Full wwPDB EM Validation Report ⓘ

Mar 13, 2024 – 01:15 PM JST

PDB ID	:	3J3W
EMDB ID	:	EMD-5643
Title	:	Atomic model of the immature 50S subunit from Bacillus subtilis (state II-a)
Authors	:	Li, N.; Guo, Q.; Zhang, Y.; Yuan, Y.; Ma, C.; Lei, J.; Gao, N.
Deposited on	:	2013-04-28
Resolution	:	10.70 Å(reported)
Based on initial models	:	2AW4, 2J01

This is a Full wwPDB EM Validation Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

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

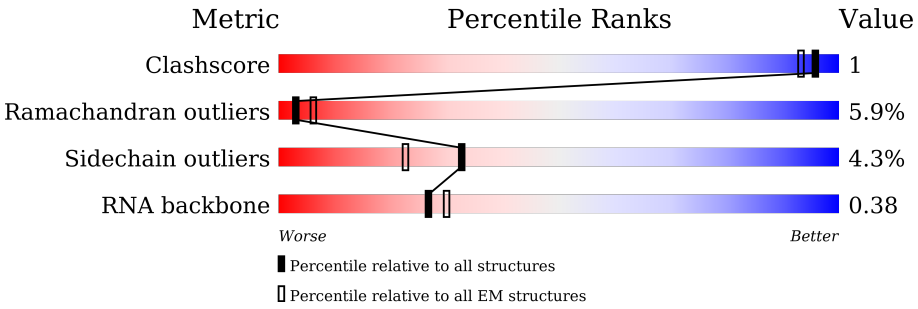
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

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 10.70 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	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. 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 <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	2927	53% 32% 7% 8%
2	0	59	83% 10% 7%
3	C	277	88% 12%
4	N	120	96%
5	G	179	84% 7% 9%
6	J	145	87% 10%
7	K	122	93% 7%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
8	L	146	88% 10%
9	P	115	72% 23%
10	Q	119	91% 8%
11	D	209	91% 6%
12	R	102	88% 11%
13	S	113	92% 6%
14	T	95	86% 13%
15	U	103	83% 17%
16	X	66	82% 11% 8%
17	2	44	91% 9%
18	5	232	48% 48%
19	6	141	59% 94% 5%
20	E	207	86% 13%

2 Entry composition

There are 20 unique types of molecules in this entry. The entry contains 76573 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 RNA chain called ribosome RNA 23S.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
1	A	2685	57639	25720	10638	18600	2681	0	0

- Molecule 2 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	0	55	433	267	87	72	7	0	0

- Molecule 3 is a protein called 50S ribosomal protein L2.

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

- Molecule 4 is a protein called 50S ribosomal protein L17.

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

- Molecule 5 is a protein called 50S ribosomal protein L6.

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

- Molecule 6 is a protein called 50S ribosomal protein L13.

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

- Molecule 7 is a protein called 50S ribosomal protein L14.

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

- Molecule 8 is a protein called 50S ribosomal protein L15.

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

- Molecule 9 is a protein called 50S ribosomal protein L19.

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

- Molecule 10 is a protein called 50S ribosomal protein L20.

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

- Molecule 11 is a protein called 50S ribosomal protein L3.

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

- Molecule 12 is a protein called 50S ribosomal protein L21.

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

- Molecule 13 is a protein called 50S ribosomal protein L22.

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

- Molecule 14 is a protein called 50S ribosomal protein L23.

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

- Molecule 15 is a protein called 50S ribosomal protein L24.

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

- Molecule 16 is a protein called 50S ribosomal protein L29.

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

- Molecule 17 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	2	44	Total	C	N	O	S	0	0
			368	222	89	55	2		

- Molecule 18 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	5	120	Total	C	N	O	S	0	0
			910	576	156	176	2		

- Molecule 19 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	6	141	Total	C	N	O	S	0	0
			1044	657	184	196	7		

- Molecule 20 is a protein called 50S ribosomal protein L4.

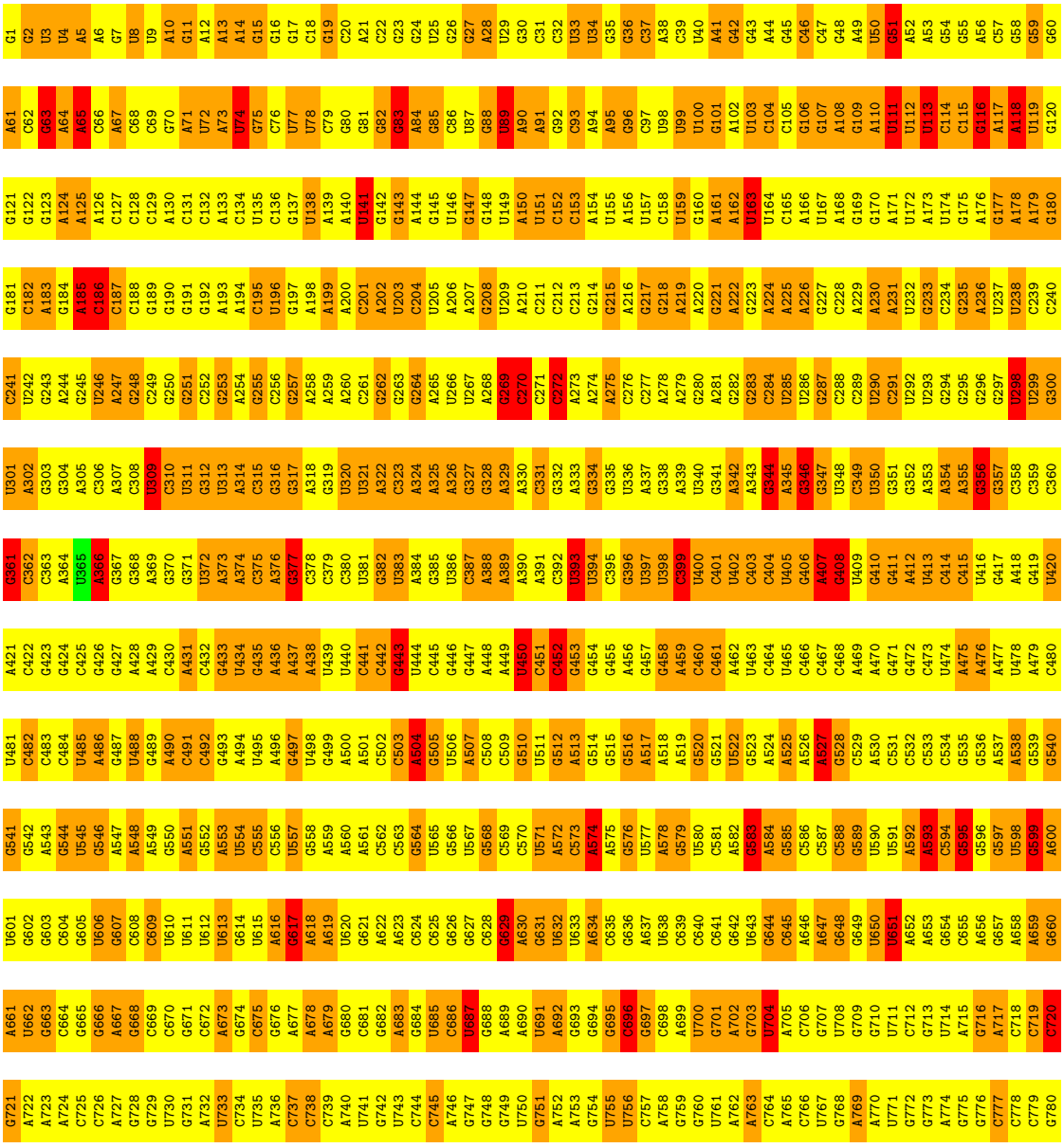
Mol	Chain	Residues	Atoms					AltConf	Trace
20	E	206	Total	C	N	O	S	0	0
			1567	983	290	292	2		

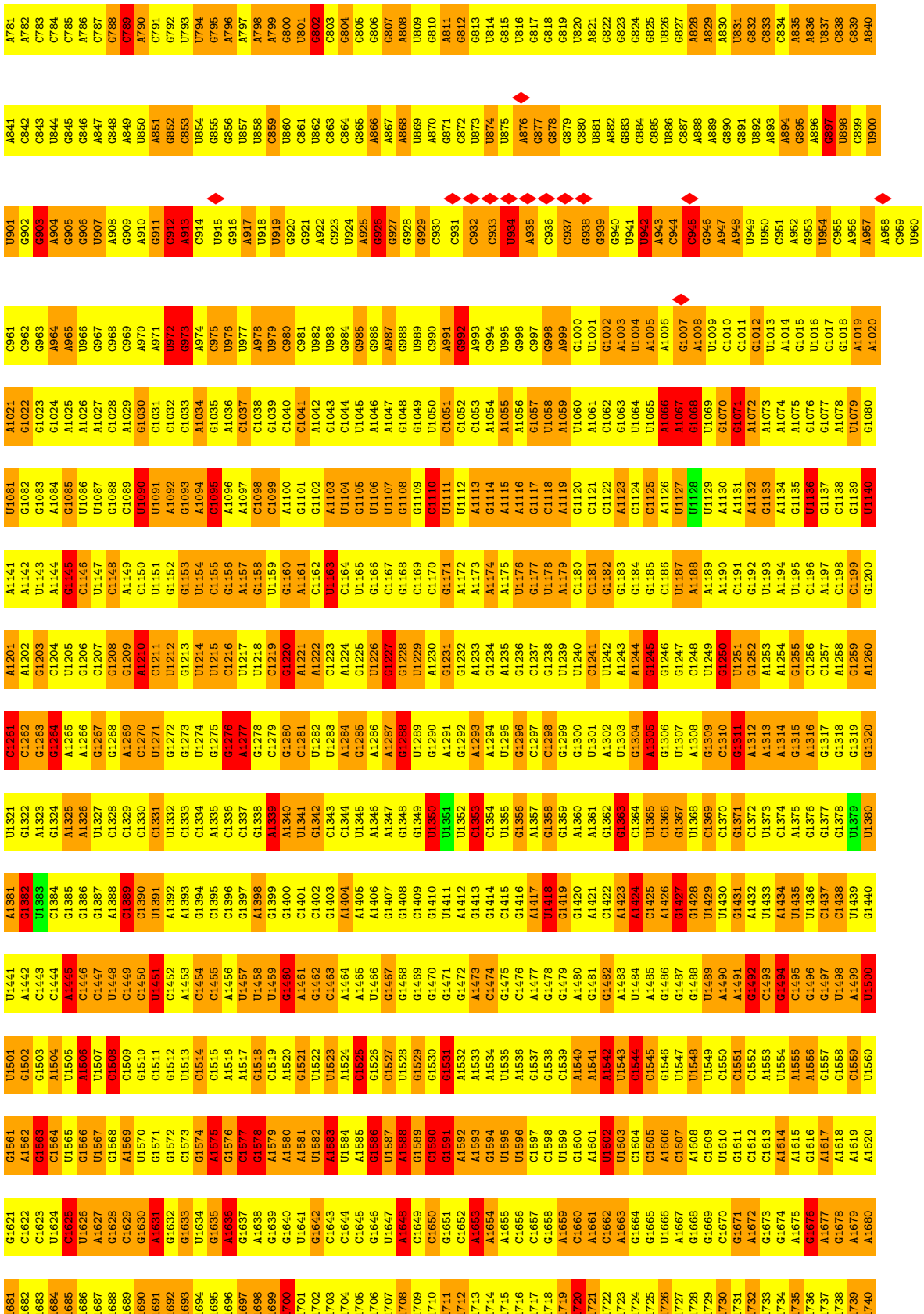
3 Residue-property plots (i)

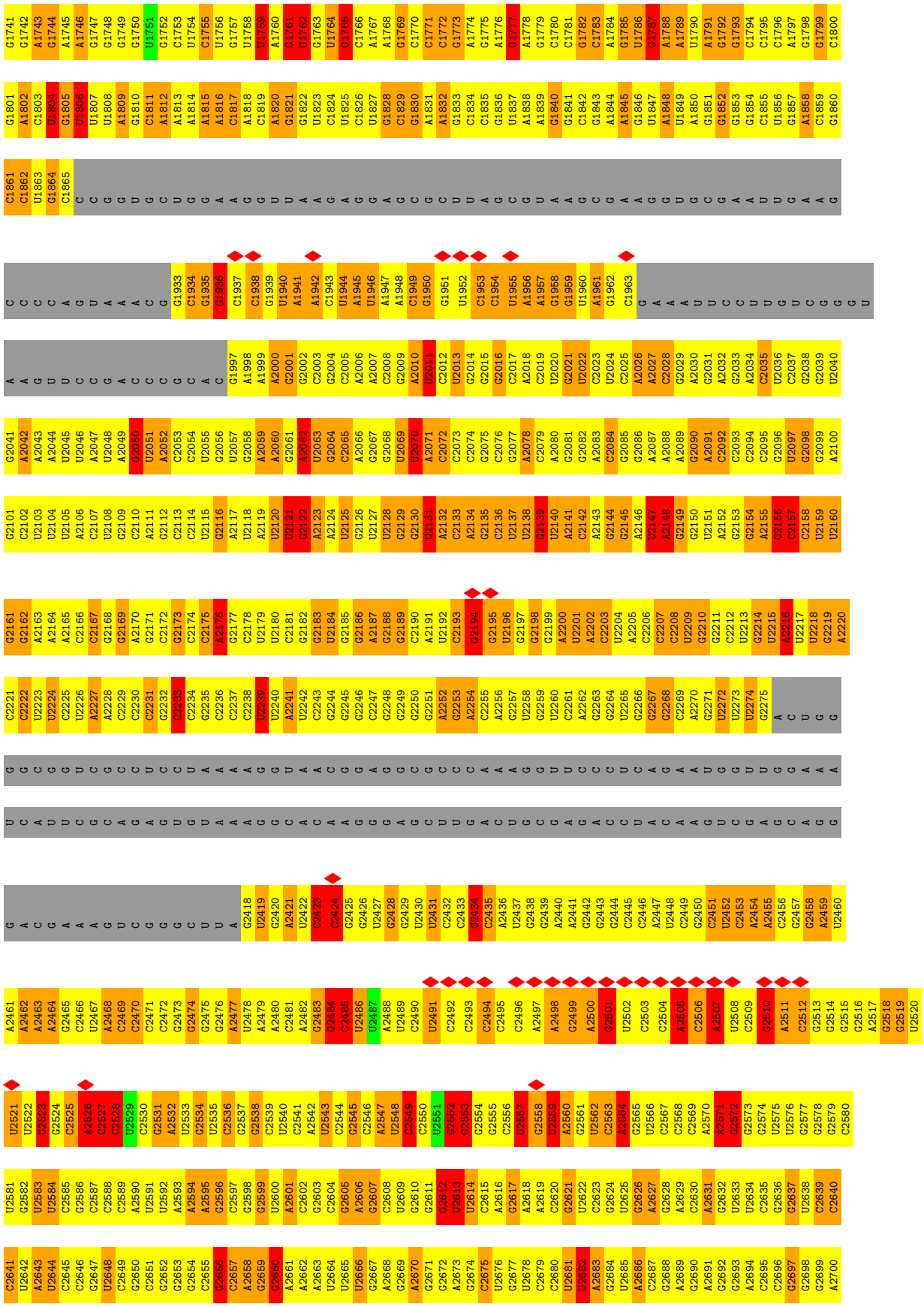
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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.

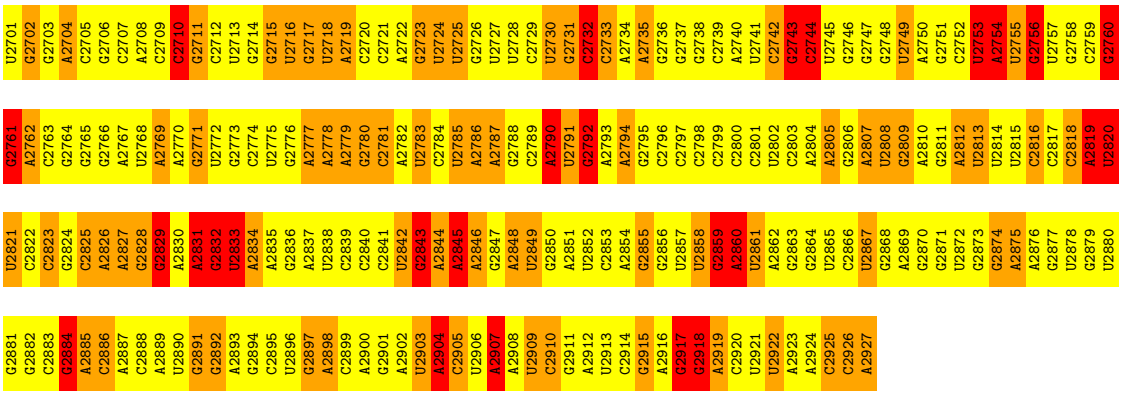
- Molecule 1: ribosome RNA 23S

Chain A:



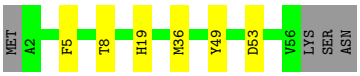






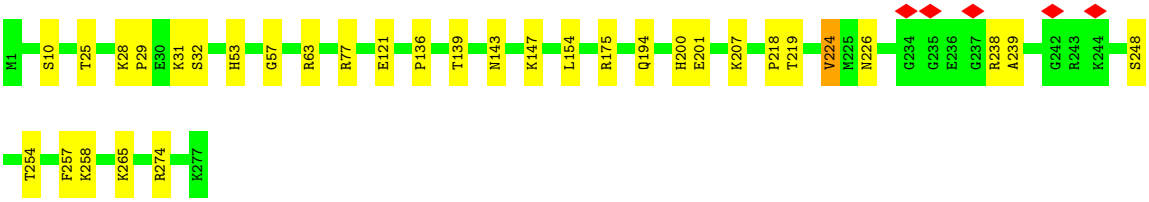
• Molecule 2: 50S ribosomal protein L32

Chain 0:



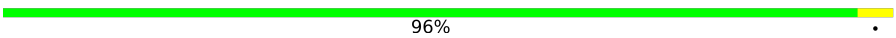
• Molecule 3: 50S ribosomal protein L2

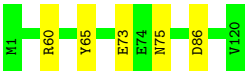
Chain C:



• Molecule 4: 50S ribosomal protein L17

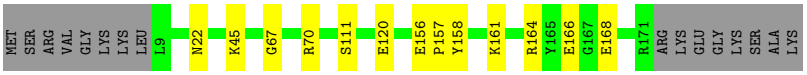
Chain N:





• Molecule 5: 50S ribosomal protein L6

Chain G:

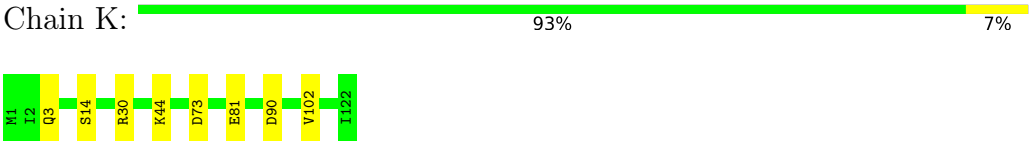


• Molecule 6: 50S ribosomal protein L13

Chain J:

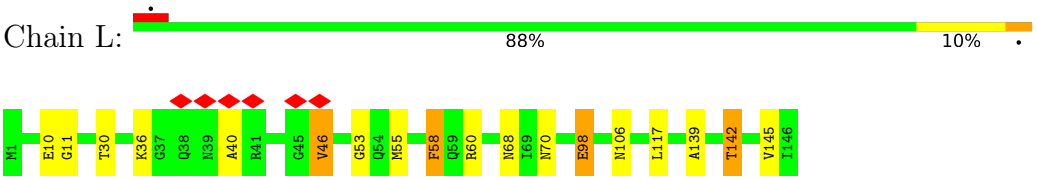
• Molecule 7: 50S ribosomal protein L14

Chain K:



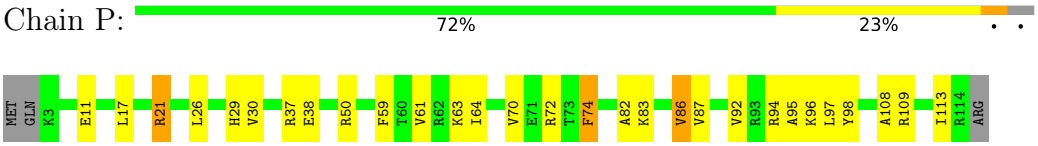
• Molecule 8: 50S ribosomal protein L15

Chain L:



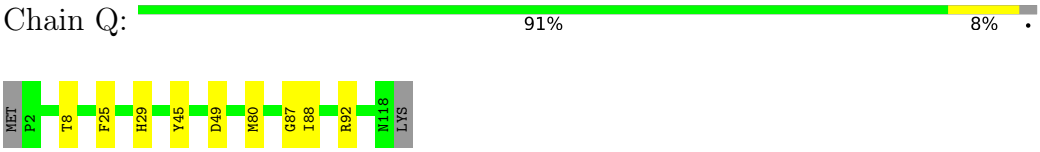
• Molecule 9: 50S ribosomal protein L19

Chain P:



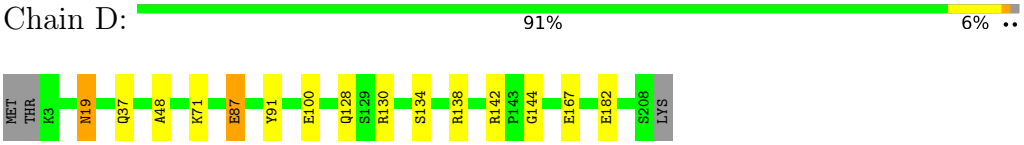
• Molecule 10: 50S ribosomal protein L20

Chain Q:



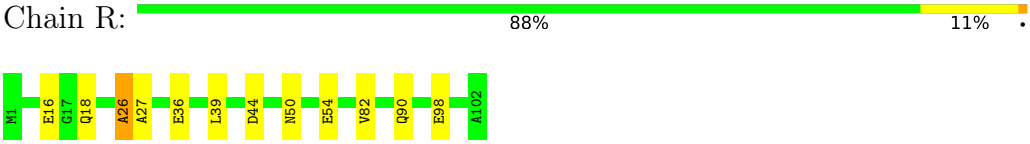
• Molecule 11: 50S ribosomal protein L3

Chain D:



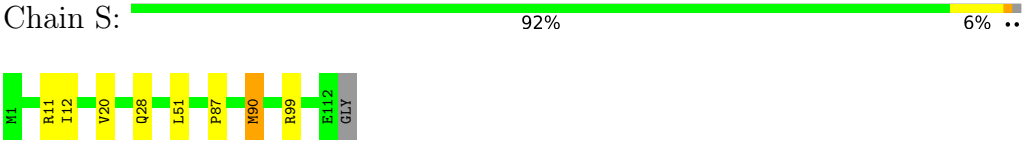
• Molecule 12: 50S ribosomal protein L21

Chain R:



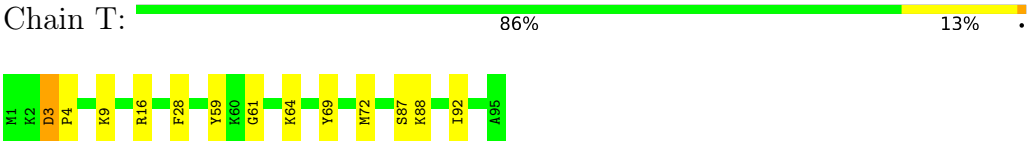
• Molecule 13: 50S ribosomal protein L22

Chain S:



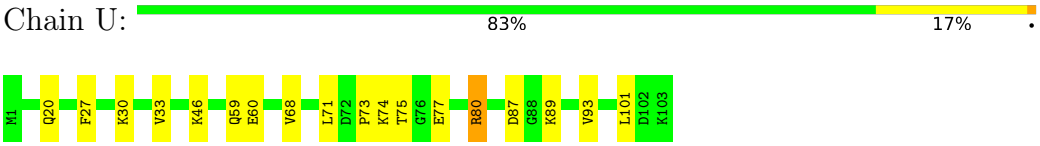
• Molecule 14: 50S ribosomal protein L23

Chain T:



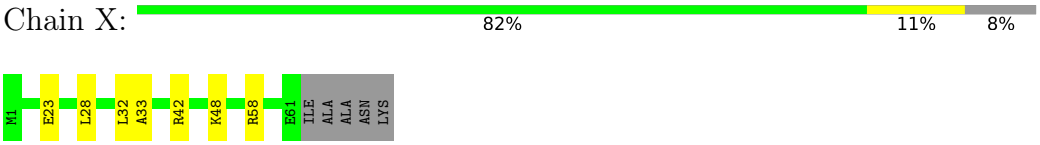
• Molecule 15: 50S ribosomal protein L24

Chain U:



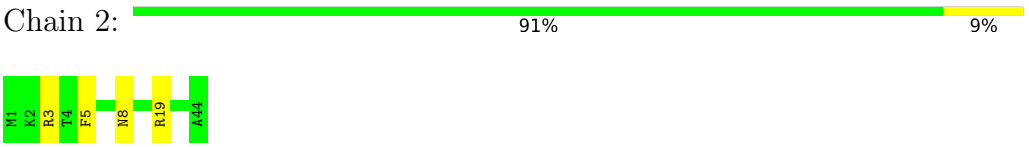
• Molecule 16: 50S ribosomal protein L29

Chain X:



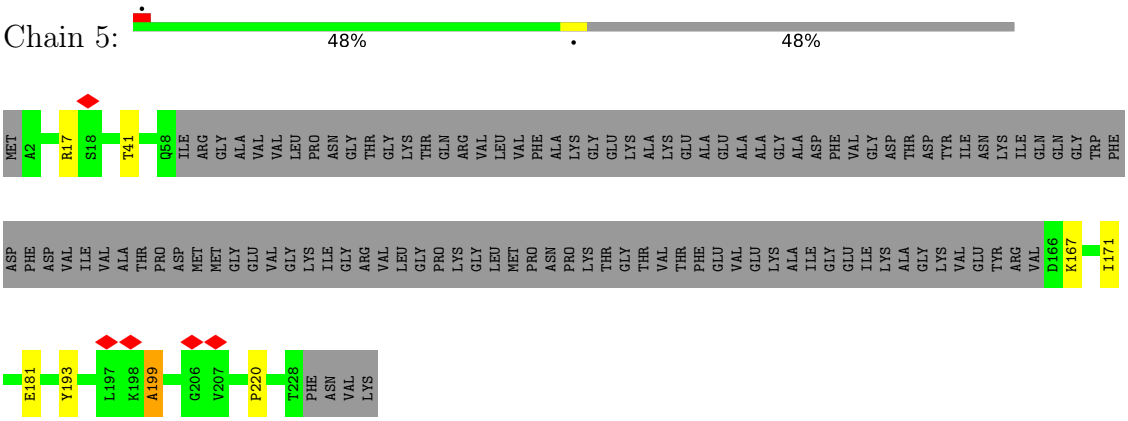
• Molecule 17: 50S ribosomal protein L34

Chain 2:



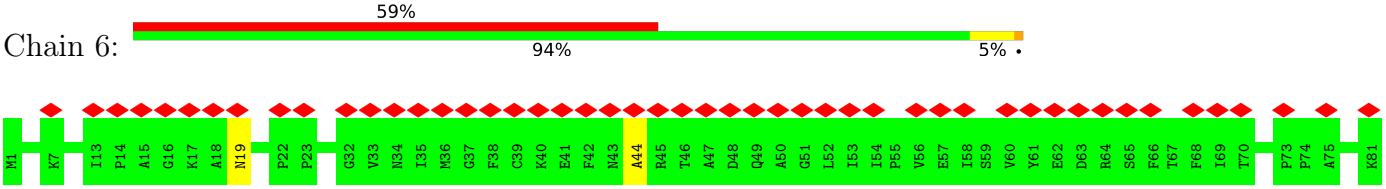
• Molecule 18: 50S ribosomal protein L1

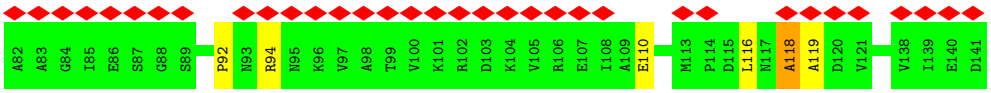
Chain 5:



• Molecule 19: 50S ribosomal protein L11

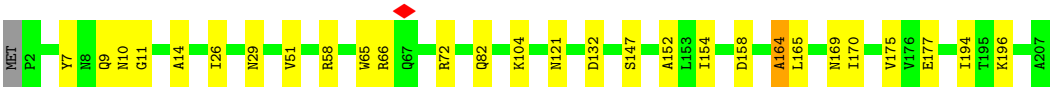
Chain 6:





• Molecule 20: 50S ribosomal protein L4

Chain E:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	27652	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	Each particle	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	59000	Depositor
Image detector	FEI EAGLE (4k x 4k)	Depositor
Maximum map value	10.909	Depositor
Minimum map value	-3.262	Depositor
Average map value	0.000	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	2.0	Depositor
Map size (Å)	384.0, 384.0, 384.0	wwPDB
Map dimensions	256, 256, 256	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.5, 1.5, 1.5	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	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	A	1.68	83/64560 (0.1%)	2.67	8132/100715 (8.1%)
2	0	1.04	0/440	1.20	2/584 (0.3%)
3	C	1.00	0/2166	1.09	0/2902
4	N	1.09	0/969	1.05	0/1294
5	G	0.97	0/1264	1.04	0/1709
6	J	0.95	0/1157	1.08	2/1557 (0.1%)
7	K	1.02	0/928	1.05	0/1245
8	L	0.97	0/1094	1.10	2/1457 (0.1%)
9	P	1.10	0/929	1.17	2/1243 (0.2%)
10	Q	1.05	0/952	1.06	2/1266 (0.2%)
11	D	0.96	0/1590	1.09	2/2130 (0.1%)
12	R	0.92	0/806	1.13	1/1080 (0.1%)
13	S	1.01	0/877	1.10	0/1179
14	T	1.01	0/774	1.15	2/1030 (0.2%)
15	U	0.87	0/790	1.16	3/1054 (0.3%)
16	X	1.04	0/505	1.01	0/671
17	2	1.26	0/371	1.04	0/483
18	5	0.87	0/921	1.05	2/1239 (0.2%)
19	6	0.92	0/1058	1.06	1/1427 (0.1%)
20	E	0.97	0/1586	1.10	1/2139 (0.0%)
All	All	1.55	83/83737 (0.1%)	2.43	8154/126404 (6.5%)

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
1	A	0	320
4	N	0	1
8	L	0	2
9	P	0	2
14	T	0	2

Continued on next page...

Continued from previous page...

Mol	Chain	#Chirality outliers	#Planarity outliers
15	U	0	1
20	E	0	2
All	All	0	330

All (83) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	1339	A	O3'-P	-7.12	1.52	1.61
1	A	1831	A	N7-C5	-6.74	1.35	1.39
1	A	52	A	N7-C5	-6.72	1.35	1.39
1	A	653	A	N7-C5	-6.68	1.35	1.39
1	A	1839	A	N7-C5	-6.64	1.35	1.39
1	A	2754	A	N7-C5	-6.54	1.35	1.39
1	A	1485	A	N7-C5	-6.49	1.35	1.39
1	A	1253	A	N7-C5	-6.30	1.35	1.39
1	A	600	A	N7-C5	-6.03	1.35	1.39
1	A	2254	A	N7-C5	-6.00	1.35	1.39
1	A	518	A	N7-C5	-5.96	1.35	1.39
1	A	1067	A	N7-C5	-5.91	1.35	1.39
1	A	2835	A	N7-C5	-5.87	1.35	1.39
1	A	1686	A	N7-C5	-5.83	1.35	1.39
1	A	113	U	C2-N3	5.82	1.41	1.37
1	A	1075	A	N7-C5	-5.81	1.35	1.39
1	A	527	A	N7-C5	-5.76	1.35	1.39
1	A	830	A	N7-C5	-5.75	1.35	1.39
1	A	2505	A	C2'-C1'	-5.73	1.47	1.53
1	A	1381	A	N7-C5	-5.72	1.35	1.39
1	A	866	A	N7-C5	-5.71	1.35	1.39
1	A	752	A	N7-C5	-5.69	1.35	1.39
1	A	629	G	C2'-C1'	-5.69	1.47	1.53
1	A	2916	A	N7-C5	-5.68	1.35	1.39
1	A	1525	G	P-O5'	-5.67	1.54	1.59
1	A	1580	A	N7-C5	-5.61	1.35	1.39
1	A	630	A	N7-C5	-5.59	1.35	1.39
1	A	765	A	N7-C5	-5.55	1.35	1.39
1	A	1671	G	C2-N3	5.51	1.37	1.32
1	A	2570	A	N7-C5	-5.47	1.35	1.39
1	A	193	A	N7-C5	-5.46	1.35	1.39
1	A	1544	C	N3-C4	5.44	1.37	1.33
1	A	926	G	C2-N3	5.36	1.37	1.32
1	A	549	A	N7-C5	-5.31	1.36	1.39
1	A	2202	A	N7-C5	-5.31	1.36	1.39

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	2441	A	N7-C5	-5.30	1.36	1.39
1	A	613	U	C2-N3	5.29	1.41	1.37
1	A	1047	A	N7-C5	-5.29	1.36	1.39
1	A	1802	A	N7-C5	-5.25	1.36	1.39
1	A	1269	A	C5'-C4'	5.25	1.57	1.51
1	A	247	A	N7-C5	-5.20	1.36	1.39
1	A	1843	G	C2-N3	5.18	1.36	1.32
1	A	168	A	N7-C5	-5.18	1.36	1.39
1	A	1339	A	N7-C5	-5.16	1.36	1.39
1	A	353	A	N7-C5	-5.16	1.36	1.39
1	A	667	A	N7-C5	-5.15	1.36	1.39
1	A	590	U	C2-N3	5.15	1.41	1.37
1	A	2176	A	N7-C5	-5.14	1.36	1.39
1	A	2627	A	N7-C5	-5.13	1.36	1.39
1	A	2067	G	C2-N3	5.13	1.36	1.32
1	A	1429	U	C2-N3	5.13	1.41	1.37
1	A	1575	A	N7-C5	-5.12	1.36	1.39
1	A	117	A	N7-C5	-5.12	1.36	1.39
1	A	660	G	C2-N3	5.11	1.36	1.32
1	A	34	U	C2-N3	5.10	1.41	1.37
1	A	1628	G	C2'-C1'	-5.10	1.47	1.53
1	A	462	A	N7-C5	-5.10	1.36	1.39
1	A	2513	G	N1-C2	5.10	1.41	1.37
1	A	2850	G	C2-N3	5.10	1.36	1.32
1	A	2485	C	P-O5'	-5.09	1.54	1.59
1	A	1588	A	N9-C4	-5.09	1.34	1.37
1	A	215	G	N1-C2	5.08	1.41	1.37
1	A	1006	A	N7-C5	-5.08	1.36	1.39
1	A	2805	A	N7-C5	-5.08	1.36	1.39
1	A	947	A	N7-C5	-5.08	1.36	1.39
1	A	927	G	C2-N3	5.07	1.36	1.32
1	A	1746	A	N7-C5	-5.07	1.36	1.39
1	A	2445	C	N3-C4	5.07	1.37	1.33
1	A	2069	U	C2-N3	5.07	1.41	1.37
1	A	2743	G	C2-N3	5.06	1.36	1.32
1	A	1840	G	N1-C2	5.06	1.41	1.37
1	A	513	A	N7-C5	-5.06	1.36	1.39
1	A	2058	G	C2-N3	5.05	1.36	1.32
1	A	1800	C	N3-C4	5.05	1.37	1.33
1	A	2891	G	C2-N3	5.05	1.36	1.32
1	A	2874	G	C2-N3	5.04	1.36	1.32
1	A	2611	G	N1-C2	5.03	1.41	1.37

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	1412	A	N7-C5	-5.03	1.36	1.39
1	A	1805	G	O3'-P	-5.02	1.55	1.61
1	A	250	G	N1-C2	5.02	1.41	1.37
1	A	366	A	N7-C5	-5.02	1.36	1.39
1	A	1055	A	N7-C5	-5.01	1.36	1.39
1	A	2770	A	N7-C5	-5.00	1.36	1.39

