



## wwPDB EM Map/Model Validation Report ⓘ

Apr 10, 2016 – 02:03 PM BST

PDB ID : 3J3V  
EMDB ID: : EMD-5642  
Title : Atomic model of the immature 50S subunit from Bacillus subtilis (state I-a)  
Authors : Li, N.; Guo, Q.; Zhang, Y.; Yuan, Y.; Ma, C.; Lei, J.; Gao, N.  
Deposited on : 2013-04-28  
Resolution : 13.30 Å (reported)  
Based on PDB ID : 2J01, 2AW4

This is a wwPDB EM Map/Model Validation Report for a publicly released PDB/EMDB entry.  
For rigid body fitted models, validation errors reported here could stem from errors in the original structure(s) used in the fitting.  
We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)  
A user guide is available at  
<http://wwpdb.org/validation/2016/EMValidationReportHelp>

---

MolProbity : 4.02b-467  
Mogul : unknown  
Percentile statistics : 20151230.v01 (using entries in the PDB archive December 30th 2015)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et. al. (1996)  
Validation Pipeline (wwPDB-VP) : trunk27241

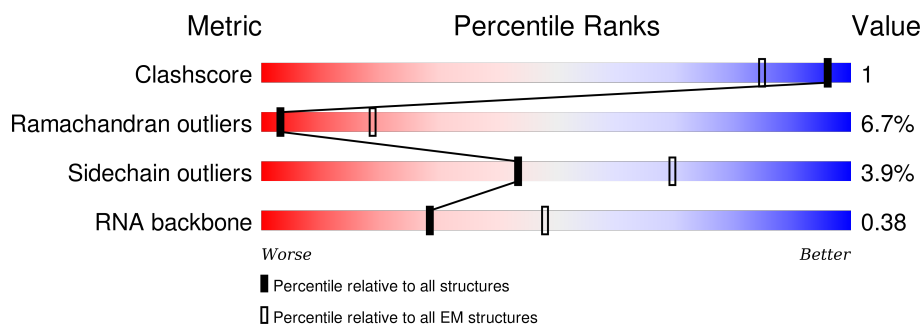
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

*ELECTRON MICROSCOPY*

The reported resolution of this entry is 13.30 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.









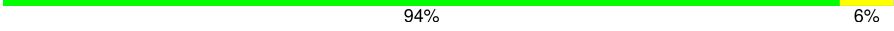


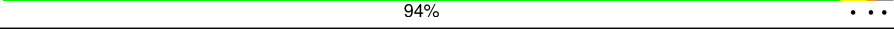

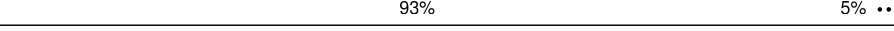

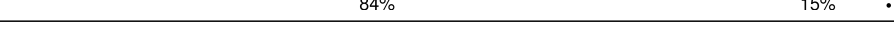


Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	114402	924
Ramachandran outliers	111179	726
Sidechain outliers	111093	686
RNA backbone	3027	244

The table below summarises the geometric issues observed across the polymeric chains. The red, orange, yellow and green segments on the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 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  $\leq 5\%$ .

Mol	Chain	Length	Quality of chain
1	0	59	86% 7% 7%
2	2	44	93% 7%
3	5	232	44% 7% 48%
4	6	141	94% 6%
5	A	2927	53% 36% 9% .
6	B	119	66% 25% 8% .
7	C	277	90% 9% .
8	D	209	89% 9% ..

Continued on next page...

*Continued from previous page...*

Mol	Chain	Length	Quality of chain
9	E	207	 86% 12% •
10	F	179	 86% 13% •
11	G	179	 87% • 9%
12	J	145	 86% 11% ••
13	K	122	 93% 7%
14	L	146	 85% 12% •
15	N	120	 94% 6%
16	O	120	 83% 15% •
17	P	115	 73% 20% • •
18	Q	119	 94% • • •
19	R	102	 88% 11% •
20	S	113	 93% 5% ••
21	T	95	 86% 12% •
22	U	103	 84% 15% •
23	X	66	 85% 8% 8%
24	Y	59	 92% • 5%

## 2 Entry composition

There are 24 unique types of molecules in this entry. The entry contains 86157 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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 protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	0	55	Total	C	N	O	S	0	0
			433	267	87	72	7		

- Molecule 2 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	2	44	Total	C	N	O	S	0	0
			368	222	89	55	2		

- Molecule 3 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	5	120	Total	C	N	O	S	0	0
			910	576	156	176	2		

- Molecule 4 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	6	141	Total	C	N	O	S	0	0
			1044	657	184	196	7		

- Molecule 5 is a RNA chain called ribosome RNA 23S.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	A	2884	Total	C	N	O	P	0	0
			61914	27625	11428	19979	2882		

- Molecule 6 is a RNA chain called ribosome RNA 5S.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	B	119	Total	C	N	O	P	0	0
			2542	1135	462	827	118		

- Molecule 7 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	C	277	Total	C	N	O	S	0	0
			2129	1323	419	380	7		

- Molecule 8 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	D	206	Total	C	N	O	S	0	0
			1568	984	289	290	5		

- Molecule 9 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	E	206	Total	C	N	O	S	0	0
			1567	983	290	292	2		

- Molecule 10 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	F	179	Total	C	N	O	S	0	0
			1413	898	246	261	8		

- Molecule 11 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	G	163	Total	C	N	O	S	0	0
			1246	776	226	242	2		

- Molecule 12 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	J	143	Total	C	N	O	S	0	0
			1134	717	207	204	6		

- Molecule 13 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	K	122	Total	C	N	O	S	0	0
			921	571	173	173	4		

- Molecule 14 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	L	146	Total	C	N	O	S	0	0
			1082	671	207	202	2		

- Molecule 15 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	N	120	Total	C	N	O	S	0	0
			962	588	187	182	5		

- Molecule 16 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	O	120	Total	C	N	O	S	0	0
			913	564	176	172	1		

- Molecule 17 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms				AltConf	Trace
17	P	112	Total	C	N	O	0	0
			916	584	178	154		

- Molecule 18 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	Q	117	Total	C	N	O	S	0	0
			940	591	189	156	4		

- Molecule 19 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	R	102	Total	C	N	O	S	0	0
			795	506	140	148	1		

- Molecule 20 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	S	112	Total	C	N	O	S	0	0
			868	541	168	155	4		

- Molecule 21 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	T	95	Total	C	N	O	S	0	0
			767	480	139	144	4		

- Molecule 22 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	U	103	Total	C	N	O	S	0	0
			780	488	145	143	4		

- Molecule 23 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	X	61	Total	C	N	O	S	0	0
			504	312	97	93	2		

- Molecule 24 is a protein called 50S ribosomal protein L30.

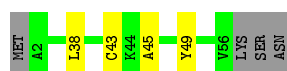
Mol	Chain	Residues	Atoms					AltConf	Trace
24	Y	56	Total	C	N	O	S	0	0
			441	273	86	81	1		

### 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. 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. 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: 50S ribosomal protein L32

Chain 0: 



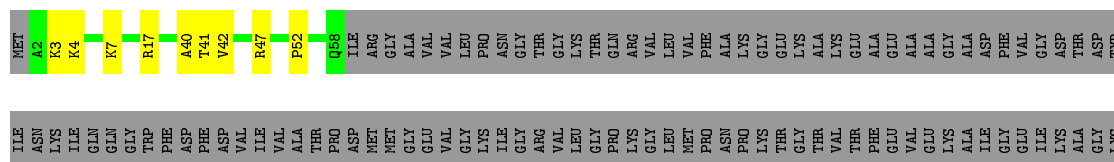
- Molecule 2: 50S ribosomal protein L34

Chain 2: 



- Molecule 3: 50S ribosomal protein L1

Chain 5: 



- Molecule 4: 50S ribosomal protein L11

Chain 6: 



- Molecule 5: ribosome RNA 23S

Chain A: 





A1021	C961	U901	A841	A781	G721	A861	U601	G541	U481	A421	G361	U301	C241	G181	G121	A61
G1022	C962	G902	C842	A782	A722	U662	G602	G542	C482	C422	C362	U302	U242	G182	G122	C62
G1023	G963	G903	C843	A783	A723	G663	G603	A543	C483	G423	C363	G303	G243	A183	A123	G63
G1024	A964	G904	C784	A964	A724	C664	C604	A544	C484	A624	A364	G304	A244	G184	G124	A64
A1025	A965	G905	C785	A965	C725	G665	G605	U545	U485	C425	U365	A305	G245	A185	A125	A65
A1026	U966	G906	C846	A786	C726	G666	U606	G546	A486	G426	G366	A307	U246	C186	C126	C66
A1027	G967	U907	A847	C787	A727	A667	G607	A547	G487	G427	G367	A307	A247	C187	C127	A67
C1028	C968	A908	C848	G788	G728	G668	C608	A548	U488	A428	C368	G308	C248	C188	C128	C68
A1029	C969	G909	A849	C789	G729	G669	C609	A549	G489	A429	A369	U309	C249	G189	C129	C69
G1030	A970	A910	U850	A790	U730	C670	U610	G550	A490	C430	G370	G310	G250	G190	G130	A71
C1031	A971	G911	A851	C791	U731	G671	U611	A551	C491	A431	G371	G311	G251	G191	C131	A72
G1032	G972	C912	G852	G792	A732	C672	U612	G552	C492	C432	U372	G312	G252	G192	C132	U72
C1033	G973	G913	C853	U793	U733	G673	U613	A553	G493	G433	A373	G313	G253	A193	A133	A73
A1034	A974	C914	U854	U794	C734	G674	G614	U554	A494	U434	A374	A314	A254	A194	C134	U74
G1035	C975	U915	G855	G795	U735	C675	U615	C555	U495	G435	C375	G315	G255	C195	U135	G75
A1036	U976	G916	A856	A796	G736	G676	A616	C556	A496	A436	A376	G316	C256	U196	C136	C76
C1037	U977	U917	U857	A797	C737	A677	G617	U557	G497	A437	G377	G317	G257	G197	G137	U77
G1038	A978	U918	U858	A798	C738	G678	A618	G558	U498	A438	C378	A318	A258	A198	U138	U78
C1039	U979	U919	C859	A799	C739	A679	A619	A559	G499	U439	C379	G319	A259	A199	A139	C79
G1040	C980	G920	U860	G800	A740	G680	U620	A560	A500	U440	C380	U320	A260	A200	A140	G80
C1041	C981	G921	C861	U801	U741	G681	U621	A561	A501	C441	U381	U321	C261	C201	U141	G81
A1042	U982	A922	U862	G802	G742	G682	A622	C562	C502	C442	G382	A322	G262	A202	G142	G82
G1043	C983	C923	C863	C803	U743	A683	G623	C563	C503	G443	C383	C323	G263	U203	G143	G83
C1044	G984	U924	G864	G804	C744	G684	C624	G564	A504	U444	A384	A324	G264	C204	A144	A84
U1045	G985	A925	G865	G805	G745	U685	C625	U565	G505	C445	G385	A325	A265	U205	G145	G85
A1046	G986	G926	A866	G806	A746	C886	G626	G566	U506	G446	U386	A326	U266	A206	U146	C86
A1047	A987	G927	A867	G807	G747	U687	G627	U567	A507	G447	C387	G327	U267	A207	G147	U87
G1048	C988	G928	A868	A808	G748	G688	C628	G568	C508	A448	A388	G328	A268	G208	G148	G88
U1049	U989	G929	U869	A809	G749	A689	G629	C569	C509	A449	A389	A329	G269	U209	U149	U89
U1050	C990	G930	A870	G810	U750	A690	A630	C570	G510	U450	A390	A330	C270	A210	A150	A90
C1051	A991	C931	G871	A811	G751	U691	U631	U571	U511	C451	A391	C331	C271	C211	U151	A91
C1052	G992	C932	C872	G812	A752	A692	U632	A572	G512	C452	C392	G332	C272	C212	C152	G92
C1053	A993	C933	U873	G813	A753	G693	U633	C573	A513	G453	U393	G333	A273	G213	C153	C93
A1054	C994	U934	U874	G814	G754	G694	A634	A574	G514	G454	C394	G334	A274	G214	A154	A94
A1055	U995	A935	U875	G815	U755	G695	C635	G575	G515	A455	C395	G335	A275	G215	U155	A95
A1056	C996	C936	A876	U816	U756	C696	G636	G576	G516	A456	G396	U336	C276	A216	A156	G96
G1057	C997	C937	G877	G817	C757	G697	A637	U577	A517	G457	U397	A337	C277	G217	U157	C97
U1058	G998	G938	C878	G818	A758	C698	U638	A578	A518	G458	U398	G338	A278	G218	C158	U98
A1059	A999	G939	G879	G819	G759	A699	C639	G579	A519	A459	C399	A339	A279	A219	U159	U99
G1060	C1000	G940	C880	U820	G760	U700	C640	U580	G520	C460	U400	U340	G280	A220	G160	U100
U1061	U1001	U941	U881	A821	U761	G701	C641	C581	U521	C461	C401	G341	A281	G221	A161	G101
C1062	C1002	U942	A882	G822	A762	A702	G642	A582	U522	A462	U402	A342	G282	A222	A162	A102
G1063	A1003	A943	G883	G823	A763	G703	U643	G583	G523	U463	C403	A343	G283	G223	U163	U103
U1064	U1004	C944	C884	G824	C764	U704	C644	A584	A524	C464	C404	G344	C284	A224	U164	C104
U1065	A1005	C945	C885	G825	A765	A705	C645	G585	A525	U465	U405	A345	U285	A225	C165	C105
A1066	C1006	G946	U886	U826	C766	C706	A646	C586	A526	C466	G406	G346	U286	A226	A166	G106
A1067	G1007	A947	C887	G827	U767	G707	A647	C587	A527	C467	A407	G347	G287	G227	U167	G107
G1068	A1008	A948	A888	A828	G768	U708	G648	C588	G528	C468	G408	U348	C288	C228	A168	A108
U1069	U1009	U949	A889	A829	A769	G709	G649	G589	C529	A469	U409	G349	C289	G229	G169	G109
G1070	C1010	U950	C890	A830	A770	G710	U650	U590	A530	A470	G410	U350	U290	A230	G170	A110
G1071	C1011	C951	G891	U831	U771	U711	U651	U591	C531	G471	G411	G351	C291	A231	A171	U111
A1072	G1012	A952	U892	G832	G772	C712	A652	A592	C532	G472	G412	G352	U292	U232	U172	U112
A1073	U1013	G953	C893	G833	G773	G713	A653	A593	C533	C473	U413	A353	G293	G233	A173	U113
A1074	A1014	U954	A894	C834	A774	U714	G654	C594	C534	U474	C414	A354	G294	C234	U174	G114
A1075	G1015	C955	G895	A835	G775	A715	G655	G595	G535	A475	C415	A355	G295	G235	G175	C115
G1076	U1016	A956	A896	A836	G776	G716	A656	G596	G536	A476	U416	G356	G296	G236	A176	G116
G1077	C1017	A957	G897	U837	G777	A717	G657	G597	A537	A477	G417	G357	G297	U237	G177	A117
A1078	G1018	C958	U898	C838	C778	C718	A658	U598	A538	U478	A418	C358	U298	U238	A178	A118
U1079	U1019	C959	C899	G839	C779	C719	A659	G599	G539	U479	G419	C359	U299	G239	A179	U119
G1080	A1020	U960	U900	A840	G780	C720	G660	A600	G540	C480	U420	C360	G300	C240	G180	G120

A1981	C1921	C1861	G1801	G1741	U1681	G1621	U1501	U1441	A1381	U1321	C1261	A1201	A1141	U1081
A1982	C1922	C1862	A1802	G1742	C1682	C1622	G1502	A1442	G1382	G1322	C1262	A1202	A1142	G1082
C1983	C1923	U1863	C1803	A1743	G1683	C1623	G1503	C1443	U1383	A1323	G1263	A1203	U1143	G1083
U1984	C1924	U1864	U1804	G1744	U1684	U1624	A1504	C1444	C1384	G1324	G1264	C1204	A1144	A1084
U1985	A1925	C1865	G1805	A1745	A1685	C1625	U1505	A1445	G1385	A1325	A1265	U1205	G1145	G1085
C1986	G1926	C1866	U1806	A1746	A1686	G1626	A1506	C1446	G1386	A1326	A1266	G1206	G1146	U1086
C1987	U1927	C1867	U1807	G1747	G1687	A1627	U1507	C1447	G1387	U1327	G1267	C1207	U1147	U1087
C1988	A1928	G1868	U1808	G1748	G1688	C1628	C1508	U1448	A1388	C1328	G1268	G1208	U1148	G1088
C1989	A1929	G1869	A1809	G1749	U1689	C1629	A1509	C1449	C1389	C1329	A1269	G1209	A1149	C1089
C1990	A1930	U1870	G1810	G1750	G1690	A1630	G1510	C1450	C1390	C1330	C1270	A1210	C1150	U1090
C1991	C1931	A1871	C1811	U1751	A1691	A1631	U1511	U1451	U1391	C1331	U1271	C1211	U1151	U1091
C1992	G1932	G1872	A1812	G1752	U1692	G1632	G1512	C1452	A1392	U1332	G1272	U1212	G1152	A1092
C1993	G1933	C1873	A1813	C1753	C1693	G1633	U1513	A1453	A1393	G1273	G1213	U1213	G1153	A1093
C1994	C1934	G1874	A1814	U1754	G1694	U1634	C1514	C1454	G1394	C1334	U1274	U1214	U1154	A1094
A1995	G1935	G1875	A1815	C1755	A1695	G1635	C1515	C1455	C1395	A1335	G1275	C1215	U1155	C1095
C1996	G1936	A1876	A1816	U1756	G1696	A1636	A1516	A1456	C1396	C1336	G1276	C1216	G1156	A1096
C1997	C1937	A1877	C1817	G1757	A1697	G1637	A1517	U1457	G1397	C1337	U1277	U1217	A1157	A1097
A1998	C1938	G	A1818	U1758	G1698	A1638	G1518	U1458	A1398	G1338	G1278	U1218	G1158	C1098
C1999	G1939	G	A1819	U1759	A1699	G1639	C1519	U1459	G1399	A1339	C1279	C1219	U1159	C1099
A2000	U1940	U	A1820	A1760	A1700	G1640	A1520	G1460	G1400	A1340	G1280	G1220	G1160	A1100
G2001	G1941	U	C1821	G1761	C1701	G1641	A1521	A1461	C1401	A1341	G1281	A1221	A1161	G1101
G2002	A1942	A	G1822	G1762	U1702	G1642	U1522	G1462	C1402	G1342	A1282	A1222	C1162	G1102
G2003	C1943	A	U1823	G1763	C1703	C1643	U1523	G1463	C1403	C1343	U1283	C1223	U1163	A1103
G2004	U1944	G	C1824	U1764	U1704	G1644	A1524	A1464	A1404	C1344	A1284	A1224	C1164	U1104
A2005	A1945	A	U1825	G1765	C1705	C1645	G1525	A1465	A1405	U1345	G1285	G1225	U1165	G1105
A2006	U1946	G	C1826	C1766	G1706	G1646	G1526	U1466	A1406	A1346	A1286	U1226	G1166	U1106
A2007	A1947	G	U1827	A1767	U1707	U1647	C1527	G1467	G1407	A1347	A1287	G1227	C1167	U1107
C2008	A1948	A	G1828	A1768	A1708	A1648	U1528	G1468	G1408	G1348	G1288	G1228	G1168	G1108
C2009	C1949	G	C1829	G1769	A1709	G1649	G1529	G1469	C1409	G1349	U1289	C1229	C1169	G1109
A2010	G1950	C	A1830	C1770	A1710	C1650	G1530	G1470	G1410	U1350	A1290	A1230	C1170	G1110
U2011	G1951	C	A1831	C1771	G1711	G1651	G1531	G1471	U1411	U1351	A1291	G1231	G1171	U1111
C2012	U1952	C	A1832	C1772	G1712	C1652	A1532	G1472	A1412	U1352	G1292	G1232	A1172	U1112
C1953	C1953	C	G1833	G1773	A1713	A1653	A1533	A1473	G1413	C1353	A1293	A1233	A1173	A1113
G2014	C1954	U	C1834	A1774	A1714	A1654	A1534	C1474	G1414	C1354	A1294	G1234	A1174	G1114
G2015	U1955	A	G1835	G1775	C1715	A1655	U1535	G1475	C1415	U1355	U1295	A1235	A1175	A1115
G2016	A1956	G	G1836	A1776	U1716	C1656	A1536	C1476	G1416	G1356	G1296	G1236	U1176	A1116
C2017	A1957	C	U1837	G1777	C1717	C1657	G1537	A1477	A1417	A1357	C1297	C1237	G1177	G1117
A2018	G1958	G	A1838	A1778	G1718	G1658	G1538	G1478	U1418	G1358	C1298	G1238	U1178	C1118
C2019	G1959	U	A1839	G1779	G1719	A1659	C1539	G1479	G1419	G1359	G1299	U1239	A1179	A1119
U2020	U1960	A	G1840	C1780	C1720	C1660	A1540	A1480	G1420	A1360	G1300	U1240	C1180	G1120
G2021	A1961	A	A1841	C1781	A1721	A1661	A1541	G1481	A1421	A1361	U1301	C1241	C1181	C1121
U2022	G1962	G	C1842	G1782	A1722	C1662	A1542	G1482	C1422	G1362	A1302	U1242	G1182	C1122
C1963	C1963	C	G1843	G1783	A1723	A1663	U1543	A1483	A1423	G1363	U1303	A1243	G1183	A1123
U2024	G1964	G	A1844	A1784	A1724	G1664	C1544	U1484	A1424	C1364	G1304	A1244	G1184	C1124
C2025	A1965	A	A1845	G1785	U1725	G1665	C1545	A1485	C1425	U1365	A1305	G1245	G1185	C1125
A2026	A1966	A	G1846	U1786	G1726	U1666	G1546	G1486	A1426	C1366	G1306	G1246	C1186	A1126
A2027	A1967	G	U1847	G1787	A1727	A1667	U1547	G1487	G1427	G1367	U1307	G1247	U1187	U1127
C2028	U1968	G	A1848	A1788	C1728	G1668	A1548	G1488	G1428	C1368	A1308	C1248	A1188	U1128
G2029	U1969	U	U1849	A1789	C1729	G1669	U1549	U1489	U1429	C1369	G1309	U1249	A1189	U1129
A2030	C1970	G	A1850	U1790	C1730	C1670	C1550	A1490	U1430	C1370	C1310	G1250	A1190	A1130
G2031	C1971	C	G1851	A1791	C1731	G1671	C1551	A1491	G1431	G1371	C1311	U1251	C1191	A1131
A2032	U1972	G	G1852	G1792	G1732	A1672	C1552	G1492	A1432	C1372	A1312	G1252	G1192	A1132
G2033	C1973	A	A1853	G1793	U1733	C1673	A1553	C1493	A1433	C1373	A1313	A1253	U1193	G1133
A2034	G1974	A	G1854	C1794	A1734	G1674	U1554	G1494	A1434	C1374	A1314	A1254	A1194	A1134
C2035	U1975	U	C1855	A1795	A1735	A1675	A1555	C1495	U1435	U1375	G1315	G1255	U1195	G1135
U2036	C1976	U	U1856	C1796	C1736	G1676	A1556	G1496	U1436	G1376	A1316	C1256	C1196	U1136
C2037	G1977	G	G1857	A1797	U1737	A1677	G1557	G1497	C1437	G1377	G1317	C1257	A1197	G1137
G2038	U1978	A	A1858	U1798	U1738	G1678	G1558	U1498	C1438	G1378	G1318	A1258	C1198	G1138
G2039	G1979	A	C1859	G1799	C1739	A1679	A1559	A1499	A1439	U1379	G1319	G1259	C1199	G1139
U2040	U1980	G	G1860	C1800	G1740	A1680	U1560	U1500	G1440	U1380	G1320	A1260	G1200	U1140

G2041	G2101	G2161	G2221	G2281	U2341	G2401	A2461	U2521	U2581	C2641	U2701	G2761	U2821
A2042	C2102	G2162	C2222	G2282	C2342	A2402	A2462	U2522	G2582	U2642	G2702	A2762	C2822
A2043	C2103	A2163	A2223	G2283	C2343	G2403	A2463	G2523	U2583	G2643	G2703	G2763	C2823
A2044	U2104	A2164	U2224	G2284	U2344	G2404	A2464	G2524	U2584	U2644	A2704	G2764	G2824
U2045	A2105	A2165	C2225	G2285	U2345	A2405	G2465	C2525	C2585	C2645	G2705	G2765	A2825
U2046	U2106	C2166	U2226	U2286	C2346	A2406	G2466	A2526	G2586	C2646	G2706	G2766	A2826
A2047	C2107	C2167	A2227	G2287	G2347	A2407	U2467	C2527	C2587	U2647	G2707	A2767	A2827
U2048	U2108	G2168	A2228	G2288	C2348	U2408	A2468	C2528	C2588	U2648	A2708	U2768	C2828
A2049	G2109	G2169	C2229	G2289	A2349	U2409	G2469	U2529	C2589	G2649	G2709	A2769	G2829
G2050	C2110	A2170	C2230	G2290	G2350	C2410	C2470	C2530	U2590	G2650	G2710	A2770	A2830
U2051	A2111	G2171	C2231	U2291	A2351	G2411	C2471	G2531	U2591	G2651	G2711	G2771	A2831
A2052	G2112	C2172	G2232	G2292	G2352	G2412	G2472	A2532	U2592	G2652	G2712	G2772	G2832
C2053	C2113	G2173	C2233	C2293	U2353	G2413	G2473	G2533	U2593	G2653	G2713	G2773	G2833
C2054	C2114	C2174	C2234	U2294	G2354	G2414	G2474	G2534	A2594	G2654	G2714	C2774	A2834
U2055	U2115	G2175	G2235	U2295	U2355	U2415	G2475	U2535	A2595	G2655	G2715	U2775	A2835
G2056	A2116	A2176	C2236	A2296	A2356	U2416	G2476	C2536	G2596	G2656	U2716	G2776	U2836
U2057	U2117	C2177	C2237	A2297	A2357	A2417	A2477	G2537	C2597	C2657	G2717	A2777	A2837
G2058	U2118	C2178	C2238	A2298	A2358	G2418	U2478	G2538	U2598	A2658	G2718	A2778	A2838
A2059	A2119	U2179	U2239	G2299	C2359	U2419	A2479	C2539	G2599	G2659	A2719	A2779	C2839
A2060	U2120	U2180	U2240	G2300	G2360	G2420	A2480	U2540	U2600	G2660	C2720	G2780	C2840
G2061	U2121	C2181	A2241	U2301	C2361	A2421	C2481	C2541	A2601	G2661	C2721	G2781	C2841
A2062	G2122	G2182	U2242	A2302	C2362	U2422	A2482	A2542	C2602	A2662	A2722	A2782	A2842
U2063	A2123	G2183	C2243	A2303	C2363	C2423	A2483	U2543	G2603	A2663	G2723	U2783	G2843
G2064	A2124	U2184	G2244	G2304	A2364	C2424	G2484	C2544	C2604	U2664	U2724	C2784	A2844
C2065	U2125	A2185	G2245	G2305	A2365	G2425	G2485	G2545	G2605	U2665	U2725	U2785	A2845
A2066	G2126	G2186	G2246	G2306	G2366	G2426	U2486	C2546	U2606	U2666	G2726	A2786	A2846
G2067	U2127	A2187	C2247	A2307	G2367	U2427	U2487	A2547	G2607	G2667	U2727	A2787	A2847
G2068	U2128	G2188	G2248	G2308	G2368	G2428	A2488	U2548	C2608	A2668	U2728	G2788	A2848
U2069	G2129	G2189	C2249	G2309	A2369	G2429	U2489	C2549	G2609	G2669	G2729	A2789	U2849
U2070	G2130	C2190	G2250	G2310	G2370	U2430	U2490	C2550	G2610	A2670	U2730	A2790	G2850
G2071	U2131	A2191	G2251	G2311	C2371	U2431	U2491	U2551	G2611	G2671	G2731	U2791	A2851
C2072	A2132	U2192	A2252	G2312	U2372	C2432	A2492	G2552	G2612	G2672	C2732	G2792	U2852
G2073	C2133	C2193	G2253	C2313	U2373	C2433	C2493	G2553	U2613	A2673	C2733	A2793	C2853
C2074	A2134	A2194	A2254	C2314	G2374	C2434	A2494	G2554	U2614	G2674	A2734	A2794	A2854
G2075	G2135	G2195	C2255	A2315	A2375	C2435	C2495	C2555	G2615	G2675	G2735	G2795	G2855
C2076	C2136	U2196	A2256	A2316	C2376	A2436	C2496	C2556	A2616	U2676	G2736	C2796	G2856
G2077	U2137	G2197	G2257	A2317	U2377	U2437	A2497	U2557	G2617	G2677	G2737	C2797	U2857
A2078	U2138	G2198	U2258	G2318	G2378	G2438	A2498	G2558	G2618	U2678	G2738	C2798	U2858
C2079	U2139	G2199	G2259	G2319	C2379	G2439	A2499	U2559	G2619	C2679	C2739	C2799	G2859
A2080	U2140	A2200	U2260	U2320	G2380	U2440	U2500	A2560	C2620	G2680	A2740	C2800	A2860
G2081	A2141	U2201	C2261	U2321	A2381	A2441	G2501	G2561	G2621	U2681	U2741	C2801	U2861
C2082	C2142	A2202	A2262	C2322	G2382	G2442	U2502	U2562	U2622	U2682	C2742	U2802	U2862
A2083	A2143	C2203	G2263	C2323	A2383	G2443	C2503	C2563	G2623	A2683	G2743	C2803	G2863
C2084	G2144	U2204	G2264	C2324	C2384	G2444	G2504	A2564	G2624	G2684	C2744	A2804	U2864
G2085	G2145	A2205	U2265	U2325	C2385	C2445	A2505	G2565	U2625	U2685	U2745	A2805	U2865
G2086	A2146	C2206	G2266	C2326	U2386	C2446	C2506	U2566	G2626	A2686	G2746	G2806	U2866
A2087	U2147	C2207	G2267	A2327	A2387	A2447	U2507	C2567	G2627	C2687	G2747	A2807	U2867
A2088	A2148	C2208	C2268	G2328	C2388	U2448	U2508	C2568	G2628	G2688	U2748	U2808	U2868
A2089	G2149	U2209	C2269	A2329	A2389	C2449	G2509	C2569	G2629	A2689	U2749	G2809	U2869
G2090	U2150	G2210	A2270	A2330	A2390	G2450	G2510	A2570	C2630	G2690	U2750	A2810	U2870
A2091	U2151	G2211	G2271	U2331	C2391	C2451	A2511	A2571	A2631	A2691	G2751	G2811	U2871
C2092	A2152	C2212	U2272	G2332	U2392	U2452	G2512	G2572	G2632	A2692	G2752	A2812	U2872
C2093	G2153	U2213	U2273	C2333	C2393	C2453	G2513	G2573	U2633	G2693	U2753	U2813	G2873
C2094	G2154	G2214	U2274	U2334	G2394	A2454	G2514	G2574	U2634	A2694	A2754	U2814	U2874
C2095	A2155	A2215	G2275	U2335	A2395	A2455	G2515	U2575	C2635	C2695	U2755	U2815	U2875
G2096	G2156	A2216	A2276	G2336	G2396	C2456	G2516	U2576	G2636	C2696	G2756	C2816	A2876
U2097	C2157	U2217	C2277	G2337	C2397	G2457	A2517	G2577	G2637	G2697	U2757	C2817	U2877
G2098	U2158	U2218	U2278	A2338	A2398	G2458	G2518	G2578	U2638	G2698	G2758	C2818	U2878
G2099	U2159	G2219	G2279	A2339	G2399	A2459	G2519	G2579	U2639	G2699	C2759	A2819	U2879
A2100	U2160	A2220	G2280	G2340	G2400	U2460	U2520	C2580	C2640	A2700	G2760	U2820	U2880

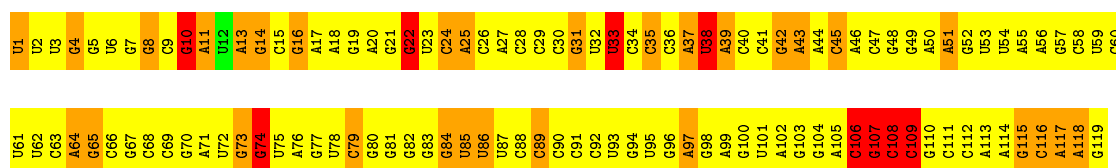
• Molecule 6: ribosome RNA 5S

Chain B: .

66%

25%

8%



• Molecule 7: 50S ribosomal protein L2

Chain C: 90% 9% •



• Molecule 8: 50S ribosomal protein L3

Chain D: 89% 9% ••



• Molecule 9: 50S ribosomal protein L4

Chain E: 86% 12% •



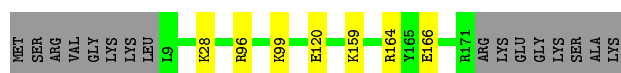
• Molecule 10: 50S ribosomal protein L5

Chain F: 86% 13% •



• Molecule 11: 50S ribosomal protein L6

Chain G: 87% 9% •



• Molecule 12: 50S ribosomal protein L13

Chain J: 86% 11% ••



• Molecule 13: 50S ribosomal protein L14

Chain K: 93% 7%



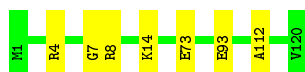
- Molecule 14: 50S ribosomal protein L15

Chain L: 85% 12% .



- Molecule 15: 50S ribosomal protein L17

Chain N: 94% 6%



- Molecule 16: 50S ribosomal protein L18

Chain O: 83% 15% .



- Molecule 17: 50S ribosomal protein L19

Chain P: 73% 20% . .



- Molecule 18: 50S ribosomal protein L20

Chain Q: 94% . . .



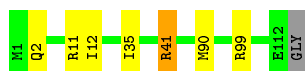
- Molecule 19: 50S ribosomal protein L21

Chain R: 88% 11% .

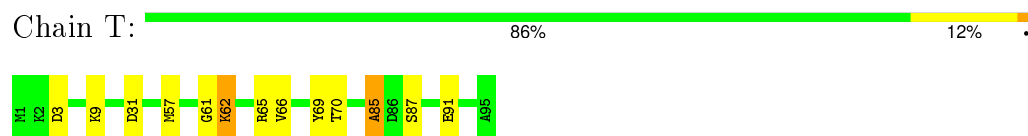


- Molecule 20: 50S ribosomal protein L22

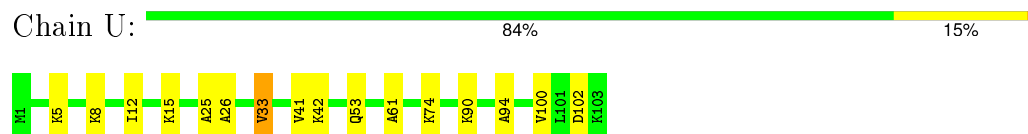
Chain S: 93% 5% . .



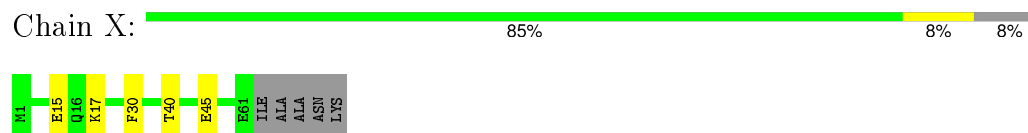
- Molecule 21: 50S ribosomal protein L23



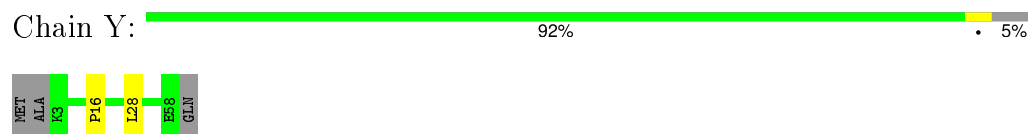
- Molecule 22: 50S ribosomal protein L24



- Molecule 23: 50S ribosomal protein L29



- Molecule 24: 50S ribosomal protein L30



## 4 Experimental information

Property	Value	Source
Reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	Depositor
Number of images	21020	Depositor
Resolution determination method	SSNR-MAP(an optimized approach of Spectral Single-to Noise Ratio) at 1.0 cutoff	Depositor
CTF correction method	Each particle	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	20	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	59000	Depositor
Image detector	FEI Eagle 4K*4K CCD	Depositor

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

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	$\# Z  > 2$	RMSZ	$\# Z  > 2$
1	0	1.04	0/440	1.06	1/584 (0.2%)
10	F	0.96	0/1432	1.09	2/1920 (0.1%)
11	G	0.98	0/1264	1.05	0/1709
12	J	0.94	0/1157	1.04	0/1557
13	K	1.03	0/928	1.05	0/1245
14	L	0.98	0/1094	1.09	2/1457 (0.1%)
15	N	1.08	0/969	1.06	0/1294
16	O	1.01	0/922	1.05	1/1236 (0.1%)
17	P	1.10	0/929	1.21	5/1243 (0.4%)
18	Q	1.06	0/952	1.08	4/1266 (0.3%)
19	R	0.91	0/806	1.09	0/1080
2	2	1.26	0/371	1.06	0/483
20	S	1.01	0/877	1.13	1/1179 (0.1%)
21	T	1.00	0/774	1.11	1/1030 (0.1%)
22	U	0.87	0/790	1.15	0/1054
23	X	1.05	0/505	1.02	0/671
24	Y	0.97	0/443	1.01	0/594
3	5	0.87	0/921	1.10	1/1239 (0.1%)
4	6	0.91	0/1058	1.02	0/1427
5	A	1.69	134/69349 (0.2%)	2.70	8798/108189 (8.1%)
6	B	1.64	4/2843 (0.1%)	2.64	336/4432 (7.6%)
7	C	1.01	0/2166	1.09	2/2902 (0.1%)
8	D	0.96	0/1590	1.07	0/2130
9	E	0.97	0/1586	1.08	2/2139 (0.1%)
All	All	1.55	138/94166 (0.1%)	2.45	9156/142060 (6.4%)

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
14	L	0	2

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	#Chirality outliers	#Planarity outliers
15	N	0	1
17	P	0	3
21	T	0	3
5	A	0	447
6	B	0	15
8	D	0	2
9	E	0	1
All	All	0	474

All (138) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	A	1253	A	N7-C5	-7.44	1.34	1.39
5	A	353	A	N7-C5	-7.42	1.34	1.39
5	A	629	G	C2'-C1'	-7.08	1.45	1.53
5	A	1449	C	P-O5'	-7.08	1.52	1.59
5	A	2297	A	N7-C5	-6.86	1.35	1.39
6	B	71	A	N7-C5	-6.74	1.35	1.39
5	A	518	A	N7-C5	-6.70	1.35	1.39
5	A	2254	A	N7-C5	-6.58	1.35	1.39
5	A	225	A	N7-C5	-6.50	1.35	1.39
5	A	752	A	N7-C5	-6.48	1.35	1.39
5	A	630	A	N7-C5	-6.42	1.35	1.39
5	A	1839	A	N7-C5	-6.42	1.35	1.39
5	A	765	A	N7-C5	-6.40	1.35	1.39
5	A	1525	G	P-O5'	-6.30	1.53	1.59
5	A	1831	A	N7-C5	-6.28	1.35	1.39
5	A	2627	A	N7-C5	-6.18	1.35	1.39
5	A	374	A	N7-C5	-6.13	1.35	1.39
5	A	2176	A	N7-C5	-6.09	1.35	1.39
5	A	163	U	C2-N3	6.02	1.42	1.37
5	A	758	A	N7-C5	-6.01	1.35	1.39
5	A	1485	A	N7-C5	-6.00	1.35	1.39
5	A	49	A	N7-C5	-5.98	1.35	1.39
5	A	168	A	N7-C5	-5.97	1.35	1.39
5	A	52	A	N7-C5	-5.97	1.35	1.39
5	A	1628	G	C2'-C1'	-5.95	1.46	1.53
5	A	2778	A	N7-C5	-5.93	1.35	1.39
5	A	1006	A	N7-C5	-5.90	1.35	1.39
5	A	653	A	N7-C5	-5.88	1.35	1.39
5	A	300	G	N7-C5	-5.82	1.35	1.39
5	A	1503	G	C6-N1	5.80	1.43	1.39

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	A	1544	C	N3-C4	5.72	1.38	1.33
5	A	830	A	N7-C5	-5.71	1.35	1.39
5	A	2859	G	N7-C5	-5.70	1.35	1.39
5	A	1068	G	C2-N3	5.69	1.37	1.32
5	A	1638	A	N7-C5	-5.68	1.35	1.39
5	A	746	A	N7-C5	-5.68	1.35	1.39
5	A	527	A	N7-C5	-5.68	1.35	1.39
5	A	549	A	N7-C5	-5.65	1.35	1.39
5	A	2133	C	N3-C4	5.64	1.37	1.33
5	A	2214	G	N1-C2	5.62	1.42	1.37
5	A	947	A	N7-C5	-5.61	1.35	1.39
5	A	224	A	N7-C5	-5.60	1.35	1.39
5	A	1561	G	N1-C2	5.58	1.42	1.37
5	A	2835	A	N7-C5	-5.54	1.35	1.39
5	A	944	C	N3-C4	5.54	1.37	1.33
5	A	2202	A	N7-C5	-5.54	1.35	1.39
5	A	600	A	N7-C5	-5.54	1.35	1.39
5	A	2441	A	N7-C5	-5.53	1.35	1.39
5	A	161	A	N7-C5	-5.53	1.35	1.39
5	A	2785	U	C2-N3	5.48	1.41	1.37
5	A	575	A	N7-C5	-5.47	1.35	1.39
5	A	760	G	N7-C5	-5.46	1.35	1.39
5	A	2505	A	C2'-C1'	-5.46	1.47	1.53
5	A	820	U	C2-N3	5.45	1.41	1.37
5	A	1516	A	N7-C5	-5.43	1.35	1.39
6	B	97	A	N7-C5	-5.41	1.36	1.39
6	B	33	U	C2-N3	5.40	1.41	1.37
5	A	926	G	C2-N3	5.39	1.37	1.32
5	A	538	A	N7-C5	-5.37	1.36	1.39
5	A	2411	G	C2-N3	5.36	1.37	1.32
5	A	867	A	N7-C5	-5.35	1.36	1.39
5	A	2754	A	N7-C5	-5.34	1.36	1.39
5	A	559	A	N9-C4	-5.33	1.34	1.37
5	A	1074	A	N7-C5	-5.33	1.36	1.39
5	A	2743	G	C2-N3	5.32	1.37	1.32
5	A	1067	A	N7-C5	-5.31	1.36	1.39
5	A	960	U	C2-N3	5.29	1.41	1.37
5	A	2058	G	C2-N3	5.28	1.36	1.32
5	A	2770	A	N7-C5	-5.28	1.36	1.39
5	A	88	G	N7-C5	-5.27	1.36	1.39
5	A	383	U	C2-N3	5.27	1.41	1.37
5	A	1857	G	C2-N3	5.27	1.36	1.32

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	A	902	G	N1-C2	5.26	1.42	1.37
5	A	461	C	N3-C4	5.26	1.37	1.33
5	A	1601	A	N7-C5	-5.26	1.36	1.39
5	A	513	A	N7-C5	-5.25	1.36	1.39
5	A	1327	U	P-O5'	-5.25	1.54	1.59
5	A	1675	A	N7-C5	-5.25	1.36	1.39
5	A	737	C	N3-C4	5.25	1.37	1.33
5	A	645	C	N3-C4	5.24	1.37	1.33
5	A	1103	A	N7-C5	-5.23	1.36	1.39
5	A	911	G	N9-C4	-5.23	1.33	1.38
5	A	42	G	N1-C2	5.22	1.42	1.37
5	A	903	G	N1-C2	5.22	1.42	1.37
5	A	1550	C	N3-C4	5.20	1.37	1.33
5	A	2373	U	C2-N3	5.19	1.41	1.37
5	A	2765	G	N1-C2	5.19	1.41	1.37
5	A	106	G	N1-C2	5.17	1.41	1.37
5	A	1820	A	N7-C5	-5.17	1.36	1.39
5	A	2096	G	C2-N3	5.17	1.36	1.32
5	A	465	U	C2-N3	5.16	1.41	1.37
5	A	1061	A	N7-C5	-5.16	1.36	1.39
5	A	586	C	C2'-C1'	-5.16	1.47	1.53
5	A	2571	A	P-O5'	-5.16	1.54	1.59
5	A	1023	G	N1-C2	5.15	1.41	1.37
5	A	1412	A	N7-C5	-5.15	1.36	1.39
5	A	1679	A	N7-C5	-5.15	1.36	1.39
6	B	102	A	N7-C5	-5.15	1.36	1.39
5	A	317	G	C2-N3	5.14	1.36	1.32
5	A	307	A	N7-C5	-5.14	1.36	1.39
5	A	1243	A	O3'-P	-5.13	1.54	1.61
5	A	34	U	C2-N3	5.13	1.41	1.37
5	A	1746	A	N7-C5	-5.13	1.36	1.39
5	A	1850	A	N7-C5	-5.12	1.36	1.39
5	A	1523	U	C2-N3	5.12	1.41	1.37
5	A	2775	U	C2-N3	5.12	1.41	1.37
5	A	948	A	N7-C5	-5.12	1.36	1.39
5	A	2871	G	C2-N3	5.12	1.36	1.32
5	A	901	U	C2-N3	5.11	1.41	1.37
5	A	825	G	N1-C2	5.11	1.41	1.37
5	A	1588	A	N9-C4	-5.10	1.34	1.37
5	A	1802	A	N7-C5	-5.10	1.36	1.39
5	A	1637	G	C2-N3	5.10	1.36	1.32
5	A	1182	G	C2-N3	5.09	1.36	1.32

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	A	1800	C	N3-C4	5.09	1.37	1.33
5	A	1440	G	N1-C2	5.09	1.41	1.37
5	A	965	A	N7-C5	-5.08	1.36	1.39
5	A	2442	G	C2-N3	5.08	1.36	1.32
5	A	30	G	N1-C2	5.08	1.41	1.37
5	A	626	G	N1-C2	5.07	1.41	1.37
5	A	65	A	N7-C5	-5.06	1.36	1.39
5	A	259	A	N7-C5	-5.05	1.36	1.39
5	A	88	G	C2-N3	5.04	1.36	1.32
5	A	1724	A	N7-C5	-5.04	1.36	1.39
5	A	1580	A	N7-C5	-5.04	1.36	1.39
5	A	665	G	C2-N3	5.04	1.36	1.32
5	A	2513	G	N1-C2	5.04	1.41	1.37
5	A	2143	A	N7-C5	-5.04	1.36	1.39
5	A	2894	G	C2-N3	5.03	1.36	1.32
5	A	1735	A	N7-C5	-5.03	1.36	1.39
5	A	462	A	N7-C5	-5.02	1.36	1.39
5	A	1491	A	N7-C5	-5.02	1.36	1.39
5	A	1635	G	C2-N3	5.02	1.36	1.32
5	A	2414	C	N3-C4	5.01	1.37	1.33
5	A	1517	A	N7-C5	-5.01	1.36	1.39
5	A	254	A	N7-C5	-5.01	1.36	1.39
5	A	1859	C	N3-C4	5.00	1.37	1.33
5	A	1075	A	N7-C5	-5.00	1.36	1.39

