26	1H	1224	G	N1-C6-O6	-7.53	115.39	119.90
26	1H	1734	C	C6-N1-C2	7.53	123.31	120.30
26	1H	1807	G	N9-C4-C5	-7.53	102.39	105.40
26	1H	2034	U	N1-C2-N3	7.53	119.42	114.90
26	1H	2267	A	N1-C2-N3	7.53	133.06	129.30
1	1G	266	G	P-O3'-C3'	7.53	128.73	119.70
26	14	143	C	C6-N1-C2	-7.53	117.29	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2040	C	C6-N1-C2	7.53	123.31	120.30
26	14	2588	G	N1-C6-O6	-7.53	115.39	119.90
26	14	1049	C	C2-N1-C1'	7.52	127.08	118.80
26	14	2553	G	C8-N9-C4	7.52	109.41	106.40
1	13	24	U	C5-C6-N1	7.52	126.46	122.70
26	1H	120	U	N3-C4-O4	-7.52	114.14	119.40
26	1H	581	C	C6-N1-C1'	7.52	129.83	120.80
26	1H	745	G	N1-C2-N3	7.52	128.41	123.90
26	1H	827	U	C5-C4-O4	-7.52	121.39	125.90
26	1H	1391	U	O5'-P-OP1	-7.52	98.93	105.70
26	1H	1685	C	N3-C4-C5	7.52	124.91	121.90
26	1H	2332	U	N1-C2-N3	-7.52	110.39	114.90
26	1H	2365	G	C5-C6-N1	7.52	115.26	111.50
26	14	754	C	C6-N1-C2	-7.52	117.29	120.30
26	14	2403	C	C6-N1-C2	-7.52	117.29	120.30
26	14	2495	G	N3-C4-N9	-7.52	121.49	126.00
1	13	789	U	N3-C2-O2	-7.52	116.94	122.20
1	1G	43	C	O5'-P-OP1	-7.52	98.93	105.70
26	14	1812	A	OP1-P-OP2	7.52	130.88	119.60
23	2K	68	C	N1-C2-O2	7.52	123.41	118.90
26	1H	727	A	C2-N3-C4	-7.52	106.84	110.60
26	1H	922	U	N1-C2-N3	7.52	119.41	114.90
1	1G	362	G	N3-C4-N9	-7.52	121.49	126.00
26	14	676	A	OP1-P-OP2	7.52	130.88	119.60
26	14	1216	G	N1-C6-O6	7.52	124.41	119.90
26	14	1933	G	C6-N1-C2	7.52	129.61	125.10
26	14	1989	G	N1-C2-N3	7.52	128.41	123.90
26	1H	298	G	C4-C5-N7	7.52	113.81	110.80
26	1H	716	A	C8-N9-C4	-7.52	102.79	105.80
26	1H	1959	G	C5-C6-O6	7.52	133.11	128.60
26	1H	2008	C	N3-C2-O2	-7.52	116.64	121.90
57	3L	44	U	C6-N1-C2	-7.52	116.49	121.00
26	14	529	A	N1-C2-N3	7.52	133.06	129.30
26	14	1605	C	OP1-P-OP2	7.52	130.88	119.60
26	14	2083	G	O5'-P-OP1	7.52	119.72	110.70
26	14	2287	A	N1-C2-N3	7.52	133.06	129.30
26	14	2330	G	N1-C2-N2	-7.52	109.44	116.20
1	13	111	G	C8-N9-C4	7.52	109.41	106.40
1	13	1144	G	N3-C4-N9	-7.52	121.49	126.00
26	1H	2053	G	N3-C4-C5	-7.52	124.84	128.60
26	14	860	U	OP1-P-OP2	-7.52	108.33	119.60
1	13	497	U	N3-C4-O4	7.51	124.66	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	271(B)	G	C2-N3-C4	7.51	115.66	111.90
26	1H	809	G	C4-C5-N7	7.51	113.81	110.80
26	1H	1316	U	C6-N1-C2	-7.51	116.49	121.00
26	1H	1317	A	C2-N3-C4	7.51	114.36	110.60
27	16	65	C	O5'-P-OP2	7.51	119.72	110.70
26	14	966	G	N3-C2-N2	7.51	125.16	119.90
26	14	1359	A	C4-C5-C6	-7.51	113.24	117.00
1	13	548	G	C5-C6-N1	7.51	115.26	111.50
26	1H	621	A	O5'-P-OP1	-7.51	98.94	105.70
26	1H	2498	C	C5-C6-N1	7.51	124.76	121.00
26	14	1405	U	O5'-P-OP2	-7.51	98.94	105.70
26	14	2313	C	N1-C2-O2	7.51	123.41	118.90
1	13	1433	A	C4-C5-C6	7.51	120.76	117.00
26	1H	1445	C	O5'-P-OP2	7.51	119.71	110.70
26	1H	1611	C	C6-N1-C2	7.51	123.30	120.30
26	14	699	A	C5-C6-N1	7.51	121.46	117.70
26	14	2028	U	N3-C4-C5	-7.51	110.09	114.60
23	2K	66	C	N3-C4-N4	-7.51	112.74	118.00
26	1H	470	A	C6-N1-C2	-7.51	114.09	118.60
26	1H	791	C	C6-N1-C2	7.51	123.30	120.30
26	1H	1613	G	N1-C2-N2	-7.51	109.44	116.20
26	1H	1997	G	C2-N3-C4	-7.51	108.14	111.90
26	14	603	A	C2-N3-C4	-7.51	106.84	110.60
26	14	1201	C	O5'-P-OP2	-7.51	98.94	105.70
26	14	1399	C	C5-C4-N4	-7.51	114.94	120.20
26	14	2865	U	C5-C6-N1	7.51	126.45	122.70
1	13	869	G	C8-N9-C4	-7.51	103.40	106.40
26	1H	686	G	O5'-P-OP2	-7.51	98.94	105.70
26	1H	2035	G	N3-C2-N2	-7.51	114.64	119.90
1	1G	323	U	N3-C4-O4	7.51	124.66	119.40
26	14	184	C	C2-N3-C4	-7.51	116.15	119.90
26	14	1891	G	N1-C2-N3	7.51	128.41	123.90
26	14	2779	U	N1-C2-O2	7.51	128.06	122.80
1	13	690	G	N9-C4-C5	-7.51	102.40	105.40
1	13	1126	U	N1-C2-O2	7.51	128.05	122.80
26	1H	326	G	N7-C8-N9	7.51	116.85	113.10
26	1H	449	A	OP1-P-O3'	7.51	121.71	105.20
26	1H	1975	G	C6-C5-N7	-7.51	125.90	130.40
27	16	63	G	O5'-P-OP2	-7.51	98.94	105.70
26	14	492	A	C5-C6-N1	7.51	121.45	117.70
26	14	2500	U	C5-C4-O4	7.51	130.40	125.90
26	14	666	G	N1-C2-N2	-7.50	109.45	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2268	A	N1-C6-N6	7.50	123.10	118.60
1	13	631	G	N1-C6-O6	7.50	124.40	119.90
26	1H	786	C	N1-C2-O2	7.50	123.40	118.90
26	1H	810	U	C5-C4-O4	-7.50	121.40	125.90
26	1H	987	G	N7-C8-N9	7.50	116.85	113.10
26	1H	1128	A	C4-C5-N7	7.50	114.45	110.70
26	1H	1789	A	N9-C4-C5	7.50	108.80	105.80
26	1H	1843	C	C4-C5-C6	7.50	121.15	117.40
26	1H	1904	G	N1-C6-O6	-7.50	115.40	119.90
26	14	2238	G	OP1-P-OP2	7.50	130.86	119.60
26	14	2295	C	N3-C2-O2	7.50	127.15	121.90
1	13	1374	A	N1-C6-N6	7.50	123.10	118.60
26	1H	210	C	C2-N3-C4	-7.50	116.15	119.90
26	1H	426	C	C6-N1-C2	7.50	123.30	120.30
26	1H	1427	A	C5-C6-N6	7.50	129.70	123.70
26	1H	1787	A	C5-C6-N6	7.50	129.70	123.70
26	14	23	G	N9-C4-C5	-7.50	102.40	105.40
26	14	691	C	C5-C6-N1	-7.50	117.25	121.00
26	14	1968	G	C5-C6-O6	-7.50	124.10	128.60
26	14	2491	U	N1-C2-O2	-7.50	117.55	122.80
26	14	2587	A	OP2-P-O3'	7.50	121.70	105.20
1	13	881	G	N7-C8-N9	-7.50	109.35	113.10
1	13	1156	G	C5-C6-N1	-7.50	107.75	111.50
26	14	1296	G	N1-C6-O6	7.50	124.40	119.90
1	13	1299	A	C6-C5-N7	-7.50	127.05	132.30
1	13	1499	A	N1-C2-N3	7.50	133.05	129.30
24	3K	65	C	C5-C6-N1	7.50	124.75	121.00
26	1H	228	A	C8-N9-C4	-7.50	102.80	105.80
26	1H	1027	A	C2-N3-C4	-7.50	106.85	110.60
26	1H	1839	G	C2-N3-C4	-7.50	108.15	111.90
26	14	153	C	N1-C2-O2	7.50	123.40	118.90
26	14	255	A	C5-C6-N1	7.50	121.45	117.70
26	14	754	C	N3-C4-C5	-7.50	118.90	121.90
26	14	2022	U	C6-N1-C2	7.50	125.50	121.00
26	14	2253	G	C5-C6-O6	-7.50	124.10	128.60
1	13	824	C	C6-N1-C2	-7.50	117.30	120.30
26	1H	2763	G	C6-C5-N7	-7.50	125.90	130.40
26	1H	2782	G	N1-C6-O6	7.50	124.40	119.90
26	14	510	C	N1-C2-O2	7.50	123.40	118.90
26	14	700	G	C8-N9-C4	-7.50	103.40	106.40
26	1H	70	G	OP1-P-OP2	-7.50	108.36	119.60
26	14	1155	A	N9-C4-C5	7.50	108.80	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	275	G	OP2-P-O3'	7.49	121.69	105.20
1	13	1106	G	C8-N9-C4	-7.49	103.40	106.40
1	13	1518	A	C2-N3-C4	-7.49	106.85	110.60
26	1H	193	U	C4-C5-C6	7.49	124.20	119.70
26	1H	470	A	C5-C6-N1	7.49	121.45	117.70
26	1H	2026	C	C6-N1-C2	7.49	123.30	120.30
26	14	93	C	C6-N1-C2	-7.49	117.30	120.30
26	14	915	C	N3-C2-O2	-7.49	116.65	121.90
26	1H	2037	G	O5'-P-OP1	7.49	119.69	110.70
26	14	483	A	N1-C2-N3	7.49	133.05	129.30
26	14	765	G	N9-C4-C5	7.49	108.40	105.40
26	1H	658	C	O5'-P-OP1	7.49	119.69	110.70
26	1H	1249	U	N3-C2-O2	7.49	127.44	122.20
26	1H	1368	G	O5'-P-OP1	-7.49	98.96	105.70
26	1H	1970	A	C2-N3-C4	7.49	114.34	110.60
1	1G	46	G	N3-C4-C5	7.49	132.34	128.60
26	14	827	U	N3-C4-O4	7.49	124.64	119.40
26	14	1235	G	C8-N9-C4	-7.49	103.40	106.40
26	14	1926	U	O5'-P-OP2	-7.49	98.96	105.70
1	13	435	C	OP1-P-OP2	-7.49	108.37	119.60
1	13	874	G	C2-N3-C4	7.49	115.64	111.90
26	1H	924	C	C5-C6-N1	-7.49	117.26	121.00
26	1H	1215	G	N3-C4-C5	-7.49	124.86	128.60
26	1H	1697	G	N3-C2-N2	7.49	125.14	119.90
1	1G	53	A	N1-C6-N6	7.49	123.09	118.60
26	14	1263	U	C6-N1-C2	-7.49	116.51	121.00
26	14	2827	C	N3-C2-O2	7.49	127.14	121.90
1	13	609	A	N1-C2-N3	7.49	133.04	129.30
1	13	796	C	N1-C2-O2	-7.49	114.41	118.90
26	1H	1287	A	N7-C8-N9	7.49	117.54	113.80
26	1H	1988	C	O5'-P-OP2	7.49	119.68	110.70
26	14	654(V)	A	N1-C6-N6	-7.49	114.11	118.60
26	14	707	G	N1-C2-N3	7.49	128.39	123.90
26	14	747	U	OP1-P-OP2	7.49	130.83	119.60
26	14	2770	G	N1-C6-O6	7.49	124.39	119.90
26	1H	194	G	N9-C4-C5	-7.49	102.41	105.40
26	1H	771	G	N3-C4-C5	7.49	132.34	128.60
26	1H	1854	A	C5-N7-C8	7.49	107.64	103.90
26	1H	2635	C	N1-C2-O2	-7.49	114.41	118.90
1	1G	121	C	N3-C4-N4	7.49	123.24	118.00
26	14	585	G	N7-C8-N9	7.49	116.84	113.10
26	14	2426	A	C6-C5-N7	-7.49	127.06	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2578	G	N7-C8-N9	-7.49	109.36	113.10
26	1H	211	A	C8-N9-C4	7.48	108.79	105.80
26	1H	844	C	C2-N3-C4	-7.48	116.16	119.90
26	1H	2509	G	C8-N9-C4	7.48	109.39	106.40
26	1H	675	A	OP1-P-OP2	7.48	130.82	119.60
26	14	81	G	C5-C6-N1	-7.48	107.76	111.50
26	14	921	G	N3-C4-N9	-7.48	121.51	126.00
26	14	1904	G	N1-C6-O6	-7.48	115.41	119.90
26	14	2258	C	C6-N1-C2	7.48	123.29	120.30
26	14	2358	G	C6-C5-N7	7.48	134.89	130.40
26	14	2502	G	C6-C5-N7	-7.48	125.91	130.40
26	14	2522	U	OP1-P-OP2	7.48	130.82	119.60
1	13	338	A	C5-N7-C8	-7.48	100.16	103.90
26	1H	970	C	N1-C2-O2	-7.48	114.41	118.90
26	1H	1139	G	C8-N9-C4	7.48	109.39	106.40
26	1H	2272	U	N3-C2-O2	7.48	127.44	122.20
27	16	53	A	N7-C8-N9	7.48	117.54	113.80
26	14	465	G	C2-N3-C4	-7.48	108.16	111.90
26	14	2034	U	N3-C2-O2	-7.48	116.96	122.20
26	14	2244	U	N3-C2-O2	7.48	127.44	122.20
26	1H	1593	G	OP1-P-O3'	7.48	121.65	105.20
1	1G	778	G	C4-C5-C6	7.48	123.29	118.80
26	14	71	A	C5-C6-N1	-7.48	113.96	117.70
26	14	1001	A	C4-C5-N7	-7.48	106.96	110.70
26	1H	749	C	N3-C4-C5	-7.48	118.91	121.90
26	1H	1022	G	C4-C5-N7	-7.48	107.81	110.80
26	1H	2346	A	N9-C4-C5	7.48	108.79	105.80
26	1H	2790	A	C8-N9-C4	-7.48	102.81	105.80
26	14	934	G	OP1-P-OP2	7.48	130.81	119.60
26	14	1800	C	O5'-P-OP2	-7.48	98.97	105.70
26	14	1977	A	N3-C4-N9	-7.48	121.42	127.40
1	13	1200	C	N3-C4-N4	7.48	123.23	118.00
26	1H	1643	G	OP1-P-OP2	7.48	130.81	119.60
26	1H	1757	U	N3-C4-O4	-7.48	114.17	119.40
26	14	506	G	O5'-P-OP1	-7.48	98.97	105.70
26	1H	1681	G	N3-C4-C5	7.47	132.34	128.60
26	1H	2723	C	C5-C6-N1	-7.47	117.26	121.00
1	1G	400	C	C6-N1-C2	7.47	123.29	120.30
26	14	14	A	C8-N9-C4	-7.47	102.81	105.80
26	14	330	A	N3-C4-C5	7.47	132.03	126.80
26	14	723	G	C5-C6-N1	-7.47	107.76	111.50
26	14	1630(A)	C	N3-C4-N4	7.47	123.23	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1831	G	C4-N9-C1'	7.47	136.22	126.50
26	14	2334	G	O5'-P-OP2	7.47	119.67	110.70
1	13	372	C	O5'-P-OP2	7.47	119.67	110.70
26	1H	723	G	C5-C6-O6	7.47	133.08	128.60
26	1H	1153	C	N3-C4-C5	-7.47	118.91	121.90
26	1H	2459	A	N1-C6-N6	-7.47	114.12	118.60
1	1G	1230	C	C4-C5-C6	-7.47	113.66	117.40
26	14	1930	G	OP1-P-OP2	7.47	130.81	119.60
26	1H	37	C	C6-N1-C2	-7.47	117.31	120.30
26	1H	197	A	C6-C5-N7	-7.47	127.07	132.30
26	1H	2726	U	C5-C6-N1	-7.47	118.96	122.70
26	14	1834	U	C5-C4-O4	-7.47	121.42	125.90
26	1H	246	C	C2-N3-C4	-7.47	116.17	119.90
26	1H	738	G	N3-C2-N2	7.47	125.13	119.90
26	1H	845	G	P-O3'-C3'	7.47	128.66	119.70
26	1H	1634	A	O5'-P-OP2	-7.47	98.98	105.70
26	1H	2295	C	O5'-P-OP2	7.47	119.66	110.70
26	1H	2313	C	N3-C4-C5	-7.47	118.91	121.90
39	55	90	ARG	NE-CZ-NH2	-7.47	116.56	120.30
26	1H	1310	G	N1-C2-N2	7.47	122.92	116.20
1	1G	917	G	N9-C4-C5	-7.47	102.41	105.40
26	14	1567	A	C2-N3-C4	-7.47	106.87	110.60
25	4K	21	A	N1-C2-N3	7.47	133.03	129.30
26	1H	964	C	O5'-P-OP2	7.47	119.66	110.70
26	1H	974	G	O5'-P-OP1	7.47	119.66	110.70
26	1H	1761	C	C5-C4-N4	-7.47	114.97	120.20
26	1H	2071	A	C6-C5-N7	-7.47	127.07	132.30
26	14	551	G	N1-C6-O6	7.47	124.38	119.90
26	14	790	C	N1-C2-O2	7.47	123.38	118.90
26	14	949	C	C6-N1-C2	7.47	123.29	120.30
26	1H	1296	G	C5-C6-O6	7.46	133.08	128.60
26	1H	2465	C	C2-N3-C4	-7.46	116.17	119.90
26	1H	2513	G	O5'-P-OP2	-7.46	98.98	105.70
1	1G	1235	U	C6-N1-C2	-7.46	116.52	121.00
26	14	780	G	C5-C6-N1	-7.46	107.77	111.50
26	14	1653	G	N7-C8-N9	-7.46	109.37	113.10
1	13	954	G	C5-C6-O6	-7.46	124.12	128.60
26	14	808	G	N1-C2-N3	7.46	128.38	123.90
26	14	2449	U	N3-C4-O4	7.46	124.62	119.40
26	1H	775	G	C5-C6-N1	-7.46	107.77	111.50
1	1G	1468	A	C5-C6-N1	7.46	121.43	117.70
26	14	796	C	C2-N3-C4	-7.46	116.17	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1299	G	N3-C2-N2	7.46	125.12	119.90
26	14	2314	C	N1-C2-O2	7.46	123.38	118.90
1	13	401	C	C2-N3-C4	-7.46	116.17	119.90
1	13	1158	C	N3-C2-O2	-7.46	116.68	121.90
26	1H	574	C	C2-N3-C4	7.46	123.63	119.90
26	1H	1274	A	C5-N7-C8	-7.46	100.17	103.90
26	1H	1355	G	OP1-P-OP2	-7.46	108.41	119.60
26	1H	1369	G	O5'-P-OP1	-7.46	98.99	105.70
26	1H	1436	G	N1-C6-O6	-7.46	115.42	119.90
26	1H	1836	C	N3-C4-C5	7.46	124.88	121.90
26	1H	1934	C	C5-C6-N1	-7.46	117.27	121.00
26	1H	2049	G	O5'-P-OP1	-7.46	98.99	105.70
1	1G	576	G	C4-N9-C1'	7.46	136.20	126.50
26	14	1968	G	N1-C2-N2	7.46	122.91	116.20
26	1H	180	G	N1-C2-N3	7.46	128.37	123.90
26	1H	599	G	C4-C5-N7	-7.46	107.82	110.80
26	1H	2626	C	N1-C2-O2	7.46	123.37	118.90
27	16	42	C	C4-C5-C6	7.46	121.13	117.40
25	4L	12	A	C5-N7-C8	-7.46	100.17	103.90
26	14	911	A	C4-C5-C6	7.46	120.73	117.00
26	14	2486	G	C5-C6-O6	-7.46	124.13	128.60
26	1H	762	U	C6-N1-C2	7.46	125.47	121.00
1	1G	1479	C	N1-C2-O2	7.46	123.37	118.90
26	14	2048	G	N7-C8-N9	7.46	116.83	113.10
1	13	1236	A	C6-N1-C2	7.45	123.07	118.60
26	1H	258	G	N1-C2-N2	-7.45	109.49	116.20
26	1H	1528	A	O4'-C1'-N9	7.45	114.16	108.20
26	1H	2546	U	N1-C2-O2	-7.45	117.58	122.80
27	16	37	C	C6-N1-C2	7.45	123.28	120.30
26	14	1198	U	N3-C2-O2	-7.45	116.98	122.20
26	14	2617	C	OP1-P-OP2	7.45	130.78	119.60
1	1G	284	G	C5-C6-O6	-7.45	124.13	128.60
1	1G	353	A	C4-C5-N7	7.45	114.43	110.70
26	14	2062	A	C4-C5-N7	7.45	114.43	110.70
26	1H	638	G	C4-C5-C6	7.45	123.27	118.80
27	16	14	U	O5'-P-OP2	-7.45	98.99	105.70
1	1G	667	G	C5-C6-O6	-7.45	124.13	128.60
26	14	213	A	C4-C5-C6	-7.45	113.27	117.00
26	14	2392	A	N3-C4-N9	-7.45	121.44	127.40
26	14	2557	G	OP1-P-OP2	-7.45	108.42	119.60
26	1H	232	G	N3-C4-N9	7.45	130.47	126.00
26	1H	1125	G	N1-C6-O6	-7.45	115.43	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1151	G	N3-C4-C5	7.45	132.32	128.60
26	1H	1698	A	O5'-P-OP2	-7.45	99.00	105.70
26	1H	1778	U	N3-C4-O4	-7.45	114.19	119.40
23	2L	58	A	OP1-P-OP2	-7.45	108.43	119.60
26	14	1604	C	N1-C2-O2	-7.45	114.43	118.90
26	14	2035	G	N7-C8-N9	-7.45	109.38	113.10
26	14	2356	C	OP2-P-O3'	7.45	121.59	105.20
26	1H	793	A	C4-C5-C6	7.45	120.72	117.00
26	1H	1298	C	C2-N3-C4	7.45	123.62	119.90
26	1H	2258	C	C6-N1-C2	-7.45	117.32	120.30
25	4L	12	A	C4-C5-N7	7.45	114.42	110.70
26	14	1643	G	OP1-P-O3'	-7.45	88.82	105.20
1	13	623	C	C2-N3-C4	7.45	123.62	119.90
1	13	1515	C	N1-C2-O2	7.45	123.37	118.90
26	1H	2030	A	N9-C4-C5	-7.45	102.82	105.80
26	14	747	U	C4-C5-C6	-7.45	115.23	119.70
26	14	2502	G	N1-C2-N3	7.45	128.37	123.90
26	1H	695	G	O5'-P-OP2	-7.44	99.00	105.70
26	14	521	G	N1-C6-O6	7.44	124.37	119.90
26	14	524	U	N1-C2-N3	7.44	119.37	114.90
26	14	2865	U	N3-C4-C5	-7.44	110.13	114.60
1	13	912	C	C5-C6-N1	-7.44	117.28	121.00
1	13	1202	G	C6-N1-C2	7.44	129.56	125.10
26	1H	1323	U	N3-C4-C5	-7.44	110.14	114.60
26	1H	1383	C	N3-C2-O2	-7.44	116.69	121.90
26	1H	1454	U	O5'-P-OP2	-7.44	99.00	105.70
26	14	352	G	C5-C6-N1	-7.44	107.78	111.50
26	14	603	A	C5-C6-N1	-7.44	113.98	117.70
26	14	1939	U	C4-C5-C6	7.44	124.17	119.70
26	14	2216	G	N3-C4-C5	7.44	132.32	128.60
26	14	2477	C	N3-C2-O2	-7.44	116.69	121.90
1	13	1417	G	N1-C2-N2	7.44	122.90	116.20
26	1H	79	G	C8-N9-C4	-7.44	103.42	106.40
26	1H	2433	A	OP2-P-O3'	7.44	121.57	105.20
26	14	198	C	OP2-P-O3'	7.44	121.57	105.20
26	14	1130	U	C4-C5-C6	7.44	124.17	119.70
26	14	1317	A	OP1-P-O3'	7.44	121.57	105.20
26	1H	1247	A	C8-N9-C4	7.44	108.78	105.80
26	1H	1918	A	N1-C6-N6	-7.44	114.14	118.60
26	1H	2627	G	N9-C4-C5	-7.44	102.42	105.40
26	1H	2751	G	C6-C5-N7	-7.44	125.94	130.40
1	1G	96	G	C5-C6-N1	-7.44	107.78	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	934	C	N3-C4-C5	-7.44	118.92	121.90
26	1H	113	G	C5-C6-O6	-7.44	124.14	128.60
26	1H	464	U	N1-C2-N3	7.44	119.36	114.90
26	1H	1797	C	C5-C4-N4	-7.44	114.99	120.20
26	1H	2226	C	C6-N1-C2	7.44	123.28	120.30
26	14	124	G	C5-C6-N1	-7.44	107.78	111.50
26	14	2711	A	C5-C6-N1	-7.44	113.98	117.70
1	13	974	A	N9-C4-C5	-7.43	102.83	105.80
26	1H	2016	U	N3-C4-C5	7.43	119.06	114.60
26	1H	2713	A	C8-N9-C4	-7.43	102.83	105.80
1	1G	1372	U	C5-C6-N1	7.43	126.42	122.70
26	14	405	U	C2-N1-C1'	7.43	126.62	117.70
26	14	2459	A	C2-N3-C4	7.43	114.32	110.60
26	1H	2017	U	N1-C2-N3	7.43	119.36	114.90
26	1H	2403	C	N1-C2-O2	-7.43	114.44	118.90
26	1H	2585	U	N3-C4-C5	7.43	119.06	114.60
26	14	1313	U	N1-C2-O2	-7.43	117.60	122.80
26	14	1423	G	C5-C6-N1	-7.43	107.78	111.50
27	1J	6	C	C4-C5-C6	7.43	121.12	117.40
26	1H	990	A	C5-C6-N6	7.43	129.64	123.70
26	1H	2270	G	N1-C2-N2	-7.43	109.51	116.20
1	13	731	G	N1-C2-N2	7.43	122.89	116.20
26	1H	1263	U	N3-C4-C5	7.43	119.06	114.60
26	1H	1323	U	N1-C2-O2	-7.43	117.60	122.80
1	1G	495	A	N7-C8-N9	-7.43	110.08	113.80
1	1G	809	G	C8-N9-C4	7.43	109.37	106.40
1	1G	1523	G	O5'-P-OP2	-7.43	99.01	105.70
26	14	1311	G	C8-N9-C4	7.43	109.37	106.40
26	14	1834	U	C5-C6-N1	7.43	126.42	122.70
26	14	2271	G	C6-N1-C2	-7.43	120.64	125.10
26	1H	619	G	N3-C4-C5	7.43	132.31	128.60
30	21	54	GLN	C-N-CA	7.43	140.27	121.70
1	1G	334	C	OP1-P-OP2	-7.43	108.46	119.60
26	14	804	A	OP1-P-OP2	-7.43	108.46	119.60
26	1H	398	G	C2-N3-C4	-7.43	108.19	111.90
26	1H	425	G	N1-C2-N2	7.43	122.88	116.20
26	1H	464	U	N3-C2-O2	-7.43	117.00	122.20
26	1H	1253	A	C5-C6-N6	-7.43	117.76	123.70
1	1G	522	C	C5-C6-N1	-7.43	117.29	121.00
26	14	104	U	O5'-P-OP1	7.43	119.61	110.70
26	14	1461	G	C5-C6-N1	-7.43	107.79	111.50
26	14	1906	G	C2-N3-C4	-7.43	108.19	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2441	C	N1-C2-O2	7.43	123.36	118.90
26	14	2590	A	O5'-P-OP1	-7.43	99.02	105.70
26	14	2688	U	N1-C2-N3	7.43	119.36	114.90
26	1H	302	C	O5'-P-OP2	-7.42	99.02	105.70
26	1H	610	C	N3-C4-N4	-7.42	112.80	118.00
26	1H	958	U	C6-N1-C2	-7.42	116.55	121.00
26	1H	1626	G	C5-C6-O6	-7.42	124.15	128.60
26	1H	1649	G	C4-C5-C6	7.42	123.25	118.80
26	1H	2396	G	C6-C5-N7	7.42	134.85	130.40
26	14	450	G	C5-C6-N1	-7.42	107.79	111.50
26	14	564	C	N3-C2-O2	7.42	127.10	121.90
26	14	1342	A	C5-C6-N1	-7.42	113.99	117.70
1	13	534	U	C5-C4-O4	7.42	130.35	125.90
1	13	690	G	C5-N7-C8	-7.42	100.59	104.30
26	1H	1264	G	N1-C6-O6	-7.42	115.45	119.90
1	13	500	G	C8-N9-C4	7.42	109.37	106.40
26	1H	407	G	C8-N9-C4	-7.42	103.43	106.40
26	1H	1222	C	C5-C4-N4	-7.42	115.01	120.20
26	1H	1486	A	N7-C8-N9	7.42	117.51	113.80
26	1H	1605	C	C5-C6-N1	-7.42	117.29	121.00
26	1H	1655	A	C6-N1-C2	-7.42	114.15	118.60
26	1H	1683	C	N3-C4-C5	7.42	124.87	121.90
26	1H	2499	C	N1-C2-N3	7.42	124.39	119.20
1	1G	1301	U	N1-C2-O2	7.42	128.00	122.80
26	14	123	G	OP1-P-OP2	7.42	130.73	119.60
26	14	452	G	O5'-P-OP1	-7.42	99.02	105.70
26	14	1407	C	C6-N1-C2	-7.42	117.33	120.30
26	14	2589	A	OP1-P-OP2	-7.42	108.47	119.60
1	13	1415	G	N1-C6-O6	7.42	124.35	119.90
26	1H	2712(A)	A	O5'-P-OP2	-7.42	99.02	105.70
26	1H	2875	C	N3-C4-N4	-7.42	112.81	118.00
1	1G	110	C	N3-C4-C5	7.42	124.87	121.90
26	14	330	A	C6-C5-N7	-7.42	127.11	132.30
26	1H	690	G	N1-C2-N3	7.42	128.35	123.90
26	1H	1392	A	C6-N1-C2	-7.42	114.15	118.60
26	1H	2379	G	N3-C2-N2	7.42	125.09	119.90
26	14	391	G	C5-N7-C8	-7.42	100.59	104.30
26	14	593	G	N3-C4-N9	-7.42	121.55	126.00
26	14	679	C	N3-C4-N4	7.42	123.19	118.00
26	14	1293	C	C5-C4-N4	-7.42	115.01	120.20
26	14	1357	U	N3-C4-C5	-7.42	110.15	114.60
26	14	2591	C	O5'-P-OP2	-7.42	99.02	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2770	G	C4-C5-N7	7.42	113.77	110.80
26	1H	250	G	N1-C6-O6	7.42	124.35	119.90
26	1H	1696	G	N1-C2-N2	-7.42	109.53	116.20
26	1H	2063	C	C2-N1-C1'	-7.42	110.64	118.80
26	1H	2230	G	C5-N7-C8	-7.42	100.59	104.30
26	14	1675	C	N3-C4-C5	-7.42	118.93	121.90
26	14	2057	A	OP1-P-OP2	7.42	130.72	119.60
26	1H	862	G	C5-N7-C8	7.42	108.01	104.30
26	1H	1313	U	C5-C4-O4	-7.42	121.45	125.90
26	1H	1761	C	O5'-P-OP1	7.42	119.60	110.70
26	1H	2433	A	N9-C4-C5	-7.42	102.83	105.80
26	14	1555	G	C4-C5-N7	-7.42	107.83	110.80
26	14	1607	C	N3-C4-C5	7.42	124.87	121.90
1	13	826	C	C5-C6-N1	7.41	124.71	121.00
1	13	1097	C	N1-C2-O2	7.41	123.35	118.90
26	1H	1337	G	C5-C6-O6	7.41	133.05	128.60
26	1H	2828	C	N3-C4-C5	7.41	124.87	121.90
27	16	16	G	N9-C4-C5	-7.41	102.43	105.40
26	14	1688	U	C4-C5-C6	7.41	124.15	119.70
1	13	644	G	O5'-P-OP1	7.41	119.59	110.70
26	1H	196	A	N9-C4-C5	-7.41	102.83	105.80
26	14	57	C	OP2-P-O3'	7.41	121.51	105.20
26	1H	536	A	O5'-P-OP1	7.41	119.59	110.70
26	1H	2766	G	C5-N7-C8	-7.41	100.59	104.30
27	16	70	C	C6-N1-C2	-7.41	117.34	120.30
26	14	586	A	C4-C5-C6	-7.41	113.30	117.00
26	14	2271	G	N1-C2-N3	7.41	128.35	123.90
26	14	2289	G	N1-C2-N2	7.41	122.87	116.20
26	1H	136	G	C5-C6-N1	-7.41	107.80	111.50
1	1G	117	G	C5-C6-O6	-7.41	124.16	128.60
1	1G	780	A	C5-N7-C8	-7.41	100.20	103.90
25	4L	18	G	OP1-P-OP2	-7.41	108.49	119.60
26	14	1301	A	OP1-P-OP2	7.41	130.71	119.60
26	14	2515	C	O5'-P-OP1	7.41	119.59	110.70
1	1G	122	G	N1-C6-O6	7.41	124.34	119.90
1	1G	901	A	C5-C6-N6	7.41	129.63	123.70
1	1G	913	A	C5-C6-N1	7.41	121.40	117.70
26	14	1762	A	C2-N3-C4	-7.41	106.90	110.60
1	13	1052	U	N3-C2-O2	-7.41	117.02	122.20
26	1H	778	G	C2-N3-C4	-7.41	108.20	111.90
26	1H	1454	U	C4-C5-C6	7.41	124.14	119.70
26	1H	1559	G	C5-C6-N1	-7.41	107.80	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1579	A	N1-C6-N6	7.41	123.04	118.60
26	1H	1585	C	N3-C4-C5	-7.41	118.94	121.90
27	16	115	G	N3-C2-N2	7.41	125.08	119.90
26	14	934	G	C4-C5-N7	-7.41	107.84	110.80
26	1H	2645	G	N1-C2-N2	-7.40	109.54	116.20
26	1H	44	A	N7-C8-N9	7.40	117.50	113.80
26	1H	185	U	C4-C5-C6	7.40	124.14	119.70
26	1H	750	A	C4-C5-N7	7.40	114.40	110.70
26	1H	2581	G	N1-C2-N3	7.40	128.34	123.90
26	14	1410	G	N3-C2-N2	7.40	125.08	119.90
27	1J	113	C	N3-C4-C5	7.40	124.86	121.90
26	1H	1782	C	N3-C4-N4	7.40	123.18	118.00
26	1H	2390	U	N1-C2-O2	-7.40	117.62	122.80
26	14	566	U	N3-C4-C5	7.40	119.04	114.60
26	14	1613	G	C5-C6-O6	7.40	133.04	128.60
1	13	572	A	N1-C6-N6	-7.40	114.16	118.60
23	2K	17	C	OP1-P-OP2	7.40	130.70	119.60
26	1H	193	U	C2-N3-C4	-7.40	122.56	127.00
26	14	510	C	C6-N1-C2	-7.40	117.34	120.30
26	14	1692	U	C2-N3-C4	-7.40	122.56	127.00
26	14	1632	A	N1-C6-N6	-7.40	114.16	118.60
1	13	120	A	C5-C6-N6	-7.40	117.78	123.70
26	1H	1128	A	N7-C8-N9	7.40	117.50	113.80
26	1H	2217	G	C8-N9-C4	-7.40	103.44	106.40
26	1H	2459	A	C5-C6-N6	7.40	129.62	123.70
26	1H	2867	G	O4'-C1'-N9	7.40	114.12	108.20
26	14	31	C	N1-C2-O2	-7.40	114.46	118.90
26	14	1316	U	N1-C2-O2	7.40	127.98	122.80
23	2K	41	C	C6-N1-C2	7.39	123.26	120.30
26	1H	211	A	N9-C4-C5	-7.39	102.84	105.80
26	1H	406	G	N3-C4-N9	-7.39	121.56	126.00
26	1H	630	G	C2-N3-C4	-7.39	108.20	111.90
26	1H	1834	U	N1-C2-N3	7.39	119.34	114.90
26	1H	2740	A	O5'-P-OP2	-7.39	99.05	105.70
26	14	1543	A	C5-C6-N6	7.39	129.62	123.70
26	14	2783	G	O5'-P-OP2	-7.39	99.05	105.70
26	1H	17	G	OP1-P-O3'	7.39	121.46	105.20
26	1H	380	U	O5'-P-OP2	-7.39	99.05	105.70
26	1H	989	G	C5-C6-N1	-7.39	107.80	111.50
26	1H	1636	C	C6-N1-C2	-7.39	117.34	120.30
1	1G	336	C	C4-C5-C6	-7.39	113.70	117.40
26	14	2021	C	N1-C2-O2	7.39	123.34	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2466	C	O5'-P-OP1	7.39	119.57	110.70
26	14	1304	C	N3-C4-N4	-7.39	112.83	118.00
26	14	1820	U	C2-N3-C4	-7.39	122.57	127.00
26	14	2255	G	C5-N7-C8	7.39	108.00	104.30
26	14	2819	G	N7-C8-N9	-7.39	109.41	113.10
1	13	359	U	C5-C4-O4	7.39	130.33	125.90
26	1H	270(R)	G	N1-C6-O6	7.39	124.33	119.90
26	1H	974(A)	C	C6-N1-C2	-7.39	117.34	120.30
26	1H	1757	U	C2-N1-C1'	-7.39	108.83	117.70
26	14	967	C	O5'-P-OP2	-7.39	99.05	105.70
26	14	1298	C	OP1-P-OP2	-7.39	108.52	119.60
26	14	1807	G	C5-C6-O6	-7.39	124.17	128.60
26	14	2236	C	C2-N3-C4	-7.39	116.20	119.90
26	14	2445	G	C5-C6-O6	7.39	133.03	128.60
23	2K	68	C	N3-C2-O2	-7.39	116.73	121.90
26	1H	222	A	P-O3'-C3'	7.39	128.57	119.70
26	1H	650	C	N1-C2-O2	-7.39	114.47	118.90
26	1H	1810	A	C6-N1-C2	-7.39	114.17	118.60
26	1H	2578	G	N1-C6-O6	-7.39	115.47	119.90
26	14	1828	G	N1-C6-O6	-7.39	115.47	119.90
1	13	199	G	C8-N9-C4	7.39	109.35	106.40
1	13	331	G	N3-C2-N2	-7.39	114.73	119.90
1	13	1465	C	N1-C2-O2	-7.39	114.47	118.90
26	1H	1190	G	O5'-P-OP2	7.39	119.56	110.70
26	1H	1378	A	C5-C6-N1	-7.39	114.01	117.70
26	1H	1577	C	N3-C4-C5	-7.39	118.94	121.90
27	16	105	G	N1-C6-O6	7.39	124.33	119.90
26	14	32	C	OP1-P-OP2	7.39	130.68	119.60
26	14	1363	C	N1-C2-O2	-7.39	114.47	118.90
26	14	1772	G	C4-C5-N7	7.39	113.75	110.80
1	13	428	G	C8-N9-C4	7.38	109.35	106.40
1	13	775	G	N3-C2-N2	-7.38	114.73	119.90
1	13	1192	C	C2-N3-C4	7.38	123.59	119.90
26	1H	776	G	C4-C5-N7	-7.38	107.85	110.80
26	1H	1037	G	N1-C6-O6	7.38	124.33	119.90
26	1H	1122	G	C4-C5-N7	7.38	113.75	110.80
26	1H	1123	C	C6-N1-C2	7.38	123.25	120.30
26	1H	2298	A	N7-C8-N9	-7.38	110.11	113.80
26	1H	2607	G	N1-C2-N3	7.38	128.33	123.90
26	14	2396	G	N1-C6-O6	7.38	124.33	119.90
1	13	623	C	C2-N1-C1'	7.38	126.92	118.80
1	13	1483	A	C5-C6-N1	7.38	121.39	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	606	U	OP1-P-OP2	7.38	130.67	119.60
26	1H	1388	G	O5'-P-OP1	-7.38	99.06	105.70
23	2L	44	A	C5-C6-N1	7.38	121.39	117.70
26	14	17	G	C6-C5-N7	-7.38	125.97	130.40
26	14	2457	U	C5-C4-O4	7.38	130.33	125.90
26	1H	1391	U	N1-C2-N3	7.38	119.33	114.90
26	1H	2702	U	OP1-P-OP2	7.38	130.67	119.60
26	14	870	A	C5-C6-N1	7.38	121.39	117.70
26	14	1328	G	C6-C5-N7	-7.38	125.97	130.40
26	14	2198	A	O4'-C1'-N9	7.38	114.10	108.20
1	13	296	U	O5'-P-OP2	-7.38	99.06	105.70
1	13	785	G	N3-C4-N9	-7.38	121.57	126.00
26	1H	655	A	C2-N3-C4	-7.38	106.91	110.60
26	1H	2726	U	N3-C4-O4	-7.38	114.23	119.40
1	1G	36	C	C6-N1-C2	-7.38	117.35	120.30
1	1G	105	G	N3-C4-N9	7.38	130.43	126.00
26	14	193	U	C6-N1-C2	7.38	125.43	121.00
26	14	695	G	N1-C6-O6	7.38	124.33	119.90
26	14	1562	A	N9-C4-C5	-7.38	102.85	105.80
26	14	2691	C	C6-N1-C2	-7.38	117.35	120.30
1	13	6	G	OP2-P-O3'	7.38	121.43	105.20
1	13	1362	C	N1-C2-O2	7.38	123.33	118.90
1	13	1433	A	N9-C4-C5	7.38	108.75	105.80
26	1H	151	C	N3-C4-C5	7.38	124.85	121.90
26	1H	619	G	N7-C8-N9	-7.38	109.41	113.10
26	1H	1974	C	C4-C5-C6	-7.38	113.71	117.40
26	1H	1988	C	C5-C4-N4	7.38	125.36	120.20
26	1H	2484	G	C8-N9-C1'	-7.38	117.41	127.00
1	1G	762	C	C6-N1-C2	7.38	123.25	120.30
1	1G	1280	A	N7-C8-N9	-7.38	110.11	113.80
26	14	575	A	C5-C6-N1	7.38	121.39	117.70
26	14	2700	C	N3-C4-N4	7.38	123.16	118.00
26	1H	802	A	N1-C6-N6	-7.38	114.17	118.60
26	1H	1630(A)	C	C4-C5-C6	7.38	121.09	117.40
26	14	1883	G	C8-N9-C4	7.38	109.35	106.40
26	14	2594	C	C6-N1-C2	7.38	123.25	120.30
1	13	287	U	N1-C2-N3	7.37	119.32	114.90
23	2K	45	A	C5-C6-N6	-7.37	117.80	123.70
26	1H	837	C	N3-C4-C5	7.37	124.85	121.90
26	1H	2827	C	C5-C4-N4	-7.37	115.04	120.20
27	16	41	U	C5-C6-N1	-7.37	119.01	122.70
1	1G	1080	A	N1-C6-N6	-7.37	114.18	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	22	C	C2-N3-C4	-7.37	116.21	119.90
26	14	690	G	C4-C5-N7	-7.37	107.85	110.80
26	14	1380	G	C5-C6-O6	-7.37	124.18	128.60
23	2K	15	G	C5-C6-O6	7.37	133.02	128.60
26	1H	600	G	N7-C8-N9	-7.37	109.42	113.10
26	1H	804	A	N1-C2-N3	7.37	132.99	129.30
26	1H	1109	C	N1-C2-O2	7.37	123.32	118.90
26	1H	1137	G	OP1-P-O3'	7.37	121.42	105.20
49	J8	40	ARG	NE-CZ-NH2	-7.37	116.61	120.30
1	1G	495	A	C6-C5-N7	7.37	137.46	132.30
26	14	762	U	C4-C5-C6	-7.37	115.28	119.70
26	14	1607	C	C2-N1-C1'	7.37	126.91	118.80
27	16	27	C	N3-C4-C5	-7.37	118.95	121.90
26	14	185	U	C5-C6-N1	-7.37	119.02	122.70
26	14	194	G	C5-N7-C8	7.37	107.98	104.30
26	14	2422	A	C5-N7-C8	-7.37	100.22	103.90
1	13	730	G	N3-C2-N2	-7.37	114.74	119.90
23	2K	77	A	N9-C4-C5	-7.37	102.85	105.80
27	16	7	G	N3-C2-N2	7.37	125.06	119.90
26	14	929	G	N3-C2-N2	-7.37	114.74	119.90
26	14	1568	G	N3-C4-C5	7.37	132.28	128.60
26	14	2017	U	C2-N3-C4	-7.37	122.58	127.00
26	14	2329	G	C6-N1-C2	-7.37	120.68	125.10
26	14	2853	C	C6-N1-C2	-7.37	117.35	120.30
1	1G	922	G	C4-C5-N7	-7.37	107.85	110.80
26	14	765	G	N3-C4-C5	-7.37	124.92	128.60
26	14	1201	C	OP1-P-OP2	7.37	130.65	119.60
1	13	290	C	OP1-P-OP2	7.37	130.65	119.60
23	2K	62	C	N1-C2-O2	7.37	123.32	118.90
26	1H	1142(A)	A	N7-C8-N9	7.37	117.48	113.80
56	1L	74	C	N1-C2-O2	7.37	123.32	118.90
26	14	2443	C	N1-C2-N3	7.37	124.36	119.20
26	1H	1758	G	N3-C2-N2	-7.36	114.75	119.90
26	1H	2079	U	N1-C2-O2	-7.36	117.64	122.80
26	1H	2777	G	O5'-P-OP1	-7.36	99.07	105.70
1	1G	26	A	N1-C6-N6	-7.36	114.18	118.60
1	1G	901	A	C2-N3-C4	-7.36	106.92	110.60
1	1G	1467	G	C8-N9-C4	-7.36	103.45	106.40
26	14	768	G	N1-C2-N2	-7.36	109.57	116.20
27	1J	16	G	C5-N7-C8	-7.36	100.62	104.30
26	14	376	C	C6-N1-C2	-7.36	117.36	120.30
1	13	1408	A	C2-N3-C4	-7.36	106.92	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1631	A	N1-C6-N6	7.36	123.02	118.60
26	14	320	A	N1-C2-N3	7.36	132.98	129.30
26	14	372	G	C5-C6-O6	-7.36	124.18	128.60
26	14	2385	C	OP1-P-OP2	7.36	130.64	119.60
26	1H	513	A	C5-C6-N1	7.36	121.38	117.70
26	1H	1927	A	N1-C6-N6	-7.36	114.19	118.60
26	14	802	A	C5-C6-N1	-7.36	114.02	117.70
26	14	1244	G	C4-C5-N7	7.36	113.74	110.80
26	14	1299	G	O5'-P-OP2	7.36	119.53	110.70
1	13	789	U	O5'-P-OP2	-7.36	99.08	105.70
26	1H	251	A	N1-C6-N6	-7.36	114.19	118.60
26	1H	318	C	C6-N1-C2	-7.36	117.36	120.30
26	1H	1494	A	N1-C2-N3	7.36	132.98	129.30
26	1H	1665	A	C5-C6-N6	-7.36	117.81	123.70
26	1H	2259	G	N1-C6-O6	7.36	124.31	119.90
26	14	219	G	N9-C4-C5	7.36	108.34	105.40
26	14	1302	A	O5'-P-OP1	-7.36	99.08	105.70
26	14	1312	U	N1-C2-O2	-7.36	117.65	122.80
26	14	1653	G	C5-C6-N1	7.36	115.18	111.50
1	13	305	G	N7-C8-N9	-7.36	109.42	113.10
26	1H	218	A	N1-C2-N3	7.36	132.98	129.30
26	1H	328	U	O5'-P-OP1	-7.36	99.08	105.70
26	1H	650	C	N3-C4-C5	-7.36	118.96	121.90
26	1H	814	C	N1-C2-O2	-7.36	114.49	118.90
26	1H	1315	C	N3-C4-N4	-7.36	112.85	118.00
26	1H	1338	G	OP1-P-OP2	-7.36	108.57	119.60
26	1H	1640	C	C2-N1-C1'	-7.36	110.71	118.80
27	16	14	U	C5-C4-O4	7.36	130.31	125.90
1	1G	105	G	N3-C4-C5	-7.36	124.92	128.60
26	14	150	C	N1-C2-N3	7.36	124.35	119.20
26	14	503	A	N1-C2-N3	7.36	132.98	129.30
26	14	2251	G	N1-C2-N3	7.36	128.31	123.90
26	1H	589	C	OP1-P-OP2	7.35	130.63	119.60
26	1H	1914	C	N3-C2-O2	-7.35	116.75	121.90
26	1H	2085	C	OP1-P-OP2	7.35	130.63	119.60
52	M8	39	CYS	N-CA-C	-7.35	91.14	111.00
26	14	1378	A	C6-C5-N7	7.35	137.45	132.30
26	14	1525	G	OP1-P-OP2	7.35	130.63	119.60
26	14	2337	G	C5-N7-C8	-7.35	100.62	104.30
1	13	852	G	C8-N9-C4	7.35	109.34	106.40
1	13	894	G	N7-C8-N9	-7.35	109.42	113.10
26	1H	618(A)	C	C6-N1-C2	7.35	123.24	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	798	G	C2-N3-C4	-7.35	108.22	111.90
26	1H	1401	G	C2-N3-C4	7.35	115.58	111.90
26	1H	1577	C	C6-N1-C2	-7.35	117.36	120.30
27	16	25	A	N1-C6-N6	7.35	123.01	118.60
27	16	67	G	C5-C6-O6	-7.35	124.19	128.60
1	1G	40	C	C5-C6-N1	-7.35	117.32	121.00
26	14	843	G	C5-C6-N1	-7.35	107.82	111.50
26	14	1790	C	N3-C4-N4	7.35	123.15	118.00
26	1H	1492	G	N1-C6-O6	7.35	124.31	119.90
26	1H	2246	G	N3-C4-N9	7.35	130.41	126.00
26	14	2363	C	C2-N1-C1'	-7.35	110.71	118.80
1	13	518	C	C6-N1-C2	7.35	123.24	120.30
1	13	915	A	N1-C6-N6	-7.35	114.19	118.60
26	1H	98	G	C6-C5-N7	-7.35	125.99	130.40
26	1H	432	A	C4-C5-N7	7.35	114.38	110.70
26	1H	628	G	C5-C6-O6	7.35	133.01	128.60
26	1H	1398	C	O5'-P-OP1	-7.35	99.09	105.70
26	1H	1726	G	N3-C4-C5	7.35	132.28	128.60
27	16	60	C	C6-N1-C2	-7.35	117.36	120.30
27	16	93	C	C6-N1-C2	-7.35	117.36	120.30
27	16	114	G	N7-C8-N9	-7.35	109.43	113.10
26	14	561	G	N9-C4-C5	7.35	108.34	105.40
26	14	1565	C	C2-N3-C4	-7.35	116.23	119.90
26	14	2045	C	C4-C5-C6	7.35	121.08	117.40
27	1J	101	A	OP1-P-OP2	7.35	130.62	119.60
26	1H	1259	G	C2-N3-C4	-7.35	108.23	111.90
26	1H	1680	U	N1-C2-N3	-7.35	110.49	114.90
26	14	71	A	N3-C4-C5	7.35	131.94	126.80
26	14	819	A	C5-N7-C8	7.35	107.57	103.90
26	14	2593	U	C6-N1-C2	-7.35	116.59	121.00
1	13	135	C	C6-N1-C2	-7.35	117.36	120.30
26	1H	207	A	C8-N9-C4	7.35	108.74	105.80
26	1H	1676	A	OP1-P-OP2	-7.35	108.58	119.60
26	1H	2264	C	N3-C4-N4	7.35	123.14	118.00
26	1H	2603	G	C6-C5-N7	-7.35	125.99	130.40
26	14	306	U	N3-C2-O2	-7.35	117.06	122.20
26	14	1601	G	OP1-P-OP2	-7.35	108.58	119.60
1	13	900	A	C5-C6-N6	-7.34	117.83	123.70
26	1H	125	G	N1-C2-N2	-7.34	109.59	116.20
26	1H	371	A	N7-C8-N9	7.34	117.47	113.80
26	1H	1448	G	O5'-P-OP1	-7.34	99.09	105.70
26	1H	2008	C	O5'-P-OP1	7.34	119.51	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	959	A	N1-C2-N3	-7.34	125.63	129.30
26	14	2063	C	OP2-P-O3'	7.34	121.36	105.20
26	14	2600	A	C5-C6-N6	7.34	129.58	123.70
26	14	829	A	O5'-P-OP2	-7.34	99.09	105.70
26	14	929	G	C8-N9-C4	-7.34	103.46	106.40
26	14	2678	C	O5'-P-OP2	-7.34	99.09	105.70
26	14	2740	A	N7-C8-N9	-7.34	110.13	113.80
26	1H	290	G	C6-C5-N7	-7.34	126.00	130.40
26	1H	1768	U	C2-N1-C1'	-7.34	108.89	117.70
26	1H	1803	A	N1-C6-N6	7.34	123.00	118.60
26	1H	2333	A	OP1-P-O3'	7.34	121.35	105.20
26	1H	2453	A	N7-C8-N9	7.34	117.47	113.80
1	1G	679	C	C6-N1-C2	-7.34	117.36	120.30
1	1G	884	U	N3-C2-O2	-7.34	117.06	122.20
26	14	1631	A	N1-C6-N6	7.34	123.00	118.60
26	14	2251	G	C2-N3-C4	-7.34	108.23	111.90
26	1H	259	G	C2-N3-C4	-7.34	108.23	111.90
26	1H	486	C	O5'-P-OP1	-7.34	99.09	105.70
26	1H	1614	A	N7-C8-N9	7.34	117.47	113.80
26	1H	2692	C	OP2-P-O3'	7.34	121.35	105.20
26	14	1641	A	C2-N3-C4	7.34	114.27	110.60
26	14	1657	C	C2-N3-C4	-7.34	116.23	119.90
1	13	656	C	C5-C6-N1	7.34	124.67	121.00
26	1H	1186	G	C4-C5-N7	-7.34	107.86	110.80
26	1H	1427	A	C4-C5-N7	-7.34	107.03	110.70
26	1H	2526	G	O5'-P-OP2	-7.34	99.10	105.70
26	14	270(D)	C	O5'-P-OP2	-7.34	99.09	105.70
1	13	1471	G	N3-C2-N2	-7.34	114.76	119.90
26	1H	318	C	N3-C4-C5	-7.34	118.97	121.90
26	1H	1008	C	C6-N1-C2	7.34	123.23	120.30
26	1H	1891	G	C5-C6-N1	-7.34	107.83	111.50
26	14	1008	C	C6-N1-C2	-7.34	117.36	120.30
26	14	2622	C	C6-N1-C2	7.34	123.23	120.30
26	1H	794	G	N7-C8-N9	-7.33	109.43	113.10
26	1H	858	U	C5-C4-O4	7.33	130.30	125.90
26	1H	1128	A	C5-N7-C8	-7.33	100.23	103.90
23	2K	43	G	C5-C6-O6	7.33	133.00	128.60
26	1H	728	G	N1-C6-O6	7.33	124.30	119.90
26	1H	1789	A	C6-N1-C2	-7.33	114.20	118.60
1	1G	948	C	O5'-P-OP2	-7.33	99.10	105.70
1	1G	1057	G	N3-C4-C5	7.33	132.27	128.60
26	14	2283	C	C5-C4-N4	-7.33	115.07	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	49	U	P-O3'-C3'	7.33	128.50	119.70
26	1H	771	G	C5-C6-O6	-7.33	124.20	128.60
26	1H	1627	G	C5-N7-C8	7.33	107.97	104.30
1	1G	573	A	C5-C6-N6	7.33	129.56	123.70
23	2L	38	A	C8-N9-C4	7.33	108.73	105.80
26	14	1781	C	C6-N1-C2	7.33	123.23	120.30
26	14	2280	G	C6-C5-N7	-7.33	126.00	130.40
26	14	2286	A	C4-C5-N7	7.33	114.37	110.70
1	13	353	A	OP2-P-O3'	7.33	121.33	105.20
1	13	1237	C	N3-C4-N4	7.33	123.13	118.00
26	1H	1352	U	C2-N3-C4	-7.33	122.60	127.00
1	1G	890	G	O4'-C1'-N9	7.33	114.06	108.20
26	14	2080	G	N9-C4-C5	7.33	108.33	105.40
1	13	664	G	C5-C6-O6	7.33	133.00	128.60
26	1H	385	C	OP1-P-OP2	7.33	130.59	119.60
26	1H	513	A	C2-N3-C4	7.33	114.27	110.60
26	1H	1241	A	N3-C4-C5	7.33	131.93	126.80
26	1H	1955	U	N1-C2-O2	-7.33	117.67	122.80
26	1H	2330	G	N1-C2-N3	7.33	128.30	123.90
26	14	808	G	C5-N7-C8	7.33	107.96	104.30
26	14	862	G	C4-C5-N7	-7.33	107.87	110.80
26	14	871	U	N1-C2-O2	-7.33	117.67	122.80
26	1H	2228	G	C8-N9-C4	7.33	109.33	106.40
26	1H	2592	G	OP1-P-OP2	7.33	130.59	119.60
1	1G	790	A	C2-N3-C4	7.33	114.26	110.60
26	14	1450	C	O5'-P-OP2	-7.33	99.11	105.70
26	14	2067	G	C8-N9-C4	-7.33	103.47	106.40
26	1H	425	G	C5-C6-O6	-7.33	124.20	128.60
26	1H	774	A	C4-C5-N7	7.33	114.36	110.70
26	1H	1434	A	C2-N3-C4	-7.33	106.94	110.60
26	1H	1642	G	N1-C6-O6	-7.33	115.50	119.90
26	1H	1925	C	N1-C2-O2	-7.33	114.50	118.90
26	1H	1955	U	P-O3'-C3'	7.33	128.49	119.70
26	1H	2714	G	OP2-P-O3'	7.33	121.32	105.20
26	14	107	C	O5'-P-OP1	7.33	119.49	110.70
26	14	569	U	C5-C6-N1	-7.33	119.04	122.70
26	14	626	U	C6-N1-C2	7.33	125.39	121.00
26	14	687	C	N3-C4-N4	-7.33	112.87	118.00
26	14	2599	G	N1-C6-O6	-7.33	115.50	119.90
1	13	1516	G	OP1-P-O3'	-7.32	89.09	105.20
26	1H	25	U	N1-C2-O2	-7.32	117.67	122.80
26	1H	232	G	N9-C4-C5	-7.32	102.47	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1121	C	N1-C2-N3	7.32	124.33	119.20
26	14	1482	U	C4-C5-C6	7.32	124.09	119.70
1	13	752	G	OP1-P-OP2	7.32	130.58	119.60
1	13	1279	A	C5-C6-N1	-7.32	114.04	117.70
1	13	1497	G	O5'-P-OP2	-7.32	99.11	105.70
1	1G	598	U	N3-C2-O2	7.32	127.33	122.20
1	13	129	U	C5-C4-O4	7.32	130.29	125.90
1	13	138	G	N1-C6-O6	7.32	124.29	119.90
1	13	1476	G	C8-N9-C4	7.32	109.33	106.40
26	1H	835	A	N1-C2-N3	7.32	132.96	129.30
26	1H	2565	A	C8-N9-C4	7.32	108.73	105.80
1	1G	733	A	C8-N9-C4	7.32	108.73	105.80
26	14	125	G	N1-C2-N3	-7.32	119.51	123.90
26	14	1881	C	N3-C2-O2	-7.32	116.78	121.90
26	14	1903	G	OP1-P-OP2	7.32	130.58	119.60
26	1H	754	C	N3-C2-O2	-7.32	116.78	121.90
26	14	221	A	C8-N9-C4	-7.32	102.87	105.80
26	14	1007	C	N3-C4-C5	7.32	124.83	121.90
26	14	1644	C	N1-C2-O2	7.32	123.29	118.90
26	14	1844	C	C4-C5-C6	-7.32	113.74	117.40
26	14	2741	A	C5-C6-N6	-7.32	117.84	123.70
1	13	625	G	N7-C8-N9	7.32	116.76	113.10
1	13	1057	G	N3-C2-N2	7.32	125.02	119.90
26	1H	540	G	C8-N9-C4	-7.32	103.47	106.40
26	1H	760	G	C5-C6-N1	-7.32	107.84	111.50
26	1H	1825	A	C4-C5-N7	-7.32	107.04	110.70
48	I8	77	ARG	NE-CZ-NH1	-7.32	116.64	120.30
1	1G	360	A	N1-C6-N6	7.32	122.99	118.60
26	14	35	G	N7-C8-N9	7.32	116.76	113.10
26	14	834	C	C2-N3-C4	-7.32	116.24	119.90
1	13	1335	C	C5-C6-N1	-7.32	117.34	121.00
1	13	1513	A	N7-C8-N9	-7.32	110.14	113.80
26	1H	1594	G	O5'-P-OP1	-7.32	99.12	105.70
26	1H	1835	G	N1-C2-N3	-7.32	119.51	123.90
26	1H	1913	A	N1-C6-N6	-7.32	114.21	118.60
26	1H	2610	C	C5-C6-N1	-7.32	117.34	121.00
1	1G	286	G	N1-C6-O6	-7.32	115.51	119.90
1	1G	413	G	C5-N7-C8	7.32	107.96	104.30
26	14	2454	G	N3-C2-N2	7.32	125.02	119.90
26	1H	2570	G	C5-C6-N1	-7.31	107.84	111.50
26	14	2239	G	N1-C2-N2	-7.31	109.62	116.20
26	1H	1413	G	N9-C4-C5	7.31	108.33	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2072	G	N7-C8-N9	-7.31	109.44	113.10
26	14	1940	U	C4-C5-C6	7.31	124.09	119.70
26	14	2101	G	C5-C6-N1	-7.31	107.84	111.50
26	14	2600	A	C5-N7-C8	7.31	107.56	103.90
23	2K	18	C	C5-C6-N1	7.31	124.65	121.00
26	1H	1414	G	C8-N9-C4	-7.31	103.48	106.40
26	1H	1977	A	N1-C6-N6	-7.31	114.22	118.60
26	1H	2259	G	C6-N1-C2	-7.31	120.71	125.10
1	1G	1416	G	N3-C4-N9	-7.31	121.61	126.00
23	2L	40	C	C5-C6-N1	7.31	124.66	121.00
26	14	620	G	OP1-P-OP2	7.31	130.56	119.60
26	14	2505	G	C6-N1-C2	7.31	129.49	125.10
1	13	1510	U	N3-C2-O2	7.31	127.32	122.20
26	1H	296	C	C4-C5-C6	7.31	121.05	117.40
26	1H	704	G	N3-C2-N2	-7.31	114.78	119.90
26	1H	785	G	N1-C2-N3	7.31	128.28	123.90
26	1H	1554	A	C6-N1-C2	-7.31	114.22	118.60
26	1H	1563	G	N9-C4-C5	7.31	108.32	105.40
26	1H	2585	U	OP1-P-OP2	-7.31	108.64	119.60
1	1G	1338	G	C4-C5-N7	-7.31	107.88	110.80
57	3L	72	C	C6-N1-C2	-7.31	117.38	120.30
26	14	643	A	O5'-P-OP2	-7.31	99.12	105.70
26	14	2427	C	O5'-P-OP2	7.31	119.47	110.70
26	1H	641	C	O5'-P-OP1	-7.31	99.12	105.70
26	14	74	A	C4-C5-C6	7.31	120.65	117.00
26	14	2461	C	C5-C6-N1	-7.31	117.35	121.00
1	13	715	A	N1-C2-N3	7.30	132.95	129.30
1	13	1388	C	N1-C2-O2	-7.30	114.52	118.90
26	1H	1989	G	C6-C5-N7	-7.30	126.02	130.40
26	1H	2635	C	C6-N1-C2	7.30	123.22	120.30
1	1G	315	A	C8-N9-C4	-7.30	102.88	105.80
26	14	197	A	C5-N7-C8	-7.30	100.25	103.90
26	14	2239	G	N1-C6-O6	-7.30	115.52	119.90
1	13	728	A	N7-C8-N9	7.30	117.45	113.80
1	13	777	A	O5'-P-OP2	-7.30	99.13	105.70
26	1H	862	G	N3-C4-C5	-7.30	124.95	128.60
26	1H	2757	A	C8-N9-C4	-7.30	102.88	105.80
1	1G	393	A	C8-N9-C4	-7.30	102.88	105.80
23	2L	40	C	O5'-P-OP1	-7.30	99.13	105.70
26	14	986	C	C6-N1-C2	-7.30	117.38	120.30
1	13	506	G	O5'-P-OP1	-7.30	99.13	105.70
26	1H	40	C	C2-N3-C4	-7.30	116.25	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	591	C	C5-C6-N1	-7.30	117.35	121.00
26	1H	1338	G	C8-N9-C4	7.30	109.32	106.40
26	1H	2417	C	N3-C4-N4	-7.30	112.89	118.00
27	16	109	G	N7-C8-N9	7.30	116.75	113.10
1	1G	386	C	C2-N3-C4	-7.30	116.25	119.90
23	2L	77	A	C5-N7-C8	-7.30	100.25	103.90
26	14	647	G	OP1-P-OP2	-7.30	108.65	119.60
26	14	2598	A	C5-N7-C8	-7.30	100.25	103.90
1	13	919	A	C2-N3-C4	7.30	114.25	110.60
26	1H	248	G	OP2-P-O3'	-7.30	89.14	105.20
26	1H	776	G	N3-C4-N9	-7.30	121.62	126.00
26	1H	960	A	N1-C2-N3	-7.30	125.65	129.30
26	1H	1406	U	N3-C4-C5	-7.30	110.22	114.60
26	1H	1980	G	C5-C6-N1	7.30	115.15	111.50
26	1H	2267	A	OP1-P-OP2	7.30	130.55	119.60
26	14	450	G	N1-C2-N3	7.30	128.28	123.90
26	14	500	G	C2-N3-C4	-7.30	108.25	111.90
26	14	624	C	N1-C2-O2	-7.30	114.52	118.90
26	14	1477	A	N1-C6-N6	-7.30	114.22	118.60
26	14	1972	A	OP2-P-O3'	7.30	121.26	105.20
1	13	821	G	C5-C6-O6	-7.30	124.22	128.60
26	1H	909	A	N7-C8-N9	-7.30	110.15	113.80
26	1H	1931	U	N3-C4-O4	-7.30	114.29	119.40
26	1H	2009	G	O5'-P-OP2	-7.30	99.13	105.70
1	1G	392	G	N3-C2-N2	-7.30	114.79	119.90
26	14	915	C	C5-C6-N1	7.30	124.65	121.00
26	14	2731	G	C4-C5-C6	7.30	123.18	118.80
26	1H	1021	A	N3-C4-N9	-7.30	121.56	127.40
26	1H	1768	U	C5-C4-O4	7.30	130.28	125.90
26	1H	2709	G	C5-C6-O6	7.30	132.98	128.60
27	16	36	C	OP2-P-O3'	7.30	121.25	105.20
1	1G	308	C	O5'-P-OP1	7.30	119.46	110.70
26	14	200	U	OP1-P-OP2	7.30	130.54	119.60
26	14	751	A	N1-C2-N3	7.30	132.95	129.30
26	14	2606	C	OP2-P-O3'	7.30	121.25	105.20
26	14	2850	A	O4'-C1'-N9	-7.30	102.36	108.20
26	1H	1159	U	O5'-P-OP1	7.29	119.45	110.70
26	14	750	A	C5-N7-C8	-7.29	100.25	103.90
26	14	2388	A	C5-C6-N6	7.29	129.54	123.70
1	13	731	G	N7-C8-N9	7.29	116.75	113.10
1	13	1528	U	C6-N1-C2	7.29	125.38	121.00
26	1H	677	A	N1-C6-N6	-7.29	114.22	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1558	A	O5'-P-OP2	7.29	119.45	110.70
26	1H	1863	G	OP1-P-OP2	7.29	130.54	119.60
1	1G	543	C	N1-C2-O2	-7.29	114.52	118.90
26	14	534	U	O5'-P-OP2	-7.29	99.14	105.70
26	14	685	A	OP1-P-OP2	7.29	130.54	119.60
26	14	741	G	C8-N9-C4	-7.29	103.48	106.40
26	14	2243	U	C4-C5-C6	7.29	124.08	119.70
26	14	2256	G	O5'-P-OP2	-7.29	99.14	105.70
1	13	1305	G	N7-C8-N9	7.29	116.75	113.10
23	2K	74	A	OP2-P-O3'	7.29	121.24	105.20
26	1H	981	A	N1-C2-N3	-7.29	125.65	129.30
26	1H	1803	A	C5-C6-N6	-7.29	117.87	123.70
26	1H	1971	A	N1-C2-N3	-7.29	125.65	129.30
27	16	14	U	O5'-P-OP1	-7.29	99.14	105.70
1	13	435	C	O5'-P-OP1	7.29	119.45	110.70
26	1H	692	C	C5-C4-N4	-7.29	115.10	120.20
26	1H	1967	C	OP1-P-OP2	7.29	130.54	119.60
1	13	335	C	C5-C4-N4	7.29	125.30	120.20
1	13	618	C	C6-N1-C2	-7.29	117.38	120.30
1	13	1517	G	O5'-P-OP1	7.29	119.45	110.70
26	1H	1981	A	C4-C5-N7	7.29	114.34	110.70
26	1H	2274	A	C2-N3-C4	-7.29	106.96	110.60
26	1H	2318	G	C4-C5-N7	7.29	113.72	110.80
26	1H	2404	C	O5'-P-OP1	-7.29	99.14	105.70
1	1G	537	G	N1-C6-O6	7.29	124.27	119.90
26	14	525	U	N3-C4-C5	-7.29	110.23	114.60
26	14	737	C	N3-C4-N4	7.29	123.10	118.00
26	14	864	G	N7-C8-N9	7.29	116.74	113.10
26	14	1021	A	C5-N7-C8	-7.29	100.26	103.90
26	1H	95	G	N1-C2-N3	7.29	128.27	123.90
27	16	29	A	C4-C5-N7	7.29	114.34	110.70
23	2L	32	G	C8-N9-C4	-7.29	103.48	106.40
26	14	268	C	N1-C2-O2	-7.29	114.53	118.90
26	14	755	C	C2-N3-C4	7.29	123.54	119.90
1	13	778	G	C2-N3-C4	-7.29	108.26	111.90
26	1H	2422	A	C8-N9-C4	-7.29	102.89	105.80
27	16	105	G	C4-C5-N7	7.29	113.71	110.80
1	1G	360	A	C5-C6-N6	-7.29	117.87	123.70
1	1G	1473	A	C2-N3-C4	-7.29	106.96	110.60
26	14	1952	A	C2-N3-C4	-7.29	106.96	110.60
26	14	2434	A	C4-C5-N7	-7.29	107.06	110.70
26	14	2550	G	N1-C6-O6	7.29	124.27	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2731	G	N1-C2-N3	7.29	128.27	123.90
26	1H	257	A	OP2-P-O3'	7.28	121.22	105.20
26	1H	1202	C	N3-C2-O2	7.28	127.00	121.90
26	14	31	C	C6-N1-C2	-7.28	117.39	120.30
26	1H	270(K)	C	N1-C2-O2	7.28	123.27	118.90
26	1H	1005	C	C4-C5-C6	7.28	121.04	117.40
26	1H	2329	G	N3-C4-C5	7.28	132.24	128.60
27	16	45	A	C5-N7-C8	-7.28	100.26	103.90
26	14	1528	A	C4-C5-N7	7.28	114.34	110.70
26	14	1603	A	N1-C6-N6	7.28	122.97	118.60
26	1H	1400	G	C4-C5-N7	-7.28	107.89	110.80
26	1H	1825	A	C6-N1-C2	-7.28	114.23	118.60
26	1H	2086	U	OP2-P-O3'	7.28	121.22	105.20
26	1H	2655	G	N1-C6-O6	-7.28	115.53	119.90
26	1H	2672	G	N1-C2-N3	7.28	128.27	123.90
1	1G	578	C	N3-C4-N4	-7.28	112.90	118.00
26	14	34	C	N1-C2-O2	7.28	123.27	118.90
26	14	414	C	C5-C6-N1	-7.28	117.36	121.00
26	14	1261	C	N1-C2-O2	-7.28	114.53	118.90
26	14	1311	G	C5-N7-C8	7.28	107.94	104.30
26	14	2420	C	O5'-P-OP2	7.28	119.44	110.70
1	13	122	G	C4-C5-C6	7.28	123.17	118.80
26	1H	300	A	N1-C6-N6	7.28	122.97	118.60
26	1H	1311	G	C5-C6-O6	-7.28	124.23	128.60
26	1H	1486	A	C8-N9-C4	-7.28	102.89	105.80
26	1H	1499	C	O5'-P-OP1	-7.28	99.15	105.70
1	1G	995	C	C6-N1-C2	-7.28	117.39	120.30
26	14	1244	G	N1-C6-O6	7.28	124.27	119.90
1	13	783	C	N3-C4-N4	-7.28	112.91	118.00
26	1H	68	G	C2-N3-C4	-7.28	108.26	111.90
26	1H	1235	G	C5-C6-N1	-7.28	107.86	111.50
1	1G	894	G	N3-C4-N9	-7.28	121.63	126.00
1	1G	1356	G	C8-N9-C4	-7.28	103.49	106.40
26	14	855	G	N7-C8-N9	7.28	116.74	113.10
26	14	1849	G	C8-N9-C4	-7.28	103.49	106.40
26	1H	270(R)	G	C2-N3-C4	-7.28	108.26	111.90
26	1H	1443	G	N7-C8-N9	7.28	116.74	113.10
26	1H	1930	G	C6-C5-N7	7.28	134.77	130.40
26	1H	2040	C	N3-C2-O2	7.28	126.99	121.90
26	1H	2242	G	C6-N1-C2	-7.28	120.73	125.10
26	1H	2617	C	N1-C2-O2	-7.28	114.53	118.90
27	16	5	C	N3-C4-C5	7.28	124.81	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	390	C	N3-C4-N4	-7.28	112.91	118.00
25	4L	14	A	N1-C6-N6	-7.28	114.23	118.60
1	13	38	G	OP1-P-OP2	-7.27	108.69	119.60
26	1H	472	A	C8-N9-C4	7.27	108.71	105.80
26	1H	1243	G	C5-N7-C8	-7.27	100.66	104.30
26	1H	1459	G	N7-C8-N9	-7.27	109.46	113.10
26	1H	1730	U	C5-C6-N1	-7.27	119.06	122.70
26	1H	2277	G	C4-C5-N7	-7.27	107.89	110.80
23	2K	5	G	N1-C6-O6	-7.27	115.54	119.90
26	1H	224	G	O5'-P-OP1	7.27	119.43	110.70
26	1H	954	G	C4-C5-N7	-7.27	107.89	110.80
26	1H	1206	G	O5'-P-OP2	-7.27	99.16	105.70
26	1H	1361	G	N7-C8-N9	-7.27	109.46	113.10
26	1H	2372	G	C4-C5-N7	-7.27	107.89	110.80
27	16	7	G	C2-N3-C4	-7.27	108.26	111.90
1	1G	106	C	C4-C5-C6	7.27	121.04	117.40
1	1G	776	G	C2-N3-C4	-7.27	108.26	111.90
1	13	611	A	N9-C4-C5	-7.27	102.89	105.80
1	13	1499	A	C2-N3-C4	-7.27	106.96	110.60
26	1H	1451	C	C5-C6-N1	-7.27	117.36	121.00
26	1H	2087	G	N9-C4-C5	-7.27	102.49	105.40
1	1G	667	G	N1-C6-O6	7.27	124.26	119.90
26	14	829	A	N1-C6-N6	7.27	122.96	118.60
26	14	2764	A	C4-C5-N7	-7.27	107.06	110.70
1	13	907	A	C5-C6-N6	-7.27	117.88	123.70
22	1K	36	U	N3-C4-O4	-7.27	114.31	119.40
26	1H	922	U	N1-C2-O2	-7.27	117.71	122.80
26	1H	1406	U	OP1-P-O3'	7.27	121.19	105.20
27	16	9	G	C4-C5-N7	7.27	113.71	110.80
26	14	914	C	O5'-P-OP2	-7.27	99.16	105.70
26	14	1229	G	C8-N9-C4	-7.27	103.49	106.40
26	14	1342	A	N1-C2-N3	7.27	132.94	129.30
26	14	1788	C	N3-C4-N4	-7.27	112.91	118.00
26	14	2419	U	N3-C4-C5	-7.27	110.24	114.60
1	13	617	G	C5-C6-N1	-7.27	107.87	111.50
26	1H	1764	G	N1-C6-O6	-7.27	115.54	119.90
26	1H	2054	A	C5-N7-C8	-7.27	100.27	103.90
26	14	1639	U	O5'-P-OP1	7.27	119.42	110.70
26	14	2034	U	C5-C4-O4	7.27	130.26	125.90
26	14	2071	A	C2-N3-C4	7.27	114.23	110.60
26	14	2392	A	O5'-P-OP1	-7.27	99.16	105.70
26	1H	1157	G	N7-C8-N9	7.27	116.73	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1776	G	O5'-P-OP1	7.27	119.42	110.70
1	1G	1480	G	C5-C6-O6	-7.27	124.24	128.60
26	14	2087	G	N3-C2-N2	7.27	124.99	119.90
26	14	2779	U	O4'-C1'-N1	7.27	114.01	108.20
26	1H	1643	G	OP2-P-O3'	7.26	121.18	105.20
26	1H	1671	U	N3-C4-O4	7.26	124.48	119.40
26	1H	1794	U	C6-N1-C2	-7.26	116.64	121.00
1	1G	320	C	C2-N1-C1'	-7.26	110.81	118.80
26	14	921	G	N3-C2-N2	-7.26	114.81	119.90
26	14	2306	C	C2-N3-C4	7.26	123.53	119.90
26	1H	38	A	C5-C6-N1	7.26	121.33	117.70
26	1H	2372	G	N3-C2-N2	-7.26	114.82	119.90
26	1H	2818	G	N3-C2-N2	-7.26	114.82	119.90
27	16	108	C	N1-C2-O2	7.26	123.26	118.90
1	1G	776	G	N3-C4-C5	7.26	132.23	128.60
22	1K	5	C	C6-N1-C2	-7.26	117.40	120.30
26	1H	923	C	N3-C4-C5	-7.26	119.00	121.90
26	1H	1355	G	O5'-P-OP1	7.26	119.42	110.70
26	1H	1434	A	N7-C8-N9	-7.26	110.17	113.80
26	1H	1579	A	C8-N9-C4	-7.26	102.89	105.80
26	1H	2883	A	C8-N9-C4	-7.26	102.89	105.80
26	14	773	U	C5-C4-O4	7.26	130.26	125.90
26	14	2275	C	C6-N1-C2	-7.26	117.39	120.30
26	1H	283	A	C5-N7-C8	7.26	107.53	103.90
26	1H	1431	U	O5'-P-OP2	-7.26	99.17	105.70
26	1H	2167	U	C6-N1-C2	-7.26	116.64	121.00
26	1H	2873	A	OP1-P-OP2	7.26	130.49	119.60
27	16	29	A	C5-N7-C8	-7.26	100.27	103.90
26	14	1617	C	N1-C2-N3	7.26	124.28	119.20
27	1J	79	C	OP1-P-OP2	-7.26	108.71	119.60
1	13	507	C	N3-C2-O2	-7.26	116.82	121.90
26	1H	27	G	N1-C2-N3	7.26	128.25	123.90
26	14	454	A	N1-C6-N6	-7.26	114.25	118.60
26	14	2688	U	C5-C6-N1	-7.26	119.07	122.70
1	13	523	A	C2-N3-C4	-7.26	106.97	110.60
26	1H	124	G	C5-C6-N1	7.26	115.13	111.50
26	1H	308	G	N1-C6-O6	-7.26	115.55	119.90
26	1H	1400	G	N3-C4-C5	-7.26	124.97	128.60
26	1H	1668	A	C8-N9-C4	7.26	108.70	105.80
26	1H	2830	G	C4-C5-N7	7.26	113.70	110.80
1	1G	970	C	C5-C6-N1	7.26	124.63	121.00
26	14	127	A	C8-N9-C4	7.26	108.70	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	704	G	C6-C5-N7	-7.26	126.05	130.40
26	14	2092	U	C6-N1-C2	-7.26	116.65	121.00
26	14	2253	G	C6-C5-N7	-7.26	126.05	130.40
1	13	912	C	C4-C5-C6	7.25	121.03	117.40
1	13	1528	U	C5-C6-N1	-7.25	119.07	122.70
26	1H	2847	U	N1-C2-O2	-7.25	117.72	122.80
27	16	41	U	C5-C4-O4	7.25	130.25	125.90
26	14	1331	A	C5-C6-N1	7.25	121.33	117.70
26	14	1547	C	N1-C2-O2	7.25	123.25	118.90
26	1H	626	U	C4-C5-C6	7.25	124.05	119.70
26	1H	1201	C	N3-C2-O2	7.25	126.98	121.90
37	78	65	ARG	NE-CZ-NH2	-7.25	116.67	120.30
26	14	483	A	C6-N1-C2	-7.25	114.25	118.60
26	14	679	C	N3-C2-O2	7.25	126.98	121.90
26	14	1376	C	C4-C5-C6	7.25	121.03	117.40
26	14	2340	G	N7-C8-N9	-7.25	109.47	113.10
1	13	436	C	N1-C2-O2	-7.25	114.55	118.90
1	13	532	A	C8-N9-C4	-7.25	102.90	105.80
26	1H	347	A	C4-C5-N7	7.25	114.33	110.70
26	1H	830	G	C4-C5-C6	7.25	123.15	118.80
26	1H	1332	G	C4-C5-C6	7.25	123.15	118.80
26	1H	1553	A	C2-N3-C4	7.25	114.23	110.60
26	1H	1639	U	C2-N3-C4	-7.25	122.65	127.00
1	1G	1197	G	O5'-P-OP2	-7.25	99.17	105.70
26	14	1154	G	C8-N9-C4	-7.25	103.50	106.40
26	14	1501	C	C6-N1-C2	-7.25	117.40	120.30
26	14	2710	C	OP2-P-O3'	7.25	121.15	105.20
1	13	1422	G	C8-N9-C4	7.25	109.30	106.40
26	1H	629	G	C2-N3-C4	-7.25	108.28	111.90
1	1G	547	A	C8-N9-C4	7.25	108.70	105.80
26	14	486	C	C6-N1-C2	-7.25	117.40	120.30
26	14	826	U	N3-C4-C5	-7.25	110.25	114.60
26	14	1338	G	C4-C5-N7	7.25	113.70	110.80
1	13	135	C	N1-C2-N3	7.25	124.27	119.20
1	13	1065	U	P-O3'-C3'	7.25	128.40	119.70
26	1H	220	G	N3-C2-N2	-7.25	114.83	119.90
26	1H	452	G	C5-C6-O6	7.25	132.95	128.60
26	1H	2427	C	C2-N3-C4	-7.25	116.28	119.90
26	1H	2450	A	N9-C4-C5	7.25	108.70	105.80
26	14	40	C	C6-N1-C2	-7.25	117.40	120.30
26	14	775	G	N1-C2-N3	7.25	128.25	123.90
26	14	800	A	C5-C6-N1	7.25	121.33	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1431	U	C5-C4-O4	-7.25	121.55	125.90
26	14	2729	G	C4-C5-N7	7.25	113.70	110.80
26	1H	1555	G	C5-C6-O6	-7.25	124.25	128.60
26	1H	1889	A	C5-N7-C8	-7.25	100.28	103.90
27	16	28	C	C6-N1-C2	-7.25	117.40	120.30
1	1G	46	G	C8-N9-C4	7.25	109.30	106.40
1	1G	284	G	C4-C5-N7	7.25	113.70	110.80
57	3L	71	C	O4'-C1'-N1	7.25	114.00	108.20
26	14	29	U	OP1-P-OP2	-7.25	108.73	119.60
26	14	449	A	C5-N7-C8	-7.25	100.28	103.90
26	14	582	G	N1-C6-O6	7.25	124.25	119.90
26	14	860	U	O5'-P-OP1	7.25	119.40	110.70
26	14	1425	G	C8-N9-C4	7.25	109.30	106.40
26	14	2053	G	N7-C8-N9	-7.25	109.48	113.10
1	13	1252	A	C5-C6-N6	7.25	129.50	123.70
1	13	1333	A	N9-C4-C5	7.25	108.70	105.80
26	1H	921	G	N7-C8-N9	7.25	116.72	113.10
26	1H	1005	C	C5-C6-N1	-7.25	117.38	121.00
26	1H	1814	G	N9-C4-C5	7.25	108.30	105.40
26	1H	2523	G	C6-N1-C2	-7.25	120.75	125.10
26	14	36	G	O5'-P-OP2	-7.25	99.18	105.70
26	14	265	A	C8-N9-C4	-7.25	102.90	105.80
1	13	284	G	N1-C6-O6	-7.24	115.55	119.90
1	13	667	G	O5'-P-OP2	-7.24	99.18	105.70
1	13	1208	C	C5-C6-N1	-7.24	117.38	121.00
26	1H	439	G	C6-C5-N7	-7.24	126.05	130.40
26	1H	1257	C	N1-C2-N3	7.24	124.27	119.20
26	1H	1352	U	O5'-P-OP2	-7.24	99.18	105.70
26	1H	1811	G	OP1-P-O3'	-7.24	89.26	105.20
26	14	1359	A	N9-C4-C5	-7.24	102.90	105.80
26	14	1461	G	N1-C6-O6	7.24	124.25	119.90
1	13	988	G	N1-C6-O6	-7.24	115.56	119.90
1	13	1482	G	C5-N7-C8	-7.24	100.68	104.30
26	1H	968	G	N9-C4-C5	7.24	108.30	105.40
26	1H	1311	G	C4-C5-N7	7.24	113.70	110.80
26	1H	1997	G	N9-C4-C5	7.24	108.30	105.40
26	1H	2032	G	N3-C4-C5	7.24	132.22	128.60
26	14	2089	U	N3-C4-C5	-7.24	110.25	114.60
26	14	2199	A	C5-N7-C8	-7.24	100.28	103.90
26	1H	594	U	O5'-P-OP2	-7.24	99.18	105.70
26	1H	1266	G	C8-N9-C4	7.24	109.30	106.40
26	1H	2750	A	OP1-P-OP2	-7.24	108.74	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	16	81	G	C5-C6-O6	-7.24	124.26	128.60
26	14	685	A	C5-N7-C8	-7.24	100.28	103.90
26	14	1706	U	N3-C4-C5	-7.24	110.26	114.60
26	14	1779	U	O5'-P-OP2	-7.24	99.18	105.70
26	1H	657	U	OP2-P-O3'	7.24	121.12	105.20
26	1H	1379	A	C4-C5-N7	7.24	114.32	110.70
26	1H	1609	A	C5-C6-N6	7.24	129.49	123.70
26	1H	1971	A	C5-C6-N6	-7.24	117.91	123.70
26	1H	2647	U	N3-C2-O2	-7.24	117.13	122.20
26	14	1349	A	C4-C5-N7	7.24	114.32	110.70
26	14	1656	C	C6-N1-C2	-7.24	117.41	120.30
26	14	2030	A	N1-C6-N6	-7.24	114.26	118.60
26	1H	125	G	C6-N1-C2	-7.24	120.76	125.10
26	1H	647	G	N3-C4-C5	-7.24	124.98	128.60
1	13	133	U	OP1-P-OP2	7.24	130.45	119.60
1	13	1069	C	C2-N3-C4	7.24	123.52	119.90
26	1H	315	G	C4-C5-N7	7.24	113.69	110.80
26	1H	620	G	OP1-P-OP2	7.24	130.46	119.60
26	1H	755	C	N3-C4-C5	-7.24	119.01	121.90
26	1H	1993	U	C2-N3-C4	-7.24	122.66	127.00
1	1G	249	U	C5-C6-N1	-7.24	119.08	122.70
1	1G	666	G	C4-C5-C6	7.24	123.14	118.80
26	14	121	G	N1-C2-N3	7.24	128.24	123.90
26	14	760	G	C8-N9-C4	-7.24	103.51	106.40
26	14	2011	U	N1-C2-O2	-7.24	117.73	122.80
26	14	2323	G	N7-C8-N9	-7.24	109.48	113.10
26	14	2609	U	C5-C6-N1	-7.24	119.08	122.70
26	1H	1653	G	N1-C2-N2	-7.23	109.69	116.20
1	1G	354	G	C6-C5-N7	-7.23	126.06	130.40
26	14	734	A	OP1-P-OP2	7.23	130.45	119.60
26	14	2506	U	O5'-P-OP1	7.23	119.38	110.70
1	13	6	G	C5-C6-N1	7.23	115.12	111.50
1	13	244	U	C2-N3-C4	7.23	131.34	127.00
26	1H	1294	U	C2-N3-C4	-7.23	122.66	127.00
26	1H	2233	U	C6-N1-C2	7.23	125.34	121.00
26	1H	793	A	C6-C5-N7	-7.23	127.24	132.30
1	1G	1511	G	N9-C4-C5	7.23	108.29	105.40
26	1H	2420	C	O5'-P-OP1	-7.23	99.19	105.70
26	1H	2645	G	N1-C6-O6	7.23	124.24	119.90
26	14	1374	G	N3-C4-N9	7.23	130.34	126.00
1	13	557	G	N1-C2-N2	-7.23	109.70	116.20
1	13	1236	A	C2-N3-C4	-7.23	106.99	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	66	C	C5-C6-N1	7.23	124.61	121.00
26	1H	2259	G	C5-C6-O6	-7.23	124.26	128.60
1	1G	851	G	N1-C6-O6	7.23	124.24	119.90
1	1G	1314	C	N3-C4-C5	-7.23	119.01	121.90
26	14	122	G	OP1-P-O3'	-7.23	89.30	105.20
26	1H	220	G	O5'-P-OP2	7.23	119.37	110.70
26	1H	258	G	O5'-P-OP2	-7.23	99.20	105.70
26	1H	1555	G	O5'-P-OP2	7.23	119.37	110.70
26	1H	2739	U	C2-N3-C4	-7.23	122.66	127.00
1	1G	1534	A	C2-N3-C4	7.23	114.21	110.60
26	14	1673	U	C2-N1-C1'	-7.23	109.03	117.70
26	14	2477	C	C2-N1-C1'	7.23	126.75	118.80
26	1H	198	C	C5-C4-N4	-7.22	115.14	120.20
26	1H	2052	G	C6-N1-C2	-7.22	120.77	125.10
26	1H	2644	G	N3-C2-N2	-7.22	114.84	119.90
26	1H	2770	G	O5'-P-OP2	-7.22	99.20	105.70
1	1G	171	A	C5-C6-N6	7.22	129.48	123.70
26	14	824	A	C5-N7-C8	7.22	107.51	103.90
26	14	1367	A	C8-N9-C4	-7.22	102.91	105.80
26	14	2442	C	OP1-P-OP2	-7.22	108.76	119.60
1	13	876	G	N1-C6-O6	-7.22	115.57	119.90
1	13	988	G	C8-N9-C4	-7.22	103.51	106.40
26	1H	225	A	N3-C4-C5	7.22	131.85	126.80
26	1H	645	C	N3-C4-C5	-7.22	119.01	121.90
26	1H	794	G	O5'-P-OP2	7.22	119.37	110.70
26	1H	1438	U	N3-C4-C5	-7.22	110.27	114.60
26	1H	1606	G	N9-C4-C5	-7.22	102.51	105.40
26	1H	1928	A	N1-C6-N6	-7.22	114.27	118.60
1	1G	359	U	C5-C4-O4	7.22	130.23	125.90
1	1G	1079	G	C5-C6-N1	-7.22	107.89	111.50
26	14	937	U	C5-C4-O4	-7.22	121.57	125.90
26	14	1598	C	C6-N1-C2	7.22	123.19	120.30
26	14	2437	U	N3-C2-O2	-7.22	117.14	122.20
26	14	2812	G	C2-N3-C4	-7.22	108.29	111.90
26	1H	2874	C	C6-N1-C2	7.22	123.19	120.30
26	14	197	A	OP2-P-O3'	7.22	121.09	105.20
26	14	523	C	N1-C2-O2	-7.22	114.57	118.90
1	13	53	A	C5-C6-N6	-7.22	117.92	123.70
1	13	973	G	N9-C4-C5	7.22	108.29	105.40
1	13	1340	A	C5-C6-N1	-7.22	114.09	117.70
23	2K	62	C	C2-N3-C4	7.22	123.51	119.90
26	1H	221	A	C5-N7-C8	7.22	107.51	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	471	A	C6-N1-C2	7.22	122.93	118.60
26	1H	2587	A	C6-N1-C2	-7.22	114.27	118.60
26	1H	2677	G	N3-C2-N2	-7.22	114.85	119.90
26	14	235	U	C6-N1-C2	7.22	125.33	121.00
26	14	672	C	N1-C2-N3	7.22	124.25	119.20
26	14	1305	C	N3-C4-C5	7.22	124.79	121.90
26	14	1368	G	N1-C6-O6	-7.22	115.57	119.90
26	14	1562	A	N1-C6-N6	7.22	122.93	118.60
26	14	1758	G	N9-C4-C5	7.22	108.29	105.40
26	14	1824	G	N1-C2-N2	7.22	122.70	116.20
26	14	1989	G	N9-C4-C5	7.22	108.29	105.40
26	14	2071	A	C8-N9-C4	-7.22	102.91	105.80
1	13	904	C	N1-C2-O2	7.22	123.23	118.90
26	1H	1192	G	O5'-P-OP2	-7.22	99.20	105.70
1	1G	1409	C	O5'-P-OP2	-7.22	99.20	105.70
26	14	760	G	N1-C6-O6	7.22	124.23	119.90
1	13	1433	A	N1-C6-N6	-7.22	114.27	118.60
26	1H	111	A	C5-C6-N1	7.22	121.31	117.70
1	1G	778	G	C4-N9-C1'	7.22	135.88	126.50
57	3L	61	C	C6-N1-C2	-7.22	117.41	120.30
26	14	1966	A	C4-C5-C6	7.22	120.61	117.00
1	13	786	G	C8-N9-C4	7.21	109.29	106.40
1	13	1329	A	C4-C5-N7	7.21	114.31	110.70
26	1H	332	A	N3-C4-N9	-7.21	121.63	127.40
26	1H	497	A	N1-C6-N6	-7.21	114.27	118.60
26	1H	2575	C	N3-C4-C5	-7.21	119.01	121.90
26	1H	2697	G	N1-C2-N3	7.21	128.23	123.90
26	1H	2845	G	C2-N3-C4	-7.21	108.29	111.90
26	14	655	A	C5-C6-N1	-7.21	114.09	117.70
26	14	739	G	N3-C4-C5	7.21	132.21	128.60
26	14	952	G	C6-C5-N7	-7.21	126.07	130.40
1	13	611	A	C4-C5-N7	7.21	114.31	110.70
26	1H	648	G	N9-C4-C5	7.21	108.28	105.40
26	1H	1520	U	N3-C4-C5	-7.21	110.27	114.60
26	1H	2325	G	C8-N9-C4	-7.21	103.52	106.40
26	1H	2339	G	N1-C2-N2	-7.21	109.71	116.20
26	14	2369	A	N1-C6-N6	-7.21	114.27	118.60
26	14	2561	A	C5-C6-N1	7.21	121.31	117.70
1	13	1208	C	N1-C2-O2	-7.21	114.57	118.90
26	1H	1027	A	O5'-P-OP2	7.21	119.36	110.70
26	1H	1626	G	N1-C2-N3	7.21	128.23	123.90
26	1H	1829	A	N7-C8-N9	-7.21	110.19	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2430	A	C6-C5-N7	-7.21	127.25	132.30
26	14	1623	G	N3-C2-N2	-7.21	114.85	119.90
26	14	1812	A	C4-C5-N7	-7.21	107.09	110.70
26	1H	37	C	O5'-P-OP2	-7.21	99.21	105.70
26	1H	1308	A	C4-C5-N7	-7.21	107.09	110.70
26	1H	1318	C	N3-C4-C5	-7.21	119.02	121.90
26	1H	1517	G	N3-C4-C5	7.21	132.21	128.60
26	14	1021	A	N3-C4-C5	7.21	131.85	126.80
26	14	1624	G	C4-C5-N7	7.21	113.68	110.80
26	1H	2383	G	N1-C2-N2	-7.21	109.71	116.20
26	1H	2390	U	OP1-P-O3'	7.21	121.06	105.20
26	1H	2552	U	C5-C6-N1	-7.21	119.09	122.70
1	1G	510	A	N1-C2-N3	-7.21	125.70	129.30
26	14	464	U	C5-C4-O4	-7.21	121.58	125.90
1	13	352	C	C4-C5-C6	-7.21	113.80	117.40
1	13	788	U	N3-C4-O4	7.21	124.44	119.40
1	13	1113	C	N3-C2-O2	-7.21	116.86	121.90
1	13	1172	C	C6-N1-C2	-7.21	117.42	120.30
1	13	1196	U	N3-C2-O2	-7.21	117.16	122.20
26	1H	738	G	C4-C5-N7	7.21	113.68	110.80
26	1H	1218	C	C6-N1-C2	-7.21	117.42	120.30
26	1H	2714	G	C5-C6-O6	-7.21	124.28	128.60
26	1H	2750	A	O5'-P-OP2	7.21	119.35	110.70
1	1G	690	G	C2-N3-C4	-7.21	108.30	111.90
26	14	460	A	C6-C5-N7	-7.21	127.25	132.30
26	14	1304	C	C4-C5-C6	-7.21	113.80	117.40
26	14	1669	A	C5-C6-N1	7.21	121.30	117.70
26	14	1898	U	C5-C4-O4	7.21	130.22	125.90
26	14	1914	C	N1-C2-O2	7.21	123.22	118.90
26	14	2061	G	OP1-P-O3'	7.21	121.06	105.20
26	1H	141	A	C6-C5-N7	-7.21	127.26	132.30
26	1H	540	G	N9-C4-C5	7.21	108.28	105.40
26	1H	2385	C	O5'-P-OP2	7.21	119.35	110.70
26	14	449	A	C4-C5-N7	7.21	114.30	110.70
26	14	759	G	N1-C6-O6	7.21	124.22	119.90
1	13	148	G	C8-N9-C4	-7.20	103.52	106.40
1	13	1208	C	C2-N3-C4	-7.20	116.30	119.90
26	1H	526	A	N9-C4-C5	7.20	108.68	105.80
26	14	468	G	C2-N3-C4	-7.20	108.30	111.90
1	13	782	A	OP2-P-O3'	7.20	121.05	105.20
1	13	1284	C	C6-N1-C2	7.20	123.18	120.30
26	1H	1243	G	C2-N3-C4	-7.20	108.30	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1786	A	N9-C1'-C2'	7.20	123.36	114.00
26	14	110	G	N9-C4-C5	-7.20	102.52	105.40
1	13	1306	A	N1-C6-N6	7.20	122.92	118.60
26	1H	528	A	O5'-P-OP2	-7.20	99.22	105.70
26	1H	717	G	C5-C6-O6	-7.20	124.28	128.60
26	1H	739	G	C2-N3-C4	-7.20	108.30	111.90
26	1H	2101	G	C2-N3-C4	-7.20	108.30	111.90
26	1H	2256	G	C4-C5-N7	7.20	113.68	110.80
26	1H	2457	U	N1-C2-O2	-7.20	117.76	122.80
27	16	45	A	C6-C5-N7	-7.20	127.26	132.30
1	1G	1431	C	N3-C4-N4	7.20	123.04	118.00
26	14	259	G	N3-C4-C5	7.20	132.20	128.60
26	14	1142(A)	A	N7-C8-N9	7.20	117.40	113.80
27	1J	96	G	N3-C2-N2	-7.20	114.86	119.90
1	13	117	G	C4-C5-N7	7.20	113.68	110.80
25	4K	16	A	C5-C6-N6	-7.20	117.94	123.70
26	1H	304	G	N3-C4-N9	-7.20	121.68	126.00
26	1H	688	U	OP1-P-OP2	7.20	130.40	119.60
26	1H	1335	U	N1-C2-O2	7.20	127.84	122.80
26	1H	1414	G	N1-C2-N3	7.20	128.22	123.90
1	1G	73	G	C5-C6-N1	-7.20	107.90	111.50
1	1G	545	C	O5'-P-OP2	-7.20	99.22	105.70
1	1G	581	G	O5'-P-OP2	-7.20	99.22	105.70
26	14	215	G	C5-C6-O6	-7.20	124.28	128.60
26	1H	37	C	C5-C4-N4	7.20	125.24	120.20
26	1H	144	C	O5'-P-OP2	-7.20	99.22	105.70
26	1H	869	G	N1-C2-N3	7.20	128.22	123.90
26	1H	2449	U	C2-N1-C1'	7.20	126.34	117.70
26	14	2362	G	N7-C8-N9	-7.20	109.50	113.10
1	13	1227	A	C5-C6-N1	-7.20	114.10	117.70
1	13	1259	C	N1-C2-O2	7.20	123.22	118.90
1	13	1525	G	OP2-P-O3'	7.20	121.03	105.20
23	2K	25	U	O5'-P-OP2	-7.20	99.22	105.70
26	1H	197	A	OP1-P-OP2	-7.20	108.81	119.60
26	1H	270(R)	G	N3-C2-N2	-7.20	114.86	119.90
26	1H	2532	G	C6-C5-N7	-7.20	126.08	130.40
1	1G	905	U	C5-C4-O4	7.20	130.22	125.90
26	14	999	U	N3-C2-O2	-7.20	117.16	122.20
26	14	1049	C	C6-N1-C1'	-7.20	112.17	120.80
26	14	1514	U	N3-C4-C5	-7.20	110.28	114.60
26	14	2315	G	N3-C4-C5	-7.20	125.00	128.60
26	14	2886	G	OP1-P-O3'	7.20	121.03	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2507	C	C5-C4-N4	7.19	125.24	120.20
26	14	411	G	OP1-P-OP2	7.19	130.39	119.60
26	14	1328	G	C8-N9-C4	7.19	109.28	106.40
26	1H	2243	U	C4-C5-C6	7.19	124.02	119.70
26	1H	2276	G	N3-C4-C5	-7.19	125.00	128.60
26	1H	2428	G	C5-C6-N1	-7.19	107.90	111.50
26	1H	2768	C	C5-C6-N1	-7.19	117.40	121.00
1	1G	180	U	N3-C4-O4	7.19	124.43	119.40
1	1G	331	G	C5-C6-O6	-7.19	124.28	128.60
1	1G	1223	C	OP1-P-OP2	-7.19	108.81	119.60
26	14	308	G	C5-C6-O6	-7.19	124.28	128.60
26	14	1287	A	N1-C6-N6	-7.19	114.28	118.60
26	14	1443	G	C8-N9-C4	-7.19	103.52	106.40
26	14	1774	C	C5-C4-N4	-7.19	115.17	120.20
26	14	2163	C	N3-C2-O2	-7.19	116.86	121.90
26	1H	741	G	C5-C6-N1	7.19	115.09	111.50
26	14	1249	U	OP1-P-OP2	7.19	130.38	119.60
26	14	2367	G	O5'-P-OP1	7.19	119.33	110.70
26	1H	1004	C	C2-N3-C4	7.19	123.49	119.90
26	14	786	C	N3-C2-O2	-7.19	116.87	121.90
26	14	2019	A	C2-N3-C4	-7.19	107.01	110.60
26	14	2522	U	C5-C4-O4	7.19	130.21	125.90
1	13	822	C	O5'-P-OP1	7.19	119.33	110.70
1	13	1301	U	N3-C4-O4	7.19	124.43	119.40
1	13	1481	U	N1-C2-N3	7.19	119.21	114.90
26	1H	589	C	O5'-P-OP2	-7.19	99.23	105.70
26	1H	1000	A	C5-C6-N1	7.19	121.29	117.70
26	1H	1442	G	N3-C2-N2	-7.19	114.87	119.90
26	1H	1568	G	N1-C2-N3	-7.19	119.59	123.90
26	1H	1807	G	C8-N9-C4	7.19	109.28	106.40
26	1H	2225	A	C4-C5-C6	-7.19	113.41	117.00
26	14	2774	C	C6-N1-C2	7.19	123.17	120.30
27	1J	116	G	N1-C6-O6	7.19	124.21	119.90
1	13	538	G	OP1-P-OP2	7.19	130.38	119.60
26	1H	461	C	OP1-P-OP2	7.19	130.38	119.60
26	1H	1193	G	C4-C5-N7	-7.19	107.92	110.80
26	1H	2436	G	N1-C2-N3	7.19	128.21	123.90
1	1G	320	C	C6-N1-C2	7.19	123.17	120.30
1	1G	353	A	C5-N7-C8	-7.19	100.31	103.90
26	14	912	C	N3-C4-C5	-7.19	119.03	121.90
1	13	872	A	N1-C2-N3	-7.18	125.71	129.30
26	1H	463	G	C2-N3-C4	-7.18	108.31	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2346	A	C4-N9-C1'	7.18	139.23	126.30
26	1H	2499	C	C5-C6-N1	-7.18	117.41	121.00
37	78	23	PRO	C-N-CA	-7.18	107.21	122.30
26	14	516	C	C5-C4-N4	-7.18	115.17	120.20
1	13	576	G	N1-C6-O6	7.18	124.21	119.90
1	13	663	A	C2-N3-C4	-7.18	107.01	110.60
26	1H	270(R)	G	N7-C8-N9	7.18	116.69	113.10
26	1H	721	C	N1-C2-O2	-7.18	114.59	118.90
26	1H	736	C	N3-C4-C5	7.18	124.77	121.90
26	1H	1130	U	N3-C2-O2	-7.18	117.17	122.20
26	1H	1147	C	C4-C5-C6	7.18	120.99	117.40
26	1H	1268	A	C8-N9-C4	7.18	108.67	105.80
26	1H	1912	A	C2-N3-C4	7.18	114.19	110.60
26	14	71	A	N1-C6-N6	7.18	122.91	118.60
26	14	731	C	C6-N1-C2	7.18	123.17	120.30
26	14	1642	G	C5-C6-O6	-7.18	124.29	128.60
26	14	2286	A	C5-C6-N6	-7.18	117.95	123.70
26	14	2400	G	C5-C6-N1	7.18	115.09	111.50
1	13	1192	C	C5-C6-N1	7.18	124.59	121.00
26	1H	723	G	C4-C5-N7	-7.18	107.93	110.80
26	1H	2267	A	O5'-P-OP1	-7.18	99.24	105.70
26	1H	2845	G	C5-C6-O6	7.18	132.91	128.60
26	14	1043	C	C6-N1-C2	-7.18	117.43	120.30
26	14	1285	G	N7-C8-N9	-7.18	109.51	113.10
26	1H	2328	A	C8-N9-C4	7.18	108.67	105.80
1	1G	886	G	C2-N3-C4	-7.18	108.31	111.90
1	1G	938	A	C8-N9-C4	-7.18	102.93	105.80
26	14	579	G	N1-C6-O6	7.18	124.21	119.90
26	14	2209	C	C6-N1-C2	-7.18	117.43	120.30
26	14	2591	C	C4-C5-C6	7.18	120.99	117.40
1	13	941	G	C5-C6-N1	7.18	115.09	111.50
26	1H	671	C	N3-C4-C5	7.18	124.77	121.90
26	1H	2178	C	C6-N1-C2	-7.18	117.43	120.30
1	1G	857	C	C6-N1-C2	7.18	123.17	120.30
26	14	1519	G	C5-C6-N1	-7.18	107.91	111.50
26	14	1930	G	C2-N3-C4	7.18	115.49	111.90
26	14	2022	U	C5-C4-O4	-7.18	121.59	125.90
1	13	492	G	C5-N7-C8	-7.18	100.71	104.30
1	13	1357	A	C5-C6-N1	-7.18	114.11	117.70
23	2K	39	A	O5'-P-OP1	7.18	119.31	110.70
1	1G	240	C	N3-C4-C5	7.18	124.77	121.90
26	14	434	U	C6-N1-C2	-7.18	116.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1034	G	O5'-P-OP2	-7.18	99.24	105.70
26	14	1547	C	N3-C4-C5	-7.18	119.03	121.90
26	14	2248	C	C5-C4-N4	7.18	125.22	120.20
26	14	2494	G	OP2-P-O3'	7.18	120.99	105.20
26	14	2711	A	O5'-P-OP1	7.18	119.31	110.70
1	13	1091	U	C6-N1-C2	-7.17	116.69	121.00
26	1H	482	A	N7-C8-N9	7.17	117.39	113.80
26	1H	556	G	O5'-P-OP1	-7.17	99.24	105.70
26	1H	777	A	C6-N1-C2	-7.17	114.30	118.60
26	1H	794	G	N1-C2-N2	-7.17	109.74	116.20
26	1H	842	G	C4-N9-C1'	-7.17	117.17	126.50
26	1H	2244	U	N3-C4-C5	7.17	118.90	114.60
26	14	1138	G	C6-C5-N7	-7.17	126.09	130.40
1	13	890	G	O4'-C1'-N9	7.17	113.94	108.20
26	1H	801	G	N1-C6-O6	-7.17	115.60	119.90
26	1H	1370	C	C2-N3-C4	-7.17	116.31	119.90
26	1H	1428	C	OP1-P-OP2	7.17	130.36	119.60
26	1H	1623	G	C6-C5-N7	7.17	134.70	130.40
26	14	1899	G	N3-C4-C5	7.17	132.19	128.60
1	13	1527	C	N1-C2-N3	7.17	124.22	119.20
26	1H	294	A	O5'-P-OP2	-7.17	99.25	105.70
26	1H	763	G	N1-C2-N3	7.17	128.20	123.90
26	1H	1244	G	N3-C4-C5	7.17	132.19	128.60
26	1H	1378	A	N3-C4-C5	7.17	131.82	126.80
26	1H	1952	A	N1-C2-N3	7.17	132.89	129.30
26	1H	2819	G	C8-N9-C4	7.17	109.27	106.40
27	16	111	U	N3-C4-O4	-7.17	114.38	119.40
26	14	141(A)	C	N3-C4-C5	-7.17	119.03	121.90
26	14	559	G	N7-C8-N9	-7.17	109.51	113.10
26	14	2037	G	C5-N7-C8	7.17	107.89	104.30
26	14	2554	U	C5-C6-N1	7.17	126.29	122.70
1	13	872	A	O5'-P-OP1	-7.17	99.25	105.70
1	13	900	A	OP1-P-OP2	-7.17	108.85	119.60
1	13	960	U	N3-C4-C5	-7.17	110.30	114.60
26	1H	23	G	C2-N3-C4	-7.17	108.31	111.90
26	14	1388	G	N1-C6-O6	7.17	124.20	119.90
26	14	1450	C	N1-C2-O2	-7.17	114.60	118.90
26	1H	308	G	N1-C2-N2	-7.17	109.75	116.20
26	1H	688	U	C4-C5-C6	7.17	124.00	119.70
26	1H	845	G	OP1-P-O3'	7.17	120.97	105.20
26	1H	1975	G	N3-C4-N9	7.17	130.30	126.00
26	1H	2252	G	N3-C4-C5	7.17	132.18	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2461	C	O5'-P-OP2	-7.17	99.25	105.70
1	1G	663	A	N1-C6-N6	7.17	122.90	118.60
26	14	502	A	C8-N9-C4	7.17	108.67	105.80
26	14	774	A	N9-C4-C5	-7.17	102.93	105.80
26	14	1319	G	C5-C6-N1	-7.17	107.92	111.50
26	14	1365	A	C5-N7-C8	-7.17	100.32	103.90
26	14	1450	C	C4-C5-C6	7.17	120.98	117.40
26	14	1807	G	N1-C6-O6	7.17	124.20	119.90
26	14	2084	C	C4-C5-C6	7.17	120.98	117.40
26	14	2259	G	C5-C6-O6	-7.17	124.30	128.60
26	14	2529	G	C5-C6-N1	-7.17	107.92	111.50
27	1J	98	G	C2-N3-C4	-7.17	108.31	111.90
1	13	9	G	C5-N7-C8	-7.17	100.72	104.30
1	13	765	G	N1-C6-O6	7.17	124.20	119.90
26	1H	613	U	C5-C6-N1	-7.17	119.12	122.70
26	1H	614	U	C6-N1-C2	-7.17	116.70	121.00
26	1H	1630(A)	C	N1-C2-N3	7.17	124.22	119.20
26	1H	1829	A	C5-C6-N6	7.17	129.43	123.70
26	1H	2276	G	N9-C4-C5	7.17	108.27	105.40
26	1H	2707	G	N7-C8-N9	-7.17	109.52	113.10
26	1H	2781	A	C2-N3-C4	-7.17	107.02	110.60
26	14	70	G	N1-C2-N2	-7.17	109.75	116.20
26	14	623	G	C5-C6-N1	7.17	115.08	111.50
26	14	1654	A	N1-C6-N6	-7.17	114.30	118.60
26	1H	1121	C	C2-N3-C4	-7.17	116.32	119.90
26	1H	2271	G	C5-N7-C8	-7.17	100.72	104.30
1	1G	581	G	C5-C6-O6	-7.17	124.30	128.60
26	14	2032	G	N7-C8-N9	7.17	116.68	113.10
26	14	2596	U	C5-C4-O4	7.17	130.20	125.90
1	13	124	G	C5-C6-O6	7.16	132.90	128.60
1	13	551	U	N1-C2-O2	-7.16	117.79	122.80
26	1H	407	G	N9-C4-C5	7.16	108.27	105.40
26	1H	545	G	N1-C6-O6	7.16	124.20	119.90
26	1H	663	G	C8-N9-C1'	-7.16	117.69	127.00
26	1H	786	C	N3-C2-O2	-7.16	116.89	121.90
26	1H	1767	C	N1-C2-N3	7.16	124.21	119.20
26	1H	1812	A	N1-C2-N3	7.16	132.88	129.30
26	1H	2835	A	C5-N7-C8	-7.16	100.32	103.90
26	14	512	G	N3-C4-C5	7.16	132.18	128.60
26	14	726	G	O4'-C1'-N9	7.16	113.93	108.20
26	14	1164	G	C2-N3-C4	-7.16	108.32	111.90
26	14	2777	G	N1-C2-N2	7.16	122.65	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	150	C	N3-C4-N4	-7.16	112.99	118.00
26	1H	1497	U	OP1-P-O3'	7.16	120.96	105.20
26	1H	1556	C	OP1-P-OP2	7.16	130.34	119.60
26	1H	2365	G	N9-C4-C5	-7.16	102.53	105.40
26	1H	2706	G	C5-N7-C8	-7.16	100.72	104.30
26	14	1166	C	C6-N1-C2	-7.16	117.44	120.30
26	1H	220	G	C4-C5-C6	7.16	123.10	118.80
26	1H	370	G	C4-C5-C6	7.16	123.10	118.80
26	1H	651	G	C2-N3-C4	7.16	115.48	111.90
26	1H	1192	G	OP1-P-OP2	7.16	130.34	119.60
26	1H	2520	C	N1-C2-O2	-7.16	114.60	118.90
26	1H	2593	U	C6-N1-C1'	7.16	131.22	121.20
27	16	89	G	C4-C5-N7	7.16	113.66	110.80
1	1G	109	A	C2-N3-C4	7.16	114.18	110.60
26	14	194	G	O5'-P-OP2	7.16	119.29	110.70
26	14	197	A	C6-C5-N7	-7.16	127.29	132.30
26	14	440	G	C5-C6-O6	-7.16	124.30	128.60
26	14	656	G	C8-N9-C4	-7.16	103.54	106.40
26	14	810	U	OP1-P-O3'	7.16	120.95	105.20
26	14	1158	C	N3-C2-O2	-7.16	116.89	121.90
26	14	1299	G	C6-N1-C2	7.16	129.40	125.10
26	14	2446	G	N3-C2-N2	7.16	124.91	119.90
1	13	803	G	C2-N3-C4	-7.16	108.32	111.90
1	13	1435	G	N3-C4-C5	7.16	132.18	128.60
26	1H	1271	G	N9-C4-C5	-7.16	102.54	105.40
26	1H	2477	C	C6-N1-C2	-7.16	117.44	120.30
1	1G	7	G	C5-N7-C8	-7.16	100.72	104.30
26	14	200	U	N1-C2-N3	7.16	119.19	114.90
26	14	471	A	N3-C4-C5	7.16	131.81	126.80
26	14	1289	C	N3-C4-C5	-7.16	119.04	121.90
26	14	2765	A	O5'-P-OP2	-7.16	99.26	105.70
27	1J	86	G	C8-N9-C4	7.16	109.26	106.40
26	1H	1162	G	N1-C6-O6	-7.16	115.61	119.90
26	1H	1296	G	OP2-P-O3'	7.16	120.95	105.20
26	1H	1406	U	C6-N1-C2	-7.16	116.71	121.00
26	1H	1680	U	N3-C4-C5	7.16	118.89	114.60
26	1H	1790	C	P-O3'-C3'	7.16	128.29	119.70
26	1H	2448	A	C6-N1-C2	-7.16	114.31	118.60
1	1G	230	G	N1-C6-O6	7.16	124.19	119.90
26	14	582	G	N3-C2-N2	-7.16	114.89	119.90
1	13	325	A	C4-C5-N7	7.16	114.28	110.70
1	13	392	G	C5-C6-O6	-7.16	124.31	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	183	C	O5'-P-OP1	7.16	119.29	110.70
26	1H	1554	A	C4-C5-N7	-7.16	107.12	110.70
26	1H	2435	A	N9-C4-C5	7.16	108.66	105.80
26	1H	2601	C	N1-C2-O2	7.16	123.19	118.90
1	1G	895	G	N1-C6-O6	7.16	124.19	119.90
1	1G	1391	U	C5-C6-N1	-7.16	119.12	122.70
1	13	995	C	C6-N1-C2	-7.15	117.44	120.30
23	2K	37	U	N1-C2-N3	7.15	119.19	114.90
26	1H	1678	G	C6-C5-N7	-7.15	126.11	130.40
26	1H	2554	U	N1-C2-O2	-7.15	117.79	122.80
46	G8	81	LYS	C-N-CA	7.15	152.05	122.00
26	14	1830	C	C4-C5-C6	-7.15	113.82	117.40
26	14	2247	A	N9-C4-C5	7.15	108.66	105.80
26	1H	36	G	O5'-P-OP2	-7.15	99.26	105.70
26	1H	88	G	O5'-P-OP1	-7.15	99.26	105.70
26	1H	305	U	C4-C5-C6	7.15	123.99	119.70
26	1H	1569	A	N3-C4-C5	7.15	131.81	126.80
26	1H	1570	A	C2-N3-C4	-7.15	107.02	110.60
1	1G	41	G	N1-C6-O6	7.15	124.19	119.90
1	1G	1468	A	C6-N1-C2	-7.15	114.31	118.60
26	14	1205	U	N3-C2-O2	-7.15	117.19	122.20
26	14	1469	A	O5'-P-OP1	-7.15	99.26	105.70
26	14	1829	A	C6-N1-C2	-7.15	114.31	118.60
1	13	383	A	N1-C6-N6	-7.15	114.31	118.60
1	13	1385	G	C5-C6-O6	-7.15	124.31	128.60
1	13	1518	A	C4-C5-N7	-7.15	107.12	110.70
26	1H	780	G	C5-C6-O6	-7.15	124.31	128.60
26	1H	836	G	N1-C6-O6	-7.15	115.61	119.90
26	1H	1759	A	OP1-P-OP2	7.15	130.32	119.60
26	1H	1869	G	OP1-P-OP2	7.15	130.32	119.60
26	1H	2458	G	N1-C2-N2	7.15	122.64	116.20
27	16	61	G	N3-C2-N2	-7.15	114.89	119.90
26	14	502	A	C2-N3-C4	-7.15	107.03	110.60
26	14	775	G	C6-C5-N7	-7.15	126.11	130.40
26	14	1763	G	N7-C8-N9	-7.15	109.53	113.10
26	1H	635	C	C4-C5-C6	7.15	120.97	117.40
26	1H	710	G	O5'-P-OP1	7.15	119.28	110.70
26	1H	1471	A	C8-N9-C4	-7.15	102.94	105.80
26	14	518	G	N1-C2-N3	7.15	128.19	123.90
26	14	754	C	C2-N3-C4	7.15	123.47	119.90
26	1H	2252	G	O5'-P-OP2	-7.15	99.27	105.70
26	14	89	G	N7-C8-N9	-7.15	109.53	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	954	G	N1-C6-O6	-7.15	115.61	119.90
26	14	2023	G	N7-C8-N9	7.15	116.67	113.10
29	19	91	ARG	NE-CZ-NH1	-7.15	116.73	120.30
26	1H	88	G	O5'-P-OP2	7.15	119.28	110.70
26	1H	372	G	C5-C6-O6	7.15	132.89	128.60
26	1H	792	G	N1-C2-N3	7.15	128.19	123.90
26	14	122	G	N3-C2-N2	-7.15	114.90	119.90
1	13	876	G	O5'-P-OP1	-7.14	99.27	105.70
26	1H	474	G	N1-C2-N2	7.14	122.63	116.20
26	1H	788	A	OP2-P-O3'	7.14	120.92	105.20
26	1H	1344	G	N7-C8-N9	7.14	116.67	113.10
1	1G	1196	U	N3-C2-O2	-7.14	117.20	122.20
1	1G	1504	G	C5-C6-O6	7.14	132.89	128.60
26	14	2436	G	O5'-P-OP1	-7.14	99.27	105.70
1	13	318	G	C2-N3-C4	-7.14	108.33	111.90
1	13	898	G	O5'-P-OP1	-7.14	99.27	105.70
1	13	1205	U	C4-C5-C6	7.14	123.98	119.70
26	1H	1200	C	N1-C2-N3	7.14	124.20	119.20
26	1H	1656	C	C2-N3-C4	7.14	123.47	119.90
26	1H	1660	C	C5-C6-N1	-7.14	117.43	121.00
26	1H	2826	A	C8-N9-C4	7.14	108.66	105.80
26	14	115	C	N3-C4-N4	-7.14	113.00	118.00
26	14	917	A	N1-C2-N3	-7.14	125.73	129.30
26	14	1273	U	O5'-P-OP1	-7.14	99.27	105.70
26	14	1443	G	C5-C6-N1	-7.14	107.93	111.50
26	14	2345	G	C2-N3-C4	-7.14	108.33	111.90
26	14	1241	A	C2-N3-C4	-7.14	107.03	110.60
26	14	1282	U	N1-C2-O2	-7.14	117.80	122.80
26	14	1465	G	C5-C6-N1	-7.14	107.93	111.50
26	14	2076	U	N1-C2-O2	-7.14	117.80	122.80
1	13	232	G	N1-C6-O6	7.14	124.18	119.90
1	13	1153	C	C6-N1-C2	7.14	123.16	120.30
26	1H	672	C	C4-C5-C6	7.14	120.97	117.40
26	1H	862	G	C4-C5-N7	-7.14	107.94	110.80
26	1H	902	C	C5-C6-N1	-7.14	117.43	121.00
26	1H	1768	U	C4-C5-C6	-7.14	115.42	119.70
25	4L	16	A	N7-C8-N9	-7.14	110.23	113.80
26	14	1186	G	OP2-P-O3'	7.14	120.91	105.20
26	14	2253	G	O5'-P-OP1	7.14	119.27	110.70
27	1J	102	G	C5-N7-C8	7.14	107.87	104.30
1	13	1494	G	N1-C6-O6	-7.14	115.62	119.90
26	14	1405	U	C5-C6-N1	-7.14	119.13	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	790	A	C6-N1-C2	-7.14	114.32	118.60
1	13	827	U	N1-C2-N3	7.14	119.18	114.90
1	13	1261	A	O5'-P-OP2	7.14	119.26	110.70
1	13	1382	C	C4-C5-C6	-7.14	113.83	117.40
26	1H	1624	G	C5-C6-N1	7.14	115.07	111.50
26	1H	2394	C	O5'-P-OP2	-7.14	99.28	105.70
26	1H	2559	C	N3-C4-C5	7.14	124.75	121.90
1	1G	537	G	C4-C5-N7	7.14	113.66	110.80
26	14	30	G	C8-N9-C4	-7.14	103.55	106.40
26	14	946	G	O4'-C1'-N9	-7.14	102.49	108.20
26	1H	674	G	N7-C8-N9	-7.13	109.53	113.10
26	1H	1812	A	OP1-P-OP2	7.13	130.30	119.60
26	1H	1939	U	N3-C2-O2	7.13	127.19	122.20
26	1H	2421	G	C6-C5-N7	7.13	134.68	130.40
25	4L	12	A	C6-C5-N7	-7.13	127.31	132.30
26	14	414	C	C2-N3-C4	-7.13	116.33	119.90
26	14	2447	G	C2-N3-C4	-7.13	108.33	111.90
26	14	2787	C	C6-N1-C2	-7.13	117.45	120.30
26	1H	71	A	O4'-C1'-N9	-7.13	102.49	108.20
26	1H	1957	C	C2-N1-C1'	-7.13	110.95	118.80
26	14	760	G	C5-C6-N1	-7.13	107.93	111.50
23	2K	13	C	N3-C4-C5	-7.13	119.05	121.90
26	1H	153	C	C5-C4-N4	-7.13	115.21	120.20
26	1H	610	C	C2-N3-C4	-7.13	116.33	119.90
26	1H	746	A	C8-N9-C4	-7.13	102.95	105.80
26	1H	1707	G	C4-C5-N7	7.13	113.65	110.80
26	1H	1891	G	C8-N9-C4	-7.13	103.55	106.40
26	1H	2298	A	C6-N1-C2	-7.13	114.32	118.60
33	51	149	ARG	NE-CZ-NH1	7.13	123.87	120.30
1	1G	897	C	N1-C2-O2	-7.13	114.62	118.90
26	14	521	G	OP1-P-OP2	-7.13	108.90	119.60
26	14	961	C	N1-C2-O2	-7.13	114.62	118.90
26	14	1236	G	C4-C5-C6	7.13	123.08	118.80
26	14	2284	C	C2-N1-C1'	-7.13	110.95	118.80
26	14	2607	G	C2-N3-C4	-7.13	108.33	111.90
26	14	2607	G	N1-C2-N2	-7.13	109.78	116.20
27	1J	97	G	C6-C5-N7	-7.13	126.12	130.40
26	1H	348	G	C6-N1-C2	-7.13	120.82	125.10
29	11	56	GLY	C-N-CA	-7.13	107.33	122.30
26	14	941	A	N9-C4-C5	7.13	108.65	105.80
1	13	1276	G	N7-C8-N9	7.13	116.66	113.10
26	1H	309	G	N3-C2-N2	7.13	124.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	795	C	C6-N1-C2	7.13	123.15	120.30
26	1H	2419	U	OP1-P-O3'	7.13	120.88	105.20
1	1G	715	A	C2-N3-C4	-7.13	107.04	110.60
1	1G	947	G	O5'-P-OP2	-7.13	99.28	105.70
26	14	463	G	C2-N3-C4	-7.13	108.34	111.90
26	14	598	G	O5'-P-OP2	-7.13	99.28	105.70
26	14	2441	C	OP1-P-OP2	-7.13	108.91	119.60
1	13	352	C	C5-C6-N1	7.13	124.56	121.00
26	1H	558	G	C5-C6-N1	-7.13	107.94	111.50
26	1H	649	G	C8-N9-C4	-7.13	103.55	106.40
26	1H	1837	C	C2-N3-C4	7.13	123.46	119.90
26	1H	1854	A	C8-N9-C4	7.13	108.65	105.80
26	1H	2487	G	N3-C4-C5	7.13	132.16	128.60
1	1G	1514	C	C6-N1-C2	-7.13	117.45	120.30
26	14	1363	C	O5'-P-OP2	-7.13	99.28	105.70
26	14	1837	C	C6-N1-C2	-7.13	117.45	120.30
26	14	587	C	C2-N3-C4	-7.12	116.34	119.90
26	14	1965	C	C4-C5-C6	-7.12	113.84	117.40
26	14	1968	G	C4-C5-N7	7.12	113.65	110.80
26	1H	92	G	C5-C6-O6	-7.12	124.33	128.60
26	1H	568	U	C4-C5-C6	7.12	123.97	119.70
26	1H	806	C	N1-C2-N3	-7.12	114.21	119.20
26	14	173	G	C4-C5-N7	7.12	113.65	110.80
26	14	2278	A	N1-C2-N3	7.12	132.86	129.30
26	14	2441	C	N1-C2-N3	7.12	124.19	119.20
26	14	2453	A	C5-C6-N1	7.12	121.26	117.70
27	1J	101	A	C2-N3-C4	-7.12	107.04	110.60
26	1H	2750	A	O5'-P-OP1	-7.12	99.29	105.70
1	1G	674	G	C5-C6-N1	7.12	115.06	111.50
25	4L	12	A	C2-N3-C4	-7.12	107.04	110.60
26	14	1856	G	C6-C5-N7	-7.12	126.13	130.40
26	14	2648	C	C5-C4-N4	-7.12	115.22	120.20
1	13	484	G	N1-C6-O6	7.12	124.17	119.90
1	13	717	C	C5-C4-N4	-7.12	115.22	120.20
1	13	950	U	N1-C2-N3	-7.12	110.63	114.90
23	2K	38	A	C6-N1-C2	-7.12	114.33	118.60
26	1H	1193	G	C6-N1-C2	-7.12	120.83	125.10
26	1H	1766	U	N3-C4-O4	7.12	124.38	119.40
26	1H	2231	C	N3-C4-C5	-7.12	119.05	121.90
26	1H	2853	C	O5'-P-OP2	-7.12	99.29	105.70
1	1G	895	G	C5-C6-O6	-7.12	124.33	128.60
26	14	2423	U	N3-C4-C5	7.12	118.87	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	197	A	N1-C6-N6	7.12	122.87	118.60
26	1H	972	G	C5-C6-O6	7.12	132.87	128.60
26	1H	1755	A	O5'-P-OP1	-7.12	99.29	105.70
26	1H	2544	G	C6-C5-N7	-7.12	126.13	130.40
1	1G	312	C	C6-N1-C2	-7.12	117.45	120.30
26	14	1815	A	C5-N7-C8	-7.12	100.34	103.90
26	14	1278	A	C5-C6-N1	7.12	121.26	117.70
26	1H	226	G	C5-C6-N1	-7.12	107.94	111.50
26	1H	259	G	N3-C4-C5	7.12	132.16	128.60
26	1H	265	A	C6-C5-N7	-7.12	127.32	132.30
26	1H	270(X)	G	N1-C6-O6	7.12	124.17	119.90
26	1H	499	U	C6-N1-C2	-7.12	116.73	121.00
1	1G	699	C	N3-C4-C5	-7.12	119.05	121.90
26	14	760	G	N3-C2-N2	-7.12	114.92	119.90
26	14	2812	G	N3-C4-N9	-7.12	121.73	126.00
1	13	245	C	C2-N3-C4	-7.11	116.34	119.90
26	1H	225	A	N7-C8-N9	-7.11	110.24	113.80
26	1H	508	G	N1-C6-O6	7.11	124.17	119.90
26	1H	835	A	O5'-P-OP2	-7.11	99.30	105.70
26	1H	1565	C	N3-C4-C5	7.11	124.75	121.90
26	1H	1984	G	N1-C6-O6	-7.11	115.63	119.90
26	1H	2017	U	C4-C5-C6	7.11	123.97	119.70
26	1H	2447	G	O4'-C1'-N9	7.11	113.89	108.20
26	1H	2651	C	C4-C5-C6	7.11	120.96	117.40
1	1G	242	C	C5-C6-N1	7.11	124.56	121.00
26	14	62	C	O5'-P-OP2	-7.11	99.30	105.70
26	14	1410	G	OP2-P-O3'	7.11	120.85	105.20
26	14	1767	C	C5-C4-N4	7.11	125.18	120.20
26	14	1908	C	N3-C2-O2	-7.11	116.92	121.90
26	1H	20	C	N1-C2-O2	-7.11	114.63	118.90
26	1H	306	U	C5-C6-N1	-7.11	119.14	122.70
26	1H	1618	A	N7-C8-N9	7.11	117.36	113.80
26	1H	1757	U	C5-C6-N1	-7.11	119.14	122.70
26	14	211	A	N9-C4-C5	-7.11	102.95	105.80
1	13	570	G	N7-C8-N9	7.11	116.66	113.10
1	13	770	C	C5-C6-N1	-7.11	117.44	121.00
1	13	1300	G	N3-C4-N9	-7.11	121.73	126.00
26	1H	105	C	N3-C2-O2	-7.11	116.92	121.90
26	1H	211	A	N1-C2-N3	7.11	132.85	129.30
26	1H	919	G	C6-N1-C2	-7.11	120.83	125.10
26	1H	1520	U	N1-C2-N3	7.11	119.17	114.90
26	14	1350	C	C5-C4-N4	-7.11	115.22	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2325	G	N1-C6-O6	7.11	124.17	119.90
26	14	2361	A	N1-C6-N6	7.11	122.87	118.60
26	1H	515	A	OP1-P-OP2	-7.11	108.94	119.60
26	14	2676	C	C2-N3-C4	-7.11	116.34	119.90
26	1H	296	C	C2-N3-C4	-7.11	116.35	119.90
26	1H	1316	U	C5-C4-O4	7.11	130.16	125.90
26	1H	1799	G	N3-C2-N2	7.11	124.88	119.90
26	1H	1973	G	N3-C2-N2	7.11	124.88	119.90
26	1H	1987	G	N3-C2-N2	-7.11	114.92	119.90
13	4A	34	LEU	CB-CG-CD2	-7.11	98.92	111.00
26	14	124	G	C4-C5-C6	7.11	123.06	118.80
26	14	673	C	N3-C2-O2	-7.11	116.92	121.90
26	14	1161	C	C6-N1-C2	-7.11	117.46	120.30
26	14	1446	C	N1-C2-O2	7.11	123.17	118.90
26	14	2080	G	C2-N3-C4	7.11	115.45	111.90
26	14	2568	C	O5'-P-OP2	7.11	119.23	110.70
26	14	2607	G	C4-C5-N7	-7.11	107.96	110.80
26	14	2701	C	N1-C2-O2	7.11	123.17	118.90
27	1J	116	G	N3-C4-C5	7.11	132.15	128.60
1	13	394	G	N1-C6-O6	7.11	124.16	119.90
26	1H	261	G	OP1-P-OP2	7.11	130.26	119.60
26	1H	1202	C	N3-C4-N4	7.11	122.97	118.00
26	1H	1226	G	C5-C6-N1	-7.11	107.95	111.50
26	1H	2535	G	O5'-P-OP2	-7.11	99.30	105.70
26	14	231	C	N1-C2-O2	-7.11	114.64	118.90
26	14	439	G	N1-C6-O6	7.11	124.16	119.90
26	14	465	G	C6-N1-C2	7.11	129.36	125.10
26	14	1271	G	C5-C6-N1	-7.11	107.95	111.50
26	14	2830	G	C2-N3-C4	-7.11	108.35	111.90
26	1H	119	A	C8-N9-C4	-7.10	102.96	105.80
26	1H	551	G	O5'-P-OP2	-7.10	99.31	105.70
26	1H	729	G	C8-N9-C4	-7.10	103.56	106.40
26	1H	2681	C	N1-C2-O2	7.10	123.16	118.90
26	14	804	A	OP1-P-O3'	7.10	120.83	105.20
26	14	1193	G	OP1-P-OP2	-7.10	108.94	119.60
26	14	2327	A	N1-C2-N3	7.10	132.85	129.30
27	1J	29	A	N7-C8-N9	7.10	117.35	113.80
1	13	689	C	C6-N1-C2	-7.10	117.46	120.30
26	1H	332	A	C4-C5-C6	-7.10	113.45	117.00
26	1H	500	G	N3-C4-N9	-7.10	121.74	126.00
26	1H	1108	U	N1-C2-N3	-7.10	110.64	114.90
26	1H	1219	G	N1-C2-N2	-7.10	109.81	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1349	A	C5-C6-N1	-7.10	114.15	117.70
1	1G	602	A	C4-C5-N7	7.10	114.25	110.70
26	14	784	A	P-O3'-C3'	7.10	128.22	119.70
26	14	1164	G	C5-C6-N1	-7.10	107.95	111.50
26	14	1209	G	OP1-P-OP2	7.10	130.25	119.60
26	14	1802	A	N1-C2-N3	7.10	132.85	129.30
1	13	689	C	N3-C4-C5	-7.10	119.06	121.90
1	13	950	U	C6-N1-C2	7.10	125.26	121.00
26	1H	2869	G	N3-C2-N2	-7.10	114.93	119.90
26	14	329	G	C5-C6-N1	7.10	115.05	111.50
26	14	820	A	N1-C6-N6	-7.10	114.34	118.60
26	14	2518	A	C5-C6-N1	-7.10	114.15	117.70
26	1H	702	G	N1-C2-N3	7.10	128.16	123.90
26	1H	1027	A	C8-N9-C4	7.10	108.64	105.80
26	1H	1028	A	OP1-P-OP2	7.10	130.25	119.60
26	1H	1507	A	C8-N9-C4	-7.10	102.96	105.80
1	1G	299	G	C4-C5-N7	-7.10	107.96	110.80
26	14	375	C	C2-N3-C4	-7.10	116.35	119.90
26	14	377	C	N3-C4-N4	7.10	122.97	118.00
26	14	849	A	C5-C6-N1	7.10	121.25	117.70
26	14	1806	C	C4-C5-C6	7.10	120.95	117.40
26	14	2596	U	OP1-P-OP2	7.10	130.25	119.60
1	13	338	A	C4-C5-N7	7.10	114.25	110.70
1	13	1222	G	C5-C6-N1	-7.10	107.95	111.50
4	3E	122	ARG	CG-CD-NE	7.10	126.71	111.80
26	1H	217	G	C5-N7-C8	7.10	107.85	104.30
26	1H	982	C	C4-C5-C6	-7.10	113.85	117.40
26	1H	2374	C	N3-C4-N4	-7.10	113.03	118.00
1	1G	1426	C	O5'-P-OP1	-7.10	99.31	105.70
1	1G	1474	G	N3-C4-C5	7.10	132.15	128.60
26	14	799	G	N1-C6-O6	7.10	124.16	119.90
1	13	976	G	N3-C2-N2	-7.10	114.93	119.90
26	1H	2519	U	N1-C2-O2	-7.10	117.83	122.80
26	14	15	G	C5-C6-N1	-7.10	107.95	111.50
26	14	1465	G	C6-C5-N7	-7.10	126.14	130.40
1	13	115	G	N3-C2-N2	-7.09	114.93	119.90
26	1H	51	G	C5'-C4'-O4'	-7.09	100.59	109.10
26	1H	244	A	N1-C6-N6	7.09	122.86	118.60
26	1H	342	G	C5-C6-N1	7.09	115.05	111.50
26	1H	383	U	O5'-P-OP1	-7.09	99.31	105.70
26	1H	452	G	OP1-P-OP2	7.09	130.24	119.60
26	1H	782	A	C6-N1-C2	-7.09	114.34	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1606	G	C5-C6-O6	-7.09	124.34	128.60
1	1G	363	A	O5'-P-OP2	-7.09	99.31	105.70
26	14	2440	C	C5-C4-N4	7.09	125.17	120.20
26	1H	1006	C	C6-N1-C2	7.09	123.14	120.30
1	1G	291	C	N3-C2-O2	7.09	126.86	121.90
1	1G	328	C	C2-N1-C1'	7.09	126.60	118.80
1	1G	1081	G	C8-N9-C4	7.09	109.24	106.40
26	14	2574	G	C6-N1-C2	-7.09	120.84	125.10
1	13	330	C	N1-C2-O2	7.09	123.16	118.90
26	1H	40	C	C4-C5-C6	7.09	120.94	117.40
26	1H	475	U	C6-N1-C2	-7.09	116.75	121.00
26	1H	509	C	O5'-P-OP2	-7.09	99.32	105.70
26	1H	930	U	N3-C2-O2	-7.09	117.24	122.20
26	1H	2019	A	C2-N3-C4	-7.09	107.05	110.60
1	1G	327	A	C6-N1-C2	-7.09	114.35	118.60
26	14	33	U	N3-C2-O2	7.09	127.16	122.20
26	14	460	A	N9-C4-C5	-7.09	102.96	105.80
26	14	810	U	C4-C5-C6	7.09	123.95	119.70
26	14	1797	C	C5-C4-N4	-7.09	115.24	120.20
27	1J	13	A	C8-N9-C4	7.09	108.64	105.80
26	1H	32	C	N3-C4-N4	-7.09	113.04	118.00
26	1H	2374	C	N3-C2-O2	-7.09	116.94	121.90
1	1G	304	U	C5-C4-O4	7.09	130.15	125.90
1	1G	673	G	N1-C6-O6	7.09	124.15	119.90
26	14	954	G	O5'-P-OP2	7.09	119.21	110.70
26	14	1634	A	C8-N9-C4	-7.09	102.96	105.80
27	1J	78	A	C4-C5-C6	7.09	120.55	117.00
34	69	77	LEU	CA-CB-CG	7.09	131.61	115.30
1	13	246	A	N1-C6-N6	7.09	122.85	118.60
23	2K	9	G	C2-N3-C4	7.09	115.44	111.90
26	1H	359	A	N1-C6-N6	-7.09	114.35	118.60
26	1H	636	G	O5'-P-OP2	7.09	119.20	110.70
1	1G	124	G	O5'-P-OP1	7.09	119.21	110.70
26	14	1412	A	OP1-P-OP2	-7.09	108.97	119.60
1	13	1401	G	N3-C4-C5	7.09	132.14	128.60
26	1H	1566	A	C5-N7-C8	-7.09	100.36	103.90
26	1H	1689	A	N3-C4-N9	-7.09	121.73	127.40
26	1H	2482	G	N1-C2-N3	7.09	128.15	123.90
26	14	58	G	O5'-P-OP2	-7.09	99.32	105.70
26	14	1369	G	C8-N9-C4	7.09	109.23	106.40
26	14	1661	G	N7-C8-N9	-7.09	109.56	113.10
26	14	2712	U	N3-C4-O4	-7.09	114.44	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	398	G	C4-C5-C6	7.08	123.05	118.80
26	14	1943	U	C5-C4-O4	-7.08	121.65	125.90
1	13	265	G	O5'-P-OP1	-7.08	99.32	105.70
26	1H	210	C	C2-N1-C1'	-7.08	111.01	118.80
26	1H	631	A	C5-N7-C8	7.08	107.44	103.90
26	1H	1348	G	OP1-P-OP2	-7.08	108.97	119.60
26	1H	1794	U	N3-C2-O2	-7.08	117.24	122.20
26	1H	2265	U	N3-C4-C5	-7.08	110.35	114.60
26	1H	2603	G	C5-N7-C8	-7.08	100.76	104.30
26	14	1285	G	C5-N7-C8	7.08	107.84	104.30
26	14	1949	G	OP1-P-OP2	7.08	130.22	119.60
26	1H	2578	G	C4-C5-N7	-7.08	107.97	110.80
1	1G	916	G	N1-C2-N3	-7.08	119.65	123.90
1	1G	1523	G	N1-C2-N3	7.08	128.15	123.90
26	14	2707	G	N9-C4-C5	-7.08	102.57	105.40
26	1H	1454	U	N1-C2-N3	7.08	119.15	114.90
26	1H	1765	C	N1-C2-O2	7.08	123.15	118.90
26	1H	2269	A	C8-N9-C4	7.08	108.63	105.80
39	98	18	LEU	CA-CB-CG	7.08	131.58	115.30
26	14	1365	A	C4-C5-N7	7.08	114.24	110.70
26	14	1404	C	N3-C2-O2	-7.08	116.95	121.90
26	14	1906	G	N3-C4-N9	-7.08	121.75	126.00
26	14	2589	A	N1-C6-N6	7.08	122.85	118.60
26	1H	180	G	N9-C4-C5	-7.08	102.57	105.40
26	1H	692	C	C6-N1-C2	7.08	123.13	120.30
26	1H	1238	G	O5'-P-OP1	-7.08	99.33	105.70
26	1H	2234	G	C8-N9-C4	7.08	109.23	106.40
1	1G	817	C	C5-C6-N1	-7.08	117.46	121.00
26	14	1634	A	N9-C4-C5	7.08	108.63	105.80
1	13	614	A	O5'-P-OP2	-7.08	99.33	105.70
26	1H	2764	A	N1-C2-N3	7.08	132.84	129.30
26	14	226	G	C4-C5-C6	7.08	123.05	118.80
27	1J	46	A	N7-C8-N9	-7.08	110.26	113.80
1	13	1089	G	C5-C6-N1	-7.07	107.96	111.50
1	13	1413	A	C8-N9-C4	-7.07	102.97	105.80
26	1H	138	G	O4'-C1'-N9	7.07	113.86	108.20
26	1H	2195	C	N3-C4-C5	7.07	124.73	121.90
26	1H	2495	G	C5-C6-O6	7.07	132.84	128.60
1	1G	36	C	N3-C2-O2	-7.07	116.95	121.90
1	1G	1416	G	C5-C6-O6	7.07	132.84	128.60
26	14	51	G	N9-C4-C5	-7.07	102.57	105.40
26	14	1445	C	C6-N1-C2	-7.07	117.47	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2253	G	N1-C6-O6	7.07	124.14	119.90
1	13	936	C	N1-C2-O2	7.07	123.14	118.90
26	1H	1208	C	C6-N1-C2	7.07	123.13	120.30
26	1H	1349	A	N1-C6-N6	7.07	122.84	118.60
26	1H	1633	G	N9-C4-C5	7.07	108.23	105.40
26	14	856	C	C2-N1-C1'	7.07	126.58	118.80
26	1H	713	G	N1-C6-O6	7.07	124.14	119.90
26	1H	2450	A	C4-C5-N7	-7.07	107.17	110.70
26	14	318	C	C2-N3-C4	-7.07	116.36	119.90
26	14	1358	G	C2-N3-C4	-7.07	108.36	111.90
26	14	1639	U	C2-N3-C4	-7.07	122.76	127.00
26	14	1771	C	C2-N3-C4	-7.07	116.36	119.90
26	14	1930	G	N3-C2-N2	-7.07	114.95	119.90
26	1H	113	G	OP1-P-O3'	7.07	120.75	105.20
26	1H	1678	G	C5-C6-O6	-7.07	124.36	128.60
1	1G	508	C	C5-C4-N4	-7.07	115.25	120.20
1	13	666	G	O5'-P-OP1	-7.07	99.34	105.70
26	1H	98	G	C5-C6-O6	-7.07	124.36	128.60
26	1H	506	G	C5-N7-C8	-7.07	100.77	104.30
26	1H	825	C	C5-C6-N1	-7.07	117.47	121.00
26	1H	1751	C	N1-C2-O2	-7.07	114.66	118.90
26	1H	2599	G	C5-C6-O6	7.07	132.84	128.60
1	1G	774	G	N1-C6-O6	7.07	124.14	119.90
23	2L	24	C	N1-C2-O2	-7.07	114.66	118.90
26	14	988	A	C5-N7-C8	-7.07	100.37	103.90
26	14	2640	G	O5'-P-OP1	-7.07	99.34	105.70
26	1H	809	G	O5'-P-OP2	-7.07	99.34	105.70
26	1H	963	U	N3-C4-O4	7.07	124.35	119.40
26	1H	1394	U	C6-N1-C2	-7.07	116.76	121.00
26	1H	1684	C	OP1-P-O3'	7.07	120.74	105.20
26	1H	2259	G	N3-C2-N2	-7.07	114.95	119.90
26	1H	2543	G	C6-C5-N7	7.07	134.64	130.40
27	16	102	G	C6-C5-N7	7.07	134.64	130.40
1	1G	352	C	C2-N1-C1'	7.07	126.57	118.80
1	1G	359	U	N3-C4-O4	-7.07	114.45	119.40
1	1G	632	A	N9-C4-C5	-7.07	102.97	105.80
1	1G	1301	U	N3-C2-O2	-7.07	117.25	122.20
26	14	55	G	C6-C5-N7	7.07	134.64	130.40
26	14	783	A	C4-C5-C6	7.07	120.53	117.00
26	14	1442	G	C8-N9-C4	7.07	109.23	106.40
26	14	2332	U	C5-C4-O4	7.07	130.14	125.90
26	14	2885	C	C4-C5-C6	-7.07	113.87	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	232	G	C5-C6-O6	-7.06	124.36	128.60
26	1H	974	G	N3-C2-N2	-7.06	114.95	119.90
26	1H	2324	C	C5-C6-N1	-7.06	117.47	121.00
1	1G	749	C	C6-N1-C2	-7.06	117.47	120.30
26	14	312	G	C6-C5-N7	-7.06	126.16	130.40
26	14	2829	C	O5'-P-OP2	7.06	119.18	110.70
1	13	726	C	C5-C6-N1	7.06	124.53	121.00
1	13	984	C	C6-N1-C2	7.06	123.12	120.30
26	1H	94	G	C5-C6-O6	-7.06	124.36	128.60
26	1H	948	G	O5'-P-OP2	7.06	119.17	110.70
26	1H	1193	G	N1-C2-N3	7.06	128.14	123.90
26	1H	2411	A	OP1-P-OP2	7.06	130.19	119.60
31	31	45	ARG	NE-CZ-NH1	7.06	123.83	120.30
1	1G	1057	G	C8-N9-C4	7.06	109.22	106.40
26	14	16	G	C5-C6-O6	-7.06	124.36	128.60
24	3K	76	A	N9-C4-C5	-7.06	102.98	105.80
26	1H	557	U	N3-C2-O2	-7.06	117.26	122.20
26	1H	1331	A	O5'-P-OP2	-7.06	99.34	105.70
26	1H	2477	C	C5-C6-N1	7.06	124.53	121.00
1	1G	1322	C	N1-C2-O2	7.06	123.14	118.90
27	1J	82	G	C2-N3-C4	-7.06	108.37	111.90
1	13	1359	C	N3-C2-O2	7.06	126.84	121.90
26	1H	30	G	N3-C2-N2	7.06	124.84	119.90
26	1H	427	U	C2-N3-C4	7.06	131.24	127.00
26	1H	1392	A	C5-C6-N1	7.06	121.23	117.70
26	1H	1992	G	P-O3'-C3'	7.06	128.17	119.70
26	1H	2461	C	N3-C4-N4	-7.06	113.06	118.00
1	1G	396	G	O5'-P-OP2	-7.06	99.35	105.70
1	1G	584	G	C5-C6-N1	-7.06	107.97	111.50
1	1G	585	G	C8-N9-C4	-7.06	103.58	106.40
26	14	209	C	OP2-P-O3'	7.06	120.73	105.20
26	14	349	G	N1-C6-O6	7.06	124.14	119.90
27	1J	35	U	C6-N1-C2	7.06	125.24	121.00
1	13	867	G	C6-C5-N7	7.06	134.63	130.40
1	13	974	A	C6-C5-N7	-7.06	127.36	132.30
1	13	1368	G	C5-C6-N1	7.06	115.03	111.50
1	13	1504	G	C2-N3-C4	-7.06	108.37	111.90
26	1H	501	A	N1-C2-N3	7.06	132.83	129.30
26	1H	706	A	N9-C4-C5	-7.06	102.98	105.80
26	1H	814	C	N3-C2-O2	7.06	126.84	121.90
26	1H	1838	C	N3-C4-N4	7.06	122.94	118.00
26	1H	2344	U	OP1-P-OP2	7.06	130.19	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2626	C	N1-C2-N3	-7.06	114.26	119.20
26	14	1381	G	N7-C8-N9	-7.06	109.57	113.10
26	14	1467	C	C2-N3-C4	-7.06	116.37	119.90
26	14	2445	G	OP2-P-O3'	7.06	120.73	105.20
26	1H	1335	U	O5'-P-OP2	-7.06	99.35	105.70
26	14	687	C	C4-C5-C6	-7.06	113.87	117.40
1	13	1338	G	C4-C5-N7	-7.05	107.98	110.80
23	2K	11	A	C2-N3-C4	7.05	114.13	110.60
26	1H	669	G	C4-C5-N7	7.05	113.62	110.80
26	1H	1017	G	C8-N9-C4	-7.05	103.58	106.40
26	1H	1128	A	C6-N1-C2	-7.05	114.37	118.60
26	1H	2491	U	N3-C4-C5	7.05	118.83	114.60
26	1H	2614	A	N1-C2-N3	-7.05	125.77	129.30
27	16	48	A	C2-N3-C4	7.05	114.13	110.60
1	1G	1496	C	OP1-P-OP2	7.05	130.18	119.60
26	14	1653	G	C4-C5-N7	-7.05	107.98	110.80
26	14	1915	U	N1-C2-O2	7.05	127.74	122.80
22	1K	74	C	C5-C6-N1	7.05	124.53	121.00
26	14	270(Z)	U	N1-C2-O2	7.05	127.74	122.80
26	14	2821	A	C5-C6-N1	-7.05	114.17	117.70
1	13	249	U	OP1-P-OP2	7.05	130.18	119.60
1	13	757	U	OP1-P-OP2	7.05	130.18	119.60
26	1H	339	U	OP1-P-OP2	-7.05	109.02	119.60
26	1H	567	A	C5-N7-C8	-7.05	100.37	103.90
26	1H	2271	G	N9-C4-C5	-7.05	102.58	105.40
26	1H	2499	C	N1-C2-O2	-7.05	114.67	118.90
26	1H	2732	G	N9-C4-C5	7.05	108.22	105.40
26	1H	2871	C	C6-N1-C2	-7.05	117.48	120.30
1	1G	1414	U	C5-C4-O4	7.05	130.13	125.90
1	1G	1490	C	N1-C2-O2	7.05	123.13	118.90
26	14	988	A	C4-C5-N7	7.05	114.23	110.70
26	14	1406	U	N3-C4-O4	7.05	124.34	119.40
26	14	1692	U	C6-N1-C1'	7.05	131.07	121.20
26	14	2715	C	C6-N1-C2	7.05	123.12	120.30
1	13	189	U	C5-C6-N1	7.05	126.22	122.70
1	13	788	U	OP1-P-OP2	-7.05	109.03	119.60
26	1H	1435	G	N3-C4-C5	-7.05	125.08	128.60
26	1H	2226	C	C5-C4-N4	7.05	125.14	120.20
26	14	85	G	N9-C4-C5	-7.05	102.58	105.40
26	14	500	G	C4-C5-C6	7.05	123.03	118.80
26	14	768	G	C4-C5-N7	7.05	113.62	110.80
26	14	909	A	N1-C6-N6	-7.05	114.37	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1557	C	N3-C4-N4	-7.05	113.06	118.00
26	14	1801	G	N3-C2-N2	-7.05	114.97	119.90
26	14	2321	G	N7-C8-N9	7.05	116.62	113.10
26	14	2620	C	C2-N3-C4	-7.05	116.38	119.90
27	1J	72	G	C8-N9-C4	7.05	109.22	106.40
26	1H	406	G	N7-C8-N9	7.05	116.62	113.10
26	1H	688	U	N3-C4-O4	7.05	124.33	119.40
26	1H	754	C	C5-C6-N1	-7.05	117.48	121.00
26	1H	1557	C	N3-C4-N4	-7.05	113.07	118.00
27	16	77	U	N1-C2-O2	-7.05	117.87	122.80
26	14	684	G	C5-N7-C8	-7.05	100.78	104.30
26	14	1260	G	C4-C5-N7	-7.05	107.98	110.80
26	14	2518	A	N3-C4-N9	-7.05	121.76	127.40
1	13	501	C	OP2-P-O3'	7.05	120.70	105.20
1	13	577	G	C5-C6-O6	-7.05	124.37	128.60
1	13	1363	A	C8-N9-C4	7.05	108.62	105.80
26	1H	356	G	C5-C6-N1	-7.05	107.98	111.50
26	1H	748	G	N3-C2-N2	-7.05	114.97	119.90
26	1H	1579	A	N7-C8-N9	7.05	117.32	113.80
1	1G	576	G	N3-C4-C5	-7.05	125.08	128.60
26	14	972	G	N1-C6-O6	-7.05	115.67	119.90
26	14	2505	G	C8-N9-C4	-7.05	103.58	106.40
45	B5	73	ARG	NE-CZ-NH2	-7.05	116.78	120.30
26	1H	2299	G	N3-C4-C5	7.04	132.12	128.60
26	1H	2580	U	N3-C4-C5	-7.04	110.37	114.60
26	1H	2609	U	C2-N3-C4	-7.04	122.77	127.00
26	14	447	A	C8-N9-C4	-7.04	102.98	105.80
26	14	499	U	C4-C5-C6	7.04	123.93	119.70
26	14	2341	G	C8-N9-C4	7.04	109.22	106.40
26	14	2371	G	N1-C6-O6	7.04	124.13	119.90
26	14	2511	U	N1-C2-O2	7.04	127.73	122.80
26	1H	197	A	OP1-P-O3'	-7.04	89.70	105.20
26	1H	207	A	C6-N1-C2	-7.04	114.37	118.60
26	1H	2069	G	N1-C6-O6	7.04	124.13	119.90
26	1H	2769	C	N3-C4-C5	7.04	124.72	121.90
38	88	14	ARG	NE-CZ-NH2	-7.04	116.78	120.30
26	14	775	G	C4-C5-C6	7.04	123.03	118.80
26	14	1192	G	C8-N9-C4	7.04	109.22	106.40
26	14	1817	G	C2-N3-C4	-7.04	108.38	111.90
23	2K	62	C	C5-C4-N4	7.04	125.13	120.20
26	1H	1396	U	C5-C4-O4	7.04	130.12	125.90
26	1H	1406	U	C2-N3-C4	7.04	131.22	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2417	C	C6-N1-C2	7.04	123.12	120.30
26	1H	2622	C	N1-C2-N3	7.04	124.13	119.20
1	1G	1459	C	O5'-P-OP1	7.04	119.15	110.70
26	14	152	G	N3-C4-C5	7.04	132.12	128.60
26	14	181	A	OP2-P-O3'	7.04	120.69	105.20
26	14	727	A	C6-N1-C2	-7.04	114.38	118.60
1	13	575	G	N7-C8-N9	-7.04	109.58	113.10
1	13	730	G	C5-C6-N1	-7.04	107.98	111.50
1	13	1503	A	N1-C6-N6	-7.04	114.38	118.60
25	4K	22	A	C2-N3-C4	-7.04	107.08	110.60
26	14	215	G	C8-N9-C4	7.04	109.22	106.40
24	3K	36	U	N3-C4-O4	-7.04	114.47	119.40
26	1H	960	A	C5-C6-N6	7.04	129.33	123.70
26	1H	1120	G	C5-C6-O6	-7.04	124.38	128.60
26	1H	2686	G	N3-C4-C5	-7.04	125.08	128.60
27	16	100	G	N1-C2-N2	-7.04	109.87	116.20
1	1G	1431	C	N1-C2-O2	-7.04	114.68	118.90
26	14	125	G	C2-N3-C4	7.04	115.42	111.90
26	14	676	A	C6-C5-N7	-7.04	127.37	132.30
26	14	686	G	C6-N1-C2	-7.04	120.88	125.10
26	14	768	G	N7-C8-N9	7.04	116.62	113.10
26	14	1129	A	OP1-P-OP2	7.04	130.16	119.60
26	14	2081	C	N3-C2-O2	-7.04	116.97	121.90
1	13	228	A	C4-C5-C6	-7.04	113.48	117.00
26	1H	919	G	C5-N7-C8	7.04	107.82	104.30
26	1H	1596	A	OP2-P-O3'	7.04	120.68	105.20
26	1H	2712	U	C5-C6-N1	-7.04	119.18	122.70
26	14	2491	U	C6-N1-C2	7.04	125.22	121.00
1	13	575	G	C6-C5-N7	7.04	134.62	130.40
24	3K	35	U	C5-C6-N1	7.04	126.22	122.70
26	1H	2697	G	N1-C6-O6	7.04	124.12	119.90
26	14	558	G	N3-C4-C5	7.04	132.12	128.60
26	14	918	A	O5'-P-OP2	7.04	119.14	110.70
27	1J	36	C	N1-C2-N3	-7.04	114.28	119.20
1	13	1501	C	OP2-P-O3'	7.03	120.67	105.20
26	1H	273	G	N7-C8-N9	-7.03	109.58	113.10
26	1H	1506	C	C5-C6-N1	7.03	124.52	121.00
26	1H	2239	G	N3-C2-N2	7.03	124.82	119.90
1	1G	1462	G	C8-N9-C4	7.03	109.21	106.40
26	14	677	A	O5'-P-OP2	-7.03	99.37	105.70
26	14	1307	A	O5'-P-OP1	-7.03	99.37	105.70
26	14	2587	A	N1-C6-N6	7.03	122.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	836	G	C8-N9-C4	-7.03	103.59	106.40
26	14	1600	C	O5'-P-OP2	-7.03	99.37	105.70
1	13	101	A	OP2-P-O3'	7.03	120.67	105.20
26	1H	460	A	C8-N9-C4	7.03	108.61	105.80
26	1H	1615	C	N1-C2-O2	7.03	123.12	118.90
26	14	424	G	N3-C2-N2	-7.03	114.98	119.90
26	1H	142	G	C8-N9-C1'	7.03	136.14	127.00
26	1H	528	A	C4-C5-N7	7.03	114.22	110.70
26	1H	679	C	C6-N1-C1'	7.03	129.23	120.80
26	1H	1925	C	N3-C4-C5	-7.03	119.09	121.90
26	14	140	A	N3-C4-C5	7.03	131.72	126.80
26	14	202	U	C4-C5-C6	7.03	123.92	119.70
26	14	579	G	C5-C6-N1	-7.03	107.98	111.50
26	14	1302	A	C4-C5-N7	-7.03	107.19	110.70
26	14	1842	G	C5-N7-C8	7.03	107.81	104.30
26	1H	581	C	N1-C2-O2	-7.03	114.68	118.90
26	1H	964	C	N3-C4-N4	7.03	122.92	118.00
26	1H	1282	U	O5'-P-OP2	7.03	119.13	110.70
26	1H	1651	G	C2-N3-C4	-7.03	108.39	111.90
26	1H	1891	G	N7-C8-N9	7.03	116.61	113.10
26	1H	2724	C	C4-C5-C6	7.03	120.91	117.40
1	1G	1305	G	C8-N9-C4	7.03	109.21	106.40
26	14	708	C	C6-N1-C2	-7.03	117.49	120.30
26	14	1933	G	N9-C4-C5	-7.03	102.59	105.40
26	14	2868	A	O5'-P-OP1	-7.03	99.38	105.70
24	3K	76	A	N7-C8-N9	7.03	117.31	113.80
26	1H	1012	U	OP1-P-OP2	-7.03	109.06	119.60
26	1H	1286	A	N9-C4-C5	7.03	108.61	105.80
26	1H	2651	C	N1-C2-O2	-7.03	114.69	118.90
26	1H	2761	G	C4-C5-N7	-7.03	107.99	110.80
26	14	252	G	C6-N1-C2	-7.03	120.88	125.10
26	14	938	G	O5'-P-OP1	7.03	119.13	110.70
26	14	1349	A	C2-N3-C4	-7.03	107.09	110.60
26	14	1772	G	C5-N7-C8	-7.03	100.79	104.30
26	14	2740	A	N9-C4-C5	-7.03	102.99	105.80
26	1H	183	C	C4-C5-C6	7.02	120.91	117.40
26	1H	796	C	N3-C4-N4	-7.02	113.08	118.00
26	1H	1024	G	C5-C6-N1	-7.02	107.99	111.50
26	14	743	G	OP1-P-OP2	7.02	130.14	119.60
26	14	1703	G	C2-N3-C4	-7.02	108.39	111.90
26	14	1816	G	C4-C5-C6	-7.02	114.59	118.80
26	14	2028	U	C6-N1-C2	-7.02	116.78	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2836	U	C5-C6-N1	7.02	126.21	122.70
26	1H	655	A	C5-N7-C8	-7.02	100.39	103.90
26	1H	1129	A	N1-C2-N3	7.02	132.81	129.30
26	14	1319	G	C6-C5-N7	-7.02	126.19	130.40
25	4L	20	U	C6-N1-C2	-7.02	116.79	121.00
26	1H	296	C	N3-C2-O2	-7.02	116.99	121.90
26	1H	502	A	C4-C5-N7	-7.02	107.19	110.70
26	1H	693	C	C4-C5-C6	7.02	120.91	117.40
26	1H	2004	G	N3-C4-N9	-7.02	121.79	126.00
26	1H	2626	C	N3-C4-C5	7.02	124.71	121.90
26	14	124	G	O5'-P-OP1	7.02	119.12	110.70
26	14	396	G	N1-C6-O6	7.02	124.11	119.90
26	14	1273	U	C6-N1-C2	7.02	125.21	121.00
26	14	1341	U	OP1-P-O3'	7.02	120.64	105.20
1	13	557	G	N3-C4-N9	7.02	130.21	126.00
1	13	1416	G	N1-C6-O6	-7.02	115.69	119.90
26	1H	501	A	OP1-P-OP2	7.02	130.13	119.60
26	1H	648	G	OP1-P-O3'	7.02	120.64	105.20
26	1H	656	G	C4-C5-N7	-7.02	107.99	110.80
26	1H	968	G	N3-C2-N2	7.02	124.81	119.90
26	1H	2314	C	C6-N1-C2	-7.02	117.49	120.30
26	1H	2361	A	C4-C5-C6	7.02	120.51	117.00
26	14	1145	C	C5-C6-N1	7.02	124.51	121.00
26	14	1959	G	C5-C6-O6	7.02	132.81	128.60
26	14	2436	G	C5-C6-O6	-7.02	124.39	128.60
26	14	2526	G	N3-C4-N9	-7.02	121.79	126.00
26	1H	326	G	N3-C4-N9	-7.02	121.79	126.00
26	1H	1295	C	N3-C4-N4	-7.02	113.09	118.00
26	1H	1450	C	OP1-P-OP2	7.02	130.12	119.60
27	16	102	G	C8-N9-C4	7.02	109.21	106.40
26	14	117	G	OP1-P-O3'	7.02	120.64	105.20
26	14	148	C	N3-C4-C5	7.02	124.71	121.90
26	14	409	C	N1-C2-N3	-7.02	114.29	119.20
26	1H	188	G	C6-C5-N7	-7.01	126.19	130.40
26	1H	1382	G	C5-C6-O6	-7.01	124.39	128.60
26	1H	1660	C	N3-C4-N4	-7.01	113.09	118.00
26	1H	2396	G	N1-C6-O6	-7.01	115.69	119.90
27	16	33	G	N3-C2-N2	7.01	124.81	119.90
1	1G	236	G	C2-N3-C4	-7.01	108.39	111.90
1	1G	778	G	C6-C5-N7	-7.01	126.19	130.40
26	14	1285	G	C5-C6-O6	-7.01	124.39	128.60
26	14	1828	G	C5-C6-O6	7.01	132.81	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2270	G	N3-C4-C5	-7.01	125.09	128.60
26	1H	188	G	C5-C6-O6	-7.01	124.39	128.60
26	1H	251	A	N3-C4-C5	-7.01	121.89	126.80
26	1H	1852	C	OP1-P-OP2	7.01	130.12	119.60
26	14	1396	U	C2-N1-C1'	7.01	126.11	117.70
26	14	2049	G	C4-C5-N7	7.01	113.61	110.80
1	13	1270	C	C5-C6-N1	7.01	124.51	121.00
26	1H	2082	A	C5-C6-N1	7.01	121.21	117.70
6	52	14	LEU	CB-CG-CD2	7.01	122.92	111.00
26	14	1300	U	N1-C2-N3	7.01	119.11	114.90
26	1H	473	G	N1-C2-N3	7.01	128.11	123.90
26	1H	744	G	N1-C2-N3	7.01	128.11	123.90
26	1H	948	G	C5-C6-N1	-7.01	108.00	111.50
26	1H	1528	A	C4-C5-N7	7.01	114.20	110.70
26	1H	2084	C	C5-C6-N1	-7.01	117.50	121.00
26	1H	2217	G	N7-C8-N9	7.01	116.61	113.10
26	14	1679	U	O5'-P-OP2	-7.01	99.39	105.70
26	1H	2283	C	N3-C4-C5	-7.01	119.10	121.90
26	14	870	A	O5'-P-OP2	-7.01	99.39	105.70
26	14	1681	G	C6-N1-C2	7.01	129.31	125.10
1	13	1268	A	OP1-P-OP2	7.01	130.11	119.60
1	13	1390	U	C5-C4-O4	7.01	130.10	125.90
26	1H	243	U	C5-C6-N1	7.01	126.20	122.70
26	1H	524	U	C2-N3-C4	-7.01	122.80	127.00
26	1H	826	U	N3-C4-O4	7.01	124.30	119.40
26	1H	1833	U	C4-C5-C6	7.01	123.90	119.70
26	1H	2301	C	N1-C2-N3	7.01	124.11	119.20
26	1H	2764	A	O4'-C1'-N9	-7.01	102.59	108.20
1	1G	510	A	C4-C5-C6	-7.01	113.50	117.00
26	14	77	C	N3-C4-N4	-7.01	113.10	118.00
26	14	1142(A)	A	C5-C6-N1	-7.01	114.20	117.70
26	14	1383	C	C5-C4-N4	-7.01	115.30	120.20
26	14	1416	G	C8-N9-C4	7.01	109.20	106.40
1	13	1219	U	C6-N1-C2	-7.00	116.80	121.00
26	1H	71	A	OP1-P-OP2	-7.00	109.09	119.60
26	1H	999	U	N3-C4-C5	-7.00	110.40	114.60
26	1H	1970	A	N7-C8-N9	7.00	117.30	113.80
26	14	243	U	N3-C2-O2	-7.00	117.30	122.20
26	14	1390	U	C5-C6-N1	7.00	126.20	122.70
26	14	2842	G	C4-C5-N7	7.00	113.60	110.80
22	1K	38	A	C2-N3-C4	-7.00	107.10	110.60
26	1H	64	A	C4-C5-N7	-7.00	107.20	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	429	A	O4'-C1'-N9	-7.00	102.60	108.20
26	1H	1303	G	C8-N9-C4	7.00	109.20	106.40
26	1H	1321	A	C6-N1-C2	-7.00	114.40	118.60
26	1H	1551	C	C6-N1-C2	-7.00	117.50	120.30
26	1H	2248	C	N3-C4-C5	7.00	124.70	121.90
27	16	36	C	OP1-P-O3'	-7.00	89.79	105.20
1	1G	118	U	C5-C6-N1	7.00	126.20	122.70
26	14	1573	G	N1-C2-N3	7.00	128.10	123.90
23	2K	43	G	N3-C2-N2	7.00	124.80	119.90
26	1H	1851	U	N1-C2-O2	-7.00	117.90	122.80
26	1H	2419	U	OP1-P-OP2	-7.00	109.10	119.60
27	16	6	C	C5-C6-N1	-7.00	117.50	121.00
26	14	188	G	N1-C2-N2	-7.00	109.90	116.20
26	14	263	C	C5-C6-N1	-7.00	117.50	121.00
26	14	388	G	N9-C4-C5	7.00	108.20	105.40
26	14	698	C	C4-C5-C6	7.00	120.90	117.40
26	14	777	A	C5-C6-N1	7.00	121.20	117.70
26	14	1378	A	N9-C4-C5	-7.00	103.00	105.80
26	14	1807	G	N9-C4-C5	-7.00	102.60	105.40
27	1J	105	G	OP1-P-OP2	-7.00	109.10	119.60
1	13	827	U	C4-C5-C6	7.00	123.90	119.70
26	1H	931	G	N3-C4-C5	-7.00	125.10	128.60
26	1H	1658	C	C4-C5-C6	7.00	120.90	117.40
26	1H	2034	U	C6-N1-C2	-7.00	116.80	121.00
1	1G	402	G	N7-C8-N9	-7.00	109.60	113.10
26	14	1419	A	N7-C8-N9	-7.00	110.30	113.80
1	13	1279	A	C5-N7-C8	-7.00	100.40	103.90
26	1H	668	G	C5-N7-C8	-7.00	100.80	104.30
26	1H	1015	G	O5'-P-OP2	-7.00	99.40	105.70
26	1H	1194	A	C5-C6-N6	-7.00	118.10	123.70
26	1H	1591	G	C2-N3-C4	-7.00	108.40	111.90
26	1H	2818	G	C8-N9-C4	7.00	109.20	106.40
27	16	106	G	O5'-P-OP2	7.00	119.10	110.70
1	1G	386	C	N3-C4-N4	-7.00	113.10	118.00
26	14	59	U	C5-C6-N1	-7.00	119.20	122.70
26	14	225	A	N7-C8-N9	-7.00	110.30	113.80
26	14	765	G	C4-C5-C6	7.00	123.00	118.80
26	14	2332	U	C6-N1-C2	7.00	125.20	121.00
1	13	477	G	N3-C4-N9	-7.00	121.80	126.00
1	13	633	G	N9-C4-C5	-7.00	102.60	105.40
1	13	800	G	N3-C2-N2	-7.00	115.00	119.90
1	13	1419	G	N1-C6-O6	7.00	124.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	917	A	OP1-P-O3'	7.00	120.59	105.20
26	1H	1293	C	C6-N1-C2	-7.00	117.50	120.30
26	1H	1603	A	OP1-P-O3'	7.00	120.59	105.20
26	1H	2573	C	C5-C6-N1	-7.00	117.50	121.00
26	1H	2642	G	C8-N9-C4	7.00	109.20	106.40
26	14	1321	A	C8-N9-C4	7.00	108.60	105.80
26	14	2683	C	C2-N3-C4	7.00	123.40	119.90
26	1H	975	G	O4'-C1'-N9	-7.00	102.60	108.20
26	1H	1299	G	C8-N9-C4	-7.00	103.60	106.40
26	1H	2268	A	C8-N9-C4	7.00	108.60	105.80
26	14	682	G	N1-C6-O6	-7.00	115.70	119.90
1	13	416	G	N1-C6-O6	6.99	124.10	119.90
1	13	611	A	N1-C6-N6	6.99	122.80	118.60
26	1H	2020	A	N1-C2-N3	6.99	132.80	129.30
26	1H	2381	C	N3-C2-O2	6.99	126.80	121.90
26	1H	2689	U	OP1-P-OP2	6.99	130.09	119.60
26	14	1449	A	C8-N9-C4	-6.99	103.00	105.80
26	14	2044	C	O5'-P-OP1	-6.99	99.41	105.70
26	14	2092	U	N3-C2-O2	-6.99	117.31	122.20
26	1H	201	C	O5'-P-OP2	-6.99	99.41	105.70
26	1H	245	G	C8-N9-C1'	-6.99	117.91	127.00
26	1H	1478	G	C5-C6-O6	6.99	132.79	128.60
50	K8	67	LYS	CD-CE-NZ	6.99	127.78	111.70
1	1G	481	G	OP1-P-OP2	6.99	130.09	119.60
26	14	733	G	O5'-P-OP2	-6.99	99.41	105.70
26	14	747	U	C5-C4-O4	-6.99	121.70	125.90
1	13	1058	G	N3-C2-N2	6.99	124.79	119.90
26	1H	181	A	C5-C6-N6	6.99	129.29	123.70
1	1G	48	C	C6-N1-C2	6.99	123.10	120.30
26	14	510	C	N3-C2-O2	-6.99	117.01	121.90
26	14	1302	A	N9-C4-C5	6.99	108.60	105.80
26	1H	290	G	C4-C5-N7	6.99	113.59	110.80
26	1H	650	C	N3-C4-N4	6.99	122.89	118.00
26	1H	1366	A	C6-C5-N7	-6.99	127.41	132.30
26	1H	1528	A	C2-N3-C4	-6.99	107.11	110.60
26	1H	1823	G	N1-C6-O6	6.99	124.09	119.90
26	1H	1830	C	N3-C4-N4	-6.99	113.11	118.00
55	Q8	30	ARG	CA-CB-CG	6.99	128.77	113.40
26	14	802	A	N9-C4-C5	6.99	108.59	105.80
26	14	1470	G	C5-C6-O6	-6.99	124.41	128.60
26	14	1579	A	C2-N3-C4	-6.99	107.11	110.60
26	14	2500	U	O5'-P-OP1	6.99	119.09	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	74	A	N3-C4-N9	-6.99	121.81	127.40
26	14	270(B)	A	N9-C4-C5	-6.99	103.00	105.80
1	13	41	G	C8-N9-C4	6.99	109.19	106.40
1	13	765	G	C5-N7-C8	-6.99	100.81	104.30
26	1H	2394	C	C2-N3-C4	-6.99	116.41	119.90
26	1H	2444	G	C8-N9-C4	-6.99	103.61	106.40
26	1H	2772	C	C5-C6-N1	-6.99	117.51	121.00
27	16	50	G	O5'-P-OP1	6.99	119.08	110.70
1	1G	500	G	C4-C5-N7	-6.99	108.01	110.80
26	14	75	G	C8-N9-C4	-6.99	103.61	106.40
26	14	2497	A	C6-N1-C2	-6.99	114.41	118.60
26	14	2595	G	C6-C5-N7	-6.99	126.21	130.40
26	14	2079	U	C5-C6-N1	-6.98	119.21	122.70
1	13	1288	A	O5'-P-OP1	-6.98	99.42	105.70
26	1H	951	C	OP1-P-OP2	-6.98	109.13	119.60
26	1H	1205	U	N1-C2-O2	-6.98	117.91	122.80
1	1G	1486	G	N7-C8-N9	-6.98	109.61	113.10
26	14	1313	U	N1-C2-N3	6.98	119.09	114.90
26	14	1329	U	N1-C2-O2	-6.98	117.91	122.80
26	14	1728	G	C5-C6-N1	6.98	114.99	111.50
26	14	2453	A	OP1-P-OP2	6.98	130.07	119.60
1	13	1504	G	N1-C6-O6	6.98	124.09	119.90
26	1H	226	G	N1-C6-O6	6.98	124.09	119.90
26	1H	2383	G	C6-C5-N7	-6.98	126.21	130.40
27	16	20	C	N3-C2-O2	6.98	126.79	121.90
1	1G	898	G	N9-C4-C5	-6.98	102.61	105.40
26	14	1006	C	C6-N1-C2	-6.98	117.51	120.30
26	14	1610	A	C6-C5-N7	-6.98	127.41	132.30
26	14	2731	G	N3-C4-C5	-6.98	125.11	128.60
26	1H	44	A	N9-C4-C5	6.98	108.59	105.80
26	1H	2497	A	OP1-P-OP2	-6.98	109.13	119.60
27	1J	101	A	N9-C4-C5	-6.98	103.01	105.80
26	1H	14	A	C8-N9-C4	6.98	108.59	105.80
26	1H	513	A	C6-N1-C2	-6.98	114.41	118.60
26	1H	778	G	N3-C2-N2	6.98	124.78	119.90
26	1H	1308	A	N9-C4-C5	6.98	108.59	105.80
26	1H	2343	C	O5'-P-OP2	6.98	119.07	110.70
26	1H	2461	C	N3-C4-C5	6.98	124.69	121.90
1	1G	322	C	N1-C2-O2	-6.98	114.71	118.90
1	1G	1402	C	C4-C5-C6	6.98	120.89	117.40
26	14	876	C	N3-C2-O2	-6.98	117.02	121.90
26	14	1197	G	C2-N3-C4	-6.98	108.41	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2325	G	N1-C2-N2	6.98	122.48	116.20
26	1H	933	A	O5'-P-OP1	6.98	119.07	110.70
1	1G	815	A	N9-C4-C5	-6.98	103.01	105.80
1	13	729	A	N1-C6-N6	-6.97	114.42	118.60
1	13	785	G	N3-C4-C5	6.97	132.09	128.60
26	1H	781	A	N7-C8-N9	-6.97	110.31	113.80
26	1H	1667	G	C2-N3-C4	-6.97	108.41	111.90
26	1H	1927	A	N9-C4-C5	6.97	108.59	105.80
26	1H	2237	G	O5'-P-OP2	-6.97	99.42	105.70
26	1H	2494	G	OP2-P-O3'	6.97	120.54	105.20
26	1H	2787	C	N1-C2-O2	6.97	123.08	118.90
52	M8	38	LYS	C-N-CA	6.97	139.14	121.70
1	1G	1415	G	C8-N9-C4	6.97	109.19	106.40
26	14	82	G	O5'-P-OP2	6.97	119.07	110.70
26	14	1120	G	N7-C8-N9	-6.97	109.61	113.10
26	14	1639	U	C4-C5-C6	6.97	123.89	119.70
26	1H	579	G	N3-C2-N2	-6.97	115.02	119.90
26	1H	844	C	N3-C4-N4	6.97	122.88	118.00
26	1H	1421	G	OP2-P-O3'	6.97	120.54	105.20
1	1G	171	A	N1-C6-N6	-6.97	114.42	118.60
26	14	665	C	N1-C2-N3	-6.97	114.32	119.20
27	1J	44	G	C8-N9-C4	6.97	109.19	106.40
26	1H	1369	G	OP1-P-OP2	6.97	130.06	119.60
26	1H	1822	G	C5-C6-N1	-6.97	108.02	111.50
26	1H	2690	C	N1-C2-N3	6.97	124.08	119.20
1	1G	1420	C	O5'-P-OP2	6.97	119.06	110.70
27	1J	89	G	N9-C4-C5	-6.97	102.61	105.40
1	13	625	G	N9-C4-C5	6.97	108.19	105.40
26	1H	330	A	C6-C5-N7	-6.97	127.42	132.30
26	1H	1647	G	O4'-C1'-N9	-6.97	102.62	108.20
26	1H	1938	A	OP1-P-OP2	6.97	130.05	119.60
26	1H	1967	C	C2-N3-C4	-6.97	116.42	119.90
26	1H	2308	G	OP1-P-OP2	6.97	130.05	119.60
27	16	81	G	O4'-C1'-N9	6.97	113.78	108.20
49	J8	85	LEU	CA-CB-CG	-6.97	99.27	115.30
1	1G	146	G	N1-C6-O6	6.97	124.08	119.90
1	1G	584	G	C5-N7-C8	-6.97	100.81	104.30
26	14	326	G	N3-C4-N9	-6.97	121.82	126.00
26	14	1945	G	N3-C2-N2	6.97	124.78	119.90
26	14	2006	C	N1-C2-N3	-6.97	114.32	119.20
1	13	874	G	O5'-P-OP1	-6.97	99.43	105.70
26	1H	784	A	O4'-C1'-N9	6.97	113.77	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1285	G	C6-C5-N7	-6.97	126.22	130.40
26	14	938	G	OP1-P-OP2	-6.97	109.15	119.60
1	13	1203	C	N3-C4-C5	-6.97	119.11	121.90
1	13	1279	A	C4-C5-C6	6.97	120.48	117.00
26	1H	1286	A	C4-C5-C6	6.97	120.48	117.00
26	1H	2014	A	C5-C6-N6	-6.97	118.13	123.70
26	1H	2015	A	C5-N7-C8	-6.97	100.42	103.90
26	1H	2287	A	C6-C5-N7	-6.97	127.42	132.30
23	2L	37	U	N3-C2-O2	-6.97	117.32	122.20
26	14	386	G	C4-C5-N7	6.97	113.59	110.80
26	14	784	A	C5-C6-N1	-6.97	114.22	117.70
26	14	790	C	OP1-P-O3'	6.97	120.53	105.20
1	13	1470	G	C2-N3-C4	-6.96	108.42	111.90
26	1H	919	G	N1-C2-N2	-6.96	109.93	116.20
26	1H	1817	G	N3-C4-N9	-6.96	121.82	126.00
26	1H	2785	C	O5'-P-OP1	-6.96	99.43	105.70
26	14	594	U	OP1-P-O3'	-6.96	89.88	105.20
26	14	835	A	OP1-P-OP2	-6.96	109.15	119.60
26	14	2313	C	N3-C2-O2	-6.96	117.03	121.90
26	14	606	U	C5-C6-N1	-6.96	119.22	122.70
1	13	1081	G	OP1-P-O3'	6.96	120.52	105.20
1	13	1478	C	N3-C4-N4	-6.96	113.13	118.00
26	1H	83	G	C8-N9-C4	6.96	109.18	106.40
26	1H	311	A	C8-N9-C4	6.96	108.58	105.80
26	1H	753	C	C6-N1-C2	-6.96	117.52	120.30
26	1H	1133	U	N3-C4-O4	-6.96	114.53	119.40
26	1H	1997	G	C5-C6-O6	6.96	132.78	128.60
26	1H	2585	U	C5-C4-O4	6.96	130.08	125.90
26	14	400	G	N3-C4-C5	6.96	132.08	128.60
26	14	938	G	OP2-P-O3'	6.96	120.51	105.20
26	14	2710	C	N1-C2-N3	-6.96	114.33	119.20
26	1H	2275	C	N1-C2-O2	-6.96	114.72	118.90
26	14	576	U	OP2-P-O3'	6.96	120.51	105.20
26	14	2082	A	C6-N1-C2	-6.96	114.42	118.60
1	13	517	G	N3-C4-N9	6.96	130.18	126.00
1	13	1190	G	N3-C4-N9	-6.96	121.83	126.00
1	13	1426	C	OP2-P-O3'	6.96	120.51	105.20
1	13	1431	C	OP1-P-OP2	6.96	130.04	119.60
26	1H	609(A)	G	C2-N3-C4	-6.96	108.42	111.90
26	1H	748	G	OP1-P-O3'	6.96	120.51	105.20
26	1H	2029	G	C5-N7-C8	-6.96	100.82	104.30
1	1G	585	G	C5-C6-N1	6.96	114.98	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	330	A	N7-C8-N9	6.96	117.28	113.80
26	14	453	C	C6-N1-C2	6.96	123.08	120.30
26	14	1479	G	C8-N9-C4	-6.96	103.62	106.40
26	14	2020	A	N9-C4-C5	6.96	108.58	105.80
27	1J	102	G	C8-N9-C4	6.96	109.18	106.40
26	1H	378	C	C5-C6-N1	-6.96	117.52	121.00
26	1H	835	A	C2-N3-C4	6.96	114.08	110.60
26	1H	1706	U	N3-C4-C5	-6.96	110.43	114.60
26	1H	2469	A	O4'-C1'-N9	6.96	113.77	108.20
26	14	703	U	C2-N3-C4	6.96	131.17	127.00
26	14	1022	G	N1-C6-O6	-6.96	115.73	119.90
26	14	1323	U	OP1-P-OP2	-6.96	109.16	119.60
26	14	2239	G	C5-C6-O6	6.96	132.77	128.60
26	14	2727	G	OP1-P-OP2	6.96	130.03	119.60
26	14	2848	G	C4-C5-C6	6.96	122.97	118.80
26	1H	780	G	C6-N1-C2	-6.96	120.93	125.10
26	1H	1027	A	OP1-P-OP2	-6.96	109.17	119.60
26	1H	1264	G	C2-N3-C4	-6.96	108.42	111.90
26	1H	2837	G	C5-N7-C8	-6.96	100.82	104.30
26	14	832	G	C5-C6-O6	6.96	132.77	128.60
26	14	1454	U	N3-C2-O2	-6.96	117.33	122.20
26	14	1558	A	C6-N1-C2	6.96	122.77	118.60
1	13	266	G	C5-N7-C8	-6.95	100.82	104.30
26	1H	1369	G	C5-C6-O6	6.95	132.77	128.60
26	1H	2487	G	N1-C6-O6	6.95	124.07	119.90
26	14	785	G	N3-C4-N9	-6.95	121.83	126.00
26	14	1004	C	C6-N1-C2	-6.95	117.52	120.30
26	14	1595	G	N3-C2-N2	-6.95	115.03	119.90
26	14	1658	C	N1-C2-N3	6.95	124.07	119.20
26	14	2459	A	N1-C2-N3	-6.95	125.82	129.30
26	14	497	A	C4-C5-N7	6.95	114.18	110.70
26	14	659	C	C5-C6-N1	-6.95	117.52	121.00
26	14	2873	A	O5'-P-OP1	-6.95	99.44	105.70
1	13	875	C	C6-N1-C2	-6.95	117.52	120.30
26	1H	478	A	C4-C5-N7	-6.95	107.22	110.70
26	1H	1017	G	N9-C4-C5	6.95	108.18	105.40
26	1H	1977	A	N1-C2-N3	6.95	132.78	129.30
26	1H	2514	U	C4-C5-C6	6.95	123.87	119.70
26	1H	2711	A	OP1-P-O3'	6.95	120.49	105.20
55	Q8	4	MET	CG-SD-CE	-6.95	89.08	100.20
1	1G	536	C	N3-C4-C5	-6.95	119.12	121.90
1	1G	1274	G	N1-C6-O6	6.95	124.07	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1483	A	C5-N7-C8	-6.95	100.42	103.90
26	14	1773	A	C6-N1-C2	-6.95	114.43	118.60
26	14	1982	C	C6-N1-C2	-6.95	117.52	120.30
1	13	1329	A	N1-C6-N6	6.95	122.77	118.60
26	1H	265	A	N1-C2-N3	6.95	132.77	129.30
26	1H	378	C	C6-N1-C2	6.95	123.08	120.30
26	1H	940	G	C6-N1-C2	-6.95	120.93	125.10
26	1H	1513	C	C5-C4-N4	-6.95	115.34	120.20
26	1H	1608	A	C2-N3-C4	-6.95	107.13	110.60
26	1H	2039	C	C6-N1-C2	-6.95	117.52	120.30
26	1H	2078	C	C5-C6-N1	-6.95	117.53	121.00
26	14	1546	C	O5'-P-OP1	-6.95	99.45	105.70
26	14	2518	A	C6-C5-N7	-6.95	127.44	132.30
1	13	807	A	N1-C6-N6	-6.95	114.43	118.60
26	1H	306	U	C4-C5-C6	6.95	123.87	119.70
26	1H	749	C	C4-C5-C6	6.95	120.87	117.40
26	1H	996	A	C2-N3-C4	-6.95	107.13	110.60
26	1H	1203	G	N3-C4-N9	6.95	130.17	126.00
37	35	36	LYS	CD-CE-NZ	6.95	127.68	111.70
1	13	540	G	C4-C5-N7	-6.95	108.02	110.80
1	13	574	A	OP2-P-O3'	6.95	120.48	105.20
1	13	1400	C	N1-C2-N3	-6.95	114.34	119.20
26	1H	657	U	OP1-P-OP2	6.95	130.02	119.60
26	1H	1644	C	N1-C2-O2	6.95	123.07	118.90
26	14	949	C	C2-N3-C4	-6.95	116.43	119.90
26	14	1182	A	N1-C6-N6	6.95	122.77	118.60
26	14	1669	A	O5'-P-OP2	-6.95	99.45	105.70
26	14	2336	A	C4-C5-N7	-6.95	107.23	110.70
26	14	2464	C	C5-C6-N1	-6.95	117.53	121.00
26	14	2556	C	OP2-P-O3'	6.95	120.48	105.20
27	1J	29	A	C5-C6-N6	-6.95	118.14	123.70
1	13	874	G	N3-C4-C5	-6.94	125.13	128.60
26	1H	1436	G	C8-N9-C4	-6.94	103.62	106.40
26	1H	1607	C	C5-C4-N4	-6.94	115.34	120.20
26	1H	1688	U	N1-C2-N3	6.94	119.07	114.90
1	1G	925	G	N7-C8-N9	-6.94	109.63	113.10
1	13	180	U	N3-C4-C5	-6.94	110.43	114.60
1	13	903	G	C5-N7-C8	6.94	107.77	104.30
1	13	1527	C	C2-N3-C4	-6.94	116.43	119.90
26	1H	232	G	C4-C5-C6	6.94	122.97	118.80
26	1H	1675	C	C5-C4-N4	6.94	125.06	120.20
26	1H	2546	U	C4-C5-C6	6.94	123.86	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2594	C	N3-C4-N4	6.94	122.86	118.00
1	1G	741	G	C5-C6-N1	-6.94	108.03	111.50
1	1G	816	A	N7-C8-N9	6.94	117.27	113.80
26	14	796	C	O5'-P-OP1	-6.94	99.45	105.70
26	14	1355	G	C4-C5-C6	6.94	122.97	118.80
26	14	1642	G	C5-N7-C8	-6.94	100.83	104.30
1	13	644	G	N7-C8-N9	-6.94	109.63	113.10
26	1H	39	C	N3-C2-O2	6.94	126.76	121.90
26	1H	62	C	N3-C2-O2	6.94	126.76	121.90
26	1H	220	G	C6-C5-N7	-6.94	126.24	130.40
26	1H	242	G	C6-C5-N7	-6.94	126.23	130.40
26	1H	684	G	C2-N3-C4	6.94	115.37	111.90
26	1H	955	C	N1-C2-N3	6.94	124.06	119.20
26	1H	1551	C	N3-C2-O2	-6.94	117.04	121.90
26	1H	2437	U	OP1-P-OP2	6.94	130.01	119.60
26	14	769	G	C6-C5-N7	6.94	134.56	130.40
26	14	1344	G	N3-C2-N2	-6.94	115.04	119.90
26	14	1558	A	P-O3'-C3'	6.94	128.03	119.70
1	13	1279	A	N7-C8-N9	6.94	117.27	113.80
26	1H	816	C	N1-C2-N3	-6.94	114.34	119.20
26	1H	2643	G	N1-C6-O6	6.94	124.06	119.90
1	1G	131	C	N3-C4-C5	-6.94	119.12	121.90
26	14	1646	C	C5-C4-N4	-6.94	115.34	120.20
1	13	1463	C	C6-N1-C2	-6.94	117.53	120.30
26	1H	37	C	C5-C6-N1	6.94	124.47	121.00
26	1H	1228	G	C4-C5-C6	6.94	122.96	118.80
26	1H	2219	G	C4-C5-N7	6.94	113.58	110.80
50	K8	16	LEU	CB-CG-CD2	-6.94	99.20	111.00
26	14	2769	C	N3-C2-O2	-6.94	117.04	121.90
1	13	525	C	C5-C6-N1	6.94	124.47	121.00
1	13	1266	G	N3-C4-C5	6.94	132.07	128.60
26	1H	636	G	OP1-P-OP2	-6.94	109.20	119.60
26	1H	1568	G	C4-C5-C6	-6.94	114.64	118.80
26	1H	2008	C	OP1-P-O3'	6.94	120.46	105.20
1	1G	558	G	C5-C6-N1	-6.94	108.03	111.50
26	14	6	A	C2-N3-C4	6.94	114.07	110.60
26	14	537	C	N3-C2-O2	-6.94	117.05	121.90
26	14	788	A	N3-C4-N9	6.94	132.95	127.40
26	1H	748	G	C6-N1-C2	-6.93	120.94	125.10
26	1H	1860	G	N3-C4-C5	6.93	132.07	128.60
26	1H	1912	A	N9-C4-C5	6.93	108.57	105.80
26	1H	1981	A	C4-C5-C6	-6.93	113.53	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2785	C	C5-C6-N1	6.93	124.47	121.00
26	14	388	G	C8-N9-C4	-6.93	103.63	106.40
26	14	955	C	C6-N1-C2	-6.93	117.53	120.30
1	13	186(A)	C	C6-N1-C2	-6.93	117.53	120.30
26	1H	271(C)	U	O4'-C1'-N1	6.93	113.75	108.20
26	1H	465	G	N1-C2-N2	6.93	122.44	116.20
26	1H	719	C	C6-N1-C2	-6.93	117.53	120.30
26	1H	2826	A	N7-C8-N9	-6.93	110.33	113.80
1	1G	592	G	C5-C6-N1	-6.93	108.03	111.50
26	14	756	C	C5-C4-N4	-6.93	115.35	120.20
26	14	1521	G	C8-N9-C4	-6.93	103.63	106.40
26	14	2092	U	C5-C6-N1	-6.93	119.23	122.70
29	19	14	ARG	NE-CZ-NH2	-6.93	116.83	120.30
26	14	324	A	N1-C2-N3	6.93	132.77	129.30
26	14	679	C	C6-N1-C2	6.93	123.07	120.30
26	14	781	A	OP1-P-OP2	6.93	130.00	119.60
26	1H	1343	G	N3-C4-N9	6.93	130.16	126.00
26	1H	1548	C	OP1-P-O3'	6.93	120.44	105.20
26	1H	1678	G	N7-C8-N9	6.93	116.56	113.10
26	1H	2594	C	N3-C4-C5	-6.93	119.13	121.90
1	1G	881	G	C6-C5-N7	-6.93	126.24	130.40
26	14	196	A	O4'-C1'-N9	6.93	113.74	108.20
26	14	2445	G	N9-C4-C5	6.93	108.17	105.40
26	1H	2260	C	C2-N3-C4	-6.93	116.44	119.90
26	14	784	A	C6-N1-C2	6.93	122.76	118.60
1	13	668	G	C8-N9-C4	-6.93	103.63	106.40
26	1H	289	A	N1-C6-N6	6.93	122.76	118.60
26	1H	804	A	O4'-C1'-N9	6.93	113.74	108.20
26	1H	1271	G	C5-C6-N1	-6.93	108.04	111.50
26	1H	1517	G	C5-C6-N1	-6.93	108.04	111.50
26	1H	1821	A	C6-N1-C2	-6.93	114.44	118.60
26	14	242	G	C5-C6-O6	-6.93	124.44	128.60
26	14	1216	G	N3-C2-N2	-6.93	115.05	119.90
26	14	1647	G	N9-C4-C5	6.93	108.17	105.40
26	14	1899	G	C4-C5-N7	6.93	113.57	110.80
26	14	1968	G	OP1-P-O3'	6.93	120.44	105.20
1	13	867	G	N9-C4-C5	6.92	108.17	105.40
1	13	1502	A	N3-C4-C5	6.92	131.65	126.80
26	1H	117	G	N1-C6-O6	-6.92	115.75	119.90
26	1H	298	G	N1-C2-N2	6.92	122.43	116.20
26	1H	693	C	C5-C6-N1	-6.92	117.54	121.00
26	1H	1220	A	O5'-P-OP1	-6.92	99.47	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2307	G	N1-C6-O6	6.92	124.05	119.90
26	1H	2358	G	O5'-P-OP2	-6.92	99.47	105.70
26	1H	2497	A	C4-C5-N7	-6.92	107.24	110.70
26	14	745	G	N1-C6-O6	-6.92	115.75	119.90
26	14	1488	G	N3-C2-N2	-6.92	115.05	119.90
1	13	1215	G	C2-N3-C4	-6.92	108.44	111.90
26	1H	1047	G	N9-C4-C5	-6.92	102.63	105.40
26	1H	2655	G	C5-C6-O6	6.92	132.75	128.60
26	14	1764	G	C8-N9-C4	-6.92	103.63	106.40
26	14	2072	G	N3-C2-N2	6.92	124.75	119.90
26	14	2607	G	O5'-P-OP2	-6.92	99.47	105.70
1	13	1442	G	N3-C4-C5	6.92	132.06	128.60
26	1H	2301	C	C2-N3-C4	-6.92	116.44	119.90
26	1H	2578	G	C2-N3-C4	6.92	115.36	111.90
27	1J	58	A	N1-C6-N6	-6.92	114.45	118.60
27	1J	89	G	C5-C6-N1	6.92	114.96	111.50
26	1H	1263	U	N3-C4-O4	-6.92	114.56	119.40
26	1H	1636	C	N3-C4-C5	-6.92	119.13	121.90
1	1G	831	U	C6-N1-C2	-6.92	116.85	121.00
26	14	1783	A	N7-C8-N9	6.92	117.26	113.80
26	1H	184	C	O5'-P-OP1	-6.92	99.47	105.70
26	14	2092	U	N3-C4-C5	-6.92	110.45	114.60
26	14	2591	C	C6-N1-C2	-6.92	117.53	120.30
26	1H	1784	A	OP1-P-O3'	6.92	120.42	105.20
26	1H	1903	G	N1-C6-O6	-6.92	115.75	119.90
1	1G	50	A	N1-C2-N3	6.92	132.76	129.30
1	1G	395	C	OP1-P-OP2	6.92	129.97	119.60
26	14	520	G	N3-C2-N2	-6.92	115.06	119.90
26	14	1342	A	C4-C5-C6	6.92	120.46	117.00
26	1H	1431	U	C6-N1-C2	-6.92	116.85	121.00
26	1H	2427	C	C4-C5-C6	6.92	120.86	117.40
26	1H	2875	C	N1-C2-O2	6.92	123.05	118.90
36	68	8	LEU	CB-CG-CD1	-6.92	99.25	111.00
1	1G	1438	G	N1-C6-O6	6.92	124.05	119.90
26	14	1430	C	N3-C4-N4	-6.92	113.16	118.00
26	14	2451	A	C6-N1-C2	-6.92	114.45	118.60
26	14	2499	C	C2-N1-C1'	6.92	126.41	118.80
26	1H	50	U	OP1-P-OP2	6.91	129.97	119.60
26	1H	119	A	C4-C5-N7	-6.91	107.24	110.70
26	1H	663	G	C4-N9-C1'	6.91	135.49	126.50
26	1H	1852	C	C6-N1-C2	6.91	123.06	120.30
26	1H	2735	G	N9-C4-C5	6.91	108.17	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	16	19	G	C5-C6-N1	-6.91	108.04	111.50
25	4L	14	A	C2-N3-C4	6.91	114.06	110.60
26	14	68	G	C4-C5-C6	6.91	122.95	118.80
26	14	1647	G	N3-C2-N2	-6.91	115.06	119.90
26	14	1940	U	N3-C4-C5	-6.91	110.45	114.60
26	14	2229	C	N3-C2-O2	6.91	126.74	121.90
26	14	2403	C	N1-C2-O2	-6.91	114.75	118.90
26	14	2695	C	C4-C5-C6	6.91	120.86	117.40
26	1H	946	G	C8-N9-C4	6.91	109.17	106.40
26	1H	2553	G	N1-C6-O6	-6.91	115.75	119.90
26	1H	291	C	C6-N1-C2	6.91	123.06	120.30
26	1H	851	U	N1-C2-O2	-6.91	117.96	122.80
26	1H	1648	C	C2-N3-C4	-6.91	116.44	119.90
26	1H	2290	G	N3-C2-N2	-6.91	115.06	119.90
26	1H	2371	G	N3-C2-N2	6.91	124.74	119.90
26	1H	2685	G	C4-C5-N7	-6.91	108.03	110.80
26	14	1334	G	C6-C5-N7	-6.91	126.25	130.40
1	13	244	U	C5-C4-O4	-6.91	121.75	125.90
1	13	533	A	C4-C5-N7	6.91	114.16	110.70
26	1H	323	G	O5'-P-OP1	-6.91	99.48	105.70
26	1H	564	C	C5-C6-N1	6.91	124.45	121.00
26	1H	2294	C	OP1-P-OP2	-6.91	109.24	119.60
1	1G	811	C	N3-C2-O2	6.91	126.74	121.90
26	14	2614	A	C5-C6-N1	-6.91	114.25	117.70
26	1H	2379	G	N3-C4-N9	6.91	130.14	126.00
26	14	1311	G	C2-N3-C4	-6.91	108.45	111.90
1	13	1428	A	N1-C6-N6	-6.91	114.46	118.60
26	1H	777	A	C4-C5-C6	6.91	120.45	117.00
26	1H	837	C	C6-N1-C2	-6.91	117.54	120.30
1	1G	858	G	C6-C5-N7	-6.91	126.26	130.40
1	1G	1203	C	C6-N1-C2	6.91	123.06	120.30
1	1G	1393	U	C5-C6-N1	6.91	126.15	122.70
26	14	146	G	N9-C4-C5	-6.91	102.64	105.40
26	14	1378	A	C6-N1-C2	6.91	122.74	118.60
26	1H	244	A	P-O3'-C3'	-6.90	111.42	119.70
26	1H	1326	U	C5-C6-N1	-6.90	119.25	122.70
26	14	620	G	N3-C2-N2	-6.90	115.07	119.90
1	13	1222	G	N3-C4-N9	-6.90	121.86	126.00
26	1H	179	G	C8-N9-C4	6.90	109.16	106.40
26	1H	2010	G	O5'-P-OP2	6.90	118.98	110.70
26	1H	2079	U	C2-N3-C4	-6.90	122.86	127.00
26	1H	2299	G	OP1-P-OP2	-6.90	109.25	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2618	G	C8-N9-C4	-6.90	103.64	106.40
1	1G	453	A	O5'-P-OP1	-6.90	99.49	105.70
26	14	2021	C	N3-C2-O2	-6.90	117.07	121.90
26	14	2609	U	C2-N3-C4	-6.90	122.86	127.00
1	13	747	C	N3-C2-O2	-6.90	117.07	121.90
1	13	1196	U	C2-N1-C1'	6.90	125.98	117.70
26	1H	199	A	C6-C5-N7	6.90	137.13	132.30
26	1H	629	G	C5-C6-N1	6.90	114.95	111.50
26	1H	1024	G	C8-N9-C4	6.90	109.16	106.40
26	1H	1566	A	N3-C4-N9	-6.90	121.88	127.40
26	1H	1814	G	N3-C2-N2	-6.90	115.07	119.90
26	1H	1989	G	N1-C2-N3	6.90	128.04	123.90
26	1H	2387	U	OP1-P-O3'	-6.90	90.02	105.20
26	1H	2407	G	O5'-P-OP1	6.90	118.98	110.70
26	1H	2464	C	O5'-P-OP2	-6.90	99.49	105.70
26	1H	2582	G	N3-C4-C5	-6.90	125.15	128.60
1	1G	128	G	C4-C5-N7	-6.90	108.04	110.80
1	1G	722	A	C5-C6-N1	-6.90	114.25	117.70
23	2L	6	G	C8-N9-C4	6.90	109.16	106.40
26	14	199	A	C4-C5-C6	-6.90	113.55	117.00
26	14	681	G	C6-N1-C2	-6.90	120.96	125.10
1	13	574	A	N7-C8-N9	-6.90	110.35	113.80
1	13	1158	C	C2-N1-C1'	6.90	126.39	118.80
1	13	1227	A	C8-N9-C4	-6.90	103.04	105.80
26	1H	2528	U	C2-N3-C4	-6.90	122.86	127.00
26	14	379	G	N3-C2-N2	-6.90	115.07	119.90
26	14	845	G	N3-C4-C5	6.90	132.05	128.60
1	13	647	C	C6-N1-C2	-6.90	117.54	120.30
1	13	867	G	C2-N3-C4	6.90	115.35	111.90
1	13	1194	U	N3-C2-O2	-6.90	117.37	122.20
26	1H	676	A	C4-C5-C6	-6.90	113.55	117.00
26	1H	1694	C	P-O3'-C3'	6.90	127.98	119.70
26	1H	2238	G	OP1-P-O3'	6.90	120.38	105.20
26	1H	2362	G	N9-C4-C5	-6.90	102.64	105.40
26	14	1833	U	C5-C4-O4	6.90	130.04	125.90
26	14	2574	G	N3-C4-C5	-6.90	125.15	128.60
26	14	2862	G	C6-C5-N7	-6.90	126.26	130.40
27	1J	88	C	N3-C4-C5	-6.90	119.14	121.90
26	1H	242	G	C5-C6-O6	-6.90	124.46	128.60
26	1H	371	A	N1-C2-N3	6.90	132.75	129.30
26	1H	694	U	C5-C4-O4	6.90	130.04	125.90
26	1H	1935	G	C2-N3-C4	-6.90	108.45	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1287	A	C2-N3-C4	-6.90	107.15	110.60
1	1G	1402	C	N1-C2-N3	6.90	124.03	119.20
26	14	1166	C	N3-C4-C5	-6.90	119.14	121.90
26	14	1314	C	OP1-P-OP2	-6.90	109.26	119.60
26	1H	535	C	N3-C2-O2	6.89	126.73	121.90
26	1H	974	G	N1-C2-N2	6.89	122.41	116.20
26	1H	2339	G	N1-C6-O6	-6.89	115.76	119.90
26	14	489	G	C6-C5-N7	-6.89	126.26	130.40
26	14	2699	C	C6-N1-C2	6.89	123.06	120.30
1	13	1069	C	O5'-P-OP1	-6.89	99.50	105.70
22	1K	27	G	C4-C5-N7	-6.89	108.04	110.80
26	1H	611	C	C5-C6-N1	-6.89	117.55	121.00
26	1H	1011	G	OP1-P-OP2	-6.89	109.26	119.60
26	1H	1273	U	N3-C4-O4	6.89	124.22	119.40
26	1H	1686	C	C6-N1-C2	6.89	123.06	120.30
38	88	25	ASP	CB-CG-OD1	6.89	124.50	118.30
26	14	782	A	C6-N1-C2	-6.89	114.47	118.60
26	14	946	G	N9-C4-C5	-6.89	102.64	105.40
26	14	1791	A	N1-C6-N6	6.89	122.74	118.60
26	14	2041	U	OP1-P-OP2	6.89	129.94	119.60
27	1J	7	G	OP2-P-O3'	6.89	120.37	105.20
26	1H	642	G	O5'-P-OP2	-6.89	99.50	105.70
26	1H	658	C	OP2-P-O3'	6.89	120.36	105.20
1	1G	416	G	C2-N3-C4	-6.89	108.45	111.90
26	14	1195	G	O5'-P-OP2	-6.89	99.50	105.70
26	14	1853	A	OP1-P-OP2	6.89	129.94	119.60
1	13	960	U	C4-C5-C6	6.89	123.83	119.70
24	3K	45	G	O4'-C1'-N9	6.89	113.71	108.20
26	1H	531	C	N3-C4-N4	6.89	122.82	118.00
26	1H	916	G	C6-N1-C2	6.89	129.23	125.10
26	1H	2412	A	N1-C6-N6	-6.89	114.47	118.60
26	1H	2489	G	C4-C5-C6	6.89	122.93	118.80
26	14	83	G	N1-C2-N3	6.89	128.03	123.90
26	14	812	C	C5-C6-N1	-6.89	117.56	121.00
26	14	1323	U	N3-C4-O4	6.89	124.22	119.40
26	14	2769	C	N1-C2-N3	6.89	124.02	119.20
1	13	1355	G	C5-N7-C8	-6.89	100.86	104.30
1	13	1482	G	N1-C2-N2	6.89	122.40	116.20
26	1H	1315	C	N1-C2-O2	6.89	123.03	118.90
1	1G	105	G	C4-N9-C1'	6.89	135.45	126.50
1	1G	750	G	C5-C6-O6	6.89	132.73	128.60
26	14	2024	G	C4-C5-N7	6.89	113.56	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2448	A	C5-C6-N1	6.89	121.14	117.70
1	13	725	G	N9-C4-C5	-6.89	102.65	105.40
1	13	934	C	C6-N1-C2	-6.89	117.55	120.30
26	1H	2379	G	N7-C8-N9	-6.89	109.66	113.10
26	1H	2623	G	N9-C4-C5	6.89	108.15	105.40
26	1H	2674	G	C2-N3-C4	-6.89	108.46	111.90
27	16	35	U	C5-C4-O4	6.89	130.03	125.90
26	14	55	G	C4-C5-C6	-6.89	114.67	118.80
26	14	456	C	C5-C4-N4	-6.89	115.38	120.20
26	14	2017	U	N3-C4-O4	6.89	124.22	119.40
26	14	2284	C	N3-C4-N4	-6.89	113.18	118.00
1	13	1070	U	N1-C2-O2	-6.88	117.98	122.80
26	1H	751	A	C6-N1-C2	-6.88	114.47	118.60
26	1H	803	U	O5'-P-OP2	-6.88	99.50	105.70
26	1H	2010	G	OP1-P-OP2	-6.88	109.27	119.60
26	1H	2871	C	N1-C2-N3	6.88	124.02	119.20
1	1G	26	A	C4-C5-N7	-6.88	107.26	110.70
26	14	203	C	O5'-P-OP1	6.88	118.96	110.70
26	14	215	G	N1-C6-O6	6.88	124.03	119.90
1	13	1385	G	C5-N7-C8	-6.88	100.86	104.30
1	13	319	G	N7-C8-N9	-6.88	109.66	113.10
1	13	543	C	C5-C6-N1	-6.88	117.56	121.00
26	1H	1356	G	N1-C6-O6	6.88	124.03	119.90
26	1H	2429	G	O5'-P-OP1	6.88	118.96	110.70
26	1H	2679	A	C2-N3-C4	-6.88	107.16	110.60
26	1H	2849	U	OP1-P-OP2	-6.88	109.28	119.60
26	14	1525	G	C5-C6-N1	6.88	114.94	111.50
26	14	1645	G	N3-C4-C5	-6.88	125.16	128.60
26	14	2289	G	N1-C2-N3	-6.88	119.77	123.90
26	1H	1561	G	OP1-P-O3'	6.88	120.34	105.20
26	1H	1854	A	C4-C5-N7	-6.88	107.26	110.70
26	14	102	G	O4'-C1'-N9	6.88	113.70	108.20
26	1H	271(C)	U	N1-C2-O2	6.88	127.61	122.80
26	1H	693	C	N3-C2-O2	-6.88	117.08	121.90
29	11	48	ARG	NE-CZ-NH1	-6.88	116.86	120.30
26	14	871	U	O5'-P-OP1	-6.88	99.51	105.70
26	14	2217	G	C5-C6-N1	-6.88	108.06	111.50
26	14	2731	G	C8-N9-C4	-6.88	103.65	106.40
1	13	760	G	C5-C6-N1	-6.88	108.06	111.50
1	13	1412	C	N3-C4-N4	-6.88	113.19	118.00
1	13	1493	A	C5-C6-N1	-6.88	114.26	117.70
26	1H	971	C	C2-N3-C4	-6.88	116.46	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2281	C	C2-N1-C1'	6.88	126.36	118.80
26	1H	2346	A	N9-C1'-C2'	6.88	122.94	114.00
26	14	2293	C	N3-C2-O2	-6.88	117.09	121.90
1	13	1497	G	C5-N7-C8	6.88	107.74	104.30
26	1H	849	A	C6-N1-C2	-6.88	114.47	118.60
26	14	2391	G	C6-C5-N7	6.88	134.53	130.40
1	13	413	G	C5-C6-N1	6.87	114.94	111.50
1	13	1442	G	C5-C6-O6	6.87	132.72	128.60
26	1H	624	C	N3-C4-N4	6.87	122.81	118.00
26	1H	1780	A	O5'-P-OP2	6.87	118.95	110.70
26	1H	2228	G	N1-C6-O6	6.87	124.02	119.90
26	1H	2762	G	C5-C6-O6	6.87	132.72	128.60
1	1G	1112	C	C6-N1-C2	-6.87	117.55	120.30
26	14	811	U	C5-C4-O4	6.87	130.02	125.90
26	14	1355	G	C6-C5-N7	-6.87	126.28	130.40
26	14	1815	A	N7-C8-N9	6.87	117.24	113.80
1	13	522	C	OP1-P-OP2	6.87	129.91	119.60
1	13	525	C	C5-C4-N4	-6.87	115.39	120.20
1	13	893	C	C4-C5-C6	-6.87	113.96	117.40
26	1H	53	A	O5'-P-OP1	-6.87	99.52	105.70
26	1H	1192	G	C5-C6-N1	6.87	114.94	111.50
26	1H	2350	C	N3-C2-O2	-6.87	117.09	121.90
26	1H	2738	A	C5-C6-N1	6.87	121.14	117.70
26	14	298	G	C6-C5-N7	-6.87	126.28	130.40
26	14	1429	G	N9-C4-C5	6.87	108.15	105.40
26	14	2391	G	C5-C6-N1	6.87	114.94	111.50
24	3K	2	G	C4-C5-N7	6.87	113.55	110.80
26	14	1929	G	C5-C6-O6	6.87	132.72	128.60
1	13	719	C	C6-N1-C2	-6.87	117.55	120.30
26	1H	471	A	N1-C6-N6	6.87	122.72	118.60
26	1H	1710	C	C5-C6-N1	-6.87	117.56	121.00
26	1H	2578	G	O5'-P-OP1	-6.87	99.52	105.70
26	1H	2593	U	OP2-P-O3'	6.87	120.31	105.20
1	1G	905	U	N1-C2-N3	6.87	119.02	114.90
26	14	326	G	N3-C4-C5	6.87	132.03	128.60
26	14	921	G	C5-C6-N1	-6.87	108.06	111.50
26	14	1420	U	C5-C6-N1	-6.87	119.27	122.70
26	14	2617	C	N3-C4-N4	-6.87	113.19	118.00
26	14	2619	C	C5-C6-N1	-6.87	117.57	121.00
26	14	2649	U	C5-C4-O4	-6.87	121.78	125.90
26	1H	617	G	N9-C4-C5	-6.87	102.65	105.40
26	1H	859	G	N3-C2-N2	-6.87	115.09	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1002	G	N1-C6-O6	-6.87	115.78	119.90
26	1H	2007	C	N3-C4-C5	-6.87	119.15	121.90
23	2L	53	G	C8-N9-C4	-6.87	103.65	106.40
26	14	861	A	OP1-P-OP2	-6.87	109.30	119.60
26	14	1676	A	C8-N9-C4	6.87	108.55	105.80
26	14	2030	A	OP1-P-OP2	6.87	129.90	119.60
26	14	2503	A	N9-C4-C5	6.87	108.55	105.80
26	1H	248	G	O5'-P-OP1	6.87	118.94	110.70
26	1H	658	C	OP1-P-O3'	-6.87	90.10	105.20
26	1H	734	A	N9-C4-C5	-6.87	103.05	105.80
26	1H	1761	C	N3-C4-N4	6.87	122.81	118.00
26	1H	2304	G	N3-C4-C5	6.87	132.03	128.60
26	14	503	A	N9-C4-C5	6.87	108.55	105.80
1	13	780	A	C2-N3-C4	-6.86	107.17	110.60
26	1H	23	G	C6-N1-C2	6.86	129.22	125.10
26	1H	444	C	N3-C4-C5	-6.86	119.15	121.90
26	1H	797	C	N1-C2-N3	6.86	124.00	119.20
26	1H	1558	A	P-O3'-C3'	6.86	127.94	119.70
26	1H	1623	G	N1-C2-N3	6.86	128.02	123.90
26	1H	1695	G	N3-C4-N9	6.86	130.12	126.00
26	1H	2198	A	OP2-P-O3'	6.86	120.30	105.20
26	1H	2485	G	N9-C4-C5	-6.86	102.66	105.40
27	16	46	A	N1-C6-N6	-6.86	114.48	118.60
26	14	973	A	N9-C4-C5	-6.86	103.05	105.80
1	13	467	G	C5-C6-O6	-6.86	124.48	128.60
26	1H	804	A	C5-C6-N1	-6.86	114.27	117.70
27	16	31	C	N1-C2-O2	6.86	123.02	118.90
1	1G	1305	G	N3-C4-C5	6.86	132.03	128.60
26	14	585	G	C4-C5-N7	6.86	113.55	110.80
26	14	1516	U	N3-C2-O2	-6.86	117.40	122.20
26	14	1706	U	C5-C4-O4	6.86	130.02	125.90
27	1J	102	G	N7-C8-N9	-6.86	109.67	113.10
1	13	1399	C	N1-C2-O2	-6.86	114.78	118.90
26	1H	1238	G	N9-C1'-C2'	-6.86	104.45	112.00
26	14	502	A	O5'-P-OP1	-6.86	99.53	105.70
26	14	1282	U	C2-N3-C4	-6.86	122.88	127.00
26	14	1334	G	N7-C8-N9	6.86	116.53	113.10
26	14	1662	C	O5'-P-OP2	-6.86	99.53	105.70
26	1H	1398	C	OP2-P-O3'	6.86	120.29	105.20
26	1H	1443	G	N3-C4-C5	6.86	132.03	128.60
26	1H	2328	A	N1-C2-N3	6.86	132.73	129.30
26	1H	2562	U	C5-C4-O4	6.86	130.02	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2397	G	O5'-P-OP2	6.86	118.93	110.70
26	14	2820	A	N1-C6-N6	6.86	122.72	118.60
1	13	757	U	C6-N1-C2	6.86	125.11	121.00
1	13	1065	U	N3-C2-O2	6.86	127.00	122.20
22	1K	61	C	C2-N3-C4	6.86	123.33	119.90
26	1H	43	G	O5'-P-OP1	6.86	118.93	110.70
26	1H	649	G	C6-C5-N7	-6.86	126.28	130.40
26	1H	789	A	OP1-P-OP2	6.86	129.88	119.60
26	1H	842	G	C2-N3-C4	-6.86	108.47	111.90
26	1H	1869	G	O5'-P-OP2	-6.86	99.53	105.70
26	14	1163	G	C8-N9-C4	6.86	109.14	106.40
26	14	1786	A	C6-C5-N7	-6.86	127.50	132.30
26	14	2489	G	C6-C5-N7	-6.86	126.29	130.40
26	1H	250	G	C8-N9-C4	-6.86	103.66	106.40
26	1H	1363	C	C2-N1-C1'	-6.86	111.26	118.80
26	1H	1373	A	OP1-P-OP2	-6.86	109.32	119.60
26	1H	1435	G	C5-C6-N1	6.86	114.93	111.50
26	1H	2373	G	OP1-P-OP2	6.86	129.88	119.60
1	1G	1437	C	C4-C5-C6	-6.86	113.97	117.40
26	14	246	C	O5'-P-OP1	-6.86	99.53	105.70
26	14	255	A	C4-C5-N7	6.86	114.13	110.70
26	14	572	A	C6-N1-C2	-6.86	114.49	118.60
1	13	1385	G	N3-C4-C5	6.85	132.03	128.60
26	1H	129	C	C6-N1-C1'	-6.85	112.58	120.80
26	1H	1215	G	N3-C4-N9	6.85	130.11	126.00
26	1H	956	G	C4-C5-N7	-6.85	108.06	110.80
26	1H	1665	A	C5-N7-C8	-6.85	100.47	103.90
26	1H	2779	U	O5'-P-OP2	-6.85	99.53	105.70
1	1G	324	G	C5-C6-N1	-6.85	108.07	111.50
1	1G	859	A	N9-C4-C5	6.85	108.54	105.80
26	14	1024	G	N3-C2-N2	-6.85	115.10	119.90
1	13	1494	G	C4-C5-N7	6.85	113.54	110.80
26	1H	1261	C	N3-C4-N4	6.85	122.80	118.00
1	13	611	A	C2-N3-C4	-6.85	107.17	110.60
1	13	727	G	C5-C6-O6	6.85	132.71	128.60
26	1H	1647	G	C6-C5-N7	6.85	134.51	130.40
26	1H	1803	A	C6-N1-C2	6.85	122.71	118.60
26	1H	1897	G	O5'-P-OP1	-6.85	99.54	105.70
26	1H	1954	G	OP1-P-OP2	-6.85	109.33	119.60
26	1H	2295	C	C5-C6-N1	6.85	124.42	121.00
26	1H	2296	U	C4-C5-C6	6.85	123.81	119.70
26	1H	2690	C	N3-C2-O2	-6.85	117.11	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	227	G	C8-N9-C4	6.85	109.14	106.40
26	14	670	A	O4'-C1'-N9	-6.85	102.72	108.20
26	14	768	G	C5-C6-O6	-6.85	124.49	128.60
27	1J	114	G	C4-C5-N7	-6.85	108.06	110.80
1	13	659	U	C5-C4-O4	6.85	130.01	125.90
1	13	1509	C	O5'-P-OP1	-6.85	99.54	105.70
1	13	1520	G	N3-C2-N2	6.85	124.69	119.90
26	1H	962	G	N1-C2-N2	-6.85	110.04	116.20
26	1H	1404	C	N3-C4-C5	6.85	124.64	121.90
26	1H	1663	C	O5'-P-OP1	6.85	118.92	110.70
26	1H	2578	G	C6-N1-C2	-6.85	120.99	125.10
1	1G	231	G	N3-C4-N9	-6.85	121.89	126.00
26	14	333	G	C4-C5-N7	6.85	113.54	110.80
26	14	1812	A	N9-C4-C5	6.85	108.54	105.80
27	1J	18	G	N3-C4-C5	6.85	132.02	128.60
27	1J	48	A	O5'-P-OP1	-6.85	99.54	105.70
1	13	792	A	C8-N9-C4	6.85	108.54	105.80
26	1H	471	A	C5-C6-N1	-6.85	114.28	117.70
26	1H	693	C	C6-N1-C2	-6.85	117.56	120.30
26	1H	1236	G	C8-N9-C4	6.85	109.14	106.40
26	1H	1907	G	N9-C4-C5	6.85	108.14	105.40
26	1H	1912	A	OP2-P-O3'	6.85	120.26	105.20
26	1H	2763	G	C2-N3-C4	-6.85	108.48	111.90
26	14	1187	G	O5'-P-OP1	6.85	118.92	110.70
1	13	540	G	O5'-P-OP1	6.84	118.91	110.70
26	1H	221	A	C4-C5-N7	-6.84	107.28	110.70
26	1H	863	A	C5-N7-C8	6.84	107.32	103.90
26	1H	1914	C	N3-C4-C5	-6.84	119.16	121.90
26	1H	2599	G	C4-C5-N7	-6.84	108.06	110.80
26	1H	2664	G	C5-C6-N1	-6.84	108.08	111.50
26	1H	2775	A	C2-N3-C4	-6.84	107.18	110.60
1	1G	913	A	N3-C4-C5	-6.84	122.01	126.80
26	14	911	A	C2-N3-C4	6.84	114.02	110.60
26	14	948	G	N1-C2-N2	6.84	122.36	116.20
26	14	2281	C	O5'-P-OP1	6.84	118.91	110.70
26	14	2584	U	C2-N3-C4	-6.84	122.89	127.00
26	14	2713	A	C4-C5-N7	6.84	114.12	110.70
27	1J	29	A	C8-N9-C4	-6.84	103.06	105.80
26	1H	1377	G	C4-N9-C1'	6.84	135.40	126.50
26	1H	2084	C	OP1-P-OP2	6.84	129.87	119.60
26	14	1935	G	O5'-P-OP2	-6.84	99.54	105.70
1	13	525	C	N3-C4-N4	6.84	122.79	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	357	A	OP1-P-OP2	-6.84	109.34	119.60
26	1H	2622	C	C2-N3-C4	-6.84	116.48	119.90
1	1G	398	C	N3-C4-C5	6.84	124.64	121.90
26	14	1543	A	C4-C5-N7	-6.84	107.28	110.70
26	14	1564	C	C5-C6-N1	-6.84	117.58	121.00
26	14	2043	C	C5-C4-N4	-6.84	115.41	120.20
26	14	2318	G	C6-C5-N7	-6.84	126.30	130.40
26	1H	1024	G	OP1-P-OP2	6.84	129.86	119.60
26	1H	1528	A	C6-C5-N7	-6.84	127.51	132.30
26	1H	1591	G	OP1-P-O3'	6.84	120.25	105.20
26	1H	1652	A	N1-C2-N3	6.84	132.72	129.30
26	1H	2225	A	C5-C6-N1	6.84	121.12	117.70
26	1H	2694	G	N1-C2-N2	-6.84	110.04	116.20
26	1H	2873	A	O5'-P-OP2	-6.84	99.55	105.70
26	14	398	G	C2-N3-C4	-6.84	108.48	111.90
26	14	1700	A	O5'-P-OP2	6.84	118.91	110.70
27	1J	29	A	C6-C5-N7	-6.84	127.51	132.30
1	13	221	C	C5-C6-N1	6.84	124.42	121.00
1	13	1495	U	N3-C2-O2	-6.84	117.41	122.20
27	16	28	C	N3-C4-C5	-6.84	119.17	121.90
1	1G	362	G	N9-C4-C5	6.84	108.14	105.40
1	1G	796	C	O5'-P-OP1	6.84	118.91	110.70
1	1G	1355	G	C5-C6-O6	-6.84	124.50	128.60
26	1H	241	A	C8-N9-C4	6.84	108.53	105.80
26	1H	395	U	C5-C6-N1	-6.84	119.28	122.70
26	1H	959	A	O5'-P-OP2	-6.84	99.55	105.70
26	1H	1586	A	C4-C5-C6	6.84	120.42	117.00
26	1H	1668	A	O5'-P-OP1	6.84	118.90	110.70
26	14	85	G	N3-C2-N2	6.84	124.69	119.90
26	14	770	G	C4-C5-C6	-6.84	114.70	118.80
26	1H	735	A	C5-C6-N6	-6.83	118.23	123.70
26	1H	1965	C	C6-N1-C2	6.83	123.03	120.30
26	1H	2296	U	O5'-P-OP2	-6.83	99.55	105.70
26	14	698	C	N3-C4-C5	-6.83	119.17	121.90
26	14	2210	G	C4-N9-C1'	6.83	135.38	126.50
55	M5	58	ILE	CG1-CB-CG2	-6.83	96.36	111.40
1	13	452	A	C8-N9-C4	6.83	108.53	105.80
1	13	749	C	N1-C2-O2	6.83	123.00	118.90
26	1H	705	A	N9-C4-C5	-6.83	103.07	105.80
26	1H	1151	G	N1-C2-N2	6.83	122.35	116.20
26	1H	1256	G	C4-C5-N7	-6.83	108.07	110.80
26	1H	2238	G	N1-C6-O6	-6.83	115.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	26	A	N9-C4-C5	6.83	108.53	105.80
1	13	376	G	OP1-P-OP2	6.83	129.85	119.60
1	13	387	U	C5-C6-N1	-6.83	119.28	122.70
1	13	403	C	N1-C2-O2	-6.83	114.80	118.90
1	13	581	G	N9-C4-C5	-6.83	102.67	105.40
1	13	1318	A	C8-N9-C4	6.83	108.53	105.80
26	1H	251	A	O5'-P-OP1	-6.83	99.55	105.70
26	1H	1153	C	N1-C2-N3	6.83	123.98	119.20
26	1H	1917	U	C5-C6-N1	6.83	126.12	122.70
26	1H	2030	A	O5'-P-OP1	-6.83	99.55	105.70
26	1H	2857	G	OP1-P-OP2	6.83	129.85	119.60
1	1G	1516	G	OP1-P-OP2	6.83	129.85	119.60
26	14	119	A	OP1-P-O3'	6.83	120.23	105.20
26	14	1451	C	OP1-P-OP2	6.83	129.85	119.60
26	14	2394	C	N3-C4-N4	-6.83	113.22	118.00
45	B5	73	ARG	NE-CZ-NH1	6.83	123.72	120.30
26	1H	990	A	C5-C6-N1	-6.83	114.28	117.70
26	1H	1400	G	O5'-P-OP2	-6.83	99.55	105.70
26	1H	1967	C	N1-C2-N3	6.83	123.98	119.20
26	14	377	C	N1-C2-O2	-6.83	114.80	118.90
26	14	2503	A	N1-C6-N6	-6.83	114.50	118.60
1	13	21	G	C5-C6-O6	6.83	132.70	128.60
1	13	325	A	C4-C5-C6	-6.83	113.59	117.00
26	1H	209	C	C6-N1-C2	6.83	123.03	120.30
26	1H	2285	C	N1-C2-O2	6.83	123.00	118.90
1	1G	1507	A	N1-C6-N6	-6.83	114.50	118.60
26	14	914	C	OP1-P-O3'	6.83	120.22	105.20
26	14	1369	G	N7-C8-N9	-6.83	109.69	113.10
27	1J	103	U	C6-N1-C2	6.83	125.10	121.00
1	13	1510	U	O5'-P-OP2	-6.83	99.56	105.70
26	1H	759	G	N1-C2-N2	6.83	122.34	116.20
26	1H	874	G	C8-N9-C4	6.83	109.13	106.40
26	1H	2282	G	N3-C2-N2	-6.83	115.12	119.90
26	1H	2346	A	N3-C4-N9	-6.83	121.94	127.40
1	13	107	G	C5-C6-O6	6.83	132.69	128.60
1	13	790	A	N1-C6-N6	6.83	122.69	118.60
26	1H	493	G	C4-C5-N7	-6.83	108.07	110.80
26	1H	2379	G	C4-C5-N7	6.83	113.53	110.80
1	1G	529	G	N7-C8-N9	6.83	116.51	113.10
1	1G	766	A	C5-C6-N6	-6.83	118.24	123.70
26	14	127	A	OP1-P-O3'	6.83	120.21	105.20
26	14	2057	A	N9-C4-C5	-6.83	103.07	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2784	C	N1-C2-O2	-6.83	114.81	118.90
1	13	479	C	O5'-P-OP1	-6.82	99.56	105.70
26	1H	190	A	C8-N9-C4	6.82	108.53	105.80
26	1H	432	A	C5-C6-N6	-6.82	118.24	123.70
26	1H	690	G	O5'-P-OP1	6.82	118.89	110.70
26	1H	2398	U	N3-C4-O4	-6.82	114.62	119.40
1	1G	1430	C	N3-C4-C5	6.82	124.63	121.90
26	14	24	G	N1-C2-N3	6.82	127.99	123.90
26	14	1225	C	C6-N1-C2	6.82	123.03	120.30
26	14	1236	G	O5'-P-OP2	6.82	118.89	110.70
26	14	1816	G	O5'-P-OP2	6.82	118.89	110.70
26	14	1860	G	C4-C5-N7	6.82	113.53	110.80
26	14	2216	G	N1-C2-N2	6.82	122.34	116.20
27	1J	96	G	C5-C6-O6	-6.82	124.51	128.60
1	13	885	G	N3-C2-N2	-6.82	115.12	119.90
26	14	1393	A	C2-N3-C4	6.82	114.01	110.60
26	14	2051	A	C2-N3-C4	-6.82	107.19	110.60
26	1H	372	G	N3-C4-N9	-6.82	121.91	126.00
26	1H	701	G	OP2-P-O3'	6.82	120.20	105.20
26	1H	1142	U	OP1-P-OP2	-6.82	109.37	119.60
26	1H	1338	G	N7-C8-N9	-6.82	109.69	113.10
26	1H	1605	C	N1-C2-N3	6.82	123.97	119.20
26	1H	2052	G	C4-C5-C6	6.82	122.89	118.80
1	13	1472	U	N3-C4-O4	-6.82	114.63	119.40
26	1H	2429	G	N7-C8-N9	6.82	116.51	113.10
1	1G	768	A	C2-N3-C4	-6.82	107.19	110.60
26	14	1758	G	N3-C4-N9	-6.82	121.91	126.00
26	14	2270	G	N1-C6-O6	-6.82	115.81	119.90
1	13	947	G	C4-C5-N7	-6.82	108.07	110.80
26	1H	270(Q)	C	C5-C6-N1	6.82	124.41	121.00
26	1H	626	U	N3-C4-C5	-6.82	110.51	114.60
26	1H	983	A	C8-N9-C4	6.82	108.53	105.80
26	1H	2611	U	OP2-P-O3'	6.82	120.20	105.20
26	1H	2767	C	C6-N1-C2	6.82	123.03	120.30
27	16	115	G	N1-C6-O6	6.82	123.99	119.90
57	3L	37	A	N1-C6-N6	6.82	122.69	118.60
26	14	1395	A	O4'-C1'-N9	6.82	113.66	108.20
1	13	40	C	C4-C5-C6	6.82	120.81	117.40
26	1H	692	C	C4-C5-C6	6.82	120.81	117.40
26	1H	1151	G	N3-C4-N9	-6.82	121.91	126.00
26	1H	2023	G	O5'-P-OP1	-6.82	99.57	105.70
1	1G	950	U	N3-C2-O2	-6.82	117.43	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1906	G	N1-C6-O6	6.82	123.99	119.90
26	14	2047	U	O5'-P-OP2	6.82	118.88	110.70
26	14	2447	G	C5-N7-C8	6.82	107.71	104.30
27	1J	55	U	C5-C6-N1	6.82	126.11	122.70
1	13	115	G	P-O3'-C3'	6.81	127.88	119.70
1	13	1431	C	C6-N1-C2	6.81	123.03	120.30
22	1K	74	C	C2-N3-C4	6.81	123.31	119.90
26	1H	721	C	C2-N1-C1'	-6.81	111.31	118.80
26	1H	2731	G	N1-C6-O6	6.81	123.99	119.90
26	14	2086	U	C5-C6-N1	-6.81	119.29	122.70
1	13	712	A	C5-C6-N1	6.81	121.11	117.70
25	4K	24	A	OP1-P-OP2	-6.81	109.38	119.60
26	1H	805	G	C6-C5-N7	-6.81	126.31	130.40
26	14	458	G	C8-N9-C4	-6.81	103.67	106.40
26	14	2552	U	C5-C4-O4	-6.81	121.81	125.90
26	14	2829	C	N3-C2-O2	6.81	126.67	121.90
26	1H	608	A	O5'-P-OP2	-6.81	99.57	105.70
1	1G	358	U	C5-C6-N1	-6.81	119.29	122.70
26	14	270(Y)	G	N9-C4-C5	6.81	108.12	105.40
26	14	305	U	N3-C4-O4	6.81	124.17	119.40
26	14	632	A	C5-C6-N6	-6.81	118.25	123.70
26	1H	760	G	O5'-P-OP2	6.81	118.87	110.70
26	1H	1003	G	C8-N9-C4	6.81	109.12	106.40
26	1H	1933	G	N1-C2-N3	6.81	127.99	123.90
26	1H	2241	A	N1-C2-N3	6.81	132.71	129.30
26	1H	2358	G	C6-C5-N7	6.81	134.49	130.40
26	1H	2819	G	N1-C2-N2	6.81	122.33	116.20
27	16	42	C	N3-C4-C5	-6.81	119.18	121.90
27	16	83	G	C2-N3-C4	-6.81	108.50	111.90
1	13	582	U	N3-C4-O4	-6.81	114.64	119.40
23	2K	7	G	C6-C5-N7	-6.81	126.32	130.40
26	1H	397	G	C6-C5-N7	-6.81	126.31	130.40
26	1H	648	G	C5-C6-O6	6.81	132.69	128.60
26	1H	786	C	C2-N1-C1'	-6.81	111.31	118.80
26	1H	1418	G	N1-C6-O6	-6.81	115.82	119.90
26	1H	1899	G	N1-C2-N2	-6.81	110.07	116.20
26	1H	1965	C	N3-C4-C5	6.81	124.62	121.90
26	1H	2879	C	C6-N1-C2	-6.81	117.58	120.30
26	14	1615	C	C5-C4-N4	6.81	124.97	120.20
26	14	1826	G	N3-C4-C5	-6.81	125.20	128.60
1	13	673	G	OP1-P-O3'	6.81	120.17	105.20
26	1H	71	A	O5'-P-OP1	6.81	118.87	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1287	A	C5-C6-N1	-6.81	114.30	117.70
26	14	205	G	N3-C4-N9	6.81	130.08	126.00
1	13	952	U	C4-C5-C6	6.80	123.78	119.70
26	1H	477	A	N9-C4-C5	6.80	108.52	105.80
26	1H	1019	U	C5-C4-O4	6.80	129.98	125.90
27	16	55	U	N3-C2-O2	6.80	126.96	122.20
1	1G	1483	A	N1-C6-N6	-6.80	114.52	118.60
26	14	173	G	C5-C6-O6	-6.80	124.52	128.60
26	14	535	C	N3-C4-C5	6.80	124.62	121.90
26	14	1385	G	C5-C6-N1	6.80	114.90	111.50
26	14	2034	U	N3-C4-C5	-6.80	110.52	114.60
23	2K	73	A	O5'-P-OP2	-6.80	99.58	105.70
26	1H	688	U	N1-C2-O2	-6.80	118.04	122.80
26	1H	2575	C	C5-C4-N4	6.80	124.96	120.20
26	14	400	G	C5-C6-O6	-6.80	124.52	128.60
26	14	1272	A	C8-N9-C4	6.80	108.52	105.80
1	13	1107	C	C6-N1-C2	-6.80	117.58	120.30
1	13	1311	G	N7-C8-N9	-6.80	109.70	113.10
24	3K	40	C	C5-C6-N1	6.80	124.40	121.00
26	1H	1489	U	O5'-P-OP1	-6.80	99.58	105.70
26	1H	1494	A	O5'-P-OP1	-6.80	99.58	105.70
27	16	24	G	N3-C4-N9	6.80	130.08	126.00
1	1G	26	A	N1-C2-N3	6.80	132.70	129.30
1	1G	183	G	C4-C5-N7	6.80	113.52	110.80
1	1G	909	A	N7-C8-N9	-6.80	110.40	113.80
1	1G	913	A	OP2-P-O3'	6.80	120.17	105.20
26	14	47	C	C6-N1-C2	6.80	123.02	120.30
26	14	1322	A	O5'-P-OP2	-6.80	99.58	105.70
1	13	112	G	N1-C6-O6	6.80	123.98	119.90
25	4K	21	A	C2-N3-C4	-6.80	107.20	110.60
26	1H	835	A	N3-C4-C5	-6.80	122.04	126.80
26	1H	1586	A	N7-C8-N9	6.80	117.20	113.80
26	1H	1799	G	C5-N7-C8	6.80	107.70	104.30
26	1H	2485	G	O5'-P-OP1	6.80	118.86	110.70
26	1H	2761	G	C2-N3-C4	-6.80	108.50	111.90
26	14	53	A	N9-C4-C5	6.80	108.52	105.80
26	14	535	C	C5-C6-N1	-6.80	117.60	121.00
26	14	1490	A	C8-N9-C4	6.80	108.52	105.80
26	14	2084	C	N3-C4-N4	6.80	122.76	118.00
1	13	237	C	N1-C2-O2	-6.80	114.82	118.90
1	13	772	U	OP2-P-O3'	6.80	120.16	105.20
26	1H	1637	A	C5-C6-N6	-6.80	118.26	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2400	G	C8-N9-C4	-6.80	103.68	106.40
26	14	208	C	N1-C2-O2	-6.80	114.82	118.90
1	13	270	A	C8-N9-C4	-6.80	103.08	105.80
1	13	318	G	C8-N9-C4	6.80	109.12	106.40
26	1H	618(A)	C	N1-C2-N3	-6.80	114.44	119.20
26	1H	1767	C	N3-C4-N4	-6.80	113.24	118.00
26	1H	2029	G	N7-C8-N9	6.80	116.50	113.10
27	16	24	G	N3-C4-C5	-6.80	125.20	128.60
26	14	1125	G	OP1-P-OP2	6.80	129.79	119.60
1	13	361	G	N1-C2-N3	6.79	127.98	123.90
1	13	570	G	C4-C5-C6	6.79	122.88	118.80
26	1H	55	G	N3-C4-N9	6.79	130.08	126.00
26	1H	1369	G	C5-N7-C8	6.79	107.70	104.30
26	1H	2767	C	O5'-P-OP1	-6.79	99.58	105.70
26	14	1784	A	O4'-C1'-N9	-6.79	102.76	108.20
1	13	61	G	C4-C5-N7	-6.79	108.08	110.80
26	1H	11	G	C8-N9-C4	6.79	109.12	106.40
26	1H	744	G	O5'-P-OP2	-6.79	99.59	105.70
26	1H	1292	U	C6-N1-C2	6.79	125.08	121.00
26	14	1341	U	N1-C2-O2	-6.79	118.05	122.80
26	14	1440	G	O5'-P-OP2	-6.79	99.58	105.70
26	14	1614	A	C4-C5-C6	6.79	120.40	117.00
26	14	1640	C	N3-C2-O2	-6.79	117.14	121.90
26	14	2782	G	N7-C8-N9	6.79	116.50	113.10
1	13	1199	U	N3-C4-C5	-6.79	110.53	114.60
26	1H	49	A	C5-N7-C8	6.79	107.30	103.90
26	1H	138	G	N9-C1'-C2'	6.79	122.83	114.00
26	1H	1603	A	O5'-P-OP1	6.79	118.85	110.70
26	1H	2284	C	N1-C2-O2	-6.79	114.83	118.90
26	14	2275	C	N1-C2-O2	6.79	122.97	118.90
26	14	2584	U	C5-C6-N1	-6.79	119.30	122.70
1	13	438	G	C5-C6-N1	-6.79	108.11	111.50
26	1H	481	G	N3-C2-N2	-6.79	115.15	119.90
26	1H	1318	C	N3-C2-O2	6.79	126.65	121.90
26	1H	386	G	N7-C8-N9	6.79	116.49	113.10
26	1H	922	U	C6-N1-C2	-6.79	116.93	121.00
26	1H	1049	C	N1-C2-O2	6.79	122.97	118.90
26	1H	1569	A	C6-C5-N7	-6.79	127.55	132.30
1	1G	787	A	C5-N7-C8	-6.79	100.51	103.90
57	3L	29	U	N3-C2-O2	-6.79	117.45	122.20
26	14	24	G	C5-C6-N1	-6.79	108.11	111.50
26	14	249	C	N3-C4-C5	-6.79	119.18	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	459	U	O5'-P-OP1	6.79	118.85	110.70
26	14	2253	G	N9-C4-C5	-6.79	102.69	105.40
26	1H	330	A	C8-N9-C4	-6.79	103.08	105.80
26	1H	1651	G	N3-C4-C5	6.79	131.99	128.60
23	2L	36	A	O5'-P-OP1	-6.79	99.59	105.70
26	14	82	G	C4-C5-C6	6.79	122.87	118.80
26	14	698	C	C6-N1-C2	-6.79	117.58	120.30
26	14	2598	A	N9-C4-C5	-6.79	103.08	105.80
1	13	227	G	N9-C4-C5	-6.79	102.69	105.40
1	13	1065	U	N1-C2-N3	-6.79	110.83	114.90
26	1H	236	C	C4-C5-C6	6.79	120.79	117.40
26	1H	304	G	C2-N3-C4	-6.79	108.51	111.90
26	1H	948	G	N1-C2-N2	6.79	122.31	116.20
26	1H	1405	U	N1-C2-N3	6.79	118.97	114.90
26	1H	2029	G	N3-C4-C5	6.79	131.99	128.60
1	1G	117	G	N3-C2-N2	-6.79	115.15	119.90
26	14	576	U	C6-N1-C2	6.79	125.07	121.00
26	14	1268	A	C5-C6-N1	6.79	121.09	117.70
26	14	1330	C	C2-N3-C4	-6.79	116.51	119.90
1	13	110	C	C5-C6-N1	-6.78	117.61	121.00
26	1H	829	A	N3-C4-C5	6.78	131.55	126.80
26	1H	852	G	OP1-P-O3'	-6.78	90.28	105.20
26	1H	1803	A	C2-N3-C4	6.78	113.99	110.60
26	1H	2459	A	C4-C5-N7	-6.78	107.31	110.70
31	31	45	ARG	NE-CZ-NH2	-6.78	116.91	120.30
26	14	46	C	C6-N1-C2	6.78	123.01	120.30
26	14	498	G	C5-C6-N1	6.78	114.89	111.50
26	14	609	A	C8-N9-C4	-6.78	103.09	105.80
27	1J	113	C	C5-C6-N1	-6.78	117.61	121.00
1	13	336	C	N3-C2-O2	6.78	126.65	121.90
1	13	575	G	O4'-C1'-N9	-6.78	102.77	108.20
1	13	1209	C	N1-C2-N3	-6.78	114.45	119.20
26	1H	689	A	C2-N3-C4	-6.78	107.21	110.60
26	1H	1022	G	C2-N3-C4	6.78	115.29	111.90
26	1H	1243	G	C5-C6-N1	-6.78	108.11	111.50
26	1H	1324	G	C2-N3-C4	-6.78	108.51	111.90
26	1H	1630(A)	C	C5-C4-N4	6.78	124.95	120.20
27	16	98	G	C8-N9-C1'	-6.78	118.18	127.00
26	14	82	G	C5-C6-N1	-6.78	108.11	111.50
26	14	509	C	N1-C2-N3	6.78	123.95	119.20
26	1H	531	C	N3-C2-O2	6.78	126.65	121.90
26	1H	673	C	C2-N3-C4	-6.78	116.51	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2397	G	N1-C2-N2	6.78	122.30	116.20
26	1H	2639	A	N9-C4-C5	-6.78	103.09	105.80
26	1H	2717	G	C8-N9-C4	6.78	109.11	106.40
1	1G	761	G	N1-C6-O6	6.78	123.97	119.90
1	1G	804	U	C5-C6-N1	-6.78	119.31	122.70
1	1G	953	G	N1-C6-O6	-6.78	115.83	119.90
26	14	237	C	N3-C4-C5	6.78	124.61	121.90
26	14	497	A	C5-C6-N6	-6.78	118.28	123.70
26	14	1232	G	C4-C5-N7	6.78	113.51	110.80
27	1J	12	C	N3-C4-N4	6.78	122.75	118.00
39	55	28	LEU	CA-CB-CG	6.78	130.90	115.30
1	13	1057	G	O5'-P-OP1	-6.78	99.60	105.70
23	2K	46	G	O5'-P-OP1	-6.78	99.60	105.70
26	1H	770	G	C5-C6-N1	-6.78	108.11	111.50
26	1H	1234	U	C6-N1-C2	6.78	125.07	121.00
26	1H	2218	G	O5'-P-OP1	-6.78	99.60	105.70
26	1H	2746	U	N3-C4-C5	-6.78	110.53	114.60
26	14	1192	G	OP1-P-OP2	6.78	129.77	119.60
1	13	336	C	N1-C2-O2	-6.78	114.83	118.90
1	13	1525	G	C2-N3-C4	-6.78	108.51	111.90
26	1H	214	G	C5-C6-O6	-6.78	124.53	128.60
26	1H	698	C	C5-C4-N4	-6.78	115.46	120.20
26	1H	1839	G	N1-C2-N3	6.78	127.97	123.90
26	1H	2021	C	OP2-P-O3'	6.78	120.11	105.20
26	1H	2501	C	N3-C4-C5	6.78	124.61	121.90
26	14	24	G	N1-C2-N2	-6.78	110.10	116.20
26	14	48	G	N9-C4-C5	6.78	108.11	105.40
26	14	752	A	N7-C8-N9	6.78	117.19	113.80
26	14	1973	G	N1-C2-N3	6.78	127.97	123.90
27	1J	37	C	O5'-P-OP1	6.78	118.83	110.70
1	13	774	G	N1-C2-N3	-6.78	119.83	123.90
26	1H	271(C)	U	N3-C2-O2	-6.78	117.46	122.20
26	1H	736	C	N3-C4-N4	6.78	122.74	118.00
26	1H	751	A	C8-N9-C4	6.78	108.51	105.80
26	1H	800	A	N9-C4-C5	6.78	108.51	105.80
26	1H	1773	A	N1-C6-N6	6.78	122.67	118.60
1	1G	291	C	N1-C2-O2	-6.78	114.83	118.90
1	1G	439	A	O5'-P-OP1	-6.78	99.60	105.70
26	14	113	G	N3-C2-N2	6.78	124.64	119.90
26	14	120	U	N3-C2-O2	-6.78	117.46	122.20
26	14	1126	A	O4'-C1'-N9	-6.78	102.78	108.20
26	14	1604	C	N3-C4-N4	-6.78	113.26	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	1J	13	A	N7-C8-N9	-6.78	110.41	113.80
1	13	1105	A	C8-N9-C4	-6.77	103.09	105.80
26	1H	1196	C	N3-C4-C5	-6.77	119.19	121.90
26	14	371	A	C2-N3-C4	-6.77	107.21	110.60
1	13	192	U	O5'-P-OP1	-6.77	99.61	105.70
26	1H	255	A	OP2-P-O3'	6.77	120.10	105.20
26	1H	950	G	C5-C6-O6	6.77	132.66	128.60
26	1H	2261	C	N3-C4-C5	-6.77	119.19	121.90
26	14	326	G	C2-N3-C4	-6.77	108.51	111.90
26	14	809	G	C4-C5-C6	6.77	122.86	118.80
26	14	2285	C	C2-N3-C4	-6.77	116.51	119.90
1	13	868	C	N1-C2-O2	6.77	122.96	118.90
1	13	1370	G	N1-C6-O6	6.77	123.96	119.90
27	16	43	C	C6-N1-C2	6.77	123.01	120.30
26	1H	642	G	N9-C4-C5	6.77	108.11	105.40
26	1H	862	G	N1-C2-N2	-6.77	110.11	116.20
26	1H	1224	G	C8-N9-C1'	6.77	135.80	127.00
27	16	102	G	C4-C5-N7	-6.77	108.09	110.80
1	1G	1270	C	C6-N1-C2	-6.77	117.59	120.30
26	14	678	C	N3-C2-O2	6.77	126.64	121.90
1	13	104	G	N9-C4-C5	-6.77	102.69	105.40
1	13	761	G	N1-C2-N3	6.77	127.96	123.90
1	13	1432	G	N1-C2-N3	6.77	127.96	123.90
1	13	1501	C	O5'-P-OP2	6.77	118.82	110.70
23	2K	21	U	C5-C4-O4	6.77	129.96	125.90
26	1H	717	G	N3-C4-C5	-6.77	125.22	128.60
26	1H	759	G	C6-N1-C2	-6.77	121.04	125.10
26	1H	842	G	C4-C5-N7	6.77	113.51	110.80
26	1H	2528	U	N1-C2-N3	6.77	118.96	114.90
27	16	75	G	C5-C6-N1	-6.77	108.12	111.50
1	1G	568	G	C8-N9-C4	-6.77	103.69	106.40
26	14	2035	G	C8-N9-C4	6.77	109.11	106.40
26	1H	411	G	C4-C5-N7	-6.77	108.09	110.80
26	1H	655	A	C4-C5-N7	6.77	114.08	110.70
26	1H	1238	G	N9-C4-C5	6.77	108.11	105.40
26	1H	1240	U	N1-C2-O2	-6.77	118.06	122.80
1	1G	783	C	C5-C6-N1	6.77	124.38	121.00
26	14	669	G	C2-N3-C4	6.77	115.28	111.90
26	14	1382	G	C6-C5-N7	-6.77	126.34	130.40
26	14	2652	C	N1-C2-O2	6.77	122.96	118.90
1	13	532	A	C6-C5-N7	-6.76	127.56	132.30
26	1H	240	G	C5-C6-N1	-6.76	108.12	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	246	C	OP1-P-O3'	6.76	120.08	105.20
26	1H	962	G	O4'-C1'-N9	6.76	113.61	108.20
26	1H	1410	G	C5-C6-N1	6.76	114.88	111.50
26	1H	1858	G	C4-C5-N7	6.76	113.51	110.80
1	1G	326	G	N1-C2-N2	-6.76	110.11	116.20
26	14	672	C	C4-C5-C6	6.76	120.78	117.40
26	14	804	A	N7-C8-N9	-6.76	110.42	113.80
26	1H	844	C	O5'-P-OP2	-6.76	99.61	105.70
26	1H	1924	C	N3-C2-O2	-6.76	117.17	121.90
26	14	2000	G	N7-C8-N9	-6.76	109.72	113.10
26	14	2764	A	O5'-P-OP1	-6.76	99.61	105.70
26	14	2787	C	C2-N3-C4	6.76	123.28	119.90
1	13	1413	A	C5-N7-C8	-6.76	100.52	103.90
23	2K	70	C	C5-C6-N1	6.76	124.38	121.00
26	1H	250	G	O5'-P-OP1	-6.76	99.61	105.70
26	1H	262	A	OP1-P-O3'	-6.76	90.32	105.20
26	1H	1271	G	C4-C5-C6	6.76	122.86	118.80
26	1H	1710	C	O5'-P-OP2	-6.76	99.61	105.70
1	1G	562	C	O5'-P-OP2	6.76	118.81	110.70
26	14	233	A	OP1-P-OP2	6.76	129.74	119.60
26	14	1212	G	N3-C2-N2	-6.76	115.17	119.90
26	14	1689	A	C5-N7-C8	-6.76	100.52	103.90
26	14	2353	G	C8-N9-C4	6.76	109.11	106.40
31	39	110	LEU	CB-CG-CD2	-6.76	99.50	111.00
1	13	364	A	N9-C4-C5	6.76	108.50	105.80
1	13	984	C	OP1-P-O3'	6.76	120.07	105.20
26	1H	701	G	N7-C8-N9	6.76	116.48	113.10
26	1H	825	C	C5-C4-N4	-6.76	115.47	120.20
26	1H	1266	G	N3-C2-N2	6.76	124.63	119.90
26	1H	1399	C	N1-C2-O2	-6.76	114.84	118.90
26	1H	2011	U	N1-C2-O2	-6.76	118.07	122.80
26	1H	2036	C	O5'-P-OP1	6.76	118.81	110.70
1	1G	309	G	N1-C6-O6	6.76	123.96	119.90
1	1G	886	G	N3-C4-C5	6.76	131.98	128.60
56	1L	32	C	C6-N1-C2	-6.76	117.60	120.30
26	14	260	G	C4-C5-N7	-6.76	108.10	110.80
26	14	2280	G	OP1-P-OP2	-6.76	109.46	119.60
26	1H	600	G	N9-C4-C5	-6.76	102.70	105.40
26	1H	1239	G	OP2-P-O3'	6.76	120.07	105.20
26	1H	2887	U	C5-C6-N1	6.76	126.08	122.70
1	1G	1450	U	N1-C2-O2	6.76	127.53	122.80
26	14	1520	U	N3-C4-C5	-6.76	110.55	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2070	G	N1-C2-N3	6.76	127.95	123.90
26	14	2880	C	O5'-P-OP2	-6.76	99.62	105.70
27	1J	74	U	N1-C2-N3	6.76	118.95	114.90
1	13	692	U	O5'-P-OP2	-6.76	99.62	105.70
1	13	1482	G	C5-C6-O6	-6.76	124.55	128.60
1	13	1491	G	C2-N3-C4	-6.76	108.52	111.90
22	1K	27	G	C2-N3-C4	6.76	115.28	111.90
26	1H	731	C	N3-C4-C5	6.76	124.60	121.90
26	1H	1258	C	OP2-P-O3'	6.76	120.07	105.20
26	1H	1857	G	N1-C6-O6	6.76	123.95	119.90
26	1H	2435	A	N1-C6-N6	-6.76	114.55	118.60
26	14	706	A	N1-C2-N3	6.76	132.68	129.30
26	14	805	G	N3-C4-C5	-6.76	125.22	128.60
26	1H	205	G	C5-C6-N1	6.75	114.88	111.50
26	1H	414	C	C2-N3-C4	-6.75	116.52	119.90
26	1H	1650	G	C2-N3-C4	-6.75	108.52	111.90
26	1H	1885	A	N7-C8-N9	-6.75	110.42	113.80
26	1H	2070	G	O5'-P-OP2	-6.75	99.62	105.70
26	1H	2189	U	C5-C6-N1	6.75	126.08	122.70
26	1H	2292	C	N1-C2-O2	6.75	122.95	118.90
26	14	988	A	C6-C5-N7	-6.75	127.57	132.30
26	1H	608	A	OP2-P-O3'	6.75	120.06	105.20
26	1H	781	A	O5'-P-OP1	-6.75	99.62	105.70
26	1H	791	C	OP2-P-O3'	6.75	120.06	105.20
26	1H	974(A)	C	C5-C4-N4	6.75	124.93	120.20
26	1H	2266	A	N1-C2-N3	6.75	132.68	129.30
26	1H	2573	C	C6-N1-C1'	-6.75	112.69	120.80
1	1G	394	G	C8-N9-C4	-6.75	103.70	106.40
26	14	62	C	C6-N1-C2	6.75	123.00	120.30
26	14	178	G	C6-C5-N7	-6.75	126.35	130.40
26	14	1949	G	C5-C6-O6	6.75	132.65	128.60
26	14	1985	G	C2-N3-C4	-6.75	108.52	111.90
23	2K	15	G	C5-C6-N1	-6.75	108.12	111.50
26	1H	439	G	N7-C8-N9	6.75	116.47	113.10
26	1H	1454	U	O4'-C1'-N1	6.75	113.60	108.20
26	1H	1594	G	O5'-P-OP2	6.75	118.80	110.70
26	1H	1819	A	C6-N1-C2	-6.75	114.55	118.60
26	1H	2254	C	N3-C2-O2	6.75	126.63	121.90
26	1H	2289	G	N3-C4-C5	6.75	131.98	128.60
26	1H	2765	A	OP1-P-OP2	6.75	129.73	119.60
1	1G	544	G	N1-C6-O6	-6.75	115.85	119.90
1	1G	1198	G	O5'-P-OP1	-6.75	99.62	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1287	A	N1-C2-N3	6.75	132.68	129.30
26	14	193	U	N3-C2-O2	6.75	126.93	122.20
26	14	808	G	O5'-P-OP2	-6.75	99.62	105.70
26	14	1780	A	C8-N9-C4	-6.75	103.10	105.80
26	14	1906	G	N3-C4-C5	6.75	131.98	128.60
26	14	2290	G	N1-C6-O6	6.75	123.95	119.90
1	13	720	C	C6-N1-C2	-6.75	117.60	120.30
26	1H	704	G	C2-N3-C4	-6.75	108.53	111.90
26	1H	2022	U	C2-N3-C4	-6.75	122.95	127.00
26	14	143	C	N3-C2-O2	-6.75	117.17	121.90
26	14	2549	G	C8-N9-C4	6.75	109.10	106.40
26	14	2722	G	N1-C6-O6	6.75	123.95	119.90
1	13	1420	C	N3-C4-C5	6.75	124.60	121.90
26	1H	188	G	C5-C6-N1	6.75	114.87	111.50
26	1H	1274	A	N1-C2-N3	6.75	132.68	129.30
26	1H	1765	C	OP1-P-OP2	6.75	129.72	119.60
26	14	742	G	O5'-P-OP1	-6.75	99.63	105.70
26	14	761	A	C8-N9-C4	6.75	108.50	105.80
26	14	945	A	C6-N1-C2	6.75	122.65	118.60
26	14	1825	A	C8-N9-C4	-6.75	103.10	105.80
1	13	520	A	N1-C6-N6	6.75	122.65	118.60
1	13	1481	U	C6-N1-C2	-6.75	116.95	121.00
26	1H	726	G	O5'-P-OP1	-6.75	99.63	105.70
26	1H	2005	A	N1-C6-N6	6.75	122.65	118.60
26	1H	2409	G	C5-N7-C8	-6.75	100.93	104.30
26	1H	2430	A	N9-C4-C5	6.75	108.50	105.80
26	1H	2549	G	C8-N9-C4	6.75	109.10	106.40
26	14	600	G	C5-N7-C8	-6.75	100.93	104.30
26	14	654(V)	A	C5-C6-N6	6.75	129.10	123.70
26	14	2083	G	C4-C5-N7	6.75	113.50	110.80
26	14	2863	C	O5'-P-OP1	-6.75	99.63	105.70
26	1H	181	A	N1-C6-N6	-6.75	114.55	118.60
26	1H	1475	G	N3-C4-C5	6.75	131.97	128.60
1	1G	1196	U	C5-C6-N1	6.75	126.07	122.70
26	14	18	C	OP1-P-OP2	-6.75	109.48	119.60
26	14	117	G	C2-N3-C4	6.75	115.27	111.90
1	13	325	A	N9-C4-C5	-6.74	103.10	105.80
1	13	575	G	C4-C5-N7	-6.74	108.10	110.80
26	1H	395	U	N1-C2-O2	6.74	127.52	122.80
26	1H	792	G	C8-N9-C4	-6.74	103.70	106.40
26	1H	923	C	C4-C5-C6	6.74	120.77	117.40
26	1H	1023	U	OP2-P-O3'	-6.74	90.36	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1646	C	N1-C2-O2	-6.74	114.85	118.90
26	1H	1790	C	N3-C4-C5	6.74	124.60	121.90
27	16	89	G	C5-C6-O6	-6.74	124.55	128.60
26	14	200	U	N3-C2-O2	-6.74	117.48	122.20
26	14	333	G	O5'-P-OP1	-6.74	99.63	105.70
26	14	701	G	N1-C2-N3	6.74	127.95	123.90
26	14	2227	A	N1-C2-N3	6.74	132.67	129.30
26	14	2492	U	O5'-P-OP1	-6.74	99.63	105.70
1	13	1486	G	C6-C5-N7	-6.74	126.36	130.40
26	1H	1948	G	N1-C2-N2	-6.74	110.13	116.20
1	1G	306	G	C6-N1-C2	6.74	129.15	125.10
26	14	1253	A	C5-C6-N1	6.74	121.07	117.70
26	14	1681	G	C6-C5-N7	-6.74	126.36	130.40
1	13	455	C	N1-C2-O2	6.74	122.94	118.90
26	1H	125	G	C4-C5-N7	6.74	113.50	110.80
26	1H	134	C	C5-C6-N1	-6.74	117.63	121.00
26	1H	463	G	N3-C4-C5	6.74	131.97	128.60
26	1H	529	A	C5-C6-N6	-6.74	118.31	123.70
26	1H	1225	C	N3-C2-O2	6.74	126.62	121.90
26	1H	1830	C	OP1-P-OP2	-6.74	109.49	119.60
26	1H	1838	C	C6-N1-C2	6.74	123.00	120.30
26	1H	1992	G	C8-N9-C4	-6.74	103.70	106.40
26	1H	2260	C	C5-C6-N1	-6.74	117.63	121.00
26	1H	2645	G	OP2-P-O3'	6.74	120.03	105.20
26	14	654(V)	A	C4-C5-N7	-6.74	107.33	110.70
26	14	736	C	C4-C5-C6	-6.74	114.03	117.40
26	14	1131	G	N1-C6-O6	6.74	123.94	119.90
26	14	2058	A	C5-C6-N1	6.74	121.07	117.70
1	13	357	G	O5'-P-OP2	6.74	118.79	110.70
1	13	509	A	C4-C5-N7	-6.74	107.33	110.70
26	1H	756	C	C6-N1-C2	-6.74	117.61	120.30
26	1H	1232	G	C2-N3-C4	-6.74	108.53	111.90
26	1H	1656	C	C6-N1-C2	-6.74	117.61	120.30
26	1H	2239	G	C6-C5-N7	-6.74	126.36	130.40
26	1H	2382	G	C5-C6-N1	-6.74	108.13	111.50
27	16	106	G	O5'-P-OP1	-6.74	99.64	105.70
1	1G	780	A	N7-C8-N9	6.74	117.17	113.80
26	14	126	A	OP1-P-OP2	6.74	129.71	119.60
26	14	822	U	N1-C2-O2	6.74	127.52	122.80
26	14	1797	C	C6-N1-C2	6.74	123.00	120.30
26	14	1903	G	C4-C5-N7	-6.74	108.11	110.80
26	14	2080	G	N3-C4-C5	-6.74	125.23	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	954	G	O5'-P-OP1	-6.74	99.64	105.70
1	1G	535	A	C4-C5-N7	-6.74	107.33	110.70
26	14	1806	C	C2-N3-C4	-6.74	116.53	119.90
26	14	2391	G	OP1-P-OP2	6.74	129.71	119.60
1	13	23	C	N3-C4-N4	6.74	122.71	118.00
1	13	117	G	C6-C5-N7	-6.74	126.36	130.40
1	13	426	G	N1-C6-O6	-6.74	115.86	119.90
1	13	1390	U	N3-C4-C5	-6.74	110.56	114.60
1	13	1502	A	C5-C6-N1	-6.74	114.33	117.70
26	1H	509	C	N1-C2-N3	6.74	123.92	119.20
26	1H	680	G	N7-C8-N9	-6.74	109.73	113.10
26	1H	774	A	C6-N1-C2	6.74	122.64	118.60
27	16	78	A	N1-C6-N6	-6.74	114.56	118.60
1	1G	533	A	C8-N9-C4	6.74	108.49	105.80
26	14	141	A	C2-N3-C4	-6.74	107.23	110.60
26	14	1451	C	N1-C2-O2	-6.74	114.86	118.90
26	14	1831	G	C8-N9-C1'	-6.74	118.24	127.00
26	14	2219	G	N7-C8-N9	-6.74	109.73	113.10
26	14	2283	C	N1-C2-O2	-6.74	114.86	118.90
26	14	2303	G	C8-N9-C4	-6.74	103.70	106.40
26	14	2698	U	N1-C2-O2	-6.74	118.09	122.80
1	13	678	U	N1-C2-O2	-6.73	118.09	122.80
26	1H	787	U	C2-N1-C1'	-6.73	109.62	117.70
26	14	1285	G	OP2-P-O3'	6.73	120.02	105.20
26	14	1798	U	C2-N3-C4	-6.73	122.96	127.00
26	14	2377	A	C8-N9-C4	6.73	108.49	105.80
1	13	1200	C	C5-C6-N1	6.73	124.37	121.00
26	1H	13	A	N9-C4-C5	-6.73	103.11	105.80
26	1H	1402	C	C2-N3-C4	6.73	123.27	119.90
26	1H	1706	U	C6-N1-C2	-6.73	116.96	121.00
26	1H	1778	U	C5-C6-N1	-6.73	119.33	122.70
26	1H	2468	G	C4-C5-N7	6.73	113.49	110.80
26	1H	2517	C	C2-N3-C4	-6.73	116.53	119.90
23	2L	48	U	P-O3'-C3'	6.73	127.78	119.70
26	14	456	C	N1-C2-O2	-6.73	114.86	118.90
26	14	695	G	N9-C4-C5	-6.73	102.71	105.40
1	13	33	A	OP1-P-O3'	6.73	120.01	105.20
1	13	963	G	C4-N9-C1'	6.73	135.25	126.50
1	13	1529	G	N1-C2-N2	6.73	122.26	116.20
26	1H	2014	A	N1-C6-N6	6.73	122.64	118.60
26	1H	2418	A	N1-C6-N6	-6.73	114.56	118.60
26	1H	2578	G	C5-N7-C8	6.73	107.67	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1518	A	O5'-P-OP1	-6.73	99.64	105.70
26	14	2778	A	C5-N7-C8	6.73	107.27	103.90
1	13	235	C	N1-C2-N3	-6.73	114.49	119.20
26	1H	155	C	N1-C2-O2	6.73	122.94	118.90
26	1H	1904	G	OP1-P-OP2	6.73	129.69	119.60
26	1H	2070	G	C6-N1-C2	6.73	129.14	125.10
27	16	103	U	C5-C6-N1	-6.73	119.33	122.70
1	1G	858	G	N7-C8-N9	6.73	116.46	113.10
26	14	1984	G	C8-N9-C4	6.73	109.09	106.40
26	14	2278	A	N9-C4-C5	6.73	108.49	105.80
23	2K	43	G	N1-C6-O6	-6.73	115.86	119.90
26	1H	253	C	O5'-P-OP2	6.73	118.77	110.70
26	1H	1374	G	C8-N9-C4	-6.73	103.71	106.40
26	1H	1672	C	O5'-P-OP1	-6.73	99.64	105.70
26	1H	1800	C	C2-N3-C4	6.73	123.26	119.90
26	1H	2050	C	N1-C2-O2	-6.73	114.86	118.90
26	1H	2440	C	C5-C4-N4	6.73	124.91	120.20
26	14	129	C	C6-N1-C1'	-6.73	112.73	120.80
26	14	2253	G	N1-C2-N3	6.73	127.94	123.90
26	14	2485	G	N3-C4-C5	6.73	131.96	128.60
27	1J	7	G	N9-C4-C5	-6.73	102.71	105.40
1	13	1064	G	C4-C5-N7	-6.73	108.11	110.80
1	13	1498	U	N3-C2-O2	-6.73	117.49	122.20
26	1H	521	G	OP1-P-OP2	-6.73	109.51	119.60
26	1H	1359	A	O5'-P-OP2	-6.73	99.65	105.70
26	1H	2247	A	C5-C6-N1	-6.73	114.34	117.70
26	1H	2265	U	C4-C5-C6	6.73	123.74	119.70
26	14	2289	G	C5-C6-N1	6.73	114.86	111.50
1	13	322	C	C5-C6-N1	6.72	124.36	121.00
1	13	818	G	N1-C2-N2	-6.72	110.15	116.20
26	1H	422	A	C4-C5-C6	6.72	120.36	117.00
26	1H	1229(A)	G	C5-C6-N1	-6.72	108.14	111.50
26	1H	1380	G	O5'-P-OP2	-6.72	99.65	105.70
26	14	649	G	C8-N9-C4	-6.72	103.71	106.40
26	14	1453	A	N1-C6-N6	6.72	122.63	118.60
26	14	1608	A	O5'-P-OP1	-6.72	99.65	105.70
26	14	1934	C	N3-C4-C5	6.72	124.59	121.90
26	14	2274	A	O5'-P-OP2	-6.72	99.65	105.70
26	14	2293	C	N3-C4-N4	-6.72	113.29	118.00
1	13	464	G	C6-C5-N7	-6.72	126.37	130.40
26	1H	290	G	N9-C4-C5	-6.72	102.71	105.40
26	1H	2236	C	O5'-P-OP1	-6.72	99.65	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2546	U	N1-C2-N3	6.72	118.93	114.90
44	E8	94	ASP	CB-CG-OD1	-6.72	112.25	118.30
26	14	2522	U	C5-C6-N1	-6.72	119.34	122.70
26	14	2701	C	N3-C4-C5	6.72	124.59	121.90
46	C5	31	LEU	CA-CB-CG	6.72	130.76	115.30
1	13	123	C	OP1-P-OP2	6.72	129.68	119.60
26	1H	326	G	N9-C4-C5	6.72	108.09	105.40
26	1H	1123	C	N3-C2-O2	6.72	126.61	121.90
26	1H	1697	G	N9-C4-C5	-6.72	102.71	105.40
26	1H	2334	G	C8-N9-C4	6.72	109.09	106.40
26	14	428	A	C4-C5-N7	-6.72	107.34	110.70
1	13	223	U	O5'-P-OP2	-6.72	99.65	105.70
26	1H	294	A	C2-N3-C4	6.72	113.96	110.60
26	1H	1159	U	C5-C6-N1	-6.72	119.34	122.70
26	1H	1761	C	C6-N1-C2	6.72	122.99	120.30
26	1H	2485	G	N1-C2-N2	-6.72	110.15	116.20
26	1H	2615	U	N3-C4-O4	-6.72	114.70	119.40
27	16	33	G	C5-C6-O6	-6.72	124.57	128.60
27	16	47	C	C2-N1-C1'	-6.72	111.41	118.80
1	1G	295	C	C2-N3-C4	6.72	123.26	119.90
26	14	211	A	C5-N7-C8	-6.72	100.54	103.90
26	14	396	G	C5-C6-N1	-6.72	108.14	111.50
26	14	444	C	C2-N3-C4	-6.72	116.54	119.90
26	14	768	G	C2-N3-C4	-6.72	108.54	111.90
26	14	930	U	N3-C2-O2	-6.72	117.50	122.20
26	14	2846	G	C8-N9-C4	-6.72	103.71	106.40
26	1H	1277	G	C8-N9-C4	6.72	109.09	106.40
26	1H	1883	G	C8-N9-C4	6.72	109.09	106.40
1	1G	810	C	N3-C4-C5	6.72	124.59	121.90
26	14	50	U	N1-C2-N3	-6.72	110.87	114.90
1	13	110	C	C6-N1-C2	6.72	122.99	120.30
1	13	244	U	N1-C2-O2	6.72	127.50	122.80
1	13	1517	G	C6-N1-C2	-6.72	121.07	125.10
26	1H	1344	G	N1-C2-N2	6.72	122.25	116.20
26	1H	2680	C	C4-C5-C6	6.72	120.76	117.40
1	1G	323	U	N1-C2-O2	-6.72	118.10	122.80
26	14	117	G	N3-C4-C5	-6.72	125.24	128.60
26	14	816	C	N1-C2-N3	-6.72	114.50	119.20
26	14	1022	G	N9-C4-C5	6.72	108.09	105.40
26	14	1281	G	C6-C5-N7	-6.72	126.37	130.40
26	14	2606	C	OP1-P-OP2	6.72	129.68	119.60
26	14	2465	C	O5'-P-OP1	6.71	118.76	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	49	A	O5'-P-OP2	-6.71	99.66	105.70
26	1H	88	G	N3-C4-C5	-6.71	125.24	128.60
26	1H	256	A	C5-C6-N1	-6.71	114.34	117.70
26	1H	569	U	C6-N1-C2	6.71	125.03	121.00
1	1G	336	C	C5-C6-N1	6.71	124.36	121.00
1	1G	570	G	N7-C8-N9	6.71	116.46	113.10
26	14	1342	A	C4-C5-N7	6.71	114.06	110.70
27	1J	16	G	N1-C6-O6	6.71	123.93	119.90
1	13	37	U	C6-N1-C2	-6.71	116.97	121.00
26	1H	840	C	C2-N1-C1'	-6.71	111.42	118.80
26	1H	2287	A	C5-N7-C8	-6.71	100.55	103.90
26	1H	2319	G	OP1-P-OP2	6.71	129.67	119.60
26	1H	2709	G	C2-N3-C4	-6.71	108.54	111.90
1	1G	388	G	C4-C5-N7	-6.71	108.11	110.80
1	1G	811	C	O5'-P-OP1	6.71	118.75	110.70
1	1G	912	C	C5-C6-N1	-6.71	117.64	121.00
26	14	391	G	N3-C2-N2	-6.71	115.20	119.90
26	14	393	C	C6-N1-C2	-6.71	117.62	120.30
26	14	1365	A	C4-C5-C6	-6.71	113.64	117.00
26	14	1490	A	N9-C4-C5	-6.71	103.11	105.80
23	2K	37	U	C4-C5-C6	6.71	123.73	119.70
26	1H	673	C	N3-C4-C5	6.71	124.58	121.90
26	1H	2031	A	N1-C6-N6	6.71	122.63	118.60
26	1H	2056	G	N3-C2-N2	-6.71	115.20	119.90
26	14	2080	G	C8-N9-C4	-6.71	103.72	106.40
1	13	742	G	N9-C4-C5	-6.71	102.72	105.40
26	1H	96	G	C6-C5-N7	-6.71	126.38	130.40
26	1H	228	A	C5-N7-C8	-6.71	100.55	103.90
26	1H	478	A	C5-N7-C8	6.71	107.25	103.90
26	1H	781	A	C8-N9-C4	6.71	108.48	105.80
26	1H	804	A	C4-C5-C6	6.71	120.35	117.00
26	1H	909	A	C5-N7-C8	6.71	107.25	103.90
26	1H	1264	G	O5'-P-OP2	-6.71	99.66	105.70
26	1H	1284	A	N1-C6-N6	6.71	122.62	118.60
26	1H	1617	C	C4-C5-C6	6.71	120.75	117.40
26	1H	1901	A	O5'-P-OP2	-6.71	99.66	105.70
26	1H	2763	G	N1-C2-N3	6.71	127.93	123.90
1	1G	332	G	N3-C4-C5	6.71	131.95	128.60
1	1G	1428	A	C2-N3-C4	-6.71	107.25	110.60
26	14	494	G	O5'-P-OP2	6.71	118.75	110.70
26	14	949	C	C5-C6-N1	-6.71	117.65	121.00
26	14	1576	U	N1-C2-N3	6.71	118.92	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	599	G	OP1-P-OP2	6.71	129.66	119.60
1	1G	349	A	N1-C6-N6	-6.71	114.58	118.60
26	14	985	C	OP2-P-O3'	6.71	119.95	105.20
26	14	2270	G	N9-C4-C5	6.71	108.08	105.40
27	1J	83	G	OP1-P-OP2	6.71	129.66	119.60
1	13	867	G	C5-N7-C8	6.71	107.65	104.30
26	1H	1283	G	C8-N9-C1'	-6.71	118.28	127.00
1	13	542	G	O5'-P-OP2	6.70	118.75	110.70
1	13	667	G	C8-N9-C4	-6.70	103.72	106.40
1	13	869	G	N7-C8-N9	6.70	116.45	113.10
1	13	913	A	N1-C6-N6	-6.70	114.58	118.60
1	13	919	A	N9-C4-C5	6.70	108.48	105.80
26	1H	60	G	C8-N9-C4	6.70	109.08	106.40
26	1H	491	G	N1-C6-O6	6.70	123.92	119.90
26	1H	1123	C	C2-N3-C4	-6.70	116.55	119.90
26	1H	1341	U	N3-C4-O4	6.70	124.09	119.40
26	1H	1446	C	N3-C4-C5	-6.70	119.22	121.90
26	1H	1675	C	O5'-P-OP1	-6.70	99.67	105.70
26	1H	2055	C	O5'-P-OP2	6.70	118.75	110.70
1	1G	505	G	C5-C6-N1	6.70	114.85	111.50
1	1G	841	U	C5-C6-N1	6.70	126.05	122.70
1	1G	1426	C	OP1-P-OP2	6.70	129.65	119.60
26	14	37	C	N3-C4-N4	6.70	122.69	118.00
26	14	185	U	N3-C4-O4	-6.70	114.71	119.40
26	14	822	U	C5-C6-N1	6.70	126.05	122.70
26	14	1944	U	C5-C4-O4	-6.70	121.88	125.90
26	1H	263	C	C6-N1-C2	6.70	122.98	120.30
26	1H	684	G	N9-C4-C5	6.70	108.08	105.40
26	1H	2075	U	C4-C5-C6	6.70	123.72	119.70
26	1H	2731	G	C5-C6-O6	-6.70	124.58	128.60
1	1G	576	G	C4-C5-N7	-6.70	108.12	110.80
1	13	260	G	N7-C8-N9	-6.70	109.75	113.10
1	13	787	A	N1-C6-N6	6.70	122.62	118.60
26	1H	1254	A	O5'-P-OP1	-6.70	99.67	105.70
26	1H	1274	A	N1-C6-N6	6.70	122.62	118.60
26	1H	1735	C	C6-N1-C2	6.70	122.98	120.30
26	1H	1984	G	N9-C4-C5	-6.70	102.72	105.40
26	1H	2000	G	C4-C5-N7	6.70	113.48	110.80
26	1H	2068	U	C5-C4-O4	6.70	129.92	125.90
1	1G	311	C	C5-C4-N4	-6.70	115.51	120.20
1	1G	611	A	N9-C4-C5	-6.70	103.12	105.80
1	1G	1281	U	C5-C6-N1	6.70	126.05	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	141	A	C4-C5-N7	6.70	114.05	110.70
26	14	2047	U	N3-C4-C5	6.70	118.62	114.60
26	1H	208	C	C2-N3-C4	-6.70	116.55	119.90
26	1H	830	G	C2-N3-C4	-6.70	108.55	111.90
26	1H	2880	C	O5'-P-OP1	-6.70	99.67	105.70
1	1G	19	C	N3-C2-O2	-6.70	117.21	121.90
19	AA	66	MET	N-CA-C	6.70	129.09	111.00
26	14	849	A	C2-N3-C4	6.70	113.95	110.60
26	14	1626	G	C5-C6-O6	6.70	132.62	128.60
26	1H	491	G	N9-C4-C5	-6.70	102.72	105.40
26	1H	1408	C	N3-C4-N4	6.70	122.69	118.00
26	1H	1632	A	C5-N7-C8	-6.70	100.55	103.90
26	1H	2319	G	N1-C2-N2	-6.70	110.17	116.20
1	1G	1523	G	C4-C5-N7	-6.70	108.12	110.80
26	14	397	G	C6-C5-N7	-6.70	126.38	130.40
26	14	799	G	N3-C2-N2	-6.70	115.21	119.90
26	14	1811	G	OP2-P-O3'	6.70	119.93	105.20
26	14	2227	A	C5-C6-N1	-6.70	114.35	117.70
26	14	2620	C	O4'-C1'-N1	-6.70	102.84	108.20
1	13	1055	A	O5'-P-OP2	-6.70	99.67	105.70
1	13	1382	C	N1-C2-N3	-6.70	114.51	119.20
26	1H	347	A	N7-C8-N9	6.70	117.15	113.80
26	1H	945	A	O4'-C1'-N9	6.70	113.56	108.20
26	1H	1234	U	N3-C4-O4	-6.70	114.71	119.40
26	1H	1419	A	O5'-P-OP2	-6.70	99.67	105.70
26	1H	2297	C	N1-C2-N3	6.70	123.89	119.20
26	1H	2521	C	C5-C6-N1	-6.70	117.65	121.00
26	1H	2822	G	N1-C2-N3	-6.70	119.88	123.90
1	1G	622	A	N1-C6-N6	-6.70	114.58	118.60
26	14	326	G	C6-N1-C2	6.70	129.12	125.10
26	14	1604	C	C2-N1-C1'	-6.70	111.43	118.80
26	14	1796	U	N3-C2-O2	6.70	126.89	122.20
1	13	771	G	C5-C6-N1	-6.69	108.15	111.50
23	2K	27	G	C6-N1-C2	-6.69	121.08	125.10
26	1H	2237	G	C6-N1-C2	6.69	129.12	125.10
26	14	564	C	N3-C4-C5	-6.69	119.22	121.90
26	14	693	C	C5-C6-N1	-6.69	117.65	121.00
1	13	884	U	OP1-P-OP2	6.69	129.64	119.60
1	13	888	G	C2-N3-C4	-6.69	108.55	111.90
26	1H	29	U	C5-C4-O4	-6.69	121.88	125.90
26	1H	682	G	N3-C2-N2	6.69	124.58	119.90
26	1H	739	G	N3-C4-C5	6.69	131.95	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	858	U	C5-C6-N1	-6.69	119.35	122.70
26	1H	1227	A	N9-C4-C5	-6.69	103.12	105.80
26	1H	1826	G	C2-N3-C4	-6.69	108.55	111.90
26	1H	2409	G	N9-C4-C5	-6.69	102.72	105.40
26	1H	2489	G	O5'-P-OP1	-6.69	99.68	105.70
26	1H	2861	G	C8-N9-C4	-6.69	103.72	106.40
1	1G	1126	U	C6-N1-C2	6.69	125.02	121.00
26	14	440	G	C4-C5-N7	6.69	113.48	110.80
26	14	578	A	N1-C2-N3	6.69	132.65	129.30
26	14	776	G	C8-N9-C1'	-6.69	118.30	127.00
26	14	1858	G	C5-C6-N1	-6.69	108.15	111.50
26	14	1982	C	C2-N1-C1'	6.69	126.16	118.80
1	13	692	U	O5'-P-OP1	6.69	118.73	110.70
1	13	788	U	C4-C5-C6	6.69	123.71	119.70
1	13	885	G	N3-C4-N9	-6.69	121.98	126.00
1	13	953	G	N9-C4-C5	6.69	108.08	105.40
26	1H	31	C	C5-C4-N4	-6.69	115.52	120.20
26	1H	321	G	C6-C5-N7	-6.69	126.39	130.40
26	1H	2258	C	C4-C5-C6	6.69	120.75	117.40
26	1H	2329	G	N1-C2-N2	-6.69	110.18	116.20
26	14	430	G	C8-N9-C4	6.69	109.08	106.40
26	14	628	G	O5'-P-OP2	-6.69	99.68	105.70
26	14	1682	G	C2-N3-C4	-6.69	108.56	111.90
26	1H	240	G	OP1-P-OP2	-6.69	109.57	119.60
26	1H	1779	U	O5'-P-OP2	-6.69	99.68	105.70
26	1H	2290	G	C2-N3-C4	-6.69	108.56	111.90
26	14	716	A	N1-C6-N6	6.69	122.61	118.60
26	14	1489	U	C6-N1-C2	-6.69	116.99	121.00
26	14	2623	G	C5-C6-N1	6.69	114.84	111.50
1	13	371	G	C8-N9-C4	6.69	109.08	106.40
26	1H	1148	A	C5-C6-N6	6.69	129.05	123.70
26	14	2768	C	N3-C4-C5	-6.69	119.22	121.90
26	14	2778	A	C4-C5-N7	-6.69	107.36	110.70
1	13	339	C	C6-N1-C2	-6.69	117.63	120.30
1	13	509	A	C5-N7-C8	6.69	107.24	103.90
26	1H	1825	A	N9-C4-C5	6.69	108.47	105.80
1	1G	27	G	N1-C6-O6	6.69	123.91	119.90
26	14	14	A	N7-C8-N9	6.69	117.14	113.80
26	14	352	G	N1-C6-O6	6.69	123.91	119.90
26	14	1927	A	N1-C6-N6	6.69	122.61	118.60
26	14	2495	G	N1-C2-N2	6.69	122.22	116.20
1	13	242	C	OP1-P-O3'	6.68	119.91	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	290	C	O5'-P-OP1	-6.68	99.68	105.70
1	13	894	G	N1-C2-N3	6.68	127.91	123.90
25	4K	9	G	C4-N9-C1'	6.68	135.19	126.50
26	1H	961	C	OP1-P-O3'	6.68	119.91	105.20
26	1H	2346	A	C6-N1-C2	-6.68	114.59	118.60
26	14	267	C	N3-C4-N4	-6.68	113.32	118.00
26	14	452	G	C5-N7-C8	-6.68	100.96	104.30
26	14	1316	U	OP1-P-O3'	6.68	119.90	105.20
26	14	1682	G	C4-C5-C6	6.68	122.81	118.80
26	14	1786	A	N9-C1'-C2'	6.68	122.69	114.00
26	14	2580	U	N3-C4-C5	-6.68	110.59	114.60
1	13	1468	A	C5-C6-N1	6.68	121.04	117.70
26	1H	294	A	C5-N7-C8	6.68	107.24	103.90
26	1H	694	U	O5'-P-OP1	6.68	118.72	110.70
26	1H	1368	G	C8-N9-C1'	-6.68	118.31	127.00
26	1H	2542	A	N7-C8-N9	-6.68	110.46	113.80
26	14	270(Q)	C	C2-N3-C4	6.68	123.24	119.90
26	14	344	G	O5'-P-OP1	-6.68	99.69	105.70
26	14	832	G	C4-C5-N7	-6.68	108.13	110.80
26	14	998	C	N3-C4-C5	6.68	124.57	121.90
26	14	2726	U	N1-C2-O2	6.68	127.48	122.80
26	14	2773	C	C6-N1-C2	6.68	122.97	120.30
1	13	1356	G	OP1-P-OP2	-6.68	109.58	119.60
26	1H	949	C	C5-C4-N4	6.68	124.88	120.20
26	14	984	A	C5-C6-N6	-6.68	118.36	123.70
26	1H	83	G	P-O3'-C3'	-6.68	111.68	119.70
26	1H	304	G	N3-C4-C5	6.68	131.94	128.60
26	1H	372	G	N9-C4-C5	6.68	108.07	105.40
26	1H	1899	G	C4-N9-C1'	-6.68	117.82	126.50
26	1H	2476	A	C4-C5-C6	6.68	120.34	117.00
26	1H	2581	G	C4-C5-N7	6.68	113.47	110.80
26	1H	2655	G	O5'-P-OP1	6.68	118.72	110.70
26	1H	2706	G	C4-C5-N7	6.68	113.47	110.80
26	1H	2865	U	C6-N1-C2	-6.68	116.99	121.00
26	14	775	G	C8-N9-C4	-6.68	103.73	106.40
26	14	1677	A	N1-C6-N6	6.68	122.61	118.60
1	13	944	G	N3-C2-N2	-6.68	115.22	119.90
26	1H	794	G	C2-N3-C4	-6.68	108.56	111.90
26	1H	2022	U	C4-C5-C6	-6.68	115.69	119.70
26	1H	2609	U	N3-C4-O4	6.68	124.08	119.40
26	1H	2609	U	N1-C2-O2	-6.68	118.12	122.80
1	1G	664	G	N3-C4-N9	-6.68	121.99	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1465	C	N3-C4-N4	6.68	122.67	118.00
26	14	1430	C	N3-C4-C5	6.68	124.57	121.90
1	13	893	C	N1-C2-N3	-6.68	114.53	119.20
4	3E	157	LEU	CA-CB-CG	6.68	130.65	115.30
26	1H	715	G	C6-N1-C2	-6.68	121.09	125.10
26	1H	1356	G	O5'-P-OP2	6.68	118.71	110.70
26	1H	2489	G	N3-C2-N2	-6.68	115.23	119.90
26	14	57	C	N3-C2-O2	6.68	126.57	121.90
26	14	80	G	N1-C6-O6	-6.68	115.89	119.90
26	14	1278	A	C4-C5-C6	-6.68	113.66	117.00
26	14	1809	A	C5-N7-C8	-6.68	100.56	103.90
1	13	736	C	N1-C2-O2	6.67	122.90	118.90
1	13	1077	G	OP1-P-O3'	6.67	119.89	105.20
23	2K	40	C	C6-N1-C2	-6.67	117.63	120.30
26	1H	2595	G	OP1-P-OP2	6.67	129.61	119.60
27	16	7	G	OP1-P-OP2	6.67	129.61	119.60
1	1G	919	A	C8-N9-C4	6.67	108.47	105.80
1	13	31	G	C2-N3-C4	6.67	115.24	111.90
1	13	1342	C	C6-N1-C2	6.67	122.97	120.30
26	1H	950	G	N9-C4-C5	6.67	108.07	105.40
26	1H	971	C	N1-C2-O2	-6.67	114.90	118.90
26	1H	1163	G	N1-C6-O6	-6.67	115.90	119.90
26	1H	2378	A	N1-C6-N6	6.67	122.60	118.60
26	1H	2576	G	C8-N9-C4	6.67	109.07	106.40
26	14	485	C	C4-C5-C6	6.67	120.74	117.40
26	14	2526	G	C5-C6-N1	-6.67	108.16	111.50
1	13	739	C	C5-C6-N1	6.67	124.34	121.00
1	13	768	A	N7-C8-N9	-6.67	110.47	113.80
26	1H	187	G	C2-N3-C4	-6.67	108.56	111.90
26	1H	212	G	C5-N7-C8	6.67	107.64	104.30
26	1H	476	G	N3-C4-N9	-6.67	122.00	126.00
26	1H	999	U	N3-C2-O2	-6.67	117.53	122.20
26	1H	1562	A	C8-N9-C4	6.67	108.47	105.80
26	1H	2265	U	N3-C2-O2	-6.67	117.53	122.20
26	14	524	U	N3-C4-C5	-6.67	110.60	114.60
26	14	984	A	C5-C6-N1	6.67	121.04	117.70
26	14	2439	A	C8-N9-C4	-6.67	103.13	105.80
26	14	2827	C	N1-C2-O2	-6.67	114.90	118.90
1	13	138	G	C5-C6-N1	-6.67	108.17	111.50
26	1H	2318	G	O4'-C1'-N9	6.67	113.54	108.20
27	16	110	G	N7-C8-N9	6.67	116.44	113.10
1	1G	691	G	C5-C6-O6	-6.67	124.60	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2324	C	C2-N1-C1'	-6.67	111.46	118.80
26	14	2628	C	C5-C6-N1	-6.67	117.67	121.00
1	13	923	A	C8-N9-C4	-6.67	103.13	105.80
26	1H	256	A	C2-N3-C4	-6.67	107.27	110.60
26	1H	300	A	N7-C8-N9	6.67	117.13	113.80
26	1H	633	A	N9-C4-C5	-6.67	103.13	105.80
26	1H	706	A	C4-C5-N7	6.67	114.03	110.70
26	1H	1512	G	C4-C5-N7	-6.67	108.13	110.80
26	1H	2499	C	C4-C5-C6	6.67	120.73	117.40
1	1G	528	C	N3-C4-C5	6.67	124.57	121.90
26	14	796	C	C6-N1-C2	6.67	122.97	120.30
26	14	1743	G	C5-C6-N1	-6.67	108.17	111.50
26	14	1952	A	O5'-P-OP1	6.67	118.70	110.70
26	14	2827	C	C2-N3-C4	-6.67	116.57	119.90
1	13	672	U	N1-C2-O2	-6.67	118.13	122.80
1	13	824	C	N3-C4-N4	6.67	122.67	118.00
1	13	853	G	N9-C4-C5	-6.67	102.73	105.40
26	1H	1405	U	C2-N3-C4	-6.67	123.00	127.00
26	1H	2515	C	N3-C4-C5	6.67	124.57	121.90
26	1H	2675	A	C5-N7-C8	-6.67	100.57	103.90
1	1G	1	U	C5-C6-N1	6.67	126.03	122.70
1	1G	603	U	N3-C4-C5	-6.67	110.60	114.60
26	14	219	G	C5-N7-C8	6.67	107.63	104.30
26	14	479	A	C5-N7-C8	6.67	107.23	103.90
26	14	631	A	C2-N3-C4	-6.67	107.27	110.60
26	14	1245	G	N1-C6-O6	6.67	123.90	119.90
26	1H	400	G	C6-C5-N7	-6.67	126.40	130.40
26	1H	1980	G	C4-C5-N7	-6.67	108.13	110.80
1	1G	617	G	N3-C4-C5	6.67	131.93	128.60
26	14	809	G	N1-C2-N3	6.67	127.90	123.90
26	14	1763	G	C5-C6-O6	6.67	132.60	128.60
1	13	1253	G	N9-C4-C5	-6.66	102.73	105.40
22	1K	25	C	C2-N1-C1'	6.66	126.13	118.80
26	1H	907	U	OP2-P-O3'	6.66	119.86	105.20
26	1H	1516	U	N3-C2-O2	-6.66	117.54	122.20
26	1H	1689	A	C2-N3-C4	-6.66	107.27	110.60
26	1H	2412	A	N9-C4-C5	6.66	108.47	105.80
26	1H	2456	C	O5'-P-OP2	6.66	118.70	110.70
26	1H	2607	G	C4-C5-C6	6.66	122.80	118.80
26	14	939	G	C8-N9-C4	-6.66	103.73	106.40
26	1H	141(A)	C	OP1-P-OP2	6.66	129.59	119.60
26	1H	213	A	OP1-P-O3'	-6.66	90.54	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	925	C	C6-N1-C2	6.66	122.97	120.30
26	1H	1869	G	C5-N7-C8	-6.66	100.97	104.30
26	1H	2613	U	N1-C2-O2	-6.66	118.14	122.80
37	78	71	VAL	CG1-CB-CG2	-6.66	100.24	110.90
26	14	1027	A	C6-N1-C2	-6.66	114.60	118.60
26	14	2706	G	C8-N9-C4	6.66	109.06	106.40
23	2K	12	G	C6-N1-C2	-6.66	121.10	125.10
26	1H	186	G	O5'-P-OP1	-6.66	99.70	105.70
26	1H	504	U	C2-N1-C1'	6.66	125.69	117.70
26	1H	847	U	C5-C6-N1	-6.66	119.37	122.70
26	1H	977	G	N3-C4-N9	-6.66	122.00	126.00
26	1H	1960	A	C6-N1-C2	-6.66	114.60	118.60
26	1H	2258	C	N3-C4-N4	6.66	122.66	118.00
26	1H	2853	C	C6-N1-C2	-6.66	117.64	120.30
27	16	97	G	C8-N9-C4	6.66	109.06	106.40
1	1G	1196	U	C2-N1-C1'	6.66	125.69	117.70
1	1G	1466	C	OP2-P-O3'	6.66	119.85	105.20
26	14	400	G	C5-C6-N1	-6.66	108.17	111.50
26	14	513	A	O5'-P-OP2	-6.66	99.71	105.70
26	14	1849	G	N1-C2-N3	6.66	127.90	123.90
1	13	760	G	OP1-P-OP2	6.66	129.59	119.60
1	13	1191	A	OP1-P-OP2	-6.66	109.61	119.60
26	1H	258	G	C6-N1-C2	-6.66	121.11	125.10
26	1H	1598	C	N3-C2-O2	-6.66	117.24	121.90
26	1H	2361	A	N1-C2-N3	6.66	132.63	129.30
26	1H	2648	C	C6-N1-C2	6.66	122.96	120.30
27	16	96	G	N1-C2-N2	6.66	122.19	116.20
1	1G	814	A	C4-C5-C6	6.66	120.33	117.00
26	14	488	G	N1-C2-N3	-6.66	119.91	123.90
26	14	955	C	N3-C4-N4	-6.66	113.34	118.00
26	14	1989	G	N3-C2-N2	-6.66	115.24	119.90
26	14	2231	C	N3-C4-N4	-6.66	113.34	118.00
26	14	2447	G	C6-N1-C2	-6.66	121.11	125.10
1	13	1065	U	C6-N1-C2	6.66	124.99	121.00
26	1H	2435	A	C8-N9-C4	-6.66	103.14	105.80
1	1G	938	A	N7-C8-N9	6.66	117.13	113.80
26	14	2351	G	OP1-P-OP2	6.66	129.59	119.60
26	14	2765	A	C8-N9-C4	-6.66	103.14	105.80
26	14	2789	C	C5-C4-N4	6.66	124.86	120.20
1	13	692	U	C2-N3-C4	-6.66	123.01	127.00
26	1H	249	C	OP1-P-OP2	6.66	129.58	119.60
26	1H	408	G	N9-C4-C5	-6.66	102.74	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	439	G	OP1-P-O3'	6.66	119.84	105.20
26	1H	533	G	N1-C2-N3	6.66	127.89	123.90
26	1H	846	C	N1-C2-O2	6.66	122.89	118.90
26	14	1401	G	N7-C8-N9	6.66	116.43	113.10
26	14	1812	A	C6-N1-C2	-6.66	114.61	118.60
26	14	1820	U	OP1-P-O3'	6.66	119.84	105.20
26	14	1823	G	N3-C4-C5	6.66	131.93	128.60
26	14	2586	C	OP1-P-OP2	-6.66	109.62	119.60
1	13	280	C	N1-C2-N3	-6.65	114.54	119.20
26	1H	232	G	C8-N9-C1'	-6.65	118.35	127.00
26	1H	504	U	N3-C2-O2	-6.65	117.54	122.20
26	1H	769	G	C5-C6-N1	6.65	114.83	111.50
26	1H	1224	G	N3-C4-C5	6.65	131.93	128.60
26	1H	1855	G	C6-N1-C2	-6.65	121.11	125.10
26	1H	2006	C	O4'-C1'-N1	-6.65	102.88	108.20
26	14	488	G	C4-C5-N7	6.65	113.46	110.80
26	14	609	A	C5-C6-N6	-6.65	118.38	123.70
26	14	1326	U	C4-C5-C6	6.65	123.69	119.70
26	1H	270(X)	G	C5-C6-N1	-6.65	108.17	111.50
26	1H	348	G	C5-C6-O6	6.65	132.59	128.60
26	1H	607	U	N3-C4-O4	-6.65	114.74	119.40
26	1H	1286	A	OP2-P-O3'	6.65	119.83	105.20
1	1G	27	G	C8-N9-C4	-6.65	103.74	106.40
1	1G	690	G	O4'-C1'-N9	6.65	113.52	108.20
26	14	336	C	C5-C6-N1	-6.65	117.67	121.00
26	14	1196	C	C6-N1-C2	6.65	122.96	120.30
26	1H	441	U	C5-C6-N1	-6.65	119.38	122.70
26	1H	1053	C	C6-N1-C2	-6.65	117.64	120.30
26	1H	2087	G	C8-N9-C4	6.65	109.06	106.40
26	14	187	G	N3-C2-N2	6.65	124.56	119.90
26	14	332	A	OP1-P-OP2	6.65	129.57	119.60
26	14	642	G	N1-C2-N3	6.65	127.89	123.90
26	14	1025	G	N1-C6-O6	6.65	123.89	119.90
26	1H	708	C	OP1-P-OP2	6.65	129.57	119.60
27	16	60	C	C4-C5-C6	-6.65	114.08	117.40
26	14	1681	G	N7-C8-N9	6.65	116.42	113.10
1	13	144	G	C8-N9-C4	-6.65	103.74	106.40
26	1H	211	A	OP2-P-O3'	6.65	119.82	105.20
26	1H	475	U	N3-C2-O2	6.65	126.85	122.20
26	1H	948	G	N7-C8-N9	6.65	116.42	113.10
26	1H	2057	A	OP1-P-OP2	6.65	129.57	119.60
26	1H	2573	C	N3-C2-O2	-6.65	117.25	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	376	C	N1-C2-O2	-6.65	114.91	118.90
26	14	730	C	C6-N1-C2	-6.65	117.64	120.30
26	1H	400	G	C5-C6-O6	-6.65	124.61	128.60
1	1G	1505	G	OP1-P-OP2	6.65	129.57	119.60
26	14	2555	U	N3-C2-O2	6.65	126.85	122.20
1	13	511	C	C5-C6-N1	-6.64	117.68	121.00
26	1H	222	A	N9-C4-C5	-6.64	103.14	105.80
26	1H	260	G	N7-C8-N9	-6.64	109.78	113.10
26	1H	1819	A	N1-C2-N3	6.64	132.62	129.30
26	1H	2725	A	OP1-P-OP2	-6.64	109.63	119.60
1	1G	250	A	C8-N9-C4	6.64	108.46	105.80
1	1G	904	C	N3-C4-C5	6.64	124.56	121.90
26	14	432	A	C4-C5-N7	6.64	114.02	110.70
26	14	746	A	C5-C6-N6	-6.64	118.38	123.70
1	13	1052	U	N1-C2-O2	6.64	127.45	122.80
24	3K	34	U	N3-C2-O2	6.64	126.85	122.20
26	1H	1384	A	C5-C6-N6	-6.64	118.39	123.70
26	1H	2274	A	OP1-P-OP2	-6.64	109.64	119.60
26	1H	2362	G	C8-N9-C4	6.64	109.06	106.40
1	1G	1080	A	C4-C5-N7	-6.64	107.38	110.70
26	14	1934	C	C4-C5-C6	-6.64	114.08	117.40
26	14	2433	A	OP1-P-O3'	-6.64	90.59	105.20
26	14	2687	U	OP1-P-OP2	-6.64	109.64	119.60
26	1H	965	C	N3-C2-O2	-6.64	117.25	121.90
26	1H	2448	A	C5-C6-N1	6.64	121.02	117.70
26	14	2206	C	O5'-P-OP2	-6.64	99.72	105.70
26	14	2570	G	N3-C4-C5	6.64	131.92	128.60
26	1H	108	U	N1-C2-O2	6.64	127.45	122.80
26	1H	205	G	N3-C2-N2	6.64	124.55	119.90
26	1H	988	A	C6-C5-N7	-6.64	127.65	132.30
26	1H	1152	C	N3-C2-O2	6.64	126.55	121.90
26	1H	1614	A	N1-C2-N3	6.64	132.62	129.30
26	1H	1763	G	O5'-P-OP1	6.64	118.67	110.70
26	1H	2484	G	N7-C8-N9	-6.64	109.78	113.10
26	1H	2507	C	C5-C6-N1	6.64	124.32	121.00
26	1H	2738	A	C8-N9-C4	6.64	108.46	105.80
27	16	82	G	N1-C2-N3	6.64	127.88	123.90
45	F8	60	ARG	NE-CZ-NH1	-6.64	116.98	120.30
26	14	433	C	N3-C4-C5	-6.64	119.24	121.90
26	14	781	A	O5'-P-OP2	-6.64	99.72	105.70
26	14	1624	G	O5'-P-OP2	-6.64	99.72	105.70
26	14	2471	C	C6-N1-C2	-6.64	117.64	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2577	A	C4-C5-C6	6.64	120.32	117.00
26	1H	220	G	N1-C2-N3	6.64	127.88	123.90
26	1H	270(E)	G	C5-C6-N1	-6.64	108.18	111.50
26	1H	606	U	C5-C4-O4	6.64	129.88	125.90
26	1H	1430	C	N3-C2-O2	-6.64	117.25	121.90
26	1H	1805	U	O5'-P-OP1	-6.64	99.73	105.70
26	1H	1950	G	O5'-P-OP1	-6.64	99.72	105.70
26	1H	2706	G	OP1-P-O3'	-6.64	90.60	105.20
26	14	292	C	N3-C4-C5	6.64	124.56	121.90
1	13	122	G	C6-C5-N7	-6.64	126.42	130.40
1	13	618	C	C2-N3-C4	6.64	123.22	119.90
24	3K	76	A	C4-C5-C6	6.64	120.32	117.00
26	1H	1259	G	N1-C2-N2	-6.64	110.23	116.20
26	1H	1268	A	N3-C4-C5	6.64	131.45	126.80
26	14	584	C	N1-C2-O2	-6.64	114.92	118.90
26	14	1197	G	C6-N1-C2	6.64	129.08	125.10
26	14	1260	G	N9-C4-C5	6.64	108.05	105.40
26	14	1973	G	N9-C4-C5	6.64	108.05	105.40
26	14	2264	C	O5'-P-OP2	6.64	118.67	110.70
1	13	736	C	N3-C4-N4	-6.63	113.36	118.00
23	2K	15	G	C4-C5-N7	-6.63	108.15	110.80
26	1H	204	A	C2-N3-C4	6.63	113.92	110.60
26	1H	452	G	C4-C5-C6	-6.63	114.82	118.80
26	1H	581	C	N3-C2-O2	6.63	126.55	121.90
26	1H	1657	C	OP1-P-O3'	6.63	119.80	105.20
26	1H	1702	G	O5'-P-OP1	-6.63	99.73	105.70
26	1H	1783	A	C8-N9-C4	-6.63	103.15	105.80
26	1H	1825	A	OP1-P-OP2	-6.63	109.65	119.60
26	1H	2762	G	N1-C6-O6	-6.63	115.92	119.90
33	51	7	LEU	CB-CG-CD1	6.63	122.28	111.00
26	14	197	A	C5-C6-N6	-6.63	118.39	123.70
26	14	640	C	C4-C5-C6	6.63	120.72	117.40
26	14	1341	U	O5'-P-OP2	6.63	118.66	110.70
24	3K	34	U	C4-C5-C6	-6.63	115.72	119.70
26	1H	997	G	C5-N7-C8	6.63	107.62	104.30
26	14	76	C	C5-C6-N1	6.63	124.32	121.00
26	14	663	G	O5'-P-OP1	-6.63	99.73	105.70
26	14	1198	U	C5-C4-O4	6.63	129.88	125.90
26	14	1398	C	OP2-P-O3'	6.63	119.79	105.20
26	14	1652	A	O5'-P-OP1	-6.63	99.73	105.70
26	14	2337	G	N3-C4-C5	-6.63	125.28	128.60
26	1H	441	U	C2-N3-C4	-6.63	123.02	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	558	G	C5-C6-O6	6.63	132.58	128.60
26	1H	821	A	C4-C5-N7	-6.63	107.38	110.70
26	1H	1759	A	C2-N3-C4	-6.63	107.28	110.60
26	1H	1786	A	O5'-P-OP2	-6.63	99.73	105.70
26	1H	1980	G	N1-C2-N2	6.63	122.17	116.20
26	14	489	G	C2-N3-C4	-6.63	108.58	111.90
26	14	961	C	OP1-P-OP2	6.63	129.55	119.60
26	14	1341	U	N3-C4-O4	6.63	124.04	119.40
26	1H	2025	C	N3-C4-C5	-6.63	119.25	121.90
26	1H	2304	G	N3-C4-N9	-6.63	122.02	126.00
1	1G	45	U	C2-N1-C1'	-6.63	109.74	117.70
23	2L	5	G	C8-N9-C4	6.63	109.05	106.40
26	14	17	G	N7-C8-N9	6.63	116.42	113.10
26	14	1681	G	OP2-P-O3'	6.63	119.79	105.20
26	14	2456	C	O5'-P-OP2	-6.63	99.73	105.70
26	1H	499	U	O5'-P-OP1	-6.63	99.73	105.70
26	1H	1343	G	N3-C4-C5	-6.63	125.29	128.60
26	1H	1499	C	C4-C5-C6	6.63	120.71	117.40
26	1H	1512	G	C5-C6-N1	-6.63	108.19	111.50
26	1H	1884	A	C2-N3-C4	-6.63	107.29	110.60
26	1H	2593	U	C2-N3-C4	6.63	130.98	127.00
26	1H	2595	G	C5-N7-C8	-6.63	100.99	104.30
1	13	333	G	C5-C6-O6	6.63	132.58	128.60
26	1H	587	C	C6-N1-C2	-6.63	117.65	120.30
26	1H	1607	C	OP1-P-OP2	6.63	129.54	119.60
26	1H	1852	C	N3-C2-O2	6.63	126.54	121.90
26	1H	1912	A	C6-N1-C2	-6.63	114.62	118.60
26	1H	2423	U	C5-C4-O4	-6.63	121.92	125.90
26	1H	2500	U	O5'-P-OP2	-6.63	99.73	105.70
1	1G	270	A	N1-C6-N6	-6.63	114.62	118.60
26	14	140	A	C8-N9-C4	-6.63	103.15	105.80
26	14	801	G	N9-C4-C5	6.63	108.05	105.40
26	14	1608	A	N7-C8-N9	-6.63	110.49	113.80
27	1J	75	G	C4-C5-N7	6.63	113.45	110.80
26	1H	186	G	N1-C6-O6	6.62	123.88	119.90
27	16	103	U	C2-N3-C4	-6.62	123.03	127.00
1	1G	169	C	C6-N1-C2	-6.62	117.65	120.30
26	14	1293	C	N3-C2-O2	-6.62	117.26	121.90
26	14	1834	U	N3-C4-O4	6.62	124.04	119.40
26	14	2506	U	C6-N1-C1'	-6.62	111.92	121.20
27	1J	44	G	N7-C8-N9	-6.62	109.79	113.10
27	1J	82	G	C8-N9-C4	6.62	109.05	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	755	G	N1-C2-N3	6.62	127.87	123.90
1	13	1478	C	C2-N1-C1'	-6.62	111.51	118.80
1	13	1527	C	C6-N1-C2	-6.62	117.65	120.30
26	1H	132	G	N1-C2-N3	6.62	127.87	123.90
26	1H	192	C	OP1-P-OP2	-6.62	109.67	119.60
26	1H	383	U	N3-C4-O4	-6.62	114.76	119.40
26	1H	1029	A	C4-C5-N7	6.62	114.01	110.70
26	1H	1211	U	C5-C4-O4	-6.62	121.92	125.90
26	1H	1826	G	C4-C5-N7	-6.62	108.15	110.80
26	1H	2335	A	OP2-P-O3'	6.62	119.77	105.20
26	1H	2502	G	N7-C8-N9	6.62	116.41	113.10
1	1G	14	U	C4-C5-C6	-6.62	115.73	119.70
1	1G	1262	C	C6-N1-C2	6.62	122.95	120.30
1	1G	1428	A	N1-C2-N3	6.62	132.61	129.30
26	14	2578	G	N1-C2-N3	6.62	127.87	123.90
1	13	64	G	C8-N9-C4	6.62	109.05	106.40
1	13	806	C	C4-C5-C6	-6.62	114.09	117.40
1	13	1406	U	C5-C6-N1	-6.62	119.39	122.70
26	1H	270(G)	C	C6-N1-C2	-6.62	117.65	120.30
26	1H	646	A	OP1-P-O3'	6.62	119.77	105.20
26	1H	1602	U	O5'-P-OP1	-6.62	99.74	105.70
26	1H	2238	G	C8-N9-C4	-6.62	103.75	106.40
26	1H	2619	C	C6-N1-C2	6.62	122.95	120.30
1	1G	1430	C	N1-C2-O2	6.62	122.87	118.90
26	14	126	A	C4-C5-C6	6.62	120.31	117.00
26	14	335	C	C2-N3-C4	6.62	123.21	119.90
26	1H	1272	A	C5-N7-C8	-6.62	100.59	103.90
1	1G	535	A	C6-N1-C2	-6.62	114.63	118.60
26	14	80	G	C6-N1-C2	-6.62	121.13	125.10
26	14	335	C	N3-C2-O2	6.62	126.53	121.90
26	14	666	G	O5'-P-OP1	6.62	118.64	110.70
26	14	717	G	C8-N9-C4	6.62	109.05	106.40
26	14	2509	G	OP1-P-OP2	6.62	129.53	119.60
26	14	2851	A	C5-N7-C8	-6.62	100.59	103.90
1	13	899	C	O5'-P-OP1	6.62	118.64	110.70
26	1H	176	G	C6-C5-N7	-6.62	126.43	130.40
26	1H	275	G	N7-C8-N9	-6.62	109.79	113.10
26	1H	609	A	C2-N3-C4	-6.62	107.29	110.60
26	1H	991	C	OP2-P-O3'	6.62	119.76	105.20
26	1H	1108	U	P-O3'-C3'	6.62	127.64	119.70
26	1H	1247	A	N7-C8-N9	-6.62	110.49	113.80
1	1G	414	A	N1-C6-N6	6.62	122.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1224	G	OP1-P-OP2	-6.62	109.67	119.60
26	14	1314	C	C2-N1-C1'	6.62	126.08	118.80
26	14	2466	C	O5'-P-OP2	-6.62	99.74	105.70
27	1J	75	G	C5-C6-O6	-6.62	124.63	128.60
1	13	738	C	O5'-P-OP2	6.62	118.64	110.70
1	13	897	C	N3-C2-O2	6.62	126.53	121.90
26	1H	1822	G	N1-C6-O6	6.62	123.87	119.90
26	1H	2033	A	C8-N9-C4	-6.62	103.15	105.80
26	14	127	A	N1-C6-N6	6.62	122.57	118.60
34	69	131	LYS	C-N-CD	-6.62	106.04	120.60
26	1H	1544	C	N1-C2-O2	6.62	122.87	118.90
26	1H	2300	G	C8-N9-C4	-6.62	103.75	106.40
26	1H	2425	A	OP1-P-OP2	-6.62	109.68	119.60
27	16	98	G	C2-N3-C4	-6.62	108.59	111.90
1	1G	231	G	N9-C4-C5	6.62	108.05	105.40
1	1G	970	C	N1-C2-N3	-6.62	114.57	119.20
26	14	2618	G	N3-C4-N9	-6.62	122.03	126.00
1	13	541	G	C4-C5-N7	6.61	113.44	110.80
26	1H	699	A	C5-C6-N6	-6.61	118.41	123.70
26	1H	781	A	OP1-P-OP2	6.61	129.52	119.60
26	1H	987	G	C5-C6-O6	6.61	132.57	128.60
26	1H	2019	A	N1-C2-N3	6.61	132.61	129.30
26	1H	2509	G	N9-C4-C5	-6.61	102.75	105.40
27	16	105	G	C5-C6-O6	-6.61	124.63	128.60
26	14	79	G	O5'-P-OP2	-6.61	99.75	105.70
26	14	1474	C	C2-N3-C4	6.61	123.21	119.90
26	14	1616	A	C8-N9-C4	-6.61	103.15	105.80
26	14	2371	G	N1-C2-N2	6.61	122.15	116.20
26	14	2445	G	C8-N9-C4	-6.61	103.75	106.40
1	13	548	G	C8-N9-C4	-6.61	103.75	106.40
26	1H	248	G	C5-C6-O6	-6.61	124.63	128.60
26	14	748	G	C6-N1-C2	-6.61	121.13	125.10
26	14	1648	C	C4-C5-C6	6.61	120.71	117.40
1	13	575	G	C8-N9-C4	6.61	109.04	106.40
1	13	1240	U	C4-C5-C6	-6.61	115.73	119.70
26	1H	575	A	N3-C4-N9	6.61	132.69	127.40
26	1H	973	A	N1-C2-N3	6.61	132.60	129.30
26	1H	1344	G	C4-C5-N7	6.61	113.44	110.80
26	1H	1602	U	O5'-P-OP2	6.61	118.63	110.70
26	1H	1763	G	N3-C2-N2	6.61	124.53	119.90
26	1H	1796	U	C2-N1-C1'	-6.61	109.77	117.70
26	1H	2331	G	C5-C6-N1	-6.61	108.19	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2500	U	C5-C6-N1	-6.61	119.39	122.70
26	14	1027	A	N7-C8-N9	-6.61	110.49	113.80
26	14	1820	U	C6-N1-C2	6.61	124.97	121.00
26	14	2499	C	C5-C4-N4	-6.61	115.57	120.20
1	13	1485	U	N3-C4-C5	-6.61	110.64	114.60
26	1H	333	G	N3-C4-N9	6.61	129.97	126.00
26	14	2061	G	N7-C8-N9	-6.61	109.80	113.10
1	13	363	A	N7-C8-N9	-6.61	110.50	113.80
1	13	862	C	O5'-P-OP1	-6.61	99.75	105.70
1	13	1446	A	O4'-C1'-N9	6.61	113.49	108.20
26	1H	59	U	N1-C2-N3	6.61	118.86	114.90
26	1H	349	G	C8-N9-C4	6.61	109.04	106.40
26	1H	1368	G	C4-N9-C1'	6.61	135.09	126.50
26	1H	2000	G	O5'-P-OP1	6.61	118.63	110.70
26	1H	2073	C	OP2-P-O3'	6.61	119.74	105.20
26	14	962	G	N3-C2-N2	-6.61	115.28	119.90
26	14	2346	A	N3-C4-N9	-6.61	122.11	127.40
26	14	2556	C	N3-C4-N4	6.61	122.63	118.00
26	14	2599	G	N3-C2-N2	-6.61	115.28	119.90
1	13	268	C	OP1-P-OP2	-6.61	109.69	119.60
1	13	583	A	O5'-P-OP2	6.61	118.63	110.70
1	13	1143	G	N1-C6-O6	6.61	123.86	119.90
1	13	1417	G	C2-N3-C4	6.61	115.20	111.90
26	1H	221	A	C2-N3-C4	6.61	113.90	110.60
26	1H	467	G	OP2-P-O3'	6.61	119.73	105.20
26	1H	1145	C	N3-C4-C5	-6.61	119.26	121.90
26	1H	1186	G	N1-C2-N2	6.61	122.14	116.20
26	1H	1685	C	C5-C6-N1	-6.61	117.70	121.00
26	1H	1918	A	C6-N1-C2	6.61	122.56	118.60
26	1H	2567	G	N1-C6-O6	6.61	123.86	119.90
26	1H	2767	C	N3-C4-C5	6.61	124.54	121.90
1	1G	1183	A	N9-C4-C5	-6.61	103.16	105.80
26	14	477	A	C8-N9-C4	6.61	108.44	105.80
26	14	654(V)	A	N1-C2-N3	6.61	132.60	129.30
26	14	757	U	N1-C2-O2	-6.61	118.18	122.80
26	14	1301	A	C4-C5-C6	6.61	120.30	117.00
26	14	1321	A	N1-C6-N6	6.61	122.56	118.60
26	14	1382	G	OP2-P-O3'	6.61	119.73	105.20
26	14	2218	G	C4-C5-N7	-6.61	108.16	110.80
26	14	2502	G	C4-C5-C6	6.61	122.76	118.80
1	13	541	G	C5-N7-C8	-6.60	101.00	104.30
26	1H	315	G	N1-C6-O6	6.60	123.86	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	354	G	N1-C6-O6	6.60	123.86	119.90
26	1H	2036	C	C5-C6-N1	6.60	124.30	121.00
26	1H	2398	U	O5'-P-OP2	-6.60	99.76	105.70
1	1G	413	G	N1-C6-O6	-6.60	115.94	119.90
26	14	417	C	N3-C4-C5	-6.60	119.26	121.90
26	14	451	C	O4'-C1'-N1	6.60	113.48	108.20
26	14	760	G	C4-C5-C6	6.60	122.76	118.80
26	14	973	A	N1-C6-N6	6.60	122.56	118.60
26	14	1551	C	C6-N1-C2	6.60	122.94	120.30
26	14	1892	C	N3-C4-C5	-6.60	119.26	121.90
1	13	1304	G	N1-C6-O6	6.60	123.86	119.90
26	1H	445	C	C4-C5-C6	6.60	120.70	117.40
26	1H	814	C	C2-N3-C4	-6.60	116.60	119.90
26	1H	851	U	OP2-P-O3'	6.60	119.72	105.20
26	1H	1775	U	O4'-C1'-N1	-6.60	102.92	108.20
26	1H	2396	G	O5'-P-OP1	-6.60	99.76	105.70
1	1G	337	C	C4-C5-C6	-6.60	114.10	117.40
26	14	124	G	C5-N7-C8	6.60	107.60	104.30
26	14	1224	G	N9-C4-C5	6.60	108.04	105.40
26	14	1375	C	C4-C5-C6	-6.60	114.10	117.40
26	14	1758	G	O5'-P-OP1	-6.60	99.76	105.70
26	14	1922	G	N1-C6-O6	6.60	123.86	119.90
26	14	2133	G	O4'-C1'-N9	6.60	113.48	108.20
26	14	2707	G	C2-N3-C4	-6.60	108.60	111.90
1	13	749	C	C2-N1-C1'	6.60	126.06	118.80
1	13	755	G	C5-C6-N1	-6.60	108.20	111.50
1	13	1177	G	N7-C8-N9	-6.60	109.80	113.10
26	1H	416	C	C6-N1-C2	6.60	122.94	120.30
26	1H	709	U	OP2-P-O3'	6.60	119.72	105.20
1	1G	602	A	N7-C8-N9	6.60	117.10	113.80
1	1G	830	G	OP1-P-OP2	-6.60	109.70	119.60
26	14	1741	C	O5'-P-OP2	-6.60	99.76	105.70
26	14	1973	G	C8-N9-C4	-6.60	103.76	106.40
26	14	2605	U	C5-C4-O4	6.60	129.86	125.90
1	13	128	G	N3-C2-N2	-6.60	115.28	119.90
1	13	138	G	N3-C4-C5	6.60	131.90	128.60
1	13	1300	G	C6-C5-N7	6.60	134.36	130.40
26	1H	548	A	N1-C2-N3	-6.60	126.00	129.30
26	1H	1975	G	C8-N9-C4	6.60	109.04	106.40
12	3A	12	ARG	NE-CZ-NH1	-6.60	117.00	120.30
26	14	585	G	O4'-C1'-N9	-6.60	102.92	108.20
26	14	959	A	P-O3'-C3'	6.60	127.62	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1796	U	C4-C5-C6	-6.60	115.74	119.70
26	14	2216	G	N1-C6-O6	6.60	123.86	119.90
26	14	2383	G	N1-C2-N2	-6.60	110.26	116.20
26	14	2703	C	N1-C2-O2	6.60	122.86	118.90
1	13	1061	G	N3-C2-N2	-6.60	115.28	119.90
1	13	1357	A	C2-N3-C4	-6.60	107.30	110.60
26	1H	211	A	O5'-P-OP1	6.60	118.62	110.70
26	1H	305	U	N1-C2-O2	-6.60	118.18	122.80
26	1H	496	G	C2-N3-C4	-6.60	108.60	111.90
26	1H	1156	A	C2-N3-C4	-6.60	107.30	110.60
26	1H	1247	A	C4-C5-C6	6.60	120.30	117.00
26	1H	2329	G	O4'-C1'-N9	-6.60	102.92	108.20
26	1H	2439	A	OP1-P-OP2	6.60	129.50	119.60
26	14	503	A	C5-C6-N6	6.60	128.98	123.70
26	14	1237	A	N1-C6-N6	-6.60	114.64	118.60
26	14	1343	G	OP1-P-OP2	6.60	129.50	119.60
26	14	1786	A	N3-C4-C5	6.60	131.42	126.80
26	14	2208	U	C5-C4-O4	6.60	129.86	125.90
27	1J	79	C	N3-C4-C5	-6.60	119.26	121.90
26	1H	452	G	C5-C6-N1	6.60	114.80	111.50
26	1H	605	C	C6-N1-C2	6.60	122.94	120.30
1	1G	1113	C	C5-C6-N1	6.60	124.30	121.00
26	14	2071	A	C6-N1-C2	-6.60	114.64	118.60
26	14	2812	G	C5-C6-N1	-6.60	108.20	111.50
26	1H	579	G	N1-C2-N2	6.59	122.14	116.20
26	1H	598	G	OP1-P-O3'	-6.59	90.69	105.20
26	1H	1360	A	C4-C5-C6	-6.59	113.70	117.00
26	1H	1649	G	N1-C6-O6	6.59	123.86	119.90
26	1H	2488	A	C8-N9-C4	6.59	108.44	105.80
1	1G	43	C	O5'-P-OP2	6.59	118.61	110.70
56	1L	3	G	P-O3'-C3'	6.59	127.61	119.70
25	4L	10	G	N9-C4-C5	-6.59	102.76	105.40
26	14	2361	A	C2-N3-C4	-6.59	107.30	110.60
26	14	2559	C	C6-N1-C2	-6.59	117.66	120.30
26	1H	426	C	OP1-P-O3'	6.59	119.70	105.20
26	1H	1641	A	OP1-P-O3'	6.59	119.70	105.20
26	1H	2562	U	N1-C2-N3	6.59	118.86	114.90
26	14	2628	C	C2-N3-C4	-6.59	116.60	119.90
1	13	326	G	N7-C8-N9	-6.59	109.80	113.10
1	13	939	G	C4-C5-N7	-6.59	108.16	110.80
26	1H	113	G	C5-C6-N1	-6.59	108.20	111.50
26	1H	416	C	C5-C6-N1	-6.59	117.70	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2358	G	C5-N7-C8	6.59	107.60	104.30
26	1H	2869	G	OP2-P-O3'	6.59	119.70	105.20
26	14	1197	G	N3-C4-N9	-6.59	122.05	126.00
26	14	1777	U	C6-N1-C2	-6.59	117.05	121.00
26	14	2850	A	OP1-P-OP2	-6.59	109.71	119.60
26	1H	520	G	N1-C2-N3	6.59	127.85	123.90
26	1H	1133	U	N3-C4-C5	6.59	118.55	114.60
26	1H	1366	A	C5-C6-N6	-6.59	118.43	123.70
27	16	93	C	N3-C4-C5	-6.59	119.26	121.90
31	31	77	ASP	CB-CG-OD1	-6.59	112.37	118.30
26	14	1224	G	C8-N9-C4	-6.59	103.76	106.40
26	14	2022	U	N1-C2-O2	6.59	127.41	122.80
1	13	1290	G	N7-C8-N9	6.59	116.39	113.10
26	1H	380	U	C4-C5-C6	6.59	123.65	119.70
26	1H	1198	U	N1-C2-N3	6.59	118.85	114.90
26	1H	1340	U	O5'-P-OP1	-6.59	99.77	105.70
26	1H	1501	C	OP1-P-OP2	-6.59	109.72	119.60
26	1H	2508	G	O5'-P-OP2	6.59	118.61	110.70
1	1G	392	G	C4-C5-N7	-6.59	108.17	110.80
26	14	198	C	C4-C5-C6	6.59	120.69	117.40
26	14	558	G	N9-C4-C5	-6.59	102.77	105.40
26	14	2017	U	C4-C5-C6	6.59	123.65	119.70
1	13	50	A	N1-C6-N6	-6.59	114.65	118.60
1	13	130	A	N9-C4-C5	-6.59	103.17	105.80
26	1H	270(X)	G	N3-C4-C5	6.59	131.89	128.60
26	1H	491	G	C5-C6-O6	-6.59	124.65	128.60
1	1G	267	C	N1-C2-O2	6.59	122.85	118.90
26	14	536	A	C8-N9-C4	-6.59	103.17	105.80
26	14	1264	G	C5-C6-N1	-6.59	108.21	111.50
26	14	2108	C	C6-N1-C2	-6.59	117.67	120.30
26	14	2505	G	C4-C5-N7	-6.59	108.17	110.80
27	1J	102	G	OP2-P-O3'	6.59	119.69	105.20
1	13	1210	C	N3-C2-O2	6.58	126.51	121.90
1	13	1482	G	OP1-P-OP2	6.58	129.48	119.60
26	1H	829	A	C5-C6-N1	-6.58	114.41	117.70
26	1H	932	G	N3-C4-N9	-6.58	122.05	126.00
26	1H	1231	G	O5'-P-OP2	6.58	118.60	110.70
26	1H	2365	G	N3-C4-N9	6.58	129.95	126.00
26	14	179	G	C4-C5-N7	6.58	113.43	110.80
26	14	248	G	N1-C6-O6	-6.58	115.95	119.90
26	14	2329	G	N3-C4-N9	6.58	129.95	126.00
26	14	2437	U	C5-C4-O4	6.58	129.85	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	413	G	C6-C5-N7	6.58	134.35	130.40
1	13	557	G	N3-C4-C5	-6.58	125.31	128.60
1	13	1059	C	C6-N1-C2	-6.58	117.67	120.30
1	13	1310	G	N1-C6-O6	-6.58	115.95	119.90
26	1H	576	U	OP2-P-O3'	6.58	119.68	105.20
26	1H	1401	G	N1-C2-N3	-6.58	119.95	123.90
26	1H	1931	U	O5'-P-OP1	6.58	118.60	110.70
26	1H	2555	U	N3-C4-C5	-6.58	110.65	114.60
26	14	212	G	C6-N1-C2	-6.58	121.15	125.10
26	14	1283	G	C4-C5-N7	-6.58	108.17	110.80
26	14	1334	G	C5-C6-N1	-6.58	108.21	111.50
26	14	2073	C	OP1-P-OP2	-6.58	109.73	119.60
26	14	2558	C	C5-C4-N4	-6.58	115.59	120.20
26	1H	145	G	N1-C6-O6	6.58	123.85	119.90
26	1H	468	G	N1-C2-N3	6.58	127.85	123.90
26	1H	2046	G	C5-C6-N1	6.58	114.79	111.50
26	14	1837	C	O5'-P-OP1	-6.58	99.78	105.70
26	14	2545	G	N3-C2-N2	-6.58	115.29	119.90
26	1H	1473	G	O5'-P-OP1	6.58	118.59	110.70
26	1H	2313	C	O5'-P-OP2	-6.58	99.78	105.70
26	1H	2334	G	C2-N3-C4	-6.58	108.61	111.90
26	1H	2421	G	C5-N7-C8	6.58	107.59	104.30
26	1H	2543	G	C8-N9-C4	6.58	109.03	106.40
1	1G	361	G	O5'-P-OP2	6.58	118.59	110.70
1	1G	1407	C	C5-C6-N1	6.58	124.29	121.00
26	14	620	G	C8-N9-C4	-6.58	103.77	106.40
26	14	801	G	N1-C6-O6	-6.58	115.95	119.90
26	14	1333	C	C5-C6-N1	6.58	124.29	121.00
26	14	1517	G	OP1-P-O3'	6.58	119.67	105.20
26	14	1595	G	C5-C6-N1	-6.58	108.21	111.50
26	14	2037	G	C4-C5-N7	-6.58	108.17	110.80
26	1H	847	U	N3-C4-O4	-6.58	114.80	119.40
26	1H	1488	G	N1-C2-N3	6.58	127.85	123.90
26	1H	2256	G	C5-N7-C8	-6.58	101.01	104.30
26	14	568	U	N3-C4-C5	-6.58	110.65	114.60
26	14	1308	A	C8-N9-C4	-6.58	103.17	105.80
26	14	1629	U	C5-C6-N1	6.58	125.99	122.70
26	14	2371	G	N3-C2-N2	-6.58	115.30	119.90
26	1H	567	A	C5-C6-N6	-6.58	118.44	123.70
26	1H	811	U	O5'-P-OP1	-6.58	99.78	105.70
1	1G	529	G	C6-C5-N7	-6.58	126.45	130.40
26	14	247	G	N7-C8-N9	-6.58	109.81	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2265	U	C2-N3-C4	6.58	130.94	127.00
1	13	712	A	C6-C5-N7	6.57	136.90	132.30
1	13	1285	A	C5-C6-N1	6.57	120.99	117.70
26	1H	626	U	O5'-P-OP2	-6.57	99.78	105.70
26	1H	681	G	N7-C8-N9	-6.57	109.81	113.10
26	1H	2288	A	N9-C4-C5	-6.57	103.17	105.80
26	1H	2834	G	C5-C6-N1	-6.57	108.21	111.50
26	1H	2844	G	N7-C8-N9	6.57	116.39	113.10
55	Q8	50	LEU	CB-CG-CD2	6.57	122.18	111.00
1	1G	618	C	C5-C4-N4	6.57	124.80	120.20
1	1G	674	G	C5-C6-O6	-6.57	124.66	128.60
1	1G	1350	A	N7-C8-N9	6.57	117.09	113.80
26	14	601	C	C4-C5-C6	6.57	120.69	117.40
26	14	819	A	C8-N9-C4	-6.57	103.17	105.80
26	14	1273	U	N3-C2-O2	6.57	126.80	122.20
26	14	1576	U	O5'-P-OP2	-6.57	99.78	105.70
26	14	2427	C	N3-C2-O2	6.57	126.50	121.90
1	1G	308	C	N3-C4-C5	-6.57	119.27	121.90
26	14	206	U	N3-C2-O2	-6.57	117.60	122.20
26	14	766	C	C2-N3-C4	-6.57	116.61	119.90
26	14	1953	A	OP1-P-OP2	-6.57	109.74	119.60
26	14	2235	G	N3-C4-C5	-6.57	125.31	128.60
1	13	562	C	C6-N1-C2	-6.57	117.67	120.30
26	1H	659	C	OP2-P-O3'	6.57	119.66	105.20
26	1H	911	A	O5'-P-OP2	6.57	118.58	110.70
26	1H	1904	G	C6-C5-N7	6.57	134.34	130.40
26	1H	2445	G	N7-C8-N9	6.57	116.39	113.10
1	1G	197	A	P-O3'-C3'	6.57	127.58	119.70
26	14	1470	G	N3-C2-N2	-6.57	115.30	119.90
26	14	1700	A	N1-C2-N3	6.57	132.59	129.30
26	1H	693	C	OP2-P-O3'	6.57	119.65	105.20
26	1H	1960	A	N1-C2-N3	6.57	132.59	129.30
26	14	835	A	C5-C6-N6	-6.57	118.44	123.70
26	14	2057	A	C5-C6-N6	-6.57	118.44	123.70
1	13	59	A	C5-C6-N6	-6.57	118.45	123.70
1	13	1192	C	C6-N1-C2	-6.57	117.67	120.30
26	1H	1694	C	N3-C2-O2	6.57	126.50	121.90
26	1H	2047	U	C5-C4-O4	-6.57	121.96	125.90
27	16	67	G	C4-C5-N7	6.57	113.43	110.80
1	1G	1275	A	C8-N9-C4	-6.57	103.17	105.80
1	1G	1399	C	C2-N3-C4	6.57	123.18	119.90
26	14	2053	G	C6-C5-N7	6.57	134.34	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2243	U	N1-C2-O2	-6.57	118.20	122.80
1	13	968	A	C8-N9-C4	6.57	108.43	105.80
26	1H	132	G	N1-C6-O6	6.57	123.84	119.90
26	1H	1820	U	C2-N3-C4	-6.57	123.06	127.00
26	1H	2021	C	O5'-P-OP1	-6.57	99.79	105.70
26	1H	2681	C	N1-C2-N3	6.57	123.80	119.20
1	1G	1024	G	N3-C4-C5	-6.57	125.32	128.60
26	14	1643	G	C5-C6-N1	6.57	114.78	111.50
26	14	1896	G	C2-N3-C4	6.57	115.18	111.90
26	14	2375	G	C2-N3-C4	6.57	115.18	111.90
26	14	2832	U	C6-N1-C2	6.57	124.94	121.00
26	1H	1795	C	O5'-P-OP2	-6.56	99.79	105.70
26	14	569	U	C2-N3-C4	-6.56	123.06	127.00
26	14	2292	C	C2-N3-C4	-6.56	116.62	119.90
26	14	2610	C	C5-C4-N4	-6.56	115.61	120.20
1	13	246	A	N9-C4-C5	-6.56	103.17	105.80
1	13	1258	G	C2-N3-C4	6.56	115.18	111.90
26	1H	69	C	C5-C4-N4	6.56	124.79	120.20
26	1H	178	G	O5'-P-OP1	-6.56	99.79	105.70
26	1H	465	G	N1-C6-O6	6.56	123.84	119.90
26	1H	636	G	N1-C2-N3	-6.56	119.96	123.90
26	1H	1304	C	C6-N1-C2	6.56	122.92	120.30
1	1G	385	C	C5-C6-N1	-6.56	117.72	121.00
26	14	1125	G	N1-C2-N3	6.56	127.84	123.90
26	14	2289	G	C6-C5-N7	6.56	134.34	130.40
26	14	2381	C	C6-N1-C1'	6.56	128.68	120.80
1	13	335	C	C6-N1-C2	-6.56	117.67	120.30
1	13	417	C	N3-C2-O2	-6.56	117.31	121.90
1	13	428	G	N9-C4-C5	-6.56	102.78	105.40
26	1H	271	G	C5-C6-O6	-6.56	124.66	128.60
26	1H	1966	A	N1-C6-N6	-6.56	114.66	118.60
1	13	1408	A	N1-C2-N3	6.56	132.58	129.30
26	1H	779	U	C6-N1-C2	6.56	124.94	121.00
1	1G	1252	A	N1-C6-N6	-6.56	114.66	118.60
26	14	706	A	C5-C6-N1	-6.56	114.42	117.70
26	14	1121	C	O5'-P-OP1	6.56	118.57	110.70
26	14	2376	A	O5'-P-OP2	6.56	118.57	110.70
1	13	598	U	C5-C6-N1	6.56	125.98	122.70
1	13	1435	G	C4-C5-C6	6.56	122.73	118.80
1	13	1484	C	N1-C2-O2	-6.56	114.97	118.90
26	1H	27	G	C2-N3-C4	-6.56	108.62	111.90
26	1H	342	G	C2-N3-C4	6.56	115.18	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	910	A	C8-N9-C4	-6.56	103.18	105.80
26	1H	988	A	P-O3'-C3'	6.56	127.57	119.70
26	1H	1009	A	OP1-P-O3'	6.56	119.62	105.20
26	1H	1705	G	O5'-P-OP1	6.56	118.57	110.70
26	1H	2353	G	O5'-P-OP1	-6.56	99.80	105.70
26	1H	2867	G	N9-C4-C5	6.56	108.02	105.40
1	1G	386	C	OP1-P-OP2	6.56	129.44	119.60
1	1G	664	G	N3-C4-C5	6.56	131.88	128.60
26	14	1022	G	C4-C5-N7	-6.56	108.18	110.80
26	14	1891	G	C5-C6-N1	-6.56	108.22	111.50
26	14	1952	A	C6-N1-C2	-6.56	114.67	118.60
26	14	2037	G	C5-C6-O6	6.56	132.53	128.60
26	14	2764	A	N7-C8-N9	-6.56	110.52	113.80
1	13	1051	C	N3-C4-N4	6.56	122.59	118.00
26	1H	823	G	C6-N1-C2	-6.56	121.17	125.10
26	14	33	U	C6-N1-C2	6.56	124.93	121.00
26	14	409	C	N3-C4-C5	6.56	124.52	121.90
26	14	1323	U	OP1-P-O3'	6.56	119.62	105.20
1	13	533	A	C8-N9-C4	-6.55	103.18	105.80
25	4K	14	A	OP1-P-OP2	6.55	129.43	119.60
26	1H	789	A	N1-C6-N6	6.55	122.53	118.60
26	1H	879	G	C4-C5-N7	6.55	113.42	110.80
26	1H	1373	A	C4-C5-C6	-6.55	113.72	117.00
26	1H	1928	A	C2-N3-C4	6.55	113.88	110.60
1	1G	300	A	O5'-P-OP1	-6.55	99.80	105.70
26	14	141(A)	C	C6-N1-C2	-6.55	117.68	120.30
26	14	399	G	N1-C6-O6	-6.55	115.97	119.90
26	14	1142	U	C6-N1-C1'	-6.55	112.02	121.20
26	14	1379	A	OP1-P-O3'	6.55	119.62	105.20
26	14	1490	A	N1-C6-N6	6.55	122.53	118.60
26	14	2274	A	O5'-P-OP1	6.55	118.57	110.70
26	14	2824	C	N3-C2-O2	6.55	126.49	121.90
27	1J	20	C	C5-C4-N4	-6.55	115.61	120.20
26	1H	1798	U	C5-C6-N1	-6.55	119.42	122.70
26	14	598	G	OP1-P-OP2	6.55	129.43	119.60
26	14	2065	C	O5'-P-OP1	6.55	118.56	110.70
1	13	1431	C	N3-C2-O2	6.55	126.49	121.90
26	1H	213	A	N9-C4-C5	-6.55	103.18	105.80
26	1H	778	G	C6-N1-C2	6.55	129.03	125.10
26	1H	831	G	N1-C2-N2	-6.55	110.30	116.20
26	1H	1278	A	O5'-P-OP2	-6.55	99.80	105.70
26	1H	1694	C	OP2-P-O3'	6.55	119.61	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2532	G	C5-C6-O6	-6.55	124.67	128.60
26	1H	2880	C	OP1-P-OP2	6.55	129.43	119.60
26	14	573	G	C8-N9-C4	-6.55	103.78	106.40
26	14	2259	G	N3-C2-N2	-6.55	115.31	119.90
26	1H	126	A	O5'-P-OP2	-6.55	99.81	105.70
26	1H	649	G	C5-N7-C8	-6.55	101.03	104.30
26	1H	811	U	N1-C2-N3	6.55	118.83	114.90
26	1H	1799	G	C2-N3-C4	6.55	115.17	111.90
26	1H	2331	G	OP2-P-O3'	6.55	119.61	105.20
26	14	2003	G	C5-C6-N1	6.55	114.78	111.50
26	14	2445	G	N1-C2-N3	6.55	127.83	123.90
26	14	2567	G	N9-C4-C5	-6.55	102.78	105.40
27	1J	89	G	N1-C2-N3	-6.55	119.97	123.90
1	1G	631	G	N3-C4-C5	6.55	131.87	128.60
26	14	53	A	C6-N1-C2	-6.55	114.67	118.60
26	14	146	G	C5-C6-O6	-6.55	124.67	128.60
26	14	1574	C	OP2-P-O3'	6.55	119.61	105.20
26	14	1645	G	C5-C6-N1	6.55	114.77	111.50
26	14	2494	G	OP1-P-OP2	6.55	129.42	119.60
1	13	1301	U	C6-N1-C1'	-6.55	112.04	121.20
26	1H	242	G	C4-C5-C6	6.55	122.73	118.80
26	1H	651	G	N9-C4-C5	6.55	108.02	105.40
26	1H	1224	G	C6-N1-C2	6.55	129.03	125.10
26	1H	1348	G	N9-C1'-C2'	-6.55	104.80	112.00
1	1G	1420	C	C6-N1-C2	-6.55	117.68	120.30
1	1G	1495	U	C4-C5-C6	6.55	123.63	119.70
26	14	95	G	N1-C6-O6	6.55	123.83	119.90
26	14	2003	G	O5'-P-OP1	-6.55	99.81	105.70
26	14	2199	A	C4-C5-N7	6.55	113.97	110.70
26	14	2766	G	N7-C8-N9	6.55	116.37	113.10
26	1H	1656	C	N3-C4-C5	-6.54	119.28	121.90
27	16	48	A	C4-C5-C6	-6.54	113.73	117.00
1	1G	916	G	O5'-P-OP1	-6.54	99.81	105.70
26	14	1480	G	N3-C2-N2	-6.54	115.32	119.90
26	14	2411	A	N7-C8-N9	6.54	117.07	113.80
26	14	2520	C	C5-C6-N1	-6.54	117.73	121.00
1	13	894	G	O5'-P-OP2	-6.54	99.81	105.70
1	13	1486	G	N3-C2-N2	-6.54	115.32	119.90
26	1H	41	C	N3-C4-C5	6.54	124.52	121.90
26	1H	270	A	N1-C2-N3	6.54	132.57	129.30
26	1H	1329	U	C6-N1-C2	-6.54	117.07	121.00
26	14	113	G	N9-C4-C5	-6.54	102.78	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	254	G	C5-C6-O6	6.54	132.53	128.60
26	14	578	A	O5'-P-OP2	-6.54	99.81	105.70
1	13	916	G	O5'-P-OP1	-6.54	99.81	105.70
1	13	1386	G	N3-C2-N2	-6.54	115.32	119.90
26	1H	1763	G	N1-C6-O6	-6.54	115.97	119.90
26	1H	1919	A	O4'-C1'-N9	-6.54	102.97	108.20
26	1H	2062	A	O5'-P-OP1	-6.54	99.81	105.70
26	1H	2327	A	C4-C5-C6	-6.54	113.73	117.00
26	1H	2572	A	N1-C2-N3	6.54	132.57	129.30
26	1H	2640	G	C2-N3-C4	-6.54	108.63	111.90
26	1H	2732	G	C2-N3-C4	6.54	115.17	111.90
27	16	19	G	N3-C4-C5	6.54	131.87	128.60
26	14	236	C	C2-N3-C4	-6.54	116.63	119.90
26	14	389	G	N3-C2-N2	6.54	124.48	119.90
26	14	521	G	N9-C4-C5	-6.54	102.78	105.40
26	14	534	U	C5-C4-O4	6.54	129.82	125.90
26	14	679	C	C5-C6-N1	-6.54	117.73	121.00
26	14	932	G	N9-C4-C5	6.54	108.02	105.40
26	14	2561	A	C6-N1-C2	-6.54	114.68	118.60
26	14	2792	G	C8-N9-C4	-6.54	103.78	106.40
27	1J	75	G	C8-N9-C4	6.54	109.02	106.40
26	1H	1616	A	C4-C5-C6	6.54	120.27	117.00
26	1H	1826	G	C5-C6-O6	6.54	132.52	128.60
26	1H	2371	G	N7-C8-N9	-6.54	109.83	113.10
1	1G	1416	G	N3-C4-C5	6.54	131.87	128.60
26	14	2086	U	OP2-P-O3'	6.54	119.59	105.20
1	13	1153	C	C5-C6-N1	-6.54	117.73	121.00
26	1H	393	C	N3-C4-C5	6.54	124.52	121.90
26	1H	540	G	N3-C4-N9	-6.54	122.08	126.00
26	1H	841	A	C2-N3-C4	-6.54	107.33	110.60
26	1H	1221	C	N3-C4-N4	-6.54	113.42	118.00
26	1H	1429	G	N1-C6-O6	-6.54	115.98	119.90
26	1H	1630	G	C6-N1-C2	-6.54	121.18	125.10
26	1H	1992	G	O4'-C1'-N9	-6.54	102.97	108.20
26	1H	2340	G	C8-N9-C4	6.54	109.02	106.40
26	1H	2699	C	C5-C4-N4	-6.54	115.62	120.20
1	1G	241	C	C2-N3-C4	-6.54	116.63	119.90
1	1G	1322	C	C2-N1-C1'	6.54	125.99	118.80
26	14	180	G	C2-N3-C4	-6.54	108.63	111.90
26	14	1367	A	C5-C6-N6	-6.54	118.47	123.70
26	14	1705	G	N7-C8-N9	-6.54	109.83	113.10
26	14	2330	G	N3-C2-N2	6.54	124.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	399	G	C8-N9-C4	6.54	109.02	106.40
26	1H	857	C	C2-N3-C4	-6.54	116.63	119.90
26	14	473	G	C2-N3-C4	-6.54	108.63	111.90
1	13	23	C	C5-C4-N4	-6.54	115.62	120.20
22	1K	74	C	C2-N1-C1'	6.54	125.99	118.80
23	2K	10	G	C5-C6-O6	-6.54	124.68	128.60
26	1H	414	C	C5-C6-N1	-6.54	117.73	121.00
26	1H	532	A	N1-C6-N6	6.54	122.52	118.60
26	1H	534	U	C4-C5-C6	6.54	123.62	119.70
26	1H	695	G	C5-C6-N1	-6.54	108.23	111.50
26	1H	1510	A	C2-N3-C4	6.54	113.87	110.60
26	1H	2355	C	C2-N1-C1'	6.54	125.99	118.80
26	1H	2409	G	C5-C6-N1	6.54	114.77	111.50
26	1H	2451	A	N1-C2-N3	6.54	132.57	129.30
26	14	19	C	N3-C2-O2	6.54	126.47	121.90
26	14	642	G	C4-C5-N7	-6.54	108.19	110.80
26	14	752	A	OP1-P-O3'	6.54	119.58	105.20
26	14	919	G	C4-C5-N7	-6.54	108.19	110.80
26	14	1228	G	C5-C6-O6	6.54	132.52	128.60
26	14	1631	A	C5-C6-N1	-6.54	114.43	117.70
26	14	1796	U	N1-C2-N3	-6.54	110.98	114.90
26	14	2703	C	N3-C2-O2	-6.54	117.33	121.90
1	13	791	G	C6-N1-C2	-6.53	121.18	125.10
1	13	1215	G	N3-C2-N2	-6.53	115.33	119.90
26	1H	798	G	OP1-P-OP2	-6.53	109.80	119.60
26	1H	801	G	C4-N9-C1'	-6.53	118.01	126.50
26	1H	2240	C	C5-C4-N4	-6.53	115.63	120.20
26	1H	2447	G	N1-C2-N2	6.53	122.08	116.20
1	1G	362	G	C5-C6-O6	6.53	132.52	128.60
1	1G	611	A	N7-C8-N9	-6.53	110.53	113.80
26	14	1763	G	OP1-P-OP2	-6.53	109.80	119.60
26	14	1994	C	N3-C4-N4	-6.53	113.43	118.00
26	14	2460	U	O5'-P-OP1	-6.53	99.82	105.70
1	13	1299	A	C4-C5-N7	6.53	113.97	110.70
23	2K	27	G	C8-N9-C4	6.53	109.01	106.40
26	1H	1159	U	O5'-P-OP2	-6.53	99.82	105.70
26	1H	2647	U	N1-C2-O2	6.53	127.37	122.80
26	1H	2877	G	N3-C4-N9	-6.53	122.08	126.00
26	14	1888	G	C2-N3-C4	6.53	115.17	111.90
1	13	701	C	N3-C2-O2	-6.53	117.33	121.90
26	1H	473	G	C2-N3-C4	-6.53	108.64	111.90
26	1H	522	G	OP1-P-OP2	-6.53	109.80	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	303	A	N1-C6-N6	6.53	122.52	118.60
1	1G	508	C	N1-C2-O2	6.53	122.82	118.90
1	1G	1206	G	C5-C6-N1	6.53	114.77	111.50
26	14	1345	C	N1-C2-O2	-6.53	114.98	118.90
26	14	2007	C	C4-C5-C6	6.53	120.67	117.40
26	14	2286	A	C5-N7-C8	-6.53	100.64	103.90
26	14	2540	C	C6-N1-C2	6.53	122.91	120.30
26	14	2717	G	N1-C6-O6	6.53	123.82	119.90
27	1J	115	G	N3-C4-C5	6.53	131.87	128.60
26	1H	1650	G	C5-C6-N1	-6.53	108.24	111.50
26	1H	2350	C	O4'-C1'-N1	6.53	113.42	108.20
26	14	833	U	N3-C2-O2	6.53	126.77	122.20
1	13	146	G	N1-C6-O6	6.53	123.82	119.90
1	13	785	G	N3-C2-N2	-6.53	115.33	119.90
1	13	1294	G	O5'-P-OP1	-6.53	99.83	105.70
1	13	1304	G	C4-C5-C6	6.53	122.72	118.80
26	1H	28	A	C8-N9-C4	6.53	108.41	105.80
26	1H	207	A	N7-C8-N9	-6.53	110.54	113.80
26	1H	770	G	C4-C5-N7	6.53	113.41	110.80
26	1H	1546	C	N3-C4-N4	6.53	122.57	118.00
26	1H	1571	A	C6-N1-C2	-6.53	114.68	118.60
26	1H	2430	A	C8-N9-C1'	6.53	139.45	127.70
26	1H	2550	G	C5-C6-N1	6.53	114.76	111.50
26	1H	2691	C	OP1-P-O3'	-6.53	90.84	105.20
27	16	38	C	O5'-P-OP2	-6.53	99.83	105.70
27	16	106	G	C4-C5-N7	6.53	113.41	110.80
1	1G	121	C	N3-C4-C5	-6.53	119.29	121.90
1	1G	222	U	N3-C2-O2	-6.53	117.63	122.20
1	1G	486	U	C2-N1-C1'	6.53	125.53	117.70
1	1G	977	A	N1-C6-N6	-6.53	114.68	118.60
26	14	71	A	OP1-P-OP2	-6.53	109.81	119.60
26	14	1027	A	N9-C4-C5	-6.53	103.19	105.80
26	14	2067	G	OP1-P-O3'	6.53	119.56	105.20
26	14	2266	A	C5-C6-N1	6.53	120.96	117.70
1	13	190	G	C5-C6-N1	6.53	114.76	111.50
1	13	307	C	C5-C6-N1	-6.53	117.74	121.00
26	1H	1196	C	N1-C2-O2	-6.53	114.98	118.90
26	1H	1968	G	C8-N9-C4	6.53	109.01	106.40
26	14	307	G	C5-C6-O6	-6.53	124.69	128.60
26	14	1480	G	N1-C6-O6	6.53	123.81	119.90
26	14	1544	C	O5'-P-OP1	6.53	118.53	110.70
26	14	1767	C	C6-N1-C2	-6.53	117.69	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	227	G	N7-C8-N9	-6.52	109.84	113.10
26	1H	1677	A	C2-N3-C4	-6.52	107.34	110.60
26	1H	1787	A	N1-C6-N6	-6.52	114.69	118.60
26	1H	1830	C	OP1-P-O3'	6.52	119.55	105.20
26	1H	2421	G	C2-N3-C4	6.52	115.16	111.90
1	1G	1233	G	O5'-P-OP2	-6.52	99.83	105.70
26	14	398	G	N1-C2-N3	6.52	127.81	123.90
26	14	1015	G	N9-C4-C5	6.52	108.01	105.40
26	14	1309	G	N1-C6-O6	6.52	123.81	119.90
27	1J	100	G	C4-C5-N7	-6.52	108.19	110.80
1	13	129(A)	G	C8-N9-C4	-6.52	103.79	106.40
1	13	191(F)	U	C6-N1-C2	-6.52	117.09	121.00
1	13	963	G	C8-N9-C4	6.52	109.01	106.40
26	1H	308	G	N3-C4-N9	6.52	129.91	126.00
26	1H	993	G	C2-N3-C4	6.52	115.16	111.90
26	1H	1597	A	O4'-C1'-N9	6.52	113.42	108.20
26	1H	1977	A	C2-N3-C4	-6.52	107.34	110.60
26	1H	2019	A	C5-N7-C8	-6.52	100.64	103.90
26	14	987	G	N1-C6-O6	-6.52	115.99	119.90
26	14	1298	C	C6-N1-C2	-6.52	117.69	120.30
26	14	1601	G	O5'-P-OP1	6.52	118.53	110.70
26	1H	2233	U	C2-N3-C4	-6.52	123.09	127.00
26	14	180	G	N1-C6-O6	6.52	123.81	119.90
26	14	217	G	N1-C2-N3	6.52	127.81	123.90
25	4K	25	A	C6-N1-C2	6.52	122.51	118.60
26	1H	444	C	N3-C2-O2	-6.52	117.34	121.90
26	1H	2044	C	C5-C4-N4	-6.52	115.64	120.20
26	1H	2195	C	C4-C5-C6	-6.52	114.14	117.40
26	14	1187	G	C5-C6-N1	-6.52	108.24	111.50
26	14	2250	G	C6-C5-N7	6.52	134.31	130.40
1	13	476	G	C2-N3-C4	6.52	115.16	111.90
1	13	785	G	C5-C6-N1	-6.52	108.24	111.50
26	1H	1141	U	OP1-P-OP2	-6.52	109.83	119.60
26	1H	1671	U	N3-C4-C5	-6.52	110.69	114.60
26	1H	1942	C	OP2-P-O3'	6.52	119.54	105.20
26	1H	2550	G	C4-C5-N7	6.52	113.41	110.80
27	16	81	G	N1-C6-O6	6.52	123.81	119.90
1	1G	326	G	C8-N9-C1'	-6.52	118.53	127.00
1	1G	337	C	C5-C4-N4	-6.52	115.64	120.20
26	14	85	G	N7-C8-N9	-6.52	109.84	113.10
26	14	808	G	C2-N3-C4	-6.52	108.64	111.90
26	14	1489	U	O4'-C1'-N1	6.52	113.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1625	C	O5'-P-OP2	-6.52	99.83	105.70
26	14	1682	G	N1-C6-O6	6.52	123.81	119.90
26	14	1766	U	C5-C4-O4	-6.52	121.99	125.90
26	14	2522	U	O5'-P-OP2	-6.52	99.83	105.70
26	1H	422	A	N1-C6-N6	6.52	122.51	118.60
1	1G	521	G	N7-C8-N9	-6.52	109.84	113.10
1	1G	770	C	C5-C6-N1	-6.52	117.74	121.00
26	14	298	G	C8-N9-C4	-6.52	103.79	106.40
26	14	816	C	O5'-P-OP1	6.52	118.52	110.70
1	13	399	G	N3-C4-C5	6.51	131.86	128.60
1	13	958	A	O5'-P-OP2	-6.51	99.84	105.70
1	13	1476	G	N1-C6-O6	-6.51	115.99	119.90
26	1H	215	G	N9-C4-C5	-6.51	102.79	105.40
26	1H	1281	G	OP1-P-OP2	-6.51	109.83	119.60
26	1H	1289	C	O5'-P-OP1	-6.51	99.84	105.70
26	1H	1669	A	C5-C6-N1	6.51	120.96	117.70
26	1H	2360	A	C4-C5-C6	6.51	120.26	117.00
1	1G	1234	C	N1-C2-O2	6.51	122.81	118.90
57	3L	44	U	N3-C4-O4	6.51	123.96	119.40
26	14	270(E)	G	C8-N9-C4	-6.51	103.79	106.40
26	14	401	A	N9-C4-C5	6.51	108.41	105.80
26	14	765	G	C4-N9-C1'	6.51	134.97	126.50
26	14	1422	G	C5-C6-N1	-6.51	108.24	111.50
26	14	1619	G	OP1-P-O3'	6.51	119.53	105.20
26	14	2318	G	C4-C5-N7	6.51	113.41	110.80
26	1H	534	U	N3-C4-C5	-6.51	110.69	114.60
26	1H	693	C	OP1-P-OP2	6.51	129.37	119.60
26	1H	861	A	N1-C2-N3	6.51	132.56	129.30
26	1H	1164	G	C2-N3-C4	6.51	115.16	111.90
1	13	1214	C	N3-C2-O2	6.51	126.46	121.90
26	1H	284	U	O5'-P-OP1	-6.51	99.84	105.70
26	1H	2434	A	C8-N9-C4	6.51	108.41	105.80
26	1H	2646	C	C6-N1-C2	6.51	122.91	120.30
46	G8	85	VAL	CG1-CB-CG2	-6.51	100.48	110.90
26	14	603	A	C5-N7-C8	-6.51	100.64	103.90
26	14	1313	U	C6-N1-C2	-6.51	117.09	121.00
26	14	1534	G	P-O3'-C3'	6.51	127.52	119.70
26	14	2546	U	C2-N3-C4	6.51	130.91	127.00
26	1H	1022	G	N1-C6-O6	-6.51	116.00	119.90
26	1H	1259	G	OP2-P-O3'	6.51	119.52	105.20
26	1H	2693	A	N7-C8-N9	-6.51	110.55	113.80
26	1H	2712(A)	A	N1-C6-N6	6.51	122.51	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
44	E8	19	LEU	CB-CG-CD2	-6.51	99.93	111.00
1	1G	242	C	C5-C4-N4	-6.51	115.64	120.20
26	14	328	U	C4-C5-C6	6.51	123.61	119.70
26	14	376	C	N3-C4-N4	6.51	122.56	118.00
26	14	1703	G	C5-C6-O6	-6.51	124.69	128.60
26	14	1843	C	C2-N3-C4	-6.51	116.64	119.90
26	1H	529	A	C6-C5-N7	-6.51	127.75	132.30
26	1H	701	G	N1-C6-O6	-6.51	116.00	119.90
26	1H	1861	G	N3-C2-N2	-6.51	115.34	119.90
27	16	76	G	C5-C6-O6	6.51	132.50	128.60
1	1G	29	G	C8-N9-C4	-6.51	103.80	106.40
26	14	2389	G	N7-C8-N9	6.51	116.35	113.10
26	14	2643	G	C2-N3-C4	-6.51	108.65	111.90
1	13	325	A	C5-N7-C8	-6.51	100.65	103.90
1	13	1357	A	N7-C8-N9	6.51	117.05	113.80
1	13	1467	G	N3-C2-N2	-6.51	115.34	119.90
26	1H	229	A	O4'-C1'-N9	6.51	113.41	108.20
26	1H	632	A	C6-C5-N7	-6.51	127.75	132.30
26	1H	681	G	C5-C6-O6	-6.51	124.70	128.60
26	1H	1385	G	C5-C6-O6	6.51	132.50	128.60
26	1H	1492	G	C2-N3-C4	-6.51	108.65	111.90
26	1H	1752	C	OP1-P-OP2	6.51	129.36	119.60
26	1H	1886	C	N3-C2-O2	6.51	126.45	121.90
26	14	748	G	C2-N3-C4	6.51	115.15	111.90
26	14	1642	G	C4-C5-N7	6.51	113.40	110.80
26	14	2589	A	C5-C6-N1	-6.51	114.45	117.70
26	14	2607	G	C8-N9-C1'	-6.51	118.54	127.00
26	14	2826	A	N1-C2-N3	6.51	132.55	129.30
26	1H	622	G	C5-C6-O6	6.50	132.50	128.60
26	1H	1637	A	C5-C6-N1	6.50	120.95	117.70
26	14	2252	G	C2-N3-C4	-6.50	108.65	111.90
1	13	398	C	N3-C4-N4	-6.50	113.45	118.00
1	13	668	G	C5-C6-O6	-6.50	124.70	128.60
1	13	817	C	C4-C5-C6	6.50	120.65	117.40
1	13	1287	A	C5-C6-N1	-6.50	114.45	117.70
26	1H	70	G	OP1-P-O3'	6.50	119.51	105.20
26	1H	2431	U	N3-C4-O4	6.50	123.95	119.40
1	1G	105	G	C8-N9-C1'	-6.50	118.55	127.00
1	1G	1495	U	N1-C2-O2	-6.50	118.25	122.80
26	14	195	A	C6-C5-N7	-6.50	127.75	132.30
26	14	202	U	N3-C4-C5	-6.50	110.70	114.60
26	14	692	C	N3-C2-O2	6.50	126.45	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	57	G	C5-N7-C8	6.50	107.55	104.30
1	13	391	G	C5-C6-O6	6.50	132.50	128.60
24	3K	39	U	C6-N1-C2	-6.50	117.10	121.00
26	1H	906	G	N1-C6-O6	6.50	123.80	119.90
26	1H	1408	C	C4-C5-C6	6.50	120.65	117.40
26	1H	1554	A	OP1-P-O3'	6.50	119.50	105.20
26	1H	2822	G	C5-N7-C8	-6.50	101.05	104.30
57	3L	31	A	N7-C8-N9	6.50	117.05	113.80
26	14	270(X)	G	C2-N3-C4	-6.50	108.65	111.90
26	14	1356	G	O5'-P-OP2	6.50	118.50	110.70
1	13	843	U	C5-C6-N1	6.50	125.95	122.70
1	13	1322	C	C6-N1-C2	6.50	122.90	120.30
26	1H	1980	G	C6-C5-N7	6.50	134.30	130.40
26	1H	2554	U	O5'-P-OP1	-6.50	99.85	105.70
26	14	1303	G	N1-C6-O6	-6.50	116.00	119.90
26	14	1639	U	N3-C2-O2	-6.50	117.65	122.20
26	14	2526	G	N3-C2-N2	-6.50	115.35	119.90
1	13	181	G	C4-C5-N7	-6.50	108.20	110.80
27	16	14	U	N3-C4-O4	-6.50	114.85	119.40
1	1G	299	G	C5-C6-O6	6.50	132.50	128.60
26	14	641	C	N3-C2-O2	6.50	126.45	121.90
26	14	709	U	O5'-P-OP1	6.50	118.50	110.70
26	14	937	U	N3-C4-O4	6.50	123.95	119.40
26	14	1336	A	N3-C4-C5	-6.50	122.25	126.80
26	14	2031	A	C5-C6-N1	6.50	120.95	117.70
26	14	2501	C	N3-C4-C5	6.50	124.50	121.90
26	14	2818	G	C2-N3-C4	-6.50	108.65	111.90
26	1H	206	U	N3-C4-C5	6.50	118.50	114.60
26	1H	728	G	C4-C5-N7	-6.50	108.20	110.80
26	1H	1316	U	N1-C2-O2	6.50	127.35	122.80
26	1H	2281	C	C5-C6-N1	-6.50	117.75	121.00
26	1H	2330	G	OP2-P-O3'	6.50	119.49	105.20
1	1G	310	G	N1-C6-O6	-6.50	116.00	119.90
1	1G	584	G	C4-C5-N7	6.50	113.40	110.80
26	14	195	A	OP2-P-O3'	6.50	119.49	105.20
26	14	1394	U	OP1-P-OP2	-6.50	109.86	119.60
26	14	1543	A	C5-N7-C8	6.50	107.15	103.90
26	14	1652	A	N1-C6-N6	-6.50	114.70	118.60
26	14	2573	C	C5-C4-N4	-6.50	115.65	120.20
26	14	2709	G	C8-N9-C4	6.50	109.00	106.40
26	14	2842	G	C5-N7-C8	-6.50	101.05	104.30
26	1H	630	G	N1-C6-O6	6.50	123.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	779	U	O5'-P-OP2	6.50	118.49	110.70
1	1G	432	A	O5'-P-OP2	6.50	118.49	110.70
1	1G	678	U	OP1-P-OP2	6.50	129.34	119.60
1	1G	742	G	C4-C5-N7	6.50	113.40	110.80
1	1G	783	C	C2-N3-C4	6.50	123.15	119.90
26	14	1316	U	C5-C4-O4	6.50	129.80	125.90
26	14	2713	A	C5-C6-N1	-6.50	114.45	117.70
26	1H	435	C	OP1-P-O3'	6.49	119.49	105.20
26	14	249	C	C5-C6-N1	6.49	124.25	121.00
26	14	546	C	C5-C6-N1	6.49	124.25	121.00
27	1J	102	G	OP1-P-O3'	-6.49	90.91	105.20
26	1H	1253	A	C4-C5-C6	-6.49	113.75	117.00
26	1H	2323	G	C8-N9-C4	6.49	109.00	106.40
26	14	391	G	C6-C5-N7	-6.49	126.50	130.40
26	14	412	A	O5'-P-OP1	-6.49	99.86	105.70
1	13	47	C	C5-C6-N1	-6.49	117.75	121.00
1	13	272	C	N3-C4-C5	-6.49	119.30	121.90
26	1H	457	A	N9-C4-C5	-6.49	103.20	105.80
26	1H	2245	U	OP1-P-O3'	6.49	119.48	105.20
26	14	1008	C	N3-C4-C5	-6.49	119.30	121.90
26	14	2274	A	C5-C6-N1	-6.49	114.45	117.70
26	14	2827	C	OP1-P-OP2	6.49	129.34	119.60
24	3K	10	G	C6-C5-N7	6.49	134.29	130.40
26	1H	49	A	N7-C8-N9	-6.49	110.56	113.80
26	1H	1904	G	C2-N3-C4	6.49	115.14	111.90
26	14	126	A	C5-C6-N1	-6.49	114.46	117.70
26	14	426	C	N1-C2-O2	6.49	122.79	118.90
26	14	529	A	C6-C5-N7	-6.49	127.76	132.30
26	14	664	C	C5-C4-N4	6.49	124.74	120.20
26	14	1571	A	C6-N1-C2	-6.49	114.71	118.60
26	14	2087	G	N1-C2-N2	-6.49	110.36	116.20
26	14	2263	C	OP1-P-OP2	-6.49	109.87	119.60
26	1H	38	A	C2-N3-C4	6.49	113.84	110.60
26	1H	436	C	C4-C5-C6	-6.49	114.16	117.40
26	1H	717	G	N1-C6-O6	6.49	123.79	119.90
26	1H	1869	G	C5-C6-N1	-6.49	108.26	111.50
1	1G	819	A	N1-C6-N6	6.49	122.49	118.60
26	14	371	A	N1-C2-N3	6.49	132.54	129.30
26	14	640	C	N3-C4-C5	-6.49	119.31	121.90
1	13	864	A	C5-N7-C8	-6.49	100.66	103.90
1	13	971	G	O5'-P-OP1	6.49	118.48	110.70
26	1H	572	A	N1-C2-N3	6.49	132.54	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1306	C	C2-N3-C4	-6.49	116.66	119.90
26	1H	2073	C	N1-C2-O2	-6.49	115.01	118.90
26	1H	2336	A	N7-C8-N9	-6.49	110.56	113.80
26	1H	2718	G	C5-C6-O6	-6.49	124.71	128.60
1	1G	20	U	O5'-P-OP2	-6.49	99.86	105.70
1	1G	814	A	C4-C5-N7	-6.49	107.46	110.70
26	14	22	C	C5-C6-N1	-6.49	117.76	121.00
26	14	953	A	O5'-P-OP1	-6.49	99.86	105.70
26	14	1295	C	C6-N1-C2	6.49	122.89	120.30
26	1H	678	C	N3-C2-O2	6.48	126.44	121.90
26	1H	943	U	N1-C2-O2	-6.48	118.26	122.80
26	14	558	G	N7-C8-N9	-6.48	109.86	113.10
26	14	2614	A	C5-C6-N6	6.48	128.89	123.70
1	13	413	G	O5'-P-OP1	-6.48	99.87	105.70
1	13	1203	C	N3-C2-O2	-6.48	117.36	121.90
23	2K	10	G	C8-N9-C4	6.48	108.99	106.40
26	1H	387	U	C4-C5-C6	6.48	123.59	119.70
26	1H	1429	G	O5'-P-OP2	-6.48	99.87	105.70
26	1H	1931	U	C5-C4-O4	6.48	129.79	125.90
26	1H	2169	A	C8-N9-C4	6.48	108.39	105.80
26	1H	2228	G	C8-N9-C1'	-6.48	118.57	127.00
26	1H	2622	C	OP2-P-O3'	6.48	119.46	105.20
26	14	1339	G	C5-C6-O6	6.48	132.49	128.60
1	13	667	G	C4-C5-N7	-6.48	108.21	110.80
1	13	742	G	N3-C2-N2	6.48	124.44	119.90
26	1H	86	C	C2-N3-C4	-6.48	116.66	119.90
26	1H	625	G	C6-N1-C2	-6.48	121.21	125.10
26	1H	1474	C	OP1-P-O3'	6.48	119.46	105.20
26	1H	1568	G	N3-C4-C5	6.48	131.84	128.60
26	1H	1694	C	C6-N1-C2	6.48	122.89	120.30
26	1H	2436	G	C5-N7-C8	6.48	107.54	104.30
26	14	253	C	OP1-P-O3'	-6.48	90.94	105.20
26	14	271(A)	C	C5-C6-N1	6.48	124.24	121.00
26	14	1609	A	N1-C2-N3	6.48	132.54	129.30
26	14	1788	C	O5'-P-OP2	6.48	118.48	110.70
26	14	1816	G	O4'-C1'-N9	6.48	113.38	108.20
26	14	1984	G	OP1-P-OP2	6.48	129.32	119.60
26	14	2024	G	N9-C4-C5	-6.48	102.81	105.40
26	14	2598	A	C5-C6-N1	6.48	120.94	117.70
26	1H	843	G	OP2-P-O3'	6.48	119.45	105.20
1	1G	786	G	N7-C8-N9	-6.48	109.86	113.10
26	14	586	A	C5-N7-C8	-6.48	100.66	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1778	U	OP2-P-O3'	6.48	119.45	105.20
1	13	1054	C	C5-C6-N1	6.48	124.24	121.00
26	1H	1611	C	OP1-P-OP2	-6.48	109.88	119.60
26	1H	1950	G	N1-C6-O6	6.48	123.79	119.90
26	1H	2495	G	N3-C4-C5	6.48	131.84	128.60
26	1H	2574	G	C2-N3-C4	6.48	115.14	111.90
27	16	103	U	OP2-P-O3'	6.48	119.45	105.20
1	1G	1450	U	C5-C6-N1	6.48	125.94	122.70
1	1G	1462	G	C2-N3-C4	-6.48	108.66	111.90
57	3L	48	C	C5-C6-N1	6.48	124.24	121.00
26	14	48	G	N3-C4-N9	-6.48	122.11	126.00
26	14	1623	G	C5-C6-O6	-6.48	124.71	128.60
26	14	1654	A	C4-C5-C6	-6.48	113.76	117.00
26	14	2255	G	C6-C5-N7	6.48	134.29	130.40
26	1H	132	G	C4-C5-C6	6.48	122.69	118.80
26	1H	775	G	N1-C6-O6	6.48	123.79	119.90
26	1H	1418	G	C8-N9-C4	6.48	108.99	106.40
26	1H	2738	A	N1-C2-N3	-6.48	126.06	129.30
26	14	952	G	N3-C4-C5	-6.48	125.36	128.60
26	14	1562	A	C8-N9-C4	6.48	108.39	105.80
27	1J	88	C	C5-C6-N1	6.48	124.24	121.00
1	13	1266	G	OP1-P-OP2	6.47	129.31	119.60
26	1H	146	G	C2-N3-C4	-6.47	108.66	111.90
26	1H	332	A	C5-C6-N6	6.47	128.88	123.70
26	1H	2326	C	N1-C2-O2	6.47	122.78	118.90
26	1H	2400	G	C4-C5-N7	-6.47	108.21	110.80
1	1G	329	A	N1-C2-N3	6.47	132.54	129.30
1	1G	1402	C	N1-C2-O2	-6.47	115.02	118.90
26	14	399	G	O5'-P-OP2	-6.47	99.87	105.70
26	14	781	A	C5-C6-N6	-6.47	118.52	123.70
26	14	939	G	O5'-P-OP2	-6.47	99.87	105.70
26	14	1626	G	C4-C5-N7	-6.47	108.21	110.80
26	14	1769	G	C4-N9-C1'	6.47	134.92	126.50
26	14	1827	C	C4-C5-C6	6.47	120.64	117.40
26	14	2547	U	OP2-P-O3'	6.47	119.44	105.20
1	13	758	G	C5-C6-N1	-6.47	108.26	111.50
23	2K	48	U	C5-C6-N1	6.47	125.94	122.70
26	1H	140	A	N3-C4-C5	6.47	131.33	126.80
26	1H	252	G	C8-N9-C4	6.47	108.99	106.40
26	1H	1165	U	N1-C2-N3	6.47	118.78	114.90
26	1H	1526	G	N1-C2-N2	-6.47	110.37	116.20
26	1H	2086	U	C4-C5-C6	6.47	123.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2608	G	C2-N3-C4	6.47	115.14	111.90
1	1G	990	C	C6-N1-C2	-6.47	117.71	120.30
26	14	268	C	N3-C4-N4	6.47	122.53	118.00
26	14	1801	G	N1-C2-N3	6.47	127.78	123.90
26	1H	1479	G	C8-N9-C4	-6.47	103.81	106.40
26	1H	1655	A	N1-C6-N6	6.47	122.48	118.60
26	1H	2783	G	N1-C6-O6	6.47	123.78	119.90
1	1G	45	U	N3-C2-O2	6.47	126.73	122.20
1	13	436	C	N3-C4-N4	6.47	122.53	118.00
1	13	821	G	C8-N9-C4	6.47	108.99	106.40
1	13	1427	U	OP1-P-O3'	-6.47	90.97	105.20
6	5E	30	LEU	CB-CG-CD2	-6.47	100.00	111.00
26	1H	616	A	OP1-P-OP2	6.47	129.30	119.60
26	14	657	U	OP2-P-O3'	6.47	119.43	105.20
26	14	714	U	C5-C4-O4	6.47	129.78	125.90
26	14	1955	U	N1-C2-O2	-6.47	118.27	122.80
26	14	2024	G	C5-C6-O6	-6.47	124.72	128.60
26	14	2228	G	C2-N3-C4	-6.47	108.67	111.90
27	1J	88	C	C2-N3-C4	6.47	123.14	119.90
1	13	529	G	N9-C4-C5	-6.47	102.81	105.40
26	1H	1929	G	N7-C8-N9	-6.47	109.87	113.10
26	1H	2376	A	N9-C4-C5	-6.47	103.21	105.80
1	1G	601	C	C6-N1-C2	-6.47	117.71	120.30
1	1G	786	G	N1-C6-O6	-6.47	116.02	119.90
26	14	49	A	O5'-P-OP1	-6.47	99.88	105.70
26	14	2571	C	C5-C6-N1	-6.47	117.77	121.00
26	1H	241	A	C6-N1-C2	-6.47	114.72	118.60
26	1H	619	G	N3-C4-N9	-6.47	122.12	126.00
26	1H	1225	C	C6-N1-C2	6.47	122.89	120.30
26	1H	1328	G	O5'-P-OP1	6.47	118.46	110.70
1	1G	729	A	C8-N9-C4	-6.47	103.21	105.80
26	14	551	G	C5-C6-N1	-6.47	108.27	111.50
26	14	948	G	N3-C2-N2	-6.47	115.37	119.90
26	14	2002	G	C5-N7-C8	-6.47	101.07	104.30
26	14	2044	C	C4-C5-C6	-6.47	114.17	117.40
1	13	1516	G	C5-C6-O6	6.46	132.48	128.60
22	1K	25	C	N3-C2-O2	-6.46	117.38	121.90
26	1H	573	G	N1-C6-O6	-6.46	116.02	119.90
26	1H	737	C	C4-C5-C6	6.46	120.63	117.40
26	1H	811	U	OP1-P-OP2	6.46	129.30	119.60
26	1H	970	C	C6-N1-C2	-6.46	117.71	120.30
26	1H	1243	G	N3-C4-C5	6.46	131.83	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1488	G	C8-N9-C4	-6.46	103.81	106.40
26	1H	2489	G	C6-N1-C2	-6.46	121.22	125.10
26	1H	2578	G	OP2-P-O3'	6.46	119.42	105.20
26	1H	2700	C	N3-C2-O2	6.46	126.42	121.90
1	1G	1410	G	O5'-P-OP2	-6.46	99.88	105.70
26	14	64	A	C2-N3-C4	6.46	113.83	110.60
26	14	304	G	N1-C6-O6	6.46	123.78	119.90
26	14	442	G	N1-C2-N3	6.46	127.78	123.90
26	14	982	C	C5-C6-N1	6.46	124.23	121.00
26	14	1257	C	N1-C2-N3	6.46	123.72	119.20
26	14	1284	A	O5'-P-OP1	6.46	118.46	110.70
26	14	1319	G	N1-C6-O6	6.46	123.78	119.90
26	14	1784	A	C5-C6-N6	-6.46	118.53	123.70
26	14	2499	C	N3-C4-N4	6.46	122.53	118.00
26	14	2685	G	N1-C6-O6	6.46	123.78	119.90
26	1H	2383	G	N3-C2-N2	6.46	124.42	119.90
26	14	1409	C	OP1-P-OP2	6.46	129.29	119.60
26	14	2610	C	C4-C5-C6	-6.46	114.17	117.40
1	13	752	G	N1-C6-O6	6.46	123.78	119.90
1	13	1317	C	C5-C4-N4	6.46	124.72	120.20
26	1H	966	G	O5'-P-OP2	-6.46	99.89	105.70
26	1H	1164	G	C4-C5-N7	-6.46	108.22	110.80
26	1H	1692	U	OP1-P-O3'	6.46	119.42	105.20
26	1H	2360	A	N9-C4-C5	-6.46	103.22	105.80
26	1H	2677	G	C5-N7-C8	6.46	107.53	104.30
26	1H	2825	C	N1-C2-O2	-6.46	115.02	118.90
1	1G	778	G	C8-N9-C4	-6.46	103.82	106.40
1	1G	800	G	N1-C2-N3	6.46	127.78	123.90
25	4L	10	G	C5-C6-O6	-6.46	124.72	128.60
26	14	304	G	C5-C6-N1	-6.46	108.27	111.50
26	14	432	A	C5-N7-C8	-6.46	100.67	103.90
26	14	854	G	OP1-P-O3'	6.46	119.41	105.20
26	14	1256	G	OP2-P-O3'	6.46	119.42	105.20
26	14	1571	A	C5-C6-N6	-6.46	118.53	123.70
26	14	1674	G	N7-C8-N9	-6.46	109.87	113.10
26	14	1903	G	O5'-P-OP1	-6.46	99.89	105.70
26	1H	1367	A	C6-N1-C2	-6.46	114.72	118.60
26	1H	2420	C	OP1-P-OP2	-6.46	109.91	119.60
1	1G	880	C	N1-C2-N3	-6.46	114.68	119.20
26	14	2782	G	C2-N3-C4	-6.46	108.67	111.90
29	19	65	ILE	CG1-CB-CG2	-6.46	97.19	111.40
1	13	1437	C	N3-C2-O2	6.46	126.42	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	142	G	N3-C4-N9	-6.46	122.12	126.00
26	1H	679	C	OP1-P-OP2	6.46	129.29	119.60
26	1H	865	C	N1-C2-O2	6.46	122.78	118.90
26	1H	1424	G	C6-N1-C2	-6.46	121.22	125.10
26	1H	1624	G	C6-N1-C2	-6.46	121.22	125.10
26	1H	1936	A	C5-C6-N1	6.46	120.93	117.70
26	1H	2620	C	OP1-P-OP2	-6.46	109.91	119.60
27	16	48	A	N1-C2-N3	-6.46	126.07	129.30
1	1G	359	U	OP1-P-OP2	6.46	129.29	119.60
1	1G	898	G	N3-C4-C5	6.46	131.83	128.60
26	14	203	C	C6-N1-C1'	6.46	128.55	120.80
26	14	539	G	OP1-P-OP2	-6.46	109.91	119.60
26	14	1842	G	N3-C4-C5	-6.46	125.37	128.60
26	14	1851	U	N1-C2-N3	6.46	118.78	114.90
26	14	1923	U	O5'-P-OP2	6.46	118.45	110.70
26	14	1966	A	O5'-P-OP2	-6.46	99.89	105.70
26	14	2490	G	N7-C8-N9	6.46	116.33	113.10
1	13	132	C	N3-C4-N4	6.46	122.52	118.00
23	2K	28	U	C4-C5-C6	6.46	123.57	119.70
26	1H	132	G	OP1-P-O3'	-6.46	91.00	105.20
26	1H	911	A	N1-C6-N6	-6.46	114.73	118.60
26	1H	1299	G	C5-N7-C8	-6.46	101.07	104.30
26	1H	1309	G	C4-C5-C6	6.46	122.67	118.80
26	1H	1537	C	N1-C2-O2	6.46	122.77	118.90
26	1H	1601	G	C6-N1-C2	6.46	128.97	125.10
26	1H	1810	A	C5-C6-N6	-6.46	118.53	123.70
26	1H	2532	G	C4-C5-C6	6.46	122.67	118.80
1	1G	413	G	O4'-C1'-N9	6.46	113.36	108.20
23	2L	77	A	C4-C5-N7	6.46	113.93	110.70
57	3L	34	U	C5-C6-N1	6.46	125.93	122.70
26	14	1552	G	O5'-P-OP2	-6.46	99.89	105.70
1	13	1478	C	C2-N3-C4	-6.46	116.67	119.90
26	1H	584	C	C5-C4-N4	-6.46	115.68	120.20
26	1H	765	G	N1-C6-O6	6.46	123.77	119.90
26	1H	1907	G	O5'-P-OP2	-6.46	99.89	105.70
26	1H	2054	A	C6-N1-C2	-6.46	114.73	118.60
26	1H	2691	C	OP1-P-OP2	6.46	129.28	119.60
1	1G	46	G	N9-C4-C5	-6.46	102.82	105.40
26	14	1287	A	N1-C2-N3	6.46	132.53	129.30
1	13	575	G	C5-N7-C8	6.45	107.53	104.30
1	13	1413	A	C5-C6-N6	-6.45	118.54	123.70
26	1H	270(A)	A	C8-N9-C4	6.45	108.38	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1198	U	N3-C4-C5	6.45	118.47	114.60
26	1H	2274	A	C4-C5-N7	6.45	113.93	110.70
41	B8	54	ARG	CG-CD-NE	6.45	125.35	111.80
1	1G	650	G	C5-C6-N1	-6.45	108.27	111.50
1	1G	679	C	N3-C4-C5	-6.45	119.32	121.90
26	14	1612	C	N3-C2-O2	6.45	126.42	121.90
26	14	1952	A	OP1-P-OP2	-6.45	109.92	119.60
26	14	2041	U	C2-N3-C4	-6.45	123.13	127.00
1	13	746	A	C5-C6-N6	6.45	128.86	123.70
1	1G	758	G	N3-C4-C5	6.45	131.83	128.60
26	14	727	A	N1-C2-N3	6.45	132.53	129.30
26	14	2332	U	N3-C4-O4	-6.45	114.88	119.40
1	13	352	C	C5-C4-N4	-6.45	115.69	120.20
1	13	595	G	N1-C2-N2	-6.45	110.39	116.20
26	1H	479	A	C2-N3-C4	-6.45	107.37	110.60
26	1H	763	G	N3-C4-N9	-6.45	122.13	126.00
26	1H	867	C	O5'-P-OP1	-6.45	99.89	105.70
26	1H	1002	G	N9-C4-C5	6.45	107.98	105.40
26	1H	1022	G	N3-C2-N2	-6.45	115.39	119.90
26	1H	1139	G	C5-N7-C8	6.45	107.53	104.30
26	1H	1899	G	N3-C2-N2	-6.45	115.39	119.90
26	1H	2010	G	C8-N9-C4	-6.45	103.82	106.40
1	1G	576	G	C5-C6-O6	6.45	132.47	128.60
23	2L	19	G	C2-N3-C4	-6.45	108.67	111.90
26	14	522	G	N3-C2-N2	-6.45	115.39	119.90
26	14	668	G	N3-C4-C5	6.45	131.82	128.60
26	14	672	C	OP2-P-O3'	6.45	119.39	105.20
26	14	1976	U	N3-C4-C5	-6.45	110.73	114.60
26	14	2218	G	C5-C6-O6	6.45	132.47	128.60
26	14	2489	G	C5-N7-C8	-6.45	101.07	104.30
1	13	402	G	C5-C6-O6	6.45	132.47	128.60
26	1H	56	A	OP2-P-O3'	6.45	119.39	105.20
26	1H	245	G	C4-N9-C1'	6.45	134.88	126.50
26	1H	420	C	C4-C5-C6	6.45	120.62	117.40
26	1H	684	G	N3-C2-N2	-6.45	115.39	119.90
26	1H	2383	G	C5-N7-C8	-6.45	101.08	104.30
26	1H	2737	G	C8-N9-C4	6.45	108.98	106.40
45	F8	13	LEU	CB-CG-CD2	-6.45	100.04	111.00
57	3L	65	C	C6-N1-C2	-6.45	117.72	120.30
26	14	732	C	N3-C2-O2	6.45	126.41	121.90
26	14	1619	G	C5-C6-N1	6.45	114.72	111.50
26	1H	1852	C	C2-N1-C1'	-6.45	111.71	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1391	U	OP1-P-OP2	6.45	129.27	119.60
26	14	812	C	N1-C2-O2	-6.45	115.03	118.90
26	14	2850	A	C8-N9-C4	6.45	108.38	105.80
1	13	308	C	O5'-P-OP1	6.45	118.43	110.70
1	13	780	A	N3-C4-C5	6.45	131.31	126.80
1	13	1059	C	C4-C5-C6	-6.45	114.18	117.40
1	13	1265	G	N1-C6-O6	6.45	123.77	119.90
26	1H	123	G	N1-C6-O6	6.45	123.77	119.90
26	1H	345	A	N1-C6-N6	-6.45	114.73	118.60
26	1H	903	C	C4-C5-C6	-6.45	114.18	117.40
26	1H	1597	A	N7-C8-N9	-6.45	110.58	113.80
26	1H	1851	U	N1-C2-N3	6.45	118.77	114.90
26	1H	2033	A	N3-C4-C5	-6.45	122.29	126.80
26	1H	2751	G	C8-N9-C4	-6.45	103.82	106.40
27	16	60	C	O5'-P-OP2	6.45	118.43	110.70
26	14	1284	A	C8-N9-C4	6.45	108.38	105.80
26	14	2268	A	C4-C5-C6	6.45	120.22	117.00
26	1H	322	A	N1-C6-N6	6.44	122.47	118.60
26	14	781	A	O5'-P-OP1	-6.44	99.90	105.70
1	13	604	G	N1-C6-O6	6.44	123.77	119.90
1	13	1329	A	C5-N7-C8	-6.44	100.68	103.90
1	13	1386	G	C8-N9-C4	6.44	108.98	106.40
26	1H	292	C	N1-C2-O2	-6.44	115.03	118.90
26	1H	535	C	OP2-P-O3'	6.44	119.37	105.20
26	1H	541	C	N3-C2-O2	-6.44	117.39	121.90
26	1H	744	G	C4-C5-C6	6.44	122.67	118.80
26	1H	2378	A	C5-C6-N1	-6.44	114.48	117.70
26	1H	2445	G	C4-C5-N7	-6.44	108.22	110.80
26	1H	2662	A	N7-C8-N9	6.44	117.02	113.80
1	1G	869	G	N7-C8-N9	6.44	116.32	113.10
26	14	122	G	N1-C2-N3	6.44	127.77	123.90
26	14	582	G	C6-C5-N7	-6.44	126.53	130.40
26	14	1882	C	C5-C6-N1	6.44	124.22	121.00
26	14	1937	A	OP2-P-O3'	6.44	119.37	105.20
26	14	2083	G	C5-N7-C8	-6.44	101.08	104.30
26	14	2376	A	N9-C4-C5	-6.44	103.22	105.80
1	13	298	A	N9-C4-C5	6.44	108.38	105.80
1	13	889	A	N1-C2-N3	6.44	132.52	129.30
1	13	942	G	C6-C5-N7	-6.44	126.54	130.40
1	13	959	A	C2-N3-C4	6.44	113.82	110.60
26	1H	13	A	C4-C5-N7	6.44	113.92	110.70
26	1H	137(A)	G	OP1-P-OP2	6.44	129.26	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	150	C	C5-C4-N4	6.44	124.71	120.20
26	1H	1272	A	C4-C5-C6	-6.44	113.78	117.00
26	1H	1771	C	N3-C4-N4	6.44	122.51	118.00
26	1H	1833	U	C5-C4-O4	6.44	129.76	125.90
26	1H	1940	U	N3-C4-O4	6.44	123.91	119.40
26	1H	1996	C	C2-N3-C4	-6.44	116.68	119.90
26	1H	2310	A	N1-C6-N6	6.44	122.47	118.60
26	1H	2319	G	C4-C5-N7	6.44	113.38	110.80
26	1H	2432	A	N1-C2-N3	6.44	132.52	129.30
26	1H	2686	G	C2-N3-C4	6.44	115.12	111.90
26	1H	2704	C	OP1-P-OP2	6.44	129.26	119.60
26	1H	2872	G	C5-C6-N1	-6.44	108.28	111.50
29	11	39	LYS	N-CA-C	6.44	128.39	111.00
26	14	494	G	C5-C6-O6	-6.44	124.73	128.60
26	14	805	G	N1-C2-N2	-6.44	110.40	116.20
26	14	1899	G	N3-C4-N9	-6.44	122.14	126.00
26	14	2865	U	N1-C2-O2	-6.44	118.29	122.80
1	13	14	U	OP1-P-OP2	6.44	129.26	119.60
26	1H	787	U	C2-N3-C4	-6.44	123.14	127.00
26	14	572	A	N3-C4-C5	-6.44	122.29	126.80
26	14	1818	U	N1-C2-O2	-6.44	118.29	122.80
26	14	2456	C	N3-C4-C5	-6.44	119.32	121.90
1	13	451	A	OP1-P-OP2	6.44	129.26	119.60
1	13	972	C	O5'-P-OP2	6.44	118.43	110.70
1	13	1417	G	N3-C2-N2	-6.44	115.39	119.90
26	1H	429	A	C5-N7-C8	-6.44	100.68	103.90
26	1H	776	G	N1-C2-N2	6.44	121.99	116.20
26	1H	1696	G	C5-C6-O6	6.44	132.46	128.60
26	1H	1952	A	N9-C4-C5	6.44	108.38	105.80
26	1H	2428	G	C8-N9-C4	-6.44	103.83	106.40
26	1H	2828	C	C5-C6-N1	-6.44	117.78	121.00
26	1H	2885	C	OP1-P-OP2	-6.44	109.94	119.60
1	1G	1204	A	O5'-P-OP1	6.44	118.42	110.70
1	1G	1489	G	OP1-P-OP2	6.44	129.25	119.60
26	14	203	C	C2-N3-C4	-6.44	116.68	119.90
26	14	208	C	N3-C2-O2	6.44	126.41	121.90
26	14	414	C	N1-C2-O2	6.44	122.76	118.90
26	14	535	C	OP2-P-O3'	6.44	119.36	105.20
26	14	570	G	C4-N9-C1'	6.44	134.87	126.50
26	14	1992	G	C2'-C3'-O3'	6.44	124.00	113.70
1	13	730	G	N1-C2-N2	6.44	121.99	116.20
1	1G	633	G	OP1-P-O3'	6.44	119.36	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2391	G	N3-C2-N2	-6.44	115.39	119.90
26	14	2428	G	P-O3'-C3'	6.44	127.42	119.70
26	14	2462	U	C2-N3-C4	-6.44	123.14	127.00
1	13	1432	G	C4-C5-C6	6.43	122.66	118.80
26	1H	1799	G	P-O3'-C3'	6.43	127.42	119.70
26	1H	1828	G	C5-C6-N1	-6.43	108.28	111.50
26	1H	1900	A	C5-C6-N6	-6.43	118.55	123.70
26	1H	2451	A	C4-C5-N7	-6.43	107.48	110.70
54	P8	2	LYS	CD-CE-NZ	6.43	126.50	111.70
1	1G	314	C	N3-C2-O2	-6.43	117.40	121.90
26	14	330	A	C4-C5-N7	6.43	113.92	110.70
26	14	576	U	N3-C2-O2	6.43	126.70	122.20
26	14	577	G	OP2-P-O3'	6.43	119.36	105.20
26	14	987	G	C5-C6-N1	6.43	114.72	111.50
26	14	1763	G	N3-C4-N9	-6.43	122.14	126.00
26	14	2078	C	N3-C2-O2	-6.43	117.40	121.90
26	14	2430	A	OP1-P-OP2	-6.43	109.95	119.60
26	14	2647	U	C6-N1-C2	6.43	124.86	121.00
1	13	125	U	N1-C2-O2	-6.43	118.30	122.80
1	13	828	A	N1-C2-N3	6.43	132.52	129.30
26	1H	12	U	N1-C2-O2	6.43	127.30	122.80
26	1H	113	G	C6-C5-N7	-6.43	126.54	130.40
26	1H	1139	G	C5-C6-O6	6.43	132.46	128.60
26	1H	1831	G	N3-C2-N2	-6.43	115.40	119.90
26	1H	2414	G	C8-N9-C4	-6.43	103.83	106.40
1	1G	780	A	C4-C5-N7	6.43	113.92	110.70
26	14	270	A	N3-C4-C5	6.43	131.30	126.80
26	14	491	G	C2-N3-C4	-6.43	108.68	111.90
26	14	496	G	OP2-P-O3'	6.43	119.35	105.20
1	13	104	G	C5-C6-O6	-6.43	124.74	128.60
26	1H	228	A	C6-C5-N7	-6.43	127.80	132.30
26	1H	670	A	C5-C6-N1	6.43	120.92	117.70
26	1H	750	A	C5-C6-N6	-6.43	118.56	123.70
26	1H	2243	U	N3-C2-O2	-6.43	117.70	122.20
27	16	72	G	C2-N3-C4	-6.43	108.69	111.90
26	14	71	A	C6-C5-N7	-6.43	127.80	132.30
26	14	460	A	C4-C5-N7	6.43	113.92	110.70
26	14	791	C	C4-C5-C6	-6.43	114.18	117.40
26	14	2062	A	C4-C5-C6	-6.43	113.78	117.00
1	13	325	A	N1-C2-N3	-6.43	126.09	129.30
1	13	520	A	C5-N7-C8	-6.43	100.69	103.90
1	13	528	C	N3-C4-C5	6.43	124.47	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	568	G	O5'-P-OP2	6.43	118.42	110.70
26	1H	37	C	N1-C2-O2	6.43	122.76	118.90
26	1H	666	G	C2-N3-C4	-6.43	108.69	111.90
26	1H	1204	A	C5'-C4'-C3'	-6.43	105.71	116.00
26	1H	1285	G	C4-C5-C6	6.43	122.66	118.80
26	1H	1971	A	C6-N1-C2	-6.43	114.74	118.60
26	1H	2486	G	N3-C2-N2	-6.43	115.40	119.90
1	1G	660	G	N7-C8-N9	-6.43	109.89	113.10
26	14	81	G	C8-N9-C4	6.43	108.97	106.40
26	14	503	A	C4-C5-N7	-6.43	107.48	110.70
26	14	676	A	C5-C6-N1	-6.43	114.48	117.70
26	14	1383	C	O5'-P-OP1	6.43	118.42	110.70
26	14	2329	G	N1-C6-O6	-6.43	116.04	119.90
1	13	1292	U	O5'-P-OP2	-6.43	99.92	105.70
26	1H	1257	C	C6-N1-C2	-6.43	117.73	120.30
26	1H	2530	A	C5-C6-N6	-6.43	118.56	123.70
26	14	189	G	O4'-C1'-N9	-6.43	103.06	108.20
26	1H	458	G	O4'-C1'-N9	6.43	113.34	108.20
26	1H	505	A	N1-C6-N6	6.43	122.45	118.60
26	1H	998	C	C2-N1-C1'	6.43	125.87	118.80
26	1H	1201	C	O5'-P-OP2	-6.43	99.92	105.70
26	1H	1259	G	N3-C2-N2	6.43	124.40	119.90
26	1H	1619	G	N1-C6-O6	-6.43	116.04	119.90
26	1H	1751	C	N3-C2-O2	6.43	126.40	121.90
26	1H	1858	G	N1-C6-O6	6.43	123.76	119.90
26	1H	1922	G	O5'-P-OP2	-6.43	99.92	105.70
26	1H	2192	G	N1-C6-O6	6.43	123.76	119.90
26	14	96	G	N1-C2-N3	6.43	127.76	123.90
26	14	127	A	N7-C8-N9	-6.43	110.59	113.80
26	14	207	A	N1-C2-N3	6.43	132.51	129.30
26	14	2286	A	N7-C8-N9	6.43	117.01	113.80
26	14	2634	G	N7-C8-N9	-6.43	109.89	113.10
26	14	2782	G	C4-C5-C6	6.43	122.66	118.80
1	13	264	U	N3-C4-O4	6.42	123.90	119.40
1	13	1482	G	N7-C8-N9	6.42	116.31	113.10
26	1H	123	G	N3-C2-N2	-6.42	115.40	119.90
26	1H	180	G	N1-C6-O6	6.42	123.75	119.90
26	1H	341	G	C4-C5-N7	-6.42	108.23	110.80
26	1H	721	C	N3-C2-O2	6.42	126.40	121.90
26	1H	1243	G	N7-C8-N9	6.42	116.31	113.10
26	1H	1913	A	O4'-C1'-N9	6.42	113.34	108.20
26	1H	2254	C	OP1-P-OP2	-6.42	109.96	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2281	C	C6-N1-C2	6.42	122.87	120.30
26	1H	2377	A	N9-C4-C5	-6.42	103.23	105.80
26	1H	2479	G	C8-N9-C4	6.42	108.97	106.40
1	1G	308	C	C6-N1-C2	-6.42	117.73	120.30
26	14	110	G	C8-N9-C4	6.42	108.97	106.40
26	14	215	G	OP1-P-O3'	6.42	119.33	105.20
26	14	1309	G	N1-C2-N3	6.42	127.75	123.90
26	14	1637	A	N9-C4-C5	6.42	108.37	105.80
26	14	2163	C	C6-N1-C2	-6.42	117.73	120.30
26	1H	1047	G	N7-C8-N9	-6.42	109.89	113.10
26	1H	1487	G	C8-N9-C4	-6.42	103.83	106.40
26	1H	1644	C	N3-C2-O2	-6.42	117.40	121.90
26	1H	1705	G	C4-C5-C6	6.42	122.65	118.80
26	14	1776	G	O5'-P-OP2	6.42	118.41	110.70
26	14	1856	G	C4-C5-C6	6.42	122.65	118.80
26	14	2740	A	C2-N3-C4	-6.42	107.39	110.60
1	13	436	C	N3-C2-O2	6.42	126.39	121.90
1	13	564	C	OP1-P-OP2	6.42	129.23	119.60
1	13	712	A	C5-C6-N6	6.42	128.84	123.70
1	13	761	G	N3-C4-N9	6.42	129.85	126.00
1	13	974	A	O4'-C1'-N9	6.42	113.34	108.20
26	1H	618	G	C5-N7-C8	6.42	107.51	104.30
26	1H	1523	U	C6-N1-C2	-6.42	117.15	121.00
26	1H	2441	C	N3-C4-N4	-6.42	113.50	118.00
26	1H	2883	A	N7-C8-N9	6.42	117.01	113.80
23	2L	77	A	C4-C5-C6	-6.42	113.79	117.00
26	14	672	C	N3-C2-O2	-6.42	117.41	121.90
26	14	741	G	OP2-P-O3'	6.42	119.33	105.20
26	14	855	G	N1-C6-O6	6.42	123.75	119.90
26	14	1261	C	C2-N3-C4	-6.42	116.69	119.90
26	14	1899	G	C6-C5-N7	-6.42	126.55	130.40
26	14	2034	U	N1-C2-N3	6.42	118.75	114.90
26	14	2064	C	O5'-P-OP2	-6.42	99.92	105.70
26	14	2315	G	N3-C4-N9	6.42	129.85	126.00
26	14	2679	A	C5-C6-N6	-6.42	118.56	123.70
26	1H	15	G	OP2-P-O3'	6.42	119.32	105.20
26	1H	379	G	C2-N3-C4	6.42	115.11	111.90
26	1H	638	G	OP1-P-OP2	6.42	129.23	119.60
26	1H	2002	G	N3-C4-C5	-6.42	125.39	128.60
1	1G	1497	G	N1-C6-O6	6.42	123.75	119.90
26	14	1236	G	N1-C6-O6	6.42	123.75	119.90
26	14	2574	G	N1-C6-O6	-6.42	116.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	429	U	N3-C2-O2	-6.42	117.71	122.20
1	13	539	A	N1-C2-N3	6.42	132.51	129.30
1	13	564	C	N3-C4-C5	-6.42	119.33	121.90
26	1H	228	A	N1-C6-N6	6.42	122.45	118.60
26	1H	383	U	C4-C5-C6	6.42	123.55	119.70
26	1H	1246	A	N1-C2-N3	6.42	132.51	129.30
26	1H	1333	C	N1-C2-N3	-6.42	114.71	119.20
26	1H	1702	G	N9-C4-C5	-6.42	102.83	105.40
26	1H	1929	G	C6-C5-N7	6.42	134.25	130.40
26	1H	2029	G	OP1-P-OP2	6.42	129.23	119.60
26	1H	2450	A	C6-N1-C2	-6.42	114.75	118.60
1	1G	1465	C	N1-C2-O2	6.42	122.75	118.90
23	2L	4	G	C4-C5-N7	-6.42	108.23	110.80
26	14	521	G	C6-C5-N7	-6.42	126.55	130.40
26	14	557	U	C5-C6-N1	-6.42	119.49	122.70
26	14	806	C	C6-N1-C1'	-6.42	113.10	120.80
26	14	1960	A	O5'-P-OP2	-6.42	99.92	105.70
26	14	2392	A	N3-C4-C5	6.42	131.29	126.80
1	13	59	A	N1-C6-N6	6.42	122.45	118.60
1	13	781	A	C4-C5-N7	6.42	113.91	110.70
1	13	1519	A	C4-C5-C6	6.42	120.21	117.00
26	1H	21	A	C8-N9-C4	6.42	108.37	105.80
26	1H	935	C	C5-C4-N4	-6.42	115.71	120.20
26	1H	1271	G	N3-C4-N9	6.42	129.85	126.00
26	1H	1305	C	N1-C2-O2	6.42	122.75	118.90
26	1H	1360	A	N1-C6-N6	-6.42	114.75	118.60
26	1H	1728	G	N1-C6-O6	6.42	123.75	119.90
26	1H	1833	U	N1-C2-O2	6.42	127.29	122.80
26	1H	2347	C	OP2-P-O3'	6.42	119.32	105.20
26	1H	2503	A	C5-N7-C8	-6.42	100.69	103.90
29	11	271	ILE	CG1-CB-CG2	-6.42	97.28	111.40
26	14	1639	U	N1-C2-N3	6.42	118.75	114.90
26	14	2583	G	O5'-P-OP1	6.42	118.40	110.70
26	1H	1586	A	C8-N9-C4	-6.42	103.23	105.80
26	1H	2614	A	C4-C5-C6	-6.42	113.79	117.00
1	1G	514	C	C6-N1-C2	-6.42	117.73	120.30
26	14	397	G	C4-C5-N7	6.42	113.37	110.80
26	14	502	A	OP1-P-O3'	6.42	119.31	105.20
26	14	559	G	C2-N3-C4	-6.42	108.69	111.90
26	14	2848	G	N1-C2-N2	-6.42	110.43	116.20
1	13	736	C	C4-C5-C6	-6.41	114.19	117.40
1	13	749	C	C2-N3-C4	6.41	123.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1015	A	C8-N9-C4	6.41	108.36	105.80
1	13	1228	C	C2-N3-C4	6.41	123.11	119.90
22	1K	42	A	C4-C5-N7	6.41	113.91	110.70
26	1H	270(Z)	U	N1-C2-N3	6.41	118.75	114.90
26	1H	771	G	C4-C5-N7	6.41	113.37	110.80
26	1H	785	G	C4-C5-N7	-6.41	108.23	110.80
26	1H	857	C	N1-C2-O2	-6.41	115.05	118.90
26	1H	1187	G	OP2-P-O3'	6.41	119.31	105.20
26	1H	1319	G	C5-C6-N1	6.41	114.71	111.50
26	1H	1487	G	O5'-P-OP2	6.41	118.39	110.70
26	1H	1488	G	N3-C2-N2	-6.41	115.41	119.90
26	1H	1580	A	N1-C6-N6	6.41	122.45	118.60
26	1H	2238	G	C5-C6-O6	6.41	132.45	128.60
1	1G	824	C	N3-C4-C5	-6.41	119.33	121.90
23	2L	44	A	C2-N3-C4	6.41	113.81	110.60
26	14	233	A	C4-C5-C6	-6.41	113.79	117.00
26	14	536	A	O5'-P-OP1	6.41	118.40	110.70
26	14	627	A	N1-C6-N6	6.41	122.45	118.60
26	14	1576	U	C4-C5-C6	6.41	123.55	119.70
26	14	2496	C	N3-C4-C5	6.41	124.47	121.90
26	1H	1688	U	OP2-P-O3'	6.41	119.31	105.20
26	1H	2730	C	C5-C4-N4	-6.41	115.71	120.20
26	14	954	G	N3-C4-C5	-6.41	125.39	128.60
26	14	1571	A	OP1-P-OP2	6.41	129.22	119.60
26	14	1684	C	N1-C2-O2	-6.41	115.05	118.90
26	14	2512	C	N1-C2-O2	-6.41	115.05	118.90
1	13	5	U	N3-C4-O4	6.41	123.89	119.40
1	13	491	G	C5-C6-N1	-6.41	108.29	111.50
26	1H	262	A	N1-C6-N6	6.41	122.45	118.60
26	1H	1119	C	N1-C2-O2	6.41	122.75	118.90
26	1H	1427	A	N1-C6-N6	-6.41	114.75	118.60
26	1H	1439	A	N1-C6-N6	6.41	122.45	118.60
26	1H	1690	A	N1-C6-N6	6.41	122.45	118.60
26	1H	1997	G	C8-N9-C4	-6.41	103.84	106.40
27	16	30	C	O5'-P-OP2	6.41	118.39	110.70
27	16	71	C	N3-C4-N4	6.41	122.49	118.00
1	1G	46	G	C4-C5-N7	6.41	113.36	110.80
26	14	726	G	C5-C6-O6	6.41	132.45	128.60
26	14	1239	G	C6-C5-N7	-6.41	126.55	130.40
26	14	1292	U	C6-N1-C2	6.41	124.85	121.00
27	1J	36	C	C4-C5-C6	-6.41	114.19	117.40
1	13	527	G	C6-C5-N7	6.41	134.25	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	739	C	N1-C2-O2	-6.41	115.06	118.90
1	13	1072	G	N1-C2-N2	-6.41	110.43	116.20
26	1H	690	G	N9-C4-C5	-6.41	102.84	105.40
26	1H	840	C	C5-C4-N4	6.41	124.69	120.20
26	1H	988	A	N7-C8-N9	6.41	117.00	113.80
26	1H	1163	G	N9-C4-C5	6.41	107.96	105.40
26	1H	1734	C	C5-C4-N4	6.41	124.69	120.20
26	1H	2018	G	O5'-P-OP1	6.41	118.39	110.70
26	1H	2786	U	N3-C4-O4	6.41	123.89	119.40
1	1G	586	C	OP2-P-O3'	6.41	119.30	105.20
26	14	465	G	OP1-P-OP2	-6.41	109.99	119.60
26	14	2244	U	C5-C4-O4	6.41	129.75	125.90
27	1J	30	C	N1-C2-N3	6.41	123.69	119.20
27	1J	80	U	OP2-P-O3'	6.41	119.30	105.20
26	1H	189	G	C8-N9-C1'	-6.41	118.67	127.00
1	1G	915	A	C4-C5-N7	-6.41	107.50	110.70
31	39	38	ARG	NE-CZ-NH1	-6.41	117.10	120.30
1	13	502	G	C5-C6-O6	-6.41	124.76	128.60
1	13	581	G	C5-N7-C8	-6.41	101.10	104.30
1	13	806	C	N1-C2-O2	6.41	122.74	118.90
23	2K	2	G	N3-C4-N9	6.41	129.84	126.00
26	1H	182	A	OP2-P-O3'	6.41	119.29	105.20
26	1H	739	G	N3-C2-N2	-6.41	115.42	119.90
26	1H	985	C	N1-C2-O2	-6.41	115.06	118.90
26	1H	1229	G	OP1-P-OP2	6.41	129.21	119.60
26	1H	1547	C	OP1-P-O3'	6.41	119.29	105.20
26	1H	1828	G	C6-C5-N7	-6.41	126.56	130.40
26	1H	2012	G	N9-C4-C5	-6.41	102.84	105.40
27	16	67	G	N3-C4-C5	6.41	131.80	128.60
1	1G	258	G	C5-C6-O6	-6.41	124.76	128.60
1	1G	1508	G	N7-C8-N9	-6.41	109.90	113.10
26	14	1400	G	O5'-P-OP1	6.41	118.39	110.70
26	14	1949	G	OP2-P-O3'	6.41	119.29	105.20
26	14	2318	G	C5-C6-N1	-6.41	108.30	111.50
26	14	2544	G	C5-C6-O6	-6.41	124.76	128.60
30	29	8	LYS	CD-CE-NZ	6.41	126.43	111.70
1	13	9	G	N3-C4-C5	6.40	131.80	128.60
1	13	1252	A	O5'-P-OP2	-6.40	99.94	105.70
1	13	1302	U	N3-C2-O2	-6.40	117.72	122.20
26	1H	179	G	N9-C4-C5	-6.40	102.84	105.40
26	1H	2017	U	C5-C4-O4	-6.40	122.06	125.90
26	14	1193	G	N3-C4-C5	6.40	131.80	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	697	U	C6-N1-C2	6.40	124.84	121.00
23	2K	65	G	OP1-P-OP2	6.40	129.20	119.60
26	1H	513	A	OP1-P-OP2	-6.40	110.00	119.60
26	1H	642	G	C8-N9-C4	-6.40	103.84	106.40
26	1H	1635	G	C2-N3-C4	-6.40	108.70	111.90
26	1H	2518	A	C4-C5-C6	6.40	120.20	117.00
26	1H	2554	U	OP1-P-O3'	6.40	119.28	105.20
1	1G	402	G	N3-C4-C5	6.40	131.80	128.60
26	14	1049	C	C4-C5-C6	-6.40	114.20	117.40
26	14	2023	G	C4-C5-N7	6.40	113.36	110.80
27	1J	47	C	N1-C2-N3	-6.40	114.72	119.20
23	2K	34	U	C6-N1-C2	6.40	124.84	121.00
26	1H	1123	C	OP1-P-OP2	6.40	129.20	119.60
26	1H	1635	G	N1-C2-N3	6.40	127.74	123.90
26	1H	1662	C	N3-C4-C5	6.40	124.46	121.90
26	1H	2078	C	C4-C5-C6	6.40	120.60	117.40
1	1G	120	A	C5-C6-N6	-6.40	118.58	123.70
1	1G	304	U	OP1-P-OP2	6.40	129.20	119.60
26	14	876	C	N1-C2-O2	6.40	122.74	118.90
26	14	1142(A)	A	N3-C4-N9	-6.40	122.28	127.40
26	14	1762	A	N9-C4-C5	-6.40	103.24	105.80
1	13	573	A	N9-C4-C5	6.40	108.36	105.80
26	1H	72	U	OP1-P-O3'	6.40	119.28	105.20
1	1G	1413	A	C8-N9-C4	-6.40	103.24	105.80
26	14	120	U	OP1-P-OP2	-6.40	110.00	119.60
26	14	245	G	N1-C6-O6	6.40	123.74	119.90
26	14	654(S)	G	C8-N9-C4	6.40	108.96	106.40
26	1H	329	G	C5-C6-N1	6.40	114.70	111.50
26	1H	474	G	C5-C6-N1	6.40	114.70	111.50
26	1H	2005	A	C8-N9-C4	6.40	108.36	105.80
26	1H	2496	C	OP1-P-O3'	6.40	119.27	105.20
1	1G	791	G	C2-N3-C4	6.40	115.10	111.90
1	1G	1432	G	N7-C8-N9	6.40	116.30	113.10
26	14	1801	G	C6-N1-C2	-6.40	121.26	125.10
1	13	1196	U	N1-C2-O2	6.40	127.28	122.80
23	2K	2	G	N7-C8-N9	-6.40	109.90	113.10
26	1H	2455	G	O5'-P-OP1	6.40	118.38	110.70
1	1G	311	C	N3-C4-C5	-6.40	119.34	121.90
1	1G	363	A	N9-C4-C5	6.40	108.36	105.80
26	14	512	G	N3-C4-N9	-6.40	122.16	126.00
26	14	535	C	O5'-P-OP2	-6.40	99.94	105.70
26	14	815	C	OP2-P-O3'	6.40	119.27	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	65	110	LEU	CA-CB-CG	6.40	130.01	115.30
1	13	287	U	C4-C5-C6	6.39	123.54	119.70
23	2K	26	C	O5'-P-OP1	6.39	118.37	110.70
26	1H	288	C	O5'-P-OP2	6.39	118.37	110.70
26	1H	309	G	C2-N3-C4	6.39	115.10	111.90
26	1H	398	G	O5'-P-OP2	-6.39	99.95	105.70
26	1H	1331	A	C6-N1-C2	-6.39	114.76	118.60
26	1H	1647	G	C4-C5-N7	-6.39	108.24	110.80
26	14	2057	A	C5-C6-N1	6.39	120.90	117.70
26	14	2302	G	C8-N9-C4	-6.39	103.84	106.40
1	13	402	G	C4-C5-N7	-6.39	108.24	110.80
1	13	790	A	C5-C6-N1	6.39	120.90	117.70
26	1H	978	G	OP1-P-O3'	6.39	119.27	105.20
26	1H	2429	G	N3-C4-N9	-6.39	122.16	126.00
26	14	1332	G	OP1-P-O3'	6.39	119.26	105.20
26	14	1585	C	C6-N1-C1'	-6.39	113.13	120.80
26	14	1590	U	C5-C4-O4	6.39	129.74	125.90
26	14	1616	A	C5-C6-N1	-6.39	114.50	117.70
26	14	2292	C	O5'-P-OP2	-6.39	99.95	105.70
1	13	1111	A	C2-N3-C4	6.39	113.80	110.60
26	1H	470	A	O5'-P-OP1	-6.39	99.95	105.70
26	14	523	C	N3-C2-O2	6.39	126.37	121.90
26	14	1007	C	C2-N3-C4	-6.39	116.70	119.90
1	13	67	C	N3-C2-O2	-6.39	117.43	121.90
1	13	738	C	O5'-P-OP1	-6.39	99.95	105.70
24	3K	45	G	C2-N3-C4	6.39	115.09	111.90
26	1H	221	A	N7-C8-N9	-6.39	110.61	113.80
26	1H	715	G	N3-C4-C5	-6.39	125.41	128.60
26	1H	922	U	C4-C5-C6	6.39	123.53	119.70
26	1H	944	G	C2-N3-C4	-6.39	108.71	111.90
26	1H	1153	C	C4-C5-C6	6.39	120.59	117.40
26	1H	1923	U	N3-C4-O4	6.39	123.87	119.40
1	1G	568	G	N7-C8-N9	6.39	116.30	113.10
26	14	195	A	C5-N7-C8	-6.39	100.70	103.90
26	14	576	U	N3-C4-O4	6.39	123.87	119.40
26	14	1514	U	C5-C4-O4	6.39	129.73	125.90
26	14	1860	G	C5-C6-O6	-6.39	124.77	128.60
26	14	2270	G	C6-N1-C2	-6.39	121.27	125.10
26	14	2331	G	N3-C4-C5	-6.39	125.41	128.60
26	14	2427	C	N1-C2-N3	-6.39	114.73	119.20
26	14	2521	C	C5-C6-N1	-6.39	117.81	121.00
26	1H	863	A	N1-C6-N6	-6.39	114.77	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2600	A	C8-N9-C4	-6.39	103.25	105.80
26	14	217	G	C5-C6-O6	6.39	132.43	128.60
26	14	625	G	C5-C6-N1	6.39	114.69	111.50
26	14	1365	A	N1-C2-N3	-6.39	126.11	129.30
1	13	449	C	N3-C2-O2	-6.39	117.43	121.90
1	13	690	G	N1-C2-N2	-6.39	110.45	116.20
1	13	966	G	N7-C8-N9	-6.39	109.91	113.10
1	13	1209	C	N3-C4-N4	6.39	122.47	118.00
1	13	1410	G	C8-N9-C4	6.39	108.95	106.40
23	2K	27	G	N1-C2-N2	6.39	121.95	116.20
26	1H	299	A	OP2-P-O3'	6.39	119.25	105.20
26	1H	805	G	N1-C2-N2	-6.39	110.45	116.20
26	1H	1042	G	C5-C6-N1	-6.39	108.31	111.50
26	1H	2618	G	C5-N7-C8	6.39	107.49	104.30
26	1H	2641	G	N1-C2-N2	-6.39	110.45	116.20
1	1G	260	G	C4-C5-N7	-6.39	108.25	110.80
26	14	180	G	N9-C4-C5	-6.39	102.84	105.40
26	14	1517	G	N7-C8-N9	6.39	116.29	113.10
26	14	2390	U	N3-C4-O4	6.39	123.87	119.40
1	13	513	C	N3-C4-C5	6.38	124.45	121.90
1	13	1066	C	C6-N1-C2	-6.38	117.75	120.30
26	1H	95	G	C4-C5-C6	6.38	122.63	118.80
26	1H	697	C	N3-C4-N4	6.38	122.47	118.00
26	1H	769	G	C5-C6-O6	-6.38	124.77	128.60
26	1H	975	G	C5-C6-N1	6.38	114.69	111.50
26	1H	1342	A	N1-C6-N6	6.38	122.43	118.60
26	1H	1494	A	N1-C6-N6	-6.38	114.77	118.60
26	1H	1529	A	C4-C5-C6	-6.38	113.81	117.00
27	16	21	G	N3-C2-N2	-6.38	115.43	119.90
46	G8	73	ARG	NE-CZ-NH1	-6.38	117.11	120.30
1	1G	254	G	O5'-P-OP1	-6.38	99.95	105.70
1	1G	652	U	N3-C2-O2	-6.38	117.73	122.20
26	14	468	G	C8-N9-C4	6.38	108.95	106.40
26	14	1767	C	N1-C2-N3	6.38	123.67	119.20
26	14	2639	A	N1-C6-N6	6.38	122.43	118.60
26	14	2755	C	N3-C2-O2	-6.38	117.43	121.90
29	19	48	ARG	NE-CZ-NH2	6.38	123.49	120.30
1	13	505	G	C5-C6-N1	6.38	114.69	111.50
1	13	684	A	C8-N9-C4	-6.38	103.25	105.80
26	1H	2233	U	N1-C2-O2	-6.38	118.33	122.80
26	1H	2368	C	O5'-P-OP2	6.38	118.36	110.70
27	16	53	A	C4-C5-N7	6.38	113.89	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	28	G	N7-C8-N9	6.38	116.29	113.10
1	1G	30	U	C6-N1-C2	-6.38	117.17	121.00
26	14	755	C	C4-C5-C6	-6.38	114.21	117.40
26	14	2050	C	N1-C2-O2	6.38	122.73	118.90
26	1H	840	C	C2-N3-C4	-6.38	116.71	119.90
26	1H	1537	C	C6-N1-C2	-6.38	117.75	120.30
26	1H	2232	U	N3-C4-C5	-6.38	110.77	114.60
26	1H	2840	C	N1-C2-O2	6.38	122.73	118.90
27	16	16	G	N3-C4-C5	6.38	131.79	128.60
26	14	452	G	OP1-P-OP2	6.38	129.17	119.60
26	14	609(A)	G	N1-C2-N2	-6.38	110.46	116.20
26	14	1353	A	C6-N1-C2	-6.38	114.77	118.60
26	14	1798	U	C5-C6-N1	-6.38	119.51	122.70
26	14	2413	G	C4-C5-N7	6.38	113.35	110.80
26	14	2487	G	C2-N3-C4	-6.38	108.71	111.90
26	1H	724	U	OP1-P-OP2	-6.38	110.03	119.60
27	16	42	C	C5-C6-N1	-6.38	117.81	121.00
1	13	266	G	O4'-C1'-N9	-6.38	103.10	108.20
1	13	455	C	C2-N1-C1'	6.38	125.82	118.80
1	13	1016	A	N1-C6-N6	-6.38	114.77	118.60
26	1H	270(O)	U	C5-C6-N1	6.38	125.89	122.70
26	1H	1024	G	N9-C4-C5	-6.38	102.85	105.40
26	1H	1401	G	C6-N1-C2	6.38	128.93	125.10
26	1H	1783	A	O4'-C1'-N9	-6.38	103.10	108.20
1	1G	1260	C	C6-N1-C2	-6.38	117.75	120.30
26	14	305	U	N1-C2-O2	-6.38	118.33	122.80
26	14	365	C	N1-C2-O2	-6.38	115.07	118.90
26	14	605	C	C6-N1-C2	6.38	122.85	120.30
26	14	1131	G	C6-C5-N7	-6.38	126.57	130.40
26	14	1272	A	N9-C4-C5	-6.38	103.25	105.80
26	14	1845	G	N3-C4-N9	-6.38	122.17	126.00
26	14	1851	U	N3-C4-C5	-6.38	110.77	114.60
26	14	2557	G	C4-C5-N7	-6.38	108.25	110.80
1	13	771	G	C2-N3-C4	-6.38	108.71	111.90
1	13	1202	G	N3-C4-N9	-6.38	122.17	126.00
1	13	1204	A	C8-N9-C4	-6.38	103.25	105.80
1	13	1381	U	C2-N1-C1'	6.38	125.35	117.70
22	1K	38	A	N3-C4-C5	6.38	131.26	126.80
26	1H	930	U	OP1-P-O3'	6.38	119.23	105.20
26	1H	1116	C	C4-C5-C6	6.38	120.59	117.40
26	1H	1396	U	O5'-P-OP1	-6.38	99.96	105.70
26	1H	2728	U	C5-C6-N1	-6.38	119.51	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1239	A	O5'-P-OP2	-6.38	99.96	105.70
26	14	503	A	C4-C5-C6	6.38	120.19	117.00
26	14	950	G	OP1-P-OP2	-6.38	110.04	119.60
26	14	2371	G	O5'-P-OP2	6.38	118.35	110.70
27	1J	97	G	C4-C5-C6	6.38	122.63	118.80
26	1H	787	U	OP1-P-O3'	6.38	119.22	105.20
26	1H	1244	G	N7-C8-N9	-6.38	109.91	113.10
26	14	1120	G	N3-C4-C5	6.38	131.79	128.60
26	14	2640	G	OP1-P-OP2	6.38	129.16	119.60
1	13	1487	G	O5'-P-OP2	-6.37	99.96	105.70
26	1H	937	U	N3-C4-O4	-6.37	114.94	119.40
26	1H	947	G	N1-C6-O6	6.37	123.72	119.90
26	1H	1475	G	N3-C2-N2	-6.37	115.44	119.90
26	1H	2308	G	C6-N1-C2	6.37	128.92	125.10
26	1H	2359	C	C6-N1-C2	-6.37	117.75	120.30
26	1H	2380	C	OP1-P-O3'	-6.37	91.18	105.20
26	1H	2786	U	N1-C2-O2	-6.37	118.34	122.80
26	1H	2856	C	N1-C2-O2	6.37	122.72	118.90
1	1G	309	G	C5-C6-O6	-6.37	124.78	128.60
26	14	1573	G	O5'-P-OP2	-6.37	99.96	105.70
26	14	2244	U	N3-C4-O4	-6.37	114.94	119.40
26	14	2580	U	N1-C2-N3	6.37	118.72	114.90
26	1H	314	A	C5-N7-C8	-6.37	100.71	103.90
26	1H	627	A	OP2-P-O3'	-6.37	91.18	105.20
26	1H	1306	C	C6-N1-C2	6.37	122.85	120.30
26	1H	1588	C	OP1-P-OP2	-6.37	110.04	119.60
1	1G	53	A	C5-C6-N6	-6.37	118.60	123.70
26	14	86	C	N3-C4-N4	6.37	122.46	118.00
26	14	308	G	C6-C5-N7	-6.37	126.58	130.40
26	14	386	G	C5-N7-C8	-6.37	101.11	104.30
26	14	492	A	C6-N1-C2	-6.37	114.78	118.60
26	14	1266	G	N3-C4-N9	6.37	129.82	126.00
26	14	1281	G	C8-N9-C4	-6.37	103.85	106.40
26	14	1437	C	C6-N1-C2	-6.37	117.75	120.30
26	14	1467	C	C5-C6-N1	-6.37	117.81	121.00
26	14	1828	G	C8-N9-C4	-6.37	103.85	106.40
26	14	2079	U	N3-C4-C5	-6.37	110.78	114.60
26	14	2216	G	N3-C2-N2	-6.37	115.44	119.90
26	14	2702	U	C5-C6-N1	-6.37	119.51	122.70
26	1H	474	G	C8-N9-C1'	6.37	135.28	127.00
26	14	1256	G	C2-N3-C4	6.37	115.08	111.90
1	13	689	C	C2-N3-C4	6.37	123.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	733	A	C5-N7-C8	6.37	107.08	103.90
1	13	1107	C	N3-C4-C5	-6.37	119.35	121.90
26	1H	46	C	OP1-P-O3'	-6.37	91.19	105.20
26	1H	252	G	O5'-P-OP2	-6.37	99.97	105.70
26	1H	1236	G	OP1-P-OP2	-6.37	110.05	119.60
26	1H	2001	A	C2-N3-C4	6.37	113.78	110.60
26	1H	2219	G	N3-C4-C5	6.37	131.78	128.60
26	1H	2311	A	C4-C5-N7	6.37	113.88	110.70
26	1H	2835	A	O5'-P-OP1	6.37	118.34	110.70
1	1G	922	G	C5-C6-O6	6.37	132.42	128.60
1	1G	1183	A	O4'-C1'-N9	6.37	113.30	108.20
26	14	270	A	C5-C6-N1	-6.37	114.52	117.70
26	14	1223	C	OP2-P-O3'	6.37	119.21	105.20
26	14	2430	A	O5'-P-OP2	6.37	118.34	110.70
1	13	50	A	C5'-C4'-O4'	6.37	116.74	109.10
1	13	1190	G	C2-N3-C4	-6.37	108.72	111.90
26	1H	587	C	N1-C2-N3	6.37	123.66	119.20
26	1H	1253	A	N1-C6-N6	6.37	122.42	118.60
1	1G	266	G	C4-N9-C1'	6.37	134.78	126.50
26	14	2060	A	O5'-P-OP2	-6.37	99.97	105.70
1	13	428	G	C2-N3-C4	-6.37	108.72	111.90
1	13	1491	G	OP2-P-O3'	6.37	119.20	105.20
26	1H	113	G	C4-C5-N7	6.37	113.35	110.80
26	1H	221	A	N3-C4-C5	-6.37	122.34	126.80
26	1H	1752	C	N1-C2-N3	-6.37	114.75	119.20
26	1H	2060	A	N9-C4-C5	-6.37	103.25	105.80
26	1H	2468	G	OP1-P-OP2	6.37	129.15	119.60
1	1G	1495	U	N3-C4-O4	6.37	123.86	119.40
26	14	844	C	O5'-P-OP1	6.37	118.34	110.70
26	14	2613	U	C6-N1-C2	6.37	124.82	121.00
26	14	2768	C	O5'-P-OP2	-6.37	99.97	105.70
1	13	1260	C	N3-C4-N4	6.36	122.45	118.00
26	1H	309	G	N1-C6-O6	-6.36	116.08	119.90
26	1H	977	G	C6-C5-N7	6.36	134.22	130.40
26	1H	1630(A)	C	N3-C4-N4	-6.36	113.55	118.00
26	1H	1784	A	C4-C5-C6	-6.36	113.82	117.00
26	1H	2377	A	OP1-P-O3'	6.36	119.20	105.20
1	1G	578	C	C2-N3-C4	-6.36	116.72	119.90
1	1G	1338	G	C5-C6-O6	6.36	132.42	128.60
26	14	15	G	C8-N9-C4	-6.36	103.85	106.40
26	14	259	G	C5-C6-N1	-6.36	108.32	111.50
26	14	1158	C	C2-N3-C4	-6.36	116.72	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1244	G	N9-C4-C5	-6.36	102.86	105.40
26	14	1870	C	O5'-P-OP2	-6.36	99.97	105.70
1	13	265	G	OP1-P-OP2	6.36	129.14	119.60
26	1H	244	A	C5-C6-N6	-6.36	118.61	123.70
27	16	13	A	O5'-P-OP1	6.36	118.33	110.70
1	1G	666	G	C5-C6-N1	-6.36	108.32	111.50
1	13	364	A	C8-N9-C4	-6.36	103.26	105.80
26	1H	2192	G	N3-C2-N2	-6.36	115.45	119.90
1	1G	1526	G	C5-C6-O6	-6.36	124.78	128.60
26	14	537	C	N1-C2-O2	6.36	122.72	118.90
26	14	2080	G	N1-C6-O6	-6.36	116.08	119.90
1	13	997	U	C6-N1-C2	-6.36	117.19	121.00
26	1H	389	G	C8-N9-C1'	-6.36	118.73	127.00
26	1H	1294	U	C5-C4-O4	-6.36	122.08	125.90
26	1H	1328	G	N3-C4-N9	6.36	129.82	126.00
26	1H	1845	G	C5-C6-N1	6.36	114.68	111.50
26	1H	2432	A	OP1-P-OP2	6.36	129.14	119.60
26	1H	2497	A	N9-C4-C5	6.36	108.34	105.80
26	14	1622	G	OP1-P-OP2	-6.36	110.06	119.60
1	13	181	G	C5-N7-C8	6.36	107.48	104.30
1	13	318	G	N7-C8-N9	-6.36	109.92	113.10
1	13	324	G	C5-N7-C8	-6.36	101.12	104.30
1	13	436	C	C6-N1-C2	-6.36	117.76	120.30
1	13	1518	A	C5-C6-N6	6.36	128.79	123.70
26	1H	466	A	C8-N9-C4	6.36	108.34	105.80
26	1H	494	G	C5-C6-O6	6.36	132.41	128.60
26	1H	1148	A	C4-C5-N7	-6.36	107.52	110.70
26	1H	1391	U	N3-C2-O2	-6.36	117.75	122.20
26	1H	1918	A	C8-N9-C4	6.36	108.34	105.80
26	1H	2259	G	C6-C5-N7	-6.36	126.59	130.40
1	1G	107	G	O5'-P-OP2	-6.36	99.98	105.70
1	1G	687	A	P-O3'-C3'	6.36	127.33	119.70
1	1G	824	C	N1-C2-O2	-6.36	115.09	118.90
1	1G	921	U	O5'-P-OP2	-6.36	99.98	105.70
26	14	774	A	C5-C6-N6	-6.36	118.61	123.70
26	14	961	C	C5-C6-N1	-6.36	117.82	121.00
26	14	1443	G	C4-C5-C6	6.36	122.61	118.80
26	14	1606	G	C2-N3-C4	6.36	115.08	111.90
26	14	1613	G	N3-C2-N2	6.36	124.35	119.90
1	13	369	C	N1-C2-O2	-6.36	115.09	118.90
1	13	467	G	N1-C6-O6	6.36	123.71	119.90
1	13	675	A	C5-C6-N1	-6.36	114.52	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	742	G	OP1-P-OP2	6.36	129.13	119.60
1	13	890	G	C5-C6-N1	6.36	114.68	111.50
1	13	1132	C	C5-C6-N1	6.36	124.18	121.00
25	4K	19	A	C6-C5-N7	-6.36	127.85	132.30
26	1H	103	A	C8-N9-C4	6.36	108.34	105.80
26	1H	706	A	C5-C6-N6	-6.36	118.62	123.70
26	1H	792	G	O4'-C1'-N9	-6.36	103.11	108.20
26	1H	1052	C	C2-N3-C4	6.36	123.08	119.90
26	1H	1854	A	O5'-P-OP1	-6.36	99.98	105.70
1	1G	121	C	C2-N1-C1'	6.36	125.79	118.80
26	14	504	U	OP1-P-OP2	6.36	129.13	119.60
26	1H	650	C	C5-C6-N1	6.35	124.18	121.00
26	1H	1928	A	C5-C6-N1	6.35	120.88	117.70
26	1H	2738	A	N9-C4-C5	-6.35	103.26	105.80
1	1G	435	C	C6-N1-C2	6.35	122.84	120.30
26	14	1403	C	O5'-P-OP2	-6.35	99.98	105.70
1	13	500	G	N9-C4-C5	-6.35	102.86	105.40
1	13	609	A	C6-N1-C2	-6.35	114.79	118.60
1	13	1128	C	N1-C2-O2	6.35	122.71	118.90
24	3K	33	U	C5-C6-N1	-6.35	119.52	122.70
26	1H	137(A)	G	C8-N9-C4	-6.35	103.86	106.40
26	1H	527	C	C5-C4-N4	-6.35	115.75	120.20
26	1H	652	C	N3-C2-O2	6.35	126.35	121.90
26	1H	1426	G	C4-C5-N7	6.35	113.34	110.80
26	1H	1554	A	N3-C4-C5	-6.35	122.35	126.80
26	1H	2417	C	O5'-P-OP1	6.35	118.32	110.70
26	14	56	A	N1-C6-N6	-6.35	114.79	118.60
26	14	449	A	N1-C2-N3	-6.35	126.12	129.30
26	14	930	U	OP1-P-OP2	6.35	129.13	119.60
26	14	2731	G	C4-N9-C1'	6.35	134.76	126.50
1	13	546	G	C5-C6-N1	-6.35	108.33	111.50
26	1H	973	A	C8-N9-C4	6.35	108.34	105.80
26	1H	2464	C	C2-N3-C4	-6.35	116.72	119.90
27	16	98	G	N1-C6-O6	6.35	123.71	119.90
1	1G	359	U	C5-C6-N1	-6.35	119.52	122.70
1	1G	724	G	N1-C6-O6	6.35	123.71	119.90
23	2K	34	U	C5-C6-N1	-6.35	119.53	122.70
26	1H	253	C	C6-N1-C2	6.35	122.84	120.30
26	1H	446	G	N3-C4-N9	6.35	129.81	126.00
26	1H	783	A	N9-C4-C5	6.35	108.34	105.80
26	1H	1263	U	N1-C2-N3	-6.35	111.09	114.90
26	1H	1677	A	C4-C5-C6	6.35	120.17	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1765	C	C5-C4-N4	6.35	124.64	120.20
26	1H	1857	G	C6-C5-N7	-6.35	126.59	130.40
26	1H	1905	C	N3-C2-O2	6.35	126.34	121.90
26	1H	2014	A	C5-N7-C8	-6.35	100.72	103.90
26	14	186	G	C6-C5-N7	6.35	134.21	130.40
26	14	256	A	N1-C2-N3	6.35	132.47	129.30
26	14	393	C	N3-C2-O2	-6.35	117.46	121.90
26	14	826	U	C6-N1-C1'	6.35	130.09	121.20
26	14	1310	G	C5-C6-O6	-6.35	124.79	128.60
26	14	1986	A	C2-N3-C4	-6.35	107.43	110.60
26	14	2301	C	C5-C6-N1	6.35	124.17	121.00
1	13	713	G	O5'-P-OP1	-6.35	99.99	105.70
26	1H	364	C	N3-C4-C5	-6.35	119.36	121.90
26	1H	443	A	N9-C4-C5	-6.35	103.26	105.80
26	1H	583	G	OP2-P-O3'	-6.35	91.24	105.20
26	1H	693	C	O5'-P-OP2	-6.35	99.99	105.70
26	1H	741	G	N3-C2-N2	-6.35	115.46	119.90
26	1H	2042	A	O5'-P-OP2	-6.35	99.99	105.70
26	14	1478	G	OP1-P-OP2	6.35	129.12	119.60
26	14	1640	C	OP1-P-OP2	-6.35	110.08	119.60
26	14	1815	A	C4-C5-N7	6.35	113.87	110.70
1	13	403	C	N3-C4-C5	-6.35	119.36	121.90
1	13	1208	C	O5'-P-OP2	-6.35	99.99	105.70
1	13	1495	U	C5-C4-O4	6.35	129.71	125.90
26	1H	212	G	OP2-P-O3'	6.35	119.16	105.20
26	1H	1586	A	C5-N7-C8	-6.35	100.73	103.90
26	1H	2888	C	C6-N1-C2	-6.35	117.76	120.30
1	1G	346	G	C4-C5-N7	6.35	113.34	110.80
1	1G	368	U	O5'-P-OP2	-6.35	99.99	105.70
26	14	1273	U	N1-C2-O2	-6.35	118.36	122.80
26	14	1767	C	C2-N3-C4	-6.35	116.73	119.90
26	14	1891	G	C4-C5-N7	-6.35	108.26	110.80
1	13	562	C	N1-C2-O2	6.34	122.71	118.90
1	13	1216	G	OP1-P-OP2	6.34	129.12	119.60
26	1H	667	U	N3-C2-O2	6.34	126.64	122.20
26	1H	749	C	N3-C4-N4	6.34	122.44	118.00
26	1H	1610	A	C8-N9-C4	6.34	108.34	105.80
26	1H	2350	C	C4-C5-C6	6.34	120.57	117.40
36	68	23	ARG	NE-CZ-NH1	-6.34	117.13	120.30
26	14	117	G	OP1-P-OP2	-6.34	110.08	119.60
26	14	540	G	N3-C4-C5	6.34	131.77	128.60
26	14	559	G	N1-C6-O6	6.34	123.71	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	622	G	C8-N9-C4	6.34	108.94	106.40
26	14	1203	G	C4-C5-N7	-6.34	108.26	110.80
26	1H	2587	A	N1-C2-N3	6.34	132.47	129.30
1	1G	451	A	C8-N9-C4	6.34	108.34	105.80
26	14	689	A	O5'-P-OP1	6.34	118.31	110.70
26	14	1283	G	C4-C5-C6	6.34	122.61	118.80
1	13	927	G	C4-C5-N7	6.34	113.34	110.80
26	1H	102	G	O5'-P-OP1	6.34	118.31	110.70
26	1H	530	G	C2-N3-C4	-6.34	108.73	111.90
26	1H	1197	G	OP2-P-O3'	6.34	119.15	105.20
26	1H	1989	G	N1-C2-N2	6.34	121.91	116.20
26	1H	2070	G	OP2-P-O3'	6.34	119.15	105.20
29	11	217	ARG	CG-CD-NE	6.34	125.12	111.80
1	1G	254	G	N1-C6-O6	6.34	123.70	119.90
1	13	5	U	C6-N1-C2	-6.34	117.20	121.00
26	1H	1599	C	N3-C4-N4	-6.34	113.56	118.00
27	16	50	G	O5'-P-OP2	-6.34	99.99	105.70
1	1G	66	G	OP1-P-OP2	6.34	129.11	119.60
1	1G	110	C	C2-N3-C4	-6.34	116.73	119.90
1	1G	360	A	N7-C8-N9	-6.34	110.63	113.80
1	1G	1398	A	N1-C6-N6	-6.34	114.80	118.60
1	1G	1465	C	N3-C4-C5	-6.34	119.36	121.90
26	14	1133	U	N3-C4-C5	6.34	118.40	114.60
26	14	1590	U	O5'-P-OP1	-6.34	99.99	105.70
1	13	1490	C	N1-C2-O2	-6.34	115.10	118.90
1	13	1521	G	C2-N3-C4	-6.34	108.73	111.90
26	1H	527	C	N3-C4-N4	6.34	122.44	118.00
26	14	1367	A	C6-C5-N7	-6.34	127.86	132.30
26	14	2348	U	N1-C2-O2	6.34	127.24	122.80
26	14	2574	G	C2-N3-C4	6.34	115.07	111.90
26	14	2879	C	N1-C2-O2	6.34	122.70	118.90
1	13	387	U	OP1-P-O3'	6.34	119.14	105.20
26	1H	305	U	C6-N1-C2	-6.34	117.20	121.00
26	1H	320	A	C2-N3-C4	-6.34	107.43	110.60
26	1H	1158	C	C5-C4-N4	6.34	124.64	120.20
26	1H	1263	U	OP1-P-O3'	6.34	119.14	105.20
26	1H	1837	C	N1-C2-O2	6.34	122.70	118.90
26	1H	1902	C	C2-N1-C1'	-6.34	111.83	118.80
27	16	1	U	C5-C6-N1	6.34	125.87	122.70
27	16	65	C	N1-C2-O2	6.34	122.70	118.90
1	1G	610	G	C2-N3-C4	-6.34	108.73	111.90
1	1G	890	G	N9-C4-C5	6.34	107.94	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	203	C	C5-C6-N1	-6.34	117.83	121.00
26	14	681	G	N7-C8-N9	-6.34	109.93	113.10
26	14	1781	C	N3-C4-N4	-6.34	113.56	118.00
26	14	2569	G	N7-C8-N9	-6.34	109.93	113.10
26	1H	681	G	C6-N1-C2	-6.33	121.30	125.10
26	1H	702	G	O5'-P-OP2	-6.33	100.00	105.70
26	1H	1465	G	C5-C6-N1	6.33	114.67	111.50
26	14	76	C	C5-C4-N4	6.33	124.64	120.20
26	14	791	C	N1-C2-O2	-6.33	115.10	118.90
26	14	1252	G	C8-N9-C4	6.33	108.93	106.40
26	14	1694	C	C4-C5-C6	-6.33	114.23	117.40
1	13	310	G	OP1-P-OP2	-6.33	110.10	119.60
1	13	913	A	N1-C2-N3	6.33	132.47	129.30
26	1H	284	U	OP2-P-O3'	6.33	119.13	105.20
26	1H	1974	C	C2-N3-C4	6.33	123.07	119.90
26	1H	2423	U	C5-C6-N1	-6.33	119.53	122.70
1	1G	128	G	C5-C6-O6	6.33	132.40	128.60
26	14	326	G	C5-C6-O6	6.33	132.40	128.60
26	14	430	G	N9-C4-C5	-6.33	102.87	105.40
26	14	435	C	C6-N1-C2	6.33	122.83	120.30
26	14	1647	G	C6-N1-C2	-6.33	121.30	125.10
26	14	1976	U	OP1-P-OP2	6.33	129.10	119.60
26	14	2853	C	O5'-P-OP2	-6.33	100.00	105.70
1	13	1235	U	C6-N1-C2	-6.33	117.20	121.00
1	13	1270	C	C4-C5-C6	-6.33	114.23	117.40
26	1H	1410	G	N7-C8-N9	-6.33	109.93	113.10
26	1H	2456	C	OP2-P-O3'	6.33	119.13	105.20
26	1H	2532	G	C5-C6-N1	-6.33	108.33	111.50
1	1G	284	G	C8-N9-C4	6.33	108.93	106.40
26	14	238	C	C5-C6-N1	-6.33	117.83	121.00
26	14	1532	C	N3-C4-C5	-6.33	119.37	121.90
26	14	2256	G	N3-C2-N2	6.33	124.33	119.90
26	14	2384	G	C4-C5-N7	-6.33	108.27	110.80
26	1H	202	U	C6-N1-C2	6.33	124.80	121.00
26	1H	512	G	C5-N7-C8	-6.33	101.14	104.30
26	1H	1311	G	N1-C2-N3	6.33	127.70	123.90
26	1H	1683	C	OP1-P-O3'	6.33	119.13	105.20
26	1H	1941	C	C4-C5-C6	6.33	120.56	117.40
26	1H	2766	G	C8-N9-C4	-6.33	103.87	106.40
27	16	44	G	P-O3'-C3'	6.33	127.30	119.70
1	1G	923	A	N1-C2-N3	6.33	132.47	129.30
56	1L	76	A	N1-C6-N6	6.33	122.40	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2L	2	G	C2-N3-C4	6.33	115.06	111.90
26	14	992	C	O5'-P-OP1	6.33	118.30	110.70
26	14	2616	C	OP2-P-O3'	6.33	119.13	105.20
1	13	285	G	C5-C6-O6	-6.33	124.80	128.60
1	13	397	A	C5-C6-N6	6.33	128.76	123.70
1	13	1069	C	OP1-P-OP2	6.33	129.09	119.60
1	13	1283	G	C2-N3-C4	6.33	115.06	111.90
26	1H	465	G	OP2-P-O3'	6.33	119.12	105.20
26	1H	873	G	O5'-P-OP2	-6.33	100.00	105.70
26	1H	2545	G	N9-C4-C5	6.33	107.93	105.40
26	1H	2745	C	C6-N1-C2	-6.33	117.77	120.30
27	16	67	G	N9-C4-C5	-6.33	102.87	105.40
1	1G	766	A	N1-C6-N6	6.33	122.40	118.60
23	2L	19	G	C4-N9-C1'	-6.33	118.27	126.50
26	14	307	G	N1-C6-O6	6.33	123.70	119.90
26	14	675	A	C6-N1-C2	6.33	122.40	118.60
26	14	2426	A	C6-N1-C2	6.33	122.40	118.60
26	1H	99	U	C5-C4-O4	6.33	129.70	125.90
26	1H	704	G	N1-C6-O6	6.33	123.70	119.90
26	1H	1156	A	N1-C2-N3	6.33	132.46	129.30
26	1H	1501	C	C5-C6-N1	6.33	124.16	121.00
26	1H	1766	U	C5-C4-O4	-6.33	122.10	125.90
26	1H	1926	U	C5-C4-O4	6.33	129.70	125.90
1	1G	889	A	C5-C6-N1	6.33	120.86	117.70
26	14	1409	C	N1-C2-O2	-6.33	115.10	118.90
1	13	520	A	N9-C4-C5	-6.33	103.27	105.80
1	13	1227	A	C2-N3-C4	-6.33	107.44	110.60
1	13	1400	C	C6-N1-C1'	-6.33	113.21	120.80
1	13	1467	G	C5-C6-N1	-6.33	108.34	111.50
26	1H	414	C	OP1-P-OP2	6.33	129.09	119.60
26	1H	998	C	OP1-P-OP2	-6.33	110.11	119.60
26	1H	1551	C	C4-C5-C6	6.33	120.56	117.40
