



# Full wwPDB X-ray Structure Validation Report ⓘ

Aug 30, 2020 – 06:32 PM BST

PDB ID : 4U4O  
Title : Crystal structure of Geneticin bound to the yeast 80S ribosome  
Authors : Garreau de Loubresse, N.; Prokhorova, I.; Yusupova, G.; Yusupov, M.  
Deposited on : 2014-07-24  
Resolution : 3.60 Å(reported)

This is a Full wwPDB X-ray Structure Validation Report for a publicly released PDB entry.

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : **FAILED**  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.13

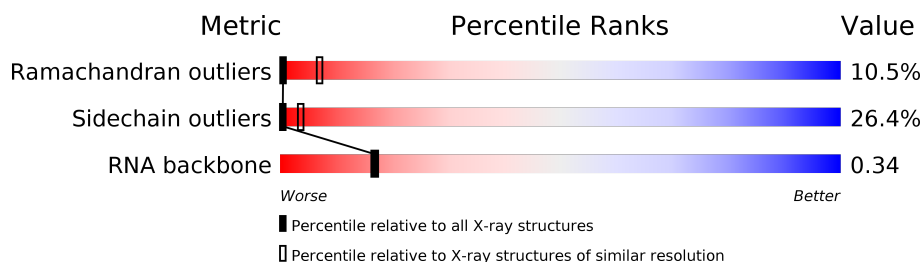
# 1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

## *X-RAY DIFFRACTION*

The reported resolution of this entry is 3.60 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
Ramachandran outliers	138981	1307 (3.70-3.50)
Sidechain outliers	138945	1307 (3.70-3.50)
RNA backbone	3102	1017 (4.20-3.00)


























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

Note EDS failed to run properly.

Mol	Chain	Length	Quality of chain
1	2	1800	<div> <div>37%</div> <div>46%</div> <div>14%</div> <div>.</div> </div>
1	6	1800	<div> <div>26%</div> <div>52%</div> <div>22%</div> <div>.</div> </div>
2	S0	251	<div> <div>55%</div> <div>25%</div> <div>.</div> <div>18%</div> </div>
2	s0	251	<div> <div>54%</div> <div>25%</div> <div>.</div> <div>18%</div> </div>
3	S1	254	<div> <div>55%</div> <div>27%</div> <div>.</div> <div>16%</div> </div>
3	s1	254	<div> <div>59%</div> <div>24%</div> <div>.</div> <div>15%</div> </div>
4	S2	253	<div> <div>59%</div> <div>24%</div> <div>.</div> <div>14%</div> </div>
4	s2	253	<div> <div>54%</div> <div>29%</div> <div>.</div> <div>14%</div> </div>


























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Mol	Chain	Length	Quality of chain
5	S3	239	
5	s3	239	
6	S4	260	
6	s4	260	
7	S5	224	
7	s5	224	
8	S6	236	
8	s6	236	
9	S7	189	
9	s7	189	
10	S8	200	
10	s8	200	
11	S9	196	
11	s9	196	
12	C0	105	
12	c0	105	
13	C1	155	
13	c1	155	
14	C2	142	
14	c2	142	
15	C3	150	
15	c3	150	
16	C4	136	
16	c4	136	
17	C5	141	












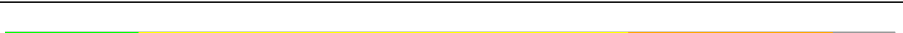


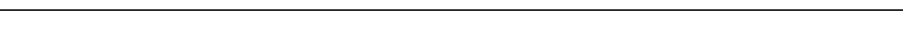
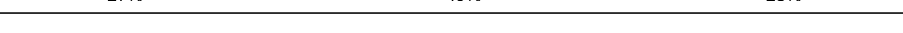
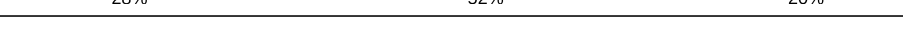


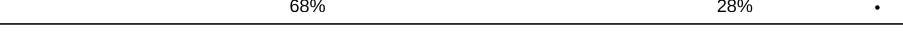





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Mol	Chain	Length	Quality of chain
17	c5	141	
18	C6	142	
18	c6	142	
19	C7	136	
19	c7	136	
20	C8	145	
20	c8	145	
21	C9	143	
21	c9	143	
22	D0	120	
22	d0	120	
23	D1	87	
23	d1	87	
24	D2	129	
24	d2	129	
25	D3	144	
25	d3	144	
26	D4	134	
26	d4	134	
27	D5	107	
27	d5	107	
28	D6	97	
28	d6	97	
29	D7	81	
29	d7	81	















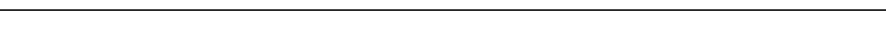




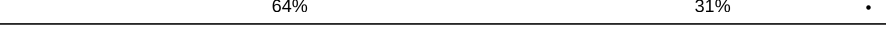





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Mol	Chain	Length	Quality of chain
30	D8	66	
30	d8	66	
31	D9	55	
31	d9	55	
32	E0	60	
33	E1	76	
34	SR	318	
34	sR	318	
35	SM	273	
35	sM	273	
36	1	3396	
36	5	3396	
37	3	121	
37	7	121	
38	4	158	
38	8	158	
39	L2	253	
39	l2	253	
40	L3	386	
40	l3	386	
41	L4	361	
41	l4	361	
42	L5	296	
42	l5	296	
43	L6	175	















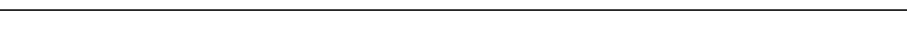




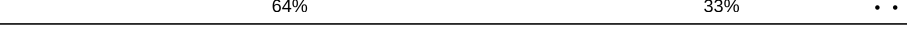





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Mol	Chain	Length	Quality of chain
43	l6	175	
44	L7	243	
44	l7	243	
45	L8	255	
45	l8	255	
46	L9	191	
46	l9	191	
47	M0	220	
47	m0	220	
48	M1	173	
48	m1	173	
49	M3	198	
49	m3	198	
50	M4	137	
50	m4	137	
51	M5	203	
51	m5	203	
52	M6	198	
52	m6	198	
53	M7	183	
53	m7	183	
54	M8	185	
54	m8	185	
55	M9	188	
55	m9	188	















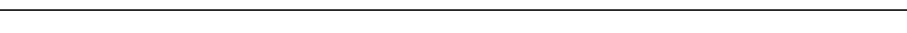




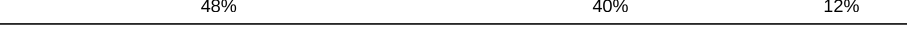





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Mol	Chain	Length	Quality of chain
56	N0	172	
56	n0	172	
57	N1	159	
57	n1	159	
58	N2	120	
58	n2	120	
59	N3	136	
59	n3	136	
60	N4	155	
60	n4	155	
61	N5	141	
61	n5	141	
62	N6	126	
62	n6	126	
63	N7	135	
63	n7	135	
64	N8	148	
64	n8	148	
65	N9	58	
65	n9	58	
66	O0	104	
66	o0	104	
67	O1	112	
67	o1	112	
68	O2	129	

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Mol	Chain	Length	Quality of chain
68	o2	129	
69	O3	106	
69	o3	106	
70	O4	119	
70	o4	119	
71	O5	119	
71	o5	119	
72	O6	99	
72	o6	99	
73	O7	87	
73	o7	87	
74	O8	77	
74	o8	77	
75	O9	50	
75	o9	50	
76	Q0	52	
76	q0	52	
77	Q1	25	
77	q1	25	
78	Q2	105	
78	q2	105	
79	Q3	91	
79	q3	91	
80	e0	62	
81	e1	76	

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Mol	Chain	Length	Quality of chain
82	m2	160	<div><div></div><div>92%</div><div></div><div>6%</div></div>
83	p0	311	<div><div></div><div>36%</div><div>9%</div><div></div><div>54%</div></div>
84	p1	47	<div><div></div><div>100%</div></div>
85	p2	46	<div><div></div><div>100%</div></div>

## 2 Entry composition

There are 89 unique types of molecules in this entry. The entry contains 411095 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called 18S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	2	1750	Total	C	N	O	P	0	0	0
			37283	16668	6591	12274	1750			
1	6	1791	Total	C	N	O	P	0	0	0
			38149	17055	6738	12565	1791			

- Molecule 2 is a protein called 40S ribosomal protein S0-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	S0	206	Total	C	N	O	S	0	0	0
			1577	1014	278	283	2			
2	s0	206	Total	C	N	O	S	0	0	0
			1583	1017	281	283	2			

- Molecule 3 is a protein called 40S ribosomal protein S1-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	S1	214	Total	C	N	O	S	0	0	0
			1709	1084	310	311	4			
3	s1	216	Total	C	N	O	S	0	0	0
			1722	1091	312	315	4			

- Molecule 4 is a protein called 40S ribosomal protein S2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	S2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			
4	s2	217	Total	C	N	O	S	0	0	0
			1635	1047	289	297	2			

- Molecule 5 is a protein called 40S ribosomal protein S3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	S3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			
5	s3	223	Total	C	N	O	S	0	0	0
			1734	1101	313	314	6			

- Molecule 6 is a protein called 40S ribosomal protein S4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	S4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			
6	s4	260	Total	C	N	O	S	0	0	0
			2068	1316	389	360	3			

- Molecule 7 is a protein called 40S ribosomal protein S5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	S5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			
7	s5	206	Total	C	N	O	S	0	0	0
			1609	1007	300	299	3			

- Molecule 8 is a protein called 40S ribosomal protein S6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	S6	226	Total	C	N	O	S	0	0	0
			1799	1129	346	321	3			
8	s6	218	Total	C	N	O	S	0	0	0
			1755	1102	337	313	3			

- Molecule 9 is a protein called 40S ribosomal protein S7-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	S7	184	Total	C	N	O	0	0	0
			1481	951	265	265			
9	s7	186	Total	C	N	O	0	0	0
			1491	957	267	267			

- Molecule 10 is a protein called 40S ribosomal protein S8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	S8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	s8	188	Total	C	N	O	S	0	0	0
			1489	925	298	264	2			

- Molecule 11 is a protein called 40S ribosomal protein S9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	S9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			
11	s9	185	Total	C	N	O	S	0	0	0
			1494	943	289	261	1			

- Molecule 12 is a protein called 40S ribosomal protein S10-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	C0	96	Total	C	N	O	S	0	0	0
			773	500	126	145	2			
12	c0	96	Total	C	N	O	S	0	0	0
			762	491	125	144	2			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C0	89	ALA	GLY	conflict	UNP Q08745
c0	89	ALA	GLY	conflict	UNP Q08745

- Molecule 13 is a protein called 40S ribosomal protein S11-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	C1	155	Total	C	N	O	S	0	0	0
			1214	775	230	206	3			
13	c1	146	Total	C	N	O	S	0	0	0
			1168	747	221	197	3			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C1	147	ALA	GLY	conflict	UNP P0CX47
c1	147	ALA	GLY	conflict	UNP P0CX47

- Molecule 14 is a protein called 40S ribosomal protein S12.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	C2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			
14	c2	124	Total	C	N	O	S	0	0	0
			892	562	156	172	2			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C2	104	ALA	GLY	conflict	UNP P48589
C2	110	ALA	GLY	conflict	UNP P48589
c2	104	ALA	GLY	conflict	UNP P48589
c2	110	ALA	GLY	conflict	UNP P48589

- Molecule 15 is a protein called 40S ribosomal protein S13.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	C3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			
15	c3	150	Total	C	N	O	S	0	0	0
			1192	759	224	207	2			

- Molecule 16 is a protein called 40S ribosomal protein S14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	C4	127	Total	C	N	O	S	0	0	0
			891	545	182	163	1			
16	c4	128	Total	C	N	O	S	0	0	0
			949	582	188	176	3			

- Molecule 17 is a protein called 40S ribosomal protein S15.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	C5	124	Total	C	N	O	S	0	0	0
			977	622	182	166	7			
17	c5	135	Total	C	N	O	S	0	0	0
			1039	658	196	178	7			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C5	137	SER	ARG	conflict	UNP Q01855
c5	137	SER	ARG	conflict	UNP Q01855

- Molecule 18 is a protein called 40S ribosomal protein S16-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	C6	141	Total	C	N	O	0	0	0
			1105	708	203	194			
18	c6	142	Total	C	N	O	0	0	0
			1111	711	204	196			

- Molecule 19 is a protein called 40S ribosomal protein S17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	C7	120	Total	C	N	O	S	0	0	0
			926	577	177	170	2			
19	c7	117	Total	C	N	O	S	0	0	0
			906	563	174	167	2			

- Molecule 20 is a protein called 40S ribosomal protein S18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	C8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			
20	c8	145	Total	C	N	O	S	0	0	0
			1192	743	237	210	2			

- Molecule 21 is a protein called 40S ribosomal protein S19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
21	C9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			
21	c9	143	Total	C	N	O	S	0	0	0
			1112	694	208	208	2			

- Molecule 22 is a protein called 40S ribosomal protein S20.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
22	D0	107	Total	C	N	O	S	0	0	0
			855	539	156	159	1			
22	d0	110	Total	C	N	O	S	0	0	0
			882	554	161	166	1			

- Molecule 23 is a protein called 40S ribosomal protein S21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
23	D1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			
23	d1	87	Total	C	N	O	S	0	0	0
			684	420	125	137	2			

- Molecule 24 is a protein called 40S ribosomal protein S22-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
24	D2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			
24	d2	129	Total	C	N	O	S	0	0	0
			1021	650	188	180	3			

- Molecule 25 is a protein called 40S ribosomal protein S23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
25	D3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			
25	d3	144	Total	C	N	O	S	0	0	0
			1121	708	220	191	2			

- Molecule 26 is a protein called 40S ribosomal protein S24-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
26	D4	134	Total	C	N	O	0	0	0
			1073	676	208	189			
26	d4	134	Total	C	N	O	0	0	0
			1073	676	208	189			

- Molecule 27 is a protein called 40S ribosomal protein S25-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
27	D5	70	Total	C	N	O	0	0	0
			563	360	104	99			
27	d5	69	Total	C	N	O	0	0	0
			558	357	103	98			

- Molecule 28 is a protein called 40S ribosomal protein S26-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	D6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
28	d6	97	Total	C	N	O	S	0	0	0
			769	475	160	129	5			

- Molecule 29 is a protein called 40S ribosomal protein S27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
29	D7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			
29	d7	81	Total	C	N	O	S	0	0	0
			610	382	110	113	5			

- Molecule 30 is a protein called 40S ribosomal protein S28-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
30	D8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			
30	d8	63	Total	C	N	O	S	0	0	0
			497	306	99	91	1			

- Molecule 31 is a protein called 40S ribosomal protein S29-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
31	D9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			
31	d9	53	Total	C	N	O	S	0	0	0
			442	274	92	72	4			

- Molecule 32 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
32	E0	60	Total	C	N	O	S	0	0	0
			475	299	98	77	1			

- Molecule 33 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
33	E1	71	Total	C	N	O	S	0	0	0
			566	362	106	94	4			

- Molecule 34 is a protein called Guanine nucleotide-binding protein subunit beta-like protein.



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
34	SR	318	Total	C	N	O	S	0	0	0
			2441	1544	419	470	8			
34	sR	318	Total	C	N	O	S	0	0	0
			2442	1544	418	472	8			

- Molecule 35 is a protein called Suppressor protein STM1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
35	SM	159	Total	C	N	O		0	0	0
			1104	652	221	231				
35	sM	104	Total	C	N	O		0	0	0
			679	402	140	137				

- Molecule 36 is a RNA chain called 25S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
36	1	3149	Total	C	N	O	P	0	0	0
			67355	30086	12142	21978	3149			
36	5	3150	Total	C	N	O	P	0	0	0
			67376	30095	12145	21987	3149			

- Molecule 37 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
37	3	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			
37	7	121	Total	C	N	O	P	0	0	0
			2579	1152	461	845	121			

- Molecule 38 is a RNA chain called 5.8S ribosomal RNA.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
38	4	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			
38	8	158	Total	C	N	O	P	0	0	0
			3353	1500	586	1109	158			

- Molecule 39 is a protein called 60S ribosomal protein L2-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	L2	252	Total	C	N	O	S	0	0	0
			1914	1191	388	334	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
39	12	252	Total	C	N	O	S	0	0	0
			1912	1190	388	333	1			

- Molecule 40 is a protein called 60S ribosomal protein L3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
40	L3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			
40	l3	386	Total	C	N	O	S	0	0	0
			3075	1950	584	533	8			

- Molecule 41 is a protein called 60S ribosomal protein L4-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
41	L4	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			
41	14	361	Total	C	N	O	S	0	0	0
			2748	1729	522	494	3			

- Molecule 42 is a protein called 60S ribosomal protein L5.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
42	L5	296	Total	C	N	O	S	0	0	0
			2375	1501	414	458	2			
42	15	294	Total	C	N	O	S	0	0	0
			2359	1489	412	456	2			

- Molecule 43 is a protein called 60S ribosomal protein L6-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
43	L6	156	Total	C	N	O	S	0	0	0
			1239	800	222	216	1			
43	16	157	Total	C	N	O	S	0	0	0
			1248	806	224	217	1			

- Molecule 44 is a protein called 60S ribosomal protein L7-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
44	L7	222	Total	C	N	O	S	0	0	0
			1784	1151	324	308	1			
44	17	223	Total	C	N	O	S	0	0	0
			1791	1155	325	310	1			

- Molecule 45 is a protein called 60S ribosomal protein L8-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
45	L8	233	Total	C	N	O	S	0	0	0
			1804	1151	323	327	3			
45	18	231	Total	C	N	O	S	0	0	0
			1763	1130	316	314	3			

- Molecule 46 is a protein called 60S ribosomal protein L9-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
46	L9	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			
46	19	191	Total	C	N	O	S	0	0	0
			1518	963	274	277	4			

- Molecule 47 is a protein called 60S ribosomal protein L10.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
47	M0	211	Total	C	N	O	S	0	0	0
			1705	1083	322	294	6			
47	m0	213	Total	C	N	O	S	0	0	0
			1722	1094	325	297	6			

- Molecule 48 is a protein called 60S ribosomal protein L11-B.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
48	M1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			
48	m1	169	Total	C	N	O	S	0	0	0
			1353	847	253	249	4			

- Molecule 49 is a protein called 60S ribosomal protein L13-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
49	M3	193	Total	C	N	O	0	0	0
			1543	962	315	266			
49	m3	194	Total	C	N	O	0	0	0
			1548	965	316	267			

- Molecule 50 is a protein called 60S ribosomal protein L14-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
50	M4	136	Total	C	N	O	S	0	0	0
			1053	675	199	177	2			
50	m4	137	Total	C	N	O	S	0	0	0
			1059	678	200	179	2			

- Molecule 51 is a protein called 60S ribosomal protein L15-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
51	M5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			
51	m5	203	Total	C	N	O	S	0	0	0
			1720	1077	361	281	1			

- Molecule 52 is a protein called 60S ribosomal protein L16-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
52	M6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			
52	m6	197	Total	C	N	O	S	0	0	0
			1555	1003	289	262	1			

- Molecule 53 is a protein called 60S ribosomal protein L17-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
53	M7	183	Total	C	N	O		0	0	0
			1420	882	281	257				
53	m7	155	Total	C	N	O		0	0	0
			1227	764	238	225				

- Molecule 54 is a protein called 60S ribosomal protein L18-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
54	M8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			
54	m8	185	Total	C	N	O	S	0	0	0
			1441	908	290	241	2			

- Molecule 55 is a protein called 60S ribosomal protein L19-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
55	M9	188	Total	C	N	O		0	0	0
			1521	935	326	260				

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
55	m9	188	Total	C	N	O	0	0	0
			1521	935	326	260			

- Molecule 56 is a protein called 60S ribosomal protein L20-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
56	N0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			
56	n0	172	Total	C	N	O	S	0	0	0
			1445	930	267	244	4			

- Molecule 57 is a protein called 60S ribosomal protein L21-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
57	N1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			
57	n1	159	Total	C	N	O	S	0	0	0
			1276	805	246	221	4			

- Molecule 58 is a protein called 60S ribosomal protein L22-A.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
58	N2	100	Total	C	N	O	0	0	0
			796	516	131	149			
58	n2	98	Total	C	N	O	0	0	0
			778	505	127	146			

- Molecule 59 is a protein called 60S ribosomal protein L23-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
59	N3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			
59	n3	136	Total	C	N	O	S	0	0	0
			1003	628	189	179	7			

- Molecule 60 is a protein called 60S ribosomal protein L24-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
60	N4	98	Total	C	N	O	S	0	0	0
			699	443	137	118	1			
60	n4	135	Total	C	N	O	S	0	0	0
			1038	651	206	180	1			

- Molecule 61 is a protein called 60S ribosomal protein L25.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
61	N5	121	Total	C	N	O	S	0	0	0
			964	620	169	173	2			
61	n5	120	Total	C	N	O	S	0	0	0
			959	617	168	172	2			

- Molecule 62 is a protein called 60S ribosomal protein L26-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
62	N6	126	Total	C	N	O		0	0	0
			993	625	192	176				
62	n6	126	Total	C	N	O		0	0	0
			993	625	192	176				

- Molecule 63 is a protein called 60S ribosomal protein L27-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
63	N7	135	Total	C	N	O		0	0	0
			1092	710	202	180				
63	n7	135	Total	C	N	O		0	0	0
			1092	710	202	180				

- Molecule 64 is a protein called 60S ribosomal protein L28.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
64	N8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			
64	n8	148	Total	C	N	O	S	0	0	0
			1173	749	231	190	3			

- Molecule 65 is a protein called 60S ribosomal protein L29.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
65	N9	58	Total	C	N	O		0	0	0
			462	289	100	73				
65	n9	58	Total	C	N	O		0	0	0
			462	289	100	73				

- Molecule 66 is a protein called 60S ribosomal protein L30.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
66	O0	97	Total	C	N	O	S	0	0	0
			743	479	124	139	1			
66	o0	100	Total	C	N	O	S	0	0	0
			767	492	128	146	1			

- Molecule 67 is a protein called 60S ribosomal protein L31-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
67	O1	109	Total	C	N	O	S	0	0	0
			876	556	167	152	1			
67	o1	109	Total	C	N	O	S	0	0	0
			883	559	167	156	1			

- Molecule 68 is a protein called 60S ribosomal protein L32.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
68	O2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			
68	o2	127	Total	C	N	O	S	0	0	0
			1020	647	205	167	1			

- Molecule 69 is a protein called 60S ribosomal protein L33-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
69	O3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			
69	o3	106	Total	C	N	O	S	0	0	0
			850	540	165	144	1			

- Molecule 70 is a protein called 60S ribosomal protein L34-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
70	O4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			
70	o4	112	Total	C	N	O	S	0	0	0
			880	545	179	152	4			

There are 22 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
O4	110	GLU	-	expression tag	UNP P87262
O4	111	ALA	-	expression tag	UNP P87262
O4	112	ALA	-	expression tag	UNP P87262

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Chain	Residue	Modelled	Actual	Comment	Reference
O4	113	LYS	-	expression tag	UNP P87262
O4	114	SER	-	expression tag	UNP P87262
O4	115	GLU	-	expression tag	UNP P87262
O4	116	LYS	-	expression tag	UNP P87262
O4	117	LYS	-	expression tag	UNP P87262
O4	118	ALA	-	expression tag	UNP P87262
O4	119	LYS	-	expression tag	UNP P87262
O4	120	LYS	-	expression tag	UNP P87262
o4	110	GLU	-	expression tag	UNP P87262
o4	111	ALA	-	expression tag	UNP P87262
o4	112	ALA	-	expression tag	UNP P87262
o4	113	LYS	-	expression tag	UNP P87262
o4	114	SER	-	expression tag	UNP P87262
o4	115	GLU	-	expression tag	UNP P87262
o4	116	LYS	-	expression tag	UNP P87262
o4	117	LYS	-	expression tag	UNP P87262
o4	118	ALA	-	expression tag	UNP P87262
o4	119	LYS	-	expression tag	UNP P87262
o4	120	LYS	-	expression tag	UNP P87262

- Molecule 71 is a protein called 60S ribosomal protein L35-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
71	O5	119	Total	C	N	O	S	0	0	0
			969	615	186	167	1			
71	o5	119	Total	C	N	O	S	0	0	0
			965	612	185	167	1			

- Molecule 72 is a protein called 60S ribosomal protein L36-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
72	O6	99	Total	C	N	O	S	0	0	0
			771	481	156	132	2			
72	o6	99	Total	C	N	O	S	0	0	0
			770	481	156	131	2			

- Molecule 73 is a protein called 60S ribosomal protein L37-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	O7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
73	o7	87	Total	C	N	O	S	0	0	0
			681	414	148	114	5			

- Molecule 74 is a protein called 60S ribosomal protein L38.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
74	O8	77	Total	C	N	O		0	0	0
			612	391	115	106				
74	o8	77	Total	C	N	O		0	0	0
			608	388	114	106				

- Molecule 75 is a protein called 60S ribosomal protein L39.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
75	O9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			
75	o9	50	Total	C	N	O	S	0	0	0
			436	272	97	65	2			

- Molecule 76 is a protein called Ubiquitin-60S ribosomal protein L40.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
76	Q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			
76	q0	52	Total	C	N	O	S	0	0	0
			417	259	86	67	5			

- Molecule 77 is a protein called 60S ribosomal protein L41-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
77	Q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			
77	q1	25	Total	C	N	O	S	0	0	0
			233	142	63	27	1			

- Molecule 78 is a protein called 60S ribosomal protein L42-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
78	Q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			
78	q2	105	Total	C	N	O	S	0	0	0
			847	534	170	138	5			

- Molecule 79 is a protein called 60S ribosomal protein L43-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
79	Q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			
79	q3	91	Total	C	N	O	S	0	0	0
			694	429	138	121	6			

- Molecule 80 is a protein called 40S ribosomal protein S30-A.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
80	e0	62	Total	C	N	O	S	0	0	0
			491	309	101	80	1			

- Molecule 81 is a protein called Ubiquitin-40S ribosomal protein S31.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
81	e1	76	Total	C	N	O	S	0	0	0
			608	388	117	99	4			

- Molecule 82 is a protein called unknown protein chain m2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
82	m2	150	Total	C	N	O	0	0	0
			750	450	150	150			

- Molecule 83 is a protein called 60S acidic ribosomal protein P0.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
83	p0	143	Total	C	N	O	S	0	0	0
			1076	686	192	195	3			

- Molecule 84 is a protein called unknown protein chain p1.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
84	p1	47	Total	C	N	O	0	0	0
			235	141	47	47			

- Molecule 85 is a protein called unknown protein chain p2.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
85	p2	46	Total	C	N	O	0	0	0
			230	138	46	46			

- Molecule 86 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	L7	2	Total 2	Mg 2	0	0
86	N9	1	Total 1	Mg 1	0	0
86	n8	2	Total 2	Mg 2	0	0
86	o1	1	Total 1	Mg 1	0	0
86	N5	2	Total 2	Mg 2	0	0
86	6	150	Total 150	Mg 150	0	0
86	n4	1	Total 1	Mg 1	0	0
86	m5	2	Total 2	Mg 2	0	0
86	l3	6	Total 6	Mg 6	0	0
86	M1	1	Total 1	Mg 1	0	0
86	d6	1	Total 1	Mg 1	0	0
86	2	124	Total 124	Mg 124	0	0
86	O3	1	Total 1	Mg 1	0	0
86	L4	2	Total 2	Mg 2	0	0
86	l7	2	Total 2	Mg 2	0	0
86	M5	2	Total 2	Mg 2	0	0
86	o0	1	Total 1	Mg 1	0	0
86	S2	2	Total 2	Mg 2	0	0
86	L8	1	Total 1	Mg 1	0	0
86	D3	1	Total 1	Mg 1	0	0
86	o4	1	Total 1	Mg 1	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	M9	1	Total 1	Mg 1	0	0
86	q0	2	Total 2	Mg 2	0	0
86	SM	1	Total 1	Mg 1	0	0
86	c8	1	Total 1	Mg 1	0	0
86	M0	3	Total 3	Mg 3	0	0
86	5	499	Total 499	Mg 499	0	0
86	L5	1	Total 1	Mg 1	0	0
86	O7	1	Total 1	Mg 1	0	0
86	l4	1	Total 1	Mg 1	0	0
86	n9	2	Total 2	Mg 2	0	0
86	1	468	Total 468	Mg 468	0	0
86	s2	1	Total 1	Mg 1	0	0
86	d3	1	Total 1	Mg 1	0	0
86	S8	1	Total 1	Mg 1	0	0
86	l2	1	Total 1	Mg 1	0	0
86	O2	1	Total 1	Mg 1	0	0
86	q3	2	Total 2	Mg 2	0	0
86	o3	2	Total 2	Mg 2	0	0
86	M3	2	Total 2	Mg 2	0	0
86	N3	2	Total 2	Mg 2	0	0
86	N8	4	Total 4	Mg 4	0	0

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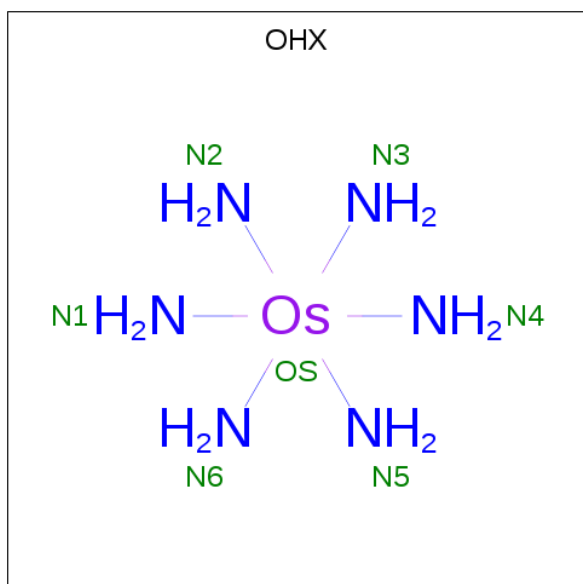
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	4	23	Total 23	Mg 23	0	0
86	D4	1	Total 1	Mg 1	0	0
86	L2	2	Total 2	Mg 2	0	0
86	m1	1	Total 1	Mg 1	0	0
86	l5	3	Total 3	Mg 3	0	0
86	m7	4	Total 4	Mg 4	0	0
86	M7	5	Total 5	Mg 5	0	0
86	m4	1	Total 1	Mg 1	0	0
86	L6	2	Total 2	Mg 2	0	0
86	s1	1	Total 1	Mg 1	0	0
86	l9	1	Total 1	Mg 1	0	0
86	O1	1	Total 1	Mg 1	0	0
86	s8	2	Total 2	Mg 2	0	0
86	o2	1	Total 1	Mg 1	0	0
86	c7	1	Total 1	Mg 1	0	0
86	7	15	Total 15	Mg 15	0	0
86	n3	1	Total 1	Mg 1	0	0
86	q1	1	Total 1	Mg 1	0	0
86	L3	2	Total 2	Mg 2	0	0
86	O5	1	Total 1	Mg 1	0	0
86	m6	3	Total 3	Mg 3	0	0

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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
86	N6	1	Total	Mg	0	0
			1	1		
86	8	17	Total	Mg	0	0
			17	17		
86	m0	1	Total	Mg	0	0
			1	1		
86	M6	1	Total	Mg	0	0
			1	1		
86	N0	1	Total	Mg	0	0
			1	1		
86	3	14	Total	Mg	0	0
			14	14		

- Molecule 87 is osmium (III) hexammine (three-letter code: OHX) (formula:  $\text{H}_{12}\text{N}_6\text{Os}$ ).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		
87	2	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	2	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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			7	6	1		
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
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			7	6	1		
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		
87	1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	1	1	Total	N	Os	0	0
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87	1	1	Total	N	Os	0	0
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87	3	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	3	1	Total	N	Os	0	0
			7	6	1		
87	3	1	Total	N	Os	0	0
			7	6	1		
87	3	1	Total	N	Os	0	0
			7	6	1		
87	3	1	Total	N	Os	0	0
			7	6	1		
87	3	1	Total	N	Os	0	0
			7	6	1		
87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
			7	6	1		
87	4	1	Total	N	Os	0	0
			7	6	1		
87	4	1	Total	N	Os	0	0
			7	6	1		
87	4	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
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87	4	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
87	4	1	Total	N	Os	0	0
			7	6	1		
87	4	1	Total	N	Os	0	0
			7	6	1		
87	4	1	Total	N	Os	0	0
			7	6	1		
87	L3	1	Total	N	Os	0	0
			7	6	1		
87	L3	1	Total	N	Os	0	0
			7	6	1		
87	L3	1	Total	N	Os	0	0
			7	6	1		
87	L4	1	Total	N	Os	0	0
			7	6	1		
87	M0	1	Total	N	Os	0	0
			7	6	1		
87	M5	1	Total	N	Os	0	0
			7	6	1		
87	M6	1	Total	N	Os	0	0
			7	6	1		
87	M7	1	Total	N	Os	0	0
			7	6	1		
87	M9	1	Total	N	Os	0	0
			7	6	1		
87	M9	1	Total	N	Os	0	0
			7	6	1		
87	N9	1	Total	N	Os	0	0
			7	6	1		
87	O1	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	O2	1	Total	N	Os	0	0
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87	O3	1	Total	N	Os	0	0
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87	O7	1	Total	N	Os	0	0
			7	6	1		
87	O7	1	Total	N	Os	0	0
			7	6	1		
87	Q2	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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			7	6	1		
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		
87	6	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	6	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	6	1	Total	N	Os	0	0
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87	6	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	6	1	Total	N	Os	0	0
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87	s1	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	c3	1	Total	N	Os	0	0
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87	c5	1	Total	N	Os	0	0
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87	c8	1	Total	N	Os	0	0
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87	d4	1	Total	N	Os	0	0
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87	d9	1	Total	N	Os	0	0
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87	sR	1	Total	N	Os	0	0
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87	5	1	Total	N	Os	0	0
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	5	1	Total	N	Os	0	0
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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87	5	1	Total	N	Os	0	0
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
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87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
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87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
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			7	6	1		
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			7	6	1		
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			7	6	1		
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			7	6	1		
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			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
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			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	5	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	7	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		

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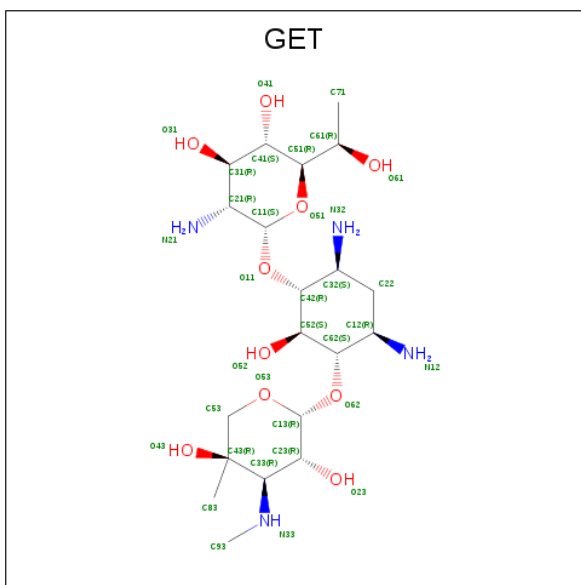
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
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87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
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87	8	1	Total	N	Os	0	0
			7	6	1		
87	8	1	Total	N	Os	0	0
			7	6	1		
87	13	1	Total	N	Os	0	0
			7	6	1		
87	13	1	Total	N	Os	0	0
			7	6	1		
87	14	1	Total	N	Os	0	0
			7	6	1		
87	14	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		
87	15	1	Total	N	Os	0	0
			7	6	1		
87	19	1	Total	N	Os	0	0
			7	6	1		
87	m0	1	Total	N	Os	0	0
			7	6	1		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
87	m0	1	Total	N	Os	0	0
			7	6	1		
87	m1	1	Total	N	Os	0	0
			7	6	1		
87	m4	1	Total	N	Os	0	0
			7	6	1		
87	m5	1	Total	N	Os	0	0
			7	6	1		
87	m7	1	Total	N	Os	0	0
			7	6	1		
87	m9	1	Total	N	Os	0	0
			7	6	1		
87	n3	1	Total	N	Os	0	0
			7	6	1		
87	n9	1	Total	N	Os	0	0
			7	6	1		
87	o3	1	Total	N	Os	0	0
			7	6	1		
87	o7	1	Total	N	Os	0	0
			7	6	1		
87	o9	1	Total	N	Os	0	0
			7	6	1		
87	q1	1	Total	N	Os	0	0
			7	6	1		
87	q2	1	Total	N	Os	0	0
			7	6	1		

- Molecule 88 is GENETICIN (three-letter code: GET) (formula: C<sub>20</sub>H<sub>40</sub>N<sub>4</sub>O<sub>10</sub>).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
88	2	1	Total	C	N	O	0	0
			34	20	4	10		

- Molecule 89 is ZINC ION (three-letter code: ZN) (formula: Zn).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
89	q0	1	Total Zn 1 1	0	0
89	D6	1	Total Zn 1 1	0	0
89	Q2	1	Total Zn 1 1	0	0
89	e1	1	Total Zn 1 1	0	0
89	Q3	1	Total Zn 1 1	0	0
89	D9	1	Total Zn 1 1	0	0
89	E1	1	Total Zn 1 1	0	0
89	Q0	1	Total Zn 1 1	0	0
89	d7	1	Total Zn 1 1	0	0
89	q3	1	Total Zn 1 1	0	0
89	d9	1	Total Zn 1 1	0	0

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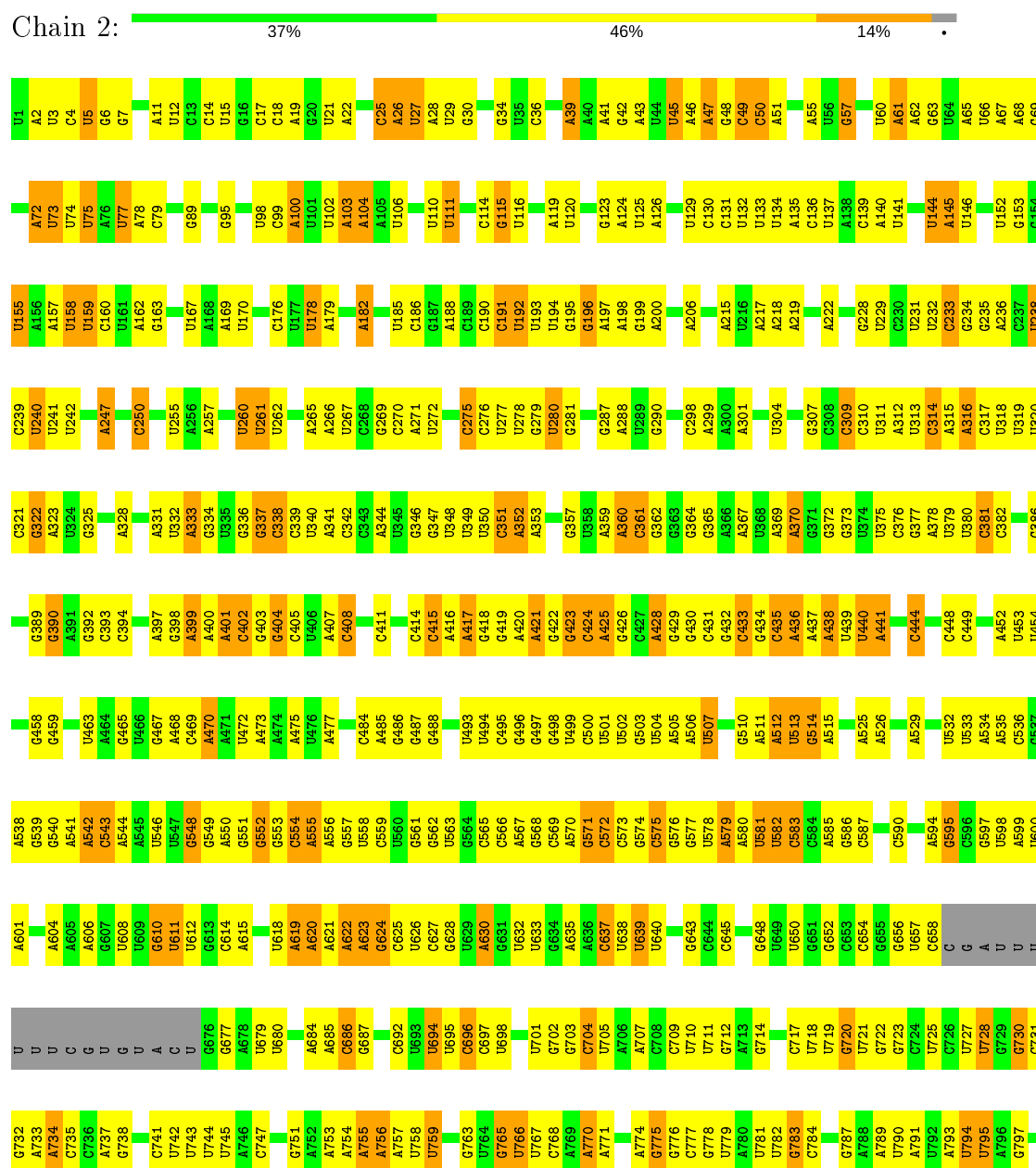
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
89	D7	1	Total 1	Zn 1	0	0
89	d6	1	Total 1	Zn 1	0	0
89	o7	1	Total 1	Zn 1	0	0
89	O7	1	Total 1	Zn 1	0	0
89	q2	1	Total 1	Zn 1	0	0

### 3 Residue-property plots

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. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

Note EDS failed to run properly.