All (9156) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	10	G	P-O3'-C3'	26.30	151.26	119.70
5	A	1339	A	P-O3'-C3'	26.04	150.94	119.70
5	A	178	A	P-O3'-C3'	22.26	146.41	119.70
5	A	2062	A	P-O3'-C3'	21.01	144.91	119.70
5	A	74	U	P-O3'-C3'	20.60	144.42	119.70
5	A	375	C	P-O3'-C3'	20.46	144.25	119.70
5	A	1449	C	P-O5'-C5'	19.34	151.84	120.90
5	A	1525	G	P-O5'-C5'	18.96	151.24	120.90
5	A	402	U	P-O3'-C3'	18.79	142.24	119.70
5	A	2252	A	P-O3'-C3'	18.63	142.05	119.70
5	A	1676	G	P-O3'-C3'	18.42	141.80	119.70
5	A	1243	A	P-O3'-C3'	18.09	141.41	119.70
5	A	1606	A	P-O3'-C3'	17.66	140.89	119.70
5	A	2785	U	P-O3'-C3'	17.55	140.76	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2904	A	N1-C6-N6	17.41	129.04	118.60
5	A	1503	G	N1-C6-O6	17.39	130.34	119.90
5	A	2155	A	P-O3'-C3'	17.39	140.57	119.70
5	A	182	C	P-O3'-C3'	17.16	140.29	119.70
5	A	2862	A	N1-C6-N6	17.09	128.86	118.60
5	A	1454	C	P-O3'-C3'	16.92	140.00	119.70
5	A	2564	A	N1-C6-N6	16.91	128.75	118.60
5	A	224	A	P-O3'-C3'	16.85	139.92	119.70
5	A	1625	C	P-O3'-C3'	16.80	139.86	119.70
5	A	2917	G	P-O3'-C3'	16.72	139.77	119.70
5	A	71	A	P-O3'-C3'	16.64	139.67	119.70
5	A	2120	U	P-O3'-C3'	16.57	139.59	119.70
5	A	1093	G	P-O3'-C3'	16.22	139.17	119.70
5	A	1450	C	P-O3'-C3'	16.20	139.14	119.70
5	A	1058	U	P-O3'-C3'	16.16	139.09	119.70
5	A	1269	A	P-O3'-C3'	16.16	139.09	119.70
5	A	1520	A	N1-C6-N6	16.05	128.23	118.60
5	A	1698	G	P-O3'-C3'	16.00	138.90	119.70
5	A	435	G	P-O3'-C3'	15.99	138.88	119.70
5	A	64	A	P-O3'-C3'	15.86	138.73	119.70
5	A	1636	A	N1-C6-N6	15.85	128.11	118.60
5	A	1503	G	C5-C6-O6	-15.74	119.16	128.60
5	A	2908	A	N1-C6-N6	15.65	127.99	118.60
5	A	1221	A	N1-C6-N6	15.59	127.95	118.60
5	A	333	A	N1-C6-N6	15.41	127.84	118.60
5	A	413	U	P-O3'-C3'	15.28	138.04	119.70
5	A	462	A	N1-C6-N6	15.22	127.73	118.60
5	A	2123	A	N1-C6-N6	15.22	127.73	118.60
5	A	56	A	N1-C6-N6	15.12	127.67	118.60
5	A	305	A	N1-C6-N6	15.02	127.61	118.60
5	A	163	U	P-O3'-C3'	15.00	137.70	119.70
5	A	1672	A	N1-C6-N6	14.99	127.59	118.60
5	A	1113	A	P-O3'-C3'	14.99	137.68	119.70
5	A	1461	A	N1-C6-N6	14.92	127.55	118.60
5	A	913	A	N1-C6-N6	14.88	127.53	118.60
5	A	154	A	N1-C6-N6	14.87	127.52	118.60
5	A	2006	A	N1-C6-N6	14.81	127.49	118.60
5	A	2488	A	N1-C6-N6	14.80	127.48	118.60
5	A	588	C	P-O3'-C3'	14.75	137.40	119.70
5	A	1361	A	N1-C6-N6	14.72	127.44	118.60
5	A	1210	A	P-O3'-C3'	14.72	137.37	119.70
5	A	549	A	N1-C6-N6	14.68	127.41	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2139	G	P-O3'-C3'	14.65	137.28	119.70
5	A	1677	A	P-O3'-C3'	14.63	137.26	119.70
5	A	400	U	P-O3'-C3'	14.61	137.23	119.70
5	A	2907	A	N1-C6-N6	14.56	127.34	118.60
5	A	1697	A	P-O5'-C5'	14.45	144.03	120.90
5	A	2059	A	P-O3'-C3'	14.45	137.04	119.70
5	A	1925	A	N1-C6-N6	14.43	127.26	118.60
5	A	150	A	P-O3'-C3'	14.43	137.01	119.70
5	A	2889	A	N1-C6-N6	14.41	127.25	118.60
5	A	1709	A	N1-C6-N6	14.39	127.23	118.60
5	A	1417	A	N1-C6-N6	14.38	127.23	118.60
5	A	548	A	N1-C6-N6	14.37	127.22	118.60
5	A	1713	A	N1-C6-N6	14.32	127.19	118.60
5	A	2348	C	P-O3'-C3'	14.28	136.83	119.70
6	B	99	A	N1-C6-N6	14.26	127.15	118.60
5	A	910	A	N1-C6-N6	14.25	127.15	118.60
5	A	705	A	N1-C6-N6	14.23	127.14	118.60
5	A	302	A	N1-C6-N6	14.17	127.10	118.60
5	A	1340	A	P-O3'-C3'	14.13	136.65	119.70
5	A	1805	G	P-O3'-C3'	14.12	136.65	119.70
5	A	2887	A	N1-C6-N6	14.12	127.07	118.60
5	A	2052	A	N1-C6-N6	14.11	127.07	118.60
5	A	1721	A	N1-C6-N6	14.09	127.05	118.60
5	A	1496	G	P-O3'-C3'	14.07	136.58	119.70
5	A	1292	G	P-O3'-C3'	14.07	136.58	119.70
5	A	572	A	N1-C6-N6	14.04	127.02	118.60
5	A	496	A	N1-C6-N6	13.99	126.99	118.60
5	A	2826	A	P-O3'-C3'	13.98	136.48	119.70
5	A	230	A	N1-C6-N6	13.93	126.96	118.60
5	A	2047	A	N1-C6-N6	13.93	126.96	118.60
5	A	2479	A	N1-C6-N6	13.92	126.95	118.60
5	A	600	A	N1-C6-N6	13.91	126.95	118.60
5	A	2860	A	N1-C6-N6	13.89	126.93	118.60
5	A	922	A	N1-C6-N6	13.86	126.91	118.60
5	A	438	A	N1-C6-N6	13.84	126.90	118.60
5	A	1497	G	O4'-C1'-N9	13.83	119.26	108.20
5	A	2885	A	N1-C6-N6	13.80	126.88	118.60
5	A	666	G	P-O3'-C3'	13.80	136.26	119.70
5	A	1774	A	N1-C6-N6	13.79	126.88	118.60
5	A	849	A	N1-C6-N6	13.78	126.87	118.60
6	B	46	A	N1-C6-N6	13.78	126.87	118.60
5	A	2606	A	N1-C6-N6	13.76	126.86	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1619	A	N1-C6-N6	13.76	126.86	118.60
5	A	799	A	P-O3'-C3'	13.76	136.21	119.70
5	A	2663	A	N1-C6-N6	13.74	126.84	118.60
5	A	2670	A	N1-C6-N6	13.72	126.83	118.60
5	A	1838	A	N1-C6-N6	13.68	126.81	118.60
5	A	156	A	N1-C6-N6	13.62	126.77	118.60
5	A	307	A	N1-C6-N6	13.61	126.77	118.60
5	A	14	A	N1-C6-N6	13.60	126.76	118.60
5	A	1928	A	N1-C6-N6	13.59	126.76	118.60
5	A	150	A	N1-C6-N6	13.57	126.74	118.60
5	A	2919	A	N1-C6-N6	13.56	126.73	118.60
5	A	2134	A	N1-C6-N6	13.52	126.71	118.60
5	A	2704	A	N1-C6-N6	13.52	126.71	118.60
5	A	260	A	N1-C6-N6	13.52	126.71	118.60
5	A	434	U	P-O3'-C3'	13.52	135.92	119.70
6	B	44	A	N1-C6-N6	13.49	126.70	118.60
5	A	948	A	N1-C6-N6	13.48	126.69	118.60
5	A	278	A	N1-C6-N6	13.47	126.68	118.60
5	A	1190	A	N1-C6-N6	13.46	126.68	118.60
5	A	2357	A	N1-C6-N6	13.45	126.67	118.60
5	A	166	A	N1-C6-N6	13.43	126.66	118.60
5	A	1326	A	N1-C6-N6	13.42	126.65	118.60
5	A	1533	A	N1-C6-N6	13.40	126.64	118.60
5	A	1291	A	N1-C6-N6	13.40	126.64	118.60
5	A	1313	A	P-O3'-C3'	13.38	135.76	119.70
5	A	2790	A	N1-C6-N6	13.38	126.63	118.60
5	A	769	A	N1-C6-N6	13.38	126.62	118.60
5	A	198	A	N1-C6-N6	13.36	126.62	118.60
5	A	2837	A	N1-C6-N6	13.36	126.61	118.60
5	A	2398	A	N1-C6-N6	13.34	126.60	118.60
5	A	1655	A	N1-C6-N6	13.33	126.60	118.60
5	A	2900	A	N1-C6-N6	13.33	126.60	118.60
5	A	329	A	N1-C6-N6	13.28	126.57	118.60
5	A	1746	A	N1-C6-N6	13.26	126.56	118.60
6	B	116	C	P-O3'-C3'	13.25	135.60	119.70
5	A	592	A	N1-C6-N6	13.22	126.53	118.60
5	A	543	A	N1-C6-N6	13.22	126.53	118.60
5	A	2482	A	N1-C6-N6	13.22	126.53	118.60
5	A	1532	A	N1-C6-N6	13.21	126.53	118.60
5	A	1103	A	N1-C6-N6	13.20	126.52	118.60
5	A	1483	A	N1-C6-N6	13.20	126.52	118.60
5	A	1580	A	N1-C6-N6	13.19	126.51	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	229	A	N1-C6-N6	13.19	126.51	118.60
5	A	753	A	N1-C6-N6	13.19	126.51	118.60
5	A	781	A	N1-C6-N6	13.18	126.51	118.60
5	A	281	A	N1-C6-N6	13.17	126.50	118.60
5	A	110	A	N1-C6-N6	13.16	126.50	118.60
5	A	724	A	N1-C6-N6	13.16	126.50	118.60
5	A	1357	A	N1-C6-N6	13.16	126.50	118.60
5	A	1653	A	N1-C6-N6	13.16	126.50	118.60
5	A	2146	A	N1-C6-N6	13.15	126.49	118.60
5	A	1961	A	N1-C6-N6	13.15	126.49	118.60
5	A	2923	A	N1-C6-N6	13.14	126.49	118.60
5	A	1235	A	N1-C6-N6	13.13	126.48	118.60
6	B	27	A	N1-C6-N6	13.12	126.47	118.60
5	A	1620	A	N1-C6-N6	13.11	126.47	118.60
5	A	2436	A	N1-C6-N6	13.11	126.46	118.60
5	A	527	A	N1-C6-N6	13.10	126.46	118.60
5	A	1250	G	P-O3'-C3'	13.10	135.42	119.70
5	A	2100	A	N1-C6-N6	13.09	126.45	118.60
5	A	870	A	N1-C6-N6	13.09	126.45	118.60
5	A	526	A	N1-C6-N6	13.08	126.45	118.60
5	A	108	A	N1-C6-N6	13.07	126.44	118.60
5	A	897	G	N1-C6-O6	13.07	127.74	119.90
5	A	1776	A	N1-C6-N6	13.07	126.44	118.60
5	A	622	A	N1-C6-N6	13.06	126.44	118.60
5	A	84	A	N1-C6-N6	13.04	126.43	118.60
5	A	1458	U	P-O3'-C3'	13.04	135.35	119.70
5	A	2740	A	N1-C6-N6	13.04	126.42	118.60
5	A	619	A	N1-C6-N6	13.03	126.42	118.60
5	A	1490	A	N1-C6-N6	12.99	126.40	118.60
5	A	1727	A	N1-C6-N6	12.99	126.39	118.60
5	A	2270	A	N1-C6-N6	12.99	126.39	118.60
5	A	952	A	N1-C6-N6	12.98	126.39	118.60
5	A	2170	A	N1-C6-N6	12.97	126.38	118.60
5	A	2406	A	N1-C6-N6	12.96	126.38	118.60
5	A	2044	A	N1-C6-N6	12.96	126.37	118.60
5	A	700	U	P-O3'-C3'	12.96	135.25	119.70
5	A	1115	A	P-O3'-C3'	12.95	135.24	119.70
5	A	647	A	P-O3'-C3'	12.92	135.20	119.70
5	A	559	A	N1-C6-N6	12.91	126.35	118.60
5	A	584	A	N1-C6-N6	12.89	126.33	118.60
6	B	55	A	N1-C6-N6	12.88	126.33	118.60
5	A	216	A	N1-C6-N6	12.88	126.33	118.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2262	A	N1-C6-N6	12.88	126.33	118.60
5	A	1327	U	P-O5'-C5'	12.87	141.49	120.90
5	A	1588	A	N1-C6-N6	12.87	126.32	118.60
5	A	1157	A	N1-C6-N6	12.86	126.32	118.60
5	A	1059	A	N1-C6-N6	12.86	126.31	118.60
5	A	2812	A	N1-C6-N6	12.84	126.31	118.60
5	A	722	A	N1-C6-N6	12.84	126.30	118.60
5	A	1477	A	N1-C6-N6	12.83	126.30	118.60
5	A	1832	A	N1-C6-N6	12.82	126.29	118.60
5	A	1084	A	N1-C6-N6	12.82	126.29	118.60
5	A	178	A	N1-C6-N6	12.81	126.29	118.60
5	A	821	A	N1-C6-N6	12.81	126.29	118.60
5	A	107	G	N1-C6-O6	12.81	127.58	119.90
5	A	1244	A	N1-C6-N6	12.81	126.28	118.60
5	A	1661	A	N1-C6-N6	12.81	126.28	118.60
5	A	903	G	P-O3'-C3'	12.80	135.06	119.70
5	A	925	A	N1-C6-N6	12.80	126.28	118.60
5	A	1094	A	N1-C6-N6	12.79	126.27	118.60
5	A	1313	A	N1-C6-N6	12.79	126.27	118.60
5	A	974	A	N1-C6-N6	12.78	126.27	118.60
5	A	2546	C	P-O3'-C3'	12.78	135.04	119.70
5	A	623	A	N1-C6-N6	12.78	126.27	118.60
5	A	2276	A	N1-C6-N6	12.78	126.27	118.60
5	A	2369	A	N1-C6-N6	12.78	126.27	118.60
5	A	2830	A	N1-C6-N6	12.78	126.27	118.60
5	A	2383	A	N1-C6-N6	12.77	126.26	118.60
5	A	406	G	P-O3'-C3'	12.77	135.02	119.70
5	A	1809	A	N1-C6-N6	12.76	126.25	118.60
5	A	888	A	N1-C6-N6	12.75	126.25	118.60
5	A	2364	A	N1-C6-N6	12.75	126.25	118.60
5	A	1258	A	N1-C6-N6	12.74	126.25	118.60
5	A	1710	A	N1-C6-N6	12.74	126.24	118.60
5	A	2734	A	N1-C6-N6	12.73	126.24	118.60
5	A	1417	A	P-O3'-C3'	12.73	134.98	119.70
5	A	1945	A	P-O3'-C3'	12.72	134.96	119.70
5	A	2440	A	N1-C6-N6	12.71	126.22	118.60
5	A	2007	A	N1-C6-N6	12.71	126.22	118.60
5	A	2924	A	N1-C6-N6	12.71	126.22	118.60
5	A	736	A	N1-C6-N6	12.70	126.22	118.60
5	A	2782	A	N1-C6-N6	12.70	126.22	118.60
5	A	280	G	N1-C6-O6	12.69	127.52	119.90
5	A	646	A	N1-C6-N6	12.69	126.21	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	21	A	N1-C6-N6	12.69	126.21	118.60
5	A	2526	A	N1-C6-N6	12.69	126.21	118.60
5	A	1201	A	N1-C6-N6	12.69	126.21	118.60
5	A	1179	A	N1-C6-N6	12.69	126.21	118.60
5	A	2691	A	N1-C6-N6	12.68	126.21	118.60
6	B	20	A	N1-C6-N6	12.68	126.21	118.60
5	A	2639	C	P-O3'-C3'	12.68	134.92	119.70
5	A	1115	A	N1-C6-N6	12.68	126.21	118.60
5	A	1067	A	N1-C6-N6	12.67	126.20	118.60
5	A	1534	A	N1-C6-N6	12.67	126.20	118.60
5	A	1695	A	N1-C6-N6	12.67	126.20	118.60
5	A	2083	A	N1-C6-N6	12.66	126.20	118.60
5	A	2499	G	N1-C6-O6	12.66	127.50	119.90
5	A	1222	A	N1-C6-N6	12.66	126.19	118.60
5	A	206	A	N1-C6-N6	12.65	126.19	118.60
5	A	1820	A	N1-C6-N6	12.64	126.19	118.60
5	A	2451	C	P-O3'-C3'	12.64	134.86	119.70
5	A	1802	A	N1-C6-N6	12.63	126.18	118.60
5	A	2241	A	N1-C6-N6	12.63	126.18	118.60
5	A	1606	A	N1-C6-N6	12.63	126.18	118.60
5	A	300	G	N1-C6-O6	12.62	127.47	119.90
5	A	2537	G	N1-C6-O6	12.61	127.47	119.90
5	A	2570	A	N1-C6-N6	12.60	126.16	118.60
5	A	2851	A	N1-C6-N6	12.60	126.16	118.60
5	A	2395	A	N1-C6-N6	12.60	126.16	118.60
5	A	185	A	P-O3'-C3'	12.59	134.81	119.70
5	A	1967	A	N1-C6-N6	12.59	126.16	118.60
5	A	418	A	N1-C6-N6	12.58	126.15	118.60
5	A	1675	A	N1-C6-N6	12.58	126.15	118.60
5	A	2027	A	N1-C6-N6	12.58	126.15	118.60
5	A	2912	A	N1-C6-N6	12.58	126.15	118.60
5	A	475	A	N1-C6-N6	12.57	126.14	118.60
5	A	1335	A	N1-C6-N6	12.56	126.14	118.60
5	A	2032	A	N1-C6-N6	12.56	126.14	118.60
5	A	1648	A	N1-C6-N6	12.56	126.14	118.60
5	A	1722	A	N1-C6-N6	12.56	126.14	118.60
5	A	1818	A	N1-C6-N6	12.56	126.14	118.60
5	A	1813	A	N1-C6-N6	12.56	126.13	118.60
5	A	1784	A	N1-C6-N6	12.55	126.13	118.60
5	A	2476	G	N1-C6-O6	12.54	127.42	119.90
5	A	1188	A	N1-C6-N6	12.53	126.12	118.60
5	A	2317	A	N1-C6-N6	12.53	126.12	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2786	A	N1-C6-N6	12.53	126.12	118.60
5	A	758	A	N1-C6-N6	12.52	126.11	118.60
5	A	2658	A	N1-C6-N6	12.51	126.11	118.60
5	A	44	A	N1-C6-N6	12.51	126.11	118.60
5	A	1743	A	N1-C6-N6	12.50	126.10	118.60
5	A	723	A	N1-C6-N6	12.50	126.10	118.60
5	A	2358	A	N1-C6-N6	12.50	126.10	118.60
5	A	2902	A	N1-C6-N6	12.50	126.10	118.60
5	A	1134	A	N1-C6-N6	12.49	126.10	118.60
5	A	1131	A	N1-C6-N6	12.49	126.09	118.60
5	A	2390	A	N1-C6-N6	12.49	126.09	118.60
5	A	1286	A	N1-C6-N6	12.49	126.09	118.60
5	A	2119	A	N1-C6-N6	12.49	126.09	118.60
5	A	732	A	N1-C6-N6	12.48	126.09	118.60
5	A	1020	A	N1-C6-N6	12.48	126.09	118.60
5	A	1852	G	N1-C6-O6	12.48	127.39	119.90
5	A	2343	A	N1-C6-N6	12.48	126.09	118.60
5	A	130	A	N1-C6-N6	12.47	126.08	118.60
5	A	727	A	N1-C6-N6	12.47	126.08	118.60
5	A	740	A	N1-C6-N6	12.47	126.08	118.60
5	A	2059	A	N1-C6-N6	12.47	126.08	118.60
5	A	1008	A	N1-C6-N6	12.46	126.08	118.60
5	A	1608	A	N1-C6-N6	12.46	126.08	118.60
5	A	2454	A	N1-C6-N6	12.46	126.08	118.60
5	A	2517	A	N1-C6-N6	12.46	126.08	118.60
5	A	1314	A	N1-C6-N6	12.46	126.08	118.60
5	A	366	A	N1-C6-N6	12.45	126.07	118.60
5	A	1098	C	P-O3'-C3'	12.44	134.62	119.70
5	A	770	A	N1-C6-N6	12.44	126.06	118.60
5	A	991	A	N1-C6-N6	12.43	126.06	118.60
5	A	1638	A	N1-C6-N6	12.43	126.06	118.60
5	A	2461	A	N1-C6-N6	12.43	126.06	118.60
5	A	324	A	N1-C6-N6	12.43	126.06	118.60
5	A	1679	A	N1-C6-N6	12.43	126.06	118.60
5	A	2619	A	N1-C6-N6	12.42	126.05	118.60
5	A	1224	A	N1-C6-N6	12.42	126.05	118.60
5	A	2627	A	N1-C6-N6	12.42	126.05	118.60
5	A	2643	A	N1-C6-N6	12.42	126.05	118.60
5	A	309	U	P-O3'-C3'	12.41	134.60	119.70
5	A	2735	A	N1-C6-N6	12.41	126.04	118.60
5	A	456	A	N1-C6-N6	12.40	126.04	118.60
5	A	2147	U	P-O3'-C3'	12.40	134.58	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1056	A	N1-C6-N6	12.40	126.04	118.60
5	A	1685	A	N1-C6-N6	12.40	126.04	118.60
5	A	602	G	N1-C6-O6	12.40	127.34	119.90
5	A	1468	G	N1-C6-O6	12.38	127.33	119.90
5	A	2694	A	N1-C6-N6	12.38	126.03	118.60
5	A	1517	A	N1-C6-N6	12.38	126.03	118.60
5	A	2700	A	N1-C6-N6	12.38	126.03	118.60
5	A	1189	A	N1-C6-N6	12.37	126.02	118.60
5	A	330	A	N1-C6-N6	12.37	126.02	118.60
5	A	222	A	N1-C6-N6	12.36	126.02	118.60
5	A	2762	A	N1-C6-N6	12.36	126.02	118.60
5	A	2402	A	N1-C6-N6	12.36	126.01	118.60
5	A	161	A	N1-C6-N6	12.35	126.01	118.60
5	A	2810	A	N1-C6-N6	12.35	126.01	118.60
5	A	1556	A	N1-C6-N6	12.35	126.01	118.60
5	A	2042	A	N1-C6-N6	12.34	126.01	118.60
5	A	1025	A	N1-C6-N6	12.34	126.00	118.60
5	A	2030	A	N1-C6-N6	12.34	126.00	118.60
5	A	2351	A	N1-C6-N6	12.34	126.00	118.60
5	A	2389	A	P-O3'-C3'	12.34	134.51	119.70
5	A	258	A	N1-C6-N6	12.34	126.00	118.60
5	A	1339	A	N1-C6-N6	12.34	126.00	118.60
5	A	634	A	N1-C6-N6	12.33	126.00	118.60
5	A	1034	A	N1-C6-N6	12.33	126.00	118.60
5	A	1014	A	N1-C6-N6	12.32	125.99	118.60
5	A	1989	A	N1-C6-N6	12.32	125.99	118.60
5	A	1106	U	P-O3'-C3'	12.32	134.48	119.70
5	A	1130	A	N1-C6-N6	12.31	125.99	118.60
5	A	173	A	N1-C6-N6	12.31	125.98	118.60
5	A	1858	A	N1-C6-N6	12.30	125.98	118.60
5	A	2405	A	N1-C6-N6	12.30	125.98	118.60
5	A	582	A	N1-C6-N6	12.30	125.98	118.60
5	A	2165	A	N1-C6-N6	12.30	125.98	118.60
5	A	179	A	P-O3'-C3'	12.29	134.45	119.70
5	A	67	A	N1-C6-N6	12.29	125.98	118.60
5	A	124	A	N1-C6-N6	12.29	125.97	118.60
5	A	1724	A	N1-C6-N6	12.28	125.97	118.60
5	A	2464	A	N1-C6-N6	12.28	125.97	118.60
5	A	2807	A	N1-C6-N6	12.28	125.97	118.60
5	A	343	A	N1-C6-N6	12.28	125.97	118.60
5	A	1445	A	N1-C6-N6	12.27	125.96	118.60
5	A	94	A	N1-C6-N6	12.27	125.96	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2463	A	N1-C6-N6	12.27	125.96	118.60
5	A	171	A	N1-C6-N6	12.27	125.96	118.60
5	A	254	A	N1-C6-N6	12.26	125.96	118.60
5	A	133	A	N1-C6-N6	12.26	125.96	118.60
5	A	1747	G	N1-C6-O6	12.26	127.25	119.90
5	A	476	A	N1-C6-N6	12.25	125.95	118.60
5	A	1042	A	N1-C6-N6	12.24	125.94	118.60
5	A	1815	A	P-O3'-C3'	12.24	134.39	119.70
5	A	667	A	N1-C6-N6	12.24	125.94	118.60
5	A	2834	A	N1-C6-N6	12.23	125.94	118.60
5	A	38	A	N1-C6-N6	12.23	125.94	118.60
5	A	867	A	N1-C6-N6	12.23	125.94	118.60
5	A	144	A	N1-C6-N6	12.23	125.94	118.60
5	A	147	G	N1-C6-O6	12.22	127.23	119.90
5	A	2629	A	N1-C6-N6	12.21	125.93	118.60
5	A	140	A	N1-C6-N6	12.21	125.93	118.60
5	A	1026	A	N1-C6-N6	12.21	125.93	118.60
5	A	1618	A	N1-C6-N6	12.21	125.93	118.60
5	A	2505	A	N1-C6-N6	12.21	125.92	118.60
5	A	964	A	N1-C6-N6	12.20	125.92	118.60
5	A	1287	A	N1-C6-N6	12.21	125.92	118.60
5	A	513	A	N1-C6-N6	12.20	125.92	118.60
5	A	1982	A	N1-C6-N6	12.20	125.92	118.60
5	A	2389	A	N1-C6-N6	12.20	125.92	118.60
5	A	866	A	N1-C6-N6	12.20	125.92	118.60
5	A	384	A	N1-C6-N6	12.20	125.92	118.60
5	A	1473	A	N1-C6-N6	12.20	125.92	118.60
5	A	656	A	N1-C6-N6	12.19	125.91	118.60
5	A	2767	A	N1-C6-N6	12.19	125.91	118.60
5	A	15	G	N1-C6-O6	12.19	127.21	119.90
5	A	673	A	N1-C6-N6	12.18	125.91	118.60
5	A	2362	A	N1-C6-N6	12.18	125.91	118.60
5	A	1406	A	N1-C6-N6	12.18	125.91	118.60
5	A	1778	A	N1-C6-N6	12.18	125.91	118.60
5	A	1480	A	N1-C6-N6	12.17	125.90	118.60
5	A	904	A	N1-C6-N6	12.17	125.90	118.60
5	A	2500	A	N1-C6-N6	12.17	125.90	118.60
5	A	1029	A	N1-C6-N6	12.17	125.90	118.60
5	A	763	A	N1-C6-N6	12.16	125.90	118.60
5	A	1097	A	N1-C6-N6	12.16	125.89	118.60
5	A	1194	A	N1-C6-N6	12.16	125.89	118.60
5	A	2034	A	N1-C6-N6	12.15	125.89	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1941	A	N1-C6-N6	12.15	125.89	118.60
5	A	2831	A	N1-C6-N6	12.15	125.89	118.60
5	A	345	A	N1-C6-N6	12.15	125.89	118.60
5	A	1243	A	N1-C6-N6	12.14	125.89	118.60
6	B	11	A	N1-C6-N6	12.14	125.88	118.60
5	A	762	A	N1-C6-N6	12.14	125.88	118.60
5	A	2143	A	N1-C6-N6	12.14	125.88	118.60
5	A	2303	A	N1-C6-N6	12.14	125.88	118.60
5	A	630	A	N1-C6-N6	12.13	125.88	118.60
5	A	95	A	N1-C6-N6	12.13	125.88	118.60
5	A	1284	A	N1-C6-N6	12.13	125.88	118.60
5	A	1398	A	N1-C6-N6	12.13	125.88	118.60
5	A	1814	A	N1-C6-N6	12.13	125.88	118.60
5	A	437	A	N1-C6-N6	12.13	125.88	118.60
5	A	259	A	N1-C6-N6	12.12	125.87	118.60
5	A	1981	A	N1-C6-N6	12.12	125.87	118.60
5	A	1617	A	N1-C6-N6	12.12	125.87	118.60
5	A	829	A	N1-C6-N6	12.12	125.87	118.60
5	A	310	C	P-O3'-C3'	12.11	134.24	119.70
5	A	431	A	N1-C6-N6	12.11	125.87	118.60
5	A	2316	A	N1-C6-N6	12.11	125.87	118.60
5	A	2462	A	N1-C6-N6	12.11	125.87	118.60
5	A	1027	A	N1-C6-N6	12.11	125.87	118.60
5	A	1767	A	N1-C6-N6	12.11	125.87	118.60
5	A	561	A	N1-C6-N6	12.11	125.86	118.60
5	A	1061	A	N1-C6-N6	12.11	125.86	118.60
5	A	2187	A	N1-C6-N6	12.11	125.86	118.60
5	A	2302	A	N1-C6-N6	12.11	125.86	118.60
5	A	2315	A	N1-C6-N6	12.11	125.86	118.60
5	A	314	A	N1-C6-N6	12.10	125.86	118.60
5	A	1614	A	N1-C6-N6	12.10	125.86	118.60
6	B	39	A	N1-C6-N6	12.10	125.86	118.60
5	A	1161	A	N1-C6-N6	12.10	125.86	118.60
5	A	971	A	N1-C6-N6	12.10	125.86	118.60
5	A	2787	A	N1-C6-N6	12.10	125.86	118.60
5	A	1697	A	N1-C6-N6	12.10	125.86	118.60
6	B	48	G	N1-C6-O6	12.10	127.16	119.90
5	A	226	A	N1-C6-N6	12.09	125.86	118.60
5	A	2066	A	N1-C6-N6	12.09	125.86	118.60
5	A	2387	A	N1-C6-N6	12.09	125.85	118.60
5	A	790	A	N1-C6-N6	12.09	125.85	118.60
5	A	1423	A	P-O3'-C3'	12.09	134.21	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	200	A	N1-C6-N6	12.08	125.85	118.60
5	A	364	A	N1-C6-N6	12.08	125.85	118.60
5	A	2511	A	N1-C6-N6	12.08	125.85	118.60
5	A	2769	A	N1-C6-N6	12.08	125.85	118.60
5	A	339	A	N1-C6-N6	12.08	125.85	118.60
5	A	369	A	N1-C6-N6	12.08	125.85	118.60
5	A	999	A	N1-C6-N6	12.08	125.85	118.60
5	A	1593	A	N1-C6-N6	12.08	125.85	118.60
5	A	2010	A	N1-C6-N6	12.08	125.85	118.60
5	A	1174	A	N1-C6-N6	12.07	125.84	118.60
5	A	1504	A	N1-C6-N6	12.07	125.84	118.60
5	A	2338	A	N1-C6-N6	12.07	125.84	118.60
5	A	2329	A	N1-C6-N6	12.07	125.84	118.60
5	A	1434	A	N1-C6-N6	12.07	125.84	118.60
5	A	1581	A	N1-C6-N6	12.07	125.84	118.60
5	A	1791	A	N1-C6-N6	12.06	125.84	118.60
5	A	1260	A	N1-C6-N6	12.06	125.84	118.60
5	A	2089	A	N1-C6-N6	12.06	125.84	118.60
5	A	1850	A	N1-C6-N6	12.06	125.83	118.60
5	A	2216	A	N1-C6-N6	12.06	125.83	118.60
5	A	91	A	N1-C6-N6	12.06	125.83	118.60
5	A	1266	A	N1-C6-N6	12.05	125.83	118.60
5	A	847	A	N1-C6-N6	12.05	125.83	118.60
5	A	1565	U	P-O3'-C3'	12.05	134.16	119.70
5	A	1848	A	N1-C6-N6	12.05	125.83	118.60
5	A	500	A	N1-C6-N6	12.05	125.83	118.60
5	A	1947	A	N1-C6-N6	12.05	125.83	118.60
5	A	2447	A	N1-C6-N6	12.05	125.83	118.60
5	A	1142	A	N1-C6-N6	12.05	125.83	118.60
5	A	2498	A	N1-C6-N6	12.05	125.83	118.60
5	A	2595	A	N1-C6-N6	12.05	125.83	118.60
5	A	185	A	N1-C6-N6	12.04	125.83	118.60
5	A	1453	A	N1-C6-N6	12.04	125.83	118.60
5	A	690	A	N1-C6-N6	12.04	125.82	118.60
5	A	889	A	N1-C6-N6	12.04	125.82	118.60
5	A	2295	A	N1-C6-N6	12.04	125.82	118.60
5	A	1113	A	N1-C6-N6	12.04	125.82	118.60
5	A	41	A	N1-C6-N6	12.03	125.82	118.60
5	A	179	A	N1-C6-N6	12.03	125.82	118.60
5	A	326	A	N1-C6-N6	12.03	125.82	118.60
5	A	1006	A	N1-C6-N6	12.03	125.81	118.60
5	A	183	A	N1-C6-N6	12.02	125.81	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1316	A	N1-C6-N6	12.02	125.81	118.60
5	A	2719	A	N1-C6-N6	12.02	125.81	118.60
5	A	1202	A	N1-C6-N6	12.02	125.81	118.60
5	A	2132	A	N1-C6-N6	12.02	125.81	118.60
5	A	1141	A	N1-C6-N6	12.01	125.81	118.60
5	A	1583	A	N1-C6-N6	12.01	125.81	118.60
5	A	2254	A	N1-C6-N6	12.01	125.81	118.60
5	A	2804	A	N1-C6-N6	12.01	125.81	118.60
5	A	2875	A	N1-C6-N6	12.01	125.81	118.60
5	A	251	G	N1-C6-O6	12.01	127.10	119.90
5	A	1078	A	N1-C6-N6	12.01	125.80	118.60
6	B	118	A	N1-C6-N6	12.01	125.80	118.60
5	A	841	A	N1-C6-N6	12.00	125.80	118.60
5	A	1966	A	N1-C6-N6	12.00	125.80	118.60
5	A	2220	A	N1-C6-N6	12.00	125.80	118.60
5	A	1426	A	N1-C6-N6	11.99	125.80	118.60
5	A	2745	U	O4'-C1'-N1	11.99	117.79	108.20
5	A	1965	A	N1-C6-N6	11.99	125.79	118.60
5	A	560	A	N1-C6-N6	11.98	125.79	118.60
6	B	114	A	N1-C6-N6	11.98	125.79	118.60
5	A	1956	A	N1-C6-N6	11.98	125.79	118.60
5	A	365	U	P-O3'-C3'	11.98	134.07	119.70
5	A	1269	A	N1-C6-N6	11.98	125.79	118.60
5	A	2071	A	N1-C6-N6	11.98	125.79	118.60
5	A	1553	A	N1-C6-N6	11.98	125.78	118.60
5	A	1149	A	N1-C6-N6	11.97	125.78	118.60
5	A	1302	A	N1-C6-N6	11.97	125.78	118.60
5	A	1555	A	N1-C6-N6	11.97	125.78	118.60
5	A	2468	A	N1-C6-N6	11.97	125.78	118.60
5	A	61	A	N1-C6-N6	11.97	125.78	118.60
5	A	939	G	N1-C6-O6	11.97	127.08	119.90
5	A	2708	A	N1-C6-N6	11.97	125.78	118.60
5	A	917	A	N1-C6-N6	11.96	125.78	118.60
5	A	2656	G	P-O3'-C3'	11.96	134.05	119.70
5	A	268	A	N1-C6-N6	11.96	125.78	118.60
5	A	2124	A	N1-C6-N6	11.96	125.78	118.60
5	A	1442	A	N1-C6-N6	11.96	125.77	118.60
5	A	1706	G	N1-C6-O6	11.96	127.07	119.90
5	A	337	A	N1-C6-N6	11.95	125.77	118.60
5	A	958	A	N1-C6-N6	11.95	125.77	118.60
5	A	1663	A	N1-C6-N6	11.95	125.77	118.60
5	A	2898	A	N1-C6-N6	11.95	125.77	118.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	177	G	N1-C6-O6	11.95	127.07	119.90
5	A	388	A	N1-C6-N6	11.95	125.77	118.60
5	A	436	A	N1-C6-N6	11.95	125.77	118.60
5	A	553	A	N1-C6-N6	11.95	125.77	118.60
5	A	1745	A	N1-C6-N6	11.95	125.77	118.60
5	A	618	A	N1-C6-N6	11.95	125.77	118.60
5	A	1405	A	N1-C6-N6	11.94	125.77	118.60
5	A	1096	A	N1-C6-N6	11.94	125.77	118.60
5	A	2000	A	N1-C6-N6	11.94	125.77	118.60
5	A	421	A	N1-C6-N6	11.94	125.76	118.60
5	A	1723	A	N1-C6-N6	11.94	125.76	118.60
5	A	1325	A	N1-C6-N6	11.94	125.76	118.60
5	A	318	A	N1-C6-N6	11.94	125.76	118.60
5	A	1173	A	N1-C6-N6	11.94	125.76	118.60
5	A	448	A	N1-C6-N6	11.93	125.76	118.60
5	A	10	A	N1-C6-N6	11.93	125.76	118.60
5	A	1293	A	N1-C6-N6	11.93	125.76	118.60
5	A	1816	A	N1-C6-N6	11.93	125.76	118.60
5	A	2078	A	N1-C6-N6	11.93	125.76	118.60
5	A	2846	A	N1-C6-N6	11.93	125.76	118.60
5	A	353	A	N1-C6-N6	11.93	125.75	118.60
5	A	1057	G	N1-C6-O6	11.93	127.06	119.90
5	A	851	A	N1-C6-N6	11.93	125.75	118.60
5	A	1930	A	N1-C6-N6	11.93	125.76	118.60
6	B	97	A	N1-C6-N6	11.93	125.76	118.60
5	A	1957	A	N1-C6-N6	11.92	125.75	118.60
5	A	2141	A	N1-C6-N6	11.92	125.75	118.60
5	A	2668	A	N1-C6-N6	11.92	125.75	118.60
5	A	2854	A	N1-C6-N6	11.92	125.75	118.60
5	A	1265	A	N1-C6-N6	11.92	125.75	118.60
5	A	538	A	N1-C6-N6	11.92	125.75	118.60
5	A	1942	A	N1-C6-N6	11.92	125.75	118.60
5	A	2590	A	N1-C6-N6	11.92	125.75	118.60
5	A	2722	A	N1-C6-N6	11.92	125.75	118.60
6	B	25	A	N1-C6-N6	11.91	125.75	118.60
5	A	517	A	N1-C6-N6	11.91	125.75	118.60
5	A	717	A	N1-C6-N6	11.91	125.74	118.60
5	A	808	A	N1-C6-N6	11.91	125.74	118.60
5	A	616	A	N1-C6-N6	11.90	125.74	118.60
5	A	1592	A	N1-C6-N6	11.90	125.74	118.60
5	A	2060	A	N1-C6-N6	11.90	125.74	118.60
5	A	2844	A	N1-C6-N6	11.90	125.74	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1456	A	N1-C6-N6	11.90	125.74	118.60
5	A	1845	A	N1-C6-N6	11.90	125.74	118.60
5	A	702	A	N1-C6-N6	11.90	125.74	118.60
5	A	1005	A	N1-C6-N6	11.90	125.74	118.60
5	A	1360	A	N1-C6-N6	11.90	125.74	118.60
5	A	1699	A	N1-C6-N6	11.90	125.74	118.60
5	A	2088	A	N1-C6-N6	11.90	125.74	118.60
5	A	139	A	N1-C6-N6	11.89	125.74	118.60
5	A	2407	A	N1-C6-N6	11.89	125.74	118.60
5	A	2689	A	N1-C6-N6	11.89	125.73	118.60
6	B	50	A	N1-C6-N6	11.89	125.73	118.60
5	A	2176	A	N1-C6-N6	11.88	125.73	118.60
5	A	2477	A	N1-C6-N6	11.88	125.73	118.60
5	A	659	A	N1-C6-N6	11.88	125.73	118.60
5	A	1760	A	N1-C6-N6	11.88	125.73	118.60
5	A	2022	U	O4'-C1'-N1	11.88	117.70	108.20
5	A	893	A	N1-C6-N6	11.88	125.73	118.60
5	A	2826	A	N1-C6-N6	11.88	125.72	118.60
5	A	935	A	N1-C6-N6	11.87	125.72	118.60
5	A	1066	A	N1-C6-N6	11.87	125.72	118.60
5	A	798	A	N1-C6-N6	11.87	125.72	118.60
5	A	2064	G	P-O3'-C3'	11.87	133.95	119.70
5	A	1423	A	N1-C6-N6	11.87	125.72	118.60
5	A	49	A	N1-C6-N6	11.87	125.72	118.60
5	A	1932	G	N1-C6-O6	11.87	127.02	119.90
5	A	2228	A	N1-C6-N6	11.87	125.72	118.60
5	A	117	A	N1-C6-N6	11.87	125.72	118.60
5	A	2117	A	N1-C6-N6	11.86	125.72	118.60
5	A	2163	A	N1-C6-N6	11.86	125.72	118.60
5	A	2298	A	N1-C6-N6	11.86	125.72	118.60
5	A	2087	A	N1-C6-N6	11.86	125.71	118.60
5	A	2091	A	N1-C6-N6	11.86	125.71	118.60
5	A	279	A	N1-C6-N6	11.85	125.71	118.60
5	A	1424	A	N1-C6-N6	11.85	125.71	118.60
5	A	1524	A	N1-C6-N6	11.85	125.71	118.60
5	A	2927	A	N1-C6-N6	11.85	125.71	118.60
5	A	637	A	N1-C6-N6	11.85	125.71	118.60
5	A	786	A	N1-C6-N6	11.85	125.71	118.60
5	A	1421	A	N1-C6-N6	11.85	125.71	118.60
5	A	2191	A	N1-C6-N6	11.85	125.71	118.60
6	B	113	A	N1-C6-N6	11.85	125.71	118.60
5	A	1579	A	N1-C6-N6	11.84	125.70	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1601	A	N1-C6-N6	11.84	125.70	118.60
5	A	840	A	N1-C6-N6	11.84	125.70	118.60
5	A	2332	G	N1-C6-O6	11.83	127.00	119.90
5	A	943	A	N1-C6-N6	11.82	125.69	118.60
5	A	2593	A	N1-C6-N6	11.82	125.69	118.60
5	A	1628	G	N1-C6-O6	11.81	126.99	119.90
5	A	412	A	N1-C6-N6	11.81	125.69	118.60
5	A	2155	A	N1-C6-N6	11.80	125.68	118.60
5	A	1686	A	N1-C6-N6	11.80	125.68	118.60
5	A	2683	A	N1-C6-N6	11.80	125.68	118.60
5	A	1233	A	N1-C6-N6	11.79	125.68	118.60
5	A	2779	A	N1-C6-N6	11.79	125.68	118.60
5	A	274	A	N1-C6-N6	11.79	125.68	118.60
5	A	2459	A	N1-C6-N6	11.79	125.67	118.60
5	A	2571	A	P-O5'-C5'	11.79	139.76	120.90
5	A	2160	U	P-O3'-C3'	11.79	133.84	119.70
5	A	678	A	N1-C6-N6	11.78	125.67	118.60
5	A	1812	A	N1-C6-N6	11.78	125.67	118.60
6	B	17	A	N1-C6-N6	11.78	125.67	118.60
5	A	1585	A	N1-C6-N6	11.78	125.67	118.60
5	A	1659	A	N1-C6-N6	11.78	125.67	118.60
5	A	2349	A	N1-C6-N6	11.78	125.67	118.60
5	A	2018	A	N1-C6-N6	11.77	125.66	118.60
5	A	73	A	N1-C6-N6	11.77	125.66	118.60
5	A	202	A	N1-C6-N6	11.77	125.66	118.60
5	A	828	A	N1-C6-N6	11.77	125.66	118.60
5	A	2547	A	N1-C6-N6	11.77	125.66	118.60
6	B	9	C	P-O3'-C3'	11.76	133.81	119.70
5	A	692	A	N1-C6-N6	11.76	125.66	118.60
5	A	2754	A	N1-C6-N6	11.76	125.66	118.60
5	A	882	A	N1-C6-N6	11.76	125.66	118.60
5	A	2848	A	N1-C6-N6	11.76	125.65	118.60
5	A	1003	A	N1-C6-N6	11.75	125.65	118.60
5	A	2164	A	N1-C6-N6	11.75	125.65	118.60
5	A	1797	A	N1-C6-N6	11.74	125.65	118.60
5	A	5	A	N1-C6-N6	11.74	125.64	118.60
5	A	574	A	N1-C6-N6	11.74	125.65	118.60
5	A	176	A	N1-C6-N6	11.74	125.64	118.60
5	A	1347	A	N1-C6-N6	11.74	125.64	118.60
5	A	2202	A	N1-C6-N6	11.73	125.64	118.60
5	A	2827	A	N1-C6-N6	11.73	125.64	118.60
5	A	1073	A	N1-C6-N6	11.73	125.64	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2542	A	N1-C6-N6	11.73	125.64	118.60
5	A	265	A	N1-C6-N6	11.73	125.64	118.60
5	A	796	A	N1-C6-N6	11.73	125.64	118.60
5	A	1995	A	N1-C6-N6	11.72	125.64	118.60
5	A	2111	A	N1-C6-N6	11.72	125.64	118.60
5	A	1516	A	N1-C6-N6	11.72	125.63	118.60
5	A	2356	A	N1-C6-N6	11.72	125.63	118.60
6	B	31	G	N1-C6-O6	11.72	126.93	119.90
5	A	2205	A	N1-C6-N6	11.71	125.63	118.60
5	A	1677	A	N1-C6-N6	11.71	125.63	118.60
5	A	6	A	N1-C6-N6	11.71	125.62	118.60
5	A	126	A	N1-C6-N6	11.71	125.62	118.60
5	A	653	A	N1-C6-N6	11.71	125.63	118.60
5	A	2876	A	N1-C6-N6	11.71	125.62	118.60
5	A	1667	A	N1-C6-N6	11.71	125.62	118.60
5	A	2673	A	N1-C6-N6	11.71	125.62	118.60
6	B	64	A	N1-C6-N6	11.70	125.62	118.60
5	A	1308	A	N1-C6-N6	11.70	125.62	118.60
5	A	1427	G	N1-C6-O6	11.70	126.92	119.90
5	A	1346	A	N1-C6-N6	11.69	125.62	118.60
5	A	2601	A	N1-C6-N6	11.68	125.61	118.60
5	A	1119	A	N1-C6-N6	11.67	125.60	118.60
5	A	2455	A	N1-C6-N6	11.67	125.61	118.60
5	A	2618	A	N1-C6-N6	11.67	125.60	118.60
5	A	407	A	N1-C6-N6	11.67	125.60	118.60
5	A	1388	A	N1-C6-N6	11.67	125.60	118.60
5	A	1540	A	N1-C6-N6	11.67	125.60	118.60
5	A	1432	A	N1-C6-N6	11.67	125.60	118.60
5	A	1691	A	N1-C6-N6	11.66	125.60	118.60
5	A	449	A	N1-C6-N6	11.65	125.59	118.60
5	A	1144	A	N1-C6-N6	11.65	125.59	118.60
5	A	1542	A	N1-C6-N6	11.65	125.59	118.60
5	A	2916	A	N1-C6-N6	11.65	125.59	118.60
5	A	689	A	N1-C6-N6	11.65	125.59	118.60
5	A	2005	C	O4'-C1'-N1	11.65	117.52	108.20
5	A	797	A	N1-C6-N6	11.64	125.59	118.60
5	A	957	A	N1-C6-N6	11.64	125.58	118.60
5	A	28	A	N1-C6-N6	11.64	125.58	118.60
5	A	182	C	O4'-C1'-N1	11.64	117.51	108.20
5	A	878	G	N1-C6-O6	11.64	126.88	119.90
6	B	117	A	N1-C6-N6	11.64	125.58	118.60
6	B	18	A	N1-C6-N6	11.64	125.58	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1582	U	P-O3'-C3'	11.63	133.66	119.70
5	A	2661	A	N1-C6-N6	11.63	125.58	118.60
5	A	2662	A	N1-C6-N6	11.63	125.58	118.60
5	A	65	A	N1-C6-N6	11.63	125.58	118.60
5	A	2152	A	N1-C6-N6	11.63	125.58	118.60
5	A	2307	A	N1-C6-N6	11.63	125.58	118.60
5	A	90	A	N1-C6-N6	11.62	125.57	118.60
5	A	1126	A	N1-C6-N6	11.62	125.57	118.60
5	A	1491	A	N1-C6-N6	11.62	125.57	118.60
5	A	2750	A	N1-C6-N6	11.62	125.57	118.60
5	A	479	A	N1-C6-N6	11.62	125.57	118.60
5	A	1123	A	N1-C6-N6	11.62	125.57	118.60
5	A	1100	A	N1-C6-N6	11.61	125.57	118.60
5	A	1615	A	N1-C6-N6	11.61	125.57	118.60
5	A	1627	A	N1-C6-N6	11.61	125.57	118.60
5	A	993	A	N1-C6-N6	11.61	125.57	118.60
5	A	486	A	N1-C6-N6	11.61	125.56	118.60
5	A	1789	A	N1-C6-N6	11.61	125.56	118.60
5	A	1464	A	N1-C6-N6	11.60	125.56	118.60
5	A	64	A	N1-C6-N6	11.59	125.56	118.60
5	A	1654	A	N1-C6-N6	11.59	125.56	118.60
5	A	2631	A	N1-C6-N6	11.59	125.56	118.60
5	A	469	A	N1-C6-N6	11.59	125.55	118.60
5	A	1210	A	N1-C6-N6	11.59	125.55	118.60
5	A	1557	G	N1-C6-O6	11.59	126.85	119.90
5	A	2819	A	N1-C6-N6	11.59	125.55	118.60
5	A	1735	A	N1-C6-N6	11.59	125.55	118.60
5	A	970	A	N1-C6-N6	11.58	125.55	118.60
5	A	2794	A	N1-C6-N6	11.58	125.55	118.60
5	A	175	G	N1-C6-O6	11.57	126.84	119.90
5	A	2150	G	N1-C6-O6	11.57	126.84	119.90
5	A	1642	G	N1-C6-O6	11.56	126.84	119.90
5	A	275	A	N1-C6-N6	11.56	125.53	118.60
5	A	799	A	N1-C6-N6	11.56	125.53	118.60
5	A	1046	A	N1-C6-N6	11.56	125.53	118.60
5	A	1499	A	N1-C6-N6	11.55	125.53	118.60
5	A	1197	A	N1-C6-N6	11.55	125.53	118.60
5	A	811	A	N1-C6-N6	11.55	125.53	118.60
5	A	2874	G	P-O3'-C3'	11.55	133.56	119.70
5	A	754	G	N1-C6-O6	11.54	126.82	119.90
5	A	1055	A	N1-C6-N6	11.54	125.52	118.60
5	A	2806	G	N1-C6-O6	11.54	126.82	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	322	A	N1-C6-N6	11.53	125.52	118.60
5	A	1404	A	N1-C6-N6	11.53	125.52	118.60
5	A	2094	C	O4'-C1'-N1	11.53	117.42	108.20
5	A	2256	A	N1-C6-N6	11.53	125.52	118.60
5	A	2375	A	N1-C6-N6	11.53	125.52	118.60
5	A	373	A	N1-C6-N6	11.53	125.52	118.60
5	A	470	A	N1-C6-N6	11.52	125.51	118.60
5	A	355	A	N1-C6-N6	11.52	125.51	118.60
5	A	1465	A	N1-C6-N6	11.52	125.51	118.60
5	A	1072	A	N1-C6-N6	11.52	125.51	118.60
5	A	410	G	N1-C6-O6	11.51	126.81	119.90
5	A	699	A	N1-C6-N6	11.51	125.51	118.60
5	A	1669	G	N1-C6-O6	11.51	126.80	119.90
5	A	2330	A	N1-C6-N6	11.50	125.50	118.60
5	A	231	A	N1-C6-N6	11.50	125.50	118.60
5	A	661	A	N1-C6-N6	11.50	125.50	118.60
5	A	1092	A	N1-C6-N6	11.49	125.50	118.60
5	A	518	A	N1-C6-N6	11.49	125.50	118.60
5	A	1447	C	O4'-C1'-N1	11.49	117.39	108.20
5	A	1831	A	N1-C6-N6	11.48	125.49	118.60
5	A	2327	A	N1-C6-N6	11.48	125.49	118.60
5	A	1714	A	N1-C6-N6	11.48	125.49	118.60
5	A	207	A	N1-C6-N6	11.47	125.48	118.60
5	A	2080	A	N1-C6-N6	11.47	125.48	118.60
5	A	835	A	N1-C6-N6	11.47	125.48	118.60
5	A	2845	A	N1-C6-N6	11.47	125.48	118.60
5	A	2365	A	N1-C6-N6	11.47	125.48	118.60
5	A	1876	A	N1-C6-N6	11.46	125.48	118.60
5	A	2537	G	C5-C6-O6	-11.46	121.72	128.60
5	A	530	A	N1-C6-N6	11.46	125.47	118.60
6	B	105	A	N1-C6-N6	11.46	125.47	118.60
5	A	1485	A	N1-C6-N6	11.45	125.47	118.60
5	A	896	A	N1-C6-N6	11.45	125.47	118.60
6	B	73	G	N1-C6-O6	11.45	126.77	119.90
5	A	2594	A	N1-C6-N6	11.45	125.47	118.60
5	A	52	A	N1-C6-N6	11.44	125.47	118.60
5	A	2227	A	N1-C6-N6	11.44	125.47	118.60
5	A	2777	A	N1-C6-N6	11.44	125.46	118.60
5	A	354	A	N1-C6-N6	11.43	125.46	118.60
5	A	679	A	N1-C6-N6	11.43	125.46	118.60
5	A	683	A	N1-C6-N6	11.43	125.45	118.60
5	A	2421	A	N1-C6-N6	11.43	125.46	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1253	A	N1-C6-N6	11.42	125.45	118.60
5	A	2909	U	O4'-C1'-N1	11.42	117.34	108.20
5	A	759	G	N1-C6-O6	11.42	126.75	119.90
5	A	1091	U	P-O3'-C3'	11.41	133.40	119.70
5	A	2532	A	N1-C6-N6	11.40	125.44	118.60
6	B	76	A	N1-C6-N6	11.40	125.44	118.60
6	B	37	A	N1-C6-N6	11.40	125.44	118.60
5	A	480	C	O4'-C1'-N1	11.38	117.31	108.20
5	A	658	A	N1-C6-N6	11.38	125.43	118.60
5	A	674	G	N1-C6-O6	11.38	126.72	119.90
5	A	1504	A	O4'-C1'-N9	11.38	117.30	108.20
5	A	1312	A	N1-C6-N6	11.37	125.42	118.60
5	A	1929	A	N1-C6-N6	11.37	125.42	118.60
5	A	2168	G	N1-C6-O6	11.37	126.72	119.90
5	A	199	A	N1-C6-N6	11.36	125.42	118.60
5	A	1054	A	N1-C6-N6	11.36	125.42	118.60
5	A	334	G	N1-C6-O6	11.36	126.72	119.90
5	A	1375	A	N1-C6-N6	11.36	125.42	118.60
5	A	715	A	N1-C6-N6	11.36	125.41	118.60
5	A	1815	A	N1-C6-N6	11.35	125.41	118.60
5	A	346	G	N1-C6-O6	11.34	126.70	119.90
5	A	2021	G	P-O3'-C3'	11.34	133.30	119.70
5	A	2381	A	N1-C6-N6	11.34	125.40	118.60
5	A	168	A	N1-C6-N6	11.33	125.40	118.60
5	A	978	A	N1-C6-N6	11.32	125.39	118.60
5	A	2616	A	N1-C6-N6	11.32	125.39	118.60
5	A	219	A	N1-C6-N6	11.32	125.39	118.60
5	A	1541	A	N1-C6-N6	11.32	125.39	118.60
5	A	494	A	N1-C6-N6	11.32	125.39	118.60
5	A	1418	U	P-O3'-C3'	11.31	133.28	119.70
5	A	2881	G	N1-C6-O6	11.31	126.69	119.90
5	A	916	G	N1-C6-O6	11.30	126.68	119.90
5	A	547	A	N1-C6-N6	11.29	125.37	118.60
5	A	2686	A	N1-C6-N6	11.28	125.37	118.60
5	A	477	A	N1-C6-N6	11.28	125.37	118.60
5	A	490	A	N1-C6-N6	11.27	125.36	118.60
5	A	822	G	N1-C6-O6	11.27	126.66	119.90
5	A	2560	A	N1-C6-N6	11.27	125.36	118.60
6	B	102	A	N1-C6-N6	11.26	125.36	118.60
5	A	1116	A	N1-C6-N6	11.26	125.35	118.60
5	A	147	G	C5-C6-O6	-11.25	121.85	128.60
5	A	411	G	N1-C6-O6	11.24	126.64	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	836	A	N1-C6-N6	11.23	125.34	118.60
5	A	2417	A	N1-C6-N6	11.23	125.34	118.60
5	A	1246	G	N1-C6-O6	11.23	126.64	119.90
5	A	1393	A	N1-C6-N6	11.23	125.34	118.60
5	A	2296	A	N1-C6-N6	11.23	125.34	118.60
5	A	244	A	N1-C6-N6	11.22	125.33	118.60
5	A	677	A	N1-C6-N6	11.22	125.33	118.60
5	A	1851	G	N1-C6-O6	11.22	126.63	119.90
5	A	996	G	N1-C6-O6	11.21	126.62	119.90
5	A	1729	C	O4'-C1'-N1	11.20	117.16	108.20
5	A	1536	A	N1-C6-N6	11.20	125.32	118.60
5	A	2677	G	N1-C6-O6	11.20	126.62	119.90
5	A	2762	A	P-O5'-C5'	11.20	138.81	120.90
5	A	125	A	N1-C6-N6	11.19	125.31	118.60
5	A	1390	C	O4'-C1'-N1	11.19	117.15	108.20
5	A	2574	G	N1-C6-O6	11.19	126.61	119.90
5	A	1628	G	O4'-C1'-N9	11.18	117.14	108.20
5	A	2562	U	P-O3'-C3'	11.17	133.11	119.70
5	A	1524	A	O4'-C1'-N9	11.15	117.12	108.20
5	A	2009	G	N1-C6-O6	11.15	126.59	119.90
5	A	2877	G	N1-C6-O6	11.15	126.59	119.90
5	A	2497	A	N1-C6-N6	11.15	125.29	118.60
5	A	426	G	N1-C6-O6	11.13	126.58	119.90
5	A	1537	G	N1-C6-O6	11.11	126.57	119.90
5	A	2311	G	P-O3'-C3'	11.11	133.03	119.70
5	A	2438	G	N1-C6-O6	11.11	126.57	119.90
5	A	1021	A	N1-C6-N6	11.11	125.27	118.60
5	A	1874	G	N1-C6-O6	11.10	126.56	119.90
5	A	2499	G	C5-C6-O6	-11.10	121.94	128.60
5	A	148	G	N1-C6-O6	11.10	126.56	119.90
5	A	2476	G	C5-C6-O6	-11.10	121.94	128.60
5	A	752	A	N1-C6-N6	11.08	125.25	118.60
5	A	376	A	N1-C6-N6	11.07	125.25	118.60
5	A	2133	C	O4'-C1'-N1	11.07	117.06	108.20
5	A	300	G	C5-C6-O6	-11.06	121.96	128.60
5	A	693	G	N1-C6-O6	11.06	126.54	119.90
5	A	1074	A	N1-C6-N6	11.06	125.24	118.60
5	A	2026	A	N1-C6-N6	11.06	125.24	118.60
5	A	2257	G	N1-C6-O6	11.06	126.53	119.90
5	A	2573	G	N1-C6-O6	11.06	126.53	119.90
5	A	2816	C	O4'-C1'-N1	11.05	117.04	108.20
5	A	553	A	P-O3'-C3'	11.05	132.96	119.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1305	A	N1-C6-N6	11.03	125.22	118.60
5	A	1680	A	N1-C6-N6	11.02	125.21	118.60
5	A	830	A	N1-C6-N6	11.02	125.21	118.60
5	A	2077	G	N1-C6-O6	11.01	126.51	119.90
5	A	357	G	N1-C6-O6	11.01	126.51	119.90
5	A	1525	G	N1-C6-O6	11.00	126.50	119.90
5	A	2513	G	N1-C6-O6	11.00	126.50	119.90
5	A	1788	A	N1-C6-N6	10.98	125.19	118.60
5	A	2793	A	N1-C6-N6	10.97	125.19	118.60
5	A	2275	G	N1-C6-O6	10.96	126.48	119.90
5	A	194	A	N1-C6-N6	10.95	125.17	118.60
5	A	1160	G	N1-C6-O6	10.95	126.47	119.90
5	A	2702	G	N1-C6-O6	10.95	126.47	119.90
5	A	1392	A	N1-C6-N6	10.94	125.16	118.60
5	A	2444	G	N1-C6-O6	10.94	126.46	119.90
5	A	1051	C	O4'-C1'-N1	10.93	116.95	108.20
5	A	1948	A	N1-C6-N6	10.92	125.16	118.60
5	A	2897	G	N1-C6-O6	10.92	126.45	119.90
5	A	868	A	N1-C6-N6	10.92	125.15	118.60
6	B	51	A	N1-C6-N6	10.92	125.15	118.60
5	A	391	A	N1-C6-N6	10.91	125.14	118.60
5	A	2252	A	N1-C6-N6	10.90	125.14	118.60
5	A	162	A	N1-C6-N6	10.89	125.14	118.60
5	A	629	G	O4'-C1'-N9	10.89	116.91	108.20
5	A	1506	A	N1-C6-N6	10.88	125.13	118.60
5	A	237	U	O4'-C1'-N1	10.87	116.90	108.20
5	A	1932	G	C5-C6-O6	-10.88	122.08	128.60
5	A	1381	A	N1-C6-N6	10.87	125.12	118.60
5	A	389	A	N1-C6-N6	10.87	125.12	118.60
5	A	921	G	N1-C6-O6	10.87	126.42	119.90
6	B	81	G	N1-C6-O6	10.86	126.42	119.90
5	A	428	A	N1-C6-N6	10.86	125.11	118.60
5	A	647	A	N1-C6-N6	10.85	125.11	118.60
5	A	1877	A	N1-C6-N6	10.85	125.11	118.60
5	A	652	A	N1-C6-N6	10.85	125.11	118.60
5	A	24	G	N1-C6-O6	10.84	126.41	119.90
5	A	1043	G	N1-C6-O6	10.84	126.41	119.90
5	A	1076	G	N1-C6-O6	10.84	126.41	119.90
5	A	2805	A	N1-C6-N6	10.84	125.10	118.60
5	A	824	G	N1-C6-O6	10.84	126.40	119.90
5	A	1254	A	N1-C6-N6	10.84	125.10	118.60
5	A	180	G	N1-C6-O6	10.83	126.40	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2386	U	O4'-C1'-N1	10.82	116.86	108.20
5	A	2396	G	N1-C6-O6	10.82	126.39	119.90
5	A	2401	G	N1-C6-O6	10.82	126.39	119.90
5	A	2246	G	N1-C6-O6	10.80	126.38	119.90
5	A	2654	G	N1-C6-O6	10.80	126.38	119.90
5	A	453	G	N1-C6-O6	10.80	126.38	119.90
5	A	2340	A	N1-C6-N6	10.79	125.07	118.60
5	A	2049	A	N1-C6-N6	10.78	125.07	118.60
5	A	2510	G	N1-C6-O6	10.78	126.37	119.90
5	A	2324	C	O4'-C1'-N1	10.77	116.82	108.20
5	A	236	A	N1-C6-N6	10.77	125.06	118.60
5	A	1175	A	N1-C6-N6	10.77	125.06	118.60
5	A	2449	C	O4'-C1'-N1	10.76	116.81	108.20
5	A	695	G	N1-C6-O6	10.76	126.36	119.90
5	A	2553	G	N1-C6-O6	10.75	126.35	119.90
5	A	12	A	N1-C6-N6	10.75	125.05	118.60
5	A	1721	A	P-O5'-C5'	10.75	138.09	120.90
5	A	897	G	C5-C6-O6	-10.74	122.16	128.60
5	A	642	G	N1-C6-O6	10.73	126.34	119.90
5	A	729	G	N1-C6-O6	10.73	126.34	119.90
5	A	998	G	N1-C6-O6	10.73	126.34	119.90
5	A	408	G	N1-C6-O6	10.73	126.34	119.90
5	A	30	G	N1-C6-O6	10.72	126.33	119.90
5	A	1082	G	N1-C6-O6	10.72	126.33	119.90
5	A	382	G	N1-C6-O6	10.71	126.33	119.90
5	A	520	G	N1-C6-O6	10.71	126.33	119.90
5	A	2599	G	N1-C6-O6	10.70	126.32	119.90
5	A	1227	G	O4'-C1'-N9	10.70	116.76	108.20
5	A	2835	A	N1-C6-N6	10.70	125.02	118.60
5	A	1012	G	N1-C6-O6	10.69	126.32	119.90
5	A	1075	A	N1-C6-N6	10.69	125.02	118.60
5	A	2840	C	O4'-C1'-N1	10.69	116.75	108.20
5	A	524	A	N1-C6-N6	10.69	125.01	118.60
5	A	2339	A	N1-C6-N6	10.69	125.01	118.60
5	A	2060	A	P-O3'-C3'	10.68	132.52	119.70
5	A	2101	G	N1-C6-O6	10.68	126.31	119.90
5	A	1833	G	N1-C6-O6	10.68	126.31	119.90
5	A	1562	A	N1-C6-N6	10.68	125.01	118.60
5	A	1707	U	O4'-C1'-N1	10.66	116.72	108.20
6	B	56	A	N1-C6-N6	10.65	124.99	118.60
5	A	1230	A	N1-C6-N6	10.64	124.98	118.60
5	A	2518	G	N1-C6-O6	10.64	126.28	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	80	G	N1-C6-O6	10.64	126.28	119.90
5	A	1263	G	N1-C6-O6	10.64	126.28	119.90
5	A	1340	A	N1-C6-N6	10.64	124.98	118.60
5	A	2248	G	N1-C6-O6	10.64	126.28	119.90
5	A	603	G	N1-C6-O6	10.63	126.28	119.90
5	A	578	A	N1-C6-N6	10.62	124.97	118.60
5	A	429	A	N1-C6-N6	10.62	124.97	118.60
5	A	1428	G	N1-C6-O6	10.62	126.27	119.90
5	A	1496	G	N1-C6-O6	10.62	126.27	119.90
5	A	251	G	C5-C6-O6	-10.62	122.23	128.60
5	A	586	C	O4'-C1'-N1	10.61	116.69	108.20
5	A	593	A	N1-C6-N6	10.61	124.96	118.60
5	A	987	A	N1-C6-N6	10.60	124.96	118.60
5	A	303	G	N1-C6-O6	10.60	126.26	119.90
5	A	53	A	N1-C6-N6	10.60	124.96	118.60
5	A	1575	A	N1-C6-N6	10.60	124.96	118.60
5	A	659	A	P-O3'-C3'	10.59	132.41	119.70
5	A	1036	A	N1-C6-N6	10.59	124.96	118.60
5	A	1926	G	N1-C6-O6	10.59	126.26	119.90
6	B	16	G	N1-C6-O6	10.59	126.25	119.90
5	A	2721	C	O4'-C1'-N1	10.59	116.67	108.20
5	A	907	U	O4'-C1'-N1	10.58	116.67	108.20
6	B	106	C	O4'-C1'-N1	10.58	116.67	108.20
5	A	220	A	N1-C6-N6	10.57	124.94	118.60
6	B	103	G	N1-C6-O6	10.57	126.24	119.90
5	A	2904	A	C5-C6-N6	-10.57	115.25	123.70
5	A	1323	A	N1-C6-N6	10.56	124.94	118.60
5	A	804	G	N1-C6-O6	10.56	126.23	119.90
5	A	1999	A	N1-C6-N6	10.55	124.93	118.60
5	A	2297	A	N1-C6-N6	10.53	124.92	118.60
5	A	2758	G	N1-C6-O6	10.54	126.22	119.90
5	A	2200	A	N1-C6-N6	10.53	124.92	118.60
5	A	2795	G	N1-C6-O6	10.53	126.22	119.90
5	A	1448	U	P-O3'-C3'	10.52	132.32	119.70
5	A	1311	G	N1-C6-O6	10.52	126.21	119.90
5	A	1168	G	N1-C6-O6	10.52	126.21	119.90
5	A	1581	A	O4'-C1'-N9	10.52	116.61	108.20
5	A	519	A	N1-C6-N6	10.51	124.91	118.60
5	A	2788	G	N1-C6-O6	10.51	126.21	119.90
5	A	1631	A	N1-C6-N6	10.51	124.91	118.60
5	A	2438	G	C5-C6-O6	-10.51	122.30	128.60
5	A	16	G	N1-C6-O6	10.50	126.20	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	906	G	P-O3'-C3'	10.50	132.31	119.70
5	A	2893	A	N1-C6-N6	10.50	124.90	118.60
5	A	2484	G	N1-C6-O6	10.50	126.20	119.90
5	A	1945	A	N1-C6-N6	10.49	124.89	118.60
5	A	1220	G	P-O3'-C3'	10.48	132.28	119.70
5	A	819	G	N1-C6-O6	10.48	126.19	119.90
5	A	2628	G	N1-C6-O6	10.48	126.19	119.90
5	A	765	A	N1-C6-N6	10.47	124.88	118.60
5	A	2235	G	N1-C6-O6	10.47	126.18	119.90
5	A	537	A	N1-C6-N6	10.46	124.88	118.60
5	A	1538	G	N1-C6-O6	10.46	126.18	119.90
5	A	1698	G	N1-C6-O6	10.46	126.17	119.90
5	A	1021	A	P-O3'-C3'	10.45	132.24	119.70
5	A	2714	G	N1-C6-O6	10.44	126.17	119.90
5	A	2905	C	O4'-C1'-N1	10.44	116.56	108.20
5	A	738	C	O4'-C1'-N1	10.44	116.55	108.20
5	A	2480	A	N1-C6-N6	10.44	124.86	118.60
5	A	225	A	N1-C6-N6	10.44	124.86	118.60
5	A	374	A	N1-C6-N6	10.44	124.86	118.60
5	A	883	G	N1-C6-O6	10.44	126.16	119.90
5	A	1294	A	N1-C6-N6	10.44	124.86	118.60
5	A	1438	C	O4'-C1'-N1	10.43	116.54	108.20
5	A	2698	G	N1-C6-O6	10.42	126.15	119.90
5	A	2879	G	N1-C6-O6	10.42	126.15	119.90
5	A	1936	G	N1-C6-O6	10.42	126.15	119.90
5	A	2425	G	N1-C6-O6	10.41	126.15	119.90
5	A	1518	G	N1-C6-O6	10.41	126.15	119.90
5	A	973	G	N1-C6-O6	10.41	126.14	119.90
5	A	871	G	N1-C6-O6	10.40	126.14	119.90
5	A	1500	U	P-O3'-C3'	10.39	132.17	119.70
5	A	2765	G	N1-C6-O6	10.38	126.13	119.90
5	A	851	A	P-O3'-C3'	10.38	132.16	119.70
5	A	876	A	N1-C6-N6	10.38	124.83	118.60
5	A	2249	G	N1-C6-O6	10.38	126.12	119.90
5	A	1768	A	N1-C6-N6	10.36	124.82	118.60
5	A	2545	G	N1-C6-O6	10.35	126.11	119.90
5	A	2617	G	N1-C6-O6	10.35	126.11	119.90
5	A	1998	A	N1-C6-N6	10.35	124.81	118.60
6	B	71	A	N1-C6-N6	10.35	124.81	118.60
6	B	31	G	C5-C6-O6	-10.35	122.39	128.60
5	A	385	G	N1-C6-O6	10.34	126.11	119.90
5	A	2413	G	N1-C6-O6	10.34	126.11	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2563	C	O4'-C1'-N1	10.34	116.47	108.20
5	A	2570	A	P-O3'-C3'	10.34	132.11	119.70
5	A	2366	G	N1-C6-O6	10.34	126.10	119.90
5	A	106	G	N1-C6-O6	10.33	126.10	119.90
5	A	107	G	C5-C6-O6	-10.31	122.41	128.60
5	A	177	G	C5-C6-O6	-10.31	122.41	128.60
5	A	2004	G	N1-C6-O6	10.31	126.09	119.90
5	A	894	A	N1-C6-N6	10.31	124.78	118.60
5	A	70	G	N1-C6-O6	10.30	126.08	119.90
5	A	1557	G	C5-C6-O6	-10.30	122.42	128.60
5	A	2578	G	N1-C6-O6	10.30	126.08	119.90
5	A	746	A	N1-C6-N6	10.30	124.78	118.60
5	A	1624	U	O4'-C1'-N1	10.30	116.44	108.20
5	A	1174	A	P-O3'-C3'	10.29	132.05	119.70
5	A	325	A	N1-C6-N6	10.29	124.77	118.60
5	A	2552	G	N1-C6-O6	10.29	126.07	119.90
5	A	15	G	C5-C6-O6	-10.28	122.43	128.60
5	A	707	G	N1-C6-O6	10.27	126.06	119.90
5	A	1166	G	N1-C6-O6	10.27	126.06	119.90
5	A	2290	C	O4'-C1'-N1	10.27	116.42	108.20
5	A	956	A	N1-C6-N6	10.26	124.76	118.60
5	A	1184	G	N1-C6-O6	10.26	126.06	119.90
5	A	2361	C	O4'-C1'-N1	10.26	116.41	108.20
5	A	2732	C	C2-N1-C1'	10.26	130.09	118.80
5	A	417	G	N1-C6-O6	10.26	126.06	119.90
5	A	1085	G	N1-C6-O6	10.26	126.05	119.90
5	A	742	G	N1-C6-O6	10.24	126.05	119.90
5	A	2092	C	O4'-C1'-N1	10.24	116.39	108.20
5	A	1694	G	N1-C6-O6	10.24	126.05	119.90
5	A	596	G	N1-C6-O6	10.23	126.04	119.90
5	A	815	G	N1-C6-O6	10.22	126.03	119.90
5	A	568	G	N1-C6-O6	10.22	126.03	119.90
5	A	720	C	O4'-C1'-N1	10.22	116.38	108.20
5	A	121	G	N1-C6-O6	10.21	126.03	119.90
5	A	1468	G	C5-C6-O6	-10.21	122.47	128.60
5	A	17	G	N1-C6-O6	10.21	126.03	119.90
5	A	1793	G	N1-C6-O6	10.21	126.03	119.90
5	A	1394	G	N1-C6-O6	10.21	126.02	119.90
5	A	1852	G	C5-C6-O6	-10.20	122.48	128.60
5	A	2367	G	N1-C6-O6	10.20	126.02	119.90
5	A	224	A	N1-C6-N6	10.20	124.72	118.60
5	A	988	G	N1-C6-O6	10.20	126.02	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	564	G	N1-C6-O6	10.19	126.01	119.90
5	A	1319	G	N1-C6-O6	10.19	126.02	119.90
5	A	833	C	O4'-C1'-N1	10.19	116.35	108.20
5	A	1664	G	N1-C6-O6	10.19	126.01	119.90
5	A	575	A	N1-C6-N6	10.18	124.71	118.60
5	A	1318	G	N1-C6-O6	10.16	126.00	119.90
5	A	344	G	N1-C6-O6	10.16	126.00	119.90
5	A	597	G	N1-C6-O6	10.16	125.99	119.90
5	A	1281	C	O4'-C1'-N1	10.15	116.32	108.20
5	A	39	C	O4'-C1'-N1	10.14	116.32	108.20
5	A	2808	U	P-O3'-C3'	10.14	131.87	119.70
5	A	759	G	C5-C6-O6	-10.13	122.52	128.60
5	A	2771	G	N1-C6-O6	10.13	125.98	119.90
5	A	280	G	C5-C6-O6	-10.13	122.52	128.60
5	A	2737	G	N1-C6-O6	10.11	125.97	119.90
5	A	1132	A	N1-C6-N6	10.11	124.67	118.60
5	A	1400	G	N1-C6-O6	10.11	125.97	119.90
5	A	2023	C	O4'-C1'-N1	10.10	116.28	108.20
5	A	1734	A	N1-C6-N6	10.10	124.66	118.60
5	A	602	G	C5-C6-O6	-10.10	122.54	128.60
5	A	718	C	O4'-C1'-N1	10.09	116.27	108.20
5	A	2014	G	N1-C6-O6	10.09	125.95	119.90
5	A	1299	G	N1-C6-O6	10.09	125.95	119.90
5	A	410	G	C5-C6-O6	-10.08	122.55	128.60
5	A	1414	G	N1-C6-O6	10.08	125.95	119.90
5	A	1736	C	O4'-C1'-N1	10.08	116.26	108.20
6	B	112	C	O4'-C1'-N1	10.08	116.27	108.20
5	A	2116	G	N1-C6-O6	10.08	125.95	119.90
6	B	115	G	N1-C6-O6	10.08	125.95	119.90
5	A	2408	G	N1-C6-O6	10.08	125.95	119.90
5	A	255	G	N1-C6-O6	10.07	125.94	119.90
5	A	1871	G	N1-C6-O6	10.07	125.94	119.90
5	A	2429	G	N1-C6-O6	10.07	125.94	119.90
5	A	709	G	N1-C6-O6	10.07	125.94	119.90
5	A	1487	G	N1-C6-O6	10.07	125.94	119.90
5	A	636	G	N1-C6-O6	10.07	125.94	119.90
5	A	2271	G	N1-C6-O6	10.07	125.94	119.90
5	A	1317	G	N1-C6-O6	10.07	125.94	119.90
5	A	1367	G	O4'-C1'-N9	10.07	116.25	108.20
5	A	1203	G	N1-C6-O6	10.06	125.94	119.90
5	A	19	G	N1-C6-O6	10.06	125.94	119.90
5	A	588	C	O4'-C1'-N1	10.06	116.25	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2470	C	O4'-C1'-N1	10.06	116.25	108.20
5	A	483	C	O4'-C1'-N1	10.06	116.25	108.20
5	A	2473	G	N1-C6-O6	10.05	125.93	119.90
5	A	2613	U	O4'-C1'-N1	10.05	116.24	108.20
5	A	36	G	N1-C6-O6	10.05	125.93	119.90
5	A	693	G	C5-C6-O6	-10.05	122.57	128.60
5	A	2156	G	N1-C6-O6	10.05	125.93	119.90
5	A	2285	G	N1-C6-O6	10.05	125.93	119.90
5	A	1200	G	N1-C6-O6	10.05	125.93	119.90
5	A	911	G	N1-C6-O6	10.04	125.93	119.90
5	A	2538	G	N1-C6-O6	10.04	125.93	119.90
5	A	1049	G	N1-C6-O6	10.04	125.93	119.90
5	A	2562	U	O4'-C1'-N1	10.04	116.23	108.20
5	A	1105	G	N1-C6-O6	10.04	125.92	119.90
5	A	2806	G	C5-C6-O6	-10.04	122.58	128.60
5	A	984	G	N1-C6-O6	10.03	125.92	119.90
5	A	2016	G	N1-C6-O6	10.03	125.92	119.90
5	A	1206	G	N1-C6-O6	10.03	125.92	119.90
5	A	2485	C	O4'-C1'-N1	10.02	116.22	108.20
5	A	2474	G	N1-C6-O6	10.02	125.91	119.90
5	A	1330	C	O4'-C1'-N1	10.02	116.21	108.20
5	A	2354	G	N1-C6-O6	10.01	125.91	119.90
5	A	472	G	N1-C6-O6	10.01	125.91	119.90
5	A	710	G	N1-C6-O6	10.01	125.91	119.90
5	A	996	G	C5-C6-O6	-10.00	122.60	128.60
5	A	2236	C	O4'-C1'-N1	9.99	116.19	108.20
5	A	680	G	N1-C6-O6	9.99	125.89	119.90
5	A	1439	U	O4'-C1'-N1	9.99	116.19	108.20
5	A	2761	G	N1-C6-O6	9.99	125.89	119.90
5	A	2864	G	N1-C6-O6	9.98	125.89	119.90
5	A	120	G	N1-C6-O6	9.98	125.89	119.90
5	A	2428	G	N1-C6-O6	9.98	125.89	119.90
5	A	2751	G	N1-C6-O6	9.98	125.89	119.90
5	A	754	G	C5-C6-O6	-9.98	122.61	128.60
5	A	2908	A	C5-C6-N6	-9.98	115.72	123.70
5	A	1951	G	N1-C6-O6	9.97	125.89	119.90
5	A	1970	C	O4'-C1'-N1	9.97	116.18	108.20
5	A	1273	G	N1-C6-O6	9.97	125.88	119.90
5	A	1426	A	O4'-C1'-N9	9.97	116.18	108.20
5	A	283	G	N1-C6-O6	9.97	125.88	119.90
5	A	1805	G	N1-C6-O6	9.97	125.88	119.90
5	A	2712	C	O4'-C1'-N1	9.97	116.17	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2881	G	C5-C6-O6	-9.97	122.62	128.60
5	A	2514	G	N1-C6-O6	9.95	125.87	119.90
5	A	2150	G	C5-C6-O6	-9.95	122.63	128.60
5	A	248	G	N1-C6-O6	9.94	125.86	119.90
5	A	1315	G	N1-C6-O6	9.94	125.86	119.90
6	B	100	G	N1-C6-O6	9.94	125.86	119.90
5	A	2259	G	N1-C6-O6	9.94	125.86	119.90
5	A	193	A	N1-C6-N6	9.93	124.56	118.60
5	A	1628	G	C5-C6-O6	-9.93	122.64	128.60
5	A	2148	A	N1-C6-N6	9.93	124.56	118.60
5	A	583	G	N1-C6-O6	9.93	125.86	119.90
5	A	1544	C	O4'-C1'-N1	9.93	116.14	108.20
6	B	14	G	N1-C6-O6	9.93	125.86	119.90
5	A	572	A	O4'-C1'-N9	9.92	116.14	108.20
5	A	1752	G	N1-C6-O6	9.92	125.85	119.90
5	A	1063	G	N1-C6-O6	9.92	125.85	119.90
5	A	102	A	N1-C6-N6	9.91	124.55	118.60
5	A	1772	C	O4'-C1'-N1	9.91	116.13	108.20
5	A	929	G	N1-C6-O6	9.91	125.84	119.90
5	A	2755	U	O4'-C1'-N1	9.91	116.13	108.20
5	A	626	G	N1-C6-O6	9.90	125.84	119.90
5	A	123	G	N1-C6-O6	9.89	125.83	119.90
5	A	217	G	N1-C6-O6	9.89	125.83	119.90
5	A	1785	G	N1-C6-O6	9.88	125.83	119.90
5	A	2009	G	C5-C6-O6	-9.88	122.67	128.60
5	A	209	U	O4'-C1'-N1	9.88	116.10	108.20
5	A	2399	G	N1-C6-O6	9.88	125.83	119.90
5	A	2706	G	N1-C6-O6	9.87	125.82	119.90
5	A	1860	G	N1-C6-O6	9.87	125.82	119.90
5	A	663	G	N1-C6-O6	9.86	125.82	119.90
5	A	2862	A	C5-C6-N6	-9.86	115.81	123.70
5	A	363	C	O4'-C1'-N1	9.86	116.09	108.20
5	A	1706	G	C5-C6-O6	-9.86	122.69	128.60
5	A	2029	G	N1-C6-O6	9.86	125.81	119.90
5	A	1232	G	N1-C6-O6	9.85	125.81	119.90
5	A	2671	G	N1-C6-O6	9.85	125.81	119.90
5	A	433	G	N1-C6-O6	9.85	125.81	119.90
5	A	1649	C	O4'-C1'-N1	9.84	116.07	108.20
5	A	1715	C	O4'-C1'-N1	9.84	116.07	108.20
5	A	768	G	N1-C6-O6	9.83	125.80	119.90
5	A	1974	G	N1-C6-O6	9.83	125.80	119.90
5	A	2571	A	N1-C6-N6	9.83	124.50	118.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	240	C	O4'-C1'-N1	9.82	116.06	108.20
5	A	2133	C	C2-N1-C1'	9.82	129.61	118.80
5	A	2077	G	C5-C6-O6	-9.81	122.71	128.60
5	A	1246	G	C5-C6-O6	-9.81	122.71	128.60
6	B	21	G	N1-C6-O6	9.81	125.79	119.90
5	A	1219	C	O4'-C1'-N1	9.81	116.05	108.20
5	A	694	G	N1-C6-O6	9.80	125.78	119.90
5	A	2411	G	C5-C6-O6	-9.80	122.72	128.60
5	A	1460	G	P-O3'-C3'	9.80	131.46	119.70
5	A	1546	G	N1-C6-O6	9.80	125.78	119.90
5	A	1978	G	N1-C6-O6	9.80	125.78	119.90
6	B	52	G	N1-C6-O6	9.79	125.78	119.90
5	A	748	G	N1-C6-O6	9.79	125.77	119.90
5	A	2359	G	N1-C6-O6	9.79	125.78	119.90
5	A	1289	U	O4'-C1'-N1	9.79	116.03	108.20
5	A	2655	C	O4'-C1'-N1	9.79	116.03	108.20
5	A	1944	U	O4'-C1'-N1	9.78	116.03	108.20
5	A	2068	G	N1-C6-O6	9.79	125.77	119.90
5	A	2154	G	O4'-C1'-N9	9.79	116.03	108.20
5	A	2766	G	N1-C6-O6	9.78	125.77	119.90
5	A	1057	G	C5-C6-O6	-9.78	122.73	128.60
5	A	309	U	O4'-C1'-N1	9.78	116.02	108.20
6	B	74	G	N1-C6-O6	9.78	125.77	119.90
5	A	764	C	O4'-C1'-N1	9.77	116.02	108.20
5	A	1943	C	O4'-C1'-N1	9.77	116.02	108.20
5	A	2565	G	N1-C6-O6	9.76	125.76	119.90
5	A	1558	G	N1-C6-O6	9.76	125.76	119.90
5	A	2839	C	O4'-C1'-N1	9.76	116.01	108.20
5	A	1023	G	N1-C6-O6	9.76	125.75	119.90
5	A	2412	G	N1-C6-O6	9.76	125.75	119.90
5	A	484	C	O4'-C1'-N1	9.75	116.00	108.20
5	A	1687	G	N1-C6-O6	9.75	125.75	119.90
5	A	1514	C	O4'-C1'-N1	9.75	116.00	108.20
5	A	1977	G	N1-C6-O6	9.75	125.75	119.90
6	B	73	G	C5-C6-O6	-9.75	122.75	128.60
6	B	91	C	O4'-C1'-N1	9.75	116.00	108.20
5	A	2106	A	N1-C6-N6	9.74	124.45	118.60
5	A	89	U	O4'-C1'-N1	9.74	115.99	108.20
5	A	2182	G	N1-C6-O6	9.74	125.75	119.90
5	A	2308	G	N1-C6-O6	9.74	125.75	119.90
5	A	2332	G	C5-C6-O6	-9.73	122.76	128.60
5	A	2729	C	O4'-C1'-N1	9.73	115.99	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	872	C	O4'-C1'-N1	9.73	115.98	108.20
5	A	2434	G	N1-C6-O6	9.73	125.74	119.90
5	A	2918	G	O4'-C1'-N9	9.73	115.98	108.20
5	A	920	G	N1-C6-O6	9.73	125.74	119.90
5	A	334	G	C5-C6-O6	-9.72	122.77	128.60
5	A	627	G	N1-C6-O6	9.72	125.73	119.90
5	A	940	G	N1-C6-O6	9.72	125.73	119.90
5	A	1543	U	O4'-C1'-N1	9.72	115.98	108.20
5	A	1874	G	C5-C6-O6	-9.72	122.77	128.60
5	A	2483	G	N1-C6-O6	9.72	125.73	119.90
5	A	213	C	O4'-C1'-N1	9.72	115.97	108.20
6	B	84	G	N1-C6-O6	9.72	125.73	119.90
5	A	1215	U	P-O3'-C3'	9.71	131.35	119.70
5	A	1777	G	N1-C6-O6	9.71	125.73	119.90
5	A	371	G	N1-C6-O6	9.71	125.72	119.90
5	A	2411	G	N1-C6-O6	9.71	125.72	119.90
5	A	1862	C	O4'-C1'-N1	9.70	115.96	108.20
5	A	2679	C	O4'-C1'-N1	9.70	115.96	108.20
5	A	2074	C	O4'-C1'-N1	9.70	115.96	108.20
5	A	2219	G	N1-C6-O6	9.70	125.72	119.90
5	A	346	G	C5-C6-O6	-9.70	122.78	128.60
5	A	1268	G	N1-C6-O6	9.69	125.72	119.90
5	A	1444	C	O4'-C1'-N1	9.69	115.95	108.20
5	A	671	G	N1-C6-O6	9.69	125.71	119.90
5	A	197	G	N1-C6-O6	9.69	125.71	119.90
5	A	1798	G	N1-C6-O6	9.69	125.71	119.90
5	A	780	G	N1-C6-O6	9.69	125.71	119.90
5	A	2133	C	C6-N1-C1'	-9.68	109.18	120.80
5	A	1629	C	P-O3'-C3'	9.68	131.31	119.70
5	A	367	G	N1-C6-O6	9.68	125.71	119.90
5	A	1531	G	N1-C6-O6	9.68	125.71	119.90
6	B	42	G	N1-C6-O6	9.67	125.70	119.90
5	A	1747	G	C5-C6-O6	-9.66	122.80	128.60
5	A	2705	C	O4'-C1'-N1	9.66	115.93	108.20
5	A	459	A	N1-C6-N6	9.66	124.39	118.60
5	A	1370	C	O4'-C1'-N1	9.66	115.92	108.20
6	B	82	G	N1-C6-O6	9.65	125.69	119.90
5	A	109	G	N1-C6-O6	9.65	125.69	119.90
5	A	986	G	N1-C6-O6	9.65	125.69	119.90
5	A	1993	G	N1-C6-O6	9.65	125.69	119.90
5	A	2798	C	O4'-C1'-N1	9.64	115.91	108.20
5	A	175	G	C5-C6-O6	-9.64	122.81	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	443	G	N1-C6-O6	9.64	125.68	119.90
5	A	939	G	C5-C6-O6	-9.64	122.82	128.60
5	A	1578	G	N1-C6-O6	9.64	125.69	119.90
5	A	1238	G	N1-C6-O6	9.64	125.68	119.90
5	A	1382	G	N1-C6-O6	9.64	125.68	119.90
5	A	599	G	N1-C6-O6	9.63	125.68	119.90
5	A	1669	G	C5-C6-O6	-9.63	122.82	128.60
5	A	2418	G	N1-C6-O6	9.63	125.68	119.90
5	A	2755	U	P-O3'-C3'	9.63	131.25	119.70
5	A	878	G	C5-C6-O6	-9.62	122.83	128.60
5	A	1841	G	N1-C6-O6	9.62	125.67	119.90
5	A	347	G	N1-C6-O6	9.62	125.67	119.90
5	A	759	G	P-O5'-C5'	9.62	136.29	120.90
5	A	1250	G	O4'-C1'-N9	9.62	115.89	108.20
5	A	1374	C	O4'-C1'-N1	9.62	115.89	108.20
5	A	2153	G	N1-C6-O6	9.62	125.67	119.90
5	A	143	G	N1-C6-O6	9.61	125.67	119.90
5	A	170	G	N1-C6-O6	9.61	125.67	119.90
5	A	370	G	N1-C6-O6	9.61	125.66	119.90
5	A	1632	G	N1-C6-O6	9.61	125.66	119.90
5	A	75	G	N1-C6-O6	9.60	125.66	119.90
5	A	566	G	N1-C6-O6	9.60	125.66	119.90
5	A	572	A	P-O3'-C3'	9.60	131.22	119.70
6	B	83	G	N1-C6-O6	9.60	125.66	119.90
5	A	2892	G	N1-C6-O6	9.60	125.66	119.90
5	A	427	G	N1-C6-O6	9.59	125.66	119.90
5	A	955	C	O4'-C1'-N1	9.59	115.87	108.20
5	A	2577	G	N1-C6-O6	9.59	125.65	119.90
5	A	2692	G	N1-C6-O6	9.59	125.65	119.90
5	A	71	A	N1-C6-N6	9.59	124.35	118.60
5	A	2149	G	N1-C6-O6	9.59	125.65	119.90
5	A	1339	A	O4'-C1'-N9	9.59	115.87	108.20
5	A	2263	G	N1-C6-O6	9.59	125.65	119.90
5	A	812	G	N1-C6-O6	9.58	125.65	119.90
5	A	1320	G	N1-C6-O6	9.58	125.65	119.90
5	A	2370	G	N1-C6-O6	9.58	125.65	119.90
5	A	1272	G	N1-C6-O6	9.58	125.65	119.90
5	A	1488	G	N1-C6-O6	9.58	125.65	119.90
5	A	43	G	N1-C6-O6	9.57	125.64	119.90
5	A	2764	G	N1-C6-O6	9.57	125.64	119.90
5	A	332	G	N1-C6-O6	9.57	125.64	119.90
5	A	1427	G	C5-C6-O6	-9.57	122.86	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	822	G	C5-C6-O6	-9.57	122.86	128.60
5	A	273	A	N1-C6-N6	9.57	124.34	118.60
5	A	1799	G	N1-C6-O6	9.57	125.64	119.90
5	A	76	C	O4'-C1'-N1	9.56	115.85	108.20
5	A	782	A	N1-C6-N6	9.56	124.34	118.60
5	A	899	C	O4'-C1'-N1	9.56	115.85	108.20
5	A	1668	G	N1-C6-O6	9.56	125.64	119.90
5	A	2318	G	N1-C6-O6	9.56	125.64	119.90
5	A	2677	G	C5-C6-O6	-9.56	122.86	128.60
5	A	953	G	N1-C6-O6	9.56	125.64	119.90
5	A	2515	G	N1-C6-O6	9.56	125.64	119.90
5	A	2635	C	O4'-C1'-N1	9.56	115.85	108.20
6	B	79	C	O4'-C1'-N1	9.56	115.85	108.20
5	A	832	G	N1-C6-O6	9.56	125.64	119.90
5	A	1719	G	N1-C6-O6	9.56	125.64	119.90
5	A	2309	G	N1-C6-O6	9.55	125.63	119.90
5	A	426	G	C5-C6-O6	-9.55	122.87	128.60
5	A	1012	G	C5-C6-O6	-9.55	122.87	128.60
5	A	719	C	O4'-C1'-N1	9.55	115.84	108.20
5	A	181	G	N1-C6-O6	9.54	125.63	119.90
5	A	476	A	P-O5'-C5'	9.54	136.16	120.90
5	A	489	G	N1-C6-O6	9.54	125.62	119.90
5	A	521	G	N1-C6-O6	9.54	125.62	119.90
5	A	1976	C	O4'-C1'-N1	9.54	115.83	108.20
5	A	2400	G	N1-C6-O6	9.54	125.62	119.90
5	A	631	G	P-O3'-C3'	9.54	131.14	119.70
5	A	879	G	N1-C6-O6	9.53	125.62	119.90
5	A	1529	G	N1-C6-O6	9.54	125.62	119.90
5	A	2620	C	O4'-C1'-N1	9.53	115.82	108.20
5	A	1367	G	N1-C6-O6	9.53	125.62	119.90
5	A	282	G	N1-C6-O6	9.53	125.61	119.90
5	A	1530	G	N1-C6-O6	9.53	125.61	119.90
5	A	2433	C	O4'-C1'-N1	9.53	115.82	108.20
5	A	169	G	N1-C6-O6	9.52	125.61	119.90
5	A	2746	G	N1-C6-O6	9.52	125.61	119.90
5	A	2747	G	N1-C6-O6	9.52	125.61	119.90
5	A	1300	G	N1-C6-O6	9.52	125.61	119.90
5	A	80	G	N1-C6-O6	9.51	125.61	119.90
5	A	667	A	O4'-C1'-N9	9.51	115.81	108.20
5	A	2275	G	C5-C6-O6	-9.51	122.90	128.60
6	B	48	G	C5-C6-O6	-9.51	122.90	128.60
5	A	2575	U	O4'-C1'-N1	9.50	115.80	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	532	C	O4'-C1'-N1	9.50	115.80	108.20
5	A	1412	A	N1-C6-N6	9.50	124.30	118.60
5	A	423	G	N1-C6-O6	9.50	125.60	119.90
5	A	536	G	N1-C6-O6	9.48	125.59	119.90
5	A	1220	G	O4'-C1'-N9	9.48	115.78	108.20
5	A	2288	G	N1-C6-O6	9.48	125.59	119.90
5	A	2694	A	O4'-C1'-N9	9.48	115.78	108.20
5	A	2554	G	N1-C6-O6	9.47	125.58	119.90
5	A	1446	C	O4'-C1'-N1	9.47	115.78	108.20
5	A	1578	G	O4'-C1'-N9	9.47	115.78	108.20
5	A	2623	C	O4'-C1'-N1	9.47	115.78	108.20
5	A	46	C	O4'-C1'-N1	9.47	115.78	108.20
5	A	1402	C	O4'-C1'-N1	9.47	115.78	108.20
5	A	1792	G	N1-C6-O6	9.47	125.58	119.90
5	A	1386	G	N1-C6-O6	9.47	125.58	119.90
5	A	447	G	N1-C6-O6	9.47	125.58	119.90
5	A	1195	U	O4'-C1'-N1	9.47	115.77	108.20
6	B	81	G	C5-C6-O6	-9.47	122.92	128.60
5	A	81	G	N1-C6-O6	9.46	125.58	119.90
5	A	1779	G	N1-C6-O6	9.46	125.58	119.90
5	A	726	C	O4'-C1'-N1	9.46	115.77	108.20
5	A	275	A	P-O5'-C5'	9.46	136.03	120.90
5	A	1642	G	C5-C6-O6	-9.46	122.93	128.60
5	A	1696	G	P-O3'-C3'	9.46	131.05	119.70
5	A	924	U	O4'-C1'-N1	9.45	115.76	108.20
5	A	1496	G	C5-C6-O6	-9.45	122.93	128.60
5	A	1869	G	N1-C6-O6	9.45	125.57	119.90
5	A	621	G	N1-C6-O6	9.45	125.57	119.90
5	A	817	G	N1-C6-O6	9.45	125.57	119.90
5	A	2450	G	N1-C6-O6	9.45	125.57	119.90
5	A	2651	C	O4'-C1'-N1	9.45	115.76	108.20
5	A	1172	A	N1-C6-N6	9.45	124.27	118.60
5	A	2523	G	N1-C6-O6	9.45	125.57	119.90
5	A	2699	G	N1-C6-O6	9.44	125.57	119.90
5	A	916	G	C5-C6-O6	-9.44	122.94	128.60
5	A	1853	G	N1-C6-O6	9.44	125.56	119.90
5	A	2832	G	N1-C6-O6	9.44	125.56	119.90
5	A	2257	G	C5-C6-O6	-9.43	122.94	128.60
5	A	297	G	N1-C6-O6	9.43	125.56	119.90
5	A	487	G	O4'-C1'-N9	9.43	115.75	108.20
5	A	1408	G	N1-C6-O6	9.43	125.56	119.90
5	A	1979	G	N1-C6-O6	9.43	125.56	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	42	G	N1-C6-O6	9.43	125.56	119.90
5	A	607	G	N1-C6-O6	9.43	125.56	119.90
5	A	1469	G	N1-C6-O6	9.43	125.56	119.90
5	A	2319	G	N1-C6-O6	9.42	125.55	119.90
5	A	471	G	N1-C6-O6	9.42	125.55	119.90
5	A	806	G	N1-C6-O6	9.42	125.55	119.90
5	A	1449	C	O4'-C1'-N1	9.42	115.73	108.20
5	A	1851	G	C5-C6-O6	-9.42	122.95	128.60
5	A	1953	C	P-O3'-C3'	9.42	131.00	119.70
5	A	247	A	N1-C6-N6	9.41	124.25	118.60
5	A	2244	G	N1-C6-O6	9.41	125.55	119.90
5	A	2385	C	O4'-C1'-N1	9.41	115.73	108.20
5	A	539	G	N1-C6-O6	9.41	125.55	119.90
5	A	1048	G	N1-C6-O6	9.41	125.55	119.90
5	A	788	G	N1-C6-O6	9.40	125.54	119.90
5	A	1245	G	N1-C6-O6	9.40	125.54	119.90
5	A	1007	G	P-O3'-C3'	9.40	130.98	119.70
5	A	1231	G	N1-C6-O6	9.39	125.54	119.90
5	A	2161	G	N1-C6-O6	9.39	125.54	119.90
5	A	2268	G	N1-C6-O6	9.39	125.53	119.90
5	A	1820	A	O4'-C1'-N9	9.39	115.71	108.20
5	A	642	G	C5-C6-O6	-9.38	122.97	128.60
5	A	1688	G	N1-C6-O6	9.39	125.53	119.90
5	A	1152	G	N1-C6-O6	9.38	125.53	119.90
5	A	1358	G	N1-C6-O6	9.38	125.53	119.90
5	A	1362	G	N1-C6-O6	9.38	125.53	119.90
5	A	1628	G	C5'-C4'-O4'	-9.38	97.84	109.10
5	A	631	G	N1-C6-O6	9.38	125.53	119.90
5	A	2457	G	N1-C6-O6	9.38	125.53	119.90
5	A	2596	G	N1-C6-O6	9.38	125.53	119.90
5	A	823	G	N1-C6-O6	9.37	125.52	119.90
5	A	654	G	N1-C6-O6	9.37	125.52	119.90
5	A	2564	A	C5-C6-N6	-9.37	116.20	123.70
5	A	1696	G	N1-C6-O6	9.37	125.52	119.90
5	A	519	A	O4'-C1'-N9	9.36	115.69	108.20
5	A	1331	C	O4'-C1'-N1	9.36	115.69	108.20
5	A	2081	G	N1-C6-O6	9.36	125.52	119.90
5	A	2099	G	N1-C6-O6	9.36	125.52	119.90
5	A	775	G	N1-C6-O6	9.36	125.52	119.90
5	A	62	C	P-O5'-C5'	9.35	135.87	120.90
5	A	579	G	N1-C6-O6	9.35	125.51	119.90
5	A	2067	G	N1-C6-O6	9.35	125.51	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1840	G	N1-C6-O6	9.35	125.51	119.90
5	A	1988	G	N1-C6-O6	9.35	125.51	119.90
5	A	1492	G	N1-C6-O6	9.34	125.51	119.90
5	A	1590	C	P-O3'-C3'	9.34	130.91	119.70
5	A	1015	G	N1-C6-O6	9.34	125.50	119.90
5	A	1846	G	N1-C6-O6	9.34	125.50	119.90
5	A	327	G	N1-C6-O6	9.34	125.50	119.90
5	A	791	C	O4'-C1'-N1	9.34	115.67	108.20
5	A	361	G	N1-C6-O6	9.33	125.50	119.90
5	A	2907	A	C5-C6-N6	-9.33	116.24	123.70
5	A	1452	C	O4'-C1'-N1	9.32	115.66	108.20
5	A	2168	G	C5-C6-O6	-9.32	123.01	128.60
5	A	457	G	O4'-C1'-N9	9.31	115.65	108.20
5	A	57	C	O4'-C1'-N1	9.31	115.65	108.20
5	A	861	C	O4'-C1'-N1	9.31	115.65	108.20
5	A	969	C	O4'-C1'-N1	9.31	115.64	108.20
5	A	1420	G	N1-C6-O6	9.30	125.48	119.90
5	A	1112	U	O4'-C1'-N1	9.30	115.64	108.20
5	A	1635	G	N1-C6-O6	9.30	125.48	119.90
5	A	2389	A	O4'-C1'-N9	9.30	115.64	108.20
5	A	2869	A	N1-C6-N6	9.30	124.18	118.60
5	A	1474	C	O4'-C1'-N1	9.29	115.63	108.20
5	A	1425	C	O4'-C1'-N1	9.28	115.63	108.20
5	A	921	G	C5-C6-O6	-9.28	123.03	128.60
5	A	1723	A	P-O3'-C3'	9.28	130.84	119.70
5	A	2720	C	O4'-C1'-N1	9.28	115.62	108.20
5	A	1693	C	O4'-C1'-N1	9.28	115.62	108.20
5	A	411	G	C5-C6-O6	-9.28	123.03	128.60
5	A	2707	C	O4'-C1'-N1	9.27	115.62	108.20
5	A	760	G	N1-C6-O6	9.27	125.46	119.90
5	A	2624	G	N1-C6-O6	9.27	125.46	119.90
5	A	294	G	N1-C6-O6	9.27	125.46	119.90
5	A	959	C	O4'-C1'-N1	9.26	115.61	108.20
5	A	1348	G	N1-C6-O6	9.26	125.46	119.90
5	A	2856	G	N1-C6-O6	9.26	125.46	119.90
5	A	382	G	C5-C6-O6	-9.26	123.05	128.60
5	A	1338	G	P-O3'-C3'	9.26	130.81	119.70
5	A	2696	C	O4'-C1'-N1	9.26	115.61	108.20
5	A	1083	G	N1-C6-O6	9.26	125.45	119.90
5	A	2654	G	C5-C6-O6	-9.25	123.05	128.60
5	A	2652	G	N1-C6-O6	9.25	125.45	119.90
5	A	1275	G	N1-C6-O6	9.25	125.45	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	245	G	N1-C6-O6	9.25	125.45	119.90
5	A	1167	C	O4'-C1'-N1	9.25	115.60	108.20
5	A	465	U	O4'-C1'-N1	9.24	115.60	108.20
5	A	1676	G	O4'-C1'-N9	9.24	115.59	108.20
6	B	77	G	N1-C6-O6	9.24	125.45	119.90
5	A	142	G	N1-C6-O6	9.24	125.44	119.90
5	A	1940	U	O4'-C1'-N1	9.24	115.59	108.20
5	A	926	G	C5-C6-O6	-9.23	123.06	128.60
5	A	1344	C	O4'-C1'-N1	9.23	115.59	108.20
6	B	110	G	N1-C6-O6	9.23	125.44	119.90
5	A	2524	G	N1-C6-O6	9.23	125.44	119.90
5	A	137	G	N1-C6-O6	9.23	125.44	119.90
5	A	2512	C	O4'-C1'-N1	9.23	115.58	108.20
5	A	1481	G	N1-C6-O6	9.22	125.44	119.90
5	A	733	U	O4'-C1'-N1	9.22	115.58	108.20
5	A	1354	C	O4'-C1'-N1	9.22	115.58	108.20
5	A	338	G	N1-C6-O6	9.21	125.43	119.90
5	A	424	G	N1-C6-O6	9.21	125.43	119.90
6	B	87	U	O4'-C1'-N1	9.21	115.57	108.20
5	A	7	G	N1-C6-O6	9.21	125.43	119.90
5	A	1363	G	N1-C6-O6	9.21	125.43	119.90
5	A	2188	G	N1-C6-O6	9.21	125.43	119.90
5	A	62	C	O4'-C1'-N1	9.21	115.57	108.20
5	A	1833	G	C5-C6-O6	-9.21	123.08	128.60
5	A	2914	C	O4'-C1'-N1	9.21	115.57	108.20
5	A	1039	G	N1-C6-O6	9.20	125.42	119.90
5	A	1338	G	N1-C6-O6	9.20	125.42	119.90
5	A	1573	C	O4'-C1'-N1	9.21	115.56	108.20
5	A	60	G	N1-C6-O6	9.20	125.42	119.90
5	A	1633	G	N1-C6-O6	9.20	125.42	119.90
5	A	2738	G	N1-C6-O6	9.20	125.42	119.90
5	A	1043	G	C5-C6-O6	-9.20	123.08	128.60
5	A	1562	A	P-O3'-C3'	9.20	130.74	119.70
5	A	1646	G	N1-C6-O6	9.20	125.42	119.90
5	A	1651	G	N1-C6-O6	9.20	125.42	119.90
5	A	1775	G	N1-C6-O6	9.20	125.42	119.90
5	A	1024	G	N1-C6-O6	9.19	125.42	119.90
5	A	2726	G	N1-C6-O6	9.19	125.41	119.90
5	A	1570	U	O4'-C1'-N1	9.19	115.55	108.20
5	A	926	G	N1-C6-O6	9.18	125.41	119.90
5	A	1080	G	N1-C6-O6	9.18	125.41	119.90
5	A	1418	U	O4'-C1'-N1	9.18	115.55	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2669	G	N1-C6-O6	9.18	125.41	119.90
5	A	27	G	P-O3'-C3'	9.18	130.72	119.70
5	A	1349	G	N1-C6-O6	9.18	125.41	119.90
5	A	11	G	N1-C6-O6	9.18	125.41	119.90
5	A	2427	U	O4'-C1'-N1	9.18	115.54	108.20
5	A	1047	A	N1-C6-N6	9.17	124.11	118.60
5	A	1683	C	O4'-C1'-N1	9.17	115.54	108.20
5	A	2090	G	N1-C6-O6	9.17	125.40	119.90
5	A	2494	C	O4'-C1'-N1	9.17	115.54	108.20
5	A	2541	C	O4'-C1'-N1	9.17	115.54	108.20
5	A	395	C	O4'-C1'-N1	9.17	115.54	108.20
5	A	2605	G	N1-C6-O6	9.17	125.40	119.90
5	A	2516	G	N1-C6-O6	9.17	125.40	119.90
5	A	349	C	P-O5'-C5'	9.16	135.56	120.90
5	A	2368	G	N1-C6-O6	9.16	125.40	119.90
5	A	1765	G	N1-C6-O6	9.16	125.40	119.90
5	A	211	C	O4'-C1'-N1	9.16	115.53	108.20
5	A	2230	C	O4'-C1'-N1	9.16	115.53	108.20
5	A	665	G	N1-C6-O6	9.16	125.39	119.90
5	A	2501	G	N1-C6-O6	9.16	125.39	119.90
5	A	214	G	N1-C6-O6	9.15	125.39	119.90
5	A	894	A	P-O3'-C3'	9.15	130.69	119.70
5	A	664	C	O4'-C1'-N1	9.15	115.52	108.20
5	A	362	C	O4'-C1'-N1	9.15	115.52	108.20
5	A	813	G	N1-C6-O6	9.15	125.39	119.90
5	A	2632	G	N1-C6-O6	9.15	125.39	119.90
5	A	2214	G	N1-C6-O6	9.14	125.39	119.90
5	A	1031	C	O4'-C1'-N1	9.14	115.51	108.20
5	A	1183	G	N1-C6-O6	9.14	125.38	119.90
5	A	263	G	N1-C6-O6	9.14	125.38	119.90
5	A	1028	C	P-O3'-C3'	9.14	130.67	119.70
5	A	1502	G	N1-C6-O6	9.14	125.38	119.90
5	A	848	G	N1-C6-O6	9.14	125.38	119.90
5	A	312	G	O4'-C1'-N9	9.13	115.51	108.20
6	B	108	C	O4'-C1'-N1	9.14	115.51	108.20
5	A	674	G	C5-C6-O6	-9.13	123.12	128.60
5	A	1182	G	N1-C6-O6	9.13	125.38	119.90
5	A	2075	G	N1-C6-O6	9.13	125.38	119.90
5	A	1223	C	O4'-C1'-N1	9.13	115.50	108.20
5	A	2758	G	C5-C6-O6	-9.13	123.12	128.60
5	A	154	A	C5-C6-N6	-9.13	116.40	123.70
5	A	455	G	N1-C6-O6	9.12	125.37	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2472	C	O4'-C1'-N1	9.12	115.50	108.20
5	A	2760	G	N1-C6-O6	9.12	125.38	119.90
5	A	457	G	N1-C6-O6	9.12	125.37	119.90
5	A	1722	A	O4'-C1'-N9	9.12	115.50	108.20
5	A	223	G	N1-C6-O6	9.12	125.37	119.90
5	A	2510	G	C5-C6-O6	-9.12	123.13	128.60
5	A	721	G	N1-C6-O6	9.12	125.37	119.90
5	A	1213	G	N1-C6-O6	9.12	125.37	119.90
5	A	1740	G	N1-C6-O6	9.12	125.37	119.90
5	A	2536	C	O4'-C1'-N1	9.12	115.50	108.20
5	A	2697	G	N1-C6-O6	9.12	125.37	119.90
5	A	585	G	N1-C6-O6	9.12	125.37	119.90
5	A	1088	G	N1-C6-O6	9.12	125.37	119.90
5	A	2043	A	O4'-C1'-N9	9.11	115.49	108.20
5	A	2773	G	N1-C6-O6	9.11	125.37	119.90
5	A	1007	G	N1-C6-O6	9.11	125.36	119.90
5	A	210	A	N1-C6-N6	9.10	124.06	118.60
5	A	2572	G	N1-C6-O6	9.10	125.36	119.90
5	A	826	U	O4'-C1'-N1	9.10	115.48	108.20
5	A	871	G	C5-C6-O6	-9.10	123.14	128.60
5	A	408	G	O4'-C1'-N9	9.10	115.48	108.20
5	A	2650	G	N1-C6-O6	9.10	125.36	119.90
5	A	2833	U	O4'-C1'-N1	9.10	115.48	108.20
5	A	625	C	O4'-C1'-N1	9.09	115.48	108.20
5	A	1168	G	C5-C6-O6	-9.09	123.14	128.60
5	A	262	G	N1-C6-O6	9.09	125.35	119.90
5	A	2843	G	N1-C6-O6	9.09	125.35	119.90
5	A	2918	G	N1-C6-O6	9.09	125.35	119.90
5	A	235	G	N1-C6-O6	9.09	125.35	119.90
5	A	1270	C	P-O3'-C3'	9.09	130.60	119.70
5	A	2038	G	N1-C6-O6	9.09	125.35	119.90
5	A	1350	U	O4'-C1'-N1	9.08	115.47	108.20
5	A	58	G	N1-C6-O6	9.08	125.35	119.90
5	A	2056	G	N1-C6-O6	9.08	125.35	119.90
5	A	1387	G	N1-C6-O6	9.07	125.34	119.90
5	A	1486	G	N1-C6-O6	9.07	125.34	119.90
5	A	540	G	N1-C6-O6	9.07	125.34	119.90
5	A	603	G	C5-C6-O6	-9.07	123.16	128.60
5	A	1153	G	N1-C6-O6	9.07	125.34	119.90
5	A	466	C	O4'-C1'-N1	9.07	115.45	108.20
5	A	2894	G	N1-C6-O6	9.06	125.34	119.90
5	A	2430	U	O4'-C1'-N1	9.06	115.45	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	63	G	P-O3'-C3'	9.06	130.57	119.70
5	A	83	G	N1-C6-O6	9.06	125.34	119.90
5	A	834	C	O4'-C1'-N1	9.06	115.45	108.20
5	A	1018	G	N1-C6-O6	9.06	125.33	119.90
5	A	1835	C	O4'-C1'-N1	9.06	115.45	108.20
5	A	2732	C	C6-N1-C2	-9.06	116.68	120.30
5	A	446	G	N1-C6-O6	9.05	125.33	119.90
5	A	802	G	N1-C6-O6	9.05	125.33	119.90
5	A	865	G	N1-C6-O6	9.05	125.33	119.90
5	A	927	G	N1-C6-O6	9.05	125.33	119.90
5	A	189	G	N1-C6-O6	9.05	125.33	119.90
5	A	1926	G	C5-C6-O6	-9.05	123.17	128.60
5	A	2126	G	N1-C6-O6	9.05	125.33	119.90
5	A	2926	C	O4'-C1'-N1	9.05	115.44	108.20
5	A	233	G	N1-C6-O6	9.05	125.33	119.90
5	A	386	U	O4'-C1'-N1	9.05	115.44	108.20
5	A	2598	G	N1-C6-O6	9.05	125.33	119.90
5	A	2723	G	N1-C6-O6	9.05	125.33	119.90
5	A	1134	A	O4'-C1'-N9	9.04	115.44	108.20
5	A	2058	G	N1-C6-O6	9.05	125.33	119.90
5	A	668	G	N1-C6-O6	9.04	125.33	119.90
5	A	2245	G	N1-C6-O6	9.04	125.33	119.90
5	A	2396	G	C5-C6-O6	-9.04	123.17	128.60
5	A	2855	G	N1-C6-O6	9.04	125.33	119.90
5	A	739	C	O4'-C1'-N1	9.04	115.43	108.20
5	A	2017	C	O4'-C1'-N1	9.04	115.43	108.20
5	A	976	U	O4'-C1'-N1	9.04	115.43	108.20
5	A	2586	G	N1-C6-O6	9.04	125.32	119.90
5	A	2780	G	P-O3'-C3'	9.04	130.54	119.70
5	A	684	G	N1-C6-O6	9.04	125.32	119.90
5	A	2079	C	O4'-C1'-N1	9.04	115.43	108.20
5	A	2574	G	C5-C6-O6	-9.03	123.18	128.60
5	A	1234	G	N1-C6-O6	9.03	125.32	119.90
5	A	507	A	N1-C6-N6	9.03	124.02	118.60
5	A	212	C	O4'-C1'-N1	9.03	115.42	108.20
5	A	1030	G	N1-C6-O6	9.03	125.31	119.90
5	A	1636	A	C5-C6-N6	-9.03	116.48	123.70
5	A	2895	C	O4'-C1'-N1	9.03	115.42	108.20
5	A	1019	A	N1-C6-N6	9.02	124.01	118.60
5	A	317	G	N1-C6-O6	9.02	125.31	119.90
5	A	377	G	N1-C6-O6	9.02	125.31	119.90
5	A	1151	U	O4'-C1'-N1	9.02	115.42	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	53	U	O4'-C1'-N1	9.02	115.42	108.20
5	A	190	G	N1-C6-O6	9.02	125.31	119.90
6	B	13	A	N1-C6-N6	9.02	124.01	118.60
5	A	546	G	N1-C6-O6	9.02	125.31	119.90
5	A	648	G	N1-C6-O6	9.02	125.31	119.90
5	A	1569	A	N1-C6-N6	9.02	124.01	118.60
5	A	2475	G	N1-C6-O6	9.02	125.31	119.90
5	A	2897	G	C5-C6-O6	-9.02	123.19	128.60
5	A	1196	C	O4'-C1'-N1	9.01	115.41	108.20
5	A	2043	A	N1-C6-N6	9.01	124.01	118.60
5	A	2756	G	N1-C6-O6	9.01	125.31	119.90
5	A	473	C	O4'-C1'-N1	9.01	115.41	108.20
5	A	595	G	N1-C6-O6	9.01	125.31	119.90
5	A	1139	G	N1-C6-O6	9.01	125.31	119.90
5	A	2391	G	N1-C6-O6	9.01	125.31	119.90
5	A	1497	G	N1-C6-O6	9.01	125.30	119.90
5	A	2645	C	O4'-C1'-N1	9.01	115.41	108.20
5	A	1757	G	N1-C6-O6	9.00	125.30	119.90
5	A	1114	G	O4'-C1'-N9	9.00	115.40	108.20
5	A	2736	G	N1-C6-O6	9.00	125.30	119.90
5	A	1304	G	P-O3'-C3'	9.00	130.50	119.70
5	A	2920	C	O4'-C1'-N1	9.00	115.40	108.20
6	B	40	C	O4'-C1'-N1	9.00	115.40	108.20
5	A	460	C	O4'-C1'-N1	8.99	115.40	108.20
5	A	1795	C	O4'-C1'-N1	8.99	115.40	108.20
5	A	2688	G	N1-C6-O6	8.99	125.30	119.90
5	A	1983	G	N1-C6-O6	8.99	125.30	119.90
5	A	810	G	N1-C6-O6	8.99	125.29	119.90
5	A	2328	G	N1-C6-O6	8.99	125.29	119.90
5	A	1413	G	N1-C6-O6	8.98	125.29	119.90
5	A	2682	U	O4'-C1'-N1	8.98	115.39	108.20
5	A	2114	C	O4'-C1'-N1	8.98	115.39	108.20
5	A	525	A	N1-C6-N6	8.98	123.99	118.60
5	A	551	A	N1-C6-N6	8.98	123.99	118.60
5	A	583	G	C5-C6-O6	-8.98	123.21	128.60
5	A	1759	U	O4'-C1'-N1	8.98	115.39	108.20
5	A	1077	G	N1-C6-O6	8.98	125.29	119.90
5	A	541	G	N1-C6-O6	8.98	125.29	119.90
5	A	731	G	N1-C6-O6	8.98	125.29	119.90
5	A	2672	G	N1-C6-O6	8.98	125.29	119.90
5	A	2703	G	N1-C6-O6	8.98	125.29	119.90
5	A	1470	G	N1-C6-O6	8.97	125.28	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2021	G	N1-C6-O6	8.97	125.28	119.90
5	A	385	G	C5-C6-O6	-8.97	123.22	128.60
5	A	967	G	N1-C6-O6	8.97	125.28	119.90
5	A	2265	U	O4'-C1'-N1	8.97	115.38	108.20
5	A	947	A	N1-C6-N6	8.97	123.98	118.60
5	A	2792	G	N1-C6-O6	8.97	125.28	119.90
5	A	1192	G	N1-C6-O6	8.97	125.28	119.90
5	A	2340	A	O4'-C1'-N9	8.97	115.38	108.20
6	B	103	G	C5-C6-O6	-8.97	123.22	128.60
5	A	417	G	P-O3'-C3'	8.97	130.46	119.70
5	A	581	C	O4'-C1'-N1	8.97	115.37	108.20
5	A	772	G	N1-C6-O6	8.96	125.28	119.90
5	A	1071	G	N1-C6-O6	8.97	125.28	119.90
5	A	2311	G	N1-C6-O6	8.97	125.28	119.90
5	A	1165	U	O4'-C1'-N1	8.96	115.37	108.20
5	A	414	C	O4'-C1'-N1	8.96	115.37	108.20
5	A	2064	G	N1-C6-O6	8.96	125.28	119.90
5	A	800	G	N1-C6-O6	8.96	125.28	119.90
5	A	1278	G	N1-C6-O6	8.96	125.28	119.90
5	A	992	G	N1-C6-O6	8.96	125.28	119.90
5	A	1741	G	N1-C6-O6	8.96	125.28	119.90
5	A	1839	A	N1-C6-N6	8.96	123.97	118.60
5	A	1137	G	N1-C6-O6	8.96	125.27	119.90
5	A	1616	G	N1-C6-O6	8.96	125.27	119.90
5	A	2388	C	O4'-C1'-N1	8.96	115.36	108.20
5	A	2519	G	N1-C6-O6	8.96	125.27	119.90
5	A	818	G	N1-C6-O6	8.95	125.27	119.90
5	A	27	G	N1-C6-O6	8.95	125.27	119.90
5	A	1440	G	N1-C6-O6	8.95	125.27	119.90
5	A	403	C	O4'-C1'-N1	8.95	115.36	108.20
5	A	1280	G	N1-C6-O6	8.95	125.27	119.90
5	A	118	A	N1-C6-N6	8.94	123.97	118.60
5	A	1324	G	N1-C6-O6	8.94	125.27	119.90
5	A	1478	G	N1-C6-O6	8.94	125.27	119.90
5	A	805	G	N1-C6-O6	8.94	125.27	119.90
5	A	2286	U	O4'-C1'-N1	8.94	115.35	108.20
5	A	2347	G	N1-C6-O6	8.94	125.27	119.90
5	A	83	G	O4'-C1'-N9	8.94	115.35	108.20
5	A	528	G	N1-C6-O6	8.94	125.26	119.90
5	A	839	G	N1-C6-O6	8.94	125.26	119.90
5	A	1022	G	N1-C6-O6	8.94	125.26	119.90
5	A	614	G	N1-C6-O6	8.94	125.26	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1629	C	O4'-C1'-N1	8.94	115.35	108.20
5	A	160	G	N1-C6-O6	8.93	125.26	119.90
5	A	1264	G	N1-C6-O6	8.93	125.26	119.90
5	A	1658	G	N1-C6-O6	8.93	125.26	119.90
5	A	1936	G	C5-C6-O6	-8.93	123.24	128.60
5	A	2190	C	O4'-C1'-N1	8.93	115.35	108.20
6	B	115	G	C5-C6-O6	-8.93	123.24	128.60
5	A	148	G	C5-C6-O6	-8.93	123.24	128.60
5	A	682	G	N1-C6-O6	8.93	125.26	119.90
5	A	1086	U	O4'-C1'-N1	8.93	115.34	108.20
5	A	2392	U	O4'-C1'-N1	8.93	115.34	108.20
5	A	1467	G	N1-C6-O6	8.93	125.26	119.90
5	A	644	G	N1-C6-O6	8.93	125.26	119.90
5	A	1572	G	N1-C6-O6	8.93	125.26	119.90
5	A	2513	G	C5-C6-O6	-8.93	123.24	128.60
5	A	617	G	N1-C6-O6	8.92	125.25	119.90
5	A	1	G	N1-C6-O6	8.92	125.25	119.90
5	A	2	G	N1-C6-O6	8.92	125.25	119.90
5	A	1939	G	N1-C6-O6	8.92	125.25	119.90
5	A	2233	C	O4'-C1'-N1	8.92	115.34	108.20
5	A	2352	G	N1-C6-O6	8.92	125.25	119.90
5	A	2873	G	N1-C6-O6	8.92	125.25	119.90
5	A	1311	G	C5-C6-O6	-8.92	123.25	128.60
5	A	2076	C	O4'-C1'-N1	8.92	115.34	108.20
5	A	1674	G	N1-C6-O6	8.92	125.25	119.90
5	A	2443	G	N1-C6-O6	8.92	125.25	119.90
6	B	118	A	O4'-C1'-N9	8.92	115.34	108.20
5	A	807	G	N1-C6-O6	8.92	125.25	119.90
5	A	933	C	P-O3'-C3'	8.92	130.40	119.70
5	A	1859	C	O4'-C1'-N1	8.92	115.33	108.20
5	A	99	U	P-O3'-C3'	8.91	130.40	119.70
5	A	501	A	N1-C6-N6	8.91	123.95	118.60
5	A	1571	G	N1-C6-O6	8.91	125.25	119.90
5	A	2144	G	N1-C6-O6	8.91	125.25	119.90
5	A	243	G	N1-C6-O6	8.91	125.25	119.90
5	A	2653	G	N1-C6-O6	8.91	125.25	119.90
6	B	43	A	N1-C6-N6	8.91	123.94	118.60
5	A	464	C	O4'-C1'-N1	8.91	115.33	108.20
5	A	1342	G	N1-C6-O6	8.91	125.24	119.90
5	A	2660	G	N1-C6-O6	8.91	125.24	119.90
5	A	1376	G	N1-C6-O6	8.90	125.24	119.90
5	A	85	G	N1-C6-O6	8.90	125.24	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	629	G	N1-C6-O6	8.90	125.24	119.90
5	A	45	G	N1-C6-O6	8.90	125.24	119.90
5	A	215	G	N1-C6-O6	8.90	125.24	119.90
5	A	335	G	N1-C6-O6	8.90	125.24	119.90
5	A	239	C	O4'-C1'-N1	8.90	115.32	108.20
5	A	445	C	O4'-C1'-N1	8.90	115.32	108.20
5	A	728	G	N1-C6-O6	8.90	125.24	119.90
5	A	1294	A	O4'-C1'-N9	8.90	115.32	108.20
5	A	2404	G	N1-C6-O6	8.90	125.24	119.90
5	A	2426	G	N1-C6-O6	8.90	125.24	119.90
5	A	2780	G	N1-C6-O6	8.90	125.24	119.90
5	A	48	G	N1-C6-O6	8.89	125.24	119.90
5	A	824	G	C5-C6-O6	-8.89	123.26	128.60
5	A	2306	G	N1-C6-O6	8.89	125.24	119.90
5	A	1761	G	N1-C6-O6	8.89	125.24	119.90
5	A	257	G	N1-C6-O6	8.89	125.23	119.90
5	A	1589	G	N1-C6-O6	8.89	125.23	119.90
5	A	1732	G	N1-C6-O6	8.89	125.23	119.90
5	A	1962	G	N1-C6-O6	8.89	125.23	119.90
5	A	2062	A	N1-C6-N6	8.89	123.93	118.60
5	A	2611	G	N1-C6-O6	8.89	125.23	119.90
5	A	2272	U	O4'-C1'-N1	8.89	115.31	108.20
5	A	2342	C	O4'-C1'-N1	8.89	115.31	108.20
5	A	2870	G	N1-C6-O6	8.89	125.23	119.90
6	B	4	G	N1-C6-O6	8.88	125.23	119.90
5	A	837	U	P-O3'-C3'	8.88	130.36	119.70
5	A	1854	G	N1-C6-O6	8.88	125.23	119.90
5	A	1219	C	C2-N1-C1'	8.88	128.57	118.80
5	A	1875	G	N1-C6-O6	8.88	125.23	119.90
5	A	96	G	N1-C6-O6	8.88	125.23	119.90
5	A	261	C	O4'-C1'-N1	8.88	115.30	108.20
5	A	269	G	N1-C6-O6	8.88	125.23	119.90
5	A	1011	C	O4'-C1'-N1	8.88	115.30	108.20
5	A	1160	G	C5-C6-O6	-8.88	123.27	128.60
6	B	104	G	N1-C6-O6	8.88	125.23	119.90
5	A	498	U	O4'-C1'-N1	8.88	115.30	108.20
6	B	63	C	O4'-C1'-N1	8.88	115.30	108.20
5	A	359	C	O4'-C1'-N1	8.87	115.30	108.20
5	A	2603	G	N1-C6-O6	8.87	125.22	119.90
6	B	8	G	N1-C6-O6	8.87	125.22	119.90
5	A	2213	U	O4'-C1'-N1	8.87	115.29	108.20
5	A	1773	G	N1-C6-O6	8.86	125.22	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1494	G	N1-C6-O6	8.86	125.22	119.90
5	A	241	C	O4'-C1'-N1	8.86	115.29	108.20
5	A	576	G	N1-C6-O6	8.86	125.21	119.90
5	A	713	G	N1-C6-O6	8.86	125.21	119.90
5	A	2135	G	N1-C6-O6	8.86	125.21	119.90
5	A	2253	G	N1-C6-O6	8.86	125.21	119.90
5	A	1463	C	O4'-C1'-N1	8.85	115.28	108.20
5	A	2130	G	N1-C6-O6	8.85	125.21	119.90
5	A	2698	G	C5-C6-O6	-8.85	123.29	128.60
5	A	264	G	N1-C6-O6	8.85	125.21	119.90
5	A	2129	G	N1-C6-O6	8.85	125.21	119.90
6	B	80	G	C5-C6-O6	-8.85	123.29	128.60
6	B	10	G	N1-C6-O6	8.85	125.21	119.90
5	A	115	C	O4'-C1'-N1	8.85	115.28	108.20
5	A	1309	G	N1-C6-O6	8.85	125.21	119.90
5	A	1782	G	N1-C6-O6	8.85	125.21	119.90
5	A	1403	G	N1-C6-O6	8.85	125.21	119.90
5	A	1563	G	N1-C6-O6	8.85	125.21	119.90
5	A	59	G	N1-C6-O6	8.84	125.20	119.90
5	A	2264	G	N1-C6-O6	8.84	125.20	119.90
5	A	2510	G	O4'-C1'-N9	8.84	115.27	108.20
5	A	174	U	O4'-C1'-N1	8.84	115.27	108.20
5	A	313	U	O4'-C1'-N1	8.84	115.27	108.20
5	A	514	G	N1-C6-O6	8.84	125.20	119.90
5	A	1389	C	O4'-C1'-N1	8.84	115.27	108.20
6	B	78	U	O4'-C1'-N1	8.84	115.27	108.20
5	A	55	G	N1-C6-O6	8.83	125.20	119.90
5	A	1396	C	O4'-C1'-N1	8.83	115.27	108.20
5	A	1117	G	N1-C6-O6	8.83	125.20	119.90
5	A	1361	A	O4'-C1'-N9	8.83	115.27	108.20
5	A	1742	G	N1-C6-O6	8.83	125.20	119.90
5	A	1784	A	P-O5'-C5'	8.83	135.03	120.90
5	A	30	G	C5-C6-O6	-8.82	123.31	128.60
5	A	1304	G	N1-C6-O6	8.82	125.19	119.90
5	A	1665	G	N1-C6-O6	8.82	125.19	119.90
5	A	2145	G	N1-C6-O6	8.82	125.19	119.90
5	A	2199	G	N1-C6-O6	8.82	125.19	119.90
6	B	29	C	O4'-C1'-N1	8.82	115.26	108.20
5	A	905	G	N1-C6-O6	8.82	125.19	119.90
5	A	1158	G	N1-C6-O6	8.82	125.19	119.90
5	A	1539	C	O4'-C1'-N1	8.82	115.26	108.20
5	A	2109	G	N1-C6-O6	8.82	125.19	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2139	G	N1-C6-O6	8.82	125.19	119.90
5	A	773	G	N1-C6-O6	8.82	125.19	119.90
5	A	116	G	N1-C6-O6	8.82	125.19	119.90
5	A	2693	G	N1-C6-O6	8.82	125.19	119.90
5	A	1093	G	N1-C6-O6	8.82	125.19	119.90
5	A	2039	G	N1-C6-O6	8.82	125.19	119.90
5	A	640	C	O4'-C1'-N1	8.81	115.25	108.20
5	A	2778	A	N1-C6-N6	8.81	123.89	118.60
6	B	119	G	N1-C6-O6	8.81	125.19	119.90
5	A	2183	G	N1-C6-O6	8.81	125.19	119.90
5	A	2467	U	P-O3'-C3'	8.81	130.28	119.70
5	A	2836	G	N1-C6-O6	8.81	125.19	119.90
5	A	2607	G	N1-C6-O6	8.81	125.18	119.90
5	A	2863	G	N1-C6-O6	8.81	125.18	119.90
5	A	917	A	P-O5'-C5'	8.81	134.99	120.90
5	A	341	G	N1-C6-O6	8.80	125.18	119.90
5	A	1177	G	N1-C6-O6	8.80	125.18	119.90
5	A	2448	U	O4'-C1'-N1	8.80	115.24	108.20
5	A	1250	G	N1-C6-O6	8.80	125.18	119.90
5	A	1613	C	O4'-C1'-N1	8.80	115.24	108.20
5	A	1255	G	N1-C6-O6	8.80	125.18	119.90
5	A	2382	G	N1-C6-O6	8.80	125.18	119.90
5	A	1673	G	N1-C6-O6	8.79	125.18	119.90
5	A	2765	G	C5-C6-O6	-8.79	123.32	128.60
5	A	23	G	N1-C6-O6	8.79	125.17	119.90
5	A	1298	C	O4'-C1'-N1	8.79	115.23	108.20
5	A	1399	G	N1-C6-O6	8.79	125.18	119.90
5	A	1454	C	O4'-C1'-N1	8.79	115.23	108.20
6	B	107	G	N1-C6-O6	8.79	125.18	119.90
5	A	2847	G	O4'-C1'-N9	8.79	115.23	108.20
5	A	357	G	C5-C6-O6	-8.79	123.33	128.60
5	A	3	U	O4'-C1'-N1	8.79	115.23	108.20
5	A	1236	G	N1-C6-O6	8.79	125.17	119.90
5	A	589	G	N1-C6-O6	8.79	125.17	119.90
5	A	1718	G	N1-C6-O6	8.79	125.17	119.90
5	A	2413	G	C5-C6-O6	-8.79	123.33	128.60
5	A	2112	G	N1-C6-O6	8.78	125.17	119.90
5	A	2266	G	N1-C6-O6	8.78	125.17	119.90
6	B	15	C	O4'-C1'-N1	8.78	115.23	108.20
5	A	2377	U	O4'-C1'-N1	8.78	115.22	108.20
5	A	1288	G	N1-C6-O6	8.78	125.17	119.90
5	A	1690	G	N1-C6-O6	8.78	125.17	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2702	G	C5-C6-O6	-8.78	123.33	128.60
5	A	508	C	O4'-C1'-N1	8.78	115.22	108.20
5	A	2829	G	N1-C6-O6	8.78	125.17	119.90
5	A	1334	C	O4'-C1'-N1	8.77	115.22	108.20
5	A	1967	A	P-O3'-C3'	8.77	130.23	119.70
5	A	2608	C	O4'-C1'-N1	8.77	115.22	108.20
5	A	134	C	O4'-C1'-N1	8.77	115.22	108.20
5	A	287	G	N1-C6-O6	8.77	125.16	119.90
5	A	845	G	N1-C6-O6	8.77	125.16	119.90
5	A	2099	G	O4'-C1'-N9	8.77	115.22	108.20
5	A	2610	G	N1-C6-O6	8.77	125.16	119.90
5	A	2803	C	O4'-C1'-N1	8.77	115.22	108.20
5	A	458	G	N1-C6-O6	8.77	125.16	119.90
5	A	1171	G	N1-C6-O6	8.77	125.16	119.90
5	A	1712	G	N1-C6-O6	8.77	125.16	119.90
5	A	328	G	N1-C6-O6	8.76	125.16	119.90
6	B	19	G	N1-C6-O6	8.76	125.16	119.90
5	A	24	G	C5-C6-O6	-8.76	123.34	128.60
5	A	26	G	N1-C6-O6	8.76	125.16	119.90
5	A	497	G	N1-C6-O6	8.76	125.16	119.90
5	A	2041	G	N1-C6-O6	8.76	125.16	119.90
5	A	825	G	N1-C6-O6	8.76	125.16	119.90
5	A	1822	G	N1-C6-O6	8.76	125.16	119.90
5	A	1407	G	N1-C6-O6	8.76	125.15	119.90
5	A	963	G	N1-C6-O6	8.75	125.15	119.90
5	A	1566	G	N1-C6-O6	8.75	125.15	119.90
5	A	2197	G	N1-C6-O6	8.75	125.15	119.90
5	A	1185	G	N1-C6-O6	8.75	125.15	119.90
5	A	2439	G	N1-C6-O6	8.75	125.15	119.90
5	A	2444	G	C5-C6-O6	-8.75	123.35	128.60
5	A	2667	G	N1-C6-O6	8.75	125.15	119.90
6	B	70	G	N1-C6-O6	8.75	125.15	119.90
5	A	1000	G	N1-C6-O6	8.75	125.15	119.90
5	A	1076	G	C5-C6-O6	-8.75	123.35	128.60
5	A	1267	G	N1-C6-O6	8.75	125.15	119.90
5	A	2917	G	N1-C6-O6	8.75	125.15	119.90
5	A	190	G	O4'-C1'-N9	8.75	115.20	108.20
5	A	2031	G	N1-C6-O6	8.75	125.15	119.90
5	A	1416	G	N1-C6-O6	8.75	125.15	119.90
5	A	2313	C	O4'-C1'-N1	8.75	115.20	108.20
5	A	218	G	N1-C6-O6	8.74	125.15	119.90
5	A	2558	G	N1-C6-O6	8.74	125.15	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2284	G	N1-C6-O6	8.74	125.14	119.90
5	A	2730	U	O4'-C1'-N1	8.74	115.19	108.20
5	A	192	G	N1-C6-O6	8.74	125.14	119.90
5	A	2305	G	N1-C6-O6	8.74	125.14	119.90
5	A	2901	G	N1-C6-O6	8.74	125.14	119.90
5	A	2337	G	N1-C6-O6	8.73	125.14	119.90
5	A	180	G	C5-C6-O6	-8.73	123.36	128.60
5	A	979	U	O4'-C1'-N1	8.73	115.19	108.20
5	A	751	G	N1-C6-O6	8.73	125.14	119.90
5	A	1621	G	N1-C6-O6	8.73	125.14	119.90
5	A	1678	G	N1-C6-O6	8.73	125.14	119.90
5	A	1964	G	N1-C6-O6	8.73	125.14	119.90
5	A	2194	G	N1-C6-O6	8.73	125.14	119.90
5	A	396	G	N1-C6-O6	8.73	125.14	119.90
5	A	413	U	O4'-C1'-N1	8.73	115.18	108.20
5	A	523	G	N1-C6-O6	8.73	125.14	119.90
5	A	1101	G	N1-C6-O6	8.73	125.14	119.90
5	A	776	G	N1-C6-O6	8.72	125.13	119.90
5	A	998	G	C5-C6-O6	-8.72	123.37	128.60
5	A	1487	G	C5-C6-O6	-8.72	123.36	128.60
5	A	2674	G	N1-C6-O6	8.72	125.14	119.90
5	A	1763	G	N1-C6-O6	8.72	125.13	119.90
5	A	2394	G	N1-C6-O6	8.72	125.13	119.90
6	B	68	C	O4'-C1'-N1	8.72	115.18	108.20
5	A	1518	G	C5-C6-O6	-8.72	123.37	128.60
5	A	2614	U	O4'-C1'-N1	8.72	115.18	108.20
5	A	2659	G	N1-C6-O6	8.72	125.13	119.90
5	A	1522	U	C2-N1-C1'	8.72	128.16	117.70
5	A	1769	G	N1-C6-O6	8.72	125.13	119.90
5	A	1836	G	N1-C6-O6	8.71	125.13	119.90
5	A	2001	G	N1-C6-O6	8.71	125.13	119.90
5	A	1002	G	N1-C6-O6	8.71	125.13	119.90
5	A	1133	G	N1-C6-O6	8.71	125.13	119.90
5	A	1356	G	N1-C6-O6	8.71	125.13	119.90
5	A	1410	G	N1-C6-O6	8.71	125.13	119.90
5	A	1611	G	N1-C6-O6	8.71	125.13	119.90
6	B	98	G	N1-C6-O6	8.71	125.13	119.90
5	A	890	G	N1-C6-O6	8.71	125.12	119.90
5	A	2251	G	N1-C6-O6	8.71	125.12	119.90
5	A	1265	A	O4'-C1'-N9	8.70	115.16	108.20
5	A	2877	G	C5-C6-O6	-8.71	123.38	128.60
5	A	404	C	O4'-C1'-N1	8.70	115.16	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1359	G	N1-C6-O6	8.70	125.12	119.90
5	A	1843	G	N1-C6-O6	8.70	125.12	119.90
5	A	749	G	N1-C6-O6	8.70	125.12	119.90
5	A	2617	G	C5-C6-O6	-8.70	123.38	128.60
6	B	65	G	N1-C6-O6	8.70	125.12	119.90
5	A	51	G	N1-C6-O6	8.70	125.12	119.90
5	A	1475	G	N1-C6-O6	8.70	125.12	119.90
5	A	1493	C	P-O3'-C3'	8.70	130.14	119.70
5	A	2189	G	N1-C6-O6	8.70	125.12	119.90
5	A	2419	U	O4'-C1'-N1	8.70	115.16	108.20
6	B	92	C	O4'-C1'-N1	8.70	115.16	108.20
5	A	1276	G	N1-C6-O6	8.70	125.12	119.90
5	A	1766	C	O4'-C1'-N1	8.70	115.16	108.20
5	A	2012	C	O4'-C1'-N1	8.70	115.16	108.20
5	A	2185	G	N1-C6-O6	8.69	125.12	119.90
5	A	122	G	N1-C6-O6	8.69	125.11	119.90
5	A	312	G	N1-C6-O6	8.69	125.11	119.90
5	A	1450	C	O4'-C1'-N1	8.69	115.15	108.20
5	A	2744	C	O4'-C1'-N1	8.69	115.15	108.20
5	A	256	C	P-O5'-C5'	8.69	134.80	120.90
5	A	2366	G	C5-C6-O6	-8.69	123.39	128.60
5	A	2871	G	N1-C6-O6	8.69	125.11	119.90
6	B	57	G	N1-C6-O6	8.69	125.11	119.90
5	A	408	G	C5-C6-O6	-8.69	123.39	128.60
5	A	2065	C	O4'-C1'-N1	8.69	115.15	108.20
5	A	2015	G	N1-C6-O6	8.68	125.11	119.90
5	A	2350	G	N1-C6-O6	8.68	125.11	119.90
6	B	30	C	O4'-C1'-N1	8.68	115.15	108.20
5	A	208	G	N1-C6-O6	8.68	125.11	119.90
5	A	411	G	O4'-C1'-N9	8.68	115.14	108.20
5	A	1209	G	N1-C6-O6	8.68	125.11	119.90
5	A	1322	G	N1-C6-O6	8.68	125.11	119.90
5	A	905	G	O4'-C1'-N9	8.68	115.14	108.20
5	A	1997	G	N1-C6-O6	8.68	125.11	119.90
5	A	2561	G	N1-C6-O6	8.68	125.11	119.90
5	A	2122	G	N1-C6-O6	8.68	125.11	119.90
5	A	550	G	N1-C6-O6	8.68	125.11	119.90
5	A	587	C	O4'-C1'-N1	8.68	115.14	108.20
5	A	1371	G	N1-C6-O6	8.68	125.11	119.90
5	A	2554	G	O4'-C1'-N9	8.68	115.14	108.20
5	A	319	G	N1-C6-O6	8.67	125.10	119.90
5	A	1145	G	N1-C6-O6	8.67	125.10	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2543	U	O4'-C1'-N1	8.67	115.14	108.20
5	A	250	G	N1-C6-O6	8.67	125.10	119.90
5	A	792	G	N1-C6-O6	8.67	125.10	119.90
5	A	2193	C	O4'-C1'-N1	8.67	115.14	108.20
5	A	2636	G	N1-C6-O6	8.67	125.10	119.90
5	A	1526	G	N1-C6-O6	8.67	125.10	119.90
5	A	2323	C	O4'-C1'-N1	8.67	115.13	108.20
5	A	2656	G	N1-C6-O6	8.67	125.10	119.90
6	B	49	G	N1-C6-O6	8.67	125.10	119.90
5	A	1520	A	C5-C6-N6	-8.66	116.77	123.70
5	A	2282	G	N1-C6-O6	8.66	125.10	119.90
5	A	2684	G	N1-C6-O6	8.66	125.10	119.90
5	A	221	G	N1-C6-O6	8.66	125.10	119.90
5	A	676	G	N1-C6-O6	8.66	125.10	119.90
5	A	1657	C	O4'-C1'-N1	8.66	115.13	108.20
5	A	2380	G	N1-C6-O6	8.66	125.10	119.90
5	A	773	G	O4'-C1'-N9	8.66	115.13	108.20
5	A	1044	C	O4'-C1'-N1	8.66	115.13	108.20
5	A	1752	G	C5-C6-O6	-8.66	123.40	128.60
5	A	1801	G	N1-C6-O6	8.66	125.10	119.90
5	A	2149	G	P-O5'-C5'	8.66	134.76	120.90
5	A	61	A	O4'-C1'-N9	8.66	115.13	108.20
5	A	1933	G	N1-C6-O6	8.66	125.10	119.90
5	A	2850	G	N1-C6-O6	8.66	125.09	119.90
5	A	184	G	N1-C6-O6	8.66	125.09	119.90
5	A	2072	C	O4'-C1'-N1	8.66	115.13	108.20
5	A	1105	G	C5-C6-O6	-8.66	123.41	128.60
5	A	2299	G	N1-C6-O6	8.66	125.09	119.90
5	A	380	C	O4'-C1'-N1	8.65	115.12	108.20
5	A	761	U	O4'-C1'-N1	8.65	115.12	108.20
5	A	1568	G	N1-C6-O6	8.65	125.09	119.90
5	A	2531	G	N1-C6-O6	8.65	125.09	119.90
5	A	248	G	C5-C6-O6	-8.65	123.41	128.60
5	A	1259	G	N1-C6-O6	8.65	125.09	119.90
5	A	1340	A	O4'-C1'-N9	8.65	115.12	108.20
5	A	1726	G	N1-C6-O6	8.65	125.09	119.90
5	A	1781	C	O4'-C1'-N1	8.65	115.12	108.20
5	A	487	G	N1-C6-O6	8.65	125.09	119.90
5	A	1750	G	N1-C6-O6	8.65	125.09	119.90
5	A	1787	G	N1-C6-O6	8.65	125.09	119.90
5	A	1228	G	N1-C6-O6	8.65	125.09	119.90
5	A	1949	C	O4'-C1'-N1	8.64	115.12	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	68	C	O4'-C1'-N1	8.64	115.11	108.20
5	A	697	G	N1-C6-O6	8.64	125.09	119.90
5	A	2281	G	N1-C6-O6	8.64	125.08	119.90
5	A	419	G	N1-C6-O6	8.64	125.08	119.90
5	A	1604	C	O4'-C1'-N1	8.64	115.11	108.20
5	A	2037	C	O4'-C1'-N1	8.64	115.11	108.20
5	A	2801	C	O4'-C1'-N1	8.64	115.11	108.20
5	A	1193	U	O4'-C1'-N1	8.64	115.11	108.20
5	A	1521	G	N1-C6-O6	8.63	125.08	119.90
5	A	2634	U	O4'-C1'-N1	8.63	115.11	108.20
5	A	1762	G	N1-C6-O6	8.63	125.08	119.90
5	A	145	G	N1-C6-O6	8.63	125.08	119.90
5	A	1240	U	O4'-C1'-N1	8.63	115.11	108.20
5	A	2637	G	N1-C6-O6	8.63	125.08	119.90
5	A	1671	G	N1-C6-O6	8.63	125.08	119.90
5	A	1865	C	O4'-C1'-N1	8.63	115.10	108.20
5	A	2336	G	N1-C6-O6	8.63	125.08	119.90
5	A	2518	G	C5-C6-O6	-8.63	123.42	128.60
5	A	544	G	N1-C6-O6	8.62	125.08	119.90
5	A	1471	G	N1-C6-O6	8.63	125.08	119.90
5	A	1263	G	C5-C6-O6	-8.62	123.42	128.60
5	A	1537	G	C5-C6-O6	-8.62	123.43	128.60
5	A	2694	A	P-O3'-C3'	-8.62	109.35	119.70
5	A	729	G	C5-C6-O6	-8.62	123.43	128.60
5	A	1441	U	O4'-C1'-N1	8.62	115.10	108.20
5	A	2014	G	C5-C6-O6	-8.62	123.43	128.60
5	A	2530	C	O4'-C1'-N1	8.62	115.10	108.20
5	A	703	G	N1-C6-O6	8.62	125.07	119.90
5	A	2743	G	N1-C6-O6	8.62	125.07	119.90
5	A	1377	G	N1-C6-O6	8.62	125.07	119.90
5	A	510	G	N1-C6-O6	8.61	125.07	119.90
5	A	1336	C	O4'-C1'-N1	8.62	115.09	108.20
5	A	688	G	N1-C6-O6	8.61	125.07	119.90
5	A	842	C	O4'-C1'-N1	8.61	115.09	108.20
5	A	1290	G	N1-C6-O6	8.61	125.07	119.90
5	A	1306	G	N1-C6-O6	8.61	125.07	119.90
5	A	2695	C	O4'-C1'-N1	8.61	115.09	108.20
5	A	535	G	N1-C6-O6	8.61	125.07	119.90
5	A	902	G	N1-C6-O6	8.61	125.07	119.90
5	A	1600	G	N1-C6-O6	8.61	125.07	119.90
5	A	2538	G	C5-C6-O6	-8.61	123.44	128.60
5	A	304	G	N1-C6-O6	8.61	125.06	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	94	G	N1-C6-O6	8.61	125.06	119.90
5	A	559	A	O4'-C1'-N9	8.60	115.08	108.20
5	A	1589	G	O4'-C1'-N9	8.60	115.08	108.20
5	A	1711	G	N1-C6-O6	8.60	125.06	119.90
5	A	609	C	O4'-C1'-N1	8.60	115.08	108.20
5	A	784	C	O4'-C1'-N1	8.60	115.08	108.20
5	A	2061	G	O4'-C1'-N9	8.60	115.08	108.20
6	B	96	G	N1-C6-O6	8.60	125.06	119.90
5	A	1959	G	N1-C6-O6	8.60	125.06	119.90
5	A	2582	G	N1-C6-O6	8.60	125.06	119.90
5	A	1694	G	C5-C6-O6	-8.60	123.44	128.60
5	A	2019	C	O4'-C1'-N1	8.59	115.08	108.20
5	A	2384	C	O4'-C1'-N1	8.59	115.07	108.20
5	A	2626	G	N1-C6-O6	8.59	125.06	119.90
5	A	1561	G	N1-C6-O6	8.59	125.05	119.90
5	A	1810	G	N1-C6-O6	8.59	125.05	119.90
5	A	1828	G	N1-C6-O6	8.59	125.05	119.90
6	B	7	G	N1-C6-O6	8.59	125.05	119.90
5	A	1227	G	N1-C6-O6	8.59	125.05	119.90
5	A	1156	G	N1-C6-O6	8.59	125.05	119.90
5	A	344	G	C5-C6-O6	-8.58	123.45	128.60
5	A	1225	G	N1-C6-O6	8.58	125.05	119.90
5	A	886	U	O4'-C1'-N1	8.58	115.07	108.20
5	A	1861	C	O4'-C1'-N1	8.58	115.07	108.20
5	A	228	C	O4'-C1'-N1	8.58	115.06	108.20
5	A	131	C	O4'-C1'-N1	8.58	115.06	108.20
5	A	906	G	N1-C6-O6	8.57	125.05	119.90
5	A	2154	G	N1-C6-O6	8.57	125.05	119.90
5	A	564	G	C5-C6-O6	-8.57	123.46	128.60
5	A	1247	G	N1-C6-O6	8.57	125.04	119.90
5	A	2195	G	O4'-C1'-N9	8.57	115.06	108.20
5	A	1397	G	N1-C6-O6	8.57	125.04	119.90
5	A	1793	G	C5-C6-O6	-8.57	123.46	128.60
5	A	454	G	N1-C6-O6	8.57	125.04	119.90
5	A	1285	G	N1-C6-O6	8.57	125.04	119.90
6	B	5	G	N1-C6-O6	8.57	125.04	119.90
5	A	677	A	O4'-C1'-N9	8.56	115.05	108.20
5	A	712	C	O4'-C1'-N1	8.56	115.05	108.20
5	A	2847	G	N1-C6-O6	8.56	125.04	119.90
5	A	778	C	O4'-C1'-N1	8.56	115.05	108.20
5	A	1703	C	O4'-C1'-N1	8.56	115.05	108.20
5	A	2171	G	N1-C6-O6	8.56	125.04	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	67	G	N1-C6-O6	8.56	125.04	119.90
5	A	35	G	N1-C6-O6	8.56	125.03	119.90
5	A	1068	G	N1-C6-O6	8.56	125.03	119.90
5	A	1594	G	N1-C6-O6	8.56	125.03	119.90
5	A	303	G	C5-C6-O6	-8.55	123.47	128.60
5	A	596	G	C5-C6-O6	-8.56	123.47	128.60
5	A	696	C	O4'-C1'-N1	8.56	115.05	108.20
5	A	725	C	O4'-C1'-N1	8.55	115.04	108.20
5	A	188	C	O4'-C1'-N1	8.55	115.04	108.20
5	A	1252	G	N1-C6-O6	8.55	125.03	119.90
5	A	499	G	N1-C6-O6	8.55	125.03	119.90
5	A	1577	C	O4'-C1'-N1	8.55	115.04	108.20
5	A	1544	C	N3-C4-N4	8.55	123.98	118.00
5	A	2280	G	N1-C6-O6	8.55	125.03	119.90
5	A	2483	G	O4'-C1'-N9	8.55	115.04	108.20
5	A	296	G	N1-C6-O6	8.55	125.03	119.90
5	A	63	G	N1-C6-O6	8.54	125.03	119.90
5	A	351	G	N1-C6-O6	8.54	125.03	119.90
5	A	598	U	O4'-C1'-N1	8.54	115.03	108.20
5	A	2425	G	C5-C6-O6	-8.54	123.47	128.60
5	A	2884	G	N1-C6-O6	8.54	125.02	119.90
5	A	716	G	N1-C6-O6	8.54	125.02	119.90
5	A	1830	G	N1-C6-O6	8.53	125.02	119.90
5	A	2248	G	C5-C6-O6	-8.54	123.48	128.60
5	A	2486	U	O4'-C1'-N1	8.53	115.03	108.20
5	A	1431	G	N1-C6-O6	8.53	125.02	119.90
5	A	804	G	C5-C6-O6	-8.53	123.48	128.60
5	A	819	G	C5-C6-O6	-8.53	123.48	128.60
5	A	2232	G	N1-C6-O6	8.53	125.02	119.90
5	A	2203	C	O4'-C1'-N1	8.52	115.02	108.20
5	A	373	A	O4'-C1'-N9	8.52	115.02	108.20
5	A	649	G	N1-C6-O6	8.52	125.01	119.90
5	A	2795	G	C5-C6-O6	-8.52	123.49	128.60
5	A	298	U	O4'-C1'-N1	8.52	115.01	108.20
5	A	1950	G	N1-C6-O6	8.52	125.01	119.90
5	A	54	G	N1-C6-O6	8.52	125.01	119.90
5	A	321	U	O4'-C1'-N1	8.52	115.01	108.20
5	A	995	U	O4'-C1'-N1	8.52	115.01	108.20
5	A	534	C	O4'-C1'-N1	8.51	115.01	108.20
5	A	516	G	N1-C6-O6	8.51	125.01	119.90
6	B	107	G	O4'-C1'-N9	8.51	115.01	108.20
5	A	1085	G	C5-C6-O6	-8.51	123.50	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2098	G	N1-C6-O6	8.51	125.01	119.90
6	B	60	C	O4'-C1'-N1	8.51	115.01	108.20
5	A	1253	A	C4-C5-C6	8.51	121.25	117.00
5	A	1400	G	C5-C6-O6	-8.51	123.50	128.60
5	A	2911	G	N1-C6-O6	8.51	125.00	119.90
5	A	352	G	N1-C6-O6	8.50	125.00	119.90
5	A	360	C	O4'-C1'-N1	8.50	115.00	108.20
5	A	1102	G	N1-C6-O6	8.50	125.00	119.90
5	A	2360	G	N1-C6-O6	8.50	125.00	119.90
5	A	441	C	O4'-C1'-N1	8.50	115.00	108.20
5	A	2255	C	O4'-C1'-N1	8.50	115.00	108.20
5	A	891	G	N1-C6-O6	8.50	125.00	119.90
5	A	973	G	C5-C6-O6	-8.50	123.50	128.60
5	A	1292	G	N1-C6-O6	8.50	125.00	119.90
5	A	1040	C	O4'-C1'-N1	8.50	115.00	108.20
5	A	1198	C	O4'-C1'-N1	8.49	115.00	108.20
5	A	1109	G	N1-C6-O6	8.49	125.00	119.90
5	A	2534	G	N1-C6-O6	8.49	125.00	119.90
5	A	308	C	O4'-C1'-N1	8.49	114.99	108.20
5	A	1482	G	N1-C6-O6	8.49	124.99	119.90
5	A	701	G	N1-C6-O6	8.49	124.99	119.90
5	A	1114	G	N1-C6-O6	8.48	124.99	119.90
5	A	1935	G	N1-C6-O6	8.48	124.99	119.90
5	A	141	U	O4'-C1'-N1	8.48	114.98	108.20
5	A	741	U	O4'-C1'-N1	8.48	114.98	108.20
5	A	1472	G	N1-C6-O6	8.48	124.99	119.90
5	A	491	C	O4'-C1'-N1	8.48	114.98	108.20
5	A	2095	C	O4'-C1'-N1	8.48	114.98	108.20
5	A	2101	G	C5-C6-O6	-8.48	123.51	128.60
6	B	95	U	O4'-C1'-N1	8.48	114.98	108.20
5	A	92	G	N1-C6-O6	8.47	124.98	119.90
5	A	843	C	O4'-C1'-N1	8.47	114.98	108.20
5	A	1117	G	P-O3'-C3'	8.47	129.87	119.70
5	A	1754	U	O4'-C1'-N1	8.47	114.98	108.20
5	A	2300	G	N1-C6-O6	8.47	124.98	119.90
5	A	512	G	N1-C6-O6	8.47	124.98	119.90
5	A	2874	G	N1-C6-O6	8.47	124.98	119.90
5	A	2891	G	N1-C6-O6	8.47	124.98	119.90
6	B	2	U	O4'-C1'-N1	8.47	114.97	108.20
5	A	2882	G	N1-C6-O6	8.47	124.98	119.90
5	A	1512	G	N1-C6-O6	8.46	124.98	119.90
5	A	54	G	O4'-C1'-N9	8.46	114.97	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	195	C	O4'-C1'-N1	8.46	114.97	108.20
5	A	492	C	O4'-C1'-N1	8.46	114.97	108.20
5	A	2401	G	C5-C6-O6	-8.46	123.52	128.60
5	A	1680	A	P-O3'-C3'	8.46	129.85	119.70
5	A	2628	G	C5-C6-O6	-8.46	123.53	128.60
5	A	1946	U	O4'-C1'-N1	8.46	114.97	108.20
5	A	697	G	O4'-C1'-N9	8.45	114.96	108.20
5	A	2600	U	O4'-C1'-N1	8.45	114.96	108.20
6	B	47	C	O4'-C1'-N1	8.45	114.96	108.20
5	A	40	U	O4'-C1'-N1	8.45	114.96	108.20
5	A	1951	G	C5-C6-O6	-8.45	123.53	128.60
5	A	2509	C	O4'-C1'-N1	8.45	114.96	108.20
5	A	2559	U	O4'-C1'-N1	8.45	114.96	108.20
5	A	2162	G	N1-C6-O6	8.45	124.97	119.90
5	A	2186	G	N1-C6-O6	8.45	124.97	119.90
5	A	556	C	O4'-C1'-N1	8.45	114.96	108.20
5	A	1280	G	O4'-C1'-N9	8.45	114.96	108.20
5	A	2599	G	C5-C6-O6	-8.45	123.53	128.60
5	A	1067	A	O4'-C1'-N9	8.44	114.95	108.20
5	A	2393	C	O4'-C1'-N1	8.44	114.95	108.20
5	A	440	U	O4'-C1'-N1	8.44	114.95	108.20
5	A	520	G	C5-C6-O6	-8.44	123.54	128.60
5	A	1246	G	P-O5'-C5'	8.44	134.40	120.90
5	A	846	G	N1-C6-O6	8.44	124.96	119.90
5	A	1748	G	N1-C6-O6	8.44	124.96	119.90
5	A	2085	G	N1-C6-O6	8.44	124.96	119.90
5	A	2796	C	O4'-C1'-N1	8.44	114.95	108.20
5	A	2859	G	C8-N9-C4	-8.44	103.03	106.40
5	A	1208	G	N1-C6-O6	8.43	124.96	119.90
5	A	1407	G	O4'-C1'-N9	8.43	114.95	108.20
5	A	1698	G	C5-C6-O6	-8.43	123.54	128.60
5	A	2811	G	N1-C6-O6	8.43	124.96	119.90
5	A	2237	C	O4'-C1'-N1	8.43	114.94	108.20
5	A	2279	G	N1-C6-O6	8.43	124.96	119.90
5	A	266	U	O4'-C1'-N1	8.43	114.94	108.20
5	A	2568	C	O4'-C1'-N1	8.43	114.94	108.20
5	A	946	G	N1-C6-O6	8.43	124.96	119.90
5	A	1821	G	N1-C6-O6	8.43	124.96	119.90
5	A	1411	U	O4'-C1'-N1	8.42	114.94	108.20
5	A	1120	G	N1-C6-O6	8.42	124.95	119.90
5	A	2555	G	N1-C6-O6	8.42	124.95	119.90
5	A	1459	U	O4'-C1'-N1	8.41	114.93	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2710	C	O4'-C1'-N1	8.41	114.93	108.20
5	A	666	G	N1-C6-O6	8.41	124.95	119.90
5	A	2578	G	C5-C6-O6	-8.41	123.55	128.60
5	A	1510	G	N1-C6-O6	8.41	124.95	119.90
5	A	2086	G	N1-C6-O6	8.41	124.95	119.90
5	A	1744	G	N1-C6-O6	8.41	124.95	119.90
5	A	2207	C	P-O3'-C3'	8.41	129.79	119.70
5	A	913	A	C5-C6-N6	-8.41	116.97	123.70
5	A	1461	A	C5-C6-N6	-8.41	116.97	123.70
5	A	815	G	C5-C6-O6	-8.40	123.56	128.60
5	A	2367	G	C5-C6-O6	-8.40	123.56	128.60
5	A	138	U	O4'-C1'-N1	8.40	114.92	108.20
5	A	1414	G	O4'-C1'-N9	8.40	114.92	108.20
5	A	2102	C	O4'-C1'-N1	8.40	114.92	108.20
5	A	2771	G	C5-C6-O6	-8.40	123.56	128.60
5	A	1053	C	O4'-C1'-N1	8.40	114.92	108.20
5	A	1639	G	N1-C6-O6	8.40	124.94	119.90
5	A	1958	G	N1-C6-O6	8.40	124.94	119.90
5	A	1564	C	O4'-C1'-N1	8.40	114.92	108.20
5	A	1684	U	O4'-C1'-N1	8.40	114.92	108.20
5	A	2177	G	N1-C6-O6	8.40	124.94	119.90
5	A	610	U	O4'-C1'-N1	8.40	114.92	108.20
5	A	962	C	O4'-C1'-N1	8.40	114.92	108.20
5	A	1640	G	N1-C6-O6	8.40	124.94	119.90
5	A	2261	C	O4'-C1'-N1	8.40	114.92	108.20
5	A	2859	G	N1-C6-O6	8.40	124.94	119.90
5	A	367	G	C5-C6-O6	-8.39	123.56	128.60
5	A	409	U	O4'-C1'-N1	8.39	114.91	108.20
5	A	2067	G	C5-C6-O6	-8.39	123.56	128.60
5	A	636	G	C5-C6-O6	-8.39	123.56	128.60
5	A	795	G	N1-C6-O6	8.39	124.94	119.90
5	A	1479	G	N1-C6-O6	8.39	124.94	119.90
5	A	1378	G	N1-C6-O6	8.39	124.93	119.90
5	A	1794	C	O4'-C1'-N1	8.39	114.91	108.20
5	A	2159	U	O4'-C1'-N1	8.39	114.91	108.20
5	A	17	G	C5-C6-O6	-8.38	123.57	128.60
5	A	1276	G	N3-C2-N2	8.38	125.77	119.90
5	A	1713	A	C5-C6-N6	-8.38	116.99	123.70
5	A	2136	C	O4'-C1'-N1	8.38	114.91	108.20
5	A	70	G	C5-C6-O6	-8.38	123.57	128.60
5	A	120	G	C5-C6-O6	-8.38	123.57	128.60
5	A	461	C	N3-C4-N4	8.38	123.87	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	658	A	O4'-C1'-N9	8.38	114.91	108.20
5	A	2545	G	C5-C6-O6	-8.38	123.57	128.60
5	A	155	U	O4'-C1'-N1	8.38	114.90	108.20
5	A	1711	G	O4'-C1'-N9	8.38	114.90	108.20
5	A	865	G	O4'-C1'-N9	8.38	114.90	108.20
5	A	2013	U	O4'-C1'-N1	8.38	114.90	108.20
5	A	201	C	O4'-C1'-N1	8.38	114.90	108.20
5	A	1871	G	C5-C6-O6	-8.38	123.58	128.60
5	A	2579	G	N1-C6-O6	8.38	124.92	119.90
5	A	542	G	N1-C6-O6	8.37	124.92	119.90
5	A	2809	G	N1-C6-O6	8.37	124.92	119.90
5	A	1319	G	C5-C6-O6	-8.37	123.58	128.60
5	A	1819	C	O4'-C1'-N1	8.37	114.90	108.20
5	A	694	G	C5-C6-O6	-8.37	123.58	128.60
5	A	109	G	O4'-C1'-N9	8.36	114.89	108.20
5	A	2050	G	N1-C6-O6	8.37	124.92	119.90
5	A	2169	G	N1-C6-O6	8.36	124.92	119.90
5	A	2040	U	O4'-C1'-N1	8.36	114.89	108.20
5	A	2649	C	O4'-C1'-N1	8.36	114.89	108.20
5	A	2266	G	O4'-C1'-N9	8.36	114.89	108.20
5	A	2388	C	C6-N1-C2	-8.36	116.96	120.30
5	A	1119	A	O4'-C1'-N9	8.36	114.89	108.20
5	A	2621	G	N1-C6-O6	8.36	124.91	119.90
5	A	493	G	N1-C6-O6	8.35	124.91	119.90
5	A	288	C	O4'-C1'-N1	8.35	114.88	108.20
5	A	1817	C	O4'-C1'-N1	8.35	114.88	108.20
5	A	36	G	C5-C6-O6	-8.35	123.59	128.60
6	B	28	C	O4'-C1'-N1	8.35	114.88	108.20
5	A	1417	A	C5-C6-N6	-8.34	117.03	123.70
5	A	626	G	C5-C6-O6	-8.34	123.59	128.60
5	A	605	G	N1-C6-O6	8.34	124.90	119.90
5	A	783	C	O4'-C1'-N1	8.34	114.87	108.20
5	A	1062	C	O4'-C1'-N1	8.34	114.87	108.20
5	A	1207	C	O4'-C1'-N1	8.34	114.87	108.20
5	A	1733	U	O4'-C1'-N1	8.34	114.87	108.20
5	A	1341	U	O4'-C1'-N1	8.34	114.87	108.20
5	A	909	G	N1-C6-O6	8.34	124.90	119.90
5	A	1992	C	O4'-C1'-N1	8.34	114.87	108.20
5	A	1476	C	O4'-C1'-N1	8.33	114.87	108.20
5	A	1538	G	C5-C6-O6	-8.33	123.60	128.60
5	A	2354	G	C5-C6-O6	-8.33	123.60	128.60
5	A	2400	G	C5-C6-O6	-8.33	123.60	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2515	G	O4'-C1'-N9	8.33	114.87	108.20
5	A	1110	C	O4'-C1'-N1	8.33	114.86	108.20
5	A	852	G	N1-C6-O6	8.33	124.90	119.90
5	A	2127	U	O4'-C1'-N1	8.33	114.86	108.20
5	A	191	G	N1-C6-O6	8.33	124.90	119.90
5	A	604	C	O4'-C1'-N1	8.33	114.86	108.20
5	A	856	G	N1-C6-O6	8.33	124.90	119.90
5	A	2161	G	O4'-C1'-N9	8.33	114.86	108.20
5	A	2553	G	C5-C6-O6	-8.33	123.60	128.60
5	A	1826	C	N3-C4-N4	8.32	123.83	118.00
5	A	472	G	O4'-C1'-N9	8.32	114.86	108.20
5	A	1019	A	O4'-C1'-N9	8.32	114.86	108.20
5	A	768	G	C5-C6-O6	-8.32	123.61	128.60
5	A	1749	G	N1-C6-O6	8.32	124.89	119.90
5	A	2212	C	O4'-C1'-N1	8.32	114.85	108.20
5	A	2142	C	O4'-C1'-N1	8.31	114.85	108.20
5	A	2659	G	O4'-C1'-N9	8.31	114.85	108.20
6	B	24	C	O4'-C1'-N1	8.31	114.85	108.20
5	A	2422	U	O4'-C1'-N1	8.31	114.85	108.20
5	A	1706	G	O4'-C1'-N9	8.31	114.85	108.20
5	A	1082	G	C5-C6-O6	-8.31	123.62	128.60
5	A	2465	G	N1-C6-O6	8.31	124.88	119.90
5	A	2507	A	N1-C6-N6	8.31	123.58	118.60
6	B	32	U	O4'-C1'-N1	8.31	114.84	108.20
5	A	803	C	O4'-C1'-N1	8.30	114.84	108.20
5	A	2824	G	N1-C6-O6	8.30	124.88	119.90
5	A	158	C	O4'-C1'-N1	8.30	114.84	108.20
5	A	1063	G	C5-C6-O6	-8.30	123.62	128.60
5	A	13	A	N1-C6-N6	8.29	123.58	118.60
5	A	2208	C	O4'-C1'-N1	8.29	114.83	108.20
5	A	255	G	C5-C6-O6	-8.29	123.62	128.60
5	A	1650	C	O4'-C1'-N1	8.29	114.83	108.20
5	A	1664	G	C5-C6-O6	-8.29	123.63	128.60
5	A	1273	G	C5-C6-O6	-8.29	123.63	128.60
5	A	1559	C	O4'-C1'-N1	8.29	114.83	108.20
5	A	2359	G	C5-C6-O6	-8.29	123.63	128.60
5	A	2788	G	C5-C6-O6	-8.29	123.63	128.60
5	A	2821	U	O4'-C1'-N1	8.29	114.83	108.20
5	A	827	G	N1-C6-O6	8.28	124.87	119.90
5	A	101	G	N1-C6-O6	8.28	124.87	119.90
5	A	515	G	N1-C6-O6	8.28	124.87	119.90
5	A	972	U	O4'-C1'-N1	8.28	114.82	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1943	C	C2-N1-C1'	8.28	127.90	118.80
6	B	41	C	O4'-C1'-N1	8.28	114.82	108.20
5	A	310	C	O4'-C1'-N1	8.27	114.82	108.20
5	A	1214	U	O4'-C1'-N1	8.27	114.82	108.20
5	A	2828	G	N1-C6-O6	8.27	124.86	119.90
5	A	97	C	O4'-C1'-N1	8.27	114.81	108.20
5	A	181	G	O4'-C1'-N9	8.27	114.81	108.20
5	A	406	G	N1-C6-O6	8.27	124.86	119.90
5	A	877	G	N1-C6-O6	8.26	124.86	119.90
5	A	82	G	N1-C6-O6	8.26	124.86	119.90
5	A	1445	A	O4'-C1'-N9	8.26	114.81	108.20
5	A	1985	U	O4'-C1'-N1	8.26	114.81	108.20
5	A	253	G	N1-C6-O6	8.26	124.86	119.90
5	A	435	G	N1-C6-O6	8.26	124.86	119.90
5	A	2250	G	N1-C6-O6	8.26	124.86	119.90
5	A	1579	A	O4'-C1'-N9	8.26	114.80	108.20
5	A	2647	G	N1-C6-O6	8.26	124.85	119.90
5	A	558	G	N1-C6-O6	8.25	124.85	119.90
5	A	747	G	N1-C6-O6	8.25	124.85	119.90
5	A	959	C	C2-N3-C4	8.25	124.03	119.90
5	A	985	G	N1-C6-O6	8.25	124.85	119.90
5	A	1318	G	C5-C6-O6	-8.25	123.65	128.60
5	A	2211	G	N1-C6-O6	8.25	124.85	119.90
5	A	482	C	O4'-C1'-N1	8.24	114.80	108.20
5	A	1547	U	O4'-C1'-N1	8.24	114.80	108.20
5	A	2283	C	O4'-C1'-N1	8.24	114.80	108.20
5	A	2544	C	O4'-C1'-N1	8.24	114.80	108.20
5	A	2718	U	P-O3'-C3'	8.24	129.59	119.70
5	A	2630	C	P-O5'-C5'	8.24	134.09	120.90
5	A	148	G	O4'-C1'-N9	8.24	114.79	108.20
5	A	669	C	O4'-C1'-N1	8.24	114.79	108.20
5	A	1343	C	O4'-C1'-N1	8.24	114.79	108.20
5	A	2096	G	N1-C6-O6	8.24	124.84	119.90
5	A	2597	C	O4'-C1'-N1	8.24	114.79	108.20
6	B	111	C	O4'-C1'-N1	8.24	114.79	108.20
5	A	1481	G	C5-C6-O6	-8.24	123.66	128.60
5	A	2217	U	O4'-C1'-N1	8.24	114.79	108.20
5	A	2552	G	C5-C6-O6	-8.24	123.66	128.60
5	A	1206	G	C5-C6-O6	-8.23	123.66	128.60
5	A	552	G	N1-C6-O6	8.23	124.84	119.90
5	A	554	U	O4'-C1'-N1	8.23	114.78	108.20
5	A	908	A	N1-C6-N6	8.23	123.54	118.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1408	G	P-O5'-C5'	8.23	134.07	120.90
5	A	2390	A	O4'-C1'-N9	8.23	114.78	108.20
5	A	2231	C	O4'-C1'-N1	8.23	114.78	108.20
5	A	706	C	O4'-C1'-N1	8.22	114.78	108.20
5	A	1199	C	O4'-C1'-N1	8.22	114.78	108.20
5	A	1550	C	O4'-C1'-N1	8.22	114.78	108.20
5	A	883	G	C5-C6-O6	-8.22	123.67	128.60
5	A	1348	G	C5-C6-O6	-8.22	123.67	128.60
5	A	2657	C	O4'-C1'-N1	8.22	114.77	108.20
5	A	2310	C	O4'-C1'-N1	8.21	114.77	108.20
5	A	620	U	O4'-C1'-N1	8.21	114.77	108.20
5	A	2866	C	O4'-C1'-N1	8.21	114.77	108.20
5	A	774	A	N1-C6-N6	8.21	123.53	118.60
5	A	709	G	C5-C6-O6	-8.21	123.68	128.60
5	A	2829	G	O4'-C1'-N9	8.21	114.77	108.20
5	A	1279	C	O4'-C1'-N1	8.21	114.76	108.20
5	A	2533	U	O4'-C1'-N1	8.21	114.76	108.20
5	A	1511	C	O4'-C1'-N1	8.20	114.76	108.20
5	A	903	G	N1-C6-O6	8.20	124.82	119.90
5	A	2235	G	C5-C6-O6	-8.19	123.69	128.60
5	A	2399	G	C5-C6-O6	-8.19	123.69	128.60
6	B	109	C	O4'-C1'-N1	8.19	114.75	108.20
5	A	742	G	C5-C6-O6	-8.19	123.69	128.60
5	A	2797	C	O4'-C1'-N1	8.19	114.75	108.20
5	A	2817	C	O4'-C1'-N1	8.19	114.75	108.20
5	A	1248	C	O4'-C1'-N1	8.18	114.75	108.20
5	A	1659	A	O4'-C1'-N9	8.18	114.75	108.20
5	A	657	G	N1-C6-O6	8.18	124.81	119.90
5	A	1049	G	C5-C6-O6	-8.18	123.69	128.60
5	A	2441	A	N1-C6-N6	8.18	123.51	118.60
5	A	1017	C	O4'-C1'-N1	8.18	114.74	108.20
5	A	2033	G	N1-C6-O6	8.18	124.81	119.90
5	A	2583	U	O4'-C1'-N1	8.18	114.74	108.20
5	A	928	G	N1-C6-O6	8.17	124.80	119.90
5	A	2333	G	N1-C6-O6	8.17	124.80	119.90
5	A	1840	G	C5-C6-O6	-8.17	123.70	128.60
5	A	2318	G	C5-C6-O6	-8.17	123.70	128.60
5	A	2457	G	P-O3'-C3'	8.17	129.51	119.70
5	A	1023	G	C5-C6-O6	-8.17	123.70	128.60
5	A	1779	G	O4'-C1'-N9	8.17	114.74	108.20
5	A	2347	G	O4'-C1'-N9	8.17	114.74	108.20
5	A	2006	A	C5-C6-N6	-8.17	117.17	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2714	G	C5-C6-O6	-8.17	123.70	128.60
5	A	1244	A	O4'-C1'-N9	8.17	114.73	108.20
6	B	58	C	O4'-C1'-N1	8.17	114.73	108.20
5	A	997	C	O4'-C1'-N1	8.16	114.73	108.20
5	A	2664	U	O4'-C1'-N1	8.16	114.73	108.20
5	A	1033	C	O4'-C1'-N1	8.16	114.73	108.20
5	A	1420	G	O4'-C1'-N9	8.16	114.73	108.20
5	A	387	C	O4'-C1'-N1	8.16	114.73	108.20
5	A	1159	U	O4'-C1'-N1	8.16	114.73	108.20
5	A	2846	A	O4'-C1'-N9	8.16	114.73	108.20
5	A	2832	G	C5-C6-O6	-8.16	123.70	128.60
5	A	121	G	C5-C6-O6	-8.16	123.71	128.60
5	A	515	G	O4'-C1'-N9	8.16	114.73	108.20
5	A	924	U	P-O5'-C5'	8.15	133.95	120.90
6	B	62	U	O4'-C1'-N1	8.15	114.72	108.20
5	A	256	C	O4'-C1'-N1	8.15	114.72	108.20
5	A	1315	G	C5-C6-O6	-8.15	123.71	128.60
5	A	1625	C	O4'-C1'-N1	8.15	114.72	108.20
5	A	680	G	O4'-C1'-N9	8.15	114.72	108.20
6	B	16	G	C5-C6-O6	-8.15	123.71	128.60
5	A	1806	U	O4'-C1'-N1	8.14	114.72	108.20
5	A	660	G	N1-C6-O6	8.14	124.79	119.90
5	A	2002	G	N1-C6-O6	8.14	124.79	119.90
5	A	2792	G	O4'-C1'-N9	8.14	114.72	108.20
5	A	358	C	O4'-C1'-N1	8.14	114.71	108.20
5	A	1700	A	O4'-C1'-N9	8.14	114.71	108.20
5	A	1758	U	O4'-C1'-N1	8.14	114.71	108.20
5	A	2073	C	O4'-C1'-N1	8.14	114.71	108.20
5	A	353	A	C4-C5-C6	8.14	121.07	117.00
5	A	399	C	O4'-C1'-N1	8.14	114.71	108.20
5	A	2267	G	N1-C6-O6	8.14	124.78	119.90
5	A	472	G	C5-C6-O6	-8.14	123.72	128.60
5	A	750	U	O4'-C1'-N1	8.14	114.71	108.20
5	A	1637	G	N1-C6-O6	8.14	124.78	119.90
5	A	1855	C	O4'-C1'-N1	8.13	114.71	108.20
5	A	2035	C	O4'-C1'-N1	8.13	114.71	108.20
5	A	152	C	O4'-C1'-N1	8.13	114.70	108.20
5	A	1670	C	O4'-C1'-N1	8.13	114.71	108.20
5	A	1070	G	N1-C6-O6	8.13	124.78	119.90
5	A	333	A	C5-C6-N6	-8.13	117.20	123.70
5	A	2156	G	C5-C6-O6	-8.13	123.72	128.60
5	A	295	G	N1-C6-O6	8.12	124.77	119.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	311	U	O4'-C1'-N1	8.12	114.70	108.20
5	A	1018	G	O4'-C1'-N9	8.12	114.70	108.20
5	A	2289	C	O4'-C1'-N1	8.12	114.70	108.20
5	A	2514	G	C5-C6-O6	-8.12	123.73	128.60
5	A	1035	G	N1-C6-O6	8.12	124.77	119.90
5	A	1150	C	O4'-C1'-N1	8.12	114.70	108.20
5	A	1954	C	O4'-C1'-N1	8.12	114.70	108.20
5	A	1978	G	C5-C6-O6	-8.12	123.73	128.60
5	A	671	G	C5-C6-O6	-8.12	123.73	128.60
5	A	1016	U	O4'-C1'-N1	8.12	114.69	108.20
5	A	1027	A	O4'-C1'-N9	8.12	114.69	108.20
5	A	2115	U	O4'-C1'-N1	8.12	114.69	108.20
5	A	2210	G	O4'-C1'-N9	8.12	114.69	108.20
5	A	187	C	O4'-C1'-N1	8.11	114.69	108.20
5	A	1546	G	O4'-C1'-N9	8.11	114.69	108.20
5	A	2249	G	C5-C6-O6	-8.11	123.73	128.60
5	A	2420	G	N1-C6-O6	8.11	124.77	119.90
5	A	2008	C	O4'-C1'-N1	8.10	114.68	108.20
5	A	468	C	O4'-C1'-N1	8.09	114.67	108.20
5	A	1282	U	O4'-C1'-N1	8.09	114.67	108.20
5	A	2414	C	O4'-C1'-N1	8.09	114.68	108.20
5	A	1203	G	C5-C6-O6	-8.09	123.75	128.60
5	A	853	C	O4'-C1'-N1	8.09	114.67	108.20
5	A	1057	G	O4'-C1'-N9	8.09	114.67	108.20
5	A	1595	U	P-O3'-C3'	8.09	129.41	119.70
5	A	1857	G	N1-C6-O6	8.09	124.75	119.90
5	A	2818	C	P-O3'-C3'	8.09	129.41	119.70
5	A	563	C	O4'-C1'-N1	8.09	114.67	108.20
5	A	1780	C	O4'-C1'-N1	8.09	114.67	108.20
5	A	1229	U	O4'-C1'-N1	8.08	114.67	108.20
5	A	1439	U	P-O5'-C5'	8.08	133.83	120.90
5	A	1503	G	P-O5'-C5'	8.08	133.83	120.90
5	A	2003	C	O4'-C1'-N1	8.08	114.67	108.20
5	A	2243	C	O4'-C1'-N1	8.08	114.67	108.20
6	B	36	C	O4'-C1'-N1	8.08	114.67	108.20
5	A	1767	A	P-O3'-C3'	8.08	129.40	119.70
5	A	1079	U	O4'-C1'-N1	8.08	114.66	108.20
5	A	1750	G	O4'-C1'-N9	8.08	114.66	108.20
5	A	812	G	C5-C6-O6	-8.07	123.76	128.60
5	A	1007	G	O4'-C1'-N9	8.07	114.66	108.20
5	A	2503	C	O4'-C1'-N1	8.07	114.66	108.20
5	A	2526	A	P-O3'-C3'	8.07	129.39	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2630	C	O4'-C1'-N1	8.07	114.66	108.20
5	A	2892	G	C5-C6-O6	-8.07	123.76	128.60
5	A	1064	U	O4'-C1'-N1	8.07	114.66	108.20
5	A	1705	C	O4'-C1'-N1	8.07	114.66	108.20
5	A	2113	C	O4'-C1'-N1	8.07	114.66	108.20
5	A	2733	C	N3-C4-N4	8.07	123.65	118.00
5	A	2116	G	C5-C6-O6	-8.07	123.76	128.60
5	A	2573	G	C5-C6-O6	-8.07	123.76	128.60
5	A	2921	U	O4'-C1'-N1	8.07	114.66	108.20
5	A	422	C	O4'-C1'-N1	8.07	114.65	108.20
5	A	2527	C	P-O5'-C5'	8.07	133.81	120.90
5	A	2804	A	O4'-C1'-N9	8.07	114.65	108.20
5	A	1010	C	O4'-C1'-N1	8.06	114.65	108.20
5	A	2458	G	N1-C6-O6	8.06	124.74	119.90
5	A	170	G	C5-C6-O6	-8.06	123.77	128.60
5	A	1574	G	N1-C6-O6	8.06	124.73	119.90
5	A	1630	G	N1-C6-O6	8.06	124.73	119.90
5	A	2752	C	O4'-C1'-N1	8.06	114.65	108.20
5	A	56	A	C5-C6-N6	-8.06	117.25	123.70
5	A	258	A	O4'-C1'-N9	8.06	114.64	108.20
5	A	1224	A	O4'-C1'-N9	8.06	114.64	108.20
5	A	920	G	C5-C6-O6	-8.05	123.77	128.60
5	A	994	C	O4'-C1'-N1	8.05	114.64	108.20
5	A	1643	C	O4'-C1'-N1	8.05	114.64	108.20
5	A	2731	G	N1-C6-O6	8.05	124.73	119.90
5	A	891	G	O4'-C1'-N9	8.05	114.64	108.20
5	A	1632	G	C5-C6-O6	-8.05	123.77	128.60
5	A	1842	C	O4'-C1'-N1	8.05	114.64	108.20
5	A	1977	G	C5-C6-O6	-8.05	123.77	128.60
5	A	2210	G	N1-C6-O6	8.05	124.73	119.90
6	B	75	U	O4'-C1'-N1	8.05	114.64	108.20
5	A	2011	U	O4'-C1'-N1	8.05	114.64	108.20
5	A	2371	C	O4'-C1'-N1	8.05	114.64	108.20
5	A	282	G	C5-C6-O6	-8.05	123.77	128.60
5	A	1257	C	O4'-C1'-N1	8.05	114.64	108.20
5	A	2652	G	C5-C6-O6	-8.05	123.77	128.60
5	A	268	A	O4'-C1'-N9	8.04	114.64	108.20
5	A	2527	C	O4'-C1'-N1	8.04	114.64	108.20
5	A	2706	G	O4'-C1'-N9	8.04	114.64	108.20
5	A	986	G	C5-C6-O6	-8.04	123.77	128.60
5	A	1721	A	O4'-C1'-N9	8.04	114.63	108.20
5	A	1408	G	O4'-C1'-N9	8.04	114.63	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2706	G	C5-C6-O6	-8.03	123.78	128.60
5	A	2770	A	N1-C6-N6	8.03	123.42	118.60
6	B	38	U	O4'-C1'-N1	8.03	114.63	108.20
5	A	50	U	P-O3'-C3'	8.03	129.34	119.70
5	A	453	G	C5-C6-O6	-8.03	123.78	128.60
5	A	1856	U	O4'-C1'-N1	8.03	114.63	108.20
5	A	2456	C	P-O5'-C5'	8.03	133.75	120.90
5	A	389	A	O4'-C1'-N9	8.03	114.62	108.20
5	A	928	G	O4'-C1'-N9	8.03	114.62	108.20
5	A	621	G	C5-C6-O6	-8.03	123.78	128.60
5	A	785	C	O4'-C1'-N1	8.03	114.62	108.20
5	A	2307	A	O4'-C1'-N9	8.03	114.62	108.20
5	A	2308	G	C5-C6-O6	-8.03	123.78	128.60
5	A	356	G	N1-C6-O6	8.03	124.72	119.90
5	A	2766	G	C5-C6-O6	-8.02	123.78	128.60
5	A	31	C	O4'-C1'-N1	8.02	114.62	108.20
5	A	816	U	O4'-C1'-N1	8.02	114.62	108.20
5	A	2133	C	N3-C4-N4	8.02	123.61	118.00
5	A	2247	C	O4'-C1'-N1	8.02	114.62	108.20
5	A	2495	C	O4'-C1'-N1	8.02	114.61	108.20
5	A	844	U	O4'-C1'-N1	8.02	114.61	108.20
5	A	1807	U	O4'-C1'-N1	8.02	114.61	108.20
5	A	735	U	O4'-C1'-N1	8.01	114.61	108.20
5	A	898	U	O4'-C1'-N1	8.01	114.61	108.20
5	A	2680	C	O4'-C1'-N1	8.01	114.61	108.20
5	A	514	G	O4'-C1'-N9	8.01	114.61	108.20
5	A	1645	C	O4'-C1'-N1	8.01	114.61	108.20
5	A	129	C	O4'-C1'-N1	8.01	114.61	108.20
5	A	944	C	O4'-C1'-N1	8.01	114.60	108.20
5	A	1473	A	O4'-C1'-N9	8.00	114.60	108.20
5	A	1221	A	C5-C6-N6	-8.00	117.30	123.70
5	A	1528	U	O4'-C1'-N1	8.00	114.60	108.20
5	A	1777	G	C5-C6-O6	-8.00	123.80	128.60
5	A	2715	G	N1-C6-O6	8.00	124.70	119.90
5	A	832	G	C5-C6-O6	-8.00	123.80	128.60
5	A	1974	G	C5-C6-O6	-8.00	123.80	128.60
5	A	1825	U	O4'-C1'-N1	8.00	114.60	108.20
5	A	779	C	O4'-C1'-N1	8.00	114.60	108.20
5	A	417	G	C5-C6-O6	-7.99	123.80	128.60
5	A	646	A	O4'-C1'-N9	7.99	114.59	108.20
5	A	932	C	O4'-C1'-N1	7.99	114.59	108.20
5	A	2130	G	O4'-C1'-N9	7.99	114.59	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	82	G	C5-C6-O6	-7.99	123.80	128.60
5	A	518	A	C4-C5-C6	7.99	121.00	117.00
5	A	1613	C	P-O3'-C3'	7.99	129.29	119.70
5	A	1668	G	C5-C6-O6	-7.99	123.81	128.60
5	A	1990	C	O4'-C1'-N1	7.99	114.59	108.20
5	A	2781	C	O4'-C1'-N1	7.99	114.59	108.20
5	A	1038	C	O4'-C1'-N1	7.99	114.59	108.20
5	A	1241	C	O4'-C1'-N1	7.99	114.59	108.20
5	A	1515	C	O4'-C1'-N1	7.98	114.59	108.20
5	A	2814	U	O4'-C1'-N1	7.98	114.58	108.20
5	A	2510	G	P-O3'-C3'	7.98	129.28	119.70
5	A	2749	U	O4'-C1'-N1	7.98	114.58	108.20
5	A	1527	C	O4'-C1'-N1	7.97	114.58	108.20
5	A	2428	G	C5-C6-O6	-7.97	123.81	128.60
6	B	22	G	N1-C6-O6	7.97	124.68	119.90
5	A	655	C	O4'-C1'-N1	7.97	114.58	108.20
5	A	1930	A	O4'-C1'-N9	7.97	114.58	108.20
5	A	2410	C	O4'-C1'-N1	7.97	114.58	108.20
5	A	1210	A	O4'-C1'-N9	7.97	114.57	108.20
5	A	2699	G	C5-C6-O6	-7.97	123.82	128.60
5	A	164	U	O4'-C1'-N1	7.96	114.57	108.20
5	A	332	G	C5-C6-O6	-7.96	123.82	128.60
5	A	2236	C	P-O5'-C5'	7.96	133.64	120.90
5	A	1455	C	O4'-C1'-N1	7.96	114.57	108.20
5	A	1728	C	O4'-C1'-N1	7.96	114.57	108.20
5	A	539	G	C5-C6-O6	-7.96	123.82	128.60
5	A	1382	G	C5-C6-O6	-7.96	123.82	128.60
5	A	1405	A	P-O3'-C3'	7.96	129.25	119.70
5	A	1609	C	O4'-C1'-N1	7.96	114.57	108.20
5	A	435	G	O4'-C1'-N9	7.96	114.57	108.20
5	A	2847	G	P-O3'-C3'	7.96	129.25	119.70
5	A	734	C	O4'-C1'-N1	7.96	114.56	108.20
5	A	802	G	P-O5'-C5'	7.95	133.62	120.90
5	A	1232	G	C5-C6-O6	-7.95	123.83	128.60
5	A	2569	C	O4'-C1'-N1	7.95	114.56	108.20
5	A	2761	G	P-O3'-C3'	7.95	129.24	119.70
5	A	630	A	C4-C5-C6	7.95	120.98	117.00
6	B	26	C	O4'-C1'-N1	7.95	114.56	108.20
5	A	2838	U	O4'-C1'-N1	7.95	114.56	108.20
5	A	2868	G	N1-C6-O6	7.95	124.67	119.90
5	A	307	A	P-O5'-C5'	7.95	133.61	120.90
5	A	1394	G	C5-C6-O6	-7.95	123.83	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2808	U	O4'-C1'-N1	7.95	114.56	108.20
5	A	1696	G	C5-C6-O6	-7.94	123.83	128.60
5	A	95	A	O4'-C1'-N9	7.94	114.55	108.20
5	A	305	A	C5-C6-N6	-7.94	117.35	123.70
5	A	45	G	O4'-C1'-N9	7.94	114.55	108.20
5	A	1385	G	N1-C6-O6	7.94	124.66	119.90
5	A	433	G	C5-C6-O6	-7.93	123.84	128.60
5	A	2505	A	O4'-C1'-N9	7.93	114.55	108.20
5	A	1585	A	P-O3'-C3'	7.93	129.22	119.70
5	A	1644	C	O4'-C1'-N1	7.93	114.55	108.20
5	A	2748	G	N1-C6-O6	7.93	124.66	119.90
5	A	2322	C	O4'-C1'-N1	7.93	114.54	108.20
5	A	2195	G	N1-C6-O6	7.93	124.66	119.90
5	A	2235	G	O4'-C1'-N9	7.92	114.54	108.20
5	A	2492	C	O4'-C1'-N1	7.92	114.54	108.20
5	A	2550	C	O4'-C1'-N1	7.92	114.54	108.20
5	A	1296	G	N1-C6-O6	7.92	124.65	119.90
5	A	2580	C	O4'-C1'-N1	7.92	114.54	108.20
5	A	1449	C	N3-C4-N4	7.92	123.55	118.00
6	B	88	C	O4'-C1'-N1	7.92	114.54	108.20
5	A	2285	G	C5-C6-O6	-7.92	123.85	128.60
5	A	641	C	O4'-C1'-N1	7.92	114.53	108.20
5	A	1152	G	C5-C6-O6	-7.92	123.85	128.60
5	A	1414	G	C5-C6-O6	-7.92	123.85	128.60
5	A	2246	G	C5-C6-O6	-7.92	123.85	128.60
5	A	165	C	O4'-C1'-N1	7.92	114.53	108.20
5	A	1163	U	O4'-C1'-N1	7.92	114.53	108.20
5	A	2234	C	O4'-C1'-N1	7.92	114.53	108.20
5	A	1268	G	C5-C6-O6	-7.91	123.85	128.60
5	A	2670	A	O4'-C1'-N9	7.91	114.53	108.20
5	A	1497	G	C5-C6-O6	-7.91	123.85	128.60
5	A	2269	C	O4'-C1'-N1	7.91	114.53	108.20
6	B	90	C	O4'-C1'-N1	7.91	114.53	108.20
5	A	2259	G	C5-C6-O6	-7.91	123.86	128.60
5	A	2711	G	N1-C6-O6	7.91	124.64	119.90
5	A	229	A	O4'-C1'-N9	7.91	114.53	108.20
5	A	1716	U	O4'-C1'-N1	7.91	114.53	108.20
5	A	2173	G	N1-C6-O6	7.91	124.64	119.90
5	A	391	A	O4'-C1'-N9	7.91	114.53	108.20
5	A	890	G	O4'-C1'-N9	7.91	114.52	108.20
5	A	1428	G	C5-C6-O6	-7.91	123.86	128.60
5	A	2690	G	N1-C6-O6	7.91	124.64	119.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	153	C	N3-C4-N4	7.90	123.53	118.00
5	A	543	A	O4'-C1'-N9	7.90	114.52	108.20
5	A	1872	C	O4'-C1'-N1	7.90	114.52	108.20
5	A	884	C	O4'-C1'-N1	7.90	114.52	108.20
5	A	1297	C	O4'-C1'-N1	7.90	114.52	108.20
5	A	1638	A	C5-C6-N1	-7.90	113.75	117.70
5	A	1832	A	O4'-C1'-N9	7.90	114.52	108.20
5	A	1552	C	O4'-C1'-N1	7.90	114.52	108.20
5	A	1558	G	C5-C6-O6	-7.90	123.86	128.60
5	A	2757	U	O4'-C1'-N1	7.90	114.52	108.20
5	A	22	C	O4'-C1'-N1	7.90	114.52	108.20
5	A	1089	C	O4'-C1'-N1	7.89	114.51	108.20
5	A	1525	G	C5-C6-O6	-7.89	123.86	128.60
6	B	14	G	C5-C6-O6	-7.89	123.86	128.60
6	B	100	G	C5-C6-O6	-7.89	123.86	128.60
5	A	1337	C	O4'-C1'-N1	7.89	114.51	108.20
5	A	2107	C	O4'-C1'-N1	7.89	114.51	108.20
5	A	151	U	P-O3'-C3'	7.88	129.16	119.70
5	A	2570	A	O4'-C1'-N9	7.88	114.51	108.20
5	A	361	G	O4'-C1'-N9	7.88	114.50	108.20
5	A	371	G	C5-C6-O6	-7.88	123.87	128.60
5	A	801	U	O4'-C1'-N1	7.88	114.50	108.20
5	A	2263	G	O4'-C1'-N9	7.88	114.50	108.20
5	A	1709	A	C5-C6-N6	-7.88	117.40	123.70
6	B	93	U	O4'-C1'-N1	7.87	114.50	108.20
5	A	1251	U	O4'-C1'-N1	7.87	114.50	108.20
5	A	681	C	O4'-C1'-N1	7.87	114.50	108.20
5	A	1375	A	O4'-C1'-N9	7.87	114.50	108.20
5	A	2135	G	O4'-C1'-N9	7.87	114.50	108.20
5	A	1864	G	N1-C6-O6	7.87	124.62	119.90
5	A	196	U	O4'-C1'-N1	7.87	114.49	108.20
5	A	511	U	O4'-C1'-N1	7.87	114.49	108.20
5	A	1469	G	C5-C6-O6	-7.87	123.88	128.60
5	A	2412	G	C5-C6-O6	-7.87	123.88	128.60
5	A	2784	C	O4'-C1'-N1	7.87	114.49	108.20
5	A	2258	U	O4'-C1'-N1	7.86	114.49	108.20
5	A	2883	C	C2-N1-C1'	7.86	127.45	118.80
5	A	99	U	O4'-C1'-N1	7.86	114.49	108.20
5	A	1009	U	P-O5'-C5'	7.86	133.48	120.90
5	A	1192	G	O4'-C1'-N9	7.86	114.49	108.20
5	A	1771	C	O4'-C1'-N1	7.86	114.49	108.20
5	A	1796	C	O4'-C1'-N1	7.86	114.49	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2644	U	O4'-C1'-N1	7.86	114.49	108.20
5	A	520	G	O4'-C1'-N9	7.86	114.49	108.20
5	A	919	U	O4'-C1'-N1	7.86	114.49	108.20
5	A	685	U	O4'-C1'-N1	7.86	114.49	108.20
5	A	2879	G	C5-C6-O6	-7.86	123.89	128.60
5	A	548	A	C5-C6-N6	-7.86	117.42	123.70
5	A	1256	C	O4'-C1'-N1	7.86	114.48	108.20
5	A	1720	C	O4'-C1'-N1	7.86	114.48	108.20
5	A	1828	G	P-O3'-C3'	7.86	129.13	119.70
5	A	2016	G	C5-C6-O6	-7.86	123.89	128.60
5	A	370	G	O4'-C1'-N9	7.85	114.48	108.20
5	A	2408	G	C5-C6-O6	-7.85	123.89	128.60
5	A	730	U	O4'-C1'-N1	7.84	114.48	108.20
5	A	1361	A	C5-C6-N6	-7.84	117.42	123.70
5	A	2207	C	O4'-C1'-N1	7.84	114.48	108.20
5	A	1274	U	O4'-C1'-N1	7.84	114.47	108.20
5	A	1155	C	O4'-C1'-N1	7.84	114.47	108.20
5	A	2418	G	C5-C6-O6	-7.84	123.89	128.60
5	A	780	G	C5-C6-O6	-7.84	123.90	128.60
5	A	2910	C	O4'-C1'-N1	7.84	114.47	108.20
5	A	707	G	C5-C6-O6	-7.84	123.90	128.60
5	A	1676	G	N1-C6-O6	7.84	124.60	119.90
5	A	526	A	O4'-C1'-N9	7.84	114.47	108.20
5	A	1353	C	C6-N1-C2	-7.84	117.17	120.30
5	A	985	G	O4'-C1'-N9	7.83	114.47	108.20
5	A	1415	C	O4'-C1'-N1	7.83	114.47	108.20
5	A	2562	U	P-O5'-C5'	7.83	133.44	120.90
5	A	153	C	N3-C4-C5	-7.83	118.77	121.90
5	A	392	C	O4'-C1'-N1	7.83	114.47	108.20
5	A	695	G	C5-C6-O6	-7.83	123.90	128.60
5	A	368	G	N1-C6-O6	7.83	124.60	119.90
5	A	836	A	P-O3'-C3'	7.83	129.10	119.70
5	A	2815	U	O4'-C1'-N1	7.83	114.47	108.20
5	A	107	G	O4'-C1'-N9	7.83	114.46	108.20
5	A	521	G	C5-C6-O6	-7.83	123.90	128.60
5	A	709	G	O4'-C1'-N9	7.83	114.46	108.20
5	A	2297	A	C4-C5-C6	7.82	120.91	117.00
5	A	961	C	O4'-C1'-N1	7.82	114.45	108.20
5	A	1043	G	O4'-C1'-N9	7.82	114.45	108.20
5	A	2442	G	N1-C6-O6	7.82	124.59	119.90
5	A	1321	U	O4'-C1'-N1	7.81	114.45	108.20
5	A	132	C	O4'-C1'-N1	7.81	114.45	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	246	U	O4'-C1'-N1	7.81	114.45	108.20
5	A	1546	G	C5-C6-O6	-7.81	123.91	128.60
5	A	127	C	O4'-C1'-N1	7.81	114.45	108.20
5	A	398	U	O4'-C1'-N1	7.81	114.45	108.20
5	A	855	G	N1-C6-O6	7.81	124.58	119.90
5	A	2125	U	O4'-C1'-N1	7.81	114.44	108.20
5	A	2415	U	O4'-C1'-N1	7.81	114.44	108.20
5	A	663	G	C5-C6-O6	-7.80	123.92	128.60
5	A	1363	G	C5-C6-O6	-7.80	123.92	128.60
5	A	1844	A	N1-C6-N6	7.80	123.28	118.60
5	A	608	C	O4'-C1'-N1	7.80	114.44	108.20
5	A	1328	C	O4'-C1'-N1	7.80	114.44	108.20
5	A	1531	G	C5-C6-O6	-7.80	123.92	128.60
5	A	1406	A	O4'-C1'-N9	7.79	114.44	108.20
5	A	186	C	O4'-C1'-N1	7.79	114.44	108.20
5	A	549	A	C5-C6-N6	-7.79	117.47	123.70
5	A	1495	C	O4'-C1'-N1	7.79	114.44	108.20
5	A	2309	G	C5-C6-O6	-7.79	123.92	128.60
5	A	238	U	O4'-C1'-N1	7.79	114.43	108.20
5	A	2687	C	O4'-C1'-N1	7.79	114.43	108.20
5	A	75	G	C5-C6-O6	-7.79	123.93	128.60
5	A	771	U	P-O5'-C5'	7.79	133.36	120.90
5	A	1051	C	N3-C4-C5	-7.78	118.79	121.90
5	A	1189	A	O4'-C1'-N9	7.78	114.43	108.20
5	A	1610	U	O4'-C1'-N1	7.78	114.43	108.20
5	A	1678	G	O4'-C1'-N9	7.78	114.43	108.20
5	A	338	G	C5-C6-O6	-7.78	123.93	128.60
5	A	931	C	O4'-C1'-N1	7.78	114.42	108.20
5	A	1237	C	O4'-C1'-N1	7.78	114.43	108.20
5	A	1320	G	C5-C6-O6	-7.78	123.93	128.60
6	B	83	G	C5-C6-O6	-7.78	123.93	128.60
5	A	1646	G	O4'-C1'-N9	7.78	114.42	108.20
5	A	1971	C	O4'-C1'-N1	7.78	114.42	108.20
5	A	2681	U	O4'-C1'-N1	7.78	114.42	108.20
5	A	1462	G	N1-C6-O6	7.78	124.57	119.90
5	A	2293	C	O4'-C1'-N1	7.78	114.42	108.20
5	A	1200	G	C5-C6-O6	-7.77	123.94	128.60
5	A	1992	C	C2-N1-C1'	7.77	127.35	118.80
5	A	2214	G	C5-C6-O6	-7.77	123.94	128.60
5	A	2424	C	O4'-C1'-N1	7.77	114.42	108.20
5	A	2751	G	C5-C6-O6	-7.77	123.94	128.60
5	A	151	U	O4'-C1'-N1	7.77	114.42	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	88	G	N1-C6-O6	7.77	124.56	119.90
5	A	2567	C	O4'-C1'-N1	7.77	114.42	108.20
5	A	79	C	O4'-C1'-N1	7.77	114.41	108.20
5	A	274	A	O4'-C1'-N9	7.77	114.41	108.20
5	A	283	G	C5-C6-O6	-7.76	123.94	128.60
5	A	1032	C	O4'-C1'-N1	7.76	114.41	108.20
5	A	2894	G	C5-C6-O6	-7.76	123.94	128.60
5	A	864	C	O4'-C1'-N1	7.76	114.41	108.20
5	A	885	C	O4'-C1'-N1	7.76	114.41	108.20
5	A	516	G	O4'-C1'-N9	7.76	114.41	108.20
5	A	2271	G	O4'-C1'-N9	7.76	114.41	108.20
5	A	461	C	O4'-C1'-N1	7.76	114.41	108.20
5	A	762	A	O4'-C1'-N9	7.75	114.40	108.20
5	A	2509	C	N3-C4-N4	7.75	123.43	118.00
5	A	963	G	O4'-C1'-N9	7.75	114.40	108.20
5	A	959	C	N3-C4-C5	-7.75	118.80	121.90
5	A	2731	G	O4'-C1'-N9	7.75	114.40	108.20
5	A	467	C	O4'-C1'-N1	7.75	114.40	108.20
5	A	627	G	C5-C6-O6	-7.74	123.95	128.60
5	A	415	C	O4'-C1'-N1	7.74	114.39	108.20
5	A	968	C	O4'-C1'-N1	7.74	114.39	108.20
5	A	1753	C	O4'-C1'-N1	7.74	114.39	108.20
6	B	22	G	N3-C2-N2	7.74	125.32	119.90
5	A	1312	A	O4'-C1'-N9	7.74	114.39	108.20
5	A	1797	A	O4'-C1'-N9	7.74	114.39	108.20
5	A	197	G	C5-C6-O6	-7.74	123.96	128.60
5	A	2789	C	O4'-C1'-N1	7.74	114.39	108.20
5	A	123	G	O4'-C1'-N9	7.73	114.39	108.20
5	A	601	U	O4'-C1'-N1	7.73	114.38	108.20
5	A	2483	G	C5-C6-O6	-7.73	123.96	128.60
5	A	2082	G	N1-C6-O6	7.73	124.54	119.90
5	A	2692	G	C5-C6-O6	-7.73	123.97	128.60
5	A	49	A	C4-C5-C6	7.72	120.86	117.00
5	A	509	C	O4'-C1'-N1	7.72	114.38	108.20
5	A	1312	A	P-O5'-C5'	7.72	133.25	120.90
5	A	744	C	O4'-C1'-N1	7.72	114.38	108.20
5	A	1672	A	C5-C6-N6	-7.72	117.52	123.70
5	A	2163	A	O4'-C1'-N9	7.72	114.38	108.20
5	A	2355	U	O4'-C1'-N1	7.72	114.38	108.20
5	A	2739	C	O4'-C1'-N1	7.72	114.38	108.20
5	A	1924	C	O4'-C1'-N1	7.72	114.37	108.20
5	A	1238	G	C5-C6-O6	-7.71	123.97	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2484	G	C5-C6-O6	-7.71	123.97	128.60
5	A	2799	C	O4'-C1'-N1	7.71	114.37	108.20
5	A	1591	G	N1-C6-O6	7.71	124.53	119.90
5	A	1871	G	O4'-C1'-N9	7.71	114.37	108.20
5	A	1299	G	C5-C6-O6	-7.71	123.97	128.60
5	A	2184	U	O4'-C1'-N1	7.71	114.37	108.20
5	A	1135	G	N1-C6-O6	7.71	124.53	119.90
5	A	1824	C	O4'-C1'-N1	7.71	114.37	108.20
5	A	2271	G	C5-C6-O6	-7.71	123.97	128.60
5	A	2489	U	O4'-C1'-N1	7.71	114.36	108.20
5	A	2288	G	C5-C6-O6	-7.70	123.98	128.60
5	A	2291	U	O4'-C1'-N1	7.70	114.36	108.20
5	A	2608	C	P-O5'-C5'	7.70	133.22	120.90
5	A	423	G	C5-C6-O6	-7.70	123.98	128.60
5	A	1492	G	C5-C6-O6	-7.70	123.98	128.60
5	A	2870	G	C5-C6-O6	-7.70	123.98	128.60
5	A	371	G	O4'-C1'-N9	7.70	114.36	108.20
5	A	1952	U	O4'-C1'-N1	7.70	114.36	108.20
5	A	2585	C	O4'-C1'-N1	7.70	114.36	108.20
5	A	323	C	O4'-C1'-N1	7.69	114.35	108.20
5	A	2824	G	P-O3'-C3'	7.69	128.93	119.70
5	A	879	G	C5-C6-O6	-7.69	123.99	128.60
5	A	2229	C	O4'-C1'-N1	7.69	114.35	108.20
6	B	71	A	C4-C5-C6	7.69	120.84	117.00
5	A	2559	U	P-O3'-C3'	7.69	128.93	119.70
5	A	1828	G	C2'-C3'-O3'	7.69	126.41	109.50
5	A	1859	C	N3-C4-N4	7.69	123.38	118.00
5	A	1635	G	C5-C6-O6	-7.69	123.99	128.60
5	A	235	G	N3-C2-N2	7.68	125.28	119.90
5	A	462	A	C5-C6-N6	-7.68	117.56	123.70
5	A	1958	G	O4'-C1'-N9	7.68	114.35	108.20
5	A	104	C	O4'-C1'-N1	7.68	114.34	108.20
5	A	8	U	O4'-C1'-N1	7.68	114.34	108.20
5	A	1823	U	O4'-C1'-N1	7.68	114.34	108.20
5	A	530	A	O4'-C1'-N9	7.67	114.34	108.20
5	A	2746	G	C5-C6-O6	-7.67	124.00	128.60
5	A	1272	G	C5-C6-O6	-7.67	124.00	128.60
5	A	1281	C	C2-N1-C1'	7.67	127.24	118.80
5	A	1847	U	O4'-C1'-N1	7.67	114.34	108.20
5	A	2776	G	N1-C6-O6	7.67	124.50	119.90
5	A	32	C	O4'-C1'-N1	7.67	114.33	108.20
5	A	172	U	O4'-C1'-N1	7.66	114.33	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1646	G	C5-C6-O6	-7.66	124.00	128.60
5	A	1734	A	O4'-C1'-N9	7.66	114.33	108.20
5	A	78	U	O4'-C1'-N1	7.66	114.33	108.20
5	A	777	C	O4'-C1'-N1	7.66	114.33	108.20
5	A	1222	A	O4'-C1'-N9	7.66	114.33	108.20
5	A	1560	U	O4'-C1'-N1	7.66	114.33	108.20
5	A	2612	G	N1-C6-O6	7.66	124.50	119.90
5	A	504	A	N1-C6-N6	7.66	123.19	118.60
5	A	1993	G	C5-C6-O6	-7.66	124.01	128.60
5	A	1620	A	O4'-C1'-N9	7.66	114.33	108.20
5	A	2292	C	O4'-C1'-N1	7.66	114.32	108.20
5	A	2822	C	O4'-C1'-N1	7.66	114.32	108.20
5	A	2515	G	C5-C6-O6	-7.65	124.01	128.60
5	A	367	G	O4'-C1'-N9	7.65	114.32	108.20
5	A	2829	G	C5-C6-O6	-7.65	124.01	128.60
5	A	314	A	O4'-C1'-N9	7.65	114.32	108.20
5	A	2055	U	O4'-C1'-N1	7.65	114.32	108.20
5	A	2872	U	O4'-C1'-N1	7.65	114.32	108.20
5	A	1927	U	O4'-C1'-N1	7.65	114.32	108.20
5	A	2394	G	O4'-C1'-N9	7.65	114.32	108.20
5	A	2099	G	C5-C6-O6	-7.64	124.01	128.60
5	A	2138	U	O4'-C1'-N1	7.64	114.32	108.20
5	A	16	G	C5-C6-O6	-7.64	124.02	128.60
5	A	81	G	C5-C6-O6	-7.64	124.01	128.60
5	A	2259	G	O4'-C1'-N9	7.64	114.31	108.20
5	A	768	G	P-O5'-C5'	7.64	133.12	120.90
5	A	1166	G	C5-C6-O6	-7.64	124.02	128.60
5	A	1170	C	P-O5'-C5'	7.64	133.12	120.90
6	B	110	G	O4'-C1'-N9	7.64	114.31	108.20
5	A	2051	U	C5'-C4'-O4'	7.63	118.26	109.10
5	A	53	A	O4'-C1'-N9	7.63	114.31	108.20
5	A	2891	G	O4'-C1'-N9	7.63	114.31	108.20
5	A	675	C	O4'-C1'-N1	7.63	114.31	108.20
6	B	3	U	O4'-C1'-N1	7.63	114.31	108.20
5	A	1839	A	C4-C5-C6	7.63	120.81	117.00
6	B	49	G	C5-C6-O6	-7.63	124.02	128.60
5	A	1688	G	C5-C6-O6	-7.62	124.03	128.60
5	A	443	G	C5-C6-O6	-7.62	124.03	128.60
5	A	988	G	C5-C6-O6	-7.62	124.03	128.60
5	A	2657	C	C2-N1-C1'	7.62	127.18	118.80
5	A	807	G	P-O5'-C5'	7.62	133.09	120.90
5	A	1937	C	O4'-C1'-N1	7.62	114.30	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2057	U	O4'-C1'-N1	7.62	114.30	108.20
5	A	49	A	P-O3'-C3'	7.62	128.84	119.70
5	A	234	C	O4'-C1'-N1	7.62	114.29	108.20
5	A	1529	G	C5-C6-O6	-7.62	124.03	128.60
5	A	2056	G	C5-C6-O6	-7.62	124.03	128.60
5	A	2314	C	O4'-C1'-N1	7.61	114.29	108.20
5	A	2319	G	C5-C6-O6	-7.61	124.03	128.60
5	A	505	G	N1-C6-O6	7.61	124.47	119.90
5	A	370	G	C5-C6-O6	-7.61	124.03	128.60
5	A	575	A	O4'-C1'-N9	7.61	114.29	108.20
5	A	2565	G	C5-C6-O6	-7.61	124.03	128.60
5	A	2382	G	C5-C6-O6	-7.61	124.03	128.60
5	A	2791	U	O4'-C1'-N1	7.61	114.29	108.20
5	A	559	A	C5-C6-N1	-7.61	113.90	117.70
5	A	1708	U	O4'-C1'-N1	7.61	114.29	108.20
5	A	2591	U	O4'-C1'-N1	7.61	114.29	108.20
5	A	19	G	O4'-C1'-N9	7.61	114.28	108.20
5	A	123	G	C5-C6-O6	-7.61	124.04	128.60
5	A	1394	G	O4'-C1'-N9	7.61	114.28	108.20
5	A	347	G	C5-C6-O6	-7.60	124.04	128.60
5	A	1145	G	C5-C6-O6	-7.60	124.04	128.60
5	A	1485	A	C4-C5-C6	7.60	120.80	117.00
5	A	488	U	O4'-C1'-N1	7.60	114.28	108.20
5	A	489	G	C5-C6-O6	-7.60	124.04	128.60
5	A	814	U	O4'-C1'-N1	7.60	114.28	108.20
5	A	2523	G	C5-C6-O6	-7.60	124.04	128.60
5	A	805	G	C5-C6-O6	-7.60	124.04	128.60
5	A	923	C	O4'-C1'-N1	7.60	114.28	108.20
5	A	1785	G	C5-C6-O6	-7.60	124.04	128.60
5	A	1782	G	O4'-C1'-N9	7.59	114.28	108.20
5	A	2134	A	O4'-C1'-N9	7.59	114.28	108.20
5	A	765	A	C4-C5-C6	7.59	120.80	117.00
5	A	1299	G	O4'-C1'-N9	7.59	114.27	108.20
5	A	2103	U	O4'-C1'-N1	7.59	114.27	108.20
5	A	181	G	C5-C6-O6	-7.59	124.05	128.60
5	A	950	U	O4'-C1'-N1	7.59	114.27	108.20
5	A	1616	G	C5-C6-O6	-7.59	124.05	128.60
5	A	2153	G	C5-C6-O6	-7.59	124.05	128.60
5	A	249	C	O4'-C1'-N1	7.58	114.27	108.20
5	A	568	G	C5-C6-O6	-7.58	124.05	128.60
5	A	2320	U	O4'-C1'-N1	7.58	114.27	108.20
5	A	2610	G	O4'-C1'-N9	7.58	114.27	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	277	C	O4'-C1'-N1	7.58	114.26	108.20
5	A	680	G	C5-C6-O6	-7.58	124.05	128.60
5	A	77	U	O4'-C1'-N1	7.58	114.26	108.20
5	A	2122	G	O4'-C1'-N9	7.58	114.26	108.20
5	A	7	G	C5-C6-O6	-7.57	124.06	128.60
5	A	2244	G	C5-C6-O6	-7.57	124.06	128.60
5	A	2471	C	O4'-C1'-N1	7.57	114.26	108.20
5	A	654	G	C5-C6-O6	-7.57	124.06	128.60
5	A	350	U	O4'-C1'-N1	7.57	114.25	108.20
5	A	98	U	O4'-C1'-N1	7.57	114.25	108.20
5	A	2473	G	C5-C6-O6	-7.57	124.06	128.60
5	A	1725	U	O4'-C1'-N1	7.56	114.25	108.20
6	B	74	G	C5-C6-O6	-7.56	124.06	128.60
5	A	1798	G	C5-C6-O6	-7.56	124.06	128.60
5	A	1837	U	O4'-C1'-N1	7.56	114.25	108.20
5	A	177	G	O4'-C1'-N9	7.56	114.25	108.20
5	A	668	G	C5-C6-O6	-7.56	124.07	128.60
5	A	1048	G	C5-C6-O6	-7.56	124.06	128.60
5	A	2592	U	O4'-C1'-N1	7.56	114.25	108.20
5	A	2646	C	O4'-C1'-N1	7.56	114.25	108.20
5	A	566	G	C5-C6-O6	-7.56	124.07	128.60
5	A	2110	C	O4'-C1'-N1	7.56	114.25	108.20
5	A	1697	A	O4'-C1'-N9	7.55	114.24	108.20
5	A	2540	U	O4'-C1'-N1	7.55	114.24	108.20
5	A	18	C	O4'-C1'-N1	7.55	114.24	108.20
5	A	535	G	O4'-C1'-N9	7.55	114.24	108.20
5	A	628	C	O4'-C1'-N1	7.55	114.24	108.20
5	A	862	U	O4'-C1'-N1	7.55	114.24	108.20
5	A	1355	U	O4'-C1'-N1	7.54	114.24	108.20
5	A	1866	C	O4'-C1'-N1	7.54	114.24	108.20
5	A	522	U	O4'-C1'-N1	7.54	114.23	108.20
5	A	2277	C	O4'-C1'-N1	7.54	114.23	108.20
5	A	2678	U	O4'-C1'-N1	7.54	114.23	108.20
5	A	163	U	O4'-C1'-N1	7.54	114.23	108.20
5	A	1869	G	C5-C6-O6	-7.54	124.08	128.60
5	A	348	U	O4'-C1'-N1	7.54	114.23	108.20
5	A	1001	U	O4'-C1'-N1	7.54	114.23	108.20
5	A	471	G	C5-C6-O6	-7.54	124.08	128.60
5	A	536	G	C5-C6-O6	-7.54	124.08	128.60
5	A	1391	U	O4'-C1'-N1	7.54	114.23	108.20
5	A	1592	A	O4'-C1'-N9	7.53	114.23	108.20
5	A	863	C	O4'-C1'-N1	7.53	114.23	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	544	G	O4'-C1'-N9	7.53	114.22	108.20
5	A	711	U	O4'-C1'-N1	7.53	114.22	108.20
5	A	673	A	P-O3'-C3'	7.53	128.73	119.70
5	A	1197	A	O4'-C1'-N9	7.53	114.22	108.20
5	A	1367	G	C5-C6-O6	-7.53	124.08	128.60
5	A	2759	C	O4'-C1'-N1	7.53	114.22	108.20
5	A	1322	G	O4'-C1'-N9	7.53	114.22	108.20
5	A	1775	G	C5-C6-O6	-7.53	124.08	128.60
5	A	2864	G	C5-C6-O6	-7.53	124.08	128.60
5	A	1584	U	O4'-C1'-N1	7.52	114.22	108.20
5	A	2719	A	C4-C5-C6	7.52	120.76	117.00
5	A	1612	C	O4'-C1'-N1	7.52	114.22	108.20
5	A	1937	C	P-O3'-C3'	7.52	128.72	119.70
5	A	830	A	C4-C5-C6	7.52	120.76	117.00
5	A	1108	G	N1-C6-O6	7.52	124.41	119.90
5	A	2070	U	O4'-C1'-N1	7.52	114.21	108.20
5	A	1118	C	O4'-C1'-N1	7.52	114.21	108.20
5	A	217	G	C5-C6-O6	-7.51	124.09	128.60
5	A	320	U	O4'-C1'-N1	7.51	114.21	108.20
5	A	2219	G	C5-C6-O6	-7.51	124.09	128.60
5	A	2369	A	O4'-C1'-N9	7.51	114.21	108.20
5	A	2469	C	O4'-C1'-N1	7.51	114.21	108.20
5	A	2621	G	O4'-C1'-N9	7.51	114.21	108.20
5	A	2058	G	C5-C6-O6	-7.51	124.09	128.60
5	A	1269	A	O4'-C1'-N9	7.51	114.21	108.20
5	A	1662	C	O4'-C1'-N1	7.51	114.21	108.20
5	A	2123	A	C5-C6-N6	-7.51	117.69	123.70
5	A	327	G	C5-C6-O6	-7.51	124.10	128.60
5	A	1449	C	N3-C4-C5	-7.51	118.90	121.90
5	A	128	C	O4'-C1'-N1	7.50	114.20	108.20
5	A	731	G	C5-C6-O6	-7.50	124.10	128.60
5	A	2685	U	O4'-C1'-N1	7.50	114.20	108.20
5	A	945	C	O4'-C1'-N1	7.50	114.20	108.20
5	A	1762	G	C5-C6-O6	-7.50	124.10	128.60
5	A	2818	C	O4'-C1'-N1	7.50	114.20	108.20
5	A	236	A	O4'-C1'-N9	7.50	114.20	108.20
5	A	2068	G	C5-C6-O6	-7.50	124.10	128.60
5	A	944	C	N3-C4-N4	7.50	123.25	118.00
5	A	737	C	O4'-C1'-N1	7.50	114.20	108.20
5	A	2917	G	O4'-C1'-N9	7.50	114.20	108.20
5	A	788	G	C5-C6-O6	-7.50	124.10	128.60
5	A	1934	C	O4'-C1'-N1	7.50	114.20	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	66	C	P-O5'-C5'	7.50	132.89	120.90
5	A	2717	G	O4'-C1'-N9	7.50	114.20	108.20
5	A	2773	G	O4'-C1'-N9	7.50	114.20	108.20
5	A	1501	U	O4'-C1'-N1	7.49	114.19	108.20
5	A	1566	G	C5'-C4'-C3'	-7.49	104.01	116.00
5	A	2056	G	O4'-C1'-N9	7.49	114.19	108.20
5	A	2161	G	C5-C6-O6	-7.49	124.10	128.60
5	A	1182	G	C5-C6-O6	-7.49	124.11	128.60
5	A	2004	G	C5-C6-O6	-7.49	124.11	128.60
5	A	474	U	O4'-C1'-N1	7.49	114.19	108.20
5	A	1401	C	O4'-C1'-N1	7.49	114.19	108.20
5	A	2925	C	O4'-C1'-N1	7.49	114.19	108.20
5	A	975	C	O4'-C1'-N1	7.49	114.19	108.20
5	A	2602	C	O4'-C1'-N1	7.49	114.19	108.20
5	A	381	U	O4'-C1'-N1	7.48	114.19	108.20
5	A	1826	C	O4'-C1'-N1	7.48	114.19	108.20
5	A	705	A	C5-C6-N6	-7.48	117.71	123.70
5	A	1860	G	C5-C6-O6	-7.48	124.11	128.60
5	A	2434	G	C5-C6-O6	-7.48	124.11	128.60
5	A	323	C	P-O3'-C3'	7.48	128.67	119.70
5	A	1365	U	O4'-C1'-N1	7.48	114.18	108.20
5	A	1178	U	C2-N1-C1'	7.48	126.67	117.70
5	A	2587	C	O4'-C1'-N1	7.48	114.18	108.20
5	A	232	U	O4'-C1'-N1	7.47	114.18	108.20
5	A	1132	A	O4'-C1'-N9	7.47	114.18	108.20
5	A	1507	U	O4'-C1'-N1	7.47	114.18	108.20
5	A	385	G	O4'-C1'-N9	7.47	114.18	108.20
5	A	529	C	O4'-C1'-N1	7.47	114.18	108.20
5	A	2577	G	C5-C6-O6	-7.47	124.12	128.60
5	A	346	G	P-O3'-C3'	7.47	128.66	119.70
5	A	1508	C	N3-C4-N4	7.47	123.23	118.00
5	A	567	U	O4'-C1'-N1	7.47	114.17	108.20
5	A	1332	U	O4'-C1'-N1	7.47	114.17	108.20
5	A	572	A	C5-C6-N6	-7.47	117.73	123.70
5	A	1460	G	O4'-C1'-N9	7.47	114.17	108.20
5	A	558	G	O4'-C1'-N9	7.46	114.17	108.20
5	A	1687	G	O4'-C1'-N9	7.46	114.17	108.20
6	B	110	G	C5-C6-O6	-7.46	124.12	128.60
5	A	1623	C	O4'-C1'-N1	7.46	114.16	108.20
5	A	109	G	C5-C6-O6	-7.45	124.13	128.60
5	A	704	U	O4'-C1'-N1	7.45	114.16	108.20
5	A	1267	G	O4'-C1'-N9	7.45	114.16	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2054	C	O4'-C1'-N1	7.45	114.16	108.20
5	A	633	U	O4'-C1'-N1	7.45	114.16	108.20
5	A	1060	U	O4'-C1'-N1	7.45	114.16	108.20
5	A	1162	C	O4'-C1'-N1	7.45	114.16	108.20
5	A	1317	G	C5-C6-O6	-7.45	124.13	128.60
5	A	1169	C	O4'-C1'-N1	7.45	114.16	108.20
5	A	1596	U	O4'-C1'-N1	7.45	114.16	108.20
5	A	2747	G	C5-C6-O6	-7.45	124.13	128.60
5	A	538	A	C4-C5-C6	7.44	120.72	117.00
5	A	142	G	C5-C6-O6	-7.44	124.13	128.60
5	A	570	C	O4'-C1'-N1	7.44	114.15	108.20
5	A	2671	G	C5-C6-O6	-7.44	124.13	128.60
5	A	752	A	C4-C5-C6	7.44	120.72	117.00
5	A	772	G	P-O5'-C5'	7.44	132.80	120.90
5	A	1660	C	O4'-C1'-N1	7.44	114.15	108.20
5	A	1701	C	O4'-C1'-N1	7.44	114.15	108.20
6	B	8	G	O4'-C1'-N9	7.44	114.15	108.20
5	A	1721	A	C5-C6-N6	-7.44	117.75	123.70
5	A	1805	G	C5-C6-O6	-7.44	124.14	128.60
5	A	2169	G	O4'-C1'-N9	7.44	114.15	108.20
5	A	52	A	C4-C5-C6	7.44	120.72	117.00
5	A	1494	G	C5-C6-O6	-7.44	124.14	128.60
5	A	1730	C	O4'-C1'-N1	7.44	114.15	108.20
5	A	2341	U	O4'-C1'-N1	7.44	114.15	108.20
5	A	788	G	O4'-C1'-N9	7.43	114.15	108.20
5	A	2501	G	C5-C6-O6	-7.43	124.14	128.60
5	A	2648	U	O4'-C1'-N1	7.43	114.15	108.20
5	A	527	A	O4'-C1'-N9	7.43	114.14	108.20
5	A	1363	G	O4'-C1'-N9	7.43	114.14	108.20
5	A	2616	A	O4'-C1'-N9	7.43	114.14	108.20
5	A	1620	A	C5-C6-N6	-7.42	117.76	123.70
5	A	2028	C	N3-C4-N4	7.42	123.20	118.00
5	A	19	G	C5-C6-O6	-7.42	124.15	128.60
5	A	1006	A	C4-C5-C6	7.42	120.71	117.00
5	A	2883	C	O4'-C1'-N1	7.42	114.13	108.20
5	A	573	C	O4'-C1'-N1	7.41	114.13	108.20
5	A	887	C	O4'-C1'-N1	7.41	114.13	108.20
5	A	2446	C	O4'-C1'-N1	7.41	114.13	108.20
5	A	837	U	O4'-C1'-N1	7.41	114.13	108.20
5	A	2239	U	O4'-C1'-N1	7.41	114.13	108.20
5	A	823	G	C5-C6-O6	-7.41	124.16	128.60
5	A	1710	A	O4'-C1'-N9	7.41	114.12	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	267	U	O4'-C1'-N1	7.40	114.12	108.20
5	A	1799	G	C5-C6-O6	-7.40	124.16	128.60
5	A	1087	U	O4'-C1'-N1	7.40	114.12	108.20
5	A	645	C	N3-C4-N4	7.40	123.18	118.00
5	A	2546	C	O4'-C1'-N1	7.40	114.12	108.20
17	P	74	PHE	CB-CG-CD1	7.40	125.98	120.80
5	A	2038	G	O4'-C1'-N9	7.39	114.11	108.20
5	A	2539	C	O4'-C1'-N1	7.39	114.12	108.20
5	A	838	C	O4'-C1'-N1	7.39	114.11	108.20
5	A	2069	U	O4'-C1'-N1	7.39	114.11	108.20
5	A	2528	C	O4'-C1'-N1	7.39	114.11	108.20
6	B	50	A	O4'-C1'-N9	7.39	114.11	108.20
5	A	953	G	C5-C6-O6	-7.39	124.17	128.60
5	A	1245	G	C5-C6-O6	-7.39	124.17	128.60
5	A	2388	C	P-O5'-C5'	7.39	132.72	120.90
6	B	43	A	O4'-C1'-N9	7.39	114.11	108.20
5	A	66	C	O4'-C1'-N1	7.38	114.11	108.20
5	A	2249	G	O4'-C1'-N9	7.38	114.11	108.20
5	A	444	U	O4'-C1'-N1	7.38	114.11	108.20
5	A	976	U	C2-N1-C1'	7.38	126.56	117.70
6	B	84	G	O4'-C1'-N9	7.38	114.10	108.20
5	A	217	G	O4'-C1'-N9	7.38	114.10	108.20
5	A	2761	G	O4'-C1'-N9	7.38	114.10	108.20
5	A	1688	G	O4'-C1'-N9	7.38	114.10	108.20
5	A	2388	C	N3-C4-N4	7.38	123.16	118.00
6	B	42	G	C5-C6-O6	-7.38	124.17	128.60
5	A	1566	G	O4'-C1'-N9	7.38	114.10	108.20
5	A	2725	U	O4'-C1'-N1	7.38	114.10	108.20
5	A	729	G	O4'-C1'-N9	7.37	114.10	108.20
5	A	1409	C	O4'-C1'-N1	7.37	114.10	108.20
5	A	2149	G	C5-C6-O6	-7.37	124.18	128.60
5	A	2865	U	O4'-C1'-N1	7.37	114.10	108.20
5	A	2379	C	O4'-C1'-N1	7.37	114.10	108.20
5	A	1816	A	C4-C5-C6	7.37	120.69	117.00
5	A	2053	C	O4'-C1'-N1	7.37	114.10	108.20
5	A	635	C	O4'-C1'-N1	7.37	114.09	108.20
5	A	2896	U	O4'-C1'-N1	7.37	114.09	108.20
5	A	145	G	O4'-C1'-N9	7.36	114.09	108.20
5	A	2182	G	C5-C6-O6	-7.36	124.18	128.60
5	A	44	A	O4'-C1'-N9	7.36	114.09	108.20
5	A	103	U	O4'-C1'-N1	7.36	114.09	108.20
5	A	113	U	O4'-C1'-N1	7.36	114.09	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	379	C	O4'-C1'-N1	7.36	114.09	108.20
5	A	817	G	C5-C6-O6	-7.36	124.18	128.60
5	A	2024	U	O4'-C1'-N1	7.36	114.09	108.20
5	A	2605	G	C5-C6-O6	-7.36	124.18	128.60
5	A	2834	A	O4'-C1'-N9	7.36	114.09	108.20
5	A	1478	G	C5-C6-O6	-7.36	124.19	128.60
5	A	2301	U	O4'-C1'-N1	7.36	114.09	108.20
5	A	2633	U	O4'-C1'-N1	7.36	114.09	108.20
5	A	2254	A	C4-C5-C6	7.36	120.68	117.00
5	A	2502	U	O4'-C1'-N1	7.36	114.08	108.20
5	A	150	A	C5-C6-N6	-7.35	117.82	123.70
5	A	447	G	C5-C6-O6	-7.35	124.19	128.60
5	A	1015	G	O4'-C1'-N9	7.35	114.08	108.20
5	A	1219	C	C6-N1-C1'	-7.35	111.98	120.80
5	A	1615	A	O4'-C1'-N9	7.35	114.08	108.20
5	A	584	A	C5-C6-N1	-7.34	114.03	117.70
5	A	813	G	C5-C6-O6	-7.34	124.19	128.60
5	A	1435	U	O4'-C1'-N1	7.34	114.08	108.20
5	A	2004	G	O4'-C1'-N9	7.34	114.08	108.20
5	A	2561	G	O4'-C1'-N9	7.34	114.08	108.20
5	A	1723	A	O4'-C1'-N9	7.34	114.07	108.20
5	A	198	A	C5-C6-N6	-7.34	117.83	123.70
5	A	1077	G	C5-C6-O6	-7.34	124.20	128.60
5	A	789	C	O4'-C1'-N1	7.34	114.07	108.20
5	A	264	G	O4'-C1'-N9	7.33	114.07	108.20
5	A	1486	G	C5-C6-O6	-7.33	124.20	128.60
5	A	986	G	P-O5'-C5'	7.33	132.63	120.90
5	A	1553	A	O4'-C1'-N9	7.33	114.07	108.20
5	A	1939	G	O4'-C1'-N9	7.33	114.07	108.20
5	A	2672	G	C5-C6-O6	-7.33	124.20	128.60
6	B	61	U	O4'-C1'-N1	7.33	114.07	108.20
5	A	2477	A	O4'-C1'-N9	7.33	114.06	108.20
5	A	2524	G	C5-C6-O6	-7.33	124.20	128.60
5	A	653	A	O4'-C1'-N9	7.33	114.06	108.20
5	A	2343	A	O4'-C1'-N9	7.33	114.06	108.20
5	A	745	C	O4'-C1'-N1	7.33	114.06	108.20
5	A	1779	G	C5-C6-O6	-7.33	124.20	128.60
5	A	1362	G	C5-C6-O6	-7.33	124.20	128.60
5	A	451	C	N3-C4-N4	7.32	123.13	118.00
5	A	573	C	C6-N1-C2	-7.32	117.37	120.30
5	A	895	G	N1-C6-O6	7.32	124.29	119.90
5	A	1039	G	C5-C6-O6	-7.32	124.20	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2800	C	O4'-C1'-N1	7.32	114.06	108.20
6	B	89	C	O4'-C1'-N1	7.32	114.06	108.20
5	A	546	G	O4'-C1'-N9	7.32	114.06	108.20
5	A	909	G	C5-C6-O6	-7.32	124.21	128.60
5	A	2774	C	O4'-C1'-N1	7.32	114.05	108.20
5	A	1095	C	O4'-C1'-N1	7.32	114.05	108.20
5	A	1940	U	P-O3'-C3'	7.31	128.48	119.70
5	A	490	A	O4'-C1'-N9	7.31	114.05	108.20
5	A	653	A	C4-C5-C6	7.31	120.66	117.00
5	A	860	U	O4'-C1'-N1	7.31	114.05	108.20
5	A	1673	G	C5-C6-O6	-7.31	124.21	128.60
5	A	2709	C	O4'-C1'-N1	7.31	114.05	108.20
5	A	2732	C	C6-N1-C1'	-7.31	112.03	120.80
5	A	2780	G	C5-C6-O6	-7.31	124.21	128.60
5	A	136	C	O4'-C1'-N1	7.31	114.05	108.20
5	A	1225	G	C5-C6-O6	-7.31	124.21	128.60
5	A	2888	C	O4'-C1'-N1	7.31	114.05	108.20
5	A	1308	A	O4'-C1'-N9	7.31	114.05	108.20
5	A	1978	G	O4'-C1'-N9	7.31	114.05	108.20
5	A	223	G	O4'-C1'-N9	7.31	114.05	108.20
5	A	1463	C	N3-C4-N4	7.31	123.11	118.00
5	A	2906	U	O4'-C1'-N1	7.31	114.05	108.20
5	A	1083	G	C5-C6-O6	-7.31	124.22	128.60
5	A	1787	G	O4'-C1'-N9	7.31	114.05	108.20
5	A	204	C	O4'-C1'-N1	7.30	114.04	108.20
5	A	1170	C	O4'-C1'-N1	7.30	114.04	108.20
5	A	2222	C	O4'-C1'-N1	7.30	114.04	108.20
5	A	2887	A	C5-C6-N6	-7.30	117.86	123.70
5	A	1988	G	C5-C6-O6	-7.30	124.22	128.60
5	A	1109	G	C5-C6-O6	-7.30	124.22	128.60
5	A	1490	A	C5-C6-N1	-7.30	114.05	117.70
5	A	2312	C	O4'-C1'-N1	7.30	114.04	108.20
5	A	2756	G	C5-C6-O6	-7.30	124.22	128.60
5	A	2728	U	O4'-C1'-N1	7.30	114.04	108.20
5	A	833	C	P-O3'-C3'	-7.30	110.94	119.70
5	A	2640	C	O4'-C1'-N1	7.30	114.04	108.20
5	A	579	G	C5-C6-O6	-7.29	124.22	128.60
5	A	925	A	O4'-C1'-N9	7.29	114.03	108.20
5	A	1329	C	O4'-C1'-N1	7.29	114.03	108.20
5	A	1922	C	O4'-C1'-N1	7.29	114.03	108.20
5	A	2021	G	C5-C6-O6	-7.29	124.22	128.60
5	A	2049	A	O4'-C1'-N9	7.29	114.03	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2176	A	C4-C5-C6	7.29	120.65	117.00
5	A	271	C	O4'-C1'-N1	7.29	114.03	108.20
5	A	1296	G	O4'-C1'-N9	7.29	114.03	108.20
5	A	2045	U	O4'-C1'-N1	7.29	114.03	108.20
5	A	2707	C	P-O5'-C5'	7.29	132.57	120.90
5	A	215	G	C5-C6-O6	-7.29	124.23	128.60
5	A	2075	G	C5-C6-O6	-7.29	124.23	128.60
5	A	1226	U	O4'-C1'-N1	7.29	114.03	108.20
5	A	2606	A	C5-C6-N6	-7.29	117.87	123.70
5	A	496	A	C5-C6-N6	-7.29	117.87	123.70
5	A	2474	G	C5-C6-O6	-7.29	124.23	128.60
5	A	938	G	N1-C6-O6	7.28	124.27	119.90
5	A	425	C	O4'-C1'-N1	7.28	114.03	108.20
5	A	1800	C	N3-C4-N4	7.28	123.10	118.00
5	A	1875	G	O4'-C1'-N9	7.28	114.02	108.20
5	A	2660	G	C5-C6-O6	-7.28	124.23	128.60
5	A	2871	G	C5-C6-O6	-7.28	124.23	128.60
5	A	1857	G	N3-C2-N2	7.28	124.99	119.90
5	A	2669	G	C5-C6-O6	-7.28	124.23	128.60
5	A	2849	U	O4'-C1'-N1	7.27	114.02	108.20
5	A	597	G	C5-C6-O6	-7.27	124.24	128.60
5	A	1687	G	C5-C6-O6	-7.27	124.24	128.60
5	A	169	G	C5-C6-O6	-7.27	124.24	128.60
5	A	940	G	C5-C6-O6	-7.27	124.24	128.60
5	A	2649	C	N3-C4-N4	7.27	123.09	118.00
6	B	85	U	O4'-C1'-N1	7.27	114.02	108.20
5	A	1338	G	C5-C6-O6	-7.27	124.24	128.60
5	A	2873	G	P-O3'-C3'	7.27	128.42	119.70
5	A	2761	G	P-O5'-C5'	7.27	132.53	120.90
5	A	66	C	N3-C4-N4	7.26	123.08	118.00
5	A	96	G	C5-C6-O6	-7.26	124.24	128.60
5	A	895	G	O4'-C1'-N9	7.26	114.01	108.20
5	A	1836	G	O4'-C1'-N9	7.26	114.01	108.20
5	A	2918	G	C5-C6-O6	-7.26	124.24	128.60
5	A	424	G	C5-C6-O6	-7.26	124.24	128.60
5	A	438	A	C5-C6-N6	-7.26	117.89	123.70
5	A	1101	G	O4'-C1'-N9	7.26	114.01	108.20
6	B	65	G	C5-C6-O6	-7.26	124.24	128.60
5	A	1921	C	O4'-C1'-N1	7.26	114.01	108.20
5	A	245	G	C5-C6-O6	-7.26	124.25	128.60
5	A	331	C	O4'-C1'-N1	7.26	114.01	108.20
5	A	1172	A	O4'-C1'-N9	7.26	114.01	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1682	C	P-O5'-C5'	7.26	132.51	120.90
5	A	550	G	O4'-C1'-N9	7.26	114.01	108.20
5	A	2128	U	O4'-C1'-N1	7.26	114.01	108.20
5	A	2188	G	C5-C6-O6	-7.26	124.25	128.60
5	A	2856	G	C5-C6-O6	-7.25	124.25	128.60
5	A	43	G	C5-C6-O6	-7.25	124.25	128.60
5	A	2029	G	C5-C6-O6	-7.25	124.25	128.60
5	A	1619	A	C5-C6-N6	-7.25	117.90	123.70
5	A	369	A	O4'-C1'-N9	7.25	114.00	108.20
5	A	1283	U	O4'-C1'-N1	7.25	114.00	108.20
5	A	1848	A	C2'-C3'-O3'	7.25	125.45	109.50
5	A	859	C	O4'-C1'-N1	7.25	114.00	108.20
5	A	1654	A	O4'-C1'-N9	7.25	114.00	108.20
5	A	1587	U	O4'-C1'-N1	7.25	114.00	108.20
5	A	291	C	O4'-C1'-N1	7.24	114.00	108.20
5	A	600	A	C4-C5-C6	7.24	120.62	117.00
5	A	927	G	C5-C6-O6	-7.24	124.25	128.60
5	A	2632	G	C5-C6-O6	-7.24	124.25	128.60
5	A	1	G	C5-C6-O6	-7.24	124.26	128.60
5	A	215	G	O4'-C1'-N9	7.24	113.99	108.20
5	A	1153	G	C5-C6-O6	-7.24	124.26	128.60
5	A	2268	G	C5-C6-O6	-7.24	124.25	128.60
5	A	2302	A	C4-C5-C6	7.24	120.62	117.00
5	A	423	G	O4'-C1'-N9	7.24	113.99	108.20
6	B	99	A	C5-C6-N6	-7.24	117.91	123.70
5	A	531	C	O4'-C1'-N1	7.24	113.99	108.20
5	A	2761	G	C5-C6-O6	-7.24	124.26	128.60
5	A	137	G	C5-C6-O6	-7.24	124.26	128.60
5	A	998	G	O4'-C1'-N9	7.24	113.99	108.20
5	A	1292	G	O4'-C1'-N9	7.24	113.99	108.20
5	A	1622	C	O4'-C1'-N1	7.24	113.99	108.20
5	A	1634	U	O4'-C1'-N1	7.24	113.99	108.20
5	A	2196	U	O4'-C1'-N1	7.24	113.99	108.20
5	A	983	U	O4'-C1'-N1	7.23	113.99	108.20
5	A	2409	U	O4'-C1'-N1	7.23	113.99	108.20
5	A	20	C	O4'-C1'-N1	7.23	113.99	108.20
5	A	432	C	O4'-C1'-N1	7.23	113.99	108.20
5	A	1938	C	O4'-C1'-N1	7.23	113.99	108.20
5	A	2238	C	O4'-C1'-N1	7.23	113.99	108.20
5	A	595	G	C5-C6-O6	-7.23	124.26	128.60
5	A	25	U	O4'-C1'-N1	7.23	113.98	108.20
5	A	1300	G	C5-C6-O6	-7.23	124.26	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1657	C	P-O3'-C3'	7.23	128.37	119.70
5	A	2346	C	O4'-C1'-N1	7.23	113.98	108.20
5	A	87	U	O4'-C1'-N1	7.23	113.98	108.20
5	A	583	G	O4'-C1'-N9	7.22	113.98	108.20
5	A	1061	A	C5-C6-N1	-7.22	114.09	117.70
5	A	1492	G	P-O3'-C3'	7.22	128.37	119.70
5	A	2785	U	O4'-C1'-N1	7.22	113.98	108.20
5	A	639	C	O4'-C1'-N1	7.22	113.97	108.20
5	A	1080	G	C5-C6-O6	-7.22	124.27	128.60
5	A	1943	C	C6-N1-C1'	-7.22	112.14	120.80
5	A	2686	A	O4'-C1'-N9	7.22	113.97	108.20
5	A	1841	G	C5-C6-O6	-7.22	124.27	128.60
5	A	2400	G	O4'-C1'-N9	7.22	113.97	108.20
5	A	941	U	P-O5'-C5'	7.21	132.44	120.90
5	A	458	G	C5-C6-O6	-7.21	124.27	128.60
5	A	1310	C	O4'-C1'-N1	7.21	113.97	108.20
5	A	1737	U	O4'-C1'-N1	7.21	113.97	108.20
5	A	2050	G	O4'-C1'-N9	7.21	113.97	108.20
5	A	710	G	C5-C6-O6	-7.21	124.27	128.60
5	A	342	A	N1-C6-N6	7.21	122.92	118.60
5	A	2554	G	C5-C6-O6	-7.21	124.28	128.60
5	A	807	G	O4'-C1'-N9	7.21	113.97	108.20
5	A	1333	C	O4'-C1'-N1	7.21	113.97	108.20
5	A	2081	G	C5-C6-O6	-7.21	124.28	128.60
6	B	77	G	C5-C6-O6	-7.21	124.28	128.60
5	A	1358	G	C5-C6-O6	-7.21	124.28	128.60
5	A	2899	C	O4'-C1'-N1	7.21	113.96	108.20
5	A	528	G	C5-C6-O6	-7.20	124.28	128.60
5	A	1067	A	C4-C5-C6	7.20	120.60	117.00
5	A	121	G	O4'-C1'-N9	7.20	113.96	108.20
5	A	2867	U	O4'-C1'-N1	7.20	113.96	108.20
5	A	778	C	N3-C4-N4	7.20	123.04	118.00
5	A	1013	U	O4'-C1'-N1	7.20	113.96	108.20
5	A	1813	A	O4'-C1'-N9	7.20	113.96	108.20
5	A	569	C	O4'-C1'-N1	7.20	113.96	108.20
5	A	2047	A	C5-C6-N6	-7.20	117.94	123.70
5	A	1821	G	O4'-C1'-N9	7.20	113.96	108.20
5	A	2488	A	C5-C6-N6	-7.20	117.94	123.70
5	A	647	A	O4'-C1'-N9	7.19	113.96	108.20
5	A	1007	G	C5-C6-O6	-7.19	124.28	128.60
5	A	1052	C	O4'-C1'-N1	7.19	113.95	108.20
5	A	2026	A	O4'-C1'-N9	7.19	113.95	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	533	C	O4'-C1'-N1	7.19	113.95	108.20
5	A	549	A	C4-C5-C6	7.18	120.59	117.00
5	A	1408	G	C5-C6-O6	-7.18	124.29	128.60
5	A	317	G	C5-C6-O6	-7.18	124.29	128.60
5	A	849	A	C5-C6-N6	-7.18	117.95	123.70
5	A	2263	G	C5-C6-O6	-7.18	124.29	128.60
6	B	34	C	O4'-C1'-N1	7.18	113.95	108.20
5	A	949	U	O4'-C1'-N1	7.18	113.94	108.20
5	A	1675	A	C5-C6-N1	-7.18	114.11	117.70
5	A	1342	G	C5-C6-O6	-7.18	124.29	128.60
5	A	1348	G	O4'-C1'-N9	7.18	113.94	108.20
5	A	2432	C	O4'-C1'-N1	7.18	113.94	108.20
5	A	775	G	C5-C6-O6	-7.18	124.29	128.60
6	B	16	G	O4'-C1'-N9	7.18	113.94	108.20
5	A	2773	G	C5-C6-O6	-7.18	124.29	128.60
5	A	2825	C	O4'-C1'-N1	7.18	113.94	108.20
5	A	453	G	O4'-C1'-N9	7.17	113.94	108.20
5	A	599	G	C5-C6-O6	-7.17	124.30	128.60
5	A	870	A	O4'-C1'-N9	7.17	113.94	108.20
5	A	1419	G	O4'-C1'-N9	7.17	113.94	108.20
5	A	2836	G	C5-C6-O6	-7.17	124.30	128.60
5	A	857	U	O4'-C1'-N1	7.17	113.94	108.20
5	A	93	C	O4'-C1'-N1	7.17	113.94	108.20
5	A	2676	U	O4'-C1'-N1	7.17	113.94	108.20
5	A	1314	A	O4'-C1'-N9	7.17	113.93	108.20
6	B	59	U	O4'-C1'-N1	7.17	113.94	108.20
5	A	1116	A	O4'-C1'-N9	7.17	113.93	108.20
5	A	611	U	O4'-C1'-N1	7.17	113.93	108.20
5	A	2720	C	N3-C4-N4	7.17	123.02	118.00
5	A	436	A	O4'-C1'-N9	7.16	113.93	108.20
5	A	807	G	C5-C6-O6	-7.16	124.30	128.60
5	A	2650	G	C5-C6-O6	-7.16	124.30	128.60
5	A	1026	A	O4'-C1'-N9	7.16	113.93	108.20
5	A	1493	C	O4'-C1'-N1	7.16	113.93	108.20
5	A	405	U	O4'-C1'-N1	7.16	113.93	108.20
5	A	2443	G	C5-C6-O6	-7.16	124.31	128.60
5	A	260	A	C5-C6-N6	-7.16	117.97	123.70
5	A	2889	A	O4'-C1'-N9	7.16	113.93	108.20
5	A	1437	C	N3-C4-N4	7.16	123.01	118.00
5	A	2884	G	O4'-C1'-N9	7.16	113.92	108.20
6	B	52	G	C5-C6-O6	-7.16	124.31	128.60
5	A	1327	U	O4'-C1'-N1	7.15	113.92	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	189	G	C5-C6-O6	-7.15	124.31	128.60
5	A	585	G	C5-C6-O6	-7.15	124.31	128.60
5	A	1051	C	N3-C4-N4	7.15	123.00	118.00
5	A	1651	G	C5-C6-O6	-7.15	124.31	128.60
5	A	2581	U	O4'-C1'-N1	7.15	113.92	108.20
5	A	2746	G	O4'-C1'-N9	7.15	113.92	108.20
5	A	2833	U	C5'-C4'-O4'	7.15	117.68	109.10
5	A	1853	G	C5-C6-O6	-7.14	124.31	128.60
5	A	2460	U	O4'-C1'-N1	7.14	113.92	108.20
5	A	421	A	C4-C5-C6	7.14	120.57	117.00
5	A	1690	G	C5-C6-O6	-7.14	124.31	128.60
5	A	16	G	O4'-C1'-N9	7.14	113.91	108.20
5	A	1191	C	O4'-C1'-N1	7.14	113.91	108.20
5	A	1834	C	O4'-C1'-N1	7.14	113.91	108.20
5	A	106	G	C5-C6-O6	-7.14	124.32	128.60
5	A	698	C	O4'-C1'-N1	7.14	113.91	108.20
5	A	2650	G	O4'-C1'-N9	7.14	113.91	108.20
5	A	340	U	O4'-C1'-N1	7.13	113.91	108.20
5	A	746	A	C4-C5-C6	7.13	120.57	117.00
5	A	1309	G	C5-C6-O6	-7.13	124.32	128.60
5	A	1848	A	P-O3'-C3'	7.13	128.26	119.70
5	A	2516	G	C5-C6-O6	-7.13	124.32	128.60
6	B	19	G	O4'-C1'-N9	7.13	113.91	108.20
5	A	715	A	O4'-C1'-N9	7.13	113.90	108.20
5	A	1554	U	P-O5'-C5'	7.13	132.31	120.90
5	A	2778	A	C4-C5-C6	7.13	120.56	117.00
5	A	1593	A	C4-C5-C6	7.13	120.56	117.00
5	A	14	A	O4'-C1'-N9	7.13	113.90	108.20
5	A	2244	G	O4'-C1'-N9	7.13	113.90	108.20
5	A	146	U	O4'-C1'-N1	7.12	113.90	108.20
5	A	289	C	O4'-C1'-N1	7.12	113.90	108.20
5	A	420	U	O4'-C1'-N1	7.12	113.90	108.20
5	A	450	U	P-O3'-C3'	7.12	128.25	119.70
5	A	2771	G	O4'-C1'-N9	7.12	113.90	108.20
5	A	11	G	C5-C6-O6	-7.12	124.33	128.60
5	A	775	G	O4'-C1'-N9	7.12	113.89	108.20
5	A	984	G	C5-C6-O6	-7.12	124.33	128.60
5	A	2116	G	O4'-C1'-N9	7.12	113.89	108.20
5	A	294	G	C5-C6-O6	-7.11	124.33	128.60
5	A	1366	C	O4'-C1'-N1	7.11	113.89	108.20
5	A	2052	A	O4'-C1'-N9	7.11	113.89	108.20
5	A	2690	G	O4'-C1'-N9	7.11	113.89	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2710	C	C2-N1-C1'	7.11	126.62	118.80
5	A	189	G	O4'-C1'-N9	7.11	113.89	108.20
5	A	1373	U	O4'-C1'-N1	7.11	113.89	108.20
5	A	105	C	O4'-C1'-N1	7.11	113.89	108.20
5	A	262	G	O4'-C1'-N9	7.11	113.89	108.20
5	A	1186	C	O4'-C1'-N1	7.11	113.89	108.20
5	A	2207	C	C2-N1-C1'	7.11	126.62	118.80
6	B	97	A	C4-C5-C6	7.11	120.55	117.00
5	A	452	C	O4'-C1'-N1	7.11	113.89	108.20
5	A	848	G	C5-C6-O6	-7.11	124.34	128.60
5	A	2368	G	C5-C6-O6	-7.11	124.34	128.60
5	A	948	A	C4-C5-C6	7.10	120.55	117.00
5	A	1420	G	C5-C6-O6	-7.10	124.34	128.60
5	A	2627	A	O4'-C1'-N9	7.10	113.88	108.20
5	A	867	A	C4-C5-C6	7.10	120.55	117.00
5	A	920	G	O4'-C1'-N9	7.10	113.88	108.20
5	A	1769	G	C5-C6-O6	-7.10	124.34	128.60
5	A	2660	G	O4'-C1'-N9	7.10	113.88	108.20
5	A	222	A	O4'-C1'-N9	7.10	113.88	108.20
5	A	354	A	O4'-C1'-N9	7.10	113.88	108.20
5	A	1277	A	O4'-C1'-N9	7.10	113.88	108.20
5	A	1449	C	C5'-C4'-C3'	-7.10	104.64	116.00
5	A	1588	A	P-O3'-C3'	7.10	128.22	119.70
5	A	27	G	C5-C6-O6	-7.09	124.34	128.60
5	A	263	G	C5-C6-O6	-7.09	124.34	128.60
5	A	1925	A	C5-C6-N6	-7.09	118.02	123.70
5	A	2264	G	C5-C6-O6	-7.09	124.34	128.60
6	B	52	G	O4'-C1'-N9	7.09	113.88	108.20
5	A	153	C	O4'-C1'-N1	7.09	113.87	108.20
6	B	33	U	O4'-C1'-N1	7.09	113.87	108.20
5	A	1451	U	O4'-C1'-N1	7.09	113.87	108.20
5	A	1491	A	C4-C5-C6	7.09	120.55	117.00
6	B	1	U	O4'-C1'-N1	7.09	113.87	108.20
5	A	111	U	O4'-C1'-N1	7.09	113.87	108.20
5	A	214	G	O4'-C1'-N9	7.09	113.87	108.20
5	A	475	A	C5-C6-N6	-7.09	118.03	123.70
5	A	787	C	O4'-C1'-N1	7.09	113.87	108.20
5	A	667	A	C4-C5-C6	7.09	120.54	117.00
5	A	839	G	C5-C6-O6	-7.09	124.35	128.60
5	A	858	U	O4'-C1'-N1	7.09	113.87	108.20
5	A	1386	G	C5-C6-O6	-7.09	124.35	128.60
5	A	351	G	O4'-C1'-N9	7.08	113.87	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1508	C	O4'-C1'-N1	7.08	113.87	108.20
5	A	854	U	O4'-C1'-N1	7.08	113.87	108.20
5	A	2497	A	O4'-C1'-N9	7.08	113.87	108.20
5	A	527	A	C5-C6-N1	-7.08	114.16	117.70
5	A	758	A	C4-C5-C6	7.08	120.54	117.00
5	A	1979	G	C5-C6-O6	-7.08	124.35	128.60
5	A	2202	A	C4-C5-C6	7.08	120.54	117.00
5	A	2434	G	O4'-C1'-N9	7.08	113.87	108.20
6	B	69	C	O4'-C1'-N1	7.08	113.86	108.20
5	A	845	G	C5-C6-O6	-7.08	124.35	128.60
5	A	442	C	O4'-C1'-N1	7.08	113.86	108.20
5	A	493	G	O4'-C1'-N9	7.08	113.86	108.20
5	A	914	C	O4'-C1'-N1	7.08	113.86	108.20
5	A	1482	G	C5-C6-O6	-7.08	124.35	128.60
5	A	2627	A	C4-C5-C6	7.08	120.54	117.00
5	A	2596	G	C5-C6-O6	-7.07	124.36	128.60
5	A	378	C	P-O5'-C5'	7.07	132.22	120.90
5	A	541	G	C5-C6-O6	-7.07	124.36	128.60
5	A	966	U	O4'-C1'-N1	7.07	113.86	108.20
5	A	2888	C	N3-C4-N4	7.07	122.95	118.00
5	A	1161	A	O4'-C1'-N9	7.07	113.86	108.20
5	A	100	U	P-O3'-C3'	7.07	128.18	119.70
5	A	322	A	C4-C5-C6	7.07	120.53	117.00
5	A	1704	U	O4'-C1'-N1	7.07	113.85	108.20
5	A	2429	G	C5-C6-O6	-7.07	124.36	128.60
5	A	903	G	O4'-C1'-N9	7.07	113.85	108.20
5	A	2763	C	O4'-C1'-N1	7.07	113.85	108.20
5	A	1231	G	C5-C6-O6	-7.06	124.36	128.60
5	A	1325	A	C4-C5-C6	7.06	120.53	117.00
5	A	351	G	N3-C2-N2	7.06	124.84	119.90
5	A	1550	C	N3-C4-N4	7.06	122.94	118.00
6	B	100	G	O4'-C1'-N9	7.06	113.85	108.20
5	A	992	G	C5-C6-O6	-7.06	124.36	128.60
5	A	1597	C	O4'-C1'-N1	7.06	113.85	108.20
5	A	1804	U	O4'-C1'-N1	7.06	113.85	108.20
5	A	2224	U	O4'-C1'-N1	7.06	113.85	108.20
5	A	847	A	O4'-C1'-N9	7.06	113.85	108.20
5	A	225	A	C4-C5-C6	7.06	120.53	117.00
5	A	748	G	C5-C6-O6	-7.06	124.37	128.60
5	A	1673	G	O4'-C1'-N9	7.06	113.84	108.20
5	A	2397	C	O4'-C1'-N1	7.06	113.84	108.20
6	B	21	G	O4'-C1'-N9	7.05	113.84	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	595	G	O4'-C1'-N9	7.05	113.84	108.20
5	A	1184	G	C5-C6-O6	-7.05	124.37	128.60
5	A	1662	C	N3-C4-N4	7.05	122.94	118.00
5	A	116	G	O4'-C1'-N9	7.05	113.84	108.20
5	A	2545	G	O4'-C1'-N9	7.05	113.84	108.20
5	A	2886	C	N3-C4-N4	7.05	122.94	118.00
5	A	2924	A	C4-C5-C6	7.05	120.53	117.00
5	A	2221	C	O4'-C1'-N1	7.05	113.84	108.20
5	A	1996	C	O4'-C1'-N1	7.05	113.84	108.20
5	A	419	G	P-O3'-C3'	7.05	128.16	119.70
5	A	1135	G	O4'-C1'-N9	7.05	113.84	108.20
5	A	1760	A	O4'-C1'-N9	7.05	113.84	108.20
5	A	2006	A	C4-C5-C6	7.05	120.52	117.00
5	A	2245	G	C5-C6-O6	-7.05	124.37	128.60
6	B	45	C	O4'-C1'-N1	7.04	113.84	108.20
5	A	1630	G	O4'-C1'-N9	7.04	113.84	108.20
5	A	2733	C	P-O5'-C5'	7.04	132.17	120.90
5	A	1960	U	O4'-C1'-N1	7.04	113.83	108.20
5	A	2206	C	O4'-C1'-N1	7.04	113.83	108.20
5	A	2370	G	C5-C6-O6	-7.04	124.38	128.60
5	A	716	G	C4-N9-C1'	7.04	135.65	126.50
5	A	1261	C	O4'-C1'-N1	7.04	113.83	108.20
5	A	1316	A	O4'-C1'-N9	7.04	113.83	108.20
5	A	1831	A	C4-C5-C6	7.04	120.52	117.00
5	A	624	C	O4'-C1'-N1	7.04	113.83	108.20
5	A	2025	C	O4'-C1'-N1	7.04	113.83	108.20
5	A	2859	G	C4-N9-C1'	7.04	135.65	126.50
5	A	607	G	C5-C6-O6	-7.03	124.38	128.60
5	A	771	U	O4'-C1'-N1	7.03	113.83	108.20
5	A	1761	G	C5-C6-O6	-7.03	124.38	128.60
6	B	21	G	C5-C6-O6	-7.03	124.38	128.60
5	A	73	A	O4'-C1'-N9	7.03	113.83	108.20
5	A	506	U	O4'-C1'-N1	7.03	113.83	108.20
5	A	2736	G	C5-C6-O6	-7.03	124.38	128.60
5	A	1469	G	O4'-C1'-N9	7.03	113.83	108.20
5	A	45	G	P-O5'-C5'	7.03	132.15	120.90
5	A	23	G	C5-C6-O6	-7.03	124.38	128.60
5	A	1134	A	C4-C5-C6	7.03	120.51	117.00
5	A	1216	C	O4'-C1'-N1	7.03	113.82	108.20
5	A	1679	A	C4-C5-C6	7.03	120.51	117.00
5	A	2372	U	O4'-C1'-N1	7.03	113.82	108.20
5	A	2604	C	O4'-C1'-N1	7.03	113.82	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	981	C	O4'-C1'-N1	7.02	113.82	108.20
5	A	1597	C	N3-C4-N4	7.02	122.92	118.00
5	A	2381	A	C4-C5-C6	7.02	120.51	117.00
5	A	865	G	C5-C6-O6	-7.02	124.39	128.60
5	A	1238	G	O4'-C1'-N9	7.02	113.81	108.20
5	A	1018	G	C5-C6-O6	-7.02	124.39	128.60
5	A	2126	G	C5-C6-O6	-7.02	124.39	128.60
5	A	2666	U	O4'-C1'-N1	7.02	113.81	108.20
5	A	982	U	O4'-C1'-N1	7.01	113.81	108.20
5	A	2662	A	O4'-C1'-N9	7.01	113.81	108.20
6	B	5	G	O4'-C1'-N9	7.01	113.81	108.20
6	B	48	G	O4'-C1'-N9	7.01	113.81	108.20
5	A	245	G	O4'-C1'-N9	7.01	113.81	108.20
5	A	2328	G	C5-C6-O6	-7.01	124.39	128.60
5	A	2337	G	O4'-C1'-N9	7.01	113.81	108.20
5	A	2668	A	O4'-C1'-N9	7.01	113.81	108.20
6	B	13	A	O4'-C1'-N9	7.01	113.81	108.20
6	B	49	G	O4'-C1'-N9	7.01	113.81	108.20
6	B	66	C	O4'-C1'-N1	7.01	113.81	108.20
5	A	1230	A	C4-C5-C6	7.01	120.50	117.00
5	A	1345	U	O4'-C1'-N1	7.01	113.81	108.20
5	A	1598	C	O4'-C1'-N1	7.01	113.81	108.20
5	A	2052	A	C5-C6-N6	-7.01	118.09	123.70
5	A	2561	G	C5-C6-O6	-7.01	124.39	128.60
5	A	90	A	P-O3'-C3'	7.01	128.11	119.70
5	A	1568	G	C5-C6-O6	-7.01	124.39	128.60
5	A	2251	G	C5-C6-O6	-7.01	124.39	128.60
5	A	243	G	C5-C6-O6	-7.01	124.40	128.60
5	A	1666	U	O4'-C1'-N1	7.01	113.81	108.20
5	A	1800	C	O4'-C1'-N1	7.01	113.81	108.20
5	A	2338	A	O4'-C1'-N9	7.01	113.81	108.20
5	A	2435	C	O4'-C1'-N1	7.01	113.81	108.20
5	A	257	G	P-O5'-C5'	7.00	132.10	120.90
5	A	1658	G	O4'-C1'-N9	7.00	113.80	108.20
5	A	1746	A	C5-C6-N6	-7.00	118.10	123.70
5	A	1770	C	O4'-C1'-N1	7.00	113.80	108.20
5	A	2318	G	O4'-C1'-N9	7.00	113.80	108.20
5	A	2413	G	O4'-C1'-N9	7.00	113.80	108.20
5	A	2831	A	O4'-C1'-N9	7.00	113.80	108.20
5	A	2916	A	O4'-C1'-N9	7.00	113.80	108.20
5	A	9	U	P-O3'-C3'	7.00	128.10	119.70
5	A	1406	A	P-O3'-C3'	7.00	128.10	119.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1924	C	N3-C4-N4	7.00	122.90	118.00
5	A	2360	G	O4'-C1'-N9	7.00	113.80	108.20
5	A	47	C	N3-C4-N4	7.00	122.90	118.00
5	A	697	G	C5-C6-O6	-7.00	124.40	128.60
5	A	706	C	N3-C4-N4	7.00	122.90	118.00
5	A	1247	G	O4'-C1'-N9	7.00	113.80	108.20
5	A	299	U	O4'-C1'-N1	7.00	113.80	108.20
5	A	1378	G	O4'-C1'-N9	7.00	113.80	108.20
5	A	2764	G	C5-C6-O6	-7.00	124.40	128.60
5	A	1285	G	O4'-C1'-N9	6.99	113.80	108.20
5	A	1530	G	C5-C6-O6	-6.99	124.40	128.60
5	A	1606	A	O4'-C1'-N9	6.99	113.80	108.20
5	A	1731	C	O4'-C1'-N1	6.99	113.80	108.20
5	A	892	U	O4'-C1'-N1	6.99	113.79	108.20
5	A	929	G	C5-C6-O6	-6.99	124.41	128.60
5	A	1436	U	O4'-C1'-N1	6.99	113.79	108.20
5	A	1599	U	O4'-C1'-N1	6.99	113.79	108.20
5	A	2027	A	P-O5'-C5'	6.99	132.08	120.90
5	A	90	A	O4'-C1'-N9	6.99	113.79	108.20
5	A	1032	C	P-O5'-C5'	6.99	132.08	120.90
5	A	1532	A	C5-C6-N6	-6.99	118.11	123.70
5	A	259	A	C4-C5-C6	6.99	120.49	117.00
5	A	1786	U	O4'-C1'-N1	6.99	113.79	108.20
5	A	2538	G	O4'-C1'-N9	6.99	113.79	108.20
6	B	119	G	C5-C6-O6	-6.99	124.41	128.60
5	A	677	A	P-O3'-C3'	6.98	128.08	119.70
5	A	2566	U	O4'-C1'-N1	6.98	113.79	108.20
5	A	264	G	C5-C6-O6	-6.98	124.41	128.60
5	A	1271	U	O4'-C1'-N1	6.98	113.79	108.20
5	A	1413	G	C5-C6-O6	-6.98	124.41	128.60
5	A	1588	A	C5-C6-N1	-6.98	114.21	117.70
5	A	2001	G	O4'-C1'-N9	6.98	113.79	108.20
5	A	2192	U	P-O3'-C3'	6.98	128.08	119.70
5	A	1590	C	C2-N1-C1'	6.98	126.48	118.80
5	A	2853	C	O4'-C1'-N1	6.98	113.78	108.20
6	B	94	G	O4'-C1'-N9	6.98	113.78	108.20
5	A	143	G	C5-C6-O6	-6.97	124.42	128.60
5	A	9	U	O4'-C1'-N1	6.97	113.78	108.20
5	A	1519	C	O4'-C1'-N1	6.97	113.78	108.20
5	A	1803	C	O4'-C1'-N1	6.97	113.78	108.20
5	A	1850	A	C5-C6-N1	-6.97	114.21	117.70
5	A	2345	U	O4'-C1'-N1	6.97	113.78	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	757	C	O4'-C1'-N1	6.97	113.78	108.20
5	A	2830	A	C4-C5-C6	6.97	120.49	117.00
5	A	140	A	C4-C5-C6	6.97	120.48	117.00
5	A	214	G	C5-C6-O6	-6.97	124.42	128.60
5	A	230	A	C5-C6-N6	-6.97	118.12	123.70
5	A	471	G	O4'-C1'-N9	6.97	113.78	108.20
5	A	686	C	O4'-C1'-N1	6.97	113.78	108.20
5	A	2619	A	C4-C5-C6	6.97	120.48	117.00
5	A	1656	C	O4'-C1'-N1	6.97	113.78	108.20
5	A	1122	C	O4'-C1'-N1	6.97	113.77	108.20
5	A	1324	G	C5-C6-O6	-6.97	124.42	128.60
5	A	2330	A	O4'-C1'-N9	6.96	113.77	108.20
5	A	2498	A	O4'-C1'-N9	6.96	113.77	108.20
5	A	157	U	O4'-C1'-N1	6.96	113.77	108.20
5	A	205	U	O4'-C1'-N1	6.96	113.77	108.20
5	A	909	G	O4'-C1'-N9	6.96	113.77	108.20
5	A	1037	C	O4'-C1'-N1	6.96	113.77	108.20
5	A	1343	C	N3-C4-N4	6.96	122.87	118.00
5	A	1353	C	N3-C4-C5	-6.96	119.12	121.90
5	A	1627	A	P-O3'-C3'	6.96	128.05	119.70
5	A	2194	G	C5-C6-O6	-6.96	124.42	128.60
5	A	2457	G	C5-C6-O6	-6.96	124.42	128.60
5	A	262	G	C5-C6-O6	-6.96	124.42	128.60
5	A	2445	C	N3-C4-N4	6.96	122.87	118.00
5	A	1572	G	O4'-C1'-N9	6.96	113.77	108.20
5	A	206	A	C4-C5-C6	6.96	120.48	117.00
5	A	1107	U	O4'-C1'-N1	6.96	113.77	108.20
5	A	1576	G	N1-C6-O6	6.96	124.07	119.90
5	A	1983	G	C5-C6-O6	-6.96	124.43	128.60
5	A	2288	G	O4'-C1'-N9	6.96	113.77	108.20
5	A	679	A	C4-C5-C6	6.96	120.48	117.00
5	A	1548	U	O4'-C1'-N1	6.96	113.76	108.20
5	A	1695	A	O4'-C1'-N9	6.96	113.76	108.20
5	A	1533	A	C5-C6-N6	-6.95	118.14	123.70
5	A	1591	G	C5-C6-O6	-6.95	124.43	128.60
5	A	2044	A	C5-C6-N6	-6.95	118.14	123.70
5	A	86	C	O4'-C1'-N1	6.95	113.76	108.20
5	A	1048	G	O4'-C1'-N9	6.95	113.76	108.20
5	A	1740	G	C5-C6-O6	-6.95	124.43	128.60
5	A	42	G	C5-C6-O6	-6.95	124.43	128.60
5	A	1424	A	O4'-C1'-N9	6.95	113.76	108.20
5	A	2733	C	O4'-C1'-N1	6.95	113.76	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	880	C	N3-C4-N4	6.95	122.86	118.00
5	A	744	C	N3-C4-N4	6.95	122.86	118.00
5	A	1092	A	O4'-C1'-N9	6.95	113.76	108.20
5	A	233	G	C5-C6-O6	-6.94	124.43	128.60
5	A	766	C	N3-C4-N4	6.94	122.86	118.00
5	A	1307	U	O4'-C1'-N1	6.94	113.75	108.20
5	A	2534	G	C5-C6-O6	-6.94	124.43	128.60
5	A	516	G	C5-C6-O6	-6.94	124.43	128.60
5	A	957	A	O4'-C1'-N9	6.94	113.75	108.20
5	A	1137	G	C5-C6-O6	-6.94	124.44	128.60
5	A	194	A	O4'-C1'-N9	6.94	113.75	108.20
5	A	284	C	O4'-C1'-N1	6.94	113.75	108.20
5	A	951	C	O4'-C1'-N1	6.94	113.75	108.20
5	A	1502	G	C5-C6-O6	-6.94	124.44	128.60
5	A	1853	G	O4'-C1'-N9	6.94	113.75	108.20
5	A	1939	G	C5-C6-O6	-6.94	124.44	128.60
5	A	1840	G	O4'-C1'-N9	6.94	113.75	108.20
5	A	2442	G	O4'-C1'-N9	6.94	113.75	108.20
5	A	2607	G	O4'-C1'-N9	6.94	113.75	108.20
5	A	119	U	O4'-C1'-N1	6.94	113.75	108.20
5	A	161	A	C4-C5-C6	6.93	120.47	117.00
5	A	2624	G	O4'-C1'-N9	6.93	113.75	108.20
5	A	269	G	O4'-C1'-N9	6.93	113.75	108.20
5	A	787	C	N3-C4-N4	6.93	122.85	118.00
5	A	1022	G	C5-C6-O6	-6.93	124.44	128.60
5	A	1102	G	C5-C6-O6	-6.93	124.44	128.60
5	A	1369	C	C6-N1-C2	-6.93	117.53	120.30
5	A	1516	A	O4'-C1'-N9	6.93	113.75	108.20
5	A	2792	G	C5-C6-O6	-6.93	124.44	128.60
5	A	1250	G	C5-C6-O6	-6.93	124.44	128.60
5	A	2697	G	C5-C6-O6	-6.93	124.44	128.60
5	A	193	A	C4-C5-C6	6.93	120.47	117.00
5	A	291	C	N3-C4-C5	-6.93	119.13	121.90
5	A	427	G	C5-C6-O6	-6.93	124.44	128.60
5	A	947	A	C4-C5-C6	6.93	120.47	117.00
5	A	1218	U	O4'-C1'-N1	6.93	113.74	108.20
5	A	1287	A	O4'-C1'-N9	6.93	113.74	108.20
5	A	1397	G	O4'-C1'-N9	6.93	113.74	108.20
5	A	1015	G	C5-C6-O6	-6.93	124.44	128.60
5	A	412	A	O4'-C1'-N9	6.93	113.74	108.20
5	A	1789	A	C4-C5-C6	6.93	120.46	117.00
5	A	2609	U	O4'-C1'-N1	6.93	113.74	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1376	G	C5-C6-O6	-6.92	124.44	128.60
5	A	1157	A	C5-C6-N6	-6.92	118.16	123.70
5	A	270	C	O4'-C1'-N1	6.92	113.74	108.20
5	A	1757	G	C5-C6-O6	-6.92	124.45	128.60
5	A	2175	C	O4'-C1'-N1	6.92	113.74	108.20
5	A	2347	G	C5-C6-O6	-6.92	124.45	128.60
5	A	2504	C	O4'-C1'-N1	6.92	113.74	108.20
5	A	2654	G	O4'-C1'-N9	6.92	113.74	108.20
5	A	910	A	C5-C6-N6	-6.92	118.16	123.70
5	A	1440	G	C5-C6-O6	-6.92	124.45	128.60
5	A	1860	G	O4'-C1'-N9	6.92	113.74	108.20
5	A	2737	G	C5-C6-O6	-6.92	124.45	128.60
5	A	297	G	C5-C6-O6	-6.92	124.45	128.60
5	A	713	G	C5-C6-O6	-6.92	124.45	128.60
5	A	1522	U	O4'-C1'-N1	6.92	113.73	108.20
5	A	1567	U	O4'-C1'-N1	6.92	113.73	108.20
6	B	19	G	C5-C6-O6	-6.92	124.45	128.60
5	A	694	G	O4'-C1'-N9	6.92	113.73	108.20
6	B	10	G	C5-C6-O6	-6.92	124.45	128.60
5	A	429	A	O4'-C1'-N9	6.92	113.73	108.20
5	A	586	C	N3-C4-N4	6.92	122.84	118.00
5	A	130	A	O4'-C1'-N9	6.91	113.73	108.20
5	A	168	A	C4-C5-C6	6.91	120.46	117.00
5	A	250	G	C5-C6-O6	-6.91	124.45	128.60
5	A	684	G	C5-C6-O6	-6.91	124.45	128.60
5	A	1026	A	C4-C5-C6	6.91	120.46	117.00
5	A	1753	C	P-O5'-C5'	6.91	131.96	120.90
5	A	682	G	C5-C6-O6	-6.91	124.45	128.60
5	A	496	A	C4-C5-C6	6.91	120.46	117.00
5	A	552	G	C5-C6-O6	-6.91	124.45	128.60
5	A	1578	G	C5-C6-O6	-6.91	124.45	128.60
5	A	1792	G	C5-C6-O6	-6.91	124.45	128.60
5	A	2636	G	O4'-C1'-N9	6.91	113.73	108.20
5	A	376	A	C2'-C3'-O3'	6.91	124.75	113.70
5	A	1090	U	O4'-C1'-N1	6.91	113.73	108.20
5	A	1177	G	C5-C6-O6	-6.91	124.45	128.60
5	A	1746	A	C4-C5-C6	6.91	120.45	117.00
5	A	2614	U	C2-N1-C1'	6.91	125.99	117.70
5	A	1942	A	O4'-C1'-N9	6.91	113.73	108.20
5	A	140	A	O4'-C1'-N9	6.91	113.72	108.20
5	A	2707	C	N3-C4-N4	6.91	122.83	118.00
5	A	2130	G	C5-C6-O6	-6.90	124.46	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2	G	C5-C6-O6	-6.90	124.46	128.60
5	A	576	G	C5-C6-O6	-6.90	124.46	128.60
5	A	1093	G	C5-C6-O6	-6.90	124.46	128.60
5	A	2624	G	C5-C6-O6	-6.90	124.46	128.60
5	A	2760	G	C5-C6-O6	-6.90	124.46	128.60
5	A	1601	A	C4-C5-C6	6.90	120.45	117.00
5	A	2090	G	C5-C6-O6	-6.90	124.46	128.60
5	A	2122	G	C5-C6-O6	-6.90	124.46	128.60
5	A	1243	A	O4'-C1'-N9	6.90	113.72	108.20
5	A	2557	U	O4'-C1'-N1	6.90	113.72	108.20
5	A	280	G	O4'-C1'-N9	6.90	113.72	108.20
5	A	1280	G	N3-C2-N2	6.90	124.73	119.90
5	A	1306	G	C5-C6-O6	-6.90	124.46	128.60
5	A	1735	A	C4-C5-C6	6.90	120.45	117.00
5	A	2376	C	O4'-C1'-N1	6.90	113.72	108.20
5	A	1275	G	C5-C6-O6	-6.90	124.46	128.60
5	A	1745	A	O4'-C1'-N9	6.90	113.72	108.20
5	A	412	A	C4-C5-C6	6.89	120.45	117.00
5	A	1103	A	C4-C5-C6	6.89	120.45	117.00
5	A	2560	A	C4-C5-C6	6.89	120.45	117.00
5	A	432	C	N3-C4-N4	6.89	122.82	118.00
5	A	525	A	O4'-C1'-N9	6.89	113.71	108.20
5	A	1938	C	N3-C4-N4	6.89	122.83	118.00
5	A	2860	A	C5-C6-N6	-6.89	118.19	123.70
5	A	446	G	C5-C6-O6	-6.89	124.47	128.60
5	A	1243	A	C5-C6-N1	-6.89	114.26	117.70
5	A	111	U	P-O3'-C3'	6.89	127.96	119.70
5	A	619	A	C5-C6-N6	-6.89	118.19	123.70
5	A	1329	C	N3-C4-N4	6.89	122.82	118.00
5	A	1566	G	C5-C6-O6	-6.89	124.47	128.60
5	A	1724	A	C4-C5-C6	6.89	120.44	117.00
5	A	2036	U	O4'-C1'-N1	6.89	113.71	108.20
5	A	2134	A	C5-C6-N6	-6.89	118.19	123.70
5	A	2695	C	P-O5'-C5'	6.89	131.92	120.90
5	A	1788	A	C4-C5-C6	6.88	120.44	117.00
5	A	2610	G	C5-C6-O6	-6.88	124.47	128.60
5	A	965	A	N1-C6-N6	6.88	122.73	118.60
5	A	997	C	N3-C4-N4	6.88	122.82	118.00
5	A	1419	G	N1-C6-O6	6.88	124.03	119.90
6	B	35	C	O4'-C1'-N1	6.88	113.70	108.20
5	A	737	C	N3-C4-N4	6.88	122.81	118.00
5	A	842	C	N3-C4-N4	6.88	122.81	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2129	G	C5-C6-O6	-6.88	124.47	128.60
5	A	2607	G	C5-C6-O6	-6.88	124.47	128.60
5	A	292	U	O4'-C1'-N1	6.88	113.70	108.20
5	A	159	U	O4'-C1'-N1	6.87	113.70	108.20
5	A	1144	A	O4'-C1'-N9	6.87	113.70	108.20
5	A	2053	C	N3-C4-N4	6.87	122.81	118.00
5	A	1590	C	C6-N1-C1'	-6.87	112.56	120.80
5	A	287	G	C5-C6-O6	-6.87	124.48	128.60
5	A	648	G	C5-C6-O6	-6.87	124.48	128.60
5	A	276	C	O4'-C1'-N1	6.87	113.69	108.20
5	A	1846	G	O4'-C1'-N9	6.87	113.69	108.20
5	A	2248	G	O4'-C1'-N9	6.87	113.69	108.20
5	A	2658	A	O4'-C1'-N9	6.87	113.69	108.20
5	A	617	G	C5-C6-O6	-6.86	124.48	128.60
5	A	1360	A	C4-C5-C6	6.86	120.43	117.00
5	A	1545	C	O4'-C1'-N1	6.86	113.69	108.20
5	A	1923	C	C6-N1-C2	-6.86	117.56	120.30
5	A	2636	G	C5-C6-O6	-6.86	124.48	128.60
5	A	881	U	O4'-C1'-N1	6.86	113.69	108.20
5	A	1164	C	O4'-C1'-N1	6.86	113.69	108.20
5	A	2842	U	O4'-C1'-N1	6.86	113.69	108.20
5	A	149	U	O4'-C1'-N1	6.86	113.69	108.20
5	A	2266	G	C5-C6-O6	-6.86	124.48	128.60
5	A	2856	G	O4'-C1'-N9	6.86	113.69	108.20
5	A	1209	G	C5-C6-O6	-6.86	124.49	128.60
5	A	1992	C	C6-N1-C1'	-6.86	112.57	120.80
5	A	2093	C	O4'-C1'-N1	6.86	113.69	108.20
5	A	2313	C	N3-C4-N4	6.86	122.80	118.00
5	A	2751	G	O4'-C1'-N9	6.86	113.69	108.20
5	A	55	G	C5-C6-O6	-6.86	124.49	128.60
5	A	85	G	C5-C6-O6	-6.86	124.49	128.60
5	A	1437	C	O4'-C1'-N1	6.85	113.68	108.20
5	A	2077	G	O4'-C1'-N9	6.85	113.68	108.20
5	A	374	A	O4'-C1'-N9	6.85	113.68	108.20
5	A	1854	G	C5-C6-O6	-6.85	124.49	128.60
5	A	45	G	C5-C6-O6	-6.85	124.49	128.60
5	A	565	U	O4'-C1'-N1	6.85	113.68	108.20
5	A	893	A	O4'-C1'-N9	6.85	113.68	108.20
5	A	1605	C	O4'-C1'-N1	6.85	113.68	108.20
5	A	2171	G	O4'-C1'-N9	6.85	113.68	108.20
5	A	887	C	N3-C4-N4	6.85	122.80	118.00
5	A	938	G	C5-C6-O6	-6.85	124.49	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	942	U	O4'-C1'-N1	6.85	113.68	108.20
5	A	1081	U	O4'-C1'-N1	6.85	113.68	108.20
5	A	1146	C	N3-C4-N4	6.85	122.80	118.00
5	A	2774	C	N3-C4-N4	6.85	122.79	118.00
5	A	2886	C	O4'-C1'-N1	6.85	113.68	108.20
5	A	1581	A	C4'-C3'-C2'	-6.85	95.75	102.60
5	A	2108	U	O4'-C1'-N1	6.85	113.68	108.20
5	A	1196	C	N3-C4-N4	6.85	122.79	118.00
5	A	1509	C	N3-C4-N4	6.85	122.79	118.00
5	A	1256	C	N3-C4-N4	6.84	122.79	118.00
6	B	91	C	N3-C4-N4	6.84	122.79	118.00
5	A	2197	G	C5-C6-O6	-6.84	124.49	128.60
5	A	141	U	C2-N1-C1'	6.84	125.91	117.70
5	A	1530	G	O4'-C1'-N9	6.84	113.67	108.20
5	A	1928	A	C4-C5-C6	6.84	120.42	117.00
5	A	1637	G	C5-C6-O6	-6.84	124.50	128.60
5	A	2441	A	C4-C5-C6	6.84	120.42	117.00
5	A	131	C	N3-C4-C5	-6.84	119.17	121.90
5	A	566	G	O4'-C1'-N9	6.84	113.67	108.20
5	A	2121	U	C2-N1-C1'	6.84	125.90	117.70
5	A	2680	C	N3-C4-N4	6.84	122.79	118.00
6	B	84	G	C5-C6-O6	-6.84	124.50	128.60
5	A	419	G	C5-C6-O6	-6.83	124.50	128.60
5	A	2890	U	O4'-C1'-N1	6.83	113.67	108.20
5	A	122	G	O4'-C1'-N9	6.83	113.67	108.20
5	A	2031	G	C5-C6-O6	-6.83	124.50	128.60
5	A	2140	U	O4'-C1'-N1	6.83	113.67	108.20
5	A	2337	G	C5-C6-O6	-6.83	124.50	128.60
5	A	2656	G	C5-C6-O6	-6.83	124.50	128.60
5	A	1267	G	C5-C6-O6	-6.83	124.50	128.60
5	A	1586	G	N1-C6-O6	6.83	124.00	119.90
5	A	1846	G	C5-C6-O6	-6.83	124.50	128.60
5	A	2659	G	C5-C6-O6	-6.83	124.50	128.60
5	A	56	A	C4-C5-C6	6.83	120.42	117.00
5	A	954	U	O4'-C1'-N1	6.83	113.66	108.20
5	A	1763	G	O4'-C1'-N9	6.83	113.66	108.20
5	A	2086	G	C5-C6-O6	-6.83	124.50	128.60
5	A	2253	G	C5-C6-O6	-6.83	124.50	128.60
5	A	252	C	O4'-C1'-N1	6.83	113.66	108.20
5	A	1143	U	O4'-C1'-N1	6.83	113.66	108.20
5	A	1874	G	O4'-C1'-N9	6.83	113.66	108.20
5	A	2453	C	O4'-C1'-N1	6.83	113.66	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	539	G	O4'-C1'-N9	6.82	113.66	108.20
5	A	901	U	O4'-C1'-N1	6.82	113.66	108.20
5	A	728	G	C5-C6-O6	-6.82	124.51	128.60
5	A	930	C	N3-C4-C5	-6.82	119.17	121.90
5	A	2143	A	C4-C5-C6	6.82	120.41	117.00
5	A	2331	U	O4'-C1'-N1	6.82	113.66	108.20
5	A	2370	G	O4'-C1'-N9	6.82	113.66	108.20
5	A	328	G	C5-C6-O6	-6.82	124.51	128.60
5	A	343	A	O4'-C1'-N9	6.82	113.66	108.20
5	A	603	G	O4'-C1'-N9	6.82	113.66	108.20
5	A	47	C	O4'-C1'-N1	6.82	113.65	108.20
5	A	166	A	C5-C6-N6	-6.82	118.25	123.70
5	A	974	A	C5-C6-N1	-6.82	114.29	117.70
5	A	1044	C	N3-C4-N4	6.82	122.77	118.00
5	A	1991	C	O4'-C1'-N1	6.82	113.65	108.20
5	A	2437	U	O4'-C1'-N1	6.82	113.65	108.20
6	B	57	G	C5-C6-O6	-6.82	124.51	128.60
5	A	63	G	C5-C6-O6	-6.82	124.51	128.60
5	A	656	A	O4'-C1'-N9	6.82	113.65	108.20
5	A	2704	A	C5-C6-N1	-6.82	114.29	117.70
5	A	743	U	O4'-C1'-N1	6.81	113.65	108.20
5	A	1190	A	C5-C6-N6	-6.81	118.25	123.70
5	A	2180	U	O4'-C1'-N1	6.81	113.65	108.20
5	A	242	U	O4'-C1'-N1	6.81	113.65	108.20
5	A	589	G	C5-C6-O6	-6.81	124.51	128.60
5	A	923	C	P-O5'-C5'	6.81	131.80	120.90
5	A	1648	A	C5-C6-N6	-6.81	118.25	123.70
5	A	792	G	C5-C6-O6	-6.81	124.51	128.60
5	A	896	A	O4'-C1'-N9	6.81	113.65	108.20
5	A	1962	G	C5-C6-O6	-6.81	124.51	128.60
5	A	2097	U	O4'-C1'-N1	6.81	113.65	108.20
5	A	2408	G	O4'-C1'-N9	6.81	113.65	108.20
5	A	2521	U	O4'-C1'-N1	6.81	113.65	108.20
5	A	2855	G	C5-C6-O6	-6.81	124.51	128.60
5	A	1442	A	O4'-C1'-N9	6.81	113.65	108.20
5	A	2188	G	P-O3'-C3'	6.81	127.87	119.70
5	A	1304	G	C5-C6-O6	-6.81	124.52	128.60
5	A	450	U	O4'-C1'-N1	6.81	113.64	108.20
5	A	457	G	C5-C6-O6	-6.81	124.52	128.60
5	A	900	U	O4'-C1'-N1	6.81	113.64	108.20
5	A	2247	C	N3-C4-N4	6.81	122.76	118.00
5	A	307	A	C4-C5-C6	6.80	120.40	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	703	G	C5-C6-O6	-6.80	124.52	128.60
5	A	1316	A	C5-C6-N1	-6.80	114.30	117.70
5	A	1322	G	C5-C6-O6	-6.80	124.52	128.60
5	A	1571	G	C5-C6-O6	-6.80	124.52	128.60
5	A	1580	A	C4-C5-C6	6.80	120.40	117.00
5	A	2822	C	N3-C4-N4	6.80	122.76	118.00
5	A	556	C	N3-C4-N4	6.80	122.76	118.00
5	A	590	U	O4'-C1'-N1	6.80	113.64	108.20
5	A	1479	G	C5-C6-O6	-6.80	124.52	128.60
5	A	1604	C	N3-C4-N4	6.80	122.76	118.00
5	A	1639	G	C5-C6-O6	-6.80	124.52	128.60
5	A	83	G	C5-C6-O6	-6.80	124.52	128.60
5	A	544	G	C5-C6-O6	-6.80	124.52	128.60
5	A	751	G	C5-C6-O6	-6.80	124.52	128.60
5	A	2054	C	N3-C4-N4	6.80	122.76	118.00
5	A	2466	C	O4'-C1'-N1	6.80	113.64	108.20
5	A	2674	G	C5-C6-O6	-6.80	124.52	128.60
5	A	2850	G	C5-C6-O6	-6.80	124.52	128.60
5	A	353	A	C5-C6-N1	-6.79	114.30	117.70
5	A	1487	G	P-O3'-C3'	6.79	127.85	119.70
5	A	347	G	O4'-C1'-N9	6.79	113.64	108.20
5	A	686	C	N3-C4-N4	6.79	122.75	118.00
5	A	1782	G	C5-C6-O6	-6.79	124.52	128.60
5	A	817	G	O4'-C1'-N9	6.79	113.63	108.20
5	A	1427	G	P-O5'-C5'	6.79	131.76	120.90
5	A	1741	G	O4'-C1'-N9	6.79	113.63	108.20
5	A	293	U	O4'-C1'-N1	6.79	113.63	108.20
5	A	411	G	C5'-C4'-C3'	-6.79	105.14	116.00
5	A	1658	G	P-O3'-C3'	6.79	127.85	119.70
6	B	98	G	C5-C6-O6	-6.79	124.53	128.60
6	B	114	A	C5-C6-N1	-6.79	114.31	117.70
5	A	487	G	C5-C6-O6	-6.79	124.53	128.60
5	A	789	C	N3-C4-C5	-6.79	119.19	121.90
5	A	922	A	C5-C6-N6	-6.79	118.27	123.70
5	A	2383	A	C4-C5-C6	6.79	120.39	117.00
5	A	2738	G	O4'-C1'-N9	6.79	113.63	108.20
5	A	2281	G	C5-C6-O6	-6.78	124.53	128.60
5	A	1407	G	C5-C6-O6	-6.78	124.53	128.60
5	A	1955	U	O4'-C1'-N1	6.78	113.63	108.20
5	A	1980	U	O4'-C1'-N1	6.78	113.62	108.20
5	A	156	A	C5-C6-N6	-6.78	118.28	123.70
5	A	1655	A	C5-C6-N6	-6.78	118.28	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2732	C	N3-C4-N4	6.78	122.75	118.00
5	A	600	A	C5-C6-N6	-6.78	118.28	123.70
5	A	1100	A	C4-C5-C6	6.78	120.39	117.00
5	A	2181	C	N3-C4-N4	6.78	122.75	118.00
5	A	631	G	C5-C6-O6	-6.78	124.53	128.60
5	A	1572	G	C5-C6-O6	-6.78	124.53	128.60
5	A	1598	C	N3-C4-N4	6.78	122.75	118.00
5	A	1619	A	O4'-C1'-N9	6.78	113.62	108.20
5	A	153	C	C2-N1-C1'	6.78	126.25	118.80
5	A	1571	G	O4'-C1'-N9	6.78	113.62	108.20
5	A	1681	U	O4'-C1'-N1	6.78	113.62	108.20
5	A	2177	G	C5-C6-O6	-6.78	124.53	128.60
5	A	2572	G	O4'-C1'-N9	6.78	113.62	108.20
5	A	2913	U	O4'-C1'-N1	6.78	113.62	108.20
5	A	562	C	N3-C4-N4	6.77	122.74	118.00
5	A	569	C	N3-C4-N4	6.77	122.74	118.00
5	A	1276	G	C5-C6-O6	-6.77	124.54	128.60
5	A	2577	G	O4'-C1'-N9	6.77	113.62	108.20
5	A	1540	A	C4-C5-C6	6.77	120.38	117.00
6	B	102	A	C4-C5-C6	6.77	120.39	117.00
5	A	102	A	C4-C5-C6	6.77	120.38	117.00
5	A	701	G	C5-C6-O6	-6.77	124.54	128.60
5	A	811	A	C4-C5-C6	6.77	120.38	117.00
5	A	1577	C	N3-C4-C5	-6.77	119.19	121.90
5	A	1718	G	C5-C6-O6	-6.77	124.54	128.60
5	A	2227	A	C4-C5-C6	6.77	120.38	117.00
5	A	224	A	C4-C5-C6	6.77	120.38	117.00
5	A	361	G	C5-C6-O6	-6.77	124.54	128.60
5	A	69	C	O4'-C1'-N1	6.76	113.61	108.20
5	A	2525	C	P-O3'-C3'	6.76	127.82	119.70
5	A	905	G	C5-C6-O6	-6.76	124.54	128.60
5	A	1185	G	C5-C6-O6	-6.76	124.54	128.60
5	A	1424	A	C4-C5-C6	6.76	120.38	117.00
5	A	1781	C	P-O3'-C3'	-6.76	111.59	119.70
5	A	2506	C	P-O5'-C5'	-6.76	110.08	120.90
5	A	135	U	O4'-C1'-N1	6.76	113.61	108.20
5	A	1521	G	C5-C6-O6	-6.76	124.54	128.60
5	A	2058	G	O4'-C1'-N9	6.76	113.61	108.20
6	B	104	G	C5-C6-O6	-6.76	124.55	128.60
5	A	2439	G	O4'-C1'-N9	6.76	113.61	108.20
5	A	2924	A	C5-C6-N6	-6.76	118.29	123.70
5	A	1201	A	C4-C5-C6	6.76	120.38	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1858	A	C5-C6-N6	-6.76	118.30	123.70
5	A	2605	G	P-O3'-C3'	6.76	127.81	119.70
5	A	682	G	O4'-C1'-N9	6.75	113.60	108.20
5	A	1068	G	O4'-C1'-N9	6.75	113.60	108.20
5	A	1280	G	C5-C6-O6	-6.75	124.55	128.60
5	A	1778	A	C5-C6-N1	-6.75	114.32	117.70
5	A	578	A	C4-C5-C6	6.75	120.38	117.00
5	A	1371	G	C5-C6-O6	-6.75	124.55	128.60
5	A	849	A	C4-C5-C6	6.75	120.38	117.00
5	A	1505	U	O4'-C1'-N1	6.75	113.60	108.20
5	A	2015	G	C5-C6-O6	-6.75	124.55	128.60
5	A	2556	C	O4'-C1'-N1	6.75	113.60	108.20
5	A	497	G	C5-C6-O6	-6.75	124.55	128.60
5	A	575	A	P-O3'-C3'	6.75	127.80	119.70
5	A	928	G	C5-C6-O6	-6.75	124.55	128.60
5	A	1356	G	C5-C6-O6	-6.75	124.55	128.60
5	A	1544	C	C5-C4-N4	-6.75	115.47	120.20
5	A	2887	A	O4'-C1'-N9	6.75	113.60	108.20
5	A	306	C	N3-C4-N4	6.75	122.72	118.00
5	A	749	G	C5-C6-O6	-6.75	124.55	128.60
5	A	1208	G	O4'-C1'-N9	6.75	113.60	108.20
5	A	35	G	C5-C6-O6	-6.75	124.55	128.60
5	A	116	G	C5-C6-O6	-6.75	124.55	128.60
5	A	958	A	O4'-C1'-N9	6.75	113.60	108.20
5	A	1109	G	O4'-C1'-N9	6.75	113.60	108.20
5	A	1748	G	C5-C6-O6	-6.75	124.55	128.60
5	A	1810	G	C5-C6-O6	-6.75	124.55	128.60
5	A	2096	G	C5-C6-O6	-6.75	124.55	128.60
5	A	166	A	C4-C5-C6	6.75	120.37	117.00
5	A	632	U	O4'-C1'-N1	6.75	113.60	108.20
5	A	665	G	C5-C6-O6	-6.75	124.55	128.60
5	A	124	A	O4'-C1'-N9	6.74	113.59	108.20
5	A	404	C	N3-C4-N4	6.74	122.72	118.00
5	A	1594	G	C5-C6-O6	-6.74	124.55	128.60
5	A	2112	G	C5-C6-O6	-6.74	124.55	128.60
6	B	46	A	C5-C6-N6	-6.74	118.31	123.70
5	A	1204	C	N3-C4-N4	6.74	122.72	118.00
5	A	2480	A	O4'-C1'-N9	6.74	113.59	108.20
5	A	2691	A	C4-C5-C6	6.74	120.37	117.00
5	A	2828	G	O4'-C1'-N9	6.74	113.59	108.20
5	A	2873	G	C5-C6-O6	-6.74	124.56	128.60
5	A	721	G	O4'-C1'-N9	6.74	113.59	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1242	U	O4'-C1'-N1	6.74	113.59	108.20
5	A	1726	G	C5-C6-O6	-6.74	124.56	128.60
5	A	2169	G	C5-C6-O6	-6.74	124.56	128.60
5	A	2738	G	C5-C6-O6	-6.74	124.56	128.60
5	A	414	C	P-O3'-C3'	6.74	127.78	119.70
5	A	938	G	O4'-C1'-N9	6.74	113.59	108.20
5	A	1740	G	O4'-C1'-N9	6.73	113.59	108.20
5	A	1787	G	C5-C6-O6	-6.73	124.56	128.60
5	A	221	G	C5-C6-O6	-6.73	124.56	128.60
5	A	1278	G	C5-C6-O6	-6.73	124.56	128.60
5	A	1516	A	C4-C5-C6	6.73	120.37	117.00
5	A	1160	G	O4'-C1'-N9	6.73	113.58	108.20
5	A	1928	A	C5-C6-N6	-6.73	118.32	123.70
5	A	2118	U	O4'-C1'-N1	6.73	113.58	108.20
5	A	2336	G	O4'-C1'-N9	6.73	113.58	108.20
5	A	2786	A	C4-C5-C6	6.73	120.36	117.00
5	A	2299	G	C5-C6-O6	-6.73	124.56	128.60
5	A	2820	U	C2-N1-C1'	6.73	125.77	117.70
5	A	2895	C	N3-C4-N4	6.73	122.71	118.00
5	A	1499	A	C4-C5-C6	6.73	120.36	117.00
5	A	2064	G	C5-C6-O6	-6.73	124.56	128.60
5	A	2719	A	P-O5'-C5'	6.73	131.66	120.90
5	A	396	G	P-O5'-C5'	6.72	131.66	120.90
5	A	896	A	C4-C5-C6	6.72	120.36	117.00
5	A	1024	G	C5-C6-O6	-6.72	124.57	128.60
5	A	1633	G	C5-C6-O6	-6.72	124.57	128.60
5	A	1863	U	O4'-C1'-N1	6.72	113.58	108.20
5	A	51	G	C5-C6-O6	-6.72	124.57	128.60
5	A	1678	G	C5-C6-O6	-6.72	124.57	128.60
5	A	2026	A	C4-C5-C6	6.72	120.36	117.00
5	A	2398	A	C5-C6-N6	-6.72	118.32	123.70
6	B	101	U	O4'-C1'-N1	6.72	113.58	108.20
5	A	800	G	O4'-C1'-N9	6.72	113.58	108.20
5	A	1682	C	O4'-C1'-N1	6.72	113.58	108.20
5	A	1743	A	O4'-C1'-N9	6.72	113.58	108.20
5	A	976	U	C6-N1-C1'	-6.72	111.79	121.20
5	A	1686	A	C4-C5-C6	6.72	120.36	117.00
5	A	2027	A	C5-C6-N1	-6.72	114.34	117.70
5	A	192	G	C5-C6-O6	-6.72	124.57	128.60
5	A	229	A	C5-C6-N6	-6.72	118.33	123.70
5	A	1961	A	C5-C6-N6	-6.72	118.33	123.70
5	A	2547	A	C4-C5-C6	6.72	120.36	117.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	250	G	O4'-C1'-N9	6.71	113.57	108.20
5	A	319	G	C5-C6-O6	-6.71	124.57	128.60
5	A	1020	A	O4'-C1'-N9	6.71	113.57	108.20
5	A	2109	G	C5-C6-O6	-6.71	124.57	128.60
5	A	2627	A	C5-C6-N1	-6.71	114.34	117.70
5	A	2376	C	N3-C4-N4	6.71	122.70	118.00
5	A	60	G	C5-C6-O6	-6.71	124.57	128.60
5	A	783	C	N3-C4-C5	-6.71	119.22	121.90
5	A	1488	G	C5-C6-O6	-6.71	124.57	128.60
5	A	1603	U	O4'-C1'-N1	6.71	113.57	108.20
5	A	2280	G	C5-C6-O6	-6.71	124.57	128.60
5	A	2348	C	O4'-C1'-N1	6.71	113.57	108.20
5	A	985	G	C5-C6-O6	-6.71	124.57	128.60
5	A	1449	C	C6-N1-C2	-6.71	117.62	120.30
5	A	1671	G	C5-C6-O6	-6.71	124.58	128.60
5	A	1843	G	C5-C6-O6	-6.71	124.58	128.60
5	A	2135	G	C5-C6-O6	-6.71	124.58	128.60
5	A	2186	G	C5-C6-O6	-6.71	124.58	128.60
5	A	2306	G	C5-C6-O6	-6.71	124.58	128.60
5	A	2465	G	O4'-C1'-N9	6.71	113.57	108.20
5	A	316	G	N1-C6-O6	6.71	123.92	119.90
5	A	486	A	O4'-C1'-N9	6.71	113.57	108.20
5	A	722	A	C4-C5-C6	6.71	120.35	117.00
5	A	1036	A	C4-C5-C6	6.71	120.35	117.00
5	A	1749	G	O4'-C1'-N9	6.71	113.56	108.20
5	A	1831	A	C5-C6-N1	-6.71	114.35	117.70
5	A	2606	A	C4-C5-C6	6.71	120.35	117.00
6	B	87	U	C2-N1-C1'	6.71	125.75	117.70
5	A	89	U	C2-N3-C4	-6.71	122.98	127.00
5	A	376	A	P-O3'-C3'	6.71	127.75	119.70
5	A	522	U	P-O5'-C5'	6.71	131.63	120.90
5	A	755	U	O4'-C1'-N1	6.71	113.56	108.20
5	A	1859	C	P-O5'-C5'	6.71	131.63	120.90
5	A	1963	C	O4'-C1'-N1	6.71	113.56	108.20
5	A	2734	A	C4-C5-C6	6.71	120.35	117.00
5	A	1611	G	C5-C6-O6	-6.70	124.58	128.60
5	A	614	G	C5-C6-O6	-6.70	124.58	128.60
5	A	2727	U	O4'-C1'-N1	6.70	113.56	108.20
5	A	643	U	O4'-C1'-N1	6.70	113.56	108.20
5	A	1384	C	O4'-C1'-N1	6.70	113.56	108.20
5	A	1771	C	N3-C4-N4	6.70	122.69	118.00
5	A	1836	G	C5-C6-O6	-6.70	124.58	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2252	A	O4'-C1'-N9	6.70	113.56	108.20
5	A	2437	U	P-O5'-C5'	6.70	131.62	120.90
5	A	1977	G	O4'-C1'-N9	6.70	113.56	108.20
5	A	2106	A	C4-C5-C6	6.70	120.35	117.00
5	A	1312	A	C4-C5-C6	6.69	120.35	117.00
5	A	184	G	C5-C6-O6	-6.69	124.58	128.60
5	A	2191	A	O4'-C1'-N9	6.69	113.55	108.20
5	A	2424	C	P-O3'-C3'	6.69	127.73	119.70
5	A	2039	G	C5-C6-O6	-6.69	124.58	128.60
5	A	2690	G	C5-C6-O6	-6.69	124.59	128.60
5	A	640	C	N3-C4-N4	6.69	122.68	118.00
5	A	753	A	C5-C6-N6	-6.69	118.35	123.70
5	A	780	G	O4'-C1'-N9	6.69	113.55	108.20
5	A	1617	A	O4'-C1'-N9	6.69	113.55	108.20
5	A	2316	A	P-O3'-C3'	6.69	127.72	119.70
5	A	2496	C	O4'-C1'-N1	6.69	113.55	108.20
5	A	721	G	C5-C6-O6	-6.68	124.59	128.60
5	A	1058	U	O4'-C1'-N1	6.68	113.55	108.20
5	A	1156	G	C5-C6-O6	-6.68	124.59	128.60
5	A	1157	A	P-O3'-C3'	6.68	127.72	119.70
5	A	1416	G	P-O5'-C5'	6.68	131.59	120.90
5	A	1475	G	O4'-C1'-N9	6.68	113.55	108.20
5	A	1764	U	O4'-C1'-N1	6.68	113.55	108.20
5	A	2410	C	N3-C4-N4	6.68	122.68	118.00
5	A	2900	A	C5-C6-N1	-6.68	114.36	117.70
5	A	110	A	O4'-C1'-N9	6.68	113.55	108.20
5	A	1959	G	C5-C6-O6	-6.68	124.59	128.60
5	A	912	C	O4'-C1'-N1	6.68	113.54	108.20
5	A	1811	C	O4'-C1'-N1	6.68	113.54	108.20
5	A	2352	G	O4'-C1'-N9	6.68	113.54	108.20
5	A	2403	C	N3-C4-N4	6.68	122.67	118.00
5	A	216	A	C4-C5-C6	6.68	120.34	117.00
5	A	1213	G	C5-C6-O6	-6.68	124.59	128.60
5	A	2333	G	C5-C6-O6	-6.68	124.59	128.60
5	A	2889	A	C5-C6-N6	-6.68	118.36	123.70
5	A	2145	G	C5-C6-O6	-6.67	124.60	128.60
5	A	393	U	O4'-C1'-N1	6.67	113.54	108.20
5	A	2531	G	C5-C6-O6	-6.67	124.60	128.60
5	A	2889	A	C5-C6-N1	-6.67	114.36	117.70
5	A	190	G	C5-C6-O6	-6.67	124.60	128.60
5	A	2157	C	O4'-C1'-N1	6.67	113.54	108.20
5	A	2684	G	C5-C6-O6	-6.67	124.60	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	644	G	O4'-C1'-N9	6.67	113.53	108.20
5	A	2240	U	O4'-C1'-N1	6.67	113.53	108.20
5	A	2777	A	C4-C5-C6	6.67	120.33	117.00
5	A	227	G	N1-C6-O6	6.67	123.90	119.90
5	A	1768	A	C4-C5-C6	6.67	120.33	117.00
5	A	2582	G	C5-C6-O6	-6.67	124.60	128.60
5	A	2743	G	C5-C6-O6	-6.67	124.60	128.60
6	B	22	G	C5-C6-O6	-6.67	124.60	128.60
5	A	2349	A	P-O3'-C3'	6.67	127.70	119.70
5	A	1234	G	C5-C6-O6	-6.66	124.60	128.60
5	A	1415	C	N3-C4-N4	6.66	122.67	118.00
5	A	1569	A	O4'-C1'-N9	6.66	113.53	108.20
5	A	2919	A	O4'-C1'-N9	6.66	113.53	108.20
5	A	161	A	C5-C6-N1	-6.66	114.37	117.70
5	A	1382	G	O4'-C1'-N9	6.66	113.53	108.20
5	A	2884	G	C5-C6-O6	-6.66	124.60	128.60
5	A	414	C	N3-C4-N4	6.66	122.66	118.00
5	A	714	U	O4'-C1'-N1	6.66	113.53	108.20
5	A	1443	C	N3-C4-N4	6.66	122.66	118.00
5	A	2874	G	C5-C6-O6	-6.66	124.60	128.60
5	A	377	G	C5-C6-O6	-6.66	124.61	128.60
5	A	907	U	C2-N1-C1'	6.66	125.69	117.70
5	A	2811	G	C5-C6-O6	-6.66	124.61	128.60
5	A	2917	G	C5-C6-O6	-6.66	124.61	128.60
5	A	499	G	C5-C6-O6	-6.66	124.61	128.60
5	A	519	A	C4-C5-C6	6.66	120.33	117.00
5	A	732	A	P-O3'-C3'	6.66	127.69	119.70
5	A	1073	A	C4-C5-C6	6.66	120.33	117.00
5	A	2336	G	C5-C6-O6	-6.66	124.61	128.60
5	A	2479	A	C5-C6-N6	-6.66	118.37	123.70
5	A	374	A	C4-C5-C6	6.66	120.33	117.00
5	A	1071	G	C5-C6-O6	-6.66	124.61	128.60
5	A	1285	G	C5-C6-O6	-6.66	124.61	128.60
5	A	2273	U	O4'-C1'-N1	6.66	113.52	108.20
5	A	2377	U	C2-N3-C4	-6.66	123.01	127.00
5	A	1235	A	C5-C6-N6	-6.65	118.38	123.70
5	A	1699	A	C4-C5-C6	6.65	120.33	117.00
5	A	1512	G	O4'-C1'-N9	6.65	113.52	108.20
5	A	12	A	C4-C5-C6	6.65	120.33	117.00
5	A	629	G	C5-C6-O6	-6.65	124.61	128.60
5	A	1188	A	O4'-C1'-N9	6.65	113.52	108.20
5	A	2311	G	C5-C6-O6	-6.65	124.61	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2450	G	C5-C6-O6	-6.65	124.61	128.60
5	A	1030	G	C5-C6-O6	-6.65	124.61	128.60
5	A	1259	G	C5-C6-O6	-6.65	124.61	128.60
5	A	1300	G	O4'-C1'-N9	6.65	113.52	108.20
5	A	1830	G	C5-C6-O6	-6.65	124.61	128.60
5	A	2297	A	C5-C6-N1	-6.65	114.38	117.70
5	A	2835	A	C4-C5-C6	6.65	120.32	117.00
5	A	42	G	O4'-C1'-N9	6.65	113.52	108.20
5	A	1042	A	C5-C6-N1	-6.65	114.38	117.70
5	A	2440	A	C5-C6-N6	-6.64	118.38	123.70
5	A	2665	U	O4'-C1'-N1	6.64	113.52	108.20
6	B	69	C	N3-C4-N4	6.64	122.65	118.00
5	A	500	A	O4'-C1'-N9	6.64	113.52	108.20
5	A	550	G	C5-C6-O6	-6.64	124.61	128.60
5	A	773	G	C5-C6-O6	-6.64	124.61	128.60
5	A	1805	G	O4'-C1'-N9	6.64	113.51	108.20
5	A	2524	G	O4'-C1'-N9	6.64	113.51	108.20
5	A	2739	C	N3-C4-N4	6.64	122.65	118.00
5	A	2339	A	O4'-C1'-N9	6.64	113.51	108.20
5	A	2764	G	O4'-C1'-N9	6.64	113.51	108.20
5	A	64	A	C4-C5-C6	6.64	120.32	117.00
5	A	1029	A	C4-C5-C6	6.64	120.32	117.00
5	A	2467	U	O4'-C1'-N1	6.64	113.51	108.20
5	A	2615	C	O4'-C1'-N1	6.64	113.51	108.20
5	A	145	G	C5-C6-O6	-6.64	124.62	128.60
5	A	1280	G	N1-C2-N3	-6.64	119.92	123.90
5	A	2350	G	C4-N9-C1'	6.64	135.13	126.50
6	B	36	C	N3-C4-N4	6.64	122.65	118.00
5	A	540	G	C5-C6-O6	-6.64	124.62	128.60
5	A	746	A	O4'-C1'-N9	6.64	113.51	108.20
5	A	1088	G	C5-C6-O6	-6.64	124.62	128.60
5	A	1181	C	O4'-C1'-N1	6.64	113.51	108.20
5	A	2112	G	O4'-C1'-N9	6.64	113.51	108.20
5	A	2688	G	C5-C6-O6	-6.64	124.62	128.60
5	A	1488	G	O4'-C1'-N9	6.63	113.51	108.20
5	A	1512	G	C5-C6-O6	-6.63	124.62	128.60
5	A	2041	G	C5-C6-O6	-6.63	124.62	128.60
5	A	2181	C	O4'-C1'-N1	6.63	113.51	108.20
5	A	2360	G	C5-C6-O6	-6.63	124.62	128.60
5	A	1422	C	O4'-C1'-N1	6.63	113.51	108.20
5	A	2885	A	C5-C6-N6	-6.63	118.39	123.70
5	A	708	U	O4'-C1'-N1	6.63	113.51	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	922	A	C4-C5-C6	6.63	120.32	117.00
5	A	1115	A	C5-C6-N1	-6.63	114.38	117.70
5	A	2852	U	O4'-C1'-N1	6.63	113.51	108.20
5	A	58	G	C5-C6-O6	-6.63	124.62	128.60
5	A	1536	A	C4-C5-C6	6.63	120.31	117.00
5	A	1682	C	N3-C4-N4	6.63	122.64	118.00
5	A	2139	G	C5-C6-O6	-6.63	124.62	128.60
5	A	2209	U	O4'-C1'-N1	6.63	113.50	108.20
5	A	430	C	O4'-C1'-N1	6.63	113.50	108.20
5	A	1964	G	C5-C6-O6	-6.63	124.62	128.60
5	A	2768	U	O4'-C1'-N1	6.63	113.50	108.20
5	A	948	A	C5-C6-N6	-6.63	118.40	123.70
5	A	1335	A	O4'-C1'-N9	6.63	113.50	108.20
5	A	1561	G	C5-C6-O6	-6.63	124.62	128.60
5	A	2380	G	C5-C6-O6	-6.63	124.62	128.60
5	A	2919	A	C5-C6-N6	-6.62	118.40	123.70
5	A	2923	A	C4-C5-C6	6.62	120.31	117.00
5	A	607	G	O4'-C1'-N9	6.62	113.50	108.20
5	A	644	G	C5-C6-O6	-6.62	124.63	128.60
5	A	2693	G	C5-C6-O6	-6.62	124.63	128.60
5	A	2809	G	C5-C6-O6	-6.62	124.63	128.60
5	A	661	A	C4-C5-C6	6.62	120.31	117.00
5	A	952	A	O4'-C1'-N9	6.62	113.50	108.20
5	A	1301	U	O4'-C1'-N1	6.62	113.50	108.20
6	B	70	G	C5-C6-O6	-6.62	124.63	128.60
5	A	2637	G	C5-C6-O6	-6.62	124.63	128.60
5	A	535	G	C5-C6-O6	-6.62	124.63	128.60
5	A	688	G	C5-C6-O6	-6.62	124.63	128.60
5	A	2256	A	C4-C5-C6	6.62	120.31	117.00
5	A	2853	C	N3-C4-C5	-6.62	119.25	121.90
5	A	1372	C	O4'-C1'-N1	6.62	113.49	108.20
5	A	80	G	C5-C6-O6	-6.62	124.63	128.60
5	A	302	A	C5-C6-N6	-6.62	118.41	123.70
5	A	459	A	C4-C5-C6	6.62	120.31	117.00
5	A	1371	G	O4'-C1'-N9	6.62	113.49	108.20
5	A	2687	C	N3-C4-N4	6.62	122.63	118.00
6	B	96	G	O4'-C1'-N9	6.62	113.49	108.20
5	A	256	C	N3-C4-N4	6.61	122.63	118.00
5	A	536	G	O4'-C1'-N9	6.61	113.49	108.20
5	A	882	A	O4'-C1'-N9	6.61	113.49	108.20
5	A	1554	U	O4'-C1'-N1	6.61	113.49	108.20
5	A	1586	G	C1'-O4'-C4'	-6.61	104.61	109.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1702	U	O4'-C1'-N1	6.61	113.49	108.20
5	A	2287	C	N3-C4-N4	6.61	122.63	118.00
5	A	2300	G	O4'-C1'-N9	6.61	113.49	108.20
5	A	2404	G	C5-C6-O6	-6.61	124.63	128.60
5	A	1478	G	O4'-C1'-N9	6.61	113.49	108.20
5	A	1967	A	C4-C5-C6	6.61	120.30	117.00
5	A	890	G	C5-C6-O6	-6.61	124.64	128.60
5	A	2033	G	C5-C6-O6	-6.61	124.64	128.60
5	A	2254	A	C5-C6-N1	-6.61	114.40	117.70
5	A	2647	G	C5-C6-O6	-6.61	124.64	128.60
5	A	1157	A	O4'-C1'-N9	6.61	113.48	108.20
5	A	1845	A	O4'-C1'-N9	6.61	113.48	108.20
5	A	2241	A	O4'-C1'-N9	6.61	113.48	108.20
5	A	2300	G	C5-C6-O6	-6.61	124.64	128.60
5	A	1872	C	N3-C4-N4	6.60	122.62	118.00
5	A	1325	A	P-O3'-C3'	6.60	127.62	119.70
5	A	1524	A	C4-C5-C6	6.60	120.30	117.00
5	A	2066	A	O4'-C1'-N9	6.60	113.48	108.20
5	A	2267	G	C5-C6-O6	-6.60	124.64	128.60
5	A	1606	A	C5-C6-N6	-6.60	118.42	123.70
5	A	1957	A	C4-C5-C6	6.60	120.30	117.00
5	A	2875	A	C4-C5-C6	6.60	120.30	117.00
5	A	358	C	N3-C4-N4	6.60	122.62	118.00
5	A	767	U	O4'-C1'-N1	6.60	113.48	108.20
5	A	776	G	C5-C6-O6	-6.60	124.64	128.60
5	A	2672	G	O4'-C1'-N9	6.60	113.48	108.20
5	A	2782	A	C4-C5-C6	6.60	120.30	117.00
5	A	2358	A	O4'-C1'-N9	6.60	113.48	108.20
5	A	580	U	O4'-C1'-N1	6.59	113.48	108.20
5	A	1252	G	C5-C6-O6	-6.59	124.64	128.60
5	A	1487	G	P-O5'-C5'	6.59	131.45	120.90
5	A	2198	G	O4'-C1'-N9	6.59	113.48	108.20
6	B	96	G	C5-C6-O6	-6.59	124.64	128.60
5	A	333	A	O4'-C1'-N9	6.59	113.47	108.20
5	A	220	A	O4'-C1'-N9	6.59	113.47	108.20
5	A	1399	G	C5-C6-O6	-6.59	124.64	128.60
5	A	1663	A	C4-C5-C6	6.59	120.30	117.00
5	A	2703	G	C5-C6-O6	-6.59	124.64	128.60
5	A	781	A	C5-C6-N6	-6.59	118.43	123.70
5	A	1864	G	C5-C6-O6	-6.59	124.65	128.60
5	A	378	C	N3-C4-C5	-6.59	119.27	121.90
5	A	716	G	C5-C6-O6	-6.59	124.65	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	956	A	O4'-C1'-N9	6.59	113.47	108.20
5	A	524	A	C4-C5-C6	6.59	120.29	117.00
5	A	2129	G	P-O3'-C3'	6.59	127.60	119.70
5	A	2185	G	C5-C6-O6	-6.59	124.65	128.60
5	A	2857	U	C5'-C4'-O4'	6.59	117.00	109.10
5	A	546	G	C5-C6-O6	-6.58	124.65	128.60
5	A	1475	G	C5-C6-O6	-6.58	124.65	128.60
5	A	2279	G	C5-C6-O6	-6.58	124.65	128.60
5	A	868	A	O4'-C1'-N9	6.58	113.47	108.20
5	A	1085	G	O4'-C1'-N9	6.58	113.47	108.20
5	A	1556	A	C4-C5-C6	6.58	120.29	117.00
5	A	1586	G	O4'-C1'-N9	6.58	113.47	108.20
5	A	1621	G	O4'-C1'-N9	6.58	113.47	108.20
6	B	29	C	N3-C4-N4	6.58	122.61	118.00
5	A	253	G	O4'-C1'-N9	6.58	113.46	108.20
5	A	1006	A	C5-C6-N1	-6.58	114.41	117.70
5	A	2282	G	C5-C6-O6	-6.58	124.65	128.60
5	A	2663	A	C5-C6-N6	-6.58	118.44	123.70
5	A	571	U	O4'-C1'-N1	6.58	113.46	108.20
5	A	1506	A	C4-C5-C6	6.58	120.29	117.00
5	A	2910	C	N3-C4-N4	6.58	122.61	118.00
6	B	44	A	C5-C6-N6	-6.58	118.44	123.70
5	A	48	G	C5-C6-O6	-6.58	124.65	128.60
5	A	56	A	O4'-C1'-N9	6.58	113.46	108.20
5	A	1310	C	P-O3'-C3'	6.58	127.59	119.70
5	A	2883	C	C6-N1-C1'	-6.58	112.91	120.80
5	A	1516	A	C5-C6-N1	-6.58	114.41	117.70
5	A	1714	A	C4-C5-C6	6.58	120.29	117.00
5	A	1935	G	C5-C6-O6	-6.58	124.66	128.60
5	A	2611	G	C5-C6-O6	-6.58	124.65	128.60
5	A	2726	G	C5-C6-O6	-6.58	124.66	128.60
5	A	2847	G	C5-C6-O6	-6.58	124.65	128.60
5	A	184	G	O4'-C1'-N9	6.57	113.46	108.20
5	A	547	A	C4-C5-C6	6.57	120.29	117.00
5	A	2270	A	O4'-C1'-N9	6.57	113.46	108.20
5	A	1071	G	O4'-C1'-N9	6.57	113.46	108.20
5	A	2098	G	C5-C6-O6	-6.57	124.66	128.60
5	A	2232	G	C5-C6-O6	-6.57	124.66	128.60
5	A	2485	C	N3-C4-N4	6.57	122.60	118.00
6	B	13	A	C4-C5-C6	6.57	120.29	117.00
20	S	41	ARG	N-CA-CB	6.57	122.43	110.60
5	A	312	G	C5-C6-O6	-6.57	124.66	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	963	G	C5-C6-O6	-6.57	124.66	128.60
5	A	964	A	C4-C5-C6	6.57	120.28	117.00
5	A	1609	C	N3-C4-C5	-6.57	119.27	121.90
5	A	2093	C	N3-C4-C5	-6.57	119.27	121.90
5	A	84	A	O4'-C1'-N9	6.57	113.45	108.20
5	A	2670	A	C5-C6-N1	-6.57	114.42	117.70
5	A	463	U	O4'-C1'-N1	6.57	113.45	108.20
5	A	510	G	C5-C6-O6	-6.57	124.66	128.60
5	A	575	A	C4-C5-C6	6.57	120.28	117.00
5	A	772	G	C5-C6-O6	-6.57	124.66	128.60
5	A	873	U	O4'-C1'-N1	6.57	113.45	108.20
5	A	1286	A	C5-C6-N1	-6.57	114.42	117.70
5	A	1290	G	C5-C6-O6	-6.57	124.66	128.60
5	A	1359	G	C5-C6-O6	-6.57	124.66	128.60
5	A	2493	C	O4'-C1'-N1	6.57	113.45	108.20
5	A	2597	C	N3-C4-N4	6.57	122.60	118.00
5	A	1084	A	C4-C5-C6	6.56	120.28	117.00
5	A	1192	G	C5-C6-O6	-6.56	124.66	128.60
5	A	1245	G	O4'-C1'-N9	6.56	113.45	108.20
5	A	1292	G	C5-C6-O6	-6.56	124.66	128.60
5	A	1838	A	C5-C6-N6	-6.56	118.45	123.70
5	A	1964	G	O4'-C1'-N9	6.56	113.45	108.20
5	A	2805	A	C4-C5-C6	6.56	120.28	117.00
5	A	2824	G	O4'-C1'-N9	6.56	113.45	108.20
5	A	1984	U	O4'-C1'-N1	6.56	113.45	108.20
5	A	341	G	C5-C6-O6	-6.56	124.66	128.60
5	A	1774	A	C5-C6-N6	-6.56	118.45	123.70
5	A	2085	G	C5-C6-O6	-6.56	124.66	128.60
5	A	2598	G	C5-C6-O6	-6.56	124.66	128.60
5	A	935	A	C4-C5-C6	6.56	120.28	117.00
5	A	1050	U	O4'-C1'-N1	6.56	113.45	108.20
5	A	1378	G	C5-C6-O6	-6.56	124.67	128.60
5	A	1813	A	C4-C5-C6	6.56	120.28	117.00
5	A	223	G	C5-C6-O6	-6.56	124.67	128.60
5	A	493	G	C5-C6-O6	-6.56	124.67	128.60
5	A	2019	C	N3-C4-C5	-6.56	119.28	121.90
5	A	454	G	C5-C6-O6	-6.55	124.67	128.60
5	A	475	A	C4-C5-C6	6.55	120.28	117.00
5	A	1030	G	O4'-C1'-N9	6.55	113.44	108.20
5	A	1103	A	C5-C6-N6	-6.55	118.46	123.70
5	A	1276	G	O4'-C1'-N9	6.55	113.44	108.20
5	A	2352	G	C5-C6-O6	-6.55	124.67	128.60