26	1H	1854	A	OP1-P-OP2	6.33	129.09	119.60
26	1H	2032	G	N1-C2-N3	6.33	127.69	123.90
26	14	153	C	OP1-P-OP2	-6.33	110.11	119.60
26	14	270(Q)	C	C6-N1-C2	-6.33	117.77	120.30
26	14	516	C	O5'-P-OP1	-6.33	100.01	105.70
26	14	775	G	C6-N1-C2	-6.33	121.30	125.10
26	14	1204	A	O4'-C1'-N9	6.33	113.26	108.20
26	14	1585	C	N1-C2-N3	-6.33	114.77	119.20
26	14	2599	G	C6-N1-C2	-6.33	121.30	125.10
26	14	2700	C	N1-C2-O2	-6.33	115.11	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	427	U	N3-C2-O2	-6.32	117.77	122.20
1	13	771	G	N3-C2-N2	-6.32	115.47	119.90
1	13	913	A	P-O3'-C3'	6.32	127.29	119.70
26	1H	241	A	N1-C2-N3	6.32	132.46	129.30
26	1H	273	G	C8-N9-C4	6.32	108.93	106.40
26	1H	1915	U	N1-C2-N3	6.32	118.69	114.90
26	1H	2438	U	C5-C6-N1	-6.32	119.54	122.70
1	1G	869	G	C8-N9-C4	-6.32	103.87	106.40
1	1G	1462	G	N3-C4-N9	-6.32	122.21	126.00
26	14	212	G	C5-C6-O6	-6.32	124.81	128.60
26	14	1232	G	N3-C4-C5	6.32	131.76	128.60
1	13	429	U	N1-C2-O2	6.32	127.22	122.80
26	1H	723	G	OP1-P-O3'	6.32	119.11	105.20
26	1H	1977	A	C5-C6-N6	6.32	128.76	123.70
26	1H	2711	A	P-O3'-C3'	6.32	127.29	119.70
26	14	1909	C	C5-C6-N1	-6.32	117.84	121.00
1	13	235	C	N3-C4-N4	6.32	122.42	118.00
1	13	976	G	C4-C5-C6	6.32	122.59	118.80
1	13	1370	G	C6-C5-N7	-6.32	126.61	130.40
25	4K	18	G	C5-C6-O6	6.32	132.39	128.60
26	1H	177	G	N1-C6-O6	-6.32	116.11	119.90
26	1H	343	C	C5-C6-N1	6.32	124.16	121.00
26	1H	1297	C	O5'-P-OP2	-6.32	100.01	105.70
26	1H	1357	U	N1-C2-N3	6.32	118.69	114.90
26	1H	2068	U	C4-C5-C6	-6.32	115.91	119.70
26	1H	2583	G	C6-C5-N7	-6.32	126.61	130.40
26	1H	2619	C	C5-C4-N4	-6.32	115.78	120.20
26	1H	2870	C	C6-N1-C2	-6.32	117.77	120.30
26	14	85	G	N1-C2-N2	-6.32	110.51	116.20
26	14	224	G	N1-C2-N2	-6.32	110.51	116.20
26	14	456	C	C2-N3-C4	-6.32	116.74	119.90
26	14	1518	C	O5'-P-OP1	-6.32	100.01	105.70
1	13	541	G	C5-C6-O6	-6.32	124.81	128.60
26	1H	1328	G	N1-C2-N3	6.32	127.69	123.90
26	14	808	G	N1-C6-O6	-6.32	116.11	119.90
49	F5	46	LEU	CB-CG-CD1	-6.32	100.26	111.00
26	1H	79	G	N7-C8-N9	6.32	116.26	113.10
26	1H	313	C	C6-N1-C2	-6.32	117.77	120.30
26	1H	386	G	N9-C4-C5	-6.32	102.87	105.40
26	1H	827	U	N3-C4-O4	6.32	123.82	119.40
26	1H	839	U	OP1-P-OP2	6.32	129.08	119.60
26	1H	1007	C	C2-N3-C4	-6.32	116.74	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1220	A	OP1-P-O3'	6.32	119.10	105.20
26	1H	1595	G	C5-C6-O6	-6.32	124.81	128.60
26	1H	1810	A	C2-N3-C4	6.32	113.76	110.60
26	1H	1953	A	C6-N1-C2	-6.32	114.81	118.60
26	1H	2346	A	O5'-P-OP1	-6.32	100.01	105.70
26	1H	2441	C	C5-C6-N1	-6.32	117.84	121.00
26	1H	2527	C	C5-C4-N4	-6.32	115.78	120.20
1	1G	1139	G	C8-N9-C4	6.32	108.93	106.40
26	14	631	A	N1-C2-N3	6.32	132.46	129.30
26	14	669	G	OP1-P-OP2	-6.32	110.12	119.60
26	14	1253	A	OP1-P-OP2	-6.32	110.12	119.60
26	14	2091	U	C5-C4-O4	6.32	129.69	125.90
26	14	2877	G	O5'-P-OP1	6.32	118.28	110.70
1	13	777	A	N7-C8-N9	6.32	116.96	113.80
1	13	928	G	N3-C2-N2	-6.32	115.48	119.90
26	1H	86	C	OP1-P-O3'	-6.32	91.31	105.20
26	1H	222	A	N7-C8-N9	-6.32	110.64	113.80
26	1H	1626	G	C6-N1-C2	-6.32	121.31	125.10
26	1H	1639	U	OP1-P-OP2	-6.32	110.13	119.60
26	1H	2580	U	N1-C2-O2	-6.32	118.38	122.80
26	1H	2632	A	C2-N3-C4	-6.32	107.44	110.60
26	14	913	U	C5-C6-N1	6.32	125.86	122.70
26	14	1297	C	N3-C4-N4	-6.32	113.58	118.00
26	14	1959	G	C6-C5-N7	6.32	134.19	130.40
26	14	2376	A	OP2-P-O3'	-6.32	91.31	105.20
26	14	2644	G	C5-C6-O6	6.32	132.39	128.60
1	13	756	C	N3-C4-C5	6.31	124.42	121.90
26	1H	1384	A	O5'-P-OP1	6.31	118.28	110.70
26	1H	2237	G	C5-C6-O6	6.31	132.39	128.60
26	1H	2600	A	N1-C2-N3	6.31	132.46	129.30
26	14	49	A	P-O3'-C3'	6.31	127.28	119.70
26	14	863	A	O5'-P-OP2	-6.31	100.02	105.70
26	14	2384	G	C5-N7-C8	6.31	107.46	104.30
14	5I	43	CYS	CA-CB-SG	-6.31	102.64	114.00
23	2K	30	G	N1-C2-N3	6.31	127.69	123.90
26	1H	332	A	N3-C4-C5	6.31	131.22	126.80
26	1H	590	A	N7-C8-N9	6.31	116.96	113.80
26	1H	1375	C	N3-C4-N4	6.31	122.42	118.00
26	1H	2259	G	N1-C2-N3	6.31	127.69	123.90
26	1H	2640	G	N3-C2-N2	-6.31	115.48	119.90
1	1G	884	U	C4-C5-C6	6.31	123.49	119.70
1	1G	1188	A	N7-C8-N9	-6.31	110.64	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	459	U	N3-C4-C5	6.31	118.39	114.60
26	14	1343	G	C6-C5-N7	-6.31	126.61	130.40
26	14	1519	G	C4-C5-N7	-6.31	108.28	110.80
26	14	1773	A	C5-C6-N1	6.31	120.86	117.70
26	14	2056	G	N9-C4-C5	-6.31	102.88	105.40
26	14	2678	C	N1-C2-O2	-6.31	115.11	118.90
26	1H	1137	G	N1-C6-O6	6.31	123.69	119.90
1	1G	586	C	N3-C4-C5	-6.31	119.38	121.90
1	13	735	C	N3-C4-N4	-6.31	113.58	118.00
26	1H	385	C	N1-C2-O2	-6.31	115.11	118.90
26	1H	802	A	N7-C8-N9	6.31	116.95	113.80
26	1H	1228	G	N1-C2-N2	-6.31	110.52	116.20
26	1H	1618	A	O5'-P-OP2	6.31	118.27	110.70
26	1H	1765	C	C4-C5-C6	6.31	120.56	117.40
26	1H	1869	G	N7-C8-N9	6.31	116.25	113.10
26	1H	2049	G	N9-C4-C5	6.31	107.92	105.40
26	1H	2289	G	N1-C2-N3	-6.31	120.11	123.90
26	1H	2717	G	C5-C6-O6	-6.31	124.81	128.60
26	14	571	A	N3-C4-C5	-6.31	122.38	126.80
26	14	1828	G	C5-N7-C8	6.31	107.45	104.30
26	14	1969	A	O4'-C1'-N9	6.31	113.25	108.20
26	14	2823	A	C8-N9-C4	6.31	108.32	105.80
40	65	110	LEU	CB-CG-CD1	6.31	121.73	111.00
1	13	191	G	N7-C8-N9	6.31	116.25	113.10
1	13	902	G	O5'-P-OP2	-6.31	100.02	105.70
1	13	1426	C	N3-C4-C5	-6.31	119.38	121.90
26	1H	995	C	N1-C2-N3	-6.31	114.78	119.20
26	1H	1225	C	N1-C2-O2	-6.31	115.12	118.90
26	1H	1892	C	O5'-P-OP2	-6.31	100.02	105.70
26	1H	2262	U	C6-N1-C2	-6.31	117.22	121.00
26	1H	2375	G	N3-C2-N2	-6.31	115.48	119.90
26	1H	2609	U	N1-C2-N3	6.31	118.69	114.90
26	1H	2691	C	O5'-P-OP1	-6.31	100.02	105.70
1	1G	30	U	C5-C4-O4	6.31	129.68	125.90
26	14	530	G	C4-C5-C6	6.31	122.58	118.80
26	14	956	G	C5-C6-N1	-6.31	108.35	111.50
26	14	1837	C	N3-C4-C5	-6.31	119.38	121.90
26	14	2422	A	C2-N3-C4	-6.31	107.45	110.60
26	14	2501	C	C2-N1-C1'	-6.31	111.86	118.80
26	14	2599	G	C5-C6-N1	6.31	114.65	111.50
26	14	2787	C	C5-C6-N1	6.31	124.15	121.00
26	1H	2493	U	OP1-P-OP2	6.31	129.06	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2544	G	C4-C5-C6	6.31	122.58	118.80
27	16	111	U	N3-C2-O2	-6.31	117.79	122.20
26	14	509	C	C2-N3-C4	-6.31	116.75	119.90
26	14	570	G	C8-N9-C4	-6.31	103.88	106.40
1	13	279	A	C2-N3-C4	-6.30	107.45	110.60
26	1H	119	A	O4'-C1'-N9	6.30	113.24	108.20
26	1H	234	C	N3-C2-O2	-6.30	117.49	121.90
26	1H	818	G	OP2-P-O3'	6.30	119.07	105.20
26	1H	2359	C	OP1-P-O3'	6.30	119.07	105.20
26	1H	2534	A	OP2-P-O3'	6.30	119.07	105.20
26	14	389	G	N9-C4-C5	-6.30	102.88	105.40
26	14	523	C	OP1-P-O3'	6.30	119.07	105.20
26	14	1698	A	N1-C2-N3	6.30	132.45	129.30
26	14	1728	G	N1-C2-N3	-6.30	120.12	123.90
26	14	1930	G	N3-C4-C5	-6.30	125.45	128.60
26	14	2008	C	N3-C2-O2	6.30	126.31	121.90
1	13	960	U	N3-C4-O4	6.30	123.81	119.40
26	1H	118	A	C8-N9-C4	6.30	108.32	105.80
26	1H	2387	U	C4-C5-C6	6.30	123.48	119.70
1	1G	901	A	N1-C6-N6	-6.30	114.82	118.60
26	14	2842	G	N1-C6-O6	6.30	123.68	119.90
1	13	284	G	C5-C6-N1	6.30	114.65	111.50
24	3K	28	U	N1-C2-O2	6.30	127.21	122.80
26	1H	227	A	O5'-P-OP2	6.30	118.26	110.70
26	1H	578	A	OP2-P-O3'	6.30	119.06	105.20
26	1H	1396	U	O4'-C1'-N1	6.30	113.24	108.20
26	1H	1572	A	N1-C2-N3	6.30	132.45	129.30
26	1H	1799	G	N3-C4-C5	-6.30	125.45	128.60
26	14	526	A	O5'-P-OP2	-6.30	100.03	105.70
26	14	1417	C	C2-N3-C4	-6.30	116.75	119.90
26	14	2370	G	N7-C8-N9	-6.30	109.95	113.10
26	14	2680	C	C5-C4-N4	-6.30	115.79	120.20
1	13	316	G	C8-N9-C4	6.30	108.92	106.40
26	1H	425	G	C5-N7-C8	6.30	107.45	104.30
26	1H	755	C	N3-C4-N4	6.30	122.41	118.00
26	1H	1324	G	N9-C4-C5	6.30	107.92	105.40
26	1H	1340	U	N1-C2-O2	-6.30	118.39	122.80
26	1H	1348	G	N1-C2-N2	6.30	121.87	116.20
26	1H	1427	A	OP1-P-OP2	6.30	129.05	119.60
26	1H	1569	A	O5'-P-OP1	-6.30	100.03	105.70
26	1H	1634	A	C4-C5-N7	-6.30	107.55	110.70
26	1H	1914	C	O4'-C1'-N1	6.30	113.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	935	A	N7-C8-N9	-6.30	110.65	113.80
26	14	349	G	C5-C6-N1	-6.30	108.35	111.50
26	14	510	C	OP1-P-OP2	6.30	129.05	119.60
26	14	1285	G	C8-N9-C4	6.30	108.92	106.40
26	14	2081	C	N3-C4-N4	-6.30	113.59	118.00
50	G5	33	MET	CB-CG-SD	-6.30	93.50	112.40
1	13	666	G	C5-N7-C8	-6.30	101.15	104.30
1	13	1521	G	C6-N1-C2	-6.30	121.32	125.10
26	1H	239	U	O5'-P-OP2	-6.30	100.03	105.70
26	1H	2380	C	C4-C5-C6	6.30	120.55	117.40
26	1H	2515	C	C4-C5-C6	-6.30	114.25	117.40
1	1G	236	G	C4-C5-C6	6.30	122.58	118.80
26	14	652	C	N1-C2-O2	-6.30	115.12	118.90
26	14	1763	G	C4-C5-N7	-6.30	108.28	110.80
26	14	1979	C	N1-C2-O2	-6.30	115.12	118.90
26	14	2530	A	N1-C6-N6	6.30	122.38	118.60
1	13	1057	G	C5-C6-O6	6.30	132.38	128.60
26	1H	164	U	C5-C6-N1	6.30	125.85	122.70
26	1H	575	A	C5-C6-N6	-6.30	118.66	123.70
26	1H	1516	U	OP1-P-O3'	6.30	119.05	105.20
26	1H	1650	G	C6-C5-N7	-6.30	126.62	130.40
26	1H	1658	C	C2-N3-C4	-6.30	116.75	119.90
26	1H	2298	A	C8-N9-C4	6.30	108.32	105.80
29	11	257	LEU	CA-CB-CG	6.30	129.78	115.30
1	13	781	A	C6-C5-N7	-6.29	127.89	132.30
1	13	1415	G	C8-N9-C1'	-6.29	118.82	127.00
26	1H	19	C	C5-C6-N1	-6.29	117.85	121.00
26	1H	476	G	C2-N3-C4	-6.29	108.75	111.90
1	1G	1272	G	C8-N9-C4	-6.29	103.88	106.40
26	14	35	G	C6-C5-N7	6.29	134.18	130.40
26	14	1955	U	N3-C2-O2	-6.29	117.79	122.20
1	13	564	C	O5'-P-OP1	-6.29	100.04	105.70
26	1H	19	C	C6-N1-C2	6.29	122.82	120.30
26	1H	292	C	C4-C5-C6	6.29	120.55	117.40
26	1H	587	C	N1-C2-O2	-6.29	115.12	118.90
26	1H	996	A	C8-N9-C4	6.29	108.32	105.80
26	1H	1259	G	C5-C6-N1	-6.29	108.35	111.50
26	1H	1422	G	N3-C2-N2	-6.29	115.50	119.90
26	1H	1527	G	OP1-P-OP2	-6.29	110.16	119.60
26	1H	2089	U	C5-C4-O4	-6.29	122.12	125.90
26	1H	2255	G	C4-C5-N7	-6.29	108.28	110.80
27	16	96	G	C5-C6-N1	6.29	114.65	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	H8	61	LEU	CB-CG-CD2	6.29	121.70	111.00
26	14	333	G	O5'-P-OP2	6.29	118.25	110.70
26	14	1388	G	C5-C6-N1	-6.29	108.35	111.50
26	14	1977	A	C4-C5-N7	-6.29	107.55	110.70
26	14	2728	U	C5-C4-O4	-6.29	122.12	125.90
27	1J	8	U	O5'-P-OP1	6.29	118.25	110.70
1	13	959	A	C5-C6-N1	6.29	120.85	117.70
1	13	963	G	O5'-P-OP2	-6.29	100.04	105.70
26	1H	807	U	C5-C4-O4	-6.29	122.12	125.90
26	1H	2042	A	O5'-P-OP1	6.29	118.25	110.70
26	14	305	U	C6-N1-C2	-6.29	117.23	121.00
26	14	1394	U	C6-N1-C2	-6.29	117.22	121.00
26	14	1966	A	N3-C4-C5	-6.29	122.40	126.80
26	14	2555	U	OP2-P-O3'	6.29	119.04	105.20
1	13	593	G	N3-C2-N2	-6.29	115.50	119.90
1	13	1523	G	C5-N7-C8	6.29	107.44	104.30
26	1H	1679	U	N3-C4-O4	6.29	123.80	119.40
26	1H	2337	G	C8-N9-C4	-6.29	103.88	106.40
1	1G	894	G	C2-N3-C4	-6.29	108.75	111.90
1	1G	898	G	N7-C8-N9	-6.29	109.95	113.10
26	14	613	U	C5-C4-O4	-6.29	122.13	125.90
1	13	500	G	N7-C8-N9	-6.29	109.96	113.10
26	1H	1900	A	N3-C4-C5	-6.29	122.40	126.80
26	1H	2257	U	OP2-P-O3'	6.29	119.03	105.20
26	1H	2407	G	OP2-P-O3'	6.29	119.03	105.20
26	1H	2553	G	C6-N1-C2	-6.29	121.33	125.10
26	14	265	A	N3-C4-C5	6.29	131.20	126.80
26	14	1900	A	N1-C2-N3	6.29	132.44	129.30
26	14	2413	G	N9-C4-C5	-6.29	102.89	105.40
26	14	2464	C	N1-C2-N3	-6.29	114.80	119.20
1	13	52	G	C6-C5-N7	-6.29	126.63	130.40
26	1H	1779	U	OP1-P-OP2	6.29	129.03	119.60
26	1H	2049	G	N1-C2-N2	6.29	121.86	116.20
26	14	2369	A	N9-C4-C5	6.29	108.31	105.80
1	13	243	A	C5-C6-N6	-6.29	118.67	123.70
1	13	970	C	N3-C2-O2	-6.29	117.50	121.90
1	13	1214	C	N1-C2-O2	-6.29	115.13	118.90
26	1H	261	G	C8-N9-C4	6.29	108.91	106.40
26	1H	701	G	N3-C4-N9	-6.29	122.23	126.00
26	1H	921	G	O5'-P-OP2	6.29	118.24	110.70
26	1H	1338	G	OP1-P-O3'	6.29	119.03	105.20
26	1H	1421	G	N3-C2-N2	-6.29	115.50	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2781	A	N3-C4-C5	6.29	131.20	126.80
27	16	79	C	OP2-P-O3'	6.29	119.03	105.20
26	14	16	G	C6-C5-N7	-6.29	126.63	130.40
26	14	113	G	N1-C2-N3	-6.29	120.13	123.90
26	14	809	G	C5-C6-N1	-6.29	108.36	111.50
26	14	843	G	C2-N3-C4	-6.29	108.76	111.90
26	14	848	G	C6-N1-C2	-6.29	121.33	125.10
26	14	2621	A	C6-N1-C2	-6.29	114.83	118.60
54	L5	19	ARG	NE-CZ-NH1	-6.29	117.16	120.30
23	2K	24	C	C2-N3-C4	-6.28	116.76	119.90
26	1H	595	C	O5'-P-OP1	6.28	118.24	110.70
26	1H	608	A	N7-C8-N9	-6.28	110.66	113.80
26	1H	937	U	C5-C6-N1	-6.28	119.56	122.70
26	1H	1561	G	C5-C6-O6	6.28	132.37	128.60
26	1H	2779	U	N3-C4-O4	-6.28	115.00	119.40
26	14	826	U	C5-C6-N1	-6.28	119.56	122.70
26	14	1506	C	C6-N1-C2	-6.28	117.79	120.30
26	14	1635	G	N3-C2-N2	-6.28	115.50	119.90
26	14	1837	C	N3-C2-O2	-6.28	117.50	121.90
1	13	140	A	N1-C6-N6	6.28	122.37	118.60
1	13	538	G	N7-C8-N9	-6.28	109.96	113.10
26	1H	575	A	N7-C8-N9	-6.28	110.66	113.80
26	1H	847	U	N1-C2-N3	6.28	118.67	114.90
26	1H	1704	G	O5'-P-OP1	6.28	118.24	110.70
1	1G	1243	C	O5'-P-OP2	-6.28	100.05	105.70
1	1G	1272	G	N7-C8-N9	6.28	116.24	113.10
26	14	678	C	C5-C6-N1	-6.28	117.86	121.00
26	14	787	U	OP1-P-OP2	-6.28	110.18	119.60
26	14	1236	G	C2-N3-C4	-6.28	108.76	111.90
26	14	2280	G	C4-C5-N7	6.28	113.31	110.80
1	13	99	C	N3-C4-C5	-6.28	119.39	121.90
1	13	326	G	C5-C6-O6	6.28	132.37	128.60
24	3K	37	A	N1-C2-N3	-6.28	126.16	129.30
26	1H	452	G	C4-C5-N7	-6.28	108.29	110.80
26	1H	973	A	N1-C6-N6	6.28	122.37	118.60
26	1H	1037	G	N3-C4-C5	6.28	131.74	128.60
26	1H	1403	C	C5-C6-N1	6.28	124.14	121.00
26	1H	2390	U	N3-C4-C5	-6.28	110.83	114.60
26	14	663	G	C4-C5-N7	-6.28	108.29	110.80
26	14	1264	G	C5-N7-C8	6.28	107.44	104.30
26	14	1284	A	C5-C6-N6	-6.28	118.68	123.70
26	14	1564	C	N1-C2-O2	6.28	122.67	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1780	A	C5-C6-N6	6.28	128.72	123.70
1	13	1340	A	C6-C5-N7	-6.28	127.91	132.30
26	1H	2373	G	N1-C2-N3	6.28	127.67	123.90
26	14	1559	G	N3-C4-N9	-6.28	122.23	126.00
26	14	1993	U	N1-C2-N3	6.28	118.67	114.90
26	14	2005	A	N9-C4-C5	6.28	108.31	105.80
26	14	2711	A	OP1-P-O3'	6.28	119.01	105.20
26	1H	233	A	N1-C6-N6	-6.28	114.83	118.60
26	1H	345	A	O5'-P-OP1	6.28	118.23	110.70
26	1H	2313	C	C4-C5-C6	6.28	120.54	117.40
1	1G	1128	C	C5-C6-N1	6.28	124.14	121.00
1	1G	1474	G	C5-C6-O6	-6.28	124.83	128.60
26	14	2338	G	C8-N9-C4	6.28	108.91	106.40
26	14	2702	U	N3-C2-O2	-6.28	117.81	122.20
26	14	2877	G	OP2-P-O3'	6.28	119.01	105.20
1	13	57	G	C4-C5-N7	-6.28	108.29	110.80
1	13	62	U	N3-C2-O2	-6.28	117.81	122.20
1	13	639	G	OP1-P-O3'	6.28	119.01	105.20
1	13	887	G	C8-N9-C4	6.28	108.91	106.40
26	1H	1164	G	O5'-P-OP2	-6.28	100.05	105.70
26	1H	1609	A	C4-C5-N7	-6.28	107.56	110.70
26	1H	1957	C	C5-C4-N4	6.28	124.59	120.20
26	1H	2055	C	N1-C1'-C2'	-6.28	105.10	112.00
1	1G	230	G	N3-C2-N2	-6.28	115.51	119.90
26	14	530	G	N3-C4-N9	6.28	129.76	126.00
26	14	568	U	OP1-P-OP2	6.28	129.01	119.60
26	14	1298	C	C5-C6-N1	6.28	124.14	121.00
26	14	1346	G	N1-C6-O6	-6.28	116.14	119.90
26	14	2218	G	N3-C4-N9	-6.28	122.23	126.00
26	14	2348	U	C5-C4-O4	-6.28	122.14	125.90
1	13	871	U	N1-C2-O2	6.27	127.19	122.80
1	1G	1515	C	OP1-P-OP2	6.27	129.01	119.60
26	14	1272	A	C5-C6-N6	-6.27	118.68	123.70
26	14	1305	C	C5-C6-N1	-6.27	117.86	121.00
27	1J	40	U	C2-N1-C1'	-6.27	110.17	117.70
1	13	1391	U	N3-C2-O2	-6.27	117.81	122.20
26	1H	771	G	C4-C5-C6	-6.27	115.04	118.80
26	1H	1156	A	C8-N9-C4	-6.27	103.29	105.80
26	1H	2243	U	N3-C4-C5	-6.27	110.84	114.60
26	1H	2575	C	C2-N3-C4	-6.27	116.76	119.90
1	1G	660	G	C6-C5-N7	6.27	134.16	130.40
26	14	255	A	C5-N7-C8	-6.27	100.76	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1005	C	N3-C2-O2	-6.27	117.51	121.90
26	14	1243	G	C6-C5-N7	-6.27	126.64	130.40
26	14	1578	U	N3-C2-O2	-6.27	117.81	122.20
26	14	2437	U	OP2-P-O3'	6.27	119.00	105.20
26	1H	868	U	C5-C6-N1	-6.27	119.56	122.70
26	1H	1199	U	C2-N3-C4	-6.27	123.24	127.00
26	1H	1247	A	C6-N1-C2	-6.27	114.84	118.60
26	14	264	C	C2-N1-C1'	6.27	125.70	118.80
26	14	1870	C	C6-N1-C2	6.27	122.81	120.30
26	14	1970	A	C6-C5-N7	-6.27	127.91	132.30
26	14	2461	C	OP1-P-OP2	6.27	129.01	119.60
26	14	2699	C	C5-C4-N4	-6.27	115.81	120.20
1	13	1502	A	C5-C6-N6	-6.27	118.69	123.70
23	2K	34	U	OP1-P-OP2	6.27	129.00	119.60
23	2K	49	C	N1-C2-O2	6.27	122.66	118.90
26	1H	446	G	C6-C5-N7	-6.27	126.64	130.40
26	1H	667	U	N1-C2-O2	-6.27	118.41	122.80
26	1H	757	U	C5-C4-O4	6.27	129.66	125.90
26	1H	856	C	OP1-P-OP2	6.27	129.00	119.60
26	1H	1015	G	C5-C6-O6	-6.27	124.84	128.60
26	1H	1639	U	C4-C5-C6	6.27	123.46	119.70
26	1H	1982	C	N3-C4-N4	6.27	122.39	118.00
30	21	152	LYS	C-N-CA	-6.27	109.14	122.30
26	14	782	A	N3-C4-N9	6.27	132.42	127.40
26	14	1296	G	N7-C8-N9	-6.27	109.97	113.10
1	13	394	G	N1-C2-N3	6.27	127.66	123.90
26	1H	1163	G	C4-C5-N7	-6.27	108.29	110.80
26	1H	1265	A	C5'-C4'-C3'	-6.27	105.97	116.00
26	1H	1559	G	N9-C4-C5	-6.27	102.89	105.40
26	1H	1604	C	O5'-P-OP2	6.27	118.22	110.70
26	1H	1765	C	OP1-P-O3'	6.27	118.99	105.20
26	1H	2069	G	N1-C2-N2	6.27	121.84	116.20
26	1H	2427	C	N3-C4-N4	6.27	122.39	118.00
26	1H	2773	C	OP2-P-O3'	6.27	118.99	105.20
27	16	23	G	C5-C6-N1	-6.27	108.37	111.50
27	16	49	C	N3-C4-N4	6.27	122.39	118.00
1	1G	197	A	C8-N9-C4	-6.27	103.29	105.80
1	1G	495	A	C5-C6-N6	6.27	128.71	123.70
26	14	102	G	C4-N9-C1'	-6.27	118.35	126.50
26	14	445	C	N1-C2-O2	-6.27	115.14	118.90
26	14	599	G	N1-C2-N3	6.27	127.66	123.90
26	14	760	G	C6-C5-N7	-6.27	126.64	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1303	G	C6-N1-C2	-6.27	121.34	125.10
26	14	1408	C	N1-C2-N3	6.27	123.59	119.20
26	14	1655	A	C8-N9-C4	6.27	108.31	105.80
26	14	1861	G	C5-C6-N1	-6.27	108.37	111.50
26	14	2721	A	C5-C6-N6	6.27	128.71	123.70
1	13	888	G	C6-C5-N7	-6.27	126.64	130.40
26	1H	92	G	C4-C5-N7	6.27	113.31	110.80
26	1H	1307	A	N1-C2-N3	6.27	132.43	129.30
26	1H	1349	A	C5-N7-C8	-6.27	100.77	103.90
1	1G	1469	G	N3-C2-N2	-6.27	115.51	119.90
1	1G	1495	U	N1-C2-N3	6.27	118.66	114.90
23	2L	57	C	OP1-P-O3'	6.27	118.98	105.20
26	14	932	G	C4-C5-N7	-6.27	108.29	110.80
26	14	1897	G	O5'-P-OP1	-6.27	100.06	105.70
26	14	2764	A	C8-N9-C4	6.27	108.31	105.80
1	13	517	G	C5-C6-O6	-6.26	124.84	128.60
1	13	1356	G	N1-C6-O6	6.26	123.66	119.90
26	1H	79	G	O5'-P-OP1	-6.26	100.06	105.70
26	1H	551	G	C2-N3-C4	-6.26	108.77	111.90
26	1H	1804	C	N3-C4-C5	6.26	124.41	121.90
26	14	1639	U	C5-C6-N1	-6.26	119.57	122.70
26	14	1789	A	OP1-P-O3'	6.26	118.98	105.20
26	14	2492	U	OP1-P-OP2	-6.26	110.20	119.60
26	14	2594	C	C5-C4-N4	-6.26	115.81	120.20
26	14	2762	G	C4-N9-C1'	6.26	134.64	126.50
26	1H	2567	G	O5'-P-OP2	6.26	118.22	110.70
26	14	1278	A	C8-N9-C1'	6.26	138.97	127.70
1	13	450	G	C4-C5-N7	-6.26	108.30	110.80
1	13	540	G	O5'-P-OP2	-6.26	100.07	105.70
26	1H	250	G	C6-C5-N7	-6.26	126.64	130.40
26	1H	686	G	OP1-P-OP2	6.26	128.99	119.60
26	1H	2351	G	N3-C4-C5	-6.26	125.47	128.60
26	1H	2445	G	OP2-P-O3'	6.26	118.97	105.20
1	1G	721	G	C5-C6-O6	6.26	132.36	128.60
1	1G	776	G	C5-C6-N1	-6.26	108.37	111.50
26	14	575	A	N7-C8-N9	-6.26	110.67	113.80
26	14	1202	C	N1-C2-N3	6.26	123.58	119.20
26	14	1919	A	O5'-P-OP1	-6.26	100.06	105.70
26	14	2429	G	OP1-P-O3'	-6.26	91.42	105.20
26	14	2456	C	OP2-P-O3'	6.26	118.97	105.20
1	13	583	A	C6-N1-C2	6.26	122.36	118.60
26	1H	194	G	O5'-P-OP2	6.26	118.21	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	631	A	N7-C8-N9	-6.26	110.67	113.80
26	1H	796	C	N3-C2-O2	6.26	126.28	121.90
26	1H	1199	U	N3-C2-O2	6.26	126.58	122.20
26	1H	1300	U	OP2-P-O3'	-6.26	91.43	105.20
26	1H	1358	G	C5-C6-O6	6.26	132.35	128.60
26	1H	2485	G	C6-N1-C2	-6.26	121.34	125.10
27	16	59	A	OP1-P-OP2	-6.26	110.21	119.60
1	1G	413	G	C8-N9-C1'	6.26	135.14	127.00
26	14	245	G	C5-C6-O6	-6.26	124.84	128.60
26	14	930	U	C5-C4-O4	6.26	129.66	125.90
26	14	1150	C	O5'-P-OP1	-6.26	100.07	105.70
26	14	1237	A	OP1-P-OP2	-6.26	110.21	119.60
26	14	1255	U	N3-C4-O4	6.26	123.78	119.40
26	14	1954	G	N1-C6-O6	-6.26	116.14	119.90
26	14	2301	C	N3-C4-C5	-6.26	119.40	121.90
26	14	2411	A	C5-N7-C8	-6.26	100.77	103.90
26	1H	633	A	C5-C6-N6	-6.26	118.69	123.70
26	1H	1568	G	N7-C8-N9	-6.26	109.97	113.10
26	1H	2357	U	C5-C6-N1	6.26	125.83	122.70
1	1G	146	G	C5-C6-N1	-6.26	108.37	111.50
26	14	324	A	N9-C4-C5	6.26	108.30	105.80
26	14	345	A	C8-N9-C4	6.26	108.30	105.80
26	14	660	G	C4-C5-N7	-6.26	108.30	110.80
26	14	2242	G	C4-C5-N7	-6.26	108.30	110.80
53	J5	20	ARG	NE-CZ-NH2	6.26	123.43	120.30
1	13	488	C	O5'-P-OP1	-6.26	100.07	105.70
1	13	750	G	O5'-P-OP1	-6.26	100.07	105.70
26	1H	271(C)	U	N3-C4-O4	-6.26	115.02	119.40
26	1H	612	G	C8-N9-C4	6.26	108.90	106.40
26	1H	2217	G	N1-C6-O6	6.26	123.65	119.90
26	1H	2331	G	N1-C2-N3	6.26	127.65	123.90
26	1H	2681	C	C2-N1-C1'	6.26	125.68	118.80
26	1H	2877	G	N1-C6-O6	6.26	123.65	119.90
1	1G	823	G	N3-C4-C5	6.26	131.73	128.60
1	1G	972	C	N3-C4-C5	-6.26	119.40	121.90
26	14	923	C	OP1-P-O3'	6.26	118.96	105.20
26	14	1973	G	N1-C6-O6	-6.26	116.15	119.90
26	14	1988	C	C4-C5-C6	-6.26	114.27	117.40
26	14	2235	G	C5-C6-N1	6.26	114.63	111.50
26	1H	2779	U	C2-N3-C4	-6.25	123.25	127.00
1	1G	1397	C	C5-C6-N1	6.25	124.13	121.00
1	1G	1529	G	C2-N3-C4	6.25	115.03	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	34	C	N3-C4-N4	6.25	122.38	118.00
26	14	102	G	P-O3'-C3'	6.25	127.21	119.70
26	14	447	A	C5-C6-N6	6.25	128.70	123.70
26	14	1438	U	N3-C2-O2	-6.25	117.82	122.20
1	13	550	G	C5-C6-N1	6.25	114.63	111.50
1	13	1468	A	C6-N1-C2	-6.25	114.85	118.60
26	1H	536	A	N1-C2-N3	6.25	132.43	129.30
26	1H	673	C	C2-N1-C1'	-6.25	111.92	118.80
26	1H	1989	G	C4-C5-N7	-6.25	108.30	110.80
26	1H	2264	C	O4'-C1'-N1	6.25	113.20	108.20
26	1H	2513	G	N3-C2-N2	-6.25	115.52	119.90
26	14	2510	C	N1-C2-N3	6.25	123.58	119.20
26	14	2516	G	OP1-P-O3'	-6.25	91.44	105.20
1	13	1512	U	N3-C2-O2	-6.25	117.83	122.20
26	1H	1264	G	N1-C2-N3	6.25	127.65	123.90
26	1H	1518	C	C5-C6-N1	6.25	124.13	121.00
26	1H	1789	A	N1-C6-N6	-6.25	114.85	118.60
26	1H	2236	C	C4-C5-C6	6.25	120.53	117.40
26	1H	2457	U	N3-C2-O2	6.25	126.58	122.20
1	1G	622	A	N7-C8-N9	-6.25	110.67	113.80
1	1G	898	G	OP1-P-OP2	6.25	128.98	119.60
26	14	110	G	C5-C6-O6	-6.25	124.85	128.60
26	14	363(D)	G	N9-C4-C5	-6.25	102.90	105.40
26	14	765	G	N1-C2-N3	6.25	127.65	123.90
26	14	1289	C	N1-C2-N3	6.25	123.58	119.20
26	14	2592	G	O5'-P-OP1	6.25	118.20	110.70
26	14	2617	C	N1-C2-N3	-6.25	114.82	119.20
26	14	2688	U	C2-N3-C4	-6.25	123.25	127.00
26	14	2731	G	N3-C2-N2	-6.25	115.52	119.90
26	1H	175	G	C4-C5-N7	6.25	113.30	110.80
26	1H	472	A	C5-C6-N6	-6.25	118.70	123.70
26	14	89	G	N9-C4-C5	-6.25	102.90	105.40
1	13	21	G	C5-N7-C8	6.25	107.42	104.30
1	13	1178	G	C8-N9-C4	-6.25	103.90	106.40
26	1H	582	G	C5-C6-O6	-6.25	124.85	128.60
26	1H	1299	G	C6-C5-N7	-6.25	126.65	130.40
26	1H	1454	U	C5-C4-O4	6.25	129.65	125.90
26	1H	1607	C	C5-C6-N1	6.25	124.12	121.00
26	1H	1779	U	C6-N1-C2	6.25	124.75	121.00
26	1H	1888	G	N7-C8-N9	6.25	116.22	113.10
26	1H	2280	G	OP1-P-O3'	6.25	118.95	105.20
26	1H	2772	C	O5'-P-OP2	-6.25	100.08	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	495	G	N3-C4-N9	-6.25	122.25	126.00
26	14	575	A	C6-N1-C2	-6.25	114.85	118.60
26	14	721	C	C5-C4-N4	-6.25	115.83	120.20
26	14	1500	G	C5-N7-C8	-6.25	101.18	104.30
26	14	2784	C	N3-C2-O2	6.25	126.27	121.90
1	13	1250	A	C5-C6-N6	6.25	128.70	123.70
1	13	1268	A	C6-N1-C2	-6.25	114.85	118.60
26	1H	86	C	OP2-P-O3'	6.25	118.94	105.20
26	1H	328	U	OP2-P-O3'	6.25	118.94	105.20
26	1H	814	C	C5-C6-N1	-6.25	117.88	121.00
26	1H	848	G	C4-C5-N7	-6.25	108.30	110.80
26	1H	2228	G	C6-C5-N7	-6.25	126.65	130.40
1	1G	481	G	C4-C5-C6	6.25	122.55	118.80
26	14	577	G	C4-C5-C6	6.25	122.55	118.80
26	14	1695	G	C4-N9-C1'	6.25	134.62	126.50
26	14	1840	G	N1-C6-O6	6.25	123.65	119.90
26	14	1936	A	O4'-C1'-N9	6.25	113.20	108.20
26	14	2565	A	C4-C5-C6	-6.25	113.88	117.00
26	14	2702	U	N3-C4-O4	-6.25	115.03	119.40
26	1H	98	G	O5'-P-OP2	-6.25	100.08	105.70
26	1H	578	A	C5-C6-N6	-6.25	118.70	123.70
27	16	4	C	C6-N1-C2	6.25	122.80	120.30
26	14	1351	C	C4-C5-C6	6.25	120.52	117.40
26	1H	124	G	C4-N9-C1'	-6.24	118.38	126.50
26	1H	1517	G	C4-C5-N7	6.24	113.30	110.80
26	1H	1689	A	OP1-P-OP2	6.24	128.97	119.60
26	1H	2355	C	C4-C5-C6	6.24	120.52	117.40
26	14	14	A	C5-C6-N1	6.24	120.82	117.70
26	14	1649	G	N1-C2-N3	6.24	127.65	123.90
26	14	1826	G	C6-C5-N7	6.24	134.15	130.40
26	1H	621	A	N7-C8-N9	6.24	116.92	113.80
26	1H	2523	G	C5-C6-N1	6.24	114.62	111.50
26	14	51	G	C8-N9-C1'	-6.24	118.89	127.00
26	14	141	A	C5-N7-C8	-6.24	100.78	103.90
26	14	830	G	C8-N9-C4	6.24	108.90	106.40
26	14	993	G	C5-C6-O6	6.24	132.34	128.60
26	14	1228	G	N1-C6-O6	-6.24	116.16	119.90
26	14	1930	G	N9-C1'-C2'	6.24	122.11	114.00
1	13	231	G	N9-C4-C5	6.24	107.90	105.40
1	13	369	C	C2-N3-C4	-6.24	116.78	119.90
1	13	1048	G	C5-C6-O6	-6.24	124.86	128.60
26	1H	843	G	C2-N3-C4	-6.24	108.78	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	917	A	C5-N7-C8	-6.24	100.78	103.90
26	1H	1218	C	OP1-P-OP2	6.24	128.96	119.60
26	1H	1404	C	N1-C2-N3	-6.24	114.83	119.20
26	1H	1634	A	N1-C6-N6	6.24	122.34	118.60
26	1H	1989	G	C5-C6-O6	-6.24	124.86	128.60
26	1H	2375	G	N1-C2-N2	6.24	121.82	116.20
27	16	106	G	C8-N9-C4	6.24	108.90	106.40
26	14	70	G	N3-C4-N9	6.24	129.74	126.00
26	14	629	G	C2-N3-C4	-6.24	108.78	111.90
26	14	2506	U	C4-C5-C6	6.24	123.44	119.70
26	14	2599	G	N9-C4-C5	6.24	107.90	105.40
27	1J	28	C	N3-C4-C5	6.24	124.40	121.90
1	13	1239	A	N9-C4-C5	-6.24	103.31	105.80
22	1K	27	G	C5-N7-C8	6.24	107.42	104.30
26	1H	316	C	C2-N3-C4	-6.24	116.78	119.90
26	1H	1052	C	O5'-P-OP2	6.24	118.19	110.70
26	1H	2284	C	C6-N1-C2	6.24	122.80	120.30
26	1H	2760	C	C2-N3-C4	-6.24	116.78	119.90
26	14	626	U	N3-C2-O2	6.24	126.57	122.20
26	14	2325	G	C4-C5-N7	-6.24	108.31	110.80
26	14	2662	A	C8-N9-C4	6.24	108.30	105.80
26	14	2726	U	N3-C2-O2	-6.24	117.83	122.20
26	1H	652	C	C5-C4-N4	-6.24	115.83	120.20
26	1H	1006	C	OP1-P-OP2	6.24	128.96	119.60
26	1H	2477	C	N1-C2-O2	6.24	122.64	118.90
1	1G	166	G	N1-C6-O6	6.24	123.64	119.90
1	1G	1469	G	C6-N1-C2	6.24	128.84	125.10
26	14	2697	G	N9-C4-C5	-6.24	102.91	105.40
26	1H	283	A	C5-C6-N6	6.24	128.69	123.70
26	1H	801	G	C8-N9-C1'	6.24	135.11	127.00
26	1H	2713	A	C4-C5-C6	6.24	120.12	117.00
1	1G	902	G	C5-C6-O6	-6.24	124.86	128.60
1	1G	1482	G	C8-N9-C1'	-6.24	118.89	127.00
1	1G	1519	A	C8-N9-C4	-6.24	103.31	105.80
26	14	361	G	N3-C4-C5	-6.24	125.48	128.60
26	14	2264	C	OP1-P-OP2	-6.24	110.25	119.60
1	13	806	C	C6-N1-C2	6.23	122.79	120.30
26	14	2067	G	N1-C6-O6	6.23	123.64	119.90
1	13	742	G	N3-C4-C5	6.23	131.72	128.60
1	13	973	G	N1-C2-N3	6.23	127.64	123.90
1	13	1129	C	C2-N3-C4	6.23	123.02	119.90
1	13	1320	C	C6-N1-C2	6.23	122.79	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	271(A)	C	C6-N1-C2	6.23	122.79	120.30
26	1H	638	G	C5-C6-N1	-6.23	108.38	111.50
26	1H	796	C	OP2-P-O3'	6.23	118.91	105.20
26	1H	1139	G	N1-C6-O6	-6.23	116.16	119.90
1	1G	688	G	N1-C2-N3	6.23	127.64	123.90
26	14	1812	A	N1-C2-N3	6.23	132.42	129.30
26	14	2330	G	C8-N9-C1'	-6.23	118.90	127.00
26	14	2427	C	N3-C4-N4	6.23	122.36	118.00
26	14	2522	U	N3-C4-O4	-6.23	115.04	119.40
1	13	52	G	N1-C2-N2	-6.23	110.59	116.20
1	13	1480	G	C4-C5-N7	-6.23	108.31	110.80
23	2K	23	G	C6-N1-C2	6.23	128.84	125.10
26	1H	344	G	N3-C4-C5	-6.23	125.48	128.60
26	1H	539	G	C6-N1-C2	6.23	128.84	125.10
26	1H	1445	C	C5-C6-N1	6.23	124.11	121.00
38	88	85	LYS	N-CA-C	-6.23	94.18	111.00
1	1G	569	C	C5-C6-N1	6.23	124.11	121.00
26	14	691	C	N1-C2-N3	6.23	123.56	119.20
26	14	701	G	C4-C5-N7	-6.23	108.31	110.80
26	14	949	C	N3-C2-O2	6.23	126.26	121.90
26	14	1555	G	N9-C4-C5	6.23	107.89	105.40
26	14	1804	C	C5-C6-N1	6.23	124.11	121.00
26	14	2290	G	C5-C6-O6	-6.23	124.86	128.60
26	1H	1470	G	N9-C4-C5	6.23	107.89	105.40
32	41	94	LEU	CB-CG-CD1	-6.23	100.41	111.00
26	14	641	C	O5'-P-OP1	-6.23	100.09	105.70
26	14	739	G	C5-C6-O6	6.23	132.34	128.60
1	13	863	U	C6-N1-C1'	6.23	129.92	121.20
1	13	941	G	C6-C5-N7	6.23	134.14	130.40
1	13	1323	G	O5'-P-OP1	-6.23	100.10	105.70
1	13	1424	C	C5-C6-N1	-6.23	117.89	121.00
26	1H	206	U	N1-C2-N3	-6.23	111.16	114.90
26	1H	806	C	OP1-P-OP2	-6.23	110.26	119.60
26	1H	1403	C	N3-C4-C5	-6.23	119.41	121.90
26	1H	1947	C	N1-C2-O2	6.23	122.64	118.90
1	1G	230	G	N1-C2-N3	6.23	127.64	123.90
1	1G	414	A	C5-C6-N6	-6.23	118.72	123.70
1	1G	742	G	N1-C6-O6	6.23	123.64	119.90
26	14	760	G	N7-C8-N9	6.23	116.21	113.10
26	14	966	G	C5-C6-O6	6.23	132.34	128.60
26	14	2060	A	O4'-C1'-N9	6.23	113.18	108.20
26	14	2444	G	N1-C2-N3	6.23	127.64	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	141	A	O4'-C1'-N9	6.23	113.18	108.20
26	1H	1249	U	C5-C6-N1	-6.23	119.59	122.70
26	1H	1488	G	N7-C8-N9	6.23	116.21	113.10
26	14	535	C	C2-N3-C4	-6.23	116.79	119.90
26	14	2557	G	C5-N7-C8	6.23	107.41	104.30
1	13	734	G	OP2-P-O3'	6.22	118.89	105.20
1	13	951	G	C5-C6-O6	6.22	132.33	128.60
1	13	1309	G	N1-C6-O6	6.22	123.63	119.90
26	1H	43	G	OP1-P-OP2	-6.22	110.27	119.60
26	1H	491	G	O4'-C1'-N9	-6.22	103.22	108.20
26	1H	680	G	C8-N9-C4	6.22	108.89	106.40
26	1H	924	C	N3-C4-C5	6.22	124.39	121.90
26	1H	1189	A	C6-C5-N7	-6.22	127.94	132.30
26	1H	1422	G	C6-C5-N7	-6.22	126.67	130.40
26	1H	1553	A	C5-C6-N1	6.22	120.81	117.70
26	1H	1907	G	N3-C4-N9	-6.22	122.27	126.00
26	1H	2618	G	C2-N3-C4	6.22	115.01	111.90
27	16	39	A	OP1-P-OP2	-6.22	110.26	119.60
26	14	52	A	C5-C6-N6	6.22	128.68	123.70
26	14	1393	A	C6-N1-C2	-6.22	114.86	118.60
26	14	1918	A	C5-N7-C8	-6.22	100.79	103.90
26	14	2219	G	N3-C4-C5	6.22	131.71	128.60
26	14	2226	C	C4-C5-C6	-6.22	114.29	117.40
26	14	2371	G	N3-C4-C5	6.22	131.71	128.60
26	14	2867	G	O4'-C1'-N9	6.22	113.18	108.20
1	13	357	G	C8-N9-C4	-6.22	103.91	106.40
26	1H	711	G	C5-C6-N1	-6.22	108.39	111.50
26	1H	1689	A	N3-C4-C5	6.22	131.16	126.80
1	1G	528	C	N1-C2-N3	-6.22	114.84	119.20
1	1G	586	C	O5'-P-OP1	6.22	118.17	110.70
1	1G	1199	U	C5-C4-O4	6.22	129.63	125.90
23	2L	68	C	N1-C2-O2	6.22	122.63	118.90
26	14	432	A	C6-C5-N7	-6.22	127.94	132.30
26	14	828	U	C2-N1-C1'	6.22	125.17	117.70
26	14	853	G	C4-C5-N7	-6.22	108.31	110.80
26	14	1802	A	N9-C4-C5	6.22	108.29	105.80
26	14	2053	G	C5-C6-O6	6.22	132.33	128.60
26	1H	615	G	C4-C5-N7	-6.22	108.31	110.80
26	14	1520	U	O5'-P-OP2	-6.22	100.10	105.70
26	14	2723	C	C5-C4-N4	6.22	124.55	120.20
1	13	51	A	N1-C2-N3	6.22	132.41	129.30
1	13	928	G	N1-C6-O6	6.22	123.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	795	C	N3-C4-N4	-6.22	113.65	118.00
26	1H	910	A	N7-C8-N9	6.22	116.91	113.80
26	1H	1953	A	C5-C6-N1	6.22	120.81	117.70
26	1H	2320	A	O4'-C1'-N9	6.22	113.17	108.20
26	1H	2497	A	C4-C5-C6	6.22	120.11	117.00
1	1G	556	C	C6-N1-C2	6.22	122.79	120.30
1	1G	558	G	N1-C2-N3	6.22	127.63	123.90
26	14	2072	G	N7-C8-N9	-6.22	109.99	113.10
26	14	2827	C	N3-C4-C5	6.22	124.39	121.90
27	1J	32	C	C5-C6-N1	-6.22	117.89	121.00
26	14	87	C	N3-C2-O2	-6.22	117.55	121.90
26	14	2814	C	O5'-P-OP1	-6.22	100.10	105.70
1	13	498	A	N9-C4-C5	6.22	108.29	105.80
1	13	1053	G	C5-C6-N1	6.22	114.61	111.50
24	3K	34	U	C5-C4-O4	-6.22	122.17	125.90
26	1H	519	U	N1-C2-O2	-6.22	118.45	122.80
26	1H	724	U	C5-C4-O4	6.22	129.63	125.90
26	1H	1460	A	C2-N3-C4	-6.22	107.49	110.60
26	1H	1478	G	O5'-P-OP1	6.22	118.16	110.70
26	1H	1549	C	N1-C2-O2	6.22	122.63	118.90
1	1G	666	G	C8-N9-C1'	-6.22	118.92	127.00
26	14	52	A	C8-N9-C4	-6.22	103.31	105.80
26	14	1357	U	OP1-P-OP2	6.22	128.93	119.60
26	14	2020	A	C5-C6-N6	6.22	128.67	123.70
26	14	2325	G	N1-C2-N3	6.22	127.63	123.90
26	14	2396	G	C5-N7-C8	-6.22	101.19	104.30
1	13	664	G	N1-C6-O6	-6.21	116.17	119.90
1	13	1215	G	C5-C6-N1	-6.21	108.39	111.50
26	1H	57	C	OP2-P-O3'	6.21	118.87	105.20
26	1H	202	U	C4-C5-C6	-6.21	115.97	119.70
26	1H	1203	G	C5-C6-N1	6.21	114.61	111.50
26	1H	1563	G	C8-N9-C4	-6.21	103.91	106.40
26	1H	1588	C	OP2-P-O3'	-6.21	91.53	105.20
1	1G	529	G	C5-N7-C8	-6.21	101.19	104.30
26	14	761	A	C6-C5-N7	6.21	136.65	132.30
26	14	1236	G	C6-C5-N7	-6.21	126.67	130.40
26	14	1573	G	C2-N3-C4	-6.21	108.79	111.90
26	14	2686	G	O5'-P-OP1	-6.21	100.11	105.70
30	29	47	VAL	CG1-CB-CG2	-6.21	100.96	110.90
1	13	1420	C	C2-N3-C4	-6.21	116.79	119.90
26	1H	1498	C	O5'-P-OP1	-6.21	100.11	105.70
26	1H	1785	A	C5-C6-N1	6.21	120.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2478	A	N1-C6-N6	-6.21	114.87	118.60
26	14	33	U	N1-C2-O2	-6.21	118.45	122.80
26	14	751	A	N7-C8-N9	-6.21	110.69	113.80
26	14	2835	A	C4-C5-C6	-6.21	113.89	117.00
27	1J	55	U	N3-C4-C5	-6.21	110.87	114.60
1	13	186	C	OP1-P-O3'	6.21	118.86	105.20
1	13	888	G	N1-C2-N3	6.21	127.63	123.90
1	13	1406	U	O5'-P-OP2	-6.21	100.11	105.70
26	1H	64	A	C6-N1-C2	-6.21	114.87	118.60
26	1H	154	G	N3-C4-C5	6.21	131.71	128.60
26	1H	1726	G	N7-C8-N9	-6.21	109.99	113.10
26	1H	2716	U	N1-C2-N3	6.21	118.63	114.90
1	1G	684	A	C5-C6-N1	-6.21	114.59	117.70
26	14	683	C	C6-N1-C2	6.21	122.78	120.30
26	14	1631	A	C2-N3-C4	-6.21	107.50	110.60
26	14	2005	A	N7-C8-N9	-6.21	110.69	113.80
26	14	2250	G	C8-N9-C4	-6.21	103.92	106.40
1	13	312	C	N3-C4-N4	6.21	122.35	118.00
1	13	1519	A	C8-N9-C4	-6.21	103.32	105.80
26	1H	335	C	C2-N3-C4	6.21	123.00	119.90
26	1H	2504	U	N1-C2-O2	-6.21	118.45	122.80
1	1G	800	G	C4-N9-C1'	6.21	134.57	126.50
26	14	28	A	N7-C8-N9	6.21	116.91	113.80
26	14	126	A	N1-C2-N3	6.21	132.41	129.30
26	14	436	C	N3-C4-N4	-6.21	113.65	118.00
26	14	452	G	N1-C2-N3	6.21	127.63	123.90
26	14	509	C	N3-C2-O2	-6.21	117.55	121.90
26	14	1702	G	N1-C2-N3	6.21	127.63	123.90
26	14	2699	C	C2-N3-C4	-6.21	116.80	119.90
1	13	382	A	C8-N9-C4	6.21	108.28	105.80
26	1H	1026	U	O4'-C1'-N1	6.21	113.17	108.20
26	1H	1329	U	O5'-P-OP1	-6.21	100.11	105.70
26	1H	1818	U	N1-C2-O2	6.21	127.15	122.80
26	1H	2092	U	C5-C6-N1	6.21	125.80	122.70
26	1H	2833	G	O5'-P-OP2	-6.21	100.11	105.70
1	1G	50	A	C5-N7-C8	6.21	107.00	103.90
26	14	738	G	N7-C8-N9	6.21	116.20	113.10
26	14	1270	C	C6-N1-C2	-6.21	117.82	120.30
26	14	1688	U	C6-N1-C1'	6.21	129.89	121.20
26	14	2020	A	C8-N9-C4	-6.21	103.32	105.80
1	13	1441	G	N3-C2-N2	-6.21	115.56	119.90
26	1H	208	C	OP2-P-O3'	6.21	118.85	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	680	G	C5-N7-C8	6.21	107.40	104.30
26	1H	1423	G	C5-C6-O6	6.21	132.32	128.60
26	1H	1622	G	C2-N3-C4	-6.21	108.80	111.90
26	1H	2325	G	OP1-P-OP2	6.21	128.91	119.60
26	1H	2617	C	OP2-P-O3'	6.21	118.85	105.20
26	1H	2839	G	N3-C2-N2	-6.21	115.56	119.90
1	1G	534	U	OP2-P-O3'	6.21	118.85	105.20
1	1G	663	A	C5-C6-N1	-6.21	114.60	117.70
1	1G	991	U	N3-C2-O2	-6.21	117.86	122.20
1	1G	1261	A	C8-N9-C4	-6.21	103.32	105.80
26	14	72	U	C2-N3-C4	-6.21	123.28	127.00
26	14	387	U	N1-C2-N3	-6.21	111.18	114.90
26	14	389	G	N3-C4-N9	6.21	129.72	126.00
26	14	675	A	N3-C4-C5	6.21	131.15	126.80
26	14	841	A	OP1-P-OP2	6.21	128.91	119.60
26	14	863	A	C5-C6-N1	6.21	120.80	117.70
26	14	1664	A	N1-C2-N3	6.21	132.40	129.30
26	14	2361	A	C5-C6-N1	-6.21	114.60	117.70
26	1H	129	C	C6-N1-C2	6.21	122.78	120.30
27	16	103	U	C5-C4-O4	-6.21	122.18	125.90
26	14	469	G	C4-C5-C6	-6.21	115.08	118.80
26	14	2041	U	N3-C2-O2	-6.21	117.86	122.20
26	14	2232	U	C6-N1-C2	-6.21	117.28	121.00
26	14	2313	C	N3-C4-C5	-6.21	119.42	121.90
1	13	247	G	N3-C4-C5	-6.20	125.50	128.60
1	13	853	G	N3-C4-C5	6.20	131.70	128.60
1	13	881	G	C5-N7-C8	6.20	107.40	104.30
1	13	1467	G	C4-C5-N7	-6.20	108.32	110.80
26	1H	345	A	N7-C8-N9	6.20	116.90	113.80
26	1H	599	G	O5'-P-OP2	-6.20	100.12	105.70
26	1H	1829	A	OP2-P-O3'	6.20	118.85	105.20
1	1G	565	U	N3-C2-O2	-6.20	117.86	122.20
1	1G	1227	A	N1-C6-N6	6.20	122.32	118.60
1	1G	1465	C	C2-N1-C1'	6.20	125.62	118.80
26	14	759	G	N9-C4-C5	6.20	107.88	105.40
26	14	991	C	OP1-P-OP2	-6.20	110.29	119.60
26	14	1032	A	C8-N9-C4	6.20	108.28	105.80
26	14	1424	G	C8-N9-C4	6.20	108.88	106.40
26	14	1480	G	C5-C6-N1	-6.20	108.40	111.50
26	14	1769	G	C4-C5-C6	6.20	122.52	118.80
26	14	2287	A	C6-N1-C2	6.20	122.32	118.60
27	1J	104	A	N1-C6-N6	6.20	122.32	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	883	C	C6-N1-C2	-6.20	117.82	120.30
1	13	1479	C	N3-C4-C5	6.20	124.38	121.90
26	1H	1488	G	C2-N3-C4	-6.20	108.80	111.90
1	1G	108	G	N7-C8-N9	6.20	116.20	113.10
1	1G	244	U	N1-C2-O2	6.20	127.14	122.80
1	1G	900	A	C8-N9-C4	6.20	108.28	105.80
26	14	1154	G	C5-N7-C8	-6.20	101.20	104.30
26	14	1970	A	C5-N7-C8	-6.20	100.80	103.90
1	13	137	C	C4-C5-C6	-6.20	114.30	117.40
1	13	561	U	OP1-P-OP2	-6.20	110.30	119.60
1	13	618	C	C5-C6-N1	6.20	124.10	121.00
1	13	824	C	N1-C2-O2	-6.20	115.18	118.90
26	1H	193	U	OP2-P-O3'	6.20	118.84	105.20
26	1H	420	C	N1-C2-O2	-6.20	115.18	118.90
26	1H	659	C	O5'-P-OP2	-6.20	100.12	105.70
26	1H	847	U	C2-N3-C4	-6.20	123.28	127.00
26	1H	1030	G	C4-C5-C6	6.20	122.52	118.80
26	1H	1962	C	C5-C6-N1	6.20	124.10	121.00
26	1H	2058	A	C6-C5-N7	-6.20	127.96	132.30
26	1H	2714	G	N3-C2-N2	-6.20	115.56	119.90
1	1G	915	A	N1-C6-N6	-6.20	114.88	118.60
26	14	969	U	O5'-P-OP1	-6.20	100.12	105.70
26	14	1309	G	N3-C4-C5	6.20	131.70	128.60
26	14	1522	G	C6-N1-C2	-6.20	121.38	125.10
26	14	2034	U	C4-C5-C6	6.20	123.42	119.70
26	14	2084	C	OP1-P-OP2	6.20	128.90	119.60
26	14	2279	G	OP1-P-OP2	-6.20	110.30	119.60
26	14	2427	C	C5-C4-N4	-6.20	115.86	120.20
26	14	2517	C	N1-C2-O2	-6.20	115.18	118.90
26	14	2707	G	C8-N9-C4	6.20	108.88	106.40
26	14	2772	C	N3-C4-N4	-6.20	113.66	118.00
26	14	2850	A	N9-C4-C5	-6.20	103.32	105.80
26	14	2893	G	C2-N3-C4	6.20	115.00	111.90
1	13	265	G	N3-C2-N2	-6.20	115.56	119.90
26	1H	954	G	C5-N7-C8	6.20	107.40	104.30
26	1H	1705	G	N1-C2-N2	-6.20	110.62	116.20
26	1H	2063	C	OP1-P-OP2	6.20	128.90	119.60
26	1H	2270	G	C8-N9-C1'	-6.20	118.94	127.00
1	1G	1432	G	C4-C5-C6	6.20	122.52	118.80
26	14	596	G	N7-C8-N9	6.20	116.20	113.10
26	14	2049	G	C5-C6-O6	-6.20	124.88	128.60
26	14	2755	C	C6-N1-C1'	-6.20	113.36	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1205	U	C6-N1-C1'	6.20	129.88	121.20
1	13	1329	A	N9-C4-C5	-6.20	103.32	105.80
1	13	1497	G	N1-C6-O6	-6.20	116.18	119.90
26	1H	247	G	O5'-P-OP1	6.20	118.14	110.70
26	1H	374	A	N1-C2-N3	-6.20	126.20	129.30
26	1H	859	G	N7-C8-N9	-6.20	110.00	113.10
26	1H	1923	U	N3-C4-C5	-6.20	110.88	114.60
1	1G	915	A	C2-N3-C4	6.20	113.70	110.60
26	14	401	A	C8-N9-C4	-6.20	103.32	105.80
26	14	955	C	OP1-P-OP2	6.20	128.90	119.60
26	14	1960	A	C4-C5-N7	-6.20	107.60	110.70
1	13	108	G	N1-C2-N3	-6.20	120.18	123.90
1	13	289	G	O5'-P-OP2	-6.20	100.12	105.70
26	1H	607	U	N1-C2-O2	6.20	127.14	122.80
26	1H	933	A	N9-C4-C5	6.20	108.28	105.80
26	1H	961	C	N3-C4-C5	6.20	124.38	121.90
26	1H	1010	A	C5-C6-N1	-6.20	114.60	117.70
26	1H	1413	G	N3-C2-N2	-6.20	115.56	119.90
26	1H	1415	U	N3-C2-O2	-6.20	117.86	122.20
26	1H	1525	G	N1-C6-O6	-6.20	116.18	119.90
26	1H	1891	G	C5-N7-C8	-6.20	101.20	104.30
26	1H	2261	C	O5'-P-OP1	6.20	118.14	110.70
26	1H	2642	G	OP2-P-O3'	6.20	118.83	105.20
1	1G	128	G	C5-C6-N1	-6.20	108.40	111.50
26	14	187	G	C6-C5-N7	-6.20	126.68	130.40
26	14	2023	G	C8-N9-C4	-6.20	103.92	106.40
26	14	2375	G	N1-C2-N3	-6.20	120.18	123.90
1	13	130	A	C4-C5-N7	6.19	113.80	110.70
1	13	890	G	C2-N3-C4	6.19	115.00	111.90
26	1H	342	G	N3-C4-C5	-6.19	125.50	128.60
26	1H	1819	A	C8-N9-C4	6.19	108.28	105.80
26	1H	2441	C	OP1-P-OP2	-6.19	110.31	119.60
1	1G	560	U	C5-C6-N1	6.19	125.80	122.70
26	14	1764	G	N1-C6-O6	-6.19	116.18	119.90
1	13	136	C	C5-C6-N1	-6.19	117.90	121.00
1	13	576	G	C4-C5-C6	6.19	122.52	118.80
1	13	699	C	C6-N1-C2	-6.19	117.82	120.30
1	13	856	C	C5-C6-N1	6.19	124.10	121.00
1	13	990	C	C5-C6-N1	6.19	124.10	121.00
1	13	1441	G	C2-N3-C4	-6.19	108.80	111.90
26	1H	299	A	N1-C6-N6	-6.19	114.88	118.60
26	1H	1384	A	C2-N3-C4	6.19	113.70	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1784	A	N7-C8-N9	6.19	116.90	113.80
26	1H	2390	U	N3-C2-O2	6.19	126.53	122.20
1	1G	775	G	C5-C6-N1	-6.19	108.40	111.50
1	1G	919	A	N1-C6-N6	-6.19	114.88	118.60
1	1G	1438	G	C5-C6-N1	-6.19	108.40	111.50
26	14	123	G	N1-C2-N2	-6.19	110.63	116.20
26	14	1164	G	N3-C4-N9	-6.19	122.28	126.00
26	14	1908	C	N1-C2-N3	6.19	123.53	119.20
26	14	1978	A	C5-C6-N6	6.19	128.65	123.70
26	14	2270	G	N1-C2-N3	6.19	127.61	123.90
26	14	2278	A	OP1-P-O3'	6.19	118.83	105.20
26	14	2296	U	O5'-P-OP1	-6.19	100.13	105.70
1	13	139	G	N9-C4-C5	6.19	107.88	105.40
1	13	687	A	N1-C6-N6	-6.19	114.89	118.60
1	13	1406	U	O5'-P-OP1	6.19	118.13	110.70
26	1H	531	C	N1-C2-O2	-6.19	115.19	118.90
26	1H	754	C	N3-C4-C5	6.19	124.38	121.90
26	1H	870	A	N1-C6-N6	-6.19	114.89	118.60
26	1H	1440	G	C5-C6-N1	-6.19	108.41	111.50
26	1H	1830	C	C2-N1-C1'	-6.19	111.99	118.80
1	1G	1508	G	N1-C6-O6	-6.19	116.19	119.90
26	14	493	G	C2-N3-C4	-6.19	108.80	111.90
26	14	1465	G	C5-N7-C8	-6.19	101.20	104.30
26	14	2447	G	C6-C5-N7	-6.19	126.69	130.40
26	14	2490	G	N3-C4-C5	6.19	131.70	128.60
26	1H	216	A	O5'-P-OP2	6.19	118.13	110.70
26	1H	697	C	O5'-P-OP1	-6.19	100.13	105.70
26	1H	1296	G	N3-C4-C5	-6.19	125.50	128.60
26	1H	2240	C	C6-N1-C2	6.19	122.78	120.30
1	1G	558	G	C5-N7-C8	6.19	107.39	104.30
26	14	2432	A	C5-C6-N6	-6.19	118.75	123.70
22	1K	61	C	N3-C4-N4	6.19	122.33	118.00
26	1H	60	G	N9-C4-C5	-6.19	102.92	105.40
26	1H	71	A	C8-N9-C4	-6.19	103.33	105.80
26	1H	464	U	C5-C6-N1	-6.19	119.61	122.70
26	1H	616	A	C5-N7-C8	-6.19	100.81	103.90
26	1H	807	U	C6-N1-C2	6.19	124.71	121.00
26	1H	1215	G	C8-N9-C4	-6.19	103.92	106.40
26	1H	1404	C	C5-C6-N1	-6.19	117.91	121.00
26	1H	2594	C	O5'-P-OP1	6.19	118.12	110.70
26	1H	2846	G	C2-N3-C4	-6.19	108.81	111.90
1	1G	138	G	N3-C4-C5	6.19	131.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	550	G	O5'-P-OP2	6.19	118.13	110.70
26	14	202	U	N3-C4-O4	6.19	123.73	119.40
26	14	2018	G	N1-C6-O6	-6.19	116.19	119.90
1	13	31	G	C5-C6-N1	6.19	114.59	111.50
1	13	1108	G	C4-C5-N7	-6.19	108.33	110.80
26	1H	396	G	C5-C6-O6	-6.19	124.89	128.60
57	3L	71	C	C5'-C4'-O4'	6.19	116.52	109.10
26	14	462	C	N3-C4-N4	6.19	122.33	118.00
26	14	824	A	N7-C8-N9	-6.19	110.71	113.80
26	14	960	A	OP1-P-OP2	6.19	128.88	119.60
26	14	1009	A	N1-C6-N6	-6.19	114.89	118.60
26	14	1397	U	O5'-P-OP1	-6.19	100.13	105.70
26	14	2712(A)	A	C5-C6-N1	6.19	120.79	117.70
1	13	584	G	N1-C2-N3	6.18	127.61	123.90
1	13	769	G	N1-C2-N3	-6.18	120.19	123.90
26	1H	381	G	N7-C8-N9	-6.18	110.01	113.10
26	1H	778	G	N1-C2-N2	-6.18	110.63	116.20
26	1H	1136	G	C2-N3-C4	-6.18	108.81	111.90
26	1H	1967	C	C4-C5-C6	6.18	120.49	117.40
26	1H	2225	A	C6-C5-N7	6.18	136.63	132.30
1	1G	117	G	C4-N9-C1'	6.18	134.54	126.50
23	2L	76	C	N1-C2-O2	-6.18	115.19	118.90
26	14	1770	G	O5'-P-OP1	-6.18	100.13	105.70
26	14	1985	G	N1-C2-N2	-6.18	110.64	116.20
26	14	2452	C	N3-C4-N4	6.18	122.33	118.00
26	14	2709	G	O4'-C1'-N9	-6.18	103.25	108.20
26	1H	1188	U	N3-C2-O2	6.18	126.53	122.20
26	1H	1332	G	O4'-C1'-N9	-6.18	103.25	108.20
26	1H	2404	C	C5-C6-N1	-6.18	117.91	121.00
26	1H	2721	A	N3-C4-C5	6.18	131.13	126.80
27	16	81	G	C2-N3-C4	-6.18	108.81	111.90
1	1G	302	G	C8-N9-C4	6.18	108.87	106.40
26	14	13	A	N1-C2-N3	-6.18	126.21	129.30
26	14	262	A	N1-C6-N6	-6.18	114.89	118.60
26	14	2029	G	O5'-P-OP1	-6.18	100.14	105.70
26	14	2206	C	N3-C4-N4	6.18	122.33	118.00
26	1H	219	G	OP1-P-O3'	6.18	118.80	105.20
26	1H	1159	U	O4'-C1'-N1	6.18	113.14	108.20
26	1H	1593	G	C4-C5-N7	6.18	113.27	110.80
26	1H	2288	A	C8-N9-C4	6.18	108.27	105.80
1	1G	544	G	OP1-P-OP2	6.18	128.87	119.60
26	14	948	G	C8-N9-C4	-6.18	103.93	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	798	G	O5'-P-OP1	6.18	118.12	110.70
1	13	914	A	O5'-P-OP1	-6.18	100.14	105.70
1	13	1052	U	OP2-P-O3'	6.18	118.80	105.20
26	1H	35	G	N1-C2-N2	-6.18	110.64	116.20
26	1H	606	U	C5-C6-N1	-6.18	119.61	122.70
26	1H	960	A	C6-C5-N7	6.18	136.62	132.30
26	1H	1204	A	C3'-C2'-C1'	-6.18	96.56	101.50
26	1H	1572	A	O5'-P-OP1	6.18	118.11	110.70
26	1H	1627	G	N3-C4-N9	6.18	129.71	126.00
26	1H	1775	U	C5-C6-N1	-6.18	119.61	122.70
26	1H	1917	U	C4-C5-C6	-6.18	115.99	119.70
26	1H	2008	C	N1-C2-O2	6.18	122.61	118.90
26	1H	2594	C	OP1-P-OP2	-6.18	110.33	119.60
1	1G	43	C	N3-C2-O2	6.18	126.23	121.90
1	1G	1414	U	O5'-P-OP1	-6.18	100.14	105.70
57	3L	2	G	C8-N9-C4	6.18	108.87	106.40
26	14	1005	C	N3-C4-N4	-6.18	113.67	118.00
26	14	1240	U	N3-C2-O2	6.18	126.53	122.20
26	14	1779	U	C6-N1-C1'	-6.18	112.55	121.20
26	14	1863	G	OP1-P-OP2	6.18	128.87	119.60
26	14	2078	C	N3-C4-C5	-6.18	119.43	121.90
26	14	2464	C	O5'-P-OP1	6.18	118.12	110.70
26	14	2874	C	C5-C4-N4	-6.18	115.87	120.20
29	19	37	LEU	CB-CG-CD2	-6.18	100.49	111.00
1	13	650	G	C8-N9-C4	-6.18	103.93	106.40
1	13	725	G	C8-N9-C4	6.18	108.87	106.40
26	1H	444	C	N3-C4-N4	6.18	122.33	118.00
26	1H	708	C	N3-C4-N4	-6.18	113.68	118.00
26	1H	1284	A	O5'-P-OP2	-6.18	100.14	105.70
26	1H	1500	G	O5'-P-OP2	-6.18	100.14	105.70
26	1H	1936	A	N9-C1'-C2'	6.18	122.03	114.00
26	1H	2417	C	C5-C6-N1	-6.18	117.91	121.00
26	1H	2818	G	N3-C4-C5	6.18	131.69	128.60
26	14	72	U	N1-C2-O2	-6.18	118.47	122.80
26	14	1655	A	N1-C6-N6	-6.18	114.89	118.60
1	13	747	C	N1-C2-O2	6.18	122.61	118.90
26	1H	600	G	O5'-P-OP2	-6.18	100.14	105.70
26	1H	1109	C	C6-N1-C1'	-6.18	113.39	120.80
26	1H	1905	C	P-O3'-C3'	6.18	127.11	119.70
1	1G	552	U	C6-N1-C2	-6.18	117.29	121.00
1	1G	569	C	N3-C2-O2	-6.18	117.58	121.90
1	1G	800	G	N7-C8-N9	6.18	116.19	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	593	G	N9-C4-C5	6.18	107.87	105.40
26	14	600	G	C4-C5-N7	6.18	113.27	110.80
26	14	1351	C	N1-C2-O2	-6.18	115.19	118.90
26	14	1601	G	N3-C2-N2	6.18	124.22	119.90
26	14	1816	G	C4-N9-C1'	-6.18	118.47	126.50
26	14	1816	G	C4-C5-N7	-6.18	108.33	110.80
26	1H	674	G	OP1-P-O3'	-6.17	91.62	105.20
26	1H	2363	C	C5-C6-N1	-6.17	117.91	121.00
26	1H	2553	G	N3-C4-C5	-6.17	125.51	128.60
1	1G	286	G	C8-N9-C4	6.17	108.87	106.40
1	1G	894	G	N3-C4-C5	6.17	131.69	128.60
26	14	1302	A	C6-C5-N7	6.17	136.62	132.30
26	14	1336	A	C6-C5-N7	6.17	136.62	132.30
1	13	185	A	C2-N3-C4	6.17	113.69	110.60
26	1H	1348	G	C4-C5-N7	6.17	113.27	110.80
26	1H	2775	A	OP1-P-OP2	6.17	128.86	119.60
26	14	212	G	N3-C2-N2	-6.17	115.58	119.90
26	14	559	G	C5-N7-C8	6.17	107.39	104.30
26	14	1660	C	N3-C2-O2	-6.17	117.58	121.90
26	1H	242	G	N7-C8-N9	-6.17	110.01	113.10
26	1H	722	A	N1-C2-N3	6.17	132.39	129.30
26	1H	1013	C	N3-C4-C5	-6.17	119.43	121.90
26	1H	1028	A	N7-C8-N9	-6.17	110.72	113.80
1	1G	1307	U	C5-C6-N1	6.17	125.79	122.70
1	1G	1334	G	C6-C5-N7	-6.17	126.70	130.40
26	14	707	G	C4-C5-C6	6.17	122.50	118.80
26	14	1812	A	C4-C5-C6	6.17	120.09	117.00
26	14	1863	G	N1-C2-N3	6.17	127.60	123.90
26	14	2361	A	C8-N9-C4	6.17	108.27	105.80
26	14	2508	G	C5-N7-C8	-6.17	101.21	104.30
1	13	438	G	O5'-P-OP2	-6.17	100.15	105.70
1	13	1204	A	C5-N7-C8	-6.17	100.81	103.90
1	13	1240	U	C5-C4-O4	-6.17	122.20	125.90
26	1H	1202	C	C4-C5-C6	6.17	120.48	117.40
26	1H	2868	A	C2-N3-C4	6.17	113.69	110.60
23	2L	3	C	C5-C6-N1	-6.17	117.92	121.00
26	14	1016	G	C5-C6-N1	-6.17	108.42	111.50
26	14	1499	C	N1-C2-O2	-6.17	115.20	118.90
1	13	915	A	N1-C2-N3	6.17	132.38	129.30
23	2K	13	C	C2-N3-C4	6.17	122.98	119.90
26	1H	474	G	N1-C6-O6	-6.17	116.20	119.90
26	1H	2256	G	O5'-P-OP1	6.17	118.10	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2406	U	N3-C2-O2	-6.17	117.88	122.20
1	1G	449	C	N3-C2-O2	-6.17	117.58	121.90
1	1G	647	C	N3-C4-C5	-6.17	119.43	121.90
1	1G	1461	G	N1-C2-N3	6.17	127.60	123.90
26	14	1145	C	N1-C2-O2	-6.17	115.20	118.90
26	14	1299	G	N1-C2-N3	-6.17	120.20	123.90
26	14	2497	A	O5'-P-OP1	-6.17	100.15	105.70
1	13	227	G	C2-N3-C4	-6.17	108.82	111.90
1	13	646	U	N1-C2-N3	6.17	118.60	114.90
1	13	856	C	N3-C4-N4	6.17	122.32	118.00
1	13	1077	G	N9-C1'-C2'	-6.17	105.22	112.00
1	13	1205	U	C5-C4-O4	6.17	129.60	125.90
26	1H	210	C	OP2-P-O3'	6.17	118.77	105.20
26	1H	2817	G	N7-C8-N9	6.17	116.18	113.10
1	1G	1327	C	C6-N1-C2	6.17	122.77	120.30
26	14	194	G	C5-C6-N1	-6.17	108.42	111.50
26	14	265	A	N1-C2-N3	6.17	132.38	129.30
26	14	409	C	N3-C2-O2	6.17	126.22	121.90
26	14	800	A	C4-C5-C6	-6.17	113.92	117.00
26	14	2032	G	C4-C5-N7	6.17	113.27	110.80
1	13	405	U	C2-N3-C4	6.17	130.70	127.00
1	13	1198	G	N3-C2-N2	-6.17	115.58	119.90
26	1H	196	A	N1-C6-N6	6.17	122.30	118.60
26	1H	1517	G	C5-N7-C8	-6.17	101.22	104.30
26	1H	1634	A	C6-N1-C2	-6.17	114.90	118.60
26	1H	1846	G	N1-C2-N3	6.17	127.60	123.90
26	14	1449(A)	G	C5-C6-N1	-6.17	108.42	111.50
26	14	2005	A	C6-C5-N7	6.17	136.62	132.30
1	13	23	C	C5-C6-N1	6.16	124.08	121.00
23	2K	14	A	C5-C6-N1	-6.16	114.62	117.70
26	1H	32	C	N3-C2-O2	-6.16	117.58	121.90
26	1H	776	G	O4'-C1'-N9	-6.16	103.27	108.20
26	1H	1151	G	C6-N1-C2	6.16	128.80	125.10
26	1H	1682	G	O5'-P-OP2	-6.16	100.15	105.70
26	1H	2025	C	N1-C2-O2	-6.16	115.20	118.90
26	1H	2237	G	N9-C4-C5	-6.16	102.93	105.40
26	1H	2327	A	O5'-P-OP2	6.16	118.10	110.70
1	1G	568	G	C5-N7-C8	-6.16	101.22	104.30
26	14	57	C	C4-C5-C6	-6.16	114.32	117.40
26	14	435	C	C5-C6-N1	-6.16	117.92	121.00
26	14	852	G	C8-N9-C4	-6.16	103.93	106.40
26	14	1189	A	OP1-P-OP2	-6.16	110.36	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1647	G	O5'-P-OP1	6.16	118.10	110.70
26	14	1813	G	C2-N3-C4	6.16	114.98	111.90
26	14	2503	A	C4-C5-N7	-6.16	107.62	110.70
1	13	766	A	C5-C6-N1	-6.16	114.62	117.70
1	13	990	C	C6-N1-C2	-6.16	117.83	120.30
26	1H	2723	C	C4-C5-C6	6.16	120.48	117.40
1	1G	965	A	N1-C6-N6	-6.16	114.90	118.60
1	1G	1251	A	C6-N1-C2	-6.16	114.90	118.60
1	1G	1473	A	C4-C5-N7	6.16	113.78	110.70
26	14	1725	G	C4-N9-C1'	6.16	134.51	126.50
26	14	2245	U	O5'-P-OP1	6.16	118.09	110.70
26	14	2287	A	N1-C6-N6	6.16	122.30	118.60
24	3K	39	U	C2-N3-C4	6.16	130.70	127.00
25	4K	14	A	N1-C6-N6	-6.16	114.90	118.60
26	1H	51	G	C6-N1-C2	-6.16	121.40	125.10
26	1H	121	G	OP2-P-O3'	6.16	118.75	105.20
26	1H	788	A	C6-C5-N7	-6.16	127.99	132.30
26	1H	1946	U	N3-C2-O2	-6.16	117.89	122.20
26	1H	2620	C	N3-C2-O2	6.16	126.21	121.90
26	1H	2696	U	C4-C5-C6	6.16	123.40	119.70
26	1H	2774	C	N1-C2-O2	6.16	122.60	118.90
26	1H	2778	A	O5'-P-OP2	-6.16	100.16	105.70
26	14	579	G	N7-C8-N9	6.16	116.18	113.10
26	14	2724	C	N3-C4-C5	-6.16	119.44	121.90
1	13	858	G	C8-N9-C4	-6.16	103.94	106.40
24	3K	71	C	C6-N1-C2	6.16	122.76	120.30
26	1H	567	A	C6-N1-C2	-6.16	114.91	118.60
26	1H	968	G	C5-C6-N1	-6.16	108.42	111.50
26	1H	1424	G	OP1-P-OP2	6.16	128.84	119.60
26	1H	2265	U	N1-C2-O2	6.16	127.11	122.80
26	1H	2495	G	OP2-P-O3'	6.16	118.75	105.20
26	1H	2537	U	O5'-P-OP1	-6.16	100.16	105.70
1	1G	293	G	C4-C5-N7	6.16	113.26	110.80
1	1G	735	C	N1-C2-O2	-6.16	115.20	118.90
1	1G	809	G	N3-C2-N2	6.16	124.21	119.90
25	4L	12	A	N7-C8-N9	6.16	116.88	113.80
26	14	1681	G	O5'-P-OP1	-6.16	100.16	105.70
26	14	2356	C	C5-C6-N1	-6.16	117.92	121.00
26	14	2695	C	N1-C2-O2	-6.16	115.20	118.90
26	14	2718	G	C8-N9-C4	-6.16	103.94	106.40
1	13	1472	U	N1-C2-O2	6.16	127.11	122.80
26	1H	54	G	C8-N9-C4	-6.16	103.94	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1597	A	C8-N9-C4	6.16	108.26	105.80
26	1H	2366	A	C6-N1-C2	-6.16	114.91	118.60
26	1H	2494	G	C4-C5-N7	-6.16	108.34	110.80
1	1G	328	C	O5'-P-OP2	-6.16	100.16	105.70
26	14	715	G	C4-C5-N7	6.16	113.26	110.80
26	14	1662	C	N3-C2-O2	-6.16	117.59	121.90
26	1H	120	U	N1-C2-N3	6.16	118.59	114.90
26	1H	311	A	N9-C4-C5	-6.16	103.34	105.80
26	1H	333	G	C5-C6-N1	6.16	114.58	111.50
26	1H	1197	G	C5-C6-O6	6.16	132.29	128.60
26	1H	1829	A	C5-C6-N1	6.16	120.78	117.70
26	1H	2601	C	N3-C2-O2	-6.16	117.59	121.90
1	1G	605	U	O5'-P-OP1	-6.16	100.16	105.70
26	14	798	G	C8-N9-C4	6.16	108.86	106.40
26	14	965	C	N1-C2-N3	6.16	123.51	119.20
26	14	1021	A	N3-C4-N9	-6.16	122.48	127.40
26	14	1284	A	C4-C5-N7	6.16	113.78	110.70
26	14	1293	C	C2-N3-C4	-6.16	116.82	119.90
26	14	1377	G	N3-C2-N2	-6.16	115.59	119.90
26	14	1448	G	OP1-P-OP2	6.16	128.83	119.60
26	14	2505	G	N9-C4-C5	6.16	107.86	105.40
1	13	925	G	N1-C6-O6	6.15	123.59	119.90
26	1H	21	A	O5'-P-OP2	-6.15	100.16	105.70
26	1H	509	C	C4-C5-C6	6.15	120.48	117.40
26	1H	1370	C	C5-C6-N1	-6.15	117.92	121.00
26	1H	1627	G	O5'-P-OP1	6.15	118.08	110.70
26	1H	1942	C	N1-C2-N3	-6.15	114.89	119.20
26	1H	2246	G	N1-C6-O6	-6.15	116.21	119.90
1	1G	7	G	N7-C8-N9	6.15	116.18	113.10
1	1G	602	A	N1-C6-N6	6.15	122.29	118.60
26	14	778	G	N1-C6-O6	-6.15	116.21	119.90
26	14	822	U	C4-C5-C6	-6.15	116.01	119.70
26	1H	106	C	N3-C2-O2	6.15	126.21	121.90
26	1H	357	A	C8-N9-C4	-6.15	103.34	105.80
26	1H	1003	G	N3-C2-N2	-6.15	115.59	119.90
26	1H	1785	A	O4'-C1'-N9	6.15	113.12	108.20
26	1H	2829	C	OP2-P-O3'	6.15	118.73	105.20
37	78	45	LEU	CB-CG-CD2	-6.15	100.54	111.00
26	14	68	G	N3-C2-N2	-6.15	115.59	119.90
1	13	1275	A	O5'-P-OP2	-6.15	100.16	105.70
26	1H	117	G	C5-C6-N1	6.15	114.58	111.50
26	1H	223	A	O5'-P-OP2	-6.15	100.17	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2579	C	C2-N3-C4	-6.15	116.83	119.90
1	1G	923	A	C8-N9-C4	-6.15	103.34	105.80
26	14	486	C	C5-C4-N4	-6.15	115.89	120.20
26	14	725	G	C5-C6-N1	-6.15	108.42	111.50
26	14	941	A	C4-C5-C6	6.15	120.08	117.00
26	14	1520	U	OP2-P-O3'	6.15	118.73	105.20
26	14	1644	C	N3-C2-O2	-6.15	117.59	121.90
26	14	2020	A	N1-C2-N3	6.15	132.38	129.30
26	14	2060	A	C5-N7-C8	-6.15	100.82	103.90
26	14	2553	G	C8-N9-C1'	-6.15	119.01	127.00
1	13	1427	U	O5'-P-OP2	-6.15	100.17	105.70
23	2K	9	G	O5'-P-OP1	6.15	118.08	110.70
26	1H	1193	G	C5-N7-C8	6.15	107.38	104.30
26	1H	1354	A	C5-C6-N6	-6.15	118.78	123.70
26	1H	1752	C	O5'-P-OP1	-6.15	100.17	105.70
26	1H	1773	A	O5'-P-OP1	6.15	118.08	110.70
26	1H	2640	G	N9-C4-C5	6.15	107.86	105.40
26	1H	2758	A	C6-N1-C2	6.15	122.29	118.60
26	14	1003	G	N3-C2-N2	-6.15	115.60	119.90
26	14	1822	G	C4-C5-C6	6.15	122.49	118.80
26	14	2013	A	C2-N3-C4	-6.15	107.53	110.60
26	14	2601	C	N3-C4-C5	6.15	124.36	121.90
26	14	2602	A	O5'-P-OP2	6.15	118.08	110.70
1	13	305	G	C8-N9-C1'	-6.15	119.01	127.00
1	13	353	A	C5-N7-C8	-6.15	100.83	103.90
1	13	905	U	C5-C4-O4	6.15	129.59	125.90
1	13	1266	G	C2-N3-C4	-6.15	108.83	111.90
26	1H	1215	G	N7-C8-N9	6.15	116.17	113.10
26	1H	1888	G	N3-C4-N9	6.15	129.69	126.00
26	1H	1913	A	C8-N9-C4	-6.15	103.34	105.80
26	1H	2028	U	N1-C2-N3	6.15	118.59	114.90
1	1G	761	G	C4-C5-N7	6.15	113.26	110.80
26	14	824	A	C5-C6-N1	6.15	120.77	117.70
26	14	1683	C	N1-C2-N3	6.15	123.50	119.20
26	1H	1939	U	N1-C2-N3	-6.15	111.21	114.90
1	1G	889	A	OP1-P-OP2	6.15	128.82	119.60
26	14	176	G	N1-C2-N3	6.15	127.59	123.90
26	14	1228	G	C4-C5-N7	-6.15	108.34	110.80
1	13	488	C	C4-C5-C6	6.14	120.47	117.40
1	13	522	C	C6-N1-C2	6.14	122.76	120.30
1	13	936	C	N3-C2-O2	-6.14	117.60	121.90
1	13	974	A	C4-C5-N7	6.14	113.77	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	96	G	C2-N3-C4	-6.14	108.83	111.90
26	1H	193	U	OP1-P-OP2	-6.14	110.38	119.60
26	1H	791	C	N3-C4-C5	6.14	124.36	121.90
26	1H	2248	C	N3-C4-N4	-6.14	113.70	118.00
1	1G	898	G	O5'-P-OP2	-6.14	100.17	105.70
1	1G	1528	U	O5'-P-OP1	6.14	118.07	110.70
26	14	765	G	C5-C6-O6	6.14	132.29	128.60
26	14	1004	C	N3-C4-C5	-6.14	119.44	121.90
26	14	1354	A	C6-N1-C2	-6.14	114.91	118.60
26	14	1673	U	OP2-P-O3'	6.14	118.72	105.20
1	13	1378	C	OP1-P-OP2	6.14	128.81	119.60
26	1H	975	G	C5-C6-O6	-6.14	124.92	128.60
26	1H	1003	G	C8-N9-C1'	-6.14	119.02	127.00
1	1G	778	G	N3-C4-C5	-6.14	125.53	128.60
1	1G	1482	G	N3-C4-N9	6.14	129.69	126.00
26	14	59	U	OP2-P-O3'	6.14	118.72	105.20
27	1J	98	G	OP1-P-OP2	6.14	128.81	119.60
1	13	255	G	C2-N3-C4	-6.14	108.83	111.90
1	13	585	G	C5-C6-O6	6.14	132.28	128.60
1	13	1518	A	OP1-P-OP2	6.14	128.81	119.60
23	2K	1	C	C5-C6-N1	6.14	124.07	121.00
26	1H	524	U	N3-C2-O2	-6.14	117.90	122.20
26	1H	2345	G	N1-C2-N3	6.14	127.58	123.90
26	1H	2758	A	N1-C2-N3	-6.14	126.23	129.30
23	2L	4	G	C5-N7-C8	6.14	107.37	104.30
26	14	116	C	N3-C4-N4	6.14	122.30	118.00
26	1H	502	A	N9-C4-C5	6.14	108.26	105.80
26	1H	631	A	OP1-P-O3'	6.14	118.71	105.20
26	1H	1197	G	N1-C2-N2	6.14	121.72	116.20
26	1H	1830	C	C2-N3-C4	-6.14	116.83	119.90
26	1H	2549	G	N7-C8-N9	-6.14	110.03	113.10
26	1H	2775	A	O5'-P-OP2	-6.14	100.17	105.70
27	16	93	C	OP2-P-O3'	6.14	118.71	105.20
26	14	879	G	C2-N3-C4	6.14	114.97	111.90
26	14	1130	U	C5-C6-N1	-6.14	119.63	122.70
26	14	1322	A	N7-C8-N9	-6.14	110.73	113.80
26	14	1477	A	O5'-P-OP2	-6.14	100.17	105.70
26	14	2437	U	C6-N1-C2	-6.14	117.32	121.00
1	13	770	C	C6-N1-C2	6.14	122.75	120.30
1	13	965	A	C5-N7-C8	-6.14	100.83	103.90
22	1K	64	G	N3-C4-C5	-6.14	125.53	128.60
26	1H	84	A	N7-C8-N9	-6.14	110.73	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	237	C	C4-C5-C6	6.14	120.47	117.40
26	1H	250	G	C6-N1-C2	6.14	128.78	125.10
26	1H	418	G	N9-C4-C5	-6.14	102.94	105.40
1	1G	61	G	O5'-P-OP1	6.14	118.07	110.70
26	14	624	C	N3-C2-O2	6.14	126.20	121.90
26	14	1024	G	O5'-P-OP1	-6.14	100.17	105.70
26	1H	103	A	N9-C4-C5	-6.14	103.34	105.80
26	1H	586	A	C5-C6-N1	6.14	120.77	117.70
26	1H	1274	A	C4-C5-C6	6.14	120.07	117.00
26	1H	1349	A	C4-C5-N7	6.14	113.77	110.70
26	1H	1814	G	N1-C2-N3	6.14	127.58	123.90
26	1H	2250	G	N3-C2-N2	-6.14	115.61	119.90
26	1H	2538	C	OP1-P-OP2	6.14	128.81	119.60
26	14	1989	G	C6-N1-C2	-6.14	121.42	125.10
1	13	1485	U	C5-C6-N1	-6.13	119.63	122.70
26	1H	87	C	N3-C2-O2	-6.13	117.61	121.90
26	1H	274	G	C8-N9-C4	-6.13	103.95	106.40
26	1H	2093	G	C5-C6-N1	-6.13	108.43	111.50
26	1H	2459	A	C8-N9-C4	-6.13	103.35	105.80
1	1G	253	U	N3-C2-O2	6.13	126.49	122.20
1	1G	510	A	C4-C5-N7	6.13	113.77	110.70
1	1G	1303	C	N1-C2-O2	6.13	122.58	118.90
26	14	254	G	N1-C6-O6	-6.13	116.22	119.90
26	14	642	G	N3-C2-N2	-6.13	115.61	119.90
26	14	849	A	OP1-P-O3'	6.13	118.70	105.20
26	14	2569	G	O5'-P-OP2	-6.13	100.18	105.70
26	14	2586	C	N1-C2-O2	-6.13	115.22	118.90
1	13	325	A	O5'-P-OP2	-6.13	100.18	105.70
1	13	1326	C	O5'-P-OP2	-6.13	100.18	105.70
26	1H	592	G	OP1-P-O3'	-6.13	91.71	105.20
26	1H	2715	C	C5-C4-N4	-6.13	115.91	120.20
1	1G	904	C	C2-N3-C4	-6.13	116.83	119.90
26	14	1405	U	C4-C5-C6	6.13	123.38	119.70
1	13	417	C	C5-C4-N4	6.13	124.49	120.20
1	13	554	C	C2-N3-C4	6.13	122.97	119.90
23	2K	75	C	N1-C2-O2	6.13	122.58	118.90
26	1H	131	G	N7-C8-N9	6.13	116.17	113.10
26	1H	652	C	C6-N1-C2	-6.13	117.85	120.30
26	1H	1236	G	N7-C8-N9	-6.13	110.03	113.10
26	1H	1651	G	N3-C2-N2	-6.13	115.61	119.90
26	1H	1772	G	O5'-P-OP1	-6.13	100.18	105.70
26	1H	1799	G	N9-C4-C5	-6.13	102.95	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	286	G	N7-C8-N9	-6.13	110.03	113.10
1	1G	402	G	C5-C6-N1	-6.13	108.44	111.50
1	1G	1338	G	N1-C6-O6	-6.13	116.22	119.90
26	14	206	U	C5-C4-O4	6.13	129.58	125.90
26	14	540	G	N1-C6-O6	6.13	123.58	119.90
26	14	1514	U	N1-C2-O2	-6.13	118.51	122.80
26	14	2581	G	C4-N9-C1'	6.13	134.47	126.50
26	14	2616	C	OP1-P-O3'	-6.13	91.71	105.20
26	1H	804	A	OP1-P-OP2	-6.13	110.41	119.60
26	1H	2781	A	O5'-P-OP1	-6.13	100.18	105.70
1	1G	24	U	OP1-P-OP2	6.13	128.79	119.60
26	14	2628	C	N3-C4-N4	-6.13	113.71	118.00
1	13	889	A	C8-N9-C4	6.13	108.25	105.80
26	1H	400	G	N9-C4-C5	6.13	107.85	105.40
26	1H	1245	G	C8-N9-C4	6.13	108.85	106.40
26	1H	1702	G	N7-C8-N9	-6.13	110.04	113.10
26	1H	1936	A	C6-N1-C2	-6.13	114.92	118.60
26	1H	2414	G	N3-C2-N2	-6.13	115.61	119.90
26	1H	2569	G	O4'-C1'-N9	-6.13	103.30	108.20
1	1G	730	G	OP1-P-OP2	6.13	128.79	119.60
1	1G	1356	G	N7-C8-N9	6.13	116.16	113.10
1	1G	1451	A	N1-C6-N6	-6.13	114.92	118.60
23	2L	75	C	C2-N3-C4	6.13	122.96	119.90
26	14	2455	G	OP1-P-O3'	-6.13	91.72	105.20
26	14	2576	G	C4-C5-N7	6.13	113.25	110.80
26	14	2879	C	OP1-P-OP2	-6.13	110.41	119.60
1	13	235	C	C5-C4-N4	-6.13	115.91	120.20
1	13	1524	C	C6-N1-C2	6.13	122.75	120.30
26	1H	533	G	C6-C5-N7	6.13	134.08	130.40
26	1H	998	C	N3-C4-C5	-6.13	119.45	121.90
26	1H	1668	A	N7-C8-N9	-6.13	110.74	113.80
26	1H	1819	A	OP1-P-OP2	6.13	128.79	119.60
26	1H	2199	A	OP1-P-OP2	-6.13	110.41	119.60
26	1H	2494	G	C8-N9-C4	-6.13	103.95	106.40
26	1H	2525	G	C5-C6-N1	-6.13	108.44	111.50
1	1G	63	C	N3-C2-O2	-6.13	117.61	121.90
1	1G	1405	G	N3-C2-N2	6.13	124.19	119.90
26	14	1385	G	C4-C5-C6	-6.13	115.12	118.80
26	14	2581	G	N1-C6-O6	6.13	123.58	119.90
26	14	2639	A	N9-C4-C5	-6.13	103.35	105.80
26	14	2651	C	N3-C2-O2	-6.13	117.61	121.90
26	1H	145	G	C2-N3-C4	-6.12	108.84	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1619	G	C5-C6-O6	6.12	132.28	128.60
44	E8	77	ASP	CB-CG-OD1	-6.12	112.79	118.30
25	4L	10	G	N1-C6-O6	6.12	123.58	119.90
26	14	84	A	C5-N7-C8	6.12	106.96	103.90
1	13	237	C	N3-C4-N4	-6.12	113.71	118.00
1	13	768	A	C4-C5-C6	6.12	120.06	117.00
1	13	779	C	C5-C4-N4	6.12	124.49	120.20
26	1H	1544	C	N1-C2-N3	-6.12	114.91	119.20
26	1H	1628	G	N9-C4-C5	6.12	107.85	105.40
1	1G	708	C	C5-C6-N1	6.12	124.06	121.00
23	2L	57	C	C6-N1-C2	6.12	122.75	120.30
26	14	1796	U	C2-N1-C1'	-6.12	110.35	117.70
26	14	2078	C	C4-C5-C6	6.12	120.46	117.40
26	14	2441	C	C5-C4-N4	6.12	124.49	120.20
22	1K	61	C	C2-N1-C1'	6.12	125.53	118.80
26	1H	46	C	C5-C6-N1	6.12	124.06	121.00
26	1H	102	G	C4-C5-N7	-6.12	108.35	110.80
26	1H	109	G	N1-C2-N2	-6.12	110.69	116.20
26	1H	146	G	N1-C6-O6	6.12	123.57	119.90
26	1H	1050	A	N1-C6-N6	6.12	122.27	118.60
26	1H	1332	G	C5-C6-O6	-6.12	124.93	128.60
26	1H	1477	A	C8-N9-C4	-6.12	103.35	105.80
26	1H	2867	G	N3-C4-N9	-6.12	122.33	126.00
26	14	1949	G	N1-C2-N2	-6.12	110.69	116.20
26	14	2595	G	N3-C4-C5	6.12	131.66	128.60
1	13	1194	U	N3-C4-C5	-6.12	110.93	114.60
26	1H	2821	A	O5'-P-OP2	-6.12	100.19	105.70
1	1G	787	A	C4-C5-N7	6.12	113.76	110.70
22	1K	27	G	O4'-C1'-N9	6.12	113.09	108.20
26	1H	179	G	N3-C4-C5	6.12	131.66	128.60
26	1H	270(A)	A	C6-N1-C2	-6.12	114.93	118.60
26	1H	829	A	OP1-P-OP2	6.12	128.78	119.60
26	1H	1128	A	N1-C6-N6	6.12	122.27	118.60
26	1H	1627	G	C4-C5-N7	-6.12	108.35	110.80
26	1H	1675	C	N3-C2-O2	-6.12	117.62	121.90
26	1H	1999	C	C6-N1-C2	6.12	122.75	120.30
26	1H	2693	A	C4-C5-C6	6.12	120.06	117.00
26	14	493	G	C5-C6-N1	-6.12	108.44	111.50
26	14	593	G	N3-C2-N2	-6.12	115.62	119.90
26	14	710	G	N1-C6-O6	6.12	123.57	119.90
26	14	785	G	N3-C2-N2	-6.12	115.62	119.90
26	14	913	U	C4-C5-C6	-6.12	116.03	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1936	A	OP1-P-OP2	-6.12	110.42	119.60
1	13	430	A	N9-C4-C5	-6.12	103.35	105.80
1	13	570	G	C5-N7-C8	-6.12	101.24	104.30
1	13	874	G	C5-C6-N1	6.12	114.56	111.50
26	14	364	C	N1-C2-O2	6.12	122.57	118.90
26	14	573	G	C4-C5-N7	-6.12	108.35	110.80
26	14	746	A	O5'-P-OP1	-6.12	100.19	105.70
26	14	1764	G	N9-C4-C5	6.12	107.85	105.40
26	14	2409	G	C4-C5-N7	6.12	113.25	110.80
1	13	830	G	C2-N3-C4	-6.12	108.84	111.90
1	13	979	C	N3-C4-C5	-6.12	119.45	121.90
26	1H	65	C	C4-C5-C6	6.12	120.46	117.40
26	1H	680	G	N1-C2-N2	-6.12	110.70	116.20
26	1H	828	U	OP1-P-OP2	6.12	128.77	119.60
26	1H	2578	G	N7-C8-N9	-6.12	110.04	113.10
1	1G	310	G	C6-C5-N7	6.12	134.07	130.40
26	14	442	G	C2-N3-C4	-6.12	108.84	111.90
26	14	597	U	C2-N3-C4	-6.12	123.33	127.00
26	14	803	U	N3-C2-O2	-6.12	117.92	122.20
26	14	1944	U	C5-C6-N1	-6.12	119.64	122.70
26	14	2639	A	C5-C6-N6	-6.12	118.81	123.70
1	13	492	G	C2-N3-C4	-6.11	108.84	111.90
1	13	757	U	C5-C6-N1	-6.11	119.64	122.70
1	13	817	C	C5-C4-N4	-6.11	115.92	120.20
1	13	1437	C	C4-C5-C6	-6.11	114.34	117.40
26	1H	607	U	N3-C2-O2	-6.11	117.92	122.20
26	1H	1805	U	OP2-P-O3'	6.11	118.65	105.20
26	1H	1902	C	O5'-P-OP1	-6.11	100.20	105.70
26	1H	2760	C	OP2-P-O3'	6.11	118.65	105.20
26	14	81	G	C2-N3-C4	-6.11	108.84	111.90
26	14	1209	G	C5-C6-N1	-6.11	108.44	111.50
26	14	1702	G	N1-C2-N2	-6.11	110.70	116.20
26	14	1832	C	C4-C5-C6	6.11	120.46	117.40
26	14	1993	U	C6-N1-C2	-6.11	117.33	121.00
26	14	2843	G	C5-C6-N1	6.11	114.56	111.50
26	1H	440	G	OP1-P-OP2	-6.11	110.43	119.60
26	1H	1366	A	O5'-P-OP1	6.11	118.03	110.70
26	1H	1372	U	C5-C6-N1	-6.11	119.64	122.70
26	1H	2093	G	O5'-P-OP2	-6.11	100.20	105.70
1	1G	598	U	N3-C4-C5	-6.11	110.93	114.60
26	14	208	C	C5-C4-N4	-6.11	115.92	120.20
26	14	1515	C	C5-C6-N1	-6.11	117.94	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1609	A	C6-N1-C2	-6.11	114.93	118.60
1	13	112	G	N7-C8-N9	6.11	116.16	113.10
1	13	442	C	N3-C4-C5	-6.11	119.45	121.90
1	13	798	G	C5-N7-C8	-6.11	101.25	104.30
1	13	942	G	N1-C6-O6	6.11	123.57	119.90
1	13	1310	G	N3-C2-N2	6.11	124.18	119.90
1	13	1520	G	C4-C5-N7	6.11	113.24	110.80
26	1H	715	G	C4-C5-N7	-6.11	108.36	110.80
26	1H	1165	U	C4-C5-C6	6.11	123.37	119.70
26	1H	1630	G	C2-N3-C4	6.11	114.95	111.90
26	1H	1704	G	N3-C2-N2	-6.11	115.62	119.90
26	1H	2028	U	OP1-P-O3'	6.11	118.64	105.20
26	1H	2068	U	N3-C4-C5	6.11	118.27	114.60
26	1H	2876	G	N3-C4-C5	6.11	131.66	128.60
26	14	59	U	O5'-P-OP2	-6.11	100.20	105.70
26	14	127	A	C5-C6-N1	6.11	120.75	117.70
26	14	802	A	OP1-P-OP2	6.11	128.77	119.60
26	14	802	A	C4-C5-N7	-6.11	107.64	110.70
26	14	2715	C	O5'-P-OP1	6.11	118.03	110.70
26	14	2823	A	C6-N1-C2	6.11	122.27	118.60
27	1J	97	G	N1-C6-O6	6.11	123.57	119.90
1	13	109	A	O5'-P-OP2	-6.11	100.20	105.70
24	3K	29	U	N1-C2-O2	6.11	127.08	122.80
1	1G	953	G	N1-C2-N2	-6.11	110.70	116.20
26	14	138	G	C8-N9-C4	-6.11	103.96	106.40
26	14	912	C	C5-C6-N1	6.11	124.06	121.00
26	1H	43	G	C5-C6-O6	6.11	132.26	128.60
26	1H	1192	G	C8-N9-C4	6.11	108.84	106.40
26	1H	1421	G	C2-N3-C4	-6.11	108.85	111.90
26	1H	2424	C	C5-C6-N1	6.11	124.05	121.00
27	16	23	G	C6-N1-C2	6.11	128.76	125.10
1	1G	977	A	C5-C6-N1	6.11	120.75	117.70
26	14	580	C	C6-N1-C2	-6.11	117.86	120.30
26	14	746	A	N9-C4-C5	6.11	108.24	105.80
26	14	2540	C	C5-C6-N1	-6.11	117.95	121.00
26	14	2689	U	C2-N3-C4	-6.11	123.34	127.00
26	14	2818	G	O5'-P-OP1	6.11	118.03	110.70
1	13	423	G	C5-C6-O6	-6.11	124.94	128.60
26	1H	425	G	C4-C5-N7	-6.11	108.36	110.80
26	1H	1367	A	C2-N3-C4	-6.11	107.55	110.60
26	1H	2732	G	C5-C6-N1	6.11	114.55	111.50
27	16	58	A	N7-C8-N9	6.11	116.85	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	597	G	N9-C4-C5	-6.11	102.96	105.40
1	1G	796	C	C6-N1-C2	6.11	122.74	120.30
26	14	77	C	N3-C4-C5	6.11	124.34	121.90
26	14	1395	A	OP2-P-O3'	6.11	118.63	105.20
26	14	1422	G	N3-C4-N9	-6.11	122.34	126.00
26	14	1789	A	OP2-P-O3'	-6.11	91.77	105.20
26	14	2345	G	OP1-P-O3'	6.11	118.63	105.20
26	14	2346	A	C6-C5-N7	-6.11	128.03	132.30
1	13	1299	A	OP1-P-OP2	6.10	128.76	119.60
26	1H	477	A	C8-N9-C4	-6.10	103.36	105.80
26	1H	564	C	C6-N1-C2	-6.10	117.86	120.30
26	1H	1630(A)	C	C6-N1-C2	-6.10	117.86	120.30
26	14	2209	C	N1-C2-N3	6.10	123.47	119.20
26	14	2782	G	C5-N7-C8	-6.10	101.25	104.30
1	13	896	C	N3-C4-C5	-6.10	119.46	121.90
1	13	901	A	OP1-P-O3'	-6.10	91.78	105.20
26	1H	187	G	C5-C6-O6	6.10	132.26	128.60
26	1H	533	G	O5'-P-OP1	-6.10	100.21	105.70
26	1H	646	A	N7-C8-N9	6.10	116.85	113.80
26	1H	1482	U	C6-N1-C2	-6.10	117.34	121.00
26	1H	1576	U	N3-C2-O2	-6.10	117.93	122.20
26	1H	1651	G	N3-C4-N9	-6.10	122.34	126.00
26	1H	2060	A	C4-C5-C6	-6.10	113.95	117.00
1	1G	111	G	N3-C4-N9	-6.10	122.34	126.00
26	14	1239	G	C2-N3-C4	-6.10	108.85	111.90
27	1J	36	C	C5-C4-N4	-6.10	115.93	120.20
1	13	1484	C	N1-C2-N3	6.10	123.47	119.20
26	1H	70	G	P-O3'-C3'	6.10	127.02	119.70
26	1H	1195	G	N1-C6-O6	-6.10	116.24	119.90
26	1H	1787	A	OP2-P-O3'	-6.10	91.78	105.20
26	14	302	C	OP1-P-OP2	-6.10	110.45	119.60
1	13	243	A	C5-C6-N1	6.10	120.75	117.70
1	13	630	G	C5-C6-N1	-6.10	108.45	111.50
1	13	1139	G	C8-N9-C4	6.10	108.84	106.40
1	13	1513	A	C5-C6-N6	-6.10	118.82	123.70
26	1H	412	A	C5-N7-C8	6.10	106.95	103.90
26	1H	831	G	N3-C4-C5	6.10	131.65	128.60
26	1H	2325	G	N3-C4-C5	-6.10	125.55	128.60
1	1G	372	C	N1-C2-N3	-6.10	114.93	119.20
26	14	1408	C	O5'-P-OP2	6.10	118.02	110.70
26	14	1500	G	C5-C6-N1	-6.10	108.45	111.50
26	14	2550	G	C4-C5-N7	6.10	113.24	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2576	G	C2-N3-C4	6.10	114.95	111.90
26	14	2589	A	C8-N9-C4	6.10	108.24	105.80
1	13	605	U	N3-C4-C5	-6.10	110.94	114.60
26	1H	818	G	N9-C4-C5	6.10	107.84	105.40
26	1H	970	C	N3-C4-N4	6.10	122.27	118.00
26	1H	1257	C	C2-N3-C4	-6.10	116.85	119.90
26	1H	1296	G	C2-N3-C4	6.10	114.95	111.90
26	1H	2589	A	N7-C8-N9	-6.10	110.75	113.80
1	1G	298	A	O4'-C1'-N9	-6.10	103.32	108.20
1	1G	1080	A	N9-C4-C5	6.10	108.24	105.80
26	14	82	G	C4-C5-N7	-6.10	108.36	110.80
26	14	669	G	N1-C6-O6	-6.10	116.24	119.90
26	14	690	G	C5-C6-O6	6.10	132.26	128.60
26	14	1416	G	N7-C8-N9	-6.10	110.05	113.10
26	14	2490	G	C5-C6-O6	6.10	132.26	128.60
1	13	220	G	C8-N9-C4	-6.10	103.96	106.40
1	13	518	C	N3-C4-C5	-6.10	119.46	121.90
26	1H	244	A	N9-C4-C5	-6.10	103.36	105.80
26	1H	1965	C	O5'-P-OP2	6.10	118.02	110.70
26	1H	2415	G	N7-C8-N9	6.10	116.15	113.10
26	1H	2527	C	N1-C2-N3	-6.10	114.93	119.20
1	1G	666	G	C4-N9-C1'	6.10	134.43	126.50
26	14	471	A	N1-C2-N3	6.10	132.35	129.30
26	14	2049	G	N7-C8-N9	6.10	116.15	113.10
1	13	618	C	N3-C4-C5	-6.09	119.46	121.90
1	13	793	U	C4-C5-C6	6.09	123.36	119.70
26	1H	271	G	N1-C6-O6	6.09	123.56	119.90
26	1H	1286	A	N7-C8-N9	-6.09	110.75	113.80
26	1H	1325	G	C8-N9-C4	-6.09	103.96	106.40
1	1G	865	A	C8-N9-C4	-6.09	103.36	105.80
1	1G	1404	C	C4-C5-C6	-6.09	114.35	117.40
26	14	233	A	N1-C2-N3	-6.09	126.25	129.30
26	14	1358	G	C8-N9-C4	-6.09	103.96	106.40
26	14	1407	C	OP1-P-OP2	-6.09	110.46	119.60
26	14	1701	A	C6-N1-C2	-6.09	114.94	118.60
1	13	559	A	C8-N9-C4	-6.09	103.36	105.80
26	1H	567	A	N7-C8-N9	6.09	116.85	113.80
26	1H	659	C	OP1-P-O3'	-6.09	91.80	105.20
26	1H	2642	G	N1-C2-N2	-6.09	110.72	116.20
1	1G	245	C	C5-C4-N4	6.09	124.47	120.20
1	13	446	G	N1-C6-O6	6.09	123.56	119.90
26	1H	933	A	N3-C4-C5	-6.09	122.53	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1035	U	OP1-P-OP2	6.09	128.74	119.60
26	1H	1474	C	OP1-P-OP2	-6.09	110.46	119.60
26	1H	2379	G	C5-C6-N1	6.09	114.55	111.50
26	1H	2691	C	N3-C4-C5	6.09	124.34	121.90
1	1G	413	G	C5-C6-O6	6.09	132.25	128.60
1	1G	975	A	C2-N3-C4	-6.09	107.55	110.60
1	1G	1487	G	O5'-P-OP2	-6.09	100.22	105.70
26	14	1259	G	OP1-P-OP2	-6.09	110.46	119.60
26	14	1678	G	C4-C5-C6	-6.09	115.14	118.80
26	14	2017	U	C5-C6-N1	-6.09	119.65	122.70
26	14	2065	C	N1-C2-O2	6.09	122.56	118.90
26	14	2444	G	C4-C5-N7	-6.09	108.36	110.80
26	14	2468	G	C5-C6-N1	6.09	114.55	111.50
1	13	64	G	N3-C4-C5	6.09	131.64	128.60
1	13	1227	A	C5-N7-C8	-6.09	100.86	103.90
22	1K	22	G	N3-C4-C5	-6.09	125.56	128.60
26	1H	39	C	C2-N3-C4	-6.09	116.86	119.90
26	1H	216	A	OP1-P-O3'	6.09	118.60	105.20
26	1H	1280	G	N9-C1'-C2'	-6.09	105.30	112.00
26	1H	1680	U	C4-C5-C6	-6.09	116.05	119.70
26	1H	1801	G	C5-C6-O6	-6.09	124.95	128.60
27	16	50	G	N7-C8-N9	6.09	116.14	113.10
25	4L	16	A	N9-C4-C5	-6.09	103.36	105.80
26	14	660	G	N1-C2-N3	6.09	127.55	123.90
26	14	723	G	C2-N3-C4	-6.09	108.86	111.90
26	14	1136	G	C5-C6-O6	-6.09	124.95	128.60
26	14	1790	C	N3-C4-C5	6.09	124.34	121.90
26	14	1944	U	N3-C4-O4	6.09	123.66	119.40
26	14	1987	G	N3-C2-N2	-6.09	115.64	119.90
26	14	2348	U	C6-N1-C2	6.09	124.65	121.00
26	14	2383	G	N3-C2-N2	6.09	124.16	119.90
26	14	2644	G	N9-C4-C5	6.09	107.83	105.40
1	13	869	G	C5-C6-N1	-6.09	108.46	111.50
26	1H	715	G	C5-N7-C8	6.09	107.34	104.30
26	1H	1661	G	O5'-P-OP1	6.09	118.00	110.70
26	1H	1797	C	C5-C6-N1	-6.09	117.96	121.00
43	D8	40	LEU	CA-CB-CG	6.09	129.30	115.30
1	1G	925	G	C5-N7-C8	6.09	107.34	104.30
26	1H	214	G	C4-C5-N7	6.09	113.23	110.80
26	1H	1032	A	N7-C8-N9	-6.09	110.76	113.80
26	1H	1187	G	N9-C4-C5	-6.09	102.97	105.40
26	1H	1339	G	N3-C4-C5	-6.09	125.56	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1341	U	OP1-P-O3'	6.09	118.59	105.20
26	1H	1780	A	C5-C6-N6	6.09	128.57	123.70
26	1H	2028	U	O5'-P-OP2	6.09	118.00	110.70
27	16	6	C	C2-N3-C4	-6.09	116.86	119.90
57	3L	37	A	O5'-P-OP2	-6.09	100.22	105.70
26	14	398	G	N3-C2-N2	-6.09	115.64	119.90
26	14	573	G	N9-C4-C5	6.09	107.83	105.40
1	13	285	G	O5'-P-OP1	6.08	118.00	110.70
1	13	766	A	C2-N3-C4	-6.08	107.56	110.60
26	1H	26	G	C4-C5-C6	6.08	122.45	118.80
26	14	472	A	N9-C4-C5	6.08	108.23	105.80
26	14	2255	G	C2-N3-C4	6.08	114.94	111.90
26	14	2675	A	O5'-P-OP1	6.08	118.00	110.70
1	13	828	A	O5'-P-OP2	-6.08	100.22	105.70
26	1H	456	C	C5-C4-N4	-6.08	115.94	120.20
26	1H	533	G	N7-C8-N9	-6.08	110.06	113.10
26	1H	688	U	N3-C4-C5	-6.08	110.95	114.60
26	1H	974(A)	C	OP1-P-O3'	6.08	118.58	105.20
26	1H	2405	G	C8-N9-C4	6.08	108.83	106.40
1	1G	231	G	C5-C6-O6	6.08	132.25	128.60
26	14	1148	A	C2-N3-C4	6.08	113.64	110.60
26	14	1378	A	O5'-P-OP1	-6.08	100.22	105.70
26	14	1698	A	C4-C5-C6	6.08	120.04	117.00
26	14	2779	U	C2-N3-C4	-6.08	123.35	127.00
1	13	467	G	C4-C5-N7	6.08	113.23	110.80
1	13	1087	G	C8-N9-C4	-6.08	103.97	106.40
23	2K	36	A	N1-C6-N6	-6.08	114.95	118.60
26	1H	247	G	N3-C4-N9	-6.08	122.35	126.00
26	1H	644	A	C8-N9-C4	6.08	108.23	105.80
26	1H	807	U	C5-C6-N1	-6.08	119.66	122.70
26	1H	1612	C	OP1-P-O3'	6.08	118.58	105.20
26	1H	1779	U	C2-N3-C4	-6.08	123.35	127.00
26	1H	1828	G	N1-C2-N3	6.08	127.55	123.90
26	1H	2048	G	N3-C2-N2	-6.08	115.64	119.90
26	1H	2295	C	N3-C4-C5	-6.08	119.47	121.90
27	16	28	C	C5-C6-N1	6.08	124.04	121.00
1	1G	970	C	C2-N3-C4	6.08	122.94	119.90
1	1G	1514	C	C5-C6-N1	6.08	124.04	121.00
26	14	50	U	C5-C6-N1	-6.08	119.66	122.70
26	14	70	G	N3-C4-C5	-6.08	125.56	128.60
26	14	122	G	C5-C6-N1	6.08	114.54	111.50
26	14	1219	G	N9-C4-C5	-6.08	102.97	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1827	C	N1-C2-N3	6.08	123.46	119.20
26	14	1964	G	N3-C4-N9	6.08	129.65	126.00
26	14	2089	U	N3-C2-O2	6.08	126.46	122.20
26	14	2108	C	N3-C4-C5	-6.08	119.47	121.90
26	14	2242	G	C6-C5-N7	6.08	134.05	130.40
26	14	2265	U	N3-C4-C5	-6.08	110.95	114.60
26	14	2492	U	C5-C6-N1	6.08	125.74	122.70
26	1H	679	C	C6-N1-C2	6.08	122.73	120.30
26	1H	1559	G	C4-C5-N7	6.08	113.23	110.80
26	1H	2330	G	OP1-P-OP2	6.08	128.72	119.60
26	1H	2490	G	OP2-P-O3'	-6.08	91.82	105.20
1	1G	875	C	N1-C2-O2	6.08	122.55	118.90
26	14	1663	C	C6-N1-C2	6.08	122.73	120.30
26	14	2627	G	C4-C5-N7	6.08	113.23	110.80
1	13	302	G	N1-C6-O6	-6.08	116.25	119.90
1	13	577	G	N7-C8-N9	6.08	116.14	113.10
1	13	821	G	N1-C6-O6	6.08	123.55	119.90
26	1H	2254	C	N3-C4-N4	6.08	122.25	118.00
1	1G	210	U	C6-N1-C2	-6.08	117.35	121.00
1	1G	285	G	OP1-P-O3'	6.08	118.57	105.20
1	1G	873	A	C6-C5-N7	6.08	136.56	132.30
1	1G	1438	G	N3-C4-C5	6.08	131.64	128.60
26	14	725	G	N1-C6-O6	6.08	123.55	119.90
26	14	1848	A	C8-N9-C4	6.08	108.23	105.80
26	14	1950	G	N7-C8-N9	6.08	116.14	113.10
1	13	758	G	C5-C6-O6	-6.08	124.95	128.60
26	1H	102	G	C5-N7-C8	6.08	107.34	104.30
26	1H	266	G	N3-C4-C5	-6.08	125.56	128.60
26	1H	1486	A	C6-C5-N7	-6.08	128.05	132.30
26	1H	2395	C	C6-N1-C1'	-6.08	113.51	120.80
1	13	802	A	C5-C6-N1	-6.08	114.66	117.70
1	13	965	A	N7-C8-N9	6.08	116.84	113.80
23	2K	23	G	N1-C2-N3	-6.08	120.25	123.90
26	1H	751	A	C5-C6-N6	-6.08	118.84	123.70
26	1H	1191	G	O5'-P-OP2	-6.08	100.23	105.70
26	1H	1274	A	OP1-P-OP2	6.08	128.71	119.60
26	1H	1644	C	OP1-P-OP2	-6.08	110.49	119.60
26	1H	1707	G	C5-N7-C8	-6.08	101.26	104.30
26	1H	2387	U	N1-C2-O2	-6.08	118.55	122.80
1	1G	783	C	C4-C5-C6	-6.08	114.36	117.40
26	14	471	A	C5-N7-C8	-6.08	100.86	103.90
26	14	787	U	C5-C6-N1	6.08	125.74	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1021	A	C6-N1-C2	6.08	122.25	118.60
26	14	1277	G	OP1-P-OP2	6.08	128.71	119.60
26	14	2250	G	N1-C2-N3	-6.08	120.25	123.90
1	13	240	C	N3-C4-N4	-6.07	113.75	118.00
1	13	939	G	N1-C2-N3	6.07	127.54	123.90
26	1H	776	G	C5-C6-O6	6.07	132.24	128.60
26	1H	1639	U	N1-C2-O2	6.07	127.05	122.80
26	1H	2018	G	C5-C6-N1	-6.07	108.46	111.50
26	1H	2527	C	C2-N3-C4	6.07	122.94	119.90
1	1G	4	U	N3-C2-O2	-6.07	117.95	122.20
1	1G	512	U	N3-C2-O2	-6.07	117.95	122.20
26	14	3	U	C2-N1-C1'	6.07	124.99	117.70
26	14	432	A	N7-C8-N9	6.07	116.84	113.80
26	14	441	U	OP1-P-OP2	6.07	128.71	119.60
26	14	925	C	N3-C4-N4	-6.07	113.75	118.00
26	14	1978	A	O5'-P-OP2	-6.07	100.23	105.70
26	14	2323	G	OP1-P-OP2	6.07	128.71	119.60
1	13	571	U	C6-N1-C2	-6.07	117.36	121.00
1	13	724	G	N1-C6-O6	-6.07	116.26	119.90
1	13	1204	A	N7-C8-N9	6.07	116.84	113.80
26	1H	617	G	N1-C2-N2	-6.07	110.73	116.20
26	1H	1386	C	N3-C4-C5	-6.07	119.47	121.90
26	14	720	C	N3-C2-O2	6.07	126.15	121.90
26	14	985	C	O5'-P-OP2	-6.07	100.23	105.70
26	14	1340	U	C5-C6-N1	-6.07	119.66	122.70
26	14	2079	U	N1-C2-O2	-6.07	118.55	122.80
1	13	950	U	C2-N1-C1'	-6.07	110.42	117.70
1	13	985	C	C6-N1-C2	6.07	122.73	120.30
26	1H	662	G	N3-C2-N2	6.07	124.15	119.90
26	1H	934	G	N1-C6-O6	6.07	123.54	119.90
26	1H	1297	C	OP2-P-O3'	-6.07	91.84	105.20
26	1H	1437	C	OP1-P-O3'	6.07	118.56	105.20
26	1H	2067	G	N3-C2-N2	-6.07	115.65	119.90
26	1H	2254	C	C5-C4-N4	-6.07	115.95	120.20
1	1G	925	G	C2-N3-C4	-6.07	108.86	111.90
26	14	489	G	N1-C6-O6	6.07	123.54	119.90
26	14	625	G	OP1-P-OP2	6.07	128.71	119.60
26	14	930	U	O5'-P-OP1	-6.07	100.24	105.70
26	14	1263	U	N3-C4-O4	6.07	123.65	119.40
26	14	1359	A	C4-N9-C1'	-6.07	115.37	126.30
26	14	2597	G	C6-N1-C2	6.07	128.74	125.10
27	1J	73	A	C8-N9-C4	-6.07	103.37	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1827	C	C5-C6-N1	6.07	124.03	121.00
26	1H	2255	G	N9-C4-C5	6.07	107.83	105.40
26	14	2259	G	O5'-P-OP2	6.07	117.98	110.70
26	14	2319	G	N3-C2-N2	6.07	124.15	119.90
1	13	307	C	C4-C5-C6	6.07	120.43	117.40
26	1H	254	G	C5-C6-O6	-6.07	124.96	128.60
26	1H	298	G	O5'-P-OP1	-6.07	100.24	105.70
26	1H	933	A	N1-C6-N6	-6.07	114.96	118.60
26	1H	1338	G	C5-C6-O6	-6.07	124.96	128.60
29	11	105	ILE	CG1-CB-CG2	-6.07	98.05	111.40
1	1G	676	A	O5'-P-OP1	-6.07	100.24	105.70
1	1G	831	U	C2-N3-C4	6.07	130.64	127.00
26	14	83	G	N3-C2-N2	-6.07	115.65	119.90
26	14	311	A	C5-N7-C8	-6.07	100.87	103.90
26	14	1558	A	C4-C5-C6	6.07	120.03	117.00
26	14	1613	G	C5-C6-N1	6.07	114.53	111.50
26	14	1821	A	C6-C5-N7	-6.07	128.05	132.30
26	14	2359	C	O5'-P-OP1	-6.07	100.24	105.70
1	13	237	C	C4-C5-C6	6.07	120.43	117.40
1	13	783	C	N1-C2-N3	-6.07	114.95	119.20
26	1H	510	C	N3-C4-N4	-6.07	113.75	118.00
26	1H	703	U	OP2-P-O3'	-6.07	91.85	105.20
26	1H	1289	C	N3-C4-C5	6.07	124.33	121.90
26	1H	2365	G	C2-N3-C4	6.07	114.93	111.90
1	1G	6	G	N1-C2-N2	6.07	121.66	116.20
1	1G	785	G	N1-C6-O6	6.07	123.54	119.90
23	2L	39	A	C5-N7-C8	-6.07	100.87	103.90
26	14	425	G	N3-C4-C5	6.07	131.63	128.60
26	14	584	C	N3-C2-O2	6.07	126.15	121.90
26	14	784	A	N3-C4-C5	6.07	131.05	126.80
26	14	1376	C	OP2-P-O3'	6.07	118.54	105.20
26	14	1843	C	C5-C6-N1	-6.07	117.97	121.00
26	14	2593	U	O5'-P-OP1	6.07	117.98	110.70
26	14	2847	U	N1-C2-N3	-6.07	111.26	114.90
26	14	2853	C	O5'-P-OP1	6.07	117.98	110.70
1	1G	956	U	C6-N1-C2	-6.06	117.36	121.00
26	14	2448	A	N9-C4-C5	6.06	108.23	105.80
1	13	755	G	C4-C5-C6	6.06	122.44	118.80
1	13	827	U	C2-N1-C1'	6.06	124.97	117.70
1	13	1283	G	O5'-P-OP1	-6.06	100.24	105.70
1	13	1331	G	OP1-P-OP2	-6.06	110.50	119.60
26	1H	292	C	N3-C4-C5	-6.06	119.47	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	540	G	N3-C2-N2	-6.06	115.66	119.90
26	1H	871	U	C4-C5-C6	6.06	123.34	119.70
26	1H	2307	G	C6-C5-N7	-6.06	126.76	130.40
26	1H	2556	C	C4-C5-C6	-6.06	114.37	117.40
26	1H	2867	G	C4-C5-N7	-6.06	108.38	110.80
31	31	33	LEU	CB-CG-CD2	-6.06	100.69	111.00
40	A8	20	ARG	NE-CZ-NH1	6.06	123.33	120.30
1	1G	690	G	C5-C6-N1	-6.06	108.47	111.50
26	14	466	A	C2-N3-C4	6.06	113.63	110.60
26	14	681	G	OP1-P-OP2	6.06	128.69	119.60
26	14	1955	U	N1-C1'-C2'	6.06	121.88	114.00
26	1H	649	G	N3-C2-N2	-6.06	115.66	119.90
26	14	1594	G	C5-N7-C8	-6.06	101.27	104.30
26	14	1970	A	C4-C5-N7	6.06	113.73	110.70
26	14	2359	C	C4-C5-C6	6.06	120.43	117.40
26	14	2455	G	N1-C6-O6	6.06	123.54	119.90
1	13	416	G	C5-C6-N1	-6.06	108.47	111.50
1	13	554	C	C6-N1-C2	-6.06	117.88	120.30
1	13	1439	C	O5'-P-OP2	-6.06	100.25	105.70
23	2K	71	G	OP2-P-O3'	6.06	118.53	105.20
26	1H	557	U	N1-C2-N3	6.06	118.54	114.90
26	1H	624	C	N1-C2-N3	-6.06	114.96	119.20
26	1H	935	C	N3-C4-C5	6.06	124.32	121.90
26	1H	991	C	C2-N1-C1'	-6.06	112.14	118.80
26	1H	2004	G	C4-C5-N7	6.06	113.22	110.80
26	1H	2060	A	OP1-P-O3'	-6.06	91.87	105.20
26	1H	2298	A	C5-C6-N1	6.06	120.73	117.70
1	1G	69	G	C8-N9-C4	6.06	108.82	106.40
1	1G	906	G	C6-C5-N7	-6.06	126.76	130.40
26	14	52	A	OP2-P-O3'	6.06	118.53	105.20
26	14	208	C	N3-C4-N4	6.06	122.24	118.00
26	14	210	C	C2-N3-C4	-6.06	116.87	119.90
26	14	1283	G	C8-N9-C1'	-6.06	119.12	127.00
26	14	1781	C	C2-N3-C4	-6.06	116.87	119.90
26	14	2003	G	C8-N9-C4	-6.06	103.98	106.40
26	14	2415	G	C5-C6-O6	-6.06	124.96	128.60
1	13	1257	U	N3-C2-O2	-6.06	117.96	122.20
1	13	1485	U	C6-N1-C1'	6.06	129.68	121.20
26	1H	65	C	N3-C2-O2	-6.06	117.66	121.90
26	1H	222	A	O4'-C1'-N9	-6.06	103.35	108.20
26	1H	302	C	O5'-P-OP1	6.06	117.97	110.70
26	1H	685	A	C5-C6-N6	-6.06	118.85	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	990	A	C8-N9-C4	-6.06	103.38	105.80
26	1H	1568	G	N1-C2-N2	6.06	121.65	116.20
26	1H	2005	A	N1-C2-N3	6.06	132.33	129.30
26	1H	2479	G	O5'-P-OP2	-6.06	100.25	105.70
1	1G	311	C	OP2-P-O3'	6.06	118.53	105.20
1	1G	624	C	C5-C6-N1	6.06	124.03	121.00
26	14	249	C	C2-N3-C4	6.06	122.93	119.90
26	14	1237	A	N7-C8-N9	6.06	116.83	113.80
26	14	1243	G	N1-C2-N2	-6.06	110.75	116.20
26	14	1567	A	N1-C2-N3	6.06	132.33	129.30
26	14	1623	G	OP1-P-OP2	6.06	128.69	119.60
26	14	1862	G	C5-C6-O6	6.06	132.24	128.60
26	14	2260	C	C4-C5-C6	6.06	120.43	117.40
26	14	2502	G	P-O3'-C3'	6.06	126.97	119.70
26	14	2617	C	C2-N1-C1'	-6.06	112.14	118.80
1	13	520	A	C4-C5-N7	6.06	113.73	110.70
26	1H	1792	G	C5-C6-O6	6.06	132.23	128.60
26	14	782	A	C5-C6-N6	-6.06	118.86	123.70
26	14	995	C	C5-C4-N4	6.06	124.44	120.20
26	14	1635	G	C5-C6-O6	-6.06	124.97	128.60
26	14	2812	G	OP1-P-OP2	-6.06	110.52	119.60
26	1H	760	G	N1-C2-N3	6.05	127.53	123.90
26	1H	1202	C	OP2-P-O3'	6.05	118.52	105.20
26	1H	1205	U	C4-C5-C6	6.05	123.33	119.70
26	1H	2617	C	N3-C2-O2	6.05	126.14	121.90
1	1G	33	A	C8-N9-C4	-6.05	103.38	105.80
1	1G	210	U	C5-C6-N1	6.05	125.73	122.70
4	32	194	LEU	CA-CB-CG	6.05	129.22	115.30
26	14	502	A	C5-C6-N1	-6.05	114.67	117.70
26	14	584	C	C2-N3-C4	-6.05	116.87	119.90
26	14	2069	G	OP2-P-O3'	6.05	118.52	105.20
26	14	2447	G	N7-C8-N9	-6.05	110.07	113.10
26	1H	1665	A	C5-C6-N1	6.05	120.73	117.70
26	1H	1916	A	C6-N1-C2	-6.05	114.97	118.60
26	1H	2673	G	N1-C6-O6	-6.05	116.27	119.90
26	14	1142(A)	A	C5-N7-C8	-6.05	100.87	103.90
26	14	1419	A	O4'-C1'-N9	6.05	113.04	108.20
26	14	2238	G	N1-C2-N2	6.05	121.65	116.20
1	13	542	G	N3-C4-C5	6.05	131.62	128.60
1	13	812	C	O5'-P-OP2	6.05	117.96	110.70
1	13	1409	C	C2-N3-C4	-6.05	116.87	119.90
1	13	1475	G	N1-C2-N3	6.05	127.53	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	68	G	N1-C2-N3	6.05	127.53	123.90
26	1H	180	G	C8-N9-C1'	-6.05	119.13	127.00
26	1H	441	U	C5-C4-O4	-6.05	122.27	125.90
26	1H	979	G	N3-C2-N2	-6.05	115.66	119.90
26	1H	2360	A	N1-C2-N3	6.05	132.33	129.30
26	1H	2408	U	O5'-P-OP2	-6.05	100.25	105.70
26	1H	2485	G	C2-N3-C4	-6.05	108.87	111.90
26	1H	2616	C	N1-C2-O2	-6.05	115.27	118.90
26	1H	2717	G	N7-C8-N9	-6.05	110.07	113.10
1	1G	44	G	N1-C2-N3	6.05	127.53	123.90
26	14	89	G	N1-C6-O6	6.05	123.53	119.90
26	14	1282	U	C4-C5-C6	6.05	123.33	119.70
26	14	1500	G	C2-N3-C4	-6.05	108.87	111.90
26	14	1555	G	N3-C4-C5	-6.05	125.57	128.60
26	14	1918	A	C4-C5-N7	6.05	113.73	110.70
26	14	1926	U	C5-C4-O4	6.05	129.53	125.90
26	14	2426	A	N9-C4-C5	-6.05	103.38	105.80
26	14	2429	G	O5'-P-OP2	-6.05	100.25	105.70
26	14	2820	A	C6-N1-C2	6.05	122.23	118.60
1	13	670	G	N1-C2-N2	-6.05	110.75	116.20
1	13	1340	A	C5-N7-C8	-6.05	100.88	103.90
1	13	1467	G	N3-C4-N9	-6.05	122.37	126.00
24	3K	32	C	C6-N1-C2	-6.05	117.88	120.30
26	1H	601	C	N3-C4-C5	6.05	124.32	121.90
26	1H	621	A	N3-C4-N9	-6.05	122.56	127.40
26	1H	956	G	C5-N7-C8	6.05	107.33	104.30
26	1H	1609	A	N1-C2-N3	6.05	132.32	129.30
26	1H	1900	A	O5'-P-OP2	-6.05	100.26	105.70
26	1H	2064	C	C6-N1-C1'	6.05	128.06	120.80
26	1H	2226	C	C2-N3-C4	-6.05	116.88	119.90
26	1H	2422	A	N1-C6-N6	-6.05	114.97	118.60
1	1G	1274	G	N7-C8-N9	6.05	116.12	113.10
1	1G	1419	G	C6-N1-C2	6.05	128.73	125.10
26	14	75	G	N9-C4-C5	6.05	107.82	105.40
26	14	104	U	O5'-P-OP2	-6.05	100.25	105.70
26	14	638	G	C4-C5-C6	6.05	122.43	118.80
26	14	879	G	N3-C4-N9	6.05	129.63	126.00
26	14	1370	C	N3-C2-O2	6.05	126.13	121.90
26	14	2026	C	O5'-P-OP2	-6.05	100.26	105.70
26	14	2386	C	OP2-P-O3'	6.05	118.51	105.20
27	1J	94	C	C2-N3-C4	6.05	122.92	119.90
26	1H	789	A	C8-N9-C4	6.05	108.22	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1024	G	C8-N9-C1'	-6.05	119.14	127.00
26	1H	2296	U	N3-C4-C5	-6.05	110.97	114.60
1	1G	7	G	N1-C6-O6	6.05	123.53	119.90
1	1G	239	U	N3-C4-C5	-6.05	110.97	114.60
1	1G	579	G	O5'-P-OP2	-6.05	100.26	105.70
26	14	497	A	N1-C6-N6	6.05	122.23	118.60
26	14	1519	G	O5'-P-OP1	-6.05	100.26	105.70
26	14	1626	G	N1-C6-O6	-6.05	116.27	119.90
26	14	1949	G	N1-C2-N3	6.05	127.53	123.90
27	1J	55	U	C6-N1-C2	-6.05	117.37	121.00
32	49	6	ALA	N-CA-C	6.05	127.33	111.00
1	13	538	G	N9-C4-C5	-6.05	102.98	105.40
1	13	744	C	N3-C2-O2	6.05	126.13	121.90
1	13	903	G	N7-C8-N9	-6.05	110.08	113.10
1	13	975	A	OP1-P-OP2	6.05	128.67	119.60
1	13	1431	C	N1-C2-O2	-6.05	115.27	118.90
24	3K	2	G	C5-C6-O6	-6.05	124.97	128.60
26	1H	62	C	OP2-P-O3'	6.05	118.50	105.20
26	1H	289	A	C5-C6-N1	-6.05	114.68	117.70
1	1G	52	G	N1-C2-N2	-6.05	110.76	116.20
1	1G	118	U	N3-C4-O4	6.05	123.63	119.40
1	1G	890	G	C5-N7-C8	6.05	107.32	104.30
1	1G	1466	C	C2-N3-C4	-6.05	116.88	119.90
26	14	56	A	C6-N1-C2	6.05	122.23	118.60
26	14	989	G	C8-N9-C4	6.05	108.82	106.40
26	14	1154	G	N7-C8-N9	6.05	116.12	113.10
26	14	1237	A	C5-C6-N6	6.05	128.54	123.70
26	14	1321	A	C6-N1-C2	-6.05	114.97	118.60
26	14	1985	G	N9-C4-C5	-6.05	102.98	105.40
1	13	835	U	OP1-P-OP2	-6.04	110.53	119.60
26	1H	734	A	C8-N9-C4	6.04	108.22	105.80
26	1H	746	A	C5-N7-C8	-6.04	100.88	103.90
26	1H	814	C	C2-N1-C1'	-6.04	112.15	118.80
26	1H	1399	C	C4-C5-C6	-6.04	114.38	117.40
26	14	1448	G	N3-C2-N2	-6.04	115.67	119.90
26	14	1513	C	N3-C4-N4	6.04	122.23	118.00
26	14	2651	C	N3-C4-N4	-6.04	113.77	118.00
1	13	124	G	N1-C6-O6	-6.04	116.27	119.90
1	13	127	G	OP2-P-O3'	6.04	118.50	105.20
26	1H	635	C	N1-C2-O2	6.04	122.53	118.90
26	1H	652	C	N1-C2-O2	-6.04	115.27	118.90
26	1H	1024	G	C2-N3-C4	-6.04	108.88	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1146	C	N1-C2-O2	-6.04	115.27	118.90
26	1H	1444	G	N1-C6-O6	-6.04	116.27	119.90
26	1H	1643	G	N3-C4-C5	-6.04	125.58	128.60
26	1H	2319	G	N9-C4-C5	-6.04	102.98	105.40
26	1H	2466	C	N3-C4-C5	6.04	124.32	121.90
26	1H	2527	C	N3-C4-N4	6.04	122.23	118.00
37	78	19	VAL	C-N-CA	6.04	134.99	122.30
1	1G	43	C	C5-C4-N4	-6.04	115.97	120.20
1	1G	50	A	N9-C4-C5	6.04	108.22	105.80
26	14	529	A	C4-C5-C6	6.04	120.02	117.00
26	14	1610	A	N1-C2-N3	6.04	132.32	129.30
26	14	2026	C	C4-C5-C6	-6.04	114.38	117.40
26	14	2062	A	OP1-P-OP2	-6.04	110.53	119.60
26	14	2373	G	N1-C2-N3	6.04	127.53	123.90
26	1H	264	C	N3-C4-C5	6.04	124.32	121.90
26	1H	1450	C	N3-C2-O2	6.04	126.13	121.90
26	1H	1525	G	OP1-P-O3'	6.04	118.49	105.20
26	1H	1902	C	C6-N1-C1'	6.04	128.05	120.80
26	1H	2067	G	C5-C6-N1	6.04	114.52	111.50
26	1H	2534	A	C5-C6-N6	-6.04	118.87	123.70
26	1H	2732	G	N1-C6-O6	-6.04	116.28	119.90
27	16	36	C	N3-C4-C5	6.04	124.32	121.90
1	1G	362	G	N1-C6-O6	-6.04	116.28	119.90
26	14	1195	G	C4-C5-N7	-6.04	108.38	110.80
26	14	1273	U	C2-N3-C4	-6.04	123.38	127.00
26	14	1693	U	N1-C2-N3	6.04	118.53	114.90
26	14	1706	U	C4-C5-C6	6.04	123.33	119.70
26	14	2770	G	C5-N7-C8	-6.04	101.28	104.30
26	14	2869	G	C5-C6-O6	-6.04	124.97	128.60
27	1J	72	G	C4-C5-N7	-6.04	108.38	110.80
27	1J	89	G	C5-N7-C8	-6.04	101.28	104.30
1	13	667	G	N1-C2-N2	6.04	121.64	116.20
1	13	1455	G	N9-C4-C5	-6.04	102.98	105.40
26	1H	593	G	OP2-P-O3'	6.04	118.49	105.20
26	1H	1136	G	N1-C2-N3	6.04	127.52	123.90
26	1H	1854	A	C6-C5-N7	6.04	136.53	132.30
1	1G	851	G	C6-C5-N7	-6.04	126.78	130.40
26	14	334	C	C6-N1-C2	6.04	122.72	120.30
26	14	1797	C	C2-N3-C4	-6.04	116.88	119.90
26	14	2772	C	N3-C2-O2	-6.04	117.67	121.90
1	13	1359	C	N1-C2-N3	-6.04	114.97	119.20
26	1H	822	U	N1-C2-O2	6.04	127.03	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	870	A	C6-N1-C2	-6.04	114.98	118.60
26	1H	1210	A	C5-C6-N6	-6.04	118.87	123.70
26	1H	1286	A	N3-C4-C5	-6.04	122.57	126.80
26	1H	1914	C	N3-C4-N4	-6.04	113.77	118.00
26	1H	2256	G	OP2-P-O3'	6.04	118.48	105.20
26	14	51	G	N3-C2-N2	6.04	124.13	119.90
26	14	744	G	N1-C2-N3	6.04	127.52	123.90
26	14	897	C	N1-C2-O2	6.04	122.52	118.90
26	14	2250	G	N1-C6-O6	-6.04	116.28	119.90
26	14	2487	G	N1-C2-N3	6.04	127.52	123.90
26	14	2543	G	C2-N3-C4	6.04	114.92	111.90
1	13	282	A	OP1-P-O3'	6.04	118.48	105.20
24	3K	10	G	N1-C6-O6	-6.04	116.28	119.90
26	1H	1474	C	C2-N3-C4	6.04	122.92	119.90
26	1H	2736	G	N1-C6-O6	-6.04	116.28	119.90
27	16	8	U	O5'-P-OP2	-6.04	100.27	105.70
26	14	389	G	N1-C2-N2	-6.04	110.77	116.20
26	14	1270	C	C2-N3-C4	6.04	122.92	119.90
26	14	2820	A	OP1-P-O3'	6.04	118.48	105.20
1	13	19	C	N3-C4-C5	-6.04	119.49	121.90
1	13	246	A	C4-C5-N7	6.04	113.72	110.70
1	13	664	G	N7-C8-N9	-6.04	110.08	113.10
1	13	808	C	C6-N1-C2	6.04	122.71	120.30
1	13	1151	A	O5'-P-OP2	-6.04	100.27	105.70
1	13	1285	A	N1-C6-N6	-6.04	114.98	118.60
24	3K	2	G	C8-N9-C4	6.04	108.81	106.40
26	1H	383	U	C2-N1-C1'	-6.04	110.46	117.70
26	1H	820	A	OP1-P-O3'	-6.04	91.92	105.20
26	1H	932	G	C2-N3-C4	-6.04	108.88	111.90
26	1H	2002	G	C2-N3-C4	6.04	114.92	111.90
26	1H	2033	A	O5'-P-OP1	-6.04	100.27	105.70
26	1H	2324	C	C2-N3-C4	-6.04	116.88	119.90
40	A8	9	ARG	NE-CZ-NH1	-6.04	117.28	120.30
1	1G	314	C	C2-N3-C4	-6.04	116.88	119.90
1	1G	740	U	C2-N3-C4	6.04	130.62	127.00
26	14	1355	G	N7-C8-N9	6.04	116.12	113.10
26	14	1463	C	N3-C4-C5	-6.04	119.49	121.90
26	14	1897	G	C8-N9-C4	6.04	108.81	106.40
26	14	2392	A	C6-C5-N7	-6.04	128.07	132.30
26	14	2607	G	N1-C2-N3	6.04	127.52	123.90
27	1J	113	C	C6-N1-C1'	-6.04	113.56	120.80
1	13	251	G	C5-N7-C8	-6.03	101.28	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	351	G	O5'-P-OP1	-6.03	100.27	105.70
1	13	401	C	C4-C5-C6	6.03	120.42	117.40
1	13	1050	G	C5-C6-O6	-6.03	124.98	128.60
26	1H	270(O)	U	C6-N1-C2	-6.03	117.38	121.00
26	1H	427	U	N3-C4-C5	-6.03	110.98	114.60
26	1H	444	C	OP1-P-OP2	-6.03	110.55	119.60
26	1H	727	A	OP2-P-O3'	6.03	118.47	105.20
26	1H	800	A	O5'-P-OP1	-6.03	100.27	105.70
26	1H	1607	C	C2-N3-C4	6.03	122.92	119.90
26	1H	1754	C	OP1-P-O3'	6.03	118.47	105.20
26	1H	2445	G	C5-C6-O6	6.03	132.22	128.60
26	1H	2472	G	C5-C6-O6	-6.03	124.98	128.60
26	14	751	A	OP2-P-O3'	6.03	118.47	105.20
26	14	1488	G	C5-C6-N1	-6.03	108.48	111.50
26	14	1614	A	N1-C2-N3	6.03	132.32	129.30
26	14	1954	G	C2-N3-C4	6.03	114.92	111.90
26	14	2076	U	C6-N1-C2	-6.03	117.38	121.00
26	1H	481	G	C5-C6-N1	-6.03	108.48	111.50
26	1H	651	G	N3-C4-C5	-6.03	125.58	128.60
1	1G	481	G	N3-C4-N9	6.03	129.62	126.00
1	1G	736	C	N1-C2-O2	-6.03	115.28	118.90
26	14	692	C	C6-N1-C2	6.03	122.71	120.30
26	14	1422	G	N1-C6-O6	6.03	123.52	119.90
26	14	1429	G	N3-C4-C5	-6.03	125.58	128.60
1	13	249	U	O5'-P-OP1	-6.03	100.27	105.70
1	13	1065	U	C4-C5-C6	-6.03	116.08	119.70
1	13	1196	U	O5'-P-OP2	-6.03	100.27	105.70
22	1K	76	A	C4-N9-C1'	6.03	137.15	126.30
26	1H	1545(A)	A	C4-C5-C6	-6.03	113.98	117.00
26	1H	1728	G	N9-C4-C5	-6.03	102.99	105.40
26	1H	2208	U	C6-N1-C2	6.03	124.62	121.00
26	1H	2301	C	N3-C4-N4	-6.03	113.78	118.00
26	1H	2817	G	N9-C4-C5	6.03	107.81	105.40
1	1G	1190	G	C4-C5-N7	-6.03	108.39	110.80
1	1G	1239	A	OP1-P-OP2	6.03	128.65	119.60
26	14	189	G	C2-N3-C4	-6.03	108.89	111.90
26	14	270(V)	G	OP1-P-O3'	6.03	118.47	105.20
26	14	699	A	N9-C4-C5	6.03	108.21	105.80
26	14	2679	A	C6-N1-C2	-6.03	114.98	118.60
1	13	1300	G	C5-C6-O6	6.03	132.22	128.60
26	1H	214	G	C5-N7-C8	-6.03	101.29	104.30
26	1H	746	A	O5'-P-OP1	-6.03	100.27	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	948	G	C5-N7-C8	-6.03	101.29	104.30
26	1H	1205	U	C6-N1-C2	-6.03	117.38	121.00
26	14	524	U	N1-C2-O2	6.03	127.02	122.80
26	14	999	U	N1-C2-O2	6.03	127.02	122.80
26	14	2232	U	N1-C2-N3	6.03	118.52	114.90
1	13	241	C	N3-C2-O2	6.03	126.12	121.90
1	13	748	C	P-O3'-C3'	6.03	126.93	119.70
1	13	1268	A	N1-C6-N6	-6.03	114.98	118.60
26	1H	599	G	O5'-P-OP1	6.03	117.93	110.70
26	1H	1324	G	N3-C4-C5	6.03	131.61	128.60
26	1H	1560	G	N3-C2-N2	-6.03	115.68	119.90
1	1G	300	A	N1-C2-N3	6.03	132.31	129.30
1	1G	652	U	O4'-C1'-N1	6.03	113.02	108.20
1	1G	767	A	C5-C6-N1	6.03	120.71	117.70
57	3L	34	U	C6-N1-C1'	-6.03	112.76	121.20
26	14	311	A	C6-C5-N7	-6.03	128.08	132.30
26	14	1388	G	OP1-P-OP2	6.03	128.64	119.60
26	14	2625	G	C2-N3-C4	-6.03	108.89	111.90
27	1J	105	G	C5-C6-O6	-6.03	124.98	128.60
1	13	560	U	C5-C6-N1	6.03	125.71	122.70
1	13	869	G	C5-N7-C8	-6.03	101.29	104.30
1	13	1265	G	C8-N9-C4	6.03	108.81	106.40
26	1H	649	G	N7-C8-N9	6.03	116.11	113.10
26	1H	708	C	N3-C4-C5	6.03	124.31	121.90
26	1H	1139	G	C4-C5-N7	-6.03	108.39	110.80
26	1H	1376	C	C2-N1-C1'	6.03	125.43	118.80
26	1H	1465	G	C2-N3-C4	6.03	114.91	111.90
26	1H	1637	A	N3-C4-N9	6.03	132.22	127.40
1	1G	1367	C	N1-C2-O2	6.03	122.52	118.90
26	14	235	U	P-O3'-C3'	-6.03	112.47	119.70
26	14	328	U	N3-C4-O4	6.03	123.62	119.40
26	14	399	G	N1-C2-N2	-6.03	110.78	116.20
26	14	1266	G	C5-C6-O6	-6.03	124.98	128.60
26	14	1906	G	C4-C5-N7	6.03	113.21	110.80
26	14	2678	C	C5-C4-N4	-6.03	115.98	120.20
54	L5	12	ARG	NE-CZ-NH1	-6.03	117.29	120.30
1	13	298	A	C8-N9-C4	-6.02	103.39	105.80
26	1H	1839	G	N1-C6-O6	-6.02	116.28	119.90
26	1H	2246	G	C6-N1-C2	-6.02	121.49	125.10
26	1H	2721	A	C5-N7-C8	-6.02	100.89	103.90
26	1H	2866	U	O5'-P-OP2	-6.02	100.28	105.70
1	1G	740	U	O4'-C1'-N1	6.02	113.02	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1196	C	N3-C4-C5	6.02	124.31	121.90
26	1H	154	G	C5-C6-O6	-6.02	124.99	128.60
26	1H	1764	G	C5-N7-C8	6.02	107.31	104.30
26	1H	1891	G	N3-C4-N9	-6.02	122.39	126.00
26	1H	2460	U	N1-C2-O2	-6.02	118.58	122.80
26	1H	2760	C	C6-N1-C2	6.02	122.71	120.30
1	1G	265	G	C5-N7-C8	6.02	107.31	104.30
1	1G	697	U	C6-N1-C2	6.02	124.61	121.00
1	1G	913	A	P-O3'-C3'	6.02	126.93	119.70
26	14	217	G	C4-C5-N7	-6.02	108.39	110.80
26	14	348	G	N3-C4-C5	6.02	131.61	128.60
26	14	352	G	C4-C5-C6	6.02	122.41	118.80
26	14	1789	A	C5-C6-N1	6.02	120.71	117.70
26	14	2405	G	C5-C6-N1	-6.02	108.49	111.50
1	13	1240	U	N3-C2-O2	6.02	126.42	122.20
26	1H	24	G	C2-N3-C4	-6.02	108.89	111.90
26	1H	32	C	C5-C4-N4	6.02	124.42	120.20
26	1H	282	A	C4-C5-N7	-6.02	107.69	110.70
26	1H	1502	C	OP1-P-OP2	-6.02	110.57	119.60
26	1H	1947	C	C5-C4-N4	-6.02	115.98	120.20
1	1G	886	G	N9-C4-C5	-6.02	102.99	105.40
1	1G	891	U	N3-C4-O4	6.02	123.61	119.40
1	1G	1506	U	O5'-P-OP1	6.02	117.92	110.70
23	2L	77	A	N9-C4-C5	-6.02	103.39	105.80
26	14	1303	G	OP2-P-O3'	6.02	118.45	105.20
1	13	467	G	C6-C5-N7	-6.02	126.79	130.40
1	13	766	A	N1-C2-N3	-6.02	126.29	129.30
1	13	781	A	C6-N1-C2	-6.02	114.99	118.60
26	1H	261	G	O5'-P-OP2	-6.02	100.28	105.70
26	1H	500	G	C6-C5-N7	6.02	134.01	130.40
26	1H	1718	G	C5-N7-C8	6.02	107.31	104.30
26	1H	2442	C	C2-N3-C4	-6.02	116.89	119.90
26	1H	2764	A	N3-C4-C5	6.02	131.01	126.80
26	1H	2888	C	O5'-P-OP1	-6.02	100.28	105.70
1	1G	108	G	C5-C6-N1	6.02	114.51	111.50
1	1G	265	G	N3-C2-N2	6.02	124.11	119.90
26	14	444	C	C2-N1-C1'	-6.02	112.18	118.80
26	14	524	U	C4-C5-C6	6.02	123.31	119.70
26	14	614	U	N3-C2-O2	6.02	126.41	122.20
26	14	776	G	N7-C8-N9	-6.02	110.09	113.10
26	14	837	C	C5-C4-N4	-6.02	115.99	120.20
26	14	1203	G	C5-C6-O6	6.02	132.21	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1791	A	C5-N7-C8	-6.02	100.89	103.90
26	14	2344	U	N3-C4-O4	-6.02	115.19	119.40
26	14	2358	G	C4-C5-N7	-6.02	108.39	110.80
1	13	229	U	N3-C4-O4	6.02	123.61	119.40
1	13	979	C	N1-C2-O2	-6.02	115.29	118.90
25	4K	18	G	C4-C5-N7	-6.02	108.39	110.80
26	1H	1162	G	OP1-P-OP2	-6.02	110.57	119.60
26	1H	1666	G	N1-C6-O6	-6.02	116.29	119.90
26	1H	2573	C	C2-N1-C1'	6.02	125.42	118.80
26	1H	2815	C	OP1-P-OP2	6.02	128.63	119.60
26	1H	2863	C	C5-C6-N1	-6.02	117.99	121.00
27	16	89(A)	A	N9-C4-C5	-6.02	103.39	105.80
26	14	264	C	N3-C4-C5	-6.02	119.49	121.90
26	14	597	U	N1-C2-N3	6.02	118.51	114.90
26	14	2710	C	OP1-P-O3'	-6.02	91.96	105.20
26	1H	2012	G	OP2-P-O3'	6.02	118.44	105.20
1	13	1068	G	N7-C8-N9	6.01	116.11	113.10
26	1H	73	A	C2-N3-C4	6.01	113.61	110.60
26	1H	493	G	C5-C6-N1	-6.01	108.49	111.50
26	1H	672	C	OP2-P-O3'	6.01	118.43	105.20
26	1H	959	A	N1-C6-N6	-6.01	114.99	118.60
26	1H	1143	A	OP1-P-OP2	6.01	128.62	119.60
26	1H	1261	C	N1-C2-O2	-6.01	115.29	118.90
26	1H	1500	G	N3-C4-C5	6.01	131.61	128.60
26	1H	1665	A	C6-N1-C2	-6.01	114.99	118.60
26	1H	1815	A	OP1-P-O3'	6.01	118.43	105.20
26	1H	2578	G	N3-C4-C5	-6.01	125.59	128.60
26	14	668	G	C8-N9-C4	6.01	108.81	106.40
26	14	733	G	N1-C2-N2	-6.01	110.79	116.20
26	14	1142	U	N1-C2-O2	6.01	127.01	122.80
26	14	2818	G	C5-C6-O6	-6.01	124.99	128.60
26	1H	44	A	OP2-P-O3'	6.01	118.43	105.20
27	16	34	U	N1-C2-O2	-6.01	118.59	122.80
1	1G	111	G	OP2-P-O3'	6.01	118.43	105.20
1	1G	239	U	C2-N3-C4	6.01	130.61	127.00
1	1G	516	U	N3-C4-C5	-6.01	110.99	114.60
26	14	138	G	C2-N3-C4	6.01	114.91	111.90
26	14	393	C	N1-C2-O2	6.01	122.51	118.90
26	14	1025	G	C5-C6-O6	-6.01	124.99	128.60
26	14	1449	A	N7-C8-N9	6.01	116.81	113.80
27	1J	79	C	C5-C6-N1	6.01	124.01	121.00
1	13	623	C	N3-C4-C5	-6.01	119.50	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	97	C	C6-N1-C2	6.01	122.70	120.30
26	1H	528	A	C8-N9-C1'	6.01	138.52	127.70
26	1H	1534	G	N3-C4-C5	-6.01	125.59	128.60
26	1H	1577	C	C4-C5-C6	6.01	120.41	117.40
26	1H	1814	G	C4-C5-N7	-6.01	108.39	110.80
26	1H	2680	C	N1-C2-O2	-6.01	115.29	118.90
27	16	110	G	OP1-P-OP2	-6.01	110.58	119.60
1	1G	7	G	C5-C6-N1	-6.01	108.49	111.50
1	1G	332	G	N9-C4-C5	-6.01	103.00	105.40
1	1G	385	C	C4-C5-C6	6.01	120.41	117.40
1	1G	748	C	P-O3'-C3'	6.01	126.91	119.70
1	1G	1508	G	C8-N9-C4	6.01	108.80	106.40
26	14	698	C	N1-C2-O2	-6.01	115.29	118.90
26	14	1257	C	OP2-P-O3'	6.01	118.42	105.20
26	14	2023	G	C6-C5-N7	-6.01	126.79	130.40
1	13	99	C	C2-N3-C4	6.01	122.91	119.90
1	13	481	G	N1-C2-N3	6.01	127.51	123.90
1	13	771	G	N3-C4-C5	6.01	131.60	128.60
1	13	863	U	C2-N1-C1'	-6.01	110.49	117.70
1	13	1056	U	O5'-P-OP2	-6.01	100.29	105.70
1	13	1067	A	O5'-P-OP1	-6.01	100.29	105.70
26	1H	866	A	OP2-P-O3'	6.01	118.42	105.20
26	14	320	A	O5'-P-OP2	-6.01	100.29	105.70
26	14	913	U	C2-N3-C4	6.01	130.61	127.00
26	14	1462	C	N1-C2-O2	-6.01	115.30	118.90
26	14	2677	G	N1-C2-N3	6.01	127.51	123.90
26	14	2692	C	N3-C2-O2	-6.01	117.69	121.90
1	13	585	G	N7-C8-N9	-6.01	110.10	113.10
26	1H	111	A	C8-N9-C4	6.01	108.20	105.80
26	1H	165	U	N1-C2-O2	6.01	127.01	122.80
26	1H	702	G	N1-C6-O6	6.01	123.50	119.90
26	1H	2573	C	C4-C5-C6	6.01	120.40	117.40
1	1G	414	A	C8-N9-C4	6.01	108.20	105.80
1	1G	486	U	N3-C2-O2	-6.01	117.99	122.20
26	14	954	G	C4-C5-N7	-6.01	108.40	110.80
26	14	1377	G	N1-C2-N3	6.01	127.50	123.90
26	14	2210	G	C8-N9-C1'	-6.01	119.19	127.00
1	13	533	A	N1-C6-N6	6.01	122.20	118.60
1	13	767	A	C5-C6-N6	6.01	128.50	123.70
23	2K	46	G	C2-N3-C4	-6.01	108.90	111.90
23	2K	63	C	N1-C2-O2	6.01	122.50	118.90
26	1H	842	G	C8-N9-C1'	6.01	134.81	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1196	C	C4-C5-C6	6.01	120.40	117.40
26	1H	1769	G	N1-C6-O6	6.01	123.50	119.90
26	1H	2366	A	N3-C4-C5	-6.01	122.59	126.80
26	1H	2589	A	C8-N9-C4	6.01	108.20	105.80
26	1H	2849	U	OP1-P-O3'	6.01	118.41	105.20
1	1G	186(F)	C	C5-C6-N1	6.01	124.00	121.00
1	1G	414	A	N9-C4-C5	-6.01	103.40	105.80
1	1G	1363	A	C8-N9-C4	6.01	108.20	105.80
57	3L	3	G	N7-C8-N9	-6.01	110.10	113.10
26	14	540	G	N3-C2-N2	-6.01	115.70	119.90
26	14	631	A	OP1-P-O3'	6.01	118.42	105.20
26	14	808	G	N1-C2-N2	-6.01	110.80	116.20
26	14	1015	G	C5-C6-O6	6.01	132.20	128.60
26	14	2258	C	N3-C4-N4	6.01	122.20	118.00
26	14	2303	G	C5-C6-N1	-6.01	108.50	111.50
26	14	2435	A	OP1-P-OP2	6.01	128.61	119.60
26	14	2618	G	N7-C8-N9	6.01	116.10	113.10
1	13	1338	G	N9-C4-C5	6.00	107.80	105.40
26	1H	17	G	C5-C6-O6	-6.00	125.00	128.60
26	1H	483	A	C5-C6-N6	6.00	128.50	123.70
26	1H	1124	C	C4-C5-C6	6.00	120.40	117.40
26	1H	1402	C	N3-C2-O2	6.00	126.10	121.90
26	1H	2008	C	O5'-P-OP2	-6.00	100.30	105.70
26	14	121	G	C2-N3-C4	-6.00	108.90	111.90
1	13	1488	G	N3-C2-N2	6.00	124.10	119.90
22	1K	26	A	C5-N7-C8	6.00	106.90	103.90
26	1H	1273	U	N1-C2-O2	-6.00	118.60	122.80
27	16	53	A	C8-N9-C4	-6.00	103.40	105.80
27	16	102	G	O5'-P-OP1	6.00	117.90	110.70
1	1G	196	A	N1-C6-N6	-6.00	115.00	118.60
1	1G	1285	A	C8-N9-C4	6.00	108.20	105.80
26	14	681	G	N1-C2-N2	-6.00	110.80	116.20
26	14	1294	U	N3-C4-O4	6.00	123.60	119.40
26	14	1673	U	O4'-C1'-N1	6.00	113.00	108.20
26	14	1937	A	O4'-C1'-N9	6.00	113.00	108.20
26	14	2392	A	C4-C5-N7	6.00	113.70	110.70
1	13	413	G	C4-C5-N7	-6.00	108.40	110.80
1	13	782	A	C5-C6-N6	-6.00	118.90	123.70
1	13	1364	U	N3-C4-C5	-6.00	111.00	114.60
1	13	1429	C	C6-N1-C2	6.00	122.70	120.30
2	1E	187	LEU	CA-CB-CG	6.00	129.10	115.30
26	1H	493	G	C5-N7-C8	6.00	107.30	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2607	G	N3-C4-C5	6.00	131.60	128.60
1	1G	474	G	C5-C6-N1	-6.00	108.50	111.50
1	1G	881	G	N1-C6-O6	6.00	123.50	119.90
26	14	2373	G	N1-C6-O6	6.00	123.50	119.90
26	14	2578	G	C6-N1-C2	-6.00	121.50	125.10
26	14	2636	U	N3-C2-O2	-6.00	118.00	122.20
26	14	2893	G	P-O3'-C3'	6.00	126.90	119.70
26	1H	94	G	C5-C6-N1	-6.00	108.50	111.50
26	1H	350	U	C5-C4-O4	6.00	129.50	125.90
26	1H	945	A	C5-C6-N6	-6.00	118.90	123.70
26	1H	2194	G	C8-N9-C4	-6.00	104.00	106.40
26	1H	2637	U	C5-C4-O4	-6.00	122.30	125.90
26	14	845	G	C4-C5-N7	6.00	113.20	110.80
26	14	2882	A	OP1-P-OP2	6.00	128.60	119.60
1	13	1214	C	C6-N1-C2	6.00	122.70	120.30
23	2K	18	C	C4-C5-C6	-6.00	114.40	117.40
26	1H	574	C	C6-N1-C2	-6.00	117.90	120.30
26	1H	673	C	O5'-P-OP2	-6.00	100.30	105.70
26	1H	907	U	N1-C2-N3	-6.00	111.30	114.90
26	1H	1414	G	O5'-P-OP1	-6.00	100.30	105.70
26	1H	1627	G	C4-C5-C6	6.00	122.40	118.80
26	1H	1710	C	C2-N1-C1'	-6.00	112.20	118.80
26	1H	2087	G	N1-C2-N3	-6.00	120.30	123.90
26	1H	2550	G	N1-C6-O6	6.00	123.50	119.90
1	1G	1519	A	N1-C6-N6	-6.00	115.00	118.60
26	14	186	G	C5-C6-O6	6.00	132.20	128.60
26	14	464	U	O5'-P-OP1	-6.00	100.30	105.70
26	14	558	G	C2-N3-C4	-6.00	108.90	111.90
26	14	835	A	C5-C6-N1	6.00	120.70	117.70
26	14	1892	C	C6-N1-C1'	6.00	128.00	120.80
26	14	2210	G	C5-C6-O6	6.00	132.20	128.60
1	13	553	A	C5-C6-N6	6.00	128.50	123.70
1	13	703	G	C8-N9-C1'	-6.00	119.20	127.00
1	13	1139	G	N3-C4-N9	-6.00	122.40	126.00
26	1H	216	A	C6-N1-C2	-6.00	115.00	118.60
26	1H	265	A	N3-C4-C5	6.00	131.00	126.80
26	1H	570	G	C8-N9-C4	-6.00	104.00	106.40
26	1H	739	G	O5'-P-OP2	-6.00	100.30	105.70
26	1H	1263	U	C5-C6-N1	6.00	125.70	122.70
26	1H	1566	A	N3-C4-C5	6.00	131.00	126.80
26	1H	1642	G	C6-C5-N7	6.00	134.00	130.40
26	1H	2386	C	N3-C4-N4	-6.00	113.80	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	11	38	LYS	CB-CA-C	6.00	122.39	110.40
1	1G	7	G	N3-C4-C5	6.00	131.60	128.60
26	14	68	G	C6-C5-N7	-6.00	126.80	130.40
26	14	183	C	C5-C6-N1	-6.00	118.00	121.00
26	14	263	C	C2-N3-C4	-6.00	116.90	119.90
26	14	660	G	C4-C5-C6	6.00	122.40	118.80
26	14	811	U	N3-C4-O4	-6.00	115.20	119.40
26	14	839	U	C5-C6-N1	-6.00	119.70	122.70
26	14	955	C	C5-C4-N4	6.00	124.40	120.20
26	14	1903	G	N7-C8-N9	-6.00	110.10	113.10
26	14	2518	A	C6-N1-C2	6.00	122.20	118.60
26	14	2702	U	C5-C4-O4	6.00	129.50	125.90
26	1H	1425	G	C4-C5-N7	6.00	113.20	110.80
26	1H	1934	C	N3-C2-O2	6.00	126.10	121.90
1	1G	27	G	OP1-P-OP2	-6.00	110.61	119.60
1	1G	38	G	N1-C2-N3	6.00	127.50	123.90
1	1G	241	C	C5-C6-N1	-6.00	118.00	121.00
1	1G	833	U	N1-C2-O2	6.00	127.00	122.80
1	1G	1472	U	O5'-P-OP2	-6.00	100.30	105.70
26	14	620	G	O5'-P-OP2	-6.00	100.31	105.70
26	14	2673	G	N1-C2-N3	6.00	127.50	123.90
1	13	587	G	C5-C6-O6	-5.99	125.00	128.60
26	1H	55	G	OP1-P-OP2	-5.99	110.61	119.60
26	1H	1650	G	C4-C5-C6	5.99	122.40	118.80
26	1H	2332	U	C6-N1-C2	5.99	124.60	121.00
26	1H	2436	G	C6-N1-C2	-5.99	121.50	125.10
1	1G	240	C	C2-N3-C4	-5.99	116.90	119.90
26	14	199	A	N3-C4-N9	5.99	132.20	127.40
26	14	571	A	C5-N7-C8	-5.99	100.90	103.90
26	14	973	A	C8-N9-C4	5.99	108.20	105.80
26	14	1412	A	N7-C8-N9	5.99	116.80	113.80
26	14	1520	U	N3-C4-O4	-5.99	115.20	119.40
26	14	1773	A	C5-N7-C8	-5.99	100.90	103.90
26	14	1863	G	C2-N3-C4	-5.99	108.90	111.90
29	19	61	LEU	CB-CG-CD2	-5.99	100.81	111.00
1	13	252	U	C6-N1-C2	5.99	124.59	121.00
1	13	480	U	C6-N1-C2	5.99	124.59	121.00
1	13	509	A	N1-C6-N6	-5.99	115.00	118.60
26	1H	123	G	C2-N3-C4	-5.99	108.90	111.90
26	1H	272	G	C8-N9-C4	5.99	108.80	106.40
26	1H	2072	G	C5-N7-C8	5.99	107.30	104.30
26	1H	2479	G	O5'-P-OP1	5.99	117.89	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2640	G	N3-C4-N9	-5.99	122.41	126.00
26	1H	2877	G	C6-N1-C2	5.99	128.69	125.10
26	14	757	U	OP1-P-OP2	5.99	128.59	119.60
26	14	1955	U	OP1-P-OP2	5.99	128.59	119.60
26	14	2036	C	N3-C4-C5	5.99	124.30	121.90
26	14	2253	G	N1-C2-N2	-5.99	110.81	116.20
26	14	2854	G	N7-C8-N9	5.99	116.10	113.10
1	13	191(F)	U	C5-C6-N1	5.99	125.69	122.70
1	13	759	A	OP2-P-O3'	5.99	118.38	105.20
1	13	1139	G	N3-C4-C5	5.99	131.59	128.60
1	13	1352	C	C6-N1-C2	5.99	122.70	120.30
26	1H	615	G	O5'-P-OP2	-5.99	100.31	105.70
26	1H	668	G	N3-C4-N9	-5.99	122.41	126.00
26	1H	726	G	C2-N3-C4	-5.99	108.90	111.90
26	1H	968	G	N7-C8-N9	5.99	116.10	113.10
26	1H	1630	G	O5'-P-OP2	5.99	117.89	110.70
26	1H	1734	C	C2-N1-C1'	-5.99	112.21	118.80
26	1H	1798	U	O5'-P-OP2	-5.99	100.31	105.70
26	1H	2523	G	C8-N9-C4	-5.99	104.00	106.40
26	1H	2681	C	C2'-C3'-O3'	5.99	123.28	113.70
27	16	46	A	N1-C2-N3	5.99	132.29	129.30
27	16	105	G	OP1-P-OP2	5.99	128.59	119.60
26	14	527	C	O4'-C1'-N1	5.99	112.99	108.20
26	14	737	C	N1-C2-N3	5.99	123.39	119.20
26	14	824	A	C2-N3-C4	5.99	113.60	110.60
26	14	872	A	N1-C6-N6	5.99	122.19	118.60
26	14	951	C	C4-C5-C6	-5.99	114.40	117.40
26	14	1309	G	OP1-P-OP2	-5.99	110.61	119.60
26	14	1406	U	N1-C2-O2	-5.99	118.61	122.80
26	14	2068	U	OP1-P-O3'	5.99	118.38	105.20
26	14	2676	C	C5-C6-N1	-5.99	118.00	121.00
26	14	2707	G	C6-C5-N7	-5.99	126.81	130.40
1	13	765	G	C4-C5-N7	5.99	113.20	110.80
1	13	793	U	N1-C2-N3	5.99	118.49	114.90
1	13	968	A	C5-C6-N6	-5.99	118.91	123.70
26	1H	655	A	N7-C8-N9	5.99	116.79	113.80
26	1H	1167	U	O4'-C1'-N1	-5.99	103.41	108.20
26	1H	1244	G	OP2-P-O3'	5.99	118.38	105.20
26	1H	1303	G	OP2-P-O3'	5.99	118.38	105.20
26	1H	1304	C	N1-C1'-C2'	-5.99	105.41	112.00
26	1H	1919	A	OP1-P-OP2	5.99	128.58	119.60
1	1G	43	C	N3-C4-N4	5.99	122.19	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1079	G	C4-C5-C6	5.99	122.39	118.80
23	2L	40	C	O5'-P-OP2	5.99	117.89	110.70
26	14	613	U	C6-N1-C1'	-5.99	112.81	121.20
26	14	2022	U	C6-N1-C1'	-5.99	112.82	121.20
26	14	2087	G	N9-C4-C5	-5.99	103.00	105.40
26	14	2716	U	N3-C4-O4	5.99	123.59	119.40
26	14	2783	G	C8-N9-C4	5.99	108.80	106.40
1	13	1059	C	N3-C4-N4	-5.99	113.81	118.00
26	1H	1946	U	C5-C4-O4	5.99	129.49	125.90
26	1H	2845	G	C5-N7-C8	5.99	107.29	104.30
26	14	88	G	N1-C6-O6	-5.99	116.31	119.90
26	14	90	U	N3-C2-O2	-5.99	118.01	122.20
26	14	149	A	C5-C6-N1	-5.99	114.71	117.70
26	14	949	C	OP2-P-O3'	5.99	118.37	105.20
26	14	1323	U	C2-N1-C1'	-5.99	110.52	117.70
26	14	1329	U	OP1-P-OP2	5.99	128.58	119.60
26	14	2012	G	C6-C5-N7	-5.99	126.81	130.40
26	1H	656	G	C5-C6-O6	5.99	132.19	128.60
26	1H	727	A	C5-C6-N1	-5.99	114.71	117.70
26	1H	729	G	OP2-P-O3'	5.99	118.37	105.20
26	1H	933	A	C6-N1-C2	-5.99	115.01	118.60
26	1H	1765	C	O5'-P-OP2	-5.99	100.31	105.70
26	1H	2018	G	N3-C4-N9	-5.99	122.41	126.00
26	1H	2062	A	C6-N1-C2	5.99	122.19	118.60
26	1H	2242	G	C5-N7-C8	5.99	107.29	104.30
26	14	777	A	N1-C6-N6	5.99	122.19	118.60
26	14	972	G	N7-C8-N9	5.99	116.09	113.10
26	14	2192	G	C5-C6-O6	-5.99	125.01	128.60
26	14	2414	G	C5-C6-N1	-5.99	108.51	111.50
26	14	2832	U	N3-C2-O2	5.99	126.39	122.20
1	13	1328	C	C2-N3-C4	5.98	122.89	119.90
26	1H	1261	C	C4-C5-C6	5.98	120.39	117.40
26	14	765	G	C5-C6-N1	-5.98	108.51	111.50
26	14	951	C	OP1-P-OP2	-5.98	110.62	119.60
26	14	974	G	C2-N3-C4	5.98	114.89	111.90
1	13	517	G	N9-C4-C5	-5.98	103.01	105.40
1	13	907	A	C4-C5-N7	5.98	113.69	110.70
1	13	1205	U	O5'-P-OP1	-5.98	100.32	105.70
26	1H	701	G	C4-C5-N7	-5.98	108.41	110.80
26	1H	1472	A	N1-C6-N6	-5.98	115.01	118.60
26	1H	1840	G	C5-N7-C8	-5.98	101.31	104.30
1	1G	147	G	C8-N9-C4	-5.98	104.01	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2302	G	N3-C4-C5	-5.98	125.61	128.60
26	1H	34	C	C2-N3-C4	5.98	122.89	119.90
26	1H	877	U	C5-C6-N1	5.98	125.69	122.70
26	1H	1412	A	C8-N9-C4	-5.98	103.41	105.80
26	1H	1808	U	C6-N1-C2	5.98	124.59	121.00
26	1H	1996	C	C4-C5-C6	5.98	120.39	117.40
26	1H	2875	C	N3-C2-O2	-5.98	117.71	121.90
1	1G	736	C	N3-C4-N4	5.98	122.19	118.00
1	1G	1438	G	C2-N3-C4	-5.98	108.91	111.90
26	14	1408	C	N3-C4-C5	-5.98	119.51	121.90
26	14	2238	G	C2-N3-C4	5.98	114.89	111.90
26	14	2729	G	N9-C4-C5	-5.98	103.01	105.40
26	14	2840	C	C2-N3-C4	-5.98	116.91	119.90
26	14	2874	C	N3-C4-N4	5.98	122.19	118.00
26	1H	375	C	N3-C4-N4	-5.98	113.81	118.00
26	1H	576	U	O5'-P-OP2	-5.98	100.32	105.70
26	1H	1467	C	O5'-P-OP1	5.98	117.88	110.70
26	1H	1473	G	N3-C4-C5	5.98	131.59	128.60
27	16	111	U	OP1-P-OP2	5.98	128.57	119.60
26	14	472	A	C4-C5-C6	5.98	119.99	117.00
26	14	620	G	C5-C6-N1	-5.98	108.51	111.50
26	14	794	G	N1-C2-N2	-5.98	110.82	116.20
26	14	1943	U	N3-C2-O2	5.98	126.39	122.20
1	13	665	A	N1-C2-N3	-5.98	126.31	129.30
26	1H	189	G	N9-C4-C5	-5.98	103.01	105.40
26	1H	673	C	C6-N1-C2	5.98	122.69	120.30
26	1H	1367	A	C6-C5-N7	-5.98	128.12	132.30
26	1H	1594	G	C8-N9-C4	-5.98	104.01	106.40
26	1H	1678	G	N3-C2-N2	-5.98	115.72	119.90
26	1H	2209	C	N3-C4-C5	5.98	124.29	121.90
26	1H	2505	G	C8-N9-C4	-5.98	104.01	106.40
26	1H	2570	G	C5-N7-C8	-5.98	101.31	104.30
27	16	62	C	O5'-P-OP2	-5.98	100.32	105.70
26	14	932	G	OP2-P-O3'	5.98	118.35	105.20
26	14	1039	G	N1-C6-O6	5.98	123.49	119.90
26	14	1675	C	OP2-P-O3'	5.98	118.35	105.20
26	14	2188	C	N1-C2-O2	-5.98	115.31	118.90
26	14	2436	G	N3-C2-N2	-5.98	115.72	119.90
26	14	2535	G	C4-C5-N7	-5.98	108.41	110.80
1	13	870	U	C4-C5-C6	-5.98	116.11	119.70
26	1H	697	C	N3-C2-O2	5.98	126.08	121.90
26	1H	1812	A	C2-N3-C4	-5.98	107.61	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2401	U	C6-N1-C2	-5.98	117.41	121.00
54	P8	42	LEU	CA-CB-CG	5.98	129.05	115.30
1	1G	525	C	C5-C6-N1	5.98	123.99	121.00
26	14	941	A	C5-N7-C8	-5.98	100.91	103.90
26	14	1546	C	O5'-P-OP2	5.98	117.87	110.70
26	14	1617	C	C4-C5-C6	5.98	120.39	117.40
1	13	45	U	C5-C4-O4	5.97	129.48	125.90
1	13	806	C	N3-C4-N4	-5.97	113.82	118.00
1	13	873	A	C2-N3-C4	5.97	113.59	110.60
26	1H	119	A	C5-C6-N6	5.97	128.48	123.70
26	1H	470	A	N1-C2-N3	5.97	132.29	129.30
26	1H	1303	G	O5'-P-OP2	-5.97	100.32	105.70
26	1H	1733	G	N7-C8-N9	-5.97	110.11	113.10
26	1H	2556	C	C2-N3-C4	-5.97	116.91	119.90
26	1H	2638	G	C8-N9-C4	5.97	108.79	106.40
1	1G	539	A	O5'-P-OP2	-5.97	100.32	105.70
26	14	518	G	C8-N9-C1'	-5.97	119.23	127.00
26	14	1468	C	C2-N3-C4	5.97	122.89	119.90
26	14	1520	U	N3-C2-O2	-5.97	118.02	122.20
26	14	1933	G	C5-N7-C8	5.97	107.29	104.30
26	14	1968	G	N3-C2-N2	-5.97	115.72	119.90
1	13	320	C	C2-N1-C1'	-5.97	112.23	118.80
1	13	659	U	O5'-P-OP1	-5.97	100.32	105.70
26	1H	185	U	C2-N3-C4	-5.97	123.42	127.00
26	1H	371	A	C5-N7-C8	-5.97	100.91	103.90
26	1H	477	A	O5'-P-OP2	-5.97	100.33	105.70
26	1H	626	U	C6-N1-C1'	5.97	129.56	121.20
26	1H	780	G	N3-C2-N2	-5.97	115.72	119.90
26	1H	1184	G	C5-C6-N1	-5.97	108.51	111.50
26	1H	1201	C	C5-C4-N4	-5.97	116.02	120.20
26	1H	1307	A	O4'-C1'-N9	-5.97	103.42	108.20
26	1H	1830	C	C4-C5-C6	-5.97	114.41	117.40
26	1H	2240	C	N1-C2-O2	-5.97	115.32	118.90
50	K8	69	ARG	NE-CZ-NH1	5.97	123.29	120.30
1	1G	692	U	N1-C2-N3	5.97	118.48	114.90
1	1G	1426	C	C6-N1-C2	5.97	122.69	120.30
26	14	17	G	OP1-P-OP2	-5.97	110.64	119.60
26	14	34	C	C6-N1-C1'	-5.97	113.63	120.80
26	14	819	A	C6-N1-C2	-5.97	115.02	118.60
26	14	2724	C	C2-N3-C4	-5.97	116.91	119.90
26	14	2764	A	C5-C6-N6	5.97	128.48	123.70
29	19	103	ARG	NE-CZ-NH2	-5.97	117.31	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	601	C	O5'-P-OP2	-5.97	100.33	105.70
26	1H	1277	G	N1-C6-O6	-5.97	116.32	119.90
26	1H	1823	G	C5-N7-C8	-5.97	101.31	104.30
1	1G	1276	G	N1-C6-O6	5.97	123.48	119.90
26	14	768	G	N3-C4-N9	5.97	129.58	126.00
26	14	2777	G	C5-N7-C8	5.97	107.29	104.30
1	13	366	C	OP1-P-OP2	5.97	128.55	119.60
26	1H	467	G	N1-C2-N3	-5.97	120.32	123.90
26	1H	543	C	C6-N1-C2	5.97	122.69	120.30
26	1H	779	U	C5-C6-N1	-5.97	119.72	122.70
26	1H	832	G	N1-C6-O6	-5.97	116.32	119.90
26	1H	863	A	C2-N3-C4	5.97	113.58	110.60
26	1H	983	A	C5-C6-N1	5.97	120.69	117.70
26	1H	1368	G	C2-N3-C4	5.97	114.89	111.90
26	1H	1642	G	C4-C5-N7	-5.97	108.41	110.80
26	1H	2758	A	OP2-P-O3'	5.97	118.33	105.20
1	1G	260	G	N3-C2-N2	-5.97	115.72	119.90
1	1G	818	G	C4-C5-N7	-5.97	108.41	110.80
26	14	1347	G	OP2-P-O3'	-5.97	92.06	105.20
26	14	1373	A	O5'-P-OP1	5.97	117.86	110.70
26	14	1464	C	C6-N1-C2	-5.97	117.91	120.30
26	14	2400	G	OP1-P-OP2	-5.97	110.65	119.60
26	14	2438	U	C6-N1-C2	5.97	124.58	121.00
1	13	397	A	C2-N3-C4	-5.97	107.62	110.60
1	13	1506	U	C5-C4-O4	-5.97	122.32	125.90
26	1H	671	C	C2-N3-C4	-5.97	116.92	119.90
26	1H	1342	A	N7-C8-N9	5.97	116.78	113.80
26	1H	2339	G	C2-N3-C4	-5.97	108.92	111.90
26	1H	2516	G	N9-C4-C5	5.97	107.79	105.40
1	1G	508	C	C6-N1-C1'	-5.97	113.64	120.80
1	1G	937	A	OP1-P-O3'	5.97	118.33	105.20
1	1G	1314	C	C5-C6-N1	5.97	123.98	121.00
26	14	59	U	N3-C2-O2	-5.97	118.02	122.20
26	14	1270	C	C5-C4-N4	5.97	124.38	120.20
26	14	1426	G	N1-C6-O6	5.97	123.48	119.90
26	14	1607	C	C6-N1-C2	5.97	122.69	120.30
26	14	2494	G	C5-C6-O6	5.97	132.18	128.60
1	13	516	U	C2-N1-C1'	5.97	124.86	117.70
1	13	1048	G	N3-C2-N2	-5.97	115.72	119.90
2	1E	149	LEU	CA-CB-CG	-5.97	101.58	115.30
26	1H	674	G	C5-C6-O6	-5.97	125.02	128.60
26	1H	847	U	O5'-P-OP1	-5.97	100.33	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1106	G	N7-C8-N9	5.97	116.08	113.10
26	1H	2023	G	N7-C8-N9	5.97	116.08	113.10
26	1H	2543	G	N7-C8-N9	-5.97	110.12	113.10
26	14	308	G	C4-C5-N7	5.97	113.19	110.80
26	14	560	C	OP1-P-OP2	-5.97	110.65	119.60
26	14	580	C	C5-C6-N1	5.97	123.98	121.00
26	14	2049	G	C6-N1-C2	-5.97	121.52	125.10
26	14	2447	G	P-O3'-C3'	5.97	126.86	119.70
49	F5	91	LYS	CD-CE-NZ	5.97	125.42	111.70
1	13	423	G	C4-C5-N7	5.96	113.19	110.80
1	13	822	C	O5'-P-OP2	-5.96	100.33	105.70
1	13	1481	U	N1-C2-O2	-5.96	118.62	122.80
1	13	1483	A	C6-N1-C2	-5.96	115.02	118.60
1	13	1508	G	N1-C2-N2	-5.96	110.83	116.20
26	1H	822	U	N1-C2-N3	5.96	118.48	114.90
26	1H	912	C	C4-C5-C6	-5.96	114.42	117.40
26	1H	1987	G	N1-C2-N3	5.96	127.48	123.90
26	1H	2506	U	N1-C2-N3	-5.96	111.32	114.90
1	1G	175	C	N3-C2-O2	5.96	126.08	121.90
1	1G	1350	A	C4-C5-C6	5.96	119.98	117.00
1	1G	1394	A	N7-C8-N9	5.96	116.78	113.80
1	1G	1497	G	C6-C5-N7	-5.96	126.82	130.40
26	14	274	G	N1-C6-O6	5.96	123.48	119.90
26	14	683	C	C5-C6-N1	-5.96	118.02	121.00
26	14	783	A	N9-C4-C5	-5.96	103.41	105.80
26	14	1991	U	OP1-P-O3'	5.96	118.32	105.20
42	85	36	ARG	NE-CZ-NH1	-5.96	117.32	120.30
26	1H	472	A	N7-C8-N9	-5.96	110.82	113.80
26	1H	500	G	C4-C5-N7	-5.96	108.42	110.80
26	1H	965	C	O5'-P-OP1	-5.96	100.33	105.70
26	1H	1210	A	N3-C4-C5	5.96	130.97	126.80
26	1H	1340	U	C6-N1-C2	5.96	124.58	121.00
26	1H	1569	A	N1-C6-N6	5.96	122.18	118.60
1	1G	1206	G	C4-C5-N7	5.96	113.19	110.80
26	14	517	C	C4-C5-C6	-5.96	114.42	117.40
26	14	1210	A	C2-N3-C4	-5.96	107.62	110.60
26	14	1241	A	N1-C2-N3	5.96	132.28	129.30
26	14	2826	A	C6-N1-C2	-5.96	115.02	118.60
1	13	5	U	C5'-C4'-O4'	5.96	116.25	109.10
1	13	901	A	OP2-P-O3'	5.96	118.32	105.20
26	1H	301	G	C8-N9-C4	5.96	108.78	106.40
26	1H	338	G	O5'-P-OP1	-5.96	100.33	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	446	G	C5-C6-O6	-5.96	125.02	128.60
26	1H	1728	G	C5-N7-C8	-5.96	101.32	104.30
26	1H	1858	G	C5-N7-C8	-5.96	101.32	104.30
26	1H	2215	G	C2-N3-C4	-5.96	108.92	111.90
26	1H	2277	G	N1-C2-N2	-5.96	110.83	116.20
42	C8	74	LEU	CB-CG-CD2	-5.96	100.87	111.00
1	1G	129	U	O5'-P-OP2	-5.96	100.33	105.70
1	1G	884	U	N3-C4-C5	-5.96	111.02	114.60
26	14	836	G	N3-C2-N2	5.96	124.07	119.90
26	14	1857	G	C4-C5-C6	5.96	122.38	118.80
26	14	2707	G	O5'-P-OP1	5.96	117.85	110.70
27	1J	30	C	C4-C5-C6	5.96	120.38	117.40
1	13	270	A	N9-C4-C5	5.96	108.18	105.80
23	2K	35	C	OP1-P-O3'	5.96	118.31	105.20
26	1H	1339	G	O5'-P-OP1	-5.96	100.34	105.70
26	1H	2722	G	C4-C5-C6	-5.96	115.22	118.80
1	1G	352	C	N3-C4-C5	-5.96	119.52	121.90
1	1G	806	C	C5-C6-N1	5.96	123.98	121.00
26	14	1373	A	C6-N1-C2	-5.96	115.02	118.60
26	14	1529	A	C8-N9-C4	-5.96	103.42	105.80
26	14	2040	C	C5-C4-N4	-5.96	116.03	120.20
26	14	2877	G	N1-C6-O6	5.96	123.48	119.90
1	13	1520	G	N3-C4-N9	5.96	129.57	126.00
26	1H	26	G	OP1-P-O3'	5.96	118.31	105.20
26	1H	338	G	C5-C6-N1	5.96	114.48	111.50
26	1H	1552	G	O5'-P-OP2	-5.96	100.34	105.70
26	1H	1648	C	N3-C4-N4	-5.96	113.83	118.00
26	1H	1668	A	C2-N3-C4	5.96	113.58	110.60
1	1G	342	C	C5-C6-N1	5.96	123.98	121.00
1	1G	851	G	C4-C5-N7	5.96	113.18	110.80
23	2L	42	C	N1-C2-O2	5.96	122.47	118.90
26	14	120	U	O5'-P-OP2	5.96	117.85	110.70
26	14	187	G	N3-C4-C5	5.96	131.58	128.60
26	14	397	G	N9-C4-C5	-5.96	103.02	105.40
26	14	1897	G	N3-C2-N2	-5.96	115.73	119.90
1	13	781	A	N9-C4-C5	-5.96	103.42	105.80
1	13	1523	G	N1-C6-O6	-5.96	116.33	119.90
23	2K	74	A	N1-C2-N3	-5.96	126.32	129.30
26	1H	361	G	C8-N9-C4	5.96	108.78	106.40
26	1H	444	C	C5-C6-N1	5.96	123.98	121.00
26	1H	1107	G	C4-N9-C1'	5.96	134.25	126.50
26	1H	2569	G	C8-N9-C1'	-5.96	119.25	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
30	21	144	ARG	NE-CZ-NH2	5.96	123.28	120.30
1	1G	254	G	O5'-P-OP2	5.96	117.85	110.70
1	1G	578	C	C5-C6-N1	-5.96	118.02	121.00
1	1G	741	G	C6-C5-N7	-5.96	126.83	130.40
1	1G	838	G	N3-C2-N2	-5.96	115.73	119.90
26	14	15	G	N7-C8-N9	5.96	116.08	113.10
26	14	113	G	C5-C6-O6	-5.96	125.03	128.60
26	14	213	A	C2-N3-C4	-5.96	107.62	110.60
26	14	733	G	N3-C4-N9	5.96	129.57	126.00
26	14	2318	G	N9-C4-C5	-5.96	103.02	105.40
1	13	1312	G	O5'-P-OP1	5.96	117.85	110.70
1	13	1392	G	OP1-P-O3'	5.96	118.30	105.20
26	1H	595	C	OP1-P-O3'	-5.96	92.10	105.20
26	1H	2542	A	C2-N3-C4	-5.96	107.62	110.60
1	1G	186	C	C6-N1-C2	-5.96	117.92	120.30
1	1G	401	C	N1-C2-O2	-5.96	115.33	118.90
1	1G	823	G	O5'-P-OP1	-5.96	100.34	105.70
26	14	1743	G	C4-C5-C6	5.96	122.37	118.80
26	14	1962	C	C5-C4-N4	-5.96	116.03	120.20
27	1J	52	A	N1-C6-N6	-5.96	115.03	118.60
26	1H	266	G	C5-N7-C8	5.95	107.28	104.30
26	1H	361	G	C5-C6-O6	5.95	132.17	128.60
26	1H	837	C	N1-C2-O2	5.95	122.47	118.90
26	1H	874	G	N9-C4-C5	-5.95	103.02	105.40
26	1H	913	U	C5-C6-N1	-5.95	119.72	122.70
26	1H	2732	G	N3-C4-C5	-5.95	125.62	128.60
26	14	135	G	N1-C2-N3	5.95	127.47	123.90
26	14	140	A	O5'-P-OP2	5.95	117.84	110.70
26	14	318	C	C6-N1-C2	5.95	122.68	120.30
26	14	530	G	C8-N9-C1'	-5.95	119.26	127.00
26	14	587	C	C5-C6-N1	-5.95	118.02	121.00
26	14	775	G	O4'-C1'-N9	5.95	112.96	108.20
26	14	1268	A	C5-N7-C8	5.95	106.88	103.90
26	14	1374	G	C5-C6-O6	-5.95	125.03	128.60
26	14	1849	G	N9-C4-C5	5.95	107.78	105.40
39	55	75	LEU	CB-CG-CD2	5.95	121.12	111.00
1	13	761	G	C8-N9-C1'	-5.95	119.26	127.00
26	1H	739	G	C4-C5-N7	-5.95	108.42	110.80
26	1H	1619	G	C4-C5-N7	-5.95	108.42	110.80
26	1H	1973	G	C8-N9-C4	-5.95	104.02	106.40
26	14	1494	A	N1-C6-N6	-5.95	115.03	118.60
1	13	505	G	C4-C5-N7	5.95	113.18	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1333	A	N1-C6-N6	-5.95	115.03	118.60
23	2K	11	A	N9-C4-C5	5.95	108.18	105.80
26	1H	141	A	N1-C6-N6	5.95	122.17	118.60
26	1H	805	G	N7-C8-N9	-5.95	110.12	113.10
26	1H	1186	G	C6-C5-N7	5.95	133.97	130.40
26	1H	1200	C	C4-C5-C6	5.95	120.38	117.40
26	1H	1303	G	N7-C8-N9	-5.95	110.12	113.10
26	1H	1669	A	C5-C6-N6	-5.95	118.94	123.70
26	1H	1812	A	C5-C6-N6	5.95	128.46	123.70
26	1H	2592	G	N1-C2-N2	-5.95	110.84	116.20
26	1H	2721	A	C8-N9-C4	5.95	108.18	105.80
1	1G	184	G	C8-N9-C4	-5.95	104.02	106.40
26	14	805	G	OP1-P-O3'	5.95	118.29	105.20
26	14	2732	G	C5-N7-C8	-5.95	101.33	104.30
26	14	2789	C	C5-C6-N1	-5.95	118.02	121.00
1	13	1432	G	C5-C6-N1	-5.95	108.53	111.50
26	1H	203	C	C5-C6-N1	-5.95	118.03	121.00
26	1H	343	C	C2-N3-C4	5.95	122.87	119.90
26	1H	673	C	N3-C2-O2	5.95	126.06	121.90
26	1H	770	G	N9-C4-C5	-5.95	103.02	105.40
26	1H	2067	G	N1-C2-N3	5.95	127.47	123.90
26	1H	2431	U	C5-C4-O4	-5.95	122.33	125.90
26	1H	2778	A	C8-N9-C4	5.95	108.18	105.80
1	1G	582	U	O5'-P-OP2	-5.95	100.35	105.70
1	1G	1230	C	C5-C6-N1	5.95	123.97	121.00
1	1G	1487	G	N1-C6-O6	5.95	123.47	119.90
23	2L	71	G	OP2-P-O3'	5.95	118.29	105.20
26	14	504	U	N3-C4-C5	5.95	118.17	114.60
26	14	1333	C	C2-N1-C1'	5.95	125.34	118.80
26	14	1839	G	C8-N9-C1'	-5.95	119.27	127.00
1	13	864	A	C8-N9-C4	-5.95	103.42	105.80
1	13	1361	G	C5-C6-O6	-5.95	125.03	128.60
1	13	1500	A	N9-C4-C5	5.95	108.18	105.80
26	1H	2660	A	O5'-P-OP1	5.95	117.84	110.70
1	1G	180	U	N3-C4-C5	-5.95	111.03	114.60
1	1G	1386	G	C5-C6-O6	5.95	132.17	128.60
1	1G	1404	C	C5-C6-N1	5.95	123.97	121.00
1	1G	1497	G	N9-C4-C5	-5.95	103.02	105.40
26	14	389	G	C6-N1-C2	-5.95	121.53	125.10
26	14	603	A	N7-C8-N9	5.95	116.77	113.80
26	14	1465	G	N3-C4-C5	5.95	131.57	128.60
26	14	2824	C	C5-C6-N1	-5.95	118.03	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	628	G	C8-N9-C4	5.95	108.78	106.40
26	1H	640	C	OP1-P-O3'	5.95	118.28	105.20
26	1H	854	G	C2-N3-C4	-5.95	108.93	111.90
26	1H	1034	G	N3-C2-N2	-5.95	115.74	119.90
26	1H	2003	G	O5'-P-OP1	-5.95	100.35	105.70
26	1H	2376	A	C6-N1-C2	-5.95	115.03	118.60
1	1G	739	C	N3-C4-C5	-5.95	119.52	121.90
26	14	2689	U	N3-C4-O4	-5.95	115.24	119.40
26	14	2708	G	N7-C8-N9	-5.95	110.13	113.10
26	14	2778	A	C5-C6-N6	5.95	128.46	123.70
26	1H	88	G	N7-C8-N9	5.94	116.07	113.10
26	1H	1381	G	C8-N9-C4	-5.94	104.02	106.40
27	16	7	G	C6-C5-N7	-5.94	126.83	130.40
26	14	835	A	C5-N7-C8	5.94	106.87	103.90
26	14	1333	C	OP1-P-OP2	-5.94	110.68	119.60
26	14	1334	G	C5-C6-O6	-5.94	125.03	128.60
26	14	1395	A	C2-N3-C4	-5.94	107.63	110.60
26	14	2612	C	N3-C4-N4	-5.94	113.84	118.00
1	13	1089	G	N3-C2-N2	-5.94	115.74	119.90
26	1H	1231	G	C2-N3-C4	-5.94	108.93	111.90
26	1H	1318	C	N1-C2-O2	-5.94	115.33	118.90
26	1H	1566	A	C6-N1-C2	5.94	122.17	118.60
26	1H	2525	G	N3-C4-C5	5.94	131.57	128.60
48	I8	11	ARG	NE-CZ-NH1	5.94	123.27	120.30
26	14	2398	U	C2-N3-C4	-5.94	123.44	127.00
1	13	11	G	C5-C6-O6	5.94	132.16	128.60
1	13	579	G	C5-C6-O6	-5.94	125.04	128.60
26	1H	1408	C	N1-C2-N3	5.94	123.36	119.20
26	1H	2031	A	C5-C6-N1	5.94	120.67	117.70
26	1H	2607	G	C6-C5-N7	-5.94	126.83	130.40
1	1G	224	C	C6-N1-C2	5.94	122.68	120.30
1	1G	687	A	N1-C6-N6	-5.94	115.03	118.60
26	14	497	A	N7-C8-N9	5.94	116.77	113.80
26	14	790	C	O5'-P-OP2	-5.94	100.35	105.70
26	14	1469	A	C5-N7-C8	-5.94	100.93	103.90
26	14	1845	G	N3-C2-N2	-5.94	115.74	119.90
26	14	2712	U	N1-C2-O2	-5.94	118.64	122.80
26	1H	209	C	OP2-P-O3'	5.94	118.27	105.20
26	1H	587	C	OP1-P-OP2	-5.94	110.69	119.60
26	1H	813	U	C4-C5-C6	5.94	123.26	119.70
26	1H	2539	C	C2-N1-C1'	-5.94	112.27	118.80
26	1H	2651	C	C5-C6-N1	-5.94	118.03	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	889	A	C8-N9-C4	-5.94	103.42	105.80
26	14	581	C	N3-C4-N4	-5.94	113.84	118.00
26	14	1689	A	C6-C5-N7	-5.94	128.14	132.30
26	14	1786	A	N9-C4-C5	5.94	108.17	105.80
26	14	2598	A	C6-C5-N7	-5.94	128.14	132.30
1	13	69	G	N1-C6-O6	5.94	123.46	119.90
1	13	247	G	C2-N3-C4	5.94	114.87	111.90
1	13	351	G	N1-C2-N2	5.94	121.54	116.20
1	13	533	A	C2-N3-C4	-5.94	107.63	110.60
1	13	636	U	C6-N1-C2	-5.94	117.44	121.00
1	13	1514	C	C2-N3-C4	-5.94	116.93	119.90
26	1H	956	G	C5-C6-N1	-5.94	108.53	111.50
26	1H	1204	A	C4-N9-C1'	5.94	136.99	126.30
26	1H	1470	G	OP2-P-O3'	5.94	118.26	105.20
26	1H	2071	A	C4-C5-C6	5.94	119.97	117.00
26	1H	2267	A	N7-C8-N9	-5.94	110.83	113.80
26	1H	2279	G	OP1-P-O3'	5.94	118.26	105.20
26	14	205	G	OP1-P-OP2	5.94	128.51	119.60
26	14	688	U	O5'-P-OP1	5.94	117.83	110.70
26	14	1125	G	O5'-P-OP1	-5.94	100.36	105.70
26	14	1933	G	N3-C2-N2	5.94	124.06	119.90
26	14	2267	A	C2-N3-C4	5.94	113.57	110.60
27	1J	82	G	N3-C4-C5	5.94	131.57	128.60
1	13	346	G	C5-C6-O6	-5.94	125.04	128.60
1	13	900	A	C5-C6-N1	5.94	120.67	117.70
26	1H	103	A	OP1-P-OP2	-5.94	110.70	119.60
26	1H	113	G	C2-N3-C4	-5.94	108.93	111.90
26	1H	728	G	OP2-P-O3'	5.94	118.26	105.20
26	1H	2377	A	C5-C6-N6	-5.94	118.95	123.70
26	1H	2404	C	C5-C4-N4	5.94	124.36	120.20
26	1H	2459	A	N1-C2-N3	5.94	132.27	129.30
27	16	75	G	N3-C4-C5	5.94	131.57	128.60
1	1G	573	A	C8-N9-C4	-5.94	103.42	105.80
26	14	1257	C	C6-N1-C2	-5.94	117.92	120.30
26	14	1289	C	C4-C5-C6	5.94	120.37	117.40
1	13	1415	G	O4'-C1'-N9	-5.93	103.45	108.20
23	2K	17	C	O5'-P-OP2	-5.93	100.36	105.70
23	2K	43	G	OP1-P-OP2	5.93	128.50	119.60
26	1H	319	C	N1-C2-O2	5.93	122.46	118.90
26	1H	571	A	O5'-P-OP1	-5.93	100.36	105.70
26	1H	1889	A	O5'-P-OP1	-5.93	100.36	105.70
26	1H	2064	C	OP2-P-O3'	5.93	118.26	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2661	G	N1-C6-O6	-5.93	116.34	119.90
26	1H	2872	G	C2-N3-C4	-5.93	108.93	111.90
1	1G	147	G	N3-C2-N2	-5.93	115.75	119.90
1	1G	1060	C	C4-C5-C6	-5.93	114.43	117.40
26	14	807	U	N3-C4-O4	5.93	123.55	119.40
26	14	1725	G	N3-C4-C5	-5.93	125.63	128.60
1	13	1471	G	C5-C6-O6	-5.93	125.04	128.60
23	2K	24	C	C6-N1-C2	5.93	122.67	120.30
26	1H	74	A	N3-C4-C5	5.93	130.95	126.80
26	1H	426	C	N3-C4-C5	5.93	124.27	121.90
26	1H	2006	C	C2-N1-C1'	-5.93	112.27	118.80
26	1H	2710	C	N1-C2-O2	-5.93	115.34	118.90
26	1H	2886	G	C2-N3-C4	5.93	114.87	111.90
27	16	40	U	C5-C4-O4	-5.93	122.34	125.90
1	1G	1407	C	C6-N1-C2	-5.93	117.93	120.30
26	14	1585	C	N3-C2-O2	-5.93	117.75	121.90
26	14	2006	C	N3-C4-N4	5.93	122.15	118.00
26	1H	80	G	C6-C5-N7	5.93	133.96	130.40
26	1H	496	G	N7-C8-N9	-5.93	110.13	113.10
26	1H	1878	G	C8-N9-C4	-5.93	104.03	106.40
26	14	658	C	C2-N3-C4	-5.93	116.93	119.90
26	14	1381	G	OP1-P-O3'	-5.93	92.15	105.20
26	14	1844	C	C6-N1-C2	-5.93	117.93	120.30
26	14	2056	G	C4-C5-N7	5.93	113.17	110.80
26	14	2444	G	C5-C6-N1	5.93	114.47	111.50
1	13	335	C	O5'-P-OP1	5.93	117.81	110.70
26	1H	35	G	N3-C2-N2	5.93	124.05	119.90
26	1H	262	A	C5-C6-N6	-5.93	118.96	123.70
26	1H	1337	G	N7-C8-N9	5.93	116.06	113.10
1	1G	60	A	N7-C8-N9	-5.93	110.84	113.80
1	1G	253	U	N1-C2-O2	-5.93	118.65	122.80
1	1G	911	U	OP1-P-OP2	5.93	128.49	119.60
26	14	1261	C	N3-C4-C5	5.93	124.27	121.90
26	14	1323	U	O5'-P-OP1	5.93	117.82	110.70
26	14	2335	A	OP1-P-OP2	5.93	128.49	119.60
26	14	2625	G	C6-C5-N7	-5.93	126.84	130.40
26	1H	560	C	N3-C2-O2	5.93	126.05	121.90
26	1H	746	A	N1-C2-N3	5.93	132.26	129.30
26	1H	803	U	C2-N1-C1'	-5.93	110.59	117.70
26	1H	854	G	C4-C5-N7	5.93	113.17	110.80
26	14	961	C	O4'-C1'-N1	5.93	112.94	108.20
26	14	1554	A	N9-C4-C5	5.93	108.17	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2291	U	C5-C6-N1	-5.93	119.74	122.70
26	14	2460	U	N3-C4-O4	5.93	123.55	119.40
1	13	555	C	N1-C2-O2	5.93	122.45	118.90
1	13	623	C	OP1-P-OP2	-5.93	110.71	119.60
26	1H	593	G	C6-N1-C2	-5.93	121.54	125.10
26	1H	725	G	C4-C5-N7	5.93	113.17	110.80
26	1H	1444(A)	A	O5'-P-OP1	-5.93	100.37	105.70
26	1H	1955	U	C5-C4-O4	5.93	129.46	125.90
26	1H	1994	C	C5-C6-N1	-5.93	118.04	121.00
26	1H	2643	G	N3-C4-C5	5.93	131.56	128.60
1	1G	533	A	OP1-P-OP2	5.93	128.49	119.60
1	1G	782	A	O5'-P-OP1	-5.93	100.37	105.70
1	1G	831	U	OP1-P-OP2	-5.93	110.71	119.60
1	1G	1391	U	C5-C4-O4	5.93	129.46	125.90
26	14	559	G	N3-C2-N2	-5.93	115.75	119.90
26	14	1925	C	N1-C2-N3	5.93	123.35	119.20
26	14	2715	C	N3-C2-O2	5.93	126.05	121.90
31	39	123	LEU	CB-CG-CD1	-5.93	100.92	111.00
1	13	1093	A	C8-N9-C4	-5.92	103.43	105.80
23	2K	13	C	C6-N1-C2	-5.92	117.93	120.30
26	1H	38	A	OP1-P-O3'	5.92	118.23	105.20
26	1H	334	C	C5-C6-N1	-5.92	118.04	121.00
26	1H	402	A	C6-N1-C2	-5.92	115.05	118.60
26	1H	614	U	N3-C2-O2	-5.92	118.05	122.20
26	1H	790	C	O4'-C1'-N1	5.92	112.94	108.20
26	1H	911	A	C5-C6-N6	5.92	128.44	123.70
26	1H	1548	C	C2-N3-C4	5.92	122.86	119.90
26	1H	1822	G	C2-N3-C4	-5.92	108.94	111.90
26	1H	2455	G	N1-C2-N3	5.92	127.45	123.90
26	1H	2693	A	N3-C4-N9	5.92	132.14	127.40
1	1G	183	G	C5-C6-O6	-5.92	125.05	128.60
26	14	545	G	C4-C5-N7	-5.92	108.43	110.80
26	14	1565	C	O5'-P-OP1	-5.92	100.37	105.70
26	14	1617	C	OP1-P-O3'	5.92	118.23	105.20
26	14	2401	U	N3-C4-C5	5.92	118.16	114.60
26	1H	726	G	O4'-C1'-N9	5.92	112.94	108.20
26	14	719	C	OP1-P-OP2	-5.92	110.72	119.60
26	14	1763	G	C4-N9-C1'	-5.92	118.80	126.50
26	14	2636	U	O5'-P-OP1	5.92	117.81	110.70
26	14	2777	G	C4-C5-N7	-5.92	108.43	110.80
23	2K	48	U	C2-N1-C1'	5.92	124.81	117.70
26	1H	828	U	C2-N3-C4	5.92	130.55	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1408	C	C5-C4-N4	-5.92	116.06	120.20
26	1H	1774	C	OP1-P-OP2	5.92	128.48	119.60
26	1H	1797	C	C6-N1-C2	5.92	122.67	120.30
26	1H	1836	C	OP1-P-O3'	5.92	118.23	105.20
26	1H	1946	U	N1-C2-N3	5.92	118.45	114.90
26	1H	1955	U	OP1-P-O3'	5.92	118.23	105.20
26	1H	2330	G	OP1-P-O3'	-5.92	92.17	105.20
26	1H	2358	G	N3-C4-C5	-5.92	125.64	128.60
1	1G	593	G	N1-C6-O6	5.92	123.45	119.90
1	1G	1514	C	N3-C4-N4	5.92	122.14	118.00
26	14	212	G	N1-C2-N3	5.92	127.45	123.90
26	14	791	C	P-O3'-C3'	5.92	126.81	119.70
26	14	979	G	N3-C4-N9	-5.92	122.45	126.00
26	14	1374	G	C4-C5-N7	5.92	113.17	110.80
26	14	2715	C	C2-N1-C1'	-5.92	112.28	118.80
1	13	790	A	O5'-P-OP1	5.92	117.80	110.70
26	1H	117	G	O5'-P-OP2	5.92	117.80	110.70
26	1H	1283	G	N1-C2-N2	-5.92	110.87	116.20
26	1H	1360	A	O5'-P-OP1	-5.92	100.37	105.70
26	1H	2332	U	C5-C4-O4	5.92	129.45	125.90
26	14	1221	C	O5'-P-OP2	-5.92	100.37	105.70
26	14	1998	G	C8-N9-C4	-5.92	104.03	106.40
1	13	585	G	N3-C2-N2	5.92	124.04	119.90
26	1H	223	A	N1-C6-N6	5.92	122.15	118.60
26	1H	623	G	C8-N9-C4	5.92	108.77	106.40
26	1H	1814	G	C4-C5-C6	5.92	122.35	118.80
26	1H	1900	A	C5-C6-N1	5.92	120.66	117.70
26	14	196	A	C8-N9-C4	5.92	108.17	105.80
26	14	336	C	O5'-P-OP2	-5.92	100.37	105.70
26	14	962	G	O5'-P-OP1	5.92	117.80	110.70
26	14	991	C	OP2-P-O3'	5.92	118.22	105.20
26	14	1914	C	O4'-C1'-N1	5.92	112.94	108.20
26	14	2391	G	C8-N9-C1'	5.92	134.69	127.00
1	13	309	G	N3-C2-N2	-5.92	115.76	119.90
1	13	698	G	C4-C5-N7	5.92	113.17	110.80
26	1H	73	A	N1-C6-N6	-5.92	115.05	118.60
26	1H	330	A	C5-C6-N1	-5.92	114.74	117.70
26	1H	623	G	C8-N9-C1'	-5.92	119.31	127.00
26	1H	634	C	O4'-C1'-N1	5.92	112.93	108.20
26	1H	659	C	C4-C5-C6	5.92	120.36	117.40
26	1H	1264	G	N9-C4-C5	5.92	107.77	105.40
26	1H	1442	G	N7-C8-N9	5.92	116.06	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1816	G	C6-C5-N7	5.92	133.95	130.40
26	1H	1840	G	N1-C2-N3	5.92	127.45	123.90
26	1H	2489	G	C8-N9-C1'	-5.92	119.31	127.00
26	1H	2764	A	N3-C4-N9	-5.92	122.67	127.40
30	21	119	ARG	NE-CZ-NH2	5.92	123.26	120.30
1	1G	40	C	C4-C5-C6	5.92	120.36	117.40
1	1G	763	G	N3-C2-N2	-5.92	115.76	119.90
1	1G	813	U	N3-C2-O2	5.92	126.34	122.20
26	14	191	A	C5-C6-N6	-5.92	118.97	123.70
26	14	196	A	OP1-P-OP2	-5.92	110.72	119.60
26	14	216	A	O5'-P-OP1	-5.92	100.38	105.70
26	14	494	G	C4-C5-C6	5.92	122.35	118.80
26	14	1645	G	N3-C2-N2	5.92	124.04	119.90
26	14	1816	G	N1-C2-N3	-5.92	120.35	123.90
1	13	481	G	C8-N9-C1'	-5.92	119.31	127.00
1	13	907	A	C5-C6-N1	5.92	120.66	117.70
1	13	919	A	C5-C6-N1	5.92	120.66	117.70
26	1H	263	C	C4-C5-C6	5.92	120.36	117.40
26	1H	2011	U	OP1-P-OP2	-5.92	110.73	119.60
26	1H	2595	G	N3-C2-N2	5.92	124.04	119.90
26	14	180	G	C5-C6-N1	-5.92	108.54	111.50
26	14	352	G	C4-N9-C1'	5.92	134.19	126.50
26	14	2501	C	C6-N1-C2	5.92	122.67	120.30
26	14	2713	A	C6-C5-N7	-5.92	128.16	132.30
1	13	239	U	N3-C4-C5	-5.91	111.05	114.60
1	13	728	A	C2-N3-C4	5.91	113.56	110.60
1	13	1403	C	O5'-P-OP2	-5.91	100.38	105.70
22	1K	62	C	N3-C2-O2	-5.91	117.76	121.90
26	1H	730	C	O5'-P-OP2	-5.91	100.38	105.70
26	1H	1574	C	OP1-P-OP2	5.91	128.47	119.60
26	1H	1575	C	C6-N1-C2	-5.91	117.93	120.30
26	1H	1685	C	O5'-P-OP2	5.91	117.80	110.70
1	1G	121	C	C6-N1-C1'	-5.91	113.70	120.80
1	1G	491	G	N9-C1'-C2'	-5.91	105.50	112.00
26	14	30	G	C4-C5-C6	5.91	122.35	118.80
26	14	572	A	C5-C6-N1	5.91	120.66	117.70
26	14	573	G	C4-C5-C6	5.91	122.35	118.80
26	14	1496	A	O4'-C1'-N9	5.91	112.93	108.20
26	14	1555	G	N1-C2-N3	5.91	127.45	123.90
26	14	2072	G	OP1-P-O3'	5.91	118.21	105.20
1	13	1471	G	C2-N3-C4	5.91	114.86	111.90
26	1H	1157	G	C8-N9-C4	-5.91	104.03	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1910	G	N1-C2-N3	5.91	127.45	123.90
26	1H	2519	U	OP1-P-OP2	5.91	128.47	119.60
26	1H	2863	C	N3-C4-N4	-5.91	113.86	118.00
1	1G	508	C	N1-C2-N3	-5.91	115.06	119.20
1	1G	1215	G	C8-N9-C4	-5.91	104.03	106.40
26	14	1959	G	C5-C6-N1	5.91	114.46	111.50
1	13	394	G	N3-C4-N9	-5.91	122.45	126.00
1	13	1358	U	OP1-P-O3'	5.91	118.20	105.20
1	13	1370	G	OP1-P-O3'	5.91	118.20	105.20
1	13	1510	U	C5-C4-O4	-5.91	122.35	125.90
26	1H	509	C	OP2-P-O3'	5.91	118.20	105.20
26	1H	1264	G	C4-C5-N7	-5.91	108.44	110.80
26	1H	1595	G	N1-C2-N2	5.91	121.52	116.20
26	1H	1968	G	OP1-P-O3'	5.91	118.20	105.20
26	1H	2273	A	C4-C5-C6	-5.91	114.05	117.00
26	1H	2768	C	C2-N3-C4	-5.91	116.94	119.90
1	1G	1204	A	C5-C6-N6	-5.91	118.97	123.70
26	14	97	C	OP1-P-OP2	5.91	128.47	119.60
26	14	861	A	N1-C6-N6	-5.91	115.05	118.60
26	14	939	G	N9-C4-C5	5.91	107.76	105.40
26	14	1232	G	C5-N7-C8	-5.91	101.34	104.30
26	14	1417	C	N3-C4-C5	5.91	124.26	121.90
26	14	1444	G	O5'-P-OP2	-5.91	100.38	105.70
26	14	2286	A	C6-C5-N7	-5.91	128.16	132.30
26	14	2583	G	C5-C6-O6	-5.91	125.05	128.60
27	1J	109	G	C5-N7-C8	-5.91	101.34	104.30
1	13	689	C	OP1-P-O3'	5.91	118.20	105.20
1	13	873	A	N3-C4-C5	-5.91	122.66	126.80
1	13	1429	C	C4-C5-C6	5.91	120.35	117.40
26	1H	226	G	O4'-C1'-N9	5.91	112.93	108.20
26	1H	566	U	N3-C2-O2	5.91	126.33	122.20
26	1H	1161	C	C5-C4-N4	-5.91	116.06	120.20
26	1H	1221	C	C5-C4-N4	5.91	124.33	120.20
26	1H	1335	U	N3-C2-O2	-5.91	118.06	122.20
26	1H	2456	C	N3-C4-C5	-5.91	119.54	121.90
26	1H	2549	G	C4-C5-N7	-5.91	108.44	110.80
1	1G	428	G	N3-C4-C5	5.91	131.56	128.60
1	1G	503	C	N3-C4-C5	-5.91	119.54	121.90
1	1G	721	G	C4-C5-C6	5.91	122.34	118.80
26	14	940	G	C8-N9-C4	-5.91	104.04	106.40
26	14	1324	G	O5'-P-OP1	-5.91	100.38	105.70
26	14	1352	U	OP1-P-OP2	5.91	128.46	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1935	G	N7-C8-N9	5.91	116.05	113.10
26	14	2432	A	C5-N7-C8	-5.91	100.95	103.90
26	14	2614	A	O5'-P-OP2	-5.91	100.38	105.70
26	14	2647	U	N1-C2-O2	5.91	126.94	122.80
31	39	95	ARG	NE-CZ-NH2	5.91	123.25	120.30
1	13	1526	G	N1-C6-O6	-5.91	116.36	119.90
26	1H	505	A	N7-C8-N9	5.91	116.75	113.80
26	1H	773	U	N3-C2-O2	-5.91	118.06	122.20
26	1H	2079	U	O5'-P-OP1	-5.91	100.38	105.70
26	1H	2225	A	C5-C6-N6	5.91	128.43	123.70
1	1G	26	A	C6-N1-C2	-5.91	115.06	118.60
26	14	843	G	C6-N1-C2	5.91	128.64	125.10
1	13	1227	A	OP1-P-O3'	5.91	118.19	105.20
22	1K	62	C	N1-C2-O2	5.91	122.44	118.90
24	3K	28	U	N3-C2-O2	-5.91	118.07	122.20
26	1H	603	A	C5-N7-C8	5.91	106.85	103.90
26	1H	746	A	O4'-C1'-N9	5.91	112.92	108.20
26	1H	750	A	N1-C6-N6	5.91	122.14	118.60
26	1H	1510	A	OP1-P-OP2	-5.91	110.74	119.60
26	1H	2231	C	C5-C4-N4	5.91	124.33	120.20
26	1H	2643	G	N9-C4-C5	-5.91	103.04	105.40
26	14	451	C	N3-C4-C5	-5.91	119.54	121.90
26	14	985	C	N3-C2-O2	-5.91	117.77	121.90
26	14	1275	A	C5-C6-N1	5.91	120.65	117.70
26	14	2699	C	N1-C2-O2	-5.91	115.36	118.90
27	1J	16	G	C4-C5-N7	5.91	113.16	110.80
1	13	908	A	C8-N9-C4	-5.90	103.44	105.80
1	13	964	A	C5-C6-N1	-5.90	114.75	117.70
23	2K	24	C	N3-C4-N4	-5.90	113.87	118.00
26	1H	1305	C	C4-C5-C6	5.90	120.35	117.40
26	1H	1345	C	N3-C4-N4	-5.90	113.87	118.00
26	1H	1693	U	N3-C2-O2	-5.90	118.07	122.20
26	1H	2453	A	C8-N9-C4	-5.90	103.44	105.80
1	1G	898	G	N1-C2-N3	5.90	127.44	123.90
26	14	596	G	C5-C6-N1	-5.90	108.55	111.50
27	1J	22	U	C6-N1-C2	-5.90	117.46	121.00
1	13	606	G	C8-N9-C4	-5.90	104.04	106.40
23	2K	30	G	OP1-P-OP2	-5.90	110.75	119.60
26	1H	394	A	OP2-P-O3'	5.90	118.19	105.20
26	1H	931	G	C5-C6-N1	5.90	114.45	111.50
26	1H	1279	G	O5'-P-OP2	-5.90	100.39	105.70
26	1H	1590	U	N3-C4-O4	5.90	123.53	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2227	A	C5-N7-C8	-5.90	100.95	103.90
26	1H	2434	A	OP1-P-OP2	-5.90	110.75	119.60
26	1H	2604	U	N3-C4-C5	-5.90	111.06	114.60
1	1G	554	C	N1-C2-O2	5.90	122.44	118.90
26	14	188	G	C2-N3-C4	-5.90	108.95	111.90
26	14	807	U	C2-N3-C4	-5.90	123.46	127.00
26	14	1195	G	C6-C5-N7	5.90	133.94	130.40
26	14	1233	C	N1-C2-O2	-5.90	115.36	118.90
26	14	1278	A	C4-N9-C1'	-5.90	115.67	126.30
26	14	1351	C	C5-C4-N4	-5.90	116.07	120.20
1	13	543	C	C2-N3-C4	-5.90	116.95	119.90
1	13	913	A	C8-N9-C4	-5.90	103.44	105.80
23	2K	45	A	N9-C4-C5	-5.90	103.44	105.80
26	1H	141(A)	C	OP2-P-O3'	5.90	118.18	105.20
26	1H	736	C	O5'-P-OP1	-5.90	100.39	105.70
26	1H	824	A	N1-C6-N6	-5.90	115.06	118.60
26	1H	1192	G	C6-N1-C2	-5.90	121.56	125.10
26	1H	1299	G	N1-C6-O6	5.90	123.44	119.90
26	1H	1798	U	N3-C4-C5	5.90	118.14	114.60
26	1H	1800	C	N3-C4-C5	-5.90	119.54	121.90
26	1H	1858	G	N7-C8-N9	5.90	116.05	113.10
27	16	25	A	OP1-P-O3'	5.90	118.18	105.20
1	1G	331	G	N3-C2-N2	-5.90	115.77	119.90
1	1G	895	G	C6-C5-N7	-5.90	126.86	130.40
1	1G	1409	C	N3-C4-C5	-5.90	119.54	121.90
26	14	37	C	N3-C4-C5	-5.90	119.54	121.90
26	14	1619	G	O5'-P-OP2	-5.90	100.39	105.70
26	14	1641	A	OP1-P-O3'	-5.90	92.22	105.20
26	14	1812	A	C5-N7-C8	5.90	106.85	103.90
26	14	2299	G	N3-C4-C5	5.90	131.55	128.60
1	13	312	C	OP2-P-O3'	5.90	118.18	105.20
1	13	798	G	N3-C4-N9	-5.90	122.46	126.00
1	13	1111	A	C5-C6-N1	5.90	120.65	117.70
26	1H	283	A	N1-C6-N6	-5.90	115.06	118.60
1	1G	1076	C	N3-C4-N4	-5.90	113.87	118.00
26	14	1258	C	OP2-P-O3'	5.90	118.18	105.20
1	13	818	G	N3-C2-N2	5.90	124.03	119.90
23	2K	4	G	N7-C8-N9	-5.90	110.15	113.10
26	1H	672	C	O5'-P-OP2	-5.90	100.39	105.70
26	1H	921	G	C2-N3-C4	5.90	114.85	111.90
26	1H	1649	G	N3-C4-C5	-5.90	125.65	128.60
26	1H	2009	G	OP1-P-OP2	-5.90	110.75	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	448	U	C4-C5-C6	5.90	123.24	119.70
26	14	672	C	C5-C4-N4	5.90	124.33	120.20
26	14	1143	A	C5-C6-N6	5.90	128.42	123.70
26	14	1792	G	C2-N3-C4	-5.90	108.95	111.90
26	14	1930	G	C8-N9-C1'	5.90	134.67	127.00
26	14	2235	G	C6-C5-N7	-5.90	126.86	130.40
27	1J	74	U	C2-N1-C1'	-5.90	110.62	117.70
1	13	881	G	OP2-P-O3'	5.90	118.17	105.20
26	1H	1177	A	N1-C6-N6	-5.90	115.06	118.60
26	1H	2560	C	O5'-P-OP2	-5.90	100.39	105.70
26	1H	2564	A	C8-N9-C4	-5.90	103.44	105.80
26	1H	2703	C	OP1-P-OP2	5.90	128.44	119.60
26	14	546	C	C6-N1-C2	-5.90	117.94	120.30
26	14	1823	G	C4-C5-N7	5.90	113.16	110.80
26	14	2828	C	N3-C2-O2	-5.90	117.77	121.90
1	13	355	C	C2-N3-C4	-5.89	116.95	119.90
1	13	779	C	OP1-P-OP2	-5.89	110.76	119.60
1	13	905	U	C5-C6-N1	-5.89	119.75	122.70
26	1H	198	C	C4-C5-C6	-5.89	114.45	117.40
26	1H	273(A)	G	C6-C5-N7	-5.89	126.86	130.40
26	1H	474	G	C6-C5-N7	5.89	133.94	130.40
26	1H	664	C	OP1-P-OP2	5.89	128.44	119.60
27	16	3	C	C6-N1-C2	5.89	122.66	120.30
1	1G	233	C	OP2-P-O3'	5.89	118.17	105.20
1	1G	1226	C	N3-C4-C5	-5.89	119.54	121.90
26	14	216	A	C8-N9-C4	5.89	108.16	105.80
26	14	914	C	C2-N3-C4	5.89	122.85	119.90
26	14	1525	G	N1-C2-N3	5.89	127.44	123.90
26	14	1945	G	C5-C6-O6	5.89	132.14	128.60
26	14	2454	G	C6-C5-N7	-5.89	126.86	130.40
26	14	2823	A	N9-C4-C5	-5.89	103.44	105.80
1	13	32	A	C8-N9-C4	-5.89	103.44	105.80
1	13	744	C	N1-C2-O2	-5.89	115.36	118.90
26	1H	14	A	C5-N7-C8	5.89	106.85	103.90
26	1H	501	A	N9-C4-C5	5.89	108.16	105.80
26	1H	575	A	C6-N1-C2	-5.89	115.06	118.60
26	1H	1231	G	N3-C4-C5	5.89	131.55	128.60
26	1H	1326	U	OP2-P-O3'	5.89	118.17	105.20
26	1H	1497	U	OP1-P-OP2	-5.89	110.76	119.60
26	1H	1683	C	C5-C6-N1	-5.89	118.05	121.00
26	1H	1952	A	N3-C4-C5	-5.89	122.68	126.80
26	1H	1957	C	C6-N1-C1'	5.89	127.87	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2062	A	N1-C2-N3	-5.89	126.35	129.30
26	1H	2258	C	N1-C2-N3	5.89	123.33	119.20
26	1H	2541	A	O5'-P-OP2	5.89	117.77	110.70
26	1H	2576	G	C2-N3-C4	-5.89	108.95	111.90
27	16	117	G	C8-N9-C4	5.89	108.76	106.40
1	1G	174	C	C6-N1-C2	-5.89	117.94	120.30
26	14	126	A	C2-N3-C4	-5.89	107.65	110.60
26	14	141(A)	C	OP1-P-O3'	-5.89	92.24	105.20
26	14	183	C	O5'-P-OP2	-5.89	100.40	105.70
26	14	1232	G	C2-N3-C4	-5.89	108.95	111.90
26	14	1291	C	N3-C4-C5	-5.89	119.54	121.90
26	14	2609	U	OP2-P-O3'	5.89	118.16	105.20
1	13	891	U	OP2-P-O3'	5.89	118.16	105.20
26	1H	38	A	C5-N7-C8	-5.89	100.95	103.90
26	1H	1408	C	C5-C6-N1	-5.89	118.06	121.00
26	1H	2330	G	O5'-P-OP2	-5.89	100.40	105.70
26	1H	2681	C	P-O3'-C3'	5.89	126.77	119.70
26	14	509	C	C5-C6-N1	-5.89	118.05	121.00
26	14	1235	G	N1-C2-N3	5.89	127.44	123.90
26	14	1271	G	C6-C5-N7	-5.89	126.86	130.40
26	14	1274	A	C5'-C4'-O4'	5.89	116.17	109.10
26	14	1821	A	N1-C2-N3	5.89	132.25	129.30
26	14	2369	A	C8-N9-C4	-5.89	103.44	105.80
1	13	595	G	N3-C2-N2	5.89	124.02	119.90
26	1H	248	G	N1-C6-O6	5.89	123.43	119.90
26	1H	378	C	C4-C5-C6	5.89	120.34	117.40
26	1H	2289	G	C6-N1-C2	5.89	128.63	125.10
26	1H	2347	C	O5'-P-OP2	-5.89	100.40	105.70
26	1H	2442	C	OP1-P-OP2	-5.89	110.77	119.60
26	1H	2781	A	C5-N7-C8	-5.89	100.96	103.90
26	14	303	U	C5-C4-O4	-5.89	122.37	125.90
26	14	800	A	C2-N3-C4	5.89	113.55	110.60
26	14	1230	C	N1-C2-O2	5.89	122.43	118.90
26	14	1383	C	N3-C2-O2	5.89	126.02	121.90
26	14	1763	G	O5'-P-OP2	-5.89	100.40	105.70
26	14	1952	A	C5-C6-N1	5.89	120.64	117.70
26	14	2584	U	C6-N1-C1'	-5.89	112.95	121.20
27	1J	43	C	C6-N1-C2	-5.89	117.94	120.30
1	13	305	G	C5-C6-O6	5.89	132.13	128.60
1	13	728	A	C5-N7-C8	-5.89	100.96	103.90
1	13	880	C	C4-C5-C6	-5.89	114.46	117.40
1	13	1103	C	C6-N1-C2	-5.89	117.94	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	627	A	N1-C6-N6	5.89	122.13	118.60
26	1H	2564	A	OP1-P-O3'	5.89	118.15	105.20
33	51	57	ASP	CB-CG-OD1	5.89	123.60	118.30
1	1G	826	C	N3-C4-N4	-5.89	113.88	118.00
26	14	911	A	OP1-P-OP2	5.89	128.43	119.60
26	14	2614	A	C8-N9-C4	-5.89	103.44	105.80
1	13	1200	C	C5-C4-N4	-5.89	116.08	120.20
1	13	1420	C	O5'-P-OP1	-5.89	100.40	105.70
1	13	1424	C	N1-C2-O2	5.89	122.43	118.90
26	1H	237	C	C2-N1-C1'	-5.89	112.33	118.80
26	1H	480	A	C5-N7-C8	-5.89	100.96	103.90
26	1H	566	U	C2-N3-C4	-5.89	123.47	127.00
26	1H	779	U	OP1-P-OP2	-5.89	110.77	119.60
26	1H	1639	U	O5'-P-OP1	5.89	117.76	110.70
26	1H	2032	G	O4'-C1'-N9	-5.89	103.49	108.20
26	1H	2250	G	N1-C6-O6	-5.89	116.37	119.90
26	1H	2697	G	C4-C5-C6	5.89	122.33	118.80
1	1G	510	A	C5-N7-C8	-5.89	100.96	103.90
1	1G	885	G	C5-C6-O6	5.89	132.13	128.60
1	1G	952	U	O5'-P-OP1	-5.89	100.40	105.70
26	14	391	G	C2-N3-C4	-5.89	108.96	111.90
26	14	1020	A	C8-N9-C4	5.89	108.16	105.80
26	14	1412	A	C5-N7-C8	-5.89	100.96	103.90
26	14	2551	C	C6-N1-C2	-5.89	117.94	120.30
26	14	2637	U	N3-C4-C5	-5.89	111.07	114.60
1	13	502	G	N1-C2-N2	5.88	121.50	116.20
1	13	541	G	N1-C2-N2	5.88	121.50	116.20
1	13	788	U	C5-C4-O4	-5.88	122.37	125.90
1	13	806	C	N3-C4-C5	5.88	124.25	121.90
1	13	807	A	N9-C4-C5	5.88	108.15	105.80
1	13	827	U	O4'-C1'-N1	5.88	112.91	108.20
1	13	1370	G	C4-C5-N7	5.88	113.15	110.80
1	13	1386	G	C5-C6-O6	-5.88	125.07	128.60
26	1H	58	G	N7-C8-N9	5.88	116.04	113.10
26	1H	1194	A	N1-C6-N6	5.88	122.13	118.60
26	1H	1791	A	N1-C6-N6	-5.88	115.07	118.60
26	1H	2396	G	OP1-P-OP2	5.88	128.43	119.60
26	1H	2494	G	C2-N3-C4	-5.88	108.96	111.90
26	1H	2510	C	N3-C2-O2	-5.88	117.78	121.90
26	14	605	C	C5-C4-N4	-5.88	116.08	120.20
26	14	1187	G	OP1-P-O3'	5.88	118.15	105.20
26	14	1793	C	O5'-P-OP1	5.88	117.76	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2442	C	C5-C6-N1	-5.88	118.06	121.00
26	1H	1902	C	C5-C4-N4	5.88	124.32	120.20
26	1H	2199	A	C2-N3-C4	5.88	113.54	110.60
26	1H	2605	U	C6-N1-C2	-5.88	117.47	121.00
1	1G	1497	G	C4-C5-N7	5.88	113.15	110.80
26	14	14	A	C4-C5-N7	5.88	113.64	110.70
26	14	1585	C	C2-N3-C4	5.88	122.84	119.90
26	14	1603	A	N1-C2-N3	5.88	132.24	129.30
29	19	35	LYS	CD-CE-NZ	5.88	125.23	111.70
1	13	633	G	C6-C5-N7	-5.88	126.87	130.40
1	13	749	C	C6-N1-C2	-5.88	117.95	120.30
1	13	827	U	N3-C4-O4	-5.88	115.28	119.40
1	13	864	A	N7-C8-N9	5.88	116.74	113.80
26	1H	1517	G	N1-C6-O6	5.88	123.43	119.90
26	1H	1787	A	OP1-P-O3'	5.88	118.14	105.20
26	1H	2228	G	N9-C4-C5	-5.88	103.05	105.40
26	1H	2280	G	C8-N9-C4	-5.88	104.05	106.40
26	1H	2580	U	C2-N1-C1'	5.88	124.76	117.70
26	1H	2659	G	OP1-P-OP2	5.88	128.42	119.60
27	16	83	G	C5-C6-N1	-5.88	108.56	111.50
1	1G	676	A	C2-N3-C4	5.88	113.54	110.60
26	14	64	A	C5-C6-N1	5.88	120.64	117.70
26	14	650	C	C5-C6-N1	5.88	123.94	121.00
26	14	1280	G	O5'-P-OP1	5.88	117.76	110.70
26	14	1534	G	OP2-P-O3'	5.88	118.14	105.20
26	14	1602	U	OP1-P-O3'	5.88	118.14	105.20
26	14	1705	G	C6-C5-N7	5.88	133.93	130.40
26	14	2627	G	C5-N7-C8	-5.88	101.36	104.30
26	14	2847	U	O5'-P-OP2	-5.88	100.41	105.70
1	13	1059	C	N3-C4-C5	5.88	124.25	121.90
26	1H	1414	G	C4-C5-C6	5.88	122.33	118.80
26	1H	1628	G	C2-N3-C4	5.88	114.84	111.90
26	1H	1642	G	N9-C1'-C2'	-5.88	105.53	112.00
26	1H	2239	G	N1-C2-N2	-5.88	110.91	116.20
26	1H	2872	G	C4-C5-C6	5.88	122.33	118.80
26	14	38	A	C2-N3-C4	5.88	113.54	110.60
26	14	772	C	N3-C4-N4	5.88	122.12	118.00
26	14	848	G	OP1-P-OP2	5.88	128.42	119.60
26	14	1766	U	C2-N3-C4	-5.88	123.47	127.00
26	14	2552	U	O5'-P-OP1	5.88	117.76	110.70
26	14	2812	G	N3-C2-N2	-5.88	115.78	119.90
26	1H	1157	G	N1-C6-O6	5.88	123.43	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1609	A	N7-C8-N9	-5.88	110.86	113.80
26	1H	1760	A	C6-N1-C2	-5.88	115.07	118.60
26	1H	1783	A	C4-C5-C6	5.88	119.94	117.00
26	1H	2246	G	N1-C2-N3	5.88	127.43	123.90
26	1H	2419	U	N1-C2-O2	-5.88	118.69	122.80
27	16	21	G	N3-C4-N9	-5.88	122.47	126.00
48	I8	46	LYS	CD-CE-NZ	5.88	125.22	111.70
1	1G	742	G	C5-C6-O6	-5.88	125.07	128.60
1	1G	770	C	C4-C5-C6	5.88	120.34	117.40
26	14	101	G	N3-C4-C5	-5.88	125.66	128.60
26	14	178	G	C2-N3-C4	-5.88	108.96	111.90
26	14	264	C	C6-N1-C1'	-5.88	113.75	120.80
26	14	265	A	C4-C5-C6	5.88	119.94	117.00
26	14	485	C	N1-C2-N3	5.88	123.31	119.20
26	14	964	C	N3-C4-C5	5.88	124.25	121.90
26	14	1248	G	N3-C4-C5	5.88	131.54	128.60
26	14	2336	A	C5-C6-N6	5.88	128.40	123.70
26	14	2570	G	N3-C2-N2	-5.88	115.78	119.90
26	1H	202	U	N3-C4-C5	5.88	118.12	114.60
26	1H	519	U	OP1-P-OP2	5.88	128.41	119.60
26	1H	946	G	N3-C4-C5	5.88	131.54	128.60
26	1H	988	A	C4-C5-C6	5.88	119.94	117.00
26	1H	1699	G	N7-C8-N9	5.88	116.04	113.10
26	1H	1757	U	C6-N1-C2	5.88	124.53	121.00
26	1H	2537	U	C2-N3-C4	-5.88	123.47	127.00
35	58	58	ASP	CB-CG-OD2	5.88	123.59	118.30
1	1G	1151	A	C8-N9-C4	5.88	108.15	105.80
1	1G	1473	A	N3-C4-C5	5.88	130.91	126.80
26	14	489	G	N7-C8-N9	5.88	116.04	113.10
26	14	1758	G	C8-N9-C4	-5.88	104.05	106.40
27	1J	73	A	N7-C8-N9	5.88	116.74	113.80
1	13	1470	G	N3-C2-N2	-5.88	115.79	119.90
26	1H	349	G	N3-C4-C5	5.88	131.54	128.60
26	1H	1301	A	C2-N3-C4	-5.88	107.66	110.60
26	1H	1653	G	N3-C4-N9	5.88	129.53	126.00
26	1H	1913	A	C2-N3-C4	5.88	113.54	110.60
26	1H	2033	A	N9-C4-C5	5.88	108.15	105.80
26	14	6	A	N3-C4-C5	-5.88	122.69	126.80
26	14	770	G	N7-C8-N9	-5.88	110.16	113.10
26	14	2359	C	C5-C4-N4	5.88	124.31	120.20
1	13	606	G	C5-C6-O6	-5.87	125.08	128.60
1	13	989	C	C6-N1-C2	-5.87	117.95	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1203	C	N3-C4-N4	5.87	122.11	118.00
26	1H	77	C	N3-C4-N4	5.87	122.11	118.00
26	1H	663	G	C6-N1-C2	-5.87	121.58	125.10
26	1H	1409	C	N1-C2-O2	5.87	122.42	118.90
26	1H	2045	C	O5'-P-OP1	5.87	117.75	110.70
26	1H	2276	G	OP1-P-OP2	-5.87	110.79	119.60
26	1H	2373	G	C8-N9-C1'	-5.87	119.36	127.00
26	1H	2645	G	C6-N1-C2	5.87	128.62	125.10
1	1G	224	C	OP1-P-OP2	5.87	128.41	119.60
1	1G	410	G	N1-C6-O6	5.87	123.42	119.90
1	1G	872	A	O5'-P-OP1	-5.87	100.41	105.70
26	14	72	U	N1-C2-N3	5.87	118.42	114.90
26	14	188	G	C8-N9-C4	5.87	108.75	106.40
26	14	974	G	N1-C6-O6	-5.87	116.38	119.90
26	14	1906	G	N3-C2-N2	-5.87	115.79	119.90
26	14	2346	A	N3-C4-C5	5.87	130.91	126.80
26	14	2382	G	C5-C6-N1	5.87	114.44	111.50
1	13	748	C	N3-C4-N4	5.87	122.11	118.00
26	1H	400	G	C5-N7-C8	-5.87	101.36	104.30
26	1H	428	A	C8-N9-C4	-5.87	103.45	105.80
26	1H	446	G	N1-C6-O6	5.87	123.42	119.90
26	1H	1023	U	C5-C6-N1	-5.87	119.76	122.70
26	1H	1437	C	N3-C2-O2	-5.87	117.79	121.90
26	1H	1999	C	C2-N3-C4	-5.87	116.96	119.90
1	1G	909	A	C5-C6-N6	-5.87	119.00	123.70
26	14	376	C	C4-C5-C6	5.87	120.33	117.40
26	14	1219	G	N1-C6-O6	5.87	123.42	119.90
26	14	2429	G	N1-C2-N2	5.87	121.48	116.20
26	14	2439	A	N7-C8-N9	5.87	116.74	113.80
44	A5	19	LEU	CB-CG-CD1	-5.87	101.02	111.00
1	13	1403	C	N3-C2-O2	5.87	126.01	121.90
26	1H	496	G	N3-C2-N2	-5.87	115.79	119.90
26	1H	708	C	C5-C6-N1	-5.87	118.06	121.00
26	1H	1769	G	C6-C5-N7	-5.87	126.88	130.40
26	1H	2247	A	C4-C5-N7	-5.87	107.77	110.70
26	1H	2302	G	N1-C2-N3	5.87	127.42	123.90
26	1H	2313	C	N1-C2-N3	5.87	123.31	119.20
26	1H	2505	G	O5'-P-OP2	-5.87	100.42	105.70
1	1G	927	G	N3-C4-C5	5.87	131.53	128.60
1	1G	1371	G	OP1-P-OP2	-5.87	110.80	119.60
26	14	17	G	C4-C5-N7	5.87	113.15	110.80
26	14	23	G	N3-C4-C5	5.87	131.53	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1242	A	O5'-P-OP2	-5.87	100.42	105.70
1	13	909	A	N7-C8-N9	-5.87	110.87	113.80
1	13	1422	G	N7-C8-N9	-5.87	110.17	113.10
26	1H	196	A	C6-C5-N7	-5.87	128.19	132.30
26	1H	928	G	N3-C4-N9	-5.87	122.48	126.00
26	1H	1322	A	OP2-P-O3'	5.87	118.11	105.20
26	1H	1336	A	OP1-P-OP2	-5.87	110.80	119.60
26	1H	1441	G	N1-C2-N3	-5.87	120.38	123.90
26	1H	1447	G	O5'-P-OP1	-5.87	100.42	105.70
26	1H	1650	G	N3-C2-N2	-5.87	115.79	119.90
26	1H	1669	A	C6-C5-N7	-5.87	128.19	132.30
26	1H	1893	C	C2-N3-C4	-5.87	116.97	119.90
26	1H	2010	G	N9-C4-C5	5.87	107.75	105.40
26	1H	2065	C	N3-C2-O2	-5.87	117.79	121.90
26	1H	2597	G	C2-N3-C4	-5.87	108.97	111.90
1	1G	117	G	C8-N9-C1'	-5.87	119.37	127.00
26	14	364	C	N3-C4-C5	5.87	124.25	121.90
26	14	509	C	C4-C5-C6	5.87	120.33	117.40
26	14	1194	A	C2-N3-C4	-5.87	107.67	110.60
26	14	2012	G	C5-C6-O6	-5.87	125.08	128.60
29	19	48	ARG	NE-CZ-NH1	-5.87	117.37	120.30
26	1H	161	U	N3-C4-O4	5.87	123.51	119.40
26	1H	689	A	N7-C8-N9	-5.87	110.87	113.80
26	1H	2345	G	C5-C6-N1	-5.87	108.57	111.50
55	Q8	50	LEU	CB-CG-CD1	-5.87	101.03	111.00
1	1G	124	G	C2-N3-C4	5.87	114.83	111.90
1	1G	1516	G	C5-C6-N1	-5.87	108.57	111.50
26	14	1490	A	N1-C2-N3	-5.87	126.37	129.30
26	14	1826	G	C8-N9-C4	5.87	108.75	106.40
26	14	2507	C	C5-C4-N4	5.87	124.31	120.20
1	13	1315	U	N3-C4-O4	5.87	123.51	119.40
1	13	1485	U	C6-N1-C2	-5.87	117.48	121.00
26	1H	817	C	O5'-P-OP1	5.87	117.74	110.70
26	1H	1004	C	C4-C5-C6	5.87	120.33	117.40
26	1H	1250	G	N3-C4-N9	5.87	129.52	126.00
26	1H	1647	G	C6-N1-C2	5.87	128.62	125.10
26	1H	1812	A	OP1-P-O3'	5.87	118.10	105.20
26	1H	2665	A	N7-C8-N9	5.87	116.73	113.80
1	1G	319	G	C2-N3-C4	-5.87	108.97	111.90
26	14	1284	A	C5-N7-C8	-5.87	100.97	103.90
26	14	1760	A	C6-N1-C2	-5.87	115.08	118.60
1	13	976	G	C4-C5-N7	-5.86	108.45	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	3K	45	G	N3-C4-N9	5.86	129.52	126.00
26	1H	394	A	C5-C6-N1	5.86	120.63	117.70
26	1H	621	A	OP1-P-OP2	5.86	128.40	119.60
26	1H	833	U	OP2-P-O3'	5.86	118.10	105.20
26	1H	1375	C	C6-N1-C2	-5.86	117.95	120.30
26	1H	1443	G	OP1-P-OP2	-5.86	110.80	119.60
26	1H	1594	G	N7-C8-N9	5.86	116.03	113.10
26	1H	1927	A	OP1-P-OP2	5.86	128.40	119.60
26	1H	2007	C	N1-C2-N3	5.86	123.31	119.20
26	1H	2497	A	C5-N7-C8	5.86	106.83	103.90
1	1G	664	G	C2-N3-C4	-5.86	108.97	111.90
1	1G	689	C	N3-C4-C5	-5.86	119.55	121.90
1	1G	1440	C	N3-C2-O2	5.86	126.00	121.90
26	14	1236	G	N1-C2-N3	5.86	127.42	123.90
26	14	1860	G	C4-C5-C6	-5.86	115.28	118.80
26	14	1907	G	N3-C4-C5	5.86	131.53	128.60
26	14	2465	C	C5-C6-N1	-5.86	118.07	121.00
27	1J	104	A	OP2-P-O3'	5.86	118.10	105.20
53	J5	20	ARG	NE-CZ-NH1	-5.86	117.37	120.30
1	13	1194	U	OP2-P-O3'	5.86	118.10	105.20
1	13	1521	G	C5-C6-O6	-5.86	125.08	128.60
26	1H	298	G	C4-C5-C6	-5.86	115.28	118.80
26	1H	1893	C	C5-C6-N1	-5.86	118.07	121.00
26	1H	2613	U	C5-C6-N1	5.86	125.63	122.70
26	1H	2837	G	C6-C5-N7	-5.86	126.88	130.40
1	1G	1495	U	N3-C4-C5	-5.86	111.08	114.60
26	14	654(V)	A	N9-C4-C5	5.86	108.14	105.80
26	14	845	G	C6-N1-C2	5.86	128.62	125.10
26	14	2071	A	N3-C4-C5	-5.86	122.70	126.80
26	14	2872	G	C8-N9-C4	-5.86	104.06	106.40
1	13	573	A	N1-C6-N6	-5.86	115.08	118.60
1	13	1115	C	OP1-P-OP2	5.86	128.39	119.60
25	4K	14	A	N1-C2-N3	-5.86	126.37	129.30
26	1H	1162	G	N3-C4-N9	-5.86	122.48	126.00
26	1H	1817	G	OP2-P-O3'	5.86	118.09	105.20
26	1H	2747	G	C5-N7-C8	-5.86	101.37	104.30
40	A8	88	ASP	CB-CG-OD1	-5.86	113.03	118.30
1	1G	326	G	C4-N9-C1'	5.86	134.12	126.50
1	1G	769	G	C6-C5-N7	-5.86	126.88	130.40
1	1G	921	U	OP1-P-OP2	-5.86	110.81	119.60
26	14	235	U	N1-C2-N3	-5.86	111.38	114.90
26	14	1305	C	O5'-P-OP2	5.86	117.73	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1328	G	N3-C4-N9	5.86	129.52	126.00
26	14	1994	C	N1-C2-O2	5.86	122.42	118.90
26	14	2352	A	C5-C6-N1	-5.86	114.77	117.70
26	14	2479	G	N7-C8-N9	5.86	116.03	113.10
26	1H	452	G	O5'-P-OP2	-5.86	100.43	105.70
26	1H	865	C	O5'-P-OP2	5.86	117.73	110.70
1	1G	897	C	N3-C2-O2	5.86	126.00	121.90
1	1G	1403	C	N1-C2-O2	-5.86	115.39	118.90
26	14	444	C	OP2-P-O3'	5.86	118.09	105.20
27	1J	58	A	C5-C6-N1	5.86	120.63	117.70
1	13	663	A	N1-C2-N3	5.86	132.23	129.30
1	13	1306	A	C5-C6-N1	-5.86	114.77	117.70
26	1H	1224	G	C5-C6-N1	5.86	114.43	111.50
26	1H	1492	G	OP1-P-OP2	-5.86	110.81	119.60
26	1H	1678	G	C8-N9-C1'	5.86	134.61	127.00
26	1H	1776	G	N3-C4-N9	5.86	129.51	126.00
26	1H	1956	U	N1-C2-N3	5.86	118.42	114.90
26	1H	2311	A	O4'-C1'-N9	5.86	112.89	108.20
26	1H	2468	G	N9-C4-C5	-5.86	103.06	105.40
26	14	382	G	OP1-P-O3'	5.86	118.08	105.20
26	14	574	C	C4-C5-C6	-5.86	114.47	117.40
26	14	628	G	N1-C6-O6	-5.86	116.39	119.90
26	14	984	A	C2-N3-C4	5.86	113.53	110.60
26	14	2514	U	C6-N1-C2	5.86	124.52	121.00
1	13	1226	C	N1-C2-O2	-5.86	115.39	118.90
26	1H	1937	A	C6-N1-C2	-5.86	115.09	118.60
26	1H	1970	A	C8-N9-C4	-5.86	103.46	105.80
26	1H	2266	A	C5-C6-N1	5.86	120.63	117.70
26	1H	2383	G	C4-C5-N7	5.86	113.14	110.80
26	1H	2423	U	N3-C4-C5	5.86	118.11	114.60
26	14	429	A	O5'-P-OP2	5.86	117.73	110.70
26	14	459	U	N3-C4-O4	-5.86	115.30	119.40
26	14	578	A	OP1-P-O3'	-5.86	92.32	105.20
26	14	2649	U	N1-C2-O2	-5.86	118.70	122.80
1	13	628	G	C2-N3-C4	-5.85	108.97	111.90
1	13	1374	A	N9-C4-C5	-5.85	103.46	105.80
26	1H	75	G	OP1-P-O3'	-5.85	92.32	105.20
26	1H	737	C	N1-C2-N3	5.85	123.30	119.20
26	1H	1034	G	C5-C6-O6	-5.85	125.09	128.60
26	14	2784	C	N3-C4-C5	5.85	124.24	121.90
1	13	976	G	C5-N7-C8	5.85	107.23	104.30
26	1H	257	A	N7-C8-N9	5.85	116.73	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	518	G	N1-C6-O6	-5.85	116.39	119.90
26	1H	791	C	P-O3'-C3'	5.85	126.72	119.70
26	1H	851	U	C2-N1-C1'	-5.85	110.68	117.70
26	1H	1892	C	N1-C2-O2	-5.85	115.39	118.90
26	1H	2032	G	C5-N7-C8	-5.85	101.37	104.30
26	1H	2046	G	N1-C6-O6	-5.85	116.39	119.90
26	1H	2454	G	N9-C4-C5	5.85	107.74	105.40
26	1H	2539	C	N3-C4-N4	-5.85	113.90	118.00
26	14	249	C	C6-N1-C2	-5.85	117.96	120.30
26	14	1422	G	C2-N3-C4	-5.85	108.97	111.90
26	14	1776	G	N1-C2-N2	-5.85	110.93	116.20
1	13	277	C	C6-N1-C2	-5.85	117.96	120.30
1	13	1522	U	C4-C5-C6	5.85	123.21	119.70
26	1H	596	G	N3-C2-N2	-5.85	115.80	119.90
26	1H	2300	G	N1-C6-O6	5.85	123.41	119.90
1	1G	1261	A	N7-C8-N9	5.85	116.72	113.80
26	14	1279	G	C6-C5-N7	5.85	133.91	130.40
26	14	2510	C	N1-C2-O2	-5.85	115.39	118.90
1	13	584	G	OP1-P-OP2	5.85	128.37	119.60
24	3K	2	G	N3-C4-C5	5.85	131.53	128.60
26	1H	557	U	OP1-P-OP2	5.85	128.38	119.60
26	1H	588	U	N3-C4-C5	5.85	118.11	114.60
26	1H	808	G	C6-C5-N7	-5.85	126.89	130.40
26	1H	907	U	C6-N1-C2	5.85	124.51	121.00
26	1H	1775	U	C2-N3-C4	-5.85	123.49	127.00
47	H8	61	LEU	CA-CB-CG	5.85	128.75	115.30
26	14	2018	G	N3-C4-C5	-5.85	125.67	128.60
26	14	2085	C	C6-N1-C2	5.85	122.64	120.30
26	14	2388	A	N1-C6-N6	-5.85	115.09	118.60
1	13	558	G	OP1-P-O3'	5.85	118.06	105.20
1	13	816	A	N3-C4-C5	-5.85	122.71	126.80
1	13	1340	A	C4-C5-N7	5.85	113.62	110.70
26	1H	17	G	C4-C5-N7	5.85	113.14	110.80
26	1H	128	C	N3-C2-O2	5.85	125.99	121.90
26	1H	307	G	N3-C2-N2	5.85	123.99	119.90
26	1H	760	G	C4-C5-N7	-5.85	108.46	110.80
26	1H	766	C	C6-N1-C2	5.85	122.64	120.30
26	1H	1358	G	N3-C2-N2	5.85	123.99	119.90
26	1H	1681	G	C5-C6-O6	-5.85	125.09	128.60
1	1G	18	C	C5-C4-N4	-5.85	116.11	120.20
1	1G	286	G	N1-C2-N3	5.85	127.41	123.90
1	1G	986	A	N1-C2-N3	-5.85	126.38	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1521	G	C5-C6-N1	-5.85	108.58	111.50
26	14	204	A	C2-N3-C4	5.85	113.52	110.60
26	14	1274	A	C8-N9-C4	-5.85	103.46	105.80
26	14	1818	U	N3-C4-C5	-5.85	111.09	114.60
26	14	1856	G	C4-N9-C1'	5.85	134.10	126.50
26	14	2241	A	O5'-P-OP1	5.85	117.72	110.70
26	1H	536	A	C4-C5-N7	-5.85	107.78	110.70
26	1H	836	G	C5-N7-C8	5.85	107.22	104.30
26	14	1319	G	C5-N7-C8	-5.85	101.38	104.30
26	14	1950	G	C5-C6-N1	5.85	114.42	111.50
26	14	2607	G	C4-N9-C1'	5.85	134.10	126.50
26	14	2622	C	N1-C2-O2	-5.85	115.39	118.90
1	13	905	U	N1-C2-O2	5.84	126.89	122.80
23	2K	5	G	N3-C2-N2	5.84	123.99	119.90
26	1H	717	G	N7-C8-N9	5.84	116.02	113.10
26	1H	725	G	N9-C4-C5	-5.84	103.06	105.40
26	1H	1037	G	N9-C4-C5	-5.84	103.06	105.40
26	1H	2390	U	C4-C5-C6	5.84	123.21	119.70
1	1G	312	C	N1-C2-N3	5.84	123.29	119.20
1	1G	581	G	N1-C6-O6	5.84	123.41	119.90
26	14	1021	A	N7-C8-N9	5.84	116.72	113.80
26	14	1296	G	C8-N9-C4	5.84	108.74	106.40
26	14	1407	C	N3-C4-N4	5.84	122.09	118.00
26	14	1560	G	O5'-P-OP1	-5.84	100.44	105.70
26	14	2265	U	N3-C4-O4	5.84	123.49	119.40
26	1H	220	G	C6-N1-C2	-5.84	121.59	125.10
26	1H	1980	G	N3-C4-C5	-5.84	125.68	128.60
49	J8	41	ARG	NE-CZ-NH2	-5.84	117.38	120.30
26	14	801	G	O5'-P-OP1	5.84	117.71	110.70
26	14	2428	G	OP1-P-O3'	5.84	118.06	105.20
1	13	913	A	N9-C4-C5	5.84	108.14	105.80
1	13	1056	U	N3-C4-C5	-5.84	111.09	114.60
26	1H	39	C	C5-C4-N4	-5.84	116.11	120.20
26	1H	759	G	C8-N9-C4	-5.84	104.06	106.40
26	1H	908	C	C6-N1-C2	5.84	122.64	120.30
26	1H	1869	G	C6-C5-N7	-5.84	126.89	130.40
26	1H	2084	C	C6-N1-C2	5.84	122.64	120.30
26	1H	2357	U	C2-N3-C4	5.84	130.50	127.00
1	1G	260	G	C5-C6-N1	-5.84	108.58	111.50
1	1G	300	A	C2-N3-C4	-5.84	107.68	110.60
26	14	479	A	C4-C5-N7	-5.84	107.78	110.70
26	14	1043	C	C5-C6-N1	5.84	123.92	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1238	G	N1-C6-O6	5.84	123.41	119.90
26	14	1819	A	C4-C5-C6	5.84	119.92	117.00
1	13	323	U	OP2-P-O3'	5.84	118.05	105.20
1	13	541	G	OP1-P-O3'	5.84	118.05	105.20
1	13	1435	G	N9-C4-C5	-5.84	103.06	105.40
26	1H	746	A	N9-C4-C5	5.84	108.14	105.80
26	1H	936	C	C5-C4-N4	-5.84	116.11	120.20
26	1H	1520	U	C5-C6-N1	5.84	125.62	122.70
26	1H	1601	G	C5-C6-O6	5.84	132.10	128.60
26	1H	2025	C	C2-N1-C1'	5.84	125.22	118.80
26	1H	2307	G	C5-C6-O6	-5.84	125.10	128.60
27	16	72	G	C5-C6-O6	5.84	132.10	128.60
1	1G	175	C	C6-N1-C2	5.84	122.64	120.30
1	1G	963	G	N3-C4-N9	5.84	129.50	126.00
26	14	571	A	N3-C4-N9	5.84	132.07	127.40
26	14	1636	C	C4-C5-C6	-5.84	114.48	117.40
26	14	1904	G	N3-C4-C5	-5.84	125.68	128.60
26	14	2728	U	N3-C4-O4	5.84	123.49	119.40
1	13	5	U	C5-C4-O4	-5.84	122.40	125.90
1	13	1189	C	C6-N1-C2	5.84	122.64	120.30
1	13	1252	A	N9-C4-C5	5.84	108.14	105.80
10	1I	16	LEU	CA-CB-CG	5.84	128.73	115.30
26	1H	1571	A	C5-N7-C8	5.84	106.82	103.90
26	1H	1779	U	C5-C4-O4	-5.84	122.40	125.90
1	1G	1523	G	C2-N3-C4	-5.84	108.98	111.90
26	14	395	U	C6-N1-C2	5.84	124.50	121.00
26	14	1440	G	C8-N9-C4	5.84	108.73	106.40
26	14	2563	U	C5-C4-O4	5.84	129.40	125.90
1	13	812	C	C2-N3-C4	-5.84	116.98	119.90
26	1H	289	A	C2-N3-C4	-5.84	107.68	110.60
26	1H	718	A	C2-N3-C4	-5.84	107.68	110.60
26	1H	1220	A	N1-C2-N3	5.84	132.22	129.30
27	16	50	G	N1-C6-O6	5.84	123.40	119.90
1	1G	403	C	O5'-P-OP2	-5.84	100.45	105.70
1	1G	1301	U	OP1-P-O3'	5.84	118.04	105.20
26	14	211	A	OP1-P-OP2	5.84	128.35	119.60
26	14	428	A	C5-C6-N1	5.84	120.62	117.70
26	14	1326	U	N1-C2-O2	-5.84	118.72	122.80
26	14	2062	A	C4-N9-C1'	-5.84	115.80	126.30
27	1J	37	C	OP1-P-OP2	-5.84	110.85	119.60
1	13	1305	G	C8-N9-C4	-5.83	104.07	106.40
26	1H	48	G	OP1-P-OP2	5.83	128.35	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1211	U	OP1-P-OP2	-5.83	110.85	119.60
1	1G	286	G	C5-C6-O6	5.83	132.10	128.60
1	1G	868	C	C5-C6-N1	5.83	123.92	121.00
26	14	789	A	O5'-P-OP2	5.83	117.70	110.70
1	13	108	G	C5-N7-C8	-5.83	101.38	104.30
1	13	389	A	OP1-P-O3'	5.83	118.03	105.20
1	13	1221	G	C4-C5-N7	-5.83	108.47	110.80
26	1H	830	G	N9-C4-C5	5.83	107.73	105.40
26	1H	921	G	N3-C4-C5	-5.83	125.68	128.60
26	1H	1028	A	N1-C6-N6	-5.83	115.10	118.60
26	1H	1125	G	C2-N3-C4	-5.83	108.98	111.90
26	1H	1200	C	N1-C2-O2	-5.83	115.40	118.90
26	1H	1640	C	N1-C2-O2	5.83	122.40	118.90
26	1H	1993	U	OP1-P-OP2	5.83	128.35	119.60
26	1H	2392	A	C5-C6-N6	5.83	128.37	123.70
31	31	162	LEU	CB-CG-CD1	5.83	120.92	111.00
1	1G	295	C	N3-C4-C5	-5.83	119.57	121.90
1	1G	717	C	N3-C4-C5	5.83	124.23	121.90
1	1G	736	C	N3-C4-C5	-5.83	119.57	121.90
26	14	270(S)	G	C5-C6-N1	-5.83	108.58	111.50
26	14	439	G	C5-C6-O6	-5.83	125.10	128.60
26	14	1267	U	OP2-P-O3'	5.83	118.03	105.20
26	14	1273	U	C5-C6-N1	-5.83	119.78	122.70
26	14	1703	G	N1-C6-O6	5.83	123.40	119.90
1	13	726	C	O5'-P-OP2	5.83	117.70	110.70
1	13	804	U	N3-C2-O2	-5.83	118.12	122.20
26	1H	69	C	N3-C4-N4	-5.83	113.92	118.00
26	1H	114	U	N3-C2-O2	5.83	126.28	122.20
26	1H	613	U	O4'-C1'-N1	5.83	112.87	108.20
26	1H	996	A	C6-N1-C2	-5.83	115.10	118.60
26	1H	1635	G	C6-C5-N7	-5.83	126.90	130.40
45	F8	60	ARG	NE-CZ-NH2	5.83	123.22	120.30
1	1G	1277	C	N3-C4-C5	-5.83	119.57	121.90
26	14	630	G	C5-N7-C8	5.83	107.22	104.30
26	14	1283	G	C4-N9-C1'	5.83	134.08	126.50
26	14	1331	A	C6-N1-C2	-5.83	115.10	118.60
26	14	1374	G	N3-C4-C5	-5.83	125.69	128.60
26	14	1784	A	C5-C6-N1	5.83	120.62	117.70
1	13	297	G	N7-C8-N9	5.83	116.02	113.10
1	13	1497	G	C2-N3-C4	5.83	114.81	111.90
23	2K	9	G	N1-C2-N2	5.83	121.45	116.20
26	1H	957	A	O5'-P-OP1	-5.83	100.45	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2412	A	O5'-P-OP2	-5.83	100.45	105.70
26	1H	2878	U	C5-C6-N1	5.83	125.61	122.70
1	1G	394	G	N9-C4-C5	5.83	107.73	105.40
26	14	831	G	N1-C6-O6	-5.83	116.40	119.90
26	14	2762	G	N7-C8-N9	5.83	116.02	113.10
26	14	2784	C	C5-C4-N4	-5.83	116.12	120.20
1	13	137	C	N3-C2-O2	5.83	125.98	121.90
22	1K	33	U	O5'-P-OP2	-5.83	100.45	105.70
23	2K	40	C	C2-N1-C1'	5.83	125.21	118.80
24	3K	31	A	C8-N9-C4	-5.83	103.47	105.80
26	1H	765	G	N3-C4-C5	5.83	131.51	128.60
26	1H	768	G	O5'-P-OP1	-5.83	100.45	105.70
26	1H	966	G	N3-C2-N2	5.83	123.98	119.90
26	1H	1669	A	C6-N1-C2	-5.83	115.10	118.60
26	1H	2532	G	C2-N3-C4	-5.83	108.99	111.90
26	1H	2605	U	N3-C2-O2	-5.83	118.12	122.20
26	14	1630	G	N1-C6-O6	-5.83	116.40	119.90
26	14	1779	U	N3-C4-C5	5.83	118.10	114.60
26	14	2256	G	N1-C2-N3	5.83	127.40	123.90
26	14	2619	C	OP1-P-O3'	5.83	118.02	105.20
26	14	2724	C	N1-C2-O2	-5.83	115.40	118.90
1	13	223	U	C6-N1-C2	-5.83	117.50	121.00
1	1G	352	C	C6-N1-C2	-5.83	117.97	120.30
1	1G	548	G	N3-C4-C5	-5.83	125.69	128.60
57	3L	70	C	N3-C2-O2	-5.83	117.82	121.90
26	14	389	G	N1-C6-O6	-5.83	116.40	119.90
26	14	859	G	OP2-P-O3'	5.83	118.02	105.20
26	14	1193	G	OP1-P-O3'	5.83	118.02	105.20
29	19	49	ILE	CG1-CB-CG2	-5.83	98.58	111.40
1	13	395	C	O5'-P-OP1	-5.83	100.46	105.70
1	13	721	G	O5'-P-OP2	-5.83	100.46	105.70
1	13	1223	C	OP1-P-OP2	-5.83	110.86	119.60
1	13	1249	C	N3-C2-O2	5.83	125.98	121.90
26	1H	132	G	C4-N9-C1'	5.83	134.07	126.50
26	1H	239	U	OP1-P-OP2	5.83	128.34	119.60
26	1H	611	C	N3-C4-C5	5.83	124.23	121.90
26	1H	764	A	O5'-P-OP1	5.83	117.69	110.70
26	1H	1264	G	OP1-P-OP2	5.83	128.34	119.60
26	1H	2553	G	C5-C6-N1	5.83	114.41	111.50
26	1H	2623	G	C2-N3-C4	5.83	114.81	111.90
26	1H	2785	C	N3-C4-C5	-5.83	119.57	121.90
27	16	78	A	O5'-P-OP1	5.83	117.69	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	250	G	OP1-P-OP2	5.83	128.34	119.60
26	14	919	G	C4-C5-C6	5.83	122.30	118.80
26	14	2494	G	C4-C5-N7	-5.83	108.47	110.80
23	2K	29	C	OP2-P-O3'	5.82	118.01	105.20
26	1H	139	G	C2-N3-C4	5.82	114.81	111.90
26	1H	211	A	C4-C5-C6	5.82	119.91	117.00
26	1H	473	G	OP1-P-OP2	5.82	128.34	119.60
26	1H	1278	A	N9-C4-C5	5.82	108.13	105.80
26	1H	1557	C	N3-C4-C5	5.82	124.23	121.90
26	1H	1580	A	C8-N9-C4	5.82	108.13	105.80
26	1H	1671	U	N3-C2-O2	5.82	126.28	122.20
26	1H	1907	G	C4-C5-N7	-5.82	108.47	110.80
26	1H	2427	C	C6-N1-C2	-5.82	117.97	120.30
1	1G	122	G	N3-C2-N2	-5.82	115.82	119.90
1	1G	191(F)	U	C5-C6-N1	5.82	125.61	122.70
1	1G	263	A	C2-N3-C4	-5.82	107.69	110.60
26	14	570	G	C6-C5-N7	-5.82	126.91	130.40
26	14	921	G	N1-C2-N2	5.82	121.44	116.20
26	14	1777	U	O5'-P-OP1	-5.82	100.46	105.70
26	14	1780	A	C4-C5-N7	-5.82	107.79	110.70
26	14	2238	G	C6-C5-N7	5.82	133.89	130.40
1	13	1367	C	OP1-P-OP2	5.82	128.33	119.60
1	13	1403	C	C5-C4-N4	5.82	124.28	120.20
26	1H	989	G	O5'-P-OP1	-5.82	100.46	105.70
26	1H	1224	G	C2-N3-C4	5.82	114.81	111.90
26	1H	1303	G	OP1-P-OP2	5.82	128.33	119.60
1	1G	47	C	N1-C2-N3	5.82	123.28	119.20
1	1G	333	G	C5-C6-O6	5.82	132.09	128.60
26	14	1645	G	N1-C2-N2	-5.82	110.96	116.20
26	14	2081	C	C5-C4-N4	5.82	124.28	120.20
1	13	416	G	N3-C2-N2	-5.82	115.83	119.90
1	13	760	G	C4-C5-C6	5.82	122.29	118.80
1	13	774	G	C4-C5-N7	5.82	113.13	110.80
1	13	934	C	N1-C2-N3	5.82	123.28	119.20
1	13	1285	A	P-O3'-C3'	5.82	126.69	119.70
1	13	1397	C	OP2-P-O3'	5.82	118.00	105.20
1	13	1487	G	C2-N3-C4	-5.82	108.99	111.90
26	1H	65	C	N1-C2-O2	5.82	122.39	118.90
26	1H	776	G	C4-N9-C1'	5.82	134.07	126.50
26	1H	924	C	C2-N3-C4	-5.82	116.99	119.90
26	1H	1248	G	O5'-P-OP2	5.82	117.68	110.70
26	1H	1253	A	C4-C5-N7	5.82	113.61	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1324	G	C4-C5-C6	5.82	122.29	118.80
26	1H	1816	G	N1-C2-N2	5.82	121.44	116.20
26	1H	2569	G	C4-N9-C1'	5.82	134.07	126.50
26	1H	2740	A	C5-C6-N6	-5.82	119.04	123.70
27	16	99	A	C5-C6-N1	5.82	120.61	117.70
1	1G	38	G	OP1-P-O3'	5.82	118.01	105.20
1	1G	1438	G	N3-C2-N2	-5.82	115.83	119.90
26	14	2777	G	N7-C8-N9	-5.82	110.19	113.10
26	1H	312	G	OP2-P-O3'	5.82	118.00	105.20
26	1H	1528	A	C5-C6-N1	-5.82	114.79	117.70
26	1H	1910	G	C4-C5-N7	-5.82	108.47	110.80
26	1H	2310	A	C2-N3-C4	5.82	113.51	110.60
26	1H	2485	G	N3-C4-N9	5.82	129.49	126.00
27	16	72	G	O5'-P-OP2	-5.82	100.46	105.70
1	1G	184	G	N7-C8-N9	5.82	116.01	113.10
23	2K	39	A	C5-C6-N1	5.82	120.61	117.70
24	3K	44	U	C6-N1-C2	-5.82	117.51	121.00
26	1H	228	A	C4-C5-N7	5.82	113.61	110.70
26	1H	266	G	N3-C4-N9	5.82	129.49	126.00
26	1H	569	U	N3-C4-C5	5.82	118.09	114.60
26	1H	1248	G	C6-N1-C2	5.82	128.59	125.10
26	1H	1449(A)	G	C5-C6-N1	-5.82	108.59	111.50
26	1H	1637	A	N3-C4-C5	-5.82	122.73	126.80
26	1H	1938	A	C6-N1-C2	-5.82	115.11	118.60
26	1H	2712(A)	A	C6-C5-N7	-5.82	128.23	132.30
1	1G	222	U	O5'-P-OP2	-5.82	100.46	105.70
1	1G	903	G	C4-C5-N7	5.82	113.13	110.80
26	14	292	C	C5-C6-N1	-5.82	118.09	121.00
26	14	454	A	N7-C8-N9	-5.82	110.89	113.80
26	14	513	A	OP2-P-O3'	5.82	118.00	105.20
26	14	756	C	O5'-P-OP1	-5.82	100.47	105.70
26	14	1684	C	N3-C2-O2	5.82	125.97	121.90
26	14	1761	C	N3-C2-O2	5.82	125.97	121.90
26	14	1785	A	C4-C5-C6	5.82	119.91	117.00
26	14	2042	A	N3-C4-C5	5.82	130.87	126.80
26	14	2508	G	N7-C8-N9	5.82	116.01	113.10
26	14	2707	G	N1-C6-O6	5.82	123.39	119.90
26	14	2725	A	C2-N3-C4	-5.82	107.69	110.60
1	13	1525	G	N3-C4-C5	5.82	131.51	128.60
26	1H	25	U	O5'-P-OP1	-5.82	100.47	105.70
26	1H	282	A	N9-C4-C5	5.82	108.13	105.80
26	1H	710	G	N1-C2-N3	5.82	127.39	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	739	G	N3-C4-N9	-5.82	122.51	126.00
26	1H	2326	C	C6-N1-C2	-5.82	117.97	120.30
26	1H	2372	G	N1-C2-N3	5.82	127.39	123.90
26	1H	2561	A	C4-C5-N7	-5.82	107.79	110.70
1	1G	922	G	N9-C4-C5	5.82	107.73	105.40
26	14	324	A	C2-N3-C4	-5.82	107.69	110.60
26	14	802	A	N1-C2-N3	5.82	132.21	129.30
26	14	1295	C	C2-N1-C1'	-5.82	112.40	118.80
26	14	1368	G	C5-C6-O6	5.82	132.09	128.60
26	14	1610	A	C5-C6-N6	-5.82	119.05	123.70
26	14	1786	A	C4-C5-C6	5.82	119.91	117.00
26	14	2365	G	N1-C2-N2	-5.82	110.97	116.20
1	13	1297	C	O5'-P-OP2	-5.81	100.47	105.70
24	3K	35	U	C6-N1-C2	-5.81	117.51	121.00
26	1H	2692	C	N1-C2-O2	5.81	122.39	118.90
26	14	647	G	C5-C6-O6	-5.81	125.11	128.60
26	14	812	C	C4-C5-C6	5.81	120.31	117.40
26	14	1259	G	O5'-P-OP2	5.81	117.68	110.70
1	13	50	A	O5'-P-OP2	-5.81	100.47	105.70
1	13	1336	C	P-O3'-C3'	5.81	126.67	119.70
26	1H	861	A	C4-C5-C6	5.81	119.91	117.00
26	1H	1196	C	OP1-P-O3'	-5.81	92.41	105.20
26	1H	1918	A	C6-C5-N7	5.81	136.37	132.30
26	1H	2068	U	N3-C2-O2	-5.81	118.13	122.20
26	1H	2217	G	C5-C6-N1	-5.81	108.59	111.50
26	1H	2436	G	N9-C4-C5	5.81	107.72	105.40
26	1H	2597	G	C4-C5-N7	5.81	113.12	110.80
1	1G	690	G	N3-C2-N2	-5.81	115.83	119.90
1	1G	1508	G	C4-C5-N7	-5.81	108.47	110.80
26	14	247	G	C6-N1-C2	5.81	128.59	125.10
26	14	318	C	N3-C4-C5	5.81	124.22	121.90
26	14	531	C	N3-C4-N4	5.81	122.07	118.00
26	14	577	G	O5'-P-OP2	5.81	117.67	110.70
26	14	803	U	O5'-P-OP1	5.81	117.67	110.70
26	14	1005	C	N1-C2-O2	5.81	122.39	118.90
26	14	1165	U	OP1-P-OP2	5.81	128.32	119.60
26	14	1757	U	C6-N1-C2	5.81	124.49	121.00
26	14	2085	C	C2-N3-C4	-5.81	116.99	119.90
26	14	2619	C	O5'-P-OP2	-5.81	100.47	105.70
1	13	37	U	OP1-P-O3'	5.81	117.98	105.20
26	1H	80	G	C5-C6-O6	5.81	132.09	128.60
26	1H	131	G	C6-N1-C2	-5.81	121.61	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	468	G	N9-C1'-C2'	-5.81	105.61	112.00
26	1H	530	G	C4-C5-C6	-5.81	115.31	118.80
26	1H	1203	G	C8-N9-C4	-5.81	104.08	106.40
26	1H	1698	A	O4'-C1'-N9	5.81	112.85	108.20
26	14	235	U	OP1-P-OP2	-5.81	110.88	119.60
26	14	297	C	C4-C5-C6	5.81	120.31	117.40
26	14	646	A	OP1-P-O3'	5.81	117.98	105.20
26	14	1344	G	C5-C6-N1	-5.81	108.59	111.50
26	14	1933	G	O5'-P-OP2	-5.81	100.47	105.70
26	14	2266	A	C6-N1-C2	-5.81	115.11	118.60
1	13	243	A	C6-N1-C2	-5.81	115.11	118.60
1	13	324	G	N7-C8-N9	5.81	116.00	113.10
1	13	490	G	C8-N9-C4	5.81	108.72	106.40
1	13	520	A	C8-N9-C4	5.81	108.12	105.80
1	13	1408	A	C5-N7-C8	-5.81	101.00	103.90
26	1H	801	G	C6-N1-C2	-5.81	121.61	125.10
26	1H	876	C	C5-C4-N4	-5.81	116.13	120.20
26	1H	1825	A	N1-C2-N3	5.81	132.21	129.30
26	1H	2042	A	C5-C6-N6	5.81	128.35	123.70
26	1H	2216	G	N3-C2-N2	-5.81	115.83	119.90
1	1G	425	G	O5'-P-OP1	-5.81	100.47	105.70
1	1G	808	C	N3-C4-C5	-5.81	119.58	121.90
26	14	396	G	C8-N9-C4	-5.81	104.08	106.40
26	14	692	C	N1-C2-O2	-5.81	115.41	118.90
26	14	793	A	N3-C4-C5	5.81	130.87	126.80
26	14	1165	U	C5-C4-O4	5.81	129.38	125.90
26	14	1280	G	C6-N1-C2	5.81	128.59	125.10
26	14	1323	U	C5-C4-O4	-5.81	122.41	125.90
26	14	1633	G	OP1-P-OP2	5.81	128.31	119.60
26	14	2325	G	C8-N9-C4	-5.81	104.08	106.40
27	1J	11	C	N1-C2-O2	5.81	122.39	118.90
32	49	34	LEU	CA-CB-CG	5.81	128.66	115.30
26	1H	403	U	N3-C2-O2	-5.81	118.14	122.20
26	1H	979	G	N9-C4-C5	5.81	107.72	105.40
26	1H	1008	C	N3-C4-C5	5.81	124.22	121.90
26	1H	1144	G	N1-C2-N2	5.81	121.43	116.20
26	1H	1215	G	C4-C5-N7	5.81	113.12	110.80
26	1H	1391	U	C4-C5-C6	5.81	123.19	119.70
26	1H	1930	G	N7-C8-N9	-5.81	110.20	113.10
26	1H	2032	G	N3-C2-N2	-5.81	115.83	119.90
26	1H	2071	A	C5-C6-N6	-5.81	119.06	123.70
26	1H	2306	C	OP1-P-OP2	-5.81	110.89	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	518	G	N1-C2-N2	-5.81	110.97	116.20
26	14	1697	G	N3-C4-N9	-5.81	122.52	126.00
26	14	1770	G	N1-C2-N2	5.81	121.43	116.20
26	14	1771	C	OP1-P-O3'	5.81	117.98	105.20
26	14	2264	C	C5-C6-N1	5.81	123.90	121.00
26	14	2581	G	C8-N9-C4	-5.81	104.08	106.40
1	13	853	G	N7-C8-N9	-5.81	110.20	113.10
1	13	1129	C	C5-C6-N1	5.81	123.90	121.00
26	1H	192	C	O5'-P-OP2	5.81	117.67	110.70
26	1H	1773	A	O5'-P-OP2	-5.81	100.47	105.70
26	1H	2239	G	C8-N9-C4	5.81	108.72	106.40
26	1H	2469	A	N9-C4-C5	-5.81	103.48	105.80
26	1H	2651	C	N1-C2-N3	5.81	123.26	119.20
1	1G	1347	G	C4-C5-N7	5.81	113.12	110.80
26	14	1321	A	C5-C6-N6	-5.81	119.06	123.70
1	13	884	U	C2-N1-C1'	-5.80	110.73	117.70
1	13	1302	U	N1-C2-N3	5.80	118.38	114.90
25	4K	19	A	C4-C5-C6	5.80	119.90	117.00
26	1H	134	C	N3-C2-O2	-5.80	117.84	121.90
26	1H	315	G	N3-C4-C5	5.80	131.50	128.60
26	1H	942	G	C6-C5-N7	5.80	133.88	130.40
26	1H	1145	C	C6-N1-C2	-5.80	117.98	120.30
26	1H	1220	A	N9-C4-C5	5.80	108.12	105.80
26	1H	1769	G	C5-C6-O6	5.80	132.08	128.60
26	1H	2373	G	C8-N9-C4	5.80	108.72	106.40
26	1H	2582	G	C2-N3-C4	5.80	114.80	111.90
37	78	26	GLY	N-CA-C	-5.80	98.59	113.10
26	14	250	G	OP1-P-O3'	5.80	117.97	105.20
26	14	598	G	N3-C2-N2	-5.80	115.84	119.90
26	14	778	G	C5-C6-O6	5.80	132.08	128.60
26	14	824	A	OP1-P-O3'	5.80	117.97	105.20
26	14	1377	G	C8-N9-C4	-5.80	104.08	106.40
26	14	2783	G	N3-C4-C5	5.80	131.50	128.60
26	1H	1303	G	C5-N7-C8	5.80	107.20	104.30
26	1H	2566	A	C8-N9-C4	5.80	108.12	105.80
1	1G	522	C	N3-C4-N4	-5.80	113.94	118.00
1	13	291	C	C5-C4-N4	5.80	124.26	120.20
1	13	365	U	N3-C4-C5	-5.80	111.12	114.60
23	2K	75	C	OP1-P-O3'	5.80	117.96	105.20
25	4K	19	A	C2-N3-C4	-5.80	107.70	110.60
26	1H	456	C	OP1-P-O3'	5.80	117.96	105.20
26	1H	776	G	C5-C6-N1	-5.80	108.60	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1031	G	C6-N1-C2	-5.80	121.62	125.10
26	1H	1140	C	N1-C2-O2	5.80	122.38	118.90
26	1H	1573	G	C8-N9-C4	5.80	108.72	106.40
26	1H	1927	A	C4-C5-N7	-5.80	107.80	110.70
26	1H	1938	A	N1-C6-N6	5.80	122.08	118.60
26	1H	1962	C	O4'-C1'-N1	-5.80	103.56	108.20
26	1H	2069	G	C6-C5-N7	-5.80	126.92	130.40
27	16	7	G	N7-C8-N9	-5.80	110.20	113.10
1	1G	1442	G	P-O3'-C3'	5.80	126.66	119.70
57	3L	76	A	C2-N3-C4	-5.80	107.70	110.60
26	14	379	G	C4-C5-N7	-5.80	108.48	110.80
26	14	1410	G	N1-C2-N2	-5.80	110.98	116.20
26	14	1786	A	OP1-P-O3'	5.80	117.96	105.20
26	14	1803	A	N1-C2-N3	-5.80	126.40	129.30
1	13	587	G	N3-C2-N2	-5.80	115.84	119.90
1	13	1054	C	N3-C2-O2	-5.80	117.84	121.90
1	13	1307	U	N1-C2-O2	5.80	126.86	122.80
22	1K	75	C	C2-N3-C4	-5.80	117.00	119.90
26	1H	435	C	C2-N3-C4	5.80	122.80	119.90
26	1H	1230	C	C5-C6-N1	-5.80	118.10	121.00
26	1H	1327	C	N3-C4-C5	-5.80	119.58	121.90
26	1H	1372	U	N1-C2-N3	5.80	118.38	114.90
26	1H	1985	G	C6-N1-C2	-5.80	121.62	125.10
1	1G	124	G	C4-C5-N7	-5.80	108.48	110.80
1	1G	980	C	N1-C2-O2	5.80	122.38	118.90
26	14	201	C	N3-C4-C5	5.80	124.22	121.90
26	14	1816	G	C5-N7-C8	5.80	107.20	104.30
26	1H	242	G	N3-C4-N9	5.80	129.48	126.00
26	1H	1240	U	N3-C2-O2	5.80	126.26	122.20
26	1H	2676	C	C6-N1-C2	5.80	122.62	120.30
1	1G	55	A	N7-C8-N9	5.80	116.70	113.80
1	1G	1302	U	N3-C2-O2	-5.80	118.14	122.20
26	14	639	U	N3-C4-O4	-5.80	115.34	119.40
26	14	1197	G	C8-N9-C4	-5.80	104.08	106.40
26	14	1298	C	N3-C4-N4	5.80	122.06	118.00
26	14	1500	G	C6-C5-N7	-5.80	126.92	130.40
26	14	1662	C	C2-N3-C4	-5.80	117.00	119.90
1	13	810	C	C4-C5-C6	5.80	120.30	117.40
1	13	1408	A	C5-C6-N1	-5.80	114.80	117.70
1	13	1518	A	OP2-P-O3'	5.80	117.95	105.20
1	13	1531	A	C8-N9-C4	-5.80	103.48	105.80
26	1H	487	C	OP1-P-OP2	5.80	128.29	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1752	C	C5-C4-N4	-5.80	116.14	120.20
26	1H	1781	C	N1-C2-N3	-5.80	115.14	119.20
26	1H	1787	A	C6-N1-C2	5.80	122.08	118.60
26	1H	2379	G	N1-C2-N2	-5.80	110.98	116.20
26	1H	2592	G	N1-C2-N3	5.80	127.38	123.90
26	1H	2706	G	N1-C6-O6	5.80	123.38	119.90
26	1H	2777	G	N9-C4-C5	5.80	107.72	105.40
27	16	33	G	C5-C6-N1	5.80	114.40	111.50
1	1G	557	G	C8-N9-C4	5.80	108.72	106.40
57	3L	41	A	N1-C6-N6	-5.80	115.12	118.60
26	14	968	G	OP1-P-O3'	5.80	117.95	105.20
26	14	1685	C	C5-C4-N4	-5.80	116.14	120.20
26	14	1756	G	N9-C4-C5	5.80	107.72	105.40
26	14	1831	G	C6-N1-C2	-5.80	121.62	125.10
26	14	1838	C	C2-N3-C4	5.80	122.80	119.90
26	14	2463	C	N1-C2-O2	-5.80	115.42	118.90
27	1J	56	G	N1-C6-O6	5.80	123.38	119.90
1	13	722	A	O5'-P-OP2	5.79	117.65	110.70
22	1K	27	G	N1-C6-O6	-5.79	116.42	119.90
26	1H	263	C	C6-N1-C1'	-5.79	113.84	120.80
26	1H	1122	G	N3-C4-C5	5.79	131.50	128.60
26	1H	1124	C	C5-C6-N1	-5.79	118.10	121.00
26	14	1470	G	OP2-P-O3'	5.79	117.95	105.20
1	13	266	G	N7-C8-N9	5.79	116.00	113.10
26	1H	942	G	C2-N3-C4	5.79	114.80	111.90
26	1H	1272	A	C8-N9-C4	-5.79	103.48	105.80
26	1H	1808	U	N3-C2-O2	5.79	126.26	122.20
1	1G	866	C	C5-C6-N1	5.79	123.90	121.00
1	1G	890	G	C6-C5-N7	5.79	133.88	130.40
26	14	934	G	C5-N7-C8	5.79	107.20	104.30
26	14	938	G	C8-N9-C4	5.79	108.72	106.40
26	14	2163	C	N1-C2-O2	5.79	122.38	118.90
26	14	2610	C	C6-N1-C1'	-5.79	113.85	120.80
1	13	411	A	O5'-P-OP2	-5.79	100.49	105.70
26	1H	194	G	OP1-P-OP2	-5.79	110.91	119.60
26	1H	583	G	C8-N9-C4	-5.79	104.08	106.40
26	1H	956	G	O4'-C1'-N9	5.79	112.83	108.20
26	1H	1835	G	N1-C6-O6	-5.79	116.42	119.90
26	1H	1895	C	N3-C2-O2	5.79	125.95	121.90
27	16	19	G	C2-N3-C4	-5.79	109.00	111.90
1	1G	617	G	N3-C2-N2	-5.79	115.85	119.90
1	1G	809	G	N3-C4-C5	5.79	131.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2L	27	G	N9-C4-C5	-5.79	103.08	105.40
26	14	1834	U	OP2-P-O3'	5.79	117.94	105.20
26	14	2218	G	N9-C4-C5	5.79	107.72	105.40
26	14	2363	C	C5-C4-N4	-5.79	116.14	120.20
26	14	2478	A	C8-N9-C4	5.79	108.12	105.80
1	13	108	G	C5-C6-O6	-5.79	125.13	128.60
1	13	804	U	C5-C6-N1	-5.79	119.81	122.70
26	1H	412	A	N7-C8-N9	-5.79	110.91	113.80
26	1H	1332	G	C4-N9-C1'	5.79	134.03	126.50
26	1H	1651	G	C5-C6-N1	-5.79	108.61	111.50
26	1H	2487	G	N1-C2-N2	5.79	121.41	116.20
26	1H	2719	G	OP1-P-OP2	-5.79	110.92	119.60
26	14	868	U	N3-C4-C5	-5.79	111.13	114.60
26	14	2238	G	C4-C5-C6	-5.79	115.33	118.80
1	13	698	G	C6-C5-N7	-5.79	126.93	130.40
1	13	802	A	N9-C4-C5	-5.79	103.48	105.80
26	1H	1384	A	C5-C6-N1	5.79	120.59	117.70
26	1H	1579	A	N1-C2-N3	5.79	132.19	129.30
26	1H	1902	C	N3-C2-O2	5.79	125.95	121.90
26	1H	2065	C	OP1-P-O3'	5.79	117.94	105.20
26	1H	2308	G	N1-C6-O6	5.79	123.37	119.90
26	1H	2321	G	OP2-P-O3'	5.79	117.94	105.20
26	1H	2404	C	N3-C4-N4	-5.79	113.95	118.00
26	1H	2598	A	N7-C8-N9	-5.79	110.91	113.80
26	1H	2696	U	O5'-P-OP1	-5.79	100.49	105.70
1	1G	109	A	C5-C6-N6	-5.79	119.07	123.70
1	1G	630	G	N3-C4-N9	5.79	129.47	126.00
26	14	606	U	N3-C2-O2	-5.79	118.15	122.20
26	14	662	G	C4-C5-N7	-5.79	108.48	110.80
26	14	748	G	OP1-P-OP2	5.79	128.28	119.60
26	14	988	A	N7-C8-N9	5.79	116.69	113.80
26	14	1831	G	C4-C5-C6	5.79	122.27	118.80
26	14	2015	A	O5'-P-OP1	-5.79	100.49	105.70
26	14	2276	G	C2-N3-C4	-5.79	109.00	111.90
26	14	2746	U	N3-C4-O4	-5.79	115.35	119.40
27	1J	52	A	C4-C5-C6	-5.79	114.11	117.00
1	13	228	A	C8-N9-C4	5.79	108.11	105.80
1	13	464	G	N7-C8-N9	5.79	115.99	113.10
1	13	538	G	C5-C6-N1	5.79	114.39	111.50
26	1H	741	G	N3-C4-C5	-5.79	125.71	128.60
26	1H	1265	A	O5'-P-OP1	-5.79	100.49	105.70
26	1H	2674	G	C5-N7-C8	5.79	107.19	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	970	C	C5-C4-N4	-5.79	116.15	120.20
26	14	752	A	C8-N9-C4	-5.79	103.48	105.80
26	14	756	C	C4-C5-C6	5.79	120.29	117.40
26	14	830	G	N9-C4-C5	-5.79	103.08	105.40
26	14	852	G	O5'-P-OP2	-5.79	100.49	105.70
26	14	1019	U	C5-C6-N1	-5.79	119.81	122.70
26	14	1754	C	N3-C4-C5	5.79	124.22	121.90
26	14	2003	G	N7-C8-N9	5.79	115.99	113.10
1	13	1343	G	C2-N3-C4	-5.79	109.01	111.90
1	13	1408	A	C4-C5-C6	5.79	119.89	117.00
26	1H	978	G	C2-N3-C4	-5.79	109.01	111.90
26	1H	984	A	C5-C6-N1	5.79	120.59	117.70
26	1H	1559	G	N3-C4-N9	-5.79	122.53	126.00
26	1H	2028	U	N1-C2-O2	-5.79	118.75	122.80
26	1H	2039	C	N3-C4-N4	5.79	122.05	118.00
26	1H	2183	C	C6-N1-C2	-5.79	117.99	120.30
26	1H	2215	G	C5-C6-O6	5.79	132.07	128.60
26	1H	2228	G	C4-C5-C6	5.79	122.27	118.80
26	1H	2655	G	C6-C5-N7	5.79	133.87	130.40
27	16	109	G	OP2-P-O3'	5.79	117.93	105.20
26	14	83	G	N1-C6-O6	5.79	123.37	119.90
26	14	414	C	N3-C4-C5	5.79	124.21	121.90
26	14	1596	A	N1-C2-N3	5.79	132.19	129.30
26	14	2196	C	N3-C4-C5	-5.79	119.59	121.90
26	14	2839	G	OP1-P-OP2	5.79	128.28	119.60
27	1J	54	G	O5'-P-OP2	5.79	117.64	110.70
27	1J	98	G	N3-C4-C5	5.79	131.49	128.60
1	13	713	G	C6-C5-N7	5.78	133.87	130.40
1	13	769	G	N3-C2-N2	5.78	123.95	119.90
1	13	1011	G	C8-N9-C4	5.78	108.71	106.40
23	2K	66	C	C5-C4-N4	5.78	124.25	120.20
26	1H	270(Y)	G	N1-C6-O6	5.78	123.37	119.90
26	1H	670	A	C4-C5-N7	5.78	113.59	110.70
26	1H	994	C	OP1-P-O3'	5.78	117.92	105.20
26	1H	1330	C	N1-C2-O2	-5.78	115.43	118.90
44	E8	77	ASP	CB-CG-OD2	5.78	123.50	118.30
1	1G	919	A	N7-C8-N9	-5.78	110.91	113.80
1	1G	1285	A	P-O3'-C3'	5.78	126.64	119.70
26	14	543	C	C6-N1-C1'	-5.78	113.86	120.80
26	14	948	G	O5'-P-OP1	-5.78	100.50	105.70
26	14	1125	G	N3-C2-N2	-5.78	115.85	119.90
26	14	1342	A	C5-C6-N6	-5.78	119.07	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2248	C	N3-C2-O2	-5.78	117.85	121.90
26	14	2494	G	C5-C6-N1	-5.78	108.61	111.50
26	14	2718	G	N1-C6-O6	5.78	123.37	119.90
26	1H	113	G	N3-C4-C5	5.78	131.49	128.60
26	1H	1248	G	N3-C4-N9	-5.78	122.53	126.00
26	1H	1920	C	N3-C4-N4	-5.78	113.95	118.00
1	1G	67	C	O5'-P-OP2	-5.78	100.50	105.70
26	14	2238	G	C5'-C4'-O4'	5.78	116.04	109.10
26	14	2597	G	O5'-P-OP1	5.78	117.64	110.70
1	13	568	G	C2-N3-C4	5.78	114.79	111.90
1	13	718	G	O5'-P-OP2	5.78	117.64	110.70
1	13	802	A	C2-N3-C4	-5.78	107.71	110.60
1	13	1426	C	N1-C2-O2	-5.78	115.43	118.90
26	1H	469	G	OP2-P-O3'	5.78	117.92	105.20
26	1H	845	G	N1-C2-N2	-5.78	111.00	116.20
26	1H	846	C	O5'-P-OP1	-5.78	100.50	105.70
26	1H	902	C	N3-C4-N4	-5.78	113.95	118.00
26	1H	1698	A	N9-C4-C5	-5.78	103.49	105.80
26	1H	2266	A	C5-C6-N6	-5.78	119.08	123.70
26	1H	2275	C	O4'-C1'-N1	-5.78	103.58	108.20
26	1H	2638	G	O5'-P-OP2	5.78	117.64	110.70
1	1G	111	G	C5-N7-C8	-5.78	101.41	104.30
1	1G	486	U	C6-N1-C2	-5.78	117.53	121.00
26	14	834	C	C2-N1-C1'	-5.78	112.44	118.80
26	14	1809	A	C2-N3-C4	-5.78	107.71	110.60
26	14	2393	A	C2-N3-C4	-5.78	107.71	110.60
26	14	2717	G	C5-C6-O6	-5.78	125.13	128.60
26	14	2844	G	C8-N9-C4	5.78	108.71	106.40
26	14	2868	A	C5-C6-N6	-5.78	119.08	123.70
26	14	2876	G	C2-N3-C4	-5.78	109.01	111.90
1	13	1199	U	C6-N1-C2	-5.78	117.53	121.00
26	1H	785	G	N9-C4-C5	5.78	107.71	105.40
26	1H	1336	A	C8-N9-C4	-5.78	103.49	105.80
26	1H	1549	C	C6-N1-C2	5.78	122.61	120.30
26	1H	2252	G	C2-N3-C4	-5.78	109.01	111.90
26	1H	2302	G	N1-C6-O6	-5.78	116.43	119.90
26	1H	2442	C	C5-C6-N1	-5.78	118.11	121.00
1	1G	816	A	C5-C6-N1	5.78	120.59	117.70
23	2L	10	G	OP1-P-OP2	-5.78	110.93	119.60
26	14	399	G	N3-C2-N2	5.78	123.95	119.90
26	14	694	U	O5'-P-OP1	5.78	117.64	110.70
26	14	839	U	C2-N3-C4	-5.78	123.53	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	907	U	C5-C4-O4	-5.78	122.43	125.90
26	14	1167	U	N3-C2-O2	5.78	126.25	122.20
1	13	402	G	N7-C8-N9	-5.78	110.21	113.10
1	13	633	G	C5-C6-O6	-5.78	125.13	128.60
1	13	721	G	C6-C5-N7	-5.78	126.93	130.40
1	13	1502	A	N9-C1'-C2'	5.78	121.51	114.00
26	1H	470	A	N9-C4-C5	-5.78	103.49	105.80
26	1H	470	A	C5-C6-N6	-5.78	119.08	123.70
26	1H	739	G	N1-C6-O6	5.78	123.37	119.90
26	1H	1399	C	OP2-P-O3'	5.78	117.91	105.20
26	1H	1627	G	C5-C6-N1	-5.78	108.61	111.50
26	1H	1630(A)	C	C5-C6-N1	-5.78	118.11	121.00
26	1H	2495	G	N3-C4-N9	-5.78	122.53	126.00
26	1H	2776	A	OP1-P-O3'	5.78	117.91	105.20
1	1G	108	G	C5-N7-C8	-5.78	101.41	104.30
1	1G	680	C	OP2-P-O3'	5.78	117.91	105.20
1	1G	855	G	C5-C6-N1	5.78	114.39	111.50
1	1G	1077	G	N9-C4-C5	-5.78	103.09	105.40
26	14	447	A	OP1-P-OP2	-5.78	110.94	119.60
26	14	917	A	O5'-P-OP2	5.78	117.63	110.70
26	14	2287	A	C5-N7-C8	-5.78	101.01	103.90
26	14	2330	G	OP1-P-OP2	-5.78	110.93	119.60
26	14	2644	G	C8-N9-C4	-5.78	104.09	106.40
1	13	585	G	N1-C2-N2	-5.78	111.00	116.20
1	13	668	G	N3-C4-C5	-5.78	125.71	128.60
1	13	875	C	OP1-P-O3'	5.78	117.91	105.20
1	13	908	A	N1-C6-N6	-5.78	115.13	118.60
1	13	1144	G	N3-C2-N2	-5.78	115.86	119.90
26	1H	211	A	C4-C5-N7	5.78	113.59	110.70
26	1H	550	G	OP2-P-O3'	5.78	117.91	105.20
26	1H	560	C	N1-C2-O2	-5.78	115.44	118.90
26	1H	784	A	C5-C6-N6	5.78	128.32	123.70
26	1H	1621	U	N3-C2-O2	5.78	126.24	122.20
26	1H	1918	A	C5-C6-N6	5.78	128.32	123.70
26	1H	1937	A	C5-N7-C8	5.78	106.79	103.90
26	1H	2075	U	N1-C2-N3	5.78	118.36	114.90
26	1H	2084	C	N1-C2-O2	-5.78	115.44	118.90
26	1H	2600	A	C6-C5-N7	5.78	136.34	132.30
27	16	26	A	C5-C6-N6	5.78	128.32	123.70
26	14	375	C	N1-C2-O2	-5.78	115.44	118.90
26	14	1811	G	O5'-P-OP1	5.78	117.63	110.70
26	14	2617	C	C5-C6-N1	-5.78	118.11	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	138	G	C2-N3-C4	-5.77	109.01	111.90
1	13	925	G	C5-N7-C8	5.77	107.19	104.30
26	1H	352	G	OP1-P-OP2	5.77	128.26	119.60
26	1H	699	A	C5-C6-N1	5.77	120.59	117.70
26	1H	1268	A	N1-C2-N3	5.77	132.19	129.30
26	1H	1612	C	N3-C4-N4	5.77	122.04	118.00
26	1H	2273	A	C5-C6-N6	5.77	128.32	123.70
26	1H	2712(A)	A	N7-C8-N9	5.77	116.69	113.80
1	1G	1441	G	O5'-P-OP1	-5.77	100.50	105.70
26	14	767	U	N3-C4-O4	-5.77	115.36	119.40
26	14	910	A	OP2-P-O3'	5.77	117.90	105.20
1	13	186(B)	C	N1-C2-O2	5.77	122.36	118.90
1	13	897	C	N3-C4-N4	5.77	122.04	118.00
1	13	1389	C	N1-C2-O2	-5.77	115.44	118.90
26	1H	1003	G	C4-C5-C6	5.77	122.26	118.80
26	1H	1248	G	N3-C4-C5	5.77	131.49	128.60
26	1H	1543	A	C2-N3-C4	-5.77	107.71	110.60
26	1H	2062	A	C8-N9-C4	5.77	108.11	105.80
26	1H	2284	C	C5-C6-N1	-5.77	118.11	121.00
26	1H	2381	C	OP2-P-O3'	5.77	117.90	105.20
1	1G	1188	A	C8-N9-C4	5.77	108.11	105.80
26	14	246	C	N3-C4-N4	5.77	122.04	118.00
26	14	678	C	C5-C4-N4	-5.77	116.16	120.20
26	14	691	C	N3-C2-O2	5.77	125.94	121.90
26	14	2070	G	N1-C6-O6	-5.77	116.44	119.90
26	14	2247	A	C4-C5-N7	-5.77	107.81	110.70
1	13	628	G	N1-C6-O6	5.77	123.36	119.90
1	13	1408	A	N1-C6-N6	5.77	122.06	118.60
26	1H	768	G	C4-C5-C6	5.77	122.26	118.80
26	1H	906	G	N3-C2-N2	-5.77	115.86	119.90
26	1H	1622	G	C4-C5-C6	5.77	122.26	118.80
26	1H	1888	G	C4-N9-C1'	5.77	134.00	126.50
26	1H	1894	C	C5-C4-N4	-5.77	116.16	120.20
26	1H	2072	G	O5'-P-OP2	-5.77	100.51	105.70
27	16	29	A	O5'-P-OP1	5.77	117.62	110.70
1	1G	280	C	OP1-P-O3'	5.77	117.90	105.20
1	1G	362	G	N3-C2-N2	-5.77	115.86	119.90
1	1G	573	A	N3-C4-C5	-5.77	122.76	126.80
1	13	254	G	O5'-P-OP1	-5.77	100.51	105.70
1	13	1323	G	C5-C6-O6	-5.77	125.14	128.60
1	13	1405	G	C4-C5-N7	-5.77	108.49	110.80
26	1H	585	G	N1-C2-N2	-5.77	111.01	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1300	U	C6-N1-C2	-5.77	117.54	121.00
26	1H	1426	G	C5-N7-C8	-5.77	101.42	104.30
26	1H	1854	A	C2-N3-C4	5.77	113.48	110.60
26	1H	2046	G	O5'-P-OP2	-5.77	100.51	105.70
26	1H	2333	A	N3-C4-N9	5.77	132.02	127.40
26	1H	2359	C	N1-C2-N3	5.77	123.24	119.20
26	1H	2867	G	C5-C6-O6	5.77	132.06	128.60
27	16	87	G	C4-N9-C1'	-5.77	119.00	126.50
1	1G	780	A	C8-N9-C4	-5.77	103.49	105.80
1	1G	896	C	C6-N1-C2	5.77	122.61	120.30
1	1G	1157	A	P-O3'-C3'	5.77	126.62	119.70
26	14	256	A	C5-C6-N1	-5.77	114.82	117.70
26	14	1319	G	C2-N3-C4	-5.77	109.02	111.90
26	14	1598	C	OP1-P-OP2	-5.77	110.95	119.60
26	14	1814	G	OP2-P-O3'	5.77	117.89	105.20
26	14	2279	G	N1-C2-N2	-5.77	111.01	116.20
26	14	2331	G	N3-C4-N9	5.77	129.46	126.00
26	14	2385	C	N3-C4-N4	5.77	122.04	118.00
26	14	2817	G	C8-N9-C4	5.77	108.71	106.40
26	14	2868	A	C6-C5-N7	-5.77	128.26	132.30
1	13	107	G	N1-C6-O6	-5.77	116.44	119.90
1	13	617	G	C6-N1-C2	5.77	128.56	125.10
26	1H	139	G	N3-C4-C5	-5.77	125.72	128.60
26	1H	182	A	C4-C5-N7	5.77	113.58	110.70
26	1H	1107	G	N3-C4-C5	-5.77	125.72	128.60
26	1H	2022	U	C6-N1-C2	5.77	124.46	121.00
26	1H	2093	G	C2-N3-C4	-5.77	109.02	111.90
26	1H	2235	G	N3-C2-N2	5.77	123.94	119.90
26	1H	2426	A	O5'-P-OP1	5.77	117.62	110.70
26	1H	2787	C	C2-N1-C1'	5.77	125.14	118.80
26	14	45	G	C8-N9-C4	-5.77	104.09	106.40
26	14	380	U	N3-C4-C5	-5.77	111.14	114.60
26	14	431	U	N1-C2-O2	-5.77	118.76	122.80
26	14	442	G	N3-C2-N2	-5.77	115.86	119.90
26	14	656	G	C5-C6-N1	-5.77	108.62	111.50
26	14	711	G	C5-C6-N1	-5.77	108.62	111.50
26	14	1916	A	C6-N1-C2	-5.77	115.14	118.60
1	13	574	A	O5'-P-OP1	-5.77	100.51	105.70
23	2K	11	A	OP2-P-O3'	5.77	117.89	105.20
26	1H	283	A	C4-C5-N7	-5.77	107.82	110.70
26	1H	466	A	N3-C4-N9	5.77	132.01	127.40
26	1H	734	A	N3-C4-C5	5.77	130.84	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1811	G	OP2-P-O3'	5.77	117.88	105.20
26	1H	2052	G	C5-C6-O6	-5.77	125.14	128.60
1	1G	863	U	O4'-C1'-N1	5.77	112.81	108.20
27	1J	20	C	N3-C4-N4	5.77	122.04	118.00
27	1J	42	C	O5'-P-OP1	-5.77	100.51	105.70
1	13	318	G	N1-C2-N3	5.76	127.36	123.90
1	13	402	G	C8-N9-C4	5.76	108.71	106.40
1	13	1222	G	O5'-P-OP2	-5.76	100.51	105.70
1	13	1285	A	O4'-C1'-N9	-5.76	103.59	108.20
1	13	1337	G	N3-C4-N9	-5.76	122.54	126.00
1	13	1474	G	OP1-P-OP2	-5.76	110.95	119.60
26	1H	767	U	C4-C5-C6	5.76	123.16	119.70
26	1H	1718	G	C4-C5-N7	-5.76	108.49	110.80
26	1H	2536	G	O5'-P-OP2	5.76	117.62	110.70
27	16	88	C	O5'-P-OP2	-5.76	100.51	105.70
29	11	244	ARG	NE-CZ-NH2	-5.76	117.42	120.30
25	4L	10	G	C4-C5-N7	5.76	113.11	110.80
26	14	567	A	C4-C5-N7	5.76	113.58	110.70
26	14	1274	A	C6-N1-C2	-5.76	115.14	118.60
26	14	1513	C	C5-C4-N4	-5.76	116.17	120.20
26	14	1556	C	N3-C4-N4	-5.76	113.97	118.00
26	14	2079	U	N1-C2-N3	5.76	118.36	114.90
26	14	2712	U	C6-N1-C2	5.76	124.46	121.00
1	13	824	C	N3-C2-O2	5.76	125.93	121.90
1	13	1267	C	O5'-P-OP2	-5.76	100.51	105.70
26	1H	262	A	C8-N9-C4	5.76	108.11	105.80
26	1H	569	U	N1-C2-O2	-5.76	118.77	122.80
26	1H	794	G	N3-C2-N2	5.76	123.93	119.90
26	1H	1228	G	C6-C5-N7	-5.76	126.94	130.40
26	1H	1580	A	N9-C4-C5	-5.76	103.50	105.80
26	14	951	C	O5'-P-OP2	5.76	117.61	110.70
26	14	2861	G	OP1-P-OP2	5.76	128.25	119.60
1	13	41	G	O5'-P-OP1	5.76	117.61	110.70
1	13	905	U	N3-C4-C5	5.76	118.06	114.60
1	13	1506	U	O5'-P-OP2	-5.76	100.52	105.70
26	1H	486	C	OP2-P-O3'	5.76	117.88	105.20
26	1H	539	G	N3-C4-N9	-5.76	122.54	126.00
26	1H	974	G	OP2-P-O3'	5.76	117.88	105.20
26	1H	1974	C	N3-C4-N4	-5.76	113.97	118.00
1	1G	403	C	OP2-P-O3'	5.76	117.88	105.20
23	2L	71	G	C8-N9-C4	5.76	108.70	106.40
26	14	298	G	N3-C4-C5	5.76	131.48	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	604	G	C5-C6-N1	5.76	114.38	111.50
26	14	799	G	C8-N9-C4	5.76	108.70	106.40
26	14	809	G	C4-C5-N7	-5.76	108.50	110.80
26	14	1253	A	C4-C5-C6	-5.76	114.12	117.00
26	14	1608	A	C5-C6-N1	5.76	120.58	117.70
26	14	2254	C	C6-N1-C2	5.76	122.60	120.30
26	14	2572	A	C4-C5-N7	5.76	113.58	110.70
1	13	868	C	O5'-P-OP1	5.76	117.61	110.70
22	1K	22	G	C2-N3-C4	5.76	114.78	111.90
26	1H	2076	U	C4-C5-C6	5.76	123.16	119.70
26	1H	2324	C	N3-C4-C5	5.76	124.20	121.90
26	1H	2711	A	C4-N9-C1'	-5.76	115.93	126.30
31	31	72	ARG	NE-CZ-NH1	-5.76	117.42	120.30
26	14	333	G	C6-C5-N7	-5.76	126.94	130.40
26	14	597	U	N1-C2-O2	-5.76	118.77	122.80
26	14	1378	A	OP1-P-OP2	5.76	128.24	119.60
26	14	1792	G	N1-C2-N3	5.76	127.36	123.90
26	14	2409	G	C8-N9-C4	-5.76	104.10	106.40
26	14	2677	G	OP2-P-O3'	5.76	117.87	105.20
26	14	2870	C	N3-C2-O2	-5.76	117.87	121.90
26	1H	2335	A	P-O3'-C3'	5.76	126.61	119.70
27	16	18	G	C5-C6-O6	-5.76	125.14	128.60
1	1G	1501	C	C5-C6-N1	-5.76	118.12	121.00
23	2L	40	C	N3-C4-C5	-5.76	119.60	121.90
26	14	528	A	N1-C6-N6	5.76	122.06	118.60
26	14	1603	A	C4-C5-C6	5.76	119.88	117.00
27	1J	81	G	C5-C6-O6	-5.76	125.14	128.60
1	13	1418	A	C8-N9-C4	5.76	108.10	105.80
23	2K	71	G	C2-N3-C4	-5.76	109.02	111.90
26	1H	145	G	C8-N9-C4	5.76	108.70	106.40
26	1H	306	U	C2-N3-C4	-5.76	123.55	127.00
26	1H	554	U	N1-C2-O2	-5.76	118.77	122.80
26	1H	626	U	C6-N1-C2	-5.76	117.55	121.00
26	1H	844	C	N1-C2-N3	5.76	123.23	119.20
26	1H	864	G	N3-C4-C5	-5.76	125.72	128.60
26	1H	898	C	C2-N1-C1'	5.76	125.13	118.80
26	1H	1497	U	C5-C6-N1	5.76	125.58	122.70
26	1H	1799	G	N1-C2-N3	-5.76	120.45	123.90
26	1H	2612	C	N1-C2-O2	5.76	122.35	118.90
26	1H	2637	U	C6-N1-C2	5.76	124.45	121.00
1	1G	323	U	C5-C6-N1	5.76	125.58	122.70
26	14	983	A	O5'-P-OP2	5.76	117.61	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	250	G	N3-C4-N9	-5.75	122.55	126.00
26	1H	2010	G	OP1-P-O3'	5.75	117.86	105.20
26	1H	2848	G	C6-N1-C2	-5.75	121.65	125.10
1	1G	576	G	C8-N9-C1'	-5.75	119.52	127.00
26	14	2644	G	N7-C8-N9	5.75	115.98	113.10
1	13	703	G	C4-N9-C1'	5.75	133.98	126.50
26	1H	36	G	C6-C5-N7	5.75	133.85	130.40
26	1H	175	G	C5-N7-C8	-5.75	101.42	104.30
26	1H	422	A	C6-C5-N7	-5.75	128.27	132.30
26	1H	606	U	O5'-P-OP1	5.75	117.60	110.70
26	1H	651	G	C5-N7-C8	-5.75	101.42	104.30
26	1H	1800	C	C5-C4-N4	5.75	124.23	120.20
26	1H	1822	G	N1-C2-N2	5.75	121.38	116.20
26	1H	1826	G	C6-N1-C2	5.75	128.55	125.10
26	1H	2061	G	C6-N1-C2	-5.75	121.65	125.10
26	1H	2647	U	C2-N3-C4	-5.75	123.55	127.00
1	1G	915	A	C5-C6-N1	5.75	120.58	117.70
26	14	143	C	N1-C2-O2	5.75	122.35	118.90
26	14	964	C	P-O3'-C3'	-5.75	112.80	119.70
26	14	1548	C	OP1-P-OP2	-5.75	110.97	119.60
26	14	2570	G	C4-C5-N7	5.75	113.10	110.80
26	14	2643	G	N1-C2-N3	5.75	127.35	123.90
1	13	741	G	N1-C2-N3	5.75	127.35	123.90
1	13	809	G	OP1-P-OP2	5.75	128.23	119.60
26	1H	205	G	N1-C2-N3	-5.75	120.45	123.90
26	1H	245	G	C4-C5-C6	5.75	122.25	118.80
26	1H	274	G	N7-C8-N9	5.75	115.98	113.10
26	1H	397	G	C4-C5-N7	5.75	113.10	110.80
26	1H	480	A	C4-C5-N7	5.75	113.58	110.70
26	1H	592	G	OP2-P-O3'	5.75	117.86	105.20
26	1H	725	G	C5-C6-O6	-5.75	125.15	128.60
26	1H	2228	G	N1-C2-N2	-5.75	111.02	116.20
26	1H	2326	C	C5-C6-N1	5.75	123.88	121.00
26	1H	2333	A	C4-C5-N7	-5.75	107.82	110.70
26	1H	2576	G	N3-C4-C5	5.75	131.48	128.60
26	1H	2723	C	C5-C4-N4	5.75	124.22	120.20
1	1G	550	G	N3-C2-N2	-5.75	115.87	119.90
1	1G	620	C	N3-C2-O2	-5.75	117.87	121.90
1	1G	975	A	C5-C6-N1	-5.75	114.82	117.70
1	1G	1482	G	N1-C2-N2	-5.75	111.02	116.20
26	14	1311	G	N1-C2-N2	-5.75	111.02	116.20
26	14	1393	A	C4-C5-C6	-5.75	114.12	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1819	A	C5-C6-N6	-5.75	119.10	123.70
26	14	1825	A	N1-C6-N6	-5.75	115.15	118.60
26	14	1945	G	OP1-P-OP2	5.75	128.23	119.60
1	13	340	U	N1-C2-N3	5.75	118.35	114.90
1	13	581	G	N1-C6-O6	5.75	123.35	119.90
1	13	1306	A	OP1-P-OP2	5.75	128.22	119.60
26	1H	1572	A	C6-N1-C2	-5.75	115.15	118.60
26	1H	1973	G	N1-C2-N2	-5.75	111.03	116.20
26	1H	2571	C	C4-C5-C6	5.75	120.28	117.40
29	11	242	ARG	NE-CZ-NH2	5.75	123.17	120.30
1	1G	331	G	C8-N9-C4	-5.75	104.10	106.40
26	14	197	A	OP1-P-O3'	-5.75	92.55	105.20
26	14	632	A	C6-C5-N7	-5.75	128.28	132.30
1	13	582	U	C5-C4-O4	5.75	129.35	125.90
1	13	651	C	N3-C2-O2	-5.75	117.88	121.90
26	1H	429	A	O5'-P-OP1	-5.75	100.53	105.70
26	1H	473	G	C8-N9-C4	5.75	108.70	106.40
26	1H	859	G	C8-N9-C1'	5.75	134.47	127.00
26	1H	1142	U	OP1-P-O3'	5.75	117.85	105.20
26	1H	2290	G	C8-N9-C4	5.75	108.70	106.40
26	1H	2595	G	N9-C4-C5	-5.75	103.10	105.40
1	1G	304	U	N1-C2-O2	-5.75	118.78	122.80
1	1G	509	A	N1-C6-N6	5.75	122.05	118.60
26	14	207	A	OP1-P-OP2	5.75	128.22	119.60
26	14	558	G	N1-C6-O6	5.75	123.35	119.90
26	14	1370	C	N3-C4-C5	5.75	124.20	121.90
26	14	1803	A	C4-C5-C6	-5.75	114.13	117.00
26	14	2383	G	C8-N9-C1'	-5.75	119.53	127.00
26	14	2528	U	N1-C2-N3	5.75	118.35	114.90
1	13	492	G	C4-C5-N7	5.75	113.10	110.80
1	13	688	G	C8-N9-C4	5.75	108.70	106.40
1	13	1417	G	N9-C4-C5	5.75	107.70	105.40
26	1H	258	G	N3-C2-N2	5.75	123.92	119.90
26	1H	975	G	C4-C5-C6	-5.75	115.35	118.80
26	1H	1272	A	OP1-P-O3'	5.75	117.84	105.20
1	1G	481	G	C4-N9-C1'	5.75	133.97	126.50
1	1G	1200	C	C2-N1-C1'	5.75	125.12	118.80
1	1G	1474	G	C4-C5-N7	5.75	113.10	110.80
26	14	480	A	C5-C6-N6	5.75	128.30	123.70
26	14	1296	G	C5-C6-O6	-5.75	125.15	128.60
26	14	1666	G	C5-C6-O6	5.75	132.05	128.60
26	14	1943	U	N1-C2-O2	-5.75	118.78	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2070	G	C2-N3-C4	-5.75	109.03	111.90
26	14	2136	C	C6-N1-C2	-5.75	118.00	120.30
1	13	509	A	P-O3'-C3'	5.75	126.59	119.70
1	13	1304	G	C4-C5-N7	-5.75	108.50	110.80
26	1H	815	C	N3-C2-O2	5.75	125.92	121.90
26	1H	1849	G	C5-C6-N1	-5.75	108.63	111.50
26	1H	1944	U	C5-C6-N1	-5.75	119.83	122.70
26	1H	2352	A	N1-C6-N6	-5.75	115.15	118.60
26	14	834	C	OP2-P-O3'	5.75	117.84	105.20
1	13	63	C	C5-C6-N1	5.74	123.87	121.00
1	13	219	C	C5-C6-N1	5.74	123.87	121.00
1	13	439	A	C4-C5-C6	5.74	119.87	117.00
26	1H	182	A	N3-C4-C5	5.74	130.82	126.80
26	1H	265	A	C4-C5-N7	5.74	113.57	110.70
26	1H	372	G	C6-C5-N7	5.74	133.85	130.40
26	1H	919	G	N9-C4-C5	5.74	107.70	105.40
26	1H	940	G	N1-C2-N3	5.74	127.35	123.90
26	1H	973	A	C5-C6-N1	-5.74	114.83	117.70
26	1H	1367	A	N1-C6-N6	5.74	122.05	118.60
26	1H	1601	G	C5-C6-N1	-5.74	108.63	111.50
26	1H	1849	G	O5'-P-OP1	-5.74	100.53	105.70
26	1H	2739	U	C4-C5-C6	5.74	123.15	119.70
1	1G	482	A	N1-C2-N3	5.74	132.17	129.30
1	1G	863	U	C6-N1-C2	-5.74	117.55	121.00
1	1G	1511	G	C4-C5-C6	5.74	122.25	118.80
26	14	1333	C	O5'-P-OP1	5.74	117.59	110.70
26	14	1357	U	C5-C6-N1	-5.74	119.83	122.70
26	14	1405	U	N1-C2-N3	5.74	118.35	114.90
26	14	1567	A	C4-C5-C6	5.74	119.87	117.00
26	14	1767	C	C5-C6-N1	-5.74	118.13	121.00
26	14	1861	G	C6-C5-N7	-5.74	126.95	130.40
26	14	2262	U	N3-C4-O4	-5.74	115.38	119.40
1	13	319	G	OP2-P-O3'	5.74	117.83	105.20
1	13	828	A	N9-C4-C5	5.74	108.10	105.80
26	1H	457	A	O4'-C1'-N9	-5.74	103.61	108.20
1	1G	134	A	C5-N7-C8	-5.74	101.03	103.90
1	1G	428	G	OP1-P-OP2	5.74	128.21	119.60
1	1G	932	C	N1-C2-O2	5.74	122.34	118.90
26	14	771	G	OP1-P-O3'	5.74	117.83	105.20
26	14	1777	U	C4-C5-C6	5.74	123.14	119.70
26	14	1826	G	O4'-C1'-N9	5.74	112.79	108.20
26	14	1908	C	C4-C5-C6	5.74	120.27	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	984	C	C2-N1-C1'	-5.74	112.48	118.80
1	13	1378	C	C4-C5-C6	-5.74	114.53	117.40
23	2K	9	G	N1-C2-N3	-5.74	120.46	123.90
26	1H	138	G	OP1-P-O3'	5.74	117.83	105.20
26	1H	428	A	N9-C4-C5	5.74	108.10	105.80
26	1H	830	G	N7-C8-N9	5.74	115.97	113.10
26	1H	947	G	N1-C2-N2	5.74	121.37	116.20
26	1H	1403	C	C2-N3-C4	5.74	122.77	119.90
26	1H	1665	A	OP1-P-O3'	5.74	117.83	105.20
26	1H	2056	G	N3-C4-C5	-5.74	125.73	128.60
26	1H	2880	C	C6-N1-C2	-5.74	118.00	120.30
26	14	879	G	N7-C8-N9	5.74	115.97	113.10
26	14	1236	G	C5-C6-N1	-5.74	108.63	111.50
26	14	1757	U	N1-C2-N3	-5.74	111.45	114.90
26	14	1896	G	N9-C4-C5	5.74	107.70	105.40
27	1J	98	G	C5-C6-N1	-5.74	108.63	111.50
1	13	1190	G	OP2-P-O3'	5.74	117.83	105.20
1	13	1333	A	C2-N3-C4	5.74	113.47	110.60
26	1H	95	G	N3-C4-C5	-5.74	125.73	128.60
26	1H	1440	G	N1-C2-N3	5.74	127.34	123.90
26	1H	2079	U	OP1-P-OP2	5.74	128.21	119.60
26	1H	2276	G	N1-C2-N3	5.74	127.34	123.90
26	1H	2286	A	OP1-P-O3'	5.74	117.83	105.20
1	1G	522	C	C6-N1-C2	5.74	122.59	120.30
1	1G	633	G	C5-C6-N1	-5.74	108.63	111.50
1	1G	718	G	C4-C5-N7	5.74	113.09	110.80
26	14	831	G	OP1-P-OP2	-5.74	110.99	119.60
26	14	914	C	N3-C4-C5	-5.74	119.61	121.90
26	14	1982	C	N3-C4-C5	-5.74	119.60	121.90
26	14	2707	G	C4-C5-N7	5.74	113.09	110.80
1	13	129	U	C6-N1-C2	-5.74	117.56	121.00
26	1H	1552	G	O5'-P-OP1	-5.74	100.54	105.70
26	1H	2048	G	N1-C2-N2	5.74	121.36	116.20
1	1G	553	A	O5'-P-OP2	-5.74	100.54	105.70
26	14	782	A	N3-C4-C5	-5.74	122.78	126.80
26	14	1688	U	N3-C4-C5	-5.74	111.16	114.60
1	13	409	G	C4-C5-N7	-5.74	108.51	110.80
1	13	560	U	OP1-P-OP2	5.74	128.20	119.60
1	13	670	G	OP1-P-OP2	5.74	128.20	119.60
1	13	1309	G	N9-C4-C5	-5.74	103.11	105.40
26	1H	71	A	N3-C4-C5	5.74	130.81	126.80
26	1H	125	G	N3-C4-N9	5.74	129.44	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	611	C	C2-N3-C4	-5.74	117.03	119.90
26	1H	1652	A	N1-C6-N6	5.74	122.04	118.60
26	1H	2237	G	C5-C6-N1	-5.74	108.63	111.50
26	1H	2483	C	C4-C5-C6	-5.74	114.53	117.40
26	1H	2509	G	N3-C4-N9	5.74	129.44	126.00
1	1G	29	G	C5-C6-O6	5.74	132.04	128.60
1	1G	144	G	N3-C4-C5	-5.74	125.73	128.60
1	1G	513	C	N3-C4-N4	5.74	122.02	118.00
1	1G	800	G	C6-C5-N7	-5.74	126.96	130.40
1	1G	938	A	C5-N7-C8	-5.74	101.03	103.90
26	14	116	C	C4-C5-C6	5.74	120.27	117.40
26	14	260	G	N1-C6-O6	-5.74	116.46	119.90
26	14	740	U	C2-N3-C4	5.74	130.44	127.00
26	14	741	G	O5'-P-OP1	-5.74	100.54	105.70
26	14	1252	G	O4'-C1'-N9	-5.74	103.61	108.20
26	14	1377	G	O5'-P-OP2	-5.74	100.54	105.70
26	14	1407	C	C5-C6-N1	5.74	123.87	121.00
26	14	1757	U	N3-C2-O2	5.74	126.22	122.20
27	1J	84	C	C6-N1-C2	5.74	122.59	120.30
1	13	1381	U	N1-C2-N3	5.73	118.34	114.90
26	1H	2332	U	C2-N3-C4	5.73	130.44	127.00
1	1G	324	G	C6-N1-C2	5.73	128.54	125.10
26	14	621	A	O5'-P-OP1	-5.73	100.54	105.70
26	14	965	C	C2-N3-C4	-5.73	117.03	119.90
26	14	1519	G	C5-C6-O6	5.73	132.04	128.60
26	14	1858	G	O5'-P-OP1	5.73	117.58	110.70
26	14	1979	C	O5'-P-OP2	-5.73	100.54	105.70
26	14	2502	G	C5-N7-C8	-5.73	101.43	104.30
1	13	436	C	N3-C4-C5	-5.73	119.61	121.90
1	13	1375	A	C5-C6-N1	5.73	120.57	117.70
23	2K	67	C	C4-C5-C6	5.73	120.27	117.40
26	1H	1430	C	N1-C2-N3	5.73	123.21	119.20
26	1H	2774	C	N3-C2-O2	-5.73	117.89	121.90
27	16	7	G	OP2-P-O3'	5.73	117.81	105.20
1	1G	32	A	N7-C8-N9	5.73	116.67	113.80
1	1G	1390	U	C5-C4-O4	5.73	129.34	125.90
56	1L	69	A	P-O3'-C3'	5.73	126.58	119.70
26	14	117	G	N3-C4-N9	5.73	129.44	126.00
26	14	130	C	O5'-P-OP2	5.73	117.58	110.70
26	14	1471	A	C8-N9-C4	-5.73	103.51	105.80
26	14	2444	G	N9-C4-C5	5.73	107.69	105.40
26	14	2740	A	OP1-P-OP2	5.73	128.20	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	1J	100	G	C5-N7-C8	5.73	107.17	104.30
1	13	542	G	C5-N7-C8	-5.73	101.43	104.30
1	13	989	C	O5'-P-OP1	5.73	117.58	110.70
24	3K	35	U	O5'-P-OP2	5.73	117.58	110.70
26	1H	501	A	C2-N3-C4	-5.73	107.73	110.60
26	1H	662	G	N3-C4-N9	5.73	129.44	126.00
26	1H	663	G	C2-N3-C4	-5.73	109.03	111.90
26	1H	698	C	N1-C2-N3	-5.73	115.19	119.20
26	1H	1561	G	N9-C4-C5	5.73	107.69	105.40
26	1H	1606	G	N1-C6-O6	5.73	123.34	119.90
26	1H	1613	G	OP1-P-O3'	5.73	117.81	105.20
26	1H	2261	C	OP1-P-OP2	-5.73	111.00	119.60
26	1H	2301	C	N1-C2-O2	-5.73	115.46	118.90
26	1H	2332	U	C2-N1-C1'	-5.73	110.82	117.70
26	1H	2376	A	C5-C6-N6	-5.73	119.12	123.70
26	1H	2672	G	C6-N1-C2	-5.73	121.66	125.10
1	1G	328	C	C6-N1-C2	-5.73	118.01	120.30
26	14	697	C	OP1-P-OP2	5.73	128.20	119.60
26	14	773	U	C5-C6-N1	-5.73	119.83	122.70
26	14	1856	G	C8-N9-C1'	-5.73	119.55	127.00
1	13	57	G	N1-C6-O6	-5.73	116.46	119.90
1	13	148	G	N7-C8-N9	5.73	115.97	113.10
1	13	511	C	C2-N3-C4	-5.73	117.04	119.90
1	13	578	C	O5'-P-OP1	5.73	117.58	110.70
26	1H	952	G	OP2-P-O3'	5.73	117.80	105.20
26	1H	1390	U	C2-N3-C4	5.73	130.44	127.00
26	1H	1553	A	N7-C8-N9	-5.73	110.94	113.80
26	1H	1932	A	O5'-P-OP1	-5.73	100.54	105.70
26	1H	2367	G	C2-N3-C4	-5.73	109.03	111.90
26	1H	2645	G	N3-C4-C5	5.73	131.46	128.60
1	1G	53	A	N7-C8-N9	5.73	116.67	113.80
26	14	1138	G	N1-C6-O6	5.73	123.34	119.90
26	14	1392	A	C4-C5-N7	-5.73	107.83	110.70
1	13	244	U	N3-C4-O4	5.73	123.41	119.40
1	13	362	G	C4-C5-N7	5.73	113.09	110.80
26	1H	717	G	C4-C5-C6	5.73	122.24	118.80
26	1H	1000	A	C5-N7-C8	-5.73	101.04	103.90
26	1H	2228	G	N1-C2-N3	5.73	127.34	123.90
26	1H	2314	C	N1-C2-N3	5.73	123.21	119.20
26	1H	2418	A	N9-C4-C5	5.73	108.09	105.80
26	1H	2494	G	OP1-P-OP2	5.73	128.19	119.60
50	K8	17	SER	N-CA-C	5.73	126.47	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	617	G	C5-C6-N1	-5.73	108.64	111.50
1	1G	885	G	N1-C6-O6	-5.73	116.46	119.90
23	2L	25	U	OP1-P-OP2	5.73	128.19	119.60
26	14	83	G	C4-C5-C6	5.73	122.24	118.80
26	14	363(D)	G	C8-N9-C4	5.73	108.69	106.40
26	14	481	G	C5-N7-C8	5.73	107.16	104.30
26	14	979	G	N7-C8-N9	5.73	115.96	113.10
26	14	1209	G	C5-C6-O6	5.73	132.04	128.60
26	14	2000	G	N1-C2-N3	5.73	127.34	123.90
26	14	2377	A	N3-C4-C5	5.73	130.81	126.80
1	13	52	G	N9-C4-C5	-5.73	103.11	105.40
1	13	56	U	N3-C2-O2	-5.73	118.19	122.20
1	13	250	A	C8-N9-C4	5.73	108.09	105.80
26	1H	282	A	C5-C6-N6	5.73	128.28	123.70
26	1H	2303	G	O4'-C1'-N9	5.73	112.78	108.20
26	1H	2592	G	C4-C5-C6	5.73	122.23	118.80
26	1H	2641	G	N1-C6-O6	-5.73	116.46	119.90
1	1G	1206	G	C5-C6-O6	-5.73	125.17	128.60
26	14	1674	G	N9-C4-C5	-5.73	103.11	105.40
1	13	556	C	C5-C6-N1	5.72	123.86	121.00
1	13	1223	C	N1-C2-O2	5.72	122.33	118.90
26	1H	269	U	N3-C4-O4	5.72	123.41	119.40
26	1H	792	G	OP2-P-O3'	5.72	117.80	105.20
26	1H	1932	A	C2-N3-C4	-5.72	107.74	110.60
26	1H	2280	G	C4-N9-C1'	5.72	133.94	126.50
1	1G	4	U	C5-C4-O4	5.72	129.34	125.90
1	1G	732	C	N1-C2-O2	5.72	122.33	118.90
26	14	983	A	C8-N9-C4	-5.72	103.51	105.80
26	14	1903	G	C6-C5-N7	5.72	133.84	130.40
26	14	2240	C	C2-N3-C4	5.72	122.76	119.90
37	35	41	ARG	NE-CZ-NH1	-5.72	117.44	120.30
1	13	106	C	N1-C2-O2	-5.72	115.47	118.90
24	3K	72	C	N3-C2-O2	-5.72	117.89	121.90
26	1H	475	U	O5'-P-OP2	-5.72	100.55	105.70
26	1H	691	C	C2-N3-C4	-5.72	117.04	119.90
26	1H	874	G	O5'-P-OP1	5.72	117.57	110.70
26	1H	1162	G	C5-C6-O6	5.72	132.03	128.60
26	1H	1512	G	C5-N7-C8	5.72	107.16	104.30
26	1H	1785	A	C6-N1-C2	-5.72	115.17	118.60
26	1H	2074	U	C5-C6-N1	-5.72	119.84	122.70
26	1H	2076	U	C2-N3-C4	-5.72	123.57	127.00
26	1H	2498	C	O5'-P-OP1	5.72	117.57	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	42	G	C4-C5-N7	-5.72	108.51	110.80
1	1G	347	G	C4-C5-C6	-5.72	115.37	118.80
1	1G	601	C	O5'-P-OP2	-5.72	100.55	105.70
26	14	115	C	O5'-P-OP2	-5.72	100.55	105.70
26	14	971	C	C6-N1-C2	-5.72	118.01	120.30
26	14	1020	A	C2-N3-C4	-5.72	107.74	110.60
26	14	1443	G	N9-C4-C5	5.72	107.69	105.40
26	14	1612	C	C5-C4-N4	-5.72	116.19	120.20
26	14	1957	C	N1-C2-O2	-5.72	115.47	118.90
27	1J	98	G	C6-C5-N7	-5.72	126.97	130.40
1	13	176	C	C5-C6-N1	5.72	123.86	121.00
1	13	1255	G	O5'-P-OP1	-5.72	100.55	105.70
1	13	1265	G	C5-C6-O6	-5.72	125.17	128.60
26	14	392	C	OP2-P-O3'	5.72	117.79	105.20
26	14	1616	A	N3-C4-N9	-5.72	122.82	127.40
26	14	1690	A	C5-C6-N6	-5.72	119.12	123.70
26	14	2070	G	C5-C6-O6	5.72	132.03	128.60
26	14	2230	G	C8-N9-C4	-5.72	104.11	106.40
1	13	423	G	OP1-P-O3'	5.72	117.78	105.20
1	13	535	A	N1-C6-N6	-5.72	115.17	118.60
1	13	615	C	C6-N1-C2	5.72	122.59	120.30
1	13	864	A	O5'-P-OP1	5.72	117.56	110.70
26	1H	70	G	C8-N9-C4	-5.72	104.11	106.40
26	1H	310	A	C8-N9-C4	5.72	108.09	105.80
26	1H	1215	G	C6-N1-C2	-5.72	121.67	125.10
26	1H	1603	A	C5-N7-C8	-5.72	101.04	103.90
1	1G	28	G	C5-N7-C8	-5.72	101.44	104.30
26	14	1280	G	C5-C6-N1	-5.72	108.64	111.50
26	14	1816	G	C8-N9-C1'	5.72	134.43	127.00
26	14	2047	U	N3-C4-O4	-5.72	115.40	119.40
26	14	2263	C	OP1-P-O3'	5.72	117.78	105.20
26	14	2572	A	C2-N3-C4	-5.72	107.74	110.60
1	13	570	G	C2-N3-C4	-5.72	109.04	111.90
1	13	605	U	C5-C4-O4	5.72	129.33	125.90
26	1H	271(B)	G	N3-C4-C5	-5.72	125.74	128.60
26	1H	1833	U	C5-C6-N1	-5.72	119.84	122.70
26	1H	2319	G	C6-C5-N7	-5.72	126.97	130.40
26	1H	2343	C	C5-C6-N1	-5.72	118.14	121.00
27	16	108	C	C4-C5-C6	5.72	120.26	117.40
1	1G	65	U	C6-N1-C2	5.72	124.43	121.00
1	1G	406	G	O5'-P-OP1	-5.72	100.55	105.70
26	14	52	A	C6-N1-C2	5.72	122.03	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1194	U	C6-N1-C2	-5.72	117.57	121.00
1	13	1315	U	N3-C4-C5	-5.72	111.17	114.60
26	1H	432	A	OP1-P-OP2	-5.72	111.03	119.60
26	1H	467	G	N9-C1'-C2'	-5.72	105.71	112.00
26	1H	617	G	N3-C2-N2	5.72	123.90	119.90
26	1H	665	C	C5-C6-N1	-5.72	118.14	121.00
26	1H	913	U	N3-C4-O4	-5.72	115.40	119.40
26	1H	1571	A	C4-C5-N7	-5.72	107.84	110.70
26	1H	2385	C	N1-C2-O2	-5.72	115.47	118.90
26	1H	2787	C	C6-N1-C1'	-5.72	113.94	120.80
27	16	66	A	N3-C4-C5	-5.72	122.80	126.80
1	1G	311	C	OP1-P-O3'	-5.72	92.62	105.20
26	14	315	G	N1-C6-O6	-5.72	116.47	119.90
26	14	425	G	C8-N9-C4	5.72	108.69	106.40
26	14	578	A	C5-N7-C8	-5.72	101.04	103.90
26	14	1660	C	N1-C2-O2	5.72	122.33	118.90
26	14	2391	G	N9-C4-C5	5.72	107.69	105.40
1	13	13	U	N3-C2-O2	-5.71	118.20	122.20
1	13	296	U	O5'-P-OP1	5.71	117.56	110.70
1	13	783	C	N3-C2-O2	5.71	125.90	121.90
26	1H	656	G	N1-C6-O6	-5.71	116.47	119.90
26	1H	813	U	C2-N3-C4	-5.71	123.57	127.00
26	1H	1272	A	C5-C6-N1	5.71	120.56	117.70
26	1H	1350	C	O5'-P-OP1	-5.71	100.56	105.70
26	1H	2323	G	C2-N3-C4	-5.71	109.04	111.90
26	1H	2413	G	OP1-P-OP2	5.71	128.17	119.60
26	1H	2427	C	N1-C2-O2	-5.71	115.47	118.90
26	1H	2818	G	N3-C4-N9	-5.71	122.57	126.00
26	1H	2867	G	C5-C6-N1	-5.71	108.64	111.50
1	1G	184	G	OP2-P-O3'	5.71	117.77	105.20
1	1G	1529	G	N3-C4-N9	5.71	129.43	126.00
26	14	133	C	N3-C4-N4	-5.71	114.00	118.00
26	14	183	C	OP2-P-O3'	5.71	117.77	105.20
26	14	1621	U	N3-C2-O2	5.71	126.20	122.20
26	14	2513	G	N7-C8-N9	-5.71	110.24	113.10
26	1H	705	A	C6-C5-N7	-5.71	128.30	132.30
26	1H	752	A	C2-N3-C4	-5.71	107.74	110.60
26	1H	1155	A	C6-N1-C2	-5.71	115.17	118.60
26	1H	1429	G	OP2-P-O3'	5.71	117.77	105.20
26	1H	2688	U	C4-C5-C6	5.71	123.13	119.70
39	98	105	ARG	NE-CZ-NH1	-5.71	117.44	120.30
50	K8	61	LEU	CB-CG-CD2	-5.71	101.29	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	610	G	C5-C6-N1	-5.71	108.64	111.50
1	1G	1369	C	C6-N1-C2	5.71	122.58	120.30
1	13	31	G	N1-C2-N2	5.71	121.34	116.20
1	13	312	C	C2-N3-C4	5.71	122.75	119.90
1	13	517	G	C4-C5-N7	5.71	113.08	110.80
1	13	542	G	N9-C4-C5	-5.71	103.11	105.40
1	13	656	C	N3-C4-C5	-5.71	119.61	121.90
1	13	790	A	N3-C4-C5	-5.71	122.80	126.80
26	1H	214	G	N3-C4-C5	-5.71	125.74	128.60
26	1H	245	G	N3-C4-N9	5.71	129.43	126.00
26	1H	502	A	C4-C5-C6	5.71	119.86	117.00
26	1H	751	A	O5'-P-OP2	5.71	117.56	110.70
26	1H	811	U	C2-N3-C4	-5.71	123.57	127.00
26	1H	933	A	C5-C6-N1	5.71	120.56	117.70
26	1H	990	A	N3-C4-N9	-5.71	122.83	127.40
26	1H	2303	G	C5-C6-N1	-5.71	108.64	111.50
26	1H	2344	U	N3-C2-O2	-5.71	118.20	122.20
26	1H	2367	G	C5-C6-N1	-5.71	108.64	111.50
26	1H	2446	G	O4'-C1'-N9	5.71	112.77	108.20
26	1H	2486	G	OP1-P-O3'	5.71	117.76	105.20
26	1H	2628	C	N1-C2-N3	-5.71	115.20	119.20
1	1G	912	C	C4-C5-C6	5.71	120.25	117.40
1	1G	1236	A	OP1-P-OP2	-5.71	111.03	119.60
26	14	481	G	O5'-P-OP1	5.71	117.55	110.70
26	14	992	C	OP1-P-O3'	5.71	117.76	105.20
26	14	1468	C	N3-C4-N4	5.71	122.00	118.00
26	14	1950	G	N1-C2-N3	-5.71	120.47	123.90
26	14	1997	G	N1-C6-O6	-5.71	116.47	119.90
1	13	593	G	C8-N9-C4	-5.71	104.12	106.40
26	1H	1596	A	C5-C6-N6	-5.71	119.13	123.70
26	1H	2244	U	OP1-P-OP2	-5.71	111.03	119.60
1	1G	535	A	N1-C2-N3	5.71	132.16	129.30
26	14	577	G	N1-C2-N3	5.71	127.33	123.90
26	14	1049	C	N1-C2-O2	5.71	122.33	118.90
26	14	1629	U	C5-C4-O4	5.71	129.33	125.90
26	14	1808	U	N3-C4-C5	5.71	118.03	114.60
1	13	633	G	C2-N3-C4	-5.71	109.05	111.90
1	13	1435	G	C5-N7-C8	-5.71	101.45	104.30
26	1H	466	A	C6-N1-C2	-5.71	115.17	118.60
26	1H	627	A	C5-N7-C8	5.71	106.75	103.90
26	1H	669	G	C5-N7-C8	-5.71	101.45	104.30
26	1H	2035	G	C4-C5-N7	-5.71	108.52	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1072	G	O5'-P-OP2	-5.71	100.56	105.70
1	1G	1435	G	N1-C2-N3	5.71	127.33	123.90
26	14	1641	A	OP2-P-O3'	5.71	117.76	105.20
26	14	1857	G	C5-C6-O6	5.71	132.03	128.60
26	14	2061	G	C8-N9-C4	5.71	108.68	106.40
27	1J	16	G	C8-N9-C4	-5.71	104.12	106.40
55	M5	50	LEU	CB-CG-CD1	5.71	120.70	111.00
1	13	302	G	OP1-P-OP2	5.71	128.16	119.60
26	1H	39	C	C6-N1-C2	5.71	122.58	120.30
26	1H	508	G	C6-C5-N7	-5.71	126.98	130.40
26	1H	670	A	C2-N3-C4	5.71	113.45	110.60
26	1H	1106	G	N3-C4-C5	-5.71	125.75	128.60
26	1H	1757	U	OP1-P-O3'	5.71	117.75	105.20
26	1H	1801	G	N1-C6-O6	5.71	123.32	119.90
26	1H	2081	C	OP2-P-O3'	5.71	117.75	105.20
26	1H	2762	G	N3-C4-C5	-5.71	125.75	128.60
26	1H	2896	C	C5-C6-N1	5.71	123.85	121.00
1	1G	273	A	N7-C8-N9	5.71	116.65	113.80
1	1G	402	G	OP2-P-O3'	5.71	117.75	105.20
26	14	44	A	N1-C2-N3	5.71	132.15	129.30
26	14	211	A	OP2-P-O3'	5.71	117.75	105.20
26	14	530	G	C4-N9-C1'	5.71	133.92	126.50
26	14	1049	C	C5-C6-N1	5.71	123.85	121.00
26	14	1346	G	N7-C8-N9	-5.71	110.25	113.10
26	14	1807	G	N9-C1'-C2'	-5.71	105.72	112.00
26	14	2689	U	C5-C6-N1	-5.71	119.85	122.70
26	14	2727	G	C2-N3-C4	-5.71	109.05	111.90
1	13	1311	G	N1-C2-N2	-5.71	111.06	116.20
1	13	1511	G	C5-N7-C8	-5.71	101.45	104.30
26	1H	51	G	C4-C5-N7	-5.71	108.52	110.80
26	1H	185	U	N1-C2-N3	5.71	118.32	114.90
26	1H	358	U	N1-C2-O2	5.71	126.79	122.80
26	1H	618(A)	C	N3-C2-O2	5.71	125.89	121.90
26	1H	2360	A	N3-C4-C5	5.71	130.79	126.80
27	16	97	G	N7-C8-N9	-5.71	110.25	113.10
1	1G	1188	A	C2-N3-C4	5.71	113.45	110.60
1	1G	1325	C	O4'-C1'-N1	5.71	112.76	108.20
1	13	516	U	C5-C6-N1	5.70	125.55	122.70
1	13	1196	U	N3-C4-O4	5.70	123.39	119.40
26	1H	248	G	C2-N3-C4	-5.70	109.05	111.90
26	1H	431	U	OP1-P-O3'	5.70	117.75	105.20
26	1H	1316	U	O5'-P-OP2	-5.70	100.57	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2262	U	N3-C2-O2	-5.70	118.21	122.20
26	1H	2522	U	N3-C4-O4	5.70	123.39	119.40
26	1H	2862	G	OP1-P-O3'	5.70	117.75	105.20
1	1G	292	G	N1-C2-N2	-5.70	111.07	116.20
1	1G	515	G	C8-N9-C4	5.70	108.68	106.40
1	1G	778	G	OP1-P-O3'	5.70	117.75	105.20
26	14	71	A	P-O3'-C3'	5.70	126.54	119.70
26	14	138	G	O5'-P-OP2	-5.70	100.57	105.70
26	14	352	G	C6-C5-N7	-5.70	126.98	130.40
26	14	518	G	C4-N9-C1'	5.70	133.91	126.50
26	14	843	G	OP2-P-O3'	5.70	117.75	105.20
26	14	1624	G	OP2-P-O3'	5.70	117.75	105.20
26	14	2264	C	C2-N3-C4	5.70	122.75	119.90
26	14	2444	G	N1-C6-O6	-5.70	116.48	119.90
1	13	141	A	N1-C6-N6	5.70	122.02	118.60
26	1H	956	G	O5'-P-OP1	5.70	117.54	110.70
26	1H	1862	G	C8-N9-C4	5.70	108.68	106.40
26	1H	2400	G	N1-C6-O6	-5.70	116.48	119.90
26	1H	2599	G	N1-C6-O6	-5.70	116.48	119.90
1	1G	764	C	N3-C4-C5	5.70	124.18	121.90
26	14	383	U	O5'-P-OP1	-5.70	100.57	105.70
26	14	1811	G	C8-N9-C4	5.70	108.68	106.40
1	13	484	G	O4'-C1'-N9	-5.70	103.64	108.20
1	13	800	G	O5'-P-OP2	-5.70	100.57	105.70
1	13	1251	A	N1-C6-N6	-5.70	115.18	118.60
1	13	1279	A	C8-N9-C4	-5.70	103.52	105.80
22	1K	27	G	C6-C5-N7	5.70	133.82	130.40
26	1H	131	G	N3-C2-N2	-5.70	115.91	119.90
26	1H	575	A	C5-C6-N1	5.70	120.55	117.70
26	1H	846	C	C5-C4-N4	-5.70	116.21	120.20
26	1H	1126	A	C2-N3-C4	-5.70	107.75	110.60
1	1G	1535	C	C6-N1-C2	-5.70	118.02	120.30
26	14	443	A	O4'-C1'-N9	5.70	112.76	108.20
26	14	932	G	N3-C4-N9	-5.70	122.58	126.00
26	14	1342	A	O5'-P-OP2	5.70	117.54	110.70
26	14	1657	C	N3-C4-C5	5.70	124.18	121.90
29	19	177	LEU	CA-CB-CG	-5.70	102.19	115.30
1	13	420	U	N3-C4-O4	5.70	123.39	119.40
1	13	1279	A	C4-C5-N7	5.70	113.55	110.70
1	13	1522	U	N3-C2-O2	-5.70	118.21	122.20
23	2K	23	G	N3-C4-C5	5.70	131.45	128.60
24	3K	21	A	N1-C6-N6	-5.70	115.18	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	3K	35	U	N1-C2-O2	5.70	126.79	122.80
26	1H	442	G	N1-C2-N2	-5.70	111.07	116.20
26	1H	791	C	OP1-P-O3'	-5.70	92.67	105.20
26	1H	1186	G	C5-N7-C8	5.70	107.15	104.30
26	1H	1214	A	N7-C8-N9	-5.70	110.95	113.80
26	1H	1284	A	C4-C5-N7	5.70	113.55	110.70
26	1H	1561	G	N3-C4-N9	-5.70	122.58	126.00
26	1H	1578	U	N3-C4-C5	-5.70	111.18	114.60
26	1H	2330	G	N3-C4-C5	5.70	131.45	128.60
26	1H	2376	A	N1-C2-N3	5.70	132.15	129.30
27	16	96	G	C8-N9-C4	5.70	108.68	106.40
1	1G	721	G	C2-N3-C4	-5.70	109.05	111.90
1	1G	1442	G	N3-C4-C5	5.70	131.45	128.60
26	14	271(B)	G	O5'-P-OP1	-5.70	100.57	105.70
26	14	324	A	O5'-P-OP1	-5.70	100.57	105.70
26	14	337	C	C4-C5-C6	5.70	120.25	117.40
26	14	1256	G	N1-C2-N2	5.70	121.33	116.20
26	14	2060	A	N7-C8-N9	5.70	116.65	113.80
26	14	2686	G	N3-C2-N2	5.70	123.89	119.90
1	13	765	G	C6-C5-N7	-5.70	126.98	130.40
1	13	803	G	N1-C2-N2	-5.70	111.07	116.20
26	1H	833	U	O5'-P-OP1	-5.70	100.57	105.70
26	1H	1834	U	O5'-P-OP2	5.70	117.54	110.70
1	1G	20	U	OP1-P-OP2	5.70	128.15	119.60
1	1G	292	G	N3-C2-N2	5.70	123.89	119.90
1	1G	691	G	C6-C5-N7	-5.70	126.98	130.40
26	14	611	C	C5-C4-N4	-5.70	116.21	120.20
26	14	1987	G	C5-C6-O6	-5.70	125.18	128.60
26	14	2385	C	N3-C4-C5	5.70	124.18	121.90
26	14	2737	G	C5-C6-N1	-5.70	108.65	111.50
1	13	976	G	C2-N3-C4	-5.70	109.05	111.90
1	13	1521	G	OP1-P-OP2	5.70	128.15	119.60
26	1H	536	A	C5-C6-N1	5.70	120.55	117.70
26	1H	551	G	N1-C6-O6	5.70	123.32	119.90
26	1H	639	U	N1-C2-O2	5.70	126.79	122.80
26	1H	651	G	N3-C2-N2	-5.70	115.91	119.90
26	1H	721	C	C6-N1-C2	5.70	122.58	120.30
26	1H	782	A	N1-C6-N6	-5.70	115.18	118.60
1	1G	425	G	C5-N7-C8	-5.70	101.45	104.30
1	1G	1370	G	C8-N9-C4	-5.70	104.12	106.40
26	14	333	G	N3-C2-N2	-5.70	115.91	119.90
26	14	570	G	C4-C5-C6	5.70	122.22	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1245	G	C6-C5-N7	-5.70	126.98	130.40
26	14	1992	G	N3-C4-C5	-5.70	125.75	128.60
26	1H	13	A	C6-C5-N7	-5.69	128.31	132.30
26	1H	260	G	N1-C6-O6	-5.69	116.48	119.90
26	1H	397	G	N1-C2-N3	5.69	127.32	123.90
26	1H	1184	G	N3-C4-N9	-5.69	122.58	126.00
26	1H	1763	G	C5-C6-O6	5.69	132.02	128.60
1	1G	331	G	N7-C8-N9	5.69	115.95	113.10
1	1G	404	U	OP1-P-OP2	-5.69	111.06	119.60
1	1G	1229	A	C8-N9-C4	-5.69	103.52	105.80
26	14	450	G	OP1-P-OP2	-5.69	111.06	119.60
26	14	795	C	OP1-P-OP2	5.69	128.14	119.60
26	14	857	C	N3-C2-O2	-5.69	117.91	121.90
26	14	2069	G	OP1-P-OP2	5.69	128.14	119.60
1	13	304	U	C5-C4-O4	5.69	129.31	125.90
22	1K	38	A	C5-N7-C8	-5.69	101.05	103.90
26	1H	333	G	C2-N3-C4	5.69	114.75	111.90
26	1H	991	C	C6-N1-C1'	5.69	127.63	120.80
26	1H	1672	C	N3-C4-N4	5.69	121.98	118.00
26	1H	1820	U	O5'-P-OP2	-5.69	100.58	105.70
26	1H	2509	G	C4-C5-N7	5.69	113.08	110.80
46	G8	84	ARG	CA-CB-CG	5.69	125.92	113.40
1	1G	530	G	N3-C4-C5	5.69	131.45	128.60
1	1G	579	G	C5-C6-N1	-5.69	108.65	111.50
1	1G	645	C	C6-N1-C2	-5.69	118.02	120.30
26	14	260	G	N9-C4-C5	5.69	107.68	105.40
26	14	398	G	N1-C6-O6	5.69	123.31	119.90
26	14	1465	G	C4-C5-N7	5.69	113.08	110.80
26	14	1690	A	N1-C6-N6	5.69	122.02	118.60
26	14	1969	A	O5'-P-OP2	5.69	117.53	110.70
26	14	2383	G	C4-N9-C1'	5.69	133.90	126.50
1	13	112	G	OP2-P-O3'	5.69	117.72	105.20
1	13	582	U	C6-N1-C2	5.69	124.41	121.00
1	13	1045	C	N3-C4-C5	-5.69	119.62	121.90
26	1H	1220	A	C4-C5-C6	5.69	119.84	117.00
26	1H	1358	G	N1-C6-O6	-5.69	116.49	119.90
26	1H	2080	G	C4-C5-N7	-5.69	108.52	110.80
26	1H	2332	U	N3-C2-O2	5.69	126.18	122.20
26	1H	2550	G	N3-C4-C5	-5.69	125.75	128.60
27	16	21	G	N3-C4-C5	5.69	131.45	128.60
26	14	639	U	C4-C5-C6	5.69	123.11	119.70
26	14	651	G	O5'-P-OP2	5.69	117.53	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1232	G	N1-C6-O6	5.69	123.31	119.90
26	14	1702	G	C5-C6-N1	-5.69	108.66	111.50
26	14	2028	U	N3-C4-O4	5.69	123.38	119.40
29	19	37	LEU	CA-CB-CG	-5.69	102.21	115.30
26	1H	38	A	C6-N1-C2	-5.69	115.19	118.60
26	1H	189	G	C6-N1-C2	-5.69	121.69	125.10
26	1H	207	A	N1-C2-N3	5.69	132.14	129.30
26	1H	1398	C	N1-C2-O2	-5.69	115.49	118.90
26	1H	1623	G	N7-C8-N9	-5.69	110.26	113.10
26	1H	1783	A	N7-C8-N9	5.69	116.64	113.80
26	1H	2734	A	C8-N9-C4	5.69	108.08	105.80
26	1H	2875	C	C6-N1-C2	5.69	122.58	120.30
26	14	729	G	N1-C2-N3	-5.69	120.49	123.90
26	14	809	G	N1-C2-N2	-5.69	111.08	116.20
26	14	2640	G	N1-C2-N3	5.69	127.31	123.90
1	13	1281	U	N1-C2-O2	5.69	126.78	122.80
1	13	1353	G	OP1-P-OP2	-5.69	111.07	119.60
26	1H	17	G	N3-C4-N9	5.69	129.41	126.00
26	1H	1016	G	O5'-P-OP2	5.69	117.53	110.70
26	1H	1760	A	C5-N7-C8	-5.69	101.06	103.90
26	1H	2198	A	OP1-P-OP2	5.69	128.13	119.60
26	1H	2300	G	OP2-P-O3'	5.69	117.71	105.20
1	1G	449	C	C6-N1-C2	-5.69	118.03	120.30
1	1G	489	C	C6-N1-C2	5.69	122.58	120.30
26	14	1479	G	C6-C5-N7	-5.69	126.99	130.40
26	14	1568	G	N1-C2-N2	5.69	121.32	116.20
1	13	364	A	C6-N1-C2	-5.69	115.19	118.60
12	3I	52	LEU	CB-CG-CD1	-5.69	101.33	111.00
26	1H	480	A	N1-C6-N6	5.69	122.01	118.60
26	1H	711	G	N7-C8-N9	5.69	115.94	113.10
26	1H	741	G	N1-C2-N3	5.69	127.31	123.90
26	1H	969	U	N1-C2-O2	-5.69	118.82	122.80
26	1H	1602	U	C6-N1-C2	-5.69	117.59	121.00
26	1H	1839	G	N3-C2-N2	5.69	123.88	119.90
26	1H	2291	U	N3-C2-O2	-5.69	118.22	122.20
26	1H	2387	U	C2-N1-C1'	-5.69	110.88	117.70
26	1H	2524	G	C4-C5-N7	-5.69	108.53	110.80
26	1H	2585	U	C4-C5-C6	-5.69	116.29	119.70
26	1H	2695	C	C2-N3-C4	-5.69	117.06	119.90
26	1H	2761	G	N1-C2-N2	-5.69	111.08	116.20
26	14	1340	U	C5-C4-O4	-5.69	122.49	125.90
26	14	1948	G	C5-N7-C8	-5.69	101.46	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2325	G	N9-C4-C5	5.69	107.67	105.40
1	13	180	U	N3-C4-O4	5.68	123.38	119.40
1	13	660	G	OP1-P-OP2	-5.68	111.08	119.60
23	2K	61	U	OP2-P-O3'	5.68	117.71	105.20
26	1H	211	A	N3-C4-C5	5.68	130.78	126.80
26	1H	315	G	C2-N3-C4	-5.68	109.06	111.90
26	1H	580	C	N3-C4-C5	-5.68	119.63	121.90
26	1H	632	A	C5-N7-C8	-5.68	101.06	103.90
26	1H	811	U	N3-C2-O2	-5.68	118.22	122.20
26	1H	2061	G	OP1-P-O3'	5.68	117.71	105.20
31	31	33	LEU	CA-CB-CG	5.68	128.38	115.30
1	1G	326	G	C4-C5-N7	-5.68	108.53	110.80
1	1G	1084	G	O5'-P-OP2	-5.68	100.58	105.70
1	1G	1146	A	C2-N3-C4	-5.68	107.76	110.60
26	14	189	G	N7-C8-N9	-5.68	110.26	113.10
26	14	774	A	O5'-P-OP2	-5.68	100.58	105.70
26	14	812	C	C2-N3-C4	-5.68	117.06	119.90
26	14	1301	A	C5-N7-C8	5.68	106.74	103.90
26	14	1556	C	C5-C4-N4	5.68	124.18	120.20
26	14	1634	A	C5-C6-N6	5.68	128.25	123.70
26	14	1806	C	C6-N1-C2	5.68	122.57	120.30
26	14	1912	A	O5'-P-OP2	5.68	117.52	110.70
27	1J	40	U	C6-N1-C1'	5.68	129.16	121.20
39	55	107	ASP	CB-CG-OD1	5.68	123.42	118.30
1	13	746	A	N9-C4-C5	5.68	108.07	105.80
26	1H	448	U	C4-C5-C6	5.68	123.11	119.70
26	1H	577	G	N1-C2-N2	-5.68	111.09	116.20
26	1H	1345	C	OP2-P-O3'	5.68	117.70	105.20
26	1H	1537	C	C5-C6-N1	5.68	123.84	121.00
26	1H	1586	A	C5-C6-N1	-5.68	114.86	117.70
1	1G	22	G	N3-C2-N2	-5.68	115.92	119.90
1	1G	730	G	C5-N7-C8	5.68	107.14	104.30
1	1G	750	G	N1-C2-N2	-5.68	111.09	116.20
26	14	186	G	C5-C6-N1	5.68	114.34	111.50
26	14	195	A	N7-C8-N9	5.68	116.64	113.80
26	14	377	C	OP2-P-O3'	5.68	117.70	105.20
26	14	608	A	C6-N1-C2	-5.68	115.19	118.60
26	14	676	A	C5-C6-N6	-5.68	119.15	123.70
26	14	1813	G	N3-C2-N2	-5.68	115.92	119.90
26	14	1969	A	C6-N1-C2	-5.68	115.19	118.60
26	14	2551	C	C5-C4-N4	5.68	124.18	120.20
27	1J	76	G	O5'-P-OP2	-5.68	100.59	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	6	G	N3-C4-C5	-5.68	125.76	128.60
1	13	243	A	C8-N9-C4	-5.68	103.53	105.80
26	1H	134	C	N3-C4-N4	-5.68	114.02	118.00
26	1H	199	A	N7-C8-N9	-5.68	110.96	113.80
26	1H	578	A	N1-C6-N6	5.68	122.01	118.60
26	1H	1845	G	C6-N1-C2	-5.68	121.69	125.10
26	14	229	A	O5'-P-OP1	-5.68	100.59	105.70
26	14	842	G	C8-N9-C4	5.68	108.67	106.40
26	14	1425	G	OP1-P-O3'	5.68	117.70	105.20
26	14	1992	G	O4'-C1'-N9	-5.68	103.66	108.20
1	13	110	C	N3-C4-N4	-5.68	114.02	118.00
1	13	321	A	O5'-P-OP2	-5.68	100.59	105.70
1	13	843	U	C6-N1-C1'	-5.68	113.25	121.20
1	13	1524	C	C5-C6-N1	-5.68	118.16	121.00
26	1H	697	C	N1-C2-N3	-5.68	115.22	119.20
26	1H	1196	C	O5'-P-OP2	5.68	117.52	110.70
26	1H	1211	U	N1-C2-O2	5.68	126.78	122.80
26	1H	1409	C	C5-C6-N1	-5.68	118.16	121.00
26	1H	1633	G	C4-C5-C6	5.68	122.21	118.80
26	1H	2272	U	C2-N1-C1'	-5.68	110.88	117.70
26	1H	2325	G	N7-C8-N9	5.68	115.94	113.10
26	1H	2711	A	N9-C4-C5	-5.68	103.53	105.80
27	16	92	G	OP2-P-O3'	5.68	117.70	105.20
1	1G	924	C	N1-C2-N3	5.68	123.17	119.20
26	14	121	G	N7-C8-N9	5.68	115.94	113.10
26	14	204	A	C4-C5-N7	5.68	113.54	110.70
26	14	866	A	O4'-C1'-N9	-5.68	103.66	108.20
26	14	947	G	C6-N1-C2	5.68	128.51	125.10
26	14	953	A	OP1-P-O3'	5.68	117.70	105.20
26	14	1266	G	C4-C5-C6	-5.68	115.39	118.80
26	14	1807	G	N7-C8-N9	-5.68	110.26	113.10
23	2K	10	G	C6-N1-C2	-5.68	121.69	125.10
26	1H	2047	U	C2-N1-C1'	5.68	124.51	117.70
26	1H	2050	C	OP2-P-O3'	5.68	117.69	105.20
26	14	497	A	C8-N9-C4	-5.68	103.53	105.80
26	14	1802	A	N1-C6-N6	-5.68	115.19	118.60
26	14	2635	C	C4-C5-C6	5.68	120.24	117.40
1	13	758	G	C2-N3-C4	-5.68	109.06	111.90
1	13	776	G	C5-N7-C8	-5.68	101.46	104.30
1	13	1108	G	C5-C6-O6	5.68	132.01	128.60
1	13	1503	A	C4-C5-N7	-5.68	107.86	110.70
26	1H	387	U	N1-C2-N3	5.68	118.31	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	789	A	C5-C6-N6	-5.68	119.16	123.70
26	1H	1906	G	C8-N9-C4	-5.68	104.13	106.40
26	1H	2040	C	C5-C4-N4	-5.68	116.23	120.20
27	16	14	U	OP2-P-O3'	5.68	117.69	105.20
26	14	650	C	N3-C4-N4	5.68	121.97	118.00
26	14	1935	G	N1-C6-O6	-5.68	116.49	119.90
26	14	2304	G	C4-C5-C6	5.68	122.21	118.80
1	13	391	G	C6-C5-N7	5.67	133.81	130.40
1	13	592	G	C8-N9-C4	-5.67	104.13	106.40
26	1H	186	G	OP1-P-O3'	-5.67	92.72	105.20
26	1H	238	C	OP1-P-OP2	5.67	128.11	119.60
26	1H	1120	G	N1-C2-N2	5.67	121.31	116.20
26	1H	2234	G	N7-C8-N9	-5.67	110.26	113.10
1	1G	1523	G	N3-C2-N2	-5.67	115.93	119.90
26	14	76	C	N3-C4-N4	-5.67	114.03	118.00
26	14	504	U	OP2-P-O3'	5.67	117.68	105.20
26	14	578	A	C6-N1-C2	-5.67	115.19	118.60
26	14	781	A	C2-N3-C4	5.67	113.44	110.60
26	14	1008	C	C5-C6-N1	5.67	123.84	121.00
26	14	1642	G	N7-C8-N9	5.67	115.94	113.10
26	14	1946	U	C2-N3-C4	-5.67	123.59	127.00
26	14	1963	U	C2-N3-C4	5.67	130.40	127.00
26	14	2636	U	OP1-P-OP2	-5.67	111.09	119.60
26	14	2782	G	C4-N9-C1'	5.67	133.88	126.50
1	13	247	G	C8-N9-C4	-5.67	104.13	106.40
1	13	715	A	C2-N3-C4	-5.67	107.76	110.60
26	1H	996	A	N7-C8-N9	-5.67	110.96	113.80
26	1H	1227	A	C4-C5-C6	-5.67	114.16	117.00
26	1H	1904	G	C4-C5-C6	-5.67	115.40	118.80
26	14	243	U	N1-C2-N3	5.67	118.30	114.90
26	14	754	C	N1-C2-O2	5.67	122.30	118.90
26	14	1013	C	N1-C2-O2	-5.67	115.50	118.90
23	2K	42	C	OP1-P-OP2	5.67	128.11	119.60
26	1H	223	A	OP1-P-OP2	5.67	128.11	119.60
26	1H	447	A	C5-C6-N1	5.67	120.54	117.70
26	1H	676	A	C6-C5-N7	-5.67	128.33	132.30
26	1H	748	G	N1-C2-N2	5.67	121.31	116.20
26	1H	1701	A	N3-C4-C5	5.67	130.77	126.80
26	1H	1789	A	C5-C6-N1	5.67	120.54	117.70
26	1H	1801	G	OP1-P-O3'	5.67	117.68	105.20
26	1H	2268	A	N1-C6-N6	5.67	122.00	118.60
26	1H	2351	G	C2-N3-C4	5.67	114.74	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2370	G	C2-N3-C4	5.67	114.73	111.90
27	16	115	G	C8-N9-C4	5.67	108.67	106.40
1	1G	38	G	OP1-P-OP2	-5.67	111.09	119.60
8	72	72	PRO	C-N-CA	5.67	135.88	121.70
23	2L	75	C	OP1-P-O3'	5.67	117.68	105.20
26	14	329	G	O5'-P-OP2	-5.67	100.59	105.70
26	14	382	G	C5-C6-N1	-5.67	108.66	111.50
26	14	669	G	N1-C2-N2	5.67	121.31	116.20
26	14	1248	G	N1-C6-O6	5.67	123.30	119.90
26	14	1292	U	N3-C2-O2	5.67	126.17	122.20
26	14	1460	A	N1-C2-N3	-5.67	126.46	129.30
26	14	1702	G	C6-C5-N7	-5.67	127.00	130.40
26	14	1993	U	O5'-P-OP1	-5.67	100.59	105.70
26	14	2779	U	N3-C4-O4	5.67	123.37	119.40
1	13	529	G	C6-C5-N7	-5.67	127.00	130.40
1	13	542	G	C2-N3-C4	-5.67	109.06	111.90
26	1H	1380	G	OP2-P-O3'	5.67	117.67	105.20
26	1H	1395	A	N1-C6-N6	-5.67	115.20	118.60
50	K8	69	ARG	NE-CZ-NH2	-5.67	117.47	120.30
1	1G	63	C	N1-C2-O2	5.67	122.30	118.90
26	14	2303	G	N7-C8-N9	5.67	115.94	113.10
1	13	783	C	O5'-P-OP2	-5.67	100.60	105.70
26	1H	57	C	C6-N1-C1'	5.67	127.60	120.80
26	1H	380	U	OP1-P-O3'	5.67	117.67	105.20
26	1H	666	G	C5-C6-N1	-5.67	108.67	111.50
26	1H	813	U	O5'-P-OP2	-5.67	100.60	105.70
26	1H	1632	A	C4-C5-N7	5.67	113.53	110.70
26	1H	2761	G	N9-C4-C5	5.67	107.67	105.40
1	1G	722	A	C6-C5-N7	-5.67	128.33	132.30
1	1G	898	G	N1-C6-O6	5.67	123.30	119.90
26	14	306	U	N3-C4-O4	-5.67	115.43	119.40
26	14	391	G	N1-C2-N3	5.67	127.30	123.90
26	14	808	G	OP1-P-OP2	5.67	128.10	119.60
26	14	876	C	O5'-P-OP1	-5.67	100.60	105.70
26	14	1298	C	O5'-P-OP1	5.67	117.50	110.70
26	14	1385	G	C4-N9-C1'	-5.67	119.13	126.50
26	14	2451	A	C4-C5-C6	5.67	119.83	117.00
1	13	539	A	C5-N7-C8	5.67	106.73	103.90
1	13	1095	U	N3-C4-C5	-5.67	111.20	114.60
1	13	1530	G	N3-C4-C5	5.67	131.43	128.60
23	2K	25	U	C6-N1-C2	5.67	124.40	121.00
26	1H	206	U	C5-C6-N1	-5.67	119.87	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1324	G	O4'-C1'-N9	5.67	112.73	108.20
26	1H	1416	G	P-O3'-C3'	5.67	126.50	119.70
26	1H	1565	C	OP2-P-O3'	5.67	117.67	105.20
26	1H	1565	C	N1-C2-N3	-5.67	115.23	119.20
26	1H	2207	C	C6-N1-C2	-5.67	118.03	120.30
26	1H	2494	G	N7-C8-N9	5.67	115.93	113.10
26	1H	2652	C	C6-N1-C2	-5.67	118.03	120.30
26	1H	2710	C	OP2-P-O3'	5.67	117.67	105.20
1	1G	530	G	C5-C6-N1	-5.67	108.67	111.50
1	1G	785	G	C2-N3-C4	-5.67	109.07	111.90
26	14	175	G	N1-C2-N3	5.67	127.30	123.90
26	14	348	G	N9-C4-C5	-5.67	103.13	105.40
26	14	1813	G	N1-C2-N2	5.67	121.30	116.20
26	14	2255	G	N7-C8-N9	-5.67	110.27	113.10
26	14	2444	G	N3-C4-C5	-5.67	125.77	128.60
1	13	320	C	O5'-P-OP1	5.67	117.50	110.70
1	13	331	G	N1-C6-O6	5.67	123.30	119.90
26	1H	188	G	C6-N1-C2	-5.67	121.70	125.10
26	1H	1007	C	C4-C5-C6	5.67	120.23	117.40
1	1G	286	G	C4-C5-N7	-5.67	108.53	110.80
1	1G	853	G	N9-C4-C5	5.67	107.67	105.40
26	14	148	C	N3-C2-O2	5.67	125.86	121.90
26	14	265	A	O4'-C1'-N9	5.67	112.73	108.20
26	14	751	A	C2-N3-C4	-5.67	107.77	110.60
26	14	774	A	OP1-P-OP2	5.67	128.10	119.60
26	14	1340	U	N3-C2-O2	5.67	126.17	122.20
26	14	1658	C	N3-C4-N4	5.67	121.97	118.00
1	13	538	G	O5'-P-OP2	-5.66	100.60	105.70
1	13	541	G	N7-C8-N9	5.66	115.93	113.10
1	13	817	C	N3-C4-N4	5.66	121.96	118.00
1	13	852	G	N7-C8-N9	-5.66	110.27	113.10
1	13	1432	G	C2-N3-C4	-5.66	109.07	111.90
1	13	1502	A	N9-C4-C5	-5.66	103.53	105.80
23	2K	41	C	O5'-P-OP2	-5.66	100.60	105.70
26	1H	565	C	O5'-P-OP1	-5.66	100.60	105.70
26	1H	794	G	C5-N7-C8	5.66	107.13	104.30
26	1H	977	G	C4-C5-N7	-5.66	108.53	110.80
26	1H	1017	G	C6-C5-N7	5.66	133.80	130.40
26	1H	1398	C	C2-N3-C4	-5.66	117.07	119.90
26	1H	1569	A	OP1-P-O3'	5.66	117.66	105.20
26	1H	1608	A	O5'-P-OP1	-5.66	100.60	105.70
27	16	13	A	C5-C6-N6	5.66	128.23	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	666	G	C2-N3-C4	-5.66	109.07	111.90
1	1G	806	C	C2-N3-C4	5.66	122.73	119.90
1	1G	1452	C	N3-C4-N4	5.66	121.96	118.00
26	14	200	U	C4-C5-C6	5.66	123.10	119.70
26	14	666	G	N1-C2-N3	5.66	127.30	123.90
26	14	846	C	O5'-P-OP2	5.66	117.50	110.70
26	14	1918	A	C4-C5-C6	-5.66	114.17	117.00
26	14	2593	U	OP2-P-O3'	5.66	117.66	105.20
22	1K	61	C	N3-C4-C5	-5.66	119.64	121.90
26	1H	133	C	N3-C2-O2	5.66	125.86	121.90
26	1H	2484	G	C2-N3-C4	-5.66	109.07	111.90
26	1H	2555	U	N1-C2-N3	5.66	118.30	114.90
26	14	290	G	C8-N9-C4	5.66	108.67	106.40
26	14	1135	C	N3-C4-C5	5.66	124.17	121.90
26	14	1629	U	C4-C5-C6	5.66	123.10	119.70
26	14	1900	A	N9-C4-C5	5.66	108.06	105.80
26	1H	662	G	C6-N1-C2	-5.66	121.70	125.10
26	1H	959	A	C4-C5-C6	-5.66	114.17	117.00
26	1H	2305	A	OP1-P-O3'	5.66	117.65	105.20
26	1H	2325	G	C4-N9-C1'	5.66	133.86	126.50
26	1H	2464	C	OP1-P-OP2	5.66	128.09	119.60
26	1H	2664	G	N1-C6-O6	5.66	123.30	119.90
26	1H	2723	C	N1-C2-N3	5.66	123.16	119.20
29	11	95	LEU	CA-CB-CG	5.66	128.32	115.30
1	1G	697	U	C2-N3-C4	-5.66	123.60	127.00
26	14	135	G	C2-N3-C4	-5.66	109.07	111.90
26	14	1385	G	N1-C2-N2	5.66	121.30	116.20
26	14	1478	G	C8-N9-C4	-5.66	104.14	106.40
26	14	1934	C	N3-C4-N4	-5.66	114.04	118.00
26	14	2592	G	C2-N3-C4	5.66	114.73	111.90
27	1J	104	A	O5'-P-OP1	5.66	117.49	110.70
23	2K	57	C	OP1-P-O3'	5.66	117.65	105.20
26	1H	91	A	N1-C6-N6	5.66	122.00	118.60
26	1H	113	G	OP1-P-OP2	-5.66	111.11	119.60
26	1H	1368	G	N3-C4-N9	5.66	129.40	126.00
26	1H	1600	C	N3-C2-O2	-5.66	117.94	121.90
26	1H	1947	C	N1-C2-N3	-5.66	115.24	119.20
26	1H	2183	C	C5-C6-N1	5.66	123.83	121.00
26	1H	2286	A	N1-C6-N6	5.66	122.00	118.60
26	1H	2841	C	N3-C4-C5	5.66	124.16	121.90
44	E8	1	MET	CA-CB-CG	5.66	122.92	113.30
1	1G	923	A	N7-C8-N9	5.66	116.63	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	998	C	OP1-P-OP2	-5.66	111.11	119.60
26	14	1228	G	N9-C4-C5	5.66	107.66	105.40
26	14	1494	A	N9-C4-C5	5.66	108.06	105.80
26	14	1617	C	N3-C2-O2	-5.66	117.94	121.90
26	14	2508	G	C8-N9-C4	-5.66	104.14	106.40
26	14	2591	C	N1-C2-N3	5.66	123.16	119.20
26	14	2789	C	C4-C5-C6	5.66	120.23	117.40
26	14	2869	G	N1-C2-N2	5.66	121.29	116.20
1	13	1410	G	C2-N3-C4	-5.66	109.07	111.90
26	1H	833	U	C5-C6-N1	-5.66	119.87	122.70
26	1H	1534	G	N3-C4-N9	5.66	129.39	126.00
26	1H	2695	C	C4-C5-C6	5.66	120.23	117.40
1	1G	39	G	C8-N9-C4	5.66	108.66	106.40
26	14	339	U	OP1-P-OP2	-5.66	111.11	119.60
26	14	1651	G	C5-C6-O6	5.66	131.99	128.60
1	13	5	U	O4'-C1'-N1	5.66	112.72	108.20
1	13	509	A	C2-N3-C4	5.66	113.43	110.60
1	13	792	A	N1-C2-N3	5.66	132.13	129.30
1	13	975	A	C5-N7-C8	-5.66	101.07	103.90
26	1H	120	U	OP2-P-O3'	-5.66	92.76	105.20
26	1H	258	G	C5-N7-C8	5.66	107.13	104.30
26	1H	482	A	N9-C4-C5	5.66	108.06	105.80
26	1H	819	A	OP2-P-O3'	5.66	117.64	105.20
26	1H	1284	A	C8-N9-C4	-5.66	103.54	105.80
26	1H	1407	C	OP1-P-O3'	5.66	117.64	105.20
26	1H	1806	C	C2-N1-C1'	-5.66	112.58	118.80
1	1G	667	G	C4-C5-N7	5.66	113.06	110.80
26	14	626	U	C5-C6-N1	-5.66	119.87	122.70
26	14	1039	G	N3-C4-C5	5.66	131.43	128.60
1	13	1381	U	N1-C2-O2	5.65	126.76	122.80
26	1H	242	G	N9-C4-C5	-5.65	103.14	105.40
26	1H	270(S)	G	N1-C6-O6	5.65	123.29	119.90
26	1H	2470	G	C8-N9-C4	5.65	108.66	106.40
26	14	189	G	N3-C4-C5	5.65	131.43	128.60
26	14	1482	U	OP1-P-OP2	5.65	128.08	119.60
26	14	2661	G	N1-C6-O6	5.65	123.29	119.90
1	13	533	A	C6-C5-N7	-5.65	128.34	132.30
1	13	1266	G	N3-C4-N9	-5.65	122.61	126.00
1	13	1347	G	C5-C6-O6	5.65	131.99	128.60
1	13	1355	G	C5-C6-O6	-5.65	125.21	128.60
1	13	1519	A	C5-C6-N1	-5.65	114.87	117.70
26	1H	288	C	C5-C6-N1	5.65	123.83	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	552	G	N3-C4-C5	5.65	131.43	128.60
26	1H	668	G	OP1-P-O3'	5.65	117.63	105.20
26	1H	1516	U	O5'-P-OP1	5.65	117.48	110.70
26	1H	1838	C	C5-C6-N1	-5.65	118.17	121.00
27	16	72	G	N1-C2-N3	5.65	127.29	123.90
27	16	117	G	N9-C4-C5	-5.65	103.14	105.40
38	88	29	PHE	C-N-CA	-5.65	110.43	122.30
1	1G	340	U	C6-N1-C2	5.65	124.39	121.00
1	1G	967	C	C5-C6-N1	-5.65	118.17	121.00
26	14	1598	C	O5'-P-OP1	5.65	117.48	110.70
26	14	1626	G	N1-C2-N3	5.65	127.29	123.90
26	14	1825	A	C2-N3-C4	5.65	113.43	110.60
26	14	1946	U	O5'-P-OP1	5.65	117.48	110.70
26	14	2374	C	N1-C2-O2	-5.65	115.51	118.90
26	14	2566	A	C8-N9-C4	-5.65	103.54	105.80
26	14	2685	G	C5-C6-N1	-5.65	108.67	111.50
26	14	2735	G	N1-C2-N3	5.65	127.29	123.90
1	13	195	A	N1-C6-N6	-5.65	115.21	118.60
1	13	568	G	C5-C6-N1	5.65	114.33	111.50
1	13	811	C	OP1-P-OP2	5.65	128.07	119.60
1	13	1372	U	O5'-P-OP1	-5.65	100.61	105.70
1	13	1491	G	N1-C2-N3	5.65	127.29	123.90
23	2K	37	U	C5-C6-N1	-5.65	119.87	122.70
26	1H	341	G	C5-N7-C8	5.65	107.12	104.30
26	1H	593	G	C5-N7-C8	-5.65	101.47	104.30
26	1H	972	G	OP1-P-O3'	5.65	117.63	105.20
26	1H	1202	C	OP1-P-O3'	-5.65	92.77	105.20
26	1H	2052	G	N3-C4-N9	5.65	129.39	126.00
26	1H	2264	C	C6-N1-C1'	5.65	127.58	120.80
26	1H	2839	G	N9-C4-C5	5.65	107.66	105.40
1	1G	41	G	N7-C8-N9	-5.65	110.28	113.10
1	1G	730	G	C6-C5-N7	5.65	133.79	130.40
1	1G	880	C	C5-C4-N4	-5.65	116.25	120.20
26	14	308	G	C2-N3-C4	-5.65	109.08	111.90
26	14	1917	U	C5-C6-N1	5.65	125.53	122.70
26	14	2250	G	OP1-P-O3'	5.65	117.63	105.20
26	14	2284	C	OP1-P-OP2	5.65	128.07	119.60
1	13	359	U	N3-C4-O4	-5.65	115.45	119.40
1	13	966	G	N1-C6-O6	5.65	123.29	119.90
26	1H	255	A	OP1-P-O3'	-5.65	92.77	105.20
26	1H	465	G	C4-C5-N7	-5.65	108.54	110.80
26	1H	668	G	C5-C6-N1	-5.65	108.68	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2242	G	N1-C6-O6	5.65	123.29	119.90
1	1G	314	C	C4-C5-C6	5.65	120.22	117.40
26	14	623	G	N1-C2-N3	-5.65	120.51	123.90
26	14	1406	U	N3-C2-O2	5.65	126.15	122.20
26	14	2708	G	N1-C6-O6	5.65	123.29	119.90
26	1H	196	A	OP2-P-O3'	5.65	117.62	105.20
26	1H	246	C	N1-C2-O2	-5.65	115.51	118.90
26	1H	459	U	OP2-P-O3'	5.65	117.62	105.20
26	1H	772	C	OP1-P-OP2	5.65	128.07	119.60
26	1H	1952	A	OP1-P-OP2	-5.65	111.13	119.60
27	16	19	G	C8-N9-C4	5.65	108.66	106.40
1	1G	155	C	N3-C2-O2	-5.65	117.95	121.90
1	1G	911	U	O4'-C1'-N1	5.65	112.72	108.20
1	1G	1503	A	C2-N3-C4	5.65	113.42	110.60
56	1L	19	G	C4-N9-C1'	5.65	133.84	126.50
26	14	307	G	C4-C5-N7	5.65	113.06	110.80
26	14	405	U	C6-N1-C1'	-5.65	113.29	121.20
26	14	1135	C	C6-N1-C1'	-5.65	114.02	120.80
26	14	1275	A	OP1-P-OP2	-5.65	111.13	119.60
26	14	1689	A	C4-C5-N7	5.65	113.52	110.70
26	14	2007	C	C5-C6-N1	-5.65	118.18	121.00
27	1J	54	G	N1-C6-O6	5.65	123.29	119.90
46	C5	90	LEU	CA-CB-CG	5.65	128.29	115.30
1	13	1317	C	N1-C2-O2	5.65	122.29	118.90
26	1H	673	C	C5-C6-N1	-5.65	118.18	121.00
26	1H	1274	A	C2-N3-C4	-5.65	107.78	110.60
26	1H	1579	A	OP1-P-OP2	5.65	128.07	119.60
26	14	640	C	O5'-P-OP2	-5.65	100.62	105.70
26	14	698	C	N3-C4-N4	5.65	121.95	118.00
1	13	253	U	OP1-P-OP2	-5.64	111.13	119.60
1	13	518	C	C6-N1-C1'	-5.64	114.03	120.80
1	13	635	G	C5-C6-N1	-5.64	108.68	111.50
1	13	1086	U	OP1-P-OP2	-5.64	111.13	119.60
26	1H	49	A	C8-N9-C4	5.64	108.06	105.80
26	1H	213	A	N7-C8-N9	-5.64	110.98	113.80
26	1H	636	G	C2-N3-C4	5.64	114.72	111.90
26	1H	857	C	N1-C2-N3	5.64	123.15	119.20
26	1H	938	G	C6-C5-N7	5.64	133.79	130.40
26	1H	1238	G	C5-N7-C8	5.64	107.12	104.30
26	1H	1258	C	O5'-P-OP2	-5.64	100.62	105.70
26	1H	2249	U	C5-C6-N1	5.64	125.52	122.70
26	1H	2355	C	C6-N1-C1'	-5.64	114.03	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	31	62	ARG	NE-CZ-NH1	-5.64	117.48	120.30
1	1G	24	U	C5-C6-N1	5.64	125.52	122.70
1	1G	1073	U	N3-C4-C5	-5.64	111.21	114.60
26	14	215	G	C5-N7-C8	5.64	107.12	104.30
26	14	946	G	C5-C6-O6	5.64	131.99	128.60
26	14	1343	G	C5-C6-N1	-5.64	108.68	111.50
26	14	1524	G	O5'-P-OP2	5.64	117.47	110.70
26	14	1559	G	C6-N1-C2	5.64	128.49	125.10
26	14	1973	G	C4-C5-N7	-5.64	108.54	110.80
26	14	1974	C	C5-C6-N1	5.64	123.82	121.00
26	14	2255	G	C5-C6-O6	5.64	131.99	128.60
26	14	2515	C	N1-C2-N3	5.64	123.15	119.20
1	13	781	A	C5-C6-N1	5.64	120.52	117.70
26	1H	227	A	C6-N1-C2	-5.64	115.21	118.60
26	1H	450	G	N3-C2-N2	-5.64	115.95	119.90
26	1H	626	U	C5-C4-O4	5.64	129.29	125.90
26	1H	2488	A	N7-C8-N9	-5.64	110.98	113.80
1	1G	209	U	C5-C6-N1	5.64	125.52	122.70
1	1G	760	G	O5'-P-OP1	5.64	117.47	110.70
1	1G	1186	G	N1-C6-O6	5.64	123.29	119.90
26	14	512	G	C5-N7-C8	-5.64	101.48	104.30
26	14	752	A	C5-N7-C8	-5.64	101.08	103.90
26	14	844	C	OP1-P-OP2	-5.64	111.14	119.60
26	14	1279	G	O5'-P-OP1	5.64	117.47	110.70
26	14	1283	G	C5-N7-C8	5.64	107.12	104.30
26	14	1301	A	O5'-P-OP2	-5.64	100.62	105.70
26	14	1352	U	N3-C4-C5	5.64	117.98	114.60
26	14	1926	U	C4-C5-C6	5.64	123.08	119.70
26	14	2183	C	C6-N1-C2	-5.64	118.04	120.30
29	19	271	ILE	C-N-CA	-5.64	107.59	121.70
1	13	731	G	N1-C2-N3	-5.64	120.52	123.90
1	13	1113	C	C2-N1-C1'	5.64	125.01	118.80
1	13	1433	A	C5-N7-C8	5.64	106.72	103.90
26	1H	247	G	N7-C8-N9	-5.64	110.28	113.10
26	1H	484	C	O5'-P-OP1	5.64	117.47	110.70
26	1H	1282	U	C2-N3-C4	-5.64	123.61	127.00
26	1H	1470	G	C8-N9-C4	-5.64	104.14	106.40
33	51	12	PRO	C-N-CA	5.64	135.80	121.70
1	1G	1267	C	C2-N1-C1'	5.64	125.00	118.80
26	14	863	A	C6-N1-C2	-5.64	115.22	118.60
26	14	2585	U	O5'-P-OP1	-5.64	100.62	105.70
1	13	1478	C	OP1-P-OP2	-5.64	111.14	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	42	A	C5-C6-N6	-5.64	119.19	123.70
26	1H	78	A	N9-C4-C5	-5.64	103.54	105.80
26	1H	1125	G	N3-C4-N9	-5.64	122.62	126.00
26	1H	1382	G	N1-C6-O6	5.64	123.28	119.90
26	1H	1778	U	C2-N1-C1'	-5.64	110.93	117.70
26	1H	1784	A	C2-N3-C4	-5.64	107.78	110.60
26	1H	1798	U	N1-C2-O2	-5.64	118.85	122.80
31	31	12	LEU	CB-CG-CD1	-5.64	101.41	111.00
44	E8	42	ARG	C-N-CA	-5.64	110.45	122.30
1	1G	761	G	C5-C6-O6	-5.64	125.22	128.60
26	14	563	G	C6-C5-N7	-5.64	127.02	130.40
26	14	2004	G	N1-C2-N2	5.64	121.28	116.20
26	14	2067	G	C6-N1-C2	-5.64	121.72	125.10
1	13	31	G	OP1-P-OP2	-5.64	111.14	119.60
1	13	535	A	C5-C6-N6	5.64	128.21	123.70
26	1H	956	G	N1-C2-N2	-5.64	111.13	116.20
26	1H	1763	G	OP2-P-O3'	5.64	117.60	105.20
26	1H	1888	G	C5-C6-N1	5.64	114.32	111.50
26	1H	2343	C	O5'-P-OP1	-5.64	100.63	105.70
26	1H	2430	A	O5'-P-OP1	-5.64	100.63	105.70
26	1H	2737	G	C5-N7-C8	-5.64	101.48	104.30
26	14	503	A	N1-C6-N6	-5.64	115.22	118.60
26	14	1387	C	O5'-P-OP1	-5.64	100.62	105.70
26	14	1438	U	C4-C5-C6	5.64	123.08	119.70
26	14	1487	G	C8-N9-C4	-5.64	104.14	106.40
26	14	1691	C	C6-N1-C2	-5.64	118.05	120.30
26	14	2396	G	N9-C4-C5	-5.64	103.14	105.40
1	13	242	C	C4-C5-C6	-5.64	114.58	117.40
1	13	266	G	C4-C5-N7	5.64	113.06	110.80
1	13	763	G	C5-C6-O6	-5.64	125.22	128.60
26	1H	315	G	C6-C5-N7	-5.64	127.02	130.40
26	1H	729	G	C4-N9-C1'	5.64	133.83	126.50
26	1H	1203	G	C5-N7-C8	5.64	107.12	104.30
26	1H	1674	G	N7-C8-N9	5.64	115.92	113.10
26	1H	2078	C	C2-N3-C4	-5.64	117.08	119.90
26	1H	2620	C	C5-C6-N1	-5.64	118.18	121.00
26	1H	2844	G	N9-C4-C5	5.64	107.66	105.40
1	1G	803	G	C5-C6-N1	-5.64	108.68	111.50
1	1G	1334	G	N7-C8-N9	5.64	115.92	113.10
26	14	456	C	O5'-P-OP2	-5.64	100.63	105.70
26	14	1273	U	C2-N1-C1'	-5.64	110.94	117.70
26	14	1300	U	C6-N1-C2	-5.64	117.62	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2323	G	N1-C6-O6	5.64	123.28	119.90
26	14	2768	C	C6-N1-C2	-5.64	118.05	120.30
26	14	2818	G	C5-N7-C8	-5.64	101.48	104.30
1	13	365	U	N3-C4-O4	5.63	123.34	119.40
1	13	1497	G	C5-C6-O6	5.63	131.98	128.60
1	13	1530	G	O5'-P-OP1	5.63	117.46	110.70
26	1H	1214	A	OP2-P-O3'	5.63	117.60	105.20
26	1H	1742	C	N1-C2-O2	-5.63	115.52	118.90
26	1H	1795	C	C2-N3-C4	5.63	122.72	119.90
26	1H	2467	C	C5-C6-N1	-5.63	118.18	121.00
26	14	408	G	C5-C6-N1	-5.63	108.68	111.50
26	14	1330	C	C6-N1-C1'	-5.63	114.04	120.80
26	14	2072	G	N3-C4-N9	5.63	129.38	126.00
26	14	2388	A	N9-C4-C5	5.63	108.05	105.80
26	1H	834	C	N1-C2-N3	5.63	123.14	119.20
1	1G	698	G	C8-N9-C4	-5.63	104.15	106.40
26	14	1618	A	N1-C6-N6	-5.63	115.22	118.60
26	14	2549	G	N3-C4-N9	-5.63	122.62	126.00
26	14	2778	A	OP1-P-OP2	5.63	128.05	119.60
1	13	1312	G	N1-C2-N3	-5.63	120.52	123.90
26	1H	214	G	OP2-P-O3'	5.63	117.59	105.20
26	1H	473	G	N3-C2-N2	5.63	123.84	119.90
26	1H	692	C	OP1-P-O3'	-5.63	92.81	105.20
26	1H	2353	G	N1-C6-O6	-5.63	116.52	119.90
1	1G	521	G	OP1-P-OP2	5.63	128.05	119.60
1	1G	700	G	N3-C2-N2	-5.63	115.96	119.90
26	14	79	G	C5-C6-N1	5.63	114.32	111.50
26	14	1586	A	N1-C6-N6	5.63	121.98	118.60
26	14	1939	U	OP2-P-O3'	5.63	117.59	105.20
26	14	2601	C	C2-N3-C4	-5.63	117.08	119.90
1	13	713	G	C5-C6-O6	5.63	131.98	128.60
1	13	889	A	C5-C6-N1	-5.63	114.89	117.70
25	4K	14	A	O5'-P-OP2	-5.63	100.63	105.70
26	1H	469	G	C5-C6-N1	5.63	114.31	111.50
1	1G	131	C	N1-C2-O2	-5.63	115.52	118.90
1	1G	209	U	C2-N1-C1'	5.63	124.46	117.70
26	14	332	A	C5-C6-N6	5.63	128.20	123.70
1	13	315	A	C5-C6-N1	5.63	120.51	117.70
1	13	695	A	C5-C6-N1	-5.63	114.89	117.70
1	13	758	G	N1-C2-N2	5.63	121.27	116.20
1	13	1214	C	C2-N1-C1'	-5.63	112.61	118.80
1	13	1438	G	N1-C2-N3	5.63	127.28	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	486	C	O5'-P-OP2	5.63	117.45	110.70
26	1H	782	A	C4-C5-C6	5.63	119.81	117.00
26	1H	1153	C	C6-N1-C1'	5.63	127.55	120.80
26	1H	1161	C	C2-N3-C4	5.63	122.71	119.90
26	1H	1526	G	C5-C6-O6	5.63	131.98	128.60
26	1H	1827	C	OP1-P-OP2	-5.63	111.16	119.60
26	1H	2101	G	N1-C6-O6	5.63	123.28	119.90
26	1H	2287	A	C4-C5-N7	5.63	113.51	110.70
26	1H	2531	A	O5'-P-OP1	-5.63	100.64	105.70
26	1H	2606	C	C2-N3-C4	-5.63	117.09	119.90
26	1H	2708	G	N3-C2-N2	-5.63	115.96	119.90
27	16	8	U	C5-C6-N1	-5.63	119.89	122.70
27	16	52	A	C2-N3-C4	5.63	113.42	110.60
1	1G	324	G	N3-C4-N9	-5.63	122.62	126.00
1	1G	702	A	N1-C6-N6	-5.63	115.22	118.60
1	1G	1432	G	N1-C6-O6	5.63	123.28	119.90
1	1G	1452	C	O5'-P-OP2	-5.63	100.64	105.70
23	2L	1	C	N1-C2-O2	5.63	122.28	118.90
26	14	230	U	C5-C6-N1	-5.63	119.89	122.70
26	14	788	A	OP2-P-O3'	5.63	117.58	105.20
26	14	864	G	N3-C4-C5	-5.63	125.79	128.60
26	14	2522	U	N3-C2-O2	-5.63	118.26	122.20
26	14	2737	G	C8-N9-C4	-5.63	104.15	106.40
49	F5	36	GLY	N-CA-C	5.63	127.17	113.10
1	13	112	G	C2-N3-C4	5.63	114.71	111.90
1	13	1184	G	C5-C6-N1	-5.63	108.69	111.50
22	1K	64	G	N3-C4-N9	5.63	129.38	126.00
26	1H	290	G	N1-C2-N2	-5.63	111.14	116.20
26	1H	386	G	O5'-P-OP1	-5.63	100.64	105.70
26	1H	481	G	OP1-P-OP2	-5.63	111.16	119.60
26	1H	787	U	O4'-C1'-N1	5.63	112.70	108.20
26	1H	1997	G	N3-C4-C5	5.63	131.41	128.60
26	1H	2375	G	N3-C4-N9	-5.63	122.62	126.00
30	21	49	LEU	CA-CB-CG	-5.63	102.36	115.30
1	1G	390	C	N3-C4-C5	5.63	124.15	121.90
1	1G	558	G	N9-C4-C5	5.63	107.65	105.40
1	1G	1205	U	C2-N3-C4	5.63	130.38	127.00
56	1L	19	G	N3-C4-C5	-5.63	125.79	128.60
23	2L	21	U	C6-N1-C2	-5.63	117.62	121.00
26	14	775	G	N3-C4-N9	5.63	129.38	126.00
26	14	1350	C	N3-C4-C5	5.63	124.15	121.90
26	14	2008	C	N3-C4-N4	5.63	121.94	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2374	C	N3-C4-C5	5.63	124.15	121.90
26	14	2508	G	C5-C6-N1	5.63	114.31	111.50
26	14	2621	A	C5-C6-N1	5.63	120.51	117.70
26	14	2821	A	N3-C4-C5	5.63	130.74	126.80
1	13	1067	A	O5'-P-OP2	5.62	117.45	110.70
23	2K	71	G	N7-C8-N9	-5.62	110.29	113.10
26	1H	325	G	C5-N7-C8	5.62	107.11	104.30
26	1H	816	C	C2-N3-C4	5.62	122.71	119.90
26	1H	1510	A	C8-N9-C4	-5.62	103.55	105.80
26	1H	2682	U	O5'-P-OP2	-5.62	100.64	105.70
1	1G	242	C	C4-C5-C6	-5.62	114.59	117.40
1	1G	1315	U	C5-C6-N1	5.62	125.51	122.70
26	14	223	A	C4-C5-C6	5.62	119.81	117.00
26	14	1271	G	C8-N9-C4	5.62	108.65	106.40
26	14	1754	C	N3-C2-O2	-5.62	117.96	121.90
1	13	510	A	C5-N7-C8	-5.62	101.09	103.90
1	13	622	A	OP2-P-O3'	5.62	117.57	105.20
1	13	1155	G	N1-C6-O6	5.62	123.28	119.90
1	13	1401	G	N1-C2-N3	5.62	127.27	123.90
26	1H	283	A	N7-C8-N9	-5.62	110.99	113.80
26	1H	2305	A	C8-N9-C4	-5.62	103.55	105.80
26	1H	2318	G	C8-N9-C4	-5.62	104.15	106.40
26	1H	2709	G	N3-C4-N9	-5.62	122.63	126.00
1	1G	664	G	C5-C6-N1	-5.62	108.69	111.50
1	1G	800	G	N1-C6-O6	5.62	123.27	119.90
26	14	715	G	C5-N7-C8	-5.62	101.49	104.30
26	14	788	A	OP1-P-O3'	-5.62	92.83	105.20
1	13	298	A	N1-C2-N3	5.62	132.11	129.30
1	13	740	U	C4-C5-C6	5.62	123.07	119.70
1	13	906	G	C6-C5-N7	-5.62	127.03	130.40
1	13	1058	G	N3-C4-N9	5.62	129.37	126.00
1	13	1227	A	O5'-P-OP2	-5.62	100.64	105.70
1	13	1533	C	C6-N1-C1'	-5.62	114.05	120.80
26	1H	530	G	C4-C5-N7	5.62	113.05	110.80
26	1H	1257	C	OP2-P-O3'	5.62	117.57	105.20
26	1H	1269	A	C4-C5-C6	-5.62	114.19	117.00
26	1H	1325	G	N7-C8-N9	5.62	115.91	113.10
26	1H	1368	G	N1-C2-N3	5.62	127.27	123.90
26	1H	1558	A	N3-C4-C5	5.62	130.74	126.80
26	1H	1683	C	N3-C4-N4	-5.62	114.06	118.00
26	1H	2312	U	N3-C4-C5	-5.62	111.23	114.60
26	1H	2835	A	C8-N9-C4	-5.62	103.55	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1070	U	C6-N1-C2	-5.62	117.63	121.00
26	14	71	A	N3-C4-N9	-5.62	122.90	127.40
26	14	242	G	N9-C4-C5	-5.62	103.15	105.40
26	14	622	G	N7-C8-N9	-5.62	110.29	113.10
26	14	737	C	C5-C4-N4	-5.62	116.27	120.20
26	14	950	G	C5-C6-O6	5.62	131.97	128.60
26	14	2417	C	O5'-P-OP1	5.62	117.45	110.70
23	2K	73	A	N9-C4-C5	-5.62	103.55	105.80
26	1H	118	A	N9-C4-C5	-5.62	103.55	105.80
26	1H	532	A	O5'-P-OP1	-5.62	100.64	105.70
26	1H	580	C	OP2-P-O3'	5.62	117.56	105.20
26	1H	1802	A	C4-C5-C6	5.62	119.81	117.00
26	1H	2058	A	N9-C4-C5	-5.62	103.55	105.80
1	1G	385	C	C5-C4-N4	5.62	124.13	120.20
26	14	1202	C	OP1-P-OP2	5.62	128.03	119.60
26	14	2089	U	N1-C2-O2	-5.62	118.87	122.80
26	14	2459	A	N7-C8-N9	5.62	116.61	113.80
1	13	375	U	N1-C2-O2	5.62	126.73	122.80
1	13	388	G	C8-N9-C4	5.62	108.65	106.40
1	13	1156	G	C2-N3-C4	-5.62	109.09	111.90
1	13	1359	C	C4-C5-C6	-5.62	114.59	117.40
26	1H	310	A	C6-N1-C2	-5.62	115.23	118.60
26	1H	415	A	N1-C2-N3	5.62	132.11	129.30
26	1H	1475	G	N3-C4-N9	-5.62	122.63	126.00
26	1H	1510	A	N7-C8-N9	5.62	116.61	113.80
26	1H	1757	U	C2-N3-C4	-5.62	123.63	127.00
26	1H	2729	G	C2-N3-C4	-5.62	109.09	111.90
26	1H	2872	G	O4'-C1'-N9	-5.62	103.71	108.20
1	1G	503	C	C5-C4-N4	-5.62	116.27	120.20
23	2L	24	C	O5'-P-OP2	-5.62	100.64	105.70
26	14	691	C	C2-N3-C4	-5.62	117.09	119.90
26	14	1596	A	OP1-P-OP2	5.62	128.03	119.60
26	14	1668	A	OP2-P-O3'	5.62	117.56	105.20
26	14	1774	C	N3-C4-C5	5.62	124.15	121.90
1	13	40	C	C5-C4-N4	5.62	124.13	120.20
26	1H	270(Y)	G	C5-C6-N1	-5.62	108.69	111.50
26	1H	654(V)	A	N1-C6-N6	-5.62	115.23	118.60
26	1H	1338	G	N9-C4-C5	-5.62	103.15	105.40
26	1H	1622	G	C4-C5-N7	-5.62	108.55	110.80
26	1H	2666	C	N3-C4-N4	5.62	121.93	118.00
26	14	70	G	C5-C6-O6	5.62	131.97	128.60
26	14	225	A	C2-N3-C4	-5.62	107.79	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	752	A	C6-N1-C2	-5.62	115.23	118.60
26	14	2430	A	C5-N7-C8	-5.62	101.09	103.90
1	13	31	G	C4-C5-N7	5.62	113.05	110.80
1	13	977	A	C4-C5-N7	-5.62	107.89	110.70
1	13	1428	A	O5'-P-OP1	5.62	117.44	110.70
26	1H	142	G	OP2-P-O3'	5.62	117.55	105.20
26	1H	183	C	C2-N3-C4	-5.62	117.09	119.90
26	1H	594	U	C5-C4-O4	5.62	129.27	125.90
26	1H	922	U	N3-C4-C5	-5.62	111.23	114.60
26	1H	1109	C	N3-C2-O2	-5.62	117.97	121.90
26	1H	1236	G	OP1-P-O3'	5.62	117.56	105.20
26	1H	1246	A	O5'-P-OP2	-5.62	100.65	105.70
26	1H	2530	A	C5-N7-C8	-5.62	101.09	103.90
51	L8	31	LEU	CB-CA-C	-5.62	99.53	110.20
1	1G	619	U	N1-C2-N3	5.62	118.27	114.90
26	14	463	G	OP1-P-O3'	5.62	117.55	105.20
26	14	993	G	C8-N9-C4	-5.62	104.15	106.40
26	14	2093	G	C8-N9-C4	-5.62	104.15	106.40
26	14	2595	G	N7-C8-N9	5.62	115.91	113.10
26	14	2607	G	OP1-P-OP2	-5.62	111.18	119.60
26	14	2609	U	C6-N1-C2	5.62	124.37	121.00
1	13	513	C	N1-C2-N3	-5.61	115.27	119.20
23	2K	5	G	N7-C8-N9	-5.61	110.29	113.10
25	4K	25	A	C5-C6-N1	-5.61	114.89	117.70
26	1H	71	A	C6-N1-C2	-5.61	115.23	118.60
26	1H	755	C	OP2-P-O3'	5.61	117.55	105.20
26	1H	1046	A	C2-N3-C4	5.61	113.41	110.60
26	1H	1377	G	O4'-C1'-N9	-5.61	103.71	108.20
26	1H	1473	G	N7-C8-N9	-5.61	110.29	113.10
26	1H	1872	A	C8-N9-C4	5.61	108.05	105.80
26	1H	2068	U	O5'-P-OP1	-5.61	100.65	105.70
1	1G	715	A	N1-C2-N3	5.61	132.11	129.30
1	1G	1408	A	C4-C5-N7	-5.61	107.89	110.70
26	14	851	U	OP1-P-OP2	5.61	128.02	119.60
26	14	1630(A)	C	O5'-P-OP1	-5.61	100.65	105.70
1	13	694	A	C5-N7-C8	-5.61	101.09	103.90
1	13	894	G	N9-C4-C5	-5.61	103.16	105.40
26	14	858	U	N3-C2-O2	-5.61	118.27	122.20
26	14	1351	C	C2-N3-C4	-5.61	117.09	119.90
26	14	1972	A	N3-C4-C5	-5.61	122.87	126.80
26	14	2381	C	N1-C2-O2	-5.61	115.53	118.90
26	14	2506	U	O5'-P-OP2	-5.61	100.65	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2641	G	OP1-P-OP2	5.61	128.02	119.60
26	14	2644	G	N3-C2-N2	-5.61	115.97	119.90
27	1J	90	C	C4-C5-C6	-5.61	114.59	117.40
26	1H	998	C	N1-C2-O2	5.61	122.27	118.90
26	1H	1115	G	C8-N9-C4	5.61	108.64	106.40
26	1H	1288	U	OP1-P-O3'	5.61	117.54	105.20
26	1H	1726	G	N3-C4-N9	-5.61	122.63	126.00
26	1H	2439	A	OP2-P-O3'	-5.61	92.86	105.20
1	1G	12	U	N3-C2-O2	-5.61	118.27	122.20
1	1G	773	G	N3-C2-N2	-5.61	115.97	119.90
1	1G	1391	U	C4-C5-C6	5.61	123.07	119.70
26	14	259	G	C6-N1-C2	5.61	128.47	125.10
26	14	776	G	OP1-P-OP2	5.61	128.02	119.60
26	14	914	C	N3-C2-O2	-5.61	117.97	121.90
26	14	1287	A	C6-N1-C2	-5.61	115.23	118.60
26	14	1489	U	N3-C4-C5	-5.61	111.23	114.60
26	14	1500	G	N7-C8-N9	5.61	115.91	113.10
26	14	1784	A	C5-N7-C8	-5.61	101.09	103.90
26	14	1789	A	N9-C4-C5	5.61	108.04	105.80
26	14	1823	G	C8-N9-C4	5.61	108.64	106.40
26	1H	591	C	C2-N3-C4	-5.61	117.09	119.90
26	1H	843	G	N1-C6-O6	5.61	123.27	119.90
26	1H	846	C	OP1-P-OP2	5.61	128.01	119.60
26	1H	992	C	C4-C5-C6	5.61	120.20	117.40
26	1H	2358	G	OP1-P-O3'	5.61	117.54	105.20
26	14	567	A	C4-C5-C6	-5.61	114.20	117.00
26	14	1221	C	N3-C4-C5	5.61	124.14	121.90
1	13	35	G	N1-C6-O6	5.61	123.27	119.90
1	13	977	A	C8-N9-C4	-5.61	103.56	105.80
1	13	1415	G	C8-N9-C4	5.61	108.64	106.40
1	13	1502	A	OP1-P-OP2	5.61	128.01	119.60
26	1H	87	C	N1-C2-N3	5.61	123.13	119.20
26	1H	1791	A	O5'-P-OP1	-5.61	100.65	105.70
26	1H	2608	G	N9-C4-C5	5.61	107.64	105.40
26	1H	2646	C	N3-C4-C5	5.61	124.14	121.90
1	1G	291	C	C6-N1-C2	5.61	122.54	120.30
1	1G	603	U	C6-N1-C2	-5.61	117.64	121.00
1	1G	917	G	N1-C6-O6	5.61	123.26	119.90
1	1G	1519	A	C5-C6-N6	5.61	128.19	123.70
26	14	34	C	N3-C2-O2	-5.61	117.97	121.90
26	14	547	A	N3-C4-C5	-5.61	122.88	126.80
26	14	979	G	C8-N9-C4	-5.61	104.16	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1135	C	O5'-P-OP2	-5.61	100.65	105.70
26	14	1606	G	N3-C4-C5	-5.61	125.80	128.60
26	14	1831	G	N1-C2-N3	5.61	127.26	123.90
26	14	2332	U	O5'-P-OP1	5.61	117.43	110.70
26	14	2337	G	C4-N9-C1'	5.61	133.79	126.50
26	14	2425	A	C4-C5-C6	5.61	119.80	117.00
27	1J	62	C	OP1-P-OP2	5.61	128.01	119.60
1	13	808	C	N1-C2-O2	-5.61	115.54	118.90
1	13	903	G	OP2-P-O3'	5.61	117.53	105.20
1	13	1199	U	C6-N1-C1'	5.61	129.05	121.20
1	13	1494	G	C4-C5-C6	-5.61	115.44	118.80
26	1H	303	U	N1-C2-N3	5.61	118.26	114.90
26	1H	387	U	N1-C2-O2	-5.61	118.88	122.80
26	1H	489	G	C8-N9-C4	-5.61	104.16	106.40
26	1H	678	C	N1-C2-O2	-5.61	115.54	118.90
26	1H	1366	A	C4-C5-C6	5.61	119.80	117.00
26	1H	1904	G	N3-C2-N2	5.61	123.82	119.90
26	1H	1948	G	C6-C5-N7	5.61	133.76	130.40
26	1H	1950	G	OP1-P-OP2	5.61	128.01	119.60
26	1H	1988	C	N3-C4-C5	5.61	124.14	121.90
26	1H	2426	A	OP1-P-O3'	5.61	117.53	105.20
27	16	116	G	N1-C6-O6	5.61	123.26	119.90
1	1G	610	G	N1-C2-N2	-5.61	111.15	116.20
26	14	1431	U	C4-C5-C6	-5.61	116.34	119.70
26	14	1559	G	C8-N9-C4	5.61	108.64	106.40
26	14	1755	A	O5'-P-OP1	-5.61	100.65	105.70
26	14	1903	G	C5-C6-O6	5.61	131.96	128.60
26	14	2477	C	C6-N1-C1'	-5.61	114.07	120.80
26	14	2614	A	OP2-P-O3'	5.61	117.53	105.20
30	29	136	ARG	NE-CZ-NH1	-5.61	117.50	120.30
26	1H	763	G	OP1-P-O3'	5.60	117.53	105.20
26	1H	1201	C	C6-N1-C2	5.60	122.54	120.30
26	1H	1858	G	C6-C5-N7	-5.60	127.04	130.40
26	1H	2241	A	C2-N3-C4	-5.60	107.80	110.60
37	78	18	ARG	NE-CZ-NH2	5.60	123.10	120.30
57	3L	34	U	N3-C2-O2	-5.60	118.28	122.20
26	14	37	C	N1-C2-O2	-5.60	115.54	118.90
26	14	670	A	C8-N9-C4	5.60	108.04	105.80
26	14	1237	A	N9-C4-C5	5.60	108.04	105.80
44	A5	96	ILE	CG1-CB-CG2	-5.60	99.07	111.40
26	1H	107	C	C2-N1-C1'	-5.60	112.64	118.80
26	1H	491	G	N3-C4-C5	5.60	131.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	744	G	N7-C8-N9	5.60	115.90	113.10
26	1H	1338	G	C5-N7-C8	5.60	107.10	104.30
26	1H	1599	C	C5-C6-N1	-5.60	118.20	121.00
26	1H	1770	G	OP1-P-O3'	5.60	117.52	105.20
26	1H	2362	G	N1-C2-N2	-5.60	111.16	116.20
27	16	49	C	O5'-P-OP1	5.60	117.42	110.70
1	1G	1335	C	OP1-P-OP2	5.60	128.00	119.60
1	1G	1435	G	C5-C6-N1	-5.60	108.70	111.50
26	14	299	A	C8-N9-C4	5.60	108.04	105.80
26	14	534	U	N1-C2-N3	5.60	118.26	114.90
26	14	816	C	C2-N3-C4	5.60	122.70	119.90
26	14	1386	C	N1-C2-O2	-5.60	115.54	118.90
26	1H	1364	G	P-O3'-C3'	5.60	126.42	119.70
26	1H	1831	G	OP1-P-OP2	-5.60	111.20	119.60
26	1H	2669	G	C5-C6-O6	-5.60	125.24	128.60
26	1H	2694	G	N3-C2-N2	5.60	123.82	119.90
1	1G	1518	A	C5-C6-N6	5.60	128.18	123.70
26	14	1568	G	C5-N7-C8	-5.60	101.50	104.30
26	14	1858	G	C6-N1-C2	5.60	128.46	125.10
26	14	2239	G	N9-C4-C5	-5.60	103.16	105.40
1	13	1514	C	C5-C6-N1	-5.60	118.20	121.00
26	1H	299	A	N9-C4-C5	5.60	108.04	105.80
26	1H	685	A	O5'-P-OP1	-5.60	100.66	105.70
26	1H	930	U	OP1-P-OP2	5.60	128.00	119.60
26	1H	1225	C	OP1-P-OP2	5.60	128.00	119.60
26	1H	1339	G	N3-C4-N9	5.60	129.36	126.00
26	1H	2547	U	C2-N3-C4	-5.60	123.64	127.00
26	1H	2640	G	N1-C2-N3	5.60	127.26	123.90
26	1H	2642	G	N9-C4-C5	-5.60	103.16	105.40
26	1H	2651	C	C5-C4-N4	-5.60	116.28	120.20
1	1G	924	C	N3-C2-O2	-5.60	117.98	121.90
26	14	759	G	N3-C4-N9	-5.60	122.64	126.00
26	14	1301	A	C5-C6-N1	-5.60	114.90	117.70
26	14	1787	A	N9-C4-C5	-5.60	103.56	105.80
26	14	2558	C	C2-N3-C4	-5.60	117.10	119.90
1	13	492	G	C5-C6-O6	-5.60	125.24	128.60
1	13	1485	U	N1-C2-O2	-5.60	118.88	122.80
1	13	1495	U	C2-N3-C4	5.60	130.36	127.00
26	1H	85	G	C6-N1-C2	-5.60	121.74	125.10
26	1H	684	G	C4-C5-N7	-5.60	108.56	110.80
26	1H	860	U	N1-C2-N3	5.60	118.26	114.90
26	1H	875	G	C8-N9-C4	5.60	108.64	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2825	C	OP2-P-O3'	5.60	117.52	105.20
1	1G	1096	C	N1-C2-O2	5.60	122.26	118.90
26	14	202	U	OP1-P-OP2	5.60	128.00	119.60
26	14	946	G	C5-C6-N1	-5.60	108.70	111.50
26	14	1270	C	OP2-P-O3'	5.60	117.51	105.20
26	14	1346	G	C8-N9-C4	5.60	108.64	106.40
26	14	1550	C	N1-C2-O2	-5.60	115.54	118.90
26	14	1814	G	N1-C2-N2	5.60	121.24	116.20
26	14	2258	C	O5'-P-OP2	5.60	117.42	110.70
26	14	2470	G	O4'-C1'-N9	-5.60	103.72	108.20
1	13	272	C	C6-N1-C2	-5.60	118.06	120.30
1	13	726	C	N3-C2-O2	-5.60	117.98	121.90
26	1H	13	A	C5-C6-N6	-5.60	119.22	123.70
26	1H	293	U	N3-C2-O2	-5.60	118.28	122.20
26	1H	1324	G	C4-C5-N7	-5.60	108.56	110.80
26	1H	1471	A	N7-C8-N9	5.60	116.60	113.80
26	14	207	A	C2-N3-C4	-5.60	107.80	110.60
26	14	1034	G	C8-N9-C4	5.60	108.64	106.40
26	14	1281	G	C5-C6-N1	5.60	114.30	111.50
26	14	1465	G	OP1-P-OP2	5.60	127.99	119.60
26	14	1870	C	N3-C4-C5	5.60	124.14	121.90
1	13	125	U	C4-C5-C6	5.59	123.06	119.70
1	13	1083	U	N3-C4-C5	-5.59	111.24	114.60
26	1H	308	G	C4-C5-N7	5.59	113.04	110.80
26	1H	439	G	C2-N3-C4	-5.59	109.10	111.90
26	1H	615	G	N1-C2-N3	-5.59	120.54	123.90
26	1H	1031	G	C8-N9-C4	-5.59	104.16	106.40
26	1H	1405	U	N3-C2-O2	-5.59	118.28	122.20
26	1H	2555	U	N1-C2-O2	-5.59	118.88	122.80
1	1G	292	G	C8-N9-C4	5.59	108.64	106.40
1	1G	1274	G	C5-N7-C8	-5.59	101.50	104.30
23	2L	76	C	OP1-P-OP2	-5.59	111.21	119.60
26	14	16	G	N7-C8-N9	5.59	115.90	113.10
26	14	244	A	O4'-C1'-N9	5.59	112.67	108.20
26	14	1612	C	C4-C5-C6	5.59	120.20	117.40
26	14	1770	G	N3-C2-N2	-5.59	115.98	119.90
26	14	1909	C	C4-C5-C6	5.59	120.20	117.40
26	14	2294	C	C5-C6-N1	5.59	123.80	121.00
1	13	998	G	C4-C5-N7	-5.59	108.56	110.80
26	1H	622	G	C4-C5-N7	-5.59	108.56	110.80
26	1H	635	C	O5'-P-OP1	5.59	117.41	110.70
26	1H	945	A	C8-N9-C1'	-5.59	117.63	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2356	C	OP2-P-O3'	5.59	117.50	105.20
26	1H	2558	C	OP2-P-O3'	5.59	117.50	105.20
26	1H	2744	G	N1-C2-N3	5.59	127.26	123.90
1	1G	838	G	N3-C4-C5	5.59	131.40	128.60
26	14	477	A	C5-C6-N6	5.59	128.17	123.70
26	14	1840	G	C6-N1-C2	-5.59	121.74	125.10
26	14	1898	U	C2-N1-C1'	-5.59	110.99	117.70
27	1J	88	C	N1-C2-O2	5.59	122.26	118.90
1	13	697	U	C2-N1-C1'	-5.59	110.99	117.70
1	13	1332	A	C5-C6-N1	-5.59	114.90	117.70
26	1H	692	C	OP2-P-O3'	5.59	117.50	105.20
26	1H	955	C	OP1-P-O3'	5.59	117.50	105.20
26	1H	1183	G	C4-C5-N7	5.59	113.04	110.80
26	1H	1184	G	N1-C6-O6	5.59	123.25	119.90
26	1H	2713	A	C6-N1-C2	5.59	121.95	118.60
26	1H	2818	G	N7-C8-N9	-5.59	110.30	113.10
27	16	116	G	C5-C6-N1	-5.59	108.70	111.50
1	1G	818	G	N3-C2-N2	-5.59	115.99	119.90
1	1G	1095	U	C4-C5-C6	5.59	123.05	119.70
1	1G	1273	G	C8-N9-C4	-5.59	104.16	106.40
1	1G	1421	G	O5'-P-OP2	-5.59	100.67	105.70
26	14	62	C	OP1-P-OP2	5.59	127.99	119.60
26	14	714	U	N1-C2-N3	5.59	118.25	114.90
1	13	623	C	C5-C4-N4	-5.59	116.29	120.20
24	3K	61	C	C5-C6-N1	5.59	123.80	121.00
26	1H	571	A	C8-N9-C4	5.59	108.03	105.80
26	1H	704	G	C4-C5-C6	5.59	122.15	118.80
26	1H	1182	A	OP1-P-OP2	-5.59	111.22	119.60
26	1H	1395	A	O5'-P-OP1	-5.59	100.67	105.70
26	1H	2545	G	C2-N3-C4	5.59	114.69	111.90
1	1G	1113	C	C2-N3-C4	5.59	122.69	119.90
1	1G	1356	G	C5-C6-N1	-5.59	108.70	111.50
1	1G	1474	G	N3-C2-N2	-5.59	115.99	119.90
56	1L	37	A	C2-N3-C4	5.59	113.39	110.60
26	14	469	G	C5-C6-O6	-5.59	125.25	128.60
26	14	1138	G	C2-N3-C4	-5.59	109.11	111.90
26	14	1334	G	N1-C2-N2	5.59	121.23	116.20
26	14	1381	G	N3-C4-C5	5.59	131.40	128.60
26	14	1698	A	OP1-P-OP2	-5.59	111.22	119.60
26	14	1904	G	O5'-P-OP1	-5.59	100.67	105.70
26	14	2352	A	C4-C5-C6	5.59	119.80	117.00
26	14	2519	U	C5-C6-N1	-5.59	119.91	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	870	U	O4'-C1'-N1	-5.59	103.73	108.20
22	1K	36	U	C5-C4-O4	5.59	129.25	125.90
26	1H	60	G	C5-C6-N1	5.59	114.29	111.50
26	1H	431	U	C6-N1-C2	-5.59	117.65	121.00
26	1H	728	G	C5-N7-C8	5.59	107.09	104.30
26	1H	736	C	C4-C5-C6	-5.59	114.61	117.40
26	1H	802	A	OP1-P-O3'	-5.59	92.91	105.20
26	1H	1813	G	O5'-P-OP2	5.59	117.41	110.70
26	1H	2234	G	O5'-P-OP2	-5.59	100.67	105.70
26	14	630	G	C4-C5-N7	-5.59	108.56	110.80
26	14	1397	U	N1-C2-O2	5.59	126.71	122.80
26	14	2049	G	OP1-P-OP2	5.59	127.98	119.60
26	14	2431	U	N1-C2-O2	-5.59	118.89	122.80
1	13	392	G	C6-C5-N7	-5.59	127.05	130.40
1	13	646	U	C6-N1-C2	-5.59	117.65	121.00
1	13	681	C	N3-C4-C5	5.59	124.14	121.90
1	13	806	C	O5'-P-OP2	-5.59	100.67	105.70
1	13	861	G	N3-C4-C5	-5.59	125.81	128.60
1	13	965	A	C2-N3-C4	-5.59	107.81	110.60
1	13	1392	G	C5-C6-O6	5.59	131.95	128.60
3	2E	140	ARG	NE-CZ-NH1	5.59	123.09	120.30
23	2K	24	C	OP2-P-O3'	5.59	117.49	105.20
26	1H	147	U	C2-N3-C4	-5.59	123.65	127.00
26	1H	1556	C	N3-C4-N4	-5.59	114.09	118.00
26	1H	1797	C	N3-C4-C5	5.59	124.14	121.90
26	1H	1823	G	C4-C5-C6	5.59	122.15	118.80
26	1H	1891	G	OP2-P-O3'	5.59	117.49	105.20
26	1H	2052	G	C4-C5-N7	-5.59	108.56	110.80
26	1H	2094	G	O5'-P-OP1	5.59	117.40	110.70
26	1H	2464	C	C5-C6-N1	-5.59	118.21	121.00
26	1H	2615	U	N3-C4-C5	5.59	117.95	114.60
1	1G	774	G	N3-C4-C5	5.59	131.39	128.60
1	1G	1314	C	N1-C2-O2	-5.59	115.55	118.90
26	14	210	C	O5'-P-OP2	-5.59	100.67	105.70
26	14	501	A	O5'-P-OP2	-5.59	100.67	105.70
26	14	699	A	C6-C5-N7	5.59	136.21	132.30
26	14	761	A	C5-C6-N6	5.59	128.17	123.70
26	14	1207	C	C5-C6-N1	5.59	123.79	121.00
26	14	1598	C	C6-N1-C1'	-5.59	114.09	120.80
26	14	2286	A	N9-C4-C5	-5.59	103.56	105.80
1	13	374	A	O5'-P-OP2	5.58	117.40	110.70
1	13	1107	C	C4-C5-C6	5.58	120.19	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	27	G	N3-C4-C5	-5.58	125.81	128.60
26	1H	911	A	C8-N9-C4	-5.58	103.57	105.80
26	1H	2277	G	OP2-P-O3'	5.58	117.49	105.20
26	1H	2706	G	C6-C5-N7	-5.58	127.05	130.40
26	1H	2830	G	C6-C5-N7	-5.58	127.05	130.40
1	1G	663	A	C2-N3-C4	-5.58	107.81	110.60
1	1G	894	G	C5-N7-C8	-5.58	101.51	104.30
1	1G	933	G	C5-C6-O6	-5.58	125.25	128.60
1	1G	1518	A	C5-C6-N1	-5.58	114.91	117.70
26	14	2277	G	N7-C8-N9	-5.58	110.31	113.10
26	14	2722	G	OP1-P-OP2	-5.58	111.22	119.60
1	13	110	C	C5-C4-N4	5.58	124.11	120.20
1	13	503	C	C2-N1-C1'	5.58	124.94	118.80
1	13	800	G	N1-C6-O6	5.58	123.25	119.90
1	13	866	C	N3-C2-O2	5.58	125.81	121.90
26	1H	151	C	O5'-P-OP1	5.58	117.40	110.70
26	1H	396	G	C6-N1-C2	-5.58	121.75	125.10
26	1H	716	A	OP1-P-OP2	-5.58	111.22	119.60
26	1H	723	G	C5-N7-C8	5.58	107.09	104.30
26	1H	1003	G	C2-N3-C4	-5.58	109.11	111.90
26	1H	1970	A	N1-C2-N3	-5.58	126.51	129.30
26	1H	2767	C	C6-N1-C1'	-5.58	114.10	120.80
1	1G	293	G	C2-N3-C4	-5.58	109.11	111.90
1	1G	907	A	C5-C6-N6	-5.58	119.23	123.70
26	14	749	C	O5'-P-OP1	-5.58	100.67	105.70
26	14	750	A	N9-C4-C5	5.58	108.03	105.80
26	14	1200	C	C5-C4-N4	5.58	124.11	120.20
26	14	2243	U	C5-C6-N1	-5.58	119.91	122.70
26	14	2631	G	N3-C4-N9	-5.58	122.65	126.00
1	13	42	G	C2-N3-C4	5.58	114.69	111.90
1	13	108	G	N3-C2-N2	5.58	123.81	119.90
1	13	539	A	N7-C8-N9	-5.58	111.01	113.80
1	13	709	G	OP1-P-OP2	-5.58	111.23	119.60
1	13	1019	C	C5-C6-N1	5.58	123.79	121.00
23	2K	7	G	N3-C4-C5	5.58	131.39	128.60
26	1H	50	U	C4-C5-C6	5.58	123.05	119.70
26	1H	407	G	C5-C6-O6	5.58	131.95	128.60
26	1H	646	A	C5-N7-C8	-5.58	101.11	103.90
26	1H	1001	A	N7-C8-N9	5.58	116.59	113.80
26	1H	1332	G	N3-C2-N2	5.58	123.81	119.90
26	1H	1554	A	N9-C4-C5	5.58	108.03	105.80
26	1H	1817	G	C6-N1-C2	5.58	128.45	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2001	A	N1-C6-N6	-5.58	115.25	118.60
26	1H	2189	U	C6-N1-C2	-5.58	117.65	121.00
26	14	1026	U	O4'-C1'-N1	5.58	112.67	108.20
26	14	1303	G	N1-C2-N2	-5.58	111.18	116.20
26	14	1985	G	N7-C8-N9	-5.58	110.31	113.10
26	14	2259	G	C4-C5-N7	5.58	113.03	110.80
26	14	2527	C	N1-C2-O2	5.58	122.25	118.90
1	13	1503	A	C5-N7-C8	5.58	106.69	103.90
26	1H	1884	A	N1-C2-N3	5.58	132.09	129.30
1	1G	903	G	N1-C2-N2	-5.58	111.18	116.20
26	14	1487	G	OP1-P-OP2	-5.58	111.23	119.60
26	14	2217	G	N3-C2-N2	-5.58	115.99	119.90
26	14	2590	A	C2-N3-C4	-5.58	107.81	110.60
1	13	571	U	OP2-P-O3'	5.58	117.47	105.20
1	13	1488	G	N1-C2-N2	-5.58	111.18	116.20
26	1H	920	G	N7-C8-N9	-5.58	110.31	113.10
26	1H	1579	A	C5-N7-C8	-5.58	101.11	103.90
26	1H	1691	C	OP1-P-O3'	5.58	117.47	105.20
1	1G	52	G	OP1-P-OP2	5.58	127.97	119.60
1	1G	278	G	C5-C6-O6	-5.58	125.25	128.60
1	1G	592	G	N1-C6-O6	5.58	123.25	119.90
26	14	1395	A	N1-C6-N6	5.58	121.95	118.60
26	14	1402	C	N3-C4-N4	5.58	121.91	118.00
26	14	2031	A	C5-C6-N6	-5.58	119.24	123.70
26	14	2639	A	N7-C8-N9	-5.58	111.01	113.80
1	13	429	U	O5'-P-OP2	5.58	117.39	110.70
23	2K	40	C	OP2-P-O3'	5.58	117.47	105.20
26	1H	1644	C	C2-N1-C1'	5.58	124.94	118.80
26	1H	1860	G	C2-N3-C4	-5.58	109.11	111.90
1	1G	231	G	C4-C5-N7	-5.58	108.57	110.80
1	1G	442	C	N3-C4-C5	-5.58	119.67	121.90
57	3L	42	A	C5-C6-N1	5.58	120.49	117.70
26	14	582	G	C5-C6-O6	-5.58	125.25	128.60
26	14	1243	G	C4-C5-N7	5.58	113.03	110.80
26	14	2645	G	C4-C5-N7	-5.58	108.57	110.80
22	1K	74	C	N1-C2-N3	-5.58	115.30	119.20
26	1H	268	C	C4-C5-C6	5.58	120.19	117.40
26	1H	480	A	OP1-P-O3'	5.58	117.47	105.20
26	1H	630	G	C5-C6-N1	-5.58	108.71	111.50
26	1H	1203	G	N1-C2-N2	-5.58	111.18	116.20
26	1H	1364	G	C6-C5-N7	-5.58	127.06	130.40
26	1H	1641	A	OP1-P-OP2	-5.58	111.24	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2000	G	C8-N9-C4	5.58	108.63	106.40
1	1G	105	G	C6-C5-N7	-5.58	127.06	130.40
1	1G	161	A	C8-N9-C4	-5.58	103.57	105.80
1	1G	585	G	OP2-P-O3'	5.58	117.47	105.20
1	1G	700	G	N1-C6-O6	5.58	123.25	119.90
1	1G	735	C	C5-C4-N4	-5.58	116.30	120.20
26	14	399	G	C5-C6-N1	5.58	114.29	111.50
26	14	443	A	N7-C8-N9	5.58	116.59	113.80
26	14	714	U	N1-C2-O2	-5.58	118.90	122.80
26	14	1563	G	C5-C6-O6	-5.58	125.25	128.60
26	14	2313	C	O5'-P-OP2	-5.58	100.68	105.70
26	14	2568	C	C5-C4-N4	-5.58	116.30	120.20
26	14	2587	A	N1-C2-N3	5.58	132.09	129.30
1	13	232	G	C4-C5-C6	5.57	122.14	118.80
1	13	395	C	C5-C4-N4	5.57	124.10	120.20
1	13	455	C	C5-C6-N1	5.57	123.79	121.00
1	13	1382	C	OP1-P-OP2	-5.57	111.24	119.60
1	13	1411	C	C4-C5-C6	-5.57	114.61	117.40
26	1H	15	G	O5'-P-OP1	-5.57	100.68	105.70
26	1H	814	C	OP2-P-O3'	5.57	117.46	105.20
26	1H	997	G	N7-C8-N9	-5.57	110.31	113.10
26	1H	1425	G	OP1-P-O3'	5.57	117.46	105.20
26	1H	1797	C	C2-N3-C4	-5.57	117.11	119.90
26	1H	1899	G	N9-C4-C5	5.57	107.63	105.40
26	1H	1959	G	C4-C5-N7	-5.57	108.57	110.80
26	1H	2208	U	N3-C4-O4	5.57	123.30	119.40
26	1H	2280	G	N3-C2-N2	-5.57	116.00	119.90
26	1H	2485	G	N7-C8-N9	-5.57	110.31	113.10
26	1H	2848	G	C4-C5-N7	-5.57	108.57	110.80
26	14	473	G	N1-C2-N3	5.57	127.24	123.90
26	14	1815	A	C6-N1-C2	-5.57	115.26	118.60
26	14	1820	U	O5'-P-OP1	-5.57	100.68	105.70
26	14	1996	C	O5'-P-OP1	-5.57	100.68	105.70
26	14	2026	C	C6-N1-C2	5.57	122.53	120.30
26	14	2446	G	P-O3'-C3'	5.57	126.39	119.70
1	13	1222	G	C5-C6-O6	5.57	131.94	128.60
1	13	1411	C	N3-C4-C5	5.57	124.13	121.90
26	1H	511	U	N3-C4-C5	-5.57	111.26	114.60
26	1H	974(A)	C	N3-C2-O2	-5.57	118.00	121.90
26	1H	1193	G	C6-C5-N7	5.57	133.74	130.40
26	14	1925	C	OP1-P-OP2	5.57	127.96	119.60
26	14	2712	U	O4'-C1'-N1	5.57	112.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	357	G	OP1-P-OP2	-5.57	111.25	119.60
1	13	523	A	C6-N1-C2	5.57	121.94	118.60
1	13	1512	U	N3-C4-C5	-5.57	111.26	114.60
26	1H	505	A	C4-C5-C6	-5.57	114.22	117.00
26	1H	619	G	C6-C5-N7	5.57	133.74	130.40
26	1H	865	C	OP1-P-OP2	-5.57	111.25	119.60
26	1H	1181	C	OP1-P-O3'	5.57	117.45	105.20
26	1H	1192	G	C5-C6-O6	-5.57	125.26	128.60
26	1H	2290	G	N3-C4-C5	5.57	131.38	128.60
26	1H	2370	G	OP1-P-OP2	5.57	127.95	119.60
27	16	23	G	N1-C2-N2	5.57	121.21	116.20
1	1G	747	C	C6-N1-C2	5.57	122.53	120.30
1	1G	1522	U	C4-C5-C6	5.57	123.04	119.70
26	14	282	A	N1-C2-N3	5.57	132.09	129.30
26	14	449	A	N3-C4-C5	5.57	130.70	126.80
26	14	1224	G	N3-C2-N2	-5.57	116.00	119.90
26	14	1413	G	OP1-P-OP2	-5.57	111.25	119.60
26	14	1777	U	C2-N1-C1'	5.57	124.38	117.70
26	14	2038	G	C8-N9-C4	5.57	108.63	106.40
26	14	2376	A	C6-N1-C2	5.57	121.94	118.60
26	14	2549	G	C6-N1-C2	5.57	128.44	125.10
26	1H	126	A	OP2-P-O3'	5.57	117.45	105.20
26	1H	558	G	N1-C2-N3	5.57	127.24	123.90
26	1H	1491	G	OP1-P-O3'	5.57	117.45	105.20
26	1H	2051	A	OP2-P-O3'	5.57	117.45	105.20
26	1H	2054	A	C5-C6-N6	-5.57	119.25	123.70
26	14	248	G	O5'-P-OP1	5.57	117.38	110.70
26	14	372	G	O4'-C1'-N9	5.57	112.66	108.20
26	14	2009	G	OP2-P-O3'	5.57	117.45	105.20
26	14	2385	C	O5'-P-OP2	-5.57	100.69	105.70
1	13	731	G	N9-C4-C5	5.57	107.63	105.40
1	13	903	G	C8-N9-C4	5.57	108.63	106.40
26	1H	142	G	N1-C6-O6	5.57	123.24	119.90
26	1H	511	U	C4-C5-C6	5.57	123.04	119.70
26	1H	1386	C	OP1-P-OP2	-5.57	111.25	119.60
26	1H	2023	G	O5'-P-OP2	5.57	117.38	110.70
26	1H	2680	C	N3-C4-C5	-5.57	119.67	121.90
1	1G	286	G	C5-N7-C8	5.57	107.08	104.30
1	1G	305	G	N1-C2-N2	-5.57	111.19	116.20
1	1G	739	C	C4-C5-C6	5.57	120.18	117.40
26	14	485	C	C2-N3-C4	-5.57	117.12	119.90
26	14	1462	C	C5-C6-N1	5.57	123.78	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1664	A	O4'-C1'-N9	-5.57	103.75	108.20
26	14	1733	G	C6-C5-N7	-5.57	127.06	130.40
26	14	2208	U	N3-C4-O4	-5.57	115.50	119.40
26	14	2259	G	N3-C4-C5	5.57	131.38	128.60
27	1J	56	G	C2-N3-C4	5.57	114.68	111.90
1	13	551	U	C4-C5-C6	5.57	123.04	119.70
1	13	1281	U	N3-C2-O2	-5.57	118.30	122.20
26	1H	260	G	C6-C5-N7	5.57	133.74	130.40
26	1H	1131	G	O5'-P-OP2	-5.57	100.69	105.70
26	1H	1392	A	OP1-P-OP2	5.57	127.95	119.60
26	1H	1661	G	C5-N7-C8	5.57	107.08	104.30
26	1H	2440	C	O5'-P-OP2	-5.57	100.69	105.70
1	1G	1305	G	C4-N9-C1'	-5.57	119.26	126.50
1	1G	1392	G	N1-C6-O6	-5.57	116.56	119.90
26	14	381	G	C5-C6-O6	5.57	131.94	128.60
26	14	465	G	N7-C8-N9	5.57	115.88	113.10
26	14	760	G	C4-N9-C1'	5.57	133.73	126.50
26	14	962	G	OP1-P-OP2	-5.57	111.25	119.60
26	14	1003	G	N1-C6-O6	5.57	123.24	119.90
26	14	1007	C	C5-C4-N4	-5.57	116.30	120.20
26	14	1361	G	C2-N3-C4	-5.57	109.12	111.90
26	14	2012	G	OP1-P-O3'	5.57	117.44	105.20
26	14	2298	A	OP1-P-O3'	5.57	117.44	105.20
26	14	2597	G	C5-C6-N1	-5.57	108.72	111.50
26	14	2615	U	O5'-P-OP1	-5.57	100.69	105.70
26	14	2844	G	OP1-P-O3'	-5.57	92.96	105.20
26	1H	2370	G	O5'-P-OP1	-5.56	100.69	105.70
1	1G	1514	C	N3-C4-C5	-5.56	119.67	121.90
26	14	705	A	O5'-P-OP2	-5.56	100.69	105.70
1	13	974	A	C6-N1-C2	5.56	121.94	118.60
1	13	1057	G	C2-N3-C4	-5.56	109.12	111.90
1	13	1221	G	OP2-P-O3'	5.56	117.44	105.20
1	13	1327	C	N3-C4-N4	-5.56	114.11	118.00
1	13	1394	A	C2-N3-C4	5.56	113.38	110.60
1	13	1401	G	N1-C2-N2	5.56	121.21	116.20
1	13	1414	U	OP2-P-O3'	5.56	117.44	105.20
26	1H	942	G	C8-N9-C1'	5.56	134.23	127.00
26	1H	1153	C	OP2-P-O3'	5.56	117.44	105.20
26	1H	1232	G	C5-C6-O6	-5.56	125.26	128.60
26	1H	1363	C	C6-N1-C1'	5.56	127.47	120.80
26	1H	1772	G	N7-C8-N9	5.56	115.88	113.10
26	1H	1896	G	C6-C5-N7	5.56	133.74	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1954	G	O5'-P-OP2	5.56	117.38	110.70
41	B8	91	ARG	NE-CZ-NH2	-5.56	117.52	120.30
1	1G	562	C	OP1-P-OP2	-5.56	111.26	119.60
1	1G	738	C	C4-C5-C6	5.56	120.18	117.40
26	14	745	G	C5-N7-C8	5.56	107.08	104.30
26	14	939	G	OP1-P-O3'	-5.56	92.96	105.20
26	14	1125	G	C5-C6-O6	5.56	131.94	128.60
26	14	1350	C	N1-C2-O2	-5.56	115.56	118.90
26	14	2028	U	C4-C5-C6	5.56	123.04	119.70
26	14	2534	A	C4-C5-N7	5.56	113.48	110.70
26	14	2657	A	C8-N9-C4	-5.56	103.58	105.80
27	1J	60	C	N3-C2-O2	-5.56	118.01	121.90
1	13	997	U	C5-C6-N1	5.56	125.48	122.70
26	1H	304	G	C6-N1-C2	5.56	128.44	125.10
26	1H	752	A	C5'-C4'-O4'	-5.56	102.43	109.10
26	1H	1836	C	N1-C2-O2	5.56	122.24	118.90
1	1G	1074	G	C5-C6-N1	-5.56	108.72	111.50
26	14	377	C	OP1-P-OP2	-5.56	111.26	119.60
26	14	2602	A	OP1-P-O3'	5.56	117.43	105.20
1	13	631	G	OP1-P-OP2	-5.56	111.26	119.60
1	13	940	C	C5-C6-N1	5.56	123.78	121.00
26	1H	439	G	N9-C4-C5	5.56	107.62	105.40
26	1H	764	A	C8-N9-C4	5.56	108.02	105.80
26	1H	2018	G	C5-C6-O6	5.56	131.94	128.60