All (8154) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1339	A	P-O3'-C3'	34.26	160.81	119.70
1	A	313	U	P-O3'-C3'	20.76	144.62	119.70
1	A	178	A	P-O3'-C3'	20.05	143.75	119.70
1	A	74	U	P-O3'-C3'	19.98	143.68	119.70
1	A	375	C	P-O3'-C3'	19.92	143.60	119.70
1	A	2605	G	P-O3'-C3'	18.69	142.13	119.70
1	A	1338	G	P-O3'-C3'	18.07	141.39	119.70
1	A	1625	C	P-O3'-C3'	18.06	141.38	119.70
1	A	2155	A	P-O3'-C3'	17.99	141.29	119.70
1	A	2785	U	P-O3'-C3'	17.89	141.16	119.70
1	A	1454	C	P-O3'-C3'	17.65	140.88	119.70
1	A	2252	A	P-O3'-C3'	17.37	140.54	119.70
1	A	182	C	P-O3'-C3'	17.32	140.48	119.70
1	A	1496	G	P-O3'-C3'	17.21	140.35	119.70
1	A	2820	U	P-O3'-C3'	17.03	140.13	119.70
1	A	2564	A	N1-C6-N6	17.02	128.81	118.60
1	A	1805	G	P-O3'-C3'	16.77	139.82	119.70
1	A	402	U	P-O3'-C3'	16.72	139.77	119.70
1	A	1021	A	P-O3'-C3'	16.70	139.75	119.70
1	A	906	G	P-O3'-C3'	16.43	139.42	119.70
1	A	1448	U	P-O3'-C3'	16.43	139.42	119.70
1	A	2021	G	P-O3'-C3'	16.37	139.35	119.70
1	A	1210	A	P-O3'-C3'	16.25	139.20	119.70
1	A	1606	A	P-O3'-C3'	16.20	139.13	119.70
1	A	2120	U	P-O3'-C3'	16.18	139.11	119.70
1	A	592	A	N1-C6-N6	16.09	128.25	118.60
1	A	1243	A	P-O3'-C3'	16.08	139.00	119.70
1	A	56	A	N1-C6-N6	16.08	128.25	118.60
1	A	1269	A	P-O3'-C3'	16.08	138.99	119.70
1	A	1113	A	P-O3'-C3'	16.03	138.94	119.70
1	A	2062	A	P-O3'-C3'	15.93	138.82	119.70
1	A	2907	A	N1-C6-N6	15.90	128.14	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2862	A	N1-C6-N6	15.87	128.12	118.60
1	A	913	A	N1-C6-N6	15.63	127.98	118.60
1	A	90	A	P-O3'-C3'	15.60	138.42	119.70
1	A	1580	A	N1-C6-N6	15.53	127.92	118.60
1	A	224	A	P-O3'-C3'	15.43	138.21	119.70
1	A	1340	A	P-O3'-C3'	15.40	138.18	119.70
1	A	150	A	P-O3'-C3'	15.11	137.83	119.70
1	A	309	U	P-O3'-C3'	14.96	137.65	119.70
1	A	1698	G	P-O3'-C3'	14.95	137.64	119.70
1	A	1655	A	N1-C6-N6	14.88	127.53	118.60
1	A	1774	A	N1-C6-N6	14.81	127.49	118.60
1	A	2059	A	P-O3'-C3'	14.80	137.46	119.70
1	A	1313	A	P-O3'-C3'	14.76	137.42	119.70
1	A	1221	A	N1-C6-N6	14.60	127.36	118.60
1	A	1458	U	P-O3'-C3'	14.56	137.17	119.70
1	A	1291	A	N1-C6-N6	14.55	127.33	118.60
1	A	2917	G	P-O3'-C3'	14.55	137.16	119.70
1	A	2006	A	N1-C6-N6	14.54	127.32	118.60
1	A	449	A	N1-C6-N6	14.52	127.31	118.60
1	A	230	A	N1-C6-N6	14.49	127.30	118.60
1	A	758	A	N1-C6-N6	14.46	127.27	118.60
1	A	64	A	P-O3'-C3'	14.45	137.04	119.70
1	A	333	A	N1-C6-N6	14.40	127.24	118.60
1	A	1861	C	P-O3'-C3'	14.39	136.97	119.70
1	A	2663	A	N1-C6-N6	14.39	127.23	118.60
1	A	462	A	N1-C6-N6	14.31	127.19	118.60
1	A	38	A	N1-C6-N6	14.30	127.18	118.60
1	A	799	A	P-O3'-C3'	14.30	136.86	119.70
1	A	2858	U	P-O3'-C3'	14.29	136.85	119.70
1	A	2488	A	N1-C6-N6	14.25	127.15	118.60
1	A	800	G	P-O3'-C3'	14.24	136.78	119.70
1	A	150	A	N1-C6-N6	14.23	127.14	118.60
1	A	1858	A	N1-C6-N6	14.22	127.13	118.60
1	A	2904	A	N1-C6-N6	14.17	127.10	118.60
1	A	588	C	P-O3'-C3'	14.17	136.70	119.70
1	A	1189	A	N1-C6-N6	14.15	127.09	118.60
1	A	343	A	N1-C6-N6	14.13	127.08	118.60
1	A	1042	A	N1-C6-N6	14.12	127.07	118.60
1	A	353	A	N1-C6-N6	14.11	127.07	118.60
1	A	1667	A	N1-C6-N6	14.10	127.06	118.60
1	A	705	A	N1-C6-N6	14.07	127.04	118.60
1	A	849	A	N1-C6-N6	14.06	127.03	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1727	A	N1-C6-N6	14.05	127.03	118.60
1	A	1636	A	N1-C6-N6	14.04	127.03	118.60
1	A	1058	U	P-O3'-C3'	13.99	136.49	119.70
1	A	1450	C	P-O3'-C3'	13.99	136.48	119.70
1	A	796	A	N1-C6-N6	13.98	126.99	118.60
1	A	1115	A	P-O3'-C3'	13.97	136.46	119.70
1	A	1608	A	N1-C6-N6	13.89	126.93	118.60
1	A	2790	A	N1-C6-N6	13.88	126.93	118.60
1	A	2047	A	N1-C6-N6	13.83	126.90	118.60
1	A	254	A	N1-C6-N6	13.83	126.90	118.60
1	A	2874	G	P-O3'-C3'	13.82	136.28	119.70
1	A	1832	A	N1-C6-N6	13.82	126.89	118.60
1	A	260	A	N1-C6-N6	13.80	126.88	118.60
1	A	1642	G	N1-C6-O6	13.79	128.18	119.90
1	A	1115	A	N1-C6-N6	13.78	126.87	118.60
1	A	278	A	N1-C6-N6	13.76	126.86	118.60
1	A	2902	A	N1-C6-N6	13.74	126.84	118.60
1	A	549	A	N1-C6-N6	13.72	126.83	118.60
1	A	948	A	N1-C6-N6	13.70	126.82	118.60
1	A	2482	A	N1-C6-N6	13.56	126.74	118.60
1	A	1461	A	N1-C6-N6	13.52	126.71	118.60
1	A	1672	A	N1-C6-N6	13.50	126.70	118.60
1	A	305	A	N1-C6-N6	13.47	126.68	118.60
1	A	548	A	N1-C6-N6	13.46	126.68	118.60
1	A	307	A	N1-C6-N6	13.46	126.68	118.60
1	A	1490	A	N1-C6-N6	13.44	126.66	118.60
1	A	1235	A	N1-C6-N6	13.44	126.66	118.60
1	A	2123	A	N1-C6-N6	13.43	126.66	118.60
1	A	10	A	N1-C6-N6	13.41	126.65	118.60
1	A	910	A	N1-C6-N6	13.40	126.64	118.60
1	A	1316	A	N1-C6-N6	13.40	126.64	118.60
1	A	1532	A	N1-C6-N6	13.40	126.64	118.60
1	A	1258	A	N1-C6-N6	13.40	126.64	118.60
1	A	407	A	N1-C6-N6	13.39	126.63	118.60
1	A	1453	A	N1-C6-N6	13.38	126.63	118.60
1	A	781	A	N1-C6-N6	13.38	126.62	118.60
1	A	1679	A	N1-C6-N6	13.36	126.62	118.60
1	A	95	A	N1-C6-N6	13.36	126.62	118.60
1	A	1503	G	N1-C6-O6	13.36	127.91	119.90
1	A	302	A	N1-C6-N6	13.32	126.59	118.60
1	A	163	U	P-O3'-C3'	13.31	135.68	119.70
1	A	847	A	N1-C6-N6	13.30	126.58	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1828	G	P-O3'-C3'	13.30	135.66	119.70
1	A	1222	A	N1-C6-N6	13.26	126.56	118.60
1	A	622	A	N1-C6-N6	13.26	126.56	118.60
1	A	67	A	N1-C6-N6	13.25	126.55	118.60
1	A	1480	A	N1-C6-N6	13.24	126.55	118.60
1	A	835	A	N1-C6-N6	13.24	126.54	118.60
1	A	133	A	N1-C6-N6	13.22	126.53	118.60
1	A	496	A	N1-C6-N6	13.18	126.51	118.60
1	A	1106	U	P-O3'-C3'	13.17	135.50	119.70
1	A	2078	A	N1-C6-N6	13.17	126.50	118.60
1	A	2704	A	N1-C6-N6	13.13	126.48	118.60
1	A	2887	A	N1-C6-N6	13.13	126.48	118.60
1	A	740	A	N1-C6-N6	13.13	126.48	118.60
1	A	1791	A	N1-C6-N6	13.12	126.47	118.60
1	A	1588	A	N1-C6-N6	13.10	126.46	118.60
1	A	1848	A	N1-C6-N6	13.08	126.45	118.60
1	A	1059	A	N1-C6-N6	13.06	126.44	118.60
1	A	619	A	N1-C6-N6	13.06	126.43	118.60
1	A	1784	A	N1-C6-N6	13.05	126.43	118.60
1	A	108	A	N1-C6-N6	13.05	126.43	118.60
1	A	2860	A	N1-C6-N6	13.05	126.43	118.60
1	A	736	A	N1-C6-N6	13.04	126.43	118.60
1	A	1653	A	N1-C6-N6	13.01	126.41	118.60
1	A	1525	G	P-O5'-C5'	13.00	141.71	120.90
1	A	2026	A	N1-C6-N6	13.00	126.40	118.60
1	A	1190	A	N1-C6-N6	12.98	126.39	118.60
1	A	2734	A	N1-C6-N6	12.98	126.39	118.60
1	A	2050	G	P-O3'-C3'	12.98	135.27	119.70
1	A	2670	A	N1-C6-N6	12.97	126.39	118.60
1	A	1474	C	O4'-C1'-N1	12.97	118.58	108.20
1	A	1126	A	N1-C6-N6	12.96	126.38	118.60
1	A	526	A	N1-C6-N6	12.94	126.36	118.60
1	A	2030	A	N1-C6-N6	12.93	126.36	118.60
1	A	222	A	N1-C6-N6	12.92	126.35	118.60
1	A	821	A	N1-C6-N6	12.91	126.35	118.60
1	A	329	A	N1-C6-N6	12.91	126.34	118.60
1	A	2027	A	N1-C6-N6	12.90	126.34	118.60
1	A	2794	A	N1-C6-N6	12.90	126.34	118.60
1	A	2767	A	N1-C6-N6	12.89	126.33	118.60
1	A	1709	A	N1-C6-N6	12.88	126.33	118.60
1	A	1534	A	N1-C6-N6	12.86	126.32	118.60
1	A	513	A	N1-C6-N6	12.85	126.31	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2782	A	N1-C6-N6	12.84	126.31	118.60
1	A	1838	A	N1-C6-N6	12.84	126.30	118.60
1	A	2262	A	N1-C6-N6	12.84	126.30	118.60
1	A	888	A	N1-C6-N6	12.82	126.29	118.60
1	A	1721	A	N1-C6-N6	12.81	126.28	118.60
1	A	2134	A	N1-C6-N6	12.80	126.28	118.60
1	A	634	A	N1-C6-N6	12.80	126.28	118.60
1	A	2052	A	N1-C6-N6	12.80	126.28	118.60
1	A	41	A	N1-C6-N6	12.79	126.28	118.60
1	A	369	A	N1-C6-N6	12.79	126.28	118.60
1	A	1812	A	N1-C6-N6	12.79	126.28	118.60
1	A	1003	A	N1-C6-N6	12.78	126.27	118.60
1	A	2207	C	P-O3'-C3'	12.78	135.03	119.70
1	A	438	A	N1-C6-N6	12.76	126.26	118.60
1	A	326	A	N1-C6-N6	12.76	126.26	118.60
1	A	226	A	N1-C6-N6	12.76	126.25	118.60
1	A	1361	A	N1-C6-N6	12.76	126.25	118.60
1	A	2889	A	N1-C6-N6	12.76	126.25	118.60
1	A	1638	A	N1-C6-N6	12.74	126.25	118.60
1	A	723	A	N1-C6-N6	12.73	126.24	118.60
1	A	1360	A	N1-C6-N6	12.73	126.24	118.60
1	A	2553	G	N1-C6-O6	12.72	127.53	119.90
1	A	2124	A	N1-C6-N6	12.71	126.23	118.60
1	A	1713	A	N1-C6-N6	12.71	126.22	118.60
1	A	2170	A	N1-C6-N6	12.71	126.22	118.60
1	A	1743	A	N1-C6-N6	12.70	126.22	118.60
1	A	2187	A	N1-C6-N6	12.70	126.22	118.60
1	A	904	A	N1-C6-N6	12.70	126.22	118.60
1	A	1398	A	N1-C6-N6	12.70	126.22	118.60
1	A	2708	A	N1-C6-N6	12.70	126.22	118.60
1	A	198	A	N1-C6-N6	12.69	126.21	118.60
1	A	2066	A	N1-C6-N6	12.67	126.20	118.60
1	A	156	A	N1-C6-N6	12.67	126.20	118.60
1	A	2812	A	N1-C6-N6	12.67	126.20	118.60
1	A	2923	A	N1-C6-N6	12.67	126.20	118.60
1	A	1699	A	N1-C6-N6	12.66	126.20	118.60
1	A	1809	A	N1-C6-N6	12.65	126.19	118.60
1	A	2851	A	N1-C6-N6	12.64	126.19	118.60
1	A	21	A	N1-C6-N6	12.64	126.19	118.60
1	A	646	A	N1-C6-N6	12.63	126.18	118.60
1	A	1357	A	N1-C6-N6	12.63	126.17	118.60
1	A	578	A	N1-C6-N6	12.62	126.17	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1601	A	N1-C6-N6	12.62	126.17	118.60
1	A	1533	A	N1-C6-N6	12.61	126.17	118.60
1	A	727	A	N1-C6-N6	12.60	126.16	118.60
1	A	173	A	N1-C6-N6	12.60	126.16	118.60
1	A	837	U	P-O3'-C3'	12.60	134.82	119.70
1	A	2919	A	N1-C6-N6	12.60	126.16	118.60
1	A	1746	A	N1-C6-N6	12.59	126.15	118.60
1	A	193	A	N1-C6-N6	12.58	126.15	118.60
1	A	456	A	N1-C6-N6	12.58	126.14	118.60
1	A	2735	A	N1-C6-N6	12.57	126.14	118.60
1	A	220	A	N1-C6-N6	12.56	126.14	118.60
1	A	178	A	N1-C6-N6	12.56	126.13	118.60
1	A	1286	A	N1-C6-N6	12.55	126.13	118.60
1	A	2722	A	N1-C6-N6	12.55	126.13	118.60
1	A	1767	A	N1-C6-N6	12.55	126.13	118.60
1	A	2629	A	N1-C6-N6	12.54	126.13	118.60
1	A	366	A	N1-C6-N6	12.54	126.12	118.60
1	A	1244	A	N1-C6-N6	12.54	126.12	118.60
1	A	666	G	P-O3'-C3'	12.52	134.72	119.70
1	A	330	A	N1-C6-N6	12.50	126.10	118.60
1	A	903	G	P-O3'-C3'	12.50	134.70	119.70
1	A	2837	A	N1-C6-N6	12.50	126.10	118.60
1	A	1820	A	N1-C6-N6	12.49	126.10	118.60
1	A	418	A	N1-C6-N6	12.49	126.09	118.60
1	A	2885	A	N1-C6-N6	12.48	126.09	118.60
1	A	1556	A	N1-C6-N6	12.48	126.09	118.60
1	A	1067	A	N1-C6-N6	12.46	126.08	118.60
1	A	130	A	N1-C6-N6	12.46	126.07	118.60
1	A	623	A	N1-C6-N6	12.45	126.07	118.60
1	A	724	A	N1-C6-N6	12.45	126.07	118.60
1	A	1194	A	N1-C6-N6	12.44	126.06	118.60
1	A	2111	A	N1-C6-N6	12.44	126.06	118.60
1	A	2216	A	N1-C6-N6	12.44	126.06	118.60
1	A	1284	A	N1-C6-N6	12.43	126.06	118.60
1	A	1094	A	N1-C6-N6	12.43	126.06	118.60
1	A	1432	A	N1-C6-N6	12.43	126.06	118.60
1	A	475	A	N1-C6-N6	12.43	126.06	118.60
1	A	154	A	N1-C6-N6	12.43	126.06	118.60
1	A	1619	A	N1-C6-N6	12.42	126.05	118.60
1	A	6	A	N1-C6-N6	12.42	126.05	118.60
1	A	110	A	N1-C6-N6	12.42	126.05	118.60
1	A	2700	A	N1-C6-N6	12.41	126.05	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1006	A	N1-C6-N6	12.41	126.05	118.60
1	A	318	A	N1-C6-N6	12.41	126.04	118.60
1	A	185	A	P-O3'-C3'	12.39	134.57	119.70
1	A	1021	A	N1-C6-N6	12.39	126.03	118.60
1	A	1491	A	N1-C6-N6	12.39	126.03	118.60
1	A	637	A	N1-C6-N6	12.38	126.03	118.60
1	A	2627	A	N1-C6-N6	12.38	126.03	118.60
1	A	2769	A	N1-C6-N6	12.38	126.03	118.60
1	A	600	A	N1-C6-N6	12.37	126.02	118.60
1	A	2804	A	N1-C6-N6	12.37	126.02	118.60
1	A	2900	A	N1-C6-N6	12.37	126.02	118.60
1	A	974	A	N1-C6-N6	12.36	126.01	118.60
1	A	1287	A	N1-C6-N6	12.36	126.01	118.60
1	A	1675	A	N1-C6-N6	12.35	126.01	118.60
1	A	2619	A	N1-C6-N6	12.35	126.01	118.60
1	A	2816	C	O4'-C1'-N1	12.35	118.08	108.20
1	A	867	A	N1-C6-N6	12.34	126.00	118.60
1	A	1294	A	N1-C6-N6	12.34	126.00	118.60
1	A	790	A	N1-C6-N6	12.34	126.00	118.60
1	A	1947	A	N1-C6-N6	12.34	126.00	118.60
1	A	2132	A	N1-C6-N6	12.33	126.00	118.60
1	A	2143	A	N1-C6-N6	12.32	125.99	118.60
1	A	1710	A	N1-C6-N6	12.32	125.99	118.60
1	A	561	A	N1-C6-N6	12.32	125.99	118.60
1	A	1778	A	N1-C6-N6	12.32	125.99	118.60
1	A	236	A	N1-C6-N6	12.31	125.99	118.60
1	A	769	A	N1-C6-N6	12.31	125.98	118.60
1	A	2119	A	N1-C6-N6	12.30	125.98	118.60
1	A	2164	A	N1-C6-N6	12.30	125.98	118.60
1	A	259	A	N1-C6-N6	12.30	125.98	118.60
1	A	1323	A	N1-C6-N6	12.29	125.98	118.60
1	A	2517	A	N1-C6-N6	12.30	125.98	118.60
1	A	2500	A	N1-C6-N6	12.29	125.98	118.60
1	A	281	A	N1-C6-N6	12.29	125.97	118.60
1	A	752	A	N1-C6-N6	12.29	125.97	118.60
1	A	1393	A	N1-C6-N6	12.29	125.97	118.60
1	A	1424	A	N1-C6-N6	12.29	125.97	118.60
1	A	1776	A	N1-C6-N6	12.29	125.97	118.60
1	A	1036	A	N1-C6-N6	12.28	125.97	118.60
1	A	2228	A	N1-C6-N6	12.28	125.97	118.60
1	A	1179	A	N1-C6-N6	12.28	125.97	118.60
1	A	1008	A	N1-C6-N6	12.28	125.97	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	673	A	N1-C6-N6	12.27	125.96	118.60
1	A	1308	A	N1-C6-N6	12.27	125.96	118.60
1	A	2049	A	N1-C6-N6	12.27	125.96	118.60
1	A	279	A	N1-C6-N6	12.27	125.96	118.60
1	A	1850	A	N1-C6-N6	12.27	125.96	118.60
1	A	274	A	N1-C6-N6	12.26	125.96	118.60
1	A	354	A	N1-C6-N6	12.26	125.96	118.60
1	A	798	A	N1-C6-N6	12.26	125.96	118.60
1	A	866	A	N1-C6-N6	12.26	125.96	118.60
1	A	1721	A	P-O5'-C5'	12.26	140.52	120.90
1	A	229	A	N1-C6-N6	12.26	125.95	118.60
1	A	1084	A	N1-C6-N6	12.26	125.95	118.60
1	A	1034	A	N1-C6-N6	12.25	125.95	118.60
1	A	384	A	N1-C6-N6	12.24	125.95	118.60
1	A	2220	A	N1-C6-N6	12.24	125.94	118.60
1	A	889	A	N1-C6-N6	12.23	125.94	118.60
1	A	1697	A	N1-C6-N6	12.23	125.94	118.60
1	A	2511	A	N1-C6-N6	12.23	125.94	118.60
1	A	1097	A	N1-C6-N6	12.23	125.94	118.60
1	A	183	A	N1-C6-N6	12.22	125.93	118.60
1	A	1802	A	N1-C6-N6	12.22	125.94	118.60
1	A	2570	A	N1-C6-N6	12.22	125.93	118.60
1	A	216	A	N1-C6-N6	12.22	125.93	118.60
1	A	2831	A	N1-C6-N6	12.22	125.93	118.60
1	A	1142	A	N1-C6-N6	12.21	125.93	118.60
1	A	2498	A	N1-C6-N6	12.21	125.93	118.60
1	A	2673	A	N1-C6-N6	12.21	125.93	118.60
1	A	999	A	N1-C6-N6	12.21	125.92	118.60
1	A	762	A	N1-C6-N6	12.19	125.92	118.60
1	A	258	A	N1-C6-N6	12.19	125.91	118.60
1	A	1166	G	N1-C6-O6	12.19	127.21	119.90
1	A	1593	A	N1-C6-N6	12.19	125.91	118.60
1	A	2793	A	N1-C6-N6	12.19	125.91	118.60
1	A	13	A	N1-C6-N6	12.19	125.91	118.60
1	A	500	A	N1-C6-N6	12.19	125.91	118.60
1	A	1392	A	N1-C6-N6	12.19	125.91	118.60
1	A	2270	A	N1-C6-N6	12.19	125.91	118.60
1	A	559	A	N1-C6-N6	12.18	125.91	118.60
1	A	490	A	N1-C6-N6	12.18	125.91	118.60
1	A	1442	A	N1-C6-N6	12.18	125.91	118.60
1	A	1074	A	N1-C6-N6	12.18	125.91	118.60
1	A	1175	A	N1-C6-N6	12.18	125.91	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2505	A	N1-C6-N6	12.18	125.91	118.60
1	A	1654	A	N1-C6-N6	12.18	125.91	118.60
1	A	2846	A	N1-C6-N6	12.18	125.91	118.60
1	A	1406	A	N1-C6-N6	12.17	125.90	118.60
1	A	2740	A	N1-C6-N6	12.17	125.90	118.60
1	A	2844	A	N1-C6-N6	12.17	125.90	118.60
1	A	1269	A	N1-C6-N6	12.16	125.90	118.60
1	A	2560	A	N1-C6-N6	12.16	125.90	118.60
1	A	1961	A	N1-C6-N6	12.16	125.90	118.60
1	A	2044	A	N1-C6-N6	12.16	125.90	118.60
1	A	2807	A	N1-C6-N6	12.16	125.90	118.60
1	A	543	A	N1-C6-N6	12.16	125.89	118.60
1	A	2440	A	N1-C6-N6	12.16	125.89	118.60
1	A	1020	A	N1-C6-N6	12.15	125.89	118.60
1	A	2106	A	N1-C6-N6	12.15	125.89	118.60
1	A	2694	A	N1-C6-N6	12.15	125.89	118.60
1	A	1335	A	N1-C6-N6	12.15	125.89	118.60
1	A	1569	A	N1-C6-N6	12.15	125.89	118.60
1	A	631	G	P-O3'-C3'	12.15	134.28	119.70
1	A	572	A	N1-C6-N6	12.14	125.89	118.60
1	A	584	A	N1-C6-N6	12.14	125.88	118.60
1	A	1061	A	N1-C6-N6	12.14	125.88	118.60
1	A	690	A	N1-C6-N6	12.14	125.88	118.60
1	A	965	A	N1-C6-N6	12.13	125.88	118.60
1	A	314	A	N1-C6-N6	12.13	125.88	118.60
1	A	1046	A	N1-C6-N6	12.12	125.88	118.60
1	A	1149	A	N1-C6-N6	12.13	125.88	118.60
1	A	1618	A	N1-C6-N6	12.13	125.88	118.60
1	A	5	A	N1-C6-N6	12.12	125.87	118.60
1	A	322	A	N1-C6-N6	12.12	125.87	118.60
1	A	1695	A	N1-C6-N6	12.12	125.87	118.60
1	A	2436	A	N1-C6-N6	12.12	125.87	118.60
1	A	1760	A	N1-C6-N6	12.12	125.87	118.60
1	A	1314	A	N1-C6-N6	12.11	125.87	118.60
1	A	1201	A	N1-C6-N6	12.11	125.87	118.60
1	A	194	A	N1-C6-N6	12.11	125.87	118.60
1	A	808	A	N1-C6-N6	12.11	125.86	118.60
1	A	2032	A	N1-C6-N6	12.10	125.86	118.60
1	A	199	A	N1-C6-N6	12.10	125.86	118.60
1	A	179	A	N1-C6-N6	12.10	125.86	118.60
1	A	786	A	N1-C6-N6	12.09	125.86	118.60
1	A	1945	A	N1-C6-N6	12.09	125.86	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2606	A	N1-C6-N6	12.09	125.86	118.60
1	A	44	A	N1-C6-N6	12.09	125.85	118.60
1	A	1520	A	N1-C6-N6	12.09	125.85	118.60
1	A	2689	A	N1-C6-N6	12.09	125.85	118.60
1	A	1173	A	N1-C6-N6	12.09	125.85	118.60
1	A	933	C	P-O3'-C3'	12.08	134.20	119.70
1	A	1299	G	N1-C6-O6	12.08	127.15	119.90
1	A	200	A	N1-C6-N6	12.07	125.84	118.60
1	A	2083	A	N1-C6-N6	12.07	125.84	118.60
1	A	1456	A	N1-C6-N6	12.07	125.84	118.60
1	A	102	A	N1-C6-N6	12.07	125.84	118.60
1	A	2691	A	N1-C6-N6	12.07	125.84	118.60
1	A	1473	A	N1-C6-N6	12.07	125.84	118.60
1	A	166	A	N1-C6-N6	12.06	125.84	118.60
1	A	1404	A	N1-C6-N6	12.06	125.84	118.60
1	A	1465	A	N1-C6-N6	12.06	125.84	118.60
1	A	538	A	N1-C6-N6	12.06	125.84	118.60
1	A	1312	A	N1-C6-N6	12.06	125.83	118.60
1	A	560	A	N1-C6-N6	12.05	125.83	118.60
1	A	1266	A	N1-C6-N6	12.05	125.83	118.60
1	A	1541	A	N1-C6-N6	12.05	125.83	118.60
1	A	2000	A	N1-C6-N6	12.05	125.83	118.60
1	A	2455	A	N1-C6-N6	12.05	125.83	118.60
1	A	337	A	N1-C6-N6	12.04	125.82	118.60
1	A	2750	A	N1-C6-N6	12.04	125.82	118.60
1	A	840	A	N1-C6-N6	12.04	125.82	118.60
1	A	1073	A	N1-C6-N6	12.04	125.82	118.60
1	A	1243	A	N1-C6-N6	12.04	125.82	118.60
1	A	1161	A	N1-C6-N6	12.03	125.82	118.60
1	A	2875	A	N1-C6-N6	12.03	125.82	118.60
1	A	171	A	N1-C6-N6	12.02	125.81	118.60
1	A	1302	A	N1-C6-N6	12.02	125.81	118.60
1	A	1606	A	N1-C6-N6	12.02	125.81	118.60
1	A	1685	A	N1-C6-N6	12.02	125.81	118.60
1	A	2176	A	N1-C6-N6	12.02	125.81	118.60
1	A	2924	A	N1-C6-N6	12.02	125.81	118.60
1	A	882	A	N1-C6-N6	12.02	125.81	118.60
1	A	176	A	N1-C6-N6	12.01	125.81	118.60
1	A	753	A	N1-C6-N6	12.01	125.81	118.60
1	A	437	A	N1-C6-N6	12.01	125.81	118.60
1	A	339	A	N1-C6-N6	12.01	125.80	118.60
1	A	732	A	N1-C6-N6	12.01	125.80	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	126	A	N1-C6-N6	12.00	125.80	118.60
1	A	2912	A	N1-C6-N6	12.00	125.80	118.60
1	A	2141	A	N1-C6-N6	11.99	125.80	118.60
1	A	1233	A	N1-C6-N6	11.99	125.79	118.60
1	A	583	G	N1-C6-O6	11.99	127.09	119.90
1	A	1141	A	N1-C6-N6	11.99	125.79	118.60
1	A	658	A	N1-C6-N6	11.98	125.79	118.60
1	A	428	A	N1-C6-N6	11.98	125.79	118.60
1	A	1714	A	N1-C6-N6	11.98	125.79	118.60
1	A	1648	A	N1-C6-N6	11.97	125.78	118.60
1	A	2089	A	N1-C6-N6	11.97	125.78	118.60
1	A	2080	A	N1-C6-N6	11.97	125.78	118.60
1	A	2854	A	N1-C6-N6	11.97	125.78	118.60
1	A	828	A	N1-C6-N6	11.97	125.78	118.60
1	A	1582	U	P-O3'-C3'	11.97	134.06	119.70
1	A	388	A	N1-C6-N6	11.96	125.78	118.60
1	A	922	A	N1-C6-N6	11.96	125.78	118.60
1	A	2256	A	N1-C6-N6	11.96	125.78	118.60
1	A	364	A	N1-C6-N6	11.96	125.78	118.60
1	A	1174	A	N1-C6-N6	11.96	125.78	118.60
1	A	553	A	N1-C6-N6	11.96	125.77	118.60
1	A	1999	A	N1-C6-N6	11.96	125.77	118.60
1	A	2034	A	N1-C6-N6	11.95	125.77	118.60
1	A	2463	A	N1-C6-N6	11.95	125.77	118.60
1	A	448	A	N1-C6-N6	11.95	125.77	118.60
1	A	1477	A	N1-C6-N6	11.95	125.77	118.60
1	A	1722	A	N1-C6-N6	11.95	125.77	118.60
1	A	2594	A	N1-C6-N6	11.95	125.77	118.60
1	A	231	A	N1-C6-N6	11.94	125.77	118.60
1	A	1056	A	N1-C6-N6	11.94	125.77	118.60
1	A	1445	A	N1-C6-N6	11.94	125.77	118.60
1	A	2876	A	N1-C6-N6	11.94	125.76	118.60
1	A	1055	A	N1-C6-N6	11.94	125.76	118.60
1	A	1260	A	N1-C6-N6	11.94	125.76	118.60
1	A	265	A	N1-C6-N6	11.93	125.76	118.60
1	A	2777	A	N1-C6-N6	11.93	125.76	118.60
1	A	1265	A	N1-C6-N6	11.93	125.76	118.60
1	A	1116	A	N1-C6-N6	11.93	125.75	118.60
1	A	2018	A	N1-C6-N6	11.93	125.75	118.60
1	A	185	A	N1-C6-N6	11.92	125.75	118.60
1	A	2010	A	N1-C6-N6	11.92	125.75	118.60
1	A	2601	A	N1-C6-N6	11.92	125.75	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	476	A	N1-C6-N6	11.92	125.75	118.60
1	A	896	A	N1-C6-N6	11.92	125.75	118.60
1	A	1517	A	N1-C6-N6	11.92	125.75	118.60
1	A	689	A	N1-C6-N6	11.91	125.75	118.60
1	A	1516	A	N1-C6-N6	11.91	125.75	118.60
1	A	661	A	N1-C6-N6	11.91	125.75	118.60
1	A	1497	G	O4'-C1'-N9	11.91	117.73	108.20
1	A	2532	A	N1-C6-N6	11.91	125.75	118.60
1	A	324	A	N1-C6-N6	11.91	125.75	118.60
1	A	2542	A	N1-C6-N6	11.91	125.74	118.60
1	A	2810	A	N1-C6-N6	11.90	125.74	118.60
1	A	1581	A	N1-C6-N6	11.90	125.74	118.60
1	A	91	A	N1-C6-N6	11.90	125.74	118.60
1	A	656	A	N1-C6-N6	11.90	125.74	118.60
1	A	574	A	N1-C6-N6	11.89	125.74	118.60
1	A	958	A	N1-C6-N6	11.89	125.74	118.60
1	A	1691	A	N1-C6-N6	11.89	125.74	118.60
1	A	2007	A	N1-C6-N6	11.89	125.74	118.60
1	A	1642	G	C5-C6-O6	-11.89	121.46	128.60
1	A	376	A	N1-C6-N6	11.89	125.73	118.60
1	A	1818	A	N1-C6-N6	11.89	125.73	118.60
1	A	2656	G	P-O3'-C3'	11.89	133.97	119.70
1	A	841	A	N1-C6-N6	11.89	125.73	118.60
1	A	2447	A	N1-C6-N6	11.89	125.73	118.60
1	A	300	G	N1-C6-O6	11.88	127.03	119.90
1	A	486	A	N1-C6-N6	11.89	125.73	118.60
1	A	1026	A	N1-C6-N6	11.88	125.73	118.60
1	A	1157	A	N1-C6-N6	11.89	125.73	118.60
1	A	1078	A	N1-C6-N6	11.88	125.73	118.60
1	A	1224	A	N1-C6-N6	11.88	125.73	118.60
1	A	206	A	N1-C6-N6	11.88	125.73	118.60
1	A	410	G	N1-C6-O6	11.88	127.03	119.90
1	A	1014	A	N1-C6-N6	11.88	125.73	118.60
1	A	1119	A	N1-C6-N6	11.88	125.73	118.60
1	A	1423	A	N1-C6-N6	11.87	125.72	118.60
1	A	73	A	N1-C6-N6	11.87	125.72	118.60
1	A	722	A	N1-C6-N6	11.87	125.72	118.60
1	A	1592	A	N1-C6-N6	11.87	125.72	118.60
1	A	2100	A	N1-C6-N6	11.87	125.72	118.60
1	A	836	A	N1-C6-N6	11.87	125.72	118.60
1	A	1723	A	N1-C6-N6	11.86	125.72	118.60
1	A	957	A	N1-C6-N6	11.86	125.72	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1631	A	N1-C6-N6	11.86	125.72	118.60
1	A	125	A	N1-C6-N6	11.86	125.71	118.60
1	A	876	A	N1-C6-N6	11.86	125.71	118.60
1	A	1096	A	N1-C6-N6	11.86	125.71	118.60
1	A	2191	A	N1-C6-N6	11.86	125.71	118.60
1	A	971	A	N1-C6-N6	11.85	125.71	118.60
1	A	1553	A	N1-C6-N6	11.85	125.71	118.60
1	A	412	A	N1-C6-N6	11.85	125.71	118.60
1	A	630	A	N1-C6-N6	11.85	125.71	118.60
1	A	2927	A	N1-C6-N6	11.85	125.71	118.60
1	A	1555	A	N1-C6-N6	11.85	125.71	118.60
1	A	2835	A	N1-C6-N6	11.85	125.71	118.60
1	A	1686	A	N1-C6-N6	11.84	125.70	118.60
1	A	683	A	N1-C6-N6	11.84	125.70	118.60
1	A	970	A	N1-C6-N6	11.84	125.70	118.60
1	A	2071	A	N1-C6-N6	11.84	125.70	118.60
1	A	1745	A	N1-C6-N6	11.84	125.70	118.60
1	A	436	A	N1-C6-N6	11.83	125.70	118.60
1	A	1562	A	N1-C6-N6	11.83	125.70	118.60
1	A	1027	A	N1-C6-N6	11.83	125.70	118.60
1	A	1540	A	N1-C6-N6	11.83	125.70	118.60
1	A	702	A	N1-C6-N6	11.83	125.70	118.60
1	A	829	A	N1-C6-N6	11.83	125.70	118.60
1	A	2060	A	N1-C6-N6	11.83	125.70	118.60
1	A	537	A	N1-C6-N6	11.82	125.69	118.60
1	A	1499	A	N1-C6-N6	11.82	125.69	118.60
1	A	2833	U	O4'-C1'-N1	11.82	117.66	108.20
1	A	325	A	N1-C6-N6	11.82	125.69	118.60
1	A	811	A	N1-C6-N6	11.82	125.69	118.60
1	A	2661	A	N1-C6-N6	11.82	125.69	118.60
1	A	1421	A	N1-C6-N6	11.82	125.69	118.60
1	A	2165	A	N1-C6-N6	11.82	125.69	118.60
1	A	1313	A	N1-C6-N6	11.82	125.69	118.60
1	A	1845	A	N1-C6-N6	11.82	125.69	118.60
1	A	616	A	N1-C6-N6	11.81	125.69	118.60
1	A	2779	A	N1-C6-N6	11.81	125.69	118.60
1	A	653	A	N1-C6-N6	11.81	125.69	118.60
1	A	1426	A	N1-C6-N6	11.81	125.69	118.60
1	A	1197	A	N1-C6-N6	11.81	125.68	118.60
1	A	1253	A	N1-C6-N6	11.81	125.69	118.60
1	A	2526	A	N1-C6-N6	11.81	125.68	118.60
1	A	144	A	N1-C6-N6	11.80	125.68	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1536	A	N1-C6-N6	11.80	125.68	118.60
1	A	1483	A	N1-C6-N6	11.80	125.68	118.60
1	A	893	A	N1-C6-N6	11.80	125.68	118.60
1	A	1178	U	P-O3'-C3'	11.80	133.86	119.70
1	A	2826	A	N1-C6-N6	11.80	125.68	118.60
1	A	470	A	N1-C6-N6	11.79	125.68	118.60
1	A	61	A	N1-C6-N6	11.79	125.67	118.60
1	A	2252	A	N1-C6-N6	11.79	125.67	118.60
1	A	1202	A	N1-C6-N6	11.79	125.67	118.60
1	A	1663	A	N1-C6-N6	11.79	125.67	118.60
1	A	2618	A	N1-C6-N6	11.79	125.67	118.60
1	A	1326	A	N1-C6-N6	11.78	125.67	118.60
1	A	2827	A	N1-C6-N6	11.78	125.67	118.60
1	A	952	A	N1-C6-N6	11.78	125.67	118.60
1	A	283	G	N1-C6-O6	11.77	126.96	119.90
1	A	1123	A	N1-C6-N6	11.77	125.66	118.60
1	A	207	A	N1-C6-N6	11.77	125.66	118.60
1	A	978	A	N1-C6-N6	11.77	125.66	118.60
1	A	2916	A	N1-C6-N6	11.76	125.66	118.60
1	A	1427	G	N1-C6-O6	11.76	126.95	119.90
1	A	1583	A	N1-C6-N6	11.76	125.65	118.60
1	A	2059	A	N1-C6-N6	11.76	125.65	118.60
1	A	2510	G	N1-C6-O6	11.76	126.95	119.90
1	A	1941	A	N1-C6-N6	11.75	125.65	118.60
1	A	1072	A	N1-C6-N6	11.75	125.65	118.60
1	A	2631	A	N1-C6-N6	11.75	125.65	118.60
1	A	943	A	N1-C6-N6	11.74	125.65	118.60
1	A	1620	A	N1-C6-N6	11.74	125.65	118.60
1	A	2241	A	N1-C6-N6	11.74	125.65	118.60
1	A	917	A	N1-C6-N6	11.74	125.64	118.60
1	A	1542	A	N1-C6-N6	11.73	125.64	118.60
1	A	355	A	N1-C6-N6	11.73	125.64	118.60
1	A	878	G	N1-C6-O6	11.72	126.94	119.90
1	A	1677	A	N1-C6-N6	11.72	125.63	118.60
1	A	1661	A	N1-C6-N6	11.72	125.63	118.60
1	A	477	A	N1-C6-N6	11.72	125.63	118.60
1	A	1144	A	N1-C6-N6	11.72	125.63	118.60
1	A	1417	A	N1-C6-N6	11.72	125.63	118.60
1	A	1504	A	N1-C6-N6	11.72	125.63	118.60
1	A	1293	A	N1-C6-N6	11.71	125.63	118.60
1	A	1405	A	N1-C6-N6	11.71	125.63	118.60
1	A	2819	A	N1-C6-N6	11.71	125.63	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1942	A	N1-C6-N6	11.71	125.62	118.60
1	A	168	A	N1-C6-N6	11.70	125.62	118.60
1	A	2613	U	O4'-C1'-N1	11.70	117.56	108.20
1	A	434	U	P-O3'-C3'	11.70	133.74	119.70
1	A	699	A	N1-C6-N6	11.70	125.62	118.60
1	A	2719	A	N1-C6-N6	11.70	125.62	118.60
1	A	431	A	N1-C6-N6	11.70	125.62	118.60
1	A	1524	A	N1-C6-N6	11.70	125.62	118.60
1	A	2468	A	N1-C6-N6	11.70	125.62	118.60
1	A	2869	A	N1-C6-N6	11.69	125.61	118.60
1	A	2590	A	N1-C6-N6	11.69	125.61	118.60
1	A	1617	A	N1-C6-N6	11.68	125.61	118.60
1	A	582	A	N1-C6-N6	11.68	125.61	118.60
1	A	2042	A	N1-C6-N6	11.68	125.61	118.60
1	A	1496	G	N1-C6-O6	11.68	126.91	119.90
1	A	770	A	N1-C6-N6	11.68	125.61	118.60
1	A	991	A	N1-C6-N6	11.68	125.61	118.60
1	A	2088	A	N1-C6-N6	11.68	125.61	118.60
1	A	1100	A	N1-C6-N6	11.67	125.60	118.60
1	A	2571	A	N1-C6-N6	11.67	125.60	118.60
1	A	1130	A	N1-C6-N6	11.67	125.60	118.60
1	A	1816	A	N1-C6-N6	11.67	125.60	118.60
1	A	2421	A	N1-C6-N6	11.66	125.60	118.60
1	A	2848	A	N1-C6-N6	11.66	125.60	118.60
1	A	124	A	N1-C6-N6	11.66	125.59	118.60
1	A	1680	A	N1-C6-N6	11.66	125.59	118.60
1	A	2537	G	N1-C6-O6	11.66	126.89	119.90
1	A	1677	A	P-O3'-C3'	11.65	133.68	119.70
1	A	647	A	N1-C6-N6	11.65	125.59	118.60
1	A	2547	A	N1-C6-N6	11.64	125.58	118.60
1	A	1585	A	N1-C6-N6	11.64	125.58	118.60
1	A	2643	A	N1-C6-N6	11.64	125.58	118.60
1	A	1388	A	N1-C6-N6	11.63	125.58	118.60
1	A	2429	G	N1-C6-O6	11.63	126.88	119.90
1	A	2480	A	N1-C6-N6	11.63	125.58	118.60
1	A	429	A	N1-C6-N6	11.63	125.58	118.60
1	A	679	A	N1-C6-N6	11.63	125.58	118.60
1	A	2662	A	N1-C6-N6	11.63	125.58	118.60
1	A	851	A	N1-C6-N6	11.63	125.58	118.60
1	A	2762	A	N1-C6-N6	11.62	125.57	118.60
1	A	1537	G	N1-C6-O6	11.62	126.87	119.90
1	A	1724	A	N1-C6-N6	11.62	125.57	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2257	G	N1-C6-O6	11.61	126.86	119.90
1	A	2593	A	N1-C6-N6	11.60	125.56	118.60
1	A	1156	G	P-O3'-C3'	11.60	133.62	119.70
1	A	870	A	N1-C6-N6	11.59	125.55	118.60
1	A	1005	A	N1-C6-N6	11.59	125.55	118.60
1	A	763	A	N1-C6-N6	11.59	125.55	118.60
1	A	1614	A	N1-C6-N6	11.59	125.55	118.60
1	A	720	C	O4'-C1'-N1	11.58	117.47	108.20
1	A	12	A	N1-C6-N6	11.57	125.54	118.60
1	A	94	A	N1-C6-N6	11.56	125.54	118.60
1	A	647	A	P-O3'-C3'	11.56	133.58	119.70
1	A	139	A	N1-C6-N6	11.56	125.53	118.60
1	A	935	A	N1-C6-N6	11.56	125.53	118.60
1	A	1797	A	N1-C6-N6	11.56	125.53	118.60
1	A	2573	G	N1-C6-O6	11.56	126.83	119.90
1	A	268	A	N1-C6-N6	11.55	125.53	118.60
1	A	1029	A	N1-C6-N6	11.55	125.53	118.60
1	A	1066	A	N1-C6-N6	11.55	125.53	118.60
1	A	524	A	N1-C6-N6	11.54	125.53	118.60
1	A	52	A	N1-C6-N6	11.54	125.53	118.60
1	A	70	G	N1-C6-O6	11.54	126.82	119.90
1	A	1025	A	N1-C6-N6	11.54	125.52	118.60
1	A	1814	A	N1-C6-N6	11.54	125.52	118.60
1	A	2830	A	N1-C6-N6	11.54	125.52	118.60
1	A	2683	A	N1-C6-N6	11.52	125.51	118.60
1	A	1113	A	N1-C6-N6	11.51	125.51	118.60
1	A	1210	A	N1-C6-N6	11.51	125.51	118.60
1	A	602	G	N1-C6-O6	11.51	126.81	119.90
1	A	2117	A	N1-C6-N6	11.51	125.50	118.60
1	A	1054	A	N1-C6-N6	11.50	125.50	118.60
1	A	1659	A	N1-C6-N6	11.50	125.50	118.60
1	A	2477	A	N1-C6-N6	11.49	125.50	118.60
1	A	799	A	N1-C6-N6	11.49	125.49	118.60
1	A	1325	A	N1-C6-N6	11.49	125.49	118.60
1	A	345	A	N1-C6-N6	11.49	125.49	118.60
1	A	692	A	N1-C6-N6	11.48	125.49	118.60
1	A	588	C	O4'-C1'-N1	11.48	117.38	108.20
1	A	469	A	N1-C6-N6	11.48	125.49	118.60
1	A	1777	G	N1-C6-O6	11.47	126.78	119.90
1	A	1503	G	C5-C6-O6	-11.47	121.72	128.60
1	A	2826	A	P-O3'-C3'	11.47	133.47	119.70
1	A	1093	G	P-O3'-C3'	11.47	133.47	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1747	G	N1-C6-O6	11.47	126.78	119.90
1	A	2152	A	N1-C6-N6	11.47	125.48	118.60
1	A	2087	A	N1-C6-N6	11.46	125.48	118.60
1	A	30	G	N1-C6-O6	11.46	126.78	119.90
1	A	2091	A	N1-C6-N6	11.46	125.48	118.60
1	A	2163	A	N1-C6-N6	11.46	125.47	118.60
1	A	1172	A	N1-C6-N6	11.45	125.47	118.60
1	A	2464	A	N1-C6-N6	11.45	125.47	118.60
1	A	593	A	N1-C6-N6	11.44	125.47	118.60
1	A	64	A	N1-C6-N6	11.44	125.46	118.60
1	A	1615	A	N1-C6-N6	11.44	125.46	118.60
1	A	618	A	N1-C6-N6	11.43	125.46	118.60
1	A	2828	G	P-O3'-C3'	11.43	133.41	119.70
1	A	2461	A	N1-C6-N6	11.42	125.45	118.60
1	A	65	A	N1-C6-N6	11.42	125.45	118.60
1	A	987	A	N1-C6-N6	11.42	125.45	118.60
1	A	202	A	N1-C6-N6	11.42	125.45	118.60
1	A	14	A	N1-C6-N6	11.41	125.45	118.60
1	A	2462	A	N1-C6-N6	11.41	125.45	118.60
1	A	2200	A	N1-C6-N6	11.41	125.44	118.60
1	A	1813	A	N1-C6-N6	11.41	125.44	118.60
1	A	597	G	N1-C6-O6	11.40	126.74	119.90
1	A	1957	A	N1-C6-N6	11.40	125.44	118.60
1	A	1092	A	N1-C6-N6	11.40	125.44	118.60
1	A	925	A	N1-C6-N6	11.39	125.44	118.60
1	A	140	A	N1-C6-N6	11.39	125.44	118.60
1	A	177	G	N1-C6-O6	11.38	126.73	119.90
1	A	161	A	N1-C6-N6	11.37	125.42	118.60
1	A	964	A	N1-C6-N6	11.37	125.42	118.60
1	A	1706	G	N1-C6-O6	11.37	126.72	119.90
1	A	667	A	N1-C6-N6	11.36	125.42	118.60
1	A	2227	A	N1-C6-N6	11.36	125.42	118.60
1	A	1346	A	N1-C6-N6	11.35	125.41	118.60
1	A	28	A	N1-C6-N6	11.35	125.41	118.60
1	A	2254	A	N1-C6-N6	11.35	125.41	118.60
1	A	2787	A	N1-C6-N6	11.32	125.39	118.60
1	A	1103	A	N1-C6-N6	11.32	125.39	118.60
1	A	1956	A	N1-C6-N6	11.30	125.38	118.60
1	A	2497	A	N1-C6-N6	11.30	125.38	118.60
1	A	479	A	N1-C6-N6	11.30	125.38	118.60
1	A	677	A	N1-C6-N6	11.30	125.38	118.60
1	A	715	A	N1-C6-N6	11.30	125.38	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	908	A	N1-C6-N6	11.30	125.38	118.60
1	A	90	A	N1-C6-N6	11.29	125.38	118.60
1	A	1468	G	N1-C6-O6	11.29	126.68	119.90
1	A	996	G	N1-C6-O6	11.29	126.67	119.90
1	A	519	A	N1-C6-N6	11.28	125.37	118.60
1	A	993	A	N1-C6-N6	11.27	125.36	118.60
1	A	363	C	O4'-C1'-N1	11.27	117.21	108.20
1	A	1131	A	N1-C6-N6	11.27	125.36	118.60
1	A	1340	A	N1-C6-N6	11.27	125.36	118.60
1	A	1525	G	N1-C6-O6	11.27	126.66	119.90
1	A	1485	A	N1-C6-N6	11.26	125.36	118.60
1	A	1953	C	P-O3'-C3'	11.26	133.22	119.70
1	A	71	A	P-O3'-C3'	11.26	133.21	119.70
1	A	1047	A	N1-C6-N6	11.26	125.36	118.60
1	A	1831	A	N1-C6-N6	11.26	125.36	118.60
1	A	2454	A	N1-C6-N6	11.26	125.35	118.60
1	A	717	A	N1-C6-N6	11.25	125.35	118.60
1	A	84	A	N1-C6-N6	11.25	125.35	118.60
1	A	1098	C	P-O3'-C3'	11.24	133.19	119.70
1	A	2202	A	N1-C6-N6	11.24	125.34	118.60
1	A	175	G	N1-C6-O6	11.23	126.64	119.90
1	A	1007	G	P-O3'-C3'	11.23	133.17	119.70
1	A	518	A	N1-C6-N6	11.22	125.33	118.60
1	A	2686	A	N1-C6-N6	11.21	125.33	118.60
1	A	1160	G	N1-C6-O6	11.20	126.62	119.90
1	A	2168	G	N1-C6-O6	11.20	126.62	119.90
1	A	998	G	N1-C6-O6	11.20	126.62	119.90
1	A	1091	U	P-O3'-C3'	11.20	133.14	119.70
1	A	1347	A	N1-C6-N6	11.20	125.32	118.60
1	A	1381	A	N1-C6-N6	11.20	125.32	118.60
1	A	517	A	N1-C6-N6	11.19	125.31	118.60
1	A	1506	A	N1-C6-N6	11.19	125.31	118.60
1	A	107	G	N1-C6-O6	11.19	126.61	119.90
1	A	695	G	N1-C6-O6	11.19	126.61	119.90
1	A	2898	A	N1-C6-N6	11.19	125.31	118.60
1	A	219	A	N1-C6-N6	11.18	125.31	118.60
1	A	264	G	N1-C6-O6	11.18	126.61	119.90
1	A	2881	G	N1-C6-O6	11.18	126.61	119.90
1	A	527	A	N1-C6-N6	11.18	125.31	118.60
1	A	947	A	N1-C6-N6	11.18	125.31	118.60
1	A	1815	A	N1-C6-N6	11.18	125.31	118.60
1	A	652	A	N1-C6-N6	11.17	125.30	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2155	A	N1-C6-N6	11.17	125.30	118.60
1	A	1628	G	N1-C6-O6	11.16	126.59	119.90
1	A	1518	G	N1-C6-O6	11.15	126.59	119.90
1	A	2754	A	N1-C6-N6	11.15	125.29	118.60
1	A	2474	G	N1-C6-O6	11.14	126.58	119.90
1	A	426	G	N1-C6-O6	11.14	126.58	119.90
1	A	1188	A	N1-C6-N6	11.14	125.28	118.60
1	A	871	G	N1-C6-O6	11.13	126.58	119.90
1	A	797	A	N1-C6-N6	11.13	125.28	118.60
1	A	1464	A	N1-C6-N6	11.13	125.28	118.60
1	A	2425	G	N1-C6-O6	11.12	126.58	119.90
1	A	1687	G	N1-C6-O6	11.12	126.57	119.90
1	A	2745	U	O4'-C1'-N1	11.12	117.10	108.20
1	A	1788	A	N1-C6-N6	11.12	125.27	118.60
1	A	2459	A	N1-C6-N6	11.11	125.27	118.60
1	A	1057	G	N1-C6-O6	11.11	126.56	119.90
1	A	2499	G	N1-C6-O6	11.10	126.56	119.90
1	A	1019	A	N1-C6-N6	11.09	125.25	118.60
1	A	1246	G	N1-C6-O6	11.07	126.55	119.90
1	A	1627	A	N1-C6-N6	11.07	125.25	118.60
1	A	626	G	N1-C6-O6	11.07	126.54	119.90
1	A	1375	A	N1-C6-N6	11.06	125.24	118.60
1	A	275	A	N1-C6-N6	11.06	125.24	118.60
1	A	659	A	N1-C6-N6	11.06	125.24	118.60
1	A	1418	U	P-O3'-C3'	11.06	132.97	119.70
1	A	2259	G	N1-C6-O6	11.06	126.53	119.90
1	A	1075	A	N1-C6-N6	11.05	125.23	118.60
1	A	976	U	P-O3'-C3'	11.05	132.96	119.70
1	A	2786	A	N1-C6-N6	11.04	125.23	118.60
1	A	1575	A	N1-C6-N6	11.04	125.22	118.60
1	A	2615	C	O4'-C1'-N1	11.02	117.01	108.20
1	A	2146	A	N1-C6-N6	11.01	125.21	118.60
1	A	2639	C	P-O3'-C3'	11.00	132.90	119.70
1	A	530	A	N1-C6-N6	11.00	125.20	118.60
1	A	2205	A	N1-C6-N6	10.98	125.19	118.60
1	A	385	G	N1-C6-O6	10.98	126.49	119.90
1	A	2658	A	N1-C6-N6	10.97	125.18	118.60
1	A	1669	G	N1-C6-O6	10.96	126.48	119.90
1	A	2711	G	N1-C6-O6	10.96	126.48	119.90
1	A	162	A	N1-C6-N6	10.96	125.17	118.60
1	A	472	G	N1-C6-O6	10.96	126.47	119.90
1	A	824	G	N1-C6-O6	10.96	126.47	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	346	G	N1-C6-O6	10.95	126.47	119.90
1	A	2654	G	N1-C6-O6	10.95	126.47	119.90
1	A	1848	A	P-O3'-C3'	10.95	132.84	119.70
1	A	2473	G	N1-C6-O6	10.94	126.47	119.90
1	A	547	A	N1-C6-N6	10.93	125.16	118.60
1	A	2246	G	N1-C6-O6	10.93	126.46	119.90
1	A	1362	G	N1-C6-O6	10.93	126.45	119.90
1	A	435	G	P-O3'-C3'	10.92	132.80	119.70
1	A	408	G	N1-C6-O6	10.91	126.45	119.90
1	A	575	A	N1-C6-N6	10.91	125.14	118.60
1	A	344	G	N1-C6-O6	10.90	126.44	119.90
1	A	1628	G	C5'-C4'-O4'	-10.90	96.03	109.10
1	A	1317	G	N1-C6-O6	10.89	126.44	119.90
1	A	1538	G	N1-C6-O6	10.89	126.43	119.90
1	A	851	A	P-O3'-C3'	10.88	132.75	119.70
1	A	1492	G	P-O3'-C3'	10.87	132.74	119.70
1	A	3	U	O4'-C1'-N1	10.87	116.89	108.20
1	A	494	A	N1-C6-N6	10.86	125.12	118.60
1	A	421	A	N1-C6-N6	10.86	125.12	118.60
1	A	1434	A	N1-C6-N6	10.86	125.12	118.60
1	A	2064	G	P-O3'-C3'	10.86	132.73	119.70
1	A	568	G	N1-C6-O6	10.86	126.42	119.90
1	A	2806	G	N1-C6-O6	10.85	126.41	119.90
1	A	374	A	N1-C6-N6	10.84	125.11	118.60
1	A	1539	C	C2-N1-C1'	10.84	130.72	118.80
1	A	1735	A	N1-C6-N6	10.84	125.10	118.60
1	A	373	A	N1-C6-N6	10.84	125.10	118.60
1	A	2160	U	P-O3'-C3'	10.83	132.70	119.70
1	A	50	U	P-O3'-C3'	10.83	132.69	119.70
1	A	585	G	N1-C6-O6	10.83	126.40	119.90
1	A	2518	G	N1-C6-O6	10.82	126.39	119.90
1	A	389	A	N1-C6-N6	10.82	125.09	118.60
1	A	678	A	N1-C6-N6	10.81	125.08	118.60
1	A	1382	G	N1-C6-O6	10.81	126.39	119.90
1	A	2788	G	N1-C6-O6	10.81	126.38	119.90
1	A	1948	A	N1-C6-N6	10.80	125.08	118.60
1	A	1263	G	N1-C6-O6	10.79	126.38	119.90
1	A	583	G	C5-C6-O6	-10.79	122.13	128.60
1	A	71	A	N1-C6-N6	10.79	125.07	118.60
1	A	1132	A	N1-C6-N6	10.78	125.07	118.60
1	A	507	A	N1-C6-N6	10.78	125.07	118.60
1	A	1936	G	N1-C6-O6	10.78	126.36	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	417	G	N1-C6-O6	10.77	126.36	119.90
1	A	939	G	N1-C6-O6	10.77	126.36	119.90
1	A	182	C	O4'-C1'-N1	10.77	116.81	108.20
1	A	1998	A	N1-C6-N6	10.77	125.06	118.60
1	A	197	G	N1-C6-O6	10.76	126.36	119.90
1	A	382	G	N1-C6-O6	10.76	126.36	119.90
1	A	2578	G	N1-C6-O6	10.75	126.35	119.90
1	A	2009	G	N1-C6-O6	10.74	126.34	119.90
1	A	1012	G	N1-C6-O6	10.73	126.34	119.90
1	A	2758	G	N1-C6-O6	10.73	126.34	119.90
1	A	280	G	N1-C6-O6	10.72	126.33	119.90
1	A	371	G	N1-C6-O6	10.72	126.33	119.90
1	A	1526	G	N1-C6-O6	10.71	126.33	119.90
1	A	2756	G	N1-C6-O6	10.71	126.33	119.90
1	A	2562	U	P-O3'-C3'	10.70	132.54	119.70
1	A	2702	G	N1-C6-O6	10.70	126.32	119.90
1	A	2877	G	N1-C6-O6	10.68	126.31	119.90
1	A	1707	U	O4'-C1'-N1	10.68	116.74	108.20
1	A	1852	G	N1-C6-O6	10.67	126.30	119.90
1	A	1428	G	N1-C6-O6	10.67	126.30	119.90
1	A	1657	C	O4'-C1'-N1	10.66	116.73	108.20
1	A	1768	A	N1-C6-N6	10.66	125.00	118.60
1	A	532	C	O4'-C1'-N1	10.65	116.72	108.20
1	A	1439	U	O4'-C1'-N1	10.65	116.72	108.20
1	A	2616	A	N1-C6-N6	10.64	124.99	118.60
1	A	180	G	N1-C6-O6	10.64	126.28	119.90
1	A	1721	A	O4'-C1'-N9	10.64	116.71	108.20
1	A	2444	G	N1-C6-O6	10.63	126.28	119.90
1	A	2449	C	O4'-C1'-N1	10.63	116.71	108.20
1	A	15	G	N1-C6-O6	10.63	126.28	119.90
1	A	179	A	P-O3'-C3'	10.62	132.45	119.70
1	A	2595	A	N1-C6-N6	10.62	124.97	118.60
1	A	2894	G	N1-C6-O6	10.62	126.27	119.90
1	A	642	G	N1-C6-O6	10.61	126.27	119.90
1	A	1694	G	N1-C6-O6	10.61	126.27	119.90
1	A	632	U	P-O5'-C5'	10.61	137.87	120.90
1	A	815	G	N1-C6-O6	10.61	126.26	119.90
1	A	807	G	N1-C6-O6	10.60	126.26	119.90
1	A	391	A	N1-C6-N6	10.60	124.96	118.60
1	A	2479	A	N1-C6-N6	10.60	124.96	118.60
1	A	251	G	N1-C6-O6	10.59	126.26	119.90
1	A	2538	G	N1-C6-O6	10.59	126.25	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1769	G	N1-C6-O6	10.58	126.25	119.90
1	A	2150	G	N1-C6-O6	10.58	126.25	119.90
1	A	710	G	N1-C6-O6	10.57	126.24	119.90
1	A	803	C	O4'-C1'-N1	10.57	116.66	108.20
1	A	1851	G	N1-C6-O6	10.57	126.24	119.90
1	A	2864	G	N1-C6-O6	10.57	126.24	119.90
1	A	2795	G	N1-C6-O6	10.55	126.23	119.90
1	A	36	G	N1-C6-O6	10.55	126.23	119.90
1	A	334	G	N1-C6-O6	10.54	126.22	119.90
1	A	1082	G	N1-C6-O6	10.54	126.23	119.90
1	A	564	G	N1-C6-O6	10.54	126.22	119.90
1	A	225	A	N1-C6-N6	10.54	124.92	118.60
1	A	1363	G	N1-C6-O6	10.54	126.22	119.90
1	A	1789	A	N1-C6-N6	10.51	124.91	118.60
1	A	2554	G	N1-C6-O6	10.51	126.21	119.90
1	A	2438	G	N1-C6-O6	10.51	126.21	119.90
1	A	2771	G	N1-C6-O6	10.51	126.21	119.90
1	A	1561	G	N1-C6-O6	10.49	126.19	119.90
1	A	2893	A	N1-C6-N6	10.49	124.89	118.60
1	A	1105	G	N1-C6-O6	10.49	126.19	119.90
1	A	2553	G	C5-C6-O6	-10.49	122.31	128.60
1	A	55	G	N1-C6-O6	10.49	126.19	119.90
1	A	1628	G	O4'-C1'-N9	10.49	116.59	108.20
1	A	2135	G	N1-C6-O6	10.47	126.18	119.90
1	A	2248	G	N1-C6-O6	10.45	126.17	119.90
1	A	244	A	N1-C6-N6	10.44	124.87	118.60
1	A	356	G	N1-C6-O6	10.45	126.17	119.90
1	A	2513	G	N1-C6-O6	10.44	126.17	119.90
1	A	411	G	O4'-C1'-N9	10.43	116.55	108.20
1	A	2808	U	P-O3'-C3'	10.43	132.22	119.70
1	A	1206	G	N1-C6-O6	10.41	126.15	119.90
1	A	1254	A	N1-C6-N6	10.41	124.85	118.60
1	A	1370	C	O4'-C1'-N1	10.41	116.53	108.20
1	A	2574	G	N1-C6-O6	10.41	126.14	119.90
1	A	1305	A	N1-C6-N6	10.41	124.84	118.60
1	A	1420	G	N1-C6-O6	10.40	126.14	119.90
1	A	2077	G	N1-C6-O6	10.40	126.14	119.90
1	A	1134	A	N1-C6-N6	10.39	124.83	118.60
1	A	382	G	C5-C6-O6	-10.38	122.37	128.60
1	A	99	U	P-O3'-C3'	10.38	132.16	119.70
1	A	373	A	P-O3'-C3'	10.38	132.15	119.70
1	A	1529	G	N1-C6-O6	10.36	126.11	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2268	G	N1-C6-O6	10.36	126.11	119.90
1	A	49	A	N1-C6-N6	10.36	124.81	118.60
1	A	1394	G	N1-C6-O6	10.35	126.11	119.90
1	A	719	C	O4'-C1'-N1	10.33	116.47	108.20
1	A	1315	G	O4'-C1'-N9	10.33	116.47	108.20
1	A	1775	G	N1-C6-O6	10.32	126.09	119.90
1	A	2714	G	N1-C6-O6	10.32	126.09	119.90
1	A	2699	G	N1-C6-O6	10.32	126.09	119.90
1	A	303	G	N1-C6-O6	10.31	126.09	119.90
1	A	1417	A	P-O3'-C3'	10.31	132.08	119.70
1	A	629	G	O4'-C1'-N9	10.31	116.45	108.20
1	A	2537	G	C5-C6-O6	-10.30	122.42	128.60
1	A	1085	G	N1-C6-O6	10.28	126.07	119.90
1	A	2698	G	N1-C6-O6	10.28	126.07	119.90
1	A	2733	C	O4'-C1'-N1	10.28	116.42	108.20
1	A	1255	G	N1-C6-O6	10.27	126.06	119.90
1	A	228	C	O4'-C1'-N1	10.27	116.41	108.20
1	A	106	G	N1-C6-O6	10.26	126.06	119.90
1	A	2761	G	N1-C6-O6	10.26	126.06	119.90
1	A	2845	A	P-O3'-C3'	10.26	132.01	119.70
1	A	1500	U	P-O3'-C3'	10.24	131.99	119.70
1	A	684	G	N1-C6-O6	10.23	126.04	119.90
1	A	1049	G	N1-C6-O6	10.23	126.04	119.90
1	A	410	G	C5-C6-O6	-10.23	122.46	128.60
1	A	2765	G	N1-C6-O6	10.23	126.04	119.90
1	A	2138	U	P-O3'-C3'	10.22	131.97	119.70
1	A	1339	A	N1-C6-N6	10.22	124.73	118.60
1	A	992	G	N1-C6-O6	10.21	126.03	119.90
1	A	210	A	N1-C6-N6	10.20	124.72	118.60
1	A	147	G	N1-C6-O6	10.19	126.02	119.90
1	A	30	G	C5-C6-O6	-10.19	122.49	128.60
1	A	2845	A	N1-C6-N6	10.19	124.71	118.60
1	A	817	G	N1-C6-O6	10.19	126.01	119.90
1	A	1039	G	N1-C6-O6	10.18	126.01	119.90
1	A	1629	C	P-O3'-C3'	10.18	131.92	119.70
1	A	2109	G	N1-C6-O6	10.18	126.01	119.90
1	A	2677	G	N1-C6-O6	10.18	126.01	119.90
1	A	2847	G	P-O3'-C3'	10.18	131.91	119.70
1	A	264	G	C5-C6-O6	-10.18	122.50	128.60
1	A	909	G	N1-C6-O6	10.18	126.00	119.90
1	A	1200	G	N1-C6-O6	10.17	126.00	119.90
1	A	1579	A	N1-C6-N6	10.17	124.70	118.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	897	G	N1-C6-O6	10.16	126.00	119.90
1	A	1022	G	N1-C6-O6	10.16	126.00	119.90
1	A	986	G	N1-C6-O6	10.15	125.99	119.90
1	A	1488	G	N1-C6-O6	10.15	125.99	119.90
1	A	2545	G	N1-C6-O6	10.15	125.99	119.90
1	A	800	G	N1-C6-O6	10.14	125.99	119.90
1	A	453	G	N1-C6-O6	10.13	125.98	119.90
1	A	2599	G	N1-C6-O6	10.12	125.97	119.90
1	A	2054	C	O4'-C1'-N1	10.12	116.30	108.20
1	A	1514	C	O4'-C1'-N1	10.12	116.30	108.20
1	A	1863	U	O4'-C1'-N1	10.12	116.30	108.20
1	A	899	C	O4'-C1'-N1	10.11	116.29	108.20
1	A	746	A	N1-C6-N6	10.11	124.67	118.60
1	A	1319	G	N1-C6-O6	10.11	125.97	119.90
1	A	2742	C	P-O3'-C3'	10.11	131.83	119.70
1	A	1414	G	N1-C6-O6	10.10	125.96	119.90
1	A	2651	C	O4'-C1'-N1	10.10	116.28	108.20
1	A	248	G	N1-C6-O6	10.09	125.95	119.90
1	A	2620	C	O4'-C1'-N1	10.08	116.27	108.20
1	A	1386	G	N1-C6-O6	10.07	125.94	119.90
1	A	2514	G	N1-C6-O6	10.07	125.94	119.90
1	A	879	G	N1-C6-O6	10.07	125.94	119.90
1	A	2043	A	N1-C6-N6	10.07	124.64	118.60
1	A	2798	C	O4'-C1'-N1	10.07	116.25	108.20
1	A	19	G	N1-C6-O6	10.06	125.94	119.90
1	A	1757	G	N1-C6-O6	10.06	125.94	119.90
1	A	2834	A	N1-C6-N6	10.06	124.64	118.60
1	A	16	G	N1-C6-O6	10.05	125.93	119.90
1	A	967	G	N1-C6-O6	10.05	125.93	119.90
1	A	120	G	N1-C6-O6	10.04	125.92	119.90
1	A	224	A	N1-C6-N6	10.04	124.62	118.60
1	A	855	G	N1-C6-O6	10.04	125.92	119.90
1	A	514	G	N1-C6-O6	10.03	125.92	119.90
1	A	973	G	N1-C6-O6	10.03	125.92	119.90
1	A	1752	G	N1-C6-O6	10.02	125.91	119.90
1	A	2062	A	N1-C6-N6	10.02	124.61	118.60
1	A	2820	U	O4'-C1'-N1	10.02	116.22	108.20
1	A	2510	G	C5-C6-O6	-10.02	122.59	128.60
1	A	2271	G	N1-C6-O6	10.02	125.91	119.90
1	A	300	G	C5-C6-O6	-10.01	122.59	128.60
1	A	2483	G	N1-C6-O6	10.01	125.91	119.90
1	A	283	G	C5-C6-O6	-10.01	122.60	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2552	G	N1-C6-O6	10.00	125.90	119.90
1	A	1839	A	N1-C6-N6	10.00	124.60	118.60
1	A	255	G	N1-C6-O6	10.00	125.90	119.90
1	A	2219	G	N1-C6-O6	9.99	125.90	119.90
1	A	2840	C	O4'-C1'-N1	9.99	116.19	108.20
1	A	1299	G	C5-C6-O6	-9.99	122.61	128.60
1	A	88	G	N1-C6-O6	9.99	125.89	119.90
1	A	1400	G	N1-C6-O6	9.99	125.89	119.90
1	A	2617	G	N1-C6-O6	9.99	125.89	119.90
1	A	2016	G	N1-C6-O6	9.99	125.89	119.90
1	A	566	G	N1-C6-O6	9.99	125.89	119.90
1	A	2543	U	O4'-C1'-N1	9.98	116.18	108.20
1	A	674	G	N1-C6-O6	9.98	125.89	119.90
1	A	911	G	N1-C6-O6	9.98	125.89	119.90
1	A	390	A	N1-C6-N6	9.97	124.58	118.60
1	A	2502	U	O4'-C1'-N1	9.96	116.17	108.20
1	A	765	A	N1-C6-N6	9.96	124.57	118.60
1	A	2250	G	N1-C6-O6	9.96	125.88	119.90
1	A	791	C	O4'-C1'-N1	9.95	116.16	108.20
1	A	1390	C	O4'-C1'-N1	9.96	116.16	108.20
1	A	1300	G	N1-C6-O6	9.95	125.87	119.90
1	A	2706	G	N1-C6-O6	9.95	125.87	119.90
1	A	1076	G	N1-C6-O6	9.95	125.87	119.90
1	A	75	G	N1-C6-O6	9.95	125.87	119.90
1	A	1412	A	N1-C6-N6	9.95	124.57	118.60
1	A	1700	A	N1-C6-N6	9.94	124.57	118.60
1	A	1446	C	O4'-C1'-N1	9.94	116.15	108.20
1	A	2871	G	N1-C6-O6	9.94	125.86	119.90
1	A	868	A	N1-C6-N6	9.93	124.56	118.60
1	A	1734	A	N1-C6-N6	9.93	124.56	118.60
1	A	2428	G	N1-C6-O6	9.93	125.86	119.90
1	A	1546	G	N1-C6-O6	9.93	125.86	119.90
1	A	1023	G	N1-C6-O6	9.93	125.86	119.90
1	A	768	G	N1-C6-O6	9.92	125.85	119.90
1	A	1649	C	O4'-C1'-N1	9.92	116.13	108.20
1	A	636	G	N1-C6-O6	9.91	125.85	119.90
1	A	2811	G	N1-C6-O6	9.91	125.85	119.90
1	A	2190	C	O4'-C1'-N1	9.91	116.13	108.20
1	A	668	G	N1-C6-O6	9.91	125.84	119.90
1	A	1318	G	N1-C6-O6	9.90	125.84	119.90
1	A	24	G	N1-C6-O6	9.90	125.84	119.90
1	A	42	G	N1-C6-O6	9.90	125.84	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	819	G	N1-C6-O6	9.90	125.84	119.90
1	A	788	G	N1-C6-O6	9.90	125.84	119.90
1	A	1268	G	N1-C6-O6	9.90	125.84	119.90
1	A	1463	C	O4'-C1'-N1	9.90	116.12	108.20
1	A	1374	C	O4'-C1'-N1	9.89	116.12	108.20
1	A	1272	G	N1-C6-O6	9.89	125.84	119.90
1	A	1586	G	N1-C6-O6	9.89	125.84	119.90
1	A	2251	G	N1-C6-O6	9.89	125.84	119.90
1	A	332	G	N1-C6-O6	9.89	125.83	119.90
1	A	480	C	O4'-C1'-N1	9.89	116.11	108.20
1	A	1633	G	N1-C6-O6	9.89	125.83	119.90
1	A	1511	C	O4'-C1'-N1	9.88	116.11	108.20
1	A	2081	G	N1-C6-O6	9.88	125.83	119.90
1	A	2832	G	N1-C6-O6	9.88	125.83	119.90
1	A	237	U	O4'-C1'-N1	9.87	116.10	108.20
1	A	377	G	N1-C6-O6	9.87	125.82	119.90
1	A	427	G	N1-C6-O6	9.87	125.82	119.90
1	A	830	A	N1-C6-N6	9.87	124.52	118.60
1	A	357	G	N1-C6-O6	9.87	125.82	119.90
1	A	878	G	C5-C6-O6	-9.87	122.68	128.60
1	A	833	C	O4'-C1'-N1	9.86	116.08	108.20
1	A	1475	G	N1-C6-O6	9.85	125.81	119.90
1	A	1450	C	O4'-C1'-N1	9.85	116.08	108.20
1	A	629	G	N1-C6-O6	9.85	125.81	119.90
1	A	2245	G	N1-C6-O6	9.84	125.81	119.90
1	A	50	U	O4'-C1'-N1	9.84	116.07	108.20
1	A	718	C	O4'-C1'-N1	9.84	116.07	108.20
1	A	984	G	N1-C6-O6	9.83	125.80	119.90
1	A	1515	C	O4'-C1'-N1	9.83	116.07	108.20
1	A	1804	U	O4'-C1'-N1	9.83	116.07	108.20
1	A	414	C	P-O3'-C3'	9.83	131.49	119.70
1	A	2565	G	N1-C6-O6	9.83	125.80	119.90
1	A	2751	G	N1-C6-O6	9.82	125.79	119.90
1	A	2	G	N1-C6-O6	9.82	125.79	119.90
1	A	1338	G	N1-C6-O6	9.82	125.79	119.90
1	A	1460	G	P-O3'-C3'	9.81	131.48	119.70
1	A	1246	G	C5-C6-O6	-9.81	122.71	128.60
1	A	832	G	N1-C6-O6	9.81	125.78	119.90
1	A	1510	G	N1-C6-O6	9.80	125.78	119.90
1	A	2429	G	C5-C6-O6	-9.80	122.72	128.60
1	A	148	G	N1-C6-O6	9.80	125.78	119.90
1	A	663	G	N1-C6-O6	9.80	125.78	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2147	U	P-O3'-C3'	9.80	131.46	119.70
1	A	595	G	N1-C6-O6	9.80	125.78	119.90
1	A	504	A	N1-C6-N6	9.79	124.48	118.60
1	A	1558	G	N1-C6-O6	9.79	125.78	119.90
1	A	1	G	N1-C6-O6	9.79	125.77	119.90
1	A	2101	G	N1-C6-O6	9.79	125.77	119.90
1	A	1762	G	N1-C6-O6	9.78	125.77	119.90
1	A	2596	G	N1-C6-O6	9.78	125.77	119.90
1	A	916	G	N1-C6-O6	9.78	125.77	119.90
1	A	1777	G	C5-C6-O6	-9.78	122.73	128.60
1	A	2193	C	P-O3'-C3'	9.78	131.43	119.70
1	A	1063	G	N1-C6-O6	9.77	125.76	119.90
1	A	1496	G	C5-C6-O6	-9.77	122.74	128.60
1	A	1799	G	N1-C6-O6	9.77	125.76	119.90
1	A	53	A	N1-C6-N6	9.77	124.46	118.60
1	A	2524	G	N1-C6-O6	9.77	125.76	119.90
1	A	2747	G	N1-C6-O6	9.77	125.76	119.90
1	A	907	U	O4'-C1'-N1	9.76	116.01	108.20
1	A	1273	G	N1-C6-O6	9.76	125.76	119.90
1	A	1043	G	N1-C6-O6	9.76	125.76	119.90
1	A	680	G	N1-C6-O6	9.76	125.75	119.90
1	A	693	G	N1-C6-O6	9.76	125.75	119.90
1	A	1785	G	N1-C6-O6	9.76	125.75	119.90
1	A	211	C	O4'-C1'-N1	9.76	116.00	108.20
1	A	626	G	C5-C6-O6	-9.75	122.75	128.60
1	A	586	C	O4'-C1'-N1	9.75	116.00	108.20
1	A	804	G	N1-C6-O6	9.75	125.75	119.90
1	A	1860	G	N1-C6-O6	9.75	125.75	119.90
1	A	414	C	O4'-C1'-N1	9.74	115.99	108.20
1	A	1356	G	N1-C6-O6	9.74	125.75	119.90
1	A	1951	G	N1-C6-O6	9.74	125.75	119.90
1	A	1203	G	N1-C6-O6	9.74	125.74	119.90
1	A	2099	G	N1-C6-O6	9.74	125.74	119.90
1	A	1479	G	N1-C6-O6	9.74	125.74	119.90
1	A	1846	G	N1-C6-O6	9.73	125.74	119.90
1	A	39	C	O4'-C1'-N1	9.72	115.98	108.20
1	A	1219	C	O4'-C1'-N1	9.72	115.98	108.20
1	A	118	A	N1-C6-N6	9.71	124.43	118.60
1	A	2249	G	N1-C6-O6	9.72	125.73	119.90
1	A	17	G	N1-C6-O6	9.71	125.73	119.90
1	A	2058	G	N1-C6-O6	9.71	125.73	119.90
1	A	520	G	N1-C6-O6	9.71	125.72	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1833	G	N1-C6-O6	9.70	125.72	119.90
1	A	822	G	N1-C6-O6	9.70	125.72	119.90
1	A	996	G	C5-C6-O6	-9.70	122.78	128.60
1	A	2112	G	N1-C6-O6	9.70	125.72	119.90
1	A	2133	C	O4'-C1'-N1	9.69	115.95	108.20
1	A	1476	C	O4'-C1'-N1	9.69	115.95	108.20
1	A	780	G	N1-C6-O6	9.69	125.71	119.90
1	A	775	G	N1-C6-O6	9.69	125.71	119.90
1	A	1232	G	N1-C6-O6	9.68	125.71	119.90
1	A	2755	U	O4'-C1'-N1	9.68	115.95	108.20
1	A	1080	G	N1-C6-O6	9.68	125.71	119.90
1	A	1230	A	N1-C6-N6	9.68	124.41	118.60
1	A	2760	G	N1-C6-O6	9.68	125.71	119.90
1	A	709	G	N1-C6-O6	9.67	125.70	119.90
1	A	1518	G	C5-C6-O6	-9.67	122.80	128.60
1	A	1736	C	O4'-C1'-N1	9.67	115.93	108.20
1	A	2074	C	O4'-C1'-N1	9.67	115.93	108.20
1	A	1854	G	N1-C6-O6	9.66	125.69	119.90
1	A	1245	G	N1-C6-O6	9.66	125.69	119.90
1	A	2031	G	N1-C6-O6	9.66	125.69	119.90
1	A	2004	G	N1-C6-O6	9.65	125.69	119.90
1	A	2607	G	N1-C6-O6	9.65	125.69	119.90
1	A	338	G	N1-C6-O6	9.64	125.68	119.90
1	A	516	G	N1-C6-O6	9.63	125.68	119.90
1	A	579	G	N1-C6-O6	9.63	125.68	119.90
1	A	2654	G	C5-C6-O6	-9.63	122.82	128.60
1	A	528	G	N1-C6-O6	9.62	125.67	119.90
1	A	742	G	N1-C6-O6	9.62	125.67	119.90
1	A	2168	G	C5-C6-O6	-9.62	122.83	128.60
1	A	929	G	N1-C6-O6	9.62	125.67	119.90
1	A	2915	G	N1-C6-O6	9.62	125.67	119.90
1	A	2519	G	N1-C6-O6	9.62	125.67	119.90
1	A	2061	G	N1-C6-O6	9.61	125.67	119.90
1	A	2126	G	N1-C6-O6	9.61	125.67	119.90
1	A	2573	G	C5-C6-O6	-9.60	122.84	128.60
1	A	599	G	N1-C6-O6	9.60	125.66	119.90
1	A	2720	C	O4'-C1'-N1	9.60	115.88	108.20
1	A	43	G	N1-C6-O6	9.60	125.66	119.90
1	A	143	G	N1-C6-O6	9.60	125.66	119.90
1	A	568	G	C5-C6-O6	-9.60	122.84	128.60
1	A	1537	G	C5-C6-O6	-9.60	122.84	128.60
1	A	602	G	C5-C6-O6	-9.60	122.84	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1673	G	N1-C6-O6	9.60	125.66	119.90
1	A	2235	G	N1-C6-O6	9.59	125.66	119.90
1	A	175	G	C5-C6-O6	-9.59	122.85	128.60
1	A	677	A	O4'-C1'-N9	9.59	115.87	108.20
1	A	890	G	N1-C6-O6	9.59	125.65	119.90
1	A	81	G	N1-C6-O6	9.58	125.65	119.90
1	A	1035	G	N1-C6-O6	9.58	125.65	119.90
1	A	585	G	C5-C6-O6	-9.58	122.85	128.60
1	A	1449	C	O4'-C1'-N1	9.58	115.86	108.20
1	A	1795	C	O4'-C1'-N1	9.58	115.86	108.20
1	A	607	G	N1-C6-O6	9.57	125.64	119.90
1	A	1031	C	O4'-C1'-N1	9.57	115.86	108.20
1	A	1068	G	N1-C6-O6	9.57	125.64	119.90
1	A	2515	G	N1-C6-O6	9.57	125.64	119.90
1	A	2756	G	C5-C6-O6	-9.57	122.86	128.60
1	A	1195	U	O4'-C1'-N1	9.57	115.86	108.20
1	A	2577	G	N1-C6-O6	9.56	125.64	119.90
1	A	1413	G	N1-C6-O6	9.56	125.63	119.90
1	A	2014	G	N1-C6-O6	9.56	125.64	119.90
1	A	2257	G	C5-C6-O6	-9.56	122.87	128.60
1	A	105	C	O4'-C1'-N1	9.55	115.84	108.20
1	A	1071	G	N1-C6-O6	9.56	125.63	119.90
1	A	1604	C	O4'-C1'-N1	9.56	115.84	108.20
1	A	829	A	O4'-C1'-N9	9.55	115.84	108.20
1	A	1234	G	N1-C6-O6	9.55	125.63	119.90
1	A	251	G	C5-C6-O6	-9.55	122.87	128.60
1	A	1166	G	C5-C6-O6	-9.55	122.87	128.60
1	A	2009	G	C5-C6-O6	-9.55	122.87	128.60
1	A	177	G	C5-C6-O6	-9.55	122.87	128.60
1	A	1402	C	O4'-C1'-N1	9.55	115.84	108.20
1	A	310	C	O4'-C1'-N1	9.54	115.83	108.20
1	A	346	G	C5-C6-O6	-9.54	122.88	128.60
1	A	23	G	N1-C6-O6	9.54	125.62	119.90
1	A	2485	C	O4'-C1'-N1	9.54	115.83	108.20
1	A	1045	U	O4'-C1'-N1	9.54	115.83	108.20
1	A	1793	G	N1-C6-O6	9.53	125.62	119.90
1	A	988	G	N1-C6-O6	9.53	125.62	119.90
1	A	492	C	O4'-C1'-N1	9.53	115.82	108.20
1	A	738	C	O4'-C1'-N1	9.53	115.82	108.20
1	A	979	U	O4'-C1'-N1	9.53	115.82	108.20
1	A	1578	G	O4'-C1'-N9	9.53	115.82	108.20
1	A	317	G	N1-C6-O6	9.52	125.61	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2116	G	N1-C6-O6	9.52	125.61	119.90
1	A	1250	G	N1-C6-O6	9.52	125.61	119.90
1	A	1482	G	N1-C6-O6	9.52	125.61	119.90
1	A	1706	G	C5-C6-O6	-9.52	122.89	128.60
1	A	2881	G	C5-C6-O6	-9.51	122.89	128.60
1	A	665	G	N1-C6-O6	9.51	125.61	119.90
1	A	2201	U	O4'-C1'-N1	9.51	115.81	108.20
1	A	501	A	N1-C6-N6	9.51	124.30	118.60
1	A	1185	G	N1-C6-O6	9.51	125.60	119.90
1	A	1376	G	N1-C6-O6	9.51	125.60	119.90
1	A	2679	C	O4'-C1'-N1	9.51	115.81	108.20
1	A	85	G	N1-C6-O6	9.50	125.60	119.90
1	A	861	C	O4'-C1'-N1	9.50	115.80	108.20
1	A	2148	A	N1-C6-N6	9.50	124.30	118.60
1	A	927	G	N1-C6-O6	9.49	125.59	119.90
1	A	2917	G	O4'-C1'-N9	9.49	115.79	108.20
1	A	955	C	O4'-C1'-N1	9.48	115.79	108.20
1	A	169	G	N1-C6-O6	9.48	125.59	119.90
1	A	713	G	N1-C6-O6	9.48	125.59	119.90
1	A	1462	G	N1-C6-O6	9.48	125.59	119.90
1	A	297	G	N1-C6-O6	9.48	125.59	119.90
1	A	1763	G	N1-C6-O6	9.48	125.59	119.90
1	A	2495	C	O4'-C1'-N1	9.48	115.78	108.20
1	A	2516	G	N1-C6-O6	9.48	125.59	119.90
1	A	2632	G	N1-C6-O6	9.47	125.58	119.90
1	A	2263	G	N1-C6-O6	9.47	125.58	119.90
1	A	80	G	N1-C6-O6	9.47	125.58	119.90
1	A	1531	G	N1-C6-O6	9.47	125.58	119.90
1	A	1798	G	N1-C6-O6	9.46	125.58	119.90
1	A	2023	C	O4'-C1'-N1	9.46	115.77	108.20
1	A	2766	G	N1-C6-O6	9.46	125.58	119.90
1	A	2628	G	N1-C6-O6	9.46	125.58	119.90
1	A	1487	G	N1-C6-O6	9.46	125.57	119.90
1	A	1772	C	O4'-C1'-N1	9.46	115.77	108.20
1	A	443	G	N1-C6-O6	9.45	125.57	119.90
1	A	654	G	N1-C6-O6	9.45	125.57	119.90
1	A	1543	U	O4'-C1'-N1	9.44	115.75	108.20
1	A	2652	G	N1-C6-O6	9.44	125.56	119.90
1	A	367	G	N1-C6-O6	9.44	125.56	119.90
1	A	1051	C	O4'-C1'-N1	9.44	115.75	108.20
1	A	2094	C	O4'-C1'-N1	9.43	115.75	108.20
1	A	1729	C	O4'-C1'-N1	9.43	115.75	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1385	G	N1-C6-O6	9.43	125.56	119.90
1	A	213	C	O4'-C1'-N1	9.43	115.74	108.20
1	A	1696	G	N1-C6-O6	9.43	125.56	119.90
1	A	707	G	N1-C6-O6	9.42	125.55	119.90
1	A	2122	G	N1-C6-O6	9.42	125.55	119.90
1	A	1943	C	O4'-C1'-N1	9.42	115.73	108.20
1	A	426	G	C5-C6-O6	-9.41	122.95	128.60
1	A	471	G	N1-C6-O6	9.41	125.55	119.90
1	A	1427	G	C5-C6-O6	-9.41	122.95	128.60
1	A	2731	G	N1-C6-O6	9.41	125.55	119.90
1	A	2068	G	N1-C6-O6	9.41	125.55	119.90
1	A	1024	G	N1-C6-O6	9.41	125.55	119.90
1	A	959	C	O4'-C1'-N1	9.41	115.73	108.20
1	A	1240	U	O4'-C1'-N1	9.40	115.72	108.20
1	A	1440	G	N1-C6-O6	9.39	125.54	119.90
1	A	1609	C	O4'-C1'-N1	9.39	115.71	108.20
1	A	2501	G	N1-C6-O6	9.39	125.54	119.90
1	A	1824	C	O4'-C1'-N1	9.39	115.71	108.20
1	A	1012	G	C5-C6-O6	-9.39	122.97	128.60
1	A	1168	G	N1-C6-O6	9.39	125.53	119.90
1	A	2653	G	N1-C6-O6	9.39	125.53	119.90
1	A	1053	C	O4'-C1'-N1	9.38	115.70	108.20
1	A	1525	G	C5-C6-O6	-9.38	122.97	128.60
1	A	641	C	O4'-C1'-N1	9.38	115.70	108.20
1	A	2056	G	N1-C6-O6	9.38	125.53	119.90
1	A	99	U	O4'-C1'-N1	9.38	115.70	108.20
1	A	754	G	N1-C6-O6	9.38	125.53	119.90
1	A	2778	A	N1-C6-N6	9.37	124.22	118.60
1	A	1184	G	N1-C6-O6	9.37	125.52	119.90
1	A	940	G	N1-C6-O6	9.37	125.52	119.90
1	A	1632	G	N1-C6-O6	9.37	125.52	119.90
1	A	1306	G	N1-C6-O6	9.37	125.52	119.90
1	A	121	G	N1-C6-O6	9.37	125.52	119.90
1	A	385	G	C5-C6-O6	-9.36	122.98	128.60
1	A	694	G	N1-C6-O6	9.37	125.52	119.90
1	A	1110	C	O4'-C1'-N1	9.37	115.69	108.20
1	A	2090	G	N1-C6-O6	9.36	125.52	119.90
1	A	806	G	N1-C6-O6	9.36	125.52	119.90
1	A	189	G	N1-C6-O6	9.36	125.51	119.90
1	A	1018	G	N1-C6-O6	9.36	125.51	119.90
1	A	2075	G	N1-C6-O6	9.36	125.51	119.90
1	A	1573	C	O4'-C1'-N1	9.35	115.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	170	G	N1-C6-O6	9.35	125.51	119.90
1	A	836	A	P-O3'-C3'	9.35	130.92	119.70
1	A	2423	C	C2-N1-C1'	9.35	129.09	118.80
1	A	1358	G	N1-C6-O6	9.35	125.51	119.90
1	A	2153	G	N1-C6-O6	9.35	125.51	119.90
1	A	2562	U	O4'-C1'-N1	9.35	115.68	108.20
1	A	2856	G	N1-C6-O6	9.34	125.50	119.90
1	A	2891	G	O4'-C1'-N9	9.33	115.67	108.20
1	A	1438	C	O4'-C1'-N1	9.33	115.67	108.20
1	A	1331	C	O4'-C1'-N1	9.33	115.66	108.20
1	A	2265	U	O4'-C1'-N1	9.33	115.66	108.20
1	A	2603	G	N1-C6-O6	9.33	125.50	119.90
1	A	541	G	N1-C6-O6	9.32	125.49	119.90
1	A	603	G	N1-C6-O6	9.32	125.49	119.90
1	A	856	G	N1-C6-O6	9.32	125.49	119.90
1	A	1862	C	P-O3'-C3'	9.32	130.88	119.70
1	A	2539	C	O4'-C1'-N1	9.32	115.66	108.20
1	A	621	G	N1-C6-O6	9.32	125.49	119.90
1	A	1668	G	N1-C6-O6	9.31	125.49	119.90
1	A	905	G	O4'-C1'-N9	9.31	115.65	108.20
1	A	644	G	N1-C6-O6	9.31	125.48	119.90
1	A	1611	G	N1-C6-O6	9.30	125.48	119.90
1	A	1646	G	N1-C6-O6	9.30	125.48	119.90
1	A	46	C	O4'-C1'-N1	9.30	115.64	108.20
1	A	1936	G	C5-C6-O6	-9.30	123.02	128.60
1	A	288	C	O4'-C1'-N1	9.30	115.64	108.20
1	A	1109	G	N1-C6-O6	9.30	125.48	119.90
1	A	2476	G	N1-C6-O6	9.30	125.48	119.90
1	A	411	G	N1-C6-O6	9.30	125.48	119.90
1	A	627	G	N1-C6-O6	9.30	125.48	119.90
1	A	2586	G	N1-C6-O6	9.29	125.48	119.90
1	A	891	G	N1-C6-O6	9.29	125.47	119.90
1	A	2499	G	C5-C6-O6	-9.29	123.03	128.60
1	A	1342	G	N1-C6-O6	9.28	125.47	119.90
1	A	2108	U	O4'-C1'-N1	9.28	115.63	108.20
1	A	667	A	O4'-C1'-N9	9.28	115.62	108.20
1	A	729	G	N1-C6-O6	9.28	125.47	119.90
1	A	2013	U	O4'-C1'-N1	9.28	115.62	108.20
1	A	70	G	C5-C6-O6	-9.27	123.04	128.60
1	A	2711	G	C5-C6-O6	-9.27	123.04	128.60
1	A	1137	G	N1-C6-O6	9.27	125.46	119.90
1	A	1236	G	N1-C6-O6	9.27	125.46	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2564	A	C5-C6-N6	-9.27	116.28	123.70
1	A	2649	C	O4'-C1'-N1	9.27	115.61	108.20
1	A	309	U	O4'-C1'-N1	9.27	115.61	108.20
1	A	280	G	C5-C6-O6	-9.27	123.04	128.60
1	A	1112	U	O4'-C1'-N1	9.27	115.61	108.20
1	A	1805	G	N1-C6-O6	9.27	125.46	119.90
1	A	628	C	P-O5'-C5'	9.26	135.72	120.90
1	A	1289	U	O4'-C1'-N1	9.26	115.61	108.20
1	A	2655	C	O4'-C1'-N1	9.26	115.61	108.20
1	A	2660	G	N1-C6-O6	9.26	125.45	119.90
1	A	152	C	O4'-C1'-N1	9.25	115.60	108.20
1	A	2723	G	N1-C6-O6	9.25	125.45	119.90
1	A	111	U	O4'-C1'-N1	9.25	115.60	108.20
1	A	2806	G	C5-C6-O6	-9.25	123.05	128.60
1	A	539	G	N1-C6-O6	9.25	125.45	119.90
1	A	60	G	N1-C6-O6	9.24	125.45	119.90
1	A	675	C	O4'-C1'-N1	9.24	115.59	108.20
1	A	1088	G	N1-C6-O6	9.24	125.45	119.90
1	A	661	A	P-O3'-C3'	9.24	130.79	119.70
1	A	2486	U	O4'-C1'-N1	9.24	115.59	108.20
1	A	1840	G	N1-C6-O6	9.24	125.44	119.90
1	A	759	G	N1-C6-O6	9.24	125.44	119.90
1	A	1578	G	N1-C6-O6	9.24	125.44	119.90
1	A	1344	C	O4'-C1'-N1	9.23	115.59	108.20
1	A	1635	G	N1-C6-O6	9.23	125.44	119.90
1	A	696	C	O4'-C1'-N1	9.22	115.58	108.20
1	A	1418	U	C2-N1-C1'	9.22	128.77	117.70
1	A	1083	G	N1-C6-O6	9.22	125.43	119.90
1	A	2697	G	N1-C6-O6	9.22	125.43	119.90
1	A	2050	G	N1-C6-O6	9.22	125.43	119.90
1	A	2901	G	N1-C6-O6	9.21	125.43	119.90
1	A	284	C	O4'-C1'-N1	9.21	115.57	108.20
1	A	2492	C	O4'-C1'-N1	9.21	115.57	108.20
1	A	117	A	N1-C6-N6	9.20	124.12	118.60
1	A	1363	G	C5-C6-O6	-9.20	123.08	128.60
1	A	1669	G	C5-C6-O6	-9.20	123.08	128.60
1	A	1830	G	N1-C6-O6	9.20	125.42	119.90
1	A	101	G	N1-C6-O6	9.20	125.42	119.90
1	A	109	G	N1-C6-O6	9.20	125.42	119.90
1	A	207	A	O4'-C1'-N9	9.20	115.56	108.20
1	A	1478	G	N1-C6-O6	9.20	125.42	119.90
1	A	2450	G	N1-C6-O6	9.20	125.42	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2572	G	N1-C6-O6	9.20	125.42	119.90
1	A	131	C	O4'-C1'-N1	9.19	115.56	108.20
1	A	455	G	N1-C6-O6	9.19	125.42	119.90
1	A	1779	G	N1-C6-O6	9.19	125.42	119.90
1	A	2230	C	O4'-C1'-N1	9.19	115.55	108.20
1	A	2910	C	O4'-C1'-N1	9.19	115.55	108.20
1	A	273	A	N1-C6-N6	9.19	124.11	118.60
1	A	1590	C	P-O3'-C3'	9.19	130.72	119.70
1	A	1628	G	C5-C6-O6	-9.19	123.09	128.60
1	A	1944	U	O4'-C1'-N1	9.19	115.55	108.20
1	A	2855	G	N1-C6-O6	9.18	125.41	119.90
1	A	2894	G	C5-C6-O6	-9.18	123.09	128.60
1	A	676	G	N1-C6-O6	9.18	125.41	119.90
1	A	748	G	N1-C6-O6	9.18	125.41	119.90
1	A	2870	G	N1-C6-O6	9.18	125.41	119.90
1	A	1387	G	N1-C6-O6	9.18	125.41	119.90
1	A	2156	G	N1-C6-O6	9.18	125.41	119.90
1	A	408	G	C5-C6-O6	-9.17	123.10	128.60
1	A	1602	U	O4'-C1'-N1	9.17	115.54	108.20
1	A	472	G	C5-C6-O6	-9.17	123.10	128.60
1	A	526	A	O4'-C1'-N9	9.17	115.53	108.20
1	A	1278	G	N1-C6-O6	9.17	125.40	119.90
1	A	2805	A	N1-C6-N6	9.17	124.10	118.60
1	A	2776	G	N1-C6-O6	9.16	125.40	119.90
1	A	2926	C	O4'-C1'-N1	9.16	115.53	108.20
1	A	190	G	N1-C6-O6	9.16	125.40	119.90
1	A	1494	G	N1-C6-O6	9.16	125.39	119.90
1	A	2538	G	C5-C6-O6	-9.16	123.11	128.60
1	A	413	U	P-O3'-C3'	9.15	130.68	119.70
1	A	546	G	N1-C6-O6	9.15	125.39	119.90
1	A	1133	G	N1-C6-O6	9.15	125.39	119.90
1	A	2162	G	O4'-C1'-N9	9.15	115.52	108.20
1	A	921	G	N1-C6-O6	9.15	125.39	119.90
1	A	913	A	C5-C6-N6	-9.15	116.38	123.70
1	A	2659	G	N1-C6-O6	9.15	125.39	119.90
1	A	1822	G	N1-C6-O6	9.15	125.39	119.90
1	A	1057	G	C5-C6-O6	-9.14	123.11	128.60
1	A	1160	G	C5-C6-O6	-9.14	123.11	128.60
1	A	1563	G	N1-C6-O6	9.14	125.39	119.90
1	A	457	G	N1-C6-O6	9.14	125.39	119.90
1	A	998	G	C5-C6-O6	-9.14	123.12	128.60
1	A	672	C	O4'-C1'-N1	9.14	115.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1030	G	N1-C6-O6	9.14	125.38	119.90
1	A	466	C	O4'-C1'-N1	9.13	115.51	108.20
1	A	483	C	O4'-C1'-N1	9.13	115.51	108.20
1	A	997	C	O4'-C1'-N1	9.13	115.51	108.20
1	A	2194	G	N1-C6-O6	9.13	125.38	119.90
1	A	127	C	O4'-C1'-N1	9.13	115.50	108.20
1	A	347	G	N1-C6-O6	9.13	125.38	119.90
1	A	649	G	N1-C6-O6	9.13	125.38	119.90
1	A	1298	C	O4'-C1'-N1	9.13	115.50	108.20
1	A	2424	C	P-O3'-C3'	9.13	130.66	119.70
1	A	464	C	O4'-C1'-N1	9.13	115.50	108.20
1	A	883	G	N1-C6-O6	9.13	125.38	119.90
1	A	1469	G	N1-C6-O6	9.13	125.38	119.90
1	A	424	G	N1-C6-O6	9.13	125.38	119.90
1	A	2110	C	O4'-C1'-N1	9.12	115.50	108.20
1	A	2426	G	N1-C6-O6	9.12	125.38	119.90
1	A	181	G	N1-C6-O6	9.12	125.37	119.90
1	A	635	C	O4'-C1'-N1	9.12	115.49	108.20
1	A	1481	G	N1-C6-O6	9.12	125.37	119.90
1	A	1362	G	C5-C6-O6	-9.12	123.13	128.60
1	A	2737	G	N1-C6-O6	9.12	125.37	119.90
1	A	1170	C	O4'-C1'-N1	9.11	115.49	108.20
1	A	1748	G	N1-C6-O6	9.11	125.37	119.90
1	A	2773	G	N1-C6-O6	9.11	125.37	119.90
1	A	197	G	C5-C6-O6	-9.11	123.13	128.60
1	A	262	G	N1-C6-O6	9.11	125.37	119.90
1	A	1949	C	O4'-C1'-N1	9.10	115.48	108.20
1	A	2758	G	C5-C6-O6	-9.10	123.14	128.60
1	A	815	G	C5-C6-O6	-9.10	123.14	128.60
1	A	1497	G	N1-C6-O6	9.10	125.36	119.90
1	A	1470	G	N1-C6-O6	9.10	125.36	119.90
1	A	1495	C	O4'-C1'-N1	9.09	115.47	108.20
1	A	2578	G	C5-C6-O6	-9.09	123.15	128.60
1	A	2818	C	O4'-C1'-N1	9.09	115.47	108.20
1	A	505	G	N1-C6-O6	9.09	125.35	119.90
1	A	1238	G	N1-C6-O6	9.09	125.35	119.90
1	A	1377	G	N1-C6-O6	9.09	125.35	119.90
1	A	1817	C	O4'-C1'-N1	9.09	115.47	108.20
1	A	2076	C	O4'-C1'-N1	9.09	115.47	108.20
1	A	2729	C	O4'-C1'-N1	9.09	115.47	108.20
1	A	926	G	N1-C6-O6	9.08	125.35	119.90
1	A	2077	G	C5-C6-O6	-9.08	123.15	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	534	C	O4'-C1'-N1	9.07	115.46	108.20
1	A	671	G	N1-C6-O6	9.07	125.34	119.90
1	A	1747	G	C5-C6-O6	-9.07	123.16	128.60
1	A	818	G	N1-C6-O6	9.07	125.34	119.90
1	A	2021	G	N1-C6-O6	9.07	125.34	119.90
1	A	58	G	N1-C6-O6	9.07	125.34	119.90
1	A	564	G	C5-C6-O6	-9.07	123.16	128.60
1	A	1039	G	C5-C6-O6	-9.07	123.16	128.60
1	A	1468	G	C5-C6-O6	-9.07	123.16	128.60
1	A	423	G	N1-C6-O6	9.06	125.34	119.90
1	A	1275	G	N1-C6-O6	9.06	125.34	119.90
1	A	294	G	N1-C6-O6	9.06	125.34	119.90
1	A	319	G	N1-C6-O6	9.06	125.34	119.90
1	A	2563	C	O4'-C1'-N1	9.06	115.45	108.20
1	A	2699	G	C5-C6-O6	-9.06	123.17	128.60
1	A	614	G	N1-C6-O6	9.06	125.33	119.90
1	A	1467	G	N1-C6-O6	9.06	125.33	119.90
1	A	2443	G	N1-C6-O6	9.06	125.33	119.90
1	A	2465	G	N1-C6-O6	9.06	125.33	119.90
1	A	2780	G	P-O3'-C3'	9.05	130.57	119.70
1	A	192	G	N1-C6-O6	9.05	125.33	119.90
1	A	1431	G	N1-C6-O6	9.05	125.33	119.90
1	A	2692	G	N1-C6-O6	9.05	125.33	119.90
1	A	515	G	N1-C6-O6	9.04	125.33	119.90
1	A	361	G	N1-C6-O6	9.04	125.33	119.90
1	A	1408	G	N1-C6-O6	9.04	125.32	119.90
1	A	114	C	O4'-C1'-N1	9.04	115.43	108.20
1	A	2253	G	N1-C6-O6	9.03	125.32	119.90
1	A	362	C	O4'-C1'-N1	9.03	115.42	108.20
1	A	1015	G	N1-C6-O6	9.03	125.32	119.90
1	A	1455	C	O4'-C1'-N1	9.03	115.42	108.20
1	A	2668	A	N1-C6-N6	9.03	124.02	118.60
1	A	107	G	C5-C6-O6	-9.02	123.19	128.60
1	A	721	G	N1-C6-O6	9.02	125.31	119.90
1	A	2526	A	O4'-C1'-N9	9.02	115.42	108.20
1	A	1665	G	N1-C6-O6	9.02	125.31	119.90
1	A	217	G	N1-C6-O6	9.02	125.31	119.90
1	A	1688	G	N1-C6-O6	9.02	125.31	119.90
1	A	344	G	C5-C6-O6	-9.02	123.19	128.60
1	A	2494	C	O4'-C1'-N1	9.02	115.41	108.20
1	A	62	C	O4'-C1'-N1	9.01	115.41	108.20
1	A	824	G	C5-C6-O6	-9.01	123.19	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1311	G	N1-C6-O6	9.01	125.31	119.90
1	A	214	G	N1-C6-O6	9.01	125.30	119.90
1	A	223	G	N1-C6-O6	9.01	125.30	119.90
1	A	2693	G	N1-C6-O6	9.01	125.30	119.90
1	A	447	G	N1-C6-O6	9.01	125.30	119.90
1	A	1864	G	N1-C6-O6	9.01	125.30	119.90
1	A	1698	G	N1-C6-O6	9.00	125.30	119.90
1	A	2650	G	N1-C6-O6	9.00	125.30	119.90
1	A	2244	G	N1-C6-O6	9.00	125.30	119.90
1	A	2721	C	O4'-C1'-N1	9.00	115.40	108.20
1	A	842	C	O4'-C1'-N1	9.00	115.40	108.20
1	A	1095	C	O4'-C1'-N1	9.00	115.40	108.20
1	A	598	U	O4'-C1'-N1	8.99	115.39	108.20
1	A	725	C	O4'-C1'-N1	8.99	115.39	108.20
1	A	1728	C	O4'-C1'-N1	8.99	115.39	108.20
1	A	489	G	N1-C6-O6	8.98	125.29	119.90
1	A	1037	C	O4'-C1'-N1	8.98	115.39	108.20
1	A	813	G	N1-C6-O6	8.98	125.29	119.90
1	A	2868	G	N1-C6-O6	8.98	125.29	119.90
1	A	536	G	N1-C6-O6	8.98	125.29	119.90
1	A	1939	G	N1-C6-O6	8.98	125.29	119.90
1	A	1940	U	O4'-C1'-N1	8.98	115.38	108.20
1	A	2145	G	N1-C6-O6	8.98	125.29	119.90
1	A	2873	G	N1-C6-O6	8.98	125.29	119.90
1	A	2471	C	O4'-C1'-N1	8.97	115.38	108.20
1	A	2212	C	O4'-C1'-N1	8.96	115.37	108.20
1	A	257	G	N1-C6-O6	8.96	125.28	119.90
1	A	2546	C	O4'-C1'-N1	8.96	115.37	108.20
1	A	2610	G	N1-C6-O6	8.96	125.28	119.90
1	A	1367	G	N1-C6-O6	8.96	125.28	119.90
1	A	1077	G	N1-C6-O6	8.96	125.27	119.90
1	A	1598	C	O4'-C1'-N1	8.96	115.37	108.20
1	A	510	G	N1-C6-O6	8.96	125.27	119.90
1	A	1399	G	N1-C6-O6	8.96	125.27	119.90
1	A	1220	G	N1-C6-O6	8.95	125.27	119.90
1	A	1512	G	N1-C6-O6	8.96	125.27	119.90
1	A	1962	G	N1-C6-O6	8.95	125.27	119.90
1	A	2012	C	O4'-C1'-N1	8.95	115.36	108.20
1	A	2746	G	N1-C6-O6	8.95	125.27	119.90
1	A	261	C	O4'-C1'-N1	8.95	115.36	108.20
1	A	1114	G	O4'-C1'-N9	8.95	115.36	108.20
1	A	1732	G	N1-C6-O6	8.95	125.27	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2261	C	O4'-C1'-N1	8.95	115.36	108.20
1	A	802	G	N1-C6-O6	8.94	125.27	119.90
1	A	1044	C	O4'-C1'-N1	8.94	115.35	108.20
1	A	2114	C	O4'-C1'-N1	8.94	115.35	108.20
1	A	2476	G	O4'-C1'-N9	8.94	115.35	108.20
1	A	2836	G	N1-C6-O6	8.94	125.27	119.90
1	A	476	A	P-O5'-C5'	8.94	135.20	120.90
1	A	2829	G	N1-C6-O6	8.94	125.26	119.90
1	A	26	G	N1-C6-O6	8.94	125.26	119.90
1	A	540	G	N1-C6-O6	8.94	125.26	119.90
1	A	458	G	N1-C6-O6	8.93	125.26	119.90
1	A	2703	G	N1-C6-O6	8.93	125.26	119.90
1	A	2736	G	N1-C6-O6	8.93	125.26	119.90
1	A	660	G	N1-C6-O6	8.93	125.25	119.90
1	A	1101	G	N1-C6-O6	8.93	125.25	119.90
1	A	1213	G	N1-C6-O6	8.93	125.25	119.90
1	A	1676	G	N1-C6-O6	8.93	125.25	119.90
1	A	2264	G	N1-C6-O6	8.93	125.25	119.90
1	A	2086	G	N1-C6-O6	8.92	125.25	119.90
1	A	1526	G	C5-C6-O6	-8.92	123.25	128.60
1	A	839	G	N1-C6-O6	8.92	125.25	119.90
1	A	2144	G	N1-C6-O6	8.92	125.25	119.90
1	A	134	C	O4'-C1'-N1	8.91	115.33	108.20
1	A	1336	C	O4'-C1'-N1	8.91	115.33	108.20
1	A	1651	G	N1-C6-O6	8.91	125.25	119.90
1	A	7	G	N1-C6-O6	8.91	125.25	119.90
1	A	186	C	O4'-C1'-N1	8.91	115.33	108.20
1	A	592	A	C5-C6-N6	-8.91	116.57	123.70
1	A	2474	G	C5-C6-O6	-8.91	123.25	128.60
1	A	608	C	O4'-C1'-N1	8.91	115.33	108.20
1	A	909	G	C5-C6-O6	-8.91	123.26	128.60
1	A	2604	C	O4'-C1'-N1	8.91	115.33	108.20
1	A	744	C	O4'-C1'-N1	8.90	115.32	108.20
1	A	2475	G	N1-C6-O6	8.90	125.24	119.90
1	A	1519	C	O4'-C1'-N1	8.90	115.32	108.20
1	A	2690	G	N1-C6-O6	8.90	125.24	119.90
1	A	487	G	N1-C6-O6	8.90	125.24	119.90
1	A	184	G	N1-C6-O6	8.90	125.24	119.90
1	A	1521	G	N1-C6-O6	8.90	125.24	119.90
1	A	2669	G	N1-C6-O6	8.90	125.24	119.90
1	A	201	C	O4'-C1'-N1	8.89	115.31	108.20
1	A	2672	G	N1-C6-O6	8.89	125.24	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	772	G	N1-C6-O6	8.89	125.23	119.90
1	A	2879	G	N1-C6-O6	8.89	125.23	119.90
1	A	864	C	O4'-C1'-N1	8.89	115.31	108.20
1	A	1349	G	N1-C6-O6	8.89	125.23	119.90
1	A	1280	G	N1-C6-O6	8.89	125.23	119.90
1	A	1701	C	O4'-C1'-N1	8.89	115.31	108.20
1	A	2671	G	N1-C6-O6	8.89	125.23	119.90
1	A	2843	G	N1-C6-O6	8.89	125.23	119.90
1	A	370	G	N1-C6-O6	8.88	125.23	119.90
1	A	871	G	C5-C6-O6	-8.88	123.27	128.60
1	A	323	C	O4'-C1'-N1	8.88	115.31	108.20
1	A	2731	G	O4'-C1'-N9	8.88	115.31	108.20
1	A	1624	U	O4'-C1'-N1	8.88	115.30	108.20
1	A	36	G	C5-C6-O6	-8.88	123.27	128.60
1	A	2645	C	O4'-C1'-N1	8.88	115.30	108.20
1	A	701	G	N1-C6-O6	8.87	125.22	119.90
1	A	766	C	O4'-C1'-N1	8.87	115.30	108.20
1	A	160	G	N1-C6-O6	8.87	125.22	119.90
1	A	956	A	N1-C6-N6	8.87	123.92	118.60
1	A	1139	G	N1-C6-O6	8.87	125.22	119.90
1	A	2425	G	C5-C6-O6	-8.87	123.28	128.60
1	A	2541	C	O4'-C1'-N1	8.87	115.30	108.20
1	A	2621	G	N1-C6-O6	8.87	125.22	119.90
1	A	2847	G	O4'-C1'-N9	8.87	115.30	108.20
1	A	2738	G	N1-C6-O6	8.87	125.22	119.90
1	A	367	G	O4'-C1'-N9	8.86	115.29	108.20
1	A	792	G	N1-C6-O6	8.87	125.22	119.90
1	A	1741	G	N1-C6-O6	8.87	125.22	119.90
1	A	1821	G	N1-C6-O6	8.86	125.22	119.90
1	A	2795	G	C5-C6-O6	-8.86	123.28	128.60
1	A	2434	G	N1-C6-O6	8.86	125.22	119.90
1	A	1177	G	N1-C6-O6	8.86	125.21	119.90
1	A	1290	G	N1-C6-O6	8.86	125.21	119.90
1	A	1304	G	N1-C6-O6	8.86	125.21	119.90
1	A	2764	G	N1-C6-O6	8.85	125.21	119.90
1	A	776	G	N1-C6-O6	8.85	125.21	119.90
1	A	827	G	N1-C6-O6	8.85	125.21	119.90
1	A	1796	C	O4'-C1'-N1	8.85	115.28	108.20
1	A	1426	A	O4'-C1'-N9	8.85	115.28	108.20
1	A	1674	G	N1-C6-O6	8.85	125.21	119.90
1	A	2064	G	N1-C6-O6	8.85	125.21	119.90
1	A	1309	G	N1-C6-O6	8.85	125.21	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	215	G	N1-C6-O6	8.84	125.21	119.90
1	A	408	G	O4'-C1'-N9	8.84	115.28	108.20
1	A	728	G	N1-C6-O6	8.84	125.21	119.90
1	A	1048	G	N1-C6-O6	8.84	125.21	119.90
1	A	2159	U	O4'-C1'-N1	8.84	115.28	108.20
1	A	2674	G	N1-C6-O6	8.84	125.21	119.90
1	A	2214	G	N1-C6-O6	8.84	125.20	119.90
1	A	2828	G	N1-C6-O6	8.84	125.20	119.90
1	A	551	A	N1-C6-N6	8.84	123.90	118.60
1	A	1225	G	N1-C6-O6	8.84	125.20	119.90
1	A	1742	G	N1-C6-O6	8.84	125.20	119.90
1	A	902	G	N1-C6-O6	8.83	125.20	119.90
1	A	1192	G	N1-C6-O6	8.83	125.20	119.90
1	A	1264	G	N1-C6-O6	8.83	125.20	119.90
1	A	1572	G	N1-C6-O6	8.83	125.20	119.90
1	A	2130	G	O4'-C1'-N9	8.83	115.27	108.20
1	A	235	G	N1-C6-O6	8.83	125.20	119.90
1	A	1761	G	N1-C6-O6	8.83	125.20	119.90
1	A	2788	G	C5-C6-O6	-8.83	123.30	128.60
1	A	446	G	N1-C6-O6	8.83	125.20	119.90
1	A	2246	G	C5-C6-O6	-8.83	123.31	128.60
1	A	54	G	N1-C6-O6	8.82	125.19	119.90
1	A	2444	G	C5-C6-O6	-8.82	123.31	128.60
1	A	63	G	N1-C6-O6	8.82	125.19	119.90
1	A	111	U	P-O3'-C3'	8.82	130.28	119.70
1	A	2605	G	N1-C6-O6	8.82	125.19	119.90
1	A	657	G	N1-C6-O6	8.82	125.19	119.90
1	A	920	G	N1-C6-O6	8.82	125.19	119.90
1	A	1276	G	N1-C6-O6	8.82	125.19	119.90
1	A	1215	U	P-O3'-C3'	8.82	130.28	119.70
1	A	2096	G	N1-C6-O6	8.82	125.19	119.90
1	A	1570	U	O4'-C1'-N1	8.81	115.25	108.20
1	A	523	G	N1-C6-O6	8.81	125.19	119.90
1	A	1389	C	O4'-C1'-N1	8.81	115.25	108.20
1	A	2891	G	N1-C6-O6	8.81	125.19	119.90
1	A	2907	A	C5-C6-N6	-8.81	116.65	123.70
1	A	308	C	O4'-C1'-N1	8.81	115.25	108.20
1	A	1836	G	N1-C6-O6	8.81	125.19	119.90
1	A	11	G	N1-C6-O6	8.81	125.19	119.90
1	A	1267	G	N1-C6-O6	8.81	125.19	119.90
1	A	2824	G	N1-C6-O6	8.81	125.19	119.90
1	A	1457	U	P-O3'-C3'	8.81	130.27	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1093	G	N1-C6-O6	8.80	125.18	119.90
1	A	1279	C	O4'-C1'-N1	8.80	115.24	108.20
1	A	1602	U	P-O3'-C3'	8.80	130.26	119.70
1	A	2688	G	N1-C6-O6	8.80	125.18	119.90
1	A	2687	C	O4'-C1'-N1	8.80	115.24	108.20
1	A	544	G	N1-C6-O6	8.80	125.18	119.90
1	A	617	G	N1-C6-O6	8.80	125.18	119.90
1	A	1416	G	N1-C6-O6	8.80	125.18	119.90
1	A	2624	G	N1-C6-O6	8.80	125.18	119.90
1	A	703	G	P-O3'-C3'	8.80	130.26	119.70
1	A	263	G	N1-C6-O6	8.79	125.18	119.90
1	A	1219	C	C2-N1-C1'	8.79	128.47	118.80
1	A	1827	U	O4'-C1'-N1	8.79	115.23	108.20
1	A	712	C	O4'-C1'-N1	8.79	115.23	108.20
1	A	1158	G	N1-C6-O6	8.79	125.17	119.90
1	A	1946	U	O4'-C1'-N1	8.79	115.23	108.20
1	A	246	U	O4'-C1'-N1	8.79	115.23	108.20
1	A	852	G	N1-C6-O6	8.79	125.17	119.90
1	A	137	G	N1-C6-O6	8.78	125.17	119.90
1	A	1562	A	P-O3'-C3'	8.78	130.24	119.70
1	A	2130	G	N1-C6-O6	8.78	125.17	119.90
1	A	1228	G	N1-C6-O6	8.78	125.17	119.90
1	A	1658	G	N1-C6-O6	8.78	125.17	119.90
1	A	2558	G	N1-C6-O6	8.78	125.17	119.90
1	A	1	G	C5-C6-O6	-8.78	123.33	128.60
1	A	142	G	N1-C6-O6	8.78	125.17	119.90
1	A	56	A	C5-C6-N6	-8.78	116.68	123.70
1	A	553	A	P-O3'-C3'	8.78	130.23	119.70
1	A	558	G	N1-C6-O6	8.78	125.17	119.90
1	A	1718	G	N1-C6-O6	8.78	125.17	119.90
1	A	926	G	C5-C6-O6	-8.78	123.33	128.60
1	A	2188	G	P-O3'-C3'	8.78	130.23	119.70
1	A	116	G	N1-C6-O6	8.77	125.16	119.90
1	A	396	G	N1-C6-O6	8.77	125.16	119.90
1	A	783	C	O4'-C1'-N1	8.77	115.22	108.20
1	A	1000	G	N1-C6-O6	8.77	125.16	119.90
1	A	1206	G	C5-C6-O6	-8.77	123.34	128.60
1	A	1694	G	C5-C6-O6	-8.77	123.34	128.60
1	A	1167	C	O4'-C1'-N1	8.77	115.22	108.20
1	A	1348	G	N1-C6-O6	8.77	125.16	119.90
1	A	1705	C	O4'-C1'-N1	8.77	115.21	108.20
1	A	96	G	N1-C6-O6	8.76	125.16	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1261	C	O4'-C1'-N1	8.76	115.21	108.20
1	A	1471	G	N1-C6-O6	8.76	125.16	119.90
1	A	1530	G	N1-C6-O6	8.76	125.16	119.90
1	A	1740	G	N1-C6-O6	8.76	125.16	119.90
1	A	1859	C	O4'-C1'-N1	8.76	115.21	108.20
1	A	138	U	O4'-C1'-N1	8.76	115.21	108.20
1	A	731	G	N1-C6-O6	8.76	125.16	119.90
1	A	1382	G	C5-C6-O6	-8.76	123.34	128.60
1	A	2874	G	N1-C6-O6	8.76	125.16	119.90
1	A	1220	G	O4'-C1'-N9	8.76	115.20	108.20
1	A	2473	G	C5-C6-O6	-8.76	123.35	128.60
1	A	2574	G	C5-C6-O6	-8.76	123.35	128.60
1	A	1410	G	N1-C6-O6	8.75	125.15	119.90
1	A	267	U	O4'-C1'-N1	8.75	115.20	108.20
1	A	2705	C	O4'-C1'-N1	8.75	115.20	108.20
1	A	760	G	N1-C6-O6	8.75	125.15	119.90
1	A	1538	G	C5-C6-O6	-8.75	123.35	128.60
1	A	2809	G	N1-C6-O6	8.75	125.15	119.90
1	A	145	G	N1-C6-O6	8.74	125.15	119.90
1	A	335	G	N1-C6-O6	8.74	125.15	119.90
1	A	2484	G	N1-C6-O6	8.74	125.15	119.90
1	A	497	G	N1-C6-O6	8.74	125.15	119.90
1	A	865	G	N1-C6-O6	8.74	125.15	119.90
1	A	2611	G	N1-C6-O6	8.74	125.14	119.90
1	A	596	G	N1-C6-O6	8.74	125.14	119.90
1	A	2647	G	N1-C6-O6	8.74	125.14	119.90
1	A	63	G	P-O3'-C3'	8.74	130.19	119.70
1	A	642	G	C5-C6-O6	-8.74	123.36	128.60
1	A	1270	C	P-O3'-C3'	8.73	130.18	119.70
1	A	1769	G	C5-C6-O6	-8.73	123.36	128.60
1	A	1781	C	O4'-C1'-N1	8.73	115.19	108.20
1	A	187	C	P-O5'-C5'	8.73	134.87	120.90
1	A	341	G	N1-C6-O6	8.73	125.14	119.90
1	A	812	G	N1-C6-O6	8.73	125.14	119.90
1	A	823	G	N1-C6-O6	8.73	125.14	119.90
1	A	1958	G	N1-C6-O6	8.72	125.13	119.90
1	A	844	U	O4'-C1'-N1	8.72	115.18	108.20
1	A	1171	G	N1-C6-O6	8.72	125.13	119.90
1	A	1810	G	N1-C6-O6	8.72	125.13	119.90
1	A	2438	G	C5-C6-O6	-8.72	123.37	128.60
1	A	825	G	N1-C6-O6	8.72	125.13	119.90
1	A	1315	G	N1-C6-O6	8.72	125.13	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1671	G	N1-C6-O6	8.72	125.13	119.90
1	A	688	G	N1-C6-O6	8.72	125.13	119.90
1	A	490	A	O4'-C1'-N9	8.71	115.17	108.20
1	A	669	C	O4'-C1'-N1	8.71	115.17	108.20
1	A	2266	G	N1-C6-O6	8.71	125.13	119.90
1	A	2600	U	O4'-C1'-N1	8.71	115.17	108.20
1	A	2657	C	C2-N1-C1'	8.71	128.39	118.80
1	A	484	C	O4'-C1'-N1	8.71	115.17	108.20
1	A	1857	G	N1-C6-O6	8.71	125.13	119.90
1	A	1557	G	N1-C6-O6	8.71	125.13	119.90
1	A	1600	G	N1-C6-O6	8.71	125.13	119.90
1	A	2183	G	N1-C6-O6	8.71	125.13	119.90
1	A	351	G	N1-C6-O6	8.71	125.12	119.90
1	A	589	G	N1-C6-O6	8.71	125.12	119.90
1	A	2909	U	O4'-C1'-N1	8.71	115.17	108.20
1	A	1394	G	C5-C6-O6	-8.71	123.38	128.60
1	A	1773	G	N1-C6-O6	8.71	125.12	119.90
1	A	2001	G	N1-C6-O6	8.71	125.12	119.90
1	A	356	G	C5-C6-O6	-8.71	123.38	128.60
1	A	749	G	N1-C6-O6	8.71	125.12	119.90
1	A	1719	G	N1-C6-O6	8.71	125.12	119.90
1	A	2038	G	N1-C6-O6	8.71	125.12	119.90
1	A	2433	C	O4'-C1'-N1	8.71	115.17	108.20
1	A	1712	G	N1-C6-O6	8.70	125.12	119.90
1	A	2259	G	C5-C6-O6	-8.70	123.38	128.60
1	A	1529	G	C5-C6-O6	-8.70	123.38	128.60
1	A	1703	C	O4'-C1'-N1	8.70	115.16	108.20
1	A	1959	G	N1-C6-O6	8.70	125.12	119.90
1	A	950	U	O4'-C1'-N1	8.70	115.16	108.20
1	A	1474	C	P-O5'-C5'	8.70	134.81	120.90
1	A	1639	G	N1-C6-O6	8.69	125.12	119.90
1	A	120	G	C5-C6-O6	-8.69	123.39	128.60
1	A	423	G	O4'-C1'-N9	8.69	115.15	108.20
1	A	1241	C	O4'-C1'-N1	8.69	115.15	108.20
1	A	2029	G	N1-C6-O6	8.69	125.11	119.90
1	A	2598	G	N1-C6-O6	8.69	125.11	119.90
1	A	2169	G	N1-C6-O6	8.69	125.11	119.90
1	A	27	G	N1-C6-O6	8.69	125.11	119.90
1	A	48	G	N1-C6-O6	8.69	125.11	119.90
1	A	2067	G	N1-C6-O6	8.69	125.11	119.90
1	A	233	G	N1-C6-O6	8.68	125.11	119.90
1	A	963	G	N1-C6-O6	8.68	125.11	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1064	U	O4'-C1'-N1	8.68	115.15	108.20
1	A	1594	G	N1-C6-O6	8.68	125.11	119.90
1	A	2667	G	N1-C6-O6	8.68	125.11	119.90
1	A	20	C	O4'-C1'-N1	8.68	115.14	108.20
1	A	1350	U	O4'-C1'-N1	8.68	115.14	108.20
1	A	1397	G	N1-C6-O6	8.68	125.11	119.90
1	A	1486	G	N1-C6-O6	8.68	125.11	119.90
1	A	1717	C	O4'-C1'-N1	8.68	115.14	108.20
1	A	1079	U	O4'-C1'-N1	8.68	115.14	108.20
1	A	1502	G	N1-C6-O6	8.68	125.11	119.90
1	A	1640	G	N1-C6-O6	8.68	125.11	119.90
1	A	1378	G	N1-C6-O6	8.67	125.10	119.90
1	A	2161	G	N1-C6-O6	8.67	125.10	119.90
1	A	2188	G	N1-C6-O6	8.67	125.10	119.90
1	A	256	C	O4'-C1'-N1	8.67	115.14	108.20
1	A	764	C	O4'-C1'-N1	8.67	115.14	108.20
1	A	2423	C	O4'-C1'-N1	8.67	115.14	108.20
1	A	2897	G	N1-C6-O6	8.67	125.10	119.90
1	A	15	G	C5-C6-O6	-8.67	123.40	128.60
1	A	435	G	N1-C6-O6	8.67	125.10	119.90
1	A	2866	C	O4'-C1'-N1	8.67	115.13	108.20
1	A	573	C	O4'-C1'-N1	8.67	115.13	108.20
1	A	1263	G	C5-C6-O6	-8.67	123.40	128.60
1	A	682	G	N1-C6-O6	8.66	125.10	119.90
1	A	180	G	C5-C6-O6	-8.66	123.40	128.60
1	A	604	C	O4'-C1'-N1	8.66	115.13	108.20
1	A	1208	G	N1-C6-O6	8.66	125.10	119.90
1	A	1726	G	N1-C6-O6	8.66	125.10	119.90
1	A	2102	C	O4'-C1'-N1	8.66	115.13	108.20
1	A	2884	G	N1-C6-O6	8.66	125.10	119.90
1	A	1102	G	N1-C6-O6	8.65	125.09	119.90
1	A	1403	G	N1-C6-O6	8.65	125.09	119.90
1	A	245	G	N1-C6-O6	8.65	125.09	119.90
1	A	282	G	N1-C6-O6	8.65	125.09	119.90
1	A	2637	G	N1-C6-O6	8.65	125.09	119.90
1	A	2792	G	N1-C6-O6	8.65	125.09	119.90
1	A	535	G	N1-C6-O6	8.65	125.09	119.90
1	A	1678	G	N1-C6-O6	8.65	125.09	119.90
1	A	97	C	O4'-C1'-N1	8.65	115.12	108.20
1	A	938	G	O4'-C1'-N9	8.65	115.12	108.20
1	A	1782	G	N1-C6-O6	8.65	125.09	119.90
1	A	2274	U	O4'-C1'-N1	8.65	115.12	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2743	G	N1-C6-O6	8.65	125.09	119.90
1	A	92	G	N1-C6-O6	8.64	125.09	119.90
1	A	1324	G	N1-C6-O6	8.64	125.09	119.90
1	A	1340	A	O4'-C1'-N9	8.64	115.11	108.20
1	A	751	G	N1-C6-O6	8.64	125.08	119.90
1	A	2232	G	N1-C6-O6	8.64	125.08	119.90
1	A	287	G	N1-C6-O6	8.64	125.08	119.90
1	A	2545	G	O4'-C1'-N9	8.64	115.11	108.20
1	A	1444	C	O4'-C1'-N1	8.64	115.11	108.20
1	A	2039	G	N1-C6-O6	8.64	125.08	119.90
1	A	2684	G	N1-C6-O6	8.64	125.08	119.90
1	A	247	A	N1-C6-N6	8.63	123.78	118.60
1	A	1156	G	N1-C6-O6	8.64	125.08	119.90
1	A	2182	G	N1-C6-O6	8.64	125.08	119.90
1	A	2555	G	N1-C6-O6	8.64	125.08	119.90
1	A	2531	G	N1-C6-O6	8.63	125.08	119.90
1	A	903	G	N1-C6-O6	8.63	125.08	119.90
1	A	1231	G	N1-C6-O6	8.63	125.08	119.90
1	A	1708	U	P-O3'-C3'	8.63	130.06	119.70
1	A	1320	G	N1-C6-O6	8.63	125.08	119.90
1	A	1544	C	O4'-C1'-N1	8.63	115.10	108.20
1	A	2418	G	N1-C6-O6	8.63	125.08	119.90
1	A	2509	C	O4'-C1'-N1	8.63	115.11	108.20
1	A	1792	G	N1-C6-O6	8.63	125.08	119.90
1	A	1843	G	N1-C6-O6	8.63	125.08	119.90
1	A	2197	G	N1-C6-O6	8.63	125.08	119.90
1	A	2419	U	O4'-C1'-N1	8.63	115.10	108.20
1	A	2741	U	O4'-C1'-N1	8.63	115.10	108.20
1	A	550	G	N1-C6-O6	8.62	125.07	119.90
1	A	1247	G	N1-C6-O6	8.62	125.07	119.90
1	A	2041	G	N1-C6-O6	8.62	125.08	119.90
1	A	312	G	N1-C6-O6	8.62	125.07	119.90
1	A	512	G	N1-C6-O6	8.62	125.07	119.90
1	A	83	G	N1-C6-O6	8.62	125.07	119.90
1	A	521	G	N1-C6-O6	8.62	125.07	119.90
1	A	1322	G	N1-C6-O6	8.62	125.07	119.90
1	A	2135	G	C5-C6-O6	-8.62	123.43	128.60
1	A	82	G	N1-C6-O6	8.62	125.07	119.90
1	A	1539	C	C6-N1-C1'	-8.62	110.46	120.80
1	A	2904	A	C5-C6-N6	-8.62	116.80	123.70
1	A	706	C	O4'-C1'-N1	8.62	115.09	108.20
1	A	2917	G	N1-C6-O6	8.62	125.07	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1568	G	N1-C6-O6	8.62	125.07	119.90
1	A	986	G	C5-C6-O6	-8.61	123.43	128.60
1	A	1678	G	P-O3'-C3'	8.62	130.04	119.70
1	A	115	C	O4'-C1'-N1	8.61	115.09	108.20
1	A	573	C	P-O3'-C3'	8.61	130.03	119.70
1	A	953	G	N1-C6-O6	8.61	125.07	119.90
1	A	1105	G	C5-C6-O6	-8.61	123.43	128.60
1	A	1132	A	O4'-C1'-N9	8.61	115.09	108.20
1	A	2185	G	N1-C6-O6	8.61	125.07	119.90
1	A	697	G	N1-C6-O6	8.61	125.06	119.90
1	A	2914	C	O4'-C1'-N1	8.61	115.09	108.20
1	A	2544	C	O4'-C1'-N1	8.61	115.08	108.20
1	A	296	G	N1-C6-O6	8.61	125.06	119.90
1	A	1296	G	N1-C6-O6	8.61	125.06	119.90
1	A	1715	C	O4'-C1'-N1	8.61	115.08	108.20
1	A	2518	G	C5-C6-O6	-8.61	123.44	128.60
1	A	433	G	N1-C6-O6	8.60	125.06	119.90
1	A	605	G	N1-C6-O6	8.60	125.06	119.90
1	A	1117	G	N1-C6-O6	8.60	125.06	119.90
1	A	1002	G	N1-C6-O6	8.60	125.06	119.90
1	A	1153	G	N1-C6-O6	8.60	125.06	119.90
1	A	1425	C	O4'-C1'-N1	8.60	115.08	108.20
1	A	2559	U	P-O3'-C3'	8.60	130.02	119.70
1	A	2800	C	O4'-C1'-N1	8.60	115.08	108.20
1	A	975	C	O4'-C1'-N1	8.60	115.08	108.20
1	A	212	C	O4'-C1'-N1	8.60	115.08	108.20
1	A	2203	C	O4'-C1'-N1	8.60	115.08	108.20
1	A	2458	G	N1-C6-O6	8.60	125.06	119.90
1	A	1120	G	N1-C6-O6	8.59	125.06	119.90
1	A	1152	G	N1-C6-O6	8.59	125.06	119.90
1	A	2789	C	O4'-C1'-N1	8.59	115.08	108.20
1	A	905	G	N1-C6-O6	8.59	125.06	119.90
1	A	2811	G	C5-C6-O6	-8.59	123.45	128.60
1	A	1252	G	N1-C6-O6	8.59	125.05	119.90
1	A	1664	G	N1-C6-O6	8.59	125.05	119.90
1	A	2765	G	C5-C6-O6	-8.59	123.45	128.60
1	A	2523	G	N1-C6-O6	8.59	125.05	119.90
1	A	2847	G	N1-C6-O6	8.59	125.05	119.90
1	A	454	G	N1-C6-O6	8.58	125.05	119.90
1	A	2186	G	N1-C6-O6	8.58	125.05	119.90
1	A	773	G	N1-C6-O6	8.58	125.05	119.90
1	A	1209	G	N1-C6-O6	8.58	125.05	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2636	G	N1-C6-O6	8.58	125.05	119.90
1	A	243	G	N1-C6-O6	8.58	125.05	119.90
1	A	703	G	N1-C6-O6	8.58	125.05	119.90
1	A	1085	G	C5-C6-O6	-8.58	123.45	128.60
1	A	2005	C	O4'-C1'-N1	8.58	115.06	108.20
1	A	417	G	C5-C6-O6	-8.57	123.45	128.60
1	A	845	G	N1-C6-O6	8.57	125.05	119.90
1	A	1182	G	N1-C6-O6	8.57	125.04	119.90
1	A	19	G	C5-C6-O6	-8.57	123.46	128.60
1	A	2154	G	N1-C6-O6	8.57	125.04	119.90
1	A	2626	G	N1-C6-O6	8.57	125.04	119.90
1	A	2698	G	C5-C6-O6	-8.57	123.46	128.60
1	A	465	U	O4'-C1'-N1	8.56	115.05	108.20
1	A	1865	C	O4'-C1'-N1	8.56	115.05	108.20
1	A	2161	G	O4'-C1'-N9	8.56	115.05	108.20
1	A	2213	U	O4'-C1'-N1	8.56	115.05	108.20
1	A	352	G	N1-C6-O6	8.56	125.04	119.90
1	A	810	G	N1-C6-O6	8.56	125.04	119.90
1	A	1571	G	N1-C6-O6	8.56	125.04	119.90
1	A	928	G	O4'-C1'-N9	8.56	115.05	108.20
1	A	741	U	O4'-C1'-N1	8.56	115.05	108.20
1	A	2561	G	N1-C6-O6	8.56	125.03	119.90
1	A	1842	C	O4'-C1'-N1	8.55	115.04	108.20
1	A	2908	A	P-O5'-C5'	8.55	134.59	120.90
1	A	419	G	N1-C6-O6	8.55	125.03	119.90
1	A	1766	C	O4'-C1'-N1	8.55	115.04	108.20
1	A	2882	G	N1-C6-O6	8.55	125.03	119.90
1	A	1040	C	O4'-C1'-N1	8.55	115.04	108.20
1	A	2466	C	O4'-C1'-N1	8.55	115.04	108.20
1	A	1737	U	O4'-C1'-N1	8.55	115.04	108.20
1	A	2275	G	N1-C6-O6	8.55	125.03	119.90
1	A	1589	G	N1-C6-O6	8.54	125.03	119.90
1	A	35	G	N1-C6-O6	8.54	125.02	119.90
1	A	221	G	N1-C6-O6	8.54	125.03	119.90
1	A	240	C	O4'-C1'-N1	8.54	115.03	108.20
1	A	442	C	O4'-C1'-N1	8.54	115.03	108.20
1	A	1566	G	N1-C6-O6	8.54	125.03	119.90
1	A	1407	G	N1-C6-O6	8.54	125.03	119.90
1	A	700	U	O4'-C1'-N1	8.54	115.03	108.20
1	A	2015	G	N1-C6-O6	8.54	125.02	119.90
1	A	1259	G	N1-C6-O6	8.54	125.02	119.90
1	A	1359	G	N1-C6-O6	8.54	125.02	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1749	G	N1-C6-O6	8.54	125.02	119.90
1	A	2043	A	O4'-C1'-N9	8.54	115.03	108.20
1	A	968	C	O4'-C1'-N1	8.54	115.03	108.20
1	A	2033	G	N1-C6-O6	8.54	125.02	119.90
1	A	2895	C	O4'-C1'-N1	8.54	115.03	108.20
1	A	906	G	N1-C6-O6	8.53	125.02	119.90
1	A	2154	G	O4'-C1'-N9	8.53	115.02	108.20
1	A	2485	C	P-O5'-C5'	8.53	134.55	120.90
1	A	2514	G	C5-C6-O6	-8.53	123.48	128.60
1	A	1750	G	N1-C6-O6	8.53	125.02	119.90
1	A	962	C	O4'-C1'-N1	8.53	115.02	108.20
1	A	2098	G	N1-C6-O6	8.53	125.02	119.90
1	A	2129	G	N1-C6-O6	8.53	125.02	119.90
1	A	2150	G	C5-C6-O6	-8.53	123.48	128.60
1	A	1371	G	N1-C6-O6	8.53	125.02	119.90
1	A	1621	G	N1-C6-O6	8.53	125.02	119.90
1	A	2749	U	O4'-C1'-N1	8.53	115.02	108.20
1	A	2189	G	N1-C6-O6	8.53	125.02	119.90
1	A	2911	G	N1-C6-O6	8.53	125.02	119.90
1	A	716	G	N1-C6-O6	8.52	125.01	119.90
1	A	1107	U	O4'-C1'-N1	8.52	115.02	108.20
1	A	2177	G	N1-C6-O6	8.52	125.01	119.90
1	A	2534	G	N1-C6-O6	8.52	125.01	119.90
1	A	1198	C	O4'-C1'-N1	8.52	115.01	108.20
1	A	1853	G	N1-C6-O6	8.52	125.01	119.90
1	A	1017	C	O4'-C1'-N1	8.52	115.01	108.20
1	A	606	U	O4'-C1'-N1	8.51	115.01	108.20
1	A	1743	A	O4'-C1'-N9	8.51	115.01	108.20
1	A	2582	G	N1-C6-O6	8.51	125.01	119.90
1	A	2862	A	C5-C6-N6	-8.51	116.89	123.70
1	A	1690	G	N1-C6-O6	8.51	125.00	119.90
1	A	1951	G	C5-C6-O6	-8.51	123.50	128.60
1	A	2859	G	N1-C6-O6	8.50	125.00	119.90
1	A	1711	G	N1-C6-O6	8.50	125.00	119.90
1	A	2103	U	O4'-C1'-N1	8.49	115.00	108.20
1	A	1353	C	C6-N1-C2	-8.49	116.90	120.30
1	A	2752	C	O4'-C1'-N1	8.49	115.00	108.20
1	A	1933	G	N1-C6-O6	8.49	125.00	119.90
1	A	406	G	N1-C6-O6	8.49	124.99	119.90
1	A	1801	G	N1-C6-O6	8.49	124.99	119.90
1	A	2231	C	O4'-C1'-N1	8.49	114.99	108.20
1	A	2726	G	N1-C6-O6	8.49	124.99	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1022	G	C5-C6-O6	-8.49	123.51	128.60
1	A	946	G	N1-C6-O6	8.48	124.99	119.90
1	A	445	C	O4'-C1'-N1	8.48	114.99	108.20
1	A	1687	G	C5-C6-O6	-8.48	123.51	128.60
1	A	597	G	C5-C6-O6	-8.48	123.51	128.60
1	A	666	G	N1-C6-O6	8.48	124.99	119.90
1	A	334	G	C5-C6-O6	-8.48	123.51	128.60
1	A	1937	C	O4'-C1'-N1	8.48	114.98	108.20
1	A	805	G	N1-C6-O6	8.48	124.99	119.90
1	A	1744	G	N1-C6-O6	8.48	124.99	119.90
1	A	1775	G	C5-C6-O6	-8.48	123.51	128.60
1	A	1841	G	N1-C6-O6	8.48	124.99	119.90
1	A	1472	G	N1-C6-O6	8.47	124.98	119.90
1	A	2717	G	O4'-C1'-N9	8.47	114.98	108.20
1	A	2139	G	N1-C6-O6	8.47	124.98	119.90
1	A	778	C	O4'-C1'-N1	8.47	114.98	108.20
1	A	1292	G	N1-C6-O6	8.47	124.98	119.90
1	A	2567	C	O4'-C1'-N1	8.47	114.98	108.20
1	A	304	G	N1-C6-O6	8.47	124.98	119.90
1	A	1861	C	O4'-C1'-N1	8.47	114.97	108.20
1	A	2770	A	N1-C6-N6	8.47	123.68	118.60
1	A	2863	G	N1-C6-O6	8.47	124.98	119.90
1	A	371	G	C5-C6-O6	-8.46	123.52	128.60
1	A	409	U	O4'-C1'-N1	8.46	114.97	108.20
1	A	529	C	O4'-C1'-N1	8.46	114.97	108.20
1	A	191	G	N1-C6-O6	8.46	124.97	119.90
1	A	2171	G	N1-C6-O6	8.46	124.97	119.90
1	A	2797	C	O4'-C1'-N1	8.46	114.97	108.20
1	A	2635	C	O4'-C1'-N1	8.45	114.96	108.20
1	A	1255	G	C5-C6-O6	-8.45	123.53	128.60
1	A	985	G	O4'-C1'-N9	8.45	114.96	108.20
1	A	1251	U	P-O3'-C3'	8.45	129.84	119.70
1	A	2877	G	C5-C6-O6	-8.44	123.53	128.60
1	A	972	U	O4'-C1'-N1	8.44	114.95	108.20
1	A	1488	G	C5-C6-O6	-8.44	123.53	128.60
1	A	327	G	N1-C6-O6	8.44	124.96	119.90
1	A	877	G	N1-C6-O6	8.44	124.96	119.90
1	A	316	G	N1-C6-O6	8.44	124.96	119.90
1	A	188	C	O4'-C1'-N1	8.43	114.95	108.20
1	A	328	G	N1-C6-O6	8.43	124.96	119.90
1	A	380	C	O4'-C1'-N1	8.43	114.94	108.20
1	A	1581	A	O4'-C1'-N9	8.43	114.94	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	147	G	C5-C6-O6	-8.43	123.54	128.60
1	A	846	G	N1-C6-O6	8.43	124.96	119.90
1	A	2696	C	O4'-C1'-N1	8.43	114.94	108.20
1	A	1819	C	O4'-C1'-N1	8.43	114.94	108.20
1	A	59	G	N1-C6-O6	8.42	124.95	119.90
1	A	303	G	C5-C6-O6	-8.42	123.55	128.60
1	A	648	G	N1-C6-O6	8.42	124.95	119.90
1	A	804	G	C5-C6-O6	-8.42	123.55	128.60
1	A	872	C	O4'-C1'-N1	8.42	114.94	108.20
1	A	208	G	N1-C6-O6	8.42	124.95	119.90
1	A	2905	C	O4'-C1'-N1	8.42	114.94	108.20
1	A	1272	G	C5-C6-O6	-8.42	123.55	128.60
1	A	2448	U	O4'-C1'-N1	8.41	114.93	108.20
1	A	2925	C	O4'-C1'-N1	8.41	114.93	108.20
1	A	1427	G	P-O5'-C5'	8.41	134.36	120.90
1	A	148	G	O4'-C1'-N9	8.41	114.93	108.20
1	A	1119	A	O4'-C1'-N9	8.41	114.93	108.20
1	A	1645	C	O4'-C1'-N1	8.41	114.93	108.20
1	A	2006	A	C5-C6-N6	-8.41	116.97	123.70
1	A	2439	G	N1-C6-O6	8.41	124.94	119.90
1	A	57	C	O4'-C1'-N1	8.40	114.92	108.20
1	A	533	C	O4'-C1'-N1	8.40	114.92	108.20
1	A	2702	G	C5-C6-O6	-8.40	123.56	128.60
1	A	2744	C	O4'-C1'-N1	8.40	114.92	108.20
1	A	1388	A	O4'-C1'-N9	8.40	114.92	108.20
1	A	2771	G	C5-C6-O6	-8.40	123.56	128.60
1	A	499	G	N1-C6-O6	8.40	124.94	119.90
1	A	1950	G	N1-C6-O6	8.40	124.94	119.90
1	A	230	A	C5-C6-N6	-8.39	116.99	123.70
1	A	2803	C	O4'-C1'-N1	8.39	114.91	108.20
1	A	973	G	C5-C6-O6	-8.38	123.57	128.60
1	A	2133	C	C2-N1-C1'	8.38	128.01	118.80
1	A	1762	G	C5-C6-O6	-8.38	123.58	128.60
1	A	2579	G	N1-C6-O6	8.38	124.92	119.90
1	A	1754	U	O4'-C1'-N1	8.37	114.90	108.20
1	A	2241	A	O4'-C1'-N9	8.37	114.90	108.20
1	A	2660	G	O4'-C1'-N9	8.37	114.90	108.20
1	A	1317	G	C5-C6-O6	-8.37	123.58	128.60
1	A	2211	G	N1-C6-O6	8.37	124.92	119.90
1	A	2678	U	O4'-C1'-N1	8.37	114.89	108.20
1	A	865	G	O4'-C1'-N9	8.37	114.89	108.20
1	A	51	G	N1-C6-O6	8.36	124.92	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2195	G	N1-C6-O6	8.37	124.92	119.90
1	A	132	C	O4'-C1'-N1	8.36	114.89	108.20
1	A	158	C	O4'-C1'-N1	8.36	114.89	108.20
1	A	45	G	N1-C6-O6	8.36	124.92	119.90
1	A	1285	G	N1-C6-O6	8.36	124.92	119.90
1	A	2193	C	O4'-C1'-N1	8.36	114.89	108.20
1	A	826	U	O4'-C1'-N1	8.36	114.89	108.20
1	A	1586	G	C5-C6-O6	-8.36	123.59	128.60
1	A	1637	G	N1-C6-O6	8.36	124.91	119.90
1	A	2253	G	P-O3'-C3'	8.35	129.72	119.70
1	A	22	C	O4'-C1'-N1	8.35	114.88	108.20
1	A	2420	G	N1-C6-O6	8.35	124.91	119.90
1	A	130	A	O4'-C1'-N9	8.35	114.88	108.20
1	A	832	G	C5-C6-O6	-8.35	123.59	128.60
1	A	122	G	N1-C6-O6	8.35	124.91	119.90
1	A	1633	G	C5-C6-O6	-8.35	123.59	128.60
1	A	1183	G	N1-C6-O6	8.35	124.91	119.90
1	A	218	G	P-O3'-C3'	8.34	129.71	119.70
1	A	295	G	N1-C6-O6	8.34	124.91	119.90
1	A	1544	C	N3-C4-N4	8.34	123.84	118.00
1	A	444	U	O4'-C1'-N1	8.34	114.87	108.20
1	A	1574	G	N1-C6-O6	8.34	124.90	119.90
1	A	2085	G	N1-C6-O6	8.34	124.91	119.90
1	A	2456	C	O4'-C1'-N1	8.34	114.87	108.20
1	A	2780	G	N1-C6-O6	8.34	124.90	119.90
1	A	493	G	N1-C6-O6	8.34	124.90	119.90
1	A	2245	G	C5-C6-O6	-8.34	123.60	128.60
1	A	360	C	O4'-C1'-N1	8.34	114.87	108.20
1	A	1531	G	C5-C6-O6	-8.33	123.60	128.60
1	A	2065	C	O4'-C1'-N1	8.33	114.87	108.20
1	A	2605	G	O4'-C1'-N9	8.32	114.86	108.20
1	A	2186	G	P-O3'-C3'	8.32	129.69	119.70
1	A	2196	U	O4'-C1'-N1	8.32	114.86	108.20
1	A	1411	U	O4'-C1'-N1	8.32	114.85	108.20
1	A	321	U	O4'-C1'-N1	8.31	114.85	108.20
1	A	1803	C	O4'-C1'-N1	8.31	114.85	108.20
1	A	2470	C	O4'-C1'-N1	8.31	114.85	108.20
1	A	1212	U	O4'-C1'-N1	8.30	114.84	108.20
1	A	726	C	O4'-C1'-N1	8.30	114.84	108.20
1	A	2082	G	N1-C6-O6	8.30	124.88	119.90
1	A	2677	G	C5-C6-O6	-8.30	123.62	128.60
1	A	1650	C	O4'-C1'-N1	8.29	114.84	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	848	G	N1-C6-O6	8.29	124.88	119.90
1	A	79	C	O4'-C1'-N1	8.29	114.83	108.20
1	A	196	U	O4'-C1'-N1	8.29	114.83	108.20
1	A	1787	G	N1-C6-O6	8.28	124.87	119.90
1	A	2715	G	N1-C6-O6	8.28	124.87	119.90
1	A	640	C	O4'-C1'-N1	8.28	114.82	108.20
1	A	2113	C	O4'-C1'-N1	8.28	114.82	108.20
1	A	2545	G	C5-C6-O6	-8.28	123.63	128.60
1	A	2162	G	N1-C6-O6	8.28	124.87	119.90
1	A	2002	G	N1-C6-O6	8.27	124.86	119.90
1	A	693	G	C5-C6-O6	-8.27	123.64	128.60
1	A	2838	U	O4'-C1'-N1	8.27	114.81	108.20
1	A	636	G	C5-C6-O6	-8.26	123.64	128.60
1	A	2871	G	C5-C6-O6	-8.26	123.64	128.60
1	A	113	U	O4'-C1'-N1	8.26	114.81	108.20
1	A	695	G	C5-C6-O6	-8.26	123.64	128.60
1	A	68	C	O4'-C1'-N1	8.26	114.81	108.20
1	A	1007	G	N1-C6-O6	8.26	124.85	119.90
1	A	1165	U	O4'-C1'-N1	8.26	114.81	108.20
1	A	2575	U	O4'-C1'-N1	8.26	114.81	108.20
1	A	2248	G	C5-C6-O6	-8.26	123.65	128.60
1	A	2918	G	N1-C6-O6	8.26	124.85	119.90
1	A	1447	C	O4'-C1'-N1	8.25	114.80	108.20
1	A	1625	C	O4'-C1'-N1	8.25	114.80	108.20
1	A	403	C	O4'-C1'-N1	8.25	114.80	108.20
1	A	2210	G	N1-C6-O6	8.25	124.85	119.90
1	A	2513	G	C5-C6-O6	-8.25	123.65	128.60
1	A	985	G	N1-C6-O6	8.24	124.85	119.90
1	A	1428	G	C5-C6-O6	-8.24	123.65	128.60
1	A	1038	C	O4'-C1'-N1	8.24	114.79	108.20
1	A	2423	C	C6-N1-C1'	-8.24	110.91	120.80
1	A	482	C	O4'-C1'-N1	8.24	114.79	108.20
1	A	780	G	C5-C6-O6	-8.24	123.66	128.60
1	A	474	U	O4'-C1'-N1	8.24	114.79	108.20
1	A	248	G	C5-C6-O6	-8.23	123.66	128.60
1	A	359	C	O4'-C1'-N1	8.23	114.79	108.20
1	A	850	U	O4'-C1'-N1	8.23	114.79	108.20
1	A	1935	G	N1-C6-O6	8.23	124.84	119.90
1	A	8	U	O4'-C1'-N1	8.23	114.79	108.20
1	A	884	C	O4'-C1'-N1	8.23	114.78	108.20
1	A	441	C	O4'-C1'-N1	8.22	114.78	108.20
1	A	1943	C	C2-N1-C1'	8.22	127.84	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2664	U	O4'-C1'-N1	8.22	114.78	108.20
1	A	1310	C	O4'-C1'-N1	8.21	114.77	108.20
1	A	1670	C	O4'-C1'-N1	8.21	114.77	108.20
1	A	255	G	C5-C6-O6	-8.21	123.67	128.60
1	A	747	G	N1-C6-O6	8.21	124.83	119.90
1	A	2568	C	O4'-C1'-N1	8.21	114.77	108.20
1	A	2442	G	N1-C6-O6	8.21	124.83	119.90
1	A	542	G	N1-C6-O6	8.21	124.83	119.90
1	A	2093	C	O4'-C1'-N1	8.21	114.77	108.20
1	A	2095	C	O4'-C1'-N1	8.21	114.77	108.20
1	A	1655	A	C5-C6-N6	-8.21	117.14	123.70
1	A	2706	G	C5-C6-O6	-8.20	123.68	128.60
1	A	2597	C	O4'-C1'-N1	8.20	114.76	108.20
1	A	817	G	C5-C6-O6	-8.20	123.68	128.60
1	A	569	C	O4'-C1'-N1	8.20	114.76	108.20
1	A	1419	G	N1-C6-O6	8.20	124.82	119.90
1	A	2536	C	O4'-C1'-N1	8.20	114.76	108.20
1	A	1062	C	O4'-C1'-N1	8.19	114.75	108.20
1	A	2599	G	C5-C6-O6	-8.19	123.69	128.60
1	A	123	G	N1-C6-O6	8.19	124.81	119.90
1	A	777	C	O4'-C1'-N1	8.19	114.75	108.20
1	A	250	G	N1-C6-O6	8.18	124.81	119.90
1	A	2428	G	C5-C6-O6	-8.18	123.69	128.60
1	A	855	G	C5-C6-O6	-8.18	123.69	128.60
1	A	563	C	O4'-C1'-N1	8.18	114.74	108.20
1	A	1414	G	C5-C6-O6	-8.18	123.69	128.60
1	A	187	C	O4'-C1'-N1	8.17	114.74	108.20
1	A	491	C	O4'-C1'-N1	8.17	114.74	108.20
1	A	951	C	O4'-C1'-N1	8.17	114.74	108.20
1	A	995	U	O4'-C1'-N1	8.17	114.74	108.20
1	A	1268	G	C5-C6-O6	-8.17	123.70	128.60
1	A	473	C	O4'-C1'-N1	8.17	114.74	108.20
1	A	1330	C	O4'-C1'-N1	8.17	114.74	108.20
1	A	1826	C	O4'-C1'-N1	8.17	114.73	108.20
1	A	895	G	N1-C6-O6	8.17	124.80	119.90
1	A	1730	C	O4'-C1'-N1	8.17	114.73	108.20
1	A	681	C	O4'-C1'-N1	8.16	114.73	108.20
1	A	2644	U	O4'-C1'-N1	8.16	114.73	108.20
1	A	371	G	O4'-C1'-N9	8.16	114.73	108.20
1	A	1257	C	O4'-C1'-N1	8.16	114.73	108.20
1	A	1475	G	C5-C6-O6	-8.16	123.70	128.60
1	A	2236	C	O4'-C1'-N1	8.16	114.73	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	55	G	C5-C6-O6	-8.16	123.71	128.60
1	A	739	C	O4'-C1'-N1	8.16	114.73	108.20
1	A	2107	C	P-O5'-C5'	8.16	133.95	120.90
1	A	2142	C	O4'-C1'-N1	8.16	114.73	108.20
1	A	2748	G	N1-C6-O6	8.16	124.79	119.90
1	A	807	G	C5-C6-O6	-8.15	123.71	128.60
1	A	1752	G	C5-C6-O6	-8.15	123.71	128.60
1	A	2112	G	C5-C6-O6	-8.15	123.71	128.60
1	A	2566	U	O4'-C1'-N1	8.15	114.72	108.20
1	A	628	C	O4'-C1'-N1	8.15	114.72	108.20
1	A	2680	C	O4'-C1'-N1	8.15	114.72	108.20
1	A	930	C	O4'-C1'-N1	8.15	114.72	108.20
1	A	2441	A	N1-C6-N6	8.15	123.49	118.60
1	A	1958	G	O4'-C1'-N9	8.15	114.72	108.20
1	A	227	G	N1-C6-O6	8.14	124.79	119.90
1	A	2037	C	O4'-C1'-N1	8.14	114.72	108.20
1	A	2623	C	O4'-C1'-N1	8.14	114.71	108.20
1	A	392	C	O4'-C1'-N1	8.14	114.71	108.20
1	A	2565	G	C5-C6-O6	-8.13	123.72	128.60
1	A	2712	C	O4'-C1'-N1	8.13	114.71	108.20
1	A	2105	U	O4'-C1'-N1	8.13	114.70	108.20
1	A	98	U	O4'-C1'-N1	8.13	114.70	108.20
1	A	734	C	O4'-C1'-N1	8.13	114.70	108.20
1	A	1343	C	O4'-C1'-N1	8.13	114.70	108.20
1	A	2656	G	N1-C6-O6	8.13	124.78	119.90
1	A	2237	C	O4'-C1'-N1	8.13	114.70	108.20
1	A	1520	A	O4'-C1'-N9	8.12	114.70	108.20
1	A	2870	G	C5-C6-O6	-8.12	123.73	128.60
1	A	66	C	P-O5'-C5'	8.12	133.89	120.90
1	A	1644	C	O4'-C1'-N1	8.12	114.69	108.20
1	A	1196	C	O4'-C1'-N1	8.12	114.69	108.20
1	A	1576	G	N1-C6-O6	8.12	124.77	119.90
1	A	2714	G	C5-C6-O6	-8.12	123.73	128.60
1	A	668	G	C5-C6-O6	-8.11	123.73	128.60
1	A	2512	C	O4'-C1'-N1	8.11	114.69	108.20
1	A	1016	U	O4'-C1'-N1	8.11	114.69	108.20
1	A	2199	G	N1-C6-O6	8.11	124.77	119.90
1	A	1049	G	C5-C6-O6	-8.11	123.74	128.60
1	A	1135	G	N1-C6-O6	8.11	124.76	119.90
1	A	1765	G	N1-C6-O6	8.10	124.76	119.90
1	A	2759	C	O4'-C1'-N1	8.10	114.68	108.20
1	A	76	C	O4'-C1'-N1	8.10	114.68	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1688	G	O4'-C1'-N9	8.10	114.68	108.20
1	A	514	G	C5-C6-O6	-8.10	123.74	128.60
1	A	2451	C	P-O3'-C3'	8.10	129.42	119.70
1	A	1704	U	O4'-C1'-N1	8.10	114.68	108.20
1	A	2229	C	O4'-C1'-N1	8.10	114.68	108.20
1	A	2149	G	N1-C6-O6	8.09	124.76	119.90
1	A	2821	U	O4'-C1'-N1	8.09	114.67	108.20
1	A	599	G	O4'-C1'-N9	8.09	114.67	108.20
1	A	1386	G	C5-C6-O6	-8.09	123.75	128.60
1	A	40	U	O4'-C1'-N1	8.09	114.67	108.20
1	A	566	G	C5-C6-O6	-8.08	123.75	128.60
1	A	938	G	N1-C6-O6	8.08	124.75	119.90
1	A	1199	C	O4'-C1'-N1	8.08	114.66	108.20
1	A	387	C	O4'-C1'-N1	8.08	114.66	108.20
1	A	1851	G	C5-C6-O6	-8.08	123.75	128.60
1	A	1448	U	O4'-C1'-N1	8.07	114.66	108.20
1	A	1497	G	C5-C6-O6	-8.07	123.76	128.60
1	A	2	G	C5-C6-O6	-8.07	123.76	128.60
1	A	894	A	N1-C6-N6	8.07	123.44	118.60
1	A	2630	C	O4'-C1'-N1	8.07	114.65	108.20
1	A	1997	G	N1-C6-O6	8.07	124.74	119.90
1	A	710	G	C5-C6-O6	-8.06	123.76	128.60
1	A	1179	A	O4'-C1'-N9	8.06	114.65	108.20
1	A	1517	A	O4'-C1'-N9	8.06	114.65	108.20
1	A	2659	G	O4'-C1'-N9	8.06	114.65	108.20
1	A	54	G	O4'-C1'-N9	8.06	114.65	108.20
1	A	629	G	C5-C6-O6	-8.06	123.77	128.60
1	A	1239	U	O4'-C1'-N1	8.05	114.64	108.20
1	A	1561	G	C5-C6-O6	-8.05	123.77	128.60
1	A	2921	U	O4'-C1'-N1	8.06	114.64	108.20
1	A	2268	G	C5-C6-O6	-8.05	123.77	128.60
1	A	358	C	O4'-C1'-N1	8.05	114.64	108.20
1	A	1189	A	C5-C6-N6	-8.05	117.26	123.70
1	A	1596	U	O4'-C1'-N1	8.05	114.64	108.20
1	A	2850	G	N1-C6-O6	8.05	124.73	119.90
1	A	771	U	O4'-C1'-N1	8.04	114.64	108.20
1	A	2081	G	C5-C6-O6	-8.04	123.77	128.60
1	A	2617	G	C5-C6-O6	-8.04	123.77	128.60
1	A	779	C	O4'-C1'-N1	8.04	114.63	108.20
1	A	1855	C	O4'-C1'-N1	8.04	114.63	108.20
1	A	609	C	O4'-C1'-N1	8.04	114.63	108.20
1	A	2469	C	O4'-C1'-N1	8.04	114.63	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2109	G	C5-C6-O6	-8.04	123.78	128.60
1	A	1070	G	N1-C6-O6	8.04	124.72	119.90
1	A	1785	G	C5-C6-O6	-8.04	123.78	128.60
1	A	23	G	C5-C6-O6	-8.03	123.78	128.60
1	A	2808	U	O4'-C1'-N1	8.03	114.62	108.20
1	A	2209	U	O4'-C1'-N1	8.03	114.62	108.20
1	A	432	C	O4'-C1'-N1	8.03	114.62	108.20
1	A	1109	G	C5-C6-O6	-8.03	123.78	128.60
1	A	2430	U	O4'-C1'-N1	8.03	114.62	108.20
1	A	587	C	O4'-C1'-N1	8.02	114.62	108.20
1	A	595	G	C5-C6-O6	-8.02	123.79	128.60
1	A	735	U	O4'-C1'-N1	8.02	114.62	108.20
1	A	1076	G	C5-C6-O6	-8.02	123.79	128.60
1	A	1400	G	C5-C6-O6	-8.02	123.79	128.60
1	A	1280	G	O4'-C1'-N9	8.02	114.62	108.20
1	A	377	G	C5-C6-O6	-8.02	123.79	128.60
1	A	531	C	O4'-C1'-N1	8.02	114.61	108.20
1	A	1033	C	O4'-C1'-N1	8.02	114.61	108.20
1	A	2608	C	O4'-C1'-N1	8.01	114.61	108.20
1	A	461	C	O4'-C1'-N1	8.01	114.61	108.20
1	A	570	C	O4'-C1'-N1	8.01	114.61	108.20
1	A	912	C	O4'-C1'-N1	8.01	114.61	108.20
1	A	1328	C	O4'-C1'-N1	8.01	114.61	108.20
1	A	2503	C	O4'-C1'-N1	8.01	114.61	108.20
1	A	927	G	C5-C6-O6	-8.00	123.80	128.60
1	A	2801	C	O4'-C1'-N1	8.00	114.60	108.20
1	A	1013	U	O4'-C1'-N1	8.00	114.60	108.20
1	A	1454	C	O4'-C1'-N1	8.00	114.60	108.20
1	A	1864	G	O4'-C1'-N9	8.00	114.60	108.20
1	A	576	G	N1-C6-O6	8.00	124.70	119.90
1	A	2061	G	C5-C6-O6	-7.99	123.80	128.60
1	A	525	A	N1-C6-N6	7.99	123.39	118.60
1	A	2483	G	O4'-C1'-N9	7.99	114.59	108.20
1	A	1396	C	O4'-C1'-N1	7.99	114.59	108.20
1	A	2577	G	O4'-C1'-N9	7.98	114.59	108.20
1	A	104	C	O4'-C1'-N1	7.98	114.58	108.20
1	A	1839	A	C4-C5-C6	7.98	120.99	117.00
1	A	2457	G	N1-C6-O6	7.98	124.69	119.90
1	A	2559	U	O4'-C1'-N1	7.98	114.59	108.20
1	A	819	G	C5-C6-O6	-7.98	123.81	128.60
1	A	2525	C	O4'-C1'-N1	7.98	114.58	108.20
1	A	2796	C	O4'-C1'-N1	7.98	114.58	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	705	A	O4'-C1'-N9	7.98	114.58	108.20
1	A	788	G	C5-C6-O6	-7.97	123.81	128.60
1	A	1248	C	O4'-C1'-N1	7.97	114.58	108.20
1	A	1825	U	O4'-C1'-N1	7.97	114.58	108.20
1	A	348	U	O4'-C1'-N1	7.97	114.58	108.20
1	A	795	G	N1-C6-O6	7.97	124.68	119.90
1	A	1567	U	O4'-C1'-N1	7.97	114.58	108.20
1	A	1858	A	C5-C6-N6	-7.97	117.32	123.70
1	A	1145	G	N1-C6-O6	7.97	124.68	119.90
1	A	2234	C	O4'-C1'-N1	7.97	114.58	108.20
1	A	346	G	P-O3'-C3'	7.97	129.26	119.70
1	A	1307	U	O4'-C1'-N1	7.97	114.58	108.20
1	A	2035	C	O4'-C1'-N1	7.97	114.57	108.20
1	A	1333	C	O4'-C1'-N1	7.96	114.57	108.20
1	A	2839	C	O4'-C1'-N1	7.96	114.57	108.20
1	A	1023	G	C5-C6-O6	-7.96	123.82	128.60
1	A	2439	G	O4'-C1'-N9	7.96	114.57	108.20
1	A	1214	U	O4'-C1'-N1	7.96	114.56	108.20
1	A	1319	G	C5-C6-O6	-7.96	123.83	128.60
1	A	200	A	O4'-C1'-N9	7.95	114.56	108.20
1	A	768	G	C5-C6-O6	-7.95	123.83	128.60
1	A	2505	A	O4'-C1'-N9	7.95	114.56	108.20
1	A	398	U	O4'-C1'-N1	7.95	114.56	108.20
1	A	2695	C	O4'-C1'-N1	7.95	114.56	108.20
1	A	2099	G	C5-C6-O6	-7.95	123.83	128.60
1	A	174	U	O4'-C1'-N1	7.95	114.56	108.20
1	A	1668	G	C5-C6-O6	-7.95	123.83	128.60
1	A	2120	U	O4'-C1'-N1	7.95	114.56	108.20
1	A	2646	C	O4'-C1'-N1	7.95	114.56	108.20
1	A	1656	C	O4'-C1'-N1	7.94	114.56	108.20
1	A	2250	G	C5-C6-O6	-7.94	123.83	128.60
1	A	834	C	O4'-C1'-N1	7.94	114.56	108.20
1	A	2761	G	C5-C6-O6	-7.94	123.83	128.60
1	A	1623	C	O4'-C1'-N1	7.94	114.55	108.20
1	A	1358	G	C5-C6-O6	-7.94	123.84	128.60
1	A	2251	G	C5-C6-O6	-7.94	123.84	128.60
1	A	1232	G	C5-C6-O6	-7.94	123.84	128.60
1	A	194	A	O4'-C1'-N9	7.93	114.55	108.20
1	A	743	U	O4'-C1'-N1	7.93	114.54	108.20
1	A	1082	G	C5-C6-O6	-7.93	123.84	128.60
1	A	1203	G	C5-C6-O6	-7.93	123.84	128.60
1	A	1757	G	C5-C6-O6	-7.93	123.84	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	655	C	O4'-C1'-N1	7.93	114.54	108.20
1	A	1833	G	C5-C6-O6	-7.93	123.84	128.60
1	A	393	U	O4'-C1'-N1	7.92	114.54	108.20
1	A	914	C	O4'-C1'-N1	7.92	114.54	108.20
1	A	1043	G	C5-C6-O6	-7.92	123.84	128.60
1	A	2709	C	O4'-C1'-N1	7.92	114.54	108.20
1	A	2730	U	O4'-C1'-N1	7.92	114.54	108.20
1	A	2014	G	C5-C6-O6	-7.92	123.85	128.60
1	A	422	C	O4'-C1'-N1	7.92	114.53	108.20
1	A	687	U	O4'-C1'-N1	7.92	114.53	108.20
1	A	887	C	O4'-C1'-N1	7.92	114.53	108.20
1	A	1342	G	C5-C6-O6	-7.92	123.85	128.60
1	A	1545	C	O4'-C1'-N1	7.92	114.53	108.20
1	A	1133	G	P-O3'-C3'	7.92	129.20	119.70
1	A	338	G	C5-C6-O6	-7.91	123.85	128.60
1	A	1021	A	O4'-C1'-N9	7.91	114.53	108.20
1	A	1297	C	O4'-C1'-N1	7.91	114.53	108.20
1	A	1321	U	O4'-C1'-N1	7.91	114.53	108.20
1	A	2510	G	O4'-C1'-N9	7.91	114.53	108.20
1	A	165	C	O4'-C1'-N1	7.91	114.53	108.20
1	A	2072	C	O4'-C1'-N1	7.91	114.53	108.20
1	A	103	U	O4'-C1'-N1	7.91	114.53	108.20
1	A	415	C	O4'-C1'-N1	7.91	114.53	108.20
1	A	367	G	C5-C6-O6	-7.91	123.86	128.60
1	A	2057	U	O4'-C1'-N1	7.91	114.53	108.20
1	A	679	A	P-O3'-C3'	7.90	129.18	119.70
1	A	1136	U	O4'-C1'-N1	7.90	114.52	108.20
1	A	386	U	O4'-C1'-N1	7.90	114.52	108.20
1	A	2138	U	O4'-C1'-N1	7.90	114.52	108.20
1	A	78	U	O4'-C1'-N1	7.90	114.52	108.20
1	A	269	G	N1-C6-O6	7.90	124.64	119.90
1	A	332	G	C5-C6-O6	-7.90	123.86	128.60
1	A	153	C	O4'-C1'-N1	7.90	114.52	108.20
1	A	631	G	N1-C6-O6	7.89	124.64	119.90
1	A	1759	U	O4'-C1'-N1	7.89	114.51	108.20
1	A	2865	U	O4'-C1'-N1	7.89	114.51	108.20
1	A	2483	G	C5-C6-O6	-7.89	123.87	128.60
1	A	2504	C	O4'-C1'-N1	7.89	114.51	108.20
1	A	1527	C	O4'-C1'-N1	7.88	114.51	108.20
1	A	218	G	N1-C6-O6	7.88	124.63	119.90
1	A	1485	A	C4-C5-C6	7.88	120.94	117.00
1	A	816	U	O4'-C1'-N1	7.88	114.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	528	G	C5-C6-O6	-7.88	123.87	128.60
1	A	86	C	O4'-C1'-N1	7.88	114.50	108.20
1	A	289	C	O4'-C1'-N1	7.88	114.50	108.20
1	A	2554	G	O4'-C1'-N9	7.88	114.50	108.20
1	A	2832	G	C5-C6-O6	-7.88	123.87	128.60
1	A	488	U	O4'-C1'-N1	7.88	114.50	108.20
1	A	1318	G	C5-C6-O6	-7.88	123.87	128.60
1	A	1462	G	C5-C6-O6	-7.88	123.87	128.60
1	A	1479	G	C5-C6-O6	-7.88	123.87	128.60
1	A	1528	U	O4'-C1'-N1	7.88	114.50	108.20
1	A	2657	C	O4'-C1'-N1	7.88	114.50	108.20
1	A	1733	U	O4'-C1'-N1	7.87	114.50	108.20
1	A	663	G	C5-C6-O6	-7.87	123.88	128.60
1	A	674	G	C5-C6-O6	-7.87	123.88	128.60
1	A	939	G	C5-C6-O6	-7.87	123.88	128.60
1	A	1228	G	O4'-C1'-N9	7.87	114.50	108.20
1	A	1741	G	O4'-C1'-N9	7.87	114.49	108.20
1	A	24	G	C5-C6-O6	-7.86	123.88	128.60
1	A	1174	A	O4'-C1'-N9	7.86	114.49	108.20
1	A	1226	U	P-O3'-C3'	7.86	129.14	119.70
1	A	2017	C	O4'-C1'-N1	7.86	114.49	108.20
1	A	128	C	O4'-C1'-N1	7.86	114.49	108.20
1	A	2058	G	C5-C6-O6	-7.86	123.88	128.60
1	A	2269	C	O4'-C1'-N1	7.86	114.49	108.20
1	A	176	A	P-O3'-C3'	7.86	129.13	119.70
1	A	715	A	O4'-C1'-N9	7.86	114.48	108.20
1	A	1599	U	O4'-C1'-N1	7.85	114.48	108.20
1	A	2056	G	C5-C6-O6	-7.85	123.89	128.60
1	A	787	C	O4'-C1'-N1	7.85	114.48	108.20
1	A	1244	A	O4'-C1'-N9	7.85	114.48	108.20
1	A	1678	G	O4'-C1'-N9	7.85	114.48	108.20
1	A	264	G	O4'-C1'-N9	7.84	114.47	108.20
1	A	381	U	O4'-C1'-N1	7.84	114.48	108.20
1	A	801	U	O4'-C1'-N1	7.84	114.48	108.20
1	A	1115	A	O4'-C1'-N9	7.84	114.47	108.20
1	A	75	G	C5-C6-O6	-7.84	123.90	128.60
1	A	100	U	O4'-C1'-N1	7.84	114.47	108.20
1	A	509	C	O4'-C1'-N1	7.84	114.47	108.20
1	A	1253	A	C4-C5-C6	7.84	120.92	117.00
1	A	1753	C	O4'-C1'-N1	7.84	114.47	108.20
1	A	653	A	C4-C5-C6	7.83	120.92	117.00
1	A	1207	C	O4'-C1'-N1	7.83	114.47	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	89	U	O4'-C1'-N1	7.83	114.47	108.20
1	A	1035	G	C5-C6-O6	-7.83	123.90	128.60
1	A	1291	A	C5-C6-N6	-7.83	117.44	123.70
1	A	2602	C	O4'-C1'-N1	7.83	114.47	108.20
1	A	2133	C	C6-N1-C1'	-7.83	111.41	120.80
1	A	2908	A	N1-C6-N6	7.83	123.30	118.60
1	A	77	U	O4'-C1'-N1	7.83	114.46	108.20
1	A	406	G	P-O3'-C3'	7.83	129.09	119.70
1	A	508	C	O4'-C1'-N1	7.83	114.46	108.20
1	A	1366	C	O4'-C1'-N1	7.83	114.46	108.20
1	A	1558	G	C5-C6-O6	-7.83	123.91	128.60
1	A	2206	C	O4'-C1'-N1	7.83	114.46	108.20
1	A	331	C	O4'-C1'-N1	7.82	114.46	108.20
1	A	755	U	O4'-C1'-N1	7.82	114.46	108.20
1	A	277	C	O4'-C1'-N1	7.82	114.46	108.20
1	A	684	G	C5-C6-O6	-7.82	123.91	128.60
1	A	1579	A	O4'-C1'-N9	7.82	114.46	108.20
1	A	2515	G	C5-C6-O6	-7.82	123.91	128.60
1	A	2883	C	O4'-C1'-N1	7.82	114.46	108.20
1	A	1337	C	O4'-C1'-N1	7.82	114.45	108.20
1	A	401	C	O4'-C1'-N1	7.82	114.45	108.20
1	A	603	G	O4'-C1'-N9	7.82	114.45	108.20
1	A	2031	G	C5-C6-O6	-7.82	123.91	128.60
1	A	1823	U	O4'-C1'-N1	7.81	114.45	108.20
1	A	967	G	C5-C6-O6	-7.81	123.91	128.60
1	A	2157	C	O4'-C1'-N1	7.81	114.45	108.20
1	A	2827	A	O4'-C1'-N9	7.81	114.45	108.20
1	A	1223	C	O4'-C1'-N1	7.81	114.45	108.20
1	A	1409	C	O4'-C1'-N1	7.81	114.45	108.20
1	A	843	C	O4'-C1'-N1	7.81	114.44	108.20
1	A	2766	G	C5-C6-O6	-7.80	123.92	128.60
1	A	2920	C	O4'-C1'-N1	7.80	114.44	108.20
1	A	713	G	C5-C6-O6	-7.80	123.92	128.60
1	A	1630	G	N1-C6-O6	7.80	124.58	119.90
1	A	1524	A	O4'-C1'-N9	7.80	114.44	108.20
1	A	1271	U	O4'-C1'-N1	7.80	114.44	108.20
1	A	1492	G	N1-C6-O6	7.80	124.58	119.90
1	A	1696	G	P-O3'-C3'	7.80	129.06	119.70
1	A	2255	C	O4'-C1'-N1	7.80	114.44	108.20
1	A	1193	U	O4'-C1'-N1	7.79	114.44	108.20
1	A	2115	U	O4'-C1'-N1	7.79	114.44	108.20
1	A	1856	U	O4'-C1'-N1	7.79	114.43	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2552	G	C5-C6-O6	-7.79	123.93	128.60
1	A	1028	C	O4'-C1'-N1	7.79	114.43	108.20
1	A	1281	C	O4'-C1'-N1	7.79	114.43	108.20
1	A	1828	G	N1-C6-O6	7.78	124.57	119.90
1	A	1420	G	C5-C6-O6	-7.78	123.93	128.60
1	A	69	C	O4'-C1'-N1	7.78	114.42	108.20
1	A	399	C	C6-N1-C2	-7.78	117.19	120.30
1	A	31	C	O4'-C1'-N1	7.78	114.42	108.20
1	A	417	G	P-O3'-C3'	7.78	129.03	119.70
1	A	1612	C	O4'-C1'-N1	7.78	114.42	108.20
1	A	879	G	C5-C6-O6	-7.78	123.93	128.60
1	A	1169	C	O4'-C1'-N1	7.78	114.42	108.20
1	A	2632	G	C5-C6-O6	-7.77	123.94	128.60
1	A	525	A	O4'-C1'-N9	7.77	114.42	108.20
1	A	2694	A	O4'-C1'-N9	7.77	114.42	108.20
1	A	1610	U	O4'-C1'-N1	7.77	114.41	108.20
1	A	2707	C	O4'-C1'-N1	7.76	114.41	108.20
1	A	2864	G	C5-C6-O6	-7.76	123.94	128.60
1	A	1832	A	O4'-C1'-N9	7.76	114.41	108.20
1	A	181	G	O4'-C1'-N9	7.76	114.41	108.20
1	A	650	U	O4'-C1'-N1	7.75	114.40	108.20
1	A	1673	G	C5-C6-O6	-7.75	123.95	128.60
1	A	2727	U	O4'-C1'-N1	7.75	114.40	108.20
1	A	660	G	C5-C6-O6	-7.75	123.95	128.60
1	A	2219	G	C5-C6-O6	-7.75	123.95	128.60
1	A	2799	C	O4'-C1'-N1	7.75	114.40	108.20
1	A	2918	G	O4'-C1'-N9	7.75	114.40	108.20
1	A	1482	G	C5-C6-O6	-7.75	123.95	128.60
1	A	1774	A	C5-C6-N6	-7.75	117.50	123.70
1	A	1683	C	O4'-C1'-N1	7.74	114.39	108.20
1	A	2048	U	O4'-C1'-N1	7.74	114.39	108.20
1	A	992	G	C5-C6-O6	-7.74	123.95	128.60
1	A	2892	G	N1-C6-O6	7.74	124.55	119.90
1	A	2253	G	O4'-C1'-N9	7.74	114.39	108.20
1	A	1854	G	C5-C6-O6	-7.74	123.96	128.60
1	A	80	G	O4'-C1'-N9	7.73	114.39	108.20
1	A	453	G	C5-C6-O6	-7.73	123.96	128.60
1	A	1108	G	N1-C6-O6	7.73	124.54	119.90
1	A	1273	G	C5-C6-O6	-7.73	123.96	128.60
1	A	1595	U	P-O3'-C3'	7.73	128.98	119.70
1	A	2580	C	O4'-C1'-N1	7.73	114.39	108.20
1	A	552	G	N1-C6-O6	7.73	124.54	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	449	A	C5-C6-N6	-7.73	117.52	123.70
1	A	988	G	C5-C6-O6	-7.73	123.96	128.60
1	A	1277	A	N1-C6-N6	7.73	123.24	118.60
1	A	204	C	O4'-C1'-N1	7.72	114.38	108.20
1	A	790	A	O4'-C1'-N9	7.72	114.38	108.20
1	A	1137	G	C5-C6-O6	-7.72	123.97	128.60
1	A	1632	G	C5-C6-O6	-7.72	123.97	128.60
1	A	1941	A	O4'-C1'-N9	7.72	114.38	108.20
1	A	88	G	C5-C6-O6	-7.72	123.97	128.60
1	A	1786	U	O4'-C1'-N1	7.71	114.37	108.20
1	A	2107	C	O4'-C1'-N1	7.71	114.37	108.20
1	A	2258	U	O4'-C1'-N1	7.71	114.37	108.20
1	A	1288	G	N1-C6-O6	7.71	124.52	119.90
1	A	1580	A	C5-C6-N6	-7.71	117.53	123.70
1	A	2587	C	O4'-C1'-N1	7.70	114.36	108.20
1	A	372	U	O4'-C1'-N1	7.70	114.36	108.20
1	A	52	A	C4-C5-C6	7.70	120.85	117.00
1	A	298	U	O4'-C1'-N1	7.70	114.36	108.20
1	A	425	C	O4'-C1'-N1	7.70	114.36	108.20
1	A	274	A	O4'-C1'-N9	7.69	114.36	108.20
1	A	1952	U	O4'-C1'-N1	7.69	114.35	108.20
1	A	2025	C	O4'-C1'-N1	7.69	114.35	108.20
1	A	885	C	O4'-C1'-N1	7.69	114.35	108.20
1	A	347	G	O4'-C1'-N9	7.69	114.35	108.20
1	A	420	U	O4'-C1'-N1	7.69	114.35	108.20
1	A	928	G	N1-C6-O6	7.69	124.51	119.90
1	A	1226	U	O4'-C1'-N1	7.69	114.35	108.20
1	A	1837	U	O4'-C1'-N1	7.69	114.35	108.20
1	A	106	G	C5-C6-O6	-7.68	123.99	128.60
1	A	190	G	O4'-C1'-N9	7.68	114.35	108.20
1	A	273	A	O4'-C1'-N9	7.68	114.35	108.20
1	A	969	C	O4'-C1'-N1	7.68	114.35	108.20
1	A	2021	G	O4'-C1'-N9	7.68	114.35	108.20
1	A	282	G	O4'-C1'-N9	7.68	114.34	108.20
1	A	1546	G	C5-C6-O6	-7.68	123.99	128.60
1	A	994	C	O4'-C1'-N1	7.68	114.34	108.20
1	A	2829	G	O4'-C1'-N9	7.68	114.34	108.20
1	A	151	U	P-O3'-C3'	7.68	128.91	119.70
1	A	1345	U	O4'-C1'-N1	7.68	114.34	108.20
1	A	1616	G	N1-C6-O6	7.68	124.51	119.90
1	A	2173	G	N1-C6-O6	7.68	124.51	119.90
1	A	1722	A	O4'-C1'-N9	7.67	114.34	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	110	A	O4'-C1'-N9	7.67	114.33	108.20
1	A	215	G	C5-C6-O6	-7.67	124.00	128.60
1	A	498	U	O4'-C1'-N1	7.67	114.33	108.20
1	A	2530	C	O4'-C1'-N1	7.67	114.33	108.20
1	A	427	G	C5-C6-O6	-7.66	124.00	128.60
1	A	897	G	C5-C6-O6	-7.66	124.00	128.60
1	A	1080	G	C5-C6-O6	-7.66	124.00	128.60
1	A	2577	G	C5-C6-O6	-7.66	124.00	128.60
1	A	2884	G	O4'-C1'-N9	7.66	114.33	108.20
1	A	1484	U	O4'-C1'-N1	7.66	114.33	108.20
1	A	2856	G	C5-C6-O6	-7.66	124.00	128.60
1	A	311	U	O4'-C1'-N1	7.65	114.32	108.20
1	A	2075	G	C5-C6-O6	-7.65	124.01	128.60
1	A	1794	C	O4'-C1'-N1	7.65	114.32	108.20
1	A	2528	C	O4'-C1'-N1	7.65	114.32	108.20
1	A	1860	G	C5-C6-O6	-7.64	124.01	128.60
1	A	443	G	C5-C6-O6	-7.64	124.02	128.60
1	A	467	C	O4'-C1'-N1	7.64	114.31	108.20
1	A	2026	A	O4'-C1'-N9	7.64	114.31	108.20
1	A	671	G	C5-C6-O6	-7.64	124.02	128.60
1	A	2489	U	O4'-C1'-N1	7.63	114.31	108.20
1	A	1329	C	O4'-C1'-N1	7.63	114.31	108.20
1	A	2028	C	O4'-C1'-N1	7.63	114.31	108.20
1	A	1684	U	O4'-C1'-N1	7.63	114.31	108.20
1	A	1852	G	C5-C6-O6	-7.63	124.02	128.60
1	A	2153	G	C5-C6-O6	-7.63	124.02	128.60
1	A	129	C	O4'-C1'-N1	7.63	114.30	108.20
1	A	468	C	O4'-C1'-N1	7.63	114.30	108.20
1	A	944	C	O4'-C1'-N1	7.63	114.30	108.20
1	A	1487	G	C5-C6-O6	-7.63	124.02	128.60
1	A	2101	G	C5-C6-O6	-7.63	124.02	128.60
1	A	924	U	O4'-C1'-N1	7.63	114.30	108.20
1	A	1308	A	O4'-C1'-N9	7.63	114.30	108.20
1	A	2116	G	C5-C6-O6	-7.63	124.02	128.60
1	A	2781	C	O4'-C1'-N1	7.63	114.30	108.20
1	A	2845	A	O4'-C1'-N9	7.63	114.30	108.20
1	A	2732	C	O4'-C1'-N1	7.62	114.30	108.20
1	A	42	G	C5-C6-O6	-7.62	124.03	128.60
1	A	709	G	C5-C6-O6	-7.62	124.03	128.60
1	A	2652	G	C5-C6-O6	-7.62	124.03	128.60
1	A	2776	G	C5-C6-O6	-7.62	124.03	128.60
1	A	2809	G	O4'-C1'-N9	7.62	114.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2751	G	C5-C6-O6	-7.62	124.03	128.60
1	A	1274	U	O4'-C1'-N1	7.62	114.30	108.20
1	A	2249	G	C5-C6-O6	-7.62	124.03	128.60
1	A	2822	C	O4'-C1'-N1	7.62	114.29	108.20
1	A	1063	G	C5-C6-O6	-7.61	124.03	128.60
1	A	1830	G	C5-C6-O6	-7.61	124.03	128.60
1	A	923	C	O4'-C1'-N1	7.61	114.29	108.20
1	A	984	G	C5-C6-O6	-7.61	124.03	128.60
1	A	2883	C	C2-N1-C1'	7.61	127.17	118.80
1	A	2747	G	C5-C6-O6	-7.61	124.03	128.60
1	A	1805	G	O4'-C1'-N9	7.61	114.29	108.20
1	A	1696	G	C5-C6-O6	-7.61	124.04	128.60
1	A	302	A	C5-C6-N1	-7.60	113.90	117.70
1	A	1508	C	O4'-C1'-N1	7.60	114.28	108.20
1	A	1697	A	P-O5'-C5'	7.60	133.06	120.90
1	A	1799	G	C5-C6-O6	-7.60	124.04	128.60
1	A	2476	G	C5-C6-O6	-7.60	124.04	128.60
1	A	546	G	O4'-C1'-N9	7.60	114.28	108.20
1	A	1815	A	P-O3'-C3'	7.60	128.82	119.70
1	A	2467	U	O4'-C1'-N1	7.60	114.28	108.20
1	A	859	C	O4'-C1'-N1	7.60	114.28	108.20
1	A	745	C	O4'-C1'-N1	7.59	114.28	108.20
1	A	1408	G	O4'-C1'-N9	7.59	114.28	108.20
1	A	2554	G	C5-C6-O6	-7.59	124.04	128.60
1	A	214	G	O4'-C1'-N9	7.59	114.27	108.20
1	A	1564	C	O4'-C1'-N1	7.59	114.27	108.20
1	A	1306	G	C5-C6-O6	-7.58	124.05	128.60
1	A	556	C	O4'-C1'-N1	7.58	114.27	108.20
1	A	862	U	O4'-C1'-N1	7.58	114.27	108.20
1	A	2915	G	C5-C6-O6	-7.58	124.05	128.60
1	A	1688	G	C5-C6-O6	-7.58	124.05	128.60
1	A	2610	G	O4'-C1'-N9	7.58	114.26	108.20
1	A	1457	U	O4'-C1'-N1	7.58	114.26	108.20
1	A	1376	G	C5-C6-O6	-7.57	124.06	128.60
1	A	2841	C	O4'-C1'-N1	7.57	114.26	108.20
1	A	1510	G	C5-C6-O6	-7.57	124.06	128.60
1	A	2086	G	O4'-C1'-N9	7.57	114.26	108.20
1	A	310	C	P-O3'-C3'	7.57	128.78	119.70
1	A	1338	G	C5-C6-O6	-7.57	124.06	128.60
1	A	1559	C	O4'-C1'-N1	7.57	114.25	108.20
1	A	457	G	O4'-C1'-N9	7.57	114.25	108.20
1	A	1355	U	O4'-C1'-N1	7.57	114.25	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2569	C	O4'-C1'-N1	7.56	114.25	108.20
1	A	219	A	O4'-C1'-N9	7.56	114.25	108.20
1	A	2437	U	O4'-C1'-N1	7.56	114.25	108.20
1	A	2814	U	O4'-C1'-N1	7.56	114.25	108.20
1	A	775	G	C5-C6-O6	-7.56	124.07	128.60
1	A	1243	A	O4'-C1'-N9	7.56	114.25	108.20
1	A	2016	G	C5-C6-O6	-7.56	124.07	128.60
1	A	539	G	C5-C6-O6	-7.55	124.07	128.60
1	A	2118	U	O4'-C1'-N1	7.55	114.24	108.20
1	A	2472	C	O4'-C1'-N1	7.55	114.24	108.20
1	A	493	G	O4'-C1'-N9	7.55	114.24	108.20
1	A	1151	U	O4'-C1'-N1	7.55	114.24	108.20
1	A	898	U	O4'-C1'-N1	7.55	114.24	108.20
1	A	1954	C	O4'-C1'-N1	7.55	114.24	108.20
1	A	379	C	O4'-C1'-N1	7.54	114.24	108.20
1	A	654	G	C5-C6-O6	-7.54	124.07	128.60
1	A	2004	G	C5-C6-O6	-7.54	124.07	128.60
1	A	2760	G	C5-C6-O6	-7.54	124.08	128.60
1	A	2815	U	O4'-C1'-N1	7.54	114.23	108.20
1	A	1127	U	O4'-C1'-N1	7.54	114.23	108.20
1	A	1740	G	O4'-C1'-N9	7.54	114.23	108.20
1	A	1840	G	O4'-C1'-N9	7.54	114.23	108.20
1	A	460	C	O4'-C1'-N1	7.53	114.23	108.20
1	A	1798	G	C5-C6-O6	-7.53	124.08	128.60
1	A	857	U	O4'-C1'-N1	7.53	114.23	108.20
1	A	1143	U	O4'-C1'-N1	7.53	114.23	108.20
1	A	2666	U	O4'-C1'-N1	7.53	114.22	108.20
1	A	157	U	O4'-C1'-N1	7.53	114.22	108.20
1	A	471	G	C5-C6-O6	-7.53	124.08	128.60
1	A	1702	U	O4'-C1'-N1	7.53	114.22	108.20
1	A	2686	A	O4'-C1'-N9	7.52	114.22	108.20
1	A	1400	G	O4'-C1'-N9	7.52	114.22	108.20
1	A	1047	A	O4'-C1'-N9	7.52	114.22	108.20
1	A	1067	A	C4-C5-C6	7.52	120.76	117.00
1	A	2725	U	O4'-C1'-N1	7.52	114.22	108.20
1	A	1841	G	O4'-C1'-N9	7.52	114.21	108.20
1	A	1611	G	C5-C6-O6	-7.51	124.09	128.60
1	A	2079	C	O4'-C1'-N1	7.51	114.21	108.20
1	A	516	G	C5-C6-O6	-7.51	124.09	128.60
1	A	2628	G	C5-C6-O6	-7.51	124.09	128.60
1	A	541	G	C5-C6-O6	-7.51	124.09	128.60
1	A	1767	A	O4'-C1'-N9	7.51	114.21	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1835	C	O4'-C1'-N1	7.51	114.21	108.20
1	A	2068	G	C5-C6-O6	-7.51	124.09	128.60
1	A	1834	C	O4'-C1'-N1	7.50	114.20	108.20
1	A	2011	U	O4'-C1'-N1	7.50	114.20	108.20
1	A	927	G	O4'-C1'-N9	7.50	114.20	108.20
1	A	1168	G	C5-C6-O6	-7.50	124.10	128.60
1	A	579	G	C5-C6-O6	-7.50	124.10	128.60
1	A	1391	U	O4'-C1'-N1	7.50	114.20	108.20
1	A	153	C	N3-C4-N4	7.50	123.25	118.00
1	A	742	G	C5-C6-O6	-7.50	124.10	128.60
1	A	891	G	O4'-C1'-N9	7.50	114.20	108.20
1	A	2648	U	O4'-C1'-N1	7.50	114.20	108.20
1	A	2067	G	C5-C6-O6	-7.50	124.10	128.60
1	A	694	G	C5-C6-O6	-7.49	124.10	128.60
1	A	2127	U	O4'-C1'-N1	7.49	114.19	108.20
1	A	2589	C	O4'-C1'-N1	7.49	114.19	108.20
1	A	1681	U	O4'-C1'-N1	7.49	114.19	108.20
1	A	124	A	P-O3'-C3'	7.49	128.69	119.70
1	A	785	C	O4'-C1'-N1	7.49	114.19	108.20
1	A	2233	C	O4'-C1'-N1	7.49	114.19	108.20
1	A	1227	G	N1-C6-O6	7.49	124.39	119.90
1	A	2266	G	O4'-C1'-N9	7.49	114.19	108.20
1	A	184	G	C5-C6-O6	-7.49	124.11	128.60
1	A	2243	C	O4'-C1'-N1	7.49	114.19	108.20
1	A	121	G	C5-C6-O6	-7.48	124.11	128.60
1	A	915	U	O4'-C1'-N1	7.48	114.19	108.20
1	A	2603	G	C5-C6-O6	-7.48	124.11	128.60
1	A	757	C	O4'-C1'-N1	7.48	114.19	108.20
1	A	1469	G	C5-C6-O6	-7.48	124.11	128.60
1	A	1420	G	O4'-C1'-N9	7.48	114.18	108.20
1	A	239	C	O4'-C1'-N1	7.48	114.18	108.20
1	A	938	G	C5-C6-O6	-7.48	124.11	128.60
1	A	81	G	C5-C6-O6	-7.48	124.11	128.60
1	A	698	C	O4'-C1'-N1	7.48	114.18	108.20
1	A	624	C	O4'-C1'-N1	7.48	114.18	108.20
1	A	1486	G	O4'-C1'-N9	7.48	114.18	108.20
1	A	268	A	O4'-C1'-N9	7.47	114.18	108.20
1	A	945	C	O4'-C1'-N1	7.47	114.18	108.20
1	A	38	A	C5-C6-N6	-7.47	117.72	123.70
1	A	1711	G	O4'-C1'-N9	7.47	114.17	108.20
1	A	2853	C	O4'-C1'-N1	7.47	114.17	108.20
1	A	1862	C	O4'-C1'-N1	7.46	114.17	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2122	G	C5-C6-O6	-7.46	124.12	128.60
1	A	630	A	C4-C5-C6	7.46	120.73	117.00
1	A	704	U	O4'-C1'-N1	7.46	114.17	108.20
1	A	2532	A	O4'-C1'-N9	7.46	114.17	108.20
1	A	4	U	O4'-C1'-N1	7.45	114.16	108.20
1	A	357	G	C5-C6-O6	-7.45	124.13	128.60
1	A	1373	U	O4'-C1'-N1	7.45	114.16	108.20
1	A	658	A	O4'-C1'-N9	7.45	114.16	108.20
1	A	472	G	O4'-C1'-N9	7.45	114.16	108.20
1	A	610	U	O4'-C1'-N1	7.45	114.16	108.20
1	A	1185	G	C5-C6-O6	-7.45	124.13	128.60
1	A	2557	U	O4'-C1'-N1	7.45	114.16	108.20
1	A	2906	U	O4'-C1'-N1	7.45	114.16	108.20
1	A	935	A	O4'-C1'-N9	7.45	114.16	108.20
1	A	796	A	C5-C6-N6	-7.44	117.74	123.70
1	A	1118	C	O4'-C1'-N1	7.44	114.16	108.20
1	A	148	G	C5-C6-O6	-7.44	124.13	128.60
1	A	430	C	O4'-C1'-N1	7.44	114.15	108.20
1	A	1413	G	C5-C6-O6	-7.44	124.14	128.60
1	A	1846	G	C5-C6-O6	-7.44	124.14	128.60
1	A	2775	U	O4'-C1'-N1	7.44	114.15	108.20
1	A	150	A	C5-C6-N6	-7.44	117.75	123.70
1	A	1109	G	O4'-C1'-N9	7.44	114.15	108.20
1	A	1667	A	O4'-C1'-N9	7.44	114.15	108.20
1	A	2477	A	O4'-C1'-N9	7.44	114.15	108.20
1	A	2903	U	O4'-C1'-N1	7.44	114.15	108.20
1	A	297	G	C5-C6-O6	-7.44	124.14	128.60
1	A	632	U	O4'-C1'-N1	7.44	114.15	108.20
1	A	1437	C	O4'-C1'-N1	7.44	114.15	108.20
1	A	621	G	C5-C6-O6	-7.44	124.14	128.60
1	A	905	G	C5-C6-O6	-7.43	124.14	128.60
1	A	1300	G	C5-C6-O6	-7.43	124.14	128.60
1	A	761	U	O4'-C1'-N1	7.43	114.14	108.20
1	A	1844	A	N1-C6-N6	7.43	123.06	118.60
1	A	890	G	C5-C6-O6	-7.43	124.14	128.60
1	A	2614	U	O4'-C1'-N1	7.43	114.14	108.20
1	A	664	C	O4'-C1'-N1	7.42	114.14	108.20
1	A	856	G	C5-C6-O6	-7.42	124.15	128.60
1	A	919	U	O4'-C1'-N1	7.42	114.14	108.20
1	A	1682	C	O4'-C1'-N1	7.42	114.14	108.20
1	A	1840	G	C5-C6-O6	-7.42	124.15	128.60
1	A	43	G	C5-C6-O6	-7.42	124.15	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	852	G	O4'-C1'-N9	7.42	114.14	108.20
1	A	1580	A	C4-C5-C6	7.42	120.71	117.00
1	A	1020	A	O4'-C1'-N9	7.42	114.13	108.20
1	A	1807	U	O4'-C1'-N1	7.42	114.13	108.20
9	P	74	PHE	CB-CG-CD1	7.42	125.99	120.80
1	A	2195	G	O4'-C1'-N9	7.41	114.13	108.20
1	A	2640	C	O4'-C1'-N1	7.41	114.13	108.20
1	A	2846	A	O4'-C1'-N9	7.41	114.13	108.20
1	A	1050	U	O4'-C1'-N1	7.41	114.13	108.20
1	A	497	G	O4'-C1'-N9	7.41	114.13	108.20
1	A	1686	A	C4-C5-C6	7.41	120.70	117.00
1	A	2235	G	O4'-C1'-N9	7.41	114.13	108.20
1	A	295	G	O4'-C1'-N9	7.41	114.13	108.20
1	A	2040	U	O4'-C1'-N1	7.41	114.13	108.20
1	A	342	A	O4'-C1'-N9	7.41	114.13	108.20
1	A	266	U	O4'-C1'-N1	7.41	114.12	108.20
1	A	824	G	O4'-C1'-N9	7.41	114.12	108.20
1	A	2690	G	O4'-C1'-N9	7.41	114.12	108.20
1	A	2704	A	O4'-C1'-N9	7.41	114.12	108.20
1	A	2591	U	O4'-C1'-N1	7.40	114.12	108.20
1	A	1635	G	C5-C6-O6	-7.40	124.16	128.60
1	A	2267	G	N1-C6-O6	7.40	124.34	119.90
1	A	2038	G	O4'-C1'-N9	7.40	114.12	108.20
1	A	2791	U	O4'-C1'-N1	7.40	114.12	108.20
1	A	639	C	O4'-C1'-N1	7.40	114.12	108.20
1	A	2833	U	C5'-C4'-O4'	7.40	117.98	109.10
1	A	2586	G	C5-C6-O6	-7.40	124.16	128.60
1	A	189	G	C5-C6-O6	-7.39	124.16	128.60
1	A	520	G	C5-C6-O6	-7.39	124.16	128.60
1	A	1780	C	O4'-C1'-N1	7.39	114.11	108.20
1	A	2690	G	C5-C6-O6	-7.39	124.16	128.60
1	A	1200	G	C5-C6-O6	-7.39	124.17	128.60
1	A	562	C	O4'-C1'-N1	7.39	114.11	108.20
1	A	1748	G	C5-C6-O6	-7.38	124.17	128.60
1	A	2753	U	O4'-C1'-N1	7.38	114.10	108.20
1	A	794	U	O4'-C1'-N1	7.38	114.10	108.20
1	A	1441	U	O4'-C1'-N1	7.38	114.10	108.20
1	A	2524	G	C5-C6-O6	-7.38	124.17	128.60
1	A	2273	U	O4'-C1'-N1	7.38	114.10	108.20
1	A	169	G	C5-C6-O6	-7.37	124.17	128.60
1	A	170	G	C5-C6-O6	-7.37	124.18	128.60
1	A	354	A	O4'-C1'-N9	7.37	114.10	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1221	A	C5-C6-N6	-7.37	117.81	123.70
1	A	1354	C	O4'-C1'-N1	7.37	114.10	108.20
1	A	1793	G	C5-C6-O6	-7.37	124.18	128.60
1	A	242	U	O4'-C1'-N1	7.37	114.09	108.20
1	A	368	G	N1-C6-O6	7.36	124.32	119.90
1	A	567	U	O4'-C1'-N1	7.36	114.09	108.20
1	A	1437	C	N3-C4-N4	7.36	123.15	118.00
1	A	1667	A	C5-C6-N6	-7.36	117.81	123.70
1	A	217	G	O4'-C1'-N9	7.36	114.09	108.20
1	A	2581	U	O4'-C1'-N1	7.36	114.09	108.20
1	A	2022	U	O4'-C1'-N1	7.36	114.09	108.20
1	A	85	G	C5-C6-O6	-7.36	124.19	128.60
1	A	1832	A	C5-C6-N6	-7.35	117.82	123.70
1	A	1629	C	O4'-C1'-N1	7.35	114.08	108.20
1	A	2092	C	O4'-C1'-N1	7.35	114.08	108.20
1	A	2607	G	C5-C6-O6	-7.35	124.19	128.60
1	A	1784	A	P-O5'-C5'	7.35	132.66	120.90
1	A	763	A	O4'-C1'-N9	7.35	114.08	108.20
1	A	2019	C	O4'-C1'-N1	7.35	114.08	108.20
1	A	260	A	C5-C6-N6	-7.35	117.82	123.70
1	A	545	U	O4'-C1'-N1	7.35	114.08	108.20
1	A	1018	G	C5-C6-O6	-7.35	124.19	128.60
1	A	95	A	C5-C6-N1	-7.35	114.03	117.70
1	A	571	U	O4'-C1'-N1	7.35	114.08	108.20
1	A	1140	U	O4'-C1'-N1	7.35	114.08	108.20
1	A	1181	C	O4'-C1'-N1	7.34	114.08	108.20
1	A	2003	C	O4'-C1'-N1	7.34	114.08	108.20
1	A	2135	G	O4'-C1'-N9	7.34	114.07	108.20
1	A	241	C	O4'-C1'-N1	7.34	114.07	108.20
1	A	1010	C	O4'-C1'-N1	7.34	114.07	108.20
1	A	1577	C	O4'-C1'-N1	7.34	114.07	108.20
1	A	2490	C	O4'-C1'-N1	7.34	114.07	108.20
1	A	2090	G	C5-C6-O6	-7.33	124.20	128.60
1	A	2432	C	O4'-C1'-N1	7.33	114.07	108.20
1	A	2498	A	O4'-C1'-N9	7.33	114.07	108.20
1	A	319	G	C5-C6-O6	-7.33	124.20	128.60
1	A	863	C	O4'-C1'-N1	7.33	114.06	108.20
19	6	118	ALA	N-CA-CB	7.33	120.36	110.10
1	A	998	G	O4'-C1'-N9	7.33	114.06	108.20
1	A	2714	G	O4'-C1'-N9	7.33	114.06	108.20
1	A	163	U	O4'-C1'-N1	7.33	114.06	108.20
1	A	518	A	C4-C5-C6	7.33	120.66	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1236	G	C5-C6-O6	-7.33	124.20	128.60
1	A	2126	G	C5-C6-O6	-7.33	124.20	128.60
1	A	947	A	C4-C5-C6	7.33	120.66	117.00
1	A	95	A	O4'-C1'-N9	7.33	114.06	108.20
1	A	2068	G	O4'-C1'-N9	7.33	114.06	108.20
1	A	2879	G	O4'-C1'-N9	7.33	114.06	108.20
1	A	1019	A	O4'-C1'-N9	7.32	114.06	108.20
1	A	2125	U	O4'-C1'-N1	7.32	114.06	108.20
1	A	2235	G	C5-C6-O6	-7.32	124.21	128.60
1	A	1535	U	O4'-C1'-N1	7.32	114.06	108.20
1	A	2916	A	O4'-C1'-N9	7.32	114.06	108.20
1	A	1043	G	O4'-C1'-N9	7.32	114.06	108.20
1	A	2184	U	O4'-C1'-N1	7.32	114.06	108.20
1	A	2501	G	C5-C6-O6	-7.32	124.21	128.60
1	A	404	C	O4'-C1'-N1	7.32	114.05	108.20
1	A	370	G	O4'-C1'-N9	7.31	114.05	108.20
1	A	2899	C	O4'-C1'-N1	7.31	114.05	108.20
1	A	1256	C	O4'-C1'-N1	7.31	114.05	108.20
1	A	2757	U	O4'-C1'-N1	7.31	114.05	108.20
1	A	1460	G	O4'-C1'-N9	7.31	114.05	108.20
1	A	1698	G	C5-C6-O6	-7.31	124.22	128.60
1	A	432	C	N3-C4-N4	7.30	123.11	118.00
1	A	2468	A	P-O3'-C3'	7.30	128.47	119.70
1	A	2026	A	C5-C6-N6	-7.30	117.86	123.70
1	A	63	G	C5-C6-O6	-7.30	124.22	128.60
1	A	1440	G	C5-C6-O6	-7.30	124.22	128.60
1	A	399	C	N3-C4-C5	-7.30	118.98	121.90
1	A	789	C	O4'-C1'-N1	7.30	114.04	108.20
1	A	1693	C	O4'-C1'-N1	7.30	114.04	108.20
1	A	1219	C	C6-N1-C1'	-7.29	112.05	120.80
1	A	2874	G	C5-C6-O6	-7.29	124.22	128.60
1	A	47	C	O4'-C1'-N1	7.29	114.03	108.20
1	A	457	G	C5-C6-O6	-7.29	124.22	128.60
1	A	548	A	C5-C6-N6	-7.29	117.87	123.70
1	A	866	A	C4-C5-C6	7.29	120.65	117.00
1	A	1384	C	O4'-C1'-N1	7.29	114.03	108.20
1	A	1101	G	O4'-C1'-N9	7.29	114.03	108.20
1	A	333	A	C5-C6-N6	-7.29	117.87	123.70
1	A	342	A	N1-C6-N6	7.29	122.97	118.60
1	A	2226	U	P-O3'-C3'	7.29	128.45	119.70
1	A	1468	G	O4'-C1'-N9	7.29	114.03	108.20
1	A	429	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(^{o})	Ideal(^{o})
1	A	684	G	O4'-C1'-N9	7.29	114.03	108.20
1	A	1831	A	C4-C5-C6	7.29	120.64	117.00
1	A	982	U	O4'-C1'-N1	7.28	114.03	108.20
1	A	583	G	O4'-C1'-N9	7.28	114.03	108.20
1	A	435	G	O4'-C1'-N9	7.28	114.03	108.20
1	A	740	A	O4'-C1'-N9	7.28	114.02	108.20
1	A	911	G	C5-C6-O6	-7.28	124.23	128.60
1	A	1381	A	C4-C5-C6	7.28	120.64	117.00
1	A	2169	G	C5-C6-O6	-7.28	124.23	128.60
1	A	752	A	C4-C5-C6	7.28	120.64	117.00
1	A	1401	C	O4'-C1'-N1	7.27	114.02	108.20
1	A	1133	G	C5-C6-O6	-7.27	124.24	128.60
1	A	1800	C	N3-C4-N4	7.27	123.09	118.00
1	A	2836	G	C5-C6-O6	-7.27	124.24	128.60
1	A	2849	U	O4'-C1'-N1	7.27	114.01	108.20
1	A	1720	C	C6-N1-C2	-7.27	117.39	120.30
1	A	66	C	O4'-C1'-N1	7.26	114.01	108.20
1	A	1138	C	O4'-C1'-N1	7.26	114.01	108.20
1	A	2660	G	C5-C6-O6	-7.26	124.24	128.60
1	A	199	A	O4'-C1'-N9	7.26	114.01	108.20
1	A	1481	G	C5-C6-O6	-7.26	124.24	128.60
1	A	44	A	O4'-C1'-N9	7.26	114.01	108.20
1	A	347	G	C5-C6-O6	-7.26	124.24	128.60
1	A	2227	A	C4-C5-C6	7.26	120.63	117.00
1	A	30	G	O4'-C1'-N9	7.26	114.01	108.20
1	A	299	U	O4'-C1'-N1	7.26	114.00	108.20
1	A	720	C	C5'-C4'-O4'	-7.26	100.39	109.10
1	A	2510	G	P-O3'-C3'	7.26	128.41	119.70
1	A	1237	C	O4'-C1'-N1	7.25	114.00	108.20
1	A	1404	A	O4'-C1'-N9	7.25	114.00	108.20
1	A	1646	G	C5-C6-O6	-7.25	124.25	128.60
1	A	2571	A	O4'-C1'-N9	7.25	114.00	108.20
1	A	1478	G	C5-C6-O6	-7.25	124.25	128.60
1	A	249	C	O4'-C1'-N1	7.25	114.00	108.20
1	A	1603	U	O4'-C1'-N1	7.25	114.00	108.20
1	A	1779	G	O4'-C1'-N9	7.25	114.00	108.20
1	A	2167	C	O4'-C1'-N1	7.25	114.00	108.20
1	A	353	A	C5-C6-N6	-7.24	117.91	123.70
1	A	424	G	C5-C6-O6	-7.24	124.26	128.60
1	A	1250	G	C5-C6-O6	-7.24	124.25	128.60
1	A	1069	U	O4'-C1'-N1	7.24	113.99	108.20
1	A	1770	C	O4'-C1'-N1	7.24	113.99	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	691	U	O4'-C1'-N1	7.24	113.99	108.20
1	A	1773	G	O4'-C1'-N9	7.24	113.99	108.20
1	A	2198	G	O4'-C1'-N9	7.24	113.99	108.20
1	A	830	A	C4-C5-C6	7.23	120.62	117.00
1	A	1114	G	N1-C6-O6	7.23	124.24	119.90
1	A	1613	C	O4'-C1'-N1	7.23	113.99	108.20
1	A	964	A	O4'-C1'-N9	7.23	113.99	108.20
1	A	1052	C	O4'-C1'-N1	7.23	113.99	108.20
1	A	17	G	C5-C6-O6	-7.23	124.26	128.60
1	A	731	G	C5-C6-O6	-7.23	124.26	128.60
1	A	2050	G	C5-C6-O6	-7.23	124.26	128.60
1	A	2625	U	O4'-C1'-N1	7.23	113.98	108.20
1	A	238	U	O4'-C1'-N1	7.23	113.98	108.20
1	A	2562	U	P-O5'-C5'	7.23	132.47	120.90
1	A	520	G	O4'-C1'-N9	7.23	113.98	108.20
1	A	2682	U	O4'-C1'-N1	7.23	113.98	108.20
1	A	1162	C	O4'-C1'-N1	7.22	113.98	108.20
1	A	1186	C	O4'-C1'-N1	7.22	113.98	108.20
1	A	1155	C	O4'-C1'-N1	7.22	113.98	108.20
1	A	2034	A	O4'-C1'-N9	7.22	113.97	108.20
1	A	2549	C	O4'-C1'-N1	7.22	113.97	108.20
1	A	175	G	O4'-C1'-N9	7.21	113.97	108.20
1	A	329	A	O4'-C1'-N9	7.21	113.97	108.20
1	A	1415	C	O4'-C1'-N1	7.21	113.97	108.20
1	A	603	G	C5-C6-O6	-7.21	124.28	128.60
1	A	1225	G	C5-C6-O6	-7.21	124.28	128.60
1	A	1608	A	C5-C6-N6	-7.21	117.93	123.70
1	A	1690	G	O4'-C1'-N9	7.21	113.97	108.20
1	A	1431	G	C5-C6-O6	-7.21	124.28	128.60
1	A	2156	G	C5-C6-O6	-7.21	124.28	128.60
1	A	1159	U	O4'-C1'-N1	7.20	113.96	108.20
1	A	9	U	O4'-C1'-N1	7.20	113.96	108.20
1	A	462	A	C5-C6-N1	-7.20	114.10	117.70
1	A	961	C	O4'-C1'-N1	7.20	113.96	108.20
1	A	1299	G	O4'-C1'-N9	7.20	113.96	108.20
1	A	2263	G	C5-C6-O6	-7.20	124.28	128.60
1	A	601	U	O4'-C1'-N1	7.20	113.96	108.20
1	A	667	A	C4-C5-C6	7.20	120.60	117.00
1	A	1015	G	O4'-C1'-N9	7.20	113.96	108.20
1	A	1494	G	C5-C6-O6	-7.20	124.28	128.60
1	A	2177	G	O4'-C1'-N9	7.20	113.96	108.20
1	A	1301	U	O4'-C1'-N1	7.20	113.96	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2570	A	O4'-C1'-N9	7.20	113.96	108.20
1	A	1089	C	O4'-C1'-N1	7.19	113.95	108.20
1	A	412	A	O4'-C1'-N9	7.19	113.95	108.20
1	A	895	G	O4'-C1'-N9	7.19	113.95	108.20
1	A	560	A	O4'-C1'-N9	7.19	113.95	108.20
1	A	676	G	C5-C6-O6	-7.19	124.29	128.60
1	A	2214	G	C5-C6-O6	-7.19	124.29	128.60
1	A	1816	A	C4-C5-C6	7.19	120.59	117.00
1	A	2475	G	C5-C6-O6	-7.19	124.29	128.60
1	A	680	G	O4'-C1'-N9	7.18	113.95	108.20
1	A	1213	G	O4'-C1'-N9	7.18	113.95	108.20
1	A	2785	U	O4'-C1'-N1	7.18	113.95	108.20
1	A	920	G	O4'-C1'-N9	7.18	113.95	108.20
1	A	1380	U	O4'-C1'-N1	7.18	113.94	108.20
1	A	2722	A	O4'-C1'-N9	7.18	113.94	108.20
1	A	952	A	O4'-C1'-N9	7.18	113.94	108.20
1	A	2244	G	O4'-C1'-N9	7.17	113.94	108.20
1	A	1473	A	P-O3'-C3'	7.17	128.31	119.70
1	A	16	G	C5-C6-O6	-7.17	124.30	128.60
1	A	80	G	C5-C6-O6	-7.17	124.30	128.60
1	A	2049	A	C4-C5-C6	7.17	120.59	117.00
1	A	652	A	O4'-C1'-N9	7.17	113.94	108.20
1	A	1216	C	O4'-C1'-N1	7.17	113.94	108.20
1	A	981	C	O4'-C1'-N1	7.17	113.93	108.20
1	A	1267	G	O4'-C1'-N9	7.17	113.93	108.20
1	A	1348	G	C5-C6-O6	-7.17	124.30	128.60
1	A	2073	C	O4'-C1'-N1	7.17	113.93	108.20
1	A	2533	U	O4'-C1'-N1	7.17	113.93	108.20
1	A	2576	U	O4'-C1'-N1	7.17	113.93	108.20
1	A	1096	A	C4-C5-C6	7.16	120.58	117.00
1	A	1385	G	C5-C6-O6	-7.16	124.30	128.60
1	A	607	G	C5-C6-O6	-7.16	124.30	128.60
1	A	1546	G	O4'-C1'-N9	7.16	113.93	108.20
1	A	42	G	O4'-C1'-N9	7.16	113.93	108.20
1	A	522	U	P-O5'-C5'	7.16	132.35	120.90
1	A	940	G	O4'-C1'-N9	7.16	113.93	108.20
1	A	976	U	O4'-C1'-N1	7.16	113.93	108.20
1	A	1676	G	C5-C6-O6	-7.16	124.31	128.60
1	A	1638	A	C5-C6-N1	-7.16	114.12	117.70
1	A	2450	G	C5-C6-O6	-7.15	124.31	128.60
1	A	57	C	N3-C4-N4	7.15	123.01	118.00
1	A	505	G	C5-C6-O6	-7.15	124.31	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	840	A	O4'-C1'-N9	7.15	113.92	108.20
1	A	1238	G	C5-C6-O6	-7.15	124.31	128.60
1	A	1933	G	O4'-C1'-N9	7.15	113.92	108.20
1	A	2736	G	C5-C6-O6	-7.15	124.31	128.60
1	A	193	A	C4-C5-C6	7.15	120.57	117.00
1	A	860	U	O4'-C1'-N1	7.15	113.92	108.20
1	A	1227	G	O4'-C1'-N9	7.15	113.92	108.20
1	A	1864	G	C5-C6-O6	-7.15	124.31	128.60
1	A	2773	G	C5-C6-O6	-7.15	124.31	128.60
1	A	901	U	O4'-C1'-N1	7.15	113.92	108.20
1	A	1369	C	O4'-C1'-N1	7.15	113.92	108.20
1	A	317	G	C5-C6-O6	-7.14	124.31	128.60
1	A	822	G	C5-C6-O6	-7.14	124.31	128.60
1	A	2145	G	C5-C6-O6	-7.14	124.31	128.60
1	A	2657	C	C6-N1-C1'	-7.14	112.23	120.80
1	A	820	U	O4'-C1'-N1	7.14	113.91	108.20
1	A	1636	A	C5-C6-N6	-7.14	117.99	123.70
1	A	2208	C	C2-N1-C1'	7.14	126.66	118.80
1	A	1075	A	C4-C5-C6	7.14	120.57	117.00
1	A	437	A	P-O3'-C3'	7.14	128.27	119.70
1	A	1188	A	O4'-C1'-N9	7.14	113.91	108.20
1	A	1245	G	C5-C6-O6	-7.14	124.32	128.60
1	A	2202	A	C4-C5-C6	7.14	120.57	117.00
1	A	2453	C	N3-C4-N4	7.14	123.00	118.00
1	A	1163	U	O4'-C1'-N1	7.13	113.91	108.20
1	A	1332	U	O4'-C1'-N1	7.13	113.91	108.20
1	A	2918	G	C5-C6-O6	-7.13	124.32	128.60
1	A	294	G	C5-C6-O6	-7.13	124.32	128.60
1	A	1324	G	C5-C6-O6	-7.13	124.32	128.60
1	A	2094	C	N3-C4-N4	7.13	122.99	118.00
1	A	2516	G	C5-C6-O6	-7.13	124.32	128.60
1	A	121	G	O4'-C1'-N9	7.13	113.90	108.20
1	A	247	A	P-O3'-C3'	7.13	128.25	119.70
1	A	679	A	C4-C5-C6	7.13	120.56	117.00
1	A	627	G	C5-C6-O6	-7.12	124.33	128.60
1	A	812	G	C5-C6-O6	-7.12	124.33	128.60
1	A	1571	G	O4'-C1'-N9	7.12	113.90	108.20
1	A	1943	C	C6-N1-C1'	-7.12	112.25	120.80
1	A	2493	C	O4'-C1'-N1	7.12	113.90	108.20
1	A	705	A	C5-C6-N6	-7.12	118.01	123.70
1	A	784	C	O4'-C1'-N1	7.12	113.89	108.20
1	A	931	C	O4'-C1'-N1	7.12	113.89	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2221	C	O4'-C1'-N1	7.12	113.89	108.20
1	A	1071	G	C5-C6-O6	-7.11	124.33	128.60
1	A	1144	A	O4'-C1'-N9	7.11	113.89	108.20
1	A	301	U	O4'-C1'-N1	7.11	113.89	108.20
1	A	253	G	N1-C6-O6	7.11	124.17	119.90
1	A	558	G	O4'-C1'-N9	7.11	113.89	108.20
1	A	1068	G	C5-C6-O6	-7.11	124.33	128.60
1	A	2097	U	O4'-C1'-N1	7.11	113.89	108.20
1	A	349	C	P-O5'-C5'	7.11	132.28	120.90
1	A	2496	C	O4'-C1'-N1	7.11	113.89	108.20
1	A	1191	C	O4'-C1'-N1	7.11	113.89	108.20
1	A	1607	C	O4'-C1'-N1	7.11	113.89	108.20
1	A	24	G	O4'-C1'-N9	7.11	113.88	108.20
1	A	2692	G	C5-C6-O6	-7.11	124.34	128.60
1	A	313	U	O4'-C1'-N1	7.10	113.88	108.20
1	A	326	A	C5-C6-N6	-7.10	118.02	123.70
1	A	2253	G	C5-C6-O6	-7.10	124.34	128.60
1	A	2633	U	O4'-C1'-N1	7.10	113.88	108.20
1	A	2607	G	O4'-C1'-N9	7.10	113.88	108.20
1	A	205	U	O4'-C1'-N1	7.10	113.88	108.20
1	A	227	G	O4'-C1'-N9	7.10	113.88	108.20
1	A	2424	C	O4'-C1'-N1	7.10	113.88	108.20
1	A	2878	U	O4'-C1'-N1	7.10	113.88	108.20
1	A	1247	G	O4'-C1'-N9	7.10	113.88	108.20
1	A	2014	G	O4'-C1'-N9	7.10	113.88	108.20
1	A	633	U	O4'-C1'-N1	7.10	113.88	108.20
1	A	1018	G	O4'-C1'-N9	7.10	113.88	108.20
1	A	215	G	O4'-C1'-N9	7.09	113.88	108.20
1	A	172	U	O4'-C1'-N1	7.09	113.87	108.20
1	A	852	G	C5-C6-O6	-7.09	124.35	128.60
1	A	1783	C	O4'-C1'-N1	7.09	113.87	108.20
1	A	806	G	C5-C6-O6	-7.09	124.35	128.60
1	A	1004	U	O4'-C1'-N1	7.09	113.87	108.20
1	A	2008	C	O4'-C1'-N1	7.09	113.87	108.20
1	A	1158	G	O4'-C1'-N9	7.08	113.87	108.20
1	A	1461	A	C5-C6-N6	-7.08	118.03	123.70
1	A	2254	A	C4-C5-C6	7.08	120.54	117.00
1	A	411	G	C5-C6-O6	-7.08	124.35	128.60
1	A	754	G	C5-C6-O6	-7.08	124.35	128.60
1	A	1311	G	C5-C6-O6	-7.08	124.35	128.60
1	A	2062	A	O4'-C1'-N9	7.08	113.87	108.20
1	A	2247	C	O4'-C1'-N1	7.08	113.87	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2662	A	O4'-C1'-N9	7.08	113.87	108.20
1	A	674	G	O4'-C1'-N9	7.08	113.86	108.20
1	A	782	A	N1-C6-N6	7.08	122.85	118.60
1	A	1451	U	O4'-C1'-N1	7.08	113.86	108.20
1	A	1706	G	O4'-C1'-N9	7.08	113.86	108.20
1	A	2140	U	O4'-C1'-N1	7.08	113.87	108.20
1	A	254	A	C5-C6-N6	-7.08	118.04	123.70
1	A	2223	U	O4'-C1'-N1	7.08	113.86	108.20
1	A	109	G	O4'-C1'-N9	7.08	113.86	108.20
1	A	813	G	C5-C6-O6	-7.08	124.35	128.60
1	A	2045	U	O4'-C1'-N1	7.08	113.86	108.20
1	A	1463	C	N3-C4-N4	7.08	122.95	118.00
1	A	1822	G	C5-C6-O6	-7.08	124.35	128.60
1	A	459	A	N1-C6-N6	7.07	122.84	118.60
1	A	1461	A	O4'-C1'-N9	7.07	113.86	108.20
1	A	2436	A	C4-C5-C6	7.07	120.54	117.00
1	A	721	G	C5-C6-O6	-7.07	124.36	128.60
1	A	1229	U	O4'-C1'-N1	7.07	113.86	108.20
1	A	2728	U	O4'-C1'-N1	7.07	113.86	108.20
1	A	680	G	C5-C6-O6	-7.07	124.36	128.60
1	A	727	A	O4'-C1'-N9	7.07	113.86	108.20
1	A	6	A	O4'-C1'-N9	7.07	113.86	108.20
1	A	209	U	O4'-C1'-N1	7.07	113.85	108.20
1	A	2116	G	O4'-C1'-N9	7.07	113.85	108.20
1	A	2550	C	N3-C4-N4	7.07	122.95	118.00
1	A	18	C	N3-C4-N4	7.07	122.95	118.00
1	A	259	A	O4'-C1'-N9	7.07	113.85	108.20
1	A	1502	G	C5-C6-O6	-7.07	124.36	128.60
1	A	2837	A	O4'-C1'-N9	7.07	113.85	108.20
1	A	916	G	C5-C6-O6	-7.06	124.36	128.60
1	A	1478	G	O4'-C1'-N9	7.06	113.85	108.20
1	A	336	U	O4'-C1'-N1	7.06	113.85	108.20
1	A	515	G	O4'-C1'-N9	7.06	113.85	108.20
1	A	707	G	O4'-C1'-N9	7.06	113.85	108.20
1	A	1572	G	O4'-C1'-N9	7.06	113.85	108.20
1	A	2663	A	C5-C6-N6	-7.06	118.05	123.70
1	A	2868	G	C5-C6-O6	-7.06	124.36	128.60
1	A	486	A	O4'-C1'-N9	7.06	113.85	108.20
1	A	774	A	N1-C6-N6	7.06	122.83	118.60
1	A	1806	U	O4'-C1'-N1	7.06	113.85	108.20
1	A	2066	A	O4'-C1'-N9	7.06	113.84	108.20
1	A	2697	G	C5-C6-O6	-7.06	124.37	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	135	U	O4'-C1'-N1	7.05	113.84	108.20
1	A	1395	C	O4'-C1'-N1	7.05	113.84	108.20
1	A	2021	G	C5-C6-O6	-7.05	124.37	128.60
1	A	2519	G	C5-C6-O6	-7.05	124.37	128.60
1	A	378	C	P-O5'-C5'	7.05	132.18	120.90
1	A	1088	G	C5-C6-O6	-7.05	124.37	128.60
1	A	32	C	O4'-C1'-N1	7.05	113.84	108.20
1	A	2754	A	C4-C5-C6	7.05	120.52	117.00
1	A	1087	U	O4'-C1'-N1	7.05	113.84	108.20
1	A	1177	G	C5-C6-O6	-7.05	124.37	128.60
1	A	1851	G	O4'-C1'-N9	7.05	113.84	108.20
1	A	1938	C	O4'-C1'-N1	7.05	113.84	108.20
1	A	2424	C	P-O5'-C5'	7.04	132.17	120.90
1	A	385	G	O4'-C1'-N9	7.04	113.83	108.20
1	A	600	A	C4-C5-C6	7.04	120.52	117.00
1	A	625	C	O4'-C1'-N1	7.04	113.83	108.20
1	A	758	A	C5-C6-N6	-7.04	118.07	123.70
1	A	888	A	O4'-C1'-N9	7.04	113.83	108.20
1	A	2051	U	O4'-C1'-N1	7.04	113.83	108.20
1	A	1048	G	C5-C6-O6	-7.04	124.38	128.60
1	A	1960	U	O4'-C1'-N1	7.04	113.83	108.20
1	A	60	G	C5-C6-O6	-7.04	124.38	128.60
1	A	767	U	O4'-C1'-N1	7.04	113.83	108.20
1	A	343	A	C5-C6-N6	-7.04	118.07	123.70
1	A	1092	A	O4'-C1'-N9	7.04	113.83	108.20
1	A	1578	G	C5-C6-O6	-7.04	124.38	128.60
1	A	1782	G	C5-C6-O6	-7.04	124.38	128.60
1	A	2842	U	O4'-C1'-N1	7.03	113.83	108.20
1	A	259	A	C4-C5-C6	7.03	120.52	117.00
1	A	320	U	O4'-C1'-N1	7.03	113.83	108.20
1	A	540	G	C5-C6-O6	-7.03	124.38	128.60
1	A	109	G	C5-C6-O6	-7.03	124.38	128.60
1	A	454	G	O4'-C1'-N9	7.03	113.82	108.20
1	A	1771	C	O4'-C1'-N1	7.03	113.82	108.20
1	A	81	G	O4'-C1'-N9	7.02	113.82	108.20
1	A	1666	U	O4'-C1'-N1	7.02	113.82	108.20
1	A	2895	C	N3-C4-N4	7.02	122.92	118.00
1	A	423	G	C5-C6-O6	-7.02	124.39	128.60
1	A	883	G	C5-C6-O6	-7.02	124.39	128.60
1	A	1469	G	O4'-C1'-N9	7.02	113.81	108.20
1	A	2446	C	O4'-C1'-N1	7.02	113.82	108.20
1	A	2582	G	O4'-C1'-N9	7.02	113.82	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	35	G	O4'-C1'-N9	7.02	113.81	108.20
1	A	2523	G	C5-C6-O6	-7.02	124.39	128.60
1	A	2824	G	C5-C6-O6	-7.02	124.39	128.60
1	A	2716	U	O4'-C1'-N1	7.02	113.81	108.20
1	A	1449	C	N3-C4-N4	7.01	122.91	118.00
1	A	1523	U	O4'-C1'-N1	7.01	113.81	108.20
1	A	2169	G	O4'-C1'-N9	7.01	113.81	108.20
1	A	101	G	C5-C6-O6	-7.01	124.39	128.60
1	A	1962	G	C5-C6-O6	-7.01	124.39	128.60
1	A	2246	G	O4'-C1'-N9	7.01	113.81	108.20
1	A	22	C	N3-C4-N4	7.01	122.91	118.00
1	A	119	U	O4'-C1'-N1	7.01	113.81	108.20
1	A	839	G	C5-C6-O6	-7.01	124.39	128.60
1	A	881	U	O4'-C1'-N1	7.01	113.81	108.20
1	A	1805	G	C5-C6-O6	-7.01	124.39	128.60
1	A	797	A	C4-C5-C6	7.01	120.50	117.00
1	A	2181	C	N3-C4-N4	7.01	122.90	118.00
1	A	2659	G	C5-C6-O6	-7.01	124.40	128.60
1	A	181	G	C5-C6-O6	-7.00	124.40	128.60
1	A	613	U	O4'-C1'-N1	7.00	113.80	108.20
1	A	1490	A	C5-C6-N6	-7.00	118.10	123.70
1	A	708	U	O4'-C1'-N1	7.00	113.80	108.20
1	A	1085	G	O4'-C1'-N9	7.00	113.80	108.20
1	A	2902	A	C5-C6-N6	-7.00	118.10	123.70
1	A	1443	C	O4'-C1'-N1	7.00	113.80	108.20
1	A	2901	G	C5-C6-O6	-7.00	124.40	128.60
1	A	107	G	O4'-C1'-N9	7.00	113.80	108.20
1	A	2215	U	O4'-C1'-N1	7.00	113.80	108.20
1	A	2650	G	O4'-C1'-N9	7.00	113.80	108.20
1	A	1680	A	O4'-C1'-N9	7.00	113.80	108.20
1	A	2236	C	P-O5'-C5'	7.00	132.09	120.90
1	A	2864	G	O4'-C1'-N9	6.99	113.79	108.20
1	A	581	C	O4'-C1'-N1	6.99	113.79	108.20
1	A	906	G	C5-C6-O6	-6.99	124.41	128.60
1	A	1356	G	C5-C6-O6	-6.99	124.41	128.60
1	A	1746	A	C4-C5-C6	6.99	120.49	117.00
1	A	1762	G	O4'-C1'-N9	6.99	113.79	108.20
1	A	198	A	C5-C6-N6	-6.99	118.11	123.70
1	A	606	U	P-O3'-C3'	6.99	128.08	119.70
1	A	1466	U	O4'-C1'-N1	6.99	113.79	108.20
1	A	2135	G	P-O3'-C3'	6.99	128.08	119.70
1	A	2829	G	C5-C6-O6	-6.99	124.41	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	27	G	C5-C6-O6	-6.98	124.41	128.60
1	A	870	A	O4'-C1'-N9	6.98	113.79	108.20
1	A	2534	G	C5-C6-O6	-6.98	124.41	128.60
1	A	2583	U	P-O3'-C3'	6.98	128.08	119.70
1	A	2892	G	O4'-C1'-N9	6.98	113.79	108.20
1	A	155	U	O4'-C1'-N1	6.98	113.78	108.20
1	A	192	G	C5-C6-O6	-6.98	124.41	128.60
1	A	1006	A	C4-C5-C6	6.98	120.49	117.00
1	A	2622	U	O4'-C1'-N1	6.98	113.78	108.20
1	A	2637	G	O4'-C1'-N9	6.98	113.78	108.20
1	A	90	A	C4-C5-C6	6.98	120.49	117.00
1	A	665	G	C5-C6-O6	-6.98	124.41	128.60
1	A	2746	G	C5-C6-O6	-6.98	124.41	128.60
1	A	2535	U	O4'-C1'-N1	6.98	113.78	108.20
1	A	292	U	O4'-C1'-N1	6.97	113.78	108.20
1	A	854	U	O4'-C1'-N1	6.97	113.78	108.20
1	A	910	A	C5-C6-N1	-6.97	114.21	117.70
1	A	1659	A	O4'-C1'-N9	6.97	113.78	108.20
1	A	657	G	C5-C6-O6	-6.97	124.42	128.60
1	A	412	A	C4-C5-C6	6.97	120.48	117.00
1	A	1642	G	O4'-C1'-N9	6.97	113.78	108.20
1	A	1773	G	C5-C6-O6	-6.97	124.42	128.60
1	A	475	A	C4-C5-C6	6.97	120.48	117.00
1	A	2506	C	O4'-C1'-N1	6.97	113.77	108.20
1	A	1164	C	O4'-C1'-N1	6.96	113.77	108.20
1	A	940	G	C5-C6-O6	-6.96	124.42	128.60
1	A	780	G	O4'-C1'-N9	6.96	113.77	108.20
1	A	714	U	O4'-C1'-N1	6.96	113.77	108.20
1	A	817	G	O4'-C1'-N9	6.96	113.77	108.20
1	A	1572	G	C5-C6-O6	-6.96	124.42	128.60
1	A	2679	C	N3-C4-N4	6.96	122.87	118.00
1	A	1708	U	O4'-C1'-N1	6.96	113.77	108.20
1	A	1100	A	C4-C5-C6	6.96	120.48	117.00
1	A	1597	C	N3-C4-N4	6.96	122.87	118.00
1	A	2128	U	O4'-C1'-N1	6.96	113.77	108.20
1	A	2069	U	O4'-C1'-N1	6.96	113.76	108.20
1	A	2669	G	C5-C6-O6	-6.96	124.43	128.60
1	A	66	C	N3-C4-N4	6.95	122.87	118.00
1	A	2693	G	C5-C6-O6	-6.95	124.43	128.60
1	A	35	G	C5-C6-O6	-6.95	124.43	128.60
1	A	56	A	O4'-C1'-N9	6.95	113.76	108.20
1	A	596	G	C5-C6-O6	-6.95	124.43	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	825	G	C5-C6-O6	-6.95	124.43	128.60
1	A	987	A	O4'-C1'-N9	6.95	113.76	108.20
1	A	1826	C	N3-C4-N4	6.95	122.86	118.00
1	A	2688	G	O4'-C1'-N9	6.95	113.76	108.20
1	A	1597	C	O4'-C1'-N1	6.95	113.76	108.20
1	A	2252	A	O4'-C1'-N9	6.95	113.76	108.20
1	A	1073	A	C4-C5-C6	6.95	120.47	117.00
1	A	2211	G	C5-C6-O6	-6.95	124.43	128.60
1	A	2264	G	C5-C6-O6	-6.95	124.43	128.60
1	A	512	G	C5-C6-O6	-6.94	124.43	128.60
1	A	2072	C	N3-C4-N4	6.94	122.86	118.00
1	A	1641	U	O4'-C1'-N1	6.94	113.75	108.20
1	A	2790	A	C5-C6-N6	-6.94	118.15	123.70
1	A	203	U	O4'-C1'-N1	6.94	113.75	108.20
1	A	814	U	O4'-C1'-N1	6.94	113.75	108.20
1	A	143	G	C5-C6-O6	-6.94	124.44	128.60
1	A	234	C	O4'-C1'-N1	6.94	113.75	108.20
1	A	634	A	O4'-C1'-N9	6.94	113.75	108.20
1	A	723	A	O4'-C1'-N9	6.94	113.75	108.20
1	A	2650	G	C5-C6-O6	-6.94	124.44	128.60
1	A	595	G	O4'-C1'-N9	6.94	113.75	108.20
1	A	1030	G	C5-C6-O6	-6.94	124.44	128.60
1	A	1192	G	C5-C6-O6	-6.94	124.44	128.60
1	A	1719	G	C5-C6-O6	-6.94	124.44	128.60
1	A	1763	G	C5-C6-O6	-6.94	124.44	128.60
1	A	1493	C	O4'-C1'-N1	6.93	113.75	108.20
1	A	2585	C	O4'-C1'-N1	6.93	113.75	108.20
1	A	720	C	P-O5'-C5'	-6.93	109.81	120.90
1	A	1032	C	O4'-C1'-N1	6.93	113.75	108.20
1	A	1296	G	O4'-C1'-N9	6.93	113.75	108.20
1	A	1117	G	P-O3'-C3'	6.93	128.02	119.70
1	A	2244	G	C5-C6-O6	-6.93	124.44	128.60
1	A	2443	G	C5-C6-O6	-6.93	124.44	128.60
1	A	707	G	C5-C6-O6	-6.93	124.44	128.60
1	A	1055	A	C4-C5-C6	6.93	120.47	117.00
1	A	1575	A	C4-C5-C6	6.93	120.46	117.00
1	A	2671	G	O4'-C1'-N9	6.93	113.74	108.20
1	A	58	G	O4'-C1'-N9	6.93	113.74	108.20
1	A	1367	G	C5-C6-O6	-6.93	124.44	128.60
1	A	1489	U	O4'-C1'-N1	6.93	113.74	108.20
1	A	599	G	C5-C6-O6	-6.92	124.44	128.60
1	A	1286	A	C5-C6-N1	-6.92	114.24	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1836	G	O4'-C1'-N9	6.92	113.74	108.20
1	A	2422	U	O4'-C1'-N1	6.92	113.74	108.20
1	A	566	G	O4'-C1'-N9	6.92	113.74	108.20
1	A	1443	C	N3-C4-N4	6.92	122.84	118.00
1	A	2077	G	O4'-C1'-N9	6.92	113.74	108.20
1	A	2596	G	C5-C6-O6	-6.92	124.45	128.60
1	A	1231	G	O4'-C1'-N9	6.92	113.74	108.20
1	A	1282	U	O4'-C1'-N1	6.92	113.74	108.20
1	A	1316	A	C5-C6-N1	-6.92	114.24	117.70
1	A	2180	U	O4'-C1'-N1	6.92	113.73	108.20
1	A	2488	A	C5-C6-N1	-6.92	114.24	117.70
1	A	877	G	C5-C6-O6	-6.92	124.45	128.60
1	A	1077	G	C5-C6-O6	-6.92	124.45	128.60
1	A	1102	G	C5-C6-O6	-6.92	124.45	128.60
1	A	2674	G	C5-C6-O6	-6.92	124.45	128.60
1	A	2896	U	O4'-C1'-N1	6.92	113.73	108.20
1	A	692	A	O4'-C1'-N9	6.92	113.73	108.20
1	A	2875	A	C4-C5-C6	6.92	120.46	117.00
1	A	386	U	P-O5'-C5'	6.91	131.96	120.90
1	A	800	G	O4'-C1'-N9	6.91	113.73	108.20
1	A	307	A	C4-C5-C6	6.91	120.45	117.00
1	A	1424	A	O4'-C1'-N9	6.91	113.73	108.20
1	A	2222	C	O4'-C1'-N1	6.91	113.73	108.20
1	A	800	G	C5-C6-O6	-6.91	124.45	128.60
1	A	917	A	O4'-C1'-N9	6.91	113.73	108.20
1	A	1788	A	C4-C5-C6	6.91	120.45	117.00
1	A	2051	U	C5'-C4'-O4'	6.91	117.39	109.10
1	A	835	A	C5-C6-N6	-6.91	118.17	123.70
1	A	446	G	O4'-C1'-N9	6.91	113.72	108.20
1	A	536	G	C5-C6-O6	-6.91	124.46	128.60
1	A	2041	G	C5-C6-O6	-6.91	124.46	128.60
1	A	2676	U	O4'-C1'-N1	6.91	113.72	108.20
1	A	2176	A	O4'-C1'-N9	6.90	113.72	108.20
1	A	1320	G	O4'-C1'-N9	6.90	113.72	108.20
1	A	1658	G	C5-C6-O6	-6.90	124.46	128.60
1	A	1801	G	O4'-C1'-N9	6.90	113.72	108.20
1	A	2055	U	O4'-C1'-N1	6.90	113.72	108.20
1	A	2447	A	O4'-C1'-N9	6.90	113.72	108.20
1	A	759	G	C5-C6-O6	-6.90	124.46	128.60
1	A	1939	G	C5-C6-O6	-6.90	124.46	128.60
1	A	792	G	O4'-C1'-N9	6.90	113.72	108.20
1	A	461	C	N3-C4-N4	6.89	122.83	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1750	G	O4'-C1'-N9	6.89	113.72	108.20
1	A	2855	G	C5-C6-O6	-6.89	124.46	128.60
1	A	1290	G	C5-C6-O6	-6.89	124.46	128.60
1	A	1782	G	O4'-C1'-N9	6.89	113.71	108.20
1	A	2612	G	N1-C6-O6	6.89	124.03	119.90
1	A	2828	G	C5-C6-O6	-6.89	124.47	128.60
1	A	2029	G	O4'-C1'-N9	6.89	113.71	108.20
1	A	1149	A	O4'-C1'-N9	6.89	113.71	108.20
1	A	1859	C	N3-C4-N4	6.89	122.82	118.00
1	A	140	A	O4'-C1'-N9	6.89	113.71	108.20
1	A	1263	G	O4'-C1'-N9	6.89	113.71	108.20
1	A	2706	G	O4'-C1'-N9	6.89	113.71	108.20
1	A	1320	G	C5-C6-O6	-6.88	124.47	128.60
1	A	2634	U	O4'-C1'-N1	6.88	113.71	108.20
1	A	312	G	C5-C6-O6	-6.88	124.47	128.60
1	A	527	A	O4'-C1'-N9	6.88	113.70	108.20
1	A	2166	C	O4'-C1'-N1	6.88	113.70	108.20
1	A	2266	G	C5-C6-O6	-6.88	124.47	128.60
1	A	353	A	C4-C5-C6	6.88	120.44	117.00
1	A	1550	C	P-O3'-C3'	6.88	127.95	119.70
1	A	2672	G	C5-C6-O6	-6.88	124.47	128.60
1	A	1267	G	C5-C6-O6	-6.88	124.47	128.60
1	A	2225	C	O4'-C1'-N1	6.88	113.70	108.20
1	A	2649	C	N3-C4-N4	6.88	122.81	118.00
1	A	223	G	C5-C6-O6	-6.87	124.48	128.60
1	A	263	G	C5-C6-O6	-6.87	124.48	128.60
1	A	269	G	O4'-C1'-N9	6.87	113.70	108.20
1	A	810	G	C5-C6-O6	-6.87	124.48	128.60
1	A	1483	A	O4'-C1'-N9	6.87	113.70	108.20
1	A	2681	U	O4'-C1'-N1	6.87	113.70	108.20
1	A	521	G	C5-C6-O6	-6.87	124.48	128.60
1	A	1615	A	O4'-C1'-N9	6.87	113.70	108.20
1	A	2027	A	O4'-C1'-N9	6.87	113.70	108.20
1	A	170	G	O4'-C1'-N9	6.87	113.70	108.20
1	A	455	G	C5-C6-O6	-6.87	124.48	128.60
1	A	447	G	C5-C6-O6	-6.87	124.48	128.60
1	A	556	C	N3-C4-N4	6.87	122.81	118.00
1	A	262	G	C5-C6-O6	-6.87	124.48	128.60
1	A	781	A	C5-C6-N6	-6.87	118.21	123.70
1	A	2627	A	O4'-C1'-N9	6.87	113.69	108.20
1	A	751	G	C5-C6-O6	-6.86	124.48	128.60
1	A	2121	U	O4'-C1'-N1	6.86	113.69	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	487	G	C5-C6-O6	-6.86	124.48	128.60
1	A	2670	A	O4'-C1'-N9	6.86	113.69	108.20
1	A	1745	A	O4'-C1'-N9	6.86	113.69	108.20
1	A	2844	A	C5-C6-N1	-6.86	114.27	117.70
1	A	2794	A	C5-C6-N6	-6.86	118.21	123.70
1	A	765	A	C4-C5-C6	6.86	120.43	117.00
1	A	846	G	O4'-C1'-N9	6.86	113.69	108.20
1	A	2482	A	C5-C6-N1	-6.86	114.27	117.70
1	A	2177	G	C5-C6-O6	-6.86	124.49	128.60
1	A	2458	G	C5-C6-O6	-6.86	124.49	128.60
1	A	2550	C	O4'-C1'-N1	6.86	113.68	108.20
1	A	404	C	N3-C4-N4	6.85	122.80	118.00
1	A	1462	G	O4'-C1'-N9	6.85	113.68	108.20
1	A	1620	A	O4'-C1'-N9	6.85	113.68	108.20
1	A	2784	C	O4'-C1'-N1	6.85	113.68	108.20
1	A	214	G	C5-C6-O6	-6.85	124.49	128.60
1	A	819	G	O4'-C1'-N9	6.85	113.68	108.20
1	A	190	G	C5-C6-O6	-6.85	124.49	128.60
1	A	479	A	C4-C5-C6	6.85	120.42	117.00
1	A	1234	G	C5-C6-O6	-6.85	124.49	128.60
1	A	1375	A	O4'-C1'-N9	6.85	113.68	108.20
1	A	1664	G	C5-C6-O6	-6.85	124.49	128.60
1	A	2182	G	C5-C6-O6	-6.85	124.49	128.60
1	A	871	G	O4'-C1'-N9	6.85	113.68	108.20
1	A	1101	G	C5-C6-O6	-6.85	124.49	128.60
1	A	1735	A	C4-C5-C6	6.84	120.42	117.00
1	A	2802	U	O4'-C1'-N1	6.84	113.67	108.20
1	A	229	A	O4'-C1'-N9	6.84	113.67	108.20
1	A	276	C	O4'-C1'-N1	6.84	113.67	108.20
1	A	789	C	N3-C4-C5	-6.84	119.16	121.90
1	A	1221	A	O4'-C1'-N9	6.84	113.67	108.20
1	A	1512	G	O4'-C1'-N9	6.84	113.67	108.20
1	A	1521	G	C5-C6-O6	-6.84	124.50	128.60
1	A	847	A	C5-C6-N6	-6.84	118.23	123.70
1	A	2710	C	C2-N1-C1'	6.84	126.32	118.80
1	A	2873	G	C5-C6-O6	-6.84	124.50	128.60
1	A	1755	C	O4'-C1'-N1	6.84	113.67	108.20
1	A	339	A	O4'-C1'-N9	6.84	113.67	108.20
11	D	91	TYR	CB-CG-CD2	6.84	125.10	121.00
1	A	2096	G	C5-C6-O6	-6.83	124.50	128.60
1	A	451	C	N3-C4-N4	6.83	122.78	118.00
1	A	1547	U	O4'-C1'-N1	6.83	113.67	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1265	A	O4'-C1'-N9	6.83	113.67	108.20
1	A	1341	U	O4'-C1'-N1	6.83	113.67	108.20
1	A	1361	A	O4'-C1'-N9	6.83	113.67	108.20
1	A	255	G	O4'-C1'-N9	6.83	113.66	108.20
1	A	845	G	C5-C6-O6	-6.83	124.50	128.60
1	A	2144	G	C5-C6-O6	-6.83	124.50	128.60
1	A	370	G	C5-C6-O6	-6.83	124.50	128.60
1	A	396	G	P-O5'-C5'	6.83	131.82	120.90
1	A	813	G	O4'-C1'-N9	6.83	113.66	108.20
1	A	331	C	N3-C4-N4	6.82	122.78	118.00
1	A	496	A	C5-C6-N6	-6.82	118.24	123.70
1	A	1042	A	C5-C6-N1	-6.82	114.29	117.70
1	A	1353	C	N3-C4-C5	-6.82	119.17	121.90
1	A	278	A	C5-C6-N6	-6.82	118.24	123.70
1	A	1491	A	C4-C5-C6	6.82	120.41	117.00
1	A	1614	A	C4-C5-C6	6.82	120.41	117.00
1	A	1196	C	N3-C4-N4	6.82	122.77	118.00
1	A	2888	C	O4'-C1'-N1	6.82	113.66	108.20
1	A	2228	A	C4-C5-C6	6.82	120.41	117.00
1	A	695	G	O4'-C1'-N9	6.82	113.65	108.20
1	A	1115	A	C5-C6-N6	-6.82	118.25	123.70
1	A	1146	C	N3-C4-N4	6.82	122.77	118.00
1	A	1182	G	C5-C6-O6	-6.82	124.51	128.60
1	A	701	G	C5-C6-O6	-6.82	124.51	128.60
1	A	989	U	O4'-C1'-N1	6.82	113.65	108.20
1	A	1238	G	O4'-C1'-N9	6.81	113.65	108.20
1	A	402	U	O4'-C1'-N1	6.81	113.65	108.20
1	A	1727	A	C5-C6-N6	-6.81	118.25	123.70
1	A	435	G	C5-C6-O6	-6.81	124.52	128.60
1	A	949	U	O4'-C1'-N1	6.81	113.65	108.20
1	A	1549	U	O4'-C1'-N1	6.81	113.64	108.20
1	A	2238	C	O4'-C1'-N1	6.81	113.65	108.20
1	A	2540	U	O4'-C1'-N1	6.81	113.65	108.20
1	A	1083	G	O4'-C1'-N9	6.81	113.64	108.20
1	A	350	U	O4'-C1'-N1	6.80	113.64	108.20
1	A	1593	A	C4-C5-C6	6.80	120.40	117.00
1	A	2656	G	O4'-C1'-N9	6.80	113.64	108.20
1	A	369	A	C5-C6-N1	-6.80	114.30	117.70
1	A	634	A	C5-C6-N6	-6.80	118.26	123.70
1	A	783	C	N3-C4-C5	-6.80	119.18	121.90
1	A	2893	A	O4'-C1'-N9	6.80	113.64	108.20
1	A	617	G	C5-C6-O6	-6.80	124.52	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	818	G	C5-C6-O6	-6.80	124.52	128.60
1	A	1033	C	N3-C4-N4	6.80	122.76	118.00
1	A	1516	A	O4'-C1'-N9	6.80	113.64	108.20
1	A	2185	G	O4'-C1'-N9	6.80	113.64	108.20
1	A	1201	A	C4-C5-C6	6.80	120.40	117.00
1	A	1372	C	O4'-C1'-N1	6.80	113.64	108.20
1	A	2584	U	O4'-C1'-N1	6.80	113.64	108.20
1	A	1153	G	C5-C6-O6	-6.80	124.52	128.60
1	A	1387	G	C5-C6-O6	-6.80	124.52	128.60
1	A	1414	G	O4'-C1'-N9	6.80	113.64	108.20
1	A	1632	G	O4'-C1'-N9	6.80	113.64	108.20
1	A	506	U	O4'-C1'-N1	6.79	113.64	108.20
1	A	2271	G	O4'-C1'-N9	6.79	113.64	108.20
1	A	2438	G	O4'-C1'-N9	6.79	113.64	108.20
1	A	306	C	O4'-C1'-N1	6.79	113.63	108.20
1	A	943	A	O4'-C1'-N9	6.79	113.63	108.20
1	A	1315	G	C5-C6-O6	-6.79	124.53	128.60
1	A	133	A	O4'-C1'-N9	6.79	113.63	108.20
1	A	703	G	C5-C6-O6	-6.79	124.53	128.60
1	A	2612	G	O4'-C1'-N9	6.79	113.63	108.20
1	A	1605	C	O4'-C1'-N1	6.79	113.63	108.20
1	A	980	C	N3-C4-N4	6.79	122.75	118.00
1	A	2629	A	O4'-C1'-N9	6.79	113.63	108.20
1	A	999	A	C5-C6-N1	-6.79	114.31	117.70
1	A	1040	C	N3-C4-N4	6.79	122.75	118.00
1	A	1309	G	C5-C6-O6	-6.79	124.53	128.60
1	A	2786	A	C4-C5-C6	6.79	120.39	117.00
1	A	323	C	P-O3'-C3'	6.78	127.84	119.70
1	A	627	G	O4'-C1'-N9	6.78	113.63	108.20
1	A	1312	A	P-O3'-C3'	6.78	127.84	119.70
1	A	2009	G	O4'-C1'-N9	6.78	113.63	108.20
1	A	2249	G	O4'-C1'-N9	6.78	113.63	108.20
1	A	2070	U	O4'-C1'-N1	6.78	113.63	108.20
1	A	270	C	N3-C4-N4	6.78	122.75	118.00
1	A	1210	A	O4'-C1'-N9	6.78	113.62	108.20
1	A	2151	U	O4'-C1'-N1	6.78	113.62	108.20
1	A	1130	A	C4-C5-C6	6.78	120.39	117.00
1	A	1184	G	C5-C6-O6	-6.78	124.53	128.60
1	A	2507	A	N1-C6-N6	6.78	122.67	118.60
1	A	812	G	O4'-C1'-N9	6.78	113.62	108.20
1	A	280	G	O4'-C1'-N9	6.78	113.62	108.20
1	A	1718	G	C5-C6-O6	-6.78	124.53	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2063	U	O4'-C1'-N1	6.78	113.62	108.20
1	A	2194	G	C5-C6-O6	-6.78	124.53	128.60
1	A	778	C	N3-C4-N4	6.77	122.74	118.00
1	A	216	A	C4-C5-C6	6.77	120.39	117.00
1	A	920	G	C5-C6-O6	-6.77	124.54	128.60
1	A	1093	G	C5-C6-O6	-6.77	124.54	128.60
1	A	1213	G	C5-C6-O6	-6.77	124.54	128.60
1	A	1231	G	C5-C6-O6	-6.77	124.54	128.60
1	A	1220	G	P-O3'-C3'	6.77	127.83	119.70
1	A	376	A	P-O3'-C3'	6.77	127.82	119.70
1	A	1317	G	O4'-C1'-N9	6.77	113.62	108.20
1	A	1697	A	O4'-C1'-N9	6.77	113.62	108.20
1	A	2434	G	C5-C6-O6	-6.77	124.54	128.60
1	A	2852	U	O4'-C1'-N1	6.77	113.61	108.20
1	A	772	G	C5-C6-O6	-6.77	124.54	128.60
1	A	1160	G	O4'-C1'-N9	6.77	113.61	108.20
1	A	1550	C	N3-C4-N4	6.77	122.74	118.00
1	A	2891	G	C5-C6-O6	-6.77	124.54	128.60
1	A	2053	C	N3-C4-N4	6.77	122.74	118.00
1	A	1298	C	N3-C4-N4	6.76	122.74	118.00
1	A	2028	C	N3-C4-N4	6.76	122.73	118.00
1	A	921	G	C5-C6-O6	-6.76	124.54	128.60
1	A	2809	G	C5-C6-O6	-6.76	124.54	128.60
1	A	436	A	C4-C5-C6	6.76	120.38	117.00
1	A	805	G	C5-C6-O6	-6.76	124.54	128.60
1	A	1228	G	C5-C6-O6	-6.76	124.54	128.60
1	A	1793	G	O4'-C1'-N9	6.76	113.61	108.20
1	A	2271	G	C5-C6-O6	-6.76	124.54	128.60
1	A	407	A	C4-C5-C6	6.76	120.38	117.00
1	A	750	U	O4'-C1'-N1	6.76	113.61	108.20
1	A	1314	A	O4'-C1'-N9	6.76	113.61	108.20
1	A	439	U	O4'-C1'-N1	6.76	113.61	108.20
1	A	1209	G	C5-C6-O6	-6.76	124.55	128.60
1	A	1265	A	C4-C5-C6	6.76	120.38	117.00
1	A	2568	C	N3-C4-N4	6.76	122.73	118.00
1	A	450	U	O4'-C1'-N1	6.75	113.60	108.20
1	A	2724	U	P-O5'-C5'	6.75	131.71	120.90
1	A	2636	G	C5-C6-O6	-6.75	124.55	128.60
1	A	230	A	C4-C5-C6	6.75	120.38	117.00
1	A	678	A	O4'-C1'-N9	6.75	113.60	108.20
1	A	1588	A	C5-C6-N1	-6.75	114.32	117.70
1	A	2002	G	O4'-C1'-N9	6.75	113.60	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2059	A	C4-C5-C6	6.75	120.38	117.00
1	A	589	G	C5-C6-O6	-6.75	124.55	128.60
1	A	341	G	C5-C6-O6	-6.75	124.55	128.60
1	A	1504	A	O4'-C1'-N9	6.75	113.60	108.20
1	A	2684	G	C5-C6-O6	-6.75	124.55	128.60
1	A	73	A	O4'-C1'-N9	6.75	113.60	108.20
1	A	122	G	C5-C6-O6	-6.75	124.55	128.60
1	A	416	U	O4'-C1'-N1	6.75	113.60	108.20
1	A	1678	G	C5-C6-O6	-6.75	124.55	128.60
1	A	2418	G	C5-C6-O6	-6.75	124.55	128.60
1	A	1312	A	P-O5'-C5'	6.75	131.69	120.90
1	A	2154	G	C5-C6-O6	-6.74	124.55	128.60
1	A	335	G	C5-C6-O6	-6.74	124.56	128.60
1	A	159	U	O4'-C1'-N1	6.74	113.59	108.20
1	A	431	A	C4-C5-C6	6.74	120.37	117.00
1	A	600	A	C5-C6-N1	-6.74	114.33	117.70
1	A	1088	G	O4'-C1'-N9	6.74	113.59	108.20
1	A	1304	G	C5-C6-O6	-6.74	124.56	128.60
1	A	1530	G	C5-C6-O6	-6.74	124.56	128.60
1	A	1857	G	O4'-C1'-N9	6.74	113.59	108.20
1	A	1948	A	C4-C5-C6	6.74	120.37	117.00
1	A	2792	G	C5-C6-O6	-6.74	124.56	128.60
1	A	686	C	O4'-C1'-N1	6.74	113.59	108.20
1	A	1860	G	O4'-C1'-N9	6.74	113.59	108.20
1	A	2890	U	O4'-C1'-N1	6.74	113.59	108.20
1	A	1606	A	C5-C6-N6	-6.74	118.31	123.70
1	A	48	G	C5-C6-O6	-6.74	124.56	128.60
1	A	2856	G	O4'-C1'-N9	6.74	113.59	108.20
1	A	1156	G	C5-C6-O6	-6.73	124.56	128.60
1	A	2236	C	N3-C4-N4	6.73	122.71	118.00
1	A	2869	A	C4-C5-C6	6.73	120.37	117.00
1	A	282	G	C5-C6-O6	-6.73	124.56	128.60
1	A	685	U	O4'-C1'-N1	6.73	113.59	108.20
1	A	1120	G	C5-C6-O6	-6.73	124.56	128.60
1	A	1486	G	C5-C6-O6	-6.73	124.56	128.60
1	A	1651	G	O4'-C1'-N9	6.73	113.58	108.20
1	A	2763	C	O4'-C1'-N1	6.73	113.58	108.20
1	A	1005	A	O4'-C1'-N9	6.73	113.58	108.20
1	A	448	A	O4'-C1'-N9	6.73	113.58	108.20
1	A	821	A	C5-C6-N6	-6.73	118.32	123.70
1	A	1551	C	O4'-C1'-N1	6.73	113.58	108.20
1	A	1589	G	C5-C6-O6	-6.73	124.56	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	233	G	C5-C6-O6	-6.72	124.57	128.60
1	A	1621	G	O4'-C1'-N9	6.72	113.58	108.20
1	A	1800	C	O4'-C1'-N1	6.72	113.58	108.20
1	A	1086	U	O4'-C1'-N1	6.72	113.58	108.20
1	A	2624	G	C5-C6-O6	-6.72	124.57	128.60
1	A	2734	A	C4-C5-C6	6.72	120.36	117.00
1	A	1726	G	C5-C6-O6	-6.72	124.57	128.60
1	A	2583	U	O4'-C1'-N1	6.72	113.58	108.20
1	A	662	U	O4'-C1'-N1	6.72	113.58	108.20
1	A	1508	C	N3-C4-N4	6.72	122.70	118.00
1	A	722	A	C4-C5-C6	6.72	120.36	117.00
1	A	1418	U	C6-N1-C1'	-6.72	111.80	121.20
1	A	2916	A	C4-C5-C6	6.72	120.36	117.00
1	A	948	A	C5-C6-N6	-6.72	118.33	123.70
1	A	1470	G	C5-C6-O6	-6.72	124.57	128.60
1	A	1506	A	C4-C5-C6	6.72	120.36	117.00
1	A	2621	G	C5-C6-O6	-6.72	124.57	128.60
1	A	2873	G	O4'-C1'-N9	6.72	113.57	108.20
1	A	1015	G	C5-C6-O6	-6.71	124.57	128.60
1	A	2560	A	C4-C5-C6	6.71	120.36	117.00
1	A	2599	G	O4'-C1'-N9	6.71	113.57	108.20
1	A	2677	G	O4'-C1'-N9	6.71	113.57	108.20
1	A	1787	G	C5-C6-O6	-6.71	124.57	128.60
1	A	322	A	C4-C5-C6	6.71	120.36	117.00
1	A	515	G	C5-C6-O6	-6.71	124.57	128.60
1	A	524	A	O4'-C1'-N9	6.71	113.57	108.20
1	A	938	G	C5'-C4'-O4'	6.71	117.16	109.10
1	A	463	U	O4'-C1'-N1	6.71	113.57	108.20
1	A	250	G	O4'-C1'-N9	6.71	113.57	108.20
1	A	903	G	C5-C6-O6	-6.71	124.58	128.60
1	A	2636	G	O4'-C1'-N9	6.71	113.57	108.20
1	A	1501	U	O4'-C1'-N1	6.71	113.57	108.20
1	A	2515	G	O4'-C1'-N9	6.71	113.57	108.20
1	A	458	G	O4'-C1'-N9	6.71	113.56	108.20
1	A	1761	G	C5-C6-O6	-6.70	124.58	128.60
1	A	2570	A	C5-C6-N1	-6.70	114.35	117.70
1	A	522	U	O4'-C1'-N1	6.70	113.56	108.20
1	A	550	G	C5-C6-O6	-6.70	124.58	128.60
1	A	1074	A	C4-C5-C6	6.70	120.35	117.00
1	A	1545	C	N3-C4-N4	6.70	122.69	118.00
1	A	1558	G	O4'-C1'-N9	6.70	113.56	108.20
1	A	2637	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(^{o})	Ideal(^{o})
1	A	307	A	C5-C6-N6	-6.70	118.34	123.70
1	A	688	G	C5-C6-O6	-6.70	124.58	128.60
1	A	963	G	C5-C6-O6	-6.70	124.58	128.60
1	A	2882	G	O4'-C1'-N9	6.70	113.56	108.20
1	A	1009	U	O4'-C1'-N1	6.70	113.56	108.20
1	A	1247	G	C5-C6-O6	-6.70	124.58	128.60
1	A	1285	G	C5-C6-O6	-6.70	124.58	128.60
1	A	2454	A	C4-C5-C6	6.70	120.35	117.00
1	A	2647	G	C5-C6-O6	-6.70	124.58	128.60
1	A	7	G	O4'-C1'-N9	6.69	113.55	108.20
1	A	122	G	O4'-C1'-N9	6.69	113.55	108.20
1	A	189	G	O4'-C1'-N9	6.69	113.55	108.20
1	A	285	U	O4'-C1'-N1	6.69	113.55	108.20
1	A	908	A	C4-C5-C6	6.69	120.35	117.00
1	A	1710	A	C4-C5-C6	6.69	120.35	117.00
1	A	2275	G	C5-C6-O6	-6.69	124.58	128.60
1	A	2605	G	C5-C6-O6	-6.69	124.58	128.60
1	A	2720	C	N3-C4-N4	6.69	122.68	118.00
11	D	91	TYR	CB-CG-CD1	-6.69	116.98	121.00
1	A	535	G	C5-C6-O6	-6.69	124.58	128.60
1	A	776	G	C5-C6-O6	-6.69	124.59	128.60
1	A	1258	A	C5-C6-N6	-6.69	118.35	123.70
1	A	2263	G	O4'-C1'-N9	6.69	113.55	108.20
1	A	490	A	C4-C5-C6	6.69	120.34	117.00
1	A	1218	U	O4'-C1'-N1	6.69	113.55	108.20
1	A	1525	G	O4'-C1'-N9	6.69	113.55	108.20
1	A	1674	G	C5-C6-O6	-6.69	124.59	128.60
1	A	1802	A	C4-C5-C6	6.69	120.34	117.00
1	A	237	U	P-O3'-C3'	-6.69	111.68	119.70
1	A	558	G	C5-C6-O6	-6.69	124.59	128.60
1	A	849	A	C5-C6-N6	-6.69	118.35	123.70
1	A	1742	G	C5-C6-O6	-6.69	124.59	128.60
1	A	1810	G	C5-C6-O6	-6.69	124.59	128.60
1	A	2170	A	C4-C5-C6	6.69	120.34	117.00
1	A	728	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1651	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1660	C	O4'-C1'-N1	6.68	113.55	108.20
1	A	1717	C	C2-N1-C1'	6.68	126.15	118.80
1	A	2036	U	O4'-C1'-N1	6.68	113.55	108.20
1	A	2259	G	O4'-C1'-N9	6.68	113.55	108.20
1	A	51	G	C5-C6-O6	-6.68	124.59	128.60
1	A	511	U	O4'-C1'-N1	6.68	113.55	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1022	G	O4'-C1'-N9	6.68	113.55	108.20
1	A	1524	A	C4-C5-C6	6.68	120.34	117.00
1	A	1725	U	O4'-C1'-N1	6.68	113.55	108.20
1	A	1789	A	C4-C5-C6	6.68	120.34	117.00
1	A	1821	G	C5-C6-O6	-6.68	124.59	128.60
1	A	2445	C	N3-C4-N4	6.68	122.68	118.00
1	A	1168	G	O4'-C1'-N9	6.68	113.55	108.20
1	A	1230	A	C4-C5-C6	6.68	120.34	117.00
1	A	2777	A	C4-C5-C6	6.68	120.34	117.00
1	A	697	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1259	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1767	A	C4-C5-C6	6.68	120.34	117.00
1	A	1857	G	C5-C6-O6	-6.68	124.59	128.60
1	A	2000	A	O4'-C1'-N9	6.68	113.54	108.20
1	A	2707	C	N3-C4-N4	6.68	122.68	118.00
1	A	513	A	C4-C5-C6	6.68	120.34	117.00
1	A	644	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1566	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1569	A	C4-C5-C6	6.68	120.34	117.00
1	A	1571	G	C5-C6-O6	-6.68	124.59	128.60
1	A	1581	A	C4'-C3'-C2'	-6.68	95.92	102.60
1	A	271	C	O4'-C1'-N1	6.67	113.54	108.20
1	A	1403	G	C5-C6-O6	-6.67	124.60	128.60
1	A	1959	G	C5-C6-O6	-6.67	124.60	128.60
1	A	2441	A	C4-C5-C6	6.67	120.34	117.00
1	A	959	C	N3-C4-N4	6.67	122.67	118.00
1	A	1393	A	C4-C5-C6	6.67	120.34	117.00
1	A	1407	G	C5-C6-O6	-6.67	124.60	128.60
1	A	2033	G	C5-C6-O6	-6.67	124.60	128.60
1	A	2086	G	C5-C6-O6	-6.67	124.60	128.60
1	A	2162	G	C5-C6-O6	-6.67	124.60	128.60
1	A	2186	G	C5-C6-O6	-6.67	124.60	128.60
1	A	471	G	O4'-C1'-N9	6.67	113.54	108.20
1	A	645	C	N3-C4-N4	6.67	122.67	118.00
1	A	1235	A	C5-C6-N6	-6.67	118.36	123.70
1	A	845	G	O4'-C1'-N9	6.67	113.53	108.20
1	A	1548	U	O4'-C1'-N1	6.67	113.53	108.20
1	A	493	G	C5-C6-O6	-6.67	124.60	128.60
1	A	666	G	O4'-C1'-N9	6.67	113.53	108.20
1	A	2734	A	C5-C6-N6	-6.67	118.37	123.70
1	A	116	G	C5-C6-O6	-6.66	124.60	128.60
1	A	334	G	O4'-C1'-N9	6.66	113.53	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	716	G	C4-N9-C1'	6.66	135.16	126.50
1	A	243	G	C5-C6-O6	-6.66	124.60	128.60
8	L	58	PHE	CB-CG-CD1	6.66	125.46	120.80
1	A	2561	G	C5-C6-O6	-6.66	124.60	128.60
1	A	2732	C	C2-N1-C1'	6.66	126.13	118.80
1	A	2750	A	C5-C6-N6	-6.66	118.37	123.70
1	A	2886	C	N3-C4-N4	6.66	122.66	118.00
1	A	167	U	O4'-C1'-N1	6.66	113.53	108.20
1	A	287	G	C5-C6-O6	-6.66	124.61	128.60
1	A	1044	C	N3-C4-N4	6.66	122.66	118.00
1	A	1653	A	C4-C5-C6	6.66	120.33	117.00
1	A	2176	A	C4-C5-C6	6.66	120.33	117.00
1	A	2780	G	C5-C6-O6	-6.66	124.60	128.60
1	A	58	G	C5-C6-O6	-6.66	124.61	128.60
1	A	2884	G	C5-C6-O6	-6.66	124.61	128.60
1	A	137	G	C5-C6-O6	-6.66	124.61	128.60
1	A	2609	U	O4'-C1'-N1	6.66	113.53	108.20
1	A	737	C	O4'-C1'-N1	6.65	113.52	108.20
1	A	2185	G	C5-C6-O6	-6.65	124.61	128.60
1	A	2191	A	C4-C5-C6	6.65	120.33	117.00
1	A	2272	U	O4'-C1'-N1	6.65	113.52	108.20
1	A	1060	U	O4'-C1'-N1	6.65	113.52	108.20
1	A	1233	A	C5-C6-N1	-6.65	114.37	117.70
1	A	485	U	O4'-C1'-N1	6.65	113.52	108.20
1	A	827	G	N3-C2-N2	6.65	124.56	119.90
1	A	1161	A	O4'-C1'-N9	6.65	113.52	108.20
1	A	1371	G	C5-C6-O6	-6.65	124.61	128.60
1	A	1204	C	O4'-C1'-N1	6.65	113.52	108.20
1	A	962	C	N3-C4-N4	6.65	122.65	118.00
1	A	1779	G	C5-C6-O6	-6.65	124.61	128.60
1	A	2183	G	C5-C6-O6	-6.65	124.61	128.60
1	A	2877	G	O4'-C1'-N9	6.65	113.52	108.20
1	A	11	G	C5-C6-O6	-6.65	124.61	128.60
1	A	349	C	N3-C4-N4	6.65	122.65	118.00
1	A	1554	U	O4'-C1'-N1	6.65	113.52	108.20
1	A	516	G	O4'-C1'-N9	6.64	113.52	108.20
1	A	648	G	C5-C6-O6	-6.64	124.61	128.60
1	A	1439	U	P-O5'-C5'	6.64	131.53	120.90
1	A	1544	C	C5-C4-N4	-6.64	115.55	120.20
1	A	2879	G	C5-C6-O6	-6.64	124.61	128.60
1	A	2047	A	C5-C6-N6	-6.64	118.39	123.70
1	A	2830	A	O4'-C1'-N9	6.64	113.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2453	C	O4'-C1'-N1	6.64	113.51	108.20
1	A	41	A	C4-C5-C6	6.64	120.32	117.00
1	A	980	C	O4'-C1'-N1	6.64	113.51	108.20
1	A	222	A	C4-C5-C6	6.64	120.32	117.00
1	A	573	C	C6-N1-C1'	-6.64	112.84	120.80
1	A	1057	G	O4'-C1'-N9	6.64	113.51	108.20
1	A	2555	G	C5-C6-O6	-6.64	124.62	128.60
1	A	740	A	C5-C6-N6	-6.63	118.39	123.70
1	A	1513	U	O4'-C1'-N1	6.63	113.51	108.20
1	A	2143	A	C4-C5-C6	6.63	120.32	117.00
1	A	1179	A	C5-C6-N6	-6.63	118.39	123.70
1	A	1207	C	N3-C4-N4	6.63	122.64	118.00
1	A	2481	C	O4'-C1'-N1	6.63	113.50	108.20
1	A	1627	A	P-O3'-C3'	6.63	127.66	119.70
1	A	827	G	C5-C6-O6	-6.63	124.62	128.60
1	A	1843	G	C5-C6-O6	-6.63	124.62	128.60
1	A	1590	C	C2-N1-C1'	6.63	126.09	118.80
1	A	730	U	O4'-C1'-N1	6.62	113.50	108.20
1	A	2582	G	C5-C6-O6	-6.62	124.62	128.60
1	A	1854	G	O4'-C1'-N9	6.62	113.50	108.20
1	A	1958	G	C5-C6-O6	-6.62	124.63	128.60
1	A	2100	A	C5-C6-N1	-6.62	114.39	117.70
1	A	2122	G	O4'-C1'-N9	6.62	113.50	108.20
1	A	614	G	C5-C6-O6	-6.62	124.63	128.60
1	A	2611	G	C5-C6-O6	-6.62	124.63	128.60
1	A	84	A	O4'-C1'-N9	6.62	113.50	108.20
1	A	2232	G	C5-C6-O6	-6.62	124.63	128.60
1	A	2522	U	O4'-C1'-N1	6.62	113.50	108.20
1	A	1594	G	C5-C6-O6	-6.62	124.63	128.60
1	A	2601	A	C4-C5-C6	6.62	120.31	117.00
1	A	2882	G	C5-C6-O6	-6.62	124.63	128.60
1	A	52	A	C5-C6-N1	-6.62	114.39	117.70
1	A	75	G	O4'-C1'-N9	6.62	113.49	108.20
1	A	1671	G	C5-C6-O6	-6.62	124.63	128.60
1	A	1689	U	O4'-C1'-N1	6.62	113.49	108.20
1	A	2916	A	C5-C6-N1	-6.62	114.39	117.70
1	A	728	G	O4'-C1'-N9	6.61	113.49	108.20
1	A	1220	G	C5-C6-O6	-6.61	124.63	128.60
1	A	2455	A	C4-C5-C6	6.61	120.31	117.00
1	A	2588	C	O4'-C1'-N1	6.61	113.49	108.20
1	A	2817	C	P-O5'-C5'	6.61	131.48	120.90
1	A	383	U	O4'-C1'-N1	6.61	113.49	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	413	U	O4'-C1'-N1	6.61	113.49	108.20
1	A	781	A	C4-C5-C6	6.61	120.31	117.00
1	A	1090	U	O4'-C1'-N1	6.61	113.49	108.20
1	A	2455	A	P-O3'-C3'	6.61	127.63	119.70
1	A	946	G	O4'-C1'-N9	6.61	113.49	108.20
1	A	1078	A	O4'-C1'-N9	6.61	113.49	108.20
1	A	1399	G	C5-C6-O6	-6.61	124.63	128.60
1	A	140	A	C4-C5-C6	6.61	120.30	117.00
1	A	220	A	O4'-C1'-N9	6.61	113.49	108.20
1	A	2763	C	N3-C4-N4	6.61	122.62	118.00
1	A	574	A	C4-C5-C6	6.61	120.30	117.00
1	A	1477	A	O4'-C1'-N9	6.61	113.48	108.20
1	A	1850	A	O4'-C1'-N9	6.60	113.48	108.20
1	A	293	U	O4'-C1'-N1	6.60	113.48	108.20
1	A	1275	G	C5-C6-O6	-6.60	124.64	128.60
1	A	1407	G	O4'-C1'-N9	6.60	113.48	108.20
1	A	661	A	C4-C5-C6	6.60	120.30	117.00
1	A	716	G	C5-C6-O6	-6.60	124.64	128.60
1	A	1552	C	O4'-C1'-N1	6.60	113.48	108.20
1	A	2181	C	O4'-C1'-N1	6.60	113.48	108.20
1	A	2250	G	O4'-C1'-N9	6.60	113.48	108.20
1	A	446	G	C5-C6-O6	-6.60	124.64	128.60
1	A	559	A	O4'-C1'-N9	6.60	113.48	108.20
1	A	682	G	C5-C6-O6	-6.60	124.64	128.60
1	A	848	G	C5-C6-O6	-6.60	124.64	128.60
1	A	2189	G	C5-C6-O6	-6.60	124.64	128.60
1	A	2744	C	N3-C4-C5	-6.60	119.26	121.90
1	A	2876	A	C4-C5-C6	6.60	120.30	117.00
1	A	1634	U	O4'-C1'-N1	6.60	113.48	108.20
1	A	2053	C	O4'-C1'-N1	6.60	113.48	108.20
1	A	2420	G	C5-C6-O6	-6.60	124.64	128.60
1	A	236	A	O4'-C1'-N9	6.59	113.47	108.20
1	A	736	A	C5-C6-N6	-6.59	118.42	123.70
1	A	1066	A	O4'-C1'-N9	6.59	113.47	108.20
1	A	2465	G	C5-C6-O6	-6.59	124.64	128.60
1	A	2691	A	C4-C5-C6	6.59	120.30	117.00
1	A	497	G	C5-C6-O6	-6.59	124.64	128.60
1	A	1950	G	O4'-C1'-N9	6.59	113.47	108.20
1	A	1792	G	C5-C6-O6	-6.59	124.65	128.60
1	A	2831	A	C4-C5-C6	6.59	120.29	117.00
1	A	419	G	C5-C6-O6	-6.59	124.65	128.60
1	A	10	A	C5-C6-N6	-6.59	118.43	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	45	G	C5-C6-O6	-6.59	124.65	128.60
1	A	1622	C	O4'-C1'-N1	6.59	113.47	108.20
1	A	2442	G	C5-C6-O6	-6.59	124.65	128.60
1	A	572	A	O4'-C1'-N9	6.58	113.47	108.20
1	A	1134	A	O4'-C1'-N9	6.58	113.47	108.20
1	A	1963	C	O4'-C1'-N1	6.58	113.47	108.20
1	A	2917	G	C5-C6-O6	-6.58	124.65	128.60
1	A	454	G	C5-C6-O6	-6.58	124.65	128.60
1	A	792	G	C5-C6-O6	-6.58	124.65	128.60
1	A	1276	G	C5-C6-O6	-6.58	124.65	128.60
1	A	330	A	O4'-C1'-N9	6.58	113.46	108.20
1	A	361	G	C5-C6-O6	-6.58	124.65	128.60
1	A	555	C	O4'-C1'-N1	6.58	113.46	108.20
1	A	825	G	O4'-C1'-N9	6.58	113.46	108.20
1	A	1343	C	N3-C4-N4	6.58	122.60	118.00
1	A	2002	G	C5-C6-O6	-6.58	124.65	128.60
1	A	2531	G	C5-C6-O6	-6.58	124.65	128.60
1	A	2627	A	C4-C5-C6	6.58	120.29	117.00
1	A	1631	A	O4'-C1'-N9	6.58	113.46	108.20
1	A	2834	A	O4'-C1'-N9	6.58	113.46	108.20
1	A	749	G	O4'-C1'-N9	6.58	113.46	108.20
1	A	880	C	O4'-C1'-N1	6.58	113.46	108.20
1	A	126	A	C5-C6-N1	-6.57	114.41	117.70
1	A	406	G	C5-C6-O6	-6.57	124.66	128.60
1	A	969	C	N3-C4-C5	-6.57	119.27	121.90
1	A	1278	G	C5-C6-O6	-6.57	124.66	128.60
1	A	1797	A	O4'-C1'-N9	6.57	113.46	108.20
1	A	2726	G	C5-C6-O6	-6.57	124.66	128.60
1	A	1190	A	O4'-C1'-N9	6.57	113.46	108.20
1	A	2134	A	C5-C6-N6	-6.57	118.44	123.70
1	A	329	A	C5-C6-N1	-6.57	114.41	117.70
1	A	997	C	N3-C4-N4	6.57	122.60	118.00
1	A	1397	G	O4'-C1'-N9	6.57	113.46	108.20
1	A	846	G	C5-C6-O6	-6.57	124.66	128.60
1	A	1031	C	N3-C4-N4	6.57	122.60	118.00
1	A	1313	A	C4-C5-C6	6.57	120.28	117.00
1	A	1432	A	O4'-C1'-N9	6.57	113.45	108.20
1	A	1471	G	C5-C6-O6	-6.57	124.66	128.60
1	A	1490	A	O4'-C1'-N9	6.57	113.45	108.20
1	A	1687	G	O4'-C1'-N9	6.57	113.45	108.20
1	A	1720	C	O4'-C1'-N1	6.57	113.45	108.20
1	A	2015	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(^{o})	Ideal(^{o})
1	A	2867	U	O4'-C1'-N1	6.57	113.45	108.20
1	A	343	A	C4-C5-C6	6.57	120.28	117.00
1	A	823	G	C5-C6-O6	-6.57	124.66	128.60
1	A	1536	A	C4-C5-C6	6.57	120.28	117.00
1	A	2764	G	C5-C6-O6	-6.57	124.66	128.60
1	A	1208	G	C5-C6-O6	-6.56	124.66	128.60
1	A	1831	A	C5-C6-N1	-6.56	114.42	117.70
1	A	1157	A	C4-C5-C6	6.56	120.28	117.00
1	A	1269	A	O4'-C1'-N9	6.56	113.45	108.20
1	A	1637	G	C5-C6-O6	-6.56	124.66	128.60
1	A	2170	A	C5-C6-N6	-6.56	118.45	123.70
1	A	853	C	O4'-C1'-N1	6.56	113.45	108.20
1	A	865	G	C5-C6-O6	-6.56	124.66	128.60
1	A	1440	G	O4'-C1'-N9	6.56	113.45	108.20
1	A	1254	A	C4-C5-C6	6.56	120.28	117.00
1	A	611	U	O4'-C1'-N1	6.55	113.44	108.20
1	A	1445	A	C4-C5-C6	6.55	120.28	117.00
1	A	2100	A	C4-C5-C6	6.55	120.28	117.00
1	A	2889	A	C5-C6-N1	-6.55	114.42	117.70
1	A	102	A	C4-C5-C6	6.55	120.28	117.00
1	A	1252	G	C5-C6-O6	-6.55	124.67	128.60
1	A	2020	U	O4'-C1'-N1	6.55	113.44	108.20
1	A	2718	U	O4'-C1'-N1	6.55	113.44	108.20
1	A	2817	C	O4'-C1'-N1	6.55	113.44	108.20
1	A	1512	G	C5-C6-O6	-6.55	124.67	128.60
1	A	2835	A	C4-C5-C6	6.55	120.28	117.00
1	A	2925	C	N3-C4-N4	6.55	122.58	118.00
1	A	1455	C	P-O5'-C5'	6.55	131.38	120.90
1	A	1415	C	N3-C4-N4	6.55	122.58	118.00
1	A	1763	G	O4'-C1'-N9	6.55	113.44	108.20
1	A	291	C	O4'-C1'-N1	6.54	113.44	108.20
1	A	489	G	C5-C6-O6	-6.54	124.67	128.60
1	A	666	G	C5-C6-O6	-6.54	124.67	128.60
1	A	2439	G	C5-C6-O6	-6.54	124.67	128.60
1	A	2474	G	O4'-C1'-N9	6.54	113.44	108.20
1	A	620	U	O4'-C1'-N1	6.54	113.44	108.20
1	A	769	A	C5-C6-N1	-6.54	114.43	117.70
1	A	1680	A	C4-C5-C6	6.54	120.27	117.00
1	A	458	G	C5-C6-O6	-6.54	124.67	128.60
1	A	1152	G	C5-C6-O6	-6.54	124.68	128.60
1	A	1472	G	C5-C6-O6	-6.54	124.67	128.60
1	A	1557	G	C5-C6-O6	-6.54	124.67	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2188	G	C5-C6-O6	-6.54	124.67	128.60
1	A	2198	G	N1-C6-O6	6.54	123.83	119.90
1	A	198	A	O4'-C1'-N9	6.54	113.43	108.20
1	A	434	U	O4'-C1'-N1	6.54	113.43	108.20
1	A	1339	A	C4-C5-C6	6.54	120.27	117.00
1	A	2847	G	C5-C6-O6	-6.54	124.68	128.60
1	A	224	A	C4-C5-C6	6.54	120.27	117.00
1	A	892	U	O4'-C1'-N1	6.54	113.43	108.20
1	A	1249	U	O4'-C1'-N1	6.54	113.43	108.20
10	Q	45	TYR	CB-CG-CD1	-6.54	117.08	121.00
1	A	2671	G	C5-C6-O6	-6.54	124.68	128.60
1	A	1234	G	O4'-C1'-N9	6.54	113.43	108.20
1	A	2570	A	C4-C5-C6	6.54	120.27	117.00
1	A	351	G	C5-C6-O6	-6.53	124.68	128.60
1	A	1475	G	O4'-C1'-N9	6.53	113.43	108.20
1	A	2039	G	C5-C6-O6	-6.53	124.68	128.60
1	A	2130	G	C5-C6-O6	-6.53	124.68	128.60
1	A	2857	U	O4'-C1'-N1	6.53	113.43	108.20
1	A	123	G	C5-C6-O6	-6.53	124.68	128.60
1	A	160	G	C5-C6-O6	-6.53	124.68	128.60
1	A	201	C	N3-C4-N4	6.53	122.57	118.00
1	A	305	A	O4'-C1'-N9	6.53	113.42	108.20
1	A	747	G	C5-C6-O6	-6.53	124.68	128.60
1	A	1601	A	C4-C5-C6	6.53	120.27	117.00
1	A	2855	G	O4'-C1'-N9	6.53	113.42	108.20
1	A	54	G	C5-C6-O6	-6.53	124.68	128.60
1	A	815	G	O4'-C1'-N9	6.53	113.42	108.20
1	A	1685	A	O4'-C1'-N9	6.53	113.42	108.20
1	A	2242	U	O4'-C1'-N1	6.53	113.42	108.20
1	A	2667	G	C5-C6-O6	-6.53	124.68	128.60
1	A	737	C	N3-C4-N4	6.53	122.57	118.00
1	A	1452	C	O4'-C1'-N1	6.53	113.42	108.20
1	A	2212	C	N3-C4-N4	6.53	122.57	118.00
1	A	2854	A	C5-C6-N1	-6.53	114.44	117.70
1	A	296	G	C5-C6-O6	-6.53	124.68	128.60
1	A	1255	G	O4'-C1'-N9	6.53	113.42	108.20
1	A	1280	G	C5-C6-O6	-6.53	124.69	128.60
1	A	1639	G	C5-C6-O6	-6.53	124.68	128.60
1	A	168	A	C4-C5-C6	6.52	120.26	117.00
1	A	295	G	C5-C6-O6	-6.52	124.69	128.60
1	A	510	G	C5-C6-O6	-6.52	124.69	128.60
1	A	640	C	N3-C4-N4	6.52	122.57	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1997	G	C5-C6-O6	-6.52	124.69	128.60
1	A	2900	A	C5-C6-N1	-6.52	114.44	117.70
1	A	150	A	C4-C5-C6	6.52	120.26	117.00
1	A	514	G	O4'-C1'-N9	6.52	113.42	108.20
1	A	1233	A	C4-C5-C6	6.52	120.26	117.00
1	A	53	A	O4'-C1'-N9	6.52	113.41	108.20
1	A	82	G	C5-C6-O6	-6.52	124.69	128.60
1	A	1758	U	O4'-C1'-N1	6.52	113.41	108.20
1	A	1801	G	C5-C6-O6	-6.52	124.69	128.60
1	A	55	G	O4'-C1'-N9	6.51	113.41	108.20
1	A	327	G	C5-C6-O6	-6.51	124.69	128.60
1	A	443	G	O4'-C1'-N9	6.51	113.41	108.20
1	A	946	G	C5-C6-O6	-6.51	124.69	128.60
1	A	1194	A	C4-C5-C6	6.51	120.26	117.00
1	A	1316	A	C4-C5-C6	6.51	120.26	117.00
1	A	146	U	O4'-C1'-N1	6.51	113.41	108.20
1	A	896	A	O4'-C1'-N9	6.51	113.41	108.20
1	A	1723	A	O4'-C1'-N9	6.51	113.41	108.20
1	A	2509	C	N3-C4-N4	6.51	122.56	118.00
1	A	2765	G	O4'-C1'-N9	6.51	113.41	108.20
1	A	37	C	O4'-C1'-N1	6.51	113.41	108.20
1	A	1744	G	C5-C6-O6	-6.51	124.69	128.60
1	A	1933	G	C5-C6-O6	-6.51	124.69	128.60
1	A	245	G	C5-C6-O6	-6.51	124.70	128.60
1	A	1395	C	N3-C4-N4	6.51	122.55	118.00
1	A	428	A	O4'-C1'-N9	6.50	113.40	108.20
1	A	1315	G	P-O3'-C3'	6.50	127.51	119.70
1	A	549	A	C5-C6-N6	-6.50	118.50	123.70
1	A	2859	G	C5-C6-O6	-6.50	124.70	128.60
1	A	998	G	P-O5'-C5'	6.50	131.30	120.90
1	A	1672	A	O4'-C1'-N9	6.50	113.40	108.20
1	A	1679	A	C5-C6-N6	-6.50	118.50	123.70
1	A	1848	A	C5-C6-N6	-6.50	118.50	123.70
1	A	2001	G	C5-C6-O6	-6.50	124.70	128.60
9	P	74	PHE	CB-CG-CD2	-6.50	116.25	120.80
1	A	669	C	P-O5'-C5'	6.50	131.30	120.90
1	A	407	A	C5-C6-N6	-6.50	118.50	123.70
1	A	1257	C	N3-C4-N4	6.50	122.55	118.00
1	A	2195	G	C5-C6-O6	-6.50	124.70	128.60
1	A	1723	A	C4-C5-C6	6.50	120.25	117.00
1	A	2680	C	N3-C4-N4	6.50	122.55	118.00
1	A	1640	G	C5-C6-O6	-6.49	124.70	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2085	G	C5-C6-O6	-6.49	124.70	128.60
1	A	2139	G	C5-C6-O6	-6.49	124.70	128.60
1	A	2717	G	N1-C6-O6	6.49	123.80	119.90
1	A	1812	A	O4'-C1'-N9	6.49	113.39	108.20
1	A	2845	A	C4-C5-C6	6.49	120.25	117.00
1	A	217	G	C5-C6-O6	-6.49	124.71	128.60
1	A	395	C	O4'-C1'-N1	6.49	113.39	108.20
1	A	578	A	C4-C5-C6	6.49	120.25	117.00
1	A	1749	G	C5-C6-O6	-6.49	124.71	128.60
1	A	2149	G	P-O5'-C5'	6.49	131.28	120.90
1	A	2688	G	C5-C6-O6	-6.49	124.71	128.60
1	A	524	A	C4-C5-C6	6.49	120.24	117.00
1	A	1303	U	O4'-C1'-N1	6.49	113.39	108.20
1	A	2161	G	C5-C6-O6	-6.49	124.71	128.60
1	A	2270	A	C5-C6-N1	-6.49	114.45	117.70
1	A	2774	C	N3-C4-N4	6.49	122.54	118.00
1	A	142	G	C5-C6-O6	-6.49	124.71	128.60
1	A	1268	G	P-O3'-C3'	-6.49	111.92	119.70
1	A	1408	G	C5-C6-O6	-6.49	124.71	128.60
1	A	1568	G	C5-C6-O6	-6.49	124.71	128.60
1	A	2064	G	C5-C6-O6	-6.49	124.71	128.60
1	A	1183	G	C5-C6-O6	-6.48	124.71	128.60
1	A	133	A	C5-C6-N6	-6.48	118.51	123.70
1	A	932	C	O4'-C1'-N1	6.48	113.39	108.20
1	A	1709	A	C5-C6-N6	-6.48	118.51	123.70
1	A	2475	G	O4'-C1'-N9	6.48	113.39	108.20
1	A	2889	A	O4'-C1'-N9	6.48	113.39	108.20
1	A	931	C	N3-C4-N4	6.48	122.54	118.00
1	A	1294	A	C4-C5-C6	6.48	120.24	117.00
1	A	2594	A	C4-C5-C6	6.48	120.24	117.00
1	A	257	G	N3-C2-N2	6.48	124.44	119.90
1	A	1067	A	C8-N9-C4	-6.48	103.21	105.80
1	A	1838	A	C4-C5-C6	6.48	120.24	117.00
1	A	1619	A	C4-C5-C6	6.48	120.24	117.00
1	A	1619	A	O4'-C1'-N9	6.48	113.38	108.20
1	A	2604	C	N3-C4-N4	6.48	122.53	118.00
1	A	1950	G	C5-C6-O6	-6.48	124.71	128.60
1	A	2807	A	C4-C5-C6	6.48	120.24	117.00
1	A	19	G	O4'-C1'-N9	6.47	113.38	108.20
1	A	149	U	O4'-C1'-N1	6.47	113.38	108.20
1	A	929	G	C5-C6-O6	-6.47	124.72	128.60
1	A	983	U	O4'-C1'-N1	6.47	113.38	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1643	C	N3-C4-N4	6.47	122.53	118.00
1	A	1643	C	O4'-C1'-N1	6.47	113.38	108.20
1	A	1714	A	C5-C6-N1	-6.47	114.46	117.70
1	A	2883	C	C6-N1-C1'	-6.47	113.03	120.80
1	A	359	C	N3-C4-N4	6.47	122.53	118.00
1	A	2782	A	C4-C5-C6	6.47	120.24	117.00
1	A	1104	U	O4'-C1'-N1	6.47	113.38	108.20
1	A	1444	C	N3-C4-C5	-6.47	119.31	121.90
1	A	2237	C	N3-C4-N4	6.47	122.53	118.00
1	A	2484	G	C5-C6-O6	-6.47	124.72	128.60
1	A	2663	A	O4'-C1'-N9	6.47	113.38	108.20
1	A	2813	U	O4'-C1'-N1	6.47	113.38	108.20
1	A	1590	C	N3-C4-N4	6.47	122.53	118.00
1	A	2095	C	N3-C4-C5	-6.47	119.31	121.90
1	A	1586	G	O4'-C1'-N9	6.47	113.37	108.20
1	A	2794	A	C4-C5-C6	6.47	120.23	117.00
1	A	749	G	C5-C6-O6	-6.47	124.72	128.60
1	A	868	A	C4-C5-C6	6.47	120.23	117.00
1	A	1171	G	C5-C6-O6	-6.47	124.72	128.60
1	A	1621	G	C5-C6-O6	-6.47	124.72	128.60
1	A	499	G	C5-C6-O6	-6.46	124.72	128.60
1	A	1078	A	C4-C5-C6	6.46	120.23	117.00
1	A	1444	C	N3-C4-N4	6.46	122.53	118.00
1	A	1712	G	O4'-C1'-N9	6.46	113.37	108.20
1	A	2797	C	N3-C4-N4	6.46	122.53	118.00
1	A	49	A	C4-C5-C6	6.46	120.23	117.00
1	A	139	A	C4-C5-C6	6.46	120.23	117.00
1	A	2579	G	C5-C6-O6	-6.46	124.72	128.60
1	A	1732	G	C5-C6-O6	-6.46	124.72	128.60
1	A	2485	C	N3-C4-N4	6.46	122.52	118.00
1	A	1487	G	P-O3'-C3'	6.46	127.45	119.70
1	A	478	U	O4'-C1'-N1	6.46	113.36	108.20
1	A	985	G	C5-C6-O6	-6.46	124.73	128.60
1	A	1600	G	C5-C6-O6	-6.46	124.73	128.60
1	A	2887	A	O4'-C1'-N9	6.46	113.37	108.20
1	A	1242	U	O4'-C1'-N1	6.46	113.36	108.20
1	A	2748	G	O4'-C1'-N9	6.46	113.36	108.20
1	A	2887	A	C4-C5-C6	6.46	120.23	117.00
1	A	254	A	C4-C5-C6	6.45	120.23	117.00
1	A	1532	A	C5-C6-N6	-6.45	118.54	123.70
1	A	2598	G	O4'-C1'-N9	6.45	113.36	108.20
1	A	257	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(^{o})	Ideal(^{o})
1	A	2740	A	O4'-C1'-N9	6.45	113.36	108.20
1	A	1312	A	C5-C6-N6	-6.45	118.54	123.70
1	A	1768	A	C4-C5-C6	6.45	120.22	117.00
1	A	2628	G	O4'-C1'-N9	6.45	113.36	108.20
1	A	2755	U	C2-N1-C1'	6.45	125.44	117.70
1	A	538	A	C4-C5-C6	6.45	120.22	117.00
1	A	783	C	P-O5'-C5'	6.45	131.22	120.90
1	A	2197	G	C5-C6-O6	-6.45	124.73	128.60
1	A	2669	G	O4'-C1'-N9	6.45	113.36	108.20
1	A	2743	G	C5-C6-O6	-6.45	124.73	128.60
1	A	262	G	O4'-C1'-N9	6.45	113.36	108.20
1	A	2038	G	C5-C6-O6	-6.45	124.73	128.60
1	A	67	A	C5-C6-N6	-6.45	118.54	123.70
1	A	1000	G	C5-C6-O6	-6.45	124.73	128.60
1	A	2588	C	N3-C4-N4	6.45	122.51	118.00
1	A	202	A	O4'-C1'-N9	6.44	113.36	108.20
1	A	2660	G	P-O5'-C5'	6.44	131.21	120.90
1	A	374	A	O4'-C1'-N9	6.44	113.35	108.20
1	A	1412	A	C4-C5-C6	6.44	120.22	117.00
1	A	1453	A	C5-C6-N6	-6.44	118.55	123.70
1	A	1750	G	C5-C6-O6	-6.44	124.73	128.60
1	A	399	C	N3-C4-N4	6.44	122.51	118.00
1	A	719	C	N3-C4-N4	6.44	122.51	118.00
1	A	1618	A	P-O3'-C3'	6.44	127.43	119.70
1	A	2182	G	O4'-C1'-N9	6.44	113.35	108.20
1	A	2851	A	C4-C5-C6	6.44	120.22	117.00
1	A	1792	G	O4'-C1'-N9	6.44	113.35	108.20
1	A	2107	C	N3-C4-C5	-6.44	119.32	121.90
1	A	166	A	C4-C5-C6	6.44	120.22	117.00
1	A	1465	A	C4-C5-C6	6.44	120.22	117.00
1	A	1958	G	P-O3'-C3'	6.44	127.42	119.70
1	A	617	G	O4'-C1'-N9	6.44	113.35	108.20
1	A	283	G	O4'-C1'-N9	6.43	113.35	108.20
1	A	991	A	O4'-C1'-N9	6.43	113.35	108.20
1	A	1174	A	C4-C5-C6	6.43	120.22	117.00
1	A	1709	A	C4-C5-C6	6.43	120.22	117.00
1	A	2507	A	O4'-C1'-N9	6.43	113.35	108.20
1	A	2546	C	P-O3'-C3'	6.43	127.42	119.70
1	A	2769	A	C5-C6-N6	-6.43	118.55	123.70
1	A	376	A	C2'-C3'-O3'	6.43	123.99	113.70
1	A	468	C	N3-C4-C5	-6.43	119.33	121.90
1	A	496	A	C4-C5-C6	6.43	120.22	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	562	C	N3-C4-N4	6.43	122.50	118.00
1	A	746	A	O4'-C1'-N9	6.43	113.35	108.20
1	A	1197	A	O4'-C1'-N9	6.43	113.35	108.20
1	A	1292	G	C5-C6-O6	-6.43	124.74	128.60
1	A	1430	U	O4'-C1'-N1	6.43	113.35	108.20
1	A	1791	A	C4-C5-C6	6.43	120.22	117.00
1	A	625	C	N3-C4-N4	6.43	122.50	118.00
1	A	1002	G	C5-C6-O6	-6.43	124.74	128.60
1	A	1721	A	C5-C6-N6	-6.43	118.56	123.70
1	A	2886	C	O4'-C1'-N1	6.43	113.34	108.20
1	A	10	A	O4'-C1'-N9	6.43	113.34	108.20
1	A	305	A	C5-C6-N6	-6.43	118.56	123.70
1	A	1003	A	O4'-C1'-N9	6.43	113.34	108.20
1	A	1083	G	C5-C6-O6	-6.43	124.74	128.60
1	A	1509	C	N3-C4-C5	-6.43	119.33	121.90
1	A	2082	G	C5-C6-O6	-6.43	124.74	128.60
1	A	2477	A	C4-C5-C6	6.43	120.22	117.00
1	A	2626	G	C5-C6-O6	-6.43	124.74	128.60
1	A	145	G	C5-C6-O6	-6.43	124.74	128.60
1	A	1716	U	O4'-C1'-N1	6.43	113.34	108.20
1	A	2257	G	O4'-C1'-N9	6.43	113.34	108.20
1	A	546	G	C5-C6-O6	-6.42	124.75	128.60
1	A	783	C	N3-C4-N4	6.42	122.50	118.00
1	A	1626	U	O4'-C1'-N1	6.42	113.34	108.20
1	A	2511	A	C4-C5-C6	6.42	120.21	117.00
1	A	2665	U	O4'-C1'-N1	6.42	113.34	108.20
1	A	2751	G	O4'-C1'-N9	6.42	113.34	108.20
1	A	227	G	C5-C6-O6	-6.42	124.75	128.60
1	A	651	U	O4'-C1'-N1	6.42	113.34	108.20
1	A	895	G	C5-C6-O6	-6.42	124.75	128.60
1	A	18	C	O4'-C1'-N1	6.42	113.34	108.20
1	A	368	G	C5-C6-O6	-6.42	124.75	128.60
1	A	866	A	C5-C6-N1	-6.42	114.49	117.70
1	A	899	C	N3-C4-N4	6.42	122.50	118.00
1	A	978	A	C4-C5-C6	6.42	120.21	117.00
1	A	1630	G	O4'-C1'-N9	6.42	113.34	108.20
1	A	552	G	C5-C6-O6	-6.42	124.75	128.60
1	A	64	A	C4-C5-C6	6.42	120.21	117.00
1	A	1084	A	C4-C5-C6	6.42	120.21	117.00
1	A	1405	A	O4'-C1'-N9	6.42	113.33	108.20
1	A	1778	A	C5-C6-N1	-6.42	114.49	117.70
1	A	1861	C	C2'-C3'-O3'	6.42	123.97	113.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	475	A	O3'-P-O5'	-6.42	91.81	104.00
1	A	661	A	O4'-C1'-N9	6.42	113.33	108.20
1	A	964	A	C4-C5-C6	6.42	120.21	117.00
1	A	272	C	O4'-C1'-N1	6.42	113.33	108.20
1	A	1264	G	C5-C6-O6	-6.42	124.75	128.60
1	A	1784	A	C5-C6-N6	-6.42	118.57	123.70
1	A	2075	G	O4'-C1'-N9	6.42	113.33	108.20
1	A	2780	G	O4'-C1'-N9	6.42	113.33	108.20
1	A	1205	U	O4'-C1'-N1	6.41	113.33	108.20
1	A	1405	A	C4-C5-C6	6.41	120.21	117.00
1	A	2239	U	O4'-C1'-N1	6.41	113.33	108.20
1	A	2738	G	C5-C6-O6	-6.41	124.75	128.60
1	A	2920	C	N3-C4-C5	-6.41	119.33	121.90
1	A	178	A	C4-C5-C6	6.41	120.21	117.00
1	A	208	G	C5-C6-O6	-6.41	124.75	128.60
1	A	1222	A	C5-C6-N6	-6.41	118.57	123.70
1	A	1686	A	C5-C6-N1	-6.41	114.49	117.70
1	A	352	G	C5-C6-O6	-6.41	124.75	128.60
1	A	479	A	O4'-C1'-N9	6.41	113.33	108.20
1	A	1648	A	O4'-C1'-N9	6.41	113.33	108.20
1	A	1656	C	N3-C4-C5	-6.41	119.34	121.90
1	A	1701	C	N3-C4-N4	6.41	122.49	118.00
1	A	2254	A	C5-C6-N1	-6.41	114.50	117.70
1	A	1244	A	C5-C6-N6	-6.41	118.58	123.70
1	A	1360	A	C4-C5-C6	6.41	120.20	117.00
1	A	304	G	C5-C6-O6	-6.41	124.76	128.60
1	A	900	U	O4'-C1'-N1	6.41	113.32	108.20
1	A	1065	U	O4'-C1'-N1	6.41	113.33	108.20
1	A	2494	C	N3-C4-N4	6.41	122.48	118.00
1	A	2598	G	C5-C6-O6	-6.41	124.76	128.60
1	A	2850	G	C5-C6-O6	-6.41	124.76	128.60
1	A	2123	A	C4-C5-C6	6.40	120.20	117.00
1	A	2805	A	C4-C5-C6	6.40	120.20	117.00
1	A	83	G	O4'-C1'-N9	6.40	113.32	108.20
1	A	378	C	O4'-C1'-N1	6.40	113.32	108.20
1	A	984	G	O4'-C1'-N9	6.40	113.32	108.20
1	A	27	G	P-O3'-C3'	6.40	127.38	119.70
1	A	48	G	O4'-C1'-N9	6.40	113.32	108.20
1	A	256	C	N3-C4-N4	6.40	122.48	118.00
1	A	1177	G	O4'-C1'-N9	6.40	113.32	108.20
1	A	1322	G	C5-C6-O6	-6.40	124.76	128.60
1	A	1809	A	C4-C5-C6	6.40	120.20	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1845	A	C4-C5-C6	6.40	120.20	117.00
1	A	2610	G	C5-C6-O6	-6.40	124.76	128.60
1	A	2782	A	C5-C6-N6	-6.40	118.58	123.70
1	A	91	A	C4-C5-C6	6.40	120.20	117.00
1	A	2870	G	O4'-C1'-N9	6.40	113.32	108.20
1	A	790	A	C5-C6-N1	-6.40	114.50	117.70
1	A	1731	C	O4'-C1'-N1	6.40	113.32	108.20
1	A	2037	C	N3-C4-N4	6.40	122.48	118.00
1	A	438	A	C4-C5-C6	6.40	120.20	117.00
1	A	1398	A	C4-C5-C6	6.39	120.20	117.00
1	A	2129	G	C5-C6-O6	-6.39	124.76	128.60
1	A	108	A	C4-C5-C6	6.39	120.20	117.00
1	A	433	G	C5-C6-O6	-6.39	124.76	128.60
1	A	1563	G	C5-C6-O6	-6.39	124.76	128.60
1	A	1591	G	N1-C6-O6	6.39	123.73	119.90
1	A	2764	G	O4'-C1'-N9	6.39	113.31	108.20
1	A	630	A	C5-C6-N1	-6.39	114.50	117.70
1	A	593	A	O4'-C1'-N9	6.39	113.31	108.20
1	A	2173	G	O4'-C1'-N9	6.39	113.31	108.20
1	A	2627	A	C5-C6-N1	-6.39	114.50	117.70
1	A	1740	G	C5-C6-O6	-6.39	124.77	128.60
1	A	291	C	N3-C4-N4	6.39	122.47	118.00
1	A	605	G	C5-C6-O6	-6.39	124.77	128.60
1	A	980	C	N3-C4-C5	-6.39	119.34	121.90
1	A	1210	A	C4-C5-C6	6.39	120.19	117.00
1	A	1776	A	C5-C6-N1	-6.39	114.51	117.70
1	A	2141	A	C4-C5-C6	6.39	120.19	117.00
1	A	2568	C	N3-C4-C5	-6.39	119.35	121.90
1	A	229	A	C5-C6-N1	-6.38	114.51	117.70
1	A	456	A	O4'-C1'-N9	6.38	113.31	108.20
1	A	646	A	C5-C6-N1	-6.38	114.51	117.70
1	A	1103	A	C4-C5-C6	6.38	120.19	117.00
1	A	1192	G	O4'-C1'-N9	6.38	113.31	108.20
1	A	2597	C	N3-C4-N4	6.38	122.47	118.00
1	A	721	G	O4'-C1'-N9	6.38	113.31	108.20
1	A	729	G	C5-C6-O6	-6.38	124.77	128.60
1	A	1850	A	C5-C6-N1	-6.38	114.51	117.70
1	A	2267	G	C4-N9-C1'	6.38	134.79	126.50
1	A	2488	A	C5-C6-N6	-6.38	118.60	123.70
1	A	891	G	C5-C6-O6	-6.38	124.77	128.60
1	A	1541	A	C4-C5-C6	6.38	120.19	117.00
1	A	1764	U	O4'-C1'-N1	6.38	113.30	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1942	A	C4-C5-C6	6.38	120.19	117.00
1	A	2096	G	O4'-C1'-N9	6.38	113.30	108.20
1	A	2758	G	O4'-C1'-N9	6.38	113.30	108.20
1	A	2860	A	C5-C6-N6	-6.38	118.60	123.70
1	A	61	A	O4'-C1'-N9	6.38	113.30	108.20
1	A	252	C	O4'-C1'-N1	6.38	113.30	108.20
1	A	391	A	O4'-C1'-N9	6.38	113.30	108.20
1	A	966	U	O4'-C1'-N1	6.38	113.30	108.20
1	A	1791	A	C5-C6-N6	-6.38	118.60	123.70
1	A	2848	A	C4-C5-C6	6.38	120.19	117.00
1	A	45	G	P-O5'-C5'	6.37	131.10	120.90
1	A	925	A	C4-C5-C6	6.37	120.19	117.00
1	A	1388	A	C4-C5-C6	6.37	120.19	117.00
1	A	47	C	N3-C4-N4	6.37	122.46	118.00
1	A	225	A	C4-C5-C6	6.37	120.19	117.00
1	A	258	A	C4-C5-C6	6.37	120.19	117.00
1	A	328	G	C5-C6-O6	-6.37	124.78	128.60
1	A	83	G	C5-C6-O6	-6.37	124.78	128.60
1	A	222	A	C5-C6-N6	-6.37	118.61	123.70
1	A	523	G	C5-C6-O6	-6.37	124.78	128.60
1	A	867	A	C4-C5-C6	6.37	120.18	117.00
1	A	1123	A	C5-C6-N1	-6.37	114.52	117.70
1	A	1935	G	C5-C6-O6	-6.37	124.78	128.60
1	A	2459	A	C4-C5-C6	6.37	120.18	117.00
1	A	2624	G	O4'-C1'-N9	6.37	113.30	108.20
1	A	1961	A	O4'-C1'-N9	6.37	113.29	108.20
1	A	2042	A	C4-C5-C6	6.37	120.18	117.00
1	A	1032	C	N3-C4-N4	6.37	122.45	118.00
1	A	1480	A	C5-C6-N6	-6.37	118.61	123.70
1	A	2778	A	C4-C5-C6	6.37	120.18	117.00
1	A	288	C	N3-C4-N4	6.36	122.45	118.00
1	A	316	G	C5-C6-O6	-6.36	124.78	128.60
1	A	1337	C	N3-C4-N4	6.36	122.45	118.00
1	A	1511	C	N3-C4-N4	6.36	122.45	118.00
1	A	1658	G	P-O3'-C3'	6.36	127.33	119.70
1	A	2124	A	C5-C6-N6	-6.36	118.61	123.70
1	A	2759	C	N3-C4-N4	6.36	122.45	118.00
1	A	2796	C	N3-C4-N4	6.36	122.45	118.00
1	A	1385	G	O4'-C1'-N9	6.36	113.29	108.20
1	A	773	G	C5-C6-O6	-6.36	124.78	128.60
1	A	911	G	O4'-C1'-N9	6.36	113.29	108.20
1	A	396	G	C5-C6-O6	-6.36	124.79	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	648	G	O4'-C1'-N9	6.36	113.29	108.20
1	A	653	A	C5-C6-N1	-6.36	114.52	117.70
1	A	928	G	C5-C6-O6	-6.36	124.79	128.60
1	A	185	A	C4-C5-C6	6.36	120.18	117.00
1	A	233	G	O4'-C1'-N9	6.36	113.28	108.20
1	A	340	U	O4'-C1'-N1	6.36	113.28	108.20
1	A	1092	A	C4-C5-C6	6.36	120.18	117.00
1	A	1000	G	O4'-C1'-N9	6.35	113.28	108.20
1	A	1652	C	N3-C4-N4	6.35	122.45	118.00
1	A	2200	A	C4-C5-C6	6.35	120.18	117.00
1	A	974	A	C5-C6-N1	-6.35	114.52	117.70
1	A	1291	A	C4-C5-C6	6.35	120.18	117.00
1	A	1302	A	C4-C5-C6	6.35	120.18	117.00
1	A	1416	G	C5-C6-O6	-6.35	124.79	128.60
1	A	1424	A	C5-C6-N1	-6.35	114.52	117.70
1	A	2163	A	O4'-C1'-N9	6.35	113.28	108.20
1	A	374	A	C4-C5-C6	6.35	120.17	117.00
1	A	341	G	O4'-C1'-N9	6.35	113.28	108.20
1	A	543	A	O4'-C1'-N9	6.35	113.28	108.20
1	A	2087	A	C4-C5-C6	6.35	120.17	117.00
1	A	2837	A	C5-C6-N1	-6.35	114.53	117.70
1	A	1280	G	N3-C2-N2	6.35	124.34	119.90
1	A	2656	G	C5-C6-O6	-6.35	124.79	128.60
1	A	837	U	O4'-C1'-N1	6.35	113.28	108.20
1	A	1334	C	N3-C4-C5	-6.35	119.36	121.90
1	A	1477	A	C4-C5-C6	6.35	120.17	117.00
1	A	257	G	O4'-C1'-N9	6.34	113.28	108.20
1	A	1058	U	O4'-C1'-N1	6.34	113.28	108.20
1	A	1695	A	C5-C6-N1	-6.34	114.53	117.70
1	A	1177	G	C4-N9-C1'	6.34	134.75	126.50
1	A	1584	U	O4'-C1'-N1	6.34	113.28	108.20
1	A	2078	A	C5-C6-N1	-6.34	114.53	117.70
1	A	21	A	C5-C6-N1	-6.34	114.53	117.70
1	A	221	G	C5-C6-O6	-6.34	124.80	128.60
1	A	486	A	C4-C5-C6	6.34	120.17	117.00
1	A	1190	A	C5-C6-N6	-6.34	118.63	123.70
1	A	1662	C	O4'-C1'-N1	6.34	113.27	108.20
1	A	1672	A	C5-C6-N6	-6.34	118.63	123.70
1	A	2709	C	N3-C4-N4	6.34	122.44	118.00
1	A	125	A	C4-C5-C6	6.34	120.17	117.00
1	A	129	C	N3-C4-N4	6.34	122.44	118.00
1	A	582	A	C4-C5-C6	6.34	120.17	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	775	G	O4'-C1'-N9	6.34	113.27	108.20
1	A	2029	G	C5-C6-O6	-6.34	124.80	128.60
1	A	1253	A	C5-C6-N1	-6.34	114.53	117.70
1	A	1367	G	P-O3'-C3'	6.34	127.31	119.70
1	A	210	A	C4-C5-C6	6.34	120.17	117.00
1	A	890	G	O4'-C1'-N9	6.34	113.27	108.20
1	A	1587	U	O4'-C1'-N1	6.34	113.27	108.20
1	A	1653	A	C5-C6-N6	-6.34	118.63	123.70
1	A	2558	G	C5-C6-O6	-6.34	124.80	128.60
1	A	2493	C	N3-C4-N4	6.33	122.44	118.00
1	A	2868	G	O4'-C1'-N9	6.33	113.27	108.20
1	A	117	A	C4-C5-C6	6.33	120.17	117.00
1	A	1836	G	C5-C6-O6	-6.33	124.80	128.60
1	A	2793	A	C4-C5-C6	6.33	120.17	117.00
1	A	1042	A	C5-C6-N6	-6.33	118.63	123.70
1	A	2574	G	O4'-C1'-N9	6.33	113.27	108.20
1	A	2731	G	C5-C6-O6	-6.33	124.80	128.60
1	A	1108	G	C5-C6-O6	-6.33	124.80	128.60
1	A	513	A	O4'-C1'-N9	6.33	113.26	108.20
1	A	586	C	N3-C4-N4	6.33	122.43	118.00
1	A	1189	A	C4-C5-C6	6.33	120.16	117.00
1	A	1378	G	C5-C6-O6	-6.33	124.80	128.60
1	A	2149	G	C5-C6-O6	-6.33	124.80	128.60
1	A	2654	G	O4'-C1'-N9	6.33	113.26	108.20
1	A	1580	A	C5-C6-N1	-6.33	114.54	117.70
1	A	136	C	O4'-C1'-N1	6.33	113.26	108.20
1	A	204	C	N3-C4-N4	6.33	122.43	118.00
1	A	811	A	C4-C5-C6	6.33	120.16	117.00
1	A	1119	A	C4-C5-C6	6.33	120.16	117.00
1	A	1158	G	C5-C6-O6	-6.33	124.81	128.60
1	A	1997	G	O4'-C1'-N9	6.33	113.26	108.20
1	A	2136	C	O4'-C1'-N1	6.33	113.26	108.20
1	A	2226	U	O4'-C1'-N1	6.32	113.26	108.20
1	A	1357	A	C5-C6-N1	-6.32	114.54	117.70
1	A	2111	A	C4-C5-C6	6.32	120.16	117.00
1	A	2133	C	N3-C4-N4	6.32	122.42	118.00
1	A	2596	G	O4'-C1'-N9	6.32	113.26	108.20
1	A	178	A	C5-C6-N1	-6.32	114.54	117.70
1	A	208	G	P-O3'-C3'	6.32	127.28	119.70
1	A	649	G	C5-C6-O6	-6.32	124.81	128.60
1	A	2772	U	O4'-C1'-N1	6.32	113.25	108.20
1	A	1490	A	C5'-C4'-O4'	6.32	116.68	109.10