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2495	C	N3-C4-N4	6.55	122.59	118.00
6	B	103	G	O4'-C1'-N9	6.55	113.44	108.20
5	A	658	A	C4-C5-C6	6.55	120.28	117.00
5	A	2394	G	C5-C6-O6	-6.55	124.67	128.60
5	A	307	A	C5-C6-N6	-6.55	118.46	123.70
5	A	357	G	O4'-C1'-N9	6.55	113.44	108.20
5	A	1748	G	O4'-C1'-N9	6.55	113.44	108.20
5	A	2477	A	C4-C5-C6	6.55	120.28	117.00
5	A	2667	G	C5-C6-O6	-6.55	124.67	128.60
5	A	2740	A	C5-C6-N6	-6.55	118.46	123.70
5	A	2824	G	C5-C6-O6	-6.55	124.67	128.60
5	A	396	G	C5-C6-O6	-6.55	124.67	128.60
5	A	1002	G	C5-C6-O6	-6.55	124.67	128.60
5	A	1484	U	O4'-C1'-N1	6.55	113.44	108.20
5	A	1600	G	C5-C6-O6	-6.55	124.67	128.60
6	B	118	A	C4-C5-C6	6.55	120.27	117.00
5	A	669	C	P-O5'-C5'	6.55	131.38	120.90
5	A	1641	U	O4'-C1'-N1	6.55	113.44	108.20
5	A	906	G	C5-C6-O6	-6.55	124.67	128.60
5	A	1812	A	O4'-C1'-N9	6.55	113.44	108.20
5	A	1989	A	C5-C6-N1	-6.55	114.43	117.70
5	A	1247	G	C5-C6-O6	-6.54	124.67	128.60
5	A	1815	A	O4'-C1'-N9	6.54	113.44	108.20
5	A	2436	A	C5-C6-N6	-6.54	118.46	123.70
5	A	1576	G	O4'-C1'-N9	6.54	113.44	108.20
5	A	2407	A	C4-C5-C6	6.54	120.27	117.00
5	A	1509	C	O4'-C1'-N1	6.54	113.43	108.20
5	A	1667	A	C4-C5-C6	6.54	120.27	117.00
5	A	1750	G	C5-C6-O6	-6.54	124.67	128.60
5	A	1832	A	C5-C6-N6	-6.54	118.47	123.70
5	A	2514	G	O4'-C1'-N9	6.54	113.43	108.20
5	A	2588	C	N3-C4-N4	6.54	122.58	118.00
5	A	2629	A	O4'-C1'-N9	6.54	113.43	108.20
5	A	2915	G	N1-C6-O6	6.54	123.83	119.90
5	A	727	A	O4'-C1'-N9	6.54	113.43	108.20
5	A	321	U	C5'-C4'-C3'	-6.54	105.54	116.00
5	A	1986	C	O4'-C1'-N1	6.54	113.43	108.20
5	A	2439	G	C5-C6-O6	-6.54	124.68	128.60
5	A	526	A	C5-C6-N6	-6.54	118.47	123.70
5	A	2603	G	C5-C6-O6	-6.53	124.68	128.60
5	A	2802	U	O4'-C1'-N1	6.53	113.43	108.20
5	A	1171	G	C5-C6-O6	-6.53	124.68	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1470	G	C5-C6-O6	-6.53	124.68	128.60
5	A	2241	A	C4-C5-C6	6.53	120.27	117.00
5	A	2873	G	O4'-C1'-N9	6.53	113.43	108.20
5	A	1288	G	C5-C6-O6	-6.53	124.68	128.60
5	A	1742	G	C5-C6-O6	-6.53	124.68	128.60
5	A	1796	C	N3-C4-N4	6.53	122.57	118.00
5	A	2558	G	C5-C6-O6	-6.53	124.68	128.60
5	A	1848	A	C4-C5-C6	6.53	120.27	117.00
5	A	2081	G	O4'-C1'-N9	6.53	113.42	108.20
5	A	270	C	N3-C4-N4	6.53	122.57	118.00
5	A	767	U	P-O5'-C5'	6.53	131.34	120.90
5	A	1239	U	O4'-C1'-N1	6.53	113.42	108.20
5	A	1253	A	C5-C6-N1	-6.53	114.44	117.70
5	A	1921	C	C2-N1-C1'	6.53	125.98	118.80
5	A	2111	A	O4'-C1'-N9	6.53	113.42	108.20
5	A	2397	C	N3-C4-N4	6.53	122.57	118.00
5	A	2172	C	O4'-C1'-N1	6.53	113.42	108.20
5	A	2284	G	O4'-C1'-N9	6.53	113.42	108.20
5	A	2491	U	O4'-C1'-N1	6.53	113.42	108.20
5	A	676	G	C5-C6-O6	-6.52	124.69	128.60
5	A	1966	A	C4-C5-C6	6.52	120.26	117.00
5	A	1948	A	C4-C5-C6	6.52	120.26	117.00
6	B	89	C	N3-C4-N4	6.52	122.56	118.00
5	A	1030	G	P-O5'-C5'	6.52	131.33	120.90
5	A	2797	C	N3-C4-N4	6.52	122.56	118.00
5	A	846	G	O4'-C1'-N9	6.52	113.42	108.20
5	A	1467	G	O4'-C1'-N9	6.52	113.42	108.20
5	A	2923	A	C5-C6-N6	-6.52	118.48	123.70
6	B	27	A	C5-C6-N1	-6.52	114.44	117.70
5	A	695	G	O4'-C1'-N9	6.52	113.42	108.20
5	A	1068	G	C5-C6-O6	-6.52	124.69	128.60
5	A	1791	A	C4-C5-C6	6.52	120.26	117.00
5	A	2216	A	C4-C5-C6	6.52	120.26	117.00
5	A	35	G	O4'-C1'-N9	6.51	113.41	108.20
5	A	1801	G	O4'-C1'-N9	6.51	113.41	108.20
5	A	2402	A	O4'-C1'-N9	6.51	113.41	108.20
5	A	513	A	C5-C6-N1	-6.51	114.44	117.70
5	A	351	G	C5-C6-O6	-6.51	124.69	128.60
5	A	278	A	C5-C6-N1	-6.51	114.44	117.70
5	A	468	C	N3-C4-C5	-6.51	119.30	121.90
5	A	763	A	C4-C5-C6	6.51	120.25	117.00
5	A	652	A	O4'-C1'-N9	6.51	113.41	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1864	G	O4'-C1'-N9	6.51	113.41	108.20
5	A	720	C	C5'-C4'-O4'	-6.51	101.29	109.10
5	A	1176	U	O4'-C1'-N1	6.51	113.41	108.20
5	A	1228	G	C5-C6-O6	-6.51	124.70	128.60
6	B	7	G	C5-C6-O6	-6.51	124.70	128.60
5	A	1665	G	C5-C6-O6	-6.50	124.70	128.60
5	A	1838	A	C4-C5-C6	6.50	120.25	117.00
5	A	2691	A	C5-C6-N6	-6.50	118.50	123.70
6	B	67	G	C5-C6-O6	-6.50	124.70	128.60
5	A	2390	A	C4-C5-C6	6.50	120.25	117.00
5	A	2694	A	C4-C5-C6	6.50	120.25	117.00
5	A	592	A	C5-C6-N1	-6.50	114.45	117.70
5	A	2809	G	O4'-C1'-N9	6.50	113.40	108.20
5	A	2038	G	C5-C6-O6	-6.50	124.70	128.60
5	A	2555	G	C5-C6-O6	-6.50	124.70	128.60
5	A	660	G	C5-C6-O6	-6.50	124.70	128.60
5	A	806	G	C5-C6-O6	-6.50	124.70	128.60
5	A	810	G	C5-C6-O6	-6.50	124.70	128.60
5	A	877	G	C5-C6-O6	-6.50	124.70	128.60
5	A	1123	A	O4'-C1'-N9	6.50	113.40	108.20
5	A	1526	G	C5-C6-O6	-6.50	124.70	128.60
5	A	2488	A	C4-C5-C6	6.50	120.25	117.00
5	A	2576	U	O4'-C1'-N1	6.50	113.40	108.20
5	A	2683	A	C4-C5-C6	6.50	120.25	117.00
5	A	2848	A	C4-C5-C6	6.50	120.25	117.00
5	A	2071	A	O4'-C1'-N9	6.50	113.40	108.20
5	A	1188	A	C5-C6-N1	-6.49	114.45	117.70
5	A	1212	U	O4'-C1'-N1	6.49	113.39	108.20
5	A	2660	G	P-O5'-C5'	6.49	131.29	120.90
5	A	852	G	C5-C6-O6	-6.49	124.71	128.60
5	A	1120	G	C5-C6-O6	-6.49	124.71	128.60
5	A	1244	A	C5-C6-N6	-6.49	118.51	123.70
5	A	562	C	O4'-C1'-N1	6.49	113.39	108.20
5	A	758	A	C5-C6-N6	-6.49	118.51	123.70
5	A	821	A	C5-C6-N6	-6.49	118.51	123.70
5	A	933	C	O4'-C1'-N1	6.49	113.39	108.20
5	A	1106	U	C2'-C3'-O3'	6.49	124.08	113.70
5	A	1314	A	C4-C5-C6	6.49	120.24	117.00
5	A	1438	C	N3-C4-N4	6.49	122.54	118.00
5	A	2763	C	N3-C4-N4	6.49	122.54	118.00
5	A	191	G	C5-C6-O6	-6.49	124.71	128.60
5	A	790	A	O4'-C1'-N9	6.49	113.39	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1672	A	O4'-C1'-N9	6.49	113.39	108.20
5	A	476	A	P-O3'-C3'	6.49	127.48	119.70
5	A	1310	C	N3-C4-N4	6.49	122.54	118.00
5	A	1742	G	O4'-C1'-N9	6.49	113.39	108.20
5	A	1958	G	C5-C6-O6	-6.49	124.71	128.60
5	A	2775	U	O4'-C1'-N1	6.49	113.39	108.20
5	A	329	A	C5-C6-N6	-6.48	118.51	123.70
5	A	160	G	C5-C6-O6	-6.48	124.71	128.60
5	A	272	C	N3-C4-C5	-6.48	119.31	121.90
5	A	574	A	C4-C5-C6	6.48	120.24	117.00
5	A	872	C	N3-C4-C5	-6.48	119.31	121.90
5	A	2170	A	C5-C6-N6	-6.48	118.51	123.70
5	A	2205	A	C5-C6-N6	-6.48	118.51	123.70
5	A	2790	A	C5-C6-N6	-6.48	118.52	123.70
5	A	871	G	P-O5'-C5'	6.48	131.27	120.90
5	A	899	C	N3-C4-N4	6.48	122.54	118.00
5	A	1870	U	O4'-C1'-N1	6.48	113.38	108.20
5	A	2569	C	N3-C4-N4	6.48	122.54	118.00
5	A	2572	G	C5-C6-O6	-6.48	124.71	128.60
6	B	66	C	N3-C4-N4	6.48	122.54	118.00
6	B	99	A	C4-C5-C6	6.48	120.24	117.00
5	A	896	A	P-O5'-C5'	6.48	131.26	120.90
5	A	2459	A	C4-C5-C6	6.48	120.24	117.00
5	A	2734	A	O4'-C1'-N9	6.48	113.38	108.20
5	A	1254	A	C4-C5-C6	6.48	120.24	117.00
5	A	1233	A	O4'-C1'-N9	6.47	113.38	108.20
5	A	1479	G	O4'-C1'-N9	6.47	113.38	108.20
5	A	2626	G	C5-C6-O6	-6.47	124.72	128.60
5	A	2801	C	N3-C4-C5	-6.47	119.31	121.90
5	A	1460	G	N1-C6-O6	6.47	123.78	119.90
5	A	1466	U	O4'-C1'-N1	6.47	113.38	108.20
5	A	2144	G	C5-C6-O6	-6.47	124.72	128.60
5	A	2233	C	N3-C4-N4	6.47	122.53	118.00
5	A	2511	A	C4-C5-C6	6.47	120.24	117.00
6	B	94	G	C5-C6-O6	-6.47	124.72	128.60
5	A	295	G	C5-C6-O6	-6.47	124.72	128.60
5	A	42	G	C5'-C4'-C3'	-6.47	105.65	116.00
5	A	330	A	C5-C6-N1	-6.47	114.47	117.70
5	A	1541	A	P-O3'-C3'	6.47	127.46	119.70
5	A	1981	A	C4-C5-C6	6.47	120.23	117.00
5	A	2827	A	C4-C5-C6	6.47	120.23	117.00
6	B	57	G	O4'-C1'-N9	6.47	113.37	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	399	C	N3-C4-C5	-6.47	119.31	121.90
5	A	662	U	O4'-C1'-N1	6.47	113.37	108.20
5	A	935	A	O4'-C1'-N9	6.47	113.37	108.20
5	A	1114	G	C5-C6-O6	-6.47	124.72	128.60
5	A	1523	U	O4'-C1'-N1	6.47	113.37	108.20
5	A	1942	A	C4-C5-C6	6.47	120.23	117.00
6	B	5	G	C5-C6-O6	-6.47	124.72	128.60
5	A	1188	A	C4-C5-C6	6.46	120.23	117.00
5	A	1467	G	C5-C6-O6	-6.46	124.72	128.60
5	A	1755	C	O4'-C1'-N1	6.46	113.37	108.20
5	A	2162	G	C5-C6-O6	-6.46	124.72	128.60
5	A	2463	A	C5-C6-N6	-6.46	118.53	123.70
5	A	2715	G	O4'-C1'-N9	6.46	113.37	108.20
5	A	866	A	C4-C5-C6	6.46	120.23	117.00
5	A	2284	G	C5-C6-O6	-6.46	124.72	128.60
5	A	2353	U	O4'-C1'-N1	6.46	113.37	108.20
5	A	2744	C	N3-C4-C5	-6.46	119.31	121.90
5	A	2820	U	P-O3'-C3'	6.46	127.46	119.70
5	A	537	A	O4'-C1'-N9	6.46	113.37	108.20
5	A	692	A	O4'-C1'-N9	6.46	113.37	108.20
5	A	1785	G	O4'-C1'-N9	6.46	113.37	108.20
5	A	2066	A	C4-C5-C6	6.46	120.23	117.00
5	A	2595	A	C4-C5-C6	6.46	120.23	117.00
5	A	160	G	O4'-C1'-N9	6.46	113.37	108.20
5	A	1403	G	C5-C6-O6	-6.46	124.72	128.60
5	A	2837	A	O4'-C1'-N9	6.46	113.37	108.20
5	A	1390	C	P-O3'-C3'	6.46	127.45	119.70
5	A	1590	C	N3-C4-N4	6.46	122.52	118.00
5	A	2192	U	O4'-C1'-N1	6.46	113.37	108.20
5	A	2211	G	C5-C6-O6	-6.46	124.73	128.60
5	A	2365	A	C4-C5-C6	6.46	120.23	117.00
5	A	2391	G	C5-C6-O6	-6.46	124.73	128.60
5	A	2901	G	C5-C6-O6	-6.46	124.73	128.60
5	A	2129	G	O4'-C1'-N9	6.46	113.36	108.20
5	A	2573	G	O4'-C1'-N9	6.46	113.36	108.20
5	A	59	G	O4'-C1'-N9	6.45	113.36	108.20
5	A	760	G	P-O5'-C5'	6.45	131.23	120.90
5	A	2183	G	C5-C6-O6	-6.45	124.73	128.60
5	A	93	C	N3-C4-N4	6.45	122.52	118.00
5	A	1170	C	N3-C4-N4	6.45	122.52	118.00
5	A	2478	U	O4'-C1'-N1	6.45	113.36	108.20
5	A	2519	G	C5-C6-O6	-6.45	124.73	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2669	G	O4'-C1'-N9	6.45	113.36	108.20
5	A	37	C	O4'-C1'-N1	6.45	113.36	108.20
5	A	1046	A	C4-C5-C6	6.45	120.23	117.00
5	A	1233	A	C5-C6-N1	-6.45	114.47	117.70
5	A	1972	U	O4'-C1'-N1	6.45	113.36	108.20
5	A	84	A	C5-C6-N6	-6.45	118.54	123.70
5	A	296	G	C5-C6-O6	-6.45	124.73	128.60
5	A	500	A	C4-C5-C6	6.45	120.22	117.00
5	A	762	A	C4-C5-C6	6.45	120.22	117.00
5	A	2527	C	N3-C4-C5	-6.45	119.32	121.90
5	A	235	G	C5-C6-O6	-6.45	124.73	128.60
5	A	269	G	C5-C6-O6	-6.45	124.73	128.60
5	A	827	G	C5-C6-O6	-6.45	124.73	128.60
5	A	830	A	C8-N9-C4	-6.45	103.22	105.80
5	A	1462	G	O4'-C1'-N9	6.45	113.36	108.20
5	A	891	G	C5-C6-O6	-6.45	124.73	128.60
5	A	937	C	O4'-C1'-N1	6.45	113.36	108.20
5	A	1035	G	C5-C6-O6	-6.45	124.73	128.60
5	A	1198	C	N3-C4-N4	6.45	122.51	118.00
5	A	2050	G	C5-C6-O6	-6.44	124.73	128.60
5	A	2294	U	O4'-C1'-N1	6.44	113.36	108.20
5	A	322	A	C5'-C4'-C3'	-6.44	105.69	116.00
5	A	329	A	C4-C5-C6	6.44	120.22	117.00
5	A	1553	A	C4-C5-C6	6.44	120.22	117.00
5	A	1926	G	O4'-C1'-N9	6.44	113.35	108.20
5	A	2755	U	C2-N1-C1'	6.44	125.43	117.70
5	A	54	G	C5-C6-O6	-6.44	124.74	128.60
5	A	868	A	C4-C5-C6	6.44	120.22	117.00
5	A	2723	G	C5-C6-O6	-6.44	124.74	128.60
5	A	14	A	C5-C6-N6	-6.44	118.55	123.70
5	A	87	U	P-O3'-C3'	-6.44	111.97	119.70
5	A	1152	G	O4'-C1'-N9	6.44	113.35	108.20
5	A	1055	A	C4-C5-C6	6.44	120.22	117.00
5	A	2026	A	C5'-C4'-O4'	6.44	116.82	109.10
5	A	305	A	C4-C5-C6	6.43	120.22	117.00
5	A	414	C	C6-N1-C2	-6.43	117.73	120.30
5	A	605	G	C5-C6-O6	-6.43	124.74	128.60
5	A	1951	G	O4'-C1'-N9	6.43	113.35	108.20
5	A	2005	C	P-O3'-C3'	6.43	127.42	119.70
5	A	2222	C	N3-C4-N4	6.43	122.50	118.00
5	A	4	U	O4'-C1'-N1	6.43	113.35	108.20
5	A	81	G	O4'-C1'-N9	6.43	113.35	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	124	A	P-O3'-C3'	6.43	127.42	119.70
5	A	1928	A	O4'-C1'-N9	6.43	113.35	108.20
5	A	2260	U	O4'-C1'-N1	6.43	113.35	108.20
5	A	2527	C	N3-C4-N4	6.43	122.50	118.00
5	A	2653	G	C5-C6-O6	-6.43	124.74	128.60
5	A	418	A	O4'-C1'-N9	6.43	113.34	108.20
5	A	1092	A	C4-C5-C6	6.43	120.22	117.00
5	A	406	G	C5-C6-O6	-6.43	124.74	128.60
5	A	797	A	C4-C5-C6	6.43	120.22	117.00
5	A	1659	A	C4-C5-C6	6.43	120.22	117.00
5	A	1712	G	C5-C6-O6	-6.43	124.74	128.60
5	A	2086	G	O4'-C1'-N9	6.43	113.34	108.20
5	A	2176	A	O4'-C1'-N9	6.43	113.34	108.20
5	A	2204	U	O4'-C1'-N1	6.43	113.34	108.20
5	A	2717	G	N1-C6-O6	6.43	123.76	119.90
5	A	2796	C	N3-C4-N4	6.43	122.50	118.00
5	A	1691	A	O4'-C1'-N9	6.43	113.34	108.20
5	A	2876	A	O4'-C1'-N9	6.43	113.34	108.20
5	A	302	A	C5-C6-N1	-6.43	114.49	117.70
5	A	413	U	C2-N1-C1'	6.43	125.41	117.70
5	A	712	C	N3-C4-N4	6.43	122.50	118.00
5	A	1313	A	C5-C6-N6	-6.43	118.56	123.70
5	A	1873	U	O4'-C1'-N1	6.43	113.34	108.20
5	A	2742	C	O4'-C1'-N1	6.43	113.34	108.20
5	A	1149	A	O4'-C1'-N9	6.42	113.34	108.20
5	A	1745	A	C4-C5-C6	6.42	120.21	117.00
5	A	2350	G	C5-C6-O6	-6.42	124.75	128.60
5	A	2579	G	C5-C6-O6	-6.42	124.75	128.60
5	A	120	G	O4'-C1'-N9	6.42	113.34	108.20
5	A	1096	A	C4-C5-C6	6.42	120.21	117.00
5	A	1110	C	P-O3'-C3'	6.42	127.40	119.70
5	A	1280	G	P-O3'-C3'	-6.42	112.00	119.70
5	A	1780	C	N3-C4-N4	6.42	122.49	118.00
5	A	2379	C	N3-C4-N4	6.42	122.49	118.00
5	A	152	C	N3-C4-C5	-6.42	119.33	121.90
5	A	216	A	C5-C6-N1	-6.42	114.49	117.70
5	A	356	G	O4'-C1'-N9	6.42	113.33	108.20
5	A	1228	G	O4'-C1'-N9	6.42	113.33	108.20
5	A	1337	C	N3-C4-N4	6.42	122.49	118.00
5	A	1444	C	N3-C4-N4	6.42	122.49	118.00
5	A	1953	C	O4'-C1'-N1	6.42	113.33	108.20
5	A	2656	G	O4'-C1'-N9	6.42	113.33	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1370	C	N3-C4-C5	-6.42	119.33	121.90
5	A	2343	A	C5-C6-N1	-6.42	114.49	117.70
5	A	237	U	P-O3'-C3'	-6.41	112.00	119.70
5	A	769	A	C5-C6-N6	-6.41	118.57	123.70
5	A	1614	A	C4-C5-C6	6.41	120.21	117.00
5	A	2154	G	C5-C6-O6	-6.41	124.75	128.60
5	A	80	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	1074	A	C4-C5-C6	6.41	120.21	117.00
5	A	437	A	C4-C5-C6	6.41	120.20	117.00
5	A	1679	A	C5-C6-N1	-6.41	114.49	117.70
5	A	1762	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	2490	C	O4'-C1'-N1	6.41	113.33	108.20
5	A	2589	C	O4'-C1'-N1	6.41	113.33	108.20
5	A	273	A	O4'-C1'-N9	6.41	113.33	108.20
5	A	528	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	824	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	1621	G	C5-C6-O6	-6.41	124.75	128.60
5	A	2264	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	101	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	129	C	N3-C4-N4	6.41	122.48	118.00
5	A	1385	G	O4'-C1'-N9	6.41	113.33	108.20
5	A	2072	C	N3-C4-N4	6.41	122.48	118.00
5	A	2325	U	O4'-C1'-N1	6.41	113.33	108.20
5	A	208	G	C5-C6-O6	-6.41	124.76	128.60
5	A	558	G	C5-C6-O6	-6.41	124.76	128.60
5	A	1094	A	C4-C5-C6	6.41	120.20	117.00
5	A	1098	C	O4'-C1'-N1	6.41	113.33	108.20
5	A	1665	G	O4'-C1'-N9	6.41	113.32	108.20
5	A	1829	C	O4'-C1'-N1	6.41	113.32	108.20
5	A	2882	G	C5-C6-O6	-6.41	124.76	128.60
5	A	1366	C	N3-C4-N4	6.40	122.48	118.00
5	A	2020	U	O4'-C1'-N1	6.40	113.32	108.20
5	A	24	G	O4'-C1'-N9	6.40	113.32	108.20
5	A	794	U	O4'-C1'-N1	6.40	113.32	108.20
5	A	1158	G	O4'-C1'-N9	6.40	113.32	108.20
5	A	2898	A	C4-C5-C6	6.40	120.20	117.00
5	A	661	A	O4'-C1'-N9	6.40	113.32	108.20
5	A	1398	A	C4-C5-C6	6.40	120.20	117.00
5	A	2007	A	O4'-C1'-N9	6.40	113.32	108.20
5	A	2155	A	C5-C6-N6	-6.40	118.58	123.70
5	A	531	C	N3-C4-N4	6.40	122.48	118.00
5	A	1648	A	O4'-C1'-N9	6.40	113.32	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1995	A	C4-C5-C6	6.40	120.20	117.00
5	A	2048	U	O4'-C1'-N1	6.40	113.32	108.20
5	A	65	A	O4'-C1'-N9	6.40	113.32	108.20
5	A	2061	G	N1-C6-O6	6.40	123.74	119.90
5	A	2225	C	O4'-C1'-N1	6.40	113.32	108.20
5	A	699	A	O4'-C1'-N9	6.40	113.32	108.20
5	A	740	A	O4'-C1'-N9	6.40	113.32	108.20
5	A	988	G	O4'-C1'-N9	6.40	113.32	108.20
5	A	512	G	C5-C6-O6	-6.39	124.76	128.60
5	A	979	U	C2-N1-C1'	6.39	125.37	117.70
5	A	1303	U	O4'-C1'-N1	6.39	113.32	108.20
5	A	1589	G	C5-C6-O6	-6.39	124.76	128.60
5	A	2002	G	C5-C6-O6	-6.39	124.76	128.60
5	A	57	C	N3-C4-N4	6.39	122.47	118.00
5	A	304	G	C5-C6-O6	-6.39	124.77	128.60
5	A	1252	G	N3-C2-N2	6.39	124.37	119.90
5	A	2080	A	O4'-C1'-N9	6.39	113.31	108.20
5	A	2754	A	C4-C5-C6	6.39	120.20	117.00
5	A	2653	G	O4'-C1'-N9	6.39	113.31	108.20
6	B	109	C	C6-N1-C2	-6.39	117.74	120.30
5	A	1954	C	N3-C4-N4	6.39	122.47	118.00
6	B	71	A	C5-C6-N1	-6.39	114.51	117.70
5	A	888	A	O4'-C1'-N9	6.39	113.31	108.20
5	A	917	A	C5-C6-N1	-6.39	114.51	117.70
5	A	1464	A	O4'-C1'-N9	6.39	113.31	108.20
5	A	257	G	C5-C6-O6	-6.39	124.77	128.60
5	A	454	G	O4'-C1'-N9	6.39	113.31	108.20
5	A	1088	G	O4'-C1'-N9	6.39	113.31	108.20
5	A	1235	A	C4-C5-C6	6.39	120.19	117.00
5	A	766	C	O4'-C1'-N1	6.38	113.31	108.20
5	A	1061	A	C4-C5-C6	6.38	120.19	117.00
5	A	1219	C	P-O3'-C3'	6.38	127.36	119.70
5	A	473	C	N3-C4-C5	-6.38	119.35	121.90
5	A	545	U	O4'-C1'-N1	6.38	113.31	108.20
5	A	1335	A	C5-C6-N6	-6.38	118.59	123.70
5	A	1472	G	C5-C6-O6	-6.38	124.77	128.60
5	A	1653	A	C4-C5-C6	6.38	120.19	117.00
5	A	2494	C	N3-C4-N4	6.38	122.47	118.00
5	A	2860	A	C4-C5-C6	6.38	120.19	117.00
5	A	128	C	N3-C4-N4	6.38	122.47	118.00
5	A	613	U	O4'-C1'-N1	6.38	113.30	108.20
5	A	314	A	C4-C5-C6	6.38	120.19	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	723	A	C5-C6-N1	-6.38	114.51	117.70
5	A	2794	A	O4'-C1'-N9	6.38	113.30	108.20
5	A	1149	A	C4-C5-C6	6.38	120.19	117.00
5	A	1021	A	O4'-C1'-N9	6.38	113.30	108.20
5	A	2141	A	C4-C5-C6	6.38	120.19	117.00
5	A	2526	A	C5-C6-N6	-6.38	118.60	123.70
5	A	2622	U	O4'-C1'-N1	6.38	113.30	108.20
5	A	124	A	C4-C5-C6	6.37	120.19	117.00
5	A	1517	A	C4-C5-C6	6.37	120.19	117.00
5	A	2023	C	N3-C4-C5	-6.37	119.35	121.90
5	A	2454	A	C4-C5-C6	6.37	120.19	117.00
5	A	2473	G	O4'-C1'-N9	6.37	113.30	108.20
5	A	2845	A	C4-C5-C6	6.37	120.19	117.00
6	B	9	C	O4'-C1'-N1	6.37	113.30	108.20
5	A	1190	A	O4'-C1'-N9	6.37	113.30	108.20
5	A	1409	C	N3-C4-N4	6.37	122.46	118.00
5	A	1827	U	O4'-C1'-N1	6.37	113.30	108.20
5	A	1845	A	C4-C5-C6	6.37	120.19	117.00
5	A	2855	G	O4'-C1'-N9	6.37	113.30	108.20
6	B	37	A	C4-C5-C6	6.37	120.19	117.00
5	A	945	C	N3-C4-N4	6.37	122.46	118.00
5	A	1130	A	C4-C5-C6	6.37	120.18	117.00
5	A	1186	C	N3-C4-N4	6.37	122.46	118.00
5	A	1696	G	O4'-C1'-N9	6.37	113.29	108.20
5	A	2522	U	O4'-C1'-N1	6.37	113.30	108.20
5	A	1349	G	C5-C6-O6	-6.37	124.78	128.60
5	A	1710	A	C5-C6-N6	-6.37	118.61	123.70
5	A	2753	U	O4'-C1'-N1	6.37	113.29	108.20
6	B	30	C	N3-C4-C5	-6.37	119.35	121.90
5	A	1099	C	N3-C4-N4	6.37	122.46	118.00
5	A	1359	G	O4'-C1'-N9	6.37	113.29	108.20
5	A	1802	A	C5-C6-N1	-6.37	114.52	117.70
5	A	681	C	N3-C4-N4	6.36	122.45	118.00
5	A	847	A	C4-C5-C6	6.36	120.18	117.00
5	A	1686	A	O4'-C1'-N9	6.36	113.29	108.20
5	A	1722	A	C5-C6-N6	-6.36	118.61	123.70
5	A	2035	C	N3-C4-N4	6.36	122.45	118.00
5	A	2435	C	N3-C4-C5	-6.36	119.35	121.90
5	A	138	U	C2-N1-C1'	6.36	125.33	117.70
5	A	1133	G	O4'-C1'-N9	6.36	113.29	108.20
5	A	2737	G	O4'-C1'-N9	6.36	113.29	108.20
5	A	372	U	O4'-C1'-N1	6.36	113.29	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1945	A	O4'-C1'-N9	6.36	113.29	108.20
5	A	1967	A	O4'-C1'-N9	6.36	113.29	108.20
5	A	92	G	C5-C6-O6	-6.36	124.78	128.60
5	A	724	A	C4-C5-C6	6.36	120.18	117.00
5	A	1008	A	C4-C5-C6	6.36	120.18	117.00
5	A	2210	G	C5-C6-O6	-6.36	124.78	128.60
5	A	435	G	C5-C6-O6	-6.36	124.78	128.60
5	A	623	A	C5-C6-N1	-6.36	114.52	117.70
5	A	673	A	C5-C6-N6	-6.36	118.61	123.70
5	A	1053	C	N3-C4-N4	6.36	122.45	118.00
5	A	1480	A	C5-C6-N1	-6.36	114.52	117.70
5	A	1763	G	C5-C6-O6	-6.36	124.79	128.60
5	A	2333	G	O4'-C1'-N9	6.36	113.28	108.20
5	A	2791	U	P-O3'-C3'	6.36	127.33	119.70
5	A	2828	G	C5-C6-O6	-6.36	124.78	128.60
5	A	614	G	O4'-C1'-N9	6.36	113.28	108.20
5	A	932	C	N3-C4-N4	6.36	122.45	118.00
5	A	1264	G	C5-C6-O6	-6.36	124.79	128.60
5	A	2142	C	N3-C4-C5	-6.36	119.36	121.90
5	A	2458	G	C5-C6-O6	-6.36	124.79	128.60
5	A	627	G	O4'-C1'-N9	6.35	113.28	108.20
5	A	2368	G	O4'-C1'-N9	6.35	113.28	108.20
5	A	870	A	C5-C6-N6	-6.35	118.62	123.70
6	B	104	G	O4'-C1'-N9	6.35	113.28	108.20
5	A	782	A	C4-C5-C6	6.35	120.17	117.00
5	A	878	G	O4'-C1'-N9	6.35	113.28	108.20
5	A	542	G	C5-C6-O6	-6.35	124.79	128.60
5	A	1471	G	C5-C6-O6	-6.35	124.79	128.60
5	A	2179	U	O4'-C1'-N1	6.35	113.28	108.20
5	A	2621	G	C5-C6-O6	-6.35	124.79	128.60
5	A	2877	G	O4'-C1'-N9	6.35	113.28	108.20
6	B	64	A	C4-C5-C6	6.35	120.17	117.00
5	A	59	G	C5-C6-O6	-6.35	124.79	128.60
5	A	160	G	N3-C2-N2	6.35	124.34	119.90
5	A	1744	G	C5-C6-O6	-6.35	124.79	128.60
5	A	279	A	C5-C6-N1	-6.34	114.53	117.70
5	A	302	A	O4'-C1'-N9	6.34	113.28	108.20
5	A	669	C	N3-C4-N4	6.34	122.44	118.00
5	A	1541	A	C4-C5-C6	6.34	120.17	117.00
5	A	1784	A	C5-C6-N6	-6.34	118.62	123.70
5	A	2825	C	N3-C4-N4	6.34	122.44	118.00
6	B	8	G	C5-C6-O6	-6.34	124.79	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	171	A	O4'-C1'-N9	6.34	113.28	108.20
5	A	616	A	C4-C5-C6	6.34	120.17	117.00
5	A	634	A	O4'-C1'-N9	6.34	113.28	108.20
5	A	1850	A	C4-C5-C6	6.34	120.17	117.00
5	A	1941	A	C4-C5-C6	6.34	120.17	117.00
5	A	2364	A	C4-C5-C6	6.34	120.17	117.00
5	A	22	C	N3-C4-N4	6.34	122.44	118.00
5	A	112	U	O4'-C1'-N1	6.34	113.27	108.20
5	A	1801	G	C5-C6-O6	-6.34	124.80	128.60
5	A	2002	G	O4'-C1'-N9	6.34	113.27	108.20
5	A	192	G	O4'-C1'-N9	6.34	113.27	108.20
5	A	517	A	C4-C5-C6	6.34	120.17	117.00
5	A	2401	G	O4'-C1'-N9	6.34	113.27	108.20
6	B	86	U	O4'-C1'-N1	6.34	113.27	108.20
5	A	800	G	C5-C6-O6	-6.34	124.80	128.60
5	A	1674	G	O4'-C1'-N9	6.34	113.27	108.20
5	A	26	G	C5-C6-O6	-6.34	124.80	128.60
5	A	674	G	O4'-C1'-N9	6.34	113.27	108.20
5	A	918	U	O4'-C1'-N1	6.34	113.27	108.20
5	A	1773	G	O4'-C1'-N9	6.34	113.27	108.20
5	A	2305	G	C5-C6-O6	-6.34	124.80	128.60
5	A	2722	A	O4'-C1'-N9	6.34	113.27	108.20
5	A	5	A	C4-C5-C6	6.33	120.17	117.00
5	A	589	G	O4'-C1'-N9	6.33	113.27	108.20
5	A	1710	A	C4-C5-C6	6.33	120.17	117.00
5	A	699	A	C4-C5-C6	6.33	120.17	117.00
5	A	969	C	N3-C4-C5	-6.33	119.37	121.90
5	A	1828	G	C5-C6-O6	-6.33	124.80	128.60
5	A	2498	A	C4-C5-C6	6.33	120.17	117.00
5	A	2758	G	O4'-C1'-N9	6.33	113.27	108.20
5	A	1640	G	C5-C6-O6	-6.33	124.80	128.60
5	A	2001	G	C5-C6-O6	-6.33	124.80	128.60
5	A	2157	C	N3-C4-N4	6.33	122.43	118.00
5	A	2481	C	O4'-C1'-N1	6.33	113.27	108.20
5	A	2556	C	N3-C4-N4	6.33	122.43	118.00
5	A	2772	U	O4'-C1'-N1	6.33	113.27	108.20
5	A	53	A	C4-C5-C6	6.33	120.17	117.00
5	A	823	G	C4-N9-C1'	6.33	134.73	126.50
5	A	925	A	C4-C5-C6	6.33	120.17	117.00
5	A	49	A	C5-C6-N1	-6.33	114.54	117.70
5	A	747	G	C5-C6-O6	-6.33	124.80	128.60
5	A	1852	G	O4'-C1'-N9	6.33	113.26	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2042	A	C4-C5-C6	6.33	120.16	117.00
5	A	2334	U	O4'-C1'-N1	6.33	113.26	108.20
5	A	2794	A	C5-C6-N6	-6.33	118.64	123.70
5	A	231	A	C5-C6-N1	-6.33	114.54	117.70
5	A	1444	C	N3-C4-C5	-6.33	119.37	121.90
5	A	436	A	C4-C5-C6	6.33	120.16	117.00
5	A	749	G	O4'-C1'-N9	6.33	113.26	108.20
5	A	781	A	C4-C5-C6	6.33	120.16	117.00
5	A	795	G	C5-C6-O6	-6.33	124.80	128.60
5	A	1047	A	O4'-C1'-N9	6.33	113.26	108.20
5	A	2062	A	O4'-C1'-N9	6.33	113.26	108.20
5	A	475	A	O3'-P-O5'	-6.32	91.98	104.00
5	A	1210	A	C4-C5-C6	6.32	120.16	117.00
5	A	1431	G	C5-C6-O6	-6.32	124.81	128.60
5	A	2146	A	C5-C6-N6	-6.32	118.64	123.70
5	A	2586	G	C5-C6-O6	-6.32	124.81	128.60
5	A	15	G	O4'-C1'-N9	6.32	113.26	108.20
5	A	335	G	C5-C6-O6	-6.32	124.81	128.60
5	A	835	A	C4-C5-C6	6.32	120.16	117.00
5	A	2274	U	O4'-C1'-N1	6.32	113.26	108.20
5	A	178	A	C4-C5-C6	6.32	120.16	117.00
5	A	218	G	C5-C6-O6	-6.32	124.81	128.60
5	A	518	A	C5-C6-N1	-6.32	114.54	117.70
5	A	957	A	C4-C5-C6	6.32	120.16	117.00
5	A	1227	G	C5-C6-O6	-6.32	124.81	128.60
5	A	1736	C	N3-C4-C5	-6.32	119.37	121.90
5	A	2254	A	O4'-C1'-N9	6.32	113.26	108.20
5	A	2429	G	O4'-C1'-N9	6.32	113.26	108.20
17	P	43	PHE	CB-CG-CD2	6.32	125.22	120.80
5	A	1248	C	N3-C4-N4	6.32	122.42	118.00
5	A	2734	A	C5-C6-N6	-6.32	118.64	123.70
5	A	1062	C	N3-C4-C5	-6.32	119.37	121.90
5	A	1643	C	N3-C4-N4	6.32	122.42	118.00
5	A	1711	G	C5-C6-O6	-6.32	124.81	128.60
5	A	2787	A	C5-C6-N6	-6.32	118.64	123.70
6	B	15	C	N3-C4-N4	6.32	122.42	118.00
6	B	30	C	N3-C4-N4	6.32	122.42	118.00
5	A	260	A	C4-C5-C6	6.32	120.16	117.00
5	A	1630	G	C5-C6-O6	-6.32	124.81	128.60
5	A	2391	G	O4'-C1'-N9	6.32	113.25	108.20
5	A	201	C	N3-C4-N4	6.31	122.42	118.00
5	A	514	G	C5-C6-O6	-6.31	124.81	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	808	A	C4-C5-C6	6.31	120.16	117.00
5	A	885	C	N3-C4-N4	6.31	122.42	118.00
5	A	2092	C	N3-C4-N4	6.31	122.42	118.00
5	A	2357	A	C5-C6-N6	-6.31	118.65	123.70
5	A	2444	G	O4'-C1'-N9	6.31	113.25	108.20
6	B	4	G	C5-C6-O6	-6.31	124.81	128.60
6	B	31	G	O4'-C1'-N9	6.31	113.25	108.20
6	B	55	A	C4-C5-C6	6.31	120.16	117.00
5	A	1236	G	C5-C6-O6	-6.31	124.81	128.60
5	A	834	C	N3-C4-N4	6.31	122.42	118.00
5	A	1421	A	C4-C5-C6	6.31	120.16	117.00
5	A	1480	A	C4-C5-C6	6.31	120.16	117.00
5	A	2044	A	O4'-C1'-N9	6.31	113.25	108.20
5	A	2094	C	N3-C4-N4	6.31	122.42	118.00
5	A	2762	A	C4-C5-C6	6.31	120.15	117.00
5	A	611	U	P-O3'-C3'	6.31	127.27	119.70
5	A	769	A	C4-C5-C6	6.31	120.15	117.00
5	A	2508	U	O4'-C1'-N1	6.31	113.25	108.20
5	A	2620	C	N3-C4-C5	-6.31	119.38	121.90
5	A	360	C	N3-C4-N4	6.31	122.41	118.00
5	A	1269	A	C4-C5-C6	6.31	120.15	117.00
5	A	2925	C	N3-C4-N4	6.31	122.41	118.00
5	A	127	C	N3-C4-C5	-6.30	119.38	121.90
5	A	407	A	C4-C5-C6	6.30	120.15	117.00
5	A	1563	G	C5-C6-O6	-6.30	124.82	128.60
5	A	2371	C	N3-C4-N4	6.30	122.41	118.00
5	A	2708	A	C4-C5-C6	6.30	120.15	117.00
5	A	2812	A	C4-C5-C6	6.30	120.15	117.00
5	A	7	G	O4'-C1'-N9	6.30	113.24	108.20
5	A	490	A	C4-C5-C6	6.30	120.15	117.00
5	A	938	G	C5'-C4'-O4'	6.30	116.66	109.10
5	A	1937	C	N3-C4-N4	6.30	122.41	118.00
5	A	2711	G	C5-C6-O6	-6.30	124.82	128.60
5	A	2835	A	C5-C6-N1	-6.30	114.55	117.70
5	A	2841	C	O4'-C1'-N1	6.30	113.24	108.20
6	B	90	C	N3-C4-N4	6.30	122.41	118.00
5	A	368	G	O4'-C1'-N9	6.30	113.24	108.20
5	A	513	A	C4-C5-C6	6.30	120.15	117.00
5	A	910	A	C4-C5-C6	6.30	120.15	117.00
5	A	932	C	N3-C4-C5	-6.30	119.38	121.90
5	A	2406	A	C4-C5-C6	6.30	120.15	117.00
5	A	2420	G	C5-C6-O6	-6.30	124.82	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2030	A	O4'-C1'-N9	6.30	113.24	108.20
5	A	2765	G	O4'-C1'-N9	6.30	113.24	108.20
5	A	67	A	C5-C6-N1	-6.30	114.55	117.70
5	A	1326	A	C5-C6-N6	-6.30	118.66	123.70
5	A	1352	U	C2-N1-C1'	6.30	125.26	117.70
5	A	2716	U	O4'-C1'-N1	6.30	113.24	108.20
5	A	2885	A	C4-C5-C6	6.30	120.15	117.00
5	A	1364	C	O4'-C1'-N1	6.29	113.24	108.20
17	P	74	PHE	CB-CG-CD2	-6.29	116.39	120.80
5	A	18	C	N3-C4-N4	6.29	122.41	118.00
5	A	202	A	C4-C5-C6	6.29	120.15	117.00
5	A	448	A	O4'-C1'-N9	6.29	113.23	108.20
5	A	657	G	O4'-C1'-N9	6.29	113.23	108.20
5	A	786	A	C4-C5-C6	6.29	120.15	117.00
5	A	917	A	C4-C5-C6	6.29	120.15	117.00
5	A	1813	A	C5-C6-N6	-6.29	118.67	123.70
5	A	2228	A	P-O3'-C3'	6.29	127.25	119.70
5	A	65	A	C4-C5-C6	6.29	120.15	117.00
5	A	1068	G	N3-C2-N2	6.29	124.30	119.90
5	A	2869	A	O4'-C1'-N9	6.29	113.23	108.20
5	A	2885	A	O4'-C1'-N9	6.29	113.23	108.20
5	A	2290	C	N3-C4-N4	6.29	122.40	118.00
5	A	359	C	N3-C4-N4	6.29	122.40	118.00
5	A	1357	A	C4-C5-C6	6.29	120.14	117.00
5	A	1511	C	N3-C4-N4	6.29	122.40	118.00
5	A	2157	C	N3-C4-C5	-6.29	119.39	121.90
5	A	2395	A	C5-C6-N6	-6.29	118.67	123.70
5	A	1773	G	C5-C6-O6	-6.29	124.83	128.60
5	A	428	A	C4-C5-C6	6.29	120.14	117.00
5	A	1397	G	C5-C6-O6	-6.29	124.83	128.60
5	A	1493	C	N3-C4-N4	6.29	122.40	118.00
5	A	2655	C	N3-C4-N4	6.29	122.40	118.00
5	A	2708	A	C5-C6-N1	-6.29	114.56	117.70
5	A	415	C	N3-C4-N4	6.28	122.40	118.00
5	A	418	A	C5-C6-N6	-6.28	118.67	123.70
5	A	818	G	C5-C6-O6	-6.28	124.83	128.60
5	A	1400	G	O4'-C1'-N9	6.28	113.23	108.20
5	A	2199	G	C5-C6-O6	-6.28	124.83	128.60
5	A	2613	U	C2-N1-C1'	6.28	125.24	117.70
5	A	2870	G	O4'-C1'-N9	6.28	113.23	108.20
5	A	2907	A	O4'-C1'-N9	6.28	113.23	108.20
5	A	2658	A	C4-C5-C6	6.28	120.14	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	51	A	C4-C5-C6	6.28	120.14	117.00
5	A	421	A	O4'-C1'-N9	6.28	113.22	108.20
5	A	678	A	C4-C5-C6	6.28	120.14	117.00
5	A	736	A	C5-C6-N6	-6.28	118.68	123.70
5	A	114	C	O4'-C1'-N1	6.28	113.22	108.20
5	A	1483	A	C5-C6-N6	-6.28	118.68	123.70
5	A	2461	A	C5-C6-N6	-6.28	118.68	123.70
5	A	1274	U	P-O3'-C3'	6.28	127.23	119.70
5	A	2349	A	C4-C5-C6	6.28	120.14	117.00
6	B	92	C	N3-C4-N4	6.28	122.39	118.00
5	A	479	A	C4-C5-C6	6.28	120.14	117.00
5	A	919	U	P-O5'-C5'	6.28	130.94	120.90
5	A	1809	A	C4-C5-C6	6.28	120.14	117.00
5	A	1834	C	N3-C4-N4	6.28	122.39	118.00
5	A	2100	A	C5-C6-N6	-6.28	118.68	123.70
5	A	2421	A	C4-C5-C6	6.28	120.14	117.00
5	A	2550	C	N3-C4-N4	6.28	122.39	118.00
5	A	1683	C	N3-C4-N4	6.27	122.39	118.00
5	A	2398	A	C4-C5-C6	6.27	120.14	117.00
5	A	825	G	C5-C6-O6	-6.27	124.84	128.60
5	A	1072	A	C4-C5-C6	6.27	120.14	117.00
5	A	2207	C	C6-N1-C1'	-6.27	113.27	120.80
5	A	126	A	C4-C5-C6	6.27	120.14	117.00
5	A	1468	G	O4'-C1'-N9	6.27	113.22	108.20
5	A	1923	C	N3-C4-N4	6.27	122.39	118.00
5	A	2123	A	C5-C6-N1	-6.27	114.56	117.70
5	A	2163	A	C5-C6-N6	-6.27	118.68	123.70
5	A	2223	U	O4'-C1'-N1	6.27	113.22	108.20
5	A	2626	G	C5'-C4'-C3'	6.27	126.03	116.00
5	A	845	G	O4'-C1'-N9	6.27	113.22	108.20
5	A	1051	C	P-O5'-C5'	6.27	130.93	120.90
5	A	1191	C	N3-C4-N4	6.27	122.39	118.00
5	A	2419	U	C2-N1-C1'	6.27	125.22	117.70
5	A	254	A	C4-C5-C6	6.27	120.13	117.00
5	A	645	C	O4'-C1'-N1	6.27	113.21	108.20
5	A	884	C	N3-C4-N4	6.27	122.39	118.00
5	A	1769	G	O4'-C1'-N9	6.27	113.21	108.20
5	A	2073	C	N3-C4-N4	6.27	122.39	118.00
5	A	2406	A	C5-C6-N6	-6.27	118.69	123.70
6	B	44	A	C4-C5-C6	6.27	120.13	117.00
5	A	10	A	C4-C5-C6	6.27	120.13	117.00
5	A	324	A	C4-C5-C6	6.27	120.13	117.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1429	U	O4'-C1'-N1	6.27	113.21	108.20
5	A	2032	A	C5-C6-N6	-6.27	118.69	123.70
5	A	2488	A	C5-C6-N1	-6.27	114.57	117.70
5	A	183	A	O4'-C1'-N9	6.26	113.21	108.20
5	A	1084	A	C5-C6-N6	-6.26	118.69	123.70
5	A	1653	A	C5-C6-N6	-6.26	118.69	123.70
5	A	1658	G	C5-C6-O6	-6.26	124.84	128.60
5	A	2426	G	C5-C6-O6	-6.26	124.84	128.60
5	A	637	A	C5-C6-N1	-6.26	114.57	117.70
5	A	1020	A	C4-C5-C6	6.26	120.13	117.00
5	A	1410	G	C5-C6-O6	-6.26	124.84	128.60
5	A	1734	A	C4-C5-C6	6.26	120.13	117.00
5	A	2293	C	N3-C4-N4	6.26	122.38	118.00
5	A	2482	A	C5-C6-N1	-6.26	114.57	117.70
5	A	231	A	C4-C5-C6	6.26	120.13	117.00
5	A	1281	C	C6-N1-C1'	-6.26	113.29	120.80
5	A	1661	A	C4-C5-C6	6.26	120.13	117.00
5	A	1675	A	C4-C5-C6	6.26	120.13	117.00
5	A	2496	C	N3-C4-N4	6.26	122.38	118.00
5	A	2588	C	O4'-C1'-N1	6.26	113.21	108.20
5	A	2733	C	C5-C4-N4	-6.26	115.82	120.20
5	A	2813	U	O4'-C1'-N1	6.26	113.21	108.20
5	A	2854	A	C5-C6-N1	-6.26	114.57	117.70
5	A	2858	U	O4'-C1'-N1	6.26	113.21	108.20
5	A	460	C	N3-C4-C5	-6.26	119.40	121.90
5	A	494	A	C5-C6-N6	-6.26	118.69	123.70
5	A	543	A	C5-C6-N6	-6.26	118.69	123.70
5	A	1179	A	C4-C5-C6	6.26	120.13	117.00
5	A	1183	G	C5-C6-O6	-6.26	124.84	128.60
5	A	2369	A	C5-C6-N6	-6.26	118.69	123.70
5	A	965	A	O4'-C1'-N9	6.26	113.21	108.20
5	A	1623	C	N3-C4-N4	6.26	122.38	118.00
5	A	1749	G	C5-C6-O6	-6.26	124.84	128.60
5	A	515	G	C5-C6-O6	-6.26	124.85	128.60
5	A	1131	A	C4-C5-C6	6.26	120.13	117.00
5	A	1817	C	N3-C4-N4	6.26	122.38	118.00
5	A	2532	A	C4-C5-C6	6.26	120.13	117.00
5	A	2882	G	O4'-C1'-N9	6.26	113.21	108.20
5	A	724	A	C5-C6-N6	-6.25	118.70	123.70
5	A	2880	U	O4'-C1'-N1	6.25	113.20	108.20
5	A	278	A	O4'-C1'-N9	6.25	113.20	108.20
5	A	469	A	C4-C5-C6	6.25	120.13	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2182	G	O4'-C1'-N9	6.25	113.20	108.20
5	A	2324	C	N3-C4-N4	6.25	122.38	118.00
5	A	1674	G	C5-C6-O6	-6.25	124.85	128.60
5	A	2482	A	C5-C6-N6	-6.25	118.70	123.70
5	A	2635	C	N3-C4-N4	6.25	122.38	118.00
6	B	11	A	C4-C5-C6	6.25	120.12	117.00
5	A	439	U	O4'-C1'-N1	6.25	113.20	108.20
5	A	455	G	O4'-C1'-N9	6.25	113.20	108.20
5	A	734	C	N3-C4-N4	6.25	122.37	118.00
5	A	1265	A	C4-C5-C6	6.25	120.12	117.00
5	A	1346	A	C4-C5-C6	6.25	120.12	117.00
5	A	510	G	O4'-C1'-N9	6.25	113.20	108.20
5	A	1139	G	C5-C6-O6	-6.25	124.85	128.60
5	A	2891	G	C5-C6-O6	-6.25	124.85	128.60
5	A	2903	U	O4'-C1'-N1	6.25	113.20	108.20
5	A	1194	A	C4-C5-C6	6.25	120.12	117.00
5	A	1536	A	O4'-C1'-N9	6.25	113.20	108.20
5	A	32	C	N3-C4-C5	-6.24	119.40	121.90
5	A	186	C	N3-C4-N4	6.24	122.37	118.00
5	A	593	A	O4'-C1'-N9	6.24	113.20	108.20
5	A	654	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	770	A	C5-C6-N6	-6.24	118.70	123.70
5	A	1631	A	C4-C5-C6	6.24	120.12	117.00
5	A	2411	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	2542	A	C4-C5-C6	6.24	120.12	117.00
6	B	107	G	C5-C6-O6	-6.24	124.85	128.60
5	A	630	A	C5-C6-N1	-6.24	114.58	117.70
5	A	2714	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	268	A	C5-C6-N6	-6.24	118.71	123.70
5	A	1440	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	1841	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	2525	C	N3-C4-C5	-6.24	119.40	121.90
5	A	365	U	O4'-C1'-N1	6.24	113.19	108.20
5	A	477	A	C4-C5-C6	6.24	120.12	117.00
5	A	734	C	N3-C4-C5	-6.24	119.41	121.90
5	A	871	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	1221	A	O4'-C1'-N9	6.24	113.19	108.20
5	A	1313	A	C4-C5-C6	6.24	120.12	117.00
5	A	1387	G	C5-C6-O6	-6.24	124.86	128.60
5	A	2233	C	N3-C4-C5	-6.24	119.40	121.90
5	A	443	G	O4'-C1'-N9	6.24	113.19	108.20
5	A	1174	A	O4'-C1'-N9	6.24	113.19	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1732	G	C5-C6-O6	-6.24	124.86	128.60
5	A	1986	C	N3-C4-N4	6.24	122.37	118.00
5	A	2351	A	C4-C5-C6	6.24	120.12	117.00
5	A	2686	A	C4-C5-C6	6.24	120.12	117.00
5	A	108	A	C4-C5-C6	6.24	120.12	117.00
5	A	1765	G	C5-C6-O6	-6.24	124.86	128.60
5	A	1933	G	C5-C6-O6	-6.24	124.86	128.60
5	A	2793	A	C4-C5-C6	6.24	120.12	117.00
5	A	2362	A	C4-C5-C6	6.23	120.12	117.00
5	A	84	A	C4-C5-C6	6.23	120.12	117.00
5	A	952	A	C5-C6-N6	-6.23	118.71	123.70
5	A	2767	A	C4-C5-C6	6.23	120.12	117.00
5	A	33	U	O4'-C1'-N1	6.23	113.19	108.20
5	A	930	C	O4'-C1'-N1	6.23	113.18	108.20
5	A	951	C	N3-C4-N4	6.23	122.36	118.00
5	A	1416	G	C5-C6-O6	-6.23	124.86	128.60
5	A	1453	A	C4-C5-C6	6.23	120.11	117.00
5	A	1611	G	O4'-C1'-N9	6.23	113.19	108.20
5	A	2544	C	N3-C4-C5	-6.23	119.41	121.90
5	A	2759	C	N3-C4-N4	6.23	122.36	118.00
5	A	376	A	O4'-C1'-N9	6.23	113.18	108.20
5	A	867	A	C5-C6-N1	-6.23	114.58	117.70
6	B	39	A	C4-C5-C6	6.23	120.11	117.00
5	A	110	A	C5-C6-N6	-6.23	118.72	123.70
5	A	760	G	C5-C6-O6	-6.23	124.86	128.60
5	A	1222	A	C4-C5-C6	6.23	120.11	117.00
5	A	1258	A	C4-C5-C6	6.23	120.11	117.00
5	A	2083	A	C5-C6-N6	-6.23	118.72	123.70
5	A	2652	G	O4'-C1'-N9	6.23	113.18	108.20
5	A	2915	G	N3-C2-N2	6.23	124.26	119.90
5	A	1384	C	N3-C4-N4	6.22	122.36	118.00
5	A	2547	A	O4'-C1'-N9	6.22	113.18	108.20
5	A	2837	A	C5-C6-N6	-6.22	118.72	123.70
5	A	538	A	C5-C6-N1	-6.22	114.59	117.70
5	A	2395	A	C4-C5-C6	6.22	120.11	117.00
5	A	446	G	O4'-C1'-N9	6.22	113.18	108.20
5	A	2250	G	C5-C6-O6	-6.22	124.87	128.60
5	A	200	A	C4-C5-C6	6.22	120.11	117.00
5	A	278	A	C4-C5-C6	6.22	120.11	117.00
5	A	312	G	O4'-C4'-C3'	-6.22	97.78	104.00
5	A	967	G	O4'-C1'-N9	6.22	113.18	108.20
5	A	1075	A	C4-C5-C6	6.22	120.11	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1336	C	N3-C4-N4	6.22	122.35	118.00
5	A	1342	G	O4'-C1'-N9	6.22	113.17	108.20
5	A	1967	A	C5-C6-N6	-6.22	118.72	123.70
5	A	1291	A	C5-C6-N1	-6.22	114.59	117.70
5	A	1406	A	C5-C6-N6	-6.22	118.73	123.70
5	A	1723	A	C4-C5-C6	6.22	120.11	117.00
5	A	291	C	N3-C4-N4	6.22	122.35	118.00
5	A	1022	G	O4'-C1'-N9	6.22	113.17	108.20
5	A	1199	C	N3-C4-N4	6.22	122.35	118.00
5	A	1876	A	C4-C5-C6	6.22	120.11	117.00
5	A	2831	A	C4-C5-C6	6.22	120.11	117.00
5	A	422	C	N3-C4-C5	-6.21	119.41	121.90
5	A	1302	A	C4-C5-C6	6.21	120.11	117.00
5	A	970	A	O4'-C1'-N9	6.21	113.17	108.20
5	A	97	C	P-O5'-C5'	6.21	130.84	120.90
5	A	171	A	C4-C5-C6	6.21	120.11	117.00
5	A	288	C	N3-C4-N4	6.21	122.35	118.00
5	A	1123	A	C4-C5-C6	6.21	120.11	117.00
5	A	1395	C	N3-C4-N4	6.21	122.35	118.00
5	A	1821	G	C5-C6-O6	-6.21	124.87	128.60
5	A	2479	A	O4'-C1'-N9	6.21	113.17	108.20
5	A	2555	G	O4'-C1'-N9	6.21	113.17	108.20
5	A	352	G	C5-C6-O6	-6.21	124.87	128.60
5	A	527	A	C4-C5-C6	6.21	120.11	117.00
5	A	1222	A	C5-C6-N6	-6.21	118.73	123.70
5	A	1339	A	C5-C6-N6	-6.21	118.73	123.70
5	A	455	G	C5-C6-O6	-6.21	124.88	128.60
5	A	2406	A	O4'-C1'-N9	6.21	113.17	108.20
5	A	2920	C	N3-C4-N4	6.21	122.35	118.00
6	B	26	C	N3-C4-N4	6.21	122.34	118.00
5	A	1335	A	C4-C5-C6	6.21	120.10	117.00
5	A	1356	G	O4'-C1'-N9	6.21	113.17	108.20
5	A	2384	C	N3-C4-C5	-6.21	119.42	121.90
5	A	374	A	C5-C6-N1	-6.20	114.60	117.70
5	A	1037	C	N3-C4-N4	6.20	122.34	118.00
5	A	1158	G	C5-C6-O6	-6.20	124.88	128.60
5	A	1388	A	C4-C5-C6	6.20	120.10	117.00
5	A	1477	A	C5-C6-N1	-6.20	114.60	117.70
5	A	1767	A	C4-C5-C6	6.20	120.10	117.00
5	A	2310	C	N3-C4-N4	6.20	122.34	118.00
5	A	2490	C	N3-C4-C5	-6.20	119.42	121.90
5	A	2819	A	C4-C5-C6	6.20	120.10	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1049	G	O4'-C1'-N9	6.20	113.16	108.20
5	A	2132	A	C5-C6-N1	-6.20	114.60	117.70
5	A	153	C	C2-N3-C4	6.20	123.00	119.90
5	A	836	A	C4-C5-C6	6.20	120.10	117.00
5	A	953	G	O4'-C1'-N9	6.20	113.16	108.20
5	A	1078	A	C5-C6-N1	-6.20	114.60	117.70
5	A	1470	G	O4'-C1'-N9	6.20	113.16	108.20
5	A	1709	A	C4-C5-C6	6.20	120.10	117.00
5	A	1965	A	C4-C5-C6	6.20	120.10	117.00
5	A	2018	A	C4-C5-C6	6.20	120.10	117.00
5	A	2151	U	O4'-C1'-N1	6.20	113.16	108.20
5	A	2485	C	P-O5'-C5'	6.20	130.82	120.90
5	A	2893	A	C4-C5-C6	6.20	120.10	117.00
5	A	326	A	C4-C5-C6	6.20	120.10	117.00
5	A	646	A	C5-C6-N1	-6.20	114.60	117.70
5	A	1131	A	C5-C6-N6	-6.20	118.74	123.70
5	A	1208	G	C5-C6-O6	-6.20	124.88	128.60
5	A	2594	A	O4'-C1'-N9	6.20	113.16	108.20
5	A	2922	U	O4'-C1'-N1	6.20	113.16	108.20
5	A	803	C	N3-C4-N4	6.20	122.34	118.00
5	A	1067	A	C5-C6-N6	-6.20	118.74	123.70
5	A	1291	A	C5-C6-N6	-6.20	118.74	123.70
5	A	1404	A	C4-C5-C6	6.20	120.10	117.00
5	A	1412	A	C4-C5-C6	6.20	120.10	117.00
5	A	1858	A	C4-C5-C6	6.20	120.10	117.00
5	A	2670	A	C5-C6-N6	-6.20	118.74	123.70
5	A	2782	A	C5-C6-N6	-6.20	118.74	123.70
5	A	345	A	C4-C5-C6	6.19	120.10	117.00
5	A	634	A	C4-C5-C6	6.19	120.10	117.00
6	B	55	A	C5-C6-N6	-6.19	118.75	123.70
5	A	1774	A	C4-C5-C6	6.19	120.10	117.00
5	A	2441	A	P-O5'-C5'	6.19	130.81	120.90
5	A	2804	A	C4-C5-C6	6.19	120.10	117.00
5	A	870	A	C4-C5-C6	6.19	120.09	117.00
5	A	1140	U	O4'-C1'-N1	6.19	113.15	108.20
5	A	1968	U	O4'-C1'-N1	6.19	113.15	108.20
5	A	2191	A	C4-C5-C6	6.19	120.10	117.00
5	A	2289	C	N3-C4-N4	6.19	122.33	118.00
5	A	2362	A	C5-C6-N6	-6.19	118.75	123.70
5	A	2405	A	C4-C5-C6	6.19	120.09	117.00
6	B	58	C	N3-C4-N4	6.19	122.33	118.00
5	A	991	A	C4-C5-C6	6.19	120.09	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1349	G	O4'-C1'-N9	6.19	113.15	108.20
5	A	2801	C	N3-C4-N4	6.19	122.33	118.00
5	A	593	A	C4-C5-C6	6.19	120.09	117.00
5	A	1138	C	O4'-C1'-N1	6.19	113.15	108.20
5	A	2262	A	C4-C5-C6	6.19	120.09	117.00
5	A	1034	A	C5-C6-N6	-6.19	118.75	123.70
5	A	1132	A	C4-C5-C6	6.19	120.09	117.00
5	A	356	G	C5-C6-O6	-6.18	124.89	128.60
5	A	1818	A	C4-C5-C6	6.18	120.09	117.00
5	A	2273	U	P-O5'-C5'	6.18	130.79	120.90
5	A	2414	C	N3-C4-N4	6.18	122.33	118.00
5	A	403	C	N3-C4-N4	6.18	122.33	118.00
5	A	1697	A	C4-C5-C6	6.18	120.09	117.00
5	A	2695	C	N3-C4-N4	6.18	122.33	118.00
5	A	2700	A	C5-C6-N1	-6.18	114.61	117.70
5	A	2851	A	C4-C5-C6	6.18	120.09	117.00
5	A	52	A	C5-C6-N1	-6.18	114.61	117.70
5	A	272	C	O4'-C1'-N1	6.18	113.14	108.20
5	A	808	A	O4'-C1'-N9	6.18	113.14	108.20
5	A	1171	G	O4'-C1'-N9	6.18	113.14	108.20
5	A	1442	A	C4-C5-C6	6.18	120.09	117.00
5	A	1615	A	C4-C5-C6	6.18	120.09	117.00
5	A	1820	A	C4-C5-C6	6.18	120.09	117.00
6	B	88	C	N3-C4-C5	-6.18	119.43	121.90
5	A	1133	G	C5-C6-O6	-6.18	124.89	128.60
5	A	1405	A	O4'-C1'-N9	6.18	113.14	108.20
5	A	1454	C	N3-C4-N4	6.18	122.33	118.00
5	A	126	A	C5-C6-N1	-6.18	114.61	117.70
5	A	224	A	C5-C6-N1	-6.18	114.61	117.70
5	A	331	C	N3-C4-N4	6.18	122.32	118.00
5	A	582	A	C5-C6-N6	-6.18	118.76	123.70
5	A	605	G	O4'-C1'-N9	6.18	113.14	108.20
5	A	666	G	C5-C6-O6	-6.18	124.89	128.60
5	A	2339	A	C4-C5-C6	6.18	120.09	117.00
5	A	2646	C	N3-C4-N4	6.18	122.32	118.00
5	A	1627	A	C5-C6-N6	-6.17	118.76	123.70
5	A	2228	A	C5-C6-N6	-6.17	118.76	123.70
5	A	2718	U	O4'-C1'-N1	6.17	113.14	108.20
5	A	45	G	P-O3'-C3'	-6.17	112.29	119.70
5	A	104	C	N3-C4-N4	6.17	122.32	118.00
5	A	2500	A	C5-C6-N1	-6.17	114.61	117.70
6	B	47	C	N3-C4-N4	6.17	122.32	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2623	C	N3-C4-C5	-6.17	119.43	121.90
5	A	456	A	O4'-C1'-N9	6.17	113.13	108.20
5	A	657	G	C5-C6-O6	-6.17	124.90	128.60
5	A	683	A	C4-C5-C6	6.17	120.08	117.00
5	A	896	A	C5-C6-N1	-6.17	114.62	117.70
5	A	1255	G	C5-C6-O6	-6.17	124.90	128.60
5	A	1722	A	C4-C5-C6	6.17	120.08	117.00
5	A	2713	U	O4'-C1'-N1	6.17	113.14	108.20
5	A	2794	A	C4-C5-C6	6.17	120.08	117.00
5	A	903	G	C5-C6-O6	-6.17	124.90	128.60
5	A	1141	A	C4-C5-C6	6.17	120.08	117.00
5	A	1234	G	O4'-C1'-N9	6.17	113.13	108.20
5	A	1423	A	C4-C5-C6	6.17	120.08	117.00
5	A	1822	G	C5-C6-O6	-6.17	124.90	128.60
5	A	2165	A	C4-C5-C6	6.17	120.08	117.00
5	A	2606	A	O4'-C1'-N9	6.17	113.13	108.20
5	A	2671	G	O4'-C1'-N9	6.17	113.13	108.20
5	A	41	A	C4-C5-C6	6.17	120.08	117.00
5	A	1961	A	O4'-C1'-N9	6.17	113.13	108.20
5	A	2087	A	C4-C5-C6	6.17	120.08	117.00
5	A	2451	C	O4'-C1'-N1	6.17	113.13	108.20
5	A	281	A	C5-C6-N1	-6.16	114.62	117.70
5	A	1040	C	N3-C4-N4	6.16	122.31	118.00
5	A	1648	A	C4-C5-C6	6.16	120.08	117.00
5	A	2436	A	C4-C5-C6	6.16	120.08	117.00
5	A	1987	C	N3-C4-N4	6.16	122.31	118.00
5	A	2009	G	O4'-C1'-N9	6.16	113.13	108.20
5	A	2234	C	N3-C4-N4	6.16	122.31	118.00
6	B	74	G	O4'-C1'-N9	6.16	113.13	108.20
5	A	1462	G	C5-C6-O6	-6.16	124.90	128.60
5	A	2462	A	C4-C5-C6	6.16	120.08	117.00
5	A	14	A	C5-C6-N1	-6.16	114.62	117.70
5	A	198	A	O4'-C1'-N9	6.16	113.13	108.20
5	A	220	A	C4-C5-C6	6.16	120.08	117.00
5	A	927	G	O4'-C1'-N9	6.16	113.13	108.20
5	A	1014	A	O4'-C1'-N9	6.16	113.13	108.20
5	A	2017	C	N3-C4-N4	6.16	122.31	118.00
5	A	2719	A	P-O3'-C3'	6.16	127.09	119.70
5	A	2750	A	C4-C5-C6	6.16	120.08	117.00
5	A	308	C	N3-C4-C5	-6.16	119.44	121.90
5	A	2608	C	N3-C4-C5	-6.16	119.44	121.90
5	A	91	A	C4-C5-C6	6.16	120.08	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	503	C	O4'-C1'-N1	6.16	113.12	108.20
5	A	831	U	O4'-C1'-N1	6.16	113.12	108.20
5	A	1157	A	C4-C5-C6	6.16	120.08	117.00
5	A	1575	A	C4-C5-C6	6.16	120.08	117.00
5	A	1824	C	N3-C4-C5	-6.16	119.44	121.90
6	B	56	A	O4'-C1'-N9	6.16	113.12	108.20
5	A	1155	C	N3-C4-N4	6.15	122.31	118.00
5	A	1233	A	C4-C5-C6	6.15	120.08	117.00
5	A	2012	C	N3-C4-N4	6.15	122.31	118.00
5	A	2270	A	C5-C6-N6	-6.15	118.78	123.70
5	A	2792	G	N3-C2-N2	6.15	124.21	119.90
5	A	410	G	O4'-C1'-N9	6.15	113.12	108.20
5	A	594	C	O4'-C1'-N1	6.15	113.12	108.20
5	A	831	U	P-O3'-C3'	6.15	127.08	119.70
5	A	1135	G	C5-C6-O6	-6.15	124.91	128.60
5	A	1583	A	C4-C5-C6	6.15	120.08	117.00
5	A	1654	A	C4-C5-C6	6.15	120.08	117.00
5	A	2455	A	C4-C5-C6	6.15	120.08	117.00
5	A	2846	A	C4-C5-C6	6.15	120.08	117.00
5	A	2902	A	C4-C5-C6	6.15	120.08	117.00
5	A	108	A	C5-C6-N1	-6.15	114.62	117.70
5	A	388	A	C4-C5-C6	6.15	120.08	117.00
5	A	1021	A	C4-C5-C6	6.15	120.08	117.00
5	A	1070	G	C5-C6-O6	-6.15	124.91	128.60
5	A	1119	A	C4-C5-C6	6.15	120.08	117.00
5	A	2089	A	C4-C5-C6	6.15	120.08	117.00
5	A	2517	A	C4-C5-C6	6.15	120.08	117.00
5	A	2911	G	C5-C6-O6	-6.15	124.91	128.60
5	A	67	A	P-O5'-C5'	6.15	130.74	120.90
5	A	101	G	C5-C6-O6	-6.15	124.91	128.60
5	A	130	A	C4-C5-C6	6.15	120.07	117.00
5	A	369	A	C4-C5-C6	6.15	120.07	117.00
5	A	1056	A	C4-C5-C6	6.15	120.07	117.00
5	A	2479	A	C5-C6-N1	-6.15	114.63	117.70
5	A	441	C	N3-C4-N4	6.15	122.30	118.00
5	A	1649	C	N3-C4-N4	6.15	122.30	118.00
5	A	666	G	O4'-C1'-N9	6.14	113.12	108.20
5	A	887	C	N3-C4-C5	-6.14	119.44	121.90
5	A	1535	U	O4'-C1'-N1	6.14	113.11	108.20
5	A	2047	A	C4-C5-C6	6.14	120.07	117.00
5	A	2436	A	C5'-C4'-C3'	-6.14	106.17	116.00
5	A	789	C	N3-C4-N4	6.14	122.30	118.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	943	A	C4-C5-C6	6.14	120.07	117.00
5	A	1316	A	C4-C5-C6	6.14	120.07	117.00
5	A	1330	C	N3-C4-N4	6.14	122.30	118.00
5	A	1540	A	P-O5'-C5'	6.14	130.73	120.90
5	A	2315	A	C4-C5-C6	6.14	120.07	117.00
5	A	2387	A	C5-C6-N6	-6.14	118.79	123.70
5	A	1381	A	C4-C5-C6	6.14	120.07	117.00
5	A	1677	A	O4'-C1'-N9	6.14	113.11	108.20
5	A	2590	A	O4'-C1'-N9	6.14	113.11	108.20
5	A	158	C	N3-C4-N4	6.14	122.30	118.00
5	A	2779	A	C4-C5-C6	6.14	120.07	117.00
5	A	692	A	C4-C5-C6	6.14	120.07	117.00
5	A	1784	A	C4-C5-C6	6.14	120.07	117.00
5	A	2456	C	N3-C4-C5	-6.14	119.44	121.90
5	A	2742	C	N3-C4-N4	6.14	122.30	118.00
5	A	171	A	C5-C6-N6	-6.13	118.79	123.70
5	A	740	A	C4-C5-C6	6.13	120.07	117.00
5	A	1453	A	O4'-C1'-N9	6.13	113.11	108.20
5	A	1510	G	O4'-C1'-N9	6.13	113.11	108.20
5	A	2378	G	O4'-C1'-N9	6.13	113.11	108.20
5	A	2604	C	N3-C4-N4	6.13	122.29	118.00
5	A	255	G	O4'-C1'-N9	6.13	113.11	108.20
5	A	364	A	C4-C5-C6	6.13	120.07	117.00
5	A	967	G	C5-C6-O6	-6.13	124.92	128.60
5	A	1097	A	C4-C5-C6	6.13	120.07	117.00
5	A	339	A	O4'-C1'-N9	6.13	113.11	108.20
5	A	740	A	C5-C6-N6	-6.13	118.79	123.70
5	A	1258	A	C5-C6-N6	-6.13	118.80	123.70
5	A	2810	A	C4-C5-C6	6.13	120.07	117.00
6	B	45	C	N3-C4-C5	-6.13	119.45	121.90
5	A	785	C	N3-C4-N4	6.13	122.29	118.00
5	A	874	U	O4'-C1'-N1	6.13	113.10	108.20
5	A	990	C	N3-C4-C5	-6.13	119.45	121.90
5	A	1069	U	O4'-C1'-N1	6.13	113.10	108.20
5	A	2171	G	C5-C6-O6	-6.13	124.92	128.60
5	A	2236	C	N3-C4-N4	6.13	122.29	118.00
5	A	2601	A	O4'-C1'-N9	6.13	113.10	108.20
5	A	2691	A	O4'-C1'-N9	6.13	113.10	108.20
5	A	336	U	O4'-C1'-N1	6.13	113.10	108.20
5	A	362	C	N3-C4-C5	-6.13	119.45	121.90
5	A	669	C	N3-C4-C5	-6.13	119.45	121.90
5	A	825	G	O4'-C1'-N9	6.13	113.10	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2812	A	C5-C6-N1	-6.13	114.64	117.70
5	A	2120	U	O4'-C1'-N1	6.12	113.10	108.20
5	A	2493	C	N3-C4-N4	6.12	122.29	118.00
5	A	2724	U	O4'-C1'-N1	6.12	113.10	108.20
5	A	791	C	N3-C4-C5	-6.12	119.45	121.90
5	A	1580	A	C5-C6-N6	-6.12	118.80	123.70
5	A	1676	G	C5-C6-O6	-6.12	124.93	128.60
5	A	2117	A	C4-C5-C6	6.12	120.06	117.00
5	A	962	C	N3-C4-N4	6.12	122.28	118.00
5	A	2375	A	C4-C5-C6	6.12	120.06	117.00
5	A	1533	A	C4-C5-C6	6.12	120.06	117.00
5	A	226	A	C4-C5-C6	6.12	120.06	117.00
5	A	579	G	O4'-C1'-N9	6.12	113.10	108.20
5	A	889	A	O4'-C1'-N9	6.12	113.09	108.20
5	A	1078	A	C4-C5-C6	6.12	120.06	117.00
5	A	1793	G	O4'-C1'-N9	6.12	113.09	108.20
5	A	231	A	O4'-C1'-N9	6.12	113.09	108.20
5	A	276	C	N3-C4-N4	6.12	122.28	118.00
5	A	431	A	C4-C5-C6	6.12	120.06	117.00
5	A	1494	G	O4'-C1'-N9	6.12	113.09	108.20
5	A	2195	G	C5-C6-O6	-6.12	124.93	128.60
5	A	1005	A	C4-C5-C6	6.12	120.06	117.00
5	A	1025	A	C5-C6-N6	-6.12	118.81	123.70
5	A	1802	A	O4'-C1'-N9	6.12	113.09	108.20
5	A	2465	G	C5-C6-O6	-6.12	124.93	128.60
5	A	150	A	O4'-C1'-N9	6.11	113.09	108.20
5	A	445	C	N3-C4-N4	6.11	122.28	118.00
5	A	659	A	C4-C5-C6	6.11	120.06	117.00
5	A	851	A	O4'-C1'-N9	6.11	113.09	108.20
5	A	934	U	O4'-C1'-N1	6.11	113.09	108.20
5	A	1618	A	C5-C6-N1	-6.11	114.64	117.70
5	A	1997	G	C5-C6-O6	-6.11	124.93	128.60
5	A	2019	C	N3-C4-N4	6.11	122.28	118.00
5	A	2507	A	O4'-C1'-N9	6.11	113.09	108.20
5	A	829	A	C4-C5-C6	6.11	120.06	117.00
5	A	523	G	C5-C6-O6	-6.11	124.93	128.60
5	A	1171	G	P-O5'-C5'	6.11	130.68	120.90
5	A	2083	A	O4'-C1'-N9	6.11	113.09	108.20
5	A	2303	A	C5-C6-N6	-6.11	118.81	123.70
5	A	105	C	N3-C4-C5	-6.11	119.46	121.90
5	A	1809	A	C5-C6-N6	-6.11	118.81	123.70
5	A	2442	G	C5-C6-O6	-6.11	124.94	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2468	A	C4-C5-C6	6.11	120.06	117.00
5	A	131	C	N3-C4-N4	6.11	122.28	118.00
5	A	401	C	O4'-C1'-N1	6.11	113.09	108.20
5	A	637	A	C4-C5-C6	6.11	120.05	117.00
5	A	1367	G	P-O3'-C3'	6.11	127.03	119.70
5	A	1456	A	C4-C5-C6	6.11	120.05	117.00
5	A	1526	G	O4'-C1'-N9	6.11	113.09	108.20
5	A	1550	C	P-O3'-C3'	6.11	127.03	119.70
5	A	2594	A	C4-C5-C6	6.11	120.05	117.00
5	A	2910	C	C6-N1-C2	-6.11	117.86	120.30
5	A	330	A	C4-C5-C6	6.11	120.05	117.00
5	A	452	C	C2-N1-C1'	6.11	125.52	118.80
5	A	1388	A	O4'-C1'-N9	6.11	113.08	108.20
5	A	1657	C	N3-C4-N4	6.11	122.27	118.00
5	A	467	C	N3-C4-C5	-6.10	119.46	121.90
5	A	738	C	N3-C4-N4	6.10	122.27	118.00
5	A	20	C	N3-C4-N4	6.10	122.27	118.00
5	A	58	G	O4'-C1'-N9	6.10	113.08	108.20
5	A	438	A	C4-C5-C6	6.10	120.05	117.00
5	A	1317	G	O4'-C1'-N9	6.10	113.08	108.20
5	A	1671	G	O4'-C1'-N9	6.10	113.08	108.20
5	A	2059	A	C5-C6-N6	-6.10	118.82	123.70
5	A	2262	A	C5-C6-N6	-6.10	118.82	123.70
5	A	900	U	P-O3'-C3'	6.10	127.02	119.70
5	A	970	A	C5-C6-N1	-6.10	114.65	117.70
5	A	1333	C	N3-C4-N4	6.10	122.27	118.00
5	A	2464	A	C5-C6-N1	-6.10	114.65	117.70
5	A	167	U	O4'-C1'-N1	6.10	113.08	108.20
5	A	773	G	N3-C2-N2	6.10	124.17	119.90
5	A	1174	A	C4-C5-C6	6.10	120.05	117.00
5	A	2364	A	C5-C6-N6	-6.10	118.82	123.70
5	A	61	A	C5-C6-N6	-6.10	118.82	123.70
5	A	90	A	C4-C5-C6	6.10	120.05	117.00
5	A	1480	A	O4'-C1'-N9	6.10	113.08	108.20
5	A	1600	G	O4'-C1'-N9	6.10	113.08	108.20
5	A	2211	G	O4'-C1'-N9	6.10	113.08	108.20
5	A	2739	C	N3-C4-C5	-6.10	119.46	121.90
5	A	82	G	C5-C6-O6	-6.09	124.94	128.60
5	A	376	A	C4-C5-C6	6.09	120.05	117.00
5	A	2216	A	O4'-C1'-N9	6.09	113.08	108.20
5	A	2317	A	C5-C6-N6	-6.09	118.82	123.70
5	A	1581	A	C5-C6-N6	-6.09	118.83	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2202	A	C5-C6-N6	-6.09	118.83	123.70
5	A	105	C	N3-C4-N4	6.09	122.26	118.00
5	A	815	G	O4'-C1'-N9	6.09	113.07	108.20
5	A	1101	G	C5-C6-O6	-6.09	124.94	128.60
5	A	1145	G	P-O5'-C5'	6.09	130.65	120.90
5	A	1731	C	N3-C4-C5	-6.09	119.46	121.90
5	A	329	A	O4'-C1'-N9	6.09	113.07	108.20
5	A	812	G	O4'-C1'-N9	6.09	113.07	108.20
5	A	2568	C	N3-C4-N4	6.09	122.26	118.00
5	A	2670	A	C4-C5-C6	6.09	120.05	117.00
5	A	2710	C	C6-N1-C1'	-6.09	113.49	120.80
5	A	2912	A	C4-C5-C6	6.09	120.04	117.00
5	A	625	C	N3-C4-N4	6.09	122.26	118.00
5	A	2124	A	C5-C6-N1	-6.09	114.66	117.70
5	A	2769	A	C4-C5-C6	6.09	120.04	117.00
5	A	368	G	C5-C6-O6	-6.09	124.95	128.60
5	A	552	G	O4'-C1'-N9	6.09	113.07	108.20
5	A	630	A	P-O5'-C5'	6.09	130.64	120.90
5	A	906	G	C4'-C3'-C2'	-6.09	96.51	102.60
5	A	2162	G	C4-N9-C1'	6.09	134.41	126.50
5	A	2176	A	C5-C6-N1	-6.09	114.66	117.70
5	A	2807	A	O4'-C1'-N9	6.09	113.07	108.20
5	A	570	C	N3-C4-C5	-6.08	119.47	121.90
5	A	2276	A	C5-C6-N6	-6.08	118.83	123.70
5	A	888	A	C5-C6-N6	-6.08	118.83	123.70
5	A	1357	A	C5-C6-N6	-6.08	118.83	123.70
5	A	2201	U	O4'-C1'-N1	6.08	113.07	108.20
5	A	2220	A	C4-C5-C6	6.08	120.04	117.00
5	A	480	C	N3-C4-C5	-6.08	119.47	121.90
5	A	1094	A	C5-C6-N6	-6.08	118.83	123.70
5	A	1693	C	N3-C4-C5	-6.08	119.47	121.90
5	A	2389	A	C5-C6-N1	-6.08	114.66	117.70
5	A	2446	C	N3-C4-N4	6.08	122.26	118.00
5	A	2454	A	C5-C6-N1	-6.08	114.66	117.70
5	A	560	A	C5-C6-N6	-6.08	118.84	123.70
5	A	813	G	O4'-C1'-N9	6.08	113.06	108.20
5	A	856	G	O4'-C1'-N9	6.08	113.06	108.20
5	A	1545	C	N3-C4-N4	6.08	122.26	118.00
5	A	2358	A	C4-C5-C6	6.08	120.04	117.00
5	A	258	A	C4-C5-C6	6.08	120.04	117.00
5	A	861	C	N3-C4-C5	-6.08	119.47	121.90
5	A	1162	C	N3-C4-N4	6.08	122.26	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1393	A	C4-C5-C6	6.08	120.04	117.00
5	A	1776	A	C5-C6-N1	-6.08	114.66	117.70
5	A	2327	A	C4-C5-C6	6.08	120.04	117.00
5	A	2384	C	C6-N1-C2	-6.08	117.87	120.30
5	A	2885	A	C5-C6-N1	-6.08	114.66	117.70
5	A	2208	C	C2-N1-C1'	6.08	125.48	118.80
5	A	28	A	O4'-C1'-N9	6.08	113.06	108.20
5	A	625	C	N3-C4-C5	-6.08	119.47	121.90
5	A	1685	A	C5-C6-N1	-6.08	114.66	117.70
5	A	1859	C	N3-C4-C5	-6.08	119.47	121.90
5	A	2178	C	O4'-C1'-N1	6.08	113.06	108.20
5	A	2459	A	O4'-C1'-N9	6.08	113.06	108.20
5	A	2892	G	O4'-C1'-N9	6.08	113.06	108.20
5	A	343	A	C5-C6-N6	-6.07	118.84	123.70
5	A	1326	A	C5-C6-N1	-6.07	114.66	117.70
5	A	1497	G	C4'-C3'-C2'	6.07	108.67	102.60
5	A	294	G	O4'-C1'-N9	6.07	113.06	108.20
5	A	449	A	C4-C5-C6	6.07	120.04	117.00
5	A	684	G	O4'-C1'-N9	6.07	113.06	108.20
5	A	2102	C	P-O5'-C5'	6.07	130.62	120.90
5	A	2173	G	C5-C6-O6	-6.07	124.96	128.60
5	A	117	A	C4-C5-C6	6.07	120.03	117.00
5	A	975	C	N3-C4-C5	-6.07	119.47	121.90
5	A	980	C	O4'-C1'-N1	6.07	113.06	108.20
5	A	1794	C	N3-C4-N4	6.07	122.25	118.00
5	A	1814	A	C4-C5-C6	6.07	120.03	117.00
5	A	2100	A	C4-C5-C6	6.07	120.03	117.00
5	A	2541	C	N3-C4-N4	6.07	122.25	118.00
5	A	1251	U	C2-N1-C1'	6.07	124.98	117.70
5	A	2837	A	C5-C6-N1	-6.07	114.67	117.70
5	A	1357	A	C5-C6-N1	-6.07	114.67	117.70
5	A	1580	A	C5-C6-N1	-6.07	114.67	117.70
5	A	1622	C	N3-C4-C5	-6.07	119.47	121.90
5	A	1817	C	N3-C4-C5	-6.07	119.47	121.90
5	A	2542	A	C5-C6-N1	-6.07	114.67	117.70
5	A	2675	C	N3-C4-N4	6.07	122.25	118.00
5	A	582	A	C4-C5-C6	6.07	120.03	117.00
5	A	622	A	C5-C6-N1	-6.07	114.67	117.70
5	A	707	G	O4'-C1'-N9	6.07	113.05	108.20
5	A	1161	A	C4-C5-C6	6.07	120.03	117.00
5	A	1998	A	C4-C5-C6	6.07	120.03	117.00
6	B	97	A	C5-C6-N1	-6.07	114.67	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	364	A	O4'-C1'-N9	6.06	113.05	108.20
5	A	783	C	N3-C4-N4	6.06	122.25	118.00
5	A	1818	A	C5-C6-N6	-6.06	118.85	123.70
5	A	2857	U	O4'-C1'-N1	6.06	113.05	108.20
5	A	592	A	C4-C5-C6	6.06	120.03	117.00
5	A	1059	A	O4'-C1'-N9	6.06	113.05	108.20
5	A	2863	G	C5-C6-O6	-6.06	124.96	128.60
5	A	17	G	O4'-C1'-N9	6.06	113.05	108.20
5	A	311	U	C2-N1-C1'	6.06	124.97	117.70
5	A	1454	C	N3-C4-C5	-6.06	119.48	121.90
5	A	1555	A	C4-C5-C6	6.06	120.03	117.00
5	A	1695	A	C5-C6-N1	-6.06	114.67	117.70
5	A	1727	A	C5-C6-N6	-6.06	118.85	123.70
5	A	1998	A	O4'-C1'-N9	6.06	113.05	108.20
5	A	999	A	C5-C6-N1	-6.06	114.67	117.70
5	A	1268	G	O4'-C1'-N9	6.06	113.05	108.20
5	A	1774	A	C5-C6-N1	-6.06	114.67	117.70
5	A	2025	C	N3-C4-N4	6.06	122.24	118.00
5	A	2063	U	O4'-C1'-N1	6.06	113.05	108.20
5	A	2417	A	O4'-C1'-N9	6.06	113.05	108.20
5	A	736	A	C4-C5-C6	6.06	120.03	117.00
5	A	1325	A	C5-C6-N1	-6.06	114.67	117.70
5	A	1955	U	P-O3'-C3'	6.06	126.97	119.70
5	A	2356	A	C4-C5-C6	6.06	120.03	117.00
5	A	2631	A	C4-C5-C6	6.06	120.03	117.00
5	A	2689	A	C4-C5-C6	6.06	120.03	117.00
5	A	204	C	N3-C4-N4	6.05	122.24	118.00
5	A	247	A	P-O3'-C3'	6.05	126.97	119.70
5	A	555	C	O4'-C1'-N1	6.05	113.04	108.20
5	A	846	G	C5-C6-O6	-6.05	124.97	128.60
5	A	1450	C	N3-C4-N4	6.05	122.24	118.00
5	A	2241	A	C5-C6-N6	-6.05	118.86	123.70
5	A	774	A	O4'-C1'-N9	6.05	113.04	108.20
5	A	1073	A	O4'-C1'-N9	6.05	113.04	108.20
5	A	2844	A	C5-C6-N1	-6.05	114.67	117.70
5	A	179	A	O4'-C1'-N9	6.05	113.04	108.20
5	A	229	A	C4-C5-C6	6.05	120.03	117.00
5	A	363	C	N3-C4-N4	6.05	122.23	118.00
5	A	1931	C	O4'-C1'-N1	6.05	113.04	108.20
5	A	2357	A	C5-C6-N1	-6.05	114.67	117.70
5	A	2735	A	C4-C5-C6	6.05	120.03	117.00
6	B	6	U	O4'-C1'-N1	6.05	113.04	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	306	C	N3-C4-C5	-6.05	119.48	121.90
5	A	770	A	C4-C5-C6	6.05	120.03	117.00
5	A	1098	C	N3-C4-N4	6.05	122.23	118.00
5	A	1689	U	O4'-C1'-N1	6.05	113.04	108.20
5	A	2585	C	N3-C4-N4	6.05	122.23	118.00
6	B	34	C	N3-C4-N4	6.05	122.23	118.00
5	A	518	A	O4'-C1'-N9	6.05	113.04	108.20
5	A	910	A	C5-C6-N1	-6.05	114.68	117.70
5	A	958	A	C4-C5-C6	6.05	120.02	117.00
5	A	203	U	O4'-C1'-N1	6.05	113.04	108.20
5	A	271	C	N3-C4-N4	6.05	122.23	118.00
5	A	738	C	N3-C4-C5	-6.05	119.48	121.90
5	A	799	A	C4-C5-C6	6.05	120.02	117.00
5	A	1250	G	C4'-C3'-C2'	6.05	108.65	102.60
5	A	1272	G	O4'-C1'-N9	6.05	113.04	108.20
5	A	1395	C	O4'-C1'-N1	6.05	113.04	108.20
5	A	1545	C	N3-C4-C5	-6.05	119.48	121.90
5	A	1638	A	C4-C5-C6	6.05	120.02	117.00
5	A	2449	C	N3-C4-N4	6.05	122.23	118.00
5	A	2525	C	N3-C4-N4	6.05	122.23	118.00
5	A	2549	C	O4'-C1'-N1	6.05	113.04	108.20
5	A	2620	C	N3-C4-N4	6.05	122.23	118.00
5	A	95	A	C5-C6-N1	-6.04	114.68	117.70
5	A	1661	A	C5-C6-N6	-6.04	118.86	123.70
5	A	1877	A	O4'-C1'-N9	6.04	113.04	108.20
5	A	2143	A	C5-C6-N1	-6.04	114.68	117.70
5	A	44	A	C4-C5-C6	6.04	120.02	117.00
5	A	207	A	C4-C5-C6	6.04	120.02	117.00
5	A	2618	A	C4-C5-C6	6.04	120.02	117.00
5	A	2694	A	C5-C6-N6	-6.04	118.87	123.70
5	A	21	A	C5-C6-N6	-6.04	118.87	123.70
5	A	339	A	C5-C6-N1	-6.04	114.68	117.70
5	A	1059	A	C5-C6-N1	-6.04	114.68	117.70
5	A	1875	G	C5-C6-O6	-6.04	124.97	128.60
5	A	1982	A	C4-C5-C6	6.04	120.02	117.00
5	A	2490	C	N3-C4-N4	6.04	122.23	118.00
5	A	757	C	N3-C4-N4	6.04	122.23	118.00
5	A	1950	G	O4'-C1'-N9	6.04	113.03	108.20
5	A	383	U	O4'-C1'-N1	6.04	113.03	108.20
5	A	419	G	N3-C2-N2	6.04	124.13	119.90
5	A	467	C	C6-N1-C2	-6.04	117.89	120.30
5	A	907	U	C6-N1-C1'	-6.04	112.75	121.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1014	A	C4-C5-C6	6.04	120.02	117.00
5	A	1108	G	O4'-C1'-N9	6.04	113.03	108.20
5	A	1129	U	O4'-C1'-N1	6.04	113.03	108.20
5	A	176	A	C4-C5-C6	6.04	120.02	117.00
5	A	1622	C	N3-C4-N4	6.04	122.23	118.00
5	A	394	U	O4'-C1'-N1	6.04	113.03	108.20
5	A	2383	A	C5-C6-N6	-6.04	118.87	123.70
5	A	2623	C	N3-C4-N4	6.04	122.22	118.00
5	A	278	A	C5-C6-N6	-6.03	118.87	123.70
5	A	281	A	C5-C6-N6	-6.03	118.87	123.70
5	A	742	G	O4'-C1'-N9	6.03	113.03	108.20
5	A	1032	C	N3-C4-N4	6.03	122.22	118.00
5	A	1608	A	C5-C6-N6	-6.03	118.87	123.70
5	A	868	A	P-O5'-C5'	6.03	130.55	120.90
5	A	1921	C	C6-N1-C1'	-6.03	113.56	120.80
5	A	2007	A	C5-C6-N6	-6.03	118.88	123.70
5	A	2799	C	N3-C4-C5	-6.03	119.49	121.90
5	A	1000	G	O4'-C1'-N9	6.03	113.02	108.20
5	A	1173	A	C4-C5-C6	6.03	120.02	117.00
5	A	1799	G	O4'-C1'-N9	6.03	113.02	108.20
5	A	2034	A	C5-C6-N6	-6.03	118.88	123.70
5	A	2769	A	C5-C6-N6	-6.03	118.88	123.70
5	A	2800	C	N3-C4-N4	6.03	122.22	118.00
5	A	38	A	C5-C6-N1	-6.03	114.69	117.70
5	A	2207	C	N3-C4-N4	6.03	122.22	118.00
5	A	2612	G	C5-C6-O6	-6.03	124.98	128.60
6	B	63	C	N3-C4-C5	-6.03	119.49	121.90
5	A	1284	A	C4-C5-C6	6.03	120.01	117.00
5	A	1293	A	C4-C5-C6	6.03	120.01	117.00
5	A	1445	A	C4-C5-C6	6.03	120.01	117.00
5	A	1473	A	C4-C5-C6	6.03	120.01	117.00
5	A	2679	C	N3-C4-N4	6.03	122.22	118.00
5	A	2834	A	C5'-C4'-O4'	6.03	116.33	109.10
5	A	722	A	C5-C6-N6	-6.02	118.88	123.70
5	A	732	A	C5-C6-N1	-6.02	114.69	117.70
5	A	632	U	P-O5'-C5'	6.02	130.53	120.90
5	A	1405	A	C4-C5-C6	6.02	120.01	117.00
5	A	2854	A	C4-C5-C6	6.02	120.01	117.00
5	A	2887	A	C4-C5-C6	6.02	120.01	117.00
5	A	247	A	C4-C5-C6	6.02	120.01	117.00
5	A	876	A	C4-C5-C6	6.02	120.01	117.00
5	A	1473	A	C5-C6-N1	-6.02	114.69	117.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	225	A	C5-C6-N1	-6.02	114.69	117.70
5	A	821	A	C4-C5-C6	6.02	120.01	117.00
5	A	1204	C	O4'-C1'-N1	6.02	113.02	108.20
5	A	1256	C	N3-C4-C5	-6.02	119.49	121.90
5	A	2132	A	C4-C5-C6	6.02	120.01	117.00
5	A	2643	A	C4-C5-C6	6.02	120.01	117.00
5	A	1802	A	C4-C5-C6	6.02	120.01	117.00
5	A	2546	C	N3-C4-N4	6.02	122.21	118.00
5	A	2853	C	N3-C4-N4	6.02	122.21	118.00
5	A	373	A	C4'-C3'-C2'	-6.02	96.58	102.60
5	A	1108	G	C5-C6-O6	-6.02	124.99	128.60
5	A	1812	A	C4-C5-C6	6.02	120.01	117.00
5	A	2379	C	P-O5'-C5'	6.02	130.53	120.90
5	A	491	C	N3-C4-N4	6.01	122.21	118.00
5	A	1643	C	N3-C4-C5	-6.01	119.49	121.90
5	A	2445	C	N3-C4-C5	-6.01	119.49	121.90
6	B	20	A	O4'-C1'-N9	6.01	113.01	108.20
5	A	2167	C	O4'-C1'-N1	6.01	113.01	108.20
5	A	2380	G	O4'-C1'-N9	6.01	113.01	108.20
5	A	88	G	C5-C6-O6	-6.01	124.99	128.60
5	A	139	A	C4-C5-C6	6.01	120.01	117.00
5	A	1486	G	O4'-C1'-N9	6.01	113.01	108.20
5	A	1490	A	C4-C5-C6	6.01	120.00	117.00
5	A	1534	A	C4-C5-C6	6.01	120.00	117.00
5	A	1685	A	C4-C5-C6	6.01	120.00	117.00
5	A	1743	A	C4-C5-C6	6.01	120.01	117.00
5	A	1947	A	C5-C6-N6	-6.01	118.89	123.70
9	E	22	SER	N-CA-CB	6.01	119.52	110.50
5	A	240	C	N3-C4-N4	6.01	122.21	118.00
5	A	355	A	C4-C5-C6	6.01	120.00	117.00
5	A	1014	A	C5-C6-N1	-6.01	114.69	117.70
5	A	1117	G	C5-C6-O6	-6.01	124.99	128.60
5	A	1224	A	C5-C6-N6	-6.01	118.89	123.70
5	A	2119	A	C5-C6-N6	-6.01	118.89	123.70
5	A	219	A	C4-C5-C6	6.01	120.00	117.00
5	A	2618	A	O4'-C1'-N9	6.01	113.01	108.20
5	A	438	A	O4'-C1'-N9	6.01	113.01	108.20
5	A	1202	A	C4-C5-C6	6.01	120.00	117.00
5	A	2776	G	C5-C6-O6	-6.01	125.00	128.60
5	A	2868	G	O4'-C1'-N9	6.01	113.01	108.20
5	A	178	A	C5-C6-N6	-6.00	118.90	123.70
5	A	622	A	C5-C6-N6	-6.00	118.90	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1686	A	C5-C6-N1	-6.00	114.70	117.70
5	A	1776	A	C5-C6-N6	-6.00	118.90	123.70
5	A	2748	G	O4'-C1'-N9	6.00	113.00	108.20
6	B	47	C	N3-C4-C5	-6.00	119.50	121.90
5	A	893	A	C4-C5-C6	6.00	120.00	117.00
5	A	1142	A	C4-C5-C6	6.00	120.00	117.00
5	A	1166	G	O4'-C1'-N9	6.00	113.00	108.20
5	A	2018	A	O4'-C1'-N9	6.00	113.00	108.20
5	A	228	C	N3-C4-C5	-6.00	119.50	121.90
5	A	650	U	O4'-C1'-N1	6.00	113.00	108.20
5	A	1691	A	C4-C5-C6	6.00	120.00	117.00
5	A	2536	C	N3-C4-N4	6.00	122.20	118.00
5	A	2910	C	N3-C4-C5	-6.00	119.50	121.90
5	A	641	C	N3-C4-C5	-6.00	119.50	121.90
5	A	652	A	C4-C5-C6	6.00	120.00	117.00
5	A	841	A	C4-C5-C6	6.00	120.00	117.00
5	A	1113	A	C4-C5-C6	6.00	120.00	117.00
5	A	1305	A	C4-C5-C6	6.00	120.00	117.00
5	A	2612	G	O4'-C1'-N9	6.00	113.00	108.20
5	A	2902	A	C5-C6-N1	-6.00	114.70	117.70
5	A	183	A	C5-C6-N6	-6.00	118.90	123.70
5	A	744	C	N3-C4-C5	-6.00	119.50	121.90
5	A	2083	A	C4-C5-C6	6.00	120.00	117.00
5	A	2563	C	N3-C4-C5	-6.00	119.50	121.90
5	A	464	C	N3-C4-C5	-6.00	119.50	121.90
5	A	690	A	C5-C6-N6	-6.00	118.90	123.70
5	A	1006	A	O4'-C1'-N9	6.00	113.00	108.20
5	A	2688	G	O4'-C1'-N9	6.00	113.00	108.20
5	A	2909	U	C5'-C4'-O4'	6.00	116.29	109.10
5	A	143	G	O4'-C1'-N9	5.99	113.00	108.20
5	A	856	G	C5-C6-O6	-5.99	125.00	128.60
5	A	1585	A	C4-C5-C6	5.99	120.00	117.00
5	A	2647	G	O4'-C1'-N9	5.99	112.99	108.20
5	A	2722	A	C4-C5-C6	5.99	120.00	117.00
5	A	2804	A	C5-C6-N1	-5.99	114.70	117.70
5	A	798	A	C4-C5-C6	5.99	120.00	117.00
5	A	399	C	N3-C4-N4	5.99	122.19	118.00
5	A	587	C	N3-C4-N4	5.99	122.19	118.00
5	A	1266	A	C4-C5-C6	5.99	120.00	117.00
5	A	2215	U	O4'-C1'-N1	5.99	112.99	108.20
5	A	48	G	O4'-C1'-N9	5.99	112.99	108.20
5	A	122	G	C5-C6-O6	-5.99	125.01	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	132	C	N3-C4-N4	5.99	122.19	118.00
5	A	213	C	N3-C4-C5	-5.99	119.50	121.90
5	A	308	C	N3-C4-N4	5.99	122.19	118.00
5	A	987	A	O4'-C1'-N9	5.99	112.99	108.20
5	A	1097	A	C5-C6-N1	-5.99	114.71	117.70
5	A	2296	A	C4-C5-C6	5.99	120.00	117.00
5	A	2358	A	C5-C6-N6	-5.99	118.91	123.70
6	B	11	A	O4'-C1'-N9	5.99	112.99	108.20
6	B	105	A	C4-C5-C6	5.99	119.99	117.00
5	A	946	G	C5-C6-O6	-5.99	125.01	128.60
5	A	1664	G	O4'-C1'-N9	5.99	112.99	108.20
5	A	1971	C	P-O5'-C5'	5.99	130.48	120.90
5	A	2859	G	C5-C6-O6	-5.99	125.01	128.60
5	A	723	A	C4-C5-C6	5.99	119.99	117.00
5	A	1618	A	C4-C5-C6	5.99	119.99	117.00
5	A	2090	G	O4'-C1'-N9	5.99	112.99	108.20
5	A	83	G	P-O3'-C3'	5.98	126.88	119.70
5	A	812	G	P-O5'-C5'	5.98	130.47	120.90
5	A	1483	A	C4-C5-C6	5.98	119.99	117.00
5	A	442	C	N3-C4-N4	5.98	122.19	118.00
5	A	697	G	P-O5'-C5'	5.98	130.47	120.90
5	A	904	A	C5-C6-N1	-5.98	114.71	117.70
5	A	1741	G	C5-C6-O6	-5.98	125.01	128.60
5	A	2517	A	C5-C6-N1	-5.98	114.71	117.70
5	A	130	A	C5-C6-N6	-5.98	118.92	123.70
5	A	486	A	C4-C5-C6	5.98	119.99	117.00
5	A	1820	A	C5-C6-N6	-5.98	118.92	123.70
5	A	1925	A	C5-C6-N1	-5.98	114.71	117.70
5	A	2481	C	N3-C4-N4	5.98	122.19	118.00
5	A	2668	A	C4-C5-C6	5.98	119.99	117.00
5	A	462	A	C5-C6-N1	-5.98	114.71	117.70
5	A	668	G	O4'-C1'-N9	5.98	112.98	108.20
5	A	1189	A	C5-C6-N6	-5.98	118.92	123.70
5	A	2189	G	C5-C6-O6	-5.98	125.01	128.60
5	A	2762	A	C5-C6-N6	-5.98	118.92	123.70
5	A	92	G	O4'-C1'-N9	5.98	112.98	108.20
5	A	222	A	C5-C6-N6	-5.98	118.92	123.70
5	A	524	A	O4'-C1'-N9	5.98	112.98	108.20
5	A	526	A	C4-C5-C6	5.98	119.99	117.00
5	A	1608	A	C4-C5-C6	5.98	119.99	117.00
5	A	1731	C	N3-C4-N4	5.98	122.18	118.00
5	A	1797	A	C4-C5-C6	5.98	119.99	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1956	A	C4-C5-C6	5.98	119.99	117.00
5	A	162	A	C4-C5-C6	5.97	119.99	117.00
5	A	185	A	O4'-C1'-N9	5.97	112.98	108.20
5	A	1114	G	C1'-O4'-C4'	-5.97	105.12	109.90
5	A	1520	A	C4-C5-C6	5.97	119.99	117.00
5	A	1851	G	O4'-C1'-N9	5.97	112.98	108.20
5	A	485	U	O4'-C1'-N1	5.97	112.98	108.20
5	A	719	C	N3-C4-N4	5.97	122.18	118.00
5	A	733	U	C2-N1-C1'	5.97	124.87	117.70
5	A	1025	A	O4'-C1'-N9	5.97	112.98	108.20
5	A	1065	U	P-O3'-C3'	5.97	126.87	119.70
5	A	2155	A	O4'-C1'-N9	5.97	112.98	108.20
5	A	2402	A	C5-C6-N6	-5.97	118.92	123.70
5	A	2663	A	C5-C6-N1	-5.97	114.71	117.70
6	B	117	A	C4-C5-C6	5.97	119.99	117.00
5	A	2841	C	N3-C4-C5	-5.97	119.51	121.90
5	A	94	A	C5-C6-N6	-5.97	118.92	123.70
5	A	428	A	O4'-C1'-N9	5.97	112.98	108.20
5	A	1000	G	C5-C6-O6	-5.97	125.02	128.60
5	A	1718	G	O4'-C1'-N9	5.97	112.98	108.20
5	A	1719	G	C5-C6-O6	-5.97	125.02	128.60
5	A	2343	A	C4-C5-C6	5.97	119.98	117.00
5	A	2700	A	C4-C5-C6	5.97	119.98	117.00
5	A	2861	U	O4'-C1'-N1	5.97	112.98	108.20
5	A	2893	A	O4'-C1'-N9	5.97	112.98	108.20
5	A	2900	A	C4-C5-C6	5.97	119.98	117.00
5	A	2904	A	C4-C5-C6	5.97	119.98	117.00
5	A	716	G	C8-N9-C1'	-5.97	119.24	127.00
5	A	2505	A	C4-C5-C6	5.97	119.98	117.00
5	A	2657	C	C6-N1-C1'	-5.97	113.64	120.80
6	B	20	A	C5-C6-N1	-5.97	114.72	117.70
5	A	1727	A	C4-C5-C6	5.97	119.98	117.00
5	A	2000	A	C4-C5-C6	5.97	119.98	117.00
5	A	2087	A	O4'-C1'-N9	5.97	112.97	108.20
5	A	2457	G	O4'-C1'-N9	5.97	112.97	108.20
5	A	1534	A	C5-C6-N6	-5.96	118.93	123.70
5	A	1744	G	O4'-C1'-N9	5.96	112.97	108.20
5	A	2091	A	C4-C5-C6	5.96	119.98	117.00
5	A	2351	A	C5-C6-N6	-5.96	118.93	123.70
5	A	2629	A	C4-C5-C6	5.96	119.98	117.00
5	A	1590	C	N3-C4-C5	-5.96	119.52	121.90
5	A	2003	C	N3-C4-N4	5.96	122.17	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	108	A	C5-C6-N6	-5.96	118.93	123.70
5	A	2170	A	C4-C5-C6	5.96	119.98	117.00
5	A	2238	C	N3-C4-N4	5.96	122.17	118.00
5	A	2444	G	N3-C2-N2	5.96	124.07	119.90
5	A	235	G	P-O3'-C3'	5.96	126.85	119.70
5	A	999	A	C4-C5-C6	5.96	119.98	117.00
5	A	324	A	C5-C6-N6	-5.96	118.93	123.70
5	A	847	A	C5-C6-N1	-5.96	114.72	117.70
5	A	1343	C	N3-C4-C5	-5.96	119.52	121.90
5	A	1369	C	O4'-C1'-N1	5.96	112.97	108.20
5	A	1568	G	O4'-C1'-N9	5.96	112.97	108.20
5	A	2461	A	C4-C5-C6	5.96	119.98	117.00
5	A	2658	A	C5-C6-N6	-5.96	118.93	123.70
5	A	978	A	C4-C5-C6	5.96	119.98	117.00
5	A	984	G	O4'-C1'-N9	5.96	112.97	108.20
5	A	1464	A	C4-C5-C6	5.96	119.98	117.00
5	A	1809	A	P-O3'-C3'	5.96	126.85	119.70
5	A	2147	U	O4'-C1'-N1	5.96	112.97	108.20
5	A	2312	C	N3-C4-N4	5.96	122.17	118.00
5	A	275	A	C4-C5-C6	5.96	119.98	117.00
5	A	2183	G	O4'-C1'-N9	5.96	112.96	108.20
5	A	2629	A	C5-C6-N1	-5.96	114.72	117.70
5	A	2756	G	O4'-C1'-N9	5.96	112.96	108.20
5	A	2570	A	C5-C6-N6	-5.95	118.94	123.70
5	A	2740	A	C4-C5-C6	5.95	119.98	117.00
5	A	136	C	N3-C4-N4	5.95	122.17	118.00
5	A	1031	C	N3-C4-N4	5.95	122.17	118.00
6	B	41	C	N3-C4-N4	5.95	122.17	118.00
5	A	94	A	C4-C5-C6	5.95	119.97	117.00
5	A	201	C	N3-C4-C5	-5.95	119.52	121.90
5	A	461	C	P-O5'-C5'	5.95	130.42	120.90
5	A	655	C	N3-C4-C5	-5.95	119.52	121.90
5	A	665	G	N3-C2-N2	5.95	124.06	119.90
5	A	753	A	O4'-C1'-N9	5.95	112.96	108.20
5	A	1296	G	C5-C6-O6	-5.95	125.03	128.60
5	A	1552	C	N3-C4-N4	5.95	122.17	118.00
5	A	2071	A	C4-C5-C6	5.95	119.98	117.00
5	A	2074	C	N3-C4-N4	5.95	122.17	118.00
6	B	68	C	N3-C4-N4	5.95	122.17	118.00
6	B	112	C	N3-C4-C5	-5.95	119.52	121.90
5	A	290	U	O4'-C1'-N1	5.95	112.96	108.20
5	A	554	U	C2-N1-C1'	5.95	124.84	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1028	C	N3-C4-N4	5.95	122.16	118.00
5	A	1067	A	C8-N9-C4	-5.95	103.42	105.80
5	A	1071	G	P-O5'-C5'	5.95	130.42	120.90
5	A	1425	C	N3-C4-C5	-5.95	119.52	121.90
5	A	1440	G	P-O5'-C5'	5.95	130.42	120.90
5	A	2172	C	N3-C4-N4	5.95	122.16	118.00
6	B	92	C	N3-C4-C5	-5.95	119.52	121.90
5	A	419	G	O4'-C1'-N9	5.95	112.96	108.20
5	A	925	A	C5-C6-N1	-5.95	114.73	117.70
6	B	109	C	N3-C4-C5	-5.95	119.52	121.90
5	A	55	G	O4'-C1'-N9	5.95	112.96	108.20
5	A	102	A	O4'-C1'-N9	5.95	112.96	108.20
5	A	441	C	N3-C4-C5	-5.95	119.52	121.90
5	A	599	G	O4'-C1'-N9	5.95	112.96	108.20
5	A	1721	A	C4-C5-C6	5.95	119.97	117.00
5	A	2044	A	C4-C5-C6	5.95	119.97	117.00
5	A	2114	C	N3-C4-N4	5.95	122.16	118.00
5	A	2293	C	N3-C4-C5	-5.95	119.52	121.90
5	A	2470	C	N3-C4-N4	5.95	122.16	118.00
5	A	1344	C	N3-C4-N4	5.94	122.16	118.00
5	A	1561	G	O4'-C1'-N9	5.94	112.96	108.20
5	A	2619	A	C5-C6-N6	-5.94	118.94	123.70
5	A	2830	A	C5-C6-N6	-5.94	118.94	123.70
6	B	27	A	C4-C5-C6	5.94	119.97	117.00
5	A	670	C	N3-C4-C5	-5.94	119.52	121.90
5	A	866	A	C5-C6-N1	-5.94	114.73	117.70
5	A	1298	C	N3-C4-N4	5.94	122.16	118.00
5	A	1829	C	N3-C4-C5	-5.94	119.52	121.90
5	A	2187	A	C4-C5-C6	5.94	119.97	117.00
5	A	2479	A	C4-C5-C6	5.94	119.97	117.00
5	A	2927	A	C4-C5-C6	5.94	119.97	117.00
5	A	6	A	C5-C6-N1	-5.94	114.73	117.70
5	A	114	C	N3-C4-N4	5.94	122.16	118.00
5	A	537	A	C4-C5-C6	5.94	119.97	117.00
5	A	1223	C	N3-C4-N4	5.94	122.16	118.00
5	A	1947	A	O4'-C1'-N9	5.94	112.95	108.20
5	A	2625	U	O4'-C1'-N1	5.94	112.95	108.20
5	A	2645	C	N3-C4-N4	5.94	122.16	118.00
5	A	913	A	C4-C5-C6	5.94	119.97	117.00
5	A	1921	C	N3-C4-N4	5.94	122.16	118.00
5	A	2316	A	C5-C6-N6	-5.94	118.95	123.70
5	A	318	A	C4-C5-C6	5.94	119.97	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	505	G	C5-C6-O6	-5.94	125.04	128.60
5	A	1286	A	C4-C5-C6	5.94	119.97	117.00
5	A	1701	C	N3-C4-N4	5.94	122.16	118.00
5	A	1923	C	C2-N1-C1'	5.94	125.33	118.80
5	A	2088	A	C4-C5-C6	5.94	119.97	117.00
5	A	2464	A	O4'-C1'-N9	5.94	112.95	108.20
5	A	2530	C	N3-C4-C5	-5.94	119.53	121.90
5	A	401	C	N3-C4-N4	5.93	122.15	118.00
5	A	1727	A	C5-C6-N1	-5.93	114.73	117.70
5	A	2277	C	N3-C4-N4	5.93	122.15	118.00
6	B	116	C	N3-C4-C5	-5.93	119.53	121.90
5	A	261	C	N3-C4-N4	5.93	122.15	118.00
5	A	1770	C	N3-C4-N4	5.93	122.15	118.00
5	A	1976	C	N3-C4-N4	5.93	122.15	118.00
5	A	188	C	N3-C4-N4	5.93	122.15	118.00
5	A	1121	C	N3-C4-N4	5.93	122.15	118.00
5	A	1556	A	C5-C6-N6	-5.93	118.95	123.70
5	A	448	A	C4-C5-C6	5.93	119.97	117.00
5	A	784	C	N3-C4-C5	-5.93	119.53	121.90
5	A	1249	U	O4'-C1'-N1	5.93	112.94	108.20
5	A	1465	A	C4-C5-C6	5.93	119.97	117.00
5	A	1645	C	N3-C4-C5	-5.93	119.53	121.90
5	A	850	U	O4'-C1'-N1	5.93	112.94	108.20
5	A	1284	A	C5-C6-N1	-5.93	114.74	117.70
5	A	2177	G	O4'-C1'-N9	5.93	112.94	108.20
5	A	2732	C	C5-C6-N1	5.93	123.96	121.00
5	A	2851	A	C5-C6-N1	-5.93	114.74	117.70
5	A	1029	A	C5-C6-N1	-5.93	114.74	117.70
5	A	2220	A	C5-C6-N1	-5.93	114.74	117.70
5	A	2316	A	C4-C5-C6	5.93	119.96	117.00
5	A	2464	A	C4-C5-C6	5.93	119.96	117.00
5	A	2868	G	C5-C6-O6	-5.93	125.04	128.60
5	A	249	C	N3-C4-N4	5.92	122.15	118.00
5	A	1072	A	O4'-C1'-N9	5.92	112.94	108.20
5	A	1260	A	C4-C5-C6	5.92	119.96	117.00
5	A	1636	A	C4-C5-C6	5.92	119.96	117.00
5	A	1989	A	O4'-C1'-N9	5.92	112.94	108.20
5	A	2167	C	N3-C4-N4	5.92	122.15	118.00
5	A	222	A	C4-C5-C6	5.92	119.96	117.00
5	A	827	G	O4'-C1'-N9	5.92	112.94	108.20
5	A	1390	C	N3-C4-C5	-5.92	119.53	121.90
5	A	2010	A	C4-C5-C6	5.92	119.96	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	281	A	C4-C5-C6	5.92	119.96	117.00
5	A	533	C	N3-C4-N4	5.92	122.15	118.00
5	A	914	C	N3-C4-N4	5.92	122.15	118.00
5	A	1389	C	N3-C4-N4	5.92	122.14	118.00
5	A	2905	C	N3-C4-C5	-5.92	119.53	121.90
5	A	21	A	C4-C5-C6	5.92	119.96	117.00
5	A	670	C	N3-C4-N4	5.92	122.14	118.00
5	A	2712	C	N3-C4-N4	5.92	122.14	118.00
5	A	330	A	O4'-C1'-N9	5.92	112.93	108.20
5	A	772	G	O4'-C1'-N9	5.92	112.94	108.20
5	A	2338	A	C4-C5-C6	5.92	119.96	117.00
5	A	2396	G	O4'-C1'-N9	5.92	112.94	108.20
5	A	2919	A	C4-C5-C6	5.92	119.96	117.00
6	B	66	C	N3-C4-C5	-5.92	119.53	121.90
5	A	476	A	C5-C6-N1	-5.92	114.74	117.70
5	A	781	A	O4'-C1'-N9	5.92	112.93	108.20
5	A	971	A	C4-C5-C6	5.92	119.96	117.00
5	A	2275	G	O4'-C1'-N9	5.92	112.93	108.20
5	A	2424	C	N3-C4-N4	5.92	122.14	118.00
5	A	2750	A	C5-C6-N6	-5.92	118.97	123.70
5	A	448	A	C5-C6-N6	-5.92	118.97	123.70
5	A	2012	C	N3-C4-C5	-5.92	119.53	121.90
5	A	2844	A	C4-C5-C6	5.92	119.96	117.00
5	A	79	C	N3-C4-N4	5.91	122.14	118.00
5	A	88	G	C5'-C4'-C3'	-5.91	106.54	116.00
5	A	152	C	N3-C4-N4	5.91	122.14	118.00
5	A	244	A	O4'-C1'-N9	5.91	112.93	108.20
5	A	270	C	N3-C4-C5	-5.91	119.53	121.90
5	A	700	U	O4'-C1'-N1	5.91	112.93	108.20
5	A	1314	A	C5-C6-N6	-5.91	118.97	123.70
5	A	1482	G	O4'-C1'-N9	5.91	112.93	108.20
5	A	1485	A	C5-C6-N1	-5.91	114.74	117.70
5	A	1838	A	C5-C6-N1	-5.91	114.74	117.70
5	A	2329	A	C5-C6-N1	-5.91	114.74	117.70
6	B	17	A	C4-C5-C6	5.91	119.96	117.00
6	B	18	A	O4'-C1'-N9	5.91	112.93	108.20
5	A	37	C	N3-C4-N4	5.91	122.14	118.00
5	A	449	A	O4'-C1'-N9	5.91	112.93	108.20
5	A	818	G	O4'-C1'-N9	5.91	112.93	108.20
5	A	1297	C	N3-C4-C5	-5.91	119.54	121.90
5	A	1397	G	N3-C2-N2	5.91	124.04	119.90
5	A	1402	C	N3-C4-C5	-5.91	119.54	121.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1724	A	C5-C6-N1	-5.91	114.74	117.70
5	A	1998	A	C5-C6-N1	-5.91	114.75	117.70
5	A	1999	A	C4-C5-C6	5.91	119.95	117.00
5	A	2621	G	P-O5'-C5'	5.91	130.36	120.90
5	A	2914	C	N3-C4-N4	5.91	122.14	118.00
5	A	509	C	N3-C4-C5	-5.91	119.54	121.90
5	A	769	A	C5-C6-N1	-5.91	114.75	117.70
5	A	840	A	C4-C5-C6	5.91	119.95	117.00
5	A	853	C	N3-C4-C5	-5.91	119.54	121.90
5	A	1115	A	O4'-C1'-N9	5.91	112.93	108.20
5	A	1957	A	C5-C6-N1	-5.91	114.75	117.70
5	A	2295	A	C4-C5-C6	5.91	119.95	117.00
5	A	2852	U	P-O5'-C5'	5.91	130.35	120.90
5	A	259	A	C5-C6-N1	-5.91	114.75	117.70
5	A	994	C	N3-C4-N4	5.91	122.14	118.00
5	A	30	G	O4'-C1'-N9	5.91	112.92	108.20
5	A	185	A	C5-C6-N1	-5.91	114.75	117.70
5	A	930	C	N3-C4-N4	5.91	122.13	118.00
5	A	1011	C	N3-C4-N4	5.91	122.13	118.00
5	A	1201	A	C5-C6-N1	-5.91	114.75	117.70
5	A	1632	G	O4'-C1'-N9	5.91	112.92	108.20
5	A	1814	A	C5-C6-N6	-5.91	118.98	123.70
5	A	2342	C	N3-C4-N4	5.91	122.13	118.00
5	A	2518	G	O4'-C1'-N9	5.91	112.92	108.20
5	A	2601	A	C4-C5-C6	5.91	119.95	117.00
5	A	2619	A	P-O5'-C5'	5.91	130.35	120.90
5	A	1987	C	O4'-C1'-N1	5.90	112.92	108.20
5	A	2361	C	N3-C4-C5	-5.90	119.54	121.90
5	A	2393	C	N3-C4-N4	5.90	122.13	118.00
5	A	2447	A	C5-C6-N1	-5.90	114.75	117.70
5	A	2807	A	C5-C6-N6	-5.90	118.98	123.70
5	A	645	C	P-O5'-C5'	5.90	130.34	120.90
5	A	765	A	C5-C6-N1	-5.90	114.75	117.70
5	A	1757	G	O4'-C1'-N9	5.90	112.92	108.20
5	A	2499	G	O4'-C1'-N9	5.90	112.92	108.20
5	A	2663	A	C4-C5-C6	5.90	119.95	117.00
5	A	2834	A	C5-C6-N6	-5.90	118.98	123.70
5	A	1168	G	O4'-C1'-N9	5.90	112.92	108.20
5	A	1172	A	C4-C5-C6	5.90	119.95	117.00
5	A	1221	A	C5-C6-N1	-5.90	114.75	117.70
5	A	2042	A	C5-C6-N6	-5.90	118.98	123.70
5	A	2166	C	N3-C4-C5	-5.90	119.54	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	411	G	C3'-C2'-C1'	5.90	106.22	101.50
5	A	2308	G	O4'-C1'-N9	5.90	112.92	108.20
5	A	194	A	C4-C5-C6	5.90	119.95	117.00
5	A	753	A	C4-C5-C6	5.90	119.95	117.00
5	A	1179	A	C5-C6-N6	-5.90	118.98	123.70
5	A	1924	C	N3-C4-C5	-5.90	119.54	121.90
6	B	36	C	N3-C4-C5	-5.90	119.54	121.90
5	A	675	C	N3-C4-C5	-5.90	119.54	121.90
5	A	677	A	C5-C6-N6	-5.90	118.98	123.70
5	A	859	C	N3-C4-C5	-5.90	119.54	121.90
5	A	1510	G	C5-C6-O6	-5.90	125.06	128.60
5	A	1765	G	O4'-C1'-N9	5.90	112.92	108.20
5	A	337	A	C5-C6-N6	-5.89	118.98	123.70
5	A	384	A	C4-C5-C6	5.89	119.95	117.00
5	A	2539	C	N3-C4-C5	-5.89	119.54	121.90
5	A	618	A	O4'-C1'-N9	5.89	112.92	108.20
5	A	1241	C	N3-C4-C5	-5.89	119.54	121.90
5	A	1269	A	C5-C6-N1	-5.89	114.75	117.70
5	A	1682	C	N3-C4-C5	-5.89	119.54	121.90
5	A	2702	G	O4'-C1'-N9	5.89	112.91	108.20
6	B	7	G	O4'-C1'-N9	5.89	112.91	108.20
5	A	156	A	C4-C5-C6	5.89	119.95	117.00
5	A	1194	A	C5-C6-N1	-5.89	114.75	117.70
5	A	548	A	C4-C5-C6	5.89	119.94	117.00
5	A	561	A	O4'-C1'-N9	5.89	112.91	108.20
5	A	727	A	C5-C6-N6	-5.89	118.99	123.70
5	A	1434	A	C4-C5-C6	5.89	119.94	117.00
5	A	1877	A	C4-C5-C6	5.89	119.94	117.00
5	A	136	C	N3-C4-C5	-5.89	119.55	121.90
5	A	284	C	C6-N1-C2	-5.89	117.94	120.30
5	A	1386	G	O4'-C1'-N9	5.89	112.91	108.20
5	A	106	G	O4'-C1'-N9	5.89	112.91	108.20
5	A	392	C	N3-C4-C5	-5.89	119.55	121.90
5	A	975	C	N3-C4-N4	5.89	122.12	118.00
5	A	1263	G	O4'-C1'-N9	5.89	112.91	108.20
5	A	2164	A	C5-C6-N6	-5.89	118.99	123.70
5	A	2321	U	O4'-C1'-N1	5.89	112.91	108.20
5	A	2390	A	C5-C6-N6	-5.89	118.99	123.70
5	A	65	A	C5-C6-N6	-5.88	118.99	123.70
5	A	310	C	N3-C4-C5	-5.88	119.55	121.90
5	A	851	A	C4-C5-C6	5.88	119.94	117.00
5	A	902	G	C5-C6-O6	-5.88	125.07	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	925	A	C5-C6-N6	-5.88	118.99	123.70
5	A	1074	A	C5-C6-N1	-5.88	114.76	117.70
5	A	1631	A	O4'-C1'-N9	5.88	112.91	108.20
5	A	1818	A	O4'-C1'-N9	5.88	112.91	108.20
5	A	2912	A	C5-C6-N1	-5.88	114.76	117.70
5	A	618	A	C4-C5-C6	5.88	119.94	117.00
5	A	1223	C	N3-C4-C5	-5.88	119.55	121.90
5	A	1354	C	N3-C4-N4	5.88	122.12	118.00
5	A	1650	C	N3-C4-N4	5.88	122.12	118.00
5	A	2692	G	O4'-C1'-N9	5.88	112.91	108.20
5	A	466	C	N3-C4-C5	-5.88	119.55	121.90
5	A	543	A	C5-C6-N1	-5.88	114.76	117.70
5	A	1826	C	N3-C4-C5	-5.88	119.55	121.90
5	A	2200	A	C4-C5-C6	5.88	119.94	117.00
5	A	2378	G	N1-C6-O6	5.88	123.43	119.90
5	A	2704	A	C5-C6-N6	-5.88	118.99	123.70
5	A	1607	C	O4'-C1'-N1	5.88	112.90	108.20
5	A	2267	G	C4-N9-C1'	5.88	134.15	126.50
5	A	2879	G	O4'-C1'-N9	5.88	112.90	108.20
5	A	1089	C	N3-C4-C5	-5.88	119.55	121.90
5	A	1206	G	O4'-C1'-N9	5.88	112.90	108.20
6	B	72	U	O4'-C1'-N1	5.88	112.90	108.20
5	A	1425	C	N3-C4-N4	5.88	122.11	118.00
5	A	1699	A	C5-C6-N6	-5.88	119.00	123.70
5	A	504	A	O4'-C1'-N9	5.88	112.90	108.20
5	A	509	C	N3-C4-N4	5.88	122.11	118.00
5	A	965	A	C4-C5-C6	5.88	119.94	117.00
5	A	1377	G	C5-C6-O6	-5.88	125.08	128.60
5	A	1569	A	C4-C5-C6	5.88	119.94	117.00
5	A	2589	C	N3-C4-N4	5.88	122.11	118.00
5	A	268	A	C4-C5-C6	5.87	119.94	117.00
5	A	466	C	P-O5'-C5'	5.87	130.30	120.90
5	A	718	C	N3-C4-N4	5.87	122.11	118.00
5	A	1181	C	N3-C4-N4	5.87	122.11	118.00
5	A	2027	A	C4-C5-C6	5.87	119.94	117.00
5	A	173	A	C4-C5-C6	5.87	119.94	117.00
5	A	307	A	C5-C6-N1	-5.87	114.76	117.70
5	A	560	A	O4'-C1'-N9	5.87	112.90	108.20
5	A	1743	A	C5-C6-N1	-5.87	114.76	117.70
5	A	2726	G	O4'-C1'-N9	5.87	112.90	108.20
5	A	181	G	P-O3'-C3'	-5.87	112.66	119.70
5	A	1003	A	C4-C5-C6	5.87	119.94	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2078	A	C4-C5-C6	5.87	119.94	117.00
5	A	568	G	O4'-C1'-N9	5.87	112.89	108.20
5	A	576	G	O4'-C1'-N9	5.87	112.89	108.20
5	A	1059	A	C5-C6-N6	-5.87	119.00	123.70
5	A	1364	C	N3-C4-N4	5.87	122.11	118.00
6	B	17	A	C5-C6-N1	-5.87	114.77	117.70
5	A	1708	U	P-O3'-C3'	5.87	126.74	119.70
5	A	2513	G	O4'-C1'-N9	5.87	112.89	108.20
5	A	2646	C	N3-C4-C5	-5.87	119.55	121.90
5	A	258	A	C5-C6-N6	-5.87	119.01	123.70
5	A	572	A	C4-C5-C6	5.87	119.93	117.00
5	A	728	G	O4'-C1'-N9	5.87	112.89	108.20
5	A	2095	C	N3-C4-N4	5.87	122.11	118.00
6	B	106	C	N3-C4-N4	5.87	122.11	118.00
6	B	116	C	O4'-C1'-N1	5.86	112.89	108.20
5	A	322	A	O4'-C1'-N9	5.86	112.89	108.20
5	A	335	G	O4'-C1'-N9	5.86	112.89	108.20
5	A	534	C	N3-C4-N4	5.86	122.10	118.00
5	A	622	A	C4-C5-C6	5.86	119.93	117.00
5	A	1169	C	N3-C4-N4	5.86	122.10	118.00
5	A	2322	C	N3-C4-C5	-5.86	119.56	121.90
5	A	462	A	C4-C5-C6	5.86	119.93	117.00
5	A	581	C	N3-C4-N4	5.86	122.10	118.00
5	A	2094	C	N3-C4-C5	-5.86	119.56	121.90
5	A	2595	A	C5-C6-N1	-5.86	114.77	117.70
5	A	392	C	N3-C4-N4	5.86	122.10	118.00
5	A	1333	C	N3-C4-C5	-5.86	119.56	121.90
5	A	1519	C	N3-C4-C5	-5.86	119.56	121.90
5	A	1644	C	N3-C4-C5	-5.86	119.56	121.90
5	A	1842	C	N3-C4-C5	-5.86	119.56	121.90
5	A	206	A	C5-C6-N1	-5.86	114.77	117.70
5	A	591	U	O4'-C1'-N1	5.86	112.89	108.20
5	A	592	A	C5-C6-N6	-5.86	119.01	123.70
5	A	1490	A	O4'-C1'-N9	5.86	112.89	108.20
5	A	1776	A	C4-C5-C6	5.86	119.93	117.00
5	A	1975	U	O4'-C1'-N1	5.86	112.89	108.20
5	A	2060	A	C4-C5-C6	5.86	119.93	117.00
5	A	199	A	C4-C5-C6	5.86	119.93	117.00
5	A	796	A	C5-C6-N6	-5.86	119.02	123.70
5	A	2124	A	O4'-C1'-N9	5.86	112.89	108.20
5	A	2146	A	C4-C5-C6	5.86	119.93	117.00
5	A	2826	A	C4-C5-C6	5.86	119.93	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	65	G	O4'-C1'-N9	5.86	112.88	108.20
5	A	466	C	N3-C4-N4	5.85	122.10	118.00
5	A	667	A	C5-C6-N1	-5.85	114.77	117.70
5	A	723	A	O4'-C1'-N9	5.85	112.88	108.20
5	A	1609	C	N3-C4-N4	5.85	122.10	118.00
5	A	2270	A	C4-C5-C6	5.85	119.93	117.00
5	A	2329	A	C4-C5-C6	5.85	119.93	117.00
5	A	114	C	N3-C4-C5	-5.85	119.56	121.90
5	A	341	G	O4'-C1'-N9	5.85	112.88	108.20
5	A	702	A	C4-C5-C6	5.85	119.93	117.00
5	A	1608	A	O4'-C1'-N9	5.85	112.88	108.20
5	A	2203	C	N3-C4-N4	5.85	122.10	118.00
5	A	2505	A	C5-C6-N1	-5.85	114.77	117.70
5	A	2673	A	C4-C5-C6	5.85	119.93	117.00
5	A	2915	G	O4'-C1'-N9	5.85	112.88	108.20
5	A	273	A	C4-C5-C6	5.85	119.92	117.00
5	A	1842	C	N3-C4-N4	5.85	122.10	118.00
5	A	1950	G	C5-C6-O6	-5.85	125.09	128.60
5	A	2317	A	C4-C5-C6	5.85	119.93	117.00
5	A	211	C	N3-C4-N4	5.85	122.09	118.00
5	A	342	A	C4-C5-C6	5.85	119.92	117.00
5	A	502	C	N3-C4-C5	-5.85	119.56	121.90
5	A	1445	A	C5-C6-N6	-5.85	119.02	123.70
5	A	2014	G	O4'-C1'-N9	5.85	112.88	108.20
6	B	112	C	N3-C4-N4	5.85	122.09	118.00
5	A	127	C	C2-N3-C4	5.85	122.82	119.90
5	A	389	A	C4-C5-C6	5.85	119.92	117.00
5	A	908	A	C4-C5-C6	5.85	119.92	117.00
5	A	1736	C	N3-C4-N4	5.85	122.09	118.00
5	A	2322	C	N3-C4-N4	5.85	122.09	118.00
5	A	2323	C	N3-C4-N4	5.85	122.09	118.00
5	A	2344	U	O4'-C1'-N1	5.85	112.88	108.20
5	A	600	A	C5-C6-N1	-5.85	114.78	117.70
5	A	647	A	C4-C5-C6	5.85	119.92	117.00
5	A	1207	C	N3-C4-N4	5.85	122.09	118.00
5	A	1558	G	O4'-C1'-N9	5.85	112.88	108.20
6	B	28	C	N3-C4-N4	5.85	122.09	118.00
5	A	964	A	C5-C6-N1	-5.84	114.78	117.70
5	A	2593	A	C4-C5-C6	5.84	119.92	117.00
5	A	185	A	C4-C5-C6	5.84	119.92	117.00
5	A	1056	A	C5-C6-N1	-5.84	114.78	117.70
5	A	2111	A	C5-C6-N6	-5.84	119.03	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2269	C	N3-C4-C5	-5.84	119.56	121.90
5	A	2423	C	O4'-C1'-N1	5.84	112.87	108.20
5	A	2484	G	O4'-C1'-N9	5.84	112.88	108.20
5	A	287	G	O4'-C1'-N9	5.84	112.87	108.20
5	A	375	C	N3-C4-C5	-5.84	119.56	121.90
5	A	1148	C	N3-C4-N4	5.84	122.09	118.00
5	A	1170	C	N3-C4-C5	-5.84	119.56	121.90
5	A	2234	C	N3-C4-C5	-5.84	119.56	121.90
5	A	2551	U	O4'-C1'-N1	5.84	112.87	108.20
5	A	689	A	C4-C5-C6	5.84	119.92	117.00
5	A	747	G	O4'-C1'-N9	5.84	112.87	108.20
5	A	1244	A	C4-C5-C6	5.84	119.92	117.00
5	A	1385	G	C5-C6-O6	-5.84	125.10	128.60
5	A	1499	A	C5-C6-N1	-5.84	114.78	117.70
5	A	2496	C	N3-C4-C5	-5.84	119.56	121.90
5	A	2735	A	C5-C6-N1	-5.84	114.78	117.70
5	A	2840	C	N3-C4-N4	5.84	122.09	118.00
5	A	852	G	O4'-C1'-N9	5.84	112.87	108.20
5	A	110	A	C5-C6-N1	-5.84	114.78	117.70
5	A	1338	G	O4'-C1'-N9	5.84	112.87	108.20
5	A	2661	A	C4-C5-C6	5.84	119.92	117.00
6	B	18	A	C4-C5-C6	5.84	119.92	117.00
5	A	37	C	N3-C4-C5	-5.83	119.57	121.90
5	A	253	G	C5-C6-O6	-5.83	125.10	128.60
5	A	1033	C	N3-C4-N4	5.83	122.08	118.00
5	A	1039	G	O4'-C1'-N9	5.83	112.87	108.20
5	A	1592	A	C4-C5-C6	5.83	119.92	117.00
5	A	1672	A	C4-C5-C6	5.83	119.92	117.00
5	A	2365	A	C5-C6-N6	-5.83	119.03	123.70
5	A	868	A	C5-C6-N1	-5.83	114.78	117.70
5	A	976	U	O4'-C1'-C2'	-5.83	99.97	105.80
6	B	20	A	C4-C5-C6	5.83	119.92	117.00
6	B	70	G	N3-C2-N2	5.83	123.98	119.90
5	A	153	C	P-O5'-C5'	5.83	130.23	120.90
5	A	206	A	C5-C6-N6	-5.83	119.03	123.70
5	A	705	A	C4-C5-C6	5.83	119.92	117.00
5	A	725	C	N3-C4-C5	-5.83	119.57	121.90
5	A	790	A	C5-C6-N1	-5.83	114.78	117.70
5	A	2453	C	N3-C4-N4	5.83	122.08	118.00
5	A	2810	A	C5-C6-N6	-5.83	119.03	123.70
5	A	2898	A	C5-C6-N1	-5.83	114.78	117.70
6	B	88	C	N3-C4-N4	5.83	122.08	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	133	A	C4-C5-C6	5.83	119.92	117.00
5	A	720	C	P-O5'-C5'	-5.83	111.57	120.90
5	A	32	C	N3-C4-N4	5.83	122.08	118.00
5	A	464	C	N3-C4-N4	5.83	122.08	118.00
5	A	1416	G	O4'-C1'-N9	5.83	112.86	108.20
5	A	1652	C	O4'-C1'-N1	5.83	112.86	108.20
5	A	1705	C	N3-C4-C5	-5.83	119.57	121.90
5	A	2000	A	O4'-C1'-N9	5.83	112.86	108.20
5	A	2007	A	C4-C5-C6	5.83	119.92	117.00
5	A	2110	C	N3-C4-C5	-5.83	119.57	121.90
5	A	2123	A	C4-C5-C6	5.83	119.92	117.00
5	A	140	A	C5-C6-N1	-5.83	114.79	117.70
5	A	708	U	P-O5'-C5'	5.83	130.22	120.90
5	A	1144	A	C4-C5-C6	5.83	119.91	117.00
5	A	2786	A	C5-C6-N6	-5.83	119.04	123.70
5	A	2	G	O4'-C1'-N9	5.83	112.86	108.20
5	A	584	A	C4-C5-C6	5.83	119.91	117.00
5	A	1201	A	C5-C6-N6	-5.83	119.04	123.70
5	A	1676	G	C4'-C3'-C2'	-5.83	96.77	102.60
5	A	2298	A	C4-C5-C6	5.83	119.91	117.00
5	A	2338	A	C5-C6-N6	-5.83	119.04	123.70
5	A	2878	U	P-O5'-C5'	5.83	130.22	120.90
5	A	1601	A	C5-C6-N1	-5.82	114.79	117.70
5	A	1768	A	C5-C6-N1	-5.82	114.79	117.70
5	A	1932	G	O4'-C1'-N9	5.82	112.86	108.20
5	A	2424	C	N3-C4-C5	-5.82	119.57	121.90
5	A	2651	C	N3-C4-N4	5.82	122.08	118.00
5	A	2704	A	C4-C5-C6	5.82	119.91	117.00
5	A	2830	A	C5-C6-N1	-5.82	114.79	117.70
6	B	27	A	O4'-C1'-N9	5.82	112.86	108.20
6	B	114	A	C4-C5-C6	5.82	119.91	117.00
5	A	553	A	C4-C5-C6	5.82	119.91	117.00
5	A	1703	C	N3-C4-C5	-5.82	119.57	121.90
5	A	656	A	C5-C6-N1	-5.82	114.79	117.70
5	A	727	A	C4-C5-C6	5.82	119.91	117.00
5	A	1118	C	N3-C4-C5	-5.82	119.57	121.90
5	A	2722	A	C5-C6-N1	-5.82	114.79	117.70
5	A	2900	A	C5-C6-N6	-5.82	119.04	123.70
9	E	147	SER	N-CA-CB	5.82	119.23	110.50
5	A	656	A	C4-C5-C6	5.82	119.91	117.00
5	A	889	A	C4-C5-C6	5.82	119.91	117.00
5	A	1392	A	O4'-C1'-N9	5.82	112.86	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	424	G	O4'-C1'-N9	5.82	112.85	108.20
5	A	994	C	N3-C4-C5	-5.82	119.57	121.90
5	A	996	G	O4'-C1'-N9	5.82	112.86	108.20
5	A	1331	C	N3-C4-C5	-5.82	119.57	121.90
5	A	1331	C	N3-C4-N4	5.82	122.07	118.00
5	A	1504	A	C5-C6-N6	-5.82	119.05	123.70
5	A	2165	A	C5-C6-N1	-5.82	114.79	117.70
5	A	2225	C	N3-C4-N4	5.82	122.07	118.00
5	A	2326	C	O4'-C1'-N1	5.82	112.86	108.20
5	A	2812	A	C5-C6-N6	-5.82	119.05	123.70
5	A	2899	C	N3-C4-N4	5.82	122.07	118.00
5	A	10	A	O4'-C1'-N9	5.82	112.85	108.20
5	A	31	C	N3-C4-N4	5.82	122.07	118.00
5	A	200	A	O4'-C1'-N9	5.82	112.85	108.20
5	A	236	A	C4-C5-C6	5.82	119.91	117.00
5	A	888	A	C4-C5-C6	5.82	119.91	117.00
5	A	1052	C	N3-C4-C5	-5.82	119.57	121.90
5	A	1096	A	C5-C6-N6	-5.82	119.05	123.70
5	A	1991	C	N3-C4-C5	-5.82	119.57	121.90
5	A	2052	A	C4-C5-C6	5.82	119.91	117.00
5	A	2064	G	C5'-C4'-O4'	5.82	116.08	109.10
5	A	2068	G	O4'-C1'-N9	5.82	112.85	108.20
5	A	2330	A	C5-C6-N1	-5.82	114.79	117.70
5	A	2799	C	C6-N1-C2	-5.82	117.97	120.30
5	A	442	C	N3-C4-C5	-5.81	119.57	121.90
5	A	530	A	C4-C5-C6	5.81	119.91	117.00
5	A	1020	A	C5-C6-N6	-5.81	119.05	123.70
5	A	1442	A	C5-C6-N1	-5.81	114.79	117.70
5	A	44	A	C5-C6-N6	-5.81	119.05	123.70
5	A	265	A	C4-C5-C6	5.81	119.91	117.00
5	A	1477	A	C4-C5-C6	5.81	119.91	117.00
5	A	1617	A	C5-C6-N6	-5.81	119.05	123.70
5	A	2717	G	N3-C2-N2	5.81	123.97	119.90
5	A	326	A	C5-C6-N6	-5.81	119.05	123.70
5	A	553	A	O4'-C1'-N9	5.81	112.85	108.20
5	A	1824	C	N3-C4-N4	5.81	122.07	118.00
5	A	2719	A	C5-C6-N6	-5.81	119.05	123.70
5	A	20	C	N3-C4-C5	-5.81	119.58	121.90
5	A	655	C	N3-C4-N4	5.81	122.07	118.00
5	A	1059	A	C4-C5-C6	5.81	119.90	117.00
5	A	1257	C	N3-C4-N4	5.81	122.07	118.00
5	A	1542	A	C5-C6-N6	-5.81	119.05	123.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2774	C	N3-C4-C5	-5.81	119.58	121.90
5	A	94	A	O4'-C1'-N9	5.81	112.85	108.20
5	A	551	A	O4'-C1'-N9	5.81	112.85	108.20
5	A	778	C	N3-C4-C5	-5.81	119.58	121.90
5	A	1164	C	N3-C4-N4	5.81	122.06	118.00
5	A	2032	A	O4'-C1'-N9	5.81	112.85	108.20
5	A	2462	A	C5-C6-N6	-5.81	119.06	123.70
5	A	170	G	O4'-C1'-N9	5.81	112.84	108.20
5	A	1134	A	C5-C6-N6	-5.81	119.06	123.70
5	A	1971	C	N3-C4-N4	5.81	122.06	118.00
5	A	2124	A	C4-C5-C6	5.81	119.90	117.00
5	A	2512	C	N3-C4-N4	5.81	122.06	118.00
5	A	2516	G	O4'-C1'-N9	5.81	112.84	108.20
5	A	6	A	C4-C5-C6	5.80	119.90	117.00
5	A	784	C	N3-C4-N4	5.80	122.06	118.00
5	A	955	C	N3-C4-N4	5.80	122.06	118.00
5	A	1008	A	C5-C6-N6	-5.80	119.06	123.70
5	A	1243	A	C4-C5-C6	5.80	119.90	117.00
5	A	1418	U	C2-N1-C1'	5.80	124.67	117.70
5	A	529	C	N3-C4-N4	5.80	122.06	118.00
5	A	1283	U	P-O3'-C3'	5.80	126.66	119.70
5	A	2190	C	N3-C4-N4	5.80	122.06	118.00
5	A	2369	A	C4-C5-C6	5.80	119.90	117.00
5	A	178	A	C5-C6-N1	-5.80	114.80	117.70
5	A	623	A	C4-C5-C6	5.80	119.90	117.00
5	A	2387	A	C4-C5-C6	5.80	119.90	117.00
6	B	46	A	C4-C5-C6	5.80	119.90	117.00
5	A	204	C	N3-C4-C5	-5.80	119.58	121.90
5	A	265	A	C5-C6-N1	-5.80	114.80	117.70
5	A	366	A	C5-C6-N1	-5.80	114.80	117.70
5	A	384	A	C5-C6-N6	-5.80	119.06	123.70
5	A	476	A	C4-C5-C6	5.80	119.90	117.00
5	A	729	G	C5'-C4'-C3'	-5.80	106.72	116.00
5	A	1278	G	O4'-C1'-N9	5.80	112.84	108.20
5	A	1835	C	N3-C4-N4	5.80	122.06	118.00
5	A	1948	A	O4'-C1'-N9	5.80	112.84	108.20
5	A	2790	A	C5-C6-N1	-5.80	114.80	117.70
5	A	1483	A	C5-C6-N1	-5.80	114.80	117.70
5	A	1593	A	C5-C6-N6	-5.80	119.06	123.70
5	A	1830	G	O4'-C1'-N9	5.80	112.84	108.20
5	A	69	C	N3-C4-C5	-5.80	119.58	121.90
5	A	369	A	C5-C6-N1	-5.80	114.80	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	641	C	N3-C4-N4	5.80	122.06	118.00
5	A	1167	C	N3-C4-N4	5.80	122.06	118.00
5	A	1929	A	C4-C5-C6	5.80	119.90	117.00
5	A	619	A	C4-C5-C6	5.79	119.90	117.00
5	A	1323	A	O4'-C1'-N9	5.79	112.84	108.20
5	A	1949	C	N3-C4-N4	5.79	122.06	118.00
5	A	2402	A	C4-C5-C6	5.79	119.90	117.00
5	A	1179	A	C5-C6-N1	-5.79	114.80	117.70
5	A	1819	C	N3-C4-N4	5.79	122.06	118.00
5	A	1923	C	N3-C4-C5	-5.79	119.58	121.90
5	A	2037	C	N3-C4-N4	5.79	122.06	118.00
5	A	2443	G	O4'-C1'-N9	5.79	112.83	108.20
5	A	2643	A	C5-C6-N6	-5.79	119.07	123.70
5	A	79	C	N3-C4-C5	-5.79	119.58	121.90
5	A	227	G	O4'-C1'-N9	5.79	112.83	108.20
5	A	407	A	O4'-C1'-N9	5.79	112.83	108.20
5	A	525	A	C4-C5-C6	5.79	119.90	117.00
5	A	616	A	O4'-C1'-N9	5.79	112.83	108.20
5	A	1175	A	O4'-C1'-N9	5.79	112.83	108.20
5	A	1297	C	N3-C4-N4	5.79	122.05	118.00
5	A	2030	A	C5-C6-N6	-5.79	119.07	123.70
5	A	2053	C	P-O5'-C5'	5.79	130.17	120.90
5	A	259	A	O4'-C1'-N9	5.79	112.83	108.20
5	A	1318	G	O4'-C1'-N9	5.79	112.83	108.20
5	A	1770	C	N3-C4-C5	-5.79	119.58	121.90
5	A	1935	G	O4'-C1'-N9	5.79	112.83	108.20
5	A	2158	C	N3-C4-N4	5.79	122.05	118.00
5	A	49	A	O4'-C1'-N9	5.79	112.83	108.20
5	A	1010	C	N3-C4-C5	-5.79	119.58	121.90
5	A	2285	G	O4'-C1'-N9	5.79	112.83	108.20
5	A	2675	C	N3-C4-C5	-5.79	119.58	121.90
5	A	2742	C	C2-N1-C1'	5.79	125.17	118.80
5	A	1401	C	N3-C4-N4	5.79	122.05	118.00
5	A	306	C	O4'-C1'-N1	5.79	112.83	108.20
5	A	418	A	C4-C5-C6	5.79	119.89	117.00
5	A	724	A	C5-C6-N1	-5.79	114.81	117.70
5	A	1052	C	N3-C4-N4	5.79	122.05	118.00
5	A	1326	A	C4-C5-C6	5.79	119.89	117.00
5	A	1717	C	N3-C4-N4	5.79	122.05	118.00
5	A	2032	A	C4-C5-C6	5.79	119.89	117.00
5	A	2841	C	N3-C4-N4	5.79	122.05	118.00
6	B	20	A	C5-C6-N6	-5.79	119.07	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1453	A	C5-C6-N1	-5.78	114.81	117.70
5	A	1655	A	C4-C5-C6	5.78	119.89	117.00
5	A	2306	G	O4'-C1'-N9	5.78	112.83	108.20
6	B	27	A	C5-C6-N6	-5.78	119.07	123.70
6	B	108	C	N3-C4-C5	-5.78	119.59	121.90
5	A	689	A	C5-C6-N1	-5.78	114.81	117.70
5	A	1047	A	C4-C5-C6	5.78	119.89	117.00
5	A	1994	C	N3-C4-N4	5.78	122.05	118.00
5	A	2030	A	C4-C5-C6	5.78	119.89	117.00
5	A	2066	A	C5-C6-N1	-5.78	114.81	117.70
5	A	2506	C	N3-C4-N4	5.78	122.05	118.00
5	A	230	A	C5-C6-N1	-5.78	114.81	117.70
5	A	284	C	N3-C4-N4	5.78	122.05	118.00
5	A	1077	G	O4'-C1'-N9	5.78	112.82	108.20
5	A	1142	A	C5-C6-N6	-5.78	119.08	123.70
5	A	1766	C	C2-N1-C1'	5.78	125.16	118.80
5	A	2076	C	N3-C4-N4	5.78	122.05	118.00
5	A	2567	C	N3-C4-C5	-5.78	119.59	121.90
5	A	2590	A	C5-C6-N1	-5.78	114.81	117.70
5	A	2705	C	N3-C4-C5	-5.78	119.59	121.90
5	A	922	A	C5-C6-N1	-5.78	114.81	117.70
5	A	986	G	O4'-C1'-N9	5.78	112.82	108.20
5	A	2466	C	N3-C4-N4	5.78	122.05	118.00
6	B	25	A	C4-C5-C6	5.78	119.89	117.00
5	A	722	A	C5-C6-N1	-5.78	114.81	117.70
5	A	1025	A	C4-C5-C6	5.78	119.89	117.00
5	A	1083	G	O4'-C1'-N9	5.78	112.82	108.20
5	A	2292	C	N3-C4-C5	-5.78	119.59	121.90
5	A	2446	C	N3-C4-C5	-5.78	119.59	121.90
5	A	2605	G	O4'-C1'-N9	5.78	112.82	108.20
5	A	604	C	N3-C4-N4	5.77	122.04	118.00
6	B	17	A	O4'-C1'-N9	5.77	112.82	108.20
5	A	144	A	C5-C6-N6	-5.77	119.08	123.70
5	A	1027	A	C5-C6-N6	-5.77	119.08	123.70
5	A	1178	U	C6-N1-C1'	-5.77	113.12	121.20
5	A	1778	A	C4-C5-C6	5.77	119.89	117.00
5	A	2212	C	N3-C4-N4	5.77	122.04	118.00
5	A	2834	A	C4-C5-C6	5.77	119.89	117.00
5	A	62	C	N3-C4-C5	-5.77	119.59	121.90
5	A	828	A	C4-C5-C6	5.77	119.89	117.00
5	A	2603	G	O4'-C1'-N9	5.77	112.82	108.20
5	A	1653	A	C5-C6-N1	-5.77	114.81	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2031	G	O4'-C1'-N9	5.77	112.81	108.20
5	A	2843	G	C5-C6-O6	-5.77	125.14	128.60
5	A	875	U	O4'-C1'-N1	5.77	112.81	108.20
5	A	960	U	O4'-C1'-N1	5.77	112.81	108.20
5	A	1389	C	N3-C4-C5	-5.77	119.59	121.90
5	A	2432	C	N3-C4-C5	-5.77	119.59	121.90
5	A	2926	C	N3-C4-N4	5.77	122.04	118.00
6	B	113	A	C5-C6-N6	-5.77	119.09	123.70
5	A	864	C	N3-C4-N4	5.77	122.04	118.00
5	A	359	C	N3-C4-C5	-5.76	119.59	121.90
5	A	492	C	N3-C4-N4	5.76	122.04	118.00
5	A	543	A	C4-C5-C6	5.76	119.88	117.00
5	A	811	A	C5-C6-N1	-5.76	114.82	117.70
5	A	1677	A	C4-C5-C6	5.76	119.88	117.00
5	A	1767	A	O4'-C1'-N9	5.76	112.81	108.20
5	A	2547	A	C5-C6-N1	-5.76	114.82	117.70
5	A	2695	C	N3-C4-C5	-5.76	119.59	121.90
5	A	780	G	N3-C2-N2	5.76	123.93	119.90
5	A	1976	C	N3-C4-C5	-5.76	119.59	121.90
5	A	940	G	O4'-C1'-N9	5.76	112.81	108.20
5	A	1579	A	C5-C6-N1	-5.76	114.82	117.70
5	A	1618	A	P-O3'-C3'	5.76	126.61	119.70
5	A	1922	C	N3-C4-N4	5.76	122.03	118.00
5	A	2113	C	N3-C4-N4	5.76	122.03	118.00
5	A	2602	C	N3-C4-N4	5.76	122.03	118.00
6	B	46	A	C5-C6-N1	-5.76	114.82	117.70
5	A	904	A	C4-C5-C6	5.76	119.88	117.00
5	A	1434	A	O4'-C1'-N9	5.76	112.81	108.20
5	A	1492	G	C4'-C3'-C2'	-5.76	96.84	102.60
5	A	1753	C	N3-C4-N4	5.76	122.03	118.00
5	A	2225	C	N3-C4-C5	-5.76	119.60	121.90
5	A	2530	C	N3-C4-N4	5.76	122.03	118.00
5	A	97	C	N3-C4-N4	5.76	122.03	118.00
5	A	1739	C	N3-C4-C5	-5.76	119.60	121.90
5	A	154	A	C4-C5-C6	5.76	119.88	117.00
5	A	173	A	C5-C6-N1	-5.76	114.82	117.70
5	A	1219	C	N3-C4-C5	-5.76	119.60	121.90
5	A	1565	U	O4'-C1'-N1	5.76	112.81	108.20
5	A	1606	A	C4-C5-C6	5.76	119.88	117.00
5	A	2395	A	O4'-C1'-N9	5.76	112.81	108.20
5	A	2440	A	C4-C5-C6	5.76	119.88	117.00
5	A	2503	C	N3-C4-N4	5.76	122.03	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2912	A	C5-C6-N6	-5.76	119.09	123.70
5	A	353	A	P-O5'-C5'	5.75	130.11	120.90
5	A	1517	A	C5-C6-N1	-5.75	114.82	117.70
5	A	1552	C	N3-C4-C5	-5.75	119.60	121.90
5	A	1956	A	O4'-C1'-N9	5.75	112.80	108.20
6	B	41	C	N3-C4-C5	-5.75	119.60	121.90
5	A	284	C	N3-C4-C5	-5.75	119.60	121.90
5	A	481	U	O4'-C1'-N1	5.75	112.80	108.20
5	A	864	C	N3-C4-C5	-5.75	119.60	121.90
5	A	1461	A	O4'-C1'-N9	5.75	112.80	108.20
5	A	1619	A	C4-C5-C6	5.75	119.88	117.00
5	A	2715	G	C5-C6-O6	-5.75	125.15	128.60
5	A	421	A	C5-C6-N6	-5.75	119.10	123.70
5	A	672	C	C6-N1-C2	-5.75	118.00	120.30
5	A	1532	A	C4-C5-C6	5.75	119.88	117.00
5	A	2492	C	N3-C4-N4	5.75	122.03	118.00
5	A	2657	C	N3-C4-C5	-5.75	119.60	121.90
5	A	362	C	N3-C4-N4	5.75	122.03	118.00
5	A	593	A	C5-C6-N1	-5.75	114.83	117.70
5	A	1493	C	N3-C4-C5	-5.75	119.60	121.90
5	A	1522	U	C6-N1-C1'	-5.75	113.15	121.20
5	A	2270	A	C5-C6-N1	-5.75	114.83	117.70
5	A	2475	G	C5-C6-O6	-5.75	125.15	128.60
5	A	69	C	N3-C4-N4	5.75	122.02	118.00
5	A	133	A	C5-C6-N1	-5.75	114.83	117.70
5	A	460	C	N3-C4-N4	5.75	122.02	118.00
5	A	581	C	N3-C4-C5	-5.75	119.60	121.90
5	A	1169	C	N3-C4-C5	-5.75	119.60	121.90
5	A	1287	A	C4-C5-C6	5.75	119.88	117.00
5	A	1477	A	C5-C6-N6	-5.75	119.10	123.70
5	A	1694	G	O4'-C1'-N9	5.75	112.80	108.20
5	A	1925	A	C4-C5-C6	5.75	119.87	117.00
5	A	2193	C	N3-C4-N4	5.75	122.02	118.00
5	A	2330	A	C4-C5-C6	5.75	119.87	117.00
5	A	2604	C	N3-C4-C5	-5.75	119.60	121.90
5	A	2742	C	N3-C4-C5	-5.75	119.60	121.90
5	A	1153	G	P-O5'-C5'	5.75	130.09	120.90
5	A	1217	U	O4'-C1'-N1	5.75	112.80	108.20
5	A	1618	A	O4'-C1'-N9	5.75	112.80	108.20
5	A	1829	C	N3-C4-N4	5.75	122.02	118.00
5	A	2164	A	C4-C5-C6	5.75	119.87	117.00
5	A	2166	C	N3-C4-N4	5.75	122.02	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2456	C	O4'-C1'-N1	5.75	112.80	108.20
5	A	2729	C	N3-C4-N4	5.75	122.02	118.00
5	A	2851	A	C5-C6-N6	-5.75	119.10	123.70
5	A	759	G	C6-C5-N7	-5.75	126.95	130.40
5	A	1279	C	N3-C4-N4	5.75	122.02	118.00
5	A	634	A	C5-C6-N6	-5.74	119.11	123.70
5	A	2065	C	N3-C4-N4	5.74	122.02	118.00
5	A	2594	A	C5-C6-N1	-5.74	114.83	117.70
5	A	2789	C	N3-C4-N4	5.74	122.02	118.00
5	A	991	A	C5-C6-N1	-5.74	114.83	117.70
5	A	1065	U	O4'-C1'-N1	5.74	112.79	108.20
5	A	1542	A	O4'-C1'-N9	5.74	112.79	108.20
5	A	456	A	C5-C6-N6	-5.74	119.11	123.70
5	A	618	A	C5-C6-N6	-5.74	119.11	123.70
5	A	2166	C	O4'-C1'-N1	5.74	112.79	108.20
5	A	2375	A	O4'-C1'-N9	5.74	112.79	108.20
5	A	154	A	O4'-C1'-N9	5.74	112.79	108.20
5	A	181	G	C4'-C3'-C2'	-5.74	96.86	102.60
5	A	991	A	C5-C6-N6	-5.74	119.11	123.70
5	A	1132	A	C5-C6-N1	-5.74	114.83	117.70
5	A	2097	U	P-O3'-C3'	5.74	126.59	119.70
5	A	2433	C	N3-C4-N4	5.74	122.02	118.00
5	A	1027	A	C4-C5-C6	5.74	119.87	117.00
5	A	2675	C	C2-N1-C1'	5.74	125.11	118.80
6	B	58	C	N3-C4-C5	-5.74	119.61	121.90
5	A	47	C	N3-C4-C5	-5.74	119.61	121.90
5	A	649	G	O4'-C1'-N9	5.74	112.79	108.20
5	A	1426	A	C4-C5-C6	5.74	119.87	117.00
5	A	2155	A	C4-C5-C6	5.74	119.87	117.00
5	A	2407	A	C5-C6-N1	-5.74	114.83	117.70
5	A	2789	C	N3-C4-C5	-5.74	119.61	121.90
6	B	109	C	N3-C4-N4	5.74	122.02	118.00
5	A	76	C	N3-C4-N4	5.73	122.01	118.00
5	A	183	A	C4-C5-C6	5.73	119.87	117.00
5	A	207	A	O4'-C1'-N9	5.73	112.78	108.20
5	A	467	C	N3-C4-N4	5.73	122.01	118.00
5	A	1693	C	N3-C4-N4	5.73	122.01	118.00
5	A	1781	C	N3-C4-N4	5.73	122.01	118.00
5	A	1855	C	N3-C4-C5	-5.73	119.61	121.90
5	A	1963	C	N3-C4-N4	5.73	122.01	118.00
5	A	2039	G	O4'-C1'-N9	5.73	112.79	108.20
5	A	254	A	C5-C6-N6	-5.73	119.12	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	445	C	N3-C4-C5	-5.73	119.61	121.90
5	A	1130	A	C5-C6-N6	-5.73	119.11	123.70
5	A	1575	A	C5-C6-N1	-5.73	114.83	117.70
5	A	1764	U	P-O3'-C3'	5.73	126.58	119.70
5	A	2315	A	C5-C6-N6	-5.73	119.11	123.70
5	A	2319	G	O4'-C1'-N9	5.73	112.78	108.20
5	A	2731	G	C5-C6-O6	-5.73	125.16	128.60
5	A	2803	C	N3-C4-N4	5.73	122.01	118.00
5	A	3	U	C3'-C2'-C1'	5.73	106.08	101.50
5	A	710	G	O4'-C1'-N9	5.73	112.78	108.20
5	A	889	A	C5-C6-N1	-5.73	114.83	117.70
5	A	309	U	C5'-C4'-O4'	-5.73	102.23	109.10
5	A	366	A	C4-C5-C6	5.73	119.86	117.00
5	A	999	A	O4'-C1'-N9	5.73	112.78	108.20
5	A	1119	A	C5-C6-N6	-5.73	119.12	123.70
5	A	1366	C	N3-C4-C5	-5.73	119.61	121.90
5	A	1374	C	N3-C4-N4	5.73	122.01	118.00
5	A	1500	U	O4'-C1'-N1	5.73	112.78	108.20
5	A	1815	A	C4-C5-C6	5.73	119.86	117.00
5	A	2119	A	C4-C5-C6	5.73	119.86	117.00
5	A	2277	C	N3-C4-C5	-5.73	119.61	121.90
6	B	118	A	C5-C6-N1	-5.73	114.84	117.70
5	A	38	A	C4-C5-C6	5.73	119.86	117.00
5	A	1921	C	N3-C4-C5	-5.72	119.61	121.90
5	A	28	A	C4-C5-C6	5.72	119.86	117.00
5	A	73	A	C4-C5-C6	5.72	119.86	117.00
5	A	234	C	N3-C4-N4	5.72	122.01	118.00
5	A	574	A	C5-C6-N1	-5.72	114.84	117.70
5	A	1644	C	N3-C4-N4	5.72	122.01	118.00
5	A	2052	A	C5-C6-N1	-5.72	114.84	117.70
5	A	2075	G	O4'-C1'-N9	5.72	112.78	108.20
5	A	2076	C	N3-C4-C5	-5.72	119.61	121.90
5	A	2173	G	N3-C2-N2	5.72	123.91	119.90
5	A	1767	A	C5-C6-N6	-5.72	119.12	123.70
5	A	2100	A	C5-C6-N1	-5.72	114.84	117.70
5	A	2236	C	N3-C4-C5	-5.72	119.61	121.90
5	A	1196	C	N3-C4-C5	-5.72	119.61	121.90
5	A	1434	A	C5-C6-N1	-5.72	114.84	117.70
5	A	1557	G	O4'-C1'-N9	5.72	112.78	108.20
5	A	1627	A	C4-C5-C6	5.72	119.86	117.00
5	A	1947	A	C4-C5-C6	5.72	119.86	117.00
5	A	2544	C	N3-C4-N4	5.72	122.00	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2752	C	N3-C4-N4	5.72	122.00	118.00
5	A	688	G	O4'-C1'-N9	5.72	112.77	108.20
5	A	692	A	C5-C6-N6	-5.72	119.13	123.70
5	A	872	C	N3-C4-N4	5.72	122.00	118.00
5	A	1034	A	C4-C5-C6	5.72	119.86	117.00
5	A	2375	A	C5-C6-N1	-5.72	114.84	117.70
5	A	41	A	C5-C6-N6	-5.72	119.13	123.70
5	A	993	A	C4-C5-C6	5.72	119.86	117.00
5	A	1078	A	O4'-C1'-N9	5.72	112.77	108.20
5	A	1115	A	C4-C5-C6	5.72	119.86	117.00
5	A	1213	G	O4'-C1'-N9	5.72	112.77	108.20
5	A	1334	C	N3-C4-N4	5.72	122.00	118.00
5	A	1712	G	O4'-C1'-N9	5.72	112.77	108.20
5	A	1743	A	C5-C6-N6	-5.72	119.13	123.70
5	A	1943	C	N3-C4-N4	5.72	122.00	118.00
5	A	1982	A	C5-C6-N6	-5.72	119.13	123.70
5	A	2071	A	C5-C6-N6	-5.72	119.13	123.70
5	A	2102	C	N3-C4-C5	-5.72	119.61	121.90
5	A	2777	A	C5-C6-N1	-5.72	114.84	117.70
5	A	364	A	C5-C6-N6	-5.71	119.13	123.70
5	A	425	C	N3-C4-N4	5.71	122.00	118.00
5	A	640	C	N3-C4-C5	-5.71	119.61	121.90
5	A	1375	A	C4-C5-C6	5.71	119.86	117.00
5	A	1421	A	O4'-C1'-N9	5.71	112.77	108.20
5	A	2062	A	C4-C5-C6	5.71	119.86	117.00
5	A	2405	A	C5-C6-N6	-5.71	119.13	123.70
5	A	2495	C	N3-C4-C5	-5.71	119.61	121.90
5	A	2668	A	C5-C6-N6	-5.71	119.13	123.70
5	A	1118	C	N3-C4-N4	5.71	122.00	118.00
5	A	1695	A	C5-C6-N6	-5.71	119.13	123.70
5	A	1994	C	N3-C4-C5	-5.71	119.61	121.90
5	A	2029	G	P-O5'-C5'	5.71	130.04	120.90
5	A	44	A	C5-C6-N1	-5.71	114.84	117.70
5	A	95	A	C4-C5-C6	5.71	119.86	117.00
5	A	366	A	C5-C6-N6	-5.71	119.13	123.70
5	A	561	A	C5-C6-N6	-5.71	119.13	123.70
5	A	791	C	N3-C4-N4	5.71	122.00	118.00
5	A	1260	A	C5-C6-N6	-5.71	119.13	123.70
5	A	1347	A	C4-C5-C6	5.71	119.86	117.00
5	A	1965	A	C5-C6-N6	-5.71	119.13	123.70
5	A	75	G	O4'-C1'-N9	5.71	112.77	108.20
5	A	387	C	N3-C4-N4	5.71	122.00	118.00