#### • Molecule 1: 18S ribosomal RNA



G1751	U1752	A1753	A1754	A1755	A1756	G1757	U1758	U1759	G1760	G1761	A1762	G1763	G1764	A1765	A1766	G1767	G1768	U1769	U1770	U1771	C1772	C1773	G1774	U1775	A1776	G1777	G1778	U1779	G1780	A1781	A1782	C1783	C1784	U1785	G1786	C1787	A1788	G1789	A1790	A1791	G1792	G1793	A1794	U1795	C1796	A1797	U1798	U	A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
C1619	C1620	C1623	C1624	C1625	A1631	C1632	G1633	C1634	A1635	G1636	C1637	C1638	A1639	C1640	C1641	C1642	C1643	C1644	G1645	C1646	U1647	A1648	A1649	U1650	A1651	C1652	C1653	A1654	A1655	U1656	U1657	C1658	A1659	A1660	U1661	G1662	C1663	C1664	U1665	U1666	A1667	G1668	U1669	G1670	A1671	G1672	A1673	C1674	C1675	G1679	G1682	C1683	U1684	G1685	C																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
A1475	G1476	G1477	G1478	A1479	G1480	C1481	A1482	A1483	G1484	C1485	G1486	U1489	C1490	U1491	A1492	A1493	U1496	U1497	G1498	G1499	C1500	C1501	A1502	U1503	G1504	A1505	G1506	U1514	A1515	A1516	U1517	U1520	C1521	U1522	G1523	A1524	A1525	A1526	C1530	G1531	U1532	C1533	G1534	U1535	G1536	C1537	U1538	G1539	G1540	A1541	G1542	G1546	A1547																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
G1412	U1413	C1414	U1415	G1416	A1417	G1418	U1419	A1420	A1421	A1422	U1423	A1424	A1425	C1426	A1427	G1428	U1429	U1430	U1431	U1432	G1433	U1434	G1435	A1436	U1437	G1438	U1439	U1440	A1441	A1442	U1443	A1444	A1445	U1446	U1447	G1448	U1449	U1450	U1451	U1452	U1453	U1454	U1455	U1456	U1457	U1458	U1459	U1460	U1461	U1462	U1463	U1464	U1465	U1466	U1467	U1468	U1469	U1470	U1471	U1472	U1473	U1474	U1475	U1476	U1477	U1478	U1479	U1480	U1481	U1482	U1483	U1484	U1485	U1486	U1487	U1488	U1489	U1490	U1491	U1492	U1493	U1494	U1495	U1496	U1497	U1498	U1499	U1500	U1501	U1502	U1503	U1504	U1505	U1506	U1507	U1508	U1509	U1510	U1511	U1512	U1513	U1514	U1515	U1516	U1517	U1518	U1519	U1520	U1521	U1522	U1523	U1524	U1525	U1526	U1527	U1528	U1529	U1530	U1531	U1532	U1533	U1534	U1535	U1536	U1537	U1538	U1539	U1540	U1541	U1542	U1543	U1544	U1545	U1546	U1547	U1548	U1549	U1550	U1551	U1552	U1553	U1554	U1555	U1556	U1557	U1558	U1559	U1560	U1561	U1562	U1563	U1564	U1565	U1566	U1567	U1568	U1569	U1570	U1571	U1572	U1573	U1574	U1575	U1576	U1577	U1578	U1579	U1580	U1581	U1582	U1583	U1584	U1585	U1586	U1587	U1588	U1589	U1590	U1591	U1592	U1593	U1594	U1595	U1596	U1597	U1598	U1599	U1600	U1601	U1602	U1603	U1604	U1605	U1606	U1607	U1608	U1609	U1610	U1611	U1612	U1613	U1614	U1615	U1616	U1617	U1618	U1619	U1620	U1621	U1622	U1623	U1624	U1625	U1626	U1627	U1628	U1629	U1630	U1631	U1632	U1633	U1634	U1635	U1636	U1637	U1638	U1639	U1640	U1641	U1642	U1643	U1644	U1645	U1646	U1647	U1648	U1649	U1650	U1651	U1652	U1653	U1654	U1655	U1656	U1657	U1658	U1659	U1660	U1661	U1662	U1663	U1664	U1665	U1666	U1667	U1668	U1669	U1670	U1671	U1672	U1673	U1674	U1675	U1676	U1677	U1678	U1679	U1680	U1681	U1682	U1683	U1684	U1685	U1686	U1687	U1688	U1689	U1690	U1691	U1692	U1693	U1694	U1695	U1696	U1697	U1698	U1699	U1700	U1701	U1702	U1703	U1704	U1705	U1706	U1707	U1708	U1709	U1710	U1711	U1712	U1713	U1714	U1715	U1716	U1717	U1718	U1719	U1720	U1721	U1722	U1723	U1724	U1725	U1726	U1727	U1728	U1729	U1730	U1731	U1732	U1733	U1734	U1735	U1736	U1737	U1738	U1739	U1740	U1741	U1742	U1743	U1744	U1745	U1746	U1747	U1748	U1749	U1750	U1751	U1752	U1753	U1754	U1755	U1756	U1757	U1758	U1759	U1760	U1761	U1762	U1763	U1764	U1765	U1766	U1767	U1768	U1769	U1770	U1771	U1772	U1773	U1774	U1775	U1776	U1777	U1778	U1779	U1780	U1781	U1782	U1783	U1784	U1785	U1786	U1787	U1788	U1789	U1790	U1791	U1792	U1793	U1794	U1795	U1796	U1797	U1798	U1799	U1800	U1801	U1802	U1803	U1804	U1805	U1806	U1807	U1808	U1809	U1810	U1811	U1812	U1813	U1814	U1815	U1816	U1817	U1818	U1819	U1820	U1821	U1822	U1823	U1824	U1825	U1826	U1827	U1828	U1829	U1830	U1831	U1832	U1833	U1834	U1835	U1836	U1837	U1838	U1839	U1840	U1841	U1842	U1843	U1844	U1845	U1846	U1847	U1848	U1849	U1850	U1851	U1852	U1853	U1854	U1855	U1856	U1857	U1858	U1859	U1860	U1861	U1862	U1863	U1864	U1865	U1866	U1867	U1868	U1869	U1870	U1871	U1872	U1873	U1874	U1875	U1876	U1877	U1878	U1879	U1880	U1881	U1882	U1883	U1884	U1885	U1886	U1887	U1888	U1889	U1890	U1891	U1892	U1893	U1894	U1895	U1896	U1897	U1898	U1899	U1900	U1901	U1902	U1903	U1904	U1905	U1906	U1907	U1908	U1909	U1910	U1911	U1912	U1913	U1914	U1915	U1916	U1917	U1918	U1919	U1920	U1921	U1922	U1923	U1924	U1925	U1926	U1927	U1928	U1929	U1930	U1931	U1932	U1933	U1934	U1935	U1936	U1937	U1938	U1939	U1940	U1941	U1942	U1943	U1944	U1945	U1946	U1947	U1948	U1949	U1950	U1951	U1952	U1953	U1954	U1955	U1956	U1957	U1958	U1959	U1960	U1961	U1962	U1963	U1964	U1965	U1966	U1967	U1968	U1969	U1970	U1971	U1972	U1973	U1974	U1975	U1976	U1977	U1978	U1979	U1980	U1981	U1982	U1983	U1984	U1985	U1986	U1987	U1988	U1989	U1990	U1991	U1992	U1993	U1994	U1995	U1996	U1997	U1998	U1999	U2000	U2001	U2002	U2003	U2004	U2005	U2006	U2007	U2008	U2009	U2010	U2011	U2012	U2013	U2014	U2015	U2016	U2017	U2018	U2019	U2020	U2021	U2022	U2023	U2024	U2025	U2026	U2027	U2028	U2029	U2030	U2031	U2032	U2033	U2034	U2035	U2036	U2037	U2038	U2039	U2040	U2041	U2042	U2043	U2044	U2045	U2046	U2047	U2048	U2049	U2050	U2051	U2052	U2053	U2054	U2055	U2056	U2057	U2058	U2059	U2060	U2061	U2062	U2063	U2064	U2065	U2066	U2067	U2068	U2069	U2070	U2071	U2072	U2073	U2074	U2075	U2076	U2077	U2078	U2079	U2080	U2081	U2082	U2083	U2084	U2085	U2086	U2087	U2088	U2089	U2090	U2091	U2092	U2093	U2094	U2095	U2096	U2097	U2098	U2099	U2100	U2101	U2102	U2103	U2104	U2105	U2106	U2107	U2108	U2109	U2110	U2111	U2112	U2113	U2114	U2115	U2116	U2117	U2118	U2119	U2120	U2121	U2122	U2123	U2124	U2125	U2126	U2127	U2128	U2129	U2130	U2131	U2132	U2133	U2134	U2135	U2136	U2137	U2138	U2139	U2140	U2141	U2142	U2143	U2144	U2145	U2146	U2147	U2148	U2149	U2150	U2151	U2152	U2153	U2154	U2155	U2156	U2157	U2158	U2159	U2160	U2161	U2162	U2163	U2164	U2165	U2166	U2167	U2168	U2169	U2170	U2171	U2172	U2173	U2174	U2175	U2176	U2177	U2178	U2179	U2180	U2181	U2182	U2183	U2184	U2185	U2186	U2187	U2188	U2189	U2190	U2191	U2192	U2193	U2194	U2195	U2196	U2197	U2198	U2199	U2200	U2201	U2202	U2203	U2204	U2205	U2206	U2207	U2208	U2209	U2210	U2211	U2212	U2213	U2214	U2215	U2216	U2217	U2218	U2219	U2220	U2221	U2222	U2223	U2224	U2225	U2226	U2227	U2228	U2229	U2230	U2231	U2232	U2233	U2234	U2235	U2236	U2237	U2238	U2239	U2240	U2241	U2242	U2243	U2244	U2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U1018	A1019	C996	U805	U742	U666	G597	C531	U463	A400	C338	G273	U194	U128	A82	U1	
A1019	A955	C996	U808	U743	U667	A598	U532	A464	A401	C339	G274	G195	U129	G63	A2	
C1021	C956	A809	U810	U744	G669	U600	U533	A465	A402	C468	C275	G196	U130	U64	U3	
A1022	U958	G810	A811	U745	U670	A601	A534	U466	G403	A341	C276	A200	C131	A65	C4	
A1023	A896	A812	A813	A746	G	U602	A388	U467	G404	C342	U277	G201	U132	U66	U5	
U1024	G999	A812	U748	C747	U	U603	G539	A468	U405	C343	U278	G204	U	A67	G6	
U1025	A813	U813	U748	U747	A673	U603	G540	A469	U406	C344	G279	G204	U	A88	G7	
A1026	G901	A814	U749	U749	U676	A606	A541	A473	C408	U345	G281	U208	A	G69	U8	
A1027	A963	G815	U750	U750	G677	G607	A542	A474	C409	U346	G282	U209	U137	C70	U9	
A1028	U903	G816	G751	A752	A678	U608	C563	A474	C410	U347	C286	A210	U138	A71	A11	
U1029	G904	U903	A752	A752	U679	U609	A544	A475	C411	U348	G287	U211	C139	U73	U12	
U1030	A905	U904	A753	A753	U679	U610	A545	A476	C412	U349	G288	U212	A140	U74	C13	
U1031	A906	G823	A754	A754	U680	U611	A546	U477	C413	U350	U289	U213	U141	U75	C14	
G1032	A907	G823	A755	A755	U681	U612	U547	U477	C414	C351	U289	G214	U142	U76	U15	
U1033	G969	G824	A756	A756	U682	G613	U548	U477	C415	A352	U293	A215	G143	U77	G16	
A1034	A970	U825	A757	A757	C683	G614	G549	G480	C416	A353	U294	U216	G144	U77	C17	
A1035	A971	U826	U758	U758	A684	A615	G549	G481	A417	C354	A295	U217	U145	C79	C18	
U1036	G972	U911	U759	U759	A685	A616	G552	C484	G418	G356	U296	A218	U146	A80	A19	
A1037	A973	U912	U760	A760	A686	U617	G553	A485	G419	G357	U297	A219	U147	U89	C20	
U1038	A829	U913	G761	G761	G687	U618	C554	G486	A420	U358	C298	A220	U148	A85	U21	
A1039	G914	U930	U764	U764	C691	A619	A555	G488	A421	A359	A299	C149	U149	A86	A22	
G1040	A915	U931	G765	G765	C692	A620	A556	G489	G422	A360	A300	A226	U150	C87	C23	
A977	U916	U932	U766	U766	C692	A621	G557	C490	G423	C361	A301	U227	G151	U88	U24	
G980	U917	U933	U767	U767	U699	A622	U558	C491	G424	G362	U302	U228	U152	G89	C25	
U981	U918	G834	C768	C768	U695	A623	C559	A492	A425	C363	U303	G229	G153	A89	A26	
U982	A919	U935	A769	A769	C696	G624	U560	U493	G426	U304	U304	C230	G154	C90	C26	
A983	U920	U935	A770	A770	C697	G625	G561	U494	C427	C305	U305	U231	U155	U99	U32	
G984	U921	C648	A771	A771	U698	U626	G562	C495	A428	U368	U306	U232	U156	A94	A28	
G985	G922	U936	G772	G772	U699	C627	C565	G496	G429	A369	G307	C233	A157	G95	U29	
U986	A923	A956	C773	C773	U702	U628	C566	U499	G430	A370	C308	G234	U158	G96	G30	
U1051	A924	U957	A774	A774	G702	U629	C567	U499	C431	G371	C309	G235	U159	C97	C31	
U1052	G958	G958	G775	G775	G703	A630	A567	C500	G432	G372	U310	A236	U160	U98	U32	
G1053	A988	A925	G776	G776	C704	G631	G568	U501	C433	G373	C311	C237	C160	U99	U33	
U989	A926	A959	G776	G776	U705	U632	G569	U501	G434	U374	A312	U238	U163	C99	G34	
U1055	C927	U960	C777	C777	U705	U633	A570	U504	C435	U375	U313	U239	G163	U35	U35	
U1056	U961	U861	G778	G778	U633	U633	A570	U504	C435	U375	U313	C239	A164	U101	C36	
U1057	A962	A962	U779	U779	C709	G634	G571	A505	C436	C376	U314	U240	A164	U102		
U1058	A993	A863	A780	A780	U710	A635	C572	A506	A437	G377	A315	U241	C166	U102	A39	
U1059	G994	U864	U781	U781	U711	A636	C573	A507	A438	A378	A316	G246	U167	A104	A40	
U1060	A995	A933	G782	G782	U711	A636	G574	U508	U439	U379	C317	G247	A168	A105	A41	
A1061	G966	G866	G783	G783	G714	U638	C575	G509	U440	U380	U318	A247	A169	U106	G42	
A1062	G987	G867	G784	G784	U714	U639	C576	G510	A441	C381	U319	U248	U170	C107	A43	
U1063	A998	G968	U785	U785	C717	U639	G577	A511	C442	C382	U320	U249	A171	A108	U44	
G1064	U999	G937	C786	C786	U718	C646	U578	A512	C443	C383	C321	U250	C172	U109	U45	
A1065	C1000	G938	G787	G787	U719	G647	A579	U513	C444	G384	G322	A251	C172	U110	A46	
	A1001	A938	U783	A788	G720	G648	A580	G514	C444	A385	A323	U252	G175	U111	A47	
G1002	A940	C874	A789	A789	U721	U649	U581	A515	C448	C386	U324	A253	C176	A112	G48	
A1069	G975	G875	U790	U790	G722	U650	U582	A516	C449	A387	G325	A254	U177	U113	A48	
C1070	U1004	A941	G876	G876	G723	U651	U583	U517	C449	A388	G326	U260	U178	U113	C49	
U1071	G942	G942	C787	A793	U724	C651	C583	U518	A452	C389	U327	U261	U177	C50	C50	
C1072	A1005	C943	G977	U794	G724	C652	C584	A518	U452	C390	U327	U261	U178	G115	A51	
G1073	C1006	A944	G878	U794	U725	G653	C585	C519	A452	A328	G326	U261	U178	G115	A51	
C1074	C1007	G979	U795	U795	G726	U654	G586	A520	U454	A391	G326	U261	U179	G115	U52	
U1075	U945	U945	U796	U796	U727	U655	G586	A521	C455	C392	G326	U261	U179	G115	U52	
A1076	U1009	U947	U882	G797	U728	U655	C589	A522	C456	C393	G326	U261	U179	G115	U52	
A1077	C1010	G948	U883	G799	U729	U660	C589	U522	A456	C394	G326	U261	U179	G115	U52	
C1077	G1011	C949	U882	A799	G730	A661	C592	U523	G457	C394	G326	U261	U179	G115	U52	
A1078	G1078	G1011	G878	U799	G730	A661	C592	U523	G457	C394	G326	U261	U179	G115	U52	
C1079	C1079	C950	U883	U800	U731	U662	C593	U524	A458	C394	G326	U261	U179	G115	U52	
A1080	U1079	G984	G885	U800	A733	U663	A594	A526	A460	C397	U335	C270	C191	U125	C59	
A1081	A982	A952	U886	A803	A734	U664	A594	A526	A460	C397	U335	C270	C191	U125	C59	
U1082	U1082	C952	U887	A904	A734	U665	C596	A527	G461	C400	G336	C271	U192	A126	A61	

- Molecule 2: 40S ribosomal protein S0-A

GLU GLN VAL ALA GLU GLU ALA GLU ALA THR THR GLU ALA GLU LYS VAL VAL THR GLU GLN ALA THR TRP ALA GLU GLU ASN ASP ASN VAL GLU TRP

• Molecule 2: 40S ribosomal protein S0-A

Chain s0:  54% 25% 18%

S2 L3 P4 A5 T6 L9 T10 E12 Q15 T22 E23 L24 L28 V29 Q30 Q31 R41 V50 V58 L59 R62 I63 I64 A65 P68 M69 D72 T80 R84 A85 V86 L87 A95 T96 P97 I98 T103 Y110 I111 T112 R113 S114 F115

R119 I122 R127 S128 D129 A130 Q131 A132 I133 V139 H140 I141 L146 P152 S153 E154 F155 V156 D157 V158 N164 R165 G166 K167 L172 L177 A178 R179 E180 V181 L182 R183 L184 R185 G186 A187 L188 V189 P194 W195 S196 Y202 R205 D206 P207 GLU GLU VAL GLU

• Molecule 3: 40S ribosomal protein S1-A

Chain S1:  55% 27% 16%

ALA VAL GLY LYS ASN LYS ARG LEU SER LYS GLY LYS LYS GLY GLN LYS ARG V20 V21 T25 R26 P25 S26 T37 F38 E39 M40 V43 T46 M49 L54 S58 D59 A60 L61 K62 G63 R64 L70 L73 D78 H79 S80 F81 R82 K85 D89

G93 K94 N95 L96 L97 H101 D104 F105 R111 K116 T119 V125 T126 T127 K128 T129 S130 D131 I137 Q149 S154 Y155 S158 S169 T173 V176 Q177 G178 S179 T180 L181 S186 K187 L188 E191 V192 I193 N194 E198 N199 K202

• Molecule 3: 40S ribosomal protein S1-A

Chain s1:  59% 24% 15%

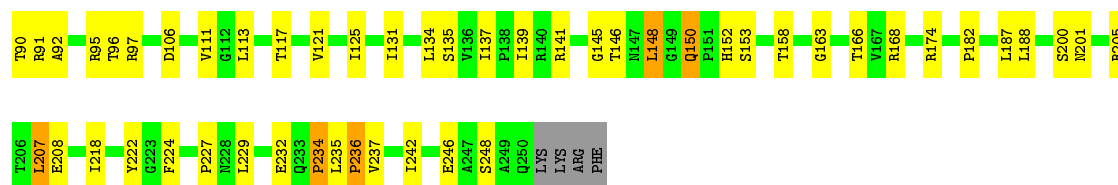
ALA VAL GLY LYS ASN LYS ARG LEU SER LYS GLY LYS LYS GLY GLN LYS ARG V20 V21 D22 R26 S36 T37 R41 T46 L47 K50 K55 D59 A60 L61 K62 V65 V66 L70 L73 S76 E77 D78 H79 S80 F81 R82 D89 E90 G93

T98 N99 F105 T106 T107 D108 R115 T126 T129 S130 D131 I137 A147 S154 S158 S159 H160 I161 R162 T173 T180 L181 T185 L188 E191 V192 I193 N194 A200 T201 K202 F205 P206 L207 Q208 M209 I210 H211 L218 R222 F223 D224

• Molecule 4: 40S ribosomal protein S2

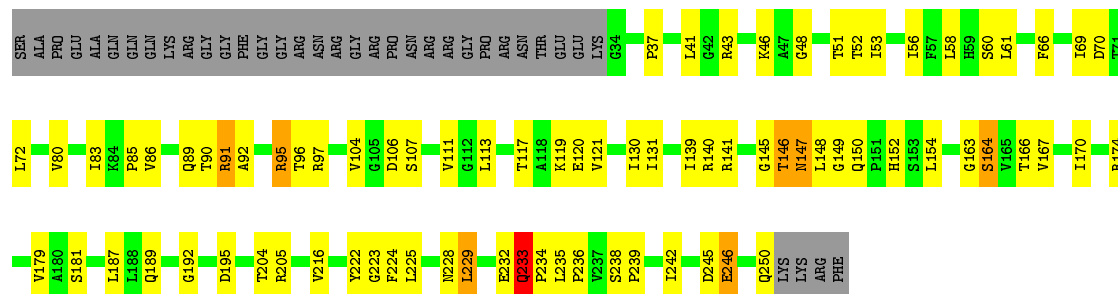
Chain S2:  59% 24% 14%

SER ALA ALA GLU GLU GLN GLN LYS ARG GLY GLY PHE VAL THR GLY ARG ASN ARG GLY ARG PRO ASN ARG ARG PRO ARG ASN THR GLU GLU LYS G34 K35 V38 L41 T53 E54 L58 H59 S60 L61 D70 T71 L72 G75 L76 Q77 R85 V86 Q87 R88 Q89



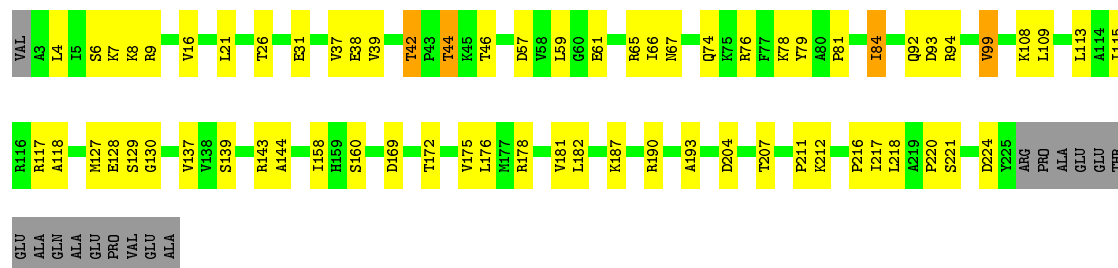
• Molecule 4: 40S ribosomal protein S2

Chain s2: 54% 29% 14%



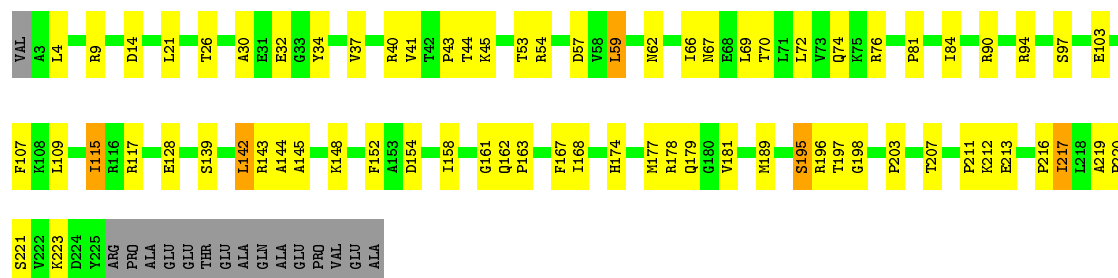
• Molecule 5: 40S ribosomal protein S3

Chain S3: 65% 26% 7%



• Molecule 5: 40S ribosomal protein S3

Chain s3: 63% 28% 7%

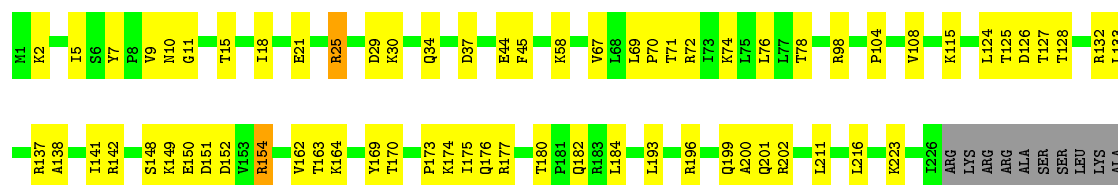


• Molecule 6: 40S ribosomal protein S4-A

Chain S4: 71% 27% 2%

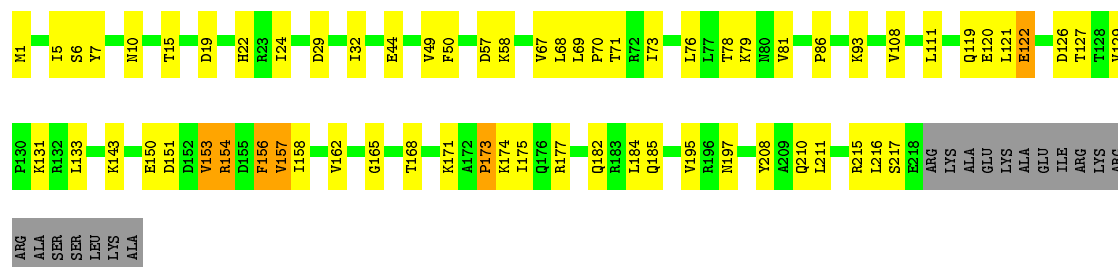


Chain S6:  67% 28% • •



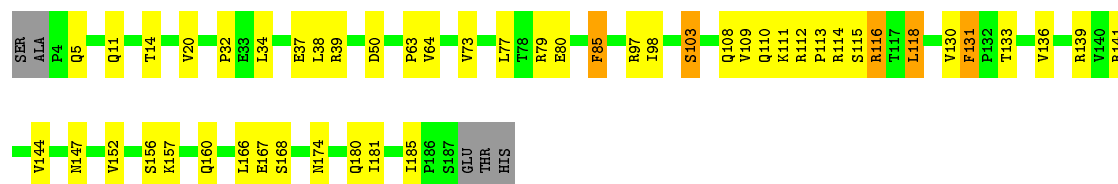
• Molecule 8: 40S ribosomal protein S6-A

Chain s6:  64% 25% 8% •



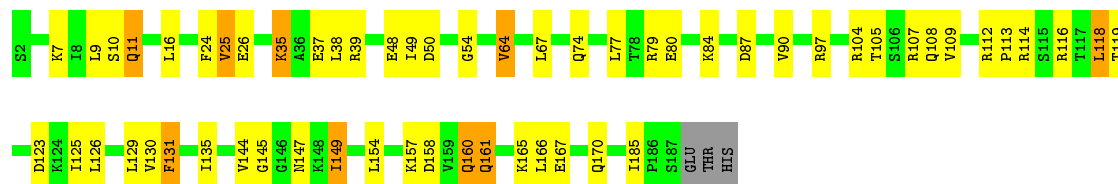
• Molecule 9: 40S ribosomal protein S7-A

Chain S7:  71% 23% • •



• Molecule 9: 40S ribosomal protein S7-A

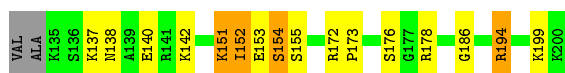
Chain s7:  68% 26% 5% •



• Molecule 10: 40S ribosomal protein S8-A

Chain S8:  72% 19% 6% •





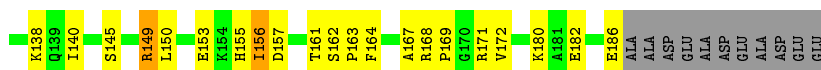
- Molecule 10: 40S ribosomal protein S8-A

Chain s8: 67% 26% 6%



- Molecule 11: 40S ribosomal protein S9-A

Chain S9: 67% 25% 6%



- Molecule 11: 40S ribosomal protein S9-A

Chain s9: 65% 26% 6%



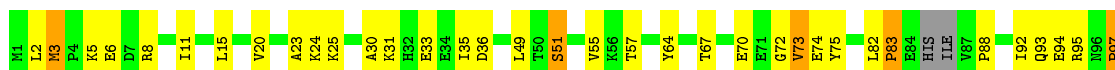
- Molecule 12: 40S ribosomal protein S10-A

Chain C0: 57% 30% 9%



- Molecule 12: 40S ribosomal protein S10-A

Chain c0: 58% 29% 5% 9%



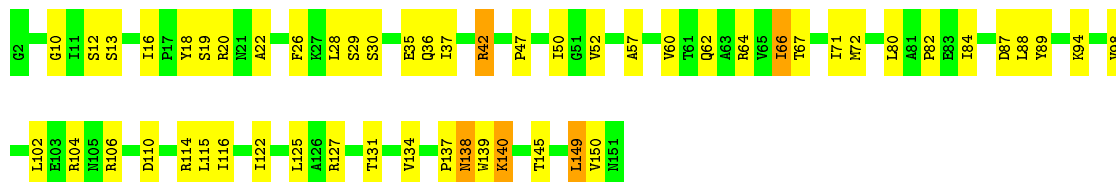






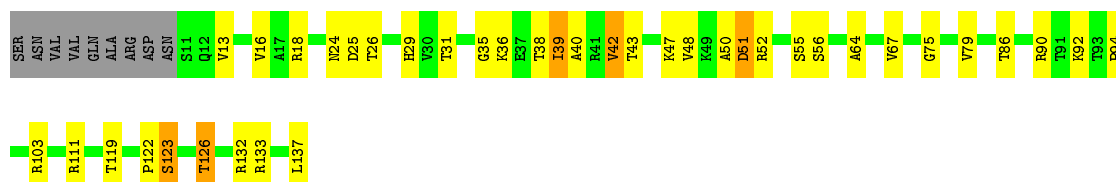
- Molecule 15: 40S ribosomal protein S13

Chain c3: 64% 33%



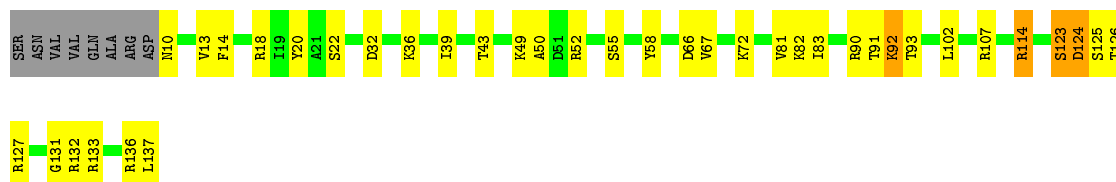
- Molecule 16: 40S ribosomal protein S14-A

Chain C4: 65% 25% 7%



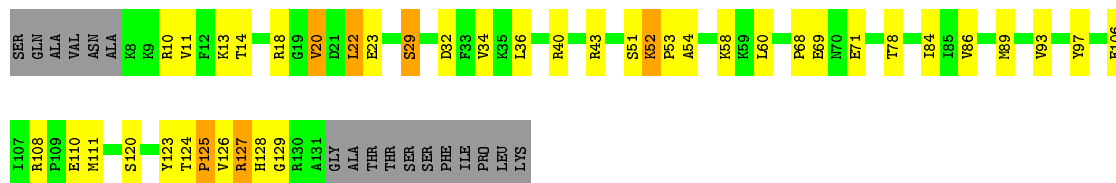
- Molecule 16: 40S ribosomal protein S14-A

Chain c4: 66% 25% 6%



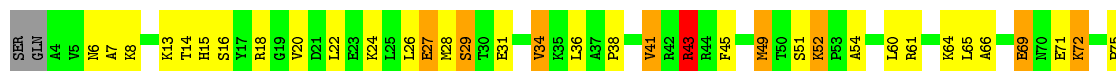
- Molecule 17: 40S ribosomal protein S15

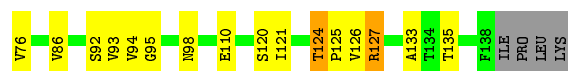
Chain C5: 59% 25% 12%



- Molecule 17: 40S ribosomal protein S15

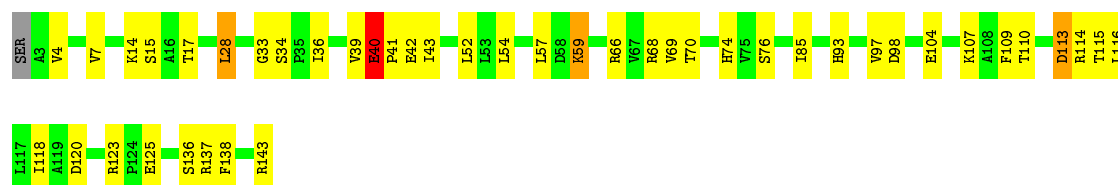
Chain c5: 60% 28% 7%





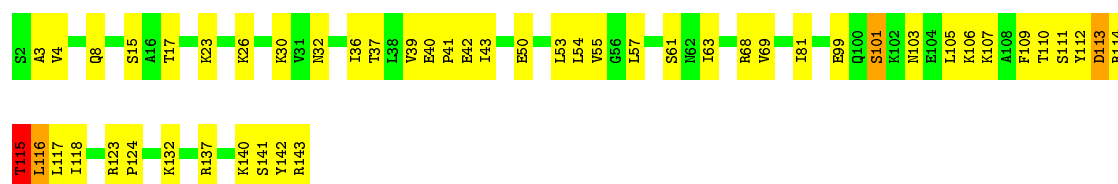
- Molecule 18: 40S ribosomal protein S16-A

Chain C6: 68% 28% ..



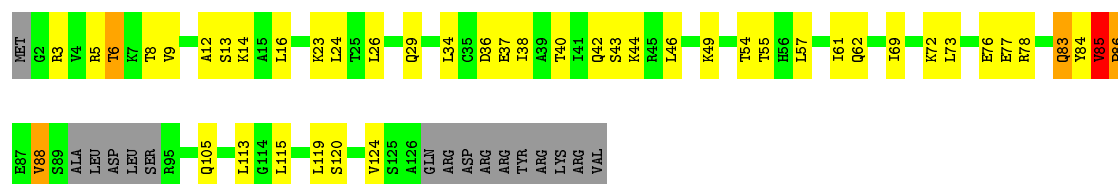
- Molecule 18: 40S ribosomal protein S16-A

Chain c6: 65% 32% ..



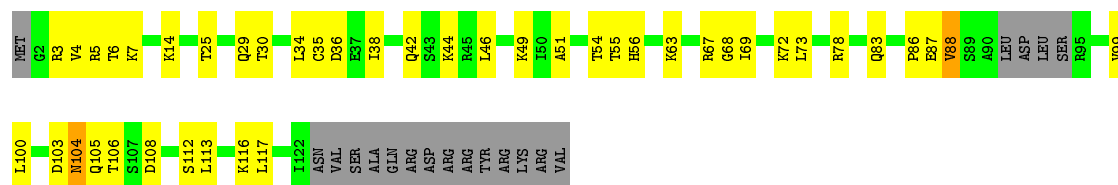
- Molecule 19: 40S ribosomal protein S17-A

Chain C7: 55% 29% 12%



- Molecule 19: 40S ribosomal protein S17-A

Chain c7: 54% 30% 14%



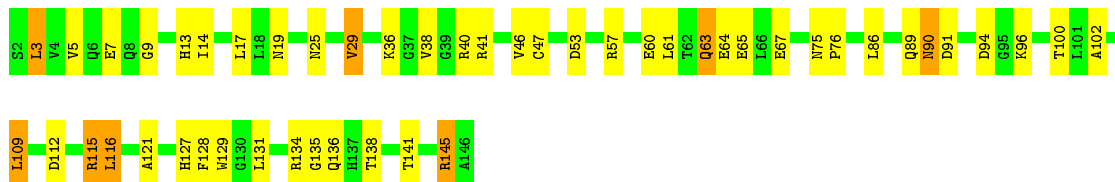
- Molecule 20: 40S ribosomal protein S18-A

Chain C8: 77% 21%




R145  
A146


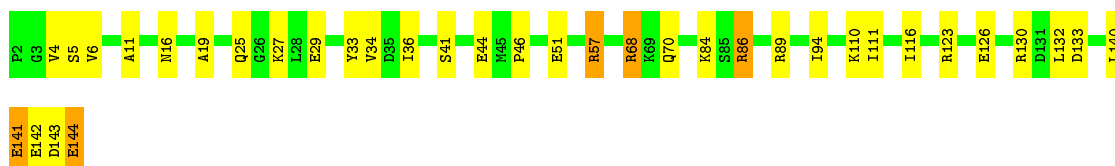
- Molecule 20: 40S ribosomal protein S18-A

Chain c8:  66% 28% 6%

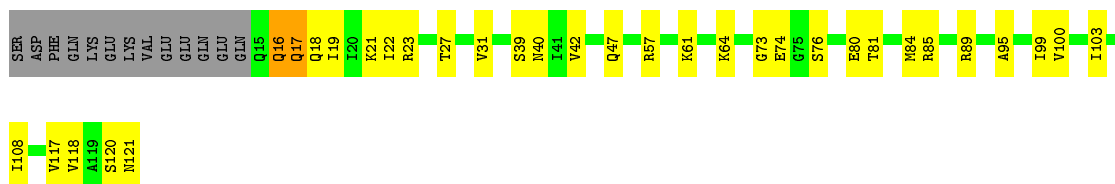
- Molecule 21: 40S ribosomal protein S19-A

Chain C9:  73% 24% .

- Molecule 21: 40S ribosomal protein S19-A

Chain c9:  75% 22% .

- Molecule 22: 40S ribosomal protein S20

Chain D0:  62% 26% . 11%

- Molecule 22: 40S ribosomal protein S20

Chain d0:  49% 38% 5% 8%



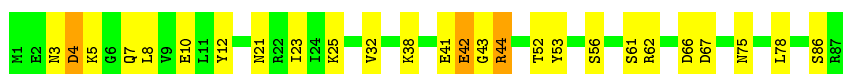
- Molecule 23: 40S ribosomal protein S21-A

Chain D1: 68% 28% 5%



- Molecule 23: 40S ribosomal protein S21-A

Chain d1: 70% 26% 4%



- Molecule 24: 40S ribosomal protein S22-A

Chain D2: 72% 26% 2%



- Molecule 24: 40S ribosomal protein S22-A

Chain d2: 78% 20% 2%



- Molecule 25: 40S ribosomal protein S23-A

Chain D3: 58% 36% 6%



- Molecule 25: 40S ribosomal protein S23-A

Chain d3: 71% 27% 2%





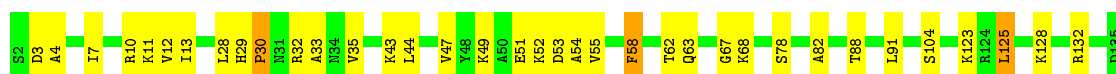
- Molecule 26: 40S ribosomal protein S24-A

Chain D4: 78% 18%



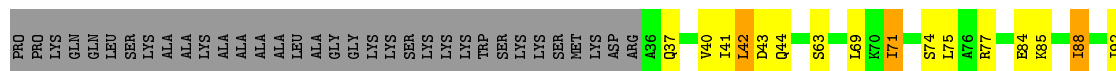
- Molecule 26: 40S ribosomal protein S24-A

Chain d4: 73% 25%



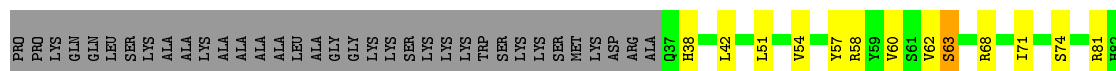
- Molecule 27: 40S ribosomal protein S25-A

Chain D5: 46% 17% 35%



- Molecule 27: 40S ribosomal protein S25-A

Chain d5: 45% 18% 36%



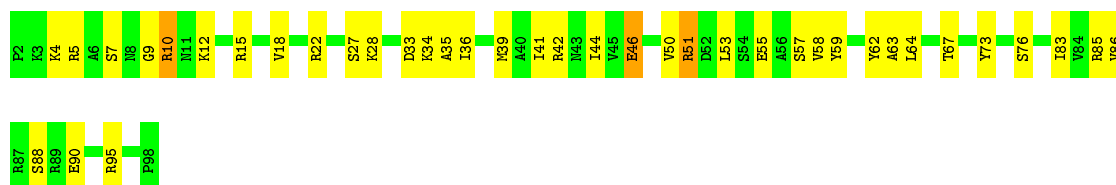
- Molecule 28: 40S ribosomal protein S26-B

Chain D6: 60% 31% 9%



- Molecule 28: 40S ribosomal protein S26-B

Chain d6: 60% 37%



- Molecule 29: 40S ribosomal protein S27-A

Chain D7: 75% 23%



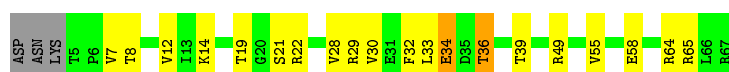
- Molecule 29: 40S ribosomal protein S27-A

Chain d7: 72% 26%



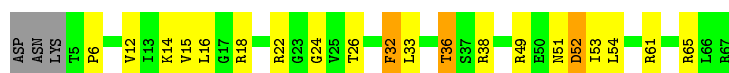
- Molecule 30: 40S ribosomal protein S28-A

Chain D8: 65% 27% 5%



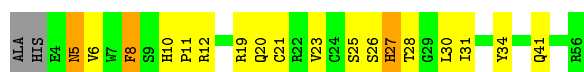
- Molecule 30: 40S ribosomal protein S28-A

Chain d8: 65% 26% 5% 5%



- Molecule 31: 40S ribosomal protein S29-A

Chain D9: 64% 27% 5%



- Molecule 31: 40S ribosomal protein S29-A

Chain d9: 58% 35% 5%



- Molecule 32: 40S ribosomal protein S30-A

A2	K3	G6	K13	V14	K15	S16	K20	V21	E22	K23	T24	E25	K26	P27	R33	L38	L39	R42	V47	T48	L49	V50	N51	G52	K53	R54	R55	M56	S61
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- Chain E1:  53% 37% 7%

[illegible]

- Chain SR:  80% 19%

C140	C144	D149	S152	Q153	V154	E160	R161	A162	V178	F186	D191	G194	N200	P206	K216	D217	I220	A230	K231	Y232	Q237	D238	S242	S246	F263	D272	K283	H288	D307	Q314	T317	A318	N319	C42	V6	I9	R10	H16	V20	T25	S26	Q29	L32	T48	O49	D50	D51	Q52	V58	R59	S60	G63	H66	D70	G71	T72	L73	D76	V79	A80	K87	V94	A95	T96	F103	V104	G105	V110	M111	K117	D128	T129
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- Chain sR:  80% 19% .