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2000	A	P-O3'-C3'	6.32	127.28	119.70
1	A	2606	A	C4-C5-C6	6.32	120.16	117.00
1	A	2832	G	P-O3'-C3'	6.32	127.28	119.70
1	A	2835	A	C5-C6-N1	-6.32	114.54	117.70
1	A	683	A	C4-C5-C6	6.31	120.16	117.00
1	A	1818	A	O4'-C1'-N9	6.31	113.25	108.20
1	A	275	A	C5'-C4'-O4'	6.31	116.67	109.10
1	A	1393	A	O4'-C1'-N9	6.31	113.25	108.20
1	A	1454	C	N3-C4-N4	6.31	122.42	118.00
1	A	2694	A	C4-C5-C6	6.31	120.16	117.00
1	A	126	A	C4-C5-C6	6.31	120.16	117.00
1	A	1046	A	C4-C5-C6	6.31	120.16	117.00
1	A	1776	A	C4-C5-C6	6.31	120.16	117.00
1	A	1397	G	N3-C2-N2	6.31	124.32	119.90
1	A	1562	A	C4-C5-C6	6.31	120.15	117.00
1	A	1714	A	O4'-C1'-N9	6.31	113.25	108.20
1	A	2514	G	O4'-C1'-N9	6.31	113.25	108.20
1	A	1555	A	C4-C5-C6	6.31	120.15	117.00
1	A	1618	A	O4'-C1'-N9	6.31	113.25	108.20
1	A	2893	A	C4-C5-C6	6.31	120.15	117.00
1	A	2831	A	O4'-C1'-N9	6.31	113.24	108.20
1	A	2710	C	N3-C4-C5	-6.30	119.38	121.90
1	A	953	G	O4'-C1'-N9	6.30	113.24	108.20
1	A	1377	G	C5-C6-O6	-6.30	124.82	128.60
1	A	2464	A	C4-C5-C6	6.30	120.15	117.00
1	A	937	C	P-O3'-C3'	6.30	127.26	119.70
1	A	1305	A	C4-C5-C6	6.30	120.15	117.00
1	A	1490	A	C4-C5-C6	6.30	120.15	117.00
1	A	2164	A	C5-C6-N6	-6.30	118.66	123.70
1	A	2762	A	C4-C5-C6	6.30	120.15	117.00
1	A	1285	G	O4'-C1'-N9	6.30	113.24	108.20
1	A	1945	A	P-O3'-C3'	6.30	127.26	119.70
1	A	17	G	O4'-C1'-N9	6.30	113.24	108.20
1	A	953	G	C5-C6-O6	-6.30	124.82	128.60
1	A	1284	A	C4-C5-C6	6.30	120.15	117.00
1	A	1627	A	C4-C5-C6	6.30	120.15	117.00
1	A	1939	G	O4'-C1'-N9	6.30	113.24	108.20
1	A	2427	U	O4'-C1'-N1	6.30	113.24	108.20
1	A	161	A	C4-C5-C6	6.29	120.15	117.00
1	A	250	G	C5-C6-O6	-6.29	124.82	128.60
1	A	376	A	C4-C5-C6	6.29	120.15	117.00
1	A	625	C	N3-C4-C5	-6.29	119.38	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1162	C	N3-C4-N4	6.29	122.41	118.00
1	A	1434	A	C4-C5-C6	6.29	120.15	117.00
1	A	1183	G	O4'-C1'-N9	6.29	113.23	108.20
1	A	1453	A	O4'-C1'-N9	6.29	113.23	108.20
1	A	2595	A	C4-C5-C6	6.29	120.15	117.00
1	A	2670	A	C4-C5-C6	6.29	120.15	117.00
1	A	527	A	C4-C5-C6	6.29	120.15	117.00
1	A	658	A	C4-C5-C6	6.29	120.15	117.00
1	A	1679	A	C4-C5-C6	6.29	120.15	117.00
1	A	1712	G	C5-C6-O6	-6.29	124.83	128.60
1	A	2527	C	N3-C4-N4	6.29	122.40	118.00
1	A	197	G	O4'-C1'-N9	6.29	113.23	108.20
1	A	1150	C	O4'-C1'-N1	6.29	113.23	108.20
1	A	2767	A	C4-C5-C6	6.29	120.14	117.00
1	A	448	A	C4-C5-C6	6.29	120.14	117.00
1	A	500	A	C4-C5-C6	6.29	120.14	117.00
1	A	894	A	C4-C5-C6	6.29	120.14	117.00
1	A	1034	A	C5-C6-N6	-6.29	118.67	123.70
1	A	2123	A	C5-C6-N1	-6.29	114.56	117.70
1	A	2593	A	O4'-C1'-N9	6.29	113.23	108.20
1	A	2922	U	O4'-C1'-N1	6.29	113.23	108.20
1	A	245	G	O4'-C1'-N9	6.29	113.23	108.20
1	A	699	A	O4'-C1'-N9	6.29	113.23	108.20
1	A	1785	G	O4'-C1'-N9	6.29	113.23	108.20
1	A	2913	U	O4'-C1'-N1	6.29	113.23	108.20
1	A	541	G	O4'-C1'-N9	6.29	113.23	108.20
1	A	740	A	C4-C5-C6	6.29	120.14	117.00
1	A	778	C	N3-C4-C5	-6.29	119.39	121.90
1	A	2241	A	C4-C5-C6	6.29	120.14	117.00
1	A	2651	C	P-O3'-C3'	-6.29	112.16	119.70
1	A	2779	A	C4-C5-C6	6.29	120.14	117.00
1	A	410	G	O4'-C1'-N9	6.28	113.23	108.20
1	A	622	A	C5-C6-N1	-6.28	114.56	117.70
1	A	742	G	O4'-C1'-N9	6.28	113.23	108.20
1	A	1553	A	O4'-C1'-N9	6.28	113.23	108.20
1	A	1646	G	O4'-C1'-N9	6.28	113.23	108.20
1	A	2613	U	C2-N1-C1'	6.28	125.24	117.70
1	A	723	A	C5-C6-N1	-6.28	114.56	117.70
1	A	2722	A	C5-C6-N1	-6.28	114.56	117.70
1	A	112	U	O4'-C1'-N1	6.28	113.22	108.20
1	A	1381	A	C5-C6-N1	-6.28	114.56	117.70
1	A	2216	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(^{o})	Ideal(^{o})
1	A	2488	A	C4-C5-C6	6.28	120.14	117.00
1	A	491	C	N3-C4-N4	6.28	122.39	118.00
1	A	692	A	C4-C5-C6	6.28	120.14	117.00
1	A	922	A	C4-C5-C6	6.28	120.14	117.00
1	A	2091	A	C4-C5-C6	6.28	120.14	117.00
1	A	517	A	C4-C5-C6	6.28	120.14	117.00
1	A	872	C	N3-C4-C5	-6.28	119.39	121.90
1	A	1026	A	C4-C5-C6	6.28	120.14	117.00
1	A	1419	G	C5-C6-O6	-6.28	124.83	128.60
1	A	1493	C	N3-C4-N4	6.28	122.39	118.00
1	A	2450	G	O4'-C1'-N9	6.28	113.22	108.20
1	A	2541	C	N3-C4-N4	6.28	122.39	118.00
1	A	935	A	C4-C5-C6	6.27	120.14	117.00
1	A	1034	A	C4-C5-C6	6.27	120.14	117.00
1	A	2502	U	C2-N1-C1'	6.27	125.23	117.70
1	A	235	G	C5-C6-O6	-6.27	124.84	128.60
1	A	238	U	P-O5'-C5'	6.27	130.94	120.90
1	A	1516	A	C4-C5-C6	6.27	120.14	117.00
1	A	2569	C	N3-C4-N4	6.27	122.39	118.00
1	A	2585	C	N3-C4-N4	6.27	122.39	118.00
1	A	2767	A	C5-C6-N6	-6.27	118.68	123.70
1	A	1149	A	C4-C5-C6	6.27	120.14	117.00
1	A	6	A	C5-C6-N1	-6.27	114.56	117.70
1	A	526	A	C5-C6-N6	-6.27	118.69	123.70
1	A	1845	A	O4'-C1'-N9	6.27	113.22	108.20
1	A	2445	C	O4'-C1'-N1	6.27	113.22	108.20
6	J	45	TYR	CB-CG-CD1	-6.27	117.24	121.00
1	A	1095	C	P-O5'-C5'	6.27	130.93	120.90
1	A	1630	G	C5-C6-O6	-6.27	124.84	128.60
1	A	2592	U	O4'-C1'-N1	6.27	113.21	108.20
1	A	2880	U	O4'-C1'-N1	6.27	113.22	108.20
1	A	638	U	O4'-C1'-N1	6.27	113.21	108.20
1	A	1406	A	O4'-C1'-N9	6.27	113.21	108.20
1	A	2902	A	C4-C5-C6	6.27	120.13	117.00
1	A	489	G	O4'-C1'-N9	6.26	113.21	108.20
1	A	547	A	C4-C5-C6	6.26	120.13	117.00
1	A	760	G	C5-C6-O6	-6.26	124.84	128.60
1	A	1449	C	N3-C4-C5	-6.26	119.39	121.90
1	A	1853	G	C5-C6-O6	-6.26	124.84	128.60
1	A	2208	C	C6-N1-C1'	-6.26	113.28	120.80
1	A	2498	A	C4-C5-C6	6.26	120.13	117.00
1	A	2737	G	C5-C6-O6	-6.26	124.84	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2804	A	O4'-C1'-N9	6.26	113.21	108.20
1	A	694	G	O4'-C1'-N9	6.26	113.21	108.20
1	A	2655	C	N3-C4-N4	6.26	122.38	118.00
1	A	2723	G	C5-C6-O6	-6.26	124.84	128.60
1	A	374	A	C5-C6-N1	-6.26	114.57	117.70
1	A	559	A	C4-C5-C6	6.26	120.13	117.00
1	A	1661	A	C4-C5-C6	6.26	120.13	117.00
1	A	1732	G	O4'-C1'-N9	6.26	113.21	108.20
1	A	1826	C	N3-C4-C5	-6.26	119.39	121.90
1	A	2495	C	N3-C4-C5	-6.26	119.39	121.90
1	A	581	C	N3-C4-N4	6.26	122.38	118.00
1	A	1176	U	O4'-C1'-N1	6.26	113.21	108.20
1	A	2479	A	C5-C6-N1	-6.26	114.57	117.70
1	A	2888	C	N3-C4-N4	6.26	122.38	118.00
1	A	2741	U	C2-N1-C1'	6.26	125.21	117.70
1	A	2853	C	N3-C4-C5	-6.26	119.40	121.90
1	A	452	C	O4'-C1'-N1	6.26	113.21	108.20
1	A	1645	C	N3-C4-C5	-6.26	119.40	121.90
1	A	1675	A	C5-C6-N6	-6.26	118.69	123.70
1	A	2673	A	C4-C5-C6	6.26	120.13	117.00
1	A	2840	C	N3-C4-N4	6.26	122.38	118.00
1	A	1467	G	C5-C6-O6	-6.25	124.85	128.60
1	A	637	A	C5-C6-N1	-6.25	114.57	117.70
1	A	710	G	O4'-C1'-N9	6.25	113.20	108.20
1	A	952	A	C5-C6-N1	-6.25	114.57	117.70
1	A	1361	A	C5-C6-N1	-6.25	114.57	117.70
1	A	1941	A	C4-C5-C6	6.25	120.13	117.00
15	U	27	PHE	CB-CG-CD1	6.25	125.18	120.80
1	A	130	A	C4-C5-C6	6.25	120.13	117.00
1	A	970	A	O4'-C1'-N9	6.25	113.20	108.20
1	A	1436	U	O4'-C1'-N1	6.25	113.20	108.20
1	A	1499	A	C4-C5-C6	6.25	120.13	117.00
1	A	2155	A	C4-C5-C6	6.25	120.13	117.00
1	A	2819	A	C4-C5-C6	6.25	120.12	117.00
1	A	1945	A	C4-C5-C6	6.25	120.12	117.00
1	A	2112	G	O4'-C1'-N9	6.25	113.20	108.20
1	A	143	G	O4'-C1'-N9	6.25	113.20	108.20
1	A	226	A	C5-C6-N6	-6.25	118.70	123.70
1	A	330	A	C5-C6-N1	-6.25	114.58	117.70
1	A	849	A	C4-C5-C6	6.25	120.12	117.00
1	A	1145	G	C5-C6-O6	-6.25	124.85	128.60
1	A	2110	C	N3-C4-C5	-6.25	119.40	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	92	G	C5-C6-O6	-6.25	124.85	128.60
1	A	281	A	O4'-C1'-N9	6.25	113.20	108.20
1	A	2619	A	C4-C5-C6	6.25	120.12	117.00
1	A	388	A	O4'-C1'-N9	6.25	113.20	108.20
1	A	2066	A	C5-C6-N6	-6.25	118.70	123.70
1	A	2208	C	O4'-C1'-N1	6.25	113.20	108.20
1	A	160	G	N3-C2-N2	6.24	124.27	119.90
1	A	306	C	N3-C4-C5	-6.24	119.40	121.90
1	A	699	A	C4-C5-C6	6.24	120.12	117.00
1	A	1349	G	O4'-C1'-N9	6.24	113.19	108.20
1	A	2495	C	N3-C4-N4	6.24	122.37	118.00
1	A	1264	G	O4'-C1'-N9	6.24	113.19	108.20
1	A	1746	A	C5-C6-N6	-6.24	118.71	123.70
1	A	1812	A	C5-C6-N6	-6.24	118.71	123.70
1	A	2739	C	N3-C4-N4	6.24	122.37	118.00
1	A	424	G	O4'-C1'-N9	6.24	113.19	108.20
1	A	803	C	N3-C4-N4	6.24	122.37	118.00
1	A	885	C	N3-C4-N4	6.24	122.37	118.00
1	A	2547	A	C4-C5-C6	6.24	120.12	117.00
1	A	272	C	N3-C4-C5	-6.24	119.41	121.90
1	A	441	C	N3-C4-N4	6.24	122.37	118.00
1	A	944	C	N3-C4-N4	6.24	122.37	118.00
1	A	1068	G	O4'-C1'-N9	6.24	113.19	108.20
1	A	619	A	C5-C6-N6	-6.24	118.71	123.70
1	A	831	U	P-O3'-C3'	6.24	127.18	119.70
1	A	1198	C	N3-C4-N4	6.24	122.36	118.00
1	A	2260	U	O4'-C1'-N1	6.24	113.19	108.20
1	A	2739	C	O4'-C1'-N1	6.24	113.19	108.20
1	A	2771	G	O4'-C1'-N9	6.24	113.19	108.20
1	A	2897	G	C5-C6-O6	-6.24	124.86	128.60
1	A	462	A	C5-C6-N6	-6.23	118.71	123.70
1	A	2686	A	C4-C5-C6	6.23	120.12	117.00
1	A	2830	A	C4-C5-C6	6.23	120.12	117.00
1	A	882	A	C5-C6-N1	-6.23	114.58	117.70
1	A	1522	U	O4'-C1'-N1	6.23	113.18	108.20
1	A	1659	A	C4-C5-C6	6.23	120.11	117.00
1	A	1771	C	N3-C4-N4	6.23	122.36	118.00
1	A	2526	A	P-O3'-C3'	6.23	127.17	119.70
1	A	50	U	C2-N1-C1'	6.23	125.17	117.70
1	A	1204	C	N3-C4-N4	6.23	122.36	118.00
1	A	1300	G	O4'-C1'-N9	6.23	113.18	108.20
1	A	1417	A	O4'-C1'-N9	6.23	113.18	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1745	A	C4-C5-C6	6.23	120.11	117.00
1	A	429	A	C4-C5-C6	6.23	120.11	117.00
1	A	1056	A	C4-C5-C6	6.23	120.11	117.00
1	A	1413	G	O4'-C1'-N9	6.23	113.18	108.20
1	A	90	A	O4'-C1'-N9	6.22	113.18	108.20
1	A	324	A	C4-C5-C6	6.22	120.11	117.00
1	A	789	C	N3-C4-N4	6.22	122.36	118.00
1	A	1308	A	C5-C6-N6	-6.22	118.72	123.70
1	A	2854	A	O4'-C1'-N9	6.22	113.18	108.20
1	A	26	G	C5-C6-O6	-6.22	124.87	128.60
1	A	93	C	O4'-C1'-N1	6.22	113.18	108.20
1	A	131	C	N3-C4-C5	-6.22	119.41	121.90
1	A	199	A	C4-C5-C6	6.22	120.11	117.00
1	A	427	G	O4'-C1'-N9	6.22	113.18	108.20
1	A	2826	A	C4-C5-C6	6.22	120.11	117.00
1	A	13	A	C4-C5-C6	6.22	120.11	117.00
1	A	440	U	O4'-C1'-N1	6.22	113.18	108.20
1	A	1323	A	C4-C5-C6	6.22	120.11	117.00
1	A	2030	A	C5-C6-N6	-6.22	118.72	123.70
1	A	549	A	C4-C5-C6	6.22	120.11	117.00
1	A	878	G	O4'-C1'-N9	6.22	113.17	108.20
1	A	1593	A	C5-C6-N6	-6.22	118.73	123.70
1	A	220	A	C5-C6-N6	-6.22	118.73	123.70
1	A	364	A	C4-C5-C6	6.22	120.11	117.00
1	A	1054	A	C4-C5-C6	6.22	120.11	117.00
1	A	1673	G	O4'-C1'-N9	6.22	113.17	108.20
1	A	421	A	C4-C5-C6	6.21	120.11	117.00
1	A	584	A	C5-C6-N1	-6.21	114.59	117.70
1	A	1389	C	N3-C4-C5	-6.21	119.41	121.90
1	A	936	C	N3-C4-N4	6.21	122.35	118.00
1	A	2792	G	O4'-C1'-N9	6.21	113.17	108.20
1	A	96	G	C5-C6-O6	-6.21	124.87	128.60
1	A	1180	C	O4'-C1'-N1	6.21	113.17	108.20
1	A	2232	G	O4'-C1'-N9	6.21	113.17	108.20
1	A	297	G	P-O3'-C3'	6.21	127.15	119.70
1	A	2160	U	O4'-C1'-N1	6.21	113.17	108.20
1	A	201	C	C6-N1-C2	-6.21	117.82	120.30
1	A	1598	C	N3-C4-N4	6.21	122.35	118.00
1	A	2620	C	N3-C4-N4	6.21	122.35	118.00
1	A	2738	G	O4'-C1'-N9	6.21	113.17	108.20
1	A	360	C	N3-C4-N4	6.21	122.34	118.00
1	A	569	C	N3-C4-N4	6.21	122.34	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	798	A	C4-C5-C6	6.21	120.10	117.00
1	A	1592	A	O4'-C1'-N9	6.21	113.17	108.20
1	A	2171	G	C5-C6-O6	-6.21	124.88	128.60
1	A	437	A	O4'-C1'-N9	6.21	113.16	108.20
1	A	183	A	C5-C6-N6	-6.20	118.74	123.70
1	A	1951	G	O4'-C1'-N9	6.20	113.16	108.20
1	A	2134	A	C4-C5-C6	6.20	120.10	117.00
1	A	2468	A	O4'-C1'-N9	6.20	113.16	108.20
1	A	2872	U	O4'-C1'-N1	6.20	113.16	108.20
1	A	2924	A	C4-C5-C6	6.20	120.10	117.00
1	A	20	C	N3-C4-N4	6.20	122.34	118.00
1	A	585	G	O4'-C1'-N9	6.20	113.16	108.20
1	A	2768	U	O4'-C1'-N1	6.20	113.16	108.20
1	A	65	A	O4'-C1'-N9	6.20	113.16	108.20
1	A	330	A	C4-C5-C6	6.20	120.10	117.00
1	A	1360	A	O4'-C1'-N9	6.20	113.16	108.20
1	A	1736	C	N3-C4-N4	6.20	122.34	118.00
1	A	1739	C	O4'-C1'-N1	6.20	113.16	108.20
1	A	2007	A	C4-C5-C6	6.20	120.10	117.00
1	A	2653	G	C5-C6-O6	-6.20	124.88	128.60
1	A	415	C	N3-C4-C5	-6.20	119.42	121.90
1	A	2804	A	C5-C6-N1	-6.20	114.60	117.70
1	A	840	A	C4-C5-C6	6.20	120.10	117.00
1	A	1454	C	N3-C4-C5	-6.20	119.42	121.90
1	A	1743	A	C4-C5-C6	6.20	120.10	117.00
1	A	1957	A	C4-C5-C6	6.20	120.10	117.00
1	A	2556	C	N3-C4-N4	6.20	122.34	118.00
1	A	2675	C	O4'-C1'-N1	6.20	113.16	108.20
1	A	2782	A	O4'-C1'-N9	6.20	113.16	108.20
1	A	1070	G	C5-C6-O6	-6.19	124.88	128.60
1	A	1126	A	C5-C6-N1	-6.19	114.60	117.70
1	A	2032	A	O4'-C1'-N9	6.19	113.16	108.20
1	A	834	C	N3-C4-N4	6.19	122.33	118.00
1	A	1302	A	C5-C6-N1	-6.19	114.60	117.70
1	A	25	U	O4'-C1'-N1	6.19	113.15	108.20
1	A	669	C	N3-C4-N4	6.19	122.33	118.00
1	A	2071	A	C4-C5-C6	6.19	120.09	117.00
1	A	2538	G	O4'-C1'-N9	6.19	113.15	108.20
1	A	2700	A	C5-C6-N1	-6.19	114.61	117.70
1	A	1155	C	N3-C4-N4	6.19	122.33	118.00
1	A	2044	A	C4-C5-C6	6.19	120.09	117.00
1	A	2719	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(^{o})	Ideal(^{o})
1	A	475	A	C5-C6-N6	-6.19	118.75	123.70
1	A	1480	A	C4-C5-C6	6.19	120.09	117.00
1	A	299	U	P-O3'-C3'	6.18	127.12	119.70
1	A	469	A	C4-C5-C6	6.18	120.09	117.00
1	A	561	A	O4'-C1'-N9	6.18	113.15	108.20
1	A	1170	C	N3-C4-N4	6.18	122.33	118.00
1	A	1445	A	C5-C6-N1	-6.18	114.61	117.70
1	A	2152	A	C4-C5-C6	6.18	120.09	117.00
1	A	2643	A	C4-C5-C6	6.18	120.09	117.00
1	A	281	A	C5-C6-N1	-6.18	114.61	117.70
1	A	673	A	C5-C6-N6	-6.18	118.75	123.70
1	A	999	A	O4'-C1'-N9	6.18	113.15	108.20
1	A	1003	A	C4-C5-C6	6.18	120.09	117.00
1	A	1188	A	C4-C5-C6	6.18	120.09	117.00
1	A	1325	A	C4-C5-C6	6.18	120.09	117.00
1	A	1724	A	C4-C5-C6	6.18	120.09	117.00
1	A	1734	A	C4-C5-C6	6.18	120.09	117.00
1	A	2245	G	O4'-C1'-N9	6.18	113.15	108.20
1	A	244	A	O4'-C1'-N9	6.18	113.14	108.20
1	A	260	A	C4-C5-C6	6.18	120.09	117.00
1	A	379	C	N3-C4-N4	6.18	122.33	118.00
1	A	355	A	C4-C5-C6	6.18	120.09	117.00
1	A	993	A	C4-C5-C6	6.18	120.09	117.00
1	A	1532	A	C4-C5-C6	6.18	120.09	117.00
1	A	114	C	N3-C4-C5	-6.18	119.43	121.90
1	A	1029	A	C4-C5-C6	6.18	120.09	117.00
1	A	415	C	N3-C4-N4	6.17	122.32	118.00
1	A	1122	C	O4'-C1'-N1	6.17	113.14	108.20
1	A	1256	C	N3-C4-N4	6.17	122.32	118.00
1	A	1534	A	C4-C5-C6	6.17	120.09	117.00
1	A	1813	A	C4-C5-C6	6.17	120.09	117.00
1	A	13	A	C5-C6-N6	-6.17	118.76	123.70
1	A	281	A	C4-C5-C6	6.17	120.09	117.00
1	A	849	A	C5-C6-N1	-6.17	114.61	117.70
1	A	1036	A	C4-C5-C6	6.17	120.09	117.00
1	A	1534	A	C5-C6-N6	-6.17	118.76	123.70
1	A	1608	A	C4-C5-C6	6.17	120.09	117.00
1	A	1661	A	O4'-C1'-N9	6.17	113.14	108.20
1	A	449	A	C4-C5-C6	6.17	120.08	117.00
1	A	948	A	C4-C5-C6	6.17	120.08	117.00
1	A	101	G	O4'-C1'-N9	6.17	113.14	108.20
1	A	576	G	C5-C6-O6	-6.17	124.90	128.60