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1054	A	C4-C5-C6	5.71	119.86	117.00
5	A	1062	C	N3-C4-N4	5.71	122.00	118.00
5	A	2198	G	N1-C6-O6	5.71	123.33	119.90
5	A	2231	C	N3-C4-N4	5.71	122.00	118.00
5	A	2776	G	N3-C2-N2	5.71	123.90	119.90
6	B	44	A	C5-C6-N1	-5.71	114.84	117.70
5	A	639	C	N3-C4-N4	5.71	122.00	118.00
5	A	720	C	N3-C4-C5	-5.71	119.62	121.90
5	A	762	A	C5-C6-N6	-5.71	119.13	123.70
5	A	1042	A	C4-C5-C6	5.71	119.85	117.00
5	A	1398	A	C5-C6-N1	-5.71	114.84	117.70
5	A	1426	A	C4'-C3'-C2'	-5.71	96.89	102.60
5	A	2786	A	C5-C6-N1	-5.71	114.85	117.70
5	A	1534	A	C5-C6-N1	-5.71	114.85	117.70
5	A	1661	A	C5-C6-N1	-5.71	114.85	117.70
5	A	2381	A	C5-C6-N1	-5.71	114.85	117.70
5	A	124	A	C5-C6-N1	-5.71	114.85	117.70
5	A	279	A	C4-C5-C6	5.71	119.85	117.00
5	A	2082	G	C5-C6-O6	-5.71	125.18	128.60
5	A	829	A	C5-C6-N1	-5.70	114.85	117.70
5	A	1134	A	C5-C6-N1	-5.70	114.85	117.70
5	A	1312	A	C5-C6-N6	-5.70	119.14	123.70
5	A	1360	A	C5-C6-N6	-5.70	119.14	123.70
5	A	1521	G	O4'-C1'-N9	5.70	112.76	108.20
5	A	1703	C	N3-C4-N4	5.70	121.99	118.00
5	A	2517	A	O4'-C1'-N9	5.70	112.76	108.20
5	A	2549	C	N3-C4-N4	5.70	121.99	118.00
5	A	2651	C	P-O3'-C3'	-5.70	112.86	119.70
7	C	143	ASN	N-CA-CB	5.70	120.87	110.60
5	A	456	A	C5-C6-N1	-5.70	114.85	117.70
5	A	1760	A	C5-C6-N6	-5.70	119.14	123.70
5	A	2563	C	N3-C4-N4	5.70	121.99	118.00
5	A	2739	C	P-O5'-C5'	5.70	130.02	120.90
5	A	470	A	C4-C5-C6	5.70	119.85	117.00
5	A	653	A	C5-C6-N1	-5.70	114.85	117.70
5	A	1095	C	N3-C4-N4	5.70	121.99	118.00
5	A	1866	C	N3-C4-C5	-5.70	119.62	121.90
5	A	1966	A	C5-C6-N1	-5.70	114.85	117.70
5	A	2466	C	N3-C4-C5	-5.70	119.62	121.90
5	A	494	A	C4-C5-C6	5.70	119.85	117.00
5	A	2805	A	C5-C6-N1	-5.70	114.85	117.70
17	P	43	PHE	CB-CG-CD1	-5.70	116.81	120.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	90	A	C5-C6-N1	-5.70	114.85	117.70
5	A	482	C	N3-C4-N4	5.70	121.99	118.00
5	A	486	A	C5-C6-N1	-5.70	114.85	117.70
5	A	943	A	O4'-C1'-N9	5.70	112.76	108.20
5	A	1126	A	C4-C5-C6	5.70	119.85	117.00
5	A	150	A	C4-C5-C6	5.70	119.85	117.00
5	A	179	A	C5-C6-N6	-5.70	119.14	123.70
5	A	241	C	N3-C4-C5	-5.70	119.62	121.90
5	A	395	C	N3-C4-N4	5.70	121.99	118.00
5	A	508	C	N3-C4-C5	-5.70	119.62	121.90
5	A	945	C	N3-C4-C5	-5.70	119.62	121.90
5	A	2010	A	C5-C6-N6	-5.70	119.14	123.70
5	A	2093	C	C2-N3-C4	5.70	122.75	119.90
5	A	2237	C	N3-C4-N4	5.70	121.99	118.00
5	A	1575	A	O4'-C1'-N9	5.69	112.75	108.20
5	A	2029	G	P-O3'-C3'	-5.69	112.87	119.70
5	A	2262	A	C5-C6-N1	-5.69	114.85	117.70
5	A	2569	C	N3-C4-C5	-5.69	119.62	121.90
18	Q	45	TYR	CB-CG-CD2	5.69	124.42	121.00
5	A	717	A	C4-C5-C6	5.69	119.85	117.00
5	A	1008	A	C5-C6-N1	-5.69	114.85	117.70
5	A	1330	C	N3-C4-C5	-5.69	119.62	121.90
5	A	1517	A	C5-C6-N6	-5.69	119.15	123.70
5	A	2447	A	O4'-C1'-N9	5.69	112.75	108.20
6	B	37	A	C5-C6-N6	-5.69	119.15	123.70
5	A	282	G	P-O3'-C3'	5.69	126.53	119.70
5	A	971	A	C5-C6-N6	-5.69	119.15	123.70
5	A	1241	C	N3-C4-N4	5.69	121.98	118.00
5	A	1309	G	O4'-C1'-N9	5.69	112.75	108.20
5	A	2042	A	O4'-C1'-N9	5.69	112.75	108.20
5	A	2093	C	N3-C4-N4	5.69	121.98	118.00
5	A	2752	C	N3-C4-C5	-5.69	119.62	121.90
5	A	2816	C	N3-C4-N4	5.69	121.98	118.00
6	B	11	A	C5-C6-N6	-5.69	119.15	123.70
5	A	244	A	C4-C5-C6	5.69	119.84	117.00
5	A	547	A	C5-C6-N1	-5.69	114.86	117.70
5	A	660	G	O4'-C1'-N9	5.69	112.75	108.20
5	A	924	U	O3'-P-O5'	5.69	114.81	104.00
5	A	2859	G	C6-C5-N7	-5.69	126.99	130.40
5	A	1455	C	N3-C4-N4	5.69	121.98	118.00
5	A	1953	C	N3-C4-C5	-5.69	119.62	121.90
5	A	1956	A	C5-C6-N6	-5.69	119.15	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2146	A	C5-C6-N1	-5.69	114.86	117.70
5	A	2916	A	C4-C5-C6	5.69	119.84	117.00
5	A	1495	C	N3-C4-C5	-5.69	119.62	121.90
5	A	1161	A	C5-C6-N1	-5.68	114.86	117.70
5	A	1270	C	N3-C4-N4	5.68	121.98	118.00
5	A	1346	A	O4'-C1'-N9	5.68	112.75	108.20
5	A	1812	A	C5-C6-N1	-5.68	114.86	117.70
5	A	431	A	C5-C6-N6	-5.68	119.15	123.70
5	A	560	A	C4-C5-C6	5.68	119.84	117.00
5	A	725	C	N3-C4-N4	5.68	121.98	118.00
5	A	1392	A	C4-C5-C6	5.68	119.84	117.00
5	A	1452	C	N3-C4-N4	5.68	121.98	118.00
5	A	2200	A	O4'-C1'-N9	5.68	112.75	108.20
5	A	11	G	O4'-C1'-N9	5.68	112.75	108.20
5	A	902	G	O4'-C1'-N9	5.68	112.75	108.20
5	A	1729	C	N3-C4-N4	5.68	121.98	118.00
5	A	373	A	C4-C5-C6	5.68	119.84	117.00
5	A	745	C	N3-C4-N4	5.68	121.97	118.00
5	A	1583	A	O4'-C1'-N9	5.68	112.74	108.20
5	A	1626	U	O4'-C1'-N1	5.68	112.74	108.20
5	A	1766	C	N3-C4-C5	-5.68	119.63	121.90
5	A	1795	C	N3-C4-N4	5.68	121.98	118.00
5	A	1941	A	C5-C6-N1	-5.68	114.86	117.70
5	A	2498	A	C5-C6-N6	-5.68	119.16	123.70
5	A	2570	A	C4-C5-C6	5.68	119.84	117.00
5	A	373	A	C5-C6-N6	-5.68	119.16	123.70
5	A	1205	U	O4'-C1'-N1	5.68	112.74	108.20
5	A	1667	A	C5-C6-N1	-5.68	114.86	117.70
5	A	212	C	N3-C4-C5	-5.68	119.63	121.90
5	A	295	G	O4'-C1'-N9	5.68	112.74	108.20
5	A	906	G	N3-C2-N2	5.68	123.87	119.90
5	A	1020	A	C5-C6-N1	-5.68	114.86	117.70
5	A	2095	C	N3-C4-C5	-5.68	119.63	121.90
5	A	2403	C	O4'-C1'-N1	5.68	112.74	108.20
5	A	2523	G	O4'-C1'-N9	5.68	112.74	108.20
5	A	2799	C	N3-C4-N4	5.68	121.97	118.00
5	A	283	G	O4'-C1'-N9	5.67	112.74	108.20
5	A	897	G	C6-C5-N7	-5.67	127.00	130.40
5	A	1862	C	N3-C4-C5	-5.67	119.63	121.90
5	A	2389	A	C4-C5-C6	5.67	119.84	117.00
5	A	823	G	C8-N9-C1'	-5.67	119.62	127.00
5	A	840	A	O4'-C1'-N9	5.67	112.74	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1113	A	C5-C6-N6	-5.67	119.16	123.70
5	A	218	G	N3-C2-N2	5.67	123.87	119.90
5	A	616	A	C5-C6-N1	-5.67	114.86	117.70
5	A	696	C	N3-C4-N4	5.67	121.97	118.00
5	A	1413	G	O4'-C1'-N9	5.67	112.74	108.20
5	A	2027	A	O4'-C1'-N9	5.67	112.74	108.20
5	A	2744	C	N3-C4-N4	5.67	121.97	118.00
5	A	1347	A	C5-C6-N6	-5.67	119.16	123.70
5	A	698	C	N3-C4-N4	5.67	121.97	118.00
5	A	1346	A	C5-C6-N6	-5.67	119.17	123.70
5	A	1504	A	C4-C5-C6	5.67	119.83	117.00
5	A	2245	G	O4'-C1'-N9	5.67	112.73	108.20
5	A	2383	A	C5-C6-N1	-5.67	114.87	117.70
5	A	2919	A	C5-C6-N1	-5.67	114.86	117.70
6	B	76	A	C4-C5-C6	5.67	119.83	117.00
5	A	1819	C	N3-C4-C5	-5.67	119.63	121.90
5	A	2709	C	N3-C4-N4	5.67	121.97	118.00
5	A	318	A	C5-C6-N6	-5.67	119.17	123.70
5	A	841	A	O4'-C1'-N9	5.67	112.73	108.20
5	A	980	C	N3-C4-C5	-5.67	119.63	121.90
5	A	2276	A	C4-C5-C6	5.67	119.83	117.00
5	A	2643	A	C5-C6-N1	-5.67	114.87	117.70
5	A	2735	A	C5-C6-N6	-5.67	119.17	123.70
5	A	62	C	N3-C4-N4	5.66	121.97	118.00
5	A	582	A	O4'-C1'-N9	5.66	112.73	108.20
5	A	628	C	N3-C4-N4	5.66	121.96	118.00
5	A	923	C	N3-C4-C5	-5.66	119.64	121.90
5	A	1476	C	N3-C4-N4	5.66	121.96	118.00
5	A	1697	A	C5-C6-N1	-5.66	114.87	117.70
5	A	2049	A	C4-C5-C6	5.66	119.83	117.00
5	A	2158	C	N3-C4-C5	-5.66	119.63	121.90
5	A	2187	A	C5-C6-N1	-5.66	114.87	117.70
5	A	2228	A	C4-C5-C6	5.66	119.83	117.00
5	A	2326	C	N3-C4-N4	5.66	121.96	118.00
5	A	912	C	N3-C4-C5	-5.66	119.64	121.90
5	A	1026	A	C5-C6-N6	-5.66	119.17	123.70
5	A	1991	C	N3-C4-N4	5.66	121.96	118.00
5	A	2088	A	C5-C6-N6	-5.66	119.17	123.70
5	A	2846	A	C5-C6-N6	-5.66	119.17	123.70
6	B	25	A	C5-C6-N6	-5.66	119.17	123.70
5	A	38	A	O4'-C1'-N9	5.66	112.73	108.20
5	A	216	A	C5-C6-N6	-5.66	119.17	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	422	C	N3-C4-N4	5.66	121.96	118.00
5	A	578	A	C5-C6-N1	-5.66	114.87	117.70
5	A	608	C	N3-C4-N4	5.66	121.96	118.00
5	A	862	U	P-O5'-C5'	5.66	129.96	120.90
5	A	932	C	C2-N1-C1'	5.66	125.03	118.80
5	A	993	A	C5-C6-N6	-5.66	119.17	123.70
5	A	1266	A	C5-C6-N6	-5.66	119.17	123.70
5	A	1287	A	C5-C6-N6	-5.66	119.17	123.70
5	A	2492	C	N3-C4-C5	-5.66	119.64	121.90
5	A	2790	A	C4-C5-C6	5.66	119.83	117.00
5	A	2860	A	C5-C6-N1	-5.66	114.87	117.70
5	A	2876	A	C5-C6-N6	-5.66	119.17	123.70
6	B	108	C	N3-C4-N4	5.66	121.96	118.00
5	A	401	C	C1'-O4'-C4'	-5.66	105.37	109.90
5	A	468	C	N3-C4-N4	5.66	121.96	118.00
5	A	1056	A	C5-C6-N6	-5.66	119.17	123.70
5	A	1607	C	N3-C4-N4	5.66	121.96	118.00
5	A	2323	C	N3-C4-C5	-5.66	119.64	121.90
5	A	2630	C	N3-C4-C5	-5.66	119.64	121.90
5	A	2781	C	N3-C4-N4	5.66	121.96	118.00
5	A	2819	A	O4'-C1'-N9	5.66	112.73	108.20
5	A	1592	A	C5-C6-N6	-5.66	119.17	123.70
5	A	2564	A	O4'-C1'-N9	5.66	112.72	108.20
5	A	2571	A	C4-C5-C6	5.66	119.83	117.00
6	B	39	A	C5-C6-N6	-5.66	119.17	123.70
5	A	124	A	C5-C6-N6	-5.66	119.18	123.70
5	A	333	A	C4-C5-C6	5.66	119.83	117.00
5	A	414	C	N3-C4-C5	-5.66	119.64	121.90
5	A	436	A	C5-C6-N6	-5.66	119.18	123.70
5	A	2212	C	N3-C4-C5	-5.66	119.64	121.90
5	A	2539	C	N3-C4-N4	5.66	121.96	118.00
5	A	2869	A	C4-C5-C6	5.66	119.83	117.00
6	B	40	C	N3-C4-C5	-5.66	119.64	121.90
5	A	234	C	N3-C4-C5	-5.65	119.64	121.90
5	A	1942	A	C5-C6-N6	-5.65	119.18	123.70
5	A	969	C	N3-C4-N4	5.65	121.96	118.00
5	A	970	A	C4-C5-C6	5.65	119.83	117.00
5	A	2525	C	O4'-C1'-N1	5.65	112.72	108.20
5	A	2550	C	N3-C4-C5	-5.65	119.64	121.90
5	A	345	A	C5-C6-N6	-5.65	119.18	123.70
5	A	819	G	O4'-C1'-N9	5.65	112.72	108.20
5	A	1149	A	C5-C6-N1	-5.65	114.87	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1515	C	N3-C4-N4	5.65	121.96	118.00
5	A	1562	A	C4-C5-C6	5.65	119.83	117.00
5	A	1961	A	C4-C5-C6	5.65	119.83	117.00
5	A	2298	A	O4'-C1'-N9	5.65	112.72	108.20
5	A	2616	A	C5-C6-N6	-5.65	119.18	123.70
6	B	68	C	N3-C4-C5	-5.65	119.64	121.90
5	A	257	G	O4'-C1'-N9	5.65	112.72	108.20
5	A	763	A	C5-C6-N6	-5.65	119.18	123.70
5	A	1141	A	C5-C6-N6	-5.65	119.18	123.70
5	A	2295	A	C5-C6-N6	-5.65	119.18	123.70
5	A	2501	G	N3-C2-N2	5.65	123.85	119.90
5	A	257	G	N3-C2-N2	5.65	123.85	119.90
5	A	646	A	C5-C6-N6	-5.65	119.18	123.70
5	A	802	G	C5-C6-O6	-5.65	125.21	128.60
5	A	838	C	N3-C4-N4	5.65	121.95	118.00
5	A	1219	C	N3-C4-N4	5.65	121.95	118.00
5	A	1401	C	N3-C4-C5	-5.65	119.64	121.90
5	A	1614	A	C5-C6-N6	-5.65	119.18	123.70
5	A	2599	G	O4'-C1'-N9	5.65	112.72	108.20
5	A	2767	A	C5-C6-N6	-5.65	119.18	123.70
5	A	2817	C	N3-C4-N4	5.65	121.95	118.00
5	A	31	C	N3-C4-C5	-5.65	119.64	121.90
5	A	137	G	O4'-C1'-N9	5.65	112.72	108.20
5	A	1607	C	N3-C4-C5	-5.65	119.64	121.90
5	A	10	A	C5-C6-N6	-5.64	119.18	123.70
5	A	212	C	N3-C4-N4	5.64	121.95	118.00
5	A	635	C	N3-C4-C5	-5.64	119.64	121.90
5	A	1396	C	N3-C4-N4	5.64	121.95	118.00
5	A	1845	A	C5-C6-N6	-5.64	119.18	123.70
5	A	2007	A	C5-C6-N1	-5.64	114.88	117.70
5	A	2350	G	C8-N9-C1'	-5.64	119.66	127.00
5	A	1415	C	N3-C4-C5	-5.64	119.64	121.90
5	A	1714	A	C5-C6-N1	-5.64	114.88	117.70
5	A	1791	A	C5-C6-N6	-5.64	119.19	123.70
5	A	1854	G	O4'-C1'-N9	5.64	112.71	108.20
5	A	2447	A	C4-C5-C6	5.64	119.82	117.00
5	A	2630	C	N3-C4-N4	5.64	121.95	118.00
5	A	104	C	N3-C4-C5	-5.64	119.64	121.90
5	A	551	A	C5-C6-N1	-5.64	114.88	117.70
5	A	1542	A	C4-C5-C6	5.64	119.82	117.00
5	A	1981	A	C5-C6-N1	-5.64	114.88	117.70
5	A	2451	C	N3-C4-N4	5.64	121.95	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2839	C	N3-C4-C5	-5.64	119.64	121.90
5	A	777	C	N3-C4-C5	-5.64	119.64	121.90
5	A	948	A	C5-C6-N1	-5.64	114.88	117.70
5	A	1422	C	N3-C4-N4	5.64	121.95	118.00
5	A	1949	C	N3-C4-C5	-5.64	119.64	121.90
5	A	2087	A	C5-C6-N1	-5.64	114.88	117.70
5	A	2740	A	O4'-C1'-N9	5.64	112.71	108.20
5	A	2866	C	N3-C4-N4	5.64	121.95	118.00
5	A	1672	A	C5-C6-N1	-5.64	114.88	117.70
5	A	2219	G	C4-N9-C1'	5.64	133.83	126.50
5	A	2587	C	N3-C4-N4	5.64	121.95	118.00
5	A	91	A	C5-C6-N6	-5.64	119.19	123.70
5	A	173	A	C5-C6-N6	-5.64	119.19	123.70
5	A	500	A	C5-C6-N6	-5.64	119.19	123.70
5	A	542	G	O4'-C1'-N9	5.64	112.71	108.20
5	A	585	G	O4'-C1'-N9	5.64	112.71	108.20
5	A	635	C	N3-C4-N4	5.64	121.95	118.00
5	A	763	A	O4'-C1'-N9	5.64	112.71	108.20
5	A	1172	A	C5-C6-N1	-5.64	114.88	117.70
5	A	1555	A	C5-C6-N6	-5.64	119.19	123.70
5	A	1637	G	O4'-C1'-N9	5.64	112.71	108.20
5	A	2089	A	C5-C6-N6	-5.64	119.19	123.70
5	A	2136	C	N3-C4-N4	5.64	121.95	118.00
5	A	2504	C	N3-C4-N4	5.64	121.95	118.00
5	A	2831	A	C5-C6-N1	-5.64	114.88	117.70
5	A	110	A	C4-C5-C6	5.63	119.82	117.00
5	A	339	A	C4-C5-C6	5.63	119.82	117.00
5	A	1028	C	N3-C4-C5	-5.63	119.65	121.90
5	A	1405	A	C5-C6-N6	-5.63	119.19	123.70
5	A	1992	C	N3-C4-C5	-5.63	119.65	121.90
5	A	2283	C	N3-C4-N4	5.63	121.94	118.00
5	A	2818	C	N3-C4-N4	5.63	121.94	118.00
5	A	2866	C	N3-C4-C5	-5.63	119.65	121.90
6	B	9	C	N3-C4-N4	5.63	121.94	118.00
5	A	1094	A	C5-C6-N1	-5.63	114.88	117.70
5	A	134	C	N3-C4-C5	-5.63	119.65	121.90
5	A	1649	C	N3-C4-C5	-5.63	119.65	121.90
5	A	1679	A	O4'-C1'-N9	5.63	112.70	108.20
5	A	2869	A	O4'-C4'-C3'	-5.63	98.37	104.00
5	A	1174	A	C5-C6-N6	-5.63	119.20	123.70
5	A	2405	A	C5-C6-N1	-5.63	114.89	117.70
5	A	132	C	N3-C4-C5	-5.63	119.65	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	247	A	O4'-C1'-N9	5.63	112.70	108.20
5	A	745	C	N3-C4-C5	-5.63	119.65	121.90
5	A	884	C	N3-C4-C5	-5.63	119.65	121.90
5	A	992	G	O4'-C1'-N9	5.63	112.70	108.20
5	A	1523	U	P-O3'-C3'	5.63	126.45	119.70
5	A	1839	A	C5-C6-N1	-5.63	114.89	117.70
5	A	349	C	N3-C4-C5	-5.63	119.65	121.90
5	A	702	A	C5-C6-N6	-5.63	119.20	123.70
5	A	1381	A	C5-C6-N1	-5.63	114.89	117.70
5	A	1988	G	O4'-C1'-N9	5.63	112.70	108.20
5	A	2034	A	O4'-C1'-N9	5.63	112.70	108.20
5	A	2307	A	C4-C5-C6	5.63	119.81	117.00
5	A	2468	A	C5-C6-N6	-5.63	119.20	123.70
5	A	1150	C	N3-C4-N4	5.62	121.94	118.00
5	A	2305	G	O4'-C1'-N9	5.62	112.70	108.20
5	A	254	A	C5-C6-N1	-5.62	114.89	117.70
5	A	642	G	O4'-C1'-N9	5.62	112.70	108.20
5	A	690	A	C4-C5-C6	5.62	119.81	117.00
5	A	1202	A	C5-C6-N1	-5.62	114.89	117.70
5	A	1308	A	C5-C6-N6	-5.62	119.20	123.70
5	A	2126	G	O4'-C1'-N9	5.62	112.70	108.20
5	A	2137	U	O4'-C1'-N1	5.62	112.70	108.20
5	A	2357	A	C4-C5-C6	5.62	119.81	117.00
5	A	2541	C	N3-C4-C5	-5.62	119.65	121.90
5	A	2902	A	C5-C6-N6	-5.62	119.20	123.70
5	A	200	A	C5-C6-N6	-5.62	119.20	123.70
5	A	437	A	C5-C6-N6	-5.62	119.20	123.70
5	A	609	C	N3-C4-C5	-5.62	119.65	121.90
5	A	624	C	N3-C4-C5	-5.62	119.65	121.90
5	A	2261	C	N3-C4-C5	-5.62	119.65	121.90
5	A	537	A	C5-C6-N1	-5.62	114.89	117.70
5	A	899	C	N3-C4-C5	-5.62	119.65	121.90
5	A	956	A	C5-C6-N1	-5.62	114.89	117.70
5	A	1122	C	N3-C4-N4	5.62	121.93	118.00
5	A	1650	C	P-O5'-C5'	5.62	129.89	120.90
5	A	1685	A	O4'-C1'-N9	5.62	112.70	108.20
5	A	2348	C	N3-C4-N4	5.62	121.93	118.00
5	A	188	C	N3-C4-C5	-5.62	119.65	121.90
5	A	202	A	C5-C6-N1	-5.62	114.89	117.70
5	A	719	C	N3-C4-C5	-5.62	119.65	121.90
5	A	1423	A	C5-C6-N6	-5.62	119.20	123.70
5	A	2015	G	O4'-C1'-N9	5.62	112.69	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2019	C	C2-N3-C4	5.62	122.71	119.90
5	A	2060	A	C5-C6-N6	-5.62	119.21	123.70
5	A	893	A	C5-C6-N6	-5.62	119.21	123.70
5	A	1368	U	O4'-C1'-N1	5.62	112.69	108.20
5	A	226	A	C5-C6-N6	-5.62	119.21	123.70
5	A	322	A	C5-C6-N1	-5.62	114.89	117.70
5	A	624	C	N3-C4-N4	5.62	121.93	118.00
5	A	1265	A	C5-C6-N6	-5.62	119.21	123.70
5	A	1723	A	C5-C6-N6	-5.62	119.21	123.70
5	A	2208	C	N3-C4-N4	5.62	121.93	118.00
5	A	2826	A	C5-C6-N6	-5.62	119.21	123.70
5	A	2883	C	N3-C4-C5	-5.62	119.65	121.90
5	A	86	C	N3-C4-N4	5.61	121.93	118.00
5	A	1225	G	O4'-C1'-N9	5.61	112.69	108.20
5	A	1625	C	N3-C4-N4	5.61	121.93	118.00
5	A	1753	C	N3-C4-C5	-5.61	119.66	121.90
5	A	2197	G	O4'-C1'-N9	5.61	112.69	108.20
5	A	2506	C	N3-C4-C5	-5.61	119.66	121.90
5	A	2721	C	N3-C4-N4	5.61	121.93	118.00
5	A	2777	A	O4'-C1'-N9	5.61	112.69	108.20
5	A	859	C	N3-C4-N4	5.61	121.93	118.00
5	A	2148	A	C4-C5-C6	5.61	119.81	117.00
5	A	2178	C	N3-C4-C5	-5.61	119.66	121.90
16	O	67	SER	N-CA-CB	5.61	118.92	110.50
5	A	508	C	N3-C4-N4	5.61	121.93	118.00
5	A	594	C	P-O3'-C3'	5.61	126.43	119.70
5	A	634	A	C5-C6-N1	-5.61	114.89	117.70
5	A	798	A	C5-C6-N6	-5.61	119.21	123.70
5	A	882	A	C4-C5-C6	5.61	119.81	117.00
5	A	131	C	P-O5'-C5'	5.61	129.88	120.90
5	A	133	A	C5-C6-N6	-5.61	119.21	123.70
5	A	623	A	C5-C6-N6	-5.61	119.21	123.70
5	A	688	G	N3-C2-N2	5.61	123.83	119.90
5	A	863	C	N3-C4-N4	5.61	121.93	118.00
5	A	1695	A	C4-C5-C6	5.61	119.80	117.00
5	A	2175	C	N3-C4-N4	5.61	121.93	118.00
5	A	952	A	C5-C6-N1	-5.61	114.90	117.70
5	A	2000	A	C5-C6-N6	-5.61	119.21	123.70
5	A	2423	C	C2-N1-C1'	5.61	124.97	118.80
5	A	2450	G	O4'-C1'-N9	5.61	112.69	108.20
5	A	2517	A	C5-C6-N6	-5.61	119.21	123.70
5	A	2689	A	C5-C6-N6	-5.61	119.21	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	473	C	N3-C4-N4	5.61	121.92	118.00
5	A	1130	A	C5-C6-N1	-5.61	114.90	117.70
5	A	1236	G	O4'-C1'-N9	5.61	112.69	108.20
5	A	1509	C	N3-C4-C5	-5.61	119.66	121.90
5	A	1559	C	N3-C4-C5	-5.61	119.66	121.90
5	A	1848	A	C5-C6-N6	-5.61	119.22	123.70
5	A	2055	U	P-O3'-C3'	5.61	126.43	119.70
5	A	2578	G	O4'-C1'-N9	5.61	112.68	108.20
5	A	2916	A	C5-C6-N6	-5.61	119.22	123.70
6	B	45	C	N3-C4-N4	5.61	121.92	118.00
5	A	117	A	C5-C6-N1	-5.60	114.90	117.70
5	A	219	A	C5-C6-N1	-5.60	114.90	117.70
5	A	395	C	N3-C4-C5	-5.60	119.66	121.90
5	A	732	A	C5-C6-N6	-5.60	119.22	123.70
5	A	1221	A	C4-C5-C6	5.60	119.80	117.00
5	A	1820	A	C5-C6-N1	-5.60	114.90	117.70
5	A	718	C	N3-C4-C5	-5.60	119.66	121.90
5	A	1618	A	P-O5'-C5'	5.60	129.87	120.90
5	A	2107	C	N3-C4-N4	5.60	121.92	118.00
5	A	2191	A	C5-C6-N6	-5.60	119.22	123.70
5	A	2276	A	C5-C6-N1	-5.60	114.90	117.70
5	A	2302	A	C5-C6-N6	-5.60	119.22	123.70
5	A	2349	A	C5-C6-N6	-5.60	119.22	123.70
5	A	1456	A	C5-C6-N6	-5.60	119.22	123.70
5	A	1730	C	N3-C4-C5	-5.60	119.66	121.90
5	A	134	C	N3-C4-N4	5.60	121.92	118.00
5	A	199	A	C5-C6-N6	-5.60	119.22	123.70
5	A	1605	C	P-O5'-C5'	5.60	129.86	120.90
5	A	2570	A	C5-C6-N1	-5.60	114.90	117.70
5	A	182	C	N3-C4-N4	5.60	121.92	118.00
5	A	325	A	C4-C5-C6	5.60	119.80	117.00
5	A	808	A	C5-C6-N1	-5.60	114.90	117.70
5	A	833	C	N3-C4-N4	5.60	121.92	118.00
5	A	1427	G	C6-C5-N7	-5.60	127.04	130.40
5	A	1739	C	N3-C4-N4	5.60	121.92	118.00
5	A	1792	G	O4'-C1'-N9	5.60	112.68	108.20
5	A	1857	G	O4'-C1'-N9	5.60	112.68	108.20
5	A	2121	U	C6-N1-C1'	-5.60	113.36	121.20
5	A	2216	A	C5-C6-N1	-5.60	114.90	117.70
5	A	2250	G	O4'-C1'-N9	5.60	112.68	108.20
5	A	2593	A	C5-C6-N6	-5.60	119.22	123.70
5	A	2883	C	N3-C4-N4	5.60	121.92	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	105	A	O4'-C1'-N9	5.60	112.68	108.20
5	A	1180	C	N3-C4-C5	-5.60	119.66	121.90
5	A	144	A	C4-C5-C6	5.59	119.80	117.00
5	A	314	A	C5-C6-N6	-5.59	119.22	123.70
5	A	429	A	C5-C6-N1	-5.59	114.90	117.70
5	A	484	C	N3-C4-N4	5.59	121.92	118.00
5	A	841	A	C5-C6-N6	-5.59	119.22	123.70
5	A	1026	A	C5-C6-N1	-5.59	114.90	117.70
5	A	1735	A	C5-C6-N1	-5.59	114.90	117.70
5	A	2025	C	N3-C4-C5	-5.59	119.66	121.90
5	A	2080	A	C4-C5-C6	5.59	119.80	117.00
5	A	2767	A	C5-C6-N1	-5.59	114.90	117.70
5	A	388	A	C5-C6-N1	-5.59	114.90	117.70
5	A	987	A	C4-C5-C6	5.59	119.80	117.00
5	A	1190	A	C4-C5-C6	5.59	119.80	117.00
5	A	2845	A	O4'-C1'-N9	5.59	112.67	108.20
5	A	354	A	C5-C6-N6	-5.59	119.23	123.70
5	A	717	A	C5-C6-N6	-5.59	119.23	123.70
5	A	739	C	N3-C4-N4	5.59	121.91	118.00
5	A	1583	A	C5-C6-N6	-5.59	119.23	123.70
5	A	1782	G	C5'-C4'-C3'	-5.59	107.05	116.00
5	A	2208	C	N3-C4-C5	-5.59	119.66	121.90
5	A	2379	C	N3-C4-C5	-5.59	119.66	121.90
5	A	97	C	N3-C4-C5	-5.59	119.66	121.90
5	A	401	C	N3-C4-C5	-5.59	119.66	121.90
5	A	412	A	C5-C6-N6	-5.59	119.23	123.70
5	A	479	A	C5-C6-N6	-5.59	119.23	123.70
5	A	675	C	N3-C4-N4	5.59	121.91	118.00
5	A	958	A	C5-C6-N6	-5.59	119.23	123.70
5	A	1197	A	C5-C6-N6	-5.59	119.23	123.70
5	A	1287	A	C5-C6-N1	-5.59	114.91	117.70
5	A	1374	C	N3-C4-C5	-5.59	119.66	121.90
5	A	1670	C	N3-C4-N4	5.59	121.91	118.00
5	A	2091	A	C5-C6-N6	-5.59	119.23	123.70
5	A	2208	C	C6-N1-C1'	-5.59	114.09	120.80
5	A	2608	C	N3-C4-N4	5.59	121.91	118.00
5	A	2782	A	P-O3'-C3'	5.59	126.41	119.70
5	A	2831	A	C5-C6-N6	-5.59	119.23	123.70
5	A	1981	A	C5-C6-N6	-5.59	119.23	123.70
5	A	2165	A	C5-C6-N6	-5.59	119.23	123.70
6	B	76	A	C5-C6-N6	-5.59	119.23	123.70
5	A	139	A	C5-C6-N1	-5.59	114.91	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	799	A	C5-C6-N6	-5.59	119.23	123.70
5	A	1036	A	C5-C6-N1	-5.59	114.91	117.70
5	A	1855	C	N3-C4-N4	5.59	121.91	118.00
5	A	2417	A	C5-C6-N1	-5.59	114.91	117.70
6	B	60	C	N3-C4-N4	5.59	121.91	118.00
5	A	198	A	C4-C5-C6	5.58	119.79	117.00
5	A	562	C	N3-C4-C5	-5.58	119.67	121.90
5	A	774	A	C4-C5-C6	5.58	119.79	117.00
5	A	869	U	O4'-C1'-N1	5.58	112.67	108.20
5	A	888	A	C5-C6-N1	-5.58	114.91	117.70
5	A	974	A	C4-C5-C6	5.58	119.79	117.00
5	A	1034	A	O4'-C1'-N9	5.58	112.67	108.20
5	A	1396	C	N3-C4-C5	-5.58	119.67	121.90
5	A	1449	C	C2-N1-C1'	5.58	124.94	118.80
5	A	1931	C	P-O5'-C5'	5.58	129.84	120.90
5	A	2683	A	C5-C6-N6	-5.58	119.23	123.70
5	A	570	C	N3-C4-N4	5.58	121.91	118.00
5	A	1066	A	C5-C6-N6	-5.58	119.23	123.70
5	A	1171	G	N3-C2-N2	5.58	123.81	119.90
5	A	1210	A	C5-C6-N1	-5.58	114.91	117.70
5	A	1252	G	P-O3'-C3'	5.58	126.40	119.70
5	A	1380	U	O4'-C1'-N1	5.58	112.67	108.20
5	A	2008	C	N3-C4-C5	-5.58	119.67	121.90
5	A	2511	A	C5-C6-N6	-5.58	119.23	123.70
5	A	2754	A	P-O5'-C5'	5.58	129.83	120.90
5	A	2807	A	C4-C5-C6	5.58	119.79	117.00
6	B	81	G	O4'-C1'-N9	5.58	112.67	108.20
5	A	273	A	C5-C6-N1	-5.58	114.91	117.70
5	A	429	A	C4-C5-C6	5.58	119.79	117.00
5	A	557	U	P-O5'-C5'	5.58	129.83	120.90
5	A	1426	A	C5-C6-N1	-5.58	114.91	117.70
5	A	1677	A	C5-C6-N1	-5.58	114.91	117.70
5	A	2069	U	P-O3'-C3'	5.58	126.40	119.70
5	A	2167	C	N3-C4-C5	-5.58	119.67	121.90
5	A	2298	A	C5-C6-N6	-5.58	119.23	123.70
5	A	2860	A	P-O3'-C3'	-5.58	113.00	119.70
5	A	2875	A	C5-C6-N6	-5.58	119.23	123.70
5	A	950	U	P-O5'-C5'	5.58	129.83	120.90
5	A	1005	A	C5-C6-N6	-5.58	119.24	123.70
5	A	5	A	C5-C6-N6	-5.58	119.24	123.70
5	A	314	A	C5-C6-N1	-5.58	114.91	117.70
5	A	343	A	C4-C5-C6	5.58	119.79	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	840	A	C5-C6-N6	-5.58	119.24	123.70
5	A	943	A	C5-C6-N1	-5.58	114.91	117.70
5	A	1124	C	N3-C4-C5	-5.58	119.67	121.90
5	A	1197	A	C4-C5-C6	5.58	119.79	117.00
5	A	2390	A	C5-C6-N1	-5.58	114.91	117.70
5	A	2834	A	P-O3'-C3'	5.58	126.39	119.70
5	A	2927	A	C5-C6-N6	-5.58	119.24	123.70
14	L	10	GLU	N-CA-CB	5.58	120.64	110.60
5	A	1925	A	O4'-C1'-N9	5.58	112.66	108.20
5	A	2567	C	N3-C4-N4	5.58	121.90	118.00
5	A	867	A	P-O3'-C3'	5.58	126.39	119.70
5	A	981	C	N3-C4-C5	-5.58	119.67	121.90
5	A	1096	A	P-O3'-C3'	-5.58	113.01	119.70
5	A	1353	C	O4'-C1'-N1	5.58	112.66	108.20
5	A	2216	A	C5-C6-N6	-5.58	119.24	123.70
5	A	437	A	C5-C6-N1	-5.57	114.91	117.70
5	A	2511	A	C5-C6-N1	-5.57	114.91	117.70
5	A	553	A	C5-C6-N6	-5.57	119.24	123.70
5	A	1585	A	C5-C6-N6	-5.57	119.24	123.70
5	A	1660	C	N3-C4-N4	5.57	121.90	118.00
5	A	2189	G	O4'-C1'-N9	5.57	112.66	108.20
5	A	2374	G	N1-C6-O6	5.57	123.24	119.90
5	A	529	C	N3-C4-C5	-5.57	119.67	121.90
5	A	1175	A	C4-C5-C6	5.57	119.79	117.00
5	A	2206	C	N3-C4-N4	5.57	121.90	118.00
6	B	24	C	N3-C4-N4	5.57	121.90	118.00
5	A	649	G	C5-C6-O6	-5.57	125.26	128.60
5	A	1680	A	C4-C5-C6	5.57	119.78	117.00
5	A	1756	U	O4'-C1'-N1	5.57	112.66	108.20
5	A	2784	C	N3-C4-N4	5.57	121.90	118.00
5	A	2798	C	N3-C4-N4	5.57	121.90	118.00
5	A	213	C	N3-C4-N4	5.57	121.90	118.00
5	A	609	C	N3-C4-N4	5.57	121.90	118.00
5	A	1536	A	C5-C6-N6	-5.57	119.25	123.70
5	A	2500	A	C4-C5-C6	5.57	119.78	117.00
5	A	2645	C	N3-C4-C5	-5.57	119.67	121.90
5	A	21	A	C5-C6-N1	-5.57	114.92	117.70
5	A	329	A	C5-C6-N1	-5.57	114.92	117.70
5	A	672	C	N3-C4-N4	5.57	121.90	118.00
5	A	752	A	O4'-C1'-N9	5.57	112.65	108.20
5	A	764	C	N3-C4-N4	5.57	121.90	118.00
5	A	1320	G	O4'-C1'-N9	5.57	112.65	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1663	A	C5-C6-N6	-5.57	119.25	123.70
5	A	2303	A	C4-C5-C6	5.57	119.78	117.00
5	A	2417	A	C4-C5-C6	5.57	119.78	117.00
5	A	2743	G	C6-C5-N7	-5.57	127.06	130.40
5	A	1941	A	C5-C6-N6	-5.56	119.25	123.70
5	A	2356	A	C5-C6-N1	-5.56	114.92	117.70
5	A	501	A	C4-C5-C6	5.56	119.78	117.00
5	A	1866	C	N3-C4-N4	5.56	121.89	118.00
5	A	2210	G	P-O5'-C5'	-5.56	112.00	120.90
5	A	2302	A	C5-C6-N1	-5.56	114.92	117.70
5	A	2926	C	N3-C4-C5	-5.56	119.67	121.90
6	B	55	A	C5-C6-N1	-5.56	114.92	117.70
5	A	1432	A	O4'-C1'-N9	5.56	112.65	108.20
5	A	211	C	N3-C4-C5	-5.56	119.68	121.90
5	A	502	C	N3-C4-N4	5.56	121.89	118.00
5	A	763	A	C5-C6-N1	-5.56	114.92	117.70
5	A	1553	A	C5-C6-N6	-5.56	119.25	123.70
5	A	1868	G	O4'-C1'-N9	5.56	112.65	108.20
5	A	2111	A	C4-C5-C6	5.56	119.78	117.00
5	A	2477	A	C5-C6-N1	-5.56	114.92	117.70
5	A	28	A	C5-C6-N6	-5.56	119.25	123.70
5	A	274	A	C4-C5-C6	5.56	119.78	117.00
5	A	664	C	N3-C4-N4	5.56	121.89	118.00
5	A	931	C	N3-C4-N4	5.56	121.89	118.00
5	A	935	A	C5-C6-N6	-5.56	119.25	123.70
5	A	1126	A	C5-C6-N6	-5.56	119.25	123.70
5	A	1933	G	O4'-C1'-N9	5.56	112.65	108.20
5	A	2078	A	C5-C6-N6	-5.56	119.25	123.70
5	A	2175	C	N3-C4-C5	-5.56	119.68	121.90
5	A	2711	G	O4'-C1'-N9	5.56	112.65	108.20
5	A	76	C	N3-C4-C5	-5.56	119.68	121.90
5	A	1009	U	O4'-C1'-N1	5.56	112.64	108.20
5	A	2252	A	C4-C5-C6	5.56	119.78	117.00
5	A	2340	A	C5-C6-N6	-5.56	119.25	123.70
5	A	507	A	C4-C5-C6	5.55	119.78	117.00
5	A	1930	A	C5-C6-N1	-5.55	114.92	117.70
5	A	2202	A	O4'-C1'-N9	5.55	112.64	108.20
5	A	2459	A	C5-C6-N6	-5.55	119.26	123.70
5	A	2484	G	P-O5'-C5'	5.55	129.79	120.90
5	A	2617	G	O4'-C1'-N9	5.55	112.64	108.20
5	A	2723	G	O4'-C1'-N9	5.55	112.64	108.20
5	A	895	G	C5-C6-O6	-5.55	125.27	128.60