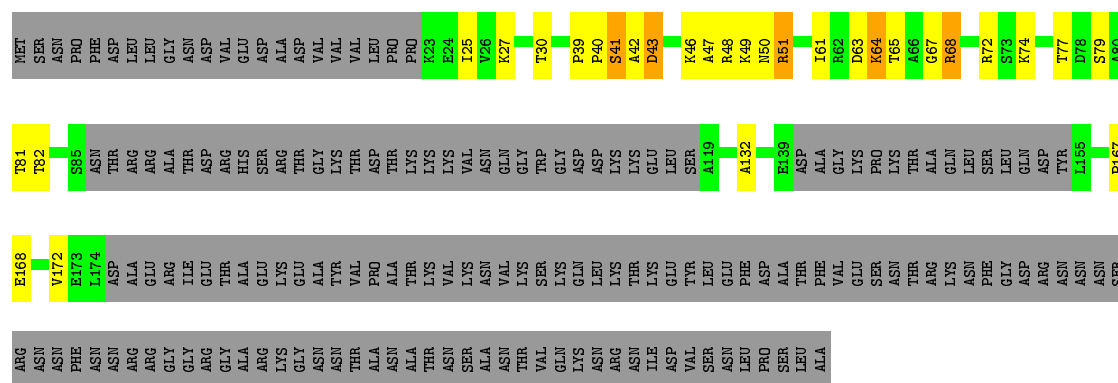
D149	Q153	V154	N159	E160	A161	A162	D163	D164	D165	S166	V167	I170	V178	I193	S205	A226	A227	K228	M231	Y232	T233	T258	Y269	L274	R275	K283	A284	A285	A286	D287	G298	Q299	Q314	V315	M316	T317	A318	M319	D149	Q153	V154	N159	E160	A161	A162	D163	D164	D165	S166	V167	I170	V178	I193	S205	A226	A227	K228	M231	Y232	T233	T258	Y269	L274	R275	K283	A284	A285	A286	D287	G298	Q299	Q314	V315	M316	T317	A318	M319
42	53	114	55	78	615	116	117	220	123	124	225	229	143	748	556	557	558	559	560	669	772	175	176	677	882	796	697	698	1102	1103	1104	6105	1106	1107	1108	1115	1116	2129	1136	1145																																					

- Chain SM:  40% 16% • 42%

SER	LYS	A90
ALA	ASN	T91
ASN	VAL	D92
THR	LYS	
VAL	SER	T100
GLN	LYS	D101
LYS	GLN	T102
ASN	LEU	
ARG	LYS	V106
ASN	THR	
ILE	LYS	D112
ASP	GLU	D113
VAL	TYR	K114
SER	LEU	K115
ASN	GLU	E116
LEU	PHE	
PRO	ASP	E120
SER	ALA	
LEU	THR	E133
ALA	PHE	D134
	VAL	
	GLU	E139
	SER	D140
	ASN	A141
	THR	GLY
	ARG	LVS
	LYS	PRO
	ASN	LVS
	PHE	THR
	GLY	ALA
	ASP	GLN
	ARG	LEU
	ASN	SER
	ASN	L151
	ASN	Q152
	SER	D153
	ARG	
	ASN	V166
	ASN	P167
	PHE	
	ASN	E173
	ASN	
	ARG	A176
	PRO	GLU
	GLY	ARG
	GLY	I1E
	ARG	GLU
	GLY	THR
	ALA	ALA
	LYS	LVS
	GLY	GLU
	ASN	ALA
	ASN	TYR
	THR	VAL
	ALA	PRO
	ASN	ALA
	ALA	THR
	THR	LVS
	ASN	R89

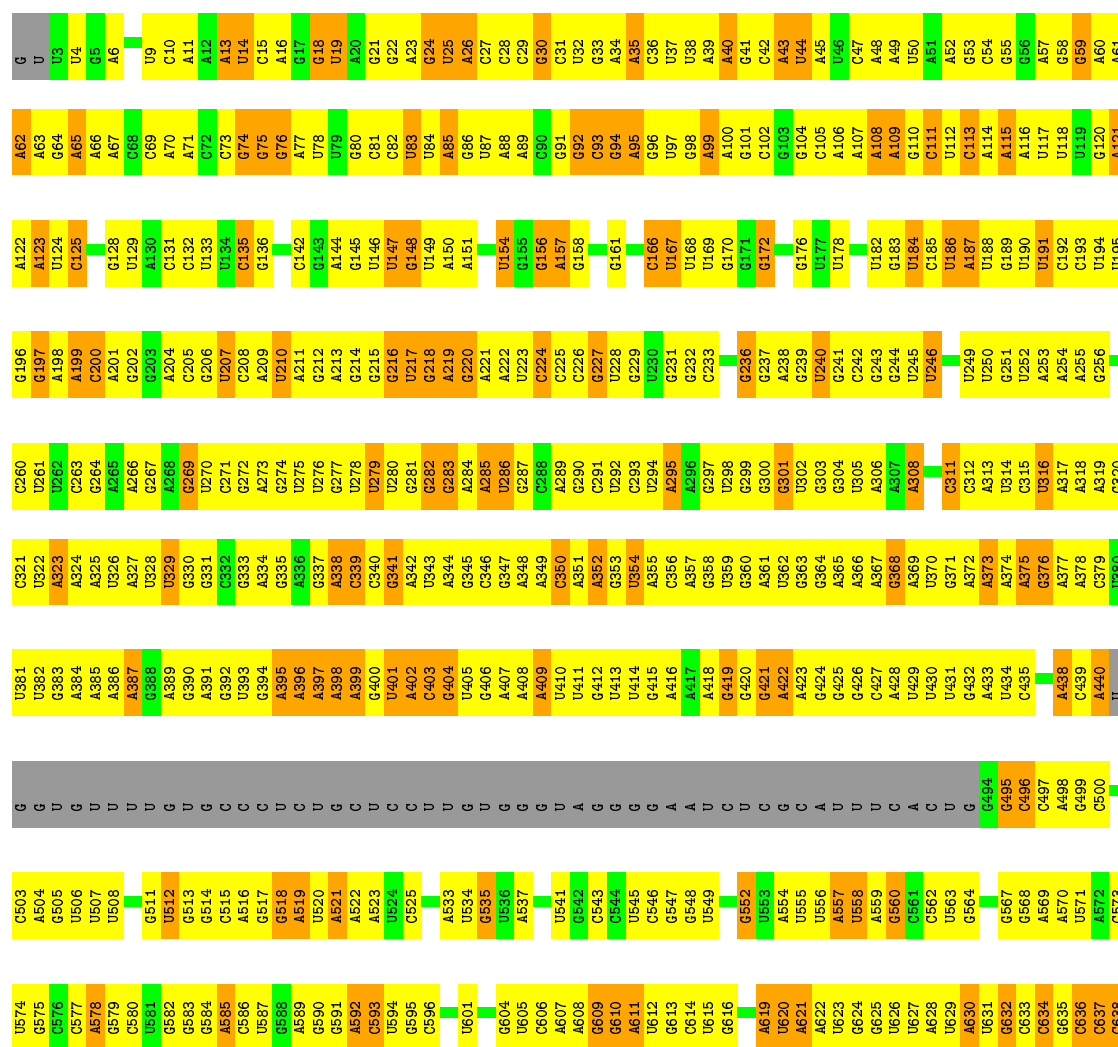
- Molecule 35: Suppressor protein STM1

Chain sM:



- Molecule 36: 25S ribosomal RNA

Chain 1:

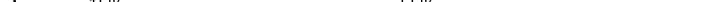




G1586	G1587	A1588	A1589	G1592	A1593	A1594	A1595	A1596	G1599	A1600	A1601	A1602	G1603	G1604	A1605	A1606	A1607	A1613	C1614	G1617	G1618	A1619	A1620	A1621	A1622	G1623	G1624	G1627	C1628	A1629	C1630	C1631	A1632	C1633	G1634	G1636	C1639	A1640	A1641	A1642	A1643	C1644	G1645	G1646	G1650	A1651	A1656																																																																																										
U1521	U1522	U1523	A1524	U1525	U1526	C1527	G1528	A1529	U1530	U1533	A1534	U1540	G1541	G1542	G1543	A1544	A1545	A1546	A1547	A1548	U1549	C1550	C1551	G1552	U1553	U1554	U1555	U1556	A1557	A1558	A1559	A1560	G1561	C1562	C1563	U1564	G1565	C1631	U1567	U1568	U1569	U1570	A1571	U1572	G1573	A1574	A1575	G1576	G1577	C1578	A1579	A1580	C1581	C1582	A1583	U1584	C1585																																																																																
A1461	A1462	U1463	G1464	A1465	G1466	A1467	A1468	C1469	U1470	U1471	U1472	G1473	G1474	G1475	A1476	A1477	G1478	U1479	G1480	A1481	A1482	G1483	U1484	G1485	G1486	G1487	A1488	U1489	A1490	A1491	G1492	A1493	U1494	A1495	C1496	G1497	A1498	C1499	G1500	U1501	C1502	A1503	A1504	C1505	A1506	G1507	C1508	A1509	U1510	U1511	U1512	G1513	A1514	A1515	A1516	G1517	U1518	U1519	G1520																																																																														
A1401	C1402	A1403	G1404	U1405	A1406	A1407	G1408	G1409	U1410	C1411	G1412	G1413	G1414	G1415	U1416	A1417	A1418	A1419	A1420	U1421	G1422	C1423	C1424	U1425	C1426	U1427	A1428	A1429	U1430	A1431	C1432	A1433	G1434	A1435	U1436	C1437	U1438	U1439	G1440	G1441	U1442	G1443	G1444	U1445	A1446	G1447	U1448	A1449	A1450	C1451	A1452	A1453	A1454	A1455	A1456	U1457	U1458	A1459	A1460																																																																														
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WORLDWIDE  
**PDB**  
PROTEIN DATA BANK

- Molecule 36: 25S ribosomal RNA

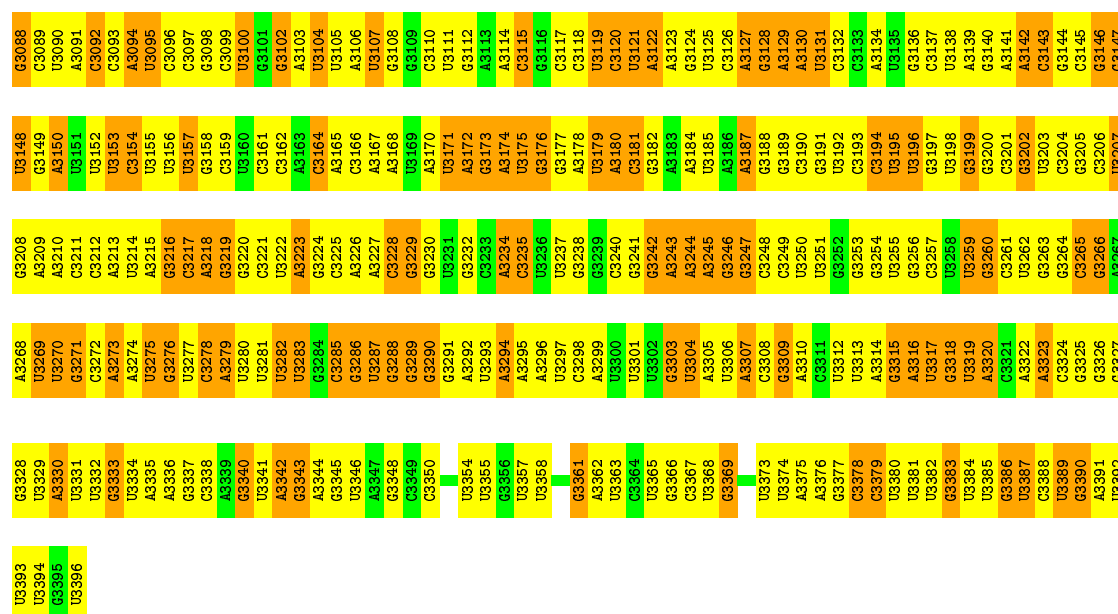
Chain 5:  15% 55% 23% 7%

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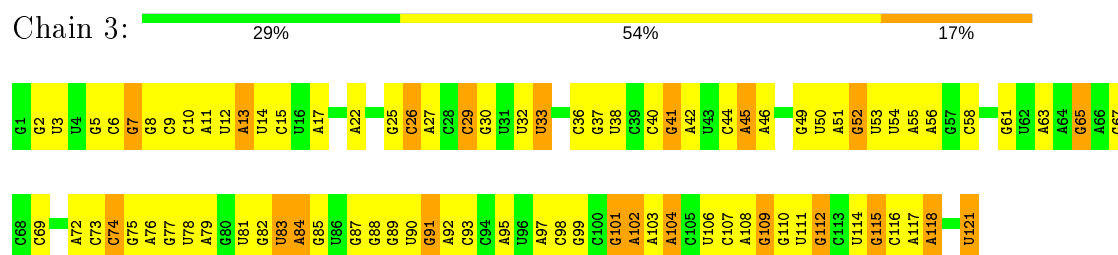
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G1010	G950	C890	G768	C769	A705	A645	C577	G514	G330	G330	A265	C200	C132	C69
A1011	A951	C891	A646	A706	A706	A646	A578	C515	G331	G331	A266	A201	U133	A70
G1012	A952	U892	G831	G770	U707	A647	C579	G517	U393	G332	G267	G202	U134	A71
G1013	G953	C893	G832	A771	G708	C648	C580	G518	G333	G333	A268	G206	C135	C72
U1014	U954	C894	G833	A772	A709	A649	U581	G519	G334	G334	G269	G136	G136	C73
U1015	U955	A895	U834	U773	A710	C650	G582	A519	A396	G335	U270	G137	G137	C74
C1016	U956	A896	G835	G774	A711	G651	U583	U520	A397	G336	C271	C208	G138	G75
C1017	C957	U897	A836	A775	G712	G652	G584	A521	A398	A338	G272	A209	G139	A76
G1018	C958	U898	A837	U776	U713	A653	A585	A522	A399	A339	A273	U210	G140	A77
G1019	U959	U899	U777	A714	G715	C654	C586	A523	G400	C340	G274	A211	G142	U78
G1020	U960	U900	U778	A715	A716	C655	U587	U524	G401	G341	U275	G143	U79	U79
G1021	C961	G901	A841	G779	A716	A656	G588	C525	A402	A342	U276	A213	A144	G80
U1022	A962	G902	G842	A780	C717	A657	A589	C526	C403	U343	G277	G214	G145	C81
C1023	G963	U903	A843	G781	G718	G658	G590	U278	A344	A344	U278	G215	U146	C82
G1024	G964	A904	G844	U782	U719	C659	C591	G527	U405	G345	U279	G216	U147	
A1025	A965	U905	G845	A783	A720	A660	A592	A529	G346	G346	U280	U217	G148	
U1026	U966	A906	A846	A784	G721	G661	C593	G530	A407	G347	G281	G218	G149	A85
A1027	A967	G907	A847	U785	G722	U682	U594	G531	A408	A348	G282	A219	A151	G86
G1028	G968	U908	A848	A786	U723	G663	G595	A532	A409	A349	G283	A289	U87	U87
U1029	C969	G909	C849	G787	U724	U664	C596	A533	G413	C350	A284	U228	U152	A88
	A970	G910	U850	C788	G725	A665	U534	U534	U413	A351	A285	A221	U153	A89
U1033	G971	C911	C851	A789	G726	A666	U601	G535	U414	A352	U286	U223	U154	C90
U1034	A972	G912	U852	U790	G727	C667	U536	G536	G415	G353	G287	G287	G155	G91
G1035	A973	A913	G853	A791	G728	G668	G604	A537	A416	U854	C288	C226	A157	G92
	G974	A914	G854	G792	C729	U669	U605	G538	A417	A355	A289	G227	G158	C93
C1038	C975	A915	U855	C793	C730	C670	C606	G539	A418	C356	G290	U228	G159	A94
U1039	U976	G916	G856	U794	U731	U671	A607	U541	G419	A357	G291	G229	G161	A95
A1040	C977	A917	G857	G795	C732	A672	A608	U542	G420	G358	U292	U230	G162	G96
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C1043	A980	A920	G860	G798	A735	C675	A611	U545	A423	A361	A295	C233	A166	A99
U1044	C981	U921	U861	G799	A736	A677	U612	C546	G424	U362	A296	G234	C167	A100
A1046	C982	U922	G862	G800		G678	G613	G547	G425	G363	G297	A235	U167	G101
G1047	A983	C923	C863	A801	G740	G679	C614	G548	G426	G364	U298	G236	U169	C102
A1048	G984	G924	G864	C802	U741	U679	U626	G549	C427	A365	G299	G237	G170	G103
U1049	U985	A925	U865	C803	G742	G680	U627	U558	A428	A366	G300	A238	G171	G104
U1050	A926	A926	A866	C804	C743	U681	C618	U553	A429	A367	G301	G239	G172	A105
U1051	C927	G927	G867	G805	A744	U682	A619	A554	U430	A374	U302	U240	G173	
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A1053	A989	A929	G869	A807	A746	G684	A621	U556	G432	A376	G304	C242	G174	A109
U1054	U990	U930	G870	A808	A747	G685	U626	A557	A433	G371	U305	G243	G180	G110
A1055	C991	C931	U871	G809	U748	G686	U627	U558	C495	A372	A306	G244	U181	C111
U1056	A992	U932	U872	A810	C749	U687	U627	A559	C496	A373	A307		U182	C112
G1057	G993	A933	C873	U811	G750	G688	A628	G560	C497	A374		U248	G183	C113
U1058	G994	G934	U874	G812	A751	U689	U629	C561	A438	A375	C311	U249	U184	A115
U1059	U995	U935	G875	G813	C752	A690	A630	C562	C439	G376	C312	U250	C185	A116
G1059	A996	A936	A876	U814	C753	A691	U631	U563	U440	A377	A313	G251	U186	U117
U1060	A997	G937	C877	G815	G754	A692	G632	G564	U441	A378	U314	U252	U187	U118
A1061	A998	C938	G878	A816	A755	A693	C633	U565	C498	C379	C315	A253	U188	U119
U1062	G999	U939	U879	A817	U756	C694	C634	G566	U380	U380	G320	A254	G189	G120
C1063	C1000	G940	G880	C818	C757	C695	G635	G567	U381	A374	A255	A255	U190	A121
A1064	G1001	C941	C881	U819	C758	C696	G636	G505	U382	A375	C321	G256	U191	A122
A1065	A1002	U942	A882	A820	U759	A697	C637	A569	G383	A377	U322	U257	C192	A123
G1066	A1003	U943	A883	U821	G760	U698	C638	A570	U384	A378	A323	G258	C193	
	U1004	C944	A884	G822	G761	A699	G639	U571	U385	A379	A324	C259	U194	U126
	G1005	C945	U885	C823	G763	C700	U640	A572	U386	A385	A325	C260	U195	G127
	A1006	U946	C886	C824	U764	G701	C641	C573	U387	A386	A326	G261	G196	G128
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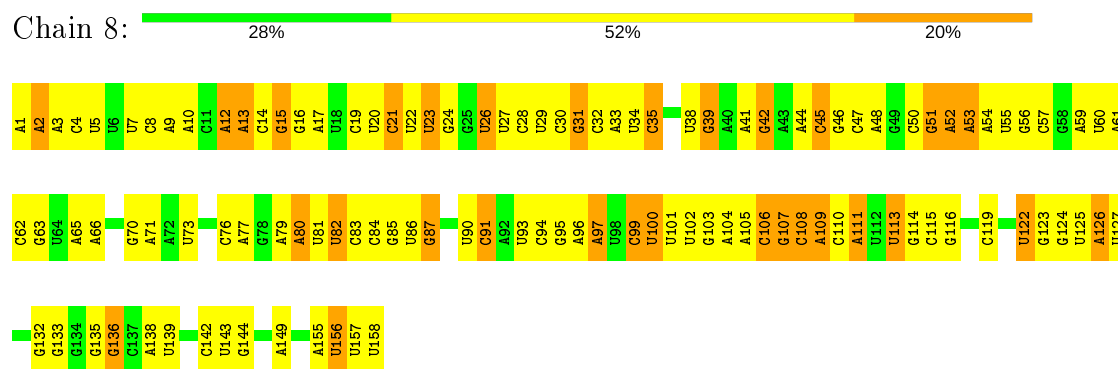




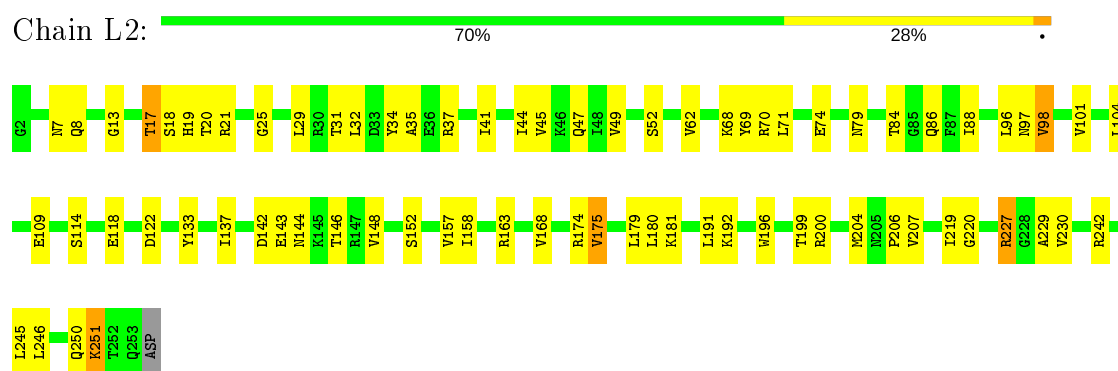
• Molecule 37: 5S ribosomal RNA



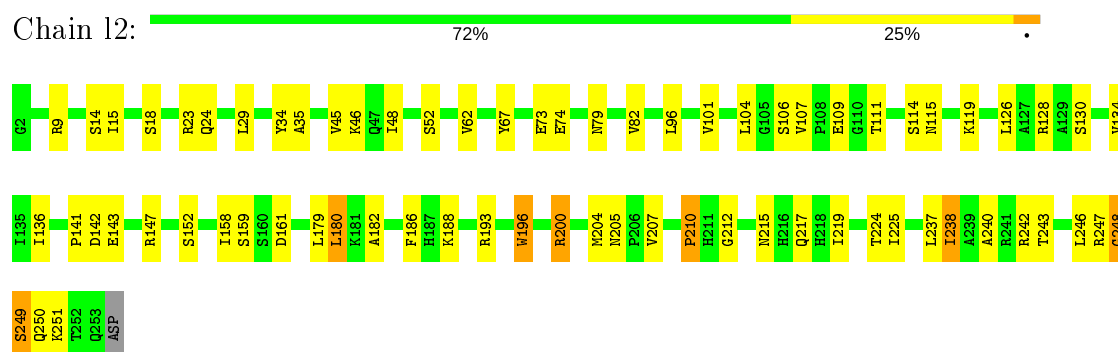
- Molecule 38: 5.8S ribosomal RNA



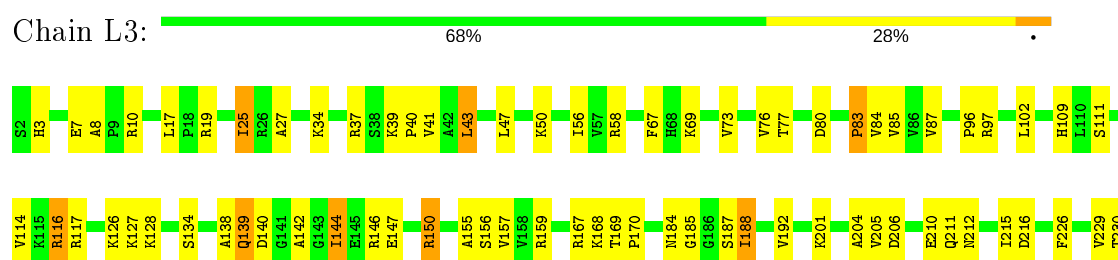
- Molecule 39: 60S ribosomal protein L2-A



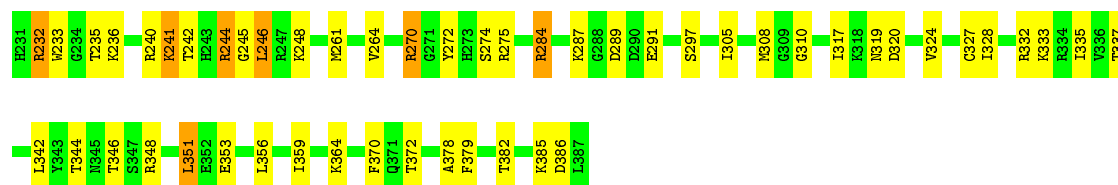
- Molecule 39: 60S ribosomal protein L2-A



- Molecule 40: 60S ribosomal protein L3

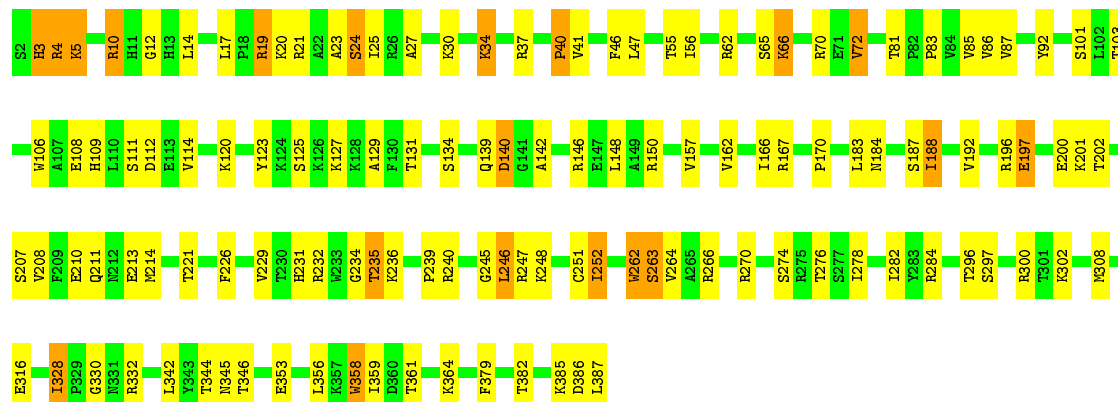






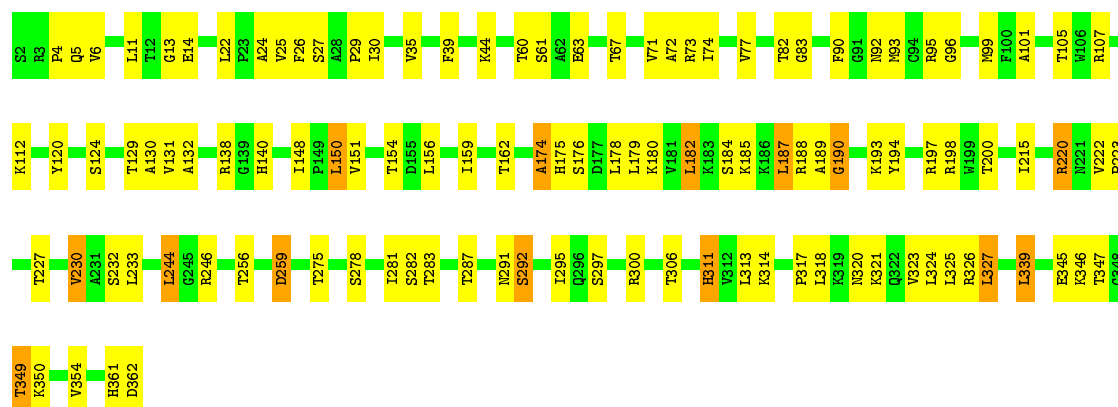
• Molecule 40: 60S ribosomal protein L3

Chain 13: 67% 27% 5%



• Molecule 41: 60S ribosomal protein L4-A

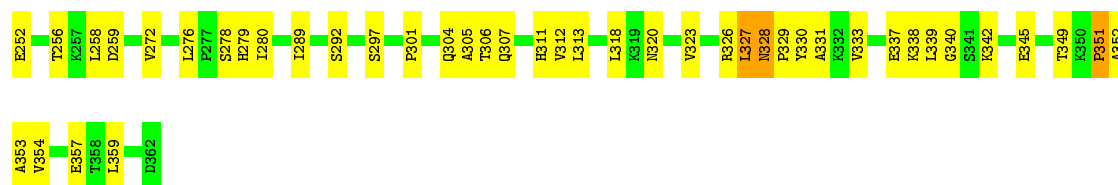
Chain L4: 68% 28% 4%



• Molecule 41: 60S ribosomal protein L4-A

Chain 14: 68% 29% 3%





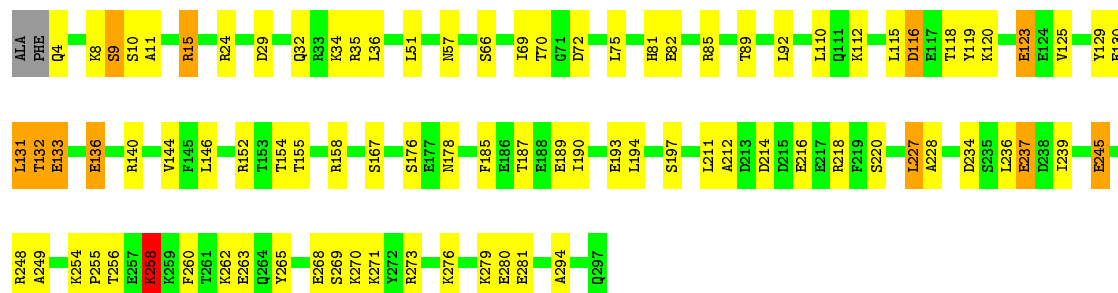
• Molecule 42: 60S ribosomal protein L5

Chain L5: 72% 25%



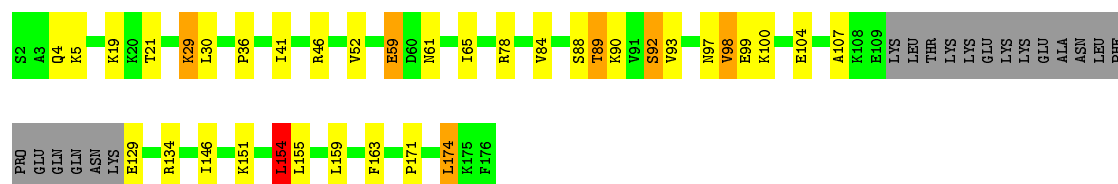
• Molecule 42: 60S ribosomal protein L5

Chain l5: 69% 26%



• Molecule 43: 60S ribosomal protein L6-A

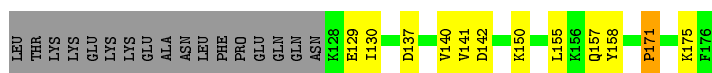
Chain L6: 69% 17% 11%



• Molecule 43: 60S ribosomal protein L6-A

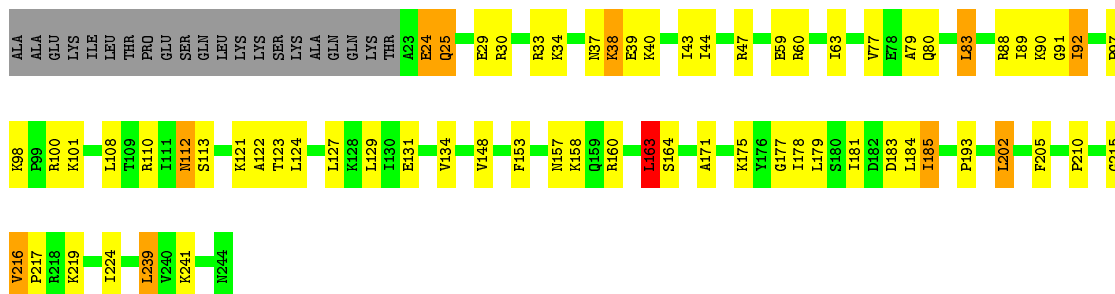
Chain l6: 63% 22% 10%





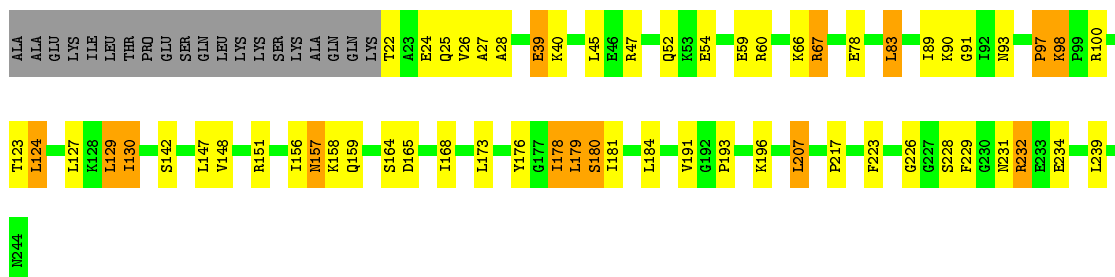
- Molecule 44: 60S ribosomal protein L7-A

Chain L7: 63% 23% 9%



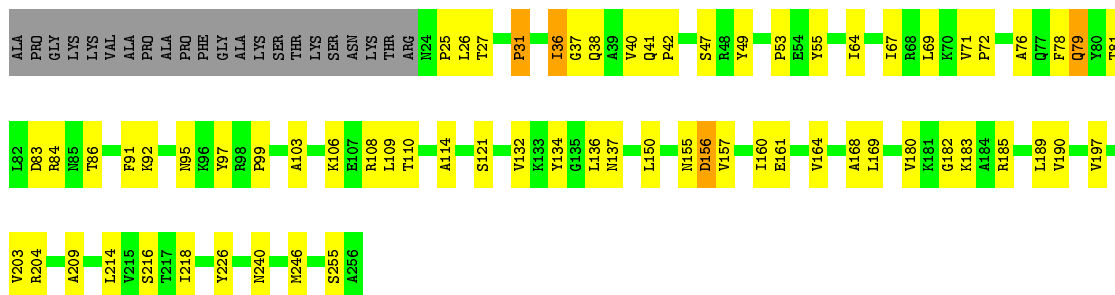
- Molecule 44: 60S ribosomal protein L7-A

Chain L7: 67% 19% 6% 8%



- Molecule 45: 60S ribosomal protein L8-A

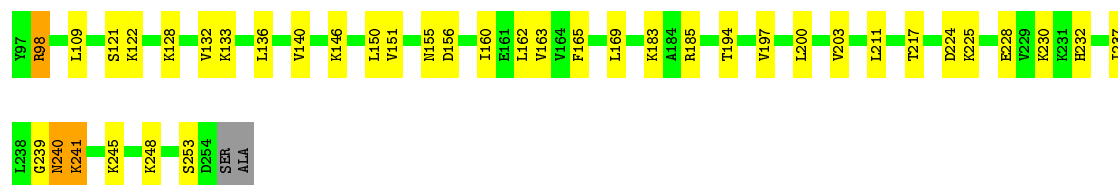
Chain L8: 65% 25% 9%



- Molecule 45: 60S ribosomal protein L8-A

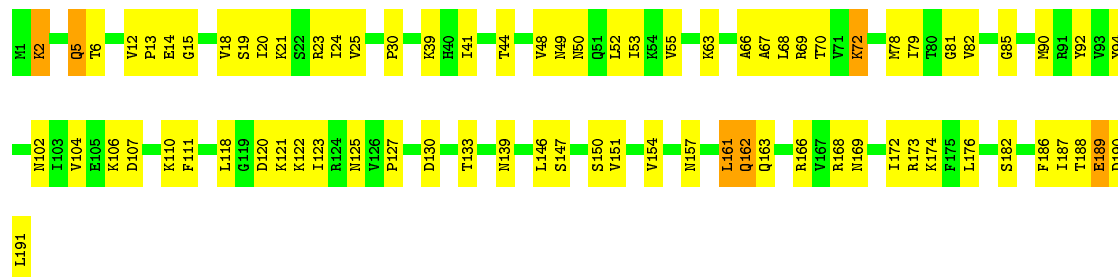
Chain L8: 67% 21% 9%





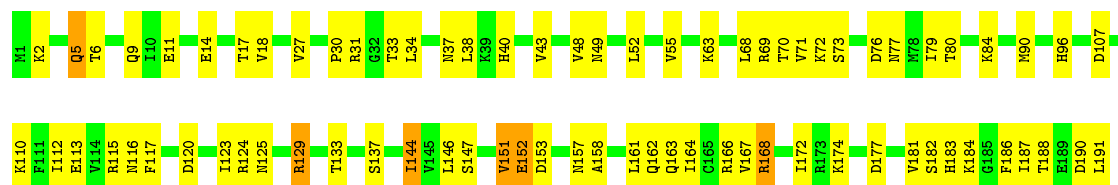
- Molecule 46: 60S ribosomal protein L9-A

Chain L9: 59% 38%



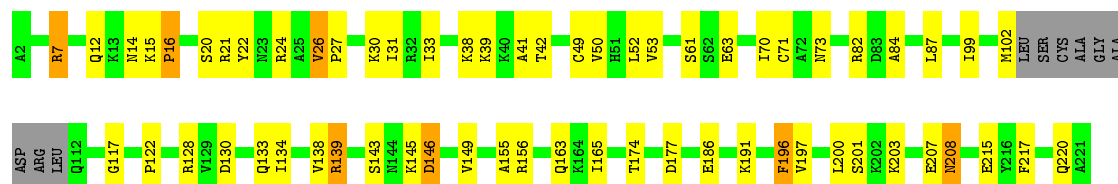
- Molecule 46: 60S ribosomal protein L9-A

Chain l9: 60% 37%



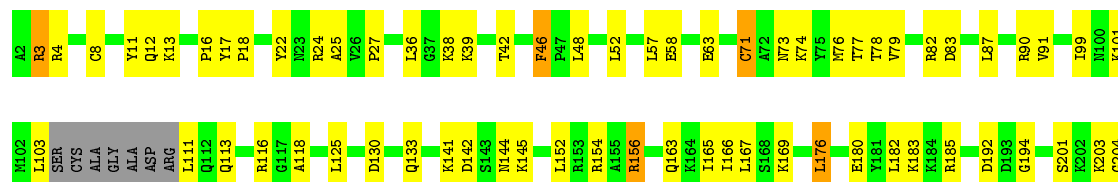
- Molecule 47: 60S ribosomal protein L10

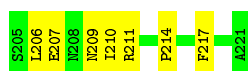
Chain M0: 68% 25%



- Molecule 47: 60S ribosomal protein L10

Chain m0: 63% 31%





- Molecule 48: 60S ribosomal protein L11-B

Chain M1: 66% 27% . . .



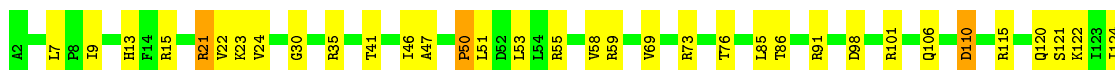
- Molecule 48: 60S ribosomal protein L11-B

Chain m1: 57% 32% 8% .



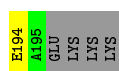
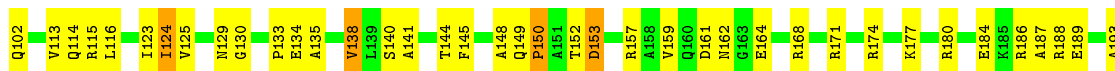
- Molecule 49: 60S ribosomal protein L13-A

Chain M3: 71% 24% . .



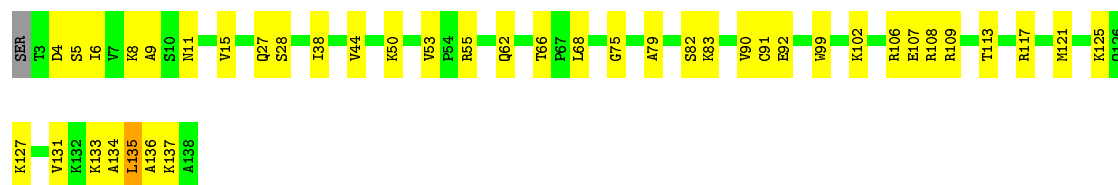
- Molecule 49: 60S ribosomal protein L13-A

Chain m3: 59% 37% . .



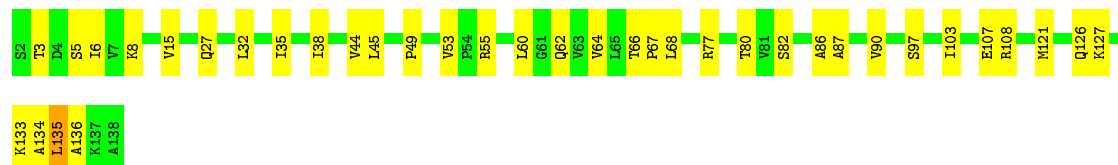
- Molecule 50: 60S ribosomal protein L14-A

Chain M4: 69% 29% . .



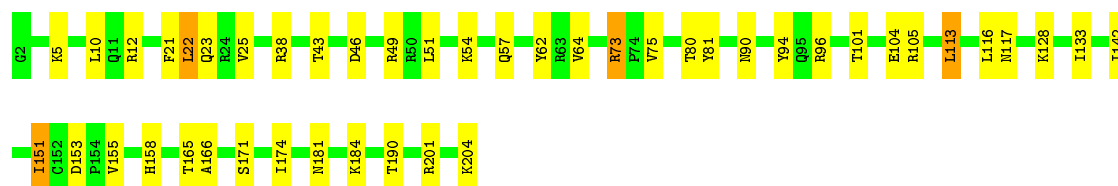
- Molecule 50: 60S ribosomal protein L14-A

Chain m4:   .



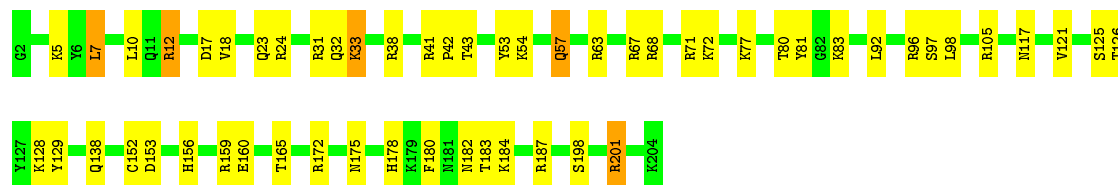
- Molecule 51: 60S ribosomal protein L15-A

Chain M5:   .



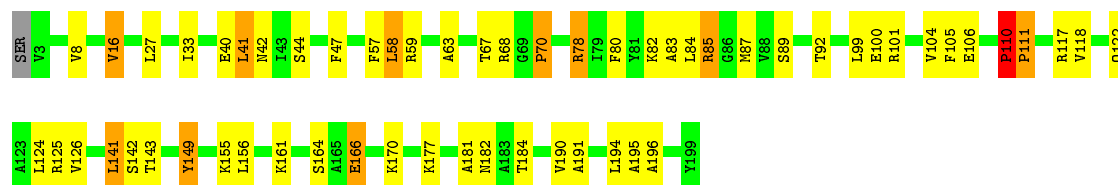
- Molecule 51: 60S ribosomal protein L15-A

Chain m5:   .



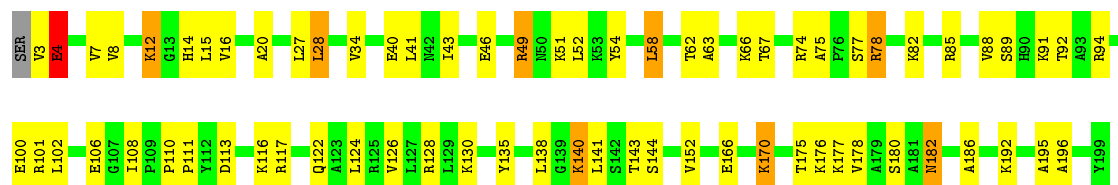
- Molecule 52: 60S ribosomal protein L16-A

Chain M6:    ..

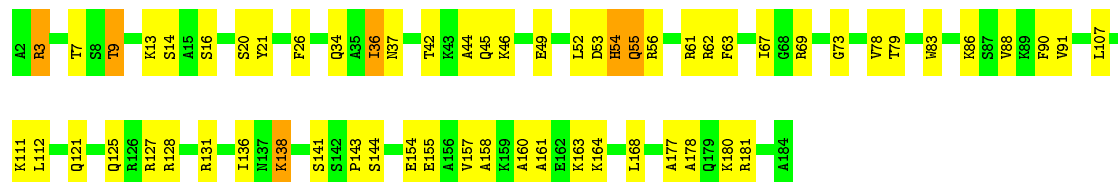


- Molecule 52: 60S ribosomal protein L16-A

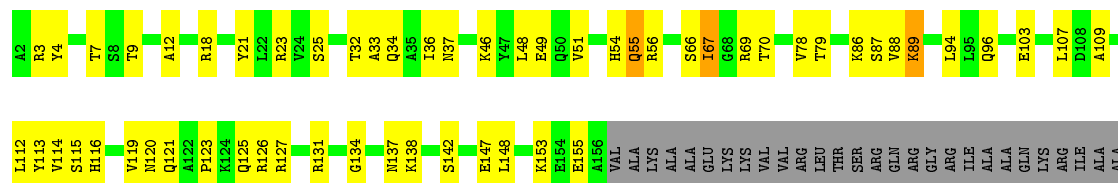
Chain m6:    ..