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	634	A	C4-C5-C6	6.17	120.08	117.00
1	A	880	C	N3-C4-N4	6.17	122.32	118.00
1	A	572	A	C5-C6-N6	-6.17	118.77	123.70
1	A	1224	A	C4-C5-C6	6.17	120.08	117.00
1	A	1410	G	C5-C6-O6	-6.17	124.90	128.60
1	A	1576	G	C5-C6-O6	-6.17	124.90	128.60
1	A	2915	G	N3-C2-N2	6.17	124.22	119.90
1	A	91	A	O4'-C1'-N9	6.17	113.13	108.20
1	A	655	C	N3-C4-N4	6.17	122.32	118.00
1	A	842	C	N3-C4-C5	-6.17	119.43	121.90
1	A	884	C	N3-C4-N4	6.17	122.32	118.00
1	A	1533	A	C4-C5-C6	6.17	120.08	117.00
1	A	110	A	C5-C6-N1	-6.16	114.62	117.70
1	A	239	C	N3-C4-C5	-6.16	119.44	121.90
1	A	469	A	O4'-C1'-N9	6.16	113.13	108.20
1	A	744	C	N3-C4-N4	6.16	122.31	118.00
1	A	851	A	C4-C5-C6	6.16	120.08	117.00
1	A	1032	C	P-O5'-C5'	6.16	130.76	120.90
1	A	1622	C	N3-C4-N4	6.16	122.31	118.00
1	A	1628	G	C1'-O4'-C4'	6.16	114.83	109.90
1	A	2887	A	C5-C6-N6	-6.16	118.77	123.70
1	A	41	A	C5-C6-N6	-6.16	118.77	123.70
1	A	2098	G	C5-C6-O6	-6.16	124.90	128.60
1	A	354	A	C5-C6-N6	-6.16	118.77	123.70
1	A	712	C	N3-C4-N4	6.16	122.31	118.00
1	A	893	A	C4-C5-C6	6.16	120.08	117.00
1	A	1461	A	C4-C5-C6	6.16	120.08	117.00
1	A	2090	G	O4'-C1'-N9	6.16	113.13	108.20
1	A	2123	A	C5-C6-N6	-6.16	118.77	123.70
1	A	2715	G	O4'-C1'-N9	6.16	113.13	108.20
1	A	314	A	O4'-C1'-N9	6.16	113.13	108.20
1	A	762	A	C4-C5-C6	6.16	120.08	117.00
1	A	2421	A	C4-C5-C6	6.16	120.08	117.00
1	A	2564	A	O4'-C1'-N9	6.16	113.13	108.20
1	A	2689	A	C4-C5-C6	6.16	120.08	117.00
1	A	173	A	C4-C5-C6	6.16	120.08	117.00
1	A	216	A	C5-C6-N1	-6.16	114.62	117.70
1	A	904	A	C4-C5-C6	6.16	120.08	117.00
1	A	1099	C	O4'-C1'-N1	6.16	113.12	108.20
1	A	1829	C	N3-C4-N4	6.16	122.31	118.00
1	A	2026	A	C4-C5-C6	6.16	120.08	117.00
1	A	2910	C	N3-C4-C5	-6.16	119.44	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	325	A	C4-C5-C6	6.16	120.08	117.00
1	A	889	A	O4'-C1'-N9	6.16	113.12	108.20
1	A	1814	A	C4-C5-C6	6.16	120.08	117.00
1	A	934	U	O4'-C1'-N1	6.15	113.12	108.20
1	A	279	A	C5-C6-N1	-6.15	114.62	117.70
1	A	656	A	O4'-C1'-N9	6.15	113.12	108.20
1	A	702	A	C4-C5-C6	6.15	120.08	117.00
1	A	965	A	P-O3'-C3'	6.15	127.08	119.70
1	A	1741	G	C5-C6-O6	-6.15	124.91	128.60
1	A	2256	A	C4-C5-C6	6.15	120.08	117.00
1	A	2687	C	N3-C4-N4	6.15	122.31	118.00
1	A	2700	A	C4-C5-C6	6.15	120.08	117.00
1	A	512	G	O4'-C1'-N9	6.15	113.12	108.20
1	A	738	C	N3-C4-N4	6.15	122.31	118.00
1	A	1326	A	C4-C5-C6	6.15	120.08	117.00
1	A	1618	A	P-O5'-C5'	6.15	130.74	120.90
1	A	1108	G	O4'-C1'-N9	6.15	113.12	108.20
1	A	1488	G	O4'-C1'-N9	6.15	113.12	108.20
1	A	2025	C	N3-C4-C5	-6.15	119.44	121.90
1	A	2703	G	C5-C6-O6	-6.15	124.91	128.60
1	A	124	A	C4-C5-C6	6.15	120.07	117.00
1	A	619	A	C4-C5-C6	6.15	120.07	117.00
1	A	191	G	C5-C6-O6	-6.14	124.91	128.60
1	A	271	C	N3-C4-N4	6.14	122.30	118.00
1	A	519	A	C4-C5-C6	6.14	120.07	117.00
1	A	584	A	C4-C5-C6	6.14	120.07	117.00
1	A	1003	A	C5-C6-N6	-6.14	118.78	123.70
1	A	1356	G	O4'-C1'-N9	6.14	113.11	108.20
1	A	194	A	C4-C5-C6	6.14	120.07	117.00
1	A	1406	A	C4-C5-C6	6.14	120.07	117.00
1	A	1051	C	N3-C4-N4	6.14	122.30	118.00
1	A	1296	G	C5-C6-O6	-6.14	124.92	128.60
1	A	1492	G	C5-C6-O6	-6.14	124.92	128.60
1	A	1556	A	C4-C5-C6	6.14	120.07	117.00
1	A	2052	A	C5-C6-N6	-6.14	118.79	123.70
1	A	2200	A	O4'-C1'-N9	6.14	113.11	108.20
1	A	2426	G	C5-C6-O6	-6.14	124.92	128.60
1	A	2446	C	N3-C4-N4	6.14	122.30	118.00
1	A	1841	G	C5-C6-O6	-6.14	124.92	128.60
1	A	1047	A	C5-C6-N1	-6.14	114.63	117.70
1	A	1348	G	O4'-C1'-N9	6.14	113.11	108.20
1	A	1685	A	C4-C5-C6	6.14	120.07	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2089	A	C4-C5-C6	6.14	120.07	117.00
1	A	473	C	N3-C4-C5	-6.13	119.45	121.90
1	A	967	G	O4'-C1'-N9	6.13	113.11	108.20
1	A	991	A	C4-C5-C6	6.13	120.07	117.00
1	A	1550	C	O4'-C1'-N1	6.13	113.11	108.20
1	A	2142	C	N3-C4-C5	-6.13	119.45	121.90
1	A	2490	C	N3-C4-C5	-6.13	119.45	121.90
1	A	141	U	O4'-C1'-N1	6.13	113.11	108.20
1	A	616	A	C4-C5-C6	6.13	120.07	117.00
1	A	1344	C	N3-C4-N4	6.13	122.29	118.00
1	A	1533	A	C5-C6-N6	-6.13	118.79	123.70
1	A	2018	A	C4-C5-C6	6.13	120.07	117.00
1	A	2091	A	O4'-C1'-N9	6.13	113.11	108.20
1	A	806	G	O4'-C1'-N9	6.13	113.11	108.20
1	A	876	A	C4-C5-C6	6.13	120.07	117.00
1	A	1421	A	C4-C5-C6	6.13	120.06	117.00
1	A	2035	C	N3-C4-N4	6.13	122.29	118.00
1	A	2216	A	C5-C6-N6	-6.13	118.80	123.70
1	A	2447	A	C4-C5-C6	6.13	120.07	117.00
1	A	2740	A	C4-C5-C6	6.13	120.07	117.00
1	A	2843	G	C5-C6-O6	-6.13	124.92	128.60
1	A	1697	A	C4-C5-C6	6.13	120.06	117.00
1	A	2024	U	O4'-C1'-N1	6.13	113.10	108.20
1	A	2187	A	C4-C5-C6	6.13	120.06	117.00
1	A	753	A	O4'-C1'-N9	6.13	113.10	108.20
1	A	904	A	C5-C6-N1	-6.13	114.64	117.70
1	A	1818	A	C4-C5-C6	6.13	120.06	117.00
1	A	2653	G	O4'-C1'-N9	6.13	113.10	108.20
1	A	2685	U	O4'-C1'-N1	6.13	113.10	108.20
1	A	220	A	C4-C5-C6	6.13	120.06	117.00
1	A	746	A	C4-C5-C6	6.13	120.06	117.00
1	A	954	U	O4'-C1'-N1	6.13	113.10	108.20
1	A	1027	A	C4-C5-C6	6.13	120.06	117.00
1	A	2710	C	O4'-C1'-N1	6.13	113.10	108.20
1	A	12	A	C4-C5-C6	6.12	120.06	117.00
1	A	724	A	C4-C5-C6	6.12	120.06	117.00
1	A	1556	A	C5-C6-N6	-6.12	118.80	123.70
1	A	2799	C	N3-C4-C5	-6.12	119.45	121.90
1	A	2843	G	O4'-C1'-N9	6.12	113.10	108.20
1	A	575	A	P-O3'-C3'	6.12	127.05	119.70
1	A	1007	G	C5-C6-O6	-6.12	124.93	128.60
1	A	1059	A	C5-C6-N6	-6.12	118.80	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1312	A	C4-C5-C6	6.12	120.06	117.00
1	A	1361	A	C4-C5-C6	6.12	120.06	117.00
1	A	2532	A	C4-C5-C6	6.12	120.06	117.00
1	A	418	A	C5-C6-N6	-6.12	118.80	123.70
1	A	1398	A	C5-C6-N6	-6.12	118.80	123.70
1	A	59	G	C5-C6-O6	-6.12	124.93	128.60
1	A	1998	A	O4'-C1'-N9	6.12	113.10	108.20
1	A	2028	C	N3-C4-C5	-6.12	119.45	121.90
1	A	665	G	N3-C2-N2	6.12	124.18	119.90
1	A	723	A	C4-C5-C6	6.12	120.06	117.00
1	A	2187	A	C5-C6-N6	-6.12	118.81	123.70
1	A	2556	C	O4'-C1'-N1	6.12	113.09	108.20
1	A	2631	A	C4-C5-C6	6.12	120.06	117.00
1	A	2812	A	C5-C6-N6	-6.12	118.80	123.70
1	A	339	A	C5-C6-N1	-6.12	114.64	117.70
1	A	542	G	C5-C6-O6	-6.12	124.93	128.60
1	A	1189	A	O4'-C1'-N9	6.12	113.09	108.20
1	A	2210	G	C5-C6-O6	-6.12	124.93	128.60
1	A	2619	A	C5-C6-N6	-6.12	118.81	123.70
1	A	387	C	N3-C4-N4	6.12	122.28	118.00
1	A	543	A	C4-C5-C6	6.12	120.06	117.00
1	A	965	A	C4-C5-C6	6.12	120.06	117.00
1	A	1248	C	N3-C4-C5	-6.12	119.45	121.90
1	A	2256	A	O4'-C1'-N9	6.12	113.09	108.20
1	A	2457	G	C5-C6-O6	-6.12	124.93	128.60
1	A	231	A	C4-C5-C6	6.11	120.06	117.00
1	A	247	A	C4-C5-C6	6.11	120.06	117.00
1	A	941	U	O4'-C1'-N1	6.11	113.09	108.20
1	A	2192	U	O4'-C1'-N1	6.11	113.09	108.20
1	A	2449	C	N3-C4-N4	6.11	122.28	118.00
1	A	2572	G	C5-C6-O6	-6.11	124.93	128.60
1	A	978	A	O4'-C1'-N9	6.11	113.09	108.20
1	A	1392	A	C4-C5-C6	6.11	120.06	117.00
1	A	2165	A	O4'-C1'-N9	6.11	113.09	108.20
1	A	362	C	N3-C4-N4	6.11	122.28	118.00
1	A	487	G	O4'-C1'-N9	6.11	113.09	108.20
1	A	1076	G	O4'-C1'-N9	6.11	113.09	108.20
1	A	1340	A	C4-C5-C6	6.11	120.06	117.00
1	A	1491	A	C5-C6-N6	-6.11	118.81	123.70
1	A	226	A	C4-C5-C6	6.11	120.05	117.00
1	A	1409	C	N3-C4-N4	6.11	122.28	118.00
1	A	1736	C	N3-C4-C5	-6.11	119.46	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	173	A	C5-C6-N6	-6.11	118.81	123.70
1	A	314	A	C4-C5-C6	6.11	120.05	117.00
1	A	366	A	C4-C5-C6	6.11	120.05	117.00
1	A	527	A	C5-C6-N1	-6.11	114.65	117.70
1	A	616	A	O4'-C1'-N9	6.11	113.08	108.20
1	A	1094	A	C4-C5-C6	6.11	120.05	117.00
1	A	1141	A	C4-C5-C6	6.11	120.05	117.00
1	A	1171	G	N3-C2-N2	6.11	124.17	119.90
1	A	2567	C	N3-C4-C5	-6.11	119.46	121.90
1	A	2517	A	C4-C5-C6	6.10	120.05	117.00
1	A	404	C	N3-C4-C5	-6.10	119.46	121.90
1	A	752	A	C5-C6-N1	-6.10	114.65	117.70
1	A	1278	G	O4'-C1'-N9	6.10	113.08	108.20
1	A	1346	A	C4-C5-C6	6.10	120.05	117.00
1	A	1612	C	N3-C4-N4	6.10	122.27	118.00
1	A	1711	G	C5-C6-O6	-6.10	124.94	128.60
1	A	1947	A	C5-C6-N6	-6.10	118.82	123.70
1	A	2080	A	C4-C5-C6	6.10	120.05	117.00
1	A	2163	A	C4-C5-C6	6.10	120.05	117.00
1	A	2594	A	C5-C6-N1	-6.10	114.65	117.70
1	A	1031	C	N3-C4-C5	-6.10	119.46	121.90
1	A	2197	G	O4'-C1'-N9	6.10	113.08	108.20
1	A	2844	A	C4-C5-C6	6.10	120.05	117.00
1	A	758	A	C4-C5-C6	6.10	120.05	117.00
1	A	2735	A	O4'-C1'-N9	6.10	113.08	108.20
1	A	2908	A	C4-C5-C6	6.10	120.05	117.00
1	A	643	U	O4'-C1'-N1	6.10	113.08	108.20
1	A	670	C	O4'-C1'-N1	6.10	113.08	108.20
1	A	1552	C	N3-C4-N4	6.10	122.27	118.00
1	A	62	C	N3-C4-C5	-6.09	119.46	121.90
1	A	672	C	N3-C4-N4	6.09	122.27	118.00
1	A	838	C	O4'-C1'-N1	6.09	113.08	108.20
1	A	1327	U	O4'-C1'-N1	6.09	113.08	108.20
1	A	2172	C	N3-C4-N4	6.09	122.27	118.00
1	A	108	A	C5-C6-N6	-6.09	118.83	123.70
1	A	717	A	C4-C5-C6	6.09	120.05	117.00
1	A	1252	G	N3-C2-N2	6.09	124.16	119.90
1	A	2049	A	C5-C6-N1	-6.09	114.65	117.70
1	A	476	A	C4-C5-C6	6.09	120.05	117.00
1	A	535	G	O4'-C1'-N9	6.09	113.07	108.20
1	A	2262	A	C5-C6-N6	-6.09	118.83	123.70
1	A	1310	C	N3-C4-N4	6.09	122.26	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1583	A	C4-C5-C6	6.09	120.04	117.00
1	A	2143	A	C5-C6-N1	-6.09	114.66	117.70
1	A	1011	C	N3-C4-N4	6.09	122.26	118.00
1	A	1397	G	C5-C6-O6	-6.09	124.95	128.60
1	A	1710	A	C5-C6-N1	-6.09	114.66	117.70
1	A	1744	G	O4'-C1'-N9	6.09	113.07	108.20
1	A	2603	G	O4'-C1'-N9	6.09	113.07	108.20
1	A	2630	C	P-O5'-C5'	6.09	130.64	120.90
1	A	622	A	C4-C5-C6	6.08	120.04	117.00
1	A	758	A	C5-C6-N1	-6.08	114.66	117.70
1	A	974	A	C4-C5-C6	6.08	120.04	117.00
1	A	1778	A	O4'-C1'-N9	6.08	113.07	108.20
1	A	2124	A	C4-C5-C6	6.08	120.04	117.00
1	A	7	G	C5-C6-O6	-6.08	124.95	128.60
1	A	305	A	C4-C5-C6	6.08	120.04	117.00
1	A	578	A	C5-C6-N1	-6.08	114.66	117.70
1	A	1010	C	N3-C4-C5	-6.08	119.47	121.90
1	A	2233	C	N3-C4-N4	6.08	122.26	118.00
1	A	539	G	O4'-C1'-N9	6.08	113.06	108.20
1	A	1329	C	N3-C4-N4	6.08	122.26	118.00
1	A	2616	A	O4'-C1'-N9	6.08	113.06	108.20
1	A	2769	A	C4-C5-C6	6.08	120.04	117.00
1	A	308	C	N3-C4-N4	6.08	122.25	118.00
1	A	886	U	O4'-C1'-N1	6.08	113.06	108.20
1	A	1713	A	C5-C6-N6	-6.08	118.84	123.70
1	A	1802	A	C5-C6-N1	-6.08	114.66	117.70
1	A	2006	A	C4-C5-C6	6.08	120.04	117.00
1	A	460	C	N3-C4-N4	6.08	122.25	118.00
1	A	464	C	N3-C4-N4	6.08	122.25	118.00
1	A	608	C	N3-C4-N4	6.08	122.25	118.00
1	A	652	A	C4-C5-C6	6.08	120.04	117.00
1	A	162	A	C4-C5-C6	6.08	120.04	117.00
1	A	358	C	N3-C4-N4	6.08	122.25	118.00
1	A	918	U	O4'-C1'-N1	6.08	113.06	108.20
1	A	1097	A	C4-C5-C6	6.08	120.04	117.00
1	A	1654	A	C4-C5-C6	6.08	120.04	117.00
1	A	2911	G	C5-C6-O6	-6.08	124.95	128.60
1	A	94	A	C4-C5-C6	6.07	120.04	117.00
1	A	136	C	N3-C4-C5	-6.07	119.47	121.90
1	A	1047	A	C4-C5-C6	6.07	120.04	117.00
1	A	1266	A	C4-C5-C6	6.07	120.04	117.00
1	A	1467	G	O4'-C1'-N9	6.07	113.06	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2000	A	C4-C5-C6	6.07	120.04	117.00
1	A	2708	A	C5-C6-N1	-6.07	114.66	117.70
1	A	2573	G	O4'-C1'-N9	6.07	113.06	108.20
1	A	531	C	N3-C4-N4	6.07	122.25	118.00
1	A	873	U	O4'-C1'-N1	6.07	113.06	108.20
1	A	943	A	C4-C5-C6	6.07	120.03	117.00
1	A	1164	C	N3-C4-C5	-6.07	119.47	121.90
1	A	1691	A	C4-C5-C6	6.07	120.03	117.00
1	A	2704	A	C5-C6-N6	-6.07	118.84	123.70
1	A	2827	A	C4-C5-C6	6.07	120.03	117.00
1	A	2923	A	C4-C5-C6	6.07	120.03	117.00
1	A	2471	C	N3-C4-C5	-6.07	119.47	121.90
1	A	1120	G	O4'-C1'-N9	6.07	113.05	108.20
1	A	2490	C	N3-C4-N4	6.07	122.25	118.00
1	A	2499	G	P-O3'-C3'	6.07	126.98	119.70
1	A	5	A	C4-C5-C6	6.06	120.03	117.00
1	A	477	A	C4-C5-C6	6.06	120.03	117.00
1	A	549	A	C5-C6-N1	-6.06	114.67	117.70
1	A	631	G	C5-C6-O6	-6.06	124.96	128.60
1	A	1445	A	O4'-C1'-N9	6.06	113.05	108.20
1	A	1961	A	C4-C5-C6	6.06	120.03	117.00
1	A	2060	A	C4-C5-C6	6.06	120.03	117.00
1	A	2820	U	C2-N1-C1'	6.06	124.98	117.70
1	A	623	A	C5-C6-N1	-6.06	114.67	117.70
1	A	681	C	N3-C4-N4	6.06	122.24	118.00
1	A	766	C	N3-C4-N4	6.06	122.24	118.00
1	A	1277	A	O4'-C1'-N9	6.06	113.05	108.20
1	A	1715	C	P-O5'-C5'	6.06	130.60	120.90
1	A	1094	A	C5-C6-N6	-6.06	118.85	123.70
1	A	1360	A	C5-C6-N6	-6.06	118.85	123.70
1	A	1672	A	C5-C6-N1	-6.06	114.67	117.70
1	A	1695	A	C4-C5-C6	6.06	120.03	117.00
1	A	2132	A	C5-C6-N6	-6.06	118.85	123.70
1	A	2863	G	C5-C6-O6	-6.06	124.96	128.60
1	A	79	C	N3-C4-N4	6.06	122.24	118.00
1	A	462	A	C4-C5-C6	6.06	120.03	117.00
1	A	1014	A	C4-C5-C6	6.06	120.03	117.00
1	A	2774	C	O4'-C1'-N1	6.06	113.05	108.20
1	A	796	A	C4-C5-C6	6.06	120.03	117.00
1	A	127	C	N3-C4-N4	6.05	122.24	118.00
1	A	1130	A	O4'-C1'-N9	6.05	113.04	108.20
1	A	1152	G	O4'-C1'-N9	6.05	113.04	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1340	A	C5-C6-N1	-6.05	114.67	117.70
1	A	1665	G	C5-C6-O6	-6.05	124.97	128.60
1	A	2088	A	C4-C5-C6	6.05	120.03	117.00
1	A	689	A	C4-C5-C6	6.05	120.03	117.00
1	A	1173	A	C4-C5-C6	6.05	120.03	117.00
1	A	223	G	O4'-C1'-N9	6.05	113.04	108.20
1	A	308	C	N3-C4-C5	-6.05	119.48	121.90
1	A	456	A	C5-C6-N6	-6.05	118.86	123.70
1	A	747	G	O4'-C1'-N9	6.05	113.04	108.20
1	A	1542	A	C5-C6-N6	-6.05	118.86	123.70
1	A	1557	G	O4'-C1'-N9	6.05	113.04	108.20
1	A	2073	C	N3-C4-C5	-6.05	119.48	121.90
1	A	2436	A	C5-C6-N6	-6.05	118.86	123.70
1	A	2810	A	C4-C5-C6	6.05	120.03	117.00
6	J	45	TYR	CB-CG-CD2	6.05	124.63	121.00
1	A	67	A	C4-C5-C6	6.05	120.02	117.00
1	A	1434	A	C5-C6-N1	-6.05	114.68	117.70
1	A	1600	G	N3-C2-N2	6.05	124.13	119.90
1	A	2423	C	P-O3'-C3'	6.05	126.95	119.70
1	A	2704	A	C5-C6-N1	-6.05	114.68	117.70
1	A	1452	C	N3-C4-N4	6.04	122.23	118.00
1	A	2462	A	C4-C5-C6	6.04	120.02	117.00
1	A	738	C	N3-C4-C5	-6.04	119.48	121.90
1	A	1039	G	O4'-C1'-N9	6.04	113.03	108.20
1	A	2234	C	N3-C4-C5	-6.04	119.48	121.90
1	A	2816	C	C5'-C4'-O4'	6.04	116.35	109.10
1	A	2923	A	C5-C6-N6	-6.04	118.86	123.70
1	A	711	U	O4'-C1'-N1	6.04	113.03	108.20
1	A	863	C	N3-C4-N4	6.04	122.23	118.00
1	A	1021	A	C5-C6-N6	-6.04	118.87	123.70
1	A	1269	A	C4-C5-C6	6.04	120.02	117.00
1	A	2012	C	N3-C4-N4	6.04	122.23	118.00
1	A	2041	G	O4'-C1'-N9	6.04	113.03	108.20
1	A	2092	C	N3-C4-C5	-6.04	119.48	121.90
1	A	2186	G	O4'-C1'-N9	6.04	113.03	108.20
1	A	183	A	C4-C5-C6	6.04	120.02	117.00
1	A	508	C	N3-C4-C5	-6.04	119.48	121.90
1	A	2701	U	O4'-C1'-N1	6.04	113.03	108.20
1	A	171	A	O4'-C1'-N9	6.04	113.03	108.20
1	A	1200	G	N3-C2-N2	6.04	124.13	119.90
1	A	1221	A	C4-C5-C6	6.04	120.02	117.00
1	A	1954	C	N3-C4-N4	6.04	122.23	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2207	C	N3-C4-N4	6.04	122.23	118.00
1	A	2818	C	C1'-O4'-C4'	-6.04	105.07	109.90
1	A	1509	C	O4'-C1'-N1	6.04	113.03	108.20
1	A	1743	A	C5-C6-N6	-6.04	118.87	123.70
1	A	2702	G	O4'-C1'-N9	6.04	113.03	108.20
1	A	2770	A	O4'-C1'-N9	6.04	113.03	108.20
1	A	1760	A	C5-C6-N1	-6.04	114.68	117.70
1	A	1796	C	N3-C4-N4	6.04	122.22	118.00
1	A	236	A	C5-C6-N6	-6.03	118.87	123.70
1	A	1331	C	N3-C4-C5	-6.03	119.49	121.90
1	A	1423	A	C4-C5-C6	6.03	120.02	117.00
1	A	2204	U	O4'-C1'-N1	6.03	113.03	108.20
1	A	2670	A	C5-C6-N6	-6.03	118.87	123.70
1	A	519	A	O4'-C1'-N9	6.03	113.03	108.20
1	A	560	A	C5-C6-N6	-6.03	118.88	123.70
1	A	665	G	O4'-C1'-N9	6.03	113.03	108.20
1	A	1270	C	N3-C4-C5	-6.03	119.49	121.90
1	A	2056	G	O4'-C1'-N9	6.03	113.02	108.20
1	A	229	A	C4-C5-C6	6.03	120.02	117.00
1	A	1314	A	C5-C6-N6	-6.03	118.88	123.70
1	A	1797	A	C4-C5-C6	6.03	120.01	117.00
1	A	130	A	C5-C6-N6	-6.03	118.88	123.70
1	A	270	C	O4'-C1'-N1	6.03	113.02	108.20
1	A	1129	U	O4'-C1'-N1	6.03	113.02	108.20
1	A	1829	C	N3-C4-C5	-6.03	119.49	121.90
1	A	2892	G	C5-C6-O6	-6.03	124.98	128.60
1	A	686	C	N3-C4-N4	6.03	122.22	118.00
1	A	793	U	O4'-C1'-N1	6.03	113.02	108.20
1	A	2027	A	C5-C6-N6	-6.03	118.88	123.70
1	A	2066	A	C4-C5-C6	6.03	120.01	117.00
1	A	2461	A	C4-C5-C6	6.03	120.01	117.00
1	A	261	C	N3-C4-N4	6.02	122.22	118.00
1	A	1579	A	C5-C6-N1	-6.02	114.69	117.70
1	A	2030	A	C4-C5-C6	6.02	120.01	117.00
1	A	507	A	O4'-C1'-N9	6.02	113.02	108.20
1	A	1283	U	O4'-C1'-N1	6.02	113.02	108.20
1	A	518	A	C5-C6-N1	-6.02	114.69	117.70
1	A	622	A	C5-C6-N6	-6.02	118.89	123.70
1	A	1113	A	C4-C5-C6	6.02	120.01	117.00
1	A	1312	A	O4'-C1'-N9	6.02	113.01	108.20
1	A	2854	A	C4-C5-C6	6.02	120.01	117.00
1	A	221	G	O4'-C1'-N9	6.01	113.01	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	836	A	C4-C5-C6	6.01	120.01	117.00
1	A	888	A	C5-C6-N6	-6.01	118.89	123.70
1	A	1002	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	1690	G	C5-C6-O6	-6.01	124.99	128.60
1	A	1757	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	2139	G	P-O3'-C3'	6.01	126.92	119.70
1	A	1349	G	C5-C6-O6	-6.01	124.99	128.60
1	A	1852	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	2062	A	C4-C5-C6	6.01	120.01	117.00
1	A	2101	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	275	A	C4-C5-C6	6.01	120.00	117.00
1	A	1589	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	2642	U	O4'-C1'-N1	6.01	113.01	108.20
1	A	414	C	C5'-C4'-O4'	6.01	116.31	109.10
1	A	1075	A	C5-C6-N1	-6.01	114.70	117.70
1	A	1223	C	P-O5'-C5'	6.01	130.52	120.90
1	A	1731	C	N3-C4-C5	-6.01	119.50	121.90
1	A	2099	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	2166	C	N3-C4-N4	6.01	122.21	118.00
1	A	2480	A	C4-C5-C6	6.01	120.00	117.00
1	A	513	A	C5-C6-N1	-6.01	114.70	117.70
1	A	1072	A	C4-C5-C6	6.01	120.00	117.00
1	A	1663	A	C4-C5-C6	6.01	120.00	117.00
1	A	2156	G	O4'-C1'-N9	6.01	113.01	108.20
1	A	808	A	C4-C5-C6	6.01	120.00	117.00
1	A	1227	G	C5-C6-O6	-6.01	125.00	128.60
1	A	1438	C	N3-C4-N4	6.01	122.20	118.00
1	A	2544	C	N3-C4-C5	-6.01	119.50	121.90
1	A	2275	G	O4'-C1'-N9	6.00	113.00	108.20
1	A	171	A	C4-C5-C6	6.00	120.00	117.00
1	A	557	U	O4'-C1'-N1	6.00	113.00	108.20
1	A	667	A	C5-C6-N1	-6.00	114.70	117.70
1	A	1147	U	O4'-C1'-N1	6.00	113.00	108.20
1	A	1220	G	P-O5'-C5'	6.00	130.51	120.90
1	A	2267	G	C5-C6-O6	-6.00	125.00	128.60
1	A	185	A	O4'-C1'-N9	6.00	113.00	108.20
1	A	690	A	C4-C5-C6	6.00	120.00	117.00
1	A	784	C	N3-C4-N4	6.00	122.20	118.00
1	A	841	A	C4-C5-C6	6.00	120.00	117.00
1	A	1258	A	C4-C5-C6	6.00	120.00	117.00
1	A	1516	A	C5-C6-N1	-6.00	114.70	117.70
1	A	2270	A	O4'-C1'-N9	6.00	113.00	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	T	59	TYR	CB-CG-CD2	-6.00	117.40	121.00
1	A	274	A	C5-C6-N6	-6.00	118.90	123.70
1	A	2231	C	N3-C4-N4	6.00	122.20	118.00
1	A	2517	A	C5-C6-N1	-6.00	114.70	117.70
1	A	2527	C	C6-N1-C2	-6.00	117.90	120.30
1	A	224	A	O4'-C1'-N9	6.00	113.00	108.20
1	A	942	U	O4'-C1'-N1	6.00	113.00	108.20
1	A	2132	A	C4-C5-C6	6.00	120.00	117.00
1	A	2924	A	O4'-C1'-N9	6.00	113.00	108.20
1	A	859	C	N3-C4-N4	6.00	122.20	118.00
1	A	861	C	N3-C4-N4	6.00	122.20	118.00
1	A	1006	A	C5-C6-N1	-6.00	114.70	117.70
1	A	1123	A	C4-C5-C6	6.00	120.00	117.00
1	A	1850	A	C4-C5-C6	6.00	120.00	117.00
1	A	2083	A	O4'-C1'-N9	6.00	113.00	108.20
1	A	2179	U	O4'-C1'-N1	6.00	113.00	108.20
1	A	195	C	O4'-C1'-N1	6.00	113.00	108.20
1	A	438	A	C5-C6-N6	-6.00	118.90	123.70
1	A	957	A	C4-C5-C6	6.00	120.00	117.00
1	A	1474	C	N3-C4-N4	6.00	122.20	118.00
1	A	1731	C	N3-C4-N4	5.99	122.19	118.00
1	A	2825	C	N3-C4-N4	5.99	122.20	118.00
1	A	1294	A	C5-C6-N6	-5.99	118.91	123.70
1	A	2527	C	N3-C4-C5	-5.99	119.50	121.90
1	A	278	A	O4'-C1'-N9	5.99	112.99	108.20
1	A	1008	A	C4-C5-C6	5.99	120.00	117.00
1	A	1117	G	C5-C6-O6	-5.99	125.01	128.60
1	A	1601	A	C5-C6-N6	-5.99	118.91	123.70
1	A	1947	A	C4-C5-C6	5.99	120.00	117.00
1	A	2107	C	C2-N3-C4	5.99	122.89	119.90
1	A	2927	A	C4-C5-C6	5.99	120.00	117.00
1	A	21	A	C4-C5-C6	5.99	119.99	117.00
1	A	1020	A	C4-C5-C6	5.99	119.99	117.00
1	A	1059	A	C4-C5-C6	5.99	119.99	117.00
1	A	1483	A	C4-C5-C6	5.99	120.00	117.00
1	A	1727	A	C5-C6-N1	-5.99	114.71	117.70
1	A	2025	C	N3-C4-N4	5.99	122.19	118.00
1	A	2201	U	C5'-C4'-O4'	5.99	116.28	109.10
1	A	624	C	N3-C4-C5	-5.99	119.50	121.90
1	A	903	G	O4'-C1'-N9	5.99	112.99	108.20
1	A	1453	A	C4-C5-C6	5.99	119.99	117.00
1	A	1061	A	C5-C6-N1	-5.99	114.71	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1333	C	N3-C4-N4	5.99	122.19	118.00
1	A	1848	A	C4-C5-C6	5.99	119.99	117.00
1	A	2023	C	N3-C4-C5	-5.99	119.51	121.90
1	A	2071	A	O4'-C1'-N9	5.98	112.99	108.20
1	A	2111	A	C5-C6-N6	-5.98	118.91	123.70
1	A	96	G	O4'-C1'-N9	5.98	112.99	108.20
1	A	343	A	O4'-C1'-N9	5.98	112.98	108.20
1	A	1574	G	C5-C6-O6	-5.98	125.01	128.60
1	A	1699	A	C4-C5-C6	5.98	119.99	117.00
1	A	2683	A	C4-C5-C6	5.98	119.99	117.00
1	A	2722	A	C4-C5-C6	5.98	119.99	117.00
1	A	154	A	C5-C6-N6	-5.98	118.92	123.70
1	A	1194	A	C5-C6-N6	-5.98	118.92	123.70
1	A	1843	G	O4'-C1'-N9	5.98	112.98	108.20
1	A	2694	A	C5-C6-N6	-5.98	118.92	123.70
1	A	186	C	N3-C4-N4	5.98	122.19	118.00
1	A	442	C	N3-C4-C5	-5.98	119.51	121.90
1	A	1576	G	O4'-C1'-N9	5.98	112.98	108.20
1	A	1638	A	C4-C5-C6	5.98	119.99	117.00
1	A	1742	G	O4'-C1'-N9	5.98	112.98	108.20
1	A	2227	A	C4-N9-C1'	5.98	137.06	126.30
1	A	2571	A	C4-C5-C6	5.98	119.99	117.00
1	A	2663	A	C5-C6-N1	-5.98	114.71	117.70
1	A	366	A	O4'-C1'-N9	5.98	112.98	108.20
1	A	1259	G	O4'-C1'-N9	5.98	112.98	108.20
1	A	2470	C	N3-C4-N4	5.98	122.18	118.00
1	A	418	A	C4-C5-C6	5.97	119.99	117.00
1	A	510	G	O4'-C1'-N9	5.97	112.98	108.20
1	A	731	G	O4'-C1'-N9	5.97	112.98	108.20
1	A	911	G	N3-C2-N2	5.97	124.08	119.90
1	A	1473	A	C4-C5-C6	5.97	119.99	117.00
1	A	1648	A	C4-C5-C6	5.97	119.99	117.00
1	A	2047	A	C5-C6-N1	-5.97	114.71	117.70
1	A	2218	U	O4'-C1'-N1	5.97	112.98	108.20
1	A	2589	C	N3-C4-N4	5.97	122.18	118.00
1	A	2713	U	O4'-C1'-N1	5.97	112.98	108.20
1	A	2892	G	C1'-O4'-C4'	-5.97	105.12	109.90
1	A	168	A	C5-C6-N6	-5.97	118.92	123.70
1	A	234	C	N3-C4-N4	5.97	122.18	118.00
1	A	384	A	C5-C6-N6	-5.97	118.92	123.70
1	A	1239	U	P-O5'-C5'	5.97	130.46	120.90
1	A	2073	C	N3-C4-N4	5.97	122.18	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2704	A	C4-C5-C6	5.97	119.99	117.00
1	A	494	A	C4-C5-C6	5.97	119.99	117.00
1	A	748	G	C5-C6-O6	-5.97	125.02	128.60
1	A	1024	G	C5-C6-O6	-5.97	125.02	128.60
1	A	1359	G	C5-C6-O6	-5.97	125.02	128.60
1	A	2003	C	N3-C4-N4	5.97	122.18	118.00
1	A	2247	C	N3-C4-N4	5.97	122.18	118.00
1	A	2620	C	N3-C4-C5	-5.97	119.51	121.90
1	A	154	A	O4'-C1'-N9	5.97	112.98	108.20
1	A	607	G	O4'-C1'-N9	5.97	112.97	108.20
1	A	696	C	N3-C4-N4	5.97	122.18	118.00
1	A	861	C	N3-C4-C5	-5.97	119.51	121.90
1	A	987	A	C4-C5-C6	5.97	119.98	117.00
1	A	1339	A	O3'-P-O5'	-5.97	92.66	104.00
1	A	786	A	C4-C5-C6	5.97	119.98	117.00
1	A	1847	U	O4'-C1'-N1	5.97	112.97	108.20
1	A	169	G	O4'-C1'-N9	5.97	112.97	108.20
1	A	2165	A	C4-C5-C6	5.97	119.98	117.00
1	A	544	G	C5-C6-O6	-5.96	125.02	128.60
1	A	981	C	N3-C4-N4	5.96	122.17	118.00
1	A	1370	C	N3-C4-C5	-5.96	119.51	121.90
1	A	2715	G	C5-C6-O6	-5.96	125.02	128.60
1	A	799	A	C4-C5-C6	5.96	119.98	117.00
1	A	44	A	C4-C5-C6	5.96	119.98	117.00
1	A	455	G	O4'-C1'-N9	5.96	112.97	108.20
1	A	565	U	O4'-C1'-N1	5.96	112.97	108.20
1	A	1734	A	O4'-C1'-N9	5.96	112.97	108.20
1	A	2042	A	O4'-C1'-N9	5.96	112.97	108.20
1	A	2088	A	O4'-C1'-N9	5.96	112.97	108.20
1	A	2254	A	O4'-C1'-N9	5.96	112.97	108.20
1	A	61	A	C4-C5-C6	5.96	119.98	117.00
1	A	584	A	O4'-C1'-N9	5.96	112.97	108.20
1	A	1336	C	N3-C4-N4	5.96	122.17	118.00
1	A	2117	A	C4-C5-C6	5.96	119.98	117.00
1	A	637	A	C4-C5-C6	5.96	119.98	117.00
1	A	669	C	N3-C4-C5	-5.96	119.52	121.90
1	A	988	G	O4'-C1'-N9	5.96	112.97	108.20
1	A	1269	A	C5-C6-N1	-5.96	114.72	117.70
1	A	2620	C	P-O5'-C5'	5.96	130.43	120.90
1	A	2904	A	C4-C5-C6	5.96	119.98	117.00
1	A	322	A	C5-C6-N6	-5.96	118.94	123.70
1	A	490	A	C5-C6-N6	-5.96	118.94	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	828	A	C5-C6-N6	-5.96	118.94	123.70
1	A	1260	A	C4-C5-C6	5.96	119.98	117.00
1	A	1838	A	C5-C6-N6	-5.96	118.94	123.70
1	A	2035	C	N3-C4-C5	-5.96	119.52	121.90
1	A	2560	A	C5-C6-N6	-5.96	118.93	123.70
1	A	14	A	C4-C5-C6	5.96	119.98	117.00
1	A	958	A	O4'-C1'-N9	5.96	112.96	108.20
1	A	1575	A	C5-C6-N1	-5.96	114.72	117.70
1	A	2567	C	N3-C4-N4	5.96	122.17	118.00
1	A	84	A	C4-C5-C6	5.95	119.98	117.00
1	A	176	A	C4-C5-C6	5.95	119.98	117.00
1	A	790	A	C4-C5-C6	5.95	119.98	117.00
1	A	1432	A	C5-C6-N6	-5.95	118.94	123.70
1	A	1781	C	N3-C4-N4	5.95	122.17	118.00
1	A	2159	U	C2-N1-C1'	5.95	124.84	117.70
1	A	2482	A	C5-C6-N6	-5.95	118.94	123.70
1	A	1005	A	C4-C5-C6	5.95	119.98	117.00
1	A	1280	G	N1-C2-N3	-5.95	120.33	123.90
1	A	2548	U	O4'-C1'-N1	5.95	112.96	108.20
1	A	1067	A	C5-C6-N1	-5.95	114.72	117.70
1	A	2491	U	O4'-C1'-N1	5.95	112.96	108.20
1	A	2874	G	O4'-C1'-N9	5.95	112.96	108.20
1	A	456	A	C4-C5-C6	5.95	119.97	117.00
1	A	917	A	C5-C6-N1	-5.95	114.73	117.70
1	A	1061	A	C4-C5-C6	5.95	119.97	117.00
1	A	1309	G	O4'-C1'-N9	5.95	112.96	108.20
1	A	1780	C	N3-C4-N4	5.95	122.16	118.00
1	A	240	C	N3-C4-N4	5.95	122.16	118.00
1	A	382	G	O4'-C1'-N9	5.95	112.96	108.20
1	A	1175	A	C5-C6-N6	-5.95	118.94	123.70
1	A	2209	U	C2-N1-C1'	5.95	124.83	117.70
1	A	2464	A	C5-C6-N1	-5.95	114.73	117.70
1	A	2542	A	C4-C5-C6	5.95	119.97	117.00
1	A	2612	G	C5-C6-O6	-5.95	125.03	128.60
1	A	2647	G	O4'-C1'-N9	5.95	112.96	108.20
1	A	16	G	O4'-C1'-N9	5.94	112.95	108.20
1	A	896	A	C4-C5-C6	5.94	119.97	117.00
1	A	1839	A	C5-C6-N1	-5.94	114.73	117.70
1	A	193	A	C5-C6-N6	-5.94	118.95	123.70
1	A	345	A	C4-C5-C6	5.94	119.97	117.00
1	A	602	G	O4'-C1'-N9	5.94	112.95	108.20
1	A	604	C	N3-C4-N4	5.94	122.16	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1497	G	C8-N9-C1'	5.94	134.73	127.00
1	A	2444	G	N3-C2-N2	5.94	124.06	119.90
1	A	265	A	C5-C6-N1	-5.94	114.73	117.70
1	A	675	C	N3-C4-C5	-5.94	119.52	121.90
1	A	1181	C	N3-C4-N4	5.94	122.16	118.00
1	A	1699	A	C5-C6-N6	-5.94	118.95	123.70
1	A	1714	A	C4-C5-C6	5.94	119.97	117.00
1	A	1330	C	N3-C4-N4	5.94	122.16	118.00
1	A	206	A	C4-C5-C6	5.94	119.97	117.00
1	A	705	A	C4-C5-C6	5.94	119.97	117.00
1	A	727	A	C5-C6-N6	-5.94	118.95	123.70
1	A	958	A	C4-C5-C6	5.94	119.97	117.00
1	A	1442	A	C4-C5-C6	5.94	119.97	117.00
1	A	1144	A	C4-C5-C6	5.94	119.97	117.00
1	A	1644	C	N3-C4-N4	5.94	122.16	118.00
1	A	2689	A	O4'-C1'-N9	5.94	112.95	108.20
1	A	2804	A	C4-C5-C6	5.94	119.97	117.00
1	A	114	C	N3-C4-N4	5.93	122.15	118.00
1	A	263	G	O4'-C1'-N9	5.93	112.95	108.20
1	A	531	C	N3-C4-C5	-5.93	119.53	121.90
1	A	795	G	C5-C6-O6	-5.93	125.04	128.60
1	A	2052	A	C4-C5-C6	5.93	119.97	117.00
1	A	2629	A	C5-C6-N6	-5.93	118.95	123.70
1	A	2078	A	C5-C6-N6	-5.93	118.95	123.70
1	A	889	A	C4-C5-C6	5.93	119.97	117.00
1	A	2222	C	N3-C4-N4	5.93	122.15	118.00
1	A	2431	U	O4'-C1'-N1	5.93	112.94	108.20
1	A	2668	A	O4'-C1'-N9	5.93	112.94	108.20
1	A	996	G	O4'-C1'-N9	5.93	112.94	108.20
1	A	1276	G	O4'-C1'-N9	5.93	112.94	108.20
1	A	1470	G	O4'-C1'-N9	5.93	112.94	108.20
1	A	1520	A	C4-C5-C6	5.93	119.96	117.00
1	A	212	C	N3-C4-C5	-5.93	119.53	121.90
1	A	1942	A	O4'-C1'-N9	5.93	112.94	108.20
1	A	389	A	C4-C5-C6	5.92	119.96	117.00
1	A	529	C	N3-C4-N4	5.92	122.15	118.00
1	A	1649	C	N3-C4-C5	-5.92	119.53	121.90
1	A	1820	A	C5-C6-N6	-5.92	118.96	123.70
1	A	2027	A	C4-C5-C6	5.92	119.96	117.00
1	A	2661	A	O4'-C1'-N9	5.92	112.94	108.20
1	A	2812	A	C4-C5-C6	5.92	119.96	117.00
1	A	179	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(^{o})	Ideal(^{o})
1	A	644	G	O4'-C1'-N9	5.92	112.94	108.20
1	A	770	A	C4-C5-C6	5.92	119.96	117.00
1	A	847	A	O4'-C1'-N9	5.92	112.94	108.20
1	A	853	C	N3-C4-C5	-5.92	119.53	121.90
1	A	136	C	N3-C4-N4	5.92	122.15	118.00
1	A	151	U	O4'-C1'-N1	5.92	112.94	108.20
1	A	414	C	N3-C4-N4	5.92	122.14	118.00
1	A	887	C	N3-C4-N4	5.92	122.14	118.00
1	A	2455	A	O4'-C1'-N9	5.92	112.94	108.20
1	A	2850	G	O4'-C1'-N9	5.92	112.94	108.20
1	A	537	A	C4-C5-C6	5.92	119.96	117.00
1	A	553	A	C4-C5-C6	5.92	119.96	117.00
1	A	1139	G	C5-C6-O6	-5.92	125.05	128.60
1	A	1620	A	C4-C5-C6	5.92	119.96	117.00
1	A	1753	C	N3-C4-C5	-5.92	119.53	121.90
1	A	2463	A	C4-C5-C6	5.92	119.96	117.00
1	A	211	C	N3-C4-C5	-5.92	119.53	121.90
1	A	729	G	O4'-C1'-N9	5.92	112.94	108.20
1	A	1175	A	O4'-C1'-N9	5.92	112.94	108.20
1	A	1476	C	N3-C4-N4	5.92	122.14	118.00
1	A	1493	C	N3-C4-C5	-5.92	119.53	121.90
1	A	1677	A	C4-C5-C6	5.92	119.96	117.00
1	A	2505	A	C5-C6-N1	-5.92	114.74	117.70
1	A	2670	A	C5-C6-N1	-5.92	114.74	117.70
1	A	2742	C	C2-N1-C1'	5.92	125.31	118.80
1	A	2887	A	C5-C6-N1	-5.92	114.74	117.70
1	A	310	C	N3-C4-N4	5.92	122.14	118.00
1	A	647	A	C4-C5-C6	5.92	119.96	117.00
1	A	1592	A	C4-C5-C6	5.92	119.96	117.00
1	A	1767	A	C5-C6-N6	-5.92	118.97	123.70
1	A	2590	A	C5-C6-N1	-5.92	114.74	117.70
1	A	2593	A	C4-C5-C6	5.92	119.96	117.00
1	A	384	A	C4-C5-C6	5.92	119.96	117.00
1	A	1727	A	C4-C5-C6	5.92	119.96	117.00
1	A	108	A	C5-C6-N1	-5.91	114.74	117.70
1	A	160	G	O4'-C1'-N9	5.91	112.93	108.20
1	A	207	A	P-O3'-C3'	5.91	126.80	119.70
1	A	390	A	C5-C6-N6	-5.91	118.97	123.70
1	A	1622	C	N3-C4-C5	-5.91	119.53	121.90
1	A	2899	C	N3-C4-N4	5.91	122.14	118.00
1	A	321	U	C2-N1-C1'	5.91	124.80	117.70
1	A	697	G	O4'-C1'-N9	5.91	112.93	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1591	G	C5-C6-O6	-5.91	125.05	128.60
1	A	399	C	O4'-C1'-N1	5.91	112.93	108.20
1	A	570	C	N3-C4-C5	-5.91	119.54	121.90
1	A	910	A	C4-C5-C6	5.91	119.95	117.00
1	A	1335	A	O4'-C1'-N9	5.91	112.93	108.20
1	A	1424	A	C4-C5-C6	5.91	119.96	117.00
1	A	2230	C	N3-C4-N4	5.91	122.14	118.00
1	A	2508	U	O4'-C1'-N1	5.91	112.93	108.20
1	A	2618	A	C4-C5-C6	5.91	119.96	117.00
1	A	59	G	O4'-C1'-N9	5.91	112.93	108.20
1	A	835	A	C4-C5-C6	5.91	119.95	117.00
1	A	877	G	O4'-C1'-N9	5.91	112.93	108.20
1	A	1171	G	O4'-C1'-N9	5.91	112.93	108.20
1	A	1623	C	N3-C4-N4	5.91	122.14	118.00
1	A	1784	A	C4-C5-C6	5.91	119.95	117.00
1	A	2234	C	N3-C4-N4	5.91	122.14	118.00
1	A	2273	U	P-O5'-C5'	5.91	130.35	120.90
1	A	2909	U	C5'-C4'-O4'	5.91	116.19	109.10
1	A	72	U	O4'-C1'-N1	5.91	112.93	108.20
1	A	156	A	C5-C6-N6	-5.91	118.97	123.70
1	A	718	C	N3-C4-N4	5.91	122.14	118.00
1	A	10	A	C4-C5-C6	5.91	119.95	117.00
1	A	156	A	C4-C5-C6	5.91	119.95	117.00
1	A	838	C	N3-C4-C5	-5.91	119.54	121.90
1	A	1197	A	C4-C5-C6	5.91	119.95	117.00
1	A	2423	C	N3-C4-C5	-5.91	119.54	121.90
1	A	1258	A	O4'-C1'-N9	5.90	112.92	108.20
1	A	1616	G	O4'-C1'-N9	5.90	112.92	108.20
1	A	2505	A	P-O3'-C3'	5.90	126.78	119.70
1	A	670	C	N3-C4-N4	5.90	122.13	118.00
1	A	1199	C	N3-C4-N4	5.90	122.13	118.00
1	A	2233	C	N3-C4-C5	-5.90	119.54	121.90
1	A	90	A	C5-C6-N1	-5.90	114.75	117.70
1	A	236	A	C4-C5-C6	5.90	119.95	117.00
1	A	437	A	C5-C6-N6	-5.90	118.98	123.70
1	A	706	C	N3-C4-N4	5.90	122.13	118.00
1	A	739	C	N3-C4-N4	5.90	122.13	118.00
1	A	1175	A	C4-C5-C6	5.90	119.95	117.00
1	A	1202	A	C4-C5-C6	5.90	119.95	117.00
1	A	1284	A	C5-C6-N6	-5.90	118.98	123.70
1	A	1354	C	N3-C4-N4	5.90	122.13	118.00
1	A	2247	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(^{o})	Ideal(^{o})
1	A	153	C	N3-C4-C5	-5.90	119.54	121.90
1	A	628	C	N3-C4-C5	-5.90	119.54	121.90
1	A	659	A	O4'-C1'-N9	5.90	112.92	108.20
1	A	679	A	P-O5'-C5'	5.90	130.34	120.90
1	A	2506	C	N3-C4-N4	5.90	122.13	118.00
1	A	2885	A	C4-C5-C6	5.90	119.95	117.00
1	A	869	U	O4'-C1'-N1	5.90	112.92	108.20
1	A	1540	A	C4-C5-C6	5.90	119.95	117.00
1	A	1846	G	O4'-C1'-N9	5.90	112.92	108.20
1	A	2006	A	O4'-C1'-N9	5.90	112.92	108.20
1	A	2691	A	C5-C6-N6	-5.90	118.98	123.70
1	A	2750	A	O4'-C1'-N9	5.90	112.92	108.20
1	A	1161	A	C4-C5-C6	5.90	119.95	117.00
1	A	1235	A	C4-C5-C6	5.90	119.95	117.00
1	A	1244	A	C4-C5-C6	5.90	119.95	117.00
1	A	218	G	C5-C6-O6	-5.89	125.06	128.60
1	A	829	A	C4-C5-C6	5.89	119.95	117.00
1	A	979	U	C2-N1-C1'	5.89	124.77	117.70
1	A	1287	A	C5-C6-N1	-5.89	114.75	117.70
1	A	2015	G	O4'-C1'-N9	5.89	112.92	108.20
1	A	2230	C	N3-C4-C5	-5.89	119.54	121.90
1	A	2817	C	N3-C4-N4	5.89	122.13	118.00
1	A	922	A	C5-C6-N1	-5.89	114.75	117.70
1	A	1794	C	N3-C4-C5	-5.89	119.54	121.90
1	A	1604	C	N3-C4-N4	5.89	122.12	118.00
1	A	1809	A	C5-C6-N6	-5.89	118.99	123.70
1	A	2920	C	N3-C4-N4	5.89	122.12	118.00
1	A	158	C	N3-C4-N4	5.89	122.12	118.00
1	A	294	G	O4'-C1'-N9	5.89	112.91	108.20
1	A	470	A	C5-C6-N1	-5.89	114.75	117.70
1	A	785	C	N3-C4-N4	5.89	122.12	118.00
1	A	1059	A	C5-C6-N1	-5.89	114.75	117.70
1	A	1618	A	C4-C5-C6	5.89	119.94	117.00
1	A	2270	A	C4-C5-C6	5.89	119.94	117.00
1	A	373	A	C4'-C3'-C2'	-5.89	96.71	102.60
1	A	1114	G	C1'-O4'-C4'	-5.89	105.19	109.90
1	A	1838	A	C5-C6-N1	-5.89	114.76	117.70
1	A	2635	C	N3-C4-N4	5.89	122.12	118.00
1	A	152	C	N3-C4-C5	-5.88	119.55	121.90
1	A	513	A	C5-C6-N6	-5.88	118.99	123.70
1	A	657	G	O4'-C1'-N9	5.88	112.91	108.20
1	A	859	C	N3-C4-C5	-5.88	119.55	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	912	C	N3-C4-N4	5.88	122.12	118.00
1	A	1326	A	C5-C6-N1	-5.88	114.76	117.70
1	A	2178	C	N3-C4-N4	5.88	122.12	118.00
1	A	2452	U	O4'-C1'-N1	5.88	112.91	108.20
1	A	1262	C	N3-C4-N4	5.88	122.12	118.00
1	A	1382	G	O4'-C1'-N9	5.88	112.91	108.20
1	A	1715	C	N3-C4-C5	-5.88	119.55	121.90
1	A	2783	U	O4'-C1'-N1	5.88	112.91	108.20
1	A	366	A	C5-C6-N1	-5.88	114.76	117.70
1	A	623	A	C4-C5-C6	5.88	119.94	117.00
1	A	1063	G	O4'-C1'-N9	5.88	112.91	108.20
1	A	1141	A	C5-C6-N6	-5.88	119.00	123.70
1	A	1222	A	C4-C5-C6	5.88	119.94	117.00
1	A	1675	A	C4-C5-C6	5.88	119.94	117.00
1	A	1765	G	C5-C6-O6	-5.88	125.07	128.60
1	A	2032	A	C4-C5-C6	5.88	119.94	117.00
1	A	2157	C	N3-C4-C5	-5.88	119.55	121.90
1	A	618	A	C4-C5-C6	5.88	119.94	117.00
1	A	932	C	N3-C4-C5	-5.88	119.55	121.90
1	A	963	G	O4'-C1'-N9	5.88	112.90	108.20
1	A	1403	G	O4'-C1'-N9	5.88	112.90	108.20
1	A	2549	C	P-O3'-C3'	5.88	126.76	119.70
1	A	104	C	N3-C4-N4	5.88	122.11	118.00
1	A	179	A	C5-C6-N1	-5.88	114.76	117.70
1	A	249	C	N3-C4-N4	5.88	122.11	118.00
1	A	442	C	N3-C4-N4	5.88	122.11	118.00
1	A	1201	A	C5-C6-N1	-5.88	114.76	117.70
1	A	1357	A	C4-C5-C6	5.88	119.94	117.00
1	A	1536	A	C5-C6-N1	-5.88	114.76	117.70
1	A	1834	C	N3-C4-N4	5.88	122.11	118.00
1	A	2526	A	C4-C5-C6	5.88	119.94	117.00
1	A	2860	A	C4-C5-C6	5.88	119.94	117.00
1	A	411	G	C3'-C2'-C1'	5.88	106.20	101.50
1	A	533	C	N3-C4-N4	5.88	122.11	118.00
1	A	883	G	O4'-C1'-N9	5.88	112.90	108.20
1	A	1722	A	C4-C5-C6	5.88	119.94	117.00
1	A	2202	A	C5-C6-N6	-5.88	119.00	123.70
1	A	2501	G	N3-C2-N2	5.88	124.01	119.90
1	A	2521	U	O4'-C1'-N1	5.88	112.90	108.20
1	A	2579	G	O4'-C1'-N9	5.88	112.90	108.20
1	A	2919	A	C5-C6-N6	-5.88	119.00	123.70
1	A	62	C	N3-C4-N4	5.88	122.11	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	305	A	C5-C6-N1	-5.88	114.76	117.70
1	A	736	A	C4-C5-C6	5.88	119.94	117.00
1	A	882	A	C4-C5-C6	5.88	119.94	117.00
1	A	1025	A	C4-C5-C6	5.88	119.94	117.00
1	A	1098	C	N3-C4-N4	5.88	122.11	118.00
1	A	1142	A	C5-C6-N6	-5.88	119.00	123.70
1	A	1483	A	C5-C6-N1	-5.88	114.76	117.70
1	A	115	C	N3-C4-C5	-5.87	119.55	121.90
1	A	259	A	C5-C6-N1	-5.87	114.76	117.70
1	A	328	G	P-O3'-C3'	5.87	126.75	119.70
1	A	727	A	C4-C5-C6	5.87	119.94	117.00
1	A	770	A	O4'-C1'-N9	5.87	112.90	108.20
1	A	1569	A	C5-C6-N1	-5.87	114.76	117.70
1	A	1616	G	C5-C6-O6	-5.87	125.08	128.60
1	A	1617	A	C4-C5-C6	5.87	119.94	117.00
1	A	2046	U	O4'-C1'-N1	5.87	112.90	108.20
10	Q	45	TYR	CB-CG-CD2	5.87	124.52	121.00
1	A	44	A	C5-C6-N1	-5.87	114.76	117.70
1	A	944	C	N3-C4-C5	-5.87	119.55	121.90
1	A	1335	A	C4-C5-C6	5.87	119.94	117.00
1	A	2119	A	C5-C6-N1	-5.87	114.76	117.70
1	A	827	G	O4'-C1'-N9	5.87	112.90	108.20
1	A	1237	C	N3-C4-C5	-5.87	119.55	121.90
1	A	2010	A	C4-C5-C6	5.87	119.94	117.00
1	A	2482	A	C4-C5-C6	5.87	119.94	117.00
1	A	28	A	O4'-C1'-N9	5.87	112.89	108.20
1	A	1425	C	N3-C4-N4	5.87	122.11	118.00
1	A	1683	C	N3-C4-N4	5.87	122.11	118.00
1	A	2468	A	C4-C5-C6	5.87	119.93	117.00
1	A	2691	A	O4'-C1'-N9	5.87	112.89	108.20
1	A	199	A	C5-C6-N6	-5.87	119.01	123.70
1	A	663	G	O4'-C1'-N9	5.87	112.89	108.20
1	A	696	C	N3-C4-C5	-5.87	119.55	121.90
1	A	753	A	C4-C5-C6	5.87	119.93	117.00
1	A	2106	A	C5-C6-N1	-5.87	114.77	117.70
1	A	509	C	N3-C4-N4	5.86	122.11	118.00
1	A	1364	C	N3-C4-N4	5.86	122.10	118.00
1	A	1537	G	O4'-C1'-N9	5.86	112.89	108.20
1	A	1937	C	N3-C4-N4	5.86	122.10	118.00
1	A	840	A	C5-C6-N1	-5.86	114.77	117.70
1	A	1617	A	O4'-C1'-N9	5.86	112.89	108.20
1	A	1697	A	C5-C6-N6	-5.86	119.01	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2608	C	N3-C4-N4	5.86	122.10	118.00
1	A	2621	G	O4'-C1'-N9	5.86	112.89	108.20
1	A	206	A	O4'-C1'-N9	5.86	112.89	108.20
1	A	902	G	C5-C6-O6	-5.86	125.08	128.60
1	A	1017	C	N3-C4-C5	-5.86	119.56	121.90
1	A	2851	A	C5-C6-N1	-5.86	114.77	117.70
1	A	357	G	O4'-C1'-N9	5.86	112.89	108.20
1	A	406	G	O4'-C1'-N9	5.86	112.89	108.20
1	A	1940	U	P-O3'-C3'	5.86	126.73	119.70
1	A	2017	C	N3-C4-N4	5.86	122.10	118.00
1	A	132	C	N3-C4-N4	5.86	122.10	118.00
1	A	273	A	C4-C5-C6	5.86	119.93	117.00
1	A	590	U	O4'-C1'-N1	5.86	112.88	108.20
1	A	166	A	C5-C6-N1	-5.85	114.77	117.70
1	A	1481	G	O4'-C1'-N9	5.85	112.88	108.20
1	A	1774	A	C4-C5-C6	5.85	119.93	117.00
1	A	188	C	N3-C4-C5	-5.85	119.56	121.90
1	A	470	A	O4'-C1'-N9	5.85	112.88	108.20
1	A	889	A	C5-C6-N1	-5.85	114.77	117.70
1	A	2044	A	C5-C6-N6	-5.85	119.02	123.70
1	A	2067	G	O4'-C1'-N9	5.85	112.88	108.20
1	A	2735	A	C5-C6-N6	-5.85	119.02	123.70
1	A	1126	A	C5-C6-N6	-5.85	119.02	123.70
1	A	2145	G	O4'-C1'-N9	5.85	112.88	108.20
1	A	1243	A	C5-C6-N1	-5.85	114.78	117.70
1	A	1392	A	C5-C6-N6	-5.85	119.02	123.70
1	A	1999	A	C4-C5-C6	5.85	119.92	117.00
1	A	2146	A	C4-C5-C6	5.85	119.92	117.00
1	A	1099	C	N3-C4-C5	-5.85	119.56	121.90
1	A	1485	A	C5-C6-N1	-5.85	114.78	117.70
1	A	132	C	N3-C4-C5	-5.84	119.56	121.90
1	A	265	A	C4-C5-C6	5.84	119.92	117.00
1	A	575	A	C4-C5-C6	5.84	119.92	117.00
1	A	867	A	O4'-C1'-N9	5.84	112.88	108.20
1	A	1029	A	O4'-C1'-N9	5.84	112.88	108.20
1	A	1655	A	C4-C5-C6	5.84	119.92	117.00
1	A	1769	G	O4'-C1'-N9	5.84	112.88	108.20
1	A	2155	A	C5-C6-N6	-5.84	119.02	123.70
1	A	2800	C	N3-C4-N4	5.84	122.09	118.00
1	A	2885	A	C5-C6-N6	-5.84	119.02	123.70
1	A	473	C	N3-C4-N4	5.84	122.09	118.00
1	A	503	C	N3-C4-N4	5.84	122.09	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1254	A	O4'-C1'-N9	5.84	112.87	108.20
1	A	917	A	P-O5'-C5'	5.84	130.25	120.90
1	A	937	C	N3-C4-C5	-5.84	119.56	121.90
1	A	1384	C	N3-C4-N4	5.84	122.09	118.00
1	A	1521	G	O4'-C1'-N9	5.84	112.87	108.20
1	A	2027	A	C5-C6-N1	-5.84	114.78	117.70
1	A	1066	A	C4-C5-C6	5.84	119.92	117.00
1	A	1179	A	C4-C5-C6	5.84	119.92	117.00
1	A	1191	C	N3-C4-N4	5.84	122.09	118.00
1	A	2831	A	P-O3'-C3'	5.84	126.71	119.70
1	A	2871	G	O4'-C1'-N9	5.84	112.87	108.20
1	A	2220	A	C5-C6-N6	-5.84	119.03	123.70
1	A	2790	A	C4-C5-C6	5.84	119.92	117.00
1	A	53	A	C4-C5-C6	5.84	119.92	117.00
1	A	73	A	C4-C5-C6	5.84	119.92	117.00
1	A	194	A	C5-C6-N6	-5.84	119.03	123.70
1	A	1052	C	N3-C4-N4	5.84	122.09	118.00
1	A	1116	A	C5-C6-N6	-5.84	119.03	123.70
1	A	1196	C	P-O5'-C5'	5.84	130.24	120.90
1	A	1778	A	C4-C5-C6	5.84	119.92	117.00
1	A	530	A	C4-C5-C6	5.83	119.92	117.00
1	A	724	A	C5-C6-N1	-5.83	114.78	117.70
1	A	1585	A	C4-C5-C6	5.83	119.92	117.00
1	A	561	A	C5-C6-N6	-5.83	119.03	123.70
1	A	757	C	N3-C4-N4	5.83	122.08	118.00
1	A	1020	A	C5-C6-N6	-5.83	119.03	123.70
1	A	1287	A	C4-C5-C6	5.83	119.92	117.00
1	A	1649	C	N3-C4-N4	5.83	122.08	118.00
1	A	394	U	O4'-C1'-N1	5.83	112.86	108.20
1	A	563	C	N3-C4-N4	5.83	122.08	118.00
1	A	668	G	O4'-C1'-N9	5.83	112.87	108.20
1	A	1124	C	N3-C4-C5	-5.83	119.57	121.90
1	A	1631	A	C4-C5-C6	5.83	119.92	117.00
1	A	2053	C	P-O5'-C5'	5.83	130.23	120.90
1	A	2645	C	N3-C4-C5	-5.83	119.57	121.90
1	A	2846	A	C5-C6-N6	-5.83	119.03	123.70
1	A	304	G	O4'-C1'-N9	5.83	112.86	108.20
1	A	722	A	C5-C6-N1	-5.83	114.78	117.70
1	A	1208	G	O4'-C1'-N9	5.83	112.86	108.20
1	A	140	A	C5-C6-N1	-5.83	114.79	117.70
1	A	202	A	C4-C5-C6	5.83	119.91	117.00
1	A	753	A	C5-C6-N6	-5.83	119.04	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1553	A	C4-C5-C6	5.83	119.91	117.00
1	A	1812	A	C4-C5-C6	5.83	119.91	117.00
1	A	1820	A	C4-C5-C6	5.83	119.91	117.00
1	A	782	A	O4'-C1'-N9	5.83	112.86	108.20
1	A	1094	A	O4'-C1'-N9	5.83	112.86	108.20
1	A	1172	A	C4-C5-C6	5.83	119.91	117.00
1	A	2752	C	N3-C4-N4	5.83	122.08	118.00
1	A	368	G	O4'-C1'-N9	5.82	112.86	108.20
1	A	1241	C	C6-N1-C2	-5.82	117.97	120.30
1	A	1676	G	O4'-C1'-N9	5.82	112.86	108.20
1	A	2500	A	C5-C6-N6	-5.82	119.04	123.70
1	A	2851	A	C5-C6-N6	-5.82	119.04	123.70
1	A	609	C	N3-C4-N4	5.82	122.07	118.00
1	A	1256	C	N3-C4-C5	-5.82	119.57	121.90
1	A	1401	C	N3-C4-C5	-5.82	119.57	121.90
1	A	645	C	O4'-C1'-N1	5.82	112.85	108.20
1	A	732	A	C5-C6-N6	-5.82	119.05	123.70
1	A	1256	C	P-O5'-C5'	5.82	130.21	120.90
1	A	60	G	O4'-C1'-N9	5.82	112.85	108.20
1	A	641	C	N3-C4-C5	-5.82	119.57	121.90
1	A	798	A	C5-C6-N6	-5.82	119.05	123.70
1	A	952	A	C4-C5-C6	5.82	119.91	117.00
1	A	1715	C	N3-C4-N4	5.82	122.07	118.00
1	A	2178	C	N3-C4-C5	-5.82	119.57	121.90
1	A	2449	C	N3-C4-C5	-5.81	119.57	121.90
1	A	133	A	C4-C5-C6	5.81	119.91	117.00
1	A	318	A	C5-C6-N6	-5.81	119.05	123.70
1	A	1098	C	O4'-C1'-N1	5.81	112.85	108.20
1	A	1938	C	N3-C4-N4	5.81	122.07	118.00
1	A	2176	A	C5-C6-N6	-5.81	119.05	123.70
1	A	2539	C	N3-C4-N4	5.81	122.07	118.00
1	A	278	A	C4-C5-C6	5.81	119.91	117.00
1	A	1288	G	C5-C6-O6	-5.81	125.11	128.60
1	A	1432	A	C4-C5-C6	5.81	119.91	117.00
1	A	2110	C	N3-C4-N4	5.81	122.07	118.00
1	A	2861	U	O4'-C1'-N1	5.81	112.85	108.20
1	A	349	C	O4'-C1'-N1	5.81	112.85	108.20
1	A	587	C	N3-C4-N4	5.81	122.07	118.00
1	A	641	C	N3-C4-N4	5.81	122.07	118.00
1	A	762	A	C5-C6-N6	-5.81	119.05	123.70
1	A	2023	C	N3-C4-N4	5.81	122.07	118.00
1	A	2083	A	C4-C5-C6	5.81	119.90	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2668	A	C4-C5-C6	5.81	119.91	117.00
1	A	2793	A	C5-C6-N6	-5.81	119.05	123.70
1	A	2819	A	O4'-C1'-N9	5.81	112.85	108.20
1	A	231	A	O4'-C1'-N9	5.81	112.84	108.20
1	A	388	A	C4-C5-C6	5.81	119.90	117.00
1	A	800	G	C2'-C3'-O3'	5.81	122.99	113.70
1	A	821	A	C4-C5-C6	5.81	119.90	117.00
1	A	65	A	C5-C6-N6	-5.81	119.06	123.70
1	A	1236	G	O4'-C1'-N9	5.81	112.84	108.20
1	A	105	C	N3-C4-N4	5.80	122.06	118.00
1	A	125	A	C5-C6-N6	-5.80	119.06	123.70
1	A	291	C	N3-C4-C5	-5.80	119.58	121.90
1	A	459	A	C4-C5-C6	5.80	119.90	117.00
1	A	797	A	O4'-C1'-N9	5.80	112.84	108.20
1	A	1119	A	C5-C6-N6	-5.80	119.06	123.70
1	A	1365	U	O4'-C1'-N1	5.80	112.84	108.20
1	A	2007	A	O4'-C1'-N9	5.80	112.84	108.20
1	A	2044	A	O4'-C1'-N9	5.80	112.84	108.20
1	A	2447	A	C5-C6-N1	-5.80	114.80	117.70
1	A	2485	C	N3-C4-C5	-5.80	119.58	121.90
1	A	2527	C	O4'-C1'-N1	5.80	112.84	108.20
1	A	354	A	C4-C5-C6	5.80	119.90	117.00
1	A	69	C	N3-C4-N4	5.80	122.06	118.00
1	A	279	A	O4'-C1'-N9	5.80	112.84	108.20
1	A	1369	C	C2-N1-C1'	5.80	125.18	118.80
1	A	2777	A	C5-C6-N1	-5.80	114.80	117.70
1	A	677	A	C4-C5-C6	5.80	119.90	117.00
1	A	1096	A	C5-C6-N1	-5.80	114.80	117.70
1	A	1335	A	C5-C6-N6	-5.80	119.06	123.70
1	A	2629	A	C4-C5-C6	5.80	119.90	117.00
1	A	2773	G	O4'-C1'-N9	5.80	112.84	108.20
1	A	483	C	N3-C4-C5	-5.80	119.58	121.90
1	A	930	C	N3-C4-C5	-5.80	119.58	121.90
1	A	1456	A	C4-C5-C6	5.80	119.90	117.00
1	A	79	C	N3-C4-C5	-5.80	119.58	121.90
1	A	314	A	C5-C6-N6	-5.80	119.06	123.70
1	A	547	A	C5-C6-N1	-5.80	114.80	117.70
1	A	970	A	C4-C5-C6	5.80	119.90	117.00
1	A	991	A	C5-C6-N6	-5.80	119.06	123.70
1	A	1008	A	C5-C6-N6	-5.80	119.06	123.70
1	A	1142	A	C4-C5-C6	5.80	119.90	117.00
1	A	2740	A	C5-C6-N6	-5.80	119.06	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2817	C	N3-C4-C5	-5.80	119.58	121.90
1	A	2912	A	C4-C5-C6	5.80	119.90	117.00
12	R	26	ALA	N-CA-CB	5.80	118.21	110.10
1	A	73	A	C5-C6-N6	-5.79	119.06	123.70
1	A	271	C	N3-C4-C5	-5.79	119.58	121.90
1	A	2658	A	C4-C5-C6	5.79	119.90	117.00
1	A	1012	G	O4'-C1'-N9	5.79	112.83	108.20
1	A	1509	C	N3-C4-N4	5.79	122.06	118.00
1	A	2497	A	C4-C5-C6	5.79	119.90	117.00
1	A	2839	C	N3-C4-C5	-5.79	119.58	121.90
1	A	2841	C	N3-C4-C5	-5.79	119.58	121.90
1	A	1442	A	C5-C6-N1	-5.79	114.80	117.70
1	A	2482	A	O4'-C1'-N9	5.79	112.83	108.20
1	A	69	C	N3-C4-C5	-5.79	119.58	121.90
1	A	2675	C	N3-C4-C5	-5.79	119.58	121.90
1	A	2752	C	N3-C4-C5	-5.79	119.58	121.90
1	A	29	U	O4'-C1'-N1	5.79	112.83	108.20
1	A	466	C	N3-C4-C5	-5.79	119.58	121.90
1	A	784	C	N3-C4-C5	-5.79	119.58	121.90
1	A	811	A	C5-C6-N1	-5.79	114.81	117.70
1	A	1100	A	C5-C6-N1	-5.79	114.81	117.70
1	A	2119	A	C4-C5-C6	5.79	119.89	117.00
1	A	981	C	N3-C4-C5	-5.79	119.58	121.90
1	A	1627	A	C5-C6-N6	-5.79	119.07	123.70
1	A	2005	C	N3-C4-C5	-5.79	119.58	121.90
1	A	675	C	N3-C4-N4	5.79	122.05	118.00
1	A	932	C	N3-C4-N4	5.79	122.05	118.00
1	A	1223	C	N3-C4-C5	-5.79	119.59	121.90
1	A	1250	G	P-O3'-C3'	5.79	126.64	119.70
1	A	1819	C	N3-C4-N4	5.79	122.05	118.00
1	A	2883	C	P-O3'-C3'	5.79	126.64	119.70
1	A	128	C	N3-C4-C5	-5.78	119.59	121.90
1	A	1126	A	C4-C5-C6	5.78	119.89	117.00
1	A	1532	A	C5-C6-N1	-5.78	114.81	117.70
1	A	2018	A	O4'-C1'-N9	5.78	112.83	108.20
1	A	2032	A	C5-C6-N1	-5.78	114.81	117.70
1	A	2915	G	O4'-C1'-N9	5.78	112.83	108.20
1	A	422	C	N3-C4-C5	-5.78	119.59	121.90
1	A	502	C	N3-C4-C5	-5.78	119.59	121.90
1	A	1216	C	N3-C4-C5	-5.78	119.59	121.90
1	A	1203	G	O4'-C1'-N9	5.78	112.82	108.20
1	A	1770	C	N3-C4-N4	5.78	122.04	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2618	A	C5-C6-N1	-5.78	114.81	117.70
1	A	2733	C	N3-C4-C5	-5.78	119.59	121.90
1	A	2776	G	O4'-C1'-N9	5.78	112.82	108.20
1	A	2799	C	N3-C4-N4	5.78	122.04	118.00
1	A	589	G	O4'-C1'-N9	5.78	112.82	108.20
1	A	655	C	N3-C4-C5	-5.78	119.59	121.90
1	A	734	C	N3-C4-C5	-5.78	119.59	121.90
1	A	2031	G	O4'-C1'-N9	5.78	112.82	108.20
1	A	2104	U	O4'-C1'-N1	5.78	112.82	108.20
1	A	2831	A	C5-C6-N6	-5.78	119.08	123.70
1	A	2841	C	N3-C4-N4	5.78	122.04	118.00
1	A	318	A	C4-C5-C6	5.77	119.89	117.00
1	A	1116	A	C4-C5-C6	5.77	119.89	117.00
1	A	55	G	C5'-C4'-O4'	5.77	116.03	109.10
1	A	180	G	O4'-C1'-N9	5.77	112.82	108.20
1	A	279	A	C4-C5-C6	5.77	119.89	117.00
1	A	661	A	C5-C6-N1	-5.77	114.81	117.70
1	A	1390	C	N3-C4-C5	-5.77	119.59	121.90
1	A	1545	C	N3-C4-C5	-5.77	119.59	121.90
1	A	2158	C	N3-C4-N4	5.77	122.04	118.00
1	A	2434	G	N3-C2-N2	5.77	123.94	119.90
1	A	1	G	O4'-C1'-N9	5.77	112.82	108.20
1	A	2924	A	C5-C6-N6	-5.77	119.08	123.70
1	A	391	A	C4-C5-C6	5.77	119.89	117.00
1	A	1164	C	N3-C4-N4	5.77	122.04	118.00
1	A	1809	A	C5-C6-N1	-5.77	114.82	117.70
1	A	1011	C	O4'-C1'-N1	5.77	112.81	108.20
1	A	1656	C	N3-C4-N4	5.77	122.04	118.00
1	A	1935	G	O4'-C1'-N9	5.77	112.81	108.20
1	A	2264	G	O4'-C1'-N9	5.77	112.81	108.20
1	A	76	C	N3-C4-N4	5.77	122.04	118.00
1	A	2126	G	O4'-C1'-N9	5.77	112.81	108.20
1	A	2432	C	N3-C4-C5	-5.77	119.59	121.90
1	A	337	A	O4'-C1'-N9	5.76	112.81	108.20
1	A	2095	C	N3-C4-N4	5.76	122.03	118.00
1	A	102	A	C5-C6-N1	-5.76	114.82	117.70
1	A	690	A	C5-C6-N6	-5.76	119.09	123.70
1	A	1135	G	C5-C6-O6	-5.76	125.14	128.60
1	A	2498	A	C5-C6-N1	-5.76	114.82	117.70
1	A	2834	A	C4-C5-C6	5.76	119.88	117.00
1	A	560	A	C4-C5-C6	5.76	119.88	117.00
1	A	683	A	C5-C6-N1	-5.76	114.82	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	870	A	C4-C5-C6	5.76	119.88	117.00
1	A	888	A	C5-C6-N1	-5.76	114.82	117.70
1	A	1853	G	O4'-C1'-N9	5.76	112.81	108.20
1	A	2000	A	C5-C6-N6	-5.76	119.09	123.70
1	A	2269	C	N3-C4-C5	-5.76	119.60	121.90
1	A	2902	A	O4'-C1'-N9	5.76	112.81	108.20
1	A	647	A	O4'-C1'-N9	5.76	112.81	108.20
1	A	905	G	O3'-P-O5'	-5.76	93.06	104.00
1	A	1046	A	C5-C6-N6	-5.76	119.09	123.70
1	A	1078	A	C5-C6-N1	-5.76	114.82	117.70
1	A	156	A	C5-C6-N1	-5.76	114.82	117.70
1	A	1323	A	C5-C6-N6	-5.76	119.09	123.70
1	A	1955	U	O4'-C1'-N1	5.76	112.81	108.20
1	A	2512	C	N3-C4-N4	5.76	122.03	118.00
1	A	14	A	O4'-C1'-N9	5.76	112.81	108.20
1	A	173	A	O4'-C1'-N9	5.76	112.81	108.20
1	A	537	A	O4'-C1'-N9	5.76	112.81	108.20
1	A	994	C	N3-C4-N4	5.76	122.03	118.00
1	A	1453	A	C5-C6-N1	-5.76	114.82	117.70
1	A	1703	C	N3-C4-N4	5.76	122.03	118.00
1	A	2503	C	N3-C4-N4	5.76	122.03	118.00
1	A	1272	G	O4'-C1'-N9	5.75	112.80	108.20
1	A	1615	A	C4-C5-C6	5.75	119.88	117.00
1	A	2651	C	N3-C4-N4	5.75	122.03	118.00
1	A	808	A	C5-C6-N1	-5.75	114.82	117.70
1	A	913	A	C4-C5-C6	5.75	119.88	117.00
1	A	1768	A	C5-C6-N1	-5.75	114.82	117.70
1	A	2092	C	N3-C4-N4	5.75	122.03	118.00
1	A	965	A	C5-C6-N6	-5.75	119.10	123.70
1	A	1073	A	C5-C6-N6	-5.75	119.10	123.70
1	A	1097	A	C5-C6-N6	-5.75	119.10	123.70
1	A	1347	A	C5-C6-N1	-5.75	114.82	117.70
1	A	1374	C	N3-C4-N4	5.75	122.03	118.00
1	A	1611	G	O4'-C1'-N9	5.75	112.80	108.20
1	A	1722	A	C5-C6-N1	-5.75	114.82	117.70
1	A	2238	C	N3-C4-C5	-5.75	119.60	121.90
1	A	401	C	N3-C4-C5	-5.75	119.60	121.90
1	A	734	C	N3-C4-N4	5.75	122.02	118.00
1	A	2113	C	N3-C4-N4	5.75	122.02	118.00
1	A	2243	C	N3-C4-C5	-5.75	119.60	121.90
1	A	364	A	O4'-C1'-N9	5.75	112.80	108.20
1	A	720	C	N3-C4-C5	-5.75	119.60	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	971	A	C4-C5-C6	5.75	119.87	117.00
1	A	1161	A	C5-C6-N1	-5.75	114.83	117.70
1	A	1209	G	O4'-C1'-N9	5.75	112.80	108.20
1	A	2262	A	C4-C5-C6	5.75	119.87	117.00
1	A	2733	C	N3-C4-N4	5.75	122.02	118.00
1	A	97	C	N3-C4-C5	-5.75	119.60	121.90
1	A	592	A	C4-C5-C6	5.75	119.87	117.00
1	A	1318	G	O4'-C1'-N9	5.75	112.80	108.20
1	A	1506	A	C5-C6-N6	-5.75	119.10	123.70
1	A	2735	A	C4-C5-C6	5.75	119.87	117.00
1	A	247	A	O4'-C1'-N9	5.74	112.79	108.20
1	A	678	A	C4-C5-C6	5.74	119.87	117.00
1	A	990	C	N3-C4-N4	5.74	122.02	118.00
1	A	1027	A	C5-C6-N1	-5.74	114.83	117.70
1	A	1049	G	O4'-C1'-N9	5.74	112.79	108.20
1	A	1131	A	C4-C5-C6	5.74	119.87	117.00
1	A	2197	G	N3-C2-N2	5.74	123.92	119.90
1	A	2202	A	O4'-C1'-N9	5.74	112.80	108.20
1	A	171	A	C5-C6-N6	-5.74	119.11	123.70
1	A	1685	A	C5-C6-N6	-5.74	119.11	123.70
1	A	2074	C	N3-C4-N4	5.74	122.02	118.00
1	A	2821	U	C5'-C4'-O4'	-5.74	102.21	109.10
1	A	1122	C	N3-C4-N4	5.74	122.02	118.00
1	A	1273	G	O4'-C1'-N9	5.74	112.79	108.20
1	A	1729	C	N3-C4-N4	5.74	122.02	118.00
1	A	1953	C	N3-C4-C5	-5.74	119.60	121.90
1	A	2033	G	O4'-C1'-N9	5.74	112.79	108.20
1	A	2141	A	O4'-C1'-N9	5.74	112.79	108.20
1	A	104	C	N3-C4-C5	-5.74	119.60	121.90
1	A	198	A	P-O3'-C3'	5.74	126.59	119.70
1	A	1038	C	N3-C4-N4	5.74	122.02	118.00
1	A	1581	A	C5-C6-N6	-5.74	119.11	123.70
1	A	1645	C	N3-C4-N4	5.74	122.02	118.00
1	A	1818	A	C5-C6-N6	-5.74	119.11	123.70
1	A	2662	A	C4-C5-C6	5.74	119.87	117.00
1	A	2735	A	C5-C6-N1	-5.74	114.83	117.70
1	A	397	U	O4'-C1'-N1	5.74	112.79	108.20
1	A	1014	A	O4'-C1'-N9	5.74	112.79	108.20
1	A	1196	C	N3-C4-C5	-5.74	119.61	121.90
1	A	1221	A	C5-C6-N1	-5.74	114.83	117.70
1	A	1524	A	C5-C6-N1	-5.74	114.83	117.70
1	A	1619	A	C5-C6-N1	-5.74	114.83	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2801	C	N3-C4-C5	-5.74	119.61	121.90
1	A	201	C	N3-C4-C5	-5.74	119.61	121.90
1	A	791	C	N3-C4-C5	-5.74	119.61	121.90
1	A	1219	C	N3-C4-C5	-5.74	119.61	121.90
1	A	1375	A	C4-C5-C6	5.74	119.87	117.00
1	A	2673	A	C5-C6-N6	-5.74	119.11	123.70
1	A	2853	C	N3-C4-N4	5.74	122.02	118.00
1	A	1619	A	C5-C6-N6	-5.73	119.11	123.70
1	A	428	A	C4-C5-C6	5.73	119.87	117.00
1	A	543	A	C5-C6-N6	-5.73	119.11	123.70
1	A	605	G	O4'-C1'-N9	5.73	112.78	108.20
1	A	969	C	N3-C4-N4	5.73	122.01	118.00
1	A	1363	G	O4'-C1'-N9	5.73	112.79	108.20
1	A	1945	A	O4'-C1'-N9	5.73	112.79	108.20
1	A	2708	A	C5-C6-N6	-5.73	119.11	123.70
1	A	138	U	C2-N1-C1'	5.73	124.58	117.70
1	A	842	C	N3-C4-N4	5.73	122.01	118.00
1	A	1148	C	N3-C4-C5	-5.73	119.61	121.90
1	A	1329	C	N3-C4-C5	-5.73	119.61	121.90
1	A	1541	A	C5-C6-N6	-5.73	119.12	123.70
1	A	2083	A	C5-C6-N6	-5.73	119.11	123.70
1	A	2866	C	N3-C4-N4	5.73	122.01	118.00
1	A	31	C	N3-C4-C5	-5.73	119.61	121.90
1	A	323	C	C1'-O4'-C4'	-5.73	105.32	109.90
1	A	438	A	C5-C6-N1	-5.73	114.83	117.70
1	A	867	A	C5-C6-N6	-5.73	119.12	123.70
1	A	145	G	O4'-C1'-N9	5.73	112.78	108.20
1	A	366	A	C5-C6-N6	-5.73	119.12	123.70
1	A	1346	A	O4'-C1'-N9	5.73	112.78	108.20
1	A	1406	A	C5-C6-N6	-5.73	119.12	123.70
1	A	1794	C	N3-C4-N4	5.73	122.01	118.00
1	A	2542	A	C5-C6-N6	-5.73	119.12	123.70
1	A	428	A	C5-C6-N1	-5.73	114.84	117.70
1	A	449	A	O4'-C1'-N9	5.73	112.78	108.20
1	A	1036	A	C5-C6-N6	-5.73	119.12	123.70
1	A	1190	A	C4-C5-C6	5.73	119.86	117.00
1	A	1316	A	C5-C6-N6	-5.73	119.12	123.70
1	A	2781	C	N3-C4-C5	-5.73	119.61	121.90
1	A	14	A	C5-C6-N1	-5.72	114.84	117.70
1	A	62	C	P-O5'-C5'	5.72	130.06	120.90
1	A	208	G	O4'-C1'-N9	5.72	112.78	108.20
1	A	1293	A	C5-C6-N1	-5.72	114.84	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1636	A	C4-C5-C6	5.72	119.86	117.00
1	A	1787	G	C1'-O4'-C4'	-5.72	105.32	109.90
1	A	2113	C	N3-C4-C5	-5.72	119.61	121.90
1	A	2132	A	O4'-C1'-N9	5.72	112.78	108.20
1	A	2480	A	O4'-C1'-N9	5.72	112.78	108.20
1	A	2661	A	C4-C5-C6	5.72	119.86	117.00
1	A	152	C	N3-C4-N4	5.72	122.00	118.00
1	A	763	A	C4-C5-C6	5.72	119.86	117.00
1	A	1503	G	O4'-C1'-N9	5.72	112.78	108.20
1	A	1819	C	N3-C4-C5	-5.72	119.61	121.90
1	A	2564	A	C5-C6-N1	-5.72	114.84	117.70
1	A	2750	A	C4-C5-C6	5.72	119.86	117.00
1	A	2774	C	N3-C4-C5	-5.72	119.61	121.90
1	A	258	A	C5-C6-N6	-5.72	119.12	123.70
1	A	1523	U	P-O3'-C3'	5.72	126.56	119.70
1	A	2424	C	N3-C4-N4	5.72	122.00	118.00
1	A	47	C	N3-C4-C5	-5.72	119.61	121.90
1	A	95	A	C4-C5-C6	5.72	119.86	117.00
1	A	2539	C	N3-C4-C5	-5.72	119.61	121.90
1	A	500	A	C5-C6-N6	-5.72	119.13	123.70
1	A	553	A	O4'-C1'-N9	5.72	112.78	108.20
1	A	833	C	N3-C4-N4	5.72	122.00	118.00
1	A	1186	C	N3-C4-C5	-5.72	119.61	121.90
1	A	1682	C	N3-C4-C5	-5.72	119.61	121.90
1	A	2217	U	O4'-C1'-N1	5.72	112.77	108.20
1	A	476	A	C5-C6-N6	-5.72	119.13	123.70
1	A	593	A	C4-C5-C6	5.72	119.86	117.00
1	A	658	A	C5-C6-N6	-5.72	119.13	123.70
1	A	659	A	C5-C6-N6	-5.72	119.13	123.70
1	A	1056	A	C5-C6-N1	-5.72	114.84	117.70
1	A	1150	C	N3-C4-N4	5.72	122.00	118.00
1	A	2466	C	N3-C4-N4	5.72	122.00	118.00
1	A	2661	A	C5-C6-N6	-5.72	119.13	123.70
1	A	2919	A	C5-C6-N1	-5.72	114.84	117.70
8	L	58	PHE	CB-CG-CD2	-5.72	116.80	120.80
1	A	270	C	N3-C4-C5	-5.71	119.61	121.90
1	A	656	A	C4-C5-C6	5.71	119.86	117.00
1	A	757	C	N3-C4-C5	-5.71	119.61	121.90
1	A	828	A	C4-C5-C6	5.71	119.86	117.00
1	A	1091	U	O4'-C1'-N1	5.71	112.77	108.20
1	A	1225	G	O4'-C1'-N9	5.71	112.77	108.20
1	A	1480	A	C5-C6-N1	-5.71	114.84	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1672	A	C4-C5-C6	5.71	119.86	117.00
1	A	2005	C	N3-C4-N4	5.71	122.00	118.00
1	A	2203	C	N3-C4-N4	5.71	122.00	118.00
1	A	2500	A	C4-C5-C6	5.71	119.86	117.00
1	A	501	A	C4-C5-C6	5.71	119.86	117.00
1	A	904	A	C5-C6-N6	-5.71	119.13	123.70
1	A	1393	A	C5-C6-N1	-5.71	114.84	117.70
1	A	2705	C	N3-C4-C5	-5.71	119.61	121.90
1	A	106	G	O4'-C1'-N9	5.71	112.77	108.20
1	A	156	A	O4'-C1'-N9	5.71	112.77	108.20
1	A	756	U	O4'-C1'-N1	5.71	112.77	108.20
1	A	769	A	O4'-C1'-N9	5.71	112.77	108.20
1	A	1331	C	N3-C4-N4	5.71	122.00	118.00
1	A	2172	C	O4'-C1'-N1	5.71	112.77	108.20
1	A	219	A	C4-C5-C6	5.71	119.86	117.00
1	A	841	A	O4'-C1'-N9	5.71	112.77	108.20
1	A	1396	C	N3-C4-C5	-5.71	119.62	121.90
1	A	1671	G	O4'-C1'-N9	5.71	112.77	108.20
1	A	200	A	C5-C6-N6	-5.71	119.13	123.70
1	A	910	A	C5-C6-N6	-5.71	119.13	123.70
1	A	1030	G	O4'-C1'-N9	5.71	112.77	108.20
1	A	1074	A	C5-C6-N6	-5.71	119.13	123.70
1	A	1961	A	C5-C6-N6	-5.71	119.13	123.70
1	A	2807	A	C5-C6-N6	-5.71	119.13	123.70
1	A	2923	A	O4'-C1'-N9	5.71	112.77	108.20
1	A	37	C	N3-C4-C5	-5.71	119.62	121.90
1	A	851	A	O4'-C1'-N9	5.71	112.77	108.20
1	A	959	C	N3-C4-C5	-5.71	119.62	121.90
1	A	1527	C	N3-C4-N4	5.71	121.99	118.00
1	A	2255	C	N3-C4-C5	-5.71	119.62	121.90
1	A	2511	A	C5-C6-N6	-5.71	119.13	123.70
1	A	2010	A	C5-C6-N6	-5.71	119.14	123.70
1	A	2748	G	C5-C6-O6	-5.71	125.18	128.60
1	A	51	G	N3-C2-N2	5.70	123.89	119.90
1	A	185	A	C5-C6-N1	-5.70	114.85	117.70
1	A	328	G	O4'-C1'-N9	5.70	112.76	108.20
1	A	769	A	C4-C5-C6	5.70	119.85	117.00
1	A	2440	A	C5-C6-N6	-5.70	119.14	123.70
1	A	929	G	O4'-C1'-N9	5.70	112.76	108.20
1	A	1211	C	N3-C4-C5	-5.70	119.62	121.90
1	A	2114	C	N3-C4-N4	5.70	121.99	118.00
1	A	452	C	C2-N1-C1'	5.70	125.07	118.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	559	A	C5-C6-N6	-5.70	119.14	123.70
1	A	635	C	N3-C4-N4	5.70	121.99	118.00
1	A	1456	A	C5-C6-N6	-5.70	119.14	123.70
1	A	1735	A	C5-C6-N1	-5.70	114.85	117.70
1	A	1858	A	C4-C5-C6	5.70	119.85	117.00
1	A	2646	C	N3-C4-N4	5.70	121.99	118.00
1	A	524	A	C5-C6-N1	-5.70	114.85	117.70
1	A	534	C	N3-C4-N4	5.70	121.99	118.00
1	A	1465	A	C5-C6-N1	-5.70	114.85	117.70
1	A	1717	C	N3-C4-C5	-5.70	119.62	121.90
1	A	1753	C	N3-C4-N4	5.70	121.99	118.00
1	A	2786	A	C5-C6-N1	-5.70	114.85	117.70
1	A	329	A	C4-C5-C6	5.70	119.85	117.00
1	A	948	A	C5-C6-N1	-5.70	114.85	117.70
1	A	2229	C	N3-C4-N4	5.70	121.99	118.00
1	A	388	A	C5-C6-N6	-5.70	119.14	123.70
1	A	407	A	C5-C6-N1	-5.70	114.85	117.70
1	A	619	A	C5-C6-N1	-5.70	114.85	117.70
1	A	670	C	N3-C4-C5	-5.70	119.62	121.90
1	A	1001	U	O4'-C1'-N1	5.70	112.76	108.20
1	A	1211	C	N3-C4-N4	5.70	121.99	118.00
1	A	2590	A	C4-C5-C6	5.70	119.85	117.00
1	A	999	A	C4-C5-C6	5.69	119.85	117.00
1	A	1372	C	N3-C4-C5	-5.69	119.62	121.90
1	A	1635	G	O4'-C1'-N9	5.69	112.75	108.20
1	A	1699	A	C5-C6-N1	-5.69	114.85	117.70
1	A	5	A	C5-C6-N6	-5.69	119.15	123.70
1	A	677	A	C5-C6-N6	-5.69	119.15	123.70
1	A	951	C	N3-C4-N4	5.69	121.98	118.00
1	A	1157	A	O4'-C1'-N9	5.69	112.75	108.20
1	A	1949	C	N3-C4-C5	-5.69	119.62	121.90
1	A	2152	A	C5-C6-N6	-5.69	119.15	123.70
1	A	343	A	C5-C6-N1	-5.69	114.86	117.70
1	A	724	A	C5-C6-N6	-5.69	119.15	123.70
1	A	1416	G	P-O5'-C5'	5.69	130.00	120.90
1	A	2019	C	N3-C4-N4	5.69	121.98	118.00
1	A	2602	C	N3-C4-N4	5.69	121.98	118.00
1	A	45	G	O4'-C1'-N9	5.69	112.75	108.20
1	A	1755	C	N3-C4-C5	-5.69	119.62	121.90
1	A	2227	A	C5-C6-N1	-5.69	114.86	117.70
1	A	2255	C	N3-C4-N4	5.69	121.98	118.00
1	A	117	A	C5-C6-N1	-5.69	114.86	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1605	C	N3-C4-C5	-5.69	119.62	121.90
1	A	2037	C	N3-C4-C5	-5.69	119.62	121.90
1	A	2193	C	N3-C4-C5	-5.69	119.62	121.90
1	A	2228	A	C5-C6-N1	-5.69	114.86	117.70
1	A	2238	C	N3-C4-N4	5.69	121.98	118.00
1	A	2463	A	C5-C6-N1	-5.69	114.86	117.70
1	A	2898	A	C4-C5-C6	5.69	119.84	117.00
1	A	1067	A	C5-C6-N6	-5.69	119.15	123.70
1	A	1099	C	N3-C4-N4	5.69	121.98	118.00
1	A	2252	A	C5-C6-N6	-5.69	119.15	123.70
1	A	2473	G	O4'-C1'-N9	5.69	112.75	108.20
1	A	605	G	P-O3'-C3'	5.68	126.52	119.70
1	A	764	C	N3-C4-N4	5.68	121.98	118.00
1	A	1121	C	N3-C4-N4	5.68	121.98	118.00
1	A	1156	G	O4'-C1'-N9	5.68	112.75	108.20
1	A	1755	C	N3-C4-N4	5.68	121.98	118.00
1	A	2787	A	C5-C6-N6	-5.68	119.15	123.70
1	A	2801	C	N3-C4-N4	5.68	121.98	118.00
1	A	85	G	O4'-C1'-N9	5.68	112.75	108.20
1	A	187	C	N3-C4-N4	5.68	121.98	118.00
1	A	369	A	C4-C5-C6	5.68	119.84	117.00
1	A	466	C	N3-C4-N4	5.68	121.98	118.00
1	A	716	G	C8-N9-C1'	-5.68	119.61	127.00
1	A	1504	A	C5-C6-N1	-5.68	114.86	117.70
1	A	2875	A	C5-C6-N1	-5.68	114.86	117.70
1	A	2506	C	P-O5'-C5'	-5.68	111.81	120.90
1	A	2082	G	O4'-C1'-N9	5.68	112.74	108.20
1	A	2229	C	N3-C4-C5	-5.68	119.63	121.90
1	A	2455	A	C5-C6-N6	-5.68	119.16	123.70
1	A	2889	A	C4-C5-C6	5.68	119.84	117.00
1	A	275	A	C5-C6-N1	-5.68	114.86	117.70
1	A	628	C	N3-C4-N4	5.68	121.97	118.00
1	A	1999	A	C5-C6-N6	-5.68	119.16	123.70
1	A	2459	A	C5-C6-N1	-5.68	114.86	117.70
1	A	2546	C	N3-C4-C5	-5.68	119.63	121.90
1	A	917	A	C4-C5-C6	5.68	119.84	117.00
1	A	1222	A	C5-C6-N1	-5.68	114.86	117.70
1	A	1657	C	N3-C4-N4	5.68	121.97	118.00
1	A	2228	A	C5-C6-N6	-5.68	119.16	123.70
1	A	789	C	C2-N3-C4	5.67	122.74	119.90
1	A	1084	A	C5-C6-N6	-5.67	119.16	123.70
1	A	1730	C	N3-C4-N4	5.67	121.97	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2084	C	N3-C4-N4	5.67	121.97	118.00
1	A	2871	G	P-O5'-C5'	5.67	129.98	120.90
1	A	339	A	C4-C5-C6	5.67	119.84	117.00
1	A	1150	C	N3-C4-C5	-5.67	119.63	121.90
1	A	2261	C	N3-C4-C5	-5.67	119.63	121.90
1	A	724	A	O4'-C1'-N9	5.67	112.74	108.20
1	A	1815	A	C5-C6-N6	-5.67	119.16	123.70
1	A	2423	C	N3-C4-N4	5.67	121.97	118.00
1	A	2803	C	N3-C4-N4	5.67	121.97	118.00
1	A	2816	C	N3-C4-N4	5.67	121.97	118.00
1	A	770	A	C5-C6-N1	-5.67	114.86	117.70
1	A	1859	C	N3-C4-C5	-5.67	119.63	121.90
1	A	2597	C	N3-C4-C5	-5.67	119.63	121.90
1	A	1118	C	N3-C4-C5	-5.67	119.63	121.90
1	A	1304	G	P-O3'-C3'	5.67	126.50	119.70
1	A	1423	A	C5-C6-N6	-5.67	119.17	123.70
1	A	1590	C	C6-N1-C1'	-5.67	114.00	120.80
1	A	2262	A	C5-C6-N1	-5.67	114.87	117.70
1	A	2663	A	C4-C5-C6	5.67	119.83	117.00
1	A	43	G	O4'-C1'-N9	5.67	112.73	108.20
1	A	562	C	N3-C4-C5	-5.67	119.63	121.90
1	A	574	A	C5-C6-N1	-5.67	114.87	117.70
1	A	1580	A	O4'-C1'-N9	5.67	112.73	108.20
1	A	1631	A	C5-C6-N1	-5.67	114.87	117.70
1	A	1768	A	O4'-C1'-N9	5.67	112.73	108.20
1	A	2221	C	N3-C4-N4	5.67	121.97	118.00
1	A	430	C	N3-C4-C5	-5.67	119.63	121.90
1	A	578	A	C5-C6-N6	-5.67	119.17	123.70
1	A	897	G	O4'-C1'-N9	5.67	112.73	108.20
1	A	1615	A	C5-C6-N1	-5.67	114.87	117.70
1	A	144	A	C5-C6-N1	-5.66	114.87	117.70
1	A	532	C	N3-C4-N4	5.66	121.97	118.00
1	A	698	C	N3-C4-N4	5.66	121.96	118.00
1	A	1286	A	C4-C5-C6	5.66	119.83	117.00
1	A	1517	A	C4-C5-C6	5.66	119.83	117.00
1	A	1723	A	C5-C6-N1	-5.66	114.87	117.70
1	A	2173	G	C5-C6-O6	-5.66	125.20	128.60
1	A	2421	A	C5-C6-N6	-5.66	119.17	123.70
1	A	2518	G	O4'-C1'-N9	5.66	112.73	108.20
1	A	2790	A	C5-C6-N1	-5.66	114.87	117.70
1	A	268	A	C4-C5-C6	5.66	119.83	117.00
1	A	2606	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(^{o})	Ideal(^{o})
1	A	105	C	N3-C4-C5	-5.66	119.64	121.90
1	A	239	C	N3-C4-N4	5.66	121.96	118.00
1	A	807	G	O4'-C1'-N9	5.66	112.73	108.20
1	A	955	C	N3-C4-N4	5.66	121.96	118.00
1	A	1198	C	N3-C4-C5	-5.66	119.64	121.90
1	A	2047	A	C4-C5-C6	5.66	119.83	117.00
1	A	2432	C	N3-C4-N4	5.66	121.96	118.00
1	A	2542	A	O4'-C1'-N9	5.66	112.73	108.20
1	A	153	C	C2-N1-C1'	5.66	125.03	118.80
1	A	773	G	O4'-C1'-N9	5.66	112.73	108.20
1	A	1354	C	N3-C4-C5	-5.66	119.64	121.90
1	A	1361	A	C5-C6-N6	-5.66	119.17	123.70
1	A	1824	C	N3-C4-C5	-5.66	119.64	121.90
1	A	774	A	O4'-C1'-N9	5.66	112.72	108.20
1	A	2205	A	C4-C5-C6	5.66	119.83	117.00
1	A	445	C	N3-C4-N4	5.66	121.96	118.00
1	A	687	U	C2-N3-C4	-5.66	123.61	127.00
1	A	1103	A	C5-C6-N6	-5.66	119.18	123.70
1	A	1530	G	O4'-C1'-N9	5.66	112.72	108.20
1	A	2457	G	O4'-C1'-N9	5.66	112.72	108.20
1	A	2594	A	P-O3'-C3'	5.66	126.49	119.70
1	A	2729	C	N3-C4-N4	5.66	121.96	118.00
18	5	193	TYR	CB-CG-CD2	-5.66	117.61	121.00
1	A	2093	C	N3-C4-N4	5.65	121.96	118.00
1	A	2563	C	N3-C4-C5	-5.65	119.64	121.90
1	A	2828	G	O4'-C1'-N9	5.65	112.72	108.20
1	A	32	C	N3-C4-N4	5.65	121.96	118.00
1	A	582	A	C5-C6-N1	-5.65	114.87	117.70
1	A	786	A	C5-C6-N6	-5.65	119.18	123.70
1	A	1464	A	C4-C5-C6	5.65	119.83	117.00
1	A	1650	C	N3-C4-N4	5.65	121.96	118.00
1	A	2167	C	N3-C4-N4	5.65	121.96	118.00
1	A	310	C	N3-C4-C5	-5.65	119.64	121.90
1	A	1394	G	O4'-C1'-N9	5.65	112.72	108.20
1	A	1724	A	C5-C6-N1	-5.65	114.87	117.70
1	A	321	U	C5'-C4'-C3'	-5.65	106.96	116.00
1	A	2148	A	C5-C6-N1	-5.65	114.88	117.70
1	A	2606	A	O4'-C1'-N9	5.65	112.72	108.20
1	A	176	A	C5-C6-N6	-5.65	119.18	123.70
1	A	470	A	C4-C5-C6	5.65	119.82	117.00
1	A	1051	C	N3-C4-C5	-5.65	119.64	121.90
1	A	1174	A	C5-C6-N6	-5.65	119.18	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1186	C	N3-C4-N4	5.65	121.95	118.00
1	A	1393	A	C5-C6-N6	-5.65	119.18	123.70
1	A	2220	A	C4-C5-C6	5.65	119.82	117.00
1	A	2268	G	O4'-C1'-N9	5.65	112.72	108.20
1	A	2034	A	C4-C5-C6	5.65	119.82	117.00
1	A	1324	G	O4'-C1'-N9	5.64	112.72	108.20
1	A	1540	A	C5-C6-N6	-5.64	119.18	123.70
1	A	2191	A	C5-C6-N1	-5.64	114.88	117.70
1	A	60	G	P-O3'-C3'	5.64	126.47	119.70
1	A	333	A	O4'-C1'-N9	5.64	112.71	108.20
1	A	519	A	C5-C6-N1	-5.64	114.88	117.70
1	A	799	A	C5-C6-N6	-5.64	119.19	123.70
1	A	867	A	C5-C6-N1	-5.64	114.88	117.70
1	A	1149	A	C5-C6-N6	-5.64	119.19	123.70
1	A	2256	A	C5-C6-N1	-5.64	114.88	117.70
1	A	569	C	N3-C4-C5	-5.64	119.64	121.90
1	A	1717	C	C6-N1-C1'	-5.64	114.03	120.80
1	A	46	C	N3-C4-C5	-5.64	119.64	121.90
1	A	723	A	C5-C6-N6	-5.64	119.19	123.70
1	A	1115	A	C4-C5-C6	5.64	119.82	117.00
1	A	1352	U	C2-N1-C1'	5.64	124.47	117.70
1	A	1679	A	C5-C6-N1	-5.64	114.88	117.70
1	A	2076	C	N3-C4-N4	5.64	121.95	118.00
1	A	2552	G	O4'-C1'-N9	5.64	112.71	108.20
1	A	2601	A	C5-C6-N6	-5.64	119.19	123.70
1	A	2907	A	C4-C5-C6	5.64	119.82	117.00
1	A	872	C	N3-C4-N4	5.64	121.95	118.00
1	A	2549	C	N3-C4-N4	5.64	121.95	118.00
1	A	2761	G	O4'-C1'-N9	5.64	112.71	108.20
1	A	39	C	P-O5'-C5'	5.64	129.92	120.90
1	A	188	C	N3-C4-N4	5.64	121.94	118.00
1	A	235	G	N3-C2-N2	5.64	123.85	119.90
1	A	306	C	N3-C4-N4	5.64	121.95	118.00
1	A	653	A	O4'-C1'-N9	5.64	112.71	108.20
1	A	880	C	N3-C4-C5	-5.64	119.64	121.90
1	A	1233	A	O4'-C1'-N9	5.64	112.71	108.20
1	A	1547	U	P-O3'-C3'	5.64	126.46	119.70
1	A	1824	C	N3-C4-N4	5.64	121.95	118.00
1	A	2007	A	C5-C6-N1	-5.64	114.88	117.70
1	A	2034	A	C5-C6-N6	-5.64	119.19	123.70
1	A	2058	G	O4'-C1'-N9	5.64	112.71	108.20
1	A	2792	G	N3-C2-N2	5.64	123.84	119.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	507	A	C4-C5-C6	5.63	119.82	117.00
1	A	1219	C	N3-C4-N4	5.63	121.94	118.00
1	A	1266	A	C5-C6-N6	-5.63	119.19	123.70
1	A	1559	C	N3-C4-N4	5.63	121.94	118.00
1	A	1625	C	N3-C4-N4	5.63	121.94	118.00
1	A	588	C	N3-C4-N4	5.63	121.94	118.00
1	A	759	G	O4'-C1'-N9	5.63	112.71	108.20
1	A	888	A	C4-C5-C6	5.63	119.82	117.00
1	A	67	A	C5-C6-N1	-5.63	114.88	117.70
1	A	195	C	N3-C4-N4	5.63	121.94	118.00
1	A	211	C	N3-C4-N4	5.63	121.94	118.00
1	A	486	A	C5-C6-N6	-5.63	119.19	123.70
1	A	689	A	C5-C6-N6	-5.63	119.19	123.70
1	A	787	C	N3-C4-N4	5.63	121.94	118.00
1	A	896	A	C5-C6-N6	-5.63	119.19	123.70
1	A	1115	A	C5-C6-N1	-5.63	114.88	117.70
1	A	1308	A	C4-C5-C6	5.63	119.82	117.00
1	A	1334	C	N3-C4-N4	5.63	121.94	118.00
1	A	1620	A	C5-C6-N6	-5.63	119.19	123.70
1	A	1945	A	C5-C6-N6	-5.63	119.19	123.70
1	A	2212	C	N3-C4-C5	-5.63	119.65	121.90
1	A	2527	C	C2-N1-C1'	5.63	124.99	118.80
1	A	2662	A	C5-C6-N6	-5.63	119.19	123.70
1	A	193	A	C5-C6-N1	-5.63	114.89	117.70
1	A	468	C	N3-C4-N4	5.63	121.94	118.00
1	A	709	G	O4'-C1'-N9	5.63	112.70	108.20
1	A	1476	C	N3-C4-C5	-5.63	119.65	121.90
1	A	1743	A	C5-C6-N1	-5.63	114.89	117.70
1	A	2885	A	C5-C6-N1	-5.63	114.89	117.70
1	A	333	A	C5-C6-N1	-5.63	114.89	117.70
1	A	467	C	N3-C4-C5	-5.63	119.65	121.90
1	A	964	A	C5-C6-N1	-5.63	114.89	117.70
1	A	1204	C	N3-C4-C5	-5.63	119.65	121.90
1	A	1224	A	C5-C6-N6	-5.63	119.20	123.70
1	A	1404	A	C5-C6-N6	-5.63	119.20	123.70
1	A	1654	A	C5-C6-N6	-5.63	119.20	123.70
1	A	2018	A	C5-C6-N6	-5.63	119.20	123.70
1	A	2062	A	C5-C6-N1	-5.63	114.89	117.70
1	A	2789	C	N3-C4-N4	5.63	121.94	118.00
1	A	2927	A	C5-C6-N6	-5.63	119.20	123.70
1	A	49	A	P-O3'-C3'	5.63	126.45	119.70
1	A	544	G	O4'-C1'-N9	5.63	112.70	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	624	C	N3-C4-N4	5.63	121.94	118.00
1	A	933	C	O4'-C1'-N1	5.63	112.70	108.20
1	A	951	C	N3-C4-C5	-5.63	119.65	121.90
1	A	1084	A	C5-C6-N1	-5.63	114.89	117.70
1	A	2065	C	N3-C4-N4	5.63	121.94	118.00
1	A	2206	C	N3-C4-N4	5.63	121.94	118.00
1	A	2919	A	C4-C5-C6	5.62	119.81	117.00
1	A	231	A	C5-C6-N6	-5.62	119.20	123.70
1	A	843	C	N3-C4-C5	-5.62	119.65	121.90
1	A	923	C	N3-C4-N4	5.62	121.94	118.00
1	A	1562	A	C5-C6-N1	-5.62	114.89	117.70
1	A	1998	A	C4-C5-C6	5.62	119.81	117.00
1	A	2472	C	N3-C4-N4	5.62	121.94	118.00
1	A	2689	A	C5-C6-N6	-5.62	119.20	123.70
1	A	727	A	C5-C6-N1	-5.62	114.89	117.70
1	A	1017	C	N3-C4-N4	5.62	121.94	118.00
1	A	1021	A	C4-C5-C6	5.62	119.81	117.00
1	A	1314	A	C4-C5-C6	5.62	119.81	117.00
1	A	1520	A	C5-C6-N6	-5.62	119.20	123.70
1	A	1553	A	C5-C6-N6	-5.62	119.20	123.70
1	A	1694	G	O4'-C1'-N9	5.62	112.70	108.20
1	A	2862	A	O4'-C1'-N9	5.62	112.70	108.20
1	A	1504	A	C4-C5-C6	5.62	119.81	117.00
1	A	2236	C	N3-C4-C5	-5.62	119.65	121.90
1	A	318	A	C5-C6-N1	-5.62	114.89	117.70
1	A	553	A	C5-C6-N6	-5.62	119.21	123.70
1	A	702	A	C5-C6-N6	-5.62	119.21	123.70
1	A	1648	A	C5-C6-N6	-5.62	119.20	123.70
1	A	1667	A	C4-C5-C6	5.62	119.81	117.00
1	A	1828	G	C5-C6-O6	-5.62	125.23	128.60
1	A	1834	C	N3-C4-C5	-5.62	119.65	121.90
1	A	56	A	C4-C5-C6	5.62	119.81	117.00
1	A	1112	U	C2-N1-C1'	5.62	124.44	117.70
1	A	2171	G	O4'-C1'-N9	5.62	112.69	108.20
1	A	2563	C	N3-C4-N4	5.62	121.93	118.00
1	A	2640	C	N3-C4-C5	-5.62	119.65	121.90
1	A	2777	A	O4'-C1'-N9	5.62	112.69	108.20
1	A	131	C	N3-C4-N4	5.62	121.93	118.00
1	A	1037	C	N3-C4-N4	5.62	121.93	118.00
1	A	2016	G	O4'-C1'-N9	5.62	112.69	108.20
1	A	2139	G	N3-C2-N2	5.62	123.83	119.90
1	A	2742	C	O4'-C1'-N1	5.62	112.69	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2810	A	C5-C6-N1	-5.62	114.89	117.70
2	0	5	PHE	CB-CG-CD1	5.62	124.73	120.80
1	A	28	A	C4-C5-C6	5.61	119.81	117.00
1	A	191	G	O4'-C1'-N9	5.61	112.69	108.20
1	A	285	U	P-O3'-C3'	5.61	126.44	119.70
1	A	1019	A	P-O3'-C3'	5.61	126.44	119.70
1	A	1374	C	N3-C4-C5	-5.61	119.66	121.90
1	A	1265	A	C5-C6-N1	-5.61	114.89	117.70
1	A	1605	C	N3-C4-N4	5.61	121.93	118.00
1	A	1609	C	N3-C4-N4	5.61	121.93	118.00
1	A	2054	C	N3-C4-N4	5.61	121.93	118.00
1	A	2106	A	C4-C5-C6	5.61	119.81	117.00
1	A	2472	C	N3-C4-C5	-5.61	119.66	121.90
1	A	2767	A	O4'-C1'-N9	5.61	112.69	108.20
1	A	2825	C	N3-C4-C5	-5.61	119.66	121.90
1	A	134	C	N3-C4-C5	-5.61	119.66	121.90
1	A	573	C	N3-C4-N4	5.61	121.93	118.00
1	A	1055	A	C5-C6-N1	-5.61	114.89	117.70
1	A	1618	A	C5-C6-N1	-5.61	114.89	117.70
1	A	1949	C	N3-C4-N4	5.61	121.93	118.00
1	A	2012	C	N3-C4-C5	-5.61	119.66	121.90
1	A	206	A	C5-C6-N6	-5.61	119.21	123.70
1	A	278	A	C5-C6-N1	-5.61	114.89	117.70
1	A	337	A	C5-C6-N1	-5.61	114.89	117.70
1	A	672	C	N3-C4-C5	-5.61	119.66	121.90
1	A	1542	A	C4-C5-C6	5.61	119.80	117.00
1	A	2089	A	C5-C6-N1	-5.61	114.90	117.70
1	A	2526	A	C5-C6-N1	-5.61	114.89	117.70
1	A	436	A	C5-C6-N6	-5.61	119.21	123.70
1	A	1654	A	C5-C6-N1	-5.61	114.90	117.70
1	A	1802	A	O4'-C1'-N9	5.61	112.69	108.20
1	A	2079	C	N3-C4-N4	5.61	121.92	118.00
1	A	2532	A	C5-C6-N6	-5.61	119.21	123.70
1	A	2710	C	C6-N1-C1'	-5.61	114.07	120.80
1	A	20	C	N3-C4-C5	-5.61	119.66	121.90
1	A	345	A	C5-C6-N1	-5.61	114.90	117.70
1	A	525	A	C4-C5-C6	5.61	119.80	117.00
1	A	664	C	N3-C4-N4	5.61	121.92	118.00
1	A	1473	A	C5-C6-N6	-5.61	119.22	123.70
1	A	614	G	O4'-C1'-N9	5.60	112.68	108.20
1	A	1173	A	C5-C6-N6	-5.60	119.22	123.70
1	A	1588	A	C5-C6-N6	-5.60	119.22	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2175	C	N3-C4-N4	5.60	121.92	118.00
1	A	2231	C	N3-C4-C5	-5.60	119.66	121.90
1	A	93	C	N3-C4-N4	5.60	121.92	118.00
1	A	241	C	N3-C4-C5	-5.60	119.66	121.90
1	A	254	A	O4'-C1'-N9	5.60	112.68	108.20
1	A	538	A	C5-C6-N1	-5.60	114.90	117.70
1	A	576	G	O4'-C1'-N9	5.60	112.68	108.20
1	A	681	C	N3-C4-C5	-5.60	119.66	121.90
1	A	720	C	N3-C4-N4	5.60	121.92	118.00
1	A	1776	A	O4'-C1'-N9	5.60	112.68	108.20
1	A	2800	C	N3-C4-C5	-5.60	119.66	121.90
1	A	212	C	N3-C4-N4	5.60	121.92	118.00
1	A	1682	C	N3-C4-N4	5.60	121.92	118.00
1	A	1713	A	C4-C5-C6	5.60	119.80	117.00
1	A	437	A	C4-C5-C6	5.60	119.80	117.00
1	A	537	A	C5-C6-N6	-5.60	119.22	123.70
1	A	893	A	C5-C6-N6	-5.60	119.22	123.70
1	A	936	C	N3-C4-C5	-5.60	119.66	121.90
1	A	2003	C	N3-C4-C5	-5.60	119.66	121.90
1	A	2269	C	N3-C4-N4	5.60	121.92	118.00
1	A	61	A	C5-C6-N1	-5.60	114.90	117.70
1	A	448	A	C5-C6-N1	-5.60	114.90	117.70
1	A	1767	A	C5-C6-N1	-5.60	114.90	117.70
1	A	2519	G	O4'-C1'-N9	5.60	112.68	108.20
1	A	2657	C	N3-C4-C5	-5.60	119.66	121.90
15	U	80	ARG	N-CA-CB	5.60	120.67	110.60
1	A	234	C	N3-C4-C5	-5.59	119.66	121.90
1	A	377	G	O4'-C1'-N9	5.59	112.68	108.20
1	A	656	A	C5-C6-N6	-5.59	119.22	123.70
1	A	795	G	O4'-C1'-N9	5.59	112.68	108.20
1	A	847	A	C4-C5-C6	5.59	119.80	117.00
1	A	1132	A	C4-C5-C6	5.59	119.80	117.00
1	A	1184	G	O4'-C1'-N9	5.59	112.67	108.20
1	A	1322	G	O4'-C1'-N9	5.59	112.67	108.20
1	A	1845	A	C5-C6-N6	-5.59	119.22	123.70
1	A	2167	C	N3-C4-C5	-5.59	119.66	121.90
1	A	1855	C	N3-C4-N4	5.59	121.92	118.00
1	A	207	A	C4-C5-C6	5.59	119.80	117.00
1	A	855	G	O4'-C1'-N9	5.59	112.67	108.20
1	A	1122	C	N3-C4-C5	-5.59	119.66	121.90
1	A	1625	C	N3-C4-C5	-5.59	119.66	121.90
1	A	2141	A	C5-C6-N6	-5.59	119.23	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2674	G	O4'-C1'-N9	5.59	112.67	108.20
1	A	2866	C	N3-C4-C5	-5.59	119.66	121.90
1	A	2876	A	O4'-C1'-N9	5.59	112.67	108.20
1	A	2900	A	C4-C5-C6	5.59	119.80	117.00
1	A	182	C	N3-C4-N4	5.59	121.91	118.00
1	A	1223	C	N3-C4-N4	5.59	121.91	118.00
1	A	1369	C	N3-C4-N4	5.59	121.91	118.00
1	A	1677	A	O4'-C1'-N9	5.59	112.67	108.20
1	A	2466	C	N3-C4-C5	-5.59	119.66	121.90
1	A	110	A	C4-C5-C6	5.59	119.79	117.00
1	A	1618	A	C5-C6-N6	-5.59	119.23	123.70
1	A	82	G	O4'-C1'-N9	5.59	112.67	108.20
1	A	213	C	N3-C4-C5	-5.59	119.67	121.90
1	A	364	A	C5-C6-N6	-5.59	119.23	123.70
1	A	1126	A	O4'-C1'-N9	5.59	112.67	108.20
1	A	1821	G	O4'-C1'-N9	5.59	112.67	108.20
1	A	2117	A	P-O5'-C5'	5.59	129.84	120.90
1	A	378	C	N3-C4-N4	5.58	121.91	118.00
1	A	404	C	P-O5'-C5'	5.58	129.84	120.90
1	A	1142	A	O4'-C1'-N9	5.58	112.67	108.20
1	A	2225	C	N3-C4-N4	5.58	121.91	118.00
1	A	208	G	C4'-C3'-C2'	-5.58	97.02	102.60
1	A	241	C	N3-C4-N4	5.58	121.91	118.00
1	A	1036	A	C5-C6-N1	-5.58	114.91	117.70
1	A	1287	A	C5-C6-N6	-5.58	119.23	123.70
1	A	1446	C	P-O3'-C3'	5.58	126.40	119.70
1	A	1788	A	O4'-C1'-N9	5.58	112.67	108.20
1	A	2590	A	O4'-C1'-N9	5.58	112.67	108.20
1	A	2850	G	N3-C2-N2	5.58	123.81	119.90
1	A	390	A	C4-C5-C6	5.58	119.79	117.00
1	A	555	C	N3-C4-N4	5.58	121.91	118.00
1	A	876	A	C5-C6-N6	-5.58	119.23	123.70
1	A	961	C	C6-N1-C2	-5.58	118.07	120.30
1	A	1191	C	N3-C4-C5	-5.58	119.67	121.90
1	A	1260	A	C5-C6-N6	-5.58	119.23	123.70
1	A	1495	C	N3-C4-N4	5.58	121.91	118.00
1	A	1254	A	C5-C6-N1	-5.58	114.91	117.70
1	A	1450	C	N3-C4-N4	5.58	121.91	118.00
1	A	1721	A	C4-C5-C6	5.58	119.79	117.00
1	A	2910	C	N3-C4-N4	5.58	121.91	118.00
1	A	10	A	C5-C6-N1	-5.58	114.91	117.70
1	A	1360	A	C5-C6-N1	-5.58	114.91	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1495	C	N3-C4-C5	-5.58	119.67	121.90
1	A	1943	C	N3-C4-N4	5.58	121.90	118.00
1	A	2078	A	C4-C5-C6	5.58	119.79	117.00
1	A	2102	C	N3-C4-C5	-5.58	119.67	121.90
1	A	2117	A	C5-C6-N1	-5.58	114.91	117.70
1	A	1836	G	N3-C2-N2	5.58	123.80	119.90
1	A	2444	G	O4'-C1'-N9	5.58	112.66	108.20
1	A	268	A	C5-C6-N1	-5.58	114.91	117.70
1	A	329	A	C5-C6-N6	-5.58	119.24	123.70
1	A	337	A	C4-C5-C6	5.58	119.79	117.00
1	A	444	U	P-O5'-C5'	5.58	129.82	120.90
1	A	958	A	C5-C6-N6	-5.58	119.24	123.70
1	A	1691	A	C5-C6-N6	-5.58	119.24	123.70
1	A	1783	C	N3-C4-N4	5.58	121.90	118.00
1	A	2744	C	N3-C4-N4	5.58	121.90	118.00
15	U	27	PHE	CB-CG-CD2	-5.58	116.90	120.80
1	A	921	G	O4'-C1'-N9	5.57	112.66	108.20
1	A	1613	C	N3-C4-C5	-5.57	119.67	121.90
1	A	1784	A	C5-C6-N1	-5.57	114.91	117.70
1	A	2199	G	C5-C6-O6	-5.57	125.26	128.60
1	A	2612	G	C5'-C4'-O4'	5.57	115.79	109.10
1	A	2822	C	N3-C4-N4	5.57	121.90	118.00
1	A	2914	C	N3-C4-N4	5.57	121.90	118.00
1	A	290	U	O4'-C1'-N1	5.57	112.66	108.20
1	A	961	C	N3-C4-C5	-5.57	119.67	121.90
1	A	452	C	N3-C4-N4	5.57	121.90	118.00
1	A	548	A	C4-C5-C6	5.57	119.78	117.00
1	A	1054	A	C5-C6-N1	-5.57	114.92	117.70
1	A	1326	A	O4'-C1'-N9	5.57	112.66	108.20
1	A	1577	C	N3-C4-C5	-5.57	119.67	121.90
1	A	2493	C	N3-C4-C5	-5.57	119.67	121.90
1	A	276	C	N3-C4-C5	-5.57	119.67	121.90
1	A	1197	A	C5-C6-N1	-5.57	114.92	117.70
1	A	2503	C	N3-C4-C5	-5.57	119.67	121.90
1	A	363	C	N3-C4-N4	5.57	121.90	118.00
1	A	1167	C	N3-C4-N4	5.57	121.90	118.00
1	A	1606	A	C4-C5-C6	5.57	119.78	117.00
1	A	2030	A	C5-C6-N1	-5.57	114.92	117.70
1	A	2684	G	O4'-C1'-N9	5.57	112.65	108.20
1	A	39	C	N3-C4-N4	5.57	121.90	118.00
1	A	400	U	P-O3'-C3'	5.57	126.38	119.70
1	A	639	C	N3-C4-N4	5.57	121.90	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	791	C	N3-C4-N4	5.57	121.90	118.00
1	A	1310	C	N3-C4-C5	-5.57	119.67	121.90
1	A	1330	C	N3-C4-C5	-5.57	119.67	121.90
1	A	1388	A	C5-C6-N6	-5.57	119.25	123.70
1	A	1956	A	C4-C5-C6	5.57	119.78	117.00
1	A	2137	U	O4'-C1'-N1	5.57	112.65	108.20
1	A	968	C	N3-C4-N4	5.56	121.89	118.00
1	A	1130	A	C5-C6-N1	-5.56	114.92	117.70
1	A	2876	A	C5-C6-N1	-5.56	114.92	117.70
1	A	418	A	P-O3'-C3'	5.56	126.38	119.70
1	A	1006	A	C5-C6-N6	-5.56	119.25	123.70
1	A	1297	C	N3-C4-C5	-5.56	119.67	121.90
1	A	1417	A	C5-C6-N6	-5.56	119.25	123.70
1	A	1534	A	C5-C6-N1	-5.56	114.92	117.70
1	A	1592	A	C5-C6-N6	-5.56	119.25	123.70
1	A	1595	U	C2-N1-C1'	5.56	124.38	117.70
1	A	1601	A	C5-C6-N1	-5.56	114.92	117.70
1	A	1791	A	C5-C6-N1	-5.56	114.92	117.70
1	A	1795	C	N3-C4-N4	5.56	121.89	118.00
1	A	1999	A	P-O3'-C3'	5.56	126.37	119.70
1	A	2506	C	N3-C4-C5	-5.56	119.67	121.90
1	A	2517	A	O4'-C1'-N9	5.56	112.65	108.20
1	A	2734	A	O4'-C1'-N9	5.56	112.65	108.20
1	A	2827	A	C5-C6-N1	-5.56	114.92	117.70
1	A	76	C	N3-C4-C5	-5.56	119.68	121.90
1	A	838	C	N3-C4-N4	5.56	121.89	118.00
1	A	975	C	N3-C4-N4	5.56	121.89	118.00
1	A	1005	A	C5-C6-N6	-5.56	119.25	123.70
1	A	1334	C	O4'-C1'-N1	5.56	112.65	108.20
1	A	1473	A	C5-C6-N1	-5.56	114.92	117.70
1	A	2498	A	C5-C6-N6	-5.56	119.25	123.70
1	A	2629	A	C5-C6-N1	-5.56	114.92	117.70
1	A	2883	C	N3-C4-N4	5.56	121.89	118.00
1	A	276	C	N3-C4-N4	5.56	121.89	118.00
1	A	369	A	O4'-C1'-N9	5.56	112.65	108.20
1	A	686	C	N3-C4-C5	-5.56	119.68	121.90
1	A	1026	A	C5-C6-N1	-5.56	114.92	117.70
1	A	2119	A	C5-C6-N6	-5.56	119.25	123.70
1	A	2183	G	O4'-C1'-N9	5.56	112.65	108.20
1	A	1384	C	N3-C4-C5	-5.56	119.68	121.90
1	A	2163	A	C5-C6-N6	-5.56	119.25	123.70
1	A	526	A	C4-C5-C6	5.55	119.78	117.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	581	C	N3-C4-C5	-5.55	119.68	121.90
1	A	971	A	C5-C6-N1	-5.55	114.92	117.70
1	A	1014	A	C5-C6-N1	-5.55	114.92	117.70
1	A	1664	G	O4'-C1'-N9	5.55	112.64	108.20
1	A	2081	G	O4'-C1'-N9	5.55	112.64	108.20
1	A	362	C	N3-C4-C5	-5.55	119.68	121.90
1	A	502	C	N3-C4-N4	5.55	121.89	118.00
1	A	580	U	O4'-C1'-N1	5.55	112.64	108.20
1	A	1417	A	C4-C5-C6	5.55	119.78	117.00
1	A	1795	C	N3-C4-C5	-5.55	119.68	121.90
1	A	2511	A	C5-C6-N1	-5.55	114.92	117.70
1	A	259	A	C5-C6-N6	-5.55	119.26	123.70
1	A	923	C	N3-C4-C5	-5.55	119.68	121.90
1	A	1261	C	N3-C4-N4	5.55	121.89	118.00
1	A	1607	C	N3-C4-C5	-5.55	119.68	121.90
1	A	2912	A	C5-C6-N1	-5.55	114.92	117.70
1	A	623	A	C5-C6-N6	-5.55	119.26	123.70
1	A	930	C	N3-C4-N4	5.55	121.88	118.00
1	A	1019	A	C5-C6-N6	-5.55	119.26	123.70
1	A	1313	A	C5-C6-N6	-5.55	119.26	123.70
1	A	1426	A	C4-C5-C6	5.55	119.78	117.00
1	A	1496	G	O4'-C1'-N9	5.55	112.64	108.20
1	A	1517	A	C5-C6-N6	-5.55	119.26	123.70
1	A	2623	C	N3-C4-C5	-5.55	119.68	121.90
1	A	829	A	C5-C6-N6	-5.55	119.26	123.70
1	A	1262	C	N3-C4-C5	-5.55	119.68	121.90
1	A	318	A	O4'-C1'-N9	5.55	112.64	108.20
1	A	538	A	C5-C6-N6	-5.55	119.26	123.70
1	A	654	G	O4'-C1'-N9	5.55	112.64	108.20
1	A	1402	C	N3-C4-C5	-5.55	119.68	121.90
1	A	1552	C	N3-C4-C5	-5.55	119.68	121.90
1	A	1770	C	N3-C4-C5	-5.55	119.68	121.90
1	A	2019	C	N3-C4-C5	-5.55	119.68	121.90
1	A	2080	A	C5-C6-N6	-5.55	119.26	123.70
1	A	2136	C	N3-C4-C5	-5.55	119.68	121.90
1	A	2784	C	N3-C4-C5	-5.55	119.68	121.90
1	A	2826	A	C5-C6-N6	-5.55	119.26	123.70
14	T	59	TYR	CB-CG-CD1	5.55	124.33	121.00
1	A	375	C	O4'-C1'-N1	5.54	112.64	108.20
1	A	1157	A	C5-C6-N6	-5.54	119.26	123.70
1	A	1555	A	C5-C6-N6	-5.54	119.26	123.70
1	A	1607	C	N3-C4-N4	5.54	121.88	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1713	A	C5-C6-N1	-5.54	114.93	117.70
1	A	2008	C	N3-C4-N4	5.54	121.88	118.00
1	A	108	A	O4'-C1'-N9	5.54	112.63	108.20
1	A	509	C	N3-C4-C5	-5.54	119.68	121.90
1	A	1323	A	C5-C6-N1	-5.54	114.93	117.70
1	A	1728	C	N3-C4-N4	5.54	121.88	118.00
1	A	2537	G	O4'-C1'-N9	5.54	112.64	108.20
1	A	86	C	N3-C4-C5	-5.54	119.68	121.90
1	A	91	A	C5-C6-N6	-5.54	119.27	123.70
1	A	586	C	N3-C4-C5	-5.54	119.68	121.90
1	A	868	A	O4'-C1'-N9	5.54	112.63	108.20
1	A	1110	C	C5'-C4'-O4'	5.54	115.75	109.10
1	A	1248	C	N3-C4-N4	5.54	121.88	118.00
1	A	1556	A	O4'-C1'-N9	5.54	112.63	108.20
1	A	1577	C	N3-C4-N4	5.54	121.88	118.00
1	A	2060	A	C5-C6-N6	-5.54	119.27	123.70
1	A	2630	C	N3-C4-N4	5.54	121.88	118.00
1	A	302	A	C4-C5-C6	5.54	119.77	117.00
1	A	830	A	C8-N9-C4	-5.54	103.58	105.80
1	A	1477	A	C5-C6-N6	-5.54	119.27	123.70
1	A	2456	C	N3-C4-N4	5.54	121.88	118.00
1	A	324	A	C5-C6-N6	-5.54	119.27	123.70
1	A	699	A	C5-C6-N6	-5.54	119.27	123.70
1	A	836	A	C5-C6-N6	-5.54	119.27	123.70
1	A	1297	C	N3-C4-N4	5.54	121.88	118.00
1	A	1862	C	N3-C4-C5	-5.54	119.69	121.90
1	A	2164	A	C4-C5-C6	5.54	119.77	117.00
1	A	2252	A	C4-C5-C6	5.54	119.77	117.00
1	A	2615	C	N3-C4-C5	-5.54	119.69	121.90
1	A	2700	A	O4'-C1'-N9	5.54	112.63	108.20
1	A	2825	C	O4'-C1'-N1	5.54	112.63	108.20
1	A	269	G	C5-C6-O6	-5.54	125.28	128.60
1	A	337	A	C5-C6-N6	-5.54	119.27	123.70
1	A	401	C	N3-C4-N4	5.54	121.88	118.00
1	A	618	A	C5-C6-N1	-5.54	114.93	117.70
1	A	1243	A	C4-C5-C6	5.54	119.77	117.00
1	A	1396	C	N3-C4-N4	5.54	121.88	118.00
1	A	2923	A	C5-C6-N1	-5.54	114.93	117.70
1	A	333	A	C4-C5-C6	5.54	119.77	117.00
1	A	841	A	C5-C6-N1	-5.54	114.93	117.70
1	A	1173	A	C5-C6-N1	-5.54	114.93	117.70
1	A	1807	U	P-O3'-C3'	-5.54	113.06	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	422	C	N3-C4-N4	5.53	121.87	118.00
1	A	503	C	O4'-C1'-N1	5.53	112.63	108.20
1	A	593	A	C5-C6-N1	-5.53	114.93	117.70
1	A	739	C	N3-C4-C5	-5.53	119.69	121.90
1	A	1106	U	O4'-C1'-N1	5.53	112.63	108.20
1	A	1542	A	O4'-C1'-N9	5.53	112.63	108.20
1	A	1760	A	O4'-C1'-N9	5.53	112.63	108.20
1	A	2200	A	C5-C6-N1	-5.53	114.93	117.70
1	A	2544	C	N3-C4-N4	5.53	121.87	118.00
1	A	639	C	N3-C4-C5	-5.53	119.69	121.90
1	A	2052	A	C5-C6-N1	-5.53	114.93	117.70
1	A	225	A	C5-C6-N1	-5.53	114.94	117.70
1	A	994	C	N3-C4-C5	-5.53	119.69	121.90
1	A	1539	C	N3-C4-N4	5.53	121.87	118.00
1	A	1677	A	C5-C6-N6	-5.53	119.28	123.70
1	A	2912	A	C5-C6-N6	-5.53	119.28	123.70
1	A	1617	A	C5-C6-N1	-5.53	114.94	117.70
1	A	1942	A	C5-C6-N6	-5.53	119.28	123.70
1	A	2094	C	N3-C4-C5	-5.53	119.69	121.90
1	A	2267	G	C8-N9-C1'	-5.53	119.81	127.00
1	A	395	C	N3-C4-C5	-5.53	119.69	121.90
1	A	401	C	C6-N1-C2	-5.53	118.09	120.30
1	A	864	C	N3-C4-C5	-5.53	119.69	121.90
1	A	957	A	C5-C6-N6	-5.53	119.28	123.70
1	A	1074	A	C5-C6-N1	-5.53	114.94	117.70
1	A	1170	C	N3-C4-C5	-5.53	119.69	121.90
1	A	1745	A	C5-C6-N6	-5.53	119.28	123.70
1	A	2093	C	N3-C4-C5	-5.53	119.69	121.90
1	A	2638	U	P-O3'-C3'	5.53	126.33	119.70
1	A	2695	C	N3-C4-N4	5.53	121.87	118.00
1	A	68	C	N3-C4-N4	5.53	121.87	118.00
1	A	467	C	N3-C4-N4	5.53	121.87	118.00
1	A	889	A	C5-C6-N6	-5.53	119.28	123.70
1	A	1720	C	N3-C4-N4	5.53	121.87	118.00
1	A	2043	A	C4-C5-C6	5.53	119.76	117.00
1	A	2555	G	O4'-C1'-N9	5.53	112.62	108.20
1	A	2834	A	C5-C6-N1	-5.53	114.94	117.70
1	A	912	C	N3-C4-C5	-5.52	119.69	121.90
1	A	1149	A	C5-C6-N1	-5.52	114.94	117.70
1	A	376	A	C5-C6-N1	-5.52	114.94	117.70
1	A	970	A	C5-C6-N6	-5.52	119.28	123.70
1	A	1202	A	C5-C6-N6	-5.52	119.28	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2071	A	C5-C6-N6	-5.52	119.28	123.70
1	A	2846	A	C4-C5-C6	5.52	119.76	117.00
1	A	2888	C	N3-C4-C5	-5.52	119.69	121.90
1	A	1442	A	C5-C6-N6	-5.52	119.28	123.70
1	A	1499	A	C5-C6-N6	-5.52	119.28	123.70
1	A	1803	C	N3-C4-C5	-5.52	119.69	121.90
1	A	2043	A	C5-C6-N1	-5.52	114.94	117.70
1	A	2069	U	P-O3'-C3'	5.52	126.33	119.70
1	A	21	A	C5-C6-N6	-5.52	119.28	123.70
1	A	492	C	N3-C4-N4	5.52	121.86	118.00
1	A	517	A	C5-C6-N1	-5.52	114.94	117.70
1	A	570	C	N3-C4-N4	5.52	121.86	118.00
1	A	712	C	N3-C4-C5	-5.52	119.69	121.90
1	A	1357	A	C5-C6-N6	-5.52	119.28	123.70
1	A	1663	A	C5-C6-N6	-5.52	119.28	123.70
1	A	1817	C	N3-C4-N4	5.52	121.86	118.00
1	A	1820	A	C5-C6-N1	-5.52	114.94	117.70
1	A	1957	A	C5-C6-N6	-5.52	119.28	123.70
1	A	2208	C	N3-C4-N4	5.52	121.86	118.00
1	A	46	C	N3-C4-N4	5.52	121.86	118.00
1	A	97	C	N3-C4-N4	5.52	121.86	118.00
1	A	375	C	N3-C4-C5	-5.52	119.69	121.90
1	A	899	C	N3-C4-C5	-5.52	119.69	121.90
1	A	2894	G	O4'-C1'-N9	5.52	112.61	108.20
1	A	1211	C	O4'-C1'-N1	5.52	112.61	108.20
1	A	2789	C	N3-C4-C5	-5.52	119.69	121.90
1	A	249	C	N3-C4-C5	-5.51	119.69	121.90
1	A	258	A	O4'-C1'-N9	5.51	112.61	108.20
1	A	378	C	N3-C4-C5	-5.51	119.69	121.90
1	A	419	G	N3-C2-N2	5.51	123.76	119.90
1	A	726	C	N3-C4-C5	-5.51	119.69	121.90
1	A	1180	C	C2-N1-C1'	5.51	124.87	118.80
1	A	1241	C	N3-C4-N4	5.51	121.86	118.00
1	A	1564	C	N3-C4-N4	5.51	121.86	118.00
1	A	1700	A	C4-C5-C6	5.51	119.76	117.00
1	A	2059	A	C5-C6-N1	-5.51	114.94	117.70
1	A	133	A	C5-C6-N1	-5.51	114.94	117.70
1	A	1422	C	N3-C4-N4	5.51	121.86	118.00
1	A	1510	G	O4'-C1'-N9	5.51	112.61	108.20
1	A	1842	C	N3-C4-N4	5.51	121.86	118.00
1	A	2471	C	N3-C4-N4	5.51	121.86	118.00
1	A	2683	A	C5-C6-N1	-5.51	114.94	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	213	C	N3-C4-N4	5.51	121.86	118.00
1	A	239	C	P-O5'-C5'	5.51	129.72	120.90
1	A	559	A	C5-C6-N1	-5.51	114.94	117.70
1	A	575	A	O4'-C1'-N9	5.51	112.61	108.20
1	A	705	A	C5-C6-N1	-5.51	114.94	117.70
1	A	1520	A	C5-C6-N1	-5.51	114.94	117.70
1	A	2839	C	N3-C4-N4	5.51	121.86	118.00
1	A	252	C	N3-C4-N4	5.51	121.86	118.00
1	A	647	A	C5-C6-N6	-5.51	119.29	123.70
1	A	947	A	C5-C6-N1	-5.51	114.94	117.70
1	A	1630	G	C1'-O4'-C4'	-5.51	105.49	109.90
1	A	1637	G	O4'-C1'-N9	5.51	112.61	108.20
1	A	477	A	C5-C6-N6	-5.51	119.29	123.70
1	A	1628	G	C5'-C4'-C3'	5.51	124.81	116.00
1	A	1639	G	O4'-C1'-N9	5.51	112.61	108.20
1	A	2468	A	C5-C6-N6	-5.51	119.29	123.70
1	A	11	G	O4'-C1'-N9	5.51	112.61	108.20
1	A	526	A	C5-C6-N1	-5.51	114.95	117.70
1	A	1032	C	N3-C4-C5	-5.51	119.70	121.90
1	A	1865	C	N3-C4-N4	5.51	121.86	118.00
1	A	2080	A	C5-C6-N1	-5.51	114.95	117.70
1	A	2689	A	C5-C6-N1	-5.51	114.95	117.70
1	A	1963	C	N3-C4-N4	5.50	121.85	118.00
1	A	261	C	N3-C4-C5	-5.50	119.70	121.90
1	A	425	C	N3-C4-N4	5.50	121.85	118.00
1	A	1003	A	C5-C6-N1	-5.50	114.95	117.70
1	A	1765	G	O4'-C1'-N9	5.50	112.60	108.20
1	A	2496	C	N3-C4-N4	5.50	121.85	118.00
1	A	2550	C	N3-C4-C5	-5.50	119.70	121.90
1	A	2722	A	C5-C6-N6	-5.50	119.30	123.70
1	A	2739	C	N3-C4-C5	-5.50	119.70	121.90
1	A	41	A	C5-C6-N1	-5.50	114.95	117.70
1	A	395	C	N3-C4-N4	5.50	121.85	118.00
1	A	504	A	C4-C5-C6	5.50	119.75	117.00
1	A	508	C	N3-C4-N4	5.50	121.85	118.00
1	A	673	A	C4-C5-C6	5.50	119.75	117.00
1	A	853	C	N3-C4-N4	5.50	121.85	118.00
1	A	1945	A	C5-C6-N1	-5.50	114.95	117.70
1	A	2421	A	P-O3'-C3'	5.50	126.30	119.70
1	A	2705	C	N3-C4-N4	5.50	121.85	118.00
1	A	851	A	C5-C6-N1	-5.50	114.95	117.70
1	A	1739	C	N3-C4-N4	5.50	121.85	118.00