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1200	G	N3-C2-N2	5.55	123.78	119.90
5	A	1302	A	C5-C6-N1	-5.55	114.92	117.70
5	A	1329	C	N3-C4-C5	-5.55	119.68	121.90
5	A	1422	C	N3-C4-C5	-5.55	119.68	121.90
5	A	1620	A	C4-C5-C6	5.55	119.78	117.00
5	A	1745	A	C5-C6-N6	-5.55	119.26	123.70
5	A	1992	C	N3-C4-N4	5.55	121.89	118.00
5	A	2023	C	N3-C4-N4	5.55	121.89	118.00
5	A	2134	A	C5'-C4'-C3'	-5.55	107.12	116.00
5	A	2187	A	C5-C6-N6	-5.55	119.26	123.70
5	A	2193	C	N3-C4-C5	-5.55	119.68	121.90
5	A	2535	U	O4'-C1'-N1	5.55	112.64	108.20
6	B	50	A	C5-C6-N1	-5.55	114.92	117.70
5	A	715	A	C4-C5-C6	5.55	119.78	117.00
5	A	727	A	C5-C6-N1	-5.55	114.93	117.70
5	A	1308	A	C4-C5-C6	5.55	119.78	117.00
5	A	1816	A	C5-C6-N1	-5.55	114.92	117.70
5	A	2139	G	O4'-C1'-N9	5.55	112.64	108.20
5	A	2296	A	C5-C6-N6	-5.55	119.26	123.70
5	A	2454	A	C5-C6-N6	-5.55	119.26	123.70
5	A	2602	C	P-O5'-C5'	5.55	129.78	120.90
5	A	2754	A	C5-C6-N6	-5.55	119.26	123.70
5	A	176	A	C5-C6-N6	-5.55	119.26	123.70
5	A	1615	A	C5-C6-N1	-5.55	114.93	117.70
5	A	1850	A	O4'-C1'-N9	5.55	112.64	108.20
5	A	1928	A	C5-C6-N1	-5.55	114.93	117.70
5	A	2807	A	C5'-C4'-C3'	-5.55	107.12	116.00
5	A	2906	U	P-O3'-C3'	-5.55	113.05	119.70
5	A	790	A	C4-C5-C6	5.54	119.77	117.00
5	A	1173	A	C5-C6-N1	-5.54	114.93	117.70
5	A	1215	U	O4'-C1'-N1	5.54	112.64	108.20
5	A	2704	A	O4'-C1'-N9	5.54	112.64	108.20
5	A	2899	C	N3-C4-C5	-5.54	119.68	121.90
5	A	531	C	N3-C4-C5	-5.54	119.68	121.90
5	A	1834	C	N3-C4-C5	-5.54	119.68	121.90
5	A	2018	A	C5-C6-N1	-5.54	114.93	117.70
5	A	2030	A	C5-C6-N1	-5.54	114.93	117.70
5	A	2434	G	N3-C2-N2	5.54	123.78	119.90
5	A	2574	G	O4'-C1'-N9	5.54	112.63	108.20
5	A	2590	A	C4-C5-C6	5.54	119.77	117.00
5	A	2596	G	O4'-C1'-N9	5.54	112.64	108.20
5	A	2762	A	O4'-C1'-N9	5.54	112.63	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	125	A	C4-C5-C6	5.54	119.77	117.00
5	A	911	G	C5-C6-N1	-5.54	108.73	111.50
5	A	924	U	C4'-C3'-C2'	-5.54	97.06	102.60
5	A	1253	A	O4'-C1'-N9	5.54	112.63	108.20
5	A	1541	A	C5-C6-N1	-5.54	114.93	117.70
5	A	1600	G	N3-C2-N2	5.54	123.78	119.90
5	A	1809	A	C5-C6-N1	-5.54	114.93	117.70
5	A	2364	A	C5-C6-N1	-5.54	114.93	117.70
5	A	2503	C	N3-C4-C5	-5.54	119.68	121.90
5	A	2883	C	P-O3'-C3'	5.54	126.35	119.70
6	B	32	U	P-O3'-C3'	5.54	126.35	119.70
5	A	870	A	C5-C6-N1	-5.54	114.93	117.70
6	B	117	A	C5-C6-N6	-5.54	119.27	123.70
5	A	540	G	O4'-C1'-N9	5.54	112.63	108.20
5	A	917	A	O4'-C1'-N9	5.54	112.63	108.20
5	A	1795	C	N3-C4-C5	-5.54	119.69	121.90
5	A	2073	C	N3-C4-C5	-5.54	119.69	121.90
5	A	241	C	N3-C4-N4	5.54	121.88	118.00
5	A	345	A	C5-C6-N1	-5.54	114.93	117.70
5	A	936	C	N3-C4-N4	5.54	121.88	118.00
5	A	1402	C	N3-C4-N4	5.54	121.88	118.00
5	A	1491	A	C5-C6-N6	-5.54	119.27	123.70
5	A	1597	C	N3-C4-C5	-5.54	119.69	121.90
5	A	1657	C	N3-C4-C5	-5.54	119.69	121.90
5	A	1930	A	C4-C5-C6	5.54	119.77	117.00
6	B	73	G	O4'-C1'-N9	5.54	112.63	108.20
5	A	477	A	C5-C6-N6	-5.53	119.27	123.70
5	A	1066	A	C4-C5-C6	5.53	119.77	117.00
5	A	1099	C	O4'-C1'-N1	5.53	112.63	108.20
5	A	1658	G	C4'-C3'-C2'	-5.53	97.07	102.60
5	A	1697	A	C5-C6-N6	-5.53	119.27	123.70
5	A	2110	C	N3-C4-N4	5.53	121.87	118.00
5	A	2541	C	P-O5'-C5'	5.53	129.75	120.90
6	B	99	A	C5-C6-N1	-5.53	114.93	117.70
5	A	261	C	N3-C4-C5	-5.53	119.69	121.90
5	A	1089	C	N3-C4-N4	5.53	121.87	118.00
5	A	1398	A	C5-C6-N6	-5.53	119.27	123.70
6	B	9	C	N3-C4-C5	-5.53	119.69	121.90
5	A	289	C	N3-C4-C5	-5.53	119.69	121.90
5	A	851	A	C5-C6-N6	-5.53	119.28	123.70
5	A	1231	G	O4'-C1'-N9	5.53	112.62	108.20
5	A	1656	C	N3-C4-C5	-5.53	119.69	121.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2152	A	C4-C5-C6	5.53	119.77	117.00
5	A	2406	A	C5-C6-N1	-5.53	114.94	117.70
5	A	2589	C	N3-C4-C5	-5.53	119.69	121.90
5	A	2673	A	C5-C6-N6	-5.53	119.28	123.70
6	B	39	A	O4'-C1'-N9	5.53	112.62	108.20
6	B	45	C	C6-N1-C2	-5.53	118.09	120.30
5	A	46	C	N3-C4-N4	5.53	121.87	118.00
5	A	541	G	O4'-C1'-N9	5.53	112.62	108.20
5	A	1199	C	N3-C4-C5	-5.53	119.69	121.90
5	A	1293	A	C5-C6-N6	-5.53	119.28	123.70
5	A	1351	U	O4'-C1'-N1	5.53	112.62	108.20
5	A	302	A	C4-C5-C6	5.53	119.76	117.00
5	A	476	A	C5-C6-N6	-5.53	119.28	123.70
5	A	524	A	C5-C6-N1	-5.53	114.94	117.70
5	A	631	G	O4'-C1'-N9	5.53	112.62	108.20
5	A	1248	C	N3-C4-C5	-5.53	119.69	121.90
5	A	2141	A	C5-C6-N6	-5.53	119.28	123.70
5	A	2506	C	O4'-C1'-N1	5.53	112.62	108.20
5	A	2678	U	P-O5'-C5'	5.53	129.74	120.90
5	A	2721	C	N3-C4-C5	-5.53	119.69	121.90
6	B	87	U	C6-N1-C1'	-5.53	113.46	121.20
5	A	452	C	N3-C4-N4	5.53	121.87	118.00
5	A	1038	C	N3-C4-C5	-5.53	119.69	121.90
5	A	1270	C	N3-C4-C5	-5.53	119.69	121.90
5	A	1302	A	C5-C6-N6	-5.53	119.28	123.70
5	A	1424	A	C5-C6-N1	-5.53	114.94	117.70
5	A	1670	C	N3-C4-C5	-5.53	119.69	121.90
5	A	2205	A	C4-C5-C6	5.53	119.76	117.00
5	A	2639	C	N3-C4-N4	5.53	121.87	118.00
5	A	226	A	C5-C6-N1	-5.52	114.94	117.70
5	A	46	C	N3-C4-C5	-5.52	119.69	121.90
5	A	108	A	O4'-C1'-N9	5.52	112.62	108.20
5	A	546	G	N3-C2-N2	5.52	123.77	119.90
5	A	829	A	C5-C6-N6	-5.52	119.28	123.70
5	A	1161	A	C5-C6-N6	-5.52	119.28	123.70
5	A	1612	C	N3-C4-N4	5.52	121.86	118.00
5	A	1660	C	P-O3'-C3'	5.52	126.33	119.70
5	A	1962	G	O4'-C1'-N9	5.52	112.62	108.20
5	A	2511	A	O4'-C1'-N9	5.52	112.62	108.20
5	A	13	A	C4-C5-C6	5.52	119.76	117.00
5	A	1540	A	C5-C6-N1	-5.52	114.94	117.70
5	A	2875	A	O4'-C1'-N9	5.52	112.62	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	659	A	C5-C6-N6	-5.52	119.28	123.70
5	A	667	A	C5-C6-N6	-5.52	119.28	123.70
5	A	786	A	C5-C6-N1	-5.52	114.94	117.70
5	A	828	A	C5-C6-N6	-5.52	119.28	123.70
5	A	1364	C	N3-C4-C5	-5.52	119.69	121.90
5	A	1524	A	P-O3'-C3'	5.52	126.32	119.70
5	A	1724	A	C5-C6-N6	-5.52	119.28	123.70
5	A	1865	C	N3-C4-N4	5.52	121.86	118.00
5	A	2421	A	C5-C6-N6	-5.52	119.28	123.70
5	A	2705	C	N3-C4-N4	5.52	121.86	118.00
5	A	156	A	C5-C6-N1	-5.52	114.94	117.70
5	A	517	A	C5-C6-N6	-5.52	119.28	123.70
5	A	531	C	P-O5'-C5'	5.52	129.73	120.90
5	A	922	A	O4'-C1'-N9	5.52	112.61	108.20
5	A	1100	A	C5-C6-N1	-5.52	114.94	117.70
5	A	1567	U	C3'-C2'-C1'	5.52	105.91	101.50
5	A	2580	C	N3-C4-N4	5.52	121.86	118.00
5	A	140	A	C5-C6-N6	-5.52	119.29	123.70
5	A	746	A	C5-C6-N1	-5.52	114.94	117.70
5	A	1783	C	N3-C4-N4	5.52	121.86	118.00
5	A	2059	A	C4-C5-C6	5.51	119.76	117.00
6	B	18	A	C5-C6-N1	-5.51	114.94	117.70
5	A	272	C	N3-C4-N4	5.51	121.86	118.00
5	A	1761	G	O4'-C1'-N9	5.51	112.61	108.20
5	A	639	C	N3-C4-C5	-5.51	119.70	121.90
5	A	852	G	P-O3'-C3'	5.51	126.31	119.70
5	A	861	C	N3-C4-N4	5.51	121.86	118.00
5	A	1261	C	N3-C4-N4	5.51	121.86	118.00
5	A	2687	C	N3-C4-C5	-5.51	119.70	121.90
5	A	1527	C	N3-C4-N4	5.51	121.86	118.00
5	A	2556	C	N3-C4-C5	-5.51	119.70	121.90
5	A	911	G	N1-C2-N3	-5.51	120.59	123.90
5	A	1848	A	C5-C6-N1	-5.51	114.95	117.70
5	A	115	C	N3-C4-N4	5.51	121.86	118.00
5	A	573	C	N3-C4-C5	-5.51	119.70	121.90
5	A	1421	A	C5-C6-N1	-5.51	114.95	117.70
5	A	1426	A	C5-C6-N6	-5.51	119.29	123.70
5	A	2065	C	N3-C4-C5	-5.51	119.70	121.90
5	A	2304	C	N3-C4-C5	-5.51	119.70	121.90
5	A	2520	U	O4'-C1'-N1	5.51	112.61	108.20
5	A	2779	A	C5-C6-N1	-5.51	114.95	117.70
5	A	2810	A	C5-C6-N1	-5.51	114.95	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2818	C	N3-C4-C5	-5.51	119.70	121.90
5	A	656	A	C5-C6-N6	-5.50	119.30	123.70
5	A	1659	A	C5-C6-N6	-5.50	119.30	123.70
5	A	2769	A	O4'-C1'-N9	5.50	112.60	108.20
5	A	156	A	O4'-C1'-N9	5.50	112.60	108.20
5	A	200	A	C5-C6-N1	-5.50	114.95	117.70
5	A	882	A	C5-C6-N1	-5.50	114.95	117.70
5	A	1406	A	C4-C5-C6	5.50	119.75	117.00
5	A	1685	A	C5-C6-N6	-5.50	119.30	123.70
5	A	1766	C	N3-C4-N4	5.50	121.85	118.00
5	A	2361	C	N3-C4-N4	5.50	121.85	118.00
5	A	404	C	P-O5'-C5'	5.50	129.70	120.90
5	A	689	A	O4'-C1'-N9	5.50	112.60	108.20
5	A	957	A	C5-C6-N6	-5.50	119.30	123.70
5	A	964	A	C5-C6-N6	-5.50	119.30	123.70
5	A	2455	A	C5-C6-N6	-5.50	119.30	123.70
5	A	2570	A	O3'-P-O5'	-5.50	93.55	104.00
5	A	2658	A	C5-C6-N1	-5.50	114.95	117.70
5	A	2859	G	N3-C2-N2	5.50	123.75	119.90
5	A	835	A	C5-C6-N1	-5.50	114.95	117.70
5	A	836	A	O4'-C1'-N9	5.50	112.60	108.20
5	A	1220	G	P-O5'-C5'	5.50	129.70	120.90
5	A	1458	U	O4'-C1'-N1	5.50	112.60	108.20
5	A	1645	C	N3-C4-N4	5.50	121.85	118.00
5	A	1723	A	P-O5'-C5'	5.50	129.70	120.90
5	A	2471	C	N3-C4-C5	-5.50	119.70	121.90
5	A	2505	A	C5-C6-N6	-5.50	119.30	123.70
5	A	115	C	N3-C4-C5	-5.50	119.70	121.90
5	A	182	C	N3-C4-C5	-5.50	119.70	121.90
5	A	575	A	C5-C6-N1	-5.50	114.95	117.70
5	A	1202	A	C5-C6-N6	-5.50	119.30	123.70
5	A	1995	A	C5-C6-N1	-5.50	114.95	117.70
5	A	2229	C	N3-C4-N4	5.50	121.85	118.00
5	A	2307	A	C5-C6-N1	-5.50	114.95	117.70
5	A	2313	C	N3-C4-C5	-5.50	119.70	121.90
18	Q	24	TYR	CB-CG-CD2	-5.50	117.70	121.00
5	A	72	U	O4'-C1'-N1	5.50	112.60	108.20
5	A	162	A	C5-C6-N1	-5.50	114.95	117.70
5	A	337	A	C4-C5-C6	5.50	119.75	117.00
5	A	483	C	N3-C4-C5	-5.50	119.70	121.90
5	A	1003	A	C5-C6-N6	-5.50	119.30	123.70
5	A	1110	C	N3-C4-C5	-5.50	119.70	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1173	A	C5-C6-N6	-5.50	119.30	123.70
5	A	1314	A	C5-C6-N1	-5.50	114.95	117.70
5	A	1772	C	N3-C4-N4	5.50	121.85	118.00
5	A	1802	A	C5-C6-N6	-5.50	119.30	123.70
5	A	1973	U	O4'-C1'-N1	5.50	112.60	108.20
5	A	1982	A	C5-C6-N1	-5.50	114.95	117.70
5	A	1994	C	O4'-C1'-N1	5.50	112.60	108.20
5	A	2839	C	N3-C4-N4	5.50	121.85	118.00
5	A	1696	G	O3'-P-O5'	5.50	114.44	104.00
5	A	2536	C	N3-C4-C5	-5.50	119.70	121.90
6	B	116	C	N3-C4-N4	5.50	121.85	118.00
5	A	279	A	O4'-C1'-N9	5.49	112.59	108.20
5	A	331	C	N3-C4-C5	-5.49	119.70	121.90
5	A	713	G	O4'-C1'-N9	5.49	112.59	108.20
5	A	1166	G	N3-C2-N2	5.49	123.75	119.90
5	A	1989	A	C4-C5-C6	5.49	119.75	117.00
5	A	2178	C	N3-C4-N4	5.49	121.84	118.00
5	A	2662	A	C4-C5-C6	5.49	119.75	117.00
5	A	2875	A	C5-C6-N1	-5.49	114.95	117.70
6	B	37	A	O4'-C1'-N9	5.49	112.59	108.20
5	A	1125	C	N3-C4-C5	-5.49	119.70	121.90
5	A	2221	C	N3-C4-N4	5.49	121.84	118.00
5	A	64	A	C5-C6-N6	-5.49	119.31	123.70
5	A	333	A	C5-C6-N1	-5.49	114.95	117.70
5	A	783	C	P-O5'-C5'	5.49	129.68	120.90
5	A	1010	C	N3-C4-N4	5.49	121.84	118.00
5	A	1127	U	O4'-C1'-N1	5.49	112.59	108.20
5	A	1428	G	O4'-C1'-N9	5.49	112.59	108.20
5	A	2008	C	N3-C4-N4	5.49	121.84	118.00
5	A	2667	G	O4'-C1'-N9	5.49	112.59	108.20
5	A	2823	C	N3-C4-C5	-5.49	119.70	121.90
5	A	503	C	N3-C4-N4	5.49	121.84	118.00
5	A	2117	A	C5-C6-N6	-5.49	119.31	123.70
5	A	2384	C	N3-C4-N4	5.49	121.84	118.00
5	A	2661	A	C5-C6-N1	-5.49	114.96	117.70
5	A	1525	G	O4'-C1'-N9	5.49	112.59	108.20
5	A	1559	C	N3-C4-N4	5.49	121.84	118.00
5	A	1742	G	N3-C2-N2	5.49	123.74	119.90
5	A	2102	C	N3-C4-N4	5.49	121.84	118.00
5	A	2787	A	O4'-C1'-N9	5.49	112.59	108.20
5	A	73	A	C5-C6-N1	-5.49	114.96	117.70
5	A	197	G	O4'-C1'-N9	5.49	112.59	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1014	A	C5-C6-N6	-5.49	119.31	123.70
5	A	1083	G	P-O3'-C3'	-5.49	113.12	119.70
5	A	1293	A	C5-C6-N1	-5.49	114.96	117.70
5	A	1372	C	N3-C4-C5	-5.49	119.70	121.90
5	A	1464	A	C5-C6-N1	-5.49	114.96	117.70
5	A	1564	C	N3-C4-N4	5.49	121.84	118.00
5	A	1614	A	C5-C6-N1	-5.49	114.96	117.70
5	A	1865	C	N3-C4-C5	-5.49	119.71	121.90
5	A	1876	A	C5-C6-N1	-5.49	114.96	117.70
5	A	1982	A	O4'-C1'-N9	5.49	112.59	108.20
5	A	2114	C	N3-C4-C5	-5.49	119.70	121.90
5	A	2637	G	O4'-C1'-N9	5.49	112.59	108.20
5	A	2770	A	C4-C5-C6	5.49	119.74	117.00
21	T	85	ALA	N-CA-CB	5.49	117.78	110.10
5	A	230	A	C4-C5-C6	5.48	119.74	117.00
5	A	275	A	C5-C6-N1	-5.48	114.96	117.70
5	A	1506	A	C5-C6-N6	-5.48	119.31	123.70
5	A	2078	A	C5-C6-N1	-5.48	114.96	117.70
5	A	2403	C	N3-C4-C5	-5.48	119.71	121.90
6	B	119	G	O4'-C1'-N9	5.48	112.59	108.20
5	A	981	C	N3-C4-N4	5.48	121.84	118.00
5	A	1103	A	C5-C6-N1	-5.48	114.96	117.70
5	A	1174	A	C5-C6-N1	-5.48	114.96	117.70
5	A	1258	A	C5-C6-N1	-5.48	114.96	117.70
5	A	1586	G	C5-C6-O6	-5.48	125.31	128.60
5	A	1945	A	C4-C5-C6	5.48	119.74	117.00
5	A	2253	G	P-O3'-C3'	5.48	126.28	119.70
5	A	2425	G	O4'-C1'-N9	5.48	112.58	108.20
5	A	2778	A	C8-N9-C4	-5.48	103.61	105.80
6	B	114	A	O4'-C1'-N9	5.48	112.59	108.20
5	A	1434	A	C5-C6-N6	-5.48	119.32	123.70
5	A	1631	A	C5-C6-N1	-5.48	114.96	117.70
5	A	1816	A	C5-C6-N6	-5.48	119.32	123.70
5	A	2247	C	N3-C4-C5	-5.48	119.71	121.90
5	A	2279	G	O4'-C1'-N9	5.48	112.58	108.20
5	A	2026	A	C5-C6-N6	-5.48	119.32	123.70
5	A	2615	C	N3-C4-N4	5.48	121.83	118.00
6	B	64	A	C5-C6-N1	-5.48	114.96	117.70
5	A	379	C	N3-C4-C5	-5.48	119.71	121.90
5	A	430	C	N3-C4-C5	-5.48	119.71	121.90
5	A	678	A	C5-C6-N6	-5.48	119.32	123.70
5	A	797	A	C5-C6-N6	-5.48	119.32	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1495	C	N3-C4-N4	5.48	121.83	118.00
5	A	1727	A	O4'-C1'-N9	5.48	112.58	108.20
5	A	2783	U	O4'-C1'-N1	5.48	112.58	108.20
6	B	113	A	C4-C5-C6	5.48	119.74	117.00
5	A	469	A	C5-C6-N1	-5.48	114.96	117.70
5	A	1261	C	N3-C4-C5	-5.48	119.71	121.90
5	A	1294	A	C4-C5-C6	5.48	119.74	117.00
5	A	1930	A	C5-C6-N6	-5.48	119.32	123.70
5	A	1997	G	O4'-C1'-N9	5.48	112.58	108.20
5	A	2005	C	N3-C4-N4	5.48	121.83	118.00
5	A	2257	G	O4'-C1'-N9	5.48	112.58	108.20
5	A	2703	G	O4'-C1'-N9	5.48	112.58	108.20
5	A	449	A	C5-C6-N1	-5.47	114.96	117.70
5	A	626	G	O4'-C1'-N9	5.47	112.58	108.20
5	A	1053	C	N3-C4-C5	-5.47	119.71	121.90
5	A	1150	C	N3-C4-C5	-5.47	119.71	121.90
5	A	1473	A	P-O3'-C3'	5.47	126.27	119.70
5	A	1553	A	C5-C6-N1	-5.47	114.96	117.70
5	A	1583	A	C5-C6-N1	-5.47	114.96	117.70
5	A	2241	A	C5-C6-N1	-5.47	114.96	117.70
5	A	68	C	N3-C4-N4	5.47	121.83	118.00
5	A	1281	C	N3-C4-N4	5.47	121.83	118.00
5	A	1432	A	C5-C6-N6	-5.47	119.32	123.70
5	A	1524	A	C5-C6-N6	-5.47	119.32	123.70
5	A	2889	A	C4-C5-C6	5.47	119.74	117.00
5	A	1369	C	N3-C4-N4	5.47	121.83	118.00
5	A	249	C	N3-C4-C5	-5.47	119.71	121.90
5	A	678	A	C5-C6-N1	-5.47	114.97	117.70
5	A	1340	A	C4-C5-C6	5.47	119.73	117.00
5	A	1524	A	C5-C6-N1	-5.47	114.97	117.70
5	A	1616	G	O4'-C1'-N9	5.47	112.58	108.20
5	A	1715	C	N3-C4-C5	-5.47	119.71	121.90
5	A	2113	C	N3-C4-C5	-5.47	119.71	121.90
6	B	39	A	C5-C6-N1	-5.47	114.97	117.70
6	B	91	C	N3-C4-C5	-5.47	119.71	121.90
5	A	244	A	C5-C6-N6	-5.47	119.33	123.70
5	A	388	A	C5-C6-N6	-5.47	119.33	123.70
5	A	1690	G	O4'-C1'-N9	5.47	112.58	108.20
5	A	2662	A	C5-C6-N6	-5.47	119.33	123.70
5	A	239	C	N3-C4-N4	5.47	121.83	118.00
5	A	676	G	O4'-C1'-N9	5.47	112.57	108.20
5	A	1073	A	C5-C6-N6	-5.47	119.33	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1388	A	C5-C6-N6	-5.47	119.33	123.70
5	A	2134	A	C4-C5-C6	5.47	119.73	117.00
5	A	2314	C	N3-C4-N4	5.47	121.83	118.00
5	A	777	C	N3-C4-N4	5.46	121.83	118.00
5	A	851	A	C5-C6-N1	-5.46	114.97	117.70
5	A	2141	A	C5-C6-N1	-5.46	114.97	117.70
5	A	2788	G	O4'-C1'-N9	5.46	112.57	108.20
6	B	11	A	C5-C6-N1	-5.46	114.97	117.70
6	B	26	C	N3-C4-C5	-5.46	119.71	121.90
6	B	50	A	C5-C6-N6	-5.46	119.33	123.70
5	A	432	C	C5'-C4'-C3'	-5.46	107.26	116.00
5	A	428	A	C5-C6-N1	-5.46	114.97	117.70
5	A	636	G	O4'-C1'-N9	5.46	112.57	108.20
5	A	1551	C	P-O3'-C3'	5.46	126.25	119.70
5	A	1659	A	C5-C6-N1	-5.46	114.97	117.70
5	A	1745	A	C5-C6-N1	-5.46	114.97	117.70
5	A	2066	A	C5-C6-N6	-5.46	119.33	123.70
5	A	517	A	C5-C6-N1	-5.46	114.97	117.70
5	A	144	A	C5-C6-N1	-5.46	114.97	117.70
5	A	427	G	O4'-C1'-N9	5.46	112.57	108.20
5	A	461	C	C5-C4-N4	-5.46	116.38	120.20
5	A	1291	A	C4-C5-C6	5.46	119.73	117.00
5	A	1337	C	N3-C4-C5	-5.46	119.72	121.90
5	A	1538	G	N3-C2-N2	5.46	123.72	119.90
5	A	697	G	C5'-C4'-O4'	5.46	115.65	109.10
5	A	963	G	N3-C2-N2	5.46	123.72	119.90
5	A	1125	C	O4'-C1'-N1	5.46	112.56	108.20
5	A	1216	C	N3-C4-N4	5.46	121.82	118.00
5	A	1375	A	C5-C6-N6	-5.46	119.33	123.70
5	A	1393	A	C5-C6-N6	-5.46	119.33	123.70
5	A	1443	C	O4'-C1'-N1	5.46	112.56	108.20
5	A	1797	A	C5-C6-N6	-5.46	119.33	123.70
5	A	2089	A	C5-C6-N1	-5.46	114.97	117.70
5	A	2117	A	C5-C6-N1	-5.46	114.97	117.70
5	A	2363	C	N3-C4-N4	5.46	121.82	118.00
5	A	18	C	N3-C4-C5	-5.46	119.72	121.90
5	A	2423	C	N3-C4-N4	5.46	121.82	118.00
5	A	757	C	N3-C4-C5	-5.45	119.72	121.90
5	A	841	A	C5-C6-N1	-5.45	114.97	117.70
5	A	2098	G	O4'-C1'-N9	5.45	112.56	108.20
5	A	2227	A	C5-C6-N6	-5.45	119.34	123.70
5	A	91	A	C5-C6-N1	-5.45	114.97	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	588	C	N3-C4-N4	5.45	121.82	118.00
5	A	883	G	O4'-C1'-N9	5.45	112.56	108.20
5	A	1149	A	C5-C6-N6	-5.45	119.34	123.70
5	A	1275	G	O4'-C1'-N9	5.45	112.56	108.20
5	A	1652	C	N3-C4-N4	5.45	121.82	118.00
5	A	2028	C	N3-C4-C5	-5.45	119.72	121.90
5	A	274	A	C5-C6-N1	-5.45	114.97	117.70
5	A	277	C	N3-C4-N4	5.45	121.82	118.00
5	A	380	C	N3-C4-C5	-5.45	119.72	121.90
5	A	530	A	C5-C6-N6	-5.45	119.34	123.70
5	A	670	C	O4'-C1'-N1	5.45	112.56	108.20
5	A	889	A	C5-C6-N6	-5.45	119.34	123.70
5	A	990	C	N3-C4-N4	5.45	121.81	118.00
5	A	1189	A	C5-C6-N1	-5.45	114.97	117.70
5	A	492	C	N3-C4-C5	-5.45	119.72	121.90
5	A	2601	A	C5-C6-N6	-5.45	119.34	123.70
5	A	2742	C	P-O3'-C3'	5.45	126.24	119.70
5	A	2827	A	C5-C6-N6	-5.45	119.34	123.70
5	A	274	A	C5-C6-N6	-5.45	119.34	123.70
5	A	315	C	N3-C4-N4	5.45	121.81	118.00
5	A	1207	C	N3-C4-C5	-5.45	119.72	121.90
5	A	1791	A	C5-C6-N1	-5.45	114.98	117.70
5	A	2618	A	C5-C6-N6	-5.45	119.34	123.70
5	A	2853	C	C2-N3-C4	5.45	122.62	119.90
5	A	144	A	O4'-C1'-N9	5.45	112.56	108.20
5	A	573	C	N3-C4-N4	5.45	121.81	118.00
5	A	679	A	C5-C6-N1	-5.45	114.98	117.70
5	A	911	G	C5-C6-O6	-5.45	125.33	128.60
5	A	933	C	N3-C4-C5	-5.45	119.72	121.90
5	A	1421	A	C5-C6-N6	-5.45	119.34	123.70
5	A	1432	A	C4-C5-C6	5.45	119.72	117.00
5	A	1736	C	C2-N3-C4	5.45	122.62	119.90
5	A	431	A	C5-C6-N1	-5.44	114.98	117.70
5	A	459	A	C5-C6-N1	-5.44	114.98	117.70
5	A	1194	A	C5-C6-N6	-5.44	119.34	123.70
5	A	2843	G	O4'-C1'-N9	5.44	112.56	108.20
5	A	586	C	N3-C4-C5	-5.44	119.72	121.90
5	A	1515	C	N3-C4-C5	-5.44	119.72	121.90
5	A	2207	C	N3-C4-C5	-5.44	119.72	121.90
5	A	2482	A	C4-C5-C6	5.44	119.72	117.00
5	A	2661	A	O4'-C1'-N9	5.44	112.55	108.20
5	A	2908	A	P-O5'-C5'	5.44	129.61	120.90