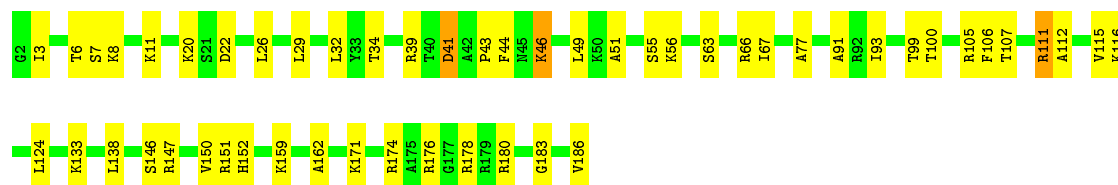
• Molecule 53: 60S ribosomal protein L17-A



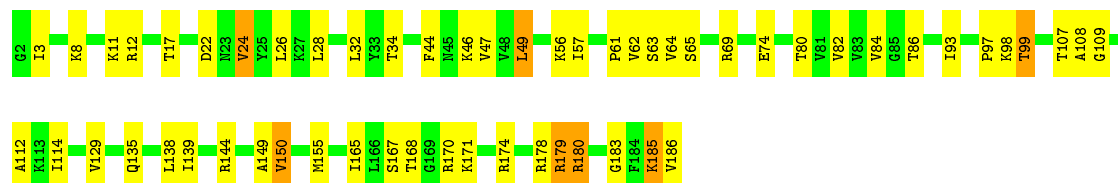
• Molecule 53: 60S ribosomal protein L17-A



• Molecule 54: 60S ribosomal protein L18-A

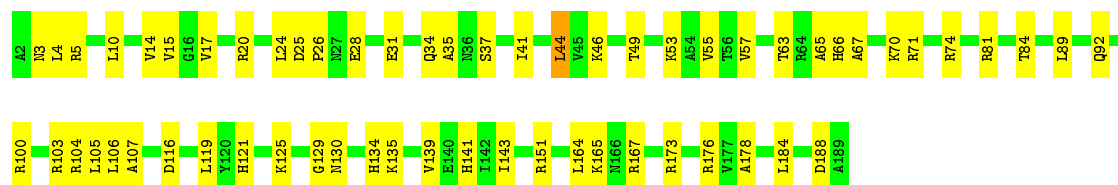


• Molecule 54: 60S ribosomal protein L18-A



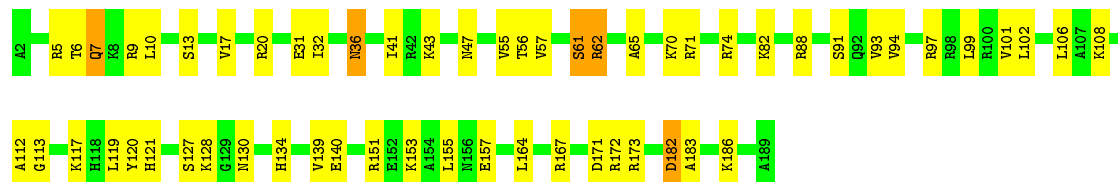
• Molecule 55: 60S ribosomal protein L19-A





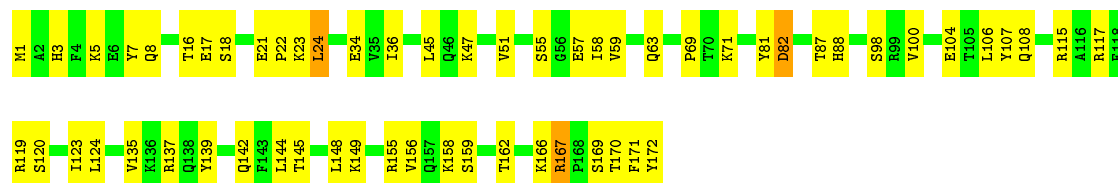
• Molecule 55: 60S ribosomal protein L19-A

Chain m9: 69% 28%



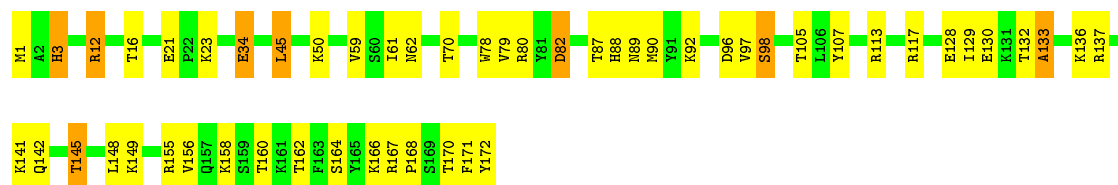
• Molecule 56: 60S ribosomal protein L20-A

Chain N0: 66% 33%



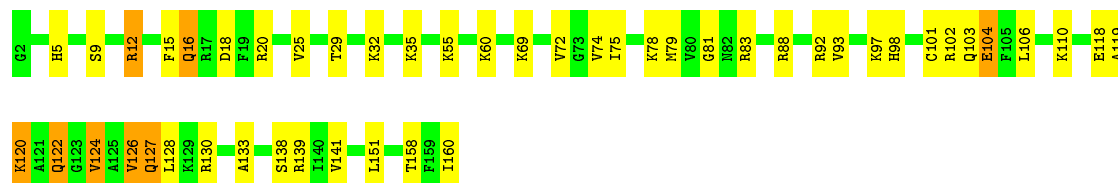
• Molecule 56: 60S ribosomal protein L20-A

Chain n0: 69% 26% 5%



• Molecule 57: 60S ribosomal protein L21-A

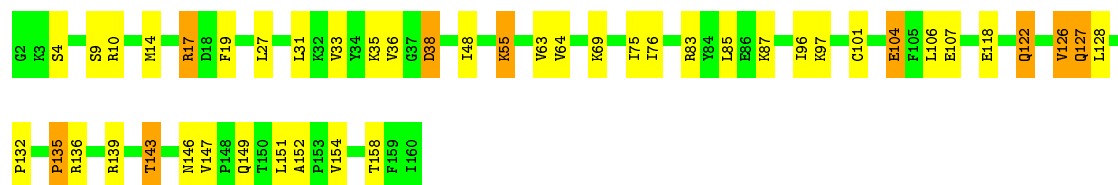
Chain N1: 70% 25% 5%



• Molecule 57: 60S ribosomal protein L21-A

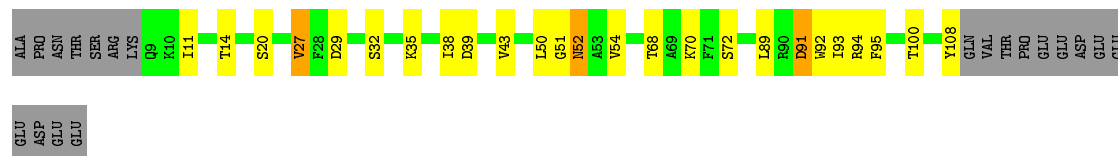
Chain n1: 72% 23% 6%





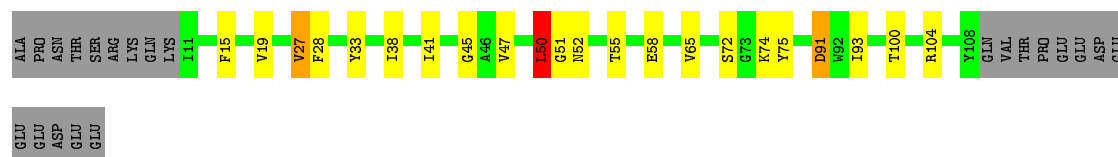
- Molecule 58: 60S ribosomal protein L22-A

Chain N2:    63% 18% 17%



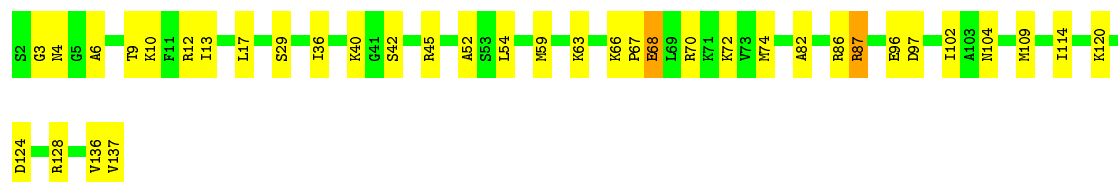
- Molecule 58: 60S ribosomal protein L22-A

Chain n2:    63% 16% 18%



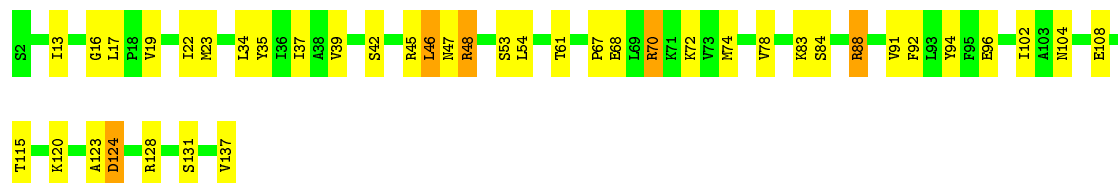
- Molecule 59: 60S ribosomal protein L23-A

Chain N3:    73% 26%



- Molecule 59: 60S ribosomal protein L23-A

Chain n3:    70% 26%



- Molecule 60: 60S ribosomal protein L24-A

Chain N4:    46% 15% 37%

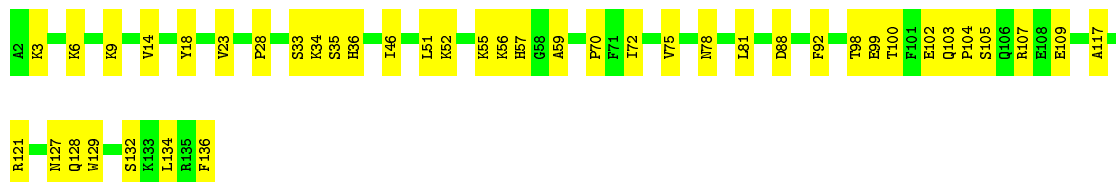






- Molecule 63: 60S ribosomal protein L27-A

Chain N7:   69% 31%



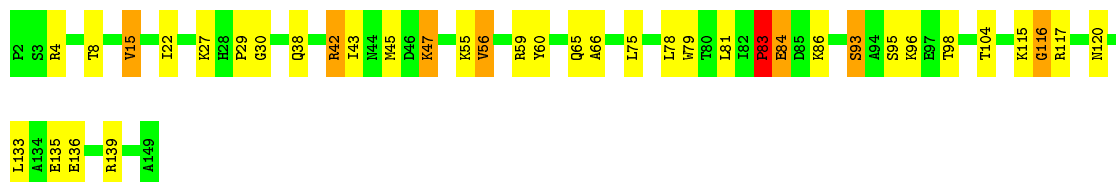
- Molecule 63: 60S ribosomal protein L27-A

Chain n7:   76% 23%



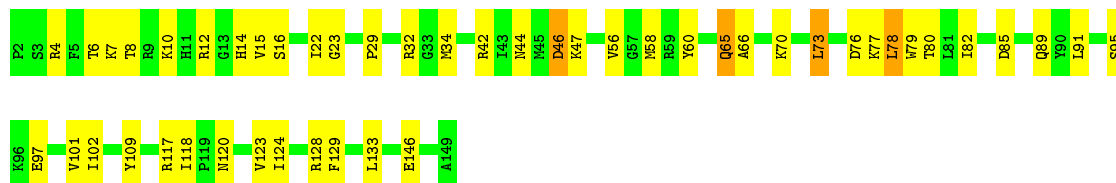
- Molecule 64: 60S ribosomal protein L28

Chain N8:    74% 20% 5%



- Molecule 64: 60S ribosomal protein L28

Chain n8:   68% 30%



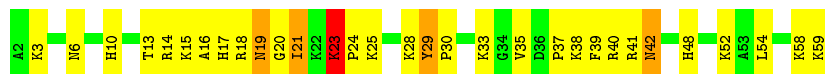
- Molecule 65: 60S ribosomal protein L29

Chain N9:    64% 33%



- Molecule 65: 60S ribosomal protein L29

Chain n9:  47% 45% 7%



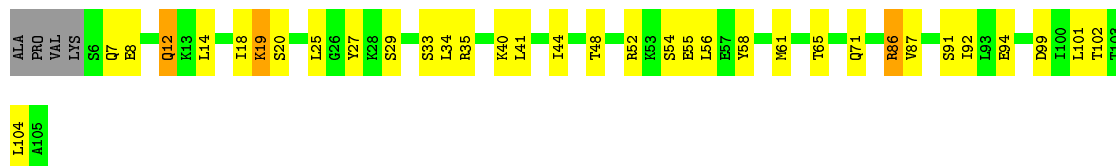
- Molecule 66: 60S ribosomal protein L30

Chain O0:  73% 19% 7%



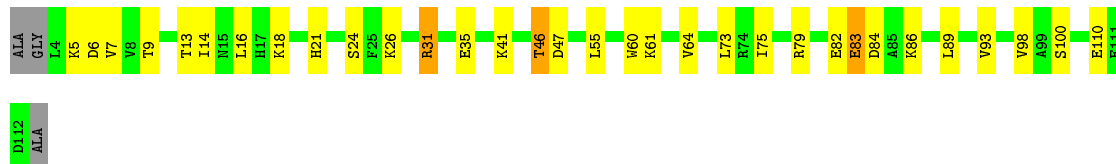
- Molecule 66: 60S ribosomal protein L30

Chain o0:  63% 30%



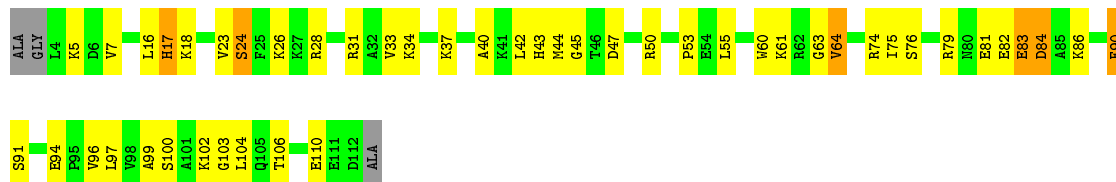
- Molecule 67: 60S ribosomal protein L31-A

Chain O1:  69% 26%



- Molecule 67: 60S ribosomal protein L31-A

Chain o1:  55% 37% 5%



- Molecule 68: 60S ribosomal protein L32

Chain O2:  63% 33%





- Molecule 68: 60S ribosomal protein L32

Chain o2: 67% 25% 5% ..



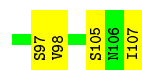
- Molecule 69: 60S ribosomal protein L33-A

Chain O3: 74% 23% .



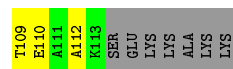
- Molecule 69: 60S ribosomal protein L33-A

Chain o3: 65% 30% 5%



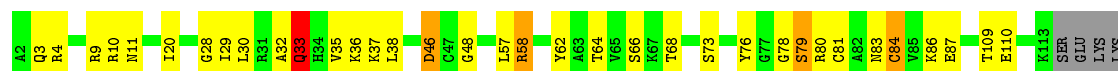
- Molecule 70: 60S ribosomal protein L34-A

Chain O4: 61% 27% 6% 6%

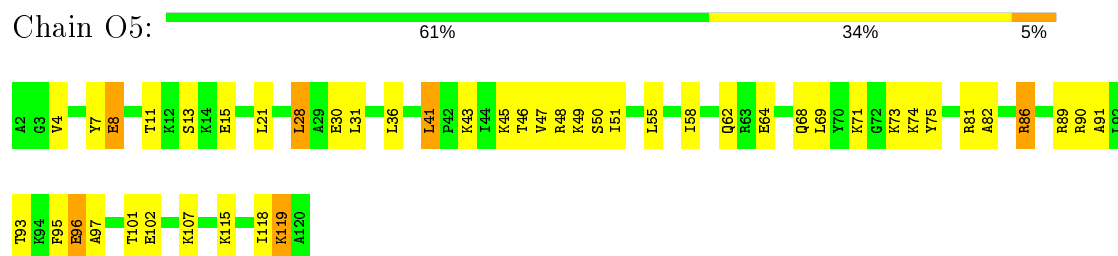


- Molecule 70: 60S ribosomal protein L34-A

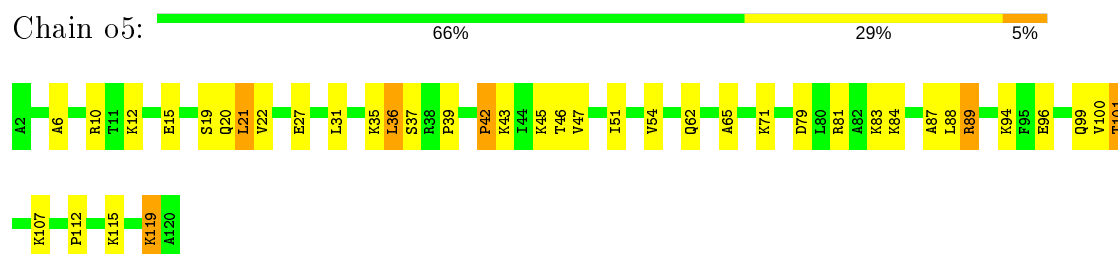
Chain o4: 65% 25% 6%



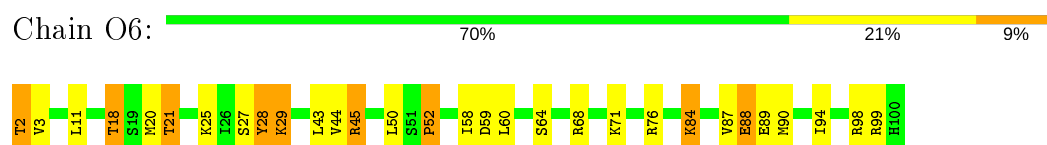
- Molecule 71: 60S ribosomal protein L35-A



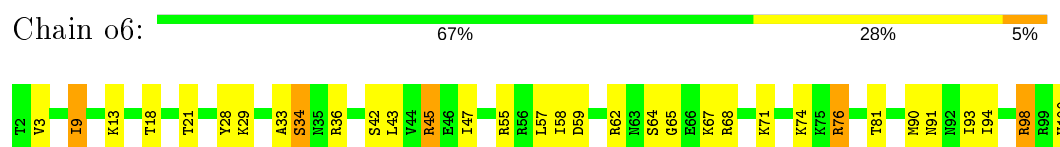
- Molecule 71: 60S ribosomal protein L35-A



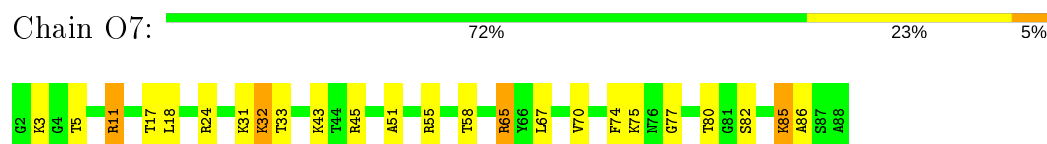
- Molecule 72: 60S ribosomal protein L36-A



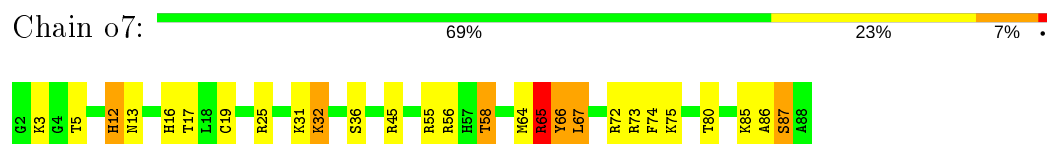
- Molecule 72: 60S ribosomal protein L36-A



- Molecule 73: 60S ribosomal protein L37-A

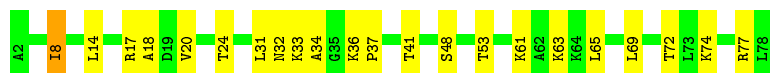


- Molecule 73: 60S ribosomal protein L37-A




- Molecule 74: 60S ribosomal protein L38

Chain O8:  71% 27%



- Molecule 74: 60S ribosomal protein L38

Chain o8:  77% 22%



- Molecule 75: 60S ribosomal protein L39

Chain O9:  68% 30%



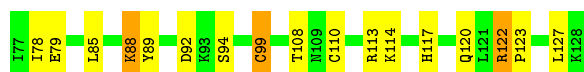
- Molecule 75: 60S ribosomal protein L39

Chain o9:  70% 30%



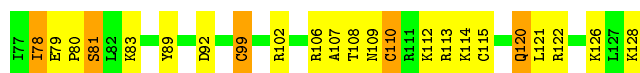
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain Q0:  67% 27% 6%



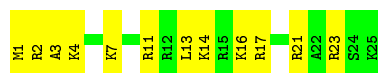
- Molecule 76: Ubiquitin-60S ribosomal protein L40

Chain q0:  56% 35% 10%



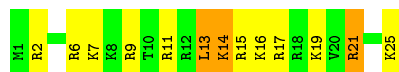
- Molecule 77: 60S ribosomal protein L41-A

Chain Q1:  52% 48%



- Molecule 77: 60S ribosomal protein L41-A

Chain q1: 



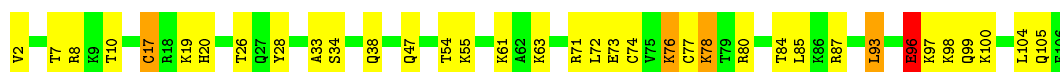
- Molecule 78: 60S ribosomal protein L42-A

Chain Q2: 



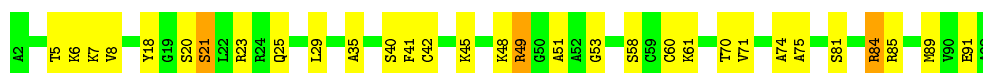
- Molecule 78: 60S ribosomal protein L42-A

Chain q2: 



- Molecule 79: 60S ribosomal protein L43-A

Chain Q3: 



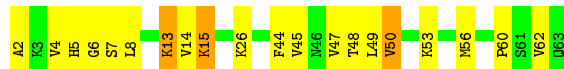
- Molecule 79: 60S ribosomal protein L43-A

Chain q3: 



- Molecule 80: 40S ribosomal protein S30-A

Chain e0: 



- Molecule 81: Ubiquitin-40S ribosomal protein S31

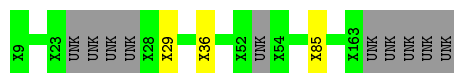
Chain e1: 




- Molecule 82: unknown protein chain m2

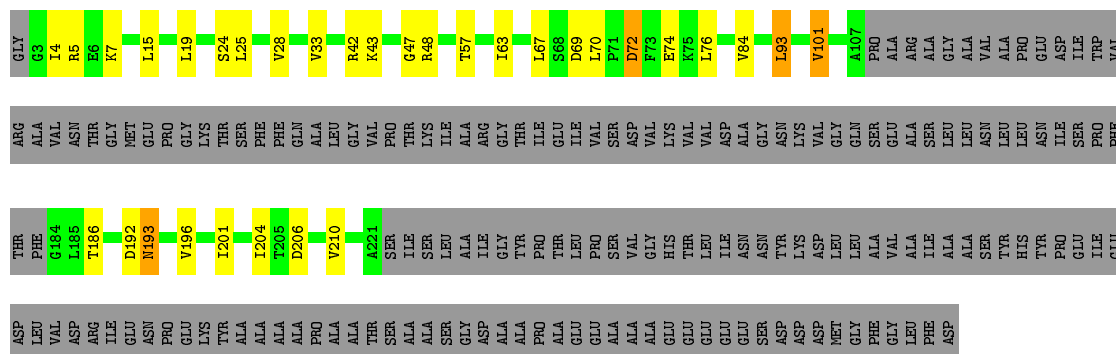


Chain m2:  92% 6%



- Molecule 83: 60S acidic ribosomal protein P0

Chain p0:  36% 9% 54%



- Molecule 84: unknown protein chain p1

Chain p1:  100%

There are no outlier residues recorded for this chain.

- Molecule 85: unknown protein chain p2

Chain p2:  100%

There are no outlier residues recorded for this chain.

## 4 Data and refinement statistics

EDS failed to run properly - this section is therefore incomplete.

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	437.00Å 286.75Å 305.18Å 90.00° 99.24° 90.00°	Depositor
Resolution (Å)	135.58 – 3.60	Depositor
% Data completeness (in resolution range)	100.0 (135.58-3.60)	Depositor
$R_{merge}$	0.52	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	1.26 (at 3.58Å)	Xtriage
Refinement program	PHENIX (phenix.refine: dev_1702)	Depositor
R, $R_{free}$	0.190 , 0.267	Depositor
Wilson B-factor (Å <sup>2</sup> )	115.6	Xtriage
Anisotropy	0.083	Xtriage
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.43$ , $\langle L^2 \rangle = 0.25$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
Total number of atoms	411095	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	98.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.62% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

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

## 5 Model quality ⓘ

### 5.1 Standard geometry ⓘ

Bond lengths and bond angles in the following residue types are not validated in this section: ZN, OHX, MG, GET

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	2	1.08	91/41698 (0.2%)	1.83	1528/64972 (2.4%)
1	6	1.44	367/42663 (0.9%)	2.19	2982/66472 (4.5%)
2	S0	0.60	0/1617	0.83	0/2215
2	s0	0.75	0/1623	0.92	1/2222 (0.0%)
3	S1	0.46	0/1735	0.74	0/2335
3	s1	0.67	0/1748	0.87	3/2352 (0.1%)
4	S2	0.74	2/1665 (0.1%)	0.90	2/2263 (0.1%)
4	s2	0.87	1/1665 (0.1%)	1.01	4/2263 (0.2%)
5	S3	0.72	0/1759	0.86	1/2368 (0.0%)
5	s3	0.72	0/1759	0.89	1/2368 (0.0%)
6	S4	0.65	0/2109	0.86	2/2839 (0.1%)
6	s4	0.77	0/2109	0.90	1/2839 (0.0%)
7	S5	0.54	0/1629	0.76	0/2202
7	s5	0.89	1/1629 (0.1%)	1.02	4/2202 (0.2%)
8	S6	0.64	0/1823	0.79	0/2439
8	s6	0.88	0/1779	0.99	2/2379 (0.1%)
9	S7	0.54	0/1506	0.75	0/2028
9	s7	0.68	0/1516	0.91	2/2043 (0.1%)
10	S8	0.79	0/1514	0.92	1/2021 (0.0%)
10	s8	0.86	0/1514	0.94	1/2021 (0.0%)
11	S9	0.65	0/1519	0.84	1/2035 (0.0%)
11	s9	0.79	0/1519	0.91	2/2035 (0.1%)
12	C0	0.66	0/790	0.86	2/1069 (0.2%)
12	c0	0.56	0/777	0.87	2/1049 (0.2%)
13	C1	0.82	0/1240	0.88	0/1675
13	c1	0.91	0/1194	1.00	2/1610 (0.1%)
14	C2	0.51	0/900	0.80	1/1224 (0.1%)
14	c2	0.46	0/900	0.69	1/1224 (0.1%)
15	C3	0.59	0/1215	0.76	0/1638
15	c3	0.80	0/1215	0.96	2/1638 (0.1%)
16	C4	0.50	0/901	0.79	0/1217
16	c4	0.76	0/960	0.91	0/1290

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
17	C5	0.69	0/998	0.81	0/1341
17	c5	0.89	0/1060	1.05	3/1426 (0.2%)
18	C6	0.60	0/1125	0.89	3/1510 (0.2%)
18	c6	0.93	0/1131	1.06	2/1518 (0.1%)
19	C7	0.59	0/935	0.87	3/1254 (0.2%)
19	c7	0.80	0/914	0.91	1/1224 (0.1%)
20	C8	0.61	0/1211	0.82	0/1628
20	c8	0.92	2/1211 (0.2%)	1.08	5/1628 (0.3%)
21	C9	0.61	0/1130	0.83	0/1517
21	c9	0.94	1/1130 (0.1%)	1.01	2/1517 (0.1%)
22	D0	0.65	0/865	0.83	0/1169
22	d0	0.79	0/892	0.97	1/1205 (0.1%)
23	D1	0.65	0/693	0.88	2/935 (0.2%)
23	d1	0.79	0/693	0.92	0/935
24	D2	0.63	0/1038	0.89	1/1395 (0.1%)
24	d2	0.88	0/1038	0.98	1/1395 (0.1%)
25	D3	0.90	1/1139 (0.1%)	1.04	1/1518 (0.1%)
25	d3	1.17	5/1139 (0.4%)	1.14	4/1518 (0.3%)
26	D4	0.66	0/1087	0.80	0/1449
26	d4	0.77	0/1087	0.92	0/1449
27	D5	0.61	0/571	0.84	0/768
27	d5	0.81	0/566	0.96	0/761
28	D6	0.66	0/782	0.84	0/1047
28	d6	0.81	0/782	0.92	1/1047 (0.1%)
29	D7	0.53	0/620	0.81	1/838 (0.1%)
29	d7	0.67	0/620	0.93	2/838 (0.2%)
30	D8	0.49	0/499	0.74	0/670
30	d8	0.76	0/499	0.97	1/670 (0.1%)
31	D9	0.75	0/452	0.86	0/600
31	d9	0.97	0/452	0.97	0/600
32	E0	0.69	0/483	0.87	0/643
33	E1	0.65	0/577	0.90	0/770
34	SR	0.54	0/2494	0.72	0/3393
34	sR	0.69	0/2495	0.85	2/3395 (0.1%)
35	SM	0.72	0/1113	0.91	2/1502 (0.1%)
35	sM	0.77	0/682	0.98	1/921 (0.1%)
36	1	1.76	1434/75394 (1.9%)	2.53	7929/117545 (6.7%)
36	5	1.87	1867/75414 (2.5%)	2.61	8463/117575 (7.2%)
37	3	1.50	28/2883 (1.0%)	2.28	214/4491 (4.8%)
37	7	2.04	91/2883 (3.2%)	2.85	410/4491 (9.1%)
38	4	1.54	29/3746 (0.8%)	2.42	331/5832 (5.7%)
38	8	1.43	34/3746 (0.9%)	2.16	250/5832 (4.3%)
39	L2	0.98	1/1948 (0.1%)	1.08	2/2617 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
39	l2	0.96	1/1946 (0.1%)	1.03	4/2614 (0.2%)
40	L3	1.12	3/3146 (0.1%)	1.12	11/4228 (0.3%)
40	l3	1.32	9/3146 (0.3%)	1.24	17/4228 (0.4%)
41	L4	1.03	0/2800	1.15	13/3790 (0.3%)
41	l4	1.02	1/2800 (0.0%)	1.11	5/3790 (0.1%)
42	L5	0.84	1/2425 (0.0%)	0.97	2/3271 (0.1%)
42	l5	1.16	2/2408 (0.1%)	1.08	3/3248 (0.1%)
43	L6	1.15	2/1260 (0.2%)	1.17	4/1694 (0.2%)
43	l6	1.18	2/1269 (0.2%)	1.15	3/1705 (0.2%)
44	L7	1.09	0/1821	1.13	9/2451 (0.4%)
44	l7	1.26	3/1828 (0.2%)	1.17	7/2461 (0.3%)
45	L8	0.74	0/1836	0.91	0/2481
45	l8	0.72	0/1795	0.86	1/2429 (0.0%)
46	L9	0.97	0/1539	1.07	1/2073 (0.0%)
46	l9	1.33	4/1539 (0.3%)	1.23	8/2073 (0.4%)
47	M0	1.02	4/1741 (0.2%)	1.04	1/2335 (0.0%)
47	m0	1.23	5/1758 (0.3%)	1.20	7/2358 (0.3%)
48	M1	0.80	1/1374 (0.1%)	0.93	3/1842 (0.2%)
48	m1	1.09	3/1374 (0.2%)	1.09	5/1842 (0.3%)
49	M3	0.96	2/1568 (0.1%)	1.09	4/2106 (0.2%)
49	m3	0.87	0/1573	1.02	0/2113
50	M4	1.10	0/1068	1.13	1/1438 (0.1%)
50	m4	1.30	1/1074 (0.1%)	1.15	3/1446 (0.2%)
51	M5	0.97	0/1757	1.04	5/2354 (0.2%)
51	m5	0.84	0/1757	0.93	2/2354 (0.1%)
52	M6	1.25	6/1585 (0.4%)	1.28	12/2128 (0.6%)
52	m6	1.54	9/1585 (0.6%)	1.38	14/2128 (0.7%)
53	M7	1.21	3/1443 (0.2%)	1.09	3/1944 (0.2%)
53	m7	1.18	1/1250 (0.1%)	1.19	2/1683 (0.1%)
54	M8	1.03	0/1465	1.12	5/1965 (0.3%)
54	m8	0.98	1/1465 (0.1%)	1.06	3/1965 (0.2%)
55	M9	0.84	0/1538	0.92	3/2050 (0.1%)
55	m9	0.88	1/1538 (0.1%)	0.92	2/2050 (0.1%)
56	N0	1.05	0/1481	1.10	5/1990 (0.3%)
56	n0	1.46	7/1481 (0.5%)	1.21	5/1990 (0.3%)
57	N1	1.09	1/1300 (0.1%)	1.10	4/1743 (0.2%)
57	n1	1.28	6/1300 (0.5%)	1.17	5/1743 (0.3%)
58	N2	0.73	1/812 (0.1%)	0.89	1/1099 (0.1%)
58	n2	0.73	0/794	0.84	1/1076 (0.1%)
59	N3	1.09	2/1018 (0.2%)	1.07	3/1369 (0.2%)
59	n3	1.35	7/1018 (0.7%)	1.28	7/1369 (0.5%)
60	N4	0.90	0/712	0.98	1/958 (0.1%)
60	n4	1.04	0/1052	1.04	0/1398

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
61	N5	0.86	1/979 (0.1%)	1.00	4/1321 (0.3%)
61	n5	0.85	0/974	1.03	2/1314 (0.2%)
62	N6	0.92	0/1004	1.11	6/1341 (0.4%)
62	n6	0.89	0/1004	1.02	5/1341 (0.4%)
63	N7	0.68	0/1118	0.89	1/1497 (0.1%)
63	n7	0.67	0/1118	0.83	0/1497
64	N8	1.05	0/1204	1.10	5/1612 (0.3%)
64	n8	0.98	1/1204 (0.1%)	1.08	2/1612 (0.1%)
65	N9	0.98	0/473	1.07	1/629 (0.2%)
65	n9	1.12	1/473 (0.2%)	1.33	3/629 (0.5%)
66	O0	0.71	0/751	0.87	0/1008
66	o0	0.69	0/775	0.88	2/1040 (0.2%)
67	O1	0.90	0/890	1.00	1/1196 (0.1%)
67	o1	1.13	2/897 (0.2%)	1.20	3/1205 (0.2%)
68	O2	1.21	2/1041 (0.2%)	1.20	4/1394 (0.3%)
68	o2	1.15	2/1041 (0.2%)	1.13	5/1394 (0.4%)
69	O3	1.32	2/868 (0.2%)	1.23	3/1168 (0.3%)
69	o3	1.38	3/868 (0.3%)	1.19	2/1168 (0.2%)
70	O4	0.84	0/890	1.00	4/1189 (0.3%)
70	o4	0.83	1/890 (0.1%)	0.99	2/1189 (0.2%)
71	O5	0.98	2/978 (0.2%)	1.09	2/1301 (0.2%)
71	o5	0.82	0/974	0.89	1/1297 (0.1%)
72	O6	0.84	0/778	0.98	1/1034 (0.1%)
72	o6	0.79	0/777	0.98	1/1033 (0.1%)
73	O7	1.08	0/696	1.20	4/923 (0.4%)
73	o7	0.99	0/696	1.07	3/923 (0.3%)
74	O8	0.72	0/618	0.84	0/826
74	o8	0.66	0/614	0.90	0/822
75	O9	1.05	0/443	1.19	3/588 (0.5%)
75	o9	0.82	0/443	0.99	0/588
76	Q0	1.04	2/423 (0.5%)	1.14	1/562 (0.2%)
76	q0	1.58	3/423 (0.7%)	1.44	5/562 (0.9%)
77	Q1	0.76	0/234	1.11	2/300 (0.7%)
77	q1	1.03	0/234	1.30	3/300 (1.0%)
78	Q2	1.12	1/860 (0.1%)	1.07	2/1136 (0.2%)
78	q2	1.13	2/860 (0.2%)	1.09	2/1136 (0.2%)
79	Q3	1.04	0/701	1.10	3/934 (0.3%)
79	q3	1.07	1/701 (0.1%)	1.05	0/934
80	e0	0.81	0/499	0.95	0/665
81	e1	0.51	0/619	0.87	0/822
83	p0	0.75	0/1091	0.85	0/1472
All	All	1.39	4070/429970 (0.9%)	1.97	22469/631198 (3.6%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
2	S0	0	2
2	s0	0	2
3	s1	0	3
5	S3	0	2
5	s3	0	2
6	s4	0	2
7	s5	0	3
9	s7	0	1
11	S9	0	2
11	s9	0	1
12	C0	0	2
15	c3	0	1
16	C4	0	1
17	c5	0	1
18	C6	0	1
18	c6	0	3
19	C7	0	1
19	c7	0	2
20	c8	0	1
21	c9	0	1
22	d0	0	1
23	D1	0	1
24	D2	0	1
24	d2	0	2
25	D3	0	2
26	D4	0	1
26	d4	0	2
27	D5	0	1
27	d5	0	1
28	D6	0	1
28	d6	0	1
33	E1	0	2
35	SM	0	1
39	l2	0	2
40	L3	0	3
40	l3	0	5
41	L4	0	5
41	l4	0	2
42	L5	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
42	l5	0	3
43	L6	0	2
43	l6	0	1
44	L7	0	2
44	l7	0	3
45	l8	0	1
47	M0	0	2
47	m0	0	1
48	m1	0	1
49	m3	0	2
52	M6	0	2
52	m6	0	2
53	M7	0	1
53	m7	0	2
54	m8	0	1
56	n0	0	2
57	N1	0	1
57	n1	0	1
60	n4	0	1
61	n5	0	1
63	N7	0	2
64	N8	0	4
64	n8	0	2
65	N9	0	2
65	n9	0	1
67	o1	0	1
68	o2	0	2
69	O3	0	2
70	O4	0	2
70	o4	0	2
72	O6	0	1
76	q0	0	1
80	e0	0	2
81	e1	0	1
82	m2	0	3
83	p0	0	1
All	All	0	130

All (4070) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
78	Q2	17	CYS	CB-SG	15.17	2.08	1.82