27	16	79	C	C6-N1-C2	-5.56	118.08	120.30
26	14	440	G	C6-C5-N7	-5.56	127.06	130.40
26	14	856	C	N1-C2-O2	5.56	122.23	118.90
26	14	911	A	C5-C6-N1	5.56	120.48	117.70
26	14	1187	G	N1-C6-O6	5.56	123.23	119.90
26	14	1496	A	OP1-P-O3'	5.56	117.43	105.20
26	14	1925	C	C6-N1-C1'	5.56	127.47	120.80
26	14	2275	C	OP1-P-O3'	5.56	117.43	105.20
26	14	2424	C	N3-C4-N4	-5.56	114.11	118.00
26	14	2457	U	N1-C2-O2	5.56	126.69	122.80
26	14	2826	A	C4-C5-C6	5.56	119.78	117.00
26	1H	24	G	N1-C2-N3	5.56	127.23	123.90
26	1H	56	A	N1-C6-N6	-5.56	115.27	118.60
26	1H	210	C	N3-C2-O2	5.56	125.79	121.90
26	1H	301	G	N7-C8-N9	-5.56	110.32	113.10
26	1H	531	C	C6-N1-C2	5.56	122.52	120.30
26	1H	629	G	N9-C4-C5	-5.56	103.18	105.40
26	1H	929	G	N1-C6-O6	5.56	123.23	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1003	G	C5-N7-C8	5.56	107.08	104.30
26	1H	1197	G	C8-N9-C4	5.56	108.62	106.40
26	1H	1222	C	C6-N1-C1'	-5.56	114.13	120.80
26	1H	1480	G	C5-C6-N1	-5.56	108.72	111.50
26	1H	2308	G	N1-C2-N3	-5.56	120.57	123.90
26	1H	2372	G	C2-N3-C4	-5.56	109.12	111.90
26	1H	2488	A	OP2-P-O3'	5.56	117.43	105.20
26	1H	2675	A	N7-C8-N9	5.56	116.58	113.80
27	16	58	A	C5-N7-C8	-5.56	101.12	103.90
27	16	73	A	O5'-P-OP2	-5.56	100.70	105.70
27	16	78	A	C8-N9-C4	-5.56	103.58	105.80
1	1G	955	U	N3-C2-O2	5.56	126.09	122.20
1	1G	1393	U	C2-N3-C4	5.56	130.33	127.00
26	14	1600	C	N1-C2-O2	-5.56	115.56	118.90
26	14	2248	C	OP1-P-O3'	5.56	117.43	105.20
26	14	2689	U	C2-N1-C1'	-5.56	111.03	117.70
1	13	102	G	N3-C4-C5	-5.56	125.82	128.60
1	13	605	U	N3-C2-O2	5.56	126.09	122.20
1	13	795	C	OP1-P-O3'	5.56	117.42	105.20
1	13	1127	G	C5-C6-O6	-5.56	125.27	128.60
26	1H	179	G	C6-C5-N7	-5.56	127.07	130.40
26	1H	425	G	C6-C5-N7	5.56	133.73	130.40
26	1H	844	C	N3-C4-C5	-5.56	119.68	121.90
26	1H	2383	G	N7-C8-N9	5.56	115.88	113.10
48	I8	23	VAL	CG1-CB-CG2	5.56	119.79	110.90
1	1G	197	A	N7-C8-N9	5.56	116.58	113.80
26	14	1186	G	C4-C5-C6	5.56	122.13	118.80
26	14	2040	C	C5-C6-N1	-5.56	118.22	121.00
26	14	2389	G	O5'-P-OP2	5.56	117.37	110.70
1	13	265	G	N9-C4-C5	5.55	107.62	105.40
1	13	275	G	C8-N9-C4	-5.55	104.18	106.40
1	13	1230	C	C5-C4-N4	-5.55	116.31	120.20
26	1H	343	C	N3-C4-C5	-5.55	119.68	121.90
26	1H	476	G	N1-C2-N2	5.55	121.20	116.20
26	1H	1138	G	N3-C2-N2	-5.55	116.01	119.90
26	1H	1288	U	OP1-P-OP2	5.55	127.93	119.60
26	1H	1413	G	N1-C2-N3	5.55	127.23	123.90
26	1H	2723	C	C2-N3-C4	-5.55	117.12	119.90
26	1H	2730	C	N3-C4-C5	5.55	124.12	121.90
1	1G	585	G	N9-C4-C5	5.55	107.62	105.40
1	1G	1372	U	N3-C4-O4	5.55	123.29	119.40
14	5A	44	LEU	CA-CB-CG	5.55	128.07	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	270(Q)	C	C5-C6-N1	5.55	123.78	121.00
26	14	786	C	C2-N1-C1'	-5.55	112.69	118.80
26	14	1303	G	N3-C4-C5	-5.55	125.82	128.60
26	14	1557	C	C5-C6-N1	-5.55	118.22	121.00
26	14	2263	C	N3-C4-C5	-5.55	119.68	121.90
23	2K	30	G	C2-N3-C4	-5.55	109.12	111.90
26	1H	629	G	N3-C4-C5	5.55	131.38	128.60
26	1H	1902	C	N3-C4-N4	-5.55	114.11	118.00
1	1G	355	C	C6-N1-C2	5.55	122.52	120.30
1	1G	553	A	N9-C4-C5	5.55	108.02	105.80
1	1G	652	U	C6-N1-C2	-5.55	117.67	121.00
1	1G	1443	G	C5-C6-N1	-5.55	108.72	111.50
26	14	270(T)	G	C2-N3-C4	-5.55	109.12	111.90
26	14	1187	G	N1-C2-N2	5.55	121.20	116.20
26	14	2873	A	O4'-C1'-N9	5.55	112.64	108.20
1	13	794	A	C8-N9-C4	-5.55	103.58	105.80
1	13	913	A	O5'-P-OP2	5.55	117.36	110.70
1	13	926	G	N3-C2-N2	-5.55	116.01	119.90
1	13	952	U	N3-C4-C5	-5.55	111.27	114.60
1	13	1410	G	OP1-P-OP2	5.55	127.93	119.60
1	13	1466	C	N3-C4-C5	-5.55	119.68	121.90
23	2K	77	A	O5'-P-OP2	5.55	117.36	110.70
26	1H	567	A	C5-C6-N1	5.55	120.48	117.70
26	1H	736	C	C2-N1-C1'	-5.55	112.69	118.80
26	1H	995	C	O5'-P-OP1	-5.55	100.70	105.70
26	1H	1401	G	N7-C8-N9	5.55	115.88	113.10
26	1H	1949	G	N9-C4-C5	5.55	107.62	105.40
26	1H	1959	G	C2-N3-C4	5.55	114.68	111.90
26	1H	1990	C	C6-N1-C2	-5.55	118.08	120.30
26	1H	2270	G	C6-N1-C2	-5.55	121.77	125.10
26	1H	2314	C	C4-C5-C6	5.55	120.18	117.40
26	1H	2869	G	N3-C4-N9	-5.55	122.67	126.00
27	16	43	C	OP2-P-O3'	5.55	117.41	105.20
1	1G	529	G	C8-N9-C4	-5.55	104.18	106.40
26	14	1334	G	C5-N7-C8	-5.55	101.52	104.30
26	14	1342	A	C5-N7-C8	-5.55	101.12	103.90
26	14	1543	A	C5-C6-N1	-5.55	114.92	117.70
26	14	1554	A	O4'-C1'-N9	5.55	112.64	108.20
26	14	2238	G	N1-C2-N3	-5.55	120.57	123.90
26	14	2394	C	OP1-P-OP2	5.55	127.93	119.60
26	14	2581	G	OP1-P-OP2	5.55	127.93	119.60
26	14	2585	U	N3-C2-O2	-5.55	118.31	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1240	U	C6-N1-C2	5.55	124.33	121.00
26	1H	148	C	N3-C4-C5	5.55	124.12	121.90
26	1H	520	G	C8-N9-C4	5.55	108.62	106.40
26	1H	702	G	C8-N9-C4	5.55	108.62	106.40
26	1H	965	C	N1-C2-O2	5.55	122.23	118.90
26	1H	1781	C	N3-C2-O2	5.55	125.78	121.90
26	1H	2033	A	C2-N3-C4	5.55	113.38	110.60
26	1H	2384	G	C6-C5-N7	5.55	133.73	130.40
26	1H	2739	U	N1-C2-N3	5.55	118.23	114.90
1	1G	247	G	C8-N9-C4	5.55	108.62	106.40
1	1G	887	G	N1-C6-O6	5.55	123.23	119.90
1	1G	1057	G	C5-C6-N1	-5.55	108.72	111.50
26	14	250	G	C8-N9-C4	-5.55	104.18	106.40
26	14	484	C	N3-C4-C5	-5.55	119.68	121.90
26	14	1663	C	C4-C5-C6	-5.55	114.62	117.40
26	14	1845	G	C2-N3-C4	-5.55	109.13	111.90
26	14	2259	G	N1-C2-N2	5.55	121.19	116.20
26	14	2352	A	O5'-P-OP1	-5.55	100.70	105.70
26	1H	858	U	OP1-P-O3'	-5.55	92.99	105.20
26	1H	1167	U	N3-C4-O4	5.55	123.28	119.40
26	1H	1205	U	O5'-P-OP1	5.55	117.36	110.70
26	1H	1278	A	C5-C6-N1	5.55	120.47	117.70
26	1H	1512	G	C5-C6-O6	5.55	131.93	128.60
1	1G	932	C	C6-N1-C2	-5.55	118.08	120.30
26	14	190	A	N3-C4-C5	5.55	130.68	126.80
26	14	375	C	C5-C6-N1	-5.55	118.23	121.00
1	13	526	C	C5-C6-N1	-5.55	118.23	121.00
1	13	747	C	N3-C4-C5	5.55	124.12	121.90
26	1H	306	U	C5-C4-O4	5.55	129.23	125.90
26	1H	800	A	C4-C5-C6	5.55	119.77	117.00
26	1H	805	G	OP1-P-OP2	5.55	127.92	119.60
26	1H	1021	A	N9-C4-C5	-5.55	103.58	105.80
26	1H	1466	G	N3-C4-C5	-5.55	125.83	128.60
26	1H	1466	G	C2-N3-C4	5.55	114.67	111.90
26	1H	1848	A	N1-C6-N6	5.55	121.93	118.60
26	1H	1938	A	C4-C5-C6	5.55	119.77	117.00
1	1G	1463	C	C5-C6-N1	-5.55	118.23	121.00
23	2L	38	A	C4-C5-C6	-5.55	114.23	117.00
25	4L	6	G	C4-C5-N7	-5.55	108.58	110.80
26	14	44	A	C5-C6-N1	-5.55	114.93	117.70
26	14	176	G	C6-N1-C2	-5.55	121.77	125.10
26	14	224	G	C5-C6-O6	5.55	131.93	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	386	G	C6-C5-N7	-5.55	127.07	130.40
26	14	631	A	C4-C5-C6	5.55	119.77	117.00
26	14	1247	A	N1-C6-N6	-5.55	115.27	118.60
26	14	1249	U	O5'-P-OP2	-5.55	100.71	105.70
26	14	1685	C	C6-N1-C2	5.55	122.52	120.30
1	13	569	C	OP1-P-O3'	-5.54	93.00	105.20
26	1H	572	A	C4-C5-C6	5.54	119.77	117.00
26	1H	723	G	C5-C6-N1	-5.54	108.73	111.50
26	1H	1158	C	N1-C2-N3	5.54	123.08	119.20
26	1H	1421	G	C8-N9-C4	-5.54	104.18	106.40
26	1H	1883	G	N9-C4-C5	-5.54	103.18	105.40
26	1H	2650	U	C5-C6-N1	-5.54	119.93	122.70
26	1H	2853	C	O5'-P-OP1	5.54	117.35	110.70
1	1G	897	C	N3-C4-N4	5.54	121.88	118.00
1	1G	1313	U	OP1-P-OP2	-5.54	111.28	119.60
26	14	194	G	N7-C8-N9	-5.54	110.33	113.10
26	14	370	G	C8-N9-C4	5.54	108.62	106.40
26	14	1395	A	C5-C6-N1	-5.54	114.93	117.70
26	14	2026	C	N3-C4-C5	5.54	124.12	121.90
26	14	2543	G	N3-C2-N2	5.54	123.78	119.90
1	13	584	G	N3-C4-C5	-5.54	125.83	128.60
1	13	811	C	N3-C4-C5	5.54	124.12	121.90
1	13	1067	A	OP2-P-O3'	5.54	117.39	105.20
1	13	1111	A	N9-C4-C5	5.54	108.02	105.80
1	13	1394	A	C5-C6-N1	5.54	120.47	117.70
26	1H	676	A	N1-C6-N6	5.54	121.93	118.60
26	1H	771	G	N1-C6-O6	5.54	123.23	119.90
26	1H	826	U	N1-C2-N3	5.54	118.23	114.90
26	1H	1235	G	C6-N1-C2	5.54	128.43	125.10
26	1H	1368	G	C4-C5-N7	-5.54	108.58	110.80
26	1H	1748	G	N3-C4-C5	5.54	131.37	128.60
27	16	18	G	C2-N3-C4	-5.54	109.13	111.90
1	1G	859	A	N7-C8-N9	5.54	116.57	113.80
1	1G	1242	C	N1-C2-N3	-5.54	115.32	119.20
1	1G	1301	U	C5-C6-N1	5.54	125.47	122.70
1	1G	1482	G	C6-C5-N7	-5.54	127.07	130.40
23	2L	72	C	N3-C4-N4	-5.54	114.12	118.00
26	14	223	A	N9-C4-C5	5.54	108.02	105.80
26	14	478	A	N9-C4-C5	-5.54	103.58	105.80
26	14	731	C	C2-N1-C1'	-5.54	112.70	118.80
26	14	1901	A	N1-C2-N3	5.54	132.07	129.30
26	14	1999	C	N3-C2-O2	-5.54	118.02	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2253	G	O4'-C1'-N9	5.54	112.64	108.20
26	14	2586	C	N1-C1'-C2'	-5.54	105.90	112.00
27	1J	80	U	C5-C4-O4	5.54	129.23	125.90
1	13	777	A	N9-C4-C5	5.54	108.02	105.80
1	13	1226	C	N3-C4-C5	-5.54	119.68	121.90
1	13	1533	C	C5-C6-N1	5.54	123.77	121.00
23	2K	27	G	C5-C6-N1	5.54	114.27	111.50
26	1H	861	A	OP1-P-OP2	-5.54	111.29	119.60
26	1H	957	A	C2-N3-C4	5.54	113.37	110.60
26	1H	1243	G	N3-C4-N9	-5.54	122.67	126.00
26	1H	1463	C	N3-C4-N4	5.54	121.88	118.00
26	1H	2504	U	C6-N1-C2	-5.54	117.67	121.00
26	1H	2549	G	O5'-P-OP1	5.54	117.35	110.70
1	1G	111	G	C2-N3-C4	-5.54	109.13	111.90
1	1G	773	G	N7-C8-N9	5.54	115.87	113.10
1	1G	1059	C	OP1-P-OP2	-5.54	111.29	119.60
20	BA	13	LEU	CA-CB-CG	5.54	128.05	115.30
57	3L	3	G	N1-C2-N3	-5.54	120.58	123.90
26	14	57	C	O5'-P-OP2	-5.54	100.71	105.70
26	14	327	G	C4-C5-C6	5.54	122.12	118.80
26	14	756	C	N3-C4-C5	-5.54	119.68	121.90
26	14	1607	C	C2-N3-C4	-5.54	117.13	119.90
26	14	2051	A	C5-C6-N6	5.54	128.13	123.70
27	1J	39	A	N7-C8-N9	5.54	116.57	113.80
1	13	401	C	N1-C2-N3	5.54	123.08	119.20
26	1H	1630(A)	C	C2-N3-C4	-5.54	117.13	119.90
26	1H	2724	C	N1-C2-N3	5.54	123.08	119.20
29	11	255	LYS	CD-CE-NZ	5.54	124.44	111.70
1	1G	555	C	C6-N1-C2	-5.54	118.08	120.30
26	14	1687	G	C8-N9-C4	5.54	108.62	106.40
1	13	602	A	C8-N9-C4	-5.54	103.58	105.80
1	13	666	G	N3-C4-C5	5.54	131.37	128.60
1	13	753	A	C5-C6-N1	-5.54	114.93	117.70
1	13	1196	U	C6-N1-C2	-5.54	117.68	121.00
26	1H	676	A	O5'-P-OP1	-5.54	100.72	105.70
26	1H	726	G	OP1-P-O3'	5.54	117.39	105.20
26	1H	1188	U	OP2-P-O3'	5.54	117.38	105.20
26	1H	1507	A	N7-C8-N9	5.54	116.57	113.80
26	1H	1611	C	O5'-P-OP2	5.54	117.35	110.70
26	1H	2317	C	N3-C2-O2	5.54	125.78	121.90
26	1H	2419	U	O5'-P-OP2	5.54	117.34	110.70
26	1H	2669	G	N1-C6-O6	5.54	123.22	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2840	C	N3-C4-N4	-5.54	114.12	118.00
27	16	21	G	N1-C6-O6	5.54	123.22	119.90
27	16	115	G	N3-C4-C5	5.54	131.37	128.60
1	1G	785	G	C5-C6-N1	-5.54	108.73	111.50
1	1G	1251	A	N3-C4-C5	-5.54	122.92	126.80
5	42	31	LEU	CA-CB-CG	5.54	128.04	115.30
26	14	28	A	C4-C5-N7	5.54	113.47	110.70
26	14	1842	G	OP2-P-O3'	5.54	117.38	105.20
26	14	2206	C	C5-C4-N4	-5.54	116.32	120.20
1	13	836	G	N1-C6-O6	5.54	123.22	119.90
1	13	1199	U	O4'-C1'-N1	5.54	112.63	108.20
26	1H	879	G	N1-C6-O6	5.54	123.22	119.90
1	1G	711	G	N1-C2-N3	5.54	127.22	123.90
26	14	1546	C	N3-C4-C5	-5.54	119.69	121.90
26	14	1823	G	C6-N1-C2	5.54	128.42	125.10
1	13	176	C	C2-N3-C4	5.54	122.67	119.90
1	13	264	U	N3-C2-O2	5.54	126.07	122.20
1	13	419	C	N3-C2-O2	5.54	125.78	121.90
1	13	861	G	O5'-P-OP1	-5.54	100.72	105.70
1	13	1216	G	N3-C2-N2	-5.54	116.03	119.90
1	13	1290	G	N3-C2-N2	-5.54	116.03	119.90
26	1H	546	C	C2-N1-C1'	5.54	124.89	118.80
26	1H	603	A	C4-C5-N7	-5.54	107.93	110.70
26	1H	979	G	O5'-P-OP2	-5.54	100.72	105.70
26	1H	1049	C	N3-C2-O2	-5.54	118.03	121.90
26	1H	1422	G	N1-C6-O6	5.54	123.22	119.90
26	1H	1677	A	OP1-P-O3'	-5.54	93.02	105.20
26	1H	1762	A	C4-C5-C6	-5.54	114.23	117.00
26	1H	2253	G	N3-C4-C5	5.54	131.37	128.60
26	1H	2385	C	C2-N3-C4	-5.54	117.13	119.90
26	1H	2603	G	N1-C6-O6	5.54	123.22	119.90
1	1G	274	A	C5-N7-C8	5.54	106.67	103.90
1	1G	826	C	C6-N1-C2	5.54	122.51	120.30
1	1G	1508	G	C5-N7-C8	5.54	107.07	104.30
1	13	1417	G	O5'-P-OP1	-5.53	100.72	105.70
1	13	1480	G	OP2-P-O3'	5.53	117.37	105.20
26	1H	454	A	OP2-P-O3'	5.53	117.37	105.20
26	1H	477	A	C4-C5-C6	5.53	119.77	117.00
26	1H	594	U	C6-N1-C2	5.53	124.32	121.00
26	1H	768	G	N7-C8-N9	-5.53	110.33	113.10
26	1H	1552	G	C8-N9-C4	-5.53	104.19	106.40
26	1H	1731	G	C5-C6-O6	5.53	131.92	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2342	C	O5'-P-OP1	-5.53	100.72	105.70
1	1G	680	C	OP1-P-OP2	-5.53	111.30	119.60
1	1G	1188	A	C5-N7-C8	5.53	106.67	103.90
1	1G	1261	A	O5'-P-OP1	-5.53	100.72	105.70
56	1L	36	U	N3-C2-O2	-5.53	118.33	122.20
26	14	472	A	N1-C2-N3	5.53	132.07	129.30
26	14	1248	G	C5-N7-C8	-5.53	101.53	104.30
26	14	1364	G	N7-C8-N9	-5.53	110.33	113.10
26	14	1857	G	C4-C5-N7	-5.53	108.59	110.80
26	14	2506	U	N3-C4-O4	5.53	123.27	119.40
26	14	2521	C	C2-N3-C4	-5.53	117.13	119.90
39	55	12	ARG	NE-CZ-NH2	5.53	123.07	120.30
1	13	129	U	N3-C4-C5	-5.53	111.28	114.60
1	13	266	G	C6-C5-N7	-5.53	127.08	130.40
1	13	973	G	C5-C6-N1	-5.53	108.73	111.50
22	1K	56	C	O5'-P-OP2	-5.53	100.72	105.70
26	1H	1136	G	N3-C2-N2	-5.53	116.03	119.90
26	1H	1189	A	C5-C6-N1	5.53	120.47	117.70
26	14	715	G	C5-C6-N1	5.53	114.27	111.50
26	14	1022	G	N3-C4-C5	-5.53	125.83	128.60
26	14	1624	G	C5-C6-N1	5.53	114.27	111.50
26	14	1808	U	C6-N1-C2	5.53	124.32	121.00
26	14	2679	A	OP2-P-O3'	5.53	117.37	105.20
1	13	297	G	C8-N9-C4	-5.53	104.19	106.40
1	13	500	G	N3-C4-N9	5.53	129.32	126.00
1	13	1214	C	O5'-P-OP1	5.53	117.34	110.70
1	13	1327	C	N3-C4-C5	5.53	124.11	121.90
26	1H	1486	A	C5-N7-C8	-5.53	101.14	103.90
26	1H	1764	G	C2-N3-C4	-5.53	109.14	111.90
26	1H	2762	G	C4-N9-C1'	5.53	133.69	126.50
1	1G	1323	G	C8-N9-C4	-5.53	104.19	106.40
26	14	337	C	C5-C6-N1	-5.53	118.23	121.00
26	14	723	G	N3-C4-C5	5.53	131.37	128.60
26	14	1251	C	N3-C4-N4	5.53	121.87	118.00
26	14	1582	C	N3-C4-C5	5.53	124.11	121.90
26	14	2322	A	O5'-P-OP1	-5.53	100.72	105.70
26	14	2711	A	OP2-P-O3'	-5.53	93.03	105.20
26	1H	235	U	N1-C2-O2	5.53	126.67	122.80
26	1H	321	G	N1-C6-O6	5.53	123.22	119.90
26	1H	417	C	C6-N1-C2	5.53	122.51	120.30
26	1H	445	C	N1-C2-N3	5.53	123.07	119.20
26	1H	1130	U	N1-C2-N3	5.53	118.22	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2092	U	N3-C2-O2	-5.53	118.33	122.20
26	14	911	A	OP1-P-O3'	5.53	117.36	105.20
26	14	1671	U	O5'-P-OP1	-5.53	100.72	105.70
26	14	1673	U	C6-N1-C1'	5.53	128.94	121.20
1	13	299	G	C6-N1-C2	5.53	128.42	125.10
1	13	733	A	C6-N1-C2	-5.53	115.28	118.60
1	13	877	C	C4-C5-C6	5.53	120.16	117.40
1	13	919	A	C8-N9-C4	-5.53	103.59	105.80
22	1K	56	C	C6-N1-C2	-5.53	118.09	120.30
26	1H	739	G	OP1-P-O3'	5.53	117.36	105.20
26	1H	764	A	OP1-P-OP2	-5.53	111.31	119.60
26	1H	909	A	C4-C5-N7	-5.53	107.94	110.70
26	1H	1763	G	N3-C4-C5	5.53	131.36	128.60
26	1H	2348	U	OP2-P-O3'	5.53	117.36	105.20
26	1H	2574	G	N3-C4-C5	-5.53	125.84	128.60
26	14	122	G	N1-C6-O6	5.53	123.22	119.90
26	14	432	A	C6-N1-C2	5.53	121.92	118.60
26	14	640	C	OP1-P-O3'	5.53	117.36	105.20
26	14	782	A	N1-C2-N3	5.53	132.06	129.30
26	14	1290	C	OP1-P-OP2	5.53	127.89	119.60
26	14	1633	G	N1-C2-N3	5.53	127.22	123.90
26	14	2422	A	C6-N1-C2	5.53	121.92	118.60
27	1J	96	G	N1-C2-N2	5.53	121.17	116.20
1	13	293	G	OP1-P-OP2	-5.53	111.31	119.60
1	13	587	G	N1-C6-O6	5.53	123.22	119.90
26	1H	101	G	N3-C2-N2	5.53	123.77	119.90
26	1H	110	G	C2-N3-C4	-5.53	109.14	111.90
26	1H	657	U	OP1-P-O3'	-5.53	93.04	105.20
26	1H	1579	A	C6-C5-N7	-5.53	128.43	132.30
26	1H	2006	C	N3-C4-N4	-5.53	114.13	118.00
26	1H	2058	A	C5-C6-N6	-5.53	119.28	123.70
26	1H	2063	C	OP2-P-O3'	5.53	117.36	105.20
26	1H	2870	C	N3-C4-N4	5.53	121.87	118.00
27	16	103	U	C6-N1-C2	5.53	124.31	121.00
1	1G	718	G	C5-N7-C8	-5.53	101.54	104.30
1	1G	1338	G	N3-C4-C5	-5.53	125.84	128.60
26	14	179	G	N3-C4-C5	5.53	131.36	128.60
26	14	492	A	N1-C6-N6	5.53	121.92	118.60
26	14	805	G	C5-C6-N1	5.53	114.26	111.50
26	14	1093	G	C8-N9-C4	-5.53	104.19	106.40
26	14	1364	G	C8-N9-C4	5.53	108.61	106.40
26	14	1688	U	C5-C4-O4	5.53	129.22	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2280	G	C6-N1-C2	5.53	128.42	125.10
26	14	2291	U	N3-C2-O2	-5.53	118.33	122.20
1	13	581	G	N1-C2-N3	5.52	127.22	123.90
1	13	761	G	C6-C5-N7	-5.52	127.08	130.40
1	13	1527	C	N1-C2-O2	-5.52	115.59	118.90
26	1H	386	G	N3-C4-N9	5.52	129.31	126.00
26	1H	596	G	C5-C6-O6	-5.52	125.29	128.60
26	1H	1235	G	N1-C6-O6	5.52	123.21	119.90
26	1H	1560	G	N1-C2-N2	5.52	121.17	116.20
26	1H	2790	A	N3-C4-C5	-5.52	122.93	126.80
26	14	312	G	N9-C4-C5	-5.52	103.19	105.40
26	14	737	C	OP2-P-O3'	5.52	117.35	105.20
26	14	1283	G	O5'-P-OP1	-5.52	100.73	105.70
26	14	1818	U	C6-N1-C2	-5.52	117.69	121.00
26	14	2442	C	N3-C2-O2	-5.52	118.03	121.90
1	13	878	G	C8-N9-C1'	-5.52	119.82	127.00
1	13	956	U	C5-C6-N1	5.52	125.46	122.70
26	1H	123	G	C8-N9-C4	5.52	108.61	106.40
26	1H	738	G	OP2-P-O3'	5.52	117.35	105.20
26	1H	769	G	OP1-P-OP2	5.52	127.88	119.60
26	1H	788	A	N1-C2-N3	-5.52	126.54	129.30
26	1H	818	G	C4-C5-N7	-5.52	108.59	110.80
26	1H	2224	G	N7-C8-N9	5.52	115.86	113.10
27	16	110	G	C5-C6-N1	-5.52	108.74	111.50
1	1G	115	G	N1-C6-O6	-5.52	116.59	119.90
1	1G	363	A	OP1-P-O3'	5.52	117.35	105.20
1	1G	615	C	C5-C4-N4	-5.52	116.33	120.20
1	1G	770	C	C6-N1-C2	5.52	122.51	120.30
1	1G	881	G	C4-C5-N7	5.52	113.01	110.80
1	1G	1224	G	O5'-P-OP1	5.52	117.33	110.70
26	14	794	G	C8-N9-C4	5.52	108.61	106.40
26	14	919	G	C4-N9-C1'	5.52	133.68	126.50
26	14	1242	A	OP1-P-OP2	5.52	127.88	119.60
26	14	2357	U	C5-C6-N1	5.52	125.46	122.70
26	1H	833	U	OP1-P-O3'	-5.52	93.05	105.20
26	1H	1238	G	C4-N9-C1'	-5.52	119.32	126.50
26	1H	1267	U	C6-N1-C2	5.52	124.31	121.00
26	14	229	A	O4'-C1'-N9	5.52	112.62	108.20
26	14	2594	C	N3-C2-O2	5.52	125.77	121.90
27	1J	101	A	C5-C6-N1	-5.52	114.94	117.70
1	13	822	C	OP1-P-O3'	5.52	117.34	105.20
12	3I	124	LYS	CD-CE-NZ	5.52	124.39	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	383	U	O5'-P-OP2	5.52	117.32	110.70
26	1H	2426	A	C5-C6-N6	5.52	128.12	123.70
26	1H	2492	U	N3-C4-C5	-5.52	111.29	114.60
26	1H	2863	C	C2-N3-C4	-5.52	117.14	119.90
1	1G	402	G	C2-N3-C4	-5.52	109.14	111.90
1	1G	884	U	N1-C2-N3	5.52	118.21	114.90
26	14	620	G	N1-C2-N3	5.52	127.21	123.90
26	14	753	C	N3-C2-O2	-5.52	118.04	121.90
26	14	1643	G	N1-C2-N2	5.52	121.17	116.20
26	14	1681	G	N9-C4-C5	-5.52	103.19	105.40
26	14	2077	A	OP1-P-OP2	5.52	127.88	119.60
26	14	2155	G	N3-C4-C5	-5.52	125.84	128.60
26	14	2199	A	N7-C8-N9	5.52	116.56	113.80
26	14	2331	G	C6-N1-C2	-5.52	121.79	125.10
26	14	2386	C	OP1-P-OP2	5.52	127.88	119.60
26	14	2824	C	C6-N1-C2	5.52	122.51	120.30
23	2K	15	G	N1-C2-N3	5.52	127.21	123.90
26	1H	113	G	OP2-P-O3'	-5.52	93.06	105.20
26	1H	361	G	N7-C8-N9	-5.52	110.34	113.10
26	1H	540	G	OP2-P-O3'	5.52	117.34	105.20
26	1H	1409	C	C6-N1-C2	5.52	122.51	120.30
26	1H	1594	G	OP1-P-OP2	-5.52	111.32	119.60
26	1H	1630	G	N3-C4-C5	-5.52	125.84	128.60
26	1H	1700	A	N1-C6-N6	5.52	121.91	118.60
26	1H	1778	U	C5-C4-O4	5.52	129.21	125.90
1	1G	10	A	OP1-P-OP2	-5.52	111.33	119.60
1	1G	584	G	C2-N3-C4	-5.52	109.14	111.90
26	14	449	A	C4-C5-C6	-5.52	114.24	117.00
26	14	491	G	N3-C4-N9	-5.52	122.69	126.00
26	14	766	C	N1-C2-N3	5.52	123.06	119.20
26	14	1285	G	N3-C2-N2	-5.52	116.04	119.90
26	14	1658	C	OP2-P-O3'	5.52	117.34	105.20
26	14	1673	U	C5-C4-O4	5.52	129.21	125.90
26	14	2414	G	C4-C5-N7	-5.52	108.59	110.80
27	1J	79	C	N3-C4-N4	5.52	121.86	118.00
1	13	947	G	C5-C6-O6	5.52	131.91	128.60
1	13	954	G	O5'-P-OP1	5.52	117.32	110.70
26	1H	509	C	C2-N3-C4	-5.52	117.14	119.90
26	1H	2299	G	C8-N9-C4	-5.52	104.19	106.40
1	1G	4	U	N3-C4-C5	-5.52	111.29	114.60
26	14	44	A	C4-C5-C6	5.52	119.76	117.00
26	14	809	G	C4-N9-C1'	5.52	133.67	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2057	A	N7-C8-N9	-5.52	111.04	113.80
1	13	727	G	N9-C4-C5	5.51	107.61	105.40
1	13	911	U	C5-C6-N1	-5.51	119.94	122.70
1	13	955	U	C5-C4-O4	-5.51	122.59	125.90
1	13	1162	C	C5-C6-N1	5.51	123.76	121.00
1	13	1202	G	O5'-P-OP1	-5.51	100.74	105.70
1	13	1261	A	OP1-P-OP2	-5.51	111.33	119.60
26	1H	205	G	O5'-P-OP1	5.51	117.32	110.70
26	1H	380	U	C5-C4-O4	5.51	129.21	125.90
26	1H	385	C	OP2-P-O3'	5.51	117.33	105.20
26	1H	1037	G	C8-N9-C4	5.51	108.61	106.40
26	1H	1301	A	C6-N1-C2	5.51	121.91	118.60
26	1H	1693	U	C2-N1-C1'	5.51	124.32	117.70
26	1H	2071	A	OP2-P-O3'	5.51	117.33	105.20
26	1H	2073	C	C5-C4-N4	-5.51	116.34	120.20
26	1H	2421	G	C5-C6-N1	5.51	114.26	111.50
26	1H	2533	A	N1-C6-N6	-5.51	115.29	118.60
26	1H	2558	C	C2-N3-C4	-5.51	117.14	119.90
31	31	164	ARG	NE-CZ-NH1	5.51	123.06	120.30
1	1G	347	G	N3-C4-C5	5.51	131.36	128.60
1	1G	676	A	OP1-P-OP2	5.51	127.87	119.60
1	1G	851	G	C5-N7-C8	-5.51	101.54	104.30
1	1G	1322	C	C5-C6-N1	5.51	123.76	121.00
26	14	450	G	C4-C5-N7	-5.51	108.59	110.80
26	14	596	G	N3-C2-N2	-5.51	116.04	119.90
26	14	1807	G	N1-C2-N2	5.51	121.16	116.20
26	14	2438	U	C2-N3-C4	-5.51	123.69	127.00
27	1J	65	C	OP1-P-OP2	-5.51	111.33	119.60
27	1J	105	G	N9-C4-C5	-5.51	103.19	105.40
1	13	120	A	O5'-P-OP2	5.51	117.32	110.70
1	13	635	G	C2-N3-C4	-5.51	109.14	111.90
23	2K	12	G	C2-N3-C4	5.51	114.66	111.90
26	1H	270(A)	A	C5-C6-N1	5.51	120.46	117.70
26	1H	651	G	C5-C6-O6	-5.51	125.29	128.60
26	1H	684	G	C8-N9-C4	-5.51	104.19	106.40
26	1H	1157	G	N3-C4-N9	5.51	129.31	126.00
26	1H	1229(A)	G	N3-C4-C5	5.51	131.36	128.60
26	1H	1296	G	C4-C5-N7	-5.51	108.59	110.80
26	1H	1661	G	C5-C6-N1	5.51	114.26	111.50
26	1H	1688	U	OP1-P-OP2	5.51	127.87	119.60
26	1H	2055	C	O4'-C1'-N1	5.51	112.61	108.20
26	1H	2632	A	C8-N9-C4	5.51	108.00	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	758	G	C8-N9-C4	5.51	108.61	106.40
1	1G	1199	U	N3-C4-C5	-5.51	111.29	114.60
26	14	103	A	OP2-P-O3'	5.51	117.33	105.20
26	14	2586	C	N1-C2-N3	-5.51	115.34	119.20
1	13	428	G	C4-C5-N7	5.51	113.00	110.80
1	13	798	G	N9-C4-C5	5.51	107.61	105.40
26	1H	232	G	C8-N9-C4	5.51	108.61	106.40
26	1H	728	G	C2-N3-C4	-5.51	109.14	111.90
26	1H	1031	G	N3-C2-N2	5.51	123.76	119.90
26	1H	1197	G	O5'-P-OP2	-5.51	100.74	105.70
26	1H	1295	C	N1-C2-N3	5.51	123.06	119.20
26	1H	1762	A	N7-C8-N9	-5.51	111.04	113.80
26	1H	2297	C	C4-C5-C6	5.51	120.16	117.40
26	1H	2300	G	N7-C8-N9	5.51	115.86	113.10
26	1H	2334	G	N3-C4-C5	5.51	131.36	128.60
50	K8	5	GLU	CG-CD-OE1	-5.51	107.28	118.30
1	1G	1261	A	C4-C5-C6	5.51	119.76	117.00
57	3L	3	G	C6-C5-N7	5.51	133.71	130.40
26	14	35	G	C8-N9-C1'	5.51	134.16	127.00
26	14	797	C	N3-C4-C5	-5.51	119.70	121.90
26	14	1216	G	N3-C4-C5	-5.51	125.84	128.60
26	14	2035	G	O4'-C1'-N9	5.51	112.61	108.20
1	13	396	G	C4-C5-C6	5.51	122.11	118.80
1	13	1415	G	C5-C6-N1	-5.51	108.75	111.50
26	1H	105	C	N1-C2-N3	5.51	123.06	119.20
26	1H	215	G	C8-N9-C4	5.51	108.60	106.40
26	1H	698	C	C6-N1-C1'	-5.51	114.19	120.80
26	1H	1324	G	C8-N9-C4	-5.51	104.20	106.40
1	1G	284	G	N3-C4-C5	5.51	131.35	128.60
1	1G	691	G	N3-C4-N9	5.51	129.31	126.00
1	1G	724	G	N1-C2-N2	5.51	121.16	116.20
25	4L	12	A	N9-C4-C5	-5.51	103.60	105.80
26	14	316	C	C5-C6-N1	-5.51	118.25	121.00
26	14	826	U	C5-C4-O4	5.51	129.21	125.90
26	14	987	G	C8-N9-C4	-5.51	104.20	106.40
26	14	2236	C	N1-C2-O2	-5.51	115.59	118.90
26	14	2414	G	C2-N3-C4	-5.51	109.14	111.90
26	14	2557	G	C5-C6-O6	5.51	131.91	128.60
26	14	2871	C	N3-C2-O2	-5.51	118.04	121.90
1	13	1432	G	O5'-P-OP2	-5.51	100.74	105.70
26	1H	580	C	N1-C2-O2	-5.51	115.59	118.90
26	1H	1699	G	C5-N7-C8	-5.51	101.55	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	44	G	C4-C5-N7	-5.51	108.60	110.80
26	14	111	A	O5'-P-OP2	-5.51	100.74	105.70
26	14	1396	U	C6-N1-C1'	-5.51	113.49	121.20
26	14	1823	G	N9-C4-C5	-5.51	103.20	105.40
26	14	2250	G	N9-C4-C5	5.51	107.60	105.40
1	13	24	U	N1-C2-N3	-5.51	111.60	114.90
1	13	1253	G	N3-C4-N9	5.51	129.30	126.00
26	1H	115	C	O5'-P-OP1	-5.51	100.74	105.70
26	1H	189	G	C4-C5-C6	5.51	122.10	118.80
26	1H	2208	U	C5-C6-N1	-5.51	119.95	122.70
26	1H	2294	C	C4-C5-C6	-5.51	114.65	117.40
26	1H	2712(A)	A	C5-N7-C8	-5.51	101.15	103.90
26	1H	2735	G	C6-N1-C2	-5.51	121.80	125.10
26	1H	2830	G	N9-C4-C5	5.51	107.60	105.40
1	1G	608	A	N1-C2-N3	-5.51	126.55	129.30
1	1G	950	U	N1-C2-O2	5.51	126.65	122.80
1	1G	1230	C	N1-C2-O2	5.51	122.20	118.90
26	14	684	G	N1-C6-O6	-5.51	116.60	119.90
26	14	992	C	O5'-P-OP2	-5.51	100.75	105.70
26	1H	932	G	O4'-C1'-N9	5.50	112.60	108.20
26	1H	1630(A)	C	N3-C2-O2	-5.50	118.05	121.90
26	1H	1784	A	C6-C5-N7	5.50	136.15	132.30
26	1H	2068	U	OP1-P-O3'	5.50	117.31	105.20
27	16	47	C	N1-C2-N3	-5.50	115.35	119.20
1	1G	1322	C	C6-N1-C2	-5.50	118.10	120.30
26	14	824	A	O5'-P-OP1	5.50	117.31	110.70
26	14	1186	G	O5'-P-OP1	-5.50	100.75	105.70
26	14	1755	A	C5-C6-N6	5.50	128.10	123.70
26	14	2509	G	N3-C2-N2	-5.50	116.05	119.90
1	13	236	G	C5-C6-N1	-5.50	108.75	111.50
1	13	611	A	N3-C4-C5	5.50	130.65	126.80
1	13	725	G	N3-C2-N2	5.50	123.75	119.90
23	2K	3	C	OP1-P-OP2	5.50	127.86	119.60
26	1H	309	G	O5'-P-OP2	5.50	117.30	110.70
26	1H	591	C	N1-C2-N3	5.50	123.05	119.20
26	1H	645	C	P-O3'-C3'	5.50	126.30	119.70
26	1H	1031	G	N1-C2-N3	5.50	127.20	123.90
26	1H	1614	A	C5-C6-N6	-5.50	119.30	123.70
26	1H	1682	G	C2-N3-C4	-5.50	109.15	111.90
26	1H	2658	C	N3-C2-O2	5.50	125.75	121.90
26	1H	2664	G	C6-C5-N7	-5.50	127.10	130.40
26	1H	2692	C	N3-C2-O2	-5.50	118.05	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	15	G	N3-C4-N9	5.50	129.30	126.00
1	1G	183	G	C5-N7-C8	-5.50	101.55	104.30
1	1G	1068	G	C6-C5-N7	-5.50	127.10	130.40
26	14	57	C	N1-C2-O2	-5.50	115.60	118.90
26	14	82	G	N1-C2-N3	5.50	127.20	123.90
26	14	360	G	C8-N9-C4	-5.50	104.20	106.40
26	14	2041	U	C5-C6-N1	-5.50	119.95	122.70
26	14	2295	C	N3-C4-N4	5.50	121.85	118.00
42	85	95	LEU	CA-CB-CG	-5.50	102.64	115.30
1	13	803	G	C4-C5-N7	-5.50	108.60	110.80
1	13	1245	A	C5-N7-C8	5.50	106.65	103.90
1	13	1350	A	OP1-P-OP2	-5.50	111.35	119.60
1	13	1356	G	C6-C5-N7	-5.50	127.10	130.40
1	13	1453	G	O5'-P-OP2	5.50	117.30	110.70
26	1H	181	A	OP2-P-O3'	5.50	117.30	105.20
26	1H	508	G	C4-N9-C1'	5.50	133.65	126.50
26	1H	776	G	C8-N9-C4	-5.50	104.20	106.40
26	1H	946	G	N3-C2-N2	-5.50	116.05	119.90
26	1H	950	G	N7-C8-N9	-5.50	110.35	113.10
26	1H	962	G	N9-C4-C5	-5.50	103.20	105.40
26	1H	1377	G	C4-C5-N7	-5.50	108.60	110.80
26	1H	1449(A)	G	OP1-P-OP2	5.50	127.85	119.60
26	1H	1689	A	O5'-P-OP2	-5.50	100.75	105.70
26	1H	2229	C	C6-N1-C2	5.50	122.50	120.30
26	1H	2270	G	C2-N3-C4	-5.50	109.15	111.90
26	1H	2330	G	C6-N1-C2	-5.50	121.80	125.10
26	1H	2563	U	C4-C5-C6	-5.50	116.40	119.70
26	1H	2745	C	N3-C4-N4	5.50	121.85	118.00
26	14	332	A	N1-C6-N6	-5.50	115.30	118.60
26	14	494	G	N3-C4-C5	5.50	131.35	128.60
26	14	770	G	N9-C4-C5	-5.50	103.20	105.40
26	14	1348	G	OP1-P-O3'	5.50	117.30	105.20
26	14	1575	C	OP1-P-OP2	-5.50	111.35	119.60
26	14	2433	A	N1-C2-N3	5.50	132.05	129.30
26	14	2545	G	C2-N3-C4	-5.50	109.15	111.90
26	14	2580	U	OP2-P-O3'	5.50	117.30	105.20
26	14	2667	C	C6-N1-C2	-5.50	118.10	120.30
1	13	132	C	C5-C4-N4	-5.50	116.35	120.20
26	1H	598	G	OP1-P-OP2	5.50	127.85	119.60
26	1H	1489	U	C5-C6-N1	-5.50	119.95	122.70
26	1H	1871	A	N7-C8-N9	-5.50	111.05	113.80
29	11	157	ARG	NE-CZ-NH1	-5.50	117.55	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1481	U	O5'-P-OP1	-5.50	100.75	105.70
1	1G	1499	A	OP1-P-OP2	-5.50	111.35	119.60
27	1J	97	G	N1-C2-N3	5.50	127.20	123.90
1	13	197	A	C8-N9-C4	-5.50	103.60	105.80
1	13	228	A	C5-C6-N1	5.50	120.45	117.70
1	13	501	C	N3-C2-O2	-5.50	118.05	121.90
1	13	578	C	N1-C2-O2	-5.50	115.60	118.90
1	13	1223	C	C5-C6-N1	5.50	123.75	121.00
1	13	1289	A	C4-C5-N7	-5.50	107.95	110.70
1	13	1333	A	N3-C4-C5	-5.50	122.95	126.80
1	13	1409	C	C5-C6-N1	-5.50	118.25	121.00
1	13	1482	G	C5-C6-N1	-5.50	108.75	111.50
26	1H	977	G	C8-N9-C4	-5.50	104.20	106.40
26	1H	980	A	OP1-P-O3'	5.50	117.30	105.20
26	1H	1342	A	C6-C5-N7	-5.50	128.45	132.30
26	1H	1552	G	OP1-P-O3'	5.50	117.30	105.20
26	1H	2064	C	N3-C4-N4	-5.50	114.15	118.00
26	1H	2533	A	C5-C6-N6	5.50	128.10	123.70
26	1H	2706	G	OP2-P-O3'	5.50	117.30	105.20
26	14	2432	A	N9-C4-C5	-5.50	103.60	105.80
26	14	2830	G	N3-C4-C5	5.50	131.35	128.60
32	49	106	LEU	CB-CG-CD1	5.50	120.35	111.00
1	13	1440	C	N3-C2-O2	5.50	125.75	121.90
26	1H	681	G	N9-C4-C5	-5.50	103.20	105.40
26	1H	1255	U	C4-C5-C6	5.50	123.00	119.70
26	1H	1313	U	C6-N1-C1'	-5.50	113.51	121.20
26	1H	1337	G	N3-C2-N2	5.50	123.75	119.90
26	1H	1459	G	O5'-P-OP2	-5.50	100.75	105.70
26	1H	1609	A	C5-N7-C8	5.50	106.65	103.90
26	1H	1931	U	OP1-P-OP2	-5.50	111.35	119.60
26	1H	2688	U	N3-C4-C5	5.50	117.90	114.60
26	1H	2786	U	N3-C2-O2	5.50	126.05	122.20
1	1G	102	G	N7-C8-N9	5.50	115.85	113.10
1	1G	612	C	C6-N1-C2	5.50	122.50	120.30
1	1G	1424	C	C5-C6-N1	5.50	123.75	121.00
26	14	14	A	OP2-P-O3'	5.50	117.29	105.20
26	14	1318	C	O5'-P-OP1	-5.50	100.75	105.70
26	14	1333	C	C6-N1-C2	-5.50	118.10	120.30
26	14	1484	G	C8-N9-C4	5.50	108.60	106.40
26	14	1776	G	C2-N3-C4	-5.50	109.15	111.90
26	14	2449	U	C6-N1-C2	5.50	124.30	121.00
26	14	2502	G	OP1-P-O3'	5.50	117.29	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2695	C	C5-C6-N1	-5.50	118.25	121.00
26	14	2844	G	N9-C4-C5	-5.50	103.20	105.40
1	13	776	G	C4-C5-N7	5.50	113.00	110.80
1	13	1076	C	N1-C2-O2	-5.50	115.60	118.90
26	1H	654(U)	A	N1-C6-N6	5.50	121.90	118.60
26	1H	914	C	C6-N1-C2	5.50	122.50	120.30
26	1H	985	C	OP2-P-O3'	5.50	117.29	105.20
26	1H	2538	C	C2-N3-C4	-5.50	117.15	119.90
1	1G	1466	C	O4'-C1'-N1	5.50	112.60	108.20
26	14	1324	G	OP1-P-O3'	5.50	117.29	105.20
53	J5	51	TYR	CA-CB-CG	5.50	123.84	113.40
1	13	231	G	C4-C5-N7	-5.49	108.60	110.80
1	13	608	A	C4-C5-N7	5.49	113.45	110.70
1	13	1055	A	N1-C2-N3	5.49	132.05	129.30
1	13	1346	A	C2-N3-C4	-5.49	107.85	110.60
24	3K	75	C	OP1-P-OP2	5.49	127.84	119.60
26	1H	114	U	OP1-P-O3'	5.49	117.29	105.20
26	1H	322	A	OP2-P-O3'	5.49	117.28	105.20
26	1H	326	G	C5-N7-C8	-5.49	101.55	104.30
26	1H	990	A	N3-C4-C5	5.49	130.65	126.80
26	1H	1294	U	OP2-P-O3'	5.49	117.29	105.20
26	1H	2064	C	C2-N1-C1'	-5.49	112.76	118.80
1	1G	874	G	C8-N9-C4	5.49	108.60	106.40
1	1G	1473	A	N9-C4-C5	-5.49	103.60	105.80
26	14	60	G	C5-C6-O6	-5.49	125.30	128.60
26	14	579	G	C4-C5-C6	5.49	122.10	118.80
26	14	686	G	N1-C2-N2	-5.49	111.25	116.20
26	14	1373	A	C5-C6-N1	5.49	120.45	117.70
26	14	1966	A	C5-C6-N1	5.49	120.45	117.70
26	14	2074	U	C6-N1-C2	-5.49	117.70	121.00
26	14	2512	C	C5-C4-N4	-5.49	116.36	120.20
26	14	2516	G	C5-C6-O6	-5.49	125.30	128.60
26	14	2686	G	C2-N3-C4	5.49	114.65	111.90
27	1J	2	C	C6-N1-C2	-5.49	118.10	120.30
1	13	859	A	C6-N1-C2	-5.49	115.31	118.60
26	1H	132	G	C8-N9-C1'	-5.49	119.86	127.00
26	1H	413	C	C5-C6-N1	5.49	123.75	121.00
26	1H	810	U	O5'-P-OP1	5.49	117.29	110.70
26	1H	1294	U	N1-C2-N3	5.49	118.19	114.90
26	1H	1652	A	OP1-P-OP2	5.49	127.84	119.60
26	1H	2281	C	C2-N3-C4	-5.49	117.15	119.90
26	1H	2512	C	C5-C6-N1	-5.49	118.25	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	906	G	N3-C2-N2	-5.49	116.06	119.90
26	14	52	A	N7-C8-N9	5.49	116.55	113.80
26	14	56	A	C5-C6-N1	-5.49	114.95	117.70
26	14	146	G	C4-C5-N7	5.49	113.00	110.80
26	14	956	G	N1-C6-O6	5.49	123.19	119.90
26	14	2313	C	C2-N1-C1'	5.49	124.84	118.80
1	13	276	G	O5'-P-OP1	-5.49	100.76	105.70
1	13	1268	A	C4-C5-N7	-5.49	107.95	110.70
1	13	1433	A	O5'-P-OP2	5.49	117.29	110.70
26	1H	46	C	C4-C5-C6	5.49	120.14	117.40
26	1H	65	C	N3-C4-C5	-5.49	119.70	121.90
26	1H	501	A	OP1-P-O3'	5.49	117.28	105.20
26	1H	1970	A	C5-C6-N1	5.49	120.44	117.70
26	1H	2078	C	N1-C2-O2	5.49	122.19	118.90
1	1G	105	G	C6-N1-C2	-5.49	121.81	125.10
1	1G	772	U	O5'-P-OP2	-5.49	100.76	105.70
1	1G	915	A	O5'-P-OP2	-5.49	100.76	105.70
1	1G	1433	A	N1-C6-N6	-5.49	115.31	118.60
26	14	382	G	C4-C5-C6	5.49	122.09	118.80
26	14	1410	G	C5-C6-N1	5.49	114.25	111.50
26	14	1473	G	N1-C2-N2	-5.49	111.26	116.20
26	14	1703	G	C4-C5-N7	5.49	113.00	110.80
26	14	1718	G	N1-C6-O6	5.49	123.19	119.90
26	14	2373	G	C2-N3-C4	-5.49	109.16	111.90
26	14	2629	A	C2-N3-C4	5.49	113.34	110.60
26	14	2735	G	C5-C6-N1	-5.49	108.75	111.50
1	13	541	G	C8-N9-C4	-5.49	104.20	106.40
1	13	1064	G	C8-N9-C4	5.49	108.59	106.40
1	13	1336	C	N1-C2-O2	5.49	122.19	118.90
26	1H	244	A	C2-N3-C4	-5.49	107.86	110.60
26	1H	383	U	N3-C2-O2	-5.49	118.36	122.20
26	1H	718	A	C6-C5-N7	-5.49	128.46	132.30
26	1H	1011	G	C8-N9-C4	-5.49	104.20	106.40
26	1H	1125	G	N9-C4-C5	5.49	107.59	105.40
26	1H	1148	A	C5-N7-C8	5.49	106.64	103.90
26	1H	2507	C	O5'-P-OP2	-5.49	100.76	105.70
26	1H	2557	G	OP1-P-O3'	-5.49	93.13	105.20
26	1H	2706	G	C2-N3-C4	-5.49	109.16	111.90
1	1G	772	U	N1-C2-N3	5.49	118.19	114.90
1	1G	1275	A	N7-C8-N9	5.49	116.54	113.80
26	14	198	C	C6-N1-C2	-5.49	118.10	120.30
26	14	1127	A	C2-N3-C4	5.49	113.34	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	1J	13	A	N1-C6-N6	-5.49	115.31	118.60
27	1J	80	U	N3-C4-C5	-5.49	111.31	114.60
1	13	973	G	C4-N9-C1'	5.49	133.63	126.50
1	13	1157	A	N1-C2-N3	5.49	132.04	129.30
26	1H	621	A	C5-C6-N6	-5.49	119.31	123.70
26	1H	1372	U	OP2-P-O3'	5.49	117.27	105.20
26	1H	2299	G	N3-C2-N2	-5.49	116.06	119.90
1	1G	1490	C	N3-C4-N4	-5.49	114.16	118.00
57	3L	72	C	C5-C6-N1	5.49	123.74	121.00
26	14	1031	G	C2-N3-C4	-5.49	109.16	111.90
26	14	1313	U	O4'-C1'-N1	5.49	112.59	108.20
26	14	1608	A	C5-C6-N6	5.49	128.09	123.70
26	14	2261	C	N3-C4-N4	-5.49	114.16	118.00
27	1J	63	G	N9-C4-C5	-5.49	103.20	105.40
1	13	755	G	N7-C8-N9	-5.49	110.36	113.10
1	13	1203	C	C2-N1-C1'	5.49	124.83	118.80
26	1H	359	A	N1-C2-N3	5.49	132.04	129.30
26	1H	513	A	N7-C8-N9	5.49	116.54	113.80
26	1H	997	G	OP1-P-OP2	-5.49	111.37	119.60
26	1H	1120	G	C8-N9-C4	5.49	108.59	106.40
26	1H	1918	A	N3-C4-C5	5.49	130.64	126.80
26	1H	2504	U	N1-C2-N3	5.49	118.19	114.90
1	1G	1306	A	N1-C6-N6	-5.49	115.31	118.60
26	14	17	G	O4'-C1'-N9	5.49	112.59	108.20
26	14	200	U	OP2-P-O3'	5.49	117.27	105.20
26	14	757	U	O5'-P-OP2	-5.49	100.76	105.70
26	14	803	U	N3-C4-O4	-5.49	115.56	119.40
26	14	1143	A	O5'-P-OP2	-5.49	100.76	105.70
26	14	1959	G	C4-C5-C6	-5.49	115.51	118.80
26	14	2007	C	N3-C4-C5	-5.49	119.70	121.90
1	13	246	A	C2-N3-C4	-5.48	107.86	110.60
1	13	727	G	C5-C6-N1	-5.48	108.76	111.50
26	1H	26	G	C4-N9-C1'	5.48	133.63	126.50
26	1H	468	G	C2-N3-C4	-5.48	109.16	111.90
26	1H	1555	G	N1-C6-O6	5.48	123.19	119.90
1	1G	666	G	C5-C6-O6	-5.48	125.31	128.60
1	1G	826	C	N3-C4-C5	5.48	124.09	121.90
1	13	508	C	C6-N1-C2	5.48	122.49	120.30
1	13	980	C	N1-C2-O2	5.48	122.19	118.90
1	13	1209	C	C4-C5-C6	-5.48	114.66	117.40
23	2K	7	G	C5-C6-O6	-5.48	125.31	128.60
23	2K	61	U	O5'-P-OP2	-5.48	100.77	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	508	G	N9-C1'-C2'	5.48	121.13	114.00
26	1H	795	C	C2-N1-C1'	-5.48	112.77	118.80
26	1H	1494	A	C5-C6-N6	5.48	128.09	123.70
26	1H	1621	U	OP1-P-OP2	5.48	127.82	119.60
26	1H	1624	G	O5'-P-OP2	-5.48	100.77	105.70
26	1H	1699	G	C8-N9-C4	-5.48	104.21	106.40
26	1H	1940	U	C5-C4-O4	-5.48	122.61	125.90
26	1H	2460	U	N3-C2-O2	5.48	126.04	122.20
26	1H	2886	G	C8-N9-C4	-5.48	104.21	106.40
27	16	73	A	C8-N9-C4	5.48	107.99	105.80
1	1G	159	G	C5-C6-O6	5.48	131.89	128.60
1	1G	219	C	C5-C6-N1	5.48	123.74	121.00
26	14	205	G	C4-C5-N7	5.48	112.99	110.80
26	14	456	C	OP2-P-O3'	5.48	117.26	105.20
26	14	576	U	O5'-P-OP2	-5.48	100.77	105.70
26	14	2083	G	C6-C5-N7	-5.48	127.11	130.40
26	14	2539	C	C5-C6-N1	-5.48	118.26	121.00
29	19	44	ASN	N-CA-C	5.48	125.81	111.00
1	13	1503	A	C5-C6-N6	5.48	128.08	123.70
26	1H	1000	A	C4-C5-N7	5.48	113.44	110.70
26	1H	1361	G	N1-C6-O6	-5.48	116.61	119.90
26	1H	1463	C	N3-C2-O2	5.48	125.74	121.90
26	1H	1952	A	C4-C5-C6	5.48	119.74	117.00
26	1H	2026	C	N1-C2-O2	5.48	122.19	118.90
26	1H	2491	U	N1-C2-O2	5.48	126.64	122.80
26	1H	2610	C	N3-C4-C5	5.48	124.09	121.90
1	1G	1160	G	C8-N9-C4	-5.48	104.21	106.40
26	14	53	A	C5-C6-N6	5.48	128.08	123.70
26	14	545	G	C5-C6-O6	5.48	131.89	128.60
26	14	699	A	C2-N3-C4	5.48	113.34	110.60
26	14	744	G	C8-N9-C4	5.48	108.59	106.40
26	14	1385	G	C6-C5-N7	5.48	133.69	130.40
26	14	2620	C	C4-C5-C6	5.48	120.14	117.40
26	1H	514	A	N7-C8-N9	-5.48	111.06	113.80
26	1H	975	G	C2-N3-C4	5.48	114.64	111.90
26	1H	1212	G	N1-C6-O6	5.48	123.19	119.90
26	1H	1346	G	N1-C2-N2	-5.48	111.27	116.20
26	1H	1471	A	O5'-P-OP1	5.48	117.28	110.70
26	1H	2345	G	N1-C2-N2	-5.48	111.27	116.20
1	1G	1469	G	C6-C5-N7	-5.48	127.11	130.40
26	14	396	G	C4-C5-C6	5.48	122.09	118.80
26	14	1883	G	N7-C8-N9	-5.48	110.36	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2017	U	N1-C2-N3	5.48	118.19	114.90
38	45	79	LEU	CA-CB-CG	5.48	127.90	115.30
1	13	1470	G	N1-C2-N3	5.48	127.19	123.90
24	3K	76	A	OP1-P-OP2	5.48	127.82	119.60
26	1H	151	C	C6-N1-C2	5.48	122.49	120.30
26	1H	431	U	C5-C6-N1	5.48	125.44	122.70
26	1H	525	U	C4-C5-C6	5.48	122.99	119.70
26	1H	560	C	N3-C4-C5	-5.48	119.71	121.90
26	1H	585	G	C6-N1-C2	-5.48	121.81	125.10
26	1H	608	A	OP1-P-O3'	-5.48	93.15	105.20
26	1H	703	U	C2-N3-C4	-5.48	123.71	127.00
26	1H	1376	C	C5-C6-N1	5.48	123.74	121.00
26	1H	1488	G	C5-C6-N1	-5.48	108.76	111.50
26	1H	1911	U	C5-C6-N1	5.48	125.44	122.70
26	1H	1994	C	C5-C4-N4	5.48	124.03	120.20
1	1G	158	G	C5-C6-O6	-5.48	125.31	128.60
1	1G	1467	G	C4-C5-C6	5.48	122.09	118.80
18	9A	30	ASP	CB-CG-OD1	-5.48	113.37	118.30
26	14	241	A	C5-C6-N1	-5.48	114.96	117.70
26	14	1142	U	C5-C6-N1	5.48	125.44	122.70
26	14	1392	A	C5-N7-C8	5.48	106.64	103.90
26	14	1561	G	N3-C2-N2	-5.48	116.07	119.90
1	13	778	G	C4-C5-C6	5.48	122.08	118.80
1	13	894	G	N3-C4-C5	5.48	131.34	128.60
1	13	1058	G	N1-C6-O6	5.48	123.19	119.90
26	1H	662	G	C5-C6-N1	5.48	114.24	111.50
26	1H	785	G	C8-N9-C4	-5.48	104.21	106.40
26	1H	1226	G	C6-N1-C2	5.48	128.39	125.10
26	1H	1653	G	O5'-P-OP2	-5.48	100.77	105.70
26	1H	2472	G	C6-C5-N7	-5.48	127.11	130.40
12	3A	92	ASP	CB-CG-OD2	-5.48	113.37	118.30
26	14	74	A	OP1-P-OP2	-5.48	111.39	119.60
26	14	137(A)	G	C5-C6-O6	-5.48	125.31	128.60
26	14	810	U	N1-C2-O2	-5.48	118.97	122.80
26	14	1825	A	N7-C8-N9	5.48	116.54	113.80
26	14	2626	C	N1-C2-O2	-5.48	115.61	118.90
1	13	393	A	O5'-P-OP1	5.47	117.27	110.70
1	13	1503	A	C6-C5-N7	5.47	136.13	132.30
26	1H	55	G	N3-C4-C5	-5.47	125.86	128.60
26	1H	520	G	C6-N1-C2	-5.47	121.82	125.10
26	1H	599	G	C5-C6-O6	5.47	131.88	128.60
26	1H	703	U	N3-C4-O4	-5.47	115.57	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	879	G	C5-N7-C8	-5.47	101.56	104.30
26	1H	910	A	C6-N1-C2	5.47	121.88	118.60
26	1H	2291	U	O5'-P-OP1	-5.47	100.77	105.70
26	1H	2435	A	N7-C8-N9	5.47	116.54	113.80
37	78	2	LYS	CD-CE-NZ	5.47	124.29	111.70
1	1G	580	U	OP1-P-OP2	5.47	127.81	119.60
1	1G	978	A	N7-C8-N9	5.47	116.54	113.80
26	14	1774	C	C2-N3-C4	-5.47	117.16	119.90
26	14	1807	G	OP1-P-O3'	5.47	117.25	105.20
26	14	2422	A	C4-C5-N7	5.47	113.44	110.70
26	14	2521	C	C4-C5-C6	5.47	120.14	117.40
26	14	2735	G	N1-C6-O6	5.47	123.19	119.90
1	13	564	C	C4-C5-C6	5.47	120.14	117.40
1	13	570	G	N1-C2-N2	5.47	121.13	116.20
1	13	788	U	C5-C6-N1	-5.47	119.96	122.70
22	1K	76	A	C4-C5-C6	5.47	119.74	117.00
26	1H	327	G	C8-N9-C4	-5.47	104.21	106.40
26	1H	624	C	C4-C5-C6	-5.47	114.66	117.40
26	1H	1187	G	N1-C6-O6	5.47	123.18	119.90
26	1H	1448	G	N1-C6-O6	5.47	123.18	119.90
26	1H	1792	G	C4-C5-N7	-5.47	108.61	110.80
26	1H	1884	A	C5-C6-N6	5.47	128.08	123.70
26	1H	2281	C	N1-C2-O2	-5.47	115.62	118.90
27	16	58	A	O5'-P-OP1	5.47	117.27	110.70
1	1G	419	C	N1-C2-N3	-5.47	115.37	119.20
1	1G	580	U	N3-C4-O4	-5.47	115.57	119.40
1	1G	604	G	O5'-P-OP1	-5.47	100.77	105.70
1	1G	735	C	N3-C4-N4	5.47	121.83	118.00
1	1G	1080	A	C5-C6-N6	5.47	128.08	123.70
26	14	80	G	N1-C2-N2	-5.47	111.28	116.20
26	14	549	G	N1-C2-N3	-5.47	120.62	123.90
26	14	562	U	C5-C4-O4	5.47	129.18	125.90
26	14	785	G	C6-C5-N7	5.47	133.68	130.40
26	14	831	G	C5-C6-O6	5.47	131.88	128.60
26	14	1189	A	O5'-P-OP2	5.47	117.27	110.70
26	14	1990	C	C6-N1-C2	5.47	122.49	120.30
26	14	2402	C	C5-C6-N1	5.47	123.74	121.00
26	14	2783	G	N1-C6-O6	5.47	123.18	119.90
1	13	510	A	N7-C8-N9	5.47	116.53	113.80
1	13	1064	G	N1-C2-N3	5.47	127.18	123.90
23	2K	11	A	C6-N1-C2	-5.47	115.32	118.60
24	3K	71	C	N1-C2-N3	-5.47	115.37	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	453	C	N3-C4-N4	5.47	121.83	118.00
26	1H	765	G	C5-C6-N1	-5.47	108.76	111.50
26	1H	910	A	C6-C5-N7	-5.47	128.47	132.30
26	1H	2458	G	C2-N3-C4	-5.47	109.17	111.90
47	H8	61	LEU	CB-CG-CD1	-5.47	101.70	111.00
1	1G	234	C	C5-C6-N1	5.47	123.73	121.00
23	2L	27	G	N7-C8-N9	-5.47	110.36	113.10
26	14	1292	U	C5-C4-O4	-5.47	122.62	125.90
26	14	1423	G	N3-C4-C5	5.47	131.34	128.60
26	14	2001	A	C5-N7-C8	-5.47	101.16	103.90
1	13	694	A	OP1-P-OP2	-5.47	111.39	119.60
26	1H	273(B)	C	N1-C2-O2	-5.47	115.62	118.90
26	1H	1613	G	N1-C2-N3	5.47	127.18	123.90
26	1H	1676	A	N1-C2-N3	5.47	132.03	129.30
26	1H	1857	G	C2-N3-C4	-5.47	109.17	111.90
26	1H	2408	U	N3-C4-O4	-5.47	115.57	119.40
29	11	272	ALA	C-N-CA	5.47	135.37	121.70
1	1G	260	G	N1-C2-N3	5.47	127.18	123.90
1	1G	482	A	C2-N3-C4	-5.47	107.87	110.60
1	1G	770	C	C2-N3-C4	-5.47	117.17	119.90
1	1G	1459	C	OP1-P-OP2	-5.47	111.39	119.60
23	2L	34	U	OP1-P-O3'	5.47	117.23	105.20
57	3L	42	A	C2-N3-C4	5.47	113.33	110.60
26	14	222	A	C5-C6-N1	-5.47	114.97	117.70
26	14	704	G	N3-C4-N9	-5.47	122.72	126.00
26	14	1415	U	C2-N3-C4	-5.47	123.72	127.00
26	14	2321	G	N3-C4-C5	-5.47	125.86	128.60
26	14	2345	G	C4-C5-C6	5.47	122.08	118.80
26	14	2592	G	C8-N9-C4	-5.47	104.21	106.40
26	14	2729	G	N1-C6-O6	5.47	123.18	119.90
1	13	873	A	C6-N1-C2	-5.47	115.32	118.60
26	1H	937	U	C6-N1-C2	5.47	124.28	121.00
26	1H	1155	A	C5-C6-N1	5.47	120.43	117.70
26	1H	1296	G	OP1-P-OP2	5.47	127.80	119.60
26	1H	2482	G	C2-N3-C4	-5.47	109.17	111.90
29	11	222	ARG	NE-CZ-NH1	-5.47	117.57	120.30
1	1G	443	C	N1-C2-O2	5.47	122.18	118.90
26	14	1374	G	O5'-P-OP2	5.47	117.26	110.70
26	14	2242	G	O5'-P-OP2	5.47	117.26	110.70
26	14	2266	A	N7-C8-N9	-5.47	111.07	113.80
26	14	2331	G	OP1-P-O3'	-5.47	93.17	105.20
26	14	2868	A	O5'-P-OP2	5.47	117.26	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	138	G	OP2-P-O3'	5.47	117.23	105.20
22	1K	35	U	N1-C2-N3	5.47	118.18	114.90
26	1H	408	G	C6-N1-C2	5.47	128.38	125.10
26	1H	524	U	O5'-P-OP2	-5.47	100.78	105.70
26	1H	559	G	C4-C5-C6	5.47	122.08	118.80
26	1H	734	A	C4-C5-N7	5.47	113.43	110.70
26	1H	859	G	OP2-P-O3'	5.47	117.22	105.20
26	1H	1304	C	N3-C4-N4	-5.47	114.17	118.00
26	1H	1333	C	N3-C4-N4	5.47	121.83	118.00
26	1H	1498	C	N1-C2-O2	-5.47	115.62	118.90
1	1G	1274	G	C6-C5-N7	-5.47	127.12	130.40
1	1G	1484	C	C6-N1-C2	5.47	122.49	120.30
23	2L	4	G	OP1-P-OP2	5.47	127.80	119.60
23	2L	15	G	C5-C6-O6	5.47	131.88	128.60
26	14	301	G	N1-C2-N3	5.47	127.18	123.90
26	14	318	C	C5-C4-N4	-5.47	116.37	120.20
26	14	467	G	OP2-P-O3'	5.47	117.23	105.20
1	13	230	G	OP2-P-O3'	5.46	117.22	105.20
1	13	506	G	O5'-P-OP2	5.46	117.26	110.70
1	13	728	A	C5-C6-N6	-5.46	119.33	123.70
1	13	1198	G	O5'-P-OP1	-5.46	100.78	105.70
26	1H	187	G	OP1-P-OP2	5.46	127.80	119.60
26	1H	409	C	N1-C2-O2	5.46	122.18	118.90
26	1H	569	U	C2-N1-C1'	-5.46	111.14	117.70
26	1H	592	G	C5-C6-N1	-5.46	108.77	111.50
26	1H	777	A	C2-N3-C4	-5.46	107.87	110.60
26	1H	1288	U	O5'-P-OP1	-5.46	100.78	105.70
26	1H	1546	C	N3-C4-C5	-5.46	119.71	121.90
26	1H	2046	G	C2-N3-C4	5.46	114.63	111.90
26	14	56	A	OP2-P-O3'	5.46	117.22	105.20
26	14	196	A	C5-C6-N6	5.46	128.07	123.70
26	14	389	G	C4-C5-N7	5.46	112.99	110.80
26	14	683	C	N1-C2-O2	-5.46	115.62	118.90
26	14	686	G	C5-C6-N1	5.46	114.23	111.50
26	14	774	A	N7-C8-N9	5.46	116.53	113.80
26	14	1952	A	N1-C6-N6	-5.46	115.32	118.60
26	14	2290	G	O5'-P-OP2	5.46	117.26	110.70
26	14	2409	G	N7-C8-N9	5.46	115.83	113.10
1	13	128	G	N3-C4-N9	-5.46	122.72	126.00
1	13	1222	G	C2-N3-C4	-5.46	109.17	111.90
1	13	1286	A	O4'-C1'-N9	5.46	112.57	108.20
25	4K	19	A	C5-C6-N6	-5.46	119.33	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1473	G	N9-C4-C5	-5.46	103.22	105.40
26	14	177	G	C5-C6-N1	-5.46	108.77	111.50
26	14	1677	A	O5'-P-OP2	5.46	117.26	110.70
26	14	2485	G	C5-C6-N1	-5.46	108.77	111.50
1	13	1342	C	C2-N1-C1'	-5.46	112.79	118.80
26	1H	504	U	N1-C2-O2	5.46	126.62	122.80
26	1H	553	U	OP2-P-O3'	5.46	117.22	105.20
26	1H	592	G	C4-C5-C6	5.46	122.08	118.80
26	1H	744	G	N9-C4-C5	5.46	107.58	105.40
26	1H	949	C	C5-C6-N1	-5.46	118.27	121.00
26	1H	950	G	OP1-P-OP2	-5.46	111.41	119.60
26	1H	2230	G	C4-C5-N7	5.46	112.98	110.80
26	1H	2250	G	C6-C5-N7	5.46	133.68	130.40
26	1H	2307	G	OP1-P-OP2	5.46	127.79	119.60
26	1H	2697	G	P-O3'-C3'	-5.46	113.15	119.70
26	1H	2731	G	C4-C5-N7	5.46	112.98	110.80
1	1G	99	C	C6-N1-C2	-5.46	118.11	120.30
1	1G	358	U	C4-C5-C6	5.46	122.98	119.70
26	14	590	A	C5-N7-C8	-5.46	101.17	103.90
26	14	998	C	C4-C5-C6	-5.46	114.67	117.40
26	14	2046	G	C8-N9-C1'	-5.46	119.90	127.00
26	14	2077	A	C2-N3-C4	5.46	113.33	110.60
26	14	2088	G	C5-C6-N1	-5.46	108.77	111.50
26	14	2272	U	P-O3'-C3'	5.46	126.25	119.70
26	14	2844	G	OP2-P-O3'	5.46	117.22	105.20
37	35	62	LEU	CB-CG-CD2	-5.46	101.72	111.00
1	13	952	U	O5'-P-OP1	-5.46	100.79	105.70
26	1H	183	C	C5-C6-N1	-5.46	118.27	121.00
26	1H	741	G	N9-C4-C5	5.46	107.58	105.40
26	1H	1271	G	O5'-P-OP2	-5.46	100.79	105.70
26	1H	1364	G	N3-C4-C5	-5.46	125.87	128.60
26	1H	1731	G	O5'-P-OP1	-5.46	100.79	105.70
26	1H	2063	C	N3-C2-O2	5.46	125.72	121.90
26	1H	2438	U	O5'-P-OP2	-5.46	100.79	105.70
26	1H	2877	G	O5'-P-OP2	-5.46	100.79	105.70
26	14	2528	U	C6-N1-C2	-5.46	117.72	121.00
26	14	2576	G	N9-C4-C5	-5.46	103.22	105.40
34	69	131	LYS	C-N-CA	5.46	144.93	122.00
1	13	685	G	C8-N9-C4	-5.46	104.22	106.40
1	13	1365	G	OP1-P-OP2	-5.46	111.41	119.60
26	1H	107	C	N1-C2-N3	-5.46	115.38	119.20
26	1H	583	G	C5-C6-N1	5.46	114.23	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	806	C	N1-C2-O2	5.46	122.17	118.90
26	1H	870	A	OP2-P-O3'	-5.46	93.19	105.20
26	1H	975	G	C6-C5-N7	5.46	133.68	130.40
26	1H	2016	U	C6-N1-C2	5.46	124.28	121.00
26	1H	2354	G	OP1-P-O3'	5.46	117.21	105.20
26	1H	2544	G	N3-C2-N2	-5.46	116.08	119.90
26	1H	2550	G	C6-N1-C2	-5.46	121.83	125.10
26	1H	2727	G	C8-N9-C4	-5.46	104.22	106.40
1	1G	231	G	C4-C5-C6	5.46	122.08	118.80
1	1G	294	U	OP1-P-OP2	5.46	127.79	119.60
1	1G	314	C	C5-C6-N1	-5.46	118.27	121.00
1	1G	363	A	C4-C5-N7	-5.46	107.97	110.70
1	1G	547	A	C5-C6-N1	-5.46	114.97	117.70
1	1G	548	G	OP1-P-OP2	5.46	127.79	119.60
1	1G	1187	G	O5'-P-OP2	5.46	117.25	110.70
1	1G	1467	G	N1-C6-O6	5.46	123.18	119.90
1	1G	1483	A	C4-C5-N7	5.46	113.43	110.70
23	2L	68	C	N3-C4-C5	5.46	124.08	121.90
26	14	246	C	OP1-P-OP2	5.46	127.79	119.60
26	14	475	U	C6-N1-C2	-5.46	117.72	121.00
26	14	777	A	N1-C2-N3	5.46	132.03	129.30
26	14	1348	G	OP1-P-OP2	-5.46	111.41	119.60
26	14	1461	G	C2-N3-C4	-5.46	109.17	111.90
26	14	1586	A	OP2-P-O3'	5.46	117.21	105.20
26	14	2713	A	C2-N3-C4	-5.46	107.87	110.60
26	14	2762	G	C4-C5-N7	5.46	112.98	110.80
26	14	2771	C	O5'-P-OP2	5.46	117.25	110.70
47	D5	163	LEU	CA-CB-CG	5.46	127.86	115.30
1	13	540	G	OP2-P-O3'	5.46	117.20	105.20
1	13	570	G	N1-C2-N3	5.46	127.17	123.90
1	13	668	G	C2-N3-C4	5.46	114.63	111.90
22	1K	63	U	C5-C6-N1	5.46	125.43	122.70
26	1H	273(A)	G	C5-C6-N1	-5.46	108.77	111.50
26	1H	648	G	N1-C2-N3	5.46	127.17	123.90
26	1H	1258	C	OP1-P-OP2	5.46	127.78	119.60
26	1H	1681	G	C8-N9-C4	5.46	108.58	106.40
26	1H	2349	G	N3-C4-C5	-5.46	125.87	128.60
1	1G	894	G	C8-N9-C4	-5.46	104.22	106.40
26	14	1558	A	O5'-P-OP2	5.46	117.25	110.70
26	14	1786	A	OP2-P-O3'	5.46	117.20	105.20
26	14	1973	G	N1-C2-N2	-5.46	111.29	116.20
26	14	2407	G	C5-N7-C8	-5.46	101.57	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2437	U	N1-C2-N3	5.46	118.17	114.90
26	14	2525	G	N1-C6-O6	5.46	123.17	119.90
26	14	2835	A	C8-N9-C4	5.46	107.98	105.80
1	13	476	G	C8-N9-C4	-5.46	104.22	106.40
1	13	629	G	C8-N9-C4	-5.46	104.22	106.40
1	13	942	G	C5-C6-O6	-5.46	125.33	128.60
26	1H	1249	U	N3-C4-C5	5.46	117.87	114.60
26	1H	1690	A	C4-C5-C6	5.46	119.73	117.00
23	2L	4	G	N7-C8-N9	-5.46	110.37	113.10
26	14	684	G	C5-C6-N1	5.46	114.23	111.50
26	14	795	C	N3-C4-N4	-5.46	114.18	118.00
26	14	1521	G	C6-C5-N7	-5.46	127.13	130.40
26	14	2002	G	N3-C4-C5	5.46	131.33	128.60
26	14	2572	A	N9-C4-C5	-5.46	103.62	105.80
35	15	48	MET	CB-CG-SD	5.46	128.76	112.40
1	13	238	G	C5-C6-O6	5.45	131.87	128.60
1	13	905	U	N3-C2-O2	-5.45	118.38	122.20
1	13	1183	A	OP1-P-O3'	5.45	117.20	105.20
1	13	1268	A	C5-N7-C8	5.45	106.63	103.90
26	1H	751	A	N7-C8-N9	-5.45	111.07	113.80
26	1H	1321	A	O4'-C1'-N9	-5.45	103.84	108.20
26	1H	1360	A	O5'-P-OP2	5.45	117.25	110.70
26	1H	1377	G	O5'-P-OP2	-5.45	100.79	105.70
26	1H	1974	C	N1-C2-N3	-5.45	115.38	119.20
26	1H	2627	G	C4-C5-N7	5.45	112.98	110.80
1	1G	260	G	C2-N3-C4	-5.45	109.17	111.90
1	1G	353	A	N1-C2-N3	-5.45	126.57	129.30
23	2L	28	U	N3-C2-O2	-5.45	118.38	122.20
26	14	623	G	C2-N3-C4	5.45	114.63	111.90
26	14	846	C	C6-N1-C2	-5.45	118.12	120.30
26	14	940	G	O5'-P-OP2	-5.45	100.79	105.70
26	14	1198	U	OP1-P-OP2	-5.45	111.42	119.60
26	14	2001	A	C6-C5-N7	-5.45	128.48	132.30
26	14	2266	A	C8-N9-C4	5.45	107.98	105.80
26	14	2406	U	OP1-P-OP2	5.45	127.78	119.60
31	39	45	ARG	NE-CZ-NH1	-5.45	117.57	120.30
1	13	656	C	C2-N3-C4	5.45	122.63	119.90
1	13	792	A	N7-C8-N9	-5.45	111.07	113.80
1	13	895	G	C6-N1-C2	-5.45	121.83	125.10
26	1H	1332	G	C8-N9-C4	-5.45	104.22	106.40
26	1H	1412	A	N7-C8-N9	5.45	116.53	113.80
26	1H	2167	U	O4'-C1'-N1	5.45	112.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2600	A	OP1-P-O3'	5.45	117.19	105.20
27	16	78	A	OP2-P-O3'	5.45	117.19	105.20
1	1G	585	G	N3-C4-N9	5.45	129.27	126.00
26	14	1017	G	N1-C6-O6	5.45	123.17	119.90
26	14	1427	A	C4-C5-N7	-5.45	107.97	110.70
26	14	1476	C	C2-N1-C1'	-5.45	112.80	118.80
26	14	1685	C	C2-N3-C4	-5.45	117.17	119.90
26	14	2035	G	OP1-P-OP2	5.45	127.78	119.60
1	13	392	G	C2-N3-C4	-5.45	109.17	111.90
1	13	416	G	C8-N9-C4	-5.45	104.22	106.40
1	13	422	C	O5'-P-OP2	-5.45	100.79	105.70
1	13	519	C	O5'-P-OP2	-5.45	100.79	105.70
1	13	998	G	C5-C6-O6	5.45	131.87	128.60
1	13	1413	A	C6-N1-C2	-5.45	115.33	118.60
23	2K	74	A	N9-C4-C5	-5.45	103.62	105.80
26	1H	121	G	C2-N3-C4	5.45	114.62	111.90
26	1H	241	A	C5-C6-N6	-5.45	119.34	123.70
26	1H	442	G	C5-C6-O6	5.45	131.87	128.60
26	1H	682	G	N1-C6-O6	-5.45	116.63	119.90
26	1H	693	C	C2-N3-C4	-5.45	117.17	119.90
26	1H	802	A	OP2-P-O3'	5.45	117.19	105.20
26	1H	989	G	C4-C5-C6	5.45	122.07	118.80
26	1H	1354	A	C5-C6-N1	5.45	120.42	117.70
26	1H	1419	A	OP2-P-O3'	5.45	117.19	105.20
26	1H	2014	A	C4-C5-N7	5.45	113.42	110.70
26	1H	2554	U	N3-C4-C5	5.45	117.87	114.60
48	I8	25	ARG	NE-CZ-NH1	5.45	123.03	120.30
1	1G	509	A	N9-C1'-C2'	-5.45	106.00	112.00
1	1G	673	G	C8-N9-C4	5.45	108.58	106.40
26	14	123	G	C8-N9-C4	5.45	108.58	106.40
26	14	222	A	O5'-P-OP1	5.45	117.24	110.70
26	14	243	U	C6-N1-C2	-5.45	117.73	121.00
26	14	577	G	N3-C4-C5	-5.45	125.88	128.60
26	14	1646	C	C2-N3-C4	-5.45	117.17	119.90
1	13	136	C	C6-N1-C2	5.45	122.48	120.30
1	13	629	G	N9-C4-C5	5.45	107.58	105.40
1	13	1520	G	N1-C2-N2	-5.45	111.30	116.20
26	1H	59	U	C5-C4-O4	5.45	129.17	125.90
26	1H	488	G	C2-N3-C4	-5.45	109.18	111.90
26	1H	1133	U	C2-N3-C4	-5.45	123.73	127.00
26	1H	1683	C	N1-C2-N3	5.45	123.01	119.20
26	1H	1823	G	C8-N9-C4	-5.45	104.22	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1830	C	N1-C2-O2	-5.45	115.63	118.90
26	1H	1956	U	C4-C5-C6	5.45	122.97	119.70
26	1H	2405	G	O5'-P-OP2	-5.45	100.80	105.70
26	1H	2711	A	N3-C4-C5	5.45	130.61	126.80
26	1H	2741	A	N7-C8-N9	-5.45	111.08	113.80
1	1G	1087	G	N1-C6-O6	5.45	123.17	119.90
1	1G	1349	A	C5-C6-N1	5.45	120.42	117.70
26	14	1424	G	C2-N3-C4	-5.45	109.17	111.90
26	14	2644	G	C5-N7-C8	-5.45	101.58	104.30
1	13	242	C	OP2-P-O3'	-5.45	93.22	105.20
26	1H	30	G	OP1-P-OP2	-5.45	111.43	119.60
26	1H	500	G	O5'-P-OP1	-5.45	100.80	105.70
26	1H	869	G	C2-N3-C4	-5.45	109.18	111.90
26	1H	1591	G	N3-C4-C5	5.45	131.32	128.60
26	1H	2362	G	C2-N3-C4	-5.45	109.18	111.90
26	14	1354	A	C5-C6-N1	5.45	120.42	117.70
26	14	1497	U	O5'-P-OP1	-5.45	100.80	105.70
26	14	1712	C	O5'-P-OP2	5.45	117.24	110.70
26	14	1996	C	N3-C4-C5	-5.45	119.72	121.90
1	13	523	A	C5-C6-N1	-5.45	114.98	117.70
1	13	543	C	N1-C2-O2	-5.45	115.63	118.90
26	1H	217	G	N3-C4-N9	-5.45	122.73	126.00
26	1H	246	C	O5'-P-OP2	-5.45	100.80	105.70
26	1H	270(K)	C	N3-C2-O2	-5.45	118.09	121.90
26	1H	610	C	C2-N1-C1'	-5.45	112.81	118.80
26	1H	765	G	N3-C4-N9	-5.45	122.73	126.00
26	1H	1256	G	C5-C6-O6	5.45	131.87	128.60
26	1H	2297	C	N1-C2-O2	-5.45	115.63	118.90
26	1H	2454	G	N1-C6-O6	-5.45	116.63	119.90
1	1G	779	C	C6-N1-C2	-5.45	118.12	120.30
1	1G	1420	C	O5'-P-OP1	-5.45	100.80	105.70
26	14	102	G	C8-N9-C1'	5.45	134.08	127.00
26	14	834	C	N1-C2-N3	5.45	123.01	119.20
26	14	1440	G	N7-C8-N9	-5.45	110.38	113.10
26	14	1597	A	OP1-P-OP2	5.45	127.77	119.60
26	14	1768	U	C4-C5-C6	-5.45	116.43	119.70
26	14	1935	G	C5-N7-C8	-5.45	101.58	104.30
26	14	2413	G	C6-C5-N7	-5.45	127.13	130.40
26	14	2607	G	OP1-P-O3'	5.45	117.18	105.20
26	14	2736	G	C2-N3-C4	-5.45	109.18	111.90
1	13	1048	G	C5-N7-C8	-5.44	101.58	104.30
26	1H	610	C	C5-C4-N4	5.44	124.01	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1569	A	O5'-P-OP2	-5.44	100.80	105.70
26	1H	2545	G	OP1-P-OP2	5.44	127.77	119.60
1	1G	1204	A	C8-N9-C4	-5.44	103.62	105.80
26	14	1590	U	N3-C4-C5	-5.44	111.33	114.60
26	14	2589	A	C6-C5-N7	-5.44	128.49	132.30
1	13	571	U	C5-C4-O4	-5.44	122.63	125.90
1	13	608	A	C5-N7-C8	-5.44	101.18	103.90
1	13	767	A	C8-N9-C4	5.44	107.98	105.80
1	13	800	G	C4-C5-C6	5.44	122.06	118.80
1	13	824	C	OP1-P-OP2	-5.44	111.44	119.60
1	13	1059	C	C5-C6-N1	5.44	123.72	121.00
26	1H	1426	G	C2-N3-C4	-5.44	109.18	111.90
26	1H	2082	A	N1-C6-N6	-5.44	115.33	118.60
1	1G	678	U	N1-C2-N3	5.44	118.17	114.90
1	1G	742	G	C5-N7-C8	-5.44	101.58	104.30
1	1G	881	G	C2-N3-C4	-5.44	109.18	111.90
1	1G	1473	A	C5-N7-C8	-5.44	101.18	103.90
57	3L	48	C	C5-C4-N4	-5.44	116.39	120.20
26	14	55	G	C6-N1-C2	-5.44	121.83	125.10
26	14	242	G	C5-C6-N1	5.44	114.22	111.50
26	14	472	A	C8-N9-C4	-5.44	103.62	105.80
26	14	980	A	C8-N9-C4	5.44	107.98	105.80
26	14	1485	G	C2-N3-C4	-5.44	109.18	111.90
26	14	1514	U	N1-C2-N3	5.44	118.17	114.90
26	14	1682	G	OP1-P-O3'	5.44	117.17	105.20
26	14	1904	G	C2-N3-C4	5.44	114.62	111.90
26	14	2264	C	N1-C2-O2	-5.44	115.63	118.90
26	14	2337	G	C4-C5-N7	5.44	112.98	110.80
26	14	2777	G	C4-C5-C6	5.44	122.06	118.80
26	14	2866	U	OP1-P-O3'	5.44	117.17	105.20
1	13	994	A	C2-N3-C4	5.44	113.32	110.60
23	2K	41	C	N3-C2-O2	-5.44	118.09	121.90
23	2K	70	C	O5'-P-OP1	5.44	117.23	110.70
26	1H	126	A	OP1-P-OP2	5.44	127.76	119.60
26	1H	363(E)	U	N3-C4-O4	5.44	123.21	119.40
26	1H	371	A	C6-N1-C2	-5.44	115.34	118.60
26	1H	1323	U	C4-C5-C6	5.44	122.96	119.70
26	1H	2215	G	C5-C6-N1	-5.44	108.78	111.50
26	1H	2376	A	N1-C6-N6	5.44	121.86	118.60
26	1H	2605	U	C2-N3-C4	5.44	130.26	127.00
1	1G	337	C	N3-C4-N4	5.44	121.81	118.00
1	1G	917	G	C8-N9-C4	5.44	108.58	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	609	A	OP2-P-O3'	5.44	117.17	105.20
26	14	668	G	N3-C2-N2	-5.44	116.09	119.90
26	14	2560	C	N1-C2-O2	-5.44	115.64	118.90
26	14	2708	G	N1-C2-N3	5.44	127.16	123.90
1	13	5	U	C4'-C3'-C2'	-5.44	97.16	102.60
1	13	606	G	N3-C4-N9	5.44	129.26	126.00
26	1H	631	A	OP2-P-O3'	-5.44	93.23	105.20
26	1H	1512	G	C4-C5-C6	5.44	122.06	118.80
1	1G	442	C	C5-C6-N1	5.44	123.72	121.00
1	1G	1139	G	N3-C4-N9	-5.44	122.74	126.00
1	1G	1529	G	C8-N9-C4	-5.44	104.22	106.40
26	14	762	U	N1-C2-N3	-5.44	111.64	114.90
26	14	2058	A	N1-C2-N3	5.44	132.02	129.30
1	13	68	G	N3-C4-C5	-5.44	125.88	128.60
1	13	1523	G	C6-N1-C2	-5.44	121.84	125.10
26	1H	176	G	C2-N3-C4	-5.44	109.18	111.90
26	1H	754	C	OP2-P-O3'	5.44	117.16	105.20
26	1H	941	A	N1-C2-N3	-5.44	126.58	129.30
26	1H	1355	G	C8-N9-C4	-5.44	104.22	106.40
26	1H	1741	C	O5'-P-OP1	5.44	117.22	110.70
26	1H	1815	A	N7-C8-N9	-5.44	111.08	113.80
26	1H	1839	G	C8-N9-C4	5.44	108.58	106.40
26	1H	1940	U	N1-C2-O2	-5.44	118.99	122.80
26	1H	2410	G	C4-C5-N7	5.44	112.97	110.80
26	1H	2624	G	N1-C2-N2	-5.44	111.31	116.20
37	78	50	ARG	NE-CZ-NH2	5.44	123.02	120.30
1	1G	922	G	C8-N9-C4	-5.44	104.22	106.40
26	14	459	U	N3-C2-O2	-5.44	118.39	122.20
26	14	536	A	N9-C4-C5	5.44	107.97	105.80
26	14	1394	U	C5-C6-N1	5.44	125.42	122.70
26	14	1453	A	C5-C6-N6	-5.44	119.35	123.70
26	14	1892	C	N1-C2-O2	-5.44	115.64	118.90
26	14	1950	G	N9-C1'-C2'	5.44	121.07	114.00
26	14	1995	U	N1-C2-N3	5.44	118.16	114.90
26	14	2237	G	C5-N7-C8	-5.44	101.58	104.30
1	13	1523	G	C8-N9-C4	5.44	108.58	106.40
23	2K	24	C	C5-C6-N1	-5.44	118.28	121.00
26	1H	954	G	N3-C4-N9	5.44	129.26	126.00
26	1H	2458	G	C4-C5-C6	5.44	122.06	118.80
1	1G	1190	G	O5'-P-OP2	5.44	117.22	110.70
26	14	2242	G	C2-N3-C4	5.44	114.62	111.90
26	14	2504	U	C5-C6-N1	5.44	125.42	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	35	19	VAL	CG1-CB-CG2	5.44	119.60	110.90
1	13	37	U	O5'-P-OP1	5.43	117.22	110.70
1	13	354	G	C8-N9-C4	-5.43	104.23	106.40
1	13	1371	G	O5'-P-OP1	-5.43	100.81	105.70
26	1H	831	G	C8-N9-C1'	-5.43	119.94	127.00
26	1H	1999	C	OP2-P-O3'	5.43	117.15	105.20
1	1G	906	G	OP1-P-OP2	5.43	127.75	119.60
1	1G	1427	U	C5-C6-N1	-5.43	119.98	122.70
26	14	530	G	C5-C6-N1	-5.43	108.78	111.50
26	14	935	C	N3-C4-C5	5.43	124.07	121.90
26	14	1197	G	OP2-P-O3'	5.43	117.15	105.20
26	14	2039	C	OP1-P-OP2	-5.43	111.45	119.60
26	14	2703	C	O5'-P-OP2	-5.43	100.81	105.70
26	14	2763	G	N1-C6-O6	-5.43	116.64	119.90
27	1J	89	G	N3-C2-N2	5.43	123.70	119.90
1	13	323	U	N3-C2-O2	-5.43	118.40	122.20
1	13	704	A	O5'-P-OP1	-5.43	100.81	105.70
1	13	965	A	C5-C6-N6	-5.43	119.35	123.70
26	1H	270(E)	G	C2-N3-C4	-5.43	109.18	111.90
26	1H	333	G	N3-C4-C5	-5.43	125.88	128.60
26	1H	408	G	N7-C8-N9	-5.43	110.38	113.10
26	1H	645	C	C2-N3-C4	5.43	122.62	119.90
26	1H	918	A	N7-C8-N9	5.43	116.52	113.80
26	1H	1616	A	C6-N1-C2	-5.43	115.34	118.60
26	1H	1889	A	C4-C5-N7	5.43	113.42	110.70
26	1H	1994	C	C4-C5-C6	5.43	120.12	117.40
1	1G	761	G	N9-C4-C5	-5.43	103.23	105.40
1	1G	927	G	C6-N1-C2	5.43	128.36	125.10
1	1G	1420	C	C5-C6-N1	5.43	123.72	121.00
26	14	137(A)	G	N1-C2-N2	5.43	121.09	116.20
26	14	270(B)	A	C5-C6-N6	-5.43	119.35	123.70
26	14	413	C	C4-C5-C6	-5.43	114.68	117.40
26	14	700	G	N1-C6-O6	-5.43	116.64	119.90
26	14	995	C	C2-N3-C4	5.43	122.62	119.90
26	14	2262	U	O4'-C1'-N1	5.43	112.55	108.20
22	1K	35	U	O5'-P-OP1	-5.43	100.81	105.70
26	1H	520	G	OP1-P-OP2	-5.43	111.45	119.60
26	1H	1123	C	C4-C5-C6	5.43	120.12	117.40
26	1H	1438	U	C2-N3-C4	5.43	130.26	127.00
26	1H	1780	A	C2-N3-C4	-5.43	107.89	110.60
26	1H	2863	C	N3-C4-C5	5.43	124.07	121.90
1	1G	251	G	O4'-C1'-N9	-5.43	103.86	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	678	U	N1-C2-O2	-5.43	119.00	122.80
26	14	327	G	N1-C2-N3	5.43	127.16	123.90
26	14	1589	C	OP1-P-OP2	-5.43	111.45	119.60
1	13	523	A	C4-C5-N7	5.43	113.42	110.70
1	13	761	G	N3-C2-N2	5.43	123.70	119.90
1	13	878	G	N1-C2-N3	-5.43	120.64	123.90
26	1H	197	A	N3-C4-N9	-5.43	123.06	127.40
26	1H	866	A	C8-N9-C1'	-5.43	117.93	127.70
26	1H	1109	C	P-O3'-C3'	5.43	126.22	119.70
26	1H	1122	G	C5-C6-O6	-5.43	125.34	128.60
26	1H	1336	A	OP1-P-O3'	5.43	117.14	105.20
26	1H	1451	C	C4-C5-C6	5.43	120.11	117.40
26	1H	1727	U	C5-C4-O4	5.43	129.16	125.90
26	1H	1729	A	O4'-C1'-N9	5.43	112.54	108.20
26	1H	2384	G	N1-C6-O6	-5.43	116.64	119.90
26	1H	2585	U	OP2-P-O3'	5.43	117.14	105.20
27	16	32	C	C5-C6-N1	-5.43	118.28	121.00
1	1G	231	G	O5'-P-OP2	-5.43	100.81	105.70
1	1G	292	G	N1-C6-O6	-5.43	116.64	119.90
1	1G	451	A	N7-C8-N9	-5.43	111.08	113.80
1	1G	513	C	OP1-P-O3'	5.43	117.14	105.20
1	1G	558	G	OP2-P-O3'	5.43	117.15	105.20
1	1G	562	C	N3-C2-O2	-5.43	118.10	121.90
1	1G	1226	C	C5-C4-N4	5.43	124.00	120.20
26	14	11	G	C5-C6-N1	-5.43	108.78	111.50
26	14	333	G	N1-C2-N2	5.43	121.09	116.20
26	14	466	A	N1-C6-N6	5.43	121.86	118.60
26	14	609	A	C5-N7-C8	-5.43	101.19	103.90
26	14	718	A	C8-N9-C4	5.43	107.97	105.80
26	14	1271	G	N1-C6-O6	5.43	123.16	119.90
26	14	2042	A	C2-N3-C4	-5.43	107.89	110.60
26	14	2669	G	C8-N9-C4	5.43	108.57	106.40
26	14	2706	G	N3-C4-C5	5.43	131.31	128.60
26	14	2736	G	N1-C6-O6	5.43	123.16	119.90
1	13	804	U	OP2-P-O3'	5.43	117.14	105.20
1	13	876	G	C8-N9-C4	5.43	108.57	106.40
1	13	1072	G	N1-C2-N3	5.43	127.16	123.90
1	13	1322	C	N3-C2-O2	5.43	125.70	121.90
26	1H	562	U	N3-C2-O2	-5.43	118.40	122.20
26	1H	1229	G	C2-N3-C4	-5.43	109.19	111.90
26	1H	1986	A	OP1-P-O3'	5.43	117.14	105.20
1	1G	1507	A	N9-C4-C5	5.43	107.97	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	447	A	N1-C2-N3	5.43	132.01	129.30
26	14	596	G	N1-C6-O6	5.43	123.16	119.90
26	14	1953	A	C5-C6-N1	5.43	120.41	117.70
26	14	2075	U	OP2-P-O3'	5.43	117.14	105.20
1	13	30	U	OP1-P-OP2	5.43	127.74	119.60
1	13	337	C	OP2-P-O3'	5.43	117.14	105.20
1	13	1452	C	P-O3'-C3'	5.43	126.21	119.70
1	13	1529	G	C5-C6-O6	-5.43	125.34	128.60
26	1H	29	U	O5'-P-OP1	5.43	117.21	110.70
26	1H	957	A	N9-C4-C5	5.43	107.97	105.80
26	1H	1214	A	N1-C6-N6	5.43	121.86	118.60
26	1H	1859	A	N1-C6-N6	-5.43	115.34	118.60
26	1H	2418	A	C5-C6-N1	5.43	120.41	117.70
1	1G	528	C	C4-C5-C6	-5.43	114.69	117.40
1	1G	1405	G	O5'-P-OP2	-5.43	100.82	105.70
26	14	238	C	N3-C4-N4	-5.43	114.20	118.00
26	14	2073	C	N3-C4-C5	5.43	124.07	121.90
1	13	1277	C	O5'-P-OP1	-5.42	100.82	105.70
26	1H	254	G	N1-C6-O6	5.42	123.16	119.90
26	1H	848	G	C6-N1-C2	-5.42	121.85	125.10
26	1H	1036	G	N3-C2-N2	5.42	123.70	119.90
1	1G	515	G	N3-C4-C5	5.42	131.31	128.60
1	1G	554	C	C6-N1-C2	-5.42	118.13	120.30
1	1G	759	A	C5-N7-C8	-5.42	101.19	103.90
1	1G	819	A	OP2-P-O3'	5.42	117.14	105.20
57	3L	3	G	C4-N9-C1'	-5.42	119.45	126.50
26	14	623	G	N9-C4-C5	-5.42	103.23	105.40
26	14	1383	C	O5'-P-OP2	-5.42	100.82	105.70
26	14	2299	G	N1-C2-N2	5.42	121.08	116.20
26	14	2498	C	N3-C4-C5	-5.42	119.73	121.90
26	14	2577	A	N1-C6-N6	5.42	121.86	118.60
26	1H	109	G	C8-N9-C4	-5.42	104.23	106.40
26	1H	2260	C	O5'-P-OP1	5.42	117.21	110.70
26	1H	2566	A	N1-C6-N6	5.42	121.85	118.60
26	1H	2726	U	N3-C2-O2	-5.42	118.40	122.20
1	1G	1139	G	N1-C6-O6	5.42	123.15	119.90
23	2L	17	C	N1-C2-O2	5.42	122.15	118.90
26	14	461	C	C4-C5-C6	5.42	120.11	117.40
26	14	921	G	N1-C6-O6	5.42	123.15	119.90
26	14	1514	U	C6-N1-C2	-5.42	117.75	121.00
26	14	1565	C	C5-C4-N4	-5.42	116.40	120.20
26	14	1807	G	N3-C4-C5	5.42	131.31	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2291	U	C4-C5-C6	5.42	122.95	119.70
37	35	52	GLU	C-N-CA	-5.42	110.91	122.30
1	13	866	C	C6-N1-C1'	5.42	127.31	120.80
24	3K	58	A	P-O3'-C3'	5.42	126.21	119.70
26	1H	1140	C	O5'-P-OP1	5.42	117.20	110.70
26	1H	1186	G	N9-C4-C5	5.42	107.57	105.40
26	1H	1601	G	N3-C4-C5	5.42	131.31	128.60
26	1H	1620	G	N9-C4-C5	-5.42	103.23	105.40
26	1H	2415	G	C5-N7-C8	-5.42	101.59	104.30
26	1H	2456	C	C5-C6-N1	-5.42	118.29	121.00
26	1H	2621	A	N1-C6-N6	-5.42	115.35	118.60
1	1G	267	C	N3-C4-C5	5.42	124.07	121.90
1	1G	512	U	C4-C5-C6	5.42	122.95	119.70
1	1G	1058	G	OP1-P-O3'	5.42	117.13	105.20
26	14	198	C	N3-C4-N4	5.42	121.80	118.00
26	14	217	G	C2-N3-C4	-5.42	109.19	111.90
26	14	1329	U	C5-C4-O4	5.42	129.15	125.90
26	14	1771	C	N1-C2-N3	5.42	123.00	119.20
26	14	2420	C	N3-C4-C5	-5.42	119.73	121.90
26	14	2515	C	OP1-P-OP2	-5.42	111.47	119.60
26	14	2863	C	OP1-P-OP2	5.42	127.73	119.60
1	13	1486	G	C5-N7-C8	-5.42	101.59	104.30
1	13	1486	G	OP1-P-OP2	5.42	127.73	119.60
26	1H	154	G	C4-C5-N7	5.42	112.97	110.80
26	1H	713	G	C5-C6-N1	-5.42	108.79	111.50
1	1G	386	C	N3-C4-C5	5.42	124.07	121.90
26	14	126	A	O5'-P-OP2	-5.42	100.82	105.70
26	14	1154	G	C4-C5-N7	5.42	112.97	110.80
26	14	1189	A	OP2-P-O3'	5.42	117.12	105.20
26	14	1404	C	O5'-P-OP1	-5.42	100.82	105.70
26	14	2378	A	C8-N9-C4	5.42	107.97	105.80
27	1J	103	U	N3-C4-O4	-5.42	115.61	119.40
1	13	1144	G	N9-C4-C5	5.42	107.57	105.40
23	2K	57	C	N1-C2-N3	-5.42	115.41	119.20
26	1H	454	A	OP1-P-O3'	-5.42	93.28	105.20
26	1H	983	A	OP2-P-O3'	5.42	117.12	105.20
26	1H	2363	C	OP2-P-O3'	5.42	117.12	105.20
26	1H	2400	G	C2-N3-C4	5.42	114.61	111.90
27	16	107	U	OP1-P-OP2	5.42	127.73	119.60
1	1G	222	U	C6-N1-C2	-5.42	117.75	121.00
1	1G	276	G	N7-C8-N9	-5.42	110.39	113.10
26	14	46	C	OP2-P-O3'	5.42	117.12	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	636	G	OP2-P-O3'	5.42	117.12	105.20
26	14	1265	A	OP1-P-O3'	5.42	117.12	105.20
26	14	2001	A	C4-C5-N7	5.42	113.41	110.70
26	14	2336	A	O5'-P-OP2	-5.42	100.82	105.70
27	1J	52	A	C6-C5-N7	5.42	136.09	132.30
1	13	577	G	OP2-P-O3'	5.42	117.12	105.20
1	13	595	G	C5-C6-O6	5.42	131.85	128.60
1	13	1371	G	N1-C6-O6	-5.42	116.65	119.90
8	7E	26	VAL	CG1-CB-CG2	-5.42	102.23	110.90
26	1H	195	A	OP2-P-O3'	5.42	117.12	105.20
26	1H	271(B)	G	P-O3'-C3'	5.42	126.20	119.70
26	1H	680	G	N1-C2-N3	5.42	127.15	123.90
26	1H	1002	G	C5-C6-N1	-5.42	108.79	111.50
26	1H	1545(A)	A	O4'-C1'-N9	5.42	112.53	108.20
26	1H	1772	G	C5-N7-C8	-5.42	101.59	104.30
26	1H	1893	C	N3-C4-N4	-5.42	114.21	118.00
26	1H	2451	A	C8-N9-C4	-5.42	103.63	105.80
26	14	742	G	C4-C5-N7	-5.42	108.63	110.80
26	14	1293	C	O5'-P-OP2	5.42	117.20	110.70
26	14	1338	G	N3-C2-N2	5.42	123.69	119.90
26	14	1858	G	P-O3'-C3'	5.42	126.20	119.70
26	14	2231	C	C5-C4-N4	5.42	123.99	120.20
26	14	2248	C	C4-C5-C6	5.42	120.11	117.40
24	3K	36	U	OP1-P-OP2	5.42	127.72	119.60
26	1H	360	G	N9-C4-C5	-5.42	103.23	105.40
26	1H	729	G	N1-C6-O6	5.42	123.15	119.90
26	1H	1236	G	C5-N7-C8	5.42	107.01	104.30
26	1H	1566	A	OP1-P-O3'	5.42	117.11	105.20
26	1H	2466	C	C4-C5-C6	-5.42	114.69	117.40
1	1G	1397	C	N1-C2-O2	5.42	122.15	118.90
26	14	629	G	OP1-P-OP2	5.42	127.72	119.60
26	14	703	U	C5-C6-N1	5.42	125.41	122.70
26	14	960	A	O5'-P-OP2	-5.42	100.83	105.70
1	13	767	A	C4-C5-C6	5.41	119.71	117.00
1	13	1509	C	N3-C4-N4	-5.41	114.21	118.00
26	1H	381	G	C2-N3-C4	-5.41	109.19	111.90
26	1H	1148	A	C6-C5-N7	5.41	136.09	132.30
26	1H	1237	A	O5'-P-OP1	-5.41	100.83	105.70
26	1H	1423	G	O5'-P-OP2	-5.41	100.83	105.70
26	1H	1494	A	C2-N3-C4	-5.41	107.89	110.60
26	1H	1521	G	C8-N9-C4	-5.41	104.23	106.40
26	1H	2207	C	N3-C4-C5	-5.41	119.73	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2447	G	C8-N9-C1'	5.41	134.04	127.00
26	1H	2486	G	C5-C6-N1	5.41	114.21	111.50
26	1H	2592	G	C5-C6-O6	5.41	131.85	128.60
1	1G	349	A	C4-C5-N7	-5.41	107.99	110.70
1	1G	1340	A	C8-N9-C4	-5.41	103.64	105.80
1	1G	1467	G	N7-C8-N9	5.41	115.81	113.10
26	14	32	C	N3-C2-O2	5.41	125.69	121.90
26	14	547	A	N7-C8-N9	5.41	116.51	113.80
26	14	1131	G	C2-N3-C4	-5.41	109.19	111.90
26	14	1260	G	OP2-P-O3'	5.41	117.11	105.20
26	14	2581	G	N1-C2-N2	-5.41	111.33	116.20
26	14	2714	G	OP1-P-OP2	-5.41	111.48	119.60
24	3K	61	C	N1-C2-O2	5.41	122.15	118.90
26	1H	1036	G	N9-C4-C5	-5.41	103.23	105.40
26	1H	1389	G	OP1-P-O3'	5.41	117.11	105.20
1	1G	804	U	N1-C2-N3	5.41	118.15	114.90
26	14	522	G	OP1-P-OP2	-5.41	111.48	119.60
26	14	1276	A	O5'-P-OP1	-5.41	100.83	105.70
1	13	52	G	C2-N3-C4	-5.41	109.19	111.90
1	13	529	G	C5-N7-C8	-5.41	101.59	104.30
1	13	562	C	N3-C2-O2	-5.41	118.11	121.90
1	13	917	G	N1-C2-N3	-5.41	120.65	123.90
26	1H	17	G	N3-C2-N2	5.41	123.69	119.90
26	1H	906	G	N7-C8-N9	5.41	115.81	113.10
26	1H	1021	A	C8-N9-C4	-5.41	103.64	105.80
26	1H	1701	A	N9-C1'-C2'	-5.41	106.05	112.00
26	1H	1899	G	C8-N9-C4	-5.41	104.23	106.40
26	1H	2051	A	C6-C5-N7	-5.41	128.51	132.30
26	1H	2649	U	C4-C5-C6	5.41	122.95	119.70
1	1G	388	G	C5-C6-O6	5.41	131.85	128.60
1	1G	630	G	C4-C5-N7	-5.41	108.64	110.80
1	1G	1260	C	C5-C6-N1	5.41	123.71	121.00
26	14	604	G	C2-N3-C4	5.41	114.61	111.90
26	14	681	G	N1-C6-O6	-5.41	116.65	119.90
26	14	785	G	C8-N9-C4	-5.41	104.24	106.40
26	14	1212	G	N1-C2-N2	5.41	121.07	116.20
26	14	2216	G	O4'-C1'-N9	-5.41	103.87	108.20
26	14	2460	U	C5-C4-O4	-5.41	122.65	125.90
26	14	2873	A	N3-C4-C5	5.41	130.59	126.80
1	13	62	U	N1-C2-O2	5.41	126.59	122.80
1	13	1208	C	OP1-P-OP2	5.41	127.71	119.60
26	1H	28	A	N1-C2-N3	-5.41	126.60	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	28	A	O5'-P-OP2	-5.41	100.83	105.70
26	1H	640	C	N1-C2-O2	-5.41	115.66	118.90
26	1H	1137	G	C5-C6-O6	-5.41	125.36	128.60
26	1H	1142(A)	A	C4-C5-N7	5.41	113.40	110.70
26	1H	1281	G	C5-C6-O6	-5.41	125.35	128.60
26	1H	2075	U	C2-N1-C1'	-5.41	111.21	117.70
26	1H	2089	U	N3-C2-O2	5.41	125.99	122.20
26	1H	2099	U	C5-C6-N1	5.41	125.40	122.70
26	1H	2262	U	N3-C4-C5	-5.41	111.36	114.60
26	1H	2783	G	C6-C5-N7	-5.41	127.16	130.40
1	1G	46	G	O5'-P-OP2	-5.41	100.83	105.70
1	1G	305	G	N9-C4-C5	5.41	107.56	105.40
26	14	270(T)	G	C6-C5-N7	-5.41	127.16	130.40
26	14	1206	G	C5-C6-N1	-5.41	108.80	111.50
26	14	1477	A	C5-N7-C8	5.41	106.60	103.90
26	14	1637	A	N1-C6-N6	-5.41	115.36	118.60
26	14	1852	C	C6-N1-C2	-5.41	118.14	120.30
26	14	2284	C	C5-C4-N4	5.41	123.98	120.20
1	13	1468	A	C4-C5-N7	5.41	113.40	110.70
26	1H	182	A	OP1-P-OP2	-5.41	111.49	119.60
26	1H	243	U	C4-C5-C6	-5.41	116.46	119.70
26	1H	780	G	OP2-P-O3'	5.41	117.09	105.20
26	1H	1937	A	OP2-P-O3'	5.41	117.10	105.20
26	1H	2291	U	C2-N3-C4	5.41	130.24	127.00
26	1H	2655	G	O4'-C1'-N9	5.41	112.53	108.20
1	1G	346	G	O5'-P-OP2	5.41	117.19	110.70
26	14	806	C	C5-C4-N4	-5.41	116.42	120.20
26	14	1215	G	C4-C5-N7	5.41	112.96	110.80
26	14	1547	C	OP1-P-O3'	5.41	117.09	105.20
26	14	1585	C	C2-N1-C1'	5.41	124.75	118.80
26	14	2729	G	C8-N9-C4	5.41	108.56	106.40
1	13	762	C	N3-C4-N4	-5.41	114.22	118.00
1	13	890	G	C6-C5-N7	5.41	133.64	130.40
23	2K	21	U	N3-C4-O4	-5.41	115.62	119.40
26	1H	449	A	C8-N9-C4	5.41	107.96	105.80
26	1H	1830	C	O5'-P-OP2	5.41	117.19	110.70
26	1H	2019	A	C6-N1-C2	-5.41	115.36	118.60
26	1H	2060	A	C5-N7-C8	-5.41	101.20	103.90
26	1H	2370	G	C5-C6-N1	5.41	114.20	111.50
26	1H	2563	U	O5'-P-OP1	-5.41	100.83	105.70
26	1H	2686	G	N3-C2-N2	-5.41	116.12	119.90
1	1G	386	C	C2-N1-C1'	-5.41	112.85	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	137(A)	G	C5-C6-N1	-5.41	108.80	111.50
26	14	255	A	C5-C6-N6	-5.41	119.38	123.70
26	14	656	G	N7-C8-N9	5.41	115.80	113.10
26	14	1600	C	C5-C6-N1	-5.41	118.30	121.00
26	14	1955	U	C5-C4-O4	5.41	129.14	125.90
26	14	1962	C	OP2-P-O3'	5.41	117.09	105.20
26	14	2046	G	O5'-P-OP2	-5.41	100.83	105.70
26	14	2368	C	O5'-P-OP2	5.41	117.19	110.70
26	14	2597	G	C5-C6-O6	5.41	131.84	128.60
26	14	2686	G	C5-C6-N1	5.41	114.20	111.50
1	13	698	G	N1-C6-O6	5.40	123.14	119.90
1	13	1182	G	N7-C8-N9	5.40	115.80	113.10
26	1H	459	U	N3-C4-C5	5.40	117.84	114.60
26	1H	929	G	C5-C6-O6	-5.40	125.36	128.60
50	K8	17	SER	N-CA-CB	-5.40	102.39	110.50
26	14	62	C	N3-C2-O2	5.40	125.68	121.90
26	14	69	C	N1-C2-O2	-5.40	115.66	118.90
26	14	1006	C	N1-C2-O2	-5.40	115.66	118.90
26	14	2034	U	OP2-P-O3'	5.40	117.09	105.20
29	19	230	ASP	CB-CG-OD1	-5.40	113.44	118.30
23	2K	71	G	C5-C6-O6	5.40	131.84	128.60
26	1H	145	G	N3-C4-C5	5.40	131.30	128.60
26	1H	489	G	N3-C4-N9	-5.40	122.76	126.00
26	1H	716	A	N7-C8-N9	5.40	116.50	113.80
26	1H	947	G	N3-C4-N9	-5.40	122.76	126.00
26	1H	1229	G	N1-C2-N3	5.40	127.14	123.90
26	1H	1309	G	N9-C1'-C2'	-5.40	106.06	112.00
26	1H	1937	A	C2-N3-C4	-5.40	107.90	110.60
26	1H	1942	C	N3-C4-N4	-5.40	114.22	118.00
26	1H	2083	G	N7-C8-N9	5.40	115.80	113.10
27	16	28	C	N3-C4-N4	5.40	121.78	118.00
1	1G	52	G	N1-C2-N3	5.40	127.14	123.90
1	1G	959	A	C8-N9-C4	-5.40	103.64	105.80
1	1G	1200	C	N3-C2-O2	-5.40	118.12	121.90
1	1G	1336	C	N3-C4-N4	5.40	121.78	118.00
1	1G	1432	G	C2-N3-C4	-5.40	109.20	111.90
1	1G	1502	A	N1-C2-N3	5.40	132.00	129.30
26	14	202	U	OP2-P-O3'	5.40	117.09	105.20
26	14	256	A	C6-C5-N7	-5.40	128.52	132.30
26	14	771	G	OP2-P-O3'	-5.40	93.31	105.20
26	14	855	G	C4-C5-C6	5.40	122.04	118.80
26	14	862	G	N1-C6-O6	-5.40	116.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1319	G	OP1-P-OP2	5.40	127.70	119.60
26	14	1351	C	N3-C2-O2	5.40	125.68	121.90
26	14	1728	G	N3-C4-N9	5.40	129.24	126.00
26	14	2026	C	O5'-P-OP1	5.40	117.18	110.70
26	14	2244	U	C2-N3-C4	-5.40	123.76	127.00
26	14	2397	G	OP1-P-OP2	-5.40	111.50	119.60
26	14	2418	A	C5-C6-N6	-5.40	119.38	123.70
26	14	2775	A	C5-C6-N1	-5.40	115.00	117.70
1	13	52	G	N1-C6-O6	5.40	123.14	119.90
1	13	580	U	C2-N3-C4	-5.40	123.76	127.00
1	13	1525	G	N9-C1'-C2'	-5.40	106.06	112.00
23	2K	10	G	C8-N9-C1'	-5.40	119.98	127.00
26	1H	125	G	C5-C6-O6	-5.40	125.36	128.60
26	1H	596	G	N3-C4-C5	5.40	131.30	128.60
26	1H	1346	G	N3-C2-N2	5.40	123.68	119.90
26	1H	1831	G	O5'-P-OP2	5.40	117.18	110.70
26	1H	2089	U	C6-N1-C2	5.40	124.24	121.00
26	1H	2500	U	C6-N1-C2	5.40	124.24	121.00
26	1H	2600	A	N3-C4-C5	-5.40	123.02	126.80
1	1G	273	A	C8-N9-C4	-5.40	103.64	105.80
1	1G	305	G	N1-C2-N3	5.40	127.14	123.90
1	1G	1052	U	C5-C6-N1	5.40	125.40	122.70
1	1G	1467	G	N9-C4-C5	5.40	107.56	105.40
26	14	698	C	O5'-P-OP1	-5.40	100.84	105.70
26	14	731	C	OP1-P-OP2	-5.40	111.50	119.60
26	14	2048	G	N3-C4-C5	-5.40	125.90	128.60
1	13	260	G	N9-C4-C5	5.40	107.56	105.40
1	13	753	A	N1-C2-N3	5.40	132.00	129.30
1	13	1413	A	N7-C8-N9	5.40	116.50	113.80
5	4E	91	LEU	CA-CB-CG	5.40	127.72	115.30
26	1H	972	G	C5-C6-N1	5.40	114.20	111.50
26	1H	1282	U	OP2-P-O3'	5.40	117.08	105.20
26	14	868	U	C2-N3-C4	5.40	130.24	127.00
26	14	1313	U	C5-C4-O4	-5.40	122.66	125.90
26	14	1420	U	OP1-P-OP2	5.40	127.70	119.60
26	14	2840	C	C6-N1-C2	5.40	122.46	120.30
1	13	621	A	C5-C6-N1	5.40	120.40	117.70
1	13	1139	G	C6-C5-N7	5.40	133.64	130.40
23	2K	61	U	C5-C4-O4	-5.40	122.66	125.90
26	1H	867	C	N3-C2-O2	5.40	125.68	121.90
26	1H	908	C	OP2-P-O3'	5.40	117.07	105.20
26	1H	1031	G	C5-C6-O6	5.40	131.84	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1278	A	N7-C8-N9	-5.40	111.10	113.80
26	1H	1395	A	OP1-P-OP2	5.40	127.70	119.60
26	1H	1923	U	O5'-P-OP2	-5.40	100.84	105.70
26	1H	2446	G	N3-C4-N9	5.40	129.24	126.00
26	1H	2532	G	C8-N9-C1'	-5.40	119.98	127.00
26	14	15	G	O5'-P-OP1	-5.40	100.84	105.70
26	14	396	G	N3-C2-N2	-5.40	116.12	119.90
26	14	823	G	N1-C6-O6	-5.40	116.66	119.90
26	14	826	U	C6-N1-C2	-5.40	117.76	121.00
26	14	1127	A	C5-C6-N6	-5.40	119.38	123.70
26	14	1642	G	C5-C6-N1	5.40	114.20	111.50
26	14	1827	C	N3-C4-N4	-5.40	114.22	118.00
26	14	1882	C	N1-C2-O2	5.40	122.14	118.90
26	14	1990	C	C5-C6-N1	-5.40	118.30	121.00
26	14	2027	G	C4-C5-N7	5.40	112.96	110.80
26	14	2381	C	O5'-P-OP1	5.40	117.18	110.70
1	13	449	C	C6-N1-C2	-5.40	118.14	120.30
26	1H	1826	G	N9-C4-C5	-5.40	103.24	105.40
26	1H	2264	C	C5'-C4'-O4'	5.40	115.58	109.10
27	16	37	C	OP2-P-O3'	5.40	117.07	105.20
1	1G	740	U	N3-C4-C5	-5.40	111.36	114.60
1	1G	1509	C	OP2-P-O3'	5.40	117.07	105.20
12	3A	27	LEU	CB-CG-CD2	5.40	120.17	111.00
26	14	225	A	C5-C6-N1	-5.40	115.00	117.70
26	14	1695	G	C2-N3-C4	-5.40	109.20	111.90
1	13	231	G	C4-C5-C6	5.39	122.04	118.80
1	13	1083	U	OP1-P-OP2	-5.39	111.51	119.60
1	13	1386	G	C6-N1-C2	5.39	128.34	125.10
25	4K	13	A	N9-C4-C5	5.39	107.96	105.80
26	1H	745	G	OP1-P-O3'	5.39	117.07	105.20
26	1H	817	C	O5'-P-OP2	5.39	117.17	110.70
26	1H	1141	U	O5'-P-OP1	5.39	117.17	110.70
26	1H	2646	C	OP2-P-O3'	5.39	117.07	105.20
26	1H	2675	A	OP1-P-OP2	-5.39	111.51	119.60
26	1H	2747	G	OP2-P-O3'	5.39	117.07	105.20
1	1G	402	G	O5'-P-OP1	5.39	117.17	110.70
26	14	332	A	N7-C8-N9	-5.39	111.10	113.80
26	14	920	G	C4-C5-N7	-5.39	108.64	110.80
26	14	1163	G	O5'-P-OP1	-5.39	100.84	105.70
26	14	1949	G	N7-C8-N9	-5.39	110.40	113.10
26	14	2436	G	N1-C6-O6	5.39	123.14	119.90
26	14	2881	C	O5'-P-OP2	5.39	117.17	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	1J	78	A	N1-C2-N3	5.39	132.00	129.30
1	13	331	G	N1-C2-N2	5.39	121.05	116.20
1	13	510	A	C8-N9-C4	-5.39	103.64	105.80
1	13	1228	C	OP1-P-O3'	5.39	117.06	105.20
26	1H	121	G	OP1-P-OP2	5.39	127.69	119.60
26	1H	214	G	N1-C6-O6	5.39	123.14	119.90
26	1H	226	G	C4-C5-C6	5.39	122.03	118.80
26	1H	550	G	C8-N9-C4	5.39	108.56	106.40
26	1H	1568	G	C4-N9-C1'	-5.39	119.49	126.50
26	1H	1625	C	N3-C2-O2	-5.39	118.12	121.90
27	16	95	U	N1-C2-O2	-5.39	119.03	122.80
1	1G	1374	A	O4'-C1'-N9	5.39	112.51	108.20
26	14	45	G	N7-C8-N9	5.39	115.80	113.10
26	14	391	G	C5-C6-N1	-5.39	108.80	111.50
26	14	570	G	C8-N9-C1'	-5.39	119.99	127.00
26	14	600	G	O5'-P-OP1	-5.39	100.85	105.70
26	14	619	G	C5-C6-N1	5.39	114.20	111.50
26	14	944	G	N1-C2-N2	5.39	121.05	116.20
26	14	1388	G	C4-C5-C6	5.39	122.03	118.80
26	14	1808	U	N1-C2-N3	-5.39	111.66	114.90
26	14	1988	C	C5-C6-N1	5.39	123.70	121.00
26	14	2210	G	N1-C6-O6	-5.39	116.66	119.90
26	14	2289	G	C4-C5-C6	-5.39	115.56	118.80
26	14	2529	G	C2-N3-C4	-5.39	109.20	111.90
1	13	416	G	N7-C8-N9	5.39	115.80	113.10
1	13	655	A	N7-C8-N9	5.39	116.50	113.80
1	13	1301	U	N1-C2-O2	5.39	126.57	122.80
26	1H	442	G	N7-C8-N9	5.39	115.80	113.10
26	1H	1020	A	O5'-P-OP1	5.39	117.17	110.70
26	1H	1697	G	N1-C6-O6	-5.39	116.67	119.90
27	16	89	G	N9-C4-C5	-5.39	103.24	105.40
1	1G	1204	A	N1-C6-N6	5.39	121.83	118.60
26	14	112	U	N1-C2-O2	-5.39	119.03	122.80
26	14	1428	C	C2-N3-C4	-5.39	117.20	119.90
27	1J	74	U	C2-N3-C4	-5.39	123.77	127.00
1	13	863	U	C5-C6-N1	-5.39	120.00	122.70
1	13	977	A	N9-C4-C5	5.39	107.95	105.80
1	13	1203	C	C2-N3-C4	5.39	122.59	119.90
26	1H	68	G	N1-C2-N2	5.39	121.05	116.20
26	1H	681	G	N1-C2-N3	5.39	127.13	123.90
26	1H	763	G	C5-C6-N1	-5.39	108.81	111.50
26	1H	1519	G	C5-C6-O6	5.39	131.83	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1647	G	OP1-P-O3'	5.39	117.06	105.20
26	1H	2410	G	C8-N9-C4	-5.39	104.25	106.40
26	1H	2525	G	N7-C8-N9	-5.39	110.41	113.10
26	1H	2721	A	OP1-P-OP2	5.39	127.69	119.60
1	1G	1216	G	C5-C6-O6	5.39	131.83	128.60
57	3L	76	A	O4'-C1'-N9	5.39	112.51	108.20
26	14	559	G	N3-C4-C5	5.39	131.29	128.60
26	14	726	G	N9-C4-C5	5.39	107.56	105.40
26	14	819	A	C4-C5-C6	5.39	119.69	117.00
26	14	1155	A	OP1-P-O3'	5.39	117.06	105.20
26	14	1289	C	C6-N1-C2	-5.39	118.14	120.30
26	14	1648	C	N1-C2-N3	5.39	122.97	119.20
26	14	1790	C	C5-C6-N1	-5.39	118.31	121.00
27	1J	22	U	C5-C6-N1	5.39	125.39	122.70
1	13	506	G	N3-C2-N2	-5.39	116.13	119.90
1	13	717	C	N3-C2-O2	5.39	125.67	121.90
1	13	1413	A	OP2-P-O3'	5.39	117.05	105.20
26	1H	1220	A	C4-C5-N7	-5.39	108.01	110.70
26	1H	2023	G	C2-N3-C4	-5.39	109.21	111.90
1	1G	1449	C	C2-N3-C4	5.39	122.59	119.90
26	14	1269	A	O5'-P-OP1	-5.39	100.85	105.70
26	14	2505	G	OP1-P-OP2	-5.39	111.52	119.60
1	13	742	G	C2-N3-C4	-5.39	109.21	111.90
1	13	1116	C	OP1-P-OP2	5.39	127.68	119.60
1	13	1240	U	O5'-P-OP1	-5.39	100.85	105.70
25	4K	7	G	N1-C6-O6	5.39	123.13	119.90
26	1H	830	G	N3-C2-N2	-5.39	116.13	119.90
26	1H	1370	C	C2-N1-C1'	-5.39	112.88	118.80
26	1H	1446	C	N3-C2-O2	-5.39	118.13	121.90
26	1H	1469	A	N1-C2-N3	5.39	131.99	129.30
26	1H	1490	A	C8-N9-C4	5.39	107.95	105.80
26	1H	1566	A	C2-N3-C4	-5.39	107.91	110.60
26	1H	2513	G	OP1-P-OP2	5.39	127.68	119.60
26	1H	2818	G	C5-C6-N1	-5.39	108.81	111.50
27	16	97	G	OP1-P-O3'	-5.39	93.35	105.20
1	1G	125	U	N3-C4-C5	-5.39	111.37	114.60
1	1G	138	G	C2-N3-C4	-5.39	109.21	111.90
1	1G	143	A	N1-C6-N6	5.39	121.83	118.60
23	2L	44	A	C8-N9-C4	5.39	107.95	105.80
26	14	624	C	C2-N1-C1'	-5.39	112.88	118.80
26	14	708	C	OP1-P-OP2	-5.39	111.52	119.60
26	14	758	C	O5'-P-OP1	5.39	117.16	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1493	C	N3-C4-C5	-5.39	119.75	121.90
26	14	1734	C	OP2-P-O3'	5.39	117.05	105.20
26	14	1838	C	C5-C6-N1	5.39	123.69	121.00
26	14	2846	G	N7-C8-N9	5.39	115.79	113.10
29	19	273	ARG	N-CA-C	5.39	125.54	111.00
39	55	79	LEU	CA-CB-CG	5.39	127.69	115.30
1	13	236	G	C4-C5-N7	-5.38	108.65	110.80
1	13	262	A	N1-C6-N6	-5.38	115.37	118.60
1	13	268	C	O5'-P-OP2	5.38	117.16	110.70
1	13	357	G	N9-C4-C5	5.38	107.55	105.40
1	13	788	U	OP2-P-O3'	5.38	117.05	105.20
1	13	1190	G	N3-C2-N2	-5.38	116.13	119.90
1	13	1199	U	C2-N3-C4	5.38	130.23	127.00
26	1H	346	A	O5'-P-OP2	-5.38	100.86	105.70
26	1H	388	G	OP1-P-OP2	5.38	127.68	119.60
26	1H	389	G	N3-C4-C5	5.38	131.29	128.60
26	1H	663	G	N3-C4-C5	-5.38	125.91	128.60
26	1H	878	A	C2-N3-C4	5.38	113.29	110.60
26	1H	1121	C	C4-C5-C6	5.38	120.09	117.40
26	1H	1652	A	C2-N3-C4	-5.38	107.91	110.60
26	1H	1698	A	N3-C4-N9	-5.38	123.09	127.40
26	1H	1980	G	N9-C4-C5	5.38	107.55	105.40
26	1H	2450	A	O5'-P-OP1	5.38	117.16	110.70
26	1H	2876	G	C4-C5-N7	5.38	112.95	110.80
27	16	74	U	C2-N1-C1'	-5.38	111.24	117.70
26	14	617	G	C8-N9-C4	5.38	108.55	106.40
26	14	2231	C	N1-C2-O2	-5.38	115.67	118.90
26	14	2873	A	C4-N9-C1'	5.38	135.99	126.30
1	13	64	G	N9-C4-C5	-5.38	103.25	105.40
1	13	108	G	O4'-C1'-N9	5.38	112.51	108.20
1	13	464	G	C4-C5-N7	5.38	112.95	110.80
26	1H	153	C	C5-C6-N1	5.38	123.69	121.00
26	14	359	A	C8-N9-C4	-5.38	103.65	105.80
1	13	1370	G	N7-C8-N9	5.38	115.79	113.10
26	1H	67	U	OP1-P-O3'	5.38	117.04	105.20
26	1H	2071	A	OP1-P-OP2	-5.38	111.53	119.60
26	1H	2509	G	O5'-P-OP1	-5.38	100.86	105.70
26	1H	2668	G	C5-C6-N1	-5.38	108.81	111.50
26	1H	2709	G	O5'-P-OP1	5.38	117.16	110.70
1	1G	1535	C	C5-C6-N1	5.38	123.69	121.00
25	4L	22	A	C2-N3-C4	5.38	113.29	110.60
26	14	689	A	N1-C2-N3	-5.38	126.61	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	769	G	N7-C8-N9	-5.38	110.41	113.10
26	14	944	G	O5'-P-OP2	5.38	117.16	110.70
26	14	1489	U	N3-C4-O4	5.38	123.17	119.40
26	14	1604	C	N3-C4-C5	5.38	124.05	121.90
26	14	1618	A	O5'-P-OP2	5.38	117.16	110.70
26	14	2470	G	C4-N9-C1'	5.38	133.50	126.50
27	1J	70	C	C2-N3-C4	5.38	122.59	119.90
1	13	140	A	C8-N9-C4	-5.38	103.65	105.80
26	1H	397	G	C8-N9-C4	5.38	108.55	106.40
26	14	1293	C	C6-N1-C1'	-5.38	114.34	120.80
26	14	1696	G	N3-C2-N2	5.38	123.67	119.90
26	14	2018	G	C2-N3-C4	5.38	114.59	111.90
27	1J	89	G	OP1-P-OP2	5.38	127.67	119.60
1	13	893	C	C6-N1-C1'	-5.38	114.35	120.80
1	13	970	C	O5'-P-OP1	-5.38	100.86	105.70
25	4K	18	G	P-O3'-C3'	5.38	126.15	119.70
26	1H	25	U	N3-C2-O2	5.38	125.97	122.20
26	1H	161	U	C5-C6-N1	5.38	125.39	122.70
26	1H	1108	U	C4-C5-C6	-5.38	116.47	119.70
26	1H	1207	C	N3-C2-O2	5.38	125.67	121.90
26	1H	1333	C	N1-C2-O2	-5.38	115.67	118.90
26	1H	2278	A	C5-N7-C8	-5.38	101.21	103.90
26	1H	2585	U	N1-C2-N3	-5.38	111.67	114.90
26	1H	2766	G	C5-C6-O6	-5.38	125.37	128.60
44	E8	86	LEU	CB-CG-CD2	-5.38	101.86	111.00
1	1G	133	U	OP1-P-OP2	5.38	127.67	119.60
26	14	264	C	C5-C4-N4	-5.38	116.44	120.20
26	14	611	C	N3-C4-N4	5.38	121.76	118.00
26	14	790	C	C5-C6-N1	-5.38	118.31	121.00
26	14	1811	G	OP1-P-O3'	-5.38	93.37	105.20
27	1J	98	G	C5-C6-O6	-5.38	125.37	128.60
1	13	1045	C	O5'-P-OP1	-5.38	100.86	105.70
24	3K	40	C	O5'-P-OP2	-5.38	100.86	105.70
26	1H	314	A	N7-C8-N9	5.38	116.49	113.80
26	1H	959	A	C6-N1-C2	5.38	121.83	118.60
26	1H	1231	G	C4-C5-N7	5.38	112.95	110.80
26	1H	1625	C	C5-C4-N4	5.38	123.96	120.20
26	1H	1681	G	C4-N9-C1'	-5.38	119.51	126.50
26	1H	2333	A	C6-N1-C2	-5.38	115.37	118.60
27	16	17	C	C4-C5-C6	5.38	120.09	117.40
45	F8	3	THR	N-CA-C	-5.38	96.49	111.00
1	1G	1522	U	N3-C2-O2	-5.38	118.44	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1477	A	C5-C6-N6	5.38	128.00	123.70
26	14	1592	C	N3-C4-N4	5.38	121.76	118.00
26	14	1647	G	N7-C8-N9	5.38	115.79	113.10
26	14	1768	U	O4'-C1'-N1	5.38	112.50	108.20
26	14	2258	C	C5-C4-N4	-5.38	116.44	120.20
26	14	2700	C	C6-N1-C1'	-5.38	114.35	120.80
1	13	404	U	C6-N1-C2	-5.38	117.78	121.00
1	13	558	G	N3-C2-N2	5.38	123.66	119.90
26	1H	478	A	N9-C4-C5	5.38	107.95	105.80
26	1H	1129	A	C2-N3-C4	-5.38	107.91	110.60
26	1H	1158	C	N1-C2-O2	5.38	122.12	118.90
26	1H	1616	A	C4-N9-C1'	5.38	135.97	126.30
26	1H	2538	C	C5-C6-N1	-5.38	118.31	121.00
1	1G	264	U	N1-C2-N3	-5.38	111.67	114.90
26	14	221	A	C5'-C4'-C3'	-5.38	107.40	116.00
26	14	2400	G	C5-C6-O6	-5.38	125.38	128.60
27	1J	7	G	N1-C6-O6	5.38	123.12	119.90
1	13	51	A	O5'-P-OP2	5.37	117.15	110.70
23	2K	60	A	C6-N1-C2	-5.37	115.38	118.60
26	1H	146	G	C8-N9-C4	5.37	108.55	106.40
26	1H	243	U	O5'-P-OP1	5.37	117.15	110.70
26	1H	1255	U	N3-C4-C5	-5.37	111.38	114.60
26	1H	1353	A	OP1-P-OP2	5.37	127.66	119.60
26	1H	1728	G	N1-C2-N3	-5.37	120.68	123.90
26	1H	2030	A	OP1-P-OP2	5.37	127.66	119.60
26	1H	2224	G	N3-C4-C5	5.37	131.29	128.60
26	1H	2449	U	OP2-P-O3'	5.37	117.02	105.20
1	1G	321	A	C4-C5-N7	5.37	113.39	110.70
26	14	429	A	N7-C8-N9	5.37	116.49	113.80
26	14	592	G	N1-C2-N2	5.37	121.04	116.20
26	14	919	G	C8-N9-C4	-5.37	104.25	106.40
26	14	1182	A	C8-N9-C4	5.37	107.95	105.80
26	14	1601	G	N1-C2-N2	-5.37	111.36	116.20
26	14	2408	U	OP1-P-OP2	5.37	127.66	119.60
1	13	335	C	N3-C4-C5	-5.37	119.75	121.90
1	13	717	C	N3-C4-C5	5.37	124.05	121.90
26	1H	18	C	C6-N1-C2	5.37	122.45	120.30
26	1H	128	C	C5-C6-N1	-5.37	118.31	121.00
26	1H	455	C	N3-C4-N4	-5.37	114.24	118.00
26	1H	679	C	N1-C2-O2	-5.37	115.68	118.90
26	1H	807	U	O5'-P-OP1	-5.37	100.87	105.70
26	1H	1107	G	O4'-C1'-N9	-5.37	103.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1347	G	C5-C6-N1	5.37	114.19	111.50
26	1H	1983	C	C2-N1-C1'	-5.37	112.89	118.80
26	1H	2661	G	C8-N9-C4	-5.37	104.25	106.40
26	1H	2744	G	C5-N7-C8	5.37	106.99	104.30
1	1G	1480	G	C4-C5-N7	5.37	112.95	110.80
26	14	669	G	N3-C4-C5	-5.37	125.92	128.60
26	14	765	G	N1-C2-N2	-5.37	111.37	116.20
26	14	984	A	OP1-P-O3'	5.37	117.02	105.20
26	14	2608	G	OP1-P-OP2	-5.37	111.54	119.60
1	13	945	G	OP1-P-O3'	5.37	117.02	105.20
1	13	1346	A	C8-N9-C4	5.37	107.95	105.80
26	1H	241	A	O5'-P-OP1	5.37	117.14	110.70
26	1H	328	U	C4-C5-C6	5.37	122.92	119.70
26	1H	1320	C	C2-N3-C4	-5.37	117.22	119.90
26	1H	1806	C	O5'-P-OP1	-5.37	100.87	105.70
26	14	423	A	OP1-P-O3'	5.37	117.01	105.20
26	14	521	G	C5-N7-C8	-5.37	101.61	104.30
26	14	1594	G	O5'-P-OP1	-5.37	100.87	105.70
27	1J	81	G	O4'-C1'-N9	5.37	112.50	108.20
1	13	57	G	C5-C6-O6	5.37	131.82	128.60
1	13	771	G	C5-C6-O6	5.37	131.82	128.60
1	13	1357	A	C5-N7-C8	-5.37	101.22	103.90
26	1H	603	A	O5'-P-OP2	5.37	117.14	110.70
26	1H	738	G	N1-C2-N3	5.37	127.12	123.90
26	1H	960	A	C6-N1-C2	5.37	121.82	118.60
26	1H	1206	G	C6-N1-C2	-5.37	121.88	125.10
26	1H	1261	C	C5-C4-N4	-5.37	116.44	120.20
26	1H	1339	G	N3-C2-N2	5.37	123.66	119.90
26	1H	1704	G	N1-C6-O6	5.37	123.12	119.90
26	1H	1929	G	OP1-P-OP2	5.37	127.65	119.60
26	1H	2339	G	N7-C8-N9	-5.37	110.42	113.10
26	14	181	A	C2-N3-C4	-5.37	107.92	110.60
26	14	609	A	N7-C8-N9	5.37	116.48	113.80
26	14	1267	U	C6-N1-C1'	-5.37	113.68	121.20
26	14	1479	G	C4-C5-C6	5.37	122.02	118.80
26	14	1633	G	C6-N1-C2	-5.37	121.88	125.10
26	14	2005	A	OP1-P-OP2	5.37	127.65	119.60
26	14	2038	G	C5-C6-O6	5.37	131.82	128.60
44	A5	23	LEU	CB-CG-CD2	-5.37	101.87	111.00
1	13	951	G	C5-N7-C8	5.37	106.98	104.30
23	2K	53	G	N7-C8-N9	5.37	115.78	113.10
24	3K	70	C	N1-C2-O2	5.37	122.12	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	551	G	N3-C4-N9	-5.37	122.78	126.00
26	1H	584	C	C5-C6-N1	5.37	123.68	121.00
26	1H	1294	U	C4-C5-C6	5.37	122.92	119.70
26	1H	1325	G	N1-C6-O6	5.37	123.12	119.90
26	1H	1429	G	N7-C8-N9	5.37	115.78	113.10
26	1H	1568	G	C6-C5-N7	5.37	133.62	130.40
26	1H	1932	A	N1-C6-N6	5.37	121.82	118.60
26	1H	2508	G	O4'-C1'-N9	5.37	112.49	108.20
1	1G	97	U	C6-N1-C2	-5.37	117.78	121.00
26	14	439	G	N1-C2-N3	5.37	127.12	123.90
1	13	9	G	N1-C6-O6	5.37	123.12	119.90
1	13	231	G	C5-C6-N1	-5.37	108.82	111.50
1	13	235	C	N3-C2-O2	5.37	125.66	121.90
1	13	771	G	OP1-P-O3'	5.37	117.00	105.20
1	13	1245	A	N7-C8-N9	-5.37	111.12	113.80
26	1H	112	U	N1-C2-O2	-5.37	119.04	122.80
26	1H	898	C	N1-C2-O2	5.37	122.12	118.90
26	1H	1162	G	O5'-P-OP1	-5.37	100.87	105.70
26	1H	1239	G	N1-C6-O6	-5.37	116.68	119.90
26	1H	1301	A	O4'-C1'-N9	5.37	112.49	108.20
26	1H	1351	C	N1-C2-O2	-5.37	115.68	118.90
26	1H	1638	C	O5'-P-OP2	-5.37	100.87	105.70
26	1H	1677	A	C5-N7-C8	5.37	106.58	103.90
26	1H	2454	G	OP1-P-OP2	5.37	127.65	119.60
26	1H	2828	C	C2-N3-C4	-5.37	117.22	119.90
1	1G	1305	G	N3-C4-N9	-5.37	122.78	126.00
1	1G	1310	G	N1-C6-O6	-5.37	116.68	119.90
1	1G	1438	G	N7-C8-N9	-5.37	110.42	113.10
56	1L	34	U	C5-C4-O4	-5.37	122.68	125.90
23	2L	12	G	N9-C4-C5	5.37	107.55	105.40
23	2L	77	A	N3-C4-C5	5.37	130.56	126.80
26	14	868	U	O5'-P-OP1	-5.37	100.87	105.70
26	14	1249	U	C5-C6-N1	-5.37	120.02	122.70
26	14	1816	G	N3-C4-C5	-5.37	125.92	128.60
26	14	2254	C	C5-C6-N1	-5.37	118.32	121.00
26	14	2510	C	OP1-P-OP2	5.37	127.65	119.60
26	14	2770	G	C5-C6-O6	-5.37	125.38	128.60
26	14	2787	C	N3-C4-N4	5.37	121.76	118.00
26	14	2854	G	N3-C4-N9	-5.37	122.78	126.00
1	13	1008	C	N1-C2-O2	5.36	122.12	118.90
1	13	1236	A	C8-N9-C4	5.36	107.95	105.80
1	13	1404	C	N1-C2-O2	5.36	122.12	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1520	G	C6-C5-N7	-5.36	127.18	130.40
26	1H	630	G	N1-C2-N3	5.36	127.12	123.90
26	1H	907	U	OP1-P-OP2	5.36	127.65	119.60
26	1H	1660	C	N3-C2-O2	-5.36	118.15	121.90
26	1H	2024	G	N9-C4-C5	5.36	107.55	105.40
26	1H	2496	C	C5-C6-N1	-5.36	118.32	121.00
1	1G	346	G	N9-C4-C5	-5.36	103.25	105.40
1	1G	908	A	OP2-P-O3'	5.36	117.00	105.20
26	14	702	G	N1-C2-N3	5.36	127.12	123.90
26	14	828	U	O5'-P-OP2	-5.36	100.87	105.70
26	14	847	U	C2-N3-C4	-5.36	123.78	127.00
26	14	2328	A	C6-N1-C2	-5.36	115.38	118.60
26	14	2356	C	C2-N3-C4	-5.36	117.22	119.90
26	14	2400	G	C2-N3-C4	5.36	114.58	111.90
27	1J	103	U	C2-N1-C1'	-5.36	111.26	117.70
1	13	432	A	O5'-P-OP2	5.36	117.14	110.70
1	13	503	C	C5-C6-N1	5.36	123.68	121.00
1	13	1494	G	N1-C2-N3	-5.36	120.68	123.90
26	1H	15	G	OP1-P-OP2	5.36	127.64	119.60
26	1H	1670	C	N1-C2-O2	-5.36	115.68	118.90
26	1H	2597	G	C8-N9-C4	5.36	108.55	106.40
1	1G	385	C	N3-C4-C5	-5.36	119.75	121.90
26	14	128	C	N3-C4-C5	5.36	124.05	121.90
26	14	618	G	C8-N9-C4	5.36	108.55	106.40
26	14	853	G	O5'-P-OP2	-5.36	100.87	105.70
26	14	1429	G	N1-C2-N3	5.36	127.12	123.90
26	14	1435	G	C5-C6-O6	-5.36	125.38	128.60
26	14	1606	G	N1-C6-O6	-5.36	116.68	119.90
1	13	31	G	N7-C8-N9	5.36	115.78	113.10
1	13	107	G	C4-C5-N7	-5.36	108.66	110.80
1	13	828	A	C8-N9-C4	-5.36	103.66	105.80
1	13	893	C	OP2-P-O3'	5.36	116.99	105.20
1	13	1305	G	C5-N7-C8	-5.36	101.62	104.30
26	1H	212	G	OP1-P-O3'	-5.36	93.41	105.20
26	1H	266	G	C6-N1-C2	-5.36	121.88	125.10
26	1H	815	C	C6-N1-C1'	-5.36	114.37	120.80
26	1H	1566	A	C5-C6-N6	5.36	127.99	123.70
26	1H	1769	G	O5'-P-OP1	5.36	117.13	110.70
26	1H	1773	A	C2-N3-C4	-5.36	107.92	110.60
26	1H	2277	G	C8-N9-C4	-5.36	104.26	106.40
1	1G	293	G	C5-N7-C8	-5.36	101.62	104.30
1	1G	558	G	C4-C5-C6	5.36	122.02	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1129	A	P-O3'-C3'	5.36	126.13	119.70
26	14	1848	A	N9-C4-C5	-5.36	103.66	105.80
26	14	1951	U	N1-C2-N3	5.36	118.12	114.90
26	14	2077	A	C8-N9-C4	-5.36	103.66	105.80
26	14	2320	A	O5'-P-OP1	-5.36	100.88	105.70
26	14	2491	U	OP1-P-O3'	5.36	116.99	105.20
26	14	2514	U	C2-N3-C4	-5.36	123.78	127.00
46	C5	76	CYS	CA-CB-SG	5.36	123.65	114.00
1	13	802	A	C4-C5-N7	5.36	113.38	110.70
26	1H	261	G	N1-C6-O6	5.36	123.11	119.90
26	1H	428	A	C4-C5-C6	5.36	119.68	117.00
26	1H	761	A	C5-C6-N1	-5.36	115.02	117.70
26	1H	775	G	OP1-P-OP2	5.36	127.64	119.60
26	1H	833	U	C4-C5-C6	5.36	122.92	119.70
26	1H	1940	U	N1-C2-N3	5.36	118.12	114.90
1	1G	1414	U	OP1-P-OP2	5.36	127.64	119.60
26	14	602	G	N3-C4-N9	5.36	129.22	126.00
26	14	2228	G	C4-C5-C6	5.36	122.02	118.80
1	13	352	C	C2-N3-C4	5.36	122.58	119.90
1	13	586	C	C4-C5-C6	5.36	120.08	117.40
1	13	827	U	C6-N1-C2	-5.36	117.79	121.00
26	1H	121	G	OP1-P-O3'	-5.36	93.41	105.20
26	1H	133	C	C2-N3-C4	-5.36	117.22	119.90
26	1H	782	A	C5-N7-C8	5.36	106.58	103.90
26	1H	1414	G	C6-C5-N7	-5.36	127.19	130.40
26	1H	1434	A	N1-C2-N3	5.36	131.98	129.30
26	1H	1522	G	C2-N3-C4	5.36	114.58	111.90
26	1H	1656	C	N3-C4-N4	5.36	121.75	118.00
26	1H	1836	C	N3-C2-O2	-5.36	118.15	121.90
26	1H	2329	G	N3-C2-N2	5.36	123.65	119.90
26	1H	2745	C	C5-C6-N1	5.36	123.68	121.00
27	16	45	A	C5-C6-N1	-5.36	115.02	117.70
1	1G	394	G	N3-C2-N2	-5.36	116.15	119.90
1	1G	1442	G	N3-C4-N9	-5.36	122.79	126.00
1	1G	1486	G	N1-C2-N3	-5.36	120.69	123.90
26	14	187	G	C5-N7-C8	-5.36	101.62	104.30
26	14	270(T)	G	C4-C5-C6	5.36	122.02	118.80
26	14	430	G	C5-C6-O6	-5.36	125.39	128.60
26	14	854	G	C8-N9-C4	-5.36	104.26	106.40
26	14	1261	C	C5-C6-N1	-5.36	118.32	121.00
26	14	1633	G	N1-C2-N2	-5.36	111.38	116.20
26	14	1934	C	N1-C1'-C2'	-5.36	106.11	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2199	A	C2-N3-C4	-5.36	107.92	110.60
26	14	2488	A	N1-C2-N3	5.36	131.98	129.30
1	13	779	C	N3-C2-O2	-5.36	118.15	121.90
1	13	1305	G	N1-C2-N3	5.36	127.11	123.90
1	13	1407	C	N1-C2-O2	5.36	122.11	118.90
23	2K	12	G	N3-C4-C5	-5.36	125.92	128.60
26	1H	6	A	C5-N7-C8	-5.36	101.22	103.90
26	1H	23	G	N1-C2-N2	-5.36	111.38	116.20
26	1H	402	A	OP1-P-OP2	-5.36	111.57	119.60
26	1H	871	U	O4'-C1'-N1	-5.36	103.92	108.20
26	1H	1142(A)	A	OP1-P-OP2	-5.36	111.57	119.60
26	1H	2545	G	C4-C5-N7	-5.36	108.66	110.80
1	1G	316	G	OP1-P-O3'	5.36	116.98	105.20
1	1G	1316	G	N1-C6-O6	-5.36	116.69	119.90
1	1G	1403	C	N3-C4-C5	5.36	124.04	121.90
1	1G	1437	C	N3-C2-O2	5.36	125.65	121.90
1	1G	1516	G	C6-N1-C2	5.36	128.31	125.10
9	82	79	LEU	CA-CB-CG	5.36	127.62	115.30
26	14	1372	U	N1-C2-N3	5.36	118.11	114.90
26	14	1575	C	N3-C2-O2	-5.36	118.15	121.90
26	14	1819	A	C2-N3-C4	-5.36	107.92	110.60
26	14	2323	G	N9-C4-C5	-5.36	103.26	105.40
27	1J	72	G	OP1-P-OP2	5.36	127.63	119.60
27	1J	118	G	C8-N9-C1'	-5.36	120.04	127.00
1	13	57	G	N1-C2-N2	-5.35	111.38	116.20
1	13	396	G	C5-C6-N1	-5.35	108.82	111.50
6	5E	86	ARG	NE-CZ-NH2	-5.35	117.62	120.30
26	1H	1125	G	C6-C5-N7	5.35	133.61	130.40
26	1H	2217	G	C6-C5-N7	-5.35	127.19	130.40
26	1H	2424	C	OP2-P-O3'	5.35	116.98	105.20
1	1G	1422	G	C6-C5-N7	5.35	133.61	130.40
26	14	661	C	C6-N1-C2	-5.35	118.16	120.30
26	14	1581	G	N1-C6-O6	5.35	123.11	119.90
26	14	2587	A	C4-C5-C6	5.35	119.68	117.00
26	14	2594	C	C2-N1-C1'	-5.35	112.91	118.80
1	13	1441	G	N3-C4-N9	-5.35	122.79	126.00
1	13	1483	A	C5-N7-C8	-5.35	101.22	103.90
24	3K	36	U	N3-C2-O2	-5.35	118.45	122.20
26	1H	177	G	O4'-C1'-N9	5.35	112.48	108.20
26	1H	273	G	C5-N7-C8	5.35	106.98	104.30
26	1H	408	G	N1-C2-N3	-5.35	120.69	123.90
26	1H	500	G	N1-C6-O6	-5.35	116.69	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	793	A	N3-C4-N9	5.35	131.68	127.40
26	1H	1006	C	C2-N1-C1'	-5.35	112.91	118.80
26	1H	1977	A	N9-C1'-C2'	-5.35	106.11	112.00
26	1H	2836	U	C5-C6-N1	5.35	125.38	122.70
1	1G	483	C	N3-C2-O2	5.35	125.65	121.90
23	2L	26	C	N3-C4-C5	-5.35	119.76	121.90
26	14	775	G	N7-C8-N9	5.35	115.78	113.10
26	14	915	C	C5-C4-N4	5.35	123.95	120.20
26	14	1445	C	N3-C4-N4	5.35	121.75	118.00
26	14	1704	G	OP1-P-OP2	-5.35	111.57	119.60
26	14	1913	A	OP1-P-OP2	-5.35	111.57	119.60
26	14	2709	G	N3-C4-C5	5.35	131.28	128.60
26	14	2721	A	N1-C6-N6	-5.35	115.39	118.60
1	13	238	G	C8-N9-C4	5.35	108.54	106.40
26	1H	132	G	OP1-P-OP2	5.35	127.63	119.60
26	1H	380	U	N1-C2-N3	5.35	118.11	114.90
26	1H	2071	A	C5-N7-C8	-5.35	101.22	103.90
1	1G	195	A	C8-N9-C4	-5.35	103.66	105.80
1	1G	913	A	C2-N3-C4	5.35	113.28	110.60
1	1G	1342	C	C6-N1-C2	-5.35	118.16	120.30
26	14	1790	C	OP1-P-O3'	5.35	116.97	105.20
26	14	2595	G	C5-C6-N1	5.35	114.18	111.50
1	13	330	C	N3-C2-O2	-5.35	118.16	121.90
1	13	1407	C	OP1-P-OP2	-5.35	111.57	119.60
23	2K	60	A	O5'-P-OP2	-5.35	100.89	105.70
26	1H	893	C	C5-C6-N1	5.35	123.67	121.00
26	1H	1036	G	OP2-P-O3'	5.35	116.97	105.20
26	1H	1375	C	OP1-P-O3'	5.35	116.97	105.20
26	1H	1655	A	C5-C6-N1	5.35	120.37	117.70
26	1H	2429	G	C5-C6-N1	-5.35	108.83	111.50
26	1H	2773	C	N3-C4-N4	5.35	121.74	118.00
27	16	75	G	N1-C6-O6	5.35	123.11	119.90
26	14	556	G	N1-C6-O6	-5.35	116.69	119.90
26	14	626	U	N1-C2-O2	-5.35	119.06	122.80
26	14	668	G	C2-N3-C4	-5.35	109.22	111.90
26	14	1154	G	OP1-P-OP2	-5.35	111.58	119.60
26	14	1303	G	N1-C2-N3	5.35	127.11	123.90
26	14	2011	U	N3-C2-O2	5.35	125.94	122.20
26	14	2255	G	C5-C6-N1	5.35	114.17	111.50
30	29	50	GLY	N-CA-C	5.35	126.48	113.10
1	13	748	C	C5-C4-N4	-5.35	116.46	120.20
1	13	810	C	O5'-P-OP2	-5.35	100.89	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1075	C	C5-C6-N1	5.35	123.67	121.00
1	13	1110	A	N1-C6-N6	5.35	121.81	118.60
25	4K	16	A	N9-C4-C5	-5.35	103.66	105.80
26	1H	273(D)	C	N1-C2-O2	5.35	122.11	118.90
26	1H	718	A	C4-C5-N7	5.35	113.37	110.70
26	1H	1187	G	N7-C8-N9	-5.35	110.43	113.10
26	1H	1238	G	C6-C5-N7	5.35	133.61	130.40
1	1G	255	G	N1-C6-O6	-5.35	116.69	119.90
1	1G	419	C	C6-N1-C2	5.35	122.44	120.30
1	1G	495	A	C4-C5-C6	-5.35	114.33	117.00
1	1G	875	C	C5-C6-N1	-5.35	118.33	121.00
57	3L	4	U	C5-C6-N1	5.35	125.37	122.70
26	14	469	G	C6-N1-C2	-5.35	121.89	125.10
26	14	819	A	OP2-P-O3'	5.35	116.96	105.20
26	14	1860	G	C5-N7-C8	-5.35	101.63	104.30
27	1J	105	G	O5'-P-OP2	5.35	117.12	110.70
4	3E	53	ASP	CB-CG-OD2	-5.35	113.49	118.30
26	1H	180	G	N3-C4-C5	5.35	131.27	128.60
26	1H	685	A	N1-C6-N6	5.35	121.81	118.60
26	1H	836	G	C4-C5-N7	-5.35	108.66	110.80
26	1H	2076	U	N1-C2-N3	5.35	118.11	114.90
26	1H	2709	G	N1-C2-N2	-5.35	111.39	116.20
29	11	109	ASP	CB-CG-OD1	-5.35	113.49	118.30
41	B8	6	LEU	CA-CB-CG	5.35	127.59	115.30
1	1G	915	A	N3-C4-C5	-5.35	123.06	126.80
26	14	125	G	C4-C5-C6	-5.35	115.59	118.80
26	14	559	G	C4-C5-N7	-5.35	108.66	110.80
26	14	1799	G	C4-C5-N7	-5.35	108.66	110.80
26	14	1938	A	C5-N7-C8	-5.35	101.23	103.90
26	14	2044	C	C6-N1-C1'	-5.35	114.39	120.80
1	13	37	U	C2-N3-C4	5.34	130.21	127.00
1	13	428	G	N1-C6-O6	5.34	123.11	119.90
1	13	1133	G	N3-C2-N2	-5.34	116.16	119.90
26	1H	49	A	OP1-P-OP2	5.34	127.62	119.60
26	1H	382	G	C8-N9-C4	5.34	108.54	106.40
26	1H	482	A	O5'-P-OP1	5.34	117.11	110.70
26	1H	869	G	N1-C6-O6	-5.34	116.69	119.90
26	1H	1814	G	C6-N1-C2	-5.34	121.89	125.10
26	1H	1979	C	N3-C2-O2	-5.34	118.16	121.90
26	1H	2012	G	N7-C8-N9	-5.34	110.43	113.10
26	1H	2612	C	O5'-P-OP1	-5.34	100.89	105.70
27	16	56	G	N3-C4-C5	-5.34	125.93	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	16	104	A	C5-C6-N1	5.34	120.37	117.70
1	1G	963	G	N3-C4-C5	-5.34	125.93	128.60
1	1G	964	A	N1-C6-N6	5.34	121.81	118.60
1	1G	968	A	N1-C6-N6	5.34	121.81	118.60
26	14	459	U	N1-C2-N3	5.34	118.11	114.90
26	14	1252	G	OP1-P-O3'	5.34	116.96	105.20
26	14	1445	C	N3-C4-C5	-5.34	119.76	121.90
26	14	1783	A	C4-C5-C6	5.34	119.67	117.00
26	14	2003	G	N3-C4-C5	-5.34	125.93	128.60
26	14	2295	C	C5-C4-N4	-5.34	116.46	120.20
26	14	2596	U	N3-C4-C5	5.34	117.81	114.60
26	14	2673	G	O5'-P-OP2	-5.34	100.89	105.70
26	14	2686	G	N1-C2-N3	-5.34	120.69	123.90
27	1J	12	C	C5-C4-N4	-5.34	116.46	120.20
44	A5	90	ARG	NE-CZ-NH1	-5.34	117.63	120.30
1	13	42	G	N3-C4-N9	5.34	129.21	126.00
23	2K	17	C	C2-N3-C4	5.34	122.57	119.90
26	1H	735	A	O5'-P-OP2	-5.34	100.89	105.70
26	1H	1978	A	C6-C5-N7	5.34	136.04	132.30
1	1G	1246	C	C6-N1-C2	-5.34	118.16	120.30
26	14	1319	G	N7-C8-N9	5.34	115.77	113.10
26	14	1412	A	C4-C5-N7	5.34	113.37	110.70
26	14	1646	C	N3-C4-N4	5.34	121.74	118.00
26	14	2067	G	C6-C5-N7	-5.34	127.19	130.40
1	13	714	G	O5'-P-OP1	-5.34	100.89	105.70
1	13	1239	A	N3-C4-C5	5.34	130.54	126.80
26	1H	127	A	C2-N3-C4	-5.34	107.93	110.60
26	1H	223	A	O5'-P-OP1	-5.34	100.89	105.70
26	1H	273(B)	C	OP2-P-O3'	5.34	116.95	105.20
26	1H	280	C	C6-N1-C2	-5.34	118.16	120.30
26	1H	578	A	O5'-P-OP1	5.34	117.11	110.70
26	1H	2279	G	O4'-C1'-N9	5.34	112.47	108.20
26	1H	2483	C	C5-C6-N1	5.34	123.67	121.00
26	1H	2819	G	O5'-P-OP1	5.34	117.11	110.70
1	1G	326	G	C2-N3-C4	-5.34	109.23	111.90
1	1G	580	U	O5'-P-OP1	-5.34	100.89	105.70
1	1G	1525	G	C5-C6-O6	5.34	131.81	128.60
26	14	178	G	C4-C5-N7	5.34	112.94	110.80
26	14	642	G	N9-C4-C5	5.34	107.54	105.40
26	14	740	U	C5-C6-N1	5.34	125.37	122.70
26	14	962	G	N3-C4-N9	-5.34	122.80	126.00
26	14	1309	G	N3-C4-N9	-5.34	122.80	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1449(A)	G	C2-N3-C4	-5.34	109.23	111.90
26	14	1815	A	C5-C6-N1	5.34	120.37	117.70
26	14	2384	G	C2-N3-C4	5.34	114.57	111.90
1	13	253	U	N3-C2-O2	5.34	125.94	122.20
1	13	592	G	N7-C8-N9	5.34	115.77	113.10
1	13	1068	G	C8-N9-C4	-5.34	104.26	106.40
1	13	1222	G	N3-C4-C5	5.34	131.27	128.60
1	13	1391	U	N1-C2-O2	5.34	126.54	122.80
1	13	1411	C	P-O3'-C3'	-5.34	113.29	119.70
26	1H	1488	G	N1-C6-O6	5.34	123.10	119.90
26	1H	1635	G	N9-C4-C5	-5.34	103.26	105.40
26	1H	1648	C	C5-C4-N4	5.34	123.94	120.20
26	1H	1758	G	C6-N1-C2	-5.34	121.90	125.10
50	K8	49	LYS	CD-CE-NZ	5.34	123.98	111.70
1	1G	604	G	C8-N9-C4	-5.34	104.26	106.40
1	1G	1359	C	O5'-P-OP1	-5.34	100.89	105.70
26	14	619	G	C2-N3-C4	5.34	114.57	111.90
26	14	1235	G	C5-C6-O6	5.34	131.80	128.60
26	14	1390	U	C2-N3-C4	5.34	130.20	127.00
26	14	1919	A	OP1-P-OP2	5.34	127.61	119.60
26	14	1948	G	N1-C6-O6	5.34	123.10	119.90
26	14	1992	G	N3-C4-N9	5.34	129.20	126.00
26	14	2260	C	N3-C4-C5	-5.34	119.76	121.90
1	13	382	A	N7-C8-N9	-5.34	111.13	113.80
1	13	1480	G	N9-C4-C5	5.34	107.53	105.40
26	1H	14	A	N7-C8-N9	-5.34	111.13	113.80
26	1H	280	C	C2-N1-C1'	5.34	124.67	118.80
26	1H	921	G	N9-C4-C5	5.34	107.53	105.40
26	1H	944	G	C5-C6-O6	5.34	131.80	128.60
26	1H	1608	A	N1-C2-N3	5.34	131.97	129.30
26	1H	1784	A	N1-C2-N3	5.34	131.97	129.30
1	1G	332	G	N7-C8-N9	-5.34	110.43	113.10
1	1G	510	A	N3-C4-C5	5.34	130.54	126.80
26	14	80	G	C5-C6-O6	5.34	131.80	128.60
26	14	1254	A	C5-C6-N6	-5.34	119.43	123.70
26	14	2043	C	N3-C4-N4	5.34	121.74	118.00
26	14	2280	G	N9-C1'-C2'	-5.34	106.13	112.00
26	14	2296	U	N3-C2-O2	-5.34	118.46	122.20
26	14	2416	C	C5-C6-N1	-5.34	118.33	121.00
32	49	5	VAL	N-CA-C	-5.34	96.59	111.00
1	13	266	G	P-O3'-C3'	5.34	126.10	119.70
26	1H	416	C	N3-C4-N4	-5.34	114.27	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	794	G	C8-N9-C1'	-5.34	120.06	127.00
26	1H	1347	G	C5-C6-O6	-5.34	125.40	128.60
26	1H	1554	A	C5-N7-C8	5.34	106.57	103.90
26	1H	1618	A	C8-N9-C4	-5.34	103.67	105.80
26	1H	1644	C	C6-N1-C2	-5.34	118.17	120.30
26	1H	2243	U	C6-N1-C2	-5.34	117.80	121.00
26	1H	2420	C	N3-C2-O2	5.34	125.64	121.90
27	16	8	U	C5-C4-O4	5.34	129.10	125.90
1	1G	458	C	C6-N1-C2	-5.34	118.17	120.30
1	1G	818	G	N9-C4-C5	5.34	107.53	105.40
23	2L	54	G	C6-C5-N7	-5.34	127.20	130.40
26	14	209	C	N3-C2-O2	-5.34	118.16	121.90
26	14	618(A)	C	C5-C4-N4	-5.34	116.47	120.20
26	14	2395	C	N1-C2-N3	-5.34	115.46	119.20
26	14	2535	G	O5'-P-OP2	-5.34	100.90	105.70
26	14	2648	C	N3-C4-N4	5.34	121.73	118.00
1	13	413	G	C5-C6-O6	5.33	131.80	128.60
1	13	673	G	N7-C8-N9	5.33	115.77	113.10
26	1H	612	G	N7-C8-N9	-5.33	110.43	113.10
26	1H	686	G	O5'-P-OP1	5.33	117.10	110.70
26	1H	2092	U	N3-C4-O4	5.33	123.13	119.40
26	1H	2287	A	C6-N1-C2	5.33	121.80	118.60
1	1G	354	G	N1-C6-O6	5.33	123.10	119.90
1	1G	615	C	C5-C6-N1	5.33	123.67	121.00
1	1G	1406	U	C4-C5-C6	5.33	122.90	119.70
26	14	1901	A	C6-N1-C2	-5.33	115.40	118.60
26	14	2776	A	N7-C8-N9	5.33	116.47	113.80
1	13	415	A	N1-C6-N6	-5.33	115.40	118.60
1	13	1069	C	C4-C5-C6	-5.33	114.73	117.40
1	13	1479	C	C6-N1-C2	5.33	122.43	120.30
26	1H	212	G	C5-C6-O6	5.33	131.80	128.60
26	1H	270(A)	A	OP1-P-OP2	5.33	127.60	119.60
26	1H	298	G	C4-N9-C1'	-5.33	119.57	126.50
26	1H	1151	G	N1-C2-N3	-5.33	120.70	123.90
26	1H	1670	C	N1-C2-N3	5.33	122.93	119.20
26	1H	1751	C	C5-C6-N1	-5.33	118.33	121.00
26	1H	2047	U	N3-C4-O4	5.33	123.13	119.40
26	1H	2066	C	OP2-P-O3'	5.33	116.94	105.20
26	1H	2094	G	C2-N3-C4	-5.33	109.23	111.90
26	1H	2256	G	C4-C5-C6	-5.33	115.60	118.80
27	16	72	G	N1-C6-O6	-5.33	116.70	119.90
1	1G	105	G	N1-C2-N2	-5.33	111.40	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	318	C	N1-C2-O2	-5.33	115.70	118.90
26	14	671	C	C5-C6-N1	-5.33	118.33	121.00
26	14	1500	G	N3-C2-N2	-5.33	116.17	119.90
1	13	28	G	N3-C2-N2	-5.33	116.17	119.90
1	13	1300	G	N1-C6-O6	-5.33	116.70	119.90
1	13	1318	A	N7-C8-N9	-5.33	111.13	113.80
26	1H	366	C	N1-C2-O2	-5.33	115.70	118.90
26	1H	673	C	C5-C4-N4	-5.33	116.47	120.20
26	1H	1571	A	N1-C6-N6	-5.33	115.40	118.60
26	1H	1706	U	C2-N3-C4	5.33	130.20	127.00
26	1H	1955	U	N3-C4-O4	-5.33	115.67	119.40
26	1H	2315	G	C8-N9-C4	-5.33	104.27	106.40
26	1H	2328	A	N9-C1'-C2'	5.33	120.93	114.00
27	16	13	A	N9-C4-C5	5.33	107.93	105.80
1	1G	266	G	C8-N9-C1'	-5.33	120.07	127.00
1	1G	612	C	N3-C4-C5	5.33	124.03	121.90
4	32	191	ARG	NH1-CZ-NH2	5.33	125.27	119.40
23	2L	39	A	C4-C5-N7	5.33	113.37	110.70
26	14	1518	C	C4-C5-C6	5.33	120.07	117.40
26	14	1842	G	N7-C8-N9	-5.33	110.43	113.10
26	14	2416	C	N1-C2-O2	-5.33	115.70	118.90
26	14	2553	G	N7-C8-N9	-5.33	110.43	113.10
27	1J	16	G	C6-C5-N7	-5.33	127.20	130.40
1	13	425	G	O5'-P-OP1	-5.33	100.90	105.70
1	13	728	A	C5-C6-N1	5.33	120.36	117.70
26	1H	80	G	N3-C4-C5	-5.33	125.94	128.60
26	1H	245	G	C6-C5-N7	-5.33	127.20	130.40
26	1H	594	U	OP2-P-O3'	5.33	116.93	105.20
26	1H	1283	G	C4-N9-C1'	5.33	133.43	126.50
1	1G	621	A	C8-N9-C4	5.33	107.93	105.80
26	14	191	A	C6-C5-N7	-5.33	128.57	132.30
1	13	497	U	C2-N1-C1'	5.33	124.09	117.70
1	13	802	A	C6-N1-C2	5.33	121.80	118.60
1	13	1210	C	N3-C4-C5	5.33	124.03	121.90
1	13	1523	G	OP2-P-O3'	5.33	116.92	105.20
26	1H	715	G	N1-C6-O6	-5.33	116.70	119.90
26	1H	867	C	N1-C2-O2	-5.33	115.70	118.90
26	1H	916	G	OP2-P-O3'	5.33	116.92	105.20
26	1H	1384	A	O5'-P-OP2	-5.33	100.90	105.70
26	1H	1708	C	C5-C4-N4	-5.33	116.47	120.20
26	1H	1862	G	C2-N3-C4	-5.33	109.24	111.90
26	1H	2260	C	OP1-P-OP2	-5.33	111.61	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2429	G	C4-C5-N7	-5.33	108.67	110.80
26	1H	2478	A	OP2-P-O3'	5.33	116.92	105.20
1	1G	392	G	C5-N7-C8	5.33	106.96	104.30
1	1G	829	G	C8-N9-C4	-5.33	104.27	106.40
23	2L	35	C	C2-N3-C4	5.33	122.56	119.90
26	14	450	G	N3-C2-N2	-5.33	116.17	119.90
26	14	789	A	C2-N3-C4	-5.33	107.94	110.60
26	14	1299	G	O5'-P-OP1	-5.33	100.90	105.70
26	14	2070	G	C4-C5-N7	-5.33	108.67	110.80
26	14	2237	G	C5-C6-O6	5.33	131.80	128.60
22	1K	52	G	N3-C4-C5	5.33	131.26	128.60
26	1H	1619	G	C6-C5-N7	5.33	133.60	130.40
26	1H	1690	A	O5'-P-OP1	-5.33	100.91	105.70
26	1H	1841	U	OP1-P-OP2	-5.33	111.61	119.60
26	14	62	C	N3-C4-C5	5.33	124.03	121.90
1	13	776	G	N3-C2-N2	-5.33	116.17	119.90
1	13	1101	A	C5-C6-N1	5.33	120.36	117.70
1	13	1266	G	N1-C6-O6	5.33	123.09	119.90
26	1H	196	A	N7-C8-N9	5.33	116.46	113.80
26	1H	570	G	C5-C6-N1	-5.33	108.84	111.50
26	1H	1291	C	C5-C6-N1	-5.33	118.34	121.00
26	1H	1312	U	OP1-P-O3'	5.33	116.92	105.20
26	1H	1619	G	OP1-P-OP2	5.33	127.59	119.60
26	1H	2707	G	C6-N1-C2	-5.33	121.91	125.10
1	1G	823	G	N3-C4-N9	-5.33	122.81	126.00
1	1G	1528	U	C2-N3-C4	-5.33	123.81	127.00
1	1G	1534	A	N1-C2-N3	-5.33	126.64	129.30
26	14	70	G	C5-C6-N1	5.33	114.16	111.50
26	14	76	C	C2-N3-C4	5.33	122.56	119.90
26	14	606	U	C2-N3-C4	-5.33	123.80	127.00
26	14	1133	U	C5-C4-O4	-5.33	122.70	125.90
26	14	1257	C	N3-C4-C5	-5.33	119.77	121.90
26	14	1337	G	OP1-P-O3'	5.33	116.92	105.20
26	14	2078	C	N1-C2-N3	5.33	122.93	119.20
26	14	2441	C	C4-C5-C6	5.33	120.06	117.40
26	14	2534	A	C6-C5-N7	-5.33	128.57	132.30
26	14	2818	G	N1-C6-O6	5.33	123.10	119.90
39	55	90	ARG	NE-CZ-NH1	5.33	122.96	120.30
1	13	569	C	C5-C6-N1	5.32	123.66	121.00
1	13	680	C	N3-C2-O2	-5.32	118.17	121.90
1	13	1236	A	C6-C5-N7	-5.32	128.57	132.30
1	13	1301	U	C5-C4-O4	-5.32	122.71	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1357	A	C8-N9-C4	-5.32	103.67	105.80
26	1H	212	G	C4-C5-N7	-5.32	108.67	110.80
26	1H	272	G	N1-C2-N3	5.32	127.09	123.90
26	1H	415	A	C5-C6-N6	-5.32	119.44	123.70
26	1H	1120	G	N9-C4-C5	-5.32	103.27	105.40
26	1H	1358	G	N1-C2-N2	-5.32	111.41	116.20
26	1H	1362	C	N3-C4-C5	-5.32	119.77	121.90
26	1H	1850	G	C5-C6-N1	-5.32	108.84	111.50
26	1H	2197	U	C4-C5-C6	5.32	122.89	119.70
26	1H	2234	G	O5'-P-OP1	5.32	117.09	110.70
26	1H	2408	U	N1-C2-N3	5.32	118.09	114.90
26	1H	2486	G	N1-C2-N3	5.32	127.09	123.90
26	1H	2495	G	C6-N1-C2	5.32	128.29	125.10
1	1G	305	G	O5'-P-OP1	-5.32	100.91	105.70
1	1G	328	C	N3-C4-N4	-5.32	114.27	118.00
1	1G	525	C	C2-N3-C4	5.32	122.56	119.90
26	14	669	G	C4-C5-N7	-5.32	108.67	110.80
26	14	1241	A	OP1-P-OP2	5.32	127.58	119.60
26	14	1725	G	C8-N9-C1'	-5.32	120.08	127.00
26	14	2267	A	N7-C8-N9	-5.32	111.14	113.80
26	14	2817	G	N9-C4-C5	-5.32	103.27	105.40
1	13	1283	G	C5-C6-N1	5.32	114.16	111.50
1	13	1408	A	N7-C8-N9	5.32	116.46	113.80
24	3K	35	U	C2-N3-C4	5.32	130.19	127.00
26	1H	1345	C	N1-C2-O2	5.32	122.09	118.90
26	1H	2452	C	C5-C4-N4	-5.32	116.47	120.20
26	1H	2627	G	N1-C2-N3	5.32	127.09	123.90
26	1H	2743	C	C4-C5-C6	5.32	120.06	117.40
1	1G	1286	A	C8-N9-C4	-5.32	103.67	105.80
26	14	1560	G	OP1-P-O3'	5.32	116.91	105.20
26	14	1818	U	N1-C2-N3	5.32	118.09	114.90
1	13	705	U	N1-C2-O2	-5.32	119.08	122.80
1	13	1376	U	N3-C4-C5	5.32	117.79	114.60
26	1H	210	C	OP1-P-O3'	-5.32	93.50	105.20
26	1H	475	U	OP1-P-OP2	5.32	127.58	119.60
26	1H	619	G	C4-C5-N7	-5.32	108.67	110.80
26	1H	676	A	C5-C6-N6	5.32	127.96	123.70
26	1H	1347	G	C6-N1-C2	-5.32	121.91	125.10
26	1H	1607	C	O5'-P-OP1	-5.32	100.91	105.70
26	1H	1830	C	C6-N1-C1'	5.32	127.18	120.80
26	1H	2518	A	C2-N3-C4	-5.32	107.94	110.60
26	1H	2702	U	O5'-P-OP2	-5.32	100.91	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2848	G	OP1-P-O3'	5.32	116.91	105.20
1	1G	722	A	N9-C4-C5	-5.32	103.67	105.80
1	1G	940	C	N3-C4-C5	5.32	124.03	121.90
1	1G	1470	G	C5-N7-C8	-5.32	101.64	104.30
26	14	340	A	C5-C6-N6	5.32	127.96	123.70
26	14	550	G	C4-C5-N7	5.32	112.93	110.80
26	14	743	G	O5'-P-OP1	-5.32	100.91	105.70
26	14	939	G	N1-C2-N3	5.32	127.09	123.90
26	14	1385	G	O4'-C1'-N9	5.32	112.46	108.20
26	14	2439	A	O5'-P-OP1	-5.32	100.91	105.70
26	14	2708	G	C2-N3-C4	-5.32	109.24	111.90
1	13	1340	A	N9-C4-C5	-5.32	103.67	105.80
23	2K	75	C	N3-C2-O2	-5.32	118.18	121.90
26	1H	251	A	C2-N3-C4	5.32	113.26	110.60
26	1H	596	G	N1-C6-O6	5.32	123.09	119.90
26	1H	831	G	N3-C2-N2	5.32	123.62	119.90
26	1H	1304	C	N1-C2-N3	-5.32	115.48	119.20
26	1H	1338	G	N3-C4-N9	5.32	129.19	126.00
26	1H	1569	A	C4-C5-C6	5.32	119.66	117.00
26	1H	1925	C	C4-C5-C6	5.32	120.06	117.40
26	1H	2087	G	N3-C4-N9	5.32	129.19	126.00
26	1H	2240	C	N1-C2-N3	-5.32	115.48	119.20
1	1G	323	U	C5-C4-O4	-5.32	122.71	125.90
26	14	41	C	N1-C2-O2	-5.32	115.71	118.90
26	14	187	G	C8-N9-C4	5.32	108.53	106.40
26	14	564	C	C5-C6-N1	5.32	123.66	121.00
26	14	1245	G	OP1-P-O3'	5.32	116.90	105.20
1	13	405	U	N3-C4-C5	-5.32	111.41	114.60
1	13	963	G	N3-C4-N9	5.32	129.19	126.00
26	1H	341	G	O5'-P-OP1	-5.32	100.91	105.70
26	1H	1042	G	C8-N9-C4	-5.32	104.27	106.40
26	1H	1117	G	C5-C6-O6	-5.32	125.41	128.60
26	1H	1223	C	N3-C2-O2	5.32	125.62	121.90
26	1H	1947	C	N3-C4-C5	5.32	124.03	121.90
26	1H	2241	A	C4-C5-N7	-5.32	108.04	110.70
26	1H	2487	G	N3-C4-N9	-5.32	122.81	126.00
48	18	62	LEU	CB-CG-CD2	-5.32	101.96	111.00
1	1G	722	A	C2-N3-C4	-5.32	107.94	110.60
1	1G	1134	G	C8-N9-C4	-5.32	104.27	106.40
1	1G	1200	C	N1-C2-O2	5.32	122.09	118.90
26	14	408	G	O5'-P-OP1	5.32	117.08	110.70
26	14	441	U	O5'-P-OP1	-5.32	100.91	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	792	G	N1-C2-N3	5.32	127.09	123.90
26	14	1907	G	C4-N9-C1'	-5.32	119.59	126.50
26	14	2269	A	OP1-P-OP2	-5.32	111.62	119.60
26	14	2852	G	C5-C6-N1	-5.32	108.84	111.50
36	25	117	LEU	CB-CG-CD2	-5.32	101.96	111.00
26	1H	116	C	C5-C6-N1	-5.32	118.34	121.00
26	1H	413	C	C2-N3-C4	5.32	122.56	119.90
26	1H	687	C	N1-C2-O2	-5.32	115.71	118.90
26	1H	798	G	C8-N9-C4	5.32	108.53	106.40
26	1H	1268	A	N7-C8-N9	-5.32	111.14	113.80
26	1H	1351	C	OP2-P-O3'	5.32	116.89	105.20
26	1H	1465	G	N7-C8-N9	-5.32	110.44	113.10
26	1H	2451	A	C6-C5-N7	5.32	136.02	132.30
26	1H	2497	A	N3-C4-C5	-5.32	123.08	126.80
26	1H	2565	A	N7-C8-N9	-5.32	111.14	113.80
1	1G	311	C	C2-N3-C4	5.32	122.56	119.90
1	1G	352	C	C5'-C4'-O4'	5.32	115.48	109.10
26	14	495	G	N3-C2-N2	-5.32	116.18	119.90
26	14	654(R)	C	C6-N1-C2	-5.32	118.17	120.30
26	14	802	A	N1-C6-N6	-5.32	115.41	118.60
26	14	988	A	N9-C4-C5	-5.32	103.67	105.80
26	14	2033	A	C5-C6-N6	-5.32	119.45	123.70
26	14	2068	U	N3-C4-O4	5.32	123.12	119.40
26	14	2559	C	N3-C4-C5	-5.32	119.77	121.90
26	14	2699	C	N3-C4-C5	5.32	124.03	121.90
26	14	2867	G	N3-C2-N2	-5.32	116.18	119.90
1	13	562	C	C5-C6-N1	5.31	123.66	121.00
1	13	758	G	C6-C5-N7	-5.31	127.21	130.40
1	13	1229	A	C5-C6-N1	-5.31	115.04	117.70
26	1H	1009	A	C8-N9-C4	5.31	107.92	105.80
1	1G	11	G	O5'-P-OP1	-5.31	100.92	105.70
1	1G	584	G	N7-C8-N9	5.31	115.76	113.10
26	14	2231	C	C2-N1-C1'	-5.31	112.95	118.80
26	14	2768	C	N3-C2-O2	5.31	125.62	121.90
27	1J	28	C	N1-C1'-C2'	-5.31	106.16	112.00
1	13	1400	C	C5-C6-N1	5.31	123.66	121.00
26	1H	17	G	N9-C4-C5	-5.31	103.28	105.40
26	1H	270(B)	A	C5-C6-N6	5.31	127.95	123.70
26	1H	1229	G	C4-C5-N7	-5.31	108.67	110.80
26	1H	2583	G	N3-C4-N9	5.31	129.19	126.00
26	1H	2674	G	C6-N1-C2	-5.31	121.91	125.10
26	1H	2877	G	C2-N3-C4	-5.31	109.24	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	229	U	N3-C4-C5	-5.31	111.41	114.60
1	1G	632	A	N1-C6-N6	5.31	121.79	118.60
1	1G	738	C	C5-C4-N4	5.31	123.92	120.20
26	14	536	A	OP1-P-OP2	-5.31	111.63	119.60
26	14	848	G	N1-C2-N3	5.31	127.09	123.90
26	14	963	U	OP1-P-OP2	-5.31	111.63	119.60
26	14	1125	G	N9-C4-C5	5.31	107.53	105.40
26	14	1159	U	C6-N1-C2	5.31	124.19	121.00
1	13	18	C	OP1-P-OP2	-5.31	111.63	119.60
26	1H	129	C	C2-N1-C1'	5.31	124.64	118.80
26	1H	911	A	N9-C4-C5	5.31	107.92	105.80
26	1H	983	A	N9-C4-C5	-5.31	103.68	105.80
26	1H	2070	G	N7-C8-N9	-5.31	110.44	113.10
1	1G	759	A	C4-C5-N7	5.31	113.36	110.70
26	14	803	U	C5-C6-N1	-5.31	120.04	122.70
26	14	1525	G	N3-C4-C5	-5.31	125.94	128.60
26	14	1768	U	N3-C4-O4	-5.31	115.68	119.40
26	14	1930	G	N7-C8-N9	-5.31	110.44	113.10
26	14	2711	A	P-O3'-C3'	5.31	126.07	119.70
26	14	2770	G	N3-C4-C5	5.31	131.25	128.60
1	13	427	U	C2-N1-C1'	5.31	124.07	117.70
1	13	482	A	N1-C2-N3	5.31	131.96	129.30
1	13	1337	G	C8-N9-C4	-5.31	104.28	106.40
1	13	1420	C	N3-C4-N4	-5.31	114.28	118.00
26	1H	186	G	C6-C5-N7	-5.31	127.21	130.40
26	1H	214	G	O5'-P-OP1	5.31	117.07	110.70
26	1H	300	A	C6-C5-N7	-5.31	128.58	132.30
26	1H	332	A	C6-C5-N7	5.31	136.02	132.30
26	1H	470	A	C5-N7-C8	-5.31	101.25	103.90
26	1H	1365	A	C5-C6-N1	-5.31	115.05	117.70
26	1H	1465	G	C5-N7-C8	5.31	106.95	104.30
26	1H	1487	G	N7-C8-N9	5.31	115.75	113.10
27	16	98	G	N3-C2-N2	5.31	123.62	119.90
26	14	1031	G	C5-C6-N1	-5.31	108.84	111.50
26	14	1336	A	C4-C5-N7	-5.31	108.05	110.70
26	14	2832	U	C5-C4-O4	-5.31	122.71	125.90
1	13	1158	C	C6-N1-C2	-5.31	118.18	120.30
1	13	1240	U	C5-C6-N1	5.31	125.35	122.70
26	1H	184	C	C5-C4-N4	5.31	123.92	120.20
26	1H	779	U	C6-N1-C1'	-5.31	113.77	121.20
26	1H	823	G	N1-C2-N3	5.31	127.08	123.90
26	1H	2258	C	C5-C4-N4	-5.31	116.48	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	1L	27	G	N1-C6-O6	-5.31	116.72	119.90
26	14	584	C	N3-C4-C5	5.31	124.02	121.90
26	14	1272	A	N1-C2-N3	-5.31	126.65	129.30
26	14	1366	A	C6-N1-C2	5.31	121.78	118.60
27	1J	36	C	C5-C6-N1	5.31	123.65	121.00
27	1J	115	G	N9-C4-C5	-5.31	103.28	105.40
55	M5	48	PHE	C-N-CA	5.31	134.97	121.70
1	13	335	C	C6-N1-C1'	5.31	127.17	120.80
1	13	947	G	N1-C6-O6	-5.31	116.72	119.90
1	13	1441	G	C5-C6-N1	-5.31	108.85	111.50
1	13	1505	G	N9-C4-C5	5.31	107.52	105.40
26	1H	131	G	OP1-P-O3'	-5.31	93.53	105.20
26	1H	2291	U	C6-N1-C1'	5.31	128.63	121.20
1	1G	517	G	C5-C6-O6	-5.31	125.42	128.60
1	1G	913	A	C5-C6-N6	-5.31	119.45	123.70
26	14	453	C	OP2-P-O3'	5.31	116.87	105.20
26	14	952	G	C4-C5-N7	5.31	112.92	110.80
26	14	2391	G	C6-N1-C2	-5.31	121.92	125.10
26	14	2763	G	C5-C6-N1	5.31	114.15	111.50
1	13	1497	G	N3-C4-C5	-5.30	125.95	128.60
22	1K	22	G	N3-C4-N9	5.30	129.18	126.00
26	1H	208	C	C4-C5-C6	5.30	120.05	117.40
26	1H	1973	G	O5'-P-OP2	-5.30	100.92	105.70
26	1H	2558	C	N1-C2-N3	5.30	122.91	119.20
27	16	23	G	N3-C4-N9	-5.30	122.82	126.00
1	1G	773	G	C8-N9-C4	-5.30	104.28	106.40
1	1G	1429	C	O5'-P-OP1	5.30	117.06	110.70
26	14	270(S)	G	C8-N9-C4	-5.30	104.28	106.40
26	14	596	G	C2-N3-C4	-5.30	109.25	111.90
26	14	778	G	N1-C2-N2	-5.30	111.43	116.20
26	14	1425	G	N9-C4-C5	-5.30	103.28	105.40
26	14	1497	U	C5-C4-O4	5.30	129.08	125.90
26	14	1527	G	C8-N9-C4	5.30	108.52	106.40
26	14	1528	A	C6-C5-N7	-5.30	128.59	132.30
26	14	1678	G	C6-N1-C2	5.30	128.28	125.10
26	14	1839	G	O4'-C1'-N9	-5.30	103.96	108.20
26	14	2037	G	N7-C8-N9	-5.30	110.45	113.10
27	1J	81	G	N1-C2-N2	-5.30	111.43	116.20
27	1J	103	U	OP2-P-O3'	5.30	116.87	105.20
26	1H	312	G	C5-C6-O6	5.30	131.78	128.60
26	1H	577	G	C2-N3-C4	-5.30	109.25	111.90
26	1H	804	A	C2-N3-C4	-5.30	107.95	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	823	G	C5-C6-O6	-5.30	125.42	128.60
26	1H	1339	G	N1-C6-O6	-5.30	116.72	119.90
26	14	146	G	C2-N3-C4	-5.30	109.25	111.90
26	14	508	G	OP1-P-OP2	5.30	127.55	119.60
26	14	829	A	N9-C4-C5	-5.30	103.68	105.80
26	14	1904	G	C4-C5-N7	-5.30	108.68	110.80
26	14	2035	G	C4-C5-N7	-5.30	108.68	110.80
26	14	2584	U	N3-C2-O2	-5.30	118.49	122.20
1	13	113	G	C8-N9-C4	-5.30	104.28	106.40
1	13	523	A	N3-C4-C5	5.30	130.51	126.80
1	13	561	U	N3-C2-O2	5.30	125.91	122.20
1	13	1318	A	N1-C6-N6	-5.30	115.42	118.60
26	1H	282	A	C5-N7-C8	5.30	106.55	103.90
26	1H	536	A	N3-C4-C5	-5.30	123.09	126.80
26	1H	740	U	C2-N3-C4	-5.30	123.82	127.00
26	1H	912	C	C5-C6-N1	5.30	123.65	121.00
26	1H	1365	A	C2-N3-C4	-5.30	107.95	110.60
26	1H	1587	A	C6-N1-C2	-5.30	115.42	118.60
26	1H	1759	A	OP2-P-O3'	5.30	116.86	105.20
26	1H	1819	A	C2-N3-C4	-5.30	107.95	110.60
26	1H	2577	A	C4-C5-N7	-5.30	108.05	110.70
29	11	244	ARG	NE-CZ-NH1	5.30	122.95	120.30
1	1G	372	C	C6-N1-C2	5.30	122.42	120.30
1	1G	887	G	C6-C5-N7	-5.30	127.22	130.40
7	62	89	MET	CG-SD-CE	5.30	108.68	100.20
26	14	241	A	C2-N3-C4	-5.30	107.95	110.60
26	14	632	A	C4-C5-N7	5.30	113.35	110.70
26	14	649	G	O5'-P-OP2	-5.30	100.93	105.70
26	14	835	A	N3-C4-N9	5.30	131.64	127.40
26	14	1626	G	N3-C2-N2	-5.30	116.19	119.90
26	14	1921	G	O5'-P-OP2	-5.30	100.93	105.70
26	14	2227	A	C5-C6-N6	5.30	127.94	123.70
26	14	2425	A	OP2-P-O3'	5.30	116.86	105.20
26	14	2722	G	C4-C5-N7	5.30	112.92	110.80
1	13	5	U	O5'-P-OP1	5.30	117.06	110.70
1	13	543	C	N1-C2-N3	5.30	122.91	119.20
1	13	548	G	C6-N1-C2	-5.30	121.92	125.10
1	13	1070	U	N3-C2-O2	5.30	125.91	122.20
26	1H	1256	G	C5-N7-C8	5.30	106.95	104.30
26	1H	1470	G	N3-C2-N2	-5.30	116.19	119.90
26	1H	1768	U	C6-N1-C1'	5.30	128.62	121.20
26	1H	1964	G	O5'-P-OP1	5.30	117.06	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2072	G	OP1-P-O3'	5.30	116.86	105.20
26	1H	2448	A	C4-C5-N7	5.30	113.35	110.70
27	16	49	C	N3-C4-C5	-5.30	119.78	121.90
1	1G	171	A	C4-C5-N7	-5.30	108.05	110.70
1	1G	284	G	C6-C5-N7	-5.30	127.22	130.40
26	14	1132	A	N9-C4-C5	5.30	107.92	105.80
26	14	1595	G	OP1-P-OP2	-5.30	111.65	119.60
26	14	1998	G	C5-C6-N1	-5.30	108.85	111.50
26	14	2326	C	O5'-P-OP2	5.30	117.06	110.70
26	14	2435	A	C2-N3-C4	5.30	113.25	110.60
26	14	2502	G	C4-N9-C1'	5.30	133.39	126.50
1	13	61	G	C5-N7-C8	5.30	106.95	104.30
1	13	324	G	C4-C5-N7	5.30	112.92	110.80
1	13	1083	U	C6-N1-C2	-5.30	117.82	121.00
1	13	1320	C	O5'-P-OP2	-5.30	100.93	105.70
1	13	1485	U	OP2-P-O3'	5.30	116.86	105.20
26	1H	35	G	OP1-P-OP2	-5.30	111.65	119.60
26	1H	522	G	OP2-P-O3'	5.30	116.86	105.20
26	1H	967	C	C5-C4-N4	5.30	123.91	120.20
26	1H	1705	G	C5-C6-O6	5.30	131.78	128.60
26	1H	1934	C	OP1-P-O3'	5.30	116.86	105.20
26	1H	2425	A	C8-N9-C4	-5.30	103.68	105.80
26	1H	2703	C	C2-N3-C4	-5.30	117.25	119.90
26	1H	2858	C	OP1-P-OP2	5.30	127.55	119.60
55	Q8	46	ARG	C-N-CA	5.30	134.95	121.70
1	1G	336	C	N3-C2-O2	5.30	125.61	121.90
26	14	79	G	C6-N1-C2	-5.30	121.92	125.10
26	14	1255	U	C4-C5-C6	5.30	122.88	119.70
26	14	1321	A	N1-C2-N3	5.30	131.95	129.30
26	14	1896	G	C5-C6-N1	5.30	114.15	111.50
26	14	1944	U	C4-C5-C6	5.30	122.88	119.70
26	14	2087	G	C5-C6-O6	5.30	131.78	128.60
26	14	2600	A	N9-C4-C5	5.30	107.92	105.80
1	13	505	G	N1-C6-O6	5.30	123.08	119.90
1	13	741	G	N1-C2-N2	-5.30	111.43	116.20
1	13	830	G	C8-N9-C4	-5.30	104.28	106.40
1	13	971	G	C8-N9-C4	5.30	108.52	106.40
1	13	977	A	C6-C5-N7	5.30	136.01	132.30
26	1H	116	C	N1-C2-O2	-5.30	115.72	118.90
26	1H	179	G	C5-C6-N1	-5.30	108.85	111.50
26	1H	514	A	OP1-P-OP2	5.30	127.54	119.60
26	1H	518	G	C8-N9-C4	5.30	108.52	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	526	A	C2-N3-C4	5.30	113.25	110.60
26	1H	878	A	C8-N9-C4	-5.30	103.68	105.80
26	1H	1121	C	C6-N1-C2	-5.30	118.18	120.30
26	1H	1662	C	C5-C4-N4	-5.30	116.49	120.20
26	1H	1795	C	C5-C4-N4	5.30	123.91	120.20
26	1H	2096	U	O5'-P-OP2	-5.30	100.93	105.70
26	1H	2235	G	OP2-P-O3'	5.30	116.85	105.20
26	1H	2797	U	P-O3'-C3'	5.30	126.06	119.70
26	14	491	G	N1-C2-N3	5.30	127.08	123.90
26	14	1262	A	O5'-P-OP1	-5.30	100.93	105.70
26	14	2242	G	N9-C4-C5	5.30	107.52	105.40
26	14	2258	C	OP1-P-O3'	5.30	116.85	105.20
1	13	34	C	C6-N1-C2	-5.29	118.18	120.30
1	13	115	G	N7-C8-N9	5.29	115.75	113.10
1	13	1345	U	OP1-P-OP2	-5.29	111.66	119.60
26	1H	1470	G	C5-C6-N1	-5.29	108.85	111.50
26	1H	1884	A	C4-C5-N7	-5.29	108.05	110.70
27	16	77	U	N3-C2-O2	5.29	125.91	122.20
27	16	87	G	C4-C5-C6	-5.29	115.62	118.80
1	1G	1422	G	OP1-P-OP2	5.29	127.54	119.60
26	14	1762	A	N1-C2-N3	-5.29	126.65	129.30
26	14	2273	A	C4-C5-C6	-5.29	114.35	117.00
1	13	409	G	C5-C6-O6	5.29	131.78	128.60
1	13	505	G	N3-C4-N9	5.29	129.18	126.00
1	13	826	C	OP1-P-OP2	-5.29	111.66	119.60
26	1H	287	C	C4-C5-C6	-5.29	114.75	117.40
26	1H	680	G	C4-C5-C6	5.29	121.98	118.80
26	1H	930	U	O5'-P-OP2	-5.29	100.94	105.70
26	1H	968	G	N1-C6-O6	-5.29	116.72	119.90
26	1H	1006	C	N1-C2-O2	-5.29	115.72	118.90
26	1H	1444	G	N1-C2-N2	-5.29	111.44	116.20
26	1H	1459	G	N1-C2-N2	-5.29	111.44	116.20
26	1H	1522	G	C4-C5-C6	-5.29	115.62	118.80
27	16	58	A	N9-C4-C5	5.29	107.92	105.80
1	1G	425	G	N1-C6-O6	5.29	123.08	119.90
1	1G	484	G	C8-N9-C4	5.29	108.52	106.40
1	1G	1530	G	N1-C6-O6	5.29	123.08	119.90
26	14	529	A	N1-C6-N6	5.29	121.78	118.60
26	14	978	G	C5-C6-O6	5.29	131.78	128.60
26	14	1365	A	OP2-P-O3'	5.29	116.84	105.20
26	14	2686	G	N3-C4-N9	5.29	129.18	126.00
27	1J	52	A	OP2-P-O3'	5.29	116.84	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	181	G	N3-C4-C5	-5.29	125.95	128.60
1	13	248	C	O5'-P-OP1	-5.29	100.94	105.70
1	13	266	G	N1-C6-O6	5.29	123.08	119.90
1	13	505	G	N3-C4-C5	-5.29	125.95	128.60
26	1H	180	G	O4'-C1'-N9	-5.29	103.97	108.20
26	1H	643	A	C8-N9-C4	5.29	107.92	105.80
26	1H	1299	G	O5'-P-OP1	-5.29	100.94	105.70
26	1H	1568	G	N9-C4-C5	-5.29	103.28	105.40
26	1H	1879	C	C5-C6-N1	5.29	123.64	121.00
1	1G	692	U	C6-N1-C2	-5.29	117.83	121.00
1	1G	1511	G	N7-C8-N9	5.29	115.75	113.10
26	14	262	A	C5-C6-N1	5.29	120.35	117.70
26	14	291	C	N3-C4-C5	-5.29	119.78	121.90
26	14	405	U	C5-C6-N1	5.29	125.35	122.70
26	14	772	C	OP2-P-O3'	5.29	116.84	105.20
26	14	782	A	C5-C6-N1	5.29	120.35	117.70
26	14	967	C	N1-C2-O2	5.29	122.08	118.90
26	14	1621	U	O5'-P-OP1	-5.29	100.94	105.70
26	14	1696	G	O5'-P-OP1	5.29	117.05	110.70
26	14	1842	G	C6-N1-C2	-5.29	121.92	125.10
26	14	2434	A	N1-C6-N6	-5.29	115.42	118.60
1	13	531	U	OP1-P-O3'	5.29	116.84	105.20
1	13	706	A	OP1-P-OP2	-5.29	111.67	119.60
1	13	721	G	C8-N9-C4	-5.29	104.28	106.40
26	1H	592	G	C4-C5-N7	-5.29	108.68	110.80
26	1H	689	A	OP1-P-O3'	-5.29	93.56	105.20
26	1H	775	G	OP2-P-O3'	-5.29	93.56	105.20
26	1H	972	G	C6-N1-C2	-5.29	121.93	125.10
26	1H	1343	G	C4-N9-C1'	5.29	133.38	126.50
26	1H	1978	A	C5-C6-N1	5.29	120.34	117.70
26	1H	2403	C	C6-N1-C1'	5.29	127.15	120.80
1	1G	199	G	C5-C6-N1	-5.29	108.86	111.50
1	1G	576	G	C8-N9-C4	-5.29	104.28	106.40
26	14	2672	G	N1-C2-N3	5.29	127.07	123.90
26	14	2769	C	C4-C5-C6	5.29	120.05	117.40
1	13	899	C	C4-C5-C6	-5.29	114.76	117.40
26	1H	101	G	OP1-P-OP2	5.29	127.53	119.60
26	1H	259	G	C6-C5-N7	-5.29	127.23	130.40
26	1H	271(A)	C	N1-C2-N3	-5.29	115.50	119.20
26	1H	727	A	C6-C5-N7	-5.29	128.60	132.30
26	1H	1266	G	C5-C6-O6	-5.29	125.43	128.60
26	1H	1655	A	N1-C2-N3	5.29	131.94	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1769	G	C6-N1-C2	5.29	128.27	125.10
26	1H	1780	A	C5-C6-N1	-5.29	115.06	117.70
26	1H	2239	G	O5'-P-OP2	5.29	117.05	110.70
26	1H	2676	C	C2-N3-C4	-5.29	117.25	119.90
41	B8	42	ILE	CB-CG1-CD1	5.29	128.71	113.90
26	14	458	G	O5'-P-OP2	-5.29	100.94	105.70
26	14	602	G	C8-N9-C1'	-5.29	120.12	127.00
26	14	702	G	OP2-P-O3'	5.29	116.84	105.20
26	14	2016	U	N3-C4-C5	-5.29	111.43	114.60
26	14	2761	G	O4'-C1'-N9	-5.29	103.97	108.20
1	13	777	A	C5-N7-C8	-5.29	101.26	103.90
1	13	871	U	C5-C4-O4	5.29	129.07	125.90
1	13	1475	G	N1-C6-O6	5.29	123.07	119.90
26	1H	826	U	N3-C2-O2	5.29	125.90	122.20
26	1H	1348	G	N1-C2-N3	-5.29	120.73	123.90
26	1H	1459	G	C5-N7-C8	5.29	106.94	104.30
1	1G	124	G	OP1-P-OP2	-5.29	111.67	119.60
1	1G	886	G	N7-C8-N9	-5.29	110.46	113.10
26	14	119	A	N1-C2-N3	5.29	131.94	129.30
26	14	963	U	OP1-P-O3'	5.29	116.83	105.20
26	14	1275	A	O5'-P-OP2	5.29	117.04	110.70
27	1J	44	G	OP1-P-O3'	5.29	116.83	105.20
1	13	260	G	C4-C5-C6	5.29	121.97	118.80
1	13	263	A	OP1-P-OP2	-5.29	111.67	119.60
1	13	632	A	C8-N9-C4	5.29	107.91	105.80
1	13	925	G	N1-C2-N3	5.29	127.07	123.90
1	13	1203	C	N1-C2-O2	5.29	122.07	118.90
24	3K	62	C	C6-N1-C2	-5.29	118.19	120.30
26	1H	1501	C	C6-N1-C2	-5.29	118.19	120.30
26	1H	1543	A	C6-C5-N7	-5.29	128.60	132.30
26	1H	1700	A	N9-C4-C5	-5.29	103.69	105.80
26	1H	2783	G	C2-N3-C4	-5.29	109.26	111.90
1	1G	504	C	N1-C2-O2	-5.29	115.73	118.90
26	14	529	A	C5-C6-N1	-5.29	115.06	117.70
26	14	821	A	C4-C5-C6	5.29	119.64	117.00
26	14	948	G	N7-C8-N9	5.29	115.74	113.10
26	14	956	G	C2-N3-C4	-5.29	109.26	111.90
26	14	1197	G	N9-C4-C5	5.29	107.51	105.40
26	14	1841	U	N3-C4-C5	-5.29	111.43	114.60
26	14	2339	G	OP1-P-OP2	5.29	127.53	119.60
26	14	2442	C	C4-C5-C6	5.29	120.04	117.40
26	14	2589	A	C5-N7-C8	-5.29	101.26	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2607	G	C6-N1-C2	5.29	128.27	125.10
26	14	2782	G	C8-N9-C4	-5.29	104.29	106.40
27	1J	98	G	C4-C5-N7	5.29	112.91	110.80
1	13	397	A	C4-C5-N7	-5.28	108.06	110.70
1	13	606	G	N1-C6-O6	5.28	123.07	119.90
1	13	1216	G	C5-C6-N1	-5.28	108.86	111.50
25	4K	9	G	C8-N9-C1'	-5.28	120.13	127.00
26	1H	82	G	OP1-P-O3'	5.28	116.82	105.20
26	1H	1307	A	C6-N1-C2	-5.28	115.43	118.60
26	1H	1492	G	C5-C6-N1	-5.28	108.86	111.50
26	1H	1514	U	OP2-P-O3'	5.28	116.82	105.20
26	1H	1588	C	O5'-P-OP1	5.28	117.04	110.70
26	1H	2083	G	O5'-P-OP2	5.28	117.04	110.70
26	1H	2716	U	OP1-P-OP2	5.28	127.52	119.60
1	1G	329	A	C6-N1-C2	-5.28	115.43	118.60
56	1L	19	G	C8-N9-C4	-5.28	104.29	106.40
26	14	1239	G	C4-C5-C6	5.28	121.97	118.80
26	14	1651	G	C5-N7-C8	-5.28	101.66	104.30
26	14	1688	U	C6-N1-C2	-5.28	117.83	121.00
26	14	1804	C	OP1-P-OP2	-5.28	111.67	119.60
26	14	2278	A	C6-N1-C2	-5.28	115.43	118.60
26	14	2426	A	C5-C6-N1	-5.28	115.06	117.70
26	14	2722	G	N1-C2-N2	5.28	120.95	116.20
27	1J	54	G	OP1-P-OP2	-5.28	111.67	119.60
1	13	8	A	O5'-P-OP2	5.28	117.04	110.70
1	13	843	U	N1-C2-O2	5.28	126.50	122.80
24	3K	24	G	N1-C6-O6	5.28	123.07	119.90
26	1H	59	U	C4-C5-C6	5.28	122.87	119.70
26	1H	565	C	N1-C2-O2	5.28	122.07	118.90
26	1H	781	A	N9-C4-C5	-5.28	103.69	105.80
26	1H	2308	G	O5'-P-OP2	-5.28	100.95	105.70
26	1H	2489	G	C4-N9-C1'	5.28	133.37	126.50
1	1G	1188	A	N1-C6-N6	-5.28	115.43	118.60
26	14	705	A	C5-C6-N1	5.28	120.34	117.70
26	14	801	G	C5-C6-O6	5.28	131.77	128.60
26	14	2139	C	C5-C6-N1	5.28	123.64	121.00
26	14	2459	A	OP1-P-OP2	5.28	127.52	119.60
27	1J	14	U	OP2-P-O3'	5.28	116.82	105.20
1	13	409	G	N1-C6-O6	-5.28	116.73	119.90
1	13	1332	A	OP2-P-O3'	5.28	116.82	105.20
1	13	1511	G	N1-C2-N3	5.28	127.07	123.90
26	1H	1184	G	N3-C4-C5	5.28	131.24	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1202	C	OP1-P-OP2	5.28	127.52	119.60
26	1H	1586	A	C4-C5-N7	5.28	113.34	110.70
26	1H	1661	G	N9-C4-C5	-5.28	103.29	105.40
26	1H	2256	G	N1-C2-N2	-5.28	111.45	116.20
26	1H	2508	G	N7-C8-N9	5.28	115.74	113.10
26	1H	2513	G	N1-C6-O6	5.28	123.07	119.90
26	1H	2554	U	C5-C6-N1	5.28	125.34	122.70
26	1H	2705	A	N9-C4-C5	-5.28	103.69	105.80
27	16	17	C	N3-C2-O2	-5.28	118.20	121.90
1	1G	567	G	C6-C5-N7	5.28	133.57	130.40
1	1G	741	G	C4-C5-C6	5.28	121.97	118.80
23	2L	72	C	OP2-P-O3'	5.28	116.82	105.20
26	14	52	A	N1-C6-N6	-5.28	115.43	118.60
26	14	233	A	C8-N9-C4	5.28	107.91	105.80
26	14	595	C	N1-C2-O2	-5.28	115.73	118.90
26	14	656	G	C6-C5-N7	-5.28	127.23	130.40
26	14	764	A	C6-N1-C2	5.28	121.77	118.60
26	14	990	A	C2-N3-C4	-5.28	107.96	110.60
26	14	1354	A	N9-C1'-C2'	-5.28	106.19	112.00
26	14	1516	U	N1-C2-O2	5.28	126.50	122.80
26	14	1798	U	OP1-P-OP2	5.28	127.52	119.60
26	14	1900	A	OP2-P-O3'	-5.28	93.58	105.20
26	14	1905	C	OP1-P-O3'	5.28	116.82	105.20
26	14	2084	C	N3-C4-C5	5.28	124.01	121.90
26	14	2497	A	C5-C6-N1	5.28	120.34	117.70
26	14	2558	C	C5-C6-N1	-5.28	118.36	121.00
39	55	111	LEU	CA-CB-CG	-5.28	103.15	115.30
26	1H	556	G	OP1-P-OP2	5.28	127.52	119.60
26	1H	2761	G	C6-N1-C2	-5.28	121.93	125.10
1	1G	1057	G	N7-C8-N9	-5.28	110.46	113.10
1	1G	1476	G	N7-C8-N9	-5.28	110.46	113.10
26	14	941	A	N3-C4-C5	-5.28	123.11	126.80
26	14	1310	G	N1-C2-N2	5.28	120.95	116.20
26	14	1953	A	C8-N9-C4	5.28	107.91	105.80
26	14	2056	G	C8-N9-C4	5.28	108.51	106.40
26	14	2257	U	OP1-P-O3'	5.28	116.81	105.20
1	13	509	A	C2'-C3'-O3'	5.28	122.14	113.70
26	1H	273(B)	C	N3-C2-O2	5.28	125.59	121.90
26	1H	333	G	O4'-C1'-N9	-5.28	103.98	108.20
26	1H	488	G	O5'-P-OP2	-5.28	100.95	105.70
26	1H	533	G	C5-N7-C8	5.28	106.94	104.30
26	1H	1550	C	OP2-P-O3'	5.28	116.81	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1681	G	C5-C6-N1	5.28	114.14	111.50
26	1H	1821	A	N1-C6-N6	-5.28	115.43	118.60
26	1H	2639	A	N1-C6-N6	5.28	121.77	118.60
27	16	16	G	C6-C5-N7	-5.28	127.23	130.40
52	M8	1	MET	CG-SD-CE	5.28	108.64	100.20
1	1G	15	G	C8-N9-C4	5.28	108.51	106.40
1	1G	483	C	C5-C6-N1	-5.28	118.36	121.00
1	1G	517	G	C4-C5-N7	5.28	112.91	110.80
1	1G	567	G	C4-N9-C1'	-5.28	119.64	126.50
1	1G	1502	A	C8-N9-C4	-5.28	103.69	105.80
26	14	191	A	C8-N9-C4	5.28	107.91	105.80
26	14	222	A	C5'-C4'-O4'	5.28	115.43	109.10
26	14	377	C	O5'-P-OP1	5.28	117.03	110.70
26	14	737	C	C5-C6-N1	-5.28	118.36	121.00
26	14	738	G	C6-C5-N7	-5.28	127.23	130.40
26	14	971	C	C4-C5-C6	5.28	120.04	117.40
26	14	1490	A	O5'-P-OP1	-5.28	100.95	105.70
26	14	1661	G	C2-N3-C4	-5.28	109.26	111.90
26	14	1885	A	C8-N9-C4	5.28	107.91	105.80
26	14	2462	U	N1-C2-N3	5.28	118.07	114.90
26	14	2500	U	C5-C6-N1	-5.28	120.06	122.70
26	14	2636	U	OP2-P-O3'	5.28	116.81	105.20
26	1H	31	C	C2-N3-C4	-5.28	117.26	119.90
26	1H	524	U	C4-C5-C6	5.28	122.87	119.70
26	1H	1466	G	N1-C2-N2	5.28	120.95	116.20
26	1H	1559	G	C6-N1-C2	5.28	128.27	125.10
26	1H	2290	G	N7-C8-N9	-5.28	110.46	113.10
26	1H	2339	G	N1-C2-N3	5.28	127.07	123.90
26	1H	2427	C	C5-C4-N4	-5.28	116.51	120.20
26	1H	2651	C	N3-C4-N4	5.28	121.69	118.00
26	14	534	U	OP2-P-O3'	5.28	116.81	105.20
26	14	706	A	O5'-P-OP1	5.28	117.03	110.70
26	14	859	G	N1-C6-O6	5.28	123.06	119.90
26	14	952	G	OP1-P-O3'	5.28	116.81	105.20
26	14	2001	A	O4'-C1'-N9	-5.28	103.98	108.20
1	13	405	U	N3-C4-O4	5.27	123.09	119.40
26	1H	940	G	O5'-P-OP1	5.27	117.03	110.70
26	1H	1642	G	C2-N3-C4	5.27	114.54	111.90
26	1H	2369	A	C5-C6-N1	5.27	120.34	117.70
27	16	97	G	C5-N7-C8	5.27	106.94	104.30
1	1G	510	A	C6-N1-C2	5.27	121.76	118.60
1	1G	1426	C	N3-C2-O2	5.27	125.59	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	243	U	OP1-P-OP2	-5.27	111.69	119.60
26	14	632	A	C5-N7-C8	-5.27	101.26	103.90
26	14	1290	C	C2-N3-C4	5.27	122.54	119.90
26	14	1479	G	O5'-P-OP2	-5.27	100.95	105.70
1	13	798	G	N1-C2-N3	5.27	127.06	123.90
23	2K	6	G	C4-C5-N7	5.27	112.91	110.80
26	1H	132	G	C6-N1-C2	5.27	128.26	125.10
26	1H	338	G	OP1-P-O3'	5.27	116.80	105.20
26	1H	492	A	C5-C6-N6	5.27	127.92	123.70
26	1H	666	G	N1-C2-N3	5.27	127.06	123.90
26	1H	1385	G	N3-C4-N9	-5.27	122.84	126.00
26	1H	1757	U	N3-C4-C5	5.27	117.76	114.60
26	1H	1954	G	C2-N3-C4	-5.27	109.26	111.90
26	1H	1985	G	OP1-P-O3'	5.27	116.80	105.20
26	1H	2061	G	C4-C5-N7	-5.27	108.69	110.80
26	1H	2253	G	C5-C6-O6	-5.27	125.44	128.60
26	14	125	G	P-O3'-C3'	-5.27	113.37	119.70
26	14	335	C	N3-C4-C5	-5.27	119.79	121.90
26	14	1475	G	C6-C5-N7	-5.27	127.24	130.40
26	14	1949	G	O5'-P-OP1	-5.27	100.95	105.70
26	14	1979	C	C5-C4-N4	-5.27	116.51	120.20
26	14	2503	A	C2-N3-C4	5.27	113.24	110.60
26	14	2838	G	N1-C2-N2	5.27	120.94	116.20
27	1J	60	C	C5-C6-N1	5.27	123.64	121.00
26	1H	952	G	C2-N3-C4	5.27	114.54	111.90
1	1G	645	C	OP1-P-OP2	-5.27	111.69	119.60
1	1G	1334	G	C8-N9-C4	-5.27	104.29	106.40
25	4L	12	A	O4'-C1'-N9	5.27	112.42	108.20
26	14	530	G	N7-C8-N9	5.27	115.74	113.10
26	14	744	G	N1-C6-O6	5.27	123.06	119.90
1	13	1239	A	OP1-P-OP2	5.27	127.51	119.60
1	13	1337	G	OP2-P-O3'	5.27	116.80	105.20
26	1H	533	G	C4-C5-N7	-5.27	108.69	110.80
26	1H	615	G	C5-N7-C8	5.27	106.94	104.30
26	1H	790	C	N3-C2-O2	5.27	125.59	121.90
26	1H	1311	G	C8-N9-C4	5.27	108.51	106.40
26	1H	1379	A	C6-N1-C2	5.27	121.76	118.60
26	1H	1530	G	OP1-P-OP2	5.27	127.50	119.60
26	1H	1945	G	N1-C2-N3	5.27	127.06	123.90
26	1H	2030	A	C2-N3-C4	5.27	113.23	110.60
26	1H	2252	G	N9-C4-C5	5.27	107.51	105.40
26	1H	2701	C	P-O3'-C3'	5.27	126.02	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	11	122	ASP	CB-CG-OD2	5.27	123.04	118.30
1	1G	250	A	N9-C4-C5	-5.27	103.69	105.80
1	1G	813	U	N1-C2-O2	-5.27	119.11	122.80
1	1G	1413	A	N7-C8-N9	5.27	116.44	113.80
1	1G	1473	A	C8-N9-C4	5.27	107.91	105.80
26	14	848	G	N3-C4-C5	-5.27	125.97	128.60
26	14	969	U	OP1-P-O3'	5.27	116.79	105.20
26	14	1130	U	N3-C4-C5	-5.27	111.44	114.60
26	14	1236	G	OP1-P-OP2	-5.27	111.70	119.60
26	14	1399	C	OP1-P-O3'	-5.27	93.61	105.20
26	14	1544	C	O4'-C1'-N1	5.27	112.42	108.20
1	13	42	G	C8-N9-C4	5.27	108.51	106.40
1	13	57	G	N7-C8-N9	-5.27	110.47	113.10
1	13	858	G	OP1-P-O3'	5.27	116.79	105.20
1	13	896	C	C2-N3-C4	5.27	122.53	119.90
1	13	1453	G	C4-C5-N7	-5.27	108.69	110.80
1	13	1463	C	N3-C4-C5	-5.27	119.79	121.90
26	1H	34	C	OP2-P-O3'	5.27	116.79	105.20
26	1H	1395	A	C8-N9-C4	5.27	107.91	105.80
26	1H	2265	U	C2-N1-C1'	5.27	124.02	117.70
27	16	55	U	N1-C2-O2	-5.27	119.11	122.80
27	16	70	C	N3-C2-O2	-5.27	118.21	121.90
1	1G	418	C	OP1-P-O3'	5.27	116.79	105.20
1	1G	529	G	N3-C4-N9	5.27	129.16	126.00
1	1G	1477	C	C4-C5-C6	5.27	120.03	117.40
56	1L	69	A	O4'-C1'-N9	5.27	112.42	108.20
26	14	663	G	N1-C6-O6	5.27	123.06	119.90
26	14	981	A	N1-C2-N3	5.27	131.93	129.30
26	14	1235	G	N3-C4-C5	-5.27	125.97	128.60
26	14	1292	U	N3-C4-C5	5.27	117.76	114.60
26	14	1596	A	C4-C5-N7	-5.27	108.07	110.70
26	14	1767	C	C4-C5-C6	5.27	120.03	117.40
26	14	2439	A	C5-N7-C8	-5.27	101.27	103.90
26	14	2514	U	C4-C5-C6	5.27	122.86	119.70
27	1J	17	C	N3-C4-C5	5.27	124.01	121.90
27	1J	106	G	N3-C2-N2	-5.27	116.21	119.90
1	13	67	C	N1-C2-O2	5.27	122.06	118.90
1	13	874	G	N3-C2-N2	5.27	123.59	119.90
1	13	1337	G	N3-C2-N2	-5.27	116.21	119.90
26	1H	2325	G	C5-C6-N1	5.27	114.13	111.50
26	1H	2712(A)	A	OP1-P-O3'	-5.27	93.61	105.20
27	16	88	C	O5'-P-OP1	5.27	117.02	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	122	G	O5'-P-OP1	-5.27	100.96	105.70
1	13	106	C	C4-C5-C6	5.26	120.03	117.40
1	13	721	G	OP1-P-O3'	5.26	116.78	105.20
1	13	800	G	C5-C6-N1	-5.26	108.87	111.50
1	13	1526	G	C4-C5-N7	-5.26	108.69	110.80
26	1H	134	C	N1-C2-O2	5.26	122.06	118.90
26	1H	308	G	N3-C4-C5	-5.26	125.97	128.60
26	1H	323	G	OP1-P-O3'	5.26	116.78	105.20
26	1H	639	U	C2-N3-C4	5.26	130.16	127.00
26	1H	803	U	C6-N1-C2	5.26	124.16	121.00
26	1H	1043	C	N3-C2-O2	-5.26	118.22	121.90
26	1H	1327	C	N3-C2-O2	5.26	125.58	121.90
26	1H	1394	U	OP1-P-OP2	-5.26	111.70	119.60
26	1H	1525	G	C5-N7-C8	5.26	106.93	104.30
1	1G	82	U	N1-C2-O2	5.26	126.48	122.80
1	1G	541	G	N1-C2-N3	-5.26	120.74	123.90
1	1G	880	C	C4-C5-C6	-5.26	114.77	117.40
1	1G	956	U	C5-C6-N1	5.26	125.33	122.70
1	1G	1186	G	C5-C6-N1	-5.26	108.87	111.50
26	14	110	G	C2-N3-C4	-5.26	109.27	111.90
26	14	940	G	N7-C8-N9	5.26	115.73	113.10
26	14	951	C	N3-C2-O2	-5.26	118.22	121.90
26	14	1953	A	N7-C8-N9	-5.26	111.17	113.80
26	14	2390	U	N1-C2-N3	5.26	118.06	114.90
26	14	2394	C	N3-C4-C5	5.26	124.01	121.90
1	13	1416	G	N1-C2-N2	-5.26	111.46	116.20
26	1H	561	G	C4-C5-N7	-5.26	108.69	110.80
26	1H	785	G	N3-C4-C5	-5.26	125.97	128.60
26	1H	2239	G	C2-N3-C4	-5.26	109.27	111.90
26	1H	2848	G	N3-C4-C5	-5.26	125.97	128.60
30	21	144	ARG	CG-CD-NE	5.26	122.85	111.80
1	1G	234	C	C5-C4-N4	-5.26	116.52	120.20
1	1G	1301	U	C6-N1-C1'	-5.26	113.83	121.20
1	1G	1500	A	OP1-P-O3'	5.26	116.78	105.20
26	14	175	G	C8-N9-C4	-5.26	104.30	106.40
26	14	782	A	OP1-P-OP2	5.26	127.49	119.60
26	14	965	C	N1-C2-O2	-5.26	115.74	118.90
26	14	2032	G	N1-C2-N2	-5.26	111.46	116.20
26	14	2049	G	C8-N9-C4	-5.26	104.30	106.40
26	14	2584	U	N3-C4-C5	5.26	117.76	114.60
1	13	18	C	O5'-P-OP2	5.26	117.01	110.70
1	13	272	C	C2-N3-C4	5.26	122.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	749	C	C5-C6-N1	5.26	123.63	121.00
1	13	889	A	C5-C6-N6	5.26	127.91	123.70
1	13	925	G	C2-N3-C4	-5.26	109.27	111.90
1	13	1183	A	N7-C8-N9	-5.26	111.17	113.80
1	13	1289	A	N9-C4-C5	5.26	107.91	105.80
26	1H	966	G	C5-N7-C8	5.26	106.93	104.30
26	1H	1597	A	O5'-P-OP2	-5.26	100.96	105.70
26	1H	1672	C	C5-C6-N1	-5.26	118.37	121.00
26	1H	1860	G	C5-C6-N1	-5.26	108.87	111.50
26	1H	2057	A	C8-N9-C4	-5.26	103.69	105.80
26	1H	2607	G	OP1-P-OP2	-5.26	111.71	119.60
26	1H	2849	U	N3-C2-O2	5.26	125.88	122.20
1	1G	851	G	C5-C6-O6	-5.26	125.44	128.60
1	1G	892	A	N1-C6-N6	5.26	121.76	118.60
57	3L	58	A	P-O3'-C3'	5.26	126.01	119.70
26	14	446	G	O5'-P-OP1	-5.26	100.97	105.70
26	14	584	C	C5-C6-N1	-5.26	118.37	121.00
26	14	1857	G	C2-N3-C4	-5.26	109.27	111.90
26	14	2060	A	O5'-P-OP1	5.26	117.02	110.70
26	14	2650	U	C5-C6-N1	-5.26	120.07	122.70
1	13	191	G	N3-C4-C5	-5.26	125.97	128.60
1	13	752	G	C8-N9-C1'	-5.26	120.16	127.00
1	13	815	A	N7-C8-N9	-5.26	111.17	113.80
23	2K	57	C	O5'-P-OP1	5.26	117.01	110.70
26	1H	628	G	C4-C5-C6	-5.26	115.64	118.80
26	1H	668	G	N7-C8-N9	5.26	115.73	113.10
26	1H	1815	A	C6-N1-C2	-5.26	115.44	118.60
26	1H	2592	G	C6-C5-N7	-5.26	127.24	130.40
1	1G	691	G	N1-C6-O6	5.26	123.06	119.90
1	1G	982	U	C6-N1-C1'	-5.26	113.84	121.20
1	1G	1068	G	N1-C6-O6	5.26	123.06	119.90
1	1G	1414	U	C6-N1-C2	-5.26	117.84	121.00
56	1L	32	C	N3-C2-O2	-5.26	118.22	121.90
26	14	448	U	O5'-P-OP2	5.26	117.01	110.70
26	14	1393	A	O5'-P-OP1	5.26	117.01	110.70
26	14	1427	A	C2-N3-C4	-5.26	107.97	110.60
26	14	1922	G	C8-N9-C4	5.26	108.50	106.40
26	14	2305	A	N1-C6-N6	-5.26	115.44	118.60
26	14	2307	G	O4'-C1'-N9	5.26	112.41	108.20
1	13	115	G	C8-N9-C4	-5.26	104.30	106.40
1	13	438	G	N9-C4-C5	5.26	107.50	105.40
1	13	913	A	C6-N1-C2	-5.26	115.44	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	664	C	N1-C2-O2	-5.26	115.75	118.90
26	1H	804	A	C4-C5-N7	-5.26	108.07	110.70
27	16	35	U	OP1-P-O3'	-5.26	93.63	105.20
27	16	54	G	N3-C4-C5	5.26	131.23	128.60
30	21	21	VAL	CG1-CB-CG2	5.26	119.31	110.90
35	58	120	LEU	CA-CB-CG	5.26	127.39	115.30
26	14	1341	U	N3-C2-O2	5.26	125.88	122.20
1	13	319	G	C6-N1-C2	5.26	128.25	125.10
1	13	324	G	C8-N9-C4	-5.26	104.30	106.40
1	13	878	G	N3-C4-N9	5.26	129.15	126.00
1	13	1374	A	C2-N3-C4	-5.26	107.97	110.60
26	1H	195	A	P-O3'-C3'	5.26	126.01	119.70
26	1H	270(H)	C	C5-C6-N1	5.26	123.63	121.00
26	1H	428	A	C4-C5-N7	-5.26	108.07	110.70
26	1H	691	C	O4'-C1'-N1	-5.26	104.00	108.20
26	1H	731	C	N3-C4-N4	-5.26	114.32	118.00
26	1H	959	A	OP1-P-OP2	5.26	127.49	119.60
26	1H	1204	A	C4-C5-C6	5.26	119.63	117.00
26	1H	1606	G	OP1-P-O3'	5.26	116.77	105.20
26	1H	2848	G	C5-C6-O6	5.26	131.75	128.60
27	16	63	G	C2-N3-C4	-5.26	109.27	111.90
1	1G	884	U	OP1-P-O3'	5.26	116.76	105.20
1	1G	1461	G	N1-C2-N2	-5.26	111.47	116.20
26	14	403	U	C4-C5-C6	5.26	122.85	119.70
26	14	551	G	C2-N3-C4	-5.26	109.27	111.90
26	14	595	C	O5'-P-OP1	5.26	117.01	110.70
26	14	962	G	N1-C2-N2	5.26	120.93	116.20
26	14	1108	U	C5-C6-N1	5.26	125.33	122.70
26	14	2021	C	N3-C4-N4	5.26	121.68	118.00
26	14	2364	C	OP2-P-O3'	5.26	116.76	105.20
27	1J	67	G	OP2-P-O3'	5.26	116.77	105.20
1	13	1417	G	C8-N9-C4	-5.25	104.30	106.40
26	1H	98	G	C4-C5-C6	5.25	121.95	118.80
26	1H	338	G	C2-N3-C4	5.25	114.53	111.90
26	1H	950	G	C5-C6-N1	5.25	114.13	111.50
26	1H	2000	G	N3-C4-N9	5.25	129.15	126.00
1	1G	1294	G	N3-C4-C5	5.25	131.23	128.60
26	14	64	A	C6-N1-C2	-5.25	115.45	118.60
26	14	464	U	C4-C5-C6	5.25	122.85	119.70
26	14	1271	G	N9-C4-C5	-5.25	103.30	105.40
26	14	1560	G	N9-C4-C5	-5.25	103.30	105.40
26	14	2415	G	N1-C6-O6	5.25	123.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	765	G	OP1-P-OP2	5.25	127.48	119.60
1	13	882	C	N1-C2-O2	-5.25	115.75	118.90
1	13	956	U	C2-N3-C4	5.25	130.15	127.00
1	13	1259	C	C5-C6-N1	5.25	123.63	121.00
26	1H	1008	C	O5'-P-OP1	-5.25	100.97	105.70
26	1H	1051	G	N3-C4-N9	5.25	129.15	126.00
26	1H	1144	G	N1-C2-N3	-5.25	120.75	123.90
26	1H	1300	U	N3-C2-O2	-5.25	118.52	122.20
26	1H	1755	A	N1-C6-N6	-5.25	115.45	118.60
26	1H	2023	G	C4-C5-C6	5.25	121.95	118.80
26	1H	2708	G	C2-N3-C4	-5.25	109.27	111.90
1	1G	730	G	C5-C6-N1	-5.25	108.87	111.50
1	1G	1487	G	C6-C5-N7	-5.25	127.25	130.40
6	52	21	LEU	CB-CG-CD2	-5.25	102.07	111.00
26	14	266	G	C6-C5-N7	-5.25	127.25	130.40
26	14	1661	G	O5'-P-OP1	5.25	117.00	110.70
26	14	1661	G	C4-C5-N7	5.25	112.90	110.80
26	14	1666	G	O4'-C1'-N9	5.25	112.40	108.20
26	14	1711	C	C2-N3-C4	-5.25	117.27	119.90
26	14	1788	C	OP2-P-O3'	5.25	116.76	105.20
26	14	1800	C	N3-C4-N4	5.25	121.68	118.00
26	14	1824	G	O5'-P-OP2	-5.25	100.97	105.70
26	14	2446	G	N1-C2-N2	-5.25	111.47	116.20
26	14	2454	G	C8-N9-C4	5.25	108.50	106.40
1	13	526	C	C2-N3-C4	-5.25	117.28	119.90
1	13	727	G	C8-N9-C4	-5.25	104.30	106.40
1	13	979	C	N3-C2-O2	5.25	125.58	121.90
1	13	1049	U	OP1-P-O3'	5.25	116.75	105.20
1	13	1482	G	N3-C4-N9	-5.25	122.85	126.00
26	1H	26	G	C4-C5-N7	5.25	112.90	110.80
26	1H	348	G	C5-C6-N1	5.25	114.13	111.50
26	1H	777	A	N9-C4-C5	5.25	107.90	105.80
26	1H	1136	G	C8-N9-C4	5.25	108.50	106.40
26	1H	1659	U	N1-C2-O2	-5.25	119.12	122.80
26	1H	1857	G	C4-C5-C6	5.25	121.95	118.80
26	1H	2032	G	C5-C6-O6	-5.25	125.45	128.60
26	1H	2563	U	N3-C4-C5	5.25	117.75	114.60
26	1H	2574	G	N9-C4-C5	5.25	107.50	105.40
38	88	82	ARG	NE-CZ-NH2	-5.25	117.67	120.30
1	1G	244	U	C6-N1-C1'	-5.25	113.85	121.20
1	1G	663	A	C6-C5-N7	-5.25	128.62	132.30
1	1G	729	A	N7-C8-N9	5.25	116.43	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	113	G	C2-N3-C4	5.25	114.53	111.90
26	14	249	C	OP1-P-OP2	-5.25	111.72	119.60
26	14	525	U	N1-C2-N3	5.25	118.05	114.90
26	14	987	G	C6-N1-C2	-5.25	121.95	125.10
26	14	1380	G	N3-C4-C5	5.25	131.23	128.60
26	14	1495	A	C5-C6-N1	5.25	120.33	117.70
26	14	1627	G	N1-C2-N2	-5.25	111.47	116.20
26	14	2080	G	C4-C5-N7	-5.25	108.70	110.80
26	14	2500	U	N3-C2-O2	-5.25	118.52	122.20
26	14	2606	C	C6-N1-C2	-5.25	118.20	120.30
27	1J	81	G	N3-C4-C5	5.25	131.23	128.60
1	13	42	G	N3-C2-N2	5.25	123.58	119.90
1	13	53	A	N9-C4-C5	-5.25	103.70	105.80
1	13	539	A	O5'-P-OP1	5.25	117.00	110.70
1	13	809	G	N1-C6-O6	-5.25	116.75	119.90
1	13	891	U	OP1-P-OP2	5.25	127.47	119.60
1	13	1462	G	N1-C6-O6	-5.25	116.75	119.90
26	1H	356	G	OP1-P-O3'	5.25	116.75	105.20
26	1H	1129	A	OP1-P-O3'	5.25	116.75	105.20
26	1H	1157	G	C4-N9-C1'	5.25	133.32	126.50
26	1H	1772	G	N9-C1'-C2'	-5.25	106.22	112.00
26	1H	2327	A	C6-C5-N7	5.25	135.97	132.30
26	1H	2537	U	C5-C6-N1	-5.25	120.08	122.70
26	1H	2583	G	N9-C4-C5	-5.25	103.30	105.40
1	1G	853	G	N7-C8-N9	5.25	115.72	113.10
26	14	1930	G	C4-N9-C1'	-5.25	119.68	126.50
1	13	25	C	N3-C2-O2	5.25	125.57	121.90
1	13	947	G	N3-C4-C5	-5.25	125.97	128.60
1	13	1187	G	O5'-P-OP1	-5.25	100.98	105.70
1	13	1477	C	C6-N1-C2	-5.25	118.20	120.30
26	1H	265	A	N3-C4-N9	-5.25	123.20	127.40
26	1H	352	G	C5-C6-N1	-5.25	108.88	111.50
26	1H	1021	A	O4'-C1'-N9	-5.25	104.00	108.20
26	1H	1341	U	N3-C4-C5	-5.25	111.45	114.60
26	1H	1443	G	N1-C2-N3	5.25	127.05	123.90
26	1H	1446	C	C2-N3-C4	5.25	122.52	119.90
26	1H	1670	C	C5-C4-N4	-5.25	116.53	120.20
26	1H	2019	A	C8-N9-C4	-5.25	103.70	105.80
26	1H	2035	G	O5'-P-OP1	-5.25	100.98	105.70
26	1H	2414	G	N1-C2-N3	5.25	127.05	123.90
1	1G	150	C	N3-C4-N4	5.25	121.67	118.00
1	1G	522	C	C5-C4-N4	5.25	123.87	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	750	G	N1-C6-O6	-5.25	116.75	119.90
26	14	470	A	C4-C5-N7	5.25	113.33	110.70
26	14	1408	C	N3-C4-N4	5.25	121.67	118.00
26	14	1635	G	C6-N1-C2	-5.25	121.95	125.10
26	14	2044	C	C2-N1-C1'	5.25	124.57	118.80
26	14	2047	U	C2-N3-C4	-5.25	123.85	127.00
26	14	2292	C	C6-N1-C2	5.25	122.40	120.30
26	14	2548	G	C5-C6-O6	-5.25	125.45	128.60
26	14	2627	G	N1-C6-O6	5.25	123.05	119.90
26	14	2847	U	C5-C4-O4	-5.25	122.75	125.90
27	1J	55	U	C2-N3-C4	5.25	130.15	127.00
48	E5	20	ARG	NE-CZ-NH1	-5.25	117.68	120.30
1	13	240	C	C5-C6-N1	-5.25	118.38	121.00
1	13	875	C	N3-C4-C5	-5.25	119.80	121.90
26	1H	80	G	N9-C4-C5	5.25	107.50	105.40
26	1H	211	A	C5-N7-C8	-5.25	101.28	103.90
26	1H	1397	U	OP1-P-OP2	-5.25	111.73	119.60
26	1H	2029	G	C2-N3-C4	-5.25	109.28	111.90
26	1H	2282	G	OP1-P-OP2	-5.25	111.73	119.60
26	1H	2506	U	C2-N3-C4	5.25	130.15	127.00
26	1H	2721	A	O5'-P-OP1	-5.25	100.98	105.70
26	1H	2871	C	C6-N1-C1'	5.25	127.09	120.80
26	14	270(R)	G	N3-C4-N9	-5.25	122.85	126.00
26	14	557	U	C6-N1-C2	5.25	124.15	121.00
26	14	1385	G	C5-C6-O6	-5.25	125.45	128.60
26	14	1938	A	O4'-C1'-N9	5.25	112.40	108.20
26	14	1975	G	N1-C2-N2	5.25	120.92	116.20
26	14	2367	G	N7-C8-N9	5.25	115.72	113.10
26	14	2554	U	O5'-P-OP2	5.25	117.00	110.70
1	13	1333	A	OP2-P-O3'	5.25	116.74	105.20
1	13	1515	C	N1-C2-N3	-5.25	115.53	119.20
23	2K	36	A	C8-N9-C4	5.25	107.90	105.80
26	1H	270(B)	A	N1-C6-N6	-5.25	115.45	118.60
26	1H	288	C	N3-C4-C5	-5.25	119.80	121.90
26	1H	868	U	N3-C4-C5	-5.25	111.45	114.60
26	1H	1248	G	OP2-P-O3'	5.25	116.74	105.20
26	1H	1906	G	OP2-P-O3'	5.25	116.74	105.20
26	1H	2506	U	C5-C4-O4	5.25	129.05	125.90
55	Q8	30	ARG	NE-CZ-NH1	5.25	122.92	120.30
1	1G	180	U	C2-N3-C4	5.25	130.15	127.00
1	1G	500	G	N1-C6-O6	-5.25	116.75	119.90
1	1G	831	U	N3-C4-C5	-5.25	111.45	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1231	G	OP1-P-OP2	5.25	127.47	119.60
26	14	543	C	C2-N1-C1'	5.25	124.57	118.80
26	14	1945	G	C5-C6-N1	5.25	114.12	111.50
26	14	2242	G	N1-C2-N2	5.25	120.92	116.20
26	14	2578	G	C5-N7-C8	5.25	106.92	104.30
27	1J	7	G	N7-C8-N9	-5.25	110.48	113.10
1	13	190	G	C2-N3-C4	5.24	114.52	111.90
1	13	493	G	C5-C6-N1	-5.24	108.88	111.50
1	13	617	G	N3-C4-C5	5.24	131.22	128.60
1	13	1111	A	N3-C4-C5	-5.24	123.13	126.80
1	13	1174	G	N3-C4-C5	5.24	131.22	128.60
1	13	1239	A	N1-C6-N6	5.24	121.75	118.60
1	13	1338	G	C6-C5-N7	5.24	133.55	130.40
1	13	1525	G	C5-N7-C8	5.24	106.92	104.30
24	3K	43	U	C5-C4-O4	-5.24	122.75	125.90
26	1H	20	C	OP2-P-O3'	5.24	116.73	105.20
26	1H	706	A	C6-C5-N7	-5.24	128.63	132.30
26	1H	809	G	N1-C6-O6	5.24	123.05	119.90
26	1H	1126	A	C4-C5-N7	-5.24	108.08	110.70
26	1H	1640	C	N1-C2-N3	-5.24	115.53	119.20
26	1H	2054	A	N9-C4-C5	5.24	107.90	105.80
26	1H	2281	C	O5'-P-OP2	-5.24	100.98	105.70
26	1H	2396	G	C4-C5-C6	-5.24	115.65	118.80
26	1H	2582	G	OP1-P-OP2	-5.24	111.74	119.60
26	14	248	G	C6-N1-C2	-5.24	121.95	125.10
26	14	614	U	P-O3'-C3'	5.24	125.99	119.70
26	14	827	U	O5'-P-OP1	5.24	116.99	110.70
26	14	1256	G	N1-C6-O6	5.24	123.05	119.90
26	14	1330	C	C5-C6-N1	-5.24	118.38	121.00
26	14	1579	A	C6-C5-N7	-5.24	128.63	132.30
26	14	1951	U	N1-C2-O2	-5.24	119.13	122.80
26	14	2228	G	C4-N9-C1'	5.24	133.32	126.50
26	14	2359	C	C5-C6-N1	-5.24	118.38	121.00
35	15	82	LEU	CA-CB-CG	-5.24	103.24	115.30
26	1H	143	C	N1-C2-N3	-5.24	115.53	119.20
26	1H	1238	G	N1-C2-N3	5.24	127.05	123.90
26	1H	1313	U	OP1-P-OP2	-5.24	111.74	119.60
26	1H	2557	G	N1-C2-N2	5.24	120.92	116.20
27	16	31	C	N3-C2-O2	-5.24	118.23	121.90
1	1G	1208	C	N3-C2-O2	-5.24	118.23	121.90
26	14	1473	G	N9-C4-C5	-5.24	103.30	105.40
27	1J	54	G	C5-N7-C8	-5.24	101.68	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	262	A	C5-C6-N6	5.24	127.89	123.70
1	13	730	G	N9-C4-C5	5.24	107.50	105.40
1	13	964	A	C2-N3-C4	-5.24	107.98	110.60
26	1H	229	A	C2-N3-C4	5.24	113.22	110.60
26	1H	234	C	C5-C6-N1	-5.24	118.38	121.00
26	1H	404	C	P-O3'-C3'	5.24	125.99	119.70
26	1H	536	A	OP2-P-O3'	5.24	116.73	105.20
26	1H	769	G	N7-C8-N9	-5.24	110.48	113.10
26	1H	1461	G	N3-C4-C5	-5.24	125.98	128.60
26	1H	1726	G	C5-C6-O6	5.24	131.75	128.60
26	1H	1989	G	N9-C4-C5	5.24	107.50	105.40
26	1H	2067	G	C8-N9-C4	-5.24	104.30	106.40
26	1H	2069	G	OP2-P-O3'	5.24	116.73	105.20
1	1G	550	G	N1-C6-O6	5.24	123.04	119.90
1	1G	882	C	OP1-P-O3'	5.24	116.73	105.20
1	1G	1187	G	N3-C2-N2	-5.24	116.23	119.90
26	14	777	A	OP2-P-O3'	5.24	116.73	105.20
26	14	784	A	N3-C4-N9	-5.24	123.21	127.40
26	14	1334	G	O5'-P-OP1	-5.24	100.98	105.70
26	14	1627	G	N3-C4-N9	-5.24	122.86	126.00
26	14	2021	C	N3-C4-C5	5.24	124.00	121.90
26	14	2056	G	N3-C2-N2	-5.24	116.23	119.90
26	14	2531	A	C8-N9-C4	5.24	107.90	105.80
27	1J	48	A	C4-C5-C6	5.24	119.62	117.00
1	13	237	C	C5-C6-N1	-5.24	118.38	121.00
1	13	335	C	N1-C2-N3	5.24	122.87	119.20
1	13	798	G	OP2-P-O3'	5.24	116.73	105.20
26	1H	67	U	C6-N1-C2	-5.24	117.86	121.00
26	1H	417	C	C5-C4-N4	-5.24	116.53	120.20
26	1H	689	A	C8-N9-C4	5.24	107.90	105.80
26	1H	1215	G	C4-C5-C6	5.24	121.94	118.80
26	1H	1434	A	N1-C6-N6	-5.24	115.46	118.60
26	1H	1834	U	N3-C2-O2	-5.24	118.53	122.20
26	1H	2074	U	N1-C2-O2	-5.24	119.13	122.80
26	1H	2245	U	O4'-C1'-N1	5.24	112.39	108.20
29	11	35	LYS	CG-CD-CE	-5.24	96.19	111.90
1	1G	73	G	C2-N3-C4	-5.24	109.28	111.90
1	1G	872	A	O5'-P-OP2	5.24	116.98	110.70
1	1G	921	U	N3-C4-O4	5.24	123.07	119.40
26	14	3	U	C5-C6-N1	5.24	125.32	122.70
26	14	556	G	C8-N9-C4	5.24	108.50	106.40
26	14	1726	G	C8-N9-C4	-5.24	104.30	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1796	U	N3-C4-O4	-5.24	115.73	119.40
26	14	1839	G	N1-C2-N2	-5.24	111.48	116.20
26	14	1926	U	N1-C2-O2	-5.24	119.13	122.80
26	14	1951	U	C6-N1-C1'	5.24	128.53	121.20
26	14	1986	A	C6-N1-C2	-5.24	115.46	118.60
26	14	2429	G	O5'-P-OP1	5.24	116.99	110.70
26	14	2509	G	C5-C6-N1	-5.24	108.88	111.50
26	14	2564	A	N1-C6-N6	-5.24	115.46	118.60
1	13	743	U	N3-C4-O4	-5.24	115.73	119.40
1	13	1311	G	C2-N3-C4	-5.24	109.28	111.90
26	1H	1214	A	N9-C4-C5	-5.24	103.70	105.80
26	1H	1499	C	OP2-P-O3'	5.24	116.72	105.20
26	1H	1501	C	C2-N3-C4	5.24	122.52	119.90
26	1H	2218	G	C8-N9-C4	-5.24	104.31	106.40
1	1G	144	G	C8-N9-C4	-5.24	104.31	106.40
1	1G	1363	A	N7-C8-N9	-5.24	111.18	113.80
25	4L	13	A	N1-C6-N6	-5.24	115.46	118.60
26	14	1526	G	N3-C2-N2	5.24	123.57	119.90
26	14	1695	G	C8-N9-C1'	-5.24	120.19	127.00
26	14	1955	U	O4'-C1'-N1	5.24	112.39	108.20
26	14	2516	G	OP2-P-O3'	5.24	116.72	105.20
1	13	478	A	C5-C6-N1	-5.24	115.08	117.70
1	13	1189	C	O5'-P-OP2	5.24	116.98	110.70
26	1H	663	G	N1-C2-N2	-5.24	111.49	116.20
26	1H	986	C	OP1-P-OP2	-5.24	111.75	119.60
26	1H	1014	U	N1-C2-O2	-5.24	119.13	122.80
26	1H	1619	G	C5-N7-C8	5.24	106.92	104.30
1	1G	73	G	N3-C4-N9	-5.24	122.86	126.00
1	1G	169	C	C5-C6-N1	5.24	123.62	121.00
1	1G	711	G	N1-C2-N2	-5.24	111.49	116.20
26	14	396	G	C6-C5-N7	-5.24	127.26	130.40
26	14	1543	A	N1-C6-N6	-5.24	115.46	118.60
44	A5	16	LYS	CD-CE-NZ	-5.24	99.66	111.70
1	13	494	U	N3-C4-O4	5.23	123.06	119.40
1	13	1304	G	O5'-P-OP1	-5.23	100.99	105.70
26	1H	76	C	N3-C4-N4	5.23	121.66	118.00
26	1H	294	A	N1-C2-N3	-5.23	126.68	129.30
26	1H	670	A	N1-C6-N6	5.23	121.74	118.60
26	1H	775	G	N7-C8-N9	5.23	115.72	113.10
26	1H	1544	C	N3-C4-C5	5.23	123.99	121.90
26	1H	2056	G	N1-C2-N3	5.23	127.04	123.90
26	1H	2094	G	C8-N9-C4	-5.23	104.31	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2640	G	OP1-P-OP2	5.23	127.45	119.60
26	1H	2891	G	O5'-P-OP2	5.23	116.98	110.70
1	1G	609	A	N9-C4-C5	5.23	107.89	105.80
1	1G	718	G	C6-C5-N7	-5.23	127.26	130.40
26	14	1451	C	P-O3'-C3'	-5.23	113.42	119.70
26	14	1886	C	C4-C5-C6	-5.23	114.78	117.40
26	1H	270(W)	G	N3-C4-N9	5.23	129.14	126.00
26	1H	807	U	O4'-C1'-N1	-5.23	104.01	108.20
26	1H	1629	U	C6-N1-C2	-5.23	117.86	121.00
26	1H	1902	C	N1-C2-O2	-5.23	115.76	118.90
26	1H	2639	A	C5-C6-N6	-5.23	119.52	123.70
26	1H	2865	U	OP1-P-OP2	5.23	127.45	119.60
1	1G	411	A	C6-N1-C2	5.23	121.74	118.60
1	1G	790	A	C5-C6-N1	5.23	120.32	117.70
1	1G	930	C	N3-C4-C5	5.23	123.99	121.90
1	1G	994	A	C8-N9-C4	-5.23	103.71	105.80
1	1G	1437	C	C6-N1-C2	5.23	122.39	120.30
26	14	137	C	N3-C2-O2	-5.23	118.24	121.90
26	14	270(X)	G	C6-C5-N7	-5.23	127.26	130.40
26	14	328	U	N3-C4-C5	-5.23	111.46	114.60
26	14	1364	G	C5-N7-C8	5.23	106.92	104.30
26	14	1662	C	N3-C4-C5	-5.23	119.81	121.90
26	14	2336	A	OP1-P-OP2	5.23	127.45	119.60
26	14	2534	A	C5-N7-C8	-5.23	101.28	103.90
26	14	2602	A	O5'-P-OP1	-5.23	100.99	105.70
1	13	1269	A	C2-N3-C4	5.23	113.22	110.60
1	13	1484	C	C2-N3-C4	-5.23	117.28	119.90
26	1H	478	A	O5'-P-OP1	-5.23	100.99	105.70
26	1H	645	C	O5'-P-OP2	-5.23	100.99	105.70
26	1H	795	C	C5-C6-N1	-5.23	118.39	121.00
26	1H	1000	A	C2-N3-C4	5.23	113.22	110.60
26	1H	1443	G	C5-N7-C8	-5.23	101.68	104.30
26	1H	1818	U	N3-C2-O2	-5.23	118.54	122.20
26	1H	2135	A	C8-N9-C4	-5.23	103.71	105.80
26	1H	2538	C	C5-C4-N4	-5.23	116.54	120.20
26	1H	2694	G	N3-C4-N9	5.23	129.14	126.00
26	1H	2701	C	N1-C2-O2	-5.23	115.76	118.90
1	1G	6	G	OP1-P-O3'	5.23	116.71	105.20
1	1G	900	A	O5'-P-OP1	-5.23	100.99	105.70
1	1G	969	A	OP1-P-OP2	5.23	127.44	119.60
26	14	206	U	O5'-P-OP2	-5.23	100.99	105.70
26	14	450	G	C2-N3-C4	-5.23	109.28	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	648	G	OP2-P-O3'	5.23	116.71	105.20
26	14	752	A	P-O3'-C3'	5.23	125.98	119.70
26	14	1218	C	C6-N1-C2	5.23	122.39	120.30
26	14	1259	G	OP1-P-O3'	-5.23	93.69	105.20
26	14	1418	G	C8-N9-C4	5.23	108.49	106.40
26	14	1643	G	N3-C2-N2	-5.23	116.24	119.90
26	14	2240	C	O5'-P-OP2	-5.23	100.99	105.70
26	14	2539	C	OP1-P-OP2	5.23	127.45	119.60
26	14	2692	C	O4'-C1'-N1	5.23	112.38	108.20
26	1H	505	A	C2-N3-C4	5.23	113.22	110.60
26	1H	707	G	O5'-P-OP2	-5.23	100.99	105.70
26	1H	1415	U	O4'-C1'-N1	5.23	112.38	108.20
26	1H	1807	G	N3-C4-C5	5.23	131.21	128.60
26	14	626	U	C2-N3-C4	-5.23	123.86	127.00
26	14	736	C	N3-C4-N4	5.23	121.66	118.00
26	14	2623	G	N9-C4-C5	5.23	107.49	105.40
1	13	566	G	O5'-P-OP2	-5.23	101.00	105.70
1	13	580	U	C6-N1-C2	5.23	124.14	121.00
1	13	1509	C	C2-N1-C1'	-5.23	113.05	118.80
26	1H	239	U	C2-N1-C1'	-5.23	111.43	117.70
26	1H	374	A	OP1-P-OP2	5.23	127.44	119.60
26	1H	638	G	C2-N3-C4	-5.23	109.29	111.90
26	1H	1004	C	OP1-P-O3'	5.23	116.70	105.20
26	1H	1239	G	N9-C4-C5	5.23	107.49	105.40
26	1H	1834	U	OP2-P-O3'	5.23	116.70	105.20
26	1H	2225	A	OP1-P-OP2	-5.23	111.76	119.60
26	1H	2395	C	N1-C2-N3	-5.23	115.54	119.20
26	1H	2434	A	C4-C5-C6	-5.23	114.39	117.00
1	1G	174	C	C5-C6-N1	5.23	123.61	121.00
1	1G	778	G	C8-N9-C1'	-5.23	120.20	127.00
26	14	548	A	C2-N3-C4	5.23	113.21	110.60
26	14	1467	C	C4-C5-C6	5.23	120.01	117.40
26	14	1477	A	C4-C5-N7	-5.23	108.09	110.70
26	14	1497	U	N3-C4-O4	-5.23	115.74	119.40
26	14	1545(A)	A	N1-C6-N6	5.23	121.74	118.60
26	14	1583	A	C4-C5-N7	5.23	113.31	110.70
26	14	1892	C	C5-C6-N1	5.23	123.61	121.00
26	14	1984	G	N1-C2-N3	5.23	127.04	123.90
26	14	2304	G	N1-C2-N2	-5.23	111.50	116.20
26	14	2827	C	C2-N1-C1'	-5.23	113.05	118.80
1	13	909	A	O5'-P-OP1	-5.23	101.00	105.70
26	1H	948	G	C5-C6-O6	-5.23	125.47	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1624	G	C6-C5-N7	5.23	133.54	130.40
26	1H	1795	C	N3-C4-C5	-5.23	119.81	121.90
26	1H	2306	C	N1-C2-N3	-5.23	115.54	119.20
27	16	71	C	N1-C2-O2	-5.23	115.77	118.90
26	14	59	U	C4-C5-C6	5.23	122.84	119.70
26	14	540	G	N3-C4-N9	-5.23	122.86	126.00
26	14	932	G	C6-C5-N7	5.23	133.54	130.40
26	14	2255	G	N3-C4-C5	-5.23	125.99	128.60
26	14	2870	C	C5-C6-N1	5.23	123.61	121.00
1	13	803	G	N1-C2-N3	5.22	127.03	123.90
1	13	1092	A	C8-N9-C4	-5.22	103.71	105.80
26	1H	307	G	C4-N9-C1'	5.22	133.29	126.50
26	1H	471	A	C2-N3-C4	-5.22	107.99	110.60
26	1H	728	G	C8-N9-C1'	-5.22	120.21	127.00
26	1H	1628	G	C4-C5-N7	-5.22	108.71	110.80
26	1H	1665	A	C4-C5-N7	5.22	113.31	110.70
26	1H	1689	A	C5-C6-N6	5.22	127.88	123.70
26	1H	2246	G	OP1-P-O3'	5.22	116.69	105.20
1	1G	14	U	C2-N3-C4	5.22	130.13	127.00
1	1G	196	A	C5-C6-N6	5.22	127.88	123.70
1	1G	500	G	N9-C4-C5	5.22	107.49	105.40
1	1G	535	A	N9-C4-C5	5.22	107.89	105.80
1	1G	578	C	O5'-P-OP2	5.22	116.97	110.70
23	2L	58	A	O5'-P-OP2	5.22	116.97	110.70
26	14	128	C	C3'-C2'-C1'	-5.22	97.32	101.50
26	14	1652	A	N9-C4-C5	5.22	107.89	105.80
26	14	1954	G	C4-C5-N7	-5.22	108.71	110.80
26	14	2586	C	C5-C6-N1	5.22	123.61	121.00
46	C5	88	LYS	CD-CE-NZ	5.22	123.72	111.70
1	13	331	G	N3-C4-C5	5.22	131.21	128.60
1	13	977	A	N3-C4-C5	-5.22	123.14	126.80
24	3K	15	G	C8-N9-C4	-5.22	104.31	106.40
26	1H	360	G	N3-C2-N2	5.22	123.56	119.90
26	1H	494	G	N3-C2-N2	5.22	123.56	119.90
26	1H	745	G	C6-C5-N7	-5.22	127.27	130.40
26	1H	981	A	C6-N1-C2	5.22	121.73	118.60
26	1H	1189	A	C5-N7-C8	-5.22	101.29	103.90
26	1H	1886	C	OP1-P-OP2	-5.22	111.77	119.60
26	1H	2427	C	OP2-P-O3'	5.22	116.69	105.20
26	1H	2711	A	OP2-P-O3'	-5.22	93.71	105.20
26	1H	2848	G	N9-C4-C5	5.22	107.49	105.40
1	1G	262	A	C4-C5-N7	5.22	113.31	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	800	G	N9-C4-C5	5.22	107.49	105.40
1	1G	826	C	N3-C2-O2	-5.22	118.24	121.90
26	14	18	C	C6-N1-C1'	5.22	127.07	120.80
26	14	43	G	C5-C6-O6	-5.22	125.47	128.60
26	14	95	G	C8-N9-C4	5.22	108.49	106.40
26	14	1455	G	N1-C6-O6	5.22	123.03	119.90
26	14	1809	A	C4-C5-N7	5.22	113.31	110.70
26	14	1907	G	C2-N3-C4	-5.22	109.29	111.90
26	14	2243	U	C2-N3-C4	-5.22	123.87	127.00
26	1H	1391	U	C6-N1-C1'	-5.22	113.89	121.20
26	1H	2767	C	N3-C2-O2	-5.22	118.25	121.90
26	14	640	C	O5'-P-OP1	5.22	116.97	110.70
26	14	997	G	OP1-P-OP2	-5.22	111.77	119.60
26	14	2721	A	O5'-P-OP1	-5.22	101.00	105.70
1	13	609	A	N9-C4-C5	5.22	107.89	105.80
26	1H	270(W)	G	C5-C6-N1	5.22	114.11	111.50
26	1H	316	C	C5-C6-N1	-5.22	118.39	121.00
26	1H	798	G	C5-C6-O6	5.22	131.73	128.60
26	1H	853	G	C8-N9-C4	5.22	108.49	106.40
26	1H	966	G	N1-C2-N3	5.22	127.03	123.90
26	1H	1557	C	OP1-P-O3'	5.22	116.69	105.20
26	1H	2658	C	C5-C6-N1	5.22	123.61	121.00
27	16	49	C	C5-C6-N1	5.22	123.61	121.00
1	1G	25	C	O5'-P-OP2	-5.22	101.00	105.70
1	1G	33	A	N7-C8-N9	5.22	116.41	113.80
1	1G	428	G	N3-C4-N9	-5.22	122.87	126.00
1	1G	796	C	O5'-P-OP2	-5.22	101.00	105.70
56	1L	74	C	N3-C4-N4	-5.22	114.35	118.00
26	14	134	C	C5-C6-N1	-5.22	118.39	121.00
26	14	251	A	C2-N3-C4	5.22	113.21	110.60
26	14	750	A	C6-N1-C2	5.22	121.73	118.60
26	14	1271	G	O5'-P-OP1	5.22	116.96	110.70
26	14	1443	G	C4-N9-C1'	5.22	133.28	126.50
26	14	1479	G	N1-C6-O6	5.22	123.03	119.90
26	14	2016	U	N1-C2-O2	-5.22	119.15	122.80
26	14	2369	A	OP1-P-OP2	5.22	127.43	119.60
26	14	2409	G	C5-N7-C8	-5.22	101.69	104.30
26	14	2502	G	O4'-C1'-N9	-5.22	104.02	108.20
26	14	2579	C	N3-C4-C5	-5.22	119.81	121.90
26	14	2699	C	N3-C2-O2	5.22	125.55	121.90
26	1H	1262	A	O4'-C1'-N9	-5.22	104.03	108.20
26	1H	1285	G	C5-C6-N1	-5.22	108.89	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	686	G	P-O3'-C3'	5.22	125.96	119.70
26	14	717	G	N9-C4-C5	-5.22	103.31	105.40
1	13	42	G	N9-C4-C5	-5.22	103.31	105.40
1	13	151	A	N1-C6-N6	-5.22	115.47	118.60
1	13	370	C	O5'-P-OP1	5.22	116.96	110.70
1	13	438	G	C4-C5-N7	-5.22	108.71	110.80
1	13	716	A	C2-N3-C4	5.22	113.21	110.60
23	2K	53	G	C8-N9-C4	-5.22	104.31	106.40
26	1H	63	U	C6-N1-C2	-5.22	117.87	121.00
26	1H	293	U	OP1-P-OP2	5.22	127.42	119.60
26	1H	452	G	OP2-P-O3'	5.22	116.67	105.20
26	1H	455	C	OP1-P-OP2	-5.22	111.78	119.60
26	1H	803	U	C4-C5-C6	5.22	122.83	119.70
26	1H	958	U	N3-C2-O2	-5.22	118.55	122.20
26	1H	2087	G	OP1-P-OP2	-5.22	111.77	119.60
40	A8	88	ASP	CB-CG-OD2	5.22	122.99	118.30
1	1G	232	G	C4-N9-C1'	5.22	133.28	126.50
1	1G	1393	U	C6-N1-C2	-5.22	117.87	121.00
26	14	260	G	C5-C6-O6	5.22	131.73	128.60
26	14	458	G	N3-C2-N2	5.22	123.55	119.90
26	14	527	C	N3-C4-N4	5.22	121.65	118.00
26	14	2337	G	C6-C5-N7	-5.22	127.27	130.40
26	14	2712	U	N3-C4-C5	5.22	117.73	114.60
1	13	119	A	O5'-P-OP2	5.21	116.96	110.70
1	13	731	G	N3-C4-C5	-5.21	125.99	128.60
1	13	940	C	C4-C5-C6	-5.21	114.79	117.40
26	1H	317	G	OP1-P-OP2	-5.21	111.78	119.60
26	1H	411	G	OP1-P-OP2	5.21	127.42	119.60
26	1H	430	G	C2-N3-C4	-5.21	109.29	111.90
26	1H	945	A	P-O3'-C3'	5.21	125.96	119.70
26	1H	1024	G	N1-C6-O6	5.21	123.03	119.90
26	1H	1375	C	C5-C4-N4	-5.21	116.55	120.20
26	1H	1399	C	N3-C4-N4	5.21	121.65	118.00
26	1H	1726	G	C4-C5-N7	-5.21	108.71	110.80
26	1H	1822	G	N3-C4-N9	-5.21	122.87	126.00
26	1H	1972	A	C5-C6-N6	-5.21	119.53	123.70
26	1H	2053	G	O5'-P-OP2	-5.21	101.01	105.70
26	1H	2085	C	C6-N1-C2	5.21	122.39	120.30
26	1H	2211	G	O5'-P-OP2	-5.21	101.01	105.70
26	1H	2236	C	OP2-P-O3'	5.21	116.67	105.20
1	1G	610	G	O5'-P-OP2	-5.21	101.01	105.70
26	14	1428	C	C6-N1-C2	5.21	122.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1753	G	C8-N9-C4	-5.21	104.31	106.40
26	14	1896	G	N3-C4-C5	-5.21	125.99	128.60
26	14	2306	C	C6-N1-C2	-5.21	118.21	120.30
26	14	2705	A	N1-C6-N6	-5.21	115.47	118.60
26	14	2788	C	C6-N1-C2	5.21	122.39	120.30
26	14	2845	G	N3-C4-N9	-5.21	122.87	126.00
1	13	1252	A	C4-C5-N7	-5.21	108.09	110.70
26	1H	111	A	C6-N1-C2	-5.21	115.47	118.60
26	1H	598	G	C2-N3-C4	5.21	114.51	111.90
26	1H	732	C	OP1-P-O3'	5.21	116.67	105.20
26	1H	774	A	OP1-P-OP2	5.21	127.42	119.60
26	1H	823	G	N1-C6-O6	5.21	123.03	119.90
26	1H	1381	G	N3-C4-C5	5.21	131.21	128.60
26	1H	1444	G	C5-C6-O6	5.21	131.73	128.60
26	1H	1936	A	C4-C5-N7	5.21	113.31	110.70
26	1H	2387	U	OP2-P-O3'	5.21	116.67	105.20
27	16	87	G	N3-C4-N9	-5.21	122.87	126.00
37	78	64	LYS	CD-CE-NZ	5.21	123.69	111.70
1	1G	237	C	N3-C4-C5	5.21	123.98	121.90
1	1G	308	C	C4-C5-C6	5.21	120.01	117.40
1	1G	1407	C	O5'-P-OP1	-5.21	101.01	105.70
1	1G	1469	G	N1-C2-N3	5.21	127.03	123.90
26	14	149	A	N1-C6-N6	5.21	121.73	118.60
26	14	956	G	C4-C5-C6	5.21	121.93	118.80
1	13	722	A	OP1-P-OP2	-5.21	111.78	119.60
1	13	825	G	OP2-P-O3'	5.21	116.66	105.20
26	1H	26	G	N9-C4-C5	-5.21	103.32	105.40
26	1H	137	C	OP1-P-O3'	-5.21	93.73	105.20
26	1H	1164	G	O4'-C1'-N9	5.21	112.37	108.20
26	1H	1688	U	N3-C2-O2	-5.21	118.55	122.20
26	1H	1852	C	C5-C6-N1	-5.21	118.39	121.00
26	1H	2558	C	OP1-P-OP2	-5.21	111.78	119.60
26	1H	2647	U	N3-C4-O4	-5.21	115.75	119.40
33	51	6	ARG	NE-CZ-NH1	-5.21	117.69	120.30
54	P8	39	ARG	CD-NE-CZ	5.21	130.90	123.60
1	1G	535	A	C5-N7-C8	5.21	106.51	103.90
1	1G	546	G	C5-C6-O6	5.21	131.73	128.60
1	1G	856	C	N1-C2-O2	-5.21	115.77	118.90
26	14	721	C	O5'-P-OP2	5.21	116.95	110.70
26	14	1711	C	C5-C6-N1	-5.21	118.39	121.00
26	14	1754	C	OP1-P-O3'	5.21	116.66	105.20
26	14	1917	U	C2-N3-C4	5.21	130.13	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
27	1J	46	A	C5-N7-C8	5.21	106.51	103.90
1	13	150	C	C6-N1-C2	-5.21	118.22	120.30
1	13	1478	C	N3-C4-C5	5.21	123.98	121.90
26	1H	136	G	N3-C4-C5	5.21	131.21	128.60
26	1H	459	U	O5'-P-OP1	5.21	116.95	110.70
26	1H	1040	C	N1-C2-O2	5.21	122.03	118.90
26	1H	1966	A	N3-C4-N9	-5.21	123.23	127.40
26	1H	1973	G	N9-C4-C5	5.21	107.48	105.40
26	1H	2547	U	C5-C4-O4	-5.21	122.77	125.90
1	1G	191(A)	G	C8-N9-C4	5.21	108.48	106.40
23	2L	35	C	OP1-P-O3'	5.21	116.66	105.20
26	14	1158	C	C4-C5-C6	5.21	120.00	117.40
26	14	1309	G	C4-C5-N7	-5.21	108.72	110.80
1	13	1418	A	C5-C6-N1	5.21	120.31	117.70
24	3K	3	G	C8-N9-C4	-5.21	104.32	106.40
25	4K	13	A	N1-C6-N6	-5.21	115.47	118.60
26	1H	477	A	C5-C6-N6	5.21	127.87	123.70
26	1H	696	G	N3-C2-N2	5.21	123.55	119.90
26	1H	854	G	N9-C4-C5	-5.21	103.32	105.40
26	1H	1413	G	OP1-P-OP2	-5.21	111.79	119.60
26	1H	1497	U	N3-C2-O2	5.21	125.85	122.20
26	1H	1771	C	N1-C2-O2	-5.21	115.78	118.90
26	1H	2372	G	C5-C6-N1	-5.21	108.90	111.50
26	1H	2844	G	C5-N7-C8	-5.21	101.70	104.30
1	1G	46	G	N3-C2-N2	-5.21	116.25	119.90
1	1G	122	G	OP2-P-O3'	5.21	116.66	105.20
26	14	477	A	OP1-P-O3'	5.21	116.66	105.20
26	14	1283	G	N3-C4-N9	5.21	129.13	126.00
26	14	1437	C	C5-C6-N1	5.21	123.60	121.00
26	14	1600	C	OP1-P-O3'	5.21	116.66	105.20
26	14	2395	C	OP1-P-OP2	-5.21	111.79	119.60
26	14	2824	C	C4-C5-C6	5.21	120.00	117.40
1	13	93	U	C5-C6-N1	5.21	125.30	122.70
1	13	701	C	N1-C2-O2	5.21	122.02	118.90
1	13	865	A	C5-N7-C8	-5.21	101.30	103.90
24	3K	34	U	N1-C2-N3	-5.21	111.78	114.90
26	1H	29	U	OP1-P-OP2	-5.21	111.79	119.60
26	1H	258	G	N3-C4-N9	5.21	129.12	126.00
26	1H	621	A	C4-C5-C6	5.21	119.60	117.00
26	1H	2077	A	C6-N1-C2	-5.21	115.48	118.60
26	1H	2248	C	OP1-P-OP2	5.21	127.41	119.60
27	16	45	A	C4-C5-C6	5.21	119.60	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	617	G	N3-C4-N9	-5.21	122.88	126.00
1	1G	775	G	C5-C6-O6	5.21	131.72	128.60
1	1G	1313	U	N3-C4-O4	5.21	123.04	119.40
56	1L	45	G	O4'-C1'-N9	5.21	112.36	108.20
26	14	524	U	C2-N1-C1'	5.21	123.95	117.70
26	14	526	A	N9-C4-C5	5.21	107.88	105.80
26	14	619	G	C8-N9-C4	-5.21	104.32	106.40
26	14	763	G	C8-N9-C4	-5.21	104.32	106.40
26	14	2464	C	C2-N1-C1'	-5.21	113.07	118.80
26	14	2731	G	N9-C4-C5	5.21	107.48	105.40
26	14	2772	C	C2-N3-C4	-5.21	117.30	119.90
1	13	365	U	C2-N1-C1'	5.21	123.95	117.70
1	13	1106	G	N9-C4-C5	5.21	107.48	105.40
26	1H	750	A	C4-C5-C6	-5.21	114.40	117.00
26	1H	1285	G	OP1-P-OP2	5.21	127.41	119.60
26	1H	1559	G	C3'-C2'-C1'	-5.21	97.34	101.50
26	1H	1561	G	N1-C6-O6	-5.21	116.78	119.90
26	1H	1911	U	OP2-P-O3'	5.21	116.65	105.20
26	1H	2710	C	C4-C5-C6	5.21	120.00	117.40
1	1G	147	G	N1-C6-O6	5.21	123.02	119.90
26	14	1155	A	N1-C2-N3	5.21	131.90	129.30
26	14	1446	C	C6-N1-C2	-5.21	118.22	120.30
26	14	1907	G	N7-C8-N9	-5.21	110.50	113.10
26	14	2040	C	C2-N3-C4	-5.21	117.30	119.90
26	14	2544	G	C6-C5-N7	-5.21	127.28	130.40
1	13	31	G	N3-C4-C5	-5.20	126.00	128.60
1	13	117	G	C5-C6-N1	-5.20	108.90	111.50
1	13	795	C	C2-N3-C4	-5.20	117.30	119.90
1	13	925	G	C6-C5-N7	-5.20	127.28	130.40
1	13	1399	C	N3-C4-N4	5.20	121.64	118.00
26	1H	768	G	C8-N9-C1'	-5.20	120.23	127.00
26	1H	983	A	C4-C5-C6	-5.20	114.40	117.00
26	1H	995	C	OP1-P-OP2	-5.20	111.80	119.60
26	1H	2443	C	C2-N3-C4	-5.20	117.30	119.90
26	1H	2653	U	C6-N1-C2	-5.20	117.88	121.00
26	14	259	G	C8-N9-C4	5.20	108.48	106.40
26	14	519	U	C5-C6-N1	-5.20	120.10	122.70
26	14	1320	C	N1-C2-O2	-5.20	115.78	118.90
26	14	1687	G	C4-C5-C6	-5.20	115.68	118.80
26	14	1935	G	C4-C5-C6	-5.20	115.68	118.80
26	14	2368	C	N3-C4-C5	5.20	123.98	121.90
1	13	352	C	N1-C2-O2	5.20	122.02	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	622	A	C5-C6-N6	5.20	127.86	123.70
1	13	1129	C	O5'-P-OP2	-5.20	101.02	105.70
1	13	1483	A	C5-C6-N6	-5.20	119.54	123.70
27	16	98	G	N1-C2-N2	-5.20	111.52	116.20
1	1G	825	G	N1-C2-N2	-5.20	111.52	116.20
1	1G	1523	G	C5-C6-O6	5.20	131.72	128.60
26	14	807	U	N1-C2-N3	5.20	118.02	114.90
26	14	1669	A	N1-C2-N3	5.20	131.90	129.30
26	14	1800	C	C5-C4-N4	-5.20	116.56	120.20
26	14	2227	A	N9-C1'-C2'	-5.20	106.28	112.00
26	14	2383	G	N3-C4-N9	5.20	129.12	126.00
26	14	2511	U	C5-C6-N1	-5.20	120.10	122.70
1	13	1281	U	C2-N1-C1'	5.20	123.94	117.70
23	2K	37	U	O5'-P-OP2	-5.20	101.02	105.70
26	1H	209	C	C5-C6-N1	-5.20	118.40	121.00
26	1H	486	C	C2-N3-C4	5.20	122.50	119.90
26	1H	1564	C	N3-C2-O2	-5.20	118.26	121.90
26	1H	1677	A	OP2-P-O3'	5.20	116.64	105.20
26	1H	1860	G	N3-C4-N9	-5.20	122.88	126.00
26	1H	2036	C	OP1-P-OP2	-5.20	111.80	119.60
26	1H	2353	G	C5-C6-O6	5.20	131.72	128.60
26	1H	2820	A	C6-N1-C2	-5.20	115.48	118.60
27	16	101	A	OP1-P-O3'	-5.20	93.76	105.20
1	1G	108	G	N1-C6-O6	5.20	123.02	119.90
1	1G	114	U	C4-C5-C6	5.20	122.82	119.70
1	1G	1460	A	N1-C6-N6	-5.20	115.48	118.60
26	14	71	A	O4'-C1'-N9	-5.20	104.04	108.20
26	14	536	A	O5'-P-OP2	-5.20	101.02	105.70
26	14	871	U	OP1-P-OP2	-5.20	111.80	119.60
26	14	1603	A	C4-C5-N7	5.20	113.30	110.70
26	14	1935	G	OP1-P-O3'	5.20	116.64	105.20
26	14	1981	A	OP1-P-O3'	-5.20	93.76	105.20
26	14	2253	G	C8-N9-C4	5.20	108.48	106.40
26	14	2816	C	C2-N3-C4	-5.20	117.30	119.90
29	19	273	ARG	NE-CZ-NH1	5.20	122.90	120.30
1	13	478	A	OP1-P-O3'	5.20	116.64	105.20
1	13	502	G	C8-N9-C4	5.20	108.48	106.40
1	13	601	C	C5-C6-N1	5.20	123.60	121.00
1	13	1462	G	N7-C8-N9	-5.20	110.50	113.10
1	13	1470	G	OP2-P-O3'	5.20	116.64	105.20
23	2K	20	G	OP1-P-OP2	5.20	127.40	119.60
26	1H	265	A	N1-C6-N6	5.20	121.72	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	837	C	O5'-P-OP1	-5.20	101.02	105.70
26	1H	1690	A	C2-N3-C4	-5.20	108.00	110.60
26	1H	2060	A	OP2-P-O3'	5.20	116.64	105.20
26	1H	2198	A	N1-C2-N3	5.20	131.90	129.30
26	1H	2351	G	OP1-P-O3'	5.20	116.64	105.20
26	1H	2636	U	C5-C6-N1	-5.20	120.10	122.70
26	1H	2878	U	N3-C2-O2	-5.20	118.56	122.20
39	98	4	LEU	CB-CG-CD2	-5.20	102.16	111.00
1	1G	1328	C	N1-C2-N3	-5.20	115.56	119.20
26	14	1256	G	C4-N9-C1'	5.20	133.26	126.50
26	14	1703	G	C6-C5-N7	-5.20	127.28	130.40
26	14	2026	C	N3-C2-O2	5.20	125.54	121.90
26	14	2256	G	O5'-P-OP1	5.20	116.94	110.70
26	14	2822	G	C5-C6-N1	-5.20	108.90	111.50
1	13	566	G	N3-C4-C5	-5.20	126.00	128.60
1	13	694	A	N3-C4-C5	5.20	130.44	126.80
26	1H	573	G	C6-N1-C2	-5.20	121.98	125.10
26	1H	595	C	OP2-P-O3'	5.20	116.63	105.20
26	1H	758	C	N3-C2-O2	-5.20	118.26	121.90
26	1H	2065	C	N1-C2-N3	5.20	122.84	119.20
38	88	10	ARG	NE-CZ-NH2	-5.20	117.70	120.30
1	1G	446	G	N1-C6-O6	5.20	123.02	119.90
26	14	623	G	C4-C5-N7	5.20	112.88	110.80
26	14	795	C	OP1-P-O3'	5.20	116.63	105.20
26	14	1243	G	N3-C2-N2	5.20	123.54	119.90
26	14	1644	C	O5'-P-OP2	-5.20	101.02	105.70
26	14	1682	G	OP1-P-OP2	5.20	127.39	119.60
26	14	1931	U	OP1-P-OP2	-5.20	111.80	119.60
26	14	1938	A	C4-C5-N7	5.20	113.30	110.70
26	1H	58	G	N3-C4-C5	-5.20	126.00	128.60
26	1H	359	A	OP1-P-OP2	5.20	127.39	119.60
26	1H	457	A	C2-N3-C4	-5.20	108.00	110.60
26	1H	589	C	C6-N1-C2	-5.20	118.22	120.30
26	1H	932	G	C8-N9-C4	-5.20	104.32	106.40
26	1H	1031	G	N3-C4-C5	-5.20	126.00	128.60
26	1H	1338	G	C5-C6-N1	5.20	114.10	111.50
26	1H	1648	C	N1-C2-N3	5.20	122.84	119.20
26	1H	2023	G	C5-C6-N1	-5.20	108.90	111.50
1	1G	544	G	C6-N1-C2	-5.20	121.98	125.10
1	1G	910	C	C6-N1-C1'	-5.20	114.57	120.80
26	14	684	G	N3-C4-C5	-5.20	126.00	128.60
26	14	951	C	N3-C4-N4	-5.20	114.36	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1223	C	N1-C2-O2	-5.20	115.78	118.90
26	14	1557	C	C2-N3-C4	-5.20	117.30	119.90
26	14	2381	C	C5-C4-N4	5.20	123.84	120.20
26	14	2724	C	OP2-P-O3'	5.20	116.63	105.20
26	1H	221	A	C5-C6-N1	5.19	120.30	117.70
26	1H	439	G	N1-C6-O6	5.19	123.02	119.90
26	1H	526	A	C4-C5-N7	-5.19	108.10	110.70
26	1H	1700	A	C5-C6-N6	-5.19	119.55	123.70
1	1G	97	U	N3-C4-C5	-5.19	111.48	114.60
1	1G	888	G	N1-C2-N2	-5.19	111.53	116.20
26	14	796	C	N3-C4-N4	-5.19	114.36	118.00
26	14	2627	G	C5-C6-O6	-5.19	125.48	128.60
26	1H	215	G	N3-C4-C5	5.19	131.20	128.60
26	1H	293	U	C6-N1-C2	-5.19	117.89	121.00
26	1H	747	U	C5-C6-N1	-5.19	120.10	122.70
26	1H	1391	U	N3-C4-O4	5.19	123.03	119.40
26	1H	1843	C	C2-N1-C1'	-5.19	113.09	118.80
26	1H	2744	G	C4-C5-N7	-5.19	108.72	110.80
26	1H	2841	C	N3-C4-N4	-5.19	114.36	118.00
27	16	30	C	O5'-P-OP1	-5.19	101.03	105.70
27	16	54	G	C4-N9-C1'	-5.19	119.75	126.50
29	11	30	GLU	CB-CA-C	5.19	120.78	110.40
29	11	233	HIS	C-N-CA	-5.19	111.40	122.30
1	1G	1189	C	C6-N1-C2	5.19	122.38	120.30
1	1G	1338	G	N9-C4-C5	5.19	107.48	105.40
1	1G	1482	G	C4-N9-C1'	5.19	133.25	126.50
26	14	324	A	C4-C5-N7	-5.19	108.10	110.70
26	14	735	A	OP1-P-O3'	5.19	116.62	105.20
26	14	1378	A	N7-C8-N9	-5.19	111.20	113.80
26	14	1812	A	OP1-P-O3'	5.19	116.62	105.20
26	14	2395	C	C4-C5-C6	-5.19	114.80	117.40
26	14	2406	U	O4'-C1'-N1	-5.19	104.05	108.20
26	14	2552	U	C4-C5-C6	-5.19	116.58	119.70
27	1J	18	G	N3-C2-N2	-5.19	116.27	119.90
1	13	509	A	N9-C4-C5	5.19	107.88	105.80
1	13	915	A	N9-C4-C5	5.19	107.88	105.80
1	13	1185	G	N1-C6-O6	5.19	123.02	119.90
1	13	1355	G	C6-C5-N7	-5.19	127.29	130.40
1	13	1419	G	N3-C2-N2	-5.19	116.27	119.90
1	13	1446	A	O5'-P-OP2	-5.19	101.03	105.70
26	1H	414	C	C4-C5-C6	5.19	120.00	117.40
26	1H	501	A	C4-C5-N7	-5.19	108.10	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	554	U	C2-N1-C1'	-5.19	111.47	117.70
26	1H	617	G	O5'-P-OP1	5.19	116.93	110.70
26	1H	755	C	N1-C2-N3	5.19	122.83	119.20
26	1H	1424	G	N1-C2-N3	5.19	127.01	123.90
26	1H	1601	G	OP1-P-O3'	5.19	116.62	105.20
26	1H	1899	G	C5-N7-C8	-5.19	101.70	104.30
26	1H	1981	A	N3-C4-C5	5.19	130.43	126.80
26	1H	2192	G	N1-C2-N3	5.19	127.01	123.90
26	1H	2735	G	C5-C6-N1	5.19	114.09	111.50
26	1H	2774	C	C5-C6-N1	-5.19	118.41	121.00
27	16	5	C	C5-C4-N4	-5.19	116.57	120.20
1	1G	145	G	N1-C6-O6	5.19	123.02	119.90
26	14	270(G)	C	OP1-P-OP2	5.19	127.39	119.60
26	14	795	C	C2-N1-C1'	5.19	124.51	118.80
26	14	1386	C	N3-C2-O2	5.19	125.53	121.90
26	14	1981	A	O4'-C1'-N9	-5.19	104.05	108.20
26	14	2489	G	C2-N3-C4	-5.19	109.30	111.90
1	13	1365	G	N3-C4-C5	5.19	131.19	128.60
26	1H	122	G	C4-C5-C6	5.19	121.91	118.80
26	1H	1809	A	C8-N9-C4	5.19	107.88	105.80
26	1H	2427	C	OP1-P-OP2	-5.19	111.82	119.60
27	16	109	G	N1-C6-O6	5.19	123.01	119.90
1	1G	252	U	N3-C2-O2	-5.19	118.57	122.20
26	14	788	A	C4-C5-N7	5.19	113.30	110.70
26	14	1547	C	C5-C4-N4	5.19	123.83	120.20
26	14	1760	A	O5'-P-OP2	-5.19	101.03	105.70
26	14	1829	A	C4-C5-C6	5.19	119.59	117.00
26	14	1861	G	C2-N3-C4	-5.19	109.31	111.90
26	14	2718	G	C6-C5-N7	-5.19	127.29	130.40
1	13	466	C	C6-N1-C2	5.19	122.38	120.30
1	13	944	G	N9-C4-C5	5.19	107.47	105.40
1	13	1306	A	C8-N9-C4	-5.19	103.72	105.80
26	1H	95	G	C4-N9-C1'	5.19	133.24	126.50
26	1H	348	G	C4-C5-N7	-5.19	108.72	110.80
26	1H	484	C	OP1-P-O3'	5.19	116.61	105.20
26	1H	972	G	N1-C2-N2	-5.19	111.53	116.20
26	1H	1392	A	C5-N7-C8	5.19	106.49	103.90
26	1H	1597	A	O5'-P-OP1	5.19	116.92	110.70
26	1H	1983	C	O5'-P-OP2	-5.19	101.03	105.70
1	1G	113	G	OP2-P-O3'	5.19	116.61	105.20
26	14	600	G	N7-C8-N9	5.19	115.69	113.10
26	14	1501	C	C5-C6-N1	5.19	123.59	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1811	G	N1-C6-O6	5.19	123.01	119.90
26	14	2277	G	C6-C5-N7	5.19	133.51	130.40
26	14	2580	U	C5-C6-N1	-5.19	120.11	122.70
26	14	2602	A	C6-C5-N7	5.19	135.93	132.30
26	14	2762	G	C8-N9-C4	-5.19	104.33	106.40
1	13	38	G	C8-N9-C4	-5.19	104.33	106.40
1	13	1298	C	O5'-P-OP2	-5.19	101.03	105.70
1	13	1361	G	C6-N1-C2	-5.19	121.99	125.10
26	1H	551	G	C5-N7-C8	-5.19	101.71	104.30
26	1H	2458	G	C6-C5-N7	-5.19	127.29	130.40
1	1G	910	C	C6-N1-C2	5.19	122.37	120.30
26	14	345	A	N7-C8-N9	-5.19	111.21	113.80
26	14	939	G	N3-C2-N2	-5.19	116.27	119.90
26	14	1361	G	N7-C8-N9	-5.19	110.51	113.10
26	14	2051	A	C5-C6-N1	-5.19	115.11	117.70
1	13	295	C	C5-C6-N1	-5.18	118.41	121.00
1	13	810	C	C5-C6-N1	-5.18	118.41	121.00
1	13	1442	G	C2-N3-C4	-5.18	109.31	111.90
26	1H	212	G	C5-C6-N1	5.18	114.09	111.50
26	1H	554	U	C5-C6-N1	-5.18	120.11	122.70
26	1H	926	A	C5-N7-C8	-5.18	101.31	103.90
26	1H	1676	A	OP2-P-O3'	5.18	116.60	105.20
26	1H	2367	G	N1-C2-N3	5.18	127.01	123.90
26	1H	2412	A	C4-C5-N7	-5.18	108.11	110.70
26	1H	2567	G	N1-C2-N3	-5.18	120.79	123.90
26	1H	2850	A	C4-C5-C6	-5.18	114.41	117.00
1	1G	293	G	OP1-P-OP2	-5.18	111.82	119.60
1	1G	1406	U	N1-C2-N3	5.18	118.01	114.90
26	14	798	G	C2-N3-C4	-5.18	109.31	111.90
26	14	847	U	OP1-P-OP2	5.18	127.38	119.60
26	14	1285	G	C6-N1-C2	-5.18	121.99	125.10
26	14	1935	G	C8-N9-C4	-5.18	104.33	106.40
1	13	31	G	N1-C6-O6	5.18	123.01	119.90
1	13	297	G	C5-N7-C8	-5.18	101.71	104.30
1	13	1465	C	O5'-P-OP1	-5.18	101.03	105.70
26	1H	122	G	OP1-P-OP2	5.18	127.37	119.60
26	1H	1423	G	C4-C5-N7	-5.18	108.73	110.80
26	1H	1577	C	N3-C2-O2	-5.18	118.27	121.90
26	1H	1695	G	N3-C4-C5	-5.18	126.01	128.60
26	1H	2072	G	N1-C2-N3	-5.18	120.79	123.90
26	1H	2369	A	C6-N1-C2	-5.18	115.49	118.60
26	1H	2507	C	C4-C5-C6	5.18	119.99	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2521	C	OP1-P-O3'	-5.18	93.80	105.20
26	1H	2697	G	C2-N3-C4	-5.18	109.31	111.90
1	1G	5	U	C6-N1-C2	5.18	124.11	121.00
1	1G	609	A	N1-C6-N6	-5.18	115.49	118.60
1	1G	660	G	O5'-P-OP2	-5.18	101.03	105.70
56	1L	37	A	C5-C6-N6	-5.18	119.56	123.70
26	14	81	G	OP1-P-OP2	5.18	127.37	119.60
26	14	817	C	O5'-P-OP1	-5.18	101.03	105.70
26	14	1278	A	OP1-P-OP2	5.18	127.38	119.60
26	14	1804	C	N3-C2-O2	-5.18	118.27	121.90
26	14	2271	G	OP2-P-O3'	5.18	116.60	105.20
26	14	2553	G	N9-C4-C5	-5.18	103.33	105.40
47	D5	63	ASP	CB-CG-OD1	5.18	122.96	118.30
1	13	1389	C	N3-C2-O2	5.18	125.53	121.90
1	13	1437	C	O5'-P-OP2	5.18	116.92	110.70
13	4I	108	ARG	NE-CZ-NH2	5.18	122.89	120.30
26	1H	381	G	OP1-P-O3'	5.18	116.60	105.20
26	1H	1051	G	N3-C4-C5	-5.18	126.01	128.60
26	1H	1916	A	OP1-P-OP2	-5.18	111.83	119.60
26	1H	2209	C	C6-N1-C2	5.18	122.37	120.30
26	1H	2787	C	C5-C6-N1	5.18	123.59	121.00
1	1G	123	C	C5-C6-N1	-5.18	118.41	121.00
1	1G	1527	C	N1-C2-O2	-5.18	115.79	118.90
26	14	242	G	C4-N9-C1'	-5.18	119.76	126.50
26	14	277	C	N1-C2-O2	5.18	122.01	118.90
26	14	2195	C	C2-N1-C1'	-5.18	113.10	118.80
26	14	2603	G	N9-C4-C5	-5.18	103.33	105.40
1	13	753	A	C4-C5-C6	5.18	119.59	117.00
1	13	1534	A	C8-N9-C4	-5.18	103.73	105.80
26	1H	50	U	N1-C2-O2	-5.18	119.17	122.80
26	1H	102	G	C5-C6-N1	-5.18	108.91	111.50
26	1H	529	A	N9-C4-C5	-5.18	103.73	105.80
26	1H	2508	G	OP1-P-OP2	-5.18	111.83	119.60
26	14	31	C	N3-C4-N4	5.18	121.63	118.00
26	14	112	U	N1-C2-N3	5.18	118.01	114.90
26	14	1324	G	N3-C4-C5	-5.18	126.01	128.60
26	14	1468	C	C5-C4-N4	-5.18	116.58	120.20
26	14	1878	G	N1-C6-O6	5.18	123.01	119.90
26	14	1914	C	N3-C2-O2	-5.18	118.27	121.90
26	14	1973	G	OP1-P-OP2	-5.18	111.83	119.60
26	14	2280	G	N3-C4-C5	5.18	131.19	128.60
26	14	2532	G	C2-N3-C4	-5.18	109.31	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2878	U	C4-C5-C6	5.18	122.81	119.70
1	13	140	A	C6-C5-N7	-5.18	128.68	132.30
1	13	613	C	OP2-P-O3'	5.18	116.59	105.20
26	1H	468	G	N3-C4-N9	5.18	129.11	126.00
26	1H	1351	C	N1-C2-N3	5.18	122.83	119.20
26	1H	1572	A	OP2-P-O3'	5.18	116.59	105.20
26	1H	2047	U	C5-C6-N1	5.18	125.29	122.70
1	1G	114	U	C5-C6-N1	-5.18	120.11	122.70
1	1G	565	U	C4-C5-C6	5.18	122.81	119.70
26	14	303	U	O5'-P-OP1	5.18	116.91	110.70
26	14	660	G	C6-N1-C2	5.18	128.21	125.10
26	14	1268	A	C6-N1-C2	-5.18	115.49	118.60
26	14	2425	A	N1-C2-N3	5.18	131.89	129.30
1	13	362	G	C6-N1-C2	5.18	128.21	125.10
1	13	364	A	OP1-P-OP2	-5.18	111.84	119.60
1	13	545	C	C4-C5-C6	-5.18	114.81	117.40
1	13	975	A	N1-C6-N6	5.18	121.71	118.60
1	13	1267	C	N3-C4-C5	-5.18	119.83	121.90
1	13	1512	U	N1-C2-O2	5.18	126.42	122.80
26	1H	266	G	N7-C8-N9	-5.18	110.51	113.10
26	1H	394	A	C6-N1-C2	-5.18	115.49	118.60
26	1H	1050	A	O4'-C1'-N9	5.18	112.34	108.20
26	1H	1215	G	OP1-P-O3'	5.18	116.59	105.20
26	1H	1237	A	C5-C6-N6	5.18	127.84	123.70
26	1H	1780	A	C4-C5-N7	-5.18	108.11	110.70
26	1H	2728	U	O5'-P-OP2	-5.18	101.04	105.70
26	1H	2822	G	C8-N9-C4	5.18	108.47	106.40
1	1G	50	A	C4-C5-C6	5.18	119.59	117.00
1	1G	313	A	C2-N3-C4	5.18	113.19	110.60
1	1G	327	A	N1-C2-N3	5.18	131.89	129.30
1	1G	509	A	C5-C6-N6	-5.18	119.56	123.70
1	1G	942	G	N3-C4-C5	-5.18	126.01	128.60
1	1G	1190	G	C5-C6-O6	5.18	131.71	128.60
26	14	238	C	C2-N3-C4	-5.18	117.31	119.90
26	14	793	A	O5'-P-OP1	5.18	116.91	110.70
26	14	1140	C	C2-N3-C4	5.18	122.49	119.90
26	14	1862	G	C5-C6-N1	-5.18	108.91	111.50
26	14	2405	G	N7-C8-N9	5.18	115.69	113.10
26	14	2613	U	C5-C6-N1	-5.18	120.11	122.70
26	14	2698	U	OP1-P-OP2	-5.18	111.84	119.60
26	14	2820	A	N1-C2-N3	5.18	131.89	129.30
1	13	314	C	N3-C4-N4	-5.17	114.38	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	464	G	C5-N7-C8	-5.17	101.71	104.30
1	13	726	C	C2-N3-C4	5.17	122.49	119.90
1	13	967	C	C2-N3-C4	-5.17	117.31	119.90
1	13	1114	C	N1-C2-O2	5.17	122.00	118.90
22	1K	38	A	C4-C5-N7	5.17	113.29	110.70
26	1H	59	U	C5-C6-N1	5.17	125.29	122.70
26	1H	1126	A	N9-C4-C5	5.17	107.87	105.80
26	1H	2759	G	C8-N9-C4	5.17	108.47	106.40
26	1H	2896	C	C2-N3-C4	5.17	122.49	119.90
27	16	15	A	OP1-P-O3'	5.17	116.59	105.20
1	1G	1183	A	C8-N9-C4	5.17	107.87	105.80
23	2L	39	A	N7-C8-N9	5.17	116.39	113.80
26	14	97	C	N1-C2-O2	5.17	122.00	118.90
26	14	312	G	C4-N9-C1'	5.17	133.23	126.50
26	14	981	A	C2-N3-C4	-5.17	108.01	110.60
26	14	1143	A	O5'-P-OP1	5.17	116.91	110.70
26	14	1478	G	O5'-P-OP2	-5.17	101.04	105.70
26	14	1728	G	N3-C2-N2	5.17	123.52	119.90
26	14	1764	G	N3-C4-C5	-5.17	126.01	128.60
26	14	2661	G	C5-C6-N1	-5.17	108.91	111.50
26	14	2728	U	OP1-P-OP2	5.17	127.36	119.60
26	14	2871	C	N1-C2-O2	5.17	122.00	118.90
39	55	98	LEU	CB-CG-CD1	-5.17	102.20	111.00
1	13	521	G	C5-C6-N1	5.17	114.09	111.50
26	1H	782	A	O5'-P-OP1	-5.17	101.04	105.70
26	1H	805	G	C4-C5-N7	5.17	112.87	110.80
26	1H	1214	A	N1-C2-N3	-5.17	126.71	129.30
26	1H	1440	G	OP1-P-O3'	5.17	116.58	105.20
26	1H	1961	C	C5-C4-N4	-5.17	116.58	120.20
26	1H	2520	C	C2-N3-C4	-5.17	117.31	119.90
26	1H	2521	C	C2-N3-C4	-5.17	117.31	119.90
1	1G	114	U	OP1-P-OP2	5.17	127.36	119.60
1	1G	592	G	C8-N9-C4	-5.17	104.33	106.40
26	14	781	A	C6-N1-C2	-5.17	115.50	118.60
26	14	1292	U	N1-C2-N3	-5.17	111.80	114.90
26	14	1307	A	C5-N7-C8	-5.17	101.31	103.90
26	14	1969	A	C4-C5-C6	5.17	119.59	117.00
26	14	2078	C	OP1-P-OP2	-5.17	111.84	119.60
26	14	2723	C	N3-C2-O2	-5.17	118.28	121.90
26	14	2816	C	N1-C2-O2	-5.17	115.80	118.90
1	13	397	A	C5-C6-N1	-5.17	115.11	117.70
1	13	568	G	N3-C4-C5	-5.17	126.01	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	698	G	C8-N9-C4	-5.17	104.33	106.40
1	13	1125	U	N3-C2-O2	5.17	125.82	122.20
26	1H	1116	C	N3-C4-C5	-5.17	119.83	121.90
26	1H	1120	G	C6-N1-C2	5.17	128.20	125.10
26	1H	1173	G	C4-N9-C1'	-5.17	119.78	126.50
26	1H	1364	G	N9-C1'-C2'	-5.17	106.31	112.00
26	1H	2049	G	C4-C5-N7	-5.17	108.73	110.80
26	1H	2340	G	C4-C5-C6	-5.17	115.70	118.80
26	1H	2372	G	P-O3'-C3'	-5.17	113.50	119.70
26	1H	2445	G	N1-C2-N3	5.17	127.00	123.90
27	16	61	G	C8-N9-C4	-5.17	104.33	106.40
1	1G	96	G	C2-N3-C4	-5.17	109.31	111.90
1	1G	454	C	N1-C2-O2	5.17	122.00	118.90
1	1G	837	G	N3-C4-C5	5.17	131.19	128.60
26	14	786	C	N1-C2-N3	5.17	122.82	119.20
26	14	2016	U	C6-N1-C2	-5.17	117.90	121.00
1	13	1517	G	N1-C2-N3	5.17	127.00	123.90
26	1H	270(R)	G	C4-C5-C6	5.17	121.90	118.80
26	1H	1765	C	C2-N3-C4	-5.17	117.31	119.90
26	1H	1821	A	C4-C5-C6	5.17	119.58	117.00
26	1H	1843	C	OP1-P-OP2	-5.17	111.84	119.60
1	1G	27	G	C5-C6-N1	-5.17	108.92	111.50
1	1G	509	A	C4-C5-N7	5.17	113.28	110.70
26	14	150	C	N3-C4-N4	-5.17	114.38	118.00
26	14	2173	A	P-O3'-C3'	5.17	125.90	119.70
26	14	2391	G	C4-N9-C1'	-5.17	119.78	126.50
26	14	2539	C	O5'-P-OP2	-5.17	101.05	105.70
26	14	2559	C	C4-C5-C6	5.17	119.98	117.40
26	14	2611	U	N3-C4-O4	5.17	123.02	119.40
1	13	1333	A	C8-N9-C4	-5.17	103.73	105.80
24	3K	76	A	N3-C4-C5	5.17	130.42	126.80
26	1H	399	G	C6-N1-C2	-5.17	122.00	125.10
26	1H	424	G	C5-C6-O6	-5.17	125.50	128.60
26	1H	464	U	O5'-P-OP2	5.17	116.90	110.70
26	1H	636	G	N1-C2-N2	5.17	120.85	116.20
26	1H	806	C	OP2-P-O3'	-5.17	93.83	105.20
26	1H	816	C	O5'-P-OP1	5.17	116.90	110.70
26	1H	2241	A	C5-N7-C8	5.17	106.48	103.90
26	1H	2252	G	C5-C6-N1	-5.17	108.92	111.50
26	1H	2578	G	O5'-P-OP2	5.17	116.90	110.70
26	14	294	A	O5'-P-OP1	5.17	116.90	110.70
26	14	2073	C	C5-C4-N4	-5.17	116.58	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2344	U	N1-C2-O2	5.17	126.42	122.80
26	14	2541	A	N1-C6-N6	5.17	121.70	118.60
27	1J	109	G	C6-C5-N7	-5.17	127.30	130.40
1	13	244	U	C4-C5-C6	-5.17	116.60	119.70
1	13	729	A	OP1-P-O3'	5.17	116.56	105.20
1	13	1064	G	N7-C8-N9	-5.17	110.52	113.10
26	1H	182	A	C2-N3-C4	-5.17	108.02	110.60
26	1H	475	U	C5-C6-N1	5.17	125.28	122.70
26	1H	545	G	C5-C6-N1	-5.17	108.92	111.50
26	1H	651	G	C6-N1-C2	-5.17	122.00	125.10
26	1H	670	A	N1-C2-N3	-5.17	126.72	129.30
26	1H	1927	A	C5-C6-N6	5.17	127.83	123.70
26	1H	2039	C	N3-C4-C5	-5.17	119.83	121.90
26	1H	2072	G	N1-C6-O6	-5.17	116.80	119.90
26	1H	2638	G	N1-C2-N3	-5.17	120.80	123.90
26	1H	2839	G	C4-C5-N7	-5.17	108.73	110.80
1	1G	904	C	OP2-P-O3'	5.17	116.57	105.20
1	1G	1204	A	N7-C8-N9	5.17	116.38	113.80
1	1G	1325	C	C4-C5-C6	5.17	119.98	117.40
57	3L	70	C	N1-C2-O2	5.17	122.00	118.90
26	14	266	G	C4-C5-C6	5.17	121.90	118.80
26	14	274	G	C4-C5-N7	5.17	112.87	110.80
26	14	404	C	O5'-P-OP1	-5.17	101.05	105.70
26	14	667	U	C5-C4-O4	-5.17	122.80	125.90
26	14	699	A	N3-C4-C5	-5.17	123.18	126.80
26	14	864	G	O5'-P-OP1	5.17	116.90	110.70
26	14	960	A	O4'-C1'-N9	5.17	112.33	108.20
26	14	1207	C	OP1-P-O3'	5.17	116.57	105.20
26	14	1761	C	C2-N3-C4	-5.17	117.32	119.90
26	14	2021	C	C2-N1-C1'	5.17	124.48	118.80
37	35	33	ARG	C-N-CA	5.17	133.15	122.30
1	13	714	G	OP2-P-O3'	5.17	116.56	105.20
1	13	1128	C	O4'-C1'-N1	5.17	112.33	108.20
1	13	1362	C	C5-C6-N1	5.17	123.58	121.00
26	1H	270(K)	C	C6-N1-C2	-5.17	118.23	120.30
26	1H	602	G	C6-C5-N7	-5.17	127.30	130.40
26	1H	728	G	C6-N1-C2	5.17	128.20	125.10
26	1H	1395	A	N1-C2-N3	5.17	131.88	129.30
26	1H	1968	G	N3-C4-C5	-5.17	126.02	128.60
26	1H	2302	G	O5'-P-OP2	-5.17	101.05	105.70
26	1H	2560	C	OP1-P-OP2	5.17	127.35	119.60
41	B8	19	LEU	CB-CG-CD2	-5.17	102.22	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1287	A	C5-C6-N6	5.17	127.83	123.70
1	1G	1437	C	C5-C6-N1	5.17	123.58	121.00
26	14	138	G	C5-C6-N1	5.17	114.08	111.50
26	14	502	A	N1-C2-N3	5.17	131.88	129.30
26	14	852	G	C2-N3-C4	5.17	114.48	111.90
26	14	1574	C	OP1-P-OP2	-5.17	111.85	119.60
1	13	314	C	C5-C4-N4	5.16	123.81	120.20
1	13	567	G	OP1-P-OP2	5.16	127.34	119.60
1	13	1054	C	C4-C5-C6	-5.16	114.82	117.40
1	13	1403	C	OP1-P-OP2	5.16	127.34	119.60
1	13	1495	U	C5-C6-N1	5.16	125.28	122.70
1	13	1510	U	OP1-P-OP2	5.16	127.35	119.60
26	1H	123	G	C6-C5-N7	-5.16	127.30	130.40
26	1H	385	C	C4-C5-C6	-5.16	114.82	117.40
26	1H	540	G	C5-C6-N1	-5.16	108.92	111.50
26	1H	645	C	N1-C2-O2	5.16	122.00	118.90
26	1H	746	A	N7-C8-N9	5.16	116.38	113.80
26	1H	903	C	C6-N1-C2	5.16	122.37	120.30
26	1H	2730	C	C4-C5-C6	-5.16	114.82	117.40
32	41	101	ILE	CG1-CB-CG2	-5.16	100.04	111.40
32	41	170	ARG	NE-CZ-NH1	5.16	122.88	120.30
1	1G	660	G	C4-N9-C1'	-5.16	119.79	126.50
1	1G	902	G	N1-C2-N2	5.16	120.85	116.20
1	1G	1388	C	N1-C2-O2	5.16	122.00	118.90
23	2L	60	A	OP2-P-O3'	5.16	116.56	105.20
26	14	21	A	C2-N3-C4	-5.16	108.02	110.60
26	14	1138	G	N3-C4-C5	5.16	131.18	128.60
41	75	8	LYS	CB-CG-CD	-5.16	98.17	111.60
1	13	828	A	C4-C5-C6	5.16	119.58	117.00
26	1H	617	G	C5-N7-C8	5.16	106.88	104.30
26	1H	1026	U	N1-C2-O2	-5.16	119.19	122.80
26	1H	1440	G	OP2-P-O3'	-5.16	93.84	105.20
26	1H	1896	G	C8-N9-C4	5.16	108.47	106.40
26	1H	2332	U	N3-C4-O4	-5.16	115.79	119.40
1	1G	129	U	C5-C4-O4	5.16	129.00	125.90
26	14	1229	G	N7-C8-N9	5.16	115.68	113.10
26	14	1926	U	C5-C6-N1	-5.16	120.12	122.70
1	13	1177	G	O5'-P-OP1	5.16	116.89	110.70
1	13	1393	U	C5-C4-O4	5.16	129.00	125.90
26	1H	439	G	C5-C6-N1	-5.16	108.92	111.50
26	1H	814	C	OP1-P-OP2	5.16	127.34	119.60
26	1H	1110	G	O3'-P-O5'	5.16	113.81	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1222	C	N3-C4-C5	5.16	123.96	121.90
26	1H	1486	A	C5-C6-N1	-5.16	115.12	117.70
26	1H	1961	C	OP1-P-O3'	5.16	116.56	105.20
26	1H	2244	U	O5'-P-OP2	5.16	116.89	110.70
26	1H	2447	G	C4-C5-N7	-5.16	108.74	110.80
26	1H	2652	C	C5-C6-N1	5.16	123.58	121.00
26	1H	2666	C	N1-C2-N3	5.16	122.81	119.20
26	1H	2712	U	OP2-P-O3'	5.16	116.55	105.20
26	1H	2889	C	N3-C2-O2	5.16	125.51	121.90
1	1G	828	A	N1-C2-N3	5.16	131.88	129.30
1	1G	972	C	C5-C6-N1	5.16	123.58	121.00
1	1G	1277	C	C6-N1-C2	-5.16	118.23	120.30
1	1G	1522	U	N1-C2-O2	-5.16	119.19	122.80
26	14	125	G	N7-C8-N9	-5.16	110.52	113.10
26	14	198	C	OP1-P-OP2	-5.16	111.86	119.60
26	14	264	C	C4-C5-C6	5.16	119.98	117.40
26	14	355	G	C6-C5-N7	-5.16	127.30	130.40
26	14	1407	C	O5'-P-OP2	5.16	116.89	110.70
26	14	1941	C	O5'-P-OP2	5.16	116.89	110.70
26	14	1961	C	OP1-P-OP2	5.16	127.34	119.60
26	14	2267	A	C5-C6-N1	5.16	120.28	117.70
1	13	1306	A	C4-C5-C6	5.16	119.58	117.00
1	13	1455	G	N3-C4-N9	-5.16	122.91	126.00
25	4K	15	A	C2-N3-C4	5.16	113.18	110.60
26	1H	550	G	N1-C2-N3	5.16	127.00	123.90
26	1H	744	G	N3-C4-N9	5.16	129.09	126.00
26	1H	1031	G	C5-C6-N1	5.16	114.08	111.50
26	1H	1407	C	P-O3'-C3'	-5.16	113.51	119.70
26	1H	1449(A)	G	N1-C6-O6	-5.16	116.81	119.90
26	1H	1869	G	C4-C5-N7	5.16	112.86	110.80
26	1H	2004	G	N3-C4-C5	5.16	131.18	128.60
26	1H	2231	C	C4-C5-C6	5.16	119.98	117.40
26	1H	2313	C	OP2-P-O3'	5.16	116.55	105.20
26	1H	2371	G	N1-C2-N2	-5.16	111.56	116.20
1	1G	322	C	C6-N1-C2	5.16	122.36	120.30
1	1G	1183	A	N1-C6-N6	5.16	121.69	118.60
26	14	1040	C	N3-C2-O2	-5.16	118.29	121.90
26	14	1200	C	C4-C5-C6	5.16	119.98	117.40
26	14	1482	U	C6-N1-C2	-5.16	117.91	121.00
26	14	1784	A	P-O5'-C5'	-5.16	112.64	120.90
26	14	2619	C	OP2-P-O3'	-5.16	93.85	105.20
1	13	1084	G	N3-C4-C5	-5.16	126.02	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1402	C	N3-C4-C5	-5.16	119.84	121.90
26	1H	89	G	N1-C2-N3	-5.16	120.81	123.90
26	1H	1697	G	N3-C4-N9	5.16	129.09	126.00
26	1H	2671	A	N1-C6-N6	5.16	121.69	118.60
26	14	2651	C	C5-C4-N4	5.16	123.81	120.20
27	1J	22	U	C2-N1-C1'	5.16	123.89	117.70
27	1J	70	C	O5'-P-OP1	-5.16	101.06	105.70
55	M5	49	VAL	CA-CB-CG1	5.16	118.64	110.90
1	13	115	G	N1-C2-N2	5.16	120.84	116.20
1	13	873	A	OP1-P-OP2	5.16	127.33	119.60
1	13	918	A	C6-C5-N7	-5.16	128.69	132.30
1	13	1287	A	C2-N3-C4	-5.16	108.02	110.60
25	4K	13	A	C8-N9-C4	-5.16	103.74	105.80
26	1H	112	U	C4-C5-C6	-5.16	116.61	119.70
26	1H	192	C	OP1-P-O3'	5.16	116.54	105.20
26	1H	214	G	O5'-P-OP2	-5.16	101.06	105.70
26	1H	217	G	N3-C2-N2	-5.16	116.29	119.90
26	1H	404	C	N3-C2-O2	5.16	125.51	121.90
26	1H	669	G	C2-N3-C4	-5.16	109.32	111.90
26	1H	976	C	OP1-P-OP2	5.16	127.33	119.60
26	1H	1159	U	C2-N1-C1'	5.16	123.89	117.70
26	1H	1402	C	N1-C2-N3	-5.16	115.59	119.20
26	1H	1660	C	O5'-P-OP2	-5.16	101.06	105.70
26	1H	2429	G	N1-C2-N3	5.16	126.99	123.90
26	1H	2718	G	N1-C6-O6	5.16	122.99	119.90
26	1H	2859	G	OP1-P-O3'	5.16	116.54	105.20
54	P8	28	ARG	NE-CZ-NH1	5.16	122.88	120.30
1	1G	790	A	N9-C4-C5	5.16	107.86	105.80
26	14	117	G	C5-C6-N1	5.16	114.08	111.50
26	14	387	U	C5-C6-N1	5.16	125.28	122.70
26	14	1296	G	C5-N7-C8	5.16	106.88	104.30
26	14	2195	C	C6-N1-C2	5.16	122.36	120.30
1	13	1139	G	N7-C8-N9	-5.15	110.52	113.10
25	4K	10	G	C8-N9-C4	-5.15	104.34	106.40
26	1H	41	C	N1-C2-O2	5.15	121.99	118.90
26	1H	1215	G	C5-N7-C8	-5.15	101.72	104.30
26	1H	1229(A)	G	N1-C2-N3	5.15	126.99	123.90
26	1H	1361	G	OP2-P-O3'	5.15	116.54	105.20
26	1H	2736	G	C5-C6-O6	5.15	131.69	128.60
26	14	577	G	C6-C5-N7	-5.15	127.31	130.40
26	14	1996	C	C5-C4-N4	5.15	123.81	120.20
26	14	2467	C	N3-C2-O2	-5.15	118.29	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	J5	19	ARG	NE-CZ-NH1	-5.15	117.72	120.30
1	13	51	A	C2-N3-C4	-5.15	108.02	110.60
1	13	287	U	C5-C6-N1	-5.15	120.12	122.70
1	13	353	A	N9-C4-C5	5.15	107.86	105.80
1	13	447	G	C4-C5-N7	5.15	112.86	110.80
26	1H	207	A	N9-C4-C5	-5.15	103.74	105.80
26	1H	404	C	N3-C4-C5	5.15	123.96	121.90
26	1H	460	A	N9-C4-C5	-5.15	103.74	105.80
26	1H	763	G	N9-C4-C5	5.15	107.46	105.40
26	1H	826	U	C6-N1-C1'	5.15	128.41	121.20
26	1H	1238	G	C8-N9-C1'	5.15	133.70	127.00
26	1H	1614	A	O4'-C1'-N9	5.15	112.32	108.20
26	1H	1726	G	C2-N3-C4	-5.15	109.32	111.90
26	1H	2523	G	OP2-P-O3'	5.15	116.54	105.20
26	1H	2667	C	N3-C2-O2	5.15	125.51	121.90
26	1H	2670	A	N1-C2-N3	5.15	131.88	129.30
27	16	2	C	C6-N1-C2	-5.15	118.24	120.30
27	16	96	G	C4-C5-C6	-5.15	115.71	118.80
54	P8	3	ARG	NE-CZ-NH2	-5.15	117.72	120.30
1	1G	381	C	C6-N1-C2	5.15	122.36	120.30
1	1G	707	C	C5-C4-N4	-5.15	116.59	120.20
1	1G	1423	G	O5'-P-OP2	-5.15	101.06	105.70
57	3L	49	G	C4-N9-C1'	5.15	133.20	126.50
26	14	377	C	N3-C4-C5	-5.15	119.84	121.90
26	14	389	G	C8-N9-C4	5.15	108.46	106.40
26	14	650	C	N3-C2-O2	-5.15	118.29	121.90
26	14	987	G	C2-N3-C4	5.15	114.48	111.90
26	14	1245	G	N7-C8-N9	5.15	115.68	113.10
26	14	1271	G	OP2-P-O3'	5.15	116.54	105.20
26	14	1689	A	N7-C8-N9	5.15	116.38	113.80
26	14	1778	U	C2-N3-C4	5.15	130.09	127.00
26	14	1954	G	N3-C4-C5	-5.15	126.02	128.60
26	14	2240	C	OP2-P-O3'	5.15	116.53	105.20
26	14	2336	A	OP1-P-O3'	5.15	116.54	105.20
26	14	2461	C	C2-N3-C4	-5.15	117.32	119.90
1	13	1159	U	C4-C5-C6	5.15	122.79	119.70
26	1H	195	A	OP1-P-O3'	-5.15	93.87	105.20
26	1H	786	C	C6-N1-C1'	5.15	126.98	120.80
26	1H	868	U	O5'-P-OP2	-5.15	101.06	105.70
26	1H	1190	G	C5'-C4'-C3'	-5.15	107.76	116.00
26	1H	1441	G	C8-N9-C4	5.15	108.46	106.40
26	1H	1526	G	OP1-P-OP2	-5.15	111.87	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1711	C	C6-N1-C2	-5.15	118.24	120.30
27	16	110	G	O5'-P-OP2	5.15	116.88	110.70
1	1G	1125	U	C6-N1-C2	5.15	124.09	121.00
1	1G	1467	G	N3-C4-N9	-5.15	122.91	126.00
23	2L	44	A	N7-C8-N9	-5.15	111.22	113.80
26	14	268	C	C5-C4-N4	-5.15	116.59	120.20
26	14	782	A	C4-C5-C6	5.15	119.58	117.00
26	14	925	C	OP1-P-OP2	5.15	127.33	119.60
26	14	1608	A	C5-N7-C8	5.15	106.47	103.90
26	14	1682	G	C4-C5-N7	-5.15	108.74	110.80
26	14	1822	G	N1-C2-N2	5.15	120.83	116.20
26	14	2016	U	N3-C4-O4	5.15	123.00	119.40
26	14	2059	A	C2-N3-C4	5.15	113.17	110.60
26	14	2492	U	C6-N1-C2	-5.15	117.91	121.00
26	14	2608	G	N3-C2-N2	-5.15	116.29	119.90
1	13	1255	G	C8-N9-C4	5.15	108.46	106.40
26	1H	124	G	C4-C5-N7	5.15	112.86	110.80
26	1H	182	A	C5-C6-N6	-5.15	119.58	123.70
26	1H	574	C	C6-N1-C1'	5.15	126.98	120.80
26	1H	1522	G	N1-C2-N2	5.15	120.83	116.20
26	1H	1917	U	N1-C2-O2	5.15	126.40	122.80
26	1H	2663	G	N3-C2-N2	-5.15	116.30	119.90
29	19	105	ILE	CG1-CB-CG2	5.15	122.73	111.40
1	13	608	A	C4-C5-C6	-5.15	114.43	117.00
1	13	774	G	N3-C4-N9	5.15	129.09	126.00
1	13	1253	G	N3-C2-N2	5.15	123.50	119.90
23	2K	12	G	N7-C8-N9	-5.15	110.53	113.10
23	2K	53	G	C4-C5-N7	5.15	112.86	110.80
26	1H	96	G	C5-N7-C8	-5.15	101.73	104.30
26	1H	397	G	OP1-P-OP2	5.15	127.32	119.60
26	1H	500	G	C5-C6-O6	5.15	131.69	128.60
26	1H	820	A	C8-N9-C4	5.15	107.86	105.80
26	1H	964	C	C2-N3-C4	-5.15	117.33	119.90
26	1H	1166	C	N3-C4-N4	5.15	121.60	118.00
26	1H	1374	G	N7-C8-N9	5.15	115.67	113.10
26	1H	1440	G	C5-C6-O6	5.15	131.69	128.60
26	1H	1667	G	N3-C4-C5	5.15	131.17	128.60
26	1H	2503	A	C2-N3-C4	5.15	113.17	110.60
26	1H	2578	G	P-O3'-C3'	5.15	125.88	119.70
26	1H	2606	C	OP2-P-O3'	5.15	116.53	105.20
26	1H	2645	G	C8-N9-C1'	-5.15	120.31	127.00
26	1H	2826	A	C5-N7-C8	5.15	106.47	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	264	U	N3-C4-O4	5.15	123.00	119.40
1	1G	1382	C	N1-C2-O2	5.15	121.99	118.90
26	14	141	A	N3-C4-C5	5.15	130.40	126.80
26	14	869	G	OP1-P-O3'	5.15	116.53	105.20
26	14	2246	G	OP1-P-OP2	5.15	127.32	119.60
26	14	2527	C	N3-C2-O2	-5.15	118.30	121.90
26	1H	966	G	N9-C4-C5	5.15	107.46	105.40
26	1H	1026	U	C4-C5-C6	5.15	122.79	119.70
26	1H	1235	G	C6-C5-N7	-5.15	127.31	130.40
26	1H	1549	C	N3-C4-N4	-5.15	114.40	118.00
1	1G	1095	U	N1-C2-N3	5.15	117.99	114.90
26	14	315	G	N1-C2-N2	-5.15	111.57	116.20
26	14	664	C	C2-N1-C1'	-5.15	113.14	118.80
26	14	1002	G	C5-C6-O6	5.15	131.69	128.60
26	14	1518	C	N3-C4-C5	-5.15	119.84	121.90
26	14	2356	C	C6-N1-C2	5.15	122.36	120.30
1	13	1083	U	O5'-P-OP2	5.14	116.87	110.70
26	1H	449	A	OP2-P-O3'	-5.14	93.88	105.20
26	1H	488	G	OP1-P-O3'	5.14	116.52	105.20
26	1H	1617	C	C5'-C4'-O4'	-5.14	102.93	109.10
26	1H	1859	A	OP1-P-OP2	-5.14	111.88	119.60
26	1H	1901	A	N3-C4-N9	5.14	131.51	127.40
26	1H	1992	G	C2'-C3'-O3'	5.14	121.93	113.70
26	1H	2002	G	C5-C6-N1	5.14	114.07	111.50
26	1H	2088	G	N1-C6-O6	-5.14	116.81	119.90
26	1H	2291	U	OP2-P-O3'	5.14	116.52	105.20
26	1H	2333	A	O5'-P-OP1	5.14	116.87	110.70
26	1H	2513	G	C4-N9-C1'	5.14	133.19	126.50
26	1H	2541	A	C4-C5-C6	-5.14	114.43	117.00
26	1H	2708	G	C6-N1-C2	-5.14	122.01	125.10
27	16	30	C	C5-C6-N1	5.14	123.57	121.00
27	16	115	G	OP1-P-O3'	-5.14	93.88	105.20
1	1G	218	C	C6-N1-C2	-5.14	118.24	120.30
1	1G	1090	U	C6-N1-C2	-5.14	117.91	121.00
26	14	330	A	C6-N1-C2	5.14	121.69	118.60
26	14	456	C	N3-C4-N4	5.14	121.60	118.00
26	14	525	U	N1-C2-O2	-5.14	119.20	122.80
26	14	982	C	O4'-C1'-N1	-5.14	104.08	108.20
26	14	1610	A	C2-N3-C4	-5.14	108.03	110.60
26	14	2731	G	C6-N1-C2	-5.14	122.01	125.10
1	13	14	U	N1-C2-O2	-5.14	119.20	122.80
1	13	191(D)	U	C5-C6-N1	5.14	125.27	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	498	A	N3-C4-C5	-5.14	123.20	126.80
1	13	712	A	C4-C5-N7	-5.14	108.13	110.70
1	13	1482	G	N3-C2-N2	-5.14	116.30	119.90
26	1H	529	A	C4-C5-N7	5.14	113.27	110.70
26	1H	875	G	N9-C4-C5	-5.14	103.34	105.40
26	1H	1163	G	C8-N9-C4	-5.14	104.34	106.40
26	1H	1726	G	C6-C5-N7	5.14	133.49	130.40
26	1H	1728	G	C6-C5-N7	-5.14	127.31	130.40
26	1H	1813	G	N9-C4-C5	5.14	107.46	105.40
26	1H	1817	G	OP1-P-O3'	-5.14	93.89	105.20
26	1H	1968	G	N9-C4-C5	-5.14	103.34	105.40
26	1H	2042	A	N3-C4-C5	5.14	130.40	126.80
26	1H	2258	C	C2-N3-C4	-5.14	117.33	119.90
26	1H	2330	G	O5'-P-OP1	5.14	116.87	110.70
27	16	68	C	C6-N1-C2	5.14	122.36	120.30
1	1G	26	A	C5-N7-C8	5.14	106.47	103.90
1	1G	306	G	N7-C8-N9	5.14	115.67	113.10
26	14	972	G	P-O3'-C3'	5.14	125.87	119.70
26	14	1154	G	OP2-P-O3'	5.14	116.52	105.20
26	14	1732	A	C2-N3-C4	-5.14	108.03	110.60
26	14	2362	G	N3-C2-N2	-5.14	116.30	119.90
26	14	2418	A	C5-C6-N1	5.14	120.27	117.70
26	14	2808	U	N3-C2-O2	5.14	125.80	122.20
42	85	109	LEU	CB-CG-CD2	-5.14	102.26	111.00
23	2K	54	G	C5-C6-N1	-5.14	108.93	111.50
26	1H	241	A	C5-C6-N1	5.14	120.27	117.70
26	1H	821	A	O5'-P-OP2	-5.14	101.07	105.70
26	1H	2366	A	N1-C2-N3	5.14	131.87	129.30
1	1G	303	A	C5-C6-N1	-5.14	115.13	117.70
1	1G	518	C	C5-C6-N1	-5.14	118.43	121.00
26	14	125	G	N1-C2-N2	5.14	120.83	116.20
26	14	173	G	N1-C6-O6	5.14	122.98	119.90
26	14	638	G	N1-C6-O6	5.14	122.98	119.90
26	14	744	G	C6-C5-N7	-5.14	127.31	130.40
26	14	1665	A	N1-C2-N3	5.14	131.87	129.30
26	14	2599	G	N1-C2-N3	5.14	126.98	123.90
27	1J	100	G	N7-C8-N9	-5.14	110.53	113.10
23	2K	62	C	OP1-P-OP2	5.14	127.31	119.60
26	1H	26	G	C2-N3-C4	-5.14	109.33	111.90
26	1H	40	C	C5-C6-N1	-5.14	118.43	121.00
26	1H	237	C	C6-N1-C2	5.14	122.36	120.30
26	1H	463	G	C4-N9-C1'	-5.14	119.82	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	979	G	N1-C2-N2	5.14	120.83	116.20
26	1H	1431	U	OP1-P-OP2	-5.14	111.89	119.60
26	1H	1485	G	C8-N9-C4	5.14	108.46	106.40
26	1H	1650	G	N1-C2-N3	5.14	126.98	123.90
26	1H	2210	G	C5-C6-O6	5.14	131.68	128.60
1	1G	132	C	N3-C4-C5	-5.14	119.84	121.90
1	1G	513	C	N3-C4-C5	-5.14	119.84	121.90
26	14	373	U	C6-N1-C1'	-5.14	114.00	121.20
26	14	399	G	N7-C8-N9	-5.14	110.53	113.10
26	14	870	A	C8-N9-C4	5.14	107.86	105.80
26	14	1285	G	OP1-P-O3'	-5.14	93.89	105.20
26	14	2027	G	C2-N3-C4	-5.14	109.33	111.90
26	14	2035	G	C5-N7-C8	5.14	106.87	104.30
31	39	95	ARG	NE-CZ-NH1	-5.14	117.73	120.30
1	13	973	G	N3-C4-C5	-5.14	126.03	128.60
1	13	1424	C	OP1-P-OP2	-5.14	111.89	119.60
26	1H	96	G	OP1-P-OP2	5.14	127.31	119.60
26	1H	113	G	C5-N7-C8	-5.14	101.73	104.30
26	1H	192	C	N3-C4-C5	5.14	123.95	121.90
26	1H	2781	A	C4-C5-N7	5.14	113.27	110.70
27	16	6	C	C2-N1-C1'	-5.14	113.15	118.80
27	16	9	G	C5-N7-C8	-5.14	101.73	104.30
23	2L	19	G	C8-N9-C1'	5.14	133.68	127.00
26	14	245	G	C8-N9-C1'	-5.14	120.32	127.00
26	14	2718	G	N7-C8-N9	5.14	115.67	113.10
40	65	101	LEU	CB-CG-CD1	5.14	119.73	111.00
1	13	313	A	C8-N9-C4	-5.14	103.75	105.80
1	13	1238	A	N7-C8-N9	5.14	116.37	113.80
1	13	1420	C	C5-C6-N1	-5.14	118.43	121.00
26	1H	74	A	O4'-C1'-N9	-5.14	104.09	108.20
26	1H	462	C	C6-N1-C2	-5.14	118.25	120.30
26	1H	682	G	OP1-P-OP2	5.14	127.31	119.60
26	1H	804	A	OP1-P-O3'	5.14	116.50	105.20
26	1H	1028	A	OP2-P-O3'	5.14	116.50	105.20
26	1H	1290	C	N3-C2-O2	5.14	125.50	121.90
26	1H	1381	G	N9-C4-C5	5.14	107.45	105.40
26	1H	1388	G	C5-N7-C8	-5.14	101.73	104.30
26	1H	1440	G	C2-N3-C4	-5.14	109.33	111.90
26	1H	2283	C	OP1-P-OP2	-5.14	111.90	119.60
48	I8	75	LEU	CA-CB-CG	-5.14	103.49	115.30
1	1G	527	G	N1-C6-O6	-5.14	116.82	119.90
1	1G	899	C	C6-N1-C1'	-5.14	114.64	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1325	C	N3-C2-O2	-5.14	118.31	121.90
1	1G	1500	A	C5-N7-C8	-5.14	101.33	103.90
1	1G	1528	U	N3-C4-C5	5.14	117.68	114.60
25	4L	19	A	O5'-P-OP2	-5.14	101.08	105.70
26	14	304	G	N7-C8-N9	5.14	115.67	113.10
26	14	515	A	OP2-P-O3'	5.14	116.50	105.20
26	14	748	G	O5'-P-OP1	-5.14	101.08	105.70
26	14	1186	G	C8-N9-C1'	-5.14	120.32	127.00
26	14	1428	C	C4-C5-C6	5.14	119.97	117.40
26	14	1703	G	N1-C2-N3	5.14	126.98	123.90
26	14	2049	G	C5-C6-N1	5.14	114.07	111.50
26	14	2374	C	C5-C4-N4	-5.14	116.60	120.20
26	14	2581	G	N7-C8-N9	5.14	115.67	113.10
1	13	668	G	N1-C6-O6	5.13	122.98	119.90
1	13	714	G	C5-C6-N1	5.13	114.07	111.50
1	13	898	G	C5-N7-C8	-5.13	101.73	104.30
1	13	946	A	O5'-P-OP1	-5.13	101.08	105.70
23	2K	17	C	C5-C6-N1	5.13	123.57	121.00
26	1H	737	C	OP1-P-O3'	-5.13	93.90	105.20
26	1H	1440	G	C5-N7-C8	5.13	106.87	104.30
26	1H	1824	G	OP1-P-OP2	-5.13	111.90	119.60
26	1H	2060	A	C4-C5-N7	5.13	113.27	110.70
26	1H	2517	C	N3-C4-C5	5.13	123.95	121.90
49	J8	7	ILE	CA-CB-CG1	-5.13	101.24	111.00
1	1G	333	G	OP2-P-O3'	5.13	116.50	105.20
26	14	388	G	C6-C5-N7	5.13	133.48	130.40
26	14	568	U	C6-N1-C2	5.13	124.08	121.00
26	14	1339	G	N1-C2-N3	5.13	126.98	123.90
26	14	1805	U	N1-C2-N3	5.13	117.98	114.90
26	14	1828	G	C6-N1-C2	-5.13	122.02	125.10
26	14	2002	G	C5-C6-O6	-5.13	125.52	128.60
26	14	2810	A	C8-N9-C4	5.13	107.85	105.80
26	14	2851	A	O5'-P-OP1	-5.13	101.08	105.70
1	13	559	A	N7-C8-N9	5.13	116.37	113.80
24	3K	34	U	C5-C6-N1	5.13	125.27	122.70
26	1H	1606	G	C5-N7-C8	5.13	106.87	104.30
26	1H	1666	G	N1-C2-N2	-5.13	111.58	116.20
26	1H	1674	G	N1-C6-O6	5.13	122.98	119.90
26	1H	2341	G	OP1-P-O3'	5.13	116.49	105.20
26	1H	2545	G	C5-C6-N1	5.13	114.07	111.50
26	1H	2741	A	O4'-C1'-N9	-5.13	104.09	108.20
1	1G	754	C	N1-C2-O2	5.13	121.98	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	899	C	C6-N1-C2	5.13	122.35	120.30
1	1G	1443	G	C2-N3-C4	-5.13	109.33	111.90
1	1G	1508	G	N3-C2-N2	5.13	123.49	119.90
26	14	175	G	OP2-P-O3'	5.13	116.49	105.20
26	14	700	G	C2-N3-C4	5.13	114.47	111.90
26	14	1480	G	N3-C4-C5	5.13	131.17	128.60
1	13	172	A	C4-C5-C6	5.13	119.57	117.00
1	13	655	A	C5-N7-C8	-5.13	101.33	103.90
23	2K	58	A	C6-N1-C2	-5.13	115.52	118.60
26	1H	96	G	C5-C6-O6	-5.13	125.52	128.60
26	1H	561	G	C5-C6-O6	5.13	131.68	128.60
26	1H	1119	C	N3-C2-O2	-5.13	118.31	121.90
26	1H	1127	A	N1-C2-N3	-5.13	126.73	129.30
26	1H	1415	U	O5'-P-OP2	-5.13	101.08	105.70
26	1H	1817	G	C2-N3-C4	-5.13	109.33	111.90
26	1H	1954	G	N1-C2-N2	-5.13	111.58	116.20
26	1H	2271	G	N1-C2-N2	-5.13	111.58	116.20
26	1H	2489	G	C2-N3-C4	-5.13	109.33	111.90
26	1H	2680	C	N1-C2-N3	5.13	122.79	119.20
1	1G	713	G	C8-N9-C4	-5.13	104.35	106.40
1	1G	917	G	C4-C5-N7	5.13	112.85	110.80
1	1G	1267	C	C5-C6-N1	5.13	123.57	121.00
11	2A	63	LEU	CA-CB-CG	5.13	127.10	115.30
26	14	36	G	N1-C6-O6	-5.13	116.82	119.90
26	14	663	G	OP1-P-OP2	5.13	127.30	119.60
26	14	821	A	N7-C8-N9	5.13	116.36	113.80
26	14	919	G	N3-C2-N2	-5.13	116.31	119.90
26	14	1225	C	N3-C2-O2	5.13	125.49	121.90
26	14	1269	A	C2-N3-C4	-5.13	108.03	110.60
26	14	1913	A	N1-C2-N3	-5.13	126.73	129.30
26	14	1915	U	C6-N1-C2	-5.13	117.92	121.00
26	14	2311	A	C8-N9-C4	-5.13	103.75	105.80
26	14	2424	C	C5-C4-N4	5.13	123.79	120.20
26	14	2619	C	C2-N1-C1'	-5.13	113.16	118.80
1	13	254	G	O5'-P-OP2	5.13	116.86	110.70
1	13	726	C	C2-N1-C1'	5.13	124.44	118.80
6	5E	87	ARG	NE-CZ-NH2	-5.13	117.73	120.30
23	2K	6	G	C5-C6-O6	-5.13	125.52	128.60
26	1H	36	G	N3-C2-N2	-5.13	116.31	119.90
26	1H	290	G	C8-N9-C1'	-5.13	120.33	127.00
26	1H	456	C	C2-N1-C1'	5.13	124.44	118.80
26	1H	477	A	C4-C5-N7	-5.13	108.14	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	664	C	C2-N1-C1'	-5.13	113.16	118.80
26	1H	1187	G	N1-C2-N3	-5.13	120.82	123.90
26	1H	1309	G	O5'-P-OP1	5.13	116.86	110.70
26	1H	1427	A	C6-N1-C2	-5.13	115.52	118.60
26	1H	1909	C	N3-C2-O2	-5.13	118.31	121.90
26	1H	2818	G	C4-C5-N7	-5.13	108.75	110.80
23	2L	39	A	N1-C6-N6	5.13	121.68	118.60
26	14	250	G	C2-N3-C4	5.13	114.47	111.90
26	14	425	G	N1-C2-N2	5.13	120.82	116.20
26	14	1631	A	C5-N7-C8	-5.13	101.33	103.90
26	14	2500	U	C2-N1-C1'	-5.13	111.54	117.70
1	13	66	G	OP1-P-OP2	5.13	127.29	119.60
1	13	802	A	OP1-P-OP2	5.13	127.29	119.60
1	13	1470	G	N3-C4-N9	-5.13	122.92	126.00
24	3K	71	C	C2-N3-C4	5.13	122.47	119.90
26	1H	915	C	C5-C4-N4	5.13	123.79	120.20
26	1H	1990	C	O5'-P-OP1	-5.13	101.08	105.70
26	1H	2038	G	C5-N7-C8	5.13	106.86	104.30
26	1H	2452	C	OP1-P-OP2	5.13	127.29	119.60
26	1H	2480	C	O5'-P-OP2	-5.13	101.08	105.70
26	1H	2493	U	N1-C2-O2	-5.13	119.21	122.80
26	1H	2742	C	C5-C6-N1	5.13	123.56	121.00
1	1G	197	A	C4-C5-C6	5.13	119.56	117.00
1	1G	392	G	N1-C6-O6	5.13	122.98	119.90
1	1G	639	G	C5-C6-N1	-5.13	108.94	111.50
1	1G	673	G	N3-C2-N2	-5.13	116.31	119.90
1	1G	1316	G	C5-C6-O6	5.13	131.68	128.60
26	14	132	G	C8-N9-C4	5.13	108.45	106.40
26	14	184	C	OP2-P-O3'	5.13	116.48	105.20
26	14	406	G	C5-C6-N1	-5.13	108.94	111.50
26	14	452	G	N9-C4-C5	5.13	107.45	105.40
26	14	1995	U	C6-N1-C2	-5.13	117.92	121.00
1	13	294	U	C6-N1-C2	-5.13	117.92	121.00
1	13	758	G	N3-C4-C5	5.13	131.16	128.60
1	13	976	G	C8-N9-C4	5.13	108.45	106.40
1	13	1406	U	C4-C5-C6	5.13	122.78	119.70
24	3K	44	U	N1-C2-O2	5.13	126.39	122.80
26	1H	151	C	C4-C5-C6	-5.13	114.84	117.40
26	1H	264	C	C5-C4-N4	-5.13	116.61	120.20
26	1H	975	G	C8-N9-C4	5.13	108.45	106.40
26	1H	1011	G	O5'-P-OP2	5.13	116.85	110.70
26	1H	1435	G	N9-C4-C5	5.13	107.45	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1622	G	C6-N1-C2	-5.13	122.03	125.10
26	1H	2414	G	N9-C4-C5	5.13	107.45	105.40
26	1H	2758	A	C4-C5-N7	5.13	113.26	110.70
26	14	1827	C	O4'-C1'-N1	5.13	112.30	108.20
26	14	1906	G	C6-C5-N7	-5.13	127.33	130.40
26	14	2080	G	OP1-P-OP2	5.13	127.29	119.60
1	13	224	C	C6-N1-C2	-5.12	118.25	120.30
1	13	672	U	N3-C4-C5	-5.12	111.53	114.60
26	1H	1265	A	C2-N3-C4	-5.12	108.04	110.60
26	1H	1386	C	C6-N1-C1'	5.12	126.95	120.80
26	1H	2031	A	N3-C4-C5	-5.12	123.21	126.80
27	16	58	A	C4-C5-C6	-5.12	114.44	117.00
26	14	953	A	N1-C6-N6	5.12	121.67	118.60
26	14	1824	G	OP2-P-O3'	5.12	116.48	105.20
26	14	2405	G	OP2-P-O3'	-5.12	93.92	105.20
26	14	2724	C	N1-C2-N3	5.12	122.79	119.20
26	14	2883	A	C8-N9-C4	5.12	107.85	105.80
1	13	15	G	OP1-P-O3'	5.12	116.47	105.20
1	13	239	U	O5'-P-OP1	5.12	116.85	110.70
1	13	754	C	C6-N1-C2	-5.12	118.25	120.30
26	1H	226	G	C8-N9-C4	5.12	108.45	106.40
26	1H	512	G	OP1-P-O3'	5.12	116.47	105.20
26	1H	817	C	N1-C2-N3	5.12	122.79	119.20
26	1H	1391	U	C6-N1-C2	-5.12	117.93	121.00
26	1H	1496	A	C6-N1-C2	5.12	121.67	118.60
26	1H	1981	A	OP1-P-O3'	5.12	116.47	105.20
26	1H	2050	C	N3-C4-C5	-5.12	119.85	121.90
26	1H	2324	C	N1-C1'-C2'	5.12	120.66	114.00
27	16	112	G	C2-N3-C4	5.12	114.46	111.90
1	1G	454	C	N3-C2-O2	-5.12	118.31	121.90
1	1G	609	A	C8-N9-C4	-5.12	103.75	105.80
1	1G	1096	C	C5-C6-N1	5.12	123.56	121.00
1	1G	1499	A	N9-C4-C5	-5.12	103.75	105.80
26	14	445	C	N3-C4-N4	-5.12	114.41	118.00
26	14	872	A	C5-C6-N6	-5.12	119.60	123.70
26	14	1583	A	C2-N3-C4	5.12	113.16	110.60
26	14	2449	U	C6-N1-C1'	-5.12	114.03	121.20
26	14	2488	A	C2-N3-C4	-5.12	108.04	110.60
26	14	2692	C	C6-N1-C2	-5.12	118.25	120.30
27	1J	17	C	N1-C2-O2	5.12	121.97	118.90
1	13	151	A	C2-N3-C4	5.12	113.16	110.60
1	13	386	C	C2-N1-C1'	-5.12	113.17	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	567	G	OP1-P-O3'	5.12	116.47	105.20
1	13	793	U	C6-N1-C2	-5.12	117.93	121.00
1	13	1101	A	C6-N1-C2	-5.12	115.53	118.60
1	13	1376	U	N3-C4-O4	-5.12	115.82	119.40
8	7E	36	LEU	CB-CG-CD2	-5.12	102.29	111.00
26	1H	283	A	O5'-P-OP2	-5.12	101.09	105.70
26	1H	335	C	C5-C6-N1	5.12	123.56	121.00
26	1H	342	G	OP1-P-O3'	5.12	116.47	105.20
26	1H	445	C	OP1-P-OP2	-5.12	111.92	119.60
26	1H	609	A	C5-C6-N1	-5.12	115.14	117.70
26	1H	862	G	N3-C4-N9	5.12	129.07	126.00
26	1H	2274	A	N3-C4-C5	5.12	130.38	126.80
26	1H	2412	A	N3-C4-C5	-5.12	123.22	126.80
26	1H	2639	A	C6-C5-N7	-5.12	128.72	132.30
1	1G	750	G	N1-C2-N3	5.12	126.97	123.90
26	14	96	G	C8-N9-C4	5.12	108.45	106.40
26	14	137(A)	G	C6-C5-N7	-5.12	127.33	130.40
26	14	203	C	N3-C2-O2	5.12	125.48	121.90
26	14	564	C	C5-C4-N4	-5.12	116.61	120.20
26	14	2313	C	C2-N3-C4	5.12	122.46	119.90
26	14	2348	U	OP1-P-O3'	-5.12	93.93	105.20
1	13	308	C	C6-N1-C2	5.12	122.35	120.30
1	13	521	G	C5-C6-O6	-5.12	125.53	128.60
26	1H	88	G	N1-C6-O6	-5.12	116.83	119.90
26	1H	1421	G	C6-C5-N7	-5.12	127.33	130.40
1	1G	451	A	C5-N7-C8	5.12	106.46	103.90
26	14	381	G	C5-C6-N1	-5.12	108.94	111.50
26	14	2094	G	C8-N9-C4	5.12	108.45	106.40
26	14	2382	G	N3-C2-N2	5.12	123.48	119.90
1	13	35	G	C4-C5-C6	5.12	121.87	118.80
1	13	244	U	C2-N1-C1'	5.12	123.84	117.70
1	13	532	A	C5-C6-N6	-5.12	119.61	123.70
1	13	1047	G	C4-C5-N7	-5.12	108.75	110.80
1	13	1433	A	C2-N3-C4	-5.12	108.04	110.60
1	13	1433	A	OP1-P-OP2	5.12	127.28	119.60
24	3K	33	U	C6-N1-C2	5.12	124.07	121.00
26	1H	254	G	N1-C2-N2	5.12	120.81	116.20
26	1H	447	A	OP2-P-O3'	5.12	116.46	105.20
26	1H	756	C	C5-C6-N1	5.12	123.56	121.00
26	1H	858	U	OP2-P-O3'	5.12	116.46	105.20
26	1H	1342	A	N3-C4-C5	5.12	130.38	126.80
26	1H	1784	A	C6-N1-C2	5.12	121.67	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1971	A	C8-N9-C4	5.12	107.85	105.80
26	1H	2743	C	C5-C6-N1	-5.12	118.44	121.00
1	1G	114	U	C5-C4-O4	5.12	128.97	125.90
1	1G	138	G	C5-C6-N1	-5.12	108.94	111.50
1	1G	950	U	C6-N1-C2	-5.12	117.93	121.00
26	14	592	G	N3-C2-N2	-5.12	116.32	119.90
26	14	700	G	N3-C2-N2	-5.12	116.32	119.90
26	14	1551	C	C2-N3-C4	-5.12	117.34	119.90
26	14	1963	U	N3-C4-O4	5.12	122.98	119.40
26	14	1974	C	C5-C4-N4	-5.12	116.62	120.20
26	14	2348	U	N3-C4-C5	5.12	117.67	114.60
26	14	2681	C	C2-N3-C4	-5.12	117.34	119.90
1	13	900	A	O5'-P-OP1	5.12	116.84	110.70
1	13	1317	C	N3-C2-O2	-5.12	118.32	121.90
26	1H	1277	G	C4-N9-C1'	-5.12	119.85	126.50
26	1H	2026	C	N3-C4-C5	5.12	123.95	121.90
1	1G	1387	G	C8-N9-C4	5.12	108.45	106.40
26	14	860	U	OP1-P-O3'	5.12	116.46	105.20
26	14	1460	A	C4-C5-C6	-5.12	114.44	117.00
1	13	41	G	N7-C8-N9	-5.12	110.54	113.10
1	13	153	C	N1-C2-O2	5.12	121.97	118.90
1	13	500	G	C5-C6-O6	-5.12	125.53	128.60
1	13	645	C	N1-C2-O2	5.12	121.97	118.90
1	13	685	G	O5'-P-OP1	-5.12	101.10	105.70
26	1H	127	A	N3-C4-C5	5.12	130.38	126.80
26	1H	471	A	OP1-P-OP2	-5.12	111.93	119.60
26	1H	640	C	C5-C6-N1	-5.12	118.44	121.00
26	1H	1028	A	C2-N3-C4	-5.12	108.04	110.60
26	1H	2244	U	N3-C4-O4	-5.12	115.82	119.40
26	1H	2255	G	C6-N1-C2	-5.12	122.03	125.10
26	1H	2321	G	O4'-C1'-N9	5.12	112.29	108.20
26	1H	2426	A	N7-C8-N9	5.12	116.36	113.80
1	1G	386	C	P-O3'-C3'	-5.12	113.56	119.70
1	1G	912	C	OP2-P-O3'	5.12	116.45	105.20
26	14	1822	G	N1-C2-N3	5.12	126.97	123.90
26	14	2065	C	O5'-P-OP2	-5.12	101.10	105.70
26	14	2508	G	O5'-P-OP2	5.12	116.84	110.70
26	14	2555	U	C5-C6-N1	-5.12	120.14	122.70
1	13	275	G	C2-N3-C4	5.11	114.46	111.90
1	13	307	C	OP1-P-OP2	5.11	127.27	119.60
1	13	347	G	O5'-P-OP1	-5.11	101.10	105.70
1	13	721	G	OP1-P-OP2	5.11	127.27	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1075	C	C4-C5-C6	-5.11	114.84	117.40
26	1H	188	G	N1-C2-N2	-5.11	111.60	116.20
26	1H	286	C	N1-C2-O2	5.11	121.97	118.90
26	1H	360	G	C4-C5-N7	5.11	112.85	110.80
26	1H	989	G	N7-C8-N9	5.11	115.66	113.10
26	1H	1309	G	C5-C6-N1	-5.11	108.94	111.50
26	1H	1898	U	OP1-P-O3'	5.11	116.45	105.20
26	1H	1961	C	N3-C4-N4	5.11	121.58	118.00
26	1H	2212	A	C5-C6-N1	-5.11	115.14	117.70
26	1H	2380	C	N3-C4-C5	5.11	123.94	121.90
26	1H	2670	A	C2-N3-C4	-5.11	108.04	110.60
26	1H	2684	U	C4-C5-C6	5.11	122.77	119.70
27	16	20	C	C6-N1-C2	5.11	122.34	120.30
1	1G	434	U	N3-C2-O2	-5.11	118.62	122.20
1	1G	610	G	O5'-P-OP1	5.11	116.84	110.70
1	1G	795	C	OP2-P-O3'	5.11	116.45	105.20
1	1G	1512	U	N3-C4-C5	-5.11	111.53	114.60
26	14	300	A	N9-C4-C5	-5.11	103.75	105.80
26	14	663	G	N1-C2-N3	5.11	126.97	123.90
26	14	783	A	N9-C1'-C2'	-5.11	106.37	112.00
26	14	917	A	OP1-P-OP2	5.11	127.27	119.60
26	14	1343	G	C4-C5-C6	5.11	121.87	118.80
26	14	1558	A	C6-C5-N7	-5.11	128.72	132.30
26	14	1690	A	C5-N7-C8	-5.11	101.34	103.90
26	14	1769	G	C8-N9-C1'	-5.11	120.35	127.00
26	14	2559	C	N3-C2-O2	-5.11	118.32	121.90
27	1J	9	G	OP2-P-O3'	5.11	116.45	105.20
29	19	272	ALA	N-CA-C	5.11	124.81	111.00
26	1H	452	G	N1-C2-N3	-5.11	120.83	123.90
26	1H	568	U	N1-C2-O2	-5.11	119.22	122.80
1	1G	353	A	OP2-P-O3'	5.11	116.45	105.20
1	1G	892	A	OP1-P-OP2	5.11	127.27	119.60
26	14	695	G	C5-C6-N1	-5.11	108.94	111.50
26	14	2395	C	N3-C4-C5	5.11	123.94	121.90
1	13	333	G	C5-N7-C8	5.11	106.86	104.30
1	13	954	G	N9-C1'-C2'	-5.11	106.38	112.00
1	13	1467	G	C5-C6-O6	5.11	131.67	128.60
1	13	1468	A	N9-C4-C5	-5.11	103.75	105.80
26	1H	793	A	N3-C4-C5	-5.11	123.22	126.80
26	1H	821	A	N9-C4-C5	5.11	107.84	105.80
26	1H	928	G	C6-N1-C2	5.11	128.17	125.10
26	1H	956	G	N3-C2-N2	5.11	123.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1279	G	N3-C2-N2	5.11	123.48	119.90
26	1H	2128	C	C6-N1-C2	-5.11	118.26	120.30
26	1H	2216	G	C2-N3-C4	-5.11	109.34	111.90
26	1H	2841	C	C4-C5-C6	-5.11	114.84	117.40
26	1H	2850	A	OP1-P-O3'	5.11	116.44	105.20
1	1G	51	A	OP1-P-OP2	5.11	127.27	119.60
26	14	313	C	OP2-P-O3'	5.11	116.44	105.20
26	14	449	A	OP1-P-O3'	5.11	116.44	105.20
26	14	1245	G	C5-N7-C8	-5.11	101.75	104.30
26	14	1696	G	N1-C2-N2	-5.11	111.60	116.20
26	14	1815	A	C5-C6-N6	-5.11	119.61	123.70
26	14	2029	G	N9-C4-C5	5.11	107.44	105.40
26	14	2068	U	C4-C5-C6	-5.11	116.63	119.70
1	13	500	G	C5-N7-C8	5.11	106.86	104.30
26	1H	245	G	N1-C6-O6	5.11	122.97	119.90
26	1H	275	G	N1-C6-O6	-5.11	116.83	119.90
26	1H	828	U	C4-C5-C6	5.11	122.77	119.70
26	1H	931	G	C5-C6-O6	-5.11	125.53	128.60
26	1H	1025	G	N1-C6-O6	5.11	122.97	119.90
26	1H	1810	A	O5'-P-OP2	-5.11	101.10	105.70
1	1G	1409	C	N3-C2-O2	-5.11	118.32	121.90
26	14	556	G	N3-C4-N9	5.11	129.06	126.00
26	14	1234	U	N3-C4-O4	-5.11	115.82	119.40
26	14	1271	G	N1-C2-N3	5.11	126.97	123.90
26	14	1777	U	C2-N3-C4	-5.11	123.94	127.00
26	14	1942	C	OP1-P-O3'	5.11	116.44	105.20
1	13	795	C	C5-C6-N1	-5.11	118.45	121.00
1	13	885	G	N3-C4-C5	5.11	131.15	128.60
1	13	943	U	N3-C2-O2	5.11	125.78	122.20
26	1H	427	U	C2-N1-C1'	5.11	123.83	117.70
26	1H	474	G	C4-C5-C6	-5.11	115.74	118.80
26	1H	848	G	O5'-P-OP1	5.11	116.83	110.70
26	1H	1398	C	OP1-P-O3'	-5.11	93.97	105.20
26	1H	1622	G	N1-C2-N2	-5.11	111.60	116.20
26	1H	1848	A	C5-C6-N6	-5.11	119.61	123.70
26	1H	2716	U	C2-N3-C4	-5.11	123.94	127.00
38	88	25	ASP	CB-CG-OD2	-5.11	113.70	118.30
26	14	270(C)	C	OP2-P-O3'	5.11	116.44	105.20
26	14	282	A	N9-C4-C5	5.11	107.84	105.80
26	14	300	A	C4-C5-N7	5.11	113.25	110.70
26	14	791	C	C2-N1-C1'	-5.11	113.18	118.80
26	14	1259	G	OP2-P-O3'	5.11	116.44	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1902	C	C2-N3-C4	-5.11	117.35	119.90
26	14	2269	A	C8-N9-C4	5.11	107.84	105.80
26	14	2584	U	C2-N1-C1'	5.11	123.83	117.70
1	13	430	A	C4-C5-N7	5.11	113.25	110.70
1	13	452	A	N7-C8-N9	-5.11	111.25	113.80
26	1H	504	U	C6-N1-C1'	-5.11	114.05	121.20
26	1H	765	G	C2-N3-C4	-5.11	109.35	111.90
26	1H	1678	G	C4-N9-C1'	-5.11	119.86	126.50
26	1H	1832	C	N3-C4-C5	-5.11	119.86	121.90
26	1H	1984	G	C5-N7-C8	5.11	106.85	104.30
26	1H	2842	G	N1-C2-N3	-5.11	120.84	123.90
27	16	13	A	OP1-P-OP2	5.11	127.26	119.60
27	16	103	U	N1-C2-O2	-5.11	119.22	122.80
1	1G	800	G	N3-C2-N2	-5.11	116.33	119.90
1	1G	857	C	O5'-P-OP2	-5.11	101.11	105.70
1	1G	910	C	N3-C2-O2	-5.11	118.33	121.90
1	1G	994	A	N7-C8-N9	5.11	116.35	113.80
26	14	71	A	C8-N9-C4	-5.11	103.76	105.80
26	14	270(A)	A	C8-N9-C4	5.11	107.84	105.80
26	14	704	G	C6-N1-C2	5.11	128.16	125.10
26	14	741	G	N7-C8-N9	5.11	115.65	113.10
26	14	745	G	OP1-P-O3'	5.11	116.43	105.20
26	14	971	C	OP2-P-O3'	5.11	116.43	105.20
26	14	1163	G	C4-C5-N7	-5.11	108.76	110.80
26	14	1363	C	N3-C2-O2	5.11	125.47	121.90
26	14	1667	G	C8-N9-C4	-5.11	104.36	106.40
26	14	1763	G	C4-C5-C6	-5.11	115.74	118.80
26	14	1780	A	C2-N3-C4	-5.11	108.05	110.60
26	14	2603	G	OP1-P-O3'	5.11	116.43	105.20
1	13	758	G	OP1-P-OP2	-5.10	111.94	119.60
26	1H	347	A	N9-C4-C5	-5.10	103.76	105.80
26	1H	451	C	N3-C4-N4	5.10	121.57	118.00
26	1H	997	G	C4-C5-N7	-5.10	108.76	110.80
26	1H	1899	G	N1-C6-O6	5.10	122.96	119.90
26	1H	2346	A	C1'-O4'-C4'	-5.10	105.82	109.90
26	1H	2382	G	C5-C6-O6	5.10	131.66	128.60
1	1G	127	G	C8-N9-C4	5.10	108.44	106.40
1	1G	183	G	C6-C5-N7	-5.10	127.34	130.40
26	14	263	C	C4-C5-C6	5.10	119.95	117.40
26	14	672	C	O5'-P-OP1	5.10	116.83	110.70
26	14	1233	C	C6-N1-C2	-5.10	118.26	120.30
26	14	2677	G	C4-C5-N7	-5.10	108.76	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	417	C	O5'-P-OP1	5.10	116.82	110.70
1	13	540	G	C5-C6-O6	5.10	131.66	128.60
23	2K	24	C	OP1-P-OP2	5.10	127.25	119.60
26	1H	642	G	N3-C2-N2	-5.10	116.33	119.90
26	1H	848	G	C8-N9-C1'	-5.10	120.37	127.00
26	1H	873	G	C2-N3-C4	5.10	114.45	111.90
26	1H	1336	A	C2-N3-C4	5.10	113.15	110.60
26	1H	2583	G	O5'-P-OP1	5.10	116.82	110.70
26	1H	2758	A	N3-C4-C5	5.10	130.37	126.80
27	16	93	C	C5-C6-N1	5.10	123.55	121.00
27	16	109	G	N3-C2-N2	-5.10	116.33	119.90
26	14	432	A	C8-N9-C4	-5.10	103.76	105.80
26	14	603	A	N1-C6-N6	5.10	121.66	118.60
26	14	823	G	C4-C5-N7	-5.10	108.76	110.80
26	14	1777	U	N1-C2-O2	-5.10	119.23	122.80
1	13	125	U	OP2-P-O3'	5.10	116.42	105.20
1	13	251	G	N7-C8-N9	5.10	115.65	113.10
1	13	812	C	OP1-P-O3'	5.10	116.42	105.20
26	1H	200	U	O5'-P-OP1	-5.10	101.11	105.70
26	1H	532	A	O4'-C1'-N9	5.10	112.28	108.20
26	1H	2274	A	C8-N9-C4	-5.10	103.76	105.80
26	1H	2435	A	C4-C5-N7	-5.10	108.15	110.70
26	1H	2507	C	N1-C2-N3	5.10	122.77	119.20
1	1G	305	G	N3-C4-C5	-5.10	126.05	128.60
1	1G	584	G	C6-N1-C2	5.10	128.16	125.10
23	2L	13	C	N3-C2-O2	-5.10	118.33	121.90
26	14	1283	G	N1-C2-N3	5.10	126.96	123.90
26	14	1695	G	C4-C5-N7	5.10	112.84	110.80
26	14	2001	A	N9-C4-C5	-5.10	103.76	105.80
26	14	2567	G	N7-C8-N9	-5.10	110.55	113.10
26	14	2776	A	O5'-P-OP2	5.10	116.82	110.70
1	13	873	A	C4-C5-N7	-5.10	108.15	110.70
26	1H	300	A	C4-C5-C6	5.10	119.55	117.00
26	1H	566	U	O5'-P-OP2	5.10	116.82	110.70
26	1H	1475	G	C2-N3-C4	-5.10	109.35	111.90
26	1H	2301	C	C6-N1-C1'	5.10	126.92	120.80
26	1H	2527	C	C4-C5-C6	-5.10	114.85	117.40
26	1H	2585	U	C6-N1-C2	5.10	124.06	121.00
26	1H	2757	A	N7-C8-N9	5.10	116.35	113.80
45	F8	3	THR	CA-C-N	5.10	128.42	117.20
1	1G	27	G	N7-C8-N9	5.10	115.65	113.10
1	1G	860	A	OP1-P-OP2	-5.10	111.95	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1450	U	C2-N1-C1'	5.10	123.82	117.70
26	14	466	A	C5-C6-N6	-5.10	119.62	123.70
26	14	785	G	N1-C2-N2	5.10	120.79	116.20
26	14	1374	G	N7-C8-N9	5.10	115.65	113.10
26	14	1864	U	OP1-P-O3'	5.10	116.42	105.20
26	14	2241	A	N1-C2-N3	5.10	131.85	129.30
26	14	2359	C	N1-C2-N3	5.10	122.77	119.20
26	14	2401	U	N1-C2-O2	5.10	126.37	122.80
26	14	2426	A	C2-N3-C4	-5.10	108.05	110.60
26	14	2789	C	N3-C4-N4	-5.10	114.43	118.00
1	13	784	C	N3-C2-O2	5.10	125.47	121.90
26	1H	60	G	C4-C5-N7	5.10	112.84	110.80
26	1H	194	G	N1-C2-N2	5.10	120.79	116.20
26	1H	344	G	C6-C5-N7	5.10	133.46	130.40
26	1H	651	G	C5-C6-N1	5.10	114.05	111.50
26	1H	702	G	C4-C5-C6	5.10	121.86	118.80
26	1H	1124	C	O5'-P-OP1	5.10	116.82	110.70
26	1H	1691	C	C5-C4-N4	5.10	123.77	120.20
26	1H	1820	U	C6-N1-C2	5.10	124.06	121.00
26	1H	2002	G	N1-C2-N3	5.10	126.96	123.90
26	1H	2313	C	N3-C2-O2	-5.10	118.33	121.90
26	1H	2743	C	N3-C2-O2	-5.10	118.33	121.90
26	1H	2835	A	N7-C8-N9	5.10	116.35	113.80
27	16	40	U	N3-C2-O2	5.10	125.77	122.20
37	78	50	ARG	NE-CZ-NH1	-5.10	117.75	120.30
1	1G	68	G	N3-C4-C5	-5.10	126.05	128.60
1	1G	108	G	C8-N9-C4	-5.10	104.36	106.40
1	1G	375	U	O5'-P-OP1	-5.10	101.11	105.70
1	1G	596	C	N1-C2-N3	-5.10	115.63	119.20
1	1G	1521	G	N3-C2-N2	-5.10	116.33	119.90
26	14	107	C	OP1-P-OP2	-5.10	111.95	119.60
26	14	352	G	N7-C8-N9	5.10	115.65	113.10
26	14	683	C	C2-N3-C4	-5.10	117.35	119.90
26	14	732	C	C6-N1-C2	5.10	122.34	120.30
26	14	916	G	O5'-P-OP1	-5.10	101.11	105.70
26	14	1372	U	OP2-P-O3'	5.10	116.42	105.20
26	14	1412	A	C4-C5-C6	-5.10	114.45	117.00
26	14	2175	C	C6-N1-C2	5.10	122.34	120.30
26	14	2224	G	N3-C2-N2	-5.10	116.33	119.90
26	14	2312	U	C4-C5-C6	5.10	122.76	119.70
26	14	2312	U	N3-C4-C5	-5.10	111.54	114.60
26	14	2467	C	C6-N1-C2	-5.10	118.26	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2570	G	C5-N7-C8	-5.10	101.75	104.30
26	14	2629	A	N3-C4-C5	-5.10	123.23	126.80
1	13	954	G	N1-C2-N2	5.10	120.79	116.20
1	13	1519	A	OP1-P-OP2	5.10	127.24	119.60
26	1H	330	A	C4-C5-C6	5.10	119.55	117.00
26	1H	765	G	O5'-P-OP1	-5.10	101.11	105.70
26	1H	1321	A	P-O3'-C3'	-5.10	113.58	119.70
26	1H	2570	G	C6-C5-N7	-5.10	127.34	130.40
27	16	117	G	N3-C4-C5	5.10	131.15	128.60
1	1G	1361	G	OP1-P-OP2	-5.10	111.96	119.60
26	14	1296	G	O4'-C1'-N9	5.10	112.28	108.20
26	14	2853	C	N1-C2-N3	5.10	122.77	119.20
1	13	61	G	C5-C6-O6	5.09	131.66	128.60
1	13	248	C	N1-C2-O2	5.09	121.96	118.90
1	13	937	A	C8-N9-C4	-5.09	103.76	105.80
1	13	1357	A	C6-N1-C2	5.09	121.66	118.60
26	1H	962	G	N3-C4-C5	-5.09	126.05	128.60
26	1H	1192	G	OP2-P-O3'	5.09	116.41	105.20
26	1H	1298	C	N3-C4-C5	-5.09	119.86	121.90
26	1H	1545(A)	A	N1-C2-N3	-5.09	126.75	129.30
26	1H	1573	G	N3-C4-C5	5.09	131.15	128.60
26	1H	2293	C	N1-C2-O2	5.09	121.96	118.90
26	1H	2837	G	OP1-P-OP2	-5.09	111.96	119.60
29	11	272	ALA	N-CA-C	5.09	124.75	111.00
1	1G	778	G	N7-C8-N9	5.09	115.65	113.10
57	3L	42	A	N3-C4-N9	5.09	131.48	127.40
26	14	544	C	N3-C4-N4	5.09	121.57	118.00
26	14	640	C	N1-C2-O2	-5.09	115.84	118.90
26	14	669	G	C5-C6-O6	5.09	131.66	128.60
26	14	1243	G	N3-C4-N9	5.09	129.06	126.00
26	14	1455	G	C6-C5-N7	-5.09	127.34	130.40
26	14	1782	C	N3-C4-N4	5.09	121.57	118.00
26	14	1824	G	N9-C4-C5	5.09	107.44	105.40
26	14	2314	C	N3-C4-N4	-5.09	114.43	118.00
26	14	2588	G	C4-C5-N7	-5.09	108.76	110.80
1	13	879	C	OP1-P-OP2	-5.09	111.96	119.60
1	13	1494	G	N3-C4-N9	5.09	129.06	126.00
26	1H	744	G	C6-C5-N7	-5.09	127.34	130.40
26	1H	810	U	N1-C2-O2	-5.09	119.23	122.80
27	16	22	U	OP1-P-OP2	-5.09	111.96	119.60
1	1G	1352	C	N3-C4-C5	-5.09	119.86	121.90
26	14	1135	C	O5'-P-OP1	5.09	116.81	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1820	U	C4-C5-C6	5.09	122.76	119.70
26	14	1996	C	C4-C5-C6	5.09	119.95	117.40
26	1H	327	G	N9-C4-C5	5.09	107.44	105.40
26	1H	693	C	C6-N1-C1'	5.09	126.91	120.80
26	1H	846	C	N3-C4-C5	5.09	123.94	121.90
26	1H	976	C	C4-C5-C6	5.09	119.95	117.40
26	1H	1107	G	N3-C4-N9	5.09	129.05	126.00
26	1H	2054	A	C5-C6-N1	5.09	120.25	117.70
26	1H	2245	U	N1-C2-O2	5.09	126.36	122.80
26	1H	2301	C	C6-N1-C2	-5.09	118.26	120.30
26	1H	2471	C	N3-C4-C5	-5.09	119.86	121.90
1	1G	154	C	N1-C2-O2	5.09	121.95	118.90
1	1G	502	G	OP1-P-O3'	5.09	116.40	105.20
1	1G	530	G	N3-C4-N9	-5.09	122.95	126.00
1	1G	808	C	N3-C4-N4	-5.09	114.44	118.00
1	1G	1395	C	C6-N1-C2	-5.09	118.26	120.30
26	14	1031	G	N1-C6-O6	5.09	122.95	119.90
26	14	1705	G	N1-C6-O6	-5.09	116.84	119.90
26	14	1730	U	O4'-C1'-N1	5.09	112.27	108.20
26	14	1933	G	OP1-P-OP2	5.09	127.24	119.60
26	14	2812	G	N3-C4-C5	5.09	131.15	128.60
1	13	283	C	O5'-P-OP1	-5.09	101.12	105.70
1	13	541	G	O5'-P-OP1	5.09	116.81	110.70
1	13	1082	G	C4-C5-N7	5.09	112.84	110.80
1	13	1454	G	N1-C6-O6	5.09	122.95	119.90
22	1K	64	G	N1-C2-N3	-5.09	120.85	123.90
26	1H	966	G	N3-C4-C5	-5.09	126.06	128.60
26	1H	986	C	OP2-P-O3'	5.09	116.39	105.20
26	1H	1763	G	C4-C5-C6	-5.09	115.75	118.80
26	1H	1764	G	N9-C4-C5	5.09	107.44	105.40
26	1H	2352	A	OP1-P-O3'	5.09	116.40	105.20
26	1H	2773	C	OP1-P-OP2	-5.09	111.97	119.60
26	14	454	A	C5-N7-C8	5.09	106.44	103.90
26	14	485	C	C6-N1-C2	-5.09	118.26	120.30
26	14	641	C	C5-C6-N1	-5.09	118.46	121.00
26	14	1203	G	N1-C2-N3	5.09	126.95	123.90
26	14	1409	C	C2-N3-C4	-5.09	117.36	119.90
26	14	1666	G	OP2-P-O3'	5.09	116.39	105.20
26	14	1682	G	N3-C2-N2	-5.09	116.34	119.90
26	14	1903	G	OP2-P-O3'	5.09	116.40	105.20
26	14	2872	G	C2-N3-C4	5.09	114.44	111.90
1	13	362	G	C5-C6-N1	-5.09	108.96	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	857	C	C4-C5-C6	5.09	119.94	117.40
1	13	890	G	OP1-P-O3'	-5.09	94.01	105.20
6	5E	48	LEU	CB-CG-CD2	-5.09	102.35	111.00
26	1H	250	G	OP1-P-OP2	5.09	127.23	119.60
26	1H	2025	C	C5-C4-N4	-5.09	116.64	120.20
1	1G	906	G	C4-C5-N7	5.09	112.83	110.80
57	3L	18	G	C8-N9-C4	-5.09	104.36	106.40
1	13	712	A	C6-N1-C2	-5.09	115.55	118.60
1	13	883	C	C5-C6-N1	5.09	123.54	121.00
1	13	1466	C	C5-C4-N4	5.09	123.76	120.20
23	2K	37	U	OP2-P-O3'	5.09	116.39	105.20
26	1H	48	G	OP2-P-O3'	5.09	116.39	105.20
26	1H	325	G	C6-C5-N7	5.09	133.45	130.40
26	1H	356	G	N3-C4-C5	5.09	131.14	128.60
26	1H	406	G	C5-C6-N1	-5.09	108.96	111.50
26	1H	565	C	C4-C5-C6	-5.09	114.86	117.40
26	1H	612	G	O5'-P-OP1	5.09	116.80	110.70
26	1H	1187	G	C2-N3-C4	5.09	114.44	111.90
26	1H	2251	G	OP2-P-O3'	-5.09	94.01	105.20
26	1H	2777	G	OP1-P-O3'	5.09	116.39	105.20
27	16	33	G	N1-C2-N2	-5.09	111.62	116.20
27	16	37	C	N3-C2-O2	5.09	125.46	121.90
27	16	117	G	N3-C2-N2	5.09	123.46	119.90
1	1G	11	G	C4-C5-N7	-5.09	108.77	110.80
26	14	224	G	O5'-P-OP2	-5.09	101.12	105.70
26	14	966	G	N7-C8-N9	-5.09	110.56	113.10
26	14	1354	A	C5-C6-N6	-5.09	119.63	123.70
26	14	1578	U	C6-N1-C2	-5.09	117.95	121.00
26	14	1815	A	C6-C5-N7	-5.09	128.74	132.30
26	14	1827	C	OP2-P-O3'	-5.09	94.01	105.20
26	14	2275	C	C5'-C4'-O4'	-5.09	103.00	109.10
26	14	2384	G	N7-C8-N9	-5.09	110.56	113.10
26	14	2653	U	N1-C2-N3	-5.09	111.85	114.90
23	2K	43	G	N1-C2-N3	5.08	126.95	123.90
26	1H	1449(A)	G	C5-N7-C8	5.08	106.84	104.30
26	1H	2278	A	C6-C5-N7	-5.08	128.74	132.30
26	1H	2476	A	C4-N9-C1'	5.08	135.45	126.30
26	1H	2714	G	C6-N1-C2	-5.08	122.05	125.10
27	16	54	G	O5'-P-OP2	5.08	116.80	110.70
26	14	28	A	N1-C6-N6	5.08	121.65	118.60
26	14	1924	C	N3-C2-O2	5.08	125.46	121.90
26	14	2496	C	C5-C4-N4	-5.08	116.64	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2781	A	C5-C6-N6	5.08	127.77	123.70
1	13	1126	U	C5-C6-N1	-5.08	120.16	122.70
1	13	1190	G	C8-N9-C4	-5.08	104.37	106.40
1	13	1350	A	C8-N9-C4	-5.08	103.77	105.80
1	13	1413	A	N1-C6-N6	5.08	121.65	118.60
13	4I	48	LEU	CA-CB-CG	5.08	126.99	115.30
26	1H	344	G	C5-C6-O6	5.08	131.65	128.60
26	1H	451	C	OP2-P-O3'	5.08	116.38	105.20
26	1H	675	A	N1-C6-N6	-5.08	115.55	118.60
26	1H	1005	C	N1-C2-O2	-5.08	115.85	118.90
26	1H	1160	G	C5-N7-C8	-5.08	101.76	104.30
26	1H	1170	G	C8-N9-C4	-5.08	104.37	106.40
26	1H	2234	G	N1-C2-N3	5.08	126.95	123.90
26	1H	2270	G	C4-C5-C6	5.08	121.85	118.80
26	1H	2273	A	OP2-P-O3'	5.08	116.38	105.20
26	1H	2289	G	C4-C5-C6	-5.08	115.75	118.80
26	1H	2532	G	N9-C4-C5	-5.08	103.37	105.40
26	1H	2581	G	N3-C2-N2	5.08	123.46	119.90
26	1H	2625	G	O4'-C1'-N9	-5.08	104.13	108.20
1	1G	7	G	OP1-P-O3'	5.08	116.39	105.20
1	1G	1521	G	N1-C6-O6	5.08	122.95	119.90
26	14	256	A	N1-C6-N6	5.08	121.65	118.60
26	14	408	G	OP1-P-OP2	-5.08	111.97	119.60
26	14	472	A	C2-N3-C4	-5.08	108.06	110.60
26	14	629	G	N1-C6-O6	5.08	122.95	119.90
26	14	842	G	O4'-C1'-N9	-5.08	104.13	108.20
26	14	1203	G	C5-C6-N1	-5.08	108.96	111.50
26	14	1230	C	N3-C4-C5	5.08	123.93	121.90
26	14	1295	C	N3-C4-N4	-5.08	114.44	118.00
26	14	1613	G	N3-C4-C5	-5.08	126.06	128.60
26	14	2381	C	N3-C2-O2	5.08	125.46	121.90
1	13	696	A	C2-N3-C4	-5.08	108.06	110.60
1	13	765	G	C2-N3-C4	-5.08	109.36	111.90
1	13	833	U	O5'-P-OP2	-5.08	101.13	105.70
1	13	1068	G	O5'-P-OP1	5.08	116.80	110.70
26	1H	111	A	O5'-P-OP2	-5.08	101.13	105.70
26	1H	194	G	C6-C5-N7	-5.08	127.35	130.40
26	1H	270(A)	A	N7-C8-N9	-5.08	111.26	113.80
26	1H	423	A	N1-C6-N6	-5.08	115.55	118.60
26	1H	529	A	N3-C4-N9	5.08	131.47	127.40
26	1H	690	G	C6-N1-C2	-5.08	122.05	125.10
26	1H	735	A	N1-C2-N3	5.08	131.84	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	793	A	C5-C6-N1	5.08	120.24	117.70
26	1H	837	C	C5-C4-N4	-5.08	116.64	120.20
26	1H	1130	U	N3-C4-O4	5.08	122.96	119.40
26	1H	1286	A	C5-C6-N1	5.08	120.24	117.70
26	1H	1339	G	OP1-P-OP2	-5.08	111.98	119.60
26	1H	1454	U	C5-C6-N1	-5.08	120.16	122.70
26	1H	1551	C	OP2-P-O3'	5.08	116.38	105.20
26	1H	2056	G	C6-N1-C2	-5.08	122.05	125.10
26	1H	2092	U	C2-N1-C1'	5.08	123.80	117.70
26	1H	2230	G	OP1-P-OP2	5.08	127.22	119.60
26	1H	2307	G	C4-C5-N7	5.08	112.83	110.80
26	1H	2555	U	C5-C4-O4	5.08	128.95	125.90
1	1G	1441	G	C5-C6-N1	-5.08	108.96	111.50
26	14	138	G	N7-C8-N9	5.08	115.64	113.10
26	14	308	G	C5-N7-C8	-5.08	101.76	104.30
26	14	518	G	C6-C5-N7	-5.08	127.35	130.40
26	14	1474	C	N3-C4-C5	-5.08	119.87	121.90
1	13	259	G	N1-C6-O6	5.08	122.95	119.90
1	13	391	G	C4-C5-C6	-5.08	115.75	118.80
26	1H	412	A	N1-C2-N3	5.08	131.84	129.30
26	1H	612	G	N3-C2-N2	-5.08	116.34	119.90
26	1H	1012	U	N3-C2-O2	5.08	125.76	122.20
26	1H	2026	C	O5'-P-OP1	5.08	116.80	110.70
26	1H	2360	A	C4-C5-N7	5.08	113.24	110.70
26	1H	2857	G	C5-N7-C8	-5.08	101.76	104.30
26	1H	2875	C	C5-C6-N1	-5.08	118.46	121.00
55	Q8	62	LEU	CA-CB-CG	5.08	126.98	115.30
1	1G	118	U	N3-C4-C5	-5.08	111.55	114.60
1	1G	755	G	N1-C6-O6	5.08	122.95	119.90
23	2L	14	A	O5'-P-OP2	5.08	116.80	110.70
26	14	339	U	N1-C2-N3	-5.08	111.85	114.90
26	14	407	G	OP2-P-O3'	5.08	116.38	105.20
26	14	1263	U	C2-N1-C1'	5.08	123.80	117.70
26	14	1496	A	C5-C6-N1	-5.08	115.16	117.70
1	13	344	A	O4'-C1'-N9	-5.08	104.14	108.20
1	13	624	C	OP2-P-O3'	5.08	116.37	105.20
1	13	828	A	OP1-P-OP2	5.08	127.22	119.60
1	13	1219	U	N1-C2-O2	-5.08	119.25	122.80
26	1H	28	A	O5'-P-OP1	5.08	116.79	110.70
26	1H	659	C	N3-C4-C5	5.08	123.93	121.90
26	1H	685	A	N9-C4-C5	-5.08	103.77	105.80
26	1H	723	G	C8-N9-C1'	-5.08	120.40	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1453	A	C5-C6-N6	-5.08	119.64	123.70
26	1H	2022	U	N3-C2-O2	5.08	125.75	122.20
26	1H	2340	G	OP1-P-O3'	5.08	116.38	105.20
27	16	25	A	C6-C5-N7	-5.08	128.75	132.30
27	16	108	C	N3-C4-C5	-5.08	119.87	121.90
39	98	18	LEU	CB-CG-CD2	-5.08	102.37	111.00
1	1G	54	C	N3-C4-C5	5.08	123.93	121.90
1	1G	133	U	N3-C4-O4	5.08	122.95	119.40
1	1G	169	C	N1-C2-O2	5.08	121.95	118.90
1	1G	758	G	N9-C4-C5	-5.08	103.37	105.40
1	1G	951	G	O5'-P-OP2	5.08	116.80	110.70
26	14	760	G	N1-C2-N3	5.08	126.95	123.90
26	14	818	G	N1-C6-O6	-5.08	116.85	119.90
26	14	1138	G	N7-C8-N9	5.08	115.64	113.10
26	14	1914	C	C6-N1-C1'	-5.08	114.70	120.80
26	14	1978	A	N1-C6-N6	-5.08	115.55	118.60
26	14	2031	A	C6-N1-C2	-5.08	115.55	118.60
26	14	2718	G	C5-C6-N1	-5.08	108.96	111.50
1	13	12	U	C4-C5-C6	5.08	122.75	119.70
8	7E	14	ARG	NE-CZ-NH1	-5.08	117.76	120.30
26	1H	1349	A	C6-C5-N7	-5.08	128.75	132.30
26	1H	1775	U	N1-C2-O2	-5.08	119.25	122.80
26	1H	1990	C	N1-C2-N3	5.08	122.75	119.20
26	1H	2333	A	O5'-P-OP2	-5.08	101.13	105.70
26	1H	2383	G	C4-N9-C1'	5.08	133.10	126.50
26	1H	2679	A	C5-C6-N6	-5.08	119.64	123.70
1	1G	1473	A	C5-C6-N6	-5.08	119.64	123.70
26	14	2315	G	OP1-P-O3'	5.08	116.37	105.20
24	3K	17	U	N1-C2-O2	5.08	126.35	122.80
26	1H	343	C	C6-N1-C2	-5.08	118.27	120.30
26	1H	496	G	N3-C4-C5	5.08	131.14	128.60
26	1H	596	G	N1-C2-N2	5.08	120.77	116.20
26	1H	677	A	O5'-P-OP2	-5.08	101.13	105.70
26	1H	928	G	O5'-P-OP2	5.08	116.79	110.70
26	1H	978	G	N1-C2-N3	5.08	126.95	123.90
26	1H	1161	C	C6-N1-C1'	5.08	126.89	120.80
26	1H	1330	C	C6-N1-C2	-5.08	118.27	120.30
1	1G	142	G	C5-C6-N1	5.08	114.04	111.50
1	1G	1048	G	C8-N9-C4	-5.08	104.37	106.40
1	1G	1525	G	N1-C2-N2	-5.08	111.63	116.20
26	14	1557	C	C5-C4-N4	5.08	123.75	120.20
26	14	1622	G	OP2-P-O3'	5.08	116.37	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1792	G	N3-C2-N2	-5.08	116.35	119.90
26	14	1904	G	OP2-P-O3'	5.08	116.37	105.20
26	14	2046	G	C8-N9-C4	5.08	108.43	106.40
27	1J	66	A	C5-C6-N1	-5.08	115.16	117.70
1	13	360	A	N1-C6-N6	5.07	121.64	118.60
1	13	599	C	C5-C6-N1	5.07	123.54	121.00
1	13	861	G	C4-C5-N7	-5.07	108.77	110.80
1	13	907	A	N9-C4-C5	-5.07	103.77	105.80
23	2K	7	G	N9-C4-C5	-5.07	103.37	105.40
26	1H	201	C	N1-C2-O2	-5.07	115.86	118.90
26	1H	273(A)	G	N3-C4-C5	5.07	131.14	128.60
26	1H	481	G	C5-C6-O6	-5.07	125.56	128.60
26	1H	1636	C	O5'-P-OP2	5.07	116.79	110.70
26	1H	1640	C	C5-C4-N4	5.07	123.75	120.20
26	1H	1814	G	C8-N9-C4	-5.07	104.37	106.40
26	1H	2608	G	N3-C2-N2	-5.07	116.35	119.90
1	1G	376	G	C4-C5-N7	-5.07	108.77	110.80
1	1G	422	C	O4'-C1'-N1	5.07	112.26	108.20
1	1G	483	C	C2-N1-C1'	-5.07	113.22	118.80
1	1G	552	U	N1-C2-N3	5.07	117.94	114.90
23	2L	20	G	N1-C6-O6	5.07	122.94	119.90
23	2L	28	U	N1-C2-O2	5.07	126.35	122.80
57	3L	76	A	C5-C6-N6	-5.07	119.64	123.70
26	14	312	G	C5-N7-C8	-5.07	101.76	104.30
26	14	639	U	O5'-P-OP2	-5.07	101.13	105.70
26	14	958	U	O5'-P-OP1	-5.07	101.13	105.70
26	14	961	C	O5'-P-OP2	-5.07	101.13	105.70
26	14	1297	C	C5-C4-N4	5.07	123.75	120.20
26	14	1773	A	N1-C2-N3	5.07	131.84	129.30
26	14	1926	U	C2-N3-C4	-5.07	123.95	127.00
26	14	2043	C	N3-C2-O2	5.07	125.45	121.90
1	13	295	C	C4-C5-C6	5.07	119.94	117.40
1	13	1342	C	N3-C4-N4	-5.07	114.45	118.00
1	13	1501	C	N3-C4-N4	5.07	121.55	118.00
26	1H	1567	A	O5'-P-OP2	-5.07	101.14	105.70
26	1H	1685	C	C5-C4-N4	-5.07	116.65	120.20
26	1H	2271	G	C8-N9-C1'	-5.07	120.41	127.00
26	1H	2294	C	N3-C4-C5	5.07	123.93	121.90
26	1H	2640	G	C8-N9-C4	-5.07	104.37	106.40
1	1G	958	A	O5'-P-OP2	-5.07	101.14	105.70
26	14	462	C	N3-C2-O2	-5.07	118.35	121.90
26	14	2868	A	C4-C5-C6	5.07	119.54	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	22	G	OP2-P-O3'	5.07	116.35	105.20
1	13	32	A	N9-C4-C5	5.07	107.83	105.80
1	13	606	G	N3-C4-C5	-5.07	126.06	128.60
1	13	749	C	OP1-P-OP2	-5.07	111.99	119.60
1	13	1211	U	C5-C6-N1	-5.07	120.17	122.70
26	1H	40	C	O4'-C1'-N1	5.07	112.26	108.20
26	1H	144	C	N1-C2-O2	5.07	121.94	118.90
26	1H	180	G	C6-C5-N7	-5.07	127.36	130.40
26	1H	973	A	O5'-P-OP1	-5.07	101.14	105.70
26	1H	1029	A	C6-C5-N7	-5.07	128.75	132.30
26	1H	1320	C	C4-C5-C6	5.07	119.94	117.40
26	1H	2323	G	N3-C4-C5	5.07	131.14	128.60
26	1H	2505	G	P-O3'-C3'	5.07	125.78	119.70
26	1H	2562	U	N3-C4-O4	-5.07	115.85	119.40
29	11	52	ARG	NE-CZ-NH2	5.07	122.83	120.30
42	C8	3	ARG	NE-CZ-NH2	-5.07	117.76	120.30
26	14	86	C	C5-C4-N4	-5.07	116.65	120.20
26	14	634	C	C6-N1-C2	5.07	122.33	120.30
26	14	1920	C	C6-N1-C2	5.07	122.33	120.30
26	14	2068	U	C5-C4-O4	-5.07	122.86	125.90
26	14	2280	G	C2-N3-C4	-5.07	109.36	111.90
26	14	2675	A	OP1-P-OP2	-5.07	111.99	119.60
27	1J	44	G	C4-C5-N7	-5.07	108.77	110.80
1	13	887	G	N1-C2-N2	-5.07	111.64	116.20
23	2K	39	A	OP1-P-OP2	-5.07	112.00	119.60
23	2K	72	C	C4-C5-C6	5.07	119.93	117.40
26	1H	377	C	N3-C2-O2	5.07	125.45	121.90
26	1H	566	U	C4-C5-C6	-5.07	116.66	119.70
26	1H	606	U	N3-C4-O4	-5.07	115.85	119.40
26	1H	708	C	N1-C2-O2	-5.07	115.86	118.90
26	1H	848	G	N1-C2-N3	5.07	126.94	123.90
26	1H	998	C	C5-C6-N1	5.07	123.53	121.00
26	1H	1944	U	C6-N1-C2	5.07	124.04	121.00
26	1H	2292	C	C4-C5-C6	-5.07	114.86	117.40
26	1H	2435	A	C6-N1-C2	5.07	121.64	118.60
26	1H	2846	G	N1-C6-O6	5.07	122.94	119.90
1	1G	299	G	C5-N7-C8	5.07	106.83	104.30
26	14	871	U	C6-N1-C1'	5.07	128.30	121.20
26	14	1891	G	C2-N3-C4	-5.07	109.36	111.90
29	19	43	ARG	NE-CZ-NH2	5.07	122.83	120.30
1	13	498	A	C6-N1-C2	-5.07	115.56	118.60
1	13	892	A	C5-C6-N6	-5.07	119.65	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	1331	G	P-O3'-C3'	5.07	125.78	119.70
1	13	1405	G	N9-C4-C5	5.07	107.43	105.40
1	13	1452	C	N1-C2-O2	5.07	121.94	118.90
26	1H	55	G	N1-C2-N3	5.07	126.94	123.90
26	1H	197	A	C5-N7-C8	-5.07	101.37	103.90
26	1H	2708	G	N9-C4-C5	-5.07	103.37	105.40
1	1G	873	A	C5-C6-N6	5.07	127.75	123.70
26	14	398	G	C4-C5-N7	-5.07	108.77	110.80
26	14	508	G	P-O3'-C3'	-5.07	113.62	119.70
26	14	823	G	O5'-P-OP1	5.07	116.78	110.70
26	14	1093	G	N7-C8-N9	5.07	115.63	113.10
26	14	1135	C	OP1-P-OP2	-5.07	112.00	119.60
26	14	2101	G	C2-N3-C4	-5.07	109.37	111.90
26	14	2247	A	N1-C2-N3	5.07	131.83	129.30
26	14	2296	U	OP1-P-O3'	5.07	116.35	105.20
26	14	2336	A	N3-C4-C5	-5.07	123.25	126.80
27	1J	63	G	N7-C8-N9	-5.07	110.57	113.10
1	13	242	C	N3-C4-C5	5.07	123.93	121.90
1	13	423	G	C2-N3-C4	5.07	114.43	111.90
1	13	478	A	C2-N3-C4	-5.07	108.07	110.60
1	13	907	A	C5-N7-C8	-5.07	101.37	103.90
1	13	1476	G	N7-C8-N9	-5.07	110.57	113.10
26	1H	132	G	N1-C2-N2	-5.07	111.64	116.20
26	1H	510	C	C5-C4-N4	5.07	123.75	120.20
26	1H	560	C	C6-N1-C2	5.07	122.33	120.30
26	1H	790	C	C6-N1-C2	5.07	122.33	120.30
26	1H	1242	A	N1-C6-N6	5.07	121.64	118.60
26	1H	1430	C	N3-C4-C5	-5.07	119.87	121.90
26	1H	1846	G	N1-C6-O6	5.07	122.94	119.90
26	1H	2062	A	N9-C4-C5	-5.07	103.77	105.80
26	1H	2697	G	C5-C6-N1	-5.07	108.97	111.50
1	1G	128	G	C2-N3-C4	-5.07	109.37	111.90
1	1G	727	G	C2-N3-C4	5.07	114.43	111.90
57	3L	48	C	C2-N1-C1'	5.07	124.37	118.80
26	14	124	G	OP2-P-O3'	5.07	116.34	105.20
26	14	136	G	OP1-P-OP2	5.07	127.20	119.60
26	14	582	G	C2-N3-C4	-5.07	109.37	111.90
26	14	673	C	N3-C4-C5	5.07	123.93	121.90
26	14	811	U	OP1-P-OP2	-5.07	112.00	119.60
26	14	1569	A	C5-C6-N1	5.07	120.23	117.70
26	14	1894	C	N3-C2-O2	-5.07	118.36	121.90
26	14	2247	A	C8-N9-C4	-5.07	103.77	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2562	U	C5-C6-N1	-5.07	120.17	122.70
26	14	2694	G	OP1-P-OP2	5.07	127.20	119.60
26	14	2727	G	N1-C2-N3	5.07	126.94	123.90
1	13	104	G	C4-C5-N7	5.06	112.83	110.80
26	1H	845	G	C5-C6-O6	-5.06	125.56	128.60
1	1G	247	G	C5-C6-N1	5.06	114.03	111.50
56	1L	76	A	O5'-P-OP2	-5.06	101.14	105.70
26	14	861	A	C5-C6-N6	5.06	127.75	123.70
26	14	939	G	OP2-P-O3'	5.06	116.34	105.20
26	14	1392	A	N1-C6-N6	-5.06	115.56	118.60
26	14	2042	A	C5-N7-C8	-5.06	101.37	103.90
26	14	2346	A	N9-C1'-C2'	5.06	120.58	114.00
1	13	791	G	N3-C4-C5	-5.06	126.07	128.60
1	13	833	U	C2-N1-C1'	-5.06	111.62	117.70
1	13	1085	U	O5'-P-OP2	5.06	116.78	110.70
1	13	1324	A	O5'-P-OP2	5.06	116.77	110.70
26	1H	135	G	C2-N3-C4	5.06	114.43	111.90
26	1H	440	G	C5-C6-N1	5.06	114.03	111.50
26	1H	816	C	OP1-P-OP2	-5.06	112.00	119.60
26	1H	931	G	N1-C2-N3	5.06	126.94	123.90
26	1H	1107	G	C8-N9-C1'	-5.06	120.42	127.00
26	1H	1160	G	C6-N1-C2	5.06	128.14	125.10
26	1H	1264	G	N3-C4-C5	5.06	131.13	128.60
26	1H	1414	G	C6-N1-C2	-5.06	122.06	125.10
26	1H	1579	A	C4-C5-C6	5.06	119.53	117.00
26	1H	2042	A	N3-C4-N9	-5.06	123.35	127.40
26	1H	2360	A	C8-N9-C4	5.06	107.83	105.80
55	Q8	47	LYS	N-CA-C	-5.06	97.33	111.00
1	1G	328	C	N3-C4-C5	-5.06	119.88	121.90
1	1G	331	G	C4-N9-C1'	5.06	133.08	126.50
1	1G	543	C	C6-N1-C2	-5.06	118.28	120.30
1	1G	1070	U	N3-C2-O2	-5.06	118.66	122.20
26	14	1020	A	N1-C2-N3	5.06	131.83	129.30
26	14	1471	A	N7-C8-N9	5.06	116.33	113.80
26	14	1846	G	C4-C5-C6	5.06	121.84	118.80
26	14	2447	G	C8-N9-C4	5.06	108.42	106.40
26	14	2468	G	C2-N3-C4	5.06	114.43	111.90
26	14	2590	A	N7-C8-N9	-5.06	111.27	113.80
1	13	959	A	C5-C6-N6	-5.06	119.65	123.70
26	1H	310	A	N9-C4-C5	-5.06	103.78	105.80
26	1H	1537	C	C2-N3-C4	5.06	122.43	119.90
26	1H	1591	G	C5-C6-O6	5.06	131.64	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2701	C	OP1-P-O3'	-5.06	94.06	105.20
1	1G	309	G	C4-C5-N7	5.06	112.82	110.80
26	14	2397	G	N1-C2-N3	-5.06	120.86	123.90
1	13	293	G	N1-C6-O6	5.06	122.94	119.90
1	13	295	C	N3-C2-O2	-5.06	118.36	121.90
1	13	816	A	C2-N3-C4	5.06	113.13	110.60
1	13	959	A	N9-C4-C5	-5.06	103.78	105.80
26	1H	125	G	C5-N7-C8	-5.06	101.77	104.30
26	1H	270(Y)	G	C2-N3-C4	-5.06	109.37	111.90
26	1H	945	A	OP1-P-O3'	5.06	116.33	105.20
27	16	24	G	C4-N9-C1'	5.06	133.08	126.50
1	1G	311	C	C5-C6-N1	5.06	123.53	121.00
1	1G	505	G	C2-N3-C4	5.06	114.43	111.90
1	1G	825	G	OP2-P-O3'	5.06	116.33	105.20
1	1G	1305	G	N7-C8-N9	-5.06	110.57	113.10
1	1G	1429	C	OP1-P-OP2	-5.06	112.01	119.60
23	2L	46	G	N1-C6-O6	5.06	122.94	119.90
26	14	428	A	O4'-C1'-N9	5.06	112.25	108.20
26	14	1218	C	C5-C6-N1	-5.06	118.47	121.00
26	14	1235	G	C4-C5-N7	-5.06	108.78	110.80
26	14	1860	G	N1-C2-N2	5.06	120.75	116.20
26	14	2209	C	C2-N3-C4	-5.06	117.37	119.90
26	14	2500	U	O4'-C1'-N1	5.06	112.25	108.20
1	13	254	G	OP1-P-OP2	-5.06	112.01	119.60
1	13	287	U	C2-N3-C4	-5.06	123.97	127.00
1	13	652	U	N3-C4-O4	5.06	122.94	119.40
1	13	681	C	OP1-P-O3'	5.06	116.33	105.20
1	13	869	G	C2-N3-C4	-5.06	109.37	111.90
26	1H	137	C	N1-C2-O2	5.06	121.94	118.90
26	1H	876	C	OP1-P-OP2	-5.06	112.02	119.60
26	1H	943	U	C5-C6-N1	-5.06	120.17	122.70
26	1H	1138	G	C8-N9-C1'	-5.06	120.42	127.00
26	1H	2462	U	OP1-P-OP2	5.06	127.19	119.60
26	1H	2525	G	OP2-P-O3'	5.06	116.33	105.20
1	1G	608	A	C4-C5-C6	-5.06	114.47	117.00
1	1G	687	A	C5-C6-N1	5.06	120.23	117.70
26	14	141	A	O5'-P-OP2	-5.06	101.15	105.70
26	14	318	C	O5'-P-OP1	-5.06	101.15	105.70
26	14	1565	C	C5-C6-N1	-5.06	118.47	121.00
26	14	1762	A	C4-C5-C6	-5.06	114.47	117.00
26	14	1791	A	C5-C6-N6	-5.06	119.65	123.70
26	14	1891	G	C5-C6-O6	5.06	131.63	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2030	A	N9-C1'-C2'	5.06	120.57	114.00
26	14	2331	G	C5-C6-O6	-5.06	125.56	128.60
26	14	2440	C	OP1-P-O3'	5.06	116.33	105.20
26	14	2851	A	N7-C8-N9	5.06	116.33	113.80
1	13	58	C	N1-C2-O2	5.06	121.93	118.90
1	13	778	G	C6-C5-N7	-5.06	127.37	130.40
26	1H	472	A	C5-C6-N1	5.06	120.23	117.70
26	1H	570	G	C4-N9-C1'	5.06	133.07	126.50
26	1H	1273	U	C4-C5-C6	5.06	122.73	119.70
26	1H	1627	G	N9-C4-C5	-5.06	103.38	105.40
26	1H	2454	G	C6-N1-C2	-5.06	122.07	125.10
26	1H	2814	C	N3-C2-O2	5.06	125.44	121.90
1	1G	610	G	N1-C2-N3	5.06	126.93	123.90
26	14	75	G	C4-C5-N7	-5.06	108.78	110.80
26	14	265	A	C6-N1-C2	5.06	121.63	118.60
26	14	1693	U	C5-C4-O4	5.06	128.93	125.90
26	14	1823	G	N3-C2-N2	5.06	123.44	119.90
1	13	4	U	N3-C2-O2	-5.05	118.66	122.20
1	13	338	A	N7-C8-N9	5.05	116.33	113.80
1	13	364	A	C4-C5-C6	5.05	119.53	117.00
1	13	716	A	OP1-P-OP2	-5.05	112.02	119.60
1	13	862	C	N3-C4-C5	-5.05	119.88	121.90
1	13	1216	G	C4-C5-N7	-5.05	108.78	110.80
1	13	1368	G	C2-N3-C4	5.05	114.43	111.90
1	13	1517	G	OP1-P-O3'	5.05	116.32	105.20
23	2K	61	U	O5'-P-OP1	5.05	116.77	110.70
26	1H	95	G	C4-C5-N7	-5.05	108.78	110.80
26	1H	470	A	C2-N3-C4	-5.05	108.07	110.60
26	1H	1228	G	C5-C6-N1	-5.05	108.97	111.50
26	1H	1321	A	C5-N7-C8	5.05	106.43	103.90
1	1G	191	G	O5'-P-OP1	-5.05	101.15	105.70
1	1G	995	C	C5-C6-N1	5.05	123.53	121.00
26	14	431	U	N3-C2-O2	5.05	125.74	122.20
26	14	473	G	C6-C5-N7	-5.05	127.37	130.40
26	14	626	U	C5-C4-O4	-5.05	122.87	125.90
26	14	823	G	N1-C2-N3	5.05	126.93	123.90
26	14	1001	A	C6-C5-N7	5.05	135.84	132.30
26	14	1108	U	C6-N1-C2	-5.05	117.97	121.00
26	14	1388	G	C2-N3-C4	-5.05	109.37	111.90
26	14	1672	C	C6-N1-C2	5.05	122.32	120.30
26	14	2008	C	C5-C4-N4	-5.05	116.66	120.20
26	14	2380	C	OP2-P-O3'	5.05	116.32	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2872	G	N3-C4-C5	-5.05	126.07	128.60
1	13	180	U	C6-N1-C2	-5.05	117.97	121.00
1	13	560	U	OP1-P-O3'	5.05	116.32	105.20
1	13	597	G	OP2-P-O3'	5.05	116.32	105.20
1	13	1433	A	C5-C6-N1	-5.05	115.17	117.70
22	1K	7	U	N3-C2-O2	-5.05	118.66	122.20
26	1H	2197	U	C2-N3-C4	-5.05	123.97	127.00
26	1H	2299	G	OP1-P-O3'	5.05	116.32	105.20
26	1H	2782	G	C6-C5-N7	-5.05	127.37	130.40
1	1G	294	U	OP2-P-O3'	5.05	116.32	105.20
26	14	1374	G	N1-C6-O6	5.05	122.93	119.90
26	14	1461	G	C6-C5-N7	-5.05	127.37	130.40
26	14	1853	A	C2-N3-C4	-5.05	108.07	110.60
26	14	1994	C	C5-C4-N4	5.05	123.74	120.20
26	14	2026	C	C5-C4-N4	-5.05	116.66	120.20
1	13	256	U	O5'-P-OP2	-5.05	101.15	105.70
26	1H	206	U	C6-N1-C1'	-5.05	114.13	121.20
26	1H	270	A	N9-C4-C5	5.05	107.82	105.80
26	1H	365	C	C6-N1-C2	5.05	122.32	120.30
26	1H	699	A	C6-N1-C2	-5.05	115.57	118.60
26	1H	791	C	O4'-C1'-N1	-5.05	104.16	108.20
26	1H	836	G	N3-C2-N2	5.05	123.44	119.90
26	1H	1347	G	C8-N9-C4	-5.05	104.38	106.40
26	1H	1368	G	C5-N7-C8	5.05	106.83	104.30
26	1H	1794	U	O5'-P-OP1	5.05	116.76	110.70
26	1H	1861	G	C6-C5-N7	5.05	133.43	130.40
26	1H	2445	G	N1-C6-O6	-5.05	116.87	119.90
37	78	60	MET	CG-SD-CE	-5.05	92.12	100.20
1	1G	301	G	C5-C6-N1	-5.05	108.97	111.50
1	1G	346	G	C5-C6-O6	-5.05	125.57	128.60
1	1G	426	G	C4-C5-N7	-5.05	108.78	110.80
26	14	199	A	N3-C4-C5	-5.05	123.26	126.80
26	14	444	C	N3-C4-C5	5.05	123.92	121.90
26	14	500	G	C4-C5-N7	-5.05	108.78	110.80
26	14	644	A	N7-C8-N9	-5.05	111.27	113.80
26	14	984	A	OP1-P-OP2	-5.05	112.02	119.60
26	14	1296	G	N1-C2-N3	5.05	126.93	123.90
26	14	1951	U	OP1-P-O3'	5.05	116.31	105.20
26	14	2272	U	OP1-P-O3'	5.05	116.31	105.20
26	14	2440	C	N3-C4-N4	-5.05	114.46	118.00
1	13	251	G	C6-C5-N7	-5.05	127.37	130.40
1	13	807	A	C6-N1-C2	-5.05	115.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	13	983	A	C2-N3-C4	-5.05	108.08	110.60
26	1H	25	U	C6-N1-C2	5.05	124.03	121.00
26	1H	59	U	N3-C2-O2	-5.05	118.67	122.20
26	1H	365	C	N1-C2-O2	-5.05	115.87	118.90
26	1H	655	A	C5-C6-N6	-5.05	119.66	123.70
26	1H	954	G	OP1-P-O3'	5.05	116.31	105.20
26	1H	1229(A)	G	N3-C4-N9	-5.05	122.97	126.00
26	1H	1328	G	N3-C4-C5	-5.05	126.08	128.60
26	1H	1328	G	N1-C2-N2	-5.05	111.66	116.20
26	1H	1435	G	N1-C2-N3	5.05	126.93	123.90
26	1H	1454	U	N3-C2-O2	-5.05	118.67	122.20
26	1H	1911	U	N1-C2-N3	5.05	117.93	114.90
26	1H	1963	U	OP1-P-OP2	5.05	127.18	119.60
26	1H	2066	C	C2-N1-C1'	5.05	124.35	118.80
1	1G	596	C	N3-C4-C5	5.05	123.92	121.90
1	1G	646	U	C5-C4-O4	5.05	128.93	125.90
1	1G	1431	C	C5-C6-N1	5.05	123.53	121.00
1	1G	1525	G	N1-C6-O6	-5.05	116.87	119.90
3	22	34	LEU	CA-CB-CG	5.05	126.91	115.30
26	14	139	G	OP1-P-O3'	5.05	116.31	105.20
26	14	425	G	C4-N9-C1'	-5.05	119.94	126.50
26	14	570	G	O4'-C1'-N9	-5.05	104.16	108.20
26	14	703	U	N3-C4-O4	-5.05	115.86	119.40
26	14	1845	G	N1-C2-N3	5.05	126.93	123.90
26	14	2325	G	N7-C8-N9	5.05	115.62	113.10
26	14	2714	G	C2-N3-C4	-5.05	109.38	111.90
1	13	953	G	N7-C8-N9	5.05	115.62	113.10
26	1H	141(A)	C	N1-C2-O2	-5.05	115.87	118.90
26	1H	2090	G	C5-C6-N1	-5.05	108.98	111.50
26	1H	2099	U	C6-N1-C2	-5.05	117.97	121.00
26	14	958	U	C5-C6-N1	5.05	125.22	122.70
26	14	2518	A	N7-C8-N9	5.05	116.32	113.80
1	13	713	G	C8-N9-C4	5.05	108.42	106.40
1	13	1064	G	N3-C2-N2	-5.05	116.37	119.90
22	1K	56	C	C5-C6-N1	5.05	123.52	121.00
26	1H	85	G	N3-C2-N2	-5.05	116.37	119.90
26	1H	309	G	N1-C2-N3	-5.05	120.87	123.90
26	1H	557	U	OP2-P-O3'	5.05	116.30	105.20
26	1H	916	G	N1-C2-N3	-5.05	120.87	123.90
26	1H	1429	G	C5-C6-N1	-5.05	108.98	111.50
26	1H	1448	G	C5-C6-O6	-5.05	125.57	128.60
26	1H	2346	A	OP1-P-O3'	5.05	116.30	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	2357	U	OP2-P-O3'	5.05	116.30	105.20
26	1H	2366	A	OP2-P-O3'	5.05	116.30	105.20
26	1H	2529	G	C4-C5-N7	5.05	112.82	110.80
26	1H	2537	U	N3-C2-O2	-5.05	118.67	122.20
1	1G	184	G	C5-N7-C8	-5.05	101.78	104.30
1	1G	1465	C	C5-C6-N1	5.05	123.52	121.00
26	14	372	G	C4-C5-C6	-5.05	115.77	118.80
26	14	547	A	N9-C4-C5	5.05	107.82	105.80
26	14	804	A	C4-C5-N7	-5.05	108.18	110.70
26	14	961	C	N3-C4-C5	5.05	123.92	121.90
26	14	1252	G	C2-N3-C4	5.05	114.42	111.90
26	14	1359	A	C6-N1-C2	5.05	121.63	118.60
26	14	1490	A	C5-C6-N6	-5.05	119.66	123.70
26	14	1731	G	N1-C6-O6	5.05	122.93	119.90
26	14	2108	C	C5-C6-N1	5.05	123.52	121.00
1	13	298	A	C6-N1-C2	-5.04	115.57	118.60
1	13	622	A	N9-C4-C5	5.04	107.82	105.80
1	13	667	G	N3-C4-N9	-5.04	122.97	126.00
26	1H	397	G	C5-C6-O6	-5.04	125.57	128.60
26	1H	696	G	N9-C4-C5	-5.04	103.38	105.40
26	1H	1314	C	C6-N1-C1'	-5.04	114.75	120.80
26	1H	1707	G	N3-C4-C5	5.04	131.12	128.60
26	1H	1870	C	C4-C5-C6	5.04	119.92	117.40
26	1H	1976	U	C2-N3-C4	-5.04	123.97	127.00
26	1H	2094	G	O5'-P-OP2	-5.04	101.16	105.70
26	1H	2578	G	C6-C5-N7	5.04	133.43	130.40
1	1G	1348	U	OP2-P-O3'	5.04	116.30	105.20
26	14	633	A	N1-C6-N6	5.04	121.63	118.60
26	14	807	U	N1-C2-O2	-5.04	119.27	122.80
26	14	951	C	C5-C6-N1	5.04	123.52	121.00
26	14	1229	G	C6-C5-N7	-5.04	127.37	130.40
1	13	1089	G	C8-N9-C4	5.04	108.42	106.40
1	13	1400	C	C2-N1-C1'	5.04	124.35	118.80
26	1H	36	G	C2-N3-C4	5.04	114.42	111.90
26	1H	482	A	OP1-P-O3'	5.04	116.29	105.20
26	1H	608	A	C4-C5-N7	-5.04	108.18	110.70
26	1H	784	A	P-O3'-C3'	5.04	125.75	119.70
26	1H	863	A	C6-N1-C2	-5.04	115.57	118.60
26	1H	974	G	C5-C6-O6	-5.04	125.57	128.60
26	1H	1800	C	OP1-P-OP2	-5.04	112.03	119.60
26	1H	1829	A	C4-C5-C6	5.04	119.52	117.00
26	1H	2745	C	O5'-P-OP2	5.04	116.75	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	798	G	OP1-P-OP2	-5.04	112.03	119.60
1	1G	1432	G	C8-N9-C4	-5.04	104.38	106.40
26	14	212	G	OP1-P-OP2	5.04	127.17	119.60
26	14	1429	G	C4-N9-C1'	5.04	133.06	126.50
26	14	1704	G	N1-C6-O6	5.04	122.93	119.90
26	14	2024	G	N1-C6-O6	5.04	122.93	119.90
26	14	2163	C	C2-N1-C1'	5.04	124.35	118.80
26	14	2340	G	N3-C4-C5	5.04	131.12	128.60
26	14	2357	U	N3-C4-O4	5.04	122.93	119.40
27	1J	54	G	N9-C4-C5	5.04	107.42	105.40
1	13	125	U	N3-C4-O4	5.04	122.93	119.40
1	13	784	C	C6-N1-C2	5.04	122.32	120.30
23	2K	45	A	C4-C5-N7	5.04	113.22	110.70
25	4K	12	A	C8-N9-C4	-5.04	103.78	105.80
26	1H	71	A	N9-C1'-C2'	-5.04	106.45	112.00
26	1H	278	A	C2-N3-C4	5.04	113.12	110.60
26	1H	493	G	O5'-P-OP2	-5.04	101.16	105.70
26	1H	585	G	O5'-P-OP1	-5.04	101.16	105.70
26	1H	684	G	N1-C2-N2	5.04	120.74	116.20
26	1H	1966	A	C5-C6-N6	5.04	127.73	123.70
26	1H	2620	C	N3-C4-N4	5.04	121.53	118.00
26	1H	2706	G	C5-C6-O6	-5.04	125.58	128.60
1	1G	1243	C	N3-C4-C5	-5.04	119.88	121.90
1	1G	1432	G	C6-C5-N7	-5.04	127.38	130.40
1	1G	1437	C	N1-C2-N3	-5.04	115.67	119.20
26	14	69	C	C4-C5-C6	5.04	119.92	117.40
26	14	716	A	N1-C2-N3	5.04	131.82	129.30
26	14	730	C	N3-C2-O2	-5.04	118.37	121.90
26	14	1014	U	C5-C6-N1	5.04	125.22	122.70
26	14	1024	G	C2-N3-C4	-5.04	109.38	111.90
26	14	1235	G	C4-C5-C6	5.04	121.83	118.80
26	14	1236	G	O5'-P-OP1	-5.04	101.16	105.70
26	14	1772	G	P-O3'-C3'	5.04	125.75	119.70
26	14	2543	G	C5-C6-N1	5.04	114.02	111.50
26	14	2546	U	C6-N1-C2	-5.04	117.98	121.00
26	14	2583	G	C6-N1-C2	-5.04	122.08	125.10
26	1H	254	G	C2-N3-C4	5.04	114.42	111.90
26	1H	1018	C	C6-N1-C2	5.04	122.32	120.30
26	1H	2147	G	N1-C6-O6	5.04	122.92	119.90
26	1H	2517	C	C6-N1-C2	5.04	122.32	120.30
1	1G	1490	C	O5'-P-OP1	5.04	116.75	110.70
26	14	580	C	C4-C5-C6	-5.04	114.88	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	817	C	C5-C6-N1	5.04	123.52	121.00
26	14	1149	G	OP1-P-O3'	5.04	116.29	105.20
1	13	522	C	N1-C2-N3	-5.04	115.67	119.20
1	13	988	G	N1-C2-N2	-5.04	111.67	116.20
1	13	1398	A	C6-N1-C2	-5.04	115.58	118.60
1	13	1442	G	C8-N9-C1'	5.04	133.55	127.00
26	1H	55	G	C8-N9-C4	5.04	108.42	106.40
26	1H	252	G	N7-C8-N9	-5.04	110.58	113.10
26	1H	523	C	N3-C4-N4	5.04	121.53	118.00
26	1H	630	G	C4-C5-C6	5.04	121.82	118.80
26	1H	780	G	C5-C6-N1	-5.04	108.98	111.50
26	1H	1390	U	N3-C4-O4	-5.04	115.87	119.40
26	1H	2666	C	C5-C6-N1	5.04	123.52	121.00
26	1H	2671	A	C4-C5-N7	5.04	113.22	110.70
26	1H	2711	A	O4'-C1'-N9	5.04	112.23	108.20
26	1H	2732	G	C6-N1-C2	-5.04	122.08	125.10
27	16	102	G	C5-N7-C8	5.04	106.82	104.30
1	1G	1127	G	N3-C4-N9	5.04	129.02	126.00
26	14	1382	G	N9-C4-C5	-5.04	103.39	105.40
26	14	1685	C	N1-C2-O2	-5.04	115.88	118.90
26	14	1947	C	N3-C4-C5	5.04	123.92	121.90
26	14	2346	A	O4'-C1'-N9	5.04	112.23	108.20
26	14	2434	A	C4-C5-C6	5.04	119.52	117.00
26	14	2642	G	O5'-P-OP1	5.04	116.75	110.70
1	13	30	U	C5-C6-N1	5.04	125.22	122.70
26	1H	339	U	OP1-P-O3'	5.04	116.28	105.20
26	1H	717	G	C6-N1-C2	-5.04	122.08	125.10
26	1H	1378	A	C6-N1-C2	5.04	121.62	118.60
27	16	54	G	N1-C2-N2	5.04	120.73	116.20
1	1G	1516	G	C5-C6-O6	5.04	131.62	128.60
26	14	1390	U	OP1-P-O3'	5.04	116.28	105.20
26	14	2042	A	C4-C5-N7	5.04	113.22	110.70
26	14	2048	G	C6-C5-N7	5.04	133.42	130.40
26	14	2587	A	C5-C6-N6	-5.04	119.67	123.70
26	14	2724	C	C6-N1-C2	5.04	122.31	120.30
1	13	394	G	C4-C5-C6	5.04	121.82	118.80
1	13	503	C	C4-C5-C6	5.04	119.92	117.40
1	13	753	A	C2-N3-C4	-5.04	108.08	110.60
1	13	900	A	C8-N9-C4	5.04	107.81	105.80
1	13	1198	G	C4-C5-N7	-5.04	108.79	110.80
1	13	1480	G	N1-C2-N3	5.04	126.92	123.90
26	1H	1034	G	C4-C5-C6	5.04	121.82	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1604	C	C2-N3-C4	-5.04	117.38	119.90
26	1H	1772	G	O4'-C1'-N9	5.04	112.23	108.20
26	1H	2438	U	N3-C2-O2	-5.04	118.67	122.20
26	1H	2557	G	C6-C5-N7	5.04	133.42	130.40
1	1G	303	A	C2-N3-C4	-5.04	108.08	110.60
1	1G	816	A	N1-C6-N6	-5.04	115.58	118.60
26	14	92	G	C2-N3-C4	-5.04	109.38	111.90
26	14	283	A	N1-C2-N3	5.04	131.82	129.30
26	14	686	G	C4-C5-N7	5.04	112.81	110.80
26	14	1515	C	C2-N3-C4	-5.04	117.38	119.90
26	14	1987	G	C8-N9-C4	5.04	108.41	106.40
26	14	2415	G	OP1-P-O3'	5.04	116.28	105.20
26	14	2820	A	N3-C4-C5	5.04	130.32	126.80
26	14	2865	U	C6-N1-C1'	5.04	128.25	121.20
24	3K	21	A	C2-N3-C4	5.03	113.12	110.60
26	1H	134	C	OP1-P-OP2	-5.03	112.05	119.60
26	1H	341	G	N7-C8-N9	-5.03	110.58	113.10
26	1H	385	C	C5-C6-N1	5.03	123.52	121.00
26	1H	747	U	C6-N1-C2	5.03	124.02	121.00
26	1H	962	G	O5'-P-OP1	-5.03	101.17	105.70
26	1H	985	C	C5-C6-N1	-5.03	118.48	121.00
26	1H	1259	G	C6-N1-C2	5.03	128.12	125.10
26	1H	1320	C	C6-N1-C2	5.03	122.31	120.30
26	1H	1354	A	C6-C5-N7	-5.03	128.78	132.30
26	1H	1408	C	N3-C2-O2	5.03	125.42	121.90
26	1H	1810	A	N9-C1'-C2'	-5.03	106.46	112.00
26	1H	2847	U	O5'-P-OP2	5.03	116.74	110.70
1	1G	452	A	N9-C4-C5	-5.03	103.79	105.80
1	1G	673	G	C5-C6-O6	-5.03	125.58	128.60
1	1G	889	A	O4'-C1'-N9	5.03	112.23	108.20
56	1L	45	G	C4-N9-C1'	5.03	133.04	126.50
26	14	25	U	N1-C2-O2	-5.03	119.28	122.80
26	14	30	G	C6-C5-N7	-5.03	127.38	130.40
26	14	33	U	C5-C6-N1	-5.03	120.18	122.70
26	14	456	C	OP1-P-OP2	5.03	127.15	119.60
26	14	686	G	N1-C2-N3	5.03	126.92	123.90
26	14	1381	G	OP1-P-OP2	5.03	127.15	119.60
26	14	1429	G	OP2-P-O3'	5.03	116.27	105.20
26	14	1455	G	O5'-P-OP1	-5.03	101.17	105.70
26	14	1651	G	N7-C8-N9	5.03	115.62	113.10
26	14	2000	G	OP1-P-OP2	-5.03	112.05	119.60
26	14	2282	G	C6-N1-C2	5.03	128.12	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2405	G	OP1-P-O3'	5.03	116.28	105.20
26	14	2490	G	C8-N9-C4	-5.03	104.39	106.40
26	14	2572	A	OP1-P-OP2	5.03	127.15	119.60
1	13	598	U	C6-N1-C2	-5.03	117.98	121.00
1	13	1518	A	C4-C5-C6	5.03	119.52	117.00
26	1H	44	A	O5'-P-OP2	5.03	116.74	110.70
26	1H	309	G	OP1-P-OP2	-5.03	112.05	119.60
26	1H	1257	C	N3-C4-N4	5.03	121.52	118.00
26	1H	1450	C	O5'-P-OP2	-5.03	101.17	105.70
26	1H	2024	G	C8-N9-C4	-5.03	104.39	106.40
26	1H	2596	U	N3-C4-C5	5.03	117.62	114.60
1	1G	495	A	C4-N9-C1'	-5.03	117.24	126.30
1	1G	977	A	N3-C4-C5	-5.03	123.28	126.80
26	14	652	C	C6-N1-C2	-5.03	118.29	120.30
26	14	1828	G	OP2-P-O3'	5.03	116.27	105.20
1	13	516	U	N1-C2-O2	5.03	126.32	122.80
1	13	1060	C	C2-N3-C4	5.03	122.42	119.90
1	13	1065	U	N3-C4-C5	5.03	117.62	114.60
26	1H	341	G	C6-C5-N7	5.03	133.42	130.40
26	1H	1377	G	C6-N1-C2	-5.03	122.08	125.10
26	1H	2015	A	C4-C5-N7	5.03	113.22	110.70
26	1H	2035	G	N1-C2-N3	5.03	126.92	123.90
26	1H	2335	A	N1-C6-N6	-5.03	115.58	118.60
26	1H	2595	G	C6-N1-C2	5.03	128.12	125.10
26	1H	2729	G	C4-C5-C6	5.03	121.82	118.80
26	1H	2825	C	N3-C4-N4	5.03	121.52	118.00
27	16	100	G	C5-N7-C8	5.03	106.81	104.30
1	1G	897	C	C5-C4-N4	-5.03	116.68	120.20
1	1G	971	G	O5'-P-OP1	5.03	116.74	110.70
1	1G	1478	C	C5-C4-N4	5.03	123.72	120.20
26	14	569	U	OP1-P-O3'	5.03	116.27	105.20
26	14	750	A	OP2-P-O3'	5.03	116.27	105.20
26	14	925	C	C5-C4-N4	5.03	123.72	120.20
26	14	1368	G	C6-C5-N7	5.03	133.42	130.40
26	14	1686	C	C6-N1-C2	5.03	122.31	120.30
26	14	2356	C	C4-C5-C6	5.03	119.92	117.40
27	1J	18	G	C6-N1-C2	5.03	128.12	125.10
1	13	477	G	C4-N9-C1'	-5.03	119.96	126.50
1	13	521	G	C6-N1-C2	-5.03	122.08	125.10
26	1H	348	G	C6-C5-N7	5.03	133.42	130.40
26	1H	809	G	C5-C6-N1	5.03	114.02	111.50
26	1H	1590	U	C4-C5-C6	5.03	122.72	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	265	G	C8-N9-C4	5.03	108.41	106.40
1	1G	353	A	C4-C5-C6	-5.03	114.48	117.00
1	1G	697	U	C4-C5-C6	5.03	122.72	119.70
26	14	30	G	N3-C4-C5	-5.03	126.09	128.60
26	14	833	U	N3-C4-O4	5.03	122.92	119.40
26	14	1283	G	N1-C2-N2	-5.03	111.67	116.20
26	14	2216	G	C8-N9-C4	5.03	108.41	106.40
26	14	2299	G	O5'-P-OP1	-5.03	101.17	105.70
26	14	2706	G	OP1-P-OP2	5.03	127.14	119.60
26	14	2776	A	P-O3'-C3'	5.03	125.73	119.70
1	13	505	G	C6-C5-N7	-5.03	127.38	130.40
23	2K	76	C	O5'-P-OP2	-5.03	101.17	105.70
26	1H	218	A	C4-C5-C6	5.03	119.51	117.00
26	1H	687	C	N3-C2-O2	5.03	125.42	121.90
26	1H	936	C	C6-N1-C1'	-5.03	114.77	120.80
26	1H	1249	U	O4'-C1'-N1	-5.03	104.18	108.20
26	1H	1519	G	C5-C6-N1	-5.03	108.99	111.50
26	1H	2006	C	O5'-P-OP1	5.03	116.73	110.70
26	1H	2562	U	C2-N3-C4	-5.03	123.98	127.00
26	1H	2760	C	N3-C4-N4	-5.03	114.48	118.00
1	1G	1073	U	C2-N3-C4	5.03	130.02	127.00
23	2L	36	A	OP1-P-O3'	5.03	116.26	105.20
26	14	15	G	N1-C2-N3	5.03	126.92	123.90
26	14	18	C	N3-C2-O2	5.03	125.42	121.90
26	14	231	C	N3-C2-O2	5.03	125.42	121.90
26	14	287	C	C6-N1-C2	-5.03	118.29	120.30
26	14	573	G	C2-N3-C4	5.03	114.41	111.90
26	14	621	A	N3-C4-N9	-5.03	123.38	127.40
26	14	1313	U	C2-N3-C4	-5.03	123.98	127.00
26	14	1792	G	C5-N7-C8	5.03	106.81	104.30
1	13	744	C	OP1-P-OP2	-5.03	112.06	119.60
1	13	822	C	N3-C4-C5	-5.03	119.89	121.90
1	13	1159	U	N3-C4-C5	-5.03	111.58	114.60
1	13	1192	C	C2-N1-C1'	5.03	124.33	118.80
26	1H	514	A	C5-N7-C8	5.03	106.41	103.90
26	1H	1127	A	C2-N3-C4	5.03	113.11	110.60
26	1H	1534	G	C4-N9-C1'	5.03	133.03	126.50
26	1H	1656	C	OP2-P-O3'	5.03	116.26	105.20
26	1H	1807	G	C4-C5-N7	5.03	112.81	110.80
26	1H	1888	G	O4'-C1'-N9	5.03	112.22	108.20
26	1H	1904	G	C5-N7-C8	5.03	106.81	104.30
26	1H	2643	G	C4-C5-N7	5.03	112.81	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	675	A	N1-C6-N6	5.03	121.62	118.60
1	1G	939	G	N1-C6-O6	-5.03	116.88	119.90
1	1G	942	G	N3-C4-N9	5.03	129.01	126.00
26	14	622	G	C5-N7-C8	5.03	106.81	104.30
26	14	746	A	P-O5'-C5'	-5.03	112.86	120.90
26	14	1239	G	O5'-P-OP1	-5.03	101.18	105.70
26	14	1782	C	C2-N1-C1'	5.03	124.33	118.80
26	14	1844	C	O5'-P-OP2	5.03	116.73	110.70
26	14	1962	C	C2-N3-C4	-5.03	117.39	119.90
26	14	2378	A	N1-C6-N6	5.03	121.61	118.60
1	13	338	A	C5-C6-N6	-5.02	119.68	123.70
1	13	1493	A	C4-C5-N7	-5.02	108.19	110.70
26	1H	305	U	C5-C4-O4	5.02	128.91	125.90
26	1H	1712	C	C5-C6-N1	5.02	123.51	121.00
26	1H	2206	C	C2-N3-C4	-5.02	117.39	119.90
26	1H	2740	A	N9-C4-C5	-5.02	103.79	105.80
26	14	2427	C	OP2-P-O3'	5.02	116.25	105.20
1	13	561	U	C5-C4-O4	-5.02	122.89	125.90
1	13	677	U	OP1-P-O3'	5.02	116.25	105.20
1	13	1108	G	C5-C6-N1	-5.02	108.99	111.50
1	13	1191	A	C8-N9-C4	5.02	107.81	105.80
1	13	1285	A	C6-N1-C2	-5.02	115.59	118.60
26	1H	1038	C	N1-C2-O2	5.02	121.91	118.90
26	1H	1248	G	OP1-P-OP2	-5.02	112.07	119.60
26	1H	1894	C	N3-C4-N4	5.02	121.52	118.00
26	1H	2709	G	N1-C6-O6	-5.02	116.89	119.90
26	1H	2782	G	OP1-P-OP2	5.02	127.13	119.60
26	1H	2822	G	C6-N1-C2	5.02	128.11	125.10
1	1G	291	C	N3-C4-N4	5.02	121.52	118.00
1	1G	982	U	C4-C5-C6	-5.02	116.69	119.70
26	14	66	C	N1-C2-O2	-5.02	115.89	118.90
26	14	444	C	OP1-P-OP2	5.02	127.13	119.60
26	14	512	G	C5-C6-N1	-5.02	108.99	111.50
26	14	659	C	C6-N1-C2	5.02	122.31	120.30
26	14	780	G	C5-C6-O6	5.02	131.61	128.60
26	14	1128	A	C5-C6-N6	5.02	127.72	123.70
26	14	1408	C	OP1-P-OP2	-5.02	112.07	119.60
26	14	1526	G	O5'-P-OP1	5.02	116.73	110.70
26	14	1618	A	N7-C8-N9	5.02	116.31	113.80
26	14	1933	G	C5-C6-N1	-5.02	108.99	111.50
26	14	2387	U	OP1-P-OP2	5.02	127.13	119.60
26	14	2392	A	C5-C6-N6	5.02	127.72	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	2844	G	C5-C6-O6	-5.02	125.59	128.60
1	13	252	U	N1-C2-O2	5.02	126.31	122.80
1	13	519	C	N3-C4-C5	-5.02	119.89	121.90
1	13	695	A	N1-C2-N3	5.02	131.81	129.30
26	1H	455	C	OP1-P-O3'	-5.02	94.15	105.20
26	1H	468	G	C5-N7-C8	5.02	106.81	104.30
26	1H	1152	C	C6-N1-C1'	5.02	126.83	120.80
26	1H	2584	U	OP1-P-O3'	5.02	116.25	105.20
26	1H	2658	C	C4-C5-C6	-5.02	114.89	117.40
1	1G	1251	A	N9-C4-C5	5.02	107.81	105.80
26	14	99	U	C5-C4-O4	5.02	128.91	125.90
26	14	410	G	C2-N3-C4	-5.02	109.39	111.90
26	14	1564	C	O5'-P-OP2	-5.02	101.18	105.70
26	14	1667	G	N9-C4-C5	5.02	107.41	105.40
26	14	1692	U	N1-C2-O2	-5.02	119.29	122.80
1	13	1082	G	OP1-P-O3'	5.02	116.24	105.20
1	13	1364	U	OP1-P-O3'	5.02	116.24	105.20
3	2E	204	LEU	CA-CB-CG	-5.02	103.75	115.30
23	2K	70	C	OP2-P-O3'	5.02	116.24	105.20
26	1H	729	G	N7-C8-N9	5.02	115.61	113.10
26	1H	970	C	OP1-P-O3'	-5.02	94.16	105.20
26	1H	1855	G	N3-C4-C5	-5.02	126.09	128.60
26	1H	2087	G	C2-N3-C4	5.02	114.41	111.90
26	1H	2210	G	O5'-P-OP1	5.02	116.72	110.70
26	1H	2327	A	C6-N1-C2	-5.02	115.59	118.60
26	1H	2448	A	C5-C6-N6	-5.02	119.69	123.70
27	16	6	C	O5'-P-OP1	5.02	116.72	110.70
1	1G	259	G	C2-N3-C4	-5.02	109.39	111.90
1	1G	708	C	C4-C5-C6	-5.02	114.89	117.40
1	1G	952	U	OP2-P-O3'	5.02	116.24	105.20
1	1G	1272	G	C5-N7-C8	-5.02	101.79	104.30
1	1G	1386	G	C4-C5-N7	-5.02	108.79	110.80
25	4L	20	U	N3-C2-O2	-5.02	118.69	122.20
26	14	179	G	O5'-P-OP2	-5.02	101.18	105.70
26	14	268	C	O5'-P-OP2	-5.02	101.18	105.70
26	14	431	U	N3-C4-O4	5.02	122.91	119.40
26	14	596	G	N1-C2-N3	5.02	126.91	123.90
26	14	1962	C	OP1-P-OP2	-5.02	112.07	119.60
26	14	2039	C	O5'-P-OP1	5.02	116.72	110.70
1	13	909	A	OP1-P-O3'	-5.02	94.16	105.20
26	1H	99	U	N1-C2-O2	5.02	126.31	122.80
26	1H	193	U	OP1-P-O3'	-5.02	94.16	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	456	C	N3-C4-C5	-5.02	119.89	121.90
26	1H	483	A	N1-C2-N3	5.02	131.81	129.30
26	1H	1346	G	C5-C6-N1	5.02	114.01	111.50
26	1H	1349	A	N3-C4-C5	5.02	130.31	126.80
26	1H	1849	G	C4-C5-C6	5.02	121.81	118.80
26	1H	1959	G	OP2-P-O3'	5.02	116.24	105.20
26	1H	2007	C	N3-C2-O2	-5.02	118.39	121.90
26	1H	2276	G	C4-N9-C1'	5.02	133.02	126.50
26	1H	2336	A	C4-C5-N7	-5.02	108.19	110.70
1	1G	292	G	O5'-P-OP2	-5.02	101.18	105.70
1	1G	882	C	C2-N3-C4	-5.02	117.39	119.90
26	14	96	G	C6-N1-C2	-5.02	122.09	125.10
26	14	578	A	C2-N3-C4	-5.02	108.09	110.60
26	14	738	G	C4-C5-C6	5.02	121.81	118.80
26	14	767	U	N1-C2-O2	5.02	126.31	122.80
26	14	1280	G	OP2-P-O3'	5.02	116.24	105.20
26	14	2318	G	C6-N1-C2	5.02	128.11	125.10
26	14	2428	G	C6-C5-N7	5.02	133.41	130.40
26	14	2691	C	N3-C4-C5	-5.02	119.89	121.90
26	14	2878	U	C6-N1-C2	-5.02	117.99	121.00
1	13	824	C	C5-C4-N4	-5.02	116.69	120.20
26	1H	232	G	C4-N9-C1'	5.02	133.02	126.50
26	1H	313	C	N3-C4-N4	5.02	121.51	118.00
26	1H	753	C	O4'-C1'-N1	5.02	112.21	108.20
26	1H	2406	U	N1-C2-O2	5.02	126.31	122.80
1	1G	159	G	C6-C5-N7	5.02	133.41	130.40
1	1G	354	G	O5'-P-OP2	-5.02	101.19	105.70
1	1G	1516	G	O5'-P-OP2	-5.02	101.19	105.70
26	14	1603	A	O5'-P-OP1	5.02	116.72	110.70
1	13	438	G	C8-N9-C4	-5.01	104.39	106.40
1	13	1488	G	C6-N1-C2	-5.01	122.09	125.10
26	1H	76	C	OP2-P-O3'	5.01	116.23	105.20
26	1H	424	G	OP1-P-OP2	5.01	127.12	119.60
26	1H	771	G	N1-C2-N2	5.01	120.71	116.20
26	1H	1679	U	C5-C4-O4	-5.01	122.89	125.90
26	1H	1982	C	C5-C4-N4	-5.01	116.69	120.20
26	1H	2016	U	C2-N1-C1'	-5.01	111.68	117.70
26	1H	2295	C	N1-C2-O2	5.01	121.91	118.90
1	1G	186	C	OP1-P-O3'	5.01	116.23	105.20
23	2L	10	G	N1-C2-N2	-5.01	111.69	116.20
26	14	130	C	C5-C6-N1	-5.01	118.49	121.00
26	14	187	G	C2-N3-C4	-5.01	109.39	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	440	G	C5-N7-C8	-5.01	101.79	104.30
26	14	1001	A	C8-N9-C4	-5.01	103.79	105.80
26	14	2330	G	C4-N9-C1'	5.01	133.02	126.50
26	14	2689	U	N1-C2-N3	5.01	117.91	114.90
26	14	2856	C	OP1-P-OP2	-5.01	112.08	119.60
1	13	1102	A	OP2-P-O3'	5.01	116.23	105.20
26	1H	6	A	C6-C5-N7	-5.01	128.79	132.30
26	1H	303	U	O4'-C1'-N1	5.01	112.21	108.20
26	1H	636	G	O4'-C1'-N9	5.01	112.21	108.20
26	1H	1316	U	N3-C4-O4	-5.01	115.89	119.40
26	1H	2225	A	C2-N3-C4	5.01	113.11	110.60
26	1H	2300	G	N3-C2-N2	-5.01	116.39	119.90
26	1H	2328	A	C6-N1-C2	-5.01	115.59	118.60
26	1H	2558	C	N3-C2-O2	-5.01	118.39	121.90
26	14	429	A	C5-N7-C8	-5.01	101.39	103.90
26	14	736	C	C6-N1-C2	5.01	122.31	120.30
26	14	1958	C	C2-N3-C4	5.01	122.41	119.90
26	14	2067	G	N7-C8-N9	5.01	115.61	113.10
26	14	2330	G	N3-C4-N9	5.01	129.01	126.00
1	13	771	G	N9-C4-C5	5.01	107.41	105.40
1	13	906	G	C6-N1-C2	-5.01	122.09	125.10
1	13	975	A	O4'-C1'-N9	-5.01	104.19	108.20
1	13	1056	U	C5-C4-O4	5.01	128.91	125.90
1	13	1144	G	O5'-P-OP1	-5.01	101.19	105.70
1	13	1302	U	N3-C4-O4	-5.01	115.89	119.40
1	13	1399	C	C2-N3-C4	-5.01	117.39	119.90
26	1H	125	G	N3-C4-C5	-5.01	126.09	128.60
26	1H	236	C	OP2-P-O3'	5.01	116.22	105.20
26	1H	334	C	C4-C5-C6	5.01	119.91	117.40
26	1H	619	G	C5-N7-C8	5.01	106.81	104.30
26	1H	627	A	C4-C5-N7	-5.01	108.19	110.70
26	1H	674	G	O5'-P-OP2	5.01	116.71	110.70
26	1H	787	U	N1-C2-O2	-5.01	119.29	122.80
26	1H	1204	A	N9-C1'-C2'	5.01	120.52	114.00
26	1H	1573	G	N1-C6-O6	5.01	122.91	119.90
26	1H	1937	A	P-O3'-C3'	5.01	125.71	119.70
26	1H	2328	A	C2-N3-C4	-5.01	108.09	110.60
26	1H	2508	G	C8-N9-C4	-5.01	104.40	106.40
26	1H	2556	C	C5-C4-N4	-5.01	116.69	120.20
26	1H	2603	G	C5-C6-O6	-5.01	125.59	128.60
27	16	21	G	N1-C2-N3	-5.01	120.89	123.90
27	16	25	A	C5-C6-N1	-5.01	115.19	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	1415	G	N9-C4-C5	-5.01	103.40	105.40
3	22	142	MET	CB-CG-SD	5.01	127.43	112.40
26	14	1226	G	N1-C2-N2	-5.01	111.69	116.20
26	14	1901	A	N1-C6-N6	-5.01	115.59	118.60
41	75	93	ARG	NE-CZ-NH2	-5.01	117.79	120.30
1	13	524	G	OP2-P-O3'	5.01	116.22	105.20
1	13	605	U	N1-C2-N3	5.01	117.91	114.90
1	13	617	G	C6-C5-N7	-5.01	127.39	130.40
1	13	768	A	N9-C4-C5	5.01	107.80	105.80
1	13	988	G	C5-C6-O6	5.01	131.61	128.60
23	2K	59	A	OP1-P-OP2	-5.01	112.09	119.60
26	1H	270(E)	G	N3-C4-C5	5.01	131.10	128.60
26	1H	476	G	C4-C5-N7	-5.01	108.80	110.80
26	1H	480	A	C5-C6-N6	-5.01	119.69	123.70
26	1H	873	G	N9-C4-C5	5.01	107.40	105.40
26	1H	1237	A	N1-C6-N6	-5.01	115.59	118.60
26	1H	1250	G	N9-C4-C5	-5.01	103.40	105.40
26	1H	1450	C	N1-C2-O2	-5.01	115.89	118.90
26	1H	2316	C	C6-N1-C2	-5.01	118.30	120.30
26	1H	2567	G	C5-C6-O6	-5.01	125.59	128.60
26	1H	2699	C	N3-C2-O2	5.01	125.41	121.90
26	1H	2710	C	C2-N1-C1'	-5.01	113.29	118.80
27	16	73	A	C5-C6-N1	5.01	120.20	117.70
29	11	29	PRO	CA-N-CD	-5.01	104.49	111.50
1	1G	544	G	C5-C6-N1	5.01	114.00	111.50
57	3L	42	A	N9-C4-C5	-5.01	103.80	105.80
26	14	224	G	N1-C6-O6	-5.01	116.89	119.90
26	14	415	A	C6-N1-C2	-5.01	115.59	118.60
26	14	514	A	OP1-P-OP2	5.01	127.11	119.60
26	14	649	G	N9-C4-C5	5.01	107.40	105.40
26	14	769	G	C5-N7-C8	5.01	106.81	104.30
26	14	794	G	C5-N7-C8	5.01	106.80	104.30
26	14	835	A	N9-C4-C5	-5.01	103.80	105.80
26	14	2085	C	C4-C5-C6	5.01	119.91	117.40
1	13	35	G	N3-C2-N2	-5.01	116.39	119.90
1	13	973	G	C4-C5-N7	-5.01	108.80	110.80
1	13	1389	C	C5-C6-N1	5.01	123.50	121.00
26	1H	88	G	N1-C2-N2	-5.01	111.69	116.20
26	1H	767	U	C2-N3-C4	-5.01	124.00	127.00
26	1H	1150	C	C6-N1-C2	5.01	122.30	120.30
26	1H	2279	G	N3-C2-N2	5.01	123.41	119.90
26	1H	2407	G	C4-N9-C1'	5.01	133.01	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	1G	700	G	C6-C5-N7	-5.01	127.39	130.40
23	2L	72	C	N3-C2-O2	-5.01	118.39	121.90
26	14	148	C	C2-N1-C1'	-5.01	113.29	118.80
26	14	768	G	N3-C4-C5	-5.01	126.10	128.60
26	14	1449(A)	G	OP1-P-OP2	5.01	127.11	119.60
26	14	1768	U	C5-C6-N1	5.01	125.20	122.70
26	14	2335	A	C5-C6-N6	5.01	127.71	123.70
26	14	2668	G	N1-C6-O6	-5.01	116.89	119.90
29	19	215	LEU	CA-CB-CG	-5.01	103.78	115.30
1	13	481	G	C4-N9-C1'	5.01	133.01	126.50
1	13	770	C	C2-N3-C4	-5.01	117.40	119.90
1	13	928	G	N3-C4-C5	5.01	131.10	128.60
1	13	1317	C	C6-N1-C2	-5.01	118.30	120.30
26	1H	645	C	C5-C4-N4	5.01	123.70	120.20
26	1H	967	C	C5-C6-N1	-5.01	118.50	121.00
26	1H	1161	C	OP1-P-O3'	5.01	116.21	105.20
26	1H	1357	U	N1-C2-O2	-5.01	119.30	122.80
26	1H	1367	A	C4-C5-C6	5.01	119.50	117.00
26	1H	2031	A	P-O3'-C3'	-5.01	113.69	119.70
26	1H	2758	A	C5-N7-C8	-5.01	101.40	103.90
27	16	94	C	N3-C4-C5	-5.01	119.90	121.90
1	1G	668	G	OP1-P-O3'	5.01	116.22	105.20
1	1G	1095	U	C6-N1-C2	-5.01	118.00	121.00
1	1G	1366	C	OP1-P-O3'	5.01	116.22	105.20
1	1G	1416	G	C6-N1-C2	5.01	128.10	125.10
1	1G	1454	G	N1-C6-O6	5.01	122.90	119.90
26	14	258	G	C5-C6-N1	-5.01	109.00	111.50
26	14	679	C	O5'-P-OP1	-5.01	101.19	105.70
26	14	706	A	N3-C4-N9	-5.01	123.40	127.40
26	14	1251	C	N3-C2-O2	5.01	125.40	121.90
26	14	1322	A	N1-C6-N6	-5.01	115.60	118.60
26	14	1726	G	N1-C2-N3	5.01	126.90	123.90
26	14	2069	G	O5'-P-OP2	5.01	116.71	110.70
26	14	2347	C	N3-C4-N4	-5.01	114.50	118.00
26	14	2606	C	N1-C2-N3	5.01	122.70	119.20
26	14	2712(A)	A	OP1-P-OP2	5.01	127.11	119.60
1	13	343	U	O4'-C1'-N1	5.00	112.20	108.20
1	13	1048	G	C6-C5-N7	-5.00	127.40	130.40
26	1H	1164	G	N9-C4-C5	5.00	107.40	105.40
26	1H	2414	G	OP1-P-O3'	5.00	116.21	105.20
1	1G	306	G	C5-N7-C8	-5.00	101.80	104.30
1	1G	1482	G	N9-C4-C5	-5.00	103.40	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	14	1399	C	N3-C4-N4	5.00	121.50	118.00
26	14	2016	U	C5-C6-N1	-5.00	120.20	122.70
27	1J	81	G	N3-C2-N2	5.00	123.40	119.90
1	13	129(A)	G	N7-C8-N9	5.00	115.60	113.10
1	13	168	G	C8-N9-C4	-5.00	104.40	106.40
1	13	635	G	N1-C6-O6	5.00	122.90	119.90
1	13	880	C	N1-C2-O2	5.00	121.90	118.90
22	1K	31	A	OP1-P-OP2	-5.00	112.09	119.60
24	3K	43	U	C6-N1-C1'	-5.00	114.20	121.20
26	1H	17	G	C5-C6-N1	5.00	114.00	111.50
26	1H	391	G	OP1-P-OP2	5.00	127.10	119.60
26	1H	804	A	O5'-P-OP2	5.00	116.70	110.70
26	1H	970	C	O5'-P-OP1	-5.00	101.20	105.70
26	1H	1000	A	C4-C5-C6	-5.00	114.50	117.00
26	1H	2097	C	N3-C4-C5	5.00	123.90	121.90
26	1H	2437	U	C2-N1-C1'	-5.00	111.70	117.70
1	1G	678	U	C5-C4-O4	5.00	128.90	125.90
1	1G	690	G	C4-C5-N7	5.00	112.80	110.80
1	1G	788	U	OP2-P-O3'	5.00	116.21	105.20
1	1G	1452	C	C5-C6-N1	5.00	123.50	121.00
26	14	96	G	N7-C8-N9	-5.00	110.60	113.10
26	14	228	A	N3-C4-C5	5.00	130.30	126.80
26	14	818	G	C2-N3-C4	5.00	114.40	111.90
26	14	908	C	C6-N1-C2	-5.00	118.30	120.30
26	14	1613	G	N1-C2-N2	-5.00	111.70	116.20
26	14	1664	A	C8-N9-C1'	-5.00	118.69	127.70
26	14	2341	G	N3-C4-C5	5.00	131.10	128.60
26	14	2518	A	O4'-C1'-N9	-5.00	104.20	108.20
26	14	2551	C	N3-C4-C5	-5.00	119.90	121.90
27	1J	118	G	C4-N9-C1'	5.00	133.01	126.50
1	13	557	G	N1-C6-O6	-5.00	116.90	119.90
1	13	587	G	OP1-P-OP2	-5.00	112.10	119.60
1	13	625	G	OP2-P-O3'	5.00	116.20	105.20
1	13	1320	C	C5-C6-N1	-5.00	118.50	121.00
1	13	1504	G	N3-C2-N2	-5.00	116.40	119.90
26	1H	177	G	C5-N7-C8	5.00	106.80	104.30
26	1H	672	C	O5'-P-OP1	5.00	116.70	110.70
26	1H	937	U	N3-C4-C5	5.00	117.60	114.60
26	1H	1017	G	N1-C2-N2	5.00	120.70	116.20
26	1H	1169	G	N1-C6-O6	5.00	122.90	119.90
26	1H	1383	C	C6-N1-C1'	-5.00	114.80	120.80
26	1H	1445	C	N3-C4-C5	-5.00	119.90	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	1H	1470	G	C4-C5-N7	-5.00	108.80	110.80
26	1H	1620	G	O5'-P-OP2	5.00	116.70	110.70
26	1H	1930	G	OP1-P-OP2	5.00	127.10	119.60
26	1H	2427	C	C5-C6-N1	-5.00	118.50	121.00
26	1H	2768	C	N3-C2-O2	-5.00	118.40	121.90
48	I8	55	ARG	NE-CZ-NH1	-5.00	117.80	120.30
1	1G	1427	U	C2-N3-C4	-5.00	124.00	127.00
1	1G	1474	G	C5-N7-C8	-5.00	101.80	104.30
26	14	523	C	C2-N3-C4	5.00	122.40	119.90
26	14	620	G	N9-C4-C5	5.00	107.40	105.40
26	14	1594	G	C4-C5-N7	5.00	112.80	110.80
26	14	1596	A	C2-N3-C4	-5.00	108.10	110.60
26	14	1911	U	C4-C5-C6	-5.00	116.70	119.70
26	14	2441	C	C6-N1-C2	5.00	122.30	120.30
26	14	2834	G	C5-C6-O6	5.00	131.60	128.60