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	289	C	N3-C4-N4	5.44	121.81	118.00
5	A	500	A	C5-C6-N1	-5.44	114.98	117.70
5	A	532	C	N3-C4-N4	5.44	121.81	118.00
5	A	937	C	N3-C4-C5	-5.44	119.72	121.90
5	A	1730	C	N3-C4-N4	5.44	121.81	118.00
5	A	2292	C	N3-C4-N4	5.44	121.81	118.00
5	A	2324	C	N3-C4-C5	-5.44	119.72	121.90
5	A	2472	C	N3-C4-N4	5.44	121.81	118.00
5	A	2477	A	C5-C6-N6	-5.44	119.35	123.70
5	A	2629	A	C5-C6-N6	-5.44	119.35	123.70
5	A	2876	A	C4-C5-C6	5.44	119.72	117.00
5	A	756	U	O4'-C1'-N1	5.44	112.55	108.20
5	A	786	A	C5-C6-N6	-5.44	119.35	123.70
5	A	1144	A	C5-C6-N6	-5.44	119.35	123.70
5	A	2819	A	C5-C6-N6	-5.44	119.35	123.70
5	A	628	C	P-O5'-C5'	5.44	129.60	120.90
5	A	792	G	O4'-C1'-N9	5.44	112.55	108.20
5	A	1293	A	O4'-C1'-N9	5.44	112.55	108.20
5	A	1305	A	C5-C6-N1	-5.44	114.98	117.70
5	A	1651	G	O4'-C1'-N9	5.44	112.55	108.20
5	A	1663	A	C5-C6-N1	-5.44	114.98	117.70
5	A	1691	A	C5-C6-N6	-5.44	119.35	123.70
5	A	1966	A	C5-C6-N6	-5.44	119.35	123.70
5	A	2150	G	O4'-C1'-N9	5.44	112.55	108.20
5	A	369	A	C5-C6-N6	-5.44	119.35	123.70
5	A	762	A	C5-C6-N1	-5.44	114.98	117.70
5	A	1424	A	C5-C6-N6	-5.44	119.35	123.70
5	A	1477	A	O4'-C1'-N9	5.44	112.55	108.20
5	A	2502	U	C2-N1-C1'	5.44	124.22	117.70
6	B	25	A	C5-C6-N1	-5.44	114.98	117.70
5	A	224	A	O4'-C1'-N9	5.43	112.55	108.20
5	A	693	G	N3-C2-N2	5.43	123.70	119.90
5	A	766	C	P-O5'-C5'	5.43	129.60	120.90
5	A	866	A	C5-C6-N6	-5.43	119.35	123.70
5	A	2615	C	N3-C4-C5	-5.43	119.73	121.90
5	A	349	C	O4'-C1'-N1	5.43	112.55	108.20
5	A	808	A	C5-C6-N6	-5.43	119.35	123.70
5	A	1002	G	O4'-C1'-N9	5.43	112.55	108.20
5	A	1446	C	N3-C4-N4	5.43	121.80	118.00
5	A	1450	C	N3-C4-C5	-5.43	119.73	121.90
5	A	1645	C	P-O5'-C5'	5.43	129.59	120.90
5	A	1652	C	C2-N1-C1'	5.43	124.78	118.80