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	806	A	N9-C4	-14.79	1.28	1.37
37	7	89	G	C6-O6	14.62	1.37	1.24
36	5	2397	A	N9-C4	-14.38	1.29	1.37
36	5	2875	U	N1-C2	13.97	1.51	1.38
36	5	1303	A	C5-C6	-13.90	1.28	1.41
36	5	2689	A	N3-C4	-13.75	1.26	1.34
1	6	1753	A	N9-C4	13.53	1.46	1.37
36	5	2358	A	N9-C4	-13.26	1.29	1.37
36	1	408	A	N3-C4	-12.89	1.27	1.34
36	1	1432	C	N1-C6	-12.89	1.29	1.37
36	1	2875	U	C2-N3	12.87	1.46	1.37
36	5	1152	G	N9-C4	-12.77	1.27	1.38
36	1	2726	C	N3-C4	-12.50	1.25	1.33
36	1	3011	A	N9-C4	-12.47	1.30	1.37
36	1	2373	A	N9-C4	-12.37	1.30	1.37
36	5	367	A	N9-C4	-12.32	1.30	1.37
36	5	1589	A	C5-C6	-12.05	1.30	1.41
36	1	2834	G	N3-C4	-11.96	1.27	1.35
36	5	1159	A	N9-C4	-11.92	1.30	1.37
36	5	1195	A	N3-C4	-11.89	1.27	1.34
36	5	958	C	N1-C6	-11.88	1.30	1.37
36	1	1103	A	N7-C5	11.71	1.46	1.39
36	1	2636	A	N9-C4	-11.68	1.30	1.37
76	q0	99	CYS	CB-SG	-11.64	1.62	1.82
36	5	917	A	N9-C4	-11.55	1.30	1.37
36	1	2409	G	N9-C8	-11.52	1.29	1.37
37	7	104	A	N9-C4	-11.52	1.30	1.37
36	1	645	A	C6-N6	-11.48	1.24	1.33
37	7	84	A	N3-C4	-11.45	1.27	1.34
36	1	2875	U	N1-C2	11.42	1.48	1.38
36	1	2820	A	N9-C4	-11.37	1.31	1.37
36	1	3142	A	N9-C4	-11.35	1.31	1.37
36	5	3005	A	N7-C5	-11.35	1.32	1.39
36	5	2875	U	C2-N3	11.35	1.45	1.37
36	5	2988	C	N1-C6	-11.35	1.30	1.37
36	5	1183	C	N1-C6	-11.29	1.30	1.37
36	5	994	G	C5-C4	-11.23	1.30	1.38
36	1	2860	U	C4-O4	11.21	1.32	1.23
36	5	2291	A	N9-C4	-11.17	1.31	1.37
36	5	2892	A	N3-C4	-11.10	1.28	1.34
36	1	2877	G	N3-C4	-11.07	1.27	1.35
36	1	1316	C	N1-C6	-11.05	1.30	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2636	A	N3-C4	-11.02	1.28	1.34
36	5	1197	A	N3-C4	-10.91	1.28	1.34
36	1	1330	A	N9-C4	-10.90	1.31	1.37
36	5	2799	A	N3-C4	-10.88	1.28	1.34
36	5	523	A	N3-C4	-10.87	1.28	1.34
36	1	2619	G	C5-C4	-10.85	1.30	1.38
36	5	523	A	N9-C4	-10.85	1.31	1.37
36	5	1159	A	N3-C4	-10.84	1.28	1.34
36	5	960	U	N1-C2	10.82	1.48	1.38
36	1	3006	A	N9-C4	-10.81	1.31	1.37
36	5	2936	A	C5-C4	-10.80	1.31	1.38
36	5	1303	A	C5-C4	-10.79	1.31	1.38
36	5	2743	A	N9-C4	-10.74	1.31	1.37
36	1	936	A	N9-C4	-10.68	1.31	1.37
36	1	962	A	N3-C4	-10.66	1.28	1.34
36	1	962	A	N9-C4	-10.66	1.31	1.37
36	5	2875	U	C4-C5	10.62	1.53	1.43
36	1	1135	A	N3-C4	-10.62	1.28	1.34
37	7	102	A	N9-C4	-10.60	1.31	1.37
36	5	40	A	N9-C4	-10.56	1.31	1.37
36	1	744	A	N9-C4	-10.56	1.31	1.37
1	6	1131	A	C5-C6	-10.55	1.31	1.41
36	1	2409	G	C8-N7	-10.53	1.24	1.30
36	5	1195	A	N9-C4	-10.52	1.31	1.37
1	6	1537	C	N1-C6	10.52	1.43	1.37
36	5	2386	A	N9-C4	-10.49	1.31	1.37
36	1	2404	A	N3-C4	10.48	1.41	1.34
1	6	992	A	N9-C4	-10.48	1.31	1.37
36	5	1178	G	C6-N1	-10.45	1.32	1.39
36	5	2397	A	N3-C4	-10.44	1.28	1.34
36	1	2877	G	C5-C4	-10.43	1.31	1.38
36	5	2879	C	N1-C6	-10.41	1.30	1.37
36	5	2892	A	N9-C4	-10.36	1.31	1.37
36	5	1883	A	N3-C4	-10.34	1.28	1.34
36	1	2409	G	N7-C5	-10.32	1.33	1.39
36	1	1103	A	C5-C6	10.30	1.50	1.41
36	1	2404	A	C5-C4	10.26	1.46	1.38
36	5	2703	A	N3-C4	-10.25	1.28	1.34
36	1	1411	C	N3-C4	-10.22	1.26	1.33
36	5	2813	A	N7-C5	-10.22	1.33	1.39
36	1	3011	A	N3-C4	-10.17	1.28	1.34
56	n0	128	GLU	CG-CD	10.15	1.67	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2379	U	C2-N3	-10.15	1.30	1.37
36	1	423	A	N3-C4	-10.14	1.28	1.34
36	5	3310	A	N7-C5	-10.14	1.33	1.39
36	1	367	A	N9-C4	-10.13	1.31	1.37
1	6	1778	G	C5-C4	-10.12	1.31	1.38
36	1	70	A	N9-C4	-10.11	1.31	1.37
36	5	3012	A	C5-C4	-10.11	1.31	1.38
36	5	2836	C	N1-C6	-10.11	1.31	1.37
36	5	2994	A	N3-C4	-10.04	1.28	1.34
36	5	2139	A	N3-C4	-10.02	1.28	1.34
36	5	1320	C	N1-C6	-10.01	1.31	1.37
36	1	1180	A	N9-C4	-10.00	1.31	1.37
36	5	94	G	N9-C4	-9.99	1.29	1.38
36	1	962	A	N7-C5	-9.97	1.33	1.39
1	6	1537	C	C2-N3	9.97	1.43	1.35
36	1	2605	G	N9-C4	-9.96	1.29	1.38
36	1	35	A	C5-C6	-9.95	1.32	1.41
36	5	2404	A	C5-C6	9.94	1.50	1.41
36	5	3245	A	C5-C6	-9.93	1.32	1.41
36	1	806	A	N9-C4	-9.92	1.31	1.37
36	5	654	C	N1-C6	-9.92	1.31	1.37
36	5	1174	G	C5-C4	-9.92	1.31	1.38
36	5	1332	A	N9-C4	-9.89	1.31	1.37
36	1	2860	U	N3-C4	9.88	1.47	1.38
36	1	3305	A	N7-C5	-9.86	1.33	1.39
36	5	3012	A	N9-C4	-9.84	1.31	1.37
36	5	2689	A	N9-C4	-9.83	1.31	1.37
1	6	1556	A	N9-C4	-9.82	1.31	1.37
36	5	1330	A	N9-C4	-9.81	1.31	1.37
36	1	1154	A	N3-C4	-9.79	1.28	1.34
36	5	1399	A	N9-C4	-9.79	1.31	1.37
56	n0	78	TRP	CB-CG	-9.78	1.32	1.50
36	5	1370	G	C6-N1	-9.77	1.32	1.39
36	5	2353	G	C5-C6	-9.75	1.32	1.42
36	5	3091	A	N7-C5	-9.71	1.33	1.39
36	1	1393	A	N3-C4	-9.67	1.29	1.34
36	5	1040	A	N9-C4	-9.67	1.32	1.37
36	1	2605	G	N3-C4	-9.66	1.28	1.35
36	5	1047	A	N3-C4	-9.64	1.29	1.34
36	5	2644	C	N1-C6	-9.63	1.31	1.37
36	5	3029	A	N9-C4	-9.59	1.32	1.37
36	5	2920	U	C2-N3	-9.58	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	667	C	N3-C4	-9.58	1.27	1.33
36	1	1369	A	N9-C4	-9.56	1.32	1.37
36	5	994	G	C5-C6	-9.55	1.32	1.42
1	6	1028	C	N1-C6	-9.54	1.31	1.37
36	5	3043	C	N1-C6	-9.54	1.31	1.37
36	5	2986	U	N1-C2	-9.53	1.29	1.38
36	1	913	A	N7-C5	-9.53	1.33	1.39
36	1	2377	G	C6-N1	-9.51	1.32	1.39
36	5	1292	C	N1-C2	-9.51	1.30	1.40
36	1	402	A	N7-C5	-9.50	1.33	1.39
36	1	2333	C	N3-C4	-9.50	1.27	1.33
36	5	1103	A	C5-C4	9.49	1.45	1.38
36	1	2964	G	N7-C5	-9.44	1.33	1.39
37	7	44	C	C2-O2	9.44	1.32	1.24
36	5	2626	A	N3-C4	-9.43	1.29	1.34
36	1	2326	A	N9-C4	-9.42	1.32	1.37
36	1	2644	C	N1-C6	-9.40	1.31	1.37
1	6	1003	A	N9-C4	-9.40	1.32	1.37
36	5	806	A	N3-C4	-9.39	1.29	1.34
36	5	1332	A	N7-C5	-9.38	1.33	1.39
36	5	3213	A	N9-C4	-9.38	1.32	1.37
36	1	2871	G	N9-C8	9.37	1.44	1.37
36	1	1432	C	N3-C4	-9.37	1.27	1.33
36	1	2878	G	N9-C8	-9.36	1.31	1.37
36	5	1103	A	N3-C4	9.36	1.40	1.34
36	1	1320	C	N3-C4	-9.35	1.27	1.33
57	n1	104	GLU	CB-CG	9.30	1.69	1.52
36	5	848	A	N7-C5	-9.28	1.33	1.39
36	1	421	G	N1-C2	-9.27	1.30	1.37
36	5	884	A	C5-C6	-9.26	1.32	1.41
36	5	345	G	N9-C8	-9.26	1.31	1.37
36	5	1205	A	N3-C4	-9.26	1.29	1.34
36	5	428	A	N9-C4	-9.26	1.32	1.37
36	5	2918	G	C6-N1	-9.26	1.33	1.39
36	1	1103	A	N9-C4	9.25	1.43	1.37
36	1	3272	C	N1-C6	-9.25	1.31	1.37
36	5	3195	U	C2-N3	9.23	1.44	1.37
36	5	2626	A	N9-C4	-9.20	1.32	1.37
36	5	2970	C	N1-C6	-9.20	1.31	1.37
36	1	422	A	N3-C4	-9.19	1.29	1.34
36	1	2644	C	N3-C4	-9.19	1.27	1.33
1	6	100	A	N3-C4	-9.18	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	345	G	N7-C5	-9.17	1.33	1.39
36	5	1136	A	N3-C4	-9.16	1.29	1.34
36	5	2145	A	N7-C5	-9.15	1.33	1.39
36	5	2401	A	C5-C4	9.13	1.45	1.38
36	1	2877	G	C2-N3	-9.11	1.25	1.32
1	6	1778	G	C5-C6	-9.10	1.33	1.42
36	5	422	A	N3-C4	-9.09	1.29	1.34
36	1	1304	A	N9-C4	-9.09	1.32	1.37
36	1	2969	A	N9-C4	-9.08	1.32	1.37
36	5	1204	A	N9-C4	-9.07	1.32	1.37
36	1	644	G	C6-N1	-9.06	1.33	1.39
36	1	2159	U	N1-C2	9.06	1.46	1.38
36	5	512	U	C2-N3	-9.06	1.31	1.37
36	5	2149	A	N9-C4	-9.05	1.32	1.37
36	1	3181	C	N3-C4	-9.04	1.27	1.33
36	5	2908	G	N7-C5	-9.04	1.33	1.39
36	5	2309	A	N3-C4	-9.03	1.29	1.34
36	1	2948	C	N3-C4	-9.02	1.27	1.33
36	5	2879	C	C4-C5	-9.02	1.35	1.43
36	5	1589	A	N7-C5	-9.01	1.33	1.39
36	5	1592	G	C6-O6	8.99	1.32	1.24
36	5	3024	A	N9-C4	-8.99	1.32	1.37
36	5	1406	A	N3-C4	-8.98	1.29	1.34
36	1	1154	A	N7-C5	-8.95	1.33	1.39
37	7	73	C	N1-C6	8.95	1.42	1.37
36	5	2857	C	N3-C4	-8.95	1.27	1.33
36	1	357	A	N3-C4	-8.95	1.29	1.34
36	1	2641	U	C2-N3	-8.95	1.31	1.37
36	5	1152	G	N3-C4	-8.94	1.29	1.35
36	5	2401	A	N9-C4	8.91	1.43	1.37
36	5	2821	C	N1-C2	8.90	1.49	1.40
36	1	638	C	N1-C6	-8.89	1.31	1.37
36	1	70	A	N3-C4	-8.89	1.29	1.34
36	1	2878	G	C5-C4	-8.88	1.32	1.38
36	5	2936	A	N3-C4	-8.88	1.29	1.34
36	5	2304	C	C4-C5	-8.87	1.35	1.43
36	1	3142	A	N3-C4	-8.87	1.29	1.34
37	3	10	C	N1-C6	-8.86	1.31	1.37
36	5	2703	A	N7-C5	-8.86	1.33	1.39
36	5	2404	A	C5-C4	8.86	1.45	1.38
36	1	693	A	N3-C4	-8.84	1.29	1.34
36	5	367	A	N7-C5	-8.84	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2938	G	N7-C5	-8.83	1.33	1.39
36	5	1103	A	N9-C4	8.82	1.43	1.37
36	5	3038	U	C4-O4	-8.82	1.16	1.23
36	5	2386	A	N3-C4	-8.81	1.29	1.34
78	q2	17	CYS	CB-SG	8.81	1.97	1.82
36	5	884	A	N7-C5	-8.81	1.33	1.39
36	5	3310	A	C5-C4	-8.80	1.32	1.38
36	1	780	A	N3-C4	-8.80	1.29	1.34
36	5	2279	A	C5-C6	-8.79	1.33	1.41
36	1	2811	A	N3-C4	-8.77	1.29	1.34
1	6	1148	C	N3-C4	-8.77	1.27	1.33
36	5	2940	A	N7-C5	-8.77	1.33	1.39
36	5	2381	G	N9-C8	-8.74	1.31	1.37
36	5	3012	A	N7-C5	-8.73	1.34	1.39
36	5	2637	A	N3-C4	-8.72	1.29	1.34
36	1	1204	A	N9-C4	-8.72	1.32	1.37
36	1	1867	A	N9-C4	-8.71	1.32	1.37
36	5	2980	U	N3-C4	-8.71	1.30	1.38
36	5	39	A	N9-C4	-8.71	1.32	1.37
36	5	3213	A	C5-C4	-8.71	1.32	1.38
37	7	95	A	N3-C4	-8.70	1.29	1.34
36	5	2378	C	N1-C6	-8.70	1.31	1.37
36	5	2902	A	N3-C4	-8.70	1.29	1.34
36	5	2404	A	N9-C4	8.68	1.43	1.37
36	5	2875	U	C5-C6	8.67	1.42	1.34
36	5	2830	G	N3-C4	-8.67	1.29	1.35
36	1	1901	A	N9-C4	-8.67	1.32	1.37
36	5	2353	G	N7-C5	-8.66	1.34	1.39
36	5	2377	G	C5-C4	-8.66	1.32	1.38
36	5	3310	A	N3-C4	-8.66	1.29	1.34
36	1	2601	A	N3-C4	-8.65	1.29	1.34
36	5	2933	A	C6-N1	-8.65	1.29	1.35
36	5	2996	U	N3-C4	8.64	1.46	1.38
36	1	806	A	N3-C4	-8.64	1.29	1.34
36	5	2637	A	N9-C4	-8.62	1.32	1.37
36	1	2819	A	C5-C4	-8.62	1.32	1.38
36	1	3142	A	C6-N1	-8.62	1.29	1.35
36	1	635	G	C5-C6	-8.61	1.33	1.42
36	1	1145	G	N7-C5	-8.61	1.34	1.39
36	5	1307	G	N7-C5	-8.61	1.34	1.39
36	5	2412	G	N7-C5	-8.61	1.34	1.39
1	6	1025	A	N7-C5	-8.60	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1047	A	C6-N1	-8.60	1.29	1.35
36	5	1197	A	N7-C5	-8.59	1.34	1.39
36	1	2277	C	N1-C6	-8.59	1.31	1.37
36	1	2627	C	N1-C6	-8.59	1.31	1.37
36	5	951	A	C6-N1	-8.59	1.29	1.35
36	1	1333	C	N3-C4	-8.58	1.27	1.33
36	5	2125	A	N9-C4	-8.58	1.32	1.37
36	5	3035	A	N9-C4	-8.58	1.32	1.37
36	1	2365	C	N1-C6	-8.58	1.32	1.37
36	1	1398	U	C2-N3	-8.58	1.31	1.37
36	5	2726	C	N3-C4	-8.57	1.27	1.33
36	1	2971	A	N9-C4	8.56	1.43	1.37
36	5	3242	G	N1-C2	-8.56	1.30	1.37
36	1	2325	G	N7-C5	-8.56	1.34	1.39
36	5	345	G	C8-N7	-8.56	1.25	1.30
36	1	2187	G	N3-C4	-8.56	1.29	1.35
36	1	1182	A	N9-C4	-8.56	1.32	1.37
36	5	1178	G	N3-C4	-8.55	1.29	1.35
36	5	1205	A	C6-N1	-8.55	1.29	1.35
36	1	1178	G	C6-N1	-8.55	1.33	1.39
36	1	2880	U	N3-C4	-8.54	1.30	1.38
36	5	2816	G	N9-C4	-8.54	1.31	1.38
36	5	2934	A	C5-C6	-8.54	1.33	1.41
36	1	1884	A	N9-C4	-8.53	1.32	1.37
36	5	1203	A	C5-C6	-8.53	1.33	1.41
36	1	639	G	N9-C4	-8.53	1.31	1.38
36	1	2878	G	N7-C5	-8.53	1.34	1.39
1	6	1660	A	N3-C4	-8.51	1.29	1.34
36	5	2379	U	N3-C4	-8.51	1.30	1.38
36	5	1847	A	N9-C4	-8.51	1.32	1.37
1	2	1208	A	N9-C4	-8.50	1.32	1.37
36	5	2986	U	N1-C6	-8.50	1.30	1.38
36	5	2285	C	N1-C6	-8.50	1.32	1.37
36	1	1178	G	N1-C2	-8.50	1.30	1.37
36	5	2386	A	N7-C5	-8.49	1.34	1.39
36	1	804	C	N1-C6	-8.49	1.32	1.37
36	5	1120	A	N3-C4	-8.49	1.29	1.34
38	4	12	A	C5-C6	-8.48	1.33	1.41
36	5	3061	G	N9-C4	-8.48	1.31	1.38
36	5	1794	G	N9-C4	-8.46	1.31	1.38
36	5	806	A	N7-C5	-8.46	1.34	1.39
36	5	1175	C	N3-C4	-8.46	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2813	A	C5-C6	-8.45	1.33	1.41
36	1	2326	A	N3-C4	-8.45	1.29	1.34
38	4	24	G	N3-C4	-8.45	1.29	1.35
36	5	668	G	C5-C4	-8.44	1.32	1.38
36	1	2869	U	C4-C5	-8.44	1.35	1.43
36	1	1046	A	C5-C6	-8.43	1.33	1.41
36	1	1127	G	N3-C4	-8.42	1.29	1.35
36	5	367	A	N3-C4	-8.42	1.29	1.34
36	1	2356	A	N7-C5	-8.42	1.34	1.39
36	1	1156	C	N3-C4	-8.41	1.28	1.33
36	5	2933	A	N3-C4	-8.41	1.29	1.34
36	5	3209	A	C5-C4	8.41	1.44	1.38
36	5	3308	C	N1-C6	-8.41	1.32	1.37
36	1	348	A	N9-C4	-8.40	1.32	1.37
36	5	425	G	N3-C4	-8.40	1.29	1.35
36	1	421	G	C6-N1	-8.39	1.33	1.39
36	1	423	A	N9-C4	-8.39	1.32	1.37
36	1	2618	G	C6-N1	-8.39	1.33	1.39
36	5	1300	G	N9-C8	-8.39	1.31	1.37
36	1	2404	A	N9-C4	8.39	1.42	1.37
36	1	639	G	N3-C4	-8.39	1.29	1.35
36	5	2811	A	N3-C4	-8.38	1.29	1.34
1	6	1753	A	N3-C4	8.38	1.39	1.34
36	1	1366	A	C5-C6	-8.37	1.33	1.41
36	1	3098	G	C5-C4	-8.36	1.32	1.38
36	5	2976	A	C5-C4	-8.35	1.32	1.38
36	1	808	A	N9-C4	-8.35	1.32	1.37
36	5	2620	G	C6-N1	-8.34	1.33	1.39
36	1	645	A	C6-N1	-8.33	1.29	1.35
36	5	1149	G	C6-O6	8.33	1.31	1.24
36	5	3005	A	N3-C4	-8.33	1.29	1.34
36	5	3005	A	C5-C4	-8.33	1.32	1.38
36	5	921	A	N3-C4	-8.33	1.29	1.34
36	5	2979	U	C2-N3	-8.33	1.31	1.37
36	5	2375	G	N3-C4	-8.32	1.29	1.35
36	5	1165	A	N7-C5	-8.31	1.34	1.39
36	1	612	U	C2-N3	-8.30	1.31	1.37
36	5	1546	A	N3-C4	-8.30	1.29	1.34
36	5	422	A	C6-N1	-8.29	1.29	1.35
36	5	2285	C	N3-C4	-8.29	1.28	1.33
1	6	100	A	C6-N1	-8.28	1.29	1.35
25	d3	63	GLN	CB-CG	8.28	1.75	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2743	A	N3-C4	-8.28	1.29	1.34
36	5	3195	U	N3-C4	8.28	1.45	1.38
36	5	345	G	N7-C5	-8.27	1.34	1.39
36	1	27	C	N3-C4	-8.27	1.28	1.33
37	7	95	A	N9-C4	-8.27	1.32	1.37
36	1	1001	G	C6-N1	8.26	1.45	1.39
36	5	642	U	C2-N3	-8.26	1.31	1.37
36	1	1431	G	C5-C4	-8.25	1.32	1.38
36	1	1197	A	C6-N1	-8.24	1.29	1.35
36	1	189	G	N3-C4	-8.24	1.29	1.35
36	1	408	A	N9-C4	-8.23	1.32	1.37
36	5	1886	A	N3-C4	-8.23	1.29	1.34
36	1	1134	G	N9-C8	-8.22	1.32	1.37
36	5	3382	U	N1-C2	8.21	1.46	1.38
36	5	1867	A	N9-C4	-8.21	1.32	1.37
36	1	2811	A	N7-C5	-8.20	1.34	1.39
36	1	2619	G	N9-C8	-8.19	1.32	1.37
1	6	1746	A	N9-C4	-8.19	1.32	1.37
36	1	1156	C	N1-C6	-8.19	1.32	1.37
36	5	2879	C	N1-C2	-8.18	1.31	1.40
49	M3	176	GLU	CG-CD	8.18	1.64	1.51
36	1	2819	A	N3-C4	-8.17	1.29	1.34
36	5	1295	G	C5-C6	-8.17	1.34	1.42
36	1	2415	C	N3-C4	-8.16	1.28	1.33
36	5	2302	G	N3-C4	-8.16	1.29	1.35
36	1	2619	G	N7-C5	-8.15	1.34	1.39
36	5	1292	C	N1-C6	-8.15	1.32	1.37
36	5	994	G	C8-N7	-8.15	1.26	1.30
36	5	2302	G	C6-N1	-8.15	1.33	1.39
36	5	1053	A	N3-C4	-8.14	1.29	1.34
36	1	2306	C	N1-C2	8.13	1.48	1.40
36	5	2819	A	N3-C4	-8.13	1.29	1.34
36	1	1369	A	N3-C4	-8.12	1.29	1.34
36	5	1891	A	N9-C4	-8.12	1.32	1.37
1	6	757	A	N9-C4	-8.12	1.32	1.37
36	5	2117	A	N9-C4	-8.11	1.32	1.37
36	5	2935	U	N1-C2	-8.10	1.31	1.38
36	1	1116	G	C6-N1	-8.10	1.33	1.39
36	1	1197	A	N3-C4	-8.09	1.29	1.34
36	1	2802	A	N9-C4	-8.09	1.32	1.37
36	5	1005	G	N9-C4	-8.09	1.31	1.38
36	5	2302	G	N1-C2	-8.08	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2414	G	N3-C4	-8.08	1.29	1.35
36	1	2623	G	C5-C6	-8.08	1.34	1.42
36	5	2392	C	N1-C6	-8.08	1.32	1.37
36	5	1513	G	N7-C5	-8.07	1.34	1.39
36	1	2372	A	N9-C4	8.06	1.42	1.37
36	5	402	A	N7-C5	-8.05	1.34	1.39
36	1	2979	U	C2-N3	-8.04	1.32	1.37
36	5	921	A	C6-N1	-8.04	1.29	1.35
36	1	1883	A	N9-C4	-8.04	1.33	1.37
36	5	3310	A	N9-C4	-8.04	1.33	1.37
36	5	1432	C	N1-C6	-8.03	1.32	1.37
36	5	2387	A	N3-C4	-8.03	1.30	1.34
36	1	2377	G	N7-C5	-8.02	1.34	1.39
36	1	2860	U	C4-C5	8.02	1.50	1.43
36	1	1197	A	C5-C6	-8.02	1.33	1.41
36	1	2981	U	C2-N3	-8.01	1.32	1.37
36	5	2934	A	N7-C5	-8.01	1.34	1.39
36	1	2640	A	N3-C4	-8.00	1.30	1.34
36	5	920	A	N3-C4	-8.00	1.30	1.34
36	1	905	U	N1-C2	-8.00	1.31	1.38
36	5	1845	G	N9-C8	-8.00	1.32	1.37
1	6	1655	A	N7-C5	-7.98	1.34	1.39
36	5	3012	A	C5-C6	-7.98	1.33	1.41
36	1	1399	A	N3-C4	-7.98	1.30	1.34
36	1	2956	A	N3-C4	-7.98	1.30	1.34
36	5	2637	A	C6-N1	-7.97	1.29	1.35
37	3	88	G	C6-N1	-7.97	1.33	1.39
36	1	796	U	C4-C5	-7.97	1.36	1.43
36	5	437	G	N9-C4	7.96	1.44	1.38
36	5	2847	A	N9-C4	-7.96	1.33	1.37
36	1	1127	G	N9-C4	-7.96	1.31	1.38
36	1	1145	G	N9-C8	-7.96	1.32	1.37
36	5	1794	G	C5-C4	-7.96	1.32	1.38
36	5	1129	A	C5-C6	-7.95	1.33	1.41
36	1	2356	A	N9-C4	-7.95	1.33	1.37
36	1	1146	C	C4-C5	-7.95	1.36	1.43
36	5	367	A	N9-C8	-7.94	1.31	1.37
1	6	321	C	N1-C2	7.93	1.48	1.40
36	5	2150	G	N7-C5	-7.92	1.34	1.39
36	1	2404	A	C5-C6	7.92	1.48	1.41
36	1	366	A	N7-C5	-7.91	1.34	1.39
36	1	651	G	C8-N7	-7.91	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1116	G	N7-C5	-7.91	1.34	1.39
36	5	2917	G	N3-C4	-7.91	1.29	1.35
36	5	1337	A	N9-C4	-7.91	1.33	1.37
1	6	1670	G	N7-C5	-7.90	1.34	1.39
36	5	1332	A	N9-C8	-7.90	1.31	1.37
36	5	2130	G	N9-C4	-7.90	1.31	1.38
36	5	3112	G	N9-C8	-7.89	1.32	1.37
1	6	1119	G	N7-C5	-7.89	1.34	1.39
36	5	585	A	N7-C5	-7.89	1.34	1.39
36	5	1887	A	N7-C5	-7.88	1.34	1.39
36	1	691	A	N9-C4	-7.88	1.33	1.37
37	7	81	U	C2-N3	-7.88	1.32	1.37
37	7	84	A	C6-N1	-7.88	1.30	1.35
36	1	3006	A	N3-C4	-7.88	1.30	1.34
36	5	1139	G	N9-C4	-7.88	1.31	1.38
36	5	1203	A	N7-C5	-7.87	1.34	1.39
1	6	1778	G	N7-C5	-7.87	1.34	1.39
38	4	15	G	N7-C5	-7.86	1.34	1.39
36	5	3207	U	C4-C5	7.86	1.50	1.43
36	1	2819	A	N9-C4	-7.85	1.33	1.37
36	5	1205	A	N9-C4	-7.85	1.33	1.37
36	5	3209	A	C5-C6	7.85	1.48	1.41
36	5	1520	G	N9-C4	7.85	1.44	1.38
36	5	3310	A	C5-C6	-7.85	1.33	1.41
36	1	3273	A	N3-C4	-7.84	1.30	1.34
36	1	423	A	N7-C5	-7.84	1.34	1.39
36	5	3006	A	N3-C4	-7.83	1.30	1.34
36	5	3093	C	N1-C6	-7.83	1.32	1.37
36	1	1886	A	N3-C4	-7.83	1.30	1.34
36	1	3081	C	N3-C4	-7.83	1.28	1.33
36	5	3124	G	N3-C4	-7.83	1.29	1.35
36	5	363	G	N7-C5	-7.83	1.34	1.39
36	5	2172	A	N7-C5	-7.83	1.34	1.39
36	1	2980	U	C2-O2	-7.82	1.15	1.22
36	5	367	A	C5-C4	-7.82	1.33	1.38
36	5	2884	C	N1-C2	-7.82	1.32	1.40
36	1	3150	A	C5-C6	-7.82	1.34	1.41
36	1	414	U	C2-N3	-7.81	1.32	1.37
36	1	425	G	C6-N1	-7.81	1.34	1.39
36	1	916	G	C5-C4	-7.81	1.32	1.38
36	1	880	G	N9-C4	-7.80	1.31	1.38
36	1	2809	C	N1-C2	-7.80	1.32	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3182	G	C6-N1	-7.80	1.34	1.39
1	6	1671	A	N3-C4	-7.80	1.30	1.34
36	1	1145	G	C5-C4	-7.80	1.32	1.38
36	1	2834	G	C5-C4	-7.80	1.32	1.38
36	5	396	A	N9-C4	-7.80	1.33	1.37
36	5	2138	A	N3-C4	-7.80	1.30	1.34
36	5	1174	G	C6-N1	-7.80	1.34	1.39
36	1	1153	A	N3-C4	-7.79	1.30	1.34
36	5	2665	U	C4-C5	-7.79	1.36	1.43
36	5	1486	G	N9-C4	-7.79	1.31	1.38
36	1	644	G	N3-C4	-7.79	1.29	1.35
36	5	1217	A	N9-C4	-7.79	1.33	1.37
36	5	3130	A	N3-C4	-7.78	1.30	1.34
36	5	3091	A	C5-C6	-7.77	1.34	1.41
36	1	1197	A	N9-C4	-7.76	1.33	1.37
36	5	2404	A	N3-C4	7.76	1.39	1.34
1	6	1137	A	N9-C4	-7.76	1.33	1.37
36	5	2940	A	N3-C4	-7.76	1.30	1.34
36	5	1174	G	N1-C2	-7.75	1.31	1.37
36	5	2400	G	C2-N3	-7.75	1.26	1.32
37	7	25	G	C6-N1	-7.75	1.34	1.39
36	1	1401	A	N9-C4	-7.74	1.33	1.37
36	5	647	A	N3-C4	-7.74	1.30	1.34
36	5	2415	C	N1-C6	-7.74	1.32	1.37
36	1	1180	A	N3-C4	-7.74	1.30	1.34
36	5	51	A	N7-C5	-7.74	1.34	1.39
36	5	3025	C	N3-C4	-7.73	1.28	1.33
36	1	3011	A	C5-C4	-7.73	1.33	1.38
36	5	1101	G	C6-N1	-7.73	1.34	1.39
40	L3	233	TRP	CB-CG	-7.73	1.36	1.50
36	5	1197	A	C5-C4	-7.73	1.33	1.38
36	5	1197	A	C6-N1	-7.73	1.30	1.35
38	8	80	A	N9-C4	7.73	1.42	1.37
36	5	1175	C	N1-C6	-7.72	1.32	1.37
36	1	1197	A	C5-C4	-7.72	1.33	1.38
36	1	3172	A	N7-C5	-7.72	1.34	1.39
36	5	3132	C	N1-C6	-7.72	1.32	1.37
36	5	918	C	N1-C6	-7.72	1.32	1.37
36	1	2875	U	N3-C4	7.72	1.45	1.38
36	1	357	A	N9-C4	-7.72	1.33	1.37
36	5	2386	A	C5-C6	-7.72	1.34	1.41
1	6	309	C	N1-C6	-7.71	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	971	G	C6-N1	-7.71	1.34	1.39
36	5	2373	A	C6-N1	-7.71	1.30	1.35
36	1	2614	G	N1-C2	-7.70	1.31	1.37
36	1	2875	U	N1-C6	7.70	1.44	1.38
36	5	2382	G	N9-C4	-7.70	1.31	1.38
36	5	2743	A	N7-C5	-7.70	1.34	1.39
36	1	2996	U	N1-C2	7.69	1.45	1.38
36	5	3085	G	C5-C4	-7.69	1.32	1.38
36	1	1149	G	C6-O6	7.69	1.31	1.24
36	1	3180	A	C6-N1	-7.68	1.30	1.35
1	6	65	A	N9-C4	-7.68	1.33	1.37
1	6	391	A	N3-C4	-7.68	1.30	1.34
36	5	2811	A	N9-C4	-7.68	1.33	1.37
36	5	2329	C	N1-C6	-7.68	1.32	1.37
36	1	402	A	C5-C6	-7.68	1.34	1.41
36	5	1910	A	C5-C6	-7.68	1.34	1.41
36	5	1307	G	N3-C4	-7.68	1.30	1.35
36	1	865	U	C2-N3	-7.67	1.32	1.37
36	1	2913	C	N1-C6	-7.67	1.32	1.37
36	1	2164	A	N3-C4	-7.67	1.30	1.34
36	1	2953	U	C4-O4	7.66	1.29	1.23
36	5	2875	U	N1-C6	7.66	1.44	1.38
36	1	2956	A	N7-C5	-7.66	1.34	1.39
36	5	189	G	N3-C4	-7.66	1.30	1.35
36	5	363	G	C5-C6	-7.66	1.34	1.42
38	8	53	A	N3-C4	-7.66	1.30	1.34
36	5	2364	G	N7-C5	-7.65	1.34	1.39
36	1	2613	U	C2-O2	-7.65	1.15	1.22
1	6	1778	G	N3-C4	-7.65	1.30	1.35
1	6	1729	C	N1-C6	-7.65	1.32	1.37
36	1	65	A	N9-C4	-7.64	1.33	1.37
36	1	583	G	C6-N1	-7.64	1.34	1.39
36	1	2356	A	N3-C4	-7.64	1.30	1.34
36	5	2946	A	N3-C4	-7.64	1.30	1.34
36	5	2341	A	N9-C4	-7.64	1.33	1.37
36	5	2370	G	N7-C5	-7.64	1.34	1.39
37	3	87	G	C2-N3	-7.63	1.26	1.32
36	5	95	A	N9-C4	-7.63	1.33	1.37
36	5	2868	U	C2-N3	-7.63	1.32	1.37
36	1	883	A	C6-N1	-7.62	1.30	1.35
36	5	994	G	N7-C5	-7.62	1.34	1.39
36	5	2287	C	N3-C4	-7.62	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3061	G	C5-C6	-7.62	1.34	1.42
36	1	883	A	N3-C4	-7.62	1.30	1.34
37	7	79	A	N9-C4	-7.62	1.33	1.37
36	1	1905	G	N3-C4	-7.61	1.30	1.35
36	5	2849	C	N1-C6	-7.61	1.32	1.37
36	1	952	A	C6-N1	-7.61	1.30	1.35
36	1	1340	G	C5-C4	-7.61	1.33	1.38
36	1	2641	U	N3-C4	-7.61	1.31	1.38
37	3	89	G	C5-C4	-7.61	1.33	1.38
36	5	1370	G	N3-C4	-7.61	1.30	1.35
36	1	397	A	N3-C4	-7.61	1.30	1.34
36	5	588	G	C5-C4	-7.61	1.33	1.38
36	5	2120	A	N9-C4	-7.61	1.33	1.37
36	5	1298	C	C4-C5	-7.60	1.36	1.43
36	1	964	G	C5-C6	-7.60	1.34	1.42
36	1	1910	A	N9-C4	-7.60	1.33	1.37
1	6	1547	A	N9-C4	-7.60	1.33	1.37
36	5	958	C	N3-C4	-7.60	1.28	1.33
36	5	201	A	N9-C4	-7.59	1.33	1.37
37	7	95	A	N7-C5	-7.59	1.34	1.39
1	6	163	G	N3-C4	-7.59	1.30	1.35
36	5	3344	A	N9-C4	-7.59	1.33	1.37
36	1	2409	G	C5-C4	-7.58	1.33	1.38
36	5	883	A	N3-C4	-7.58	1.30	1.34
36	1	1340	G	C5-C6	-7.57	1.34	1.42
36	1	2864	A	N3-C4	-7.57	1.30	1.34
36	1	940	G	C5-C4	-7.57	1.33	1.38
36	1	1103	A	N3-C4	7.57	1.39	1.34
36	1	2385	G	C5-C6	-7.57	1.34	1.42
36	5	1205	A	C5-C4	-7.57	1.33	1.38
36	5	2867	C	N1-C6	-7.57	1.32	1.37
36	5	633	C	C4-C5	-7.56	1.36	1.43
36	5	1879	A	N3-C4	-7.56	1.30	1.34
36	5	2242	A	N3-C4	-7.56	1.30	1.34
36	1	942	U	C4-O4	7.56	1.29	1.23
36	5	637	C	N1-C6	-7.56	1.32	1.37
36	5	2856	G	N3-C4	-7.55	1.30	1.35
36	1	1405	U	C2-N3	-7.55	1.32	1.37
1	6	1025	A	C5-C6	-7.55	1.34	1.41
36	5	2639	G	N3-C4	-7.55	1.30	1.35
36	5	2936	A	N9-C8	-7.55	1.31	1.37
36	1	2422	C	N3-C4	-7.54	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3130	A	N7-C5	-7.54	1.34	1.39
36	5	418	A	N3-C4	-7.53	1.30	1.34
36	1	2353	G	N7-C5	-7.53	1.34	1.39
36	1	1159	A	N9-C4	-7.53	1.33	1.37
36	1	596	C	N3-C4	-7.52	1.28	1.33
36	5	1402	C	N1-C6	-7.52	1.32	1.37
1	6	1746	A	N3-C4	-7.52	1.30	1.34
36	5	799	G	N3-C4	-7.52	1.30	1.35
36	5	3227	A	C5-C6	-7.52	1.34	1.41
1	2	1655	A	N9-C4	-7.51	1.33	1.37
36	5	1332	A	C5-C6	-7.51	1.34	1.41
36	1	1854	C	N1-C6	-7.51	1.32	1.37
36	5	647	A	N7-C5	-7.51	1.34	1.39
36	5	2401	A	N3-C4	-7.51	1.39	1.34
36	5	1127	G	N9-C8	-7.51	1.32	1.37
36	5	2936	A	C6-N1	-7.50	1.30	1.35
36	5	2920	U	N3-C4	-7.50	1.31	1.38
36	1	422	A	N7-C5	-7.49	1.34	1.39
36	1	937	G	C5-C6	-7.49	1.34	1.42
36	1	973	A	N9-C4	-7.49	1.33	1.37
36	1	220	G	N9-C4	-7.49	1.31	1.38
36	1	1887	A	N9-C4	-7.49	1.33	1.37
36	5	2375	G	N7-C5	-7.48	1.34	1.39
36	1	660	A	C6-N1	-7.48	1.30	1.35
36	5	2877	G	C6-N1	-7.48	1.34	1.39
36	1	810	A	C6-N1	-7.48	1.30	1.35
36	5	1879	A	N9-C4	-7.48	1.33	1.37
36	1	1131	G	N9-C8	-7.48	1.32	1.37
36	5	2922	G	C6-N1	-7.47	1.34	1.39
36	1	979	U	N1-C2	-7.47	1.45	1.38
36	5	941	G	C5-C4	-7.47	1.33	1.38
36	1	401	U	N1-C2	-7.47	1.45	1.38
36	1	645	A	N9-C4	-7.47	1.42	1.37
36	1	2373	A	N3-C4	-7.47	1.30	1.34
36	1	365	A	N3-C4	-7.47	1.30	1.34
38	8	2	A	N3-C4	-7.47	1.30	1.34
36	5	1177	G	C6-N1	-7.46	1.34	1.39
1	6	623	A	N9-C4	-7.46	1.33	1.37
36	1	2755	C	N3-C4	-7.46	1.28	1.33
1	2	377	G	N9-C4	-7.45	1.31	1.38
36	5	2952	G	N7-C5	-7.45	1.34	1.39
36	5	503	C	N1-C6	-7.45	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	943	U	N1-C6	-7.45	1.31	1.38
36	1	2635	A	N3-C4	-7.44	1.30	1.34
36	1	1366	A	C6-N1	-7.44	1.30	1.35
36	1	1366	A	C6-N6	-7.44	1.27	1.33
36	5	2620	G	N3-C4	-7.44	1.30	1.35
37	7	113	C	N1-C6	-7.44	1.32	1.37
36	1	2983	C	N3-C4	-7.43	1.28	1.33
1	6	1131	A	N7-C5	-7.43	1.34	1.39
36	5	669	U	N1-C2	7.43	1.45	1.38
36	5	2976	A	N3-C4	-7.43	1.30	1.34
70	o4	84	CYS	CB-SG	-7.43	1.69	1.82
36	1	2377	G	C5-C4	-7.43	1.33	1.38
36	5	1374	G	C5-C6	-7.43	1.34	1.42
36	5	2385	G	N7-C5	-7.42	1.34	1.39
36	5	408	A	N3-C4	-7.42	1.30	1.34
37	7	102	A	C5-C4	-7.42	1.33	1.38
36	1	699	A	N9-C4	-7.42	1.33	1.37
36	5	2125	A	N3-C4	-7.42	1.30	1.34
36	5	3005	A	N9-C8	-7.41	1.31	1.37
36	5	3035	A	N3-C4	-7.41	1.30	1.34
36	1	909	G	N7-C5	-7.41	1.34	1.39
36	5	706	A	N9-C4	-7.41	1.33	1.37
36	1	1542	G	C5-C6	-7.40	1.34	1.42
36	1	2412	G	N1-C2	-7.40	1.31	1.37
36	1	2869	U	N1-C2	-7.40	1.31	1.38
36	1	1313	G	N9-C4	-7.40	1.32	1.38
36	1	2639	G	N9-C4	-7.40	1.32	1.38
38	8	2	A	C6-N1	-7.40	1.30	1.35
36	1	2954	U	N3-C4	7.39	1.45	1.38
1	6	506	A	N9-C4	7.39	1.42	1.37
1	2	1455	G	C6-O6	7.39	1.30	1.24
36	1	1154	A	C5-C4	-7.39	1.33	1.38
36	1	1901	A	C5-C4	-7.39	1.33	1.38
36	1	2371	G	C6-N1	-7.39	1.34	1.39
36	1	2387	A	C6-N6	-7.39	1.28	1.33
1	6	456	A	N3-C4	-7.38	1.30	1.34
36	5	2943	G	C5-C6	-7.38	1.34	1.42
36	5	2969	A	N3-C4	-7.38	1.30	1.34
36	5	2374	C	N1-C6	-7.37	1.32	1.37
36	5	1310	G	C5-C6	-7.37	1.34	1.42
36	5	2823	G	N7-C5	-7.36	1.34	1.39
38	8	53	A	C5-C4	-7.36	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1336	A	N9-C4	-7.36	1.33	1.37
36	1	2358	A	N9-C4	-7.36	1.33	1.37
37	3	82	G	N3-C4	-7.36	1.30	1.35
36	5	2662	G	N9-C8	-7.36	1.32	1.37
36	5	1128	U	N1-C2	-7.36	1.31	1.38
1	6	1525	A	N3-C4	-7.35	1.30	1.34
36	1	28	C	N1-C6	-7.35	1.32	1.37
36	1	2916	U	C2-O2	7.34	1.28	1.22
36	1	608	A	N9-C4	7.34	1.42	1.37
36	5	1116	G	C6-N1	-7.34	1.34	1.39
36	5	3085	G	N1-C2	-7.34	1.31	1.37
36	1	189	G	C6-N1	-7.33	1.34	1.39
37	7	104	A	N3-C4	-7.33	1.30	1.34
37	3	95	A	C5-C6	-7.32	1.34	1.41
36	1	2652	U	N1-C2	-7.32	1.31	1.38
36	5	2833	A	C5-C4	-7.31	1.33	1.38
36	5	2994	A	N7-C5	-7.31	1.34	1.39
36	5	1182	A	N3-C4	-7.31	1.30	1.34
36	5	3017	A	C5-C4	-7.31	1.33	1.38
36	5	1006	A	N3-C4	-7.31	1.30	1.34
36	5	3041	U	C2-N3	-7.31	1.32	1.37
36	1	808	A	N3-C4	-7.31	1.30	1.34
36	5	878	G	N9-C4	7.30	1.43	1.38
36	1	2605	G	N7-C5	-7.30	1.34	1.39
36	1	3307	A	C5-C6	-7.30	1.34	1.41
36	5	1849	C	N1-C6	-7.29	1.32	1.37
1	6	1645	G	N3-C4	7.29	1.40	1.35
36	5	1048	A	N3-C4	-7.29	1.30	1.34
36	5	3048	A	N9-C4	-7.29	1.33	1.37
36	1	1203	A	N9-C4	-7.29	1.33	1.37
1	2	1336	A	N9-C4	-7.29	1.33	1.37
36	1	408	A	C6-N1	-7.29	1.30	1.35
1	6	746	A	N7-C5	-7.29	1.34	1.39
42	15	193	GLU	CG-CD	7.28	1.62	1.51
38	8	138	A	C6-N1	-7.28	1.30	1.35
36	1	2344	U	N1-C2	-7.28	1.32	1.38
36	1	385	A	N3-C4	-7.27	1.30	1.34
36	1	1594	A	C6-N1	-7.27	1.30	1.35
36	5	417	A	N3-C4	-7.27	1.30	1.34
36	5	1307	G	C5-C4	-7.27	1.33	1.38
36	1	2802	A	C5-C4	-7.27	1.33	1.38
36	5	1556	C	N1-C2	7.27	1.47	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	933	A	N9-C4	7.26	1.42	1.37
36	1	408	A	C5-C4	-7.26	1.33	1.38
36	1	1131	G	C5-C4	-7.26	1.33	1.38
36	5	2900	A	N7-C5	-7.26	1.34	1.39
36	5	2796	G	N9-C8	-7.25	1.32	1.37
36	5	3180	A	N9-C4	-7.25	1.33	1.37
1	6	163	G	N9-C4	-7.25	1.32	1.38
36	1	52	A	N3-C4	-7.24	1.30	1.34