There are no chirality outliers.

All (209) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
29	11	113	VAL	Peptide
29	11	122	ASP	Peptide
29	11	236	GLY	Peptide
29	11	237	GLU	Peptide
29	11	29	PRO	Peptide
29	11	41	GLY	Peptide
2	12	127	ILE	Peptide
2	12	19	HIS	Peptide
2	12	22	LYS	Peptide
2	12	23	ARG	Peptide
2	12	44	LEU	Peptide
2	12	98	LEU	Peptide
26	14	463	G	Sidechain
35	15	124	ALA	Peptide
35	15	127	ASP	Peptide
35	15	135	PRO	Peptide
35	15	41	ASP	Peptide
29	19	237	GLU	Peptide
29	19	27	THR	Peptide
29	19	271	ILE	Peptide
29	19	273	ARG	Peptide
29	19	28	GLU	Peptide

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Mol	Chain	Res	Type	Group
29	19	9	TYR	Peptide
2	1E	169	LYS	Peptide
2	1E	234	PRO	Peptide
2	1E	9	GLU	Peptide
30	21	153	GLY	Peptide
30	21	18	ASP	Peptide
30	21	187	ALA	Peptide
30	21	19	ARG	Peptide
30	21	53	PRO	Peptide
30	21	56	PRO	Peptide
30	21	57	LYS	Peptide
30	21	64	LYS	Peptide
30	21	77	ILE	Peptide
30	21	78	LEU	Peptide
30	21	82	ARG	Peptide
3	22	125	GLU	Peptide
3	22	88	ARG	Peptide
30	29	202	LYS	Peptide
30	29	61	ARG	Peptide
30	29	76	ARG	Peptide
30	29	87	GLU	Peptide
30	29	88	GLY	Peptide
30	29	89	ASP	Peptide
11	2A	49	GLY	Peptide
3	2E	128	PHE	Peptide
3	2E	166	GLU	Peptide
11	2I	102	GLY	Peptide
31	31	130	ALA	Peptide
31	31	133	ASN	Peptide
31	31	17	ARG	Peptide
4	32	154	ASN	Peptide
4	32	179	GLU	Peptide
4	32	29	PRO	Peptide
4	32	84	LYS	Peptide
37	35	107	LYS	Peptide
37	35	110	TYR	Peptide
37	35	36	LYS	Peptide
37	35	70	GLN	Peptide
31	39	12	LEU	Peptide
31	39	123	LEU	Peptide
31	39	127	GLU	Peptide
31	39	146	ALA	Peptide

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Mol	Chain	Res	Type	Group
31	39	15	SER	Peptide
31	39	166	ALA	Peptide
31	39	20	LEU	Peptide
31	39	24	LEU	Peptide
31	39	26	ALA	Peptide
31	39	82	ILE	Peptide
31	39	89	VAL	Peptide
12	3A	46	LYS	Peptide
4	3E	151	LYS	Peptide
12	3I	118	SER	Peptide
12	3I	125	PRO	Peptide
12	3I	47	LYS	Peptide
12	3I	48	PRO	Peptide
12	3I	87	GLY	Peptide
32	41	82	LEU	Peptide
32	41	85	GLY	Peptide
32	41	95	ARG	Peptide
38	45	134	ARG	Peptide
38	45	135	ASP	Peptide
38	45	137	TYR	Peptide
38	45	24	GLY	Peptide
38	45	79	LEU	Peptide
38	45	80	GLU	Peptide
38	45	82	ARG	Peptide
32	49	106	LEU	Peptide
32	49	113	ARG	Peptide
32	49	13	GLU	Peptide
32	49	142	PRO	Peptide
32	49	4	ASP	Peptide
32	49	5	VAL	Peptide
13	4A	57	ARG	Peptide
13	4A	94	ARG	Peptide
5	4E	112	LEU	Peptide
13	4I	105	THR	Peptide
13	4I	107	ALA	Peptide
13	4I	94	ARG	Peptide
33	51	137	ASP	Peptide
33	51	152	ARG	Peptide
33	51	155	SER	Peptide
35	58	47	ALA	Peptide
35	58	49	GLY	Peptide
35	58	56	ASN	Peptide

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Mol	Chain	Res	Type	Group
33	59	144	VAL	Peptide
33	59	150	ALA	Peptide
33	59	7	LEU	Peptide
14	5A	27	CYS	Peptide
14	5I	14	PRO	Peptide
34	61	11	ASN	Peptide
34	61	114	LEU	Peptide
34	61	134	PRO	Peptide
34	61	61	ARG	Peptide
34	69	101	LEU	Peptide
34	69	112	LYS	Peptide
34	69	142	VAL	Peptide
34	69	143	SER	Peptide
34	69	75	LEU	Peptide
34	69	77	LEU	Peptide
15	6A	12	ILE	Peptide
7	6E	5	ARG	Peptide
28	71	38	ASP	Peptide
41	75	11	GLU	Peptide
41	75	12	SER	Peptide
37	78	115	LEU	Peptide
37	78	12	ALA	Peptide
37	78	18	ARG	Peptide
37	78	19	VAL	Peptide
37	78	24	GLY	Peptide
37	78	26	GLY	Peptide
37	78	36	LYS	Peptide
16	7I	51	VAL	Peptide
9	82	117	HIS	Peptide
42	85	72	HIS	Peptide
42	85	90	VAL	Peptide
42	85	95	LEU	Peptide
42	85	96	ALA	Peptide
42	85	98	LEU	Peptide
38	88	138	ASP	Peptide
38	88	20	ALA	Peptide
38	88	58	PHE	Peptide
9	8E	110	GLU	Peptide
17	8I	48	GLU	Peptide
43	95	44	LYS	Peptide
43	95	49	THR	Peptide
43	95	80	GLN	Peptide

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Mol	Chain	Res	Type	Group
44	A5	43	GLY	Peptide
40	A8	110	LEU	Peptide
40	A8	3	ARG	Peptide
19	AA	66	MET	Peptide
19	AI	6	LYS	Peptide
19	AI	7	LYS	Peptide
45	B5	61	GLY	Peptide
45	B5	93	GLU	Peptide
41	B8	12	SER	Peptide
41	B8	2	ASN	Peptide
41	B8	54	ARG	Peptide
41	B8	58	ASN	Peptide
20	BA	101	GLY	Peptide
20	BA	11	SER	Peptide
20	BA	72	LEU	Peptide
20	BA	99	LEU	Peptide
20	BI	12	ALA	Peptide
46	C5	81	LYS	Peptide
42	C8	75	ASN	Peptide
42	C8	90	VAL	Peptide
42	C8	95	LEU	Peptide
47	D5	61	LEU	Peptide
43	D8	36	PRO	Peptide
43	D8	44	LYS	Peptide
43	D8	48	GLY	Peptide
43	D8	49	THR	Peptide
48	E5	17	GLN	Peptide
49	F5	78	LYS	Peptide
49	F5	82	LEU	Peptide
49	F5	85	LEU	Peptide
45	F8	2	LYS	Peptide
45	F8	24	GLY	Peptide
50	G5	15	LYS	Peptide
50	G5	17	SER	Peptide
50	G5	42	GLY	Peptide
50	G5	43	GLN	Peptide
46	G8	10	GLY	Peptide
46	G8	53	PRO	Peptide
46	G8	54	LYS	Peptide
46	G8	80	GLY	Peptide
46	G8	84	ARG	Peptide
46	G8	94	LYS	Peptide

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Mol	Chain	Res	Type	Group
47	H8	59	LEU	Peptide
47	H8	63	ASP	Peptide
49	J8	75	GLU	Peptide
49	J8	85	LEU	Peptide
50	K8	15	LYS	Peptide
50	K8	17	SER	Peptide
50	K8	2	LYS	Peptide
50	K8	46	GLN	Peptide
55	M5	29	LYS	Peptide
55	M5	40	GLU	Peptide
55	M5	48	PHE	Peptide
52	M8	37	SER	Peptide
52	M8	38	LYS	Peptide
52	M8	40	HIS	Peptide
52	M8	43	TYR	Peptide
52	M8	45	GLY	Peptide
54	P8	45	ALA	Peptide
55	Q8	49	VAL	Peptide
55	Q8	51	ALA	Peptide

5.2 Too-close contacts [i](#)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	13	32097	0	16197	1109	0
1	1G	32152	0	16231	1228	2
2	12	1695	0	1729	133	0
2	1E	1874	0	1926	143	0
3	22	1529	0	1592	134	0
3	2E	1605	0	1668	83	0
4	32	1702	0	1764	160	0
4	3E	1696	0	1752	134	0
5	42	1136	0	1200	105	0
5	4E	1142	0	1204	90	0
6	52	842	0	857	50	0
6	5E	837	0	852	48	0
7	62	1110	0	1163	82	0
7	6E	1229	0	1274	76	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
8	72	1107	0	1165	73	0
8	7E	1115	0	1177	78	0
9	82	820	0	848	83	0
9	8E	1000	0	1031	93	0
10	1A	474	0	484	43	0
10	1I	593	0	610	46	0
11	2A	835	0	847	31	0
11	2I	823	0	833	53	0
12	3A	947	0	1033	81	0
12	3I	956	0	1046	47	0
13	4A	893	0	946	85	0
13	4I	942	0	997	66	0
14	5A	388	0	424	47	0
14	5I	491	0	530	37	0
15	6A	729	0	768	35	0
15	6I	729	0	768	52	0
16	7A	705	0	725	55	0
16	7I	671	0	693	60	0
17	8A	823	0	891	37	0
17	8I	834	0	904	56	0
18	9A	544	0	605	35	0
18	9I	544	0	605	33	0
19	AA	283	0	284	22	0
19	AI	654	0	675	55	0
20	BA	757	0	856	56	0
20	BI	746	0	843	56	0
21	1B	204	0	218	18	0
21	1F	199	0	208	10	0
22	1K	1477	0	758	66	0
23	2K	1646	0	844	42	0
23	2L	1646	0	844	59	0
24	3K	1611	0	817	93	0
25	4K	439	0	219	17	0
25	4L	373	0	185	10	0
26	14	61630	0	31047	1916	1
26	1H	60960	0	30668	1946	0
27	16	2617	0	1328	91	0
27	1J	2617	0	1328	133	0
28	71	1050	0	1071	88	0
29	11	2120	0	2197	169	0
29	19	2120	0	2197	169	0
30	21	1558	0	1624	120	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
30	29	1558	0	1622	186	0
31	31	1585	0	1632	121	0
31	39	1602	0	1649	122	0
32	41	1457	0	1514	130	0
32	49	1457	0	1514	161	0
33	51	1312	0	1384	87	0
33	59	539	0	563	41	0
34	61	1131	0	1218	80	1
34	69	1131	0	1218	86	0
35	15	1096	0	1168	60	0
35	58	1104	0	1180	75	0
36	25	932	0	996	65	0
36	68	932	0	996	50	0
37	35	1130	0	1217	140	0
37	78	1122	0	1206	122	0
38	45	1099	0	1153	112	0
38	88	1113	0	1156	82	0
39	55	967	0	1033	57	0
39	98	967	0	1033	62	0
40	65	876	0	938	85	0
40	A8	881	0	943	86	0
41	75	1133	0	1190	80	0
41	B8	1123	0	1181	105	0
42	85	959	0	1019	68	0
42	C8	950	0	1011	82	0
43	95	766	0	837	77	0
43	D8	778	0	851	80	0
44	A5	876	0	941	41	0
44	E8	876	0	941	46	0
45	B5	735	0	785	54	0
45	F8	740	0	787	50	0
46	C5	799	0	888	79	0
46	G8	788	0	875	88	0
47	D5	1064	0	1082	88	0
47	H8	1218	0	1241	75	0
48	E5	616	0	633	49	0
48	I8	606	0	625	40	0
49	F5	737	0	813	60	0
49	J8	737	0	813	50	0
50	G5	563	0	612	35	0
50	K8	568	0	614	47	0
51	H5	459	0	512	19	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	L8	459	0	512	20	0
52	M8	366	0	370	49	0
53	J5	434	0	454	33	0
53	N8	369	0	388	44	0
54	L5	391	0	432	22	0
54	P8	401	0	436	18	0
55	M5	516	0	582	50	0
55	Q8	516	0	582	54	0
56	1L	1570	0	798	39	0
57	3L	1611	0	817	69	0
58	11	1	0	0	0	0
58	13	141	0	0	0	0
58	14	420	0	0	0	0
58	16	12	0	0	0	0
58	1G	78	0	0	0	0
58	1H	488	0	0	0	0
58	1J	6	0	0	0	0
58	21	2	0	0	0	0
58	29	3	0	0	0	0
58	2K	3	0	0	0	0
58	2L	3	0	0	0	0
58	32	1	0	0	0	0
58	35	1	0	0	0	0
58	3I	1	0	0	0	0
58	41	1	0	0	0	0
58	45	3	0	0	0	0
58	55	1	0	0	0	0
58	5E	2	0	0	0	0
58	5I	1	0	0	0	0
58	78	1	0	0	0	0
58	7A	1	0	0	0	0
58	85	2	0	0	0	0
58	88	1	0	0	0	0
58	C5	1	0	0	0	0
58	C8	1	0	0	0	0
58	E5	1	0	0	0	0
58	I8	1	0	0	0	0
58	J8	2	0	0	0	0
58	L5	1	0	0	0	0
58	P8	1	0	0	0	0
58	Q8	1	0	0	0	0
59	32	8	0	0	4	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
59	3E	8	0	0	0	0
60	5A	1	0	0	0	0
60	5I	1	0	0	0	0
60	C5	1	0	0	0	0
60	G8	1	0	0	0	0
61	11	9	0	0	0	0
61	13	148	0	0	21	0
61	14	411	0	0	57	0
61	16	18	0	0	4	0
61	19	4	0	0	2	0
61	1G	44	0	0	6	0
61	1H	670	0	0	78	0
61	1J	11	0	0	2	0
61	1K	1	0	0	0	0
61	21	5	0	0	2	0
61	29	3	0	0	0	0
61	31	6	0	0	0	0
61	35	2	0	0	0	0
61	39	8	0	0	0	0
61	3E	2	0	0	1	0
61	3I	2	0	0	0	0
61	4K	6	0	0	0	0
61	55	1	0	0	0	0
61	58	2	0	0	0	0
61	5A	3	0	0	2	0
61	5I	1	0	0	0	0
61	6I	1	0	0	0	0
61	78	3	0	0	1	0
61	B8	1	0	0	0	0
61	BA	1	0	0	0	0
61	D8	1	0	0	0	0
61	E5	1	0	0	0	0
61	E8	1	0	0	0	0
61	F5	2	0	0	0	0
61	G8	1	0	0	0	0
61	I8	1	0	0	0	0
61	L5	1	0	0	0	0
61	M5	2	0	0	0	0
61	Q8	1	0	0	0	0
All	All	292607	0	194505	12060	2

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 26.