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1857	G	C5-C6-O6	-5.43	125.34	128.60
5	A	2848	A	C5-C6-N6	-5.43	119.35	123.70
5	A	2537	G	O4'-C1'-N9	5.43	112.54	108.20
5	A	2580	C	N3-C4-C5	-5.43	119.73	121.90
5	A	139	A	C5-C6-N6	-5.43	119.36	123.70
5	A	238	U	P-O5'-C5'	5.43	129.59	120.90
5	A	752	A	C5-C6-N1	-5.43	114.98	117.70
5	A	790	A	C5-C6-N6	-5.43	119.36	123.70
5	A	2546	C	P-O5'-C5'	5.43	129.59	120.90
5	A	2863	G	O4'-C1'-N9	5.43	112.54	108.20
18	Q	24	TYR	CB-CG-CD1	5.43	124.26	121.00
5	A	659	A	C5-C6-N1	-5.43	114.99	117.70
5	A	2152	A	C5-C6-N6	-5.43	119.36	123.70
5	A	2616	A	C4-C5-C6	5.43	119.71	117.00
6	B	118	A	C5-C6-N6	-5.43	119.36	123.70
5	A	258	A	C5-C6-N1	-5.43	114.99	117.70
5	A	553	A	C5-C6-N1	-5.43	114.99	117.70
5	A	602	G	O4'-C1'-N9	5.43	112.54	108.20
5	A	1607	C	C2-N1-C1'	5.43	124.77	118.80
5	A	1612	C	N3-C4-C5	-5.43	119.73	121.90
5	A	2532	A	O4'-C1'-N9	5.43	112.54	108.20
5	A	2918	G	O4'-C1'-C2'	-5.43	100.37	105.80
5	A	1506	A	O4'-C1'-N9	5.42	112.54	108.20
5	A	1720	C	N3-C4-N4	5.42	121.80	118.00
5	A	2579	G	O4'-C1'-N9	5.42	112.54	108.20
5	A	2878	U	O4'-C1'-N1	5.42	112.54	108.20
5	A	499	G	O4'-C1'-N9	5.42	112.54	108.20
5	A	1794	C	N3-C4-C5	-5.42	119.73	121.90
5	A	416	U	O4'-C1'-N1	5.42	112.54	108.20
5	A	1029	A	C5-C6-N6	-5.42	119.36	123.70
5	A	1046	A	C5-C6-N6	-5.42	119.36	123.70
5	A	1122	C	N3-C4-C5	-5.42	119.73	121.90
5	A	2005	C	N3-C4-C5	-5.42	119.73	121.90
5	A	2261	C	N3-C4-N4	5.42	121.80	118.00
5	A	2314	C	N3-C4-C5	-5.42	119.73	121.90
5	A	2822	C	N3-C4-C5	-5.42	119.73	121.90
5	A	2908	A	C4-C5-C6	5.42	119.71	117.00
5	A	739	C	N3-C4-C5	-5.42	119.73	121.90
5	A	1465	A	C5-C6-N1	-5.42	114.99	117.70
5	A	1520	A	O4'-C1'-N9	5.42	112.54	108.20
5	A	2848	A	C5-C6-N1	-5.42	114.99	117.70
5	A	712	C	N3-C4-C5	-5.42	119.73	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	980	C	N3-C4-N4	5.42	121.79	118.00
5	A	989	U	O4'-C1'-N1	5.42	112.53	108.20
5	A	1167	C	N3-C4-C5	-5.42	119.73	121.90
5	A	1453	A	C5-C6-N6	-5.42	119.36	123.70
5	A	1629	C	N3-C4-C5	-5.42	119.73	121.90
5	A	1934	C	N3-C4-N4	5.42	121.79	118.00
5	A	1990	C	N3-C4-C5	-5.42	119.73	121.90
5	A	2080	A	C5-C6-N1	-5.42	114.99	117.70
5	A	2246	G	O4'-C1'-N9	5.42	112.53	108.20
5	A	2700	A	C5-C6-N6	-5.42	119.37	123.70
5	A	71	A	C4-C5-C6	5.42	119.71	117.00
5	A	1266	A	C5-C6-N1	-5.42	114.99	117.70
5	A	1487	G	O4'-C1'-N9	5.42	112.53	108.20
5	A	2295	A	C5-C6-N1	-5.42	114.99	117.70
5	A	2386	U	C1'-O4'-C4'	-5.42	105.57	109.90
5	A	2568	C	N3-C4-C5	-5.42	119.73	121.90
5	A	2619	A	C5-C6-N1	-5.42	114.99	117.70
5	A	971	A	C5-C6-N1	-5.42	114.99	117.70
5	A	61	A	C4-C5-C6	5.41	119.71	117.00
5	A	518	A	P-O3'-C3'	5.41	126.20	119.70
5	A	806	G	O4'-C1'-N9	5.41	112.53	108.20
5	A	915	U	O4'-C1'-N1	5.41	112.53	108.20
5	A	1123	A	C5-C6-N6	-5.41	119.37	123.70
5	A	1191	C	N3-C4-C5	-5.41	119.73	121.90
5	A	1328	C	N3-C4-C5	-5.41	119.73	121.90
5	A	1503	G	C6-C5-N7	-5.41	127.15	130.40
5	A	1811	C	N3-C4-N4	5.41	121.79	118.00
5	A	2358	A	C5-C6-N1	-5.41	114.99	117.70
5	A	2159	U	C2-N1-C1'	5.41	124.19	117.70
5	A	1433	U	O4'-C1'-N1	5.41	112.53	108.20
5	A	2148	A	C5-C6-N1	-5.41	115.00	117.70
5	A	2463	A	C4-C5-C6	5.41	119.70	117.00
5	A	2689	A	O4'-C1'-N9	5.41	112.53	108.20
5	A	2696	C	N3-C4-C5	-5.41	119.74	121.90
5	A	38	A	C5-C6-N6	-5.41	119.37	123.70
5	A	259	A	C5-C6-N6	-5.41	119.37	123.70
5	A	324	A	C5-C6-N1	-5.41	115.00	117.70
5	A	803	C	N3-C4-C5	-5.41	119.74	121.90
5	A	1255	G	O4'-C1'-N9	5.41	112.53	108.20
5	A	2438	G	O4'-C1'-N9	5.41	112.53	108.20
5	A	2779	A	C5-C6-N6	-5.41	119.37	123.70
5	A	955	C	N3-C4-C5	-5.41	119.74	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1789	A	C5-C6-N6	-5.41	119.37	123.70
5	A	2283	C	N3-C4-C5	-5.41	119.74	121.90
5	A	2816	C	N3-C4-C5	-5.41	119.74	121.90
5	A	130	A	C5-C6-N1	-5.41	115.00	117.70
5	A	2464	A	C5-C6-N6	-5.41	119.38	123.70
5	A	2493	C	N3-C4-C5	-5.41	119.74	121.90
5	A	2526	A	C4-C5-C6	5.41	119.70	117.00
6	B	24	C	N3-C4-C5	-5.41	119.74	121.90
6	B	28	C	N3-C4-C5	-5.41	119.74	121.90
6	B	63	C	N3-C4-N4	5.41	121.78	118.00
5	A	221	G	C8-N9-C4	-5.40	104.24	106.40
5	A	622	A	O4'-C1'-N9	5.40	112.52	108.20
5	A	933	C	N3-C4-N4	5.40	121.78	118.00
5	A	958	A	C5-C6-N1	-5.40	115.00	117.70
5	A	1011	C	N3-C4-C5	-5.40	119.74	121.90
5	A	73	A	C5-C6-N6	-5.40	119.38	123.70
5	A	83	G	C3'-C2'-C1'	-5.40	97.18	101.50
5	A	310	C	N3-C4-N4	5.40	121.78	118.00
5	A	561	A	C4-C5-C6	5.40	119.70	117.00
5	A	698	C	N3-C4-C5	-5.40	119.74	121.90
5	A	968	C	N3-C4-N4	5.40	121.78	118.00
5	A	1112	U	C2-N1-C1'	5.40	124.18	117.70
5	A	1929	A	C5-C6-N1	-5.40	115.00	117.70
5	A	117	A	C5-C6-N6	-5.40	119.38	123.70
5	A	2874	G	O4'-C1'-N9	5.40	112.52	108.20
5	A	527	A	C5-C6-N6	-5.40	119.38	123.70
5	A	561	A	C5-C6-N1	-5.40	115.00	117.70
5	A	628	C	N3-C4-C5	-5.40	119.74	121.90
5	A	833	C	N3-C4-C5	-5.40	119.74	121.90
5	A	1473	A	C5-C6-N6	-5.40	119.38	123.70
5	A	1520	A	C5-C6-N1	-5.40	115.00	117.70
5	A	1717	C	N3-C4-C5	-5.40	119.74	121.90
5	A	1963	C	N3-C4-C5	-5.40	119.74	121.90
5	A	842	C	N3-C4-C5	-5.40	119.74	121.90
5	A	1055	A	C5-C6-N6	-5.40	119.38	123.70
5	A	407	A	C5-C6-N6	-5.39	119.38	123.70
5	A	1005	A	C5-C6-N1	-5.39	115.00	117.70
5	A	1284	A	C5-C6-N6	-5.39	119.38	123.70
5	A	1404	A	C5-C6-N1	-5.39	115.00	117.70
5	A	1613	C	N3-C4-N4	5.39	121.78	118.00
5	A	1781	C	N3-C4-C5	-5.39	119.74	121.90
5	A	2548	U	O4'-C1'-N1	5.39	112.52	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	532	C	N3-C4-C5	-5.39	119.74	121.90
5	A	2499	G	P-O3'-C3'	5.39	126.17	119.70
5	A	1643	C	C2-N3-C4	5.39	122.60	119.90
5	A	723	A	C5-C6-N6	-5.39	119.39	123.70
5	A	1097	A	C5-C6-N6	-5.39	119.39	123.70
5	A	1831	A	O4'-C1'-N9	5.39	112.51	108.20
5	A	2456	C	N3-C4-N4	5.39	121.77	118.00
5	A	2782	A	O4'-C1'-N9	5.39	112.51	108.20
5	A	2817	C	N3-C4-C5	-5.39	119.74	121.90
17	P	16	ASP	N-CA-CB	5.39	120.30	110.60
5	A	533	C	N3-C4-C5	-5.39	119.75	121.90
5	A	904	A	C5-C6-N6	-5.39	119.39	123.70
5	A	1996	C	N3-C4-N4	5.39	121.77	118.00
5	A	239	C	N3-C4-C5	-5.39	119.75	121.90
5	A	1573	C	N3-C4-N4	5.39	121.77	118.00
5	A	1776	A	O4'-C1'-N9	5.39	112.51	108.20
5	A	2823	C	N3-C4-N4	5.39	121.77	118.00
6	B	102	A	C5-C6-N6	-5.39	119.39	123.70
5	A	240	C	N3-C4-C5	-5.38	119.75	121.90
5	A	296	G	O4'-C1'-N9	5.38	112.51	108.20
5	A	399	C	C6-N1-C2	-5.38	118.15	120.30
5	A	923	C	N3-C4-N4	5.38	121.77	118.00
5	A	1445	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2085	G	O4'-C1'-N9	5.38	112.51	108.20
5	A	2363	C	N3-C4-C5	-5.38	119.75	121.90
5	A	2432	C	N3-C4-N4	5.38	121.77	118.00
5	A	2564	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2640	C	N3-C4-C5	-5.38	119.75	121.90
5	A	2754	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2837	A	C4-C5-C6	5.38	119.69	117.00
5	A	2925	C	N3-C4-C5	-5.38	119.75	121.90
6	B	111	C	N3-C4-N4	5.38	121.77	118.00
18	Q	45	TYR	CB-CG-CD1	-5.38	117.77	121.00
5	A	616	A	C5-C6-N6	-5.38	119.39	123.70
5	A	1539	C	N3-C4-C5	-5.38	119.75	121.90
5	A	1585	A	O4'-C1'-N9	5.38	112.51	108.20
5	A	2674	G	O4'-C1'-N9	5.38	112.51	108.20
5	A	535	G	P-O3'-C3'	5.38	126.16	119.70
5	A	882	A	C5-C6-N6	-5.38	119.39	123.70
5	A	1141	A	C5-C6-N1	-5.38	115.01	117.70
5	A	1818	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2190	C	N3-C4-C5	-5.38	119.75	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2310	C	N3-C4-C5	-5.38	119.75	121.90
5	A	2329	A	C5-C6-N6	-5.38	119.39	123.70
5	A	2388	C	C5-C6-N1	5.38	123.69	121.00
5	A	2388	C	N3-C4-C5	-5.38	119.75	121.90
5	A	2436	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2445	C	O4'-C1'-N1	5.38	112.50	108.20
5	A	2675	C	C6-N1-C2	-5.38	118.15	120.30
5	A	943	A	C5-C6-N6	-5.38	119.40	123.70
5	A	945	C	C1'-O4'-C4'	5.38	114.20	109.90
5	A	1767	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2010	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2251	G	O4'-C1'-N9	5.38	112.50	108.20
6	B	111	C	N3-C4-C5	-5.38	119.75	121.90
5	A	643	U	C5'-C4'-C3'	-5.38	107.40	116.00
5	A	699	A	C5-C6-N6	-5.38	119.40	123.70
5	A	769	A	O4'-C1'-N9	5.38	112.50	108.20
5	A	1340	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2034	A	C4-C5-C6	5.38	119.69	117.00
5	A	2698	G	O4'-C1'-N9	5.38	112.50	108.20
5	A	407	A	C5-C6-N1	-5.38	115.01	117.70
5	A	843	C	N3-C4-N4	5.38	121.76	118.00
5	A	974	A	O4'-C1'-N9	5.38	112.50	108.20
5	A	1537	G	O4'-C1'-N9	5.38	112.50	108.20
5	A	2018	A	C5-C6-N6	-5.38	119.40	123.70
5	A	2560	A	C5-C6-N1	-5.38	115.01	117.70
5	A	1539	C	N3-C4-N4	5.38	121.76	118.00
5	A	2042	A	C5-C6-N1	-5.38	115.01	117.70
5	A	2498	A	C5-C6-N1	-5.38	115.01	117.70
5	A	461	C	N3-C4-C5	-5.37	119.75	121.90
5	A	944	C	N3-C4-C5	-5.37	119.75	121.90
5	A	1116	A	C4-C5-C6	5.37	119.69	117.00
5	A	2134	A	C5-C6-N1	-5.37	115.01	117.70
5	A	2327	A	O4'-C1'-N9	5.37	112.50	108.20
5	A	2423	C	N3-C4-C5	-5.37	119.75	121.90
5	A	2631	A	C5-C6-N6	-5.37	119.40	123.70
5	A	161	A	O4'-C1'-N9	5.37	112.50	108.20
5	A	1115	A	C5-C6-N6	-5.37	119.40	123.70
5	A	1447	C	N3-C4-N4	5.37	121.76	118.00
5	A	1574	G	C5-C6-O6	-5.37	125.38	128.60
5	A	1780	C	N3-C4-C5	-5.37	119.75	121.90
5	A	2148	A	O4'-C1'-N9	5.37	112.50	108.20
5	A	2595	A	C5-C6-N6	-5.37	119.40	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1953	C	N3-C4-N4	5.37	121.76	118.00
5	A	2119	A	C5-C6-N1	-5.37	115.02	117.70
5	A	2433	C	P-O3'-C3'	5.37	126.14	119.70
5	A	129	C	N3-C4-C5	-5.37	119.75	121.90
5	A	141	U	C6-N1-C1'	-5.37	113.68	121.20
5	A	384	A	C5-C6-N1	-5.37	115.02	117.70
5	A	1339	A	C4-C5-C6	5.37	119.68	117.00
5	A	1033	C	N3-C4-C5	-5.37	119.75	121.90
5	A	1113	A	C5-C6-N1	-5.37	115.02	117.70
5	A	1987	C	N3-C4-C5	-5.37	119.75	121.90
5	A	2087	A	C5-C6-N6	-5.37	119.41	123.70
5	A	2176	A	C5-C6-N6	-5.37	119.41	123.70
5	A	2449	C	N3-C4-C5	-5.37	119.75	121.90
5	A	663	G	O4'-C1'-N9	5.37	112.49	108.20
5	A	1797	A	C5-C6-N1	-5.37	115.02	117.70
5	A	2673	A	O4'-C1'-N9	5.37	112.49	108.20
6	B	4	G	O4'-C1'-N9	5.37	112.49	108.20
5	A	355	A	C5-C6-N1	-5.36	115.02	117.70
5	A	672	C	N3-C4-C5	-5.36	119.75	121.90
5	A	1492	G	P-O5'-C5'	5.36	129.48	120.90
5	A	1556	A	C5-C6-N1	-5.36	115.02	117.70
5	A	1938	C	N3-C4-C5	-5.36	119.75	121.90
5	A	208	G	P-O3'-C3'	5.36	126.13	119.70
5	A	847	A	C5-C6-N6	-5.36	119.41	123.70
5	A	2468	A	C5-C6-N1	-5.36	115.02	117.70
5	A	2827	A	C5-C6-N1	-5.36	115.02	117.70
5	A	179	A	C4-C5-C6	5.36	119.68	117.00
5	A	277	C	N3-C4-C5	-5.36	119.76	121.90
5	A	658	A	C5-C6-N1	-5.36	115.02	117.70
5	A	2000	A	C5-C6-N1	-5.36	115.02	117.70
5	A	594	C	N3-C4-N4	5.36	121.75	118.00
5	A	717	A	C5-C6-N1	-5.36	115.02	117.70
5	A	2218	U	O4'-C1'-N1	5.36	112.49	108.20
5	A	2287	C	O4'-C1'-N1	5.36	112.49	108.20
5	A	39	C	N3-C4-N4	5.36	121.75	118.00
5	A	122	G	O3'-P-O5'	-5.36	93.82	104.00
5	A	364	A	C5-C6-N1	-5.36	115.02	117.70
5	A	555	C	N3-C4-N4	5.36	121.75	118.00
5	A	935	A	C5-C6-N1	-5.36	115.02	117.70
5	A	1583	A	C5'-C4'-O4'	5.36	115.53	109.10
5	A	1862	C	N3-C4-N4	5.36	121.75	118.00
5	A	1995	A	C5-C6-N6	-5.36	119.41	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2315	A	C5-C6-N1	-5.36	115.02	117.70
5	A	2759	C	N3-C4-C5	-5.36	119.76	121.90
5	A	2801	C	P-O5'-C5'	5.36	129.47	120.90
5	A	315	C	N3-C4-C5	-5.36	119.76	121.90
5	A	594	C	N3-C4-C5	-5.36	119.76	121.90
5	A	1084	A	C5-C6-N1	-5.36	115.02	117.70
5	A	1476	C	N3-C4-C5	-5.36	119.76	121.90
5	A	1755	C	N3-C4-N4	5.36	121.75	118.00
5	A	2327	A	C5-C6-N1	-5.36	115.02	117.70
5	A	2588	C	N3-C4-C5	-5.36	119.76	121.90
5	A	2686	A	C5-C6-N6	-5.36	119.42	123.70
5	A	2701	U	O4'-C1'-N1	5.36	112.48	108.20
5	A	1654	A	C5-C6-N6	-5.35	119.42	123.70
6	B	64	A	C5-C6-N6	-5.35	119.42	123.70
5	A	388	A	O4'-C1'-N9	5.35	112.48	108.20
5	A	1305	A	O4'-C1'-N9	5.35	112.48	108.20
5	A	1705	C	N3-C4-N4	5.35	121.75	118.00
5	A	2143	A	C5-C6-N6	-5.35	119.42	123.70
5	A	2256	A	C5-C6-N1	-5.35	115.02	117.70
5	A	2845	A	C5-C6-N6	-5.35	119.42	123.70
5	A	391	A	C4-C5-C6	5.35	119.68	117.00
5	A	584	A	O4'-C1'-N9	5.35	112.48	108.20
5	A	1186	C	N3-C4-C5	-5.35	119.76	121.90
5	A	1772	C	N3-C4-C5	-5.35	119.76	121.90
5	A	2343	A	C5-C6-N6	-5.35	119.42	123.70
5	A	2389	A	C5-C6-N6	-5.35	119.42	123.70
5	A	470	A	C5-C6-N6	-5.35	119.42	123.70
5	A	683	A	C5-C6-N1	-5.35	115.03	117.70
5	A	1438	C	N3-C4-C5	-5.35	119.76	121.90
5	A	2003	C	N3-C4-C5	-5.35	119.76	121.90
5	A	2468	A	O4'-C1'-N9	5.35	112.48	108.20
5	A	2812	A	O4'-C1'-N9	5.35	112.48	108.20
5	A	2850	G	O4'-C1'-N9	5.35	112.48	108.20
5	A	1072	A	C5-C6-N6	-5.35	119.42	123.70
5	A	1564	C	N3-C4-C5	-5.35	119.76	121.90
5	A	2109	G	O4'-C1'-N9	5.35	112.48	108.20
5	A	256	C	N3-C4-C5	-5.35	119.76	121.90
5	A	1092	A	C5-C6-N6	-5.35	119.42	123.70
5	A	1555	A	C5-C6-N1	-5.35	115.03	117.70
5	A	2376	C	N3-C4-C5	-5.35	119.76	121.90
5	A	2447	A	C5-C6-N6	-5.35	119.42	123.70
5	A	185	A	C5-C6-N6	-5.34	119.42	123.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	271	C	N3-C4-C5	-5.34	119.76	121.90
5	A	912	C	N3-C4-N4	5.34	121.74	118.00
5	A	968	C	N3-C4-C5	-5.34	119.76	121.90
5	A	1017	C	N3-C4-N4	5.34	121.74	118.00
5	A	1608	A	P-O5'-C5'	5.34	129.45	120.90
5	A	1654	A	C5-C6-N1	-5.34	115.03	117.70
5	A	2453	C	N3-C4-C5	-5.34	119.76	121.90
5	A	2632	G	O4'-C1'-N9	5.34	112.47	108.20
5	A	2782	A	C5-C6-N1	-5.34	115.03	117.70
5	A	1260	A	C5-C6-N1	-5.34	115.03	117.70
5	A	2923	A	C5-C6-N1	-5.34	115.03	117.70
5	A	84	A	C5-C6-N1	-5.34	115.03	117.70
5	A	1452	C	N3-C4-C5	-5.34	119.76	121.90
5	A	1723	A	C5-C6-N1	-5.34	115.03	117.70
5	A	2485	C	N3-C4-C5	-5.34	119.76	121.90
5	A	2526	A	O4'-C1'-N9	5.34	112.47	108.20
5	A	661	A	C5-C6-N1	-5.34	115.03	117.70
5	A	978	A	C5-C6-N1	-5.34	115.03	117.70
5	A	1019	A	C4-C5-C6	5.34	119.67	117.00
5	A	1188	A	C5-C6-N6	-5.34	119.43	123.70
5	A	2509	C	N3-C4-C5	-5.34	119.76	121.90
6	B	40	C	N3-C4-N4	5.34	121.74	118.00
5	A	1042	A	P-O3'-C3'	5.34	126.11	119.70
5	A	1124	C	N3-C4-N4	5.34	121.74	118.00
5	A	1618	A	C5-C6-N6	-5.34	119.43	123.70
5	A	245	G	C4'-C3'-C2'	-5.34	97.26	102.60
5	A	505	G	O4'-C1'-N9	5.34	112.47	108.20
5	A	1264	G	O4'-C1'-N9	5.34	112.47	108.20
5	A	1395	C	N3-C4-C5	-5.34	119.77	121.90
5	A	1442	A	C5-C6-N6	-5.34	119.43	123.70
5	A	1957	A	O4'-C1'-N9	5.34	112.47	108.20
5	A	2407	A	C5-C6-N6	-5.34	119.43	123.70
5	A	2781	C	N3-C4-C5	-5.34	119.77	121.90
5	A	179	A	C5-C6-N1	-5.33	115.03	117.70
5	A	1120	G	O4'-C1'-N9	5.33	112.47	108.20
5	A	1867	C	N3-C4-C5	-5.33	119.77	121.90
5	A	2043	A	C4-C5-C6	5.33	119.67	117.00
5	A	2582	G	O4'-C1'-N9	5.33	112.47	108.20
5	A	378	C	O4'-C1'-N1	5.33	112.47	108.20
5	A	1073	A	C5-C6-N1	-5.33	115.03	117.70
5	A	1405	A	C5-C6-N1	-5.33	115.03	117.70
5	A	1970	C	N3-C4-N4	5.33	121.73	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2410	C	N3-C4-C5	-5.33	119.77	121.90
5	A	2862	A	C4-C5-C6	5.33	119.67	117.00
5	A	2909	U	C4'-C3'-C2'	-5.33	97.27	102.60
5	A	207	A	C5-C6-N1	-5.33	115.03	117.70
5	A	820	U	O4'-C1'-N1	5.33	112.46	108.20
5	A	2657	C	N3-C4-N4	5.33	121.73	118.00
5	A	305	A	C5-C6-N1	-5.33	115.04	117.70
5	A	974	A	C5-C6-N6	-5.33	119.44	123.70
5	A	1142	A	O4'-C1'-N9	5.33	112.46	108.20
5	A	1614	A	O4'-C1'-N9	5.33	112.46	108.20
5	A	1932	G	N3-C2-N2	5.33	123.63	119.90
5	A	1974	G	O4'-C1'-N9	5.33	112.46	108.20
7	C	260	ARG	N-CA-CB	5.33	120.19	110.60
5	A	2107	C	N3-C4-C5	-5.33	119.77	121.90
5	A	449	A	C5-C6-N6	-5.33	119.44	123.70
5	A	1339	A	O4'-C4'-C3'	-5.33	98.67	104.00
5	A	1679	A	C5-C6-N6	-5.33	119.44	123.70
5	A	2470	C	N3-C4-C5	-5.33	119.77	121.90
5	A	2471	C	N3-C4-N4	5.33	121.73	118.00
5	A	2504	C	N3-C4-C5	-5.33	119.77	121.90
5	A	2528	C	N3-C4-N4	5.33	121.73	118.00
5	A	572	A	C1'-O4'-C4'	-5.32	105.64	109.90
5	A	588	C	N3-C4-C5	-5.32	119.77	121.90
5	A	1369	C	N3-C4-C5	-5.32	119.77	121.90
5	A	1652	C	N3-C4-C5	-5.32	119.77	121.90
5	A	2029	G	O4'-C1'-N9	5.32	112.46	108.20
5	A	2590	A	C5-C6-N6	-5.32	119.44	123.70
5	A	1201	A	O4'-C1'-N9	5.32	112.46	108.20
5	A	2328	G	O4'-C1'-N9	5.32	112.46	108.20
5	A	2614	U	C6-N1-C1'	-5.32	113.75	121.20
5	A	95	A	C5-C6-N6	-5.32	119.44	123.70
5	A	1054	A	C5-C6-N6	-5.32	119.44	123.70
5	A	1721	A	O5'-C5'-C4'	5.32	121.81	111.70
5	A	2898	A	C5-C6-N6	-5.32	119.44	123.70
6	B	105	A	C5-C6-N1	-5.32	115.04	117.70
5	A	1265	A	C5-C6-N1	-5.32	115.04	117.70
5	A	1861	C	N3-C4-N4	5.32	121.72	118.00
5	A	2532	A	C5-C6-N6	-5.32	119.44	123.70
5	A	166	A	C5-C6-N1	-5.32	115.04	117.70
5	A	202	A	C5-C6-N6	-5.32	119.45	123.70
5	A	867	A	O4'-C1'-N9	5.32	112.45	108.20
5	A	1066	A	C5-C6-N1	-5.32	115.04	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1233	A	P-O3'-C3'	-5.32	113.32	119.70
5	A	1456	A	C5-C6-N1	-5.32	115.04	117.70
5	A	1943	C	N3-C4-C5	-5.32	119.77	121.90
5	A	380	C	N3-C4-N4	5.32	121.72	118.00
5	A	1067	A	C5-C6-N1	-5.32	115.04	117.70
5	A	1298	C	N3-C4-C5	-5.32	119.77	121.90
5	A	2356	A	C5-C6-N6	-5.32	119.45	123.70
5	A	2631	A	C5-C6-N1	-5.32	115.04	117.70
5	A	1003	A	C5-C6-N1	-5.31	115.04	117.70
5	A	2369	A	C5-C6-N1	-5.31	115.04	117.70
5	A	2834	A	C5-C6-N1	-5.31	115.04	117.70
5	A	275	A	C5-C6-N6	-5.31	119.45	123.70
5	A	732	A	O4'-C1'-N9	5.31	112.45	108.20
5	A	759	G	P-O3'-C3'	-5.31	113.32	119.70
5	A	1179	A	O4'-C1'-N9	5.31	112.45	108.20
5	A	1224	A	C5-C6-N1	-5.31	115.04	117.70
5	A	1728	C	N3-C4-N4	5.31	121.72	118.00
5	A	1843	G	O4'-C1'-N9	5.31	112.45	108.20
5	A	2348	C	N3-C4-C5	-5.31	119.78	121.90
5	A	2420	G	O4'-C1'-N9	5.31	112.45	108.20
5	A	2469	C	N3-C4-N4	5.31	121.72	118.00
5	A	2689	A	C5-C6-N1	-5.31	115.04	117.70
5	A	2661	A	C5-C6-N6	-5.31	119.45	123.70
5	A	452	C	C6-N1-C1'	-5.31	114.43	120.80
5	A	933	C	C2-N1-C1'	5.31	124.64	118.80
5	A	1715	C	N3-C4-N4	5.31	121.72	118.00
5	A	1844	A	C4-C5-C6	5.31	119.65	117.00
5	A	2826	A	O4'-C1'-N9	5.31	112.45	108.20
5	A	456	A	C4-C5-C6	5.31	119.65	117.00
5	A	475	A	O4'-C1'-N9	5.31	112.45	108.20
5	A	516	G	N3-C2-N2	5.31	123.61	119.90
5	A	1027	A	C5-C6-N1	-5.31	115.05	117.70
5	A	1237	C	N3-C4-N4	5.31	121.72	118.00
5	A	1696	G	C5'-C4'-C3'	-5.31	107.51	116.00
5	A	1956	A	C5-C6-N1	-5.31	115.05	117.70
5	A	2256	A	C5-C6-N6	-5.31	119.45	123.70
5	A	2398	A	C5-C6-N1	-5.31	115.05	117.70
5	A	2722	A	C5-C6-N6	-5.31	119.45	123.70
6	B	106	C	N3-C4-C5	-5.31	119.78	121.90
5	A	478	U	O4'-C1'-N1	5.30	112.44	108.20
5	A	678	A	O4'-C1'-N9	5.30	112.44	108.20
5	A	1021	A	C5-C6-N1	-5.30	115.05	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1617	A	C5-C6-N1	-5.30	115.05	117.70
5	A	2221	C	N3-C4-C5	-5.30	119.78	121.90
5	A	2269	C	N3-C4-N4	5.30	121.71	118.00
5	A	2584	U	O4'-C1'-N1	5.30	112.44	108.20
5	A	2729	C	N3-C4-C5	-5.30	119.78	121.90
5	A	384	A	O4'-C1'-N9	5.30	112.44	108.20
5	A	1269	A	C5-C6-N6	-5.30	119.46	123.70
5	A	1608	A	C5-C6-N1	-5.30	115.05	117.70
5	A	1211	C	N3-C4-N4	5.30	121.71	118.00
5	A	1540	A	C5-C6-N6	-5.30	119.46	123.70
5	A	1579	A	C5-C6-N6	-5.30	119.46	123.70
5	A	1625	C	N3-C4-C5	-5.30	119.78	121.90
5	A	2060	A	C5-C6-N1	-5.30	115.05	117.70
5	A	2298	A	C5-C6-N1	-5.30	115.05	117.70
5	A	93	C	N3-C4-C5	-5.30	119.78	121.90
5	A	879	G	O4'-C1'-N9	5.30	112.44	108.20
5	A	937	C	N3-C4-N4	5.30	121.71	118.00
5	A	1098	C	N3-C4-C5	-5.30	119.78	121.90
5	A	2220	A	C5-C6-N6	-5.30	119.46	123.70
5	A	2796	C	N3-C4-C5	-5.30	119.78	121.90
5	A	41	A	C5-C6-N1	-5.30	115.05	117.70
5	A	1126	A	O4'-C1'-N9	5.30	112.44	108.20
5	A	1701	C	N3-C4-C5	-5.30	119.78	121.90
5	A	2349	A	O4'-C1'-N9	5.30	112.44	108.20
5	A	2399	G	O4'-C1'-N9	5.30	112.44	108.20
5	A	318	A	O4'-C1'-N9	5.30	112.44	108.20
5	A	1573	C	N3-C4-C5	-5.30	119.78	121.90
5	A	1934	C	N3-C4-C5	-5.30	119.78	121.90
5	A	2312	C	N3-C4-C5	-5.30	119.78	121.90
5	A	2854	A	O4'-C1'-N9	5.30	112.44	108.20
5	A	436	A	C5-C6-N1	-5.29	115.05	117.70
5	A	828	A	C5-C6-N1	-5.29	115.05	117.70
5	A	1198	C	N3-C4-C5	-5.29	119.78	121.90
5	A	1677	A	C5-C6-N6	-5.29	119.46	123.70
5	A	2381	A	O4'-C1'-N9	5.29	112.44	108.20
5	A	2601	A	C5-C6-N1	-5.29	115.05	117.70
5	A	2858	U	P-O3'-C3'	5.29	126.05	119.70
5	A	2927	A	C5-C6-N1	-5.29	115.05	117.70
5	A	67	A	C4-C5-C6	5.29	119.65	117.00
5	A	131	C	C2-N3-C4	5.29	122.55	119.90
5	A	787	C	N3-C4-C5	-5.29	119.78	121.90
5	A	1123	A	C5-C6-N1	-5.29	115.05	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1788	A	C5-C6-N6	-5.29	119.46	123.70
5	A	1970	C	N3-C4-C5	-5.29	119.78	121.90
5	A	2317	A	C5-C6-N1	-5.29	115.05	117.70
5	A	2641	C	N3-C4-C5	-5.29	119.78	121.90
5	A	67	A	C5-C6-N6	-5.29	119.47	123.70
5	A	168	A	C5-C6-N6	-5.29	119.47	123.70
5	A	328	G	O4'-C1'-N9	5.29	112.43	108.20
5	A	1144	A	C5-C6-N1	-5.29	115.05	117.70
5	A	1180	C	O4'-C1'-N1	5.29	112.43	108.20
5	A	1328	C	N3-C4-N4	5.29	121.70	118.00
5	A	1369	C	C2-N1-C1'	5.29	124.62	118.80
5	A	1642	G	O4'-C1'-N9	5.29	112.43	108.20
5	A	1691	A	C5-C6-N1	-5.29	115.06	117.70
5	A	1836	G	N3-C2-N2	5.29	123.60	119.90
5	A	1993	G	C5'-C4'-C3'	-5.29	107.53	116.00
5	A	2133	C	C5-C4-N4	-5.29	116.50	120.20
5	A	2351	A	C5-C6-N1	-5.29	115.05	117.70
5	A	2618	A	C5-C6-N1	-5.29	115.05	117.70
5	A	2755	U	P-O5'-C5'	5.29	129.37	120.90
5	A	2807	A	C5-C6-N1	-5.29	115.06	117.70
5	A	281	A	O4'-C1'-N9	5.29	112.43	108.20
5	A	840	A	C5-C6-N1	-5.29	115.06	117.70
5	A	1588	A	C5-C6-N6	-5.29	119.47	123.70
5	A	2229	C	N3-C4-C5	-5.29	119.78	121.90
5	A	2534	G	O4'-C1'-N9	5.29	112.43	108.20
5	A	10	A	C5-C6-N1	-5.29	115.06	117.70
5	A	355	A	C5-C6-N6	-5.29	119.47	123.70
5	A	733	U	P-O5'-C5'	-5.29	112.44	120.90
5	A	2278	U	O4'-C1'-N1	5.29	112.43	108.20
5	A	2694	A	C5-C6-N1	-5.29	115.06	117.70
10	F	75	ALA	N-CA-CB	5.29	117.50	110.10
5	A	29	U	O4'-C1'-N1	5.29	112.43	108.20
5	A	86	C	N3-C4-C5	-5.29	119.78	121.90
5	A	1812	A	C5-C6-N6	-5.29	119.47	123.70
5	A	2507	A	C4-C5-C6	5.29	119.64	117.00
5	A	39	C	N3-C4-C5	-5.29	119.79	121.90
5	A	490	A	C5-C6-N6	-5.29	119.47	123.70
5	A	661	A	C5-C6-N6	-5.29	119.47	123.70
5	A	1284	A	O4'-C1'-N9	5.29	112.43	108.20
5	A	1751	U	O4'-C1'-N1	5.29	112.43	108.20
5	A	2307	A	C5-C6-N6	-5.29	119.47	123.70
5	A	68	C	N3-C4-C5	-5.28	119.79	121.90

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	319	G	O4'-C1'-N9	5.28	112.43	108.20
5	A	867	A	C5-C6-N6	-5.28	119.47	123.70
5	A	1996	C	N3-C4-C5	-5.28	119.79	121.90
5	A	2091	A	C5-C6-N1	-5.28	115.06	117.70
5	A	2294	U	P-O5'-C5'	-5.28	112.45	120.90
5	A	2497	A	C4-C5-C6	5.28	119.64	117.00
6	B	90	C	N3-C4-C5	-5.28	119.79	121.90
5	A	339	A	C5-C6-N6	-5.28	119.47	123.70
5	A	671	G	O4'-C1'-N9	5.28	112.42	108.20
5	A	760	G	C6-C5-N7	-5.28	127.23	130.40
5	A	781	A	C5-C6-N1	-5.28	115.06	117.70
5	A	1404	A	C5-C6-N6	-5.28	119.47	123.70
5	A	1656	C	N3-C4-N4	5.28	121.70	118.00
5	A	2887	A	C5-C6-N1	-5.28	115.06	117.70
6	B	18	A	C5-C6-N6	-5.28	119.47	123.70
5	A	60	G	O4'-C1'-N9	5.28	112.42	108.20
5	A	563	C	N3-C4-N4	5.28	121.70	118.00
5	A	703	G	O4'-C1'-N9	5.28	112.42	108.20
5	A	751	G	N1-C2-N3	-5.28	120.73	123.90
5	A	2185	G	O4'-C1'-N9	5.28	112.42	108.20
5	A	2237	C	N3-C4-C5	-5.28	119.79	121.90
5	A	2441	A	C5-C6-N1	-5.28	115.06	117.70
5	A	207	A	C5-C6-N6	-5.28	119.48	123.70
5	A	501	A	C5-C6-N1	-5.28	115.06	117.70
5	A	1080	G	O4'-C1'-N9	5.28	112.42	108.20
5	A	1699	A	O4'-C1'-N9	5.28	112.42	108.20
5	A	2152	A	C5-C6-N1	-5.28	115.06	117.70
5	A	252	C	N3-C4-C5	-5.28	119.79	121.90
5	A	415	C	N3-C4-C5	-5.28	119.79	121.90
5	A	547	A	O4'-C1'-N9	5.28	112.42	108.20
5	A	652	A	C5-C6-N1	-5.28	115.06	117.70
5	A	702	A	C5-C6-N1	-5.28	115.06	117.70
5	A	1288	G	P-O3'-C3'	5.28	126.03	119.70
5	A	1789	A	C5-C6-N1	-5.28	115.06	117.70
5	A	2402	A	C5-C6-N1	-5.28	115.06	117.70
5	A	2762	A	C5-C6-N1	-5.28	115.06	117.70
5	A	195	C	N3-C4-N4	5.28	121.69	118.00
5	A	673	A	C4-C5-C6	5.28	119.64	117.00
5	A	1464	A	C5-C6-N6	-5.28	119.48	123.70
5	A	1660	C	N3-C4-C5	-5.28	119.79	121.90
5	A	1279	C	N3-C4-C5	-5.27	119.79	121.90
5	A	222	A	C5-C6-N1	-5.27	115.06	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	677	A	C4-C5-C6	5.27	119.64	117.00
5	A	999	A	C5-C6-N6	-5.27	119.48	123.70
5	A	1810	G	O4'-C1'-N9	5.27	112.42	108.20
5	A	2587	C	N3-C4-C5	-5.27	119.79	121.90
6	B	105	A	C5-C6-N6	-5.27	119.48	123.70
5	A	469	A	C5-C6-N6	-5.27	119.48	123.70
5	A	1190	A	C5-C6-N1	-5.27	115.06	117.70
5	A	389	A	C5-C6-N1	-5.27	115.06	117.70
5	A	406	G	O4'-C1'-N9	5.27	112.42	108.20
5	A	470	A	C5-C6-N1	-5.27	115.06	117.70
5	A	798	A	C5-C6-N1	-5.27	115.06	117.70
5	A	1072	A	C5-C6-N1	-5.27	115.06	117.70
5	A	1211	C	P-O5'-C5'	5.27	129.33	120.90
5	A	1286	A	C5-C6-N6	-5.27	119.48	123.70
5	A	1404	A	O4'-C1'-N9	5.27	112.42	108.20
5	A	2500	A	C5-C6-N6	-5.27	119.48	123.70
5	A	2651	C	N3-C4-C5	-5.27	119.79	121.90
5	A	27	G	O4'-C1'-N9	5.27	112.41	108.20
5	A	519	A	C5-C6-N1	-5.27	115.07	117.70
5	A	796	A	C5-C6-N1	-5.27	115.07	117.70
5	A	1070	G	O4'-C1'-N9	5.27	112.41	108.20
5	A	1142	A	C5-C6-N1	-5.27	115.07	117.70
5	A	1164	C	N3-C4-C5	-5.27	119.79	121.90
5	A	1816	A	O4'-C1'-N9	5.27	112.41	108.20
6	B	51	A	C5-C6-N6	-5.27	119.48	123.70
5	A	228	C	C2-N3-C4	5.27	122.53	119.90
5	A	838	C	N3-C4-C5	-5.27	119.79	121.90
5	A	2826	A	C5-C6-N1	-5.27	115.07	117.70
5	A	74	U	C6-N1-C1'	-5.26	113.83	121.20
5	A	252	C	N3-C4-N4	5.26	121.69	118.00
5	A	327	G	O4'-C1'-N9	5.26	112.41	108.20
5	A	604	C	N3-C4-C5	-5.26	119.79	121.90
5	A	863	C	N3-C4-C5	-5.26	119.79	121.90
5	A	893	A	C5-C6-N1	-5.26	115.07	117.70
5	A	1100	A	C5-C6-N6	-5.26	119.49	123.70
5	A	1461	A	C4-C5-C6	5.26	119.63	117.00
5	A	2327	A	C5-C6-N6	-5.26	119.49	123.70
5	A	479	A	O4'-C1'-N9	5.26	112.41	108.20
5	A	2058	G	N3-C2-N2	5.26	123.58	119.90
5	A	2230	C	N3-C4-C5	-5.26	119.80	121.90
5	A	102	A	C5-C6-N1	-5.26	115.07	117.70
5	A	1747	G	O4'-C1'-N9	5.26	112.41	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2804	A	C5-C6-N6	-5.26	119.49	123.70
5	A	318	A	C5-C6-N1	-5.26	115.07	117.70
5	A	979	U	C6-N1-C1'	-5.26	113.84	121.20
5	A	1040	C	N3-C4-C5	-5.26	119.80	121.90
5	A	1116	A	C5-C6-N1	-5.26	115.07	117.70
5	A	1534	A	O4'-C1'-N9	5.26	112.41	108.20
5	A	1755	C	N3-C4-C5	-5.26	119.80	121.90
5	A	2339	A	C5-C6-N1	-5.26	115.07	117.70
5	A	2346	C	N3-C4-N4	5.26	121.68	118.00
5	A	2459	A	C5-C6-N1	-5.26	115.07	117.70
5	A	2736	G	O4'-C1'-N9	5.26	112.41	108.20
5	A	210	A	C4-C5-C6	5.26	119.63	117.00
5	A	247	A	C5-C6-N1	-5.26	115.07	117.70
5	A	1876	A	O4'-C1'-N9	5.26	112.41	108.20
5	A	2290	C	N3-C4-C5	-5.26	119.80	121.90
5	A	56	A	C5-C6-N1	-5.26	115.07	117.70
5	A	1273	G	O4'-C1'-N9	5.26	112.40	108.20
5	A	1388	A	C5-C6-N1	-5.26	115.07	117.70
5	A	1465	A	C5-C6-N6	-5.26	119.50	123.70
5	A	1942	A	C5-C6-N1	-5.26	115.07	117.70
5	A	2047	A	C5-C6-N1	-5.26	115.07	117.70
5	A	2144	G	N3-C2-N2	5.26	123.58	119.90
5	A	2820	U	C6-N1-C1'	-5.26	113.84	121.20
5	A	2846	A	C5-C6-N1	-5.26	115.07	117.70
5	A	2923	A	O4'-C1'-N9	5.26	112.41	108.20
5	A	165	C	N3-C4-N4	5.25	121.68	118.00
5	A	1732	G	O4'-C1'-N9	5.25	112.40	108.20
5	A	1815	A	C5-C6-N6	-5.25	119.50	123.70
5	A	2191	A	C5-C6-N1	-5.25	115.07	117.70
5	A	254	A	O4'-C1'-N9	5.25	112.40	108.20
5	A	285	U	O4'-C1'-N1	5.25	112.40	108.20
5	A	391	A	C5-C6-N6	-5.25	119.50	123.70
5	A	519	A	C8-N9-C4	-5.25	103.70	105.80
5	A	715	A	C5-C6-N6	-5.25	119.50	123.70
5	A	1323	A	C4-C5-C6	5.25	119.63	117.00
5	A	1354	C	N3-C4-C5	-5.25	119.80	121.90
5	A	1423	A	C5-C6-N1	-5.25	115.07	117.70
5	A	1809	A	O4'-C1'-N9	5.25	112.40	108.20
5	A	301	U	O4'-C1'-N1	5.25	112.40	108.20
5	A	1222	A	C5-C6-N1	-5.25	115.07	117.70
5	A	1527	C	N3-C4-C5	-5.25	119.80	121.90
5	A	1601	A	C5-C6-N6	-5.25	119.50	123.70

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1811	C	N3-C4-C5	-5.25	119.80	121.90
5	A	1845	A	C5-C6-N1	-5.25	115.07	117.70
5	A	1957	A	C5-C6-N6	-5.25	119.50	123.70
5	A	1237	C	N3-C4-C5	-5.25	119.80	121.90
5	A	2071	A	C5-C6-N1	-5.25	115.08	117.70
5	A	2297	A	O4'-C1'-N9	5.25	112.40	108.20
5	A	811	A	P-O3'-C3'	-5.25	113.40	119.70
5	A	1211	C	N3-C4-C5	-5.25	119.80	121.90
5	A	1605	C	N3-C4-N4	5.25	121.67	118.00
5	A	1965	A	C5-C6-N1	-5.25	115.08	117.70
5	A	2174	C	N3-C4-C5	-5.25	119.80	121.90
5	A	2462	A	C5-C6-N1	-5.25	115.08	117.70
5	A	2683	A	C5-C6-N1	-5.25	115.08	117.70
5	A	770	A	O4'-C1'-N9	5.25	112.40	108.20
5	A	1615	A	C5-C6-N6	-5.25	119.50	123.70
5	A	2281	G	O4'-C1'-N9	5.25	112.40	108.20
5	A	696	C	N3-C4-C5	-5.25	119.80	121.90
5	A	1092	A	C5-C6-N1	-5.24	115.08	117.70
5	A	1147	U	O4'-C1'-N1	5.24	112.39	108.20
5	A	1432	A	C5-C6-N1	-5.24	115.08	117.70
5	A	2170	A	C5-C6-N1	-5.24	115.08	117.70
5	A	2255	C	N3-C4-N4	5.24	121.67	118.00
5	A	2593	A	C5-C6-N1	-5.24	115.08	117.70
5	A	325	A	C5-C6-N1	-5.24	115.08	117.70
5	A	880	C	N3-C4-C5	-5.24	119.80	121.90
5	A	353	A	C5-N7-C8	5.24	106.52	103.90
5	A	1017	C	N3-C4-C5	-5.24	119.81	121.90
5	A	1591	G	C1'-O4'-C4'	5.24	114.09	109.90
5	A	1592	A	C5-C6-N1	-5.24	115.08	117.70
5	A	1815	A	C5-C6-N1	-5.24	115.08	117.70
5	A	2083	A	C5-C6-N1	-5.24	115.08	117.70
5	A	2597	C	N3-C4-C5	-5.24	119.81	121.90
5	A	14	A	C4-C5-C6	5.24	119.62	117.00
5	A	526	A	C5-C6-N1	-5.24	115.08	117.70
5	A	2027	A	C5-C6-N6	-5.24	119.51	123.70
5	A	2546	C	N3-C4-C5	-5.24	119.81	121.90
5	A	705	A	O4'-C1'-N9	5.24	112.39	108.20
5	A	1613	C	N3-C4-C5	-5.24	119.81	121.90
5	A	1872	C	N3-C4-C5	-5.23	119.81	121.90
5	A	2079	C	N3-C4-N4	5.23	121.66	118.00
5	A	2527	C	C6-N1-C2	-5.23	118.21	120.30
5	A	330	A	C5-C6-N6	-5.23	119.52	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	653	A	C5-C6-N6	-5.23	119.51	123.70
5	A	853	C	N3-C4-N4	5.23	121.66	118.00
5	A	987	A	C5-C6-N6	-5.23	119.51	123.70
5	A	1593	A	C5-C6-N1	-5.23	115.08	117.70
5	A	1667	A	C5-C6-N6	-5.23	119.51	123.70
5	A	1828	G	C4'-C3'-C2'	5.23	107.83	102.60
5	A	66	C	C5-C4-N4	-5.23	116.54	120.20
5	A	375	C	O4'-C1'-N1	5.23	112.38	108.20
5	A	574	A	C5-C6-N6	-5.23	119.52	123.70
5	A	592	A	O4'-C1'-N9	5.23	112.38	108.20
5	A	1155	C	N3-C4-C5	-5.23	119.81	121.90
5	A	1200	G	O4'-C1'-N9	5.23	112.39	108.20
5	A	1832	A	C4-C5-C6	5.23	119.61	117.00
5	A	2316	A	C5-C6-N1	-5.23	115.08	117.70
5	A	2680	C	N3-C4-C5	-5.23	119.81	121.90
5	A	53	A	C5-C6-N6	-5.23	119.52	123.70
5	A	715	A	C5-C6-N1	-5.23	115.09	117.70
5	A	2662	A	C5-C6-N1	-5.23	115.09	117.70
5	A	412	A	C5-C6-N1	-5.23	115.09	117.70
5	A	683	A	C5-C6-N6	-5.23	119.52	123.70
5	A	1159	U	P-O3'-C3'	-5.23	113.43	119.70
5	A	2393	C	N3-C4-C5	-5.23	119.81	121.90
5	A	414	C	C5'-C4'-O4'	5.22	115.37	109.10
5	A	430	C	N3-C4-N4	5.22	121.66	118.00
5	A	2367	G	O4'-C1'-N9	5.22	112.38	108.20
5	A	2784	C	N3-C4-C5	-5.22	119.81	121.90
5	A	83	G	C1'-O4'-C4'	-5.22	105.72	109.90
5	A	236	A	C5-C6-N6	-5.22	119.52	123.70
5	A	1323	A	C5-C6-N6	-5.22	119.52	123.70
5	A	1662	C	N3-C4-C5	-5.22	119.81	121.90
5	A	2104	U	O4'-C1'-N1	5.22	112.38	108.20
5	A	2547	A	C5-C6-N6	-5.22	119.52	123.70
5	A	667	A	C1'-O4'-C4'	-5.22	105.72	109.90
5	A	2920	C	N3-C4-C5	-5.22	119.81	121.90
5	A	324	A	O4'-C1'-N9	5.22	112.38	108.20
5	A	2080	A	C5-C6-N6	-5.22	119.53	123.70
5	A	2276	A	O4'-C1'-N9	5.22	112.38	108.20
5	A	218	G	P-O3'-C3'	5.22	125.96	119.70
6	B	56	A	C5-C6-N1	-5.22	115.09	117.70
5	A	194	A	C5-C6-N6	-5.22	119.53	123.70
5	A	265	A	O4'-C1'-N9	5.22	112.37	108.20
5	A	300	G	C6-C5-N7	-5.22	127.27	130.40