36	5	2986	U	C2-O2	-7.24	1.15	1.22
36	1	2864	A	N9-C4	-7.24	1.33	1.37
36	1	2937	G	C5-C4	-7.24	1.33	1.38
36	1	2639	G	C2-N3	-7.24	1.26	1.32
38	4	104	A	N9-C4	-7.24	1.33	1.37
36	5	2957	G	N9-C4	-7.23	1.32	1.38
36	5	426	G	C5-C4	-7.23	1.33	1.38
36	5	1327	C	N3-C4	-7.23	1.28	1.33
36	5	1053	A	N9-C4	-7.23	1.33	1.37
36	5	2863	G	N9-C4	-7.23	1.32	1.38
36	1	1134	G	N3-C4	-7.23	1.30	1.35
36	5	1116	G	C5-C6	-7.23	1.35	1.42
36	5	2954	U	N1-C2	7.22	1.45	1.38
36	1	1432	C	C2-O2	-7.22	1.18	1.24
36	5	2897	A	N3-C4	-7.22	1.30	1.34
36	5	3172	A	C5-C4	-7.22	1.33	1.38
36	5	1309	U	C2-N3	-7.22	1.32	1.37
36	5	940	G	N7-C5	7.22	1.43	1.39
36	5	1892	G	N7-C5	-7.22	1.34	1.39
36	1	2640	A	N9-C4	-7.22	1.33	1.37
1	6	1777	G	C5-C6	-7.22	1.35	1.42
36	1	908	G	N7-C5	-7.21	1.34	1.39
36	1	2168	A	N3-C4	-7.21	1.30	1.34
37	7	73	C	N1-C2	7.21	1.47	1.40
36	5	1140	G	C5-C4	-7.21	1.33	1.38
36	1	913	A	C5-C6	-7.21	1.34	1.41
36	1	1197	A	N7-C5	-7.21	1.34	1.39
36	1	2874	G	N9-C4	7.21	1.43	1.38
36	5	958	C	C4-C5	-7.20	1.37	1.43
36	5	803	C	C4-C5	-7.20	1.37	1.43
36	1	282	G	C2-N3	-7.20	1.26	1.32
36	5	799	G	N9-C4	-7.20	1.32	1.38
36	1	2156	C	N1-C6	-7.19	1.32	1.37
36	1	1506	A	N7-C5	-7.18	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	407	A	N9-C8	-7.18	1.32	1.37
36	5	607	A	N3-C4	-7.18	1.30	1.34
36	1	659	G	N9-C8	-7.18	1.32	1.37
37	7	49	G	N7-C5	-7.18	1.34	1.39
36	5	2367	A	N3-C4	-7.18	1.30	1.34
36	5	1933	A	N3-C4	-7.17	1.30	1.34
36	1	585	A	N3-C4	-7.17	1.30	1.34
36	1	2802	A	N7-C5	-7.17	1.34	1.39
36	5	3376	A	N3-C4	-7.17	1.30	1.34
76	Q0	99	CYS	CB-SG	-7.17	1.70	1.82
36	5	1116	G	N3-C4	-7.17	1.30	1.35
36	1	2912	G	C6-N1	-7.17	1.34	1.39
36	5	2931	C	C4-N4	-7.17	1.27	1.33
1	6	1313	A	N9-C4	-7.17	1.33	1.37
36	5	1006	A	N9-C4	-7.17	1.33	1.37
36	1	2999	U	C2-N3	-7.17	1.32	1.37
36	1	883	A	N9-C4	-7.16	1.33	1.37
36	1	1116	G	N3-C4	-7.16	1.30	1.35
36	1	2371	G	N7-C5	-7.16	1.34	1.39
36	5	1041	U	N1-C2	-7.16	1.32	1.38
36	1	3277	U	N1-C2	7.16	1.45	1.38
7	s5	87	CYS	CB-SG	-7.16	1.70	1.82
36	1	2187	G	C6-N1	-7.16	1.34	1.39
36	1	2117	A	C5-C4	-7.16	1.33	1.38
36	5	2400	G	N9-C4	-7.15	1.32	1.38
36	5	3189	G	N9-C8	-7.15	1.32	1.37
36	1	2296	A	C5-C6	-7.15	1.34	1.41
36	1	3130	A	N3-C4	-7.15	1.30	1.34
36	5	2857	C	N1-C6	-7.15	1.32	1.37
36	1	80	G	C6-N1	-7.14	1.34	1.39
36	5	677	A	C5-C6	-7.14	1.34	1.41
36	5	2919	A	C6-N1	-7.14	1.30	1.35
36	5	2799	A	N9-C4	-7.14	1.33	1.37
36	5	789	A	N3-C4	-7.14	1.30	1.34
36	1	789	A	N3-C4	-7.14	1.30	1.34
36	5	1145	G	C5-C4	-7.13	1.33	1.38
36	5	2338	C	N1-C6	-7.13	1.32	1.37
1	6	1100	G	N9-C4	-7.13	1.32	1.38
36	5	3016	A	C6-N1	-7.12	1.30	1.35
36	5	3085	G	C6-N1	-7.12	1.34	1.39
36	5	995	U	C2-N3	-7.12	1.32	1.37
36	5	1054	A	N9-C4	-7.12	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3015	G	N9-C4	-7.12	1.32	1.38
36	5	2953	U	C4-O4	7.11	1.29	1.23
36	5	917	A	N3-C4	-7.11	1.30	1.34
36	5	3310	A	C6-N1	-7.11	1.30	1.35
36	1	911	C	N3-C4	-7.11	1.28	1.33
36	1	1116	G	N7-C5	-7.11	1.34	1.39
36	5	3122	A	N9-C4	-7.10	1.33	1.37
36	5	731	U	C2-N3	-7.10	1.32	1.37
36	5	911	C	N1-C6	-7.10	1.32	1.37
36	5	2995	A	N9-C4	-7.10	1.33	1.37
1	2	615	A	N9-C4	7.10	1.42	1.37
36	5	96	G	N7-C5	7.10	1.43	1.39
36	5	1887	A	N3-C4	-7.10	1.30	1.34
36	1	2878	G	N3-C4	-7.10	1.30	1.35
36	5	3053	G	N9-C8	-7.10	1.32	1.37
1	6	1614	A	C5-C6	-7.09	1.34	1.41
36	5	3172	A	N9-C4	-7.09	1.33	1.37
59	n3	39	VAL	CA-CB	-7.09	1.39	1.54
36	5	795	G	N1-C2	-7.09	1.32	1.37
36	5	2736	A	N9-C4	-7.09	1.33	1.37
47	m0	71	CYS	CB-SG	7.09	1.94	1.82
36	1	1307	G	P-O5'	-7.08	1.52	1.59
1	6	1658	G	N3-C4	-7.08	1.30	1.35
36	5	1289	G	N1-C2	-7.08	1.32	1.37
36	5	589	A	N7-C5	-7.08	1.35	1.39
36	5	2996	U	C2-N3	7.08	1.42	1.37
36	5	2401	A	C5-C6	7.08	1.47	1.41
36	1	808	A	C5-C4	-7.07	1.33	1.38
36	5	2743	A	N9-C8	-7.07	1.32	1.37
36	5	2919	A	N3-C4	-7.07	1.30	1.34
36	5	3189	G	N1-C2	-7.07	1.32	1.37
36	5	1175	C	C2-N3	-7.07	1.30	1.35
36	5	1332	A	C5-C4	-7.06	1.33	1.38
36	1	2939	G	N9-C8	-7.06	1.32	1.37
36	5	818	C	N1-C6	-7.06	1.32	1.37
36	5	1202	A	N7-C5	-7.06	1.35	1.39
36	5	2936	A	N1-C2	-7.06	1.27	1.34
1	6	1504	G	N3-C4	-7.06	1.30	1.35
36	5	61	A	C6-N1	-7.05	1.30	1.35
36	5	637	C	C4-C5	-7.05	1.37	1.43
53	M7	138	LYS	CD-CE	7.05	1.68	1.51
36	5	2733	A	N9-C4	-7.05	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3344	A	N3-C4	-7.05	1.30	1.34
36	5	866	A	N9-C4	-7.04	1.33	1.37
36	5	1099	A	N9-C4	-7.04	1.33	1.37
36	1	422	A	C5-C4	-7.04	1.33	1.38
36	1	3006	A	N7-C5	-7.04	1.35	1.39
36	1	45	A	N9-C4	-7.04	1.33	1.37
36	1	2330	C	N3-C4	-7.04	1.29	1.33
36	5	522	A	N9-C4	-7.04	1.33	1.37
36	5	2968	G	N9-C4	-7.04	1.32	1.38
36	5	2872	A	C6-N1	7.03	1.40	1.35
36	5	1184	A	N9-C4	-7.03	1.33	1.37
36	5	1348	U	N1-C2	7.03	1.44	1.38
36	5	1310	G	C6-O6	-7.03	1.17	1.24
36	5	2813	A	N3-C4	-7.02	1.30	1.34
36	5	2833	A	N3-C4	-7.02	1.30	1.34
36	5	2359	C	N1-C6	-7.02	1.32	1.37
36	1	920	A	N3-C4	-7.02	1.30	1.34
38	8	111	A	N9-C4	-7.02	1.33	1.37
1	6	1005	A	C6-N1	-7.02	1.30	1.35
36	5	2837	A	C5-C4	-7.02	1.33	1.38
36	1	2207	A	N9-C4	7.01	1.42	1.37
36	5	416	A	N9-C4	-7.01	1.33	1.37
36	5	1150	A	N9-C4	-7.01	1.33	1.37
36	5	67	A	N9-C4	-7.01	1.33	1.37
52	M6	40	GLU	CB-CG	7.01	1.65	1.52
36	1	1504	A	N3-C4	-7.00	1.30	1.34
36	1	2404	A	C6-N1	7.00	1.40	1.35
36	5	2976	A	N9-C4	-7.00	1.33	1.37
36	1	860	G	N7-C5	-7.00	1.35	1.39
36	1	1409	G	N7-C5	-7.00	1.35	1.39
36	1	1880	U	C2-N3	-7.00	1.32	1.37
36	1	1401	A	N3-C4	-7.00	1.30	1.34
36	1	3084	C	N3-C4	-7.00	1.29	1.33
36	5	1332	A	N3-C4	-7.00	1.30	1.34
1	6	1201	G	N9-C4	-6.99	1.32	1.38
36	5	3206	C	N3-C4	-6.99	1.29	1.33
38	4	54	A	N7-C5	-6.99	1.35	1.39
36	5	289	A	N9-C4	-6.99	1.33	1.37
36	5	2665	U	C4-O4	-6.99	1.18	1.23
36	1	2303	A	N3-C4	-6.99	1.30	1.34
1	6	580	A	N9-C4	6.99	1.42	1.37
36	1	812	G	N3-C4	-6.99	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	787	G	N9-C8	-6.99	1.32	1.37
36	1	2689	A	N3-C4	-6.99	1.30	1.34
36	5	1298	C	N1-C6	-6.99	1.32	1.37
36	5	1404	G	C6-N1	-6.99	1.34	1.39
36	5	1437	C	N1-C6	-6.99	1.32	1.37
36	5	2876	C	C2-N3	-6.99	1.30	1.35
36	5	2367	A	C6-N1	-6.98	1.30	1.35
37	3	56	A	N9-C4	-6.98	1.33	1.37
36	1	89	A	N3-C4	-6.98	1.30	1.34
36	5	1107	C	N1-C6	-6.97	1.32	1.37
36	1	1131	G	N9-C4	-6.97	1.32	1.38
36	1	2960	C	C2-N3	-6.97	1.30	1.35
36	5	2884	C	N1-C6	-6.97	1.32	1.37
36	5	2898	G	N9-C8	-6.97	1.32	1.37
36	5	3016	A	C5-C6	-6.97	1.34	1.41
36	5	969	C	N1-C6	-6.97	1.32	1.37
36	1	3316	A	N9-C4	-6.97	1.33	1.37
1	6	1108	G	C6-N1	-6.97	1.34	1.39
36	5	2607	G	N7-C5	-6.97	1.35	1.39
36	1	911	C	N1-C6	-6.96	1.32	1.37
36	1	1100	U	C2-N3	-6.96	1.32	1.37
36	5	1163	A	C6-N1	-6.96	1.30	1.35
36	1	2404	A	N7-C5	6.96	1.43	1.39
36	5	2259	A	N9-C4	-6.96	1.33	1.37
36	1	2986	U	C4-C5	-6.96	1.37	1.43
36	5	3203	U	C2-N3	-6.95	1.32	1.37
36	5	2284	C	C4-C5	-6.95	1.37	1.43
36	5	2874	G	C6-O6	6.95	1.30	1.24
36	5	2956	A	C6-N1	-6.95	1.30	1.35
36	5	94	G	N7-C5	-6.94	1.35	1.39
36	5	943	U	N1-C2	-6.94	1.32	1.38
36	1	635	G	C6-O6	-6.94	1.18	1.24
36	1	806	A	C6-N1	-6.94	1.30	1.35
36	5	583	G	C5-C4	-6.94	1.33	1.38
36	5	3017	A	C6-N1	-6.94	1.30	1.35
1	6	746	A	C5-C6	-6.94	1.34	1.41
36	5	3106	A	N7-C5	-6.94	1.35	1.39
36	5	1146	C	C4-C5	-6.94	1.37	1.43
36	5	3242	G	C6-N1	-6.94	1.34	1.39
36	1	206	G	C5-C4	-6.93	1.33	1.38
36	1	660	A	N7-C5	-6.93	1.35	1.39
36	1	3142	A	C5-C4	-6.93	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1660	A	N7-C5	-6.93	1.35	1.39
36	5	3060	C	C4-C5	-6.93	1.37	1.43
36	1	1310	G	N9-C4	-6.93	1.32	1.38
36	1	85	A	N3-C4	-6.93	1.30	1.34
36	1	2308	C	N1-C6	-6.92	1.32	1.37
1	6	1116	A	N7-C5	-6.92	1.35	1.39
36	5	2903	A	N3-C4	-6.92	1.30	1.34
36	5	3140	G	C5-C6	-6.92	1.35	1.42
36	1	3150	A	N9-C4	-6.91	1.33	1.37
36	5	1867	A	N3-C4	-6.91	1.30	1.34
36	5	3045	G	N7-C5	-6.91	1.35	1.39
36	1	2796	G	N1-C2	-6.91	1.32	1.37
36	1	952	A	N3-C4	-6.91	1.30	1.34
36	5	897	U	N1-C2	-6.91	1.32	1.38
36	5	1405	U	N1-C2	-6.91	1.32	1.38
36	1	1153	A	N7-C5	-6.90	1.35	1.39
36	1	218	G	C5-C4	-6.90	1.33	1.38
36	1	918	C	N3-C4	-6.90	1.29	1.33
36	1	2914	G	N3-C4	-6.90	1.30	1.35
36	5	2405	C	N3-C4	-6.90	1.29	1.33
36	1	272	G	N9-C4	-6.90	1.32	1.38
36	5	2402	A	N3-C4	-6.90	1.30	1.34
1	2	104	A	N9-C4	6.90	1.42	1.37
36	1	589	A	N9-C8	-6.90	1.32	1.37
36	5	2246	G	N7-C5	-6.89	1.35	1.39
36	1	2185	G	N7-C5	-6.89	1.35	1.39
36	5	3016	A	C6-N6	-6.89	1.28	1.33
36	1	656	A	C5-C4	-6.89	1.33	1.38
36	1	1186	G	N1-C2	-6.89	1.32	1.37
36	5	3005	A	C5-C6	-6.89	1.34	1.41
36	5	651	G	N7-C5	-6.88	1.35	1.39
36	5	1150	A	N7-C5	-6.88	1.35	1.39
36	5	654	C	N1-C2	-6.88	1.33	1.40
36	1	338	A	N7-C5	-6.88	1.35	1.39
36	5	352	A	N9-C4	-6.88	1.33	1.37
36	5	1318	A	N3-C4	-6.88	1.30	1.34
36	5	3127	A	C6-N6	-6.88	1.28	1.33
36	5	3172	A	C5-C6	-6.88	1.34	1.41
36	1	1583	A	N3-C4	-6.88	1.30	1.34
36	1	2802	A	N3-C4	-6.88	1.30	1.34
36	5	1924	U	N1-C2	-6.88	1.32	1.38
36	1	1146	C	N1-C6	-6.87	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	521	A	N3-C4	-6.87	1.30	1.34
36	5	1076	C	N1-C6	-6.87	1.33	1.37
36	5	1136	A	N7-C5	-6.87	1.35	1.39
36	5	2689	A	C6-N1	-6.87	1.30	1.35
36	1	2878	G	N9-C4	-6.87	1.32	1.38
36	5	2145	A	C5-C6	-6.87	1.34	1.41
36	5	2284	C	N3-C4	-6.87	1.29	1.33
36	1	589	A	C5-C4	-6.87	1.33	1.38
36	5	2616	C	N1-C6	-6.87	1.33	1.37
1	6	427	C	N3-C4	-6.87	1.29	1.33
36	5	1131	G	N3-C4	-6.87	1.30	1.35
36	5	3038	U	N3-C4	-6.87	1.32	1.38
36	1	2802	A	C6-N1	-6.87	1.30	1.35
36	1	587	U	N1-C2	-6.87	1.32	1.38
36	1	2364	G	N9-C8	-6.86	1.33	1.37
36	1	2985	C	N3-C4	-6.86	1.29	1.33
36	5	406	G	N9-C4	-6.86	1.32	1.38
36	5	1477	A	C6-N1	-6.86	1.30	1.35
36	1	2377	G	C6-O6	-6.86	1.18	1.24
36	1	2287	C	N1-C6	-6.86	1.33	1.37
36	1	1120	A	N3-C4	-6.86	1.30	1.34
36	1	1893	A	N3-C4	-6.86	1.30	1.34
57	n1	104	GLU	CG-CD	6.86	1.62	1.51
36	5	1141	C	N3-C4	-6.86	1.29	1.33
36	5	3146	G	C8-N7	-6.86	1.26	1.30
37	7	72	A	N9-C4	6.86	1.42	1.37
1	6	797	G	C5-C4	-6.85	1.33	1.38
36	5	2853	A	C5-C6	-6.85	1.34	1.41
71	O5	64	GLU	CG-CD	6.85	1.62	1.51
1	6	1537	C	C5-C6	6.85	1.39	1.34
36	5	2821	C	N3-C4	6.85	1.38	1.33
36	1	1340	G	N7-C5	-6.85	1.35	1.39
36	5	695	C	N1-C6	-6.85	1.33	1.37
36	5	3036	G	N3-C4	-6.85	1.30	1.35
37	7	88	G	N7-C5	-6.85	1.35	1.39
36	1	654	C	N1-C6	-6.84	1.33	1.37
36	5	21	G	N3-C4	-6.84	1.30	1.35
36	5	1456	A	N3-C4	-6.84	1.30	1.34
1	2	1270	G	N7-C5	-6.84	1.35	1.39
36	1	1139	G	N9-C4	-6.84	1.32	1.38
36	1	2969	A	N3-C4	-6.84	1.30	1.34
36	5	2931	C	C4-C5	-6.84	1.37	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1554	U	C2-N3	6.84	1.42	1.37
36	5	1149	G	C6-N1	6.84	1.44	1.39
36	5	2847	A	N3-C4	-6.84	1.30	1.34
36	5	2967	A	N3-C4	-6.84	1.30	1.34
1	6	100	A	C5-C6	-6.84	1.34	1.41
1	6	971	A	N9-C4	-6.84	1.33	1.37
36	5	2895	G	N3-C4	-6.84	1.30	1.35
36	5	3127	A	C6-N1	-6.84	1.30	1.35
36	1	344	A	N9-C4	-6.83	1.33	1.37
36	1	2394	G	N9-C8	-6.83	1.33	1.37
36	1	1428	A	C5-C6	-6.83	1.34	1.41
36	1	2960	C	N3-C4	-6.83	1.29	1.33
1	6	441	A	N7-C5	-6.83	1.35	1.39
36	5	1403	C	N1-C6	-6.83	1.33	1.37
36	1	2821	C	N3-C4	6.83	1.38	1.33
36	1	904	A	N9-C4	-6.83	1.33	1.37
36	1	2386	A	N3-C4	-6.83	1.30	1.34
36	1	3273	A	C5-C4	-6.82	1.33	1.38
36	5	3226	A	N3-C4	-6.82	1.30	1.34
36	1	34	A	N3-C4	-6.82	1.30	1.34
36	1	1881	A	N3-C4	-6.82	1.30	1.34
36	5	2184	U	C2-N3	-6.82	1.32	1.37
36	1	2639	G	N3-C4	-6.82	1.30	1.35
36	1	1366	A	N7-C5	-6.81	1.35	1.39
36	1	2834	G	N9-C4	-6.81	1.32	1.38
36	5	2994	A	C6-N1	-6.81	1.30	1.35
36	1	2617	U	N3-C4	-6.81	1.32	1.38
36	1	3130	A	C6-N1	-6.81	1.30	1.35
36	5	3091	A	N3-C4	-6.81	1.30	1.34
36	1	1901	A	N3-C4	-6.80	1.30	1.34
36	1	2875	U	C2-O2	6.80	1.28	1.22
36	5	1289	G	C6-N1	-6.80	1.34	1.39
36	1	1887	A	C5-C6	-6.80	1.34	1.41
1	6	1732	A	N9-C4	-6.80	1.33	1.37
36	1	2919	A	N9-C4	-6.79	1.33	1.37
36	1	663	C	N1-C6	-6.79	1.33	1.37
36	1	218	G	N9-C4	-6.79	1.32	1.38
36	1	2633	U	N1-C2	-6.79	1.32	1.38
47	M0	186	GLU	CG-CD	6.79	1.62	1.51
36	5	2099	A	N9-C4	6.79	1.42	1.37
36	1	358	G	N9-C4	-6.79	1.32	1.38
36	1	364	G	N7-C5	-6.79	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2385	G	N9-C4	-6.78	1.32	1.38
36	5	3127	A	N7-C5	-6.78	1.35	1.39
36	1	952	A	N9-C4	-6.78	1.33	1.37
36	1	2143	A	C5-C4	-6.78	1.34	1.38
36	5	3272	C	N3-C4	-6.78	1.29	1.33
36	5	217	U	N3-C4	-6.78	1.32	1.38
36	1	1913	A	N9-C4	-6.77	1.33	1.37
36	5	2290	C	N1-C6	-6.77	1.33	1.37
36	5	2794	G	C5-C4	-6.77	1.33	1.38
36	1	2205	U	N1-C2	6.77	1.44	1.38
36	1	2809	C	N1-C6	-6.77	1.33	1.37
36	5	1217	A	N3-C4	-6.76	1.30	1.34
36	5	3045	G	C6-N1	-6.76	1.34	1.39
36	5	2892	A	N7-C5	-6.76	1.35	1.39
36	1	282	G	N1-C2	-6.76	1.32	1.37
36	1	1103	A	C5-C4	6.76	1.43	1.38
1	6	1093	A	N9-C4	6.76	1.42	1.37
36	5	3043	C	N3-C4	-6.76	1.29	1.33
36	1	1887	A	N7-C5	-6.76	1.35	1.39
36	1	2956	A	C5-C6	-6.76	1.34	1.41
36	5	1115	G	C5-C6	-6.76	1.35	1.42
36	1	635	G	C6-N1	-6.76	1.34	1.39
1	6	1762	A	N3-C4	-6.76	1.30	1.34
36	5	402	A	N3-C4	-6.76	1.30	1.34
36	5	2151	C	N1-C2	-6.76	1.33	1.40
36	5	3199	G	C5-C4	-6.75	1.33	1.38
1	6	46	A	C5-C6	-6.75	1.34	1.41
36	5	633	C	N1-C6	-6.75	1.33	1.37
36	5	2864	A	C5-C6	-6.75	1.34	1.41
25	d3	63	GLN	CG-CD	6.75	1.66	1.51
36	5	3275	U	N1-C2	6.75	1.44	1.38
36	1	2613	U	N1-C2	-6.75	1.32	1.38
1	6	19	A	N3-C4	-6.75	1.30	1.34
36	5	3209	A	N3-C4	6.75	1.38	1.34
36	5	1430	U	N1-C6	-6.74	1.31	1.38
36	1	2748	A	N9-C4	-6.74	1.33	1.37
36	1	109	A	N3-C4	-6.74	1.30	1.34
1	6	179	A	N9-C4	6.74	1.41	1.37
36	1	2374	C	N3-C4	-6.74	1.29	1.33
36	1	900	G	C5-C4	-6.74	1.33	1.38
52	M6	40	GLU	CG-CD	6.74	1.62	1.51
1	6	391	A	N9-C4	-6.74	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	628	A	N3-C4	-6.73	1.30	1.34
36	1	2302	G	N1-C2	-6.73	1.32	1.37
36	5	1433	A	N7-C5	-6.73	1.35	1.39
36	5	2946	A	N9-C4	-6.73	1.33	1.37
40	13	66	LYS	CD-CE	6.73	1.68	1.51
36	5	2938	G	C5-C4	-6.73	1.33	1.38
36	1	1429	G	N1-C2	-6.72	1.32	1.37
36	1	2948	C	N1-C6	-6.72	1.33	1.37
36	5	189	G	C6-N1	-6.72	1.34	1.39
36	1	211	A	N9-C4	-6.72	1.33	1.37
36	1	1886	A	N9-C4	-6.72	1.33	1.37
36	5	924	G	N3-C4	-6.72	1.30	1.35
36	5	951	A	N9-C4	-6.72	1.33	1.37
36	5	2247	G	N1-C2	-6.72	1.32	1.37
36	5	2886	U	C2-N3	-6.72	1.33	1.37
36	5	3030	G	C5-C4	-6.72	1.33	1.38
36	5	3226	A	N9-C4	-6.72	1.33	1.37
36	1	693	A	N9-C4	-6.71	1.33	1.37
36	5	1300	G	C8-N7	-6.71	1.26	1.30
37	7	5	G	C5-C4	-6.71	1.33	1.38
37	7	29	C	N1-C6	-6.71	1.33	1.37
36	1	2137	U	N1-C6	-6.71	1.31	1.38
36	5	1845	G	C5-C4	-6.71	1.33	1.38
36	5	2837	A	N3-C4	-6.71	1.30	1.34
36	5	2911	A	N7-C5	-6.71	1.35	1.39
36	5	2980	U	C4-O4	-6.71	1.18	1.23
36	1	920	A	C6-N1	-6.70	1.30	1.35
36	5	2126	A	C5-C4	-6.70	1.34	1.38
36	1	34	A	N9-C4	-6.70	1.33	1.37
36	1	343	U	N1-C6	-6.70	1.31	1.38
36	5	958	C	C2-N3	-6.70	1.30	1.35
36	1	2385	G	C5-C4	-6.70	1.33	1.38
36	5	2956	A	C5-C6	-6.70	1.35	1.41
36	5	2963	C	N1-C2	-6.70	1.33	1.40
36	1	1306	G	N7-C5	-6.70	1.35	1.39
36	1	2954	U	C2-N3	6.70	1.42	1.37
20	c8	47	CYS	CB-SG	-6.70	1.70	1.82
36	5	1867	A	C6-N1	-6.70	1.30	1.35
36	1	1432	C	C2-N3	-6.69	1.30	1.35
1	6	310	C	C4-C5	-6.69	1.37	1.43
38	8	12	A	N9-C4	6.69	1.41	1.37
36	1	220	G	N3-C4	-6.69	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	52	A	N3-C4	-6.69	1.30	1.34
36	5	3295	A	C6-N1	-6.69	1.30	1.35
36	5	1883	A	N9-C4	-6.69	1.33	1.37
56	n0	128	GLU	CB-CG	6.69	1.64	1.52
36	1	2847	A	N9-C4	-6.69	1.33	1.37
36	5	2813	A	N9-C4	-6.69	1.33	1.37
36	1	904	A	N3-C4	-6.68	1.30	1.34
69	O3	71	VAL	CB-CG1	-6.68	1.38	1.52
36	5	1064	A	N9-C4	-6.68	1.33	1.37
36	5	1296	C	N3-C4	-6.68	1.29	1.33
36	1	361	A	N9-C4	-6.68	1.33	1.37
1	2	1654	G	N1-C2	-6.68	1.32	1.37
1	6	46	A	N7-C5	-6.68	1.35	1.39
1	6	758	U	N3-C4	-6.68	1.32	1.38
1	6	982	U	C2-N3	-6.68	1.33	1.37
36	5	1116	G	N9-C8	-6.68	1.33	1.37
36	5	1173	U	N3-C4	-6.68	1.32	1.38
36	5	2404	A	C6-N1	6.68	1.40	1.35
36	5	2416	U	C2-N3	-6.68	1.33	1.37
36	5	1197	A	N9-C4	-6.68	1.33	1.37
36	1	2762	A	C5-C4	-6.68	1.34	1.38
1	6	369	A	N9-C4	6.68	1.41	1.37
1	6	758	U	C2-N3	-6.68	1.33	1.37
36	5	900	G	N7-C5	-6.68	1.35	1.39
36	1	1915	A	N9-C4	-6.67	1.33	1.37
38	8	15	G	C6-N1	-6.67	1.34	1.39
36	5	647	A	N9-C4	-6.67	1.33	1.37
36	1	2979	U	P-O5'	-6.67	1.53	1.59
36	5	973	A	N7-C5	-6.67	1.35	1.39
36	1	1158	A	C5-C4	-6.67	1.34	1.38
36	1	100	A	N7-C5	-6.67	1.35	1.39
36	5	583	G	N7-C5	-6.67	1.35	1.39
36	1	2129	U	C2-N3	-6.66	1.33	1.37
1	6	23	G	N3-C4	-6.66	1.30	1.35
36	5	1306	G	N3-C4	-6.66	1.30	1.35
36	5	3295	A	N3-C4	-6.66	1.30	1.34
36	1	1440	G	C5-C4	-6.66	1.33	1.38
1	6	1087	A	C6-N1	-6.66	1.30	1.35
36	5	2689	A	N7-C5	-6.66	1.35	1.39
36	5	2374	C	N1-C2	-6.66	1.33	1.40
1	6	992	A	N7-C5	-6.66	1.35	1.39
36	1	1061	A	N9-C8	-6.65	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	585	A	C5-C4	-6.65	1.34	1.38
38	4	3	A	C5-C4	-6.65	1.34	1.38
36	5	2276	G	N3-C4	-6.65	1.30	1.35
36	5	2847	A	C5-C6	-6.65	1.35	1.41
36	1	2811	A	C5-C6	-6.65	1.35	1.41
1	6	797	G	N9-C4	-6.65	1.32	1.38
36	5	1128	U	C2-O2	-6.65	1.16	1.22
36	5	1887	A	N9-C4	-6.65	1.33	1.37
36	5	2313	A	N3-C4	-6.65	1.30	1.34
36	5	2637	A	C5-C6	-6.64	1.35	1.41
1	6	1337	A	N9-C4	-6.64	1.33	1.37
36	1	1369	A	N7-C5	-6.64	1.35	1.39
36	1	1398	U	C2-O2	-6.64	1.16	1.22
36	5	1417	G	C6-N1	-6.64	1.34	1.39
36	5	2941	A	N7-C5	-6.64	1.35	1.39
36	5	990	U	C2-N3	-6.64	1.33	1.37
36	5	1481	A	N7-C5	-6.64	1.35	1.39
1	2	1751	C	C2-N3	-6.63	1.30	1.35
36	1	2932	U	N3-C4	-6.63	1.32	1.38
1	6	342	C	N1-C6	-6.63	1.33	1.37
36	5	559	A	N7-C5	-6.63	1.35	1.39
36	5	2139	A	C6-N1	-6.63	1.30	1.35
36	5	2915	U	C4-C5	-6.63	1.37	1.43
40	13	251	CYS	CB-SG	-6.63	1.71	1.82
36	1	1320	C	N1-C6	-6.63	1.33	1.37
36	5	2915	U	N1-C2	-6.63	1.32	1.38
36	1	1910	A	C6-N1	-6.63	1.30	1.35
36	1	2831	G	C5-C6	-6.63	1.35	1.42
1	6	401	A	N3-C4	-6.63	1.30	1.34
36	5	944	C	N1-C6	-6.63	1.33	1.37
36	1	85	A	C6-N1	-6.63	1.30	1.35
36	5	920	A	C5-C6	-6.63	1.35	1.41
37	7	22	A	C6-N1	-6.62	1.30	1.35
36	1	85	A	N7-C5	-6.62	1.35	1.39
36	5	1310	G	N7-C5	-6.62	1.35	1.39
36	5	2335	G	C5-C4	-6.62	1.33	1.38
36	1	1435	A	C6-N1	-6.62	1.30	1.35
36	5	1899	G	N9-C8	-6.62	1.33	1.37
36	5	425	G	N9-C4	-6.62	1.32	1.38
36	1	1387	G	C6-N1	-6.61	1.34	1.39
1	6	1777	G	N7-C5	-6.61	1.35	1.39
36	5	2728	G	N7-C5	-6.61	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1112	G	N3-C4	-6.61	1.30	1.35
36	1	788	C	N1-C6	-6.61	1.33	1.37
36	1	2994	A	N7-C5	-6.61	1.35	1.39
1	6	1763	A	N3-C4	-6.60	1.30	1.34
36	5	2796	G	C5-C4	-6.60	1.33	1.38
36	1	327	A	C5-C6	-6.60	1.35	1.41
36	1	943	U	C2-O2	-6.60	1.16	1.22
1	6	26	A	C6-N6	-6.60	1.28	1.33
36	5	1178	G	N1-C2	-6.60	1.32	1.37
36	5	3141	A	N3-C4	-6.60	1.30	1.34
38	8	2	A	C5-C6	-6.60	1.35	1.41
36	5	1515	A	N9-C4	-6.59	1.33	1.37
1	2	353	A	N7-C5	-6.59	1.35	1.39
36	1	2398	A	N9-C8	-6.59	1.32	1.37
36	1	3009	G	N7-C5	-6.59	1.35	1.39
36	5	2856	G	N7-C5	-6.59	1.35	1.39
36	1	96	G	N9-C4	-6.59	1.32	1.38
1	6	1226	A	N9-C4	6.59	1.41	1.37
36	5	2277	C	N1-C6	-6.59	1.33	1.37
36	1	709	A	C5-C4	-6.59	1.34	1.38
36	1	2377	G	N3-C4	-6.58	1.30	1.35
36	1	3005	A	N3-C4	-6.58	1.30	1.34
36	5	3047	U	N1-C2	-6.58	1.32	1.38
36	1	1159	A	N7-C5	-6.58	1.35	1.39
1	6	427	C	N1-C6	-6.58	1.33	1.37
36	5	1081	U	N1-C2	6.58	1.44	1.38
37	3	82	G	C6-N1	-6.58	1.34	1.39
36	1	2733	A	C5-C4	-6.58	1.34	1.38
36	5	2404	A	C6-N6	6.58	1.39	1.33
36	5	2828	G	N1-C2	-6.58	1.32	1.37
36	1	1704	A	N9-C4	-6.57	1.33	1.37
36	1	2613	U	C4-O4	6.57	1.28	1.23
1	6	1517	U	N1-C2	-6.57	1.32	1.38
36	5	2968	G	N3-C4	-6.57	1.30	1.35
36	5	1911	A	N3-C4	-6.57	1.30	1.34
36	5	2816	G	N3-C4	-6.57	1.30	1.35
36	1	796	U	C4-O4	-6.57	1.18	1.23
36	1	2365	C	N3-C4	-6.57	1.29	1.33
36	5	433	A	C5-C6	-6.57	1.35	1.41
36	5	3088	G	N7-C5	-6.57	1.35	1.39
1	6	388	G	N3-C4	-6.57	1.30	1.35
36	5	2296	A	N9-C8	-6.57	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2796	G	C8-N7	-6.57	1.27	1.30
47	m0	8	CYS	CB-SG	-6.57	1.71	1.82
36	1	1046	A	N9-C4	-6.57	1.33	1.37
37	7	88	G	C6-N1	-6.57	1.34	1.39
36	5	3004	C	C4-C5	-6.56	1.37	1.43
36	5	2750	U	C2-N3	-6.56	1.33	1.37
36	5	2332	A	C5-C4	-6.56	1.34	1.38
1	6	565	C	N1-C6	-6.56	1.33	1.37
36	5	2922	G	N3-C4	-6.56	1.30	1.35
36	5	3344	A	C5-C4	-6.56	1.34	1.38
36	1	32	U	N1-C6	-6.56	1.32	1.38
36	1	907	G	C2-N3	6.56	1.38	1.32
36	1	916	G	N3-C4	-6.56	1.30	1.35
36	5	2418	G	N1-C2	6.56	1.43	1.37
36	1	2659	G	N7-C5	-6.55	1.35	1.39
1	6	1112	G	N9-C4	-6.55	1.32	1.38
36	5	1310	G	C6-N1	-6.55	1.34	1.39
36	5	3061	G	N7-C5	-6.55	1.35	1.39
36	5	2977	G	N3-C4	-6.55	1.30	1.35
1	2	1631	A	N9-C4	-6.55	1.33	1.37
36	1	1400	G	N9-C8	-6.55	1.33	1.37
37	7	24	A	C6-N1	-6.55	1.30	1.35
36	1	345	G	N9-C8	-6.55	1.33	1.37
36	5	1290	A	C5-C6	-6.55	1.35	1.41
36	1	2412	G	C2-N3	-6.55	1.27	1.32
36	5	2743	A	C5-C4	-6.55	1.34	1.38
36	5	1350	A	N9-C4	6.54	1.41	1.37
36	5	2690	G	N9-C4	-6.54	1.32	1.38
36	5	3173	G	C6-N1	-6.54	1.34	1.39
38	8	133	G	N9-C4	-6.54	1.32	1.38
36	5	1212	A	C6-N6	-6.54	1.28	1.33
36	5	2117	A	N3-C4	-6.54	1.30	1.34
36	5	1370	G	C6-O6	-6.54	1.18	1.24
36	1	1159	A	N3-C4	-6.53	1.30	1.34
36	1	2145	A	C6-N6	-6.53	1.28	1.33
36	1	820	A	C6-N1	-6.53	1.30	1.35
36	5	1180	A	N3-C4	-6.53	1.30	1.34
36	5	3305	A	N3-C4	-6.53	1.30	1.34
36	1	1656	A	N9-C4	-6.53	1.33	1.37
36	1	659	G	C5-C4	-6.53	1.33	1.38
36	5	588	G	N7-C5	-6.53	1.35	1.39
36	5	1309	U	N1-C2	-6.53	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1432	C	C4-C5	-6.53	1.37	1.43
36	1	935	U	C2-O2	-6.52	1.16	1.22
36	5	1150	A	N3-C4	-6.52	1.30	1.34
1	2	599	A	N9-C4	6.52	1.41	1.37
36	1	33	G	N3-C4	-6.52	1.30	1.35
36	1	2424	A	N3-C4	-6.52	1.30	1.34
1	6	601	A	C5-C4	-6.52	1.34	1.38
36	5	218	G	P-O5'	-6.52	1.53	1.59
36	5	1370	G	N1-C2	-6.52	1.32	1.37
36	1	1309	U	N1-C2	-6.51	1.32	1.38
36	5	2333	C	N1-C6	-6.51	1.33	1.37
36	1	860	G	C5-C6	-6.51	1.35	1.42
37	3	95	A	N3-C4	-6.51	1.30	1.34
36	5	937	G	N9-C8	-6.51	1.33	1.37
36	1	1195	A	N7-C5	-6.51	1.35	1.39
36	5	857	G	N7-C5	-6.51	1.35	1.39
36	5	1295	G	N1-C2	-6.51	1.32	1.37
36	1	2311	G	N7-C5	-6.51	1.35	1.39
36	5	408	A	C6-N1	-6.51	1.30	1.35
36	5	3206	C	N1-C6	-6.51	1.33	1.37
1	6	901	G	C6-N1	6.50	1.44	1.39
36	1	335	G	C2-N3	-6.50	1.27	1.32
36	5	425	G	N7-C5	-6.50	1.35	1.39
36	5	962	A	N7-C5	-6.50	1.35	1.39
36	5	2644	C	N1-C2	-6.50	1.33	1.40
36	5	3130	A	C5-C4	-6.50	1.34	1.38
1	2	757	A	N9-C4	6.50	1.41	1.37
36	1	780	A	N7-C5	-6.50	1.35	1.39
36	1	505	G	N3-C4	-6.50	1.30	1.35
36	1	1144	U	N1-C2	-6.50	1.32	1.38
36	1	2363	A	N9-C4	-6.50	1.33	1.37
36	1	358	G	C5-C6	-6.49	1.35	1.42
36	5	424	G	C5-C6	-6.49	1.35	1.42
1	2	1750	A	N3-C4	-6.49	1.30	1.34
36	5	3044	G	N7-C5	-6.49	1.35	1.39
37	7	14	U	C2-N3	-6.49	1.33	1.37
36	1	929	A	C5-C6	-6.49	1.35	1.41
36	5	1892	G	C6-N1	-6.49	1.35	1.39
36	5	2889	C	C2-N3	-6.49	1.30	1.35
36	5	2950	G	C5-C6	-6.49	1.35	1.42
36	1	1401	A	N7-C5	-6.48	1.35	1.39
36	5	1139	G	N3-C4	-6.48	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2396	G	N9-C4	-6.48	1.32	1.38
36	5	2371	G	N9-C8	-6.48	1.33	1.37
36	5	1408	G	C8-N7	-6.48	1.27	1.30
36	1	3045	G	N7-C5	-6.48	1.35	1.39
36	5	2913	C	N1-C6	-6.48	1.33	1.37
56	n0	34	GLU	CG-CD	6.48	1.61	1.51
1	6	39	A	N3-C4	-6.48	1.30	1.34
36	1	364	G	N9-C4	-6.47	1.32	1.38
36	1	2878	G	C6-N1	-6.47	1.35	1.39
36	5	2817	A	N3-C4	-6.47	1.30	1.34
36	1	109	A	N9-C4	-6.47	1.33	1.37
36	1	367	A	N9-C8	-6.47	1.32	1.37
36	5	2303	A	C5-C6	-6.47	1.35	1.41
36	1	585	A	N7-C5	-6.47	1.35	1.39
36	1	1306	G	N3-C4	-6.47	1.30	1.35
36	5	1060	U	C2-N3	-6.47	1.33	1.37
36	5	2877	G	N1-C2	-6.47	1.32	1.37
36	5	2863	G	N7-C5	-6.46	1.35	1.39
1	6	1002	G	N9-C4	-6.46	1.32	1.38
1	6	1535	U	N3-C4	-6.46	1.32	1.38
1	6	1765	A	N3-C4	-6.46	1.30	1.34
36	5	1303	A	N9-C4	-6.46	1.33	1.37
36	1	25	U	C2-N3	6.46	1.42	1.37
36	1	1440	G	N1-C2	-6.46	1.32	1.37
36	1	2801	A	C5-C6	-6.46	1.35	1.41
36	5	406	G	N3-C4	-6.46	1.30	1.35
36	5	1886	A	C6-N1	-6.45	1.31	1.35
36	5	500	C	N1-C6	-6.45	1.33	1.37
36	5	3140	G	N1-C2	-6.45	1.32	1.37
36	1	2834	G	N9-C8	-6.45	1.33	1.37
36	5	2119	A	N7-C5	-6.45	1.35	1.39
1	6	992	A	C5-C6	-6.45	1.35	1.41
36	5	2375	G	N9-C4	-6.45	1.32	1.38
36	1	2620	G	C2-N3	-6.44	1.27	1.32
36	5	2980	U	C2-N3	-6.44	1.33	1.37
36	1	220	G	N7-C5	-6.44	1.35	1.39
36	1	1309	U	C2-O2	-6.44	1.16	1.22
36	1	1534	A	N3-C4	-6.44	1.30	1.34
36	5	2848	G	N3-C4	-6.44	1.30	1.35
36	5	235	A	N9-C4	-6.44	1.33	1.37
36	5	283	G	N1-C2	-6.44	1.32	1.37
36	5	3118	C	N3-C4	-6.44	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	971	G	N9-C8	-6.44	1.33	1.37
57	n1	63	VAL	CA-CB	-6.44	1.41	1.54
36	1	1460	A	C5-C4	-6.43	1.34	1.38
36	5	2755	C	N1-C6	-6.43	1.33	1.37
1	6	1651	A	C5-C6	-6.43	1.35	1.41
36	5	2307	G	N3-C4	-6.43	1.30	1.35
36	5	1188	U	N1-C6	-6.43	1.32	1.38
36	5	1913	A	C5-C6	-6.43	1.35	1.41
36	1	697	A	N3-C4	6.42	1.38	1.34
36	1	1135	A	N9-C4	-6.42	1.33	1.37
36	1	1398	U	N1-C2	-6.42	1.32	1.38
36	5	278	U	N3-C4	-6.42	1.32	1.38
36	5	942	U	C4-O4	6.42	1.28	1.23
36	1	1094	U	C2-N3	6.42	1.42	1.37
36	1	432	G	N3-C4	-6.42	1.30	1.35
36	1	2424	A	N9-C4	-6.42	1.33	1.37
1	6	151	G	N3-C4	-6.42	1.30	1.35
36	5	2875	U	C4-O4	6.42	1.28	1.23
36	5	3315	G	C6-N1	-6.42	1.35	1.39
36	5	52	A	N9-C4	-6.41	1.34	1.37
36	5	1314	C	N1-C6	-6.41	1.33	1.37
36	5	2326	A	N7-C5	-6.41	1.35	1.39
36	1	322	U	C2-N3	-6.41	1.33	1.37
1	6	1592	A	N3-C4	-6.41	1.31	1.34
1	2	6	G	N9-C4	6.41	1.43	1.38
36	1	916	G	N9-C4	-6.41	1.32	1.38
1	2	1751	C	N3-C4	-6.41	1.29	1.33
36	1	2641	U	C4-O4	-6.41	1.18	1.23
36	1	2971	A	C6-N1	6.41	1.40	1.35
36	5	2748	A	C6-N1	-6.41	1.31	1.35
36	5	1929	G	N9-C4	-6.40	1.32	1.38
36	5	2116	G	N7-C5	-6.40	1.35	1.39
36	5	2634	U	C4-O4	-6.40	1.18	1.23
37	7	42	A	N7-C5	-6.40	1.35	1.39
1	6	410	A	N7-C5	-6.40	1.35	1.39
36	5	2849	C	N1-C2	-6.40	1.33	1.40
36	5	2890	A	N3-C4	-6.40	1.31	1.34
36	1	1867	A	N3-C4	-6.39	1.31	1.34
36	5	428	A	N7-C5	-6.39	1.35	1.39
36	5	929	A	C5-C4	-6.39	1.34	1.38
36	5	1127	G	N7-C5	-6.39	1.35	1.39
36	5	1897	G	C5-C6	-6.39	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	572	A	N3-C4	-6.39	1.31	1.34
36	5	2872	A	N3-C4	6.39	1.38	1.34
36	5	2983	C	C4-C5	-6.39	1.37	1.43
37	7	99	G	C5-C4	-6.39	1.33	1.38
1	6	349	U	C2-N3	-6.39	1.33	1.37
36	5	2926	A	N3-C4	-6.39	1.31	1.34
1	6	1653	C	N1-C6	-6.39	1.33	1.37
1	6	1750	A	N3-C4	-6.39	1.31	1.34
36	5	2172	A	C5-C6	-6.38	1.35	1.41
36	5	2416	U	C2-O2	-6.38	1.16	1.22
36	1	3260	G	N3-C4	-6.38	1.30	1.35
36	5	1834	U	C4-O4	6.38	1.28	1.23
36	5	3094	A	C6-N1	-6.38	1.31	1.35
36	1	2899	C	N3-C4	-6.38	1.29	1.33
1	2	1208	A	N3-C4	-6.38	1.31	1.34
38	4	104	A	N3-C4	-6.38	1.31	1.34
36	1	2651	G	N9-C8	-6.37	1.33	1.37
36	5	1205	A	C6-N6	-6.37	1.28	1.33
36	1	3011	A	C6-N1	-6.37	1.31	1.35
36	5	2919	A	N9-C4	-6.37	1.34	1.37
36	1	2756	C	N3-C4	-6.37	1.29	1.33
36	5	1129	A	N7-C5	-6.37	1.35	1.39