All (12060) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:G8:84:ARG:CB	46:G8:84:ARG:CG	1.75	1.63
46:G8:84:ARG:CG	46:G8:84:ARG:CD	1.76	1.61
29:19:246:PRO:N	29:19:255:LYS:HZ1	1.10	1.44
3:22:29:TYR:CE1	3:22:33:LEU:HD22	1.61	1.35
37:35:121:LYS:C	37:35:122:PRO:N	1.77	1.35
26:14:2572:A:C8	30:29:144:ARG:HD2	1.64	1.31
26:14:957:A:H5'	38:45:76:LYS:CD	1.59	1.30
26:1H:389:G:P	49:J8:25:LYS:NZ	2.09	1.26
15:6I:26:GLU:OE2	15:6I:77:ARG:NE	1.67	1.25
32:49:111:LEU:HD23	32:49:140:ILE:CD1	1.65	1.25
34:61:135:GLU:OE1	34:61:136:VAL:N	1.70	1.24
37:35:52:GLU:N	37:35:52:GLU:OE2	1.71	1.23
2:1E:189:ASP:CG	2:1E:205:ASP:OD1	1.78	1.22
3:22:29:TYR:CZ	3:22:33:LEU:HD22	1.76	1.20
32:49:111:LEU:CD2	32:49:140:ILE:HD13	1.70	1.19
30:29:119:ARG:NH1	30:29:120:TRP:NE1	1.90	1.18
43:D8:1:MET:SD	43:D8:43:GLU:HG2	1.82	1.18
40:A8:61:ASN:ND2	40:A8:64:GLU:OE1	1.77	1.17
35:58:48:MET:CE	35:58:48:MET:O	1.93	1.16
29:19:246:PRO:N	29:19:255:LYS:NZ	1.95	1.15
26:1H:943:U:OP2	37:78:36:LYS:NZ	1.79	1.14
26:1H:389:G:P	49:J8:25:LYS:HZ2	1.68	1.13
37:78:126:VAL:HG12	37:78:147:LEU:HD11	1.29	1.13
49:F5:91:LYS:NZ	49:F5:95:LEU:HD22	1.62	1.13
40:A8:85:VAL:HG23	40:A8:112:PHE:HZ	1.01	1.12
26:1H:2714:G:OP2	61:1H:3501:HOH:O	1.67	1.12
49:F5:92:LYS:HD3	49:F5:93:GLU:H	1.02	1.11
3:22:29:TYR:CE1	3:22:33:LEU:CD2	2.35	1.10
26:1H:2711:A:OP2	61:1H:3501:HOH:O	1.68	1.09
46:G8:85:VAL:HG23	46:G8:96:ILE:HG13	1.36	1.08
26:14:957:A:C5'	38:45:76:LYS:HD3	1.83	1.07
30:29:119:ARG:NH1	30:29:120:TRP:CE2	2.23	1.06
40:A8:85:VAL:HG23	40:A8:112:PHE:CZ	1.89	1.06
26:1H:95:G:OP1	50:K8:46:GLN:OE1	1.74	1.05
32:49:114:ILE:HD13	32:49:140:ILE:HG21	1.40	1.04
42:C8:92:ARG:HD2	43:D8:11:GLN:HG3	1.40	1.04
35:58:48:MET:HE1	35:58:48:MET:O	1.58	1.03
39:55:51:LEU:HD22	39:55:66:VAL:HG23	1.41	1.03
1:13:974:A:OP2	14:5I:41:ARG:NH1	1.92	1.03
26:1H:389:G:OP1	49:J8:25:LYS:NZ	1.84	1.03

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:45:25:ASP:HB3	38:45:102:VAL:H	1.21	1.03
3:22:29:TYR:CE1	3:22:33:LEU:HB2	1.92	1.02
26:14:2415:G:H4'	37:35:67:MET:H	1.20	1.02
1:1G:998:G:N2	1:1G:1043:C:N3	2.08	1.01
26:14:2075:U:OP1	29:19:244:ARG:NH2	1.92	1.01
1:13:837:G:OP2	1:13:842:C:N4	1.92	1.01
49:F5:85:LEU:HD13	49:F5:88:LYS:HG3	1.40	1.01
26:1H:2124:G:H5''	28:71:174:PRO:HG3	1.43	1.01
32:41:161:THR:HG22	32:41:163:ALA:H	1.22	1.01
32:49:15:VAL:O	32:49:19:LEU:HD12	1.60	1.01
32:41:132:ASN:HB3	32:41:158:ALA:HA	1.40	1.00
38:45:81:VAL:O	38:45:82:ARG:NH1	1.92	1.00
32:41:131:TYR:O	32:41:159:VAL:HG22	1.60	1.00
13:4A:13:LYS:HD3	13:4A:14:ARG:H	1.25	0.99
26:1H:863:A:N7	61:1H:3511:HOH:O	1.93	0.99
29:19:246:PRO:HG2	29:19:255:LYS:HE3	1.43	0.99
4:32:60:GLU:HG2	4:32:202:LEU:HB2	1.44	0.99
9:8E:112:LYS:HA	9:8E:119:ALA:HB2	1.44	0.99
19:AI:40:ILE:HG12	19:AI:41:VAL:HG13	1.43	0.99
26:1H:818:G:OP2	61:1H:3502:HOH:O	1.81	0.98
26:1H:1109:C:O2	26:1H:1110:G:N2	1.96	0.98
17:8I:76:LEU:HD11	17:8I:79:SER:HB3	1.42	0.98
29:19:28:GLU:OE1	29:19:28:GLU:O	1.82	0.98
26:14:957:A:H5'	38:45:76:LYS:HD3	0.98	0.98
18:9A:21:LYS:HE2	18:9A:57:GLY:HA3	1.45	0.97
30:29:54:GLN:NE2	30:29:72:VAL:O	1.96	0.97
26:14:1970:A:OP1	61:14:3501:HOH:O	1.82	0.97
26:1H:1187:G:O6	61:1H:3502:HOH:O	1.81	0.96
26:14:2135:A:N7	26:14:2156:G:N2	2.13	0.96
26:1H:862:G:OP2	61:1H:3503:HOH:O	1.81	0.96
49:F5:91:LYS:HZ3	49:F5:95:LEU:HD22	1.22	0.96
31:39:63:LYS:HZ2	31:39:67:GLN:HB3	1.30	0.96
26:14:1997:G:OP2	61:14:3502:HOH:O	1.83	0.96
2:12:75:LYS:HA	2:12:78:GLN:HB2	1.44	0.96
47:D5:91:LEU:HD13	47:D5:130:PRO:HG3	1.47	0.96
29:19:246:PRO:CD	29:19:255:LYS:HZ1	1.78	0.96
26:1H:2577:A:H5''	26:1H:2578:G:H5'	1.46	0.96
26:14:957:A:H5'	38:45:76:LYS:CE	1.95	0.96
24:3K:59:A:H3'	24:3K:60:U:H5'	1.47	0.96
3:22:29:TYR:HE1	3:22:33:LEU:HD22	1.31	0.95
38:45:66:ILE:HD12	38:45:67:ARG:H	1.27	0.95

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:42:31:LEU:HD23	5:42:45:PHE:HB3	1.47	0.95
27:16:15:A:H5'	27:16:16:G:H8	1.30	0.95
1:1G:474:G:H2'	1:1G:475:G:H8	1.30	0.95
2:1E:189:ASP:OD2	2:1E:205:ASP:OD1	1.83	0.95
30:29:119:ARG:NH1	30:29:120:TRP:HE1	1.53	0.95
30:29:119:ARG:NH1	30:29:120:TRP:CZ2	2.34	0.95
26:1H:1634:A:OP2	61:1H:3504:HOH:O	1.85	0.95
43:95:2:PHE:HD2	43:95:42:GLY:HA2	1.32	0.95
26:14:2611:U:H5'	26:14:2611:U:H6	1.31	0.95
13:4I:10:PRO:HB2	13:4I:18:ALA:HB1	1.48	0.95
26:1H:912:C:OP1	38:88:8:LYS:NZ	1.98	0.95
41:B8:3:ARG:HB2	41:B8:6:LEU:HB2	1.49	0.94
27:16:15:A:H5'	27:16:16:G:C8	2.01	0.94
28:71:45:ALA:HB2	28:71:212:VAL:HG22	1.49	0.94
31:39:53:THR:HG22	31:39:55:GLY:H	1.31	0.94
1:13:1502:A:H2	1:13:1505:G:H1	1.13	0.94
30:29:60:ASN:HB2	30:29:62:PRO:HD2	1.49	0.94
26:1H:2576:G:OP1	61:1H:3505:HOH:O	1.86	0.94
1:1G:1395:C:HO2'	1:1G:1401:G:HO2'	1.07	0.94
26:14:1359:A:N6	26:14:1372:U:H3	1.66	0.94
26:14:676:A:H8	26:14:2069:G:H21	1.12	0.93
31:31:6:VAL:N	31:31:24:LEU:O	2.01	0.93
1:13:509:A:OP2	61:13:1801:HOH:O	1.85	0.93
26:1H:674:G:H1'	31:31:74:ARG:HD3	1.47	0.93
1:13:1123:A:HO2'	10:1I:38:ILE:N	1.66	0.93
22:1K:76:A:H8	26:1H:2583:G:H21	1.12	0.93
26:1H:751:A:H5'	44:E8:90:ARG:HA	1.48	0.93
31:31:185:ASP:OD1	31:31:188:ARG:NH1	2.02	0.93
56:1L:34:U:O4	25:4L:21:A:N6	2.01	0.93
40:A8:11:LYS:HD3	40:A8:91:PRO:HD3	1.51	0.93
35:58:47:ALA:HB2	35:58:112:LEU:HD11	1.50	0.93
1:13:468:A:H5''	16:7I:80:PHE:CD1	2.04	0.93
30:21:119:ARG:HD3	30:21:160:TYR:HB2	1.50	0.93
1:13:963:G:N3	10:1I:55:LYS:NZ	2.16	0.93
4:32:157:LEU:O	4:32:161:ASN:ND2	2.01	0.93
24:3K:19:G:N2	26:1H:2112:G:N3	2.18	0.92
5:42:101:ILE:O	5:42:120:THR:OG1	1.86	0.92
26:1H:1899:G:N2	26:1H:1902:C:H41	1.65	0.92
32:49:114:ILE:HB	32:49:117:PHE:HB2	1.52	0.92
1:13:455:C:N3	1:13:477:G:N2	2.15	0.92
1:13:613:C:H42	1:13:627:G:H1	1.17	0.92

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:275:G:N2	26:14:276:A:N7	2.17	0.92
26:1H:320:A:OP1	31:31:135:LYS:NZ	2.02	0.91
2:12:91:PRO:HG2	2:12:155:LEU:HG	1.52	0.91
32:49:106:LEU:CG	32:49:111:LEU:HG	1.99	0.91
26:1H:2590:A:OP2	29:11:237:GLU:HB3	1.70	0.91
50:G5:50:ILE:HD12	50:G5:51:ARG:H	1.34	0.91
45:B5:63:LYS:HD2	45:B5:63:LYS:O	1.70	0.91
42:C8:8:VAL:HG23	42:C8:11:ARG:HH21	1.35	0.91
1:13:1077:G:N2	1:13:1080:A:OP2	2.03	0.91
26:14:2485:G:H5'	38:45:46:GLN:HE21	1.35	0.91
26:1H:993:G:OP1	42:C8:50:ARG:NH2	2.04	0.91
44:E8:73:ALA:HB3	44:E8:106:ILE:HB	1.53	0.91
26:1H:270(K):C:O2	26:1H:270(N):G:N2	2.04	0.91
29:11:31:LYS:HG3	29:11:33:LEU:HD21	1.52	0.91
26:1H:2315:G:H21	32:41:128:ARG:HH22	1.19	0.90
1:1G:838:G:N2	1:1G:848:C:N3	2.20	0.90
26:14:957:A:O4'	38:45:76:LYS:HE2	1.69	0.90
26:1H:1047:G:N2	26:1H:1111:A:OP2	2.03	0.90
30:29:25:VAL:HG12	30:29:26:ILE:H	1.36	0.90
32:49:111:LEU:HD23	32:49:140:ILE:HD13	0.92	0.90
42:85:91:ASP:OD1	42:85:96:ALA:N	2.04	0.90
5:42:79:GLU:O	8:72:104:ARG:NH1	2.04	0.90
31:39:123:LEU:O	31:39:125:LEU:N	2.03	0.90
20:BI:69:GLY:O	20:BI:73:HIS:NE2	2.05	0.90
49:F5:92:LYS:HD3	49:F5:93:GLU:N	1.87	0.90
26:14:2873:A:H8	39:55:6:SER:H	1.17	0.90
11:2I:41:THR:HG21	11:2I:71:LYS:HD2	1.52	0.90
26:1H:1899:G:H22	26:1H:1902:C:N4	1.70	0.90
27:1J:18:G:H1	27:1J:65:C:H42	1.13	0.90
32:41:98:ARG:NE	52:M8:1:MET:SD	2.45	0.90
36:25:13:ASN:HD21	36:25:96:THR:HG23	1.36	0.90
26:1H:1899:G:H22	26:1H:1902:C:H41	0.90	0.90
55:M5:48:PHE:HB2	55:M5:49:VAL:HG22	1.52	0.90
13:4A:31:LYS:HA	13:4A:34:LEU:HD21	1.52	0.90
15:6I:26:GLU:OE2	15:6I:77:ARG:CZ	2.21	0.89
26:14:654(B):C:HO2'	26:14:654(S):G:H1	1.13	0.89
26:14:869:G:H5'	38:45:6:ARG:HH21	1.33	0.89
26:1H:1257:C:H4'	31:31:83:PHE:CD1	2.08	0.89
26:1H:2469:A:H2	26:1H:2481:G:H21	1.16	0.89
26:1H:733:G:OP2	61:1H:3508:HOH:O	1.90	0.89
29:11:37:LEU:HD23	29:11:37:LEU:N	1.88	0.89

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:177:C:OP1	20:BI:65:LYS:NZ	2.06	0.89
1:1G:589:C:H42	1:1G:650:G:H1	1.12	0.89
3:22:29:TYR:HE1	3:22:33:LEU:CB	1.85	0.89
2:1E:68:ILE:HG13	2:1E:161:ALA:HB3	1.53	0.89
26:1H:1228:G:OP2	42:C8:16:LYS:NZ	2.06	0.89
1:13:339:C:OP2	36:68:97:ARG:NH1	2.05	0.89
1:1G:258:G:N7	61:1G:1701:HOH:O	2.05	0.89
9:8E:47:LEU:HD12	9:8E:50:LEU:HD12	1.55	0.89
15:6I:82:ILE:O	15:6I:86:GLY:N	2.05	0.89
38:88:65:PHE:O	38:88:66:ILE:HG13	1.73	0.89
26:1H:1981:A:OP1	61:1H:3506:HOH:O	1.89	0.89
26:1H:138:G:N2	45:F8:44:GLU:OE2	2.04	0.89
29:19:245:PRO:C	29:19:255:LYS:HZ1	1.76	0.89
15:6I:25:THR:HB	15:6I:77:ARG:NH2	1.87	0.89
26:1H:676:A:H8	26:1H:2069:G:H21	1.13	0.89
26:1H:456:C:H3'	45:F8:68:ARG:HH12	1.37	0.89
26:1H:2789:C:O2	26:1H:2894:G:N2	2.06	0.89
7:62:113:GLU:HB2	7:62:119:ARG:HG2	1.54	0.88
45:B5:27:THR:HG22	45:B5:80:ILE:HG22	1.55	0.88
29:19:246:PRO:CG	29:19:255:LYS:HE3	2.03	0.88
5:4E:11:ILE:HD11	5:4E:31:LEU:HD13	1.56	0.88
12:3A:20:LYS:HD2	12:3A:21:LYS:N	1.88	0.88
1:1G:54:C:N4	1:1G:353:A:OP2	2.07	0.88
26:1H:2781:A:H5''	26:1H:2782:G:H5'	1.52	0.88
37:35:79:ARG:HG2	37:35:110:TYR:HB2	1.55	0.88
57:3L:55:U:H3	57:3L:57:G:H3'	1.37	0.88
40:65:50:SER:O	40:65:76:LYS:NZ	2.06	0.88
3:22:29:TYR:OH	3:22:33:LEU:HD22	1.74	0.88
35:58:48:MET:SD	35:58:48:MET:O	2.30	0.88
26:1H:1434:A:H61	26:1H:1558:A:N6	1.72	0.88
5:42:102:ALA:HB1	5:42:106:PRO:HG2	1.54	0.88
26:1H:2615:U:OP2	61:1H:3507:HOH:O	1.90	0.88
26:14:2651:C:H42	26:14:2669:G:H1	1.22	0.88
26:1H:2308:G:H1	26:1H:2311:A:H2	1.21	0.88
29:11:6:PHE:CE2	29:11:13:ARG:NH2	2.42	0.87
3:22:29:TYR:HE1	3:22:33:LEU:HB2	1.35	0.87
26:1H:135:G:O6	26:1H:144:C:N4	2.07	0.87
43:D8:65:GLY:HA3	43:D8:91:TYR:CE1	2.09	0.87
26:1H:1040:C:N4	26:1H:1115:G:O6	2.07	0.87
26:14:1754:C:OP1	41:75:96:ARG:NH1	2.07	0.87
26:1H:2032:G:H21	30:21:146:THR:HG23	1.39	0.87

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:130:VAL:HG13	3:22:134:ILE:HG12	1.53	0.87
1:1G:617:G:H1	1:1G:623:C:H42	1.20	0.87
39:55:103:ARG:NH2	44:A5:40:ASN:OD1	2.08	0.87
27:1J:80:U:H2'	27:1J:81:G:H21	1.39	0.87
1:1G:1095:U:P	1:1G:1108:G:H1	1.98	0.87
26:14:1806:C:O2'	29:19:46:GLN:NE2	2.08	0.87
26:14:71:A:H2	45:B5:31:HIS:HE2	1.23	0.87
1:13:542:G:OP1	4:3E:10:ARG:NH2	2.07	0.87
26:14:2287:A:H62	26:14:2344:U:H3	1.20	0.87
26:1H:1287:A:N7	39:98:107:ASP:HB2	1.90	0.87
50:G5:25:VAL:HG12	50:G5:60:LEU:HD23	1.56	0.87
46:C5:75:ILE:HA	46:C5:80:GLY:HA2	1.57	0.87
49:F5:80:LEU:HD12	49:F5:82:LEU:HD13	1.57	0.87
3:22:29:TYR:HE1	3:22:33:LEU:CD2	1.83	0.86
43:D8:21:ARG:NE	43:D8:93:GLU:OE2	2.08	0.86
26:1H:568:U:O4	61:1H:3510:HOH:O	1.92	0.86
26:1H:1239:G:OP1	61:1H:3509:HOH:O	1.92	0.86
32:41:66:GLN:HA	52:M8:6:HIS:HE1	1.40	0.86
29:11:6:PHE:HE2	29:11:13:ARG:HH21	0.94	0.86
31:39:188:ARG:HA	37:35:3:LEU:HD11	1.57	0.86
49:J8:93:GLU:CD	49:J8:94:LEU:H	1.79	0.86
32:49:106:LEU:HG	32:49:111:LEU:HG	1.56	0.86
1:1G:976:G:N2	1:1G:1362(A):C:OP2	2.08	0.86
46:G8:82:PRO:HB3	46:G8:99:CYS:HB2	1.54	0.86
3:22:29:TYR:CE1	3:22:33:LEU:CB	2.57	0.86
1:13:1422:G:H5''	36:68:48:PRO:HB3	1.57	0.86
1:13:601:C:H2'	1:13:602:A:H8	1.39	0.86
1:13:510:A:OP2	61:13:1802:HOH:O	1.92	0.86
26:1H:2712(A):A:OP2	61:1H:3501:HOH:O	1.94	0.86
26:14:84:A:N6	26:14:102:G:O2'	2.09	0.86
1:1G:1249:C:H41	1:1G:1287:A:H5'	1.40	0.86
36:68:2:ILE:HD12	36:68:6:THR:HG21	1.57	0.86
53:N8:36:CYS:HB2	53:N8:49:CYS:SG	2.16	0.86
1:13:1122:U:O4	1:13:1123:A:N6	2.08	0.86
1:13:877:C:OP1	8:7E:88:LYS:NZ	2.09	0.85
9:82:27:THR:OG1	9:82:31:GLN:O	1.91	0.85
16:7I:8:ARG:NH1	16:7I:15:PRO:HB3	1.91	0.85
1:13:535:A:OP1	61:13:1803:HOH:O	1.94	0.85
44:E8:79:GLY:HA3	44:E8:100:THR:HG22	1.56	0.85
47:D5:53:ILE:HG22	47:D5:71:VAL:HG13	1.54	0.85
1:13:1149:C:H2'	1:13:1150:U:H6	1.42	0.85

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:61:6:LEU:HD13	34:61:36:ALA:HA	1.57	0.85
1:13:148:G:N2	1:13:174:C:N3	2.24	0.85
26:14:517:C:OP2	53:J5:13:LYS:NZ	2.08	0.85
16:7A:14:ASN:O	16:7A:16:HIS:N	2.08	0.85
1:13:1290:G:O3'	7:6E:37:ASN:OD1	1.94	0.85
50:K8:4:SER:OG	50:K8:5:GLU:N	2.08	0.85
31:31:129:PHE:HB2	31:31:132:VAL:HG13	1.59	0.85
26:1H:2392:A:H2	26:1H:2424:C:H42	1.24	0.85
32:41:150:ASP:OD1	32:41:153:ARG:NH1	2.09	0.85
26:14:1899:G:H21	26:14:1902:C:H41	1.24	0.85
41:B8:26:ASP:HB3	41:B8:92:GLY:H	1.40	0.85
24:3K:34:U:H1'	24:3K:35:U:H5'	1.57	0.85
5:42:79:GLU:HG2	5:42:92:LYS:HG3	1.57	0.85
27:1J:15:A:H5'	27:1J:16:G:C8	2.11	0.85
4:32:108:LEU:HD13	4:32:174:LEU:HB3	1.58	0.85
29:19:44:ASN:OD1	29:19:46:GLN:HG3	1.76	0.85
26:14:71:A:H3'	26:14:71:A:OP2	1.76	0.85
1:13:1256:A:OP2	3:2E:26:LYS:NZ	2.10	0.85
39:98:41:ALA:O	39:98:44:LEU:N	2.10	0.85
26:1H:620:G:H4'	26:1H:621:A:H5''	1.57	0.84
26:14:71:A:C8	26:14:71:A:H5'	2.11	0.84
30:21:105:THR:OG1	30:21:199:ARG:NH2	2.09	0.84
30:21:169:ASN:HA	30:21:201:THR:HG21	1.58	0.84
2:1E:212:GLN:HE21	2:1E:234:PRO:HA	1.41	0.84
41:B8:12:SER:OG	41:B8:15:VAL:N	2.09	0.84
30:21:97:LYS:N	30:21:100:GLU:OE1	2.09	0.84
30:29:134:ILE:O	30:29:134:ILE:HD12	1.78	0.84
26:14:2415:G:H4'	37:35:67:MET:N	1.91	0.84
3:2E:78:GLY:HA3	3:2E:83:ARG:HB3	1.59	0.84
22:1K:52:G:H1	22:1K:62:C:H42	1.20	0.84
57:3L:6:G:N1	57:3L:67:C:O2	2.11	0.84
1:13:307:C:OP2	61:13:1804:HOH:O	1.96	0.84
1:1G:1200:C:H1'	1:1G:1204:A:H61	1.40	0.84
1:1G:975:A:H4'	1:1G:976:G:H5''	1.59	0.84
33:51:106:THR:HG22	33:51:112:PRO:HB3	1.57	0.84
26:1H:10:G:O2'	26:1H:2801:A:N3	2.10	0.84
51:L8:18:ASP:OD2	51:L8:49:LYS:NZ	2.11	0.84
7:6E:35:LYS:HD3	7:6E:38:LEU:HD23	1.60	0.84
26:1H:2134:A:OP2	26:1H:2156:G:N2	2.11	0.84
46:G8:38:ILE:HD11	46:G8:64:GLU:HG3	1.59	0.84
33:51:86:GLU:HG3	33:51:87:LEU:H	1.42	0.84

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1A:48:THR:HA	10:1A:62:HIS:HB3	1.60	0.84
26:14:1899:G:H21	26:14:1902:C:N4	1.76	0.84
1:1G:587:G:N2	1:1G:754:C:OP2	2.11	0.84
8:7E:7:ALA:HB2	8:7E:85:ARG:HD3	1.60	0.83
26:1H:2656:U:H3	26:1H:2665:A:H2	1.25	0.83
1:1G:353:A:H8	1:1G:353:A:H5'	1.43	0.83
46:C5:3:VAL:HG11	46:C5:32:PRO:HB2	1.60	0.83
8:72:12:ARG:HD3	8:72:26:VAL:HG12	1.58	0.83
20:BI:71:THR:HG22	20:BI:72:LEU:H	1.40	0.83
24:3K:61:C:H1'	28:71:52:ARG:HH11	1.42	0.83
9:8E:3:GLN:OE1	9:8E:20:ARG:NH1	2.11	0.83
3:2E:58:GLU:HB2	3:2E:65:ALA:HB3	1.58	0.83
30:21:135:HIS:NE2	61:21:401:HOH:O	2.10	0.83
23:2L:24:C:H2'	23:2L:25:U:C6	2.13	0.83
40:65:3:ARG:HH21	40:65:4:LEU:HB2	1.43	0.83
1:13:1263:C:O2	1:13:1272:G:N2	2.11	0.83
47:H8:152:ALA:HB2	47:H8:169:GLU:H	1.43	0.83
1:1G:81:G:H1	1:1G:89:U:H3	1.26	0.83
4:32:122:ARG:NH2	4:32:134:ASP:OD2	2.10	0.83
1:1G:1221:G:H4'	19:AA:77:THR:HG21	1.59	0.83
48:E5:72:ARG:HB3	48:E5:75:LEU:HB2	1.58	0.83
26:14:869:G:H5'	38:45:6:ARG:NH2	1.92	0.83
1:13:1191:A:OP2	3:2E:3:ASN:ND2	2.12	0.83
26:1H:2096:U:H3	26:1H:2193:G:H1	1.22	0.83
26:14:622:G:OP2	37:35:108:LYS:NZ	2.11	0.83
26:14:831:G:OP1	61:14:3504:HOH:O	1.97	0.83
1:13:538:G:H5''	12:3I:114:LYS:HB2	1.59	0.83
44:E8:88:ARG:HB3	44:E8:92:ARG:HB2	1.59	0.83
1:1G:1000:A:N6	1:1G:1040:U:O4	2.11	0.83
1:1G:934:C:O2'	1:1G:1344:C:OP2	1.97	0.83
29:11:108:PRO:HG3	29:11:143:HIS:CE1	2.14	0.83
13:4A:36:LYS:NZ	13:4A:59:TYR:OH	2.11	0.83
1:13:1240:U:OP2	7:6E:116:ALA:N	2.11	0.83
7:6E:16:LEU:HD13	9:8E:44:VAL:HG22	1.61	0.83
35:58:96:GLU:O	35:58:98:VAL:N	2.12	0.83
26:14:900:A:H2'	26:14:901:A:H8	1.43	0.83
4:32:191:ARG:HH21	4:32:194:LEU:HB2	1.43	0.83
1:1G:1192:C:OP2	3:22:4:LYS:NZ	2.12	0.83
26:14:1364:G:OP2	49:F5:2:SER:N	2.12	0.83
26:14:2156:G:N7	26:14:2157:G:N2	2.26	0.82
4:32:31:CYS:C	4:32:33:MET:H	1.82	0.82

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:35:71:VAL:HG13	37:35:72:PRO:HD3	1.61	0.82
38:45:22:LYS:HG2	38:45:23:GLY:HA2	1.60	0.82
9:82:17:VAL:HG11	9:82:81:ILE:HD13	1.59	0.82
41:75:125:ARG:HB2	41:75:129:ARG:HH21	1.42	0.82
28:71:181:PRO:HG2	28:71:184:LYS:H	1.44	0.82
55:Q8:6:THR:HG23	55:Q8:64:TYR:HD2	1.44	0.82
26:1H:879:G:O6	26:1H:897:C:N4	2.12	0.82
43:95:21:ARG:NH2	43:95:65:GLY:O	2.12	0.82
1:13:894:G:OP2	61:13:1805:HOH:O	1.96	0.82
13:4I:13:LYS:O	13:4I:44:ARG:HD3	1.79	0.82
26:14:71:A:H4'	26:14:72:U:H5''	1.61	0.82
1:1G:1273:G:H3'	1:1G:1274:G:H8	1.45	0.82
32:41:112:PRO:HB3	52:M8:36:CYS:HA	1.61	0.82
26:1H:71:A:H2	45:F8:31:HIS:HE2	1.24	0.82
26:14:1188:U:O2'	26:14:1189:A:H5'	1.79	0.82
15:6I:25:THR:HB	15:6I:77:ARG:HH21	1.41	0.82
26:14:2468:G:N2	26:14:2481:G:O2'	2.10	0.82
1:13:262:A:H2'	1:13:263:A:C8	2.15	0.82
26:14:161:U:H4'	26:14:171:G:H21	1.43	0.82
55:Q8:52:LYS:HB3	55:Q8:53:PRO:HD2	1.60	0.82
34:61:135:GLU:OE1	34:61:135:GLU:C	2.18	0.82
1:1G:1342:C:H4'	9:82:125:TYR:HB2	1.58	0.82
26:1H:1992:G:N7	61:1H:3532:HOH:O	2.10	0.82
3:22:18:TRP:HE1	14:5A:55:GLY:H	1.23	0.82
26:14:2127:G:H1	26:14:2161:C:H42	1.25	0.82
26:1H:1703:G:N7	61:1H:3538:HOH:O	2.12	0.82
38:88:66:ILE:HD12	38:88:67:ARG:H	1.44	0.82
29:11:17:THR:HG22	29:11:204:ILE:HA	1.62	0.82
26:14:1049:C:N4	26:14:2751:G:O6	2.12	0.82
1:1G:523:A:H61	12:3A:92:ASP:HB2	1.45	0.82
32:41:170:ARG:HH21	32:41:180:PHE:HB3	1.45	0.82
41:75:13:ARG:HD3	41:75:13:ARG:H	1.45	0.82
40:65:12:PHE:O	40:65:16:ASN:ND2	2.13	0.82
41:B8:6:LEU:HA	41:B8:9:LEU:HB2	1.60	0.82
24:3K:5:C:O2	24:3K:68:G:N1	2.08	0.82
26:1H:363(B):G:H2'	26:1H:363(C):G:H8	1.44	0.82
1:1G:1218:C:OP2	14:5A:9:LYS:NZ	2.13	0.82
26:1H:588:U:H2'	26:1H:589:C:C6	2.14	0.82
24:3K:4:U:H3	24:3K:69:A:H61	1.25	0.81
1:1G:1076:C:H42	1:1G:1081:G:H1	1.28	0.81
4:3E:19:LEU:HB2	4:3E:21:LEU:HD11	1.62	0.81

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:75:88:ILE:HD13	41:75:91:ARG:CZ	2.10	0.81
26:1H:389:G:P	49:J8:25:LYS:HZ1	1.89	0.81
29:11:10:THR:OG1	29:11:13:ARG:HB2	1.78	0.81
26:1H:2787:C:H1'	30:21:62:PRO:HG3	1.63	0.81
52:M8:40:HIS:ND1	52:M8:44:THR:O	2.13	0.81
51:L8:37:LEU:HD12	51:L8:43:ILE:HD13	1.63	0.81
26:1H:2101:G:N2	26:1H:2188:C:N3	2.27	0.81
1:13:989:C:H42	1:13:1216:G:H1	1.26	0.81
27:1J:73:A:OP2	61:1J:301:HOH:O	1.97	0.81
27:16:90:C:H5'	38:88:18:LYS:HA	1.62	0.81
42:85:50:ARG:HH12	43:95:72:VAL:HG23	1.44	0.81
26:14:2074:U:OP1	61:14:3506:HOH:O	1.98	0.81
29:19:244:ARG:NH2	61:19:301:HOH:O	2.14	0.81
43:D8:1:MET:SD	43:D8:43:GLU:CG	2.66	0.81
13:4A:13:LYS:HD3	13:4A:14:ARG:N	1.96	0.81
28:71:21:THR:HG23	28:71:24:GLU:HB3	1.63	0.81
26:14:806:C:OP2	37:35:41:ARG:NH2	2.13	0.81
26:14:1154:G:OP2	42:85:58:ARG:NH1	2.14	0.81
4:32:61:LYS:HB2	4:32:203:VAL:HG13	1.62	0.81
40:A8:85:VAL:CG2	40:A8:112:PHE:HZ	1.88	0.81
7:6E:16:LEU:HD11	9:8E:42:ARG:HA	1.63	0.81
2:1E:185:ILE:HD12	2:1E:199:TYR:HB2	1.60	0.81
26:14:654(B):C:O2'	26:14:654(S):G:N1	2.12	0.81
46:C5:73:ARG:NH1	46:C5:81:LYS:O	2.14	0.81
26:1H:1606:G:OP1	61:1H:3512:HOH:O	1.97	0.81
7:62:70:LYS:HG3	7:62:96:GLN:HB3	1.63	0.81
26:14:2572:A:N7	30:29:144:ARG:HD2	1.96	0.81
49:F5:85:LEU:HA	49:F5:87:PRO:HD2	1.61	0.81
26:1H:270(J):G:H2'	26:1H:270(K):C:H4'	1.63	0.81
24:3K:3:G:N2	24:3K:70:C:N3	2.28	0.81
52:M8:37:SER:OG	52:M8:42:PHE:O	1.99	0.81
26:14:993:G:OP1	42:85:50:ARG:NH2	2.14	0.81
4:32:23:GLY:N	4:32:26:CYS:SG	2.54	0.81
36:25:1:MET:HE3	36:25:67:LYS:HG2	1.63	0.81
26:14:570:G:O6	61:14:3505:HOH:O	1.98	0.81
34:69:3:VAL:HG12	34:69:38:LEU:HA	1.60	0.81
1:1G:377:G:H1	1:1G:386:C:H42	1.24	0.81
26:1H:2749:A:P	33:51:4:ILE:HD11	2.21	0.80
26:14:1945:G:H2'	26:14:1946:U:C6	2.16	0.80
27:1J:28:C:H42	27:1J:56:G:H1	1.30	0.80
26:14:977:G:N2	26:14:986:C:O2	2.11	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2572:A:C8	30:29:144:ARG:CD	2.58	0.80
19:AI:40:ILE:HD11	19:AI:62:ILE:HD13	1.63	0.80
9:82:81:ILE:HG22	9:82:85:LEU:HD23	1.64	0.80
32:49:145:THR:HG1	32:49:148:MET:H	1.27	0.80
26:1H:1021:A:H62	26:1H:1141:U:H3	1.24	0.80
1:1G:474:G:H2'	1:1G:475:G:C8	2.15	0.80
39:55:74:LYS:HE2	39:55:74:LYS:H	1.45	0.80
1:13:362:G:H4'	12:3I:33:ARG:HH21	1.45	0.80
3:22:29:TYR:HE1	3:22:33:LEU:CG	1.94	0.80
26:1H:674:G:C1'	31:31:74:ARG:HD3	2.12	0.80
1:1G:80:G:N1	1:1G:89:U:O2	2.12	0.80
33:59:60:ARG:O	33:59:63:SER:OG	1.99	0.80
1:13:1178:G:OP2	9:8E:93:ARG:NH2	2.13	0.80
24:3K:34:U:O2'	24:3K:35:U:O5'	2.00	0.80
26:1H:270(H):C:N3	26:1H:270(R):G:N2	2.29	0.80
26:14:1250:G:OP2	37:35:21:ARG:NH1	2.14	0.80
32:49:106:LEU:CD1	32:49:111:LEU:HG	2.11	0.80
10:1I:49:VAL:HG23	14:5I:41:ARG:HB2	1.63	0.80
32:41:66:GLN:HA	52:M8:6:HIS:CE1	2.16	0.80
26:1H:2469:A:O2'	38:88:56:ARG:HG2	1.82	0.80
40:65:107:GLU:H	40:65:110:LEU:HD21	1.43	0.80
36:25:2:ILE:HD12	36:25:6:THR:HG21	1.64	0.80
1:13:8:A:N7	4:3E:208:SER:OG	2.14	0.80
26:1H:517:C:OP1	53:N8:16:ARG:NH2	2.13	0.80
26:1H:907:U:O2'	38:88:101:ARG:NH2	2.14	0.80
33:59:54:ARG:HB3	33:59:65:HIS:HB2	1.64	0.80
3:22:90:GLU:HA	3:22:93:LYS:HD3	1.63	0.80
29:19:39:LYS:O	29:19:40:THR:HG23	1.80	0.80
50:G5:47:ASN:O	50:G5:49:LYS:N	2.15	0.80
38:45:32:TYR:OH	38:45:111:GLU:OE1	2.00	0.80
11:2I:85:ARG:HG2	11:2I:112:THR:H	1.45	0.80
34:61:68:LEU:HA	34:61:71:ILE:HG22	1.62	0.80
1:13:982:U:H5''	14:5I:6:LEU:HD11	1.64	0.80
35:58:12:ARG:HG2	35:58:13:TRP:H	1.46	0.80
27:1J:18:G:N2	27:1J:65:C:N3	2.29	0.80
26:1H:945:A:N3	61:1H:3544:HOH:O	2.14	0.80
1:13:1133:G:N2	1:13:1141:C:O2	2.11	0.80
26:1H:1278:A:OP1	39:98:36:THR:HG22	1.82	0.80
29:19:83:GLU:OE1	29:19:104:TYR:OH	1.98	0.80
26:14:1012:U:OP1	42:85:70:ARG:NH2	2.15	0.80
26:14:1632:A:N7	61:14:3531:HOH:O	2.15	0.80

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:186(B):C:O2	1:13:191(E):G:N2	2.13	0.80
41:B8:3:ARG:O	41:B8:7:ILE:N	2.13	0.80
45:B5:1:MET:N	45:B5:6:ASP:OD2	2.15	0.80
27:1J:42:C:O2'	32:49:67:LYS:O	2.00	0.80
26:14:1327:C:OP2	61:14:3507:HOH:O	1.99	0.80
8:7E:102:ARG:HD3	8:7E:102:ARG:H	1.47	0.80
26:14:2075:U:P	29:19:244:ARG:HH21	2.03	0.79
2:1E:189:ASP:CB	2:1E:205:ASP:OD1	2.30	0.79
29:19:43:ARG:HG2	29:19:49:ILE:HA	1.62	0.79
1:13:1454:G:H4'	20:BI:36:LEU:HD21	1.62	0.79
26:14:569:U:OP2	61:14:3508:HOH:O	1.99	0.79
13:4A:96:LEU:HD22	13:4A:97:PRO:HD2	1.64	0.79
1:13:737:A:H2'	1:13:738:C:C6	2.16	0.79
46:G8:94:LYS:NZ	46:G8:95:LYS:H	1.80	0.79
36:68:98:VAL:HG11	36:68:114:ILE:HG23	1.65	0.79
1:13:474:G:H2'	1:13:475:G:H8	1.48	0.79
7:6E:122:HIS:HA	7:6E:125:MET:HE2	1.63	0.79
26:14:938:G:OP2	55:M5:52:LYS:NZ	2.14	0.79
26:14:2293:C:N4	26:14:2339:G:O6	2.16	0.79
34:69:59:ALA:HA	34:69:62:LYS:HB3	1.63	0.79
9:8E:10:ARG:CD	9:8E:11:LYS:HG3	2.12	0.79
3:22:29:TYR:CD1	3:22:33:LEU:HB2	2.16	0.79
10:1I:40:LEU:HB2	10:1I:69:ASN:HB2	1.64	0.79
1:1G:1263:C:N4	1:1G:1272:G:O6	2.12	0.79
55:Q8:52:LYS:HB3	55:Q8:53:PRO:CD	2.11	0.79
26:14:1456:G:OP2	61:14:3509:HOH:O	2.00	0.79
49:F5:91:LYS:HZ1	49:F5:95:LEU:HD22	1.43	0.79
2:12:71:VAL:HG11	2:12:164:VAL:HA	1.65	0.79
26:14:751:A:H5'	44:A5:90:ARG:HA	1.65	0.79
26:1H:2857:G:N2	26:1H:2860:A:OP2	2.13	0.79
35:58:42:TRP:O	42:C8:64:ARG:NH2	2.15	0.79
26:14:2075:U:P	29:19:244:ARG:NH2	2.54	0.79
26:1H:2303:G:O2'	32:41:132:ASN:OD1	1.99	0.79
26:14:1942:C:OP2	26:14:1943:U:O2'	2.01	0.79
13:4I:9:ILE:HD12	32:41:146:TYR:HD2	1.48	0.79
29:19:255:LYS:HD3	29:19:255:LYS:H	1.48	0.79
1:1G:1316:G:H5''	14:5A:17:LYS:NZ	1.97	0.79
1:1G:1128:C:H5''	9:82:16:ARG:HH22	1.46	0.79
35:58:56:ASN:N	35:58:125:GLY:O	2.13	0.79
47:D5:45:ASP:OD1	47:D5:49:ARG:NH2	2.14	0.79
50:G5:42:GLY:HA2	50:G5:43:GLN:OE1	1.83	0.79

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2773:C:H2'	26:14:2774:C:H6	1.47	0.79
29:11:71:ASP:OD1	29:11:103:ARG:NH2	2.16	0.79
26:1H:1437:C:HO2'	26:1H:1518:C:HO2'	1.27	0.79
26:14:2377:A:H4'	40:65:111:GLU:HG2	1.65	0.79
48:I8:23:VAL:HG13	48:I8:38:VAL:HG22	1.64	0.79
26:1H:135:G:N1	26:1H:144:C:N3	2.30	0.79
37:35:37:GLY:HA2	37:35:41:ARG:NH2	1.98	0.79
4:3E:15:GLU:OE1	4:3E:66:ARG:NH1	2.16	0.79
26:1H:287:C:H2'	26:1H:288:C:H6	1.48	0.79
26:14:847:U:OP2	61:14:3510:HOH:O	2.01	0.79
26:1H:86:C:H4'	26:1H:104:U:H1'	1.65	0.79
31:31:134:GLY:H	31:31:162:LEU:HB3	1.48	0.79
29:11:182:LEU:H	29:11:272:ALA:HB3	1.48	0.79
1:1G:1243:C:OP2	21:1B:10:ARG:NH2	2.16	0.78
2:12:50:GLU:HG3	2:12:201:ILE:HG12	1.64	0.78
26:14:2636:U:O2'	30:29:44:TYR:OH	1.99	0.78
44:E8:79:GLY:HA3	44:E8:100:THR:CG2	2.14	0.78
27:1J:27:C:H2'	27:1J:28:C:H5'	1.66	0.78
2:1E:115:LEU:HD11	2:1E:146:GLN:HG3	1.65	0.78
50:G5:22:GLU:HG2	50:G5:64:LEU:HD11	1.63	0.78
7:6E:15:ASP:HB3	7:6E:20:ASP:H	1.47	0.78
41:75:126:ALA:HA	41:75:129:ARG:HD2	1.66	0.78
14:5A:14:PRO:HB2	14:5A:15:LYS:HG3	1.66	0.78
9:8E:10:ARG:HD3	9:8E:11:LYS:HG3	1.63	0.78
26:1H:1441:G:H2'	26:1H:1442:G:H8	1.49	0.78
1:1G:1116:C:H42	1:1G:1184:G:H1	1.27	0.78
57:3L:29:U:O4	57:3L:41:A:N6	2.16	0.78
26:14:1592:C:H2'	26:14:1593:G:C8	2.19	0.78
26:1H:2059:A:OP2	61:1H:3513:HOH:O	2.01	0.78
27:1J:80:U:O2	27:1J:96:G:N1	2.13	0.78
7:6E:113:GLU:HB2	7:6E:119:ARG:HG2	1.66	0.78
1:1G:362:G:H4'	12:3A:33:ARG:HH21	1.48	0.78
1:1G:664:G:H22	1:1G:741:G:H1	1.30	0.78
35:15:104:LYS:HA	35:15:107:LEU:HD12	1.65	0.78
4:3E:72:GLU:OE1	4:3E:207:TYR:OH	2.01	0.78
32:49:15:VAL:HG13	32:49:175:LEU:HB3	1.65	0.78
26:14:2287:A:N6	26:14:2344:U:H3	1.80	0.78
24:3K:33:U:H2'	24:3K:34:U:H3'	1.66	0.78
8:72:69:ARG:NH1	8:72:75:ARG:O	2.17	0.78
26:1H:2287:A:N6	26:1H:2344:U:H3	1.81	0.78
33:51:8:PRO:HG2	33:51:69:ARG:HH21	1.47	0.78

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:7A:1:MET:O	16:7A:24:ALA:N	2.17	0.78
18:9A:84:LYS:H	18:9A:84:LYS:HD3	1.47	0.78
30:21:116:VAL:HG11	30:21:138:PRO:HB3	1.66	0.78
26:1H:259:G:O2'	26:1H:621:A:O2'	2.01	0.78
1:1G:1209:C:O2'	1:1G:1214:C:N4	2.13	0.78
1:13:1455:G:OP1	20:BI:35:THR:OG1	2.01	0.78
13:4A:80:ARG:HH21	19:AA:65:ASN:HD22	1.32	0.78
1:13:1329:A:H5'	13:4I:29:ARG:HD2	1.66	0.78
54:L5:29:LYS:HA	54:L5:32:LYS:HB3	1.65	0.78
43:D8:35:LEU:HB2	43:D8:57:VAL:HG13	1.65	0.78
42:85:66:ASN:HB2	42:85:76:TYR:HB2	1.65	0.78
32:41:67:LYS:H	32:41:67:LYS:HD3	1.48	0.78
9:8E:17:VAL:HA	9:8E:63:ILE:HG12	1.66	0.78
26:1H:1170:G:N2	26:1H:1180:C:N3	2.32	0.78
8:72:123:GLU:OE2	8:72:123:GLU:N	2.13	0.78
1:13:316:G:OP2	1:13:351:G:O2'	2.02	0.78
1:1G:588:G:H1	1:1G:651:C:H42	1.32	0.78
26:14:625:G:N7	37:35:107:LYS:NZ	2.32	0.78
26:1H:592:G:H21	55:Q8:4:MET:HE1	1.49	0.78
13:4I:19:LEU:HD13	13:4I:22:ILE:HD13	1.65	0.78
26:14:2130:U:O2'	26:14:2158:A:N1	2.15	0.78
26:14:848:G:H2'	26:14:849:A:C8	2.18	0.78
8:72:99:GLU:HG2	8:72:100:ILE:H	1.47	0.78
37:78:63:PRO:HB2	55:Q8:30:ARG:HH21	1.49	0.78
26:1H:2701:C:H3'	26:1H:2702:U:H5'	1.66	0.78
26:1H:1334:G:N7	61:1H:3548:HOH:O	2.17	0.78
1:13:989:C:N3	1:13:1216:G:N2	2.30	0.77
26:1H:1479:G:N7	26:1H:1510:A:N6	2.32	0.77
26:1H:1728:G:H8	26:1H:1732:A:H62	1.30	0.77
13:4A:79:LYS:O	13:4A:82:MET:HG2	1.85	0.77
4:32:163:GLU:HA	4:32:166:LYS:HD2	1.65	0.77
26:14:1443:G:H1	26:14:1548:C:H42	1.32	0.77
24:3K:17:U:H3	26:1H:2112:G:N2	1.82	0.77
40:65:106:ARG:O	40:65:106:ARG:HD2	1.84	0.77
53:N8:40:LYS:HG2	53:N8:46:CYS:HA	1.66	0.77
1:13:1213:A:O2'	1:13:1215:G:N7	2.15	0.77
46:G8:61:ILE:CG2	46:G8:63:LYS:HD3	2.14	0.77
3:22:70:VAL:HG12	3:22:72:LYS:H	1.48	0.77
16:7I:4:ILE:HB	16:7I:66:PRO:HB3	1.66	0.77
1:1G:1423:G:H2'	1:1G:1424:C:H6	1.49	0.77
1:1G:278:G:N7	17:8A:92:ARG:NH2	2.31	0.77

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M8:18:CYS:SG	52:M8:39:CYS:HB2	2.23	0.77
26:1H:49:A:N7	26:1H:120:U:H5	1.81	0.77
26:14:1771:C:HO2'	26:14:1786:A:H8	1.31	0.77
34:61:8:PRO:HA	34:61:14:ASP:HA	1.65	0.77
26:1H:2327:A:H2'	26:1H:2328:A:C8	2.18	0.77
27:16:42:C:O3'	32:41:67:LYS:HE2	1.84	0.77
47:D5:30:ASN:HA	47:D5:89:PHE:HE1	1.48	0.77
31:31:66:PRO:O	31:31:67:GLN:HB3	1.83	0.77
2:1E:11:LEU:HB3	2:1E:213:LEU:HD13	1.66	0.77
26:14:1218:C:H42	26:14:1231:G:H1	1.29	0.77
26:1H:2791:C:H2'	26:1H:2792:G:H5'	1.65	0.77
1:1G:1435:G:H2'	1:1G:1436:U:C6	2.19	0.77
34:61:129:THR:HG22	34:61:137:PRO:HB3	1.66	0.77
2:12:91:PRO:HG3	2:12:154:LEU:HB2	1.66	0.77
16:7I:8:ARG:NH1	16:7I:15:PRO:HA	2.00	0.77
19:AA:66:MET:SD	19:AA:69:HIS:NE2	2.57	0.77
41:B8:11:GLU:OE1	41:B8:11:GLU:HA	1.84	0.77
26:1H:760:G:OP2	61:1H:3514:HOH:O	2.02	0.77
3:22:130:VAL:HG13	3:22:134:ILE:CG1	2.13	0.77
30:21:105:THR:HG1	30:21:199:ARG:HH21	1.31	0.77
3:22:18:TRP:HE1	14:5A:55:GLY:N	1.82	0.77
42:C8:79:PHE:CE1	42:C8:83:LEU:HD22	2.20	0.77
36:25:115:VAL:HG13	36:25:121:VAL:HG21	1.66	0.77
44:E8:79:GLY:N	44:E8:100:THR:O	2.16	0.77
41:B8:24:PRO:HD3	41:B8:52:ILE:HD12	1.67	0.77
1:1G:1453:G:O2'	20:BA:39:LYS:NZ	2.13	0.77
26:1H:662:G:H4'	37:78:15:ARG:HA	1.65	0.77
37:35:146:VAL:HG22	37:35:147:LEU:HG	1.66	0.77
20:BA:49:ALA:HA	20:BA:52:ALA:HB3	1.66	0.77
26:14:1057:A:N7	26:14:1086:A:O2'	2.18	0.77
1:1G:920:U:H2'	1:1G:921:U:C6	2.20	0.77
32:49:106:LEU:HD11	32:49:111:LEU:HG	1.65	0.77
34:61:38:LEU:HD13	34:61:40:THR:HG23	1.67	0.77
57:3L:70:C:H2'	57:3L:71:C:H5'	1.67	0.77
15:6I:39:LEU:HB3	15:6I:56:LEU:HD12	1.66	0.77
26:14:259:G:H21	26:14:621:A:H8	1.33	0.77
2:1E:219:VAL:HA	2:1E:222:ILE:HD12	1.67	0.77
26:14:1141:U:H2'	35:15:63:THR:HG21	1.67	0.77
30:29:1:MET:HG3	30:29:200:GLU:OE2	1.85	0.77
30:21:116:VAL:HG23	30:21:120:TRP:HD1	1.50	0.76
30:29:25:VAL:HG12	30:29:26:ILE:N	1.98	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2308:G:N1	26:1H:2311:A:H2	1.83	0.76
55:M5:34:TRP:HB3	55:M5:35:GLN:OE1	1.85	0.76
26:14:2207:C:H42	26:14:2217:G:H1	1.28	0.76
26:14:125:G:H5''	54:L5:19:ARG:HD3	1.67	0.76
2:1E:166:ASP:HB3	2:1E:169:LYS:HB2	1.65	0.76
26:14:662:G:H5'	37:35:15:ARG:HA	1.66	0.76
26:14:2110:G:C2	26:14:2120:G:H1'	2.20	0.76
26:1H:1568:G:OP1	29:11:63:ARG:NH1	2.17	0.76
26:1H:452:G:OP2	61:1H:3517:HOH:O	2.03	0.76
41:75:51:ARG:HG2	41:75:98:LYS:HE3	1.65	0.76
4:32:201:GLN:HA	4:32:204:ILE:HG22	1.67	0.76
26:14:770:G:OP2	61:14:3512:HOH:O	2.03	0.76
6:5E:27:GLN:HA	6:5E:30:LEU:HD12	1.66	0.76
17:8A:66:SER:O	17:8A:70:ARG:NH1	2.17	0.76
37:35:85:LEU:HA	37:35:88:LEU:HB3	1.67	0.76
1:1G:1347:G:O2'	1:1G:1373:G:O6	2.01	0.76
1:1G:1095:U:OP1	1:1G:1108:G:N2	2.17	0.76
44:E8:78:GLU:OE2	44:E8:99:ARG:HD3	1.84	0.76
3:2E:101:LEU:HD23	3:2E:102:ASN:N	2.00	0.76
5:4E:39:GLY:HA2	5:4E:113:ALA:HB1	1.66	0.76
26:1H:2404:C:OP2	61:1H:3516:HOH:O	2.02	0.76
41:75:26:ASP:OD1	41:75:120:ARG:NH2	2.18	0.76
1:13:160:A:N6	1:13:343:U:O2'	2.18	0.76
32:49:161:THR:HG22	32:49:163:ALA:H	1.50	0.76
1:1G:447:G:H21	1:1G:487:A:H62	1.34	0.76
1:1G:1001:G:O6	1:1G:1038:C:N4	2.15	0.76
43:D8:21:ARG:HG2	43:D8:91:TYR:HE2	1.51	0.76
49:J8:93:GLU:OE2	49:J8:94:LEU:HB2	1.85	0.76
1:1G:1016:A:H1'	1:1G:1218:C:H1'	1.66	0.76
4:3E:157:LEU:HD12	4:3E:161:ASN:HD21	1.51	0.76
26:14:1198:U:H2'	26:14:1199:U:C6	2.21	0.76
1:1G:292:G:OP2	1:1G:305:G:N2	2.14	0.76
26:14:2141:G:H1	26:14:2150:U:H3	1.33	0.76
1:1G:407:G:OP1	4:32:115:ARG:NH2	2.13	0.76
26:1H:2302:G:N2	26:1H:2314:C:O2	2.17	0.76
5:4E:73:ASN:ND2	5:4E:73:ASN:O	2.18	0.76
26:1H:298:G:N7	46:G8:84:ARG:NH1	2.33	0.76
29:19:246:PRO:CD	29:19:255:LYS:HE3	2.16	0.76
31:31:129:PHE:HA	31:31:142:TRP:NE1	2.01	0.76
1:13:1009:G:O6	1:13:1020:U:N3	2.15	0.76
31:39:25:PRO:HB3	31:39:28:ILE:HG23	1.68	0.76

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:78:47:ASP:OD2	37:78:50:ARG:NH2	2.19	0.76
49:F5:92:LYS:CD	49:F5:93:GLU:H	1.92	0.76
26:1H:2787:C:O3'	30:21:61:ARG:NH1	2.18	0.76
1:1G:1116:C:H2'	1:1G:1117:G:C8	2.21	0.76
1:1G:490:G:OP2	4:32:132:ARG:NH2	2.19	0.76
1:1G:1256:A:N6	1:1G:1278:U:OP2	2.17	0.76
43:D8:47:VAL:HG13	43:D8:48:GLY:H	1.51	0.76
26:1H:2334:G:O6	48:I8:74:ARG:NH2	2.19	0.76
33:51:98:LEU:HD23	33:51:125:VAL:HG23	1.68	0.76
1:1G:1069:C:O2'	5:42:25:ARG:NH2	2.18	0.76
33:51:40:GLU:N	33:51:40:GLU:OE2	2.19	0.76
26:14:95:G:H4'	50:G5:46:GLN:HB2	1.68	0.76
17:8I:66:SER:O	17:8I:70:ARG:NH1	2.19	0.76
1:13:452:A:N6	1:13:480:U:O2	2.19	0.75
1:1G:1218:C:OP1	14:5A:12:ARG:NH2	2.19	0.75
24:3K:44:U:H3'	24:3K:45:G:H4'	1.68	0.75
26:1H:176:G:O2'	26:1H:177:G:H5'	1.87	0.75
3:22:73:PRO:O	3:22:76:VAL:HG22	1.86	0.75
26:1H:1871:A:H2'	26:1H:1872:A:C8	2.21	0.75
27:1J:21:G:H2'	27:1J:22:U:O4'	1.86	0.75
26:14:517:C:OP1	53:J5:16:ARG:NH2	2.19	0.75
47:D5:30:ASN:HA	47:D5:89:PHE:CE1	2.20	0.75
9:8E:17:VAL:HG21	9:8E:80:GLY:HA3	1.66	0.75
29:11:30:GLU:OE1	29:11:63:ARG:NE	2.14	0.75
43:95:35:LEU:HB2	43:95:37:VAL:HG13	1.67	0.75
1:1G:1025:U:O2'	1:1G:1026:G:N7	2.19	0.75
26:14:2392:A:H2	26:14:2424:C:H42	1.31	0.75
34:69:123:LEU:HD21	34:69:143:SER:HB3	1.68	0.75
32:49:111:LEU:CD2	32:49:140:ILE:CD1	2.46	0.75
3:2E:150:LYS:HE2	3:2E:152:ILE:HD11	1.68	0.75
6:52:11:ASN:O	6:52:14:LEU:HD22	1.86	0.75
41:75:108:ARG:HA	41:75:111:ARG:HG3	1.67	0.75
34:69:65:ALA:O	34:69:69:LYS:N	2.19	0.75
12:3A:100:ILE:HG22	12:3A:101:VAL:H	1.50	0.75
26:14:675:A:O2'	31:39:67:GLN:NE2	2.20	0.75
30:29:169:ASN:HA	30:29:201:THR:HG21	1.65	0.75
1:1G:1071:C:H2'	1:1G:1072:G:H8	1.51	0.75
5:4E:145:LYS:HA	5:4E:148:VAL:HB	1.67	0.75
5:42:33:VAL:HG21	5:42:109:ILE:HG12	1.69	0.75
48:E5:32:ARG:O	48:E5:34:GLY:N	2.15	0.75
1:1G:243:A:H4'	1:1G:244:U:H5''	1.67	0.75

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:G8:97:ARG:NH2	46:G8:103:GLY:O	2.20	0.75
18:9A:22:VAL:HG22	18:9A:23:LYS:H	1.52	0.75
1:13:474:G:H2'	1:13:475:G:C8	2.22	0.75
1:1G:620:C:C2	4:32:135:LEU:HG	2.21	0.75
16:7I:8:ARG:NH1	16:7I:15:PRO:CB	2.50	0.75
17:8A:87:LYS:O	17:8A:91:ARG:HD2	1.85	0.75
27:1J:11:C:OP2	27:1J:12:C:N4	2.18	0.75
26:1H:1016:G:O6	61:1H:3515:HOH:O	2.02	0.75
30:29:68:ALA:C	30:29:70:ALA:H	1.90	0.75
26:1H:1021:A:H8	26:1H:1021:A:H3'	1.50	0.75
35:58:12:ARG:HG2	35:58:13:TRP:N	2.01	0.75
26:14:1141:U:H2'	35:15:63:THR:CG2	2.16	0.75
26:14:1678:G:H22	26:14:1989:G:H22	1.34	0.75
30:29:12:THR:O	30:29:23:VAL:HG22	1.87	0.75
28:71:30:LYS:NZ	28:71:178:ALA:O	2.19	0.75
34:69:102:SER:O	34:69:106:GLY:N	2.19	0.75
1:1G:607:A:H2'	1:1G:608:A:O4'	1.85	0.75
45:F8:36:LYS:HG2	45:F8:54:VAL:HG23	1.67	0.75
29:19:244:ARG:HB2	29:19:245:PRO:HD2	1.68	0.75
28:71:22:ILE:HD13	28:71:189:ILE:HG22	1.68	0.75
57:3L:19:G:N3	57:3L:57:G:N2	2.35	0.75
26:1H:1016:G:N7	61:1H:3550:HOH:O	2.18	0.75
26:1H:2698:U:N3	26:1H:2709:G:O6	2.17	0.75
26:14:863:A:H2'	26:14:864:G:C8	2.22	0.75
26:1H:489:G:N7	44:E8:49:LYS:NZ	2.35	0.75
26:1H:2636:U:OP1	30:21:79:ARG:HA	1.86	0.75
26:14:2250:G:C4	38:45:82:ARG:HG3	2.21	0.75
26:14:1443:G:N2	26:14:1548:C:N3	2.34	0.75
48:E5:12:ASN:HA	48:E5:14:ARG:HH21	1.52	0.75
26:1H:587:C:N3	37:78:33:ARG:NH1	2.35	0.75
29:19:95:LEU:HD11	29:19:105:ILE:HD12	1.69	0.75
43:95:2:PHE:HE1	43:95:13:ARG:HG3	1.50	0.75
26:1H:547:A:H2	26:1H:548:A:H62	1.34	0.75
26:1H:1285:G:N2	26:1H:1329:U:OP1	2.17	0.75
13:4I:12:ASN:HD22	13:4I:13:LYS:H	1.35	0.75
26:14:1055:G:N2	26:14:1086:A:OP1	2.19	0.75
33:59:66:GLY:O	33:59:70:THR:OG1	2.03	0.75
37:35:13:ASN:C	37:35:15:ARG:H	1.90	0.74
26:1H:2849:U:H4'	26:1H:2868:A:C2	2.21	0.74
26:1H:2154:G:N2	26:1H:2155:G:O6	2.20	0.74
13:4I:4:ILE:HG22	13:4I:5:ALA:H	1.52	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:469:G:OP2	61:14:3513:HOH:O	2.04	0.74
5:4E:76:ILE:HG13	5:4E:93:PRO:HG3	1.69	0.74
41:B8:21:GLU:OE1	41:B8:91:ARG:NH2	2.20	0.74
26:1H:142:G:H1'	45:F8:37:THR:HG21	1.69	0.74
26:1H:974(A):C:OP1	61:1H:3521:HOH:O	2.04	0.74
2:12:18:GLY:O	2:12:19:HIS:ND1	2.17	0.74
41:75:125:ARG:HB2	41:75:129:ARG:NH2	2.01	0.74
8:72:51:VAL:HG11	8:72:60:ARG:HB2	1.68	0.74
45:F8:47:PHE:O	45:F8:49:VAL:HG23	1.87	0.74
1:13:5:U:H4'	1:13:5:U:OP1	1.82	0.74
1:1G:539:A:H2'	1:1G:540:G:C8	2.21	0.74
37:78:97:PRO:HA	37:78:100:LEU:HB2	1.69	0.74
26:14:918:A:O2'	27:1J:96:G:N2	2.20	0.74
26:1H:259:G:HO2'	26:1H:621:A:HO2'	1.35	0.74
26:14:1019:U:H2'	26:14:1020:A:C8	2.23	0.74
4:3E:29:PRO:HA	4:3E:34:GLU:HG3	1.68	0.74
4:3E:64:LEU:HD22	4:3E:198:VAL:HG11	1.70	0.74
3:2E:62:ASP:O	3:2E:98:ASN:ND2	2.16	0.74
26:14:2260:C:OP1	61:14:3514:HOH:O	2.04	0.74
30:21:26:ILE:HG23	30:21:182:LEU:HB3	1.69	0.74
26:14:1171:G:O2'	26:14:1173:G:O4'	2.04	0.74
26:1H:1430:C:H2'	26:1H:1431:U:C6	2.23	0.74
1:1G:750:G:N2	15:6A:23:GLY:O	2.17	0.74
43:95:22:VAL:HG22	43:95:23:GLU:H	1.52	0.74
46:G8:28:LYS:NZ	46:G8:40:GLU:HG3	2.03	0.74
12:3I:60:LEU:HD13	12:3I:61:THR:N	2.02	0.74
12:3A:41:ARG:HG2	12:3A:42:THR:H	1.52	0.74
12:3A:20:LYS:HE3	12:3A:21:LYS:C	2.07	0.74
26:1H:2129:C:N4	26:1H:2161:C:O2'	2.21	0.74
26:1H:760:G:OP1	61:1H:3520:HOH:O	2.04	0.74
26:1H:1536:A:H3'	26:1H:1537:C:H6	1.53	0.74
9:8E:5:TYR:O	9:8E:87:GLN:NE2	2.19	0.74
26:14:2173:A:O2'	26:14:2174:C:OP1	2.05	0.74
26:14:152:G:O6	26:14:174:C:N4	2.13	0.74
42:C8:92:ARG:NH1	43:D8:11:GLN:O	2.21	0.74
26:1H:2315:G:OP1	32:41:36:LYS:NZ	2.21	0.74
26:1H:1649:G:O2'	39:98:107:ASP:OD2	2.04	0.74
23:2L:24:C:H2'	23:2L:25:U:H6	1.51	0.74
26:1H:2359:C:H5''	55:Q8:52:LYS:HD2	1.67	0.74
1:13:1125:U:OP2	1:13:1145:C:N4	2.20	0.74
19:AI:5:LEU:HD13	19:AI:10:PHE:HD1	1.50	0.74

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:88:139:GLU:N	38:88:139:GLU:OE2	2.20	0.74
6:5E:39:LYS:HD3	6:5E:64:GLN:HG3	1.70	0.74
31:39:110:LEU:HD21	31:39:181:LEU:HD12	1.67	0.74
26:14:631:A:OP2	55:M5:47:LYS:NZ	2.18	0.74
1:1G:539:A:OP2	12:3A:115:LYS:NZ	2.16	0.74
1:13:353:A:H5'	1:13:353:A:H8	1.53	0.74
53:N8:41:PRO:O	53:N8:44:THR:OG1	2.03	0.74
1:1G:128:G:H4'	17:8A:3:LYS:HG2	1.69	0.74
26:14:1210:A:H5''	26:14:1211:U:H3'	1.69	0.74
2:12:166:ASP:HB3	2:12:169:LYS:HB2	1.70	0.74
26:1H:1021:A:C8	26:1H:1021:A:H3'	2.23	0.74
31:31:167:ALA:HB1	31:31:173:VAL:HG11	1.69	0.74
26:1H:2683:C:OP1	41:B8:53:ARG:NH2	2.20	0.74
37:35:75:ILE:HD12	37:35:77:ARG:NH2	2.03	0.74
4:32:145:GLU:HG3	4:32:184:LYS:HG2	1.70	0.74
7:6E:79:ARG:HA	7:6E:84:ASN:HA	1.68	0.74
39:98:67:LEU:HD22	39:98:76:VAL:HG21	1.70	0.74
26:14:1310:G:H1	26:14:1604:C:H42	1.34	0.74
40:65:28:VAL:HG11	40:65:98:VAL:HG12	1.70	0.74
1:13:1081:G:H2'	1:13:1082:G:H8	1.53	0.73
14:5A:12:ARG:HG3	14:5A:14:PRO:HD3	1.70	0.73
26:14:2404:C:OP2	61:14:3515:HOH:O	2.06	0.73
26:1H:543:C:H42	26:1H:550:G:H1	1.36	0.73
26:14:528:A:C2	26:14:2042:A:H2'	2.23	0.73
11:2I:22:HIS:HB3	11:2I:29:ILE:HG23	1.68	0.73
26:14:780:G:H21	26:14:783:A:H62	1.36	0.73
35:58:97:ARG:H	35:58:100:GLU:HG3	1.53	0.73
1:1G:408:A:H2'	1:1G:409:G:O4'	1.88	0.73
26:1H:2452:C:OP1	61:1H:3519:HOH:O	2.04	0.73
20:BI:10:LEU:HD21	20:BI:12:ALA:HB3	1.68	0.73
19:AI:64:GLU:O	19:AI:67:VAL:HG13	1.88	0.73
33:51:8:PRO:HG2	33:51:69:ARG:NH2	2.03	0.73
26:1H:1169:G:H1	26:1H:1180:C:H42	1.34	0.73
1:13:1442:G:H2'	1:13:1443:G:H5'	1.69	0.73
38:88:17:LEU:HB3	38:88:39:PRO:HB2	1.70	0.73
26:14:1784:A:H4'	26:14:1785:A:O5'	1.86	0.73
26:1H:2053:G:OP2	61:1H:3523:HOH:O	2.05	0.73
26:14:2292:C:OP1	40:65:17:ARG:NH2	2.21	0.73
27:16:15:A:H1'	27:16:109:G:C8	2.23	0.73
30:21:103:ASP:OD1	30:21:201:THR:HG22	1.87	0.73
8:7E:87:SER:HB2	8:7E:93:VAL:HB	1.69	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:848:G:C4	26:14:933:A:H8	2.06	0.73
26:14:2387:U:H1'	48:E5:41:ARG:HE	1.54	0.73
26:14:2768:C:O2'	35:15:89:LYS:NZ	2.20	0.73
12:3I:117:ARG:HB3	12:3I:122:THR:HB	1.71	0.73
26:1H:2502:G:OP2	61:1H:3518:HOH:O	2.04	0.73
29:19:37:LEU:HD12	29:19:37:LEU:O	1.88	0.73
1:13:468:A:H4'	16:7I:80:PHE:HB2	1.68	0.73
26:14:848:G:OP2	26:14:929:G:N2	2.17	0.73
1:1G:1266:G:N2	1:1G:1270:C:N3	2.36	0.73
6:5E:82:ARG:HB2	6:5E:85:VAL:HG23	1.70	0.73
35:58:39:ARG:NH2	35:58:41:ASP:OD2	2.21	0.73
26:1H:275:G:N2	26:1H:276:A:N7	2.35	0.73
43:D8:24:LYS:HA	43:D8:92:THR:HG23	1.68	0.73
26:14:1689:A:H62	26:14:1698:A:H2	1.37	0.73
1:1G:330:C:O2	61:1G:1702:HOH:O	2.07	0.73
43:95:2:PHE:CD2	43:95:42:GLY:HA2	2.20	0.73
4:32:107:ARG:HH22	4:32:196:LEU:HD11	1.54	0.73
47:H8:165:VAL:HB	47:H8:166:SER:HA	1.70	0.73
26:14:1005:C:O2'	35:15:28:THR:HG23	1.89	0.73
40:65:62:LYS:O	40:65:66:ALA:N	2.16	0.73
1:1G:1133:G:N2	1:1G:1141:C:O2	2.21	0.73
26:14:1187:G:O5'	26:14:1187:G:H8	1.69	0.73
42:C8:84:LYS:C	42:C8:84:LYS:HD3	2.09	0.73
29:11:65:ILE:HD11	29:11:67:PHE:CZ	2.23	0.73
4:32:60:GLU:OE2	4:32:199:ASN:N	2.21	0.73
26:1H:2176:A:O2'	28:71:44:HIS:NE2	2.20	0.73
47:H8:165:VAL:HB	47:H8:167:PRO:HD3	1.70	0.73
7:6E:78:ARG:NH2	7:6E:154:TYR:O	2.22	0.73
42:85:28:ARG:NH1	42:85:38:THR:OG1	2.21	0.73
24:3K:76:A:H8	26:1H:2394:C:H42	1.34	0.73
1:13:352:C:O2'	1:13:354:G:OP1	2.07	0.73
3:2E:88:ARG:HA	3:2E:91:LEU:HD12	1.71	0.73
26:14:176:G:O2'	26:14:177:G:H5'	1.88	0.73
26:14:1167:U:O2	26:14:1183:G:N2	2.22	0.73
1:1G:1291:G:O3'	9:82:39:GLY:HA3	1.89	0.73
26:14:1560:G:OP1	61:14:3516:HOH:O	2.07	0.73
1:1G:371:G:O2'	1:1G:373:A:N7	2.22	0.73
40:A8:66:ALA:HA	40:A8:69:VAL:HG12	1.70	0.73
26:1H:1045:A:O2'	26:1H:1047:G:N7	2.22	0.73
26:1H:588:U:H2'	26:1H:589:C:H6	1.52	0.73
1:1G:1142:G:H3'	1:1G:1143:G:H8	1.53	0.73

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1048:A:OP2	26:14:1110:G:N2	2.22	0.73
26:14:943:U:OP2	37:35:36:LYS:HD3	1.87	0.73
20:BI:63:ILE:HD12	20:BI:81:LYS:HG3	1.70	0.73
26:14:2062:A:O2'	26:14:2063:C:OP1	2.07	0.73
26:1H:848:G:H2'	26:1H:849:A:C8	2.24	0.73
26:1H:1156:A:C8	42:C8:51:LYS:HG2	2.24	0.73
44:E8:27:LYS:HB3	44:E8:31:GLU:HG3	1.71	0.73
46:C5:2:ARG:NE	46:C5:2:ARG:HA	2.04	0.73
26:14:1022:G:O2'	26:14:1023:U:OP2	2.07	0.73
1:1G:1105:A:H2'	1:1G:1106:G:C8	2.24	0.73
30:21:50:GLY:HA2	30:21:77:ILE:HA	1.69	0.73
26:14:470:A:H8	26:14:470:A:H5'	1.53	0.73
39:55:56:LYS:NZ	39:55:90:ARG:O	2.18	0.73
7:62:18:TYR:HD2	7:62:59:LEU:HD22	1.54	0.73
47:H8:134:PRO:HG3	47:H8:161:VAL:HG11	1.71	0.73
9:82:32:ASP:HB3	9:82:35:GLU:HB2	1.69	0.73
1:1G:1411:C:O2	1:1G:1489:G:N2	2.16	0.73
37:35:98:GLU:HA	37:35:101:VAL:HG12	1.70	0.73
26:14:972:G:OP2	26:14:973:A:O2'	2.05	0.73
33:51:9:ILE:HG21	33:51:51:ARG:HH21	1.54	0.73
38:45:75:THR:HA	38:45:89:ASN:HA	1.69	0.73
32:41:55:LYS:HE2	32:41:150:ASP:HB3	1.68	0.72
1:1G:973:G:O2'	10:1A:54:PHE:O	2.06	0.72
1:1G:958:A:N3	1:1G:985:C:O2'	2.21	0.72
13:4A:90:LEU:HD12	13:4A:91:ARG:HD3	1.69	0.72
1:1G:1449:C:H3'	1:1G:1450:U:O4'	1.88	0.72
3:22:63:ASN:HA	3:22:98:ASN:HB2	1.71	0.72
31:39:129:PHE:HA	31:39:142:TRP:CD1	2.22	0.72
26:14:1107:G:N2	26:14:1108:U:O2	2.22	0.72
26:14:1899:G:O2'	26:14:1900:A:O5'	2.07	0.72
26:14:960:A:H61	38:45:82:ARG:HH21	1.37	0.72
45:B5:57:LEU:HD21	45:B5:78:LYS:HD2	1.70	0.72
9:82:26:VAL:HG22	9:82:60:ASP:HA	1.69	0.72
26:14:1288:U:C2	26:14:1327:C:O2	2.42	0.72
26:14:839:U:H2'	26:14:840:C:C6	2.24	0.72
26:1H:1174:A:O2'	26:1H:1178:C:N4	2.22	0.72
53:N8:40:LYS:NZ	53:N8:48:GLU:H	1.87	0.72
16:7A:72:ARG:HD2	16:7A:73:LEU:HD23	1.70	0.72
26:14:754:C:H2'	26:14:755:C:H6	1.54	0.72
1:1G:1305:G:H22	1:1G:1331:G:H2'	1.53	0.72
8:72:48:TYR:HB3	8:72:61:VAL:HG13	1.71	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:142:VAL:HG23	29:11:193:VAL:HA	1.71	0.72
1:1G:1207:G:H2'	1:1G:1208:C:C6	2.24	0.72
1:13:1372:U:H5''	9:8E:71:SER:HB3	1.71	0.72
43:95:79:VAL:O	43:95:80:GLN:HG2	1.90	0.72
26:1H:1520:U:H2'	26:1H:1521:G:O4'	1.90	0.72
36:68:19:ILE:HG22	36:68:43:VAL:HA	1.71	0.72
40:A8:106:ARG:NH1	40:A8:107:GLU:HG2	2.04	0.72
32:49:136:ARG:NH2	32:49:154:GLY:H	1.88	0.72
5:42:68:GLU:HG3	5:42:70:PRO:HD3	1.70	0.72
1:13:730:G:C5	1:13:731:G:H1'	2.24	0.72
28:71:45:ALA:HA	28:71:211:SER:O	1.89	0.72
42:85:91:ASP:O	42:85:92:ARG:HG3	1.90	0.72
1:1G:1055:A:H62	1:1G:1200:C:H42	1.37	0.72
7:6E:111:ARG:NH1	7:6E:113:GLU:OE2	2.23	0.72
6:5E:81:ILE:HD11	29:11:125:ILE:HB	1.70	0.72
43:D8:44:LYS:O	43:D8:46:VAL:N	2.22	0.72
37:78:114:ILE:HD11	37:78:130:PHE:HD2	1.54	0.72
32:49:106:LEU:HG	32:49:111:LEU:CG	2.19	0.72
42:C8:92:ARG:O	42:C8:94:ASN:N	2.23	0.72
26:1H:732:C:H3'	61:1H:3508:HOH:O	1.89	0.72
37:35:106:LEU:HD13	37:35:112:LEU:HD23	1.71	0.72
13:4A:97:PRO:HA	13:4A:110:ARG:HE	1.53	0.72
26:1H:1173:G:N2	26:1H:1175:U:O4'	2.23	0.72
26:14:1252:G:N3	42:85:33:ARG:HD2	2.05	0.72
26:14:1316:U:H2'	26:14:1317:A:H8	1.54	0.72
26:14:1329:U:H5''	26:14:1330:C:H5	1.54	0.72
5:4E:98:THR:HB	5:4E:117:ASP:HB3	1.72	0.72
26:14:993:G:N3	43:95:89:GLN:NE2	2.38	0.72
43:D8:47:VAL:O	43:D8:49:THR:OG1	2.08	0.72
1:1G:1410:G:H2'	1:1G:1411:C:C6	2.25	0.72
26:1H:1785:A:OP2	61:1H:3525:HOH:O	2.07	0.72
1:13:611:A:N1	1:13:629:G:N2	2.33	0.72
53:J5:49:CYS:SG	53:J5:50:GLY:N	2.62	0.72
32:41:47:LYS:HD2	32:41:81:LYS:HB2	1.70	0.72
31:31:33:LEU:HD13	31:31:112:MET:HE2	1.69	0.72
26:14:580:C:H2'	26:14:581:C:H6	1.54	0.72
26:1H:1798:U:H5'	29:11:259:THR:OG1	1.89	0.72
37:78:115:LEU:HA	37:78:134:ALA:HB2	1.72	0.72
26:14:2399:G:N2	26:14:2417:C:O2	2.18	0.72
22:1K:51:A:H2	22:1K:64:G:H1	1.38	0.72
50:K8:42:GLY:O	50:K8:44:LEU:N	2.23	0.72

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:552:U:H1'	12:3A:32:PHE:CE1	2.25	0.72
1:1G:1123:A:H4'	10:1A:36:GLY:HA3	1.72	0.72
26:1H:1338:G:O2'	26:1H:1339:G:H5'	1.88	0.72
26:1H:297:C:H5''	46:G8:86:ARG:HG3	1.70	0.72
26:1H:2788:C:O2'	26:1H:2809:A:N3	2.22	0.72
41:75:91:ARG:NH1	41:75:124:ASP:OD2	2.22	0.72
20:BA:92:LEU:HB3	20:BA:98:PRO:HB3	1.72	0.72
40:65:62:LYS:HA	40:65:65:VAL:HB	1.70	0.72
26:1H:2053:G:OP1	61:1H:3522:HOH:O	2.05	0.72
26:1H:2298:A:H62	26:1H:2318:G:H8	1.36	0.72
1:1G:37:U:H2'	1:1G:38:G:H8	1.54	0.72
26:14:1378:A:O2'	26:14:1380:G:N7	2.17	0.72
11:2A:29:ILE:HG22	11:2A:44:SER:HB2	1.72	0.72
26:1H:2213:U:O2	49:J8:52:ARG:NH2	2.23	0.72
1:1G:589:C:N3	1:1G:650:G:N2	2.30	0.72
9:82:28:VAL:HG13	9:82:63:ILE:O	1.89	0.72
47:D5:10:ARG:NH2	47:D5:26:GLY:O	2.22	0.72
26:14:2304:G:N2	26:14:2312:U:O4	2.22	0.72
1:1G:600:C:H2'	1:1G:601:C:H6	1.55	0.72
41:75:93:ARG:HG2	41:75:93:ARG:HH11	1.55	0.72
26:1H:2453:A:OP2	61:1H:3524:HOH:O	2.07	0.72
26:1H:2712:U:H1'	26:1H:2712(A):A:C8	2.23	0.72
2:12:61:LEU:HD12	2:12:160:ASP:HB2	1.72	0.72
27:1J:80:U:H2'	27:1J:81:G:N2	2.04	0.72
1:1G:1150:U:H4'	10:1A:41:PRO:HG3	1.70	0.72
26:14:1945:G:H2'	26:14:1946:U:H6	1.54	0.72
1:1G:363:A:OP1	12:3A:33:ARG:HG3	1.90	0.72
26:14:1416:G:O2'	26:14:1417:C:O5'	2.07	0.72
2:12:118:LEU:HD11	2:12:141:GLU:HG2	1.71	0.72
44:A5:45:TYR:CZ	44:A5:49:LYS:NZ	2.57	0.72
44:A5:45:TYR:OH	44:A5:49:LYS:NZ	2.23	0.72
27:1J:101:A:N7	61:1J:302:HOH:O	2.23	0.72
32:41:96:ARG:HB2	32:41:96:ARG:HH11	1.52	0.72
27:1J:7:G:H2'	40:65:38:GLN:HE22	1.55	0.72
10:1A:80:LYS:O	10:1A:84:GLN:NE2	2.23	0.72
26:14:450:G:OP2	61:14:3520:HOH:O	2.08	0.72
26:14:872:A:H4'	38:45:66:ILE:HD11	1.72	0.71
26:14:1754:C:P	41:75:96:ARG:NH1	2.63	0.71
1:1G:625:G:H4'	16:7A:16:HIS:CG	2.25	0.71
40:65:85:VAL:HG22	40:65:110:LEU:HB2	1.71	0.71
26:1H:1250:G:N7	37:78:18:ARG:NH1	2.38	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2E:84:ILE:HG23	3:2E:88:ARG:HH22	1.55	0.71
26:1H:2399:G:H1	26:1H:2417:C:H42	1.37	0.71
8:72:83:ILE:HD13	8:72:137:VAL:HG22	1.70	0.71
26:1H:646:A:H2'	26:1H:647:G:O4'	1.90	0.71
26:14:2016:U:O2	53:J5:7:PRO:HG2	1.90	0.71
26:1H:1486:A:H2'	26:1H:1487:G:H8	1.53	0.71
26:14:1579:A:H2'	26:14:1580:A:C8	2.25	0.71
5:42:84:PHE:N	5:42:87:SER:O	2.23	0.71
26:1H:1009:A:OP2	35:58:37:LYS:NZ	2.23	0.71
50:G5:43:GLN:HB2	50:G5:45:SER:O	1.90	0.71
5:4E:145:LYS:HD3	5:4E:146:ALA:H	1.54	0.71
26:1H:1521:G:N7	61:1H:3567:HOH:O	2.23	0.71
1:13:652:U:O4	1:13:752:G:O2'	2.03	0.71
11:2A:98:LEU:HA	11:2A:101:SER:HB3	1.71	0.71
46:C5:87:LYS:H	46:C5:94:LYS:HG2	1.55	0.71
26:1H:2145:C:H5	26:1H:2148:G:H21	1.37	0.71
37:78:101:VAL:HG12	37:78:106:LEU:HD12	1.71	0.71
1:1G:1154:G:H2'	1:1G:1155:G:C8	2.25	0.71
19:AI:18:LYS:HZ1	19:AI:22:LEU:HD13	1.55	0.71
1:1G:1090:U:H2'	1:1G:1091:U:C6	2.25	0.71
31:39:63:LYS:NZ	31:39:67:GLN:HB3	2.04	0.71
26:14:2376:A:H2'	26:14:2377:A:C8	2.25	0.71
1:1G:278:G:OP2	17:8A:41:LYS:NZ	2.23	0.71
37:78:17:LYS:HG3	37:78:18:ARG:H	1.54	0.71
40:65:66:ALA:O	40:65:69:VAL:HG22	1.91	0.71
26:14:529:A:H4'	26:14:530:G:H5'	1.70	0.71
34:69:8:PRO:HD3	34:69:15:VAL:HG22	1.71	0.71
26:14:2343:C:HO2'	26:14:2373:G:HO2'	1.24	0.71
43:D8:15:GLU:HG3	43:D8:16:PRO:HD2	1.72	0.71
7:6E:2:ALA:HB2	7:6E:7:ALA:HB2	1.73	0.71
26:1H:1332:G:OP1	61:1H:3527:HOH:O	2.08	0.71
26:1H:2287:A:H62	26:1H:2344:U:H3	1.35	0.71
26:14:733:G:OP2	61:14:3517:HOH:O	2.07	0.71
27:16:101:A:OP2	61:16:301:HOH:O	2.06	0.71
27:1J:3:C:H42	27:1J:117:G:H22	1.37	0.71
26:1H:234:C:H2'	26:1H:235:U:H6	1.55	0.71
3:22:33:LEU:HD12	3:22:36:ASP:HB3	1.70	0.71
9:82:114:TYR:HE2	10:1A:60:ARG:H	1.38	0.71
26:14:1198:U:H2'	26:14:1199:U:H6	1.54	0.71
43:95:35:LEU:HB2	43:95:37:VAL:CG1	2.19	0.71
29:11:69:ARG:NH2	29:11:128:GLY:O	2.18	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:544:C:N4	26:14:549:G:O6	2.16	0.71
5:42:101:ILE:HD11	5:42:119:LEU:HD23	1.71	0.71
5:42:122:GLU:O	5:42:126:ARG:NH1	2.23	0.71
1:1G:942:G:N2	9:82:124:GLN:OE1	2.23	0.71
26:14:2334:G:N2	40:65:16:ASN:OD1	2.22	0.71
55:M5:33:ASN:O	55:M5:35:GLN:N	2.23	0.71
12:3A:100:ILE:HG22	12:3A:101:VAL:N	2.06	0.71
34:61:59:ALA:HA	34:61:62:LYS:HB3	1.73	0.71
1:13:396:G:O2'	1:13:398:C:OP1	2.09	0.71
26:14:1091:G:N2	26:14:1092:C:N3	2.38	0.71
1:1G:1508:G:O6	1:1G:1527:C:N4	2.19	0.71
26:1H:2751:G:H5'	33:51:4:ILE:HD12	1.73	0.71
26:14:996:A:OP2	42:85:92:ARG:NH1	2.22	0.71
26:1H:2795:G:N2	26:1H:2799:A:OP2	2.24	0.71
12:3A:78:GLN:HE22	12:3A:81:SER:HB3	1.55	0.71
26:1H:125:G:H5'	26:1H:125:G:H8	1.55	0.71
1:13:404:U:OP1	4:3E:118:ARG:NH1	2.24	0.71
1:1G:581:G:OP1	15:6A:61:GLY:HA3	1.89	0.71
26:1H:1113:U:H5'	33:51:2:SER:HB2	1.71	0.71
1:13:1130:A:O2'	9:8E:3:GLN:NE2	2.24	0.71
26:1H:1141:U:H6	35:58:63:THR:HG1	1.36	0.71
26:1H:1430:C:H2'	26:1H:1431:U:H6	1.55	0.71
31:39:131:GLY:H	31:39:142:TRP:HB2	1.56	0.71
1:13:330:C:O2	61:13:1806:HOH:O	2.08	0.71
1:13:583:A:OP2	61:13:1807:HOH:O	2.09	0.71
45:F8:9:LEU:HB2	45:F8:29:TRP:O	1.91	0.71
26:14:2378:A:H4'	40:65:23:ARG:HH11	1.55	0.71
1:13:881:G:OP2	12:3I:12:ARG:NH2	2.24	0.71
26:1H:1496:A:H8	26:1H:1577:C:HO2'	1.38	0.71
51:L8:12:PRO:O	51:L8:20:LYS:NZ	2.23	0.71
26:14:139:G:N2	26:14:1596:A:H4'	2.05	0.71
1:1G:922:G:H4'	5:42:20:GLN:HA	1.73	0.71
29:11:31:LYS:O	29:11:34:VAL:N	2.23	0.71
26:1H:1981:A:OP1	61:1H:3526:HOH:O	2.08	0.71
26:14:598:G:H1'	37:35:12:ALA:HB2	1.71	0.71
50:K8:3:LEU:CB	50:K8:6:VAL:H	2.04	0.71
1:1G:1052:U:O2	1:1G:1206:G:N1	2.16	0.71
26:14:1455:G:OP2	61:14:3518:HOH:O	2.08	0.71
1:1G:1134:G:N2	1:1G:1141:C:N3	2.39	0.71
26:1H:2395:C:H5''	26:1H:2396:G:OP2	1.89	0.71
5:42:10:MET:HA	5:42:32:VAL:HG22	1.73	0.71

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:39:160:ASN:HB3	31:39:163:VAL:HB	1.73	0.71
26:1H:1705:G:C2'	26:1H:1706:U:H5'	2.20	0.71
29:19:255:LYS:H	29:19:255:LYS:CD	2.03	0.71
24:3K:15:G:H2'	24:3K:59:A:H61	1.56	0.71
26:1H:2849:U:O4	41:B8:23:ARG:NH2	2.18	0.71
26:14:1024:G:H3'	26:14:1025:G:H5''	1.71	0.71
1:13:1147:C:O2	9:8E:16:ARG:NH1	2.24	0.71
30:21:77:ILE:O	30:21:79:ARG:N	2.23	0.71
22:1K:14:A:H61	22:1K:22:G:H2'	1.55	0.71
32:49:76:SER:OG	32:49:84:LYS:N	2.24	0.71
50:G5:23:LYS:NZ	50:G5:27:GLU:OE2	2.20	0.71
47:D5:158:PRO:HG2	47:D5:161:VAL:HG22	1.73	0.71
30:29:54:GLN:O	30:29:75:VAL:HG13	1.91	0.70
32:41:35:GLU:HG3	32:41:36:LYS:HB2	1.72	0.70
9:8E:50:LEU:HD23	9:8E:85:LEU:HD11	1.71	0.70
30:21:82:ARG:O	30:21:84:PHE:N	2.24	0.70
40:65:62:LYS:HD3	40:65:97:ARG:HD2	1.71	0.70
4:3E:74:GLN:O	4:3E:78:LEU:HD13	1.91	0.70
1:1G:198:G:H2'	1:1G:199:G:H8	1.56	0.70
29:11:146:GLU:HB2	29:11:189:CYS:HB3	1.72	0.70
29:11:38:LYS:HD2	29:11:38:LYS:C	2.09	0.70
26:1H:1678:G:O5'	26:1H:1678:G:H8	1.74	0.70
26:14:273(F):C:H3'	26:14:274:G:H5''	1.72	0.70
7:6E:5:ARG:HB3	7:6E:7:ALA:H	1.56	0.70
9:82:14:VAL:HB	9:82:65:VAL:HG23	1.73	0.70
41:B8:111:ARG:H	41:B8:111:ARG:HD3	1.56	0.70
9:8E:121:ARG:NH1	9:8E:122:ALA:O	2.23	0.70
26:14:321:G:OP1	31:39:135:LYS:NZ	2.17	0.70
3:22:16:ARG:NH2	3:22:182:ILE:H	1.88	0.70
37:78:126:VAL:CG1	37:78:147:LEU:HD11	2.15	0.70
29:11:31:LYS:O	29:11:35:LYS:NZ	2.24	0.70
31:39:27:GLU:O	31:39:28:ILE:HG12	1.91	0.70
26:1H:1336:A:OP2	45:F8:64:LYS:NZ	2.18	0.70
32:49:73:ALA:HB3	32:49:85:GLY:H	1.57	0.70
4:32:71:SER:OG	4:32:74:GLN:OE1	2.08	0.70
1:13:1062:U:H2'	1:13:1063:C:C6	2.27	0.70
57:3L:35:U:O2	25:4L:14:A:N6	2.24	0.70
1:1G:1248:A:N6	1:1G:1288:A:OP2	2.24	0.70
17:8I:75:ARG:NH1	17:8I:76:LEU:O	2.24	0.70
48:E5:70:GLN:OE1	48:E5:72:ARG:NH1	2.24	0.70
47:D5:29:TYR:HB3	47:D5:34:ASN:HB2	1.72	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:103:ASP:OD1	30:29:201:THR:HG22	1.90	0.70
53:N8:33:CYS:SG	53:N8:40:LYS:HD3	2.31	0.70
1:1G:1080:A:H5'	5:42:14:ARG:HH22	1.56	0.70
52:M8:31:ILE:HG22	52:M8:32:TYR:H	1.55	0.70
46:G8:68:HIS:O	46:G8:71:LYS:HG2	1.91	0.70
4:3E:107:ARG:NH2	4:3E:194:LEU:HD22	2.06	0.70
28:71:23:ASP:HB2	28:71:190:ARG:NH2	2.05	0.70
1:13:812:C:N3	61:13:1815:HOH:O	2.25	0.70
29:19:255:LYS:N	29:19:255:LYS:CD	2.55	0.70
1:13:848:C:H2'	1:13:849:C:O4'	1.92	0.70
4:32:19:LEU:HB2	4:32:21:LEU:HD11	1.73	0.70
26:1H:442:G:H1'	31:31:48:THR:HG21	1.72	0.70
26:1H:33:U:H4'	26:1H:34:C:OP1	1.90	0.70
1:13:266:G:H5''	1:13:267:C:C5	2.27	0.70
13:4A:32:GLU:O	13:4A:36:LYS:N	2.23	0.70
26:1H:1359:A:H2'	26:1H:1360:A:H5'	1.72	0.70
26:14:1106:G:H3'	26:14:1107:G:C8	2.27	0.70
26:1H:654(C):G:H1	26:1H:654(Q):C:N4	1.89	0.70
1:13:719:C:H1'	18:9I:49:LYS:HG2	1.72	0.70
2:1E:63:MET:HB2	2:1E:225:ALA:HB1	1.73	0.70
26:1H:1381:G:N7	61:1H:3566:HOH:O	2.23	0.70
1:1G:114:U:H2'	1:1G:115:G:C8	2.26	0.70
39:55:29:LEU:HB3	39:55:75:LEU:HD21	1.73	0.70
26:1H:389:G:P	49:J8:25:LYS:CE	2.79	0.70
30:29:53:PRO:HA	30:29:74:PRO:HB3	1.74	0.70
2:12:103:THR:HG23	2:12:176:GLU:HB3	1.72	0.70
30:29:47:VAL:HG21	30:29:86:PRO:HD2	1.72	0.70
26:1H:731:C:OP1	61:1H:3529:HOH:O	2.09	0.70
26:1H:1329:U:H5''	26:1H:1330:C:H5	1.54	0.70
26:14:2468:G:H22	26:14:2481:G:HO2'	1.37	0.70
29:11:26:LYS:HD2	29:11:29:PRO:HB3	1.72	0.70
15:6A:16:ALA:HB1	15:6A:21:ASP:HB3	1.74	0.70
1:1G:1162:C:H42	1:1G:1174:G:H1	1.38	0.70
26:14:1486:A:H2'	26:14:1487:G:C8	2.26	0.70
2:12:127:ILE:O	2:12:135:GLN:NE2	2.24	0.70
31:39:120:GLU:HG3	31:39:122:LYS:HG2	1.72	0.70
1:1G:617:G:H5'	16:7A:45:THR:HG22	1.74	0.70
46:G8:42:VAL:HG13	46:G8:43:ASN:H	1.56	0.70
1:1G:1105:A:H2'	1:1G:1106:G:H8	1.55	0.70
31:31:33:LEU:CD1	31:31:112:MET:HE2	2.21	0.70
32:49:119:GLY:HA3	32:49:181:ARG:HB2	1.74	0.70

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:116:VAL:HG11	30:29:138:PRO:HB3	1.73	0.70
21:1B:6:ARG:HH11	21:1B:15:ARG:HH12	1.38	0.70
30:21:128:SER:OG	30:21:129:HIS:N	2.25	0.70
1:13:524:G:H2'	1:13:525:C:C6	2.27	0.70
7:62:47:CYS:HA	7:62:50:ILE:HB	1.73	0.70
26:14:1635:G:OP1	61:14:3519:HOH:O	2.08	0.70
26:14:900:A:H2'	26:14:901:A:C8	2.27	0.70
30:21:48:GLN:OE1	30:21:77:ILE:HG21	1.92	0.70
26:14:1047:G:H21	26:14:1111:A:H61	1.37	0.70
26:1H:2295:C:OP1	40:A8:10:ARG:NH1	2.24	0.70
8:72:17:THR:O	8:72:78:GLN:NE2	2.24	0.70
4:32:150:GLU:C	4:32:152:SER:H	1.95	0.70
1:1G:421:U:O2'	1:1G:423:G:N7	2.24	0.70
18:9I:53:ARG:HA	18:9I:56:THR:CG2	2.22	0.70
56:1L:3:G:O2'	56:1L:4:U:O5'	2.10	0.70
21:1B:3:LYS:HB3	21:1B:14:TRP:CD1	2.26	0.70
42:C8:92:ARG:HD2	43:D8:11:GLN:CG	2.20	0.70
30:29:60:ASN:OD1	30:29:63:LEU:HD22	1.92	0.70
1:1G:1343:G:H4'	9:82:122:ALA:HB3	1.74	0.70
1:1G:1126:U:N3	1:1G:1281:U:O4'	2.25	0.70
26:14:531:C:H4'	26:14:532:A:H5''	1.74	0.70
1:13:664:G:H22	1:13:741:G:H1	1.38	0.70
7:62:51:GLN:NE2	7:62:51:GLN:O	2.24	0.70
26:1H:2646:C:OP2	26:1H:2732:G:O2'	2.10	0.70
24:3K:49:G:N2	24:3K:65:C:O2	2.21	0.69
1:13:737:A:H2'	1:13:738:C:H6	1.53	0.69
43:D8:38:LEU:O	43:D8:51:VAL:HG23	1.92	0.69
39:98:61:HIS:O	39:98:64:ARG:N	2.25	0.69
29:11:137:PRO:O	29:11:140:THR:OG1	2.08	0.69
8:7E:21:LYS:O	8:7E:63:LEU:HD23	1.92	0.69
11:2A:27:ASN:OD1	11:2A:28:THR:N	2.26	0.69
26:14:1794:U:H2'	26:14:1795:C:H6	1.55	0.69
43:95:69:LYS:HD3	43:95:86:GLY:HA3	1.72	0.69
30:21:38:THR:HG23	30:21:41:LYS:H	1.57	0.69
26:1H:311:A:H2	26:1H:331:A:H5''	1.57	0.69
26:14:39:C:O2	31:39:46:ARG:NH2	2.25	0.69
8:72:29:SER:HB3	8:72:32:LYS:HG3	1.74	0.69
26:1H:1330:C:OP1	61:1H:3530:HOH:O	2.09	0.69
53:J5:16:ARG:NH1	53:J5:17:ASP:OD1	2.26	0.69
9:82:81:ILE:O	9:82:85:LEU:N	2.25	0.69
33:59:9:ILE:HG22	33:59:52:VAL:H	1.58	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:19:30:GLU:HG3	29:19:63:ARG:NH2	2.06	0.69
1:13:692:U:O2'	1:13:694:A:N7	2.21	0.69
22:1K:48:C:O2'	22:1K:49:G:OP1	2.10	0.69
47:D5:76:LEU:HA	47:D5:83:PRO:HA	1.74	0.69
26:14:452:G:OP2	61:14:3524:HOH:O	2.10	0.69
3:22:20:SER:HB2	3:22:40:ARG:HH22	1.57	0.69
26:1H:270(L):U:C2	34:61:50:ARG:HG2	2.26	0.69
1:1G:1184:G:H2'	1:1G:1185:G:C8	2.26	0.69
26:14:323:G:O2'	26:14:1205:U:N3	2.25	0.69
26:1H:1386:C:H2'	26:1H:1387:C:H6	1.58	0.69
34:61:110:ASP:OD1	34:61:112:LYS:HG3	1.92	0.69
26:14:2836:U:H2'	26:14:2837:G:C8	2.27	0.69
1:1G:1264:C:H1'	1:1G:1272:G:H22	1.58	0.69
32:41:179:PRO:HB3	52:M8:38:LYS:HE2	1.72	0.69
26:14:1582:C:HO2'	26:14:1586:A:H8	1.39	0.69
41:B8:16:ARG:NH2	41:B8:83:ILE:O	2.24	0.69
16:7I:5:ARG:HH21	16:7I:22:THR:HG23	1.57	0.69
7:6E:75:VAL:HG13	7:6E:145:ALA:HA	1.72	0.69
32:41:25:TYR:CD2	32:41:31:VAL:HG12	2.27	0.69
29:11:136:ILE:O	29:11:168:ARG:NH2	2.25	0.69
1:13:233:C:H2'	1:13:234:C:H6	1.56	0.69
27:16:4:C:H42	27:16:116:G:H1	1.39	0.69
20:BI:90:GLN:HA	20:BI:93:GLU:HB2	1.74	0.69
1:1G:1348:U:H3	1:1G:1374:A:H2	1.38	0.69
28:71:212:VAL:HG21	28:71:226:PRO:HG3	1.74	0.69
48:E5:21:LEU:HD21	48:E5:41:ARG:HH12	1.58	0.69
26:14:2812:G:N2	26:14:2889:C:N3	2.41	0.69
35:58:69:GLN:O	35:58:71:ILE:HD12	1.92	0.69
26:14:1800:C:OP2	29:19:183:ARG:NH2	2.25	0.69
43:D8:1:MET:SD	43:D8:43:GLU:OE1	2.51	0.69
38:45:66:ILE:HD12	38:45:67:ARG:N	2.04	0.69
1:1G:1353:G:O6	1:1G:1369:C:N4	2.26	0.69
2:12:91:PRO:CG	2:12:155:LEU:HG	2.23	0.69
1:1G:838:G:N2	1:1G:842:C:O2'	2.24	0.69
50:G5:19:VAL:HA	50:G5:22:GLU:HG3	1.73	0.69
37:35:101:VAL:HG21	37:35:108:LYS:HB2	1.72	0.69
37:35:97:PRO:O	37:35:98:GLU:HG3	1.91	0.69
41:75:88:ILE:HG13	41:75:88:ILE:O	1.91	0.69
26:1H:1606:G:OP1	61:1H:3531:HOH:O	2.09	0.69
26:14:1019:U:H3	26:14:1142(A):A:H62	1.41	0.69
1:13:126:G:OP1	1:13:605:U:O2'	2.11	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8A:88:TYR:HA	17:8A:91:ARG:HD2	1.75	0.69
23:2L:61:U:OP2	23:2L:62:C:N4	2.23	0.69
26:14:1073:A:H2'	26:14:1074:G:H8	1.58	0.69
26:1H:2098:U:H3	26:1H:2191:G:H1	1.40	0.69
1:1G:534:U:O3'	61:1G:1703:HOH:O	2.10	0.69
26:1H:818:G:OP2	61:1H:3534:HOH:O	2.11	0.69
26:1H:1290:C:H2'	26:1H:1291:C:C6	2.28	0.69
24:3K:34:U:C4	25:4K:14:A:N6	2.59	0.69
26:14:1456:G:OP2	61:14:3518:HOH:O	2.10	0.69
1:1G:503:C:OP2	12:3A:116:SER:HB3	1.92	0.69
20:BI:50:GLU:HG2	20:BI:100:ILE:HB	1.75	0.69
26:1H:1658:C:OP1	61:1H:3533:HOH:O	2.10	0.69
1:13:1412:C:H2'	1:13:1413:A:C8	2.27	0.69
32:41:54:GLU:OE2	32:41:54:GLU:N	2.26	0.69
1:1G:1181:G:N2	1:1G:1182:G:O2'	2.25	0.69
57:3L:76:A:H61	26:14:2422:A:H5''	1.56	0.69
38:88:66:ILE:CD1	38:88:67:ARG:H	2.05	0.69
41:B8:26:ASP:OD2	41:B8:120:ARG:NH2	2.24	0.69
30:21:131:ALA:HB1	61:21:401:HOH:O	1.90	0.69
1:1G:438:G:H4'	4:32:123:HIS:CD2	2.27	0.69
26:1H:1525:G:H2'	26:1H:1526:G:H8	1.58	0.69
50:K8:47:ASN:O	50:K8:49:LYS:N	2.24	0.69
46:C5:48:ALA:HB3	46:C5:59:GLY:HA2	1.74	0.69
26:14:1453:A:OP2	61:14:3522:HOH:O	2.10	0.69
48:E5:49:LYS:HB2	48:E5:82:ARG:HH12	1.58	0.69
55:Q8:33:ASN:HA	55:Q8:36:LYS:HD2	1.75	0.69
17:8I:65:ILE:HG21	17:8I:69:LYS:HE2	1.75	0.69
44:E8:1:MET:HB3	44:E8:64:MET:HE3	1.73	0.69
1:13:1078:U:O2	5:4E:130:ASN:ND2	2.25	0.69
1:1G:517:G:N2	1:1G:530:G:OP1	2.19	0.69
42:85:92:ARG:C	42:85:94:ASN:H	1.96	0.69
9:8E:47:LEU:HD23	9:8E:47:LEU:H	1.58	0.69
32:41:150:ASP:OD1	32:41:151:ALA:N	2.26	0.69
26:1H:2849:U:OP2	41:B8:95:ARG:NH1	2.26	0.69
4:32:112:VAL:N	4:32:116:GLN:OE1	2.14	0.69
26:1H:1520:U:OP2	61:1H:3535:HOH:O	2.11	0.69
34:69:7:GLU:HG2	34:69:8:PRO:HD2	1.74	0.69
1:1G:316:G:OP2	1:1G:351:G:O2'	2.11	0.69
1:13:1137:C:O2	1:13:1138:G:N2	2.25	0.69
26:1H:1845:G:OP1	29:11:258:LYS:NZ	2.23	0.69
1:1G:1239:A:H4'	1:1G:1240:U:H5''	1.74	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:F5:7:ILE:HA	49:F5:91:LYS:HE2	1.73	0.69
38:88:66:ILE:O	38:88:104:PHE:N	2.26	0.69
19:AI:18:LYS:NZ	19:AI:18:LYS:O	2.21	0.69
32:49:124:SER:HB2	32:49:131:TYR:CE1	2.28	0.69
49:F5:40:ARG:HH21	49:F5:42:GLN:HE21	1.41	0.69
29:19:31:LYS:NZ	29:19:33:LEU:HB2	2.08	0.69
30:29:9:VAL:HG12	41:75:8:LYS:NZ	2.08	0.69
1:1G:928:G:O2'	1:1G:1533:C:OP1	2.11	0.69
26:1H:2377:A:H2'	26:1H:2378:A:C8	2.27	0.68
8:72:104:ARG:HB3	8:72:108:GLY:H	1.57	0.68
43:D8:21:ARG:HG2	43:D8:91:TYR:CE2	2.28	0.68
9:8E:13:ALA:HB2	9:8E:68:GLY:HA3	1.74	0.68
45:B5:40:LYS:HA	45:B5:51:VAL:HG11	1.74	0.68
1:13:376:G:O3'	16:7I:5:ARG:NH1	2.25	0.68
46:G8:30:VAL:HG22	46:G8:37:VAL:HG12	1.73	0.68
42:C8:74:LEU:HD13	42:C8:75:ASN:O	1.93	0.68
3:2E:180:ALA:HB1	3:2E:182:ILE:HG13	1.74	0.68
2:1E:70:PHE:O	2:1E:93:VAL:N	2.20	0.68
7:62:148:ASN:ND2	7:62:148:ASN:O	2.26	0.68
13:4A:66:LEU:HA	13:4A:70:LEU:HD12	1.75	0.68
2:12:30:ARG:HH22	2:12:194:PRO:HB2	1.58	0.68
26:14:752:A:H3'	54:L5:1:MET:SD	2.34	0.68
2:1E:86:GLU:C	2:1E:86:GLU:OE1	2.31	0.68
26:14:1693:U:O2'	29:19:14:ARG:NH2	2.26	0.68
26:14:1153:C:OP1	42:85:93:LYS:NZ	2.26	0.68
57:3L:11:C:H42	57:3L:24:G:H1	1.41	0.68
11:2A:48:ILE:HD11	11:2A:64:ALA:HA	1.74	0.68
1:13:453:A:H4'	16:7I:72:ARG:HB2	1.73	0.68
1:13:1149:C:H2'	1:13:1150:U:C6	2.27	0.68
4:3E:18:LYS:HD3	4:3E:31:CYS:SG	2.33	0.68
32:49:136:ARG:CZ	32:49:154:GLY:H	2.06	0.68
26:1H:780:G:H21	26:1H:783:A:H62	1.39	0.68
47:D5:4:ARG:HG2	47:D5:58:VAL:HB	1.74	0.68
26:14:1399:C:H2'	26:14:1400:G:H8	1.59	0.68
48:I8:53:MET:HG3	48:I8:59:LEU:CD2	2.24	0.68
26:14:26:G:OP1	44:A5:80:PRO:HB3	1.93	0.68
26:14:34:C:H1'	26:14:35:G:OP1	1.92	0.68
26:1H:1729:A:O2'	26:1H:1730:U:H5''	1.93	0.68
47:D5:10:ARG:HH21	47:D5:26:GLY:N	1.91	0.68
16:7I:22:THR:HA	16:7I:33:ILE:HG13	1.74	0.68
26:14:2210:G:H3'	26:14:2211:G:C5	2.28	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1778:U:H2'	26:1H:1784:A:N6	2.07	0.68
6:5E:17:SER:HA	6:5E:20:ALA:HB3	1.74	0.68
41:B8:51:ARG:HB2	41:B8:98:LYS:HD3	1.76	0.68
2:1E:230:VAL:HG22	2:1E:231:GLU:H	1.57	0.68
48:E5:63:VAL:HG12	48:E5:64:ASP:H	1.58	0.68
1:1G:1160:G:OP1	2:12:133:LYS:NZ	2.25	0.68
1:13:1291:G:OP1	7:6E:37:ASN:ND2	2.25	0.68
8:7E:86:ILE:HG22	8:7E:87:SER:H	1.58	0.68
26:14:34:C:O2'	26:14:35:G:O5'	2.10	0.68
33:51:153:LYS:HB2	33:51:155:SER:H	1.58	0.68
37:78:118:GLY:O	37:78:137:LYS:NZ	2.24	0.68
1:1G:345:C:OP2	41:75:39:ARG:NH2	2.22	0.68
26:1H:639:U:O2'	26:1H:640:C:H5'	1.91	0.68
1:1G:560:U:O2'	1:1G:561:U:OP2	2.11	0.68
17:8I:101:ARG:H	17:8I:101:ARG:HH21	1.41	0.68
16:7I:8:ARG:NH1	16:7I:15:PRO:CA	2.56	0.68
27:1J:103:U:HO2'	47:D5:29:TYR:HH	1.34	0.68
37:78:15:ARG:HB3	37:78:16:ARG:HD2	1.73	0.68
1:1G:1089:G:H1	1:1G:1096:C:H42	1.41	0.68
1:1G:1086:U:H2'	1:1G:1087:G:H8	1.58	0.68
26:14:1680:U:N3	26:14:1764:G:OP2	2.23	0.68
1:13:1238:A:N3	1:13:1241:G:O2'	2.26	0.68
23:2L:10:G:N2	23:2L:27:G:H1'	2.08	0.68
26:1H:1405:U:H2'	26:1H:1406:U:C6	2.28	0.68
28:7I:21:THR:O	28:7I:25:ALA:N	2.27	0.68
43:95:35:LEU:O	43:95:37:VAL:HG22	1.93	0.68
30:21:64:LYS:O	30:21:70:ALA:HB1	1.93	0.68
41:B8:31:SER:HB2	41:B8:84:GLN:HB2	1.75	0.68
2:1E:133:LYS:HD2	2:1E:134:GLU:N	2.09	0.68
26:14:2513:G:O2'	30:29:154:LYS:NZ	2.26	0.68
49:F5:52:ARG:HH11	49:F5:57:GLU:HG3	1.58	0.68
8:72:7:ALA:HA	8:72:10:LEU:HD12	1.75	0.68
1:13:1285:A:H8	1:13:1285:A:O5'	1.77	0.68
19:AI:44:MET:O	19:AI:47:HIS:ND1	2.23	0.68
26:14:1359:A:H62	26:14:1372:U:H3	0.80	0.68
1:13:457:C:H2'	1:13:458:C:H6	1.59	0.68
31:39:34:TRP:HB2	37:35:6:LEU:HD12	1.74	0.68
26:14:93:C:H5'	26:14:94:G:OP2	1.94	0.68
2:12:30:ARG:NH2	2:12:195:ASP:OD1	2.27	0.68
9:82:21:PRO:HA	9:82:59:PHE:HA	1.75	0.68
22:1K:5:C:H1'	22:1K:69:A:H61	1.57	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
41:75:3:ARG:HG2	41:75:6:LEU:H	1.57	0.68
10:1A:28:ARG:HH21	10:1A:34:VAL:HB	1.59	0.68
26:14:2352:A:C2	48:E5:33:ALA:HB1	2.29	0.68
1:13:401:C:O2'	1:13:621:A:N3	2.27	0.68
26:1H:270(R):G:H2'	26:1H:270(S):G:C8	2.29	0.68
26:1H:1443:G:C2	26:1H:1549:C:N3	2.62	0.68
26:14:1771:C:O2'	26:14:1786:A:H8	1.77	0.68
29:11:29:PRO:O	29:11:30:GLU:HG2	1.94	0.68
4:3E:157:LEU:O	4:3E:161:ASN:ND2	2.27	0.68
26:1H:1538:G:H2'	26:1H:1539:G:H8	1.59	0.68
26:1H:2405:G:OP1	37:78:77:ARG:NH2	2.27	0.68
5:4E:81:GLU:HG2	5:4E:90:VAL:HG23	1.73	0.68
18:9I:66:LEU:HG	18:9I:70:ILE:HD11	1.75	0.68
32:49:19:LEU:HA	32:49:22:ARG:HB2	1.75	0.68
24:3K:57:G:H1	26:1H:2112:G:N2	1.91	0.68
41:75:13:ARG:N	41:75:13:ARG:HD3	2.09	0.68
4:32:15:GLU:OE1	4:32:59:ARG:NH2	2.19	0.68
13:4I:9:ILE:HD12	32:41:146:TYR:CD2	2.28	0.68
32:49:41:GLN:NE2	32:49:154:GLY:O	2.26	0.68
2:1E:69:LEU:HD11	2:1E:93:VAL:HG23	1.74	0.68
19:AI:13:ASP:HA	19:AI:16:LEU:HB3	1.76	0.68
5:42:43:LEU:HD22	5:42:136:MET:HG3	1.76	0.68
1:13:407:G:OP2	61:13:1808:HOH:O	2.11	0.68
26:14:601:C:O2'	31:39:104:LYS:NZ	2.27	0.68
45:B5:15:GLU:H	45:B5:15:GLU:CD	1.97	0.68
4:32:165:MET:HA	4:32:168:ARG:HD2	1.75	0.68
29:19:246:PRO:HD2	29:19:255:LYS:HE3	1.76	0.68
49:J8:91:LYS:O	49:J8:93:GLU:OE1	2.12	0.68
1:13:1291:G:P	7:6E:37:ASN:OD1	2.52	0.68
13:4A:91:ARG:HB2	13:4A:92:HIS:CD2	2.29	0.68
1:13:736:C:H2'	1:13:737:A:C8	2.28	0.68
26:14:2773:C:H2'	26:14:2774:C:C6	2.29	0.68
26:14:2353:G:N7	61:14:3547:HOH:O	2.27	0.68
26:1H:1537:C:H42	26:1H:1538:G:H21	1.42	0.68
1:13:552:U:H5'	12:3I:86:ARG:HD2	1.75	0.68
16:7I:43:LYS:HA	16:7I:48:TRP:HB2	1.76	0.68
1:1G:967:C:H3'	1:1G:968:A:H2'	1.76	0.68
44:E8:24:ILE:HD12	44:E8:24:ILE:O	1.94	0.68
2:1E:33:TYR:HB2	2:1E:43:ASP:HB2	1.76	0.68
26:1H:2591:C:H2'	26:1H:2592:G:C8	2.28	0.67
43:D8:21:ARG:CZ	43:D8:93:GLU:OE2	2.42	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:875:G:H2'	26:14:876:C:H5'	1.77	0.67
1:1G:1258:G:H2'	1:1G:1259:C:H6	1.59	0.67
26:1H:1509:C:H2'	26:1H:1511:A:C8	2.29	0.67
29:19:148:GLU:HB2	29:19:151:LYS:HD2	1.75	0.67
29:11:85:ASP:OD2	29:11:88:ARG:NH1	2.25	0.67
1:1G:1004:A:OP2	1:1G:1025:U:N3	2.26	0.67
26:1H:1535:U:O4	26:1H:1538:G:O2'	2.06	0.67
4:3E:107:ARG:HH22	4:3E:194:LEU:HD22	1.58	0.67
1:1G:275:G:H5'	17:8A:14:LYS:HG2	1.74	0.67
1:1G:108:G:OP1	1:1G:326:G:N2	2.26	0.67
26:14:2681:C:H5	26:14:2725:A:H62	1.41	0.67
26:14:1342:A:H2	26:14:1602:U:H3	1.42	0.67
47:D5:127:LYS:O	47:D5:162:GLU:HB3	1.93	0.67
5:4E:9:LYS:NZ	5:4E:111:GLU:OE2	2.27	0.67
32:49:125:PHE:HB3	32:49:166:ASP:HB2	1.74	0.67
1:1G:658:G:O6	1:1G:746:A:N6	2.27	0.67
46:G8:29:GLU:HB3	46:G8:38:ILE:CG2	2.24	0.67
8:72:106:GLY:O	8:72:122:ARG:NH2	2.27	0.67
18:9I:66:LEU:O	18:9I:70:ILE:HG13	1.94	0.67
26:14:1388:G:H2'	26:14:1389:G:H8	1.59	0.67
26:14:536:A:H4'	42:85:57:PHE:HZ	1.59	0.67
26:1H:1859:A:N6	26:1H:1883:G:O2'	2.28	0.67
26:14:2273:A:H2'	26:14:2274:A:C8	2.29	0.67
1:1G:1431:C:N3	1:1G:1469:G:N2	2.38	0.67
9:82:15:ALA:HB1	9:82:80:GLY:HA3	1.76	0.67
27:1J:88:C:H5''	27:1J:89:G:N7	2.09	0.67
32:49:173:LEU:HA	32:49:176:LEU:HB2	1.76	0.67
1:1G:536:C:OP2	61:1G:1705:HOH:O	2.12	0.67
32:49:105:LYS:CG	32:49:106:LEU:HD13	2.25	0.67
42:C8:91:ASP:OD1	42:C8:93:LYS:HA	1.95	0.67
50:K8:42:GLY:C	50:K8:44:LEU:H	1.97	0.67
40:65:10:ARG:HH21	40:65:91:PRO:HB2	1.57	0.67
46:C5:88:LYS:O	46:C5:89:PHE:HB3	1.95	0.67
50:K8:16:LEU:C	50:K8:16:LEU:HD23	2.14	0.67
26:14:2012:G:OP1	44:A5:11:ARG:NH2	2.27	0.67
49:J8:83:GLU:HG3	49:J8:85:LEU:H	1.59	0.67
1:13:145:G:O6	1:13:177:C:N4	2.27	0.67
26:1H:1557:C:OP2	26:1H:1558:A:O2'	2.12	0.67
43:95:76:LYS:HZ2	43:95:82:ARG:HE	1.42	0.67
46:C5:83:THR:HG22	46:C5:84:ARG:H	1.60	0.67
1:1G:448:A:P	1:1G:485:G:H22	2.17	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:D8:37:VAL:O	43:D8:38:LEU:HG	1.94	0.67
47:D5:97:GLU:HB3	47:D5:125:LEU:HD11	1.76	0.67
26:1H:2093:G:OP2	34:61:22:LYS:HD2	1.95	0.67
26:1H:55:G:H2'	26:1H:56:A:H8	1.57	0.67
27:16:73:A:OP2	61:16:302:HOH:O	2.11	0.67
26:14:2537:U:H2'	26:14:2538:C:C6	2.29	0.67
4:3E:30:LYS:HA	4:3E:35:ARG:HE	1.59	0.67
26:1H:787:U:H5''	26:1H:788:A:H5'	1.75	0.67
31:39:40:GLN:HE22	31:39:182:ASN:HB2	1.59	0.67
7:6E:48:LYS:HA	7:6E:51:GLN:HB3	1.76	0.67
34:61:135:GLU:OE1	34:61:136:VAL:CA	2.42	0.67
26:1H:2801:A:OP2	26:1H:2895:U:O2'	2.13	0.67
37:35:105:LEU:O	37:35:106:LEU:HB3	1.92	0.67
33:59:61:HIS:O	33:59:65:HIS:N	2.24	0.67
26:14:1678:G:H22	26:14:1989:G:N2	1.92	0.67
3:22:16:ARG:HH22	3:22:182:ILE:H	1.43	0.67
46:C5:20:TYR:CZ	46:C5:42:VAL:HA	2.29	0.67
15:6I:55:GLY:HA2	15:6I:58:MET:HE3	1.76	0.67
1:1G:1304:G:N1	1:1G:1332:A:OP2	2.27	0.67
28:71:200:LYS:HE3	28:71:204:ALA:HB3	1.77	0.67
26:14:188:G:N7	61:14:3550:HOH:O	2.28	0.67
29:19:242:ARG:H	29:19:242:ARG:HH11	1.42	0.67
32:49:112:PRO:HA	32:49:117:PHE:CG	2.30	0.67
28:71:20:TYR:HB2	28:71:25:ALA:HB2	1.74	0.67
42:85:92:ARG:HD3	42:85:94:ASN:HB3	1.76	0.67
27:1J:20:C:N3	27:1J:63:G:N2	2.42	0.67
13:4A:37:THR:HG22	13:4A:55:ARG:HH12	1.58	0.67
1:1G:1452:C:H4'	1:1G:1453:G:O5'	1.92	0.67
1:1G:108:G:H5'	1:1G:109:A:H5''	1.74	0.67
26:14:1007:C:OP1	35:15:37:LYS:NZ	2.28	0.67
32:49:53:LEU:HB2	32:49:90:LEU:HD11	1.76	0.67
1:1G:762:C:H2'	1:1G:763:G:H8	1.58	0.67
26:1H:422:A:P	61:1H:3579:HOH:O	2.53	0.67
1:1G:677:U:H3	1:1G:713:G:H22	1.40	0.67
31:31:165:ARG:HA	31:31:168:ARG:HD3	1.76	0.67
1:1G:977:A:O2'	1:1G:981:U:N3	2.28	0.67
49:J8:93:GLU:CD	49:J8:94:LEU:N	2.48	0.67
5:4E:102:ALA:HB3	5:4E:107:ARG:HB3	1.77	0.67
46:G8:28:LYS:HZ1	46:G8:40:GLU:HG3	1.60	0.67
26:14:2305:A:C6	26:14:2306:C:C2	2.83	0.67
45:B5:41:ASN:HA	45:B5:44:GLU:HB2	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2A:82:VAL:HB	11:2A:108:ILE:HG12	1.77	0.67
1:13:690:G:H1	11:2I:51:LYS:HE3	1.60	0.67
26:1H:1857:G:O2'	26:1H:1885:A:N6	2.27	0.67
5:4E:51:VAL:HG13	5:4E:52:PRO:HD3	1.75	0.67
39:98:33:ARG:HG3	39:98:115:GLU:HB3	1.76	0.67
32:49:106:LEU:HD23	32:49:178:PHE:CE1	2.29	0.67
26:1H:1257:C:H4'	31:31:83:PHE:CE1	2.29	0.67
16:7A:45:THR:OG1	16:7A:47:ASP:OD1	2.10	0.67
4:32:22:LYS:N	4:32:26:CYS:SG	2.66	0.67
26:14:1581:G:H2'	26:14:1582:C:O4'	1.95	0.67
2:12:211:ILE:HG22	2:12:215:LEU:HD11	1.75	0.67
26:1H:1432:C:H2'	26:1H:1433:U:O4'	1.94	0.67
5:4E:8:GLU:HG2	5:4E:34:VAL:HG22	1.75	0.67
33:51:102:ALA:HA	33:51:117:PRO:HD3	1.77	0.67
33:51:4:ILE:HG23	33:51:6:ARG:CZ	2.25	0.67
1:1G:979:C:H3'	1:1G:980:C:H5''	1.76	0.67
26:1H:1510:A:O2'	26:1H:1512:G:N7	2.17	0.67
26:14:607:U:OP1	31:39:102:PRO:HA	1.94	0.67
43:95:37:VAL:HG21	43:95:57:VAL:H	1.60	0.67
26:1H:426:C:H2'	26:1H:427:U:H6	1.60	0.67
1:1G:762:C:H2'	1:1G:763:G:C8	2.30	0.67
26:1H:1697:G:OP2	26:1H:1698:A:O2'	2.11	0.67
26:14:10:G:N2	26:14:2802:G:OP1	2.27	0.67
2:1E:136:VAL:HA	2:1E:139:LYS:HB3	1.76	0.67
1:1G:1400:C:N4	23:2L:35:C:H1'	2.10	0.67
1:1G:155:C:H42	1:1G:166:G:H1	1.42	0.67
32:49:106:LEU:HG	32:49:111:LEU:HB2	1.76	0.67
38:45:35:VAL:HG12	38:45:36:ALA:H	1.59	0.67
26:14:2414:G:H21	37:35:67:MET:CE	2.08	0.67
42:85:92:ARG:O	42:85:94:ASN:N	2.27	0.67
1:13:601:C:H2'	1:13:602:A:C8	2.26	0.67
1:13:1256:A:N6	1:13:1278:U:OP2	2.24	0.67
1:13:1182:G:H4'	1:13:1183:A:H5''	1.75	0.67
26:1H:2345:G:N3	26:1H:2381:C:H2'	2.10	0.67
36:25:107:ARG:HB3	36:25:115:VAL:HG21	1.76	0.67
40:65:42:ASP:O	40:65:43:GLU:HB3	1.94	0.67
32:49:39:ILE:HD11	32:49:94:LEU:HD12	1.76	0.67
32:49:132:ASN:HB3	32:49:158:ALA:HA	1.77	0.67
26:1H:607:U:OP1	31:31:102:PRO:HA	1.95	0.67
26:14:2190:G:H2'	26:14:2191:G:H1'	1.76	0.67
3:2E:95:THR:HB	3:2E:97:LYS:HG3	1.77	0.67

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2070:G:OP1	61:1H:3540:HOH:O	2.13	0.67
26:14:1537:C:H2'	26:14:1538:G:C8	2.30	0.67
24:3K:17:U:H2'	24:3K:18:G:C8	2.29	0.66
26:1H:1287:A:C8	39:98:107:ASP:HB2	2.29	0.66
1:13:1291:G:OP1	7:6E:37:ASN:CG	2.32	0.66
1:1G:1255:G:H22	1:1G:1283:G:H1'	1.58	0.66
1:1G:406:G:O6	1:1G:436:C:N4	2.20	0.66
30:21:47:VAL:HG11	30:21:86:PRO:HD2	1.76	0.66
37:78:17:LYS:HG3	37:78:18:ARG:N	2.09	0.66
26:14:528:A:OP2	35:15:114:ARG:NH1	2.28	0.66
26:14:1784:A:H5''	61:14:3656:HOH:O	1.94	0.66
12:3A:78:GLN:NE2	12:3A:81:SER:HB3	2.09	0.66
26:1H:2079:U:O4	61:1H:3528:HOH:O	2.09	0.66
26:14:1701:A:H5''	26:14:1702:G:OP2	1.95	0.66
26:14:750:A:OP1	26:14:1615:C:N4	2.28	0.66
1:13:765:G:H5''	1:13:766:A:OP1	1.96	0.66
26:1H:193:U:OP1	61:1H:3539:HOH:O	2.12	0.66
1:13:318:G:H1	1:13:335:C:H42	1.43	0.66
26:14:2064:C:H2'	26:14:2065:C:C6	2.29	0.66
4:32:127:THR:OG1	4:32:131:ARG:N	2.28	0.66
37:35:84:ASN:HD22	37:35:117:GLU:HB2	1.60	0.66
23:2K:2:G:H2'	23:2K:2:G:N3	2.09	0.66
1:13:454:C:H41	1:13:478:A:H2	1.43	0.66
20:BI:29:LYS:O	20:BI:33:ILE:HG12	1.96	0.66
1:1G:1259:C:H42	1:1G:1275:A:H61	1.43	0.66
26:14:34:C:HO2'	26:14:35:G:H8	1.43	0.66
20:BA:64:ASP:CG	20:BA:81:LYS:HZ2	1.99	0.66
29:19:27:THR:HG22	29:19:29:PRO:O	1.95	0.66
17:8I:45:HIS:O	17:8I:73:VAL:HG23	1.95	0.66
26:14:1975:G:OP2	61:14:3527:HOH:O	2.13	0.66
3:2E:147:LYS:HB3	3:2E:203:PHE:CD2	2.30	0.66
1:1G:631:G:H2'	1:1G:631:G:OP2	1.95	0.66
42:C8:92:ARG:HH21	43:D8:10:LYS:HB3	1.61	0.66
18:9A:21:LYS:NZ	18:9A:22:VAL:O	2.27	0.66
42:85:70:ARG:NH2	42:85:75:ASN:HB3	2.10	0.66
1:13:505:G:N7	61:13:1819:HOH:O	2.28	0.66
26:1H:2312:U:H5'	32:41:88:ILE:HD12	1.76	0.66
1:13:559:A:OP1	5:4E:126:ARG:NH2	2.28	0.66
5:4E:100:VAL:HG22	5:4E:118:ILE:HG22	1.75	0.66
46:G8:34:LYS:O	46:G8:34:LYS:HG3	1.94	0.66
26:1H:1187:G:H5''	43:D8:81:TYR:CE2	2.31	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2749:A:N3	33:59:59:ARG:NH1	2.38	0.66
34:69:123:LEU:HD23	34:69:142:VAL:HG23	1.75	0.66
19:AI:5:LEU:HD13	19:AI:10:PHE:CD1	2.30	0.66
17:8I:88:TYR:O	17:8I:91:ARG:HB2	1.94	0.66
44:E8:18:ARG:HD3	44:E8:76:VAL:HG13	1.77	0.66
1:13:1060:C:C4	3:2E:2:GLY:HA3	2.30	0.66
26:1H:1914:C:H2'	26:1H:1915:U:O4'	1.95	0.66
26:1H:1901:A:OP2	29:11:255:LYS:HE2	1.96	0.66
26:14:2350:C:OP2	61:14:3528:HOH:O	2.14	0.66
6:52:100:ASN:ND2	18:9A:26:LEU:O	2.28	0.66
26:14:2488:A:H8	26:14:2488:A:O5'	1.78	0.66
35:58:96:GLU:O	35:58:98:VAL:HG12	1.94	0.66
26:14:336:C:OP1	46:C5:83:THR:HG23	1.96	0.66
1:1G:377:G:OP1	16:7A:3:LYS:NZ	2.28	0.66
26:14:780:G:OP1	29:19:218:ARG:NH2	2.29	0.66
3:22:182:ILE:HG22	3:22:203:PHE:HA	1.77	0.66
1:1G:155:C:N3	1:1G:166:G:N2	2.40	0.66
41:B8:29:ARG:HB2	41:B8:46:GLU:HG3	1.76	0.66
57:3L:50:C:H2'	57:3L:51:A:C8	2.31	0.66
1:13:221:C:H2'	1:13:222:U:H6	1.58	0.66
26:1H:2690:C:H5''	26:1H:2872:G:N2	2.10	0.66
4:3E:92:VAL:HG12	4:3E:96:LEU:HD21	1.78	0.66
2:1E:12:GLU:N	2:1E:12:GLU:OE1	2.27	0.66
26:1H:600:G:N2	26:1H:605:C:O3'	2.29	0.66
26:14:1653:G:H3'	39:55:2:ARG:HG2	1.77	0.66
26:14:1729:A:H2'	26:14:1731:G:N2	2.11	0.66
38:45:4:PRO:HD3	38:45:70:PRO:O	1.96	0.66
43:D8:79:VAL:HG13	43:D8:81:TYR:HB3	1.75	0.66
26:1H:363(B):G:H2'	26:1H:363(C):G:C8	2.29	0.66
26:1H:1728:G:N2	26:1H:1730:U:OP2	2.29	0.66
26:14:1975:G:OP1	61:14:3526:HOH:O	2.13	0.66
34:61:93:THR:HA	34:61:119:PRO:HB3	1.78	0.66
1:1G:297:G:N2	1:1G:300:A:OP2	2.28	0.66
26:1H:106:C:H2'	26:1H:107:C:C6	2.31	0.66
26:1H:1397:U:OP2	26:1H:1398:C:N4	2.27	0.66
54:L5:12:ARG:NH2	54:L5:44:PRO:HB3	2.11	0.66
7:62:69:VAL:HG22	7:62:135:VAL:HG22	1.76	0.66
1:1G:411:A:H62	1:1G:413:G:H21	1.43	0.66
45:F8:15:GLU:CD	45:F8:15:GLU:H	1.98	0.66
37:35:114:ILE:O	37:35:115:LEU:HD23	1.96	0.66
28:71:45:ALA:CB	28:71:212:VAL:HG22	2.25	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:963:G:H21	10:1I:55:LYS:CE	2.08	0.66
26:14:1022:G:H22	26:14:1142(A):A:H2	1.43	0.66
26:14:580:C:H2'	26:14:581:C:C6	2.30	0.66
26:1H:654(C):G:O2'	26:1H:654(S):G:N2	2.25	0.66
1:13:376:G:H5''	16:7I:5:ARG:HB2	1.76	0.66
21:1F:5:ASP:HB3	21:1F:8:THR:HG22	1.77	0.66
5:42:69:VAL:O	5:42:71:LEU:N	2.29	0.66
4:32:91:SER:HA	4:32:94:LEU:HD12	1.76	0.66
30:29:182:LEU:O	30:29:183:LEU:HD12	1.96	0.66
16:7A:67:THR:HG22	16:7A:68:ASP:H	1.60	0.66
10:1A:79:ARG:HA	10:1A:82:ILE:HG12	1.78	0.66
1:13:280:C:C2	17:8I:38:ARG:HG3	2.31	0.66
19:AI:41:VAL:HG22	19:AI:67:VAL:O	1.96	0.66
1:13:963:G:H1	1:13:972:C:H42	1.43	0.66
1:13:1126:U:H2'	1:13:1127:G:C8	2.31	0.66
1:13:1132:C:H2'	1:13:1133:G:H8	1.61	0.66
26:1H:1870:C:H2'	26:1H:1871:A:O4'	1.96	0.66
6:5E:38:GLU:HB2	6:5E:64:GLN:HB3	1.78	0.66
26:1H:1689:A:H62	26:1H:1698:A:H2	1.43	0.66
4:3E:92:VAL:O	4:3E:96:LEU:HD22	1.95	0.66
2:1E:5:ILE:HD12	2:1E:6:THR:H	1.61	0.66
26:1H:2019:A:H62	53:N8:9:LYS:HE3	1.60	0.66
26:14:2712:U:H1'	26:14:2712(A):A:C8	2.31	0.66
26:14:2520:C:H41	26:14:2542:A:H62	1.43	0.66
1:13:1189:C:H5'	3:2E:5:ILE:HD13	1.77	0.66
37:78:144:GLU:N	37:78:144:GLU:OE2	2.29	0.66
26:14:1899:G:N2	26:14:1902:C:H41	1.91	0.66
26:14:2414:G:H21	37:35:67:MET:HE3	1.61	0.66
29:11:31:LYS:HG3	29:11:33:LEU:CD2	2.24	0.66
26:1H:2863:C:O2'	26:1H:2864:G:H5'	1.96	0.66
1:1G:1148:U:H2'	1:1G:1149:C:O4'	1.96	0.66
26:1H:2572:A:C8	30:21:144:ARG:HD2	2.30	0.66
1:1G:1412:C:H2'	1:1G:1413:A:C8	2.31	0.66
1:1G:887:G:H21	1:1G:1489:G:H4'	1.61	0.66
32:49:7:LEU:HD21	32:49:104:GLU:HA	1.77	0.66
1:1G:1535:C:H41	25:4L:9:G:H22	1.43	0.66
26:14:2068:U:H3	26:14:2430:A:H2	1.42	0.66
26:14:2162:G:H2'	26:14:2163:C:H5'	1.77	0.66
56:1L:54:5MU:OP2	56:1L:54:5MU:H71	1.94	0.66
33:51:93:GLY:O	33:51:95:ARG:NH2	2.28	0.66
28:71:66:HIS:HB2	28:71:188:ASN:HD21	1.60	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1778:U:H2'	26:14:1784:A:N6	2.10	0.66
5:42:68:GLU:OE1	5:42:70:PRO:HG3	1.95	0.66
26:1H:1657:C:H2'	26:1H:1658:C:C6	2.31	0.66
26:1H:2312:U:H5'	32:41:88:ILE:CD1	2.26	0.66
1:1G:359:U:H2'	1:1G:360:A:C8	2.31	0.66
1:1G:889:A:H61	1:1G:907:A:H5''	1.61	0.66
26:1H:1800:C:OP2	29:11:183:ARG:NH2	2.25	0.66
1:13:58:C:O2'	1:13:388:G:N7	2.27	0.66
1:1G:1460:A:OP2	20:BA:27:LYS:NZ	2.28	0.66
26:14:796:C:H2'	26:14:797:C:C6	2.31	0.66
26:14:602:G:O2'	26:14:604:G:O2'	2.11	0.66
9:8E:128:ARG:NH1	23:2K:34:U:OP2	2.19	0.66
33:51:126:PRO:HG2	33:51:130:ARG:HH12	1.61	0.66
26:14:2758:A:H2'	26:14:2759:G:O4'	1.95	0.66
4:32:175:SER:HB3	4:32:186:LEU:HD11	1.77	0.66
37:35:52:GLU:N	37:35:52:GLU:CD	2.49	0.65
26:1H:1441:G:H2'	26:1H:1442:G:C8	2.31	0.65
1:1G:1184:G:H2'	1:1G:1185:G:H8	1.59	0.65
31:39:25:PRO:HB2	31:39:27:GLU:H	1.60	0.65
26:1H:2502:G:OP2	61:1H:3543:HOH:O	2.14	0.65
1:1G:1096:C:O2'	1:1G:1170:A:O2'	2.05	0.65
4:3E:98:GLU:O	4:3E:103:ASN:ND2	2.28	0.65
21:1F:8:THR:HG23	21:1F:11:GLY:H	1.61	0.65
23:2L:5:G:N2	23:2L:69:C:O2	2.28	0.65
26:1H:836:G:H5''	26:1H:837:C:OP2	1.96	0.65
1:13:1328:C:OP1	21:1F:21:TYR:OH	2.14	0.65
2:1E:237:ALA:O	2:1E:239:VAL:N	2.28	0.65
37:35:47:ASP:OD2	37:35:50:ARG:NH1	2.30	0.65
1:1G:1513:A:H2'	1:1G:1514:C:C6	2.31	0.65
1:13:247:G:OP2	17:8I:100:LYS:N	2.29	0.65
26:14:1797:C:HO2'	29:19:259:THR:HG1	1.29	0.65
29:11:2:ALA:HA	29:11:20:ASP:HB3	1.78	0.65
26:1H:1794:U:H2'	26:1H:1795:C:C6	2.31	0.65
1:1G:1200:C:O2	1:1G:1205:U:N3	2.27	0.65
26:1H:243:U:OP1	55:Q8:6:THR:OG1	2.14	0.65
1:13:129(A):G:H4'	1:13:130:A:H5''	1.78	0.65
40:65:107:GLU:N	40:65:110:LEU:HD21	2.10	0.65
12:3I:60:LEU:HD13	12:3I:61:THR:H	1.61	0.65
26:1H:275:G:N7	26:1H:363:G:N1	2.45	0.65
41:75:8:LYS:O	41:75:11:GLU:HG2	1.96	0.65
23:2K:33:OMC:HM22	23:2K:34:U:H5'	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:B5:8:ILE:O	50:G5:36:ARG:NH2	2.29	0.65
26:14:1670:C:O2	30:29:129:HIS:NE2	2.24	0.65
26:1H:2855:C:H2'	26:1H:2856:C:H6	1.60	0.65
27:16:54:G:H2'	27:16:55:U:H6	1.60	0.65
45:B5:18:TYR:O	45:B5:20:GLY:N	2.30	0.65
51:H5:4:LEU:O	51:H5:36:VAL:HA	1.96	0.65
26:14:2137:C:H42	26:14:2155:G:H1	1.43	0.65
24:3K:19:G:H22	26:1H:2112:G:H1'	1.59	0.65
29:11:35:LYS:N	29:11:35:LYS:HD2	2.10	0.65
31:39:148:LEU:HD21	31:39:191:ARG:HD3	1.77	0.65
26:1H:456:C:H3'	45:F8:68:ARG:NH1	2.10	0.65
43:95:76:LYS:NZ	43:95:82:ARG:HE	1.95	0.65
26:14:1665:A:OP2	61:14:3511:HOH:O	2.14	0.65
40:65:104:GLY:O	40:65:106:ARG:NH1	2.30	0.65
1:1G:1071:C:H2'	1:1G:1072:G:C8	2.30	0.65
26:1H:1538:G:H2'	26:1H:1539:G:C8	2.31	0.65
26:1H:425:G:H2'	26:1H:426:C:H6	1.62	0.65
7:62:75:VAL:HA	7:62:88:PRO:HA	1.79	0.65
1:1G:1092:A:H5''	7:62:4:ARG:HH21	1.61	0.65
1:13:827:U:H5	1:13:872:A:N1	1.94	0.65
26:14:628:G:H5''	55:M5:18:ALA:HB2	1.79	0.65
27:16:100:G:OP2	61:16:303:HOH:O	2.13	0.65
16:7A:36:ILE:HD12	16:7A:56:ALA:HA	1.79	0.65
1:13:916:G:OP2	61:13:1809:HOH:O	2.15	0.65
26:1H:547:A:H2'	26:1H:548:A:H8	1.60	0.65
1:1G:532:A:H2	3:22:156:ARG:HH22	1.44	0.65
46:C5:3:VAL:CG1	46:C5:32:PRO:HB2	2.27	0.65
2:1E:215:LEU:HA	2:1E:218:ALA:HB3	1.79	0.65
1:13:224:C:H2'	1:13:225:C:C6	2.32	0.65
26:14:825:C:H1'	37:35:55:ARG:HD3	1.78	0.65
26:1H:729:G:O4'	29:11:208:LYS:NZ	2.30	0.65
26:14:1856:G:N2	26:14:1886:C:N3	2.44	0.65
30:29:170:LEU:HD11	30:29:185:LYS:O	1.96	0.65
1:13:1073:U:O2'	2:1E:104:ASN:OD1	2.06	0.65
50:K8:50:ILE:HD12	50:K8:51:ARG:N	2.10	0.65
31:39:36:VAL:HG11	31:39:183:VAL:HG21	1.77	0.65
27:16:8:U:N3	27:16:112:G:O6	2.17	0.65
1:1G:1292:U:H2'	1:1G:1293:G:C8	2.30	0.65
26:1H:2176:A:OP1	28:71:7:TYR:OH	2.09	0.65
28:71:22:ILE:HA	28:71:25:ALA:HB3	1.79	0.65
26:14:2785:C:O2'	30:29:64:LYS:NZ	2.28	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:62:113:GLU:O	7:62:119:ARG:HD3	1.96	0.65
26:14:901:A:H5'	26:14:902:C:OP2	1.96	0.65
1:13:1178:G:N2	1:13:1181:G:H8	1.95	0.65
1:13:1448:C:H42	1:13:1455:G:H1	1.44	0.65
26:1H:125:G:H5'	26:1H:125:G:C8	2.31	0.65
1:1G:26:A:N6	1:1G:558:G:O2'	2.28	0.65
1:13:445:G:H2'	1:13:446:G:C8	2.31	0.65
1:13:323:U:H5'	20:BI:23:ARG:HB2	1.79	0.65
7:62:21:VAL:HG23	7:62:22:LEU:HD12	1.77	0.65
1:1G:592:G:N2	1:1G:647:C:O2	2.22	0.65
7:62:73:MET:HG2	7:62:90:GLU:HA	1.79	0.65
46:G8:85:VAL:HG13	46:G8:98:VAL:HB	1.79	0.65
13:4A:14:ARG:HA	13:4A:43:THR:O	1.96	0.65
26:1H:323:G:C8	31:31:171:PRO:HG3	2.32	0.65
4:32:12:CYS:SG	4:32:18:LYS:HA	2.37	0.65
32:49:145:THR:OG1	32:49:148:MET:N	2.18	0.65
1:1G:408:A:H5'	4:32:116:GLN:HG3	1.79	0.65
37:78:114:ILE:HD11	37:78:130:PHE:CD2	2.32	0.65
1:13:611:A:H61	1:13:629:G:H1	1.44	0.65
26:14:548:A:C5	26:14:549:G:H1'	2.31	0.65
29:19:30:GLU:HG3	29:19:63:ARG:CZ	2.26	0.65
27:16:116:G:H4'	40:A8:54:LEU:HD12	1.79	0.65
1:1G:517:G:N2	1:1G:533:A:OP2	2.25	0.65
33:51:30:LYS:NZ	33:51:81:GLU:H	1.94	0.65
10:1I:44:VAL:HG11	10:1I:46:ARG:HH21	1.61	0.65
26:14:2331:G:H4'	48:E5:43:THR:H	1.61	0.65
27:1J:44:G:H5''	27:1J:45:A:OP1	1.96	0.65
4:32:176:LEU:HG	4:32:178:VAL:HB	1.79	0.65
26:1H:2576:G:OP1	61:1H:3542:HOH:O	2.14	0.65
52:M8:36:CYS:HB3	52:M8:39:CYS:HB3	1.77	0.65
34:61:68:LEU:HA	34:61:71:ILE:CG2	2.27	0.65
26:1H:2261:C:O2'	26:1H:2262:U:H5'	1.97	0.65
27:1J:52:A:H62	40:65:33:LYS:HG3	1.61	0.65
19:AI:22:LEU:HA	19:AI:25:LYS:HB2	1.78	0.65
26:14:1408:C:O2	26:14:1595:G:N2	2.29	0.65
48:I8:53:MET:HG3	48:I8:59:LEU:HD23	1.78	0.65
26:14:995:C:O4'	42:85:57:PHE:HD2	1.79	0.65
7:6E:69:VAL:HG22	7:6E:135:VAL:HG13	1.77	0.65
1:13:1298:C:H2'	7:6E:114:ARG:HH21	1.61	0.65
1:13:749:C:H2'	1:13:750:G:H8	1.62	0.65
15:6A:15:PHE:O	15:6A:27:VAL:HG22	1.96	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2438:U:H5''	26:14:2600:A:OP1	1.97	0.65
49:F5:24:ALA:HB3	49:F5:27:GLU:HG3	1.77	0.65
1:1G:1109:C:H2'	1:1G:1110:A:O4'	1.96	0.65
37:78:60:MET:HA	55:Q8:13:ARG:NH1	2.12	0.65
36:25:11:ALA:HB1	36:25:99:PHE:HB2	1.78	0.65
26:14:1899:G:N2	26:14:1902:C:N4	2.44	0.65
32:49:111:LEU:HB3	32:49:117:PHE:CE1	2.30	0.65
1:13:1368:G:OP1	9:8E:111:ARG:NH2	2.30	0.65
1:13:148:G:N2	1:13:149:A:N1	2.45	0.65
13:4A:91:ARG:O	13:4A:95:GLY:N	2.30	0.65
29:11:29:PRO:HG2	29:11:83:GLU:OE1	1.95	0.65
37:78:31:ALA:O	37:78:32:THR:HG22	1.97	0.65
26:1H:141(A):C:H2'	26:1H:142:G:O4'	1.97	0.65
26:1H:2173:A:H2'	26:1H:2174:C:C2	2.31	0.65
26:14:2745:C:H42	26:14:2759:G:H1	1.44	0.65
26:14:646:A:H2'	26:14:647:G:O4'	1.96	0.65
39:55:85:PRO:O	39:55:88:ARG:HD2	1.96	0.65
13:4I:82:MET:C	13:4I:84:ILE:H	1.99	0.65
4:32:103:ASN:OD1	4:32:114:ARG:NH2	2.30	0.65
1:13:983:A:H2	1:13:984:C:C6	2.14	0.65
26:14:142:G:H1'	45:B5:37:THR:HG21	1.79	0.65
26:14:990:A:H8	26:14:990:A:H5'	1.62	0.65
15:6I:11:VAL:HG21	15:6I:34:LEU:HD13	1.79	0.65
29:19:246:PRO:CD	29:19:255:LYS:CE	2.75	0.65
43:95:2:PHE:CE1	43:95:13:ARG:HG3	2.32	0.65
16:7I:77:ALA:HB3	16:7I:79:VAL:HG23	1.78	0.65
42:85:91:ASP:OD2	42:85:96:ALA:HB2	1.97	0.65
5:4E:39:GLY:CA	5:4E:113:ALA:HB1	2.26	0.65
26:1H:587:C:H2'	37:78:19:VAL:HG21	1.77	0.65
44:E8:58:ALA:HB1	44:E8:64:MET:HG3	1.77	0.65
26:14:2724:C:OP1	30:29:118:LYS:HE3	1.97	0.65
11:2A:86:GLY:H	11:2A:112:THR:HG23	1.62	0.65
39:98:14:SER:OG	39:98:15:SER:N	2.28	0.65
44:A5:37:ARG:HG2	44:A5:38:TYR:CE1	2.32	0.65
38:45:57:HIS:CE1	38:45:116:GLU:HB3	2.32	0.65
1:1G:793:U:O2	1:1G:1516:G:H4'	1.97	0.65
34:61:144:VAL:HG13	34:61:145:VAL:HG23	1.79	0.65
30:29:54:GLN:H	30:29:74:PRO:HB3	1.62	0.65
1:13:963:G:H21	10:1I:55:LYS:HE2	1.62	0.65
1:13:1449:C:O2'	1:13:1451:A:N6	2.29	0.65
5:4E:148:VAL:HA	5:4E:151:LEU:HD12	1.78	0.65

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
17:8I:101:ARG:N	17:8I:101:ARG:HD3	2.12	0.65
1:13:410:G:OP1	4:3E:30:LYS:NZ	2.22	0.65
30:29:171:GLU:HB3	30:29:185:LYS:HG3	1.78	0.65
1:13:750:G:N3	15:6I:23:GLY:HA3	2.11	0.65
26:1H:309:G:N3	26:1H:329:G:O2'	2.29	0.65
30:29:81:ILE:HG22	30:29:82:ARG:H	1.62	0.64
1:1G:922:G:H1	1:1G:1395:C:H42	1.45	0.64
29:11:35:LYS:HA	29:11:64:ILE:HG22	1.79	0.64
1:1G:1219:U:OP1	14:5A:19:ARG:NH1	2.26	0.64
10:1A:49:VAL:HB	14:5A:41:ARG:HB2	1.79	0.64
4:32:31:CYS:HB2	4:32:33:MET:H	1.63	0.64
28:71:66:HIS:HB2	28:71:188:ASN:ND2	2.12	0.64
32:49:60:LEU:HD21	32:49:92:VAL:HG11	1.79	0.64
57:3L:12:U:H3	57:3L:23:A:H61	1.44	0.64
5:42:42:GLY:HA2	5:42:136:MET:HE1	1.78	0.64
1:1G:629:G:H2'	1:1G:630:G:H4'	1.78	0.64
1:13:536:C:OP2	61:13:1810:HOH:O	2.15	0.64
26:14:2777:G:H5''	26:14:2778:A:H5'	1.78	0.64
26:14:55:G:O6	26:14:115:C:N4	2.19	0.64
1:1G:565:U:H3'	1:1G:566:G:H2'	1.79	0.64
1:1G:933:G:N7	7:62:3:ARG:NH2	2.45	0.64
1:13:1234:C:H2'	1:13:1235:U:C6	2.32	0.64
1:1G:736:C:H2'	1:1G:737:A:C8	2.32	0.64
1:1G:298:A:O5'	1:1G:298:A:H8	1.80	0.64
26:1H:1328:G:H2'	26:1H:1330:C:C5	2.32	0.64
1:1G:625:G:H4'	16:7A:16:HIS:CD2	2.32	0.64
1:1G:1084:G:H5'	1:1G:1102:A:OP2	1.98	0.64
4:3E:31:CYS:HB3	4:3E:34:GLU:HG2	1.78	0.64
26:14:1794:U:H2'	26:14:1795:C:C6	2.31	0.64
7:62:68:ASN:ND2	7:62:127:ALA:O	2.20	0.64
35:15:30:ILE:O	35:15:34:LEU:HD22	1.97	0.64
26:14:568:U:O2'	61:14:3529:HOH:O	2.15	0.64
26:14:2683:C:OP1	41:75:53:ARG:NH2	2.31	0.64
2:12:115:LEU:HD13	2:12:145:LEU:HB3	1.77	0.64
26:14:303:U:H2'	26:14:304:G:C8	2.32	0.64
55:Q8:54:GLU:O	55:Q8:58:ILE:HG12	1.97	0.64
26:14:89:G:H3'	26:14:90:U:H5''	1.79	0.64
36:68:112:MET:HG3	36:68:113:LYS:H	1.62	0.64
12:3A:18:VAL:O	12:3A:19:ARG:HG3	1.98	0.64
22:1K:74:C:H42	26:1H:2508:G:H5'	1.61	0.64
29:19:242:ARG:O	61:19:302:HOH:O	2.15	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:960:A:H61	38:45:82:ARG:NH2	1.95	0.64
2:12:97:TRP:HZ3	2:12:99:GLY:HA2	1.63	0.64
1:13:457:C:H2'	1:13:458:C:C6	2.31	0.64
27:1J:18:G:H2'	27:1J:19:G:C8	2.31	0.64
46:C5:76:CYS:HB2	46:C5:104:GLY:HA3	1.80	0.64
26:1H:1728:G:H2'	26:1H:1731:G:O6	1.97	0.64
27:1J:7:G:H3'	27:1J:8:U:H5''	1.77	0.64
15:6A:10:LYS:C	15:6A:10:LYS:HD2	2.18	0.64
26:14:289:A:H3'	26:14:290:G:H8	1.61	0.64
44:A5:73:ALA:O	44:A5:106:ILE:HG12	1.97	0.64
26:14:2031:A:N3	26:14:2455:G:O2'	2.25	0.64
26:14:925:C:H2'	26:14:926:A:H8	1.61	0.64
29:11:141:VAL:HG12	29:11:164:GLN:HG2	1.78	0.64
27:1J:113:C:H2'	27:1J:114:G:C8	2.32	0.64
1:1G:376:G:H5''	16:7A:5:ARG:HB2	1.79	0.64
2:12:49:GLU:O	2:12:52:GLU:HG3	1.97	0.64
2:12:74:LYS:HD2	2:12:166:ASP:HB2	1.79	0.64
26:14:2611:U:H5'	26:14:2611:U:C6	2.23	0.64
31:31:8:GLN:OE1	31:31:21:ALA:HB2	1.96	0.64
45:B5:63:LYS:HD2	45:B5:63:LYS:C	2.17	0.64
32:49:60:LEU:HD22	32:49:68:PRO:HB3	1.80	0.64
35:58:38:HIS:CE1	35:58:39:ARG:HG3	2.31	0.64
1:1G:629:G:C2	1:1G:630:G:H1'	2.32	0.64
26:1H:106:C:H2'	26:1H:107:C:H6	1.61	0.64
26:14:2490:G:N3	26:14:2490:G:H2'	2.10	0.64
26:14:196:A:OP2	37:35:46:LYS:NZ	2.30	0.64
26:14:1114:G:H2'	26:14:1115:G:C8	2.32	0.64
26:14:729:G:H2'	26:14:1775:U:O2	1.98	0.64
1:13:677:U:H3	1:13:713:G:H22	1.45	0.64
1:1G:980:C:H5'	1:1G:981:U:H5	1.63	0.64
26:1H:878:A:N1	26:1H:898:C:N4	2.42	0.64
38:45:31:ASP:N	38:45:106:VAL:O	2.29	0.64
26:14:468:G:H5''	26:14:469:G:OP2	1.97	0.64
26:14:2387:U:H4'	48:E5:41:ARG:HH21	1.62	0.64
7:6E:79:ARG:HG3	7:6E:84:ASN:HB2	1.78	0.64
26:14:1071:G:N2	26:14:1090:U:OP2	2.26	0.64
46:C5:52:SER:H	46:C5:56:PRO:HA	1.62	0.64
11:2A:109:VAL:HG12	18:9A:86:VAL:HA	1.78	0.64
8:7E:10:LEU:HD22	8:7E:83:ILE:HD11	1.78	0.64
41:B8:62:THR:HG22	41:B8:75:ILE:HG13	1.79	0.64
49:F5:71:TYR:O	49:F5:74:VAL:HG12	1.97	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:957:A:C4'	38:45:76:LYS:HE2	2.28	0.64
26:14:2135:A:H1'	26:14:2159:G:O2'	1.97	0.64
46:G8:42:VAL:HG13	46:G8:43:ASN:N	2.13	0.64
4:32:12:CYS:SG	4:32:19:LEU:N	2.62	0.64
1:13:1131:G:H2'	1:13:1132:C:H6	1.62	0.64
26:1H:2701:C:H3'	26:1H:2702:U:C5'	2.27	0.64
34:61:3:VAL:HG12	34:61:38:LEU:HA	1.80	0.64
41:B8:91:ARG:O	41:B8:116:ALA:HA	1.98	0.64
1:1G:1132:C:H2'	1:1G:1133:G:C8	2.33	0.64
1:13:1034:G:N2	1:13:1035:A:N7	2.42	0.64
1:13:491:G:H2'	1:13:492:G:H8	1.61	0.64
26:1H:2580:U:H4'	30:21:130:GLY:HA3	1.78	0.64
43:95:58:VAL:H	43:95:98:GLU:HB2	1.62	0.64
27:16:7:G:H4'	40:A8:29:PHE:CD2	2.33	0.64
26:14:577:G:O2'	26:14:1254:A:OP1	2.15	0.64
55:M5:50:LEU:HG	55:M5:51:ALA:H	1.63	0.64
1:1G:1502:A:H2	1:1G:1505:G:H1	1.44	0.64
3:22:31:HIS:HA	3:22:34:LEU:HD23	1.80	0.64
17:8I:55:ASP:HA	17:8I:79:SER:HA	1.80	0.64
26:1H:2128:C:N3	26:1H:2129:C:N4	2.44	0.64
29:11:29:PRO:HD2	29:11:30:GLU:HG2	1.80	0.64
26:14:2327:A:H2'	26:14:2328:A:C8	2.33	0.64
26:14:1568:G:H5'	29:19:60:ARG:HA	1.80	0.64
26:14:2882:A:OP1	39:55:96:ARG:NE	2.18	0.64
2:1E:121:LEU:HB3	2:1E:127:ILE:HG23	1.78	0.64
26:14:867:C:H5	26:14:868:U:C4	2.15	0.64
1:13:21:G:H2'	1:13:22:G:C8	2.33	0.64
17:8I:9:VAL:O	17:8I:21:VAL:HA	1.98	0.64
26:14:620:G:H5''	26:14:620:G:N3	2.13	0.64
1:1G:1443:G:O2'	41:75:122:ASP:OD2	2.16	0.64
30:29:119:ARG:HD3	30:29:120:TRP:CD1	2.32	0.64
26:14:676:A:H8	26:14:2069:G:N2	1.92	0.64
42:85:90:VAL:HG22	43:95:39:LEU:HB3	1.78	0.64
26:1H:1434:A:H61	26:1H:1558:A:H62	1.43	0.64
16:7I:8:ARG:HH12	16:7I:15:PRO:HA	1.63	0.64
11:2I:85:ARG:HA	11:2I:112:THR:OG1	1.97	0.64
26:14:1669:A:H5''	26:14:1670:C:OP2	1.98	0.64
26:1H:185:U:H4'	26:1H:218:A:H4'	1.80	0.64
26:14:957:A:C5'	38:45:76:LYS:CD	2.54	0.64
19:AI:41:VAL:HG12	19:AI:44:MET:HB2	1.80	0.64
2:12:19:HIS:CE1	2:12:204:ASN:HB3	2.33	0.64

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:322:A:H5'	26:1H:340:A:H1'	1.79	0.64
41:B8:26:ASP:O	41:B8:49:VAL:HG12	1.98	0.64
26:1H:2657:A:O2'	33:51:160:LYS:NZ	2.30	0.64
24:3K:61:C:O2	28:71:52:ARG:HD3	1.98	0.64
26:1H:1509:C:H2'	26:1H:1511:A:H8	1.62	0.64
53:N8:40:LYS:HZ1	53:N8:48:GLU:H	1.42	0.64
1:13:5:U:O4	4:3E:89:THR:HG23	1.98	0.64
1:1G:1142:G:H3'	1:1G:1143:G:C8	2.32	0.64
3:2E:84:ILE:HG23	3:2E:88:ARG:NH2	2.13	0.64
26:14:1379:A:H4'	26:14:1380:G:OP2	1.96	0.64
26:1H:330:A:HO2'	26:1H:331:A:H8	1.43	0.64
6:52:69:GLU:N	6:52:69:GLU:OE1	2.25	0.64
1:13:836:G:OP1	18:9I:61:LYS:NZ	2.30	0.64
34:69:75:LEU:HD22	34:69:77:LEU:N	2.12	0.64
1:13:390:C:O3'	16:7I:28:ARG:NH2	2.31	0.64
43:95:44:LYS:O	43:95:46:VAL:N	2.26	0.64
26:14:1040:C:H2'	26:14:1041:C:O4'	1.97	0.64
39:98:10:LEU:O	39:98:12:ARG:N	2.31	0.64
30:29:109:LYS:HE2	30:29:191:PRO:HA	1.80	0.64
8:7E:6:ILE:HB	8:7E:85:ARG:HH12	1.61	0.64
1:13:1177:G:H2'	1:13:1178:G:C4	2.33	0.64
26:1H:274:G:H2'	26:1H:275:G:H1'	1.79	0.64
1:1G:1129:C:N4	1:1G:1139:G:H22	1.96	0.64
29:19:33:LEU:HD23	29:19:34:VAL:HG13	1.80	0.64
26:14:1492:G:H3'	26:14:1493:C:H5'	1.80	0.64
31:39:89:VAL:HG12	31:39:90:PHE:H	1.62	0.64
1:13:1503:A:N6	25:4K:11:U:O2	2.31	0.64
26:14:315:G:H2'	26:14:316:C:H6	1.63	0.64
26:14:2147:G:H2'	26:14:2148:G:H4'	1.80	0.64
46:G8:84:ARG:O	46:G8:85:VAL:HG13	1.98	0.63
32:41:66:GLN:OE1	32:41:98:ARG:NH1	2.32	0.63
36:25:13:ASN:HD21	36:25:97:ARG:H	1.46	0.63
55:M5:48:PHE:HA	55:M5:49:VAL:HG13	1.79	0.63
29:11:6:PHE:HE2	29:11:13:ARG:NH2	1.80	0.63
26:1H:102:G:OP1	50:K8:7:ARG:NH2	2.29	0.63
1:13:1145:C:H4'	1:13:1146:A:H8	1.62	0.63
46:G8:61:ILE:HG23	46:G8:63:LYS:HD3	1.78	0.63
7:6E:143:ARG:HD2	24:3K:41:A:O3'	1.98	0.63
26:1H:573:G:O2'	26:1H:574:C:H3'	1.99	0.63
26:14:1252:G:O4'	42:85:33:ARG:HD3	1.98	0.63
47:D5:3:TYR:O	47:D5:58:VAL:N	2.23	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:314:A:H2'	26:14:315:G:C8	2.33	0.63
3:2E:73:PRO:O	3:2E:76:VAL:HG22	1.98	0.63
1:13:97:U:H2'	1:13:99:C:C5	2.33	0.63
7:62:29:LYS:HB3	7:62:105:VAL:HG21	1.80	0.63
1:13:642:A:N3	8:7E:113:SER:OG	2.31	0.63
18:9A:31:LEU:H	18:9A:31:LEU:HD23	1.63	0.63
26:14:486:C:HO2'	44:A5:60:ASN:HD22	1.42	0.63
29:19:245:PRO:C	29:19:255:LYS:NZ	2.44	0.63
26:14:2572:A:C2	30:29:144:ARG:NH2	2.66	0.63
26:14:2637:U:H5'	30:29:44:TYR:CE1	2.33	0.63
43:D8:21:ARG:CG	43:D8:91:TYR:HE2	2.10	0.63
41:B8:23:ARG:HG3	41:B8:120:ARG:NH1	2.14	0.63
22:1K:52:G:N2	22:1K:62:C:N3	2.45	0.63
52:M8:37:SER:O	52:M8:44:THR:OG1	2.14	0.63
46:C5:73:ARG:NH2	46:C5:82:PRO:O	2.31	0.63
32:41:114:ILE:HG22	32:41:115:ARG:O	1.99	0.63
30:29:1:MET:N	30:29:200:GLU:OE2	2.30	0.63
31:31:33:LEU:HD13	31:31:112:MET:CE	2.29	0.63
26:1H:1230:C:H2'	26:1H:1231:G:C8	2.33	0.63
1:1G:1493:A:H2'	26:14:1913:A:H61	1.63	0.63
26:1H:1999:C:H5''	26:1H:2723:C:O2'	1.98	0.63
7:6E:18:TYR:HD2	7:6E:59:LEU:HD12	1.62	0.63
47:D5:5:LEU:HD21	47:D5:43:GLU:HB2	1.81	0.63
2:1E:212:GLN:NE2	2:1E:234:PRO:HA	2.11	0.63
46:G8:39:VAL:O	46:G8:42:VAL:HG12	1.99	0.63
5:42:27:ARG:HH11	5:42:47:LYS:HZ3	1.45	0.63
4:3E:8:VAL:O	4:3E:11:LEU:HG	1.97	0.63
1:1G:1004:A:N1	1:1G:1023:G:N2	2.47	0.63
26:1H:639:U:H2'	26:1H:640:C:C6	2.32	0.63
7:62:136:LYS:NZ	7:62:137:LYS:NZ	2.45	0.63
7:62:93:PRO:HG2	7:62:94:ARG:HH21	1.62	0.63
26:1H:1718:G:C2	26:1H:1725:G:C8	2.85	0.63
1:13:994:A:N7	1:13:1216:G:H4'	2.13	0.63
1:1G:447:G:N2	1:1G:487:A:H62	1.97	0.63
1:1G:1106:G:H2'	1:1G:1107:C:H6	1.62	0.63
20:BI:50:GLU:HB2	20:BI:99:LEU:HB3	1.80	0.63
26:1H:1138:G:H21	35:58:106:MET:HE3	1.62	0.63
1:1G:20:U:H2'	1:1G:21:G:O4'	1.98	0.63
8:72:44:PHE:HA	8:72:79:VAL:HG11	1.80	0.63
25:4K:24:A:H3'	25:4K:25:A:OP1	1.99	0.63
31:31:101:LEU:O	31:31:106:ARG:NH1	2.32	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:591:U:H2'	1:13:592:G:C8	2.33	0.63
1:1G:946:A:H61	1:1G:1234:C:H42	1.46	0.63
7:62:26:PHE:CE2	7:62:30:ILE:HD11	2.33	0.63
38:88:32:TYR:HE1	38:88:133:ARG:HD3	1.63	0.63
50:K8:3:LEU:HA	50:K8:4:SER:HB3	1.81	0.63
1:1G:1055:A:H62	1:1G:1200:C:N4	1.96	0.63
33:51:86:GLU:OE2	33:51:165:ALA:HB2	1.96	0.63
26:1H:1021:A:H8	26:1H:1022:G:H5'	1.64	0.63
1:1G:1305:G:HO2'	1:1G:1306:A:H8	1.46	0.63
44:E8:1:MET:HB3	44:E8:64:MET:CE	2.28	0.63
41:B8:50:ILE:HD13	41:B8:64:ARG:HB3	1.79	0.63
1:13:167:G:H2'	1:13:168:G:H8	1.63	0.63
1:1G:260:G:OP2	20:BA:83:ARG:NH1	2.31	0.63
26:14:981:A:OP2	26:14:982:C:N4	2.29	0.63
26:14:372:G:OP2	49:F5:69:LYS:NZ	2.29	0.63
43:D8:79:VAL:CG1	43:D8:81:TYR:HB3	2.27	0.63
1:13:455:C:H42	1:13:477:G:H1	1.44	0.63
26:1H:2750:A:H3'	33:51:4:ILE:HD13	1.80	0.63
36:25:13:ASN:ND2	36:25:96:THR:HG23	2.09	0.63
1:1G:1011:G:H22	1:1G:1018:C:N4	1.95	0.63
42:C8:79:PHE:HE1	42:C8:83:LEU:HD22	1.64	0.63
26:1H:1231:G:H2'	26:1H:1232:G:C8	2.34	0.63
6:52:2:ARG:HD3	6:52:92:LYS:HE3	1.81	0.63
3:22:44:GLU:HA	3:22:52:LEU:HD11	1.80	0.63
40:A8:48:LEU:HD23	40:A8:82:ILE:HD11	1.81	0.63
26:14:1163:G:OP1	43:95:24:LYS:NZ	2.27	0.63
47:D5:164:ALA:O	47:D5:165:VAL:HG13	1.99	0.63
37:35:57:THR:HB	37:35:60:MET:HB2	1.79	0.63
27:16:80:U:H2'	27:16:81:G:H21	1.62	0.63
55:M5:7:HIS:O	55:M5:7:HIS:ND1	2.32	0.63
26:14:1450:C:H2'	26:14:1451:C:C6	2.34	0.63
34:69:90:GLY:O	34:69:121:LYS:HD2	1.99	0.63
34:69:72:LEU:HD11	34:69:107:VAL:HG11	1.81	0.63
1:1G:1294:G:H2'	1:1G:1295:G:H8	1.63	0.63
8:7E:87:SER:HB2	8:7E:93:VAL:CB	2.29	0.63
1:13:736:C:H2'	1:13:737:A:H8	1.63	0.63
43:95:57:VAL:HG23	43:95:99:ILE:H	1.64	0.63
35:58:95:PRO:O	35:58:97:ARG:HB2	1.99	0.63
1:1G:373:A:C2	1:1G:374:A:C8	2.86	0.63
40:A8:66:ALA:HB1	40:A8:101:LEU:HB2	1.81	0.63
26:14:2304:G:N2	26:14:2313:C:H42	1.95	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:2:C:N4	27:1J:118:G:O6	2.32	0.63
26:1H:1858:G:H1'	26:1H:1883:G:H22	1.64	0.63
26:14:2068:U:N3	26:14:2430:A:C2	2.61	0.63
37:78:60:MET:HA	55:Q8:13:ARG:HH11	1.63	0.63
26:14:2108:C:N4	26:14:2180:U:O4	2.32	0.63
38:88:137:TYR:HB3	47:H8:76:LEU:HD21	1.80	0.63
13:4I:65:LYS:HG3	13:4I:69:GLU:HB3	1.81	0.63
26:14:2131:G:H5''	26:14:2133:G:H4'	1.81	0.63
4:3E:47:ARG:HH22	4:3E:49:ARG:HG2	1.64	0.63
26:14:1491:G:O4'	29:19:99:ASP:HB3	1.98	0.63
26:14:952:G:OP1	38:45:16:ARG:NH1	2.32	0.63
26:1H:1416:G:HO2'	26:1H:1417:C:H6	1.47	0.63
47:H8:19:ARG:NH1	47:H8:84:GLU:O	2.32	0.63
26:1H:1887:C:H2'	26:1H:1888:G:H5'	1.80	0.63
26:14:365:C:OP2	61:14:3530:HOH:O	2.15	0.63
49:F5:85:LEU:HD13	49:F5:88:LYS:CG	2.22	0.63
27:16:42:C:O2'	32:41:67:LYS:O	2.16	0.63
30:29:54:GLN:CG	30:29:55:ASN:H	2.12	0.63
42:C8:8:VAL:HG23	42:C8:11:ARG:NH2	2.10	0.63
24:3K:3:G:H1	24:3K:70:C:H42	1.44	0.63
29:11:27:THR:C	29:11:29:PRO:HD3	2.19	0.63
26:1H:2061:G:OP2	26:1H:2502:G:H5'	1.99	0.63
26:14:2305:A:C5	32:49:136:ARG:NH1	2.67	0.63
30:29:9:VAL:HG12	41:75:8:LYS:HZ1	1.63	0.63
1:13:1298:C:P	7:6E:114:ARG:HH22	2.21	0.63
13:4A:44:ARG:HB2	13:4A:46:LYS:HG2	1.79	0.63
26:1H:2250:G:C6	38:88:83:MET:HB3	2.33	0.63
7:6E:62:PHE:HA	7:6E:124:LEU:HD21	1.81	0.63
26:14:2298:A:H1'	26:14:2321:G:N2	2.13	0.63
26:1H:941:A:H4'	61:1H:3851:HOH:O	1.99	0.63
4:32:89:THR:H	5:42:97:GLY:HA3	1.63	0.63
2:12:58:ILE:HB	2:12:221:LEU:HB2	1.79	0.63
15:6I:26:GLU:OE2	15:6I:77:ARG:CD	2.47	0.63
38:45:36:ALA:HB2	38:45:103:MET:HE2	1.81	0.63
26:14:2485:G:C5'	38:45:46:GLN:HE21	2.11	0.63
42:85:92:ARG:HG2	43:95:11:GLN:OE1	1.99	0.63
26:1H:2156:G:H3'	26:1H:2157:G:H21	1.62	0.63
47:D5:29:TYR:HA	47:D5:34:ASN:HA	1.81	0.63
31:31:67:GLN:HG3	31:31:67:GLN:O	1.98	0.63
55:M5:33:ASN:HA	55:M5:36:LYS:HD2	1.81	0.63
19:AI:25:LYS:HG3	19:AI:27:GLU:HG3	1.81	0.63

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9I:53:ARG:HA	18:9I:56:THR:HG23	1.79	0.63
33:59:149:ARG:NH2	33:59:167:GLU:OE2	2.31	0.63
26:1H:342:G:O6	61:1H:3541:HOH:O	2.13	0.63
1:13:1469:G:H2'	1:13:1470:G:C8	2.34	0.63
26:14:480:A:H2'	26:14:480:A:N3	2.14	0.63
26:1H:299:A:H5'	26:1H:300:A:OP2	1.98	0.63
26:1H:860:U:H1'	26:1H:2268:A:H5'	1.80	0.63
1:13:1435:G:H2'	1:13:1436:U:C6	2.34	0.63
43:95:85:LYS:HB3	43:95:87:HIS:H	1.64	0.63
26:14:957:A:C5'	38:45:76:LYS:CE	2.74	0.62
26:14:2485:G:H5''	38:45:46:GLN:NE2	2.11	0.62
37:35:14:LYS:O	37:35:16:ARG:N	2.32	0.62
4:32:134:ASP:O	4:32:136:PRO:HD3	1.99	0.62
7:6E:113:GLU:HB3	7:6E:118:VAL:HG13	1.80	0.62
28:71:66:HIS:CE1	28:71:187:ASP:HB3	2.34	0.62
5:4E:101:ILE:O	5:4E:120:THR:OG1	2.13	0.62
8:7E:102:ARG:N	8:7E:102:ARG:HD3	2.14	0.62
1:13:947:G:H2'	1:13:948:C:C6	2.33	0.62
26:1H:1827:C:C2'	26:1H:1828:G:H5'	2.29	0.62
32:41:104:GLU:HB3	52:M8:23:GLU:OE1	1.99	0.62
31:39:164:ARG:O	31:39:167:ALA:HB3	1.98	0.62
1:13:403:C:OP1	4:3E:137:SER:OG	2.18	0.62
26:1H:1591:G:H2'	26:1H:1592:C:C6	2.34	0.62
30:21:1:MET:N	30:21:83:ASP:O	2.29	0.62
13:4I:27:LYS:HD3	13:4I:31:LYS:HZ3	1.64	0.62
46:G8:97:ARG:O	46:G8:101:LYS:HG3	1.99	0.62
15:6I:17:ARG:CZ	15:6I:17:ARG:HA	2.29	0.62
41:B8:2:ASN:O	41:B8:3:ARG:HG2	1.98	0.62
49:J8:93:GLU:OE2	49:J8:94:LEU:CB	2.47	0.62
1:1G:1057:G:H22	1:1G:1204:A:H1'	1.64	0.62
26:14:846:C:O2'	26:14:929:G:O6	2.11	0.62
1:1G:1411:C:H2'	1:1G:1412:C:H6	1.64	0.62
27:1J:3:C:H2'	27:1J:4:C:C6	2.34	0.62
2:12:54:THR:HA	2:12:57:PHE:CD2	2.35	0.62
20:BA:25:ARG:O	20:BA:29:LYS:HG2	1.99	0.62
1:1G:1414:U:H2'	1:1G:1415:G:C8	2.34	0.62
55:M5:40:GLU:HA	55:M5:43:GLN:HB3	1.81	0.62
26:14:2472:G:N2	26:14:2477:C:OP1	2.30	0.62
46:G8:76:CYS:SG	46:G8:97:ARG:HG3	2.39	0.62
26:1H:2577:A:OP1	61:1H:3542:HOH:O	2.16	0.62
38:88:104:PHE:HE2	38:88:125:LEU:HD11	1.64	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:910:A:C5	38:45:13:GLN:HG3	2.33	0.62
1:13:1286:A:H2'	1:13:1287:A:H4'	1.80	0.62
2:1E:100:GLY:O	2:1E:104:ASN:N	2.27	0.62
26:1H:583:G:OP2	42:C8:10:ARG:HD2	1.99	0.62
24:3K:57:G:H22	26:1H:2112:G:H21	1.46	0.62
26:14:2638:G:OP2	30:29:82:ARG:NH2	2.31	0.62
49:J8:89:GLU:O	49:J8:93:GLU:HG3	1.99	0.62
31:31:132:VAL:O	31:31:133:ASN:OD1	2.17	0.62
26:1H:2135:A:N6	26:1H:2156:G:O2'	2.28	0.62
4:32:189:PRO:HB2	4:32:194:LEU:HD21	1.82	0.62
26:1H:1516:U:H2'	26:1H:1517:G:C8	2.34	0.62
26:14:330:A:H2	26:14:1210:A:HO2'	1.47	0.62
30:29:10:GLY:N	41:75:8:LYS:HZ1	1.96	0.62
5:4E:126:ARG:HH11	5:4E:126:ARG:HG3	1.64	0.62
32:41:10:LYS:O	32:41:15:VAL:HG23	1.99	0.62
1:1G:280:C:H3'	1:1G:281:G:H5'	1.81	0.62
7:62:27:ILE:HD11	7:62:43:PHE:HD2	1.63	0.62
1:13:244:U:H4'	1:13:245:C:O5'	1.98	0.62
26:1H:950:G:H2'	26:1H:951:C:C6	2.34	0.62
26:14:1060:U:H4'	26:14:1061:U:H5''	1.81	0.62
3:2E:7:PRO:O	3:2E:11:ARG:HG2	1.99	0.62
26:1H:195:A:N6	26:1H:198:C:OP2	2.32	0.62
16:7I:79:VAL:HB	16:7I:80:PHE:CE2	2.34	0.62
13:4A:34:LEU:H	13:4A:34:LEU:HD23	1.63	0.62
1:1G:980:C:H5'	1:1G:981:U:C5	2.34	0.62
1:1G:1055:A:H8	1:1G:1055:A:OP2	1.83	0.62
26:14:162:U:H1'	26:14:171:G:C2	2.34	0.62
3:22:18:TRP:CD1	14:5A:54:PRO:HA	2.34	0.62
41:75:13:ARG:HH11	41:75:13:ARG:H	1.48	0.62
35:58:35:ARG:O	35:58:42:TRP:HZ3	1.82	0.62
4:32:119:GLN:HG3	4:32:123:HIS:HE1	1.64	0.62
26:14:1047:G:N2	26:14:1111:A:H61	1.97	0.62
26:14:1316:U:H2'	26:14:1317:A:C8	2.35	0.62
41:B8:111:ARG:O	41:B8:112:ARG:HB3	1.99	0.62
26:1H:330:A:O2'	26:1H:331:A:H8	1.82	0.62
1:13:1305:G:H5'	21:1F:4:GLY:HA3	1.81	0.62
26:14:1419:A:H2'	26:14:1421:G:N7	2.14	0.62
26:14:1859:A:N6	26:14:1883:G:O2'	2.32	0.62
1:1G:73:G:N2	1:1G:97:U:O2	2.31	0.62
26:1H:2023:G:H5'	26:1H:2617:C:H4'	1.81	0.62
1:1G:439:A:H2'	1:1G:440:A:O4'	1.98	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:12:U:H4'	1:1G:526:C:O2'	2.00	0.62
33:59:67:LEU:O	33:59:71:LEU:HD13	2.00	0.62
26:1H:818:G:H5'	26:1H:839:U:OP1	1.99	0.62
30:29:55:ASN:HB2	30:29:58:ARG:HH21	1.65	0.62
1:13:735:C:H2'	1:13:736:C:H6	1.65	0.62
1:1G:1298:C:H4'	1:1G:1299:A:C4	2.34	0.62
26:14:2712(A):A:H5''	26:14:2713:A:OP2	1.99	0.62
26:14:486:C:O2'	44:A5:60:ASN:ND2	2.23	0.62
26:1H:784:A:C6	29:11:229:VAL:HG11	2.35	0.62
47:H8:28:MET:HB3	47:H8:35:ARG:HB2	1.80	0.62
1:1G:429:U:H3'	4:32:9:CYS:SG	2.39	0.62
26:1H:1311:G:C2	45:F8:60:ARG:NH1	2.67	0.62
1:1G:857:C:H3'	1:1G:858:G:C8	2.34	0.62
34:69:129:THR:HG22	34:69:137:PRO:HB3	1.81	0.62
39:55:18:LEU:HD22	39:55:22:ARG:HD2	1.81	0.62
26:14:2564:A:H5''	26:14:2565:A:OP2	1.99	0.62
26:14:623:G:H2'	26:14:624:C:C6	2.34	0.62
26:1H:1243:G:O2'	37:78:7:ARG:NH2	2.32	0.62
25:4L:12:A:O2'	25:4L:13:A:O5'	2.12	0.62
2:1E:31:TYR:HB3	2:1E:42:ILE:HD11	1.79	0.62
1:13:838:G:O6	1:13:848:C:N4	2.31	0.62
1:1G:458:C:H2'	1:1G:464:G:H8	1.63	0.62
5:42:80:ILE:HA	8:72:104:ARG:HH12	1.64	0.62
26:1H:1359:A:N3	26:1H:1359:A:H5'	2.15	0.62
26:14:878:A:H5''	26:14:900:A:N6	2.14	0.62
34:69:124:GLY:H	34:69:142:VAL:HG22	1.62	0.62
38:88:139:GLU:HA	38:88:140:ALA:O	1.99	0.62
26:14:1110:G:H2'	26:14:1111:A:C8	2.35	0.62
26:14:141:A:H8	26:14:1595:G:H21	1.44	0.62
1:13:1006:C:O2	1:13:1023:G:N2	2.32	0.62
26:1H:1794:U:H2'	26:1H:1795:C:H6	1.63	0.62
4:3E:172:PRO:HB2	4:3E:187:ARG:HH12	1.65	0.62
1:13:1226:C:H4'	19:AI:80:TYR:OH	2.00	0.62
6:52:52:ILE:HD11	18:9A:77:GLY:HA3	1.80	0.62
37:78:68:GLN:HA	37:78:68:GLN:OE1	1.98	0.62
26:14:1639:U:H4'	26:14:2699:C:H4'	1.82	0.62
1:1G:589:C:H5''	8:72:29:SER:HB2	1.82	0.62
1:13:1296:C:OP1	13:4I:44:ARG:NH2	2.33	0.62
1:1G:520:A:OP2	12:3A:51:ALA:HB1	2.00	0.62
26:1H:270(C):C:H42	26:1H:270(W):G:H1	1.47	0.62
30:29:1:MET:CG	30:29:200:GLU:OE2	2.48	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1799:G:O2'	26:1H:1800:C:OP2	2.11	0.62
1:13:591:U:H2'	1:13:592:G:H8	1.64	0.62
26:14:527:C:N4	26:14:2779:U:OP1	2.33	0.62
26:14:745:G:H5''	26:14:746:A:OP2	2.00	0.62
1:13:767:A:H2'	1:13:768:A:O4'	1.99	0.62
1:1G:929:G:H1	1:1G:1388:C:H42	1.47	0.62
34:69:33:ARG:HB3	34:69:35:LEU:HG	1.82	0.62
1:13:1318:A:H1'	19:AI:37:ARG:HE	1.64	0.62
1:1G:779:C:O2'	1:1G:780:A:H5'	2.00	0.62
26:1H:2331:G:O3'	48:I8:43:THR:HG22	2.00	0.62
2:12:22:LYS:HB3	2:12:24:TRP:CE2	2.35	0.62
6:5E:2:ARG:HD3	6:5E:92:LYS:HE2	1.82	0.62
51:H5:37:LEU:HD13	51:H5:43:ILE:HG21	1.81	0.62
26:14:1826:G:H2'	26:14:1827:C:C6	2.35	0.62
30:29:37:ARG:HD3	30:29:42:ASP:CG	2.20	0.62
26:1H:1183:G:O2'	51:L8:29:ARG:NH1	2.32	0.62
7:62:116:ALA:O	7:62:120:ILE:HG12	2.00	0.62
26:1H:2864:G:H2'	26:1H:2865:U:C6	2.35	0.62
47:H8:126:VAL:HA	47:H8:164:ALA:H	1.65	0.62
26:1H:1516:U:H2'	26:1H:1517:G:H8	1.64	0.62
33:51:40:GLU:HB2	33:51:41:MET:HE2	1.82	0.62
3:22:84:ILE:O	3:22:88:ARG:NH2	2.33	0.62
27:16:55:U:H2'	27:16:56:G:C8	2.35	0.62
26:14:1225:C:O3'	43:95:85:LYS:HA	2.00	0.62
1:1G:857:C:H3'	1:1G:858:G:H8	1.65	0.62
1:13:1104:G:OP1	2:1E:144:ARG:NH2	2.27	0.62
32:49:4:ASP:HA	32:49:6:ALA:HA	1.81	0.62
8:7E:81:HIS:N	8:7E:138:TRP:O	2.31	0.62
5:4E:38:GLN:O	5:4E:38:GLN:HG3	1.99	0.62
47:H8:3:TYR:O	47:H8:58:VAL:HG23	1.99	0.62
1:1G:1335:C:OP1	1:1G:1337:G:N2	2.32	0.62
31:39:133:ASN:HA	31:39:162:LEU:HD23	1.81	0.62
49:F5:89:GLU:O	49:F5:93:GLU:HB2	1.98	0.62
26:1H:1111:A:H2	26:1H:1112:G:H1'	1.64	0.62
26:1H:2751:G:OP2	33:51:4:ILE:HD13	1.99	0.62
57:3L:65:C:H2'	57:3L:66:A:C8	2.35	0.62
26:1H:2054:A:H5''	26:1H:2055:C:O5'	2.00	0.62
54:L5:29:LYS:O	54:L5:33:ARG:HG2	2.00	0.62
1:1G:865:A:H8	1:1G:865:A:O5'	1.83	0.62
32:49:118:ARG:HG3	32:49:181:ARG:HD3	1.82	0.62
23:2L:48:U:O2'	23:2L:49:C:OP2	2.18	0.62

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:1A:34:VAL:HG13	10:1A:74:ILE:HD13	1.82	0.62
26:1H:871:U:OP1	38:88:5:ARG:HG3	1.99	0.62
26:14:2295:C:H5	40:65:13:ARG:HH22	1.48	0.62
13:4A:93:ARG:HG3	13:4A:94:ARG:HD2	1.82	0.62
31:39:113:ALA:HB1	31:39:186:ILE:HG21	1.81	0.62
1:1G:991:U:O2'	1:1G:993:G:O4'	2.16	0.61
26:1H:2315:G:H21	32:41:128:ARG:NH2	1.92	0.61
26:1H:1328:G:H2'	26:1H:1330:C:C4	2.35	0.61
4:32:31:CYS:C	4:32:33:MET:N	2.53	0.61
26:1H:70:G:H21	26:1H:71:A:N6	1.97	0.61
40:65:24:LEU:HB2	40:65:85:VAL:HG12	1.82	0.61
1:13:1139:G:H4'	1:13:1140:C:H5'	1.81	0.61
26:14:2387:U:C1'	48:E5:41:ARG:HE	2.13	0.61
26:14:754:C:H2'	26:14:755:C:C6	2.35	0.61
1:13:266:G:H5''	1:13:267:C:H5	1.63	0.61
1:1G:1238:A:H62	1:1G:1299:A:H61	1.47	0.61
26:14:315:G:H2'	26:14:316:C:C6	2.35	0.61
26:1H:1416:G:O2'	26:1H:1417:C:O5'	2.18	0.61
26:1H:2836:U:H2'	26:1H:2837:G:C8	2.35	0.61
26:1H:805:G:OP1	61:1H:3546:HOH:O	2.16	0.61
1:13:668:G:O2'	15:6I:46:HIS:HB3	1.99	0.61
14:5I:48:ALA:HB2	14:5I:53:LEU:HD12	1.81	0.61
2:1E:16:HIS:CE1	2:1E:210:SER:HB2	2.34	0.61
36:25:119:PRO:HB2	41:75:68:TYR:CE2	2.35	0.61
26:14:1161:C:H1'	43:95:8:GLY:O	2.00	0.61
28:71:5:LYS:HA	28:71:8:ARG:HB2	1.81	0.61
26:14:2652:C:H42	26:14:2668:G:H1	1.48	0.61
32:49:120:LEU:HB2	32:49:180:PHE:HA	1.82	0.61
26:14:1447:G:H1'	26:14:1545(A):A:H1'	1.82	0.61
12:3I:53:ARG:HG3	12:3I:53:ARG:HH11	1.65	0.61
1:13:477:G:H2'	1:13:478:A:C8	2.35	0.61
24:3K:34:U:O5'	24:3K:34:U:H6	1.84	0.61
4:32:107:ARG:HD3	4:32:173:TRP:HZ2	1.63	0.61
2:1E:212:GLN:O	2:1E:216:SER:OG	2.17	0.61
1:1G:1208:C:H2'	1:1G:1209:C:O4'	2.00	0.61
33:51:86:GLU:HG3	33:51:87:LEU:N	2.14	0.61
38:45:22:LYS:N	38:45:23:GLY:HA3	2.15	0.61
55:Q8:52:LYS:CB	55:Q8:53:PRO:HD2	2.29	0.61
26:14:1138:G:C4	26:14:1139:G:H1'	2.34	0.61
1:1G:1256:A:OP2	3:22:27:LYS:NZ	2.30	0.61
4:3E:83:SER:HA	4:3E:89:THR:HG22	1.82	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1399:C:H2'	26:14:1400:G:C8	2.34	0.61
26:14:2331:G:O3'	48:E5:43:THR:HG22	2.01	0.61
48:E5:27:GLU:OE1	48:E5:69:PHE:N	2.30	0.61
19:AI:51:VAL:O	19:AI:57:HIS:HA	1.99	0.61
26:1H:2845:G:N2	26:1H:2871:C:O2	2.32	0.61
26:1H:458:G:O2'	26:1H:469:G:O6	2.16	0.61
33:51:121:ILE:HG13	33:51:144:VAL:HG21	1.82	0.61
2:12:42:ILE:HD11	2:12:202:PRO:HB2	1.82	0.61
31:31:59:TYR:CD1	31:31:78:ILE:HD11	2.35	0.61
1:1G:1324:A:H4'	1:1G:1362:C:H4'	1.80	0.61
37:35:13:ASN:O	37:35:15:ARG:N	2.32	0.61
1:13:1178:G:H21	1:13:1181:G:H8	1.47	0.61
26:14:1814:G:H5''	29:19:54:ARG:NH1	2.15	0.61
32:49:66:GLN:NE2	32:49:93:THR:O	2.33	0.61
13:4A:81:LEU:HG	13:4A:89:GLY:HA2	1.81	0.61
34:69:130:TYR:HB3	34:69:136:VAL:HG13	1.81	0.61
3:2E:77:ILE:HA	3:2E:84:ILE:HD12	1.82	0.61
31:39:129:PHE:HB3	31:39:131:GLY:O	2.01	0.61
1:1G:867:G:H2'	1:1G:868:C:H6	1.65	0.61
1:1G:36:C:OP1	12:3A:123:LYS:NZ	2.21	0.61
26:14:2522:U:O2'	26:14:2647:U:H5''	1.99	0.61
1:1G:1188:A:H5''	14:5A:58:LYS:NZ	2.15	0.61
4:3E:67:ILE:HD13	4:3E:196:LEU:HD22	1.83	0.61
26:1H:2306:C:H3'	26:1H:2307:G:C5'	2.30	0.61
1:13:1266:G:N2	1:13:1270:C:N3	2.48	0.61
48:E5:50:ASN:O	48:E5:62:LEU:HB2	2.00	0.61
44:A5:59:VAL:HA	44:A5:64:MET:H	1.66	0.61
18:9A:53:ARG:HH21	18:9A:60:ALA:H	1.46	0.61
26:14:1992:G:N2	26:14:1996:C:O2	2.30	0.61
1:1G:1203:C:H2'	1:1G:1204:A:H8	1.66	0.61
53:N8:39:MET:O	53:N8:40:LYS:HD2	2.00	0.61
26:1H:1797:C:O2'	29:11:259:THR:OG1	2.16	0.61
13:4A:66:LEU:HA	13:4A:70:LEU:HB2	1.81	0.61
26:1H:1543:A:H3'	26:1H:1543:A:OP2	2.01	0.61
22:1K:18:G:N2	22:1K:57:G:N3	2.47	0.61
26:14:1072:C:N4	26:14:1098:A:OP2	2.32	0.61
35:15:71:ILE:HD12	35:15:71:ILE:O	2.00	0.61
39:98:52:ILE:O	39:98:55:ALA:N	2.33	0.61
26:14:957:A:N6	26:14:2459:A:C8	2.69	0.61
26:14:957:A:OP1	38:45:76:LYS:CD	2.48	0.61
1:13:1152:A:H5'	10:1I:13:HIS:CG	2.34	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2720:U:H3	26:14:2873:A:H2	1.48	0.61
26:1H:1378:A:OP1	54:P8:10:ARG:NH2	2.34	0.61
1:13:131:C:H2'	1:13:132:C:C6	2.34	0.61
1:1G:1014:A:H5'	19:AA:15:LEU:HD11	1.83	0.61
26:14:1815:A:P	29:19:54:ARG:HH22	2.22	0.61
50:G5:45:SER:O	50:G5:45:SER:OG	2.16	0.61
1:1G:1089:G:C2	1:1G:1090:U:H1'	2.35	0.61
26:14:138:G:H5''	26:14:139:G:OP2	1.99	0.61
2:12:128:GLU:O	2:12:130:ARG:HG2	2.00	0.61
39:55:18:LEU:HD22	39:55:22:ARG:CD	2.31	0.61
26:1H:1932:A:H2'	26:1H:1933:G:O4'	1.99	0.61
3:22:199:LYS:HB3	3:22:201:TYR:HE1	1.66	0.61
1:13:7:G:H5'	1:13:298:A:O4'	2.00	0.61
33:51:27:LYS:HA	33:51:32:GLU:HA	1.83	0.61
36:25:4:PRO:O	36:25:5:GLN:HB2	2.00	0.61
35:15:73:THR:HG22	35:15:84:LYS:HB3	1.83	0.61
50:K8:52:ASP:O	50:K8:56:GLN:HB2	2.01	0.61
23:2K:54:G:H2'	23:2K:55:5MU:H6	1.65	0.61
37:78:97:PRO:HB3	37:78:112:LEU:HD12	1.82	0.61
26:14:71:A:H2	45:B5:31:HIS:NE2	1.96	0.61
4:3E:7:PRO:HB2	4:3E:10:ARG:HD2	1.82	0.61
57:3L:66:A:H2'	57:3L:67:C:O4'	2.01	0.61
1:1G:1203:C:H2'	1:1G:1204:A:O4'	2.01	0.61
1:13:8:A:H5'	5:4E:101:ILE:HG22	1.82	0.61
1:13:1347:G:O6	9:8E:10:ARG:NH2	2.29	0.61
26:1H:1443:G:N2	26:1H:1549:C:N3	2.49	0.61
41:B8:108:ARG:HA	41:B8:111:ARG:NE	2.15	0.61
1:13:1113:C:H2'	1:13:1114:C:H6	1.64	0.61
26:1H:2679:A:H4'	30:21:165:VAL:HG11	1.83	0.61
26:14:1757:U:H3	26:14:1762:A:H2	1.43	0.61
15:6I:7:GLU:OE1	15:6I:38:ARG:NH2	2.33	0.61
1:1G:668:G:O2'	15:6A:46:HIS:HB3	2.00	0.61
1:1G:1111:A:H2'	1:1G:1112:C:C6	2.36	0.61
26:14:630:G:N2	26:14:633:A:OP2	2.32	0.61
27:16:15:A:H3'	27:16:16:G:H5'	1.83	0.61
4:32:101:LEU:HD23	4:32:121:VAL:HG13	1.81	0.61
26:1H:907:U:H4'	38:88:101:ARG:HH22	1.65	0.61
14:5I:6:LEU:HD13	14:5I:23:ARG:HH22	1.65	0.61
1:13:738:C:H2'	1:13:739:C:C6	2.36	0.61
13:4I:15:VAL:O	13:4I:19:LEU:HD23	1.99	0.61
41:75:98:LYS:N	41:75:98:LYS:HD2	2.15	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:6:G:N7	22:1K:68:G:N1	2.49	0.61
26:14:1027:A:C2	26:14:2488:A:H5'	2.36	0.61
26:14:1225:C:H4'	43:95:85:LYS:HA	1.82	0.61
14:5I:53:LEU:HB3	14:5I:56:VAL:HG21	1.81	0.61
1:13:1292:U:H2'	1:13:1293:G:C8	2.35	0.61
26:14:1939:U:OP1	26:14:2604:U:O2'	2.17	0.61
1:13:757:U:H5''	1:13:822:C:O2	2.00	0.61
26:14:2464:C:H42	26:14:2486:G:H1	1.49	0.61
26:14:1991:U:H2'	26:14:1992:G:H5''	1.83	0.61
26:1H:2577:A:C5'	26:1H:2578:G:H5'	2.26	0.61
36:68:47:ILE:HG13	36:68:48:PRO:HD2	1.82	0.61
19:AA:15:LEU:HD22	19:AA:18:LYS:HE3	1.81	0.61
5:4E:8:GLU:OE2	5:4E:63:ARG:NH2	2.33	0.61
1:13:537:G:H5''	12:3I:113:ARG:NH1	2.16	0.61
17:8I:9:VAL:HG21	17:8I:84:LEU:HD12	1.82	0.61
26:1H:1417:C:H2'	26:1H:1418:G:O4'	2.00	0.61
12:3A:70:ILE:HD13	12:3A:77:LEU:HD12	1.82	0.61
15:6I:37:ASN:O	15:6I:41:GLU:OE2	2.19	0.61
26:14:2052:G:O4'	30:29:142:GLY:HA3	2.00	0.61
3:22:129:ALA:O	3:22:133:ALA:N	2.28	0.61
26:1H:1018:C:O2'	26:1H:1019:U:H5'	2.01	0.61
52:M8:11:PRO:HA	52:M8:25:TYR:HA	1.83	0.61
49:F5:11:ARG:HB3	49:F5:11:ARG:HH11	1.65	0.61
2:12:162:ILE:HD11	2:12:184:VAL:HG22	1.82	0.61
4:32:171:GLY:HA3	4:32:173:TRP:CZ3	2.36	0.61
34:61:40:THR:O	34:61:44:LEU:HB2	2.01	0.61
26:14:2307:G:O2'	26:14:2308:G:OP2	2.18	0.61
26:14:2343:C:O2'	26:14:2373:G:O2'	2.01	0.61
33:51:155:SER:HB2	33:51:156:ALA:O	2.01	0.61
26:1H:1406:U:H2'	26:1H:1407:C:C6	2.36	0.61
1:13:279:A:H4'	1:13:280:C:H5''	1.82	0.61
26:14:2295:C:H41	40:65:13:ARG:NH2	1.98	0.61
12:3A:82:VAL:HG23	12:3A:105:TYR:HB3	1.81	0.61
26:14:118:A:N3	26:14:178:G:H1'	2.14	0.61
26:1H:1466:G:N2	26:1H:1547:C:N3	2.49	0.61
11:2I:19:ALA:HB2	11:2I:32:ILE:HG23	1.82	0.61
26:14:2619:C:OP1	30:29:152:LYS:NZ	2.34	0.61
26:14:873:G:H1'	38:45:29:PHE:HE2	1.66	0.61
23:2K:21:U:O2'	23:2K:22:A:H5'	2.01	0.61
47:D5:79:ARG:HB2	47:D5:80:ARG:HD2	1.83	0.61
26:1H:2367:G:H2'	26:1H:2368:C:H6	1.66	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:24:VAL:HG12	12:3A:26:ALA:HB2	1.83	0.61
26:14:2495:G:H5''	38:45:81:VAL:HG12	1.83	0.61
1:1G:589:C:N4	1:1G:650:G:H1	1.93	0.61
26:14:821:A:O2'	26:14:946:G:OP2	2.19	0.61
26:1H:270(I):G:N2	26:1H:270(R):G:H1'	2.16	0.61
38:45:12:GLN:HE21	38:45:72:LYS:HG3	1.65	0.61
26:14:995:C:C5	42:85:57:PHE:HE2	2.19	0.61
17:8I:89:LEU:HA	17:8I:92:ARG:HB3	1.82	0.61
26:14:2439:A:C8	26:14:2439:A:H5'	2.36	0.61
13:4I:66:LEU:O	13:4I:70:LEU:N	2.34	0.61
1:13:1305:G:N2	1:13:1331:G:H2'	2.16	0.61
2:12:70:PHE:N	2:12:92:TYR:HA	2.16	0.61
36:25:88:ASN:HB3	36:25:94:ARG:HD3	1.82	0.61
57:3L:43:U:H2'	57:3L:44:U:C5	2.36	0.61
11:2A:96:ARG:HA	11:2A:99:GLN:HB2	1.83	0.61
7:62:16:LEU:HD11	9:82:42:ARG:HA	1.82	0.61
41:B8:57:PHE:HE1	41:B8:79:HIS:HB2	1.66	0.61
26:1H:934:G:H2'	26:1H:935:C:H6	1.66	0.61
26:1H:483:A:H1'	46:G8:59:GLY:O	2.01	0.61
26:14:2364:C:H4'	48:E5:56:ASP:OD2	2.01	0.61
37:35:51:PHE:C	37:35:52:GLU:OE2	2.39	0.60
50:G5:50:ILE:HD12	50:G5:51:ARG:N	2.10	0.60
26:14:71:A:H5'	26:14:71:A:H8	1.62	0.60
26:14:335:C:H4'	46:C5:73:ARG:HD2	1.83	0.60
26:14:1036:G:H8	26:14:1036:G:O5'	1.83	0.60
19:AA:63:THR:HG21	19:AA:74:PHE:HE2	1.65	0.60
24:3K:76:A:H8	26:1H:2394:C:N4	1.99	0.60
26:1H:1678:G:H22	26:1H:1989:G:H22	1.48	0.60
1:13:192:U:H2'	1:13:193:C:C6	2.36	0.60
1:13:1137:C:H1'	1:13:1138:G:C2	2.36	0.60
46:G8:30:VAL:HG12	46:G8:32:PRO:HD3	1.81	0.60
26:1H:780:G:H21	26:1H:783:A:N6	1.98	0.60
1:1G:559:A:H4'	1:1G:560:U:H5''	1.83	0.60
8:7E:9:MET:SD	8:7E:32:LYS:HG2	2.41	0.60
1:1G:722:A:H5''	1:1G:723:U:OP2	2.01	0.60
26:1H:1806:C:O2'	29:11:46:GLN:OE1	2.16	0.60
26:1H:1026:U:O2'	26:1H:1027:A:H5''	2.00	0.60
44:A5:33:ARG:NE	44:A5:52:GLU:OE2	2.30	0.60
30:29:1:MET:CB	30:29:200:GLU:OE2	2.48	0.60
26:14:2880:C:H1'	39:55:92:GLY:HA3	1.81	0.60
22:1K:14:A:H62	22:1K:22:G:H21	1.49	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:K8:16:LEU:O	50:K8:16:LEU:HD23	2.00	0.60
26:1H:1433:U:O2	26:1H:1561:G:C2	2.54	0.60
2:1E:5:ILE:HD13	2:1E:6:THR:HG23	1.82	0.60
27:1J:46:A:H2'	27:1J:47:C:C6	2.36	0.60
26:1H:1340:U:H4'	26:1H:1341:U:OP2	2.00	0.60
3:2E:108:ASN:HB3	3:2E:111:LEU:HB2	1.83	0.60
1:13:136:C:H4'	16:7I:65:GLN:NE2	2.17	0.60
33:51:56:SER:HB3	33:51:61:HIS:HD1	1.64	0.60
55:Q8:37:SER:O	55:Q8:40:GLU:N	2.33	0.60
1:1G:1152:A:H2'	1:1G:1153:C:C6	2.37	0.60
37:78:121:LYS:HE2	37:78:123:LEU:HD21	1.83	0.60
26:14:1264:G:OP1	53:J5:19:ARG:NH2	2.31	0.60
46:G8:94:LYS:HG3	46:G8:95:LYS:N	2.16	0.60
38:45:36:ALA:HB2	38:45:103:MET:CE	2.31	0.60
2:12:72:GLY:HA2	2:12:165:VAL:HG11	1.83	0.60
26:14:1355:G:O2'	26:14:1356:G:H5'	2.01	0.60
29:11:35:LYS:HB2	29:11:62:TYR:O	2.01	0.60
12:3A:33:ARG:H	12:3A:85:ILE:HG22	1.66	0.60
26:14:579:G:H2'	26:14:580:C:C6	2.35	0.60
26:1H:1332:G:H21	26:1H:1610:A:H8	1.49	0.60
26:14:854:G:H2'	26:14:855:G:C8	2.37	0.60
47:D5:124:ILE:HD11	47:D5:165:VAL:HG21	1.82	0.60
1:1G:440:A:H3'	1:1G:442:C:C6	2.37	0.60
18:9A:44:LEU:HD11	18:9A:70:ILE:HG21	1.83	0.60
23:2K:29:C:H2'	23:2K:30:G:H8	1.67	0.60
1:13:1171:G:H2'	1:13:1172:C:H6	1.66	0.60
35:15:95:PRO:O	35:15:98:VAL:HG22	2.01	0.60
26:1H:503:A:H4'	26:1H:504:U:H5''	1.81	0.60
26:1H:1194:A:OP2	26:1H:1194:A:H8	1.84	0.60
26:1H:2820:A:O2'	26:1H:2821:A:OP1	2.18	0.60
51:H5:18:ASP:HB2	51:H5:49:LYS:HE3	1.83	0.60
26:14:597:U:H2'	26:14:598:G:C8	2.36	0.60
49:J8:93:GLU:OE2	49:J8:94:LEU:HD12	2.02	0.60
27:1J:14:U:OP2	27:1J:70:C:O2'	2.19	0.60
30:21:105:THR:HG1	30:21:199:ARG:NH2	1.91	0.60
1:13:1068:G:N2	1:13:1191:A:N3	2.47	0.60
2:1E:115:LEU:HD13	2:1E:145:LEU:HB2	1.84	0.60
20:BA:49:ALA:O	20:BA:100:ILE:HG21	2.02	0.60
1:1G:1004:A:C2	1:1G:1006:C:H1'	2.36	0.60
26:14:2893:G:O2'	26:14:2894:G:OP2	2.19	0.60
1:13:157:G:N2	1:13:165:C:O2	2.35	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:17:U:HO2'	22:1K:57:G:N2	1.99	0.60
7:62:126:ASP:HB3	7:62:131:LYS:O	2.01	0.60
26:14:2695:C:H2'	26:14:2696:U:C6	2.36	0.60
29:19:246:PRO:CD	29:19:255:LYS:NZ	2.52	0.60
22:1K:76:A:H8	26:1H:2583:G:N2	1.92	0.60
26:1H:1111:A:C2	26:1H:1112:G:H1'	2.36	0.60
1:1G:1309:G:OP2	13:4A:99:ARG:NH2	2.28	0.60
14:5I:6:LEU:HB3	14:5I:23:ARG:HH22	1.67	0.60
48:E5:34:GLY:HA2	48:E5:61:ALA:O	2.02	0.60
1:1G:1331:G:OP1	1:1G:1331:G:H4'	2.01	0.60
2:12:49:GLU:OE2	2:12:49:GLU:N	2.35	0.60
34:61:92:VAL:HG23	34:61:96:ASP:HB2	1.82	0.60
32:49:97:ASP:HA	32:49:100:TRP:HB2	1.83	0.60
42:85:106:PHE:O	42:85:109:LEU:N	2.32	0.60
38:88:20:ALA:HA	38:88:98:LYS:HB3	1.82	0.60
35:58:131:GLN:OE1	35:58:132:ALA:N	2.34	0.60
20:BA:56:MET:HG2	20:BA:84:LEU:HD11	1.81	0.60
8:7E:98:LYS:HD2	8:7E:98:LYS:H	1.67	0.60
26:1H:1221:C:H2'	26:1H:1222:C:H6	1.66	0.60
40:A8:20:ARG:NH2	48:I8:51:VAL:O	2.34	0.60
32:49:105:LYS:HG3	32:49:106:LEU:CD1	2.31	0.60
2:12:82:ARG:HA	2:12:85:ALA:HB3	1.84	0.60
13:4A:59:TYR:CD2	13:4A:60:VAL:HG13	2.37	0.60
57:3L:1:G:H1	57:3L:72:C:H42	1.50	0.60
26:1H:1607:C:H4'	26:1H:1608:A:O5'	2.02	0.60
28:71:29:VAL:HG13	28:71:30:LYS:HG2	1.83	0.60
1:13:1117:G:H5"	9:8E:104:ARG:NH1	2.17	0.60
26:1H:1678:G:N2	26:1H:1989:G:H22	2.00	0.60
26:14:995:C:O2	35:15:3:THR:OG1	2.18	0.60
26:14:617:G:OP1	31:39:40:GLN:NE2	2.34	0.60
3:2E:35:GLU:OE1	3:2E:97:LYS:NZ	2.33	0.60
20:BA:64:ASP:OD2	20:BA:81:LYS:NZ	2.34	0.60
16:7A:51:VAL:HG12	16:7A:53:VAL:HG22	1.84	0.60
25:4L:12:A:HO2'	25:4L:13:A:P	2.24	0.60
57:3L:61:C:N4	57:3L:62:C:H41	2.00	0.60
5:4E:24:ARG:HG3	5:4E:26:PHE:HE1	1.66	0.60
2:1E:96:ARG:H	2:1E:96:ARG:CZ	2.15	0.60
26:14:96:G:H4'	50:G5:48:HIS:ND1	2.16	0.60
6:52:77:ARG:HD3	6:52:78:GLU:N	2.16	0.60
26:14:2359:C:H2'	26:14:2360:A:O4'	2.02	0.60
33:51:10:PRO:HD2	33:51:50:VAL:H	1.66	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:814:C:O3'	43:95:84:LYS:NZ	2.31	0.60
1:1G:1243:C:OP2	21:1B:10:ARG:CZ	2.50	0.60
26:14:2136:C:H2'	26:14:2137:C:C6	2.36	0.60
31:31:155:LEU:HB2	31:31:189:THR:HG21	1.83	0.60
26:1H:2136:C:H2'	26:1H:2137:C:C6	2.36	0.60
40:65:3:ARG:HE	40:65:3:ARG:C	2.04	0.60
1:1G:1081:G:OP2	5:42:47:LYS:NZ	2.31	0.60
26:1H:1140:C:OP1	35:58:23:LEU:HB3	2.02	0.60
26:1H:1705:G:O2'	26:1H:1706:U:H5'	2.01	0.60
46:G8:17:SER:OG	46:G8:71:LYS:HE3	2.00	0.60
5:4E:51:VAL:O	5:4E:55:VAL:HG23	2.02	0.60
1:13:1060:C:C5	3:2E:2:GLY:HA3	2.37	0.60
4:32:162:LEU:HD13	4:32:178:VAL:HG22	1.83	0.60
23:2K:62:C:H2'	23:2K:63:C:H6	1.67	0.60
26:14:2762:G:H5'	26:14:2763:G:OP2	2.00	0.60
9:8E:32:ASP:OD1	9:8E:33:PHE:N	2.35	0.60
38:88:35:VAL:HG13	38:88:130:LYS:HB3	1.82	0.60
1:13:108:G:OP2	1:13:326:G:N1	2.26	0.60
34:69:21:VAL:HG21	34:69:25:TYR:HD2	1.66	0.60
26:1H:2400:G:H2'	26:1H:2401:U:H6	1.66	0.60
26:1H:2695:C:H2'	26:1H:2696:U:H6	1.66	0.60
1:13:328:C:H4'	1:13:329:A:H5'	1.84	0.60
26:14:433:C:C4	26:14:434:U:O4	2.54	0.60
1:13:457:C:O2	1:13:476:G:O2'	2.20	0.60
5:42:90:VAL:HG23	5:42:121:LYS:HB3	1.83	0.60
26:1H:547:A:H2'	26:1H:548:A:C8	2.37	0.60
1:13:1263:C:N3	1:13:1272:G:N1	2.33	0.60
40:65:31:SER:O	40:65:97:ARG:NH1	2.31	0.60
26:1H:2172:U:H5'	26:1H:2173:A:OP2	2.01	0.60
26:1H:2105:C:H2'	26:1H:2106:G:H8	1.65	0.60
26:14:387:U:H4'	26:14:388:G:O5'	2.00	0.60
1:13:64:G:H3'	1:13:65:U:H5'	1.84	0.60
44:A5:88:ARG:NH1	44:A5:94:ASP:OD2	2.35	0.60
26:1H:1971:A:C5	29:11:241:PRO:HD3	2.37	0.60
1:13:359:U:H2'	1:13:360:A:C8	2.37	0.60
9:8E:45:ALA:O	9:8E:78:LYS:NZ	2.35	0.60
28:71:49:ILE:HD13	28:71:56:GLN:O	2.01	0.60
35:15:10:GLU:HG2	35:15:11:PRO:HD2	1.84	0.60
29:19:246:PRO:HD2	29:19:255:LYS:CE	2.31	0.60
49:F5:92:LYS:O	49:F5:94:LEU:N	2.34	0.60
16:7I:74:LEU:HB3	16:7I:79:VAL:HG21	1.82	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:64:C:N4	27:1J:108:C:O2'	2.35	0.60
5:4E:43:LEU:HD13	5:4E:109:ILE:HD11	1.84	0.60
50:K8:4:SER:C	50:K8:7:ARG:HG2	2.21	0.60
33:51:87:LEU:HB2	33:51:131:VAL:HG12	1.83	0.60
1:1G:1343:G:H2'	1:1G:1344:C:C6	2.37	0.60
13:4A:57:ARG:O	13:4A:61:GLU:HB2	2.00	0.60
33:51:10:PRO:O	33:51:11:VAL:HG13	2.02	0.60
1:13:563:A:N7	1:13:567:G:H1'	2.17	0.60
26:14:1645:G:H5''	26:14:1646:C:H5'	1.83	0.60
2:1E:156:LYS:HE2	2:1E:156:LYS:N	2.17	0.60
1:1G:352:C:O2'	1:1G:354:G:OP1	2.18	0.60
29:19:246:PRO:CG	29:19:255:LYS:CE	2.79	0.60
32:49:106:LEU:HG	32:49:111:LEU:CB	2.32	0.60
37:78:50:ARG:HD3	55:Q8:7:HIS:CD2	2.35	0.60
2:12:146:GLN:O	2:12:150:SER:HB2	2.02	0.60
2:12:165:VAL:HG23	2:12:166:ASP:H	1.67	0.60
48:E5:23:VAL:HG12	48:E5:25:ARG:O	2.01	0.60
31:31:129:PHE:HB2	31:31:132:VAL:CG1	2.31	0.60
26:14:2768:C:H4'	35:15:89:LYS:HZ3	1.67	0.60
1:1G:371:G:H1	1:1G:390:C:H42	1.46	0.60
23:2L:50:G:H2'	23:2L:51:U:O4'	2.01	0.60
3:22:7:PRO:O	3:22:11:ARG:NH1	2.35	0.60
33:51:56:SER:OG	33:51:57:ASP:N	2.34	0.60
26:14:914:C:N3	26:14:915:C:H1'	2.17	0.60
29:11:39:LYS:HG3	29:11:40:THR:H	1.66	0.60
26:1H:961:C:OP2	61:1H:3547:HOH:O	2.16	0.60
1:13:1015:A:H2'	1:13:1016:A:C8	2.37	0.60
3:2E:64:VAL:HG12	3:2E:66:VAL:HG23	1.84	0.60
26:1H:455:C:N3	26:1H:472:A:H2'	2.16	0.60
13:4I:37:THR:O	13:4I:55:ARG:NH1	2.35	0.60
56:1L:67:C:N4	56:1L:68:G:O6	2.35	0.60
32:49:18:GLU:HG3	32:49:21:ARG:HH21	1.66	0.59
24:3K:57:G:H22	26:1H:2112:G:N2	2.00	0.59
27:1J:18:G:H1	27:1J:65:C:N4	1.94	0.59
27:1J:19:G:H2'	27:1J:20:C:O4'	2.01	0.59
13:4A:55:ARG:O	13:4A:59:TYR:N	2.34	0.59
14:5I:6:LEU:HB3	14:5I:23:ARG:NH2	2.17	0.59
1:1G:426:G:H2'	1:1G:427:U:C6	2.37	0.59
26:1H:2299:G:OP2	32:41:74:LYS:NZ	2.35	0.59
26:1H:1988:C:H2'	26:1H:1989:G:H8	1.67	0.59
26:1H:654(P):G:N7	26:1H:654(Q):C:N4	2.50	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:36:ALA:HA	46:C5:67:LEU:O	2.02	0.59
26:1H:430:G:H5''	26:1H:431:U:OP2	2.02	0.59
41:75:31:SER:OG	41:75:85:LYS:HE3	2.00	0.59
44:A5:20:VAL:HG23	44:A5:47:VAL:HG21	1.84	0.59
47:D5:19:ARG:HH11	47:D5:84:GLU:HB2	1.67	0.59
3:2E:16:ARG:HB2	3:2E:16:ARG:NH1	2.16	0.59
26:1H:298:G:N7	46:G8:84:ARG:CZ	2.66	0.59
26:14:2250:G:C2	38:45:82:ARG:HB3	2.37	0.59
9:82:71:SER:HA	9:82:74:ILE:HD12	1.84	0.59
31:39:122:LYS:HB3	31:39:191:ARG:HB2	1.83	0.59
8:72:29:SER:H	8:72:32:LYS:HB2	1.66	0.59
16:7A:39:TYR:HB2	16:7A:49:LEU:HD13	1.82	0.59
1:13:1372:U:OP1	9:8E:72:GLY:N	2.29	0.59
26:14:2467:C:H4'	38:45:123:HIS:CD2	2.36	0.59
26:1H:2287:A:C2	26:1H:2289:G:C8	2.91	0.59
1:1G:1084:G:O2'	1:1G:1103:C:N4	2.23	0.59
34:61:131:LYS:HB3	34:61:132:PRO:HA	1.84	0.59
26:1H:1525:G:H2'	26:1H:1526:G:C8	2.36	0.59
26:14:2232:U:P	49:F5:40:ARG:HH22	2.24	0.59
1:1G:1535:C:H41	25:4L:9:G:N2	1.99	0.59
7:62:65:ALA:HB3	7:62:124:LEU:HD23	1.85	0.59
26:14:854:G:H2'	26:14:855:G:H8	1.66	0.59
1:1G:376:G:H1	1:1G:387:U:H3	1.50	0.59
26:1H:705:A:C8	26:1H:727:A:C2	2.90	0.59
34:61:5:LEU:HD13	34:61:13:GLY:O	2.03	0.59
1:13:200:G:H1	1:13:217:C:H42	1.49	0.59
2:12:119:GLU:HG2	2:12:142:LEU:HD11	1.84	0.59
36:25:7:TYR:CE1	36:25:20:MET:HB2	2.36	0.59
26:1H:1161:C:H1'	43:D8:8:GLY:O	2.02	0.59
1:1G:826:C:O2	8:72:15:ASN:ND2	2.35	0.59
1:1G:1224:G:N1	1:1G:1322:C:O2'	2.34	0.59
36:68:88:ASN:HD21	36:68:90:GLN:HB2	1.67	0.59
10:1I:83:GLU:HA	10:1I:86:MET:CE	2.32	0.59
32:41:124:SER:HB2	32:41:131:TYR:CE2	2.37	0.59
5:42:121:LYS:NZ	5:42:122:GLU:O	2.35	0.59
26:1H:1038:C:H2'	26:1H:1039:G:O4'	2.03	0.59
26:14:830:G:H4'	26:14:831:G:OP2	2.01	0.59
26:14:161:U:H4'	26:14:171:G:N2	2.16	0.59
41:75:118:ARG:NH2	41:75:121:ILE:HG21	2.18	0.59
26:14:1218:C:N3	26:14:1231:G:N2	2.44	0.59
16:7I:43:LYS:HG2	16:7I:48:TRP:CE3	2.37	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
46:C5:42:VAL:HG13	46:C5:65:ALA:HB3	1.85	0.59
1:13:517:G:N1	1:13:533:A:OP2	2.36	0.59
26:14:2131:G:H5''	26:14:2133:G:C4'	2.32	0.59
26:1H:764:A:O4'	29:11:213:ARG:HG3	2.02	0.59
30:29:147:PRO:HB2	30:29:149:ARG:HG3	1.84	0.59
8:7E:82:HIS:CE1	8:7E:84:ARG:HB2	2.37	0.59
3:22:62:ASP:O	3:22:97:LYS:HB2	2.02	0.59
32:49:114:ILE:HG22	32:49:115:ARG:O	2.02	0.59
40:A8:27:SER:HA	40:A8:88:ASP:HB3	1.83	0.59
1:1G:997:U:H2'	1:1G:998:G:C8	2.38	0.59
1:1G:1294:G:H2'	1:1G:1295:G:C8	2.38	0.59
9:82:40:LEU:HB3	9:82:43:ALA:HB2	1.85	0.59
26:14:2136:C:N3	26:14:2137:C:N4	2.51	0.59
24:3K:58:A:O2'	24:3K:59:A:OP1	2.15	0.59
26:1H:1997:G:H5''	30:21:117:MET:HE2	1.84	0.59
5:4E:35:GLY:HA3	5:4E:112:LEU:O	2.02	0.59
1:1G:963:G:H21	10:1A:55:LYS:HE2	1.68	0.59
26:14:2467:C:H2'	26:14:2468:G:O4'	2.02	0.59
26:1H:1139:G:O2'	26:1H:1143:A:N1	2.26	0.59
1:13:1178:G:N2	1:13:1181:G:C8	2.70	0.59
26:1H:286:C:H2'	26:1H:287:C:C6	2.37	0.59
26:1H:2702:U:H5''	26:1H:2702:U:C6	2.37	0.59
34:69:69:LYS:HD2	34:69:70:GLU:HG3	1.84	0.59
8:72:110:ALA:HB3	8:72:121:ASP:HB3	1.82	0.59
15:6I:69:TYR:CE1	15:6I:73:GLU:HG3	2.37	0.59
26:1H:652:C:H2'	26:1H:653:A:H5'	1.84	0.59
26:1H:654(O):G:H8	26:1H:654(P):G:H1'	1.66	0.59
2:12:27:LYS:O	2:12:30:ARG:NH1	2.34	0.59
1:13:68:G:C2	1:13:69:G:C8	2.91	0.59
26:14:2563:U:H2'	26:14:2565:A:OP2	2.03	0.59
19:AI:23:ASN:HD21	19:AI:43:GLU:HB2	1.67	0.59
23:2L:77:A:N3	23:2L:77:A:H2'	2.17	0.59
29:19:267:SER:O	29:19:268:ARG:HG2	2.02	0.59
41:75:15:VAL:HG23	41:75:79:HIS:CE1	2.37	0.59
18:9I:38:GLU:OE1	18:9I:41:LYS:NZ	2.30	0.59
15:6I:10:LYS:HA	15:6I:10:LYS:HE2	1.83	0.59
26:14:1441:G:H2'	26:14:1442:G:H8	1.67	0.59
1:1G:991:U:O2	1:1G:993:G:H8	1.85	0.59
31:31:155:LEU:HD12	31:31:174:VAL:HG23	1.84	0.59
1:13:1053:G:N7	1:13:1199:U:H3'	2.17	0.59
2:12:91:PRO:HG3	2:12:154:LEU:HD12	1.84	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2016:U:O2	53:N8:7:PRO:HG2	2.02	0.59
47:H8:126:VAL:HG12	47:H8:163:LEU:HD23	1.83	0.59
26:1H:1510:A:N3	26:1H:1510:A:H2'	2.17	0.59
2:1E:43:ASP:HB3	2:1E:46:LYS:HD3	1.85	0.59
47:H8:61:LEU:O	47:H8:64:GLY:HA2	2.02	0.59
1:13:724:G:C2	1:13:725:G:C8	2.90	0.59
48:I8:72:ARG:O	48:I8:75:LEU:HB2	2.02	0.59
26:14:1835:G:OP2	61:14:3532:HOH:O	2.17	0.59
26:14:481:G:OP2	46:C5:47:LYS:HD3	2.02	0.59
26:1H:2584:U:H2'	26:1H:2585:U:H2'	1.85	0.59
41:75:61:PHE:CE1	41:75:76:PHE:HB2	2.37	0.59
26:14:120:U:C2	26:14:149:A:C6	2.91	0.59
1:13:1167:A:H2'	1:13:1169:A:C8	2.38	0.59
1:13:721:G:C6	1:13:733:A:C2	2.90	0.59
26:14:2651:C:N4	26:14:2669:G:H1	1.96	0.59
1:1G:1279:A:O2'	1:1G:1282:C:N4	2.35	0.59
9:8E:10:ARG:NE	9:8E:11:LYS:HG3	2.18	0.59
26:1H:51:G:H1'	26:1H:119:A:N1	2.17	0.59
45:F8:24:GLY:O	45:F8:83:VAL:HG22	2.02	0.59
40:65:30:ARG:HD3	40:65:98:VAL:HG13	1.83	0.59
26:14:2880:C:O2'	39:55:90:ARG:HD3	2.02	0.59
27:1J:7:G:C2'	40:65:38:GLN:HE22	2.16	0.59
55:Q8:21:LYS:HD3	55:Q8:49:VAL:HG11	1.84	0.59
26:1H:2164:C:OP2	26:1H:2166:G:N2	2.35	0.59
1:13:536:C:H2'	1:13:537:G:C8	2.38	0.59
3:22:44:GLU:HG3	3:22:52:LEU:HD21	1.83	0.59
1:13:200:G:N2	1:13:218:C:O2	2.35	0.59
9:8E:41:VAL:O	9:8E:43:ALA:N	2.35	0.59
30:29:89:ASP:O	30:29:90:THR:HG22	2.03	0.59
26:14:1935:G:H1'	26:14:1964:G:N2	2.17	0.59
1:1G:547:A:OP2	4:32:2:GLY:HA2	2.02	0.59
36:25:43:VAL:HG21	36:25:56:ASP:HB2	1.84	0.59
17:8I:48:GLU:O	17:8I:48:GLU:HG2	2.02	0.59
56:1L:18:G:O6	26:14:880:G:H1'	2.02	0.59
6:52:5:GLU:HG2	6:52:64:GLN:OE1	2.02	0.59
8:7E:20:TYR:HE2	8:7E:75:ARG:HD2	1.67	0.59
3:22:5:ILE:HG21	10:1A:51:ARG:NH2	2.17	0.59
1:1G:617:G:C2	1:1G:618:C:C5	2.91	0.59
50:K8:3:LEU:CB	50:K8:6:VAL:HG23	2.32	0.59
1:1G:1261:A:H5'	1:1G:1283:G:O3'	2.03	0.59
26:14:1288:U:H4'	26:14:1289:C:OP2	2.03	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:738:C:H2'	1:13:739:C:H6	1.67	0.59
1:1G:1450:U:OP1	1:1G:1451:A:N6	2.35	0.59
20:BA:39:LYS:HD2	20:BA:55:ILE:HD13	1.85	0.59
2:1E:87:ARG:NE	2:1E:232:PRO:HB3	2.17	0.59
1:1G:1411:C:H2'	1:1G:1412:C:C6	2.37	0.59
49:F5:40:ARG:HH21	49:F5:42:GLN:HG2	1.68	0.59
6:52:2:ARG:NH2	6:52:69:GLU:HG3	2.17	0.59
25:4K:23:A:H2'	25:4K:24:A:H4'	1.84	0.59
1:1G:947:G:O3'	13:4A:109:THR:OG1	2.20	0.59
26:1H:860:U:H5	26:1H:917:A:C2	2.20	0.59
1:1G:1387:G:H2'	1:1G:1388:C:H6	1.68	0.59
26:14:1542:G:O6	26:14:1543:A:N6	2.36	0.59
26:1H:1401:G:H2'	26:1H:1402:C:C6	2.38	0.59
26:14:1448:G:H1'	26:14:1528:A:H62	1.67	0.59
26:14:2259:G:N2	26:14:2282:G:C2	2.71	0.59
29:19:108:PRO:HG2	29:19:111:LEU:HB2	1.85	0.59
32:49:111:LEU:O	32:49:114:ILE:HG12	2.01	0.59
26:14:2346:A:C2	26:14:2383:G:C2	2.91	0.59
16:7I:8:ARG:HH12	16:7I:15:PRO:CA	2.15	0.59
16:7I:8:ARG:CZ	16:7I:15:PRO:HB3	2.32	0.59
24:3K:68:G:H2'	24:3K:69:A:C8	2.37	0.59
26:1H:1515:C:H2'	26:1H:1516:U:H6	1.68	0.59
26:1H:1568:G:P	29:11:63:ARG:HH12	2.25	0.59
4:3E:155:LEU:O	4:3E:158:ILE:N	2.36	0.59
26:14:2392:A:H2	26:14:2424:C:N4	1.98	0.59
38:45:75:THR:HB	38:45:86:GLY:HA3	1.84	0.59
26:14:2305:A:C4	32:49:136:ARG:HD3	2.37	0.59
26:14:1225:C:H4'	43:95:85:LYS:HG2	1.84	0.59
27:1J:83:G:H4'	51:H5:52:HIS:CG	2.38	0.59
26:1H:582:G:H2'	26:1H:583:G:C8	2.37	0.59
26:1H:6:A:H2	26:1H:7:G:C4	2.21	0.59
35:15:33:LEU:HD12	35:15:38:HIS:ND1	2.17	0.59
1:1G:1196:U:O4	5:42:24:ARG:NH1	2.36	0.59
33:51:24:VAL:HG13	33:51:35:VAL:HB	1.83	0.59
26:1H:412:A:H2'	26:1H:412:A:N3	2.17	0.59
26:1H:2666:C:H42	33:51:109:PHE:HA	1.67	0.59
41:75:77:PRO:HG2	41:75:80:SER:HB3	1.85	0.59
3:22:29:TYR:CZ	3:22:33:LEU:CD2	2.68	0.59
26:1H:252:G:OP2	37:78:50:ARG:NH1	2.36	0.59
27:1J:13:A:H2'	27:1J:70:C:O2'	2.03	0.59
32:49:145:THR:O	32:49:146:TYR:HB3	2.02	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1678:G:N2	26:14:1989:G:H22	2.00	0.59
10:1A:36:GLY:O	10:1A:38:ILE:HG13	2.02	0.59
2:12:127:ILE:HG23	2:12:135:GLN:HE22	1.67	0.59
20:BI:57:ARG:HH11	20:BI:102:GLY:HA2	1.68	0.59
42:C8:74:LEU:CD1	42:C8:75:ASN:O	2.51	0.59
26:1H:55:G:H2'	26:1H:56:A:C8	2.36	0.59
26:14:2639:A:C2	26:14:2778:A:C8	2.91	0.59
40:65:14:VAL:HG11	40:65:89:ARG:HD3	1.85	0.59
22:1K:34:U8U:S2	25:4K:21:A:H2	2.25	0.59
24:3K:13:C:H2'	24:3K:14:A:H8	1.67	0.59
20:BI:45:GLN:HB2	20:BI:91:LEU:HD13	1.85	0.59
49:F5:29:GLY:O	49:F5:30:VAL:HG22	2.01	0.59
1:1G:110:C:H2'	1:1G:111:G:O4'	2.01	0.59
27:16:91:C:OP1	38:88:19:GLY:HA2	2.01	0.59
26:14:404:C:OP2	61:14:3533:HOH:O	2.17	0.59
26:14:1165:U:H2'	26:14:1166:C:C6	2.37	0.59
49:J8:64:ALA:HA	49:J8:67:ILE:HG13	1.85	0.59
1:1G:1499:A:H1'	1:1G:1520:G:H5'	1.85	0.59
32:49:112:PRO:HA	32:49:117:PHE:CD2	2.38	0.59
26:14:1991:U:C2'	26:14:1992:G:H5''	2.33	0.59
28:71:44:HIS:O	28:71:212:VAL:HA	2.02	0.59
1:1G:1057:G:O6	1:1G:1203:C:N4	2.36	0.59
1:13:191(D):U:H2'	1:13:191(E):G:C8	2.37	0.59
29:11:26:LYS:HB3	29:11:29:PRO:HG3	1.83	0.59
1:13:346:G:H3'	1:13:346:G:N3	2.17	0.59
1:1G:1085:U:H5'	1:1G:1094:G:N2	2.18	0.59
26:1H:2146:C:H4'	26:1H:2147:G:C5	2.37	0.59
26:1H:654(O):G:H3'	26:1H:654(P):G:O4'	2.02	0.59
26:1H:858:U:O2	26:1H:2268:A:H2'	2.03	0.59
26:1H:1593:G:H2'	26:1H:1594:G:C8	2.38	0.59
1:1G:439:A:H3'	1:1G:440:A:H8	1.68	0.59
1:13:686:U:O4	1:13:703:G:H1'	2.03	0.59
1:1G:1321:C:H4'	13:4A:87:TYR:CE2	2.38	0.59
30:21:69:LYS:N	30:21:69:LYS:HD2	2.17	0.59
26:1H:723:G:H2'	26:1H:724:U:O4'	2.03	0.59
26:14:107:C:H2'	26:14:108:U:H6	1.68	0.59
26:1H:825:C:H2'	26:1H:826:U:H5'	1.84	0.59
31:39:18:ARG:NH2	31:39:19:GLU:O	2.36	0.59
26:1H:84:A:H3'	46:G8:8:LYS:HB2	1.84	0.59
13:4A:16:ASP:OD1	13:4A:16:ASP:N	2.36	0.59
26:14:1332:G:H5'	26:14:1332:G:C8	2.38	0.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:443:A:H1'	26:14:1201:C:O4'	2.02	0.59
39:55:106:GLY:O	39:55:107:ASP:HB3	2.03	0.59
26:1H:1129:A:N6	26:1H:2491:U:OP1	2.35	0.59
2:1E:19:HIS:HD2	2:1E:205:ASP:OD1	1.86	0.58
42:C8:92:ARG:NE	43:D8:11:GLN:H	2.00	0.58
42:C8:92:ARG:HB2	43:D8:11:GLN:NE2	2.18	0.58
30:29:31:CYS:SG	30:29:51:PHE:HB2	2.43	0.58
27:16:15:A:H1'	27:16:109:G:C4	2.38	0.58
1:1G:1319:A:H61	1:1G:1361:G:H21	1.50	0.58
26:1H:2134:A:H3'	26:1H:2135:A:C8	2.38	0.58
4:32:101:LEU:O	4:32:104:VAL:HG12	2.03	0.58
29:11:108:PRO:HG3	29:11:143:HIS:HE1	1.65	0.58
26:14:155:C:N3	26:14:171:G:N2	2.50	0.58
27:1J:27:C:C2'	27:1J:28:C:H5'	2.33	0.58
5:4E:148:VAL:HG21	8:7E:107:LEU:HD22	1.85	0.58
26:1H:1604:C:H5''	61:1H:4029:HOH:O	2.01	0.58
34:61:1:MET:O	34:61:20:ASP:HA	2.03	0.58
1:13:443:C:H42	1:13:491:G:H1	1.50	0.58
55:M5:14:VAL:HG11	55:M5:58:ILE:HD11	1.84	0.58
34:69:78:THR:O	34:69:80:PRO:HD3	2.03	0.58
3:2E:52:LEU:HA	3:2E:70:VAL:HG23	1.85	0.58
1:13:593:G:H1	1:13:646:U:H3	1.49	0.58
43:95:85:LYS:HD2	43:95:87:HIS:H	1.68	0.58
1:13:109:A:C8	1:13:326:G:H2'	2.38	0.58
33:51:109:PHE:HE1	33:51:152:ARG:NH2	2.01	0.58
40:A8:32:LEU:O	40:A8:62:LYS:NZ	2.36	0.58
32:49:56:ALA:HB2	32:49:153:ARG:HE	1.68	0.58
26:14:1686:C:H2'	26:14:1687:G:O4'	2.03	0.58
29:19:246:PRO:HG2	29:19:255:LYS:CE	2.27	0.58
26:1H:2378:A:O5'	26:1H:2378:A:H8	1.85	0.58
42:C8:92:ARG:HB2	43:D8:11:GLN:HE21	1.66	0.58
1:13:1121:U:H2'	1:13:1122:U:O4'	2.03	0.58
42:85:98:LEU:HA	42:85:100:VAL:O	2.02	0.58
26:1H:699:A:H2'	26:1H:700:G:O4'	2.03	0.58
32:41:179:PRO:HG3	52:M8:38:LYS:NZ	2.18	0.58
26:14:1019:U:OP1	26:14:1035:U:O2'	2.09	0.58
1:13:346:G:H8	41:B8:41:ARG:CZ	2.15	0.58
27:1J:2:C:H2'	27:1J:3:C:C5	2.38	0.58
34:61:58:LEU:O	34:61:62:LYS:N	2.35	0.58
41:75:11:GLU:N	41:75:11:GLU:OE1	2.36	0.58
26:14:2512:C:H5''	26:14:2513:G:OP2	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:303:U:H2'	26:14:304:G:H8	1.66	0.58
26:14:2489:G:N2	26:14:2491:U:O4	2.35	0.58
3:2E:16:ARG:HB2	3:2E:16:ARG:HH11	1.67	0.58
1:13:624:C:O3'	16:7I:10:GLY:HA2	2.02	0.58
40:A8:4:LEU:HD23	40:A8:8:GLU:HG3	1.85	0.58
23:2K:8:4SU:H6	23:2K:8:4SU:O5'	2.02	0.58
26:14:395:U:H2'	61:14:3782:HOH:O	2.02	0.58
26:14:395:U:H2'	26:14:396:G:N7	2.18	0.58
26:1H:1956:U:H2'	26:1H:1957:C:H5'	1.85	0.58
8:7E:36:LEU:HA	8:7E:39:LEU:HD23	1.85	0.58
26:14:2250:G:C6	38:45:82:ARG:HD2	2.38	0.58
29:19:28:GLU:O	29:19:28:GLU:CD	2.40	0.58
38:88:66:ILE:HD12	38:88:67:ARG:N	2.15	0.58
41:B8:12:SER:HG	41:B8:15:VAL:N	2.01	0.58
24:3K:65:C:H2'	24:3K:66:A:C8	2.38	0.58
1:13:1145:C:H4'	1:13:1146:A:C8	2.38	0.58
45:B5:1:MET:N	45:B5:2:LYS:HA	2.18	0.58
29:19:95:LEU:CD1	29:19:105:ILE:HD12	2.32	0.58
19:AI:5:LEU:HB3	19:AI:10:PHE:HE1	1.68	0.58
1:1G:1305:G:H22	1:1G:1331:G:C2'	2.16	0.58
57:3L:8:U:H1'	57:3L:48:C:C2	2.38	0.58
26:14:2542:A:H5''	26:14:2542:A:N3	2.18	0.58
26:1H:2126:A:N6	26:1H:2163:C:O2'	2.36	0.58
26:14:1796:U:H2'	26:14:1797:C:C6	2.38	0.58
29:19:12:SER:HB2	29:19:208:LYS:HB3	1.85	0.58
34:69:77:LEU:HD12	34:69:78:THR:H	1.67	0.58
26:14:2115:G:H1'	26:14:2171:A:H61	1.67	0.58
7:62:26:PHE:O	7:62:30:ILE:HG13	2.04	0.58
26:14:2299:G:H2'	26:14:2300:G:C8	2.38	0.58
26:14:1667:G:H5''	36:25:5:GLN:O	2.03	0.58
8:7E:43:GLY:O	8:7E:64:LYS:HD3	2.03	0.58
1:1G:575:G:O2'	61:1G:1704:HOH:O	2.11	0.58
26:1H:2122:U:O2'	28:7I:166:ASP:OD1	2.15	0.58
26:14:1403:C:OP1	26:14:1522:G:N2	2.24	0.58
1:1G:309:G:H8	1:1G:309:G:O5'	1.85	0.58
26:14:634:C:H2'	26:14:635:C:C6	2.37	0.58
30:29:54:GLN:HG3	30:29:55:ASN:H	1.68	0.58
26:14:801:G:N7	31:39:53:THR:HG23	2.19	0.58
26:14:1359:A:N7	26:14:1372:U:O4	2.35	0.58
29:11:37:LEU:HD23	29:11:37:LEU:H	1.63	0.58
1:13:178:C:H2'	1:13:179:A:O4'	2.03	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:538:G:O3'	12:3I:114:LYS:HE2	2.03	0.58
26:1H:1142(A):A:H4'	35:58:25:ARG:HH22	1.68	0.58
31:39:108:LYS:O	31:39:112:MET:HG3	2.03	0.58
26:14:2789:C:H1'	26:14:2892:A:H2	1.68	0.58
26:14:139:G:H22	26:14:1596:A:H4'	1.68	0.58
50:K8:47:ASN:C	50:K8:49:LYS:H	2.05	0.58
49:F5:40:ARG:NH2	49:F5:42:GLN:HE21	2.01	0.58
2:12:30:ARG:NH2	2:12:194:PRO:HB2	2.18	0.58
26:14:536:A:OP1	42:85:53:ARG:NH1	2.36	0.58
26:1H:2163:C:OP2	26:1H:2164:C:N4	2.35	0.58
26:14:89:G:H3'	26:14:90:U:C5'	2.34	0.58
1:13:1226:C:OP2	13:4I:103:THR:OG1	2.13	0.58
33:51:121:ILE:HG12	33:51:140:LYS:HD3	1.85	0.58
32:49:97:ASP:H	32:49:100:TRP:HD1	1.51	0.58
26:1H:2461:C:H2'	26:1H:2462:U:C6	2.38	0.58
26:1H:637:A:H2'	37:78:117:GLU:OE1	2.04	0.58
30:29:111:ARG:HD2	30:29:160:TYR:CD2	2.38	0.58
26:14:1461:G:H2'	26:14:1462:C:C6	2.38	0.58
5:42:41:VAL:O	5:42:67:VAL:N	2.37	0.58
26:14:130:C:O3'	26:14:1349:A:H1'	2.04	0.58
42:C8:106:PHE:HA	42:C8:109:LEU:HD12	1.84	0.58
26:1H:2165:G:H8	26:1H:2165:G:OP2	1.87	0.58
1:1G:1521:G:H2'	1:1G:1522:U:C6	2.39	0.58
1:1G:801:U:H2'	1:1G:802:A:H8	1.67	0.58
2:12:73:THR:O	2:12:78:GLN:NE2	2.36	0.58
37:78:19:VAL:HB	37:78:20:GLY:HA3	1.86	0.58
26:14:1418:G:H2'	26:14:1579:A:N6	2.18	0.58
1:1G:18:C:H6	1:1G:18:C:O5'	1.86	0.58
26:1H:774:A:H2	26:1H:787:U:HO2'	1.50	0.58
46:C5:20:TYR:CE2	46:C5:42:VAL:HA	2.37	0.58
38:88:5:ARG:HH21	38:88:6:ARG:HD3	1.69	0.58
39:98:100:LEU:CD1	39:98:113:LEU:HD13	2.33	0.58
26:14:673:C:H4'	31:39:82:ILE:HD11	1.85	0.58
35:15:14:VAL:HA	35:15:135:PRO:HD2	1.84	0.58
29:19:126:GLN:O	29:19:193:VAL:HG13	2.03	0.58
1:13:1106:G:H5''	3:2E:172:ARG:HG2	1.84	0.58
26:14:1292:U:H2'	26:14:1293:C:C6	2.39	0.58
38:45:25:ASP:HB3	38:45:102:VAL:N	2.05	0.58
26:1H:818:G:H4'	26:1H:838:C:O3'	2.04	0.58
1:1G:9:G:OP1	5:42:122:GLU:HB2	2.03	0.58
26:1H:1166:C:H2'	26:1H:1167:U:C6	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2470:G:H5'	38:88:56:ARG:HH21	1.69	0.58
26:14:1754:C:P	41:75:96:ARG:HH11	2.21	0.58
26:1H:354:G:H2'	26:1H:355:G:H8	1.68	0.58
29:11:30:GLU:HG3	29:11:63:ARG:NH2	2.19	0.58
37:78:19:VAL:HB	37:78:20:GLY:CA	2.33	0.58
3:22:147:LYS:HB2	3:22:203:PHE:HD1	1.69	0.58
2:1E:71:VAL:HG12	2:1E:93:VAL:HB	1.84	0.58
44:A5:72:LYS:HB3	44:A5:106:ILE:HG13	1.85	0.58
12:3A:60:LEU:HB2	12:3A:64:TYR:CB	2.33	0.58
1:1G:1365:G:H2'	1:1G:1366:C:C6	2.39	0.58
15:6A:87:ILE:HG22	15:6A:88:ARG:HB2	1.86	0.58
46:G8:94:LYS:HZ2	46:G8:95:LYS:H	1.52	0.58
7:62:116:ALA:HA	7:62:119:ARG:HE	1.69	0.58
26:1H:1517:G:H5''	26:1H:1518:C:OP2	2.03	0.58
26:14:1592:C:H2'	26:14:1593:G:H8	1.65	0.58
27:16:12:C:H6	27:16:12:C:OP2	1.85	0.58
26:1H:2636:U:H2'	26:1H:2637:U:C6	2.38	0.58
1:13:429:U:H1'	1:13:430:A:H5''	1.85	0.58
1:13:57:G:H2'	1:13:58:C:C6	2.39	0.58
1:1G:735:C:H2'	1:1G:736:C:H6	1.68	0.58
4:3E:173:TRP:CD1	4:3E:174:LEU:HG	2.39	0.58
8:72:68:ARG:CZ	8:72:74:PRO:HB3	2.33	0.58
29:11:119:ALA:CB	29:11:130:ALA:HB3	2.32	0.58
26:14:2461:C:H2'	26:14:2462:U:C6	2.39	0.58
26:14:2324:C:H5''	26:14:2325:G:H5'	1.85	0.58
26:14:1434:A:H2'	26:14:1435:G:C8	2.38	0.58
26:1H:2688:U:H5	26:1H:2720:U:OP2	1.87	0.58
26:14:2641:G:P	35:15:74:ARG:HH21	2.26	0.58
54:P8:35:ARG:NH1	54:P8:42:LEU:HD11	2.18	0.58
18:9A:38:GLU:OE2	18:9A:38:GLU:N	2.37	0.58
39:98:54:LEU:HB3	39:98:62:ALA:HB1	1.84	0.58
1:13:1464:G:H2'	1:13:1465:C:H6	1.69	0.58
12:3A:8:ASN:O	12:3A:12:ARG:HG3	2.04	0.58
26:1H:388:G:O3'	49:J8:25:LYS:CE	2.52	0.58
52:M8:6:HIS:HD1	52:M8:7:PRO:HD2	1.69	0.58
5:42:81:GLU:HA	5:42:90:VAL:HG12	1.86	0.58
50:K8:5:GLU:O	50:K8:8:LYS:N	2.37	0.58
9:8E:71:SER:HA	9:8E:74:ILE:HD12	1.86	0.58
26:1H:2359:C:C5'	55:Q8:52:LYS:HD2	2.33	0.58
50:G5:47:ASN:C	50:G5:49:LYS:H	2.03	0.58
26:1H:2327:A:H2'	26:1H:2328:A:H8	1.66	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:D8:38:LEU:O	43:D8:39:LEU:HD23	2.04	0.58
3:2E:59:ARG:HA	3:2E:63:ASN:O	2.04	0.58
26:14:943:U:OP2	37:35:36:LYS:HG3	2.03	0.58
39:55:87:TYR:HD1	39:55:90:ARG:HE	1.52	0.58
1:1G:730:G:C5	1:1G:731:G:H1'	2.38	0.58
8:7E:82:HIS:NE2	8:7E:136:GLU:OE2	2.35	0.58
8:7E:45:ILE:HD12	8:7E:47:GLY:HA2	1.86	0.58
1:1G:801:U:H2'	1:1G:802:A:C8	2.39	0.58
6:5E:50:TYR:OH	18:9I:74:ARG:O	2.12	0.58
1:13:659:U:H2'	1:13:660:G:C8	2.39	0.58
26:1H:556:G:H2'	26:1H:557:U:C6	2.39	0.58
29:11:70:TRP:CE2	29:11:150:LYS:HD3	2.39	0.58
26:1H:957:A:N1	26:1H:2458:G:H4'	2.18	0.58
26:14:2096:U:H3	26:14:2193:G:H1	1.52	0.58
26:1H:2275:C:O2'	38:88:85:LYS:HA	2.03	0.58
8:7E:44:PHE:HE2	8:7E:109:ILE:HG12	1.68	0.58
26:14:2158:A:O2'	26:14:2159:G:O4'	2.19	0.58
26:14:660:G:H21	37:35:12:ALA:CB	2.16	0.58
26:1H:662:G:C4'	37:78:15:ARG:HA	2.32	0.58
43:95:37:VAL:CG2	43:95:57:VAL:H	2.17	0.58
34:69:124:GLY:H	34:69:142:VAL:CG2	2.17	0.58
17:8A:87:LYS:C	17:8A:91:ARG:HD2	2.24	0.58
37:78:28:GLY:O	37:78:31:ALA:N	2.26	0.58
26:14:2789:C:O3'	26:14:2790:A:H4'	2.04	0.58
27:1J:49:C:OP2	40:65:30:ARG:NH1	2.36	0.58
26:1H:234:C:H2'	26:1H:235:U:C6	2.37	0.58
2:12:124:SER:O	2:12:126:GLU:N	2.34	0.58
20:BI:53:LEU:HA	20:BI:56:MET:HB3	1.85	0.58
20:BI:49:ALA:HB1	20:BI:99:LEU:HB2	1.86	0.58
15:6A:10:LYS:HA	15:6A:13:GLN:OE1	2.04	0.58
26:14:1340:U:H4'	26:14:1394:U:O2'	2.04	0.58
1:13:67:C:H1'	1:13:171:A:C2	2.39	0.58
1:13:1243:C:O2	1:13:1295:G:N2	2.37	0.58
34:69:5:LEU:HD21	34:69:19:VAL:HG12	1.86	0.58
26:1H:644:A:H4'	26:1H:645:C:C5	2.38	0.58
28:71:59:ARG:HA	28:71:163:PHE:O	2.03	0.58
26:14:550:G:O2'	26:14:1220:A:N3	2.34	0.58
6:5E:97:PHE:O	18:9I:31:LEU:HD23	2.04	0.58
36:25:89:ASN:OD1	36:25:89:ASN:N	2.37	0.58
38:45:21:THR:HG21	38:45:101:ARG:HD2	1.85	0.58
52:M8:43:TYR:CD2	52:M8:44:THR:HG23	2.38	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:69:130:TYR:O	34:69:131:LYS:HD2	2.03	0.58
8:72:23:SER:OG	8:72:60:ARG:HG2	2.04	0.58
26:14:2789:C:O2	26:14:2894:G:N2	2.37	0.58
26:1H:126:A:O5'	54:P8:19:ARG:HG3	2.04	0.58
26:1H:1675:C:N4	26:1H:1993:U:O4'	2.37	0.58
26:14:2577:A:O4'	53:J5:3:LYS:HB2	2.04	0.58
20:BA:64:ASP:OD1	20:BA:81:LYS:HD2	2.03	0.58
1:1G:735:C:H2'	1:1G:736:C:C6	2.38	0.58
26:14:853:G:H2'	26:14:854:G:C8	2.39	0.58
7:6E:62:PHE:HD1	7:6E:124:LEU:HD11	1.69	0.58
26:1H:2068:U:N3	26:1H:2430:A:C2	2.72	0.58
3:2E:57:ILE:HG12	3:2E:66:VAL:HG22	1.85	0.58
32:41:101:ILE:HD13	52:M8:9:LEU:HD11	1.86	0.58
1:1G:1251:A:H2'	1:1G:1252:A:C8	2.38	0.58
26:14:1430:C:H2'	26:14:1431:U:C6	2.39	0.58
35:15:56:ASN:H	35:15:125:GLY:HA3	1.68	0.58
26:14:2143:C:H2'	26:14:2144:U:H4'	1.85	0.58
26:1H:190:A:OP2	49:J8:39:LYS:HE3	2.03	0.58
26:14:2795:G:N3	26:14:2795:G:H2'	2.18	0.58
3:2E:38:ARG:HD3	3:2E:94:LEU:HD11	1.86	0.58
17:8I:14:LYS:HD2	17:8I:14:LYS:N	2.19	0.58
23:2K:47:G7M:O2'	23:2K:48:U:O5'	2.22	0.58
30:29:51:PHE:O	30:29:74:PRO:HB2	2.04	0.57
26:1H:1166:C:H2'	26:1H:1167:U:H6	1.69	0.57
1:1G:1095:U:OP1	1:1G:1108:G:N1	2.35	0.57
1:1G:1207:G:H2'	1:1G:1208:C:H6	1.68	0.57
9:8E:42:ARG:NH1	9:8E:71:SER:OG	2.34	0.57
1:1G:522:C:H2'	1:1G:523:A:O4'	2.04	0.57
17:8A:22:LEU:HD13	17:8A:41:LYS:HG2	1.86	0.57
31:39:28:ILE:HA	31:39:112:MET:HB3	1.86	0.57
17:8I:64:PRO:HB3	17:8I:70:ARG:NH1	2.19	0.57
26:1H:443:A:C5	31:31:45:ARG:HD2	2.39	0.57
1:13:277:C:H2'	1:13:278:G:H8	1.68	0.57
4:3E:122:ARG:HH12	4:3E:135:LEU:HD13	1.68	0.57
1:1G:930:C:H42	1:1G:1387:G:H1	1.52	0.57
39:98:2:ARG:O	39:98:5:LYS:HG2	2.04	0.57
26:1H:433:C:H2'	26:1H:434:U:C6	2.39	0.57
29:19:85:ASP:HB2	29:19:92:ILE:CD1	2.34	0.57
1:1G:634:C:H2'	1:1G:635:G:H8	1.69	0.57
8:7E:23:SER:HA	8:7E:61:VAL:O	2.04	0.57
1:1G:595:G:H1'	1:1G:596:C:H5	1.68	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:BA:72:LEU:O	20:BA:73:HIS:HB2	2.03	0.57
6:5E:52:ILE:O	6:5E:55:ASP:HB2	2.04	0.57
26:1H:631:A:H5''	26:1H:632:A:OP2	2.04	0.57
4:3E:150:GLU:HA	4:3E:153:ARG:HG3	1.86	0.57
34:61:129:THR:HA	34:61:137:PRO:HA	1.86	0.57
32:41:67:LYS:HD2	52:M8:6:HIS:CG	2.38	0.57
2:12:164:VAL:HB	2:12:186:ALA:HB2	1.87	0.57
1:13:451:A:N6	1:13:480:U:H2'	2.19	0.57
2:1E:160:ASP:O	2:1E:183:PRO:HD2	2.04	0.57
47:D5:23:LYS:HD3	47:D5:40:ASP:HA	1.86	0.57
1:13:1348:U:H4'	9:8E:120:ARG:HG3	1.85	0.57
1:1G:1179:A:H5''	9:82:97:LYS:HE3	1.86	0.57
5:42:18:ARG:HH21	5:42:25:ARG:HD3	1.68	0.57
26:14:2748:A:H2'	26:14:2749:A:H8	1.69	0.57
13:4A:78:ILE:HG23	13:4A:92:HIS:ND1	2.19	0.57
26:1H:1174:A:C8	26:1H:1176:G:H1'	2.38	0.57
41:B8:41:ARG:HH11	41:B8:41:ARG:HB2	1.69	0.57
26:1H:1639:U:H5''	61:1H:3699:HOH:O	2.03	0.57
26:1H:2146:C:H4'	26:1H:2147:G:N7	2.19	0.57
32:49:75:LYS:HA	32:49:84:LYS:HG3	1.86	0.57
41:B8:97:ALA:HB1	41:B8:98:LYS:HE2	1.85	0.57
4:32:127:THR:HG23	4:32:147:ALA:HB3	1.84	0.57
50:K8:51:ARG:NH1	50:K8:55:ARG:HH12	2.02	0.57
2:12:145:LEU:O	2:12:149:LEU:HB2	2.04	0.57
23:2K:54:G:O2'	23:2K:55:5MU:H5''	2.03	0.57
23:2K:29:C:H2'	23:2K:30:G:C8	2.38	0.57
1:13:779:C:H2'	1:13:780:A:O4'	2.05	0.57
15:6A:17:ARG:HH11	15:6A:77:ARG:NH1	2.01	0.57
26:14:1386:C:H2'	26:14:1387:C:C6	2.39	0.57
35:15:7:LYS:O	35:15:9:VAL:HG13	2.04	0.57
6:52:22:GLU:OE1	6:52:84:ASN:ND2	2.38	0.57
1:13:237:C:H5''	17:8I:25:ARG:CZ	2.33	0.57
11:2I:59:TYR:CZ	11:2I:63:LEU:HD11	2.39	0.57
4:3E:79:PHE:CE2	4:3E:204:ILE:HA	2.39	0.57
26:1H:773:U:H4'	29:11:47:GLY:HA3	1.87	0.57
39:55:45:ARG:HA	39:55:95:THR:HG21	1.84	0.57
38:88:59:ARG:C	38:88:61:GLY:H	2.08	0.57
1:13:453:A:OP2	1:13:478:A:N6	2.37	0.57
42:C8:50:ARG:HG2	42:C8:53:ARG:NH2	2.18	0.57
1:13:1423:G:P	36:68:49:ARG:HH22	2.27	0.57
26:1H:2153:G:H2'	26:1H:2154:G:O4'	2.04	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:45:21:THR:HG22	38:45:23:GLY:HA3	1.85	0.57
26:1H:2188:C:N4	26:1H:2189:U:O2	2.37	0.57
33:59:54:ARG:NH2	33:59:57:ASP:OD1	2.36	0.57
1:13:1131:G:H2'	1:13:1132:C:C6	2.39	0.57
26:1H:1444:G:C2	26:1H:1548:C:N3	2.72	0.57
26:14:1021:A:H62	26:14:1141:U:H3	1.51	0.57
1:13:343:U:H2'	1:13:344:A:H5''	1.85	0.57
31:39:130:ALA:H	31:39:142:TRP:HD1	1.51	0.57
22:1K:14:A:N6	22:1K:22:G:N3	2.53	0.57
29:19:72:LYS:NZ	29:19:99:ASP:OD2	2.29	0.57
1:1G:403:C:H42	1:1G:547:A:H5'	1.68	0.57
14:5I:26:ARG:NH1	14:5I:43:CYS:SG	2.77	0.57
1:13:625:G:H4'	16:7I:16:HIS:HB2	1.86	0.57
32:41:97:ASP:O	32:41:100:TRP:N	2.36	0.57
26:14:589:C:O3'	31:39:95:ARG:NH1	2.37	0.57
2:12:175:ARG:O	2:12:179:LYS:HB2	2.04	0.57
41:B8:20:PRO:HD2	41:B8:86:ILE:HG23	1.85	0.57
26:14:616:A:C4	31:39:180:GLY:HA2	2.39	0.57
26:1H:2361:A:OP1	55:Q8:27:THR:HG23	2.05	0.57
1:1G:1059:C:O2	10:1A:53:PRO:HG3	2.04	0.57
1:1G:620:C:H2'	1:1G:621:A:O4'	2.04	0.57
29:19:44:ASN:HB3	29:19:47:GLY:H	1.69	0.57
10:1I:8:LEU:HD12	10:1I:20:ALA:HB2	1.85	0.57
26:1H:1021:A:C3'	26:1H:1021:A:C8	2.85	0.57
26:1H:1439:A:C2	26:1H:1553:A:C4	2.93	0.57
26:14:867:C:H5''	26:14:868:U:OP2	2.04	0.57
2:1E:16:HIS:NE2	2:1E:210:SER:O	2.37	0.57
32:49:55:LYS:O	32:49:59:GLU:HB2	2.04	0.57
8:7E:64:LYS:HG2	8:7E:79:VAL:HG21	1.87	0.57
26:14:641:C:H5''	26:14:642:G:OP2	2.05	0.57
26:14:1688:U:O2	26:14:1700:A:H5'	2.04	0.57
37:35:136:GLU:O	37:35:138:LEU:N	2.36	0.57
26:1H:2291:U:H2'	26:1H:2292:C:C6	2.39	0.57
1:1G:1124:G:H2'	1:1G:1145:C:C4	2.40	0.57
7:62:41:ARG:O	7:62:45:ASP:HB2	2.04	0.57
1:13:272:C:H2'	1:13:273:A:C8	2.39	0.57
8:7E:34:GLU:OE1	8:7E:37:ARG:NH1	2.37	0.57
33:59:148:ILE:HD12	33:59:148:ILE:H	1.68	0.57
15:6I:25:THR:HG22	15:6I:70:LEU:HD22	1.86	0.57
27:16:15:A:H1'	27:16:109:G:C5	2.40	0.57
27:1J:23:G:N2	27:1J:60:C:O2	2.34	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:35:63:PRO:HG2	55:M5:25:MET:HB3	1.86	0.57
26:14:918:A:C8	26:14:919:G:C8	2.92	0.57
26:1H:1291:C:H2'	26:1H:1292:U:C6	2.39	0.57
47:D5:52:SER:O	47:D5:54:HIS:N	2.38	0.57
19:AA:15:LEU:O	19:AA:18:LYS:HG2	2.03	0.57
11:2I:85:ARG:HD3	11:2I:113:PRO:HD3	1.85	0.57
1:13:1127:G:H1'	1:13:1148:U:H3	1.68	0.57
1:13:1118:C:H1'	1:13:1179:A:C4	2.38	0.57
1:1G:1325:C:OP2	21:1B:15:ARG:NH2	2.29	0.57
26:14:2607:G:H2'	26:14:2608:G:O4'	2.03	0.57
11:2I:90:GLY:O	11:2I:94:ALA:N	2.28	0.57
26:14:815:C:O2	26:14:1193:G:C2	2.57	0.57
1:1G:1459:C:OP1	20:BA:31:SER:OG	2.15	0.57
26:14:1564:C:O2'	26:14:1565:C:H5'	2.04	0.57
3:22:58:GLU:HB2	3:22:65:ALA:HB3	1.86	0.57
26:14:205:G:O2'	26:14:206:U:OP2	2.23	0.57
1:1G:209:U:O2'	1:1G:210:U:H5''	2.05	0.57
26:1H:195:A:H4'	26:1H:251:A:O2'	2.03	0.57
38:45:25:ASP:CB	38:45:102:VAL:H	2.07	0.57
1:1G:353:A:H5'	1:1G:353:A:C8	2.32	0.57
50:K8:5:GLU:OE2	50:K8:5:GLU:C	2.43	0.57
31:31:126:VAL:O	31:31:196:LEU:HD23	2.05	0.57
1:1G:1200:C:H1'	1:1G:1204:A:N6	2.14	0.57
28:71:181:PRO:HD2	28:71:184:LYS:HB3	1.85	0.57
1:13:1455:G:H8	1:13:1455:G:O5'	1.88	0.57
26:14:1591:G:H2'	26:14:1592:C:O4'	2.04	0.57
26:1H:2702:U:H5''	26:1H:2702:U:H6	1.70	0.57
26:1H:1298:C:H5''	26:1H:1299:G:OP2	2.05	0.57
26:14:910:A:H62	38:45:12:GLN:HA	1.69	0.57
26:1H:1678:G:O5'	26:1H:1678:G:C8	2.55	0.57
1:13:1023:G:H3'	1:13:1024:G:H5''	1.85	0.57
38:88:20:ALA:HB2	38:88:99:PRO:HD2	1.87	0.57
26:1H:1221:C:H2'	26:1H:1222:C:C6	2.40	0.57
26:14:749:C:H5''	61:14:3842:HOH:O	2.04	0.57
6:52:15:ASP:OD1	6:52:17:SER:N	2.38	0.57
2:1E:120:ALA:O	2:1E:124:SER:OG	2.17	0.57
3:2E:72:LYS:HD3	3:2E:75:VAL:HG21	1.87	0.57
34:69:41:GLU:HA	34:69:44:LEU:HB2	1.86	0.57
26:1H:1820:U:O2	29:11:202:LYS:HB3	2.05	0.57
31:39:122:LYS:O	31:39:123:LEU:HG	2.04	0.57
31:39:152:GLU:OE2	31:39:191:ARG:NH1	2.38	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:3L:19:G:N1	26:14:2111:C:O2'	2.36	0.57
5:42:103:GLY:O	5:42:106:PRO:HD2	2.04	0.57
26:1H:2864:G:H2'	26:1H:2865:U:H6	1.68	0.57
1:1G:1192:C:P	3:22:4:LYS:HZ2	2.28	0.57
9:82:85:LEU:HD11	9:82:96:LEU:HD21	1.86	0.57
26:1H:2102:U:H2'	26:1H:2103:C:C6	2.40	0.57
27:1J:104:A:H2'	27:1J:105:G:O4'	2.03	0.57
26:14:838:C:O2'	26:14:839:U:H5'	2.05	0.57
37:78:16:ARG:HE	37:78:16:ARG:HA	1.70	0.57
26:14:2121:G:H22	26:14:2178:C:H1'	1.68	0.57
26:14:600:G:O3'	31:39:108:LYS:NZ	2.38	0.57
1:1G:452:A:H62	1:1G:480:U:H3	1.51	0.57
1:13:937:A:N6	1:13:1345:U:O4	2.35	0.57
1:1G:1504:G:H4'	1:1G:1505:G:O4'	2.05	0.57
26:1H:2109:U:H1'	26:1H:2181:G:N2	2.19	0.57
41:B8:27:THR:HG22	41:B8:48:ILE:HG12	1.87	0.57
2:12:116:GLU:HG2	2:12:153:ARG:NH1	2.19	0.57
1:13:886:G:OP2	61:13:1811:HOH:O	2.18	0.57
4:3E:108:LEU:HD21	4:3E:183:GLY:HA3	1.85	0.57
26:1H:1210:A:H5'	26:1H:1210:A:H8	1.69	0.57
26:14:2356:C:H4'	48:E5:20:ARG:HG3	1.85	0.57
36:68:120:GLU:HG2	36:68:122:LEU:HG	1.87	0.57
26:14:2280:G:O2'	26:14:2388:A:N1	2.30	0.57
26:1H:701:G:C2'	26:1H:702:G:H5'	2.35	0.57
30:21:116:VAL:O	30:21:117:MET:HB3	2.04	0.57
26:1H:2470:G:H8	26:1H:2470:G:O5'	1.87	0.57
29:11:37:LEU:CD2	29:11:37:LEU:H	2.17	0.57
1:1G:1315:U:H2'	1:1G:1316:G:H5'	1.87	0.57
26:1H:2533:A:OP1	26:1H:2665:A:H1'	2.05	0.57
20:BI:30:LYS:HE2	20:BI:80:ARG:HH22	1.69	0.57
26:14:1024:G:C3'	26:14:1025:G:H5''	2.34	0.57
33:59:7:LEU:HA	33:59:65:HIS:NE2	2.19	0.57
1:13:1127:G:H2'	1:13:1128:C:C2	2.40	0.57
15:6I:56:LEU:HA	15:6I:59:MET:HE2	1.85	0.57
8:72:120:THR:N	8:72:123:GLU:OE1	2.38	0.57
1:1G:1106:G:H2'	1:1G:1107:C:C6	2.40	0.57
45:F8:25:LYS:HG3	45:F8:82:GLN:OE1	2.04	0.57
39:98:67:LEU:CD2	39:98:76:VAL:HG21	2.34	0.57
26:1H:1486:A:H2'	26:1H:1487:G:C8	2.37	0.57
22:1K:27:G:N2	22:1K:43:U:H3	2.02	0.57
1:1G:713:G:H2'	1:1G:714:G:C8	2.39	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:558:G:H2'	1:13:559:A:H2	1.70	0.57
1:13:983:A:H1'	1:13:1049:U:O2	2.03	0.57
26:14:2118:U:O2	26:14:2148:G:O2'	2.21	0.57
26:14:2425:A:H4'	26:14:2426:A:H5''	1.85	0.57
26:1H:1971:A:C4	29:11:241:PRO:HD3	2.40	0.57
26:1H:2462:U:H1'	26:1H:2491:U:O4	2.05	0.57
1:1G:272:C:H2'	1:1G:273:A:H8	1.69	0.57
26:14:2556:C:H2'	26:14:2557:G:O4'	2.04	0.57
32:41:41:GLN:HG2	32:41:155:MET:HB3	1.86	0.57
2:12:188:ALA:O	2:12:203:GLY:N	2.37	0.57
3:22:123:GLN:HA	3:22:126:ARG:HB3	1.87	0.57
32:41:102:PHE:HA	32:41:105:LYS:HE2	1.87	0.57
41:75:112:ARG:HD2	41:75:113:LYS:HD2	1.87	0.57
1:1G:192:U:C4'	20:BA:103:GLY:HA2	2.34	0.57
26:1H:533:G:H5'	42:C8:24:TYR:CE1	2.39	0.57
30:29:11:MET:HE3	30:29:186:GLY:HA2	1.87	0.57
32:41:76:SER:OG	32:41:84:LYS:N	2.37	0.57
4:3E:112:VAL:HG12	4:3E:116:GLN:OE1	2.04	0.57
36:25:9:GLU:O	36:25:83:ALA:HA	2.04	0.57
26:1H:2257:U:O2'	26:1H:2258:C:H5'	2.04	0.57
1:1G:709:G:H2'	1:1G:710:G:H8	1.69	0.57
26:1H:1187:G:OP2	61:1H:3549:HOH:O	2.18	0.57
26:14:2138:C:N4	26:14:2153:G:O6	2.38	0.57
7:62:115:ARG:O	7:62:118:VAL:HG22	2.05	0.57
49:J8:93:GLU:OE2	49:J8:94:LEU:CG	2.52	0.57
1:1G:1203:C:H2'	1:1G:1204:A:C8	2.40	0.57
26:14:1019:U:H2'	26:14:1020:A:H8	1.68	0.57
26:1H:1439:A:C2	26:1H:1553:A:C5	2.93	0.57
26:14:607:U:H3	26:14:621:A:H2	1.53	0.57
34:69:120:ILE:HG22	34:69:122:GLU:H	1.69	0.57
1:13:5:U:H3	4:3E:87:GLY:HA2	1.70	0.57
26:14:2387:U:H1'	48:E5:41:ARG:NE	2.20	0.57
26:1H:1533:C:O2	26:1H:1539:G:N2	2.38	0.57
1:1G:1162:C:N4	1:1G:1174:G:H1	2.02	0.57
57:3L:8:U:H3	57:3L:14:A:N6	2.03	0.57
1:13:323:U:H2'	1:13:324:G:O4'	2.05	0.57
27:1J:94:C:H2'	27:1J:95:U:C6	2.40	0.57
2:1E:18:GLY:H	2:1E:42:ILE:HG22	1.70	0.57
47:H8:7:ALA:HB2	47:H8:59:LEU:HD22	1.86	0.57
1:13:674:G:H2'	1:13:675:A:C8	2.39	0.57
40:A8:78:LEU:HD12	40:A8:108:GLY:HA3	1.85	0.57