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	6	A	C4-C5-C6	5.50	119.75	117.00
1	A	65	A	C4-C5-C6	5.50	119.75	117.00
1	A	551	A	C5-C6-N1	-5.50	114.95	117.70
1	A	1421	A	C5-C6-N6	-5.50	119.30	123.70
1	A	1653	A	C5-C6-N1	-5.50	114.95	117.70
1	A	2174	C	N3-C4-C5	-5.50	119.70	121.90
1	A	2480	A	C5-C6-N6	-5.50	119.30	123.70
1	A	2785	U	C2'-C3'-O3'	5.50	122.50	113.70
1	A	2819	A	C5-C6-N6	-5.50	119.30	123.70
1	A	37	C	N3-C4-N4	5.50	121.85	118.00
1	A	616	A	C5-C6-N1	-5.50	114.95	117.70
1	A	1241	C	N3-C4-C5	-5.50	119.70	121.90
1	A	1284	A	C5-C6-N1	-5.50	114.95	117.70
1	A	1426	A	C5-C6-N6	-5.50	119.30	123.70
1	A	1636	A	C5-C6-N1	-5.50	114.95	117.70
1	A	2119	A	O4'-C1'-N9	5.50	112.60	108.20
1	A	253	G	C5-C6-O6	-5.50	125.30	128.60
1	A	1590	C	N3-C4-C5	-5.50	119.70	121.90
1	A	2723	G	O4'-C1'-N9	5.50	112.60	108.20
1	A	355	A	C5-C6-N1	-5.49	114.95	117.70
1	A	412	A	C5-C6-N6	-5.49	119.31	123.70
1	A	719	C	N3-C4-C5	-5.49	119.70	121.90
1	A	2026	A	C5'-C4'-O4'	5.49	115.69	109.10
1	A	2065	C	N3-C4-C5	-5.49	119.70	121.90
1	A	2084	C	O4'-C1'-N1	5.49	112.59	108.20
1	A	12	A	C5-C6-N6	-5.49	119.31	123.70
1	A	808	A	C5-C6-N6	-5.49	119.31	123.70
1	A	990	C	N3-C4-C5	-5.49	119.70	121.90
1	A	1772	C	N3-C4-C5	-5.49	119.70	121.90
1	A	2572	G	O4'-C1'-N9	5.49	112.59	108.20
1	A	207	A	C5-C6-N6	-5.49	119.31	123.70
1	A	1066	A	C5-C6-N6	-5.49	119.31	123.70
1	A	1177	G	C8-N9-C1'	-5.49	119.86	127.00
1	A	1401	C	N3-C4-N4	5.49	121.84	118.00
1	A	1612	C	N3-C4-C5	-5.49	119.70	121.90
1	A	2190	C	N3-C4-C5	-5.49	119.70	121.90
1	A	2241	A	C5-C6-N6	-5.49	119.31	123.70
1	A	2492	C	N3-C4-C5	-5.49	119.70	121.90
1	A	2719	A	C5-C6-N6	-5.49	119.31	123.70
1	A	2821	U	C1'-O4'-C4'	5.49	114.29	109.90
18	5	199	ALA	N-CA-CB	5.49	117.78	110.10
1	A	94	A	O4'-C1'-N9	5.49	112.59	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	289	C	N3-C4-N4	5.49	121.84	118.00
1	A	464	C	N3-C4-C5	-5.49	119.70	121.90
1	A	325	A	C5-C6-N1	-5.49	114.96	117.70
1	A	910	A	O4'-C1'-N9	5.49	112.59	108.20
1	A	978	A	C5-C6-N6	-5.49	119.31	123.70
1	A	1438	C	N3-C4-C5	-5.49	119.71	121.90
1	A	1465	A	C5-C6-N6	-5.49	119.31	123.70
1	A	1842	C	N3-C4-C5	-5.49	119.71	121.90
1	A	2076	C	N3-C4-C5	-5.49	119.71	121.90
1	A	2176	A	C5-C6-N1	-5.49	114.96	117.70
1	A	94	A	C5-C6-N6	-5.48	119.31	123.70
1	A	447	G	O4'-C1'-N9	5.48	112.59	108.20
1	A	646	A	C5-C6-N6	-5.48	119.31	123.70
1	A	2166	C	N3-C4-C5	-5.48	119.71	121.90
1	A	2505	A	C4-C5-C6	5.48	119.74	117.00
1	A	2876	A	C5-C6-N6	-5.48	119.31	123.70
1	A	429	A	C5-C6-N1	-5.48	114.96	117.70
1	A	480	C	N3-C4-C5	-5.48	119.71	121.90
1	A	955	C	N3-C4-C5	-5.48	119.71	121.90
1	A	1199	C	N3-C4-C5	-5.48	119.71	121.90
1	A	2221	C	N3-C4-C5	-5.48	119.71	121.90
1	A	2862	A	C5-C6-N1	-5.48	114.96	117.70
1	A	500	A	C5-C6-N1	-5.48	114.96	117.70
1	A	2818	C	N3-C4-N4	5.48	121.84	118.00
1	A	2875	A	C5-C6-N6	-5.48	119.32	123.70
1	A	253	G	O4'-C1'-N9	5.48	112.58	108.20
1	A	392	C	N3-C4-C5	-5.48	119.71	121.90
1	A	1097	A	C5-C6-N1	-5.48	114.96	117.70
1	A	1293	A	C4-C5-C6	5.48	119.74	117.00
1	A	2494	C	N3-C4-C5	-5.48	119.71	121.90
1	A	2546	C	N3-C4-N4	5.48	121.83	118.00
1	A	2616	A	C5-C6-N6	-5.48	119.32	123.70
1	A	2673	A	O4'-C1'-N9	5.48	112.58	108.20
1	A	2889	A	C5-C6-N6	-5.48	119.32	123.70
1	A	403	C	N3-C4-C5	-5.48	119.71	121.90
1	A	2089	A	C5-C6-N6	-5.48	119.32	123.70
1	A	2446	C	N3-C4-C5	-5.48	119.71	121.90
1	A	2640	C	N3-C4-N4	5.48	121.83	118.00
1	A	2673	A	C5-C6-N1	-5.48	114.96	117.70
1	A	42	G	C5'-C4'-O4'	-5.47	102.53	109.10
1	A	162	A	C5-C6-N1	-5.47	114.96	117.70
1	A	258	A	C5-C6-N1	-5.47	114.96	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	330	A	C5-C6-N6	-5.47	119.32	123.70
1	A	484	C	N3-C4-C5	-5.47	119.71	121.90
1	A	679	A	C5-C6-N1	-5.47	114.96	117.70
1	A	1404	A	C5-C6-N1	-5.47	114.96	117.70
1	A	2631	A	C5-C6-N6	-5.47	119.32	123.70
1	A	165	C	N3-C4-C5	-5.47	119.71	121.90
1	A	245	G	C4'-C3'-C2'	-5.47	97.13	102.60
1	A	812	G	P-O5'-C5'	5.47	129.66	120.90
1	A	933	C	N3-C4-N4	5.47	121.83	118.00
1	A	1072	A	C5-C6-N6	-5.47	119.32	123.70
1	A	1675	A	O4'-C1'-N9	5.47	112.58	108.20
1	A	2162	G	C1'-O4'-C4'	-5.47	105.52	109.90
1	A	2462	A	C5-C6-N1	-5.47	114.96	117.70
1	A	2517	A	C5-C6-N6	-5.47	119.32	123.70
1	A	2587	C	N3-C4-N4	5.47	121.83	118.00
1	A	555	C	N3-C4-C5	-5.47	119.71	121.90
1	A	758	A	O4'-C1'-N9	5.47	112.58	108.20
1	A	2129	G	O4'-C1'-N9	5.47	112.58	108.20
1	A	178	A	C5-C6-N6	-5.47	119.33	123.70
1	A	376	A	C5-C6-N6	-5.47	119.33	123.70
1	A	414	C	N3-C4-C5	-5.47	119.71	121.90
1	A	499	G	O4'-C1'-N9	5.47	112.58	108.20
1	A	693	G	O4'-C1'-N9	5.47	112.58	108.20
1	A	786	A	C5-C6-N1	-5.47	114.97	117.70
1	A	1062	C	N3-C4-C5	-5.47	119.71	121.90
1	A	1261	C	N3-C4-C5	-5.47	119.71	121.90
1	A	1477	A	C5-C6-N1	-5.47	114.97	117.70
1	A	2143	A	C5-C6-N6	-5.47	119.32	123.70
1	A	2536	C	N3-C4-N4	5.47	121.83	118.00
1	A	2779	A	C5-C6-N6	-5.47	119.33	123.70
1	A	737	C	N3-C4-C5	-5.47	119.71	121.90
1	A	1062	C	N3-C4-N4	5.47	121.83	118.00
1	A	1364	C	N3-C4-C5	-5.47	119.71	121.90
1	A	1941	A	C5-C6-N6	-5.47	119.33	123.70
1	A	2225	C	N3-C4-C5	-5.47	119.71	121.90
1	A	71	A	C5-C6-N6	-5.47	119.33	123.70
1	A	635	C	N3-C4-C5	-5.47	119.71	121.90
1	A	2190	C	N3-C4-N4	5.47	121.83	118.00
1	A	2807	A	C5-C6-N1	-5.47	114.97	117.70
1	A	5	A	C5-C6-N1	-5.46	114.97	117.70
1	A	161	A	O4'-C1'-N9	5.46	112.57	108.20
1	A	182	C	N3-C4-C5	-5.46	119.71	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	387	C	N3-C4-C5	-5.46	119.71	121.90
1	A	561	A	C5-C6-N1	-5.46	114.97	117.70
1	A	1008	A	C5-C6-N1	-5.46	114.97	117.70
1	A	1315	G	O4'-C1'-C2'	-5.46	100.33	105.80
1	A	1585	A	C5-C6-N6	-5.46	119.33	123.70
1	A	1710	A	C5-C6-N6	-5.46	119.33	123.70
1	A	1855	C	N3-C4-C5	-5.46	119.72	121.90
1	A	1862	C	N3-C4-N4	5.46	121.83	118.00
1	A	1961	A	C5-C6-N1	-5.46	114.97	117.70
1	A	2032	A	C5-C6-N6	-5.46	119.33	123.70
1	A	2165	A	C5-C6-N1	-5.46	114.97	117.70
1	A	2440	A	C5-C6-N1	-5.46	114.97	117.70
1	A	448	A	C5-C6-N6	-5.46	119.33	123.70
1	A	879	G	O4'-C1'-N9	5.46	112.57	108.20
1	A	1661	A	C5-C6-N6	-5.46	119.33	123.70
1	A	2812	A	C5-C6-N1	-5.46	114.97	117.70
1	A	2901	G	O4'-C1'-N9	5.46	112.57	108.20
1	A	864	C	N3-C4-N4	5.46	121.82	118.00
1	A	1275	G	O4'-C1'-N9	5.46	112.57	108.20
1	A	1829	C	O4'-C1'-N1	5.46	112.57	108.20
1	A	2569	C	N3-C4-C5	-5.46	119.72	121.90
1	A	2926	C	N3-C4-N4	5.46	121.82	118.00
1	A	23	G	O4'-C1'-N9	5.46	112.57	108.20
1	A	110	A	C5-C6-N6	-5.46	119.33	123.70
1	A	943	A	C5-C6-N6	-5.46	119.33	123.70
1	A	2708	A	C4-C5-C6	5.46	119.73	117.00
1	A	102	A	C5-C6-N6	-5.46	119.33	123.70
1	A	608	C	N3-C4-C5	-5.46	119.72	121.90
1	A	841	A	C5-C6-N6	-5.46	119.33	123.70
1	A	1144	A	C5-C6-N6	-5.46	119.33	123.70
1	A	1705	C	N3-C4-C5	-5.46	119.72	121.90
1	A	1797	A	C5-C6-N1	-5.46	114.97	117.70
1	A	1865	C	N3-C4-C5	-5.46	119.72	121.90
1	A	2451	C	N3-C4-N4	5.46	121.82	118.00
1	A	2623	C	N3-C4-N4	5.46	121.82	118.00
1	A	2818	C	N3-C4-C5	-5.46	119.72	121.90
1	A	2824	G	O4'-C1'-N9	5.46	112.57	108.20
1	A	561	A	C4-C5-C6	5.46	119.73	117.00
1	A	1025	A	O4'-C1'-N9	5.46	112.57	108.20
1	A	1245	G	O4'-C1'-N9	5.46	112.56	108.20
1	A	1410	G	O4'-C1'-N9	5.46	112.56	108.20
1	A	1482	G	O4'-C1'-N9	5.46	112.56	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1730	C	N3-C4-C5	-5.46	119.72	121.90
1	A	2091	A	C5-C6-N1	-5.46	114.97	117.70
1	A	2256	A	C5-C6-N6	-5.46	119.33	123.70
1	A	2883	C	N3-C4-C5	-5.46	119.72	121.90
1	A	777	C	N3-C4-C5	-5.46	119.72	121.90
1	A	1447	C	N3-C4-N4	5.46	121.82	118.00
1	A	1934	C	N3-C4-N4	5.46	121.82	118.00
1	A	2187	A	C5-C6-N1	-5.46	114.97	117.70
1	A	2860	A	C5-C6-N1	-5.46	114.97	117.70
1	A	803	C	N3-C4-C5	-5.45	119.72	121.90
1	A	843	C	N3-C4-N4	5.45	121.82	118.00
1	A	1235	A	C5-C6-N1	-5.45	114.97	117.70
1	A	2088	A	C5-C6-N1	-5.45	114.97	117.70
1	A	2141	A	C5-C6-N1	-5.45	114.97	117.70
1	A	2606	A	C5-C6-N1	-5.45	114.97	117.70
1	A	2648	U	P-O5'-C5'	5.45	129.63	120.90
1	A	2693	G	O4'-C1'-N9	5.45	112.56	108.20
1	A	2823	C	N3-C4-N4	5.45	121.82	118.00
1	A	244	A	C4-C5-C6	5.45	119.73	117.00
1	A	1732	G	N3-C2-N2	5.45	123.72	119.90
1	A	818	G	O4'-C1'-N9	5.45	112.56	108.20
1	A	968	C	N3-C4-C5	-5.45	119.72	121.90
1	A	1172	A	C5-C6-N6	-5.45	119.34	123.70
1	A	1266	A	C5-C6-N1	-5.45	114.97	117.70
1	A	1392	A	O4'-C1'-N9	5.45	112.56	108.20
1	A	2593	A	C5-C6-N6	-5.45	119.34	123.70
1	A	2823	C	N3-C4-C5	-5.45	119.72	121.90
1	A	32	C	N3-C4-C5	-5.45	119.72	121.90
1	A	38	A	C4-C5-C6	5.45	119.72	117.00
1	A	195	C	N3-C4-C5	-5.45	119.72	121.90
1	A	335	G	O4'-C1'-N9	5.45	112.56	108.20
1	A	461	C	N3-C4-C5	-5.45	119.72	121.90
1	A	975	C	N3-C4-C5	-5.45	119.72	121.90
1	A	1569	A	C5-C6-N6	-5.45	119.34	123.70
1	A	1644	C	N3-C4-C5	-5.45	119.72	121.90
1	A	2106	A	C5-C6-N6	-5.45	119.34	123.70
1	A	2165	A	C5-C6-N6	-5.45	119.34	123.70
1	A	543	A	C5-C6-N1	-5.45	114.98	117.70
1	A	1026	A	C5-C6-N6	-5.45	119.34	123.70
1	A	1052	C	N3-C4-C5	-5.45	119.72	121.90
1	A	1405	A	C5-C6-N1	-5.45	114.98	117.70
1	A	2262	A	O4'-C1'-N9	5.45	112.56	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1055	A	C5-C6-N6	-5.45	119.34	123.70
1	A	1398	A	C5-C6-N1	-5.45	114.98	117.70
1	A	1811	C	N3-C4-N4	5.45	121.81	118.00
1	A	1830	G	O4'-C1'-N9	5.45	112.56	108.20
1	A	2224	U	O4'-C1'-N1	5.45	112.56	108.20
1	A	2737	G	O4'-C1'-N9	5.45	112.56	108.20
1	A	18	C	N3-C4-C5	-5.44	119.72	121.90
1	A	766	C	N3-C4-C5	-5.44	119.72	121.90
1	A	1406	A	C5-C6-N1	-5.44	114.98	117.70
1	A	2602	C	N3-C4-C5	-5.44	119.72	121.90
1	A	64	A	C5-C6-N6	-5.44	119.35	123.70
1	A	274	A	C4-C5-C6	5.44	119.72	117.00
1	A	2700	A	C5-C6-N6	-5.44	119.35	123.70
1	A	68	C	N3-C4-C5	-5.44	119.72	121.90
1	A	139	A	C5-C6-N6	-5.44	119.35	123.70
1	A	307	A	C5-C6-N1	-5.44	114.98	117.70
1	A	325	A	C5-C6-N6	-5.44	119.35	123.70
1	A	1660	C	N3-C4-N4	5.44	121.81	118.00
1	A	1747	G	O4'-C1'-N9	5.44	112.55	108.20
1	A	2920	C	P-O5'-C5'	5.44	129.61	120.90
1	A	600	A	O4'-C1'-N9	5.44	112.55	108.20
1	A	1265	A	C5-C6-N6	-5.44	119.35	123.70
1	A	115	C	N3-C4-N4	5.44	121.81	118.00
1	A	501	A	C5-C6-N1	-5.44	114.98	117.70
1	A	763	A	C5-C6-N6	-5.44	119.35	123.70
1	A	777	C	N3-C4-N4	5.44	121.81	118.00
1	A	1014	A	C5-C6-N6	-5.44	119.35	123.70
1	A	1161	A	C5-C6-N6	-5.44	119.35	123.70
1	A	2421	A	O4'-C1'-N9	5.44	112.55	108.20
1	A	2505	A	C5-C6-N6	-5.44	119.35	123.70
1	A	2848	A	C5-C6-N6	-5.44	119.35	123.70
1	A	186	C	N3-C4-C5	-5.44	119.73	121.90
1	A	908	A	C5-C6-N1	-5.44	114.98	117.70
1	A	1190	A	C5-C6-N1	-5.44	114.98	117.70
1	A	1375	A	C5-C6-N1	-5.44	114.98	117.70
1	A	2500	A	C5-C6-N1	-5.44	114.98	117.70
1	A	222	A	C5-C6-N1	-5.43	114.98	117.70
1	A	412	A	C5-C6-N1	-5.43	114.98	117.70
1	A	1333	C	N3-C4-C5	-5.43	119.73	121.90
1	A	1426	A	P-O3'-C3'	-5.43	113.18	119.70
1	A	1583	A	C5-C6-N6	-5.43	119.35	123.70
1	A	1956	A	O4'-C1'-N9	5.43	112.55	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	359	C	N3-C4-C5	-5.43	119.73	121.90
1	A	480	C	N3-C4-N4	5.43	121.80	118.00
1	A	534	C	N3-C4-C5	-5.43	119.73	121.90
1	A	935	A	C5-C6-N6	-5.43	119.35	123.70
1	A	1125	C	N3-C4-N4	5.43	121.80	118.00
1	A	1328	C	N3-C4-C5	-5.43	119.73	121.90
1	A	1539	C	N3-C4-C5	-5.43	119.73	121.90
1	A	1624	U	C3'-C2'-C1'	5.43	105.85	101.50
1	A	1659	A	C5-C6-N6	-5.43	119.35	123.70
1	A	2724	U	O4'-C1'-N1	5.43	112.55	108.20
1	A	71	A	C4-C5-C6	5.43	119.72	117.00
1	A	1756	U	O4'-C1'-N1	5.43	112.55	108.20
1	A	1766	C	N3-C4-N4	5.43	121.80	118.00
1	A	2762	A	C5-C6-N1	-5.43	114.98	117.70
1	A	95	A	C5-C6-N6	-5.43	119.36	123.70
1	A	594	C	N3-C4-C5	-5.43	119.73	121.90
1	A	1703	C	N3-C4-C5	-5.43	119.73	121.90
1	A	2007	A	C5-C6-N6	-5.43	119.36	123.70
1	A	2822	C	N3-C4-C5	-5.43	119.73	121.90
1	A	971	A	O4'-C1'-N9	5.43	112.54	108.20
1	A	2767	A	C5-C6-N1	-5.43	114.99	117.70
1	A	2862	A	C4-C5-C6	5.43	119.71	117.00
1	A	324	A	C5-C6-N1	-5.43	114.99	117.70
1	A	689	A	O4'-C1'-N9	5.43	112.54	108.20
1	A	690	A	O4'-C1'-N9	5.43	112.54	108.20
1	A	1279	C	N3-C4-C5	-5.43	119.73	121.90
1	A	1517	A	C5-C6-N1	-5.43	114.99	117.70
1	A	1815	A	C4-C5-C6	5.43	119.71	117.00
1	A	2810	A	C5-C6-N6	-5.43	119.36	123.70
1	A	165	C	N3-C4-N4	5.42	121.80	118.00
1	A	616	A	C5-C6-N6	-5.42	119.36	123.70
1	A	1717	C	N3-C4-N4	5.42	121.80	118.00
1	A	1772	C	N3-C4-N4	5.42	121.80	118.00
1	A	1780	C	N3-C4-C5	-5.42	119.73	121.90
1	A	2736	G	O4'-C1'-N9	5.42	112.54	108.20
1	A	2779	A	C5-C6-N1	-5.42	114.99	117.70
1	A	124	A	C5-C6-N6	-5.42	119.36	123.70
1	A	392	C	N3-C4-N4	5.42	121.80	118.00
1	A	431	A	C5-C6-N6	-5.42	119.36	123.70
1	A	692	A	C5-C6-N6	-5.42	119.36	123.70
1	A	700	U	C2-N1-C1'	5.42	124.20	117.70
1	A	987	A	C5-C6-N6	-5.42	119.36	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1097	A	O4'-C1'-N9	5.42	112.54	108.20
1	A	1276	G	N3-C2-N2	5.42	123.69	119.90
1	A	1515	C	N3-C4-C5	-5.42	119.73	121.90
1	A	1561	G	O4'-C1'-N9	5.42	112.54	108.20
1	A	1749	G	O4'-C1'-N9	5.42	112.54	108.20
1	A	1816	A	C5-C6-N1	-5.42	114.99	117.70
1	A	971	A	C5-C6-N6	-5.42	119.37	123.70
1	A	1359	G	O4'-C1'-N9	5.42	112.53	108.20
1	A	1364	C	O4'-C1'-N1	5.42	112.53	108.20
1	A	2831	A	C5-C6-N1	-5.42	114.99	117.70
1	A	745	C	N3-C4-N4	5.42	121.79	118.00
1	A	1029	A	C5-C6-N6	-5.42	119.37	123.70
1	A	1077	G	O4'-C1'-N9	5.42	112.53	108.20
1	A	1118	C	N3-C4-N4	5.42	121.79	118.00
1	A	1583	A	C5-C6-N1	-5.42	114.99	117.70
1	A	2451	C	O4'-C1'-N1	5.42	112.53	108.20
1	A	2571	A	C5-C6-N6	-5.42	119.37	123.70
1	A	1377	G	O4'-C1'-N9	5.42	112.53	108.20
1	A	2131	U	O4'-C1'-N1	5.42	112.53	108.20
1	A	2175	C	N3-C4-C5	-5.42	119.73	121.90
1	A	134	C	N3-C4-N4	5.41	121.79	118.00
1	A	456	A	C5-C6-N1	-5.41	114.99	117.70
1	A	1201	A	C5-C6-N6	-5.41	119.37	123.70
1	A	1237	C	N3-C4-N4	5.41	121.79	118.00
1	A	1555	A	O4'-C1'-N9	5.41	112.53	108.20
1	A	1614	A	C5-C6-N6	-5.41	119.37	123.70
1	A	2042	A	C5-C6-N1	-5.41	114.99	117.70
1	A	2451	C	N3-C4-C5	-5.41	119.73	121.90
1	A	364	A	C5-C6-N1	-5.41	114.99	117.70
1	A	1332	U	P-O5'-C5'	5.41	129.56	120.90
1	A	2869	A	C5-C6-N6	-5.41	119.37	123.70
1	A	91	A	C5-C6-N1	-5.41	114.99	117.70
1	A	798	A	C5-C6-N1	-5.41	115.00	117.70
1	A	1034	A	C5'-C4'-O4'	5.41	115.59	109.10
1	A	1089	C	N3-C4-N4	5.41	121.79	118.00
1	A	1114	G	N3-C2-N2	5.41	123.69	119.90
1	A	1568	G	O4'-C1'-N9	5.41	112.53	108.20
1	A	2136	C	N3-C4-N4	5.41	121.79	118.00
1	A	2435	C	N3-C4-C5	-5.41	119.74	121.90
1	A	2479	A	O4'-C1'-N9	5.41	112.53	108.20
2	0	5	PHE	CB-CG-CD2	-5.41	117.01	120.80
1	A	604	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(^{o})	Ideal(^{o})
1	A	1774	A	C5-C6-N1	-5.41	115.00	117.70
1	A	2571	A	C5-C6-N1	-5.41	115.00	117.70
1	A	2657	C	N3-C4-N4	5.41	121.79	118.00
1	A	2784	C	N3-C4-N4	5.41	121.78	118.00
1	A	179	A	C5-C6-N6	-5.41	119.37	123.70
1	A	2463	A	C5-C6-N6	-5.41	119.37	123.70
1	A	6	A	C5-C6-N6	-5.41	119.38	123.70
1	A	428	A	C5-C6-N6	-5.41	119.38	123.70
1	A	932	C	C2-N1-C1'	5.41	124.75	118.80
1	A	1074	A	O4'-C1'-N9	5.41	112.53	108.20
1	A	1450	C	N3-C4-C5	-5.41	119.74	121.90
1	A	1680	A	C5-C6-N6	-5.41	119.38	123.70
1	A	1695	A	O4'-C1'-N9	5.41	112.52	108.20
1	A	2804	A	C5-C6-N6	-5.41	119.38	123.70
1	A	2805	A	C5-C6-N1	-5.41	115.00	117.70
1	A	2837	A	C5-C6-N6	-5.41	119.38	123.70
1	A	752	A	C5-C6-N6	-5.40	119.38	123.70
1	A	957	A	C5-C6-N1	-5.40	115.00	117.70
1	A	993	A	C5-C6-N6	-5.40	119.38	123.70
1	A	1460	G	N1-C6-O6	5.40	123.14	119.90
1	A	144	A	C4-C5-C6	5.40	119.70	117.00
1	A	460	C	N3-C4-C5	-5.40	119.74	121.90
1	A	1089	C	N3-C4-C5	-5.40	119.74	121.90
1	A	2157	C	N3-C4-N4	5.40	121.78	118.00
1	A	20	C	P-O5'-C5'	5.40	129.54	120.90
1	A	375	C	N3-C4-N4	5.40	121.78	118.00
1	A	706	C	N3-C4-C5	-5.40	119.74	121.90
1	A	887	C	N3-C4-C5	-5.40	119.74	121.90
1	A	1019	A	C1'-O4'-C4'	-5.40	105.58	109.90
1	A	1157	A	C5-C6-N1	-5.40	115.00	117.70
1	A	1260	A	C5-C6-N1	-5.40	115.00	117.70
1	A	1328	C	N3-C4-N4	5.40	121.78	118.00
1	A	1581	A	C4-C5-C6	5.40	119.70	117.00
1	A	1701	C	N3-C4-C5	-5.40	119.74	121.90
1	A	2442	G	O4'-C1'-N9	5.40	112.52	108.20
1	A	2630	C	N3-C4-C5	-5.40	119.74	121.90
1	A	1269	A	C5-C6-N6	-5.40	119.38	123.70
1	A	1279	C	N3-C4-N4	5.40	121.78	118.00
1	A	1515	C	N3-C4-N4	5.40	121.78	118.00
1	A	2461	A	C5-C6-N6	-5.40	119.38	123.70
1	A	44	A	C5-C6-N6	-5.40	119.38	123.70
1	A	956	A	C5-C6-N1	-5.40	115.00	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1325	A	C5-C6-N1	-5.40	115.00	117.70
1	A	1405	A	C5-C6-N6	-5.40	119.38	123.70
1	A	1494	G	O4'-C1'-N9	5.40	112.52	108.20
1	A	2580	C	N3-C4-N4	5.40	121.78	118.00
1	A	2643	A	C5-C6-N6	-5.40	119.38	123.70
1	A	27	G	C4'-C3'-C2'	-5.40	97.20	102.60
1	A	1447	C	N3-C4-C5	-5.40	119.74	121.90
1	A	154	A	C4-C5-C6	5.39	119.70	117.00
1	A	166	A	C5-C6-N6	-5.39	119.38	123.70
1	A	361	G	O4'-C1'-N9	5.39	112.52	108.20
1	A	542	G	O4'-C1'-N9	5.39	112.52	108.20
1	A	780	G	N3-C2-N2	5.39	123.68	119.90
1	A	445	C	N3-C4-C5	-5.39	119.74	121.90
1	A	484	C	N3-C4-N4	5.39	121.78	118.00
1	A	836	A	C5-C6-N1	-5.39	115.00	117.70
1	A	1861	C	N3-C4-N4	5.39	121.78	118.00
1	A	2049	A	C5-C6-N6	-5.39	119.39	123.70
1	A	615	U	O4'-C1'-N1	5.39	112.51	108.20
1	A	1258	A	C5-C6-N1	-5.39	115.00	117.70
1	A	1609	C	N3-C4-C5	-5.39	119.74	121.90
1	A	1710	A	O4'-C1'-N9	5.39	112.51	108.20
1	A	937	C	N3-C4-N4	5.39	121.77	118.00
1	A	1011	C	N3-C4-C5	-5.39	119.74	121.90
1	A	1421	A	C5-C6-N1	-5.39	115.00	117.70
1	A	1432	A	C5-C6-N1	-5.39	115.00	117.70
1	A	1452	C	N3-C4-C5	-5.39	119.74	121.90
1	A	1693	C	N3-C4-N4	5.39	121.77	118.00
1	A	2547	A	C5-C6-N1	-5.39	115.00	117.70
1	A	2696	C	N3-C4-C5	-5.39	119.75	121.90
1	A	1573	C	N3-C4-N4	5.39	121.77	118.00
1	A	2499	G	O4'-C1'-N9	5.39	112.51	108.20
1	A	2742	C	N3-C4-N4	5.39	121.77	118.00
1	A	2885	A	O4'-C1'-N9	5.39	112.51	108.20
1	A	28	A	C5-C6-N6	-5.39	119.39	123.70
1	A	277	C	N3-C4-C5	-5.39	119.75	121.90
1	A	979	U	C6-N1-C1'	-5.39	113.66	121.20
1	A	1455	C	N3-C4-N4	5.39	121.77	118.00
1	A	1705	C	N3-C4-N4	5.39	121.77	118.00
1	A	1844	A	C4-C5-C6	5.39	119.69	117.00
1	A	882	A	O4'-C1'-N9	5.38	112.51	108.20
1	A	1056	A	C5-C6-N6	-5.38	119.39	123.70
1	A	1811	C	O4'-C1'-N1	5.38	112.51	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2248	G	O4'-C1'-N9	5.38	112.51	108.20
1	A	2898	A	C5-C6-N6	-5.38	119.39	123.70
1	A	176	A	C5-C6-N1	-5.38	115.01	117.70
1	A	630	A	O4'-C1'-N9	5.38	112.51	108.20
1	A	870	A	C5-C6-N1	-5.38	115.01	117.70
1	A	1426	A	C5-C6-N1	-5.38	115.01	117.70
1	A	1607	C	C2-N1-C1'	5.38	124.72	118.80
1	A	1660	C	N3-C4-C5	-5.38	119.75	121.90
1	A	110	A	P-O3'-C3'	5.38	126.16	119.70
1	A	379	C	N3-C4-C5	-5.38	119.75	121.90
1	A	574	A	C5-C6-N6	-5.38	119.40	123.70
1	A	725	C	N3-C4-N4	5.38	121.77	118.00
1	A	1133	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	2042	A	C5-C6-N6	-5.38	119.40	123.70
1	A	2799	C	C6-N1-C2	-5.38	118.15	120.30
1	A	2900	A	O4'-C1'-N9	5.38	112.50	108.20
1	A	31	C	N3-C4-N4	5.38	121.77	118.00
1	A	185	A	C5-C6-N6	-5.38	119.40	123.70
1	A	200	A	C4-C5-C6	5.38	119.69	117.00
1	A	637	A	C5-C6-N6	-5.38	119.40	123.70
1	A	698	C	N3-C4-C5	-5.38	119.75	121.90
1	A	1399	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	1631	A	C5-C6-N6	-5.38	119.40	123.70
1	A	1648	A	C5-C6-N1	-5.38	115.01	117.70
1	A	1738	U	O4'-C1'-N1	5.38	112.50	108.20
1	A	1789	A	O4'-C1'-N9	5.38	112.50	108.20
1	A	2425	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	2652	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	2754	A	C5-C6-N1	-5.38	115.01	117.70
1	A	326	A	C4-C5-C6	5.38	119.69	117.00
1	A	453	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	597	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	980	C	C2-N3-C4	5.38	122.59	119.90
1	A	1037	C	N3-C4-C5	-5.38	119.75	121.90
1	A	1197	A	C5-C6-N6	-5.38	119.40	123.70
1	A	1419	G	O4'-C1'-N9	5.38	112.50	108.20
1	A	1146	C	N3-C4-C5	-5.38	119.75	121.90
1	A	1243	A	C5-C6-N6	-5.38	119.40	123.70
1	A	1956	A	C5-C6-N6	-5.38	119.40	123.70
1	A	2059	A	C5-C6-N6	-5.38	119.40	123.70
1	A	425	C	N3-C4-C5	-5.37	119.75	121.90
1	A	933	C	N3-C4-C5	-5.37	119.75	121.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1222	A	O4'-C1'-N9	5.37	112.50	108.20
1	A	1474	C	N3-C4-C5	-5.37	119.75	121.90
1	A	1802	A	C5-C6-N6	-5.37	119.40	123.70
1	A	1934	C	N3-C4-C5	-5.37	119.75	121.90
1	A	2150	G	O4'-C1'-N9	5.37	112.50	108.20
1	A	2455	A	C5-C6-N1	-5.37	115.01	117.70
1	A	2717	G	N3-C2-N2	5.37	123.66	119.90
1	A	503	C	N3-C4-C5	-5.37	119.75	121.90
1	A	646	A	O4'-C1'-N9	5.37	112.50	108.20
1	A	1456	A	C5-C6-N1	-5.37	115.02	117.70
1	A	1514	C	N3-C4-N4	5.37	121.76	118.00
1	A	2869	A	C5-C6-N1	-5.37	115.02	117.70
1	A	925	A	C5-C6-N6	-5.37	119.40	123.70
1	A	970	A	C5-C6-N1	-5.37	115.02	117.70
1	A	1298	C	N3-C4-C5	-5.37	119.75	121.90
1	A	2071	A	C5-C6-N1	-5.37	115.02	117.70
1	A	2435	C	N3-C4-N4	5.37	121.76	118.00
1	A	2547	A	C5-C6-N6	-5.37	119.40	123.70
1	A	2827	A	C5-C6-N6	-5.37	119.40	123.70
1	A	1492	G	O4'-C1'-N9	5.37	112.50	108.20
1	A	2102	C	N3-C4-N4	5.37	121.76	118.00
1	A	2121	U	C2-N1-C1'	5.37	124.14	117.70
1	A	173	A	C5-C6-N1	-5.37	115.02	117.70
1	A	1216	C	N3-C4-N4	5.37	121.76	118.00
1	A	1499	A	C5-C6-N1	-5.37	115.02	117.70
1	A	1562	A	C5-C6-N6	-5.37	119.41	123.70
1	A	1812	A	C5-C6-N1	-5.37	115.02	117.70
1	A	2191	A	C5-C6-N6	-5.37	119.41	123.70
1	A	2641	C	N3-C4-N4	5.37	121.76	118.00
1	A	355	A	C5-C6-N6	-5.37	119.41	123.70
1	A	431	A	C5-C6-N1	-5.37	115.02	117.70
1	A	575	A	P-O5'-C5'	5.37	129.49	120.90
1	A	840	A	C5-C6-N6	-5.37	119.41	123.70
1	A	1131	A	C5-C6-N1	-5.37	115.02	117.70
1	A	1194	A	C5-C6-N1	-5.37	115.02	117.70
1	A	1722	A	C5-C6-N6	-5.37	119.41	123.70
1	A	1857	G	N3-C2-N2	5.37	123.66	119.90
1	A	2111	A	C5-C6-N1	-5.37	115.02	117.70
1	A	2114	C	N3-C4-C5	-5.37	119.75	121.90
1	A	2695	C	N3-C4-C5	-5.37	119.75	121.90
1	A	200	A	C5-C6-N1	-5.36	115.02	117.70
1	A	1061	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(^{o})	Ideal(^{o})
1	A	1168	G	C5'-C4'-O4'	5.36	115.54	109.10
1	A	1210	A	C5-C6-N1	-5.36	115.02	117.70
1	A	1745	A	C5-C6-N1	-5.36	115.02	117.70
1	A	1816	A	C5-C6-N6	-5.36	119.41	123.70
1	A	2433	C	N3-C4-N4	5.36	121.75	118.00
1	A	373	A	O4'-C1'-C2'	-5.36	100.44	105.80
1	A	553	A	C5-C6-N1	-5.36	115.02	117.70
1	A	748	G	O4'-C1'-N9	5.36	112.49	108.20
1	A	1026	A	O4'-C1'-N9	5.36	112.49	108.20
1	A	1780	C	P-O5'-C5'	5.36	129.48	120.90
1	A	2744	C	C2-N3-C4	5.36	122.58	119.90
1	A	2830	A	C5-C6-N1	-5.36	115.02	117.70
1	A	2860	A	O4'-C1'-N9	5.36	112.49	108.20
1	A	369	A	C5-C6-N6	-5.36	119.41	123.70
1	A	965	A	C5-C6-N1	-5.36	115.02	117.70
1	A	389	A	O4'-C1'-N9	5.36	112.49	108.20
1	A	451	C	N3-C4-C5	-5.36	119.76	121.90
1	A	572	A	C4-C5-C6	5.36	119.68	117.00
1	A	656	A	C5-C6-N1	-5.36	115.02	117.70
1	A	943	A	C5-C6-N1	-5.36	115.02	117.70
1	A	1519	C	C5'-C4'-O4'	5.36	115.53	109.10
1	A	1691	A	C5-C6-N1	-5.36	115.02	117.70
1	A	551	A	C4-C5-C6	5.36	119.68	117.00
1	A	1169	C	N3-C4-C5	-5.36	119.76	121.90
1	A	1169	C	N3-C4-N4	5.36	121.75	118.00
1	A	1630	G	P-O3'-C3'	5.36	126.12	119.70
1	A	1723	A	C5-C6-N6	-5.36	119.42	123.70
1	A	279	A	C5-C6-N6	-5.35	119.42	123.70
1	A	281	A	C5-C6-N6	-5.35	119.42	123.70
1	A	1728	C	N3-C4-C5	-5.35	119.76	121.90
1	A	2740	A	C5-C6-N1	-5.35	115.02	117.70
1	A	288	C	N3-C4-C5	-5.35	119.76	121.90
1	A	659	A	C4-C5-C6	5.35	119.68	117.00
1	A	978	A	C5-C6-N1	-5.35	115.02	117.70
1	A	1025	A	C5-C6-N1	-5.35	115.02	117.70
1	A	1180	C	N3-C4-N4	5.35	121.75	118.00
1	A	1251	U	O4'-C1'-N1	5.35	112.48	108.20
1	A	1323	A	O4'-C1'-N9	5.35	112.48	108.20
1	A	1591	G	P-O3'-C3'	5.35	126.12	119.70
1	A	1941	A	C5-C6-N1	-5.35	115.02	117.70
1	A	1946	U	C2-N1-C1'	5.35	124.12	117.70
1	A	2083	A	C5-C6-N1	-5.35	115.02	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2440	A	C4-C5-C6	5.35	119.68	117.00
1	A	2526	A	C5-C6-N6	-5.35	119.42	123.70
1	A	958	A	C5-C6-N1	-5.35	115.02	117.70
1	A	1446	C	N3-C4-C5	-5.35	119.76	121.90
1	A	2672	G	O4'-C1'-N9	5.35	112.48	108.20
1	A	476	A	O4'-C1'-N9	5.35	112.48	108.20
1	A	717	A	C5-C6-N1	-5.35	115.03	117.70
1	A	802	G	C5-C6-O6	-5.35	125.39	128.60
1	A	1287	A	O4'-C1'-N9	5.35	112.48	108.20
1	A	1446	C	N3-C4-N4	5.35	121.75	118.00
1	A	2088	A	C5-C6-N6	-5.35	119.42	123.70
1	A	2680	C	N3-C4-C5	-5.35	119.76	121.90
1	A	154	A	C5-C6-N1	-5.35	115.03	117.70
1	A	762	A	C5-C6-N1	-5.35	115.03	117.70
1	A	948	A	O4'-C1'-N9	5.35	112.48	108.20
1	A	1402	C	N3-C4-N4	5.35	121.74	118.00
1	A	2220	A	C5-C6-N1	-5.35	115.03	117.70
1	A	207	A	C5-C6-N1	-5.35	115.03	117.70
1	A	254	A	C5-C6-N1	-5.35	115.03	117.70
1	A	652	A	C5-C6-N1	-5.35	115.03	117.70
1	A	1366	C	N3-C4-N4	5.35	121.74	118.00
1	A	1814	A	C5-C6-N1	-5.35	115.03	117.70
1	A	61	A	C5-C6-N6	-5.34	119.42	123.70
1	A	353	A	C5-C6-N1	-5.34	115.03	117.70
1	A	690	A	C5-C6-N1	-5.34	115.03	117.70
1	A	1010	C	N3-C4-N4	5.34	121.74	118.00
1	A	1092	A	C5-C6-N1	-5.34	115.03	117.70
1	A	1427	G	C6-C5-N7	-5.34	127.19	130.40
1	A	1555	A	C5-C6-N1	-5.34	115.03	117.70
1	A	1686	A	O4'-C1'-N9	5.34	112.47	108.20
1	A	1721	A	O5'-C5'-C4'	5.34	121.86	111.70
1	A	2615	C	N3-C4-N4	5.34	121.74	118.00
1	A	2635	C	N3-C4-C5	-5.34	119.76	121.90
1	A	2720	C	N3-C4-C5	-5.34	119.76	121.90
1	A	1948	A	O4'-C1'-N9	5.34	112.47	108.20
1	A	1999	A	O4'-C1'-N9	5.34	112.47	108.20
1	A	2477	A	C5-C6-N6	-5.34	119.42	123.70
1	A	797	A	C5-C6-N6	-5.34	119.43	123.70
1	A	1072	A	C5-C6-N1	-5.34	115.03	117.70
1	A	1113	A	C5-C6-N6	-5.34	119.43	123.70
1	A	1425	C	N3-C4-C5	-5.34	119.76	121.90
1	A	1592	A	C5-C6-N1	-5.34	115.03	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1680	A	C5-C6-N1	-5.34	115.03	117.70
1	A	2492	C	N3-C4-N4	5.34	121.74	118.00
1	A	128	C	N3-C4-N4	5.34	121.74	118.00
1	A	782	A	C4-C5-C6	5.34	119.67	117.00
1	A	925	A	O4'-C1'-N9	5.34	112.47	108.20
1	A	1395	C	N3-C4-C5	-5.34	119.76	121.90
1	A	2424	C	N3-C4-C5	-5.34	119.77	121.90
1	A	2742	C	N3-C4-C5	-5.34	119.76	121.90
1	A	1629	C	N3-C4-N4	5.34	121.74	118.00
1	A	2835	A	O4'-C1'-N9	5.34	112.47	108.20
1	A	469	A	C5-C6-N6	-5.34	119.43	123.70
1	A	1046	A	C5-C6-N1	-5.34	115.03	117.70
1	A	1422	C	N3-C4-C5	-5.34	119.77	121.90
1	A	1629	C	N3-C4-C5	-5.34	119.77	121.90
1	A	2631	A	C5-C6-N1	-5.34	115.03	117.70
1	A	358	C	N3-C4-C5	-5.33	119.77	121.90
1	A	27	G	O4'-C1'-N9	5.33	112.47	108.20
1	A	231	A	C5-C6-N1	-5.33	115.03	117.70
1	A	762	A	O4'-C1'-N9	5.33	112.47	108.20
1	A	1442	A	O4'-C1'-N9	5.33	112.47	108.20
1	A	1957	A	O4'-C1'-N9	5.33	112.47	108.20
1	A	2643	A	C5-C6-N1	-5.33	115.03	117.70
1	A	908	A	P-O3'-C3'	5.33	126.10	119.70
1	A	1492	G	C4'-C3'-C2'	-5.33	97.27	102.60
1	A	2060	A	C5-C6-N1	-5.33	115.03	117.70
1	A	2793	A	C5-C6-N1	-5.33	115.03	117.70
1	A	1144	A	C5-C6-N1	-5.33	115.03	117.70
1	A	2530	C	N3-C4-C5	-5.33	119.77	121.90
1	A	2777	A	C5-C6-N6	-5.33	119.44	123.70
1	A	302	A	O4'-C1'-N9	5.33	112.46	108.20
1	A	870	A	C5-C6-N6	-5.33	119.44	123.70
1	A	2742	C	C6-N1-C1'	-5.33	114.41	120.80
1	A	1232	G	O4'-C1'-N9	5.33	112.46	108.20
1	A	1663	A	C5-C6-N1	-5.33	115.04	117.70
1	A	537	A	P-O3'-C3'	5.33	126.09	119.70
1	A	588	C	N3-C4-C5	-5.33	119.77	121.90
1	A	661	A	C5-C6-N6	-5.33	119.44	123.70
1	A	1448	U	C2-N1-C1'	5.33	124.09	117.70
1	A	1533	A	C5-C6-N1	-5.33	115.04	117.70
1	A	1661	A	C5-C6-N1	-5.33	115.04	117.70
1	A	1720	C	N3-C4-C5	-5.33	119.77	121.90
1	A	33	U	O4'-C1'-N1	5.32	112.46	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	49	A	C5-C6-N1	-5.32	115.04	117.70
1	A	1943	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2174	C	N3-C4-N4	5.32	121.73	118.00
1	A	2241	A	C5-C6-N1	-5.32	115.04	117.70
1	A	2587	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2762	A	C5-C6-N6	-5.32	119.44	123.70
1	A	216	A	O4'-C1'-N9	5.32	112.46	108.20
1	A	829	A	C5-C6-N1	-5.32	115.04	117.70
1	A	1693	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2018	A	C5-C6-N1	-5.32	115.04	117.70
1	A	66	C	N3-C4-C5	-5.32	119.77	121.90
1	A	703	G	O4'-C1'-N9	5.32	112.46	108.20
1	A	956	A	C4-C5-C6	5.32	119.66	117.00
1	A	1562	A	O4'-C1'-N9	5.32	112.46	108.20
1	A	1752	G	O4'-C1'-N9	5.32	112.46	108.20
1	A	1811	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2585	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2707	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2816	C	N3-C4-C5	-5.32	119.77	121.90
1	A	452	C	N3-C4-C5	-5.32	119.77	121.90
1	A	2034	A	C5-C6-N1	-5.32	115.04	117.70
1	A	2456	C	N3-C4-C5	-5.32	119.77	121.90
1	A	124	A	C5-C6-N1	-5.32	115.04	117.70
1	A	551	A	O4'-C1'-N9	5.32	112.45	108.20
1	A	630	A	P-O5'-C5'	5.32	129.41	120.90
1	A	719	C	P-O5'-C5'	5.32	129.41	120.90
1	A	2532	A	C5-C6-N1	-5.32	115.04	117.70
1	A	144	A	C5-C6-N6	-5.32	119.45	123.70
1	A	216	A	C5-C6-N6	-5.32	119.45	123.70
1	A	226	A	C5-C6-N1	-5.32	115.04	117.70
1	A	689	A	C5-C6-N1	-5.32	115.04	117.70
1	A	1315	G	C1'-O4'-C4'	-5.32	105.65	109.90
1	A	1697	A	C5-C6-N1	-5.32	115.04	117.70
1	A	1760	A	C5-C6-N6	-5.32	119.45	123.70
1	A	1814	A	C5-C6-N6	-5.32	119.45	123.70
1	A	2619	A	P-O5'-C5'	5.32	129.41	120.90
1	A	2696	C	N3-C4-N4	5.32	121.72	118.00
1	A	2707	C	P-O5'-C5'	5.32	129.40	120.90
1	A	1174	A	C5-C6-N1	-5.31	115.04	117.70
1	A	1202	A	C5-C6-N1	-5.31	115.04	117.70
1	A	2158	C	N3-C4-C5	-5.31	119.77	121.90
1	A	2175	C	O4'-C1'-N1	5.31	112.45	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	86	C	N3-C4-N4	5.31	121.72	118.00
1	A	296	G	P-O5'-C5'	5.31	129.40	120.90
1	A	419	G	C4'-C3'-C2'	-5.31	97.29	102.60
1	A	1040	C	N3-C4-C5	-5.31	119.78	121.90
1	A	1078	A	C5-C6-N6	-5.31	119.45	123.70
1	A	2496	C	N3-C4-C5	-5.31	119.78	121.90
1	A	2721	C	N3-C4-N4	5.31	121.72	118.00
1	A	130	A	C5-C6-N1	-5.31	115.05	117.70
1	A	256	C	N3-C4-C5	-5.31	119.78	121.90
1	A	626	G	O4'-C1'-N9	5.31	112.45	108.20
1	A	679	A	C5-C6-N6	-5.31	119.45	123.70
1	A	744	C	N3-C4-C5	-5.31	119.78	121.90
1	A	1543	U	C2-N1-C1'	5.31	124.07	117.70
1	A	2052	A	O4'-C1'-N9	5.31	112.45	108.20
1	A	677	A	O4'-C4'-C3'	-5.31	98.69	104.00
1	A	1025	A	C5-C6-N6	-5.31	119.45	123.70
1	A	1059	A	O4'-C1'-N9	5.31	112.44	108.20
1	A	1604	C	N3-C4-C5	-5.31	119.78	121.90
1	A	1617	A	C5-C6-N6	-5.31	119.45	123.70
1	A	2008	C	N3-C4-C5	-5.31	119.78	121.90
1	A	2848	A	C5-C6-N1	-5.31	115.05	117.70
1	A	778	C	C2-N3-C4	5.31	122.55	119.90
1	A	1700	A	O4'-C1'-N9	5.31	112.44	108.20
1	A	2453	C	N3-C4-C5	-5.31	119.78	121.90
1	A	2525	C	N3-C4-N4	5.31	121.71	118.00
1	A	1257	C	N3-C4-C5	-5.30	119.78	121.90
1	A	1335	A	C5-C6-N1	-5.30	115.05	117.70
1	A	1582	U	O4'-C1'-N1	5.30	112.44	108.20
1	A	2087	A	C5-C6-N1	-5.30	115.05	117.70
1	A	2830	A	C5-C6-N6	-5.30	119.46	123.70
1	A	956	A	O4'-C1'-N9	5.30	112.44	108.20
1	A	1124	C	N3-C4-N4	5.30	121.71	118.00
1	A	1313	A	C5-C6-N1	-5.30	115.05	117.70
1	A	1654	A	O4'-C1'-N9	5.30	112.44	108.20
1	A	218	G	O4'-C1'-N9	5.30	112.44	108.20
1	A	715	A	C5-C6-N6	-5.30	119.46	123.70
1	A	876	A	C5-C6-N1	-5.30	115.05	117.70
1	A	1541	A	C5-C6-N1	-5.30	115.05	117.70
1	A	2844	A	C4'-C3'-C2'	5.30	107.90	102.60
1	A	219	A	C5-C6-N1	-5.30	115.05	117.70
1	A	426	G	O4'-C1'-N9	5.30	112.44	108.20
1	A	429	A	C5-C6-N6	-5.30	119.46	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	974	A	C5-C6-N6	-5.30	119.46	123.70
1	A	1202	A	O4'-C1'-N9	5.30	112.44	108.20
1	A	1591	G	O4'-C1'-N9	5.30	112.44	108.20
1	A	2261	C	N3-C4-N4	5.30	121.71	118.00
1	A	38	A	O4'-C1'-N9	5.30	112.44	108.20
1	A	1822	G	O4'-C1'-N9	5.30	112.44	108.20
1	A	2152	A	O4'-C1'-N9	5.30	112.44	108.20
1	A	183	A	O4'-C1'-N9	5.30	112.44	108.20
1	A	1861	C	N3-C4-C5	-5.30	119.78	121.90
1	A	2840	C	N3-C4-C5	-5.30	119.78	121.90
1	A	1305	A	O4'-C1'-N9	5.29	112.44	108.20
1	A	863	C	N3-C4-C5	-5.29	119.78	121.90
1	A	896	A	C5-C6-N1	-5.29	115.05	117.70
1	A	1803	C	N3-C4-N4	5.29	121.71	118.00
1	A	2627	A	C5-C6-N6	-5.29	119.47	123.70
1	A	922	A	C5-C6-N6	-5.29	119.47	123.70
1	A	931	C	N3-C4-C5	-5.29	119.78	121.90
1	A	1848	A	C5-C6-N1	-5.29	115.06	117.70
1	A	2050	G	O4'-C1'-N9	5.29	112.43	108.20
1	A	2087	A	C5-C6-N6	-5.29	119.47	123.70
1	A	2525	C	N3-C4-C5	-5.29	119.78	121.90
1	A	876	A	O4'-C1'-N9	5.29	112.43	108.20
1	A	1270	C	N3-C4-N4	5.29	121.70	118.00
1	A	1340	A	P-O5'-C5'	5.29	129.36	120.90
1	A	1608	A	O4'-C1'-N9	5.29	112.43	108.20
1	A	2435	C	O4'-C1'-N1	5.29	112.43	108.20
1	A	594	C	N3-C4-N4	5.29	121.70	118.00
1	A	752	A	O4'-C1'-N9	5.29	112.43	108.20
1	A	2447	A	C5-C6-N6	-5.29	119.47	123.70
1	A	2721	C	N3-C4-C5	-5.29	119.78	121.90
1	A	1813	A	C5-C6-N6	-5.29	119.47	123.70
1	A	2207	C	N3-C4-C5	-5.29	119.78	121.90
1	A	314	A	C5-C6-N1	-5.29	115.06	117.70
1	A	1130	A	C5-C6-N6	-5.29	119.47	123.70
1	A	1215	U	O4'-C1'-N1	5.29	112.43	108.20
1	A	1761	G	O4'-C1'-N9	5.29	112.43	108.20
1	A	2205	A	C5-C6-N6	-5.29	119.47	123.70
1	A	2601	A	C5-C6-N1	-5.29	115.06	117.70
1	A	2846	A	C5-C6-N1	-5.29	115.06	117.70
20	E	164	ALA	N-CA-CB	5.29	117.50	110.10
1	A	202	A	C5-C6-N6	-5.28	119.47	123.70
1	A	851	A	C5-C6-N6	-5.28	119.47	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1027	A	C5-C6-N6	-5.28	119.47	123.70
1	A	1096	A	C5-C6-N6	-5.28	119.47	123.70
1	A	1125	C	N3-C4-C5	-5.28	119.79	121.90
1	A	1346	A	C5-C6-N6	-5.28	119.47	123.70
1	A	1585	A	P-O3'-C3'	5.28	126.04	119.70
1	A	1787	G	O4'-C1'-N9	5.28	112.43	108.20
1	A	2530	C	N3-C4-N4	5.28	121.70	118.00
1	A	2902	A	C5-C6-N1	-5.28	115.06	117.70
1	A	1142	A	C5-C6-N1	-5.28	115.06	117.70
1	A	2760	G	O4'-C1'-N9	5.28	112.42	108.20
1	A	2826	A	C5-C6-N1	-5.28	115.06	117.70
1	A	56	A	C5-C6-N1	-5.28	115.06	117.70
1	A	683	A	C5-C6-N6	-5.28	119.48	123.70
1	A	1210	A	C5-C6-N6	-5.28	119.48	123.70
1	A	1389	C	N3-C4-N4	5.28	121.70	118.00
1	A	2084	C	N3-C4-C5	-5.28	119.79	121.90
1	A	2687	C	N3-C4-C5	-5.28	119.79	121.90
1	A	2899	C	N3-C4-C5	-5.28	119.79	121.90
1	A	206	A	C5-C6-N1	-5.28	115.06	117.70
1	A	765	A	C5-C6-N1	-5.28	115.06	117.70
1	A	833	C	N3-C4-C5	-5.28	119.79	121.90
1	A	1459	U	O4'-C1'-N1	5.28	112.42	108.20
1	A	2619	A	O4'-C1'-N9	5.28	112.42	108.20
1	A	1041	C	N3-C4-N4	5.28	121.69	118.00
1	A	1392	A	C5-C6-N1	-5.28	115.06	117.70
1	A	1206	G	O4'-C1'-N9	5.27	112.42	108.20
1	A	2434	G	C5'-C4'-O4'	5.27	115.43	109.10
1	A	2729	C	N3-C4-C5	-5.27	119.79	121.90
1	A	380	C	N3-C4-C5	-5.27	119.79	121.90
1	A	536	G	O4'-C1'-N9	5.27	112.42	108.20
1	A	546	G	N3-C2-N2	5.27	123.59	119.90
1	A	1804	U	C5'-C4'-O4'	5.27	115.43	109.10
1	A	2219	G	C4-N9-C1'	5.27	133.35	126.50
1	A	441	C	N3-C4-C5	-5.27	119.79	121.90
1	A	1788	A	C5-C6-N1	-5.27	115.06	117.70
1	A	2210	G	O4'-C1'-N9	5.27	112.42	108.20
1	A	2794	A	O4'-C1'-N9	5.27	112.42	108.20
1	A	405	U	C2-N1-C1'	5.27	124.02	117.70
1	A	1038	C	N3-C4-C5	-5.27	119.79	121.90
1	A	2039	G	O4'-C1'-N9	5.27	112.42	108.20
1	A	2109	G	O4'-C1'-N9	5.27	112.42	108.20
1	A	2191	A	O4'-C1'-N9	5.27	112.42	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	161	A	C5-C6-N6	-5.27	119.49	123.70
1	A	323	C	N3-C4-C5	-5.27	119.79	121.90
1	A	494	A	C5-C6-N6	-5.27	119.48	123.70
1	A	2578	G	O4'-C1'-N9	5.27	112.41	108.20
1	A	2756	G	O4'-C1'-N9	5.27	112.41	108.20
1	A	783	C	C2-N3-C4	5.27	122.53	119.90
1	A	1081	U	O4'-C1'-N1	5.27	112.41	108.20
1	A	1113	A	C5-C6-N1	-5.27	115.07	117.70
1	A	517	A	O4'-C1'-N9	5.26	112.41	108.20
1	A	2863	G	O4'-C1'-N9	5.26	112.41	108.20
1	A	722	A	O4'-C1'-N9	5.26	112.41	108.20
1	A	1797	A	C5-C6-N6	-5.26	119.49	123.70
1	A	1999	A	C5-C6-N1	-5.26	115.07	117.70
1	A	2613	U	C5'-C4'-O4'	5.26	115.41	109.10
1	A	2641	C	N3-C4-C5	-5.26	119.80	121.90
1	A	2719	A	C5-C6-N1	-5.26	115.07	117.70
1	A	2781	C	N3-C4-N4	5.26	121.68	118.00
1	A	1102	G	O4'-C1'-N9	5.26	112.41	108.20
1	A	1504	A	C5-C6-N6	-5.26	119.49	123.70
1	A	2819	A	C5-C6-N1	-5.26	115.07	117.70
1	A	2823	C	P-O3'-C3'	5.26	126.01	119.70
1	A	722	A	C5-C6-N6	-5.26	119.49	123.70
1	A	1709	A	O4'-C1'-N9	5.26	112.41	108.20
1	A	726	C	N3-C4-N4	5.26	121.68	118.00
1	A	1224	A	C5-C6-N1	-5.26	115.07	117.70
1	A	1224	A	O4'-C1'-N9	5.26	112.41	108.20
1	A	2454	A	C5-C6-N1	-5.26	115.07	117.70
1	A	790	A	C5-C6-N6	-5.25	119.50	123.70
1	A	486	A	C5-C6-N1	-5.25	115.07	117.70
1	A	805	G	O4'-C1'-N9	5.25	112.40	108.20
1	A	202	A	C5-C6-N1	-5.25	115.07	117.70
1	A	400	U	O4'-C1'-N1	5.25	112.40	108.20
1	A	469	A	C5-C6-N1	-5.25	115.07	117.70
1	A	477	A	C5-C6-N1	-5.25	115.07	117.70
1	A	1020	A	C5-C6-N1	-5.25	115.07	117.70
1	A	1573	C	N3-C4-C5	-5.25	119.80	121.90
1	A	2675	C	N3-C4-N4	5.25	121.68	118.00
1	A	811	A	C5-C6-N6	-5.25	119.50	123.70
1	A	1045	U	C2-N1-C1'	5.25	124.00	117.70
1	A	1073	A	C5-C6-N1	-5.25	115.08	117.70
1	A	388	A	C5-C6-N1	-5.25	115.08	117.70
1	A	1134	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(^{o})	Ideal(^{o})
1	A	1541	A	O4'-C1'-N9	5.25	112.40	108.20
1	A	1550	C	N3-C4-C5	-5.25	119.80	121.90
1	A	1560	U	O4'-C1'-N1	5.25	112.40	108.20
1	A	1424	A	C5-C6-N6	-5.25	119.50	123.70
1	A	1585	A	C5-C6-N1	-5.25	115.08	117.70
1	A	1685	A	C5-C6-N1	-5.25	115.08	117.70
1	A	2477	A	C5-C6-N1	-5.25	115.08	117.70
1	A	2686	A	C5-C6-N6	-5.25	119.50	123.70
1	A	2907	A	C5-C6-N1	-5.25	115.08	117.70
1	A	529	C	N3-C4-C5	-5.25	119.80	121.90
1	A	2803	C	N3-C4-C5	-5.25	119.80	121.90
1	A	171	A	C5-C6-N1	-5.24	115.08	117.70
1	A	349	C	N3-C4-C5	-5.24	119.80	121.90
1	A	479	A	C5-C6-N6	-5.24	119.50	123.70
1	A	537	A	C5-C6-N1	-5.24	115.08	117.70
1	A	1325	A	C5-C6-N6	-5.24	119.51	123.70
1	A	1390	C	N3-C4-N4	5.24	121.67	118.00
1	A	1583	A	O4'-C1'-N9	5.24	112.39	108.20
1	A	1614	A	C5-C6-N1	-5.24	115.08	117.70
1	A	1643	C	N3-C4-C5	-5.24	119.80	121.90
1	A	235	G	O4'-C1'-N9	5.24	112.39	108.20
1	A	1953	C	N3-C4-N4	5.24	121.67	118.00
1	A	2000	A	C5-C6-N1	-5.24	115.08	117.70
1	A	302	A	C5-C6-N6	-5.24	119.51	123.70
1	A	2497	A	C5-C6-N6	-5.24	119.51	123.70
1	A	403	C	N3-C4-N4	5.24	121.67	118.00
1	A	578	A	O4'-C1'-N9	5.24	112.39	108.20
1	A	763	A	C5-C6-N1	-5.24	115.08	117.70
1	A	1019	A	C4-C5-C6	5.24	119.62	117.00
1	A	1134	A	P-O5'-C5'	5.24	129.28	120.90
1	A	2066	A	C5-C6-N1	-5.24	115.08	117.70
1	A	2133	C	N3-C4-C5	-5.24	119.80	121.90
1	A	2604	C	N3-C4-C5	-5.24	119.81	121.90
1	A	540	G	C5'-C4'-O4'	5.24	115.38	109.10
1	A	1219	C	P-O3'-C3'	5.24	125.98	119.70
1	A	1817	C	N3-C4-C5	-5.24	119.81	121.90
1	A	2645	C	N3-C4-N4	5.24	121.67	118.00
1	A	265	A	C5-C6-N6	-5.24	119.51	123.70
1	A	1283	U	P-O3'-C3'	5.24	125.98	119.70
1	A	2044	A	C5-C6-N1	-5.24	115.08	117.70
1	A	2469	C	N3-C4-N4	5.24	121.67	118.00
1	A	2697	G	O4'-C1'-N9	5.24	112.39	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	432	C	P-O5'-C5'	5.23	129.28	120.90
1	A	1650	C	N3-C4-C5	-5.23	119.81	121.90
1	A	2058	G	N3-C2-N2	5.23	123.56	119.90
1	A	303	G	O4'-C1'-N9	5.23	112.39	108.20
1	A	430	C	N3-C4-N4	5.23	121.66	118.00
1	A	1116	A	O4'-C1'-N9	5.23	112.39	108.20
1	A	1739	C	N3-C4-C5	-5.23	119.81	121.90
1	A	1956	A	P-O3'-C3'	5.23	125.98	119.70
1	A	38	A	C5-C6-N1	-5.23	115.08	117.70
1	A	582	A	C5-C6-N6	-5.23	119.52	123.70
1	A	658	A	C5-C6-N1	-5.23	115.08	117.70
1	A	1053	C	N3-C4-N4	5.23	121.66	118.00
1	A	1553	A	C5-C6-N1	-5.23	115.08	117.70
1	A	436	A	C5-C6-N1	-5.23	115.09	117.70
1	A	1207	C	N3-C4-C5	-5.23	119.81	121.90
1	A	1514	C	N3-C4-C5	-5.23	119.81	121.90
1	A	1813	A	C5-C6-N1	-5.23	115.09	117.70
1	A	2618	A	C5-C6-N6	-5.23	119.52	123.70
1	A	354	A	P-O3'-C3'	5.23	125.97	119.70
1	A	1094	A	C5-C6-N1	-5.23	115.09	117.70
1	A	1677	A	C5-C6-N1	-5.23	115.09	117.70
1	A	1845	A	C5-C6-N1	-5.23	115.09	117.70
1	A	1778	A	C5-C6-N6	-5.23	119.52	123.70
1	A	2468	A	C5-C6-N1	-5.23	115.09	117.70
1	A	161	A	C5-C6-N1	-5.22	115.09	117.70
1	A	1294	A	C5-C6-N1	-5.22	115.09	117.70
1	A	1657	C	N3-C4-C5	-5.22	119.81	121.90
1	A	1766	C	N3-C4-C5	-5.22	119.81	121.90
1	A	1776	A	C5-C6-N6	-5.22	119.52	123.70
1	A	1781	C	N3-C4-C5	-5.22	119.81	121.90
1	A	2064	G	C2'-C3'-O3'	5.22	122.06	113.70
1	A	2641	C	O4'-C1'-N1	5.22	112.38	108.20
1	A	2788	G	O4'-C1'-N9	5.22	112.38	108.20
1	A	194	A	C5-C6-N1	-5.22	115.09	117.70
1	A	584	A	C5-C6-N6	-5.22	119.52	123.70
1	A	1110	C	N3-C4-C5	-5.22	119.81	121.90
1	A	1188	A	C5-C6-N6	-5.22	119.52	123.70
1	A	831	U	O4'-C1'-N1	5.22	112.38	108.20
1	A	2905	C	N3-C4-C5	-5.22	119.81	121.90
1	A	342	A	C4-C5-C6	5.22	119.61	117.00
1	A	786	A	O4'-C1'-N9	5.22	112.38	108.20
1	A	1293	A	C5-C6-N6	-5.22	119.52	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1370	C	N3-C4-N4	5.22	121.65	118.00
1	A	1416	G	O4'-C1'-N9	5.22	112.38	108.20
1	A	2770	A	C4-C5-C6	5.22	119.61	117.00
1	A	575	A	C5-C6-N6	-5.22	119.53	123.70
1	A	158	C	N3-C4-C5	-5.22	119.81	121.90
1	A	533	C	N3-C4-C5	-5.22	119.81	121.90
1	A	2504	C	N3-C4-N4	5.22	121.65	118.00
1	A	2497	A	C5-C6-N1	-5.21	115.09	117.70
1	A	2616	A	C4-C5-C6	5.21	119.61	117.00
1	A	504	A	O4'-C1'-N9	5.21	112.37	108.20
1	A	507	A	C5-C6-N6	-5.21	119.53	123.70
1	A	770	A	C5-C6-N6	-5.21	119.53	123.70
1	A	2168	G	O4'-C1'-N9	5.21	112.37	108.20
1	A	2927	A	C5-C6-N1	-5.21	115.09	117.70
1	A	376	A	O4'-C1'-N9	5.21	112.37	108.20
1	A	791	C	P-O5'-C5'	5.21	129.24	120.90
1	A	1850	A	C5-C6-N6	-5.21	119.53	123.70
1	A	2087	A	O4'-C1'-N9	5.21	112.37	108.20
1	A	2822	C	P-O3'-C3'	5.21	125.95	119.70
1	A	418	A	C5-C6-N1	-5.21	115.09	117.70
1	A	1464	A	C5-C6-N6	-5.21	119.53	123.70
1	A	2181	C	N3-C4-C5	-5.21	119.82	121.90
1	A	2220	A	O4'-C1'-N9	5.21	112.37	108.20
1	A	2593	A	C5-C6-N1	-5.21	115.09	117.70
1	A	204	C	N3-C4-C5	-5.21	119.82	121.90
1	A	306	C	C2-N3-C4	5.21	122.50	119.90
1	A	380	C	N3-C4-N4	5.21	121.65	118.00
1	A	518	A	O4'-C1'-N9	5.21	112.37	108.20
1	A	798	A	P-O5'-C5'	5.21	129.24	120.90
1	A	1092	A	C5-C6-N6	-5.21	119.53	123.70
1	A	1507	U	O4'-C1'-N1	5.21	112.37	108.20
1	A	2098	G	O4'-C1'-N9	5.21	112.37	108.20
1	A	2655	C	N3-C4-C5	-5.21	119.82	121.90
1	A	84	A	C5-C6-N1	-5.21	115.10	117.70
1	A	612	U	O4'-C1'-N1	5.21	112.37	108.20
1	A	640	C	N3-C4-C5	-5.21	119.82	121.90
1	A	1029	A	C5-C6-N1	-5.21	115.10	117.70
1	A	1227	G	N3-C2-N2	5.21	123.54	119.90
1	A	2589	C	N3-C4-C5	-5.21	119.82	121.90
1	A	118	A	C5-C6-N6	-5.21	119.54	123.70
1	A	268	A	C5-C6-N6	-5.21	119.54	123.70
1	A	702	A	C5-C6-N1	-5.21	115.10	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	945	C	N3-C4-N4	5.21	121.64	118.00
1	A	1692	U	P-O3'-C3'	-5.21	113.45	119.70
1	A	2091	A	C5-C6-N6	-5.21	119.54	123.70
1	A	2476	G	P-O3'-C3'	5.21	125.95	119.70
1	A	229	A	C5-C6-N6	-5.20	119.54	123.70
1	A	252	C	N3-C4-C5	-5.20	119.82	121.90
1	A	834	C	N3-C4-C5	-5.20	119.82	121.90
1	A	1516	A	C5-C6-N6	-5.20	119.54	123.70
1	A	1724	A	C5-C6-N6	-5.20	119.54	123.70
1	A	2726	G	O4'-C1'-N9	5.20	112.36	108.20
1	A	1205	U	C5'-C4'-C3'	-5.20	107.68	116.00
1	A	2900	A	C5-C6-N6	-5.20	119.54	123.70
1	A	1021	A	C5-C6-N1	-5.20	115.10	117.70
1	A	1942	A	C5-C6-N1	-5.20	115.10	117.70
1	A	373	A	C4-C5-C6	5.20	119.60	117.00
1	A	647	A	C5-C6-N1	-5.20	115.10	117.70
1	A	907	U	C2-N1-C1'	5.20	123.94	117.70
1	A	945	C	N3-C4-C5	-5.20	119.82	121.90
1	A	1844	A	O4'-C1'-N9	5.20	112.36	108.20
1	A	893	A	C5-C6-N1	-5.20	115.10	117.70
1	A	1575	A	P-O3'-C3'	5.20	125.94	119.70
1	A	2914	C	N3-C4-C5	-5.20	119.82	121.90
1	A	922	A	O4'-C1'-N9	5.19	112.36	108.20
1	A	773	G	N3-C2-N2	5.19	123.53	119.90
1	A	866	A	O4'-C1'-N9	5.19	112.35	108.20
1	A	2004	G	O4'-C1'-N9	5.19	112.35	108.20
1	A	2017	C	N3-C4-C5	-5.19	119.82	121.90
1	A	2618	A	O4'-C1'-N9	5.19	112.35	108.20
1	A	2683	A	C5-C6-N6	-5.19	119.55	123.70
1	A	2924	A	C5-C6-N1	-5.19	115.10	117.70
1	A	198	A	C4-C5-C6	5.19	119.59	117.00
1	A	284	C	N3-C4-N4	5.19	121.63	118.00
1	A	1003	A	C5'-C4'-O4'	5.19	115.33	109.10
1	A	1116	A	C5-C6-N1	-5.19	115.11	117.70
1	A	2769	A	C5'-C4'-O4'	5.19	115.33	109.10
1	A	84	A	C5-C6-N6	-5.19	119.55	123.70
1	A	756	U	C5'-C4'-O4'	5.19	115.33	109.10
1	A	476	A	C5-C6-N1	-5.19	115.11	117.70
1	A	781	A	O4'-C1'-N9	5.19	112.35	108.20
1	A	1524	A	C5-C6-N6	-5.19	119.55	123.70
1	A	1656	C	C2-N3-C4	5.19	122.49	119.90
1	A	2782	A	C5-C6-N1	-5.19	115.11	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	866	A	C5-C6-N6	-5.19	119.55	123.70
1	A	1315	G	C5'-C4'-O4'	5.19	115.32	109.10
1	A	2649	C	N3-C4-C5	-5.19	119.83	121.90
1	A	2873	G	N3-C2-N2	5.19	123.53	119.90
1	A	593	A	C5-C6-N6	-5.18	119.55	123.70
1	A	1053	C	N3-C4-C5	-5.18	119.83	121.90
1	A	1580	A	C6-C5-N7	-5.18	128.67	132.30
1	A	1585	A	O4'-C1'-N9	5.18	112.35	108.20
1	A	2010	A	C5-C6-N1	-5.18	115.11	117.70
1	A	2754	A	C5-C6-N6	-5.18	119.55	123.70
1	A	339	A	C5-C6-N6	-5.18	119.55	123.70
1	A	470	A	C5-C6-N6	-5.18	119.55	123.70
1	A	538	A	O4'-C1'-N9	5.18	112.34	108.20
1	A	1963	C	N3-C4-C5	-5.18	119.83	121.90
1	A	2079	C	N3-C4-C5	-5.18	119.83	121.90
1	A	1511	C	N3-C4-C5	-5.18	119.83	121.90
1	A	2465	G	O4'-C1'-N9	5.18	112.34	108.20
1	A	166	A	O4'-C1'-N9	5.18	112.34	108.20
1	A	1423	A	C5-C6-N1	-5.18	115.11	117.70
1	A	1536	A	C5-C6-N6	-5.18	119.56	123.70
1	A	1417	A	C5-C6-N1	-5.18	115.11	117.70
1	A	2564	A	C4-C5-C6	5.18	119.59	117.00
1	A	2684	G	N3-C2-N2	5.18	123.53	119.90
1	A	664	C	N3-C4-C5	-5.18	119.83	121.90
1	A	935	A	C5-C6-N1	-5.18	115.11	117.70
1	A	1305	A	C5-C6-N1	-5.18	115.11	117.70
1	A	1483	A	C5-C6-N6	-5.18	119.56	123.70
1	A	699	A	C5-C6-N1	-5.17	115.11	117.70
1	A	1167	C	N3-C4-C5	-5.17	119.83	121.90
1	A	1556	A	C5-C6-N1	-5.17	115.11	117.70
1	A	150	A	C5-C6-N1	-5.17	115.11	117.70
1	A	479	A	C5-C6-N1	-5.17	115.11	117.70
1	A	1110	C	N3-C4-N4	5.17	121.62	118.00
1	A	2766	G	O4'-C1'-N9	5.17	112.34	108.20
1	A	384	A	C5-C6-N1	-5.17	115.11	117.70
1	A	1134	A	C4-C5-C6	5.17	119.58	117.00
1	A	289	C	N3-C4-C5	-5.17	119.83	121.90
1	A	385	G	P-O3'-C3'	-5.17	113.50	119.70
1	A	2732	C	C6-N1-C2	-5.17	118.23	120.30
1	A	21	A	O4'-C1'-N9	5.17	112.33	108.20
1	A	139	A	C5-C6-N1	-5.17	115.12	117.70
1	A	1346	A	C5-C6-N1	-5.17	115.12	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2480	A	C5-C6-N1	-5.17	115.12	117.70
1	A	1292	G	O4'-C1'-N9	5.16	112.33	108.20
1	A	1540	A	C5-C6-N1	-5.16	115.12	117.70
1	A	1598	C	N3-C4-C5	-5.16	119.83	121.90
1	A	1998	A	C5-C6-N1	-5.16	115.12	117.70
1	A	2845	A	C5-C6-N1	-5.16	115.12	117.70
1	A	621	G	O4'-C1'-N9	5.16	112.33	108.20
1	A	199	A	C5-C6-N1	-5.16	115.12	117.70
1	A	433	G	O4'-C1'-N9	5.16	112.33	108.20
1	A	1042	A	C4-C5-C6	5.16	119.58	117.00
1	A	1326	A	C5-C6-N6	-5.16	119.57	123.70
1	A	1459	U	C2-N1-C1'	5.16	123.89	117.70
1	A	1696	G	O4'-C1'-N9	5.16	112.33	108.20
1	A	2227	A	C8-N9-C1'	-5.16	118.42	127.70
1	A	28	A	C5-C6-N1	-5.16	115.12	117.70
1	A	785	C	N3-C4-C5	-5.16	119.84	121.90
1	A	2454	A	C5-C6-N6	-5.16	119.57	123.70
1	A	240	C	N3-C4-C5	-5.16	119.84	121.90
1	A	2679	C	N3-C4-C5	-5.16	119.84	121.90
1	A	769	A	C5-C6-N6	-5.15	119.58	123.70
1	A	1519	C	C1'-O4'-C4'	-5.15	105.78	109.90
1	A	2117	A	C5-C6-N6	-5.15	119.58	123.70
1	A	2651	C	N3-C4-C5	-5.15	119.84	121.90
1	A	1302	A	C5-C6-N6	-5.15	119.58	123.70
1	A	1347	A	C4-C5-C6	5.15	119.58	117.00
1	A	1652	C	N3-C4-C5	-5.15	119.84	121.90
1	A	1670	C	N3-C4-N4	5.15	121.61	118.00
1	A	2811	G	O4'-C1'-N9	5.15	112.32	108.20
1	A	315	C	N3-C4-C5	-5.15	119.84	121.90
1	A	972	U	P-O3'-C3'	5.15	125.88	119.70
1	A	2743	G	N3-C2-N2	5.15	123.50	119.90
1	A	120	G	O4'-C1'-N9	5.15	112.32	108.20
1	A	1054	A	C5-C6-N6	-5.15	119.58	123.70
1	A	1628	G	P-O5'-C5'	-5.15	112.67	120.90
1	A	2189	G	C5'-C4'-C3'	5.15	124.23	116.00
1	A	1065	U	P-O3'-C3'	5.14	125.87	119.70
1	A	2216	A	C5-C6-N1	-5.14	115.13	117.70
1	A	2462	A	C5-C6-N6	-5.14	119.58	123.70
1	A	2588	C	N3-C4-C5	-5.14	119.84	121.90
1	A	2594	A	C5-C6-N6	-5.14	119.58	123.70
1	A	236	A	C5-C6-N1	-5.14	115.13	117.70
1	A	346	G	C6-C5-N7	-5.14	127.31	130.40