36	5	1174	G	N7-C5	-6.37	1.35	1.39
47	m0	11	TYR	CE2-CZ	6.37	1.46	1.38
36	1	1402	C	N3-C4	-6.37	1.29	1.33
1	6	46	A	C6-N1	-6.37	1.31	1.35
36	5	1795	U	C2-N3	-6.37	1.33	1.37
36	5	2969	A	N9-C4	-6.37	1.34	1.37
36	1	2326	A	C6-N1	-6.36	1.31	1.35
36	1	2910	A	C6-N1	-6.36	1.31	1.35
36	5	1286	A	N9-C4	-6.36	1.34	1.37
36	5	2830	G	C6-N1	-6.36	1.35	1.39
36	1	1169	A	N3-C4	-6.36	1.31	1.34
36	1	1357	G	N7-C5	-6.36	1.35	1.39
36	5	365	A	C5-C6	-6.36	1.35	1.41
36	5	3096	C	N1-C6	-6.36	1.33	1.37
36	1	1333	C	C4-N4	-6.36	1.28	1.33
36	1	1340	G	C6-O6	-6.36	1.18	1.24
36	1	1905	G	N9-C4	-6.36	1.32	1.38
36	1	2386	A	C5-C4	-6.36	1.34	1.38
36	1	2830	G	N9-C4	-6.36	1.32	1.38
36	5	2969	A	N7-C5	-6.36	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1321	G	C5-C4	-6.35	1.33	1.38
38	4	53	A	N3-C4	-6.35	1.31	1.34
36	5	577	C	N3-C4	-6.35	1.29	1.33
36	1	100	A	N3-C4	-6.35	1.31	1.34
36	5	1212	A	C5-C6	-6.35	1.35	1.41
36	5	2108	C	N1-C6	-6.35	1.33	1.37
36	5	2385	G	N3-C4	-6.35	1.31	1.35
1	2	47	A	N7-C5	-6.35	1.35	1.39
36	1	2145	A	C5-C6	-6.35	1.35	1.41
36	5	1198	C	N3-C4	-6.35	1.29	1.33
36	5	2407	C	C4-C5	-6.35	1.37	1.43
36	5	520	U	N1-C2	6.35	1.44	1.38
36	5	1189	C	N1-C6	-6.35	1.33	1.37
36	1	1311	G	N9-C8	-6.34	1.33	1.37
1	6	1765	A	C6-N1	-6.34	1.31	1.35
36	5	3094	A	N3-C4	-6.34	1.31	1.34
36	1	189	G	C5-C4	-6.34	1.33	1.38
36	1	2289	U	N1-C6	-6.34	1.32	1.38
37	3	65	G	N9-C4	-6.34	1.32	1.38
36	5	932	U	C4-O4	-6.34	1.18	1.23
36	5	1133	A	N7-C5	-6.34	1.35	1.39
36	5	3190	C	N1-C6	-6.34	1.33	1.37
36	5	423	A	N7-C5	-6.34	1.35	1.39
36	5	1922	A	N9-C4	-6.34	1.34	1.37
36	1	157	A	N3-C4	-6.34	1.31	1.34
36	1	914	A	N9-C4	6.34	1.41	1.37
36	1	2404	A	C2-N3	6.34	1.39	1.33
36	5	960	U	C2-O2	6.34	1.28	1.22
36	5	2816	G	C2-N3	-6.34	1.27	1.32
36	5	3122	A	N7-C5	-6.33	1.35	1.39
36	5	3207	U	C5-C6	6.33	1.39	1.34
36	1	32	U	C5-C6	-6.33	1.28	1.34
36	1	1444	G	N7-C5	-6.33	1.35	1.39
1	6	102	U	N1-C2	-6.33	1.32	1.38
36	5	1196	C	C4-C5	6.33	1.48	1.43
36	5	3209	A	N9-C4	6.33	1.41	1.37
36	5	1138	U	N1-C6	-6.33	1.32	1.38
36	5	2370	G	C6-N1	-6.33	1.35	1.39
36	1	3273	A	C6-N1	-6.33	1.31	1.35
36	1	1906	G	C5-C4	-6.33	1.33	1.38
36	1	1371	G	N9-C8	-6.33	1.33	1.37
36	1	3087	A	N3-C4	-6.33	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	425	G	N9-C8	-6.33	1.33	1.37
36	5	1317	A	C5-C4	-6.33	1.34	1.38
36	5	2806	U	C2-N3	-6.33	1.33	1.37
36	5	1592	G	C5-C6	6.32	1.48	1.42
36	5	2746	A	N9-C4	-6.32	1.34	1.37
38	8	44	A	C5-C6	-6.32	1.35	1.41
36	1	373	A	C6-N1	-6.32	1.31	1.35
40	L3	27	ALA	CA-CB	-6.32	1.39	1.52
1	6	407	A	N3-C4	-6.32	1.31	1.34
36	5	2976	A	N7-C5	-6.32	1.35	1.39
1	2	1654	G	C6-N1	-6.32	1.35	1.39
36	1	942	U	N1-C6	-6.32	1.32	1.38
36	5	2300	G	C6-N1	-6.32	1.35	1.39
1	2	1004	U	N3-C4	-6.32	1.32	1.38
36	1	2117	A	N7-C5	-6.32	1.35	1.39
36	1	2932	U	C2-N3	-6.32	1.33	1.37
1	6	358	U	C2-N3	-6.32	1.33	1.37
36	5	2967	A	C6-N1	-6.32	1.31	1.35
36	1	517	G	N3-C4	-6.32	1.31	1.35
36	1	3033	A	N9-C4	6.32	1.41	1.37
36	1	3141	A	C5-C6	-6.32	1.35	1.41
36	1	3217	C	N1-C6	-6.32	1.33	1.37
36	5	1192	C	N1-C2	6.32	1.46	1.40
69	o3	33	GLU	CG-CD	6.32	1.61	1.51
36	5	2111	G	N9-C4	-6.31	1.32	1.38
36	5	2288	G	N1-C2	-6.31	1.32	1.37
36	5	2871	G	N9-C8	6.31	1.42	1.37
36	1	409	A	N7-C5	-6.31	1.35	1.39
36	5	1929	G	N3-C4	-6.31	1.31	1.35
36	1	1906	G	N7-C5	-6.31	1.35	1.39
37	3	98	C	N3-C4	-6.31	1.29	1.33
36	5	921	A	N7-C5	-6.31	1.35	1.39
36	1	45	A	N3-C4	-6.31	1.31	1.34
36	1	955	U	N1-C2	-6.31	1.32	1.38
36	5	1103	A	N9-C8	6.31	1.42	1.37
42	l5	136	GLU	CG-CD	6.31	1.61	1.51
36	5	3276	G	C6-N1	6.30	1.44	1.39
52	m6	40	GLU	CG-CD	6.30	1.61	1.51
36	1	2861	U	C2-N3	-6.30	1.33	1.37
36	1	3273	A	N9-C4	-6.30	1.34	1.37
36	5	3181	C	N1-C6	-6.30	1.33	1.37
1	6	597	G	N7-C5	-6.30	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1073	U	C2-N3	-6.30	1.33	1.37
36	5	1120	A	N9-C4	-6.30	1.34	1.37
36	5	2900	A	C5-C6	-6.30	1.35	1.41
1	6	1411	A	N9-C4	-6.30	1.34	1.37
36	1	752	C	N3-C4	-6.30	1.29	1.33
36	1	1886	A	C6-N1	-6.29	1.31	1.35
36	1	2236	G	N7-C5	-6.29	1.35	1.39
38	4	52	A	N3-C4	-6.29	1.31	1.34
36	5	705	A	N3-C4	-6.29	1.31	1.34
1	6	3	U	C2-N3	-6.29	1.33	1.37
1	6	1631	A	C5-C6	-6.29	1.35	1.41
36	5	2862	U	C2-N3	-6.29	1.33	1.37
36	5	1145	G	N7-C5	-6.29	1.35	1.39
36	5	3020	U	C4-C5	-6.29	1.37	1.43
36	5	1180	A	C5-C4	-6.29	1.34	1.38
36	5	2815	G	N9-C8	-6.29	1.33	1.37
36	1	422	A	N9-C4	-6.29	1.34	1.37
36	5	994	G	N1-C2	-6.29	1.32	1.37
36	5	1142	G	C5-C6	-6.29	1.36	1.42
36	1	826	G	C5-C6	-6.29	1.36	1.42
36	1	2325	G	C5-C6	-6.29	1.36	1.42
36	1	2834	G	C6-N1	-6.29	1.35	1.39
36	5	433	A	N7-C5	-6.29	1.35	1.39
36	1	440	A	N9-C4	6.28	1.41	1.37
40	L3	7	GLU	CG-CD	6.28	1.61	1.51
36	5	3083	G	C5-C6	-6.28	1.36	1.42
36	5	3129	A	C6-N1	-6.28	1.31	1.35
36	5	506	U	N1-C2	-6.28	1.32	1.38
36	5	2648	G	N9-C4	-6.28	1.32	1.38
38	8	41	A	N3-C4	-6.28	1.31	1.34
36	1	391	A	N3-C4	-6.28	1.31	1.34
36	1	1176	C	N3-C4	-6.28	1.29	1.33
36	5	278	U	C2-N3	-6.28	1.33	1.37
36	1	612	U	N1-C6	-6.27	1.32	1.38
36	5	1430	U	N1-C2	-6.27	1.32	1.38
76	q0	110	CYS	CB-SG	-6.27	1.71	1.82
36	1	1126	G	N7-C5	-6.27	1.35	1.39
36	1	1534	A	C5-C6	-6.27	1.35	1.41
36	1	2801	A	C5-C4	-6.27	1.34	1.38
36	1	3274	A	N7-C5	-6.27	1.35	1.39
36	5	1150	A	C5-C4	-6.27	1.34	1.38
36	5	2816	G	C5-C6	-6.27	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2946	A	C6-N1	-6.27	1.31	1.35
36	1	1465	A	N9-C4	-6.27	1.34	1.37
36	5	589	A	N3-C4	-6.27	1.31	1.34
36	5	2836	C	N3-C4	-6.27	1.29	1.33
36	5	2385	G	N9-C8	-6.26	1.33	1.37
36	5	2956	A	N3-C4	-6.26	1.31	1.34
36	1	2649	A	N7-C5	-6.26	1.35	1.39
36	5	2365	C	N1-C6	-6.26	1.33	1.37
36	1	1403	C	P-O5'	-6.26	1.53	1.59
37	3	63	A	N9-C4	-6.26	1.34	1.37
36	5	2346	C	N1-C2	-6.26	1.33	1.40
36	5	519	A	N7-C5	-6.26	1.35	1.39
36	1	2376	G	N3-C4	-6.26	1.31	1.35
1	6	1762	A	N9-C4	-6.26	1.34	1.37
36	1	2917	G	C6-N1	-6.25	1.35	1.39
36	1	1153	A	N9-C4	-6.25	1.34	1.37
36	1	2193	U	N1-C2	-6.25	1.32	1.38
36	1	2942	C	N3-C4	6.25	1.38	1.33
36	1	1117	G	C5-C4	-6.25	1.33	1.38
36	5	2698	G	C5-C4	-6.25	1.33	1.38
36	1	1131	G	N7-C5	-6.25	1.35	1.39
36	1	1454	A	N9-C4	-6.25	1.34	1.37
36	5	2913	C	N3-C4	-6.25	1.29	1.33
36	1	357	A	C6-N1	-6.24	1.31	1.35
36	1	2614	G	C6-N1	-6.24	1.35	1.39
36	5	1151	U	C4-O4	6.24	1.28	1.23
36	5	2618	G	C6-N1	-6.24	1.35	1.39
1	6	316	A	N9-C4	-6.24	1.34	1.37
36	5	1295	G	N3-C4	-6.24	1.31	1.35
36	5	1889	G	C5-C6	-6.24	1.36	1.42
36	5	3010	U	N3-C4	-6.24	1.32	1.38
1	2	1782	A	N7-C5	-6.24	1.35	1.39
1	6	1648	A	N9-C4	-6.24	1.34	1.37
36	5	1048	A	C6-N1	-6.24	1.31	1.35
37	7	39	C	N1-C6	-6.24	1.33	1.37
36	1	318	A	N9-C4	-6.24	1.34	1.37
36	5	1303	A	C6-N6	-6.24	1.28	1.33
36	1	206	G	N1-C2	-6.23	1.32	1.37
36	5	1179	A	C6-N1	-6.23	1.31	1.35
36	5	1205	A	C5-C6	-6.23	1.35	1.41
36	5	2647	A	N9-C4	-6.23	1.34	1.37
36	1	2656	A	C6-N1	-6.23	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	102	U	C2-N3	-6.23	1.33	1.37
36	5	2400	G	C5-C6	-6.23	1.36	1.42
36	5	1145	G	C8-N7	-6.23	1.27	1.30
36	5	2983	C	N1-C6	-6.23	1.33	1.37
37	3	92	A	N9-C4	-6.23	1.34	1.37
36	1	351	A	N9-C4	-6.22	1.34	1.37
1	6	1642	G	N1-C2	-6.22	1.32	1.37
36	5	890	C	N1-C6	-6.22	1.33	1.37
36	5	1186	G	C6-N1	-6.22	1.35	1.39
36	1	89	A	C6-N1	-6.22	1.31	1.35
37	3	102	A	N9-C4	-6.22	1.34	1.37
1	6	630	A	N7-C5	-6.22	1.35	1.39
36	5	645	A	N7-C5	-6.22	1.35	1.39
36	5	1060	U	N3-C4	-6.22	1.32	1.38
36	5	3189	G	C5-C4	-6.22	1.33	1.38
37	7	84	A	N9-C4	-6.22	1.34	1.37
36	5	650	C	N3-C4	-6.22	1.29	1.33
36	5	3203	U	N3-C4	-6.22	1.32	1.38
36	1	1169	A	C6-N1	-6.21	1.31	1.35
36	5	1098	A	N9-C4	-6.21	1.34	1.37
36	5	2977	G	C5-C4	-6.21	1.33	1.38
36	1	955	U	C2-N3	-6.21	1.33	1.37
1	6	630	A	C5-C6	-6.21	1.35	1.41
36	5	2893	C	C4-C5	-6.21	1.38	1.43
36	1	1176	C	N1-C6	-6.21	1.33	1.37
36	1	85	A	C5-C6	-6.21	1.35	1.41
36	5	3020	U	C4-O4	-6.21	1.18	1.23
1	2	1124	A	N9-C4	-6.21	1.34	1.37
36	1	294	U	C2-N3	-6.21	1.33	1.37
36	1	3102	G	C6-N1	-6.21	1.35	1.39
1	6	1777	G	C6-N1	-6.21	1.35	1.39
36	5	973	A	C5-C6	-6.21	1.35	1.41
36	5	1477	A	N3-C4	-6.21	1.31	1.34
36	1	880	G	C5-C4	-6.21	1.34	1.38
36	5	1140	G	N7-C5	-6.21	1.35	1.39
36	5	2925	C	N1-C2	-6.21	1.33	1.40
36	5	2932	U	N3-C4	-6.21	1.32	1.38
36	5	2895	G	C6-N1	-6.21	1.35	1.39
36	1	343	U	C4-C5	-6.20	1.38	1.43
36	5	189	G	C5-C4	-6.20	1.34	1.38
36	5	3088	G	N3-C4	-6.20	1.31	1.35
36	5	1199	C	N1-C6	-6.20	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	383	G	N9-C8	-6.20	1.33	1.37
36	1	2382	G	C6-N1	-6.20	1.35	1.39
36	1	101	G	C5-C6	-6.20	1.36	1.42
36	1	3147	G	C5-C4	-6.20	1.34	1.38
36	5	1300	G	N7-C5	-6.19	1.35	1.39
36	5	1099	A	C5-C4	-6.19	1.34	1.38
36	5	1316	C	N1-C6	-6.19	1.33	1.37
36	5	2632	G	P-O5'	-6.19	1.53	1.59
1	6	1124	A	C5-C6	-6.19	1.35	1.41
1	6	1596	C	N1-C6	-6.19	1.33	1.37
36	5	2199	G	N7-C5	-6.19	1.35	1.39
36	1	648	C	N1-C6	-6.19	1.33	1.37
1	6	1614	A	N9-C4	-6.19	1.34	1.37
36	1	1170	A	C5-C6	-6.18	1.35	1.41
36	5	1884	A	N7-C5	-6.18	1.35	1.39
36	5	2903	A	N9-C4	-6.18	1.34	1.37
36	5	425	G	C5-C4	-6.18	1.34	1.38
36	5	512	U	N3-C4	-6.18	1.32	1.38
36	5	2117	A	N7-C5	-6.18	1.35	1.39
36	5	2395	G	N3-C4	-6.18	1.31	1.35
36	5	2881	C	N3-C4	-6.18	1.29	1.33
36	1	35	A	N3-C4	-6.18	1.31	1.34
36	1	629	U	C2-N3	-6.18	1.33	1.37
1	2	1454	G	C5-C4	-6.18	1.34	1.38
36	1	3121	U	C2-N3	-6.18	1.33	1.37
36	5	64	G	N7-C5	-6.18	1.35	1.39
36	1	41	G	C5-C4	-6.17	1.34	1.38
36	5	1295	G	C5-C4	-6.17	1.34	1.38
36	5	2698	G	N9-C8	-6.17	1.33	1.37
36	5	2892	A	C6-N1	-6.17	1.31	1.35
36	5	591	G	N9-C8	-6.17	1.33	1.37
36	1	2952	G	N3-C4	-6.17	1.31	1.35
1	6	1592	A	C6-N1	-6.17	1.31	1.35
36	5	2294	U	C2-N3	-6.17	1.33	1.37
36	1	3319	U	N1-C2	6.17	1.44	1.38
36	5	800	G	C5-C4	-6.17	1.34	1.38
25	D3	60	GLU	CG-CD	6.17	1.61	1.51
36	1	2350	C	N1-C6	-6.17	1.33	1.37
36	5	1307	G	C5-C6	-6.17	1.36	1.42
1	2	1148	C	N3-C4	-6.17	1.29	1.33
36	5	2768	U	C2-N3	-6.17	1.33	1.37
36	1	793	C	N1-C6	-6.17	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2753	G	N9-C8	-6.17	1.33	1.37
36	5	2913	C	C4-C5	-6.17	1.38	1.43
36	1	751	A	C6-N1	-6.16	1.31	1.35
36	1	1846	C	N1-C2	-6.16	1.33	1.40
36	5	642	U	N1-C2	-6.16	1.33	1.38
36	1	146	U	N1-C2	6.16	1.44	1.38
36	1	2834	G	N7-C5	-6.16	1.35	1.39
36	1	218	G	N3-C4	-6.16	1.31	1.35
36	5	962	A	N9-C4	-6.16	1.34	1.37
36	5	3362	A	N3-C4	-6.16	1.31	1.34
36	1	649	A	N3-C4	-6.16	1.31	1.34
36	1	1910	A	C5-C4	-6.16	1.34	1.38
36	1	2823	G	N3-C4	-6.16	1.31	1.35
36	5	2247	G	C5-C4	-6.15	1.34	1.38
36	5	2920	U	C4-O4	-6.15	1.18	1.23
37	7	112	G	C6-N1	-6.15	1.35	1.39
69	o3	81	VAL	CB-CG1	-6.15	1.40	1.52
36	1	1350	A	N9-C4	6.15	1.41	1.37
36	1	1534	A	N7-C5	-6.15	1.35	1.39
36	1	2733	A	N3-C4	-6.15	1.31	1.34
36	5	3016	A	N7-C5	-6.15	1.35	1.39
36	5	3146	G	C5-C6	-6.15	1.36	1.42
36	5	3210	A	C6-N1	-6.15	1.31	1.35
36	1	338	A	N9-C8	-6.15	1.32	1.37
36	5	2381	G	N7-C5	-6.15	1.35	1.39
36	5	3336	A	N9-C4	-6.15	1.34	1.37
36	1	409	A	C5-C4	-6.15	1.34	1.38
36	5	2188	A	N9-C8	-6.15	1.32	1.37
1	6	1660	A	N9-C4	-6.15	1.34	1.37
36	5	1372	C	N1-C6	-6.15	1.33	1.37
36	1	2399	A	C5-C4	-6.14	1.34	1.38
36	1	2833	A	C6-N1	-6.14	1.31	1.35
1	6	794	U	N1-C2	6.14	1.44	1.38
36	1	907	G	C6-O6	-6.14	1.18	1.24
36	1	1910	A	N3-C4	-6.14	1.31	1.34
1	6	1584	G	N7-C5	-6.14	1.35	1.39
36	1	2693	C	N1-C6	-6.14	1.33	1.37
36	1	3244	A	C6-N1	-6.14	1.31	1.35
36	5	3128	G	N3-C4	-6.14	1.31	1.35
37	7	13	A	C5-C6	-6.14	1.35	1.41
36	5	945	C	N1-C6	-6.14	1.33	1.37
36	5	3138	U	N1-C2	-6.14	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1517	U	C2-N3	-6.13	1.33	1.37
36	5	2977	G	N7-C5	-6.13	1.35	1.39
36	1	2314	U	C2-N3	6.13	1.42	1.37
36	1	2358	A	N3-C4	-6.13	1.31	1.34
36	5	2918	G	C6-O6	-6.13	1.18	1.24
36	5	1152	G	C5-C6	-6.13	1.36	1.42
36	1	1061	A	N9-C4	-6.13	1.34	1.37
36	1	2335	G	C6-N1	-6.13	1.35	1.39
38	4	12	A	N7-C5	-6.13	1.35	1.39
36	5	1085	A	N3-C4	-6.13	1.31	1.34
36	5	3172	A	N3-C4	-6.13	1.31	1.34
36	1	1129	A	N7-C5	-6.12	1.35	1.39
36	5	289	A	C5-C6	-6.12	1.35	1.41
36	5	2815	G	N7-C5	-6.12	1.35	1.39
36	5	3245	A	N7-C5	-6.12	1.35	1.39
36	5	1142	G	C6-N1	-6.12	1.35	1.39
36	5	3098	G	C6-N1	-6.12	1.35	1.39
36	5	3114	A	C5-C6	-6.12	1.35	1.41
36	1	612	U	N3-C4	-6.12	1.32	1.38
36	1	2733	A	N9-C4	-6.12	1.34	1.37
36	1	2831	G	N7-C5	-6.12	1.35	1.39
36	5	706	A	N3-C4	-6.12	1.31	1.34
36	5	710	A	N7-C5	-6.12	1.35	1.39
36	1	1904	C	N1-C6	-6.12	1.33	1.37
36	1	2309	A	N3-C4	-6.12	1.31	1.34
1	6	1778	G	N1-C2	-6.12	1.32	1.37
36	5	2996	U	C4-O4	6.12	1.28	1.23
1	2	1212	G	N7-C5	-6.12	1.35	1.39
1	6	397	A	N9-C4	-6.12	1.34	1.37
1	6	1166	A	N9-C4	-6.12	1.34	1.37
36	5	1330	A	C5-C6	-6.12	1.35	1.41
36	5	1845	G	N7-C5	-6.12	1.35	1.39
36	5	1043	C	N1-C6	-6.11	1.33	1.37
36	5	2705	A	C5-C4	-6.11	1.34	1.38
36	5	3095	U	N1-C6	-6.11	1.32	1.38
36	1	2623	G	C2-N3	-6.11	1.27	1.32
1	6	1768	G	N3-C4	-6.11	1.31	1.35
36	5	505	G	N3-C4	-6.11	1.31	1.35
36	5	2373	A	N3-C4	-6.11	1.31	1.34
43	16	175	LYS	CD-CE	6.11	1.66	1.51
52	M6	40	GLU	CD-OE2	6.11	1.32	1.25
36	1	1374	G	N7-C5	-6.11	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3130	A	N9-C4	-6.11	1.34	1.37
36	5	807	A	N9-C4	-6.11	1.34	1.37
36	5	1887	A	C5-C4	-6.11	1.34	1.38
36	1	2374	C	C5-C6	-6.11	1.29	1.34
36	5	1428	A	C6-N1	-6.11	1.31	1.35
68	O2	8	LYS	CD-CE	6.10	1.66	1.51
36	5	1114	U	N1-C2	-6.10	1.33	1.38
36	5	2400	G	C5-C4	-6.10	1.34	1.38
36	1	1907	C	N3-C4	-6.10	1.29	1.33
36	5	1195	A	N7-C5	-6.10	1.35	1.39
36	5	2954	U	N3-C4	6.10	1.44	1.38
36	1	2724	U	N1-C2	-6.10	1.33	1.38
1	6	1762	A	C5-C4	-6.10	1.34	1.38
36	5	1374	G	N3-C4	-6.10	1.31	1.35
36	5	2316	G	N3-C4	-6.10	1.31	1.35
36	1	1381	A	N3-C4	-6.10	1.31	1.34
36	1	1425	U	C2-N3	-6.10	1.33	1.37
38	4	54	A	N3-C4	-6.10	1.31	1.34
36	5	1149	G	N3-C4	-6.10	1.31	1.35
36	5	1406	A	N9-C8	-6.10	1.32	1.37
36	5	2698	G	N9-C4	-6.10	1.33	1.38
36	1	911	C	C2-N3	-6.10	1.30	1.35
1	6	1124	A	N9-C4	-6.10	1.34	1.37
36	1	2917	G	N9-C8	-6.09	1.33	1.37
36	5	51	A	C5-C6	-6.09	1.35	1.41
36	5	1910	A	N7-C5	-6.09	1.35	1.39
1	6	1780	G	N9-C8	-6.09	1.33	1.37
36	5	1065	A	N9-C4	-6.09	1.34	1.37
36	5	3010	U	C2-N3	-6.09	1.33	1.37
36	1	1192	C	N1-C2	6.09	1.46	1.40
36	1	2963	C	N3-C4	-6.09	1.29	1.33
36	5	2943	G	N3-C4	-6.09	1.31	1.35
36	1	1399	A	N9-C4	-6.09	1.34	1.37
36	5	960	U	C2-N3	6.09	1.42	1.37
36	5	1174	G	N3-C4	-6.09	1.31	1.35
36	1	2971	A	C5-C4	6.09	1.43	1.38
36	5	82	C	N1-C6	-6.09	1.33	1.37
37	7	49	G	C6-N1	6.09	1.43	1.39
38	8	45	C	N1-C6	-6.09	1.33	1.37
36	5	630	A	N9-C4	-6.08	1.34	1.37
36	5	2683	U	C4-C5	-6.08	1.38	1.43
36	1	642	U	C4-O4	6.08	1.28	1.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2960	C	N1-C6	-6.08	1.33	1.37
36	5	2932	U	C4-O4	-6.08	1.18	1.23
36	1	980	A	C5-C4	6.08	1.43	1.38
36	1	1851	G	C2-N3	-6.08	1.27	1.32
36	1	1888	U	C2-N3	-6.08	1.33	1.37
1	6	107	C	N1-C6	-6.08	1.33	1.37
36	5	633	C	N3-C4	-6.08	1.29	1.33
36	5	1370	G	C5-C4	-6.08	1.34	1.38
36	5	2305	G	N3-C4	-6.08	1.31	1.35
36	1	1406	A	N3-C4	-6.08	1.31	1.34
36	1	2908	G	N7-C5	-6.08	1.35	1.39
36	5	1062	A	N9-C4	-6.08	1.34	1.37
36	5	3184	A	C5-C6	-6.08	1.35	1.41
1	6	1635	A	N9-C4	-6.08	1.34	1.37
1	6	1411	A	N3-C4	-6.08	1.31	1.34
1	6	1655	A	N3-C4	-6.08	1.31	1.34
36	5	1364	C	N3-C4	-6.08	1.29	1.33
36	1	433	A	N3-C4	-6.07	1.31	1.34
36	1	2981	U	N3-C4	-6.07	1.32	1.38
69	O3	3	GLU	CG-CD	6.07	1.61	1.51
36	5	1196	C	N1-C2	6.07	1.46	1.40
44	17	59	GLU	CG-CD	6.07	1.61	1.51
36	5	2819	A	C5-C4	-6.07	1.34	1.38
1	6	410	A	N3-C4	-6.07	1.31	1.34
36	5	893	C	N1-C6	-6.07	1.33	1.37
36	5	2392	C	N3-C4	-6.07	1.29	1.33
36	1	2910	A	N7-C5	-6.07	1.35	1.39
36	5	1909	A	N9-C4	-6.07	1.34	1.37
36	5	3306	U	N1-C6	-6.07	1.32	1.38
36	5	2367	A	N9-C4	-6.07	1.34	1.37
36	1	2270	A	C5-C6	-6.06	1.35	1.41
36	1	2323	G	C5-C4	-6.06	1.34	1.38
36	5	2841	G	C6-N1	-6.06	1.35	1.39
36	5	635	G	N9-C8	-6.06	1.33	1.37
36	5	1200	A	C5-C6	-6.06	1.35	1.41
36	5	3324	C	N1-C6	-6.06	1.33	1.37
1	6	1108	G	N3-C4	-6.06	1.31	1.35
36	5	630	A	N9-C8	-6.06	1.32	1.37
36	1	2333	C	C2-N3	-6.06	1.30	1.35
36	1	2364	G	C5-C4	-6.05	1.34	1.38
59	n3	120	LYS	CD-CE	6.05	1.66	1.51
36	1	2374	C	N1-C6	-6.05	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	410	A	C5-C6	-6.05	1.35	1.41
36	1	2378	C	N1-C6	-6.05	1.33	1.37
36	5	856	G	C6-N1	-6.05	1.35	1.39
36	5	2768	U	N3-C4	-6.05	1.33	1.38
36	5	799	G	N7-C5	-6.05	1.35	1.39
36	5	2851	A	N9-C4	-6.05	1.34	1.37
36	5	2891	U	C2-N3	-6.05	1.33	1.37
36	1	1909	A	N9-C4	-6.04	1.34	1.37
38	4	13	A	N7-C5	-6.04	1.35	1.39
36	5	2341	A	C6-N1	-6.04	1.31	1.35
36	5	2994	A	C5-C4	-6.04	1.34	1.38
36	5	367	A	C6-N1	-6.04	1.31	1.35
36	5	660	A	C6-N1	-6.04	1.31	1.35
36	5	2287	C	N1-C6	-6.04	1.33	1.37
36	1	200	C	N1-C6	-6.04	1.33	1.37
36	1	519	A	N9-C4	-6.04	1.34	1.37
36	1	1887	A	N9-C8	-6.04	1.32	1.37
36	1	1320	C	C2-N3	-6.04	1.30	1.35
36	1	907	G	C6-N1	-6.04	1.35	1.39
1	6	417	A	N9-C4	6.04	1.41	1.37
36	1	2825	C	N1-C6	-6.03	1.33	1.37
36	1	3172	A	N3-C4	-6.03	1.31	1.34
36	5	936	A	C6-N1	-6.03	1.31	1.35
36	1	368	G	N3-C4	-6.03	1.31	1.35
36	5	3125	U	C2-N3	-6.03	1.33	1.37
36	5	1188	U	N1-C2	-6.03	1.33	1.38
36	5	2642	A	C5-C6	-6.03	1.35	1.41
36	5	2868	U	N1-C2	-6.03	1.33	1.38
36	1	1459	C	N1-C6	-6.03	1.33	1.37
36	5	1379	G	C6-N1	-6.03	1.35	1.39
1	2	1127	G	N3-C4	-6.03	1.31	1.35
1	6	611	U	N1-C6	-6.03	1.32	1.38
36	5	869	G	C6-N1	-6.03	1.35	1.39
36	5	1342	C	C2-N3	-6.03	1.30	1.35
36	5	2168	A	N7-C5	-6.03	1.35	1.39
36	1	1061	A	C5-C4	-6.03	1.34	1.38
36	1	3180	A	N3-C4	-6.03	1.31	1.34
1	6	401	A	N9-C4	-6.03	1.34	1.37
36	5	535	G	N7-C5	-6.02	1.35	1.39
36	5	2660	G	N9-C4	-6.02	1.33	1.38
36	5	3026	G	N7-C5	-6.02	1.35	1.39
38	4	2	A	C6-N1	-6.02	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	29	C	N1-C6	-6.02	1.33	1.37
36	1	1429	G	C2-N2	-6.02	1.28	1.34
36	1	2916	U	N1-C2	6.02	1.44	1.38
36	5	996	A	N9-C4	-6.02	1.34	1.37
36	1	2374	C	C4-C5	-6.02	1.38	1.43
36	5	648	C	C4-N4	6.02	1.39	1.33
36	5	2391	G	C5-C4	-6.02	1.34	1.38
36	1	2875	U	C4-O4	6.01	1.28	1.23
36	1	2601	A	C5-C4	-6.01	1.34	1.38
36	5	2286	U	N3-C4	-6.01	1.33	1.38
37	7	84	A	N7-C5	-6.01	1.35	1.39
36	1	1386	A	C5-C6	6.01	1.46	1.41
36	5	2977	G	C5-C6	-6.01	1.36	1.42
68	o2	41	VAL	CA-CB	-6.01	1.42	1.54
36	1	865	U	N1-C2	-6.01	1.33	1.38
36	1	2382	G	N1-C2	-6.01	1.32	1.37
36	5	2705	A	C6-N1	-6.01	1.31	1.35
36	1	1401	A	C5-C4	-6.01	1.34	1.38
36	1	2838	A	N9-C4	-6.01	1.34	1.37
36	5	569	A	C5-C4	-6.01	1.34	1.38
36	1	2431	C	N1-C6	-6.00	1.33	1.37
36	5	206	G	N1-C2	-6.00	1.32	1.37
36	5	2702	A	N7-C5	-6.00	1.35	1.39
36	1	2966	G	N3-C4	-6.00	1.31	1.35
1	2	1655	A	C5-C4	-6.00	1.34	1.38
36	1	2986	U	N1-C6	-6.00	1.32	1.38
36	5	883	A	C5-C4	-6.00	1.34	1.38
36	1	27	C	N1-C6	-6.00	1.33	1.37
36	5	2965	U	C4-C5	-6.00	1.38	1.43
38	8	138	A	N3-C4	-6.00	1.31	1.34
1	6	1570	A	N9-C4	-6.00	1.34	1.37
36	5	396	A	C6-N1	-6.00	1.31	1.35
36	1	1120	A	C6-N1	-5.99	1.31	1.35
36	1	1695	U	C2-N3	-5.99	1.33	1.37
1	6	1671	A	N9-C4	-5.99	1.34	1.37
36	5	1172	G	N7-C5	-5.99	1.35	1.39
36	5	1302	A	N3-C4	-5.99	1.31	1.34
1	6	1025	A	N3-C4	-5.99	1.31	1.34
1	2	1762	A	N9-C4	-5.99	1.34	1.37
36	1	608	A	C5-C6	-5.99	1.35	1.41
36	5	2799	A	N7-C5	-5.99	1.35	1.39
36	1	2948	C	C4-C5	-5.99	1.38	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	3	83	U	C2-N3	-5.99	1.33	1.37
37	7	14	U	N1-C2	-5.99	1.33	1.38
36	1	838	G	N9-C4	-5.99	1.33	1.38
1	6	1470	C	N3-C4	-5.99	1.29	1.33
36	5	958	C	C5-C6	-5.99	1.29	1.34
36	5	2130	G	C5-C4	-5.99	1.34	1.38
36	5	3374	U	C2-N3	-5.98	1.33	1.37
1	2	405	C	N1-C6	-5.98	1.33	1.37
36	1	1310	G	N7-C5	-5.98	1.35	1.39
1	6	1524	A	N7-C5	-5.98	1.35	1.39
36	5	3032	A	C6-N1	-5.98	1.31	1.35
36	1	787	G	N7-C5	-5.98	1.35	1.39
36	5	3336	A	N3-C4	-5.98	1.31	1.34
36	1	784	A	N9-C4	-5.98	1.34	1.37
36	1	1424	C	N1-C6	-5.98	1.33	1.37
36	1	2939	G	C6-N1	-5.98	1.35	1.39
36	1	2346	C	N1-C6	-5.98	1.33	1.37
36	5	1177	G	N9-C8	-5.98	1.33	1.37
36	5	1146	C	N1-C6	-5.98	1.33	1.37
36	5	2637	A	C6-N6	-5.98	1.29	1.33
36	1	2386	A	N7-C5	-5.97	1.35	1.39
1	6	1137	A	N9-C8	-5.97	1.32	1.37
36	5	519	A	C6-N1	-5.97	1.31	1.35
36	5	1490	A	N3-C4	-5.97	1.31	1.34
36	1	2935	U	N1-C2	-5.97	1.33	1.38
36	5	2314	U	N1-C2	5.97	1.44	1.38
36	5	2386	A	C5-C4	-5.97	1.34	1.38
36	5	2662	G	C6-N1	-5.97	1.35	1.39
36	5	2956	A	N7-C5	-5.97	1.35	1.39
36	1	95	A	N3-C4	-5.97	1.31	1.34
36	1	2371	G	N9-C8	-5.97	1.33	1.37
36	1	3059	G	N7-C5	5.97	1.42	1.39
36	1	2811	A	C5-C4	-5.97	1.34	1.38
36	5	1153	A	N7-C5	-5.97	1.35	1.39
36	5	2884	C	C2-N3	-5.97	1.30	1.35
36	1	2274	U	C2-N3	-5.96	1.33	1.37
36	1	2605	G	C5-C6	-5.96	1.36	1.42
1	6	1655	A	C5-C6	-5.96	1.35	1.41
36	1	1192	C	C2-N3	5.96	1.40	1.35
1	6	1467	C	N3-C4	-5.96	1.29	1.33
36	5	1791	C	N1-C6	-5.96	1.33	1.37
36	1	2919	A	N3-C4	-5.96	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2975	U	C2-N3	-5.96	1.33	1.37
36	5	2270	A	N9-C4	-5.96	1.34	1.37
36	5	2671	A	N9-C4	-5.96	1.34	1.37
36	5	3146	G	N7-C5	-5.96	1.35	1.39
36	5	569	A	N9-C4	-5.96	1.34	1.37
1	2	353	A	C5-C6	-5.96	1.35	1.41
36	1	39	A	N9-C4	-5.96	1.34	1.37
36	1	3308	C	N3-C4	-5.96	1.29	1.33
36	5	3091	A	N9-C4	-5.96	1.34	1.37
37	7	33	U	C2-N3	-5.96	1.33	1.37
36	5	422	A	C5-C4	-5.96	1.34	1.38
36	5	2182	A	N9-C4	-5.96	1.34	1.37
36	1	511	G	N9-C4	-5.95	1.33	1.38
36	1	1171	G	N3-C4	-5.95	1.31	1.35
36	5	639	G	C6-N1	-5.95	1.35	1.39
36	5	1136	A	C6-N1	-5.95	1.31	1.35
36	5	2637	A	N7-C5	-5.95	1.35	1.39
36	1	435	C	N1-C6	-5.95	1.33	1.37
36	1	3295	A	C6-N1	-5.95	1.31	1.35
36	5	1406	A	N9-C4	-5.95	1.34	1.37
36	5	2701	U	C4-O4	-5.95	1.18	1.23
1	6	151	G	C2-N3	-5.95	1.27	1.32
36	1	1116	G	N1-C2	-5.95	1.32	1.37
1	6	1644	C	N3-C4	-5.95	1.29	1.33
36	5	585	A	N9-C8	-5.95	1.32	1.37
36	5	1607	U	C4-O4	5.95	1.28	1.23
36	5	3061	G	C5-C4	-5.95	1.34	1.38
36	1	397	A	C6-N1	-5.94	1.31	1.35
36	5	1143	A	N9-C4	-5.94	1.34	1.37
36	1	430	U	C2-N3	-5.94	1.33	1.37
36	1	2199	G	N1-C2	-5.94	1.32	1.37
36	1	2981	U	C2-O2	-5.94	1.17	1.22
36	5	2840	C	N3-C4	-5.94	1.29	1.33
36	1	879	U	N1-C2	-5.94	1.33	1.38
36	1	2296	A	C6-N1	-5.94	1.31	1.35
1	6	1375	A	N9-C4	-5.94	1.34	1.37
36	5	3130	A	N7-C5	-5.94	1.35	1.39
36	5	654	C	N3-C4	-5.94	1.29	1.33
38	4	10	A	C6-N1	-5.94	1.31	1.35
1	2	1096	C	N1-C2	5.93	1.46	1.40
36	1	1305	U	N1-C2	-5.93	1.33	1.38
36	5	43	A	C5-C6	-5.93	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1113	A	C6-N1	-5.93	1.31	1.35
36	1	358	G	N7-C5	-5.93	1.35	1.39
36	1	2778	G	C6-N1	-5.93	1.35	1.39
36	5	860	G	C5-C6	-5.93	1.36	1.42
36	5	1103	A	N7-C5	5.93	1.42	1.39
36	1	1314	C	N1-C6	-5.93	1.33	1.37
36	5	637	C	C5-C6	-5.93	1.29	1.34
36	5	3298	C	N1-C6	-5.93	1.33	1.37
25	d3	71	CYS	CB-SG	-5.92	1.72	1.81
36	5	2701	U	C4-C5	-5.92	1.38	1.43
36	1	3054	U	C4-O4	5.92	1.28	1.23
36	5	1003	A	C5-C6	-5.92	1.35	1.41
36	1	2188	A	N3-C4	-5.92	1.31	1.34
36	5	2955	U	N1-C2	-5.92	1.33	1.38
36	5	2882	U	C2-N3	-5.92	1.33	1.37
36	5	2122	G	N9-C4	-5.92	1.33	1.38
36	5	2177	G	C6-N1	-5.92	1.35	1.39
36	5	2704	A	N7-C5	-5.92	1.35	1.39
36	1	1192	C	C2-O2	5.92	1.29	1.24
36	5	1429	G	N3-C4	-5.92	1.31	1.35
36	5	2307	G	N7-C5	-5.92	1.35	1.39
36	5	2316	G	C6-N1	-5.92	1.35	1.39
36	5	2678	A	N9-C4	-5.92	1.34	1.37
36	1	2324	A	C5-C6	-5.92	1.35	1.41
36	1	22	G	N3-C4	-5.91	1.31	1.35
36	1	1305	U	C2-O2	-5.91	1.17	1.22
36	1	1516	C	N3-C4	-5.91	1.29	1.33
36	5	1202	A	N9-C8	-5.91	1.33	1.37
36	5	2382	G	C5-C4	-5.91	1.34	1.38
36	5	2404	A	N7-C5	5.91	1.42	1.39
1	2	1744	A	N3-C4	-5.91	1.31	1.34
36	1	2425	G	C6-N1	-5.91	1.35	1.39
36	1	2607	G	N9-C8	-5.91	1.33	1.37
36	5	561	C	N1-C6	-5.91	1.33	1.37
36	5	3048	A	N7-C5	-5.91	1.35	1.39
58	N2	92	TRP	CB-CG	5.91	1.60	1.50
36	5	1185	C	N1-C6	-5.91	1.33	1.37
36	1	1583	A	N9-C4	-5.91	1.34	1.37
36	1	1906	G	C5-C6	-5.90	1.36	1.42
36	1	2920	U	C4-C5	-5.90	1.38	1.43
36	1	2149	A	N3-C4	-5.90	1.31	1.34
37	3	97	A	N9-C8	-5.90	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	646	A	C6-N1	-5.90	1.31	1.35
36	5	1174	G	N9-C8	-5.90	1.33	1.37
36	1	1163	A	N9-C4	-5.90	1.34	1.37
36	5	2116	G	N3-C4	-5.90	1.31	1.35
36	5	3242	G	N9-C4	5.90	1.42	1.38
36	5	1160	C	N1-C6	-5.90	1.33	1.37
36	5	1477	A	C5-C4	-5.90	1.34	1.38
36	1	962	A	C5-C4	-5.89	1.34	1.38
36	5	3104	U	C2-N3	-5.89	1.33	1.37
56	n0	79	VAL	CB-CG2	-5.89	1.40	1.52
36	1	808	A	C6-N6	-5.89	1.29	1.33
36	1	2279	A	N9-C4	-5.89	1.34	1.37
36	1	2996	U	N3-C4	5.89	1.43	1.38
36	5	1008	U	P-O5'	-5.89	1.53	1.59
36	1	2773	C	N1-C6	-5.89	1.33	1.37
36	5	3012	A	N3-C4	-5.89	1.31	1.34
36	1	1450	G	C2-N3	-5.89	1.28	1.32
36	1	1114	U	C2-N3	-5.89	1.33	1.37
36	1	3140	G	N1-C2	-5.89	1.33	1.37
36	5	895	A	C6-N1	-5.89	1.31	1.35
36	5	984	G	N7-C5	-5.89	1.35	1.39
36	1	751	A	C6-N6	-5.88	1.29	1.33
36	1	1404	G	N9-C8	-5.88	1.33	1.37
1	6	635	A	N9-C4	-5.88	1.34	1.37
36	1	367	A	C5-C4	-5.88	1.34	1.38
36	1	2241	U	N1-C2	-5.88	1.33	1.38
36	5	1163	A	N3-C4	-5.88	1.31	1.34
36	5	2798	C	N1-C6	-5.88	1.33	1.37
36	5	3110	C	N3-C4	-5.88	1.29	1.33
36	1	3213	A	N7-C5	-5.88	1.35	1.39
36	5	981	U	N1-C2	5.88	1.43	1.38
36	5	1625	A	N9-C4	-5.88	1.34	1.37
36	5	2912	G	C5-C4	-5.88	1.34	1.38
36	1	628	A	C6-N1	-5.88	1.31	1.35
36	5	2145	A	C6-N1	-5.88	1.31	1.35
36	1	306	A	C6-N1	-5.87	1.31	1.35
36	1	900	G	N7-C5	-5.87	1.35	1.39
36	1	1182	A	C5-C6	-5.87	1.35	1.41
36	1	2831	G	N9-C4	-5.87	1.33	1.38
1	6	390	G	N7-C5	-5.87	1.35	1.39
1	6	576	G	N7-C5	-5.87	1.35	1.39
36	1	2672	G	C5-C4	-5.87	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2997	G	N7-C5	-5.87	1.35	1.39
36	5	2370	G	N3-C4	-5.87	1.31	1.35
36	5	365	A	N7-C5	-5.87	1.35	1.39
36	5	583	G	C6-N1	-5.87	1.35	1.39
36	5	1152	G	C8-N7	5.87	1.34	1.30
36	5	2242	A	N9-C4	-5.87	1.34	1.37
36	5	2754	G	N1-C2	-5.87	1.33	1.37
36	5	2762	A	N9-C4	-5.87	1.34	1.37
1	6	1594	G	N9-C8	-5.87	1.33	1.37
37	7	73	C	C2-N3	5.87	1.40	1.35
1	2	390	G	N3-C4	-5.87	1.31	1.35
36	5	1406	A	N7-C5	-5.87	1.35	1.39
36	5	2813	A	C6-N1	-5.87	1.31	1.35
36	5	2871	G	N7-C5	5.87	1.42	1.39
36	1	2857	C	N1-C6	-5.86	1.33	1.37
52	M6	80	PHE	CB-CG	-5.86	1.41	1.51
36	1	2738	A	N3-C4	-5.86	1.31	1.34
36	1	431	U	N1-C2	-5.86	1.33	1.38
36	1	1309	U	C2-N3	-5.86	1.33	1.37
36	1	1335	C	N1-C6	-5.86	1.33	1.37
36	1	3139	A	N3-C4	-5.86	1.31	1.34
1	6	19	A	N7-C5	-5.86	1.35	1.39
36	5	88	A	N7-C5	-5.86	1.35	1.39
36	5	752	C	N1-C6	-5.86	1.33	1.37
38	8	12	A	C5-C6	-5.86	1.35	1.41
40	l3	46	PHE	CB-CG	-5.86	1.41	1.51
67	o1	90	PHE	CB-CG	-5.86	1.41	1.51
36	1	1401	A	C8-N7	-5.86	1.27	1.31
36	1	431	U	C2-N3	-5.86	1.33	1.37
36	1	2431	C	N3-C4	-5.86	1.29	1.33
36	5	2831	G	C6-O6	5.86	1.29	1.24
36	5	3013	U	C4-O4	-5.86	1.19	1.23
37	7	121	U	N1-C2	5.86	1.43	1.38
36	5	1557	A	N3-C4	-5.85	1.31	1.34
36	1	3213	A	C5-C6	-5.85	1.35	1.41
36	5	402	A	N9-C8	-5.85	1.33	1.37