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:3A:89:ARG:NH1	12:3A:91:LYS:HA	2.20	0.57
26:14:698:C:OP1	26:14:1634:A:N6	2.37	0.57
14:5A:7:ILE:H	14:5A:7:ILE:HD12	1.70	0.57
1:1G:684:A:C6	1:1G:685:G:C6	2.93	0.57
26:1H:2712:U:H1'	26:1H:2712(A):A:N7	2.19	0.57
26:1H:2592:G:C2'	26:1H:2593:U:H5'	2.35	0.57
1:1G:1329:A:H2'	1:1G:1330:U:O4'	2.05	0.57
29:19:44:ASN:CB	29:19:47:GLY:H	2.18	0.57
49:F5:78:LYS:O	49:F5:80:LEU:HD22	2.05	0.57
24:3K:53:G:H1	24:3K:61:C:H42	1.53	0.57
23:2L:8:4SU:C2	23:2L:14:A:H62	2.18	0.57
24:3K:68:G:H2'	24:3K:69:A:H8	1.70	0.57
8:72:97:VAL:HA	8:72:100:ILE:HD11	1.85	0.57
26:14:943:U:OP2	37:35:36:LYS:CD	2.53	0.57
37:78:115:LEU:HA	37:78:134:ALA:CB	2.34	0.57
17:8I:43:LEU:HD12	17:8I:68:ARG:HG2	1.87	0.57
1:1G:731:G:OP1	1:1G:766:A:H1'	2.05	0.57
26:1H:1915:U:H2'	26:1H:1916:A:O4'	2.05	0.57
26:1H:74:A:H8	26:1H:74:A:H5''	1.69	0.57
36:68:112:MET:HG3	36:68:113:LYS:N	2.20	0.57
26:14:923:C:H2'	26:14:924:C:C6	2.39	0.57
33:59:149:ARG:NH1	33:59:163:TYR:HB3	2.20	0.57
1:13:1171:G:O2'	1:13:1172:C:H5'	2.04	0.57
26:1H:504:U:H2'	26:1H:504:U:O2	2.05	0.57
1:13:76:G:O4'	1:13:95:G:N1	2.37	0.57
1:1G:689:C:H3'	1:1G:690:G:H21	1.70	0.57
23:2K:20:G:C2	23:2K:58:A:N3	2.73	0.57
1:13:1429:C:H2'	1:13:1430:C:H6	1.70	0.57
26:1H:736:C:O5'	26:1H:736:C:H6	1.87	0.57
13:4I:35:GLU:O	13:4I:38:GLY:N	2.34	0.57
42:C8:92:ARG:CB	43:D8:11:GLN:NE2	2.68	0.56
26:14:2688:U:H1'	26:14:2721:A:H62	1.69	0.56
7:62:49:ILE:HD13	7:62:118:VAL:HG12	1.87	0.56
3:22:130:VAL:CG1	3:22:134:ILE:HG12	2.31	0.56
47:D5:5:LEU:HD13	47:D5:6:LYS:N	2.20	0.56
2:1E:118:LEU:HD12	2:1E:142:LEU:HB2	1.86	0.56
37:78:15:ARG:HB2	37:78:16:ARG:HG2	1.87	0.56
2:1E:215:LEU:O	2:1E:219:VAL:HG23	2.05	0.56
1:13:353:A:C8	1:13:353:A:H5'	2.38	0.56
1:1G:426:G:OP1	4:32:36:ARG:NH2	2.37	0.56
26:1H:2111:C:C4	26:1H:2145:C:C2	2.93	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:98:GLU:HG3	4:3E:103:ASN:HD21	1.70	0.56
26:14:1536:A:C8	26:14:1537:C:H1'	2.40	0.56
13:4I:84:ILE:HG23	13:4I:86:CYS:H	1.70	0.56
17:8I:48:GLU:OE1	17:8I:50:LYS:HE2	2.05	0.56
26:1H:825:C:C2'	26:1H:826:U:H5'	2.35	0.56
26:14:1278:A:H2'	26:14:1279:G:C8	2.39	0.56
26:1H:2292:C:O2'	26:1H:2293:C:H5'	2.05	0.56
26:14:2354:G:N7	61:14:3561:HOH:O	2.33	0.56
1:1G:222:U:H2'	1:1G:223:U:H6	1.70	0.56
47:D5:27:VAL:HG12	47:D5:87:ASP:HA	1.87	0.56
26:1H:2721:A:H2'	26:1H:2722:G:O4'	2.05	0.56
11:2I:79:SER:HB2	11:2I:106:LYS:HD2	1.87	0.56
26:1H:1899:G:N2	26:1H:1902:C:N4	2.41	0.56
31:31:127:GLU:O	31:31:129:PHE:N	2.36	0.56
24:3K:34:U:H1'	24:3K:35:U:C5'	2.31	0.56
28:71:65:PRO:HG2	28:71:66:HIS:HD2	1.71	0.56
3:22:18:TRP:NE1	14:5A:54:PRO:HA	2.21	0.56
26:1H:1022:G:O6	35:58:66:LYS:NZ	2.37	0.56
26:14:1035:U:H5''	33:59:59:ARG:HB3	1.86	0.56
26:1H:330:A:O2'	26:1H:331:A:C8	2.57	0.56
57:3L:12:U:H3'	57:3L:13:C:C6	2.40	0.56
5:42:42:GLY:HA3	5:42:65:ASN:O	2.04	0.56
26:14:1729:A:H2	26:14:1730:U:H5	1.53	0.56
26:14:2600:A:H2'	26:14:2601:C:C6	2.40	0.56
2:1E:207:ALA:O	2:1E:210:SER:OG	2.20	0.56
19:AI:50:ALA:HB1	19:AI:57:HIS:HB3	1.87	0.56
26:14:1291:C:H2'	26:14:1292:U:C6	2.41	0.56
26:14:2142:C:H2'	26:14:2143:C:C6	2.40	0.56
26:14:2553:G:H5''	26:14:2554:U:OP2	2.03	0.56
7:6E:87:VAL:HG12	7:6E:89:MET:HG3	1.86	0.56
26:1H:192:C:N3	61:1H:3603:HOH:O	2.32	0.56
26:14:958:U:O2	27:1J:89(A):A:O2'	2.19	0.56
22:1K:10:G:H22	22:1K:26:A:H2'	1.70	0.56
8:7E:16:ALA:HB1	8:7E:24:THR:HG21	1.87	0.56
26:1H:2468:G:H4'	26:1H:2468:G:OP1	2.05	0.56
1:13:813:U:OP2	1:13:816:A:N6	2.32	0.56
6:5E:46:ARG:HB3	6:5E:60:PHE:CE1	2.40	0.56
5:42:140:ARG:O	5:42:143:ARG:NH1	2.32	0.56
12:3I:9:GLN:O	12:3I:13:LYS:HG2	2.05	0.56
46:G8:87:LYS:HD3	46:G8:88:LYS:N	2.19	0.56
1:1G:1348:U:N3	1:1G:1374:A:H2	2.02	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:16:79:C:H6	27:16:79:C:O5'	1.89	0.56
31:39:53:THR:HG22	31:39:55:GLY:N	2.12	0.56
16:7I:72:ARG:HD3	16:7I:73:LEU:HD23	1.88	0.56
36:25:13:ASN:O	36:25:15:GLY:N	2.38	0.56
38:88:66:ILE:CG1	38:88:67:ARG:H	2.17	0.56
12:3A:20:LYS:HD2	12:3A:21:LYS:H	1.70	0.56
26:14:2346:A:H5''	26:14:2383:G:H1'	1.87	0.56
1:13:877:C:H5''	8:7E:88:LYS:HD3	1.86	0.56
50:K8:5:GLU:OE2	50:K8:6:VAL:N	2.38	0.56
24:3K:34:U:HO2'	24:3K:35:U:P	2.28	0.56
46:G8:15:VAL:HG21	46:G8:42:VAL:HG21	1.87	0.56
10:1A:48:THR:HA	10:1A:62:HIS:CB	2.35	0.56
47:H8:152:ALA:HB3	47:H8:167:PRO:O	2.06	0.56
26:14:155:C:N3	26:14:171:G:N1	2.52	0.56
24:3K:67:C:H2'	24:3K:68:G:C8	2.40	0.56
14:5I:21:TYR:HE2	14:5I:23:ARG:NE	2.03	0.56
9:8E:29:ASN:N	9:8E:63:ILE:O	2.31	0.56
53:N8:39:MET:C	53:N8:40:LYS:HD2	2.25	0.56
26:14:2121:G:N1	26:14:2178:C:O2	2.38	0.56
26:14:2141:G:N2	26:14:2150:U:O2	2.30	0.56
4:32:8:VAL:HG22	4:32:115:ARG:HH12	1.69	0.56
45:F8:36:LYS:HG2	45:F8:54:VAL:CG2	2.34	0.56
26:14:1052:C:H42	26:14:1107:G:H1	1.54	0.56
19:AI:22:LEU:HD12	19:AI:25:LYS:HG2	1.87	0.56
26:14:140:A:C8	26:14:1408:C:O2'	2.57	0.56
3:22:8:ILE:HD12	3:22:16:ARG:HG2	1.87	0.56
26:14:2578:G:OP1	26:14:2614:A:N6	2.32	0.56
2:1E:46:LYS:HA	2:1E:49:GLU:OE1	2.04	0.56
26:14:2543:G:H2'	26:14:2544:G:C8	2.40	0.56
26:1H:155:C:H5'	26:1H:161:U:OP2	2.05	0.56
26:14:353:G:H2'	26:14:354:G:H8	1.70	0.56
56:1L:37:A:O2'	26:14:1913:A:N6	2.38	0.56
32:49:170:ARG:NH2	32:49:174:GLU:OE1	2.34	0.56
14:5I:53:LEU:HB3	14:5I:56:VAL:CG2	2.35	0.56
26:14:1441:G:H2'	26:14:1442:G:C8	2.40	0.56
26:1H:2468:G:O4'	26:1H:2468:G:N3	2.36	0.56
1:13:1391:U:H2'	1:13:1392:G:C8	2.40	0.56
13:4I:34:LEU:HD13	13:4I:41:PRO:HA	1.87	0.56
13:4I:58:GLU:O	13:4I:62:ASN:ND2	2.31	0.56
3:22:42:LEU:HA	3:22:45:LYS:HD3	1.86	0.56
26:14:1846:G:N2	26:14:1894:C:O2	2.35	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:67:U:H3	26:14:74:A:H2	1.53	0.56
33:59:8:PRO:HG2	33:59:69:ARG:CZ	2.35	0.56
26:1H:2785:C:H2'	26:1H:2786:U:O4'	2.06	0.56
26:1H:2296:U:H4'	26:1H:2297:C:OP1	2.05	0.56
1:1G:340:U:H2'	1:1G:341:C:C6	2.40	0.56
18:9I:58:LEU:HD23	18:9I:63:GLN:HA	1.86	0.56
1:1G:657:G:N2	15:6A:22:THR:OG1	2.38	0.56
29:11:238:GLY:O	29:11:239:ARG:HB2	2.05	0.56
31:39:74:ARG:HG3	31:39:74:ARG:O	2.05	0.56
26:14:1607:C:H4'	26:14:1608:A:O5'	2.06	0.56
50:K8:64:LEU:HD11	50:K8:68:ARG:HH11	1.70	0.56
2:1E:195:ASP:O	8:7E:74:PRO:HG3	2.05	0.56
30:29:51:PHE:CG	30:29:52:LEU:N	2.73	0.56
2:12:82:ARG:HH22	2:12:150:SER:HB3	1.70	0.56
1:13:1198:G:HO2'	10:1I:54:PHE:HD2	1.53	0.56
26:1H:2789:C:H1'	26:1H:2892:A:H2	1.71	0.56
45:B5:27:THR:CG2	45:B5:80:ILE:HG22	2.32	0.56
10:1I:40:LEU:HB2	10:1I:69:ASN:CB	2.34	0.56
26:1H:2795:G:H2'	26:1H:2798:C:OP2	2.04	0.56
26:14:2127:G:H1	26:14:2161:C:N4	1.98	0.56
29:19:43:ARG:HG2	29:19:49:ILE:CA	2.35	0.56
26:1H:2055:C:H4'	26:1H:2056:G:H5''	1.88	0.56
26:14:2685:G:O6	61:14:3523:HOH:O	2.10	0.56
57:3L:48:C:N4	57:3L:59:A:N3	2.53	0.56
6:5E:15:ASP:CG	6:5E:18:GLN:H	2.08	0.56
26:14:1388:G:H2'	26:14:1389:G:C8	2.39	0.56
1:13:390:C:H2'	1:13:391:G:C8	2.40	0.56
1:13:1318:A:H2'	1:13:1319:A:H5''	1.87	0.56
38:88:5:ARG:HH21	38:88:6:ARG:CD	2.18	0.56
26:14:66:C:H2'	26:14:67:U:O4'	2.05	0.56
51:H5:6:VAL:HG12	51:H5:56:VAL:HB	1.87	0.56
1:1G:193:C:H2'	1:1G:194:C:H6	1.70	0.56
26:14:1751:C:H2'	26:14:1752:C:C6	2.40	0.56
26:14:2270:G:OP2	61:14:3534:HOH:O	2.17	0.56
47:H8:136:PHE:C	47:H8:137:ILE:HD12	2.26	0.56
1:13:297:G:H4'	1:13:557:G:H4'	1.88	0.56
40:A8:28:VAL:HG11	40:A8:98:VAL:HG12	1.86	0.56
26:1H:2714:G:O5'	26:1H:2714:G:H8	1.88	0.56
26:1H:817:C:H4'	26:1H:932:G:C5	2.41	0.56
26:1H:748:G:C8	44:E8:89:ALA:HB1	2.40	0.56
5:42:76:ILE:HG22	5:42:78:HIS:H	1.71	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1279:G:H4'	39:98:31:HIS:CD2	2.40	0.56
26:14:662:G:H5'	37:35:15:ARG:CA	2.36	0.56
46:C5:76:CYS:CB	46:C5:97:ARG:HG3	2.36	0.56
1:13:437:U:H5''	4:3E:155:LEU:HD21	1.88	0.56
1:1G:1008:C:H42	1:1G:1021:G:H22	1.52	0.56
43:95:7:THR:HG23	43:95:22:VAL:HG21	1.86	0.56
26:14:470:A:C8	26:14:470:A:H5'	2.39	0.56
26:14:1342:A:H2	26:14:1602:U:N3	2.03	0.56
26:1H:1858:G:H1'	26:1H:1883:G:N2	2.19	0.56
23:2K:32:G:H2'	23:2K:33:OMC:H6	1.69	0.56
7:62:23:VAL:HG13	7:62:43:PHE:HE2	1.70	0.56
26:1H:710:G:H1	26:1H:721:C:H42	1.52	0.56
1:13:1429:C:H2'	1:13:1430:C:C6	2.40	0.56
38:45:34:LEU:HD11	38:45:129:THR:HB	1.86	0.56
26:14:824:A:H1'	26:14:2358:G:N7	2.21	0.56
26:1H:900:A:H2'	26:1H:901:A:H8	1.71	0.56
40:A8:58:LEU:HD12	40:A8:68:GLN:OE1	2.05	0.56
26:14:1500:G:O2'	29:19:100:GLY:O	2.23	0.56
7:6E:44:TYR:HA	7:6E:47:CYS:SG	2.46	0.56
49:J8:7:ILE:HD12	49:J8:62:VAL:HG11	1.87	0.56
15:6I:53:HIS:O	15:6I:53:HIS:ND1	2.39	0.56
26:14:2540:C:O2'	26:14:2740:A:N3	2.33	0.56
26:1H:1790:C:H2'	26:1H:1791:A:C5	2.41	0.56
32:49:12:TYR:O	32:49:17:PRO:HD3	2.05	0.56
26:14:2567:G:H2'	26:14:2568:C:C6	2.40	0.56
38:45:103:MET:O	38:45:104:PHE:HB2	2.06	0.56
24:3K:15:G:H22	24:3K:48:C:H41	1.54	0.56
1:1G:841:U:H3'	1:1G:841:U:H6	1.71	0.56
26:1H:2750:A:H3'	33:51:4:ILE:CD1	2.36	0.56
31:39:154:VAL:HA	31:39:191:ARG:O	2.05	0.56
13:4A:39:ILE:HD11	13:4A:55:ARG:HH22	1.71	0.56
1:1G:1359:C:O2'	1:1G:1362:C:N4	2.38	0.56
49:F5:79:GLY:O	49:F5:80:LEU:HD13	2.05	0.56
47:H8:163:LEU:HD13	47:H8:165:VAL:HA	1.87	0.56
1:1G:1017:G:H2'	1:1G:1018:C:C6	2.41	0.56
32:49:145:THR:HG1	32:49:148:MET:N	2.00	0.56
26:14:1593:G:H2'	26:14:1594:G:C8	2.40	0.56
26:1H:49:A:H5''	26:1H:51:G:H5''	1.88	0.56
26:14:1678:G:N2	26:14:1989:G:N2	2.52	0.56
26:1H:1429:G:O2'	26:1H:1430:C:H5'	2.05	0.56
26:1H:572:A:H5''	26:1H:573:G:OP2	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:69:8:PRO:CD	34:69:15:VAL:HG22	2.36	0.56
34:61:58:LEU:HG	34:61:59:ALA:N	2.21	0.56
26:1H:445:C:O2'	26:1H:446:G:H5'	2.05	0.56
26:14:531:C:OP1	26:14:561:G:N2	2.38	0.56
26:14:34:C:O2'	26:14:35:G:H8	1.88	0.56
27:16:73:A:C4	27:16:104:A:C2	2.93	0.56
26:1H:2175:C:H5'	28:71:3:HIS:ND1	2.21	0.56
16:7A:57:ARG:NH2	16:7A:79:VAL:O	2.33	0.56
50:K8:50:ILE:HD12	50:K8:51:ARG:H	1.70	0.56
16:7A:22:THR:HA	16:7A:33:ILE:HD12	1.87	0.56
2:1E:121:LEU:HB3	2:1E:127:ILE:CG2	2.35	0.56
3:2E:46:GLU:HB2	3:2E:47:LEU:HD22	1.88	0.56
32:41:11:TYR:OH	32:41:16:ARG:NH1	2.39	0.56
23:2K:62:C:H2'	23:2K:63:C:C6	2.40	0.56
29:11:119:ALA:HB1	29:11:130:ALA:HB3	1.86	0.56
26:14:809:G:H2'	26:14:810:U:O4'	2.06	0.56
14:5A:24:CYS:SG	14:5A:25:VAL:N	2.77	0.56
47:D5:28:MET:O	47:D5:35:ARG:N	2.31	0.56
53:J5:31:VAL:HG13	53:J5:42:PRO:HG3	1.88	0.56
1:1G:382:A:H2'	1:1G:383:A:C8	2.41	0.56
1:13:134:A:H61	16:7I:25:ARG:NH1	2.04	0.56
5:4E:48:ALA:HB2	5:4E:57:LYS:HD3	1.87	0.56
17:8A:23:VAL:O	17:8A:39:SER:HA	2.06	0.56
8:72:11:THR:HG23	8:72:14:ARG:HH12	1.70	0.56
26:1H:1766:U:O2'	26:1H:1767:C:H5'	2.05	0.56
1:13:240:C:H2'	1:13:241:C:H6	1.69	0.56
1:1G:293:G:H4'	1:1G:609:A:N1	2.21	0.56
26:14:1804:C:O5'	26:14:1804:C:H6	1.89	0.56
34:69:114:LEU:HD13	34:69:114:LEU:O	2.05	0.56
42:C8:97:ASP:OD2	42:C8:101:ARG:NH2	2.39	0.56
26:1H:298:G:N7	46:G8:84:ARG:NH2	2.53	0.56
43:D8:76:LYS:O	43:D8:79:VAL:HG12	2.05	0.56
47:D5:93:ASP:HB2	47:D5:131:ARG:HH21	1.70	0.56
26:14:2633:G:H1'	30:29:62:PRO:HG2	1.86	0.56
11:2I:41:THR:CG2	11:2I:71:LYS:HD2	2.31	0.56
26:1H:456:C:H4'	26:1H:457:A:OP1	2.03	0.56
26:1H:2533:A:H2'	26:1H:2534:A:O4'	2.06	0.56
26:14:389:G:N1	37:35:71:VAL:HG12	2.21	0.56
1:1G:1010:G:C2	1:1G:1011:G:C4	2.94	0.56
24:3K:40:C:H5'	24:3K:41:A:OP2	2.05	0.56
26:14:780:G:N2	26:14:783:A:H62	2.02	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:653:A:H4'	26:1H:654:A:OP1	2.06	0.56
57:3L:11:C:N4	57:3L:24:G:H1	2.04	0.56
2:1E:136:VAL:O	2:1E:140:HIS:N	2.34	0.56
43:95:85:LYS:HD2	43:95:87:HIS:HA	1.86	0.56
1:1G:1112:C:C4	3:22:178:LEU:HD23	2.41	0.56
1:1G:1224:G:C6	1:1G:1322:C:H1'	2.41	0.56
26:14:479:A:N3	26:14:481:G:H5''	2.19	0.56
20:BA:10:LEU:HD13	20:BA:12:ALA:H	1.70	0.56
38:88:78:PRO:HB2	38:88:81:VAL:HG11	1.87	0.56
45:B5:5:TYR:CE2	50:G5:30:ARG:HB2	2.40	0.56
26:1H:1693:U:O2'	29:11:14:ARG:NH2	2.39	0.56
1:1G:191(F):U:O2	20:BA:105:SER:OG	2.14	0.56
1:1G:42:G:H1	1:1G:400:C:H42	1.53	0.56
26:14:1843:C:H5'	29:19:253:GLN:OE1	2.06	0.56
10:1A:25:GLU:O	10:1A:29:ARG:HB3	2.06	0.56
41:B8:56:GLY:O	41:B8:59:THR:HG23	2.06	0.56
6:5E:28:ARG:O	6:5E:32:ASN:ND2	2.37	0.56
26:1H:2685:G:H5'	36:68:68:GLU:OE1	2.06	0.56
26:14:1759:A:H4'	26:14:2715:C:O4'	2.06	0.56
32:49:105:LYS:HG3	32:49:106:LEU:HD13	1.86	0.56
37:78:50:ARG:HH21	37:78:50:ARG:HG3	1.70	0.56
31:31:153:SER:HB2	31:31:189:THR:HA	1.88	0.56
26:1H:992:C:H2'	26:1H:993:G:H8	1.70	0.56
7:6E:115:ARG:O	7:6E:118:VAL:HG12	2.06	0.56
7:6E:15:ASP:HB3	7:6E:20:ASP:N	2.20	0.56
1:1G:1218:C:P	14:5A:9:LYS:HZ1	2.28	0.56
1:1G:1082:G:H8	1:1G:1082:G:OP2	1.88	0.56
32:41:115:ARG:HH21	32:41:137:GLU:CD	2.10	0.56
8:72:99:GLU:HG2	8:72:100:ILE:N	2.19	0.56
1:1G:1423:G:H2'	1:1G:1424:C:C6	2.36	0.56
1:1G:1104:G:H2'	1:1G:1105:A:H5'	1.87	0.56
17:8A:88:TYR:HA	17:8A:91:ARG:CD	2.36	0.56
26:1H:1470:G:N7	61:1H:3607:HOH:O	2.33	0.56
47:D5:10:ARG:HH21	47:D5:26:GLY:H	1.51	0.56
1:1G:198:G:H2'	1:1G:199:G:C8	2.41	0.56
1:13:276:G:C6	1:13:277:C:C4	2.94	0.56
26:14:536:A:H4'	42:85:57:PHE:CZ	2.41	0.56
5:4E:51:VAL:CG1	5:4E:52:PRO:HD3	2.36	0.56
20:BA:23:ARG:HH22	20:BA:27:LYS:HD2	1.71	0.56
26:1H:950:G:H2'	26:1H:951:C:H6	1.70	0.56
4:3E:173:TRP:HB2	4:3E:187:ARG:O	2.06	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:187:ARG:HH22	4:3E:193:ASP:CG	2.09	0.56
26:14:1639:U:OP1	61:14:3535:HOH:O	2.18	0.56
47:D5:19:ARG:NH1	47:D5:84:GLU:O	2.38	0.56
1:1G:339:C:H2'	1:1G:340:U:C6	2.41	0.56
41:B8:54:ARG:HA	41:B8:59:THR:HB	1.86	0.56
26:14:565:C:H4'	26:14:1253:A:C6	2.41	0.56
36:25:71:ARG:HE	36:25:105:GLU:CD	2.09	0.56
45:F8:57:LEU:HD23	45:F8:57:LEU:N	2.21	0.56
10:1A:32:ALA:HB1	10:1A:76:ASN:HB2	1.88	0.56
49:J8:87:PRO:O	49:J8:91:LYS:HE2	2.06	0.56
57:3L:69:A:C6	57:3L:70:C:N4	2.74	0.56
26:1H:878:A:N6	26:1H:899:A:H1'	2.21	0.56
1:1G:1127:G:O2'	1:1G:1128:C:H5'	2.05	0.56
3:22:70:VAL:HG12	3:22:72:LYS:N	2.18	0.56
27:16:12:C:N3	48:I8:74:ARG:NH1	2.54	0.56
26:14:909:A:O2'	26:14:910:A:H5''	2.06	0.56
26:14:2312:U:H5''	32:49:74:LYS:HZ3	1.71	0.56
1:13:881:G:P	12:3I:12:ARG:HH22	2.29	0.56
1:13:1305:G:H8	1:13:1305:G:OP2	1.89	0.56
2:1E:27:LYS:HD3	2:1E:193:ASP:HB2	1.88	0.56
27:16:13:A:N1	27:16:69:G:O2'	2.33	0.56
47:D5:69:THR:HG22	47:D5:90:VAL:HG22	1.86	0.56
1:1G:937:A:H1'	1:1G:1379:G:N2	2.20	0.56
33:51:20:ALA:HB1	33:51:21:PRO:HD2	1.87	0.56
26:14:2370:G:C6	26:14:2371:G:C6	2.94	0.56
26:14:1338:G:N3	26:14:1393:A:H2	2.03	0.56
26:1H:2027:G:C5	26:1H:2028:U:C5	2.93	0.56
1:1G:562:C:O2'	12:3A:17:LYS:HG2	2.06	0.56
27:16:83:G:C6	27:16:84:C:C5	2.94	0.56
26:14:1871:A:H2'	26:14:1872:A:C8	2.41	0.56
38:45:42:ILE:HD13	38:45:97:VAL:CG2	2.36	0.56
12:3I:70:ILE:HG12	12:3I:100:ILE:HD12	1.86	0.56
26:1H:1513:C:C5	26:1H:1514:U:H5	2.24	0.56
26:14:724:U:H2'	26:14:725:G:O4'	2.06	0.56
3:2E:20:SER:OG	3:2E:40:ARG:NH2	2.23	0.56
46:G8:94:LYS:HZ3	46:G8:95:LYS:H	1.53	0.56
26:14:1899:G:HO2'	26:14:1900:A:P	2.29	0.56
41:B8:3:ARG:O	41:B8:6:LEU:N	2.39	0.56
26:14:2787:C:O2'	30:29:61:ARG:O	2.17	0.56
1:1G:1401:G:OP1	25:4L:18:G:O2'	2.20	0.56
1:13:458:C:H2'	1:13:464:G:O4'	2.05	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1053:G:N7	1:1G:1199:U:H3'	2.21	0.56
8:72:26:VAL:O	8:72:59:LEU:N	2.37	0.56
1:13:188:U:O2'	1:13:189:U:OP1	2.24	0.56
1:1G:1015:A:H2'	1:1G:1016:A:H8	1.71	0.56
26:1H:1170:G:N2	26:1H:1180:C:C2	2.73	0.56
1:1G:1137:C:H1'	1:1G:1138:G:C2	2.41	0.56
26:1H:1337:G:H2'	26:1H:1338:G:H8	1.70	0.56
1:1G:601:C:H2'	1:1G:602:A:C8	2.41	0.56
4:3E:98:GLU:HG2	4:3E:189:PRO:HG2	1.87	0.56
28:71:23:ASP:HB2	28:71:190:ARG:HH22	1.71	0.56
26:1H:443:A:H3'	31:31:45:ARG:NH2	2.20	0.56
18:9I:53:ARG:HA	18:9I:56:THR:HG22	1.89	0.56
1:13:1135:U:H4'	1:13:1136:U:H5	1.70	0.56
34:61:1:MET:C	34:61:20:ASP:HB2	2.27	0.56
26:14:2712:U:O2'	26:14:2712(A):A:O5'	2.20	0.56
39:98:12:ARG:HD3	39:98:16:HIS:CD2	2.41	0.56
37:78:64:LYS:HD2	55:Q8:12:LYS:HB3	1.87	0.56
26:1H:2336:A:H61	48:I8:43:THR:CG2	2.18	0.56
26:14:2259:G:C2	26:14:2282:G:N1	2.74	0.56
35:15:13:TRP:HB2	35:15:133:GLN:HB2	1.88	0.56
11:2I:98:LEU:O	11:2I:101:SER:OG	2.18	0.56
18:9A:36:ASN:OD1	18:9A:39:VAL:HB	2.06	0.56
35:15:49:GLY:H	35:15:119:ARG:NH1	2.03	0.56
12:3I:93:LEU:O	12:3I:96:VAL:HG12	2.05	0.56
36:25:34:THR:HG22	36:25:37:ASP:OD2	2.06	0.56
47:H8:5:LEU:HD23	47:H8:47:VAL:HG21	1.87	0.56
43:D8:18:LEU:HD13	43:D8:20:LEU:HB2	1.87	0.56
2:1E:21:ARG:HB2	2:1E:39:ILE:HD13	1.88	0.56
26:14:1149:G:H2'	26:14:1150:C:C6	2.41	0.56
50:K8:30:ARG:O	50:K8:34:GLU:HG3	2.06	0.56
54:P8:5:TRP:CD1	54:P8:7:PRO:HG3	2.41	0.56
26:14:896:A:H5'	26:14:897:C:H6	1.71	0.56
30:21:87:GLU:OE1	30:21:87:GLU:N	2.38	0.56
26:14:1585:C:H2'	26:14:1585:C:O2	2.06	0.56
11:2I:73:MET:HE2	11:2I:103:LEU:HD22	1.87	0.56
1:13:1194:U:H2'	1:13:1195:C:C6	2.41	0.56
38:45:78:PRO:HG3	38:45:87:LYS:HD3	1.88	0.56
37:35:52:GLU:O	37:35:54:GLY:N	2.38	0.55
30:29:119:ARG:NH1	30:29:120:TRP:HZ2	2.02	0.55
1:1G:588:G:H1	1:1G:651:C:N4	2.04	0.55
1:1G:1104:G:C2'	1:1G:1105:A:H5'	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:78:29:LYS:HG2	37:78:30:THR:N	2.22	0.55
26:1H:550:G:H2'	26:1H:551:G:C8	2.40	0.55
32:49:136:ARG:NH2	32:49:154:GLY:N	2.54	0.55
1:13:652:U:HO2'	1:13:653:A:P	2.28	0.55
45:B5:51:VAL:H	45:B5:83:VAL:HG23	1.71	0.55
7:62:46:ALA:O	7:62:50:ILE:N	2.38	0.55
4:32:150:GLU:C	4:32:152:SER:N	2.59	0.55
34:61:113:ARG:HD2	34:61:131:LYS:HB2	1.88	0.55
1:13:247:G:C5	1:13:248:C:H5	2.24	0.55
1:13:1234:C:O2'	1:13:1235:U:H5'	2.05	0.55
1:13:711:G:O2'	1:13:712:A:H5'	2.06	0.55
1:13:491:G:H2'	1:13:492:G:C8	2.39	0.55
4:3E:49:ARG:CZ	4:3E:49:ARG:HB2	2.36	0.55
1:1G:1300:G:N1	1:1G:1335:C:O4'	2.39	0.55
26:1H:2692:C:O2	26:1H:2847:U:H4'	2.05	0.55
2:1E:73:THR:HA	2:1E:96:ARG:NH2	2.20	0.55
19:AI:23:ASN:ND2	19:AI:43:GLU:HB2	2.21	0.55
26:14:1499:C:H2'	26:14:1500:G:H8	1.70	0.55
3:2E:18:TRP:CD1	14:5I:54:PRO:HA	2.41	0.55
2:1E:20:GLU:HB3	2:1E:23:ARG:HD2	1.87	0.55
23:2L:2:G:H2'	23:2L:2:G:N3	2.20	0.55
1:1G:419:C:H42	1:1G:424:G:H1	1.52	0.55
40:65:87:PHE:CE1	40:65:102:ALA:HB2	2.41	0.55
2:1E:47:THR:O	2:1E:51:LEU:N	2.35	0.55
29:19:133:LEU:HD13	29:19:173:VAL:CG2	2.36	0.55
1:1G:521:G:O5'	12:3A:73:GLU:HG2	2.05	0.55
49:F5:85:LEU:HD12	49:F5:85:LEU:O	2.06	0.55
30:29:68:ALA:O	30:29:70:ALA:N	2.36	0.55
26:14:2611:U:H6	26:14:2611:U:C5'	2.13	0.55
26:14:275:G:O2'	26:14:276:A:O4'	2.22	0.55
45:B5:63:LYS:HA	45:B5:72:LYS:HA	1.88	0.55
26:1H:2749:A:H1'	33:51:63:SER:OG	2.06	0.55
27:1J:20:C:H42	27:1J:63:G:H1	1.54	0.55
26:1H:872:A:H4'	38:88:66:ILE:HD11	1.87	0.55
1:13:1177:G:OP1	1:13:1177:G:H4'	2.05	0.55
12:3A:28:LYS:HD2	12:3A:33:ARG:HH12	1.71	0.55
13:4A:84:ILE:HD12	19:AA:74:PHE:CZ	2.41	0.55
20:BA:49:ALA:HB2	20:BA:92:LEU:HD22	1.87	0.55
26:14:1141:U:OP2	35:15:63:THR:OG1	2.14	0.55
41:B8:41:ARG:NH1	41:B8:41:ARG:HB2	2.21	0.55
26:14:863:A:H2'	26:14:864:G:H8	1.68	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:654:A:H2	26:1H:654(A):A:H3'	1.71	0.55
26:1H:443:A:H1'	26:1H:1201:C:O4'	2.06	0.55
34:61:21:VAL:HG21	34:61:25:TYR:HD2	1.69	0.55
5:4E:6:PHE:CE2	5:4E:66:MET:HE1	2.41	0.55
26:14:6:A:H2'	35:15:131:GLN:NE2	2.22	0.55
37:35:86:LYS:HB3	37:35:117:GLU:O	2.07	0.55
38:45:57:HIS:ND1	38:45:117:ALA:HB2	2.20	0.55
1:1G:930:C:N4	1:1G:931:C:C4	2.74	0.55
26:1H:1542:G:OP2	26:1H:1543:A:O2'	2.22	0.55
26:14:640:C:H5"	26:14:641:C:OP2	2.06	0.55
39:98:50:HIS:NE2	39:98:54:LEU:HD21	2.21	0.55
4:3E:108:LEU:HD23	4:3E:110:PHE:HE1	1.71	0.55
5:42:16:THR:OG1	5:42:17:ALA:N	2.39	0.55
1:13:1351:U:H1'	7:6E:33:ASP:O	2.05	0.55
53:J5:37:LYS:HD3	53:J5:37:LYS:C	2.27	0.55
1:13:311:C:H2'	1:13:312:C:H6	1.71	0.55
26:14:2366:A:H2'	26:14:2367:G:O4'	2.06	0.55
46:C5:21:LYS:O	46:C5:23:ARG:NH2	2.39	0.55
1:13:45:U:H2'	1:13:46:G:C8	2.41	0.55
32:49:105:LYS:HG2	32:49:106:LEU:HD13	1.89	0.55
1:1G:1289:A:OP2	21:1B:9:ARG:NH2	2.39	0.55
27:1J:66:A:C2	27:1J:108:C:C4	2.95	0.55
39:98:51:LEU:HD22	39:98:66:VAL:HG13	1.88	0.55
26:1H:1022:G:N2	26:1H:1142(A):A:N1	2.46	0.55
1:13:1177:G:C8	1:13:1178:G:C2	2.94	0.55
9:8E:16:ARG:O	9:8E:63:ILE:HG23	2.07	0.55
26:1H:104:U:H2'	26:1H:105:C:H5'	1.89	0.55
43:D8:39:LEU:O	43:D8:40:LEU:HD22	2.05	0.55
38:88:39:PRO:HA	38:88:97:VAL:O	2.07	0.55
26:1H:274:G:N2	26:1H:276:A:H61	2.04	0.55
40:A8:67:ARG:HG2	40:A8:71:ARG:NH1	2.21	0.55
26:14:2305:A:H8	32:49:156:ASP:OD1	1.90	0.55
1:13:192:U:H4'	20:BI:57:ARG:HD2	1.88	0.55
41:B8:78:LEU:HD12	41:B8:79:HIS:CE1	2.41	0.55
1:13:1167:A:C6	1:13:1169:A:C6	2.95	0.55
37:35:136:GLU:O	37:35:139:LYS:N	2.39	0.55
29:11:113:VAL:HG22	29:11:113:VAL:O	2.07	0.55
19:AA:56:GLN:HE22	19:AA:59:PRO:HG3	1.71	0.55
26:1H:1761:C:H42	26:1H:1762:A:H62	1.53	0.55
27:16:75:G:H21	47:H8:85:HIS:CE1	2.25	0.55
26:1H:2611:U:H6	26:1H:2611:U:H5'	1.72	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1317:A:H2'	26:1H:1318:C:H6	1.70	0.55
14:5I:29:ARG:HH12	14:5I:31:ARG:HB2	1.69	0.55
1:13:626:U:H2'	1:13:627:G:C8	2.41	0.55
26:14:920:G:H2'	26:14:921:G:C8	2.42	0.55
26:14:660:G:H21	37:35:12:ALA:HA	1.71	0.55
44:E8:88:ARG:HB3	44:E8:92:ARG:CB	2.34	0.55
1:13:1454:G:OP1	20:BI:39:LYS:HD2	2.06	0.55
26:1H:1478:G:H2'	26:1H:1479:G:H8	1.71	0.55
1:13:342:C:H2'	1:13:343:U:H5'	1.87	0.55
26:1H:140:A:H8	26:1H:1408:C:HO2'	1.51	0.55
5:42:147:ASP:O	5:42:151:LEU:HG	2.07	0.55
26:14:2312:U:C5	26:14:2313:C:C4	2.94	0.55
1:13:651:C:H2'	1:13:652:U:C6	2.40	0.55
3:2E:47:LEU:O	3:2E:51:GLY:N	2.40	0.55
23:2L:1:C:P	38:45:87:LYS:HE2	2.46	0.55
26:14:370:G:H4'	26:14:371:A:OP2	2.05	0.55
1:1G:1438:G:OP2	20:BA:34:LYS:NZ	2.40	0.55
31:39:103:LYS:HA	31:39:106:ARG:HG3	1.89	0.55
26:1H:2244:U:H2'	26:1H:2245:U:O4'	2.06	0.55
31:39:127:GLU:HA	31:39:127:GLU:OE1	2.06	0.55
26:1H:1213:A:H1'	26:1H:1238:G:N3	2.22	0.55
1:13:490:G:OP1	4:3E:151:LYS:HE3	2.06	0.55
26:14:1532:C:H42	26:14:1539:G:H1	1.54	0.55
37:78:97:PRO:HD3	37:78:126:VAL:O	2.07	0.55
1:1G:991:U:C5	1:1G:1212:U:H1'	2.42	0.55
21:1B:10:ARG:HA	21:1B:13:ILE:HD12	1.87	0.55
1:1G:922:G:H21	1:1G:1398:A:H2	1.54	0.55
1:13:451:A:OP1	1:13:481:G:N2	2.27	0.55
2:1E:61:LEU:HD23	2:1E:68:ILE:HD11	1.89	0.55
9:82:113:LYS:H	9:82:119:ALA:CB	2.20	0.55
9:82:16:ARG:O	9:82:63:ILE:HG23	2.07	0.55
26:1H:1473:G:O5'	26:1H:1473:G:H8	1.90	0.55
27:1J:6:C:C2	27:1J:115:G:N2	2.75	0.55
27:16:116:G:H4'	40:A8:54:LEU:CD1	2.36	0.55
1:1G:1238:A:N3	1:1G:1241:G:O2'	2.33	0.55
1:13:622:A:C8	1:13:623:C:C6	2.94	0.55
26:14:2068:U:N3	26:14:2430:A:H2	2.02	0.55
26:14:117:G:OP1	26:14:124:G:N1	2.39	0.55
15:6I:15:PHE:CE1	15:6I:84:LYS:HE2	2.42	0.55
29:11:141:VAL:HA	29:11:163:ALA:O	2.07	0.55
26:1H:581:C:H2'	26:1H:582:G:H8	1.71	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1171:G:H2'	1:13:1172:C:C6	2.41	0.55
1:13:321:A:C2	1:13:333:G:C2	2.95	0.55
1:1G:596:C:H2'	1:1G:597:G:C8	2.41	0.55
26:1H:1513:C:C4	26:1H:1514:U:C5	2.95	0.55
26:14:2760:C:H2'	26:14:2761:G:C8	2.42	0.55
26:1H:85:G:OP2	46:G8:9:LYS:HB2	2.06	0.55
34:69:135:GLU:OE2	34:69:135:GLU:N	2.38	0.55
41:B8:58:ASN:O	41:B8:58:ASN:ND2	2.39	0.55
26:14:957:A:OP1	38:45:76:LYS:HD2	2.06	0.55
26:14:2495:G:H2'	26:14:2496:C:C6	2.42	0.55
41:B8:1:MET:C	41:B8:2:ASN:O	2.44	0.55
26:1H:1570:A:H5'	29:11:37:LEU:HD22	1.87	0.55
45:B5:29:TRP:CZ3	45:B5:78:LYS:HB2	2.42	0.55
45:B5:29:TRP:CZ3	45:B5:78:LYS:HE2	2.42	0.55
26:1H:1324:G:C4	26:1H:1328:G:O6	2.59	0.55
37:35:37:GLY:HA2	37:35:41:ARG:HH21	1.72	0.55
4:32:13:ARG:HB3	4:32:38:TYR:O	2.07	0.55
26:14:1815:A:OP2	29:19:54:ARG:NH2	2.30	0.55
1:13:1139:G:H22	1:13:1143:G:H1	1.55	0.55
29:11:182:LEU:N	29:11:272:ALA:HB3	2.20	0.55
26:1H:1988:C:H2'	26:1H:1989:G:C8	2.41	0.55
26:1H:1386:C:H2'	26:1H:1387:C:C6	2.41	0.55
1:1G:630:G:H3'	1:1G:631:G:H5'	1.87	0.55
26:1H:1448:G:N2	26:1H:1449:A:N6	2.54	0.55
1:13:109:A:N7	1:13:326:G:H2'	2.22	0.55
1:1G:110:C:H3'	1:1G:111:G:C8	2.42	0.55
1:1G:1252:A:H61	1:1G:1285:A:H61	1.53	0.55
34:69:47:LEU:HD23	34:69:48:GLU:N	2.21	0.55
1:1G:272:C:H2'	1:1G:273:A:C8	2.41	0.55
36:25:63:VAL:HB	36:25:102:VAL:HG12	1.89	0.55
13:4I:39:ILE:HD12	13:4I:56:LEU:HD22	1.89	0.55
26:1H:2296:U:OP2	40:A8:9:ARG:NH1	2.27	0.55
18:9I:58:LEU:HG	18:9I:62:GLU:HB3	1.87	0.55
30:21:31:CYS:HB2	30:21:91:VAL:HG22	1.88	0.55
12:3I:110:VAL:CG2	12:3I:120:TYR:HB3	2.36	0.55
26:1H:2880:C:O2'	39:98:90:ARG:NH1	2.37	0.55
26:1H:1365:A:OP1	49:J8:41:ARG:NH2	2.40	0.55
30:21:173:VAL:N	30:21:183:LEU:O	2.35	0.55
47:D5:55:HIS:HE2	47:D5:135:GLU:HG2	1.72	0.55
26:1H:94:G:H2'	26:1H:95:G:O4'	2.06	0.55
32:41:67:LYS:HG2	32:41:67:LYS:O	2.07	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1290:G:O3'	7:62:37:ASN:ND2	2.39	0.55
26:1H:2875:C:H2'	26:1H:2876:G:O4'	2.07	0.55
26:1H:2032:G:N2	30:21:146:THR:HG23	2.18	0.55
47:D5:5:LEU:HD13	47:D5:6:LYS:H	1.72	0.55
1:1G:960:U:H4'	1:1G:961:U:H5''	1.89	0.55
19:AA:14:HIS:NE2	19:AA:15:LEU:HG	2.22	0.55
26:14:987:G:O2'	26:14:1000:A:N3	2.37	0.55
26:14:2748:A:H2'	26:14:2749:A:C8	2.42	0.55
1:13:1128:C:H2'	1:13:1139:G:C6	2.42	0.55
4:32:119:GLN:O	4:32:123:HIS:ND1	2.35	0.55
1:13:264:U:O2	17:8I:64:PRO:HG2	2.07	0.55
8:72:86:ILE:HG21	8:72:133:LEU:HD22	1.89	0.55
23:2L:54:G:H2'	23:2L:55:5MU:C6	2.42	0.55
32:49:73:ALA:HB3	32:49:84:LYS:HA	1.89	0.55
26:14:1567:A:H2'	29:19:86:PRO:HB3	1.89	0.55
16:7I:5:ARG:NH2	16:7I:23:ASP:O	2.40	0.55
1:13:1007:C:O2	1:13:1022:G:N2	2.32	0.55
1:13:1071:C:H2'	1:13:1072:G:C8	2.42	0.55
47:H8:9:TYR:CE1	47:H8:35:ARG:HD2	2.40	0.55
37:78:6:LEU:O	37:78:7:ARG:HG2	2.06	0.55
1:1G:1188:A:H4'	14:5A:58:LYS:HD3	1.89	0.55
37:35:95:VAL:HA	37:35:99:LEU:HD23	1.87	0.55
26:1H:2199:A:C4	26:1H:2205:C:C6	2.95	0.55
51:L8:4:LEU:HD11	51:L8:39:ASP:OD2	2.06	0.55
26:1H:280:C:C2	26:1H:361:G:N2	2.74	0.55
26:1H:2418:A:H2'	26:1H:2419:U:O4'	2.06	0.55
1:13:11:G:C6	1:13:12:U:C4	2.94	0.55
44:E8:29:LEU:O	44:E8:29:LEU:HD12	2.06	0.55
20:BI:16:HIS:O	20:BI:19:SER:N	2.40	0.55
17:8I:76:LEU:HD11	17:8I:79:SER:CB	2.29	0.55
31:31:9:ILE:HG12	31:31:20:LEU:O	2.07	0.55
5:42:91:LEU:HD22	5:42:120:THR:HG22	1.87	0.55
8:7E:6:ILE:HB	8:7E:85:ARG:NH1	2.20	0.55
37:35:71:VAL:CG1	37:35:72:PRO:HD3	2.33	0.55
9:82:85:LEU:HD11	9:82:96:LEU:HD11	1.89	0.55
33:59:54:ARG:HD2	33:59:56:SER:O	2.06	0.55
26:14:779:U:OP1	29:19:49:ILE:HG23	2.06	0.55
1:1G:15:G:H2'	1:1G:16:A:O4'	2.06	0.55
26:14:125:G:C5'	54:L5:19:ARG:HD3	2.37	0.55
27:1J:7:G:O2'	40:65:38:GLN:NE2	2.40	0.55
23:2L:53:G:N2	23:2L:63:C:O2	2.36	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1203:G:OP2	26:14:1204:A:H2'	2.07	0.55
26:1H:1657:C:H2'	26:1H:1658:C:H6	1.71	0.55
1:13:1004:A:H5'	1:13:1024:G:N7	2.22	0.55
44:E8:76:VAL:HG21	44:E8:101:SER:HB3	1.89	0.55
38:45:57:HIS:CG	38:45:117:ALA:HB2	2.42	0.55
29:11:68:LYS:HD3	29:11:70:TRP:CZ2	2.41	0.55
29:19:85:ASP:HB2	29:19:92:ILE:HG12	1.88	0.55
3:22:45:LYS:HG3	3:22:46:GLU:HG3	1.88	0.55
1:13:1048:G:OP1	14:5I:4:LYS:HB2	2.07	0.55
1:13:859:A:OP2	1:13:869:G:N2	2.37	0.55
26:14:1576:U:H2'	26:14:1577:C:H6	1.71	0.55
26:1H:2114:A:H5''	26:1H:2117:A:H5'	1.87	0.55
1:1G:659:U:H2'	1:1G:660:G:O4'	2.07	0.55
31:39:165:ARG:HB3	31:39:165:ARG:HH11	1.71	0.55
56:1L:25:C:C2	56:1L:26:A:H1'	2.41	0.55
54:L5:5:TRP:NE1	54:L5:7:PRO:HG3	2.22	0.55
28:71:46:LYS:O	28:71:47:LEU:HD23	2.07	0.55
26:14:2840:C:O2'	39:55:91:GLN:OE1	2.23	0.55
1:1G:1534:A:H3'	1:1G:1534:A:N3	2.22	0.55
26:1H:1899:G:H21	26:1H:1902:C:H5	1.55	0.55
36:68:13:ASN:ND2	36:68:97:ARG:HB2	2.22	0.55
26:1H:1434:A:H2'	26:1H:1435:G:C8	2.42	0.55
26:1H:1329:U:H5''	26:1H:1330:C:C5	2.41	0.55
1:1G:1055:A:N3	3:22:156:ARG:HD2	2.22	0.55
26:1H:270(V):G:H2'	26:1H:270(W):G:H8	1.72	0.55
26:14:817:C:O2'	26:14:839:U:OP1	2.20	0.55
13:4A:84:ILE:C	13:4A:86:CYS:H	2.10	0.55
3:2E:91:LEU:HB2	3:2E:99:VAL:HG21	1.89	0.55
32:49:135:LEU:O	32:49:136:ARG:HD2	2.07	0.55
26:14:1100:C:H2'	26:14:1101:U:H5	1.71	0.55
1:13:255:G:C5	1:13:256:U:C4	2.94	0.55
26:14:7:G:H5'	35:15:131:GLN:HE22	1.72	0.55
20:BA:23:ARG:NH2	20:BA:27:LYS:HD2	2.21	0.55
2:1E:237:ALA:O	2:1E:239:VAL:HG23	2.07	0.55
26:14:2475:C:H5''	26:14:2476:A:H5''	1.88	0.55
1:13:64:G:O2'	1:13:65:U:OP1	2.21	0.55
28:71:62:VAL:HG12	28:71:163:PHE:HE1	1.71	0.55
1:1G:1363:A:H4'	1:1G:1364:U:H5''	1.88	0.55
26:14:1743:G:C2	26:14:1746:G:C8	2.95	0.55
29:19:71:ASP:OD1	29:19:71:ASP:N	2.39	0.55
26:1H:708:C:H6	26:1H:708:C:OP2	1.90	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:497:U:O2	1:13:497:U:H2'	2.05	0.55
34:69:82:ARG:O	34:69:89:TYR:HD2	1.90	0.55
40:A8:18:ILE:HD13	40:A8:88:ASP:HA	1.89	0.55
26:14:631:A:H2'	26:14:632:A:O4'	2.06	0.55
33:51:4:ILE:HG13	33:51:6:ARG:HD3	1.88	0.55
5:4E:33:VAL:HG11	5:4E:109:ILE:HA	1.89	0.55
1:13:1151:A:H5'	10:1I:41:PRO:HA	1.89	0.55
53:J5:16:ARG:HG3	53:J5:17:ASP:N	2.22	0.55
27:1J:109:G:C6	27:1J:110:G:C5	2.95	0.55
26:1H:835:A:OP1	55:Q8:53:PRO:HG3	2.07	0.55
26:1H:1141:U:H6	35:58:63:THR:OG1	1.90	0.55
13:4A:91:ARG:HB3	13:4A:96:LEU:H	1.72	0.55
26:1H:1408:C:C2	26:1H:1595:G:N2	2.74	0.55
7:6E:143:ARG:HG2	24:3K:41:A:H5''	1.88	0.55
48:E5:21:LEU:HD11	48:E5:41:ARG:NH1	2.21	0.55
9:82:32:ASP:OD1	9:82:33:PHE:N	2.39	0.55
26:14:1091:G:N2	26:14:1100:C:O2'	2.39	0.55
1:13:693:G:H2'	1:13:694:A:C8	2.42	0.55
1:1G:1469:G:H2'	1:1G:1470:G:C8	2.42	0.55
26:14:871:U:OP1	38:45:5:ARG:HG2	2.07	0.55
26:14:55:G:H2'	26:14:56:A:H8	1.72	0.55
26:14:90:U:HO2'	26:14:91:A:P	2.30	0.55
25:4K:23:A:H2'	25:4K:24:A:C4'	2.37	0.55
34:69:72:LEU:HD21	34:69:107:VAL:HG21	1.89	0.55
26:1H:860:U:C5	26:1H:917:A:C2	2.95	0.55
1:1G:405:U:O4	4:32:2:GLY:N	2.40	0.55
1:13:272:C:H2'	1:13:273:A:H8	1.71	0.55
53:J5:45:VAL:HG22	53:J5:51:TYR:HD2	1.72	0.55
26:1H:827:U:H5'	26:1H:828:U:O5'	2.07	0.55
42:85:112:ARG:NH1	43:95:47:VAL:HG13	2.22	0.55
5:4E:53:LEU:O	5:4E:56:GLN:HB2	2.07	0.55
27:16:71:C:C2	27:16:72:G:C8	2.95	0.55
26:14:1789:A:H2'	26:14:1790:C:O4'	2.07	0.55
50:K8:33:MET:HG3	50:K8:36:ARG:NH2	2.22	0.55
5:42:153:LYS:HE3	8:72:43:GLY:HA3	1.89	0.55
27:1J:19:G:N2	27:1J:64:C:O2	2.41	0.54
27:1J:22:U:H5'	27:1J:23:G:OP2	2.07	0.54
1:13:177:C:P	20:BI:65:LYS:HZ3	2.25	0.54
1:13:1263:C:H2'	1:13:1264:C:H6	1.71	0.54
4:32:4:TYR:CE2	4:32:11:LEU:HD11	2.42	0.54
32:41:139:LEU:HA	32:41:144:ILE:HB	1.90	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
54:L5:34:ARG:NH1	54:L5:39:ARG:HG3	2.22	0.54
1:1G:453:A:H4'	16:7A:72:ARG:HB2	1.88	0.54
32:41:143:GLU:OE1	52:M8:26:SER:OG	2.22	0.54
5:4E:6:PHE:HD2	5:4E:63:ARG:HH11	1.54	0.54
5:42:74:GLY:HA3	5:42:116:THR:OG1	2.06	0.54
26:1H:972:G:H3'	26:1H:973:A:H2'	1.89	0.54
26:14:1858:G:H2'	26:14:1883:G:H22	1.72	0.54
2:12:22:LYS:HB3	2:12:24:TRP:NE1	2.22	0.54
26:1H:1956:U:C2'	26:1H:1957:C:H5'	2.37	0.54
5:4E:72:GLN:O	5:4E:75:THR:HG22	2.06	0.54
9:8E:114:TYR:CE1	10:1I:59:SER:HA	2.42	0.54
26:1H:2074:U:H2'	26:1H:2075:U:C6	2.43	0.54
1:13:1366:C:H2'	1:13:1367:C:H6	1.72	0.54
2:12:187:LEU:HA	2:12:201:ILE:O	2.07	0.54
26:1H:1997:G:C5'	30:21:117:MET:CE	2.86	0.54
13:4A:37:THR:HG22	13:4A:55:ARG:NH1	2.23	0.54
47:D5:5:LEU:HD23	47:D5:47:VAL:HG21	1.89	0.54
1:1G:1220:G:H2'	1:1G:1221:G:C8	2.42	0.54
1:1G:1368:G:P	9:82:114:TYR:HB3	2.47	0.54
10:1A:63:PHE:HD1	14:5A:57:ARG:O	1.89	0.54
24:3K:5:C:H2'	24:3K:6:G:O4'	2.05	0.54
19:AA:14:HIS:CE1	19:AA:15:LEU:HG	2.42	0.54
57:3L:30:G:N2	57:3L:41:A:C8	2.76	0.54
29:11:85:ASP:HB2	29:11:92:ILE:HG12	1.89	0.54
35:58:1:MET:HE1	42:C8:95:LEU:HD21	1.88	0.54
43:D8:37:VAL:HG12	43:D8:55:ALA:O	2.07	0.54
34:69:79:ILE:O	34:69:143:SER:HA	2.06	0.54
11:2A:98:LEU:O	11:2A:101:SER:OG	2.20	0.54
26:14:2378:A:O2'	40:65:23:ARG:HD2	2.07	0.54
1:13:486:U:H2'	1:13:487:A:H8	1.71	0.54
26:1H:581:C:H2'	26:1H:582:G:C8	2.42	0.54
26:1H:468:G:H5''	26:1H:469:G:OP2	2.08	0.54
26:1H:7:G:N2	26:1H:2896:C:N3	2.54	0.54
10:1I:83:GLU:H	10:1I:83:GLU:CD	2.11	0.54
4:3E:110:PHE:HE2	4:3E:148:VAL:HG23	1.72	0.54
1:13:1057:G:H4'	3:2E:197:GLY:H	1.71	0.54
26:1H:928:G:H2'	26:1H:929:G:O4'	2.05	0.54
1:13:431:A:H2'	1:13:432:A:O4'	2.07	0.54
26:14:2275:C:H5'	26:14:2275:C:C6	2.42	0.54
38:88:112:GLU:H	38:88:112:GLU:CD	2.10	0.54
1:1G:1291:G:H5''	9:82:39:GLY:O	2.06	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:37:ARG:HD2	30:29:44:TYR:HE2	1.72	0.54
1:13:963:G:C2	10:1I:55:LYS:NZ	2.74	0.54
5:42:90:VAL:CG2	5:42:121:LYS:HB3	2.37	0.54
31:31:136:THR:HG22	31:31:166:ALA:O	2.07	0.54
26:1H:1165:U:H5'	26:1H:1166:C:OP2	2.08	0.54
26:1H:1167:U:C2	26:1H:1183:G:N2	2.76	0.54
26:1H:2032:G:H21	30:21:146:THR:CG2	2.17	0.54
1:13:1291:G:OP1	7:6E:37:ASN:OD1	2.25	0.54
1:1G:1057:G:C6	1:1G:1204:A:C2	2.95	0.54
26:1H:2629:A:O2'	26:1H:2630:G:H5'	2.07	0.54
37:35:97:PRO:HD3	37:35:126:VAL:O	2.08	0.54
1:1G:1453:G:HO2'	1:1G:1454:G:P	2.30	0.54
26:14:1053:C:H2'	26:14:1054:A:H1'	1.88	0.54
48:E5:12:ASN:O	48:E5:12:ASN:ND2	2.39	0.54
42:C8:104:GLN:HE22	43:D8:44:LYS:HB2	1.73	0.54
26:1H:1394:U:H4'	26:1H:1603:A:H4'	1.88	0.54
1:1G:570:G:H2'	1:1G:571:U:C6	2.43	0.54
4:3E:103:ASN:O	4:3E:107:ARG:HG2	2.07	0.54
2:12:130:ARG:O	2:12:135:GLN:NE2	2.40	0.54
26:14:30:G:H2'	26:14:31:C:C6	2.43	0.54
26:14:2525:G:N2	26:14:2539:C:C2	2.75	0.54
2:1E:5:ILE:CD1	2:1E:6:THR:H	2.20	0.54
41:B8:62:THR:HA	41:B8:74:ARG:O	2.07	0.54
26:14:2118:U:H1'	26:14:2147:G:H21	1.73	0.54
7:62:136:LYS:NZ	7:62:137:LYS:HZ1	2.04	0.54
1:13:484:G:O2'	1:13:485:G:OP2	2.17	0.54
4:3E:122:ARG:NH1	4:3E:134:ASP:HB3	2.21	0.54
1:13:329:A:C5	1:13:332:G:C6	2.96	0.54
56:1L:69:A:H1'	56:1L:70:C:O5'	2.08	0.54
32:49:151:ALA:HB3	32:49:153:ARG:HH12	1.73	0.54
39:98:100:LEU:HD11	39:98:113:LEU:HD13	1.89	0.54
40:A8:108:GLY:O	40:A8:110:LEU:HG	2.07	0.54
26:14:1752:C:P	41:75:115:ARG:HH22	2.30	0.54
40:A8:93:LYS:HG2	40:A8:95:HIS:HB2	1.88	0.54
1:1G:191(F):U:H2'	1:1G:191:G:C8	2.42	0.54
30:21:31:CYS:SG	30:21:51:PHE:HB2	2.46	0.54
26:14:2734:A:H2'	26:14:2735:G:O4'	2.07	0.54
9:82:22:GLY:N	9:82:58:HIS:O	2.23	0.54
26:1H:1260:G:H2'	26:1H:1261:C:C6	2.43	0.54
1:1G:1286:A:H5'	21:1B:25:LYS:HD3	1.90	0.54
2:12:28:PHE:CZ	2:12:189:ASP:HA	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:95:27:ALA:HB1	43:95:61:VAL:HG21	1.90	0.54
44:A5:15:ARG:O	44:A5:19:LEU:HD22	2.08	0.54
34:61:41:GLU:HG2	34:61:42:SER:N	2.23	0.54
5:42:80:ILE:HA	8:72:104:ARG:NH1	2.22	0.54
27:1J:14:U:H5'	27:1J:71:C:H1'	1.89	0.54
1:1G:1118:C:H1'	1:1G:1179:A:C4	2.42	0.54
1:13:1296:C:H5'	13:4I:14:ARG:NH1	2.23	0.54
1:1G:1264:C:O2	1:1G:1272:G:N1	2.40	0.54
1:1G:518:C:H5''	1:1G:519:C:C6	2.41	0.54
26:1H:287:C:H2'	26:1H:288:C:C6	2.36	0.54
16:7A:1:MET:HE2	16:7A:2:VAL:H	1.70	0.54
13:4A:84:ILE:HD11	19:AA:65:ASN:OD1	2.08	0.54
26:1H:2636:U:OP1	30:21:80:GLU:HG3	2.06	0.54
23:2L:60:A:H2'	23:2L:61:U:H5'	1.89	0.54
1:13:265:G:O2'	17:8I:67:LYS:N	2.40	0.54
1:13:1286:A:N6	1:13:1355:G:OP1	2.41	0.54
18:9I:66:LEU:CG	18:9I:70:ILE:HD11	2.38	0.54
1:1G:164:U:H2'	1:1G:165:C:C6	2.42	0.54
37:35:113:LYS:HD3	37:35:115:LEU:HD21	1.89	0.54
26:14:1449(A):G:H2'	26:14:1450:C:C6	2.43	0.54
12:3I:53:ARG:HG3	12:3I:53:ARG:NH1	2.21	0.54
19:AI:51:VAL:HG12	19:AI:52:TYR:H	1.72	0.54
26:14:2645:G:H3'	26:14:2646:C:H5'	1.89	0.54
26:14:642:G:H3'	26:14:642:G:C8	2.42	0.54
26:14:1386:C:H2'	26:14:1387:C:H6	1.71	0.54
11:2I:79:SER:OG	11:2I:106:LYS:NZ	2.25	0.54
1:13:923:A:OP1	5:4E:21:ALA:HB2	2.08	0.54
9:8E:27:THR:N	9:8E:61:ALA:O	2.24	0.54
48:I8:37:LEU:HD12	48:I8:60:PHE:HA	1.90	0.54
1:1G:67:C:H2'	1:1G:68:G:C8	2.43	0.54
35:58:129:PRO:O	35:58:134:ARG:NH1	2.40	0.54
4:32:141:ARG:N	4:32:144:ASP:OD2	2.39	0.54
29:19:130:ALA:HA	29:19:192:THR:HA	1.90	0.54
26:14:1366:A:H2'	26:14:1367:A:O4'	2.06	0.54
46:G8:85:VAL:N	46:G8:96:ILE:O	2.40	0.54
1:1G:456:C:H42	1:1G:476:G:H1	1.56	0.54
1:13:1122:U:C4	1:13:1123:A:N6	2.76	0.54
27:1J:63:G:N3	27:1J:63:G:H2'	2.22	0.54
47:D5:44:PHE:O	47:D5:44:PHE:HD1	1.90	0.54
1:1G:1050:G:N2	1:1G:1209:C:H1'	2.21	0.54
1:1G:963:G:N3	10:1A:55:LYS:NZ	2.48	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:363:A:OP1	12:3I:33:ARG:HG3	2.07	0.54
13:4A:80:ARG:HH22	19:AA:66:MET:CE	2.20	0.54
26:14:764:A:H2	29:19:219:PRO:HG3	1.72	0.54
1:13:1446:A:OP1	1:13:1446:A:H4'	2.08	0.54
1:1G:865:A:H5'	1:1G:1078:U:C5	2.42	0.54
26:14:2290:G:C2	26:14:2343:C:O2	2.61	0.54
1:13:269:C:H2'	1:13:270:A:H8	1.73	0.54
34:61:110:ASP:N	34:61:130:TYR:OH	2.39	0.54
20:BI:83:ARG:O	20:BI:87:LYS:HD3	2.07	0.54
33:51:157:TYR:O	33:51:158:HIS:ND1	2.41	0.54
1:1G:23:C:OP2	1:1G:561:U:N3	2.28	0.54
46:C5:29:GLU:OE2	46:C5:38:ILE:HD12	2.08	0.54
1:13:517:G:OP2	1:13:517:G:H8	1.91	0.54
39:98:10:LEU:O	39:98:12:ARG:HB2	2.08	0.54
1:1G:858:G:H8	1:1G:858:G:OP2	1.90	0.54
38:88:5:ARG:HH21	38:88:6:ARG:NE	2.05	0.54
26:1H:805:G:OP2	37:78:41:ARG:HG2	2.07	0.54
26:1H:2756:U:H4'	26:1H:2757:A:OP1	2.06	0.54
26:1H:2400:G:H2'	26:1H:2401:U:C6	2.42	0.54
1:13:328:C:H4'	1:13:329:A:C5'	2.36	0.54
26:1H:1161:C:O2'	43:D8:8:GLY:HA2	2.08	0.54
26:14:2143:C:N4	26:14:2144:U:O2	2.40	0.54
2:1E:51:LEU:HG	2:1E:201:ILE:HD12	1.90	0.54
56:1L:26:A:H2'	56:1L:27:G:H5'	1.89	0.54
26:14:2498:C:OP2	61:14:3521:HOH:O	2.19	0.54
39:98:63:ARG:HH22	39:98:77:ARG:HG2	1.72	0.54
1:13:1200:C:H4'	1:13:1201:A:H5''	1.88	0.54
1:1G:1381:U:H2'	1:1G:1382:C:H5'	1.89	0.54
1:13:128:G:H4'	17:8I:3:LYS:HD3	1.89	0.54
27:16:18:G:H1	27:16:65:C:H42	1.52	0.54
1:1G:952:U:H4'	1:1G:964:A:N1	2.22	0.54
26:14:243:U:OP1	55:M5:6:THR:OG1	2.19	0.54
26:14:2820:A:O5'	39:55:4:LEU:HD23	2.06	0.54
26:14:813:U:C2	26:14:1195:G:N2	2.76	0.54
26:14:2494:G:H2'	26:14:2495:G:H8	1.73	0.54
1:1G:1372:U:H2'	1:1G:1373:G:O4'	2.08	0.54
18:9A:51:LEU:HD22	18:9A:55:ARG:NH2	2.21	0.54
26:1H:1997:G:C5'	30:21:117:MET:HE2	2.38	0.54
42:85:98:LEU:HB2	42:85:102:GLU:HB2	1.89	0.54
45:F8:68:ARG:HH11	45:F8:69:TYR:HE1	1.56	0.54
4:32:173:TRP:CZ3	4:32:193:ASP:HB2	2.43	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1364:G:N7	49:F5:2:SER:HB2	2.23	0.54
52:M8:40:HIS:CE1	52:M8:45:GLY:HA3	2.42	0.54
26:14:1590:U:H2'	26:14:1591:G:H8	1.72	0.54
40:A8:69:VAL:HG13	40:A8:101:LEU:HD13	1.89	0.54
26:1H:753:C:H2'	26:1H:754:C:C6	2.42	0.54
13:4A:61:GLU:HA	13:4A:66:LEU:HD11	1.90	0.54
26:1H:651:G:OP2	55:Q8:21:LYS:NZ	2.39	0.54
27:16:73:A:H3'	27:16:74:U:H6	1.72	0.54
26:1H:2579:C:H2'	26:1H:2580:U:O4'	2.07	0.54
1:1G:1392:G:H21	1:1G:1502:A:H8	1.54	0.54
26:1H:1580:A:OP2	26:1H:1580:A:H8	1.90	0.54
26:1H:483:A:O2'	46:G8:49:VAL:O	2.22	0.54
32:41:4:ASP:OD1	32:41:5:VAL:N	2.41	0.54
36:25:63:VAL:HG23	36:25:64:ARG:HG3	1.88	0.54
26:1H:1346:G:C4	26:1H:1347:G:C8	2.96	0.54
27:1J:78:A:C2	27:1J:99:A:C4	2.96	0.54
1:13:292:G:C5	1:13:293:G:H1'	2.42	0.54
1:13:1358:U:P	14:5I:35:ARG:HG3	2.48	0.54
43:D8:17:GLY:N	43:D8:96:ILE:O	2.32	0.54
7:62:58:PRO:HA	7:62:61:VAL:HG12	1.90	0.54
41:B8:42:ILE:O	41:B8:42:ILE:HD12	2.07	0.54
37:35:49:ARG:HD2	55:M5:60:LEU:HD13	1.90	0.54
26:14:1970:A:H4'	26:14:1970:A:OP1	2.08	0.54
1:1G:458:C:N4	1:1G:464:G:O6	2.41	0.54
29:11:109:ASP:N	29:11:196:VAL:O	2.40	0.54
1:1G:1013:G:O2'	1:1G:1014:A:N7	2.37	0.54
1:13:734:G:C2	1:13:735:C:C2	2.96	0.54
26:1H:1709:U:H1'	26:1H:2860:A:N3	2.22	0.54
57:3L:28:U:H3	57:3L:42:A:N6	2.06	0.54
4:3E:155:LEU:HB3	4:3E:158:ILE:HG13	1.90	0.54
42:C8:84:LYS:HD3	42:C8:85:LYS:N	2.22	0.54
16:7I:28:ARG:HG3	16:7I:29:ASP:N	2.22	0.54
43:95:44:LYS:O	43:95:46:VAL:HG12	2.07	0.54
26:1H:918:A:H8	26:1H:918:A:O5'	1.91	0.54
26:1H:580:C:H2'	26:1H:581:C:C6	2.42	0.54
29:11:40:THR:HG23	29:11:41:GLY:N	2.21	0.54
1:1G:111:G:O5'	1:1G:111:G:H8	1.90	0.54
18:9I:31:LEU:H	18:9I:31:LEU:HD23	1.71	0.54
1:1G:273:A:N6	1:1G:274:A:N6	2.55	0.54
23:2K:20:G:C4	23:2K:58:A:C2	2.95	0.54
1:13:859:A:H2'	1:13:860:A:C8	2.42	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:534:U:H2'	26:1H:535:C:C6	2.43	0.54
26:14:834:C:OP2	61:14:3537:HOH:O	2.18	0.54
41:75:42:ILE:O	41:75:42:ILE:HG13	2.07	0.54
26:14:991:C:O2	26:14:1164:G:C2	2.60	0.54
5:42:8:GLU:HA	5:42:34:VAL:HA	1.90	0.54
47:H8:53:ILE:HG22	47:H8:71:VAL:HG13	1.90	0.54
26:1H:675:A:OP1	31:31:63:LYS:HE2	2.08	0.54
1:13:718:G:C8	11:2I:116:HIS:HB3	2.42	0.54
3:22:29:TYR:CD1	3:22:29:TYR:C	2.81	0.54
32:49:111:LEU:HD13	32:49:117:PHE:HE1	1.73	0.54
1:13:1368:G:OP2	9:8E:112:LYS:HD2	2.07	0.54
26:1H:863:A:H2	26:1H:914:C:N4	2.06	0.54
26:1H:2176:A:HO2'	28:71:44:HIS:CE1	2.22	0.54
1:13:1152:A:H2'	1:13:1153:C:H6	1.73	0.54
1:13:1079:G:C6	1:13:1080:A:N6	2.76	0.54
26:1H:2469:A:H2	26:1H:2481:G:N2	1.96	0.54
49:J8:53:VAL:HB	49:J8:58:ILE:HD13	1.88	0.54
47:H8:124:ILE:HD12	47:H8:125:LEU:H	1.71	0.54
1:13:1133:G:H2'	1:13:1134:G:C8	2.43	0.54
26:1H:2403:C:H2'	26:1H:2404:C:H6	1.72	0.54
1:13:346:G:H1'	41:B8:41:ARG:NH2	2.23	0.54
26:1H:2335:A:C8	26:1H:2337:G:C5	2.96	0.54
26:14:2262:U:O2'	26:14:2263:C:H5'	2.08	0.54
26:14:1048:A:N6	26:14:1112:G:O2'	2.41	0.54
8:72:110:ALA:O	8:72:121:ASP:N	2.41	0.54
5:42:84:PHE:HD2	5:42:130:ASN:HB3	1.72	0.54
1:13:266:G:C2	1:13:269:C:H5	2.25	0.54
30:21:38:THR:OG1	30:21:40:GLU:OE1	2.18	0.54
26:14:1567:A:O2'	29:19:63:ARG:NH2	2.41	0.54
26:1H:2126:A:O2'	26:1H:2162:G:N2	2.41	0.54
26:1H:2169:A:OP1	26:1H:2171:A:N6	2.41	0.54
26:1H:1800:C:OP1	29:11:266:SER:OG	2.15	0.54
27:1J:44:G:O2'	27:1J:48:A:N6	2.41	0.54
6:52:99:ALA:H	18:9A:31:LEU:HD22	1.73	0.54
12:3I:53:ARG:HB3	12:3I:69:TYR:HE1	1.72	0.54
1:1G:1521:G:H2'	1:1G:1522:U:H6	1.73	0.54
26:1H:2356:C:C5	26:1H:2357:U:C4	2.95	0.54
26:14:2357:U:OP1	48:E5:20:ARG:NH1	2.37	0.54
12:3I:70:ILE:HD13	12:3I:77:LEU:HD12	1.89	0.54
26:1H:2674:G:H4'	36:68:30:ALA:HB2	1.90	0.54
26:1H:930:U:H4'	26:1H:931:G:O5'	2.07	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2447:G:H3'	61:14:3557:HOH:O	2.08	0.54
2:1E:17:PHE:HB3	2:1E:44:LEU:HD11	1.89	0.54
5:4E:64:ARG:N	5:4E:64:ARG:HD2	2.23	0.54
45:B5:32:PRO:HA	45:B5:77:LYS:HB2	1.89	0.54
1:13:38:G:C2	1:13:397:A:C2	2.95	0.54
37:35:80:TYR:HA	37:35:111:ARG:O	2.08	0.54
42:C8:50:ARG:HH12	43:D8:72:VAL:HG23	1.72	0.54
20:BI:73:HIS:HB3	20:BI:74:LYS:HG2	1.89	0.54
13:4A:39:ILE:HG22	13:4A:40:ASN:H	1.73	0.54
26:1H:732:C:OP2	61:1H:3552:HOH:O	2.18	0.54
25:4K:12:A:C8	25:4K:14:A:OP1	2.61	0.54
1:1G:1151:A:H5'	10:1A:41:PRO:HA	1.90	0.54
26:1H:176:G:C2'	26:1H:177:G:H5'	2.38	0.54
34:69:113:ARG:O	34:69:131:LYS:HD3	2.08	0.54
26:14:139:G:H5''	26:14:139:G:H8	1.73	0.54
23:2L:35:C:H2'	23:2L:36:A:C8	2.42	0.54
26:1H:2019:A:C6	26:1H:2020:A:N7	2.76	0.54
1:1G:736:C:H2'	1:1G:737:A:H8	1.71	0.54
1:13:488:C:H2'	1:13:489:C:C6	2.42	0.54
1:13:1305:G:H21	1:13:1331:G:H2'	1.72	0.54
26:14:1857:G:C6	26:14:1858:G:C6	2.95	0.54
1:13:1316:G:H22	1:13:1319:A:H5'	1.73	0.54
38:88:5:ARG:HH21	38:88:6:ARG:HE	1.55	0.54
26:1H:2290:G:C6	26:1H:2291:U:N3	2.76	0.54
4:3E:108:LEU:HD23	4:3E:110:PHE:CE1	2.43	0.54
4:3E:108:LEU:HB3	4:3E:110:PHE:CD1	2.43	0.54
26:14:731:C:OP1	61:14:3538:HOH:O	2.19	0.54
17:8I:11:VAL:HG23	17:8I:20:THR:HB	1.90	0.54
17:8I:59:ILE:HB	17:8I:71:PHE:HD2	1.72	0.54
5:42:146:ALA:HA	5:42:149:GLU:HB2	1.89	0.54
30:21:37:ARG:HD3	30:21:42:ASP:OD2	2.08	0.54
27:1J:84:C:OP1	51:H5:15:TYR:OH	2.21	0.54
11:2A:67:ASP:OD2	11:2A:71:LYS:NZ	2.38	0.54
26:14:2075:U:OP1	29:19:244:ARG:CZ	2.54	0.54
40:A8:85:VAL:CG2	40:A8:112:PHE:CZ	2.74	0.54
1:13:1041:A:H2'	1:13:1042:G:O4'	2.07	0.54
26:1H:2749:A:OP2	33:51:4:ILE:HD11	2.06	0.54
42:85:95:LEU:O	42:85:98:LEU:HG	2.08	0.54
26:1H:548:A:H2'	26:1H:549:G:H5'	1.90	0.54
10:1I:8:LEU:O	10:1I:69:ASN:HA	2.08	0.54
4:32:107:ARG:NH2	4:32:196:LEU:HD11	2.23	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:50:U:H3'	26:1H:51:G:C5'	2.38	0.54
2:1E:84:GLU:HB3	2:1E:219:VAL:HG21	1.89	0.54
27:1J:52:A:N6	40:65:33:LYS:HG3	2.23	0.54
42:C8:81:HIS:CE1	42:C8:85:LYS:HE2	2.43	0.54
32:41:47:LYS:NZ	32:41:80:PHE:HD1	2.05	0.54
26:1H:1496:A:H8	26:1H:1577:C:O2'	1.91	0.54
1:13:1285:A:H4'	1:13:1286:A:H5'	1.91	0.54
11:2A:19:ALA:HB3	11:2A:82:VAL:HG22	1.90	0.54
23:2K:32:G:H2'	23:2K:33:OMC:C6	2.43	0.54
55:M5:22:VAL:O	55:M5:50:LEU:HB2	2.06	0.54
26:1H:556:G:H2'	26:1H:557:U:H6	1.73	0.54
1:1G:222:U:C2	1:1G:223:U:C5	2.96	0.54
47:D5:51:ALA:HB1	47:D5:57:ILE:HG12	1.90	0.54
1:13:11:G:C5	1:13:12:U:C5	2.96	0.54
26:14:2113:U:C5	26:14:2114:A:H1'	2.43	0.54
38:45:134:ARG:O	38:45:136:ALA:HA	2.07	0.54
1:13:578:C:OP1	61:13:1812:HOH:O	2.18	0.54
1:13:599:C:O2'	8:7E:129:VAL:O	2.16	0.54
1:13:667:G:H4'	15:6I:51:HIS:CE1	2.43	0.54
26:1H:2209:C:O2	26:1H:2216:G:C2	2.61	0.54
1:1G:45:U:H2'	1:1G:46:G:C8	2.43	0.54
11:2A:17:GLY:N	11:2A:77:MET:SD	2.81	0.54
26:14:590:A:H2'	26:14:591:C:C6	2.42	0.54
36:68:71:ARG:NH2	36:68:77:ILE:HG21	2.23	0.54
26:1H:1953:A:N1	26:1H:2549:G:O2'	2.41	0.54
38:88:141:GLN:O	38:88:141:GLN:NE2	2.39	0.54
1:1G:19:C:OP1	5:42:125:SER:OG	2.25	0.54
43:D8:1:MET:CE	43:D8:43:GLU:HG2	2.38	0.53
30:29:70:ALA:O	30:29:72:VAL:N	2.42	0.53
1:1G:1326:C:H2'	1:1G:1327:C:C6	2.43	0.53
45:B5:55:ASN:HB2	45:B5:80:ILE:HG12	1.90	0.53
26:1H:1556:C:H2'	26:1H:1557:C:H6	1.73	0.53
26:1H:1756:G:H1'	26:1H:1758:G:C2	2.43	0.53
16:7A:20:VAL:HG11	16:7A:32:TYR:CE2	2.43	0.53
36:68:93:PRO:HG3	36:68:114:ILE:HG12	1.90	0.53
57:3L:41:A:C2	57:3L:42:A:C8	2.96	0.53
2:1E:166:ASP:C	2:1E:168:THR:H	2.11	0.53
1:1G:1169:A:H2'	1:1G:1170:A:C8	2.43	0.53
26:1H:2294:C:C4	26:1H:2295:C:C5	2.96	0.53
1:13:401:C:OP2	4:3E:73:ARG:HD3	2.08	0.53
1:13:552:U:H4'	12:3I:86:ARG:HG3	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:98:GLU:O	4:32:103:ASN:ND2	2.41	0.53
1:1G:1502:A:H5'	1:1G:1504:G:N7	2.24	0.53
38:88:5:ARG:NH2	38:88:6:ARG:HE	2.06	0.53
1:13:757:U:OP2	1:13:757:U:H6	1.91	0.53
26:1H:1026:U:H1'	26:1H:1027:A:O5'	2.08	0.53
8:7E:68:ARG:HD2	8:7E:74:PRO:HB2	1.89	0.53
29:11:24:ILE:HD11	29:11:91:ARG:HD2	1.90	0.53
41:75:56:GLY:O	41:75:59:THR:HG22	2.08	0.53
2:12:131:PRO:O	2:12:134:GLU:N	2.40	0.53
1:1G:881:G:H2'	1:1G:882:C:O4'	2.09	0.53
26:1H:459:U:H5''	54:P8:40:TRP:CD2	2.43	0.53
6:5E:44:GLY:HA2	6:5E:59:TYR:CE2	2.44	0.53
26:14:989:G:OP2	51:H5:11:SER:OG	2.23	0.53
26:14:669:G:H2'	26:14:669:G:N3	2.22	0.53
26:1H:1869:G:H8	26:1H:1869:G:H5''	1.73	0.53
39:98:46:GLY:HA2	39:98:49:ASP:HB2	1.90	0.53
26:1H:516:C:OP1	53:N8:13:LYS:NZ	2.32	0.53
1:13:1288:A:N1	1:13:1371:G:H1'	2.23	0.53
26:14:2733:A:H61	30:29:202:LYS:HB3	1.73	0.53
40:A8:88:ASP:OD1	40:A8:90:GLY:N	2.41	0.53
24:3K:15:G:N2	24:3K:21:A:N7	2.56	0.53
1:1G:458:C:H2'	1:1G:464:G:C8	2.42	0.53
1:1G:910:C:OP2	12:3A:21:LYS:NZ	2.39	0.53
9:8E:34:ASN:O	9:8E:38:GLN:HB2	2.09	0.53
31:31:129:PHE:HA	31:31:142:TRP:HE1	1.72	0.53
30:21:166:THR:HG21	30:21:199:ARG:HH22	1.71	0.53
1:13:1263:C:H2'	1:13:1264:C:C6	2.43	0.53
26:1H:1550:C:H2'	26:1H:1551:C:H6	1.72	0.53
31:39:102:PRO:HB2	31:39:105:VAL:HG23	1.90	0.53
34:69:143:SER:OG	34:69:145:VAL:N	2.41	0.53
38:45:88:GLY:O	38:45:89:ASN:ND2	2.40	0.53
3:22:61:ALA:C	3:22:63:ASN:H	2.11	0.53
26:1H:1339:G:H21	26:1H:1603:A:H1'	1.73	0.53
1:13:232:G:H2'	1:13:233:C:H6	1.72	0.53
26:14:871:U:H5''	38:45:69:PHE:CE2	2.43	0.53
26:14:55:G:H2'	26:14:56:A:C8	2.44	0.53
18:9A:53:ARG:HH21	18:9A:60:ALA:N	2.06	0.53
32:49:56:ALA:HB2	32:49:153:ARG:NE	2.22	0.53
5:42:35:GLY:HA3	5:42:41:VAL:HG12	1.89	0.53
32:41:5:VAL:HG11	32:41:100:TRP:HB2	1.88	0.53
1:1G:191:G:H1'	20:BA:104:LEU:O	2.08	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:128:VAL:HG13	4:32:144:ASP:HB3	1.90	0.53
26:1H:933:A:H5'	61:1H:3919:HOH:O	2.08	0.53
56:1L:73:A:H3'	56:1L:73:A:N3	2.23	0.53
4:3E:185:PHE:CZ	4:3E:188:LEU:HD23	2.44	0.53
1:1G:254:G:OP1	17:8A:67:LYS:O	2.26	0.53
48:18:70:GLN:HG3	48:18:80:HIS:HE2	1.73	0.53
26:14:1776:G:N3	26:14:1776:G:H2'	2.23	0.53
30:29:6:GLY:O	30:29:195:LEU:HD12	2.08	0.53
26:1H:338:G:H2'	26:1H:339:U:H6	1.72	0.53
26:14:1899:G:O2'	26:14:1900:A:P	2.66	0.53
29:19:246:PRO:CA	29:19:255:LYS:NZ	2.70	0.53
10:1I:49:VAL:CG2	14:5I:41:ARG:HB2	2.36	0.53
26:1H:2124:G:H21	28:71:217:THR:HG22	1.74	0.53
30:29:81:ILE:O	30:29:82:ARG:HB2	2.08	0.53
1:1G:1328:C:O2'	13:4A:29:ARG:NE	2.39	0.53
9:82:82:ALA:HA	9:82:85:LEU:HG	1.89	0.53
1:1G:1263:C:C2	1:1G:1273:G:N2	2.77	0.53
1:1G:1410:G:H2'	1:1G:1411:C:H6	1.73	0.53
1:1G:197:A:H8	1:1G:198:G:C4	2.27	0.53
26:1H:33:U:O2'	26:1H:446:G:N2	2.41	0.53
57:3L:11:C:H2'	57:3L:12:U:H6	1.73	0.53
47:D5:4:ARG:NH1	47:D5:60:GLU:OE2	2.42	0.53
26:1H:1858:G:H4'	26:1H:1859:A:H5'	1.90	0.53
26:14:9:U:C5	26:14:2629:A:N6	2.76	0.53
26:14:2190:G:H2'	26:14:2191:G:C1'	2.37	0.53
26:14:795:C:H2'	26:14:796:C:C6	2.43	0.53
30:29:13:ARG:HB3	30:29:22:PRO:HA	1.89	0.53
26:14:1973:G:H2'	26:14:1974:C:C6	2.42	0.53
26:14:2862:G:H2'	26:14:2863:C:H6	1.74	0.53
20:BA:33:ILE:O	20:BA:37:SER:OG	2.22	0.53
3:22:132:ARG:HH12	4:32:47:ARG:HH12	1.55	0.53
5:4E:45:PHE:HD2	5:4E:47:LYS:HZ2	1.54	0.53
4:3E:60:GLU:OE2	4:3E:199:ASN:N	2.40	0.53
17:8I:40:LYS:HG2	17:8I:41:LYS:H	1.73	0.53
1:13:1277:C:HO2'	1:13:1279:A:H8	1.55	0.53
26:14:1444(A):A:O2'	26:14:1445:C:OP1	2.24	0.53
3:22:29:TYR:O	3:22:29:TYR:HD1	1.92	0.53
1:1G:1290:G:H21	9:82:70:LYS:HE2	1.73	0.53
1:13:475:G:H2'	1:13:476:G:H5'	1.90	0.53
5:42:93:PRO:HG3	8:72:105:ARG:HG3	1.90	0.53
26:14:2688:U:H1'	26:14:2721:A:N6	2.23	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:857:C:H4'	48:E5:23:VAL:HG21	1.90	0.53
1:1G:523:A:N6	12:3A:92:ASP:HB2	2.20	0.53
43:95:71:LEU:O	43:95:72:VAL:HG12	2.07	0.53
30:29:166:THR:HG21	30:29:199:ARG:HH21	1.72	0.53
26:14:2685:G:OP2	41:75:51:ARG:NH2	2.40	0.53
45:F8:26:TYR:O	45:F8:81:VAL:HG12	2.08	0.53
32:49:44:GLY:O	32:49:47:LYS:HG3	2.08	0.53
32:41:77:ILE:O	32:41:81:LYS:O	2.27	0.53
1:1G:1097:C:O2'	1:1G:1169:A:N3	2.40	0.53
26:1H:1113:U:C5'	33:51:2:SER:HB2	2.36	0.53
1:1G:756:C:H2'	1:1G:757:U:C6	2.44	0.53
26:14:2812:G:N2	26:14:2889:C:C2	2.77	0.53
57:3L:48:C:C5	57:3L:59:A:H1'	2.43	0.53
26:1H:1404:C:O2'	26:1H:1405:U:H5'	2.08	0.53
27:1J:44:G:C2	27:1J:48:A:C2	2.97	0.53
1:13:1221:G:H4'	19:AI:53:ASN:O	2.08	0.53
32:41:11:TYR:HA	32:41:15:VAL:HB	1.89	0.53
1:13:1225:A:H5''	1:13:1226:C:OP2	2.08	0.53
26:1H:807:U:O2'	26:1H:808:G:H5'	2.07	0.53
1:13:822:C:O2'	1:13:823:G:H5'	2.09	0.53
12:3A:60:LEU:HB2	12:3A:64:TYR:HB3	1.91	0.53
26:14:1790:C:H2'	26:14:1791:A:C5	2.43	0.53
26:1H:43:G:N2	26:1H:438:G:C4	2.77	0.53
29:19:89:SER:HB2	29:19:159:ALA:H	1.72	0.53
30:29:50:GLY:HA2	30:29:78:LEU:HD23	1.90	0.53
1:1G:1099:G:C6	1:1G:1100:C:C4	2.96	0.53
1:1G:498:A:H4'	1:1G:500:G:OP1	2.07	0.53
1:1G:195:A:C6	1:1G:196:A:N1	2.76	0.53
53:J5:41:PRO:O	53:J5:44:THR:OG1	2.22	0.53
1:13:953:G:H1	1:13:1228:C:H42	1.57	0.53
2:1E:10:LEU:HD11	2:1E:217:ARG:NE	2.23	0.53
22:1K:55:PSU:H6	22:1K:55:PSU:O5'	1.91	0.53
26:1H:143:C:H4'	45:F8:38:GLU:OE2	2.08	0.53
6:5E:67:MET:CE	6:5E:75:LEU:HD12	2.38	0.53
23:2L:21:U:OP2	23:2L:21:U:H2'	2.08	0.53
4:3E:88:VAL:H	5:4E:97:GLY:HA3	1.72	0.53
40:A8:18:ILE:O	40:A8:21:THR:HG22	2.09	0.53
18:9A:22:VAL:C	18:9A:24:ALA:H	2.12	0.53
2:12:166:ASP:O	2:12:170:GLU:N	2.37	0.53
1:13:1502:A:H2	1:13:1505:G:N1	1.94	0.53
16:7I:74:LEU:HA	16:7I:77:ALA:HB2	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:39:125:LEU:HA	31:39:194:MET:HB2	1.90	0.53
26:1H:548:A:N3	43:D8:21:ARG:NH1	2.56	0.53
1:13:148:G:N2	1:13:175:C:N3	2.56	0.53
4:32:172:PRO:HB2	4:32:187:ARG:NH1	2.24	0.53
57:3L:6:G:N3	57:3L:68:G:H1'	2.23	0.53
26:1H:2801:A:H5'	26:1H:2895:U:O4'	2.09	0.53
38:45:22:LYS:CG	38:45:23:GLY:HA2	2.34	0.53
26:1H:2359:C:OP1	55:Q8:52:LYS:HE2	2.08	0.53
26:1H:1021:A:C8	26:1H:1022:G:H5''	2.43	0.53
26:1H:2057:A:H2'	26:1H:2058:A:C8	2.43	0.53
1:1G:1103:C:C2	1:1G:1104:G:C8	2.95	0.53
37:78:29:LYS:HG2	37:78:30:THR:H	1.72	0.53
26:14:582:G:H2'	26:14:583:G:C8	2.43	0.53
26:14:38:A:H2'	26:14:39:C:C6	2.44	0.53
26:1H:1405:U:H2'	26:1H:1406:U:H6	1.72	0.53
26:14:1729:A:C5	26:14:1731:G:C6	2.97	0.53
1:13:443:C:N4	1:13:491:G:H1	2.07	0.53
1:13:168:G:N2	1:13:169:C:H41	2.06	0.53
1:13:1013:G:N2	1:13:1016:A:OP2	2.40	0.53
26:1H:722:A:H2'	26:1H:723:G:C8	2.44	0.53
26:1H:2362:G:OP1	55:Q8:44:LYS:NZ	2.37	0.53
26:14:370:G:OP1	26:14:403:U:N3	2.31	0.53
1:1G:1172:C:H2'	1:1G:1173:G:C8	2.44	0.53
10:1I:16:LEU:HD23	10:1I:94:VAL:HG13	1.89	0.53
26:14:77:C:H42	26:14:109:G:H1	1.57	0.53
1:1G:674:G:N2	1:1G:717:C:O2	2.39	0.53
26:14:270(Q):C:H5''	34:69:45:LYS:HD3	1.90	0.53
22:1K:11:C:H42	22:1K:25:C:H42	1.56	0.53
1:13:1510:U:H2'	1:13:1511:G:C8	2.44	0.53
1:13:1190:G:H5''	3:2E:176:HIS:NE2	2.23	0.53
26:14:13:A:N1	26:14:525:U:H2'	2.24	0.53
26:14:1509:C:H5''	26:14:1510:A:C8	2.44	0.53
26:1H:1420:U:O2'	26:1H:1421:G:OP1	2.25	0.53
1:1G:803:G:C6	1:1G:804:U:C4	2.96	0.53
40:A8:111:GLU:O	40:A8:112:PHE:CD1	2.62	0.53
42:C8:92:ARG:CD	43:D8:11:GLN:HG3	2.24	0.53
26:1H:1188:U:C5'	43:D8:79:VAL:HG22	2.39	0.53
28:71:22:ILE:HD12	28:71:193:ILE:HD11	1.90	0.53
26:14:2784:C:O2	30:29:37:ARG:NH2	2.42	0.53
1:1G:746:A:H2'	1:1G:747:C:C6	2.43	0.53
37:35:3:LEU:HA	37:35:6:LEU:HD23	1.89	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:39:34:TRP:CZ3	37:35:8:PRO:HB3	2.44	0.53
1:1G:973:G:H1'	10:1A:55:LYS:HG2	1.91	0.53
24:3K:53:G:H1	24:3K:61:C:N4	2.06	0.53
1:1G:1016:A:O2'	1:1G:1217:C:O2'	2.26	0.53
26:14:1001:A:H2'	26:14:1002:G:O4'	2.08	0.53
1:13:992:U:H4'	1:13:993:G:O5'	2.09	0.53
26:14:259:G:N2	26:14:621:A:H8	2.04	0.53
2:1E:168:THR:HA	2:1E:171:ALA:HB2	1.90	0.53
12:3I:60:LEU:HB3	12:3I:64:TYR:HB2	1.91	0.53
6:5E:3:ARG:HD3	6:5E:64:GLN:OE1	2.09	0.53
27:1J:3:C:N4	27:1J:117:G:H22	2.06	0.53
26:14:2578:G:C5	30:29:140:SER:HB2	2.43	0.53
26:1H:308:G:H5''	26:1H:309:G:OP2	2.08	0.53
1:13:946:A:H2'	1:13:947:G:C8	2.44	0.53
1:13:700:G:H4'	1:13:704:A:H1'	1.91	0.53
7:62:45:ASP:HA	7:62:48:LYS:HE3	1.91	0.53
30:29:11:MET:SD	30:29:24:THR:HG22	2.49	0.53
1:13:859:A:H2'	1:13:860:A:H8	1.74	0.53
26:14:1576:U:H2'	26:14:1577:C:C6	2.44	0.53
48:I8:37:LEU:HD11	48:I8:61:ALA:N	2.24	0.53
17:8I:22:LEU:HD11	17:8I:39:SER:HB3	1.90	0.53
1:1G:1354:C:H2'	1:1G:1355:G:C8	2.44	0.53
26:14:2689:U:P	26:14:2719:G:H22	2.31	0.53
48:I8:17:GLN:O	48:I8:19:LYS:HD3	2.08	0.53
1:1G:1462:G:H2'	1:1G:1463:C:C6	2.43	0.53
26:14:2441:C:OP2	26:14:2586:C:O2'	2.19	0.53
26:1H:1677:A:O5'	26:1H:1677:A:H8	1.92	0.53
31:31:179:GLU:CD	31:31:179:GLU:H	2.11	0.53
46:G8:85:VAL:HG23	46:G8:96:ILE:CG1	2.24	0.53
26:14:2402:C:OP1	26:14:2402:C:H4'	2.08	0.53
24:3K:57:G:H1	26:1H:2112:G:H22	1.56	0.53
1:13:452:A:O2'	1:13:453:A:O4'	2.24	0.53
26:14:921:G:C5	26:14:922:U:C4	2.97	0.53
4:32:31:CYS:HA	59:32:302:SF4:S2	2.49	0.53
3:22:21:ARG:NH1	3:22:21:ARG:HB3	2.24	0.53
1:13:1157:A:N6	1:13:1178:G:H21	2.06	0.53
32:41:115:ARG:HB3	32:41:115:ARG:NH1	2.23	0.53
26:1H:1567:A:OP1	29:11:60:ARG:NE	2.42	0.53
1:1G:1072:G:H2'	1:1G:1073:U:O4'	2.08	0.53
45:F8:49:VAL:HG12	45:F8:50:LYS:N	2.22	0.53
1:1G:865:A:H5'	1:1G:1078:U:H5	1.74	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:17:U:H2'	1:1G:18:C:C6	2.44	0.53
1:1G:155:C:N4	1:1G:166:G:H1	2.06	0.53
20:BA:86:ARG:NH1	20:BA:86:ARG:HB2	2.23	0.53
1:13:26:A:N6	1:13:558:G:O2'	2.40	0.53
26:14:1115:G:C5	26:14:1116:C:C4	2.97	0.53
26:14:2472:G:N1	26:14:2477:C:OP1	2.41	0.53
47:H8:28:MET:O	47:H8:35:ARG:N	2.40	0.53
1:13:1162:C:O5'	1:13:1162:C:H6	1.92	0.53
1:13:1016:A:O5'	1:13:1016:A:H8	1.92	0.53
44:A5:20:VAL:CG2	44:A5:47:VAL:HG21	2.38	0.53
50:K8:34:GLU:O	50:K8:38:GLN:HG3	2.08	0.53
26:14:2734:A:C8	26:14:2735:G:C8	2.97	0.53
1:1G:501:C:H2'	1:1G:502:G:C8	2.44	0.53
45:B5:36:LYS:HG3	45:B5:56:THR:HG23	1.91	0.53
26:1H:2832:U:H4'	26:1H:2833:G:H5''	1.90	0.53
26:14:195:A:H4'	26:14:251:A:O2'	2.08	0.53
3:22:69:HIS:HD2	3:22:104:GLN:HB3	1.74	0.53
26:1H:1545(A):A:H2'	26:1H:1546:C:O4'	2.09	0.53
9:8E:22:GLY:N	9:8E:58:HIS:O	2.35	0.53
26:14:2233:U:OP2	61:14:3536:HOH:O	2.18	0.53
45:B5:52:VAL:N	45:B5:82:GLN:O	2.42	0.53
26:1H:562:U:O4	26:1H:2036:C:H1'	2.08	0.53
22:1K:37:T6A:H2'	22:1K:38:A:O4'	2.09	0.53
26:14:1507:A:C4	26:14:1508:A:H1'	2.44	0.53
26:14:1425:G:H2'	26:14:1426:G:C8	2.43	0.53
26:14:1239:G:H2'	26:14:1240:U:O4'	2.08	0.53
26:1H:943:U:OP2	37:78:36:LYS:HG2	2.09	0.53
32:49:19:LEU:HG	32:49:175:LEU:HD12	1.90	0.53
42:85:100:VAL:O	42:85:101:ARG:HG2	2.08	0.53
43:95:39:LEU:HD12	43:95:39:LEU:H	1.74	0.53
27:1J:65:C:H41	27:1J:108:C:C2'	2.21	0.53
1:13:393:A:OP2	16:7I:12:LYS:NZ	2.20	0.53
8:72:35:ILE:O	8:72:39:LEU:HD22	2.09	0.53
37:35:107:LYS:O	37:35:109:GLY:N	2.31	0.53
26:1H:1627:G:C2'	26:1H:1628:G:H5'	2.39	0.53
20:BI:63:ILE:CG2	20:BI:77:ALA:HB1	2.39	0.53
53:J5:6:VAL:HG13	53:J5:7:PRO:HD2	1.89	0.53
7:6E:5:ARG:CZ	7:6E:7:ALA:HA	2.38	0.53
26:1H:39:C:O2	31:31:46:ARG:NH2	2.42	0.53
26:14:1204:A:N1	26:14:1241:A:H2	2.06	0.53
34:61:110:ASP:HB2	34:61:130:TYR:OH	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:E5:49:LYS:HB2	48:E5:82:ARG:NH1	2.24	0.53
44:E8:57:ASN:HA	44:E8:61:ASN:HD22	1.74	0.53
26:14:27:G:O2'	26:14:28:A:OP2	2.24	0.53
22:1K:6:G:N2	22:1K:7:U:O4	2.41	0.53
46:C5:31:LEU:CD1	46:C5:36:ALA:HB3	2.37	0.53
1:13:558:G:H5''	1:13:559:A:OP2	2.09	0.53
26:1H:2126:A:H4'	26:1H:2127:G:OP1	2.08	0.53
38:88:133:ARG:O	38:88:134:ARG:HB2	2.09	0.53
2:12:58:ILE:HB	2:12:221:LEU:CB	2.38	0.53
55:M5:37:SER:OG	55:M5:39:LYS:O	2.27	0.53
26:1H:1252:G:N3	42:C8:33:ARG:HD2	2.24	0.53
2:1E:31:TYR:CB	2:1E:42:ILE:HD11	2.38	0.53
1:1G:42:G:H2'	1:1G:43:C:O4'	2.08	0.53
1:13:46:G:H2'	1:13:366:C:H5	1.73	0.53
26:14:2275:C:H5'	26:14:2275:C:H6	1.74	0.53
6:5E:67:MET:SD	6:5E:75:LEU:HD12	2.49	0.53
26:1H:875:G:H2'	26:1H:876:C:O4'	2.07	0.53
29:11:223:GLY:HA3	29:11:231:HIS:CE1	2.44	0.53
26:14:1257:C:OP1	31:39:75:HIS:HE1	1.90	0.53
45:B5:21:PHE:CZ	45:B5:92:LEU:HD23	2.44	0.53
3:2E:156:ARG:N	3:2E:196:LEU:HD22	2.24	0.53
26:14:320:A:H4'	26:14:322:A:C8	2.44	0.53
5:4E:67:VAL:O	5:4E:69:VAL:HG23	2.09	0.53
57:3L:25:C:H2'	57:3L:26:A:O4'	2.08	0.53
2:1E:189:ASP:HB3	2:1E:205:ASP:H	1.73	0.53
38:45:81:VAL:HG23	38:45:82:ARG:H	1.74	0.53
1:1G:458:C:N3	1:1G:474:G:N2	2.55	0.53
26:1H:1257:C:OP1	31:31:75:HIS:HE1	1.92	0.53
1:1G:977:A:H2'	1:1G:978:A:H5'	1.91	0.53
26:14:597:U:H2'	26:14:598:G:H8	1.73	0.53
26:14:660:G:H21	37:35:12:ALA:CA	2.22	0.53
32:41:151:ALA:O	32:41:153:ARG:NH1	2.42	0.53
4:32:18:LYS:HG3	59:32:302:SF4:S1	2.49	0.53
37:35:41:ARG:HD2	37:35:41:ARG:N	2.24	0.53
13:4I:11:ARG:HG2	13:4I:46:LYS:HD2	1.89	0.53
26:14:2805:G:H2'	26:14:2807:G:O4'	2.08	0.53
26:1H:2399:G:H8	26:1H:2399:G:O5'	1.92	0.53
26:14:1568:G:P	29:19:63:ARG:HH12	2.32	0.53
7:62:148:ASN:O	7:62:149:ARG:HD3	2.09	0.53
1:1G:557:G:H2'	1:1G:558:G:O4'	2.09	0.53
1:1G:668:G:C2'	1:1G:669:U:H5'	2.39	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:D5:80:ARG:HD2	47:D5:80:ARG:H	1.74	0.53
26:14:181:A:H2'	26:14:182:A:C8	2.44	0.53
23:2L:20:G:C4	23:2L:58:A:C2	2.97	0.53
1:1G:261:U:OP2	20:BA:80:ARG:NH2	2.37	0.53
31:31:197:ASP:O	31:31:199:TRP:N	2.42	0.53
26:14:2056:G:C2	26:14:2057:A:C8	2.96	0.53
26:1H:2715:C:H2'	26:1H:2716:U:H6	1.74	0.53
26:14:2349:G:OP2	55:M5:42:ARG:NH2	2.42	0.53
6:52:53:ALA:HB3	6:52:86:ARG:HD3	1.91	0.53
23:2K:24:C:H2'	23:2K:25:U:C6	2.43	0.53
26:14:2453:A:H2'	26:14:2454:G:O4'	2.09	0.53
8:7E:8:ASP:O	8:7E:12:ARG:HB2	2.09	0.53
26:14:446:G:H8	61:14:3503:HOH:O	1.92	0.53
26:14:265:A:C8	26:14:266:G:H1'	2.43	0.53
26:14:184:C:H2'	26:14:185:U:C6	2.43	0.53
42:C8:92:ARG:CZ	43:D8:11:GLN:H	2.22	0.53
1:13:1368:G:H5''	9:8E:112:LYS:HB3	1.90	0.53
1:1G:1369:C:H2'	1:1G:1370:G:C8	2.44	0.53
26:14:2134:A:C2	26:14:2158:A:H1'	2.44	0.53
26:14:1995:U:H3'	26:14:1996:C:H2'	1.90	0.53
30:29:46:ALA:HB2	30:29:82:ARG:HA	1.91	0.53
1:13:963:G:H21	10:1I:55:LYS:NZ	2.07	0.53
26:14:1812:A:O2'	29:19:45:ASN:HB2	2.09	0.53
49:J8:58:ILE:HG12	49:J8:87:PRO:HD3	1.91	0.53
16:7I:13:HIS:C	16:7I:15:PRO:HD3	2.29	0.53
35:58:40:PRO:O	42:C8:64:ARG:HG2	2.09	0.53
26:1H:1553:A:HO2'	26:1H:1554:A:H8	1.54	0.53
13:4A:80:ARG:NH2	19:AA:65:ASN:HD22	2.05	0.53
26:1H:1643:G:C5	26:1H:1644:C:C5	2.96	0.53
26:1H:141:A:OP2	26:1H:141(A):C:N4	2.37	0.53
26:14:2311:A:H62	32:49:44:GLY:HA3	1.73	0.53
42:C8:74:LEU:C	42:C8:74:LEU:HD12	2.29	0.53
57:3L:12:U:C2	57:3L:13:C:H1'	2.44	0.53
55:Q8:49:VAL:HG12	55:Q8:49:VAL:O	2.09	0.53
16:7A:68:ASP:O	16:7A:71:ARG:HB3	2.08	0.53
26:14:2320:A:H2'	26:14:2333:A:H62	1.73	0.53
26:14:2101:G:N2	26:14:2189:U:O2	2.42	0.53
43:95:85:LYS:HD2	43:95:87:HIS:N	2.24	0.53
26:14:1419:A:H2'	26:14:1421:G:C8	2.44	0.53
26:14:1161:C:H2'	26:14:1162:G:C8	2.44	0.53
5:42:41:VAL:O	5:42:67:VAL:HG12	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:150:GLU:N	4:3E:150:GLU:OE1	2.42	0.53
26:14:2356:C:C5	26:14:2357:U:C4	2.97	0.53
19:AA:56:GLN:OE1	19:AA:59:PRO:HD3	2.10	0.53
1:13:1070:U:OP1	5:4E:18:ARG:NH2	2.42	0.53
26:14:482:A:H5''	26:14:483:A:OP1	2.06	0.53
26:1H:750:A:OP2	61:1H:3553:HOH:O	2.19	0.53
26:14:2335:A:C8	26:14:2337:G:C5	2.96	0.53
26:1H:527:C:H4'	26:1H:528:A:H5'	1.90	0.53
26:1H:2456:C:H6	26:1H:2456:C:O5'	1.91	0.53
32:49:15:VAL:HG12	32:49:19:LEU:CD1	2.39	0.52
19:AI:41:VAL:HB	19:AI:42:PRO:C	2.28	0.52
41:B8:3:ARG:HG3	41:B8:7:ILE:N	2.24	0.52
28:71:226:PRO:HD2	28:71:227:HIS:CE1	2.44	0.52
12:3A:20:LYS:HE3	12:3A:22:SER:N	2.24	0.52
43:D8:21:ARG:NH2	43:D8:93:GLU:OE2	2.42	0.52
4:32:101:LEU:HD23	4:32:121:VAL:CG1	2.39	0.52
26:14:1000:A:C6	26:14:1001:A:N1	2.77	0.52
1:13:1145:C:H5''	1:13:1146:A:OP1	2.09	0.52
26:14:839:U:H2'	26:14:840:C:H6	1.73	0.52
1:13:1347:G:C6	9:8E:10:ARG:NH2	2.78	0.52
1:1G:1071:C:C2	1:1G:1072:G:N7	2.77	0.52
26:14:1210:A:H5'	26:14:1212:G:H5'	1.91	0.52
34:69:14:ASP:OD1	34:69:15:VAL:N	2.42	0.52
27:1J:4:C:H2'	27:1J:5:C:C6	2.43	0.52
22:1K:28:U:H3	22:1K:42:A:H61	1.57	0.52
17:8I:67:LYS:O	17:8I:68:ARG:HB3	2.09	0.52
22:1K:66:A:H3'	22:1K:67:C:H5'	1.91	0.52
10:1A:34:VAL:HG13	10:1A:74:ILE:HG21	1.90	0.52
4:3E:115:ARG:NH2	61:3E:401:HOH:O	2.43	0.52
34:69:125:GLU:OE2	34:69:141:LYS:HB2	2.09	0.52
2:12:51:LEU:O	2:12:55:PHE:N	2.38	0.52
1:1G:403:C:OP1	4:32:137:SER:OG	2.27	0.52
31:39:3:GLU:N	31:39:24:LEU:HG	2.24	0.52
26:1H:956:G:OP2	38:88:14:ARG:NH2	2.42	0.52
28:71:43:VAL:HG23	28:71:214:VAL:HG22	1.89	0.52
30:21:78:LEU:O	30:21:78:LEU:HD23	2.09	0.52
1:13:1044:A:C5	1:13:1045:C:H1'	2.45	0.52
47:H8:69:THR:HG22	47:H8:90:VAL:HG22	1.90	0.52
27:1J:9:G:H5'	40:65:25:ARG:HH12	1.74	0.52
41:75:18:ASP:OD1	41:75:18:ASP:N	2.41	0.52
4:32:146:ILE:HD12	4:32:146:ILE:H	1.73	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2839:G:H5'	39:55:46:GLY:HA2	1.91	0.52
6:52:82:ARG:HB2	6:52:85:VAL:HG23	1.90	0.52
1:13:1259:C:O2	1:13:1283:G:H1'	2.09	0.52
26:14:920:G:O2'	26:14:921:G:H5'	2.09	0.52
1:13:1240:U:OP1	7:6E:119:ARG:NH2	2.42	0.52
24:3K:7:U:H2'	24:3K:49:G:H5'	1.91	0.52
40:65:74:ALA:HB1	40:65:107:GLU:HB2	1.92	0.52
1:13:1448:C:N4	1:13:1455:G:H1	2.05	0.52
26:14:817:C:C5	26:14:818:G:N7	2.77	0.52
46:G8:62:GLU:O	46:G8:63:LYS:HD2	2.08	0.52
26:1H:2261:C:H1'	26:1H:2388:A:N3	2.24	0.52
37:78:13:ASN:C	37:78:15:ARG:H	2.10	0.52
1:1G:1067:A:H4'	1:1G:1068:G:O5'	2.08	0.52
44:E8:76:VAL:CG2	44:E8:101:SER:HB3	2.39	0.52
26:1H:2331:G:H4'	48:I8:42:GLY:HA3	1.91	0.52
2:12:174:VAL:HA	2:12:177:ALA:HB3	1.91	0.52
1:1G:56:U:H2'	1:1G:57:G:H8	1.74	0.52
8:7E:40:ALA:HA	8:7E:45:ILE:HG13	1.92	0.52
18:9I:29:PHE:HE1	18:9I:31:LEU:HB3	1.74	0.52
40:A8:95:HIS:O	40:A8:98:VAL:HG23	2.09	0.52
38:45:34:LEU:HD12	38:45:130:LYS:O	2.09	0.52
26:14:649:G:C5	26:14:650:C:C4	2.98	0.52
6:5E:42:GLU:OE1	6:5E:59:TYR:OH	2.23	0.52
26:14:558:G:P	35:15:111:PRO:HD2	2.50	0.52
1:13:1218:C:H2'	1:13:1219:U:C6	2.43	0.52
5:4E:41:VAL:HG12	5:4E:42:GLY:N	2.24	0.52
26:14:2437:U:HO2'	26:14:2599:G:HO2'	1.57	0.52
26:1H:2254:C:O5'	26:1H:2254:C:H6	1.93	0.52
1:1G:894:G:C6	1:1G:895:G:C5	2.97	0.52
10:1A:30:SER:HB3	10:1A:81:THR:HG22	1.91	0.52
26:14:631:A:O2'	37:35:67:MET:HB3	2.09	0.52
19:AI:39:THR:HG23	19:AI:68:GLY:O	2.09	0.52
26:1H:817:C:H3'	61:1H:3534:HOH:O	2.09	0.52
26:14:2786:U:H5''	30:29:66:HIS:HB2	1.90	0.52
14:5A:17:LYS:HD2	14:5A:18:VAL:H	1.73	0.52
49:J8:91:LYS:C	49:J8:93:GLU:H	2.12	0.52
39:98:48:VAL:HA	39:98:51:LEU:HB2	1.91	0.52
1:1G:1051:C:H2'	1:1G:1052:U:C6	2.45	0.52
26:14:1022:G:C6	26:14:1140:C:C4	2.97	0.52
13:4A:81:LEU:CG	13:4A:89:GLY:HA2	2.39	0.52
26:1H:1638:C:H5''	26:1H:2710:C:O2'	2.08	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:274:G:H2'	26:1H:275:G:C1'	2.39	0.52
1:1G:1132:C:H2'	1:1G:1133:G:H8	1.72	0.52
22:1K:14:A:H62	22:1K:22:G:N2	2.08	0.52
42:C8:75:ASN:HB3	42:C8:77:SER:N	2.24	0.52
40:65:7:TYR:CZ	40:65:91:PRO:HG3	2.45	0.52
28:71:200:LYS:HA	28:71:208:PHE:CE1	2.44	0.52
26:1H:1696:G:C6	26:1H:1697:G:C4	2.97	0.52
26:1H:821:A:H5''	26:1H:822:U:H6	1.74	0.52
27:1J:46:A:H2'	27:1J:47:C:H6	1.74	0.52
55:M5:22:VAL:HG11	55:M5:58:ILE:HD11	1.90	0.52
2:12:51:LEU:HD22	2:12:54:THR:HB	1.91	0.52
55:M5:40:GLU:H	55:M5:43:GLN:HB2	1.73	0.52
1:1G:1064:G:C8	1:1G:1066:C:C2	2.97	0.52
47:H8:61:LEU:HB2	47:H8:62:PRO:HD2	1.91	0.52
47:H8:7:ALA:HB3	47:H8:61:LEU:HB3	1.91	0.52
1:13:15:G:H4'	5:4E:24:ARG:HH12	1.74	0.52
26:1H:1161:C:C6	26:1H:1161:C:H3'	2.45	0.52
18:9I:38:GLU:HA	18:9I:41:LYS:NZ	2.24	0.52
27:16:29:A:H5''	27:16:30:C:OP2	2.10	0.52
27:16:29:A:P	40:A8:32:LEU:HD13	2.49	0.52
23:2K:20:G:C5	23:2K:58:A:C2	2.97	0.52
38:45:87:LYS:HB3	38:45:90:VAL:HG23	1.91	0.52
26:14:2733:A:N6	30:29:202:LYS:HB3	2.24	0.52
2:1E:10:LEU:HD11	2:1E:217:ARG:HE	1.75	0.52
26:14:2582:G:O2'	26:14:2583:G:H5'	2.09	0.52
4:32:24:GLU:HG2	4:32:25:ARG:H	1.74	0.52
26:1H:1266:G:O4'	44:E8:15:ARG:NH2	2.42	0.52
41:B8:33:LYS:HG3	41:B8:82:LEU:O	2.09	0.52
1:13:110:C:H2'	1:13:111:G:O4'	2.09	0.52
29:11:94:LEU:HD23	29:11:95:LEU:N	2.24	0.52
1:1G:744:C:O2'	1:1G:851:G:N2	2.42	0.52
2:12:34:ALA:HB3	2:12:36:ARG:HD3	1.91	0.52
26:14:1190:G:OP1	37:35:32:THR:HA	2.10	0.52
1:13:1267:C:O2	21:1F:20:LYS:HE2	2.09	0.52
5:42:51:VAL:HB	5:42:52:PRO:HD3	1.91	0.52
3:2E:129:ALA:HB3	3:2E:132:ARG:HG2	1.92	0.52
41:B8:125:ARG:HA	41:B8:128:GLU:HG2	1.90	0.52
1:13:1074:G:N3	1:13:1102:A:C2	2.77	0.52
28:71:192:PHE:HD1	28:71:195:ALA:HB3	1.74	0.52
31:31:62:ARG:HB3	31:31:62:ARG:CZ	2.40	0.52
51:L8:31:LEU:HB3	51:L8:32:GLN:OE1	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2283:C:C2	26:14:2389:G:C2	2.98	0.52
43:95:14:VAL:HB	43:95:96:ILE:HG21	1.91	0.52
37:78:96:THR:C	37:78:98:GLU:H	2.13	0.52
3:22:20:SER:OG	3:22:36:ASP:OD2	2.25	0.52
30:29:56:PRO:HD2	30:29:58:ARG:NH2	2.24	0.52
26:14:2786:U:O2	30:29:62:PRO:HB3	2.10	0.52
26:1H:2789:C:H1'	26:1H:2892:A:C2	2.44	0.52
26:1H:1290:C:H2'	26:1H:1291:C:H6	1.73	0.52
47:D5:25:PRO:O	47:D5:85:HIS:HA	2.09	0.52
1:1G:1273:G:H5''	1:1G:1274:G:N7	2.24	0.52
26:14:848:G:H2'	26:14:849:A:H8	1.73	0.52
43:95:5:VAL:HB	43:95:37:VAL:HG12	1.90	0.52
1:1G:1305:G:N2	1:1G:1331:G:H2'	2.23	0.52
26:1H:2298:A:H2'	26:1H:2299:G:O4'	2.09	0.52
1:1G:600:C:H2'	1:1G:601:C:C6	2.41	0.52
34:61:113:ARG:HH12	34:61:132:PRO:HB3	1.73	0.52
1:1G:108:G:H5'	1:1G:109:A:C5'	2.40	0.52
2:1E:5:ILE:N	2:1E:8:LYS:HZ1	2.07	0.52
27:16:54:G:H2'	27:16:55:U:C6	2.42	0.52
26:14:2107:C:O2'	26:14:2108:C:OP1	2.26	0.52
1:13:165:C:H2'	1:13:166:G:H8	1.73	0.52
26:1H:1931:U:O2	26:1H:1931:U:H5'	2.10	0.52
26:1H:2105:C:H2'	26:1H:2106:G:C8	2.44	0.52
19:AI:19:VAL:O	19:AI:23:ASN:N	2.30	0.52
8:7E:17:THR:HG21	8:7E:80:ILE:HD11	1.91	0.52
5:42:52:PRO:O	5:42:56:GLN:HG2	2.09	0.52
26:14:105:C:H2'	26:14:106:C:C6	2.44	0.52
1:13:1497:G:H2'	1:13:1498:U:H5'	1.92	0.52
26:14:2054:A:H5''	26:14:2055:C:O5'	2.10	0.52
26:1H:2309:A:C5	26:1H:2310:A:C8	2.97	0.52
35:15:40:PRO:HB3	42:85:68:ALA:HB2	1.91	0.52
26:14:608:A:H2'	26:14:609:A:O4'	2.10	0.52
26:14:1427:A:H4'	26:14:1428:C:O4'	2.08	0.52
26:14:121:G:H8	26:14:121:G:O5'	1.93	0.52
1:1G:1244:C:H2'	1:1G:1245:A:C8	2.44	0.52
31:31:6:VAL:HG11	31:31:119:ARG:HA	1.92	0.52
13:4A:59:TYR:O	13:4A:63:THR:N	2.43	0.52
26:1H:2788:C:P	30:21:61:ARG:HH12	2.31	0.52
1:1G:1015:A:H2'	1:1G:1016:A:C8	2.45	0.52
4:3E:8:VAL:CG1	4:3E:21:LEU:HB2	2.39	0.52
33:59:10:PRO:HG2	33:59:50:VAL:HG12	1.92	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2338:G:N2	26:14:2339:G:C4	2.78	0.52
8:72:120:THR:HG22	8:72:123:GLU:OE1	2.09	0.52
42:C8:90:VAL:HG22	43:D8:39:LEU:HB3	1.90	0.52
26:14:1169:G:C2	26:14:1170:G:H1'	2.45	0.52
26:14:470:A:H2'	26:14:471:A:O4'	2.08	0.52
1:13:1379:G:O6	7:6E:2:ALA:N	2.42	0.52
27:1J:116:G:OP2	27:1J:116:G:H8	1.91	0.52
26:1H:2125:G:N3	26:1H:2173:A:N6	2.57	0.52
15:6A:24:SER:OG	15:6A:27:VAL:HG23	2.09	0.52
26:14:855:G:O2'	48:E5:27:GLU:HG2	2.08	0.52
2:12:24:TRP:HA	2:12:191:ASP:HA	1.92	0.52
26:1H:1465:G:C4	26:1H:1466:G:C8	2.97	0.52
26:1H:956:G:N2	26:1H:960:A:OP2	2.40	0.52
46:C5:17:SER:HA	46:C5:71:LYS:HD2	1.90	0.52
44:E8:29:LEU:CD1	44:E8:51:LEU:HD21	2.39	0.52
17:8A:81:ARG:HD2	17:8A:84:LEU:HD12	1.92	0.52
1:13:1440:C:H2'	1:13:1441:G:O4'	2.10	0.52
31:39:52:LYS:HD3	31:39:56:GLU:O	2.08	0.52
26:1H:2740:A:H2'	26:1H:2741:A:C8	2.45	0.52
1:13:1207:G:C6	1:13:1208:C:C4	2.98	0.52
35:15:41:ASP:HB3	35:15:48:MET:HE3	1.91	0.52
26:14:614:U:H4'	26:14:615:G:OP1	2.10	0.52
26:14:618:G:H4'	31:39:205:ARG:HH11	1.75	0.52
26:1H:673:C:H5''	31:31:81:PRO:HD2	1.91	0.52
26:1H:2415:G:C2	26:1H:2416:C:C2	2.97	0.52
26:1H:686:G:H4'	26:1H:687:C:OP2	2.09	0.52
1:13:828:A:H4'	1:13:828:A:OP1	2.08	0.52
26:1H:419:C:H2'	26:1H:420:C:O4'	2.09	0.52
34:69:93:THR:O	34:69:97:ILE:HG13	2.10	0.52
3:22:29:TYR:C	3:22:29:TYR:HD1	2.13	0.52
9:8E:118:LYS:O	9:8E:119:ALA:HB3	2.09	0.52
9:8E:112:LYS:CA	9:8E:119:ALA:HB2	2.28	0.52
32:49:18:GLU:O	32:49:22:ARG:N	2.42	0.52
32:41:37:VAL:HG13	32:41:159:VAL:HG12	1.92	0.52
31:31:119:ARG:HB3	31:31:119:ARG:CZ	2.39	0.52
16:7I:79:VAL:HB	16:7I:80:PHE:CD2	2.45	0.52
29:11:31:LYS:C	29:11:35:LYS:NZ	2.62	0.52
26:14:920:G:H2'	26:14:921:G:H8	1.74	0.52
27:1J:14:U:H4'	27:1J:70:C:O2	2.09	0.52
1:1G:1279:A:O2'	1:1G:1281:U:OP2	2.20	0.52
32:41:170:ARG:HH22	32:41:181:ARG:C	2.12	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:42:27:ARG:HH11	5:42:47:LYS:NZ	2.07	0.52
1:13:160:A:N6	1:13:343:U:HO2'	2.07	0.52
32:49:161:THR:CG2	32:49:163:ALA:H	2.19	0.52
26:14:1567:A:H5'	29:19:58:HIS:ND1	2.25	0.52
26:14:1729:A:H2'	26:14:1731:G:H22	1.74	0.52
26:1H:2126:A:H62	26:1H:2163:C:H1'	1.75	0.52
26:14:2102:U:H3	26:14:2187:G:H1	1.55	0.52
26:14:1420:U:HO2'	26:14:1421:G:P	2.32	0.52
19:AI:50:ALA:HA	19:AI:58:VAL:O	2.10	0.52
10:1A:61:GLU:OE1	14:5A:58:LYS:HD2	2.09	0.52
23:2K:19:G:C2	23:2K:59:A:C5	2.97	0.52
26:1H:934:G:H2'	26:1H:935:C:C6	2.44	0.52
26:14:2360:A:H2'	26:14:2361:A:O4'	2.10	0.52
44:A5:88:ARG:HH11	44:A5:88:ARG:HG2	1.74	0.52
30:29:15:PHE:CD2	41:75:81:PRO:HD3	2.45	0.52
38:88:14:ARG:HG2	38:88:41:TRP:HH2	1.74	0.52
26:1H:2350:C:H5'	55:Q8:46:ARG:HH12	1.74	0.52
26:14:1607:C:N4	26:14:1621:U:H2'	2.25	0.52
26:14:1499:C:H2'	26:14:1500:G:C8	2.45	0.52
26:14:2365:G:OP1	48:E5:54:GLY:HA2	2.09	0.52
28:71:192:PHE:CD1	28:71:196:LEU:HD22	2.45	0.52
34:69:97:ILE:O	34:69:100:ALA:HB3	2.10	0.52
26:1H:1354:A:H2'	26:1H:1355:G:O4'	2.09	0.52
29:11:43:ARG:H	29:11:43:ARG:HD2	1.75	0.52
26:1H:2212:A:H1'	26:1H:2215:G:C5	2.45	0.52
30:29:112:GLY:O	30:29:159:HIS:HA	2.09	0.52
26:14:2252:G:H2'	26:14:2253:G:O4'	2.10	0.52
3:22:91:LEU:HB2	3:22:99:VAL:HG12	1.92	0.52
26:1H:2412:A:H2'	26:1H:2413:G:O4'	2.09	0.52
26:1H:2233:U:H2'	26:1H:2234:G:C8	2.45	0.52
26:1H:1680:U:O2	26:1H:1763:G:H3'	2.10	0.52
47:H8:30:ASN:HA	47:H8:89:PHE:CE1	2.45	0.52
1:13:636:U:H2'	1:13:637:G:C8	2.45	0.52
19:AI:12:ASP:HB2	19:AI:35:SER:OG	2.09	0.52
1:13:1112:C:O2	3:2E:179:ARG:HG2	2.10	0.52
1:1G:1369:C:OP1	14:5A:61:TRP:NE1	2.41	0.52
30:21:116:VAL:HG23	30:21:120:TRP:CD1	2.38	0.52
26:1H:2315:G:H5''	26:1H:2316:C:OP2	2.08	0.52
26:14:919:G:C4	26:14:920:G:C8	2.97	0.52
26:14:921:G:C6	26:14:922:U:C4	2.98	0.52
1:1G:1217:C:H5''	14:5A:9:LYS:NZ	2.25	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1014:A:H5''	19:AA:15:LEU:HD21	1.92	0.52
26:1H:588:U:C2	26:1H:589:C:C5	2.98	0.52
26:14:806:C:P	37:35:41:ARG:NH2	2.83	0.52
26:1H:1176:G:H3'	26:1H:1177:A:C4	2.45	0.52
29:11:27:THR:C	29:11:29:PRO:CD	2.78	0.52
1:1G:1007:C:H2'	1:1G:1008:C:H6	1.74	0.52
26:14:270(L):U:O2	34:69:50:ARG:HD3	2.10	0.52
26:14:460:A:H62	26:14:469:G:H21	1.56	0.52
40:65:69:VAL:CG2	40:65:101:LEU:HD13	2.40	0.52
26:14:528:A:H2	26:14:2043:C:C5'	2.23	0.52
26:14:470:A:H8	26:14:470:A:C5'	2.21	0.52
32:49:42:GLY:O	32:49:43:LEU:HD13	2.10	0.52
26:14:1582:C:O2'	26:14:1586:A:H8	1.93	0.52
26:1H:425:G:H2'	26:1H:426:C:C6	2.44	0.52
1:13:1002:G:C2	1:13:1003:G:H1'	2.44	0.52
1:1G:924:C:N4	1:1G:925:G:O6	2.42	0.52
16:7I:28:ARG:HG3	16:7I:29:ASP:OD1	2.09	0.52
23:2K:59:A:H4'	23:2K:60:A:OP1	2.07	0.52
26:1H:2680:C:O2'	26:1H:2681:C:H5'	2.10	0.52
37:35:138:LEU:C	37:35:138:LEU:HD13	2.30	0.52
32:41:41:GLN:O	32:41:89:GLY:HA3	2.10	0.52
1:13:12:U:O2'	1:13:526:C:H4'	2.10	0.52
27:16:65:C:H5''	27:16:66:A:OP2	2.10	0.52
26:14:2590:A:OP2	29:19:237:GLU:HB3	2.10	0.52
46:C5:8:LYS:HE2	46:C5:95:LYS:NZ	2.25	0.52
32:49:3:LEU:HA	32:49:8:LYS:NZ	2.24	0.52
1:13:968:A:H4'	1:13:969:A:OP2	2.10	0.52
26:1H:1396:U:H2'	26:1H:1396:U:O2	2.10	0.52
1:13:377:G:OP1	16:7I:3:LYS:HD2	2.10	0.52
26:1H:768:G:O2'	26:1H:1379:A:N6	2.42	0.52
31:39:11:VAL:HG23	31:39:13:SER:H	1.75	0.52
19:AI:29:ARG:HH12	19:AI:31:ILE:HG23	1.74	0.52
26:14:2572:A:N7	30:29:144:ARG:CD	2.71	0.52
1:1G:1248:A:N3	9:82:70:LYS:NZ	2.53	0.52
26:1H:1187:G:OP2	61:1H:3554:HOH:O	2.19	0.52
30:29:41:LYS:HG3	30:29:42:ASP:N	2.24	0.52
36:25:47:ILE:HG23	36:25:48:PRO:HD2	1.90	0.52
36:25:97:ARG:HG2	36:25:98:VAL:N	2.23	0.52
1:1G:618:C:H5'	1:1G:619:U:H5''	1.92	0.52
26:1H:1288:U:O2'	26:1H:1647:G:N2	2.43	0.52
1:1G:1368:G:OP1	9:82:114:TYR:HB3	2.10	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:130:A:OP2	17:8I:63:ARG:NH2	2.42	0.52
26:1H:1444:G:N2	26:1H:1548:C:C2	2.78	0.52
2:1E:219:VAL:O	2:1E:223:ILE:HG12	2.09	0.52
37:35:85:LEU:HA	37:35:88:LEU:HD23	1.91	0.52
32:41:47:LYS:HD2	32:41:81:LYS:CB	2.38	0.52
19:AI:18:LYS:HZ1	19:AI:22:LEU:HB2	1.74	0.52
26:14:545:G:H2'	26:14:547:A:OP2	2.10	0.52
26:14:2577:A:H5'	53:J5:3:LYS:HD2	1.92	0.52
1:13:1252:A:H2'	1:13:1253:G:C8	2.44	0.52
1:13:407:G:O4'	4:3E:119:GLN:NE2	2.43	0.52
55:M5:58:ILE:O	55:M5:62:LEU:HD12	2.09	0.52
1:1G:147:G:H1	1:1G:175:C:H42	1.56	0.52
41:75:80:SER:OG	41:75:83:ILE:HG13	2.09	0.52
39:98:97:VAL:HA	39:98:113:LEU:O	2.09	0.52
23:2K:48:U:O2'	23:2K:49:C:OP2	2.25	0.52
46:C5:61:ILE:HG22	46:C5:62:GLU:HG3	1.91	0.52
26:1H:273:G:H1	26:1H:364:C:H42	1.58	0.52
26:14:930:U:H1'	26:14:931:G:C6	2.44	0.52
26:1H:2408:U:H6	26:1H:2408:U:O5'	1.93	0.52
5:42:57:LYS:HA	5:42:60:TYR:HD2	1.74	0.52
1:13:977:A:O2'	1:13:979:C:OP2	2.13	0.52
26:14:14:A:H5''	26:14:15:G:OP2	2.10	0.52
17:8A:99:SER:OG	17:8A:100:LYS:N	2.43	0.52
26:14:329:G:O6	46:C5:19:LYS:HE3	2.10	0.52
26:1H:298:G:OP1	46:G8:85:VAL:HA	2.09	0.52
1:1G:1295:G:O2'	13:4A:14:ARG:NH1	2.43	0.52
26:1H:1164:G:H2'	26:1H:1165:U:C6	2.45	0.52
13:4A:29:ARG:HD2	13:4A:64:TRP:HH2	1.75	0.52
20:BI:71:THR:HG22	20:BI:72:LEU:N	2.18	0.52
1:13:1248:A:O2'	9:8E:70:LYS:NZ	2.40	0.52
1:1G:1126:U:C4	1:1G:1281:U:C6	2.98	0.52
2:1E:174:VAL:HG13	2:1E:184:VAL:HG11	1.91	0.52
26:1H:1606:G:H5''	26:1H:1607:C:OP1	2.10	0.52
16:7A:21:VAL:O	16:7A:32:TYR:HB2	2.10	0.52
26:14:748:G:O6	26:14:751:A:H5''	2.09	0.52
57:3L:42:A:H2'	57:3L:42:A:N3	2.25	0.52
26:1H:592:G:N2	55:Q8:4:MET:HE1	2.21	0.52
26:1H:2698:U:H2'	26:1H:2699:C:C6	2.44	0.52
40:65:27:SER:HA	40:65:88:ASP:HB2	1.91	0.52
1:1G:1161:C:O2'	1:1G:1162:C:H5'	2.10	0.52
30:29:117:MET:HA	30:29:122:PHE:H	1.75	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:232:G:H2'	1:13:233:C:C6	2.45	0.52
6:5E:22:GLU:O	6:5E:26:ILE:HG13	2.10	0.52
1:1G:868:C:H2'	1:1G:869:G:O4'	2.09	0.52
8:72:11:THR:HG23	8:72:14:ARG:NH1	2.25	0.52
50:K8:33:MET:O	50:K8:37:PHE:HD1	1.93	0.52
26:1H:2212:A:H1'	26:1H:2215:G:C4	2.45	0.52
32:49:27:ASN:HB3	32:49:30:GLU:HG3	1.92	0.52
1:13:939:G:H5'	7:6E:102:ARG:CZ	2.40	0.52
11:2A:21:ILE:HA	11:2A:30:VAL:HG12	1.90	0.52
6:52:83:ASP:OD1	6:52:83:ASP:N	2.42	0.52
26:1H:2259:G:C2	26:1H:2282:G:N1	2.78	0.52
1:13:119:A:C8	1:13:288:A:C2	2.97	0.52
26:1H:609(A):G:H2'	26:1H:610:C:C6	2.45	0.52
43:D8:9:GLY:O	43:D8:10:LYS:HG3	2.09	0.52
24:3K:59:A:N7	24:3K:60:U:C4	2.78	0.52
31:31:116:ASP:OD1	31:31:119:ARG:NH2	2.42	0.52
26:14:2720:U:N3	26:14:2873:A:H2	2.07	0.52
27:1J:70:C:H2'	27:1J:71:C:H6	1.75	0.52
1:1G:1057:G:N1	1:1G:1204:A:N3	2.58	0.52
26:14:389:G:O5'	26:14:389:G:H8	1.93	0.52
13:4I:3:ARG:HD3	13:4I:7:VAL:HG13	1.91	0.52
26:14:1590:U:H2'	26:14:1591:G:C8	2.45	0.52
1:1G:740:U:H2'	1:1G:741:G:H8	1.75	0.52
24:3K:45:G:C8	24:3K:46:G:N7	2.78	0.52
37:78:31:ALA:O	37:78:33:ARG:HG3	2.10	0.52
1:1G:427:U:H3'	1:1G:428:G:H2'	1.91	0.52
26:1H:2399:G:H1	26:1H:2417:C:N4	2.06	0.52
1:1G:1170:A:C6	1:1G:1171:G:H1'	2.45	0.52
26:1H:1705:G:H2'	26:1H:1706:U:H5'	1.91	0.52
1:13:266:G:N2	1:13:269:C:H5	2.08	0.52
1:13:57:G:C5	1:13:58:C:C4	2.98	0.52
8:72:31:PHE:HZ	8:72:134:ILE:HD11	1.75	0.52
26:14:2438:U:O3'	26:14:2439:A:H3'	2.10	0.52
28:71:5:LYS:HB3	28:71:8:ARG:HH11	1.75	0.52
3:2E:16:ARG:HD2	3:2E:54:ARG:NH1	2.25	0.52
26:14:674:G:O2'	31:39:74:ARG:HD3	2.10	0.52
46:G8:9:LYS:HA	46:G8:27:VAL:HG23	1.92	0.52
26:1H:1196:C:O4'	26:1H:1227:A:C2	2.63	0.52
29:19:96:HIS:CD2	29:19:102:LYS:HG2	2.45	0.52
1:13:406:G:H5'	4:3E:5:ILE:HD13	1.91	0.52
1:13:876:G:H1'	8:7E:11:THR:HG21	1.91	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:142:G:H2'	1:1G:143:A:H8	1.75	0.52
26:14:2723:C:O5'	26:14:2723:C:H6	1.92	0.52
3:2E:107:GLN:N	3:2E:107:GLN:OE1	2.30	0.52
26:1H:1242:A:N1	37:78:4:SER:OG	2.36	0.52
39:55:58:GLY:HA2	39:55:80:PHE:CE2	2.45	0.52
9:82:118:LYS:HB3	9:82:118:LYS:NZ	2.25	0.52
1:1G:475:G:H5'	1:1G:476:G:OP2	2.10	0.51
28:71:186:ALA:HA	28:71:189:ILE:HB	1.92	0.51
1:1G:837:G:H2'	1:1G:838:G:O4'	2.09	0.51
1:1G:841:U:O2'	1:1G:842:C:H5''	2.10	0.51
45:B5:12:VAL:HG12	45:B5:29:TRP:CE2	2.45	0.51
37:78:61:ARG:HG3	37:78:61:ARG:HH11	1.75	0.51
47:H8:125:LEU:HG	47:H8:164:ALA:HB3	1.92	0.51
1:1G:1342:C:O2'	9:82:124:GLN:HA	2.11	0.51
9:82:119:ALA:O	9:82:120:ARG:HB2	2.10	0.51
4:32:19:LEU:HB2	4:32:21:LEU:CD1	2.39	0.51
1:1G:1280:A:O5'	10:1A:40:LEU:HD21	2.10	0.51
1:1G:1258:G:H2'	1:1G:1259:C:C6	2.41	0.51
1:1G:1014:A:H2'	1:1G:1015:A:C8	2.45	0.51
4:32:11:LEU:O	4:32:15:GLU:HB2	2.11	0.51
26:1H:1437:C:H2'	26:1H:1438:U:H6	1.75	0.51
26:1H:1728:G:N3	26:1H:1728:G:H5''	2.24	0.51
2:1E:72:GLY:HA2	2:1E:165:VAL:HG22	1.91	0.51
4:3E:165:MET:SD	4:3E:168:ARG:NH1	2.83	0.51
4:32:119:GLN:HG3	4:32:123:HIS:CE1	2.44	0.51
31:39:129:PHE:HA	31:39:142:TRP:NE1	2.25	0.51
43:D8:46:VAL:HG22	43:D8:52:VAL:HG11	1.92	0.51
1:13:629:G:H8	1:13:629:G:O5'	1.93	0.51
1:1G:115:G:H1'	1:1G:116:A:N7	2.24	0.51
1:13:622:A:H3'	1:13:623:C:H6	1.75	0.51
26:14:6:A:N7	26:14:2899:G:N2	2.58	0.51
26:14:2064:C:H2'	26:14:2065:C:H6	1.71	0.51
1:13:560:U:H4'	1:13:561:U:H5''	1.92	0.51
26:14:142:G:H2'	26:14:143:C:C6	2.45	0.51
1:1G:176:C:OP1	20:BA:29:LYS:NZ	2.41	0.51
1:13:1277:C:O2'	1:13:1279:A:H1'	2.10	0.51
30:21:20:ALA:O	30:21:21:VAL:HG22	2.10	0.51
49:J8:92:LYS:HA	49:J8:95:LEU:HD12	1.92	0.51
3:22:106:VAL:HB	3:22:109:PRO:HB3	1.92	0.51
26:1H:1936:A:C8	26:1H:1940:U:O2	2.64	0.51
3:2E:82:GLU:HA	3:2E:85:ARG:HB3	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:19:177:LEU:HD12	29:19:181:GLU:HG2	1.91	0.51
13:4I:23:TYR:CZ	13:4I:71:ARG:HG2	2.45	0.51
7:62:111:ARG:NH2	7:62:122:HIS:HB3	2.24	0.51
26:14:2402:C:H5'	26:14:2403:C:OP2	2.10	0.51
31:31:116:ASP:O	31:31:120:GLU:HG3	2.09	0.51
30:21:105:THR:HG22	30:21:106:GLY:H	1.74	0.51
1:1G:984:C:H42	1:1G:1221:G:H1	1.58	0.51
1:13:1348:U:H3	1:13:1374:A:H2	1.57	0.51
26:14:878:A:H5''	26:14:900:A:C6	2.45	0.51
26:14:817:C:H3'	26:14:818:G:H8	1.74	0.51
4:32:57:ARG:HE	4:32:205:GLU:HG2	1.73	0.51
1:1G:1084:G:C5	1:1G:1085:U:C4	2.97	0.51
26:1H:543:C:N4	26:1H:550:G:H1	2.06	0.51
26:14:2306:C:H3'	26:14:2307:G:H5''	1.91	0.51
26:1H:234:C:C2	26:1H:235:U:C5	2.98	0.51
26:1H:125:G:H3'	54:P8:19:ARG:HD3	1.92	0.51
43:95:70:ILE:N	43:95:86:GLY:O	2.39	0.51
57:3L:59:A:H3'	57:3L:60:U:O4'	2.11	0.51
37:78:125:VAL:O	37:78:144:GLU:HB2	2.09	0.51
1:13:445:G:H2'	1:13:446:G:H8	1.75	0.51
34:69:77:LEU:HD12	34:69:78:THR:N	2.25	0.51
26:1H:1529:A:C8	26:1H:1530:G:C8	2.99	0.51
26:14:2143:C:H2'	26:14:2144:U:C4'	2.41	0.51
1:13:625:G:H4'	16:7I:16:HIS:CB	2.40	0.51
26:1H:438:G:H2'	26:1H:439:G:H8	1.74	0.51
1:13:955:U:H1'	1:13:1227:A:N6	2.26	0.51
26:1H:749:C:H5''	61:1H:3553:HOH:O	2.09	0.51
26:1H:278:A:H3'	26:1H:279:C:C6	2.46	0.51
26:14:686:G:H5''	54:L5:11:LYS:HE2	1.91	0.51
28:71:10:LEU:HB3	28:71:32:LEU:HD22	1.92	0.51
50:K8:18:PRO:O	50:K8:21:LEU:HB2	2.10	0.51
35:15:128:HIS:HB2	35:15:129:PRO:HD2	1.91	0.51
6:5E:35:ALA:HB1	6:5E:65:VAL:HG21	1.91	0.51
27:1J:102:G:H21	47:D5:73:GLN:NE2	2.08	0.51
37:35:100:LEU:O	37:35:103:ALA:N	2.44	0.51
26:1H:333:G:O5'	26:1H:333:G:C8	2.64	0.51
26:1H:1831:G:H2'	26:1H:1832:C:C6	2.45	0.51
2:12:32:ILE:HD11	2:12:40:HIS:HB3	1.93	0.51
26:1H:2713:A:H3'	26:1H:2714:G:H5''	1.92	0.51
30:29:57:LYS:HA	30:29:59:VAL:HG13	1.93	0.51
2:12:44:LEU:O	2:12:47:THR:OG1	2.25	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:46:ALA:CB	30:29:82:ARG:HA	2.40	0.51
14:5A:17:LYS:NZ	14:5A:18:VAL:HG13	2.26	0.51
16:7A:49:LEU:HD12	16:7A:50:LYS:H	1.76	0.51
50:G5:64:LEU:O	50:G5:64:LEU:HD23	2.10	0.51
1:1G:1052:U:H5''	1:1G:1053:G:OP2	2.10	0.51
8:7E:87:SER:CB	8:7E:93:VAL:H	2.23	0.51
23:2L:24:C:C2	23:2L:25:U:C5	2.98	0.51
1:1G:1263:C:H3'	1:1G:1264:C:C6	2.45	0.51
55:Q8:51:ALA:HB1	55:Q8:52:LYS:CG	2.40	0.51
26:1H:270(U):C:H2'	26:1H:270(V):G:H8	1.75	0.51
13:4A:97:PRO:HA	13:4A:110:ARG:NE	2.24	0.51
53:N8:40:LYS:HZ3	53:N8:47:PRO:N	2.09	0.51
46:G8:55:TYR:HE1	46:G8:61:ILE:HD11	1.75	0.51
42:C8:88:ILE:C	42:C8:90:VAL:H	2.13	0.51
40:65:69:VAL:HG23	40:65:101:LEU:HD13	1.92	0.51
26:14:2306:C:C2	26:14:2307:G:C2	2.98	0.51
47:D5:10:ARG:HB3	47:D5:36:LYS:HG3	1.92	0.51
1:13:1118:C:H42	1:13:1155:G:H1	1.59	0.51
26:1H:654:A:C2	26:1H:654(A):A:H3'	2.45	0.51
22:1K:66:A:H3'	22:1K:67:C:C5'	2.40	0.51
26:1H:2115:G:H4'	26:1H:2166:G:H1'	1.92	0.51
1:1G:96:G:C6	1:1G:97:U:C4	2.98	0.51
26:14:1762:A:N6	61:14:3583:HOH:O	2.43	0.51
47:H8:136:PHE:O	47:H8:137:ILE:HD12	2.10	0.51
24:3K:72:C:H5'	24:3K:73:A:OP2	2.10	0.51
26:1H:1468:C:H2'	26:1H:1469:A:C8	2.45	0.51
26:14:955:C:OP1	38:45:85:LYS:NZ	2.26	0.51
49:J8:23:LYS:HB3	49:J8:29:GLY:HA3	1.91	0.51
1:13:598:U:H4'	8:7E:94:TYR:CD2	2.45	0.51
47:D5:7:ALA:O	47:D5:8:TYR:CG	2.63	0.51
26:14:829:A:H4'	61:14:3835:HOH:O	2.10	0.51
26:1H:599:G:O5'	37:78:9:ASN:ND2	2.43	0.51
26:14:1838:C:N4	26:14:1898:U:H2'	2.25	0.51
26:14:2660:A:OP1	26:14:2660:A:H8	1.93	0.51
26:14:2001:A:H2'	26:14:2002:G:C8	2.45	0.51
26:1H:1425:G:N2	26:1H:1573:G:N7	2.58	0.51
26:14:2844:G:N7	61:14:3564:HOH:O	2.34	0.51
30:29:65:GLY:O	30:29:68:ALA:HB2	2.10	0.51
2:12:71:VAL:HB	2:12:165:VAL:HG22	1.93	0.51
2:12:73:THR:HG21	2:12:97:TRP:N	2.25	0.51
2:12:61:LEU:HD11	2:12:157:ARG:HH22	1.75	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:20:C:N4	27:1J:63:G:H1	2.09	0.51
45:B5:29:TRP:CH2	45:B5:78:LYS:HE2	2.45	0.51
1:1G:980:C:H3'	1:1G:981:U:C6	2.46	0.51
26:1H:2392:A:H2	26:1H:2424:C:N4	2.01	0.51
8:7E:85:ARG:HG3	8:7E:86:ILE:O	2.11	0.51
13:4I:12:ASN:ND2	13:4I:13:LYS:H	2.06	0.51
4:32:61:LYS:C	4:32:61:LYS:HD2	2.31	0.51
26:1H:1443:G:H8	26:1H:1443:G:O5'	1.92	0.51
26:1H:1479:G:C2	26:1H:1480:G:C4	2.99	0.51
26:1H:575:A:OP2	26:1H:2055:C:N4	2.35	0.51
26:1H:1598:C:O2'	26:1H:1599:C:H5'	2.10	0.51
37:35:33:ARG:O	37:35:36:LYS:NZ	2.43	0.51
5:42:144:THR:OG1	5:42:147:ASP:HB2	2.10	0.51
31:31:29:ASN:H	31:31:112:MET:CE	2.23	0.51
45:B5:49:VAL:HB	45:B5:83:VAL:HG21	1.92	0.51
18:9I:52:PRO:O	18:9I:56:THR:HG22	2.10	0.51
22:1K:28:U:H3	22:1K:42:A:N6	2.09	0.51
26:14:309:G:H4'	46:C5:18:GLY:HA3	1.92	0.51
7:62:69:VAL:HG21	7:62:104:LEU:HD11	1.91	0.51
2:1E:6:THR:CB	2:1E:221:LEU:HD21	2.41	0.51
36:68:75:SER:HB2	41:B8:74:ARG:HH12	1.76	0.51
26:1H:1998:G:O2'	26:1H:1999:C:H5'	2.10	0.51
1:1G:830:G:N2	1:1G:857:C:O2	2.44	0.51
6:52:50:TYR:OH	18:9A:74:ARG:O	2.22	0.51
1:1G:1387:G:H2'	1:1G:1388:C:C6	2.46	0.51
26:1H:1448:G:H1	26:1H:1463:C:H42	1.58	0.51
26:1H:1790:C:H2'	26:1H:1791:A:C4	2.45	0.51
38:88:78:PRO:O	38:88:79:LEU:HB3	2.10	0.51
26:1H:384:U:H2'	26:1H:385:C:H6	1.76	0.51
40:65:5:THR:N	40:65:8:GLU:OE2	2.44	0.51
33:51:15:VAL:HG12	33:51:29:PRO:HD2	1.91	0.51
1:1G:828:A:H2'	1:1G:829:G:O4'	2.10	0.51
26:14:2507:C:H2'	26:14:2508:G:O4'	2.10	0.51
1:1G:652:U:C5	1:1G:752:G:N3	2.79	0.51
4:32:88:VAL:HG22	5:42:96:PRO:HB2	1.93	0.51
26:1H:2065:C:H2'	26:1H:2066:C:C6	2.45	0.51
6:5E:48:LEU:HB2	6:5E:56:PRO:O	2.10	0.51
26:14:1512:G:H2'	26:14:1513:C:C6	2.46	0.51
10:1I:92:THR:HG23	10:1I:93:GLY:H	1.74	0.51
51:L8:26:LEU:HD21	51:L8:46:ASN:HB3	1.92	0.51
1:13:195:A:H5'	1:13:196:A:OP2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:39:177:ALA:HB1	31:39:178:PRO:HD2	1.92	0.51
34:61:127:VAL:HG12	34:61:139:GLN:HB3	1.91	0.51
3:22:29:TYR:OH	3:22:33:LEU:CD2	2.53	0.51
30:29:119:ARG:HD3	30:29:120:TRP:NE1	2.25	0.51
26:14:2579:C:C4'	30:29:134:ILE:HG12	2.41	0.51
52:M8:15:ILE:O	52:M8:33:VAL:HB	2.11	0.51
1:13:1157:A:N6	1:13:1178:G:N3	2.59	0.51
20:BI:36:LEU:HD13	20:BI:39:LYS:HD3	1.92	0.51
26:1H:49:A:H4'	26:1H:50:U:H5''	1.92	0.51
34:69:124:GLY:O	34:69:142:VAL:HG22	2.11	0.51
26:1H:1299:G:H3'	26:1H:1639:U:O4	2.10	0.51
38:45:12:GLN:HG2	38:45:73:PRO:HD2	1.93	0.51
26:1H:2393:A:H2'	26:1H:2394:C:C6	2.46	0.51
1:13:663:A:H2'	1:13:664:G:O4'	2.09	0.51
26:1H:1387:C:O2	26:1H:1388:G:C8	2.63	0.51
46:C5:48:ALA:HB3	46:C5:59:GLY:CA	2.38	0.51
33:51:157:TYR:H	33:51:170:ARG:HA	1.76	0.51
26:1H:638:G:H2'	26:1H:639:U:C6	2.45	0.51
2:12:215:LEU:HD12	2:12:215:LEU:H	1.75	0.51
1:1G:411:A:H62	1:1G:413:G:N2	2.07	0.51
27:1J:44:G:H1'	27:1J:47:C:H42	1.75	0.51
26:14:2351:G:O6	55:M5:39:LYS:HG3	2.10	0.51
3:2E:14:ILE:HD12	3:2E:15:THR:H	1.75	0.51
1:13:1113:C:H2'	1:13:1114:C:C6	2.44	0.51
15:6I:35:ARG:HA	15:6I:38:ARG:HB2	1.92	0.51
2:12:86:GLU:HG2	2:12:92:TYR:HE2	1.76	0.51
26:1H:1026:U:HO2'	26:1H:1027:A:H5''	1.75	0.51
36:25:7:TYR:CZ	36:25:44:LYS:HG3	2.46	0.51
1:13:1167:A:H8	1:13:1167:A:OP1	1.94	0.51
29:11:68:LYS:HB3	29:11:70:TRP:CZ3	2.45	0.51
26:1H:701:G:H2'	26:1H:702:G:H5'	1.92	0.51
54:P8:5:TRP:NE1	54:P8:7:PRO:HG3	2.25	0.51
1:13:128:G:H5'	17:8I:2:PRO:O	2.09	0.51
41:75:50:ILE:HD11	41:75:102:ILE:HD11	1.93	0.51
26:1H:461:C:O2'	26:1H:462:C:H5'	2.10	0.51
26:1H:382:G:H5''	26:1H:383:U:OP2	2.09	0.51
42:C8:52:ARG:HA	42:C8:55:ARG:HG3	1.92	0.51
42:C8:58:ARG:HA	42:C8:61:TRP:CE3	2.46	0.51
7:6E:150:ALA:HB2	11:2I:50:TYR:OH	2.10	0.51
26:14:244:A:C2	26:14:255:A:C4	2.98	0.51
7:62:102:ARG:O	7:62:106:GLN:HG2	2.10	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:644:G:H2'	1:13:645:C:O4'	2.11	0.51
38:45:26:TYR:OH	47:D5:78:LYS:HD2	2.10	0.51
30:29:55:ASN:HD22	30:29:75:VAL:HG13	1.74	0.51
30:29:35:GLN:HE21	30:29:41:LYS:NZ	2.07	0.51
5:42:118:ILE:HG12	5:42:119:LEU:H	1.75	0.51
24:3K:33:U:H2'	24:3K:34:U:O5'	2.10	0.51
26:1H:2154:G:O2'	26:1H:2155:G:H8	1.94	0.51
1:1G:1219:U:P	14:5A:19:ARG:HH12	2.33	0.51
1:1G:1342:C:H1'	9:82:124:GLN:HG3	1.92	0.51
1:1G:1127:G:N3	1:1G:1127:G:H2'	2.26	0.51
26:1H:2060:A:OP2	31:31:71:GLY:HA2	2.10	0.51
1:1G:363:A:C6	12:3A:31:PRO:HD2	2.46	0.51
12:3A:100:ILE:CG2	12:3A:101:VAL:H	2.19	0.51
45:F8:52:VAL:HG23	45:F8:82:GLN:HB3	1.92	0.51
27:1J:1:U:H3	27:1J:119:A:H2	1.57	0.51
1:13:1118:C:H1'	1:13:1179:A:C5	2.45	0.51
26:14:995:C:C6	42:85:57:PHE:HE2	2.28	0.51
6:52:4:TYR:HB2	6:52:65:VAL:HG23	1.93	0.51
1:13:155:C:H2'	1:13:156:G:H8	1.74	0.51
26:14:1299:G:C5	26:14:1639:U:C5	2.98	0.51
26:14:2464:C:H2'	26:14:2465:C:O4'	2.11	0.51
1:1G:254:G:N2	17:8A:16:GLN:OE1	2.42	0.51
47:H8:30:ASN:HA	47:H8:89:PHE:HE1	1.76	0.51
1:13:119:A:N7	1:13:288:A:C2	2.78	0.51
1:1G:828:A:H5''	1:1G:859:A:N1	2.26	0.51
26:1H:2830:G:H8	26:1H:2830:G:H5''	1.74	0.51
2:1E:98:LEU:HB2	2:1E:101:MET:HG3	1.93	0.51
9:8E:79:LEU:O	9:8E:83:ARG:HG3	2.11	0.51
2:12:95:GLN:HB2	2:12:148:TYR:HA	1.92	0.51
26:1H:1475:G:C2	26:1H:1519:G:C2	2.98	0.51
26:1H:2620:C:H2'	26:1H:2621:A:O4'	2.10	0.51
15:6I:81:LEU:O	15:6I:85:LEU:HB2	2.11	0.51
1:13:186(A):C:O2	20:BI:105:SER:HB3	2.11	0.51
49:F5:8:SER:HB3	49:F5:66:HIS:CD2	2.46	0.51
26:14:2137:C:N4	26:14:2155:G:H1	2.06	0.51
26:14:2628:C:H1'	26:14:2781:A:H2'	1.92	0.51
2:12:91:PRO:CG	2:12:154:LEU:HB2	2.38	0.51
13:4A:56:LEU:HA	13:4A:59:TYR:HB3	1.92	0.51
2:1E:161:ALA:O	2:1E:162:ILE:HD13	2.10	0.51
38:88:103:MET:HB2	38:88:104:PHE:CD2	2.46	0.51
47:H8:152:ALA:CB	47:H8:169:GLU:H	2.20	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1281:U:H3'	1:1G:1282:C:C5	2.45	0.51
26:14:1665:A:H1'	36:25:1:MET:HG2	1.91	0.51
26:1H:270(F):U:H2'	26:1H:270(G):C:C6	2.46	0.51
26:1H:1438:U:O2'	26:1H:1439:A:H5'	2.10	0.51
1:1G:437:U:OP1	4:32:155:LEU:HD11	2.11	0.51
1:1G:1068:G:N7	1:1G:1094:G:C8	2.78	0.51
26:1H:1639:U:O2'	26:1H:1640:C:H5'	2.10	0.51
31:39:110:LEU:CD2	31:39:181:LEU:HD12	2.40	0.51
26:14:2292:C:P	40:65:17:ARG:HH21	2.34	0.51
26:1H:2061:G:C2	26:1H:2063:C:C4	2.99	0.51
26:14:35:G:H2'	26:14:36:G:O4'	2.11	0.51
26:14:994:C:OP1	42:85:53:ARG:NH2	2.43	0.51
26:14:5:A:N6	26:14:2629:A:O2'	2.37	0.51
26:1H:107:C:H2'	26:1H:108:U:C6	2.45	0.51
2:12:22:LYS:HG2	2:12:24:TRP:CZ2	2.45	0.51
26:1H:2680:C:H5'	30:21:189:PRO:HA	1.92	0.51
1:1G:56:U:H2'	1:1G:57:G:C8	2.45	0.51
41:B8:27:THR:HA	41:B8:48:ILE:HA	1.93	0.51
22:1K:10:G:H1	22:1K:26:A:H2'	1.76	0.51
38:45:134:ARG:N	38:45:135:ASP:OD1	2.44	0.51
26:1H:612:G:O2'	26:1H:616:A:N1	2.41	0.51
1:13:919:A:O2'	1:13:920:U:H5'	2.10	0.51
2:12:107:THR:HG22	2:12:110:GLN:NE2	2.26	0.51
38:88:58:PHE:HZ	38:88:106:VAL:HG11	1.76	0.51
34:69:6:LEU:HD23	34:69:34:GLY:O	2.09	0.51
7:6E:45:ASP:O	7:6E:49:ILE:HG12	2.10	0.51
26:1H:2266:A:H4'	26:1H:2267:A:N3	2.26	0.51
26:1H:1897:G:H2'	26:1H:1898:U:O4'	2.11	0.51
47:H8:10:ARG:HG3	47:H8:36:LYS:HB3	1.91	0.51
46:G8:76:CYS:HB2	46:G8:82:PRO:HG3	1.93	0.51
5:42:91:LEU:CD2	5:42:120:THR:HG22	2.41	0.51
1:1G:1314:C:H2'	1:1G:1315:U:C6	2.45	0.51
1:1G:1359:C:O2'	1:1G:1361:G:N7	2.38	0.51
26:14:660:G:H21	37:35:12:ALA:HB2	1.75	0.51
1:1G:1261:A:H61	1:1G:1274:G:H1'	1.75	0.51
12:3A:45:PRO:HD3	12:3A:51:ALA:O	2.10	0.51
4:32:4:TYR:HE2	4:32:11:LEU:HD11	1.75	0.51
26:14:777:A:C2	26:14:778:G:C4	2.99	0.51
43:D8:47:VAL:HG22	43:D8:48:GLY:N	2.25	0.51
5:4E:150:ARG:CZ	5:4E:150:ARG:HB2	2.41	0.51
4:3E:31:CYS:C	4:3E:33:MET:H	2.14	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:363(B):G:C2	26:14:363(C):G:C4	2.99	0.51
27:1J:52:A:N6	40:65:33:LYS:HE2	2.26	0.51
1:1G:1167:A:H2'	1:1G:1169:A:O4'	2.11	0.51
41:B8:107:ASP:O	41:B8:111:ARG:NH1	2.44	0.51
40:65:10:ARG:NH2	40:65:91:PRO:HB2	2.24	0.51
1:1G:186(A):C:H5''	20:BA:86:ARG:NH2	2.26	0.51
2:1E:6:THR:HA	2:1E:221:LEU:HD21	1.93	0.51
16:7A:53:VAL:HG13	16:7A:79:VAL:HG13	1.93	0.51
1:13:1305:G:C8	1:13:1305:G:OP2	2.64	0.51
7:62:15:ASP:OD1	7:62:16:LEU:N	2.43	0.51
32:41:97:ASP:H	32:41:100:TRP:HD1	1.59	0.51
47:H8:137:ILE:HG21	47:H8:155:LEU:HB3	1.91	0.51
23:2L:2:G:C2	23:2L:3:C:C5	2.99	0.51
1:1G:261:U:N3	1:1G:264:U:OP2	2.39	0.51
1:13:825:G:O2'	8:7E:12:ARG:NH1	2.44	0.51
43:95:95:LEU:HD22	43:95:97:LYS:HD3	1.92	0.51
46:C5:43:ASN:HA	46:C5:63:LYS:O	2.11	0.51
26:1H:852:G:O2'	26:1H:853:G:H5'	2.11	0.51
41:75:50:ILE:HD11	41:75:102:ILE:CD1	2.41	0.51
6:52:96:PRO:HB3	18:9A:30:ASP:CG	2.31	0.51
26:1H:532:A:OP1	26:1H:561:G:N2	2.37	0.51
9:8E:95:LYS:O	9:8E:96:LEU:HD12	2.10	0.51
15:6I:6:GLU:HA	15:6I:9:GLN:HB2	1.92	0.51
26:14:1219:G:H1	26:14:1230:C:H42	1.59	0.51
40:A8:43:GLU:HB2	48:I8:49:LYS:HE2	1.93	0.51
1:1G:604:G:H2'	1:1G:605:U:O4'	2.11	0.51
1:1G:375:U:OP1	16:7A:69:THR:OG1	2.24	0.51
26:14:1716:U:H2'	26:14:1717:G:C8	2.46	0.51
1:13:1363:A:H1'	1:13:1365:G:N7	2.26	0.51
35:58:15:LEU:HD13	35:58:16:ILE:N	2.25	0.51
1:13:1367:C:H5'	10:1I:60:ARG:NH1	2.26	0.51
30:29:81:ILE:HG22	30:29:82:ARG:N	2.26	0.51
1:1G:1401:G:C2	1:1G:1402:C:H1'	2.46	0.51
15:6I:78:TYR:CZ	15:6I:82:ILE:HD11	2.46	0.51
24:3K:33:U:H2'	24:3K:34:U:C3'	2.39	0.51
26:1H:2652:C:H2'	26:1H:2653:U:O4'	2.11	0.51
46:C5:81:LYS:HG3	46:C5:99:CYS:HB2	1.91	0.51
53:N8:16:ARG:NH1	53:N8:17:ASP:OD1	2.44	0.51
26:1H:355:G:H2'	26:1H:356:G:C8	2.46	0.51
57:3L:30:G:H2'	57:3L:31:A:C8	2.46	0.51
27:16:12:C:C6	27:16:12:C:OP2	2.64	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:126:G:N2	1:13:235:C:O2	2.37	0.51
1:1G:1137:C:H1'	1:1G:1138:G:N2	2.26	0.51
47:H8:128:VAL:HG12	47:H8:161:VAL:HB	1.93	0.51
32:41:96:ARG:HB2	32:41:96:ARG:NH1	2.23	0.51
26:1H:654(S):G:HO2'	26:1H:654(T):A:H8	1.59	0.51
26:14:2887:U:H2'	26:14:2888:C:H6	1.75	0.51
41:75:3:ARG:CG	41:75:6:LEU:H	2.24	0.51
26:14:1116:C:H2'	26:14:1117:G:C8	2.45	0.51
26:1H:1138:G:H21	35:58:106:MET:CE	2.24	0.51
7:6E:22:LEU:HB3	7:6E:62:PHE:HE2	1.75	0.51
26:14:2298:A:H62	26:14:2318:G:H8	1.57	0.51
26:14:1341:U:OP2	26:14:1394:U:O2'	2.17	0.51
22:1K:17:U:O2'	22:1K:57:G:N2	2.40	0.51
26:14:2864:G:OP1	41:75:119:LYS:HD3	2.11	0.51
26:1H:1468:C:H2'	26:1H:1469:A:H8	1.75	0.51
1:1G:277:C:H5'	17:8A:68:ARG:NH1	2.26	0.51
27:16:44:G:C2	27:16:48:A:C2	2.98	0.51
1:13:1250:A:O3'	9:8E:67:GLY:HA2	2.11	0.51
26:14:677:A:H2'	26:14:678:C:C6	2.45	0.51
26:1H:1392:A:C6	26:1H:1393:A:C6	2.98	0.51
44:E8:19:LEU:HB3	53:N8:25:LEU:HD11	1.91	0.51
26:14:2266:A:H5'	26:14:2267:A:C5	2.46	0.51
26:14:19:C:H2'	26:14:20:C:H6	1.75	0.51
1:1G:332:G:C2	1:1G:333:G:C8	2.99	0.51
39:98:29:LEU:CD1	39:98:29:LEU:N	2.74	0.51
26:14:260:G:C6	26:14:261:G:C8	2.99	0.51
26:14:363(E):U:H5'	26:14:363(F):A:OP2	2.11	0.51
26:14:1180:C:H2'	26:14:1181:C:C6	2.46	0.51
49:F5:87:PRO:HA	49:F5:90:ILE:CG2	2.41	0.51
26:14:1992:G:C8	26:14:1992:G:O5'	2.64	0.51
27:16:15:A:OP1	27:16:15:A:H4'	2.10	0.51
26:14:2786:U:H4'	30:29:63:LEU:O	2.10	0.51
1:13:626:U:C2	1:13:627:G:C8	2.99	0.51
26:14:273(F):C:N4	26:14:275:G:N7	2.59	0.51
26:1H:2599:G:N7	29:11:236:GLY:HA3	2.25	0.51
26:14:1753:G:O3'	41:75:96:ARG:NH1	2.44	0.51
26:1H:2156:G:H3'	26:1H:2157:G:N2	2.26	0.51
1:1G:87:A:C5	1:1G:88:C:C4	2.99	0.51
7:6E:23:VAL:O	7:6E:27:ILE:N	2.32	0.51
4:32:191:ARG:NH2	4:32:194:LEU:O	2.44	0.51
43:95:79:VAL:O	43:95:80:GLN:CG	2.59	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:235:C:H5'	17:8A:70:ARG:HG2	1.92	0.51
34:69:144:VAL:O	34:69:145:VAL:HG12	2.10	0.51
26:1H:1472:A:H2'	26:1H:1473:G:O4'	2.11	0.51
26:14:2615:U:C2	53:J5:7:PRO:HA	2.46	0.51
34:61:62:LYS:O	34:61:66:GLU:OE1	2.29	0.51
1:13:1118:C:OP1	9:8E:9:ARG:HD3	2.11	0.51
22:1K:14:A:N6	22:1K:22:G:H2'	2.25	0.51
41:B8:101:PHE:O	41:B8:105:LEU:HD13	2.11	0.51
32:49:129:GLY:HA2	32:49:166:ASP:HA	1.92	0.51
41:B8:29:ARG:NH1	41:B8:46:GLU:OE2	2.44	0.51
38:88:32:TYR:O	38:88:105:GLU:HA	2.11	0.51
26:1H:7:G:O5'	26:1H:7:G:H8	1.94	0.51
26:14:481:G:P	46:C5:47:LYS:HD3	2.50	0.51
26:1H:2461:C:H2'	26:1H:2462:U:H6	1.76	0.51
34:69:44:LEU:O	34:69:48:GLU:HB3	2.11	0.51
1:1G:192:U:O4'	20:BA:103:GLY:HA2	2.11	0.51
24:3K:37:A:H2'	24:3K:38:A:O4'	2.11	0.51
26:14:2861:G:H2'	26:14:2862:G:C8	2.45	0.51
1:13:804:U:H5''	1:13:805:C:OP2	2.11	0.51
1:13:807:A:H2'	1:13:808:C:C6	2.46	0.51
1:1G:35:G:C2	1:1G:550:G:N3	2.79	0.51
26:1H:1029:A:H5''	38:88:128:LYS:HE2	1.94	0.51
26:14:2850:A:C2	26:14:2851:A:C4	2.99	0.51
26:14:1375:C:H2'	26:14:1376:C:H6	1.76	0.51
39:98:117:VAL:O	39:98:118:GLU:HB2	2.09	0.51
26:14:1801:G:OP2	29:19:154:LYS:NZ	2.44	0.51
26:1H:1910:G:O2'	26:1H:1911:U:H5'	2.11	0.51
34:61:9:LEU:O	34:61:10:GLU:HG3	2.11	0.51
1:1G:103:C:C4	1:1G:104:G:N7	2.79	0.51
26:14:1819:A:H5''	29:19:161:THR:HG21	1.92	0.51
11:2I:33:THR:HA	11:2I:39:PRO:HA	1.92	0.51
35:58:78:TYR:N	35:58:78:TYR:CD1	2.78	0.51
54:P8:16:HIS:HB2	54:P8:44:PRO:HG2	1.92	0.51
47:D5:128:VAL:HG22	47:D5:129:SER:H	1.76	0.51
32:49:63:ILE:HG22	32:49:143:GLU:HB2	1.93	0.50
17:8I:52:LYS:HE3	17:8I:55:ASP:OD1	2.11	0.50
26:14:2831:G:P	30:29:58:ARG:HH11	2.33	0.50
26:1H:2591:C:H2'	26:1H:2592:G:H8	1.74	0.50
42:85:92:ARG:C	42:85:94:ASN:N	2.63	0.50
13:4A:40:ASN:OD1	13:4A:41:PRO:HD2	2.10	0.50
26:1H:259:G:H21	26:1H:621:A:H8	1.59	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:306:G:H3'	61:13:1804:HOH:O	2.11	0.50
4:32:61:LYS:HZ3	4:32:206:PHE:HE2	1.54	0.50
1:13:191(C):G:H2'	1:13:191(D):U:O4'	2.12	0.50
26:1H:51:G:H5'	26:1H:51:G:C8	2.46	0.50
34:69:123:LEU:HA	34:69:142:VAL:HG21	1.94	0.50
26:1H:550:G:H2'	26:1H:551:G:H8	1.75	0.50
32:49:136:ARG:NH1	32:49:154:GLY:C	2.65	0.50
1:13:1117:G:O3'	9:8E:104:ARG:HD3	2.11	0.50
1:1G:757:U:O2'	1:1G:879:C:H1'	2.11	0.50
20:BI:83:ARG:HB3	20:BI:87:LYS:NZ	2.25	0.50
33:51:155:SER:HB2	33:51:156:ALA:C	2.32	0.50
40:65:7:TYR:O	40:65:11:LYS:HB2	2.11	0.50
26:14:2165:G:H3'	26:14:2166:G:C5'	2.40	0.50
33:51:144:VAL:O	33:51:148:ILE:HG12	2.10	0.50
23:2K:54:G:H2'	23:2K:55:5MU:C6	2.46	0.50
2:12:178:ARG:HD3	2:12:196:LEU:O	2.12	0.50
1:13:704:A:N3	1:13:704:A:H2'	2.25	0.50
1:13:321:A:N7	1:13:328:C:C6	2.79	0.50
1:1G:1224:G:C2	1:1G:1322:C:H4'	2.46	0.50
38:45:37:LEU:HD11	38:45:130:LYS:HB3	1.93	0.50
1:13:240:C:H2'	1:13:241:C:C6	2.45	0.50
3:2E:124:ILE:HG21	3:2E:196:LEU:HD12	1.93	0.50
38:88:64:ILE:HG12	38:88:106:VAL:HG12	1.93	0.50
11:2I:99:GLN:HG3	11:2I:105:VAL:HG11	1.93	0.50
26:1H:634:C:H2'	26:1H:635:C:C6	2.46	0.50
26:14:1028:A:N6	26:14:1125:G:H2'	2.27	0.50
26:1H:2110:G:C6	26:1H:2120:G:C8	2.99	0.50
26:1H:2627:G:N2	26:1H:2777:G:OP2	2.44	0.50
2:1E:97:TRP:HH2	2:1E:176:GLU:OE2	1.94	0.50
27:16:49:C:H6	27:16:49:C:O5'	1.94	0.50
38:88:109:VAL:HG22	38:88:113:GLN:OE1	2.10	0.50
1:1G:256:U:H3	1:1G:270:A:H61	1.58	0.50
1:1G:716:A:N3	11:2A:118:GLY:HA2	2.26	0.50
2:1E:189:ASP:CG	2:1E:205:ASP:CG	2.65	0.50
2:1E:189:ASP:HB3	2:1E:205:ASP:OD1	2.07	0.50
26:14:2621:A:P	30:29:119:ARG:HH22	2.35	0.50
26:14:274:G:H2'	26:14:275:G:O4'	2.10	0.50
26:1H:2470:G:N2	26:1H:2480:C:O2	2.43	0.50
1:1G:1362:C:H2'	1:1G:1362(A):C:H5''	1.93	0.50
1:1G:1261:A:N1	1:1G:1274:G:O2'	2.44	0.50
26:14:94:G:N3	50:G5:47:ASN:ND2	2.60	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:354:G:H2'	26:1H:355:G:C8	2.46	0.50
1:1G:292:G:O5'	1:1G:292:G:H8	1.94	0.50
54:L5:34:ARG:HH11	54:L5:39:ARG:HG3	1.76	0.50
1:13:376:G:H1	1:13:387:U:H3	1.59	0.50
1:13:871:U:O2'	1:13:872:A:H5''	2.12	0.50
41:B8:74:ARG:HD3	41:B8:76:PHE:CZ	2.46	0.50
32:41:6:ALA:HB3	52:M8:23:GLU:HG3	1.94	0.50
26:1H:1591:G:H2'	26:1H:1592:C:H6	1.73	0.50
26:1H:1949:G:H1	26:1H:1957:C:H42	1.58	0.50
4:3E:108:LEU:HB3	4:3E:110:PHE:HD1	1.75	0.50
1:13:555:C:H2'	1:13:556:C:C6	2.46	0.50
1:13:1064:G:H4'	1:13:1065:U:OP1	2.10	0.50
4:32:25:ARG:HH21	4:32:30:LYS:HB2	1.76	0.50
6:52:7:ASN:HD21	18:9A:34:TYR:HE1	1.57	0.50
1:1G:814:A:N7	1:1G:816:A:C4	2.79	0.50
6:52:24:GLU:HB3	6:52:28:ARG:NH1	2.26	0.50
1:13:606:G:N2	1:13:630:G:N7	2.57	0.50
23:2K:44:A:C2	23:2K:45:A:C4	2.99	0.50
34:61:77:LEU:HG	34:61:101:LEU:HD13	1.93	0.50
43:95:75:PHE:CE2	43:95:81:TYR:CE1	3.00	0.50
46:G8:87:LYS:HD2	46:G8:89:PHE:HD2	1.76	0.50
32:49:106:LEU:O	32:49:110:ALA:HB3	2.11	0.50
32:41:94:LEU:HA	32:41:98:ARG:NH1	2.26	0.50
21:1B:9:ARG:HG3	21:1B:10:ARG:N	2.25	0.50
43:D8:76:LYS:HB2	43:D8:81:TYR:HD1	1.76	0.50
27:16:15:A:H1'	27:16:109:G:N9	2.26	0.50
28:71:22:ILE:O	28:71:26:ALA:N	2.44	0.50
26:1H:2590:A:H2'	26:1H:2591:C:C6	2.46	0.50
13:4A:52:GLU:HA	13:4A:55:ARG:HH21	1.76	0.50
26:1H:2615:U:H2'	26:1H:2616:C:H6	1.76	0.50
1:1G:1281:U:H3'	1:1G:1282:C:H5	1.76	0.50
1:1G:1081:G:N7	5:42:47:LYS:NZ	2.59	0.50
52:M8:43:TYR:CE2	52:M8:44:THR:HG23	2.46	0.50
26:14:2773:C:OP1	30:29:166:THR:OG1	2.29	0.50
26:14:929:G:H3'	26:14:929:G:C8	2.46	0.50
1:1G:1452:C:C6	1:1G:1452:C:OP1	2.65	0.50
1:13:4:U:O2'	1:13:5:U:OP1	2.25	0.50
26:14:2260:C:O2'	26:14:2261:C:H5'	2.11	0.50
40:A8:67:ARG:O	40:A8:71:ARG:HG3	2.11	0.50
26:14:2615:U:H2'	26:14:2616:C:H6	1.77	0.50
26:1H:34:C:HO2'	26:1H:35:G:P	2.35	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1389:G:C2	26:1H:1399:C:O2	2.65	0.50
26:1H:2070:G:C2	26:1H:2442:C:C2	2.99	0.50
26:1H:67:U:H2'	26:1H:68:G:H8	1.75	0.50
1:13:746:A:C5	1:13:747:C:C5	3.00	0.50
41:B8:50:ILE:HG13	41:B8:102:ILE:HD11	1.93	0.50
13:4I:65:LYS:O	13:4I:66:LEU:HD23	2.10	0.50
26:14:2295:C:H5	40:65:13:ARG:NH2	2.08	0.50
1:1G:825:G:H1	1:1G:875:C:H42	1.58	0.50
45:F8:8:ILE:CD1	45:F8:43:VAL:HG22	2.41	0.50
26:1H:1385:G:O2'	26:1H:1396:U:C6	2.63	0.50
20:BA:14:LYS:HG3	20:BA:17:ARG:NH2	2.26	0.50
1:13:672:U:H2'	1:13:673:G:C8	2.47	0.50
26:14:2849:U:H1'	26:14:2866:U:O2	2.10	0.50
26:14:1657:C:H2'	26:14:1658:C:C6	2.46	0.50
16:7I:58:TYR:O	16:7I:62:VAL:HG22	2.11	0.50
26:1H:1919:A:H5''	26:1H:1920:C:OP2	2.11	0.50
1:1G:998(A):C:H1'	1:1G:1042:G:N1	2.27	0.50
19:AI:41:VAL:HA	19:AI:44:MET:H	1.77	0.50
24:3K:59:A:H5''	24:3K:60:U:H6	1.75	0.50
30:29:60:ASN:OD1	30:29:61:ARG:N	2.44	0.50
31:31:78:ILE:HA	31:31:83:PHE:CD2	2.46	0.50
31:31:196:LEU:O	31:31:200:GLU:HB2	2.11	0.50
4:32:173:TRP:CD1	4:32:174:LEU:HG	2.46	0.50
8:7E:87:SER:HB2	8:7E:93:VAL:CG2	2.42	0.50
1:1G:1010:G:N2	1:1G:1019:C:O2	2.28	0.50
40:65:85:VAL:H	40:65:110:LEU:HA	1.77	0.50
26:14:929:G:O5'	26:14:929:G:H8	1.94	0.50
1:1G:740:U:OP2	15:6A:2:PRO:HA	2.12	0.50
13:4A:86:CYS:O	13:4A:89:GLY:N	2.29	0.50
54:L5:19:ARG:HG2	54:L5:19:ARG:HH11	1.77	0.50
3:22:88:ARG:HB3	3:22:101:LEU:HD12	1.93	0.50
34:69:69:LYS:HG2	34:69:136:VAL:HB	1.94	0.50
1:1G:243:A:H4'	1:1G:244:U:C5'	2.39	0.50
26:14:459:U:H4'	54:L5:40:TRP:CZ3	2.47	0.50
1:1G:409:G:C2	1:1G:410:G:H1'	2.45	0.50
1:1G:373:A:N3	1:1G:374:A:C8	2.78	0.50
26:14:2305:A:C2	26:14:2306:C:H1'	2.47	0.50
1:1G:1088:G:H2'	1:1G:1089:G:O4'	2.11	0.50
26:1H:1388:G:H2'	26:1H:1389:G:H8	1.76	0.50
26:1H:426:C:H2'	26:1H:427:U:C6	2.46	0.50
13:4A:66:LEU:CA	13:4A:70:LEU:HB2	2.42	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:6:A:N3	26:14:6:A:H2'	2.26	0.50
5:4E:110:LEU:HD13	5:4E:118:ILE:HG21	1.92	0.50
2:1E:59:GLU:HB2	2:1E:221:LEU:HD12	1.92	0.50
1:13:983:A:C2	1:13:984:C:C6	2.99	0.50
7:62:62:PHE:HA	7:62:124:LEU:HD22	1.92	0.50
1:13:592:G:H2'	1:13:593:G:H8	1.76	0.50
3:22:55:VAL:HG22	3:22:68:VAL:HG13	1.94	0.50
5:42:141:GLN:HA	5:42:143:ARG:NH2	2.27	0.50
2:1E:27:LYS:HZ1	2:1E:195:ASP:HB2	1.77	0.50
35:58:128:HIS:HB2	35:58:129:PRO:HD2	1.94	0.50
1:1G:882:C:OP2	12:3A:13:LYS:NZ	2.40	0.50
1:1G:35:G:C2	1:1G:550:G:C2	2.99	0.50
12:3A:117:ARG:NH2	12:3A:124:LYS:HB2	2.26	0.50
26:1H:1420:U:HO2'	26:1H:1421:G:P	2.34	0.50
38:88:54:MET:O	38:88:57:HIS:N	2.44	0.50
34:69:6:LEU:H	34:69:36:ALA:HA	1.75	0.50
26:1H:1344:G:H4'	26:1H:1384:A:C5	2.46	0.50
34:61:88:ILE:O	34:61:121:LYS:NZ	2.43	0.50
1:1G:904:C:C4	1:1G:905:U:C5	2.99	0.50
41:75:24:PRO:HA	41:75:49:VAL:HG23	1.93	0.50
36:25:24:VAL:HA	36:25:39:ILE:HG22	1.92	0.50
1:1G:294:U:OP1	1:1G:610:G:O2'	2.19	0.50
26:1H:1564:C:O2'	26:1H:1565:C:H5'	2.11	0.50
1:1G:303:A:H2'	1:1G:304:U:O4'	2.11	0.50
26:1H:207:A:H2'	26:1H:208:C:O4'	2.12	0.50
26:14:239:U:H2'	26:14:240:G:O4'	2.11	0.50
41:75:27:THR:HG23	41:75:89:VAL:HG13	1.93	0.50
26:14:2184:G:H2'	26:14:2185:C:C6	2.46	0.50
40:A8:39:ILE:O	40:A8:39:ILE:HG22	2.12	0.50
37:78:122:PRO:HA	37:78:142:GLY:HA3	1.94	0.50
30:29:68:ALA:C	30:29:70:ALA:N	2.62	0.50
2:12:187:LEU:HD13	2:12:204:ASN:H	1.77	0.50
33:51:6:ARG:HA	33:51:66:GLY:HA2	1.92	0.50
13:4A:58:GLU:O	13:4A:62:ASN:HB2	2.12	0.50
14:5A:21:TYR:HE2	14:5A:23:ARG:HE	1.58	0.50
32:41:109:VAL:HG21	52:M8:14:ILE:HD13	1.93	0.50
24:3K:6:G:H1'	24:3K:68:G:N2	2.26	0.50
26:14:978:G:H5''	26:14:979:G:OP2	2.11	0.50
26:1H:1025:G:C4	26:1H:1135:C:H1'	2.46	0.50
26:1H:270(U):C:H2'	26:1H:270(V):G:C8	2.47	0.50
1:13:1449:C:H42	1:13:1454:G:H1	1.57	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:4I:7:VAL:H	32:41:115:ARG:HH12	1.60	0.50
12:3A:28:LYS:HD2	12:3A:33:ARG:NH1	2.26	0.50
42:85:76:TYR:O	42:85:80:ILE:HG12	2.12	0.50
4:32:163:GLU:O	4:32:166:LYS:HB2	2.12	0.50
53:N8:40:LYS:NZ	53:N8:46:CYS:HB2	2.26	0.50
20:BA:50:GLU:N	20:BA:100:ILE:HG12	2.26	0.50
29:11:29:PRO:C	29:11:30:GLU:HG2	2.31	0.50
34:69:50:ARG:O	34:69:54:GLN:NE2	2.43	0.50
26:1H:2684:U:H1'	36:68:70:LYS:HE2	1.91	0.50
1:1G:1141:C:H2'	1:1G:1142:G:C8	2.46	0.50
40:65:23:ARG:NH2	40:65:84:GLN:HB3	2.26	0.50
26:14:1568:G:OP1	29:19:63:ARG:NH1	2.34	0.50
1:1G:517:G:H1	1:1G:533:A:P	2.35	0.50
1:1G:578:C:H42	1:1G:763:G:H1	1.60	0.50
26:1H:2690:C:H5''	26:1H:2872:G:H21	1.76	0.50
26:14:353:G:H2'	26:14:354:G:C8	2.47	0.50
29:19:12:SER:O	29:19:16:MET:HB2	2.12	0.50
3:22:47:LEU:HB3	3:22:52:LEU:HD13	1.94	0.50
26:1H:916:G:H2'	26:1H:917:A:H5''	1.93	0.50
1:1G:1064:G:OP2	1:1G:1386:G:H4'	2.12	0.50
1:13:1266:G:N2	1:13:1269:A:OP2	2.44	0.50
26:1H:455:C:N3	26:1H:473:G:H5'	2.26	0.50
23:2L:76:C:H2'	23:2L:77:A:C8	2.47	0.50
29:11:242:ARG:O	29:11:244:ARG:HG2	2.11	0.50
39:55:33:ARG:HA	39:55:115:GLU:HA	1.93	0.50
30:21:16:ARG:HH21	30:21:173:VAL:HG13	1.77	0.50
1:13:606:G:H5''	1:13:607:A:H5'	1.92	0.50
26:14:2025:C:H2'	26:14:2026:C:C6	2.47	0.50
31:31:32:LEU:HD21	31:31:105:VAL:HG13	1.93	0.50
26:14:1437:C:H2'	26:14:1438:U:H6	1.77	0.50
28:71:15:ASP:OD1	28:71:17:ASN:ND2	2.45	0.50
26:14:860:U:H1'	26:14:2268:A:H5'	1.93	0.50
24:3K:10:G:O6	24:3K:25:C:N4	2.26	0.50
30:21:23:VAL:HA	30:21:184:VAL:O	2.12	0.50
49:J8:78:LYS:HD3	49:J8:78:LYS:N	2.25	0.50
5:42:99:GLY:O	5:42:117:ASP:HA	2.12	0.50
5:42:83:GLU:HA	5:42:88:LYS:HA	1.93	0.50
26:1H:775:G:C4	26:1H:794:G:C8	2.99	0.50
44:A5:50:VAL:HG22	44:A5:105:VAL:HG23	1.93	0.50
1:13:640:A:O2'	8:7E:116:LYS:NZ	2.40	0.50
26:14:1826:G:H2'	26:14:1827:C:H6	1.74	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2074:U:H2'	26:14:2075:U:C6	2.47	0.50
31:31:153:SER:HB2	31:31:190:GLU:H	1.75	0.50
1:13:1080:A:H5'	5:4E:14:ARG:NH2	2.27	0.50
26:14:919:G:H2'	26:14:920:G:H8	1.75	0.50
47:D5:53:ILE:HA	47:D5:70:LEU:HD22	1.94	0.50
26:1H:2862:G:H2'	26:1H:2863:C:H6	1.76	0.50
20:BI:26:ASN:HB2	20:BI:71:THR:OG1	2.12	0.50
26:1H:1142(A):A:C4	26:1H:1144:G:C8	2.99	0.50
27:1J:39:A:C2'	27:1J:40:U:H5'	2.42	0.50
26:1H:356:G:H2'	26:1H:357:A:H8	1.77	0.50
1:1G:740:U:H2'	1:1G:741:G:C8	2.46	0.50
26:1H:1171:G:C8	26:1H:1174:A:N1	2.80	0.50
42:C8:69:CYS:SG	42:C8:79:PHE:HD2	2.34	0.50
1:1G:15:G:C5	1:1G:1396:A:C2	3.00	0.50
1:1G:448:A:OP2	1:1G:485:G:N2	2.39	0.50
1:1G:450:G:N7	1:1G:481:G:C6	2.80	0.50
1:13:604:G:C6	1:13:605:U:N3	2.80	0.50
1:1G:1129:C:OP1	1:1G:1130:A:H8	1.94	0.50
26:14:176:G:C2'	26:14:177:G:H5'	2.41	0.50
1:13:652:U:C4	1:13:752:G:N3	2.79	0.50
27:1J:115:G:H8	27:1J:115:G:OP2	1.95	0.50
2:12:126:GLU:HA	2:12:128:GLU:HB2	1.94	0.50
20:BI:49:ALA:HB3	20:BI:99:LEU:HD22	1.93	0.50
26:14:1453:A:O2'	26:14:1454:U:H2'	2.11	0.50
36:68:76:ALA:HB3	41:B8:75:ILE:HB	1.92	0.50
26:1H:1652:A:OP1	39:98:8:ARG:NH1	2.45	0.50
35:58:103:VAL:O	35:58:106:MET:N	2.45	0.50
26:14:1542:G:H3'	26:14:1543:A:H5''	1.93	0.50
26:14:1667:G:H8	26:14:1667:G:OP2	1.94	0.50
2:1E:105:PHE:HZ	2:1E:156:LYS:HA	1.76	0.50
30:29:90:THR:O	30:29:90:THR:HG23	2.12	0.50
26:14:2682:U:H5'	30:29:11:MET:HB3	1.92	0.50
11:2I:78:GLN:O	11:2I:103:LEU:HA	2.12	0.50
47:H8:85:HIS:HE1	47:H8:87:ASP:OD1	1.93	0.50
26:1H:2243:U:O2'	26:1H:2244:U:H5'	2.11	0.50
1:1G:882:C:H2'	1:1G:883:C:H6	1.76	0.50
47:H8:93:ASP:C	47:H8:94:GLU:HG3	2.30	0.50
16:7I:9:PHE:CE1	16:7I:18:ARG:HG3	2.47	0.50
26:14:1519:G:C6	26:14:1520:U:C4	3.00	0.50
45:B5:75:ASP:C	45:B5:76:ARG:HG3	2.31	0.50
4:32:100:ARG:NH1	4:32:102:ASP:OD2	2.43	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1952:A:C6	36:68:22:ILE:HG23	2.47	0.50
45:B5:84:ALA:O	45:B5:87:GLN:HG3	2.11	0.50
34:61:26:ALA:HA	34:61:30:LEU:HB2	1.93	0.50
1:13:1410:G:C4	1:13:1491:G:N2	2.80	0.50
4:3E:52:SER:O	4:3E:56:VAL:HG23	2.12	0.50
6:5E:95:GLU:OE2	6:5E:95:GLU:N	2.36	0.50
26:14:2832:U:H3'	26:14:2833:G:H8	1.77	0.50
46:C5:14:LEU:HD23	46:C5:15:VAL:N	2.27	0.50
26:1H:2564:A:C2	26:1H:2647:U:H4'	2.47	0.50
29:19:28:GLU:C	29:19:28:GLU:CD	2.70	0.50
26:1H:862:G:H5'	27:16:79:C:H4'	1.94	0.50
5:42:92:LYS:HG2	5:42:93:PRO:HD2	1.94	0.50
39:98:30:THR:OG1	39:98:75:LEU:HD12	2.12	0.50
1:13:1291:G:O3'	9:8E:39:GLY:HA3	2.11	0.50
1:13:1176:A:N6	1:13:1177:G:N7	2.59	0.50
13:4A:91:ARG:HD2	13:4A:96:LEU:HB3	1.94	0.50
42:C8:95:LEU:HD22	43:D8:4:ILE:HG12	1.94	0.50
1:1G:1004:A:C2	1:1G:1024:G:H8	2.30	0.50
26:14:2302:G:H2'	26:14:2303:G:O4'	2.11	0.50
28:71:190:ARG:NH2	28:71:228:SER:OXT	2.37	0.50
26:1H:782:A:H5'	26:1H:783:A:C2	2.47	0.50
40:65:7:TYR:CE1	40:65:91:PRO:HG3	2.46	0.50
1:13:766:A:OP2	61:13:1814:HOH:O	2.20	0.50
27:16:24:G:N7	27:16:56:G:H2'	2.27	0.50
7:62:101:LEU:O	7:62:105:VAL:HG23	2.11	0.50
1:13:1469:G:H2'	1:13:1470:G:H8	1.74	0.50
26:14:2647:U:O2	26:14:2673:G:N2	2.41	0.50
33:51:54:ARG:HE	33:51:57:ASP:HA	1.77	0.50
26:1H:690:G:O2'	29:11:43:ARG:NH2	2.45	0.50
26:1H:1392:A:N6	26:1H:1393:A:N6	2.60	0.50
26:14:1475:G:C2	26:14:1476:C:C2	3.00	0.50
39:98:37:THR:HA	39:98:111:LEU:HA	1.93	0.50
9:82:48:GLU:HA	9:82:51:ARG:HG3	1.93	0.50
27:16:33:G:O2'	27:16:34:U:H5'	2.11	0.50
15:6A:33:THR:HG21	15:6A:85:LEU:HD22	1.94	0.50
31:39:141:ALA:O	31:39:144:LYS:N	2.38	0.50
26:1H:1488:G:C5	26:1H:1489:U:C5	3.00	0.50
26:1H:244:A:H4'	37:78:74:GLU:HB2	1.94	0.50
32:49:15:VAL:CG1	32:49:175:LEU:HB3	2.39	0.50
19:AI:41:VAL:HG23	19:AI:42:PRO:HA	1.94	0.50
26:1H:1556:C:H2'	26:1H:1557:C:C6	2.46	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:J8:71:TYR:O	49:J8:74:VAL:HG12	2.11	0.50
1:1G:1206:G:H4'	3:22:192:THR:O	2.12	0.50
1:1G:532:A:N1	3:22:156:ARG:NH1	2.60	0.50
9:82:112:LYS:N	9:82:113:LYS:HZ3	2.09	0.50
28:71:66:HIS:CE1	28:71:184:LYS:HD2	2.47	0.50
52:M8:46:GLN:HA	52:M8:47:GLN:OE1	2.11	0.50
46:C5:82:PRO:CB	46:C5:97:ARG:HB3	2.41	0.50
26:1H:1627:G:H2'	26:1H:1628:G:H5'	1.94	0.50
26:1H:1471:A:OP2	26:1H:1521:G:N1	2.28	0.50
1:1G:580:U:H2'	1:1G:581:G:O4'	2.12	0.50
26:1H:415:A:H2'	26:1H:416:C:O4'	2.11	0.50
46:C5:36:ALA:HB1	46:C5:66:PRO:HB3	1.93	0.50
16:7A:5:ARG:HE	16:7A:22:THR:HG21	1.76	0.50
7:62:136:LYS:HZ2	7:62:137:LYS:NZ	2.09	0.50
26:1H:2695:C:H2'	26:1H:2696:U:C6	2.46	0.50
26:1H:773:U:C4'	29:11:47:GLY:HA3	2.41	0.50
1:1G:1145:C:H5''	1:1G:1146:A:OP1	2.10	0.50
26:1H:1210:A:OP1	26:1H:1211:U:O2'	2.18	0.50
1:1G:876:G:H1'	8:72:11:THR:HG21	1.93	0.50
2:1E:21:ARG:HG2	2:1E:38:GLY:O	2.12	0.50
1:13:859:A:H2'	1:13:860:A:O4'	2.11	0.50
26:1H:2048:G:C2	26:1H:2621:A:C2	2.99	0.50
26:1H:14:A:C8	26:1H:15:G:C8	3.00	0.50
26:14:49:A:H5''	26:14:51:G:O4'	2.11	0.50
1:1G:1194:U:H4'	5:42:22:GLY:O	2.12	0.50
1:1G:827:U:H6	1:1G:827:U:O5'	1.95	0.50
36:68:104:ARG:HH22	41:B8:43:GLN:NE2	2.08	0.50
44:A5:78:GLU:OE1	44:A5:99:ARG:HD3	2.11	0.50
26:14:2469:A:O2'	38:45:56:ARG:HG2	2.12	0.50
1:1G:79:G:H1	1:1G:90:C:H42	1.58	0.50
34:69:2:LYS:HA	34:69:20:ASP:HA	1.94	0.50
26:14:792:G:O2'	26:14:2440:C:N3	2.38	0.50
56:1L:22:G:N7	56:1L:48:C:N4	2.59	0.50
6:52:72:VAL:HG13	6:52:73:ASN:N	2.27	0.50
11:2A:59:TYR:CZ	11:2A:63:LEU:HD21	2.46	0.50
3:22:180:ALA:O	3:22:181:ASN:HB3	2.12	0.50
1:13:620:C:H5''	61:13:1859:HOH:O	2.10	0.50
37:35:92:GLU:HG2	37:35:123:LEU:HD21	1.94	0.50
1:1G:457:C:H2'	1:1G:458:C:C6	2.47	0.50
1:1G:456:C:N4	1:1G:476:G:H1	2.09	0.50
49:J8:60:PHE:HE2	49:J8:91:LYS:NZ	2.10	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:D5:44:PHE:CZ	47:D5:86:VAL:HG21	2.47	0.50
24:3K:61:C:H1'	28:71:52:ARG:NH1	2.19	0.50
1:1G:1255:G:O3'	1:1G:1258:G:H1'	2.12	0.50
32:41:106:LEU:HD12	32:41:110:ALA:HB3	1.93	0.50
1:13:1309:G:OP2	13:4I:99:ARG:NE	2.45	0.50
26:1H:2053:G:OP1	30:21:144:ARG:HG2	2.12	0.50
26:1H:444:C:OP1	31:31:45:ARG:NH2	2.45	0.50
6:5E:15:ASP:OD1	6:5E:17:SER:N	2.45	0.50
26:14:2068:U:C4	26:14:2430:A:H2	2.29	0.50
26:14:2758:A:C2	26:14:2759:G:H1'	2.46	0.50
7:62:64:GLN:NE2	7:62:128:ALA:O	2.32	0.50
1:13:1304:G:N2	1:13:1332:A:OP2	2.43	0.50
22:1K:17:U:HO2'	22:1K:57:G:H1	1.58	0.50
33:51:107:VAL:HB	33:51:152:ARG:HG3	1.93	0.50
20:BA:69:GLY:O	20:BA:73:HIS:CD2	2.64	0.50
1:1G:339:C:H2'	1:1G:340:U:H6	1.77	0.50
51:H5:6:VAL:O	51:H5:34:GLU:HA	2.12	0.50
26:14:2861:G:H2'	26:14:2862:G:H8	1.77	0.50
26:14:2019:A:OP2	53:J5:9:LYS:NZ	2.45	0.50
39:55:24:GLN:HB3	39:55:44:LEU:HD11	1.93	0.50
26:14:2547:U:O2	36:25:23:ARG:NH2	2.42	0.50
26:1H:2341:G:H2'	26:1H:2342:C:C6	2.47	0.50
13:4A:11:ARG:HG3	13:4A:12:ASN:N	2.27	0.50
2:12:72:GLY:O	2:12:78:GLN:HA	2.11	0.49
30:29:34:VAL:CG1	30:29:64:LYS:HE3	2.42	0.49
31:31:182:ASN:ND2	31:31:185:ASP:OD2	2.32	0.49
26:1H:270(N):G:H5'	26:1H:270(O):U:O4	2.11	0.49
37:35:63:PRO:CG	55:M5:25:MET:HB3	2.42	0.49
26:14:71:A:H3'	26:14:71:A:P	2.51	0.49
50:G5:24:LEU:HD23	50:G5:24:LEU:O	2.11	0.49
47:D5:40:ASP:OD1	47:D5:43:GLU:HG2	2.12	0.49
26:14:819:A:C4	26:14:1189:A:C2	3.00	0.49
26:1H:1022:G:N2	26:1H:1023:U:O4	2.40	0.49
37:78:63:PRO:HB3	55:Q8:30:ARG:HE	1.77	0.49
2:1E:215:LEU:H	2:1E:215:LEU:HD22	1.76	0.49
1:1G:1003:G:N2	1:1G:1037:C:O2	2.34	0.49
26:1H:1643:G:C6	26:1H:1644:C:C4	3.00	0.49
26:14:528:A:C2	26:14:2043:C:H4'	2.47	0.49
26:1H:574:C:N3	30:21:145:LYS:HE3	2.26	0.49
1:1G:1306:A:C6	1:1G:1307:U:C2	3.00	0.49
22:1K:44:U:H3'	22:1K:48:C:H41	1.76	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1424:G:OP1	29:19:33:LEU:HD12	2.12	0.49
26:14:2513:G:O2'	30:29:151:TYR:HE2	1.95	0.49
26:14:1222:C:C2	26:14:1229(A):G:C2	3.00	0.49
1:13:21:G:OP1	61:13:1813:HOH:O	2.20	0.49
34:69:77:LEU:HA	34:69:141:LYS:H	1.77	0.49
26:14:2115:G:C2	26:14:2116:G:N7	2.80	0.49
26:14:2115:G:O2'	26:14:2171:A:N6	2.45	0.49
11:21:32:ILE:HD12	11:21:72:ALA:HB2	1.94	0.49
18:9A:62:GLU:O	18:9A:66:LEU:N	2.42	0.49
33:51:11:VAL:HG23	33:51:76:VAL:HG11	1.93	0.49
3:22:120:VAL:HA	3:22:123:GLN:HG3	1.94	0.49
26:14:2820:A:C6	39:55:4:LEU:HD11	2.47	0.49
26:14:2185:C:H2'	26:14:2186:G:C8	2.47	0.49
32:41:174:GLU:O	32:41:177:GLY:N	2.38	0.49
26:14:944:G:H5''	26:14:945:A:O5'	2.11	0.49
1:13:793:U:H5'	1:13:794:A:H5''	1.93	0.49
35:15:121:LYS:HB3	35:15:123:TYR:CE2	2.46	0.49
34:61:102:SER:O	34:61:106:GLY:HA2	2.11	0.49
38:88:2:LEU:HD12	38:88:2:LEU:H	1.77	0.49
37:78:91:PHE:CD1	37:78:91:PHE:N	2.80	0.49
26:14:2655:G:N2	26:14:2665:A:OP2	2.44	0.49
51:H5:39:ASP:O	51:H5:44:ARG:NH1	2.45	0.49
26:1H:1262:A:N3	53:N8:10:LYS:HE3	2.27	0.49
26:14:360:G:H8	26:14:360:G:OP2	1.94	0.49
26:14:2785:C:H2'	26:14:2786:U:O4'	2.12	0.49
16:7I:53:VAL:HG13	16:7I:79:VAL:HG22	1.94	0.49
1:1G:1326:C:H2'	1:1G:1327:C:H6	1.76	0.49
26:14:2716:U:H2'	26:14:2717:G:H8	1.76	0.49
46:G8:29:GLU:HB3	46:G8:38:ILE:HG22	1.94	0.49
20:BI:64:ASP:HA	20:BI:67:ALA:HB3	1.93	0.49
1:1G:1149:C:H2'	1:1G:1150:U:O4'	2.11	0.49
26:1H:2358:G:C5	26:1H:2359:C:C5	3.00	0.49
26:14:993:G:H1'	43:95:89:GLN:NE2	2.27	0.49
2:1E:184:VAL:C	2:1E:185:ILE:HD13	2.33	0.49
26:14:1231:G:H8	26:14:1231:G:O5'	1.95	0.49
40:A8:35:ILE:HD11	40:A8:101:LEU:HD23	1.94	0.49
26:1H:654(N):G:N7	26:1H:654(P):G:N2	2.59	0.49
26:14:734:A:O2'	26:14:1635:G:H5'	2.11	0.49
26:14:323:G:HO2'	26:14:1205:U:H3	1.53	0.49
26:14:603:A:H8	26:14:604:G:H1'	1.75	0.49
16:7A:74:LEU:HD13	16:7A:79:VAL:HG21	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:E5:44:ARG:O	48:E5:45:PHE:CD1	2.65	0.49
7:62:136:LYS:HZ3	7:62:137:LYS:HZ1	1.58	0.49
1:1G:1365:G:H2'	1:1G:1366:C:H6	1.76	0.49
1:13:1464:G:H2'	1:13:1465:C:C6	2.47	0.49
1:13:659:U:H2'	1:13:660:G:H8	1.75	0.49
6:52:22:GLU:O	6:52:26:ILE:HG13	2.12	0.49
40:A8:58:LEU:HD23	40:A8:58:LEU:H	1.76	0.49
51:H5:10:LYS:NZ	51:H5:15:TYR:OH	2.37	0.49
1:13:805:C:O2'	1:13:806:C:H5'	2.12	0.49
26:14:81:G:N2	26:14:105:C:O2	2.43	0.49
26:14:1520:U:H2'	26:14:1521:G:O4'	2.12	0.49
26:1H:1621:U:O4	61:1H:3555:HOH:O	2.19	0.49
23:2K:69:C:H2'	23:2K:70:C:C6	2.46	0.49
14:5A:45:ARG:O	14:5A:49:HIS:NE2	2.46	0.49
26:1H:1491:G:H2'	26:1H:1492:G:C8	2.47	0.49
1:1G:233:C:H2'	1:1G:234:C:C6	2.47	0.49
1:13:1333:A:H2'	1:13:1334:G:O4'	2.11	0.49
52:M8:13:ARG:HA	52:M8:24:THR:HG21	1.93	0.49
19:AA:22:LEU:O	19:AA:22:LEU:HD13	2.12	0.49
49:J8:72:GLU:O	49:J8:76:ARG:HG2	2.13	0.49
26:14:2104:G:H2'	26:14:2105:C:C6	2.47	0.49
6:52:97:PHE:HB2	18:9A:32:ARG:HG3	1.94	0.49
3:22:29:TYR:CD1	3:22:33:LEU:CB	2.90	0.49
43:D8:1:MET:SD	43:D8:43:GLU:CD	2.91	0.49
26:1H:1635:G:H2'	26:1H:1636:C:C6	2.47	0.49
38:45:25:ASP:HA	38:45:67:ARG:CZ	2.42	0.49
17:8I:52:LYS:HG2	17:8I:55:ASP:OD1	2.13	0.49
26:1H:2593:U:O2'	26:1H:2594:C:H5'	2.12	0.49
26:1H:992:C:C2	26:1H:993:G:C8	3.00	0.49
12:3A:20:LYS:CD	12:3A:21:LYS:N	2.69	0.49
1:1G:401:C:O2'	1:1G:621:A:N3	2.43	0.49
26:1H:1288:U:H4'	26:1H:1289:C:OP2	2.13	0.49
46:G8:20:TYR:HB3	46:G8:42:VAL:CG2	2.42	0.49
7:6E:16:LEU:HD11	9:8E:42:ARG:CA	2.39	0.49
28:71:66:HIS:NE2	28:71:187:ASP:HB3	2.26	0.49
46:C5:84:ARG:O	46:C5:85:VAL:HG13	2.13	0.49
1:13:1329:A:N7	21:1F:7:ARG:NH2	2.60	0.49
22:1K:8:U:H2'	22:1K:22:G:O6	2.13	0.49
26:1H:651:G:H4'	55:Q8:18:ALA:HB3	1.94	0.49
26:1H:2171:A:O2'	26:1H:2172:U:O4'	2.21	0.49
34:61:83:ALA:HB2	34:61:144:VAL:HG23	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:78:59:LEU:HB2	55:Q8:58:ILE:HD12	1.94	0.49
26:1H:217:G:H2'	26:1H:218:A:C8	2.47	0.49
1:13:590:C:OP1	8:7E:30:ARG:N	2.32	0.49
26:1H:581:C:OP1	42:C8:33:ARG:HG3	2.13	0.49
1:1G:69:G:C2	1:1G:73:G:C8	3.00	0.49
34:61:92:VAL:HG13	34:61:120:ILE:HG23	1.94	0.49
23:2K:63:C:H2'	23:2K:64:G:C8	2.47	0.49
38:88:35:VAL:CG1	38:88:130:LYS:HB3	2.42	0.49
1:1G:1224:G:N2	1:1G:1322:C:H4'	2.27	0.49
26:1H:724:U:H2'	26:1H:725:G:O4'	2.12	0.49
26:1H:960:A:C8	26:1H:962:G:C8	3.00	0.49
26:1H:2275:C:C6	26:1H:2275:C:H5'	2.47	0.49
55:M5:60:LEU:HD12	55:M5:61:LEU:N	2.27	0.49
1:1G:396:G:C2	1:1G:398:C:C4	3.00	0.49
22:1K:15:G:N7	22:1K:59:A:O2'	2.39	0.49
26:14:945:A:H2	61:14:3846:HOH:O	1.94	0.49
26:14:1915:U:H2'	26:14:1916:A:H5'	1.94	0.49
31:31:191:ARG:HB3	31:31:191:ARG:HH11	1.78	0.49
1:13:1299:A:H2'	1:13:1301:U:C6	2.46	0.49
29:11:155:LEU:O	29:11:156:ALA:HB3	2.12	0.49
26:14:1384:A:N3	26:14:1405:U:H1'	2.27	0.49
37:35:39:LYS:HA	37:35:45:LEU:HD13	1.94	0.49
2:1E:94:ASN:OD1	2:1E:95:GLN:N	2.43	0.49
1:13:882:C:O2'	1:13:883:C:H5'	2.12	0.49
16:7I:38:TYR:CE2	16:7I:50:LYS:HD2	2.47	0.49
16:7I:51:VAL:HG12	16:7I:52:ASP:C	2.33	0.49
6:52:44:GLY:HA2	6:52:59:TYR:CE1	2.47	0.49
29:19:132:PRO:HG3	29:19:190:TYR:CE1	2.47	0.49
48:E5:28:GLY:HA2	48:E5:66:VAL:HG13	1.94	0.49
44:E8:70:TYR:CD1	44:E8:70:TYR:N	2.81	0.49
26:14:1126:A:H8	26:14:1126:A:O5'	1.95	0.49
26:14:1033:U:H6	26:14:1033:U:H3'	1.78	0.49
1:13:909:A:H8	1:13:909:A:O5'	1.95	0.49
29:19:36:PRO:HD2	29:19:62:TYR:O	2.12	0.49
1:13:540:G:H2'	1:13:541:G:O4'	2.11	0.49
26:1H:2544:G:H8	26:1H:2544:G:O5'	1.96	0.49
26:1H:2842:G:C4	26:1H:2876:G:N2	2.81	0.49
1:13:475:G:C2'	1:13:476:G:H5'	2.43	0.49
26:1H:270(J):G:C5	26:1H:270(K):C:H1'	2.47	0.49
26:1H:270(L):U:O2	34:61:50:ARG:HG2	2.13	0.49
1:1G:841:U:C6	1:1G:841:U:H3'	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:85:95:LEU:HD11	43:95:11:GLN:O	2.13	0.49
43:D8:93:GLU:O	43:D8:94:LEU:HD23	2.11	0.49
26:14:2286:A:H4'	26:14:2287:A:O4'	2.13	0.49
23:2L:23:G:H2'	23:2L:24:C:H6	1.77	0.49
26:14:389:G:H1	37:35:71:VAL:HG12	1.76	0.49
9:82:97:LYS:C	9:82:100:GLY:H	2.16	0.49
1:13:1128:C:H5'	9:8E:16:ARG:CZ	2.43	0.49
26:1H:1442:G:C2	26:1H:1550:C:O2	2.66	0.49
4:32:160:GLN:O	4:32:163:GLU:N	2.44	0.49
1:13:346:G:H8	41:B8:41:ARG:NH1	2.10	0.49
43:D8:39:LEU:O	43:D8:40:LEU:CD2	2.60	0.49
26:1H:1296:G:O2'	26:1H:1297:C:H5'	2.13	0.49
26:1H:2683:C:H5''	26:1H:2684:U:OP2	2.13	0.49
26:14:782:A:N7	29:19:221:VAL:HG21	2.26	0.49
1:1G:428:G:C8	1:1G:430:A:C5	3.01	0.49
1:1G:433:C:H2'	1:1G:434:U:H6	1.77	0.49
8:72:109:ILE:HG22	8:72:137:VAL:HB	1.93	0.49
8:72:86:ILE:HG13	8:72:135:CYS:HA	1.95	0.49
26:14:1796:U:H2'	26:14:1797:C:H6	1.77	0.49
1:1G:1498:U:O2'	1:1G:1499:A:OP2	2.18	0.49
26:1H:2457:U:C2'	26:1H:2458:G:H5'	2.43	0.49
2:1E:21:ARG:HD3	2:1E:22:LYS:HB2	1.93	0.49
26:14:1444(A):A:HO2'	26:14:1445:C:P	2.35	0.49
1:13:1074:G:H2'	1:13:1075:C:C6	2.48	0.49
40:65:56:LEU:O	40:65:58:LEU:HG	2.12	0.49
1:1G:286:G:H2'	1:1G:287:U:H6	1.78	0.49
26:14:2419:U:H2'	26:14:2420:C:C6	2.48	0.49
8:7E:97:VAL:HG21	8:7E:128:GLY:HA2	1.95	0.49
26:1H:1672:C:C2'	26:1H:1673:U:H5'	2.42	0.49
51:L8:7:LYS:HA	51:L8:33:GLN:O	2.12	0.49
1:13:632:A:H2'	1:13:633:G:O4'	2.12	0.49
12:3I:66:VAL:HG22	12:3I:67:THR:N	2.28	0.49
12:3A:6:THR:HG23	12:3A:9:GLN:OE1	2.12	0.49
1:1G:512:U:H2'	1:1G:513:C:C6	2.47	0.49
26:1H:996:A:C5	26:1H:1160:G:N2	2.81	0.49
32:41:66:GLN:NE2	32:41:92:VAL:HG23	2.28	0.49
18:9A:22:VAL:HG22	18:9A:23:LYS:N	2.26	0.49
1:13:455:C:H2'	1:13:456:C:H5'	1.94	0.49
26:1H:322:A:H5'	26:1H:340:A:C1'	2.41	0.49
36:25:96:THR:HG23	36:25:97:ARG:H	1.77	0.49
1:1G:617:G:H4'	16:7A:44:THR:HB	1.94	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:1J:13:A:H5''	27:1J:15:A:C6	2.48	0.49
26:1H:878:A:H61	26:1H:899:A:H1'	1.76	0.49
26:14:1036:G:P	33:59:59:ARG:HB2	2.52	0.49
26:1H:270(G):C:H2'	26:1H:270(H):C:O4'	2.13	0.49
27:1J:42:C:O4'	32:49:69:ALA:HB2	2.12	0.49
2:1E:87:ARG:HH11	2:1E:219:VAL:HB	1.77	0.49
26:1H:1429:G:H2'	26:1H:1430:C:C6	2.47	0.49
26:14:1210:A:H5'	26:14:1212:G:C5'	2.43	0.49
3:2E:91:LEU:HB3	3:2E:99:VAL:HG11	1.94	0.49
40:A8:69:VAL:HA	40:A8:72:ALA:HB3	1.95	0.49
1:1G:219:C:H2'	1:1G:220:G:O4'	2.13	0.49
1:1G:412:A:O2'	1:1G:413:G:OP2	2.22	0.49
26:1H:973:A:OP1	26:1H:973:A:H8	1.95	0.49
1:13:590:C:H2'	1:13:591:U:C6	2.47	0.49
7:62:27:ILE:HD11	7:62:43:PHE:CD2	2.45	0.49
26:14:2757:A:C2	33:59:67:LEU:HD22	2.47	0.49
3:22:151:VAL:HA	3:22:199:LYS:O	2.12	0.49
1:13:1173:G:H2'	1:13:1174:G:O4'	2.13	0.49
3:22:22:TRP:HH2	3:22:32:LEU:HB3	1.78	0.49
12:3A:60:LEU:HB2	12:3A:64:TYR:HB2	1.94	0.49
37:35:125:VAL:N	37:35:145:PRO:HD2	2.26	0.49
36:68:68:GLU:CD	36:68:68:GLU:H	2.16	0.49
2:1E:187:LEU:HD23	2:1E:201:ILE:HG22	1.93	0.49
26:14:637:A:H4'	26:14:638:G:O5'	2.12	0.49
1:13:1064:G:H21	1:13:1190:G:H1'	1.78	0.49
26:14:2718:G:C6	26:14:2719:G:C5	3.00	0.49
31:31:179:GLU:CD	31:31:179:GLU:N	2.66	0.49
26:1H:2310:A:OP1	26:1H:2310:A:H4'	2.12	0.49
6:5E:86:ARG:O	6:5E:87:ARG:HG2	2.12	0.49
26:14:1684:C:C2	26:14:1705:G:N2	2.81	0.49
26:14:383:U:H2'	26:14:385:C:H5	1.77	0.49
8:7E:120:THR:H	8:7E:123:GLU:HG3	1.77	0.49
26:14:198:C:H5'	26:14:2244:U:OP1	2.13	0.49
1:1G:854:G:N1	1:1G:855:G:N7	2.61	0.49
55:Q8:14:VAL:HG22	55:Q8:15:LYS:N	2.26	0.49
36:25:49:ARG:HA	36:25:53:LYS:CE	2.43	0.49
26:1H:1685:C:O2	26:1H:1704:G:N2	2.46	0.49
30:21:15:PHE:CD1	41:B8:81:PRO:HD2	2.48	0.49
1:1G:1529:G:OP2	1:1G:1529:G:H3'	2.12	0.49
56:1L:2:G:H2'	56:1L:2:G:N3	2.27	0.49
37:35:90:ARG:HG3	37:35:91:PHE:CD2	2.48	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:36:ASP:HA	3:22:39:ILE:HD12	1.95	0.49
37:78:46:LYS:O	37:78:47:ASP:HB3	2.12	0.49
26:1H:1047:G:HO2'	26:1H:1048:A:H8	1.59	0.49
37:35:3:LEU:HD12	37:35:3:LEU:H	1.77	0.49
46:G8:20:TYR:HB3	46:G8:42:VAL:HG22	1.95	0.49
3:22:18:TRP:HE1	14:5A:54:PRO:HA	1.78	0.49
30:29:102:VAL:CA	30:29:201:THR:HG23	2.42	0.49
26:1H:1179:C:H2'	26:1H:1180:C:C6	2.47	0.49
26:1H:49:A:N7	26:1H:120:U:C5	2.72	0.49
41:B8:5:ALA:HA	41:B8:8:LYS:HE2	1.95	0.49
5:4E:148:VAL:HG21	8:7E:107:LEU:CD2	2.42	0.49
26:14:459:U:H2'	26:14:460:A:C8	2.48	0.49
1:1G:434:U:H2'	1:1G:435:C:C6	2.48	0.49
26:1H:363:G:O2'	26:1H:363(A):A:H5'	2.13	0.49
26:14:2305:A:H1'	32:49:136:ARG:HD3	1.95	0.49
41:B8:110:ILE:HG13	41:B8:111:ARG:N	2.27	0.49
1:1G:1298:C:O2'	1:1G:1299:A:OP2	2.29	0.49
57:3L:22:G:N2	57:3L:23:A:N7	2.61	0.49
26:14:602:G:OP2	26:14:602:G:H8	1.96	0.49
2:1E:209:ARG:HD2	2:1E:239:VAL:HG13	1.94	0.49
27:1J:34:U:O4	27:1J:44:G:H2'	2.12	0.49
26:14:2776:A:H4'	26:14:2777:G:O5'	2.13	0.49
26:14:2119:A:C4	26:14:2171:A:H2	2.31	0.49
44:A5:20:VAL:HG21	44:A5:44:ALA:H	1.77	0.49
1:13:143:A:H2	1:13:220:G:H22	1.60	0.49
26:14:2323:G:H2'	26:14:2324:C:O4'	2.12	0.49
26:14:2365:G:H2'	26:14:2366:A:C8	2.47	0.49
1:13:976:G:C8	1:13:1358:U:O2	2.66	0.49
1:1G:1349:A:OP2	9:82:118:LYS:NZ	2.44	0.49
26:1H:1990:C:H2'	26:1H:1991:U:C6	2.48	0.49
26:14:1925:C:H2'	26:14:1926:U:H5'	1.94	0.49
7:62:146:GLU:CD	7:62:147:ALA:H	2.15	0.49
26:1H:2024:G:H2'	26:1H:2025:C:H6	1.78	0.49
26:14:2412:A:C2	26:14:2413:G:H1'	2.48	0.49
9:8E:25:LYS:HD3	9:8E:60:ASP:OD2	2.13	0.49
26:14:947:G:N2	26:14:971:C:C2	2.80	0.49
26:1H:2503:A:H4'	26:1H:2504:U:OP1	2.11	0.49
26:1H:2886:G:N2	26:1H:2887:U:C2	2.81	0.49
34:61:47:LEU:O	34:61:51:ILE:N	2.45	0.49
26:1H:1587:A:H2'	26:1H:1588:C:C6	2.47	0.49
26:14:609(A):G:H2'	26:14:610:C:C6	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:21:171:GLU:OE2	30:21:185:LYS:NZ	2.42	0.49
26:1H:404:C:H1'	26:1H:405:U:OP2	2.13	0.49
12:3A:55:VAL:HG23	12:3A:69:TYR:HA	1.95	0.49
26:14:270(Z):U:O3'	26:14:271(A):C:H6	1.94	0.49
1:1G:1043:C:H6	1:1G:1043:C:O5'	1.95	0.49
24:3K:59:A:H5''	24:3K:60:U:C6	2.48	0.49
30:29:3:GLY:HA3	30:29:81:ILE:HD12	1.93	0.49
1:13:1123:A:O2'	10:1I:38:ILE:N	2.39	0.49
26:1H:1320:C:H4'	26:1H:1321:A:OP1	2.12	0.49
1:1G:957:U:H1'	1:1G:960:U:H5	1.77	0.49
52:M8:16:CYS:SG	52:M8:36:CYS:HB2	2.52	0.49
26:14:1035:U:H2'	26:14:1036:G:C8	2.48	0.49
5:4E:104:ALA:HA	5:4E:107:ARG:HG2	1.94	0.49
33:59:53:GLU:HA	33:59:65:HIS:HE1	1.77	0.49
26:1H:1442:G:H1	26:1H:1549:C:N4	2.10	0.49
1:13:991:U:C4	1:13:1212:U:H1'	2.48	0.49
26:1H:660:G:O3'	31:31:38:ARG:NH2	2.46	0.49
26:14:469:G:C6	54:L5:39:ARG:NH1	2.81	0.49
1:13:1442:G:C2'	1:13:1443:G:H5'	2.41	0.49
1:13:1442:G:N7	1:13:1446:A:C4	2.80	0.49
26:14:1777:U:O2'	26:14:1778:U:H5'	2.11	0.49
35:58:6:PRO:HG3	35:58:41:ASP:HB2	1.93	0.49
1:13:652:U:O2'	1:13:653:A:O5'	2.28	0.49
26:14:1568:G:H4'	29:19:59:LYS:HD2	1.95	0.49
1:1G:1238:A:H62	1:1G:1299:A:N6	2.11	0.49
26:14:925:C:H2'	26:14:926:A:C8	2.47	0.49
31:39:89:VAL:O	31:39:90:PHE:C	2.49	0.49
30:21:45:THR:O	30:21:83:ASP:N	2.45	0.49
41:B8:57:PHE:CE1	41:B8:79:HIS:HB2	2.47	0.49
1:1G:1120:G:O6	1:1G:1152:A:N6	2.46	0.49
3:22:22:TRP:CH2	3:22:32:LEU:HB3	2.47	0.49
28:71:58:VAL:HG13	28:71:199:HIS:HB3	1.95	0.49
1:1G:222:U:H2'	1:1G:223:U:C6	2.47	0.49
1:13:1195:C:H5''	1:13:1196:U:O5'	2.12	0.49
26:1H:1317:A:H2'	26:1H:1318:C:C6	2.47	0.49
44:A5:16:LYS:O	44:A5:19:LEU:HD23	2.12	0.49
1:13:632:A:C8	1:13:633:G:C8	3.01	0.49
26:1H:536:A:H2'	26:1H:537:C:C6	2.48	0.49
26:14:1562:A:H8	26:14:1562:A:O5'	1.94	0.49
26:1H:2655:G:O2'	26:1H:2664:G:O6	2.21	0.49
13:4A:67:GLU:HG3	13:4A:68:GLY:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1659:U:C4	26:14:1660:C:C5	3.01	0.49
9:82:18:PHE:O	9:82:19:LEU:HD23	2.13	0.49
26:1H:1130:U:O2	30:21:149:ARG:NH2	2.41	0.49
26:1H:937:U:H2'	26:1H:938:G:O4'	2.11	0.49
47:H8:68:PRO:O	47:H8:91:LEU:HD22	2.13	0.49
26:1H:1124:C:H2'	26:1H:1125:G:O4'	2.12	0.49
22:1K:54:5MU:H71	22:1K:54:5MU:OP2	2.13	0.49
26:14:523:C:H5''	26:14:541:C:O2'	2.13	0.49
32:49:99:MET:O	32:49:103:LEU:HG	2.13	0.49
32:49:107:LEU:HD11	32:49:178:PHE:CE1	2.48	0.49
1:1G:1346:A:H2'	7:62:10:ARG:HH22	1.78	0.49
26:14:2636:U:H4'	30:29:80:GLU:OE2	2.13	0.49
50:G5:24:LEU:HD22	50:G5:60:LEU:HD21	1.94	0.49
26:14:2579:C:H4'	30:29:134:ILE:HG12	1.94	0.49
47:H8:98:MET:O	47:H8:125:LEU:HA	2.13	0.49
1:13:1182:G:H8	1:13:1182:G:O5'	1.94	0.49
26:1H:1443:G:N2	26:1H:1549:C:C2	2.81	0.49
8:72:97:VAL:HG22	8:72:129:VAL:O	2.13	0.49
34:69:54:GLN:HA	34:69:57:ARG:HB3	1.94	0.49
12:3A:42:THR:HG22	12:3A:54:LYS:HA	1.95	0.49
26:1H:2683:C:O2	36:68:70:LYS:NZ	2.45	0.49
1:13:113:G:O4'	1:13:354:G:H4'	2.12	0.49
26:14:1328:G:H2'	26:14:1330:C:C5	2.47	0.49
34:61:110:ASP:HB3	34:61:112:LYS:N	2.28	0.49
29:11:123:ALA:HB3	29:11:131:LEU:HG	1.94	0.49
26:14:28:A:C2	26:14:513:A:C8	3.00	0.49
41:B8:51:ARG:HB2	41:B8:98:LYS:CD	2.42	0.49
26:14:535:C:C2'	26:14:536:A:H5'	2.42	0.49
26:14:309:G:O3'	46:C5:18:GLY:HA3	2.11	0.49
26:1H:2175:C:H1'	28:71:218:MET:HA	1.94	0.49
27:16:78:A:C2	27:16:99:A:C4	3.00	0.49
26:14:142:G:OP1	26:14:1598:C:H1'	2.13	0.49
41:75:53:ARG:NH1	41:75:60:THR:HG23	2.27	0.49
7:62:93:PRO:CG	7:62:94:ARG:HH21	2.26	0.49
1:13:487:A:H5''	1:13:488:C:OP2	2.13	0.49
26:14:2741:A:H8	26:14:2741:A:O5'	1.95	0.49
26:14:1644:C:O2'	26:14:1645:G:H5'	2.12	0.49
1:1G:1124:G:H2'	1:1G:1145:C:C5	2.48	0.49
43:95:30:GLY:N	43:95:61:VAL:HB	2.28	0.49
26:1H:924:C:H2'	26:1H:925:C:C6	2.47	0.49
40:65:5:THR:O	40:65:8:GLU:N	2.44	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:640:A:O2'	8:7E:115:SER:HB2	2.12	0.49
42:85:27:LEU:HD12	42:85:31:SER:HB3	1.94	0.49
37:78:124:LYS:HA	37:78:143:GLY:O	2.12	0.49
26:1H:1817:G:C5	26:1H:1818:U:C5	3.01	0.49
2:12:84:GLU:OE1	2:12:216:SER:HB3	2.13	0.49
26:1H:1788:C:OP1	29:11:222:ARG:NH2	2.46	0.49
48:I8:24:LYS:O	48:I8:25:ARG:NH1	2.45	0.49
26:14:2032:G:O2'	30:29:145:LYS:NZ	2.46	0.49
33:59:76:VAL:HG12	33:59:77:LYS:HD2	1.93	0.49
26:1H:1412:A:H2'	26:1H:1413:G:C8	2.47	0.49
1:13:1236:A:H5''	1:13:1236:A:H8	1.77	0.49
1:1G:402:G:H8	1:1G:402:G:O5'	1.96	0.49
26:14:1727:U:H3	26:14:1733:G:H1	1.61	0.49
1:13:1367:C:OP2	9:8E:112:LYS:NZ	2.43	0.49
1:1G:1291:G:H4'	9:82:40:LEU:HD22	1.95	0.49
5:42:31:LEU:CD2	5:42:45:PHE:HB3	2.31	0.49
1:1G:464:G:N2	1:1G:467:G:C8	2.80	0.49
4:32:20:TYR:HA	4:32:26:CYS:SG	2.52	0.49
24:3K:50:C:H2'	24:3K:51:A:C8	2.48	0.49
41:75:91:ARG:NH1	41:75:124:ASP:OD1	2.46	0.49
26:14:1005:C:N4	26:14:1143:A:N3	2.61	0.49
29:11:72:LYS:HG2	29:11:103:ARG:NH2	2.28	0.49
26:1H:1176:G:C8	26:1H:1177:A:N1	2.80	0.49
42:C8:88:ILE:C	42:C8:90:VAL:N	2.66	0.49
1:1G:1006:C:H2'	1:1G:1007:C:C6	2.48	0.49
1:1G:539:A:H2'	1:1G:540:G:H8	1.76	0.49
1:1G:416:G:H1	1:1G:427:U:H3	1.61	0.49
32:49:136:ARG:CZ	32:49:154:GLY:N	2.74	0.49
26:14:1062:G:N7	26:14:1071:G:O2'	2.45	0.49
26:1H:1113:U:H5'	33:51:2:SER:N	2.28	0.49
22:1K:5:C:H2'	22:1K:68:G:H1	1.77	0.49
4:32:94:LEU:O	4:32:97:LEU:N	2.46	0.49
16:7A:53:VAL:HA	16:7A:56:ALA:HB3	1.95	0.49
26:14:866:A:H5''	26:14:867:C:OP2	2.13	0.49
1:1G:281:G:H8	1:1G:281:G:OP2	1.95	0.49
22:1K:34:U8U:S2	25:4K:21:A:C2	3.06	0.49
3:22:28:GLN:O	3:22:32:LEU:HB2	2.13	0.49
30:29:15:PHE:CE2	41:75:80:SER:HA	2.48	0.49
4:3E:162:LEU:HA	4:3E:162:LEU:HD23	1.61	0.49
1:1G:1124:G:N7	1:1G:1145:C:H2'	2.28	0.49
1:13:1392:G:C5	1:13:1393:U:C5	3.01	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2205:C:H2'	26:1H:2206:C:H6	1.78	0.49
54:L5:5:TRP:CD1	54:L5:7:PRO:HG3	2.47	0.49
26:14:2233:U:H2'	26:14:2234:G:O4'	2.13	0.49
28:71:214:VAL:HG23	28:71:224:ILE:HG12	1.94	0.49
39:55:24:GLN:OE1	39:55:36:THR:HG21	2.11	0.49
31:31:152:GLU:HG3	31:31:191:ARG:HD2	1.93	0.49
1:1G:262:A:C6	1:1G:263:A:C6	3.01	0.49
32:49:32:PRO:HB2	32:49:172:LEU:HD22	1.94	0.49
26:1H:17:G:H2'	26:1H:18:C:C6	2.48	0.49
9:8E:55:ALA:O	9:8E:56:LEU:HD23	2.13	0.49
40:A8:100:ALA:HA	40:A8:103:GLU:HG2	1.94	0.49
1:1G:492:G:H2'	1:1G:493:G:C8	2.48	0.49
26:14:1412:A:C6	26:14:1413:G:C6	3.00	0.49
23:2L:13:C:O2'	26:14:1924:C:H4'	2.12	0.49
1:1G:692:U:H2'	1:1G:693:G:H3'	1.93	0.49
34:61:56:LYS:O	34:61:60:GLU:HB3	2.12	0.49
26:14:248:G:H2'	61:14:3560:HOH:O	2.11	0.49
26:14:753:C:OP2	26:14:753:C:H6	1.96	0.49
48:I8:41:ARG:NE	48:I8:41:ARG:HA	2.26	0.49
32:49:19:LEU:HG	32:49:175:LEU:CD1	2.43	0.49
1:13:454:C:H3'	1:13:455:C:C6	2.48	0.49
1:13:1079:G:H2'	1:13:1080:A:C8	2.47	0.49
42:C8:50:ARG:NH1	43:D8:72:VAL:HG23	2.28	0.49
29:11:35:LYS:HB3	29:11:35:LYS:HE3	1.35	0.49
26:1H:134:C:H2'	26:1H:135:G:O4'	2.13	0.49
1:1G:1058:G:H1	1:1G:1199:U:H3	1.60	0.49
1:1G:1263:C:C2	1:1G:1273:G:C2	3.01	0.49
1:13:735:C:H2'	1:13:736:C:C6	2.46	0.49
1:13:1347:G:N7	9:8E:10:ARG:NH2	2.48	0.49
26:1H:141:A:H8	26:1H:1595:G:H21	1.61	0.49
26:14:1210:A:H5'	26:14:1212:G:O4'	2.13	0.49
1:1G:1142:G:H2'	1:1G:1143:G:O4'	2.13	0.49
26:14:583:G:OP2	42:85:10:ARG:HD2	2.13	0.49
26:14:139:G:N2	26:14:141:A:N1	2.53	0.49
9:8E:9:ARG:HB3	9:8E:14:VAL:HG13	1.93	0.49
4:3E:107:ARG:HH11	4:3E:114:ARG:HH22	1.61	0.49
26:1H:744:G:H5'	61:1H:3703:HOH:O	2.12	0.49
26:1H:1674:G:N3	26:1H:1676:A:N6	2.61	0.49
2:1E:71:VAL:HG23	2:1E:164:VAL:HA	1.94	0.49
33:51:153:LYS:HB2	33:51:155:SER:N	2.27	0.49
5:4E:80:ILE:HG12	5:4E:81:GLU:N	2.28	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:630:G:H5'	1:1G:631:G:OP2	2.13	0.49
26:14:302:C:H2'	26:14:303:U:C6	2.47	0.49
34:69:76:THR:HG23	34:69:77:LEU:N	2.28	0.49
26:1H:1717:G:H2'	26:1H:1718:G:C8	2.48	0.49
26:14:2472:G:C4	26:14:2475:C:N4	2.81	0.49
26:14:1060:U:H4'	26:14:1061:U:H3'	1.94	0.49
26:1H:784:A:O4'	29:11:227:ASN:ND2	2.45	0.49
1:1G:867:G:H2'	1:1G:868:C:C6	2.46	0.49
26:1H:805:G:H4'	26:1H:806:C:OP2	2.13	0.49
6:5E:97:PHE:HB2	18:9I:32:ARG:HH11	1.77	0.49
1:13:116:A:H61	1:13:313:A:H1'	1.78	0.49
41:75:42:ILE:HD12	41:75:44:ASP:OD1	2.13	0.49
26:1H:2309:A:C6	26:1H:2310:A:C8	3.00	0.49
1:13:939:G:H2'	1:13:940:C:C6	2.47	0.49
56:1L:8:U:H2'	56:1L:22:G:H1	1.78	0.49
32:49:29:TRP:O	32:49:33:ARG:NH1	2.46	0.49
22:1K:2:G:N1	22:1K:3:G:O6	2.46	0.49
26:1H:2667:C:H2'	26:1H:2668:G:O4'	2.13	0.49
1:13:1206:G:O4'	3:2E:194:GLY:HA2	2.13	0.49
15:6A:56:LEU:O	15:6A:60:VAL:HG23	2.12	0.49
26:14:1949:G:H2'	26:14:1950:G:O4'	2.12	0.49
39:98:94:TYR:CD1	39:98:94:TYR:N	2.80	0.49
26:1H:796:C:H2'	26:1H:797:C:C6	2.47	0.49
13:4I:47:ASP:O	13:4I:48:LEU:HB3	2.13	0.49
26:14:2611:U:H2'	53:J5:2:ALA:O	2.13	0.48
1:13:454:C:OP1	16:7I:71:ARG:HD3	2.12	0.48
44:E8:73:ALA:O	44:E8:74:ALA:HB2	2.13	0.48
31:39:146:ALA:HB3	31:39:148:LEU:HB2	1.95	0.48
27:1J:18:G:N2	27:1J:108:C:N3	2.61	0.48
1:1G:1309:G:C2	1:1G:1329:A:C2	3.00	0.48
38:88:66:ILE:O	38:88:67:ARG:HB2	2.13	0.48
36:68:7:TYR:CZ	36:68:44:LYS:HG3	2.48	0.48
22:1K:64:G:H2'	22:1K:65:C:O4'	2.13	0.48
26:14:901:A:H2'	26:14:901:A:N3	2.26	0.48
4:32:190:ASP:OD1	4:32:191:ARG:N	2.46	0.48
9:82:96:LEU:H	9:82:96:LEU:HD12	1.78	0.48
1:1G:1217:C:H5''	14:5A:9:LYS:HZ1	1.77	0.48
26:14:1005:C:N3	26:14:1143:A:C4	2.81	0.48
1:13:736:C:O2	1:13:737:A:C8	2.65	0.48
46:G8:55:TYR:N	46:G8:56:PRO:HD3	2.28	0.48
1:1G:1037:C:H2'	1:1G:1038:C:C6	2.48	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2324:C:H5''	26:1H:2325:G:H5'	1.95	0.48
1:1G:246:A:C5	1:1G:279:A:C6	3.01	0.48
30:21:36:ARG:NH1	30:21:85:ASN:OD1	2.45	0.48
26:1H:1533:C:H3'	26:1H:1534:G:H5''	1.95	0.48
26:1H:1533:C:H6	26:1H:1534:G:H5''	1.78	0.48
1:1G:1123:A:H4'	10:1A:36:GLY:CA	2.41	0.48
1:13:265:G:H5''	17:8I:65:ILE:O	2.13	0.48
2:1E:6:THR:HG22	2:1E:221:LEU:HD11	1.95	0.48
1:1G:738:C:H4'	6:52:69:GLU:O	2.13	0.48
1:1G:440:A:H3'	1:1G:442:C:H6	1.77	0.48
26:14:2647:U:H2'	26:14:2648:C:H6	1.78	0.48
18:9A:53:ARG:NH2	18:9A:60:ALA:H	2.10	0.48
26:1H:1543:A:H1'	26:1H:1544:C:H5''	1.94	0.48
1:1G:1223:C:OP2	1:1G:1224:G:H2'	2.13	0.48
26:1H:963:U:H2'	26:1H:964:C:C6	2.48	0.48
4:3E:162:LEU:HD12	4:3E:181:MET:HE2	1.94	0.48
11:2I:48:ILE:HG12	11:2I:63:LEU:HB2	1.95	0.48
26:1H:534:U:H5'	42:C8:42:ALA:HB1	1.94	0.48
4:3E:142:PRO:HA	4:3E:185:PHE:HD1	1.78	0.48
15:6I:6:GLU:N	15:6I:6:GLU:OE2	2.33	0.48
26:14:2020:A:OP1	42:85:27:LEU:HD23	2.13	0.48
30:21:147:PRO:HB2	30:21:149:ARG:HG3	1.95	0.48
1:1G:323:U:H4'	20:BA:22:ARG:HB2	1.94	0.48
26:1H:1283:G:N2	26:1H:1286:A:OP2	2.45	0.48
4:3E:70:ILE:HG23	4:3E:75:PHE:HB2	1.94	0.48
4:3E:80:GLU:O	4:3E:84:LYS:HG2	2.13	0.48
1:1G:162:A:O5'	1:1G:162:A:H8	1.96	0.48
44:E8:86:LEU:HD12	44:E8:86:LEU:C	2.33	0.48
3:22:29:TYR:O	3:22:33:LEU:N	2.36	0.48
37:78:112:LEU:O	37:78:128:HIS:HB2	2.12	0.48
26:14:2415:G:C2	26:14:2416:C:C2	3.01	0.48
30:29:72:VAL:HG23	30:29:74:PRO:HG3	1.93	0.48
24:3K:15:G:H2'	24:3K:59:A:N6	2.27	0.48
31:31:23:ASP:CG	31:31:24:LEU:H	2.16	0.48
26:1H:270(N):G:OP1	34:61:57:ARG:NH1	2.46	0.48
26:1H:1045:A:OP1	26:1H:1046:A:H3'	2.13	0.48
45:B5:12:VAL:HG23	45:B5:17:ALA:HB2	1.94	0.48
1:13:1423:G:OP1	36:68:49:ARG:NH2	2.47	0.48
3:22:18:TRP:HZ2	14:5A:56:VAL:H	1.61	0.48
24:3K:68:G:C2	24:3K:69:A:C5	3.00	0.48
1:13:1116:C:H42	1:13:1184:G:H1	1.59	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:C8:90:VAL:HA	43:D8:39:LEU:HD13	1.94	0.48
1:1G:1071:C:H5''	5:42:49:PRO:HG3	1.95	0.48
26:14:458:G:H5'	54:L5:40:TRP:HE1	1.77	0.48
26:14:2768:C:H2'	26:14:2769:C:O4'	2.13	0.48
26:1H:2213:U:H1'	49:J8:52:ARG:CZ	2.43	0.48
1:1G:757:U:H2'	1:1G:758:G:O4'	2.12	0.48
26:1H:2098:U:H2'	26:1H:2099:U:O4'	2.14	0.48
20:BI:53:LEU:HB2	20:BI:100:ILE:HG22	1.94	0.48
40:65:43:GLU:HB2	48:E5:49:LYS:NZ	2.28	0.48
26:14:511:U:H3'	26:14:512:G:H5''	1.95	0.48
1:1G:1158:C:N3	1:1G:1160:G:C4	2.81	0.48
55:Q8:21:LYS:HD3	55:Q8:49:VAL:CG1	2.44	0.48
1:13:571:U:O2'	1:13:918:A:OP1	2.28	0.48
6:52:2:ARG:HB3	6:52:4:TYR:CE2	2.48	0.48
1:1G:1441:G:H5''	1:1G:1442:G:H5'	1.95	0.48
26:1H:153:C:H2'	26:1H:154:G:C8	2.47	0.48
26:14:2461:C:H2'	26:14:2462:U:H6	1.77	0.48
26:1H:2720:U:H2'	26:1H:2720:U:O2	2.14	0.48
37:35:138:LEU:HD13	37:35:138:LEU:O	2.13	0.48
23:2K:20:G:N2	32:41:78:SER:OG	2.45	0.48
26:14:2113:U:C4	26:14:2114:A:H1'	2.48	0.48
51:L8:31:LEU:O	51:L8:32:GLN:HB2	2.13	0.48
26:14:1921:G:H2'	26:14:1922:G:H8	1.78	0.48
4:3E:167:GLY:HA2	29:19:135:PHE:CZ	2.48	0.48
26:1H:1268:A:H2'	26:1H:1269:A:O4'	2.13	0.48
2:1E:208:ILE:HA	2:1E:211:ILE:HD12	1.94	0.48
1:13:1499:A:O2'	1:13:1500:A:H5'	2.12	0.48
26:14:2051:A:H4'	30:29:141:ILE:HG12	1.95	0.48
3:2E:175:LEU:HD21	3:2E:201:TYR:CE2	2.48	0.48
26:1H:2879:C:O2	26:1H:2881:C:N4	2.42	0.48
26:1H:2641:G:OP1	35:58:74:ARG:NE	2.46	0.48
17:8I:31:LEU:HG	17:8I:32:TYR:CE1	2.48	0.48
1:13:1405:G:O4'	1:13:1519:A:H4'	2.13	0.48
53:N8:37:LYS:C	53:N8:37:LYS:HD2	2.34	0.48
56:1L:63:U:O2'	26:14:2482:G:O3'	2.31	0.48
26:1H:2632:A:H2'	26:1H:2633:G:C8	2.48	0.48
29:19:242:ARG:N	29:19:242:ARG:HH11	2.09	0.48
37:78:39:LYS:HA	37:78:45:LEU:HD13	1.95	0.48
1:1G:997:U:H2'	1:1G:998:G:H8	1.76	0.48
19:AI:41:VAL:H	19:AI:44:MET:HG3	1.78	0.48
1:1G:922:G:N3	1:1G:1398:A:H2	2.11	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2592:G:H2'	26:1H:2593:U:H5'	1.95	0.48
7:62:115:ARG:HB2	7:62:118:VAL:HG13	1.94	0.48
1:1G:979:C:H3'	1:1G:980:C:C5'	2.41	0.48
1:13:542:G:H5'	4:3E:41:GLY:HA3	1.95	0.48
49:J8:60:PHE:HE2	49:J8:91:LYS:HZ1	1.58	0.48
26:1H:2131:G:H5'	26:1H:2133:G:O5'	2.13	0.48
33:51:86:GLU:O	33:51:131:VAL:O	2.29	0.48
8:7E:87:SER:HB2	8:7E:93:VAL:HG23	1.96	0.48
9:82:79:LEU:O	9:82:82:ALA:HB3	2.13	0.48
46:C5:82:PRO:HG3	46:C5:97:ARG:HB3	1.95	0.48
1:13:1157:A:C6	1:13:1181:G:C8	3.00	0.48
1:13:1128:C:H5'	9:8E:16:ARG:NH2	2.28	0.48
26:1H:1168:G:H2'	26:1H:1169:G:O4'	2.13	0.48
27:16:12:C:H2'	48:18:73:GLY:HA3	1.95	0.48
1:1G:1073:U:H2'	1:1G:1074:G:C8	2.48	0.48
39:98:101:ALA:HB2	53:N8:44:THR:HB	1.95	0.48
38:88:42:ILE:HD13	38:88:97:VAL:HB	1.94	0.48
13:4A:50:GLU:HG3	13:4A:53:VAL:HB	1.96	0.48
1:13:407:G:H2'	1:13:408:A:C8	2.47	0.48
47:D5:98:MET:O	47:D5:125:LEU:HA	2.13	0.48
23:2L:37:U:H2'	23:2L:38:A:O4'	2.13	0.48
26:1H:1800:C:P	29:11:264:LYS:HZ3	2.36	0.48
4:3E:191:ARG:HH12	4:3E:196:LEU:H	1.61	0.48
12:3A:70:ILE:HG21	12:3A:75:HIS:CD2	2.48	0.48
32:49:151:ALA:HB3	32:49:153:ARG:NH1	2.27	0.48
30:21:31:CYS:HB3	30:21:49:LEU:HD23	1.96	0.48
27:1J:99:A:C4	27:1J:100:G:C8	3.01	0.48
3:2E:130:VAL:O	3:2E:134:ILE:HG12	2.13	0.48
26:1H:1759:A:C5'	26:1H:2715:C:H1'	2.43	0.48
3:2E:129:ALA:HB3	3:2E:132:ARG:HE	1.78	0.48
26:14:1015:G:O2'	26:14:1016:G:H5'	2.13	0.48
1:1G:854:G:C2	1:1G:855:G:C8	3.00	0.48
29:11:75:ILE:H	29:11:75:ILE:HD12	1.78	0.48
1:13:52:G:O2'	1:13:53:A:H5'	2.13	0.48
26:1H:2838:G:C6	26:1H:2839:G:C5	3.02	0.48
19:AI:69:HIS:HB2	19:AI:74:PHE:HZ	1.76	0.48
26:1H:1925:C:C2'	26:1H:1926:U:H5'	2.43	0.48
26:1H:2248:C:H2'	26:1H:2249:U:O4'	2.14	0.48
10:1I:25:GLU:N	10:1I:25:GLU:OE2	2.46	0.48
11:2A:100:ALA:O	11:2A:102:GLY:N	2.47	0.48
37:78:113:LYS:HA	37:78:129:ALA:O	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:38:THR:O	30:29:42:ASP:N	2.44	0.48
26:14:1358:G:N1	26:14:1372:U:OP2	2.25	0.48
26:1H:322:A:H3'	31:31:169:ASN:OD1	2.14	0.48
5:4E:11:ILE:HG23	5:4E:33:VAL:HG23	1.95	0.48
32:41:153:ARG:N	32:41:153:ARG:HD3	2.29	0.48
4:32:108:LEU:HG	4:32:110:PHE:HE1	1.77	0.48
1:1G:1199:U:H5'	10:1A:54:PHE:CE2	2.49	0.48
13:4I:13:LYS:C	13:4I:44:ARG:NH1	2.67	0.48
32:41:135:LEU:HD13	32:41:140:ILE:HD11	1.94	0.48
1:13:1159:U:O4'	1:13:1182:G:N2	2.46	0.48
15:6I:39:LEU:HD13	15:6I:56:LEU:HB2	1.96	0.48
53:N8:40:LYS:HE2	53:N8:47:PRO:HG2	1.95	0.48
43:D8:48:GLY:O	43:D8:49:THR:OG1	2.32	0.48
3:22:73:PRO:HA	3:22:76:VAL:HG13	1.95	0.48
26:1H:1470:G:O2'	26:1H:1522:G:O6	2.31	0.48
23:2L:63:C:H2'	23:2L:64:G:C8	2.49	0.48
26:1H:654(A):A:C2	26:1H:654(T):A:N1	2.82	0.48
1:1G:1352:C:OP1	21:1B:3:LYS:NZ	2.44	0.48
1:13:664:G:N2	1:13:741:G:H1	2.06	0.48
6:5E:20:ALA:HA	6:5E:23:LYS:HE2	1.95	0.48
49:J8:85:LEU:HD12	49:J8:88:LYS:HG3	1.96	0.48
34:61:95:LYS:HA	34:61:111:PRO:HG3	1.96	0.48
55:M5:50:LEU:HG	55:M5:51:ALA:N	2.28	0.48
26:1H:871:U:OP2	38:88:5:ARG:NH1	2.46	0.48
26:14:1545:A:H2'	26:14:1545(A):A:O4'	2.12	0.48
1:13:823:G:C6	1:13:878:G:N1	2.81	0.48
23:2K:16:C:O2'	23:2K:62:C:OP1	2.32	0.48
26:14:481:G:OP2	46:C5:47:LYS:HB2	2.13	0.48
26:14:1783:A:H5'	26:14:2608:G:H4'	1.95	0.48
26:14:2840:C:H4'	39:55:53:HIS:CE1	2.49	0.48
1:1G:953:G:C6	1:1G:954:G:C4	3.01	0.48
5:42:61:TYR:HA	5:42:64:ARG:HG3	1.95	0.48
26:14:2507:C:H5''	26:14:2573:C:N4	2.29	0.48
26:1H:2817:G:C4	26:1H:2830:G:N2	2.81	0.48
47:H8:93:ASP:O	47:H8:94:GLU:HG3	2.14	0.48
26:1H:2248:C:C5	26:1H:2249:U:C4	3.01	0.48
23:2L:73:A:C6	23:2L:74:A:C6	3.01	0.48
9:8E:59:PHE:HZ	9:8E:88:TYR:CE1	2.31	0.48
26:1H:1403:C:O2	26:1H:1403:C:H2'	2.13	0.48
26:1H:1051:G:H2'	26:1H:1051:G:N3	2.27	0.48
33:59:144:VAL:HG12	33:59:147:ASN:HB2	1.95	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:4K:18:G:H4'	25:4K:19:A:OP2	2.13	0.48
19:AI:67:VAL:HG23	19:AI:68:GLY:H	1.78	0.48
16:7A:81:ARG:HG3	16:7A:83:GLU:OE1	2.13	0.48
1:1G:1329:A:O2'	13:4A:24:GLY:HA2	2.12	0.48
26:1H:1378:A:O2'	26:1H:1380:G:N7	2.38	0.48
26:1H:2016:U:H1'	53:N8:6:VAL:HG13	1.95	0.48
26:14:1754:C:H2'	26:14:1755:A:C8	2.48	0.48
26:1H:2849:U:H1'	26:1H:2866:U:O2	2.14	0.48
1:1G:81:G:N1	1:1G:89:U:N3	2.54	0.48
26:14:878:A:H5"	26:14:900:A:H61	1.76	0.48
4:32:31:CYS:HB2	4:32:33:MET:N	2.28	0.48
38:45:21:THR:CG2	38:45:24:GLY:H	2.27	0.48
9:82:50:LEU:HD21	9:82:85:LEU:HB2	1.94	0.48
52:M8:15:ILE:HG12	52:M8:33:VAL:H	1.78	0.48
26:14:1188:U:H5'	43:95:79:VAL:HB	1.95	0.48
24:3K:3:G:O5'	24:3K:3:G:H8	1.95	0.48
26:1H:1021:A:H2'	26:1H:1023:U:H5'	1.94	0.48
27:1J:42:C:O2	32:49:93:THR:N	2.41	0.48
12:3A:85:ILE:HD11	12:3A:98:TYR:HB2	1.96	0.48
1:1G:135:C:O2	16:7A:1:MET:HB3	2.12	0.48
26:1H:2262:U:H4'	26:1H:2328:A:C2	2.49	0.48
27:16:12:C:O2'	48:I8:74:ARG:HG2	2.14	0.48
48:E5:12:ASN:HA	48:E5:14:ARG:NH2	2.25	0.48
1:1G:390:C:O2'	16:7A:28:ARG:NH1	2.47	0.48
1:13:112:G:OP1	16:7I:27:LYS:HD2	2.13	0.48
26:1H:753:C:OP2	26:1H:753:C:H6	1.95	0.48
26:14:1794:U:O2'	26:14:1795:C:H5'	2.13	0.48
10:1A:33:GLN:OE1	10:1A:75:ILE:HG21	2.13	0.48
26:14:796:C:H2'	26:14:797:C:H6	1.78	0.48
47:H8:9:TYR:HE1	47:H8:35:ARG:HD2	1.79	0.48
2:12:174:VAL:HG12	2:12:178:ARG:HG2	1.95	0.48
5:4E:24:ARG:HG3	5:4E:26:PHE:CE1	2.48	0.48
3:22:59:ARG:HD2	3:22:64:VAL:HG23	1.94	0.48
26:14:1432:C:H2'	26:14:1433:U:O4'	2.13	0.48
11:2I:59:TYR:O	11:2I:62:GLN:HB3	2.13	0.48
26:14:1751:C:H2'	26:14:1752:C:H6	1.76	0.48
5:4E:64:ARG:H	5:4E:64:ARG:HD2	1.77	0.48
26:1H:1196:C:H2'	26:1H:1197:G:O4'	2.14	0.48
26:14:558:G:OP2	35:15:111:PRO:HD2	2.14	0.48
46:C5:43:ASN:HB2	46:C5:62:GLU:O	2.13	0.48
37:35:90:ARG:HG3	37:35:91:PHE:H	1.78	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6A:39:LEU:HD12	15:6A:56:LEU:HB2	1.94	0.48
1:13:1478:C:H2'	1:13:1479:C:C6	2.48	0.48
26:1H:1651:G:H1	26:1H:2006:C:H42	1.60	0.48
26:14:455:C:N3	26:14:473:G:H5'	2.29	0.48
26:14:392:C:H5''	26:14:409:C:H5''	1.95	0.48
1:1G:1472:U:H2'	1:1G:1473:A:O4'	2.13	0.48
26:1H:1295:C:O4'	39:98:23:ASN:ND2	2.28	0.48
1:13:417:C:H2'	1:13:418:C:H6	1.78	0.48
26:14:2080:G:H5'	49:F5:35:THR:OG1	2.12	0.48
26:14:997:G:C2	26:14:998:C:C6	3.02	0.48
44:A5:29:LEU:HD13	44:A5:51:LEU:HD21	1.96	0.48
26:1H:2246:G:H2'	26:1H:2247:A:C8	2.49	0.48
1:13:340:U:H2'	1:13:341:C:O4'	2.13	0.48
26:14:311:A:C8	26:14:332:A:N7	2.82	0.48
29:11:205:VAL:O	29:11:205:VAL:HG12	2.13	0.48
49:J8:90:ILE:HG21	49:J8:90:ILE:HD13	1.57	0.48
26:1H:2518:A:C8	26:1H:2518:A:C5'	2.97	0.48
11:2I:125:PHE:N	11:2I:125:PHE:CD1	2.81	0.48
50:K8:63:VAL:O	50:K8:66:GLU:HG3	2.14	0.48
1:13:49:U:N3	1:13:361:G:N2	2.62	0.48
43:D8:10:LYS:NZ	43:D8:23:GLU:OE1	2.46	0.48
1:1G:1288:A:H4'	21:1B:13:ILE:HD13	1.94	0.48
26:14:2637:U:H5'	30:29:44:TYR:CD1	2.49	0.48
31:31:6:VAL:HG12	31:31:7:TYR:H	1.79	0.48
37:35:11:GLY:C	37:35:13:ASN:H	2.16	0.48
27:1J:14:U:O3'	27:1J:107:U:O2'	2.31	0.48
27:1J:109:G:C6	27:1J:110:G:C6	3.01	0.48
27:1J:16:G:H2'	27:1J:17:C:H6	1.77	0.48
30:21:105:THR:HB	30:21:197:ILE:HG23	1.96	0.48
4:32:18:LYS:HB2	4:32:33:MET:HE2	1.94	0.48
4:32:20:TYR:HD1	4:32:26:CYS:HB3	1.77	0.48
26:1H:1548:C:O2'	26:1H:1549:C:H5'	2.13	0.48
27:16:10:C:H2'	27:16:11:C:H6	1.78	0.48
30:21:34:VAL:HG22	30:21:48:GLN:HB3	1.95	0.48
40:65:33:LYS:HB3	40:65:34:HIS:CD2	2.49	0.48
1:1G:431:A:H2'	1:1G:431:A:N3	2.29	0.48
26:1H:275:G:N7	26:1H:363:G:C6	2.82	0.48
47:D5:158:PRO:HD2	47:D5:161:VAL:HG22	1.96	0.48
41:B8:107:ASP:O	41:B8:110:ILE:HG12	2.13	0.48
1:13:269:C:H2'	1:13:270:A:C8	2.48	0.48
26:14:531:C:C5	26:14:2035:G:C2	3.01	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:3L:8:U:H3	57:3L:14:A:H61	1.61	0.48
1:13:407:G:OP1	4:3E:115:ARG:NH1	2.47	0.48
13:4I:82:MET:C	13:4I:84:ILE:N	2.66	0.48
26:14:1449:A:H5'	26:14:1449(A):G:OP2	2.13	0.48
26:14:648:G:O4'	26:14:2351:G:H5''	2.14	0.48
26:1H:806:C:O2	26:1H:2444:G:O2'	2.30	0.48
36:25:4:PRO:O	36:25:5:GLN:CB	2.61	0.48
26:1H:2367:G:H2'	26:1H:2368:C:C6	2.48	0.48
37:35:138:LEU:HD11	37:35:143:GLY:C	2.33	0.48
1:1G:419:C:N4	1:1G:424:G:H1	2.11	0.48
50:K8:33:MET:O	50:K8:37:PHE:CD1	2.66	0.48
26:1H:1259:G:O2'	26:1H:1260:G:H5'	2.13	0.48
1:13:976:G:H5'	1:13:1358:U:O2'	2.13	0.48
26:14:265:A:H4'	26:14:266:G:O5'	2.12	0.48
26:14:2844:G:C6	26:14:2845:G:C4	3.01	0.48
28:71:15:ASP:OD1	28:71:18:LYS:HB2	2.14	0.48
1:13:1499:A:H2'	1:13:1500:A:H8	1.78	0.48
1:1G:1267:C:O2	21:1B:20:LYS:HE3	2.13	0.48
51:H5:3:ARG:O	51:H5:58:VAL:HG13	2.12	0.48
53:J5:20:ARG:O	53:J5:23:HIS:HB2	2.14	0.48
1:13:105:G:H2'	1:13:106:C:C6	2.48	0.48
9:8E:108:VAL:HG12	9:8E:109:VAL:H	1.78	0.48
31:39:6:VAL:HG23	31:39:124:LEU:HA	1.95	0.48
1:13:37:U:O2'	1:13:500:G:H4'	2.12	0.48
26:1H:1668:A:H4'	26:1H:1669:A:O5'	2.13	0.48
26:1H:2884:U:C2	26:1H:2885:C:C6	3.02	0.48
22:1K:29:U:H2'	22:1K:30:G:C8	2.48	0.48
1:13:1447:G:O5'	1:13:1447:G:H8	1.97	0.48
15:6A:83:GLU:OE1	15:6A:84:LYS:NZ	2.42	0.48
11:2A:114:VAL:HG23	11:2A:115:PRO:HD2	1.96	0.48
46:G8:96:ILE:HB	46:G8:101:LYS:HG2	1.95	0.48
29:19:255:LYS:N	29:19:255:LYS:HD3	2.14	0.48
26:14:957:A:C4'	38:45:76:LYS:CE	2.91	0.48
26:1H:2876:G:O5'	41:B8:2:ASN:HB3	2.13	0.48
1:1G:838:G:N2	1:1G:842:C:H1'	2.29	0.48
42:85:91:ASP:C	42:85:92:ARG:HG3	2.33	0.48
27:1J:21:G:H1	27:1J:62:C:H42	1.62	0.48
1:1G:976:G:OP1	14:5A:29:ARG:NH1	2.46	0.48
41:B8:26:ASP:CG	41:B8:120:ARG:HH22	2.16	0.48
9:82:112:LYS:HD3	9:82:113:LYS:N	2.29	0.48
24:3K:65:C:H2'	24:3K:66:A:H8	1.76	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1176:A:H3'	1:13:1177:G:H5''	1.96	0.48
31:39:25:PRO:C	31:39:27:GLU:N	2.67	0.48
26:14:528:A:O2'	26:14:529:A:H5'	2.12	0.48
50:K8:42:GLY:C	50:K8:44:LEU:N	2.65	0.48
45:B5:51:VAL:HG13	45:B5:81:VAL:HG23	1.95	0.48
32:41:142:PRO:O	52:M8:31:ILE:HG21	2.14	0.48
4:3E:107:ARG:CZ	4:3E:194:LEU:HD22	2.44	0.48
29:19:84:TYR:HE1	29:19:86:PRO:HB3	1.78	0.48
26:1H:1387:C:H2'	26:1H:1387:C:O2	2.14	0.48
1:13:277:C:H5''	17:8I:68:ARG:NH2	2.28	0.48
1:1G:766:A:H2'	1:1G:767:A:O4'	2.14	0.48
26:1H:67:U:N3	26:1H:74:A:H2	2.11	0.48
45:B5:18:TYR:C	45:B5:20:GLY:N	2.65	0.48
31:39:89:VAL:HG12	31:39:90:PHE:N	2.27	0.48
26:1H:859:G:O2'	26:1H:916:G:O6	2.28	0.48
1:1G:175:C:H2'	1:1G:176:C:O4'	2.13	0.48
34:69:29:TYR:O	34:69:33:ARG:HB2	2.13	0.48
1:13:332:G:H2'	1:13:333:G:H8	1.78	0.48
26:1H:1211:U:H3'	26:1H:1212:G:H5'	1.95	0.48
1:1G:501:C:H2'	1:1G:502:G:H8	1.79	0.48
31:39:198:ALA:O	31:39:201:VAL:HG12	2.12	0.48
26:1H:531:C:H4'	26:1H:532:A:H5''	1.95	0.48
55:Q8:14:VAL:HG22	55:Q8:15:LYS:H	1.77	0.48
1:1G:548:G:H2'	1:1G:549:C:C6	2.49	0.48
26:1H:2185:C:N4	26:1H:2186:G:O6	2.46	0.48
30:29:131:ALA:O	30:29:132:HIS:C	2.52	0.48
34:61:11:ASN:O	34:61:12:LEU:HB3	2.13	0.48
49:F5:18:ILE:HG12	49:F5:37:ILE:CD1	2.43	0.48
43:D8:34:GLU:HG2	43:D8:56:SER:HB3	1.94	0.48
3:22:111:LEU:HG	3:22:141:VAL:HG13	1.96	0.48
29:19:175:LEU:HD12	29:19:185:VAL:HG21	1.95	0.48
1:13:150:C:H2'	1:13:151:A:H8	1.79	0.48
26:14:11:G:H1'	26:14:2801:A:O3'	2.14	0.48
1:13:438:G:H5'	4:3E:123:HIS:ND1	2.29	0.48
36:25:101:PRO:HB3	36:25:122:LEU:HD12	1.96	0.48
5:4E:137:GLU:HA	5:4E:140:ARG:HD3	1.95	0.48
11:2I:108:ILE:O	18:9I:86:VAL:HA	2.14	0.48
26:14:1826:G:H4'	29:19:242:ARG:HH21	1.79	0.48
26:1H:1636:C:H2'	26:1H:1637:A:C8	2.49	0.48
26:14:2415:G:C4'	37:35:67:MET:H	2.08	0.48
26:1H:1044:G:O2'	26:1H:1111:A:N6	2.35	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:3L:69:A:H2'	57:3L:70:C:C6	2.49	0.48
26:1H:2532:G:O2'	26:1H:2657:A:N1	2.42	0.48
38:45:21:THR:HG22	38:45:24:GLY:H	1.79	0.48
28:71:184:LYS:HA	28:71:187:ASP:HB2	1.95	0.48
1:1G:1275:A:H2'	1:1G:1276:G:C8	2.49	0.48
26:14:1188:U:C2'	26:14:1189:A:H5'	2.44	0.48
24:3K:5:C:H1'	24:3K:69:A:N1	2.28	0.48
13:4A:91:ARG:HB3	13:4A:96:LEU:O	2.14	0.48
26:14:1443:G:N2	26:14:1549:C:N3	2.62	0.48
41:B8:8:LYS:O	41:B8:11:GLU:HB2	2.13	0.48
26:14:863:A:O2'	26:14:864:G:H5'	2.14	0.48
26:1H:139:G:N3	26:1H:141:A:N1	2.61	0.48
45:F8:52:VAL:HG22	45:F8:82:GLN:O	2.13	0.48
26:1H:2683:C:O2'	30:21:13:ARG:NH1	2.46	0.48
35:58:69:GLN:HB3	35:58:69:GLN:HE21	1.31	0.48
26:1H:2125:G:OP1	28:71:40:THR:HG21	2.13	0.48
8:72:31:PHE:HZ	8:72:134:ILE:CD1	2.27	0.48
1:1G:737:A:H2'	1:1G:738:C:H6	1.78	0.48
2:12:115:LEU:HB2	2:12:145:LEU:HD23	1.95	0.48
26:14:2489:G:C6	26:14:2490:G:N7	2.82	0.48
43:95:58:VAL:HB	43:95:98:GLU:HG3	1.95	0.48
1:13:767:A:O5'	1:13:767:A:H8	1.96	0.48
32:49:170:ARG:NH2	32:49:180:PHE:HB2	2.28	0.48
26:1H:1341:U:H4'	26:1H:1342:A:OP2	2.13	0.48
3:22:59:ARG:HB3	3:22:64:VAL:HA	1.94	0.48
31:39:47:GLY:HA3	31:39:95:ARG:O	2.13	0.48
27:16:14:U:OP2	27:16:70:C:O2'	2.18	0.48
1:1G:1462:G:H2'	1:1G:1463:C:H6	1.77	0.48
5:42:57:LYS:HA	5:42:60:TYR:CD2	2.48	0.48
7:62:145:ALA:O	7:62:146:GLU:HB3	2.13	0.48
26:1H:11:G:H2'	26:1H:12:U:H5'	1.94	0.48
1:13:380:G:N2	1:13:384:G:C5	2.81	0.48
1:13:1481:U:H2'	1:13:1482:G:C8	2.47	0.48
26:1H:740:U:H2'	26:1H:741:G:C8	2.49	0.48
26:1H:671:C:OP1	37:78:42:SER:O	2.32	0.48
46:C5:91:GLU:HG3	46:C5:92:ASN:N	2.28	0.48
26:14:2814:C:H5''	26:14:2815:C:OP2	2.14	0.48
26:14:2271:G:H2'	26:14:2272:U:C6	2.49	0.48
26:14:2569:G:C2	26:14:2570:G:C8	3.02	0.48
26:14:270(E):G:N3	26:14:270(V):G:C2	2.82	0.48
26:1H:2818:G:N2	26:1H:2829:C:C2	2.81	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:195:A:N7	26:1H:197:A:OP1	2.47	0.48
1:13:973:G:OP1	10:1I:57:LYS:HD3	2.13	0.48
26:1H:1166:C:O2	26:1H:1184:G:C2	2.67	0.48
26:1H:1257:C:H4'	31:31:83:PHE:HD1	1.72	0.48
29:11:9:TYR:CZ	29:11:13:ARG:HG2	2.49	0.48
1:13:1150:U:O4	1:13:1151:A:N6	2.47	0.48
26:1H:2865:U:H5''	26:1H:2866:U:H2'	1.96	0.48
20:BI:29:LYS:C	20:BI:33:ILE:HG12	2.35	0.48
1:13:1348:U:C2	1:13:1349:A:C8	3.00	0.48
1:1G:1259:C:N4	1:1G:1260:C:O2	2.47	0.48
43:95:76:LYS:HD2	43:95:80:GLN:O	2.14	0.48
46:C5:76:CYS:SG	46:C5:97:ARG:HG3	2.53	0.48
27:1J:42:C:N4	27:1J:43:C:C4	2.82	0.48
35:15:103:VAL:HG12	35:15:107:LEU:HD11	1.96	0.48
1:1G:1004:A:N1	1:1G:1006:C:H1'	2.29	0.48
26:1H:1642:G:O2'	26:1H:1643:G:H5'	2.14	0.48
26:14:581:C:H2'	26:14:582:G:H8	1.78	0.48
2:1E:133:LYS:HD2	2:1E:134:GLU:H	1.79	0.48
27:1J:44:G:H1'	27:1J:47:C:N4	2.29	0.48
37:78:59:LEU:HD21	55:Q8:10:ALA:HB2	1.95	0.48
26:14:1225:C:H4'	43:95:85:LYS:CG	2.44	0.48
1:13:243:A:H4'	1:13:244:U:H3'	1.96	0.48
5:4E:36:ASP:OD1	5:4E:38:GLN:N	2.47	0.48
1:1G:1300:G:O2'	1:1G:1301:U:O5'	2.31	0.48
26:1H:2678:C:H2'	26:1H:2679:A:O4'	2.14	0.48
15:6I:41:GLU:N	15:6I:41:GLU:OE2	2.47	0.48
47:D5:27:VAL:O	47:D5:88:PHE:HB2	2.14	0.48
14:5I:24:CYS:HB2	14:5I:40:CYS:HB3	1.95	0.48
17:8I:40:LYS:HG2	17:8I:41:LYS:N	2.29	0.48
1:13:1276:G:H2'	1:13:1277:C:C6	2.48	0.48
26:14:1906:G:N2	26:14:1925:C:O2	2.47	0.48
40:65:55:ALA:HA	40:65:57:LYS:NZ	2.29	0.48
16:7I:11:SER:HB2	16:7I:14:ASN:HB3	1.96	0.48
1:13:851:G:H2'	1:13:852:G:C8	2.48	0.48
5:4E:74:GLY:O	5:4E:115:VAL:HA	2.14	0.48
3:2E:155:GLY:O	3:2E:157:ILE:HG13	2.13	0.48
26:1H:910:A:C6	26:1H:911:A:C6	3.01	0.48
32:41:49:ASP:OD1	32:41:51:ARG:HG3	2.14	0.48
26:1H:1833:U:H2'	26:1H:1834:U:H6	1.78	0.48
35:58:67:LEU:HA	35:58:87:LEU:HD12	1.96	0.48
35:58:55:VAL:HB	35:58:126:PRO:HA	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:224:C:H2'	1:1G:225:C:C6	2.49	0.48
26:1H:2151:G:H2'	26:1H:2152:G:C8	2.49	0.48
15:6A:67:LEU:HB3	15:6A:78:TYR:HE2	1.79	0.48
13:4I:106:ASN:O	13:4I:106:ASN:ND2	2.46	0.48
26:1H:2479:G:O5'	26:1H:2479:G:H8	1.97	0.48
26:14:2533:A:H8	26:14:2533:A:O5'	1.97	0.48
26:1H:2263:C:H41	48:I8:15:ASP:HA	1.78	0.48
4:3E:128:VAL:HB	4:3E:133:VAL:HG21	1.94	0.48
46:G8:89:PHE:CD1	46:G8:90:LEU:N	2.81	0.48
2:12:74:LYS:HE3	2:12:169:LYS:HD2	1.95	0.48
26:14:2637:U:C4	26:14:2638:G:C6	3.01	0.48
26:1H:321:G:O4'	31:31:165:ARG:HD3	2.14	0.48
42:85:92:ARG:HD2	43:95:11:GLN:HB2	1.96	0.48
27:1J:63:G:C2	27:1J:64:C:C2	3.02	0.48
10:1I:40:LEU:HB3	10:1I:41:PRO:HD2	1.95	0.48
26:1H:2392:A:OP2	55:Q8:31:HIS:ND1	2.38	0.48
30:21:105:THR:HG21	30:21:164:ARG:NH1	2.29	0.48
10:1A:54:PHE:O	10:1A:55:LYS:HG3	2.13	0.48
47:H8:125:LEU:HG	47:H8:164:ALA:CB	2.43	0.48
4:32:31:CYS:O	59:32:302:SF4:S4	2.72	0.48
32:41:111:LEU:HD22	32:41:117:PHE:CZ	2.49	0.48
1:13:1432:G:OP1	41:B8:107:ASP:HB2	2.13	0.48
3:22:147:LYS:HB2	3:22:203:PHE:CD1	2.48	0.48
57:3L:13:C:H2'	57:3L:14:A:N7	2.28	0.48
1:13:1285:A:C8	1:13:1285:A:O5'	2.61	0.48
2:1E:45:GLN:O	2:1E:49:GLU:HG2	2.14	0.48
1:13:985:C:C2	1:13:1221:G:N2	2.81	0.48
7:62:136:LYS:CE	7:62:137:LYS:HZ3	2.26	0.48
4:3E:47:ARG:HG3	4:3E:47:ARG:O	2.14	0.48
47:H8:58:VAL:O	47:H8:59:LEU:HB2	2.13	0.48
26:14:1161:C:H2'	26:14:1162:G:H8	1.79	0.48
26:14:2143:C:N3	26:14:2144:U:H1'	2.29	0.48
4:3E:162:LEU:HD12	4:3E:181:MET:CE	2.44	0.48
3:22:58:GLU:O	3:22:65:ALA:N	2.42	0.48
22:1K:12:U:O4	22:1K:25:C:N4	2.46	0.48
29:11:43:ARG:HH11	29:11:43:ARG:HG2	1.79	0.48
29:19:181:GLU:HG3	29:19:272:ALA:CB	2.43	0.48
1:1G:828:A:C2	1:1G:859:A:O4'	2.67	0.48
26:1H:2266:A:H4'	26:1H:2267:A:C4	2.49	0.48
9:8E:92:TYR:O	9:8E:96:LEU:HB2	2.14	0.48
26:14:2037:G:H2'	26:14:2038:G:C8	2.49	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:361:G:H2'	26:14:362:U:O2	2.13	0.48
26:14:270(F):U:H2'	26:14:270(G):C:C6	2.48	0.48
31:39:170:LEU:HD22	31:39:172:TRP:HE1	1.79	0.48
33:51:136:ILE:HG22	33:51:136:ILE:O	2.13	0.48
26:1H:996:A:H4'	42:C8:92:ARG:CG	2.43	0.47
26:14:962:G:C2	26:14:963:U:C2	3.02	0.47
30:29:31:CYS:HB2	30:29:91:VAL:HG22	1.96	0.47
26:14:675:A:OP1	31:39:63:LYS:HE2	2.14	0.47
1:1G:468:A:N6	1:1G:474:G:N3	2.62	0.47
26:14:275:G:O6	26:14:363:G:C5	2.67	0.47
26:14:996:A:H4'	42:85:92:ARG:CZ	2.44	0.47
1:1G:1329:A:P	13:4A:28:ALA:HB3	2.54	0.47
52:M8:40:HIS:ND1	52:M8:40:HIS:O	2.46	0.47
20:BA:54:LYS:HA	20:BA:57:ARG:NH2	2.28	0.47
26:1H:1567:A:C5'	29:11:58:HIS:ND1	2.77	0.47
17:8A:88:TYR:CA	17:8A:91:ARG:HD2	2.42	0.47
26:14:363(C):G:H2'	26:14:363(D):G:H8	1.79	0.47
12:3I:117:ARG:O	12:3I:119:LYS:O	2.32	0.47
26:1H:1155:A:O2'	26:1H:1156:A:H2'	2.14	0.47
27:1J:2:C:H2'	27:1J:3:C:C6	2.48	0.47
2:12:130:ARG:HB2	2:12:135:GLN:HE21	1.79	0.47
1:13:192:U:H1'	20:BI:103:GLY:HA2	1.96	0.47
46:G8:5:MET:HE1	46:G8:32:PRO:HA	1.96	0.47
26:1H:55:G:N3	26:1H:56:A:C8	2.82	0.47
1:13:280:C:H4'	1:13:281:G:OP2	2.13	0.47
26:14:952:G:C6	26:14:966:G:C6	3.02	0.47
26:14:1225:C:O2'	43:95:85:LYS:N	2.36	0.47
1:1G:99:C:H2'	1:1G:101:A:C8	2.49	0.47
26:14:2698:U:H2'	26:14:2699:C:C6	2.49	0.47
1:1G:929:G:H1	1:1G:1388:C:N4	2.11	0.47
2:12:178:ARG:HD2	2:12:184:VAL:HG21	1.96	0.47
57:3L:44:U:O4	57:3L:45:G:C5	2.66	0.47
3:2E:16:ARG:HH22	3:2E:183:ASP:HA	1.79	0.47
1:1G:1190:G:P	3:22:5:ILE:HG13	2.55	0.47
39:55:30:THR:HG22	39:55:31:HIS:ND1	2.28	0.47
36:25:102:VAL:HB	36:25:106:LEU:HD12	1.96	0.47
2:1E:27:LYS:NZ	2:1E:195:ASP:HB2	2.29	0.47
26:14:1337:G:H2'	26:14:1338:G:H8	1.79	0.47
35:58:127:ASP:O	35:58:128:HIS:HB3	2.13	0.47
26:14:574:C:H1'	26:14:2055:C:C6	2.49	0.47
38:88:55:VAL:HG12	38:88:64:ILE:HD12	1.95	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
48:I8:41:ARG:HA	48:I8:41:ARG:HE	1.79	0.47
26:14:2483:C:O2	38:45:124:LYS:HE3	2.14	0.47
26:14:566:U:OP1	37:35:29:LYS:HD2	2.14	0.47
26:1H:2843:G:O2'	26:1H:2844:G:H5'	2.14	0.47
26:1H:189:G:OP2	49:J8:14:VAL:HG21	2.14	0.47
49:J8:18:ILE:HG12	49:J8:37:ILE:HG12	1.96	0.47
1:13:1051:C:H2'	1:13:1052:U:C6	2.49	0.47
23:2L:32:G:H5''	23:2L:33:OMC:OP2	2.14	0.47
29:11:96:HIS:CD2	29:11:102:LYS:HE2	2.49	0.47
26:14:2155:G:O6	26:14:2156:G:N1	2.47	0.47
26:14:2636:U:O2'	30:29:44:TYR:CZ	2.67	0.47
45:B5:29:TRP:HA	45:B5:29:TRP:CE3	2.48	0.47
26:1H:2801:A:H2'	26:1H:2802:G:O4'	2.13	0.47
29:11:106:ILE:O	29:11:108:PRO:HD3	2.14	0.47
26:14:335:C:H2'	26:14:336:C:C6	2.49	0.47
1:13:1455:G:H5'	20:BI:32:ALA:HB2	1.95	0.47
55:M5:31:HIS:CD2	55:M5:32:LEU:HB2	2.49	0.47
1:1G:447:G:H2'	1:1G:485:G:N2	2.29	0.47
1:13:604:G:H2'	1:13:605:U:O4'	2.14	0.47
5:4E:145:LYS:HD3	5:4E:146:ALA:N	2.24	0.47
30:21:84:PHE:CZ	30:21:86:PRO:HB3	2.48	0.47
26:1H:1429:G:C2'	26:1H:1430:C:H5'	2.44	0.47
1:1G:114:U:H2'	1:1G:115:G:H8	1.72	0.47
26:1H:311:A:C2	26:1H:331:A:H5''	2.44	0.47
23:2L:48:U:H1'	23:2L:49:C:P	2.53	0.47
23:2L:16:C:O2'	23:2L:62:C:OP1	2.24	0.47
26:14:535:C:O2'	26:14:536:A:H5'	2.13	0.47
26:14:995:C:C6	42:85:57:PHE:CE2	3.01	0.47
46:C5:89:PHE:O	46:C5:89:PHE:CG	2.67	0.47
1:1G:591:U:H2'	1:1G:592:G:C8	2.49	0.47
1:13:749:C:H2'	1:13:750:G:C8	2.47	0.47
15:6I:15:PHE:CD1	15:6I:84:LYS:HE2	2.49	0.47
39:98:55:ALA:HA	39:98:80:PHE:CE2	2.48	0.47
18:9A:66:LEU:O	18:9A:70:ILE:HG13	2.14	0.47
26:14:182:A:N3	26:14:433:C:O2'	2.43	0.47
1:1G:1321:C:H3'	1:1G:1322:C:H5''	1.95	0.47
55:Q8:45:GLY:O	55:Q8:46:ARG:C	2.51	0.47
37:35:124:LYS:HB3	37:35:145:PRO:HD3	1.96	0.47
1:1G:683:G:N2	1:1G:707:C:O2	2.41	0.47
1:1G:382:A:H2'	1:1G:383:A:H8	1.76	0.47
26:14:649:G:C6	26:14:650:C:C4	3.02	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2116:G:H21	26:1H:2117:A:H62	1.61	0.47
1:13:292:G:N7	1:13:293:G:H1'	2.29	0.47
43:D8:59:ALA:HB2	43:D8:96:ILE:HD13	1.96	0.47
26:14:322:A:H3'	31:39:169:ASN:OD1	2.13	0.47
2:12:147:LYS:HD2	2:12:148:TYR:CZ	2.49	0.47
18:9A:32:ARG:HA	18:9A:69:THR:HG21	1.95	0.47
26:14:521:G:H2'	26:14:522:G:H8	1.79	0.47
56:1L:51:A:H2'	56:1L:52:G:H8	1.78	0.47
1:1G:1357:A:H4'	10:1A:47:PHE:CZ	2.49	0.47
26:14:1570:A:H2'	26:14:1571:A:C8	2.49	0.47
5:42:9:LYS:HB3	5:42:112:LEU:HD11	1.97	0.47
56:1L:43:U:H5	56:1L:44:U:C2	2.32	0.47
26:1H:1743:G:C2	26:1H:1746:G:C8	3.01	0.47
16:7A:18:ARG:HA	16:7A:38:TYR:HA	1.96	0.47
4:3E:101:LEU:O	4:3E:105:VAL:HG23	2.14	0.47
26:1H:571:A:H5'	26:1H:2030:A:N7	2.29	0.47
45:F8:23:GLU:H	45:F8:23:GLU:HG2	1.50	0.47
46:G8:33:LYS:H	46:G8:33:LYS:HD3	1.78	0.47
39:55:38:VAL:HG12	39:55:42:LYS:HD2	1.96	0.47
1:1G:1056:U:OP1	3:22:163:ALA:HB3	2.13	0.47
2:1E:178:ARG:NH1	2:1E:196:LEU:O	2.42	0.47
37:78:147:LEU:N	37:78:147:LEU:HD12	2.29	0.47
49:F5:86:SER:N	49:F5:87:PRO:HD2	2.29	0.47
24:3K:48:C:H6	24:3K:59:A:HO2'	1.62	0.47
26:14:2786:U:O2'	30:29:63:LEU:N	2.46	0.47
10:1I:7:LYS:O	10:1I:8:LEU:HD23	2.14	0.47
1:1G:1057:G:H5''	3:22:154:SER:OG	2.14	0.47
1:1G:1126:U:H1'	1:1G:1127:G:P	2.54	0.47
26:1H:242:G:C8	55:Q8:3:LYS:HE3	2.49	0.47
1:13:1216:G:O5'	1:13:1216:G:H8	1.97	0.47
1:13:1142:G:H2'	1:13:1143:G:O4'	2.14	0.47
9:8E:10:ARG:CZ	9:8E:11:LYS:HE2	2.45	0.47
13:4I:99:ARG:O	13:4I:101:GLN:HG3	2.14	0.47
26:14:1443:G:N2	26:14:1549:C:C2	2.82	0.47
34:69:61:ARG:O	34:69:65:ALA:N	2.48	0.47
26:1H:2636:U:P	30:21:79:ARG:HA	2.54	0.47
26:14:2747:G:O3'	33:59:70:THR:HG21	2.14	0.47
19:AI:5:LEU:HB3	19:AI:10:PHE:CE1	2.49	0.47
8:72:86:ILE:HD12	8:72:133:LEU:HD22	1.96	0.47
1:1G:1166:G:H1'	1:1G:1171:G:N2	2.29	0.47
1:13:1003:G:O3'	1:13:1004:A:H4'	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:42:G:O2'	1:13:622:A:N1	2.40	0.47
46:C5:18:GLY:O	46:C5:20:TYR:N	2.48	0.47
1:1G:1442:G:H1	1:1G:1461:G:H21	1.61	0.47
2:12:53:ARG:HB3	2:12:57:PHE:CZ	2.50	0.47
34:69:129:THR:HA	34:69:137:PRO:HA	1.96	0.47
19:AI:52:TYR:HA	19:AI:56:GLN:O	2.13	0.47
39:98:4:LEU:HA	39:98:4:LEU:HD23	1.47	0.47
2:1E:105:PHE:CZ	2:1E:156:LYS:HA	2.49	0.47
49:F5:29:GLY:C	49:F5:31:GLY:H	2.18	0.47
1:13:625:G:C4'	16:7I:16:HIS:HD1	2.27	0.47
26:1H:1208:C:C4	26:1H:1209:G:N7	2.82	0.47
18:9I:58:LEU:HG	18:9I:62:GLU:CB	2.44	0.47
1:1G:41:G:H2'	1:1G:42:G:C8	2.49	0.47
45:F8:34:ALA:HA	45:F8:38:GLU:OE1	2.14	0.47
31:31:177:ALA:HB1	31:31:178:PRO:HD2	1.96	0.47
1:13:673:G:H5''	6:5E:87:ARG:NH1	2.29	0.47
26:14:1262:A:P	44:A5:99:ARG:HH12	2.37	0.47
26:14:2482:G:H2'	26:14:2483:C:O4'	2.14	0.47
11:2I:107:SER:O	11:2I:108:ILE:HG13	2.14	0.47
28:71:213:TYR:HA	28:71:223:ARG:HA	1.94	0.47
26:1H:2001:A:H2'	26:1H:2002:G:O4'	2.13	0.47
31:39:114:VAL:HG21	31:39:202:PHE:CZ	2.50	0.47
26:14:2418:A:OP2	55:M5:29:LYS:NZ	2.43	0.47
48:E5:24:LYS:N	48:E5:37:LEU:O	2.31	0.47
26:14:593:G:H1	26:14:664:C:H42	1.62	0.47
1:1G:1232:U:H2'	1:1G:1233:G:O4'	2.14	0.47
34:69:101:LEU:HB2	34:69:105:HIS:HB2	1.97	0.47
41:75:99:LEU:HD22	41:75:101:PHE:HE1	1.79	0.47
26:1H:1682:G:C6	26:1H:1683:C:N3	2.82	0.47
26:1H:2352:A:C4	26:1H:2366:A:C2	3.02	0.47
46:G8:93:GLY:O	46:G8:94:LYS:HB2	2.14	0.47
2:12:97:TRP:CZ3	2:12:99:GLY:HA2	2.45	0.47
26:14:2781:A:H5''	26:14:2782:G:H5'	1.96	0.47
1:1G:837:G:C2	1:1G:838:G:H1'	2.49	0.47
1:1G:1095:U:OP1	1:1G:1108:G:C2	2.67	0.47
30:21:169:ASN:CA	30:21:201:THR:HG21	2.39	0.47
9:82:78:LYS:HD3	9:82:79:LEU:HB2	1.95	0.47
32:41:178:PHE:O	32:41:180:PHE:HD2	1.96	0.47
1:1G:1017:G:H2'	1:1G:1018:C:C5	2.49	0.47
26:1H:907:U:C4'	38:88:101:ARG:HH22	2.28	0.47
33:59:56:SER:O	33:59:61:HIS:HB2	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:847:U:H5'	26:14:848:G:OP2	2.14	0.47
5:4E:93:PRO:HG2	8:7E:105:ARG:HD2	1.96	0.47
1:13:881:G:P	12:3I:12:ARG:NH2	2.87	0.47
26:14:1486:A:H2'	26:14:1487:G:H8	1.78	0.47
1:13:692:U:H2'	1:13:693:G:H3'	1.97	0.47
2:1E:70:PHE:H	2:1E:92:TYR:HA	1.79	0.47
26:1H:1778:U:H2'	26:1H:1784:A:H62	1.79	0.47
6:5E:20:ALA:HA	6:5E:23:LYS:HB3	1.97	0.47
1:1G:108:G:P	1:1G:326:G:H22	2.37	0.47
1:1G:537:G:H5''	12:3A:113:ARG:NH1	2.29	0.47
5:4E:126:ARG:CG	5:4E:126:ARG:HH11	2.26	0.47
26:1H:1901:A:OP2	26:1H:1901:A:H4'	2.14	0.47
38:45:116:GLU:OE2	38:45:119:ARG:NE	2.42	0.47
26:1H:2579:C:C4	26:1H:2580:U:C5	3.02	0.47
3:2E:47:LEU:HD12	3:2E:76:VAL:HG12	1.95	0.47
1:13:947:G:H2'	1:13:948:C:H6	1.77	0.47
1:13:1225:A:N3	1:13:1225:A:H2'	2.29	0.47
1:1G:1385:G:C2	1:1G:1386:G:C8	3.03	0.47
1:1G:667:G:O5'	1:1G:667:G:H8	1.98	0.47
1:13:136:C:H42	1:13:227:G:H1	1.63	0.47
2:1E:73:THR:HA	2:1E:96:ARG:HH22	1.77	0.47
26:1H:1903:G:OP1	29:11:241:PRO:HB2	2.14	0.47
32:49:56:ALA:HA	32:49:59:GLU:HB3	1.97	0.47
29:11:70:TRP:CD1	29:11:70:TRP:C	2.87	0.47
26:14:1431:U:H2'	26:14:1432:C:C6	2.49	0.47
26:14:2355:C:H5''	26:14:2356:C:OP2	2.13	0.47
13:4I:34:LEU:HD13	13:4I:41:PRO:HB3	1.97	0.47
26:14:722:A:H3'	26:14:723:G:C8	2.49	0.47
1:13:11:G:C6	1:13:12:U:C5	3.03	0.47
56:1L:73:A:H5'	56:1L:74:C:OP1	2.14	0.47
39:55:101:ALA:HB2	53:J5:44:THR:HB	1.97	0.47
1:13:954:G:H2'	1:13:955:U:C6	2.49	0.47
13:4I:67:GLU:O	13:4I:68:GLY:C	2.53	0.47
26:1H:2048:G:C6	26:1H:2049:G:C5	3.03	0.47
26:14:1925:C:C2'	26:14:1926:U:H5'	2.44	0.47
1:13:49:U:O2'	1:13:50:A:OP1	2.27	0.47
26:1H:2556:C:H2'	26:1H:2557:G:O4'	2.14	0.47
26:14:2674:G:H4'	36:25:30:ALA:HB2	1.96	0.47
26:1H:1133:U:O2	26:1H:1137:G:H5''	2.14	0.47
31:31:39:TRP:O	31:31:43:LYS:HG2	2.15	0.47
13:4I:60:VAL:HG13	13:4I:64:TRP:HE1	1.79	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:65:C:H5'	45:F8:71:GLY:HA3	1.96	0.47
31:31:201:VAL:O	31:31:205:ARG:N	2.45	0.47
31:39:83:PHE:O	31:39:84:VAL:HB	2.13	0.47
1:1G:138:G:C2	1:1G:226:G:C2	3.03	0.47
26:14:278:A:H2'	26:14:278:A:OP2	2.14	0.47
1:13:967:C:O5'	1:13:967:C:H6	1.97	0.47
26:1H:677:A:N3	26:1H:677:A:H2'	2.29	0.47
1:13:1274:G:H2'	1:13:1275:A:H8	1.78	0.47
26:1H:996:A:C6	26:1H:1160:G:C2	3.02	0.47
26:14:2494:G:C5	26:14:2495:G:N7	2.83	0.47
30:29:55:ASN:HB2	30:29:58:ARG:NH2	2.28	0.47
2:12:19:HIS:NE2	2:12:204:ASN:HB3	2.30	0.47
47:D5:93:ASP:H	47:D5:130:PRO:HG2	1.79	0.47
1:13:468:A:H3'	1:13:474:G:C8	2.50	0.47
1:1G:1315:U:C2'	1:1G:1316:G:H5'	2.45	0.47
36:68:50:GLY:O	36:68:53:LYS:NZ	2.48	0.47
36:68:2:ILE:HG22	36:68:3:GLN:N	2.29	0.47
26:1H:8:A:O5'	26:1H:8:A:H8	1.97	0.47
3:2E:58:GLU:HB2	3:2E:65:ALA:CB	2.39	0.47
32:41:170:ARG:NH2	32:41:180:PHE:HB3	2.21	0.47
34:61:68:LEU:CA	34:61:71:ILE:HG22	2.39	0.47
26:14:1012:U:O4	35:15:25:ARG:HA	2.14	0.47
26:14:841:A:H61	26:14:937:U:H3	1.62	0.47
1:13:1347:G:H22	1:13:1373:G:H2'	1.78	0.47
53:N8:40:LYS:HZ3	53:N8:46:CYS:C	2.18	0.47
1:13:1442:G:H1	1:13:1461:G:H21	1.63	0.47
40:A8:66:ALA:HA	40:A8:69:VAL:CG1	2.41	0.47
31:39:9:ILE:O	31:39:128:ALA:HB2	2.14	0.47
1:13:310:G:OP2	16:7I:27:LYS:NZ	2.33	0.47
47:D5:158:PRO:CG	47:D5:161:VAL:HG22	2.43	0.47
26:1H:1678:G:N2	26:1H:1989:G:N2	2.63	0.47
26:1H:445:C:OP1	42:C8:2:PRO:HA	2.13	0.47
26:14:2889:C:H3'	26:14:2891:G:C8	2.49	0.47
1:1G:1086:U:H2'	1:1G:1087:G:O4'	2.14	0.47
26:14:2166:G:O2'	26:14:2168:G:OP2	2.20	0.47
1:13:1113:C:O2'	1:13:1114:C:H5'	2.14	0.47
26:1H:1466:G:H2'	26:1H:1547:C:N4	2.29	0.47
26:1H:6:A:H1'	35:58:131:GLN:HB3	1.96	0.47
30:21:33:VAL:HG12	30:21:89:ASP:HA	1.97	0.47
39:55:33:ARG:HD3	39:55:113:LEU:HD11	1.96	0.47
28:71:62:VAL:HG12	28:71:163:PHE:CE1	2.48	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
55:Q8:46:ARG:HB2	55:Q8:47:LYS:HB2	1.96	0.47
26:14:896:A:H5'	26:14:897:C:C6	2.50	0.47
53:J5:45:VAL:HG22	53:J5:51:TYR:CD2	2.49	0.47
55:M5:60:LEU:C	55:M5:60:LEU:HD12	2.35	0.47
53:J5:41:PRO:HG2	53:J5:44:THR:OG1	2.14	0.47
29:11:43:ARG:N	29:11:43:ARG:HD2	2.30	0.47
26:1H:2024:G:H2'	26:1H:2025:C:C6	2.49	0.47
26:1H:2052:G:H4'	30:21:143:ASN:O	2.15	0.47
26:1H:747:U:O2	26:1H:2014:A:H1'	2.15	0.47
5:4E:82:VAL:HG11	5:4E:137:GLU:HB2	1.97	0.47
26:1H:618:G:H2'	26:1H:618(A):C:H6	1.79	0.47
45:F8:55:ASN:HB2	45:F8:80:ILE:HG23	1.96	0.47
26:1H:743:G:O3'	61:1H:3556:HOH:O	2.19	0.47
26:14:2516:G:C6	26:14:2517:C:N4	2.82	0.47
56:1L:29:U:H3	56:1L:41:A:H61	1.62	0.47
10:1I:63:PHE:HE1	14:5I:58:LYS:HG2	1.79	0.47
46:G8:87:LYS:HD3	46:G8:88:LYS:H	1.80	0.47
32:49:115:ARG:NH2	32:49:137:GLU:OE2	2.48	0.47
26:1H:2428:G:H21	37:78:61:ARG:HH12	1.62	0.47
26:1H:1753:G:H2'	26:1H:1755:A:OP2	2.13	0.47
57:3L:68:G:N2	57:3L:69:A:C4	2.83	0.47
26:1H:2795:G:N1	26:1H:2802:G:N7	2.62	0.47
26:1H:2128:C:H2'	26:1H:2129:C:C6	2.50	0.47
1:1G:1255:G:N2	1:1G:1283:G:H1'	2.28	0.47
1:1G:519:C:H2'	1:1G:520:A:O4'	2.15	0.47
41:75:91:ARG:NH1	41:75:124:ASP:CG	2.67	0.47
26:14:1024:G:C8	26:14:1025:G:H2'	2.48	0.47
1:13:1181:G:O2'	1:13:1184:G:H5'	2.14	0.47
34:61:71:ILE:HG23	34:61:72:LEU:HD13	1.96	0.47
35:58:40:PRO:HB3	42:C8:68:ALA:HB2	1.97	0.47
26:14:928:G:N7	61:14:3566:HOH:O	2.35	0.47
1:1G:1184:G:P	1:1G:1184:G:H8	2.38	0.47
26:1H:1178:C:H4'	26:1H:1179:C:OP1	2.14	0.47
3:22:72:LYS:NZ	3:22:75:VAL:HG23	2.29	0.47
26:14:1310:G:H1	26:14:1604:C:N4	2.08	0.47
1:1G:410:G:H21	1:1G:432:A:H62	1.61	0.47
26:1H:1486:A:O2'	26:1H:1487:G:H5'	2.14	0.47
30:29:117:MET:HA	30:29:122:PHE:N	2.30	0.47
22:1K:44:U:H3'	22:1K:48:C:N4	2.30	0.47
35:58:73:THR:HG22	35:58:84:LYS:HG2	1.96	0.47
26:14:1454:U:OP1	39:55:77:ARG:HD3	2.13	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:622:A:H3'	1:13:623:C:C6	2.49	0.47
32:49:127:GLY:HA2	32:49:166:ASP:CG	2.35	0.47
41:75:107:ASP:OD2	41:75:109:GLU:HB2	2.15	0.47
1:13:1060:C:O2'	10:11:56:HIS:ND1	2.47	0.47
27:16:55:U:H2'	27:16:56:G:H8	1.80	0.47
3:22:47:LEU:HD23	3:22:68:VAL:HG11	1.95	0.47
1:1G:176:C:H2'	1:1G:177:C:H6	1.80	0.47
1:13:1315:U:H2'	1:13:1316:G:O4'	2.14	0.47
55:Q8:40:GLU:O	55:Q8:43:GLN:N	2.46	0.47
1:13:1163:C:H2'	1:13:1164:G:H8	1.80	0.47
1:13:15:G:H4'	5:4E:24:ARG:NH1	2.30	0.47
1:13:321:A:C2	1:13:333:G:N2	2.83	0.47
1:13:665:A:N3	1:13:732:C:H2'	2.30	0.47
27:16:66:A:C2	27:16:108:C:C5	3.01	0.47
26:1H:1346:G:H2'	26:1H:1347:G:H8	1.79	0.47
1:1G:574:A:HO2'	1:1G:882:C:HO2'	1.63	0.47
1:13:806:C:H2'	1:13:807:A:H8	1.79	0.47
1:1G:854:G:H3'	1:1G:871:U:O4	2.14	0.47
4:3E:101:LEU:HB2	4:3E:138:TYR:HB3	1.97	0.47
26:14:2199:A:C8	26:14:2205:C:C5	3.02	0.47
26:14:282:A:C6	26:14:284:U:C2	3.02	0.47
38:45:18:LYS:H	38:45:98:LYS:HZ3	1.62	0.47
42:C8:14:HIS:O	42:C8:18:LEU:HD12	2.15	0.47
47:H8:44:PHE:C	47:H8:44:PHE:CD1	2.88	0.47
11:2A:16:SER:HA	11:2A:79:SER:O	2.14	0.47
30:29:105:THR:HG21	30:29:164:ARG:HE	1.79	0.47
35:58:4:TYR:CE2	42:C8:100:VAL:HG11	2.49	0.47
33:51:67:LEU:O	33:51:71:LEU:HD13	2.15	0.47
26:14:2631:G:O6	26:14:2632:A:N6	2.48	0.47
36:25:68:GLU:OE2	36:25:78:ARG:NH1	2.48	0.47
28:71:13:LYS:HD3	28:71:13:LYS:HA	1.67	0.47
24:3K:27:G:N1	24:3K:43:U:O4	2.41	0.47
46:G8:82:PRO:HG3	46:G8:97:ARG:HB3	1.96	0.47
26:1H:247:G:H4'	26:1H:386:G:C5	2.49	0.47
38:45:26:TYR:OH	47:D5:78:LYS:HB3	2.15	0.47
1:1G:1043:C:H2'	1:1G:1044:A:H8	1.78	0.47
26:14:2250:G:N3	26:14:2250:G:H5''	2.29	0.47
24:3K:48:C:C5	24:3K:59:A:H1'	2.49	0.47
41:B8:3:ARG:O	41:B8:4:GLY:C	2.52	0.47
26:14:1356:G:H2'	26:14:1357:U:O4'	2.13	0.47
26:1H:340:A:H2'	26:1H:341:G:O4'	2.14	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:993:G:H2'	26:1H:994:C:C6	2.50	0.47
2:1E:161:ALA:C	2:1E:162:ILE:HD13	2.34	0.47
12:3A:20:LYS:C	12:3A:20:LYS:HE2	2.35	0.47
1:1G:624:C:O3'	16:7A:10:GLY:HA2	2.14	0.47
36:68:49:ARG:C	36:68:53:LYS:HZ3	2.18	0.47
25:4K:13:A:H2'	25:4K:14:A:O4'	2.14	0.47
4:32:107:ARG:HH11	4:32:173:TRP:HZ2	1.62	0.47
39:98:44:LEU:HD21	39:98:48:VAL:HG13	1.96	0.47
57:3L:71:C:H2'	57:3L:72:C:H6	1.78	0.47
30:21:61:ARG:O	30:21:63:LEU:HD22	2.15	0.47
8:7E:133:LEU:HD23	8:7E:134:ILE:N	2.29	0.47
4:32:12:CYS:HB3	4:32:33:MET:HG3	1.97	0.47
43:95:21:ARG:HH22	43:95:65:GLY:C	2.15	0.47
32:41:113:ARG:NE	52:M8:34:GLU:OE1	2.33	0.47
4:32:61:LYS:HD2	4:32:62:GLN:N	2.29	0.47
1:13:1178:G:H2'	1:13:1180:A:OP2	2.14	0.47
33:59:9:ILE:HA	33:59:52:VAL:HB	1.97	0.47
40:65:109:GLY:O	40:65:111:GLU:N	2.31	0.47
1:1G:1116:C:H2'	1:1G:1117:G:H8	1.75	0.47
55:Q8:29:LYS:O	55:Q8:30:ARG:CG	2.63	0.47
29:11:92:ILE:HD12	29:11:104:TYR:CE1	2.50	0.47
29:11:26:LYS:HB2	29:11:83:GLU:HG2	1.96	0.47
5:4E:148:VAL:O	5:4E:151:LEU:HB2	2.14	0.47
37:78:19:VAL:CG2	37:78:20:GLY:HA3	2.44	0.47
26:14:2262:U:C2'	26:14:2263:C:H5'	2.45	0.47
12:3A:41:ARG:HG2	12:3A:42:THR:N	2.27	0.47
40:65:30:ARG:HD2	40:65:97:ARG:HB2	1.96	0.47
26:1H:2572:A:N7	30:21:144:ARG:HD2	2.29	0.47
1:1G:1134:G:C2	1:1G:1135:U:H1'	2.50	0.47
26:14:1048:A:C5'	26:14:1109:C:H42	2.27	0.47
1:1G:1489:G:H2'	1:1G:1490:C:C6	2.49	0.47
26:1H:1523:U:C2	26:1H:1524:G:C8	3.02	0.47
26:14:2308:G:H3'	26:14:2310:A:OP2	2.15	0.47
26:14:581:C:H2'	26:14:582:G:C8	2.49	0.47
37:78:84:ASN:ND2	37:78:115:LEU:HD12	2.30	0.47
26:1H:2118:U:O4'	26:1H:2147:G:N2	2.48	0.47
1:13:936:C:H2'	1:13:937:A:H5'	1.96	0.47
26:14:548:A:C4	26:14:549:G:H1'	2.49	0.47
1:1G:1500:A:OP1	1:1G:1508:G:OP1	2.33	0.47
1:1G:582:U:C2	1:1G:760:G:C6	3.03	0.47
23:2L:51:U:H2'	23:2L:52:C:C5	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:31:47:GLY:HA3	31:31:95:ARG:O	2.14	0.47
1:13:233:C:H2'	1:13:234:C:C6	2.44	0.47
16:7I:21:VAL:HG23	16:7I:34:GLU:H	1.79	0.47
1:13:1412:C:C2	1:13:1489:G:N2	2.83	0.47
57:3L:13:C:H2'	57:3L:14:A:C8	2.49	0.47
57:3L:15:G:C6	57:3L:48:C:N4	2.79	0.47
34:61:1:MET:HB3	34:61:21:VAL:O	2.14	0.47
26:14:142:G:C1'	45:B5:37:THR:HG21	2.44	0.47
26:14:141(A):C:H2'	26:14:142:G:O4'	2.14	0.47
1:13:590:C:H2'	1:13:591:U:H6	1.80	0.47
26:1H:919:G:H4'	27:16:81:G:H4'	1.96	0.47
43:95:85:LYS:HD2	43:95:87:HIS:CA	2.45	0.47
55:M5:39:LYS:HG2	55:M5:40:GLU:N	2.30	0.47
26:1H:784:A:N6	29:11:229:VAL:HG11	2.29	0.47
47:H8:4:ARG:HD3	47:H8:60:GLU:OE2	2.15	0.47
26:14:2522:U:HO2'	26:14:2647:U:H5''	1.78	0.47
48:E5:51:VAL:N	48:E5:62:LEU:HD12	2.30	0.47
26:1H:1018:C:C2'	26:1H:1019:U:H5'	2.45	0.47
27:1J:76:G:H2'	27:1J:77:U:O4'	2.15	0.47
26:1H:705:A:H5''	26:1H:706:A:OP2	2.15	0.47
26:14:107:C:H2'	26:14:108:U:C6	2.48	0.47
12:3A:8:ASN:ND2	17:8A:34:LYS:HE2	2.30	0.47
20:BA:73:HIS:O	20:BA:76:ALA:HB3	2.14	0.47
26:14:1247:A:OP1	31:39:95:ARG:NH2	2.48	0.47
2:12:188:ALA:HB1	2:12:192:SER:HB2	1.95	0.47
26:14:1608:A:H1'	26:14:1610:A:OP2	2.14	0.47
3:2E:18:TRP:NE1	14:5I:55:GLY:N	2.63	0.47
12:3I:110:VAL:HG21	12:3I:120:TYR:HB3	1.97	0.47
31:39:168:ARG:HG3	31:39:175:THR:HG21	1.95	0.47
26:1H:1260:G:H2'	26:1H:1261:C:H6	1.79	0.47
26:14:2820:A:C5	39:55:4:LEU:HD11	2.50	0.47
56:1L:1:G:H22	56:1L:72:C:H42	1.62	0.47
1:13:953:G:C6	1:13:954:G:C4	3.03	0.47
1:1G:500:G:H2'	1:1G:501:C:C6	2.50	0.47
31:31:178:PRO:HG2	31:31:179:GLU:OE1	2.15	0.47
26:14:2255:G:C5	26:14:2256:G:C8	3.03	0.47
1:1G:859:A:H2'	1:1G:860:A:O4'	2.15	0.47
9:8E:53:VAL:HG21	9:8E:92:TYR:CD2	2.49	0.47
1:1G:321:A:C2	1:1G:333:G:C2	3.03	0.47
26:1H:1817:G:C6	26:1H:1818:U:C4	3.02	0.47
36:25:14:THR:HG21	36:25:86:ILE:HD12	1.97	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:699:A:H2'	26:14:700:G:O4'	2.14	0.47
48:I8:11:ARG:O	48:I8:14:ARG:NH2	2.48	0.47
6:52:12:PRO:HB3	6:52:58:GLY:HA2	1.95	0.47
26:14:1202:C:N3	26:14:1243:G:N2	2.59	0.47
11:2I:17:GLY:O	11:2I:80:VAL:HA	2.15	0.47
6:52:20:ALA:HA	6:52:23:LYS:CD	2.45	0.47
4:32:158:ILE:O	4:32:159:ARG:C	2.52	0.47
34:61:75:LEU:HD21	34:61:105:HIS:ND1	2.30	0.47
26:14:1142:U:O2	26:14:1142:U:H2'	2.15	0.47
6:5E:69:GLU:O	6:5E:72:VAL:HG12	2.14	0.47
18:9I:34:TYR:HA	18:9I:69:THR:HG23	1.96	0.47
15:6I:18:PHE:CZ	15:6I:21:ASP:HB2	2.49	0.47
1:13:1011:G:H2'	1:13:1012:U:O4'	2.15	0.47
29:11:226:MET:HB3	29:11:230:ASP:HB2	1.96	0.47
26:1H:1449(A):G:H2'	26:1H:1450:C:C6	2.50	0.47
26:14:2791:C:H2'	26:14:2792:G:H8	1.80	0.47
26:1H:2835:A:C5	26:1H:2878:U:C5	3.02	0.47
56:1L:15:G:O2'	56:1L:16:U:H5"	2.15	0.47
42:85:72:HIS:ND1	42:85:110:VAL:HG21	2.30	0.47
17:8A:19:VAL:HG22	17:8A:44:ALA:HB3	1.95	0.47
26:1H:880:G:O2'	26:1H:881:G:OP1	2.31	0.47
26:1H:2182:G:H2'	26:1H:2183:C:O4'	2.14	0.47
2:12:47:THR:HG23	2:12:201:ILE:HG23	1.97	0.47
26:14:2788:C:O2'	26:14:2809:A:N3	2.46	0.47
31:31:7:TYR:O	31:31:21:ALA:HA	2.14	0.47
16:7I:49:LEU:HD22	16:7I:73:LEU:HD22	1.97	0.47
30:21:111:ARG:HD2	30:21:160:TYR:CE2	2.50	0.47
26:14:363:G:H2'	26:14:363(A):A:O4'	2.13	0.47
26:1H:270(N):G:O2'	26:1H:270(O):U:H3'	2.15	0.47
13:4A:48:LEU:HD12	13:4A:52:GLU:HB3	1.96	0.47
27:1J:70:C:H2'	27:1J:71:C:O4'	2.14	0.47
26:1H:1359:A:C2	26:1H:1372:U:O4	2.68	0.47
46:C5:73:ARG:CZ	46:C5:74:PRO:HD2	2.45	0.47
26:1H:1023:U:OP2	26:1H:1024:G:N7	2.48	0.47
26:1H:1144:G:C6	26:1H:1145:C:C4	3.01	0.47
42:85:66:ASN:CB	42:85:76:TYR:HB2	2.40	0.47
26:1H:1177:A:H4'	26:1H:1178:C:O5'	2.15	0.47
26:1H:1454:U:H5	26:1H:2702:U:O4	1.97	0.47
46:G8:54:LYS:O	46:G8:55:TYR:CD2	2.67	0.47
26:1H:1567:A:C8	29:11:84:TYR:CE2	3.03	0.47
26:14:909:A:C8	26:14:912:C:N4	2.83	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2807:G:H22	26:14:2892:A:N6	2.12	0.47
40:65:34:HIS:C	40:65:97:ARG:HH22	2.18	0.47
26:14:1056:G:H21	26:14:1103:A:H62	1.63	0.47
31:31:45:ARG:HD3	31:31:97:TYR:CD2	2.50	0.47
26:1H:34:C:O2'	26:1H:35:G:P	2.72	0.47
41:75:11:GLU:N	41:75:11:GLU:CD	2.67	0.47
48:I8:53:MET:HG3	48:I8:59:LEU:HD21	1.93	0.47
26:14:1389:G:H2'	26:14:1390:U:C6	2.50	0.47
26:1H:2094:G:OP1	34:61:22:LYS:HG3	2.15	0.47
5:42:71:LEU:HD21	5:42:115:VAL:HG22	1.97	0.47
30:29:101:ARG:CZ	30:29:171:GLU:HB2	2.45	0.47
1:13:22:G:H2'	1:13:23:C:C6	2.50	0.47
39:98:12:ARG:HG2	39:98:16:HIS:CG	2.50	0.47
26:1H:1718:G:N3	26:1H:1725:G:C8	2.83	0.47
31:31:101:LEU:HA	31:31:101:LEU:HD23	1.57	0.47
4:3E:47:ARG:NH2	4:3E:49:ARG:HG2	2.30	0.47
26:14:2472:G:H1	26:14:2477:C:P	2.38	0.47
1:13:1330:U:O4	1:13:1331:G:N2	2.47	0.47
32:49:170:ARG:HH22	32:49:180:PHE:HB2	1.79	0.47
26:1H:2820:A:C4	39:98:4:LEU:HD11	2.50	0.47
26:1H:6:A:C2	26:1H:7:G:C4	3.02	0.47
26:1H:721:C:H2'	26:1H:722:A:H8	1.80	0.47
26:14:1013:C:H42	26:14:1149:G:H1	1.61	0.47
26:1H:2199:A:C4	26:1H:2205:C:C5	3.03	0.47
45:F8:8:ILE:HD11	45:F8:43:VAL:HG22	1.96	0.47
26:1H:846:C:C4	26:1H:930:U:C4	3.02	0.47
1:13:1074:G:H2'	1:13:1075:C:H6	1.79	0.47
46:C5:61:ILE:HG22	46:C5:62:GLU:H	1.80	0.47
5:42:61:TYR:HA	5:42:64:ARG:CG	2.45	0.47
26:1H:255:A:H1'	26:1H:384:U:C6	2.50	0.47
51:L8:7:LYS:HB2	51:L8:34:GLU:HG2	1.97	0.47
26:1H:1283:G:O5'	26:1H:1283:G:H8	1.97	0.47
36:25:78:ARG:HH21	41:75:103:ARG:NH2	2.13	0.47
51:H5:5:LYS:HE3	51:H5:57:GLU:HB2	1.96	0.47
26:1H:1263:U:H2'	26:1H:1264:G:O4'	2.14	0.47
26:14:2228:G:C6	26:14:2229:C:C4	3.02	0.47
1:13:1029:G:H1'	1:13:1032(A):G:H21	1.80	0.47
16:7A:26:ARG:HG3	16:7A:31:LYS:O	2.14	0.47
36:68:52:VAL:HG13	36:68:94:ARG:NH1	2.30	0.47
26:14:133:C:H42	26:14:146:G:H1	1.61	0.47
26:14:1861:G:H1	26:14:1881:C:H42	1.61	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:304:G:C2	26:1H:314:A:C2	3.03	0.47
1:13:758:G:O5'	1:13:758:G:H8	1.98	0.47
2:12:185:ILE:HG23	2:12:199:TYR:O	2.14	0.47
26:1H:251:A:C5	26:1H:252:G:H1'	2.50	0.47
26:14:2495:G:H2'	26:14:2496:C:H6	1.80	0.47
2:12:17:PHE:CE2	2:12:41:ILE:HD11	2.50	0.47
30:29:66:HIS:ND1	30:29:67:PHE:N	2.62	0.47
5:42:118:ILE:HG12	5:42:119:LEU:N	2.29	0.47
26:14:1753:G:N2	26:14:1755:A:H3'	2.30	0.47
1:13:1501:C:N4	1:13:1504:G:C2	2.83	0.47
46:G8:20:TYR:CE2	46:G8:43:ASN:HA	2.50	0.47
9:82:113:LYS:H	9:82:119:ALA:HB1	1.79	0.47
9:8E:70:LYS:O	9:8E:74:ILE:HG13	2.14	0.47
9:82:17:VAL:HG22	9:82:63:ILE:HG12	1.97	0.47
1:1G:1261:A:C2	1:1G:1275:A:H1'	2.50	0.47
27:1J:73:A:C4	27:1J:104:A:C2	3.03	0.47
7:62:70:LYS:O	7:62:138:LYS:HE2	2.15	0.47
26:14:977:G:H5'	26:14:1155:A:H4'	1.97	0.47
26:1H:1640:C:H2'	26:1H:1641:A:O4'	2.15	0.47
26:14:1285:G:C5	26:14:1329:U:C4	3.03	0.47
32:41:81:LYS:NZ	32:41:81:LYS:H	2.13	0.47
26:1H:1496:A:H5'	26:1H:1497:U:P	2.55	0.47
1:13:1179:A:O2'	9:8E:103:THR:HG23	2.14	0.47
32:49:76:SER:HG	32:49:84:LYS:H	1.60	0.47
26:14:1817:G:OP1	29:19:88:ARG:NH2	2.42	0.47
49:J8:85:LEU:HA	49:J8:85:LEU:HD13	1.59	0.47
29:19:10:THR:OG1	29:19:13:ARG:HB2	2.15	0.47
26:1H:918:A:N3	27:16:80:U:O2'	2.38	0.47
34:69:29:TYR:C	34:69:32:PRO:HD2	2.34	0.47
38:88:21:THR:HA	47:H8:78:LYS:HD3	1.96	0.47
35:15:58:ASP:N	35:15:58:ASP:OD1	2.48	0.47
1:13:814:A:N7	1:13:816:A:C4	2.83	0.47
45:F8:8:ILE:O	50:K8:36:ARG:NH2	2.48	0.47
5:42:34:VAL:HG21	5:42:63:ARG:HE	1.78	0.47
1:13:667:G:H8	1:13:667:G:O5'	1.97	0.47
26:1H:459:U:H4'	54:P8:40:TRP:CZ3	2.50	0.47
26:14:669:G:C2'	26:14:669:G:N3	2.78	0.47
2:1E:217:ARG:O	2:1E:220:ASP:HB2	2.14	0.47
1:13:1509:C:H2'	1:13:1510:U:O4'	2.15	0.47
4:32:25:ARG:NH2	4:32:30:LYS:HB2	2.30	0.47
9:8E:53:VAL:HG21	9:8E:92:TYR:CG	2.50	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:363(F):A:H8	26:14:363(F):A:OP2	1.97	0.47
26:14:2865:U:C4	26:14:2866:U:C4	3.03	0.47
1:1G:855:G:OP2	1:1G:871:U:N3	2.44	0.47
26:14:1562:A:H2'	26:14:1563:G:O4'	2.15	0.47
11:2I:124:LYS:HE3	11:2I:125:PHE:HE1	1.80	0.47
35:58:87:LEU:O	35:58:91:LEU:HD23	2.15	0.47
31:39:170:LEU:HD22	31:39:172:TRP:NE1	2.30	0.47
26:1H:1264:G:OP1	53:N8:19:ARG:NH1	2.46	0.47
36:25:104:ARG:HD2	41:75:36:GLU:HB2	1.96	0.47
4:3E:22:LYS:HB2	4:3E:26:CYS:SG	2.55	0.47
26:1H:831:G:N2	37:78:53:GLY:O	2.48	0.47
26:14:86:C:C2	26:14:87:C:C5	3.02	0.47
7:6E:13:GLN:O	7:6E:24:THR:HG21	2.15	0.47
1:1G:131:C:H2'	1:1G:132:C:C6	2.50	0.47
24:3K:1:G:N3	24:3K:1:G:H2'	2.28	0.47
26:1H:2753:A:H8	26:1H:2753:A:O5'	1.98	0.47
31:31:110:LEU:HD12	31:31:110:LEU:HA	1.67	0.47
37:78:27:HIS:ND1	37:78:27:HIS:N	2.62	0.47
1:13:818:G:HO2'	1:13:820:U:H6	1.60	0.47
29:19:255:LYS:HD3	29:19:255:LYS:O	2.15	0.47
38:45:26:TYR:HA	38:45:102:VAL:HG21	1.96	0.47
2:12:82:ARG:HD2	2:12:94:ASN:HD22	1.80	0.47
26:1H:1997:G:H5'	30:21:117:MET:CE	2.44	0.47
26:1H:1753:G:OP1	41:B8:95:ARG:NE	2.41	0.47
30:21:105:THR:HB	30:21:197:ILE:CG2	2.44	0.47
30:29:134:ILE:O	30:29:134:ILE:CD1	2.58	0.47
7:6E:15:ASP:OD1	7:6E:16:LEU:N	2.48	0.47
26:1H:1021:A:OP2	35:58:65:LYS:NZ	2.47	0.47
26:1H:1024:G:C6	26:1H:1025:G:C6	3.03	0.47
26:14:937:U:H6	26:14:937:U:O5'	1.98	0.47
26:1H:286:C:H2'	26:1H:287:C:H6	1.78	0.47
13:4I:40:ASN:HB3	13:4I:43:THR:OG1	2.15	0.47
29:11:26:LYS:HD2	29:11:29:PRO:CB	2.42	0.47
40:65:93:LYS:O	40:65:98:VAL:HG21	2.15	0.47
26:1H:848:G:H2'	26:1H:849:A:H8	1.76	0.47
1:1G:38:G:O2'	1:1G:39:G:H5''	2.15	0.47
27:1J:101:A:OP2	27:1J:101:A:H8	1.98	0.47
40:65:26:LEU:O	40:65:88:ASP:HB2	2.14	0.47
27:1J:5:C:H42	27:1J:115:G:H1	1.63	0.47
4:3E:78:LEU:HB3	4:3E:93:PHE:CE1	2.50	0.47
1:1G:1325:C:P	21:1B:15:ARG:HH21	2.37	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1423:G:H2'	26:14:1424:G:H8	1.80	0.47
1:1G:967:C:H2'	1:1G:968:A:C8	2.48	0.47
26:14:8:A:H2'	26:14:9:U:C5	2.50	0.47
37:35:86:LYS:HG3	37:35:87:ASP:H	1.79	0.47
30:29:98:PRO:HB3	30:29:173:VAL:O	2.15	0.47
44:A5:37:ARG:HG2	44:A5:38:TYR:CD1	2.50	0.47
39:98:10:LEU:O	39:98:11:ASN:C	2.53	0.47
1:13:155:C:H2'	1:13:156:G:C8	2.50	0.47
2:12:24:TRP:N	2:12:24:TRP:CD1	2.82	0.47
26:1H:7:G:H1	26:1H:2896:C:N4	2.13	0.47
1:13:198:G:H2'	1:13:199:G:H8	1.79	0.47
46:C5:17:SER:O	46:C5:21:LYS:HB2	2.15	0.47
47:H8:11:GLU:O	47:H8:36:LYS:HE3	2.15	0.47
1:13:1409:C:H2'	1:13:1410:G:C8	2.50	0.47
15:6A:39:LEU:CD1	15:6A:56:LEU:HB2	2.44	0.47
4:3E:131:ARG:O	4:3E:133:VAL:HG23	2.15	0.47
45:F8:27:THR:HB	45:F8:80:ILE:HB	1.97	0.47
26:14:2630:G:H3'	26:14:2631:G:H8	1.79	0.47
23:2L:9:G:O4'	23:2L:47:G7M:H1'	2.15	0.47
26:1H:1356:G:H2'	26:1H:1357:U:C6	2.50	0.47
4:3E:166:LYS:HB2	4:3E:178:VAL:HG11	1.97	0.47
26:1H:1005:C:H2'	26:1H:1006:C:C6	2.50	0.47
26:14:341:G:C6	26:14:342:G:C5	3.03	0.47
26:14:2340:G:H2'	26:14:2341:G:C8	2.50	0.47
26:1H:2510:C:H2'	26:1H:2511:U:C6	2.50	0.47
30:29:165:VAL:O	30:29:189:PRO:HG2	2.15	0.47
34:61:117:GLU:N	34:61:117:GLU:OE1	2.33	0.47
1:13:186(F):C:H5''	1:13:187:C:OP2	2.14	0.47
26:1H:1225:C:O2'	43:D8:85:LYS:HA	2.15	0.47
11:2I:21:ILE:HD12	11:2I:84:VAL:HG12	1.96	0.47
15:6I:17:ARG:HA	15:6I:17:ARG:NE	2.29	0.46
32:41:125:PHE:CD1	32:41:131:TYR:HB2	2.50	0.46
2:12:17:PHE:CZ	2:12:42:ILE:HG23	2.50	0.46
1:13:1152:A:H2'	1:13:1153:C:C6	2.50	0.46
42:85:90:VAL:O	42:85:92:ARG:N	2.48	0.46
27:1J:65:C:H41	27:1J:108:C:H2'	1.79	0.46
13:4A:55:ARG:HA	13:4A:58:GLU:HB3	1.97	0.46
4:32:107:ARG:HG2	4:32:174:LEU:CD1	2.46	0.46
4:32:110:PHE:H	4:32:110:PHE:HD1	1.63	0.46
30:21:166:THR:CG2	30:21:199:ARG:HH22	2.28	0.46
1:13:1263:C:O2'	1:13:1264:C:H5'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
52:M8:38:LYS:HA	52:M8:40:HIS:HB3	1.96	0.46
48:I8:23:VAL:HG13	48:I8:38:VAL:CG2	2.41	0.46
53:N8:40:LYS:HG3	53:N8:47:PRO:HD2	1.97	0.46
6:52:14:LEU:HB2	6:52:18:GLN:OE1	2.15	0.46
26:1H:1641:A:N6	26:1H:1642:G:C2	2.82	0.46
30:21:7:VAL:O	30:21:26:ILE:HG13	2.15	0.46
26:1H:1534:G:H2'	26:1H:1535:U:O4'	2.15	0.46
1:1G:1138:G:C6	1:1G:1140:C:H1'	2.50	0.46
27:1J:7:G:OP2	27:1J:7:G:H8	1.98	0.46
1:13:1117:G:H5''	9:8E:104:ARG:CZ	2.45	0.46
57:3L:33:U:H2'	57:3L:35:U:OP2	2.15	0.46
29:19:31:LYS:HZ1	29:19:33:LEU:HB2	1.79	0.46
33:51:156:ALA:O	33:51:157:TYR:HB2	2.15	0.46
26:14:2577:A:H2'	26:14:2614:A:N6	2.30	0.46
46:C5:38:ILE:HG12	46:C5:66:PRO:HA	1.96	0.46
35:15:30:ILE:O	35:15:34:LEU:CD2	2.63	0.46
29:19:16:MET:HE1	29:19:208:LYS:HE2	1.96	0.46
1:13:22:G:C6	1:13:23:C:C4	3.03	0.46
26:14:2168:G:H3'	26:14:2168:G:N3	2.30	0.46
15:6I:3:ILE:HG22	15:6I:38:ARG:HG3	1.95	0.46
1:13:724:G:O2'	1:13:725:G:H5'	2.15	0.46
47:D5:19:ARG:NH1	47:D5:84:GLU:HB2	2.29	0.46
36:25:7:TYR:CD1	36:25:20:MET:HB2	2.50	0.46
26:14:396:G:H8	26:14:396:G:O5'	1.98	0.46
1:1G:635:G:C2	1:1G:636:U:C2	3.03	0.46
26:14:588:U:H2'	26:14:589:C:C6	2.50	0.46
1:1G:186(C):G:H2'	1:1G:186(D):C:O4'	2.15	0.46
26:14:1392:A:N6	26:14:1393:A:N6	2.63	0.46
26:1H:1761:C:N4	26:1H:1762:A:H62	2.13	0.46
44:E8:29:LEU:HD13	44:E8:51:LEU:HD21	1.97	0.46
1:13:922:G:C6	1:13:923:A:C6	3.02	0.46
26:1H:931:G:C4	26:1H:933:A:C8	3.04	0.46
26:1H:2784:C:O2	30:21:37:ARG:NH1	2.47	0.46
1:1G:546:G:OP1	4:32:73:ARG:HB2	2.16	0.46
1:13:988:G:C2	1:13:1218:C:O2	2.69	0.46
26:14:829:A:N7	26:14:2248:C:H5'	2.30	0.46
37:78:82:GLY:HA2	37:78:113:LYS:O	2.14	0.46
26:1H:1682:G:C6	26:1H:1683:C:C4	3.04	0.46
1:13:1014:A:H4'	19:AI:14:HIS:CG	2.50	0.46
26:14:1655:A:H3'	26:14:1656:C:H6	1.80	0.46
1:1G:555:C:H2'	1:1G:556:C:C6	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:144:ASP:O	4:3E:184:LYS:HA	2.15	0.46
39:98:79:LEU:HA	39:98:83:ILE:HB	1.97	0.46
24:3K:74:C:H2'	24:3K:75:C:C6	2.50	0.46
35:15:50:ASP:O	35:15:52:VAL:HG23	2.15	0.46
27:16:50:G:OP1	40:A8:63:THR:HG23	2.14	0.46
26:14:399:G:O6	26:14:400:G:C2	2.68	0.46
31:31:16:GLY:HA3	31:31:18:ARG:HG3	1.97	0.46
20:BA:67:ALA:HB2	20:BA:77:ALA:HB2	1.95	0.46
11:2A:32:ILE:HD11	11:2A:68:ALA:HB1	1.98	0.46
12:3I:85:ILE:HA	12:3I:85:ILE:HD13	1.64	0.46
12:3A:47:LYS:CG	12:3A:48:PRO:HD2	2.45	0.46
26:1H:986:C:O2'	26:1H:987:G:H5'	2.15	0.46
26:14:272:G:H2'	26:14:273:G:O4'	2.15	0.46
26:1H:2553:G:H5''	26:1H:2554:U:OP2	2.15	0.46
38:45:35:VAL:HG12	38:45:36:ALA:N	2.29	0.46
32:41:67:LYS:CD	32:41:67:LYS:H	2.24	0.46
32:41:94:LEU:HA	32:41:98:ARG:HH12	1.80	0.46
17:8I:55:ASP:HB3	17:8I:57:VAL:HG13	1.97	0.46
22:1K:75:C:H2'	22:1K:76:A:C4	2.50	0.46
36:25:10:VAL:HG12	36:25:17:ARG:C	2.36	0.46
37:35:63:PRO:HD3	55:M5:27:THR:HG22	1.97	0.46
26:1H:1647:G:P	26:1H:1647:G:H3'	2.55	0.46
8:7E:112:LEU:HB2	8:7E:133:LEU:HA	1.97	0.46
4:32:191:ARG:HE	4:32:191:ARG:HA	1.81	0.46
41:75:126:ALA:HA	41:75:129:ARG:CD	2.42	0.46
13:4I:16:ASP:N	13:4I:16:ASP:OD1	2.48	0.46
1:1G:1262:C:H2'	1:1G:1263:C:O4'	2.16	0.46
26:1H:2358:G:H2'	26:1H:2359:C:H6	1.81	0.46
41:75:88:ILE:HD13	41:75:91:ARG:NH2	2.29	0.46
47:D5:29:TYR:O	47:D5:89:PHE:HA	2.15	0.46
4:32:13:ARG:C	4:32:15:GLU:H	2.18	0.46
1:13:1182:G:C8	1:13:1182:G:O5'	2.68	0.46
1:13:1178:G:H5''	9:8E:93:ARG:HH22	1.80	0.46
14:5I:23:ARG:HD2	14:5I:28:GLY:O	2.16	0.46
26:14:1786:A:H2	26:14:2606:C:H1'	1.79	0.46
2:1E:169:LYS:NZ	2:1E:191:ASP:OD2	2.38	0.46
26:1H:1568:G:H5''	29:11:61:LEU:HD23	1.97	0.46
1:1G:246:A:C4	1:1G:279:A:N6	2.84	0.46
26:14:740:U:H5''	26:14:1784:A:H3'	1.97	0.46
26:1H:1522:G:H2'	26:1H:1523:U:O4'	2.16	0.46
26:14:2378:A:H4'	40:65:23:ARG:NH1	2.25	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:31:95:ARG:HG3	31:31:97:TYR:CE1	2.50	0.46
26:14:2512:C:H1'	30:29:140:SER:O	2.15	0.46
26:14:1702:G:H2'	26:14:1703:G:O4'	2.15	0.46
26:14:853:G:O2'	26:14:854:G:H5'	2.15	0.46
1:1G:892:A:O2'	1:1G:1415:G:H4'	2.15	0.46
26:1H:2068:U:O4	26:1H:2430:A:C2	2.68	0.46
37:78:64:LYS:HZ2	37:78:68:GLN:HG3	1.81	0.46
1:13:1315:U:C5	1:13:1316:G:C5	3.03	0.46
26:1H:482:A:H5''	26:1H:483:A:OP1	2.15	0.46
1:13:64:G:H21	1:13:67:C:N4	2.13	0.46
26:14:107:C:C2	26:14:108:U:C5	3.03	0.46
40:A8:62:LYS:H	40:A8:62:LYS:HG2	1.39	0.46
8:7E:39:LEU:HB3	8:7E:45:ILE:HG12	1.95	0.46
26:1H:962:G:C2	26:1H:963:U:C2	3.02	0.46
1:1G:369:C:O2'	1:1G:370:C:H5'	2.15	0.46
8:7E:118:VAL:C	8:7E:119:LEU:HD23	2.36	0.46
8:7E:34:GLU:HB3	8:7E:118:VAL:HG21	1.97	0.46
26:14:1783:A:C2	26:14:2587:A:C5	3.03	0.46
47:D5:69:THR:CG2	47:D5:90:VAL:HG22	2.44	0.46
14:5I:29:ARG:HD3	14:5I:40:CYS:HB2	1.97	0.46
9:8E:26:VAL:HG22	9:8E:61:ALA:HB3	1.97	0.46
1:13:1288:A:O2'	1:13:1289:A:H5'	2.15	0.46
26:1H:686:G:H8	54:P8:6:GLN:O	1.98	0.46
6:52:72:VAL:HG13	6:52:73:ASN:H	1.80	0.46
26:1H:2017:U:O2	53:N8:10:LYS:HB2	2.15	0.46
26:1H:1586:A:H3'	26:1H:1587:A:H8	1.81	0.46
26:1H:2518:A:H8	26:1H:2518:A:H5'	1.80	0.46
26:14:2340:G:H2'	26:14:2341:G:H8	1.80	0.46
1:13:187:C:O2	1:13:191(A):G:C2	2.68	0.46
26:14:190:A:OP2	49:F5:39:LYS:NZ	2.47	0.46
2:1E:102:LEU:HB3	2:1E:180:LEU:HD12	1.96	0.46
40:65:95:HIS:N	40:65:99:LYS:HB2	2.30	0.46
32:41:59:GLU:O	32:41:63:ILE:HG23	2.16	0.46
26:1H:2227:A:C5	26:1H:2228:G:N7	2.84	0.46
3:2E:120:VAL:O	3:2E:122:GLU:N	2.49	0.46
18:9I:22:VAL:HA	18:9I:25:THR:OG1	2.16	0.46
9:82:56:LEU:HD23	9:82:56:LEU:H	1.80	0.46
30:21:134:ILE:C	30:21:134:ILE:HD12	2.36	0.46
3:22:139:GLN:O	3:22:139:GLN:NE2	2.48	0.46
37:35:7:ARG:CZ	37:35:7:ARG:HB2	2.43	0.46
26:1H:265:A:H1'	26:1H:266:G:O4'	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1292:U:P	9:82:39:GLY:HA3	2.54	0.46
30:29:54:GLN:N	30:29:74:PRO:HB3	2.29	0.46
1:1G:464:G:C6	1:1G:466:C:H5'	2.50	0.46
30:21:111:ARG:HD2	30:21:160:TYR:CD2	2.49	0.46
42:85:98:LEU:CB	42:85:102:GLU:HB2	2.45	0.46
7:62:109:ASN:HA	7:62:119:ARG:NH1	2.31	0.46
57:3L:70:C:C2'	57:3L:71:C:H5'	2.40	0.46
26:1H:2799:A:H5''	26:1H:2801:A:O5'	2.16	0.46
20:BI:67:ALA:HA	20:BI:72:LEU:O	2.15	0.46
26:14:1024:G:H8	26:14:1024:G:O5'	1.98	0.46
26:1H:270(V):G:H2'	26:1H:270(W):G:O4'	2.15	0.46
26:14:691:C:O4'	29:19:43:ARG:NH2	2.48	0.46
26:1H:2055:C:H6	26:1H:2055:C:H5''	1.80	0.46
19:AI:18:LYS:NZ	19:AI:22:LEU:HB2	2.30	0.46
26:1H:654(S):G:O2'	26:1H:654(T):A:H8	1.97	0.46
27:16:27:C:H5''	40:A8:54:LEU:HD21	1.97	0.46
44:E8:62:HIS:HB2	44:E8:64:MET:HG2	1.97	0.46
44:E8:58:ALA:CB	44:E8:64:MET:HG3	2.45	0.46
26:14:536:A:H2'	26:14:537:C:C6	2.51	0.46
26:14:2536:G:C6	26:14:2537:U:C4	3.04	0.46
26:14:871:U:OP1	38:45:5:ARG:NH1	2.48	0.46
16:7A:67:THR:HG22	16:7A:68:ASP:N	2.27	0.46
33:51:80:SER:O	33:51:81:GLU:CD	2.54	0.46
13:4I:82:MET:O	13:4I:84:ILE:N	2.45	0.46
6:52:1:MET:HB3	6:52:66:GLU:HG3	1.97	0.46
2:1E:30:ARG:HD3	2:1E:31:TYR:CE1	2.50	0.46
26:14:2648:C:H2'	26:14:2649:U:O4'	2.15	0.46
35:15:90:MET:HG3	35:15:98:VAL:HG12	1.98	0.46
23:2K:16:C:H5''	23:2K:17:C:C4	2.50	0.46
26:1H:447:A:C8	26:1H:473:G:C6	3.03	0.46
36:25:22:ILE:HB	36:25:40:VAL:O	2.15	0.46
1:1G:1065:U:H6	1:1G:1190:G:H21	1.64	0.46
1:1G:988:G:C6	1:1G:989:C:C4	3.04	0.46
26:1H:2029:G:H2'	26:1H:2031:A:OP1	2.16	0.46
26:14:1540:G:C2	26:14:1541:U:C2	3.03	0.46
1:1G:1286:A:H5'	21:1B:25:LYS:CD	2.45	0.46
26:14:1444(A):A:N3	26:14:1444(A):A:H2'	2.30	0.46
23:2L:19:G:O2'	23:2L:20:G:H5'	2.15	0.46
1:13:1074:G:C4	1:13:1102:A:C2	3.03	0.46
26:1H:768:G:H2'	26:1H:769:G:H8	1.80	0.46
39:55:58:GLY:HA2	39:55:80:PHE:HE2	1.80	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1350:A:H2'	1:1G:1351:U:O4'	2.16	0.46
1:1G:1478:C:H2'	1:1G:1479:C:H6	1.81	0.46
26:14:860:U:C2	26:14:2268:A:C8	3.04	0.46
29:19:132:PRO:HD3	29:19:190:TYR:CE2	2.49	0.46
41:75:99:LEU:HD22	41:75:101:PHE:CE1	2.50	0.46
38:45:20:ALA:HA	38:45:99:PRO:HG2	1.97	0.46
6:52:19:LEU:O	6:52:23:LYS:HG3	2.16	0.46
26:14:1654:A:H1'	26:14:2823:A:H5'	1.98	0.46
44:E8:35:ILE:HG23	53:N8:28:PRO:HD2	1.97	0.46
26:1H:1805:U:O2	29:11:50:THR:HB	2.15	0.46
11:2A:61:ALA:HB2	11:2A:90:GLY:HA3	1.97	0.46
20:BI:46:GLU:HB2	20:BI:48:LYS:HG3	1.97	0.46
1:13:784:C:H2'	1:13:785:G:O4'	2.15	0.46
1:13:1322:C:H5''	13:4I:100:GLY:HA2	1.97	0.46
26:1H:475:U:C4	26:1H:481:G:O6	2.68	0.46
26:14:1224:G:OP2	43:95:66:ARG:NH2	2.49	0.46
43:D8:33:VAL:O	43:D8:58:VAL:HA	2.15	0.46
1:1G:216:G:O2'	1:1G:217:C:O4'	2.32	0.46
26:14:235:U:H2'	26:14:236:C:C6	2.50	0.46
1:13:1483:A:O5'	1:13:1483:A:H8	1.98	0.46
26:14:2846:G:C5	26:14:2847:U:C4	3.04	0.46
29:19:255:LYS:HD2	29:19:255:LYS:N	2.30	0.46
3:22:36:ASP:OD1	3:22:57:ILE:HG21	2.14	0.46
15:6I:17:ARG:HG2	15:6I:26:GLU:HG3	1.98	0.46
25:4L:21:A:N6	25:4L:22:A:C6	2.83	0.46
1:13:626:U:H2'	1:13:627:G:H8	1.80	0.46
1:1G:848:C:N3	1:1G:849:C:C4	2.83	0.46
13:4A:34:LEU:HG	13:4A:35:GLU:H	1.81	0.46
14:5A:17:LYS:HZ3	14:5A:18:VAL:HG13	1.79	0.46
46:C5:12:THR:HA	46:C5:26:LYS:HA	1.98	0.46
37:35:3:LEU:O	37:35:6:LEU:HD23	2.15	0.46
26:1H:620:G:N2	26:1H:620:G:OP2	2.33	0.46
20:BI:30:LYS:HZ2	20:BI:33:ILE:HB	1.79	0.46
4:32:31:CYS:HB2	4:32:33:MET:O	2.16	0.46
27:1J:104:A:OP1	47:D5:72:ARG:NH1	2.48	0.46
9:8E:29:ASN:OD1	9:8E:65:VAL:N	2.47	0.46
1:13:736:C:C2	1:13:737:A:N7	2.84	0.46
26:1H:357:A:H2'	26:1H:358:U:H6	1.80	0.46
26:14:928:G:H2'	26:14:929:G:O4'	2.15	0.46
26:1H:2369:A:H2'	26:1H:2370:G:H8	1.80	0.46
29:11:83:GLU:OE2	29:11:104:TYR:OH	2.28	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:C8:93:LYS:H	42:C8:93:LYS:HG3	1.49	0.46
24:3K:44:U:H2'	24:3K:45:G:O3'	2.15	0.46
1:1G:1004:A:H2'	1:1G:1005:A:C2	2.51	0.46
4:3E:64:LEU:HD13	4:3E:198:VAL:HG21	1.97	0.46
4:32:111:ALA:HB1	4:32:116:GLN:OE1	2.16	0.46
1:1G:1305:G:O2'	1:1G:1306:A:H8	1.98	0.46
57:3L:21:A:H2'	57:3L:22:G:C8	2.51	0.46
6:5E:23:LYS:HA	6:5E:26:ILE:HD12	1.97	0.46
29:19:25:THR:OG1	29:19:26:LYS:N	2.47	0.46
37:35:114:ILE:HD11	37:35:130:PHE:HD2	1.80	0.46
37:35:47:ASP:HB3	37:35:50:ARG:H	1.81	0.46
29:11:2:ALA:HA	29:11:20:ASP:CB	2.45	0.46
26:1H:2854:G:H2'	26:1H:2855:C:C6	2.50	0.46
26:14:1886:C:OP2	26:14:1886:C:H6	1.98	0.46
1:13:1221:G:C6	1:13:1222:G:C5	3.03	0.46
26:14:2116:G:N1	26:14:2117:A:N6	2.63	0.46
7:62:20:ASP:HB3	7:62:23:VAL:HB	1.98	0.46
26:1H:1463:C:O5'	26:1H:1463:C:H6	1.99	0.46
3:22:59:ARG:NH2	3:22:97:LYS:NZ	2.63	0.46
38:88:19:GLY:O	38:88:21:THR:OG1	2.22	0.46
27:16:30:C:OP2	40:A8:32:LEU:HD11	2.14	0.46
18:9I:29:PHE:CE1	18:9I:31:LEU:HB3	2.51	0.46
26:14:1564:C:C2'	26:14:1565:C:H5'	2.45	0.46
26:14:1845:G:C2'	26:14:1846:G:H5'	2.45	0.46
29:11:113:VAL:O	29:11:113:VAL:HG13	2.16	0.46
26:1H:708:C:C6	26:1H:708:C:OP2	2.68	0.46
26:1H:1260:G:C6	26:1H:1261:C:C4	3.03	0.46
27:16:66:A:C2	27:16:108:C:C4	3.03	0.46
11:2I:116:HIS:N	11:2I:116:HIS:CD2	2.83	0.46
6:5E:67:MET:HE1	6:5E:75:LEU:HD12	1.97	0.46
1:1G:673:G:H2'	1:1G:674:G:C8	2.51	0.46
31:31:179:GLU:OE1	31:31:179:GLU:N	2.38	0.46
8:7E:12:ARG:HE	8:7E:26:VAL:HA	1.80	0.46
13:4I:23:TYR:CD1	13:4I:67:GLU:HB3	2.50	0.46
26:1H:2110:G:C5	26:1H:2120:G:C8	3.03	0.46
31:39:141:ALA:O	31:39:144:LYS:HB2	2.15	0.46
26:1H:15:G:C2	26:1H:16:G:C8	3.04	0.46
38:45:48:GLU:O	38:45:52:VAL:HG23	2.15	0.46
30:21:55:ASN:HB3	30:21:58:ARG:HD2	1.97	0.46
38:88:11:LYS:HE2	38:88:88:GLY:O	2.15	0.46
29:19:223:GLY:HA2	29:19:231:HIS:CD2	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:85:24:TYR:O	42:85:29:SER:HB3	2.15	0.46
7:62:99:LEU:HD13	7:62:103:TRP:CZ2	2.50	0.46
26:14:592:G:H1	26:14:665:C:H42	1.63	0.46
41:B8:65:LYS:O	41:B8:72:VAL:N	2.39	0.46
1:13:1260:C:H6	1:13:1260:C:H3'	1.80	0.46
37:78:120:ALA:CB	37:78:138:LEU:HA	2.46	0.46
31:31:164:ARG:HG3	31:31:175:THR:OG1	2.15	0.46
47:D5:166:SER:O	47:D5:168:GLU:N	2.45	0.46
1:13:1042:G:O2'	26:14:2137:C:O2	2.34	0.46
26:14:2134:A:H2'	26:14:2134:A:N3	2.31	0.46
41:B8:2:ASN:OD1	41:B8:2:ASN:N	2.48	0.46
1:13:477:G:H2'	1:13:478:A:H8	1.79	0.46
8:72:104:ARG:HB3	8:72:108:GLY:N	2.28	0.46
34:61:48:GLU:O	34:61:52:ARG:HG3	2.15	0.46
47:D5:52:SER:C	47:D5:54:HIS:H	2.18	0.46
47:D5:52:SER:O	47:D5:52:SER:OG	2.25	0.46
4:32:105:VAL:HG13	4:32:110:PHE:HB2	1.97	0.46
2:1E:234:PRO:HB2	2:1E:236:TYR:N	2.30	0.46
1:1G:87:A:O2'	1:1G:88:C:H5''	2.15	0.46
1:1G:1272:G:C5	1:1G:1273:G:C8	3.03	0.46
1:1G:1259:C:N4	1:1G:1275:A:H61	2.10	0.46
3:22:9:GLY:HA2	3:22:12:LEU:HB2	1.96	0.46
38:88:16:ARG:HB3	38:88:16:ARG:HE	1.34	0.46
26:14:1946:U:H2'	26:14:1947:C:C6	2.50	0.46
13:4I:9:ILE:HD13	13:4I:11:ARG:HH22	1.81	0.46
13:4A:84:ILE:HG23	19:AA:74:PHE:CE1	2.51	0.46
26:1H:592:G:O2'	55:Q8:4:MET:HB2	2.15	0.46
4:32:201:GLN:O	4:32:205:GLU:HB2	2.15	0.46
31:39:28:ILE:O	31:39:29:ASN:C	2.49	0.46
28:71:39:GLU:O	28:71:178:ALA:HB2	2.15	0.46
26:1H:974(A):C:H4'	26:1H:975:G:C5'	2.46	0.46
26:14:1167:U:H2'	26:14:1168:G:C8	2.50	0.46
26:14:2304:G:N2	26:14:2313:C:N4	2.64	0.46
9:82:73:GLN:O	9:82:77:ILE:HG13	2.16	0.46
26:1H:654(A):A:H2	26:1H:654(T):A:N1	2.13	0.46
26:1H:754:C:H2'	26:1H:755:C:C6	2.51	0.46
26:1H:1388:G:H2'	26:1H:1389:G:C8	2.51	0.46
57:3L:76:A:H8	26:14:2394:C:N4	2.14	0.46
1:1G:1298:C:H41	7:62:114:ARG:HB3	1.80	0.46
57:3L:15:G:H1'	57:3L:59:A:H61	1.81	0.46
1:13:413:G:O6	4:3E:35:ARG:HD3	2.15	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:889:A:N6	1:1G:907:A:H5''	2.30	0.46
26:14:2107:C:N3	26:14:2182:G:N2	2.64	0.46
7:62:3:ARG:H	7:62:3:ARG:HG2	1.61	0.46
1:1G:924:C:O2'	1:1G:1502:A:N6	2.49	0.46
31:39:88:VAL:HG23	31:39:89:VAL:O	2.15	0.46
3:2E:70:VAL:N	3:2E:106:VAL:HG23	2.30	0.46
13:4I:65:LYS:HG2	13:4I:70:LEU:HA	1.97	0.46
33:59:166:GLY:O	33:59:167:GLU:HG2	2.16	0.46
1:13:1434:A:H2'	1:13:1435:G:O4'	2.15	0.46
26:14:746:A:OP1	26:14:2612:C:C6	2.68	0.46
26:14:2646:C:H2'	26:14:2647:U:O4'	2.15	0.46
35:15:91:LEU:O	35:15:95:PRO:HB3	2.15	0.46
44:A5:88:ARG:NH1	44:A5:88:ARG:HG2	2.31	0.46
29:19:260:ARG:HH12	29:19:267:SER:HB3	1.79	0.46
30:29:33:VAL:HG12	30:29:89:ASP:H	1.81	0.46
1:1G:273:A:C5	1:1G:274:A:N7	2.83	0.46
40:A8:78:LEU:HD12	40:A8:108:GLY:CA	2.45	0.46
24:3K:36:U:H2'	24:3K:37:A:O4'	2.15	0.46
26:1H:2028:U:H2'	26:1H:2029:G:O4'	2.16	0.46
1:13:1288:A:H2'	1:13:1289:A:O4'	2.15	0.46
26:1H:616:A:C4	31:31:180:GLY:HA2	2.50	0.46
28:71:192:PHE:HA	28:71:195:ALA:HB3	1.98	0.46
26:1H:2259:G:N1	26:1H:2282:G:C6	2.84	0.46
1:13:1301:U:H2'	1:13:1301:U:O2	2.14	0.46
1:1G:238:G:C6	1:1G:239:U:C4	3.04	0.46
15:6I:18:PHE:CE1	15:6I:21:ASP:HB2	2.50	0.46
26:14:43:G:H1'	26:14:438:G:N2	2.30	0.46
7:6E:139:GLU:O	7:6E:142:GLU:N	2.49	0.46
26:14:774:A:H2	26:14:787:U:HO2'	1.60	0.46
27:16:63:G:C2	27:16:64:C:C2	3.03	0.46
35:58:121:LYS:HB3	35:58:123:TYR:HE1	1.81	0.46
40:A8:83:LYS:HA	40:A8:109:GLY:HA2	1.96	0.46
12:3A:7:ILE:O	12:3A:10:LEU:N	2.49	0.46
28:71:6:ARG:HG2	28:71:34:THR:HG21	1.97	0.46
1:1G:240:C:H6	1:1G:240:C:O5'	1.98	0.46
34:61:2:LYS:HE2	34:61:2:LYS:HB3	1.48	0.46
30:29:36:ARG:HH22	30:29:88:GLY:CA	2.28	0.46
18:9A:22:VAL:HG12	18:9A:55:ARG:O	2.16	0.46
27:16:15:A:OP1	27:16:15:A:C4'	2.64	0.46
1:1G:475:G:OP1	16:7A:81:ARG:NH2	2.49	0.46
27:1J:66:A:C6	27:1J:108:C:C5	3.03	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:B5:80:ILE:HG13	45:B5:80:ILE:O	2.16	0.46
1:1G:1205:U:H4'	3:22:195:VAL:HG13	1.96	0.46
26:14:154:G:N1	26:14:155:C:H1'	2.31	0.46
46:C5:99:CYS:SG	46:C5:100:ALA:N	2.88	0.46
33:59:65:HIS:O	33:59:68:THR:N	2.49	0.46
33:59:9:ILE:HB	33:59:10:PRO:CD	2.44	0.46
26:1H:945:A:C4	26:1H:2448:A:C2	3.04	0.46
9:8E:28:VAL:HA	9:8E:63:ILE:O	2.15	0.46
1:1G:364:A:H61	12:3A:28:LYS:HZ2	1.61	0.46
5:4E:146:ALA:HB1	5:4E:150:ARG:HH22	1.80	0.46
30:29:23:VAL:HA	30:29:184:VAL:O	2.15	0.46
23:2L:54:G:H2'	23:2L:55:5MU:H6	1.80	0.46
1:1G:1086:U:H2'	1:1G:1087:G:C8	2.45	0.46
1:13:691:G:H1	11:2I:51:LYS:HZ1	1.62	0.46
1:1G:888:G:H3'	1:1G:889:A:H2'	1.97	0.46
1:13:247:G:C4	1:13:248:C:C5	3.04	0.46
26:14:2331:G:H4'	48:E5:43:THR:N	2.29	0.46
34:69:72:LEU:HD21	34:69:107:VAL:HG11	1.97	0.46
1:1G:73:G:C2	1:1G:99:C:O2	2.69	0.46
26:14:2197:U:H1'	26:14:2198:A:C8	2.51	0.46
1:13:1318:A:H1'	19:AI:37:ARG:NE	2.29	0.46
47:H8:59:LEU:HD23	47:H8:59:LEU:HA	1.49	0.46
32:49:153:ARG:N	32:49:153:ARG:HD3	2.31	0.46
26:14:639:U:H2'	26:14:640:C:C6	2.51	0.46
1:1G:1145:C:H4'	1:1G:1146:A:O5'	2.16	0.46
26:1H:719:C:H2'	26:1H:720:C:H6	1.80	0.46
26:14:674:G:H1'	31:39:74:ARG:CD	2.45	0.46
27:16:44:G:N1	27:16:48:A:C2	2.84	0.46
1:1G:103:C:OP2	20:BA:17:ARG:NH2	2.49	0.46
26:1H:794:G:H2'	26:1H:795:C:C6	2.51	0.46
1:13:1409:C:H2'	1:13:1410:G:H8	1.80	0.46
19:AI:69:HIS:HB2	19:AI:74:PHE:CZ	2.51	0.46
1:13:835:U:H3	1:13:851:G:H1	1.63	0.46
1:1G:200:G:H1	1:1G:217:C:H42	1.63	0.46
35:58:57:ALA:O	35:58:58:ASP:OD2	2.33	0.46
26:1H:1202:C:N4	26:1H:1203:G:C6	2.84	0.46
1:1G:590:C:O2	1:1G:649:G:N2	2.45	0.46
26:14:1889:A:H2'	26:14:1890:A:O4'	2.16	0.46
8:7E:14:ARG:HG2	8:7E:18:ARG:HH21	1.81	0.46
32:41:168:GLU:HG3	32:41:168:GLU:H	1.38	0.46
4:32:63:LYS:HE3	4:32:63:LYS:HB2	1.83	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:9I:36:ASN:N	18:9I:36:ASN:OD1	2.39	0.46
50:G5:32:LEU:HA	50:G5:53:LEU:HD13	1.97	0.46
43:D8:43:GLU:HA	43:D8:43:GLU:OE2	2.16	0.46
26:1H:996:A:H4'	42:C8:92:ARG:HG2	1.97	0.46
26:1H:323:G:H2'	31:31:169:ASN:ND2	2.31	0.46
26:1H:270(J):G:C6	26:1H:270(K):C:H1'	2.51	0.46
1:1G:1329:A:H4'	13:4A:24:GLY:HA2	1.97	0.46
37:35:15:ARG:HG3	37:35:16:ARG:NH1	2.30	0.46
41:B8:26:ASP:HB2	41:B8:90:GLN:O	2.14	0.46
46:G8:43:ASN:HB2	46:G8:67:LEU:HD11	1.97	0.46
9:82:121:ARG:NH1	9:82:122:ALA:O	2.49	0.46
1:13:131:C:O2	1:13:131:C:H2'	2.16	0.46
26:14:1665:A:H2'	26:14:1666:G:O4'	2.16	0.46
26:14:569:U:H5'	26:14:946:G:H1'	1.98	0.46
5:4E:102:ALA:HA	5:4E:120:THR:OG1	2.15	0.46
34:61:71:ILE:HG23	34:61:72:LEU:N	2.31	0.46
26:1H:1728:G:O6	26:1H:1730:U:H5'	2.15	0.46
26:1H:1567:A:H5'	29:11:58:HIS:ND1	2.30	0.46
1:1G:749:C:O2'	1:1G:750:G:H5'	2.15	0.46
38:45:74:TYR:O	38:45:89:ASN:HA	2.15	0.46
26:1H:2144:U:O2'	26:1H:2148:G:N2	2.48	0.46
26:1H:442:G:H4'	31:31:46:ARG:HG3	1.98	0.46
7:6E:88:PRO:HB3	7:6E:145:ALA:O	2.15	0.46
26:14:28:A:O2'	26:14:29:U:H5'	2.16	0.46
1:1G:1399:C:H4'	1:1G:1400:C:O5'	2.16	0.46
32:49:5:VAL:HG12	32:49:104:GLU:OE1	2.15	0.46
29:19:11:PRO:O	29:19:12:SER:OG	2.18	0.46
26:14:2187:G:C6	26:14:2188:C:C4	3.03	0.46
26:1H:1827:C:H2'	26:1H:1828:G:H5'	1.96	0.46
19:AI:58:VAL:HG11	19:AI:75:ALA:HB1	1.97	0.46
26:1H:1930:G:O2'	26:1H:1931:U:P	2.74	0.46
1:13:725:G:O2'	1:13:726:C:H5'	2.16	0.46
26:14:589:C:H5''	31:39:95:ARG:HH12	1.79	0.46
1:1G:709:G:H2'	1:1G:710:G:C8	2.50	0.46
32:49:20:ILE:H	32:49:20:ILE:HG13	1.63	0.46
1:1G:1229:A:H2'	1:1G:1230:C:C6	2.50	0.46
29:11:231:HIS:CD2	29:11:249:PRO:HA	2.51	0.46