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	820	U	P-O5'-C5'	5.14	129.13	120.90
1	A	1002	G	N3-C2-N2	5.14	123.50	119.90
1	A	2613	U	P-O3'-C3'	-5.14	113.53	119.70
1	A	1100	A	C5-C6-N6	-5.14	119.59	123.70
1	A	1435	U	O4'-C1'-N1	5.14	112.31	108.20
1	A	1489	U	C2-N1-C1'	5.14	123.87	117.70
1	A	1667	A	C5-C6-N1	-5.14	115.13	117.70
1	A	1938	C	N3-C4-C5	-5.14	119.84	121.90
1	A	2420	G	O4'-C1'-N9	5.14	112.31	108.20
1	A	2925	C	N3-C4-C5	-5.14	119.84	121.90
1	A	1608	A	C5-C6-N1	-5.14	115.13	117.70
1	A	740	A	C5-C6-N1	-5.14	115.13	117.70
1	A	804	G	O4'-C1'-N9	5.14	112.31	108.20
1	A	884	C	N3-C4-C5	-5.14	119.84	121.90
1	A	1246	G	P-O5'-C5'	5.14	129.12	120.90
1	A	2512	C	N3-C4-C5	-5.14	119.85	121.90
1	A	2798	C	N3-C4-C5	-5.14	119.85	121.90
1	A	530	A	C5-C6-N6	-5.13	119.59	123.70
1	A	594	C	P-O3'-C3'	5.13	125.86	119.70
1	A	1134	A	C1'-O4'-C4'	-5.13	105.79	109.90
1	A	1491	A	C5-C6-N1	-5.13	115.13	117.70
1	A	1835	C	N3-C4-N4	5.13	121.59	118.00
1	A	2155	A	O4'-C1'-N9	5.13	112.31	108.20
1	A	447	G	N3-C2-N2	5.13	123.49	119.90
1	A	1551	C	N3-C4-C5	-5.13	119.85	121.90
1	A	1746	A	C5-C6-N1	-5.13	115.13	117.70
1	A	1497	G	C4-N9-C1'	-5.13	119.83	126.50
1	A	220	A	C5-C6-N1	-5.13	115.14	117.70
1	A	1564	C	N3-C4-C5	-5.13	119.85	121.90
1	A	2586	G	O4'-C1'-N9	5.13	112.30	108.20
1	A	682	G	O4'-C1'-N9	5.13	112.30	108.20
1	A	732	A	C5-C6-N1	-5.13	115.14	117.70
1	A	1729	C	N3-C4-C5	-5.13	119.85	121.90
1	A	2617	G	O4'-C1'-N9	5.13	112.30	108.20
1	A	2208	C	N3-C4-C5	-5.13	119.85	121.90
1	A	2542	A	C5-C6-N1	-5.13	115.14	117.70
1	A	274	A	C5-C6-N1	-5.12	115.14	117.70
1	A	556	C	N3-C4-C5	-5.12	119.85	121.90
1	A	779	C	N3-C4-C5	-5.12	119.85	121.90
1	A	882	A	C5-C6-N6	-5.12	119.60	123.70
1	A	1695	A	C5-C6-N6	-5.12	119.60	123.70
1	A	2146	A	C5-C6-N6	-5.12	119.60	123.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	307	A	P-O5'-C5'	5.12	129.09	120.90
1	A	733	U	P-O5'-C5'	-5.12	112.71	120.90
1	A	2173	G	N3-C2-N2	5.12	123.48	119.90
1	A	2919	A	O4'-C1'-N9	5.12	112.30	108.20
1	A	39	C	N3-C4-C5	-5.12	119.85	121.90
1	A	1268	G	O4'-C1'-N9	5.12	112.30	108.20
1	A	1405	A	P-O3'-C3'	5.12	125.84	119.70
1	A	1166	G	N3-C2-N2	5.12	123.48	119.90
1	A	2615	C	C4'-C3'-C2'	-5.12	97.48	102.60
1	A	284	C	N3-C4-C5	-5.12	119.85	121.90
1	A	476	A	P-O3'-C3'	5.12	125.84	119.70
1	A	504	A	C5-C6-N1	-5.11	115.14	117.70
1	A	1659	A	C5-C6-N1	-5.11	115.14	117.70
1	A	1736	C	C2-N3-C4	5.11	122.46	119.90
1	A	345	A	C5-C6-N6	-5.11	119.61	123.70
1	A	587	C	N3-C4-C5	-5.11	119.86	121.90
1	A	717	A	C5-C6-N6	-5.11	119.61	123.70
1	A	2683	A	O4'-C1'-N9	5.11	112.29	108.20
1	A	15	G	O4'-C1'-N9	5.11	112.29	108.20
1	A	618	A	C5-C6-N6	-5.11	119.61	123.70
1	A	692	A	C5-C6-N1	-5.11	115.14	117.70
1	A	1343	C	N3-C4-C5	-5.11	119.86	121.90
1	A	2132	A	C5-C6-N1	-5.11	115.14	117.70
1	A	490	A	C5-C6-N1	-5.11	115.15	117.70
1	A	1034	A	O4'-C1'-N9	5.11	112.29	108.20
1	A	1670	C	N3-C4-C5	-5.11	119.86	121.90
1	A	1175	A	C5-C6-N1	-5.11	115.15	117.70
1	A	1566	G	C5'-C4'-O4'	5.11	115.23	109.10
1	A	2787	A	C4-C5-C6	5.11	119.55	117.00
1	A	12	A	C5-C6-N1	-5.11	115.15	117.70
1	A	449	A	C5-C6-N1	-5.11	115.15	117.70
1	A	1366	C	N3-C4-C5	-5.11	119.86	121.90
1	A	1581	A	C5-C6-N1	-5.11	115.15	117.70
1	A	94	A	C5-C6-N1	-5.10	115.15	117.70
1	A	53	A	C5-C6-N6	-5.10	119.62	123.70
1	A	736	A	C5-C6-N1	-5.10	115.15	117.70
1	A	746	A	C5-C6-N1	-5.10	115.15	117.70
1	A	1799	G	O4'-C1'-N9	5.10	112.28	108.20
1	A	2200	A	C5-C6-N6	-5.10	119.62	123.70
1	A	99	U	C2-N1-C1'	5.10	123.82	117.70
1	A	137	G	O4'-C1'-N9	5.10	112.28	108.20
1	A	547	A	O4'-C1'-N9	5.10	112.28	108.20