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	452	C	N3-C4-C5	-5.22	119.81	121.90
5	A	797	A	C5-C6-N1	-5.22	115.09	117.70
5	A	1585	A	C5-C6-N1	-5.22	115.09	117.70
5	A	1700	A	C4-C5-C6	5.22	119.61	117.00
5	A	2088	A	C5-C6-N1	-5.22	115.09	117.70
5	A	2497	A	C5-C6-N6	-5.22	119.53	123.70
5	A	1046	A	C5-C6-N1	-5.21	115.09	117.70
5	A	1224	A	C4-C5-C6	5.21	119.61	117.00
5	A	1541	A	O4'-C1'-N9	5.21	112.37	108.20
5	A	1995	A	O4'-C1'-N9	5.21	112.37	108.20
5	A	2819	A	C5-C6-N1	-5.21	115.09	117.70
6	B	50	A	C4-C5-C6	5.21	119.61	117.00
5	A	1669	G	O4'-C1'-N9	5.21	112.37	108.20
5	A	176	A	C5-C6-N1	-5.21	115.09	117.70
5	A	1032	C	N3-C4-C5	-5.21	119.81	121.90
5	A	1055	A	C5-C6-N1	-5.21	115.09	117.70
5	A	1735	A	C5-C6-N6	-5.21	119.53	123.70
5	A	2542	A	O4'-C1'-N9	5.21	112.37	108.20
5	A	1446	C	N3-C4-C5	-5.21	119.82	121.90
5	A	2122	G	N3-C2-N2	5.21	123.55	119.90
5	A	699	A	C5-C6-N1	-5.21	115.10	117.70
5	A	1490	A	C5-C6-N6	-5.21	119.53	123.70
5	A	1504	A	C5-C6-N1	-5.21	115.10	117.70
5	A	2132	A	O4'-C1'-N9	5.21	112.37	108.20
5	A	2455	A	C5-C6-N1	-5.21	115.10	117.70
5	A	2902	A	O4'-C1'-N9	5.21	112.37	108.20
5	A	1134	A	C5'-C4'-O4'	5.21	115.35	109.10
5	A	1230	A	C5-C6-N1	-5.21	115.10	117.70
5	A	2338	A	C5-C6-N1	-5.21	115.10	117.70
5	A	2673	A	C5-C6-N1	-5.21	115.10	117.70
5	A	162	A	O4'-C1'-N9	5.21	112.36	108.20
5	A	651	U	O4'-C1'-N1	5.21	112.36	108.20
5	A	1403	G	O4'-C1'-N9	5.21	112.36	108.20
5	A	1370	C	N3-C4-N4	5.20	121.64	118.00
5	A	2693	G	O4'-C1'-N9	5.20	112.36	108.20
5	A	2845	A	C5-C6-N1	-5.20	115.10	117.70
5	A	28	A	C5-C6-N1	-5.20	115.10	117.70
5	A	208	G	C4'-C3'-C2'	-5.20	97.40	102.60
5	A	779	C	N3-C4-C5	-5.20	119.82	121.90
5	A	1210	A	C5-C6-N6	-5.20	119.54	123.70
5	A	482	C	N3-C4-C5	-5.20	119.82	121.90
5	A	630	A	C5-C6-N6	-5.20	119.54	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	836	A	C5-C6-N6	-5.20	119.54	123.70
5	A	2059	A	C5-C6-N1	-5.20	115.10	117.70
5	A	2246	G	C6-C5-N7	-5.20	127.28	130.40
5	A	2299	G	O4'-C1'-N9	5.20	112.36	108.20
5	A	855	G	C5-C6-O6	-5.20	125.48	128.60
5	A	1729	C	N3-C4-C5	-5.20	119.82	121.90
5	A	2141	A	O4'-C1'-N9	5.20	112.36	108.20
5	A	718	C	C5'-C4'-C3'	-5.20	107.69	116.00
5	A	1	G	O4'-C1'-N9	5.20	112.36	108.20
5	A	1037	C	N3-C4-C5	-5.20	119.82	121.90
5	A	2800	C	N3-C4-C5	-5.20	119.82	121.90
5	A	2905	C	N3-C4-N4	5.20	121.64	118.00
5	A	736	A	C5-C6-N1	-5.19	115.10	117.70
14	L	73	GLU	N-CA-CB	5.19	119.95	110.60
5	A	303	G	O4'-C1'-N9	5.19	112.35	108.20
5	A	5	A	C5-C6-N1	-5.19	115.11	117.70
5	A	88	G	C5'-C4'-O4'	5.19	115.33	109.10
5	A	125	A	C5-C6-N1	-5.19	115.11	117.70
5	A	1788	A	O4'-C1'-N9	5.19	112.35	108.20
5	A	2611	G	O4'-C1'-N9	5.19	112.35	108.20
5	A	951	C	N3-C4-C5	-5.19	119.83	121.90
5	A	1511	C	N3-C4-C5	-5.19	119.83	121.90
5	A	2206	C	N3-C4-C5	-5.19	119.83	121.90
5	A	2385	C	N3-C4-C5	-5.19	119.83	121.90
5	A	2635	C	N3-C4-C5	-5.19	119.83	121.90
5	A	2755	U	C6-N1-C1'	-5.19	113.94	121.20
6	B	56	A	C4-C5-C6	5.19	119.59	117.00
5	A	658	A	C5-C6-N6	-5.19	119.55	123.70
5	A	956	A	C4-C5-C6	5.19	119.59	117.00
5	A	1116	A	C5-C6-N6	-5.19	119.55	123.70
5	A	1866	C	P-O3'-C3'	5.19	125.92	119.70
5	A	795	G	P-O3'-C3'	5.18	125.92	119.70
5	A	1474	C	N3-C4-N4	5.18	121.63	118.00
5	A	830	A	C5-C6-N6	-5.18	119.56	123.70
5	A	1426	A	P-O3'-C3'	-5.18	113.48	119.70
5	A	1581	A	C4-C5-C6	5.18	119.59	117.00
5	A	1640	G	O4'-C1'-N9	5.18	112.35	108.20
5	A	1680	A	C5-C6-N6	-5.18	119.55	123.70
5	A	74	U	O4'-C1'-N1	5.18	112.34	108.20
5	A	229	A	C5-C6-N1	-5.18	115.11	117.70
5	A	965	A	C5-C6-N1	-5.18	115.11	117.70
5	A	1577	C	N3-C4-N4	5.18	121.62	118.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1635	G	O4'-C1'-N9	5.18	112.34	108.20
5	A	2480	A	C4-C5-C6	5.18	119.59	117.00
5	A	187	C	N3-C4-N4	5.18	121.62	118.00
5	A	835	A	C5-C6-N6	-5.18	119.56	123.70
5	A	2786	A	O4'-C1'-N9	5.18	112.34	108.20
5	A	354	A	C4-C5-C6	5.18	119.59	117.00
5	A	496	A	C5-C6-N1	-5.18	115.11	117.70
5	A	936	C	N3-C4-C5	-5.18	119.83	121.90
5	A	971	A	O4'-C1'-N9	5.18	112.34	108.20
5	A	1006	A	P-O5'-C5'	5.18	129.18	120.90
5	A	1714	A	C5-C6-N6	-5.18	119.56	123.70
5	A	2734	A	C5-C6-N1	-5.18	115.11	117.70
5	A	57	C	N3-C4-C5	-5.17	119.83	121.90
5	A	476	A	O4'-C1'-N9	5.17	112.34	108.20
5	A	962	C	N3-C4-C5	-5.17	119.83	121.90
5	A	1031	C	N3-C4-C5	-5.17	119.83	121.90
5	A	1216	C	N3-C4-C5	-5.17	119.83	121.90
5	A	1246	G	C6-C5-N7	-5.17	127.30	130.40
5	A	1251	U	P-O3'-C3'	5.17	125.91	119.70
5	A	1783	C	O4'-C1'-N1	5.17	112.34	108.20
5	A	1876	A	C5-C6-N6	-5.17	119.56	123.70
5	A	2163	A	C4-C5-C6	5.17	119.59	117.00
5	A	2440	A	O4'-C1'-N9	5.17	112.34	108.20
5	A	1778	A	O4'-C1'-N9	5.17	112.34	108.20
5	A	94	A	C5-C6-N1	-5.17	115.11	117.70
5	A	1038	C	N3-C4-N4	5.17	121.62	118.00
5	A	1449	C	C2-N3-C4	5.17	122.49	119.90
5	A	1550	C	C5-C4-N4	-5.17	116.58	120.20
5	A	2532	A	C5-C6-N1	-5.17	115.11	117.70
5	A	2593	A	O4'-C1'-N9	5.17	112.34	108.20
5	A	138	U	C6-N1-C1'	-5.17	113.96	121.20
5	A	265	A	C5-C6-N6	-5.17	119.56	123.70
5	A	618	A	C5-C6-N1	-5.17	115.12	117.70
5	A	665	G	O4'-C1'-N9	5.17	112.33	108.20
5	A	679	A	C5-C6-N6	-5.17	119.56	123.70
5	A	1325	A	C5-C6-N6	-5.17	119.57	123.70
5	A	1967	A	C5-C6-N1	-5.17	115.12	117.70
5	A	2289	C	N3-C4-C5	-5.17	119.83	121.90
5	A	2349	A	C5-C6-N1	-5.17	115.12	117.70
5	A	2640	C	N3-C4-N4	5.17	121.62	118.00
5	A	2740	A	C5-C6-N1	-5.17	115.12	117.70
6	B	17	A	C5-C6-N6	-5.17	119.57	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	789	C	C2-N3-C4	5.17	122.48	119.90
5	A	957	A	C5-C6-N1	-5.17	115.12	117.70
5	A	1070	G	N3-C2-N2	5.17	123.52	119.90
5	A	1310	C	N3-C4-C5	-5.17	119.83	121.90
5	A	1721	A	C5-C6-N1	-5.17	115.12	117.70
5	A	2668	A	C5-C6-N1	-5.17	115.12	117.70
5	A	2679	C	N3-C4-C5	-5.17	119.83	121.90
5	A	1580	A	O4'-C1'-N9	5.17	112.33	108.20
5	A	1655	A	C5-C6-N1	-5.17	115.12	117.70
5	A	2124	A	C5-C6-N6	-5.17	119.57	123.70
5	A	90	A	C5-C6-N6	-5.16	119.57	123.70
5	A	952	A	C4-C5-C6	5.16	119.58	117.00
5	A	1514	C	N3-C4-C5	-5.16	119.83	121.90
5	A	2119	A	O4'-C1'-N9	5.16	112.33	108.20
5	A	2494	C	N3-C4-C5	-5.16	119.83	121.90
6	B	97	A	C5-C6-N6	-5.16	119.57	123.70
5	A	1353	C	P-O5'-C5'	5.16	129.16	120.90
5	A	2501	G	O4'-C1'-N9	5.16	112.33	108.20
5	A	290	U	P-O3'-C3'	5.16	125.89	119.70
5	A	978	A	C5-C6-N6	-5.16	119.57	123.70
5	A	1556	A	O4'-C1'-N9	5.16	112.33	108.20
5	A	2332	G	O4'-C1'-N9	5.16	112.33	108.20
5	A	2404	G	O4'-C1'-N9	5.16	112.33	108.20
5	A	2508	U	P-O5'-C5'	5.16	129.16	120.90
5	A	470	A	O4'-C1'-N9	5.16	112.33	108.20
5	A	836	A	C5-C6-N1	-5.16	115.12	117.70
5	A	1929	A	C5-C6-N6	-5.16	119.57	123.70
5	A	2346	C	N3-C4-C5	-5.16	119.84	121.90
5	A	21	A	O4'-C1'-N9	5.16	112.32	108.20
5	A	125	A	C5-C6-N6	-5.16	119.58	123.70
5	A	150	A	C4'-C3'-C2'	-5.16	97.44	102.60
5	A	349	C	N3-C4-N4	5.16	121.61	118.00
5	A	1360	A	C5-C6-N1	-5.16	115.12	117.70
5	A	1480	A	C5-C6-N6	-5.16	119.58	123.70
5	A	1556	A	P-O5'-C5'	5.15	129.15	120.90
5	A	2742	C	C6-N1-C1'	-5.15	114.61	120.80
5	A	306	C	C2-N3-C4	5.15	122.48	119.90
5	A	323	C	C1'-O4'-C4'	-5.15	105.78	109.90
5	A	343	A	C5-C6-N1	-5.15	115.12	117.70
5	A	486	A	C5-C6-N6	-5.15	119.58	123.70
5	A	740	A	C5-C6-N1	-5.15	115.12	117.70
5	A	1989	A	C5-C6-N6	-5.15	119.58	123.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	168	A	C5-C6-N1	-5.15	115.12	117.70
5	A	661	A	P-O3'-C3'	5.15	125.88	119.70
5	A	975	C	C6-N1-C2	-5.15	118.24	120.30
5	A	2253	G	O4'-C1'-N9	5.15	112.32	108.20
5	A	2585	C	N3-C4-C5	-5.15	119.84	121.90
5	A	679	A	C5'-C4'-C3'	5.15	124.24	116.00
5	A	2207	C	C5'-C4'-O4'	5.15	115.28	109.10
5	A	2925	C	C6-N1-C2	-5.15	118.24	120.30
5	A	503	C	N3-C4-C5	-5.15	119.84	121.90
5	A	549	A	C5-C6-N1	-5.15	115.13	117.70
5	A	2106	A	C5-C6-N1	-5.15	115.13	117.70
5	A	322	A	C5-C6-N6	-5.15	119.58	123.70
5	A	664	C	N3-C4-C5	-5.15	119.84	121.90
5	A	1392	A	C5-C6-N6	-5.15	119.58	123.70
5	A	326	A	C5-C6-N1	-5.14	115.13	117.70
5	A	758	A	C5-C6-N1	-5.14	115.13	117.70
5	A	1146	C	N3-C4-C5	-5.14	119.84	121.90
5	A	1483	A	O4'-C1'-N9	5.14	112.32	108.20
5	A	2766	G	O4'-C1'-N9	5.14	112.31	108.20
5	A	2844	A	C5-C6-N6	-5.14	119.58	123.70
5	A	173	A	O4'-C1'-N9	5.14	112.31	108.20
5	A	227	G	C5-C6-O6	-5.14	125.52	128.60
5	A	316	G	C5-C6-O6	-5.14	125.51	128.60
5	A	507	A	O4'-C1'-N9	5.14	112.31	108.20
5	A	809	U	O4'-C1'-N1	5.14	112.31	108.20
5	A	932	C	C6-N1-C2	-5.14	118.24	120.30
5	A	1562	A	C5-C6-N1	-5.14	115.13	117.70
5	A	1623	C	C5'-C4'-C3'	-5.14	107.77	116.00
5	A	2912	A	O4'-C1'-N9	5.14	112.31	108.20
5	A	753	A	C5-C6-N1	-5.14	115.13	117.70
5	A	993	A	O4'-C1'-N9	5.14	112.31	108.20
5	A	1185	G	N3-C2-N2	5.14	123.50	119.90
5	A	1808	U	O4'-C1'-N1	5.14	112.31	108.20
5	A	2132	A	C5-C6-N6	-5.14	119.59	123.70
5	A	469	A	O4'-C1'-N9	5.14	112.31	108.20
5	A	1735	A	O4'-C1'-N9	5.14	112.31	108.20
5	A	1986	C	N3-C4-C5	-5.14	119.84	121.90
5	A	2823	C	O4'-C1'-N1	5.14	112.31	108.20
5	A	70	G	O4'-C1'-N9	5.14	112.31	108.20
5	A	122	G	C5'-C4'-C3'	5.14	124.22	116.00
5	A	1999	A	C5-C6-N1	-5.14	115.13	117.70
5	A	2209	U	C2-N1-C1'	5.14	123.86	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2329	A	O4'-C1'-N9	5.13	112.31	108.20
5	A	195	C	N3-C4-C5	-5.13	119.85	121.90
5	A	2230	C	N3-C4-N4	5.13	121.59	118.00
5	A	2602	C	N3-C4-C5	-5.13	119.85	121.90
5	A	586	C	P-O5'-C5'	5.13	129.11	120.90
5	A	689	A	C5-C6-N6	-5.13	119.59	123.70
5	A	751	G	O4'-C1'-N9	5.13	112.31	108.20
5	A	1563	G	O4'-C1'-N9	5.13	112.31	108.20
5	A	1760	A	C5-C6-N1	-5.13	115.14	117.70
5	A	2397	C	P-O5'-C5'	5.13	129.11	120.90
5	A	64	A	C5-C6-N1	-5.13	115.14	117.70
5	A	1054	A	C5-C6-N1	-5.13	115.14	117.70
5	A	1078	A	C5-C6-N6	-5.13	119.60	123.70
5	A	376	A	C5-C6-N1	-5.13	115.14	117.70
5	A	421	A	C5-C6-N1	-5.13	115.14	117.70
5	A	2648	U	P-O5'-C5'	5.13	129.11	120.90
5	A	2719	A	C5-C6-N1	-5.13	115.14	117.70
5	A	431	A	O4'-C1'-N9	5.13	112.30	108.20
5	A	1361	A	C5-C6-N1	-5.13	115.14	117.70
5	A	2427	U	P-O3'-C3'	5.13	125.85	119.70
5	A	2512	C	N3-C4-C5	-5.13	119.85	121.90
5	A	1462	G	N3-C2-N2	5.12	123.49	119.90
5	A	894	A	C5-C6-N1	-5.12	115.14	117.70
10	F	22	TYR	N-CA-CB	5.12	119.82	110.60
5	A	392	C	P-O5'-C5'	5.12	129.09	120.90
5	A	1286	A	O4'-C1'-N9	5.12	112.30	108.20
5	A	1591	G	O4'-C1'-N9	5.12	112.30	108.20
5	A	2153	G	O4'-C1'-N9	5.12	112.30	108.20
5	A	1582	U	O4'-C1'-N1	5.12	112.30	108.20
5	A	1760	A	C4-C5-C6	5.12	119.56	117.00
5	A	2743	G	N3-C2-N2	5.12	123.48	119.90
5	A	12	A	C5-C6-N1	-5.12	115.14	117.70
5	A	705	A	C5-C6-N1	-5.12	115.14	117.70
5	A	43	G	O4'-C1'-N9	5.12	112.29	108.20
5	A	1803	C	N3-C4-C5	-5.12	119.85	121.90
5	A	2351	A	O4'-C1'-N9	5.12	112.29	108.20
5	A	2627	A	C5-C6-N6	-5.12	119.61	123.70
5	A	827	G	N3-C2-N2	5.11	123.48	119.90
5	A	1091	U	O4'-C1'-N1	5.11	112.29	108.20
5	A	1326	A	P-O5'-C5'	5.11	129.08	120.90
5	A	1377	G	O4'-C1'-N9	5.11	112.29	108.20
5	A	1517	A	O4'-C1'-N9	5.11	112.29	108.20

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2696	C	N3-C4-N4	5.11	121.58	118.00
1	0	38	LEU	N-CA-C	-5.11	97.20	111.00
5	A	1235	A	C5-C6-N1	-5.11	115.14	117.70
5	A	1710	A	C5-C6-N1	-5.11	115.14	117.70
5	A	1948	A	C5-C6-N6	-5.11	119.61	123.70
5	A	2252	A	C5-C6-N6	-5.11	119.61	123.70
5	A	2472	C	N3-C4-C5	-5.11	119.86	121.90
5	A	659	A	O4'-C1'-N9	5.11	112.29	108.20
6	B	25	A	O4'-C1'-N9	5.11	112.29	108.20
5	A	1254	A	C5-C6-N1	-5.11	115.15	117.70
5	A	1826	C	C5-C4-N4	-5.11	116.62	120.20
5	A	2732	C	N3-C4-C5	-5.11	119.86	121.90
5	A	206	A	O4'-C1'-N9	5.11	112.28	108.20
5	A	484	C	N3-C4-C5	-5.11	119.86	121.90
5	A	990	C	C5'-C4'-O4'	5.11	115.23	109.10
5	A	1046	A	O4'-C1'-N9	5.11	112.28	108.20
5	A	1232	G	O4'-C1'-N9	5.11	112.28	108.20
5	A	1814	A	C5-C6-N1	-5.11	115.15	117.70
5	A	2100	A	O4'-C1'-N9	5.11	112.28	108.20
5	A	843	C	N3-C4-C5	-5.10	119.86	121.90
5	A	1131	A	C5-C6-N1	-5.10	115.15	117.70
5	A	1491	A	C5-C6-N1	-5.10	115.15	117.70
5	A	128	C	N3-C4-C5	-5.10	119.86	121.90
5	A	161	A	C5-C6-N6	-5.10	119.62	123.70
5	A	360	C	N3-C4-C5	-5.10	119.86	121.90
5	A	1549	U	O4'-C1'-N1	5.10	112.28	108.20
5	A	2078	A	O4'-C1'-N9	5.10	112.28	108.20
6	B	117	A	C5-C6-N1	-5.10	115.15	117.70
5	A	1686	A	C5-C6-N6	-5.10	119.62	123.70
5	A	376	A	C5-C6-N6	-5.10	119.62	123.70
5	A	376	A	C5'-C4'-O4'	5.10	115.22	109.10
5	A	731	G	O4'-C1'-N9	5.10	112.28	108.20
5	A	2068	G	N3-C2-N2	5.10	123.47	119.90
5	A	1110	C	N3-C4-N4	5.10	121.57	118.00
5	A	2035	C	N3-C4-C5	-5.10	119.86	121.90
5	A	2793	A	C5-C6-N1	-5.10	115.15	117.70
5	A	868	A	C5'-C4'-C3'	5.10	124.15	116.00
5	A	2267	G	C8-N9-C1'	-5.10	120.38	127.00
5	A	191	G	O4'-C1'-N9	5.09	112.28	108.20
5	A	530	A	C5-C6-N1	-5.09	115.15	117.70
5	A	1784	A	C5-C6-N1	-5.09	115.15	117.70
5	A	2280	G	O4'-C1'-N9	5.09	112.28	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2707	C	N3-C4-C5	-5.09	119.86	121.90
5	A	282	G	O4'-C1'-N9	5.09	112.27	108.20
5	A	1935	G	P-O3'-C3'	5.09	125.81	119.70
5	A	2067	G	O4'-C1'-N9	5.09	112.28	108.20
5	A	2092	C	N3-C4-C5	-5.09	119.86	121.90
5	A	2550	C	C2-N3-C4	5.09	122.45	119.90
5	A	2560	A	C5-C6-N6	-5.09	119.63	123.70
5	A	2840	C	N3-C4-C5	-5.09	119.86	121.90
5	A	6	A	C5-C6-N6	-5.09	119.63	123.70
5	A	1945	A	C5-C6-N1	-5.09	115.16	117.70
5	A	2194	G	O4'-C1'-N9	5.09	112.27	108.20
5	A	2677	G	O4'-C1'-N9	5.09	112.27	108.20
5	A	1334	C	N3-C4-C5	-5.09	119.86	121.90
5	A	1735	A	P-O5'-C5'	5.09	129.04	120.90
5	A	1777	G	O4'-C1'-N9	5.09	112.27	108.20
5	A	2451	C	N3-C4-C5	-5.09	119.86	121.90
5	A	975	C	C2-N1-C1'	5.09	124.40	118.80
5	A	1352	U	C6-N1-C1'	-5.09	114.08	121.20
5	A	2886	C	N3-C4-C5	-5.09	119.86	121.90
5	A	10	A	C5'-C4'-O4'	5.09	115.20	109.10
5	A	946	G	O4'-C1'-N9	5.09	112.27	108.20
5	A	1282	U	C5'-C4'-C3'	-5.09	107.86	116.00
5	A	1584	U	P-O3'-C3'	5.09	125.80	119.70
5	A	1842	C	P-O5'-C5'	5.09	129.04	120.90
5	A	1168	G	C5'-C4'-O4'	5.08	115.20	109.10
5	A	1483	A	P-O3'-C3'	5.08	125.80	119.70
5	A	2916	A	C5-C6-N1	-5.08	115.16	117.70
5	A	65	A	C5-C6-N1	-5.08	115.16	117.70
5	A	513	A	C5-C6-N6	-5.08	119.64	123.70
5	A	1463	C	N3-C4-C5	-5.08	119.87	121.90
5	A	1811	C	P-O3'-C3'	5.08	125.80	119.70
5	A	2084	C	O4'-C1'-N1	5.08	112.27	108.20
5	A	2168	G	O4'-C1'-N9	5.08	112.27	108.20
5	A	756	U	C5'-C4'-O4'	5.08	115.20	109.10
6	B	35	C	N3-C4-C5	-5.08	119.87	121.90
5	A	551	A	C4-C5-C6	5.08	119.54	117.00
5	A	584	A	C5-C6-N6	-5.08	119.64	123.70
5	A	647	A	C5-C6-N1	-5.08	115.16	117.70
5	A	1961	A	C5-C6-N1	-5.08	115.16	117.70
5	A	2525	C	C3'-C2'-C1'	5.08	105.56	101.50
5	A	2724	U	P-O5'-C5'	5.08	129.02	120.90
5	A	1313	A	C5-C6-N1	-5.08	115.16	117.70

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	60	C	N3-C4-C5	-5.08	119.87	121.90
5	A	726	C	N3-C4-C5	-5.08	119.87	121.90
5	A	779	C	N3-C4-N4	5.08	121.55	118.00
5	A	977	U	O4'-C1'-N1	5.08	112.26	108.20
5	A	1387	G	O4'-C1'-N9	5.08	112.26	108.20
5	A	2082	G	O4'-C1'-N9	5.08	112.26	108.20
5	A	2850	G	N3-C2-N2	5.08	123.45	119.90
6	B	34	C	N3-C4-C5	-5.08	119.87	121.90
3	5	40	ALA	N-CA-CB	5.07	117.20	110.10
5	A	490	A	C5-C6-N1	-5.07	115.16	117.70
5	A	800	G	P-O3'-C3'	5.07	125.79	119.70
5	A	1605	C	N3-C4-C5	-5.07	119.87	121.90
5	A	2371	C	N3-C4-C5	-5.07	119.87	121.90
5	A	2375	A	C5-C6-N6	-5.07	119.64	123.70
6	B	83	G	O4'-C1'-N9	5.07	112.26	108.20
5	A	985	G	P-O3'-C3'	-5.07	113.61	119.70
5	A	2405	A	O4'-C1'-N9	5.07	112.26	108.20
6	B	89	C	N3-C4-C5	-5.07	119.87	121.90
5	A	1922	C	N3-C4-C5	-5.07	119.87	121.90
5	A	2133	C	N3-C4-C5	-5.07	119.87	121.90
5	A	2526	A	C5-C6-N1	-5.07	115.17	117.70
5	A	2531	G	O4'-C1'-N9	5.07	112.26	108.20
5	A	1771	C	N3-C4-C5	-5.07	119.87	121.90
5	A	434	U	O4'-C1'-N1	5.07	112.25	108.20
5	A	617	G	O4'-C1'-N9	5.07	112.25	108.20
5	A	1384	C	N3-C4-C5	-5.07	119.87	121.90
5	A	1417	A	C4-C5-C6	5.07	119.53	117.00
5	A	2064	G	N3-C2-N2	5.07	123.45	119.90
5	A	2475	G	O4'-C1'-N9	5.07	112.25	108.20
6	B	71	A	C5-N7-C8	5.07	106.43	103.90
5	A	2639	C	O4'-C1'-N1	5.06	112.25	108.20
5	A	1223	C	P-O5'-C5'	5.06	129.00	120.90
5	A	2825	C	N3-C4-C5	-5.06	119.88	121.90
5	A	521	G	O4'-C1'-N9	5.06	112.25	108.20
5	A	811	A	C5-C6-N6	-5.06	119.65	123.70
5	A	1103	A	O4'-C1'-N9	5.06	112.25	108.20
5	A	1344	C	N3-C4-C5	-5.06	119.88	121.90
5	A	1752	G	P-O5'-C5'	5.06	129.00	120.90
5	A	2339	A	C5'-C4'-O4'	5.06	115.17	109.10
5	A	2851	A	O4'-C1'-N9	5.06	112.25	108.20
5	A	1093	G	O4'-C1'-N9	5.06	112.25	108.20
5	A	1251	U	C6-N1-C1'	-5.06	114.12	121.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	1715	C	P-O5'-C5'	5.06	128.99	120.90
5	A	2149	G	C6-C5-N7	-5.06	127.36	130.40
5	A	2720	C	N3-C4-C5	-5.06	119.88	121.90
5	A	2767	A	O4'-C1'-N9	5.06	112.25	108.20
5	A	346	G	C6-C5-N7	-5.06	127.37	130.40
5	A	1126	A	C5-C6-N1	-5.06	115.17	117.70
5	A	2476	G	O4'-C1'-N9	5.06	112.25	108.20
6	B	69	C	N3-C4-C5	-5.06	119.88	121.90
5	A	426	G	O4'-C1'-N9	5.05	112.24	108.20
5	A	538	A	C5-C6-N6	-5.05	119.66	123.70
5	A	1379	U	O4'-C1'-N1	5.05	112.24	108.20
5	A	2431	U	O4'-C1'-N1	5.05	112.24	108.20
5	A	2475	G	P-O5'-C5'	-5.05	112.81	120.90
5	A	2708	A	C5-C6-N6	-5.05	119.66	123.70
5	A	2925	C	C2-N1-C1'	5.05	124.36	118.80
5	A	40	U	P-O3'-C3'	-5.05	113.64	119.70
5	A	418	A	C5-C6-N1	-5.05	115.17	117.70
5	A	1021	A	C5-C6-N6	-5.05	119.66	123.70
5	A	1496	G	O4'-C1'-N9	5.05	112.24	108.20
5	A	1579	A	C4-C5-C6	5.05	119.53	117.00
5	A	2395	A	C5-C6-N1	-5.05	115.17	117.70
5	A	1508	C	C5-C4-N4	-5.05	116.67	120.20
5	A	2032	A	C5-C6-N1	-5.05	115.17	117.70
5	A	2101	G	O4'-C1'-N9	5.05	112.24	108.20
5	A	2710	C	N3-C4-C5	-5.05	119.88	121.90
5	A	2793	A	C5-C6-N6	-5.05	119.66	123.70
5	A	849	A	C5-C6-N1	-5.05	115.18	117.70
5	A	2007	A	P-O3'-C3'	5.05	125.76	119.70
5	A	1308	A	C5-C6-N1	-5.05	115.18	117.70
5	A	1581	A	O4'-C1'-C2'	-5.05	100.75	105.80
5	A	2497	A	C5-C6-N1	-5.05	115.18	117.70
5	A	1547	U	P-O3'-C3'	5.04	125.75	119.70
5	A	187	C	N3-C4-C5	-5.04	119.88	121.90
5	A	679	A	P-O3'-C3'	5.04	125.75	119.70
5	A	1082	G	O4'-C1'-N9	5.04	112.23	108.20
5	A	2335	U	P-O3'-C3'	5.04	125.75	119.70
5	A	2383	A	O4'-C1'-N9	5.04	112.23	108.20
5	A	210	A	O4'-C1'-N9	5.04	112.23	108.20
5	A	358	C	N3-C4-C5	-5.04	119.89	121.90
5	A	726	C	N3-C4-N4	5.04	121.53	118.00
5	A	830	A	O4'-C1'-N9	5.04	112.23	108.20
5	A	1189	A	C4-C5-C6	5.04	119.52	117.00

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	2730	U	P-O3'-C3'	5.04	125.75	119.70
5	A	1024	G	O4'-C1'-N9	5.04	112.23	108.20
5	A	1096	A	C5-C6-N1	-5.04	115.18	117.70
5	A	876	A	C5-C6-N1	-5.04	115.18	117.70
5	A	1066	A	C5'-C4'-O4'	5.04	115.14	109.10
5	A	1499	A	C5-C6-N6	-5.04	119.67	123.70
5	A	1772	C	P-O5'-C5'	5.04	128.96	120.90
6	B	23	U	O4'-C1'-N1	5.04	112.23	108.20
5	A	20	C	P-O5'-C5'	5.03	128.96	120.90
5	A	397	U	O4'-C1'-N1	5.03	112.23	108.20
5	A	1288	G	O4'-C1'-N9	5.03	112.23	108.20
5	A	1390	C	N3-C4-N4	5.03	121.52	118.00
5	A	1025	A	C5-C6-N1	-5.03	115.18	117.70
5	A	2686	A	C5-C6-N1	-5.03	115.18	117.70
5	A	555	C	N3-C4-C5	-5.03	119.89	121.90
5	A	1241	C	C6-N1-C2	-5.03	118.29	120.30
5	A	1260	A	O4'-C1'-N9	5.03	112.22	108.20
5	A	1042	A	C5-C6-N6	-5.03	119.68	123.70
5	A	2854	A	C5-C6-N6	-5.03	119.68	123.70
5	A	232	U	C2-N1-C1'	5.03	123.73	117.70
5	A	1336	C	N3-C4-C5	-5.03	119.89	121.90
5	A	563	C	N3-C4-C5	-5.03	119.89	121.90
5	A	768	G	C6-C5-N7	-5.03	127.39	130.40
5	A	1519	C	N3-C4-N4	5.03	121.52	118.00
5	A	1541	A	C5-C6-N6	-5.03	119.68	123.70
6	B	76	A	O4'-C1'-N9	5.03	112.22	108.20
5	A	213	C	P-O5'-C5'	5.02	128.94	120.90
5	A	2918	G	C4-N9-C1'	5.02	133.03	126.50
5	A	376	A	C1'-O4'-C4'	-5.02	105.88	109.90
5	A	377	G	O4'-C1'-N9	5.02	112.22	108.20
5	A	716	G	P-O3'-C3'	5.02	125.73	119.70
5	A	880	C	O4'-C1'-N1	5.02	112.22	108.20
5	A	1999	A	O4'-C1'-N9	5.02	112.22	108.20
5	A	2914	C	N3-C4-C5	-5.02	119.89	121.90
5	A	868	A	O5'-C5'-C4'	5.02	121.24	111.70
5	A	2407	A	O4'-C1'-N9	5.02	112.22	108.20
5	A	623	A	O4'-C1'-N9	5.02	112.22	108.20
5	A	1117	G	O4'-C1'-N9	5.02	112.22	108.20
5	A	1347	A	C5-C6-N1	-5.02	115.19	117.70
5	A	2330	A	C5-C6-N6	-5.02	119.68	123.70
6	B	67	G	O4'-C1'-N9	5.02	112.22	108.20
5	A	382	G	O4'-C1'-N9	5.02	112.21	108.20

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	A	479	A	C5-C6-N1	-5.02	115.19	117.70
5	A	1861	C	N3-C4-C5	-5.02	119.89	121.90
5	A	2304	C	N3-C4-N4	5.02	121.51	118.00
5	A	2619	A	O4'-C1'-N9	5.02	112.22	108.20
5	A	2719	A	C8-N9-C4	-5.02	103.79	105.80
5	A	55	G	C5'-C4'-O4'	5.02	115.12	109.10
5	A	1175	A	C5-C6-N6	-5.01	119.69	123.70
5	A	1728	C	N3-C4-C5	-5.01	119.89	121.90
5	A	2049	A	C5-C6-N1	-5.01	115.19	117.70
5	A	2238	C	N3-C4-C5	-5.01	119.89	121.90
5	A	2893	A	C5-C6-N6	-5.01	119.69	123.70
5	A	1877	A	C5-C6-N1	-5.01	115.19	117.70
5	A	180	G	O4'-C1'-N9	5.01	112.21	108.20
5	A	220	A	C5-C6-N1	-5.01	115.19	117.70
6	B	42	G	O4'-C1'-N9	5.01	112.21	108.20
5	A	1204	C	N3-C4-C5	-5.01	119.90	121.90
5	A	1683	C	N3-C4-C5	-5.01	119.90	121.90
5	A	1877	A	C5-C6-N6	-5.01	119.69	123.70
5	A	2542	A	C5-C6-N6	-5.01	119.69	123.70
5	A	2777	A	C5-C6-N6	-5.01	119.69	123.70
5	A	821	A	C5-C6-N1	-5.00	115.20	117.70
5	A	1471	G	C6-C5-N7	-5.00	127.40	130.40
5	A	2037	C	N3-C4-C5	-5.00	119.90	121.90
5	A	2227	A	C5-C6-N1	-5.00	115.20	117.70
5	A	219	A	C5-C6-N6	-5.00	119.70	123.70
5	A	1075	A	C5-C6-N6	-5.00	119.70	123.70
5	A	1276	G	N1-C2-N2	-5.00	111.70	116.20
5	A	2079	C	N3-C4-C5	-5.00	119.90	121.90

There are no chirality outliers.

All (474) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	A	1005	A	Sidechain
5	A	1009	U	Sidechain
5	A	1022	G	Sidechain
5	A	1024	G	Sidechain
5	A	1043	G	Sidechain
5	A	1047	A	Sidechain
5	A	1051	C	Sidechain
5	A	1056	A	Sidechain
5	A	106	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	1064	U	Sidechain
5	A	1066	A	Sidechain
5	A	1068	G	Sidechain
5	A	1069	U	Sidechain
5	A	1074	A	Sidechain
5	A	1075	A	Sidechain
5	A	1102	G	Sidechain
5	A	1103	A	Sidechain
5	A	1105	G	Sidechain
5	A	1117	G	Sidechain
5	A	113	U	Sidechain
5	A	1135	G	Sidechain
5	A	1140	U	Sidechain
5	A	1142	A	Sidechain
5	A	1145	G	Sidechain
5	A	1146	C	Sidechain
5	A	116	G	Sidechain
5	A	1171	G	Sidechain
5	A	1172	A	Sidechain
5	A	118	A	Sidechain
5	A	1184	G	Sidechain
5	A	1187	U	Sidechain
5	A	1195	U	Sidechain
5	A	1205	U	Sidechain
5	A	1210	A	Sidechain
5	A	1212	U	Sidechain
5	A	1214	U	Sidechain
5	A	1216	C	Sidechain
5	A	1217	U	Sidechain
5	A	1236	G	Sidechain
5	A	1241	C	Sidechain
5	A	1244	A	Sidechain
5	A	1245	G	Sidechain
5	A	1246	G	Sidechain
5	A	1251	U	Sidechain
5	A	1263	G	Sidechain
5	A	1267	G	Sidechain
5	A	1276	G	Sidechain
5	A	1277	A	Sidechain
5	A	1278	G	Sidechain
5	A	1280	G	Sidechain
5	A	1281	C	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	1283	U	Sidechain
5	A	1311	G	Sidechain
5	A	132	C	Sidechain
5	A	1323	A	Sidechain
5	A	1331	C	Sidechain
5	A	1338	G	Sidechain
5	A	1350	U	Sidechain
5	A	1353	C	Sidechain
5	A	1359	G	Sidechain
5	A	1361	A	Sidechain
5	A	1363	G	Sidechain
5	A	1369	C	Sidechain
5	A	1370	C	Sidechain
5	A	1389	C	Sidechain
5	A	1390	C	Sidechain
5	A	1391	U	Sidechain
5	A	1394	G	Sidechain
5	A	14	A	Sidechain
5	A	1427	G	Sidechain
5	A	1428	G	Sidechain
5	A	1429	U	Sidechain
5	A	143	G	Sidechain
5	A	1431	G	Sidechain
5	A	1432	A	Sidechain
5	A	1433	U	Sidechain
5	A	144	A	Sidechain
5	A	1449	C	Sidechain
5	A	145	G	Sidechain
5	A	1451	U	Sidechain
5	A	1460	G	Sidechain
5	A	1471	G	Sidechain
5	A	1478	G	Sidechain
5	A	1479	G	Sidechain
5	A	1492	G	Sidechain
5	A	1493	C	Sidechain
5	A	1494	G	Sidechain
5	A	1495	C	Sidechain
5	A	1499	A	Sidechain
5	A	15	G	Sidechain
5	A	1503	G	Sidechain
5	A	1508	C	Sidechain
5	A	151	U	Sidechain

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	1511	C	Sidechain
5	A	1519	C	Sidechain
5	A	1521	G	Sidechain
5	A	1525	G	Sidechain
5	A	153	C	Sidechain
5	A	1538	G	Sidechain
5	A	1542	A	Sidechain
5	A	1547	U	Sidechain
5	A	1551	C	Sidechain
5	A	1561	G	Sidechain
5	A	1567	U	Sidechain
5	A	1574	G	Sidechain
5	A	1575	A	Sidechain
5	A	1576	G	Sidechain
5	A	1577	C	Sidechain
5	A	1580	A	Sidechain
5	A	1581	A	Sidechain
5	A	1586	G	Sidechain
5	A	1587	U	Sidechain
5	A	1588	A	Sidechain
5	A	1590	C	Sidechain
5	A	1591	G	Sidechain
5	A	1596	U	Sidechain
5	A	1603	U	Sidechain
5	A	1604	C	Sidechain
5	A	1605	C	Sidechain
5	A	1606	A	Sidechain
5	A	1610	U	Sidechain
5	A	1616	G	Sidechain
5	A	1617	A	Sidechain
5	A	1625	C	Sidechain
5	A	1626	U	Sidechain
5	A	1627	A	Sidechain
5	A	163	U	Sidechain
5	A	1632	G	Sidechain
5	A	1636	A	Sidechain
5	A	1637	G	Sidechain
5	A	1642	G	Sidechain
5	A	1650	C	Sidechain
5	A	1658	G	Sidechain
5	A	1674	G	Sidechain
5	A	1676	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	1708	U	Sidechain
5	A	1711	G	Sidechain
5	A	1713	A	Sidechain
5	A	1714	A	Sidechain
5	A	1726	G	Sidechain
5	A	1730	C	Sidechain
5	A	1732	G	Sidechain
5	A	1737	U	Sidechain
5	A	1738	U	Sidechain
5	A	1741	G	Sidechain
5	A	1754	U	Sidechain
5	A	1764	U	Sidechain
5	A	178	A	Sidechain
5	A	1782	G	Sidechain
5	A	1783	C	Sidechain
5	A	1784	A	Sidechain
5	A	1815	A	Sidechain
5	A	1821	G	Sidechain
5	A	1846	G	Sidechain
5	A	1852	G	Sidechain
5	A	1857	G	Sidechain
5	A	1859	C	Sidechain
5	A	1873	U	Sidechain
5	A	1923	C	Sidechain
5	A	1929	A	Sidechain
5	A	1932	G	Sidechain
5	A	1935	G	Sidechain
5	A	1944	U	Sidechain
5	A	1958	G	Sidechain
5	A	1960	U	Sidechain
5	A	1969	U	Sidechain
5	A	1993	G	Sidechain
5	A	2013	U	Sidechain
5	A	2027	A	Sidechain
5	A	2034	A	Sidechain
5	A	2058	G	Sidechain
5	A	2064	G	Sidechain
5	A	209	U	Sidechain
5	A	210	A	Sidechain
5	A	2116	G	Sidechain
5	A	213	C	Sidechain
5	A	2131	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	2134	A	Sidechain
5	A	2139	G	Sidechain
5	A	2142	C	Sidechain
5	A	215	G	Sidechain
5	A	2156	G	Sidechain
5	A	2157	C	Sidechain
5	A	2169	G	Sidechain
5	A	2173	G	Sidechain
5	A	2176	A	Sidechain
5	A	2183	G	Sidechain
5	A	2189	G	Sidechain
5	A	2194	G	Sidechain
5	A	2195	G	Sidechain
5	A	2209	U	Sidechain
5	A	2214	G	Sidechain
5	A	2215	U	Sidechain
5	A	2249	G	Sidechain
5	A	2254	A	Sidechain
5	A	229	A	Sidechain
5	A	2294	U	Sidechain
5	A	230	A	Sidechain
5	A	2316	A	Sidechain
5	A	2317	A	Sidechain
5	A	2318	G	Sidechain
5	A	2321	U	Sidechain
5	A	2332	G	Sidechain
5	A	2333	G	Sidechain
5	A	2334	U	Sidechain
5	A	2340	A	Sidechain
5	A	2342	C	Sidechain
5	A	235	G	Sidechain
5	A	2362	A	Sidechain
5	A	2373	U	Sidechain
5	A	2374	G	Sidechain
5	A	2377	U	Sidechain
5	A	2384	C	Sidechain
5	A	2386	U	Sidechain
5	A	2388	C	Sidechain
5	A	2391	G	Sidechain
5	A	241	C	Sidechain
5	A	2415	U	Sidechain
5	A	2419	U	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	243	G	Sidechain
5	A	2434	G	Sidechain
5	A	2436	A	Sidechain
5	A	2440	A	Sidechain
5	A	2442	G	Sidechain
5	A	2456	C	Sidechain
5	A	246	U	Sidechain
5	A	2483	G	Sidechain
5	A	2484	G	Sidechain
5	A	2491	U	Sidechain
5	A	2499	G	Sidechain
5	A	2505	A	Sidechain
5	A	2510	G	Sidechain
5	A	2518	G	Sidechain
5	A	2519	G	Sidechain
5	A	2523	G	Sidechain
5	A	2527	C	Sidechain
5	A	2534	G	Sidechain
5	A	2540	U	Sidechain
5	A	2558	G	Sidechain
5	A	2559	U	Sidechain
5	A	2563	C	Sidechain
5	A	2564	A	Sidechain
5	A	257	G	Sidechain
5	A	2581	U	Sidechain
5	A	2606	A	Sidechain
5	A	2611	G	Sidechain
5	A	2612	G	Sidechain
5	A	2626	G	Sidechain
5	A	2627	A	Sidechain
5	A	2656	G	Sidechain
5	A	2675	C	Sidechain
5	A	2682	U	Sidechain
5	A	269	G	Sidechain
5	A	2694	A	Sidechain
5	A	27	G	Sidechain
5	A	2710	C	Sidechain
5	A	2717	G	Sidechain
5	A	2720	C	Sidechain
5	A	2723	G	Sidechain
5	A	2725	U	Sidechain
5	A	2732	C	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	2737	G	Sidechain
5	A	2743	G	Sidechain
5	A	2744	C	Sidechain
5	A	2748	G	Sidechain
5	A	2749	U	Sidechain
5	A	275	A	Sidechain
5	A	2750	A	Sidechain
5	A	2753	U	Sidechain
5	A	2756	G	Sidechain
5	A	2760	G	Sidechain
5	A	2761	G	Sidechain
5	A	2764	G	Sidechain
5	A	2771	G	Sidechain
5	A	2778	A	Sidechain
5	A	2783	U	Sidechain
5	A	28	A	Sidechain
5	A	2811	G	Sidechain
5	A	2822	C	Sidechain
5	A	2829	G	Sidechain
5	A	2832	G	Sidechain
5	A	2833	U	Sidechain
5	A	2834	A	Sidechain
5	A	2861	U	Sidechain
5	A	2864	G	Sidechain
5	A	2867	U	Sidechain
5	A	2878	U	Sidechain
5	A	2879	G	Sidechain
5	A	288	C	Sidechain
5	A	2884	G	Sidechain
5	A	2885	A	Sidechain
5	A	2891	G	Sidechain
5	A	2897	G	Sidechain
5	A	290	U	Sidechain
5	A	2906	U	Sidechain
5	A	2907	A	Sidechain
5	A	2908	A	Sidechain
5	A	2910	C	Sidechain
5	A	2912	A	Sidechain
5	A	2915	G	Sidechain
5	A	2917	G	Sidechain
5	A	2922	U	Sidechain
5	A	2925	C	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	2926	C	Sidechain
5	A	296	G	Sidechain
5	A	298	U	Sidechain
5	A	3	U	Sidechain
5	A	31	C	Sidechain
5	A	312	G	Sidechain
5	A	316	G	Sidechain
5	A	33	U	Sidechain
5	A	34	U	Sidechain
5	A	342	A	Sidechain
5	A	343	A	Sidechain
5	A	344	G	Sidechain
5	A	346	G	Sidechain
5	A	347	G	Sidechain
5	A	349	C	Sidechain
5	A	350	U	Sidechain
5	A	351	G	Sidechain
5	A	354	A	Sidechain
5	A	357	G	Sidechain
5	A	358	C	Sidechain
5	A	36	G	Sidechain
5	A	367	G	Sidechain
5	A	37	C	Sidechain
5	A	377	G	Sidechain
5	A	385	G	Sidechain
5	A	399	C	Sidechain
5	A	40	U	Sidechain
5	A	404	C	Sidechain
5	A	410	G	Sidechain
5	A	414	C	Sidechain
5	A	42	G	Sidechain
5	A	434	U	Sidechain
5	A	441	C	Sidechain
5	A	442	C	Sidechain
5	A	443	G	Sidechain
5	A	480	C	Sidechain
5	A	481	U	Sidechain
5	A	483	C	Sidechain
5	A	494	A	Sidechain
5	A	496	A	Sidechain
5	A	504	A	Sidechain
5	A	510	G	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	512	G	Sidechain
5	A	514	G	Sidechain
5	A	519	A	Sidechain
5	A	520	G	Sidechain
5	A	527	A	Sidechain
5	A	530	A	Sidechain
5	A	535	G	Sidechain
5	A	540	G	Sidechain
5	A	541	G	Sidechain
5	A	546	G	Sidechain
5	A	573	C	Sidechain
5	A	575	A	Sidechain
5	A	583	G	Sidechain
5	A	587	C	Sidechain
5	A	59	G	Sidechain
5	A	591	U	Sidechain
5	A	597	G	Sidechain
5	A	598	U	Sidechain
5	A	599	G	Sidechain
5	A	605	G	Sidechain
5	A	613	U	Sidechain
5	A	614	G	Sidechain
5	A	629	G	Sidechain
5	A	63	G	Sidechain
5	A	631	G	Sidechain
5	A	644	G	Sidechain
5	A	645	C	Sidechain
5	A	646	A	Sidechain
5	A	65	A	Sidechain
5	A	651	U	Sidechain
5	A	665	G	Sidechain
5	A	668	G	Sidechain
5	A	67	A	Sidechain
5	A	674	G	Sidechain
5	A	676	G	Sidechain
5	A	678	A	Sidechain
5	A	680	G	Sidechain
5	A	696	C	Sidechain
5	A	704	U	Sidechain
5	A	720	C	Sidechain
5	A	729	G	Sidechain
5	A	73	A	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	732	A	Sidechain
5	A	735	U	Sidechain
5	A	74	U	Sidechain
5	A	745	C	Sidechain
5	A	757	C	Sidechain
5	A	758	A	Sidechain
5	A	759	G	Sidechain
5	A	760	G	Sidechain
5	A	767	U	Sidechain
5	A	768	G	Sidechain
5	A	771	U	Sidechain
5	A	772	G	Sidechain
5	A	773	G	Sidechain
5	A	775	G	Sidechain
5	A	784	C	Sidechain
5	A	796	A	Sidechain
5	A	802	G	Sidechain
5	A	804	G	Sidechain
5	A	81	G	Sidechain
5	A	823	G	Sidechain
5	A	825	G	Sidechain
5	A	83	G	Sidechain
5	A	850	U	Sidechain
5	A	855	G	Sidechain
5	A	858	U	Sidechain
5	A	871	G	Sidechain
5	A	878	G	Sidechain
5	A	88	G	Sidechain
5	A	881	U	Sidechain
5	A	89	U	Sidechain
5	A	892	U	Sidechain
5	A	894	A	Sidechain
5	A	895	G	Sidechain
5	A	897	G	Sidechain
5	A	900	U	Sidechain
5	A	903	G	Sidechain
5	A	905	G	Sidechain
5	A	911	G	Sidechain
5	A	912	C	Sidechain
5	A	918	U	Sidechain
5	A	923	C	Sidechain
5	A	924	U	Sidechain

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Group
5	A	930	C	Sidechain
5	A	934	U	Sidechain
5	A	939	G	Sidechain
5	A	940	G	Sidechain
5	A	941	U	Sidechain
5	A	942	U	Sidechain
5	A	944	C	Sidechain
5	A	945	C	Sidechain
5	A	946	G	Sidechain
5	A	948	A	Sidechain
5	A	960	U	Sidechain
5	A	967	G	Sidechain
5	A	969	C	Sidechain
5	A	970	A	Sidechain
5	A	972	U	Sidechain
5	A	975	C	Sidechain
5	A	987	A	Sidechain
5	A	988	G	Sidechain
6	B	10	G	Sidechain
6	B	106	C	Sidechain
6	B	108	C	Sidechain
6	B	109	C	Sidechain
6	B	16	G	Sidechain
6	B	22	G	Sidechain
6	B	31	G	Sidechain
6	B	33	U	Sidechain
6	B	38	U	Sidechain
6	B	4	G	Sidechain
6	B	45	C	Sidechain
6	B	51	A	Sidechain
6	B	74	G	Sidechain
6	B	8	G	Sidechain
6	B	84	G	Sidechain
8	D	139	TYR	Sidechain
8	D	150	ASP	Peptide
9	E	14	ALA	Peptide
14	L	55	MET	Peptide
14	L	69	ILE	Peptide
15	N	4	ARG	Sidechain
17	P	17	LEU	Peptide
17	P	51	ARG	Sidechain
17	P	99	TYR	Sidechain

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Group
21	T	61	GLY	Peptide
21	T	62	LYS	Peptide
21	T	87	SER	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	0	433	0	454	0	0
2	2	368	0	410	0	0
3	5	910	0	944	2	0
4	6	1044	0	1098	1	0
5	A	61914	0	31166	148	0
6	B	2542	0	1288	6	0
7	C	2129	0	2225	0	0
8	D	1568	0	1635	2	0
9	E	1567	0	1652	3	0
10	F	1413	0	1479	2	0
11	G	1246	0	1273	0	0
12	J	1134	0	1178	3	0
13	K	921	0	977	0	0
14	L	1082	0	1132	3	0
15	N	962	0	995	0	0
16	O	913	0	947	4	0
17	P	916	0	987	2	0
18	Q	940	0	1005	1	0
19	R	795	0	838	0	0
20	S	868	0	930	0	0
21	T	767	0	813	0	0
22	U	780	0	838	1	0
23	X	504	0	541	0	0
24	Y	441	0	478	0	0
All	All	86157	0	55283	174	0

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 1.

All (174) 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)
5:A:1799:G:H1	5:A:2011:U:H3	1.32	0.76
5:A:2557:U:H3	5:A:2564:A:H61	1.39	0.68
5:A:1672:A:H61	5:A:1684:U:H3	1.43	0.65
5:A:1339:A:C2	5:A:1679:A:C2	2.87	0.62
5:A:1976:C:H2'	5:A:1977:G:H5''	1.80	0.62
5:A:1938:C:H42	5:A:1950:G:H1	1.47	0.61
5:A:905:G:H22	5:A:966:U:H3	1.48	0.61
5:A:750:U:H3	5:A:775:G:H1	1.48	0.60
5:A:162:A:H3'	5:A:163:U:H5''	1.85	0.58
5:A:336:U:H3	5:A:391:A:H61	1.50	0.58
5:A:1070:G:H3'	5:A:1071:G:H5''	1.85	0.58
5:A:13:A:H62	5:A:571:U:H2'	1.69	0.57
5:A:1339:A:N1	5:A:1679:A:N1	2.51	0.57
5:A:321:U:H3'	5:A:322:A:H5''	1.87	0.56
5:A:1449:C:C6	5:A:1449:C:H5'	2.41	0.56
5:A:719:C:H2'	5:A:720:C:H5''	1.88	0.55
5:A:674:G:H2'	5:A:675:C:H5''	1.87	0.55
5:A:2859:G:H2'	5:A:2904:A:H61	1.70	0.55
5:A:2157:C:H42	5:A:2189:G:H1	1.55	0.55
5:A:2859:G:H1'	5:A:2908:A:H61	1.72	0.54
5:A:898:U:H3	5:A:973:G:H1	1.55	0.54
5:A:2500:A:C2	5:A:2509:C:C2	2.96	0.54
8:D:74:THR:HG22	8:D:75:ALA:H	1.72	0.53
5:A:924:U:H3	5:A:946:G:H22	1.56	0.53
5:A:2681:U:H3	5:A:2697:G:H1	1.55	0.53
5:A:719:C:C2'	5:A:720:C:H5''	2.38	0.53
5:A:1578:G:N1	5:A:1588:A:C2	2.77	0.52
5:A:451:C:H4'	5:A:452:C:H5'	1.92	0.52
5:A:1759:U:H3	5:A:1773:G:H22	1.57	0.52
5:A:1461:A:H61	5:A:1625:C:H3'	1.75	0.51
5:A:2543:U:H3	5:A:2599:G:H1	1.59	0.51
5:A:674:G:C2'	5:A:675:C:H5''	2.41	0.51
3:5:42:VAL:HG23	3:5:178:VAL:HB	1.93	0.50
6:B:37:A:H2'	6:B:38:U:C6	2.46	0.50
5:A:2196:U:H3	5:A:2200:A:H62	1.58	0.50
5:A:2858:U:H3'	5:A:2859:G:H5''	1.94	0.49
5:A:2856:G:H3'	5:A:2858:U:H3	1.76	0.49
5:A:1647:U:H3'	5:A:1648:A:H5'	1.93	0.49
5:A:584:A:C2	5:A:585:G:C5	3.01	0.49
5:A:2552:G:H2'	5:A:2553:G:H5''	1.93	0.49
5:A:2862:A:H61	5:A:2906:U:H3	1.59	0.49
5:A:1525:G:H21	5:A:1605:C:H4'	1.78	0.49

Continued on next page...

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:U:100:VAL:HG13	22:U:102:ASP:H	1.78	0.49
5:A:944:C:C4	5:A:945:C:C5	3.01	0.48
5:A:1574:G:H2'	5:A:1575:A:C2	2.48	0.48
5:A:1761:G:H3'	5:A:1762:G:C5'	2.43	0.48
5:A:1530:G:H3'	5:A:1531:G:H5''	1.94	0.48
5:A:45:G:H2'	5:A:218:G:C8	2.48	0.48
5:A:1970:C:H41	5:A:1992:C:H41	1.62	0.48
5:A:2341:U:H2'	5:A:2342:C:H5''	1.94	0.48
5:A:2123:A:H61	5:A:2224:U:H3	1.60	0.48
5:A:924:U:H2'	5:A:925:A:H5''	1.96	0.48
5:A:1976:C:C2'	5:A:1977:G:H5''	2.44	0.47
5:A:947:A:H3'	5:A:948:A:C8	2.49	0.47
5:A:1579:A:C2	5:A:1588:A:C2	3.02	0.47
5:A:760:G:H22	5:A:764:C:H5''	1.80	0.47
16:O:103:HIS:CD2	16:O:104:GLY:H	2.32	0.47
6:B:107:G:C5	6:B:108:C:C4	3.03	0.46
14:L:2:LYS:HG3	14:L:4:HIS:H	1.80	0.46
5:A:269:G:H2'	5:A:270:C:H5''	1.98	0.46
5:A:2482:A:C2	5:A:2533:U:N3	2.84	0.45
5:A:1276:G:N2	5:A:1277:A:H62	2.14	0.45
16:O:103:HIS:CG	16:O:104:GLY:N	2.85	0.45
5:A:67:A:N1	5:A:74:U:C5	2.85	0.45
16:O:63:LEU:HD13	16:O:63:LEU:H	1.81	0.45
10:F:175:MET:H	10:F:176:PRO:HD2	1.82	0.45
5:A:2730:U:H3	5:A:2735:A:H61	1.64	0.45
5:A:1627:A:H3'	5:A:1628:G:C8	2.52	0.45
5:A:321:U:H3'	5:A:322:A:C5'	2.45	0.45
5:A:1110:C:H3'	5:A:1111:U:H5''	1.98	0.45
5:A:1021:A:H3'	5:A:1022:G:H5''	1.99	0.44
5:A:1992:C:H3'	5:A:1993:G:C5'	2.47	0.44
5:A:767:U:C5	5:A:768:G:C8	3.04	0.44
5:A:1076:G:H21	5:A:2495:C:H4'	1.81	0.44
5:A:19:G:C6	5:A:568:G:C6	3.05	0.44
5:A:1867:C:H5''	5:A:1928:A:H61	1.82	0.44
5:A:42:G:C8	5:A:42:G:H5'	2.53	0.44
5:A:2904:A:C2	5:A:2907:A:N6	2.86	0.44
12:J:57:ILE:HD13	12:J:57:ILE:H	1.82	0.44
5:A:242:U:H3	5:A:261:C:H42	1.65	0.44
5:A:1339:A:C6	5:A:1679:A:C6	3.05	0.44
5:A:1676:G:H2'	5:A:1677:A:H5'	2.00	0.44
5:A:400:U:H1'	5:A:401:C:H5''	1.99	0.44

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:A:342:A:N6	5:A:382:G:H1	2.15	0.44
5:A:518:A:H2'	5:A:519:A:H5''	2.00	0.44
5:A:2144:G:H21	5:A:2148:A:H8	1.66	0.43
4:6:12:GLN:HE21	5:A:1114:G:H5'	1.83	0.43
5:A:855:G:H21	9:E:74:ARG:HB3	1.83	0.43
5:A:902:G:C2	5:A:970:A:C2	3.06	0.43
5:A:340:U:H3	5:A:385:G:H1	1.66	0.43
5:A:1488:G:H1	5:A:1597:C:H42	1.64	0.43
5:A:777:C:H2'	5:A:778:C:C6	2.53	0.43
5:A:2715:G:C5	5:A:2716:U:C4	3.06	0.43
5:A:2716:U:C5	5:A:2717:G:C6	3.06	0.43
5:A:2179:U:H2'	5:A:2180:U:C6	2.53	0.43
5:A:1214:U:C4	5:A:1215:U:C4	3.07	0.43
17:P:84:ILE:HG23	17:P:86:VAL:H	1.83	0.43
5:A:925:A:H61	5:A:945:C:H42	1.66	0.43
5:A:695:G:C2	5:A:696:C:C2	3.06	0.43
5:A:1517:A:H2'	5:A:1568:G:C2	2.53	0.43
5:A:1710:A:C3'	5:A:1711:G:H5''	2.49	0.43
5:A:65:A:H61	5:A:89:U:H3	1.67	0.43
5:A:568:G:C6	5:A:569:C:C4	3.07	0.43
5:A:1472:G:H2'	5:A:1473:A:C8	2.53	0.43
5:A:78:U:H3	5:A:107:G:H1	1.65	0.43
5:A:198:A:H61	5:A:201:C:H3'	1.84	0.43
5:A:1673:G:H2'	5:A:1674:G:C8	2.54	0.43
6:B:22:G:H21	6:B:25:A:H2	1.65	0.43
5:A:584:A:C2	5:A:599:G:N1	2.87	0.42
5:A:902:G:C6	5:A:903:G:C6	3.07	0.42
5:A:1067:A:H3'	5:A:1067:A:C8	2.54	0.42
5:A:1367:G:H8	5:A:1367:G:HO2'	1.67	0.42
5:A:30:G:C5	5:A:31:C:C4	3.07	0.42
9:E:126:LEU:HG	9:E:128:ASP:H	1.84	0.42
5:A:2216:A:H2'	5:A:2217:U:H5'	2.01	0.42
5:A:519:A:H8	5:A:519:A:H5'	1.84	0.42
5:A:788:G:H2'	5:A:789:C:C6	2.54	0.42
5:A:26:G:C5	5:A:27:G:C6	3.07	0.42
14:L:105:LEU:HG	14:L:107:ALA:H	1.84	0.42
5:A:972:U:H2'	5:A:973:G:H5''	2.02	0.42
12:J:102:LEU:H	12:J:102:LEU:HD12	1.85	0.42
5:A:703:G:H1'	5:A:704:U:H5	1.84	0.42
5:A:1263:G:H2'	5:A:1264:G:H5''	2.01	0.42
5:A:1579:A:C2	5:A:1588:A:H2	2.37	0.42

*Continued on next page...*

*Continued from previous page...*

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
10:F:70:ALA:HB3	10:F:82:GLY:H	1.85	0.42
5:A:2214:G:C6	5:A:2215:U:C4	3.08	0.42
5:A:1178:U:H1'	12:J:78:HIS:CE1	2.54	0.42
5:A:1024:G:H1	5:A:1031:C:H42	1.68	0.42
9:E:38:LEU:HD23	9:E:38:LEU:H	1.84	0.42
5:A:77:U:H3	5:A:108:A:H61	1.67	0.42
5:A:768:G:C6	5:A:769:A:C6	3.08	0.42
5:A:2146:A:H4'	5:A:2176:A:C2	2.54	0.42
5:A:354:A:N6	5:A:1251:U:H3	2.17	0.42
5:A:1712:G:H22	5:A:2020:U:H3'	1.85	0.42
8:D:156:LYS:HD2	8:D:156:LYS:H	1.85	0.42
5:A:686:C:H2'	5:A:687:U:C6	2.55	0.41
3:5:17:ARG:HA	3:5:211:ASN:HD21	1.84	0.41
5:A:898:U:C2	5:A:974:A:C2	3.08	0.41
5:A:412:A:C8	5:A:414:C:C5	3.08	0.41
5:A:1084:A:H2'	5:A:1085:G:H5''	2.03	0.41
5:A:1709:A:H61	5:A:2025:C:H42	1.68	0.41
5:A:674:G:H2'	5:A:675:C:C5'	2.50	0.41
6:B:108:C:C4	6:B:109:C:C4	3.09	0.41
17:P:35:GLY:H	17:P:82:ALA:HB1	1.85	0.41
5:A:2731:G:H21	5:A:2733:C:N4	2.18	0.41
5:A:2294:U:C4	5:A:2295:A:C6	3.08	0.41
5:A:856:G:H2'	5:A:857:U:C6	2.56	0.41
5:A:2889:A:C2	5:A:2890:U:C2	3.07	0.41
5:A:630:A:C2	5:A:857:U:H1'	2.55	0.41
5:A:2626:G:C5	5:A:2627:A:C6	3.09	0.41
5:A:2484:G:C5	5:A:2485:C:C4	3.08	0.41
5:A:2626:G:C2	5:A:2627:A:C2	3.09	0.41
5:A:1428:G:C2	5:A:1429:U:C2	3.09	0.41
5:A:2831:A:C2	5:A:2832:G:C4	3.09	0.41
5:A:1365:U:C6	5:A:1366:C:C5	3.09	0.41
18:Q:88:ILE:HG13	18:Q:89:GLU:H	1.86	0.41
5:A:2715:G:C6	5:A:2716:U:C4	3.08	0.41
5:A:1339:A:C2	5:A:1679:A:N1	2.90	0.40
5:A:1515:C:H2'	5:A:1516:A:C8	2.57	0.40
5:A:2775:U:H2'	5:A:2776:G:H5'	2.03	0.40
6:B:1:U:H3	6:B:115:G:H1	1.68	0.40
5:A:2130:G:H2'	5:A:2131:U:H5''	2.03	0.40
16:O:3:THR:HG23	16:O:4:LYS:H	1.86	0.40
5:A:2259:G:C6	5:A:2260:U:C4	3.10	0.40
5:A:152:C:H2'	5:A:153:C:C6	2.56	0.40

*Continued on next page...*

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
5:A:2753:U:H2'	5:A:2754:A:C8	2.56	0.40
5:A:1098:C:H2'	5:A:1099:C:C5	2.55	0.40
5:A:1553:A:C5	5:A:1554:U:C2	3.10	0.40
5:A:629:G:H5'	5:A:1288:G:H21	1.86	0.40
5:A:719:C:H2'	5:A:720:C:C5'	2.50	0.40
5:A:720:C:H41	14:L:42:SER:HB2	1.86	0.40
5:A:67:A:C2	5:A:74:U:C6	3.09	0.40
6:B:73:G:C6	6:B:74:G:C6	3.09	0.40
5:A:2444:G:C6	5:A:2445:C:N3	2.90	0.40

There are no symmetry-related clashes.

## 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 PDB entries followed by that with respect to all EM entries.

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	
1	0	53/59 (90%)	40 (76%)	10 (19%)	3 (6%)	2	28
2	2	42/44 (96%)	38 (90%)	2 (5%)	2 (5%)	3	32
3	5	116/232 (50%)	96 (83%)	11 (10%)	9 (8%)	1	20
4	6	139/141 (99%)	117 (84%)	15 (11%)	7 (5%)	3	31
7	C	275/277 (99%)	224 (82%)	33 (12%)	18 (6%)	1	25
8	D	204/209 (98%)	158 (78%)	38 (19%)	8 (4%)	4	36
9	E	204/207 (99%)	166 (81%)	19 (9%)	19 (9%)	1	16
10	F	177/179 (99%)	136 (77%)	27 (15%)	14 (8%)	1	19
11	G	161/179 (90%)	150 (93%)	9 (6%)	2 (1%)	16	61
12	J	141/145 (97%)	117 (83%)	14 (10%)	10 (7%)	1	22
13	K	120/122 (98%)	103 (86%)	11 (9%)	6 (5%)	3	31
14	L	144/146 (99%)	105 (73%)	24 (17%)	15 (10%)	1	12
15	N	118/120 (98%)	96 (81%)	19 (16%)	3 (2%)	7	46

Continued on next page...

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	O	118/120 (98%)	87 (74%)	18 (15%)	13 (11%)	0	11
17	P	110/115 (96%)	71 (64%)	23 (21%)	16 (14%)	0	6
18	Q	115/119 (97%)	104 (90%)	10 (9%)	1 (1%)	21	67
19	R	100/102 (98%)	79 (79%)	13 (13%)	8 (8%)	1	19
20	S	110/113 (97%)	97 (88%)	8 (7%)	5 (4%)	3	33
21	T	93/95 (98%)	70 (75%)	14 (15%)	9 (10%)	1	14
22	U	101/103 (98%)	71 (70%)	18 (18%)	12 (12%)	0	9
23	X	59/66 (89%)	53 (90%)	4 (7%)	2 (3%)	5	40
24	Y	54/59 (92%)	47 (87%)	5 (9%)	2 (4%)	4	38
All	All	2754/2952 (93%)	2225 (81%)	345 (12%)	184 (7%)	3	24

All (184) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	5	41	THR
3	5	209	VAL
3	5	212	VAL
4	6	93	ASN
7	C	34	LEU
7	C	40	LYS
7	C	260	ARG
7	C	266	SER
9	E	22	SER
9	E	75	GLN
9	E	147	SER
9	E	162	ALA
10	F	22	TYR
10	F	118	SER
10	F	132	ILE
14	L	10	GLU
14	L	57	LEU
14	L	73	GLU
14	L	74	TYR
16	O	34	PHE
16	O	56	ALA
17	P	16	ASP
17	P	19	ALA
17	P	25	THR
17	P	63	LYS

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
17	P	80	LYS
17	P	86	VAL
18	Q	89	GLU
19	R	48	VAL
20	S	41	ARG
20	S	90	MET
21	T	69	TYR
21	T	85	ALA
22	U	25	ALA
22	U	26	ALA
22	U	41	VAL
22	U	61	ALA
22	U	74	LYS
23	X	30	PHE
1	0	49	TYR
2	2	38	GLY
3	5	199	ALA
7	C	27	ASP
7	C	143	ASN
7	C	156	ARG
7	C	199	GLN
8	D	128	GLN
8	D	145	SER
8	D	206	VAL
9	E	66	ARG
9	E	121	ASN
10	F	38	MET
10	F	67	VAL
10	F	89	VAL
10	F	152	MET
12	J	27	GLY
12	J	46	THR
12	J	127	ARG
13	K	110	ASN
14	L	15	THR
14	L	107	ALA
14	L	119	LYS
14	L	145	VAL
16	O	12	LEU
16	O	93	VAL
16	O	102	TYR
17	P	65	SER

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
17	P	92	VAL
17	P	113	ILE
21	T	62	LYS
21	T	65	ARG
21	T	66	VAL
2	2	42	LEU
3	5	4	LYS
3	5	52	PRO
3	5	201	PRO
4	6	19	ASN
7	C	32	SER
8	D	48	ALA
9	E	7	TYR
9	E	11	GLY
9	E	15	GLY
9	E	26	ILE
9	E	49	HIS
9	E	81	PRO
9	E	82	GLN
9	E	157	ALA
10	F	175	MET
11	G	159	LYS
12	J	126	TYR
14	L	20	GLY
14	L	24	GLY
14	L	56	PRO
14	L	64	ARG
14	L	65	GLY
15	N	7	GLY
16	O	37	ASN
16	O	41	TYR
16	O	61	LYS
16	O	100	TYR
16	O	104	GLY
17	P	21	ARG
17	P	31	LYS
17	P	96	LYS
19	R	29	ALA
19	R	31	GLU
19	R	43	GLY
19	R	44	ASP
20	S	99	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
21	T	3	ASP
21	T	9	LYS
22	U	5	LYS
22	U	8	LYS
22	U	12	ILE
22	U	94	ALA
24	Y	16	PRO
1	0	43	CYS
3	5	206	GLY
4	6	26	PRO
4	6	27	ALA
7	C	52	ARG
7	C	68	LYS
7	C	232	HIS
8	D	37	GLN
8	D	87	GLU
9	E	36	ALA
9	E	95	ARG
10	F	68	THR
12	J	41	HIS
12	J	49	VAL
13	K	26	GLY
13	K	35	ILE
13	K	81	GLU
13	K	91	LYS
14	L	139	ALA
15	N	73	GLU
15	N	112	ALA
16	O	22	LEU
16	O	47	ASP
17	P	37	ARG
21	T	70	THR
22	U	53	GLN
23	X	40	THR
3	5	179	SER
4	6	30	GLN
7	C	37	LEU
7	C	84	ASP
7	C	123	ASP
7	C	155	VAL
8	D	86	VAL
8	D	149	VAL

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
9	E	167	ALA
10	F	45	GLN
12	J	13	GLU
12	J	66	THR
12	J	85	LEU
16	O	52	THR
17	P	59	PHE
17	P	98	TYR
19	R	98	GLU
20	S	12	ILE
21	T	31	ASP
1	0	45	ALA
4	6	119	ALA
9	E	58	ARG
10	F	81	GLU
10	F	109	PRO
10	F	110	ARG
11	G	166	GLU
12	J	110	LEU
14	L	105	LEU
17	P	38	GLU
22	U	33	VAL
22	U	42	LYS
24	Y	28	LEU
13	K	27	GLY
19	R	17	GLY
7	C	36	PRO
7	C	99	GLY
9	E	181	ILE
4	6	97	VAL
10	F	44	VAL
19	R	42	GLY
20	S	35	ILE

### 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 PDB entries followed by that with respect to all EM entries.

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	
1	0	49/53 (92%)	49 (100%)	0	100	100
2	2	39/39 (100%)	38 (97%)	1 (3%)	54	80
3	5	98/185 (53%)	93 (95%)	5 (5%)	29	66
4	6	110/110 (100%)	110 (100%)	0	100	100
7	C	225/225 (100%)	213 (95%)	12 (5%)	28	64
8	D	167/170 (98%)	157 (94%)	10 (6%)	24	60
9	E	169/170 (99%)	163 (96%)	6 (4%)	42	74
10	F	154/154 (100%)	147 (96%)	7 (4%)	34	69
11	G	138/151 (91%)	133 (96%)	5 (4%)	42	74
12	J	122/123 (99%)	113 (93%)	9 (7%)	17	54
13	K	101/101 (100%)	98 (97%)	3 (3%)	48	77
14	L	110/110 (100%)	107 (97%)	3 (3%)	52	79
15	N	100/100 (100%)	97 (97%)	3 (3%)	48	77
16	O	93/93 (100%)	90 (97%)	3 (3%)	46	76
17	P	97/100 (97%)	90 (93%)	7 (7%)	18	55
18	Q	96/98 (98%)	95 (99%)	1 (1%)	82	92
19	R	84/84 (100%)	79 (94%)	5 (6%)	24	60
20	S	93/93 (100%)	91 (98%)	2 (2%)	60	83
21	T	85/85 (100%)	83 (98%)	2 (2%)	57	82
22	U	87/87 (100%)	84 (97%)	3 (3%)	44	75
23	X	54/57 (95%)	51 (94%)	3 (6%)	26	62
24	Y	51/53 (96%)	51 (100%)	0	100	100
All	All	2322/2441 (95%)	2232 (96%)	90 (4%)	43	72

All (90) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	2	19	ARG
3	5	3	LYS
3	5	7	LYS
3	5	47	ARG
3	5	212	VAL
3	5	217	THR
7	C	13	ARG
7	C	14	ARG

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
7	C	40	LYS
7	C	68	LYS
7	C	77	ARG
7	C	91	ILE
7	C	116	ILE
7	C	154	LEU
7	C	164	VAL
7	C	182	ARG
7	C	201	GLU
7	C	274	ARG
8	D	18	GLU
8	D	37	GLN
8	D	42	GLU
8	D	74	THR
8	D	92	GLU
8	D	98	LYS
8	D	115	LYS
8	D	130	ARG
8	D	141	ARG
8	D	167	GLU
9	E	34	PHE
9	E	38	LEU
9	E	66	ARG
9	E	83	TRP
9	E	196	LYS
9	E	206	LEU
10	F	8	TYR
10	F	79	LEU
10	F	94	GLU
10	F	96	MET
10	F	153	ASP
10	F	157	VAL
10	F	169	LEU
11	G	28	LYS
11	G	96	ARG
11	G	99	LYS
11	G	120	GLU
11	G	164	ARG
12	J	2	ARG
12	J	26	LEU
12	J	46	THR
12	J	57	ILE

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
12	J	69	LYS
12	J	73	LYS
12	J	126	TYR
12	J	130	GLU
12	J	134	GLU
13	K	3	GLN
13	K	53	LYS
13	K	90	ASP
14	L	50	PHE
14	L	51	GLU
14	L	55	MET
15	N	8	ARG
15	N	14	LYS
15	N	93	GLU
16	O	63	LEU
16	O	94	VAL
16	O	97	ARG
17	P	37	ARG
17	P	38	GLU
17	P	48	ILE
17	P	64	ILE
17	P	74	PHE
17	P	85	GLU
17	P	104	ARG
18	Q	66	ASN
19	R	10	LYS
19	R	28	GLU
19	R	36	GLU
19	R	54	GLU
19	R	98	GLU
20	S	2	GLN
20	S	11	ARG
21	T	57	MET
21	T	91	GLU
22	U	15	LYS
22	U	33	VAL
22	U	90	LYS
23	X	15	GLU
23	X	17	LYS
23	X	45	GLU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (17) such sidechains are listed below:

Mol	Chain	Res	Type
1	0	19	HIS
2	2	16	HIS
3	5	211	ASN
4	6	117	ASN
7	C	95	ASN
8	D	50	GLN
10	F	2	ASN
10	F	37	ASN
10	F	172	GLN
11	G	23	ASN
11	G	39	HIS
13	K	3	GLN
14	L	38	GLN
15	N	61	GLN
16	O	103	HIS
17	P	77	HIS
20	S	2	GLN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
5	A	2882/2927 (98%)	895 (31%)	205 (7%)
6	B	118/119 (99%)	24 (20%)	3 (2%)
All	All	3000/3046 (98%)	919 (30%)	208 (6%)

All (919) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
5	A	2	G
5	A	3	U
5	A	4	U
5	A	8	U
5	A	10	A
5	A	11	G
5	A	12	A
5	A	13	A
5	A	14	A
5	A	41	A
5	A	42	G
5	A	46	C
5	A	50	U
5	A	51	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
5	A	61	A
5	A	64	A
5	A	71	A
5	A	72	U
5	A	74	U
5	A	75	G
5	A	82	G
5	A	83	G
5	A	84	A
5	A	85	G
5	A	88	G
5	A	90	A
5	A	91	A
5	A	93	C
5	A	95	A
5	A	96	G
5	A	99	U
5	A	100	U
5	A	101	G
5	A	104	C
5	A	111	U
5	A	112	U
5	A	117	A
5	A	118	A
5	A	119	U
5	A	121	G
5	A	124	A
5	A	125	A
5	A	138	U
5	A	140	A
5	A	147	G
5	A	150	A
5	A	151	U
5	A	152	C
5	A	153	C
5	A	161	A
5	A	163	U
5	A	164	U
5	A	176	A
5	A	177	G
5	A	179	A
5	A	180	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	183	A
5	A	186	C
5	A	187	C
5	A	196	U
5	A	199	A
5	A	202	A
5	A	207	A
5	A	208	G
5	A	218	G
5	A	219	A
5	A	222	A
5	A	224	A
5	A	225	A
5	A	226	A
5	A	230	A
5	A	231	A
5	A	232	U
5	A	233	G
5	A	236	A
5	A	247	A
5	A	248	G
5	A	251	G
5	A	264	G
5	A	270	C
5	A	275	A
5	A	283	G
5	A	287	G
5	A	291	C
5	A	298	U
5	A	299	U
5	A	300	G
5	A	301	U
5	A	302	A
5	A	309	U
5	A	310	C
5	A	311	U
5	A	312	G
5	A	313	U
5	A	314	A
5	A	315	C
5	A	317	G
5	A	318	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	319	G
5	A	321	U
5	A	322	A
5	A	323	C
5	A	324	A
5	A	325	A
5	A	326	A
5	A	327	G
5	A	331	C
5	A	344	G
5	A	345	A
5	A	346	G
5	A	353	A
5	A	354	A
5	A	355	A
5	A	361	G
5	A	362	C
5	A	366	A
5	A	373	A
5	A	374	A
5	A	375	C
5	A	376	A
5	A	377	G
5	A	390	A
5	A	393	U
5	A	396	G
5	A	397	U
5	A	399	C
5	A	400	U
5	A	401	C
5	A	402	U
5	A	403	C
5	A	406	G
5	A	407	A
5	A	408	G
5	A	410	G
5	A	411	G
5	A	412	A
5	A	413	U
5	A	414	C
5	A	415	C
5	A	431	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	433	G
5	A	434	U
5	A	435	G
5	A	436	A
5	A	437	A
5	A	443	G
5	A	451	C
5	A	452	C
5	A	453	G
5	A	458	G
5	A	459	A
5	A	475	A
5	A	476	A
5	A	482	C
5	A	485	U
5	A	486	A
5	A	488	U
5	A	491	C
5	A	498	U
5	A	499	G
5	A	500	A
5	A	502	C
5	A	504	A
5	A	512	G
5	A	513	A
5	A	517	A
5	A	519	A
5	A	520	G
5	A	522	U
5	A	527	A
5	A	528	G
5	A	540	G
5	A	546	G
5	A	550	G
5	A	551	A
5	A	554	U
5	A	555	C
5	A	571	U
5	A	573	C
5	A	574	A
5	A	576	G
5	A	577	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	578	A
5	A	579	G
5	A	583	G
5	A	589	G
5	A	593	A
5	A	594	C
5	A	600	A
5	A	601	U
5	A	606	U
5	A	607	G
5	A	610	U
5	A	611	U
5	A	612	U
5	A	615	U
5	A	617	G
5	A	619	A
5	A	629	G
5	A	630	A
5	A	631	G
5	A	632	U
5	A	646	A
5	A	647	A
5	A	648	G
5	A	651	U
5	A	658	A
5	A	659	A
5	A	660	G
5	A	661	A
5	A	662	U
5	A	663	G
5	A	667	A
5	A	668	G
5	A	673	A
5	A	675	C
5	A	678	A
5	A	679	A
5	A	683	A
5	A	691	U
5	A	692	A
5	A	697	G
5	A	698	C
5	A	699	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	700	U
5	A	701	G
5	A	703	G
5	A	704	U
5	A	716	G
5	A	717	A
5	A	720	C
5	A	733	U
5	A	734	C
5	A	755	U
5	A	756	U
5	A	768	G
5	A	769	A
5	A	777	C
5	A	789	C
5	A	794	U
5	A	795	G
5	A	800	G
5	A	809	U
5	A	811	A
5	A	812	G
5	A	823	G
5	A	824	G
5	A	828	A
5	A	829	A
5	A	831	U
5	A	832	G
5	A	833	C
5	A	835	A
5	A	836	A
5	A	837	U
5	A	838	C
5	A	840	A
5	A	852	G
5	A	853	C
5	A	859	C
5	A	866	A
5	A	868	A
5	A	874	U
5	A	875	U
5	A	876	A
5	A	877	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	878	G
5	A	895	G
5	A	901	U
5	A	904	A
5	A	906	G
5	A	912	C
5	A	913	A
5	A	919	U
5	A	925	A
5	A	932	C
5	A	933	C
5	A	934	U
5	A	937	C
5	A	938	G
5	A	942	U
5	A	943	A
5	A	944	C
5	A	945	C
5	A	946	G
5	A	948	A
5	A	954	U
5	A	957	A
5	A	964	A
5	A	973	G
5	A	976	U
5	A	977	U
5	A	985	G
5	A	987	A
5	A	990	C
5	A	992	G
5	A	998	G
5	A	999	A
5	A	1007	G
5	A	1008	A
5	A	1019	A
5	A	1020	A
5	A	1021	A
5	A	1022	G
5	A	1027	A
5	A	1028	C
5	A	1029	A
5	A	1030	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1031	C
5	A	1035	G
5	A	1037	C
5	A	1042	A
5	A	1051	C
5	A	1054	A
5	A	1055	A
5	A	1057	G
5	A	1058	U
5	A	1059	A
5	A	1066	A
5	A	1068	G
5	A	1071	G
5	A	1072	A
5	A	1079	U
5	A	1080	G
5	A	1081	U
5	A	1085	G
5	A	1090	U
5	A	1091	U
5	A	1092	A
5	A	1094	A
5	A	1095	C
5	A	1099	C
5	A	1103	A
5	A	1105	G
5	A	1106	U
5	A	1107	U
5	A	1108	G
5	A	1111	U
5	A	1113	A
5	A	1114	G
5	A	1115	A
5	A	1116	A
5	A	1117	G
5	A	1118	C
5	A	1119	A
5	A	1121	C
5	A	1123	A
5	A	1124	C
5	A	1125	C
5	A	1129	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1130	A
5	A	1131	A
5	A	1133	G
5	A	1134	A
5	A	1135	G
5	A	1145	G
5	A	1153	G
5	A	1154	U
5	A	1156	G
5	A	1158	G
5	A	1160	G
5	A	1161	A
5	A	1163	U
5	A	1173	A
5	A	1174	A
5	A	1175	A
5	A	1176	U
5	A	1177	G
5	A	1178	U
5	A	1179	A
5	A	1181	C
5	A	1182	G
5	A	1188	A
5	A	1201	A
5	A	1209	G
5	A	1210	A
5	A	1211	C
5	A	1212	U
5	A	1215	U
5	A	1216	C
5	A	1217	U
5	A	1218	U
5	A	1221	A
5	A	1222	A
5	A	1226	U
5	A	1227	G
5	A	1228	G
5	A	1231	G
5	A	1244	A
5	A	1245	G
5	A	1246	G
5	A	1250	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1251	U
5	A	1252	G
5	A	1260	A
5	A	1261	C
5	A	1262	C
5	A	1264	G
5	A	1269	A
5	A	1270	C
5	A	1271	U
5	A	1276	G
5	A	1277	A
5	A	1284	A
5	A	1288	G
5	A	1292	G
5	A	1293	A
5	A	1295	U
5	A	1296	G
5	A	1305	A
5	A	1311	G
5	A	1312	A
5	A	1314	A
5	A	1316	A
5	A	1325	A
5	A	1326	A
5	A	1331	C
5	A	1339	A
5	A	1340	A
5	A	1341	U
5	A	1350	U
5	A	1353	C
5	A	1358	G
5	A	1360	A
5	A	1366	C
5	A	1371	G
5	A	1380	U
5	A	1381	A
5	A	1382	G
5	A	1388	A
5	A	1389	C
5	A	1391	U
5	A	1398	A
5	A	1404	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1405	A
5	A	1417	A
5	A	1418	U
5	A	1419	G
5	A	1422	C
5	A	1423	A
5	A	1424	A
5	A	1426	A
5	A	1427	G
5	A	1431	G
5	A	1435	U
5	A	1437	C
5	A	1438	C
5	A	1445	A
5	A	1446	C
5	A	1449	C
5	A	1451	U
5	A	1455	C
5	A	1457	U
5	A	1458	U
5	A	1459	U
5	A	1460	G
5	A	1461	A
5	A	1462	G
5	A	1463	C
5	A	1467	G
5	A	1473	A
5	A	1474	C
5	A	1482	G
5	A	1483	A
5	A	1484	U
5	A	1489	U
5	A	1490	A
5	A	1493	C
5	A	1494	G
5	A	1495	C
5	A	1496	G
5	A	1497	G
5	A	1498	U
5	A	1500	U
5	A	1501	U
5	A	1504	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1505	U
5	A	1507	U
5	A	1508	C
5	A	1513	U
5	A	1514	C
5	A	1518	G
5	A	1522	U
5	A	1523	U
5	A	1525	G
5	A	1529	G
5	A	1531	G
5	A	1536	A
5	A	1539	C
5	A	1540	A
5	A	1541	A
5	A	1542	A
5	A	1543	U
5	A	1544	C
5	A	1545	C
5	A	1548	U
5	A	1551	C
5	A	1555	A
5	A	1556	A
5	A	1557	G
5	A	1562	A
5	A	1563	G
5	A	1565	U
5	A	1566	G
5	A	1567	U
5	A	1569	A
5	A	1575	A
5	A	1576	G
5	A	1577	C
5	A	1581	A
5	A	1582	U
5	A	1583	A
5	A	1584	U
5	A	1585	A
5	A	1586	G
5	A	1590	C
5	A	1591	G
5	A	1592	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1594	G
5	A	1596	U
5	A	1606	A
5	A	1607	C
5	A	1614	A
5	A	1615	A
5	A	1617	A
5	A	1626	U
5	A	1627	A
5	A	1628	G
5	A	1629	C
5	A	1630	G
5	A	1631	A
5	A	1633	G
5	A	1636	A
5	A	1648	A
5	A	1653	A
5	A	1654	A
5	A	1658	G
5	A	1659	A
5	A	1660	C
5	A	1662	C
5	A	1663	A
5	A	1677	A
5	A	1678	G
5	A	1679	A
5	A	1680	A
5	A	1685	A
5	A	1691	A
5	A	1693	C
5	A	1697	A
5	A	1698	G
5	A	1699	A
5	A	1711	G
5	A	1712	G
5	A	1719	G
5	A	1721	A
5	A	1724	A
5	A	1735	A
5	A	1739	C
5	A	1740	G
5	A	1743	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1744	G
5	A	1746	A
5	A	1748	G
5	A	1761	G
5	A	1762	G
5	A	1765	G
5	A	1768	A
5	A	1769	G
5	A	1771	C
5	A	1772	C
5	A	1777	G
5	A	1785	G
5	A	1786	U
5	A	1787	G
5	A	1788	A
5	A	1789	A
5	A	1790	U
5	A	1792	G
5	A	1793	G
5	A	1802	A
5	A	1806	U
5	A	1809	A
5	A	1810	G
5	A	1812	A
5	A	1813	A
5	A	1814	A
5	A	1815	A
5	A	1816	A
5	A	1817	C
5	A	1820	A
5	A	1821	G
5	A	1828	G
5	A	1829	C
5	A	1830	G
5	A	1845	A
5	A	1849	U
5	A	1858	A
5	A	1864	G
5	A	1867	C
5	A	1874	G
5	A	1876	A
5	A	1877	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1922	C
5	A	1923	C
5	A	1924	C
5	A	1930	A
5	A	1936	G
5	A	1938	C
5	A	1940	U
5	A	1941	A
5	A	1944	U
5	A	1946	U
5	A	1949	C
5	A	1950	G
5	A	1953	C
5	A	1954	C
5	A	1955	U
5	A	1956	A
5	A	1957	A
5	A	1958	G
5	A	1959	G
5	A	1965	A
5	A	1966	A
5	A	1967	A
5	A	1968	U
5	A	1969	U
5	A	1970	C
5	A	1971	C
5	A	1977	G
5	A	1984	U
5	A	1992	C
5	A	1993	G
5	A	1994	C
5	A	1996	C
5	A	1999	A
5	A	2000	A
5	A	2001	G
5	A	2010	A
5	A	2011	U
5	A	2016	G
5	A	2021	G
5	A	2022	U
5	A	2026	A
5	A	2028	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2050	G
5	A	2051	U
5	A	2052	A
5	A	2059	A
5	A	2060	A
5	A	2061	G
5	A	2062	A
5	A	2063	U
5	A	2065	C
5	A	2072	C
5	A	2081	G
5	A	2084	C
5	A	2088	A
5	A	2090	G
5	A	2098	G
5	A	2121	U
5	A	2122	G
5	A	2125	U
5	A	2128	U
5	A	2129	G
5	A	2131	U
5	A	2132	A
5	A	2133	C
5	A	2134	A
5	A	2136	C
5	A	2137	U
5	A	2139	G
5	A	2140	U
5	A	2145	G
5	A	2148	A
5	A	2154	G
5	A	2155	A
5	A	2156	G
5	A	2158	C
5	A	2159	U
5	A	2160	U
5	A	2161	G
5	A	2162	G
5	A	2163	A
5	A	2175	C
5	A	2176	A
5	A	2188	G

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2189	G
5	A	2193	C
5	A	2194	G
5	A	2195	G
5	A	2201	U
5	A	2202	A
5	A	2203	C
5	A	2207	C
5	A	2208	C
5	A	2210	G
5	A	2214	G
5	A	2215	U
5	A	2216	A
5	A	2218	U
5	A	2219	G
5	A	2220	A
5	A	2222	C
5	A	2227	A
5	A	2229	C
5	A	2233	C
5	A	2240	U
5	A	2242	U
5	A	2253	G
5	A	2254	A
5	A	2267	G
5	A	2268	G
5	A	2272	U
5	A	2274	U
5	A	2283	C
5	A	2294	U
5	A	2295	A
5	A	2297	A
5	A	2298	A
5	A	2299	G
5	A	2304	C
5	A	2312	C
5	A	2315	A
5	A	2316	A
5	A	2317	A
5	A	2333	G
5	A	2336	G
5	A	2337	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2338	A
5	A	2339	A
5	A	2341	U
5	A	2342	C
5	A	2345	U
5	A	2348	C
5	A	2349	A
5	A	2350	G
5	A	2360	G
5	A	2363	C
5	A	2365	A
5	A	2376	C
5	A	2379	C
5	A	2383	A
5	A	2384	C
5	A	2385	C
5	A	2386	U
5	A	2387	A
5	A	2390	A
5	A	2405	A
5	A	2408	G
5	A	2412	G
5	A	2414	C
5	A	2417	A
5	A	2421	A
5	A	2424	C
5	A	2428	G
5	A	2431	U
5	A	2434	G
5	A	2435	C
5	A	2452	U
5	A	2453	C
5	A	2454	A
5	A	2457	G
5	A	2458	G
5	A	2459	A
5	A	2460	U
5	A	2461	A
5	A	2463	A
5	A	2464	A
5	A	2468	A
5	A	2469	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2470	C
5	A	2479	A
5	A	2494	C
5	A	2498	A
5	A	2499	G
5	A	2500	A
5	A	2501	G
5	A	2502	U
5	A	2504	C
5	A	2505	A
5	A	2506	C
5	A	2507	A
5	A	2511	A
5	A	2512	C
5	A	2520	U
5	A	2521	U
5	A	2525	C
5	A	2526	A
5	A	2528	C
5	A	2531	G
5	A	2532	A
5	A	2534	G
5	A	2535	U
5	A	2536	C
5	A	2547	A
5	A	2548	U
5	A	2549	C
5	A	2553	G
5	A	2558	G
5	A	2559	U
5	A	2560	A
5	A	2563	C
5	A	2571	A
5	A	2572	G
5	A	2583	U
5	A	2595	A
5	A	2596	G
5	A	2602	C
5	A	2605	G
5	A	2606	A
5	A	2607	G
5	A	2612	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2614	U
5	A	2621	G
5	A	2631	A
5	A	2639	C
5	A	2640	C
5	A	2641	C
5	A	2643	A
5	A	2644	U
5	A	2657	C
5	A	2658	A
5	A	2659	G
5	A	2660	G
5	A	2670	A
5	A	2682	U
5	A	2683	A
5	A	2686	A
5	A	2702	G
5	A	2704	A
5	A	2708	A
5	A	2711	G
5	A	2718	U
5	A	2719	A
5	A	2720	C
5	A	2731	G
5	A	2732	C
5	A	2743	G
5	A	2744	C
5	A	2749	U
5	A	2755	U
5	A	2756	G
5	A	2762	A
5	A	2777	A
5	A	2779	A
5	A	2781	C
5	A	2784	C
5	A	2786	A
5	A	2790	A
5	A	2791	U
5	A	2792	G
5	A	2794	A
5	A	2807	A
5	A	2808	U

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2809	G
5	A	2810	A
5	A	2816	C
5	A	2818	C
5	A	2819	A
5	A	2821	U
5	A	2822	C
5	A	2823	C
5	A	2825	C
5	A	2826	A
5	A	2827	A
5	A	2829	G
5	A	2831	A
5	A	2832	G
5	A	2833	U
5	A	2843	G
5	A	2844	A
5	A	2845	A
5	A	2846	A
5	A	2848	A
5	A	2849	U
5	A	2857	U
5	A	2859	G
5	A	2860	A
5	A	2869	A
5	A	2870	G
5	A	2874	G
5	A	2875	A
5	A	2884	G
5	A	2885	A
5	A	2886	C
5	A	2892	G
5	A	2897	G
5	A	2898	A
5	A	2904	A
5	A	2909	U
5	A	2910	C
5	A	2917	G
5	A	2918	G
5	A	2919	A
5	A	2927	A
6	B	10	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
6	B	11	A
6	B	13	A
6	B	14	G
6	B	22	G
6	B	24	C
6	B	33	U
6	B	35	C
6	B	39	A
6	B	42	G
6	B	43	A
6	B	54	U
6	B	64	A
6	B	65	G
6	B	79	C
6	B	85	U
6	B	86	U
6	B	89	C
6	B	97	A
6	B	106	C
6	B	107	G
6	B	116	C
6	B	117	A
6	B	118	A

All (208) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
5	A	3	U
5	A	42	G
5	A	63	G
5	A	71	A
5	A	74	U
5	A	90	A
5	A	95	A
5	A	99	U
5	A	102	A
5	A	124	A
5	A	150	A
5	A	163	U
5	A	175	G
5	A	176	A
5	A	178	A

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	179	A
5	A	182	C
5	A	185	A
5	A	218	G
5	A	224	A
5	A	225	A
5	A	235	G
5	A	270	C
5	A	309	U
5	A	310	C
5	A	311	U
5	A	314	A
5	A	323	C
5	A	365	U
5	A	375	C
5	A	376	A
5	A	400	U
5	A	402	U
5	A	406	G
5	A	411	G
5	A	413	U
5	A	414	C
5	A	434	U
5	A	435	G
5	A	481	U
5	A	512	G
5	A	519	A
5	A	553	A
5	A	572	A
5	A	588	C
5	A	618	A
5	A	630	A
5	A	631	G
5	A	647	A
5	A	659	A
5	A	666	G
5	A	673	A
5	A	697	G
5	A	700	U
5	A	703	G
5	A	799	A
5	A	823	G

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	836	A
5	A	837	U
5	A	851	A
5	A	852	G
5	A	858	U
5	A	903	G
5	A	933	C
5	A	938	G
5	A	976	U
5	A	978	A
5	A	998	G
5	A	1021	A
5	A	1091	U
5	A	1093	G
5	A	1098	C
5	A	1102	G
5	A	1106	U
5	A	1110	C
5	A	1113	A
5	A	1114	G
5	A	1115	A
5	A	1174	A
5	A	1176	U
5	A	1210	A
5	A	1220	G
5	A	1227	G
5	A	1250	G
5	A	1270	C
5	A	1292	G
5	A	1293	A
5	A	1313	A
5	A	1314	A
5	A	1325	A
5	A	1339	A
5	A	1340	A
5	A	1363	G
5	A	1381	A
5	A	1417	A
5	A	1418	U
5	A	1423	A
5	A	1424	A
5	A	1448	U

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1450	C
5	A	1454	C
5	A	1458	U
5	A	1460	G
5	A	1473	A
5	A	1492	G
5	A	1497	G
5	A	1500	U
5	A	1504	A
5	A	1541	A
5	A	1562	A
5	A	1566	G
5	A	1582	U
5	A	1590	C
5	A	1594	G
5	A	1595	U
5	A	1606	A
5	A	1625	C
5	A	1626	U
5	A	1628	G
5	A	1629	C
5	A	1653	A
5	A	1658	G
5	A	1676	G
5	A	1677	A
5	A	1698	G
5	A	1711	G
5	A	1723	A
5	A	1739	C
5	A	1767	A
5	A	1785	G
5	A	1787	G
5	A	1805	G
5	A	1812	A
5	A	1813	A
5	A	1815	A
5	A	1816	A
5	A	1828	G
5	A	1848	A
5	A	1937	C
5	A	1945	A
5	A	1953	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	1967	A
5	A	1973	U
5	A	1999	A
5	A	2007	A
5	A	2011	U
5	A	2021	G
5	A	2026	A
5	A	2027	A
5	A	2051	U
5	A	2059	A
5	A	2060	A
5	A	2061	G
5	A	2062	A
5	A	2064	G
5	A	2139	G
5	A	2147	U
5	A	2154	G
5	A	2155	A
5	A	2160	U
5	A	2162	G
5	A	2207	C
5	A	2241	A
5	A	2252	A
5	A	2311	G
5	A	2337	G
5	A	2348	C
5	A	2386	U
5	A	2417	A
5	A	2451	C
5	A	2468	A
5	A	2484	G
5	A	2506	C
5	A	2510	G
5	A	2525	C
5	A	2526	A
5	A	2547	A
5	A	2562	U
5	A	2571	A
5	A	2605	G
5	A	2612	G
5	A	2615	C
5	A	2639	C

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type
5	A	2656	G
5	A	2658	A
5	A	2719	A
5	A	2742	C
5	A	2755	U
5	A	2780	G
5	A	2785	U
5	A	2808	U
5	A	2818	C
5	A	2821	U
5	A	2826	A
5	A	2827	A
5	A	2833	U
5	A	2844	A
5	A	2858	U
5	A	2869	A
5	A	2870	G
5	A	2874	G
5	A	2898	A
5	A	2909	U
5	A	2917	G
5	A	2918	G
6	B	10	G
6	B	54	U
6	B	116	C

#### 5.4 Non-standard residues in protein, DNA, RNA chains [i](#)

There are no non-standard protein/DNA/RNA residues in this entry.

#### 5.5 Carbohydrates [i](#)

There are no carbohydrates in this entry.

#### 5.6 Ligand geometry [i](#)

There are no ligands in this entry.

## 5.7 Other polymers [i](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.