37:78:96:THR:O	37:78:98:GLU:N	2.44	0.46
1:1G:1350:A:C2	1:1G:1351:U:C2	3.03	0.46
6:52:42:GLU:OE1	6:52:59:TYR:HE1	1.99	0.46
51:L8:6:VAL:O	51:L8:34:GLU:HA	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:949:A:C6	1:1G:1233:G:C2	3.03	0.46
26:14:111:A:C2	26:14:112:U:C2	3.03	0.46
26:14:761:A:C8	61:14:3569:HOH:O	2.68	0.46
31:31:160:ASN:CG	31:31:163:VAL:HG23	2.35	0.46
5:42:105:VAL:HG21	5:42:128:PRO:HB3	1.97	0.46
26:1H:1670:C:H3'	26:1H:1671:U:C6	2.51	0.46
1:13:1338:G:C6	1:13:1339:A:C6	3.03	0.46
11:2I:34:ASP:HB3	11:2I:40:ILE:HD11	1.98	0.46
34:69:116:LEU:HD21	34:69:119:PRO:HA	1.97	0.46
1:13:748:C:O5'	1:13:748:C:H6	1.99	0.46
26:1H:1929:G:H5''	26:1H:1929:G:N3	2.30	0.46
37:78:83:VAL:HG12	37:78:112:LEU:HD21	1.97	0.46
26:14:2831:G:OP1	30:29:58:ARG:NH1	2.41	0.46
26:14:1356:G:C5	26:14:1357:U:C5	3.04	0.46
5:42:76:ILE:HG23	5:42:142:LEU:HD13	1.97	0.46
26:1H:2315:G:C5'	26:1H:2316:C:OP2	2.64	0.46
1:1G:746:A:H4'	1:1G:837:G:O2'	2.16	0.46
36:25:13:ASN:C	36:25:15:GLY:H	2.19	0.46
37:35:63:PRO:HD3	55:M5:27:THR:CG2	2.46	0.46
26:1H:1257:C:O2'	31:31:83:PHE:HA	2.16	0.46
39:98:42:LYS:HA	39:98:45:ARG:HD2	1.97	0.46
26:1H:1359:A:N1	26:1H:1372:U:C4	2.83	0.46
1:1G:1219:U:H3'	1:1G:1220:G:H8	1.79	0.46
1:1G:942:G:H2'	1:1G:943:U:H6	1.80	0.46
16:7A:20:VAL:HG12	16:7A:35:LYS:HA	1.98	0.46
26:1H:270(I):G:H21	26:1H:270(R):G:H1'	1.80	0.46
1:13:1128:C:H1'	1:13:1146:A:H61	1.81	0.46
26:1H:1442:G:C2	26:1H:1443:G:C4	3.03	0.46
26:14:2120:G:C2	26:14:2121:G:C8	3.04	0.46
1:13:344:A:H8	1:13:346:G:O6	1.98	0.46
29:19:37:LEU:HD12	29:19:37:LEU:C	2.36	0.46
32:49:47:LYS:HD3	32:49:81:LYS:HG3	1.97	0.46
26:1H:1796:U:H2'	26:1H:1797:C:C6	2.50	0.46
26:1H:1337:G:H2'	26:1H:1338:G:C8	2.49	0.46
26:1H:443:A:C6	31:31:45:ARG:HD2	2.51	0.46
6:5E:14:LEU:HB3	6:5E:18:GLN:HB3	1.98	0.46
9:82:24:GLY:HA2	9:82:59:PHE:O	2.16	0.46
26:1H:1692:U:O2	26:1H:1696:G:C2	2.68	0.46
26:1H:2174:C:H2'	28:71:218:MET:SD	2.56	0.46
27:1J:46:A:C8	27:1J:47:C:C5	3.04	0.46
41:B8:50:ILE:CD1	41:B8:64:ARG:HB3	2.46	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1418:G:H8	26:1H:1418:G:O5'	1.99	0.46
26:1H:1592:C:H2'	26:1H:1593:G:H8	1.81	0.46
1:1G:1414:U:H2'	1:1G:1415:G:H8	1.77	0.46
26:1H:579:G:H2'	26:1H:580:C:C6	2.50	0.46
26:1H:582:G:H2'	26:1H:583:G:H8	1.80	0.46
26:14:1542:G:O5'	26:14:1543:A:H5''	2.16	0.46
39:98:2:ARG:NH2	39:98:5:LYS:O	2.49	0.46
1:13:720:C:C4	1:13:721:G:C5	3.04	0.46
56:1L:18:G:H1'	56:1L:19:G:H5'	1.98	0.46
8:7E:45:ILE:HB	8:7E:47:GLY:H	1.80	0.46
41:B8:48:ILE:HD13	41:B8:114:LEU:HD12	1.98	0.46
26:14:2557:G:H2'	26:14:2558:C:C6	2.51	0.46
1:13:928:G:C2	1:13:1390:U:O2	2.69	0.46
1:13:1289:A:N1	1:13:1371:G:O2'	2.39	0.46
1:1G:550:G:C6	1:1G:551:U:C4	3.04	0.46
1:1G:195:A:N6	1:1G:196:A:N1	2.63	0.46
1:1G:804:U:H5''	1:1G:805:C:OP2	2.16	0.46
1:13:1207:G:C5	1:13:1208:C:C5	3.03	0.46
31:39:178:PRO:HB2	31:39:201:VAL:HG11	1.98	0.46
1:13:643:C:H2'	1:13:644:G:H8	1.80	0.46
26:14:1716:U:H2'	26:14:1717:G:H8	1.79	0.46
26:14:753:C:OP2	26:14:753:C:C6	2.69	0.46
26:14:2006:C:O2'	26:14:2823:A:N3	2.44	0.46
1:1G:818:G:H1'	1:1G:820:U:H5	1.80	0.46
10:1I:26:ALA:N	10:1I:29:ARG:HH21	2.14	0.46
1:1G:742:G:H2'	1:1G:743:U:O4'	2.15	0.46
17:8I:13:ASP:HA	17:8I:19:VAL:HG12	1.97	0.46
15:6I:64:ARG:HH12	15:6I:68:ARG:NH2	2.14	0.46
26:14:1782:C:H1'	26:14:2609:U:O4'	2.15	0.46
1:1G:250:A:N3	1:1G:250:A:H5'	2.31	0.46
1:13:1111:A:H8	1:13:1111:A:O5'	1.99	0.46
34:69:117:GLU:CD	34:69:117:GLU:H	2.19	0.46
46:G8:94:LYS:HD2	46:G8:94:LYS:HA	1.58	0.46
32:49:103:LEU:HB3	32:49:178:PHE:CE2	2.51	0.46
5:42:30:ALA:O	5:42:45:PHE:HB2	2.16	0.46
31:31:138:GLU:O	31:31:141:ALA:N	2.37	0.46
1:13:1080:A:H5'	5:4E:14:ARG:HH21	1.81	0.46
13:4A:29:ARG:HD2	13:4A:64:TRP:CH2	2.50	0.46
2:1E:183:PRO:HA	2:1E:198:ASP:OD2	2.16	0.46
26:1H:1279:G:N2	26:1H:1292:U:C2	2.84	0.46
4:32:173:TRP:HB2	4:32:187:ARG:O	2.16	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2130:U:O2	26:1H:2134:A:O2'	2.31	0.46
33:51:125:VAL:HG22	33:51:131:VAL:HG23	1.97	0.46
1:1G:1186:G:C2	1:1G:1187:G:H1'	2.50	0.46
26:14:155:C:N3	26:14:171:G:C2	2.84	0.46
1:13:1160:G:H2'	1:13:1160:G:N3	2.30	0.46
1:13:708:C:OP1	11:2I:85:ARG:NH2	2.35	0.46
26:14:748:G:H3'	61:14:3589:HOH:O	2.16	0.46
26:14:1198:U:H2'	26:14:1199:U:C5	2.49	0.46
1:1G:407:G:O4'	4:32:119:GLN:NE2	2.49	0.46
35:58:94:HIS:C	35:58:95:PRO:O	2.54	0.46
49:J8:52:ARG:NH2	49:J8:55:GLY:O	2.48	0.46
1:13:1377:A:H2'	7:6E:7:ALA:CB	2.46	0.46
13:4A:61:GLU:OE1	32:49:113:ARG:NH2	2.48	0.46
26:1H:66:C:O2'	26:1H:67:U:H5'	2.16	0.46
56:1L:54:5MU:O5'	56:1L:54:5MU:H6	1.99	0.46
16:7A:36:ILE:O	16:7A:36:ILE:CG1	2.64	0.46
4:32:89:THR:HB	5:42:97:GLY:O	2.15	0.46
43:95:85:LYS:HB3	43:95:87:HIS:N	2.30	0.46
26:1H:2443:C:O2'	26:1H:2444:G:H5'	2.14	0.46
36:25:64:ARG:HB2	36:25:83:ALA:HB3	1.96	0.46
5:4E:57:LYS:HA	5:4E:60:TYR:HB3	1.98	0.46
1:1G:424:G:H8	1:1G:424:G:O5'	1.99	0.46
45:B5:26:TYR:HB3	45:B5:92:LEU:HD22	1.98	0.46
26:1H:768:G:H2'	26:1H:769:G:C8	2.51	0.46
26:14:1480:G:C6	26:14:1482:U:C4	3.04	0.46
26:1H:2564:A:OP1	26:1H:2648:C:H4'	2.16	0.46
16:7I:50:LYS:HG2	16:7I:51:VAL:N	2.31	0.46
26:1H:2013:A:H2'	26:1H:2014:A:H5'	1.98	0.46
9:8E:59:PHE:HZ	9:8E:88:TYR:CD1	2.34	0.46
1:13:104:G:C2	1:13:105:G:C8	3.03	0.46
1:1G:864:A:P	1:1G:864:A:H8	2.38	0.46
2:12:185:ILE:CG1	2:12:199:TYR:HB2	2.46	0.46
12:3A:88:GLY:O	12:3A:99:HIS:HD2	1.98	0.46
54:L5:24:THR:O	54:L5:28:ARG:HG3	2.16	0.46
39:98:103:ARG:NH1	44:E8:40:ASN:OD1	2.49	0.46
5:42:107:ARG:O	5:42:111:GLU:N	2.44	0.46
1:13:1317:C:P	14:5I:17:LYS:HE3	2.56	0.46
26:1H:1503:U:C5	26:1H:1504:C:H5	2.33	0.46
1:1G:1420:C:H6	1:1G:1420:C:O5'	1.99	0.46
1:1G:10:A:H2'	1:1G:10:A:N3	2.30	0.46
32:49:123:ASN:O	32:49:123:ASN:ND2	2.41	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:C8:92:ARG:HD3	42:C8:94:ASN:HB3	1.97	0.46
38:45:102:VAL:O	38:45:102:VAL:HG12	2.16	0.46
1:13:837:G:C2	1:13:850:U:O2	2.69	0.46
5:42:103:GLY:C	5:42:106:PRO:HD2	2.36	0.46
26:1H:2016:U:OP1	61:1H:3557:HOH:O	2.21	0.46
16:7A:45:THR:O	16:7A:48:TRP:HD1	1.99	0.46
1:1G:1128:C:H5''	9:82:16:ARG:NH2	2.23	0.46
1:1G:1263:C:H3'	1:1G:1264:C:H6	1.80	0.46
1:1G:1076:C:N4	1:1G:1081:G:H1	2.07	0.46
43:95:71:LEU:HA	43:95:71:LEU:HD13	1.51	0.46
1:13:1178:G:H8	9:8E:97:LYS:NZ	2.14	0.46
26:1H:356:G:H2'	26:1H:357:A:C8	2.51	0.46
2:1E:114:ARG:HE	2:1E:118:LEU:HD21	1.81	0.46
12:3A:27:LEU:HD12	12:3A:33:ARG:HG2	1.98	0.46
26:1H:1453:A:O2'	26:1H:1454:U:H2'	2.16	0.46
1:1G:1002:G:C6	1:1G:1003:G:H1'	2.50	0.46
1:1G:1490:C:H2'	1:1G:1491:G:O4'	2.16	0.46
33:51:9:ILE:HB	33:51:49:VAL:HB	1.98	0.46
3:22:61:ALA:O	3:22:63:ASN:N	2.49	0.46
41:B8:107:ASP:OD1	41:B8:109:GLU:HB2	2.15	0.46
44:E8:58:ALA:HB1	44:E8:64:MET:CG	2.46	0.46
1:1G:1240:U:N3	7:62:32:ARG:HG3	2.32	0.46
26:14:26:G:C6	26:14:27:G:N1	2.84	0.46
26:1H:569:U:H5''	26:1H:821:A:C2	2.50	0.46
26:1H:836:G:H3'	26:1H:837:C:H6	1.81	0.46
26:1H:1652:A:N6	39:98:11:ASN:OD1	2.49	0.46
5:4E:15:ARG:NH1	25:4K:25:A:H1'	2.31	0.46
8:7E:81:HIS:HB2	8:7E:138:TRP:CE3	2.51	0.46
55:Q8:37:SER:C	55:Q8:39:LYS:N	2.68	0.46
31:39:7:TYR:HE2	31:39:10:PRO:HG2	1.81	0.46
4:3E:79:PHE:CZ	4:3E:204:ILE:HA	2.51	0.46
4:3E:20:TYR:CE2	6:52:15:ASP:HB2	2.51	0.46
26:1H:2321:G:H5''	26:1H:2322:A:OP2	2.16	0.46
1:1G:836:G:C6	1:1G:851:G:C6	3.04	0.46
47:H8:10:ARG:HD3	47:H8:38:TYR:HB3	1.97	0.46
1:1G:538:G:H5''	12:3A:114:LYS:HB2	1.98	0.46
32:49:31:VAL:O	32:49:33:ARG:HG3	2.16	0.46
34:69:101:LEU:H	34:69:101:LEU:HD23	1.81	0.46
15:6I:24:SER:HB3	15:6I:27:VAL:HG23	1.98	0.46
1:1G:4:U:H4'	1:1G:5:U:OP1	2.16	0.46
26:14:210:C:H2'	26:14:211:A:C8	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:862:C:H1'	1:1G:874:G:H5''	1.96	0.46
26:14:1799:G:O6	29:19:178:PRO:HD2	2.16	0.46
50:G5:33:MET:HG3	50:G5:37:PHE:HE1	1.80	0.46
20:BA:60:GLU:OE1	20:BA:85:MET:HE1	2.15	0.46
49:J8:81:LYS:HD3	49:J8:81:LYS:HA	1.35	0.46
27:1J:74:U:H2'	27:1J:75:G:C8	2.51	0.46
26:14:807:U:H2'	26:14:808:G:O5'	2.16	0.46
32:49:106:LEU:HA	32:49:110:ALA:HB3	1.98	0.45
37:35:52:GLU:CD	37:35:52:GLU:H	2.15	0.45
40:A8:61:ASN:O	40:A8:65:VAL:HG23	2.16	0.45
37:78:49:ARG:HH12	37:78:50:ARG:HH22	1.64	0.45
40:A8:26:LEU:CD2	40:A8:87:PHE:HD1	2.28	0.45
26:14:676:A:H1'	26:14:2443:C:H1'	1.97	0.45
1:13:476:G:H2'	1:13:477:G:C8	2.51	0.45
1:13:963:G:H4'	61:13:1858:HOH:O	2.16	0.45
26:1H:2593:U:H2'	26:1H:2594:C:C6	2.52	0.45
33:51:4:ILE:CG1	33:51:6:ARG:HD3	2.45	0.45
26:1H:1753:G:N1	26:1H:1756:G:C2	2.84	0.45
27:1J:15:A:H1'	27:1J:109:G:C4	2.52	0.45
8:7E:86:ILE:HG22	8:7E:87:SER:N	2.27	0.45
23:2L:23:G:H2'	23:2L:24:C:C6	2.51	0.45
1:1G:942:G:C2	1:1G:1342:C:C2	3.04	0.45
26:14:901:A:H3'	26:14:902:C:C6	2.51	0.45
28:71:181:PRO:O	28:71:185:LEU:HB2	2.17	0.45
13:4I:14:ARG:HD3	13:4I:16:ASP:OD1	2.15	0.45
1:1G:1275:A:H2'	1:1G:1276:G:H8	1.81	0.45
1:13:131:C:O2'	1:13:262:A:N3	2.35	0.45
1:1G:1016:A:O5'	14:5A:15:LYS:NZ	2.47	0.45
41:75:91:ARG:HB2	41:75:121:ILE:HG12	1.99	0.45
1:13:1175:G:H2'	1:13:1176:A:C8	2.51	0.45
1:13:1128:C:H2'	1:13:1139:G:O6	2.17	0.45
1:13:186(B):C:H4'	20:BI:89:ARG:NH1	2.30	0.45
35:58:17:ASP:O	35:58:56:ASN:HB2	2.16	0.45
17:8A:9:VAL:O	17:8A:21:VAL:HA	2.17	0.45
26:14:2120:G:H2'	26:14:2120:G:N3	2.31	0.45
29:11:63:ARG:HG2	29:11:92:ILE:HD13	1.98	0.45
1:1G:1068:G:N3	1:1G:1191:A:C2	2.84	0.45
26:1H:2572:A:N7	30:21:145:LYS:HB2	2.31	0.45
26:1H:1337:G:C4	26:1H:1338:G:C8	3.05	0.45
32:41:96:ARG:HH11	32:41:96:ARG:CB	2.23	0.45
27:1J:117:G:N1	27:1J:118:G:N7	2.63	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:442:G:C4	26:1H:444:C:C5	3.04	0.45
57:3L:76:A:C8	26:14:2394:C:N4	2.84	0.45
1:1G:1298:C:H4'	1:1G:1299:A:C5	2.51	0.45
12:3I:24:VAL:HB	12:3I:27:LEU:HD12	1.97	0.45
31:39:182:ASN:HD21	31:39:185:ASP:CG	2.19	0.45
26:1H:2166:G:O2'	26:1H:2168:G:OP2	2.31	0.45
33:51:126:PRO:HG2	33:51:130:ARG:NH1	2.27	0.45
15:6A:10:LYS:O	15:6A:13:GLN:HB2	2.16	0.45
8:72:20:TYR:HA	8:72:65:TYR:CZ	2.51	0.45
1:13:168:G:H21	1:13:169:C:H5	1.63	0.45
27:1J:93:C:C4	27:1J:94:C:C5	3.04	0.45
2:1E:30:ARG:HD3	2:1E:31:TYR:CZ	2.52	0.45
26:1H:152:G:H2'	26:1H:153:C:C6	2.51	0.45
35:15:91:LEU:HA	35:15:91:LEU:HD23	1.57	0.45
1:1G:57:G:C6	1:1G:58:C:C4	3.05	0.45
26:1H:1401:G:H2'	26:1H:1402:C:H6	1.78	0.45
1:1G:596:C:H2'	1:1G:597:G:H8	1.79	0.45
8:7E:34:GLU:OE2	8:7E:37:ARG:HD3	2.15	0.45
26:14:708:C:H42	26:14:723:G:H1	1.64	0.45
1:1G:951:G:N2	1:1G:1231:G:C4	2.84	0.45
26:1H:459:U:H2'	26:1H:460:A:C8	2.51	0.45
26:14:194:G:H2'	26:14:195:A:O4'	2.15	0.45
26:1H:528:A:N1	26:1H:2042:A:H2'	2.31	0.45
26:14:2256:G:H2'	26:14:2257:U:O4'	2.17	0.45
18:9A:30:ASP:HB3	18:9A:33:ASP:HB2	1.96	0.45
6:52:97:PHE:CB	18:9A:32:ARG:HG3	2.45	0.45
12:3I:66:VAL:HG21	12:3I:98:TYR:CE1	2.51	0.45
26:1H:2151:G:H2'	26:1H:2152:G:H8	1.81	0.45
31:39:83:PHE:C	31:39:85:GLY:H	2.19	0.45
26:1H:880:G:H8	26:1H:895:U:O4	1.99	0.45
26:1H:479:A:HO2'	26:1H:481:G:H8	1.60	0.45
34:61:124:GLY:H	34:61:142:VAL:HG23	1.81	0.45
45:B5:67:GLY:C	45:B5:69:TYR:H	2.19	0.45
26:1H:606:U:H4'	26:1H:658:C:H4'	1.98	0.45
1:13:895:G:H2'	1:13:896:C:C6	2.51	0.45
26:14:1963:U:OP2	26:14:1963:U:H4'	2.15	0.45
1:1G:160:A:H2'	1:1G:161:A:O4'	2.15	0.45
32:49:96:ARG:C	32:49:98:ARG:H	2.19	0.45
26:14:2137:C:C4	26:14:2138:C:C4	3.05	0.45
26:14:1992:G:O5'	26:14:1992:G:H8	1.98	0.45
24:3K:19:G:H1	26:1H:2112:G:H1'	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2784:C:H2'	26:14:2785:C:C6	2.51	0.45
31:31:139:PHE:HB2	31:31:166:ALA:HB1	1.97	0.45
36:25:96:THR:O	36:25:117:LEU:HD21	2.16	0.45
57:3L:56:C:H2'	57:3L:57:G:C8	2.50	0.45
26:1H:2392:A:C8	37:78:61:ARG:HD2	2.51	0.45
41:B8:12:SER:OG	41:B8:15:VAL:HG13	2.17	0.45
46:G8:36:ALA:HB1	46:G8:67:LEU:O	2.16	0.45
8:72:8:ASP:O	8:72:12:ARG:N	2.43	0.45
9:8E:40:LEU:HD11	9:8E:70:LYS:HB3	1.97	0.45
52:M8:14:ILE:HG23	52:M8:21:VAL:HB	1.97	0.45
1:1G:1217:C:H2'	1:1G:1218:C:C2	2.50	0.45
1:1G:1081:G:H2'	1:1G:1082:G:C8	2.51	0.45
4:32:13:ARG:HD2	4:32:38:TYR:O	2.16	0.45
42:85:70:ARG:CZ	42:85:75:ASN:HB3	2.47	0.45
16:7A:1:MET:HE2	16:7A:2:VAL:N	2.31	0.45
20:BA:97:ALA:HA	20:BA:98:PRO:HD3	1.71	0.45
29:11:30:GLU:HG3	29:11:63:ARG:CZ	2.46	0.45
5:4E:144:THR:HG22	5:4E:145:LYS:HD2	1.97	0.45
30:21:47:VAL:O	30:21:80:GLU:HA	2.16	0.45
1:1G:1489:G:H2'	1:1G:1490:C:O4'	2.15	0.45
26:14:2313:C:O4'	32:49:40:ASN:ND2	2.49	0.45
1:1G:638:G:H2'	1:1G:639:G:H8	1.81	0.45
26:14:1586:A:C2	26:14:1587:A:C5	3.05	0.45
23:2L:54:G:C2	23:2L:55:5MU:C2	3.05	0.45
27:16:4:C:N4	27:16:116:G:H1	2.12	0.45
26:14:2888:C:H2'	26:14:2889:C:C6	2.51	0.45
1:1G:1237:C:OP1	1:1G:1238:A:H1'	2.16	0.45
1:13:690:G:H2'	1:13:691:G:O4'	2.16	0.45
26:1H:67:U:H2'	26:1H:68:G:C8	2.52	0.45
26:1H:74:A:C8	26:1H:74:A:H5''	2.51	0.45
1:13:1072:G:C6	1:13:1073:U:C4	3.04	0.45
1:1G:646:U:H2'	1:1G:647:C:C6	2.51	0.45
26:14:2108:C:OP1	26:14:2151:G:H5'	2.17	0.45
34:69:76:THR:HG21	34:69:140:LEU:HD13	1.97	0.45
1:13:373:A:C2	1:13:482:A:C6	3.04	0.45
26:1H:2729:G:H2'	26:1H:2730:C:C6	2.52	0.45
7:62:16:LEU:HD21	9:82:45:ALA:HB2	1.98	0.45
1:1G:722:A:C8	1:1G:724:G:H1'	2.51	0.45
26:1H:2821:A:H2'	26:1H:2822:G:O4'	2.16	0.45
23:2K:16:C:H2'	23:2K:17:C:C5	2.51	0.45
1:1G:1224:G:H22	1:1G:1323:G:H5'	1.81	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:13:ARG:HH22	41:75:77:PRO:HB3	1.81	0.45
5:4E:152:ARG:HA	8:7E:64:LYS:HE2	1.98	0.45
12:3A:12:ARG:HD3	12:3A:12:ARG:HH11	1.63	0.45
4:3E:110:PHE:CE2	4:3E:148:VAL:HG23	2.50	0.45
1:1G:690:G:H2'	1:1G:691:G:O4'	2.16	0.45
11:2I:78:GLN:O	11:2I:103:LEU:HD12	2.16	0.45
1:1G:882:C:O2'	1:1G:883:C:H5'	2.16	0.45
5:4E:45:PHE:CE2	5:4E:47:LYS:HE3	2.52	0.45
1:1G:1099:G:C6	1:1G:1100:C:N3	2.84	0.45
1:1G:1349:A:H2'	1:1G:1350:A:O4'	2.15	0.45
13:4A:67:GLU:HG3	13:4A:68:GLY:H	1.80	0.45
2:12:87:ARG:HH22	2:12:216:SER:HB2	1.82	0.45
15:6A:84:LYS:HE2	15:6A:84:LYS:HB2	1.77	0.45
26:1H:618:G:H2'	26:1H:618(A):C:C6	2.51	0.45
26:1H:343:C:C2'	26:1H:344:G:H5'	2.46	0.45
26:1H:2746:U:O4'	33:51:139:GLN:HG2	2.16	0.45
26:1H:1690:A:C8	26:1H:1691:C:C6	3.05	0.45
8:7E:60:ARG:HH11	8:7E:60:ARG:HB2	1.80	0.45
1:13:678:U:H2'	1:13:679:C:C6	2.51	0.45
26:1H:1003:G:C2	26:1H:1004:C:C4	3.05	0.45
26:1H:1003:G:N2	26:1H:1004:C:C2	2.84	0.45
26:1H:1655:A:H3'	26:1H:1656:C:H6	1.81	0.45
5:4E:10:MET:CB	5:4E:32:VAL:HG22	2.45	0.45
26:14:214:G:OP1	26:14:214:G:H4'	2.15	0.45
1:13:186:C:O2'	20:BI:85:MET:SD	2.69	0.45
1:1G:317:G:H1	1:1G:336:C:N4	2.14	0.45
30:21:175:VAL:HG12	30:21:177:PRO:HD3	1.98	0.45
40:A8:88:ASP:O	40:A8:89:ARG:CG	2.65	0.45
9:82:46:ALA:HB2	9:82:74:ILE:CG2	2.47	0.45
28:71:215:THR:OG1	28:71:219:GLY:O	2.35	0.45
1:13:452:A:O2'	16:7I:72:ARG:HG3	2.16	0.45
1:13:1199:U:H5'	10:1I:54:PHE:CE2	2.52	0.45
5:42:89:ILE:HD12	5:42:122:GLU:HA	1.99	0.45
31:39:192:LEU:O	31:39:193:VAL:HG23	2.15	0.45
36:25:13:ASN:C	36:25:15:GLY:N	2.69	0.45
36:25:17:ARG:HG2	36:25:47:ILE:HD13	1.98	0.45
41:B8:12:SER:CB	41:B8:15:VAL:HG13	2.47	0.45
4:32:121:VAL:O	4:32:134:ASP:HA	2.17	0.45
26:14:928:G:C2	26:14:929:G:H1'	2.52	0.45
26:1H:2287:A:N3	26:1H:2289:G:C8	2.84	0.45
26:1H:661:C:O2'	37:78:13:ASN:HA	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:259:G:N2	26:14:621:A:C8	2.81	0.45
1:1G:1072:G:C2	1:1G:1073:U:C2	3.04	0.45
37:78:18:ARG:O	37:78:19:VAL:O	2.33	0.45
26:14:2261:C:O2'	26:14:2262:U:H5'	2.17	0.45
26:1H:1536:A:H5''	26:1H:1537:C:H5	1.81	0.45
26:1H:1534:G:H21	26:1H:1538:G:N2	2.14	0.45
26:14:2173:A:HO2'	26:14:2174:C:P	2.36	0.45
42:C8:80:ILE:O	42:C8:84:LYS:N	2.44	0.45
1:1G:389:A:H5'	1:1G:390:C:OP2	2.17	0.45
26:1H:1604:C:C5'	61:1H:4029:HOH:O	2.61	0.45
26:1H:744:G:H1	26:1H:753:C:H42	1.64	0.45
26:1H:1993:U:H4'	30:21:128:SER:HB3	1.98	0.45
46:C5:42:VAL:HG12	46:C5:67:LEU:CD2	2.46	0.45
1:1G:186:C:N4	1:1G:186(A):C:H41	2.14	0.45
26:14:1729:A:C6	26:14:1731:G:C5	3.04	0.45
53:N8:9:LYS:HA	53:N8:9:LYS:HD3	1.84	0.45
26:14:142:G:H1'	45:B5:37:THR:CG2	2.45	0.45
26:14:90:U:O2'	26:14:91:A:H8	1.98	0.45
16:7I:28:ARG:HG3	16:7I:29:ASP:H	1.79	0.45
26:14:1040:C:H5''	47:D5:46:LYS:NZ	2.32	0.45
38:88:32:TYR:CE1	38:88:133:ARG:HD3	2.47	0.45
26:1H:2820:A:P	39:98:2:ARG:HH12	2.39	0.45
23:2K:64:G:O5'	23:2K:64:G:H8	1.99	0.45
41:75:61:PHE:N	41:75:61:PHE:CD1	2.84	0.45
1:13:658:G:C6	1:13:659:U:C4	3.05	0.45
35:15:56:ASN:HA	35:15:58:ASP:OD1	2.16	0.45
26:14:671:C:OP1	37:35:42:SER:O	2.33	0.45
41:B8:19:LEU:HD23	41:B8:19:LEU:HA	1.68	0.45
26:1H:900:A:H2'	26:1H:901:A:C8	2.51	0.45
19:AA:56:GLN:HE22	19:AA:59:PRO:CG	2.28	0.45
49:J8:40:ARG:NH2	49:J8:41:ARG:O	2.49	0.45
43:95:61:VAL:HG12	43:95:62:LEU:O	2.16	0.45
42:85:65:ILE:O	42:85:68:ALA:N	2.49	0.45
26:1H:1680:U:O2'	26:1H:1763:G:N7	2.35	0.45
42:C8:49:HIS:HA	42:C8:52:ARG:HG2	1.97	0.45
1:1G:998(A):C:H1'	1:1G:1042:G:H1	1.81	0.45
50:K8:63:VAL:HA	50:K8:66:GLU:HG2	1.99	0.45
26:14:2680:C:H5'	30:29:189:PRO:HA	1.99	0.45
26:14:111:A:C6	26:14:112:U:C4	3.04	0.45
1:13:929:G:C6	1:13:930:C:C4	3.04	0.45
31:31:40:GLN:OE1	31:31:184:TYR:HB2	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1767:C:C2'	26:14:1768:U:H5'	2.47	0.45
27:16:52:A:N6	40:A8:33:LYS:HD2	2.30	0.45
48:E5:48:GLY:HA3	48:E5:80:HIS:CE1	2.51	0.45
29:19:146:GLU:HB2	29:19:189:CYS:HB3	1.98	0.45
41:B8:66:VAL:HA	41:B8:71:GLY:HA2	1.97	0.45
26:14:1144:G:C6	26:14:1145:C:N4	2.84	0.45
36:68:8:LEU:HD13	36:68:8:LEU:HA	1.76	0.45
55:Q8:38:GLY:O	55:Q8:42:ARG:HB3	2.16	0.45
1:1G:153:C:H42	1:1G:168:G:H1	1.63	0.45
32:49:103:LEU:H	32:49:103:LEU:HG	1.31	0.45
1:1G:992:U:H4'	1:1G:993:G:O5'	2.16	0.45
1:1G:1370:G:O2'	1:1G:1371:G:H5'	2.16	0.45
31:39:63:LYS:HA	31:39:76:GLY:O	2.16	0.45
2:12:73:THR:HG21	2:12:97:TRP:H	1.81	0.45
1:1G:456:C:N3	1:1G:476:G:N2	2.60	0.45
26:14:654(A):A:H2'	26:14:654(T):A:C6	2.51	0.45
26:14:2716:U:H2'	26:14:2717:G:C8	2.51	0.45
44:E8:80:PRO:HD2	44:E8:100:THR:HG21	1.98	0.45
55:Q8:6:THR:HG23	55:Q8:64:TYR:CD2	2.36	0.45
1:13:189:U:C2	17:8I:72:ARG:NH1	2.85	0.45
4:32:61:LYS:HE3	4:32:62:GLN:HG2	1.99	0.45
13:4A:96:LEU:HD13	13:4A:97:PRO:CD	2.46	0.45
1:13:1347:G:N2	1:13:1373:G:H2'	2.31	0.45
32:41:111:LEU:HB3	32:41:117:PHE:CE2	2.50	0.45
26:1H:1439:A:C8	26:1H:1440:G:C8	3.05	0.45
1:1G:1184:G:O5'	1:1G:1184:G:H8	1.99	0.45
26:1H:2058:A:C6	26:1H:2059:A:N6	2.84	0.45
1:1G:364:A:H61	12:3A:28:LYS:NZ	2.14	0.45
18:9A:84:LYS:N	18:9A:84:LYS:HD3	2.25	0.45
46:G8:61:ILE:HG21	46:G8:63:LYS:HD3	1.96	0.45
34:69:60:GLU:HG3	34:69:61:ARG:N	2.30	0.45
26:14:1785:A:H4'	26:14:1982:C:O2'	2.15	0.45
26:14:1697:G:OP2	26:14:1698:A:O2'	2.23	0.45
19:AI:18:LYS:NZ	19:AI:22:LEU:HD13	2.27	0.45
45:F8:29:TRP:CZ3	45:F8:78:LYS:HD3	2.52	0.45
12:3I:86:ARG:HD3	12:3I:86:ARG:HH11	1.60	0.45
26:1H:1230:C:H2'	26:1H:1231:G:H8	1.79	0.45
26:14:2593:U:H2'	26:14:2594:C:C6	2.50	0.45
26:14:315:G:C5	26:14:316:C:C5	3.04	0.45
26:14:2115:G:N2	26:14:2116:G:O6	2.50	0.45
1:1G:830:G:H2'	1:1G:831:U:O4'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
39:55:97:VAL:HA	39:55:113:LEU:O	2.16	0.45
4:3E:148:VAL:HG12	4:3E:149:ALA:O	2.16	0.45
1:1G:66:G:C2	1:1G:67:C:C6	3.04	0.45
26:14:241:A:H5'	26:14:243:U:O4'	2.17	0.45
26:1H:611:C:H2'	26:1H:612:G:O4'	2.16	0.45
26:14:104:U:H3'	26:14:105:C:H6	1.81	0.45
26:14:686:G:N2	26:14:788:A:H61	2.15	0.45
22:1K:60:U:H3'	22:1K:61:C:C5	2.51	0.45
26:1H:633:A:H2'	26:1H:634:C:H5'	1.97	0.45
36:25:50:GLY:H	36:25:53:LYS:HE3	1.82	0.45
1:13:1320:C:O2	19:AI:36:ARG:NH2	2.46	0.45
26:1H:2745:C:O2	33:51:139:GLN:NE2	2.49	0.45
31:31:192:LEU:HD23	31:31:193:VAL:H	1.82	0.45
30:29:39:PRO:HA	30:29:43:GLY:CA	2.47	0.45
26:14:1478:G:C2	26:14:1479:G:C8	3.04	0.45
26:1H:902:C:O2'	26:1H:903:C:H5'	2.16	0.45
26:1H:1812:A:O2'	29:11:45:ASN:N	2.45	0.45
4:32:45:GLN:O	4:32:46:LYS:HG3	2.17	0.45
35:15:36:GLY:H	35:15:42:TRP:HZ3	1.64	0.45
31:31:64:ILE:HD12	31:31:64:ILE:HA	1.57	0.45
26:14:1668:A:C8	26:14:1674:G:C6	3.05	0.45
9:82:86:VAL:CG1	9:82:90:PRO:HA	2.46	0.45
47:H8:101:PRO:O	47:H8:102:LEU:HD23	2.16	0.45
1:1G:1047:G:H1	1:1G:1210:C:H42	1.64	0.45
26:1H:78:A:C2	26:1H:109:G:C2	3.04	0.45
29:19:145:VAL:HG22	29:19:191:ALA:HB1	1.98	0.45
48:I8:36:ILE:HD12	48:I8:36:ILE:C	2.36	0.45
37:78:2:LYS:HE2	37:78:2:LYS:HB2	1.80	0.45
44:A5:23:LEU:HD12	44:A5:23:LEU:HA	1.71	0.45
1:13:181:G:N2	1:13:183:G:H22	2.14	0.45
46:G8:89:PHE:HD1	46:G8:90:LEU:N	2.14	0.45
32:49:143:GLU:OE2	32:49:143:GLU:N	2.50	0.45
26:1H:2379:G:O2'	40:A8:17:ARG:NH1	2.50	0.45
26:14:2636:U:H3	26:14:2782:G:H1	1.63	0.45
1:13:474:G:C4	1:13:475:G:C8	3.04	0.45
1:1G:1359:C:H5'	14:5A:22:THR:OG1	2.16	0.45
1:1G:54:C:O2	1:1G:357:G:N2	2.36	0.45
4:32:108:LEU:HD21	4:32:183:GLY:HA3	1.99	0.45
1:1G:983:A:H2	1:1G:984:C:C6	2.34	0.45
1:1G:1368:G:H5'	9:82:112:LYS:HD2	1.98	0.45
1:13:1239:A:H4'	1:13:1240:U:H5''	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1349:A:C2	1:13:1350:A:H1'	2.52	0.45
26:1H:71:A:H4'	26:1H:72:U:H5''	1.99	0.45
30:29:102:VAL:HB	30:29:199:ARG:O	2.17	0.45
26:1H:1515:C:H2'	26:1H:1516:U:C6	2.51	0.45
26:1H:52:A:H2'	26:1H:53:A:O4'	2.16	0.45
53:N8:40:LYS:HE2	53:N8:47:PRO:CD	2.47	0.45
29:11:83:GLU:OE2	29:11:104:TYR:CE1	2.69	0.45
34:69:130:TYR:C	34:69:131:LYS:HD2	2.36	0.45
26:1H:566:U:H4'	26:1H:809:G:OP2	2.17	0.45
45:F8:24:GLY:H	45:F8:82:GLN:HE22	1.65	0.45
42:C8:108:GLU:HG3	43:D8:44:LYS:HE2	1.98	0.45
26:1H:1042:G:H1	26:1H:1113:U:H3	1.64	0.45
4:3E:90:GLY:O	4:3E:93:PHE:HB3	2.16	0.45
27:16:116:G:H2'	27:16:117:G:O4'	2.17	0.45
26:14:1680:U:H2'	26:14:1681:G:O4'	2.16	0.45
1:13:621:A:H2'	1:13:622:A:O4'	2.16	0.45
26:14:307:G:O2'	26:14:309:G:N7	2.40	0.45
32:49:37:VAL:O	32:49:94:LEU:HB2	2.16	0.45
7:62:69:VAL:HG21	7:62:104:LEU:CD1	2.46	0.45
7:62:65:ALA:HB1	7:62:127:ALA:HB3	1.99	0.45
26:1H:1416:G:H2'	26:1H:1417:C:C5	2.51	0.45
26:1H:916:G:C2'	26:1H:917:A:H5''	2.47	0.45
1:13:1318:A:H1'	19:AI:37:ARG:HH21	1.81	0.45
47:D5:80:ARG:N	47:D5:80:ARG:HD2	2.32	0.45
26:1H:709:U:H2'	26:1H:710:G:C8	2.51	0.45
26:14:950:G:C6	26:14:951:C:C4	3.04	0.45
30:21:17:ASP:C	30:21:19:ARG:H	2.19	0.45
26:1H:1420:U:O2'	26:1H:1421:G:P	2.74	0.45
5:4E:69:VAL:O	5:4E:71:LEU:HD12	2.17	0.45
26:14:2582:G:C2	26:14:2583:G:C8	3.04	0.45
29:19:177:LEU:HA	29:19:177:LEU:HD23	1.70	0.45
26:14:2256:G:C5	26:14:2257:U:C5	3.05	0.45
2:1E:97:TRP:CH2	2:1E:176:GLU:OE2	2.69	0.45
26:14:860:U:C1'	26:14:2268:A:H5'	2.47	0.45
26:1H:2663:G:H3'	26:1H:2664:G:H8	1.82	0.45
9:82:19:LEU:HB2	9:82:87:GLN:OE1	2.15	0.45
26:1H:1815:A:C5	26:1H:1817:G:C6	3.03	0.45
26:1H:2139:C:N4	26:1H:2152:G:H1	2.14	0.45
26:14:213:A:H5''	26:14:214:G:OP2	2.17	0.45
26:14:2021:C:OP1	53:J5:12:SER:OG	2.27	0.45
26:1H:803:U:C4	26:1H:804:A:N7	2.85	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:2K:73:A:C6	23:2K:74:A:C6	3.05	0.45
26:14:571:A:H5'	26:14:2030:A:N7	2.32	0.45
26:14:2219:G:OP1	29:19:172:TYR:OH	2.32	0.45
4:3E:36:ARG:HB3	4:3E:38:TYR:CZ	2.52	0.45
34:61:7:GLU:HA	34:61:15:VAL:HG22	1.99	0.45
1:13:303:A:C6	1:13:304:U:C4	3.04	0.45
26:1H:488:G:N2	26:1H:492:A:OP2	2.49	0.45
26:14:1505:C:H2'	26:14:1506:C:C6	2.51	0.45
26:1H:771:G:N7	61:1H:3622:HOH:O	2.35	0.45
35:15:93:THR:HG22	35:15:94:HIS:CE1	2.51	0.45
11:2A:51:LYS:HB3	11:2A:51:LYS:HE2	1.77	0.45
46:C5:9:LYS:HG2	46:C5:10:GLY:N	2.32	0.45
26:14:441:U:H2'	26:14:442:G:C8	2.52	0.45
50:K8:57:ILE:HG22	50:K8:61:LEU:HD12	1.97	0.45
17:8I:53:LEU:HB3	17:8I:82:MET:SD	2.56	0.45
17:8A:76:LEU:HD11	17:8A:79:SER:HB3	1.98	0.45
46:G8:94:LYS:CG	46:G8:95:LYS:N	2.78	0.45
9:82:69:GLY:O	9:82:72:GLY:N	2.45	0.45
30:29:53:PRO:CA	30:29:74:PRO:HB3	2.45	0.45
26:1H:2177:C:O4'	28:71:44:HIS:CD2	2.70	0.45
28:71:212:VAL:CG2	28:71:226:PRO:HG3	2.43	0.45
1:13:509:A:H5'	4:3E:54:TYR:HD2	1.82	0.45
10:1I:54:PHE:CZ	10:1I:55:LYS:NZ	2.80	0.45
1:13:963:G:N2	10:1I:55:LYS:NZ	2.65	0.45
26:1H:321:G:H5''	31:31:136:THR:HG23	1.98	0.45
26:1H:270(N):G:H21	34:61:50:ARG:HH22	1.65	0.45
26:1H:1048:A:H5'	26:1H:1049:C:OP2	2.17	0.45
27:1J:21:G:H1	27:1J:62:C:N4	2.15	0.45
13:4A:34:LEU:HG	13:4A:35:GLU:N	2.32	0.45
45:B5:12:VAL:HG22	45:B5:27:THR:O	2.17	0.45
1:1G:615:C:H2'	1:1G:616:G:C8	2.52	0.45
49:J8:93:GLU:OE2	49:J8:94:LEU:CD1	2.64	0.45
47:D5:39:VAL:HG21	47:D5:44:PHE:CD2	2.51	0.45
1:13:1507:A:OP2	25:4K:12:A:H2	1.99	0.45
24:3K:33:U:C2'	24:3K:34:U:O5'	2.64	0.45
26:1H:850:C:H5''	51:L8:18:ASP:HB2	1.98	0.45
26:1H:2653:U:C4	26:1H:2654:A:C5	3.05	0.45
32:41:110:ALA:HA	32:41:140:ILE:O	2.17	0.45
1:1G:1010:G:H2'	1:1G:1011:G:C8	2.51	0.45
52:M8:47:GLN:OE1	52:M8:47:GLN:N	2.50	0.45
20:BI:35:THR:HG22	20:BI:38:LYS:NZ	2.31	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6I:39:LEU:O	15:6I:42:HIS:N	2.49	0.45
26:14:816:C:H2'	26:14:817:C:C6	2.52	0.45
13:4I:9:ILE:HB	32:41:146:TYR:HE2	1.81	0.45
26:1H:116:C:H2'	26:1H:117:G:C8	2.51	0.45
29:11:30:GLU:CD	29:11:63:ARG:HE	2.15	0.45
1:1G:445:G:N2	1:1G:490:G:N3	2.65	0.45
1:1G:1256:A:P	3:22:27:LYS:HZ1	2.37	0.45
12:3I:117:ARG:HB2	12:3I:117:ARG:CZ	2.45	0.45
26:1H:2061:G:N2	26:1H:2063:C:C2	2.84	0.45
26:14:1418:G:O5'	26:14:1418:G:H8	1.99	0.45
26:14:1090:U:N3	26:14:1102:C:O2	2.47	0.45
16:7I:21:VAL:HG23	16:7I:33:ILE:HB	1.97	0.45
20:BI:49:ALA:O	20:BI:52:ALA:N	2.50	0.45
1:1G:631:G:O5'	8:72:98:LYS:NZ	2.47	0.45
26:14:2180:U:H2'	26:14:2181:G:C8	2.51	0.45
26:1H:329:G:H8	26:1H:329:G:OP1	2.00	0.45
7:6E:17:VAL:HG13	7:6E:18:TYR:H	1.82	0.45
4:32:82:ALA:HB3	4:32:89:THR:HG23	1.98	0.45
4:32:82:ALA:HB1	4:32:89:THR:HA	1.99	0.45
26:1H:2330:G:H2'	26:1H:2331:G:O4'	2.16	0.45
48:E5:46:LYS:HA	48:E5:47:PRO:HD3	1.65	0.45
26:14:814:C:OP1	43:95:83:ARG:HG2	2.16	0.45
13:4I:35:GLU:C	13:4I:38:GLY:H	2.17	0.45
29:19:133:LEU:HD13	29:19:173:VAL:HG21	1.98	0.45
46:G8:9:LYS:HA	46:G8:27:VAL:CG2	2.46	0.45
29:19:118:VAL:HG22	29:19:119:ALA:N	2.32	0.45
1:13:1497:G:C2'	1:13:1498:U:H5'	2.47	0.45
26:14:1910:G:H1	26:14:1920:C:H42	1.65	0.45
1:1G:715:A:H2'	1:1G:716:A:C8	2.52	0.45
44:E8:70:TYR:HD1	44:E8:70:TYR:N	2.14	0.45
7:62:146:GLU:CG	7:62:147:ALA:H	2.29	0.45
6:5E:72:VAL:HG13	6:5E:73:ASN:N	2.32	0.45
26:14:1668:A:O2'	26:14:1674:G:N7	2.37	0.45
1:13:830:G:H2'	1:13:831:U:O4'	2.17	0.45
26:14:2766:G:H5''	26:14:2767:C:OP2	2.16	0.45
32:41:21:ARG:HH11	32:41:22:ARG:HG3	1.82	0.45
1:1G:1419:G:C6	1:1G:1482:G:C2	3.05	0.45
28:71:14:VAL:HG13	28:71:222:VAL:HB	1.98	0.45
20:BI:59:ALA:O	20:BI:62:LEU:N	2.49	0.45
37:78:24:GLY:O	37:78:25:SER:HB3	2.16	0.45
29:19:261:LYS:HE3	29:19:263:ARG:NH2	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6I:63:ARG:HG2	15:6I:67:LEU:HD12	1.98	0.45
42:85:83:LEU:HD21	42:85:113:ALA:HB2	1.98	0.45
2:12:16:HIS:N	2:12:16:HIS:CD2	2.84	0.45
29:19:73:VAL:O	29:19:75:ILE:HG13	2.17	0.45
26:14:270(X):G:O6	26:14:270(Y):G:N1	2.50	0.45
46:G8:88:LYS:HA	46:G8:88:LYS:HD3	1.77	0.45
26:1H:250:G:C6	26:1H:251:A:C6	3.05	0.45
1:1G:1345:U:H4'	1:1G:1346:A:H5''	1.98	0.45
1:1G:1348:U:OP2	1:1G:1373:G:N1	2.47	0.45
26:1H:863:A:H2'	26:1H:864:G:H8	1.81	0.45
28:71:193:ILE:HD13	28:71:226:PRO:O	2.17	0.45
26:14:2786:U:H5''	30:29:66:HIS:CD2	2.52	0.45
30:29:37:ARG:HA	30:29:42:ASP:OD2	2.16	0.45
26:14:275:G:N2	26:14:276:A:H62	2.15	0.45
26:1H:992:C:H2'	26:1H:993:G:C8	2.50	0.45
9:8E:47:LEU:H	9:8E:47:LEU:CD2	2.28	0.45
1:1G:1359:C:H1'	1:1G:1362:C:H41	1.81	0.45
14:5A:22:THR:O	14:5A:29:ARG:HG2	2.16	0.45
37:35:79:ARG:HG2	37:35:110:TYR:CB	2.37	0.45
1:1G:619:U:C2	4:32:135:LEU:HD21	2.52	0.45
16:7A:48:TRP:CE3	16:7A:49:LEU:HB2	2.52	0.45
27:1J:15:A:H1'	27:1J:109:G:N9	2.32	0.45
1:1G:959:A:H5''	1:1G:960:U:OP2	2.17	0.45
29:11:108:PRO:HA	29:11:196:VAL:O	2.17	0.45
1:1G:1127:G:H2'	1:1G:1128:C:H6	1.82	0.45
46:C5:104:GLY:HA2	46:C5:105:ALA:HA	1.78	0.45
46:C5:82:PRO:HB3	46:C5:99:CYS:HB3	1.97	0.45
1:13:734:G:C6	1:13:735:C:C4	3.04	0.45
31:31:134:GLY:HA3	31:31:162:LEU:O	2.17	0.45
20:BA:39:LYS:O	20:BA:43:LEU:HG	2.17	0.45
2:1E:88:ALA:HB2	2:1E:219:VAL:HG13	1.99	0.45
27:1J:10:C:C4	27:1J:11:C:C5	3.05	0.45
30:21:35:GLN:CG	30:21:36:ARG:N	2.79	0.45
8:72:51:VAL:HG11	8:72:60:ARG:HE	1.80	0.45
1:13:54:C:N4	1:13:353:A:OP2	2.38	0.45
1:13:1442:G:C6	1:13:1446:A:C6	3.05	0.45
40:A8:106:ARG:O	40:A8:106:ARG:NH1	2.48	0.45
26:1H:2453:A:H2'	26:1H:2454:G:O4'	2.17	0.45
1:1G:1078:U:H1'	5:42:130:ASN:OD1	2.16	0.45
1:13:112:G:C2	1:13:330:C:N4	2.85	0.45
4:32:50:ARG:HH11	5:42:10:MET:HE2	1.82	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:192:U:C1'	20:BI:103:GLY:HA2	2.46	0.45
1:1G:1240:U:O2'	1:1G:1241:G:OP1	2.33	0.45
26:1H:2848:G:H8	41:B8:97:ALA:HB2	1.80	0.45
26:14:1389:G:H2'	26:14:1390:U:H6	1.82	0.45
26:14:2190:G:N3	26:14:2191:G:H1'	2.31	0.45
1:13:221:C:H2'	1:13:222:U:C6	2.47	0.45
26:1H:569:U:C4	26:1H:570:G:C6	3.04	0.45
37:35:47:ASP:HB3	37:35:48:PRO:CA	2.47	0.45
33:51:30:LYS:HZ2	33:51:81:GLU:H	1.63	0.45
37:78:62:LEU:O	55:Q8:13:ARG:HD3	2.17	0.45
26:14:353:G:N3	26:14:354:G:C8	2.85	0.45
26:14:853:G:H2'	26:14:854:G:H8	1.79	0.45
1:13:1304:G:C5	1:13:1305:G:C6	3.04	0.45
3:22:59:ARG:HB3	3:22:64:VAL:HG23	1.98	0.45
33:51:109:PHE:CE1	33:51:152:ARG:NH2	2.83	0.45
49:F5:25:LYS:HA	49:F5:29:GLY:HA2	1.98	0.45
1:1G:989:C:H6	1:1G:989:C:OP2	2.00	0.45
26:1H:2108:C:H2'	26:1H:2109:U:O4'	2.16	0.45
13:4I:34:LEU:HD23	13:4I:39:ILE:HB	1.98	0.45
13:4I:39:ILE:CD1	13:4I:56:LEU:HD22	2.47	0.45
26:14:725:G:C6	26:14:726:G:C6	3.04	0.45
11:2I:73:MET:HE1	11:2I:102:GLY:HA3	1.98	0.45
27:1J:99:A:C5	27:1J:100:G:N7	2.85	0.45
29:19:236:GLY:O	29:19:237:GLU:O	2.35	0.45
37:78:91:PHE:N	37:78:91:PHE:HD1	2.15	0.45
26:14:360:G:H2'	26:14:361:G:C8	2.51	0.45
26:14:1412:A:H2'	26:14:1413:G:C8	2.52	0.45
2:1E:208:ILE:HA	2:1E:211:ILE:CD1	2.46	0.45
1:1G:123:C:OP1	1:1G:312:C:H5'	2.16	0.45
1:1G:1357:A:N7	1:1G:1358:U:N3	2.65	0.45
26:14:2209:C:O2	26:14:2216:G:C2	2.70	0.45
26:14:2:G:N3	26:14:2:G:H2'	2.31	0.45
26:14:227:A:C2	26:14:2407:G:H1'	2.52	0.45
1:13:355:C:H2'	1:13:356:A:O4'	2.17	0.45
31:39:23:ASP:OD1	31:39:23:ASP:N	2.49	0.45
46:G8:21:LYS:HE2	46:G8:21:LYS:HB3	1.70	0.45
3:22:190:ARG:O	3:22:190:ARG:HG2	2.16	0.45
56:1L:9:A:H4'	56:1L:10:G:OP2	2.16	0.45
30:29:7:VAL:HG12	30:29:8:LYS:H	1.82	0.45
32:49:105:LYS:HZ2	32:49:106:LEU:HD11	1.82	0.45
26:1H:2376:A:H2'	26:1H:2377:A:O4'	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:A8:88:ASP:O	40:A8:90:GLY:N	2.50	0.45
5:42:78:HIS:HB2	8:72:104:ARG:HG3	1.99	0.45
29:11:31:LYS:HA	29:11:31:LYS:HD2	1.85	0.45
13:4A:56:LEU:O	13:4A:60:VAL:HG22	2.17	0.45
39:98:104:ARG:HB3	39:98:107:ASP:HB3	1.97	0.45
50:G5:22:GLU:O	50:G5:25:VAL:HG22	2.17	0.45
37:35:11:GLY:O	37:35:12:ALA:HB3	2.17	0.45
1:13:510:A:H5''	1:13:511:C:P	2.57	0.45
57:3L:5:C:H2'	57:3L:6:G:C8	2.51	0.45
1:1G:1206:G:C6	1:1G:1207:G:C6	3.04	0.45
1:1G:1081:G:H5''	5:42:18:ARG:HG3	1.98	0.45
5:42:27:ARG:NH1	5:42:47:LYS:HZ3	2.13	0.45
16:7A:3:LYS:O	16:7A:21:VAL:HA	2.16	0.45
26:14:1140:C:H4'	26:14:1143:A:C6	2.52	0.45
26:14:812:C:H5''	26:14:1250:G:O2'	2.17	0.45
26:14:840:C:H42	26:14:938:G:H1	1.63	0.45
1:1G:49:U:C2	1:1G:361:G:N2	2.84	0.45
26:1H:1729:A:C5	26:1H:1731:G:C5	3.05	0.45
26:1H:662:G:H5'	37:78:15:ARG:HA	1.99	0.45
1:1G:486:U:H2'	1:1G:487:A:C8	2.52	0.45
12:3A:83:VAL:HG22	12:3A:100:ILE:HG23	1.99	0.45
1:1G:750:G:C2	1:1G:751:U:C6	3.05	0.45
26:14:2312:U:H5''	32:49:74:LYS:NZ	2.32	0.45
32:49:73:ALA:HB2	32:49:82:LEU:CD2	2.47	0.45
32:49:73:ALA:HB2	32:49:82:LEU:HD22	1.98	0.45
4:32:150:GLU:HG2	4:32:151:LYS:N	2.32	0.45
1:1G:325:A:H2'	1:1G:326:G:O4'	2.16	0.45
26:14:1728:G:C2	26:14:1730:U:OP2	2.69	0.45
37:35:127:ALA:HB3	37:35:130:PHE:CZ	2.51	0.45
26:14:795:C:H2'	26:14:796:C:H6	1.82	0.45
5:4E:15:ARG:HH12	25:4K:24:A:H2	1.65	0.45
26:1H:7:G:H1	26:1H:2896:C:H42	1.63	0.45
26:1H:2401:U:H2'	26:1H:2402:C:H5''	1.98	0.45
24:3K:12:U:H2'	24:3K:13:C:O4'	2.16	0.45
1:1G:595:G:H1'	1:1G:596:C:C5	2.50	0.45
1:13:11:G:C2	1:13:24:U:O2	2.70	0.45
1:1G:502:G:H4'	1:1G:550:G:H4'	1.99	0.45
26:14:184:C:H2'	26:14:185:U:H6	1.81	0.45
26:1H:2065:C:H2'	26:1H:2066:C:H6	1.81	0.45
26:1H:1343:G:H2'	26:1H:1384:A:C2	2.51	0.45
41:75:24:PRO:HD3	41:75:52:ILE:HD12	1.99	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:860:U:C5	26:14:916:G:N2	2.85	0.45
26:1H:2663:G:C2	26:1H:2664:G:H1'	2.51	0.45
26:14:522:G:H2'	26:14:523:C:C6	2.51	0.45
1:1G:493:G:H2'	1:1G:494:U:C6	2.52	0.45
26:14:473:G:O2'	26:14:474:G:H5'	2.16	0.45
36:25:68:GLU:HB3	36:25:78:ARG:HB3	1.98	0.45
26:14:2228:G:C5	26:14:2229:C:C4	3.05	0.45
26:1H:2226:C:H5'	26:1H:2227:A:OP2	2.17	0.45
30:21:54:GLN:O	30:21:55:ASN:ND2	2.50	0.45
26:14:761:A:N7	61:14:3569:HOH:O	2.36	0.45
26:14:1674:G:H1'	26:14:1676:A:N6	2.31	0.45
29:19:145:VAL:HG13	29:19:191:ALA:HB2	1.98	0.45
1:1G:32:A:C2	1:1G:33:A:C4	3.04	0.45
11:2I:27:ASN:OD1	11:2I:28:THR:N	2.49	0.45
31:39:39:TRP:HB2	31:39:99:TYR:HE1	1.82	0.45
34:61:29:TYR:CE1	34:61:33:ARG:NE	2.85	0.45
39:55:12:ARG:HG2	39:55:16:HIS:ND1	2.32	0.45
1:13:986:A:H2'	1:13:987:G:O4'	2.17	0.45
1:1G:1509:C:H2'	1:1G:1510:U:O4'	2.16	0.45
36:68:18:LYS:N	36:68:18:LYS:HD2	2.32	0.45
26:1H:1382:G:O5'	26:1H:1382:G:H8	2.00	0.45
1:13:790:A:O5'	1:13:790:A:H8	2.00	0.45
23:2L:41:C:H2'	23:2L:42:C:H6	1.80	0.45
44:A5:69:LEU:HA	44:A5:108:GLY:O	2.17	0.45
32:49:103:LEU:HB3	32:49:178:PHE:HE2	1.82	0.45
49:F5:91:LYS:HG3	49:F5:92:LYS:N	2.31	0.45
26:1H:2689:U:H5''	26:1H:2713:A:C2	2.52	0.45
1:13:1366:C:H2'	1:13:1367:C:C6	2.50	0.45
26:14:2788:C:OP1	30:29:61:ARG:NH1	2.50	0.45
31:31:6:VAL:HG21	31:31:119:ARG:HB2	1.99	0.45
1:13:1053:G:O6	1:13:1199:U:H2'	2.17	0.45
26:1H:1162:G:C6	26:1H:1163:G:C5	3.05	0.45
26:1H:872:A:C2	26:1H:906:G:C4	3.05	0.45
12:3A:20:LYS:C	12:3A:20:LYS:CD	2.85	0.45
43:D8:65:GLY:HA3	43:D8:91:TYR:CD1	2.51	0.45
1:1G:623:C:H2'	1:1G:624:C:H5'	1.98	0.45
26:14:1246:A:OP1	37:35:15:ARG:HD2	2.17	0.45
49:J8:84:GLY:O	49:J8:87:PRO:HD2	2.17	0.45
39:98:44:LEU:O	39:98:45:ARG:C	2.55	0.45
26:1H:619:G:H3'	26:1H:620:G:N2	2.32	0.45
26:1H:621:A:O4'	26:1H:621:A:N3	2.48	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:973:G:H1'	10:1A:55:LYS:CG	2.47	0.45
26:1H:2797:U:H5''	26:1H:2798:C:OP2	2.16	0.45
26:1H:2131:G:O4'	26:1H:2133:G:H4'	2.16	0.45
23:2L:14:A:C4	23:2L:23:G:C2	3.04	0.45
4:32:26:CYS:HA	59:32:302:SF4:S1	2.57	0.45
3:22:12:LEU:HD23	3:22:12:LEU:O	2.17	0.45
24:3K:3:G:H2'	24:3K:4:U:C6	2.52	0.45
41:75:21:GLU:O	41:75:91:ARG:NH2	2.49	0.45
1:13:737:A:O2'	1:13:738:C:H5'	2.16	0.45
1:13:1347:G:C5	9:8E:10:ARG:NH2	2.85	0.45
26:1H:1551:C:C2	26:1H:1552:G:C8	3.05	0.45
1:1G:1436:U:H2'	1:1G:1437:C:O4'	2.17	0.45
26:1H:660:G:H2'	26:1H:661:C:O4'	2.16	0.45
26:14:1048:A:H5'	26:14:1109:C:H42	1.81	0.45
38:45:75:THR:HA	38:45:89:ASN:CA	2.43	0.45
1:13:612:C:C2	1:13:629:G:N2	2.85	0.45
37:78:84:ASN:HA	37:78:115:LEU:O	2.16	0.45
37:78:106:LEU:O	37:78:106:LEU:HD22	2.17	0.45
1:13:937:A:C2'	1:13:938:A:H5'	2.47	0.45
26:14:544:C:O5'	26:14:544:C:H6	2.00	0.45
3:22:11:ARG:CZ	3:22:182:ILE:HD11	2.46	0.45
26:1H:654(O):G:C8	26:1H:654(P):G:N3	2.85	0.45
44:E8:58:ALA:CA	44:E8:64:MET:HG3	2.47	0.45
49:F5:52:ARG:HD2	49:F5:57:GLU:CG	2.47	0.45
10:1A:33:GLN:O	10:1A:74:ILE:HD12	2.17	0.45
1:1G:1431:C:H42	1:1G:1469:G:H1	1.64	0.45
1:13:223:U:H2'	1:13:224:C:O4'	2.17	0.45
26:1H:836:G:H3'	26:1H:837:C:C6	2.52	0.45
1:13:536:C:H2'	1:13:537:G:H8	1.82	0.45
26:14:90:U:O2'	26:14:91:A:P	2.74	0.45
31:39:155:LEU:HB2	31:39:189:THR:HG21	1.99	0.45
51:H5:18:ASP:OD1	51:H5:18:ASP:N	2.49	0.45
9:8E:33:PHE:CE1	9:8E:37:PHE:HD2	2.35	0.45
31:39:3:GLU:O	31:39:19:GLU:HG3	2.16	0.45
26:14:205:G:O2'	26:14:206:U:P	2.75	0.45
26:1H:2320:A:H8	26:1H:2321:G:C6	2.35	0.45
1:1G:45:U:H2'	1:1G:46:G:H8	1.82	0.45
26:1H:394:A:O2'	26:1H:395:U:H5'	2.17	0.45
26:14:1909:C:H2'	26:14:1910:G:C8	2.52	0.45
1:13:119:A:C8	1:13:288:A:N1	2.85	0.45
26:1H:1920:C:O2	26:1H:1920:C:H2'	2.16	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1475:G:C2	26:14:1519:G:C2	3.05	0.45
26:14:997:G:O2'	26:14:998:C:H5'	2.17	0.45
26:14:2516:G:C6	26:14:2517:C:C4	3.05	0.45
12:3A:47:LYS:HG3	12:3A:48:PRO:HD2	1.98	0.45
26:14:2846:G:H2'	26:14:2847:U:O4'	2.17	0.45
1:13:101:A:H2'	1:13:102:G:H8	1.82	0.45
1:13:581:G:O2'	1:13:582:U:H5'	2.17	0.45
1:1G:328:C:H4'	1:1G:329:A:H5''	1.98	0.45
26:1H:669:G:C2	26:1H:801:G:C6	3.05	0.45
31:31:89:VAL:HG12	31:31:90:PHE:CD2	2.52	0.45
4:3E:126:ILE:HG22	4:3E:127:THR:N	2.32	0.45
17:8A:45:HIS:O	17:8A:73:VAL:HG12	2.17	0.45
1:13:300:A:C8	1:13:300:A:H3'	2.52	0.45
26:1H:507:A:H5''	26:1H:508:G:H3'	1.98	0.45
1:13:1360:A:H2'	1:13:1361:G:C8	2.52	0.45
1:13:912:C:O2'	1:13:913:A:H5'	2.17	0.45
26:1H:1427:A:H4'	26:1H:1428:C:O4'	2.17	0.45
37:35:92:GLU:HA	37:35:123:LEU:CD2	2.47	0.45
30:29:120:TRP:CD1	30:29:155:LYS:HB3	2.52	0.45
26:14:372:G:H3'	49:F5:66:HIS:CE1	2.52	0.45
40:A8:16:ASN:O	40:A8:17:ARG:C	2.54	0.45
26:14:2496:C:O2'	26:14:2497:A:H5'	2.17	0.45
41:B8:3:ARG:HB2	41:B8:6:LEU:CB	2.35	0.45
30:29:35:GLN:NE2	30:29:37:ARG:HE	2.14	0.45
37:35:63:PRO:HG2	55:M5:25:MET:CB	2.47	0.45
5:4E:11:ILE:CD1	5:4E:31:LEU:HD13	2.36	0.45
26:14:1246:A:OP2	37:35:15:ARG:HD3	2.16	0.45
9:8E:38:GLN:HG2	9:8E:39:GLY:N	2.31	0.45
26:1H:2422:A:N7	55:Q8:31:HIS:HE1	2.15	0.45
26:1H:2129:C:H2'	26:1H:2130:U:H4'	1.98	0.45
26:1H:2133:G:N3	26:1H:2157:G:N1	2.64	0.45
8:7E:86:ILE:HG12	8:7E:135:CYS:HA	1.99	0.45
1:1G:957:U:H2'	1:1G:958:A:H3'	1.97	0.45
26:14:2749:A:H1'	33:59:63:SER:HA	1.99	0.45
26:1H:270(C):C:N4	26:1H:270(W):G:H1	2.11	0.45
1:13:739:C:O2	15:6I:42:HIS:HE1	1.99	0.45
32:41:139:LEU:HD22	32:41:146:TYR:HB2	1.99	0.45
13:4I:3:ARG:HB3	13:4I:9:ILE:CG1	2.46	0.45
33:51:69:ARG:HH11	33:51:73:ALA:HB2	1.82	0.45
26:1H:1170:G:C6	26:1H:1171:G:N7	2.85	0.45
1:1G:1004:A:H3'	1:1G:1004:A:N3	2.32	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:663:G:OP1	37:78:17:LYS:HG2	2.17	0.45
26:1H:566:U:P	37:78:29:LYS:HZ2	2.39	0.45
26:14:469:G:O6	54:L5:39:ARG:NH1	2.50	0.45
40:65:17:ARG:O	40:65:17:ARG:HD3	2.17	0.45
1:1G:371:G:H1	1:1G:390:C:N4	2.14	0.45
26:14:2062:A:O2'	26:14:2063:C:P	2.75	0.45
19:AI:18:LYS:HZ1	19:AI:22:LEU:CD1	2.26	0.45
1:1G:755:G:H2'	1:1G:756:C:C6	2.51	0.45
1:13:266:G:N2	1:13:269:C:C5	2.85	0.45
2:12:27:LYS:HE3	2:12:27:LYS:HB2	1.69	0.45
1:13:691:G:H1	11:2I:51:LYS:NZ	2.15	0.45
1:13:872:A:C5	1:13:874:G:C8	3.04	0.45
1:13:1071:C:H2'	1:13:1072:G:H8	1.81	0.45
1:13:1503:A:H61	25:4K:11:U:H2'	1.82	0.45
26:14:2391:G:O6	26:14:2425:A:H8	2.00	0.45
26:1H:2728:U:H2'	26:1H:2729:G:H8	1.83	0.45
26:1H:2348:U:O4	26:1H:2382:G:C2	2.70	0.45
1:13:359:U:H2'	1:13:360:A:H8	1.81	0.45
1:13:216:G:H2'	1:13:217:C:O4'	2.17	0.45
26:14:2557:G:H2'	26:14:2558:C:H6	1.82	0.45
26:14:2275:C:H1'	38:45:83:MET:HG2	1.99	0.45
34:61:41:GLU:CG	34:61:42:SER:N	2.79	0.45
27:16:18:G:H1	27:16:65:C:N4	2.14	0.45
1:1G:1099:G:C5	1:1G:1100:C:C4	3.05	0.45
41:B8:125:ARG:HA	41:B8:128:GLU:CG	2.46	0.45
26:14:2849:U:H4'	26:14:2868:A:C2	2.51	0.45
6:52:10:LEU:HB2	6:52:59:TYR:HB3	1.98	0.45
32:49:33:ARG:H	32:49:162:THR:CG2	2.30	0.45
26:1H:1268:A:C2	26:1H:2013:A:C4	3.05	0.45
26:1H:1833:U:H2'	26:1H:1834:U:C6	2.52	0.45
26:14:1570:A:O5'	26:14:1570:A:H8	1.99	0.45
4:32:28:SER:HB2	4:32:29:PRO:HA	1.99	0.45
42:85:49:HIS:HA	42:85:52:ARG:HB3	1.98	0.45
26:1H:2040:C:H2'	26:1H:2041:U:O4'	2.16	0.45
23:2K:10:G:N2	23:2K:27:G:H1'	2.32	0.45
16:7A:4:ILE:HG22	16:7A:70:ALA:HB1	1.99	0.45
43:95:67:GLY:O	43:95:88:ARG:HD2	2.16	0.45
18:9A:41:LYS:HD3	18:9A:41:LYS:O	2.16	0.45
1:1G:1077:G:O5'	1:1G:1077:G:H8	1.99	0.45
26:14:1466:G:N3	26:14:1466:G:H2'	2.32	0.45
26:1H:273(B):C:O5'	26:1H:273(B):C:H6	2.00	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:65:83:LYS:HE2	40:65:83:LYS:HB2	1.48	0.45
7:6E:29:LYS:HB3	7:6E:105:VAL:HG21	1.99	0.45
26:14:2022:U:OP2	53:J5:15:ARG:NH2	2.50	0.45
26:14:1902:C:H5'	29:19:246:PRO:HD3	1.99	0.44
1:1G:1290:G:C4	1:1G:1291:G:C8	3.04	0.44
30:29:52:LEU:HB3	30:29:75:VAL:HG23	1.99	0.44
31:31:114:VAL:HG21	31:31:202:PHE:CZ	2.52	0.44
5:42:76:ILE:HG12	5:42:118:ILE:CD1	2.47	0.44
26:14:662:G:OP1	37:35:15:ARG:CZ	2.65	0.44
36:68:49:ARG:CA	36:68:53:LYS:HZ3	2.31	0.44
24:3K:34:U:P	24:3K:34:U:H6	2.40	0.44
7:6E:15:ASP:O	7:6E:19:GLY:HA2	2.17	0.44
1:13:132:C:N3	1:13:231:G:N2	2.64	0.44
26:1H:270(E):G:C2	26:1H:270(V):G:C6	3.05	0.44
1:13:740:U:H4'	15:6I:39:LEU:HD23	1.99	0.44
26:14:848:G:C2	26:14:849:A:C5	3.05	0.44
4:3E:165:MET:HA	4:3E:168:ARG:HD3	1.98	0.44
34:69:88:ILE:HD11	34:69:122:GLU:O	2.17	0.44
34:69:73:GLU:HG3	34:69:136:VAL:HG23	1.98	0.44
26:1H:1191:G:OP1	37:78:32:THR:OG1	2.35	0.44
53:N8:31:VAL:HB	53:N8:42:PRO:HG3	1.98	0.44
27:1J:117:G:C2	27:1J:118:G:N7	2.85	0.44
22:1K:27:G:H2'	22:1K:28:U:C6	2.51	0.44
1:13:191:G:C2	1:13:192:U:C2	3.06	0.44
1:1G:345:C:O3'	41:75:41:ARG:NH2	2.50	0.44
1:13:553:A:H5''	12:3I:24:VAL:HG21	1.99	0.44
1:1G:536:C:H2'	1:1G:537:G:C8	2.52	0.44
1:13:221:C:C6	1:13:222:U:H5	2.35	0.44
26:14:2126:A:N1	26:14:2163:C:H1'	2.32	0.44
26:14:825:C:C2'	26:14:826:U:H5'	2.47	0.44
10:1I:44:VAL:HG21	10:1I:66:ARG:HH21	1.83	0.44
15:6A:13:GLN:HB3	15:6A:14:GLU:H	1.38	0.44
26:14:2117:A:C8	26:14:2118:U:H5	2.35	0.44
13:4I:27:LYS:HA	13:4I:31:LYS:HZ3	1.81	0.44
22:1K:17:U:C2	22:1K:58:A:C2	3.05	0.44
26:1H:1465:G:N3	26:1H:1466:G:C8	2.85	0.44
26:14:1465:G:H5'	26:14:1528:A:O2'	2.17	0.44
1:13:556:C:H2'	1:13:557:G:H8	1.82	0.44
40:65:102:ALA:O	40:65:105:ALA:N	2.49	0.44
26:1H:1346:G:C5	26:1H:1347:G:N7	2.85	0.44
26:14:265:A:H1'	26:14:266:G:O4'	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1999:C:H4'	26:14:2723:C:O2	2.17	0.44
2:12:104:ASN:OD1	2:12:107:THR:OG1	2.35	0.44
26:14:260:G:C6	26:14:261:G:N7	2.84	0.44
49:J8:78:LYS:HD3	49:J8:78:LYS:O	2.17	0.44
36:68:104:ARG:HH22	41:B8:43:GLN:HE22	1.65	0.44
40:65:54:LEU:C	40:65:56:LEU:H	2.18	0.44
26:1H:2829:C:H5'	30:21:76:ARG:HH22	1.82	0.44
26:14:2516:G:O2'	26:14:2517:C:H5'	2.17	0.44
30:21:55:ASN:HB3	30:21:58:ARG:H	1.81	0.44
26:1H:814:C:H41	37:78:25:SER:HA	1.82	0.44
26:14:1551:C:C5	26:14:1552:G:N7	2.85	0.44
26:14:1191:G:OP1	37:35:18:ARG:NH2	2.50	0.44
26:14:656:G:H2'	26:14:657:U:O4'	2.16	0.44
1:13:588:G:H5"	8:7E:5:PRO:HG3	1.99	0.44
14:5I:12:ARG:C	14:5I:14:PRO:HD2	2.37	0.44
2:1E:67:THR:OG1	2:1E:155:LEU:HD23	2.17	0.44
30:21:108:SER:O	30:21:162:ALA:HA	2.18	0.44
38:45:27:VAL:HG12	47:D5:81:ARG:NH2	2.33	0.44
51:H5:55:ARG:O	51:H5:55:ARG:HG3	2.15	0.44
39:55:116:LEU:HD23	39:55:116:LEU:HA	1.68	0.44
32:41:120:LEU:HA	32:41:120:LEU:HD23	1.72	0.44
32:41:83:ARG:HA	32:41:83:ARG:HD3	1.86	0.44
23:2L:44:A:C2	23:2L:45:A:C8	3.05	0.44
26:14:1630(A):C:H2'	61:14:3542:HOH:O	2.17	0.44
38:45:25:ASP:O	38:45:26:TYR:CD1	2.70	0.44
49:F5:87:PRO:HA	49:F5:90:ILE:HG23	1.99	0.44
26:1H:863:A:H2'	26:1H:864:G:C8	2.52	0.44
43:D8:76:LYS:HB2	43:D8:81:TYR:CD1	2.53	0.44
2:12:71:VAL:HG21	2:12:164:VAL:HA	1.99	0.44
28:71:44:HIS:HE1	28:71:215:THR:HG22	1.82	0.44
29:11:64:ILE:HD13	29:11:64:ILE:HG21	1.72	0.44
1:13:1501:C:C5	1:13:1504:G:C5	3.05	0.44
8:7E:6:ILE:HD12	8:7E:6:ILE:H	1.82	0.44
4:32:59:ARG:HA	4:32:62:GLN:HB2	1.99	0.44
35:15:28:THR:HG22	35:15:29:LYS:HD2	1.99	0.44
1:13:1156:G:H2'	1:13:1157:A:H5"	2.00	0.44
33:59:53:GLU:HA	33:59:65:HIS:CE1	2.52	0.44
26:1H:1478:G:C2	26:1H:1479:G:C8	3.05	0.44
26:1H:1479:G:C6	26:1H:1480:G:C5	3.05	0.44
43:D8:36:PRO:HA	43:D8:37:VAL:HA	1.69	0.44
43:D8:37:VAL:HB	43:D8:51:VAL:CG2	2.48	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
43:95:37:VAL:HG21	43:95:57:VAL:HG12	1.99	0.44
12:3A:83:VAL:HG21	12:3A:100:ILE:HD13	1.98	0.44
12:3I:60:LEU:HD12	12:3I:62:SER:OG	2.17	0.44
1:13:1027:C:C2	1:13:1028:C:H5	2.35	0.44
32:49:136:ARG:HA	32:49:136:ARG:HD2	1.30	0.44
1:13:575:G:C4	1:13:881:G:C2	3.06	0.44
2:1E:69:LEU:HD13	2:1E:70:PHE:N	2.31	0.44
47:D5:67:LEU:HA	47:D5:68:PRO:HD3	1.90	0.44
26:14:2577:A:OP2	53:J5:3:LYS:NZ	2.36	0.44
1:1G:134:A:H61	16:7A:25:ARG:NH1	2.16	0.44
23:2K:1:C:H3'	23:2K:2:G:C8	2.53	0.44
1:13:559:A:H4'	1:13:560:U:O3'	2.17	0.44
57:3L:63:U:O5'	57:3L:63:U:H6	2.00	0.44
34:61:93:THR:OG1	34:61:95:LYS:HB3	2.18	0.44
1:1G:411:A:H2'	1:1G:413:G:H5'	1.99	0.44
56:1L:58:A:C6	56:1L:61:C:C4	3.05	0.44
1:1G:359:U:H2'	1:1G:360:A:H8	1.80	0.44
33:51:126:PRO:O	33:51:127:GLU:HG2	2.16	0.44
26:1H:821:A:H5''	26:1H:822:U:C6	2.52	0.44
1:1G:25:C:H2'	1:1G:26:A:H8	1.82	0.44
26:14:89:G:H5''	26:14:90:U:OP2	2.18	0.44
34:69:29:TYR:O	34:69:32:PRO:HD2	2.17	0.44
38:88:130:LYS:NZ	47:H8:81:ARG:HG2	2.31	0.44
1:1G:1321:C:O5'	1:1G:1321:C:H6	2.00	0.44
39:55:34:ILE:O	39:55:113:LEU:HD12	2.17	0.44
26:14:2324:C:H5''	26:14:2325:G:C5'	2.46	0.44
4:3E:79:PHE:HE2	4:3E:204:ILE:HA	1.82	0.44
26:1H:2355:C:H5''	26:1H:2356:C:OP2	2.16	0.44
32:49:17:PRO:HA	32:49:20:ILE:HD12	1.99	0.44
36:25:71:ARG:NH2	36:25:77:ILE:HG21	2.32	0.44
27:16:70:C:N3	27:16:71:C:C5	2.85	0.44
30:29:202:LYS:N	30:29:202:LYS:HD2	2.32	0.44
26:1H:244:A:O2'	37:78:73:GLY:HA3	2.17	0.44
37:35:39:LYS:HB2	37:35:45:LEU:CD1	2.47	0.44
26:1H:2829:C:H5'	30:21:76:ARG:NH2	2.33	0.44
26:1H:1682:G:C5	26:1H:1683:C:C4	3.05	0.44
1:13:1274:G:H2'	1:13:1275:A:C8	2.51	0.44
36:25:68:GLU:HA	36:25:78:ARG:HB3	1.98	0.44
26:14:1655:A:H1'	30:29:113:PHE:CD1	2.52	0.44
1:1G:318:G:C2	1:1G:336:C:N3	2.85	0.44
23:2K:73:A:N6	23:2K:74:A:C6	2.85	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:2747:G:O6	26:1H:2755:C:H5''	2.16	0.44
4:32:32:ALA:HA	4:32:35:ARG:HD3	1.99	0.44
1:1G:665:A:H1'	1:1G:733:A:O4'	2.16	0.44
35:15:45:ASN:OD1	35:15:46:VAL:HG23	2.17	0.44
2:12:88:ALA:HB2	2:12:219:VAL:HG12	1.99	0.44
15:6I:8:LYS:HB2	15:6I:8:LYS:HE3	1.83	0.44
42:C8:31:SER:O	42:C8:32:PHE:C	2.53	0.44
1:1G:1416:G:N2	1:1G:1485:U:H1'	2.32	0.44
36:68:4:PRO:O	36:68:5:GLN:CB	2.65	0.44
26:14:2432:A:C8	49:F5:33:LYS:HD2	2.52	0.44
26:1H:2600:A:C6	26:1H:2601:C:N4	2.86	0.44
26:1H:2718:G:C6	26:1H:2719:G:C5	3.05	0.44
16:7A:34:GLU:CD	16:7A:55:ARG:HH11	2.20	0.44
26:14:271(B):G:N7	26:14:421:U:H2'	2.33	0.44
47:H8:138:GLU:N	47:H8:138:GLU:CD	2.70	0.44
32:41:108:ASN:OD1	32:41:108:ASN:N	2.50	0.44
26:14:1037:G:H2'	26:14:1037:G:N3	2.32	0.44
56:1L:17:U:H6	56:1L:17:U:H5'	1.82	0.44
35:15:137:LYS:HD3	35:15:137:LYS:HA	1.69	0.44
1:1G:799:G:C6	1:1G:800:G:C4	3.05	0.44
1:1G:719:C:C5	1:1G:720:C:C4	3.05	0.44
29:19:246:PRO:O	29:19:254:THR:HG22	2.17	0.44
49:F5:87:PRO:O	49:F5:88:LYS:C	2.55	0.44
18:9A:43:PHE:O	18:9A:51:LEU:HG	2.17	0.44
2:12:173:ALA:O	2:12:176:GLU:N	2.48	0.44
1:1G:475:G:C4	1:1G:476:G:C8	3.05	0.44
41:B8:7:ILE:O	41:B8:10:VAL:N	2.48	0.44
42:85:92:ARG:CD	43:95:11:GLN:HB2	2.48	0.44
7:62:115:ARG:O	7:62:119:ARG:HG3	2.18	0.44
23:2L:12:G:H1'	26:14:1923:U:O2'	2.16	0.44
1:1G:986:A:C6	1:1G:1220:G:N2	2.85	0.44
1:13:1349:A:H2'	1:13:1350:A:C8	2.53	0.44
1:13:130:A:N7	17:8I:63:ARG:HB2	2.32	0.44
2:1E:142:LEU:HD11	2:1E:146:GLN:NE2	2.32	0.44
26:1H:142:G:C1'	45:F8:37:THR:HG21	2.45	0.44
4:3E:12:CYS:SG	4:3E:18:LYS:HA	2.57	0.44
26:1H:1536:A:H3'	26:1H:1537:C:C6	2.42	0.44
26:1H:274:G:OP1	26:1H:274:G:C4	2.71	0.44
7:62:18:TYR:CE2	7:62:59:LEU:HB2	2.52	0.44
26:14:2305:A:C5	32:49:136:ARG:CZ	3.01	0.44
26:1H:444:C:H4'	31:31:49:ALA:HB2	1.98	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1241:A:N6	26:14:1242:A:N1	2.65	0.44
26:14:29:U:H2'	26:14:30:G:C8	2.51	0.44
1:1G:884:U:H4'	1:1G:885:G:H5''	1.99	0.44
34:61:21:VAL:HG22	34:61:22:LYS:N	2.32	0.44
26:14:2525:G:H1	26:14:2538:C:H42	1.63	0.44
26:1H:2126:A:N6	26:1H:2163:C:H1'	2.32	0.44
26:1H:821:A:H2'	26:1H:946:G:H5''	1.99	0.44
26:14:2148:G:H2'	26:14:2149:G:H8	1.82	0.44
1:13:243:A:H4'	1:13:244:U:H5''	2.00	0.44
26:14:2563:U:H4'	36:25:28:SER:HA	1.99	0.44
26:14:2295:C:C5	40:65:13:ARG:NH2	2.86	0.44
26:1H:806:C:H2'	26:1H:807:U:H6	1.82	0.44
26:1H:1466:G:N3	26:1H:1547:C:N4	2.66	0.44
1:13:321:A:N7	1:13:328:C:O2'	2.46	0.44
1:1G:825:G:N2	1:1G:875:C:N3	2.52	0.44
29:19:85:ASP:HB2	29:19:92:ILE:CG1	2.47	0.44
4:3E:201:GLN:O	4:3E:204:ILE:HB	2.17	0.44
26:14:668:G:H2'	26:14:670:A:H62	1.81	0.44
1:13:1064:G:N2	1:13:1190:G:H1'	2.33	0.44
28:71:43:VAL:HB	28:71:214:VAL:HG13	1.98	0.44
47:H8:67:LEU:HD22	47:H8:90:VAL:HG11	1.99	0.44
26:1H:462:C:C4	26:1H:463:G:N7	2.86	0.44
26:14:1914:C:H2'	26:14:1915:U:O4'	2.17	0.44
26:1H:1817:G:C6	26:1H:1818:U:C5	3.05	0.44
26:14:2:G:H5''	26:14:2897:U:OP1	2.17	0.44
26:14:735:A:H3'	26:14:736:C:C6	2.52	0.44
13:4A:17:VAL:HA	13:4A:20:THR:OG1	2.17	0.44
26:14:1936:A:C8	26:14:1940:U:O2	2.70	0.44
1:1G:576:G:N2	1:1G:759:A:OP1	2.44	0.44
1:13:140:A:C6	1:13:141:A:C5	3.05	0.44
26:1H:778:G:C5	26:1H:779:U:C4	3.05	0.44
1:13:348:G:C2	1:13:349:A:C8	3.05	0.44
1:1G:1418:A:H2	26:14:1948:G:N3	2.14	0.44
1:13:73:G:N3	1:13:73:G:H5''	2.32	0.44
26:1H:325:G:O2'	26:1H:326:G:H5'	2.17	0.44
26:14:2663:G:C5	26:14:2664:G:C5	3.06	0.44
36:25:8:LEU:HD13	36:25:82:ASN:HB3	1.99	0.44
1:1G:718:G:H5'	11:2A:117:ASN:HB2	1.99	0.44
26:1H:336:C:OP1	46:G8:83:THR:HG23	2.17	0.44
40:A8:26:LEU:HD23	40:A8:87:PHE:HD1	1.82	0.44
1:13:1366:C:O2'	10:1I:60:ARG:NH1	2.46	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1242:C:C5'	21:1B:10:ARG:HH12	2.31	0.44
28:71:22:ILE:CD1	28:71:193:ILE:HD11	2.47	0.44
26:1H:270(O):U:O2	34:61:52:ARG:NH2	2.51	0.44
29:11:36:PRO:C	29:11:37:LEU:HD23	2.38	0.44
5:4E:35:GLY:H	5:4E:112:LEU:HD13	1.83	0.44
1:1G:980:C:H2'	14:5A:21:TYR:CD1	2.52	0.44
26:1H:2131:G:C5	26:1H:2134:A:H1'	2.52	0.44
28:71:65:PRO:HG2	28:71:66:HIS:CD2	2.51	0.44
27:16:90:C:P	38:88:16:ARG:HH21	2.40	0.44
1:13:1182:G:H4'	1:13:1183:A:C5'	2.47	0.44
26:14:816:C:N4	26:14:1192:G:C6	2.85	0.44
1:1G:1452:C:H4'	1:1G:1453:G:C5'	2.47	0.44
4:3E:31:CYS:C	4:3E:33:MET:N	2.71	0.44
35:58:39:ARG:HH21	35:58:41:ASP:CG	2.16	0.44
26:1H:2394:C:H2'	26:1H:2395:C:H6	1.83	0.44
26:1H:1336:A:H2'	26:1H:1337:G:C8	2.53	0.44
32:41:142:PRO:HG2	32:41:143:GLU:OE2	2.17	0.44
20:BI:87:LYS:O	20:BI:90:GLN:N	2.50	0.44
33:51:157:TYR:CE1	33:51:171:LEU:HB3	2.52	0.44
1:1G:560:U:OP2	61:1G:1706:HOH:O	2.21	0.44
1:1G:107:G:C2	1:1G:108:G:H1'	2.52	0.44
37:35:84:ASN:ND2	37:35:117:GLU:HB2	2.29	0.44
1:1G:1:U:H5'	1:1G:630:G:O2'	2.17	0.44
1:13:222:U:H2'	1:13:223:U:C6	2.52	0.44
1:1G:1512:U:H2'	1:1G:1513:A:C8	2.52	0.44
26:14:143:C:H2'	26:14:144:C:H6	1.82	0.44
1:1G:736:C:H5'	18:9A:72:ARG:HE	1.81	0.44
26:14:288:C:H2'	26:14:289:A:C8	2.53	0.44
17:8I:8:GLY:O	17:8I:21:VAL:HG13	2.18	0.44
26:1H:1717:G:H2'	26:1H:1718:G:H8	1.82	0.44
26:14:2296:U:OP2	40:65:9:ARG:NH1	2.37	0.44
23:2K:50:G:H1	23:2K:66:C:H42	1.63	0.44
36:25:20:MET:HG2	36:25:21:CYS:O	2.16	0.44
26:1H:1956:U:C3'	26:1H:1957:C:H5'	2.47	0.44
26:14:1291:C:H2'	26:14:1292:U:H6	1.81	0.44
1:13:75:C:O2	1:13:95:G:H2'	2.17	0.44
26:14:2820:A:HO2'	26:14:2821:A:P	2.41	0.44
26:14:2857:G:N2	26:14:2861:G:C5	2.85	0.44
6:5E:75:LEU:HD22	6:5E:79:LEU:HG	2.00	0.44
2:12:95:GLN:HB3	2:12:148:TYR:CD1	2.52	0.44
27:16:45:A:H3'	27:16:46:A:H8	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:255:G:O6	1:1G:270:A:N6	2.51	0.44
1:1G:512:U:H2'	1:1G:513:C:H6	1.83	0.44
47:H8:39:VAL:HG21	47:H8:44:PHE:CD2	2.52	0.44
23:2L:22:A:H2'	23:2L:47:G7M:H1	1.83	0.44
23:2L:9:G:C2	23:2L:47:G7M:C5	3.01	0.44
33:51:154:PRO:HB2	33:51:163:TYR:CE2	2.52	0.44
56:1L:76:A:O2'	26:14:2506:U:O2'	2.13	0.44
39:55:8:ARG:NH1	39:55:39:PRO:HB3	2.33	0.44
1:1G:914:A:C6	1:1G:915:A:C5	3.06	0.44
1:1G:27:G:H2'	1:1G:28:G:O4'	2.18	0.44
1:1G:1433:A:OP2	1:1G:1467:G:N1	2.38	0.44
37:35:30:THR:HG21	37:35:35:HIS:H	1.83	0.44
20:BA:61:SER:OG	20:BA:65:LYS:HD2	2.16	0.44
43:95:48:GLY:HA2	43:95:51:VAL:C	2.38	0.44
1:1G:236:G:OP1	17:8A:40:LYS:NZ	2.51	0.44
1:13:1468:A:H8	1:13:1468:A:O5'	2.01	0.44
45:B5:66:LEU:HA	45:B5:66:LEU:HD23	1.77	0.44
47:D5:33:LEU:HA	47:D5:33:LEU:HD12	1.72	0.44
4:3E:192:GLU:OE1	4:3E:192:GLU:N	2.42	0.44
35:15:87:LEU:HD23	35:15:87:LEU:O	2.18	0.44
44:E8:2:GLU:HB2	44:E8:107:LEU:O	2.17	0.44
29:19:123:ALA:HB3	29:19:131:LEU:HG	2.00	0.44
32:49:105:LYS:HD2	32:49:141:PHE:CE2	2.53	0.44
26:1H:863:A:H2	26:1H:914:C:H41	1.63	0.44
30:29:64:LYS:C	30:29:66:HIS:N	2.70	0.44
30:29:81:ILE:HG21	30:29:84:PHE:CD2	2.53	0.44
26:14:1357:U:H2'	26:14:1358:G:O4'	2.18	0.44
1:13:468:A:O3'	16:7I:80:PHE:HD1	2.01	0.44
26:1H:991:C:H42	26:1H:1163:G:H1	1.63	0.44
30:29:26:ILE:O	30:29:27:LEU:HB3	2.17	0.44
5:4E:35:GLY:HA3	5:4E:112:LEU:HB3	2.00	0.44
29:11:18:VAL:HG12	29:11:19:ALA:N	2.32	0.44
26:14:1753:G:N1	26:14:1756:G:C2	2.86	0.44
1:1G:616:G:H2'	1:1G:617:G:H8	1.83	0.44
1:1G:1446:A:C2	41:75:118:ARG:HD2	2.52	0.44
27:1J:42:C:N4	32:49:91:ARG:HH12	2.16	0.44
26:14:847:U:H5'	26:14:929:G:H1	1.81	0.44
1:1G:265:G:O3'	17:8A:66:SER:HA	2.18	0.44
1:1G:449:C:H2'	1:1G:450:G:O4'	2.18	0.44
1:13:1118:C:OP1	9:8E:104:ARG:HD2	2.17	0.44
46:G8:71:LYS:HB2	46:G8:71:LYS:HE3	1.68	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1003:G:N2	26:14:1153:C:C2	2.85	0.44
1:1G:885:G:H1	1:1G:912:C:H42	1.66	0.44
30:21:65:GLY:HA2	30:21:70:ALA:HB1	1.99	0.44
1:13:1285:A:H4'	1:13:1286:A:C5'	2.48	0.44
1:1G:324:G:N1	1:1G:327:A:OP2	2.47	0.44
26:14:2542:A:H1'	26:14:2543:G:C8	2.52	0.44
1:13:1326:C:H2'	1:13:1327:C:C6	2.53	0.44
26:14:1798:U:H5'	29:19:259:THR:OG1	2.18	0.44
31:39:36:VAL:HG11	31:39:183:VAL:CG2	2.45	0.44
26:14:2331:G:N3	26:14:2336:A:H2	2.15	0.44
26:14:729:G:OP2	29:19:13:ARG:NH1	2.51	0.44
7:62:136:LYS:HD3	7:62:137:LYS:HZ3	1.82	0.44
47:D5:99:TYR:HA	47:D5:124:ILE:O	2.17	0.44
1:13:402:G:C6	1:13:403:C:C4	3.05	0.44
26:14:1858:G:O2'	26:14:1884:A:N6	2.51	0.44
47:H8:7:ALA:O	47:H8:8:TYR:CD1	2.71	0.44
26:1H:458:G:O2'	54:P8:39:ARG:HD3	2.18	0.44
7:62:45:ASP:HB3	7:62:117:ALA:CB	2.47	0.44
42:C8:24:TYR:HE2	42:C8:39:LEU:CD2	2.30	0.44
40:A8:108:GLY:C	40:A8:110:LEU:HG	2.38	0.44
26:14:74:A:H4'	26:14:75:G:O5'	2.18	0.44
20:BA:89:ARG:O	20:BA:93:GLU:HG2	2.18	0.44
3:2E:29:TYR:CZ	14:5I:54:PRO:HG2	2.53	0.44
1:13:1195:C:H5''	1:13:1196:U:P	2.58	0.44
3:2E:124:ILE:HG12	3:2E:130:VAL:HG22	2.00	0.44
26:14:1921:G:H2'	26:14:1922:G:C8	2.53	0.44
29:19:102:LYS:O	29:19:103:ARG:HG2	2.17	0.44
7:62:111:ARG:HH21	7:62:122:HIS:HB3	1.82	0.44
26:14:677:A:H2'	26:14:678:C:H6	1.82	0.44
26:14:2469:A:C2	26:14:2470:G:C5	3.05	0.44
26:1H:2543:G:H2'	26:1H:2544:G:C8	2.53	0.44
26:14:540:G:H2'	26:14:541:C:C6	2.52	0.44
26:14:284:U:H2'	26:14:285:C:C6	2.53	0.44
33:51:12:PRO:HG2	33:51:13:LYS:HG2	1.98	0.44
26:14:57:C:O5'	26:14:57:C:H6	2.00	0.44
1:1G:654:G:C6	1:1G:753:A:C8	3.06	0.44
40:65:80:LEU:HB2	40:65:82:ILE:HG13	2.00	0.44
26:14:1638:C:H5''	26:14:2710:C:O2'	2.18	0.44
26:1H:494:G:O2'	26:1H:495:G:H5'	2.18	0.44
36:25:73:ASP:OD2	41:75:32:TYR:OH	2.14	0.44
51:L8:35:ARG:HA	51:L8:35:ARG:HD2	1.76	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:41:62:LEU:HD12	32:41:62:LEU:HA	1.75	0.44
50:K8:15:LYS:HD3	50:K8:15:LYS:HA	1.76	0.44
40:A8:15:ARG:HD3	40:A8:15:ARG:HA	1.61	0.44
26:1H:1188:U:H5'	43:D8:79:VAL:HG22	1.99	0.44
26:1H:322:A:P	31:31:168:ARG:HH21	2.41	0.44
26:1H:993:G:H2'	26:1H:994:C:H6	1.83	0.44
9:8E:47:LEU:O	9:8E:47:LEU:HG	2.18	0.44
10:1I:8:LEU:HD22	10:1I:96:ILE:HG22	1.98	0.44
1:1G:1054:C:OP1	1:1G:1197:G:P	2.75	0.44
1:1G:974:A:H5'	1:1G:974:A:N3	2.32	0.44
8:72:36:LEU:O	8:72:39:LEU:N	2.51	0.44
13:4I:13:LYS:C	13:4I:44:ARG:HH11	2.21	0.44
52:M8:42:PHE:N	52:M8:47:GLN:NE2	2.65	0.44
26:14:1946:U:H2'	26:14:1947:C:H6	1.82	0.44
26:14:986:C:C2'	26:14:987:G:H5'	2.47	0.44
1:13:734:G:C6	1:13:735:C:N3	2.85	0.44
1:13:735:C:O2'	1:13:736:C:H5'	2.17	0.44
44:E8:34:ASN:ND2	53:N8:39:MET:HG3	2.32	0.44
46:G8:55:TYR:CE1	46:G8:61:ILE:HD11	2.53	0.44
1:13:436:C:H2'	1:13:437:U:H6	1.82	0.44
26:14:2353:G:H5''	48:E5:32:ARG:NH2	2.33	0.44
26:1H:1638:C:H4'	26:1H:2710:C:O2	2.18	0.44
37:78:19:VAL:CB	37:78:20:GLY:HA3	2.46	0.44
1:1G:540:G:C6	1:1G:541:G:C5	3.06	0.44
12:3A:52:LEU:HD12	12:3A:54:LYS:HZ1	1.82	0.44
26:14:1212:G:H1'	26:14:1236:G:N2	2.32	0.44
26:14:2062:A:HO2'	26:14:2063:C:P	2.38	0.44
8:72:109:ILE:HG12	8:72:110:ALA:H	1.82	0.44
26:14:548:A:H2'	26:14:549:G:H4'	1.99	0.44
45:F8:29:TRP:CZ3	45:F8:78:LYS:HB3	2.53	0.44
26:1H:1496:A:H5'	26:1H:1497:U:OP1	2.17	0.44
23:2L:53:G:H2'	23:2L:54:G:H8	1.83	0.44
1:1G:197:A:C6	1:1G:221:C:H4'	2.53	0.44
32:49:119:GLY:CA	32:49:181:ARG:HB2	2.46	0.44
41:B8:16:ARG:NH1	41:B8:18:ASP:OD2	2.51	0.44
16:7I:21:VAL:O	16:7I:33:ILE:N	2.47	0.44
1:13:1022:G:H2'	1:13:1023:G:O4'	2.17	0.44
6:5E:17:SER:O	6:5E:21:LEU:N	2.50	0.44
1:1G:577:G:O2'	1:1G:578:C:H5'	2.17	0.44
1:1G:165:C:H2'	1:1G:166:G:C8	2.53	0.44
1:13:247:G:C5	1:13:248:C:C5	3.05	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
27:16:81:G:O6	27:16:95:U:O2	2.36	0.44
27:1J:92:G:O2'	27:1J:93:C:H5'	2.18	0.44
14:5I:53:LEU:HA	14:5I:53:LEU:HD23	1.56	0.44
26:1H:1448:G:H1'	26:1H:1528:A:H62	1.83	0.44
33:51:32:GLU:O	33:51:33:LEU:HD23	2.18	0.44
9:8E:33:PHE:HE1	9:8E:37:PHE:HD2	1.65	0.44
1:13:726:C:O2'	1:13:727:G:H5'	2.18	0.44
3:22:32:LEU:HD22	3:22:59:ARG:HH12	1.81	0.44
3:22:97:LYS:HB3	3:22:97:LYS:HE2	1.63	0.44
18:9I:26:LEU:HD13	18:9I:39:VAL:HG13	1.99	0.44
26:14:1247:A:C2	26:14:1249:U:C6	3.06	0.44
3:2E:72:LYS:HD3	3:2E:75:VAL:CG2	2.47	0.44
1:1G:952:U:H2'	1:1G:953:G:O4'	2.18	0.44
5:42:146:ALA:HB1	5:42:150:ARG:HH21	1.82	0.44
1:1G:195:A:H62	1:1G:196:A:H61	1.65	0.44
1:13:769:G:H4'	1:13:1513:A:H4'	1.98	0.44
26:1H:2635:C:H5''	30:21:78:LEU:HA	1.99	0.44
1:13:636:U:H2'	1:13:637:G:H8	1.83	0.44
1:13:118:U:H3'	1:13:288:A:H61	1.83	0.44
26:1H:775:G:C5	26:1H:794:G:C8	3.05	0.44
45:B5:84:ALA:HB3	45:B5:87:GLN:HE21	1.83	0.44
1:1G:287:U:H2'	1:1G:288:A:C8	2.53	0.44
26:14:1726:G:H2'	26:14:1727:U:O4'	2.18	0.44
26:14:2079:U:O3'	49:F5:35:THR:OG1	2.23	0.44
35:58:87:LEU:HD22	35:58:87:LEU:O	2.18	0.44
1:13:161:A:H2'	1:13:162:A:C8	2.53	0.44
1:1G:27:G:O5'	1:1G:27:G:H8	2.01	0.44
26:1H:2474:C:H3'	26:1H:2475:C:C6	2.53	0.44
36:68:80:ASP:HB2	41:B8:70:VAL:HG13	1.99	0.44
26:14:1526:G:H2'	26:14:1527:G:O4'	2.18	0.44
1:1G:105:G:C6	1:1G:106:C:C4	3.06	0.44
1:13:1401:G:C2	1:13:1402:C:H1'	2.53	0.44
1:1G:515:G:C6	1:1G:516:U:N3	2.85	0.44
26:1H:683:C:H6	26:1H:683:C:O5'	2.01	0.44
45:F8:66:LEU:HA	45:F8:66:LEU:HD12	1.57	0.44
1:1G:791:G:C6	1:1G:792:A:N7	2.85	0.44
26:1H:1982:C:OP2	61:1H:3560:HOH:O	2.21	0.44
37:35:119:GLU:HA	37:35:137:LYS:NZ	2.33	0.44
5:4E:143:ARG:HE	8:7E:77:GLU:CD	2.21	0.44
26:1H:1108:U:C2	26:1H:1109:C:N4	2.86	0.44
1:13:453:A:C6	1:13:454:C:C4	3.06	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:626:U:N3	1:13:627:G:N7	2.66	0.44
13:4A:33:ALA:O	13:4A:37:THR:HB	2.18	0.44
45:B5:29:TRP:HZ3	45:B5:78:LYS:HB2	1.80	0.44
26:1H:2782:G:C8	26:1H:2782:G:O5'	2.71	0.44
49:J8:93:GLU:CG	49:J8:94:LEU:N	2.81	0.44
1:1G:1053:G:H4'	1:1G:1054:C:O5'	2.18	0.44
8:72:35:ILE:HG23	8:72:111:ILE:HD12	1.98	0.44
37:35:37:GLY:O	37:35:40:SER:OG	2.33	0.44
26:1H:355:G:H2'	26:1H:356:G:H8	1.82	0.44
26:14:1198:U:C2	26:14:1199:U:C5	3.05	0.44
3:2E:63:ASN:HA	3:2E:98:ASN:OD1	2.18	0.44
1:1G:427:U:O4	1:1G:428:G:C6	2.70	0.44
1:1G:1134:G:N1	1:1G:1135:U:C2	2.85	0.44
26:14:2305:A:C6	32:49:136:ARG:CZ	3.01	0.44
26:1H:2147:G:C5	26:1H:2148:G:H1'	2.53	0.44
26:14:140:A:C6	26:14:141:A:N6	2.86	0.44
26:14:39:C:H2'	26:14:40:C:C6	2.53	0.44
23:2L:48:U:H1'	23:2L:49:C:O5'	2.17	0.44
2:1E:6:THR:HG22	2:1E:224:GLN:HE22	1.81	0.44
37:35:47:ASP:HB3	37:35:48:PRO:HA	1.99	0.44
26:1H:2579:C:H6	26:1H:2579:C:O5'	2.01	0.44
26:14:867:C:C5	26:14:868:U:C4	3.02	0.44
7:62:93:PRO:CD	7:62:94:ARG:HH21	2.31	0.44
8:72:65:TYR:HA	8:72:79:VAL:HG23	2.00	0.44
1:1G:1234:C:N4	1:1G:1235:U:O4	2.51	0.44
26:14:2297:C:C6	26:14:2333:A:N1	2.86	0.44
33:59:149:ARG:HH12	33:59:163:TYR:HB3	1.83	0.44
31:39:161:GLU:HG3	31:39:162:LEU:N	2.33	0.44
26:14:182:A:H2'	26:14:183:C:O4'	2.18	0.44
1:1G:56:U:O4	1:1G:352:C:N4	2.49	0.44
26:1H:431:U:O2'	26:1H:432:A:H5'	2.17	0.44
26:14:1279:G:H4'	39:55:31:HIS:CD2	2.52	0.44
3:2E:156:ARG:H	3:2E:196:LEU:HD22	1.83	0.44
1:13:103:C:H2'	1:13:104:G:C8	2.52	0.44
26:14:270(E):G:H2'	26:14:270(F):U:C6	2.52	0.44
36:68:86:ILE:HG22	36:68:94:ARG:HD2	2.00	0.44
5:4E:143:ARG:NE	8:7E:77:GLU:OE1	2.46	0.44
2:12:105:PHE:O	2:12:109:SER:N	2.46	0.44
26:14:1710:C:H4'	26:14:2858:C:O2	2.17	0.44
26:1H:2760:C:O2'	26:1H:2761:G:H5'	2.18	0.44
26:1H:82:G:H5''	26:1H:296:C:H5'	1.99	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:245:PRO:CG	29:11:253:GLN:HE21	2.30	0.44
53:N8:22:HIS:N	53:N8:22:HIS:ND1	2.66	0.44
29:11:233:HIS:CD2	29:11:233:HIS:N	2.86	0.44
28:71:36:LYS:HE2	28:71:36:LYS:HB2	1.64	0.44
42:C8:92:ARG:HB3	43:D8:11:GLN:NE2	2.33	0.44
32:49:15:VAL:HG12	32:49:19:LEU:HD11	1.99	0.44
1:1G:1243:C:H5''	21:1B:8:THR:OG1	2.18	0.44
30:29:55:ASN:O	30:29:57:LYS:N	2.43	0.44
30:29:70:ALA:O	30:29:72:VAL:HG22	2.18	0.44
2:12:81:VAL:O	2:12:85:ALA:HB2	2.17	0.44
29:11:236:GLY:O	29:11:237:GLU:O	2.36	0.44
27:1J:20:C:N4	27:1J:21:G:C6	2.86	0.44
1:1G:980:C:H3'	1:1G:981:U:H6	1.83	0.44
3:22:130:VAL:HG13	3:22:134:ILE:CD1	2.48	0.44
1:1G:625:G:H2'	1:1G:626:U:C6	2.53	0.44
26:1H:2863:C:H2'	26:1H:2864:G:C8	2.53	0.44
2:1E:234:PRO:CB	2:1E:236:TYR:HD2	2.31	0.44
1:1G:1342:C:H2'	1:1G:1343:G:H8	1.83	0.44
32:41:106:LEU:HG	32:41:107:LEU:HD23	2.00	0.44
40:65:24:LEU:HD12	40:65:41:ASP:HB2	2.00	0.44
29:11:28:GLU:N	29:11:29:PRO:HD3	2.32	0.44
3:22:76:VAL:O	3:22:84:ILE:HB	2.17	0.44
26:1H:2636:U:H2'	26:1H:2637:U:C5	2.53	0.44
1:1G:452:A:O2'	1:1G:453:A:O5'	2.36	0.44
26:1H:1485:G:C2	26:1H:1486:A:C4	3.06	0.44
4:3E:78:LEU:HB3	4:3E:93:PHE:HE1	1.83	0.44
41:B8:110:ILE:HG13	41:B8:111:ARG:H	1.81	0.44
26:14:1729:A:C2'	26:14:1730:U:H5''	2.47	0.44
13:4I:84:ILE:HD11	19:AI:66:MET:HG2	1.98	0.44
26:14:2115:G:H4'	26:14:2166:G:H1'	2.00	0.44
26:14:1858:G:H2'	26:14:1883:G:N2	2.33	0.44
26:14:2198:A:C2	34:69:29:TYR:HB2	2.53	0.44
26:14:2465:C:O2	26:14:2486:G:C2	2.70	0.44
1:13:171:A:C2	1:13:172:A:C4	3.05	0.44
4:3E:153:ARG:HB3	4:3E:181:MET:SD	2.57	0.44
26:14:2355:C:H1'	48:E5:36:ILE:HD11	2.00	0.44
27:16:37:C:C2'	27:16:38:C:H5'	2.48	0.44
47:D5:28:MET:HB2	47:D5:35:ARG:O	2.17	0.44
26:1H:1693:U:H4'	26:1H:1694:C:OP2	2.17	0.44
1:1G:186(C):G:C2	1:1G:191(E):G:C2	3.06	0.44
30:29:195:LEU:HD12	30:29:195:LEU:HA	1.72	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
45:B5:26:TYR:OH	45:B5:88:LYS:HA	2.17	0.44
6:52:81:ILE:HG23	6:52:82:ARG:HG3	1.98	0.44
1:13:1219:U:H2'	1:13:1220:G:C8	2.53	0.44
1:13:1219:U:H2'	1:13:1220:G:H8	1.83	0.44
43:95:95:LEU:HD23	43:95:96:ILE:N	2.33	0.44
26:1H:2309:A:C8	26:1H:2309:A:H3'	2.53	0.44
1:13:384:G:H2'	1:13:385:C:C6	2.53	0.44
26:14:186:G:H2'	26:14:187:G:H8	1.83	0.44
35:58:121:LYS:HB3	35:58:123:TYR:CE1	2.53	0.44
32:41:18:GLU:HG3	32:41:22:ARG:HD3	2.00	0.44
26:14:768:G:H2'	26:14:769:G:H8	1.83	0.44
26:14:1159:U:O2'	26:14:1160:G:H5'	2.17	0.44
34:69:52:ARG:HA	34:69:55:ALA:HB3	1.99	0.44
11:2A:103:LEU:HA	11:2A:103:LEU:HD12	1.63	0.44
7:6E:155:ARG:HG3	7:6E:155:ARG:HH21	1.82	0.44
33:51:3:ARG:HA	33:51:3:ARG:NE	2.33	0.44
50:G5:8:LYS:HG2	50:G5:9:GLN:N	2.33	0.44
26:1H:2450:A:C2	26:1H:2451:A:C4	3.06	0.44
23:2K:38:A:C4	23:2K:39:A:C8	3.05	0.44
1:1G:777:A:C6	1:1G:778:G:C5	3.06	0.44
1:13:465:A:C8	1:13:467:G:C6	3.06	0.44
35:58:48:MET:HE2	35:58:48:MET:O	2.03	0.44
1:1G:1243:C:H6	1:1G:1243:C:O5'	2.01	0.44
1:1G:1369:C:P	14:5A:61:TRP:HE1	2.41	0.44
26:1H:864:G:O2'	26:1H:865:C:H5'	2.18	0.44
1:13:1120:G:H2'	1:13:1121:U:C6	2.52	0.44
26:1H:320:A:H4'	26:1H:322:A:N7	2.33	0.44
2:12:155:LEU:HD22	2:12:157:ARG:HB2	2.00	0.44
26:14:2720:U:H2'	26:14:2720:U:O2	2.18	0.44
13:4A:63:THR:HG22	13:4A:64:TRP:CG	2.52	0.44
12:3A:20:LYS:CE	12:3A:21:LYS:C	2.84	0.44
14:5A:21:TYR:CE2	14:5A:23:ARG:HB2	2.52	0.44
29:11:5:LYS:C	29:11:6:PHE:CD1	2.92	0.44
26:1H:1757:U:O2'	26:1H:1758:G:OP1	2.33	0.44
26:1H:2862:G:O2'	26:1H:2863:C:H5'	2.18	0.44
1:13:1340:A:OP1	24:3K:35:U:OP1	2.35	0.44
10:1A:50:ILE:HD13	10:1A:60:ARG:HD2	2.00	0.44
7:6E:20:ASP:HB3	7:6E:23:VAL:HG23	2.00	0.44
26:14:1666:G:OP1	36:25:66:LYS:HD3	2.18	0.44
1:13:186(C):G:C5	1:13:191(E):G:C2	3.06	0.44
26:14:1021:A:H8	26:14:1021:A:H3'	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:69:122:GLU:HG3	34:69:123:LEU:H	1.83	0.44
1:1G:1085:U:H5'	1:1G:1094:G:H21	1.82	0.44
26:1H:363:G:C2	26:1H:363(A):A:C8	3.06	0.44
46:C5:2:ARG:CZ	46:C5:2:ARG:HA	2.48	0.44
7:62:18:TYR:CD2	7:62:59:LEU:HB2	2.53	0.44
26:14:1252:G:C2	42:85:33:ARG:HD2	2.53	0.44
31:31:29:ASN:H	31:31:112:MET:HE1	1.83	0.44
26:1H:297:C:H5''	46:G8:86:ARG:CG	2.43	0.44
4:32:49:ARG:HG2	4:32:50:ARG:H	1.83	0.44
32:49:82:LEU:HD23	32:49:82:LEU:HA	1.72	0.44
34:61:113:ARG:NH1	34:61:132:PRO:HB3	2.33	0.44
1:13:277:C:H2'	1:13:278:G:C8	2.52	0.44
17:8I:65:ILE:HB	17:8I:69:LYS:HB3	2.00	0.44
48:I8:53:MET:HA	48:I8:58:THR:O	2.18	0.44
26:14:2210:G:H5'	26:14:2211:G:C6	2.53	0.44
26:14:2712:U:O2'	26:14:2712(A):A:P	2.76	0.44
26:14:2601:C:H2'	26:14:2603:G:C8	2.53	0.44
49:F5:53:VAL:HB	49:F5:74:VAL:HG23	1.99	0.44
1:13:618:C:H5''	1:13:619:U:H5''	2.00	0.44
26:14:1059:G:H2'	26:14:1060:U:C5	2.53	0.44
1:1G:1322:C:O2'	1:1G:1323:G:H5'	2.17	0.44
1:13:116:A:H2'	1:13:117:G:O4'	2.17	0.44
26:1H:2232:U:P	49:J8:40:ARG:HH12	2.41	0.44
26:1H:360:G:H2'	26:1H:361:G:C8	2.53	0.44
1:13:868:C:H2'	1:13:869:G:O4'	2.18	0.44
23:2L:20:G:O4'	23:2L:58:A:H2	2.00	0.44
26:1H:2634:G:H2'	26:1H:2635:C:O4'	2.17	0.44
26:14:121:G:O5'	26:14:121:G:C8	2.70	0.44
26:1H:381:G:C4	26:1H:394:A:C2	3.06	0.44
26:1H:395:U:H1'	26:1H:396:G:N7	2.33	0.44
26:14:1482:U:H3	26:14:1512:G:H1	1.65	0.44
38:88:2:LEU:HD12	38:88:2:LEU:N	2.33	0.44
5:42:37:ARG:HG2	5:42:112:LEU:HA	2.00	0.44
26:14:948:G:C2	26:14:970:C:O2	2.71	0.44
26:14:2707:G:O3'	39:55:68:ARG:HG2	2.18	0.44
26:1H:529:A:H8	26:1H:530:G:C6	2.35	0.44
26:14:1651:G:N2	26:14:2007:C:C2	2.86	0.44
14:5A:27:CYS:SG	14:5A:40:CYS:HB2	2.58	0.44
26:1H:1559:G:O2'	26:1H:1560:G:H5'	2.17	0.44
4:32:64:LEU:HB2	4:32:198:VAL:HG11	2.00	0.44
26:14:1993:U:H4'	30:29:128:SER:OG	2.17	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:3E:57:ARG:HG2	4:3E:202:LEU:HD22	2.00	0.44
27:16:89:G:C6	27:16:89(A):A:C6	3.05	0.44
1:13:900:A:O5'	1:13:900:A:H8	2.01	0.44
1:13:843:U:H2'	1:13:843:U:O2	2.18	0.44
26:14:599:G:H5''	26:14:599:G:H8	1.83	0.44
26:1H:604:G:OP2	37:78:90:ARG:NH2	2.48	0.44
1:13:821:G:C2	1:13:880:C:N3	2.86	0.44
34:61:86:THR:HA	34:61:123:LEU:HD13	2.00	0.44
29:19:69:ARG:NH2	29:19:128:GLY:O	2.51	0.44
26:14:1184:G:C6	26:14:1185:C:C4	3.05	0.44
29:11:162:SER:HB3	29:11:195:ALA:HA	2.00	0.44
49:F5:94:LEU:HA	49:F5:94:LEU:HD23	1.68	0.43
1:13:837:G:H1	1:13:849:C:H42	1.66	0.43
32:49:15:VAL:HG13	32:49:175:LEU:HD13	2.00	0.43
32:41:67:LYS:HD2	52:M8:6:HIS:HB2	2.00	0.43
9:82:71:SER:O	9:82:74:ILE:HB	2.18	0.43
30:29:54:GLN:H	30:29:74:PRO:CB	2.30	0.43
30:29:55:ASN:HD22	30:29:75:VAL:CG1	2.30	0.43
24:3K:57:G:H5''	24:3K:58:A:OP2	2.18	0.43
30:29:61:ARG:HA	30:29:63:LEU:HD23	2.00	0.43
1:13:452:A:H2'	1:13:453:A:C8	2.53	0.43
1:13:613:C:N4	1:13:627:G:H1	2.00	0.43
32:41:35:GLU:OE1	32:41:35:GLU:HA	2.18	0.43
26:1H:1049:C:N3	26:1H:2751:G:O6	2.50	0.43
42:85:98:LEU:O	42:85:98:LEU:HD12	2.18	0.43
16:7A:40:ASP:HB3	16:7A:48:TRP:HB2	1.98	0.43
26:1H:1319:G:C6	26:1H:1320:C:N4	2.86	0.43
26:1H:2131:G:H5''	26:1H:2132:U:OP1	2.18	0.43
4:32:101:LEU:HD12	4:32:101:LEU:HA	1.73	0.43
3:22:12:LEU:CD2	3:22:18:TRP:CZ3	3.01	0.43
41:75:88:ILE:HG21	41:75:91:ARG:NH2	2.33	0.43
46:C5:73:ARG:NE	46:C5:74:PRO:HD2	2.33	0.43
1:1G:49:U:O4'	12:3A:28:LYS:NZ	2.48	0.43
1:13:603:U:H2'	1:13:604:G:C8	2.53	0.43
3:2E:152:ILE:HB	3:2E:199:LYS:HB2	2.00	0.43
5:4E:145:LYS:HD3	5:4E:145:LYS:N	2.33	0.43
1:1G:243:A:C2	1:1G:245:C:C2	3.07	0.43
26:14:1187:G:O5'	26:14:1187:G:C8	2.60	0.43
29:11:67:PHE:HB3	29:11:153:ALA:H	1.82	0.43
47:H8:158:PRO:O	47:H8:161:VAL:HG22	2.17	0.43
26:1H:1470:G:N2	26:1H:1521:G:H3'	2.32	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:A8:106:ARG:HH11	40:A8:106:ARG:C	2.20	0.43
1:1G:1089:G:C6	1:1G:1090:U:C2	3.05	0.43
1:1G:197:A:H8	1:1G:198:G:N9	2.16	0.43
32:41:28:VAL:O	32:41:31:VAL:HG22	2.18	0.43
1:1G:1239:A:O2'	1:1G:1298:C:N4	2.51	0.43
57:3L:22:G:N2	57:3L:23:A:C8	2.86	0.43
26:14:2575:C:H2'	26:14:2578:G:O6	2.18	0.43
31:39:40:GLN:NE2	31:39:182:ASN:HB2	2.31	0.43
46:C5:29:GLU:OE1	46:C5:30:VAL:N	2.51	0.43
46:C5:42:VAL:O	46:C5:65:ALA:N	2.37	0.43
1:13:323:U:C5'	20:BI:23:ARG:HB2	2.47	0.43
22:1K:74:C:N4	26:1H:2507:C:O2'	2.51	0.43
26:14:729:G:H2'	26:14:1775:U:H1'	2.00	0.43
1:13:491:G:C4	1:13:492:G:C8	3.06	0.43
43:95:34:GLU:HG2	43:95:58:VAL:HG22	2.00	0.43
2:12:55:PHE:CE1	2:12:221:LEU:HD11	2.53	0.43
26:14:1298:C:N4	26:14:1299:G:C6	2.86	0.43
26:1H:2331:G:C4'	48:I8:42:GLY:HA3	2.48	0.43
11:2A:96:ARG:O	11:2A:99:GLN:N	2.50	0.43
1:1G:129(A):G:C2	1:1G:191(A):G:C8	3.06	0.43
23:2K:57:C:H2'	23:2K:58:A:C8	2.53	0.43
22:1K:10:G:H22	22:1K:26:A:C2'	2.30	0.43
1:1G:338:A:H2'	1:1G:339:C:C6	2.53	0.43
1:13:241:C:C2	1:13:286:G:C2	3.05	0.43
3:22:92:ALA:HB2	3:22:99:VAL:HG13	2.00	0.43
26:14:1015:G:H2'	26:14:1016:G:H8	1.83	0.43
29:19:132:PRO:HG3	29:19:190:TYR:CZ	2.52	0.43
26:14:1927:A:H2'	26:14:1928:A:C8	2.53	0.43
26:14:1266:G:OP2	53:J5:20:ARG:NE	2.32	0.43
1:13:150:C:H2'	1:13:151:A:C8	2.53	0.43
11:2I:83:ILE:HA	11:2I:109:VAL:HG23	2.00	0.43
26:14:189:G:OP2	49:F5:39:LYS:HE2	2.18	0.43
30:29:36:ARG:HD2	30:29:36:ARG:HA	1.78	0.43
26:14:110:G:C2	26:14:111:A:C8	3.06	0.43
34:61:29:TYR:C	34:61:32:PRO:HD2	2.39	0.43
45:F8:4:ALA:H	45:F8:7:VAL:HG23	1.83	0.43
26:14:1282:U:H2'	26:14:1283:G:O4'	2.17	0.43
26:14:2643:G:H2'	26:14:2644:G:O4'	2.18	0.43
31:31:52:LYS:HB3	31:31:57:VAL:HG23	1.99	0.43
54:P8:24:THR:HG23	54:P8:27:GLY:HA3	2.00	0.43
26:14:1088:A:N3	26:14:1088:A:H2'	2.33	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:654:A:N3	26:14:654:A:H2'	2.33	0.43
36:68:106:LEU:HA	36:68:106:LEU:HD23	1.53	0.43
26:1H:2725:A:C4	26:1H:2727:G:C8	3.05	0.43
33:59:152:ARG:H	33:59:162:ILE:HD12	1.81	0.43
3:22:152:ILE:HG23	3:22:167:TRP:HB3	2.00	0.43
51:L8:47:VAL:HG11	51:L8:56:VAL:HG11	1.99	0.43
26:14:1637:A:OP2	61:14:3539:HOH:O	2.21	0.43
26:1H:247:G:O2'	26:1H:250:G:N7	2.47	0.43
37:78:36:LYS:HE2	37:78:39:LYS:HB3	2.00	0.43
30:29:57:LYS:HG2	30:29:57:LYS:HZ3	1.51	0.43
30:29:63:LEU:HA	30:29:63:LEU:HD13	1.75	0.43
26:14:2443:C:OP1	31:39:68:LYS:HG2	2.18	0.43
1:13:509:A:H5''	4:3E:55:ALA:HB2	2.00	0.43
37:35:8:PRO:HG2	37:35:13:ASN:HD22	1.83	0.43
57:3L:71:C:H2'	57:3L:72:C:H5''	1.99	0.43
26:1H:2133:G:C8	26:1H:2156:G:C5	3.06	0.43
46:G8:43:ASN:CB	46:G8:67:LEU:HD11	2.48	0.43
26:1H:1372:U:H2'	26:1H:1373:A:C8	2.53	0.43
4:32:19:LEU:HD12	4:32:21:LEU:HD11	2.00	0.43
12:3A:45:PRO:HB2	12:3A:92:ASP:HB3	2.01	0.43
4:3E:19:LEU:CB	4:3E:21:LEU:HD11	2.43	0.43
46:C5:82:PRO:HB3	46:C5:99:CYS:CB	2.48	0.43
26:1H:1022:G:O2'	26:1H:1023:U:OP2	2.30	0.43
1:13:1183:A:O2'	1:13:1184:G:OP1	2.31	0.43
26:14:1802:A:N1	26:14:1822:G:H1'	2.33	0.43
1:13:1455:G:C8	1:13:1455:G:O5'	2.71	0.43
44:E8:34:ASN:HD22	53:N8:39:MET:HB2	1.83	0.43
34:69:123:LEU:HA	34:69:142:VAL:CG2	2.49	0.43
1:1G:1084:G:H2'	1:1G:1085:U:C6	2.53	0.43
26:1H:1643:G:C4	26:1H:1644:C:C6	3.06	0.43
26:1H:2638:G:P	30:21:82:ARG:HH21	2.42	0.43
26:14:1171:G:O6	26:14:1176:G:H1'	2.18	0.43
26:1H:1534:G:N1	26:1H:1539:G:N3	2.60	0.43
19:AI:4:SER:O	19:AI:5:LEU:HD23	2.18	0.43
26:14:528:A:N1	26:14:2042:A:H2'	2.33	0.43
24:3K:76:A:O2'	26:1H:2394:C:N3	2.51	0.43
26:1H:2148:G:C4	26:1H:2149:G:C8	3.05	0.43
4:3E:107:ARG:HH22	4:3E:194:LEU:CD2	2.30	0.43
26:1H:34:C:C2	26:1H:34:C:OP2	2.71	0.43
1:1G:116:A:O5'	1:1G:116:A:H8	2.01	0.43
26:14:1487:G:N2	26:14:1503:U:O2	2.51	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:3L:14:A:N3	57:3L:14:A:H2'	2.32	0.43
26:1H:66:C:C4	26:1H:67:U:C4	3.05	0.43
26:14:2745:C:O2'	33:59:143:GLN:O	2.25	0.43
26:14:1885:A:H5'	26:14:1886:C:OP2	2.18	0.43
37:78:57:THR:OG1	37:78:60:MET:HB2	2.18	0.43
7:62:65:ALA:CB	7:62:124:LEU:HD23	2.47	0.43
1:13:358:U:H2'	1:13:359:U:O4'	2.17	0.43
29:11:232:PRO:HB3	29:11:244:ARG:NH1	2.33	0.43
39:55:107:ASP:OD1	39:55:107:ASP:C	2.57	0.43
35:15:13:TRP:O	35:15:135:PRO:HD2	2.17	0.43
26:1H:956:G:H2'	26:1H:957:A:H2'	2.00	0.43
1:1G:707:C:H2'	1:1G:708:C:C6	2.53	0.43
47:H8:137:ILE:HG21	47:H8:155:LEU:HD13	2.00	0.43
45:B5:21:PHE:CD1	45:B5:21:PHE:N	2.86	0.43
1:1G:264:U:O2'	17:8A:63:ARG:HG2	2.18	0.43
10:1A:78:ASN:ND2	10:1A:81:THR:HG23	2.32	0.43
26:1H:1831:G:C4	26:1H:1975:G:N2	2.86	0.43
42:C8:61:TRP:O	42:C8:65:ILE:HG13	2.18	0.43
1:1G:603:U:H2'	1:1G:604:G:C8	2.53	0.43
1:1G:375:U:O2'	16:7A:6:LEU:O	2.35	0.43
46:C5:15:VAL:HG23	46:C5:72:VAL:HG12	2.00	0.43
26:14:2104:G:H2'	26:14:2105:C:H6	1.82	0.43
26:1H:2518:A:C5'	26:1H:2518:A:H8	2.30	0.43
15:6A:78:TYR:HD1	15:6A:79:ARG:HG3	1.83	0.43
47:H8:138:GLU:OE2	47:H8:156:LYS:HG2	2.18	0.43
32:49:36:LYS:HE2	32:49:95:ARG:HH22	1.83	0.43
5:4E:12:LEU:HG	5:4E:13:ILE:N	2.33	0.43
1:13:942:G:C2	1:13:943:U:C6	3.06	0.43
1:13:834:C:C2	1:13:853:G:C2	3.05	0.43
1:1G:878:G:H5'	8:72:89:PRO:HG2	1.99	0.43
32:41:53:LEU:O	32:41:56:ALA:N	2.51	0.43
26:1H:2210:G:H2'	26:1H:2211:G:C5	2.53	0.43
6:52:30:LEU:HB3	6:52:35:ALA:HB3	2.00	0.43
26:14:2526:G:H5'	26:14:2742:C:O2'	2.17	0.43
37:78:108:LYS:C	37:78:110:TYR:H	2.21	0.43
2:1E:108:ILE:HA	2:1E:108:ILE:HD12	1.77	0.43
49:J8:46:LEU:HA	49:J8:46:LEU:HD12	1.78	0.43
26:1H:214:G:H4'	26:1H:214:G:OP1	2.18	0.43
29:19:65:ILE:HD11	29:19:67:PHE:CE1	2.53	0.43
26:1H:511:U:C5	26:1H:512:G:C5	3.05	0.43
1:13:282:A:C4	1:13:283:C:C6	3.06	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:G5:63:VAL:O	50:G5:66:GLU:HG2	2.17	0.43
32:49:114:ILE:HG13	32:49:117:PHE:HD1	1.81	0.43
32:49:141:PHE:C	32:49:143:GLU:H	2.22	0.43
31:31:138:GLU:O	31:31:139:PHE:C	2.56	0.43
5:4E:11:ILE:HG12	5:4E:31:LEU:HB3	2.00	0.43
1:1G:1319:A:H61	1:1G:1361:G:N2	2.16	0.43
50:K8:2:LYS:HA	50:K8:3:LEU:HA	1.81	0.43
57:3L:67:C:H3'	57:3L:68:G:H8	1.83	0.43
1:1G:1055:A:C5	1:1G:1206:G:C2	3.05	0.43
7:6E:111:ARG:HD2	7:6E:123:GLU:HB2	1.99	0.43
1:13:130:A:OP2	17:8I:63:ARG:NE	2.51	0.43
40:65:106:ARG:O	40:65:107:GLU:CD	2.56	0.43
14:5I:23:ARG:HD3	14:5I:30:ALA:HB2	2.01	0.43
26:1H:1510:A:OP1	26:1H:1511:A:H5'	2.18	0.43
53:N8:33:CYS:SG	53:N8:46:CYS:HB3	2.58	0.43
53:N8:40:LYS:CG	53:N8:47:PRO:HD2	2.48	0.43
24:3K:9:A:N3	24:3K:46:G:N2	2.66	0.43
8:72:25:ASP:OD2	8:72:60:ARG:NH1	2.51	0.43
26:14:2262:U:H4'	26:14:2328:A:C2	2.54	0.43
12:3I:60:LEU:HD12	12:3I:62:SER:H	1.83	0.43
26:14:943:U:OP2	37:35:36:LYS:CG	2.67	0.43
26:1H:1603:A:OP1	26:1H:1604:C:OP2	2.36	0.43
1:13:396:G:C2	1:13:398:C:C4	3.05	0.43
9:8E:9:ARG:HA	9:8E:76:ALA:HB1	1.99	0.43
47:D5:60:GLU:HA	47:D5:67:LEU:H	1.83	0.43
6:5E:22:GLU:O	6:5E:25:ILE:HG22	2.18	0.43
1:13:413:G:N2	1:13:428:G:H1'	2.33	0.43
46:C5:30:VAL:O	46:C5:36:ALA:O	2.36	0.43
29:19:25:THR:O	29:19:27:THR:O	2.36	0.43
38:45:4:PRO:CG	38:45:71:ASP:HA	2.48	0.43
45:B5:18:TYR:C	45:B5:20:GLY:H	2.22	0.43
26:14:1128:A:O2'	26:14:2490:G:OP1	2.30	0.43
1:13:373:A:C4	1:13:374:A:C8	3.07	0.43
31:31:103:LYS:HA	31:31:106:ARG:HD3	2.00	0.43
1:1G:176:C:O2'	1:1G:177:C:H5'	2.18	0.43
40:65:14:VAL:HG21	40:65:89:ARG:HH11	1.83	0.43
2:1E:105:PHE:HZ	2:1E:156:LYS:HD3	1.83	0.43
26:1H:1161:C:H6	26:1H:1161:C:H3'	1.83	0.43
29:19:106:ILE:O	29:19:108:PRO:HD3	2.18	0.43
1:1G:192:U:H4'	20:BA:103:GLY:HA2	2.00	0.43
26:1H:1316:U:H2'	26:1H:1317:A:C8	2.54	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:12:28:PHE:CE1	2:12:31:TYR:HE1	2.37	0.43
41:B8:125:ARG:O	41:B8:129:ARG:N	2.31	0.43
26:1H:1475:G:N2	26:1H:1476:C:O2	2.51	0.43
36:68:104:ARG:NH1	41:B8:36:GLU:OE1	2.51	0.43
6:52:94:GLN:HB3	18:9A:32:ARG:HD2	2.00	0.43
26:14:198:C:H4'	26:14:2243:U:O2'	2.18	0.43
38:45:19:GLY:O	38:45:98:LYS:HB3	2.18	0.43
1:13:1028(B):C:H3'	1:13:1029:G:C5'	2.48	0.43
12:3A:102:ARG:HB3	12:3A:108:ALA:O	2.18	0.43
5:42:15:ARG:HG2	5:42:26:PHE:HD2	1.83	0.43
26:14:82:G:N1	26:14:103:A:OP2	2.44	0.43
34:69:13:GLY:HA3	34:69:17:GLN:OE1	2.18	0.43
21:1F:9:ARG:NH1	21:1F:22:ARG:HA	2.34	0.43
26:14:1572:A:H2'	26:14:1573:G:O4'	2.17	0.43
7:62:12:LEU:HD11	7:62:25:ALA:HB2	2.00	0.43
26:14:2626:C:H2'	26:14:2627:G:O4'	2.19	0.43
50:G5:18:PRO:O	50:G5:21:LEU:HB2	2.18	0.43
50:G5:16:LEU:O	50:G5:21:LEU:HG	2.18	0.43
42:85:74:LEU:HB2	42:85:78:THR:OG1	2.18	0.43
37:35:59:LEU:HD22	37:35:59:LEU:O	2.18	0.43
4:32:90:GLY:O	4:32:93:PHE:HB3	2.18	0.43
26:14:516:C:O5'	26:14:516:C:H6	2.01	0.43
26:14:957:A:C5'	38:45:76:LYS:HE2	2.47	0.43
49:F5:72:GLU:OE2	49:F5:76:ARG:NH2	2.52	0.43
5:42:81:GLU:HG3	5:42:81:GLU:O	2.19	0.43
31:39:122:LYS:HA	31:39:191:ARG:NH2	2.33	0.43
26:1H:1380:G:N2	26:1H:1570:A:C2	2.87	0.43
26:1H:1329:U:H3'	26:1H:1330:C:H6	1.81	0.43
53:N8:49:CYS:O	53:N8:49:CYS:SG	2.77	0.43
4:32:173:TRP:HZ3	4:32:193:ASP:HB2	1.82	0.43
26:1H:1992:G:N2	26:1H:1996:C:O2'	2.50	0.43
43:95:72:VAL:HG13	43:95:72:VAL:O	2.18	0.43
27:1J:40:U:C2	27:1J:43:C:OP2	2.72	0.43
27:1J:43:C:H4'	32:49:66:GLN:OE1	2.17	0.43
26:14:929:G:C8	26:14:929:G:C3'	3.01	0.43
19:AA:66:MET:SD	19:AA:69:HIS:CE1	3.12	0.43
53:N8:40:LYS:HE2	53:N8:47:PRO:CG	2.48	0.43
1:1G:15:G:C6	1:1G:1396:A:C2	3.07	0.43
26:14:1021:A:H3'	26:14:1021:A:C8	2.54	0.43
43:95:57:VAL:HG23	43:95:99:ILE:N	2.30	0.43
26:1H:566:U:OP1	37:78:29:LYS:HD2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2327:A:H2'	26:14:2328:A:H8	1.79	0.43
38:88:139:GLU:OE1	47:H8:122:ARG:NH1	2.50	0.43
1:1G:1129:C:N4	1:1G:1142:G:N7	2.65	0.43
1:1G:1140:C:H2'	1:1G:1141:C:C6	2.53	0.43
26:14:1286:A:N6	26:14:1329:U:O2'	2.49	0.43
40:65:27:SER:HB3	40:65:38:GLN:HB2	2.00	0.43
1:1G:1170:A:N6	1:1G:1171:G:N3	2.67	0.43
45:F8:77:LYS:HG2	45:F8:78:LYS:N	2.33	0.43
9:82:14:VAL:H	9:82:65:VAL:HG23	1.84	0.43
1:1G:17:U:H1'	1:1G:1080:A:H1'	1.99	0.43
13:4A:53:VAL:O	13:4A:57:ARG:HG2	2.18	0.43
2:1E:86:GLU:C	2:1E:89:GLY:H	2.22	0.43
16:7I:43:LYS:HA	16:7I:48:TRP:CB	2.47	0.43
4:32:126:ILE:HG22	4:32:127:THR:N	2.33	0.43
37:35:86:LYS:HG3	37:35:87:ASP:N	2.33	0.43
1:13:223:U:H2'	1:13:224:C:C6	2.54	0.43
26:1H:2119:A:C2	26:1H:2171:A:N3	2.86	0.43
26:14:2162:G:C2'	26:14:2163:C:H5'	2.47	0.43
23:2L:5:G:O5'	23:2L:5:G:H8	2.02	0.43
16:7A:57:ARG:HH21	16:7A:79:VAL:C	2.19	0.43
46:C5:52:SER:HA	46:C5:55:TYR:C	2.37	0.43
55:M5:59:LYS:O	55:M5:62:LEU:N	2.35	0.43
3:2E:11:ARG:HB3	3:2E:14:ILE:O	2.18	0.43
47:D5:80:ARG:HB2	47:D5:82:ARG:HG2	2.00	0.43
36:25:21:CYS:SG	36:25:22:ILE:N	2.91	0.43
26:14:1973:G:H2'	26:14:1974:C:H6	1.83	0.43
5:42:35:GLY:CA	5:42:41:VAL:HG12	2.47	0.43
1:1G:1145:C:H4'	1:1G:1146:A:H8	1.84	0.43
34:69:44:LEU:HA	34:69:44:LEU:HD23	1.79	0.43
26:14:1530:G:H1	26:14:1541:U:H3	1.66	0.43
26:14:2056:G:O3'	53:J5:8:LYS:NZ	2.52	0.43
26:14:1999:C:H5''	26:14:2723:C:O2'	2.19	0.43
26:14:1712:C:H2'	26:14:1716:U:O4'	2.18	0.43
26:14:2019:A:N6	26:14:2020:A:C5	2.86	0.43
1:13:1299:A:C2'	1:13:1301:U:H1'	2.48	0.43
26:1H:1817:G:O2'	26:1H:1818:U:H5'	2.18	0.43
22:1K:1:G:H3'	22:1K:2:G:H8	1.84	0.43
26:1H:2518:A:C8	26:1H:2518:A:H5''	2.54	0.43
26:1H:1263:U:C4	26:1H:1264:G:C6	3.06	0.43
26:1H:2227:A:N7	26:1H:2228:G:N7	2.66	0.43
8:7E:51:VAL:HG11	8:7E:60:ARG:HH11	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:5I:39:LEU:HD11	14:5I:47:LEU:HD12	2.00	0.43
1:13:931:C:O2	1:13:1387:G:C2	2.71	0.43
26:1H:25:U:H2'	26:1H:26:G:C8	2.53	0.43
1:1G:52:G:C4	1:1G:53:A:C8	3.07	0.43
33:51:84:SER:O	33:51:85:LYS:HB2	2.19	0.43
1:1G:784:C:H2'	1:1G:785:G:O4'	2.18	0.43
26:1H:1782:C:O4'	26:1H:2609:U:C2	2.71	0.43
26:14:1093:G:H2'	26:14:1093:G:N3	2.33	0.43
43:D8:83:ARG:HD3	43:D8:83:ARG:HA	1.61	0.43
1:13:975:A:H8	1:13:975:A:H5'	1.84	0.43
26:1H:1853:A:N1	26:1H:2087:G:H1'	2.33	0.43
1:1G:995:C:O2'	1:1G:996:A:H5'	2.17	0.43
4:32:179:GLU:N	4:32:181:MET:H	2.16	0.43
26:14:2459:A:C4	26:14:2460:U:C6	3.06	0.43
32:41:132:ASN:N	32:41:132:ASN:OD1	2.51	0.43
1:1G:1329:A:H5''	13:4A:25:ILE:C	2.39	0.43
26:1H:1320:C:O2'	26:1H:1329:U:OP2	2.28	0.43
46:G8:43:ASN:O	46:G8:64:GLU:HA	2.18	0.43
26:1H:2532:G:H2'	26:1H:2533:A:O4'	2.19	0.43
1:1G:1186:G:O3'	9:82:113:LYS:HE3	2.18	0.43
55:Q8:51:ALA:HB1	55:Q8:52:LYS:HG3	2.00	0.43
1:1G:1012:U:H3	1:1G:1017:G:H1	1.66	0.43
27:1J:24:G:H4'	27:1J:25:A:H8	1.82	0.43
1:1G:235:C:H5'	17:8A:70:ARG:CG	2.49	0.43
37:78:19:VAL:HG23	37:78:20:GLY:HA3	1.99	0.43
45:F8:25:LYS:HA	45:F8:81:VAL:O	2.19	0.43
4:3E:31:CYS:O	4:3E:33:MET:N	2.51	0.43
26:1H:1536:A:H5''	26:1H:1537:C:C5	2.53	0.43
26:14:363(B):G:H2'	26:14:363(C):G:C8	2.54	0.43
17:8A:3:LYS:HB3	17:8A:61:GLU:HB3	2.00	0.43
1:1G:571:U:O2	1:1G:918:A:H5'	2.18	0.43
26:1H:2111:C:N3	26:1H:2118:U:O2'	2.49	0.43
34:69:7:GLU:HG2	34:69:8:PRO:CD	2.46	0.43
9:8E:9:ARG:HD2	9:8E:9:ARG:N	2.34	0.43
1:1G:1182:G:H5'	1:1G:1183:A:H5'	2.00	0.43
1:13:276:G:O6	1:13:277:C:N4	2.51	0.43
26:1H:1777:U:O2'	26:1H:1778:U:H5'	2.17	0.43
6:5E:19:LEU:O	6:5E:23:LYS:N	2.40	0.43
1:13:1072:G:C6	1:13:1073:U:N3	2.86	0.43
1:1G:566:G:H8	1:1G:566:G:OP1	2.01	0.43
26:14:289:A:H3'	26:14:290:G:C8	2.49	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:217:G:H3'	61:1H:3564:HOH:O	2.18	0.43
7:62:136:LYS:NZ	7:62:137:LYS:HZ3	2.14	0.43
41:B8:99:LEU:HD12	41:B8:99:LEU:O	2.19	0.43
1:1G:867:G:O2'	1:1G:868:C:H5'	2.17	0.43
26:1H:2306:C:H3'	26:1H:2307:G:H5'	1.98	0.43
26:1H:1931:U:H2'	26:1H:1932:A:O4'	2.19	0.43
8:7E:98:LYS:CD	8:7E:98:LYS:H	2.24	0.43
26:14:432:A:H2'	26:14:433:C:O4'	2.19	0.43
37:35:138:LEU:HG	37:35:144:GLU:HG2	2.01	0.43
1:13:925:G:H1	1:13:1391:U:H3	1.64	0.43
41:B8:55:ASN:N	41:B8:59:THR:HG22	2.34	0.43
2:1E:21:ARG:C	2:1E:21:ARG:HD3	2.38	0.43
44:A5:15:ARG:O	44:A5:19:LEU:CD2	2.67	0.43
26:14:2857:G:C2	26:14:2861:G:C6	3.06	0.43
17:8I:22:LEU:HD12	17:8I:40:LYS:O	2.18	0.43
26:1H:1759:A:H4'	26:1H:2715:C:O4'	2.18	0.43
26:1H:2309:A:H3'	26:1H:2309:A:H8	1.83	0.43
26:14:1769:G:O2'	26:14:1958:C:H5''	2.19	0.43
26:1H:1475:G:C2	26:1H:1476:C:C2	3.06	0.43
1:13:1406:U:O2	1:13:1517:G:N2	2.49	0.43
26:14:2027:G:H1'	26:14:2037:G:N2	2.33	0.43
31:39:144:LYS:HD3	31:39:144:LYS:HA	1.49	0.43
1:13:792:A:H4'	1:13:793:U:O5'	2.19	0.43
49:F5:37:ILE:HA	49:F5:37:ILE:HD12	1.59	0.43
31:39:83:PHE:O	31:39:85:GLY:N	2.50	0.43
26:1H:2183:C:H2'	26:1H:2184:G:H8	1.83	0.43
1:1G:200:G:H1	1:1G:217:C:N4	2.16	0.43
34:61:124:GLY:H	34:61:142:VAL:CG2	2.31	0.43
17:8A:56:VAL:O	17:8A:77:VAL:N	2.43	0.43
15:6I:32:LEU:O	15:6I:33:THR:C	2.54	0.43
26:1H:1205:U:H4'	26:1H:1206:G:OP2	2.18	0.43
45:F8:14:SER:O	45:F8:17:ALA:N	2.51	0.43
47:D5:137:ILE:HG23	47:D5:156:LYS:N	2.33	0.43
57:3L:49:G:H2'	57:3L:49:G:N3	2.32	0.43
37:78:80:TYR:CE1	37:78:111:ARG:HD3	2.52	0.43
26:14:747:U:O2	26:14:2014:A:H1'	2.18	0.43
30:29:100:GLU:O	30:29:172:VAL:HG23	2.18	0.43
26:14:2459:A:C4	26:14:2460:U:C5	3.06	0.43
1:1G:1372:U:C4	1:1G:1373:G:C4	3.07	0.43
26:1H:817:C:O2'	26:1H:839:U:H5''	2.18	0.43
26:14:2836:U:C4	26:14:2883:A:N6	2.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2611:U:H3'	26:14:2611:U:OP2	2.19	0.43
31:39:53:THR:CG2	31:39:55:GLY:H	2.15	0.43
5:42:79:GLU:HA	5:42:91:LEU:O	2.18	0.43
26:1H:991:C:H2'	26:1H:992:C:H6	1.84	0.43
32:41:35:GLU:HG3	32:41:36:LYS:CB	2.44	0.43
31:39:116:ASP:O	31:39:120:GLU:HG2	2.18	0.43
26:14:2687:U:O5'	26:14:2687:U:H6	2.02	0.43
1:1G:615:C:H2'	1:1G:616:G:H8	1.83	0.43
47:D5:44:PHE:HE1	47:D5:48:PHE:CD2	2.37	0.43
24:3K:34:U:O2	24:3K:35:U:H5'	2.19	0.43
4:32:173:TRP:CB	4:32:187:ARG:HG2	2.49	0.43
7:6E:28:ASN:O	7:6E:31:MET:HB3	2.18	0.43
26:14:900:A:C2'	26:14:901:A:H8	2.20	0.43
1:1G:1126:U:H5'	1:1G:1127:G:N7	2.33	0.43
10:1A:63:PHE:CD1	14:5A:56:VAL:HG13	2.53	0.43
26:14:1287:A:C5	26:14:1288:U:C4	3.06	0.43
26:1H:51:G:N3	26:1H:119:A:C2	2.87	0.43
37:78:63:PRO:CB	55:Q8:30:ARG:HH21	2.26	0.43
3:2E:60:ALA:H	3:2E:63:ASN:HB3	1.84	0.43
27:1J:29:A:OP1	40:65:31:SER:HA	2.19	0.43
26:1H:1523:U:H2'	26:1H:1524:G:O4'	2.19	0.43
40:A8:71:ARG:HE	40:A8:106:ARG:HH22	1.65	0.43
26:14:1286:A:H61	26:14:1329:U:HO2'	1.64	0.43
26:1H:1339:G:N2	26:1H:1603:A:H1'	2.33	0.43
1:1G:1088:G:C6	1:1G:1089:G:C5	3.06	0.43
22:1K:22:G:N3	22:1K:22:G:H2'	2.33	0.43
1:1G:17:U:C4	1:1G:18:C:N4	2.87	0.43
4:3E:107:ARG:NH1	4:3E:114:ARG:HH22	2.17	0.43
26:1H:2294:C:H5'	40:A8:13:ARG:HH12	1.83	0.43
16:7I:21:VAL:HG21	16:7I:34:GLU:HG2	2.01	0.43
1:13:192:U:H2'	1:13:193:C:H6	1.83	0.43
1:1G:1297:C:H4'	1:1G:1298:C:H5'	2.01	0.43
26:1H:1779:U:OP2	26:1H:1784:A:N6	2.46	0.43
26:1H:2848:G:C8	41:B8:97:ALA:HB2	2.54	0.43
48:E5:63:VAL:HG12	48:E5:64:ASP:N	2.30	0.43
1:13:137:C:H2'	1:13:138:G:O4'	2.19	0.43
30:29:173:VAL:N	30:29:183:LEU:O	2.27	0.43
1:13:153:C:N4	1:13:168:G:H22	2.16	0.43
13:4A:44:ARG:CB	13:4A:46:LYS:HG2	2.45	0.43
4:3E:172:PRO:HB2	4:3E:187:ARG:NH1	2.32	0.43
1:13:1226:C:H4'	19:AI:80:TYR:CZ	2.52	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
14:5I:48:ALA:HA	14:5I:53:LEU:HB2	1.99	0.43
26:1H:1931:U:O4'	26:1H:1931:U:O2	2.36	0.43
1:13:687:A:C6	1:13:704:A:N7	2.86	0.43
1:13:108:G:P	1:13:326:G:H22	2.42	0.43
26:14:1964:G:H4'	26:14:1965:C:OP2	2.17	0.43
28:71:163:PHE:HE2	28:71:199:HIS:CE1	2.36	0.43
4:3E:201:GLN:O	4:3E:205:GLU:HG3	2.19	0.43
26:1H:533:G:N2	42:C8:45:TYR:CE2	2.86	0.43
1:13:927:G:H2'	1:13:928:G:O4'	2.19	0.43
29:11:79:VAL:O	29:11:113:VAL:HG23	2.18	0.43
1:13:163:C:H6	1:13:163:C:OP2	2.02	0.43
31:39:165:ARG:HG2	31:39:168:ARG:NH1	2.33	0.43
50:K8:33:MET:HG2	50:K8:37:PHE:HE1	1.84	0.43
26:14:76:C:O3'	50:G5:59:ARG:HG3	2.18	0.43
1:13:1512:U:H2'	1:13:1513:A:C8	2.54	0.43
46:C5:61:ILE:HG22	46:C5:62:GLU:N	2.33	0.43
1:13:643:C:H2'	1:13:644:G:C8	2.53	0.43
47:H8:94:GLU:O	47:H8:130:PRO:HD3	2.18	0.43
1:1G:1267:C:H2'	1:1G:1267:C:O2	2.18	0.43
1:13:1417:G:C6	1:13:1482:G:C6	3.07	0.43
26:1H:2227:A:C6	26:1H:2228:G:C5	3.06	0.43
2:12:105:PHE:HA	2:12:108:ILE:HG22	2.01	0.43
33:59:152:ARG:HG3	33:59:153:LYS:HG3	1.99	0.43
26:1H:127:A:H5''	26:1H:128:C:C6	2.54	0.43
26:1H:511:U:H5''	26:1H:512:G:OP2	2.19	0.43
37:35:59:LEU:HD21	55:M5:10:ALA:HA	2.00	0.43
32:41:32:PRO:HB2	32:41:172:LEU:HD22	2.01	0.43
41:75:30:VAL:HG12	41:75:86:ILE:HD12	2.01	0.43
7:62:141:VAL:HA	7:62:142:GLU:CB	2.48	0.43
29:11:93:ALA:HB3	29:11:105:ILE:HG22	2.00	0.43
30:29:96:PHE:O	30:29:175:VAL:HG11	2.19	0.43
8:7E:121:ASP:OD2	8:7E:125:ARG:NH2	2.51	0.43
26:1H:375:C:H2'	26:1H:376:C:C6	2.54	0.43
42:C8:57:PHE:O	42:C8:60:LEU:N	2.51	0.43
1:1G:788:U:H2'	1:1G:789:U:O4'	2.18	0.43
45:F8:10:ALA:HB1	45:F8:11:PRO:HD2	2.00	0.43
26:1H:1686:C:H2'	26:1H:1687:G:O4'	2.19	0.43
11:2I:122:LYS:HG3	11:2I:122:LYS:H	1.60	0.43
26:1H:2812:G:C2	26:1H:2813:A:C4	3.06	0.43
26:1H:2547:U:H2'	26:1H:2548:G:C8	2.54	0.43
32:49:98:ARG:O	32:49:102:PHE:HB2	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:943:U:OP2	37:78:36:LYS:CG	2.66	0.43
1:1G:991:U:H5	1:1G:1212:U:H1'	1.84	0.43
2:12:82:ARG:HH22	2:12:150:SER:CB	2.32	0.43
42:85:90:VAL:HG22	43:95:39:LEU:HD23	2.00	0.43
31:39:117:ARG:HB3	31:39:123:LEU:HD23	2.00	0.43
26:1H:2428:G:N2	37:78:61:ARG:HH22	2.16	0.43
3:2E:26:LYS:HG3	3:2E:26:LYS:H	1.62	0.43
1:1G:963:G:H21	10:1A:55:LYS:CE	2.30	0.43
7:6E:111:ARG:H	7:6E:111:ARG:HG3	1.57	0.43
4:32:189:PRO:HB2	4:32:194:LEU:CD2	2.48	0.43
1:1G:1178:G:N3	1:1G:1180:A:C8	2.86	0.43
1:1G:1179:A:H2'	1:1G:1180:A:O4'	2.18	0.43
1:13:263:A:OP2	20:BI:79:ARG:NH1	2.50	0.43
2:1E:185:ILE:CD1	2:1E:199:TYR:HD2	2.31	0.43
26:14:335:C:H2'	26:14:336:C:H6	1.82	0.43
33:59:52:VAL:O	33:59:53:GLU:HB2	2.18	0.43
27:1J:42:C:H4'	32:49:67:LYS:HG3	2.01	0.43
1:13:736:C:OP1	18:9I:72:ARG:NE	2.52	0.43
32:41:111:LEU:HA	32:41:114:ILE:HD12	1.99	0.43
26:1H:1168:G:C2	26:1H:1182:A:C2	3.07	0.43
26:1H:662:G:OP1	37:78:15:ARG:HB3	2.18	0.43
3:22:71:ALA:O	3:22:73:PRO:HD3	2.19	0.43
1:1G:1084:G:C8	1:1G:1085:U:C6	3.06	0.43
26:14:2263:C:O2'	26:14:2264:C:H5'	2.18	0.43
30:21:26:ILE:CD1	30:21:196:VAL:HG21	2.49	0.43
26:1H:1537:C:H2'	26:1H:1538:G:H4'	2.01	0.43
1:1G:1305:G:H5''	21:1B:4:GLY:HA3	1.99	0.43
1:1G:570:G:C4	1:1G:571:U:C5	3.07	0.43
26:1H:36:G:C5	26:1H:37:C:C5	3.07	0.43
26:14:1487:G:C4	26:14:1488:G:C8	3.06	0.43
26:14:1503:U:H2'	26:14:1504:C:C6	2.53	0.43
41:75:11:GLU:HB2	41:75:12:SER:OG	2.18	0.43
26:14:34:C:H1'	26:14:35:G:P	2.58	0.43
1:13:1285:A:H8	1:13:1285:A:P	2.41	0.43
20:BA:86:ARG:CZ	20:BA:86:ARG:HB2	2.49	0.43
1:13:565:U:H3'	1:13:566:G:H2'	2.01	0.43
1:1G:376:G:H5''	16:7A:5:ARG:HD2	2.01	0.43
55:M5:40:GLU:HA	55:M5:43:GLN:CB	2.47	0.43
28:71:5:LYS:HB3	28:71:8:ARG:NH1	2.33	0.43
26:1H:1463:C:C4	26:1H:1464:C:C5	3.06	0.43
18:9I:38:GLU:HA	18:9I:41:LYS:HZ2	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:68:LYS:HB3	29:11:70:TRP:CH2	2.53	0.43
26:14:1431:U:H2'	26:14:1432:C:H6	1.84	0.43
27:16:75:G:H21	47:H8:85:HIS:HE1	1.65	0.43
43:95:30:GLY:H	43:95:61:VAL:HB	1.83	0.43
5:42:8:GLU:HB3	5:42:34:VAL:HG23	2.00	0.43
26:14:2862:G:H2'	26:14:2863:C:C6	2.52	0.43
1:13:1511:G:H2'	1:13:1512:U:O4'	2.18	0.43
1:1G:1354:C:H2'	1:1G:1355:G:H8	1.82	0.43
26:1H:2310:A:N3	26:1H:2310:A:H3'	2.34	0.43
26:1H:394:A:C6	26:1H:395:U:N3	2.86	0.43
26:1H:924:C:C4	26:1H:925:C:C4	3.07	0.43
35:58:16:ILE:HB	35:58:54:VAL:HG22	2.01	0.43
1:1G:872:A:O2'	1:1G:873:A:H5''	2.18	0.43
11:2A:57:THR:HG22	11:2A:59:TYR:H	1.82	0.43
26:1H:2888:C:O2'	26:1H:2889:C:H5'	2.18	0.43
26:1H:2663:G:H2'	26:1H:2664:G:O4'	2.18	0.43
27:1J:57:A:N3	32:49:29:TRP:HB3	2.34	0.43
11:2A:100:ALA:C	11:2A:102:GLY:H	2.22	0.43
26:1H:2081:C:C5	26:1H:2237:G:N2	2.87	0.43
26:14:2674:G:H2'	26:14:2675:A:C8	2.54	0.43
1:13:818:G:C2	1:13:820:U:O2'	2.67	0.43
26:14:234:C:C2	26:14:235:U:C5	3.07	0.43
26:14:774:A:HO2'	26:14:775:G:P	2.42	0.43
26:1H:1690:A:H3'	26:1H:1691:C:H6	1.83	0.43
27:16:52:A:C6	40:A8:33:LYS:HD2	2.53	0.43
1:13:183:G:H2'	1:13:184:G:C8	2.54	0.43
2:12:219:VAL:O	2:12:222:ILE:HG22	2.19	0.43
26:14:1652:A:OP1	39:55:8:ARG:NH1	2.51	0.43
15:6I:32:LEU:HD11	15:6I:62:GLN:HG3	2.00	0.43
43:D8:89:GLN:HG3	43:D8:90:PRO:HD2	2.01	0.43
8:7E:1:MET:HG3	8:7E:2:LEU:N	2.32	0.43
47:D5:18:LEU:O	47:D5:21:ALA:HB3	2.19	0.43
26:1H:968:G:C6	26:1H:969:U:C4	3.07	0.43
40:A8:24:LEU:HD12	40:A8:41:ASP:HB2	1.99	0.43
1:13:1202:G:C2	14:5I:42:ILE:HG21	2.54	0.43
10:1I:48:THR:HG1	10:1I:62:HIS:CE1	2.36	0.43
31:39:4:VAL:HG21	31:39:17:ARG:NH2	2.33	0.43
6:52:68:PRO:HG2	6:52:71:ARG:HB2	2.01	0.43
32:49:152:LEU:HD23	32:49:152:LEU:O	2.19	0.43
9:82:54:ASP:OD1	9:82:54:ASP:N	2.52	0.43
39:55:83:ILE:HG21	39:55:83:ILE:HD13	1.86	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
33:51:135:GLY:HA3	33:51:141:VAL:HG22	2.00	0.43
26:1H:1889:A:H2'	26:1H:1890:A:O4'	2.18	0.43
32:41:125:PHE:HA	32:41:130:ASN:O	2.19	0.43
1:13:458:C:C4	1:13:475:G:N1	2.86	0.43
30:21:119:ARG:HB3	30:21:120:TRP:CD1	2.54	0.43
1:13:1077:G:N3	1:13:1081:G:C2	2.87	0.43
26:1H:1166:C:O2	26:1H:1184:G:N2	2.51	0.43
9:8E:49:PRO:HA	9:8E:52:ALA:HB3	1.99	0.43
1:1G:1316:G:N2	1:1G:1318:A:C8	2.86	0.43
1:1G:981:U:O5'	1:1G:981:U:H6	2.01	0.43
1:1G:1359:C:P	14:5A:22:THR:HG21	2.59	0.43
26:14:99:U:C2	26:14:102:G:N2	2.87	0.43
39:98:44:LEU:O	39:98:47:PHE:N	2.38	0.43
26:14:2579:C:O2'	30:29:134:ILE:HD11	2.18	0.43
47:H8:163:LEU:HD22	47:H8:165:VAL:H	1.83	0.43
46:C5:73:ARG:HH22	46:C5:83:THR:HA	1.82	0.43
44:E8:38:TYR:OH	53:N8:47:PRO:HG2	2.19	0.43
37:78:14:LYS:O	37:78:15:ARG:O	2.37	0.43
20:BA:50:GLU:HA	20:BA:100:ILE:HG21	1.99	0.43
26:14:125:G:H1'	54:L5:13:ALA:HB1	2.01	0.43
29:11:30:GLU:CD	29:11:63:ARG:HH21	2.22	0.43
4:3E:155:LEU:O	4:3E:157:LEU:N	2.51	0.43
1:1G:1007:C:H2'	1:1G:1008:C:C6	2.53	0.43
26:1H:1297:C:N3	26:1H:1298:C:C5	2.86	0.43
26:1H:1642:G:C2'	26:1H:1643:G:H5'	2.49	0.43
54:L5:34:ARG:HG2	54:L5:39:ARG:HG3	2.00	0.43
26:1H:274:G:N3	26:1H:276:A:N1	2.66	0.43
40:A8:67:ARG:HG2	40:A8:71:ARG:CZ	2.49	0.43
1:13:1:U:N3	1:13:629:G:C2	2.87	0.43
26:14:582:G:H2'	26:14:583:G:H8	1.84	0.43
26:14:1416:G:H2'	26:14:1417:C:C6	2.54	0.43
12:3A:81:SER:HB2	12:3A:106:ASP:OD2	2.18	0.43
1:13:232:G:C4	1:13:233:C:C5	3.06	0.43
35:58:73:THR:HA	35:58:83:LYS:O	2.19	0.43
41:75:3:ARG:NE	41:75:5:ALA:HB3	2.33	0.43
26:1H:774:A:H2	26:1H:787:U:O2'	2.01	0.43
1:1G:186:C:H1'	20:BA:81:LYS:HE2	2.00	0.43
26:14:2488:A:C8	26:14:2488:A:O5'	2.66	0.43
2:1E:6:THR:HG22	2:1E:221:LEU:HD21	2.00	0.43
26:1H:2019:A:O4'	42:C8:34:LYS:HD2	2.18	0.43
26:14:2542:A:C8	26:14:2544:G:O6	2.72	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:889:A:H4'	1:1G:890:G:OP1	2.19	0.43
26:14:117:G:C6	26:14:119:A:C6	3.07	0.43
48:E5:43:THR:O	48:E5:45:PHE:N	2.52	0.43
26:14:2439:A:C5'	26:14:2439:A:C8	3.02	0.43
1:1G:1442:G:O2'	1:1G:1443:G:OP1	2.30	0.43
26:14:2119:A:C4	26:14:2171:A:C2	3.06	0.43
26:1H:918:A:O2'	27:16:96:G:N2	2.42	0.43
26:14:2295:C:H41	40:65:13:ARG:HH21	1.66	0.43
26:14:191:A:C2	26:14:192:C:C2	3.07	0.43
1:13:109:A:C6	1:13:326:G:C5	3.06	0.43
36:25:22:ILE:HG23	36:25:22:ILE:HD12	1.60	0.43
1:13:1097:C:O2'	1:13:1169:A:N3	2.39	0.43
26:1H:2461:C:H42	26:1H:2489:G:H1	1.65	0.43
26:14:2462:U:H2'	26:14:2463:C:C6	2.54	0.43
6:52:17:SER:O	6:52:21:LEU:HB2	2.19	0.43
38:45:39:PRO:HA	38:45:97:VAL:O	2.19	0.43
43:95:60:GLU:HG2	43:95:61:VAL:N	2.33	0.43
27:1J:99:A:C6	27:1J:100:G:C5	3.07	0.43
1:1G:397:A:H5'	1:1G:398:C:OP1	2.19	0.43
1:1G:34:C:H2'	1:1G:35:G:C8	2.53	0.43
45:B5:52:VAL:HG12	45:B5:82:GLN:HG3	2.00	0.43
26:1H:2740:A:C6	26:1H:2764:A:C8	3.06	0.43
7:62:106:GLN:H	7:62:106:GLN:HG2	1.61	0.43
52:M8:13:ARG:NH1	52:M8:22:ILE:O	2.52	0.43
12:3A:6:THR:H	12:3A:6:THR:HG23	1.56	0.43
26:1H:2843:G:H1	26:1H:2874:C:H42	1.65	0.43
26:14:735:A:H3'	26:14:736:C:H6	1.84	0.43
1:1G:1466:C:C2'	1:1G:1467:G:H5'	2.48	0.43
26:1H:466:A:O4'	26:1H:683:C:H4'	2.18	0.43
34:69:49:ALA:HA	34:69:52:ARG:HH11	1.84	0.43
1:13:282:A:H2'	1:13:282:A:N3	2.32	0.43
26:1H:1783:A:C2	26:1H:2587:A:C5	3.07	0.43
51:H5:8:LEU:HB2	51:H5:28:LEU:HD13	2.01	0.43
1:13:1486:G:H2'	1:13:1487:G:O4'	2.18	0.43
53:J5:33:CYS:SG	53:J5:46:CYS:HB2	2.59	0.43
26:1H:1277:G:C2	26:1H:1294:U:O2	2.72	0.43
32:41:138:GLN:HE21	32:41:149:VAL:HG12	1.84	0.43
26:1H:2675:A:H4'	36:68:29:ASN:ND2	2.34	0.43
2:12:137:ARG:HG3	2:12:138:LEU:N	2.33	0.43
23:2K:13:C:H4'	26:1H:1924:C:O2'	2.18	0.43
6:5E:37:VAL:HG22	6:5E:63:TYR:HD2	1.83	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:776:G:C8	26:14:793:A:C2	3.07	0.43
26:14:263:C:C4	26:14:264:C:C5	3.07	0.43
26:14:1826:G:H4'	29:19:242:ARG:NH2	2.34	0.43
3:22:20:SER:HB2	3:22:40:ARG:NH2	2.28	0.43
32:49:98:ARG:HA	32:49:101:ILE:HG22	2.00	0.43
26:14:2136:C:C2	26:14:2137:C:C4	3.07	0.43
31:31:24:LEU:HG	31:31:115:ALA:HB2	2.00	0.43
1:13:464:G:O6	1:13:466:C:H4'	2.18	0.43
29:11:35:LYS:HD2	29:11:35:LYS:O	2.19	0.43
30:29:25:VAL:CG1	30:29:26:ILE:N	2.72	0.43
36:25:98:VAL:HG12	36:25:117:LEU:HG	1.99	0.43
1:13:147:G:N1	1:13:148:G:N3	2.67	0.43
8:7E:87:SER:OG	8:7E:92:ARG:HA	2.19	0.43
20:BI:26:ASN:HA	20:BI:29:LYS:HB2	2.01	0.43
13:4I:13:LYS:HB3	13:4I:14:ARG:H	1.71	0.43
32:41:122:PRO:HG3	32:41:181:ARG:HB2	2.00	0.43
1:1G:1011:G:N2	1:1G:1019:C:O2	2.51	0.43
26:1H:270(I):G:H1	26:1H:270(Q):C:H42	1.67	0.43
32:49:67:LYS:HD2	32:49:68:PRO:HD2	2.00	0.43
43:D8:4:ILE:HD12	43:D8:40:LEU:HG	1.99	0.43
1:1G:1104:G:C6	1:1G:1105:A:C5	3.07	0.43
26:1H:2683:C:C5	26:1H:2684:U:C5	3.07	0.43
26:14:943:U:P	37:35:36:LYS:HG3	2.59	0.43
32:41:47:LYS:HB3	32:41:47:LYS:HE2	1.69	0.43
26:1H:1332:G:C8	26:1H:1332:G:H5'	2.53	0.43
26:14:128:C:H6	26:14:128:C:H5''	1.83	0.43
5:42:12:LEU:HD11	5:42:14:ARG:HG2	2.01	0.43
4:3E:98:GLU:HG3	4:3E:103:ASN:ND2	2.34	0.43
26:1H:36:G:N1	26:1H:445:C:C4	2.87	0.43
26:1H:37:C:H2'	26:1H:38:A:C8	2.54	0.43
1:13:193:C:H4'	20:BI:61:SER:HB2	2.01	0.43
26:1H:1884:A:H2'	26:1H:1885:A:O4'	2.18	0.43
26:14:10:G:C2	26:14:2629:A:N7	2.86	0.43
21:1F:5:ASP:O	21:1F:8:THR:HG22	2.19	0.43
6:52:91:VAL:HG12	6:52:92:LYS:O	2.19	0.43
38:88:133:ARG:HB3	38:88:134:ARG:H	1.54	0.43
26:14:2647:U:H2'	26:14:2648:C:C6	2.53	0.43
48:E5:47:PRO:HB3	48:E5:51:VAL:O	2.19	0.43
1:13:1172:C:O2'	1:13:1173:G:H5'	2.19	0.43
26:1H:2822:G:O6	39:98:2:ARG:HG3	2.19	0.43
1:13:171:A:H2'	1:13:172:A:C8	2.53	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:635:C:H2'	26:14:636:G:O4'	2.19	0.43
26:14:1279:G:C4'	39:55:31:HIS:CD2	3.02	0.43
7:62:45:ASP:HB3	7:62:117:ALA:HB1	2.00	0.43
2:1E:27:LYS:NZ	2:1E:193:ASP:OD2	2.52	0.43
26:14:1011:G:C2	26:14:1151:G:C2	3.06	0.43
26:14:2233:U:H2'	26:14:2234:G:C8	2.54	0.43
27:16:45:A:H5''	27:16:46:A:OP2	2.19	0.43
30:21:24:THR:O	30:21:184:VAL:HG22	2.19	0.43
11:2A:59:TYR:O	11:2A:63:LEU:HD23	2.19	0.43
26:14:2244:U:O5'	26:14:2244:U:H6	2.02	0.43
26:14:2630:G:H3'	26:14:2631:G:C8	2.53	0.43
23:2L:41:C:H2'	23:2L:42:C:C6	2.53	0.43
26:14:57:C:H2'	26:14:58:G:O4'	2.19	0.43
26:14:199:A:HO2'	26:14:200:U:H6	1.65	0.43
26:14:21:A:C2	26:14:520:G:C2	3.06	0.43
46:G8:104:GLY:H	46:G8:105:ALA:HB3	1.84	0.43
26:1H:2588:G:OP1	61:1H:3562:HOH:O	2.21	0.43
26:14:493:G:H2'	26:14:494:G:O4'	2.19	0.43
9:8E:86:VAL:HG12	9:8E:86:VAL:O	2.19	0.43
1:1G:310:G:OP2	16:7A:27:LYS:HD3	2.19	0.43
3:22:153:VAL:O	3:22:165:THR:HG23	2.19	0.43
26:14:1152:C:H4'	42:85:77:SER:HA	2.01	0.43
9:82:10:ARG:HH11	9:82:10:ARG:HG3	1.82	0.43
31:39:32:LEU:O	31:39:32:LEU:HD23	2.19	0.43
38:88:118:LEU:HA	38:88:118:LEU:HD23	1.61	0.43
26:1H:624:C:O5'	26:1H:624:C:H6	2.02	0.43
40:65:59:LYS:HA	40:65:59:LYS:HD2	1.84	0.43
26:1H:146:G:C6	26:1H:147:U:C4	3.06	0.43
26:1H:1423:G:H2'	26:1H:1424:G:H8	1.83	0.43
26:14:2571:C:C4	26:14:2574:G:C8	3.07	0.43
26:1H:302:C:OP1	46:G8:81:LYS:HG2	2.19	0.43
26:14:2075:U:OP2	29:19:244:ARG:NH2	2.51	0.43
1:1G:1347:G:N2	1:1G:1373:G:C8	2.87	0.43
2:12:72:GLY:HA3	2:12:81:VAL:HG21	2.01	0.43
24:3K:17:U:O4	24:3K:19:G:C4	2.72	0.43
1:13:479:C:C4	1:13:480:U:C4	3.07	0.43
26:1H:1045:A:O2'	26:1H:1047:G:C5	2.68	0.43
14:5A:17:LYS:HD2	14:5A:18:VAL:N	2.33	0.43
39:98:30:THR:HG22	39:98:31:HIS:ND1	2.33	0.43
41:B8:24:PRO:HD3	41:B8:52:ILE:CD1	2.44	0.43
1:1G:1205:U:O2'	3:22:195:VAL:HG22	2.19	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:973:A:O4'	26:14:1188:U:C6	2.72	0.43
4:3E:19:LEU:HD23	4:3E:21:LEU:HD21	2.01	0.43
46:C5:82:PRO:CG	46:C5:97:ARG:HB3	2.48	0.43
57:3L:30:G:C5	57:3L:31:A:N7	2.87	0.43
1:1G:1453:G:H1	20:BA:54:LYS:NZ	2.17	0.43
55:M5:36:LYS:HB2	55:M5:41:ILE:HD11	2.00	0.43
54:L5:13:ALA:O	54:L5:17:GLY:HA3	2.19	0.43
4:3E:165:MET:SD	4:3E:168:ARG:HD3	2.59	0.43
27:16:10:C:H2'	27:16:11:C:C6	2.54	0.43
27:1J:12:C:C6	27:1J:12:C:OP2	2.71	0.43
26:14:459:U:H4'	54:L5:40:TRP:CH2	2.54	0.43
26:14:2276:G:C2	26:14:2277:G:C8	3.07	0.43
12:3I:62:SER:HB2	12:3I:64:TYR:CD1	2.54	0.43
26:1H:1394:U:H6	26:1H:1394:U:H3'	1.84	0.43
1:1G:37:U:H2'	1:1G:38:G:C8	2.45	0.43
28:71:23:ASP:CG	28:71:190:ARG:HH12	2.21	0.43
26:1H:1525:G:C2	26:1H:1526:G:C4	3.07	0.43
1:13:1136:U:H2'	1:13:1138:G:O6	2.18	0.43
26:14:2331:G:O2'	48:E5:43:THR:HG22	2.19	0.43
26:14:1222:C:H6	26:14:1222:C:O5'	2.01	0.43
46:C5:52:SER:HA	46:C5:55:TYR:O	2.19	0.43
27:16:28:C:OP1	40:A8:36:TYR:OH	2.24	0.43
40:A8:29:PHE:O	40:A8:36:TYR:HD1	2.02	0.43
26:14:480:A:OP2	46:C5:46:LYS:HE3	2.19	0.43
26:1H:861:A:C2	26:1H:917:A:C5	3.07	0.43
47:H8:33:LEU:HD12	47:H8:33:LEU:HA	1.89	0.43
1:1G:1300:G:C5	1:1G:1334:G:C6	3.07	0.43
1:1G:1333:A:H2'	1:1G:1334:G:O4'	2.18	0.43
32:49:120:LEU:HB2	32:49:179:PRO:O	2.19	0.43
26:1H:469:G:O6	54:P8:37:LYS:HE2	2.19	0.43
1:13:1164:G:C6	1:13:1165:C:C4	3.07	0.43
22:1K:34:U8U:H6	22:1K:34:U8U:O5'	2.18	0.43
1:13:64:G:H3'	1:13:65:U:C5'	2.49	0.43
1:1G:825:G:H2'	1:1G:826:C:O4'	2.18	0.43
31:39:7:TYR:CD1	31:39:18:ARG:HD3	2.53	0.43
41:B8:19:LEU:HD22	41:B8:86:ILE:HG22	2.00	0.43
26:1H:2031:A:C6	26:1H:2498:C:H1'	2.54	0.43
53:J5:37:LYS:HD3	53:J5:38:ALA:HA	2.00	0.43
26:14:1540:G:H2'	26:14:1541:U:C6	2.53	0.43
1:1G:1230:C:H5'	23:2L:31:G:H5''	2.01	0.43
43:D8:14:VAL:HB	43:D8:96:ILE:HG13	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:953:G:H2'	1:13:954:G:O4'	2.18	0.43
2:12:95:GLN:HB3	2:12:148:TYR:HD1	1.84	0.43
38:88:54:MET:HE3	38:88:64:ILE:HD13	2.01	0.43
26:14:1819:A:H4'	26:14:1820:U:O5'	2.18	0.43
26:14:1820:U:H4'	26:14:1821:A:OP2	2.19	0.43
26:1H:2887:U:H2'	26:1H:2888:C:C6	2.54	0.43
26:1H:1028:A:N3	26:1H:2486:G:O2'	2.46	0.43
26:1H:2227:A:C5	26:1H:2228:G:C5	3.06	0.43
39:55:10:LEU:O	39:55:12:ARG:NH1	2.52	0.43
53:J5:11:THR:HG23	53:J5:15:ARG:HB3	2.00	0.43
15:6I:5:LYS:O	15:6I:8:LYS:HG2	2.19	0.43
26:1H:136:G:H2'	26:1H:137:C:C6	2.54	0.43
1:1G:1455:G:H5'	20:BA:32:ALA:HB2	1.99	0.43
26:14:1849:G:H2'	26:14:1850:G:C8	2.54	0.43
26:14:414:C:H4'	26:14:1879:C:O2	2.18	0.43
43:95:49:THR:OG1	43:95:50:PRO:HD2	2.19	0.43
2:1E:91:PRO:HG3	2:1E:154:LEU:HB2	2.00	0.43
28:71:37:PHE:CG	28:71:38:ASP:N	2.87	0.43
39:98:25:ALA:O	39:98:26:LYS:C	2.55	0.43
26:14:606:U:H4'	26:14:658:C:H4'	2.00	0.43
17:8A:6:LEU:HA	17:8A:6:LEU:HD23	1.71	0.43
16:7I:69:THR:OG1	16:7I:69:THR:O	2.34	0.43
1:13:439:A:H5''	1:13:439:A:H8	1.83	0.43
26:14:534:U:H5'	42:85:42:ALA:HB1	2.00	0.43
9:82:36:TYR:HD2	9:82:37:PHE:CE1	2.37	0.43
26:14:907:U:C2'	26:14:908:C:H5'	2.49	0.43
39:55:55:ALA:HB2	39:55:79:LEU:CD1	2.49	0.43
12:3I:58:VAL:O	12:3I:65:GLU:HA	2.19	0.43
2:1E:28:PHE:CD2	2:1E:190:THR:HG22	2.54	0.43
27:16:42:C:O2	32:41:92:VAL:HA	2.19	0.42
1:1G:922:G:N2	1:1G:1398:A:H2	2.17	0.42
1:1G:1402:C:H2'	1:1G:1403:C:O4'	2.19	0.42
5:42:93:PRO:HG2	8:72:105:ARG:NE	2.33	0.42
26:1H:270(N):G:H21	34:61:50:ARG:NH2	2.17	0.42
30:29:27:LEU:HA	30:29:181:LEU:HD12	2.01	0.42
42:85:92:ARG:HE	43:95:11:GLN:HG3	1.84	0.42
26:14:1812:A:H2'	26:14:1813:G:C8	2.53	0.42
49:J8:53:VAL:HG22	49:J8:74:VAL:HG23	2.01	0.42
50:K8:5:GLU:O	50:K8:9:GLN:N	2.42	0.42
39:98:41:ALA:O	39:98:42:LYS:C	2.57	0.42
26:1H:2129:C:C4	26:1H:2130:U:C2	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:242:G:C5'	55:Q8:64:TYR:CZ	3.02	0.42
26:14:569:U:C4	26:14:570:G:C6	3.06	0.42
9:8E:29:ASN:OD1	9:8E:64:THR:HA	2.19	0.42
26:14:778:G:C5	26:14:779:U:C4	3.07	0.42
9:8E:10:ARG:HD3	9:8E:11:LYS:N	2.34	0.42
26:1H:1443:G:C8	26:1H:1443:G:O5'	2.72	0.42
26:1H:1550:C:C5	26:1H:1551:C:H5	2.37	0.42
20:BA:50:GLU:HA	20:BA:100:ILE:CG2	2.48	0.42
29:11:29:PRO:O	29:11:30:GLU:CG	2.64	0.42
4:3E:161:ASN:O	4:3E:165:MET:HB2	2.18	0.42
1:1G:489:C:H2'	1:1G:490:G:C8	2.54	0.42
42:C8:90:VAL:HG12	42:C8:91:ASP:HA	2.01	0.42
7:6E:78:ARG:O	7:6E:85:TYR:N	2.42	0.42
4:32:111:ALA:HB3	4:32:117:ALA:HB2	2.01	0.42
40:A8:106:ARG:HD2	40:A8:107:GLU:N	2.34	0.42
26:14:2305:A:N9	32:49:136:ARG:HD3	2.33	0.42
5:42:70:PRO:HB3	5:42:144:THR:HG22	2.01	0.42
27:1J:2:C:H2'	27:1J:3:C:H5	1.82	0.42
40:65:23:ARG:NH2	40:65:84:GLN:OE1	2.40	0.42
2:12:127:ILE:CG2	2:12:135:GLN:HE22	2.30	0.42
26:1H:1675:C:H2'	26:1H:1676:A:O4'	2.18	0.42
26:14:1817:G:H5''	29:19:88:ARG:NH2	2.34	0.42
26:1H:782:A:N7	29:11:221:VAL:HG11	2.34	0.42
26:14:2505:G:O6	53:J5:3:LYS:NZ	2.46	0.42
1:13:57:G:H2'	1:13:58:C:H6	1.81	0.42
1:13:247:G:C4	1:13:248:C:H5	2.37	0.42
1:13:1072:G:C5	1:13:1073:U:C4	3.06	0.42
50:K8:55:ARG:O	50:K8:58:ALA:HB3	2.18	0.42
15:6I:11:VAL:O	15:6I:15:PHE:HD2	2.02	0.42
26:14:852:G:H2'	26:14:853:G:H8	1.84	0.42
1:1G:1493:A:H2'	26:14:1913:A:N6	2.31	0.42
38:88:31:ASP:O	38:88:133:ARG:O	2.37	0.42
1:13:403:C:O3'	4:3E:122:ARG:HD3	2.18	0.42
1:1G:1301:U:O2	1:1G:1301:U:H2'	2.19	0.42
26:1H:1026:U:O2'	26:1H:1027:A:C5'	2.67	0.42
1:13:170:U:O2'	1:13:171:A:H5'	2.19	0.42
30:21:69:LYS:HG2	30:21:89:ASP:OD1	2.19	0.42
8:7E:36:LEU:HA	8:7E:39:LEU:HB2	2.01	0.42
26:1H:557:U:H2'	26:1H:558:G:H8	1.84	0.42
29:11:70:TRP:O	29:11:73:VAL:HG23	2.19	0.42
23:2K:47:G7M:O2'	23:2K:48:U:C6	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1547:C:H2'	26:14:1547:C:O2	2.19	0.42
26:1H:901:A:N3	26:1H:901:A:H2'	2.33	0.42
36:25:105:GLU:N	36:25:105:GLU:OE1	2.47	0.42
3:2E:18:TRP:HB3	3:2E:20:SER:O	2.19	0.42
29:19:118:VAL:HG22	29:19:119:ALA:H	1.84	0.42
6:5E:75:LEU:CD2	6:5E:79:LEU:HG	2.48	0.42
26:1H:1680:U:H2'	26:1H:1681:G:O4'	2.19	0.42
24:3K:24:G:C6	24:3K:25:C:C4	3.06	0.42
26:14:1475:G:C2	26:14:1519:G:N3	2.87	0.42
26:14:1926:U:H2'	26:14:1928:A:OP2	2.19	0.42
4:3E:77:ASN:HA	4:3E:80:GLU:OE2	2.18	0.42
38:45:98:LYS:HB3	38:45:99:PRO:HD2	2.00	0.42
26:14:86:C:H2'	26:14:87:C:H6	1.84	0.42
26:1H:2227:A:H5''	29:11:263:ARG:HB3	2.01	0.42
29:11:48:ARG:O	29:11:50:THR:HG23	2.19	0.42
35:15:93:THR:O	35:15:94:HIS:C	2.57	0.42
1:13:162:A:H2	1:13:348:G:H4'	1.84	0.42
2:1E:28:PHE:CE1	2:1E:194:PRO:HD3	2.54	0.42
34:61:78:THR:HG22	34:61:141:LYS:HG3	2.00	0.42
8:72:93:VAL:O	8:72:132:GLU:HA	2.19	0.42
1:13:1037:C:O2'	1:13:1038:C:O4'	2.37	0.42
26:14:136:G:H5''	26:14:137:C:OP2	2.19	0.42
35:58:86:PRO:HG2	35:58:89:LYS:HB2	2.00	0.42
19:AI:15:LEU:HD23	19:AI:15:LEU:H	1.84	0.42
4:3E:94:LEU:HA	4:3E:94:LEU:HD23	1.77	0.42
31:31:77:ASP:OD1	31:31:77:ASP:N	2.50	0.42
38:88:34:LEU:HD12	38:88:34:LEU:HA	1.79	0.42
26:14:1805:U:O2	29:19:50:THR:HB	2.19	0.42
10:1I:47:PHE:CZ	14:5I:37:PHE:CE1	3.06	0.42
26:14:2416:C:N4	26:14:2417:C:N4	2.67	0.42
1:1G:1372:U:OP1	9:82:72:GLY:N	2.52	0.42
31:31:24:LEU:HD21	31:31:114:VAL:HG12	2.01	0.42
1:13:1124:G:O2'	10:1I:38:ILE:HD12	2.19	0.42
12:3A:20:LYS:C	12:3A:20:LYS:HD2	2.40	0.42
26:1H:545:G:H2'	26:1H:546:C:H5''	2.01	0.42
29:19:44:ASN:HB3	29:19:45:ASN:C	2.40	0.42
26:1H:1287:A:C5	26:1H:1288:U:C4	3.06	0.42
22:1K:50:C:C5	22:1K:51:A:H1'	2.53	0.42
1:1G:1195:C:H2'	1:1G:1197:G:O4'	2.19	0.42
8:72:36:LEU:HD11	8:72:59:LEU:HD13	2.00	0.42
26:14:1363:C:H2'	26:14:1364:G:C8	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:41:109:VAL:HG13	52:M8:33:VAL:CG2	2.49	0.42
52:M8:36:CYS:HB3	52:M8:39:CYS:CB	2.48	0.42
24:3K:64:G:H2'	24:3K:65:C:O4'	2.19	0.42
16:7A:20:VAL:HG11	16:7A:32:TYR:CD2	2.54	0.42
26:14:1138:G:C5	26:14:1139:G:H1'	2.53	0.42
26:1H:270(T):G:H2'	26:1H:270(U):C:C6	2.54	0.42
1:1G:362:G:O2'	1:1G:364:A:N7	2.46	0.42
26:1H:662:G:C5'	37:78:15:ARG:HA	2.49	0.42
55:M5:34:TRP:CE3	55:M5:34:TRP:HA	2.53	0.42
29:19:218:ARG:HG2	29:19:219:PRO:HD2	2.01	0.42
1:1G:431:A:H5''	1:1G:432:A:OP2	2.19	0.42
26:14:1183:G:O2'	51:H5:29:ARG:NH2	2.52	0.42
26:14:2303:G:C2'	26:14:2304:G:H5'	2.50	0.42
8:72:83:ILE:HD11	8:72:135:CYS:HB2	2.00	0.42
26:1H:646:A:C8	26:1H:647:G:H1'	2.53	0.42
26:14:1056:G:N2	26:14:1102:C:H41	2.16	0.42
1:1G:197:A:C8	1:1G:198:G:C4	3.05	0.42
22:1K:43:U:H2'	22:1K:44:U:C5	2.54	0.42
20:BI:57:ARG:HH22	20:BI:100:ILE:HD13	1.84	0.42
57:3L:47:U:H5'	57:3L:48:C:OP1	2.19	0.42
23:2L:26:C:H2'	23:2L:27:G:O4'	2.19	0.42
34:61:21:VAL:HG21	34:61:25:TYR:CD2	2.53	0.42
1:13:429:U:H3'	4:3E:9:CYS:SG	2.59	0.42
26:1H:684:G:C2	26:1H:774:A:C2	3.07	0.42
1:13:558:G:H2'	1:13:559:A:C2	2.53	0.42
39:55:2:ARG:NH2	39:55:5:LYS:O	2.38	0.42
26:1H:1397:U:H3'	26:1H:1398:C:C5	2.54	0.42
27:16:99:A:H3'	61:16:303:HOH:O	2.17	0.42
34:69:78:THR:HG22	34:69:78:THR:O	2.19	0.42
26:14:1340:U:C2	26:14:1603:A:O4'	2.72	0.42
26:14:2196:C:O2'	26:14:2197:U:H5'	2.19	0.42
26:1H:2336:A:H61	48:I8:43:THR:HG21	1.84	0.42
2:12:70:PHE:CE1	2:12:162:ILE:HG22	2.53	0.42
1:13:1163:C:H2'	1:13:1164:G:C8	2.54	0.42
26:1H:2820:A:HO2'	26:1H:2821:A:P	2.41	0.42
27:1J:77:U:H4'	47:D5:84:GLU:OE2	2.19	0.42
39:55:113:LEU:HA	39:55:113:LEU:HD12	1.79	0.42
37:35:139:LYS:HA	37:35:142:GLY:O	2.19	0.42
12:3I:83:VAL:HG13	12:3I:100:ILE:HG23	2.00	0.42
45:F8:8:ILE:HD11	45:F8:43:VAL:CG2	2.49	0.42
26:14:2854:G:C2	26:14:2864:G:C2	3.07	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1074:G:O2'	1:13:1075:C:H5'	2.19	0.42
26:1H:2259:G:C2	26:1H:2282:G:C6	3.07	0.42
24:3K:24:G:C6	24:3K:25:C:N4	2.87	0.42
26:14:1519:G:C6	26:14:1520:U:N3	2.87	0.42
13:4A:11:ARG:HG3	13:4A:12:ASN:HB2	2.01	0.42
56:1L:52:G:N2	56:1L:63:U:H3	2.17	0.42
29:19:175:LEU:HD23	29:19:175:LEU:HA	1.66	0.42
42:C8:98:LEU:O	42:C8:100:VAL:N	2.52	0.42
26:14:341:G:H2'	26:14:342:G:O4'	2.18	0.42
26:1H:2227:A:N6	26:1H:2228:G:C6	2.87	0.42
4:32:43:HIS:HA	4:32:46:LYS:HD2	2.01	0.42
9:82:86:VAL:HG13	9:82:90:PRO:HA	2.00	0.42
1:1G:1466:C:H2'	1:1G:1467:G:O4'	2.19	0.42
1:13:1486:G:H2'	1:13:1487:G:C1'	2.49	0.42
10:1I:47:PHE:CZ	14:5I:37:PHE:HE1	2.36	0.42
42:85:14:HIS:ND1	42:85:32:PHE:CD2	2.87	0.42
26:14:559:G:H2'	26:14:560:C:O4'	2.18	0.42
6:5E:96:PRO:HB3	18:9I:30:ASP:CG	2.40	0.42
26:14:1832:C:N4	26:14:1833:U:C4	2.87	0.42
8:72:81:HIS:HB3	8:72:138:TRP:CZ3	2.54	0.42
1:13:770:C:N4	61:13:1831:HOH:O	2.43	0.42
35:15:47:ALA:HB2	35:15:112:LEU:HD21	2.00	0.42
26:14:1043:C:C2'	26:14:1044:G:H5'	2.48	0.42
1:13:1336:C:H4'	1:13:1337:G:O5'	2.20	0.42
1:13:1346:A:C4	7:6E:10:ARG:NH2	2.81	0.42
42:C8:30:LYS:HD3	42:C8:30:LYS:HA	1.84	0.42
35:58:82:LEU:HD12	35:58:82:LEU:HA	1.82	0.42
1:1G:509:A:C8	1:1G:509:A:H3'	2.54	0.42
6:5E:10:LEU:HD22	6:5E:61:LEU:HD11	2.01	0.42
46:G8:87:LYS:H	46:G8:94:LYS:HG2	1.84	0.42
29:19:242:ARG:HG3	29:19:246:PRO:HG3	2.01	0.42
37:78:45:LEU:HB3	37:78:46:LYS:H	1.58	0.42
40:A8:15:ARG:NE	40:A8:88:ASP:OD2	2.52	0.42
1:1G:998:G:H22	1:1G:1043:C:H42	1.67	0.42
26:14:959:A:C6	26:14:960:A:N1	2.87	0.42
9:82:43:ALA:HA	9:82:74:ILE:HD13	2.00	0.42
26:14:2831:G:O2'	26:14:2883:A:H2'	2.18	0.42
24:3K:19:G:H21	24:3K:57:G:H22	1.66	0.42
28:71:22:ILE:HD13	28:71:189:ILE:CG2	2.41	0.42
31:31:6:VAL:HG12	31:31:7:TYR:N	2.33	0.42
1:13:963:G:N2	1:13:972:C:N3	2.53	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1899:G:N2	26:1H:1902:C:C5	2.87	0.42
42:C8:11:ARG:O	42:C8:15:LYS:HG3	2.19	0.42
26:1H:270(P):C:O2	34:61:50:ARG:NH2	2.50	0.42
1:1G:848:C:N4	1:1G:849:C:N4	2.68	0.42
26:14:869:G:N2	26:14:870:A:H1'	2.34	0.42
14:5A:21:TYR:HB2	61:5A:203:HOH:O	2.19	0.42
26:1H:1115:G:H2'	26:1H:1116:C:O4'	2.19	0.42
47:D5:48:PHE:CE2	47:D5:52:SER:HA	2.54	0.42
26:1H:2427:C:OP1	26:1H:2428:G:OP1	2.37	0.42
39:98:41:ALA:O	39:98:43:GLU:N	2.53	0.42
47:H8:166:SER:HA	47:H8:167:PRO:HD3	1.87	0.42
26:14:1945:G:C4	26:14:1946:U:C5	3.07	0.42
26:14:1006:C:C2	26:14:1138:G:N2	2.87	0.42
26:14:1139:G:O2'	26:14:1143:A:N1	2.45	0.42
26:1H:2056:G:C2	26:1H:2057:A:C8	3.06	0.42
1:1G:666:G:N2	1:1G:740:U:O2	2.50	0.42
8:72:122:ARG:HB2	8:72:123:GLU:OE2	2.20	0.42
1:13:160:A:N1	1:13:343:U:H4'	2.34	0.42
4:3E:157:LEU:HD12	4:3E:161:ASN:ND2	2.26	0.42
26:1H:587:C:OP2	37:78:21:ARG:NH2	2.52	0.42
26:14:780:G:C2	26:14:782:A:C2	3.07	0.42
1:1G:408:A:H4'	4:32:112:VAL:HG11	2.00	0.42
26:14:1416:G:N2	26:14:1582:C:O2	2.52	0.42
26:14:1071:G:H21	26:14:1090:U:P	2.42	0.42
1:13:291:C:C2	1:13:310:G:C2	3.07	0.42
1:13:375:U:O3'	16:7I:6:LEU:HB2	2.19	0.42
26:14:1009:A:OP1	35:15:37:LYS:NZ	2.45	0.42
10:1A:82:ILE:O	10:1A:85:LEU:HG	2.19	0.42
26:14:2776:A:OP1	26:14:2776:A:H3'	2.19	0.42
1:1G:925:G:H1'	1:1G:1502:A:C8	2.54	0.42
3:2E:45:LYS:HB2	3:2E:46:GLU:OE2	2.19	0.42
26:1H:2250:G:C5	38:88:83:MET:HB3	2.53	0.42
33:59:167:GLU:OE1	33:59:169:VAL:HG22	2.20	0.42
26:1H:468:G:C6	26:1H:469:G:C4	3.07	0.42
26:1H:1322:A:C2'	26:1H:1323:U:H5'	2.49	0.42
1:13:66:G:O4'	1:13:173:U:C4	2.73	0.42
26:14:2230:G:H4'	49:F5:43:TYR:HB2	2.01	0.42
26:14:2323:G:O5'	26:14:2323:G:H8	2.02	0.42
11:2I:48:ILE:HA	11:2I:48:ILE:HD12	1.76	0.42
11:2I:59:TYR:O	11:2I:63:LEU:HD12	2.19	0.42
1:1G:75:C:H2'	1:1G:76:G:O4'	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:1E:200:ILE:O	2:1E:201:ILE:HD13	2.20	0.42
1:13:953:G:N7	13:4I:104:ARG:NH2	2.67	0.42
17:8A:63:ARG:HG2	17:8A:64:PRO:HD2	2.01	0.42
51:L8:8:LEU:HD23	51:L8:8:LEU:HA	1.64	0.42
26:14:1428:C:O2'	26:14:1429:G:H5'	2.19	0.42
47:D5:7:ALA:O	47:D5:62:PRO:HD3	2.19	0.42
26:14:19:C:H2'	26:14:20:C:C6	2.53	0.42
2:1E:211:ILE:HG13	2:1E:211:ILE:H	1.61	0.42
26:1H:1925:C:O2'	26:1H:1926:U:H5'	2.19	0.42
26:14:2516:G:C5	26:14:2517:C:C4	3.07	0.42
26:14:2516:G:O6	26:14:2517:C:N4	2.53	0.42
26:14:2791:C:N4	26:14:2793:G:H22	2.17	0.42
2:1E:180:LEU:HD23	2:1E:180:LEU:HA	1.57	0.42
26:1H:1843:C:H5'	29:11:253:GLN:OE1	2.19	0.42
14:5I:47:LEU:HD23	14:5I:47:LEU:HA	1.68	0.42
40:A8:41:ASP:OD2	40:A8:44:LYS:HB2	2.19	0.42
46:G8:104:GLY:N	46:G8:105:ALA:HB3	2.34	0.42
35:15:23:LEU:HA	35:15:60:ILE:HD11	2.01	0.42
12:3A:58:VAL:N	12:3A:66:VAL:O	2.39	0.42
26:1H:48:G:C6	26:1H:178:G:O6	2.71	0.42
10:1I:15:THR:O	10:1I:19:SER:N	2.32	0.42
16:7I:20:VAL:HG11	16:7I:32:TYR:HB3	2.02	0.42
4:32:207:TYR:O	4:32:209:ARG:HG2	2.19	0.42
26:1H:1751:C:H2'	26:1H:1752:C:C6	2.54	0.42
44:E8:11:ARG:O	44:E8:42:ARG:NH1	2.48	0.42
1:13:252:U:H5'	1:13:253:U:OP2	2.19	0.42
50:G5:31:GLU:O	50:G5:35:LEU:HD23	2.20	0.42
26:14:1029:A:H8	26:14:1029:A:O5'	2.03	0.42
55:Q8:57:ARG:O	55:Q8:59:LYS:N	2.52	0.42
26:1H:406:G:C6	26:1H:407:G:C5	3.07	0.42
1:13:1187:G:O5'	9:8E:113:LYS:NZ	2.50	0.42
40:A8:61:ASN:C	40:A8:61:ASN:ND2	2.72	0.42
31:31:155:LEU:HD13	31:31:185:ASP:HB3	2.02	0.42
26:1H:1163:G:C2	26:1H:1164:G:C8	3.07	0.42
36:25:10:VAL:HG12	36:25:17:ARG:O	2.19	0.42
5:4E:33:VAL:CG1	5:4E:112:LEU:HD12	2.50	0.42
26:1H:2392:A:H1'	37:78:61:ARG:HD2	2.01	0.42
1:1G:962:C:H2'	1:1G:963:G:O4'	2.19	0.42
26:1H:2133:G:H8	26:1H:2156:G:C5	2.37	0.42
29:11:201:HIS:O	29:11:204:ILE:HG12	2.18	0.42
52:M8:40:HIS:CG	52:M8:40:HIS:O	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1216:G:H2'	1:13:1217:C:C6	2.53	0.42
26:14:1025:G:H8	26:14:1025:G:OP1	2.02	0.42
26:1H:592:G:N3	55:Q8:4:MET:HE3	2.34	0.42
13:4I:15:VAL:HG22	13:4I:45:VAL:HB	2.01	0.42
4:32:57:ARG:HH21	4:32:205:GLU:HG2	1.83	0.42
1:13:1009:G:N2	1:13:1010:G:H1'	2.34	0.42
1:1G:1256:A:N6	1:1G:1277:C:H3'	2.34	0.42
34:69:66:GLU:HA	34:69:69:LYS:HB3	2.02	0.42
26:1H:1639:U:H4'	26:1H:2699:C:H4'	2.01	0.42
45:F8:26:TYR:HB3	45:F8:92:LEU:HD12	2.00	0.42
1:1G:750:G:O3'	15:6A:18:PHE:HZ	2.02	0.42
26:14:2789:C:H2'	26:14:2790:A:O4'	2.19	0.42
29:19:37:LEU:H	29:19:37:LEU:HG	1.13	0.42
26:14:1107:G:N2	26:14:1108:U:H1'	2.35	0.42
32:41:47:LYS:HG2	32:41:48:GLU:N	2.35	0.42
1:13:1345:U:C5	1:13:1377:A:C2	3.07	0.42
26:14:1101:U:H2'	26:14:1102:C:H4'	2.00	0.42
23:2L:52:C:H2'	23:2L:53:G:O4'	2.19	0.42
1:13:254:G:H2'	1:13:255:G:O4'	2.20	0.42
1:13:692:U:H1'	1:13:694:A:N7	2.34	0.42
1:1G:1157:A:N7	1:1G:1181:G:H1'	2.33	0.42
44:E8:1:MET:SD	44:E8:62:HIS:HB3	2.59	0.42
1:1G:134:A:H1'	1:1G:325:A:C5	2.54	0.42
16:7A:23:ASP:OD1	16:7A:25:ARG:HG3	2.20	0.42
26:1H:2093:G:C6	26:1H:2225:A:C8	3.08	0.42
1:1G:578:C:C1'	1:1G:729:A:H1'	2.50	0.42
1:13:279:A:C5	17:8I:98:LEU:HD12	2.54	0.42
1:13:487:A:H2'	1:13:487:A:N3	2.34	0.42
26:14:1490:A:O2'	26:14:1491:G:O5'	2.27	0.42
4:3E:173:TRP:CE3	4:3E:193:ASP:HB3	2.54	0.42
31:39:155:LEU:HD23	31:39:186:ILE:HD13	2.01	0.42
1:13:1244:C:O5'	1:13:1244:C:H6	2.02	0.42
32:49:59:GLU:OE1	32:49:153:ARG:NH2	2.52	0.42
26:14:1278:A:H2'	26:14:1279:G:H8	1.82	0.42
18:9I:26:LEU:HD12	18:9I:29:PHE:CE2	2.54	0.42
26:14:1386:C:C2	26:14:1387:C:C5	3.07	0.42
26:1H:1211:U:H3'	26:1H:1212:G:C5'	2.50	0.42
26:14:822:U:O2'	26:14:823:G:H5'	2.19	0.42
14:5A:25:VAL:O	14:5A:26:ARG:HG2	2.19	0.42
26:14:1531:C:H2'	26:14:1532:C:C6	2.54	0.42
50:K8:37:PHE:O	50:K8:41:ILE:HG22	2.19	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:2A:67:ASP:O	11:2A:71:LYS:HG3	2.19	0.42
30:29:76:ARG:O	30:29:78:LEU:N	2.53	0.42
1:1G:673:G:H5''	6:52:87:ARG:CZ	2.49	0.42
1:1G:894:G:H2'	1:1G:895:G:O4'	2.20	0.42
1:13:965:A:C2	1:13:969:A:C2	3.07	0.42
1:13:607:A:H2'	1:13:608:A:C8	2.54	0.42
1:1G:78:G:H2'	1:1G:79:G:O4'	2.19	0.42
52:M8:22:ILE:O	52:M8:24:THR:HG23	2.19	0.42
26:14:540:G:C6	26:14:541:C:C4	3.07	0.42
5:4E:136:MET:O	5:4E:140:ARG:HD2	2.19	0.42
26:1H:11:G:C2'	26:1H:12:U:H5'	2.48	0.42
26:14:2228:G:C6	26:14:2229:C:N3	2.88	0.42
40:65:99:LYS:O	40:65:103:GLU:HG3	2.19	0.42
5:4E:10:MET:HB2	5:4E:32:VAL:HG22	2.01	0.42
27:16:110:G:C5	27:16:111:U:C5	3.08	0.42
43:D8:87:HIS:NE2	43:D8:89:GLN:OE1	2.52	0.42
26:1H:1120:G:H2'	26:1H:1121:C:C6	2.54	0.42
5:42:36:ASP:CG	5:42:38:GLN:HB2	2.39	0.42
31:39:81:PRO:HB3	31:39:87:GLY:O	2.18	0.42
41:75:133:GLU:HB3	41:75:137:LYS:NZ	2.34	0.42
1:1G:786:G:C2	1:1G:797:C:O2	2.72	0.42
1:13:615:C:C2	1:13:616:G:C8	3.08	0.42
29:19:94:LEU:HD23	29:19:94:LEU:HA	1.66	0.42
2:12:98:LEU:HD23	2:12:98:LEU:HA	1.93	0.42
26:14:350:U:H2'	26:14:351:G:O4'	2.19	0.42
34:69:127:VAL:HA	34:69:138:ILE:O	2.18	0.42
20:BI:11:SER:HA	20:BI:13:LEU:HG	2.01	0.42
32:49:105:LYS:HD2	32:49:141:PHE:CD2	2.55	0.42
35:58:9:VAL:HG21	35:58:48:MET:HB2	2.01	0.42
37:78:39:LYS:HB2	37:78:45:LEU:CD1	2.50	0.42
49:F5:69:LYS:HE2	49:F5:95:LEU:HD11	2.02	0.42
32:41:130:ASN:OD1	32:41:160:VAL:HG13	2.20	0.42
19:AI:41:VAL:HG12	19:AI:44:MET:CB	2.49	0.42
26:1H:2592:G:C6	26:1H:2593:U:C4	3.08	0.42
55:M5:30:ARG:HA	55:M5:30:ARG:HD3	1.94	0.42
1:1G:1359:C:H4'	61:5A:201:HOH:O	2.20	0.42
1:1G:1317:C:C5	14:5A:16:PHE:HB3	2.55	0.42
30:21:102:VAL:C	30:21:201:THR:HG23	2.39	0.42
30:21:60:ASN:OD1	30:21:61:ARG:N	2.52	0.42
26:1H:2532:G:O5'	26:1H:2532:G:H8	2.03	0.42
47:H8:99:TYR:CE1	47:H8:125:LEU:HB2	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:957:U:H2'	1:1G:959:A:OP2	2.19	0.42
26:1H:241:A:H5'	26:1H:243:U:O4'	2.19	0.42
1:1G:1263:C:H2'	1:1G:1264:C:O4'	2.19	0.42
14:5A:13:THR:N	14:5A:14:PRO:HD3	2.35	0.42
27:1J:27:C:O3'	40:65:36:TYR:OH	2.32	0.42
26:1H:1458:C:H4'	26:1H:1459:G:O4'	2.20	0.42
26:14:777:A:C2	26:14:778:G:C5	3.08	0.42
33:51:5:GLY:HA2	33:51:8:PRO:HD3	2.01	0.42
1:13:991:U:H4'	1:13:992:U:H5''	2.02	0.42
55:M5:33:ASN:O	55:M5:34:TRP:C	2.56	0.42
1:1G:437:U:C4	1:1G:438:G:C6	3.07	0.42
26:1H:2323:G:H2'	26:1H:2324:C:O4'	2.18	0.42
26:1H:1533:C:N3	26:1H:1534:G:C2	2.88	0.42
1:1G:427:U:O4	1:1G:428:G:N1	2.52	0.42
1:13:730:G:C6	1:13:731:G:H1'	2.54	0.42
26:1H:1336:A:H2'	26:1H:1337:G:H8	1.83	0.42
26:14:2312:U:OP1	32:49:74:LYS:HG3	2.19	0.42
3:22:11:ARG:O	3:22:14:ILE:O	2.38	0.42
26:1H:654:A:H2'	26:1H:654(A):A:H8	1.83	0.42
1:1G:51:A:N3	1:1G:116:A:H1'	2.35	0.42
1:1G:1238:A:N6	1:1G:1299:A:H61	2.14	0.42
57:3L:9:A:N1	57:3L:21:A:H2	2.17	0.42
26:1H:2163:C:H4'	26:1H:2172:U:OP2	2.19	0.42
26:1H:2175:C:OP2	28:71:3:HIS:ND1	2.53	0.42
1:1G:591:U:OP2	8:72:30:ARG:HD3	2.18	0.42
1:13:484:G:H5'	1:13:486:U:O4'	2.20	0.42
26:14:953:A:N1	26:14:954:G:C5	2.86	0.42
26:1H:2617:C:C2	26:1H:2618:G:C8	3.07	0.42
47:H8:28:MET:O	47:H8:34:ASN:HA	2.19	0.42
6:5E:91:VAL:HG12	6:5E:92:LYS:O	2.18	0.42
1:13:1269:A:C2	1:13:1313:U:O4'	2.72	0.42
26:14:1762:A:N3	26:14:1762:A:C2'	2.83	0.42
48:I8:51:VAL:N	48:I8:62:LEU:HD12	2.34	0.42
26:1H:764:A:H5'	29:11:210:GLY:HA2	2.00	0.42
26:14:396:G:O2'	49:F5:43:TYR:O	2.33	0.42
26:14:642:G:C8	26:14:642:G:C3'	3.02	0.42
28:71:58:VAL:CG1	28:71:199:HIS:HB3	2.49	0.42
26:1H:718:A:C8	26:1H:719:C:C6	3.07	0.42
26:1H:2320:A:H8	26:1H:2321:G:O6	2.03	0.42
8:72:11:THR:OG1	8:72:14:ARG:NH2	2.48	0.42
1:13:976:G:N7	1:13:1358:U:C2	2.87	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
51:L8:8:LEU:HD13	51:L8:31:LEU:HD23	2.01	0.42
1:13:964:A:N3	1:13:969:A:O2'	2.37	0.42
1:1G:860:A:N6	1:1G:861:G:C2	2.87	0.42
15:6I:9:GLN:HA	15:6I:12:ILE:HD12	2.00	0.42
48:I8:49:LYS:O	48:I8:50:ASN:HB2	2.20	0.42
13:4A:11:ARG:NH1	32:49:147:ASP:OD2	2.52	0.42
26:14:2079:U:H2'	26:14:2080:G:O4'	2.20	0.42
37:78:120:ALA:HB1	37:78:138:LEU:HA	2.01	0.42
37:35:120:ALA:H	37:35:137:LYS:HZ2	1.68	0.42
54:P8:24:THR:O	54:P8:28:ARG:HG3	2.19	0.42
4:32:207:TYR:O	4:32:209:ARG:N	2.52	0.42
26:14:1912:A:N7	26:14:1918:A:C2	2.87	0.42
31:31:53:THR:O	31:31:55:GLY:N	2.52	0.42
48:I8:29:GLN:O	48:I8:67:VAL:HG12	2.20	0.42
26:14:2050:C:H1'	30:29:156:MET:CE	2.50	0.42
26:14:318:C:H2'	26:14:319:C:H6	1.84	0.42
33:51:101:ARG:HH12	33:51:122:THR:HA	1.84	0.42
7:6E:46:ALA:HB2	7:6E:117:ALA:HB1	2.01	0.42
26:14:1514:U:O2'	26:14:1515:C:H5'	2.20	0.42
41:B8:39:ARG:HE	41:B8:39:ARG:HB2	1.60	0.42
26:1H:2682:U:H6	26:1H:2682:U:H5'	1.83	0.42
2:12:172:ILE:H	2:12:172:ILE:HD12	1.85	0.42
49:F5:62:VAL:HG21	49:F5:70:VAL:HG21	2.02	0.42
32:49:102:PHE:CG	32:49:105:LYS:HE2	2.55	0.42
26:14:2494:G:C4	26:14:2495:G:C8	3.07	0.42
1:13:450:G:N7	1:13:481:G:C6	2.87	0.42
26:14:2688:U:C5	26:14:2720:U:OP2	2.72	0.42
26:14:2285:C:H2'	26:14:2286:A:H5''	2.02	0.42
50:K8:8:LYS:HA	50:K8:11:GLU:HB3	2.02	0.42
1:1G:973:G:H5''	1:1G:974:A:H3'	2.01	0.42
26:1H:2629:A:N1	26:1H:2801:A:H4'	2.35	0.42
33:51:94:TYR:CE2	33:51:160:LYS:HB3	2.55	0.42
9:82:112:LYS:HD3	9:82:112:LYS:C	2.39	0.42
38:45:22:LYS:HG2	38:45:23:GLY:CA	2.41	0.42
26:1H:2358:G:C4	26:1H:2359:C:C6	3.08	0.42
12:3A:90:VAL:O	12:3A:92:ASP:N	2.52	0.42
24:3K:4:U:H3	24:3K:69:A:N6	2.05	0.42
26:1H:270(R):G:C2	26:1H:270(S):G:C6	3.07	0.42
1:13:676:A:H5''	11:2I:113:PRO:HB3	2.01	0.42
26:1H:1442:G:H2'	26:1H:1443:G:C8	2.54	0.42
26:1H:1510:A:H1'	26:1H:1512:G:O6	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:104:U:C2'	26:1H:105:C:H5'	2.49	0.42
1:1G:428:G:O4'	1:1G:430:A:C8	2.73	0.42
1:1G:410:G:N1	1:1G:431:A:OP2	2.48	0.42
26:14:740:U:O4'	26:14:1981:A:C4	2.72	0.42
32:41:81:LYS:HA	32:41:81:LYS:HD3	1.84	0.42
45:B5:44:GLU:HG3	45:B5:51:VAL:CG2	2.50	0.42
20:BI:57:ARG:NH1	20:BI:102:GLY:HA2	2.34	0.42
26:1H:638:G:C5	26:1H:651:G:C2	3.07	0.42
26:14:2505:G:H2'	26:14:2576:G:O6	2.20	0.42
49:F5:52:ARG:HD2	49:F5:57:GLU:HG2	2.02	0.42
41:75:3:ARG:HE	41:75:5:ALA:HB3	1.84	0.42
5:42:136:MET:H	5:42:136:MET:HG2	1.71	0.42
26:1H:2119:A:N1	26:1H:2170:A:H2'	2.35	0.42
1:13:1084:G:C8	1:13:1085:U:C5	3.07	0.42
27:1J:38:C:N3	27:1J:44:G:N2	2.67	0.42
7:6E:69:VAL:HG12	7:6E:69:VAL:O	2.19	0.42
15:6A:24:SER:O	15:6A:28:GLN:HG3	2.18	0.42
26:14:2146:C:H4'	26:14:2147:G:N7	2.34	0.42
26:14:1450:C:H2'	26:14:1451:C:C5	2.55	0.42
26:1H:1252:G:O4'	42:C8:33:ARG:HD3	2.20	0.42
26:1H:2331:G:H4'	48:I8:43:THR:H	1.84	0.42
1:13:171:A:H2'	1:13:171:A:N3	2.35	0.42
2:1E:156:LYS:HA	2:1E:156:LYS:HD3	1.75	0.42
48:I8:72:ARG:HB3	48:I8:75:LEU:HB2	2.00	0.42
26:14:1461:G:O2'	26:14:1462:C:H5'	2.19	0.42
26:14:1278:A:O2'	39:55:34:ILE:HD11	2.19	0.42
26:14:587:C:C5	26:14:671:C:H1'	2.55	0.42
41:B8:20:PRO:HG2	41:B8:86:ILE:O	2.20	0.42
37:35:125:VAL:O	37:35:125:VAL:HG13	2.19	0.42
26:1H:2321:G:N3	26:1H:2321:G:H2'	2.33	0.42
26:1H:360:G:H2'	26:1H:361:G:O4'	2.20	0.42
26:1H:534:U:H2'	26:1H:535:C:H6	1.84	0.42
17:8A:16:GLN:HA	17:8A:49:GLU:OE2	2.19	0.42
22:1K:12:U:H3	22:1K:24:G:N2	2.18	0.42
26:1H:1420:U:H6	26:1H:1420:U:H2'	1.65	0.42
26:1H:562:U:C4	26:1H:2036:C:O4'	2.73	0.42
31:31:199:TRP:C	31:31:199:TRP:CD1	2.93	0.42
47:H8:29:TYR:O	47:H8:89:PHE:HA	2.19	0.42
26:1H:380:U:C2	26:1H:381:G:C8	3.08	0.42
26:14:2025:C:H2'	26:14:2026:C:H6	1.84	0.42
22:1K:2:G:C2	22:1K:3:G:O6	2.72	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:1K:41:A:H2'	22:1K:41:A:N3	2.34	0.42
26:14:744:G:OP1	30:29:132:HIS:HA	2.19	0.42
26:14:2823:A:OP1	30:29:113:PHE:HB2	2.20	0.42
31:31:18:ARG:O	31:31:19:GLU:HG2	2.20	0.42
26:1H:1670:C:H3'	26:1H:1671:U:H6	1.84	0.42
1:1G:799:G:H3'	1:1G:800:G:C8	2.54	0.42
4:3E:192:GLU:CD	4:3E:192:GLU:N	2.72	0.42
33:51:12:PRO:HB3	33:51:48:GLY:HA2	2.01	0.42
12:3A:58:VAL:O	12:3A:65:GLU:HA	2.20	0.42
1:1G:8:A:N7	4:32:209:ARG:HA	2.35	0.42
26:14:1436:G:N2	26:14:1557:C:C2	2.88	0.42
26:14:375:C:H2'	26:14:376:C:C6	2.54	0.42
8:7E:103:VAL:HG21	8:7E:110:ALA:HB2	2.02	0.42
26:1H:1363:C:H42	26:1H:1368:G:H1	1.67	0.42
26:1H:182:A:H2'	26:1H:183:C:C6	2.54	0.42
29:11:89:SER:HB2	29:11:159:ALA:CB	2.49	0.42
1:13:971:G:P	1:13:1231:G:H21	2.42	0.42
48:I8:48:GLY:N	48:I8:79:VAL:O	2.51	0.42
21:1F:10:ARG:HH21	21:1F:13:ILE:HD12	1.85	0.42
26:14:1839:G:H2'	26:14:1839:G:N3	2.34	0.42
32:49:25:TYR:OH	32:49:168:GLU:OE2	2.37	0.42
26:1H:1204:A:C2	26:1H:1241:A:N1	2.88	0.42
32:49:107:LEU:HD21	32:49:178:PHE:HE1	1.84	0.42
30:29:119:ARG:HH12	30:29:120:TRP:HZ2	1.65	0.42
49:F5:95:LEU:HD12	49:F5:95:LEU:HA	1.80	0.42
26:14:2416:C:OP1	37:35:65:ARG:O	2.38	0.42
1:1G:1249:C:O2'	9:82:69:GLY:HA2	2.19	0.42
2:12:71:VAL:CG1	2:12:164:VAL:HA	2.45	0.42
30:29:34:VAL:HG12	30:29:64:LYS:HE3	2.01	0.42
26:14:1356:G:C6	26:14:1357:U:C4	3.07	0.42
35:58:46:VAL:O	35:58:47:ALA:HB3	2.19	0.42
5:42:76:ILE:HG12	5:42:118:ILE:HD12	2.00	0.42
47:D5:29:TYR:O	47:D5:89:PHE:HD1	2.03	0.42
33:59:60:ARG:O	33:59:64:LEU:HG	2.19	0.42
26:1H:1478:G:N3	26:1H:1479:G:C8	2.88	0.42
1:1G:135:C:C2	16:7A:1:MET:HB3	2.54	0.42
13:4A:86:CYS:HA	19:AA:74:PHE:HA	2.02	0.42
26:1H:2792:G:O6	26:1H:2805:G:C4	2.73	0.42
1:1G:448:A:O2'	1:1G:449:C:H5'	2.20	0.42
1:1G:1002:G:N1	1:1G:1039:C:O2	2.52	0.42
43:D8:49:THR:HB	43:D8:51:VAL:N	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2615:U:H2'	26:14:2616:C:C6	2.54	0.42
45:F8:12:VAL:HG12	45:F8:29:TRP:CD2	2.54	0.42
41:B8:111:ARG:O	41:B8:112:ARG:CB	2.67	0.42
26:14:1488:G:C6	26:14:1489:U:C2	3.07	0.42
23:2L:49:C:N4	23:2L:60:A:C8	2.87	0.42
57:3L:59:A:C6	57:3L:60:U:O2	2.72	0.42
26:14:2578:G:N7	30:29:140:SER:HB2	2.34	0.42
1:13:1327:C:OP1	21:1F:21:TYR:HD2	2.02	0.42
27:16:8:U:O3'	40:A8:25:ARG:NH2	2.52	0.42
7:6E:65:ALA:O	7:6E:69:VAL:HG23	2.20	0.42
1:1G:737:A:H2'	1:1G:738:C:C6	2.55	0.42
7:62:65:ALA:HB2	7:62:128:ALA:HB2	2.02	0.42
26:14:852:G:C6	26:14:926:A:C6	3.07	0.42
1:13:712:A:C6	1:13:713:G:C6	3.07	0.42
1:1G:1505:G:H4'	1:1G:1506:U:H5''	2.00	0.42
26:1H:1999:C:H4'	26:1H:2723:C:O2	2.20	0.42
1:1G:947:G:H2'	1:1G:948:C:O4'	2.19	0.42
26:14:2296:U:O2	26:14:2333:A:N3	2.52	0.42
31:39:158:THR:O	31:39:164:ARG:NH1	2.51	0.42
26:1H:580:C:H2'	26:1H:581:C:H6	1.84	0.42
26:14:1639:U:O2'	26:14:1640:C:H5'	2.20	0.42
32:49:170:ARG:HA	32:49:170:ARG:HD2	1.91	0.42
26:1H:757:U:H2'	26:1H:758:C:C6	2.54	0.42
2:12:86:GLU:O	2:12:89:GLY:N	2.52	0.42
57:3L:45:G:H5''	57:3L:46:G:C8	2.55	0.42
33:51:50:VAL:O	33:51:50:VAL:HG13	2.20	0.42
23:2L:77:A:C2'	23:2L:77:A:N3	2.82	0.42
26:14:1464:C:HO2'	26:14:1528:A:H8	1.60	0.42
29:11:70:TRP:CZ2	29:11:150:LYS:HD3	2.54	0.42
26:14:2095:C:C4	26:14:2096:U:C5	3.08	0.42
26:1H:719:C:C2	26:1H:720:C:C5	3.06	0.42
38:45:87:LYS:HB3	38:45:90:VAL:CG2	2.49	0.42
26:14:1496:A:H8	26:14:1577:C:O2'	2.03	0.42
25:4L:10:G:N1	25:4L:11:U:C5	2.87	0.42
4:32:24:GLU:OE2	4:32:24:GLU:N	2.53	0.42
28:71:10:LEU:HD22	28:71:10:LEU:H	1.84	0.42
26:14:2257:U:O2'	26:14:2258:C:H5'	2.20	0.42
11:2I:54:ARG:HA	11:2I:57:THR:HG23	2.01	0.42
26:1H:2817:G:C4	26:1H:2830:G:C2	3.08	0.42
26:14:677:A:C4	26:14:678:C:C5	3.08	0.42
54:P8:12:ARG:NH2	54:P8:44:PRO:HB3	2.34	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:25:49:ARG:HA	36:25:53:LYS:HE3	2.01	0.42
26:1H:1685:C:C2	26:1H:1704:G:N2	2.88	0.42
31:39:78:ILE:HA	31:39:83:PHE:CD2	2.55	0.42
26:1H:742:G:H2'	26:1H:743:G:C8	2.55	0.42
56:1L:9:A:N7	56:1L:45:G:O2'	2.43	0.42
32:49:36:LYS:CE	32:49:95:ARG:HH22	2.32	0.42
26:14:296:C:H2'	26:14:297:C:H6	1.85	0.42
26:14:82:G:H5'	26:14:296:C:H5'	2.02	0.42
39:98:26:LYS:HE3	39:98:70:LEU:O	2.19	0.42
29:11:89:SER:HB2	29:11:159:ALA:HB2	2.01	0.42
26:1H:995:C:O2	35:58:3:THR:OG1	2.27	0.42
26:1H:2563:U:H4'	36:68:28:SER:HA	2.02	0.42
26:14:247:G:H4'	26:14:386:G:C5	2.55	0.42
26:1H:873:G:H1	26:1H:904:C:H42	1.68	0.42
40:A8:102:ALA:O	40:A8:105:ALA:N	2.51	0.42
1:13:715:A:H1'	1:13:777:A:C2	2.54	0.42
26:14:1301:A:C8	26:14:1303:G:C8	3.07	0.42
1:1G:404:U:P	4:32:118:ARG:HH11	2.43	0.42
26:1H:856:C:O2'	48:I8:27:GLU:HB2	2.19	0.42
1:1G:1517:G:C6	1:1G:1518:A:C5	3.07	0.42
48:E5:29:GLN:O	48:E5:67:VAL:HG23	2.19	0.42
35:15:97:ARG:HA	35:15:100:GLU:HB2	2.02	0.42
49:F5:59:THR:O	49:F5:59:THR:HG23	2.19	0.42
33:51:92:ILE:H	33:51:92:ILE:HD12	1.85	0.42
42:85:39:LEU:HA	42:85:39:LEU:HD23	1.54	0.42
15:6I:57:LEU:HD23	15:6I:57:LEU:HA	1.74	0.42
20:BA:58:LYS:HA	20:BA:58:LYS:HD2	1.77	0.42
26:1H:1233:C:H2'	26:1H:1234:U:O4'	2.20	0.42
1:13:716:A:H1'	11:2I:118:GLY:O	2.19	0.42
9:8E:18:PHE:HD2	9:8E:62:TYR:HD2	1.68	0.42
46:G8:96:ILE:HD12	46:G8:101:LYS:HE2	2.02	0.42
32:41:125:PHE:CE1	32:41:131:TYR:HB2	2.55	0.42
24:3K:59:A:N3	24:3K:59:A:H2'	2.35	0.42
41:B8:1:MET:O	41:B8:2:ASN:O	2.38	0.42
30:29:37:ARG:HD2	30:29:44:TYR:CE2	2.53	0.42
26:1H:994:C:OP1	42:C8:53:ARG:NH2	2.52	0.42
13:4A:32:GLU:HG2	13:4A:36:LYS:HB3	2.01	0.42
1:1G:1317:C:H5''	1:1G:1318:A:OP2	2.20	0.42
14:5A:29:ARG:NE	14:5A:39:LEU:O	2.52	0.42
26:1H:1289:C:H2'	26:1H:1290:C:C6	2.54	0.42
24:3K:16:U:O2	24:3K:61:C:H5'	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
29:11:106:ILE:HG21	29:11:106:ILE:HD13	1.71	0.42
4:32:31:CYS:HB2	4:32:33:MET:HB2	2.00	0.42
32:41:109:VAL:HG13	52:M8:33:VAL:HG22	2.02	0.42
26:1H:2359:C:H2'	26:1H:2360:A:O4'	2.19	0.42
34:69:3:VAL:HB	34:69:37:VAL:O	2.19	0.42
26:1H:1141:U:C5	35:58:64:GLY:HA3	2.55	0.42
26:1H:270(V):G:C4	26:1H:270(W):G:C8	3.08	0.42
26:14:691:C:H2'	26:14:692:C:H6	1.85	0.42
1:13:1212:U:H4'	1:13:1213:A:H5''	2.02	0.42
26:14:1054:A:H2	26:14:1055:G:O6	2.03	0.42
26:14:1141:U:H6	35:15:63:THR:CG2	2.33	0.42
26:1H:1567:A:C4	29:11:84:TYR:CD2	3.07	0.42
1:1G:407:G:C2	1:1G:436:C:O2	2.73	0.42
26:1H:489:G:C2	26:1H:491:G:H1'	2.54	0.42
37:35:75:ILE:HD12	37:35:77:ARG:CZ	2.49	0.42
26:1H:273(F):C:H3'	26:1H:274:G:H5''	2.01	0.42
26:14:1328:G:H2'	26:14:1330:C:C4	2.55	0.42
8:72:109:ILE:HA	8:72:121:ASP:OD2	2.20	0.42
26:1H:1486:A:C4	26:1H:1487:G:C8	3.07	0.42
27:1J:3:C:H2'	27:1J:4:C:H6	1.83	0.42
22:1K:14:A:C6	22:1K:23:A:C8	3.07	0.42
31:39:135:LYS:HD2	31:39:135:LYS:HA	1.78	0.42
1:1G:1162:C:N3	1:1G:1175:G:C2	2.87	0.42
22:1K:27:G:N2	22:1K:43:U:N3	2.68	0.42
1:13:375:U:C2	1:13:376:G:C8	3.07	0.42
1:1G:1298:C:H4'	1:1G:1299:A:C8	2.54	0.42
57:3L:18:G:H4'	57:3L:60:U:O4	2.19	0.42
1:13:1004:A:N7	1:13:1026:G:N7	2.68	0.42
1:13:1023:G:C3'	1:13:1024:G:H5''	2.50	0.42
26:14:27:G:C2	26:14:512:G:N3	2.87	0.42
1:13:858:G:N1	1:13:870:U:OP2	2.44	0.42
1:13:591:U:C2	1:13:592:G:C8	3.08	0.42
26:1H:2250:G:C5	38:88:83:MET:CB	3.03	0.42
1:1G:176:C:H2'	1:1G:177:C:C6	2.54	0.42
26:1H:2022:U:O2'	26:1H:2617:C:H5'	2.20	0.42
1:13:359:U:O4	1:13:360:A:N6	2.53	0.42
26:1H:447:A:C4	26:1H:473:G:N7	2.88	0.42
34:61:5:LEU:HD23	34:61:5:LEU:HA	1.73	0.42
29:19:268:ARG:HG3	29:19:268:ARG:O	2.20	0.42
1:13:721:G:N1	1:13:733:A:C2	2.88	0.42
26:14:404:C:O2'	26:14:405:U:OP2	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:39:20:LEU:HA	31:39:20:LEU:HD23	1.55	0.42
1:1G:989:C:H2'	1:1G:990:C:C6	2.55	0.42
11:2I:48:ILE:HD13	11:2I:64:ALA:HA	2.02	0.42
26:1H:1209:G:H21	26:1H:1210:A:H62	1.68	0.42
1:1G:683:G:H2'	1:1G:684:A:C8	2.54	0.42
26:14:823:G:H2'	26:14:824:A:C8	2.54	0.42
26:1H:1790:C:H5''	26:1H:1791:A:OP1	2.20	0.42
26:1H:2027:G:C4	26:1H:2028:U:C6	3.08	0.42
2:1E:21:ARG:O	2:1E:23:ARG:N	2.53	0.42
1:13:46:G:H2'	1:13:366:C:C5	2.53	0.42
26:1H:280:C:N3	26:1H:361:G:C2	2.87	0.42
47:H8:52:SER:O	47:H8:53:ILE:HG12	2.20	0.42
26:14:2854:G:O2'	26:14:2855:C:H5'	2.20	0.42
26:14:2855:C:H2'	26:14:2856:C:H6	1.84	0.42
26:1H:2408:U:H2'	26:1H:2409:G:C8	2.55	0.42
42:C8:65:ILE:HG12	42:C8:96:ALA:HB2	2.02	0.42
47:H8:37:VAL:HG22	47:H8:38:TYR:N	2.34	0.42
1:1G:604:G:C5	1:1G:605:U:C5	3.08	0.42
1:13:672:U:H2'	1:13:673:G:H8	1.84	0.42
51:L8:6:VAL:CG1	51:L8:54:VAL:HB	2.50	0.42
26:1H:2889:C:H2'	26:1H:2891:G:O4'	2.19	0.42
26:1H:1028:A:N6	26:1H:1125:G:H2'	2.35	0.42
26:1H:265:A:C2	26:1H:428:A:C2	3.08	0.42
1:1G:742:G:P	15:6A:35:ARG:HH21	2.43	0.42
26:1H:109:G:H2'	26:1H:110:G:O4'	2.20	0.42
1:13:159:G:H2'	1:13:161:A:OP2	2.19	0.42
9:82:10:ARG:HH11	9:82:11:LYS:HB2	1.85	0.42
26:14:1043:C:H2'	26:14:1044:G:H5'	2.01	0.42
26:1H:628:G:H2'	26:1H:629:G:C8	2.55	0.42
2:1E:119:GLU:OE2	2:1E:153:ARG:NH1	2.53	0.42
1:13:260:G:H2'	1:13:261:U:C6	2.55	0.42
15:6A:32:LEU:CD1	15:6A:62:GLN:HB3	2.49	0.42
20:BI:40:ALA:HB2	20:BI:55:ILE:HG23	2.02	0.42
46:C5:45:VAL:HB	46:C5:60:PHE:HD2	1.84	0.42
35:15:75:TYR:CE2	35:15:77:GLY:HA2	2.55	0.42
26:14:2010:G:H5''	44:A5:42:ARG:HB2	2.00	0.42
14:5I:15:LYS:HG2	14:5I:16:PHE:CD2	2.55	0.42
26:14:2003:G:H8	26:14:2003:G:O5'	2.02	0.42
26:1H:307:G:N2	26:1H:310:A:C8	2.88	0.42
26:1H:76:C:H6	26:1H:76:C:O5'	2.03	0.42
4:32:138:TYR:C	4:32:138:TYR:CD1	2.93	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:45:45:GLN:N	38:45:45:GLN:OE1	2.49	0.42
1:13:1369:C:H2'	1:13:1370:G:C8	2.54	0.42
3:22:37:GLN:O	3:22:40:ARG:N	2.53	0.42
26:14:2403:C:N3	26:14:2415:G:C2	2.88	0.42
30:29:47:VAL:HG23	30:29:84:PHE:O	2.19	0.42
1:1G:1328:C:H2'	1:1G:1329:A:C8	2.55	0.42
13:4A:64:TRP:N	13:4A:64:TRP:CD1	2.86	0.42
1:1G:616:G:N3	1:1G:617:G:C8	2.88	0.42
29:19:44:ASN:HB3	29:19:45:ASN:CA	2.50	0.42
1:1G:625:G:H2'	1:1G:626:U:H6	1.85	0.42
30:21:105:THR:HG21	30:21:164:ARG:CZ	2.49	0.42
10:1A:54:PHE:CE1	10:1A:55:LYS:HE3	2.55	0.42
1:1G:958:A:N6	1:1G:1221:G:O2'	2.52	0.42
4:32:31:CYS:HB2	4:32:33:MET:CA	2.49	0.42
1:1G:1149:C:O2'	1:1G:1280:A:N1	2.46	0.42
1:13:1297:C:OP1	13:4I:13:LYS:HG2	2.20	0.42
1:13:132:C:C2	1:13:231:G:N2	2.88	0.42
4:32:61:LYS:CB	4:32:203:VAL:HG13	2.43	0.42
46:C5:85:VAL:HG23	46:C5:96:ILE:HG22	2.02	0.42
26:14:1023:U:OP2	26:14:1024:G:N7	2.53	0.42
38:45:32:TYR:O	38:45:106:VAL:N	2.49	0.42
1:13:1133:G:H2'	1:13:1134:G:H8	1.85	0.42
26:14:1055:G:N3	26:14:1055:G:H2'	2.34	0.42
26:14:2207:C:O2	29:19:151:LYS:NZ	2.50	0.42
27:16:11:C:H3'	27:16:12:C:H6	1.85	0.42
3:2E:77:ILE:HA	3:2E:84:ILE:HB	2.02	0.42
9:82:25:LYS:HE3	9:82:33:PHE:HD2	1.85	0.42
1:1G:1489:G:H2'	1:1G:1490:C:H6	1.83	0.42
43:D8:46:VAL:O	43:D8:46:VAL:HG13	2.19	0.42
26:14:2290:G:H4'	26:14:2381:C:O2'	2.20	0.42
26:14:548:A:N6	26:14:549:G:N3	2.68	0.42
51:L8:16:PRO:O	51:L8:20:LYS:HG3	2.19	0.42
45:B5:25:LYS:HA	45:B5:81:VAL:O	2.20	0.42
1:1G:198:G:H22	1:1G:220:G:H1'	1.85	0.42
1:13:552:U:O4	1:13:553:A:N6	2.53	0.42
1:1G:324:G:H2'	1:1G:326:G:OP2	2.20	0.42
1:13:560:U:H5'	1:13:566:G:N2	2.35	0.42
1:13:224:C:H2'	1:13:225:C:C5	2.55	0.42
1:13:662:G:O2'	1:13:836:G:OP1	2.38	0.42
7:6E:18:TYR:CD2	7:6E:59:LEU:HD12	2.49	0.42
47:H8:33:LEU:HG	47:H8:34:ASN:N	2.35	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:767:A:H3'	61:13:1826:HOH:O	2.19	0.42
26:1H:2846:G:H2'	26:1H:2847:U:O4'	2.19	0.42
1:1G:1111:A:C6	1:1G:1112:C:N4	2.88	0.42
2:12:193:ASP:OD2	2:12:196:LEU:HD21	2.20	0.42
1:13:725:G:C2	1:13:726:C:C6	3.08	0.42
26:14:405:U:H2'	26:14:405:U:O2	2.20	0.42
31:39:18:ARG:NH2	31:39:20:LEU:HG	2.35	0.42
38:88:59:ARG:C	38:88:61:GLY:N	2.72	0.42
48:E5:20:ARG:HD2	48:E5:20:ARG:HH11	1.68	0.42
51:H5:6:VAL:HG22	51:H5:35:ARG:O	2.20	0.42
41:B8:55:ASN:C	41:B8:59:THR:HG22	2.40	0.42
23:2L:20:G:H4'	23:2L:21:U:OP2	2.18	0.42
29:19:181:GLU:CB	29:19:272:ALA:HB1	2.50	0.42
26:14:2851:A:C5	26:14:2852:G:C5	3.08	0.42
50:K8:63:VAL:HA	50:K8:66:GLU:CG	2.49	0.42
36:25:68:GLU:CD	36:25:68:GLU:H	2.23	0.42
26:14:1243:G:H8	26:14:1243:G:O5'	2.02	0.42
26:1H:2183:C:H6	26:1H:2183:C:O5'	2.03	0.42
1:13:1321:C:C5	1:13:1322:C:C2	3.07	0.42
1:13:1320:C:H2'	1:13:1321:C:O4'	2.19	0.42
42:85:83:LEU:HA	42:85:83:LEU:HD23	1.82	0.42
26:1H:2747:G:H5''	33:51:70:THR:CG2	2.50	0.42
26:1H:2609:U:H4'	26:1H:2610:C:OP2	2.20	0.42
48:E5:26:TYR:HB2	48:E5:29:GLN:OE1	2.20	0.42
26:14:2670:A:O2'	26:14:2671:A:H5'	2.20	0.42
9:82:53:VAL:HG22	9:82:95:LYS:HE3	2.02	0.42
26:14:2635:C:OP1	30:29:77:ILE:HB	2.20	0.42
26:14:484:C:P	46:C5:49:VAL:HG13	2.59	0.42
2:12:35:GLU:HG3	2:12:38:GLY:HA2	2.02	0.42
33:51:52:VAL:O	33:51:65:HIS:NE2	2.51	0.42
26:14:508:G:H4'	26:14:509:C:OP2	2.19	0.42
3:22:155:GLY:HA3	3:22:196:LEU:HD13	2.01	0.42
27:1J:33:G:H1'	27:1J:50:G:H22	1.85	0.42
26:1H:952:G:H5''	26:1H:953:A:OP2	2.19	0.42
26:1H:1775:U:H2'	26:1H:1776:G:O5'	2.20	0.42
1:13:1170:A:H8	1:13:1170:A:O5'	2.03	0.42
22:1K:63:U:OP2	22:1K:63:U:H6	2.02	0.42
3:2E:34:LEU:O	3:2E:34:LEU:HD12	2.19	0.42
12:3I:50:SER:O	12:3I:51:ALA:HB2	2.20	0.42
26:1H:370:G:OP2	61:1H:3559:HOH:O	2.21	0.42
1:13:647:C:C4	1:13:648:A:N7	2.88	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:35:121:LYS:C	37:35:123:LEU:HD12	2.40	0.42
2:1E:19:HIS:CD2	2:1E:205:ASP:OD1	2.69	0.42
40:A8:88:ASP:C	40:A8:90:GLY:H	2.22	0.42
5:42:101:ILE:O	5:42:101:ILE:HG13	2.19	0.42
1:1G:1327:C:H2'	1:1G:1328:C:C6	2.55	0.42
26:14:861:A:C2	26:14:917:A:C4	3.08	0.42
47:D5:39:VAL:HG23	47:D5:40:ASP:O	2.19	0.42
22:1K:51:A:H2'	22:1K:52:G:C8	2.55	0.42
20:BI:26:ASN:O	20:BI:30:LYS:HG2	2.20	0.42
47:H8:126:VAL:HA	47:H8:164:ALA:N	2.33	0.42
1:1G:984:C:H2'	1:1G:985:C:C6	2.55	0.42
9:82:96:LEU:O	9:82:100:GLY:N	2.52	0.42
52:M8:15:ILE:HG13	52:M8:16:CYS:N	2.33	0.42
35:58:40:PRO:CB	42:C8:68:ALA:HB2	2.50	0.42
26:1H:53:A:H61	26:1H:117:G:H1'	1.85	0.42
37:78:16:ARG:HA	37:78:16:ARG:NE	2.34	0.42
1:1G:489:C:H2'	1:1G:490:G:O4'	2.20	0.42
27:1J:12:C:H6	27:1J:12:C:OP2	2.02	0.42
26:14:459:U:H2'	26:14:460:A:H8	1.85	0.42
4:32:113:SER:OG	4:32:116:GLN:HB2	2.20	0.42
26:1H:2061:G:N3	26:1H:2063:C:C4	2.88	0.42
40:A8:106:ARG:C	40:A8:106:ARG:HD2	2.41	0.42
26:14:2616:C:O2'	26:14:2617:C:H5'	2.19	0.42
1:1G:918:A:H2'	1:1G:919:A:O4'	2.20	0.42
1:13:1154:G:H2'	1:13:1155:G:O4'	2.19	0.42
1:1G:758:G:H5''	1:1G:880:C:H1'	2.01	0.42
34:61:112:LYS:O	34:61:113:ARG:HG2	2.20	0.42
20:BI:83:ARG:HA	20:BI:86:ARG:HB2	2.02	0.42
26:1H:425:G:C4	26:1H:426:C:C5	3.07	0.42
5:4E:118:ILE:HG12	5:4E:119:LEU:N	2.34	0.42
26:1H:2166:G:C4	26:1H:2171:A:N6	2.88	0.42
1:13:827:U:C4	1:13:870:U:N3	2.88	0.42
7:6E:17:VAL:HG13	7:6E:18:TYR:HD1	1.85	0.42
1:13:168:G:H21	1:13:169:C:H41	1.67	0.42
26:14:1857:G:C6	26:14:1858:G:N1	2.88	0.42
26:1H:152:G:C2	26:1H:175:G:C2	3.08	0.42
26:14:2697:G:H2'	26:14:2698:U:O4'	2.19	0.42
26:1H:1930:G:O2'	26:1H:1931:U:OP2	2.38	0.42
26:14:851:U:OP1	51:H5:49:LYS:HE2	2.20	0.42
34:61:92:VAL:HG23	34:61:96:ASP:CB	2.50	0.42
38:88:130:LYS:HZ2	47:H8:81:ARG:HG2	1.85	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:22:59:ARG:HB2	3:22:59:ARG:HE	1.48	0.42
31:39:5:ALA:HB3	31:39:18:ARG:HE	1.85	0.42
39:55:106:GLY:O	39:55:107:ASP:CB	2.67	0.42
26:1H:2688:U:C5	26:1H:2720:U:OP2	2.69	0.42
39:98:62:ALA:HA	39:98:65:LEU:HD23	2.01	0.42
33:59:148:ILE:O	33:59:151:ILE:HG12	2.20	0.42
26:1H:717:G:H2'	26:1H:718:A:O4'	2.19	0.42
1:13:1428:A:H2'	1:13:1429:C:C6	2.55	0.42
1:1G:341:C:H2'	1:1G:342:C:C6	2.55	0.42
40:A8:98:VAL:HG22	40:A8:98:VAL:H	1.58	0.42
20:BA:89:ARG:HH11	20:BA:104:LEU:HB3	1.84	0.42
4:32:129:ASN:OD1	4:32:144:ASP:HA	2.20	0.42
1:1G:573:A:N3	1:1G:883:C:O2'	2.53	0.42
12:3A:117:ARG:HB3	12:3A:122:THR:HB	2.02	0.42
11:2I:50:TYR:CD2	11:2I:54:ARG:HB2	2.55	0.42
26:14:2852:G:H2'	26:14:2853:C:C6	2.55	0.42
30:21:152:LYS:HG3	35:58:78:TYR:CZ	2.54	0.42
26:14:2027:G:H2'	26:14:2028:U:O4'	2.20	0.42
26:1H:1491:G:H2'	26:1H:1492:G:H8	1.84	0.42
1:1G:241:C:C2	1:1G:286:G:C2	3.08	0.42
26:14:541:C:H2'	26:14:542:C:H6	1.85	0.42
38:88:10:ARG:HH22	48:I8:11:ARG:HH22	1.66	0.42
31:31:11:VAL:HA	31:31:125:LEU:HB2	2.02	0.42
56:1L:9:A:H3'	56:1L:10:G:C8	2.55	0.42
12:3I:51:ALA:O	12:3I:52:LEU:HD23	2.20	0.42
1:13:295:C:H2'	1:13:296:U:O4'	2.20	0.42
1:1G:188:U:O2'	1:1G:189:U:H5'	2.20	0.42
26:14:2128:C:H5'	26:14:2129:C:OP2	2.20	0.42
26:14:1718:G:N2	26:14:1742:C:C2	2.88	0.42
5:4E:68:GLU:O	5:4E:70:PRO:HD3	2.19	0.42
32:41:34:LEU:HD13	32:41:99:MET:SD	2.59	0.42
26:14:2409:G:H2'	26:14:2410:G:O4'	2.20	0.42
26:1H:2038:G:C6	26:1H:2039:C:C4	3.08	0.42
37:35:68:GLN:OE1	55:M5:12:LYS:HG2	2.20	0.42
15:6A:25:THR:HG21	15:6A:70:LEU:HD13	2.02	0.42
1:13:447:G:H8	1:13:447:G:O5'	2.03	0.42
26:14:270(P):C:H6	26:14:270(P):C:O5'	2.03	0.42
42:C8:87:GLY:O	42:C8:89:GLU:HG3	2.19	0.42
26:14:717:G:H2'	26:14:718:A:O4'	2.19	0.42
26:1H:2811:G:OP2	26:1H:2811:G:H8	2.03	0.42
29:19:246:PRO:O	29:19:255:LYS:NZ	2.41	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
32:49:105:LYS:HZ1	32:49:106:LEU:HD21	1.85	0.41
1:13:973:G:H3'	1:13:974:A:H5''	2.01	0.41
26:14:2414:G:H21	37:35:67:MET:HE1	1.83	0.41
1:1G:1249:C:O2	9:82:70:LYS:HG3	2.20	0.41
26:1H:839:U:H3	26:1H:939:G:H1	1.67	0.41
30:29:30:PRO:HA	30:29:91:VAL:O	2.20	0.41
2:12:17:PHE:CG	2:12:18:GLY:N	2.87	0.41
2:12:187:LEU:HD13	2:12:204:ASN:N	2.35	0.41
31:31:6:VAL:HG11	31:31:119:ARG:CA	2.49	0.41
30:29:27:LEU:HD13	30:29:27:LEU:O	2.20	0.41
42:85:100:VAL:C	42:85:102:GLU:H	2.23	0.41
55:M5:48:PHE:CD1	55:M5:48:PHE:N	2.87	0.41
46:G8:42:VAL:CG1	46:G8:43:ASN:N	2.81	0.41
32:41:109:VAL:O	32:41:113:ARG:HG3	2.19	0.41
26:1H:270(V):G:H2'	26:1H:270(W):G:C8	2.54	0.41
8:72:99:GLU:CG	8:72:100:ILE:H	2.25	0.41
1:13:235:C:H5'	17:8I:70:ARG:HG2	2.01	0.41
26:1H:1638:C:O2	26:1H:2698:U:O2'	2.38	0.41
4:32:106:TYR:HE2	4:32:112:VAL:O	2.03	0.41
6:5E:82:ARG:HB2	6:5E:85:VAL:CG2	2.45	0.41
1:1G:1138:G:C2	1:1G:1140:C:C2	3.08	0.41
26:14:2312:U:O2	32:49:42:GLY:HA3	2.20	0.41
41:B8:105:LEU:O	41:B8:107:ASP:OD1	2.38	0.41
26:1H:654:A:H2'	26:1H:654(A):A:C8	2.55	0.41
31:31:45:ARG:HB3	31:31:45:ARG:HE	1.70	0.41
26:14:1204:A:O2'	26:14:1205:U:OP2	2.36	0.41
26:1H:1526:G:H2'	26:1H:1527:G:O4'	2.20	0.41
26:1H:1404:C:H2'	26:1H:1405:U:H6	1.84	0.41
1:13:916:G:H2'	1:13:917:G:H8	1.85	0.41
37:35:46:LYS:HE2	37:35:46:LYS:HB3	1.76	0.41
1:13:157:G:H1	1:13:164:U:H3	1.66	0.41
26:14:2297:C:H2'	26:14:2297:C:O2	2.19	0.41
26:14:1860:G:C6	26:14:1883:G:N2	2.88	0.41
26:14:2757:A:N1	33:59:67:LEU:HD22	2.34	0.41
25:4L:12:A:O2'	25:4L:13:A:H4'	2.20	0.41
2:1E:15:VAL:HG12	2:1E:210:SER:HB3	2.01	0.41
48:E5:51:VAL:HG23	48:E5:81:VAL:HG23	2.02	0.41
2:12:162:ILE:HD11	2:12:184:VAL:HA	2.02	0.41
26:14:814:C:N3	26:14:1194:A:C2	2.88	0.41
1:13:723:U:H5''	1:13:724:G:OP2	2.20	0.41
36:25:43:VAL:HG23	36:25:56:ASP:O	2.20	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:15:12:ARG:HE	35:15:14:VAL:HG22	1.85	0.41
29:11:68:LYS:HA	29:11:70:TRP:CZ3	2.55	0.41
8:7E:13:ILE:O	8:7E:16:ALA:N	2.53	0.41
1:13:123:C:OP1	1:13:311:C:O2'	2.32	0.41
1:13:860:A:H5''	1:13:861:G:OP2	2.20	0.41
27:16:17:C:H2'	27:16:18:G:O4'	2.20	0.41
56:1L:74:C:C4	26:14:2555:U:O2	2.73	0.41
23:2L:20:G:C4	23:2L:58:A:N1	2.88	0.41
26:14:942:G:H4'	26:14:1190:G:H5'	2.01	0.41
28:71:10:LEU:HG	28:71:32:LEU:HA	2.02	0.41
1:1G:375:U:H5''	16:7A:69:THR:HG21	2.02	0.41
37:35:39:LYS:CA	37:35:45:LEU:HD13	2.50	0.41
1:13:908:A:H2'	1:13:909:A:C8	2.55	0.41
3:22:141:VAL:HA	3:22:144:SER:HB3	2.01	0.41
26:1H:1682:G:C2	26:1H:1683:C:C2	3.07	0.41
26:1H:657:U:H2'	26:1H:658:C:C6	2.54	0.41
1:13:678:U:C4	1:13:679:C:N4	2.88	0.41
26:1H:1655:A:H4'	30:21:115:GLY:N	2.35	0.41
30:29:39:PRO:HA	30:29:43:GLY:H	1.84	0.41
29:19:65:ILE:HD11	29:19:67:PHE:CZ	2.54	0.41
4:32:153:ARG:HD3	4:32:181:MET:SD	2.60	0.41
47:D5:102:LEU:HA	47:D5:137:ILE:HB	2.02	0.41
26:1H:2812:G:N2	26:1H:2813:A:C4	2.88	0.41
26:1H:1034:G:H2'	26:1H:1035:U:O4'	2.20	0.41
8:7E:28:ALA:HB3	8:7E:57:PRO:O	2.20	0.41
7:6E:70:LYS:CG	7:6E:96:GLN:HB3	2.50	0.41
46:C5:39:VAL:HG23	46:C5:41:GLY:N	2.35	0.41
25:4K:8:A:H2'	25:4K:9:G:H8	1.84	0.41
13:4I:79:LYS:HE3	13:4I:83:ASP:OD2	2.20	0.41
43:D8:19:LYS:HG2	43:D8:95:LEU:HD23	2.02	0.41
26:1H:843:G:N2	26:1H:936:C:C2	2.88	0.41
26:1H:1508:A:H2'	26:1H:1508:A:N3	2.35	0.41
46:G8:23:ARG:HB3	46:G8:23:ARG:HE	1.46	0.41
26:1H:1349:A:O4'	26:1H:1349:A:N3	2.52	0.41
30:21:81:ILE:HG23	30:21:81:ILE:HD12	1.75	0.41
20:BA:87:LYS:HE3	20:BA:87:LYS:HB2	1.88	0.41
26:14:151:C:H6	26:14:151:C:O5'	2.03	0.41
26:1H:1969:A:H1'	26:1H:1973:G:O4'	2.20	0.41
3:2E:22:TRP:CH2	3:2E:32:LEU:HB3	2.55	0.41
46:G8:94:LYS:HG3	46:G8:95:LYS:C	2.41	0.41
32:49:107:LEU:HD21	32:49:178:PHE:CE1	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:32:199:ASN:O	4:32:200:GLU:HG2	2.20	0.41
31:31:7:TYR:HD2	31:31:21:ALA:HB1	1.85	0.41
30:21:120:TRP:CE3	30:21:155:LYS:HD3	2.55	0.41
30:29:26:ILE:HG22	30:29:27:LEU:C	2.41	0.41
16:7A:48:TRP:CZ3	16:7A:49:LEU:HB2	2.56	0.41
26:14:662:G:OP1	37:35:15:ARG:NH1	2.53	0.41
57:3L:1:G:N3	57:3L:1:G:H2'	2.35	0.41
1:1G:88:C:C6	1:1G:89:U:H5	2.38	0.41
37:35:101:VAL:H	37:35:106:LEU:HD23	1.85	0.41
10:1A:49:VAL:O	10:1A:60:ARG:HG2	2.19	0.41
7:6E:108:ALA:HA	7:6E:111:ARG:HD2	2.01	0.41
1:1G:1263:C:H5'	1:1G:1264:C:OP2	2.20	0.41
1:1G:1272:G:H2'	1:1G:1273:G:O4'	2.21	0.41
26:14:1025:G:C4	26:14:1135:C:H1'	2.55	0.41
26:1H:270(E):G:H1	26:1H:270(U):C:H42	1.67	0.41
40:65:24:LEU:HD22	40:65:24:LEU:H	1.85	0.41
1:13:1454:G:H2'	1:13:1455:G:C8	2.55	0.41
35:58:31:ALA:O	35:58:35:ARG:HG3	2.20	0.41
26:1H:1437:C:C2	26:1H:1438:U:C5	3.08	0.41
8:72:123:GLU:HG2	8:72:124:ALA:N	2.35	0.41
1:1G:1143:G:H2'	1:1G:1144:G:C8	2.55	0.41
42:C8:108:GLU:CG	43:D8:44:LYS:HE2	2.49	0.41
26:14:2312:U:OP2	32:49:74:LYS:HE2	2.20	0.41
23:2L:54:G:H3'	23:2L:55:5MU:H71	2.02	0.41
44:E8:57:ASN:O	44:E8:61:ASN:HB2	2.20	0.41
6:5E:16:GLN:HG2	6:5E:17:SER:H	1.86	0.41
1:13:428:G:C5	1:13:430:A:C6	3.08	0.41
26:1H:61:G:P	50:K8:50:ILE:HD13	2.60	0.41
26:14:142:G:H5''	26:14:1598:C:O2'	2.20	0.41
26:14:143:C:C2	26:14:144:C:C5	3.07	0.41
1:13:520:A:N1	1:13:536:C:H1'	2.35	0.41
6:52:2:ARG:HG2	6:52:3:ARG:H	1.84	0.41
6:52:2:ARG:O	6:52:66:GLU:HA	2.20	0.41
41:75:53:ARG:O	41:75:53:ARG:HG3	2.19	0.41
27:16:95:U:H2'	27:16:96:G:C8	2.55	0.41
26:14:648:G:O2'	26:14:2351:G:OP1	2.23	0.41
26:14:1420:U:H6	26:14:1420:U:H2'	1.68	0.41
26:1H:2336:A:N6	48:I8:43:THR:HG21	2.35	0.41
40:65:13:ARG:HG3	40:65:14:VAL:N	2.34	0.41
26:1H:2845:G:H2'	26:1H:2846:G:C8	2.55	0.41
26:1H:1930:G:N2	26:1H:1968:G:H2'	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2464:C:C2	26:14:2487:G:N2	2.88	0.41
7:62:131:LYS:HB3	7:62:131:LYS:HE3	1.68	0.41
28:71:49:ILE:O	28:71:51:PRO:HD3	2.20	0.41
1:1G:57:G:C5	1:1G:58:C:C4	3.07	0.41
36:25:22:ILE:HD13	36:25:22:ILE:HA	1.56	0.41
29:19:267:SER:C	29:19:269:PHE:H	2.24	0.41
35:15:38:HIS:CD2	35:15:39:ARG:HG3	2.56	0.41
26:14:1293:C:O5'	26:14:1293:C:H6	2.03	0.41
39:55:45:ARG:HG2	39:55:95:THR:HG23	2.02	0.41
50:K8:64:LEU:HD21	50:K8:68:ARG:NH1	2.35	0.41
17:8A:7:THR:O	17:8A:23:VAL:HG13	2.20	0.41
29:19:119:ALA:HA	29:19:130:ALA:O	2.19	0.41
26:1H:930:U:O4'	26:1H:930:U:O2	2.37	0.41
5:4E:64:ARG:HD2	5:4E:64:ARG:HH11	1.71	0.41
56:1L:72:C:H2'	56:1L:73:A:H5''	2.02	0.41
1:13:1075:C:H4'	1:13:1101:A:N6	2.35	0.41
43:95:96:ILE:HD13	43:95:96:ILE:N	2.35	0.41
26:14:106:C:O5'	26:14:106:C:H6	2.03	0.41
35:15:41:ASP:HB3	35:15:48:MET:CE	2.51	0.41
13:4I:67:GLU:HG2	13:4I:68:GLY:N	2.35	0.41
22:1K:59:A:H5''	22:1K:60:U:OP2	2.19	0.41
22:1K:60:U:H3'	22:1K:61:C:H5	1.85	0.41
26:14:2019:A:N7	53:J5:9:LYS:HD2	2.36	0.41
26:1H:2017:U:H4'	53:N8:8:LYS:O	2.19	0.41
1:1G:286:G:H2'	1:1G:287:U:C6	2.55	0.41
26:1H:2633:G:O5'	26:1H:2633:G:H8	2.03	0.41
1:13:47:C:O2	1:13:49:U:C4	2.73	0.41
31:31:64:ILE:HG23	31:31:65:TRP:NE1	2.35	0.41
47:D5:137:ILE:HA	47:D5:137:ILE:HD13	1.93	0.41
1:13:1312:G:O6	19:AI:3:ARG:N	2.53	0.41
4:32:17:VAL:HG11	4:32:197:PRO:HB2	2.02	0.41
3:22:112:SER:HB3	3:22:115:LEU:HD12	2.01	0.41
1:13:956:U:H2'	1:13:957:U:O4'	2.20	0.41
26:1H:289:A:N6	26:1H:351:G:H1'	2.34	0.41
26:14:2086:U:H2'	26:14:2087:G:C8	2.54	0.41
7:6E:101:LEU:HA	7:6E:101:LEU:HD23	1.76	0.41
32:41:167:GLU:H	32:41:167:GLU:HG2	1.59	0.41
44:E8:65:LEU:HD23	44:E8:65:LEU:HA	1.95	0.41
39:55:100:LEU:H	39:55:100:LEU:HG	1.55	0.41
26:14:1558:A:O4'	26:14:1558:A:N3	2.51	0.41
31:39:206:ILE:HD13	31:39:206:ILE:HG21	1.71	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:6A:38:ARG:HB3	15:6A:38:ARG:HE	1.63	0.41
26:1H:1978:A:H2'	26:1H:1979:C:H6	1.85	0.41
26:1H:315:G:H2'	26:1H:316:C:C6	2.55	0.41
46:G8:76:CYS:HG	46:G8:102:CYS:HG	1.68	0.41
34:61:135:GLU:CD	34:61:135:GLU:C	2.79	0.41
40:A8:111:GLU:O	40:A8:112:PHE:HD1	2.01	0.41
32:41:37:VAL:O	32:41:94:LEU:HB2	2.21	0.41
26:1H:2051:A:H5'	26:1H:2578:G:O4'	2.20	0.41
31:39:123:LEU:HA	31:39:192:LEU:C	2.40	0.41
36:25:15:GLY:O	36:25:47:ILE:HB	2.20	0.41
26:1H:2615:U:C2	53:N8:7:PRO:HA	2.56	0.41
1:13:1504:G:OP1	1:13:1507:A:H4'	2.21	0.41
1:1G:1125:U:H2'	1:1G:1126:U:C6	2.55	0.41
1:13:1178:G:H5"	9:8E:93:ARG:NH2	2.35	0.41
34:69:58:LEU:HD23	34:69:59:ALA:N	2.34	0.41
34:69:62:LYS:C	34:69:62:LYS:HD2	2.41	0.41
57:3L:29:U:H2'	57:3L:30:G:O4'	2.20	0.41
26:1H:1177:A:H4'	26:1H:1178:C:H2'	2.01	0.41
26:1H:661:C:O3'	37:78:15:ARG:HG2	2.20	0.41
2:1E:87:ARG:NH2	2:1E:232:PRO:HD3	2.35	0.41
34:69:57:ARG:O	34:69:60:GLU:HG2	2.20	0.41
7:6E:154:TYR:HD1	7:6E:154:TYR:HA	1.64	0.41
1:1G:1129:C:N3	1:1G:1143:G:N2	2.68	0.41
32:49:118:ARG:HA	32:49:118:ARG:HD3	1.87	0.41
40:A8:7:TYR:HA	40:A8:10:ARG:CZ	2.49	0.41
22:1K:9:A:C5	22:1K:43:U:C5	3.08	0.41
34:61:132:PRO:O	34:61:133:HIS:ND1	2.53	0.41
1:13:1021:G:C5	1:13:1022:G:C8	3.09	0.41
26:14:513:A:C2	26:14:514:A:C4	3.08	0.41
46:C5:89:PHE:O	46:C5:90:LEU:HB2	2.20	0.41
26:1H:68:G:H2'	26:1H:69:C:O4'	2.20	0.41
26:14:252:G:OP2	37:35:50:ARG:NH2	2.50	0.41
45:B5:18:TYR:O	45:B5:19:ALA:C	2.58	0.41
15:6A:27:VAL:HG12	15:6A:31:LEU:HD13	2.02	0.41
26:1H:216:A:C4	26:1H:217:G:C8	3.08	0.41
35:58:28:THR:HA	35:58:106:MET:HE2	2.02	0.41
26:1H:860:U:H5	26:1H:917:A:N1	2.18	0.41
1:1G:779:C:H2'	1:1G:780:A:O4'	2.20	0.41
26:1H:1448:G:H5"	26:1H:1543:A:OP1	2.20	0.41
23:2K:19:G:C2	23:2K:59:A:C6	3.08	0.41
26:1H:2679:A:C2	26:1H:2729:G:C2	3.08	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:629:G:C6	26:14:630:G:C6	3.08	0.41
1:13:562:C:H1'	12:3I:15:ARG:HB3	2.02	0.41
3:2E:12:LEU:O	3:2E:16:ARG:O	2.37	0.41
1:1G:111:G:C8	1:1G:111:G:O5'	2.72	0.41
54:P8:35:ARG:HG3	54:P8:42:LEU:HD11	2.01	0.41
11:2I:59:TYR:CE2	11:2I:63:LEU:HD11	2.56	0.41
42:C8:39:LEU:O	42:C8:40:PHE:C	2.59	0.41
7:6E:86:GLN:NE2	24:3K:32:C:H4'	2.35	0.41
50:K8:64:LEU:O	50:K8:68:ARG:HG3	2.20	0.41
47:H8:5:LEU:HD13	47:H8:6:LYS:HB2	2.03	0.41
26:14:1496:A:H2'	26:14:1498:C:C5	2.56	0.41
1:13:1510:U:O2	1:13:1526:G:C2	2.73	0.41
49:J8:78:LYS:CD	49:J8:78:LYS:N	2.83	0.41
26:1H:1491:G:O4'	29:11:99:ASP:HB3	2.20	0.41
1:1G:742:G:OP1	15:6A:35:ARG:NH2	2.53	0.41
17:8A:45:HIS:HB3	17:8A:72:ARG:HG2	2.03	0.41
26:1H:1726:G:C6	26:1H:1727:U:C4	3.09	0.41
7:6E:146:GLU:O	7:6E:149:ARG:HB2	2.20	0.41
2:12:93:VAL:HG22	2:12:152:PHE:HB2	2.02	0.41
3:2E:113:ALA:HB3	3:2E:114:PRO:HD3	2.02	0.41
26:1H:2045:C:H2'	26:1H:2046:G:O4'	2.20	0.41
35:58:76:SER:N	35:58:81:GLY:O	2.44	0.41
39:98:17:ARG:O	39:98:20:LEU:HB3	2.20	0.41
26:1H:1127:A:H2'	26:1H:1128:A:H5''	2.02	0.41
34:61:97:ILE:N	34:61:97:ILE:HD13	2.34	0.41
12:3I:76:ASN:OD1	12:3I:76:ASN:N	2.46	0.41
33:51:167:GLU:CD	33:51:167:GLU:N	2.74	0.41
29:11:82:ILE:HG22	29:11:82:ILE:O	2.20	0.41
1:13:1494:G:N3	1:13:1494:G:H2'	2.35	0.41
43:95:20:LEU:HD12	43:95:20:LEU:HA	1.74	0.41
36:68:60:ALA:HB1	36:68:84:ALA:HB1	2.03	0.41
10:1A:59:SER:OG	10:1A:59:SER:O	2.33	0.41
8:72:45:ILE:HG13	8:72:47:GLY:H	1.84	0.41
26:1H:1637:A:H4'	26:1H:2711:A:O2'	2.20	0.41
38:45:66:ILE:HG22	38:45:104:PHE:CE1	2.55	0.41
18:9A:23:LYS:HB3	18:9A:56:THR:O	2.20	0.41
1:13:626:U:N3	1:13:627:G:C5	2.88	0.41
1:1G:1329:A:H5''	13:4A:25:ILE:O	2.20	0.41
1:13:177:C:O2'	1:13:178:C:H5'	2.19	0.41
26:1H:2016:U:H6	26:1H:2016:U:O5'	2.02	0.41
50:G5:25:VAL:O	50:G5:28:LYS:N	2.54	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
36:68:44:LYS:HD3	36:68:44:LYS:HA	1.73	0.41
36:68:6:THR:HG22	36:68:7:TYR:O	2.20	0.41
47:D5:52:SER:O	47:D5:53:ILE:HG12	2.20	0.41
46:C5:85:VAL:HB	46:C5:86:ARG:H	1.61	0.41
27:1J:28:C:N4	27:1J:56:G:H1	2.06	0.41
32:49:91:ARG:HB3	32:49:91:ARG:HE	1.43	0.41
2:1E:87:ARG:HH21	2:1E:232:PRO:HD3	1.85	0.41
4:3E:155:LEU:HD23	4:3E:155:LEU:HA	1.78	0.41
26:1H:1643:G:C6	26:1H:1644:C:C5	3.08	0.41
45:F8:25:LYS:CG	45:F8:82:GLN:OE1	2.67	0.41
7:6E:78:ARG:HG2	7:6E:79:ARG:N	2.35	0.41
12:3I:117:ARG:CB	12:3I:122:THR:HB	2.46	0.41
1:13:583:A:H2'	1:13:584:G:O4'	2.21	0.41
26:1H:744:G:H1	26:1H:753:C:N4	2.17	0.41
1:13:524:G:H2'	1:13:525:C:C5	2.55	0.41
16:7I:21:VAL:HG22	16:7I:34:GLU:O	2.20	0.41
1:13:232:G:C5	1:13:233:C:C5	3.08	0.41
32:49:94:LEU:HD23	32:49:94:LEU:HA	1.83	0.41
26:1H:66:C:H2'	26:1H:67:U:C6	2.55	0.41
26:1H:2171:A:O2'	26:1H:2172:U:O5'	2.38	0.41
37:78:95:VAL:HG11	37:78:125:VAL:HG22	2.02	0.41
29:11:260:ARG:HH22	29:11:266:SER:HB3	1.85	0.41
37:78:58:THR:O	37:78:62:LEU:HG	2.21	0.41
27:16:6:C:H2'	27:16:7:G:O4'	2.20	0.41
26:14:2146:C:H4'	26:14:2147:G:C8	2.55	0.41
26:14:2299:G:C6	26:14:2318:G:C8	3.09	0.41
49:F5:11:ARG:NH1	49:F5:11:ARG:HB3	2.34	0.41
3:22:95:THR:HB	3:22:97:LYS:HG2	2.03	0.41
8:7E:17:THR:O	8:7E:20:TYR:N	2.52	0.41
33:51:35:VAL:HG12	33:51:37:VAL:HG23	2.02	0.41
1:13:660:G:H2'	1:13:661:G:O4'	2.20	0.41
37:35:124:LYS:HG2	37:35:144:GLU:HA	2.03	0.41
18:9I:23:LYS:NZ	18:9I:62:GLU:OE1	2.32	0.41
26:14:618(A):C:OP2	31:39:103:LYS:HE3	2.19	0.41
1:13:128:G:O2'	17:8I:3:LYS:NZ	2.31	0.41
56:1L:74:C:N3	26:14:2555:U:O2	2.53	0.41
1:13:773:G:H5'	1:13:774:G:OP2	2.21	0.41
1:13:807:A:H2'	1:13:808:C:H6	1.84	0.41
4:32:73:ARG:HD2	4:32:73:ARG:HA	1.67	0.41
1:1G:195:A:H62	1:1G:196:A:N6	2.18	0.41
5:42:60:TYR:HD1	5:42:64:ARG:HH12	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1511:A:H2'	26:14:1512:G:C8	2.56	0.41
41:75:27:THR:HG23	41:75:90:GLN:H	1.86	0.41
31:31:32:LEU:O	31:31:36:VAL:HG23	2.21	0.41
26:14:2051:A:H8	26:14:2051:A:OP2	2.04	0.41
56:1L:51:A:H2'	56:1L:52:G:C8	2.55	0.41
36:68:14:THR:O	36:68:52:VAL:HG22	2.20	0.41
26:1H:831:G:P	61:1H:3583:HOH:O	2.78	0.41
1:13:818:G:O2'	1:13:819:A:H5'	2.21	0.41
26:1H:2510:C:C4	26:1H:2511:U:C4	3.09	0.41
26:1H:2228:G:OP2	29:11:263:ARG:NH2	2.53	0.41
29:19:146:GLU:CB	29:19:189:CYS:HB3	2.49	0.41
26:1H:451:C:H4'	31:31:52:LYS:HE3	2.02	0.41
57:3L:37:A:H2'	57:3L:38:A:C8	2.55	0.41
26:14:911:A:H2'	38:45:9:TYR:OH	2.20	0.41
1:1G:44:G:N2	1:1G:399:G:C4	2.88	0.41
42:85:8:VAL:O	42:85:12:ARG:HG3	2.21	0.41
26:14:1774:C:O5'	26:14:1774:C:H6	2.02	0.41
41:75:95:ARG:HA	41:75:95:ARG:HD2	1.92	0.41
26:14:2817:G:C4	26:14:2830:G:N2	2.89	0.41
26:14:242:G:O5'	55:M5:3:LYS:HE3	2.21	0.41
26:14:1534:G:H4'	26:14:1535:U:OP2	2.20	0.41
2:1E:32:ILE:HD13	2:1E:40:HIS:ND1	2.36	0.41
26:1H:2179:C:H2'	26:1H:2180:U:O4'	2.20	0.41
26:1H:1152:C:O2'	26:1H:1153:C:H5'	2.20	0.41
41:B8:130:ALA:HB1	41:B8:134:GLU:OE1	2.21	0.41
46:G8:87:LYS:HB2	46:G8:96:ILE:HD13	2.03	0.41
49:F5:76:ARG:HB2	49:F5:94:LEU:HD11	2.03	0.41
1:1G:1346:A:C8	1:1G:1348:U:C2	3.08	0.41
4:32:60:GLU:CD	4:32:199:ASN:H	2.24	0.41
2:12:91:PRO:HB3	2:12:151:GLY:O	2.20	0.41
26:1H:270(M):U:H2'	26:1H:270(N):G:H5''	2.02	0.41
26:1H:2749:A:OP1	33:51:4:ILE:HD11	2.20	0.41
27:1J:63:G:N2	27:1J:64:C:O2	2.54	0.41
1:13:177:C:H2'	1:13:178:C:C6	2.56	0.41
26:14:71:A:C6	26:14:73:A:N1	2.88	0.41
26:1H:1650:G:N2	26:1H:2008:C:C2	2.88	0.41
46:C5:12:THR:O	46:C5:75:ILE:HB	2.20	0.41
49:J8:87:PRO:O	49:J8:91:LYS:HB2	2.20	0.41
26:1H:1753:G:C2	26:1H:1756:G:C2	3.09	0.41
26:1H:8:A:H2'	26:1H:9:U:C6	2.55	0.41
26:1H:2137:C:H42	26:1H:2154:G:H22	1.68	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
8:7E:87:SER:HB3	8:7E:133:LEU:O	2.20	0.41
1:13:1264:C:C2	1:13:1272:G:C2	3.09	0.41
1:1G:984:C:N3	1:1G:1221:G:N2	2.54	0.41
1:13:1348:U:N3	1:13:1349:A:N7	2.69	0.41
7:6E:27:ILE:O	7:6E:28:ASN:C	2.59	0.41
26:14:2467:C:H4'	38:45:123:HIS:NE2	2.35	0.41
27:16:90:C:OP1	38:88:16:ARG:HB3	2.20	0.41
26:14:1802:A:OP1	26:14:1814:G:N1	2.44	0.41
1:13:1448:C:N3	1:13:1455:G:N2	2.65	0.41
17:8A:21:VAL:O	17:8A:41:LYS:HA	2.20	0.41
26:1H:1249:U:H2'	37:78:18:ARG:HH12	1.86	0.41
11:2A:22:HIS:HB3	11:2A:29:ILE:HG12	2.01	0.41
23:2L:64:G:C2	23:2L:65:G:C5	3.09	0.41
21:1B:6:ARG:HD3	21:1B:15:ARG:NH1	2.36	0.41
47:D5:3:TYR:O	47:D5:58:VAL:HG23	2.21	0.41
1:13:1284:C:H2'	1:13:1285:A:N7	2.35	0.41
1:1G:1431:C:H2'	1:1G:1432:G:O4'	2.20	0.41
27:1J:87:G:H3'	27:1J:88:C:O4'	2.20	0.41
26:14:2065:C:H2'	26:14:2066:C:C6	2.55	0.41
26:1H:2018:G:H2'	26:1H:2019:A:C8	2.55	0.41
26:1H:2855:C:O2'	26:1H:2856:C:H5'	2.21	0.41
15:6A:27:VAL:O	15:6A:31:LEU:HD13	2.20	0.41
26:14:304:G:C2	26:14:305:U:C2	3.09	0.41
7:6E:50:ILE:HD11	7:6E:124:LEU:HB3	2.02	0.41
27:1J:93:C:H2'	27:1J:94:C:H6	1.86	0.41
32:41:16:ARG:O	32:41:20:ILE:HG13	2.21	0.41
26:1H:2068:U:O4	26:1H:2430:A:H2	2.04	0.41
1:13:1226:C:O3'	13:4I:111:LYS:NZ	2.51	0.41
30:21:165:VAL:O	30:21:189:PRO:HG2	2.20	0.41
26:1H:2873:A:C2	39:98:5:LYS:HB2	2.56	0.41
38:88:43:THR:HG22	38:88:94:VAL:HG12	2.01	0.41
1:1G:186(F):C:H5''	1:1G:187:C:OP2	2.21	0.41
26:14:815:C:O2	26:14:1193:G:N2	2.53	0.41
3:22:120:VAL:HG21	3:22:137:ALA:HB1	2.02	0.41
26:1H:2199:A:C5	26:1H:2205:C:C5	3.08	0.41
17:8I:20:THR:HA	17:8I:42:TYR:O	2.21	0.41
56:1L:74:C:N3	26:14:2555:U:C2	2.88	0.41
30:29:76:ARG:C	30:29:78:LEU:H	2.23	0.41
26:1H:612:G:H2'	26:1H:613:U:O2	2.20	0.41
1:1G:1349:A:P	9:82:118:LYS:HZ1	2.43	0.41
26:14:2038:G:H2'	26:14:2039:C:C6	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:537:C:H2'	26:1H:539:G:C8	2.56	0.41
25:4K:18:G:C4'	25:4K:19:A:OP2	2.69	0.41
1:13:104:G:C2	1:13:105:G:N7	2.88	0.41
26:1H:987:G:C2'	26:1H:988:A:H5'	2.51	0.41
29:11:50:THR:O	29:11:51:VAL:HG23	2.21	0.41
26:1H:1655:A:C8	26:1H:1656:C:C5	3.08	0.41
1:13:580:U:OP1	15:6I:54:ARG:NH2	2.53	0.41
26:14:1551:C:C4	26:14:1552:G:C5	3.09	0.41
26:1H:2038:G:C5	26:1H:2039:C:C5	3.09	0.41
26:14:741:G:H2'	26:14:742:G:C8	2.55	0.41
13:4I:81:LEU:HD23	13:4I:81:LEU:HA	1.67	0.41
13:4A:108:ARG:HA	13:4A:111:LYS:HB2	2.02	0.41
26:14:2058:A:H5''	26:14:2059:A:OP2	2.21	0.41
37:78:26:GLY:HA2	61:78:303:HOH:O	2.19	0.41
3:22:124:ILE:C	3:22:127:ARG:H	2.23	0.41
1:1G:972:C:H4'	10:1A:57:LYS:HG3	2.01	0.41
36:68:64:ARG:O	36:68:82:ASN:HA	2.19	0.41
55:Q8:17:THR:CG2	55:Q8:23:VAL:HG21	2.50	0.41
14:5I:10:ALA:HA	14:5I:13:THR:HG23	2.03	0.41
1:1G:136:C:H42	1:1G:227:G:H1	1.67	0.41
26:1H:2431:U:O2	26:1H:2433:A:C8	2.74	0.41
38:45:58:PHE:O	38:45:58:PHE:CD1	2.74	0.41
1:1G:334:C:H2'	1:1G:335:C:C6	2.55	0.41
26:14:1830:C:O5'	26:14:1830:C:H6	2.04	0.41
26:1H:2506:U:O2	26:1H:2506:U:H2'	2.20	0.41
26:14:2545:G:O5'	26:14:2545:G:H8	2.04	0.41
1:13:815:A:O2'	1:13:1527:C:H1'	2.20	0.41
1:13:926:G:N2	25:4K:15:A:OP2	2.51	0.41
26:1H:1965:C:H3'	26:1H:1966:A:H2'	2.02	0.41
40:A8:87:PHE:CE2	40:A8:89:ARG:HB3	2.55	0.41
26:1H:1635:G:H2'	26:1H:1635:G:N3	2.35	0.41
10:1I:57:LYS:HE2	10:1I:60:ARG:HH22	1.86	0.41
38:45:25:ASP:HA	38:45:67:ARG:NH1	2.36	0.41
26:14:1992:G:C2	26:14:1997:G:C5	3.08	0.41
26:1H:868:U:O2'	38:88:8:LYS:HE3	2.21	0.41
31:31:20:LEU:HD12	31:31:21:ALA:H	1.85	0.41
26:1H:748:G:O6	26:1H:751:A:H5''	2.21	0.41
26:1H:1997:G:H5'	30:21:117:MET:HE3	2.01	0.41
10:1I:54:PHE:CD2	10:1I:55:LYS:HG2	2.55	0.41
55:M5:25:MET:O	55:M5:48:PHE:HE1	2.04	0.41
13:4A:55:ARG:NH2	13:4A:56:LEU:HB2	2.35	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:8E:49:PRO:HB2	9:8E:85:LEU:HD12	2.02	0.41
43:D8:21:ARG:CG	43:D8:91:TYR:CE2	2.95	0.41
49:J8:91:LYS:C	49:J8:93:GLU:N	2.74	0.41
16:7I:12:LYS:O	16:7I:13:HIS:HB2	2.20	0.41
4:32:193:ASP:N	4:32:193:ASP:OD1	2.53	0.41
26:1H:2654:A:N1	26:1H:2665:A:H5'	2.36	0.41
23:2L:25:U:O2'	26:14:1923:U:H5''	2.21	0.41
1:13:1374:A:O2'	7:6E:28:ASN:HB3	2.19	0.41
1:1G:1280:A:H5'	1:1G:1281:U:OP2	2.20	0.41
26:1H:1024:G:O2'	26:1H:1144:G:O2'	2.33	0.41
35:58:18:ALA:HB3	35:58:56:ASN:O	2.21	0.41
26:1H:104:U:C5	26:1H:105:C:C4	3.09	0.41
1:1G:666:G:H5'	1:1G:726:C:H1'	2.02	0.41
26:1H:2345:G:H4'	26:1H:2346:A:O5'	2.20	0.41
53:N8:40:LYS:HZ3	53:N8:48:GLU:H	1.67	0.41
3:22:51:GLY:O	3:22:70:VAL:HG13	2.20	0.41
3:22:72:LYS:HZ1	3:22:75:VAL:HG23	1.85	0.41
5:4E:144:THR:HG22	5:4E:145:LYS:H	1.86	0.41
15:6A:18:PHE:CZ	15:6A:21:ASP:HB2	2.56	0.41
12:3A:52:LEU:HD12	12:3A:54:LYS:NZ	2.34	0.41
1:1G:428:G:C8	1:1G:430:A:C4	3.09	0.41
26:14:1167:U:C2	26:14:1183:G:N2	2.89	0.41
26:14:1052:C:N4	26:14:1107:G:H1	2.17	0.41
1:1G:1166:G:H1'	1:1G:1171:G:H22	1.85	0.41
26:1H:235:U:H5''	26:1H:236:C:OP2	2.21	0.41
26:14:139:G:H5''	26:14:139:G:C8	2.54	0.41
26:14:138:G:N2	45:B5:44:GLU:OE2	2.37	0.41
23:2L:53:G:H8	23:2L:53:G:O5'	2.04	0.41
26:14:1488:G:C5	26:14:1489:U:C6	3.09	0.41
26:14:27:G:C4	26:14:512:G:N2	2.88	0.41
1:1G:253:U:O2	1:1G:275:G:O2'	2.26	0.41
1:1G:628:G:C2	1:1G:629:G:C4	3.09	0.41
37:35:115:LEU:HD22	37:35:131:SER:HB2	2.02	0.41
8:72:30:ARG:HG2	8:72:31:PHE:H	1.86	0.41
26:14:196:A:H2'	26:14:196:A:N3	2.35	0.41
26:1H:860:U:C5	26:1H:917:A:H2	2.37	0.41
26:1H:458:G:C8	54:P8:37:LYS:HG2	2.56	0.41
26:1H:757:U:H2'	26:1H:758:C:H6	1.85	0.41
26:1H:2348:U:H2'	26:1H:2349:G:H5'	2.02	0.41
1:13:172:A:H5'	1:13:173:U:P	2.60	0.41
1:13:562:C:O4'	1:13:563:A:C2	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:15:133:GLN:HB3	35:15:135:PRO:HD3	2.02	0.41
52:M8:9:LEU:H	52:M8:27:THR:HB	1.86	0.41
26:1H:631:A:OP2	55:Q8:47:LYS:NZ	2.54	0.41
4:3E:175:SER:O	4:3E:183:GLY:HA2	2.20	0.41
6:5E:24:GLU:HG2	6:5E:28:ARG:CZ	2.51	0.41
1:1G:67:C:H2'	1:1G:68:G:H8	1.81	0.41
29:19:118:VAL:N	29:19:129:ASN:OD1	2.52	0.41
1:1G:395:C:H2'	1:1G:396:G:C8	2.56	0.41
26:1H:438:G:H2'	26:1H:439:G:C8	2.55	0.41
26:1H:363(F):A:H4'	26:1H:364:C:H5'	2.01	0.41
26:14:2256:G:C4	26:14:2257:U:C6	3.09	0.41
26:1H:1838:C:C2	26:1H:1898:U:C4	3.08	0.41
26:14:1906:G:C2	26:14:1925:C:O2	2.74	0.41
1:13:106:C:O2'	1:13:107:G:H5'	2.21	0.41
35:58:67:LEU:HD23	35:58:87:LEU:CD1	2.51	0.41
26:1H:82:G:N2	26:1H:103:A:OP2	2.41	0.41
26:1H:370:G:H5''	26:1H:423:A:N6	2.35	0.41
26:1H:289:A:H61	26:1H:351:G:H1'	1.85	0.41
35:58:75:TYR:HA	35:58:81:GLY:O	2.20	0.41
26:14:553:U:C4	26:14:554:U:O4	2.73	0.41
20:BA:45:GLN:HA	20:BA:91:LEU:HB3	2.02	0.41
26:14:1319:G:C6	26:14:1320:C:N4	2.88	0.41
24:3K:22:G:C5	24:3K:23:A:N7	2.89	0.41
4:32:81:GLU:HB3	4:32:96:LEU:HD11	2.02	0.41
4:3E:68:TYR:CE1	4:3E:97:LEU:HD13	2.55	0.41
3:2E:178:LEU:HA	3:2E:178:LEU:HD13	1.85	0.41
32:41:103:LEU:HD23	32:41:103:LEU:HA	1.85	0.41
8:72:41:ARG:HE	8:72:41:ARG:HB2	1.50	0.41
46:G8:83:THR:HG22	46:G8:84:ARG:HG2	2.01	0.41
26:14:2399:G:N1	26:14:2417:C:N3	2.47	0.41
26:14:960:A:C8	26:14:962:G:C8	3.08	0.41
32:41:67:LYS:NZ	52:M8:6:HIS:CD2	2.89	0.41
17:8I:76:LEU:HD12	17:8I:76:LEU:HA	1.77	0.41
30:29:57:LYS:HD3	30:29:57:LYS:HA	1.84	0.41
2:12:186:ALA:O	2:12:201:ILE:HB	2.21	0.41
26:1H:2176:A:O2'	28:71:44:HIS:CE1	2.71	0.41
30:29:64:LYS:C	30:29:66:HIS:H	2.24	0.41
26:14:1358:G:N2	26:14:1372:U:C5	2.89	0.41
26:1H:991:C:OP2	26:1H:1186:G:OP2	2.38	0.41
1:1G:747:C:C5	1:1G:748:C:C4	3.08	0.41
45:B5:31:HIS:CE1	45:B5:33:LYS:HB2	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1327:C:N4	26:1H:1328:G:C6	2.89	0.41
1:13:1422:G:H4'	36:68:49:ARG:NH1	2.36	0.41
47:D5:85:HIS:CG	47:D5:86:VAL:N	2.88	0.41
1:13:146:G:C2	1:13:147:G:C4	3.08	0.41
26:1H:242:G:H5''	55:Q8:64:TYR:CZ	2.56	0.41
32:41:113:ARG:HD3	32:41:140:ILE:O	2.19	0.41
3:22:18:TRP:HB2	3:22:21:ARG:HE	1.85	0.41
26:1H:270(T):G:C6	26:1H:270(U):C:C4	3.07	0.41
1:13:1132:C:H2'	1:13:1133:G:C8	2.48	0.41
4:3E:61:LYS:NZ	4:3E:62:GLN:OE1	2.26	0.41
4:3E:62:GLN:O	4:3E:66:ARG:HB2	2.20	0.41
26:1H:117:G:C6	26:1H:119:A:N6	2.89	0.41
5:4E:37:ARG:HA	5:4E:113:ALA:HA	2.02	0.41
4:32:8:VAL:CG2	4:32:115:ARG:HH12	2.33	0.41
27:16:12:C:C2	48:I8:74:ARG:NH1	2.88	0.41
34:69:130:TYR:HB3	34:69:136:VAL:CG1	2.50	0.41
1:1G:243:A:C2	1:1G:246:A:C8	3.09	0.41
29:19:93:ALA:N	29:19:105:ILE:O	2.43	0.41
54:L5:34:ARG:NH1	54:L5:39:ARG:CG	2.83	0.41
45:F8:50:LYS:O	45:F8:83:VAL:HA	2.20	0.41
1:1G:750:G:H21	15:6A:23:GLY:C	2.17	0.41
1:1G:430:A:C4	1:1G:431:A:C8	3.08	0.41
1:1G:552:U:H1'	12:3A:32:PHE:CZ	2.56	0.41
26:1H:1331:A:O2'	26:1H:1332:G:H8	2.03	0.41
23:2L:50:G:C2	23:2L:51:U:H1'	2.56	0.41
26:1H:753:C:H2'	26:1H:754:C:H6	1.82	0.41
22:1K:44:U:OP2	22:1K:48:C:N4	2.53	0.41
26:14:2513:G:HO2'	30:29:151:TYR:HE2	1.69	0.41
46:C5:42:VAL:HG12	46:C5:67:LEU:HD21	2.01	0.41
37:35:84:ASN:ND2	37:35:117:GLU:H	2.19	0.41
1:1G:630:G:C3'	1:1G:631:G:H5'	2.51	0.41
26:1H:820:A:H2'	26:1H:821:A:O4'	2.21	0.41
1:13:872:A:C4	1:13:874:G:N7	2.89	0.41
39:55:81:ASP:O	39:55:82:GLU:HG2	2.21	0.41
44:A5:73:ALA:HB3	44:A5:106:ILE:HD11	2.03	0.41
27:16:7:G:O5'	40:A8:29:PHE:CE2	2.73	0.41
41:B8:50:ILE:HA	41:B8:99:LEU:HD12	2.01	0.41
26:14:2299:G:N1	26:14:2318:G:C8	2.89	0.41
26:1H:1827:C:C3'	26:1H:1828:G:H5'	2.49	0.41
26:1H:784:A:H5'	26:1H:785:G:OP1	2.21	0.41
26:14:2563:U:O2	26:14:2565:A:C8	2.74	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:1448:G:O2'	26:1H:1529:A:N1	2.46	0.41
22:1K:18:G:C2	22:1K:57:G:N2	2.89	0.41
26:1H:1026:U:H4'	26:1H:1027:A:OP1	2.20	0.41
1:13:1162:C:H2'	1:13:1163:C:C6	2.55	0.41
56:1L:68:G:H2'	56:1L:69:A:C8	2.56	0.41
3:22:5:ILE:HG21	10:1A:51:ARG:HH22	1.86	0.41
48:E5:36:ILE:HD12	48:E5:58:THR:CG2	2.50	0.41
8:72:13:ILE:HG22	8:72:14:ARG:N	2.36	0.41
26:14:1011:G:C2	26:14:1013:C:C2	3.09	0.41
56:1L:24:G:C2	56:1L:25:C:C4	3.08	0.41
26:14:76:C:O2'	26:14:77:C:H5'	2.21	0.41
3:2E:134:ILE:HA	3:2E:134:ILE:HD13	1.71	0.41
26:1H:2282:G:OP1	26:1H:2283:C:H1'	2.20	0.41
9:8E:7:THR:O	9:8E:83:ARG:HD2	2.21	0.41
1:1G:103:C:P	20:BA:17:ARG:HH21	2.43	0.41
26:14:540:G:H2'	26:14:541:C:H6	1.85	0.41
26:1H:11:G:C3'	26:1H:12:U:H5'	2.51	0.41
1:1G:949:A:H61	1:1G:1232:U:H3	1.68	0.41
17:8I:18:THR:HG22	17:8I:19:VAL:N	2.36	0.41
15:6I:27:VAL:O	15:6I:31:LEU:HD13	2.20	0.41
29:19:67:PHE:HB3	29:19:153:ALA:H	1.85	0.41
1:1G:1517:G:C5	1:1G:1518:A:N7	2.89	0.41
29:19:6:PHE:CE1	29:19:18:VAL:HG23	2.56	0.41
1:13:1261:A:H3'	1:13:1262:C:H6	1.86	0.41
26:1H:271(C):U:O4	26:1H:272:G:H5''	2.20	0.41
35:58:104:LYS:HB2	35:58:117:PHE:CD1	2.56	0.41
48:I8:34:GLY:O	48:I8:35:ASN:C	2.58	0.41
11:2I:31:THR:HG22	11:2I:42:TRP:HB3	2.03	0.41
7:62:36:LYS:O	7:62:39:ALA:N	2.53	0.41
12:3I:30:ALA:HB1	12:3I:31:PRO:HD2	2.02	0.41
13:4A:116:THR:O	13:4A:116:THR:HG22	2.20	0.41
44:E8:96:ILE:HD13	44:E8:96:ILE:HG21	1.75	0.41
35:58:114:ARG:HH11	35:58:114:ARG:HD2	1.73	0.41
17:8A:5:VAL:HG22	17:8A:60:ILE:HD13	2.01	0.41
26:14:268:C:H2'	26:14:269:U:O4'	2.21	0.41
44:A5:5:ALA:HB3	44:A5:54:ALA:HB2	2.02	0.41
15:6I:70:LEU:HD11	15:6I:77:ARG:HE	1.84	0.41
34:61:136:VAL:HA	34:61:137:PRO:HD3	1.93	0.41
26:1H:194:G:H2'	26:1H:195:A:O4'	2.20	0.41
26:1H:248:G:H5'	26:1H:250:G:N7	2.36	0.41
1:1G:458:C:N4	1:1G:464:G:C6	2.89	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:61:ARG:HA	30:29:63:LEU:CD2	2.51	0.41
1:13:457:C:O2'	1:13:458:C:H5'	2.20	0.41
1:1G:1330:U:H5'	13:4A:24:GLY:H	1.86	0.41
13:4A:32:GLU:O	13:4A:35:GLU:N	2.54	0.41
37:35:16:ARG:HA	37:35:16:ARG:HD3	1.87	0.41
8:7E:111:ILE:HB	8:7E:135:CYS:SG	2.61	0.41
24:3K:61:C:H2'	24:3K:62:C:H6	1.85	0.41
1:1G:958:A:H5''	1:1G:959:A:OP2	2.21	0.41
24:3K:5:C:H2'	24:3K:6:G:C1'	2.50	0.41
1:1G:1011:G:H1	1:1G:1018:C:N4	2.19	0.41
1:1G:1016:A:C6	1:1G:1017:G:H1'	2.55	0.41
26:14:977:G:H2'	26:14:978:G:H8	1.85	0.41
26:1H:2287:A:C2	26:1H:2346:A:H2	2.38	0.41
1:1G:1068:G:N7	1:1G:1094:G:H8	2.19	0.41
1:1G:1072:G:C4	1:1G:1104:G:N2	2.88	0.41
45:F8:49:VAL:CG1	45:F8:50:LYS:N	2.84	0.41
26:14:910:A:H2	26:14:2264:C:O2	2.03	0.41
37:35:75:ILE:HG12	37:35:75:ILE:H	1.56	0.41
26:14:1559:G:HO2'	26:14:1560:G:C5'	2.33	0.41
26:14:2306:C:C2	26:14:2307:G:N2	2.88	0.41
27:1J:116:G:H2'	27:1J:117:G:O4'	2.20	0.41
30:29:116:VAL:O	30:29:117:MET:HG2	2.20	0.41
1:13:191:G:C5	1:13:192:U:C4	3.08	0.41
1:13:278:G:N2	17:8I:95:TYR:HB3	2.36	0.41
44:E8:56:ALA:C	44:E8:58:ALA:N	2.74	0.41
57:3L:15:G:C4	57:3L:59:A:N1	2.88	0.41
22:1K:7:U:H3'	22:1K:13:C:C5	2.56	0.41
1:13:690:G:H1	11:2I:51:LYS:CE	2.30	0.41
26:1H:107:C:H2'	26:1H:108:U:H6	1.86	0.41
26:1H:155:C:H42	26:1H:171:G:H1	1.67	0.41
1:13:959:A:C2	1:13:1222:G:O4'	2.74	0.41
1:1G:11:G:C5	1:1G:12:U:C5	3.09	0.41
29:11:229:VAL:HG22	29:11:229:VAL:H	1.61	0.41
1:1G:858:G:C6	1:1G:869:G:C8	3.09	0.41
1:13:724:G:N3	1:13:725:G:C8	2.88	0.41
3:2E:56:ASP:O	3:2E:66:VAL:HA	2.20	0.41
40:A8:62:LYS:HB2	40:A8:97:ARG:HD2	2.02	0.41
42:C8:39:LEU:HA	42:C8:39:LEU:HD23	1.83	0.41
26:14:1013:C:N3	26:14:1149:G:N2	2.60	0.41
51:L8:26:LEU:HD21	51:L8:46:ASN:CB	2.50	0.41
26:1H:1392:A:C5	26:1H:1393:A:C6	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:260:G:C5	26:14:261:G:C8	3.08	0.41
26:14:1374:G:H2'	26:14:1375:C:C6	2.55	0.41
34:61:90:GLY:O	34:61:121:LYS:HD2	2.20	0.41
36:68:22:ILE:HD11	36:68:42:SER:HB2	2.02	0.41
38:45:52:VAL:O	38:45:56:ARG:HB2	2.21	0.41
6:52:10:LEU:HD23	6:52:61:LEU:HD13	2.02	0.41
30:21:171:GLU:OE2	30:21:185:LYS:CE	2.69	0.41
30:21:143:ASN:HB2	30:21:147:PRO:HD2	2.02	0.41
56:1L:23:A:N3	56:1L:23:A:H2'	2.36	0.41
29:11:75:ILE:HG22	29:11:76:PRO:O	2.19	0.41
46:G8:33:LYS:HB2	46:G8:33:LYS:HE2	1.26	0.41
31:39:114:VAL:HG22	31:39:114:VAL:H	1.62	0.41
26:14:233:A:H2'	26:14:234:C:H6	1.86	0.41
39:55:10:LEU:HD23	39:55:10:LEU:HA	1.77	0.41
1:13:580:U:C4	1:13:581:G:C5	3.08	0.41
43:95:51:VAL:HG12	43:95:52:VAL:N	2.36	0.41
26:1H:2675:A:C5	26:1H:2676:C:C5	3.09	0.41
26:14:199:A:N6	26:14:2434:A:C5	2.89	0.41
26:14:1919:A:H2'	26:14:1919:A:N3	2.36	0.41
1:13:647:C:H2'	1:13:648:A:H8	1.85	0.41
26:1H:2810:A:H2'	26:1H:2811:G:O4'	2.21	0.41
31:39:57:VAL:HG13	31:39:59:TYR:HD1	1.86	0.41
26:1H:1648:C:H42	26:1H:2009:G:H1	1.69	0.41
26:1H:28:A:O2'	26:1H:29:U:H5'	2.21	0.41
2:12:220:ASP:O	2:12:224:GLN:HG3	2.21	0.41
17:8I:28:PRO:HA	17:8I:34:LYS:O	2.20	0.41
26:1H:2238:G:OP2	61:1H:3561:HOH:O	2.21	0.41
10:1I:9:ARG:HH22	10:1I:97:GLU:CD	2.24	0.41
44:A5:35:ILE:HG23	53:J5:28:PRO:HD2	2.03	0.41
29:19:64:ILE:HD13	29:19:64:ILE:HG21	1.75	0.41
50:K8:60:LEU:HA	50:K8:60:LEU:HD23	1.89	0.41
1:1G:183:G:H8	1:1G:183:G:OP2	2.04	0.41
1:13:1404:C:H6	1:13:1404:C:O5'	2.04	0.41
47:D5:126:VAL:HG12	47:D5:163:LEU:HA	2.01	0.41
46:G8:90:LEU:HA	46:G8:91:GLU:HA	1.77	0.41
26:14:957:A:N1	26:14:2459:A:H8	2.19	0.41
26:1H:198:C:O2'	26:1H:199:A:H5''	2.21	0.41
26:1H:2378:A:O2'	40:A8:21:THR:HG21	2.21	0.41
26:14:2134:A:C5	26:14:2158:A:C8	3.09	0.41
2:12:75:LYS:CA	2:12:78:GLN:HB2	2.32	0.41
1:1G:456:C:H2'	1:1G:457:C:C6	2.56	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:21:116:VAL:HG21	30:21:122:PHE:CE2	2.56	0.41
26:14:61:G:H5'	50:G5:50:ILE:HG12	2.03	0.41
1:1G:746:A:OP2	1:1G:746:A:H8	2.04	0.41
26:14:2687:U:C4	26:14:2688:U:C5	3.09	0.41
27:1J:62:C:H2'	27:1J:63:G:H8	1.86	0.41
1:1G:1316:G:H5''	14:5A:17:LYS:HZ1	1.80	0.41
1:1G:1316:G:N2	1:1G:1319:A:H8	2.18	0.41
37:35:78:PRO:HA	37:35:110:TYR:CD2	2.55	0.41
26:14:917:A:C2'	26:14:918:A:O5'	2.69	0.41
26:1H:1288:U:C2	26:1H:1327:C:O2	2.73	0.41
41:B8:23:ARG:O	41:B8:24:PRO:C	2.57	0.41
2:1E:80:ILE:HG12	2:1E:212:GLN:HB2	2.03	0.41
26:1H:2154:G:O2'	26:1H:2155:G:H5'	2.21	0.41
28:71:66:HIS:HE1	28:71:184:LYS:HD2	1.86	0.41
26:1H:2101:G:C6	26:1H:2102:U:C4	3.09	0.41
27:1J:73:A:C8	27:1J:103:U:O4	2.74	0.41
7:62:72:ARG:HG2	7:62:138:LYS:NZ	2.36	0.41
1:13:1157:A:H8	1:13:1158:C:N4	2.18	0.41
26:14:1815:A:O3'	29:19:39:LYS:NZ	2.52	0.41
14:5I:27:CYS:SG	14:5I:28:GLY:N	2.94	0.41
26:14:937:U:H2'	26:14:938:G:O4'	2.21	0.41
26:14:751:A:H5'	44:A5:90:ARG:CA	2.42	0.41
35:58:35:ARG:HB2	35:58:37:LYS:HG3	2.02	0.41
26:1H:2059:A:H5''	31:31:71:GLY:CA	2.51	0.41
26:1H:117:G:N1	26:1H:119:A:N6	2.69	0.41
53:N8:40:LYS:HG2	53:N8:46:CYS:CA	2.46	0.41
3:22:50:ALA:HB2	3:22:75:VAL:HG12	2.03	0.41
26:1H:2328:A:H2'	26:1H:2329:G:C8	2.55	0.41
42:C8:79:PHE:O	42:C8:79:PHE:HD1	2.04	0.41
26:1H:2313:C:C5	26:1H:2314:C:H5	2.39	0.41
26:1H:2334:G:H3'	26:1H:2335:A:H5'	2.03	0.41
24:3K:45:G:O2'	24:3K:46:G:C8	2.72	0.41
26:1H:1599:C:P	45:F8:36:LYS:HB2	2.60	0.41
30:21:35:GLN:HB3	30:21:48:GLN:HB2	2.03	0.41
26:1H:1273:U:O2'	26:1H:1274:A:H5''	2.20	0.41
37:78:28:GLY:O	37:78:29:LYS:C	2.59	0.41
26:14:2328:A:H2'	26:14:2329:G:O4'	2.21	0.41
26:1H:1537:C:N4	26:1H:1538:G:H21	2.14	0.41
26:14:273(C):C:H5'	26:14:273(D):C:OP2	2.20	0.41
53:N8:42:PRO:O	53:N8:44:THR:N	2.54	0.41
31:31:170:LEU:HB2	31:31:173:VAL:HB	2.03	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
40:65:63:THR:O	40:65:66:ALA:HB3	2.20	0.41
40:65:62:LYS:CA	40:65:65:VAL:HB	2.47	0.41
3:2E:84:ILE:HA	3:2E:87:LEU:HD12	2.03	0.41
26:14:2061:G:C2	26:14:2063:C:C4	3.09	0.41
26:14:2308:G:O6	26:14:2311:A:C2	2.74	0.41
1:1G:1090:U:H2'	1:1G:1091:U:C5	2.55	0.41
7:6E:5:ARG:NH1	7:6E:7:ALA:HA	2.36	0.41
26:1H:1332:G:N2	26:1H:1610:A:C8	2.86	0.41
26:1H:1332:G:H2'	26:1H:1332:G:H8	1.69	0.41
26:14:548:A:N6	26:14:549:G:C2	2.89	0.41
26:14:141:A:C8	26:14:1408:C:H1'	2.56	0.41
9:82:65:VAL:HG11	9:82:77:ILE:HD11	2.02	0.41
26:1H:654(R):C:N4	26:1H:654(S):G:O6	2.54	0.41
26:1H:654(B):C:H3'	26:1H:654(C):G:C8	2.55	0.41
5:42:12:LEU:CD1	5:42:14:ARG:HG2	2.50	0.41
4:3E:107:ARG:NH1	4:3E:194:LEU:HD22	2.36	0.41
26:1H:34:C:P	26:1H:34:C:O4'	2.79	0.41
1:1G:115:G:C2	1:1G:289:G:N7	2.88	0.41
26:14:1635:G:H2'	26:14:1636:C:C6	2.56	0.41
26:1H:1388:G:O2'	26:1H:1389:G:H5'	2.21	0.41
35:58:71:ILE:HG21	35:58:84:LYS:HB3	2.02	0.41
44:E8:57:ASN:O	44:E8:62:HIS:CD2	2.74	0.41
42:C8:74:LEU:C	42:C8:74:LEU:CD1	2.89	0.41
26:14:995:C:N4	35:15:2:LYS:HG3	2.36	0.41
1:13:411:A:N7	1:13:413:G:C4	2.89	0.41
1:13:138:G:H1	1:13:225:C:H42	1.69	0.41
26:1H:1397:U:P	26:1H:1398:C:H41	2.40	0.41
5:42:71:LEU:HD22	5:42:74:GLY:HA2	2.02	0.41
1:13:827:U:O5'	1:13:827:U:O2	2.39	0.41
1:13:827:U:C5	1:13:870:U:C4	3.09	0.41
2:1E:100:GLY:HA2	2:1E:103:THR:OG1	2.21	0.41
8:72:30:ARG:HG2	8:72:31:PHE:N	2.36	0.41
1:1G:557:G:C6	1:1G:558:G:C6	3.09	0.41
12:3I:113:ARG:HH21	12:3I:116:SER:HB2	1.86	0.41
29:19:10:THR:HB	29:19:11:PRO:HD2	2.03	0.41
55:M5:14:VAL:CG1	55:M5:15:LYS:N	2.84	0.41
55:M5:55:ALA:O	55:M5:59:LYS:HG3	2.21	0.41
34:69:77:LEU:HA	34:69:141:LYS:HB3	2.03	0.41
1:13:389:A:H2'	1:13:390:C:C5'	2.51	0.41
3:2E:47:LEU:HB2	3:2E:52:LEU:HD13	2.02	0.41
1:13:592:G:H2'	1:13:593:G:C8	2.55	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2187:G:C5	26:14:2188:C:C4	3.08	0.41
1:13:619:U:C6	4:3E:135:LEU:HD21	2.56	0.41
26:1H:580:C:O2'	26:1H:581:C:H5'	2.21	0.41
1:13:1304:G:C6	1:13:1305:G:N1	2.89	0.41
47:H8:58:VAL:O	47:H8:60:GLU:N	2.53	0.41
37:78:89:ALA:HA	37:78:121:LYS:HD3	2.02	0.41
26:1H:1221:C:C2	26:1H:1222:C:C5	3.08	0.41
1:13:199:G:H2'	1:13:200:G:C8	2.56	0.41
26:1H:1826:G:H4'	29:11:242:ARG:HE	1.85	0.41
26:14:2463:C:H6	26:14:2463:C:O5'	2.04	0.41
1:13:1390:U:H2'	1:13:1391:U:C6	2.56	0.41
1:1G:186(C):G:C6	1:1G:186(D):C:C4	3.08	0.41
26:14:723:G:H2'	26:14:724:U:C6	2.56	0.41
26:14:1870:C:H2'	26:14:1871:A:C8	2.56	0.41
26:1H:1514:U:O2	26:1H:1514:U:H2'	2.21	0.41
26:14:1149:G:C2	26:14:1150:C:C4	3.09	0.41
26:1H:1213:A:N3	26:1H:1238:G:O2'	2.38	0.41
26:14:1532:C:N4	26:14:1539:G:H1	2.18	0.41
47:D5:55:HIS:O	47:D5:57:ILE:HG13	2.20	0.41
39:98:74:LYS:HZ2	39:98:77:ARG:NH2	2.19	0.41
26:14:1445:C:H2'	26:14:1446:C:C6	2.55	0.41
1:1G:195:A:H4'	20:BA:68:LYS:HE3	2.03	0.41
1:13:955:U:H6	1:13:955:U:O5'	2.04	0.41
1:1G:1355:G:H1	1:1G:1367:C:H42	1.68	0.41
26:1H:1625:C:H5'	26:1H:1626:G:OP2	2.20	0.41
26:1H:273:G:H1	26:1H:364:C:N4	2.19	0.41
56:1L:75:C:O2'	26:14:2507:C:H4'	2.21	0.41
27:16:44:G:HO2'	27:16:45:A:P	2.44	0.41
26:14:1015:G:C6	26:14:1148:A:C6	3.09	0.41
6:52:7:ASN:OD1	6:52:7:ASN:N	2.53	0.41
26:14:1475:G:N2	26:14:1476:C:O2	2.54	0.41
26:1H:1672:C:H2'	26:1H:1673:U:H5'	2.02	0.41
26:14:541:C:H2'	26:14:542:C:C6	2.56	0.41
26:1H:1817:G:H2'	26:1H:1817:G:N3	2.35	0.41
26:1H:1818:U:OP2	29:11:157:ARG:NE	2.50	0.41
32:49:32:PRO:HA	32:49:162:THR:HG23	2.03	0.41
3:22:111:LEU:HD23	3:22:146:ALA:HB2	2.03	0.41
26:1H:910:A:H2	26:1H:2264:C:O2	2.04	0.41
14:5I:58:LYS:HB3	14:5I:58:LYS:HE2	1.79	0.41
12:3I:85:ILE:HG23	12:3I:85:ILE:HD12	1.74	0.41
4:32:53:ASP:OD2	5:42:107:ARG:NH2	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:G5:33:MET:O	50:G5:37:PHE:HD1	2.04	0.41
1:1G:862:C:C2'	1:1G:863:U:H5'	2.50	0.41
26:1H:779:U:H5''	29:11:49:ILE:HD12	2.02	0.41
50:K8:15:LYS:HG2	50:K8:15:LYS:HZ2	1.55	0.41
6:52:67:MET:HB2	6:52:68:PRO:HD2	2.03	0.41
26:14:519:U:H2'	26:14:520:G:C8	2.56	0.41
26:14:2408:U:H2'	26:14:2409:G:C8	2.56	0.41
13:4I:77:ASN:O	13:4I:81:LEU:N	2.49	0.41
1:1G:137:C:C2	1:1G:227:G:N2	2.89	0.41
2:12:220:ASP:O	2:12:223:ILE:HG22	2.21	0.41
26:1H:1615:C:C5	26:1H:1617:C:C4	3.08	0.41
3:22:191:THR:HG21	3:22:193:TYR:CZ	2.55	0.41
20:BA:26:ASN:O	20:BA:30:LYS:HB2	2.21	0.41
1:13:1396:A:H4'	1:13:1397:C:H5''	2.02	0.41
6:5E:100:ASN:HB2	18:9I:27:GLY:O	2.20	0.41
1:13:781:A:H5'	1:13:782:A:OP2	2.21	0.41
26:1H:390:A:C6	37:78:71:VAL:HG21	2.56	0.41
1:1G:1312:G:O2'	1:1G:1313:U:H5'	2.20	0.41
12:3A:34:ARG:HH11	12:3A:34:ARG:HD2	1.71	0.41
26:1H:90:U:H6	26:1H:90:U:OP1	2.04	0.41
40:65:15:ARG:O	40:65:19:LYS:HG3	2.20	0.41
35:15:17:ASP:O	35:15:18:ALA:HB3	2.21	0.41
6:5E:33:TYR:HE2	6:5E:78:GLU:CB	2.34	0.41
26:1H:1157:G:N2	26:1H:1158:C:C2	2.89	0.41
39:55:54:LEU:O	39:55:62:ALA:HB1	2.20	0.41
1:1G:807:A:C5	1:1G:808:C:C4	3.09	0.41
32:41:26:GLN:HG3	32:41:27:ASN:N	2.36	0.41
44:A5:79:GLY:HA3	44:A5:100:THR:HG22	2.03	0.41
29:19:77:ALA:HB2	29:19:97:TYR:CD2	2.55	0.41
29:19:97:TYR:HB2	29:19:101:GLU:O	2.21	0.41
29:19:70:TRP:CE2	29:19:150:LYS:HD3	2.56	0.41
10:1A:17:ASP:OD1	10:1A:18:ALA:N	2.54	0.41
26:1H:833:U:O2	37:78:55:ARG:NH2	2.50	0.41
26:14:219:G:H2'	26:14:220:G:C8	2.56	0.41
33:59:74:ASN:O	33:59:78:GLY:N	2.54	0.41
11:2A:33:THR:HG22	11:2A:39:PRO:HA	2.03	0.41
19:AI:11:VAL:O	19:AI:11:VAL:HG13	2.20	0.41
26:14:2238:G:N3	26:14:2238:G:H2'	2.35	0.41
47:H8:151:HIS:HD1	47:H8:170:THR:HG23	1.85	0.41
26:14:2075:U:C2'	26:14:2076:U:H5''	2.51	0.41
26:1H:2378:A:OP1	40:A8:111:GLU:OE1	2.39	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2402:C:H5	26:14:2415:G:N2	2.19	0.41
37:35:65:ARG:HD2	37:35:65:ARG:O	2.21	0.41
2:12:187:LEU:HD11	2:12:205:ASP:HA	2.03	0.41
24:3K:17:U:H3'	24:3K:19:G:OP2	2.20	0.41
24:3K:59:A:C8	24:3K:60:U:C5	3.09	0.41
1:13:452:A:HO2'	1:13:453:A:C4'	2.33	0.41
29:11:31:LYS:HB3	29:11:34:VAL:HG22	2.03	0.41
26:14:654(B):C:H4'	26:14:654(T):A:N1	2.36	0.41
50:G5:64:LEU:O	50:G5:68:ARG:HG2	2.20	0.41
46:C5:75:ILE:O	46:C5:80:GLY:N	2.54	0.41
1:13:534:U:H5''	1:13:535:A:OP2	2.19	0.41
47:D5:44:PHE:C	47:D5:44:PHE:CD1	2.94	0.41
47:D5:44:PHE:HD1	47:D5:44:PHE:C	2.25	0.41
1:1G:1055:A:N7	1:1G:1206:G:N2	2.69	0.41
1:1G:1118:C:H1'	1:1G:1179:A:C8	2.56	0.41
1:13:1296:C:H4'	1:13:1302:U:C5	2.56	0.41
24:3K:49:G:N2	24:3K:64:G:H1	2.19	0.41
1:1G:1010:G:C2	1:1G:1020:U:C4	3.09	0.41
14:5A:9:LYS:HG3	14:5A:12:ARG:NH1	2.36	0.41
1:13:1132:C:C2'	1:13:1133:G:H5'	2.51	0.41
9:8E:11:LYS:C	9:8E:13:ALA:H	2.24	0.41
13:4I:3:ARG:HB3	13:4I:9:ILE:HG12	2.03	0.41
8:72:100:ILE:HD12	8:72:125:ARG:HG3	2.02	0.41
2:1E:165:VAL:HG23	2:1E:166:ASP:H	1.85	0.41
3:22:73:PRO:HA	3:22:76:VAL:CG1	2.51	0.41
26:14:2353:G:C8	61:14:3547:HOH:O	2.73	0.41
26:1H:1274:A:N1	26:1H:1644:C:O2'	2.34	0.41
26:1H:141:A:C8	26:1H:1408:C:H1'	2.56	0.41
1:1G:750:G:N2	1:1G:751:U:C2	2.89	0.41
1:13:752:G:H4'	15:6I:69:TYR:OH	2.21	0.41
26:14:545:G:H2'	26:14:546:C:H3'	2.02	0.41
3:22:182:ILE:HA	3:22:202:ILE:O	2.21	0.41
1:1G:1432:G:OP1	41:75:107:ASP:HB2	2.21	0.41
1:13:413:G:H21	1:13:428:G:H1'	1.84	0.41
1:1G:729:A:C5	1:1G:730:G:C8	3.09	0.41
26:14:5:A:H2'	26:14:6:A:H5''	2.03	0.41
26:1H:2441:C:C2'	26:1H:2442:C:H5'	2.51	0.41
1:13:558:G:C4	1:13:559:A:C2	3.08	0.41
1:13:223:U:H2'	1:13:224:C:H6	1.86	0.41
1:1G:1092:A:H8	1:1G:1092:A:O5'	2.04	0.41
1:1G:735:C:O2'	1:1G:736:C:H5'	2.21	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:2102:U:O2	26:14:2187:G:N2	2.53	0.41
32:41:11:TYR:O	32:41:16:ARG:HG3	2.21	0.41
1:1G:830:G:H22	1:1G:857:C:H1'	1.86	0.41
33:51:54:ARG:HH21	33:51:57:ASP:HB3	1.86	0.41
23:2K:63:C:O2	23:2K:64:G:C8	2.74	0.41
26:1H:1161:C:C6	26:1H:1161:C:C3'	3.03	0.41
20:BI:45:GLN:O	20:BI:45:GLN:HG2	2.21	0.41
26:1H:557:U:H2'	26:1H:558:G:C8	2.56	0.41
50:K8:64:LEU:CD1	50:K8:68:ARG:HH11	2.34	0.41
1:1G:191(E):G:H2'	1:1G:191(F):U:C6	2.56	0.41
36:25:34:THR:O	36:25:62:VAL:HB	2.21	0.41
1:13:312:C:C2	1:13:313:A:C8	3.09	0.41
1:1G:1382:C:H2'	1:1G:1383:C:C6	2.55	0.41
26:1H:2784:C:H1'	30:21:37:ARG:NH1	2.36	0.41
27:1J:9:G:P	40:65:25:ARG:HH22	2.43	0.41
1:1G:893:C:C4	1:1G:894:G:N7	2.89	0.41
19:AI:33:THR:HG23	19:AI:35:SER:H	1.86	0.41
26:1H:924:C:N4	26:1H:925:C:N4	2.69	0.41
35:58:15:LEU:O	35:58:16:ILE:HG13	2.21	0.41
26:14:2244:U:O2'	26:14:2245:U:H5'	2.21	0.41
12:3I:10:LEU:HD12	17:8I:32:TYR:CZ	2.56	0.41
26:1H:2104:G:C2	26:1H:2186:G:C2	3.09	0.41
26:14:236:C:O5'	26:14:236:C:H6	2.04	0.41
1:13:1260:C:H3'	1:13:1260:C:C6	2.56	0.41
35:58:57:ALA:C	35:58:59:LYS:H	2.25	0.41
1:1G:328:C:H4'	1:1G:329:A:C5'	2.51	0.41
26:1H:800:A:H4'	26:1H:801:G:O5'	2.21	0.41
26:1H:507:A:H5''	26:1H:508:G:H5'	2.02	0.41
1:1G:28:G:C6	1:1G:29:G:C5	3.09	0.41
26:1H:2473:U:H2'	26:1H:2474:C:H5'	2.02	0.41
33:51:3:ARG:CZ	33:51:3:ARG:HA	2.51	0.41
39:98:34:ILE:HG22	39:98:114:VAL:HB	2.03	0.41
26:14:835:A:N6	26:14:836:G:C6	2.89	0.41
26:1H:1370:C:O2'	26:1H:1811:G:O2'	2.35	0.41
26:1H:2670:A:C2	26:1H:2671:A:C4	3.09	0.41
26:14:2527:C:H2'	26:14:2528:U:O4'	2.21	0.41
1:1G:2:U:H6	4:32:86:LYS:HE3	1.86	0.41
26:14:1971:A:H1'	29:19:240:ALA:O	2.21	0.41
45:F8:41:ASN:OD1	45:F8:41:ASN:N	2.54	0.41
29:11:111:LEU:HA	29:11:111:LEU:HD23	1.94	0.41
31:39:48:THR:OG1	31:39:48:THR:O	2.36	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:21:170:LEU:HA	30:21:170:LEU:HD23	1.91	0.41
12:3I:126:LYS:HA	12:3I:126:LYS:HD3	1.73	0.41
41:B8:22:PHE:CD1	41:B8:22:PHE:N	2.89	0.41
1:1G:1246:C:C4	1:1G:1247:U:C4	3.09	0.41
2:1E:74:LYS:H	2:1E:74:LYS:HG3	1.57	0.41
26:1H:238:C:H2'	26:1H:239:U:O4'	2.21	0.41
34:69:133:HIS:CG	34:69:134:PRO:HD3	2.56	0.41
26:14:957:A:OP1	38:45:76:LYS:HD3	2.18	0.40
26:14:959:A:N1	26:14:960:A:C2	2.88	0.40
32:41:61:ALA:HB2	32:41:67:LYS:HA	2.02	0.40
52:M8:6:HIS:HA	52:M8:7:PRO:HD3	1.93	0.40
2:12:97:TRP:CE2	2:12:173:ALA:HB2	2.56	0.40
30:21:116:VAL:O	30:21:117:MET:CB	2.65	0.40
26:1H:320:A:H5''	26:1H:321:G:OP1	2.21	0.40
42:85:92:ARG:CZ	43:95:11:GLN:H	2.33	0.40
2:1E:161:ALA:HA	2:1E:183:PRO:O	2.21	0.40
45:F8:67:GLY:O	45:F8:68:ARG:HB3	2.21	0.40
36:68:2:ILE:HD13	36:68:2:ILE:HA	1.69	0.40
57:3L:67:C:H2'	57:3L:68:G:C8	2.56	0.40
7:6E:111:ARG:HB2	7:6E:113:GLU:HG2	2.02	0.40
1:1G:1261:A:H61	1:1G:1274:G:C1'	2.34	0.40
1:1G:1081:G:OP2	1:1G:1081:G:H8	2.03	0.40
4:3E:11:LEU:HD11	4:3E:21:LEU:HD22	2.01	0.40
26:14:2749:A:C1'	33:59:63:SER:HA	2.52	0.40
1:13:1158:C:C2	1:13:1160:G:C8	3.09	0.40
26:14:690:G:O2'	29:19:43:ARG:NH2	2.49	0.40
1:13:1309:G:C2	1:13:1329:A:N3	2.89	0.40
1:13:1309:G:C6	1:13:1329:A:N1	2.89	0.40
3:22:72:LYS:HG3	3:22:75:VAL:HB	2.02	0.40
55:M5:36:LYS:CB	55:M5:41:ILE:HD11	2.51	0.40
26:1H:1568:G:N3	29:11:58:HIS:HE1	2.19	0.40
29:11:83:GLU:OE2	29:11:104:TYR:HE1	2.05	0.40
38:45:12:GLN:O	38:45:13:GLN:O	2.38	0.40
26:14:330:A:H2	26:14:1210:A:O2'	2.01	0.40
26:1H:275:G:N2	26:1H:276:A:C5	2.88	0.40
40:A8:30:ARG:HA	40:A8:35:ILE:HA	2.03	0.40
40:A8:106:ARG:HG3	40:A8:106:ARG:H	1.73	0.40
26:1H:2398:U:H2'	26:1H:2399:G:C8	2.56	0.40
1:1G:1165:C:H2'	1:1G:1166:G:O4'	2.21	0.40
26:1H:39:C:H2'	26:1H:40:C:C6	2.56	0.40
29:11:131:LEU:HB2	29:11:136:ILE:HD11	2.03	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:1004:A:N3	1:13:1004:A:H5''	2.36	0.40
26:14:307:G:N2	26:14:309:G:H3'	2.37	0.40
46:C5:42:VAL:O	46:C5:64:GLU:HA	2.21	0.40
17:8I:88:TYR:CD1	17:8I:89:LEU:N	2.89	0.40
26:14:1729:A:C6	26:14:1731:G:C6	3.09	0.40
1:13:247:G:C6	1:13:248:C:C5	3.09	0.40
1:13:247:G:C2	1:13:248:C:C5	3.09	0.40
31:39:183:VAL:O	31:39:187:VAL:HG23	2.21	0.40
1:13:532:A:O2'	1:13:533:A:H5''	2.21	0.40
1:13:533:A:C2	1:13:536:C:C5	3.08	0.40
46:C5:52:SER:N	46:C5:56:PRO:HA	2.32	0.40
26:14:2165:G:H8	26:14:2166:G:H5''	1.86	0.40
38:88:135:ASP:OD1	38:88:137:TYR:HB2	2.22	0.40
26:1H:1887:C:N4	26:1H:1888:G:N7	2.69	0.40
32:41:6:ALA:HB3	52:M8:23:GLU:HB2	2.03	0.40
1:1G:147:G:N2	1:1G:148:G:C4	2.89	0.40
26:14:2471:C:H2'	26:14:2472:G:H8	1.87	0.40
26:14:1543:A:H2	26:14:1545:A:C5	2.39	0.40
1:13:685:G:N2	1:13:686:U:O4	2.54	0.40
26:1H:483:A:H2'	26:1H:484:C:H5'	2.02	0.40
39:98:3:HIS:O	39:98:4:LEU:HB2	2.22	0.40
1:1G:113:G:O4'	1:1G:354:G:H4'	2.21	0.40
26:14:2259:G:N1	26:14:2282:G:C6	2.89	0.40
29:11:242:ARG:HD2	29:11:242:ARG:H	1.85	0.40
26:14:670:A:H4'	26:14:671:C:O5'	2.21	0.40
38:45:34:LEU:HB2	38:45:118:LEU:HD13	2.03	0.40
40:A8:56:LEU:C	40:A8:58:LEU:HD22	2.41	0.40
1:13:806:C:H2'	1:13:807:A:C8	2.57	0.40
5:42:61:TYR:HA	5:42:64:ARG:HB2	2.03	0.40
27:16:44:G:H1'	27:16:47:C:N4	2.36	0.40
52:M8:13:ARG:NH1	52:M8:22:ILE:HA	2.36	0.40
26:1H:18:C:H4'	42:C8:23:GLY:O	2.21	0.40
26:1H:1668:A:O4'	26:1H:1669:A:C2	2.74	0.40
26:14:1918:A:O3'	26:14:1919:A:C8	2.74	0.40
20:BA:11:SER:HA	20:BA:13:LEU:HD23	2.03	0.40
26:1H:1770:G:H2'	26:1H:1771:C:C6	2.56	0.40
26:1H:1771:C:O2'	26:1H:1786:A:H8	2.03	0.40
26:14:1477:A:C4	26:14:1517:G:N2	2.89	0.40
26:1H:2439:A:H4'	26:1H:2440:C:H5''	2.03	0.40
1:13:1356:G:H2'	1:13:1357:A:C8	2.56	0.40
26:14:79:G:H2'	26:14:80:G:O4'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
35:15:64:GLY:C	35:15:66:LYS:H	2.23	0.40
29:11:11:PRO:O	29:11:12:SER:OG	2.25	0.40
26:14:2728:U:O2'	26:14:2729:G:H5'	2.21	0.40
26:14:1157:G:C2	26:14:1158:C:C2	3.09	0.40
37:35:56:SER:HB2	37:35:61:ARG:HD2	2.03	0.40
44:A5:4:LYS:HG3	44:A5:4:LYS:O	2.21	0.40
53:J5:22:HIS:H	53:J5:22:HIS:CD2	2.37	0.40
26:14:1671:U:H6	26:14:1671:U:O5'	2.04	0.40
7:62:35:LYS:HB3	7:62:35:LYS:HE2	1.72	0.40
12:3I:84:LEU:HD23	12:3I:101:VAL:HG21	2.03	0.40
46:G8:81:LYS:HD2	46:G8:99:CYS:SG	2.61	0.40
40:A8:84:GLN:O	40:A8:85:VAL:HG13	2.21	0.40
10:1I:50:ILE:HA	10:1I:60:ARG:HB3	2.03	0.40
47:D5:78:LYS:HG2	47:D5:78:LYS:H	1.48	0.40
26:14:631:A:OP1	37:35:65:ARG:NH1	2.45	0.40
49:F5:90:ILE:HD13	49:F5:90:ILE:HG21	1.79	0.40
1:1G:1287:A:H2	1:1G:1353:G:HO2'	1.63	0.40
43:D8:79:VAL:HG13	43:D8:81:TYR:CB	2.47	0.40
1:13:1053:G:O5'	1:13:1054:C:H3'	2.21	0.40
2:12:90:MET:HA	2:12:91:PRO:HD3	1.84	0.40
27:1J:23:G:N1	27:1J:59:A:N6	2.69	0.40
1:1G:1311:G:N2	1:1G:1326:C:O2	2.53	0.40
1:13:179:A:H2'	1:13:180:U:H6	1.85	0.40
26:14:1754:C:N3	26:14:2716:U:O2'	2.53	0.40
39:55:103:ARG:HH21	44:A5:40:ASN:CG	2.15	0.40
26:14:917:A:N1	26:14:918:A:N3	2.70	0.40
47:D5:44:PHE:CD1	47:D5:48:PHE:HB2	2.56	0.40
1:1G:1257:U:H5''	1:1G:1258:G:C8	2.57	0.40
1:13:129(A):G:C2	1:13:188:U:O2'	2.64	0.40
1:13:1126:U:C5	1:13:1127:G:C2	3.09	0.40
26:14:817:C:H6	26:14:817:C:O5'	2.04	0.40
26:1H:287:C:O2'	26:1H:288:C:H5'	2.20	0.40
26:1H:592:G:N3	55:Q8:4:MET:CE	2.85	0.40
30:29:1:MET:CA	30:29:200:GLU:OE2	2.70	0.40
3:2E:101:LEU:HD23	3:2E:102:ASN:O	2.21	0.40
26:14:1677:A:H2'	26:14:1678:G:O4'	2.21	0.40
26:14:2405:G:OP1	37:35:77:ARG:NH2	2.54	0.40
26:14:470:A:C8	26:14:470:A:C5'	3.02	0.40
31:39:126:VAL:HG11	31:39:142:TRP:HH2	1.86	0.40
1:1G:452:A:C6	1:1G:453:A:C6	3.09	0.40
26:1H:234:C:C2	26:1H:235:U:C6	3.10	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:544:C:H2'	26:14:545:G:H5'	2.01	0.40
45:F8:9:LEU:HA	45:F8:9:LEU:HD23	1.92	0.40
26:14:141:A:H8	26:14:1408:C:H1'	1.86	0.40
1:13:1431:C:H2'	1:13:1432:G:O4'	2.20	0.40
26:1H:654(T):A:H2'	26:1H:654(U):A:O4'	2.20	0.40
26:1H:1675:C:O2	30:21:128:SER:OG	2.39	0.40
22:1K:27:G:H22	22:1K:43:U:H3	1.64	0.40
1:1G:1296:C:H3'	1:1G:1297:C:H6	1.86	0.40
2:1E:92:TYR:CE1	2:1E:151:GLY:HA2	2.56	0.40
26:14:2525:G:C2	26:14:2539:C:N3	2.89	0.40
26:14:2191:G:N3	26:14:2191:G:H2'	2.36	0.40
4:3E:92:VAL:HG12	4:3E:96:LEU:CD2	2.48	0.40
1:13:874:G:C6	1:13:875:C:N4	2.89	0.40
1:1G:926:G:C6	1:1G:1505:G:C6	3.09	0.40
39:98:12:ARG:CG	39:98:16:HIS:CG	3.04	0.40
26:14:2164:C:O2'	26:14:2165:G:H5'	2.22	0.40
7:62:93:PRO:HD2	7:62:94:ARG:HH21	1.86	0.40
26:14:953:A:OP1	38:45:16:ARG:HD3	2.20	0.40
27:1J:93:C:C2	27:1J:94:C:C6	3.09	0.40
26:1H:448:U:O4	26:1H:583:G:H1'	2.21	0.40
1:1G:95:G:C6	1:1G:96:G:C5	3.09	0.40
1:1G:1333:A:O5'	1:1G:1333:A:H8	2.05	0.40
1:1G:1213:A:N6	1:1G:1215:G:N3	2.69	0.40
48:E5:50:ASN:C	48:E5:62:LEU:HB2	2.40	0.40
41:75:113:LYS:O	41:75:114:LEU:HD23	2.21	0.40
1:1G:709:G:C4	1:1G:710:G:C8	3.09	0.40
11:2I:69:ALA:HB1	11:2I:73:MET:HE2	2.04	0.40
26:1H:1316:U:H2'	26:1H:1317:A:H8	1.85	0.40
1:1G:545:C:H2'	1:1G:546:G:O4'	2.20	0.40
3:2E:156:ARG:HB3	3:2E:160:ALA:O	2.21	0.40
6:52:95:GLU:HA	6:52:96:PRO:HD3	1.93	0.40
38:88:38:GLU:OE1	38:88:128:LYS:HD2	2.21	0.40
26:1H:1673:U:C6	26:1H:1673:U:H3'	2.56	0.40
12:3A:6:THR:OG1	12:3A:9:GLN:HG3	2.21	0.40
26:1H:1282:U:H2'	26:1H:1283:G:C8	2.56	0.40
26:14:270(E):G:C6	26:14:270(F):U:C4	3.10	0.40
26:14:968:G:C2	26:14:969:U:C2	3.09	0.40
11:2I:109:VAL:HA	18:9I:85:LEU:O	2.21	0.40
11:2I:84:VAL:HG22	11:2I:109:VAL:O	2.22	0.40
26:14:533:G:H5'	42:85:24:TYR:CE1	2.56	0.40
26:14:1767:C:O2'	26:14:1768:U:H5'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:1H:451:C:C2	26:1H:453:C:C5	3.09	0.40
3:22:152:ILE:HG23	3:22:167:TRP:CB	2.51	0.40
1:13:941:G:N2	1:13:942:G:HI1'	2.36	0.40
29:19:77:ALA:HB2	29:19:97:TYR:CG	2.56	0.40
30:21:170:LEU:HD11	30:21:187:ALA:HB3	2.02	0.40
26:1H:2197:U:HI1'	26:1H:2198:A:C8	2.56	0.40
51:H5:26:LEU:HD21	51:H5:46:ASN:HB2	2.03	0.40
10:1I:12:ASP:OD1	10:1I:14:LYS:HB2	2.21	0.40
32:41:145:THR:C	32:41:147:ASP:H	2.24	0.40
3:22:113:ALA:HB3	3:22:114:PRO:HD3	2.04	0.40
26:1H:696:G:C2	26:1H:697:C:C6	3.10	0.40
26:1H:1663:C:O2'	26:1H:2686:G:H4'	2.20	0.40
35:58:70:LYS:HE3	35:58:72:TYR:CE1	2.56	0.40
38:88:24:GLY:O	38:88:25:ASP:HB3	2.21	0.40
17:8A:29:HIS:HB3	17:8A:33:GLY:N	2.36	0.40
28:71:69:GLY:HA2	28:71:177:LYS:N	2.36	0.40
26:14:425:G:H2'	26:14:426:C:H6	1.85	0.40
18:9A:76:LEU:HA	18:9A:76:LEU:HD23	1.91	0.40
1:1G:190:G:H8	1:1G:190:G:OP1	2.04	0.40
54:P8:33:ARG:HD2	54:P8:33:ARG:HH11	1.72	0.40
1:1G:497:U:O2	1:1G:497:U:H2'	2.20	0.40
29:19:182:LEU:HA	29:19:182:LEU:HD13	1.83	0.40
1:13:799:G:C6	1:13:800:G:C4	3.10	0.40
26:14:2380:C:OP1	40:65:20:ARG:NH1	2.54	0.40
26:1H:302:C:H2'	26:1H:303:U:C6	2.56	0.40
15:6I:17:ARG:HD3	15:6I:17:ARG:HH11	1.69	0.40
32:49:106:LEU:HB3	32:49:107:LEU:CD2	2.51	0.40
37:78:126:VAL:HA	37:78:145:PRO:HD2	2.04	0.40
49:F5:5:CYS:HG	49:F5:8:SER:HG	1.59	0.40
1:13:1367:C:N3	1:13:1368:G:C8	2.90	0.40
19:AI:40:ILE:O	19:AI:41:VAL:HG22	2.21	0.40
31:39:53:THR:O	31:39:55:GLY:N	2.54	0.40
26:1H:1164:G:C6	26:1H:1165:U:C4	3.09	0.40
1:1G:841:U:C6	1:1G:841:U:C3'	3.04	0.40
42:85:100:VAL:O	42:85:102:GLU:N	2.50	0.40
5:4E:33:VAL:HG12	5:4E:112:LEU:HD12	2.03	0.40
12:3A:20:LYS:HE2	12:3A:20:LYS:O	2.21	0.40
9:82:26:VAL:HG12	9:82:27:THR:N	2.36	0.40
31:31:126:VAL:HG11	31:31:142:TRP:HH2	1.86	0.40
41:B8:89:VAL:O	41:B8:90:GLN:HB2	2.20	0.40
4:32:110:PHE:CD1	4:32:110:PHE:N	2.90	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1344:C:H4'	9:82:120:ARG:O	2.21	0.40
1:13:130:A:O2'	1:13:131:C:O5'	2.34	0.40
24:3K:3:G:H22	24:3K:70:C:N4	2.19	0.40
1:1G:377:G:H1	1:1G:386:C:N4	2.04	0.40
33:59:56:SER:HB3	33:59:61:HIS:CG	2.57	0.40
26:14:817:C:H2'	26:14:818:G:O4'	2.21	0.40
26:14:848:G:C4	26:14:933:A:C8	2.97	0.40
31:31:162:LEU:HA	31:31:162:LEU:HD23	1.79	0.40
57:3L:30:G:N2	57:3L:41:A:N9	2.69	0.40
1:1G:361:G:H2'	1:1G:362:G:O4'	2.21	0.40
26:14:1053:C:H2'	26:14:1054:A:C1'	2.51	0.40
55:M5:31:HIS:O	55:M5:36:LYS:NZ	2.55	0.40
26:1H:1598:C:H2'	26:1H:1599:C:H6	1.86	0.40
30:21:79:ARG:HG2	30:21:80:GLU:H	1.86	0.40
38:88:139:GLU:O	38:88:139:GLU:HG2	2.21	0.40
26:1H:1471:A:C2	26:1H:1472:A:C4	3.09	0.40
32:41:77:ILE:HD13	32:41:77:ILE:HG21	1.76	0.40
1:1G:637:G:H2'	1:1G:638:G:H8	1.87	0.40
27:1J:117:G:O6	27:1J:119:A:N6	2.54	0.40
26:1H:426:C:C2	26:1H:427:U:C6	3.09	0.40
49:F5:15:ALA:O	49:F5:40:ARG:HG2	2.21	0.40
26:14:2505:G:O6	26:14:2576:G:H2'	2.20	0.40
32:49:11:TYR:HD1	32:49:176:LEU:HD11	1.87	0.40
23:2L:36:A:H2'	23:2L:37:U:C6	2.56	0.40
26:1H:822:U:O2'	26:1H:823:G:H5'	2.21	0.40
26:14:2336:A:H8	26:14:2336:A:O5'	2.04	0.40
39:55:82:GLU:H	39:55:85:PRO:HG2	1.86	0.40
26:14:527:C:H6	26:14:527:C:HO2'	1.65	0.40
1:13:1316:G:N2	1:13:1319:A:OP2	2.46	0.40
26:1H:1465:G:C5	26:1H:1466:G:N7	2.89	0.40
26:1H:484:C:H2'	26:1H:485:C:C6	2.57	0.40
47:H8:81:ARG:HG3	47:H8:81:ARG:O	2.22	0.40
1:13:109:A:C6	1:13:326:G:C6	3.08	0.40
9:8E:78:LYS:HE3	9:8E:101:PHE:CE1	2.57	0.40
1:13:198:G:C6	1:13:220:G:C2	3.09	0.40
26:1H:2256:G:N2	26:1H:2275:C:N4	2.69	0.40
26:14:2795:G:HO2'	26:14:2798:C:H6	1.66	0.40
1:13:27:G:C5	1:13:557:G:C2	3.09	0.40
41:B8:55:ASN:O	41:B8:56:GLY:C	2.60	0.40
44:A5:19:LEU:HA	44:A5:19:LEU:HD13	1.82	0.40
26:14:445:C:O2'	26:14:446:G:H5'	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:1033:U:H3'	26:14:1033:U:C6	2.56	0.40
1:1G:1357:A:H3'	1:1G:1358:U:C6	2.57	0.40
26:14:284:U:H2'	26:14:285:C:H6	1.85	0.40
31:31:11:VAL:HG11	31:31:18:ARG:HH21	1.86	0.40
1:1G:815:A:N7	1:1G:1509:C:O2'	2.52	0.40
1:1G:777:A:H2	11:2A:119:CYS:HB3	1.85	0.40
26:1H:969:U:OP1	51:L8:17:LYS:HD3	2.20	0.40
31:31:53:THR:O	31:31:54:ARG:C	2.60	0.40
26:14:2050:C:H1'	30:29:156:MET:HE2	2.02	0.40
48:E5:26:TYR:O	48:E5:29:GLN:HB2	2.20	0.40
3:2E:113:ALA:O	3:2E:116:VAL:HG22	2.21	0.40
47:H8:151:HIS:HA	47:H8:170:THR:HA	2.03	0.40
26:1H:1786:A:H1'	26:1H:1938:A:N6	2.37	0.40
32:41:19:LEU:HD23	32:41:23:PHE:HE2	1.85	0.40
26:1H:2814:C:O2'	53:N8:29:THR:HG21	2.21	0.40
26:1H:781:A:C8	29:11:219:PRO:HG3	2.56	0.40
26:1H:2568:C:H2'	26:1H:2569:G:O4'	2.21	0.40
1:1G:1376:U:H2'	1:1G:1377:A:C8	2.56	0.40
46:C5:6:HIS:CD2	46:C5:7:VAL:HG13	2.57	0.40
26:1H:1748:G:H2'	26:1H:1749:A:C8	2.57	0.40
26:14:1213:A:N3	26:14:1238:G:O2'	2.49	0.40
26:1H:1422:G:H4'	26:1H:1493:C:OP1	2.21	0.40
26:14:2082:A:H3'	26:14:2083:G:H8	1.87	0.40
26:14:422:A:C6	26:14:423:A:C6	3.09	0.40
26:1H:2705:A:H2'	26:1H:2706:G:O4'	2.20	0.40
31:31:12:LEU:HD22	31:31:12:LEU:HA	1.80	0.40
26:14:2859:G:H3'	26:14:2859:G:C8	2.56	0.40
3:2E:30:ARG:HD2	3:2E:30:ARG:HH11	1.75	0.40
12:3A:76:ASN:N	12:3A:76:ASN:OD1	2.39	0.40
26:14:842:G:H8	26:14:842:G:O5'	2.04	0.40
33:51:7:LEU:HG	33:51:7:LEU:H	1.75	0.40
29:19:66:ASP:OD1	29:19:68:LYS:O	2.39	0.40
38:45:110:THR:OG1	38:45:113:GLN:HB2	2.22	0.40
18:9I:47:THR:O	18:9I:83:GLU:N	2.55	0.40
3:22:20:SER:CB	3:22:40:ARG:HH22	2.31	0.40
26:14:2572:A:N3	30:29:144:ARG:NH2	2.69	0.40
26:1H:817:C:H2'	26:1H:818:G:O4'	2.22	0.40
1:1G:464:G:O6	1:1G:466:C:H5'	2.21	0.40
13:4I:8:GLU:O	13:4I:10:PRO:HD3	2.21	0.40
28:71:44:HIS:CE1	28:71:215:THR:HG22	2.56	0.40
1:13:458:C:N4	1:13:475:G:C6	2.89	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
37:35:63:PRO:CB	55:M5:30:ARG:HH21	2.34	0.40
1:1G:1311:G:H1	1:1G:1326:C:H42	1.69	0.40
26:1H:731:C:C2	26:1H:732:C:C5	3.10	0.40
29:11:6:PHE:CE1	29:11:18:VAL:HG23	2.56	0.40
29:19:44:ASN:HA	29:19:44:ASN:HD22	1.50	0.40
50:G5:68:ARG:HD3	50:G5:68:ARG:HA	1.97	0.40
1:13:1501:C:C5	1:13:1504:G:C4	3.10	0.40
4:32:173:TRP:N	4:32:187:ARG:HH11	2.19	0.40
30:21:102:VAL:CA	30:21:201:THR:HG23	2.51	0.40
26:1H:2801:A:H5'	26:1H:2895:U:C4'	2.51	0.40
1:1G:1279:A:H5''	1:1G:1280:A:P	2.61	0.40
1:1G:1081:G:C8	5:42:47:LYS:NZ	2.90	0.40
26:1H:2370:G:C6	26:1H:2371:G:C6	3.09	0.40
19:AA:74:PHE:CD1	19:AA:74:PHE:N	2.87	0.40
13:4I:15:VAL:HG21	13:4I:43:THR:HB	2.03	0.40
55:M5:32:LEU:HA	55:M5:32:LEU:HD12	1.67	0.40
41:B8:34:VAL:CG2	41:B8:41:ARG:HG3	2.51	0.40
26:1H:997:G:OP1	42:C8:93:LYS:HG3	2.21	0.40
26:1H:2324:C:O2'	26:1H:2337:G:H5''	2.20	0.40
26:1H:594:U:H3	26:1H:663:G:H1	1.70	0.40
26:1H:2683:C:C4	26:1H:2684:U:C4	3.09	0.40
8:72:48:TYR:HB2	8:72:61:VAL:HG22	2.03	0.40
32:41:47:LYS:NZ	32:41:80:PHE:CD1	2.87	0.40
26:1H:34:C:N1	26:1H:34:C:OP2	2.55	0.40
1:13:255:G:C5	1:13:256:U:C5	3.09	0.40
27:16:3:C:H42	27:16:117:G:H1	1.68	0.40
1:1G:1157:A:H61	1:1G:1177:G:N2	2.20	0.40
1:1G:324:G:O2'	1:1G:326:G:N7	2.42	0.40
26:1H:1858:G:H4'	26:1H:1859:A:C5'	2.52	0.40
1:1G:763:G:N3	1:1G:763:G:H2'	2.36	0.40
23:2K:2:G:C2	23:2K:3:C:C4	3.09	0.40
26:1H:820:A:H4'	26:1H:836:G:N2	2.37	0.40
26:1H:2854:G:C6	26:1H:2855:C:N4	2.89	0.40
1:13:917:G:H2'	1:13:918:A:C8	2.56	0.40
1:13:592:G:C2	1:13:593:G:N7	2.89	0.40
1:1G:73:G:C6	1:1G:74:C:C4	3.09	0.40
32:49:174:GLU:HB2	32:49:180:PHE:CE1	2.56	0.40
26:14:629:G:H2'	26:14:630:G:C8	2.56	0.40
1:13:1173:G:C5	1:13:1174:G:C8	3.09	0.40
38:88:20:ALA:HB1	38:88:99:PRO:HB2	2.03	0.40
26:14:2500:U:H5''	26:14:2501:C:OP2	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
26:14:635:C:H1'	26:14:639:U:H5''	2.03	0.40
39:55:34:ILE:HD12	39:55:34:ILE:HA	1.85	0.40
38:88:41:TRP:HB3	38:88:94:VAL:HB	2.03	0.40
37:35:144:GLU:OE1	37:35:145:PRO:O	2.39	0.40
26:14:722:A:H5'	26:14:723:G:P	2.61	0.40
1:13:1196:U:O2	3:2E:162:GLN:NE2	2.54	0.40
30:21:16:ARG:HG3	30:21:17:ASP:OD1	2.22	0.40
4:32:128:VAL:CG1	4:32:144:ASP:HB3	2.51	0.40
1:1G:882:C:N4	12:3A:5:PRO:HB3	2.37	0.40
1:13:1277:C:H2'	1:13:1279:A:H8	1.86	0.40
1:13:1279:A:O2'	1:13:1281:U:OP2	2.30	0.40
26:1H:562:U:H6	26:1H:562:U:H2'	1.71	0.40
26:14:2349:G:OP2	55:M5:42:ARG:NE	2.53	0.40
26:1H:2259:G:C6	26:1H:2282:G:O6	2.75	0.40
6:5E:36:ARG:H	6:5E:65:VAL:HG23	1.86	0.40
26:1H:2663:G:OP2	26:1H:2663:G:H8	2.04	0.40
26:14:1550:C:OP1	26:14:1727:U:O2'	2.36	0.40
15:6A:39:LEU:HD22	15:6A:39:LEU:O	2.21	0.40
26:14:997:G:H2'	26:14:998:C:H6	1.87	0.40
1:1G:777:A:C6	1:1G:778:G:C4	3.10	0.40
27:16:88:C:H2'	27:16:89:G:O4'	2.21	0.40
9:82:10:ARG:NH1	9:82:11:LYS:HB2	2.36	0.40
26:1H:146:G:H2'	26:1H:147:U:O4'	2.21	0.40
8:72:37:ARG:O	8:72:41:ARG:HG3	2.21	0.40
26:14:2291:U:H5''	26:14:2380:C:O2'	2.21	0.40
46:G8:45:VAL:HG22	46:G8:46:LYS:N	2.36	0.40
5:4E:78:HIS:CE1	5:4E:142:LEU:HD23	2.56	0.40
26:1H:373:U:OP2	26:1H:400:G:N1	2.40	0.40
26:1H:811:U:H3'	37:78:22:GLY:HA2	2.02	0.40
50:G5:15:LYS:HA	50:G5:67:LYS:HZ2	1.86	0.40
26:14:1966:A:H4'	26:14:1967:C:OP1	2.22	0.40
44:A5:14:PRO:HA	44:A5:17:VAL:HG12	2.03	0.40
26:1H:1950:G:C2	26:1H:1951:U:C5	3.10	0.40
1:1G:790:A:H8	1:1G:790:A:O5'	2.05	0.40
11:2I:47:VAL:H	11:2I:47:VAL:HG23	1.61	0.40
29:19:2:ALA:N	29:19:200:ASP:OD2	2.54	0.40
26:14:2048:G:C2	26:14:2621:A:C2	3.09	0.40
26:1H:2378:A:C5	26:1H:2379:G:H1'	2.56	0.40
32:41:98:ARG:HE	52:M8:1:MET:CE	2.34	0.40
26:14:2153:G:N2	26:14:2154:G:C6	2.90	0.40
1:1G:457:C:H2'	1:1G:458:C:H6	1.85	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
30:29:81:ILE:HG21	30:29:84:PHE:HD2	1.86	0.40
1:13:458:C:H2'	1:13:464:G:C8	2.56	0.40
26:1H:1997:G:H5''	30:21:117:MET:CE	2.49	0.40
5:42:80:ILE:O	5:42:90:VAL:HA	2.21	0.40
1:1G:746:A:C5	1:1G:747:C:C4	3.10	0.40
30:29:181:LEU:HD11	41:75:7:ILE:HD11	2.03	0.40
26:1H:1569:A:C6	26:1H:1570:A:C6	3.10	0.40
45:B5:57:LEU:N	45:B5:57:LEU:HD23	2.36	0.40
57:3L:19:G:H3'	57:3L:20:U:O4'	2.21	0.40
1:13:600:C:H2'	1:13:601:C:C6	2.56	0.40
3:22:156:ARG:HB2	3:22:159:GLY:HA2	2.04	0.40
1:1G:959:A:O2'	1:1G:984:C:O2'	2.32	0.40
38:45:22:LYS:N	38:45:23:GLY:CA	2.83	0.40
1:1G:1127:G:O2'	1:1G:1148:U:O2	2.28	0.40
26:14:2467:C:H4'	38:45:123:HIS:CE1	2.57	0.40
29:11:199:ALA:C	29:11:201:HIS:H	2.24	0.40
26:1H:273(C):C:H42	26:1H:363(C):G:H1	1.70	0.40
1:13:1216:G:OP1	14:5I:2:ALA:HB1	2.21	0.40
1:13:1178:G:O2'	1:13:1180:A:N7	2.45	0.40
36:68:93:PRO:HG3	36:68:114:ILE:CG1	2.52	0.40
27:1J:11:C:H3'	27:1J:12:C:C6	2.57	0.40
1:1G:607:A:H8	1:1G:607:A:O5'	2.03	0.40
8:72:25:ASP:N	8:72:25:ASP:OD1	2.55	0.40
4:3E:31:CYS:SG	4:3E:33:MET:HB2	2.61	0.40
26:14:910:A:N7	38:45:13:GLN:HG3	2.36	0.40
26:1H:1431:U:C2	26:1H:1563:G:N2	2.89	0.40
31:39:128:ALA:O	31:39:129:PHE:C	2.59	0.40
1:13:575:G:C2	1:13:881:G:C4	3.09	0.40
26:1H:1498:C:O4'	26:1H:1577:C:H4'	2.21	0.40
26:1H:1387:C:C2	26:1H:1388:G:C8	3.09	0.40
26:14:1817:G:C6	26:14:1818:U:C4	3.10	0.40
2:12:25:ASN:OD1	2:12:27:LYS:N	2.53	0.40
1:13:622:A:OP2	1:13:623:C:N4	2.53	0.40
5:4E:51:VAL:HG13	5:4E:52:PRO:CD	2.47	0.40
38:45:69:PHE:CD1	38:45:70:PRO:HD2	2.57	0.40
2:1E:6:THR:CA	2:1E:221:LEU:HD21	2.52	0.40
16:7A:52:ASP:O	16:7A:56:ALA:N	2.53	0.40
1:13:984:C:H42	1:13:1221:G:H1	1.70	0.40
44:A5:2:GLU:OE2	44:A5:72:LYS:NZ	2.40	0.40
13:4I:70:LEU:O	13:4I:73:GLU:N	2.53	0.40
26:1H:300:A:H1'	26:1H:319:C:O4'	2.22	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:1415:G:C6	1:1G:1486:G:C6	3.10	0.40
7:62:23:VAL:HG13	7:62:43:PHE:CE2	2.55	0.40
1:13:243:A:H5''	1:13:244:U:H3'	2.04	0.40
6:52:50:TYR:HE1	6:52:52:ILE:HG12	1.86	0.40
1:1G:1386:G:H2'	1:1G:1387:G:H8	1.85	0.40
47:H8:60:GLU:O	47:H8:61:LEU:HD23	2.22	0.40
26:14:1542:G:H3'	26:14:1543:A:C5'	2.51	0.40
2:12:178:ARG:NH1	2:12:196:LEU:O	2.46	0.40
44:A5:33:ARG:NH2	44:A5:52:GLU:OE2	2.55	0.40
30:29:11:MET:HG3	30:29:24:THR:H	1.87	0.40
1:13:813:U:H5'	1:13:904:C:OP1	2.21	0.40
27:16:38:C:C4'	40:A8:95:HIS:HE2	2.33	0.40
26:14:704:G:H1'	26:14:726:G:N2	2.36	0.40
29:19:133:LEU:HD13	29:19:173:VAL:HG22	2.02	0.40
29:19:133:LEU:HA	29:19:133:LEU:HD23	1.93	0.40
26:14:649:G:H2'	26:14:650:C:C6	2.57	0.40
26:14:1575:C:H2'	26:14:1576:U:H6	1.87	0.40
5:42:153:LYS:HA	5:42:153:LYS:HD3	1.90	0.40
1:1G:501:C:OP1	12:3A:117:ARG:NH2	2.46	0.40
1:13:955:U:H1'	1:13:1227:A:H61	1.86	0.40
50:G5:59:ARG:HB2	50:G5:59:ARG:HE	1.30	0.40
9:82:118:LYS:HB3	9:82:118:LYS:HZ3	1.86	0.40
26:1H:1425:G:H2'	26:1H:1426:G:O4'	2.22	0.40
11:2I:50:TYR:HD2	11:2I:54:ARG:HB2	1.86	0.40
1:13:1517:G:H1'	26:1H:1919:A:O3'	2.21	0.40
1:1G:827:U:N3	1:1G:870:U:C4	2.89	0.40
26:14:521:G:H2'	26:14:522:G:C8	2.56	0.40
1:13:105:G:H2'	1:13:106:C:H6	1.86	0.40
1:13:1416:G:C6	1:13:1417:G:C5	3.09	0.40
1:13:1401:G:N2	1:13:1402:C:H1'	2.36	0.40
9:8E:86:VAL:O	9:8E:90:PRO:HB3	2.21	0.40
26:1H:1234:U:H2'	26:1H:1235:G:O4'	2.22	0.40
26:1H:1776:G:N3	26:1H:1776:G:H2'	2.36	0.40
12:3A:34:ARG:H	12:3A:34:ARG:HG2	1.64	0.40
36:68:25:LEU:HD12	36:68:38:VAL:HG22	2.02	0.40
53:N8:3:LYS:HB3	53:N8:4:HIS:H	1.75	0.40
38:45:41:TRP:HB3	38:45:94:VAL:HB	2.04	0.40
6:52:40:VAL:HG23	6:52:62:TRP:O	2.22	0.40
48:I8:77:ARG:HH11	48:I8:77:ARG:HD3	1.64	0.40
45:F8:3:THR:H	45:F8:3:THR:HG23	1.40	0.40
45:B5:59:VAL:HG12	45:B5:59:VAL:O	2.21	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:13:841:U:H2'	1:13:841:U:H6	1.71	0.40
15:6A:65:ARG:HD3	15:6A:65:ARG:HH11	1.78	0.40
34:69:84:GLY:O	34:69:85:GLU:HB3	2.21	0.40
26:14:1629:U:H2'	26:14:1630:G:C8	2.57	0.40
7:6E:100:ALA:O	7:6E:104:LEU:HB2	2.21	0.40
50:K8:59:ARG:O	50:K8:62:THR:HB	2.22	0.40
56:1L:65:C:N4	56:1L:66:A:N3	2.69	0.40