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	2658	A	C5-C6-N6	-5.10	119.62	123.70
1	A	2703	G	O4'-C1'-N9	5.10	112.28	108.20
1	A	315	C	N3-C4-N4	5.10	121.57	118.00
1	A	524	A	C5-C6-N6	-5.10	119.62	123.70
1	A	753	A	C5-C6-N1	-5.10	115.15	117.70
1	A	849	A	O4'-C1'-N9	5.10	112.28	108.20
1	A	1131	A	C5-C6-N6	-5.10	119.62	123.70
1	A	210	A	C5-C6-N6	-5.10	119.62	123.70
1	A	1180	C	N3-C4-C5	-5.10	119.86	121.90
1	A	2497	A	P-O3'-C3'	5.10	125.82	119.70
1	A	2605	G	C4-N9-C1'	5.10	133.12	126.50
1	A	715	A	C4-C5-C6	5.09	119.55	117.00
1	A	2837	A	C4-C5-C6	5.09	119.55	117.00
1	A	482	C	N3-C4-N4	5.09	121.56	118.00
1	A	1445	A	C5-C6-N6	-5.09	119.63	123.70
1	A	277	C	N3-C4-N4	5.09	121.56	118.00
1	A	917	A	C5-C6-N6	-5.09	119.63	123.70
1	A	2594	A	O4'-C1'-N9	5.09	112.27	108.20
1	A	2692	G	O4'-C1'-N9	5.09	112.27	108.20
1	A	1286	A	C5-C6-N6	-5.09	119.63	123.70
1	A	1818	A	C5-C6-N1	-5.09	115.16	117.70
1	A	2513	G	O4'-C1'-N9	5.09	112.27	108.20
1	A	2527	C	P-O5'-C5'	5.09	129.04	120.90
1	A	2608	C	N3-C4-C5	-5.09	119.86	121.90
1	A	50	U	C6-N1-C1'	-5.09	114.08	121.20
1	A	1479	G	O4'-C1'-N9	5.09	112.27	108.20
1	A	1668	G	O4'-C1'-N9	5.09	112.27	108.20
1	A	1709	A	C5-C6-N1	-5.08	115.16	117.70
1	A	219	A	C5-C6-N6	-5.08	119.63	123.70
1	A	925	A	C5-C6-N1	-5.08	115.16	117.70
1	A	987	A	C5-C6-N1	-5.08	115.16	117.70
1	A	1228	G	C5'-C4'-O4'	-5.08	103.00	109.10
1	A	1246	G	O4'-C1'-N9	5.08	112.27	108.20
1	A	1620	A	C5-C6-N1	-5.08	115.16	117.70
1	A	1638	A	C5-C6-N6	-5.08	119.63	123.70
1	A	1721	A	C5-C6-N1	-5.08	115.16	117.70
1	A	2270	A	C5-C6-N6	-5.08	119.63	123.70
1	A	2541	C	N3-C4-C5	-5.08	119.87	121.90
1	A	908	A	C5-C6-N6	-5.08	119.64	123.70
1	A	924	U	P-O5'-C5'	5.08	129.03	120.90
1	A	1066	A	C5-C6-N1	-5.08	115.16	117.70
1	A	452	C	C6-N1-C1'	-5.08	114.70	120.80

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	715	A	C5-C6-N1	-5.08	115.16	117.70
1	A	1188	A	C5-C6-N1	-5.08	115.16	117.70
1	A	1437	C	C5-C4-N4	-5.08	116.64	120.20
1	A	1455	C	N3-C4-C5	-5.08	119.87	121.90
1	A	1948	A	C5-C6-N6	-5.08	119.64	123.70
1	A	2893	A	C5-C6-N6	-5.08	119.64	123.70
1	A	2516	G	O4'-C1'-N9	5.08	112.26	108.20
1	A	352	G	O4'-C1'-N9	5.08	112.26	108.20
1	A	1538	G	N3-C2-N2	5.08	123.45	119.90
1	A	2124	A	C5-C6-N1	-5.08	115.16	117.70
1	A	2590	A	C5-C6-N6	-5.07	119.64	123.70
1	A	2691	A	C5-C6-N1	-5.07	115.16	117.70
1	A	2708	A	O4'-C1'-N9	5.07	112.26	108.20
1	A	2925	C	C2-N1-C1'	5.07	124.38	118.80
1	A	781	A	C5-C6-N1	-5.07	115.17	117.70
1	A	939	G	O4'-C1'-N9	5.07	112.26	108.20
1	A	1098	C	N3-C4-C5	-5.07	119.87	121.90
1	A	2560	A	C5-C6-N1	-5.07	115.16	117.70
1	A	2561	G	O4'-C1'-N9	5.07	112.26	108.20
1	A	600	A	C5-C6-N6	-5.07	119.64	123.70
1	A	2120	U	O3'-P-O5'	5.07	113.63	104.00
1	A	2461	A	C5-C6-N1	-5.07	115.17	117.70
1	A	2886	C	N3-C4-C5	-5.07	119.87	121.90
1	A	725	C	N3-C4-C5	-5.07	119.87	121.90
1	A	1200	G	O4'-C1'-N9	5.07	112.25	108.20
1	A	2198	G	C5-C6-O6	-5.07	125.56	128.60
1	A	2470	C	N3-C4-C5	-5.07	119.87	121.90
1	A	2595	A	O4'-C1'-N9	5.07	112.25	108.20
1	A	2686	A	C5-C6-N1	-5.07	115.17	117.70
1	A	2759	C	N3-C4-C5	-5.07	119.87	121.90
1	A	1579	A	C4-C5-C6	5.06	119.53	117.00
1	A	2661	A	C5-C6-N1	-5.06	115.17	117.70
1	A	1028	C	N3-C4-N4	5.06	121.54	118.00
1	A	2836	G	O4'-C1'-N9	5.06	112.25	108.20
1	A	583	G	N1-C2-N3	-5.06	120.86	123.90
1	A	592	A	C5-C6-N1	-5.06	115.17	117.70
1	A	1947	A	C5-C6-N1	-5.06	115.17	117.70
1	A	2549	C	N3-C4-C5	-5.06	119.88	121.90
1	A	2820	U	C1'-O4'-C4'	-5.06	105.85	109.90
1	A	1388	A	C5-C6-N1	-5.06	115.17	117.70
1	A	1623	C	N3-C4-C5	-5.06	119.88	121.90
1	A	1789	A	C5-C6-N1	-5.06	115.17	117.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1590	C	C2'-C3'-O3'	5.06	121.79	113.70
1	A	2776	G	N3-C2-N2	5.06	123.44	119.90
1	A	2658	A	C5-C6-N1	-5.06	115.17	117.70
1	A	796	A	C5-C6-N1	-5.05	115.17	117.70
1	A	1626	U	C2-N1-C1'	5.05	123.77	117.70
1	A	2252	A	C5-C6-N1	-5.05	115.17	117.70
1	A	2580	C	N3-C4-C5	-5.05	119.88	121.90
1	A	391	A	C5-C6-N6	-5.05	119.66	123.70
1	A	868	A	C5-C6-N1	-5.05	115.17	117.70
1	A	1137	G	O4'-C1'-N9	5.05	112.24	108.20
1	A	1415	C	N3-C4-C5	-5.05	119.88	121.90
1	A	2694	A	C5-C6-N1	-5.05	115.17	117.70
1	A	290	U	P-O3'-C3'	5.05	125.76	119.70
1	A	373	A	C5-C6-N6	-5.05	119.66	123.70
1	A	432	C	C5-C4-N4	-5.05	116.66	120.20
1	A	526	A	C3'-C2'-C1'	-5.05	97.46	101.50
1	A	1813	A	O4'-C1'-N9	5.05	112.24	108.20
1	A	2639	C	N3-C4-N4	5.05	121.54	118.00
1	A	421	A	C5-C6-N6	-5.05	119.66	123.70
1	A	856	G	O4'-C1'-N9	5.05	112.24	108.20
1	A	1291	A	C5-C6-N1	-5.05	115.17	117.70
1	A	2030	A	O4'-C1'-N9	5.05	112.24	108.20
1	A	2717	G	C5-C6-O6	-5.05	125.57	128.60
1	A	1369	C	C6-N1-C2	-5.05	118.28	120.30
1	A	1714	A	C5-C6-N6	-5.05	119.66	123.70
1	A	2528	C	N3-C4-N4	5.05	121.53	118.00
1	A	66	C	C6-N1-C2	-5.05	118.28	120.30
1	A	1028	C	N3-C4-C5	-5.05	119.88	121.90
1	A	1353	C	C2-N1-C1'	5.05	124.35	118.80
1	A	1416	G	N3-C2-N2	5.05	123.43	119.90
1	A	1615	A	C5-C6-N6	-5.05	119.66	123.70
1	A	2619	A	C5-C6-N1	-5.05	115.18	117.70
1	A	2796	C	N3-C4-C5	-5.05	119.88	121.90
1	A	421	A	C5-C6-N1	-5.04	115.18	117.70
1	A	492	C	N3-C4-C5	-5.04	119.88	121.90
1	A	554	U	O4'-C1'-N1	5.04	112.23	108.20
1	A	885	C	N3-C4-C5	-5.04	119.88	121.90
1	A	933	C	C2-N1-C1'	5.04	124.35	118.80
1	A	1788	A	C5-C6-N6	-5.04	119.67	123.70
1	A	2146	A	C5-C6-N1	-5.04	115.18	117.70
1	A	2565	G	O4'-C1'-N9	5.04	112.23	108.20
1	A	2616	A	P-O5'-C5'	5.04	128.96	120.90

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	745	C	N3-C4-C5	-5.04	119.89	121.90
1	A	1464	A	C5-C6-N1	-5.04	115.18	117.70
1	A	1734	A	C5-C6-N1	-5.04	115.18	117.70
1	A	248	G	O4'-C1'-N9	5.04	112.23	108.20
1	A	652	A	C5-C6-N6	-5.04	119.67	123.70
1	A	1480	A	O4'-C1'-N9	5.04	112.23	108.20
1	A	1959	G	N3-C2-N2	5.04	123.42	119.90
1	A	2241	A	P-O3'-C3'	5.04	125.74	119.70
1	A	764	C	N3-C4-C5	-5.03	119.89	121.90
1	A	847	A	C5-C6-N1	-5.03	115.18	117.70
1	A	2419	U	C2-N1-C1'	5.03	123.74	117.70
1	A	1093	G	O4'-C1'-N9	5.03	112.22	108.20
1	A	1132	A	C5-C6-N6	-5.03	119.68	123.70
1	A	1760	A	C4-C5-C6	5.03	119.52	117.00
1	A	2570	A	C5-C6-N6	-5.03	119.68	123.70
1	A	2801	C	P-O5'-C5'	5.03	128.95	120.90
1	A	496	A	O4'-C1'-N9	5.03	112.22	108.20
1	A	751	G	N1-C2-N3	-5.03	120.88	123.90
1	A	1044	C	N3-C4-C5	-5.03	119.89	121.90
1	A	64	A	C5-C6-N1	-5.03	115.19	117.70
1	A	327	G	O4'-C1'-N9	5.03	112.22	108.20
1	A	865	G	N3-C2-N2	5.03	123.42	119.90
1	A	1071	G	O4'-C1'-N9	5.03	112.22	108.20
1	A	1098	C	C2'-C3'-O3'	5.03	121.74	113.70
1	A	2481	C	N3-C4-N4	5.03	121.52	118.00
1	A	2504	C	N3-C4-C5	-5.03	119.89	121.90
1	A	1003	A	C1'-O4'-C4'	-5.02	105.88	109.90
1	A	49	A	O4'-C1'-N9	5.02	112.22	108.20
1	A	93	C	N3-C4-C5	-5.02	119.89	121.90
1	A	2148	A	C4-C5-C6	5.02	119.51	117.00
1	A	2823	C	O4'-C1'-N1	5.02	112.22	108.20
1	A	475	A	C5-C6-N1	-5.02	115.19	117.70
1	A	1172	A	C5-C6-N1	-5.02	115.19	117.70
1	A	1536	A	O4'-C1'-N9	5.02	112.22	108.20
1	A	322	A	C5-C6-N1	-5.02	115.19	117.70
1	A	774	A	C4-C5-C6	5.02	119.51	117.00
1	A	1041	C	N3-C4-C5	-5.02	119.89	121.90
1	A	1281	C	C6-N1-C2	-5.02	118.29	120.30
1	A	2479	A	C4-C5-C6	5.02	119.51	117.00
1	A	389	A	C5-C6-N1	-5.01	115.19	117.70
1	A	1665	G	O4'-C1'-N9	5.01	112.21	108.20
1	A	1721	A	P-O3'-C3'	5.01	125.72	119.70

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	A	1771	C	N3-C4-C5	-5.01	119.89	121.90
1	A	2441	A	C5-C6-N1	-5.01	115.19	117.70
1	A	373	A	O4'-C1'-N9	5.01	112.21	108.20
1	A	1342	G	O4'-C1'-N9	5.01	112.21	108.20
1	A	964	A	C5-C6-N6	-5.01	119.69	123.70
1	A	1005	A	C5-C6-N1	-5.01	115.19	117.70
1	A	1796	C	N3-C4-C5	-5.01	119.89	121.90
1	A	530	A	C5-C6-N1	-5.01	115.19	117.70
1	A	965	A	O4'-C1'-N9	5.01	112.21	108.20
1	A	2798	C	N3-C4-N4	5.01	121.51	118.00
1	A	1567	U	C5'-C4'-C3'	-5.01	107.99	116.00
1	A	2105	U	C2-N1-C1'	5.01	123.71	117.70
1	A	2441	A	P-O5'-C5'	5.01	128.91	120.90
1	A	540	G	O4'-C1'-N9	5.00	112.20	108.20
1	A	1421	A	O4'-C1'-N9	5.00	112.20	108.20
1	A	2552	G	C6-C5-N7	-5.00	127.40	130.40

There are no chirality outliers.

All (330) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	A	1002	G	Sidechain
1	A	1012	G	Sidechain
1	A	103	U	Sidechain
1	A	106	G	Sidechain
1	A	1066	A	Sidechain
1	A	1067	A	Sidechain
1	A	1068	G	Sidechain
1	A	1071	G	Sidechain
1	A	1090	U	Sidechain
1	A	1127	U	Sidechain
1	A	113	U	Sidechain
1	A	1132	A	Sidechain
1	A	1136	U	Sidechain
1	A	1140	U	Sidechain
1	A	1145	G	Sidechain
1	A	1146	C	Sidechain
1	A	1148	C	Sidechain
1	A	115	C	Sidechain
1	A	1154	U	Sidechain
1	A	116	G	Sidechain
1	A	1163	U	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	1171	G	Sidechain
1	A	118	A	Sidechain
1	A	1187	U	Sidechain
1	A	1199	C	Sidechain
1	A	1203	G	Sidechain
1	A	1210	A	Sidechain
1	A	1214	U	Sidechain
1	A	1227	G	Sidechain
1	A	1241	C	Sidechain
1	A	1245	G	Sidechain
1	A	1250	G	Sidechain
1	A	1255	G	Sidechain
1	A	1259	G	Sidechain
1	A	1267	G	Sidechain
1	A	1276	G	Sidechain
1	A	1277	A	Sidechain
1	A	1280	G	Sidechain
1	A	1285	G	Sidechain
1	A	1288	G	Sidechain
1	A	1298	C	Sidechain
1	A	1309	G	Sidechain
1	A	1339	A	Sidechain
1	A	1350	U	Sidechain
1	A	1353	C	Sidechain
1	A	1356	G	Sidechain
1	A	1363	G	Sidechain
1	A	1365	U	Sidechain
1	A	1369	C	Sidechain
1	A	1382	G	Sidechain
1	A	1389	C	Sidechain
1	A	1390	C	Sidechain
1	A	141	U	Sidechain
1	A	1418	U	Sidechain
1	A	1424	A	Sidechain
1	A	1427	G	Sidechain
1	A	1428	G	Sidechain
1	A	143	G	Sidechain
1	A	1431	G	Sidechain
1	A	1434	A	Sidechain
1	A	1445	A	Sidechain
1	A	1451	U	Sidechain
1	A	1460	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	1491	A	Sidechain
1	A	1492	G	Sidechain
1	A	1494	G	Sidechain
1	A	15	G	Sidechain
1	A	1500	U	Sidechain
1	A	1502	G	Sidechain
1	A	1506	A	Sidechain
1	A	1508	C	Sidechain
1	A	1521	G	Sidechain
1	A	1525	G	Sidechain
1	A	1531	G	Sidechain
1	A	1542	A	Sidechain
1	A	1544	C	Sidechain
1	A	1561	G	Sidechain
1	A	1563	G	Sidechain
1	A	1577	C	Sidechain
1	A	1578	G	Sidechain
1	A	1580	A	Sidechain
1	A	1586	G	Sidechain
1	A	1587	U	Sidechain
1	A	1588	A	Sidechain
1	A	1589	G	Sidechain
1	A	159	U	Sidechain
1	A	1590	C	Sidechain
1	A	1591	G	Sidechain
1	A	1605	C	Sidechain
1	A	1625	C	Sidechain
1	A	1631	A	Sidechain
1	A	1636	A	Sidechain
1	A	1642	G	Sidechain
1	A	1650	C	Sidechain
1	A	1653	A	Sidechain
1	A	1671	G	Sidechain
1	A	1676	G	Sidechain
1	A	1690	G	Sidechain
1	A	1700	A	Sidechain
1	A	1708	U	Sidechain
1	A	1720	C	Sidechain
1	A	1726	G	Sidechain
1	A	1730	C	Sidechain
1	A	1732	G	Sidechain
1	A	1740	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	1755	C	Sidechain
1	A	1759	U	Sidechain
1	A	1777	G	Sidechain
1	A	1782	G	Sidechain
1	A	1783	C	Sidechain
1	A	1787	G	Sidechain
1	A	1804	U	Sidechain
1	A	1806	U	Sidechain
1	A	1832	A	Sidechain
1	A	1840	G	Sidechain
1	A	1936	G	Sidechain
1	A	201	C	Sidechain
1	A	2013	U	Sidechain
1	A	2027	A	Sidechain
1	A	2035	C	Sidechain
1	A	204	C	Sidechain
1	A	2050	G	Sidechain
1	A	2069	U	Sidechain
1	A	2070	U	Sidechain
1	A	2097	U	Sidechain
1	A	2116	G	Sidechain
1	A	2120	U	Sidechain
1	A	2121	U	Sidechain
1	A	2122	G	Sidechain
1	A	2130	G	Sidechain
1	A	2135	G	Sidechain
1	A	2139	G	Sidechain
1	A	2142	C	Sidechain
1	A	2147	U	Sidechain
1	A	2148	A	Sidechain
1	A	2149	G	Sidechain
1	A	215	G	Sidechain
1	A	2157	C	Sidechain
1	A	2167	C	Sidechain
1	A	2169	G	Sidechain
1	A	217	G	Sidechain
1	A	2173	G	Sidechain
1	A	2176	A	Sidechain
1	A	2183	G	Sidechain
1	A	2184	U	Sidechain
1	A	2194	G	Sidechain
1	A	2198	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	2239	U	Sidechain
1	A	230	A	Sidechain
1	A	238	U	Sidechain
1	A	241	C	Sidechain
1	A	2434	G	Sidechain
1	A	246	U	Sidechain
1	A	2474	G	Sidechain
1	A	2483	G	Sidechain
1	A	2485	C	Sidechain
1	A	2491	U	Sidechain
1	A	2505	A	Sidechain
1	A	2510	G	Sidechain
1	A	2518	G	Sidechain
1	A	2519	G	Sidechain
1	A	2523	G	Sidechain
1	A	2526	A	Sidechain
1	A	2527	C	Sidechain
1	A	253	G	Sidechain
1	A	2538	G	Sidechain
1	A	2545	G	Sidechain
1	A	2549	C	Sidechain
1	A	255	G	Sidechain
1	A	2552	G	Sidechain
1	A	2557	U	Sidechain
1	A	2559	U	Sidechain
1	A	2564	A	Sidechain
1	A	257	G	Sidechain
1	A	2571	A	Sidechain
1	A	2612	G	Sidechain
1	A	2613	U	Sidechain
1	A	2617	G	Sidechain
1	A	262	G	Sidechain
1	A	2626	G	Sidechain
1	A	2627	A	Sidechain
1	A	2637	G	Sidechain
1	A	2656	G	Sidechain
1	A	2660	G	Sidechain
1	A	2682	U	Sidechain
1	A	269	G	Sidechain
1	A	27	G	Sidechain
1	A	2710	C	Sidechain
1	A	2717	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	272	C	Sidechain
1	A	2723	G	Sidechain
1	A	2724	U	Sidechain
1	A	2725	U	Sidechain
1	A	2733	C	Sidechain
1	A	2743	G	Sidechain
1	A	2744	C	Sidechain
1	A	2753	U	Sidechain
1	A	2754	A	Sidechain
1	A	2756	G	Sidechain
1	A	2760	G	Sidechain
1	A	2761	G	Sidechain
1	A	2771	G	Sidechain
1	A	2778	A	Sidechain
1	A	2783	U	Sidechain
1	A	2790	A	Sidechain
1	A	2792	G	Sidechain
1	A	28	A	Sidechain
1	A	2829	G	Sidechain
1	A	2833	U	Sidechain
1	A	2861	U	Sidechain
1	A	2867	U	Sidechain
1	A	2884	G	Sidechain
1	A	2891	G	Sidechain
1	A	290	U	Sidechain
1	A	2904	A	Sidechain
1	A	2905	C	Sidechain
1	A	2907	A	Sidechain
1	A	2917	G	Sidechain
1	A	2918	G	Sidechain
1	A	2922	U	Sidechain
1	A	2925	C	Sidechain
1	A	2926	C	Sidechain
1	A	298	U	Sidechain
1	A	309	U	Sidechain
1	A	316	G	Sidechain
1	A	33	U	Sidechain
1	A	34	U	Sidechain
1	A	342	A	Sidechain
1	A	344	G	Sidechain
1	A	346	G	Sidechain
1	A	347	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	349	C	Sidechain
1	A	350	U	Sidechain
1	A	356	G	Sidechain
1	A	357	G	Sidechain
1	A	36	G	Sidechain
1	A	361	G	Sidechain
1	A	37	C	Sidechain
1	A	372	U	Sidechain
1	A	377	G	Sidechain
1	A	382	G	Sidechain
1	A	394	U	Sidechain
1	A	398	U	Sidechain
1	A	399	C	Sidechain
1	A	404	C	Sidechain
1	A	407	A	Sidechain
1	A	408	G	Sidechain
1	A	420	U	Sidechain
1	A	441	C	Sidechain
1	A	442	C	Sidechain
1	A	443	G	Sidechain
1	A	450	U	Sidechain
1	A	5	A	Sidechain
1	A	504	A	Sidechain
1	A	505	G	Sidechain
1	A	507	A	Sidechain
1	A	51	G	Sidechain
1	A	510	G	Sidechain
1	A	516	G	Sidechain
1	A	527	A	Sidechain
1	A	541	G	Sidechain
1	A	544	G	Sidechain
1	A	545	U	Sidechain
1	A	546	G	Sidechain
1	A	557	U	Sidechain
1	A	564	G	Sidechain
1	A	572	A	Sidechain
1	A	573	C	Sidechain
1	A	583	G	Sidechain
1	A	585	G	Sidechain
1	A	59	G	Sidechain
1	A	591	U	Sidechain
1	A	593	A	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	595	G	Sidechain
1	A	597	G	Sidechain
1	A	598	U	Sidechain
1	A	599	G	Sidechain
1	A	617	G	Sidechain
1	A	629	G	Sidechain
1	A	63	G	Sidechain
1	A	634	A	Sidechain
1	A	645	C	Sidechain
1	A	65	A	Sidechain
1	A	650	U	Sidechain
1	A	651	U	Sidechain
1	A	67	A	Sidechain
1	A	673	A	Sidechain
1	A	685	U	Sidechain
1	A	687	U	Sidechain
1	A	696	C	Sidechain
1	A	704	U	Sidechain
1	A	721	G	Sidechain
1	A	74	U	Sidechain
1	A	745	C	Sidechain
1	A	751	G	Sidechain
1	A	763	A	Sidechain
1	A	796	A	Sidechain
1	A	801	U	Sidechain
1	A	802	G	Sidechain
1	A	804	G	Sidechain
1	A	807	G	Sidechain
1	A	808	A	Sidechain
1	A	83	G	Sidechain
1	A	87	U	Sidechain
1	A	874	U	Sidechain
1	A	89	U	Sidechain
1	A	894	A	Sidechain
1	A	897	G	Sidechain
1	A	900	U	Sidechain
1	A	903	G	Sidechain
1	A	905	G	Sidechain
1	A	912	C	Sidechain
1	A	929	G	Sidechain
1	A	934	U	Sidechain
1	A	939	G	Sidechain

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type	Group
1	A	942	U	Sidechain
1	A	945	C	Sidechain
1	A	960	U	Sidechain
1	A	972	U	Sidechain
1	A	980	C	Sidechain
20	E	14	ALA	Peptide
20	E	170	ILE	Peptide
8	L	46	VAL	Peptide
8	L	55	MET	Peptide
4	N	65	TYR	Sidechain
9	P	109	ARG	Sidechain
9	P	17	LEU	Peptide
14	T	61	GLY	Peptide
14	T	87	SER	Peptide
15	U	87	ASP	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	A	57639	0	29016	104	0
2	0	433	0	454	0	0
3	C	2129	0	2225	4	0
4	N	962	0	995	0	0
5	G	1246	0	1273	2	0
6	J	1134	0	1178	0	0
7	K	921	0	977	0	0
8	L	1082	0	1132	0	0
9	P	916	0	987	5	0
10	Q	940	0	1005	0	0
11	D	1568	0	1635	0	0
12	R	795	0	838	0	0
13	S	868	0	930	0	0
14	T	767	0	813	2	0
15	U	780	0	838	0	0
16	X	504	0	541	1	0
17	2	368	0	410	1	0
18	5	910	0	944	0	0

Continued on next page...

Continued from previous page...

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	6	1044	0	1098	1	0
20	E	1567	0	1652	1	0
All	All	76573	0	48941	116	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 (116) 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)
1:A:1245:G:H1	1:A:1281:C:H41	1.25	0.84
1:A:898:U:H3	1:A:973:G:H1	1.41	0.68
1:A:2557:U:H3	1:A:2564:A:H61	1.41	0.68
1:A:1799:G:H1	1:A:2011:U:H3	1.46	0.63
1:A:2543:U:H3	1:A:2599:G:H1	1.48	0.62
3:C:224:VAL:HG13	3:C:238:ARG:HE	1.66	0.60
1:A:1070:G:H3'	1:A:1071:G:H5"	1.86	0.58
1:A:1095:C:H41	1:A:1155:C:H42	1.53	0.56
1:A:2423:C:H3'	1:A:2424:C:H5"	1.87	0.56
1:A:1433:U:H3	14:T:16:ARG:HH22	1.53	0.55
1:A:2859:G:H2'	1:A:2904:A:H61	1.70	0.55
1:A:2843:G:H21	1:A:2845:A:H62	1.54	0.55
1:A:1527:C:H42	1:A:1559:C:H42	1.55	0.54
1:A:1110:C:H3'	1:A:1111:U:H5"	1.89	0.53
9:P:21:ARG:HH21	9:P:94:ARG:HH22	1.55	0.53
1:A:592:A:H61	1:A:1261:C:H4'	1.74	0.52
1:A:2681:U:H3	1:A:2697:G:H1	1.55	0.52
1:A:1579:A:C2	1:A:1588:A:C2	2.98	0.52
1:A:2131:U:H3	1:A:2216:A:H61	1.58	0.52
1:A:1672:A:H61	1:A:1684:U:H3	1.57	0.52
1:A:2078:A:H61	1:A:2648:U:H3	1.57	0.52
3:C:224:VAL:HG12	3:C:226:ASN:H	1.76	0.51
1:A:110:A:H2'	1:A:111:U:C6	2.45	0.51
1:A:897:G:H1	1:A:975:C:H1'	1.77	0.50
1:A:2666:U:H3	1:A:2805:A:H62	1.58	0.50
1:A:1647:U:H3'	1:A:1648:A:H5'	1.92	0.50
1:A:613:U:H4'	1:A:992:G:H21	1.77	0.50
1:A:512:G:H2'	1:A:513:A:C8	2.47	0.49
1:A:1263:G:H2'	1:A:1264:G:H5"	1.94	0.49
1:A:1579:A:C2	1:A:1588:A:H2	2.31	0.49
14:T:3:ASP:H	14:T:4:PRO:HD2	1.78	0.49

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:162:A:H3'	1:A:163:U:H5"	1.95	0.49
9:P:29:HIS:CD2	9:P:30:VAL:H	2.31	0.49
1:A:1067:A:C8	1:A:1067:A:H3'	2.48	0.48
1:A:1499:A:H62	1:A:2732:C:H41	1.61	0.48
1:A:269:G:H2'	1:A:270:C:H5"	1.96	0.48
1:A:334:G:H1	1:A:393:U:H3	1.61	0.47
9:P:64:ILE:HD12	9:P:64:ILE:H	1.79	0.47
1:A:2828:G:H3'	1:A:2829:G:H5"	1.96	0.47
1:A:2730:U:H3	1:A:2735:A:H61	1.61	0.47
1:A:719:C:C2'	1:A:720:C:H5"	2.45	0.46
1:A:1635:G:H3'	1:A:1636:A:H5"	1.98	0.46
1:A:2842:U:H3'	1:A:2843:G:H5"	1.97	0.46
1:A:737:C:H2'	1:A:738:C:C6	2.51	0.45
1:A:2753:U:H2'	1:A:2754:A:C8	2.51	0.45
1:A:2904:A:C2	1:A:2907:A:N6	2.84	0.45
1:A:2812:A:C2	1:A:2813:U:C2	3.04	0.45
1:A:2144:G:H21	1:A:2148:A:H8	1.65	0.45
1:A:2196:U:H3	1:A:2200:A:H62	1.65	0.45
5:G:67:GLY:HA2	5:G:70:ARG:HE	1.81	0.45
1:A:972:U:H2'	1:A:973:G:H5"	1.99	0.45
1:A:1304:G:H3'	1:A:1305:A:H5"	1.99	0.45
9:P:50:ARG:H	9:P:64:ILE:HG12	1.82	0.45
1:A:686:C:C4	1:A:687:U:C4	3.05	0.44
1:A:2423:C:H3'	1:A:2424:C:C5'	2.46	0.44
1:A:2123:A:H61	1:A:2224:U:H3	1.65	0.44
1:A:1219:C:H2'	1:A:1220:G:H5'	2.00	0.44
1:A:2819:A:H3'	1:A:2820:U:H5"	2.00	0.44
1:A:2572:G:H21	1:A:2675:C:H4'	1.83	0.44
1:A:77:U:H3	1:A:108:A:H61	1.64	0.44
9:P:86:VAL:HG12	9:P:87:VAL:H	1.83	0.44
1:A:1578:G:N1	1:A:1588:A:C2	2.81	0.44
1:A:911:G:H21	1:A:913:A:H61	1.66	0.43
1:A:1759:U:H3	1:A:1773:G:H22	1.65	0.43
1:A:109:G:H21	16:X:58:ARG:HH22	1.66	0.43
1:A:2501:G:H21	1:A:2507:A:H62	1.66	0.43
1:A:2860:A:C2	1:A:2903:U:C4	3.06	0.43
1:A:1852:G:H21	3:C:254:THR:HB	1.83	0.43
1:A:1700:A:C2	1:A:2078:A:H4'	2.54	0.43
1:A:2156:G:H2'	1:A:2157:C:C6	2.53	0.43
1:A:19:G:C6	1:A:568:G:C6	3.06	0.43
1:A:1067:A:C6	1:A:1187:U:C4	3.07	0.43

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:C:31:LYS:HG3	3:C:32:SER:H	1.83	0.43
1:A:116:G:C6	1:A:118:A:N1	2.87	0.43
1:A:1764:U:H2'	1:A:1765:G:H5"	2.00	0.43
1:A:366:A:H2	1:A:383:U:H3	1.64	0.43
1:A:78:U:H3	1:A:107:G:H1	1.67	0.42
1:A:584:A:C2	1:A:599:G:N1	2.87	0.42
1:A:2552:G:H2'	1:A:2553:G:H5"	2.01	0.42
1:A:1310:C:H5"	1:A:1311:G:H5'	2.00	0.42
1:A:2484:G:C5	1:A:2485:C:C4	3.07	0.42
1:A:2834:A:H62	1:A:2915:G:H2'	1.84	0.42
1:A:2760:G:C6	1:A:2761:G:C6	3.08	0.42
1:A:2486:U:H3	1:A:2523:G:H1	1.67	0.42
1:A:2715:G:C5	1:A:2716:U:C4	3.08	0.42
1:A:460:C:H2'	1:A:461:C:C6	2.55	0.42
1:A:1070:G:H3'	1:A:1071:G:C5'	2.50	0.42
1:A:616:A:C2	1:A:2062:A:C2	3.07	0.42
1:A:695:G:H2'	1:A:696:C:C6	2.55	0.41
1:A:574:A:C2	1:A:2071:A:H2'	2.56	0.41
1:A:1574:G:H2'	1:A:1575:A:C2	2.56	0.41
1:A:2831:A:C2	1:A:2832:G:C4	3.09	0.41
5:G:156:GLU:H	5:G:161:LYS:H	1.69	0.41
1:A:926:G:C6	1:A:927:G:C6	3.08	0.41
19:6:116:LEU:HD12	19:6:119:ALA:HB3	2.02	0.41
1:A:1498:U:H3	1:A:1506:A:H62	1.68	0.41
1:A:2527:C:C3'	1:A:2528:C:H5"	2.50	0.41
1:A:644:G:H1	1:A:704:U:H3	1.68	0.41
1:A:790:A:C2	1:A:802:G:C2	3.08	0.41
1:A:1305:A:H61	1:A:2042:A:H3'	1.86	0.41
1:A:2231:C:H2'	1:A:2233:C:C5	2.55	0.41
1:A:2070:U:C4	1:A:2071:A:C2	3.09	0.41
1:A:113:U:C2	1:A:114:C:C2	3.09	0.41
1:A:366:A:H3'	20:E:169:ASN:HD21	1.85	0.41
1:A:451:C:H4'	1:A:452:C:H5'	2.03	0.40
1:A:1583:A:H62	1:A:1586:G:H22	1.68	0.40
1:A:1761:G:H3'	1:A:1762:G:C5'	2.52	0.40
1:A:2710:C:C5	1:A:2754:A:N6	2.89	0.40
1:A:118:A:H3'	17:2:19:ARG:HH22	1.85	0.40
1:A:525:A:H62	1:A:548:A:N6	2.19	0.40
1:A:2710:C:C5	1:A:2756:G:C2	3.09	0.40
1:A:65:A:H61	1:A:89:U:H3	1.68	0.40
1:A:185:A:H4'	1:A:186:C:OP1	2.21	0.40

Continued on next page...

Continued from previous page...

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:272:C:C5	1:A:298:U:C5	3.09	0.40
1:A:788:G:H2'	1:A:789:C:C6	2.57	0.40
1:A:1339:A:N6	1:A:1602:U:C5	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
2	0	53/59 (90%)	43 (81%)	6 (11%)	4 (8%)	1 13
3	C	275/277 (99%)	217 (79%)	40 (14%)	18 (6%)	1 16
4	N	118/120 (98%)	101 (86%)	14 (12%)	3 (2%)	5 32
5	G	161/179 (90%)	148 (92%)	7 (4%)	6 (4%)	3 24
6	J	141/145 (97%)	124 (88%)	9 (6%)	8 (6%)	1 18
7	K	120/122 (98%)	106 (88%)	9 (8%)	5 (4%)	3 22
8	L	144/146 (99%)	100 (69%)	30 (21%)	14 (10%)	0 10
9	P	110/115 (96%)	76 (69%)	20 (18%)	14 (13%)	0 5
10	Q	115/119 (97%)	101 (88%)	9 (8%)	5 (4%)	2 22
11	D	204/209 (98%)	175 (86%)	21 (10%)	8 (4%)	3 23
12	R	100/102 (98%)	79 (79%)	15 (15%)	6 (6%)	1 17
13	S	110/113 (97%)	97 (88%)	10 (9%)	3 (3%)	5 31
14	T	93/95 (98%)	77 (83%)	11 (12%)	5 (5%)	2 19
15	U	101/103 (98%)	70 (69%)	20 (20%)	11 (11%)	0 8
16	X	59/66 (89%)	55 (93%)	2 (3%)	2 (3%)	3 26
17	2	42/44 (96%)	37 (88%)	4 (10%)	1 (2%)	6 33
18	5	116/232 (50%)	97 (84%)	13 (11%)	6 (5%)	2 19

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
19	6	139/141 (99%)	117 (84%)	17 (12%)	5 (4%)	3 25
20	E	204/207 (99%)	161 (79%)	25 (12%)	18 (9%)	1 11
All	All	2405/2594 (93%)	1981 (82%)	282 (12%)	142 (6%)	3 17

All (142) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	0	19	HIS
3	C	219	THR
7	K	30	ARG
7	K	73	ASP
8	L	117	LEU
9	P	86	VAL
9	P	92	VAL
10	Q	8	THR
11	D	142	ARG
12	R	50	ASN
15	U	77	GLU
15	U	80	ARG
19	6	118	ALA
20	E	9	GLN
20	E	51	VAL
20	E	65	TRP
20	E	104	LYS
20	E	147	SER
2	0	49	TYR
4	N	75	ASN
5	G	22	ASN
5	G	158	TYR
6	J	47	PRO
6	J	111	PRO
7	K	14	SER
7	K	90	ASP
8	L	10	GLU
8	L	106	ASN
9	P	96	LYS
9	P	98	TYR
9	P	113	ILE
11	D	128	GLN
12	R	27	ALA
14	T	9	LYS

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	T	69	TYR
15	U	33	VAL
15	U	59	GLN
15	U	71	LEU
15	U	74	LYS
15	U	75	THR
15	U	93	VAL
16	X	33	ALA
18	5	171	ILE
18	5	199	ALA
20	E	7	TYR
20	E	121	ASN
2	0	8	THR
3	C	10	SER
3	C	57	GLY
3	C	207	LYS
3	C	257	PHE
5	G	166	GLU
5	G	168	GLU
6	J	2	ARG
8	L	11	GLY
8	L	30	THR
8	L	53	GLY
8	L	139	ALA
9	P	63	LYS
9	P	70	VAL
9	P	82	ALA
9	P	97	LEU
10	Q	87	GLY
10	Q	92	ARG
11	D	48	ALA
11	D	144	GLY
12	R	16	GLU
14	T	3	ASP
15	U	46	LYS
15	U	73	PRO
18	5	41	THR
18	5	167	LYS
18	5	181	GLU
19	6	19	ASN
19	6	92	PRO
20	E	10	ASN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
20	E	11	GLY
20	E	66	ARG
20	E	132	ASP
2	0	53	ASP
3	C	25	THR
3	C	53	HIS
3	C	139	THR
3	C	143	ASN
3	C	147	LYS
3	C	200	HIS
3	C	218	PRO
4	N	73	GLU
4	N	86	ASP
5	G	111	SER
5	G	157	PRO
6	J	81	HIS
6	J	131	HIS
6	J	134	GLU
8	L	70	ASN
8	L	98	GLU
8	L	145	VAL
9	P	21	ARG
9	P	108	ALA
10	Q	29	HIS
11	D	87	GLU
11	D	100	GLU
12	R	44	ASP
12	R	90	GLN
13	S	12	ILE
13	S	90	MET
17	2	5	PHE
19	6	94	ARG
6	J	26	LEU
6	J	85	LEU
7	K	102	VAL
8	L	40	ALA
8	L	68	ASN
9	P	95	ALA
10	Q	88	ILE
11	D	19	ASN
11	D	134	SER
12	R	26	ALA

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
14	T	72	MET
15	U	68	VAL
16	X	32	LEU
19	6	44	ALA
20	E	58	ARG
20	E	152	ALA
20	E	165	LEU
3	C	29	PRO
3	C	194	GLN
3	C	248	SER
8	L	142	THR
9	P	59	PHE
20	E	164	ALA
3	C	136	PRO
3	C	224	VAL
20	E	26	ILE
9	P	61	VAL
13	S	87	PRO
18	5	220	PRO
20	E	154	ILE
8	L	46	VAL
20	E	194	ILE
3	C	239	ALA
14	T	92	ILE

5.3.2 Protein sidechains (i)

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
2	0	49/53 (92%)	48 (98%)	1 (2%)	55 74
3	C	225/225 (100%)	215 (96%)	10 (4%)	28 53
4	N	100/100 (100%)	99 (99%)	1 (1%)	76 86
5	G	138/151 (91%)	135 (98%)	3 (2%)	52 71
6	J	122/123 (99%)	111 (91%)	11 (9%)	9 30

Continued on next page...

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
7	K	101/101 (100%)	98 (97%)	3 (3%)	41	63
8	L	110/110 (100%)	105 (96%)	5 (4%)	27	52
9	P	97/100 (97%)	90 (93%)	7 (7%)	14	39
10	Q	96/98 (98%)	93 (97%)	3 (3%)	40	62
11	D	167/170 (98%)	159 (95%)	8 (5%)	25	51
12	R	84/84 (100%)	78 (93%)	6 (7%)	14	39
13	S	93/93 (100%)	87 (94%)	6 (6%)	17	42
14	T	85/85 (100%)	82 (96%)	3 (4%)	36	59
15	U	87/87 (100%)	82 (94%)	5 (6%)	20	45
16	X	54/57 (95%)	50 (93%)	4 (7%)	13	38
17	2	39/39 (100%)	37 (95%)	2 (5%)	24	48
18	5	98/185 (53%)	97 (99%)	1 (1%)	76	86
19	6	110/110 (100%)	109 (99%)	1 (1%)	78	87
20	E	169/170 (99%)	162 (96%)	7 (4%)	30	55
All	All	2024/2141 (94%)	1937 (96%)	87 (4%)	33	53

All (87) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	0	36	MET
3	C	28	LYS
3	C	63	ARG
3	C	77	ARG
3	C	121	GLU
3	C	154	LEU
3	C	175	ARG
3	C	201	GLU
3	C	258	LYS
3	C	265	LYS
3	C	274	ARG
4	N	60	ARG
5	G	45	LYS
5	G	120	GLU
5	G	164	ARG
6	J	2	ARG
6	J	28	ARG
6	J	32	GLU

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
6	J	49	VAL
6	J	62	LYS
6	J	68	LYS
6	J	69	LYS
6	J	77	ARG
6	J	119	MET
6	J	131	HIS
6	J	134	GLU
7	K	3	GLN
7	K	44	LYS
7	K	81	GLU
8	L	36	LYS
8	L	58	PHE
8	L	60	ARG
8	L	98	GLU
8	L	142	THR
9	P	11	GLU
9	P	26	LEU
9	P	37	ARG
9	P	38	GLU
9	P	72	ARG
9	P	74	PHE
9	P	83	LYS
10	Q	25	PHE
10	Q	49	ASP
10	Q	80	MET
11	D	19	ASN
11	D	37	GLN
11	D	71	LYS
11	D	87	GLU
11	D	130	ARG
11	D	138	ARG
11	D	167	GLU
11	D	182	GLU
12	R	18	GLN
12	R	36	GLU
12	R	39	LEU
12	R	54	GLU
12	R	82	VAL
12	R	98	GLU
13	S	11	ARG
13	S	20	VAL

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
13	S	28	GLN
13	S	51	LEU
13	S	90	MET
13	S	99	ARG
14	T	28	PHE
14	T	64	LYS
14	T	88	LYS
15	U	20	GLN
15	U	30	LYS
15	U	60	GLU
15	U	89	LYS
15	U	101	LEU
16	X	23	GLU
16	X	28	LEU
16	X	42	ARG
16	X	48	LYS
17	2	3	ARG
17	2	8	ASN
18	5	17	ARG
19	6	110	GLU
20	E	29	ASN
20	E	72	ARG
20	E	82	GLN
20	E	158	ASP
20	E	175	VAL
20	E	177	GLU
20	E	196	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (16) such sidechains are listed below:

Mol	Chain	Res	Type
3	C	38	HIS
4	N	57	HIS
6	J	133	HIS
7	K	4	GLN
7	K	45	GLN
9	P	29	HIS
10	Q	38	GLN
12	R	90	GLN
13	S	57	ASN
14	T	55	ASN
17	2	6	GLN

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
18	5	58	GLN
18	5	172	HIS
19	6	34	ASN
20	E	169	ASN
20	E	189	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	A	2681/2927 (91%)	823 (30%)	200 (7%)

All (823) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	A	2	G
1	A	3	U
1	A	4	U
1	A	8	U
1	A	10	A
1	A	11	G
1	A	13	A
1	A	14	A
1	A	41	A
1	A	42	G
1	A	46	C
1	A	50	U
1	A	51	G
1	A	61	A
1	A	64	A
1	A	71	A
1	A	72	U
1	A	73	A
1	A	74	U
1	A	75	G
1	A	82	G
1	A	83	G
1	A	84	A
1	A	85	G
1	A	88	G
1	A	90	A
1	A	91	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	93	C
1	A	95	A
1	A	96	G
1	A	99	U
1	A	100	U
1	A	101	G
1	A	104	C
1	A	111	U
1	A	112	U
1	A	117	A
1	A	118	A
1	A	119	U
1	A	124	A
1	A	125	A
1	A	138	U
1	A	141	U
1	A	147	G
1	A	150	A
1	A	151	U
1	A	152	C
1	A	153	C
1	A	161	A
1	A	163	U
1	A	164	U
1	A	177	G
1	A	179	A
1	A	180	G
1	A	183	A
1	A	185	A
1	A	186	C
1	A	187	C
1	A	195	C
1	A	196	U
1	A	199	A
1	A	202	A
1	A	203	U
1	A	208	G
1	A	218	G
1	A	219	A
1	A	221	G
1	A	222	A
1	A	224	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	225	A
1	A	226	A
1	A	231	A
1	A	232	U
1	A	233	G
1	A	236	A
1	A	247	A
1	A	248	G
1	A	251	G
1	A	264	G
1	A	270	C
1	A	275	A
1	A	283	G
1	A	284	C
1	A	285	U
1	A	286	U
1	A	287	G
1	A	291	C
1	A	299	U
1	A	300	G
1	A	301	U
1	A	302	A
1	A	309	U
1	A	310	C
1	A	311	U
1	A	312	G
1	A	313	U
1	A	314	A
1	A	315	C
1	A	317	G
1	A	320	U
1	A	321	U
1	A	322	A
1	A	323	C
1	A	324	A
1	A	325	A
1	A	326	A
1	A	327	G
1	A	328	G
1	A	329	A
1	A	331	C
1	A	344	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	345	A
1	A	346	G
1	A	354	A
1	A	355	A
1	A	356	G
1	A	361	G
1	A	362	C
1	A	366	A
1	A	373	A
1	A	374	A
1	A	375	C
1	A	376	A
1	A	377	G
1	A	387	C
1	A	388	A
1	A	389	A
1	A	393	U
1	A	396	G
1	A	397	U
1	A	399	C
1	A	400	U
1	A	401	C
1	A	402	U
1	A	403	C
1	A	405	U
1	A	407	A
1	A	408	G
1	A	410	G
1	A	411	G
1	A	412	A
1	A	414	C
1	A	415	C
1	A	431	A
1	A	433	G
1	A	434	U
1	A	435	G
1	A	436	A
1	A	438	A
1	A	443	G
1	A	452	C
1	A	453	G
1	A	458	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	459	A
1	A	475	A
1	A	476	A
1	A	481	U
1	A	482	C
1	A	485	U
1	A	486	A
1	A	488	U
1	A	491	C
1	A	492	C
1	A	495	U
1	A	497	G
1	A	503	C
1	A	504	A
1	A	517	A
1	A	520	G
1	A	522	U
1	A	527	A
1	A	528	G
1	A	538	A
1	A	540	G
1	A	551	A
1	A	554	U
1	A	555	C
1	A	571	U
1	A	574	A
1	A	576	G
1	A	577	U
1	A	578	A
1	A	579	G
1	A	583	G
1	A	589	G
1	A	593	A
1	A	594	C
1	A	595	G
1	A	600	A
1	A	606	U
1	A	607	G
1	A	609	C
1	A	617	G
1	A	618	A
1	A	619	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	629	G
1	A	630	A
1	A	631	G
1	A	632	U
1	A	647	A
1	A	648	G
1	A	651	U
1	A	659	A
1	A	660	G
1	A	661	A
1	A	662	U
1	A	663	G
1	A	667	A
1	A	668	G
1	A	675	C
1	A	678	A
1	A	679	A
1	A	683	A
1	A	691	U
1	A	692	A
1	A	697	G
1	A	700	U
1	A	701	G
1	A	702	A
1	A	703	G
1	A	704	U
1	A	716	G
1	A	717	A
1	A	720	C
1	A	733	U
1	A	755	U
1	A	756	U
1	A	769	A
1	A	777	C
1	A	789	C
1	A	794	U
1	A	795	G
1	A	798	A
1	A	800	G
1	A	809	U
1	A	811	A
1	A	812	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	828	A
1	A	829	A
1	A	831	U
1	A	832	G
1	A	833	C
1	A	835	A
1	A	837	U
1	A	838	C
1	A	839	G
1	A	840	A
1	A	852	G
1	A	853	C
1	A	858	U
1	A	859	C
1	A	866	A
1	A	868	A
1	A	874	U
1	A	875	U
1	A	876	A
1	A	877	G
1	A	878	G
1	A	895	G
1	A	901	U
1	A	904	A
1	A	906	G
1	A	907	U
1	A	912	C
1	A	913	A
1	A	917	A
1	A	919	U
1	A	925	A
1	A	926	G
1	A	932	C
1	A	933	C
1	A	934	U
1	A	935	A
1	A	937	C
1	A	938	G
1	A	942	U
1	A	943	A
1	A	944	C
1	A	945	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	946	G
1	A	947	A
1	A	948	A
1	A	954	U
1	A	957	A
1	A	964	A
1	A	965	A
1	A	973	G
1	A	976	U
1	A	977	U
1	A	978	A
1	A	979	U
1	A	985	G
1	A	987	A
1	A	991	A
1	A	992	G
1	A	998	G
1	A	999	A
1	A	1003	A
1	A	1004	U
1	A	1005	A
1	A	1007	G
1	A	1008	A
1	A	1019	A
1	A	1020	A
1	A	1022	G
1	A	1030	G
1	A	1034	A
1	A	1037	C
1	A	1041	C
1	A	1051	C
1	A	1055	A
1	A	1057	G
1	A	1058	U
1	A	1059	A
1	A	1066	A
1	A	1068	G
1	A	1071	G
1	A	1072	A
1	A	1079	U
1	A	1081	U
1	A	1085	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1090	U
1	A	1091	U
1	A	1092	A
1	A	1094	A
1	A	1095	C
1	A	1099	C
1	A	1103	A
1	A	1104	U
1	A	1105	G
1	A	1106	U
1	A	1107	U
1	A	1108	G
1	A	1111	U
1	A	1113	A
1	A	1114	G
1	A	1115	A
1	A	1116	A
1	A	1117	G
1	A	1118	C
1	A	1119	A
1	A	1123	A
1	A	1125	C
1	A	1133	G
1	A	1136	U
1	A	1140	U
1	A	1145	G
1	A	1153	G
1	A	1154	U
1	A	1157	A
1	A	1158	G
1	A	1160	G
1	A	1161	A
1	A	1163	U
1	A	1174	A
1	A	1176	U
1	A	1177	G
1	A	1178	U
1	A	1179	A
1	A	1181	C
1	A	1182	G
1	A	1188	A
1	A	1201	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1209	G
1	A	1210	A
1	A	1211	C
1	A	1212	U
1	A	1215	U
1	A	1216	C
1	A	1217	U
1	A	1221	A
1	A	1222	A
1	A	1226	U
1	A	1227	G
1	A	1228	G
1	A	1229	U
1	A	1231	G
1	A	1244	A
1	A	1245	G
1	A	1250	G
1	A	1251	U
1	A	1252	G
1	A	1260	A
1	A	1261	C
1	A	1262	C
1	A	1264	G
1	A	1269	A
1	A	1270	C
1	A	1271	U
1	A	1276	G
1	A	1277	A
1	A	1284	A
1	A	1287	A
1	A	1288	G
1	A	1293	A
1	A	1295	U
1	A	1296	G
1	A	1305	A
1	A	1311	G
1	A	1312	A
1	A	1314	A
1	A	1315	G
1	A	1316	A
1	A	1320	G
1	A	1325	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1326	A
1	A	1331	C
1	A	1339	A
1	A	1340	A
1	A	1341	U
1	A	1342	G
1	A	1350	U
1	A	1353	C
1	A	1358	G
1	A	1366	C
1	A	1367	G
1	A	1368	U
1	A	1371	G
1	A	1380	U
1	A	1381	A
1	A	1382	G
1	A	1389	C
1	A	1391	U
1	A	1398	A
1	A	1404	A
1	A	1418	U
1	A	1419	G
1	A	1423	A
1	A	1424	A
1	A	1425	C
1	A	1426	A
1	A	1427	G
1	A	1435	U
1	A	1437	C
1	A	1438	C
1	A	1445	A
1	A	1446	C
1	A	1449	C
1	A	1451	U
1	A	1455	C
1	A	1457	U
1	A	1458	U
1	A	1459	U
1	A	1460	G
1	A	1461	A
1	A	1462	G
1	A	1463	C

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1467	G
1	A	1473	A
1	A	1474	C
1	A	1482	G
1	A	1489	U
1	A	1490	A
1	A	1493	C
1	A	1494	G
1	A	1495	C
1	A	1496	G
1	A	1497	G
1	A	1498	U
1	A	1500	U
1	A	1501	U
1	A	1504	A
1	A	1505	U
1	A	1508	C
1	A	1514	C
1	A	1518	G
1	A	1523	U
1	A	1525	G
1	A	1529	G
1	A	1531	G
1	A	1540	A
1	A	1541	A
1	A	1542	A
1	A	1543	U
1	A	1544	C
1	A	1545	C
1	A	1548	U
1	A	1551	C
1	A	1555	A
1	A	1556	A
1	A	1562	A
1	A	1563	G
1	A	1564	C
1	A	1565	U
1	A	1566	G
1	A	1567	U
1	A	1569	A
1	A	1575	A
1	A	1576	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1577	C
1	A	1581	A
1	A	1582	U
1	A	1583	A
1	A	1586	G
1	A	1590	C
1	A	1591	G
1	A	1592	A
1	A	1593	A
1	A	1594	G
1	A	1595	U
1	A	1596	U
1	A	1602	U
1	A	1603	U
1	A	1606	A
1	A	1607	C
1	A	1614	A
1	A	1617	A
1	A	1626	U
1	A	1627	A
1	A	1628	G
1	A	1629	C
1	A	1630	G
1	A	1631	A
1	A	1633	G
1	A	1636	A
1	A	1648	A
1	A	1653	A
1	A	1654	A
1	A	1659	A
1	A	1660	C
1	A	1661	A
1	A	1662	C
1	A	1663	A
1	A	1676	G
1	A	1677	A
1	A	1678	G
1	A	1679	A
1	A	1680	A
1	A	1681	U
1	A	1685	A
1	A	1691	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1692	U
1	A	1693	C
1	A	1697	A
1	A	1698	G
1	A	1699	A
1	A	1711	G
1	A	1712	G
1	A	1719	G
1	A	1720	C
1	A	1721	A
1	A	1735	A
1	A	1739	C
1	A	1743	A
1	A	1744	G
1	A	1746	A
1	A	1761	G
1	A	1762	G
1	A	1765	G
1	A	1769	G
1	A	1771	C
1	A	1772	C
1	A	1777	G
1	A	1786	U
1	A	1787	G
1	A	1788	A
1	A	1789	A
1	A	1790	U
1	A	1791	A
1	A	1792	G
1	A	1793	G
1	A	1802	A
1	A	1804	U
1	A	1806	U
1	A	1808	U
1	A	1809	A
1	A	1811	C
1	A	1812	A
1	A	1816	A
1	A	1817	C
1	A	1820	A
1	A	1821	G
1	A	1828	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1829	C
1	A	1830	G
1	A	1845	A
1	A	1849	U
1	A	1858	A
1	A	1862	C
1	A	1864	G
1	A	1934	C
1	A	1935	G
1	A	1936	G
1	A	1938	C
1	A	1940	U
1	A	1941	A
1	A	1942	A
1	A	1944	U
1	A	1945	A
1	A	1946	U
1	A	1949	C
1	A	1950	G
1	A	1953	C
1	A	1954	C
1	A	1955	U
1	A	1956	A
1	A	1957	A
1	A	1958	G
1	A	1959	G
1	A	1961	A
1	A	2000	A
1	A	2001	G
1	A	2010	A
1	A	2011	U
1	A	2016	G
1	A	2022	U
1	A	2026	A
1	A	2028	C
1	A	2050	G
1	A	2051	U
1	A	2052	A
1	A	2059	A
1	A	2060	A
1	A	2062	A
1	A	2063	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2065	C
1	A	2072	C
1	A	2084	C
1	A	2090	G
1	A	2091	A
1	A	2092	C
1	A	2098	G
1	A	2121	U
1	A	2122	G
1	A	2125	U
1	A	2128	U
1	A	2129	G
1	A	2131	U
1	A	2132	A
1	A	2133	C
1	A	2134	A
1	A	2136	C
1	A	2137	U
1	A	2139	G
1	A	2140	U
1	A	2141	A
1	A	2145	G
1	A	2147	U
1	A	2148	A
1	A	2154	G
1	A	2155	A
1	A	2156	G
1	A	2158	C
1	A	2159	U
1	A	2160	U
1	A	2161	G
1	A	2162	G
1	A	2175	C
1	A	2176	A
1	A	2186	G
1	A	2187	A
1	A	2188	G
1	A	2189	G
1	A	2193	C
1	A	2194	G
1	A	2195	G
1	A	2201	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2202	A
1	A	2203	C
1	A	2207	C
1	A	2208	C
1	A	2209	U
1	A	2210	G
1	A	2214	G
1	A	2215	U
1	A	2216	A
1	A	2218	U
1	A	2219	G
1	A	2220	A
1	A	2222	C
1	A	2227	A
1	A	2233	C
1	A	2239	U
1	A	2240	U
1	A	2241	A
1	A	2253	G
1	A	2254	A
1	A	2267	G
1	A	2268	G
1	A	2272	U
1	A	2274	U
1	A	2419	U
1	A	2421	A
1	A	2423	C
1	A	2424	C
1	A	2428	G
1	A	2431	U
1	A	2434	G
1	A	2435	C
1	A	2452	U
1	A	2453	C
1	A	2454	A
1	A	2455	A
1	A	2458	G
1	A	2459	A
1	A	2460	U
1	A	2462	A
1	A	2463	A
1	A	2464	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2468	A
1	A	2469	C
1	A	2470	C
1	A	2477	A
1	A	2478	U
1	A	2494	C
1	A	2498	A
1	A	2499	G
1	A	2500	A
1	A	2501	G
1	A	2505	A
1	A	2506	C
1	A	2507	A
1	A	2511	A
1	A	2512	C
1	A	2520	U
1	A	2521	U
1	A	2526	A
1	A	2528	C
1	A	2531	G
1	A	2532	A
1	A	2534	G
1	A	2536	C
1	A	2547	A
1	A	2548	U
1	A	2549	C
1	A	2553	G
1	A	2558	G
1	A	2559	U
1	A	2560	A
1	A	2563	C
1	A	2571	A
1	A	2572	G
1	A	2583	U
1	A	2584	U
1	A	2594	A
1	A	2595	A
1	A	2596	G
1	A	2601	A
1	A	2605	G
1	A	2606	A
1	A	2607	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2612	G
1	A	2613	U
1	A	2614	U
1	A	2621	G
1	A	2631	A
1	A	2639	C
1	A	2640	C
1	A	2641	C
1	A	2643	A
1	A	2644	U
1	A	2657	C
1	A	2658	A
1	A	2659	G
1	A	2660	G
1	A	2670	A
1	A	2682	U
1	A	2683	A
1	A	2686	A
1	A	2702	G
1	A	2704	A
1	A	2711	G
1	A	2718	U
1	A	2719	A
1	A	2731	G
1	A	2732	C
1	A	2742	C
1	A	2743	G
1	A	2744	C
1	A	2749	U
1	A	2755	U
1	A	2762	A
1	A	2777	A
1	A	2779	A
1	A	2781	C
1	A	2785	U
1	A	2786	A
1	A	2787	A
1	A	2790	A
1	A	2791	U
1	A	2792	G
1	A	2794	A
1	A	2807	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2808	U
1	A	2809	G
1	A	2816	C
1	A	2818	C
1	A	2819	A
1	A	2820	U
1	A	2821	U
1	A	2823	C
1	A	2825	C
1	A	2826	A
1	A	2827	A
1	A	2829	G
1	A	2831	A
1	A	2832	G
1	A	2833	U
1	A	2843	G
1	A	2844	A
1	A	2845	A
1	A	2846	A
1	A	2848	A
1	A	2849	U
1	A	2855	G
1	A	2858	U
1	A	2859	G
1	A	2860	A
1	A	2874	G
1	A	2875	A
1	A	2884	G
1	A	2885	A
1	A	2886	C
1	A	2892	G
1	A	2897	G
1	A	2898	A
1	A	2904	A
1	A	2909	U
1	A	2910	C
1	A	2917	G
1	A	2918	G
1	A	2919	A
1	A	2927	A

All (200) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	A	3	U
1	A	8	U
1	A	50	U
1	A	63	G
1	A	71	A
1	A	74	U
1	A	83	G
1	A	90	A
1	A	95	A
1	A	99	U
1	A	124	A
1	A	163	U
1	A	178	A
1	A	179	A
1	A	182	C
1	A	185	A
1	A	218	G
1	A	224	A
1	A	225	A
1	A	235	G
1	A	275	A
1	A	299	U
1	A	309	U
1	A	310	C
1	A	311	U
1	A	313	U
1	A	323	C
1	A	324	A
1	A	326	A
1	A	373	A
1	A	375	C
1	A	376	A
1	A	400	U
1	A	402	U
1	A	406	G
1	A	411	G
1	A	413	U
1	A	414	C
1	A	434	U
1	A	435	G
1	A	437	A
1	A	450	U
1	A	481	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	490	A
1	A	553	A
1	A	578	A
1	A	588	C
1	A	594	C
1	A	647	A
1	A	659	A
1	A	666	G
1	A	703	G
1	A	799	A
1	A	800	G
1	A	836	A
1	A	837	U
1	A	851	A
1	A	868	A
1	A	903	G
1	A	906	G
1	A	933	C
1	A	934	U
1	A	938	G
1	A	976	U
1	A	998	G
1	A	1003	A
1	A	1007	G
1	A	1019	A
1	A	1021	A
1	A	1079	U
1	A	1091	U
1	A	1093	G
1	A	1098	C
1	A	1106	U
1	A	1110	C
1	A	1113	A
1	A	1114	G
1	A	1115	A
1	A	1156	G
1	A	1157	A
1	A	1174	A
1	A	1178	U
1	A	1208	G
1	A	1210	A
1	A	1220	G

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1226	U
1	A	1227	G
1	A	1228	G
1	A	1250	G
1	A	1270	C
1	A	1313	A
1	A	1325	A
1	A	1339	A
1	A	1340	A
1	A	1341	U
1	A	1363	G
1	A	1381	A
1	A	1417	A
1	A	1418	U
1	A	1429	U
1	A	1447	C
1	A	1448	U
1	A	1450	C
1	A	1454	C
1	A	1457	U
1	A	1458	U
1	A	1460	G
1	A	1473	A
1	A	1490	A
1	A	1492	G
1	A	1494	G
1	A	1497	G
1	A	1500	U
1	A	1562	A
1	A	1582	U
1	A	1590	C
1	A	1594	G
1	A	1595	U
1	A	1602	U
1	A	1606	A
1	A	1625	C
1	A	1628	G
1	A	1629	C
1	A	1630	G
1	A	1653	A
1	A	1661	A
1	A	1677	A

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	1678	G
1	A	1680	A
1	A	1698	G
1	A	1711	G
1	A	1785	G
1	A	1787	G
1	A	1805	G
1	A	1812	A
1	A	1815	A
1	A	1828	G
1	A	1848	A
1	A	1861	C
1	A	1945	A
1	A	1953	C
1	A	2011	U
1	A	2021	G
1	A	2050	G
1	A	2051	U
1	A	2059	A
1	A	2062	A
1	A	2064	G
1	A	2091	A
1	A	2138	U
1	A	2139	G
1	A	2147	U
1	A	2154	G
1	A	2155	A
1	A	2160	U
1	A	2162	G
1	A	2186	G
1	A	2201	U
1	A	2207	C
1	A	2252	A
1	A	2267	G
1	A	2451	C
1	A	2468	A
1	A	2484	G
1	A	2506	C
1	A	2510	G
1	A	2525	C
1	A	2526	A
1	A	2548	U

Continued on next page...

Continued from previous page...

Mol	Chain	Res	Type
1	A	2559	U
1	A	2562	U
1	A	2571	A
1	A	2605	G
1	A	2613	U
1	A	2639	C
1	A	2656	G
1	A	2658	A
1	A	2718	U
1	A	2742	C
1	A	2769	A
1	A	2779	A
1	A	2780	G
1	A	2785	U
1	A	2791	U
1	A	2807	A
1	A	2808	U
1	A	2818	C
1	A	2820	U
1	A	2826	A
1	A	2827	A
1	A	2831	A
1	A	2833	U
1	A	2844	A
1	A	2845	A
1	A	2858	U
1	A	2874	G
1	A	2898	A
1	A	2909	U
1	A	2917	G
1	A	2918	G

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 monosaccharides in this entry.

5.6 Ligand geometry

There are no ligands in this entry.

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

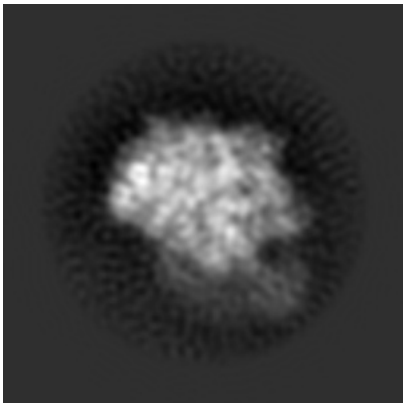
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-5643. These allow visual inspection of the internal detail of the map and identification of artifacts.

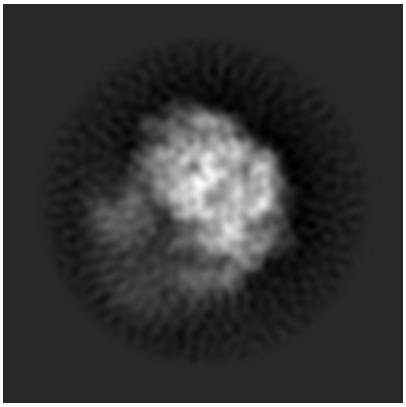
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

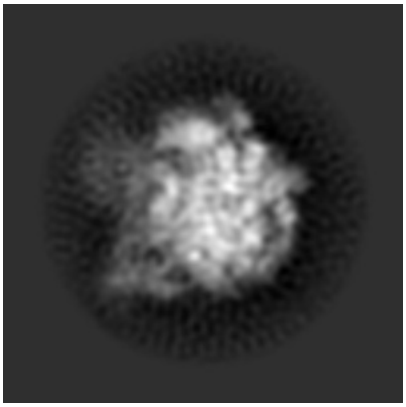
6.1.1 Primary map



X



Y

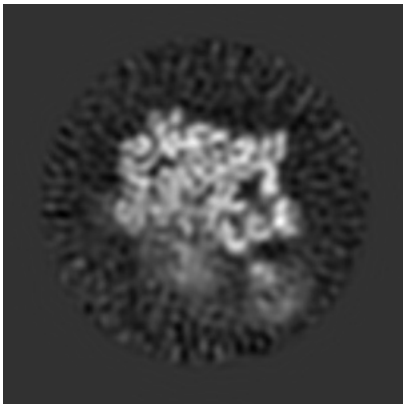


Z

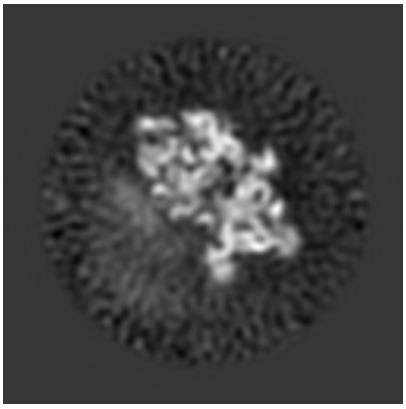
The images above show the map projected in three orthogonal directions.

6.2 Central slices

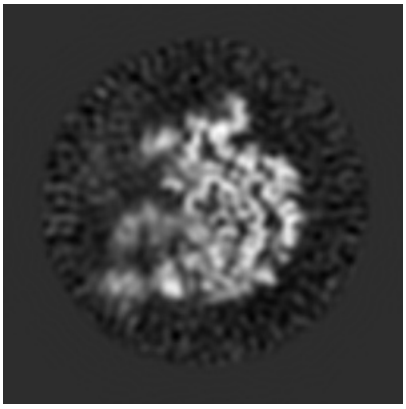
6.2.1 Primary map



X Index: 128



Y Index: 128

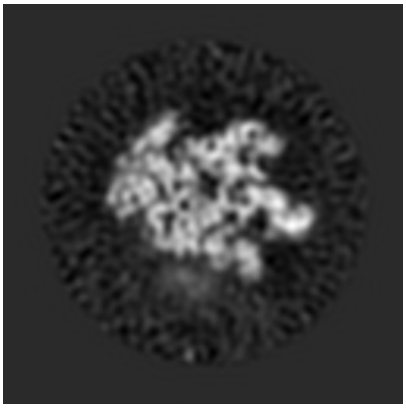


Z Index: 128

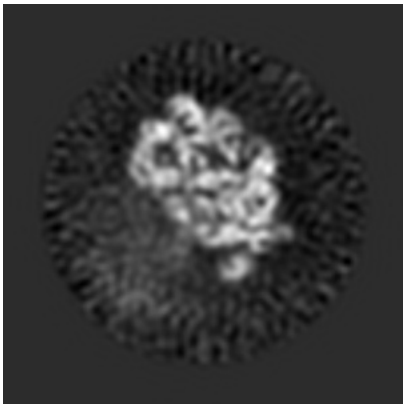
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map



X Index: 140



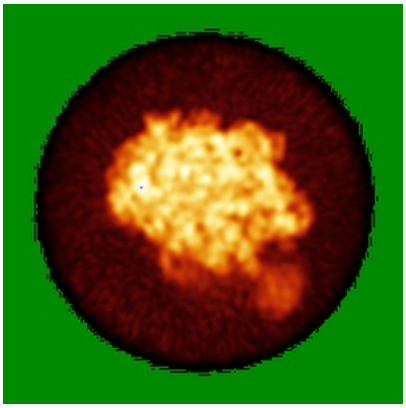
Y Index: 139

Z Index: 148

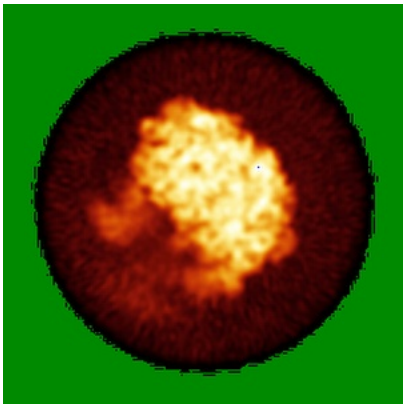
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

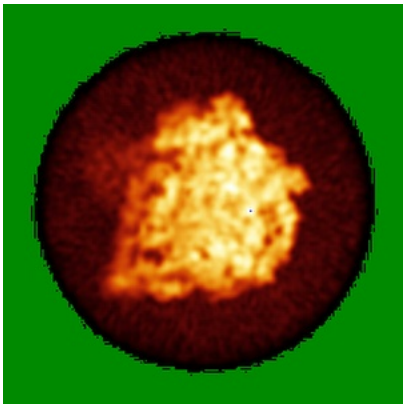
6.4.1 Primary map



X



Y

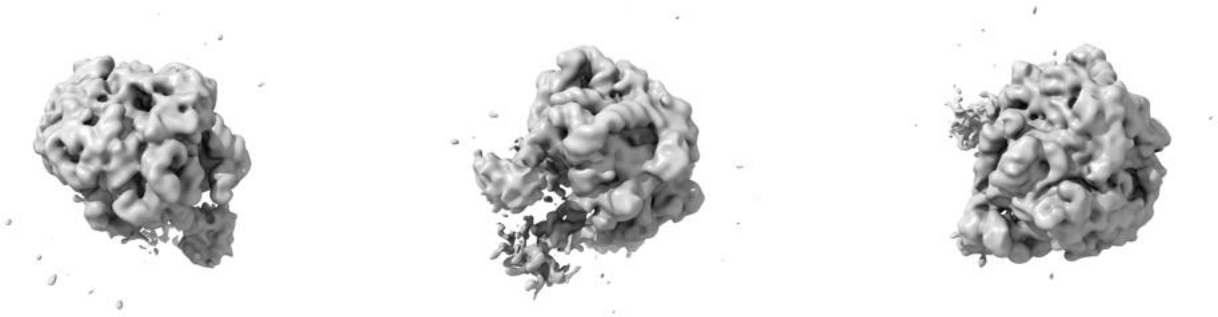


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 2.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

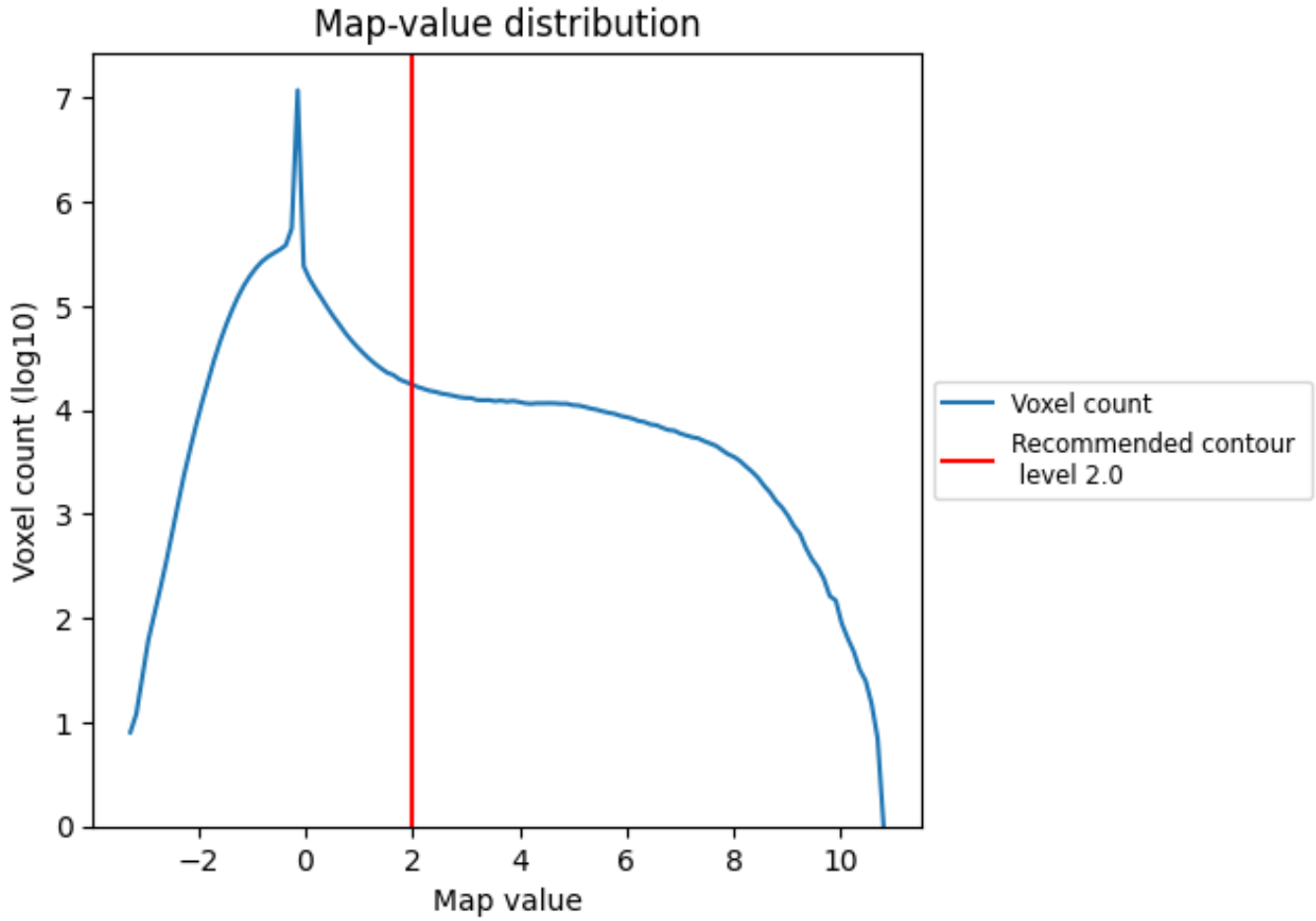
6.6 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

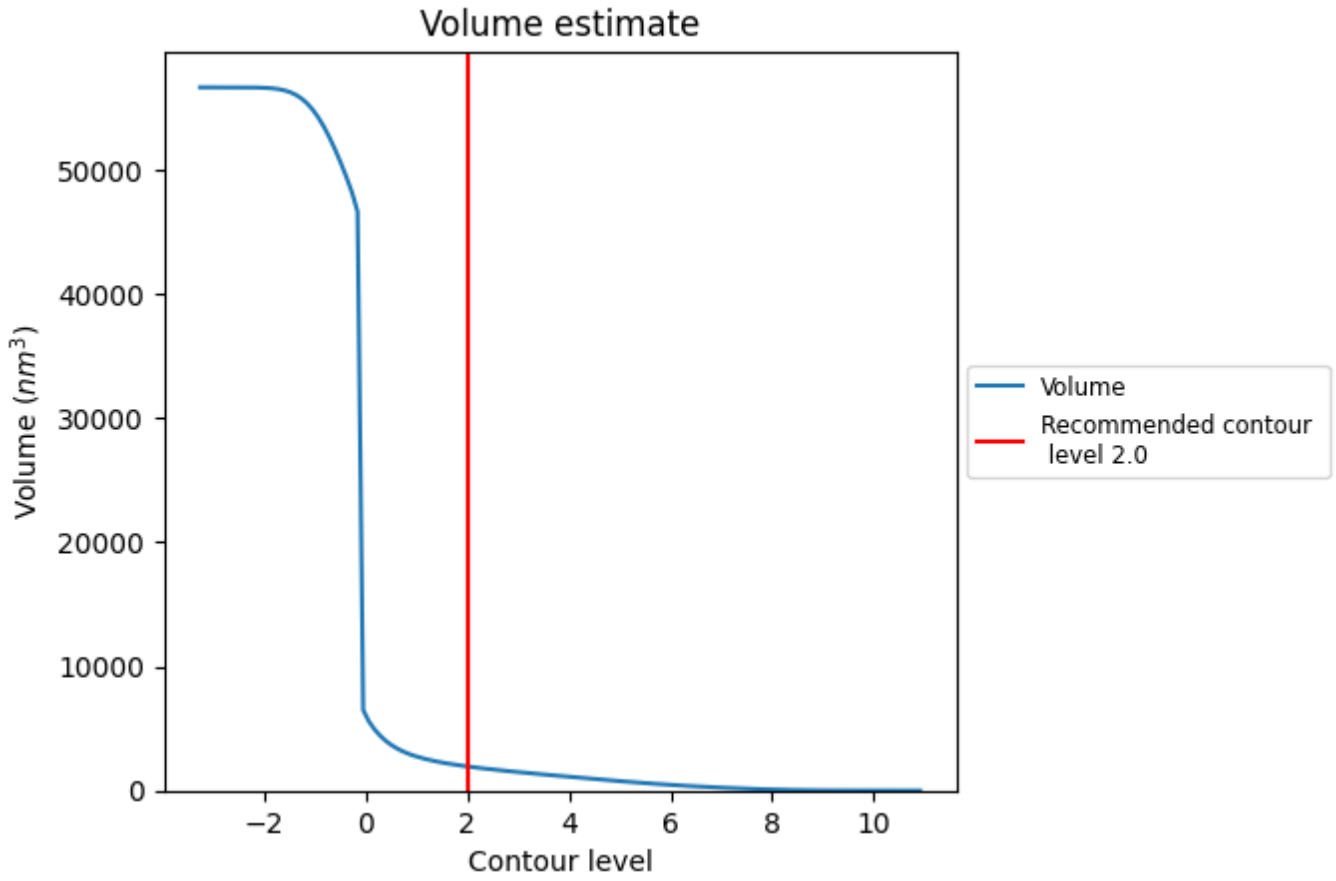
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

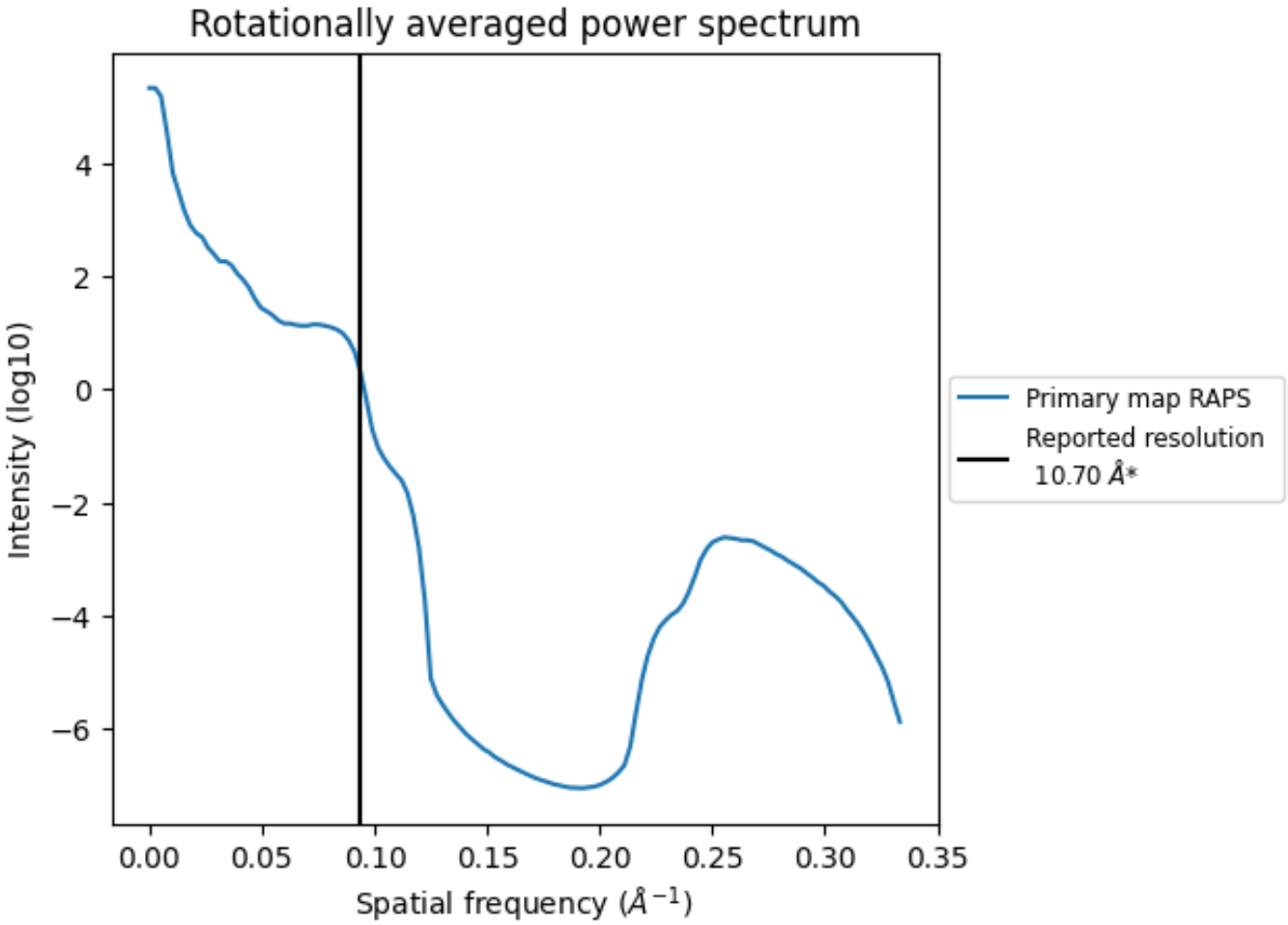
7.2 Volume estimate



The volume at the recommended contour level is 1942 nm^3; this corresponds to an approximate mass of 1754 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.093 Å^{-1}

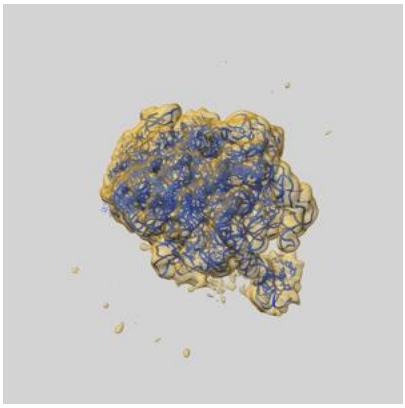
8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

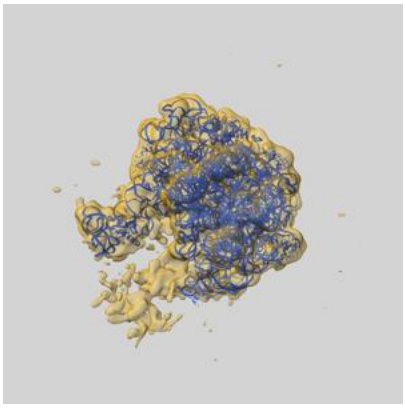
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-5643 and PDB model 3J3W. Per-residue inclusion information can be found in section 3 on page 7.

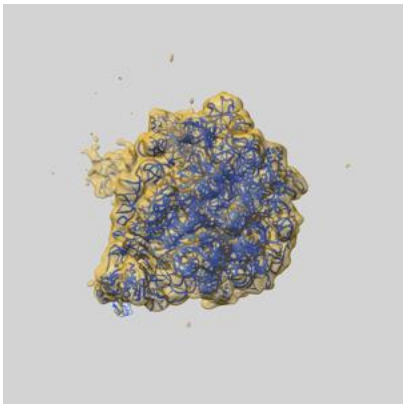
9.1 Map-model overlay



X



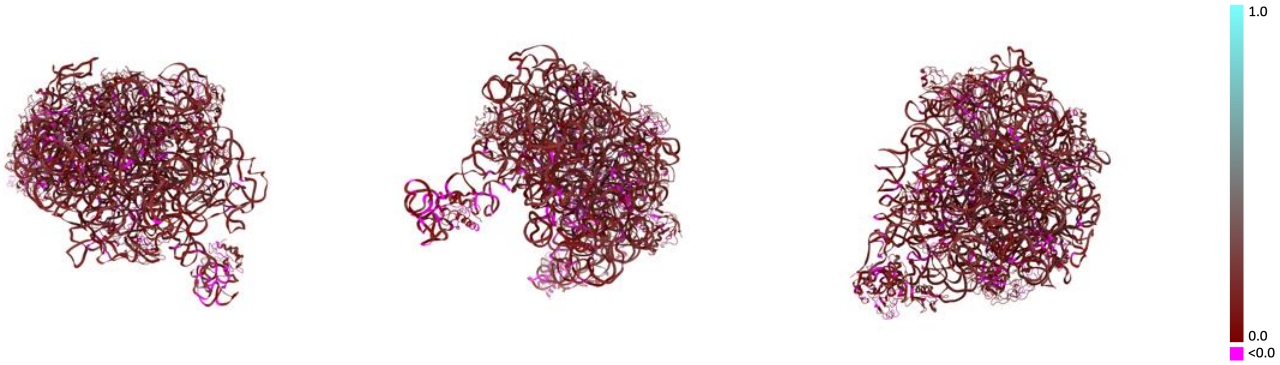
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 2.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

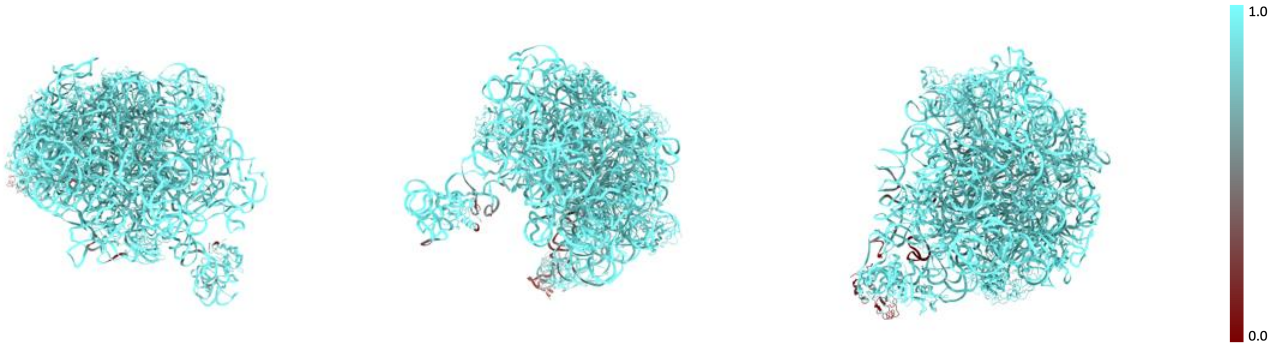
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

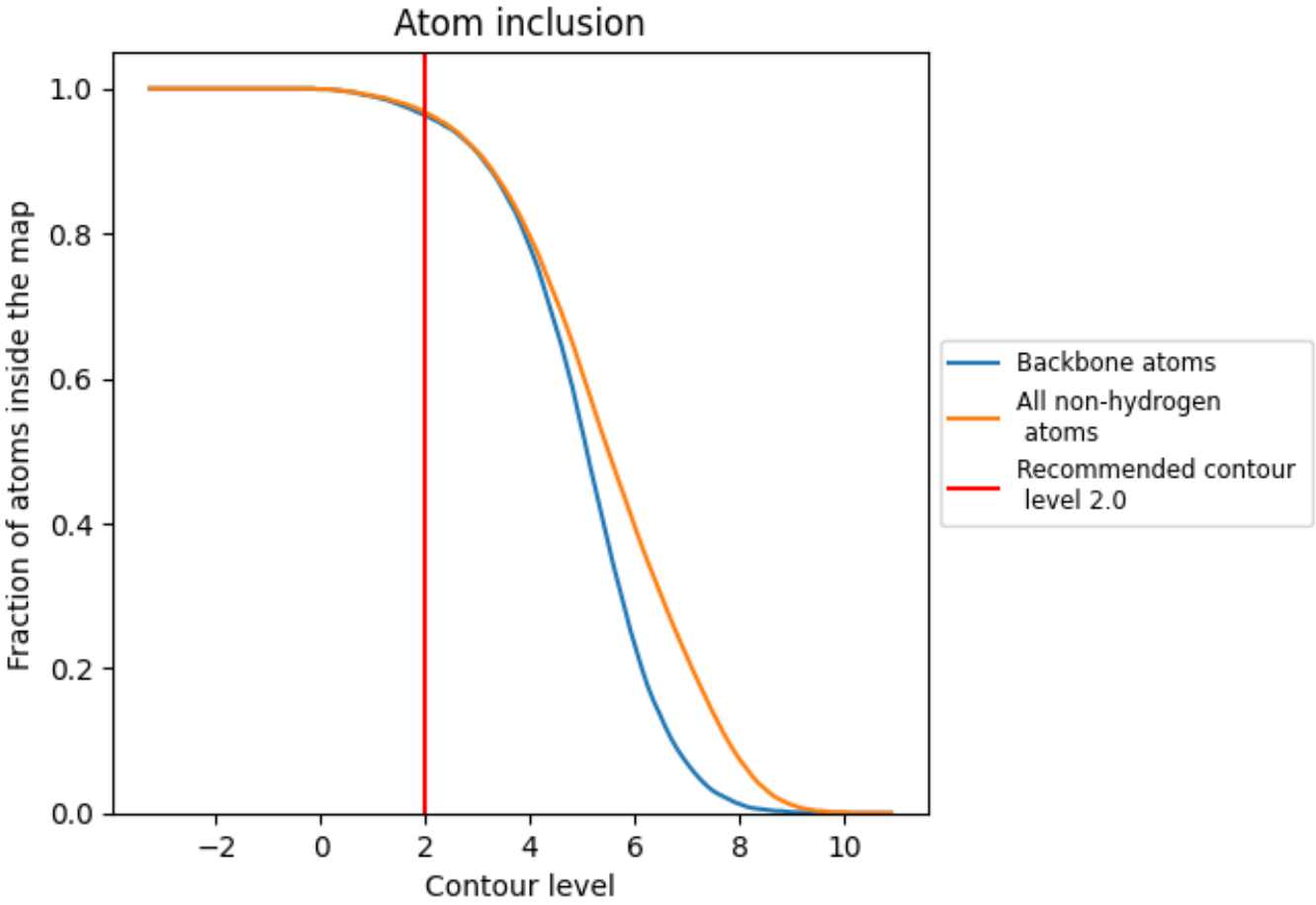
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (2.0).

9.4 Atom inclusion (i)



At the recommended contour level, 96% of all backbone atoms, 97% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (2.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.9670	0.1190
0	0.9950	0.0450
2	0.9940	0.0670
5	0.9410	0.0570
6	0.3720	0.0390
A	0.9730	0.1310
C	0.9740	0.0650
D	0.9890	0.0800
E	0.9770	0.0850
G	0.9850	0.1250
J	0.9940	0.0970
K	0.9960	0.1000
L	0.9470	0.0560
N	0.9940	0.0700
P	0.9890	0.1030
Q	0.9920	0.0770
R	0.9960	0.0960
S	0.9790	0.0910
T	0.9840	0.0830
U	0.9990	0.0700
X	0.9980	0.1510