All (2) symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:1G:82:U:O2'	26:14:271(C):U:O4[3_545]	1.99	0.21
34:61:89:TYR:O	1:1G:357:G:O2'[4_555]	2.19	0.01

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	12	202/256 (79%)	170 (84%)	26 (13%)	6 (3%)	5	34
2	1E	227/256 (89%)	194 (86%)	28 (12%)	5 (2%)	8	43
3	22	190/239 (80%)	167 (88%)	22 (12%)	1 (0%)	34	76
3	2E	203/239 (85%)	183 (90%)	20 (10%)	0	100	100
4	32	206/209 (99%)	181 (88%)	22 (11%)	3 (2%)	13	53
4	3E	205/209 (98%)	189 (92%)	14 (7%)	2 (1%)	19	63
5	42	147/162 (91%)	136 (92%)	11 (8%)	0	100	100
5	4E	147/162 (91%)	137 (93%)	9 (6%)	1 (1%)	26	71
6	52	99/101 (98%)	94 (95%)	5 (5%)	0	100	100
6	5E	98/101 (97%)	92 (94%)	6 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
7	62	134/156 (86%)	121 (90%)	13 (10%)	0	100	100
7	6E	147/156 (94%)	141 (96%)	6 (4%)	0	100	100
8	72	135/138 (98%)	124 (92%)	10 (7%)	1 (1%)	26	71
8	7E	136/138 (99%)	125 (92%)	10 (7%)	1 (1%)	26	71
9	82	101/128 (79%)	88 (87%)	11 (11%)	2 (2%)	9	46
9	8E	124/128 (97%)	103 (83%)	20 (16%)	1 (1%)	24	67
10	1A	54/105 (51%)	46 (85%)	8 (15%)	0	100	100
10	1I	66/105 (63%)	58 (88%)	6 (9%)	2 (3%)	5	34
11	2A	111/129 (86%)	97 (87%)	12 (11%)	2 (2%)	11	49
11	2I	109/129 (84%)	94 (86%)	13 (12%)	2 (2%)	11	49
12	3A	119/132 (90%)	97 (82%)	17 (14%)	5 (4%)	3	24
12	3I	120/132 (91%)	103 (86%)	16 (13%)	1 (1%)	24	67
13	4A	109/126 (86%)	93 (85%)	15 (14%)	1 (1%)	21	65
13	4I	117/126 (93%)	97 (83%)	20 (17%)	0	100	100
14	5A	44/61 (72%)	37 (84%)	7 (16%)	0	100	100
14	5I	58/61 (95%)	48 (83%)	8 (14%)	2 (3%)	5	29
15	6A	85/89 (96%)	77 (91%)	8 (9%)	0	100	100
15	6I	85/89 (96%)	74 (87%)	11 (13%)	0	100	100
16	7A	82/88 (93%)	76 (93%)	6 (7%)	0	100	100
16	7I	78/88 (89%)	73 (94%)	5 (6%)	0	100	100
17	8A	97/105 (92%)	91 (94%)	6 (6%)	0	100	100
17	8I	98/105 (93%)	91 (93%)	7 (7%)	0	100	100
18	9A	65/88 (74%)	62 (95%)	3 (5%)	0	100	100
18	9I	65/88 (74%)	60 (92%)	4 (6%)	1 (2%)	13	53
19	AA	32/93 (34%)	25 (78%)	6 (19%)	1 (3%)	5	32
19	AI	79/93 (85%)	66 (84%)	11 (14%)	2 (2%)	7	39
20	BA	96/106 (91%)	81 (84%)	12 (12%)	3 (3%)	5	32
20	BI	95/106 (90%)	80 (84%)	15 (16%)	0	100	100
21	1B	21/27 (78%)	21 (100%)	0	0	100	100
21	1F	21/27 (78%)	20 (95%)	1 (5%)	0	100	100
28	71	131/229 (57%)	121 (92%)	9 (7%)	1 (1%)	24	67

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
29	11	271/276 (98%)	233 (86%)	26 (10%)	12 (4%)	3	22
29	19	271/276 (98%)	245 (90%)	19 (7%)	7 (3%)	7	38
30	21	201/206 (98%)	158 (79%)	34 (17%)	9 (4%)	3	22
30	29	201/206 (98%)	153 (76%)	37 (18%)	11 (6%)	2	17
31	31	200/210 (95%)	176 (88%)	22 (11%)	2 (1%)	19	63
31	39	202/210 (96%)	158 (78%)	36 (18%)	8 (4%)	4	25
32	41	177/182 (97%)	154 (87%)	18 (10%)	5 (3%)	6	36
32	49	177/182 (97%)	152 (86%)	23 (13%)	2 (1%)	17	61
33	51	169/180 (94%)	135 (80%)	20 (12%)	14 (8%)	1	6
33	59	63/180 (35%)	44 (70%)	13 (21%)	6 (10%)	1	4
34	61	143/148 (97%)	118 (82%)	24 (17%)	1 (1%)	26	71
34	69	143/148 (97%)	111 (78%)	27 (19%)	5 (4%)	4	29
35	15	135/140 (96%)	119 (88%)	13 (10%)	3 (2%)	8	43
35	58	136/140 (97%)	117 (86%)	15 (11%)	4 (3%)	6	35
36	25	120/122 (98%)	110 (92%)	9 (8%)	1 (1%)	24	67
36	68	120/122 (98%)	110 (92%)	10 (8%)	0	100	100
37	35	146/150 (97%)	111 (76%)	31 (21%)	4 (3%)	6	37
37	78	145/150 (97%)	116 (80%)	21 (14%)	8 (6%)	2	17
38	45	136/141 (96%)	109 (80%)	23 (17%)	4 (3%)	6	35
38	88	139/141 (99%)	115 (83%)	17 (12%)	7 (5%)	3	19
39	55	116/118 (98%)	109 (94%)	6 (5%)	1 (1%)	21	65
39	98	116/118 (98%)	93 (80%)	22 (19%)	1 (1%)	21	65
40	65	108/112 (96%)	87 (81%)	18 (17%)	3 (3%)	6	36
40	A8	109/112 (97%)	89 (82%)	19 (17%)	1 (1%)	21	65
41	75	134/146 (92%)	121 (90%)	13 (10%)	0	100	100
41	B8	133/146 (91%)	117 (88%)	14 (10%)	2 (2%)	13	53
42	85	114/118 (97%)	99 (87%)	13 (11%)	2 (2%)	11	49
42	C8	113/118 (96%)	104 (92%)	5 (4%)	4 (4%)	4	29
43	95	97/101 (96%)	77 (79%)	16 (16%)	4 (4%)	3	25
43	D8	99/101 (98%)	89 (90%)	7 (7%)	3 (3%)	5	34
44	A5	108/113 (96%)	100 (93%)	7 (6%)	1 (1%)	21	65

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
44	E8	108/113 (96%)	97 (90%)	11 (10%)	0	100	100
45	B5	92/96 (96%)	85 (92%)	5 (5%)	2 (2%)	8	43
45	F8	93/96 (97%)	82 (88%)	10 (11%)	1 (1%)	17	61
46	C5	103/110 (94%)	70 (68%)	26 (25%)	7 (7%)	1	10
46	G8	102/110 (93%)	80 (78%)	16 (16%)	6 (6%)	2	15
47	D5	124/206 (60%)	96 (77%)	25 (20%)	3 (2%)	7	41
47	H8	142/206 (69%)	112 (79%)	22 (16%)	8 (6%)	2	17
48	E5	76/85 (89%)	66 (87%)	8 (10%)	2 (3%)	7	38
48	I8	74/85 (87%)	68 (92%)	6 (8%)	0	100	100
49	F5	92/98 (94%)	83 (90%)	7 (8%)	2 (2%)	8	43
49	J8	92/98 (94%)	84 (91%)	6 (6%)	2 (2%)	8	43
50	G5	65/72 (90%)	61 (94%)	3 (5%)	1 (2%)	13	53
50	K8	66/72 (92%)	55 (83%)	7 (11%)	4 (6%)	2	14
51	H5	56/60 (93%)	53 (95%)	3 (5%)	0	100	100
51	L8	56/60 (93%)	53 (95%)	3 (5%)	0	100	100
52	M8	45/71 (63%)	28 (62%)	15 (33%)	2 (4%)	3	22
53	J5	54/60 (90%)	46 (85%)	8 (15%)	0	100	100
53	N8	46/60 (77%)	42 (91%)	4 (9%)	0	100	100
54	L5	43/49 (88%)	39 (91%)	4 (9%)	0	100	100
54	P8	45/49 (92%)	41 (91%)	3 (7%)	1 (2%)	8	43
55	M5	62/65 (95%)	52 (84%)	7 (11%)	3 (5%)	3	20
55	Q8	62/65 (95%)	48 (77%)	10 (16%)	4 (6%)	1	12
All	All	10778/12104 (89%)	9303 (86%)	1246 (12%)	229 (2%)	9	44

All (229) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	2I	91	ARG
18	9I	22	VAL
19	AI	67	VAL
29	11	28	GLU
29	11	40	THR
29	11	240	ALA
30	21	83	ASP

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Mol	Chain	Res	Type
37	78	15	ARG
37	78	19	VAL
37	78	25	SER
42	C8	89	GLU
46	G8	81	LYS
55	Q8	52	LYS
9	82	118	LYS
20	BA	73	HIS
29	19	237	GLU
30	29	25	VAL
31	39	28	ILE
31	39	124	LEU
38	45	27	VAL
39	55	107	ASP
46	C5	29	GLU
47	D5	53	ILE
47	D5	165	VAL
48	E5	33	ALA
49	F5	30	VAL
50	G5	48	HIS
55	M5	49	VAL
2	1E	10	LEU
4	3E	88	VAL
8	7E	86	ILE
29	11	122	ASP
29	11	273	ARG
30	21	78	LEU
33	51	10	PRO
33	51	155	SER
37	78	30	THR
38	88	6	ARG
38	88	66	ILE
38	88	134	ARG
39	98	11	ASN
42	C8	90	VAL
42	C8	93	LYS
46	G8	54	LYS
47	H8	6	LYS
47	H8	61	LEU
47	H8	165	VAL
49	J8	91	LYS
50	K8	5	GLU

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Mol	Chain	Res	Type
50	K8	48	HIS
52	M8	5	ILE
11	2A	48	ILE
12	3A	18	VAL
12	3A	26	ALA
19	AA	67	VAL
29	19	44	ASN
30	29	51	PHE
30	29	59	VAL
31	39	84	VAL
31	39	132	VAL
31	39	167	ALA
34	69	113	ARG
37	35	6	LEU
37	35	15	ARG
40	65	111	GLU
43	95	45	THR
46	C5	17	SER
48	E5	44	ARG
55	M5	34	TRP
55	M5	35	GLN
2	1E	237	ALA
10	1I	16	LEU
12	3I	48	PRO
29	11	30	GLU
30	21	82	ARG
30	21	118	LYS
31	31	18	ARG
33	51	84	SER
33	51	86	GLU
35	58	95	PRO
35	58	97	ARG
37	78	6	LEU
38	88	7	MET
43	D8	45	THR
45	F8	40	LYS
47	H8	60	GLU
50	K8	47	ASN
52	M8	43	TYR
55	Q8	35	GLN
55	Q8	50	LEU
20	BA	49	ALA

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Mol	Chain	Res	Type
29	19	39	LYS
29	19	239	ARG
30	29	81	ILE
31	39	25	PRO
31	39	54	ARG
33	59	171	LEU
34	69	143	SER
36	25	5	GLN
37	35	34	GLY
38	45	60	ARG
42	85	93	LYS
42	85	96	ALA
43	95	80	GLN
44	A5	44	ALA
46	C5	89	PHE
46	C5	99	CYS
49	F5	93	GLU
2	1E	238	LEU
4	3E	155	LEU
9	8E	94	ALA
19	AI	41	VAL
29	11	3	VAL
29	11	27	THR
29	11	29	PRO
29	11	272	ALA
30	21	60	ASN
32	41	74	LYS
32	41	97	ASP
33	51	12	PRO
33	51	85	LYS
33	51	156	ALA
33	51	169	VAL
35	58	128	HIS
37	78	14	LYS
41	B8	11	GLU
41	B8	84	GLN
43	D8	44	LYS
46	G8	42	VAL
47	H8	59	LEU
49	J8	76	ARG
50	K8	43	GLN
55	Q8	47	LYS

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Mol	Chain	Res	Type
2	12	191	ASP
4	32	73	ARG
9	82	87	GLN
29	19	45	ASN
30	29	9	VAL
30	29	82	ARG
32	49	102	PHE
33	59	73	ALA
35	15	127	ASP
37	35	136	GLU
38	45	13	GLN
40	65	55	ALA
40	65	110	LEU
43	95	44	LYS
46	C5	19	LYS
46	C5	92	ASN
47	D5	161	VAL
2	1E	191	ASP
14	5I	14	PRO
14	5I	17	LYS
28	71	39	GLU
30	21	21	VAL
30	21	56	PRO
32	41	110	ALA
33	51	3	ARG
33	51	13	LYS
33	51	83	TYR
33	51	164	TYR
40	A8	4	LEU
42	C8	88	ILE
47	H8	81	ARG
2	12	32	ILE
2	12	128	GLU
12	3A	19	ARG
12	3A	79	GLU
20	BA	10	LEU
31	39	128	ALA
32	49	47	LYS
33	59	60	ARG
34	69	80	PRO
35	15	128	HIS
45	B5	40	LYS

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Mol	Chain	Res	Type
31	31	128	ALA
32	41	5	VAL
32	41	96	ARG
34	61	133	HIS
35	58	22	THR
38	88	60	ARG
38	88	79	LEU
46	G8	53	PRO
2	12	71	VAL
2	12	96	ARG
3	22	49	SER
4	32	28	SER
8	72	73	ASP
11	2A	101	SER
34	69	144	VAL
38	45	78	PRO
11	2I	82	VAL
29	11	123	ALA
33	51	92	ILE
46	G8	3	VAL
29	19	3	VAL
30	29	26	ILE
30	29	52	LEU
30	29	77	ILE
33	59	8	PRO
43	95	72	VAL
46	C5	85	VAL
10	1I	82	ILE
30	21	52	LEU
30	21	55	ASN
47	H8	53	ILE
47	H8	141	VAL
30	29	62	PRO
35	15	135	PRO
45	B5	51	VAL
5	4E	115	VAL
29	11	36	PRO
37	78	7	ARG
43	D8	47	VAL
2	12	39	ILE
4	32	56	VAL
13	4A	84	ILE

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Mol	Chain	Res	Type
33	59	167	GLU
37	78	95	VAL
54	P8	46	VAL
12	3A	47	LYS
29	19	118	VAL
33	59	169	VAL
34	69	133	HIS
2	1E	232	PRO
33	51	167	GLU
38	88	27	VAL
30	29	61	ARG
46	G8	82	PRO

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	12	180/220 (82%)	164 (91%)	16 (9%)	12	42
2	1E	200/220 (91%)	181 (90%)	19 (10%)	11	38
3	22	153/188 (81%)	143 (94%)	10 (6%)	21	60
3	2E	159/188 (85%)	148 (93%)	11 (7%)	19	57
4	32	180/181 (99%)	165 (92%)	15 (8%)	14	48
4	3E	179/181 (99%)	167 (93%)	12 (7%)	20	58
5	42	114/123 (93%)	106 (93%)	8 (7%)	19	57
5	4E	115/123 (94%)	106 (92%)	9 (8%)	16	51
6	52	90/90 (100%)	81 (90%)	9 (10%)	9	36
6	5E	90/90 (100%)	87 (97%)	3 (3%)	45	80
7	62	114/127 (90%)	101 (89%)	13 (11%)	7	30
7	6E	125/127 (98%)	118 (94%)	7 (6%)	26	66
8	72	118/119 (99%)	112 (95%)	6 (5%)	29	69
8	7E	119/119 (100%)	111 (93%)	8 (7%)	20	58

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
9	82	79/99 (80%)	69 (87%)	10 (13%)	5	24
9	8E	97/99 (98%)	90 (93%)	7 (7%)	18	55
10	1A	52/92 (56%)	48 (92%)	4 (8%)	16	52
10	1I	65/92 (71%)	62 (95%)	3 (5%)	33	73
11	2A	85/99 (86%)	82 (96%)	3 (4%)	43	79
11	2I	84/99 (85%)	81 (96%)	3 (4%)	42	78
12	3A	102/109 (94%)	95 (93%)	7 (7%)	19	57
12	3I	103/109 (94%)	95 (92%)	8 (8%)	16	51
13	4A	91/101 (90%)	85 (93%)	6 (7%)	21	59
13	4I	94/101 (93%)	87 (93%)	7 (7%)	17	54
14	5A	40/50 (80%)	36 (90%)	4 (10%)	9	36
14	5I	49/50 (98%)	48 (98%)	1 (2%)	63	88
15	6A	79/80 (99%)	75 (95%)	4 (5%)	29	69
15	6I	79/80 (99%)	75 (95%)	4 (5%)	29	69
16	7A	72/74 (97%)	70 (97%)	2 (3%)	51	83
16	7I	69/74 (93%)	63 (91%)	6 (9%)	13	44
17	8A	94/97 (97%)	90 (96%)	4 (4%)	35	74
17	8I	95/97 (98%)	91 (96%)	4 (4%)	36	74
18	9A	58/77 (75%)	56 (97%)	2 (3%)	44	80
18	9I	58/77 (75%)	57 (98%)	1 (2%)	68	90
19	AA	31/80 (39%)	28 (90%)	3 (10%)	10	37
19	AI	71/80 (89%)	66 (93%)	5 (7%)	19	57
20	BA	76/82 (93%)	74 (97%)	2 (3%)	54	85
20	BI	75/82 (92%)	72 (96%)	3 (4%)	38	76
21	1B	19/22 (86%)	18 (95%)	1 (5%)	28	67
21	1F	18/22 (82%)	18 (100%)	0	100	100
28	7I	111/181 (61%)	106 (96%)	5 (4%)	34	73
29	11	214/218 (98%)	205 (96%)	9 (4%)	36	74
29	19	214/218 (98%)	204 (95%)	10 (5%)	32	72
30	21	165/166 (99%)	159 (96%)	6 (4%)	42	78
30	29	165/166 (99%)	155 (94%)	10 (6%)	23	62

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
31	31	161/166 (97%)	153 (95%)	8 (5%)	30	70
31	39	163/166 (98%)	153 (94%)	10 (6%)	23	62
32	41	153/156 (98%)	136 (89%)	17 (11%)	8	31
32	49	153/156 (98%)	134 (88%)	19 (12%)	6	26
33	51	142/148 (96%)	134 (94%)	8 (6%)	26	66
33	59	56/148 (38%)	53 (95%)	3 (5%)	27	67
34	61	122/124 (98%)	112 (92%)	10 (8%)	14	48
34	69	122/124 (98%)	114 (93%)	8 (7%)	21	59
35	15	116/119 (98%)	112 (97%)	4 (3%)	44	80
35	58	117/119 (98%)	109 (93%)	8 (7%)	20	57
36	25	100/100 (100%)	92 (92%)	8 (8%)	15	50
36	68	100/100 (100%)	96 (96%)	4 (4%)	38	76
37	35	115/116 (99%)	110 (96%)	5 (4%)	35	74
37	78	114/116 (98%)	107 (94%)	7 (6%)	23	62
38	45	109/111 (98%)	96 (88%)	13 (12%)	6	27
38	88	109/111 (98%)	104 (95%)	5 (5%)	33	73
39	55	101/101 (100%)	94 (93%)	7 (7%)	19	57
39	98	101/101 (100%)	98 (97%)	3 (3%)	48	82
40	65	87/88 (99%)	81 (93%)	6 (7%)	19	57
40	A8	87/88 (99%)	78 (90%)	9 (10%)	9	34
41	75	119/127 (94%)	105 (88%)	14 (12%)	6	28
41	B8	118/127 (93%)	106 (90%)	12 (10%)	9	35
42	85	93/94 (99%)	85 (91%)	8 (9%)	13	45
42	C8	92/94 (98%)	82 (89%)	10 (11%)	8	31
43	95	81/82 (99%)	76 (94%)	5 (6%)	23	62
43	D8	82/82 (100%)	76 (93%)	6 (7%)	17	55
44	A5	90/92 (98%)	84 (93%)	6 (7%)	20	58
44	E8	90/92 (98%)	84 (93%)	6 (7%)	20	58
45	B5	74/78 (95%)	72 (97%)	2 (3%)	52	84
45	F8	74/78 (95%)	70 (95%)	4 (5%)	27	67
46	C5	85/91 (93%)	72 (85%)	13 (15%)	3	16

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
46	G8	84/91 (92%)	79 (94%)	5 (6%)	24	63
47	D5	118/179 (66%)	107 (91%)	11 (9%)	11	40
47	H8	137/179 (76%)	133 (97%)	4 (3%)	50	83
48	E5	62/67 (92%)	56 (90%)	6 (10%)	10	37
48	I8	61/67 (91%)	58 (95%)	3 (5%)	31	71
49	F5	79/83 (95%)	76 (96%)	3 (4%)	40	77
49	J8	79/83 (95%)	75 (95%)	4 (5%)	29	69
50	G5	62/67 (92%)	60 (97%)	2 (3%)	46	81
50	K8	62/67 (92%)	56 (90%)	6 (10%)	10	37
51	H5	50/52 (96%)	44 (88%)	6 (12%)	6	27
51	L8	50/52 (96%)	48 (96%)	2 (4%)	38	76
52	M8	42/63 (67%)	40 (95%)	2 (5%)	31	71
53	J5	48/52 (92%)	44 (92%)	4 (8%)	14	48
53	N8	43/52 (83%)	38 (88%)	5 (12%)	7	29
54	L5	38/42 (90%)	32 (84%)	6 (16%)	3	14
54	P8	38/42 (90%)	38 (100%)	0	100	100
55	M5	54/55 (98%)	49 (91%)	5 (9%)	11	40
55	Q8	54/55 (98%)	49 (91%)	5 (9%)	11	40
All	All	9127/10012 (91%)	8510 (93%)	617 (7%)	20	57

All (617) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	1E	19	HIS
2	1E	21	ARG
2	1E	23	ARG
2	1E	28	PHE
2	1E	45	GLN
2	1E	48	MET
2	1E	55	PHE
2	1E	83	MET
2	1E	86	GLU
2	1E	104	ASN
2	1E	122	PHE
2	1E	132	LYS
2	1E	133	LYS

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Mol	Chain	Res	Type
2	1E	144	ARG
2	1E	160	ASP
2	1E	163	PHE
2	1E	169	LYS
2	1E	178	ARG
2	1E	192	SER
3	2E	16	ARG
3	2E	17	ASP
3	2E	21	ARG
3	2E	29	TYR
3	2E	31	HIS
3	2E	48	TYR
3	2E	79	ARG
3	2E	89	GLU
3	2E	108	ASN
3	2E	128	PHE
3	2E	190	ARG
4	3E	3	ARG
4	3E	10	ARG
4	3E	38	TYR
4	3E	53	ASP
4	3E	66	ARG
4	3E	85	LYS
4	3E	86	LYS
4	3E	106	TYR
4	3E	122	ARG
4	3E	132	ARG
4	3E	141	ARG
4	3E	187	ARG
5	4E	18	ARG
5	4E	19	MET
5	4E	31	LEU
5	4E	64	ARG
5	4E	107	ARG
5	4E	140	ARG
5	4E	145	LYS
5	4E	147	ASP
5	4E	153	LYS
6	5E	15	ASP
6	5E	55	ASP
6	5E	95	GLU
7	6E	6	ARG

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Mol	Chain	Res	Type
7	6E	32	ARG
7	6E	37	ASN
7	6E	79	ARG
7	6E	111	ARG
7	6E	113	GLU
7	6E	154	TYR
8	7E	18	ARG
8	7E	36	LEU
8	7E	54	ASP
8	7E	68	ARG
8	7E	85	ARG
8	7E	98	LYS
8	7E	102	ARG
8	7E	122	ARG
9	8E	4	TYR
9	8E	9	ARG
9	8E	10	ARG
9	8E	20	ARG
9	8E	42	ARG
9	8E	51	ARG
9	8E	95	LYS
10	1I	29	ARG
10	1I	58	ASP
10	1I	86	MET
11	2I	51	LYS
11	2I	96	ARG
11	2I	104	GLN
12	3I	33	ARG
12	3I	47	LYS
12	3I	54	LYS
12	3I	64	TYR
12	3I	79	GLU
12	3I	84	LEU
12	3I	111	LYS
12	3I	124	LYS
13	4I	32	GLU
13	4I	50	GLU
13	4I	64	TRP
13	4I	67	GLU
13	4I	73	GLU
13	4I	86	CYS
13	4I	106	ASN

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Mol	Chain	Res	Type
14	5I	41	ARG
15	6I	10	LYS
15	6I	13	GLN
15	6I	17	ARG
15	6I	39	LEU
16	7I	1	MET
16	7I	18	ARG
16	7I	28	ARG
16	7I	32	TYR
16	7I	72	ARG
16	7I	80	PHE
17	8I	52	LYS
17	8I	68	ARG
17	8I	81	ARG
17	8I	101	ARG
18	9I	54	ARG
19	AI	7	LYS
19	AI	12	ASP
19	AI	20	LEU
19	AI	29	ARG
19	AI	37	ARG
20	BI	15	ARG
20	BI	75	ASN
20	BI	104	LEU
28	7I	17	ASN
28	7I	55	ASP
28	7I	184	LYS
28	7I	187	ASP
28	7I	192	PHE
29	11	31	LYS
29	11	33	LEU
29	11	35	LYS
29	11	37	LEU
29	11	38	LYS
29	11	43	ARG
29	11	126	GLN
29	11	208	LYS
29	11	242	ARG
30	21	19	ARG
30	21	101	ARG
30	21	111	ARG
30	21	113	PHE

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Mol	Chain	Res	Type
30	21	119	ARG
30	21	144	ARG
31	31	17	ARG
31	31	27	GLU
31	31	72	ARG
31	31	106	ARG
31	31	117	ARG
31	31	164	ARG
31	31	181	LEU
31	31	188	ARG
32	41	4	ASP
32	41	21	ARG
32	41	26	GLN
32	41	33	ARG
32	41	51	ARG
32	41	58	GLN
32	41	60	LEU
32	41	67	LYS
32	41	84	LYS
32	41	103	LEU
32	41	115	ARG
32	41	116	ASP
32	41	128	ARG
32	41	136	ARG
32	41	153	ARG
32	41	155	MET
32	41	180	PHE
33	51	3	ARG
33	51	18	GLU
33	51	41	MET
33	51	57	ASP
33	51	83	TYR
33	51	152	ARG
33	51	164	TYR
33	51	167	GLU
34	61	20	ASP
34	61	25	TYR
34	61	38	LEU
34	61	66	GLU
34	61	74	ASN
34	61	77	LEU
34	61	96	ASP

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Mol	Chain	Res	Type
34	61	112	LYS
34	61	135	GLU
34	61	140	LEU
35	58	7	LYS
35	58	48	MET
35	58	58	ASP
35	58	97	ARG
35	58	127	ASP
35	58	131	GLN
35	58	134	ARG
35	58	137	LYS
36	68	18	LYS
36	68	32	TYR
36	68	53	LYS
36	68	70	LYS
37	78	1	MET
37	78	2	LYS
37	78	7	ARG
37	78	16	ARG
37	78	27	HIS
37	78	86	LYS
37	78	117	GLU
38	88	5	ARG
38	88	10	ARG
38	88	83	MET
38	88	101	ARG
38	88	141	GLN
39	98	2	ARG
39	98	24	GLN
39	98	94	TYR
40	A8	11	LYS
40	A8	15	ARG
40	A8	20	ARG
40	A8	33	LYS
40	A8	36	TYR
40	A8	61	ASN
40	A8	88	ASP
40	A8	106	ARG
40	A8	110	LEU
41	B8	18	ASP
41	B8	21	GLU
41	B8	32	TYR

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Mol	Chain	Res	Type
41	B8	39	ARG
41	B8	41	ARG
41	B8	44	ASP
41	B8	51	ARG
41	B8	74	ARG
41	B8	85	LYS
41	B8	111	ARG
41	B8	112	ARG
41	B8	115	ARG
42	C8	11	ARG
42	C8	16	LYS
42	C8	57	PHE
42	C8	70	ARG
42	C8	74	LEU
42	C8	79	PHE
42	C8	92	ARG
42	C8	94	ASN
42	C8	108	GLU
42	C8	112	ARG
43	D8	6	LYS
43	D8	12	TYR
43	D8	25	LEU
43	D8	53	GLU
43	D8	64	HIS
43	D8	89	GLN
44	E8	1	MET
44	E8	15	ARG
44	E8	66	GLU
44	E8	70	TYR
44	E8	77	ASP
44	E8	88	ARG
45	F8	13	LEU
45	F8	53	LYS
45	F8	65	ARG
45	F8	68	ARG
46	G8	6	HIS
46	G8	33	LYS
46	G8	55	TYR
46	G8	57	GLN
46	G8	66	PRO
47	H8	35	ARG
47	H8	81	ARG

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Mol	Chain	Res	Type
47	H8	150	LEU
47	H8	162	GLU
48	I8	55	ARG
48	I8	64	ASP
48	I8	74	ARG
49	J8	25	LYS
49	J8	52	ARG
49	J8	78	LYS
49	J8	91	LYS
50	K8	5	GLU
50	K8	7	ARG
50	K8	48	HIS
50	K8	51	ARG
50	K8	53	LEU
50	K8	66	GLU
51	L8	8	LEU
51	L8	37	LEU
52	M8	38	LYS
52	M8	39	CYS
53	N8	15	ARG
53	N8	37	LYS
53	N8	40	LYS
53	N8	46	CYS
53	N8	49	CYS
55	Q8	30	ARG
55	Q8	34	TRP
55	Q8	43	GLN
55	Q8	46	ARG
55	Q8	57	ARG
2	12	12	GLU
2	12	21	ARG
2	12	24	TRP
2	12	30	ARG
2	12	61	LEU
2	12	79	ASP
2	12	83	MET
2	12	90	MET
2	12	96	ARG
2	12	134	GLU
2	12	144	ARG
2	12	163	PHE
2	12	170	GLU

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Mol	Chain	Res	Type
2	12	191	ASP
2	12	196	LEU
2	12	217	ARG
3	22	22	TRP
3	22	29	TYR
3	22	85	ARG
3	22	88	ARG
3	22	132	ARG
3	22	136	GLN
3	22	167	TRP
3	22	179	ARG
3	22	186	PHE
3	22	190	ARG
4	32	4	TYR
4	32	61	LYS
4	32	73	ARG
4	32	76	ARG
4	32	81	GLU
4	32	85	LYS
4	32	122	ARG
4	32	141	ARG
4	32	150	GLU
4	32	165	MET
4	32	168	ARG
4	32	187	ARG
4	32	191	ARG
4	32	193	ASP
4	32	209	ARG
5	42	8	GLU
5	42	27	ARG
5	42	61	TYR
5	42	68	GLU
5	42	73	ASN
5	42	78	HIS
5	42	126	ARG
5	42	143	ARG
6	52	3	ARG
6	52	7	ASN
6	52	14	LEU
6	52	47	ARG
6	52	54	LYS
6	52	59	TYR

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Mol	Chain	Res	Type
6	52	70	ASP
6	52	77	ARG
6	52	83	ASP
7	62	3	ARG
7	62	4	ARG
7	62	8	GLU
7	62	16	LEU
7	62	45	ASP
7	62	52	GLU
7	62	60	LYS
7	62	72	ARG
7	62	109	ASN
7	62	114	ARG
7	62	131	LYS
7	62	143	ARG
7	62	144	MET
8	72	25	ASP
8	72	52	ASP
8	72	82	HIS
8	72	99	GLU
8	72	102	ARG
8	72	121	ASP
9	82	18	PHE
9	82	35	GLU
9	82	42	ARG
9	82	54	ASP
9	82	78	LYS
9	82	83	ARG
9	82	91	ASP
9	82	113	LYS
9	82	117	HIS
9	82	125	TYR
10	1A	47	PHE
10	1A	51	ARG
10	1A	79	ARG
10	1A	83	GLU
11	2A	34	ASP
11	2A	81	ASP
11	2A	116	HIS
12	3A	20	LYS
12	3A	33	ARG
12	3A	34	ARG

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Mol	Chain	Res	Type
12	3A	54	LYS
12	3A	64	TYR
12	3A	78	GLN
12	3A	98	TYR
13	4A	34	LEU
13	4A	36	LYS
13	4A	55	ARG
13	4A	57	ARG
13	4A	64	TRP
13	4A	80	ARG
14	5A	17	LYS
14	5A	24	CYS
14	5A	27	CYS
14	5A	40	CYS
15	6A	10	LYS
15	6A	17	ARG
15	6A	68	ARG
15	6A	76	GLU
16	7A	39	TYR
16	7A	81	ARG
17	8A	52	LYS
17	8A	63	ARG
17	8A	70	ARG
17	8A	92	ARG
18	9A	23	LYS
18	9A	85	LEU
19	AA	21	GLU
19	AA	53	ASN
19	AA	56	GLN
20	BA	15	ARG
20	BA	73	HIS
21	1B	9	ARG
29	19	13	ARG
29	19	31	LYS
29	19	37	LEU
29	19	45	ASN
29	19	60	ARG
29	19	87	ASN
29	19	88	ARG
29	19	94	LEU
29	19	116	GLN
29	19	255	LYS

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Mol	Chain	Res	Type
30	29	36	ARG
30	29	44	TYR
30	29	49	LEU
30	29	73	GLU
30	29	79	ARG
30	29	82	ARG
30	29	111	ARG
30	29	144	ARG
30	29	154	LYS
30	29	169	ASN
31	39	7	TYR
31	39	8	GLN
31	39	17	ARG
31	39	18	ARG
31	39	19	GLU
31	39	38	ARG
31	39	65	TRP
31	39	83	PHE
31	39	197	ASP
31	39	204	ASN
32	49	34	LEU
32	49	51	ARG
32	49	58	GLN
32	49	75	LYS
32	49	80	PHE
32	49	82	LEU
32	49	91	ARG
32	49	96	ARG
32	49	102	PHE
32	49	113	ARG
32	49	116	ASP
32	49	118	ARG
32	49	123	ASN
32	49	141	PHE
32	49	153	ARG
32	49	155	MET
32	49	156	ASP
32	49	174	GLU
32	49	175	LEU
33	59	57	ASP
33	59	59	ARG
33	59	164	TYR

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Mol	Chain	Res	Type
34	69	1	MET
34	69	25	TYR
34	69	27	ARG
34	69	69	LYS
34	69	75	LEU
34	69	101	LEU
34	69	104	GLN
34	69	131	LYS
35	15	17	ASP
35	15	48	MET
35	15	59	LYS
35	15	138	LEU
36	25	5	GLN
36	25	17	ARG
36	25	18	LYS
36	25	26	LYS
36	25	42	SER
36	25	53	LYS
36	25	89	ASN
36	25	107	ARG
37	35	15	ARG
37	35	41	ARG
37	35	98	GLU
37	35	107	LYS
37	35	148	LEU
38	45	5	ARG
38	45	14	ARG
38	45	22	LYS
38	45	25	ASP
38	45	37	LEU
38	45	45	GLN
38	45	56	ARG
38	45	60	ARG
38	45	63	LYS
38	45	87	LYS
38	45	89	ASN
38	45	116	GLU
38	45	134	ARG
39	55	2	ARG
39	55	15	SER
39	55	42	LYS
39	55	44	LEU

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Mol	Chain	Res	Type
39	55	56	LYS
39	55	74	LYS
39	55	88	ARG
40	65	12	PHE
40	65	17	ARG
40	65	20	ARG
40	65	23	ARG
40	65	42	ASP
40	65	106	ARG
41	75	8	LYS
41	75	13	ARG
41	75	19	LEU
41	75	36	GLU
41	75	45	PHE
41	75	74	ARG
41	75	85	LYS
41	75	96	ARG
41	75	98	LYS
41	75	112	ARG
41	75	117	ASP
41	75	118	ARG
41	75	120	ARG
41	75	123	GLN
42	85	5	LYS
42	85	55	ARG
42	85	59	ARG
42	85	71	GLN
42	85	74	LEU
42	85	92	ARG
42	85	97	ASP
42	85	101	ARG
43	95	19	LYS
43	95	74	LYS
43	95	82	ARG
43	95	91	TYR
43	95	93	GLU
44	A5	11	ARG
44	A5	31	GLU
44	A5	67	ASP
44	A5	68	ARG
44	A5	70	TYR
44	A5	88	ARG

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Mol	Chain	Res	Type
45	B5	63	LYS
45	B5	69	TYR
46	C5	2	ARG
46	C5	6	HIS
46	C5	9	LYS
46	C5	23	ARG
46	C5	29	GLU
46	C5	33	LYS
46	C5	55	TYR
46	C5	60	PHE
46	C5	63	LYS
46	C5	84	ARG
46	C5	86	ARG
46	C5	88	LYS
46	C5	99	CYS
47	D5	13	GLU
47	D5	24	LEU
47	D5	40	ASP
47	D5	44	PHE
47	D5	59	LEU
47	D5	63	ASP
47	D5	70	LEU
47	D5	72	ARG
47	D5	80	ARG
47	D5	82	ARG
47	D5	91	LEU
48	E5	12	ASN
48	E5	20	ARG
48	E5	41	ARG
48	E5	46	LYS
48	E5	68	GLU
48	E5	74	ARG
49	F5	40	ARG
49	F5	52	ARG
49	F5	78	LYS
50	G5	45	SER
50	G5	59	ARG
51	H5	5	LYS
51	H5	24	LYS
51	H5	33	GLN
51	H5	39	ASP
51	H5	44	ARG

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Mol	Chain	Res	Type
51	H5	55	ARG
53	J5	8	LYS
53	J5	15	ARG
53	J5	23	HIS
53	J5	51	TYR
54	L5	1	MET
54	L5	3	ARG
54	L5	29	LYS
54	L5	32	LYS
54	L5	33	ARG
54	L5	41	ARG
55	M5	3	LYS
55	M5	31	HIS
55	M5	37	SER
55	M5	57	ARG
55	M5	60	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (33) such sidechains are listed below:

Mol	Chain	Res	Type
3	2E	162	GLN
4	3E	161	ASN
7	6E	84	ASN
10	1I	13	HIS
13	4I	12	ASN
28	7I	66	HIS
29	11	253	GLN
30	21	143	ASN
35	58	69	GLN
38	88	141	GLN
40	A8	61	ASN
44	E8	34	ASN
47	H8	85	HIS
52	M8	6	HIS
2	12	16	HIS
2	12	78	GLN
2	12	135	GLN
3	22	3	ASN
19	AA	65	ASN
29	19	44	ASN
29	19	46	GLN
30	29	35	GLN

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Mol	Chain	Res	Type
30	29	55	ASN
31	39	40	GLN
31	39	67	GLN
34	69	105	HIS
35	15	131	GLN
37	35	84	ASN
40	65	38	GLN
50	G5	9	GLN
50	G5	47	ASN
50	G5	48	HIS
50	G5	56	GLN

5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	13	1488/1522 (97%)	386 (25%)	35 (2%)
1	1G	1492/1522 (98%)	427 (28%)	39 (2%)
22	1K	64/76 (84%)	41 (64%)	2 (3%)
23	2K	76/77 (98%)	23 (30%)	2 (2%)
23	2L	76/77 (98%)	21 (27%)	2 (2%)
24	3K	75/76 (98%)	40 (53%)	4 (5%)
25	4K	18/27 (66%)	9 (50%)	2 (11%)
25	4L	16/27 (59%)	9 (56%)	1 (6%)
26	14	2852/2912 (97%)	788 (27%)	58 (2%)
26	1H	2824/2912 (96%)	736 (26%)	78 (2%)
27	16	121/122 (99%)	27 (22%)	1 (0%)
27	1J	121/122 (99%)	41 (33%)	2 (1%)
56	1L	71/76 (93%)	40 (56%)	5 (7%)
57	3L	75/76 (98%)	40 (53%)	1 (1%)
All	All	9369/9624 (97%)	2628 (28%)	232 (2%)

All (2628) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	13	2	U
1	13	5	U
1	13	6	G
1	13	8	A
1	13	9	G
1	13	11	G
1	13	19	C

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Mol	Chain	Res	Type
1	13	31	G
1	13	32	A
1	13	33	A
1	13	39	G
1	13	47	C
1	13	48	C
1	13	49	U
1	13	50	A
1	13	51	A
1	13	52	G
1	13	61	G
1	13	63	C
1	13	65	U
1	13	66	G
1	13	68	G
1	13	69	G
1	13	74	C
1	13	76	G
1	13	95	G
1	13	96	G
1	13	97	U
1	13	99	C
1	13	101	A
1	13	103	C
1	13	116	A
1	13	121	C
1	13	129(A)	G
1	13	131	C
1	13	143	A
1	13	144	G
1	13	145	G
1	13	151	A
1	13	160	A
1	13	163	C
1	13	164	U
1	13	167	G
1	13	169	C
1	13	172	A
1	13	173	U
1	13	174	C
1	13	180	U
1	13	182	U

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Mol	Chain	Res	Type
1	13	186(D)	C
1	13	187	C
1	13	188	U
1	13	189	U
1	13	190	G
1	13	191(A)	G
1	13	193	C
1	13	195	A
1	13	197	A
1	13	199	G
1	13	201	C
1	13	208	U
1	13	209	U
1	13	210	U
1	13	216	G
1	13	243	A
1	13	245	C
1	13	247	G
1	13	250	A
1	13	251	G
1	13	256	U
1	13	257	G
1	13	262	A
1	13	266	G
1	13	267	C
1	13	289	G
1	13	299	G
1	13	321	A
1	13	324	G
1	13	328	C
1	13	329	A
1	13	330	C
1	13	332	G
1	13	341	C
1	13	343	U
1	13	344	A
1	13	347	G
1	13	352	C
1	13	353	A
1	13	354	G
1	13	356	A
1	13	357	G

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Mol	Chain	Res	Type
1	13	363	A
1	13	365	U
1	13	367	U
1	13	372	C
1	13	373	A
1	13	374	A
1	13	378	G
1	13	382	A
1	13	383	A
1	13	386	C
1	13	388	G
1	13	390	C
1	13	397	A
1	13	398	C
1	13	406	G
1	13	412	A
1	13	413	G
1	13	414	A
1	13	422	C
1	13	423	G
1	13	424	G
1	13	429	U
1	13	430	A
1	13	439	A
1	13	445	G
1	13	453	A
1	13	455	C
1	13	456	C
1	13	458	C
1	13	466	C
1	13	467	G
1	13	474	G
1	13	484	G
1	13	485	G
1	13	487	A
1	13	496	A
1	13	497	U
1	13	505	G
1	13	509	A
1	13	510	A
1	13	511	C
1	13	517	G

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Mol	Chain	Res	Type
1	13	518	C
1	13	519	C
1	13	524	G
1	13	527	G
1	13	531	U
1	13	533	A
1	13	534	U
1	13	536	C
1	13	547	A
1	13	550	G
1	13	559	A
1	13	560	U
1	13	561	U
1	13	572	A
1	13	573	A
1	13	576	G
1	13	577	G
1	13	582	U
1	13	592	G
1	13	606	G
1	13	607	A
1	13	616	G
1	13	620	C
1	13	630	G
1	13	631	G
1	13	632	A
1	13	650	G
1	13	653	A
1	13	655	A
1	13	659	U
1	13	661	G
1	13	665	A
1	13	666	G
1	13	675	A
1	13	687	A
1	13	688	G
1	13	704	A
1	13	721	G
1	13	723	U
1	13	724	G
1	13	734	G
1	13	749	C

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Mol	Chain	Res	Type
1	13	752	G
1	13	753	A
1	13	755	G
1	13	757	U
1	13	774	G
1	13	776	G
1	13	777	A
1	13	792	A
1	13	793	U
1	13	794	A
1	13	796	C
1	13	801	U
1	13	813	U
1	13	817	C
1	13	819	A
1	13	827	U
1	13	828	A
1	13	831	U
1	13	836	G
1	13	842	C
1	13	843	U
1	13	848	C
1	13	858	G
1	13	859	A
1	13	862	C
1	13	864	A
1	13	870	U
1	13	871	U
1	13	872	A
1	13	873	A
1	13	885	G
1	13	890	G
1	13	902	G
1	13	908	A
1	13	914	A
1	13	925	G
1	13	926	G
1	13	927	G
1	13	931	C
1	13	933	G
1	13	934	C
1	13	935	A

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Mol	Chain	Res	Type
1	13	936	C
1	13	938	A
1	13	940	C
1	13	948	C
1	13	958	A
1	13	960	U
1	13	966	G
1	13	968	A
1	13	969	A
1	13	971	G
1	13	974	A
1	13	975	A
1	13	976	G
1	13	977	A
1	13	978	A
1	13	983	A
1	13	984	C
1	13	993	G
1	13	1004	A
1	13	1006	C
1	13	1007	C
1	13	1008	C
1	13	1009	G
1	13	1010	G
1	13	1012	U
1	13	1021	G
1	13	1023	G
1	13	1024	G
1	13	1025	U
1	13	1027	C
1	13	1028	C
1	13	1028(B)	C
1	13	1029	G
1	13	1030	C
1	13	1031	G
1	13	1032(A)	G
1	13	1032(B)	G
1	13	1033	G
1	13	1036	G
1	13	1037	C
1	13	1039	C
1	13	1040	U

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Mol	Chain	Res	Type
1	13	1042	G
1	13	1046	A
1	13	1049	U
1	13	1054	C
1	13	1064	G
1	13	1065	U
1	13	1066	C
1	13	1081	G
1	13	1085	U
1	13	1094	G
1	13	1095	U
1	13	1101	A
1	13	1114	C
1	13	1121	U
1	13	1123	A
1	13	1124	G
1	13	1125	U
1	13	1126	U
1	13	1127	G
1	13	1129	C
1	13	1131	G
1	13	1133	G
1	13	1134	G
1	13	1136	U
1	13	1137	C
1	13	1138	G
1	13	1139	G
1	13	1141	C
1	13	1146	A
1	13	1152	A
1	13	1156	G
1	13	1157	A
1	13	1158	C
1	13	1159	U
1	13	1171	G
1	13	1177	G
1	13	1178	G
1	13	1179	A
1	13	1181	G
1	13	1184	G
1	13	1188	A
1	13	1189	C

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Mol	Chain	Res	Type
1	13	1190	G
1	13	1191	A
1	13	1193	G
1	13	1195	C
1	13	1196	U
1	13	1197	G
1	13	1201	A
1	13	1212	U
1	13	1213	A
1	13	1218	C
1	13	1225	A
1	13	1226	C
1	13	1227	A
1	13	1236	A
1	13	1238	A
1	13	1240	U
1	13	1241	G
1	13	1250	A
1	13	1253	G
1	13	1256	A
1	13	1257	U
1	13	1258	G
1	13	1259	C
1	13	1262	C
1	13	1263	C
1	13	1265	G
1	13	1272	G
1	13	1273	G
1	13	1275	A
1	13	1278	U
1	13	1279	A
1	13	1280	A
1	13	1285	A
1	13	1286	A
1	13	1287	A
1	13	1288	A
1	13	1290	G
1	13	1299	A
1	13	1300	G
1	13	1301	U
1	13	1302	U
1	13	1320	C

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Mol	Chain	Res	Type
1	13	1322	C
1	13	1323	G
1	13	1331	G
1	13	1336	C
1	13	1337	G
1	13	1338	G
1	13	1340	A
1	13	1347	G
1	13	1350	A
1	13	1360	A
1	13	1362(A)	C
1	13	1363	A
1	13	1364	U
1	13	1368	G
1	13	1370	G
1	13	1397	C
1	13	1398	A
1	13	1401	G
1	13	1409	C
1	13	1419	G
1	13	1442	G
1	13	1443	G
1	13	1446	A
1	13	1447	G
1	13	1449	C
1	13	1450	U
1	13	1451	A
1	13	1452	C
1	13	1453	G
1	13	1469	G
1	13	1475	G
1	13	1487	G
1	13	1492	A
1	13	1494	G
1	13	1497	G
1	13	1499	A
1	13	1502	A
1	13	1503	A
1	13	1504	G
1	13	1506	U
1	13	1517	G
1	13	1529	G

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Mol	Chain	Res	Type
1	13	1530	G
22	1K	4	U
22	1K	5	C
22	1K	6	G
22	1K	7	U
22	1K	8	U
22	1K	9	A
22	1K	10	G
22	1K	11	C
22	1K	12	U
22	1K	13	C
22	1K	15	G
22	1K	18	G
22	1K	23	A
22	1K	24	G
22	1K	25	C
22	1K	26	A
22	1K	28	U
22	1K	30	G
22	1K	31	A
22	1K	40	C
22	1K	41	A
22	1K	42	A
22	1K	43	U
22	1K	44	U
22	1K	49	G
22	1K	50	C
22	1K	51	A
22	1K	52	G
22	1K	54	5MU
22	1K	56	C
22	1K	59	A
22	1K	60	U
22	1K	61	C
22	1K	62	C
22	1K	63	U
22	1K	66	A
22	1K	67	C
22	1K	68	G
22	1K	70	C
22	1K	72	C
22	1K	74	C

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Mol	Chain	Res	Type
23	2K	2	G
23	2K	3	C
23	2K	6	G
23	2K	8	4SU
23	2K	9	G
23	2K	15	G
23	2K	16	C
23	2K	17	C
23	2K	18	C
23	2K	20	G
23	2K	21	U
23	2K	22	A
23	2K	23	G
23	2K	27	G
23	2K	28	U
23	2K	31	G
23	2K	48	U
23	2K	49	C
23	2K	53	G
23	2K	55	5MU
23	2K	57	C
23	2K	68	C
23	2K	77	A
24	3K	2	G
24	3K	3	G
24	3K	7	U
24	3K	9	A
24	3K	10	G
24	3K	13	C
24	3K	14	A
24	3K	15	G
24	3K	17	U
24	3K	18	G
24	3K	19	G
24	3K	20	U
24	3K	22	G
24	3K	23	A
24	3K	24	G
24	3K	26	A
24	3K	30	G
24	3K	34	U
24	3K	35	U

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Mol	Chain	Res	Type
24	3K	39	U
24	3K	40	C
24	3K	41	A
24	3K	42	A
24	3K	44	U
24	3K	45	G
24	3K	46	G
24	3K	47	U
24	3K	48	C
24	3K	50	C
24	3K	51	A
24	3K	55	U
24	3K	58	A
24	3K	59	A
24	3K	60	U
24	3K	61	C
24	3K	65	C
24	3K	66	A
24	3K	69	A
24	3K	72	C
24	3K	73	A
25	4K	9	G
25	4K	10	G
25	4K	11	U
25	4K	13	A
25	4K	14	A
25	4K	19	A
25	4K	22	A
25	4K	23	A
25	4K	24	A
26	1H	6	A
26	1H	12	U
26	1H	14	A
26	1H	15	G
26	1H	34	C
26	1H	35	G
26	1H	37	C
26	1H	46	C
26	1H	51	G
26	1H	54	G
26	1H	61	G
26	1H	63	U

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Mol	Chain	Res	Type
26	1H	64	A
26	1H	71	A
26	1H	72	U
26	1H	74	A
26	1H	75	G
26	1H	83	G
26	1H	85	G
26	1H	101	G
26	1H	102	G
26	1H	114	U
26	1H	118	A
26	1H	119	A
26	1H	120	U
26	1H	123	G
26	1H	125	G
26	1H	126	A
26	1H	129	C
26	1H	138	G
26	1H	140	A
26	1H	146	G
26	1H	155	C
26	1H	162	U
26	1H	163	U
26	1H	164	U
26	1H	165	U
26	1H	171	G
26	1H	173	G
26	1H	177	G
26	1H	178	G
26	1H	181	A
26	1H	188	G
26	1H	196	A
26	1H	197	A
26	1H	199	A
26	1H	214	G
26	1H	215	G
26	1H	216	A
26	1H	222	A
26	1H	223	A
26	1H	227	A
26	1H	228	A
26	1H	229	A

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Mol	Chain	Res	Type
26	1H	233	A
26	1H	235	U
26	1H	248	G
26	1H	250	G
26	1H	252	G
26	1H	261	G
26	1H	264	C
26	1H	269	U
26	1H	270(E)	G
26	1H	270(K)	C
26	1H	270(M)	U
26	1H	270(O)	U
26	1H	270(P)	C
26	1H	270(R)	G
26	1H	270(Y)	G
26	1H	271(C)	U
26	1H	271	G
26	1H	274	G
26	1H	275	G
26	1H	277	C
26	1H	278	A
26	1H	295	G
26	1H	299	A
26	1H	308	G
26	1H	311	A
26	1H	318	C
26	1H	323	G
26	1H	324	A
26	1H	329	G
26	1H	330	A
26	1H	331	A
26	1H	344	G
26	1H	346	A
26	1H	347	A
26	1H	352	G
26	1H	354	G
26	1H	362	U
26	1H	363	G
26	1H	364	C
26	1H	372	G
26	1H	382	G
26	1H	386	G

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Mol	Chain	Res	Type
26	1H	396	G
26	1H	404	C
26	1H	405	U
26	1H	406	G
26	1H	411	G
26	1H	418	G
26	1H	421	U
26	1H	428	A
26	1H	444	C
26	1H	448	U
26	1H	452	G
26	1H	455	C
26	1H	457	A
26	1H	470	A
26	1H	471	A
26	1H	481	G
26	1H	482	A
26	1H	483	A
26	1H	491	G
26	1H	501	A
26	1H	504	U
26	1H	505	A
26	1H	508	G
26	1H	509	C
26	1H	529	A
26	1H	531	C
26	1H	532	A
26	1H	533	G
26	1H	546	C
26	1H	549	G
26	1H	563	G
26	1H	564	C
26	1H	570	G
26	1H	573	G
26	1H	575	A
26	1H	583	G
26	1H	586	A
26	1H	587	C
26	1H	588	U
26	1H	603	A
26	1H	607	U
26	1H	613	U

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Mol	Chain	Res	Type
26	1H	617	G
26	1H	621	A
26	1H	622	G
26	1H	627	A
26	1H	631	A
26	1H	632	A
26	1H	637	A
26	1H	640	C
26	1H	645	C
26	1H	646	A
26	1H	649	G
26	1H	650	C
26	1H	654	A
26	1H	654(A)	A
26	1H	654(P)	G
26	1H	654(Q)	C
26	1H	654(T)	A
26	1H	654(U)	A
26	1H	662	G
26	1H	663	G
26	1H	664	C
26	1H	665	C
26	1H	667	U
26	1H	686	G
26	1H	702	G
26	1H	704	G
26	1H	705	A
26	1H	708	C
26	1H	717	G
26	1H	726	G
26	1H	730	C
26	1H	738	G
26	1H	751	A
26	1H	752	A
26	1H	753	C
26	1H	762	U
26	1H	765	G
26	1H	775	G
26	1H	776	G
26	1H	777	A
26	1H	779	U
26	1H	782	A

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Mol	Chain	Res	Type
26	1H	784	A
26	1H	785	G
26	1H	788	A
26	1H	790	C
26	1H	791	C
26	1H	792	G
26	1H	793	A
26	1H	794	G
26	1H	797	C
26	1H	801	G
26	1H	805	G
26	1H	812	C
26	1H	824	A
26	1H	826	U
26	1H	827	U
26	1H	828	U
26	1H	836	G
26	1H	845	G
26	1H	846	C
26	1H	847	U
26	1H	859	G
26	1H	860	U
26	1H	866	A
26	1H	870	A
26	1H	879	G
26	1H	880	G
26	1H	881	G
26	1H	882	G
26	1H	894	C
26	1H	898	C
26	1H	899	A
26	1H	900	A
26	1H	901	A
26	1H	902	C
26	1H	906	G
26	1H	907	U
26	1H	910	A
26	1H	912	C
26	1H	914	C
26	1H	917	A
26	1H	918	A
26	1H	926	A

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Mol	Chain	Res	Type
26	1H	932	G
26	1H	936	C
26	1H	941	A
26	1H	945	A
26	1H	946	G
26	1H	953	A
26	1H	958	U
26	1H	959	A
26	1H	961	C
26	1H	974	G
26	1H	974(A)	C
26	1H	975	G
26	1H	983	A
26	1H	990	A
26	1H	993	G
26	1H	996	A
26	1H	997	G
26	1H	999	U
26	1H	1011	G
26	1H	1012	U
26	1H	1013	C
26	1H	1020	A
26	1H	1022	G
26	1H	1023	U
26	1H	1024	G
26	1H	1025	G
26	1H	1026	U
26	1H	1027	A
26	1H	1033	U
26	1H	1042	G
26	1H	1046	A
26	1H	1047	G
26	1H	1051	G
26	1H	1052	C
26	1H	1053	C
26	1H	1107	G
26	1H	1108	U
26	1H	1109	C
26	1H	1110	G
26	1H	1112	G
26	1H	1113	U
26	1H	1122	G

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Mol	Chain	Res	Type
26	1H	1126	A
26	1H	1127	A
26	1H	1128	A
26	1H	1129	A
26	1H	1130	U
26	1H	1135	C
26	1H	1136	G
26	1H	1138	G
26	1H	1139	G
26	1H	1142	U
26	1H	1142(A)	A
26	1H	1144	G
26	1H	1145	C
26	1H	1156	A
26	1H	1157	G
26	1H	1165	U
26	1H	1170	G
26	1H	1175	U
26	1H	1177	A
26	1H	1178	C
26	1H	1179	C
26	1H	1180	C
26	1H	1192	G
26	1H	1195	G
26	1H	1204	A
26	1H	1205	U
26	1H	1210	A
26	1H	1211	U
26	1H	1218	C
26	1H	1220	A
26	1H	1229(A)	G
26	1H	1234	U
26	1H	1236	G
26	1H	1244	G
26	1H	1245	G
26	1H	1248	G
26	1H	1250	G
26	1H	1253	A
26	1H	1256	G
26	1H	1265	A
26	1H	1269	A
26	1H	1271	G

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Mol	Chain	Res	Type
26	1H	1272	A
26	1H	1273	U
26	1H	1285	G
26	1H	1286	A
26	1H	1298	C
26	1H	1300	U
26	1H	1301	A
26	1H	1303	G
26	1H	1305	C
26	1H	1319	G
26	1H	1321	A
26	1H	1329	U
26	1H	1332	G
26	1H	1344	G
26	1H	1345	C
26	1H	1347	G
26	1H	1349	A
26	1H	1352	U
26	1H	1358	G
26	1H	1359	A
26	1H	1360	A
26	1H	1365	A
26	1H	1370	C
26	1H	1378	A
26	1H	1380	G
26	1H	1381	G
26	1H	1385	G
26	1H	1386	C
26	1H	1388	G
26	1H	1389	G
26	1H	1395	A
26	1H	1397	U
26	1H	1400	G
26	1H	1401	G
26	1H	1403	C
26	1H	1404	C
26	1H	1407	C
26	1H	1416	G
26	1H	1417	C
26	1H	1420	U
26	1H	1421	G
26	1H	1428	C

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Mol	Chain	Res	Type
26	1H	1429	G
26	1H	1430	C
26	1H	1431	U
26	1H	1437	C
26	1H	1438	U
26	1H	1444(A)	A
26	1H	1449	A
26	1H	1453	A
26	1H	1454	U
26	1H	1455	G
26	1H	1459	G
26	1H	1460	A
26	1H	1461	G
26	1H	1464	C
26	1H	1467	C
26	1H	1471	A
26	1H	1478	G
26	1H	1482	U
26	1H	1483	G
26	1H	1494	A
26	1H	1495	A
26	1H	1496	A
26	1H	1497	U
26	1H	1499	C
26	1H	1509	C
26	1H	1510	A
26	1H	1511	A
26	1H	1517	G
26	1H	1519	G
26	1H	1522	G
26	1H	1526	G
26	1H	1534	G
26	1H	1535	U
26	1H	1536	A
26	1H	1538	G
26	1H	1539	G
26	1H	1540	G
26	1H	1543	A
26	1H	1544	C
26	1H	1545	A
26	1H	1548	C
26	1H	1554	A

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Mol	Chain	Res	Type
26	1H	1558	A
26	1H	1559	G
26	1H	1560	G
26	1H	1566	A
26	1H	1569	A
26	1H	1578	U
26	1H	1580	A
26	1H	1585	C
26	1H	1586	A
26	1H	1606	G
26	1H	1607	C
26	1H	1608	A
26	1H	1609	A
26	1H	1610	A
26	1H	1617	C
26	1H	1618	A
26	1H	1620	G
26	1H	1625	C
26	1H	1628	G
26	1H	1632	A
26	1H	1647	G
26	1H	1648	C
26	1H	1651	G
26	1H	1661	G
26	1H	1664	A
26	1H	1673	U
26	1H	1674	G
26	1H	1675	C
26	1H	1677	A
26	1H	1678	G
26	1H	1682	G
26	1H	1694	C
26	1H	1695	G
26	1H	1699	G
26	1H	1729	A
26	1H	1730	U
26	1H	1731	G
26	1H	1735	C
26	1H	1750	G
26	1H	1756	G
26	1H	1758	G
26	1H	1762	A

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Mol	Chain	Res	Type
26	1H	1763	G
26	1H	1764	G
26	1H	1773	A
26	1H	1782	C
26	1H	1791	A
26	1H	1799	G
26	1H	1800	C
26	1H	1801	G
26	1H	1808	U
26	1H	1811	G
26	1H	1816	G
26	1H	1819	A
26	1H	1827	C
26	1H	1829	A
26	1H	1833	U
26	1H	1847	A
26	1H	1858	G
26	1H	1859	A
26	1H	1869	G
26	1H	1870	C
26	1H	1878	G
26	1H	1889	A
26	1H	1898	U
26	1H	1900	A
26	1H	1906	G
26	1H	1913	A
26	1H	1914	C
26	1H	1915	U
26	1H	1919	A
26	1H	1926	U
26	1H	1929	G
26	1H	1931	U
26	1H	1934	C
26	1H	1935	G
26	1H	1937	A
26	1H	1938	A
26	1H	1940	U
26	1H	1955	U
26	1H	1956	U
26	1H	1957	C
26	1H	1963	U
26	1H	1967	C

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Mol	Chain	Res	Type
26	1H	1969	A
26	1H	1970	A
26	1H	1971	A
26	1H	1972	A
26	1H	1978	A
26	1H	1982	C
26	1H	1992	G
26	1H	1993	U
26	1H	2004	G
26	1H	2021	C
26	1H	2023	G
26	1H	2030	A
26	1H	2031	A
26	1H	2033	A
26	1H	2035	G
26	1H	2040	C
26	1H	2043	C
26	1H	2049	G
26	1H	2052	G
26	1H	2055	C
26	1H	2056	G
26	1H	2057	A
26	1H	2060	A
26	1H	2061	G
26	1H	2067	G
26	1H	2068	U
26	1H	2069	G
26	1H	2086	U
26	1H	2092	U
26	1H	2096	U
26	1H	2099	U
26	1H	2108	C
26	1H	2110	G
26	1H	2111	C
26	1H	2112	G
26	1H	2113	U
26	1H	2114	A
26	1H	2115	G
26	1H	2116	G
26	1H	2117	A
26	1H	2119	A
26	1H	2125	G

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Mol	Chain	Res	Type
26	1H	2126	A
26	1H	2127	G
26	1H	2128	C
26	1H	2129	C
26	1H	2130	U
26	1H	2131	G
26	1H	2132	U
26	1H	2133	G
26	1H	2134	A
26	1H	2135	A
26	1H	2137	C
26	1H	2138	C
26	1H	2139	C
26	1H	2142	C
26	1H	2144	U
26	1H	2145	C
26	1H	2146	C
26	1H	2147	G
26	1H	2148	G
26	1H	2150	U
26	1H	2154	G
26	1H	2155	G
26	1H	2156	G
26	1H	2157	G
26	1H	2162	G
26	1H	2163	C
26	1H	2164	C
26	1H	2165	G
26	1H	2166	G
26	1H	2167	U
26	1H	2168	G
26	1H	2170	A
26	1H	2171	A
26	1H	2172	U
26	1H	2173	A
26	1H	2181	G
26	1H	2186	G
26	1H	2190	G
26	1H	2192	G
26	1H	2193	G
26	1H	2198	A
26	1H	2199	A

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Mol	Chain	Res	Type
26	1H	2210	G
26	1H	2211	G
26	1H	2212	A
26	1H	2213	U
26	1H	2215	G
26	1H	2217	G
26	1H	2224	G
26	1H	2225	A
26	1H	2232	U
26	1H	2238	G
26	1H	2239	G
26	1H	2240	C
26	1H	2246	G
26	1H	2259	G
26	1H	2267	A
26	1H	2271	G
26	1H	2273	A
26	1H	2275	C
26	1H	2280	G
26	1H	2283	C
26	1H	2287	A
26	1H	2288	A
26	1H	2291	U
26	1H	2295	C
26	1H	2305	A
26	1H	2307	G
26	1H	2308	G
26	1H	2309	A
26	1H	2310	A
26	1H	2311	A
26	1H	2314	C
26	1H	2315	G
26	1H	2320	A
26	1H	2321	G
26	1H	2324	C
26	1H	2325	G
26	1H	2326	C
26	1H	2327	A
26	1H	2328	A
26	1H	2334	G
26	1H	2335	A
26	1H	2336	A

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Mol	Chain	Res	Type
26	1H	2343	C
26	1H	2345	G
26	1H	2346	A
26	1H	2347	C
26	1H	2348	U
26	1H	2350	C
26	1H	2355	C
26	1H	2356	C
26	1H	2357	U
26	1H	2360	A
26	1H	2361	A
26	1H	2374	C
26	1H	2376	A
26	1H	2377	A
26	1H	2383	G
26	1H	2385	C
26	1H	2395	C
26	1H	2402	C
26	1H	2403	C
26	1H	2405	G
26	1H	2406	U
26	1H	2410	G
26	1H	2422	A
26	1H	2423	U
26	1H	2424	C
26	1H	2429	G
26	1H	2430	A
26	1H	2434	A
26	1H	2435	A
26	1H	2439	A
26	1H	2440	C
26	1H	2441	C
26	1H	2442	C
26	1H	2448	A
26	1H	2449	U
26	1H	2452	C
26	1H	2464	C
26	1H	2468	G
26	1H	2469	A
26	1H	2474	C
26	1H	2476	A
26	1H	2477	C

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Mol	Chain	Res	Type
26	1H	2478	A
26	1H	2480	C
26	1H	2482	G
26	1H	2496	C
26	1H	2502	G
26	1H	2505	G
26	1H	2506	U
26	1H	2518	A
26	1H	2529	G
26	1H	2531	A
26	1H	2554	U
26	1H	2555	U
26	1H	2566	A
26	1H	2567	G
26	1H	2573	C
26	1H	2577	A
26	1H	2582	G
26	1H	2586	C
26	1H	2587	A
26	1H	2593	U
26	1H	2602	A
26	1H	2609	U
26	1H	2610	C
26	1H	2611	U
26	1H	2612	C
26	1H	2615	U
26	1H	2618	G
26	1H	2629	A
26	1H	2634	G
26	1H	2636	U
26	1H	2643	G
26	1H	2654	A
26	1H	2665	A
26	1H	2673	G
26	1H	2682	U
26	1H	2683	C
26	1H	2689	U
26	1H	2691	C
26	1H	2700	C
26	1H	2702	U
26	1H	2703	C
26	1H	2707	G

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Mol	Chain	Res	Type
26	1H	2712(A)	A
26	1H	2713	A
26	1H	2718	G
26	1H	2719	G
26	1H	2726	U
26	1H	2733	A
26	1H	2736	G
26	1H	2744	G
26	1H	2756	U
26	1H	2757	A
26	1H	2758	A
26	1H	2761	G
26	1H	2764	A
26	1H	2765	A
26	1H	2766	G
26	1H	2778	A
26	1H	2779	U
26	1H	2781	A
26	1H	2787	C
26	1H	2789	C
26	1H	2790	A
26	1H	2791	C
26	1H	2792	G
26	1H	2793	G
26	1H	2794	C
26	1H	2795	G
26	1H	2797	U
26	1H	2798	C
26	1H	2801	A
26	1H	2802	G
26	1H	2803	C
26	1H	2807	G
26	1H	2820	A
26	1H	2821	A
26	1H	2830	G
26	1H	2833	G
26	1H	2834	G
26	1H	2835	A
26	1H	2849	U
26	1H	2850	A
26	1H	2851	A
26	1H	2860	A

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Mol	Chain	Res	Type
26	1H	2866	U
26	1H	2872	G
26	1H	2876	G
26	1H	2880	C
26	1H	2886	G
26	1H	2892	A
26	1H	2893	G
26	1H	2894	G
26	1H	2895	U
26	1H	2897	U
27	16	0	A
27	16	3	C
27	16	12	C
27	16	13	A
27	16	15	A
27	16	22	U
27	16	23	G
27	16	25	A
27	16	29	A
27	16	33	G
27	16	35	U
27	16	40	U
27	16	42	C
27	16	45	A
27	16	51	G
27	16	56	G
27	16	58	A
27	16	65	C
27	16	73	A
27	16	74	U
27	16	89	G
27	16	93	C
27	16	105	G
27	16	109	G
27	16	110	G
27	16	115	G
27	16	116	G
1	1G	5	U
1	1G	9	G
1	1G	10	A
1	1G	13	U
1	1G	32	A

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Mol	Chain	Res	Type
1	1G	33	A
1	1G	39	G
1	1G	44	G
1	1G	47	C
1	1G	48	C
1	1G	50	A
1	1G	51	A
1	1G	54	C
1	1G	65	U
1	1G	76	G
1	1G	80	G
1	1G	81	G
1	1G	82	U
1	1G	88	C
1	1G	89	U
1	1G	90	C
1	1G	91	C
1	1G	92	G
1	1G	96	G
1	1G	101	A
1	1G	105	G
1	1G	116	A
1	1G	121	C
1	1G	129	U
1	1G	131	C
1	1G	134	A
1	1G	142	G
1	1G	144	G
1	1G	147	G
1	1G	149	A
1	1G	153	C
1	1G	155	C
1	1G	163	C
1	1G	169	C
1	1G	173	U
1	1G	174	C
1	1G	182	U
1	1G	184	G
1	1G	186	C
1	1G	186(F)	C
1	1G	187	C
1	1G	189	U

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Mol	Chain	Res	Type
1	1G	190	G
1	1G	191(A)	G
1	1G	191(C)	G
1	1G	191(D)	U
1	1G	191(E)	G
1	1G	195	A
1	1G	196	A
1	1G	197	A
1	1G	198	G
1	1G	208	U
1	1G	209	U
1	1G	210	U
1	1G	216	G
1	1G	227	G
1	1G	247	G
1	1G	250	A
1	1G	251	G
1	1G	266	G
1	1G	267	C
1	1G	270	A
1	1G	275	G
1	1G	279	A
1	1G	280	C
1	1G	281	G
1	1G	289	G
1	1G	290	C
1	1G	298	A
1	1G	302	G
1	1G	305	G
1	1G	318	G
1	1G	321	A
1	1G	326	G
1	1G	328	C
1	1G	329	A
1	1G	332	G
1	1G	346	G
1	1G	347	G
1	1G	350	G
1	1G	351	G
1	1G	352	C
1	1G	353	A
1	1G	354	G

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Mol	Chain	Res	Type
1	1G	363	A
1	1G	367	U
1	1G	372	C
1	1G	381	C
1	1G	388	G
1	1G	397	A
1	1G	398	C
1	1G	406	G
1	1G	411	A
1	1G	412	A
1	1G	413	G
1	1G	414	A
1	1G	419	C
1	1G	421	U
1	1G	422	C
1	1G	423	G
1	1G	429	U
1	1G	431	A
1	1G	439	A
1	1G	442	C
1	1G	465	A
1	1G	466	C
1	1G	467	G
1	1G	475	G
1	1G	484	G
1	1G	485	G
1	1G	486	U
1	1G	492	G
1	1G	495	A
1	1G	496	A
1	1G	497	U
1	1G	505	G
1	1G	509	A
1	1G	510	A
1	1G	511	C
1	1G	517	G
1	1G	518	C
1	1G	527	G
1	1G	530	G
1	1G	531	U
1	1G	532	A
1	1G	533	A

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Mol	Chain	Res	Type
1	1G	536	C
1	1G	547	A
1	1G	549	C
1	1G	552	U
1	1G	558	G
1	1G	559	A
1	1G	561	U
1	1G	564	C
1	1G	566	G
1	1G	572	A
1	1G	573	A
1	1G	575	G
1	1G	576	G
1	1G	577	G
1	1G	587	G
1	1G	595	G
1	1G	596	C
1	1G	601	C
1	1G	607	A
1	1G	609	A
1	1G	614	A
1	1G	615	C
1	1G	618	C
1	1G	630	G
1	1G	631	G
1	1G	637	G
1	1G	644	G
1	1G	651	C
1	1G	652	U
1	1G	653	A
1	1G	659	U
1	1G	660	G
1	1G	661	G
1	1G	663	A
1	1G	665	A
1	1G	669	U
1	1G	686	U
1	1G	687	A
1	1G	688	G
1	1G	700	G
1	1G	722	A
1	1G	723	U

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Mol	Chain	Res	Type
1	1G	724	G
1	1G	731	G
1	1G	741	G
1	1G	746	A
1	1G	749	C
1	1G	750	G
1	1G	752	G
1	1G	755	G
1	1G	760	G
1	1G	764	C
1	1G	767	A
1	1G	769	G
1	1G	776	G
1	1G	777	A
1	1G	778	G
1	1G	787	A
1	1G	791	G
1	1G	793	U
1	1G	794	A
1	1G	816	A
1	1G	817	C
1	1G	818	G
1	1G	821	G
1	1G	828	A
1	1G	841	U
1	1G	842	C
1	1G	843	U
1	1G	848	C
1	1G	853	G
1	1G	857	C
1	1G	858	G
1	1G	859	A
1	1G	862	C
1	1G	867	G
1	1G	870	U
1	1G	871	U
1	1G	873	A
1	1G	874	G
1	1G	884	U
1	1G	890	G
1	1G	914	A
1	1G	916	G

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Mol	Chain	Res	Type
1	1G	917	G
1	1G	926	G
1	1G	927	G
1	1G	932	C
1	1G	934	C
1	1G	935	A
1	1G	938	A
1	1G	953	G
1	1G	954	G
1	1G	955	U
1	1G	958	A
1	1G	960	U
1	1G	961	U
1	1G	966	G
1	1G	968	A
1	1G	969	A
1	1G	971	G
1	1G	972	C
1	1G	973	G
1	1G	974	A
1	1G	975	A
1	1G	976	G
1	1G	977	A
1	1G	978	A
1	1G	979	C
1	1G	980	C
1	1G	982	U
1	1G	983	A
1	1G	989	C
1	1G	991	U
1	1G	992	U
1	1G	993	G
1	1G	995	C
1	1G	996	A
1	1G	1001	G
1	1G	1004	A
1	1G	1005	A
1	1G	1006	C
1	1G	1009	G
1	1G	1017	G
1	1G	1019	C
1	1G	1023	G

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Mol	Chain	Res	Type
1	1G	1024	G
1	1G	1025	U
1	1G	1026	G
1	1G	1037	C
1	1G	1038	C
1	1G	1040	U
1	1G	1041	A
1	1G	1042	G
1	1G	1046	A
1	1G	1047	G
1	1G	1050	G
1	1G	1052	U
1	1G	1053	G
1	1G	1054	C
1	1G	1055	A
1	1G	1056	U
1	1G	1064	G
1	1G	1081	G
1	1G	1082	G
1	1G	1084	G
1	1G	1085	U
1	1G	1086	U
1	1G	1088	G
1	1G	1091	U
1	1G	1094	G
1	1G	1095	U
1	1G	1096	C
1	1G	1098	C
1	1G	1099	G
1	1G	1101	A
1	1G	1105	A
1	1G	1110	A
1	1G	1113	C
1	1G	1117	G
1	1G	1118	C
1	1G	1121	U
1	1G	1123	A
1	1G	1124	G
1	1G	1125	U
1	1G	1127	G
1	1G	1128	C
1	1G	1129	C

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Mol	Chain	Res	Type
1	1G	1133	G
1	1G	1135	U
1	1G	1136	U
1	1G	1137	C
1	1G	1138	G
1	1G	1139	G
1	1G	1146	A
1	1G	1147	C
1	1G	1151	A
1	1G	1157	A
1	1G	1158	C
1	1G	1159	U
1	1G	1160	G
1	1G	1161	C
1	1G	1171	G
1	1G	1173	G
1	1G	1177	G
1	1G	1178	G
1	1G	1179	A
1	1G	1181	G
1	1G	1183	A
1	1G	1186	G
1	1G	1187	G
1	1G	1188	A
1	1G	1189	C
1	1G	1190	G
1	1G	1191	A
1	1G	1193	G
1	1G	1196	U
1	1G	1197	G
1	1G	1200	C
1	1G	1201	A
1	1G	1202	G
1	1G	1209	C
1	1G	1211	U
1	1G	1212	U
1	1G	1213	A
1	1G	1214	C
1	1G	1216	G
1	1G	1218	C
1	1G	1225	A
1	1G	1226	C

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Mol	Chain	Res	Type
1	1G	1227	A
1	1G	1238	A
1	1G	1240	U
1	1G	1241	G
1	1G	1256	A
1	1G	1257	U
1	1G	1258	G
1	1G	1260	C
1	1G	1263	C
1	1G	1267	C
1	1G	1268	A
1	1G	1270	C
1	1G	1273	G
1	1G	1274	G
1	1G	1279	A
1	1G	1280	A
1	1G	1286	A
1	1G	1287	A
1	1G	1288	A
1	1G	1289	A
1	1G	1293	G
1	1G	1295	G
1	1G	1296	C
1	1G	1297	C
1	1G	1299	A
1	1G	1300	G
1	1G	1301	U
1	1G	1305	G
1	1G	1317	C
1	1G	1320	C
1	1G	1322	C
1	1G	1323	G
1	1G	1331	G
1	1G	1333	A
1	1G	1335	C
1	1G	1336	C
1	1G	1338	G
1	1G	1346	A
1	1G	1347	G
1	1G	1354	C
1	1G	1356	G
1	1G	1359	C

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Mol	Chain	Res	Type
1	1G	1362(A)	C
1	1G	1364	U
1	1G	1368	G
1	1G	1369	C
1	1G	1370	G
1	1G	1377	A
1	1G	1379	G
1	1G	1381	U
1	1G	1392	G
1	1G	1397	C
1	1G	1400	C
1	1G	1401	G
1	1G	1402	C
1	1G	1406	U
1	1G	1419	G
1	1G	1442	G
1	1G	1443	G
1	1G	1446	A
1	1G	1448	C
1	1G	1450	U
1	1G	1451	A
1	1G	1452	C
1	1G	1453	G
1	1G	1454	G
1	1G	1485	U
1	1G	1491	G
1	1G	1492	A
1	1G	1493	A
1	1G	1497	G
1	1G	1499	A
1	1G	1502	A
1	1G	1503	A
1	1G	1504	G
1	1G	1506	U
1	1G	1517	G
1	1G	1519	A
1	1G	1520	G
1	1G	1529	G
1	1G	1530	G
1	1G	1532	U
1	1G	1533	C
1	1G	1534	A

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Mol	Chain	Res	Type
1	1G	1535	C
1	1G	1536	C
56	1L	2	G
56	1L	4	U
56	1L	5	C
56	1L	6	G
56	1L	7	U
56	1L	9	A
56	1L	10	G
56	1L	16	U
56	1L	17	U
56	1L	18	G
56	1L	19	G
56	1L	20	U
56	1L	23	A
56	1L	24	G
56	1L	25	C
56	1L	26	A
56	1L	33	U
56	1L	40	C
56	1L	41	A
56	1L	42	A
56	1L	43	U
56	1L	44	U
56	1L	45	G
56	1L	48	C
56	1L	49	G
56	1L	51	A
56	1L	56	C
56	1L	57	G
56	1L	58	A
56	1L	59	A
56	1L	61	C
56	1L	63	U
56	1L	64	G
56	1L	65	C
56	1L	66	A
56	1L	67	C
56	1L	70	C
56	1L	72	C
56	1L	73	A
56	1L	74	C

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Mol	Chain	Res	Type
23	2L	2	G
23	2L	8	4SU
23	2L	9	G
23	2L	13	C
23	2L	16	C
23	2L	18	C
23	2L	19	G
23	2L	20	G
23	2L	21	U
23	2L	22	A
23	2L	23	G
23	2L	32	G
23	2L	48	U
23	2L	49	C
23	2L	53	G
23	2L	54	G
23	2L	57	C
23	2L	61	U
23	2L	62	C
23	2L	68	C
23	2L	77	A
57	3L	4	U
57	3L	5	C
57	3L	6	G
57	3L	7	U
57	3L	8	U
57	3L	10	G
57	3L	11	C
57	3L	13	C
57	3L	14	A
57	3L	16	U
57	3L	17	U
57	3L	18	G
57	3L	19	G
57	3L	20	U
57	3L	21	A
57	3L	22	G
57	3L	26	A
57	3L	31	A
57	3L	33	U
57	3L	34	U
57	3L	35	U

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Mol	Chain	Res	Type
57	3L	36	U
57	3L	37	A
57	3L	43	U
57	3L	44	U
57	3L	45	G
57	3L	46	G
57	3L	47	U
57	3L	48	C
57	3L	49	G
57	3L	50	C
57	3L	58	A
57	3L	59	A
57	3L	60	U
57	3L	61	C
57	3L	64	G
57	3L	72	C
57	3L	73	A
57	3L	74	C
57	3L	76	A
25	4L	7	G
25	4L	9	G
25	4L	10	G
25	4L	11	U
25	4L	12	A
25	4L	13	A
25	4L	14	A
25	4L	15	A
25	4L	22	A
26	14	2	G
26	14	3	U
26	14	4	C
26	14	5	A
26	14	9	U
26	14	11	G
26	14	14	A
26	14	15	G
26	14	34	C
26	14	35	G
26	14	46	C
26	14	49	A
26	14	50	U
26	14	58	G

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Mol	Chain	Res	Type
26	14	59	U
26	14	60	G
26	14	71	A
26	14	72	U
26	14	74	A
26	14	75	G
26	14	90	U
26	14	91	A
26	14	93	C
26	14	95	G
26	14	99	U
26	14	101	G
26	14	102	G
26	14	107	C
26	14	118	A
26	14	119	A
26	14	120	U
26	14	125	G
26	14	129	C
26	14	136	G
26	14	138	G
26	14	139	G
26	14	140	A
26	14	153	C
26	14	154	G
26	14	161	U
26	14	162	U
26	14	172	C
26	14	173	G
26	14	174	C
26	14	175	G
26	14	181	A
26	14	182	A
26	14	188	G
26	14	196	A
26	14	199	A
26	14	205	G
26	14	214	G
26	14	215	G
26	14	216	A
26	14	221	A
26	14	222	A

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Mol	Chain	Res	Type
26	14	223	A
26	14	225	A
26	14	229	A
26	14	247	G
26	14	248	G
26	14	249	C
26	14	252	G
26	14	262	A
26	14	266	G
26	14	267	C
26	14	270(K)	C
26	14	270(L)	U
26	14	270(M)	U
26	14	270(N)	G
26	14	270(O)	U
26	14	270(P)	C
26	14	270(Y)	G
26	14	271(B)	G
26	14	271(C)	U
26	14	271	G
26	14	273(C)	C
26	14	273(D)	C
26	14	273(F)	C
26	14	274	G
26	14	275	G
26	14	276	A
26	14	278	A
26	14	279	C
26	14	289	A
26	14	290	G
26	14	292	C
26	14	294	A
26	14	311	A
26	14	324	A
26	14	329	G
26	14	330	A
26	14	331	A
26	14	346	A
26	14	352	G
26	14	354	G
26	14	355	G
26	14	356	G

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Mol	Chain	Res	Type
26	14	360	G
26	14	362	U
26	14	363	G
26	14	363(E)	U
26	14	363(F)	A
26	14	375	C
26	14	382	G
26	14	386	G
26	14	388	G
26	14	391	G
26	14	395	U
26	14	396	G
26	14	405	U
26	14	406	G
26	14	411	G
26	14	412	A
26	14	428	A
26	14	436	C
26	14	443	A
26	14	444	C
26	14	447	A
26	14	451	C
26	14	452	G
26	14	455	C
26	14	457	A
26	14	467	G
26	14	470	A
26	14	471	A
26	14	475	U
26	14	479	A
26	14	481	G
26	14	483	A
26	14	501	A
26	14	504	U
26	14	505	A
26	14	507	A
26	14	508	G
26	14	509	C
26	14	512	G
26	14	527	C
26	14	529	A
26	14	530	G

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Mol	Chain	Res	Type
26	14	531	C
26	14	532	A
26	14	533	G
26	14	543	C
26	14	546	C
26	14	547	A
26	14	549	G
26	14	556	G
26	14	563	G
26	14	568	U
26	14	570	G
26	14	573	G
26	14	575	A
26	14	599	G
26	14	603	A
26	14	606	U
26	14	607	U
26	14	609(A)	G
26	14	614	U
26	14	615	G
26	14	616	A
26	14	617	G
26	14	620	G
26	14	621	A
26	14	622	G
26	14	627	A
26	14	637	A
26	14	640	C
26	14	645	C
26	14	646	A
26	14	651	G
26	14	654	A
26	14	654(A)	A
26	14	654(B)	C
26	14	654(C)	G
26	14	654(S)	G
26	14	654(T)	A
26	14	654(U)	A
26	14	668	G
26	14	669	G
26	14	670	A
26	14	682	G

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Mol	Chain	Res	Type
26	14	686	G
26	14	709	U
26	14	717	G
26	14	722	A
26	14	723	G
26	14	730	C
26	14	731	C
26	14	738	G
26	14	739	G
26	14	740	U
26	14	745	G
26	14	747	U
26	14	748	G
26	14	751	A
26	14	752	A
26	14	753	C
26	14	765	G
26	14	770	G
26	14	771	G
26	14	776	G
26	14	779	U
26	14	782	A
26	14	783	A
26	14	784	A
26	14	785	G
26	14	788	A
26	14	790	C
26	14	792	G
26	14	793	A
26	14	800	A
26	14	805	G
26	14	808	G
26	14	812	C
26	14	816	C
26	14	819	A
26	14	824	A
26	14	827	U
26	14	828	U
26	14	830	G
26	14	832	G
26	14	836	G
26	14	846	C

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Mol	Chain	Res	Type
26	14	847	U
26	14	856	C
26	14	859	G
26	14	865	C
26	14	867	C
26	14	868	U
26	14	875	G
26	14	876	C
26	14	877	U
26	14	878	A
26	14	879	G
26	14	880	G
26	14	897	C
26	14	899	A
26	14	901	A
26	14	902	C
26	14	903	C
26	14	904	C
26	14	905	U
26	14	906	G
26	14	907	U
26	14	908	C
26	14	910	A
26	14	911	A
26	14	914	C
26	14	915	C
26	14	917	A
26	14	918	A
26	14	919	G
26	14	920	G
26	14	925	C
26	14	928	G
26	14	930	U
26	14	931	G
26	14	932	G
26	14	938	G
26	14	941	A
26	14	945	A
26	14	946	G
26	14	953	A
26	14	958	U
26	14	959	A

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Mol	Chain	Res	Type
26	14	960	A
26	14	961	C
26	14	974	G
26	14	978	G
26	14	980	A
26	14	983	A
26	14	990	A
26	14	996	A
26	14	999	U
26	14	1009	A
26	14	1010	A
26	14	1012	U
26	14	1013	C
26	14	1017	G
26	14	1020	A
26	14	1022	G
26	14	1023	U
26	14	1025	G
26	14	1026	U
26	14	1027	A
26	14	1033	U
26	14	1037	G
26	14	1042	G
26	14	1044	G
26	14	1048	A
26	14	1050	A
26	14	1052	C
26	14	1054	A
26	14	1055	G
26	14	1056	G
26	14	1057	A
26	14	1060	U
26	14	1061	U
26	14	1062	G
26	14	1070	A
26	14	1071	G
26	14	1072	C
26	14	1073	A
26	14	1086	A
26	14	1087	G
26	14	1088	A
26	14	1089	G

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Mol	Chain	Res	Type
26	14	1090	U
26	14	1091	G
26	14	1093	G
26	14	1100	C
26	14	1102	C
26	14	1103	A
26	14	1104	C
26	14	1105	U
26	14	1106	G
26	14	1107	G
26	14	1109	C
26	14	1110	G
26	14	1112	G
26	14	1114	G
26	14	1122	G
26	14	1126	A
26	14	1130	U
26	14	1131	G
26	14	1135	C
26	14	1136	G
26	14	1139	G
26	14	1143	A
26	14	1148	A
26	14	1155	A
26	14	1170	G
26	14	1171	G
26	14	1173	G
26	14	1174	A
26	14	1175	U
26	14	1176	G
26	14	1177	A
26	14	1178	C
26	14	1183	G
26	14	1188	U
26	14	1204	A
26	14	1205	U
26	14	1210	A
26	14	1212	G
26	14	1213	A
26	14	1220	A
26	14	1221	C
26	14	1229(A)	G

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Mol	Chain	Res	Type
26	14	1237	A
26	14	1241	A
26	14	1250	G
26	14	1252	G
26	14	1253	A
26	14	1256	G
26	14	1262	A
26	14	1271	G
26	14	1272	A
26	14	1273	U
26	14	1274	A
26	14	1275	A
26	14	1285	G
26	14	1298	C
26	14	1300	U
26	14	1301	A
26	14	1303	G
26	14	1319	G
26	14	1321	A
26	14	1325	G
26	14	1329	U
26	14	1341	U
26	14	1345	C
26	14	1348	G
26	14	1349	A
26	14	1352	U
26	14	1359	A
26	14	1365	A
26	14	1368	G
26	14	1370	C
26	14	1378	A
26	14	1380	G
26	14	1385	G
26	14	1386	C
26	14	1390	U
26	14	1403	C
26	14	1407	C
26	14	1408	C
26	14	1416	G
26	14	1417	C
26	14	1420	U
26	14	1421	G

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Mol	Chain	Res	Type
26	14	1424	G
26	14	1425	G
26	14	1428	C
26	14	1444(A)	A
26	14	1445	C
26	14	1449	A
26	14	1449(A)	G
26	14	1451	C
26	14	1453	A
26	14	1454	U
26	14	1459	G
26	14	1460	A
26	14	1467	C
26	14	1471	A
26	14	1474	C
26	14	1475	G
26	14	1490	A
26	14	1491	G
26	14	1493	C
26	14	1506	C
26	14	1508	A
26	14	1509	C
26	14	1510	A
26	14	1515	C
26	14	1522	G
26	14	1524	G
26	14	1528	A
26	14	1533	C
26	14	1534	G
26	14	1535	U
26	14	1536	A
26	14	1537	C
26	14	1543	A
26	14	1546	C
26	14	1554	A
26	14	1558	A
26	14	1559	G
26	14	1560	G
26	14	1565	C
26	14	1566	A
26	14	1569	A
26	14	1570	A

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Mol	Chain	Res	Type
26	14	1578	U
26	14	1580	A
26	14	1583	A
26	14	1585	C
26	14	1586	A
26	14	1587	A
26	14	1588	C
26	14	1594	G
26	14	1598	C
26	14	1608	A
26	14	1609	A
26	14	1610	A
26	14	1616	A
26	14	1635	G
26	14	1644	C
26	14	1647	G
26	14	1648	C
26	14	1667	G
26	14	1669	A
26	14	1674	G
26	14	1675	C
26	14	1695	G
26	14	1696	G
26	14	1700	A
26	14	1701	A
26	14	1702	G
26	14	1703	G
26	14	1711	C
26	14	1725	G
26	14	1728	G
26	14	1729	A
26	14	1730	U
26	14	1731	G
26	14	1735	C
26	14	1741	C
26	14	1743	G
26	14	1755	A
26	14	1756	G
26	14	1763	G
26	14	1764	G
26	14	1773	A
26	14	1776	G

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Mol	Chain	Res	Type
26	14	1777	U
26	14	1780	A
26	14	1781	C
26	14	1782	C
26	14	1784	A
26	14	1786	A
26	14	1791	A
26	14	1800	C
26	14	1801	G
26	14	1816	G
26	14	1820	U
26	14	1829	A
26	14	1830	C
26	14	1839	G
26	14	1840	G
26	14	1843	C
26	14	1847	A
26	14	1848	A
26	14	1858	G
26	14	1859	A
26	14	1860	G
26	14	1878	G
26	14	1885	A
26	14	1886	C
26	14	1888	G
26	14	1889	A
26	14	1897	G
26	14	1900	A
26	14	1904	G
26	14	1905	C
26	14	1906	G
26	14	1918	A
26	14	1919	A
26	14	1920	C
26	14	1927	A
26	14	1929	G
26	14	1930	G
26	14	1934	C
26	14	1937	A
26	14	1938	A
26	14	1940	U
26	14	1944	U

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Mol	Chain	Res	Type
26	14	1945	G
26	14	1951	U
26	14	1952	A
26	14	1955	U
26	14	1960	A
26	14	1963	U
26	14	1967	C
26	14	1970	A
26	14	1971	A
26	14	1972	A
26	14	1985	G
26	14	1991	U
26	14	1993	U
26	14	2004	G
26	14	2018	G
26	14	2021	C
26	14	2023	G
26	14	2031	A
26	14	2032	G
26	14	2033	A
26	14	2043	C
26	14	2049	G
26	14	2054	A
26	14	2055	C
26	14	2056	G
26	14	2057	A
26	14	2061	G
26	14	2062	A
26	14	2063	C
26	14	2069	G
26	14	2074	U
26	14	2076	U
26	14	2082	A
26	14	2089	U
26	14	2099	U
26	14	2100	G
26	14	2108	C
26	14	2111	C
26	14	2114	A
26	14	2116	G
26	14	2117	A
26	14	2119	A

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Mol	Chain	Res	Type
26	14	2120	G
26	14	2125	G
26	14	2126	A
26	14	2127	G
26	14	2128	C
26	14	2129	C
26	14	2130	U
26	14	2131	G
26	14	2132	U
26	14	2133	G
26	14	2134	A
26	14	2135	A
26	14	2136	C
26	14	2137	C
26	14	2139	C
26	14	2140	C
26	14	2144	U
26	14	2145	C
26	14	2146	C
26	14	2147	G
26	14	2148	G
26	14	2149	G
26	14	2151	G
26	14	2153	G
26	14	2157	G
26	14	2158	A
26	14	2159	G
26	14	2162	G
26	14	2164	C
26	14	2165	G
26	14	2166	G
26	14	2167	U
26	14	2168	G
26	14	2172	U
26	14	2173	A
26	14	2174	C
26	14	2175	C
26	14	2179	C
26	14	2189	U
26	14	2190	G
26	14	2191	G
26	14	2192	G

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Mol	Chain	Res	Type
26	14	2198	A
26	14	2207	C
26	14	2210	G
26	14	2211	G
26	14	2212	A
26	14	2213	U
26	14	2215	G
26	14	2225	A
26	14	2226	C
26	14	2229	C
26	14	2234	G
26	14	2235	G
26	14	2238	G
26	14	2239	G
26	14	2252	G
26	14	2263	C
26	14	2267	A
26	14	2268	A
26	14	2269	A
26	14	2273	A
26	14	2275	C
26	14	2276	G
26	14	2278	A
26	14	2280	G
26	14	2281	C
26	14	2283	C
26	14	2287	A
26	14	2288	A
26	14	2289	G
26	14	2291	U
26	14	2293	C
26	14	2298	A
26	14	2304	G
26	14	2305	A
26	14	2307	G
26	14	2308	G
26	14	2310	A
26	14	2311	A
26	14	2312	U
26	14	2318	G
26	14	2319	G
26	14	2321	G

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Mol	Chain	Res	Type
26	14	2325	G
26	14	2326	C
26	14	2327	A
26	14	2329	G
26	14	2334	G
26	14	2336	A
26	14	2343	C
26	14	2346	A
26	14	2347	C
26	14	2348	U
26	14	2350	C
26	14	2354	G
26	14	2357	U
26	14	2372	G
26	14	2383	G
26	14	2385	C
26	14	2389	G
26	14	2392	A
26	14	2402	C
26	14	2406	U
26	14	2411	A
26	14	2413	G
26	14	2414	G
26	14	2415	G
26	14	2417	C
26	14	2418	A
26	14	2422	A
26	14	2423	U
26	14	2429	G
26	14	2430	A
26	14	2431	U
26	14	2434	A
26	14	2435	A
26	14	2439	A
26	14	2440	C
26	14	2441	C
26	14	2448	A
26	14	2449	U
26	14	2468	G
26	14	2469	A
26	14	2470	G
26	14	2474	C

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Mol	Chain	Res	Type
26	14	2476	A
26	14	2477	C
26	14	2482	G
26	14	2487	G
26	14	2492	U
26	14	2497	A
26	14	2500	U
26	14	2502	G
26	14	2504	U
26	14	2505	G
26	14	2506	U
26	14	2507	C
26	14	2513	G
26	14	2518	A
26	14	2525	G
26	14	2529	G
26	14	2532	G
26	14	2537	U
26	14	2542	A
26	14	2543	G
26	14	2554	U
26	14	2564	A
26	14	2566	A
26	14	2567	G
26	14	2569	G
26	14	2573	C
26	14	2579	C
26	14	2587	A
26	14	2601	C
26	14	2602	A
26	14	2609	U
26	14	2611	U
26	14	2612	C
26	14	2617	C
26	14	2630	G
26	14	2636	U
26	14	2646	C
26	14	2654	A
26	14	2665	A
26	14	2667	C
26	14	2672	G
26	14	2673	G

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Mol	Chain	Res	Type
26	14	2679	A
26	14	2682	U
26	14	2689	U
26	14	2690	C
26	14	2691	C
26	14	2706	G
26	14	2707	G
26	14	2712(A)	A
26	14	2713	A
26	14	2714	G
26	14	2726	U
26	14	2733	A
26	14	2739	U
26	14	2748	A
26	14	2750	A
26	14	2751	G
26	14	2752	C
26	14	2757	A
26	14	2758	A
26	14	2761	G
26	14	2762	G
26	14	2764	A
26	14	2765	A
26	14	2766	G
26	14	2769	C
26	14	2777	G
26	14	2778	A
26	14	2779	U
26	14	2780	G
26	14	2786	U
26	14	2790	A
26	14	2791	C
26	14	2795	G
26	14	2797	U
26	14	2798	C
26	14	2799	A
26	14	2801	A
26	14	2802	G
26	14	2805	G
26	14	2808	U
26	14	2810	A
26	14	2818	G

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Mol	Chain	Res	Type
26	14	2820	A
26	14	2821	A
26	14	2833	G
26	14	2834	G
26	14	2835	A
26	14	2849	U
26	14	2860	A
26	14	2861	G
26	14	2872	G
26	14	2873	A
26	14	2874	C
26	14	2891	G
26	14	2893	G
26	14	2894	G
26	14	2895	U
26	14	2896	C
26	14	2898	U
26	14	2900	A
27	1J	0	A
27	1J	3	C
27	1J	7	G
27	1J	8	U
27	1J	12	C
27	1J	13	A
27	1J	15	A
27	1J	16	G
27	1J	22	U
27	1J	24	G
27	1J	26	A
27	1J	28	C
27	1J	29	A
27	1J	30	C
27	1J	31	C
27	1J	40	U
27	1J	41	U
27	1J	42	C
27	1J	45	A
27	1J	47	C
27	1J	51	G
27	1J	52	A
27	1J	53	A
27	1J	58	A

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Mol	Chain	Res	Type
27	1J	59	A
27	1J	63	G
27	1J	73	A
27	1J	75	G
27	1J	77	U
27	1J	88	C
27	1J	89	G
27	1J	89(A)	A
27	1J	90	C
27	1J	97	G
27	1J	101	A
27	1J	108	C
27	1J	109	G
27	1J	115	G
27	1J	116	G
27	1J	118	G
27	1J	119	A

All (232) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	13	5	U
1	13	31	G
1	13	115	G
1	13	173	U
1	13	181	G
1	13	188	U
1	13	244	U
1	13	266	G
1	13	428	G
1	13	429	U
1	13	452	A
1	13	484	G
1	13	509	A
1	13	560	U
1	13	687	A
1	13	703	G
1	13	748	C
1	13	793	U
1	13	871	U
1	13	913	A
1	13	992	U

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Mol	Chain	Res	Type
1	13	1054	C
1	13	1064	G
1	13	1065	U
1	13	1137	C
1	13	1183	A
1	13	1213	A
1	13	1285	A
1	13	1301	U
1	13	1336	C
1	13	1397	C
1	13	1443	G
1	13	1452	C
1	13	1498	U
1	13	1529	G
22	1K	6	G
22	1K	69	A
23	2K	48	U
23	2K	61	U
24	3K	2	G
24	3K	34	U
24	3K	58	A
24	3K	60	U
25	4K	13	A
25	4K	18	G
26	1H	34	C
26	1H	125	G
26	1H	162	U
26	1H	195	A
26	1H	196	A
26	1H	222	A
26	1H	242	G
26	1H	249	C
26	1H	271(B)	G
26	1H	372	G
26	1H	404	C
26	1H	456	C
26	1H	479	A
26	1H	508	G
26	1H	574	C
26	1H	587	C
26	1H	627	A
26	1H	685	A

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Mol	Chain	Res	Type
26	1H	752	A
26	1H	800	A
26	1H	845	G
26	1H	858	U
26	1H	880	G
26	1H	961	C
26	1H	974	G
26	1H	974(A)	C
26	1H	1022	G
26	1H	1026	U
26	1H	1033	U
26	1H	1050	A
26	1H	1052	C
26	1H	1108	U
26	1H	1110	G
26	1H	1128	A
26	1H	1175	U
26	1H	1176	G
26	1H	1177	A
26	1H	1178	C
26	1H	1210	A
26	1H	1378	A
26	1H	1379	A
26	1H	1396	U
26	1H	1416	G
26	1H	1420	U
26	1H	1508	A
26	1H	1558	A
26	1H	1559	G
26	1H	1608	A
26	1H	1609	A
26	1H	1617	C
26	1H	1673	U
26	1H	1694	C
26	1H	1757	U
26	1H	1784	A
26	1H	1799	G
26	1H	1800	C
26	1H	1858	G
26	1H	1955	U
26	1H	1992	G
26	1H	2035	G

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Mol	Chain	Res	Type
26	1H	2060	A
26	1H	2126	A
26	1H	2171	A
26	1H	2172	U
26	1H	2212	A
26	1H	2225	A
26	1H	2346	A
26	1H	2374	C
26	1H	2448	A
26	1H	2476	A
26	1H	2481	G
26	1H	2518	A
26	1H	2611	U
26	1H	2681	C
26	1H	2702	U
26	1H	2756	U
26	1H	2790	A
26	1H	2799	A
27	16	44	G
1	1G	64	G
1	1G	80	G
1	1G	115	G
1	1G	119	A
1	1G	197	A
1	1G	210	U
1	1G	250	A
1	1G	266	G
1	1G	274	A
1	1G	305	G
1	1G	327	A
1	1G	345	C
1	1G	412	A
1	1G	465	A
1	1G	509	A
1	1G	560	U
1	1G	687	A
1	1G	748	C
1	1G	884	U
1	1G	889	A
1	1G	913	A
1	1G	992	U
1	1G	1023	G

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Mol	Chain	Res	Type
1	1G	1053	G
1	1G	1126	U
1	1G	1137	C
1	1G	1145	C
1	1G	1157	A
1	1G	1225	A
1	1G	1285	A
1	1G	1300	G
1	1G	1346	A
1	1G	1347	G
1	1G	1396	A
1	1G	1442	G
1	1G	1443	G
1	1G	1452	C
1	1G	1498	U
1	1G	1506	U
56	1L	3	G
56	1L	18	G
56	1L	19	G
56	1L	48	C
56	1L	69	A
23	2L	20	G
23	2L	48	U
57	3L	58	A
25	4L	12	A
26	14	34	C
26	14	49	A
26	14	71	A
26	14	90	U
26	14	128	C
26	14	222	A
26	14	265	A
26	14	278	A
26	14	387	U
26	14	446	G
26	14	503	A
26	14	528	A
26	14	529	A
26	14	614	U
26	14	669	G
26	14	752	A
26	14	764	A

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Mol	Chain	Res	Type
26	14	784	A
26	14	827	U
26	14	858	U
26	14	959	A
26	14	960	A
26	14	1022	G
26	14	1220	A
26	14	1253	A
26	14	1379	A
26	14	1416	G
26	14	1420	U
26	14	1444(A)	A
26	14	1534	G
26	14	1558	A
26	14	1608	A
26	14	1609	A
26	14	1819	A
26	14	1899	G
26	14	1944	U
26	14	1955	U
26	14	1963	U
26	14	1992	G
26	14	2062	A
26	14	2107	C
26	14	2173	A
26	14	2238	G
26	14	2275	C
26	14	2335	A
26	14	2406	U
26	14	2439	A
26	14	2447	G
26	14	2477	C
26	14	2611	U
26	14	2629	A
26	14	2756	U
26	14	2776	A
26	14	2778	A
26	14	2790	A
26	14	2859	G
26	14	2873	A
26	14	2893	G
27	1J	81	G

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Mol	Chain	Res	Type
27	1J	88	C

5.4 Non-standard residues in protein, DNA, RNA chains

19 non-standard protein/DNA/RNA residues are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	U8U	1K	34	25,22	15,24,25	2.58	3 (20%)	17,34,37	2.16	3 (17%)
22	T6A	1K	37	22	23,34,35	2.76	7 (30%)	26,49,52	5.18	8 (30%)
22	PSU	1K	39	22	15,21,22	1.56	4 (26%)	16,30,33	1.84	4 (25%)
22	5MU	1K	54	22	13,22,23	1.72	2 (15%)	16,32,35	1.88	2 (12%)
22	PSU	1K	55	22	15,21,22	1.01	1 (6%)	16,30,33	2.34	3 (18%)
56	PSU	1L	39	56	15,21,22	1.05	1 (6%)	16,30,33	2.03	3 (18%)
56	5MU	1L	54	56	13,22,23	1.62	2 (15%)	16,32,35	1.31	1 (6%)
56	PSU	1L	55	56	15,21,22	1.10	1 (6%)	16,30,33	2.05	3 (18%)
23	OMC	2K	33	23	15,22,23	1.93	4 (26%)	20,31,34	1.79	3 (15%)
23	G7M	2K	47	23	18,26,27	3.43	6 (33%)	21,39,42	1.96	4 (19%)
23	5MU	2K	55	23	13,22,23	1.75	1 (7%)	16,32,35	1.44	2 (12%)
23	PSU	2K	56	23	15,21,22	1.22	1 (6%)	16,30,33	2.14	2 (12%)
23	4SU	2K	8	23	12,21,22	3.25	2 (16%)	15,30,33	1.42	1 (6%)
23	OMC	2L	33	23	15,22,23	2.29	4 (26%)	20,31,34	2.46	5 (25%)
23	G7M	2L	47	23	18,26,27	3.29	6 (33%)	21,39,42	2.26	4 (19%)
23	5MU	2L	55	23	13,22,23	1.72	2 (15%)	16,32,35	1.71	2 (12%)
23	PSU	2L	56	23	15,21,22	1.38	2 (13%)	16,30,33	1.98	4 (25%)
23	4SU	2L	8	23	12,21,22	3.18	2 (16%)	15,30,33	0.53	0
57	PSU	3L	39	57	15,21,22	1.10	1 (6%)	16,30,33	2.08	3 (18%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical

component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	U8U	1K	34	25,22	-	0/5/28/29	0/2/2/2
22	T6A	1K	37	22	-	0/15/41/42	0/3/3/3
22	PSU	1K	39	22	-	0/7/25/26	0/2/2/2
22	5MU	1K	54	22	-	0/3/25/26	0/2/2/2
22	PSU	1K	55	22	-	0/7/25/26	0/2/2/2
56	PSU	1L	39	56	-	0/7/25/26	0/2/2/2
56	5MU	1L	54	56	-	0/3/25/26	0/2/2/2
56	PSU	1L	55	56	-	0/7/25/26	0/2/2/2
23	OMC	2K	33	23	-	0/5/27/28	0/2/2/2
23	G7M	2K	47	23	-	0/3/25/26	0/3/3/3
23	5MU	2K	55	23	-	0/3/25/26	0/2/2/2
23	PSU	2K	56	23	-	0/7/25/26	0/2/2/2
23	4SU	2K	8	23	-	0/3/25/26	0/2/2/2
23	OMC	2L	33	23	-	0/5/27/28	0/2/2/2
23	G7M	2L	47	23	-	0/3/25/26	0/3/3/3
23	5MU	2L	55	23	-	0/3/25/26	0/2/2/2
23	PSU	2L	56	23	-	0/7/25/26	0/2/2/2
23	4SU	2L	8	23	-	0/3/25/26	0/2/2/2
57	PSU	3L	39	57	-	0/7/25/26	0/2/2/2

All (52) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	1K	34	U8U	C2-S2	-3.96	1.58	1.66
22	1K	39	PSU	C5-C1'	-3.70	1.49	1.52
23	2L	56	PSU	C5-C1'	-3.19	1.49	1.52
56	1L	54	5MU	C4-N3	-2.99	1.27	1.33
22	1K	37	T6A	C5-C4	-2.67	1.34	1.40
22	1K	39	PSU	O4'-C1'	-2.35	1.40	1.44
22	1K	54	5MU	C4-N3	-2.28	1.28	1.33
23	2L	55	5MU	C4-N3	-2.27	1.28	1.33
23	2L	47	G7M	O6-C6	-2.23	1.18	1.24
22	1K	39	PSU	C2'-C1'	-2.04	1.51	1.53
23	2K	47	G7M	C2-N3	2.02	1.45	1.35
22	1K	37	T6A	C2-N3	2.64	1.36	1.32
23	2K	33	OMC	C4-N4	2.86	1.43	1.35
22	1K	37	T6A	C4-N3	2.90	1.39	1.35
23	2K	56	PSU	C4-N3	2.92	1.38	1.33
22	1K	55	PSU	C4-N3	3.12	1.38	1.33
56	1L	55	PSU	C4-N3	3.17	1.38	1.33
23	2L	56	PSU	C4-N3	3.30	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	3L	39	PSU	C4-N3	3.30	1.39	1.33
56	1L	39	PSU	C4-N3	3.33	1.39	1.33
23	2K	33	OMC	C5-C4	3.33	1.48	1.41
22	1K	37	T6A	C12-N11	3.34	1.52	1.46
22	1K	39	PSU	C4-N3	3.39	1.39	1.33
23	2L	33	OMC	C5-C4	3.65	1.49	1.41
23	2L	33	OMC	C4-N4	3.71	1.45	1.35
23	2K	33	OMC	C2-N3	3.85	1.46	1.38
23	2K	33	OMC	C6-N1	4.04	1.41	1.35
23	2K	47	G7M	C2-N2	4.48	1.43	1.34
23	2L	47	G7M	C2-N1	4.54	1.44	1.35
23	2L	33	OMC	C2-N3	4.55	1.47	1.38
56	1L	54	5MU	C2-N3	4.62	1.47	1.38
23	2L	47	G7M	C2-N2	4.69	1.44	1.34
23	2K	47	G7M	C2-N1	5.18	1.45	1.35
23	2L	33	OMC	C6-N1	5.31	1.42	1.35
22	1K	54	5MU	C2-N3	5.32	1.49	1.38
23	2L	47	G7M	C6-N1	5.38	1.42	1.33
23	2L	55	5MU	C2-N3	5.42	1.49	1.38
23	2K	55	5MU	C2-N3	5.79	1.50	1.38
22	1K	34	U8U	C6-C5	5.88	1.50	1.36
23	2K	8	4SU	C6-N1	6.07	1.43	1.35
22	1K	37	T6A	C10-N11	6.07	1.52	1.35
22	1K	37	T6A	C6-N6	6.29	1.48	1.36
22	1K	34	U8U	C4-N3	6.30	1.44	1.33
23	2L	47	G7M	C6-C5	6.48	1.54	1.41
23	2L	8	4SU	C6-N1	6.79	1.44	1.35
22	1K	37	T6A	C10-N6	6.82	1.50	1.37
23	2K	47	G7M	C6-N1	7.08	1.45	1.33
23	2K	47	G7M	C6-C5	7.16	1.55	1.41
23	2K	47	G7M	C4-N3	7.22	1.47	1.35
23	2L	47	G7M	C4-N3	8.28	1.48	1.35
23	2L	8	4SU	C5-C4	8.50	1.49	1.38
23	2K	8	4SU	C5-C4	9.19	1.50	1.38

All (57) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	37	T6A	N3-C2-N1	-19.86	113.27	128.87
23	2L	47	G7M	C1'-N9-C4	-7.19	118.78	126.81
22	1K	34	U8U	C5-C4-N3	-6.86	119.03	125.19
23	2K	47	G7M	C5-C6-N1	-6.31	115.28	123.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	1K	37	T6A	O10-C10-N6	-5.57	115.07	123.59
23	2K	8	4SU	C5-C4-N3	-4.76	118.51	123.56
23	2L	47	G7M	N3-C2-N1	-4.67	121.21	127.56
23	2L	56	PSU	C5-C6-N1	-3.91	118.93	124.38
23	2L	33	OMC	C5-C4-N4	-3.83	115.05	121.19
22	1K	55	PSU	C5-C1'-C2'	-3.49	109.50	115.44
23	2K	33	OMC	C5-C4-N4	-3.48	115.61	121.19
23	2L	47	G7M	C5-C6-N1	-3.38	119.10	123.52
23	2K	47	G7M	N3-C2-N1	-3.01	123.46	127.56
23	2L	33	OMC	C5-C4-N3	-2.92	118.09	121.79
23	2L	55	5MU	C5-C4-N3	-2.84	122.97	125.35
22	1K	39	PSU	C5-C6-N1	-2.77	120.51	124.38
23	2L	33	OMC	C6-N1-C2	-2.76	116.83	121.33
22	1K	54	5MU	C5-C4-N3	-2.65	123.12	125.35
23	2L	56	PSU	C5-C1'-C2'	-2.56	111.08	115.44
57	3L	39	PSU	C5-C6-N1	-2.50	120.89	124.38
23	2K	47	G7M	C1'-N9-C4	-2.23	124.31	126.81
56	1L	55	PSU	C5-C1'-C2'	-2.22	111.66	115.44
22	1K	34	U8U	O2'-C2'-C1'	-2.21	104.69	111.61
23	2K	55	5MU	C5-C4-N3	-2.20	123.50	125.35
56	1L	39	PSU	O2'-C2'-C1'	-2.11	107.33	111.93
57	3L	39	PSU	O2'-C2'-C1'	-2.08	107.41	111.93
22	1K	39	PSU	O2'-C2'-C1'	-2.07	107.44	111.93
56	1L	55	PSU	O4'-C1'-C2'	2.03	106.88	104.69
22	1K	55	PSU	O4'-C1'-C2'	2.05	106.90	104.69
22	1K	37	T6A	C13-C12-N11	2.42	118.05	113.40
22	1K	39	PSU	O4'-C1'-C2'	2.59	107.49	104.69
23	2L	56	PSU	O4'-C1'-C2'	2.70	107.61	104.69
23	2K	56	PSU	O4'-C1'-C2'	2.76	107.67	104.69
56	1L	39	PSU	O4'-C1'-C2'	2.99	107.92	104.69
23	2L	47	G7M	C6-N1-C2	3.44	119.91	115.88
23	2K	47	G7M	C6-N1-C2	3.63	120.14	115.88
22	1K	34	U8U	C2-N3-C4	3.89	120.21	115.89
22	1K	37	T6A	C6-N6-C10	3.93	135.64	130.33
23	2K	33	OMC	C6-C5-C4	4.06	119.03	117.44
23	2K	55	5MU	C4-N3-C2	4.56	118.96	115.16
56	1L	54	5MU	C4-N3-C2	4.65	119.04	115.16
23	2L	56	PSU	C4-N3-C2	4.87	119.22	115.16
23	2K	33	OMC	N4-C4-N3	4.92	125.09	116.50
23	2L	55	5MU	C4-N3-C2	5.20	119.50	115.16
22	1K	37	T6A	N6-C10-N11	5.47	122.66	113.75
22	1K	39	PSU	C4-N3-C2	5.61	119.83	115.16

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	2L	33	OMC	N4-C4-N3	5.93	126.86	116.50
57	3L	39	PSU	C4-N3-C2	6.37	120.47	115.16
22	1K	37	T6A	N6-C6-N1	6.39	124.42	118.82
22	1K	54	5MU	C4-N3-C2	6.65	120.70	115.16
56	1L	39	PSU	C4-N3-C2	6.75	120.79	115.16
56	1L	55	PSU	C4-N3-C2	6.95	120.95	115.16
23	2L	33	OMC	C6-C5-C4	7.05	120.20	117.44
22	1K	37	T6A	C12-N11-C10	7.19	135.56	120.82
23	2K	56	PSU	C4-N3-C2	7.37	121.31	115.16
22	1K	55	PSU	C4-N3-C2	7.82	121.69	115.16
22	1K	37	T6A	C2-N1-C6	10.77	124.21	116.47

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

13 monomers are involved in 26 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	1K	34	U8U	3	0
22	1K	37	T6A	1	0
22	1K	54	5MU	1	0
22	1K	55	PSU	1	0
56	1L	54	5MU	2	0
23	2K	33	OMC	3	0
23	2K	47	G7M	2	0
23	2K	55	5MU	3	0
23	2K	8	4SU	1	0
23	2L	33	OMC	1	0
23	2L	47	G7M	3	0
23	2L	55	5MU	4	0
23	2L	8	4SU	1	0

5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

5.6 Ligand geometry [i](#)

Of 1188 ligands modelled in this entry, 1186 are monoatomic - leaving 2 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the chemical component dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
59	SF4	32	302	4	0,12,12	0.00	-	0,24,24	0.00	-
59	SF4	3E	301	4	0,12,12	0.00	-	0,24,24	0.00	-

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the chemical component dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	SF4	32	302	4	-	0/0/48/48	0/6/5/5
59	SF4	3E	301	4	-	0/0/48/48	0/6/5/5

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

1 monomer is involved in 4 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
59	32	302	SF4	4	0

5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
38	45	1
4	3E	1
5	4E	1
25	4K	1
37	35	1
38	88	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	4K	24:A	O3'	25:A	P	4.44
1	35	121:LYS	C	122:PRO	N	1.77
1	45	124:LYS	C	125:LEU	N	1.15
1	4E	69:VAL	C	70:PRO	N	1.12
1	88	124:LYS	C	125:LEU	N	1.12
1	3E	36:ARG	C	37:PRO	N	1.07

6 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	13	1493/1522 (98%)	-0.64	0 100 100	83, 129, 202, 287	0
1	1G	1496/1522 (98%)	-0.44	11 (0%) 89 82	100, 152, 223, 279	0
2	12	206/256 (80%)	0.22	27 (13%) 5 2	173, 206, 218, 228	0
2	1E	231/256 (90%)	0.83	44 (19%) 2 1	140, 173, 197, 207	0
3	22	194/239 (81%)	0.97	43 (22%) 1 1	172, 196, 209, 214	0
3	2E	205/239 (85%)	0.57	27 (13%) 4 2	115, 136, 165, 176	0
4	32	208/209 (99%)	1.16	54 (25%) 1 0	129, 152, 173, 183	0
4	3E	207/209 (99%)	0.76	45 (21%) 1 1	104, 131, 154, 164	0
5	42	149/162 (91%)	0.17	8 (5%) 29 15	138, 160, 177, 190	0
5	4E	149/162 (91%)	-0.20	0 100 100	104, 125, 147, 155	0
6	52	101/101 (100%)	0.19	5 (4%) 32 17	119, 135, 156, 163	0
6	5E	100/101 (99%)	3.70	75 (75%) 0 0	103, 129, 149, 159	0
7	62	138/156 (88%)	0.02	11 (7%) 15 7	150, 164, 173, 181	0
7	6E	151/156 (96%)	-0.84	0 100 100	134, 150, 170, 179	0
8	72	137/138 (99%)	-0.75	0 100 100	136, 164, 180, 190	0
8	7E	138/138 (100%)	-0.49	1 (0%) 89 82	112, 138, 152, 161	0
9	82	105/128 (82%)	0.72	18 (17%) 2 1	149, 196, 209, 221	0
9	8E	126/128 (98%)	-0.63	1 (0%) 87 79	111, 170, 192, 200	0
10	1A	60/105 (57%)	1.65	17 (28%) 1 0	166, 193, 204, 205	0
10	1I	72/105 (68%)	0.13	4 (5%) 28 14	112, 150, 193, 204	0
11	2A	113/129 (87%)	-0.40	0 100 100	118, 143, 157, 167	0
11	2I	111/129 (86%)	1.71	43 (38%) 0 0	102, 136, 151, 164	0
12	3A	121/132 (91%)	1.11	34 (28%) 1 0	119, 142, 165, 179	0
12	3I	122/132 (92%)	0.13	2 (1%) 74 61	91, 102, 126, 160	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	4A	111/126 (88%)	1.07	27 (24%) 1 1	162, 187, 202, 212	0
13	4I	119/126 (94%)	-0.38	1 (0%) 87 79	111, 146, 162, 173	0
14	5A	48/61 (78%)	2.62	25 (52%) 0 0	170, 191, 208, 218	0
14	5I	60/61 (98%)	0.65	6 (10%) 9 4	107, 124, 141, 155	0
15	6A	87/89 (97%)	-0.17	2 (2%) 64 47	123, 148, 167, 174	0
15	6I	87/89 (97%)	1.59	27 (31%) 1 0	106, 127, 148, 153	0
16	7A	84/88 (95%)	-0.33	0 100 100	120, 139, 161, 184	0
16	7I	80/88 (90%)	0.56	10 (12%) 5 3	127, 140, 169, 180	0
17	8A	99/105 (94%)	-0.82	0 100 100	121, 143, 156, 159	0
17	8I	100/105 (95%)	2.18	50 (50%) 0 0	117, 136, 148, 154	0
18	9A	67/88 (76%)	0.09	2 (2%) 54 37	128, 145, 163, 171	0
18	9I	67/88 (76%)	2.73	39 (58%) 0 0	115, 134, 159, 164	0
19	AA	36/93 (38%)	-0.14	2 (5%) 28 14	191, 209, 217, 223	0
19	AI	81/93 (87%)	1.19	24 (29%) 1 0	125, 148, 173, 183	0
20	BA	98/106 (92%)	0.52	12 (12%) 5 3	107, 139, 163, 176	0
20	BI	97/106 (91%)	-0.13	5 (5%) 31 16	135, 152, 181, 193	0
21	1B	23/27 (85%)	3.96	21 (91%) 0 0	157, 179, 187, 189	0
21	1F	23/27 (85%)	-0.89	0 100 100	119, 134, 143, 145	0
22	1K	64/76 (84%)	0.39	7 (10%) 7 3	112, 226, 251, 253	0
23	2K	72/77 (93%)	-0.38	1 (1%) 78 64	94, 125, 153, 169	0
23	2L	72/77 (93%)	0.10	3 (4%) 40 24	100, 151, 178, 198	0
24	3K	76/76 (100%)	-0.22	3 (3%) 43 26	96, 189, 207, 218	0
25	4K	20/27 (74%)	0.13	1 (5%) 32 17	96, 156, 196, 199	0
25	4L	17/27 (62%)	0.42	1 (5%) 26 13	131, 170, 208, 211	0
26	14	2861/2912 (98%)	-0.35	27 (0%) 85 77	72, 111, 235, 276	0
26	1H	2830/2912 (97%)	-0.37	24 (0%) 87 79	65, 97, 204, 287	0
27	16	122/122 (100%)	-0.18	3 (2%) 61 45	92, 117, 143, 228	0
27	1J	122/122 (100%)	-0.74	0 100 100	117, 155, 179, 225	0
28	7I	135/229 (58%)	1.84	56 (41%) 0 0	149, 167, 190, 202	0
29	11	273/276 (98%)	0.08	8 (2%) 55 39	65, 90, 111, 122	0
29	19	273/276 (98%)	0.91	46 (16%) 2 1	74, 100, 121, 136	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
30	21	203/206 (98%)	0.50	19 (9%) 11 5	73, 112, 157, 172	0
30	29	203/206 (98%)	1.04	46 (22%) 1 1	79, 116, 162, 178	0
31	31	202/210 (96%)	0.16	7 (3%) 48 30	70, 102, 136, 155	0
31	39	204/210 (97%)	-0.32	0 100 100	83, 128, 181, 201	0
32	41	179/182 (98%)	0.48	19 (10%) 8 4	107, 128, 164, 174	0
32	49	179/182 (98%)	0.63	25 (13%) 4 2	151, 171, 195, 204	0
33	51	171/180 (95%)	0.31	23 (13%) 4 2	102, 128, 146, 157	0
33	59	69/180 (38%)	0.75	12 (17%) 2 1	170, 198, 213, 220	0
34	61	145/148 (97%)	1.24	40 (27%) 1 0	102, 163, 188, 199	0
34	69	145/148 (97%)	1.03	37 (25%) 1 0	111, 152, 176, 189	0
35	15	137/140 (97%)	1.46	44 (32%) 1 0	106, 134, 162, 179	0
35	58	138/140 (98%)	-0.27	1 (0%) 89 82	86, 112, 154, 172	0
36	25	122/122 (100%)	0.42	2 (1%) 74 61	92, 113, 132, 142	0
36	68	122/122 (100%)	-0.19	0 100 100	81, 98, 118, 131	0
37	35	148/150 (98%)	1.16	39 (26%) 1 0	84, 135, 174, 190	0
37	78	147/150 (98%)	0.42	20 (13%) 4 2	72, 104, 136, 144	0
38	45	138/141 (97%)	0.20	10 (7%) 18 9	99, 131, 151, 168	0
38	88	141/141 (100%)	1.77	64 (45%) 0 0	76, 101, 123, 153	0
39	55	118/118 (100%)	0.58	9 (7%) 17 8	87, 102, 118, 138	0
39	98	118/118 (100%)	2.87	73 (61%) 0 0	87, 109, 131, 147	0
40	65	110/112 (98%)	0.57	11 (10%) 9 4	116, 145, 164, 173	0
40	A8	111/112 (99%)	2.28	58 (52%) 0 0	93, 112, 135, 144	0
41	75	136/146 (93%)	-0.40	4 (2%) 55 39	102, 120, 169, 198	0
41	B8	135/146 (92%)	-0.50	1 (0%) 89 82	92, 116, 166, 185	0
42	85	116/118 (98%)	0.99	21 (18%) 2 1	90, 121, 154, 166	0
42	C8	115/118 (97%)	-0.12	2 (1%) 73 59	77, 102, 130, 141	0
43	95	99/101 (98%)	1.93	48 (48%) 0 0	91, 152, 166, 174	0
43	D8	101/101 (100%)	1.67	37 (36%) 0 0	78, 124, 149, 160	0
44	A5	110/113 (97%)	-0.36	0 100 100	84, 96, 127, 133	0
44	E8	110/113 (97%)	0.03	2 (1%) 71 56	79, 95, 125, 140	0
45	B5	94/96 (97%)	0.75	14 (14%) 3 2	94, 110, 134, 144	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
45	F8	95/96 (98%)	2.15	47 (49%) 0 0	78, 93, 120, 133	0
46	C5	105/110 (95%)	1.17	22 (20%) 1 1	110, 143, 175, 185	0
46	G8	104/110 (94%)	-0.66	0 100 100	88, 116, 148, 161	0
47	D5	130/206 (63%)	1.16	35 (26%) 1 0	138, 163, 188, 194	0
47	H8	148/206 (71%)	1.96	68 (45%) 0 0	106, 140, 195, 207	0
48	E5	78/85 (91%)	0.59	5 (6%) 23 11	99, 116, 136, 149	0
48	I8	76/85 (89%)	1.41	22 (28%) 1 0	79, 95, 111, 130	0
49	F5	94/98 (95%)	0.72	12 (12%) 5 2	86, 109, 144, 159	0
49	J8	94/98 (95%)	0.40	8 (8%) 13 6	79, 96, 143, 153	0
50	G5	67/72 (93%)	0.23	3 (4%) 37 21	113, 134, 152, 171	0
50	K8	68/72 (94%)	1.03	11 (16%) 3 1	82, 105, 124, 151	0
51	H5	58/60 (96%)	3.98	53 (91%) 0 0	103, 128, 155, 180	0
51	L8	58/60 (96%)	0.96	10 (17%) 2 1	83, 104, 140, 152	0
52	M8	47/71 (66%)	0.56	5 (10%) 8 4	131, 172, 183, 188	0
53	J5	56/60 (93%)	-0.19	5 (8%) 12 6	82, 108, 155, 165	0
53	N8	48/60 (80%)	0.59	7 (14%) 3 2	72, 108, 153, 164	0
54	L5	45/49 (91%)	0.55	5 (11%) 7 3	75, 83, 95, 107	0
54	P8	47/49 (95%)	-0.23	0 100 100	68, 74, 98, 108	0
55	M5	64/65 (98%)	1.41	17 (26%) 1 0	90, 105, 123, 143	0
55	Q8	64/65 (98%)	0.18	1 (1%) 74 61	80, 91, 108, 123	0
56	1L	71/76 (93%)	1.63	20 (28%) 1 0	140, 257, 274, 277	0
57	3L	75/76 (98%)	-0.08	2 (2%) 58 42	107, 259, 277, 285	0
All	All	20395/21728 (93%)	0.17	1949 (9%) 10 5	65, 127, 204, 287	0

All (1949) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
28	71	1	PRO	15.3
43	D8	101	GLY	10.4
10	1A	59	SER	10.2
21	1B	14	TRP	9.9
32	49	137	GLU	9.6
14	5A	59	ALA	9.6
6	5E	89	MET	9.2

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Mol	Chain	Res	Type	RSRZ
12	3A	64	TYR	8.9
32	49	138	GLN	8.9
51	H5	35	ARG	8.8
39	98	118	GLU	8.3
13	4A	111	LYS	8.3
33	59	169	VAL	8.1
37	35	110	TYR	7.9
21	1B	13	ILE	7.9
51	H5	26	LEU	7.8
51	H5	25	ALA	7.7
17	8I	12	SER	7.6
39	98	94	TYR	7.6
6	5E	4	TYR	7.6
14	5A	50	LYS	7.5
6	5E	55	ASP	7.4
32	41	26	GLN	7.3
28	71	35	ALA	7.3
43	95	12	TYR	7.3
39	98	115	GLU	7.3
30	29	73	GLU	7.2
6	5E	63	TYR	7.2
14	5A	52	GLN	7.2
51	H5	29	ARG	7.2
30	29	71	GLY	7.2
51	H5	28	LEU	7.2
13	4A	114	ARG	7.1
13	4A	102	ARG	7.1
6	5E	67	MET	7.0
40	A8	48	LEU	7.0
29	19	55	GLY	7.0
11	2I	42	TRP	7.0
6	5E	2	ARG	6.9
6	5E	71	ARG	6.8
14	5A	51	GLY	6.8
39	98	87	TYR	6.8
6	5E	3	ARG	6.8
6	5E	1	MET	6.8
6	5E	33	TYR	6.8
6	5E	35	ALA	6.7
34	61	140	LEU	6.7
2	1E	231	GLU	6.7
3	22	198	VAL	6.7

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Mol	Chain	Res	Type	RSRZ
39	98	92	GLY	6.6
47	D5	69	THR	6.6
6	5E	49	ALA	6.5
14	5A	24	CYS	6.5
3	22	177	THR	6.5
3	22	178	LEU	6.5
6	5E	57	GLN	6.5
6	5E	36	ARG	6.5
30	29	3	GLY	6.4
17	8I	98	LEU	6.4
10	1A	62	HIS	6.4
28	71	34	THR	6.4
10	1A	58	ASP	6.4
28	71	2	LYS	6.4
6	5E	7	ASN	6.3
18	9I	34	TYR	6.3
6	5E	66	GLU	6.3
51	H5	34	GLU	6.2
28	71	11	LEU	6.2
40	A8	49	VAL	6.2
21	1B	23	PRO	6.2
47	D5	163	LEU	6.2
30	29	56	PRO	6.2
51	H5	19	GLN	6.1
40	A8	36	TYR	6.1
4	3E	138	TYR	6.1
47	H8	70	LEU	6.1
6	5E	68	PRO	6.0
40	A8	111	GLU	6.0
40	A8	38	GLN	6.0
51	H5	27	GLY	6.0
14	5A	58	LYS	6.0
32	49	23	PHE	6.0
6	5E	41	GLU	6.0
45	F8	92	LEU	6.0
56	1L	24	G	6.0
14	5A	57	ARG	5.9
45	F8	1	MET	5.9
43	D8	37	VAL	5.9
6	5E	64	GLN	5.9
4	3E	140	VAL	5.9
39	98	7	GLY	5.9

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Mol	Chain	Res	Type	RSRZ
43	D8	45	THR	5.9
6	5E	50	TYR	5.9
47	H8	2	GLU	5.9
6	5E	34	GLY	5.9
32	49	34	LEU	5.8
13	4A	110	ARG	5.8
40	A8	27	SER	5.8
57	3L	34	U	5.8
34	61	145	VAL	5.8
39	98	89	ASP	5.8
39	98	95	THR	5.8
39	98	114	VAL	5.8
43	D8	98	GLU	5.8
40	A8	112	PHE	5.8
6	5E	32	ASN	5.7
13	4A	118	ALA	5.7
10	1A	47	PHE	5.7
12	3A	69	TYR	5.7
2	1E	229	VAL	5.7
21	1B	16	GLY	5.7
39	98	43	GLU	5.7
12	3A	68	ALA	5.7
18	9I	31	LEU	5.7
18	9I	79	LEU	5.7
4	3E	110	PHE	5.7
30	29	4	ILE	5.7
3	22	131	ARG	5.7
56	1L	47	U	5.7
6	5E	42	GLU	5.6
39	98	69	ASP	5.6
3	2E	201	TYR	5.6
4	32	195	ALA	5.6
47	D5	56	VAL	5.6
6	5E	90	VAL	5.6
40	A8	43	GLU	5.6
9	82	121	ARG	5.6
51	H5	2	PRO	5.6
27	16	1(M)	A	5.6
33	59	168	PRO	5.6
34	61	79	ILE	5.6
2	1E	80	ILE	5.5
45	F8	26	TYR	5.5

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Mol	Chain	Res	Type	RSRZ
6	5E	62	TRP	5.5
13	4A	98	VAL	5.5
2	1E	11	LEU	5.5
42	85	89	GLU	5.4
17	8I	99	SER	5.4
32	49	155	MET	5.4
3	22	6	HIS	5.4
11	2I	43	SER	5.4
51	H5	30	ARG	5.4
6	5E	5	GLU	5.4
45	F8	87	GLN	5.4
30	29	69	LYS	5.4
46	C5	29	GLU	5.4
38	88	38	GLU	5.3
12	3A	56	ALA	5.3
9	82	115	GLY	5.3
30	29	76	ARG	5.3
40	A8	24	LEU	5.3
18	9I	72	ARG	5.3
39	98	49	ASP	5.3
20	BA	9	ASN	5.3
47	H8	166	SER	5.3
51	H5	24	LYS	5.3
54	L5	1	MET	5.3
12	3A	55	VAL	5.3
3	22	53	ALA	5.3
14	5A	44	LEU	5.3
51	H5	9	VAL	5.3
3	22	10	PHE	5.3
17	8I	101	ARG	5.3
9	82	123	PRO	5.3
14	5I	13	THR	5.3
30	29	49	LEU	5.3
53	J5	53	ALA	5.2
28	71	32	LEU	5.2
38	88	1	MET	5.2
41	75	2	ASN	5.2
40	A8	84	GLN	5.2
18	9I	35	ARG	5.2
35	15	51	PHE	5.2
13	4A	116	THR	5.2
9	82	116	LYS	5.2

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Mol	Chain	Res	Type	RSRZ
47	H8	97	GLU	5.2
21	1B	21	TYR	5.2
40	A8	37	ALA	5.2
18	9I	80	PRO	5.2
9	82	117	HIS	5.2
43	95	91	TYR	5.2
14	5A	47	LEU	5.2
47	H8	85	HIS	5.2
6	5E	38	GLU	5.2
11	2I	20	TYR	5.2
3	22	7	PRO	5.1
18	9I	78	LEU	5.1
21	1B	6	ARG	5.1
30	29	54	GLN	5.1
9	82	114	TYR	5.1
14	5A	25	VAL	5.1
32	49	142	PRO	5.1
47	H8	88	PHE	5.1
39	98	109	ALA	5.1
41	B8	1	MET	5.1
40	65	37	ALA	5.1
13	4A	66	LEU	5.1
10	1A	56	HIS	5.0
12	3A	28	LYS	5.0
56	1L	45	G	5.0
47	H8	165	VAL	5.0
17	8I	11	VAL	5.0
17	8I	17	LYS	5.0
51	H5	4	LEU	5.0
33	51	169	VAL	5.0
6	5E	48	LEU	5.0
10	1A	55	LYS	5.0
6	5E	6	VAL	4.9
39	98	116	LEU	4.9
3	2E	166	GLU	4.9
45	F8	88	LYS	4.9
35	15	73	THR	4.9
33	59	159	GLU	4.9
43	D8	1	MET	4.9
34	69	12	LEU	4.9
40	A8	110	LEU	4.9
39	98	88	ARG	4.9

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Mol	Chain	Res	Type	RSRZ
37	35	76	LYS	4.9
43	95	66	ARG	4.9
10	1A	49	VAL	4.9
6	5E	70	ASP	4.9
39	98	8	ARG	4.9
39	98	91	GLN	4.9
6	5E	100	ASN	4.9
55	M5	12	LYS	4.9
18	9I	51	LEU	4.9
3	22	12	LEU	4.9
39	98	102	GLU	4.9
51	H5	39	ASP	4.9
43	D8	54	GLY	4.9
15	6I	2	PRO	4.9
37	35	106	LEU	4.8
6	5E	69	GLU	4.8
40	A8	2	ALA	4.8
42	85	69	CYS	4.8
39	98	33	ARG	4.8
2	1E	5	ILE	4.8
34	61	141	LYS	4.8
4	3E	3	ARG	4.8
32	49	139	LEU	4.8
21	1B	15	ARG	4.8
34	61	75	LEU	4.8
39	98	103	ARG	4.8
2	1E	232	PRO	4.8
40	A8	28	VAL	4.8
2	12	62	ALA	4.8
34	69	134	PRO	4.8
13	4A	101	GLN	4.7
2	1E	230	VAL	4.7
49	F5	21	ARG	4.7
51	H5	12	PRO	4.7
14	5A	56	VAL	4.7
47	H8	96	VAL	4.7
34	61	80	PRO	4.7
51	H5	18	ASP	4.7
51	H5	5	LYS	4.7
40	A8	91	PRO	4.7
34	61	76	THR	4.7
34	69	6	LEU	4.7

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Mol	Chain	Res	Type	RSRZ
39	98	52	ILE	4.6
18	9I	23	LYS	4.6
51	H5	11	SER	4.6
6	5E	46	ARG	4.6
13	4A	103	THR	4.6
28	71	175	VAL	4.6
21	1B	9	ARG	4.6
6	5E	88	VAL	4.6
10	1I	94	VAL	4.6
12	3A	65	GLU	4.6
4	3E	122	ARG	4.6
28	71	12	GLU	4.6
30	21	55	ASN	4.6
6	5E	61	LEU	4.6
34	61	74	ASN	4.6
51	H5	23	LEU	4.6
30	21	88	GLY	4.6
38	88	104	PHE	4.6
47	H8	3	TYR	4.6
18	9I	28	GLU	4.6
43	95	73	SER	4.6
26	14	2833	G	4.6
19	AI	71	LEU	4.6
13	4A	112	GLY	4.6
47	H8	86	VAL	4.6
51	H5	48	GLU	4.6
15	6A	2	PRO	4.6
50	G5	45	SER	4.5
45	F8	81	VAL	4.5
28	71	220	PRO	4.5
38	88	39	PRO	4.5
37	35	71	VAL	4.5
30	29	52	LEU	4.5
47	H8	27	VAL	4.5
40	A8	92	TYR	4.5
34	69	11	ASN	4.5
47	D5	157	LEU	4.5
30	29	34	VAL	4.5
18	9I	81	PHE	4.5
38	88	41	TRP	4.5
46	C5	5	MET	4.5
47	H8	76	LEU	4.5

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Mol	Chain	Res	Type	RSRZ
30	29	77	ILE	4.5
39	98	34	ILE	4.5
15	6I	88	ARG	4.5
6	5E	9	VAL	4.5
51	H5	44	ARG	4.4
43	95	27	ALA	4.4
39	98	44	LEU	4.4
33	51	168	PRO	4.4
47	H8	74	VAL	4.4
45	F8	11	PRO	4.4
18	9I	22	VAL	4.4
4	32	187	ARG	4.4
18	9I	40	LEU	4.4
39	98	86	ARG	4.4
30	29	78	LEU	4.4
48	E5	84	LEU	4.4
6	5E	94	GLN	4.4
49	J8	92	LYS	4.4
4	32	133	VAL	4.4
47	H8	25	PRO	4.4
4	3E	135	LEU	4.4
18	9I	29	PHE	4.4
30	29	70	ALA	4.4
45	F8	90	GLU	4.4
47	H8	95	PRO	4.4
55	M5	64	TYR	4.3
2	12	157	ARG	4.3
33	59	170	ARG	4.3
38	88	100	GLY	4.3
51	H5	20	LYS	4.3
43	95	86	GLY	4.3
32	49	39	ILE	4.3
39	98	117	VAL	4.3
14	5A	60	SER	4.3
39	98	45	ARG	4.3
18	9I	43	PHE	4.3
51	H5	10	LYS	4.3
30	29	55	ASN	4.3
15	6I	87	ILE	4.3
29	19	5	LYS	4.3
6	5E	91	VAL	4.3
39	98	82	GLU	4.3

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Mol	Chain	Res	Type	RSRZ
28	71	47	LEU	4.3
43	D8	55	ALA	4.3
11	2I	91	ARG	4.3
50	K8	43	GLN	4.3
43	95	87	HIS	4.3
50	K8	34	GLU	4.3
3	2E	149	ALA	4.3
10	1A	54	PHE	4.3
4	32	23	GLY	4.3
18	9I	32	ARG	4.3
6	5E	52	ILE	4.3
42	85	72	HIS	4.2
4	32	110	PHE	4.2
51	H5	15	TYR	4.2
51	H5	8	LEU	4.2
13	4A	117	VAL	4.2
34	61	85	GLU	4.2
46	C5	46	LYS	4.2
33	51	128	PRO	4.2
46	C5	45	VAL	4.2
17	8I	15	MET	4.2
28	71	218	MET	4.2
34	69	63	ALA	4.2
2	1E	10	LEU	4.2
43	95	93	GLU	4.2
28	71	28	LEU	4.2
43	D8	99	ILE	4.2
1	1G	1226	C	4.2
9	82	64	THR	4.2
10	1A	53	PRO	4.2
40	A8	47	THR	4.2
3	2E	193	TYR	4.2
18	9I	26	LEU	4.2
10	1A	60	ARG	4.2
18	9I	74	ARG	4.2
10	1A	61	GLU	4.2
56	1L	40	C	4.2
13	4A	104	ARG	4.2
21	1B	22	ARG	4.2
6	5E	56	PRO	4.2
39	98	35	THR	4.2
43	95	64	HIS	4.2

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Mol	Chain	Res	Type	RSRZ
28	71	31	GLU	4.2
34	61	143	SER	4.2
38	88	34	LEU	4.1
13	4A	113	PRO	4.1
4	3E	144	ASP	4.1
37	78	106	LEU	4.1
56	1L	70	C	4.1
13	4A	107	ALA	4.1
12	3I	64	TYR	4.1
39	98	96	ARG	4.1
39	98	104	ARG	4.1
34	61	105	HIS	4.1
33	51	164	TYR	4.1
11	2I	83	ILE	4.1
39	98	51	LEU	4.1
6	5E	47	ARG	4.1
32	49	105	LYS	4.1
3	22	13	GLY	4.1
34	61	107	VAL	4.1
11	2I	29	ILE	4.1
6	5E	43	LEU	4.1
4	32	109	GLY	4.1
11	2I	81	ASP	4.1
29	19	54	ARG	4.1
3	22	199	LYS	4.1
1	1G	1202	G	4.1
17	8I	41	LYS	4.1
23	2K	1	C	4.1
10	1A	51	ARG	4.1
45	F8	89	ILE	4.1
11	2I	30	VAL	4.1
14	5A	55	GLY	4.1
45	F8	13	LEU	4.1
17	8I	20	THR	4.1
14	5A	61	TRP	4.1
18	9I	39	VAL	4.1
47	D5	162	GLU	4.1
11	2I	48	ILE	4.1
10	1A	48	THR	4.0
28	71	208	PHE	4.0
6	5E	31	GLU	4.0
47	D5	55	HIS	4.0

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Mol	Chain	Res	Type	RSRZ
2	12	160	ASP	4.0
30	29	51	PHE	4.0
34	61	139	GLN	4.0
12	3A	54	LYS	4.0
47	H8	28	MET	4.0
4	32	126	ILE	4.0
37	35	75	ILE	4.0
3	2E	200	ALA	4.0
9	82	120	ARG	4.0
32	49	62	LEU	4.0
3	22	146	ALA	4.0
22	1K	3	G	4.0
18	9I	75	ILE	4.0
38	88	92	GLY	4.0
27	16	0	A	4.0
28	71	173	ALA	4.0
38	88	20	ALA	4.0
4	32	67	ILE	4.0
14	5A	53	LEU	4.0
18	9I	65	ILE	4.0
40	A8	7	TYR	4.0
26	14	4	C	4.0
6	5E	65	VAL	4.0
29	19	16	MET	4.0
38	88	2	LEU	4.0
6	5E	86	ARG	4.0
11	2I	31	THR	4.0
37	35	35	HIS	4.0
38	88	28	ALA	4.0
33	51	87	LEU	3.9
10	1A	63	PHE	3.9
30	21	89	ASP	3.9
40	A8	39	ILE	3.9
47	H8	164	ALA	3.9
4	32	160	GLN	3.9
28	71	8	ARG	3.9
15	6I	3	ILE	3.9
17	8I	21	VAL	3.9
45	F8	51	VAL	3.9
34	69	3	VAL	3.9
26	14	2901	C	3.9
34	69	1	MET	3.9

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Mol	Chain	Res	Type	RSRZ
14	5A	41	ARG	3.9
6	5E	37	VAL	3.9
4	3E	124	GLY	3.9
4	3E	134	ASP	3.9
14	5A	49	HIS	3.9
26	14	1913	A	3.9
27	16	119	A	3.9
4	32	70	ILE	3.9
40	A8	82	ILE	3.9
11	2I	107	SER	3.9
30	29	53	PRO	3.9
38	88	33	GLY	3.9
39	98	93	GLY	3.9
51	L8	33	GLN	3.9
43	D8	56	SER	3.9
30	21	54	GLN	3.9
53	N8	34	PRO	3.8
37	35	70	GLN	3.8
6	52	36	ARG	3.8
47	H8	87	ASP	3.8
43	95	96	ILE	3.8
29	19	211	ARG	3.8
39	98	53	HIS	3.8
47	H8	161	VAL	3.8
18	9I	69	THR	3.8
17	8I	22	LEU	3.8
47	D5	54	HIS	3.8
6	5E	59	TYR	3.8
13	4A	108	ARG	3.8
52	M8	31	ILE	3.8
6	5E	72	VAL	3.8
39	98	29	LEU	3.8
11	2I	68	ALA	3.8
6	5E	87	ARG	3.8
37	78	138	LEU	3.8
43	D8	39	LEU	3.8
35	15	98	VAL	3.8
30	29	90	THR	3.8
47	H8	73	GLN	3.8
45	B5	79	ALA	3.8
47	H8	72	ARG	3.8
28	71	4	GLY	3.8

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Mol	Chain	Res	Type	RSRZ
10	1A	57	LYS	3.8
28	71	49	ILE	3.8
26	1H	1536	A	3.8
33	59	153	LYS	3.8
26	1H	2165	G	3.8
32	41	135	LEU	3.8
28	71	58	VAL	3.8
30	29	59	VAL	3.8
45	F8	52	VAL	3.8
39	98	50	HIS	3.8
4	32	169	LYS	3.7
37	35	108	LYS	3.7
18	9I	62	GLU	3.7
51	H5	32	GLN	3.7
51	H5	31	LEU	3.7
29	19	15	PHE	3.7
21	1B	5	ASP	3.7
56	1L	12	U	3.7
2	1E	127	ILE	3.7
6	5E	73	ASN	3.7
28	71	5	LYS	3.7
45	F8	50	LYS	3.7
51	H5	7	LYS	3.7
26	14	229	A	3.7
17	8I	50	LYS	3.7
43	D8	38	LEU	3.7
33	51	159	GLU	3.7
47	H8	84	GLU	3.7
4	32	68	TYR	3.7
40	A8	101	LEU	3.7
41	75	6	LEU	3.7
4	32	189	PRO	3.7
26	1H	2116	G	3.7
49	F5	36	GLY	3.7
19	AI	12	ASP	3.7
51	H5	56	VAL	3.7
18	9I	21	LYS	3.7
47	H8	98	MET	3.7
15	6I	38	ARG	3.7
47	D5	156	LYS	3.7
21	1B	10	ARG	3.7
6	5E	60	PHE	3.7

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Mol	Chain	Res	Type	RSRZ
39	98	97	VAL	3.7
56	1L	1	G	3.7
38	45	104	PHE	3.7
45	F8	83	VAL	3.7
35	15	70	LYS	3.7
34	61	144	VAL	3.7
48	I8	40	GLN	3.7
17	8I	13	ASP	3.7
28	71	13	LYS	3.7
38	88	137	TYR	3.7
37	35	74	GLU	3.7
39	98	36	THR	3.7
26	1H	2108	C	3.7
3	2E	202	ILE	3.7
4	32	27	TYR	3.7
47	H8	38	TYR	3.7
3	22	15	THR	3.6
47	D5	68	PRO	3.6
26	14	2902	C	3.6
43	95	72	VAL	3.6
34	69	17	GLN	3.6
40	A8	109	GLY	3.6
51	H5	49	LYS	3.6
18	9I	42	ARG	3.6
34	69	67	ARG	3.6
47	H8	121	HIS	3.6
35	15	48	MET	3.6
6	5E	93	SER	3.6
38	88	105	GLU	3.6
43	D8	35	LEU	3.6
50	G5	44	LEU	3.6
47	H8	7	ALA	3.6
21	1B	18	TYR	3.6
4	32	125	HIS	3.6
46	C5	63	LYS	3.6
55	M5	21	LYS	3.6
4	32	198	VAL	3.6
13	4A	97	PRO	3.6
45	F8	28	PHE	3.6
30	29	28	ALA	3.6
10	1A	50	ILE	3.6
12	3A	85	ILE	3.6

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Mol	Chain	Res	Type	RSRZ
19	AI	31	ILE	3.6
34	69	138	ILE	3.6
42	85	67	ALA	3.6
30	29	74	PRO	3.6
40	65	58	LEU	3.6
50	K8	15	LYS	3.6
11	2I	110	ASP	3.6
26	14	5	A	3.6
38	88	80	GLU	3.6
4	32	162	LEU	3.6
34	61	84	GLY	3.6
2	1E	152	PHE	3.6
17	8I	71	PHE	3.6
7	62	8	GLU	3.6
51	H5	3	ARG	3.6
45	F8	5	TYR	3.6
47	H8	26	GLY	3.6
47	H8	79	ARG	3.6
47	H8	81	ARG	3.6
18	9I	33	ASP	3.6
34	61	86	THR	3.6
20	BA	13	LEU	3.6
34	69	35	LEU	3.6
39	98	54	LEU	3.6
43	95	40	LEU	3.6
48	E5	21	LEU	3.6
51	H5	53	LEU	3.6
20	BA	8	ARG	3.6
3	2E	182	ILE	3.6
35	15	136	GLU	3.6
43	D8	57	VAL	3.6
47	H8	162	GLU	3.6
18	9I	20	ALA	3.6
39	98	112	ALA	3.6
6	5E	58	GLY	3.6
4	3E	118	ARG	3.5
4	32	69	GLY	3.5
9	82	93	ARG	3.5
37	35	77	ARG	3.5
32	41	80	PHE	3.5
30	29	48	GLN	3.5
35	15	55	VAL	3.5

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Mol	Chain	Res	Type	RSRZ
45	F8	8	ILE	3.5
22	1K	73	A	3.5
6	5E	92	LYS	3.5
40	65	57	LYS	3.5
38	88	97	VAL	3.5
43	95	75	PHE	3.5
43	95	81	TYR	3.5
17	8I	44	ALA	3.5
26	14	932	G	3.5
7	62	33	ASP	3.5
3	2E	170	GLN	3.5
39	98	21	TYR	3.5
3	2E	153	VAL	3.5
4	32	108	LEU	3.5
38	88	17	LEU	3.5
12	3I	63	GLY	3.5
26	1H	2476	A	3.5
6	5E	95	GLU	3.5
45	F8	76	ARG	3.5
40	A8	44	LYS	3.5
2	1E	233	SER	3.5
4	3E	152	SER	3.5
12	3A	62	SER	3.5
40	A8	87	PHE	3.5
35	15	74	ARG	3.5
32	41	39	ILE	3.5
43	95	74	LYS	3.5
51	H5	37	LEU	3.5
4	3E	153	ARG	3.5
6	5E	84	ASN	3.5
26	1H	2790	A	3.5
34	69	20	ASP	3.5
39	98	90	ARG	3.5
15	6I	79	ARG	3.5
3	2E	189	ALA	3.5
11	2I	35	PRO	3.5
30	29	30	PRO	3.5
17	8I	23	VAL	3.5
17	8I	37	LYS	3.4
37	78	135	LEU	3.4
40	A8	23	ARG	3.4
51	H5	6	VAL	3.4

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Mol	Chain	Res	Type	RSRZ
43	D8	40	LEU	3.4
13	4A	105	THR	3.4
47	H8	66	SER	3.4
14	5I	2	ALA	3.4
32	41	137	GLU	3.4
37	35	65	ARG	3.4
18	9A	26	LEU	3.4
2	12	152	PHE	3.4
18	9I	83	GLU	3.4
1	1G	1227	A	3.4
34	69	2	LYS	3.4
39	98	40	LYS	3.4
43	95	94	LEU	3.4
43	95	88	ARG	3.4
9	82	125	TYR	3.4
30	29	72	VAL	3.4
43	95	5	VAL	3.4
29	19	6	PHE	3.4
43	D8	16	PRO	3.4
17	8I	86	GLU	3.4
11	2I	19	ALA	3.4
15	6I	46	HIS	3.4
45	F8	48	LYS	3.4
4	3E	155	LEU	3.4
39	98	48	VAL	3.4
4	32	29	PRO	3.4
42	85	90	VAL	3.4
43	95	45	THR	3.4
34	69	109	ILE	3.4
11	2I	36	ASP	3.4
43	D8	36	PRO	3.4
28	71	33	ALA	3.4
39	98	67	LEU	3.4
3	22	8	ILE	3.4
34	61	125	GLU	3.4
34	69	5	LEU	3.4
37	35	107	LYS	3.4
38	88	130	LYS	3.4
17	8I	8	GLY	3.4
45	F8	93	GLU	3.4
35	15	87	LEU	3.4
40	A8	26	LEU	3.4

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Mol	Chain	Res	Type	RSRZ
17	8I	97	SER	3.4
4	3E	139	ARG	3.4
34	61	77	LEU	3.3
40	65	56	LEU	3.3
37	35	145	PRO	3.3
38	88	99	PRO	3.3
49	J8	51	VAL	3.3
17	8I	51	TYR	3.3
18	9I	50	ILE	3.3
40	A8	94	TYR	3.3
49	F5	22	GLY	3.3
4	32	188	LEU	3.3
18	9I	82	THR	3.3
7	62	7	ALA	3.3
46	C5	53	PRO	3.3
19	AI	13	ASP	3.3
32	49	177	GLY	3.3
4	32	185	PHE	3.3
34	61	122	GLU	3.3
38	88	32	TYR	3.3
38	88	68	ILE	3.3
2	1E	228	GLY	3.3
31	31	27	GLU	3.3
37	35	47	ASP	3.3
49	J8	95	LEU	3.3
35	15	90	MET	3.3
2	12	132	LYS	3.3
29	19	17	THR	3.3
45	F8	84	ALA	3.3
47	D5	97	GLU	3.3
53	N8	45	VAL	3.3
34	61	113	ARG	3.3
47	D5	88	PHE	3.3
4	32	192	GLU	3.3
33	59	171	LEU	3.3
2	1E	81	VAL	3.3
31	31	28	ILE	3.3
34	69	13	GLY	3.3
17	8I	43	LEU	3.3
17	8I	19	VAL	3.3
3	22	39	ILE	3.3
29	19	181	GLU	3.3

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Mol	Chain	Res	Type	RSRZ
17	8I	42	TYR	3.3
29	19	4	LYS	3.3
45	F8	9	LEU	3.3
48	I8	41	ARG	3.3
11	2I	67	ASP	3.3
38	88	103	MET	3.3
52	M8	42	PHE	3.3
6	5E	8	ILE	3.3
21	1B	3	LYS	3.3
28	71	48	GLY	3.3
45	F8	86	GLY	3.3
38	88	37	LEU	3.3
52	M8	34	GLU	3.3
13	4I	6	GLY	3.3
2	12	154	LEU	3.3
30	29	31	CYS	3.3
4	32	34	GLU	3.3
7	62	32	ARG	3.3
33	51	96	ALA	3.3
39	98	83	ILE	3.3
17	8I	45	HIS	3.3
37	78	105	LEU	3.3
39	98	70	LEU	3.3
45	B5	92	LEU	3.3
2	1E	159	PRO	3.3
29	19	208	LYS	3.3
30	29	1	MET	3.3
30	29	181	LEU	3.3
6	5E	97	PHE	3.3
17	8I	10	VAL	3.3
45	B5	54	VAL	3.3
12	3A	48	PRO	3.2
47	H8	75	ASN	3.2
18	9A	43	PHE	3.2
39	98	99	LYS	3.2
29	19	212	SER	3.2
37	35	82	GLY	3.2
39	98	9	LYS	3.2
47	H8	91	LEU	3.2
37	35	95	VAL	3.2
51	H5	16	PRO	3.2
30	29	2	LYS	3.2

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Mol	Chain	Res	Type	RSRZ
40	65	33	LYS	3.2
47	D5	5	LEU	3.2
2	1E	67	THR	3.2
51	H5	58	VAL	3.2
4	3E	151	LYS	3.2
37	35	64	LYS	3.2
40	A8	102	ALA	3.2
45	F8	29	TRP	3.2
51	L8	8	LEU	3.2
28	71	29	VAL	3.2
49	J8	70	VAL	3.2
6	5E	14	LEU	3.2
40	65	20	ARG	3.2
43	95	95	LEU	3.2
12	3A	39	VAL	3.2
42	85	66	ASN	3.2
46	C5	30	VAL	3.2
51	H5	36	VAL	3.2
12	3A	57	LYS	3.2
17	8I	80	GLY	3.2
30	29	58	ARG	3.2
32	49	94	LEU	3.2
47	H8	55	HIS	3.2
7	62	2	ALA	3.2
47	D5	96	VAL	3.2
51	H5	54	VAL	3.2
34	69	64	GLU	3.2
17	8I	59	ILE	3.2
28	71	27	HIS	3.2
47	D5	165	VAL	3.2
54	L5	14	LYS	3.2
34	61	103	ARG	3.2
23	2L	40	C	3.2
4	3E	108	LEU	3.2
19	AI	15	LEU	3.2
43	95	85	LYS	3.2
45	F8	49	VAL	3.2
55	M5	49	VAL	3.2
6	5E	10	LEU	3.2
47	H8	5	LEU	3.2
9	82	122	ALA	3.2
34	69	61	ARG	3.2

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Mol	Chain	Res	Type	RSRZ
51	H5	38	GLU	3.2
12	3A	27	LEU	3.2
15	6I	39	LEU	3.2
55	M5	16	ILE	3.2
45	F8	15	GLU	3.2
3	22	16	ARG	3.2
4	32	161	ASN	3.2
15	6I	63	ARG	3.2
51	H5	46	ASN	3.2
18	9I	76	LEU	3.1
29	19	214	TRP	3.1
34	6I	138	ILE	3.1
30	21	58	ARG	3.1
33	51	170	ARG	3.1
38	45	102	VAL	3.1
42	85	68	ALA	3.1
15	6I	4	THR	3.1
42	85	63	VAL	3.1
28	71	3	HIS	3.1
35	15	34	LEU	3.1
42	85	55	ARG	3.1
45	F8	45	THR	3.1
32	49	63	ILE	3.1
40	65	108	GLY	3.1
35	15	13	TRP	3.1
24	3K	16	U	3.1
38	88	36	ALA	3.1
39	98	42	LYS	3.1
42	85	47	TYR	3.1
2	1E	115	LEU	3.1
29	19	36	PRO	3.1
47	D5	158	PRO	3.1
4	32	112	VAL	3.1
29	19	2	ALA	3.1
16	7I	49	LEU	3.1
40	A8	78	LEU	3.1
40	A8	40	ILE	3.1
45	B5	3	THR	3.1
45	F8	7	VAL	3.1
47	H8	71	VAL	3.1
51	L8	59	VAL	3.1
47	H8	8	TYR	3.1

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Mol	Chain	Res	Type	RSRZ
3	22	155	GLY	3.1
26	1H	2126	A	3.1
14	5A	26	ARG	3.1
33	59	157	TYR	3.1
51	L8	53	LEU	3.1
11	2I	119	CYS	3.1
2	12	37	ASN	3.1
7	62	31	MET	3.1
37	35	18	ARG	3.1
4	3E	111	ALA	3.1
15	6I	67	LEU	3.1
3	22	186	PHE	3.1
30	29	50	GLY	3.1
48	I8	42	GLY	3.1
6	52	89	MET	3.1
43	D8	60	GLU	3.1
45	B5	33	LYS	3.1
4	32	35	ARG	3.1
40	A8	35	ILE	3.1
40	A8	90	GLY	3.1
54	L5	18	PHE	3.1
11	2I	109	VAL	3.1
32	49	135	LEU	3.1
34	69	14	ASP	3.1
14	5A	45	ARG	3.1
40	A8	12	PHE	3.1
43	95	89	GLN	3.1
40	A8	11	LYS	3.1
40	A8	46	VAL	3.1
49	F5	32	LYS	3.1
56	1L	66	A	3.1
11	2I	118	GLY	3.1
32	41	64	THR	3.1
53	N8	35	GLU	3.1
28	71	59	ARG	3.1
4	32	111	ALA	3.1
47	H8	171	ILE	3.0
26	1H	2117	A	3.0
26	1H	2798	C	3.0
19	AI	60	VAL	3.0
39	98	113	LEU	3.0
3	2E	150	LYS	3.0

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Mol	Chain	Res	Type	RSRZ
14	5I	15	LYS	3.0
43	95	15	GLU	3.0
46	C5	44	ILE	3.0
21	1B	7	ARG	3.0
35	15	50	ASP	3.0
36	25	42	SER	3.0
2	12	133	LYS	3.0
16	7I	37	GLY	3.0
46	C5	79	CYS	3.0
48	I8	61	ALA	3.0
3	22	179	ARG	3.0
12	3A	63	GLY	3.0
56	1L	4	U	3.0
11	2I	82	VAL	3.0
2	1E	155	LEU	3.0
20	BA	10	LEU	3.0
43	95	39	LEU	3.0
47	H8	155	LEU	3.0
19	AI	49	ILE	3.0
26	14	1185	C	3.0
32	41	72	ARG	3.0
3	2E	154	SER	3.0
17	8I	79	SER	3.0
2	12	80	ILE	3.0
39	98	55	ALA	3.0
17	8I	52	LYS	3.0
32	41	75	LYS	3.0
22	1K	71	C	3.0
32	49	41	GLN	3.0
43	95	18	LEU	3.0
32	41	23	PHE	3.0
34	69	36	ALA	3.0
17	8I	9	VAL	3.0
37	35	125	VAL	3.0
11	2I	116	HIS	3.0
26	14	277	C	3.0
33	59	160	LYS	3.0
4	32	117	ALA	3.0
26	14	274	G	3.0
33	51	86	GLU	3.0
35	15	58	ASP	3.0
12	3A	32	PHE	3.0

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Mol	Chain	Res	Type	RSRZ
19	AI	42	PRO	3.0
21	1B	12	LYS	3.0
47	D5	50	GLN	3.0
4	32	118	ARG	3.0
30	29	75	VAL	3.0
37	78	125	VAL	3.0
50	K8	21	LEU	3.0
21	1B	8	THR	3.0
48	I8	45	PHE	3.0
48	I8	68	GLU	3.0
40	A8	86	ALA	3.0
47	D5	51	ALA	3.0
51	H5	43	ILE	3.0
39	98	100	LEU	3.0
25	4K	13	A	3.0
38	88	89	ASN	3.0
38	88	12	GLN	3.0
39	98	32	GLY	2.9
4	3E	5	ILE	2.9
43	D8	100	ARG	2.9
47	D5	126	VAL	2.9
51	H5	59	VAL	2.9
48	I8	69	PHE	2.9
28	71	174	PRO	2.9
2	1E	149	LEU	2.9
4	3E	148	VAL	2.9
1	1G	1286	A	2.9
3	22	184	TYR	2.9
11	2I	84	VAL	2.9
16	7I	19	ILE	2.9
17	8I	7	THR	2.9
34	6I	12	LEU	2.9
47	H8	90	VAL	2.9
3	2E	179	ARG	2.9
34	6I	82	ARG	2.9
26	14	1184	G	2.9
29	19	216	GLY	2.9
38	88	128	LYS	2.9
47	H8	127	LYS	2.9
28	71	207	THR	2.9
47	H8	163	LEU	2.9
20	BI	87	LYS	2.9

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Mol	Chain	Res	Type	RSRZ
34	69	135	GLU	2.9
38	88	98	LYS	2.9
11	2I	73	MET	2.9
14	5A	10	ALA	2.9
34	61	65	ALA	2.9
52	M8	35	VAL	2.9
47	D5	134	PRO	2.9
53	J5	55	ARG	2.9
43	95	76	LYS	2.9
40	A8	30	ARG	2.9
47	H8	89	PHE	2.9
51	H5	52	HIS	2.9
43	D8	34	GLU	2.9
39	98	46	GLY	2.9
15	6I	77	ARG	2.9
34	69	68	LEU	2.9
40	A8	41	ASP	2.9
43	95	4	ILE	2.9
6	5E	29	ALA	2.9
43	D8	3	ALA	2.9
30	2I	6	GLY	2.9
47	H8	82	ARG	2.9
48	I8	25	ARG	2.9
9	82	65	VAL	2.9
11	2I	77	MET	2.9
18	9I	70	ILE	2.9
37	78	130	PHE	2.9
16	7I	39	TYR	2.9
39	98	84	ALA	2.9
2	1E	217	ARG	2.9
11	2I	120	ARG	2.9
29	19	13	ARG	2.9
35	15	26	LEU	2.9
42	85	71	GLN	2.9
45	F8	10	ALA	2.9
48	I8	26	TYR	2.9
33	59	142	GLY	2.9
34	61	13	GLY	2.9
28	71	41	VAL	2.9
29	11	270	ILE	2.9
29	19	51	VAL	2.9
33	51	107	VAL	2.9

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Mol	Chain	Res	Type	RSRZ
30	29	67	PHE	2.9
14	5I	8	GLU	2.9
38	88	25	ASP	2.9
40	A8	83	LYS	2.9
11	2I	16	SER	2.8
39	55	8	ARG	2.8
4	32	4	TYR	2.8
48	E5	71	ASP	2.8
26	14	931	G	2.8
29	19	219	PRO	2.8
32	41	19	LEU	2.8
47	H8	24	LEU	2.8
3	22	14	ILE	2.8
35	15	46	VAL	2.8
38	88	11	LYS	2.8
47	H8	99	TYR	2.8
12	3A	77	LEU	2.8
19	AI	16	LEU	2.8
21	1B	4	GLY	2.8
37	35	45	LEU	2.8
47	D5	91	LEU	2.8
11	2I	21	ILE	2.8
55	M5	22	VAL	2.8
19	AI	29	ARG	2.8
18	9I	71	LYS	2.8
3	22	28	GLN	2.8
4	3E	154	ASN	2.8
34	61	70	GLU	2.8
7	62	30	ILE	2.8
14	5A	42	ILE	2.8
16	7I	51	VAL	2.8
35	15	53	VAL	2.8
11	2I	22	HIS	2.8
38	45	69	PHE	2.8
39	98	31	HIS	2.8
39	98	47	PHE	2.8
50	K8	20	GLU	2.8
26	14	933	A	2.8
17	8I	74	LEU	2.8
37	35	30	THR	2.8
39	98	57	ARG	2.8
47	H8	36	LYS	2.8

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Mol	Chain	Res	Type	RSRZ
47	H8	69	THR	2.8
56	1L	27	G	2.8
32	41	63	ILE	2.8
28	71	16	PRO	2.8
4	3E	145	GLU	2.8
36	25	41	ALA	2.8
13	4A	100	GLY	2.8
17	8I	53	LEU	2.8
29	19	56	GLY	2.8
28	71	43	VAL	2.8
3	22	19	GLU	2.8
37	78	136	GLU	2.8
15	6I	85	LEU	2.8
30	21	5	LEU	2.8
54	L5	2	LYS	2.8
15	6I	36	ILE	2.8
13	4A	73	GLU	2.8
39	55	60	LEU	2.8
26	1H	2151	G	2.8
56	1L	22	G	2.8
50	K8	29	LYS	2.8
4	32	164	ALA	2.8
47	H8	150	LEU	2.8
38	88	40	ALA	2.8
43	95	36	PRO	2.8
2	1E	55	PHE	2.8
34	69	18	VAL	2.8
12	3A	21	LYS	2.8
37	35	46	LYS	2.8
43	95	34	GLU	2.8
51	H5	17	LYS	2.8
4	32	196	LEU	2.8
1	1G	973	G	2.8
2	12	79	ASP	2.8
4	32	146	ILE	2.8
17	8I	90	ILE	2.8
40	A8	89	ARG	2.8
26	1H	2132	U	2.8
2	1E	83	MET	2.8
4	32	154	ASN	2.8
6	5E	40	VAL	2.8
30	29	96	PHE	2.8

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Mol	Chain	Res	Type	RSRZ
45	F8	6	ASP	2.8
7	62	38	LEU	2.7
17	8I	4	LYS	2.7
37	35	72	PRO	2.7
15	6I	62	GLN	2.7
38	88	129	THR	2.7
53	N8	43	HIS	2.7
38	88	48	GLU	2.7
46	C5	62	GLU	2.7
47	H8	77	ASP	2.7
18	9I	85	LEU	2.7
1	1G	1190	G	2.7
38	88	65	PHE	2.7
51	L8	32	GLN	2.7
4	32	186	LEU	2.7
42	85	57	PHE	2.7
46	C5	6	HIS	2.7
38	88	7	MET	2.7
30	21	51	PHE	2.7
40	A8	29	PHE	2.7
3	2E	199	LYS	2.7
47	D5	49	ARG	2.7
47	D5	52	SER	2.7
3	22	52	LEU	2.7
17	8I	84	LEU	2.7
19	AI	30	LEU	2.7
30	29	5	LEU	2.7
35	15	43	THR	2.7
43	D8	32	THR	2.7
42	85	40	PHE	2.7
17	8I	73	VAL	2.7
28	71	14	VAL	2.7
28	71	167	LYS	2.7
34	61	109	ILE	2.7
7	62	104	LEU	2.7
29	19	147	LEU	2.7
37	35	68	GLN	2.7
35	15	56	ASN	2.7
35	15	127	ASP	2.7
14	5A	23	ARG	2.7
29	19	247	ALA	2.7
38	88	91	GLU	2.7

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Mol	Chain	Res	Type	RSRZ
38	45	91	GLU	2.7
43	D8	27	ALA	2.7
43	95	60	GLU	2.7
20	BI	91	LEU	2.7
39	98	79	LEU	2.7
37	78	124	LYS	2.7
45	F8	24	GLY	2.7
17	8I	91	ARG	2.7
15	6I	43	LEU	2.7
29	19	206	LEU	2.7
4	3E	181	MET	2.7
29	19	53	PHE	2.7
39	98	106	GLY	2.7
9	82	119	ALA	2.7
11	2I	117	ASN	2.7
38	88	136	ALA	2.7
39	98	10	LEU	2.7
51	L8	28	LEU	2.7
6	52	66	GLU	2.7
11	2I	50	TYR	2.7
38	88	74	TYR	2.7
39	98	81	ASP	2.7
43	95	70	ILE	2.7
4	32	19	LEU	2.7
17	8I	18	THR	2.7
20	BI	92	LEU	2.7
26	1H	2140	C	2.7
31	31	123	LEU	2.7
35	15	91	LEU	2.7
6	5E	51	PRO	2.7
29	19	235	GLY	2.7
37	35	51	PHE	2.7
9	82	62	TYR	2.7
38	88	26	TYR	2.7
42	85	62	ILE	2.7
11	2I	18	ARG	2.7
47	H8	167	PRO	2.7
2	1E	148	TYR	2.6
35	15	57	ALA	2.7
51	H5	22	ALA	2.7
12	3A	84	LEU	2.6
49	F5	26	ARG	2.6

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Mol	Chain	Res	Type	RSRZ
42	C8	90	VAL	2.6
46	C5	7	VAL	2.6
26	1H	2129	C	2.6
35	15	121	LYS	2.6
38	88	18	LYS	2.6
46	C5	75	ILE	2.6
49	J8	91	LYS	2.6
40	A8	25	ARG	2.6
55	M5	58	ILE	2.6
16	7I	48	TRP	2.6
39	98	80	PHE	2.6
30	29	41	LYS	2.6
38	88	102	VAL	2.6
48	I8	46	LYS	2.6
17	8I	36	ILE	2.6
35	15	72	TYR	2.6
39	98	98	LEU	2.6
34	61	73	GLU	2.6
2	1E	88	ALA	2.6
3	22	174	PRO	2.6
40	A8	51	ALA	2.6
3	2E	172	ARG	2.6
4	32	114	ARG	2.6
13	4A	88	ARG	2.6
28	71	197	GLU	2.6
46	C5	58	GLY	2.6
19	AI	20	LEU	2.6
34	61	78	THR	2.6
4	3E	125	HIS	2.6
13	4A	31	LYS	2.6
12	3A	41	ARG	2.6
37	78	94	GLU	2.6
40	A8	81	GLY	2.6
47	D5	98	MET	2.6
4	32	134	ASP	2.6
51	H5	33	GLN	2.6
11	2I	32	ILE	2.6
34	69	9	LEU	2.6
5	42	94	ALA	2.6
28	71	170	ALA	2.6
4	32	128	VAL	2.6
29	19	234	GLY	2.6

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Mol	Chain	Res	Type	RSRZ
34	69	21	VAL	2.6
37	35	92	GLU	2.6
19	AI	44	MET	2.6
13	4A	115	LYS	2.6
15	6I	74	ASP	2.6
17	8I	40	LYS	2.6
32	49	140	ILE	2.6
35	15	99	LEU	2.6
37	78	114	ILE	2.6
29	19	217	ARG	2.6
29	19	254	THR	2.6
38	88	10	ARG	2.6
43	D8	58	VAL	2.6
47	D5	128	VAL	2.6
47	D5	161	VAL	2.6
4	3E	146	ILE	2.6
6	5E	98	LEU	2.6
20	BA	104	LEU	2.6
47	H8	57	ILE	2.6
50	K8	16	LEU	2.6
6	5E	74	ASP	2.6
26	1H	2141	G	2.6
30	21	76	ARG	2.6
37	35	16	ARG	2.6
40	65	112	PHE	2.6
53	J5	51	TYR	2.6
30	21	75	VAL	2.6
9	82	112	LYS	2.6
39	98	56	LYS	2.6
4	3E	137	SER	2.6
35	15	117	PHE	2.6
28	71	165	ASN	2.6
7	62	29	LYS	2.6
11	2I	71	LYS	2.6
15	6I	27	VAL	2.6
35	15	44	PRO	2.6
45	F8	12	VAL	2.6
46	C5	42	VAL	2.6
53	N8	47	PRO	2.6
12	3A	99	HIS	2.6
4	3E	131	ARG	2.6
55	M5	50	LEU	2.6

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Mol	Chain	Res	Type	RSRZ
56	1L	65	C	2.6
2	12	163	PHE	2.6
14	5A	48	ALA	2.6
15	6A	15	PHE	2.6
39	98	41	ALA	2.6
45	F8	91	ALA	2.6
2	1E	227	GLY	2.6
2	12	156	LYS	2.6
12	3A	87	GLY	2.6
32	41	37	VAL	2.6
37	35	14	LYS	2.6
48	I8	79	VAL	2.6
19	AI	76	PRO	2.6
51	L8	4	LEU	2.6
2	1E	68	ILE	2.6
26	14	1177	A	2.6
3	22	44	GLU	2.6
37	78	113	LYS	2.6
38	88	88	GLY	2.6
48	I8	76	GLY	2.6
30	29	79	ARG	2.6
49	F5	49	VAL	2.6
55	M5	23	VAL	2.6
38	88	79	LEU	2.6
45	B5	55	ASN	2.6
4	3E	127	THR	2.6
28	71	215	THR	2.6
29	19	58	HIS	2.6
28	71	7	TYR	2.5
2	1E	118	LEU	2.5
51	H5	13	ILE	2.5
3	22	176	HIS	2.5
42	85	70	ARG	2.5
46	C5	64	GLU	2.5
51	H5	57	GLU	2.5
2	12	155	LEU	2.5
15	6I	81	LEU	2.5
34	69	4	ILE	2.5
2	1E	96	ARG	2.5
4	3E	150	GLU	2.5
5	42	109	ILE	2.5
23	2L	39	A	2.5

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Mol	Chain	Res	Type	RSRZ
30	29	7	VAL	2.5
56	1L	15	G	2.5
13	4A	96	LEU	2.5
38	88	69	PHE	2.5
38	88	4	PRO	2.5
1	1G	1115	C	2.5
28	71	40	THR	2.5
31	31	6	VAL	2.5
34	69	19	VAL	2.5
18	9I	44	LEU	2.5
3	2E	164	ARG	2.5
28	71	210	ARG	2.5
29	11	262	ARG	2.5
45	B5	28	PHE	2.5
45	B5	80	ILE	2.5
33	51	124	GLU	2.5
43	D8	26	ASP	2.5
47	H8	68	PRO	2.5
29	11	166	GLN	2.5
2	1E	157	ARG	2.5
51	H5	55	ARG	2.5
32	41	88	ILE	2.5
56	1L	31	A	2.5
10	1I	61	GLU	2.5
2	12	131	PRO	2.5
4	32	175	SER	2.5
39	98	14	SER	2.5
44	E8	38	TYR	2.5
34	61	123	LEU	2.5
35	15	67	LEU	2.5
37	35	111	ARG	2.5
47	D5	70	LEU	2.5
29	19	18	VAL	2.5
2	1E	102	LEU	2.5
2	1E	213	LEU	2.5
34	69	16	GLY	2.5
34	69	72	LEU	2.5
38	88	23	GLY	2.5
2	1E	216	SER	2.5
26	1H	2152	G	2.5
43	95	32	THR	2.5
2	1E	187	LEU	2.5

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Mol	Chain	Res	Type	RSRZ
2	1E	236	TYR	2.5
3	22	101	LEU	2.5
10	1A	34	VAL	2.5
40	A8	79	ALA	2.5
45	B5	24	GLY	2.5
43	D8	92	THR	2.5
15	6I	31	LEU	2.5
26	14	845	G	2.5
38	88	141	GLN	2.5
43	95	24	LYS	2.5
24	3K	5	C	2.5
43	95	28	GLU	2.5
48	I8	82	ARG	2.5
2	12	112	VAL	2.5
2	12	115	LEU	2.5
16	7I	53	VAL	2.5
51	H5	47	VAL	2.5
17	8I	95	TYR	2.5
3	2E	203	PHE	2.5
11	2I	113	PRO	2.5
32	49	157	ILE	2.5
42	85	56	ASP	2.5
43	D8	53	GLU	2.5
28	71	209	LEU	2.4
53	J5	54	GLY	2.4
48	I8	78	TYR	2.4
37	78	79	ARG	2.4
40	A8	13	ARG	2.4
55	M5	40	GLU	2.4
3	2E	151	VAL	2.4
11	2I	45	GLY	2.4
34	69	34	GLY	2.4
43	95	46	VAL	2.4
4	3E	147	ALA	2.4
19	AI	23	ASN	2.4
32	41	146	TYR	2.4
26	14	2900	A	2.4
30	21	90	THR	2.4
51	H5	40	THR	2.4
19	AA	76	PRO	2.4
42	C8	88	ILE	2.4
43	95	84	LYS	2.4

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Mol	Chain	Res	Type	RSRZ
30	21	25	VAL	2.4
39	55	51	LEU	2.4
40	A8	73	LEU	2.4
37	35	79	ARG	2.4
43	D8	2	PHE	2.4
51	H5	21	ALA	2.4
34	69	10	GLU	2.4
39	98	39	PRO	2.4
47	H8	78	LYS	2.4
4	3E	120	LEU	2.4
30	21	78	LEU	2.4
32	41	94	LEU	2.4
35	15	138	LEU	2.4
46	C5	59	GLY	2.4
48	I8	56	ASP	2.4
2	1E	111	ARG	2.4
6	52	38	GLU	2.4
47	H8	4	ARG	2.4
1	1G	1187	G	2.4
45	F8	31	HIS	2.4
29	19	153	ALA	2.4
45	B5	53	LYS	2.4
30	29	81	ILE	2.4
38	88	42	ILE	2.4
15	6I	13	GLN	2.4
39	55	91	GLN	2.4
30	29	182	LEU	2.4
32	49	152	LEU	2.4
47	H8	83	PRO	2.4
3	22	17	ASP	2.4
26	14	2161	C	2.4
42	85	85	LYS	2.4
4	32	15	GLU	2.4
17	8I	24	GLU	2.4
3	2E	196	LEU	2.4
15	6I	28	GLN	2.4
21	1B	11	GLY	2.4
37	78	95	VAL	2.4
28	71	46	LYS	2.4
26	1H	2167	U	2.4
34	69	60	GLU	2.4
39	98	25	ALA	2.4

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Mol	Chain	Res	Type	RSRZ
57	3L	35	U	2.4
16	7I	42	ARG	2.4
33	51	3	ARG	2.4
45	F8	60	ARG	2.4
40	65	48	LEU	2.4
2	1E	101	MET	2.4
6	5E	96	PRO	2.4
22	1K	64	G	2.4
45	F8	21	PHE	2.4
55	M5	7	HIS	2.4
20	BI	99	LEU	2.4
38	88	35	VAL	2.4
48	I8	70	GLN	2.4
49	J8	69	LYS	2.4
18	9I	48	GLY	2.4
31	31	207	GLY	2.4
17	8I	75	ARG	2.4
20	BI	89	ARG	2.4
26	1H	2162	G	2.4
38	88	76	LYS	2.4
40	A8	88	ASP	2.4
43	95	71	LEU	2.4
46	C5	88	LYS	2.4
12	3A	35	GLY	2.4
43	D8	52	VAL	2.4
4	32	115	ARG	2.4
37	35	50	ARG	2.4
40	A8	15	ARG	2.4
13	4A	106	ASN	2.4
45	B5	8	ILE	2.4
49	F5	33	LYS	2.4
55	M5	8	LYS	2.4
29	11	111	LEU	2.4
35	15	116	LEU	2.4
29	19	14	ARG	2.4
20	BA	66	ALA	2.4
2	1E	138	LEU	2.4
29	19	27	THR	2.4
35	15	38	HIS	2.4
3	22	66	VAL	2.3
26	14	849	A	2.3
2	1E	122	PHE	2.3

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Mol	Chain	Res	Type	RSRZ
29	19	223	GLY	2.3
47	H8	160	GLY	2.3
38	88	45	GLN	2.3
33	51	85	LYS	2.3
49	F5	23	LYS	2.3
4	3E	4	TYR	2.3
37	35	80	TYR	2.3
43	95	35	LEU	2.3
37	35	27	HIS	2.3
4	3E	130	GLY	2.3
28	71	176	GLY	2.3
46	C5	15	VAL	2.3
48	I8	57	PHE	2.3
4	32	156	GLU	2.3
16	71	76	GLN	2.3
22	1K	76	A	2.3
15	6I	78	TYR	2.3
32	49	179	PRO	2.3
56	1L	43	U	2.3
47	H8	80	ARG	2.3
38	88	94	VAL	2.3
9	82	118	LYS	2.3
26	14	2899	G	2.3
33	51	130	ARG	2.3
39	98	101	ALA	2.3
37	35	122	PRO	2.3
45	F8	57	LEU	2.3
56	1L	76	A	2.3
35	15	59	LYS	2.3
6	5E	39	LYS	2.3
29	19	224	ALA	2.3
33	51	171	LEU	2.3
35	15	23	LEU	2.3
52	M8	32	TYR	2.3
30	21	106	GLY	2.3
48	I8	22	GLY	2.3
3	2E	167	TRP	2.3
21	1B	24	ARG	2.3
30	29	195	LEU	2.3
34	61	83	ALA	2.3
45	F8	53	LYS	2.3
2	12	164	VAL	2.3

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Mol	Chain	Res	Type	RSRZ
37	78	122	PRO	2.3
2	1E	59	GLU	2.3
17	8I	16	GLN	2.3
4	3E	97	LEU	2.3
4	3E	101	LEU	2.3
15	6I	49	ASP	2.3
38	88	93	TYR	2.3
43	D8	25	LEU	2.3
47	H8	9	TYR	2.3
53	J5	52	TYR	2.3
28	71	214	VAL	2.3
30	29	29	GLY	2.3
32	41	178	PHE	2.3
33	51	123	PHE	2.3
9	8E	126	SER	2.3
43	D8	97	LYS	2.3
47	D5	46	LYS	2.3
15	6I	34	LEU	2.3
3	2E	183	ASP	2.3
29	19	40	THR	2.3
32	41	46	ALA	2.3
43	D8	4	ILE	2.3
47	H8	29	TYR	2.3
32	41	102	PHE	2.3
4	32	167	GLY	2.3
49	F5	20	ARG	2.3
12	3A	71	PRO	2.3
2	12	118	LEU	2.3
34	69	140	LEU	2.3
56	1L	50	C	2.3
3	22	201	TYR	2.3
11	2I	47	VAL	2.3
30	29	198	VAL	2.3
45	B5	26	TYR	2.3
24	3K	15	G	2.3
3	22	43	LEU	2.3
6	5E	81	ILE	2.3
4	32	17	VAL	2.3
12	3A	34	ARG	2.3
38	88	47	ILE	2.3
46	C5	61	ILE	2.3
33	59	165	ALA	2.3

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Mol	Chain	Res	Type	RSRZ
22	1K	65	C	2.3
55	M5	17	THR	2.3
26	1H	2793	G	2.3
29	11	168	ARG	2.3
35	15	119	ARG	2.3
38	88	77	LYS	2.3
40	A8	85	VAL	2.3
45	F8	82	GLN	2.3
3	22	60	ALA	2.3
14	5A	11	LYS	2.3
51	L8	6	VAL	2.3
32	49	104	GLU	2.3
39	98	30	THR	2.3
3	22	196	LEU	2.3
42	85	74	LEU	2.3
46	C5	31	LEU	2.3
19	AI	74	PHE	2.3
29	19	258	LYS	2.3
4	3E	170	VAL	2.3
6	5E	99	ALA	2.3
26	1H	2799	A	2.3
6	5E	80	ARG	2.2
11	2I	95	ILE	2.2
14	5I	16	PHE	2.2
26	1H	2174	C	2.2
33	51	162	ILE	2.2
35	15	84	LYS	2.2
3	22	200	ALA	2.2
30	29	10	GLY	2.2
34	69	25	TYR	2.2
35	15	36	GLY	2.2
3	22	22	TRP	2.2
4	3E	115	ARG	2.2
34	61	72	LEU	2.2
48	I8	21	LEU	2.2
6	5E	85	VAL	2.2
26	1H	2797	U	2.2
28	71	9	ALA	2.2
47	D5	135	GLU	2.2
49	J8	6	GLU	2.2
17	8I	92	ARG	2.2
20	BA	17	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
34	61	128	LEU	2.2
45	F8	62	LYS	2.2
45	F8	77	LYS	2.2
51	L8	23	LEU	2.2
4	3E	105	VAL	2.2
20	BA	71	THR	2.2
34	61	108	THR	2.2
45	F8	56	THR	2.2
49	J8	60	PHE	2.2
30	29	32	PRO	2.2
53	N8	46	CYS	2.2
4	3E	119	GLN	2.2
32	49	25	TYR	2.2
33	51	95	ARG	2.2
39	98	68	ARG	2.2
49	F5	24	ALA	2.2
20	BA	14	LYS	2.2
35	15	109	LYS	2.2
51	L8	7	LYS	2.2
55	M5	29	LYS	2.2
47	H8	67	LEU	2.2
5	42	66	MET	2.2
28	71	171	ILE	2.2
29	19	203	ASN	2.2
30	29	47	VAL	2.2
35	15	54	VAL	2.2
40	A8	69	VAL	2.2
47	D5	133	ILE	2.2
1	1G	1225	A	2.2
32	41	25	TYR	2.2
39	55	63	ARG	2.2
9	82	124	GLN	2.2
43	D8	31	ALA	2.2
38	45	103	MET	2.2
4	3E	163	GLU	2.2
28	71	166	ASP	2.2
33	51	161	GLY	2.2
3	22	37	GLN	2.2
47	D5	83	PRO	2.2
1	1G	1236	A	2.2
29	11	184	LYS	2.2
34	69	144	VAL	2.2

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Mol	Chain	Res	Type	RSRZ
38	45	33	GLY	2.2
48	E5	22	GLY	2.2
2	1E	79	ASP	2.2
56	1L	10	G	2.2
3	2E	188	LEU	2.2
28	71	10	LEU	2.2
29	19	111	LEU	2.2
37	35	81	GLN	2.2
43	95	38	LEU	2.2
11	2I	108	ILE	2.2
18	9I	84	LYS	2.2
37	35	128	HIS	2.2
38	45	130	LYS	2.2
43	95	77	ALA	2.2
43	95	6	LYS	2.2
45	F8	25	LYS	2.2
29	19	3	VAL	2.2
30	21	198	VAL	2.2
33	59	151	ILE	2.2
34	61	142	VAL	2.2
34	69	133	HIS	2.2
37	78	1	MET	2.2
45	B5	89	ILE	2.2
2	1E	235	SER	2.2
4	3E	149	ALA	2.2
25	4L	13	A	2.2
45	F8	4	ALA	2.2
45	F8	18	TYR	2.2
37	78	121	LYS	2.2
40	A8	9	ARG	2.2
50	K8	35	LEU	2.2
19	AI	28	LYS	2.2
5	42	115	VAL	2.2
19	AI	14	HIS	2.2
32	49	154	GLY	2.2
3	22	29	TYR	2.2
3	22	147	LYS	2.2
12	3A	98	TYR	2.2
31	31	21	ALA	2.2
35	15	104	LYS	2.2
40	65	24	LEU	2.2
43	95	82	ARG	2.2

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Mol	Chain	Res	Type	RSRZ
49	F5	71	TYR	2.2
55	M5	59	LYS	2.2
1	1G	1111	A	2.2
37	35	48	PRO	2.2
38	88	78	PRO	2.2
5	42	7	GLU	2.2
16	7I	36	ILE	2.2
17	8I	57	VAL	2.2
30	21	4	ILE	2.2
40	A8	75	GLU	2.2
2	12	113	HIS	2.2
4	3E	180	GLY	2.2
26	1H	277	C	2.2
6	52	101	ALA	2.2
33	51	94	TYR	2.2
45	B5	13	LEU	2.2
48	I8	37	LEU	2.2
40	A8	50	SER	2.2
2	12	134	GLU	2.2
32	49	150	ASP	2.2
34	61	127	VAL	2.2
44	E8	94	ASP	2.2
2	1E	114	ARG	2.2
2	1E	209	ARG	2.2
2	12	153	ARG	2.2
11	2I	28	THR	2.2
29	11	167	GLY	2.2
33	59	158	HIS	2.2
38	88	67	ARG	2.2
43	D8	94	LEU	2.1
4	32	119	GLN	2.1
4	3E	141	ARG	2.1
6	5E	28	ARG	2.1
18	9I	37	VAL	2.1
35	15	37	LYS	2.1
55	M5	5	LYS	2.1
3	2E	184	TYR	2.1
4	32	120	LEU	2.1
12	3A	60	LEU	2.1
17	8I	29	HIS	2.1
19	AI	61	TYR	2.1
29	11	175	LEU	2.1

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Mol	Chain	Res	Type	RSRZ
54	L5	15	THR	2.1
47	H8	48	PHE	2.1
34	61	104	GLN	2.1
34	69	139	GLN	2.1
12	3A	40	VAL	2.1
14	5I	29	ARG	2.1
22	1K	74	C	2.1
19	AA	66	MET	2.1
33	51	105	LEU	2.1
28	71	168	THR	2.1
29	19	10	THR	2.1
43	D8	7	THR	2.1
5	42	8	GLU	2.1
30	21	7	VAL	2.1
35	15	16	ILE	2.1
35	15	122	VAL	2.1
43	95	79	VAL	2.1
43	95	90	PRO	2.1
56	1L	13	C	2.1
2	12	33	TYR	2.1
37	78	110	TYR	2.1
3	2E	165	THR	2.1
12	3A	53	ARG	2.1
13	4A	109	THR	2.1
19	AI	48	THR	2.1
29	19	218	ARG	2.1
38	88	75	THR	2.1
43	D8	44	LYS	2.1
47	H8	34	ASN	2.1
12	3A	70	ILE	2.1
50	K8	22	GLU	2.1
29	19	226	MET	2.1
32	49	90	LEU	2.1
37	35	59	LEU	2.1
43	D8	95	LEU	2.1
4	3E	68	TYR	2.1
39	55	69	ASP	2.1
4	3E	123	HIS	2.1
23	2L	29	C	2.1
39	55	118	GLU	2.1
47	D5	57	ILE	2.1
53	N8	44	THR	2.1

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Mol	Chain	Res	Type	RSRZ
4	3E	21	LEU	2.1
6	5E	54	LYS	2.1
11	2I	124	LYS	2.1
26	14	764	A	2.1
46	C5	55	TYR	2.1
26	14	1555	G	2.1
47	H8	128	VAL	2.1
50	K8	41	ILE	2.1
55	M5	13	ARG	2.1
35	15	108	PRO	2.1
13	4A	25	ILE	2.1
30	21	59	VAL	2.1
38	88	106	VAL	2.1
17	8I	14	LYS	2.1
21	1B	17	THR	2.1
26	14	766	C	2.1
34	61	116	LEU	2.1
56	1L	68	G	2.1
2	12	129	GLU	2.1
10	1I	95	GLU	2.1
3	22	173	VAL	2.1
4	32	107	ARG	2.1
12	3A	47	LYS	2.1
19	AI	19	VAL	2.1
38	45	90	VAL	2.1
40	A8	4	LEU	2.1
42	85	60	LEU	2.1
51	H5	45	GLY	2.1
33	51	129	THR	2.1
3	2E	169	ALA	2.1
19	AI	38	SER	2.1
20	BA	21	LYS	2.1
34	61	121	LYS	2.1
38	88	44	ALA	2.1
20	BA	22	ARG	2.1
4	32	176	LEU	2.1
4	32	194	LEU	2.1
35	58	133	GLN	2.1
26	1H	2109	U	2.1
11	2I	70	LYS	2.1
14	5A	8	GLU	2.1
15	6I	6	GLU	2.1

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Mol	Chain	Res	Type	RSRZ
21	1B	25	LYS	2.1
29	19	9	TYR	2.1
2	12	165	VAL	2.1
28	71	6	ARG	2.1
35	15	137	LYS	2.1
37	78	119	GLU	2.1
37	78	145	PRO	2.1
43	95	69	LYS	2.1
47	H8	10	ARG	2.1
47	H8	60	GLU	2.1
55	Q8	46	ARG	2.1
38	45	68	ILE	2.1
2	1E	160	ASP	2.1
3	22	175	LEU	2.1
11	21	66	LEU	2.1
30	21	193	GLY	2.1
48	E5	52	GLY	2.1
42	85	50	ARG	2.1
7	62	39	ALA	2.1
43	95	58	VAL	2.1
12	3A	100	ILE	2.1
6	5E	27	GLN	2.0
6	5E	77	ARG	2.0
41	75	35	LYS	2.0
41	75	36	GLU	2.0
4	32	197	PRO	2.0
12	3A	38	THR	2.0
40	A8	77	ALA	2.0
26	14	1438	U	2.0
47	H8	130	PRO	2.0
47	H8	134	PRO	2.0
8	7E	131	GLY	2.0
2	1E	105	PHE	2.0
4	32	159	ARG	2.0
28	71	37	PHE	2.0
28	71	192	PHE	2.0
43	95	11	GLN	2.0
48	I8	77	ARG	2.0
50	K8	14	ARG	2.0
50	G5	43	GLN	2.0
28	71	39	GLU	2.0
5	42	69	VAL	2.0

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Mol	Chain	Res	Type	RSRZ
9	82	76	ALA	2.0
37	78	126	VAL	2.0
39	98	76	VAL	2.0
3	2E	148	GLY	2.0
15	6I	25	THR	2.0
12	3A	46	LYS	2.0
18	9I	27	GLY	2.0
19	AI	26	GLY	2.0
26	14	1917	U	2.0
39	55	47	PHE	2.0
28	71	221	SER	2.0
45	F8	14	SER	2.0
2	12	161	ALA	2.0
31	31	183	VAL	2.0
28	71	60	GLY	2.0
4	32	165	MET	2.0
26	1H	2189	U	2.0
19	AI	27	GLU	2.0
5	42	117	ASP	2.0
40	65	52	SER	2.0
30	29	33	VAL	2.0
33	51	90	LYS	2.0
37	35	126	VAL	2.0
38	45	34	LEU	2.0
40	A8	93	LYS	2.0
47	D5	9	TYR	2.0
48	I8	23	VAL	2.0
3	2E	101	LEU	2.0
3	22	180	ALA	2.0
43	D8	62	LEU	2.0
47	D5	164	ALA	2.0
47	D5	12	GLY	2.0
43	95	29	PRO	2.0
47	D5	136	PHE	2.0
2	12	146	GLN	2.0
38	88	46	GLN	2.0
38	88	27	VAL	2.0
2	12	34	ALA	2.0
10	1I	8	LEU	2.0
40	A8	52	SER	2.0
3	22	197	GLY	2.0
38	88	64	ILE	2.0

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Mol	Chain	Res	Type	RSRZ
49	F5	37	ILE	2.0
26	14	848	G	2.0
26	14	1183	G	2.0
42	85	106	PHE	2.0
45	F8	33	LYS	2.0
20	BA	25	ARG	2.0
29	19	60	ARG	2.0
29	19	257	LEU	2.0
32	49	159	VAL	2.0
39	55	117	VAL	2.0

6.2 Non-standard residues in protein, DNA, RNA chains ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å ²)	Q<0.9
22	5MU	1K	54	21/22	0.88	0.21	-	155,171,185,188	0
23	PSU	2L	56	20/21	0.87	0.15	-	143,152,158,162	0
56	PSU	1L	55	20/21	0.88	0.12	-	176,201,207,207	0
22	PSU	1K	55	20/21	0.86	0.16	-	143,175,183,183	0
23	5MU	2K	55	21/22	0.94	0.15	-	122,135,144,159	0
23	G7M	2K	47	24/25	0.95	0.10	-	124,132,139,146	0
23	OMC	2K	33	21/22	0.96	0.12	-	95,105,111,117	0
56	PSU	1L	39	20/21	0.90	0.32	-	155,179,185,187	0
23	PSU	2K	56	20/21	0.94	0.12	-	122,127,139,140	0
22	U8U	1K	34	23/24	0.96	0.12	-	116,123,130,131	0
22	PSU	1K	39	20/21	0.95	0.17	-	98,124,139,139	0
23	4SU	2K	8	20/21	0.92	0.15	-	111,120,124,128	0
57	PSU	3L	39	20/21	0.93	0.12	-	160,164,169,170	0
23	5MU	2L	55	21/22	0.91	0.15	-	146,159,164,166	0
23	OMC	2L	33	21/22	0.93	0.23	-	132,140,144,151	0
23	4SU	2L	8	20/21	0.88	0.16	-	131,155,165,169	0
22	T6A	1K	37	32/33	0.89	0.25	-	100,113,152,156	0
23	G7M	2L	47	24/25	0.92	0.13	-	161,169,178,179	0
56	5MU	1L	54	21/22	0.92	0.16	-	184,194,212,217	0

6.3 Carbohydrates ⓘ

There are no carbohydrates in this entry.

6.4 Ligands ⓘ

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. LLDF column lists the quality of electron density of the group with respect to its neighbouring residues in protein, DNA or RNA chains. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q< 0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(Å ²)	Q<0.9
58	MG	13	1638	1/1	0.81	0.54	96.04	82,82,82,82	0
58	MG	1H	3283	1/1	0.96	1.29	73.76	95,95,95,95	0
58	MG	13	1648	1/1	0.90	0.59	57.74	108,108,108,108	0
58	MG	1H	3257	1/1	0.69	1.56	56.76	97,97,97,97	0
58	MG	1H	3015	1/1	0.97	0.96	51.46	77,77,77,77	0
58	MG	14	3233	1/1	0.64	0.63	51.44	108,108,108,108	0
58	MG	1H	3254	1/1	0.84	1.18	43.62	91,91,91,91	0
58	MG	14	3239	1/1	0.96	0.67	42.94	90,90,90,90	0
58	MG	1H	3255	1/1	0.93	0.78	41.88	94,94,94,94	0
58	MG	1H	3171	1/1	0.95	0.79	40.89	83,83,83,83	0
58	MG	1H	3235	1/1	0.72	0.68	38.23	112,112,112,112	0
58	MG	14	3193	1/1	0.96	0.58	36.77	79,79,79,79	0
58	MG	1H	3290	1/1	0.87	0.51	36.68	103,103,103,103	0
58	MG	14	3308	1/1	0.77	0.55	36.20	104,104,104,104	0
58	MG	14	3255	1/1	0.89	0.39	32.04	105,105,105,105	0
58	MG	1H	3286	1/1	0.65	0.41	30.34	109,109,109,109	0
58	MG	13	1642	1/1	0.95	0.47	28.88	104,104,104,104	0
58	MG	1H	3018	1/1	0.98	0.58	28.53	66,66,66,66	0
58	MG	1H	3124	1/1	0.88	0.42	27.55	77,77,77,77	0
58	MG	14	3014	1/1	0.99	0.58	27.40	82,82,82,82	0
58	MG	1H	3296	1/1	0.96	0.89	26.90	86,86,86,86	0
58	MG	14	3152	1/1	0.88	0.58	26.83	102,102,102,102	0
58	MG	1H	3045	1/1	0.99	0.37	26.68	68,68,68,68	0
58	MG	14	3289	1/1	0.94	0.34	26.06	116,116,116,116	0
58	MG	14	3095	1/1	0.97	0.71	25.13	75,75,75,75	0
58	MG	14	3111	1/1	0.93	0.55	24.86	82,82,82,82	0
58	MG	1H	3079	1/1	0.97	0.45	24.27	68,68,68,68	0
58	MG	1H	3197	1/1	0.93	0.49	24.15	68,68,68,68	0
58	MG	1H	3075	1/1	0.85	0.93	24.08	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3333	1/1	0.79	0.34	23.18	93,93,93,93	0
58	MG	14	3016	1/1	0.97	0.44	22.69	68,68,68,68	0
58	MG	14	3224	1/1	0.76	0.35	22.47	105,105,105,105	0
58	MG	14	3088	1/1	0.95	0.41	22.41	78,78,78,78	0
58	MG	1H	3030	1/1	0.68	0.67	20.92	85,85,85,85	0
58	MG	14	3254	1/1	0.85	0.45	20.90	83,83,83,83	0
58	MG	1H	3028	1/1	0.92	0.44	20.59	82,82,82,82	0
58	MG	1H	3034	1/1	0.91	0.33	20.53	145,145,145,145	0
58	MG	14	3200	1/1	0.81	0.55	20.07	94,94,94,94	0
58	MG	14	3258	1/1	0.85	0.27	19.75	93,93,93,93	0
58	MG	14	3009	1/1	0.96	0.51	19.48	74,74,74,74	0
58	MG	13	1658	1/1	0.95	0.58	19.02	89,89,89,89	0
58	MG	1H	3340	1/1	0.35	0.60	19.00	101,101,101,101	0
58	MG	14	3093	1/1	0.97	0.64	18.77	71,71,71,71	0
58	MG	14	3116	1/1	0.96	0.45	18.31	75,75,75,75	0
58	MG	1H	3267	1/1	0.88	0.48	18.22	85,85,85,85	0
58	MG	1H	3244	1/1	0.93	0.47	18.13	103,103,103,103	0
58	MG	1G	1606	1/1	0.97	0.53	18.05	93,93,93,93	0
58	MG	14	3081	1/1	0.98	0.27	17.29	89,89,89,89	0
58	MG	E5	101	1/1	0.75	0.65	16.89	100,100,100,100	0
58	MG	1H	3078	1/1	0.97	0.28	16.78	80,80,80,80	0
58	MG	1H	3023	1/1	0.90	0.44	16.61	92,92,92,92	0
58	MG	1H	3098	1/1	0.98	0.66	16.58	70,70,70,70	0
58	MG	14	3297	1/1	0.84	0.55	16.45	91,91,91,91	0
58	MG	1H	3085	1/1	0.82	0.47	16.04	92,92,92,92	0
58	MG	14	3341	1/1	0.85	0.36	16.03	105,105,105,105	0
58	MG	14	3129	1/1	0.91	0.40	15.90	84,84,84,84	0
58	MG	1H	3261	1/1	0.84	0.52	15.59	115,115,115,115	0
58	MG	14	3187	1/1	0.95	0.30	15.29	96,96,96,96	0
58	MG	1G	1613	1/1	0.95	0.28	15.16	114,114,114,114	0
58	MG	1H	3117	1/1	0.85	0.30	14.86	75,75,75,75	0
58	MG	1H	3225	1/1	0.93	0.33	14.73	70,70,70,70	0
58	MG	1H	3226	1/1	0.85	0.32	14.66	88,88,88,88	0
58	MG	14	3215	1/1	0.97	0.38	14.66	89,89,89,89	0
58	MG	1H	3068	1/1	0.94	0.45	14.37	70,70,70,70	0
58	MG	14	3250	1/1	0.86	0.47	14.29	79,79,79,79	0
58	MG	1H	3103	1/1	0.96	0.57	13.98	72,72,72,72	0
58	MG	1H	3090	1/1	0.93	0.43	13.90	76,76,76,76	0
58	MG	1H	3143	1/1	0.90	0.35	13.86	101,101,101,101	0
58	MG	14	3195	1/1	0.74	0.54	13.56	107,107,107,107	0
58	MG	1H	3164	1/1	0.89	0.24	13.44	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1G	1640	1/1	0.47	0.42	13.43	115,115,115,115	0
58	MG	2L	101	1/1	0.99	0.52	13.36	97,97,97,97	0
58	MG	1G	1616	1/1	0.90	0.34	13.21	118,118,118,118	0
58	MG	1H	3282	1/1	0.83	0.47	13.13	106,106,106,106	0
58	MG	14	3027	1/1	0.97	0.45	12.63	79,79,79,79	0
58	MG	14	3011	1/1	0.96	0.56	12.61	85,85,85,85	0
58	MG	1H	3242	1/1	0.90	0.41	12.55	90,90,90,90	0
58	MG	13	1620	1/1	0.93	0.24	12.32	117,117,117,117	0
58	MG	14	3334	1/1	0.88	0.74	12.21	92,92,92,92	0
58	MG	14	3335	1/1	0.85	0.23	12.18	124,124,124,124	0
58	MG	1H	3091	1/1	0.99	0.49	12.17	58,58,58,58	0
58	MG	1H	3002	1/1	0.97	0.45	12.07	64,64,64,64	0
58	MG	1H	3165	1/1	0.96	0.42	12.03	99,99,99,99	0
58	MG	14	3216	1/1	0.97	0.28	11.96	101,101,101,101	0
58	MG	14	3158	1/1	0.94	0.36	11.87	92,92,92,92	0
58	MG	14	3108	1/1	0.74	0.35	11.69	88,88,88,88	0
58	MG	1H	3136	1/1	0.91	0.25	11.40	80,80,80,80	0
58	MG	14	3017	1/1	0.97	0.42	11.13	68,68,68,68	0
58	MG	1G	1649	1/1	0.99	0.37	11.00	128,128,128,128	0
58	MG	14	3125	1/1	0.99	0.30	10.99	102,102,102,102	0
58	MG	14	3290	1/1	0.99	0.28	10.81	113,113,113,113	0
58	MG	14	3245	1/1	0.92	0.43	10.77	97,97,97,97	0
58	MG	1H	3006	1/1	0.94	0.27	10.76	71,71,71,71	0
58	MG	1H	3001	1/1	0.95	0.43	10.69	66,66,66,66	0
58	MG	1G	1627	1/1	0.80	0.49	10.55	142,142,142,142	0
58	MG	1G	1667	1/1	0.83	0.30	10.34	111,111,111,111	0
58	MG	1H	3127	1/1	0.92	0.34	10.26	79,79,79,79	0
58	MG	14	3279	1/1	0.51	0.59	10.21	103,103,103,103	0
58	MG	1H	3083	1/1	0.93	0.27	10.16	74,74,74,74	0
58	MG	1H	3048	1/1	0.93	0.36	10.10	80,80,80,80	0
58	MG	14	3202	1/1	0.82	0.33	10.05	79,79,79,79	0
58	MG	14	3232	1/1	0.84	0.41	10.05	89,89,89,89	0
58	MG	14	3005	1/1	0.89	0.34	9.96	101,101,101,101	0
58	MG	14	3106	1/1	0.96	0.36	9.70	85,85,85,85	0
58	MG	14	3043	1/1	0.95	0.38	9.63	69,69,69,69	0
58	MG	1H	3041	1/1	0.97	0.29	9.56	73,73,73,73	0
58	MG	14	3074	1/1	0.97	0.50	9.49	70,70,70,70	0
58	MG	1H	3179	1/1	0.95	0.37	9.41	101,101,101,101	0
58	MG	13	1639	1/1	0.96	0.24	9.19	87,87,87,87	0
58	MG	14	3021	1/1	0.88	0.40	8.97	73,73,73,73	0
58	MG	13	1651	1/1	0.95	0.31	8.96	96,96,96,96	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3007	1/1	0.96	0.31	8.92	65,65,65,65	0
58	MG	14	3191	1/1	0.91	0.53	8.91	93,93,93,93	0
58	MG	1H	3221	1/1	0.98	0.27	8.90	81,81,81,81	0
58	MG	1H	3008	1/1	0.97	0.36	8.88	99,99,99,99	0
58	MG	1H	3214	1/1	0.95	0.28	8.75	65,65,65,65	0
58	MG	1H	3202	1/1	0.84	0.33	8.65	95,95,95,95	0
58	MG	1H	3071	1/1	0.98	0.41	8.61	94,94,94,94	0
58	MG	2K	101	1/1	0.99	0.43	8.55	84,84,84,84	0
58	MG	14	3072	1/1	0.93	0.34	8.52	84,84,84,84	0
58	MG	1H	3097	1/1	0.96	0.43	8.44	72,72,72,72	0
58	MG	1H	3150	1/1	0.94	0.40	8.40	63,63,63,63	0
58	MG	1H	3190	1/1	0.94	0.24	8.25	108,108,108,108	0
58	MG	14	3130	1/1	0.97	0.29	8.19	93,93,93,93	0
58	MG	14	3182	1/1	0.70	0.21	7.88	105,105,105,105	0
58	MG	14	3008	1/1	0.96	0.39	7.79	77,77,77,77	0
58	MG	14	3166	1/1	0.87	0.58	7.79	79,79,79,79	0
58	MG	14	3065	1/1	0.97	0.27	7.77	80,80,80,80	0
58	MG	1H	3092	1/1	0.92	0.36	7.67	76,76,76,76	0
58	MG	14	3044	1/1	0.93	0.28	7.29	88,88,88,88	0
58	MG	1H	3130	1/1	0.94	0.36	7.29	79,79,79,79	0
58	MG	1H	3104	1/1	0.96	0.31	7.20	66,66,66,66	0
58	MG	14	3251	1/1	0.86	0.17	7.20	90,90,90,90	0
58	MG	14	3214	1/1	0.90	0.31	6.96	94,94,94,94	0
58	MG	1H	3433	1/1	0.93	0.28	6.91	113,113,113,113	0
58	MG	14	3097	1/1	0.99	0.29	6.68	83,83,83,83	0
58	MG	1H	3148	1/1	0.89	0.21	6.58	92,92,92,92	0
58	MG	14	3246	1/1	0.77	0.36	6.37	95,95,95,95	0
58	MG	1H	3185	1/1	0.86	0.22	6.27	68,68,68,68	0
58	MG	1G	1634	1/1	0.98	0.34	6.20	127,127,127,127	0
58	MG	13	1610	1/1	0.96	0.30	6.07	92,92,92,92	0
58	MG	1H	3101	1/1	0.89	0.33	6.01	59,59,59,59	0
58	MG	13	1601	1/1	0.98	0.27	5.83	86,86,86,86	0
58	MG	13	1643	1/1	0.97	0.35	5.72	80,80,80,80	0
58	MG	1H	3126	1/1	0.68	0.26	5.71	83,83,83,83	0
58	MG	14	3321	1/1	0.72	0.43	5.66	109,109,109,109	0
58	MG	14	3287	1/1	0.87	0.20	5.52	101,101,101,101	0
58	MG	1H	3239	1/1	0.95	0.25	5.45	71,71,71,71	0
58	MG	1H	3284	1/1	0.89	0.20	5.43	97,97,97,97	0
58	MG	85	202	1/1	0.62	0.65	5.43	100,100,100,100	0
58	MG	14	3219	1/1	0.94	0.22	5.39	83,83,83,83	0
58	MG	14	3145	1/1	0.96	0.25	5.36	76,76,76,76	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3236	1/1	0.95	0.19	5.34	89,89,89,89	0
58	MG	14	3271	1/1	0.83	0.27	5.31	101,101,101,101	0
58	MG	14	3121	1/1	0.97	0.39	5.24	69,69,69,69	0
58	MG	1G	1626	1/1	0.98	0.27	5.15	118,118,118,118	0
58	MG	1H	3111	1/1	0.95	0.28	4.96	64,64,64,64	0
58	MG	13	1659	1/1	0.69	0.28	4.94	116,116,116,116	0
58	MG	13	1631	1/1	0.93	0.27	4.80	82,82,82,82	0
58	MG	13	1614	1/1	0.89	0.20	4.77	97,97,97,97	0
58	MG	14	3332	1/1	0.88	0.25	4.73	98,98,98,98	0
58	MG	14	3316	1/1	0.59	0.29	4.62	111,111,111,111	0
58	MG	1H	3222	1/1	0.93	0.25	4.48	94,94,94,94	0
58	MG	1H	3443	1/1	0.98	0.24	4.47	80,80,80,80	0
58	MG	14	3071	1/1	0.97	0.34	4.38	69,69,69,69	0
58	MG	14	3127	1/1	0.98	0.27	4.31	67,67,67,67	0
58	MG	14	3155	1/1	0.82	0.35	4.26	101,101,101,101	0
58	MG	14	3076	1/1	0.97	0.30	4.23	83,83,83,83	0
58	MG	1H	3057	1/1	0.95	0.27	4.20	75,75,75,75	0
58	MG	1H	3076	1/1	0.80	0.36	4.01	78,78,78,78	0
58	MG	1H	3227	1/1	0.85	0.52	4.00	92,92,92,92	0
58	MG	C8	201	1/1	0.96	0.20	3.99	74,74,74,74	0
58	MG	1G	1625	1/1	0.95	0.25	3.91	136,136,136,136	0
58	MG	1H	3194	1/1	0.94	0.24	3.88	91,91,91,91	0
58	MG	1H	3175	1/1	0.70	0.15	3.84	92,92,92,92	0
58	MG	1H	3408	1/1	0.99	0.23	3.82	72,72,72,72	0
58	MG	14	3237	1/1	0.94	0.21	3.75	181,181,181,181	0
58	MG	1H	3088	1/1	0.97	0.22	3.57	81,81,81,81	0
58	MG	14	3269	1/1	0.89	0.29	3.57	115,115,115,115	0
58	MG	14	3218	1/1	0.93	0.15	3.39	97,97,97,97	0
58	MG	13	1657	1/1	0.98	0.17	3.38	103,103,103,103	0
58	MG	14	3172	1/1	0.97	0.23	3.32	75,75,75,75	0
58	MG	13	1672	1/1	0.90	0.15	3.24	133,133,133,133	0
58	MG	29	303	1/1	0.33	0.24	3.22	106,106,106,106	0
58	MG	1H	3064	1/1	0.97	0.26	3.07	82,82,82,82	0
58	MG	1G	1619	1/1	0.98	0.27	3.06	109,109,109,109	0
58	MG	14	3054	1/1	0.88	0.26	3.02	99,99,99,99	0
58	MG	14	3282	1/1	0.82	0.33	3.01	96,96,96,96	0
58	MG	1H	3139	1/1	0.88	0.18	2.97	75,75,75,75	0
58	MG	1H	3237	1/1	0.90	0.16	2.96	88,88,88,88	0
58	MG	1H	3053	1/1	0.95	0.17	2.92	81,81,81,81	0
58	MG	1H	3308	1/1	0.91	0.24	2.91	81,81,81,81	0
58	MG	29	302	1/1	0.88	0.54	2.67	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1G	1669	1/1	0.92	0.14	2.57	151,151,151,151	0
58	MG	1G	1615	1/1	0.95	0.22	2.57	142,142,142,142	0
58	MG	13	1671	1/1	0.94	0.20	2.49	107,107,107,107	0
58	MG	1G	1676	1/1	0.98	0.21	2.46	134,134,134,134	0
58	MG	13	1682	1/1	0.98	0.17	2.37	93,93,93,93	0
58	MG	13	1611	1/1	0.93	0.22	2.37	91,91,91,91	0
58	MG	1H	3069	1/1	0.77	0.16	2.35	101,101,101,101	0
58	MG	14	3317	1/1	0.91	0.16	2.34	122,122,122,122	0
58	MG	1H	3457	1/1	0.91	0.29	2.32	89,89,89,89	0
58	MG	1H	3398	1/1	0.91	0.19	2.22	76,76,76,76	0
58	MG	14	3363	1/1	1.00	0.23	2.20	80,80,80,80	0
58	MG	14	3059	1/1	0.67	0.17	2.19	92,92,92,92	0
58	MG	14	3173	1/1	0.89	0.14	2.17	96,96,96,96	0
58	MG	1G	1673	1/1	0.92	0.17	2.17	145,145,145,145	0
58	MG	14	3118	1/1	0.97	0.26	2.16	73,73,73,73	0
58	MG	13	1686	1/1	0.81	0.17	2.15	79,79,79,79	0
58	MG	Q8	101	1/1	0.88	0.38	2.12	89,89,89,89	0
58	MG	45	201	1/1	0.92	0.27	2.06	101,101,101,101	0
58	MG	14	3119	1/1	0.95	0.27	2.03	83,83,83,83	0
58	MG	1H	3215	1/1	0.90	0.25	1.90	69,69,69,69	0
58	MG	14	3211	1/1	0.95	0.21	1.88	78,78,78,78	0
58	MG	14	3096	1/1	0.98	0.40	1.86	57,57,57,57	0
58	MG	1H	3364	1/1	0.98	0.20	1.77	74,74,74,74	0
58	MG	1H	3442	1/1	0.97	0.26	1.72	63,63,63,63	0
58	MG	1H	3428	1/1	0.97	0.20	1.56	89,89,89,89	0
58	MG	1H	3252	1/1	0.88	0.26	1.51	75,75,75,75	0
58	MG	1H	3173	1/1	0.80	0.24	1.47	108,108,108,108	0
58	MG	1H	3382	1/1	0.98	0.22	1.30	71,71,71,71	0
58	MG	1G	1601	1/1	0.99	0.20	1.29	115,115,115,115	0
58	MG	1H	3399	1/1	0.99	0.18	1.27	75,75,75,75	0
58	MG	1G	1668	1/1	0.51	0.28	1.16	138,138,138,138	0
58	MG	14	3203	1/1	0.95	0.28	1.09	84,84,84,84	0
58	MG	14	3045	1/1	0.92	0.20	1.07	89,89,89,89	0
58	MG	14	3048	1/1	0.95	0.21	1.05	90,90,90,90	0
58	MG	1H	3067	1/1	0.99	0.22	1.04	74,74,74,74	0
58	MG	1H	3486	1/1	0.77	0.31	1.02	106,106,106,106	0
58	MG	14	3138	1/1	0.98	0.18	0.99	96,96,96,96	0
58	MG	14	3273	1/1	0.88	0.15	0.99	110,110,110,110	0
58	MG	14	3306	1/1	0.96	0.20	0.97	129,129,129,129	0
58	MG	14	3066	1/1	0.98	0.32	0.93	95,95,95,95	0
58	MG	14	3265	1/1	0.96	0.14	0.90	110,110,110,110	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3400	1/1	0.99	0.19	0.90	86,86,86,86	0
58	MG	14	3252	1/1	0.85	0.18	0.86	106,106,106,106	0
58	MG	13	1718	1/1	0.98	0.12	0.78	110,110,110,110	0
58	MG	14	3213	1/1	0.93	0.27	0.69	114,114,114,114	0
58	MG	13	1694	1/1	0.84	0.18	0.65	114,114,114,114	0
58	MG	1H	3461	1/1	0.99	0.20	0.63	97,97,97,97	0
58	MG	3I	201	1/1	0.92	0.19	0.61	87,87,87,87	0
58	MG	1H	3251	1/1	0.82	0.13	0.60	75,75,75,75	0
58	MG	1H	3140	1/1	0.76	0.30	0.57	89,89,89,89	0
58	MG	14	3364	1/1	0.98	0.16	0.52	105,105,105,105	0
58	MG	1H	3416	1/1	0.99	0.18	0.51	83,83,83,83	0
58	MG	1H	3115	1/1	0.92	0.26	0.50	70,70,70,70	0
58	MG	1H	3055	1/1	0.94	0.18	0.50	74,74,74,74	0
58	MG	13	1649	1/1	0.72	0.15	0.49	118,118,118,118	0
58	MG	14	3208	1/1	0.86	0.22	0.48	93,93,93,93	0
58	MG	1H	3368	1/1	0.99	0.21	0.47	76,76,76,76	0
58	MG	1H	3180	1/1	0.97	0.13	0.45	97,97,97,97	0
58	MG	13	1711	1/1	0.99	0.18	0.40	85,85,85,85	0
58	MG	J8	101	1/1	0.84	0.29	0.38	89,89,89,89	0
58	MG	1H	3330	1/1	0.76	0.14	0.37	105,105,105,105	0
58	MG	14	3010	1/1	0.98	0.30	0.30	73,73,73,73	0
58	MG	35	201	1/1	0.81	0.51	0.28	90,90,90,90	0
58	MG	1H	3153	1/1	0.91	0.13	0.28	86,86,86,86	0
58	MG	55	201	1/1	0.92	0.28	0.28	96,96,96,96	0
58	MG	13	1741	1/1	0.97	0.17	0.26	88,88,88,88	0
58	MG	1H	3122	1/1	0.92	0.14	0.25	83,83,83,83	0
58	MG	1H	3423	1/1	0.97	0.20	0.23	92,92,92,92	0
58	MG	14	3394	1/1	0.97	0.20	0.22	88,88,88,88	0
58	MG	14	3340	1/1	0.94	0.22	0.10	91,91,91,91	0
58	MG	14	3157	1/1	0.85	0.15	0.08	81,81,81,81	0
58	MG	1G	1641	1/1	0.56	0.17	0.05	131,131,131,131	0
58	MG	14	3154	1/1	0.85	0.17	0.04	84,84,84,84	0
58	MG	14	3099	1/1	0.96	0.25	0.03	91,91,91,91	0
58	MG	1H	3054	1/1	0.75	0.13	0.02	110,110,110,110	0
58	MG	1H	3230	1/1	0.70	0.12	-0.03	104,104,104,104	0
58	MG	1H	3381	1/1	0.97	0.15	-0.05	80,80,80,80	0
58	MG	1H	3250	1/1	0.84	0.13	-0.08	94,94,94,94	0
58	MG	85	201	1/1	0.85	0.20	-0.10	85,85,85,85	0
58	MG	14	3243	1/1	0.97	0.24	-0.11	102,102,102,102	0
58	MG	1G	1678	1/1	0.94	0.14	-0.20	119,119,119,119	0
58	MG	1G	1671	1/1	0.98	0.15	-0.32	121,121,121,121	0
58	MG	1H	3056	1/1	0.96	0.22	-0.33	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3226	1/1	0.97	0.28	-0.35	88,88,88,88	0
58	MG	1H	3397	1/1	0.98	0.14	-0.36	82,82,82,82	0
58	MG	14	3343	1/1	0.99	0.20	-0.42	87,87,87,87	0
58	MG	14	3212	1/1	0.94	0.17	-0.45	105,105,105,105	0
58	MG	45	202	1/1	0.71	0.15	-0.46	122,122,122,122	0
58	MG	14	3285	1/1	0.94	0.21	-0.47	77,77,77,77	0
58	MG	1H	3375	1/1	0.95	0.16	-0.47	81,81,81,81	0
58	MG	1H	3151	1/1	0.90	0.13	-0.55	90,90,90,90	0
58	MG	14	3205	1/1	0.92	0.16	-0.67	97,97,97,97	0
59	SF4	3E	301	8/8	0.99	0.18	-0.69	95,111,117,118	0
60	ZN	5I	102	1/1	0.98	0.14	-0.72	114,114,114,114	0
58	MG	1H	3367	1/1	0.98	0.18	-0.72	84,84,84,84	0
58	MG	13	1730	1/1	0.95	0.10	-0.73	108,108,108,108	0
58	MG	1H	3484	1/1	0.99	0.18	-0.75	81,81,81,81	0
58	MG	1H	3114	1/1	0.94	0.15	-0.77	77,77,77,77	0
58	MG	5I	101	1/1	0.90	0.14	-0.78	110,110,110,110	0
58	MG	16	203	1/1	0.56	0.16	-0.80	112,112,112,112	0
58	MG	14	3139	1/1	0.92	0.12	-0.80	75,75,75,75	0
58	MG	1H	3387	1/1	1.00	0.18	-0.83	60,60,60,60	0
58	MG	13	1669	1/1	0.89	0.12	-0.83	120,120,120,120	0
58	MG	1H	3407	1/1	0.99	0.15	-0.86	83,83,83,83	0
58	MG	14	3393	1/1	0.98	0.15	-0.86	89,89,89,89	0
58	MG	1H	3113	1/1	0.94	0.15	-0.92	59,59,59,59	0
58	MG	13	1717	1/1	0.91	0.06	-0.98	123,123,123,123	0
58	MG	1H	3487	1/1	0.91	0.13	-1.01	96,96,96,96	0
58	MG	14	3070	1/1	0.95	0.16	-1.03	94,94,94,94	0
58	MG	1H	3441	1/1	0.99	0.13	-1.05	92,92,92,92	0
59	SF4	32	302	8/8	0.99	0.14	-1.06	127,146,153,155	0
58	MG	1H	3218	1/1	0.94	0.17	-1.08	68,68,68,68	0
58	MG	14	3349	1/1	1.00	0.18	-1.09	95,95,95,95	0
58	MG	14	3373	1/1	0.97	0.14	-1.09	86,86,86,86	0
58	MG	14	3037	1/1	0.99	0.18	-1.18	80,80,80,80	0
58	MG	1H	3380	1/1	0.97	0.10	-1.20	89,89,89,89	0
58	MG	1H	3424	1/1	0.99	0.12	-1.21	81,81,81,81	0
58	MG	41	201	1/1	0.82	0.10	-1.23	102,102,102,102	0
58	MG	14	3230	1/1	0.95	0.15	-1.24	122,122,122,122	0
58	MG	1G	1607	1/1	0.97	0.19	-1.25	109,109,109,109	0
58	MG	14	3345	1/1	0.99	0.16	-1.31	80,80,80,80	0
58	MG	13	1655	1/1	0.93	0.08	-1.32	106,106,106,106	0
58	MG	1H	3014	1/1	0.91	0.15	-1.34	65,65,65,65	0
58	MG	1H	3473	1/1	0.98	0.11	-1.34	89,89,89,89	0
58	MG	13	1665	1/1	0.94	0.10	-1.35	105,105,105,105	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
60	ZN	5A	101	1/1	0.97	0.06	-1.39	164,164,164,164	0
58	MG	14	3064	1/1	0.99	0.13	-1.40	86,86,86,86	0
58	MG	14	3077	1/1	0.98	0.15	-1.41	83,83,83,83	0
58	MG	1H	3356	1/1	0.98	0.16	-1.43	67,67,67,67	0
58	MG	14	3384	1/1	0.98	0.10	-1.45	96,96,96,96	0
58	MG	14	3073	1/1	0.99	0.15	-1.46	67,67,67,67	0
58	MG	14	3236	1/1	0.96	0.10	-1.46	121,121,121,121	0
58	MG	1G	1677	1/1	0.81	0.06	-1.48	185,185,185,185	0
58	MG	14	3407	1/1	0.95	0.07	-1.50	121,121,121,121	0
58	MG	1G	1617	1/1	0.96	0.05	-1.52	159,159,159,159	0
58	MG	13	1713	1/1	0.95	0.05	-1.54	117,117,117,117	0
58	MG	21	302	1/1	0.90	0.12	-1.58	91,91,91,91	0
58	MG	1H	3401	1/1	0.97	0.15	-1.66	71,71,71,71	0
58	MG	14	3419	1/1	0.99	0.09	-1.71	90,90,90,90	0
58	MG	1H	3403	1/1	0.99	0.13	-1.72	81,81,81,81	0
58	MG	14	3142	1/1	0.98	0.14	-1.77	99,99,99,99	0
58	MG	1H	3372	1/1	0.96	0.07	-1.82	73,73,73,73	0
58	MG	13	1714	1/1	0.98	0.11	-1.87	98,98,98,98	0
58	MG	14	3357	1/1	0.99	0.07	-1.89	76,76,76,76	0
58	MG	1H	3106	1/1	0.97	0.10	-1.90	82,82,82,82	0
58	MG	1H	3425	1/1	0.97	0.12	-1.94	77,77,77,77	0
60	ZN	C5	202	1/1	0.81	0.13	-2.00	183,183,183,183	0
58	MG	16	201	1/1	0.96	0.11	-2.05	114,114,114,114	0
58	MG	1H	3294	1/1	0.97	0.09	-2.12	103,103,103,103	0
58	MG	14	3060	1/1	0.94	0.07	-2.12	103,103,103,103	0
58	MG	14	3061	1/1	0.92	0.12	-2.14	102,102,102,102	0
58	MG	1H	3133	1/1	0.83	0.11	-2.17	83,83,83,83	0
58	MG	14	3206	1/1	0.93	0.09	-2.17	88,88,88,88	0
58	MG	1H	3446	1/1	0.97	0.10	-2.18	94,94,94,94	0
58	MG	13	1700	1/1	0.95	0.08	-2.19	123,123,123,123	0
58	MG	1G	1609	1/1	0.89	0.09	-2.22	113,113,113,113	0
58	MG	1H	3378	1/1	0.96	0.10	-2.23	90,90,90,90	0
58	MG	1G	1657	1/1	0.96	0.16	-2.26	163,163,163,163	0
58	MG	14	3050	1/1	0.94	0.12	-2.36	87,87,87,87	0
58	MG	13	1630	1/1	0.92	0.14	-2.38	74,74,74,74	0
58	MG	13	1721	1/1	0.96	0.05	-2.41	100,100,100,100	0
58	MG	14	3408	1/1	0.98	0.07	-2.42	130,130,130,130	0
58	MG	13	1664	1/1	0.97	0.08	-2.42	105,105,105,105	0
58	MG	1H	3388	1/1	0.99	0.12	-2.43	78,78,78,78	0
58	MG	14	3411	1/1	0.89	0.05	-2.45	134,134,134,134	0
58	MG	14	3140	1/1	0.80	0.09	-2.46	79,79,79,79	0
58	MG	16	204	1/1	0.91	0.10	-2.49	106,106,106,106	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3351	1/1	0.93	0.06	-2.57	80,80,80,80	0
58	MG	1H	3362	1/1	0.98	0.13	-2.62	71,71,71,71	0
58	MG	14	3362	1/1	0.99	0.08	-2.63	86,86,86,86	0
58	MG	1H	3417	1/1	0.97	0.10	-2.71	77,77,77,77	0
58	MG	1J	204	1/1	0.81	0.07	-2.71	119,119,119,119	0
58	MG	14	3385	1/1	0.97	0.05	-2.74	92,92,92,92	0
58	MG	1H	3123	1/1	0.83	0.09	-2.80	85,85,85,85	0
58	MG	1H	3420	1/1	0.93	0.11	-2.81	81,81,81,81	0
58	MG	14	3112	1/1	0.95	0.10	-2.82	108,108,108,108	0
58	MG	14	3052	1/1	0.95	0.13	-2.85	83,83,83,83	0
58	MG	5E	202	1/1	0.76	0.18	-2.86	111,111,111,111	0
58	MG	14	3348	1/1	0.95	0.11	-2.87	86,86,86,86	0
58	MG	14	3420	1/1	0.87	0.08	-2.89	118,118,118,118	0
58	MG	88	201	1/1	0.99	0.23	-2.93	91,91,91,91	0
58	MG	1H	3488	1/1	0.89	0.09	-2.97	92,92,92,92	0
58	MG	1H	3058	1/1	0.94	0.15	-2.99	76,76,76,76	0
58	MG	13	1725	1/1	0.98	0.10	-3.00	101,101,101,101	0
58	MG	14	3353	1/1	0.94	0.11	-3.01	73,73,73,73	0
58	MG	13	1616	1/1	0.98	0.05	-3.01	121,121,121,121	0
58	MG	1G	1651	1/1	0.85	0.14	-3.02	128,128,128,128	0
58	MG	14	3387	1/1	0.98	0.08	-3.04	88,88,88,88	0
58	MG	1H	3241	1/1	0.97	0.08	-3.12	100,100,100,100	0
58	MG	1H	3243	1/1	0.77	0.09	-3.23	96,96,96,96	0
58	MG	1H	3389	1/1	1.00	0.12	-3.23	71,71,71,71	0
58	MG	14	3391	1/1	0.98	0.09	-3.40	87,87,87,87	0
58	MG	1H	3453	1/1	0.95	0.08	-3.46	93,93,93,93	0
58	MG	1H	3386	1/1	0.97	0.06	-3.50	109,109,109,109	0
58	MG	1H	3359	1/1	0.99	0.15	-3.58	71,71,71,71	0
58	MG	14	3367	1/1	0.96	0.07	-3.68	86,86,86,86	0
58	MG	1H	3430	1/1	0.95	0.08	-3.82	81,81,81,81	0
58	MG	16	206	1/1	0.87	0.06	-3.96	89,89,89,89	0
58	MG	1H	3357	1/1	0.98	0.11	-3.97	79,79,79,79	0
58	MG	14	3307	1/1	0.96	0.10	-4.01	80,80,80,80	0
58	MG	1H	3390	1/1	0.96	0.12	-4.01	74,74,74,74	0
58	MG	14	3355	1/1	0.96	0.07	-4.04	92,92,92,92	0
58	MG	14	3242	1/1	0.92	0.10	-4.10	92,92,92,92	0
58	MG	14	3346	1/1	0.98	0.09	-4.14	81,81,81,81	0
58	MG	1H	3394	1/1	0.97	0.07	-4.22	89,89,89,89	0
58	MG	1G	1672	1/1	0.96	0.05	-4.38	115,115,115,115	0
58	MG	1H	3370	1/1	0.98	0.09	-4.43	68,68,68,68	0
58	MG	1H	3402	1/1	0.99	0.10	-4.51	76,76,76,76	0
58	MG	1H	3435	1/1	0.99	0.07	-4.56	85,85,85,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1727	1/1	0.98	0.08	-5.04	87,87,87,87	0
58	MG	14	3380	1/1	0.96	0.08	-5.66	94,94,94,94	0
58	MG	14	3347	1/1	0.95	0.05	-5.73	87,87,87,87	0
58	MG	14	3359	1/1	0.98	0.10	-6.02	94,94,94,94	0
58	MG	14	3395	1/1	0.95	0.06	-6.21	85,85,85,85	0
58	MG	14	3377	1/1	0.95	0.05	-6.37	106,106,106,106	0
58	MG	1H	3478	1/1	0.97	0.06	-11.36	95,95,95,95	0
58	MG	1G	1670	1/1	0.97	0.05	-14.06	112,112,112,112	0
58	MG	1H	3376	1/1	0.98	0.05	-20.22	106,106,106,106	0
58	MG	1H	3309	1/1	0.78	0.49	-	126,126,126,126	0
58	MG	1H	3365	1/1	0.97	0.17	-	64,64,64,64	0
58	MG	14	3131	1/1	0.98	0.33	-	79,79,79,79	0
58	MG	14	3107	1/1	0.98	0.41	-	80,80,80,80	0
58	MG	14	3323	1/1	0.89	0.07	-	159,159,159,159	0
58	MG	14	3299	1/1	0.56	0.36	-	118,118,118,118	0
58	MG	14	3092	1/1	0.99	0.34	-	91,91,91,91	0
58	MG	13	1703	1/1	0.49	0.38	-	128,128,128,128	0
58	MG	1G	1662	1/1	0.74	0.14	-	118,118,118,118	0
58	MG	14	3165	1/1	0.81	0.45	-	102,102,102,102	0
58	MG	1H	3451	1/1	0.94	0.20	-	85,85,85,85	0
58	MG	14	3102	1/1	0.95	0.25	-	92,92,92,92	0
58	MG	1G	1655	1/1	0.91	0.04	-	176,176,176,176	0
58	MG	13	1692	1/1	0.76	0.40	-	99,99,99,99	0
58	MG	14	3038	1/1	0.97	0.35	-	67,67,67,67	0
58	MG	1H	3246	1/1	0.88	0.33	-	87,87,87,87	0
58	MG	13	1635	1/1	0.89	0.36	-	111,111,111,111	0
58	MG	1H	3049	1/1	0.99	0.47	-	82,82,82,82	0
58	MG	1H	3232	1/1	0.88	0.44	-	98,98,98,98	0
58	MG	1H	3421	1/1	0.97	0.04	-	129,129,129,129	0
58	MG	1H	3120	1/1	0.90	0.57	-	107,107,107,107	0
58	MG	1H	3211	1/1	0.84	0.54	-	90,90,90,90	0
58	MG	14	3055	1/1	0.87	0.32	-	77,77,77,77	0
58	MG	13	1707	1/1	0.73	0.43	-	114,114,114,114	0
58	MG	13	1676	1/1	0.91	0.29	-	130,130,130,130	0
58	MG	14	3378	1/1	0.95	0.09	-	83,83,83,83	0
58	MG	1H	3234	1/1	0.89	1.04	-	90,90,90,90	0
58	MG	14	3329	1/1	0.95	1.17	-	91,91,91,91	0
58	MG	14	3133	1/1	0.98	0.39	-	98,98,98,98	0
58	MG	14	3309	1/1	0.87	0.20	-	109,109,109,109	0
58	MG	14	3324	1/1	0.61	0.27	-	104,104,104,104	0
58	MG	1H	3196	1/1	0.79	0.45	-	102,102,102,102	0
58	MG	1H	3289	1/1	0.65	1.03	-	86,86,86,86	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1656	1/1	0.92	0.10	-	105,105,105,105	0
58	MG	1H	3178	1/1	0.82	0.53	-	93,93,93,93	0
58	MG	14	3414	1/1	0.97	0.15	-	108,108,108,108	0
58	MG	14	3358	1/1	0.94	0.17	-	107,107,107,107	0
58	MG	1H	3032	1/1	0.55	0.35	-	110,110,110,110	0
58	MG	13	1627	1/1	0.37	0.42	-	105,105,105,105	0
58	MG	14	3041	1/1	0.94	0.39	-	80,80,80,80	0
58	MG	13	1731	1/1	0.98	0.08	-	108,108,108,108	0
58	MG	14	3185	1/1	0.82	0.71	-	113,113,113,113	0
58	MG	1H	3161	1/1	0.85	0.46	-	115,115,115,115	0
58	MG	1H	3094	1/1	0.97	0.35	-	77,77,77,77	0
58	MG	14	3372	1/1	0.90	0.08	-	134,134,134,134	0
58	MG	14	3012	1/1	0.99	0.38	-	67,67,67,67	0
58	MG	1H	3464	1/1	0.97	0.10	-	95,95,95,95	0
58	MG	13	1644	1/1	0.74	0.38	-	120,120,120,120	0
58	MG	14	3062	1/1	0.60	0.56	-	129,129,129,129	0
58	MG	14	3209	1/1	0.96	0.31	-	90,90,90,90	0
58	MG	1G	1623	1/1	0.88	0.65	-	100,100,100,100	0
58	MG	1H	3052	1/1	0.97	0.27	-	69,69,69,69	0
58	MG	1G	1642	1/1	0.93	0.43	-	114,114,114,114	0
58	MG	13	1705	1/1	0.17	0.29	-	150,150,150,150	0
58	MG	14	3114	1/1	0.96	0.56	-	66,66,66,66	0
58	MG	1G	1643	1/1	0.63	0.57	-	102,102,102,102	0
58	MG	14	3389	1/1	0.98	0.11	-	92,92,92,92	0
58	MG	1G	1646	1/1	0.79	0.18	-	126,126,126,126	0
58	MG	1H	3199	1/1	0.59	0.69	-	87,87,87,87	0
58	MG	1H	3329	1/1	0.94	0.10	-	105,105,105,105	0
58	MG	14	3085	1/1	0.81	0.44	-	85,85,85,85	0
58	MG	1H	3429	1/1	0.94	0.13	-	82,82,82,82	0
58	MG	14	3261	1/1	0.69	0.43	-	101,101,101,101	0
58	MG	1G	1602	1/1	0.64	0.75	-	133,133,133,133	0
58	MG	1G	1656	1/1	0.98	0.57	-	102,102,102,102	0
58	MG	1H	3219	1/1	0.96	0.16	-	120,120,120,120	0
58	MG	1H	3379	1/1	0.98	0.17	-	103,103,103,103	0
58	MG	14	3094	1/1	0.94	0.55	-	82,82,82,82	0
58	MG	14	3146	1/1	0.78	0.36	-	77,77,77,77	0
58	MG	1H	3004	1/1	0.97	0.26	-	60,60,60,60	0
58	MG	13	1619	1/1	0.92	0.26	-	81,81,81,81	0
58	MG	1H	3144	1/1	0.70	0.27	-	89,89,89,89	0
58	MG	1H	3299	1/1	0.86	0.31	-	94,94,94,94	0
58	MG	1H	3040	1/1	0.96	0.41	-	71,71,71,71	0
58	MG	14	3262	1/1	0.73	0.16	-	109,109,109,109	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	13	1696	1/1	0.89	0.43	-	95,95,95,95	0
58	MG	1H	3181	1/1	0.80	0.20	-	92,92,92,92	0
58	MG	1J	205	1/1	0.90	0.26	-	122,122,122,122	0
58	MG	14	3084	1/1	0.85	0.48	-	92,92,92,92	0
58	MG	1J	206	1/1	0.90	0.05	-	130,130,130,130	0
58	MG	1H	3348	1/1	0.87	0.36	-	111,111,111,111	0
58	MG	13	1673	1/1	0.71	0.40	-	106,106,106,106	0
58	MG	13	1708	1/1	0.66	0.82	-	102,102,102,102	0
58	MG	13	1685	1/1	0.95	0.39	-	107,107,107,107	0
58	MG	14	3371	1/1	0.99	0.06	-	95,95,95,95	0
58	MG	13	1603	1/1	0.55	0.40	-	102,102,102,102	0
58	MG	1H	3405	1/1	0.96	0.19	-	75,75,75,75	0
58	MG	1H	3024	1/1	0.85	0.28	-	99,99,99,99	0
58	MG	13	1738	1/1	0.84	0.05	-	106,106,106,106	0
58	MG	1H	3287	1/1	0.76	0.31	-	96,96,96,96	0
58	MG	1H	3275	1/1	0.84	0.12	-	83,83,83,83	0
58	MG	1G	1661	1/1	0.87	0.06	-	169,169,169,169	0
58	MG	13	1733	1/1	0.99	0.03	-	102,102,102,102	0
58	MG	14	3002	1/1	0.99	0.12	-	65,65,65,65	0
58	MG	13	1604	1/1	0.91	0.47	-	90,90,90,90	0
58	MG	14	3381	1/1	0.84	0.12	-	116,116,116,116	0
58	MG	1H	3109	1/1	0.81	0.69	-	102,102,102,102	0
58	MG	13	1723	1/1	0.88	0.14	-	134,134,134,134	0
58	MG	1H	3383	1/1	0.98	0.14	-	75,75,75,75	0
58	MG	13	1661	1/1	0.75	0.49	-	90,90,90,90	0
58	MG	14	3023	1/1	0.71	0.47	-	103,103,103,103	0
58	MG	14	3319	1/1	0.39	0.17	-	128,128,128,128	0
58	MG	14	3418	1/1	0.92	0.09	-	88,88,88,88	0
58	MG	14	3415	1/1	0.92	0.07	-	126,126,126,126	0
58	MG	1H	3256	1/1	0.47	0.38	-	104,104,104,104	0
58	MG	14	3376	1/1	0.98	0.02	-	124,124,124,124	0
58	MG	14	3036	1/1	0.98	0.23	-	70,70,70,70	0
58	MG	14	3134	1/1	0.93	0.39	-	100,100,100,100	0
58	MG	14	3311	1/1	0.81	0.34	-	105,105,105,105	0
58	MG	13	1606	1/1	0.66	1.05	-	119,119,119,119	0
58	MG	14	3034	1/1	0.71	0.28	-	96,96,96,96	0
58	MG	1H	3406	1/1	0.97	0.08	-	82,82,82,82	0
58	MG	45	203	1/1	0.69	0.78	-	104,104,104,104	0
58	MG	13	1670	1/1	0.86	0.26	-	119,119,119,119	0
58	MG	1G	1650	1/1	0.87	0.32	-	98,98,98,98	0
58	MG	14	3302	1/1	0.77	0.83	-	95,95,95,95	0
58	MG	1H	3292	1/1	0.73	0.27	-	82,82,82,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3377	1/1	0.98	0.04	-	119,119,119,119	0
58	MG	1H	3183	1/1	0.88	0.93	-	94,94,94,94	0
58	MG	1G	1637	1/1	0.80	0.42	-	101,101,101,101	0
58	MG	14	3199	1/1	0.78	0.61	-	91,91,91,91	0
58	MG	1H	3341	1/1	0.64	0.61	-	110,110,110,110	0
58	MG	1H	3229	1/1	0.90	0.76	-	89,89,89,89	0
58	MG	1H	3444	1/1	0.96	0.13	-	85,85,85,85	0
58	MG	13	1653	1/1	0.75	0.29	-	144,144,144,144	0
58	MG	1G	1639	1/1	0.69	0.81	-	93,93,93,93	0
58	MG	1H	3437	1/1	0.97	0.06	-	85,85,85,85	0
58	MG	14	3123	1/1	0.89	0.21	-	109,109,109,109	0
58	MG	1H	3274	1/1	0.90	0.54	-	105,105,105,105	0
58	MG	1H	3253	1/1	0.92	0.44	-	84,84,84,84	0
58	MG	13	1737	1/1	0.95	0.04	-	116,116,116,116	0
58	MG	1H	3086	1/1	0.89	0.58	-	89,89,89,89	0
58	MG	1H	3051	1/1	0.99	0.32	-	90,90,90,90	0
58	MG	14	3058	1/1	0.81	0.26	-	107,107,107,107	0
58	MG	1H	3415	1/1	0.97	0.17	-	90,90,90,90	0
58	MG	14	3101	1/1	0.86	0.27	-	108,108,108,108	0
58	MG	1H	3026	1/1	0.91	0.40	-	80,80,80,80	0
58	MG	1G	1628	1/1	0.44	0.40	-	120,120,120,120	0
58	MG	1H	3385	1/1	0.94	0.07	-	91,91,91,91	0
58	MG	1H	3102	1/1	0.97	0.71	-	73,73,73,73	0
58	MG	1H	3145	1/1	0.79	0.56	-	117,117,117,117	0
58	MG	14	3120	1/1	0.92	0.25	-	94,94,94,94	0
58	MG	L5	101	1/1	0.87	0.88	-	96,96,96,96	0
58	MG	14	3122	1/1	0.91	0.44	-	95,95,95,95	0
58	MG	1H	3025	1/1	0.99	0.36	-	55,55,55,55	0
58	MG	13	1647	1/1	0.93	0.27	-	108,108,108,108	0
58	MG	1H	3125	1/1	0.97	0.38	-	75,75,75,75	0
58	MG	1H	3313	1/1	0.33	0.68	-	114,114,114,114	0
58	MG	1H	3259	1/1	0.87	0.12	-	106,106,106,106	0
58	MG	1H	3203	1/1	0.94	0.22	-	91,91,91,91	0
58	MG	14	3350	1/1	0.96	0.04	-	116,116,116,116	0
58	MG	1H	3263	1/1	0.62	0.68	-	92,92,92,92	0
58	MG	1H	3450	1/1	0.93	0.17	-	75,75,75,75	0
58	MG	13	1699	1/1	0.67	0.49	-	97,97,97,97	0
58	MG	13	1674	1/1	0.76	0.26	-	121,121,121,121	0
58	MG	1H	3280	1/1	0.84	0.14	-	114,114,114,114	0
58	MG	14	3079	1/1	0.96	0.25	-	87,87,87,87	0
58	MG	13	1716	1/1	0.95	0.10	-	108,108,108,108	0
58	MG	1H	3351	1/1	0.64	0.33	-	122,122,122,122	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3189	1/1	0.82	0.79	-	93,93,93,93	0
58	MG	14	3234	1/1	0.49	0.49	-	85,85,85,85	0
58	MG	1H	3269	1/1	0.68	0.71	-	99,99,99,99	0
58	MG	14	3304	1/1	0.90	0.66	-	87,87,87,87	0
58	MG	1H	3268	1/1	0.95	0.55	-	104,104,104,104	0
58	MG	14	3078	1/1	0.97	0.44	-	82,82,82,82	0
58	MG	16	202	1/1	0.94	0.18	-	102,102,102,102	0
58	MG	14	3388	1/1	0.99	0.22	-	88,88,88,88	0
58	MG	1H	3262	1/1	0.39	0.26	-	100,100,100,100	0
58	MG	14	3217	1/1	0.74	0.74	-	89,89,89,89	0
58	MG	14	3024	1/1	0.63	1.13	-	106,106,106,106	0
58	MG	1H	3035	1/1	0.86	0.64	-	123,123,123,123	0
58	MG	1H	3321	1/1	0.90	0.43	-	84,84,84,84	0
58	MG	13	1684	1/1	0.70	0.26	-	141,141,141,141	0
58	MG	13	1687	1/1	0.58	1.49	-	100,100,100,100	0
58	MG	1H	3082	1/1	0.99	0.49	-	79,79,79,79	0
58	MG	13	1666	1/1	0.82	0.18	-	99,99,99,99	0
58	MG	14	3169	1/1	0.86	0.42	-	69,69,69,69	0
58	MG	1H	3288	1/1	0.66	0.32	-	99,99,99,99	0
58	MG	1H	3013	1/1	0.99	0.42	-	71,71,71,71	0
58	MG	1H	3207	1/1	0.92	0.46	-	93,93,93,93	0
58	MG	13	1628	1/1	0.74	0.68	-	94,94,94,94	0
58	MG	14	3086	1/1	0.94	0.70	-	95,95,95,95	0
58	MG	14	3201	1/1	0.69	0.49	-	91,91,91,91	0
58	MG	1H	3482	1/1	0.93	0.05	-	119,119,119,119	0
58	MG	14	3402	1/1	0.97	0.14	-	83,83,83,83	0
58	MG	14	3300	1/1	0.91	0.10	-	118,118,118,118	0
58	MG	1H	3393	1/1	0.99	0.08	-	95,95,95,95	0
58	MG	1H	3454	1/1	0.97	0.26	-	96,96,96,96	0
58	MG	13	1668	1/1	0.88	0.22	-	117,117,117,117	0
58	MG	14	3175	1/1	0.79	0.19	-	93,93,93,93	0
58	MG	1H	3300	1/1	0.94	0.86	-	99,99,99,99	0
58	MG	1H	3112	1/1	0.91	0.72	-	101,101,101,101	0
58	MG	14	3144	1/1	0.93	0.17	-	112,112,112,112	0
58	MG	14	3398	1/1	0.98	0.07	-	111,111,111,111	0
58	MG	13	1697	1/1	0.92	0.50	-	98,98,98,98	0
58	MG	14	3221	1/1	0.90	0.67	-	80,80,80,80	0
58	MG	1H	3100	1/1	0.88	0.86	-	82,82,82,82	0
58	MG	1H	3167	1/1	0.91	0.62	-	96,96,96,96	0
58	MG	J8	102	1/1	0.93	0.46	-	77,77,77,77	0
58	MG	11	301	1/1	0.90	0.31	-	73,73,73,73	0
58	MG	14	3225	1/1	0.93	0.46	-	95,95,95,95	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3223	1/1	0.95	0.23	-	96,96,96,96	0
58	MG	14	3098	1/1	0.96	0.34	-	86,86,86,86	0
58	MG	1H	3350	1/1	0.51	0.61	-	113,113,113,113	0
58	MG	13	1626	1/1	0.89	0.34	-	113,113,113,113	0
58	MG	14	3410	1/1	0.97	0.09	-	91,91,91,91	0
58	MG	1H	3195	1/1	0.91	0.74	-	96,96,96,96	0
58	MG	13	1701	1/1	0.91	0.45	-	103,103,103,103	0
58	MG	14	3162	1/1	0.91	0.67	-	90,90,90,90	0
58	MG	1H	3060	1/1	0.96	0.57	-	111,111,111,111	0
58	MG	14	3416	1/1	0.93	0.04	-	124,124,124,124	0
58	MG	1H	3462	1/1	0.97	0.15	-	90,90,90,90	0
58	MG	1G	1611	1/1	0.85	0.33	-	129,129,129,129	0
58	MG	1H	3208	1/1	0.81	0.92	-	99,99,99,99	0
58	MG	14	3032	1/1	0.83	0.18	-	109,109,109,109	0
58	MG	13	1679	1/1	0.69	0.25	-	122,122,122,122	0
58	MG	14	3310	1/1	0.75	0.38	-	124,124,124,124	0
58	MG	13	1662	1/1	0.86	0.29	-	116,116,116,116	0
58	MG	14	3115	1/1	0.93	0.33	-	88,88,88,88	0
58	MG	1G	1621	1/1	0.60	0.75	-	110,110,110,110	0
58	MG	1H	3295	1/1	0.82	0.53	-	110,110,110,110	0
58	MG	1H	3188	1/1	0.87	0.40	-	84,84,84,84	0
58	MG	14	3397	1/1	0.93	0.09	-	103,103,103,103	0
58	MG	1H	3326	1/1	0.87	0.41	-	97,97,97,97	0
58	MG	1H	3314	1/1	0.90	0.23	-	107,107,107,107	0
58	MG	14	3001	1/1	0.95	0.94	-	97,97,97,97	0
58	MG	1H	3345	1/1	0.85	0.18	-	79,79,79,79	0
58	MG	1H	3395	1/1	0.98	0.17	-	103,103,103,103	0
58	MG	14	3160	1/1	0.82	0.37	-	98,98,98,98	0
58	MG	1H	3177	1/1	0.92	0.67	-	93,93,93,93	0
58	MG	1H	3480	1/1	0.91	0.07	-	114,114,114,114	0
58	MG	1H	3384	1/1	0.99	0.20	-	87,87,87,87	0
58	MG	1H	3247	1/1	0.78	0.43	-	101,101,101,101	0
58	MG	1G	1631	1/1	0.78	0.40	-	97,97,97,97	0
58	MG	1H	3184	1/1	0.92	0.76	-	94,94,94,94	0
58	MG	1H	3316	1/1	0.40	0.38	-	91,91,91,91	0
58	MG	14	3170	1/1	0.94	0.28	-	119,119,119,119	0
58	MG	14	3022	1/1	0.85	0.57	-	101,101,101,101	0
58	MG	1H	3074	1/1	0.90	0.40	-	94,94,94,94	0
58	MG	1H	3349	1/1	0.81	0.17	-	119,119,119,119	0
58	MG	14	3174	1/1	0.62	0.38	-	98,98,98,98	0
58	MG	1H	3200	1/1	0.96	0.29	-	79,79,79,79	0
58	MG	14	3049	1/1	0.98	0.50	-	74,74,74,74	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1G	1665	1/1	0.93	0.33	-	122,122,122,122	0
58	MG	1H	3426	1/1	0.98	0.25	-	109,109,109,109	0
58	MG	1H	3336	1/1	0.65	0.12	-	93,93,93,93	0
58	MG	13	1633	1/1	0.93	0.57	-	88,88,88,88	0
58	MG	1H	3279	1/1	0.83	0.30	-	106,106,106,106	0
58	MG	1H	3334	1/1	0.77	0.29	-	77,77,77,77	0
58	MG	13	1650	1/1	0.66	0.30	-	134,134,134,134	0
58	MG	14	3314	1/1	0.84	1.13	-	99,99,99,99	0
58	MG	1H	3017	1/1	0.91	0.50	-	79,79,79,79	0
58	MG	16	205	1/1	0.83	0.36	-	106,106,106,106	0
58	MG	1H	3141	1/1	0.74	0.93	-	83,83,83,83	0
58	MG	14	3337	1/1	0.90	0.50	-	125,125,125,125	0
58	MG	1H	3469	1/1	0.93	0.24	-	124,124,124,124	0
58	MG	1G	1663	1/1	0.97	0.44	-	133,133,133,133	0
58	MG	1H	3412	1/1	0.96	0.06	-	84,84,84,84	0
58	MG	1G	1632	1/1	0.68	0.40	-	130,130,130,130	0
58	MG	1H	3248	1/1	0.89	1.58	-	93,93,93,93	0
58	MG	1H	3033	1/1	0.15	0.55	-	109,109,109,109	0
58	MG	14	3338	1/1	0.94	0.07	-	114,114,114,114	0
58	MG	14	3198	1/1	0.97	0.16	-	109,109,109,109	0
58	MG	14	3186	1/1	0.88	0.69	-	100,100,100,100	0
58	MG	13	1629	1/1	0.98	0.50	-	79,79,79,79	0
58	MG	14	3117	1/1	0.86	0.67	-	91,91,91,91	0
58	MG	1H	3249	1/1	0.95	0.15	-	83,83,83,83	0
58	MG	14	3132	1/1	0.73	0.69	-	86,86,86,86	0
58	MG	14	3047	1/1	0.97	0.17	-	102,102,102,102	0
58	MG	1H	3427	1/1	0.97	0.03	-	106,106,106,106	0
58	MG	1J	201	1/1	0.85	0.31	-	100,100,100,100	0
58	MG	1H	3062	1/1	0.92	0.44	-	103,103,103,103	0
58	MG	14	3328	1/1	0.79	1.41	-	107,107,107,107	0
58	MG	1H	3410	1/1	0.94	0.08	-	97,97,97,97	0
58	MG	13	1625	1/1	0.48	0.55	-	102,102,102,102	0
58	MG	14	3301	1/1	0.58	0.17	-	115,115,115,115	0
58	MG	1H	3448	1/1	0.98	0.21	-	88,88,88,88	0
58	MG	14	3374	1/1	0.99	0.16	-	107,107,107,107	0
58	MG	14	3113	1/1	0.93	0.49	-	102,102,102,102	0
58	MG	14	3264	1/1	0.87	0.50	-	106,106,106,106	0
58	MG	1H	3391	1/1	0.99	0.19	-	79,79,79,79	0
58	MG	1G	1638	1/1	0.78	0.43	-	102,102,102,102	0
58	MG	1G	1620	1/1	0.93	0.58	-	91,91,91,91	0
58	MG	14	3259	1/1	0.78	0.54	-	111,111,111,111	0
58	MG	13	1734	1/1	0.87	0.08	-	131,131,131,131	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3109	1/1	0.75	0.57	-	94,94,94,94	0
58	MG	1H	3105	1/1	0.60	0.90	-	86,86,86,86	0
58	MG	1H	3022	1/1	0.95	0.34	-	69,69,69,69	0
58	MG	14	3105	1/1	0.93	0.84	-	110,110,110,110	0
58	MG	13	1735	1/1	0.82	0.09	-	146,146,146,146	0
58	MG	13	1617	1/1	0.91	0.29	-	97,97,97,97	0
58	MG	13	1637	1/1	0.82	0.44	-	123,123,123,123	0
58	MG	14	3361	1/1	0.98	0.11	-	79,79,79,79	0
58	MG	14	3151	1/1	0.92	0.30	-	109,109,109,109	0
58	MG	1H	3081	1/1	0.97	0.21	-	88,88,88,88	0
58	MG	14	3190	1/1	0.96	0.22	-	91,91,91,91	0
58	MG	1H	3065	1/1	0.97	0.34	-	77,77,77,77	0
58	MG	1H	3138	1/1	0.98	0.17	-	67,67,67,67	0
58	MG	1H	3436	1/1	0.97	0.09	-	96,96,96,96	0
58	MG	14	3295	1/1	0.57	0.77	-	96,96,96,96	0
58	MG	14	3167	1/1	0.93	0.20	-	105,105,105,105	0
58	MG	14	3179	1/1	0.58	0.45	-	102,102,102,102	0
58	MG	1G	1645	1/1	0.43	0.56	-	122,122,122,122	0
58	MG	1H	3128	1/1	0.69	0.42	-	90,90,90,90	0
58	MG	1G	1675	1/1	0.85	0.11	-	150,150,150,150	0
58	MG	7A	101	1/1	0.77	0.23	-	104,104,104,104	0
58	MG	13	1726	1/1	0.99	0.07	-	91,91,91,91	0
58	MG	1H	3192	1/1	0.78	0.45	-	85,85,85,85	0
58	MG	1H	3134	1/1	0.83	0.23	-	103,103,103,103	0
58	MG	1H	3265	1/1	0.88	1.01	-	100,100,100,100	0
58	MG	14	3280	1/1	0.76	0.61	-	98,98,98,98	0
58	MG	13	1715	1/1	0.99	0.20	-	113,113,113,113	0
58	MG	1H	3460	1/1	0.96	0.18	-	86,86,86,86	0
58	MG	14	3305	1/1	0.98	0.24	-	127,127,127,127	0
58	MG	1H	3009	1/1	0.96	0.27	-	98,98,98,98	0
58	MG	14	3056	1/1	0.98	0.21	-	109,109,109,109	0
58	MG	1G	1604	1/1	0.86	0.28	-	119,119,119,119	0
58	MG	1H	3438	1/1	0.93	0.10	-	110,110,110,110	0
58	MG	1H	3087	1/1	0.99	0.28	-	69,69,69,69	0
58	MG	1H	3146	1/1	0.46	0.46	-	103,103,103,103	0
58	MG	14	3405	1/1	0.90	0.17	-	89,89,89,89	0
58	MG	1H	3059	1/1	0.94	0.12	-	110,110,110,110	0
58	MG	13	1740	1/1	0.90	0.20	-	107,107,107,107	0
58	MG	1H	3162	1/1	0.84	0.39	-	106,106,106,106	0
58	MG	16	209	1/1	0.84	0.14	-	106,106,106,106	0
58	MG	1H	3031	1/1	0.78	0.71	-	115,115,115,115	0
58	MG	1H	3159	1/1	0.90	0.38	-	89,89,89,89	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3220	1/1	0.98	0.40	-	97,97,97,97	0
58	MG	1H	3050	1/1	0.99	0.23	-	74,74,74,74	0
58	MG	13	1702	1/1	0.64	0.45	-	114,114,114,114	0
58	MG	1H	3445	1/1	0.93	0.17	-	71,71,71,71	0
58	MG	1H	3245	1/1	0.98	0.21	-	100,100,100,100	0
58	MG	14	3291	1/1	0.85	0.26	-	96,96,96,96	0
58	MG	1G	1630	1/1	0.90	0.42	-	120,120,120,120	0
58	MG	1H	3186	1/1	0.80	0.40	-	96,96,96,96	0
58	MG	1H	3193	1/1	0.94	0.40	-	104,104,104,104	0
58	MG	14	3366	1/1	0.87	0.12	-	114,114,114,114	0
58	MG	1H	3044	1/1	0.97	0.36	-	68,68,68,68	0
58	MG	1H	3110	1/1	0.89	0.35	-	83,83,83,83	0
58	MG	1H	3216	1/1	0.98	0.15	-	65,65,65,65	0
58	MG	14	3409	1/1	0.98	0.32	-	85,85,85,85	0
58	MG	14	3189	1/1	0.85	0.46	-	87,87,87,87	0
58	MG	14	3153	1/1	0.92	0.52	-	102,102,102,102	0
58	MG	14	3333	1/1	0.88	0.68	-	102,102,102,102	0
58	MG	1G	1644	1/1	0.66	0.70	-	110,110,110,110	0
58	MG	14	3035	1/1	0.99	0.28	-	89,89,89,89	0
58	MG	1H	3272	1/1	0.72	0.63	-	118,118,118,118	0
58	MG	13	1728	1/1	0.99	0.07	-	105,105,105,105	0
58	MG	14	3315	1/1	0.69	0.49	-	114,114,114,114	0
58	MG	1H	3016	1/1	0.83	0.44	-	105,105,105,105	0
58	MG	1H	3455	1/1	0.98	0.12	-	87,87,87,87	0
58	MG	14	3396	1/1	0.98	0.29	-	96,96,96,96	0
58	MG	1H	3354	1/1	0.87	0.33	-	98,98,98,98	0
58	MG	14	3288	1/1	0.78	0.80	-	120,120,120,120	0
58	MG	1H	3304	1/1	0.76	0.49	-	94,94,94,94	0
58	MG	1H	3483	1/1	0.75	0.11	-	119,119,119,119	0
58	MG	1H	3228	1/1	0.96	0.80	-	74,74,74,74	0
58	MG	14	3180	1/1	0.94	0.34	-	81,81,81,81	0
58	MG	1H	3439	1/1	0.96	0.14	-	72,72,72,72	0
58	MG	14	3083	1/1	0.94	0.28	-	94,94,94,94	0
58	MG	14	3019	1/1	0.84	0.39	-	87,87,87,87	0
58	MG	1H	3369	1/1	0.99	0.16	-	90,90,90,90	0
58	MG	1H	3319	1/1	0.76	0.62	-	102,102,102,102	0
58	MG	1H	3198	1/1	0.84	0.35	-	119,119,119,119	0
58	MG	1H	3010	1/1	0.84	0.21	-	98,98,98,98	0
58	MG	1H	3096	1/1	0.92	0.32	-	76,76,76,76	0
58	MG	I8	101	1/1	0.92	0.43	-	70,70,70,70	0
58	MG	14	3342	1/1	0.88	0.35	-	120,120,120,120	0
58	MG	13	1618	1/1	0.92	0.22	-	108,108,108,108	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3352	1/1	0.96	0.26	-	75,75,75,75	0
58	MG	1H	3311	1/1	0.84	0.18	-	77,77,77,77	0
58	MG	1H	3168	1/1	0.84	0.41	-	82,82,82,82	0
58	MG	14	3069	1/1	0.95	0.32	-	106,106,106,106	0
58	MG	1H	3020	1/1	0.88	0.38	-	84,84,84,84	0
58	MG	1H	3475	1/1	0.98	0.10	-	89,89,89,89	0
58	MG	1H	3342	1/1	0.78	0.47	-	105,105,105,105	0
58	MG	1H	3467	1/1	0.97	0.13	-	115,115,115,115	0
58	MG	1H	3011	1/1	0.82	0.48	-	71,71,71,71	0
58	MG	14	3318	1/1	0.93	0.30	-	102,102,102,102	0
58	MG	14	3196	1/1	0.74	0.29	-	98,98,98,98	0
58	MG	1G	1652	1/1	0.72	0.32	-	110,110,110,110	0
58	MG	1H	3297	1/1	0.69	0.21	-	133,133,133,133	0
58	MG	1H	3131	1/1	0.86	0.32	-	88,88,88,88	0
58	MG	1H	3477	1/1	0.94	0.05	-	114,114,114,114	0
58	MG	14	3053	1/1	0.98	0.56	-	82,82,82,82	0
58	MG	14	3368	1/1	0.94	0.14	-	87,87,87,87	0
58	MG	1H	3463	1/1	0.96	0.19	-	103,103,103,103	0
58	MG	14	3400	1/1	0.99	0.11	-	113,113,113,113	0
58	MG	1H	3374	1/1	0.92	0.13	-	77,77,77,77	0
58	MG	13	1720	1/1	0.96	0.05	-	126,126,126,126	0
58	MG	1H	3452	1/1	0.97	0.21	-	102,102,102,102	0
58	MG	1G	1633	1/1	0.72	0.25	-	137,137,137,137	0
58	MG	1H	3320	1/1	0.91	0.47	-	107,107,107,107	0
58	MG	1H	3077	1/1	0.79	0.46	-	65,65,65,65	0
58	MG	1H	3485	1/1	0.96	0.15	-	83,83,83,83	0
58	MG	1H	3305	1/1	0.84	0.57	-	96,96,96,96	0
58	MG	1H	3220	1/1	0.97	0.27	-	115,115,115,115	0
58	MG	1H	3063	1/1	0.93	0.44	-	57,57,57,57	0
58	MG	13	1722	1/1	0.98	0.06	-	99,99,99,99	0
58	MG	1H	3238	1/1	0.93	0.24	-	83,83,83,83	0
58	MG	14	3126	1/1	0.98	0.24	-	95,95,95,95	0
58	MG	1H	3281	1/1	0.98	0.68	-	108,108,108,108	0
58	MG	1G	1658	1/1	0.87	0.75	-	99,99,99,99	0
58	MG	13	1602	1/1	0.97	0.35	-	98,98,98,98	0
58	MG	1G	1612	1/1	0.86	0.36	-	105,105,105,105	0
58	MG	14	3025	1/1	0.91	0.79	-	87,87,87,87	0
58	MG	1H	3266	1/1	0.96	0.29	-	65,65,65,65	0
58	MG	14	3006	1/1	0.94	0.29	-	72,72,72,72	0
58	MG	1H	3472	1/1	0.88	0.08	-	108,108,108,108	0
58	MG	1H	3206	1/1	0.71	0.58	-	100,100,100,100	0
58	MG	14	3298	1/1	0.90	0.29	-	104,104,104,104	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3322	1/1	0.81	0.96	-	117,117,117,117	0
58	MG	1H	3205	1/1	0.87	0.65	-	114,114,114,114	0
58	MG	14	3135	1/1	0.97	0.28	-	115,115,115,115	0
58	MG	14	3004	1/1	0.88	0.70	-	76,76,76,76	0
58	MG	14	3326	1/1	0.96	0.65	-	104,104,104,104	0
58	MG	1H	3277	1/1	0.91	0.18	-	122,122,122,122	0
58	MG	1H	3324	1/1	0.84	0.11	-	97,97,97,97	0
58	MG	14	3046	1/1	0.97	0.26	-	86,86,86,86	0
58	MG	14	3110	1/1	0.66	0.32	-	94,94,94,94	0
58	MG	13	1621	1/1	0.69	0.33	-	99,99,99,99	0
58	MG	14	3033	1/1	0.95	0.79	-	95,95,95,95	0
58	MG	14	3156	1/1	0.91	0.70	-	88,88,88,88	0
58	MG	1H	3172	1/1	0.95	0.30	-	89,89,89,89	0
58	MG	1H	3119	1/1	0.87	0.59	-	81,81,81,81	0
58	MG	1H	3479	1/1	0.77	0.20	-	91,91,91,91	0
58	MG	13	1624	1/1	0.98	0.55	-	118,118,118,118	0
58	MG	14	3067	1/1	0.93	0.27	-	100,100,100,100	0
58	MG	1H	3036	1/1	0.54	0.15	-	118,118,118,118	0
58	MG	14	3238	1/1	0.92	0.70	-	83,83,83,83	0
58	MG	1H	3344	1/1	0.78	0.31	-	81,81,81,81	0
58	MG	14	3013	1/1	0.87	0.20	-	98,98,98,98	0
58	MG	14	3030	1/1	0.65	0.34	-	104,104,104,104	0
58	MG	1H	3169	1/1	0.87	0.21	-	95,95,95,95	0
58	MG	1H	3209	1/1	0.76	0.53	-	99,99,99,99	0
58	MG	1H	3270	1/1	0.78	0.25	-	87,87,87,87	0
58	MG	14	3188	1/1	0.94	1.22	-	93,93,93,93	0
58	MG	14	3136	1/1	0.96	0.42	-	93,93,93,93	0
58	MG	14	3051	1/1	0.89	0.37	-	158,158,158,158	0
58	MG	1H	3449	1/1	0.99	0.13	-	89,89,89,89	0
58	MG	13	1739	1/1	0.85	0.17	-	113,113,113,113	0
58	MG	1G	1653	1/1	0.80	0.14	-	118,118,118,118	0
58	MG	13	1608	1/1	0.98	0.19	-	90,90,90,90	0
58	MG	14	3281	1/1	0.93	0.91	-	103,103,103,103	0
58	MG	2L	102	1/1	0.88	1.72	-	95,95,95,95	0
60	ZN	G8	201	1/1	0.96	0.05	-	171,171,171,171	0
58	MG	21	301	1/1	0.98	0.43	-	69,69,69,69	0
58	MG	14	3312	1/1	0.91	0.39	-	97,97,97,97	0
58	MG	14	3293	1/1	0.92	0.69	-	109,109,109,109	0
58	MG	14	3417	1/1	0.56	0.08	-	140,140,140,140	0
58	MG	14	3392	1/1	0.99	0.05	-	89,89,89,89	0
58	MG	14	3382	1/1	0.88	0.14	-	112,112,112,112	0
58	MG	1H	3118	1/1	0.95	0.60	-	104,104,104,104	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3137	1/1	0.92	0.35	-	93,93,93,93	0
58	MG	13	1719	1/1	0.97	0.14	-	94,94,94,94	0
58	MG	14	3057	1/1	0.93	0.22	-	119,119,119,119	0
58	MG	14	3260	1/1	0.66	1.01	-	115,115,115,115	0
58	MG	1H	3474	1/1	0.97	0.05	-	110,110,110,110	0
58	MG	1H	3335	1/1	0.93	0.16	-	100,100,100,100	0
58	MG	14	3020	1/1	0.87	0.31	-	93,93,93,93	0
58	MG	14	3176	1/1	0.92	0.37	-	96,96,96,96	0
58	MG	1H	3154	1/1	0.80	0.49	-	106,106,106,106	0
58	MG	16	211	1/1	0.97	0.12	-	92,92,92,92	0
58	MG	1H	3029	1/1	0.80	0.42	-	92,92,92,92	0
58	MG	1H	3005	1/1	0.96	0.33	-	79,79,79,79	0
58	MG	2L	103	1/1	0.95	0.51	-	128,128,128,128	0
58	MG	1H	3163	1/1	0.70	0.49	-	84,84,84,84	0
58	MG	14	3327	1/1	0.90	0.46	-	83,83,83,83	0
58	MG	14	3275	1/1	0.76	0.47	-	90,90,90,90	0
58	MG	14	3007	1/1	0.91	0.50	-	81,81,81,81	0
58	MG	14	3365	1/1	0.97	0.09	-	96,96,96,96	0
58	MG	1H	3466	1/1	0.99	0.07	-	94,94,94,94	0
58	MG	1H	3170	1/1	0.89	0.07	-	92,92,92,92	0
58	MG	14	3031	1/1	0.77	0.47	-	89,89,89,89	0
58	MG	1H	3291	1/1	0.93	0.64	-	116,116,116,116	0
58	MG	14	3104	1/1	0.94	0.38	-	78,78,78,78	0
58	MG	14	3143	1/1	0.81	0.41	-	110,110,110,110	0
58	MG	14	3222	1/1	0.96	0.82	-	95,95,95,95	0
58	MG	1H	3210	1/1	0.97	0.47	-	101,101,101,101	0
58	MG	1H	3278	1/1	0.87	0.42	-	90,90,90,90	0
58	MG	1H	3012	1/1	0.81	0.40	-	93,93,93,93	0
58	MG	13	1704	1/1	0.79	0.08	-	134,134,134,134	0
58	MG	1H	3465	1/1	0.91	0.07	-	112,112,112,112	0
58	MG	1H	3346	1/1	0.81	0.33	-	113,113,113,113	0
58	MG	1G	1608	1/1	0.96	0.20	-	119,119,119,119	0
58	MG	1G	1647	1/1	0.68	0.27	-	101,101,101,101	0
58	MG	13	1710	1/1	0.79	0.33	-	118,118,118,118	0
58	MG	1H	3419	1/1	0.97	0.09	-	76,76,76,76	0
58	MG	1H	3306	1/1	0.93	0.42	-	77,77,77,77	0
58	MG	1H	3414	1/1	0.99	0.21	-	79,79,79,79	0
58	MG	14	3386	1/1	0.96	0.13	-	83,83,83,83	0
58	MG	1H	3107	1/1	0.97	0.35	-	95,95,95,95	0
58	MG	14	3296	1/1	0.58	0.32	-	110,110,110,110	0
58	MG	14	3244	1/1	0.93	0.12	-	79,79,79,79	0
58	MG	14	3149	1/1	0.76	0.58	-	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3271	1/1	0.93	0.58	-	87,87,87,87	0
58	MG	1H	3481	1/1	0.89	0.15	-	133,133,133,133	0
58	MG	14	3240	1/1	0.78	0.21	-	111,111,111,111	0
58	MG	14	3028	1/1	0.39	0.40	-	124,124,124,124	0
58	MG	14	3164	1/1	0.93	0.31	-	93,93,93,93	0
58	MG	1H	3476	1/1	0.97	0.03	-	122,122,122,122	0
58	MG	14	3100	1/1	0.99	0.10	-	107,107,107,107	0
58	MG	13	1612	1/1	0.83	0.35	-	108,108,108,108	0
58	MG	5E	201	1/1	0.24	0.82	-	107,107,107,107	0
58	MG	1H	3093	1/1	0.85	0.87	-	88,88,88,88	0
58	MG	14	3210	1/1	0.98	0.13	-	113,113,113,113	0
58	MG	1H	3434	1/1	0.96	0.13	-	82,82,82,82	0
58	MG	14	3159	1/1	0.80	0.43	-	81,81,81,81	0
58	MG	1H	3325	1/1	0.87	0.23	-	100,100,100,100	0
58	MG	13	1615	1/1	0.98	0.20	-	90,90,90,90	0
58	MG	1G	1614	1/1	0.85	0.26	-	127,127,127,127	0
58	MG	1H	3046	1/1	0.99	0.29	-	61,61,61,61	0
58	MG	14	3356	1/1	0.98	0.18	-	85,85,85,85	0
58	MG	1H	3233	1/1	0.92	0.19	-	93,93,93,93	0
58	MG	13	1691	1/1	0.98	0.80	-	94,94,94,94	0
58	MG	1G	1674	1/1	0.98	0.06	-	124,124,124,124	0
58	MG	1H	3338	1/1	0.65	0.21	-	112,112,112,112	0
58	MG	1H	3363	1/1	0.95	0.21	-	81,81,81,81	0
58	MG	1H	3347	1/1	0.57	0.17	-	102,102,102,102	0
58	MG	14	3330	1/1	0.81	0.67	-	104,104,104,104	0
58	MG	14	3360	1/1	0.99	0.07	-	78,78,78,78	0
58	MG	14	3292	1/1	0.85	0.98	-	83,83,83,83	0
58	MG	16	208	1/1	0.69	0.42	-	111,111,111,111	0
58	MG	14	3029	1/1	0.85	0.96	-	90,90,90,90	0
58	MG	1H	3322	1/1	0.60	0.30	-	121,121,121,121	0
58	MG	1H	3152	1/1	0.92	0.59	-	108,108,108,108	0
58	MG	1H	3231	1/1	0.97	0.69	-	85,85,85,85	0
58	MG	1H	3315	1/1	0.85	0.22	-	99,99,99,99	0
58	MG	13	1636	1/1	0.93	0.10	-	123,123,123,123	0
58	MG	1H	3409	1/1	0.94	0.12	-	85,85,85,85	0
58	MG	13	1678	1/1	0.58	0.19	-	121,121,121,121	0
58	MG	14	3268	1/1	0.97	0.30	-	84,84,84,84	0
58	MG	1H	3240	1/1	0.89	0.49	-	96,96,96,96	0
58	MG	14	3277	1/1	0.62	0.50	-	111,111,111,111	0
58	MG	1H	3258	1/1	0.93	0.33	-	99,99,99,99	0
58	MG	13	1675	1/1	0.97	0.29	-	149,149,149,149	0
58	MG	13	1632	1/1	0.98	0.21	-	83,83,83,83	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3263	1/1	0.50	0.49	-	102,102,102,102	0
58	MG	1H	3116	1/1	0.91	0.39	-	88,88,88,88	0
58	MG	13	1698	1/1	0.82	0.46	-	96,96,96,96	0
58	MG	13	1613	1/1	0.98	0.09	-	109,109,109,109	0
58	MG	13	1605	1/1	0.96	0.20	-	134,134,134,134	0
58	MG	13	1688	1/1	0.62	0.51	-	96,96,96,96	0
58	MG	13	1690	1/1	0.84	0.69	-	113,113,113,113	0
58	MG	1H	3147	1/1	0.86	0.75	-	93,93,93,93	0
58	MG	1G	1635	1/1	0.68	0.81	-	111,111,111,111	0
58	MG	1H	3156	1/1	0.89	0.05	-	121,121,121,121	0
58	MG	13	1622	1/1	0.97	0.30	-	99,99,99,99	0
58	MG	1H	3310	1/1	0.93	0.53	-	95,95,95,95	0
58	MG	13	1736	1/1	0.98	0.09	-	126,126,126,126	0
58	MG	13	1729	1/1	0.97	0.13	-	96,96,96,96	0
58	MG	13	1712	1/1	0.99	0.14	-	98,98,98,98	0
58	MG	1H	3303	1/1	0.72	0.24	-	102,102,102,102	0
58	MG	1H	3307	1/1	0.91	0.56	-	97,97,97,97	0
58	MG	13	1645	1/1	0.92	0.38	-	113,113,113,113	0
58	MG	1H	3418	1/1	0.97	0.10	-	86,86,86,86	0
58	MG	16	210	1/1	0.97	0.09	-	87,87,87,87	0
58	MG	14	3274	1/1	0.87	0.14	-	97,97,97,97	0
58	MG	1H	3312	1/1	0.86	0.38	-	103,103,103,103	0
58	MG	14	3276	1/1	0.85	0.10	-	130,130,130,130	0
58	MG	1G	1622	1/1	0.97	0.46	-	103,103,103,103	0
58	MG	14	3401	1/1	0.98	0.10	-	127,127,127,127	0
58	MG	14	3171	1/1	0.62	0.95	-	91,91,91,91	0
58	MG	1H	3201	1/1	0.96	0.73	-	97,97,97,97	0
58	MG	14	3227	1/1	0.49	1.19	-	104,104,104,104	0
58	MG	1H	3204	1/1	0.91	0.25	-	87,87,87,87	0
58	MG	1H	3355	1/1	0.91	0.54	-	88,88,88,88	0
58	MG	1H	3213	1/1	0.89	0.17	-	81,81,81,81	0
58	MG	14	3223	1/1	0.91	0.19	-	116,116,116,116	0
58	MG	14	3147	1/1	0.94	0.34	-	110,110,110,110	0
58	MG	1H	3459	1/1	0.94	0.25	-	102,102,102,102	0
58	MG	1H	3182	1/1	0.96	0.52	-	91,91,91,91	0
58	MG	13	1695	1/1	0.89	0.29	-	122,122,122,122	0
58	MG	1J	203	1/1	0.95	0.33	-	124,124,124,124	0
58	MG	14	3080	1/1	0.86	0.41	-	105,105,105,105	0
58	MG	14	3370	1/1	0.98	0.04	-	94,94,94,94	0
58	MG	1H	3039	1/1	0.81	0.53	-	100,100,100,100	0
58	MG	1G	1603	1/1	0.95	0.56	-	132,132,132,132	0
58	MG	1H	3411	1/1	0.93	0.16	-	94,94,94,94	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3343	1/1	0.75	0.12	-	137,137,137,137	0
58	MG	1H	3413	1/1	0.98	0.11	-	90,90,90,90	0
58	MG	13	1693	1/1	0.88	0.54	-	108,108,108,108	0
58	MG	78	201	1/1	0.93	0.26	-	92,92,92,92	0
58	MG	14	3183	1/1	0.66	0.34	-	89,89,89,89	0
58	MG	14	3320	1/1	0.86	0.21	-	119,119,119,119	0
58	MG	1H	3066	1/1	0.90	0.53	-	86,86,86,86	0
58	MG	1H	3353	1/1	0.93	0.52	-	96,96,96,96	0
58	MG	1H	3149	1/1	0.91	0.42	-	102,102,102,102	0
58	MG	13	1646	1/1	0.96	0.24	-	129,129,129,129	0
58	MG	14	3068	1/1	0.89	0.78	-	108,108,108,108	0
58	MG	1H	3129	1/1	0.88	0.60	-	85,85,85,85	0
58	MG	1H	3038	1/1	0.90	0.23	-	102,102,102,102	0
58	MG	14	3075	1/1	0.98	0.97	-	96,96,96,96	0
58	MG	14	3399	1/1	0.98	0.03	-	116,116,116,116	0
58	MG	14	3390	1/1	0.95	0.08	-	114,114,114,114	0
58	MG	1H	3317	1/1	0.50	0.44	-	106,106,106,106	0
58	MG	1H	3332	1/1	0.66	0.81	-	93,93,93,93	0
58	MG	1H	3339	1/1	0.89	0.38	-	104,104,104,104	0
58	MG	1H	3392	1/1	0.96	0.17	-	81,81,81,81	0
58	MG	14	3253	1/1	0.87	0.27	-	90,90,90,90	0
58	MG	14	3148	1/1	0.85	0.40	-	94,94,94,94	0
58	MG	14	3178	1/1	0.87	0.25	-	94,94,94,94	0
58	MG	1H	3422	1/1	0.99	0.15	-	102,102,102,102	0
58	MG	1H	3361	1/1	0.97	0.18	-	72,72,72,72	0
58	MG	14	3352	1/1	0.98	0.05	-	84,84,84,84	0
58	MG	14	3124	1/1	0.96	0.47	-	90,90,90,90	0
58	MG	13	1709	1/1	0.80	0.37	-	112,112,112,112	0
58	MG	14	3103	1/1	0.98	0.32	-	81,81,81,81	0
58	MG	14	3286	1/1	0.75	0.63	-	117,117,117,117	0
58	MG	14	3249	1/1	0.96	0.06	-	102,102,102,102	0
58	MG	1H	3027	1/1	0.89	0.17	-	95,95,95,95	0
58	MG	1H	3095	1/1	0.69	0.87	-	95,95,95,95	0
58	MG	13	1680	1/1	0.52	0.59	-	125,125,125,125	0
58	MG	14	3192	1/1	0.69	0.45	-	104,104,104,104	0
58	MG	1H	3089	1/1	0.91	0.33	-	83,83,83,83	0
58	MG	1H	3404	1/1	0.99	0.06	-	84,84,84,84	0
58	MG	1H	3260	1/1	0.93	1.54	-	95,95,95,95	0
58	MG	14	3228	1/1	0.93	0.29	-	96,96,96,96	0
58	MG	14	3313	1/1	0.80	0.35	-	107,107,107,107	0
58	MG	14	3331	1/1	0.78	0.52	-	108,108,108,108	0
58	MG	14	3241	1/1	0.95	0.48	-	115,115,115,115	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1G	1610	1/1	0.97	0.31	-	118,118,118,118	0
58	MG	14	3090	1/1	0.84	0.24	-	83,83,83,83	0
58	MG	1H	3360	1/1	0.99	0.16	-	86,86,86,86	0
58	MG	14	3247	1/1	0.85	0.90	-	104,104,104,104	0
58	MG	1H	3293	1/1	0.95	0.29	-	94,94,94,94	0
58	MG	14	3336	1/1	0.88	0.31	-	120,120,120,120	0
58	MG	1H	3019	1/1	0.98	0.56	-	65,65,65,65	0
58	MG	14	3229	1/1	0.90	0.46	-	93,93,93,93	0
58	MG	14	3344	1/1	0.99	0.08	-	91,91,91,91	0
58	MG	13	1724	1/1	0.98	0.11	-	99,99,99,99	0
58	MG	1H	3037	1/1	0.84	0.25	-	87,87,87,87	0
58	MG	13	1689	1/1	0.52	0.24	-	182,182,182,182	0
58	MG	13	1607	1/1	0.97	0.23	-	101,101,101,101	0
58	MG	14	3204	1/1	0.95	0.25	-	73,73,73,73	0
58	MG	14	3015	1/1	0.91	0.66	-	82,82,82,82	0
58	MG	14	3194	1/1	0.73	0.30	-	93,93,93,93	0
58	MG	14	3235	1/1	0.69	0.36	-	102,102,102,102	0
58	MG	13	1634	1/1	0.65	0.52	-	104,104,104,104	0
58	MG	14	3197	1/1	0.86	0.51	-	124,124,124,124	0
58	MG	1G	1629	1/1	0.95	0.34	-	121,121,121,121	0
58	MG	14	3270	1/1	0.80	0.50	-	97,97,97,97	0
58	MG	14	3137	1/1	0.84	0.27	-	119,119,119,119	0
58	MG	14	3413	1/1	0.93	0.04	-	92,92,92,92	0
58	MG	1H	3003	1/1	0.98	0.59	-	72,72,72,72	0
58	MG	14	3207	1/1	0.88	0.15	-	107,107,107,107	0
58	MG	14	3278	1/1	0.77	0.45	-	86,86,86,86	0
58	MG	14	3375	1/1	0.91	0.11	-	117,117,117,117	0
58	MG	1H	3358	1/1	0.99	0.12	-	70,70,70,70	0
58	MG	14	3150	1/1	0.51	0.86	-	102,102,102,102	0
58	MG	1H	3285	1/1	0.53	0.23	-	115,115,115,115	0
58	MG	13	1683	1/1	0.88	0.77	-	119,119,119,119	0
58	MG	14	3128	1/1	0.97	0.59	-	80,80,80,80	0
58	MG	14	3325	1/1	0.79	0.53	-	110,110,110,110	0
58	MG	1H	3132	1/1	0.98	0.52	-	87,87,87,87	0
58	MG	14	3026	1/1	0.56	0.36	-	115,115,115,115	0
58	MG	1H	3224	1/1	0.98	0.55	-	76,76,76,76	0
58	MG	1H	3373	1/1	0.98	0.15	-	86,86,86,86	0
58	MG	14	3087	1/1	0.96	0.42	-	68,68,68,68	0
58	MG	1H	3157	1/1	0.91	0.94	-	88,88,88,88	0
58	MG	1H	3337	1/1	0.63	0.52	-	140,140,140,140	0
58	MG	13	1681	1/1	0.90	0.49	-	124,124,124,124	0
58	MG	14	3339	1/1	0.81	0.64	-	120,120,120,120	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	14	3141	1/1	0.99	0.29	-	76,76,76,76	0
58	MG	14	3042	1/1	0.99	0.26	-	74,74,74,74	0
58	MG	14	3406	1/1	0.96	0.06	-	121,121,121,121	0
58	MG	1H	3276	1/1	0.59	0.28	-	91,91,91,91	0
58	MG	1H	3302	1/1	0.85	0.42	-	89,89,89,89	0
58	MG	1H	3440	1/1	0.99	0.12	-	70,70,70,70	0
58	MG	14	3283	1/1	0.88	0.67	-	98,98,98,98	0
58	MG	1H	3217	1/1	0.83	0.22	-	81,81,81,81	0
58	MG	14	3403	1/1	0.97	0.18	-	114,114,114,114	0
58	MG	1H	3073	1/1	0.91	0.60	-	84,84,84,84	0
58	MG	1H	3471	1/1	0.91	0.04	-	128,128,128,128	0
58	MG	14	3063	1/1	0.97	0.42	-	79,79,79,79	0
58	MG	14	3266	1/1	0.82	0.47	-	99,99,99,99	0
58	MG	14	3163	1/1	0.85	0.57	-	104,104,104,104	0
58	MG	1G	1660	1/1	0.73	0.92	-	111,111,111,111	0
58	MG	1H	3264	1/1	0.42	0.23	-	122,122,122,122	0
58	MG	1H	3212	1/1	0.72	0.40	-	93,93,93,93	0
58	MG	13	1654	1/1	0.98	0.21	-	111,111,111,111	0
58	MG	1H	3366	1/1	0.99	0.10	-	73,73,73,73	0
58	MG	1H	3432	1/1	0.93	0.12	-	111,111,111,111	0
58	MG	14	3267	1/1	0.62	0.59	-	104,104,104,104	0
58	MG	16	207	1/1	0.68	0.28	-	92,92,92,92	0
58	MG	1H	3447	1/1	0.98	0.11	-	115,115,115,115	0
58	MG	14	3383	1/1	0.98	0.11	-	137,137,137,137	0
58	MG	1G	1654	1/1	0.94	0.25	-	110,110,110,110	0
58	MG	1H	3155	1/1	0.36	0.21	-	86,86,86,86	0
58	MG	14	3248	1/1	0.83	0.52	-	89,89,89,89	0
58	MG	1H	3043	1/1	0.93	0.31	-	75,75,75,75	0
58	MG	1H	3396	1/1	0.93	0.06	-	99,99,99,99	0
58	MG	1H	3108	1/1	0.83	0.74	-	92,92,92,92	0
58	MG	13	1609	1/1	0.91	0.24	-	99,99,99,99	0
58	MG	1H	3160	1/1	0.94	0.40	-	88,88,88,88	0
58	MG	1G	1624	1/1	0.96	0.58	-	92,92,92,92	0
58	MG	13	1677	1/1	0.90	0.53	-	113,113,113,113	0
58	MG	13	1641	1/1	0.80	0.14	-	112,112,112,112	0
58	MG	14	3177	1/1	0.88	0.53	-	87,87,87,87	0
58	MG	14	3379	1/1	0.96	0.04	-	110,110,110,110	0
58	MG	1H	3301	1/1	0.92	0.54	-	99,99,99,99	0
58	MG	1G	1648	1/1	0.75	0.41	-	128,128,128,128	0
58	MG	1H	3470	1/1	0.98	0.13	-	85,85,85,85	0
58	MG	13	1706	1/1	0.91	0.24	-	91,91,91,91	0
58	MG	1H	3166	1/1	0.72	0.41	-	95,95,95,95	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	1H	3142	1/1	0.82	0.45	-	89,89,89,89	0
58	MG	14	3257	1/1	0.84	0.16	-	143,143,143,143	0
58	MG	1H	3121	1/1	0.91	0.37	-	93,93,93,93	0
58	MG	1G	1636	1/1	0.69	0.35	-	111,111,111,111	0
58	MG	1H	3323	1/1	0.68	0.31	-	122,122,122,122	0
58	MG	1H	3187	1/1	0.65	0.53	-	105,105,105,105	0
58	MG	14	3089	1/1	0.71	1.15	-	104,104,104,104	0
58	MG	1H	3047	1/1	0.96	0.57	-	71,71,71,71	0
58	MG	14	3231	1/1	0.77	0.79	-	107,107,107,107	0
58	MG	1H	3072	1/1	0.99	0.17	-	120,120,120,120	0
58	MG	14	3040	1/1	0.96	0.41	-	72,72,72,72	0
58	MG	1H	3135	1/1	0.97	0.12	-	69,69,69,69	0
58	MG	16	212	1/1	0.96	0.11	-	104,104,104,104	0
58	MG	1J	202	1/1	0.71	0.33	-	110,110,110,110	0
58	MG	13	1660	1/1	0.79	0.12	-	104,104,104,104	0
58	MG	1H	3273	1/1	0.94	0.19	-	85,85,85,85	0
58	MG	1H	3099	1/1	0.96	0.44	-	74,74,74,74	0
58	MG	1H	3318	1/1	0.88	0.36	-	116,116,116,116	0
58	MG	1G	1605	1/1	0.99	0.37	-	125,125,125,125	0
58	MG	1H	3174	1/1	0.83	0.54	-	99,99,99,99	0
58	MG	P8	101	1/1	0.97	0.12	-	101,101,101,101	0
58	MG	1H	3298	1/1	0.87	0.49	-	95,95,95,95	0
58	MG	14	3161	1/1	0.95	0.54	-	80,80,80,80	0
58	MG	1G	1618	1/1	0.81	0.14	-	131,131,131,131	0
58	MG	14	3284	1/1	0.72	0.67	-	112,112,112,112	0
58	MG	1H	3061	1/1	0.96	0.84	-	79,79,79,79	0
58	MG	1H	3468	1/1	0.83	0.15	-	122,122,122,122	0
58	MG	1H	3084	1/1	0.98	0.59	-	57,57,57,57	0
58	MG	13	1652	1/1	0.85	0.32	-	138,138,138,138	0
58	MG	1H	3176	1/1	0.51	0.29	-	110,110,110,110	0
58	MG	C5	201	1/1	0.68	0.35	-	137,137,137,137	0
58	MG	1G	1659	1/1	0.88	0.31	-	142,142,142,142	0
58	MG	2K	102	1/1	0.38	0.63	-	109,109,109,109	0
58	MG	13	1667	1/1	0.93	0.59	-	91,91,91,91	0
58	MG	1G	1664	1/1	0.80	0.34	-	122,122,122,122	0
58	MG	1H	3331	1/1	0.23	0.23	-	120,120,120,120	0
58	MG	13	1640	1/1	0.95	0.70	-	73,73,73,73	0
58	MG	14	3369	1/1	0.92	0.10	-	105,105,105,105	0
58	MG	1H	3080	1/1	0.98	0.27	-	73,73,73,73	0
58	MG	14	3256	1/1	0.94	0.27	-	110,110,110,110	0
58	MG	1H	3327	1/1	0.70	0.76	-	120,120,120,120	0
58	MG	1H	3431	1/1	0.94	0.10	-	111,111,111,111	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	LLDF	B-factors(\AA^2)	Q<0.9
58	MG	2K	103	1/1	0.62	0.21	-	134,134,134,134	0
58	MG	14	3039	1/1	0.99	0.58	-	86,86,86,86	0
58	MG	14	3018	1/1	0.76	0.39	-	111,111,111,111	0
58	MG	14	3354	1/1	0.99	0.11	-	87,87,87,87	0
58	MG	14	3184	1/1	0.96	0.26	-	92,92,92,92	0
58	MG	1H	3042	1/1	0.95	0.34	-	59,59,59,59	0
58	MG	1H	3328	1/1	0.83	0.46	-	119,119,119,119	0
58	MG	1H	3070	1/1	0.92	0.45	-	100,100,100,100	0
58	MG	14	3003	1/1	0.97	0.34	-	76,76,76,76	0
58	MG	14	3168	1/1	0.84	0.30	-	122,122,122,122	0
58	MG	1H	3458	1/1	0.98	0.13	-	88,88,88,88	0
58	MG	14	3082	1/1	0.82	0.34	-	92,92,92,92	0
58	MG	1H	3371	1/1	0.98	0.06	-	77,77,77,77	0
58	MG	14	3404	1/1	0.73	0.28	-	101,101,101,101	0
58	MG	1H	3191	1/1	0.93	0.36	-	95,95,95,95	0
58	MG	1H	3158	1/1	0.84	0.34	-	105,105,105,105	0
58	MG	32	301	1/1	0.49	0.61	-	128,128,128,128	0
58	MG	1G	1666	1/1	0.71	0.77	-	121,121,121,121	0
58	MG	13	1732	1/1	0.92	0.14	-	127,127,127,127	0
58	MG	29	301	1/1	0.98	0.42	-	69,69,69,69	0
58	MG	14	3303	1/1	0.55	0.54	-	115,115,115,115	0
58	MG	13	1663	1/1	0.90	0.66	-	86,86,86,86	0
58	MG	14	3294	1/1	0.87	0.80	-	100,100,100,100	0
58	MG	1H	3456	1/1	0.99	0.23	-	68,68,68,68	0
58	MG	13	1623	1/1	0.76	0.71	-	88,88,88,88	0
58	MG	14	3412	1/1	0.88	0.12	-	128,128,128,128	0
58	MG	14	3181	1/1	0.91	1.18	-	91,91,91,91	0
58	MG	14	3272	1/1	0.71	0.48	-	96,96,96,96	0
58	MG	1H	3021	1/1	0.96	0.36	-	86,86,86,86	0
58	MG	14	3091	1/1	0.99	0.37	-	92,92,92,92	0

6.5 Other polymers ⓘ

There are no such residues in this entry.