36	5	1314	C	C4-C5	-5.85	1.38	1.43
36	1	2877	G	N9-C4	-5.85	1.33	1.38
36	1	3086	A	N3-C4	-5.85	1.31	1.34
36	5	3137	C	N1-C6	-5.85	1.33	1.37
1	2	551	G	N9-C4	-5.85	1.33	1.38
38	4	52	A	N9-C4	-5.85	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1759	C	N1-C6	-5.85	1.33	1.37
36	5	888	A	N9-C4	-5.85	1.34	1.37
36	5	2950	G	N9-C4	-5.85	1.33	1.38
37	7	89	G	C6-N1	5.85	1.43	1.39
36	1	317	A	C6-N1	-5.85	1.31	1.35
36	5	884	A	N9-C8	-5.85	1.33	1.37
36	5	3195	U	C4-O4	5.85	1.28	1.23
38	8	14	C	N1-C6	-5.85	1.33	1.37
36	1	1366	A	N3-C4	-5.85	1.31	1.34
36	5	2940	A	C5-C6	-5.85	1.35	1.41
36	1	2402	A	C5-C4	-5.84	1.34	1.38
1	6	410	A	C6-N1	-5.84	1.31	1.35
36	5	421	G	C6-N1	-5.84	1.35	1.39
36	5	1303	A	C6-N1	-5.84	1.31	1.35
36	1	338	A	C5-C4	-5.84	1.34	1.38
36	1	498	A	C5-C4	-5.84	1.34	1.38
36	5	3110	C	N1-C6	-5.84	1.33	1.37
1	2	978	A	N9-C4	5.84	1.41	1.37
36	1	828	A	C5-C6	-5.84	1.35	1.41
36	1	2811	A	C6-N1	-5.84	1.31	1.35
36	5	559	A	N3-C4	-5.84	1.31	1.34
36	5	920	A	C2-N3	-5.84	1.28	1.33
36	5	1432	C	N3-C4	-5.84	1.29	1.33
36	5	2865	U	C2-N3	-5.84	1.33	1.37
36	5	1148	G	C8-N7	-5.84	1.27	1.30
36	5	2110	G	C6-N1	-5.84	1.35	1.39
36	5	2168	A	C5-C6	-5.84	1.35	1.41
36	5	2703	A	N9-C8	-5.84	1.33	1.37
36	1	209	A	C6-N1	-5.84	1.31	1.35
36	1	2391	G	N9-C8	-5.84	1.33	1.37
36	5	396	A	N3-C4	-5.84	1.31	1.34
36	5	1852	G	C5-C6	-5.84	1.36	1.42
36	1	2779	A	N3-C4	-5.83	1.31	1.34
36	1	2802	A	C5-C6	-5.83	1.35	1.41
36	1	1076	C	N1-C6	-5.83	1.33	1.37
36	1	3083	G	C5-C4	-5.83	1.34	1.38
36	5	755	A	N7-C5	-5.83	1.35	1.39
36	1	1585	C	C2-O2	5.83	1.29	1.24
36	5	2278	C	C2-O2	5.83	1.29	1.24
36	1	1554	U	N3-C4	5.83	1.43	1.38
49	M3	176	GLU	CB-CG	5.83	1.63	1.52
36	5	1180	A	C6-N1	-5.83	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2965	U	N1-C2	-5.83	1.33	1.38
36	1	1313	G	C5-C6	-5.83	1.36	1.42
36	1	3206	C	N1-C6	-5.82	1.33	1.37
47	M0	14	ASN	CB-CG	5.82	1.64	1.51
20	c8	129	TRP	CB-CG	-5.82	1.39	1.50
36	1	2641	U	N1-C6	-5.82	1.32	1.38
1	6	402	C	N1-C6	-5.82	1.33	1.37
36	5	2790	A	N9-C4	-5.82	1.34	1.37
36	1	676	G	N9-C4	5.82	1.42	1.38
36	1	2309	A	C5-C6	-5.82	1.35	1.41
36	5	2119	A	C5-C6	-5.82	1.35	1.41
36	1	2273	G	N3-C4	-5.82	1.31	1.35
36	1	2353	G	C5-C6	-5.82	1.36	1.42
36	5	3129	A	N7-C5	-5.82	1.35	1.39
36	1	3085	G	C5-C4	-5.82	1.34	1.38
36	5	353	G	N7-C5	-5.82	1.35	1.39
1	6	1730	A	C6-N1	-5.81	1.31	1.35
36	1	1171	G	C5-C4	-5.81	1.34	1.38
36	1	1184	A	N3-C4	-5.81	1.31	1.34
36	5	2364	G	C5-C6	-5.81	1.36	1.42
36	1	2383	C	C2-N3	5.81	1.40	1.35
36	1	2672	G	N1-C2	-5.81	1.33	1.37
36	5	2951	G	N1-C2	-5.81	1.33	1.37
36	5	3134	A	C6-N1	-5.81	1.31	1.35
36	5	3140	G	N3-C4	-5.81	1.31	1.35
37	7	84	A	C5-C6	-5.81	1.35	1.41
36	1	1316	C	C2-O2	-5.81	1.19	1.24
36	1	1431	G	N9-C8	-5.81	1.33	1.37
36	1	1877	U	C2-N3	-5.81	1.33	1.37
1	6	1142	A	C6-N1	-5.81	1.31	1.35
36	5	2892	A	C5-C6	-5.81	1.35	1.41
36	1	585	A	N9-C8	-5.81	1.33	1.37
36	5	3195	U	N1-C2	5.81	1.43	1.38
36	1	397	A	C5-C4	-5.80	1.34	1.38
36	1	2884	C	P-O5'	-5.80	1.53	1.59
1	6	1005	A	N3-C4	-5.80	1.31	1.34
36	5	3207	U	C4-O4	5.80	1.28	1.23
36	1	2360	C	C4-C5	-5.80	1.38	1.43
36	1	2964	G	N9-C8	-5.80	1.33	1.37
36	1	3272	C	C4-C5	-5.80	1.38	1.43
1	6	1133	A	N7-C5	-5.80	1.35	1.39
36	5	26	A	N9-C4	-5.80	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	N1	104	GLU	CG-CD	5.80	1.60	1.51
36	5	1784	G	N1-C2	-5.80	1.33	1.37
36	5	889	U	C2-N3	-5.80	1.33	1.37
36	5	2911	A	N3-C4	-5.80	1.31	1.34
36	5	2811	A	C5-C4	-5.80	1.34	1.38
1	6	1159	C	N1-C6	-5.79	1.33	1.37
36	1	1136	A	N3-C4	-5.79	1.31	1.34
1	6	1130	G	N1-C2	-5.79	1.33	1.37
36	1	939	U	C4-C5	-5.79	1.38	1.43
36	1	1377	G	C5-C6	-5.79	1.36	1.42
36	5	980	A	N3-C4	5.79	1.38	1.34
36	1	962	A	N9-C8	-5.79	1.33	1.37
1	6	46	A	N3-C4	-5.79	1.31	1.34
36	1	2651	G	N7-C5	-5.79	1.35	1.39
36	1	2853	A	N9-C4	-5.79	1.34	1.37
36	1	3085	G	N9-C4	-5.79	1.33	1.38
36	5	3148	U	C2-N3	-5.79	1.33	1.37
36	5	3362	A	N7-C5	-5.79	1.35	1.39
36	1	1906	G	N9-C4	-5.78	1.33	1.38
36	5	2303	A	N9-C4	-5.78	1.34	1.37
36	5	2400	G	N7-C5	-5.78	1.35	1.39
36	5	2662	G	C8-N7	-5.78	1.27	1.30
36	1	61	A	N7-C5	-5.78	1.35	1.39
36	1	3009	G	N9-C4	-5.78	1.33	1.38
36	5	3309	G	N1-C2	-5.78	1.33	1.37
1	6	157	A	N9-C4	-5.78	1.34	1.37
36	1	2933	A	C5-C6	-5.78	1.35	1.41
36	5	1185	C	C2-N3	-5.78	1.31	1.35
36	1	659	G	C6-N1	-5.78	1.35	1.39
36	1	2358	A	C5-C4	-5.78	1.34	1.38
1	6	1166	A	N3-C4	-5.78	1.31	1.34
36	5	2302	G	C2-N3	-5.78	1.28	1.32
36	1	2954	U	N1-C2	5.77	1.43	1.38
36	5	951	A	N7-C5	-5.77	1.35	1.39
36	5	1374	G	N9-C4	-5.77	1.33	1.38
36	5	2379	U	N1-C2	-5.77	1.33	1.38
36	5	2947	G	C6-O6	-5.77	1.19	1.24
36	1	1438	U	C2-O2	-5.77	1.17	1.22
1	6	991	G	C2-N3	-5.77	1.28	1.32
36	5	2954	U	C2-N3	5.77	1.41	1.37
36	1	2288	G	N1-C2	-5.77	1.33	1.37
36	1	2302	G	C5-C4	-5.77	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
42	L5	74	VAL	CA-CB	-5.77	1.42	1.54
36	5	2326	A	N9-C4	-5.77	1.34	1.37
36	5	2342	U	C4-O4	-5.77	1.19	1.23
36	1	77	A	N9-C4	-5.76	1.34	1.37
36	5	651	G	C5-C4	-5.76	1.34	1.38
36	5	1406	A	C5-C4	-5.76	1.34	1.38
36	5	3013	U	C4-C5	-5.76	1.38	1.43
1	6	1548	G	C5-C4	-5.76	1.34	1.38
1	2	1751	C	N1-C6	-5.76	1.33	1.37
36	1	1406	A	C5-C6	-5.76	1.35	1.41
36	1	3244	A	N3-C4	-5.76	1.31	1.34
36	5	589	A	N9-C8	-5.76	1.33	1.37
36	5	1152	G	C2-N3	-5.76	1.28	1.32
36	5	2151	C	N1-C6	-5.76	1.33	1.37
36	1	2201	G	N1-C2	-5.76	1.33	1.37
1	6	1584	G	C5-C4	-5.76	1.34	1.38
36	5	2339	C	C4-C5	-5.76	1.38	1.43
36	5	2647	A	C6-N1	-5.76	1.31	1.35
1	6	367	A	N3-C4	-5.75	1.31	1.34
36	5	2723	U	N3-C4	-5.75	1.33	1.38
36	1	2159	U	C2-O2	5.75	1.27	1.22
1	6	1039	A	N9-C4	-5.75	1.34	1.37
36	1	1373	A	N9-C4	-5.75	1.34	1.37
1	6	96	G	N7-C5	-5.75	1.35	1.39
36	5	2994	A	N9-C4	-5.75	1.34	1.37
36	5	2868	U	C4-C5	-5.75	1.38	1.43
38	8	8	C	C4-C5	-5.75	1.38	1.43
36	1	370	U	C4-C5	-5.75	1.38	1.43
36	1	780	A	C6-N1	-5.75	1.31	1.35
36	1	1891	A	N9-C4	-5.75	1.34	1.37
36	1	1924	U	C2-N3	-5.75	1.33	1.37
36	1	3011	A	C5-C6	-5.75	1.35	1.41
36	5	423	A	C5-C4	-5.75	1.34	1.38
36	5	2419	A	P-O5'	5.75	1.65	1.59
47	M0	49	CYS	CB-SG	-5.75	1.72	1.81
36	5	2936	A	C6-N6	-5.75	1.29	1.33
36	1	1206	G	C8-N7	-5.75	1.27	1.30
36	5	994	G	N9-C8	-5.75	1.33	1.37
36	5	1174	G	C8-N7	-5.74	1.27	1.30
36	1	955	U	N3-C4	-5.74	1.33	1.38
36	1	1163	A	C5-C6	-5.74	1.35	1.41
36	5	3207	U	N1-C6	5.74	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1752	A	C6-N1	-5.74	1.31	1.35
36	1	2833	A	N9-C4	-5.74	1.34	1.37
47	M0	186	GLU	CB-CG	5.74	1.63	1.52
36	5	314	U	N1-C2	-5.74	1.33	1.38
36	5	3004	C	N1-C6	-5.74	1.33	1.37
36	5	3209	A	N9-C8	5.74	1.42	1.37
36	1	1874	A	N7-C5	-5.74	1.35	1.39
36	1	883	A	C6-N6	-5.74	1.29	1.33
36	1	3180	A	N9-C4	-5.74	1.34	1.37
36	5	2868	U	N1-C6	-5.74	1.32	1.38
36	5	3131	U	C2-N3	-5.74	1.33	1.37
36	5	1352	A	N9-C4	5.73	1.41	1.37
36	1	570	A	N9-C4	-5.73	1.34	1.37
1	6	542	A	C6-N1	-5.73	1.31	1.35
36	5	1456	A	C5-C4	-5.73	1.34	1.38
36	1	80	G	N7-C5	-5.73	1.35	1.39
36	1	2377	G	N9-C8	-5.73	1.33	1.37
36	5	1319	G	N9-C8	-5.73	1.33	1.37
40	l3	197	GLU	CG-CD	5.73	1.60	1.51
1	6	1614	A	N7-C5	-5.73	1.35	1.39
36	5	2813	A	C5-C4	-5.73	1.34	1.38
36	5	2837	A	C6-N1	-5.73	1.31	1.35
36	5	3042	U	C4-O4	-5.73	1.19	1.23
36	1	2363	A	N7-C5	-5.73	1.35	1.39
1	6	408	C	N3-C4	-5.73	1.29	1.33
1	6	1638	G	N7-C5	-5.73	1.35	1.39
36	5	563	U	C2-N3	-5.73	1.33	1.37
36	5	3120	C	N1-C6	-5.73	1.33	1.37
36	5	378	A	N9-C4	-5.73	1.34	1.37
36	5	503	C	N3-C4	-5.72	1.29	1.33
36	5	1881	A	N3-C4	-5.72	1.31	1.34
36	5	2100	A	N3-C4	5.72	1.38	1.34
36	5	2952	G	N9-C8	-5.72	1.33	1.37
1	2	1454	G	N9-C8	-5.72	1.33	1.37
36	5	2976	A	N9-C8	-5.72	1.33	1.37
64	n8	16	SER	CA-CB	5.72	1.61	1.52
36	1	2800	G	N3-C4	-5.72	1.31	1.35
36	1	1407	A	C6-N1	-5.72	1.31	1.35
36	1	2401	A	C5-C4	5.72	1.42	1.38
1	6	568	G	C6-N1	-5.72	1.35	1.39
1	6	1111	G	N7-C5	-5.72	1.35	1.39
25	d3	138	GLU	CG-CD	5.72	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1933	A	N9-C4	-5.72	1.34	1.37
36	5	2748	A	N3-C4	-5.72	1.31	1.34
36	1	1154	A	C6-N1	-5.71	1.31	1.35
36	5	2401	A	C6-N6	5.71	1.38	1.33
36	5	844	G	N9-C4	-5.71	1.33	1.38
36	5	2943	G	C2-N3	-5.71	1.28	1.32
1	6	1110	G	N7-C5	-5.71	1.35	1.39
1	6	1116	A	C5-C6	-5.71	1.35	1.41
36	5	2886	U	C2-O2	-5.71	1.17	1.22
36	5	3127	A	C5-C6	-5.71	1.35	1.41
36	1	2093	A	N9-C4	5.71	1.41	1.37
36	5	1307	G	N9-C8	-5.71	1.33	1.37
36	1	607	A	N7-C5	-5.71	1.35	1.39
36	5	3114	A	N9-C4	-5.71	1.34	1.37
37	7	88	G	C6-O6	-5.71	1.19	1.24
36	5	2936	A	C5-C6	-5.71	1.35	1.41
36	5	3180	A	C6-N6	-5.71	1.29	1.33
36	1	1409	G	C5-C4	-5.71	1.34	1.38
36	1	2640	A	C6-N1	-5.71	1.31	1.35
36	5	560	G	N3-C4	-5.70	1.31	1.35
36	5	3047	U	C2-O2	-5.70	1.17	1.22
36	5	3172	A	N7-C5	-5.70	1.35	1.39
36	5	647	A	C6-N1	-5.70	1.31	1.35
1	2	525	A	N9-C4	-5.70	1.34	1.37
36	1	41	G	N9-C4	-5.70	1.33	1.38
36	1	2129	U	N3-C4	-5.70	1.33	1.38
36	1	2985	C	N1-C2	-5.70	1.34	1.40
1	6	933	A	N3-C4	-5.70	1.31	1.34
36	5	884	A	C5-C4	-5.70	1.34	1.38
36	5	2986	U	C2-N3	-5.70	1.33	1.37
36	1	1363	A	C5-C6	-5.70	1.35	1.41
36	1	2974	U	N1-C2	-5.70	1.33	1.38
36	1	3058	U	N1-C2	-5.70	1.33	1.38
36	5	1753	G	C5-C4	-5.70	1.34	1.38
36	1	2697	A	N3-C4	-5.70	1.31	1.34
1	6	1651	A	C6-N1	-5.70	1.31	1.35
36	5	2418	G	C5-C4	5.70	1.42	1.38
36	1	1178	G	C5-C6	-5.70	1.36	1.42
36	1	2860	U	C2-N3	5.70	1.41	1.37
36	1	3098	G	C6-N1	-5.70	1.35	1.39
36	1	585	A	C6-N1	-5.69	1.31	1.35
36	1	1154	A	N9-C4	-5.69	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	582	U	N1-C2	5.69	1.43	1.38
36	1	523	A	N9-C4	-5.69	1.34	1.37
36	1	652	G	N1-C2	-5.69	1.33	1.37
36	1	398	A	N3-C4	5.69	1.38	1.34
36	1	630	A	N7-C5	-5.69	1.35	1.39
36	1	1343	A	N9-C4	-5.69	1.34	1.37
37	7	102	A	C5-C6	-5.69	1.35	1.41
59	n3	137	VAL	CB-CG2	-5.69	1.41	1.52
36	1	807	A	C5-C6	-5.69	1.35	1.41
36	1	939	U	N1-C2	-5.69	1.33	1.38
36	5	1101	G	N1-C2	-5.69	1.33	1.37
36	5	3245	A	N9-C4	-5.69	1.34	1.37
36	5	1432	C	N1-C2	-5.69	1.34	1.40
36	1	2689	A	N7-C5	-5.68	1.35	1.39
36	5	1402	C	N3-C4	-5.68	1.29	1.33
36	5	2816	G	C5-C4	-5.68	1.34	1.38
37	7	98	C	N1-C6	-5.68	1.33	1.37
36	1	402	A	C5-C4	-5.68	1.34	1.38
36	5	3092	C	N1-C6	-5.68	1.33	1.37
36	1	2743	A	C5-C4	-5.68	1.34	1.38
37	7	113	C	N3-C4	-5.68	1.29	1.33
1	6	85	A	N9-C4	-5.68	1.34	1.37
1	6	1119	G	C5-C4	-5.68	1.34	1.38
36	5	2195	C	N3-C4	-5.68	1.29	1.33
36	5	2401	A	N7-C5	5.68	1.42	1.39
36	1	1369	A	N9-C8	-5.68	1.33	1.37
36	1	2185	G	N9-C8	-5.68	1.33	1.37
36	1	2396	G	N7-C5	-5.68	1.35	1.39
1	6	2	A	N9-C4	5.68	1.41	1.37
36	5	900	G	C6-N1	-5.68	1.35	1.39
36	5	946	U	C2-O2	-5.68	1.17	1.22
36	5	3075	G	N9-C4	-5.68	1.33	1.38
36	1	1927	G	N1-C2	-5.67	1.33	1.37
36	1	2913	C	N1-C2	-5.67	1.34	1.40
36	1	906	A	N7-C5	-5.67	1.35	1.39
1	6	1753	A	C2-N3	5.67	1.38	1.33
36	1	633	C	C4-C5	-5.67	1.38	1.43
36	1	3011	A	C6-N6	-5.67	1.29	1.33
1	6	119	A	N3-C4	-5.67	1.31	1.34
1	6	746	A	N3-C4	-5.67	1.31	1.34
36	5	1429	G	N1-C2	-5.67	1.33	1.37
37	7	37	G	N9-C4	5.67	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1405	U	N3-C4	-5.67	1.33	1.38
39	12	196	TRP	CB-CG	-5.67	1.40	1.50
36	1	967	A	N7-C5	-5.67	1.35	1.39
36	5	2607	G	N9-C8	-5.67	1.33	1.37
36	1	2367	A	N3-C4	-5.67	1.31	1.34
36	5	1332	A	C6-N1	-5.67	1.31	1.35
36	5	1376	C	C4-C5	-5.67	1.38	1.43
1	6	1243	G	N9-C4	5.67	1.42	1.38
36	5	2628	A	N3-C4	-5.67	1.31	1.34
36	5	3139	A	C6-N1	-5.67	1.31	1.35
36	1	1393	A	C6-N1	-5.66	1.31	1.35
36	5	1197	A	N9-C8	-5.66	1.33	1.37
36	5	2879	C	C5-C6	-5.66	1.29	1.34
36	1	2833	A	N3-C4	-5.66	1.31	1.34
36	5	1188	U	C2-O2	-5.66	1.17	1.22
1	6	1525	A	C5-C4	-5.66	1.34	1.38
36	5	1399	A	C5-C6	-5.66	1.35	1.41
36	5	1411	C	N1-C6	-5.66	1.33	1.37
36	5	2641	U	C4-C5	-5.66	1.38	1.43
36	1	1398	U	N3-C4	-5.66	1.33	1.38
1	6	72	A	N9-C4	5.66	1.41	1.37
36	5	876	A	C5-C6	-5.66	1.35	1.41
36	5	2419	A	N3-C4	-5.66	1.31	1.34
36	1	2731	U	N1-C2	-5.66	1.33	1.38
1	6	865	A	N3-C4	-5.66	1.31	1.34
78	q2	96	GLU	CG-CD	5.66	1.60	1.51
36	1	1180	A	C5-C4	-5.66	1.34	1.38
36	1	2628	A	N7-C5	-5.66	1.35	1.39
1	6	779	U	N1-C2	5.66	1.43	1.38
36	5	1166	G	N9-C4	-5.66	1.33	1.38
36	1	25	U	C4-O4	5.65	1.28	1.23
1	6	1000	C	N3-C4	-5.65	1.29	1.33
1	6	1649	G	N7-C5	-5.65	1.35	1.39
36	5	1883	A	N7-C5	-5.65	1.35	1.39
36	5	3009	G	C6-N1	-5.65	1.35	1.39
36	5	512	U	N1-C2	-5.65	1.33	1.38
36	1	3047	U	C2-N3	-5.65	1.33	1.37
1	2	1737	G	N9-C4	-5.64	1.33	1.38
36	1	35	A	C5-C4	-5.64	1.34	1.38
36	1	691	A	C5-C6	-5.64	1.35	1.41
36	1	2794	G	N9-C4	5.64	1.42	1.38
36	5	566	G	N1-C2	-5.64	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1163	A	N7-C5	-5.64	1.35	1.39
36	5	744	A	C5-C6	-5.64	1.35	1.41
36	5	798	G	N7-C5	-5.64	1.35	1.39
4	S2	35	TRP	CB-CG	5.64	1.60	1.50
36	1	920	A	C5-C6	-5.64	1.35	1.41
36	1	1541	G	N7-C5	-5.64	1.35	1.39
37	3	95	A	C6-N1	-5.64	1.31	1.35
36	5	353	G	N3-C4	-5.64	1.31	1.35
36	1	2302	G	C6-N1	-5.64	1.35	1.39
36	5	1861	G	C6-N1	-5.64	1.35	1.39
37	7	87	G	N3-C4	-5.64	1.31	1.35
46	19	11	GLU	CG-CD	5.64	1.60	1.51
36	1	2188	A	C5-C4	-5.63	1.34	1.38
1	6	1517	U	C2-O2	-5.63	1.17	1.22
36	5	944	C	N3-C4	-5.63	1.30	1.33
36	1	1178	G	N9-C4	5.63	1.42	1.38
36	1	1332	A	N7-C5	-5.63	1.35	1.39
36	1	405	U	N1-C2	-5.63	1.33	1.38
36	1	1187	C	N1-C6	-5.63	1.33	1.37
36	5	639	G	N3-C4	-5.63	1.31	1.35
1	6	1139	A	N7-C5	-5.63	1.35	1.39
36	5	1145	G	N9-C8	-5.63	1.33	1.37
36	1	343	U	N3-C4	-5.63	1.33	1.38
36	1	2143	A	N3-C4	-5.63	1.31	1.34
1	6	906	A	N9-C4	-5.63	1.34	1.37
1	6	1642	G	C6-N1	-5.63	1.35	1.39
36	5	2342	U	N3-C4	-5.63	1.33	1.38
36	5	3273	A	N3-C4	-5.63	1.31	1.34
36	5	1101	G	N9-C8	-5.62	1.33	1.37
38	4	103	G	N9-C4	5.62	1.42	1.38
36	5	1200	A	P-O5'	-5.62	1.54	1.59
36	5	2652	U	C4-C5	-5.62	1.38	1.43
36	5	2833	A	C6-N1	-5.62	1.31	1.35
36	1	35	A	N7-C5	-5.62	1.35	1.39
36	1	866	A	N3-C4	-5.62	1.31	1.34
36	1	2629	U	N1-C2	-5.62	1.33	1.38
36	1	2697	A	C6-N1	-5.62	1.31	1.35
36	5	2828	G	C6-N1	-5.62	1.35	1.39
36	5	845	G	C6-O6	5.62	1.29	1.24
36	1	425	G	N7-C5	-5.62	1.35	1.39
36	1	2932	U	N1-C2	-5.62	1.33	1.38
36	5	2113	A	N9-C4	-5.62	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	3119	U	N3-C4	-5.62	1.33	1.38
36	5	3213	A	C5-C6	-5.62	1.35	1.41
36	1	2401	A	N7-C5	5.62	1.42	1.39
36	5	1062	A	N7-C5	-5.62	1.35	1.39
36	5	2307	G	C5-C4	-5.62	1.34	1.38
36	5	2892	A	C5-C4	-5.62	1.34	1.38
36	1	637	C	N3-C4	-5.62	1.30	1.33
36	1	1348	U	N1-C2	5.62	1.43	1.38
36	1	2111	G	C5-C4	-5.62	1.34	1.38
36	1	2185	G	C5-C6	-5.62	1.36	1.42
36	5	3213	A	N3-C4	-5.62	1.31	1.34
38	8	38	U	N1-C2	5.62	1.43	1.38
36	5	1784	G	C5-C4	-5.61	1.34	1.38
36	5	3122	A	C5-C6	-5.61	1.35	1.41
37	7	27	A	C6-N1	-5.61	1.31	1.35
40	13	106	TRP	CB-CG	-5.61	1.40	1.50
36	1	1888	U	N1-C6	-5.61	1.32	1.38
36	5	911	C	C2-O2	-5.61	1.19	1.24
36	1	2756	C	N1-C6	-5.61	1.33	1.37
1	6	1147	A	N3-C4	-5.61	1.31	1.34
36	5	1535	A	C5-C4	-5.61	1.34	1.38
52	m6	40	GLU	CD-OE1	5.61	1.31	1.25
36	1	1117	G	N7-C5	-5.60	1.35	1.39
36	5	3305	A	N7-C5	-5.60	1.35	1.39
1	2	373	G	N7-C5	-5.60	1.35	1.39
36	1	654	C	N3-C4	-5.60	1.30	1.33
36	5	2371	G	N7-C5	-5.60	1.35	1.39
36	5	3015	G	N3-C4	-5.60	1.31	1.35
36	5	2872	A	C5-C6	5.60	1.46	1.41
36	5	2910	A	N9-C4	-5.60	1.34	1.37
36	1	2149	A	N9-C4	-5.60	1.34	1.37
36	1	2401	A	N9-C8	5.60	1.42	1.37
36	5	651	G	C8-N7	-5.60	1.27	1.30
36	5	3245	A	C2-N3	-5.60	1.28	1.33
79	q3	8	VAL	CB-CG2	-5.60	1.41	1.52
36	5	2995	A	C5-C6	-5.60	1.36	1.41
36	1	52	A	C6-N1	-5.59	1.31	1.35
36	1	2827	U	N3-C4	-5.59	1.33	1.38
36	5	424	G	N7-C5	-5.59	1.35	1.39
36	5	2363	A	N3-C4	-5.59	1.31	1.34
36	5	2830	G	N9-C4	-5.59	1.33	1.38
37	3	87	G	N3-C4	-5.59	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	760	A	N3-C4	-5.59	1.31	1.34
36	5	1863	G	C5-C4	-5.59	1.34	1.38
36	1	780	A	N9-C4	-5.59	1.34	1.37
36	1	2920	U	N1-C2	-5.59	1.33	1.38
1	6	781	U	N1-C2	5.59	1.43	1.38
36	5	1142	G	N7-C5	-5.59	1.35	1.39
36	5	2961	G	C8-N7	-5.59	1.27	1.30
36	1	1143	A	N7-C5	-5.59	1.35	1.39
36	1	1397	C	N1-C6	-5.59	1.33	1.37
37	3	25	G	N1-C2	-5.59	1.33	1.37
37	3	75	G	N3-C4	-5.59	1.31	1.35
1	6	100	A	N7-C5	-5.59	1.35	1.39
36	5	2155	G	N3-C4	-5.59	1.31	1.35
36	5	2259	A	C5-C4	-5.59	1.34	1.38
36	5	2394	G	C2-N3	-5.59	1.28	1.32
36	5	3057	U	C4-C5	-5.59	1.38	1.43
36	5	3144	G	C2-N2	-5.59	1.28	1.34
36	5	3220	G	C6-N1	-5.59	1.35	1.39
36	1	1176	C	C4-C5	-5.58	1.38	1.43
36	1	2520	A	N9-C4	-5.58	1.34	1.37
36	1	2650	U	N3-C4	-5.58	1.33	1.38
36	1	2997	G	C5-C6	-5.58	1.36	1.42
52	M6	166	GLU	CG-CD	5.58	1.60	1.51
1	6	375	U	N1-C2	-5.58	1.33	1.38
36	5	1119	C	N1-C6	-5.58	1.33	1.37
36	1	2273	G	C5-C4	-5.58	1.34	1.38
36	1	2874	G	P-O5'	5.58	1.65	1.59
1	6	1636	C	N1-C6	-5.58	1.33	1.37
36	5	2627	C	N1-C6	-5.58	1.33	1.37
36	1	2971	A	N3-C4	5.58	1.38	1.34
36	5	1141	C	C4-N4	-5.58	1.28	1.33
36	1	964	G	N7-C5	-5.58	1.35	1.39
36	1	1432	C	N1-C2	-5.58	1.34	1.40
36	1	2155	G	C6-N1	-5.58	1.35	1.39
36	5	1137	C	N1-C6	-5.58	1.33	1.37
36	5	3224	G	C5-C4	-5.58	1.34	1.38
36	5	2151	C	N3-C4	-5.58	1.30	1.33
36	5	3226	A	C6-N1	-5.58	1.31	1.35
36	5	2379	U	C2-O2	-5.57	1.17	1.22
36	1	909	G	C5-C6	-5.57	1.36	1.42
36	1	2111	G	C6-N1	-5.57	1.35	1.39
36	1	2335	G	N1-C2	-5.57	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	635	G	N7-C5	-5.57	1.35	1.39
36	1	1310	G	C6-O6	-5.57	1.19	1.24
36	5	281	G	C6-N1	-5.57	1.35	1.39
36	1	1169	A	C5-C4	-5.57	1.34	1.38
36	1	13	A	N7-C5	-5.57	1.35	1.39
53	M7	83	TRP	CB-CG	-5.57	1.40	1.50
36	1	628	A	N9-C4	-5.57	1.34	1.37
36	1	1180	A	P-O5'	-5.57	1.54	1.59
36	1	1096	U	P-O5'	5.56	1.65	1.59
36	1	2321	A	N9-C4	-5.56	1.34	1.37
36	1	1145	G	C8-N7	-5.56	1.27	1.30
36	1	2213	A	N9-C4	-5.56	1.34	1.37
36	5	501	A	C5-C4	-5.56	1.34	1.38
36	5	1473	G	N1-C2	-5.56	1.33	1.37
36	5	1665	C	N3-C4	-5.56	1.30	1.33
36	5	1897	G	N7-C5	-5.56	1.35	1.39
36	5	2748	A	C2-N3	-5.56	1.28	1.33
38	8	106	C	N1-C6	-5.56	1.33	1.37
36	5	349	A	N3-C4	-5.56	1.31	1.34
36	5	2933	A	C5-C4	-5.56	1.34	1.38
36	1	1207	G	N7-C5	-5.56	1.35	1.39
36	1	1361	U	N1-C2	-5.56	1.33	1.38
36	1	2145	A	C6-N1	-5.56	1.31	1.35
36	5	789	A	C6-N1	-5.56	1.31	1.35
36	5	2648	G	N9-C8	-5.56	1.33	1.37
36	5	2884	C	C2-O2	-5.56	1.19	1.24
36	5	3034	C	N1-C6	-5.56	1.33	1.37
1	2	562	G	C6-N1	-5.56	1.35	1.39
36	1	980	A	N9-C4	5.56	1.41	1.37
36	1	1791	C	N3-C4	-5.56	1.30	1.33
36	5	923	C	N3-C4	-5.56	1.30	1.33
36	5	566	G	C6-N1	-5.56	1.35	1.39
36	5	2670	G	N3-C4	-5.56	1.31	1.35
36	1	666	A	C6-N1	-5.55	1.31	1.35
36	5	1205	A	N7-C5	-5.55	1.35	1.39
36	5	3112	G	C5-C4	-5.55	1.34	1.38
36	1	1438	U	N1-C2	-5.55	1.33	1.38
36	1	1506	A	N9-C4	-5.55	1.34	1.37
36	1	2699	G	N9-C4	-5.55	1.33	1.38
36	1	3085	G	N7-C5	-5.55	1.35	1.39
1	6	318	U	N1-C2	-5.55	1.33	1.38
1	6	788	A	N9-C4	-5.55	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	842	G	C5-C4	-5.55	1.34	1.38
36	1	335	G	C5-C6	-5.55	1.36	1.42
1	6	1529	C	N1-C6	-5.55	1.33	1.37
1	2	623	A	N3-C4	-5.55	1.31	1.34
36	5	1451	C	C4-C5	-5.55	1.38	1.43
36	5	3181	C	N3-C4	-5.55	1.30	1.33
1	6	1002	G	C5-C4	-5.54	1.34	1.38
36	5	1136	A	C5-C4	-5.54	1.34	1.38
1	2	449	C	N3-C4	-5.54	1.30	1.33
36	1	2402	A	C6-N6	-5.54	1.29	1.33
36	5	847	A	N3-C4	-5.54	1.31	1.34
1	2	390	G	C2-N3	-5.54	1.28	1.32
36	1	1400	G	N7-C5	-5.54	1.35	1.39
36	5	3038	U	C4-C5	-5.54	1.38	1.43
36	1	640	U	N1-C2	-5.54	1.33	1.38
36	5	958	C	N1-C2	-5.54	1.34	1.40
36	5	3046	A	N9-C4	-5.54	1.34	1.37
36	1	2145	A	C5-C4	-5.54	1.34	1.38
1	6	1631	A	N9-C4	-5.54	1.34	1.37
36	5	2731	U	N3-C4	-5.54	1.33	1.38
36	5	2807	U	C4-C5	-5.54	1.38	1.43
36	1	1886	A	C5-C4	-5.54	1.34	1.38
1	6	781	U	C2-N3	5.54	1.41	1.37
36	5	725	G	C6-N1	-5.54	1.35	1.39
36	1	900	G	N3-C4	-5.53	1.31	1.35
36	1	2647	A	C5-C6	-5.53	1.36	1.41
36	5	2973	G	C2-N3	-5.53	1.28	1.32
36	1	2305	G	C6-N1	-5.53	1.35	1.39
1	6	1597	A	N7-C5	-5.53	1.35	1.39
36	5	2863	G	N3-C4	-5.53	1.31	1.35
36	1	3273	A	N1-C2	-5.53	1.29	1.34
36	5	199	A	N9-C4	5.53	1.41	1.37
36	5	2993	G	N7-C5	-5.53	1.35	1.39
37	7	25	G	C5-C4	-5.53	1.34	1.38
36	1	2649	A	C5-C6	-5.53	1.36	1.41
36	5	583	G	N3-C4	-5.53	1.31	1.35
38	8	1	A	N9-C8	-5.53	1.33	1.37
36	5	3086	A	N9-C4	-5.53	1.34	1.37
36	5	2244	A	P-O5'	-5.53	1.54	1.59
36	5	2632	G	C8-N7	-5.53	1.27	1.30
36	1	943	U	N1-C2	-5.52	1.33	1.38
36	5	1005	G	N3-C4	-5.52	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2378	C	N1-C2	-5.52	1.34	1.40
36	1	3045	G	C5-C6	-5.52	1.36	1.42
36	5	2307	G	N9-C4	-5.52	1.33	1.38
36	5	2616	C	C2-O2	-5.52	1.19	1.24
36	1	619	A	N3-C4	5.52	1.38	1.34
36	1	2153	U	C4-O4	-5.52	1.19	1.23
36	1	2881	C	C2-O2	5.52	1.29	1.24
36	1	3027	A	N9-C4	-5.52	1.34	1.37
38	4	52	A	C6-N1	-5.52	1.31	1.35
36	5	644	G	N9-C4	5.52	1.42	1.38
36	5	2630	C	N1-C6	-5.52	1.33	1.37
36	1	424	G	C6-O6	-5.51	1.19	1.24
36	1	744	A	N3-C4	-5.51	1.31	1.34
36	1	1913	A	N3-C4	-5.51	1.31	1.34
36	5	1589	A	C5-C4	-5.51	1.34	1.38
36	5	1908	A	N9-C4	5.51	1.41	1.37
36	5	2647	A	N3-C4	-5.51	1.31	1.34
36	5	2871	G	C5-C4	5.51	1.42	1.38
36	5	3056	U	C2-N3	-5.51	1.33	1.37
37	7	49	G	N9-C4	-5.51	1.33	1.38
36	1	2858	U	N1-C6	-5.51	1.32	1.38
36	5	1305	U	N1-C6	-5.51	1.32	1.38
36	5	2968	G	N9-C8	-5.51	1.33	1.37
36	5	588	G	C6-N1	-5.51	1.35	1.39
36	5	2172	A	C6-N1	-5.51	1.31	1.35
37	7	14	U	N1-C6	-5.51	1.32	1.38
36	1	691	A	N7-C5	-5.51	1.35	1.39
36	5	1116	G	C5-C4	-5.51	1.34	1.38
36	5	1182	A	C5-C4	-5.51	1.34	1.38
36	5	1397	C	N1-C6	-5.51	1.33	1.37
36	5	2703	A	P-O5'	-5.51	1.54	1.59
36	5	2757	U	N3-C4	-5.51	1.33	1.38
36	1	2996	U	C2-N3	5.51	1.41	1.37
36	1	3008	A	N9-C4	-5.51	1.34	1.37
36	5	3045	G	N3-C4	-5.51	1.31	1.35
36	1	2403	G	N9-C4	5.50	1.42	1.38
36	5	2848	G	N9-C4	-5.50	1.33	1.38
36	5	668	G	N3-C4	-5.50	1.31	1.35
36	5	1047	A	N9-C4	-5.50	1.34	1.37
36	5	2665	U	C2-N3	-5.50	1.33	1.37
36	5	3065	G	N3-C4	-5.50	1.31	1.35
36	1	2891	U	N1-C2	-5.50	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2980	U	N1-C6	-5.50	1.33	1.38
36	5	1193	A	N7-C5	-5.50	1.35	1.39
36	5	1217	A	C5-C4	-5.50	1.34	1.38
36	5	2188	A	N3-C4	-5.50	1.31	1.34
36	1	1467	A	N9-C4	-5.50	1.34	1.37
36	1	2940	A	N7-C5	-5.50	1.35	1.39
36	5	2409	G	N7-C5	-5.50	1.35	1.39
36	5	2618	G	P-O5'	-5.50	1.54	1.59
37	7	117	A	N3-C4	-5.50	1.31	1.34
1	2	323	A	N9-C4	-5.50	1.34	1.37
36	1	34	A	C5-C6	-5.49	1.36	1.41
36	1	2415	C	N1-C6	-5.49	1.33	1.37
36	1	3022	G	C5-C6	-5.49	1.36	1.42
36	5	2187	G	N3-C4	-5.49	1.31	1.35
1	2	42	G	N9-C8	-5.49	1.34	1.37
36	5	951	A	N3-C4	-5.49	1.31	1.34
36	5	3026	G	C8-N7	-5.49	1.27	1.30
36	1	1079	A	N3-C4	-5.49	1.31	1.34
36	1	2755	C	C2-N3	-5.49	1.31	1.35
36	1	3150	A	N7-C5	-5.49	1.35	1.39
36	5	1869	C	N1-C6	-5.49	1.33	1.37
36	5	1916	U	C2-N3	-5.49	1.33	1.37
36	5	3124	G	C5-C6	-5.49	1.36	1.42
36	1	2994	A	N3-C4	-5.49	1.31	1.34
36	1	3210	A	C6-N1	-5.49	1.31	1.35
36	5	2628	A	C6-N1	-5.49	1.31	1.35
36	5	2918	G	N1-C2	-5.49	1.33	1.37
36	5	2950	G	N7-C5	-5.49	1.35	1.39
36	5	3262	U	C2-O2	-5.49	1.17	1.22
36	5	2130	G	N3-C4	-5.49	1.31	1.35
36	5	1370	G	C2-N3	-5.49	1.28	1.32
36	5	2995	A	C5-C4	-5.49	1.34	1.38
1	6	1300	A	C5-C4	-5.48	1.34	1.38
1	2	1786	G	N3-C4	-5.48	1.31	1.35
36	1	2875	U	C5-C6	5.48	1.39	1.34
1	6	631	G	N3-C4	-5.48	1.31	1.35
1	6	1111	G	C6-N1	-5.48	1.35	1.39
1	6	1584	G	C5-C6	-5.48	1.36	1.42
36	5	915	A	N7-C5	-5.48	1.35	1.39
36	5	3139	A	N9-C8	-5.48	1.33	1.37
36	5	3299	A	N3-C4	-5.48	1.31	1.34
1	6	1127	G	C6-N1	5.48	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	356	C	N1-C6	-5.48	1.33	1.37
36	5	844	G	C5-C4	-5.48	1.34	1.38
36	5	1311	G	N9-C8	-5.48	1.34	1.37
36	5	2606	G	N9-C4	-5.48	1.33	1.38
36	1	650	C	N1-C6	-5.48	1.33	1.37
36	1	1417	G	N9-C4	-5.48	1.33	1.38
36	5	2188	A	N9-C4	-5.48	1.34	1.37
36	1	3130	A	C5-C6	-5.48	1.36	1.41
36	5	651	G	C6-N1	-5.48	1.35	1.39
36	5	1076	C	N3-C4	-5.48	1.30	1.33
36	5	2830	G	N9-C8	-5.48	1.34	1.37
43	16	52	VAL	CB-CG2	-5.48	1.41	1.52
36	1	518	G	N9-C4	-5.48	1.33	1.38
36	5	2124	G	N7-C5	-5.48	1.35	1.39
36	1	1401	A	N9-C8	-5.47	1.33	1.37
36	1	3121	U	N1-C6	-5.47	1.33	1.38
36	5	1309	U	C2-O2	-5.47	1.17	1.22
36	5	1892	G	C5-C4	-5.47	1.34	1.38
36	5	2353	G	C6-O6	-5.47	1.19	1.24
38	8	15	G	N3-C4	-5.47	1.31	1.35
38	8	111	A	C5-C6	-5.47	1.36	1.41
36	1	916	G	C6-N1	-5.47	1.35	1.39
36	1	1186	G	C6-N1	-5.47	1.35	1.39
36	5	1894	U	N1-C6	-5.47	1.33	1.38
36	5	2117	A	C6-N1	-5.47	1.31	1.35
36	5	2886	U	N1-C6	-5.47	1.33	1.38
36	5	3047	U	C2-N3	-5.47	1.33	1.37
57	n1	107	GLU	CG-CD	5.47	1.60	1.51
36	1	2122	G	N9-C8	5.47	1.41	1.37
36	5	2159	U	N1-C2	5.47	1.43	1.38
36	5	2616	C	C4-C5	-5.47	1.38	1.43
36	1	659	G	N3-C4	-5.47	1.31	1.35
36	1	973	A	N3-C4	-5.47	1.31	1.34
36	1	1599	G	N3-C4	-5.47	1.31	1.35
36	1	2394	G	N3-C4	-5.47	1.31	1.35
36	1	2831	G	C2-N3	-5.47	1.28	1.32
1	6	615	A	N3-C4	-5.47	1.31	1.34
36	5	1156	C	P-O5'	-5.47	1.54	1.59
36	5	1157	G	N9-C8	-5.47	1.34	1.37
36	5	3180	A	C6-N1	-5.47	1.31	1.35
36	5	3194	C	N1-C6	-5.47	1.33	1.37
36	5	2382	G	N3-C4	-5.47	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2994	A	C6-N1	-5.47	1.31	1.35
36	1	522	A	C6-N1	-5.46	1.31	1.35
36	1	1522	U	C2-N3	-5.46	1.33	1.37
36	1	3226	A	N9-C4	-5.46	1.34	1.37
37	7	45	A	C6-N1	-5.46	1.31	1.35
55	m9	140	GLU	CG-CD	5.46	1.60	1.51
36	1	2821	C	C4-N4	5.46	1.38	1.33
36	5	1136	A	N9-C8	-5.46	1.33	1.37
36	5	2390	A	N9-C4	-5.46	1.34	1.37
36	5	3083	G	N9-C4	-5.46	1.33	1.38
37	7	46	A	C5-C6	-5.46	1.36	1.41
36	1	944	C	N1-C6	-5.46	1.33	1.37
1	6	1525	A	N9-C4	-5.46	1.34	1.37
40	l3	72	VAL	CA-CB	-5.46	1.43	1.54
36	1	1431	G	N1-C2	-5.46	1.33	1.37
36	1	2924	U	N1-C2	-5.46	1.33	1.38
36	1	3010	U	N1-C2	-5.46	1.33	1.38
36	5	428	A	N3-C4	-5.46	1.31	1.34
36	5	505	G	C2-N3	-5.46	1.28	1.32
36	5	2401	A	C6-N1	5.46	1.39	1.35
36	5	2916	U	C4-O4	-5.46	1.19	1.23
36	1	1362	G	N9-C4	-5.46	1.33	1.38
36	5	1186	G	P-O5'	-5.46	1.54	1.59
36	5	888	A	N7-C5	-5.45	1.35	1.39
36	5	1117	G	C6-N1	-5.45	1.35	1.39
36	5	2881	C	N1-C6	-5.45	1.33	1.37
1	2	1146	G	N7-C5	-5.45	1.35	1.39
36	1	741	U	N1-C2	-5.45	1.33	1.38
36	1	2153	U	N3-C4	-5.45	1.33	1.38
36	5	1047	A	C5-C4	-5.45	1.34	1.38
36	5	1143	A	N7-C5	-5.45	1.35	1.39
36	5	2649	A	C5-C6	-5.45	1.36	1.41
36	5	2717	U	N1-C2	-5.45	1.33	1.38
1	2	162	A	N9-C4	5.45	1.41	1.37
36	1	1310	G	N3-C4	-5.45	1.31	1.35
36	5	1195	A	C6-N1	-5.45	1.31	1.35
36	5	1594	A	N3-C4	-5.45	1.31	1.34
36	1	85	A	N9-C4	-5.45	1.34	1.37
36	5	706	A	C5-C4	-5.45	1.34	1.38
36	5	789	A	N9-C4	-5.45	1.34	1.37
36	5	2754	G	C5-C4	-5.45	1.34	1.38
36	5	925	A	C6-N1	5.45	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1153	A	C5-C4	-5.45	1.34	1.38
36	5	2614	G	N1-C2	-5.45	1.33	1.37
36	5	2908	G	N9-C4	-5.45	1.33	1.38
36	5	2279	A	C6-N1	-5.44	1.31	1.35
36	1	2638	C	N3-C4	-5.44	1.30	1.33
36	1	3184	A	N3-C4	-5.44	1.31	1.34
38	4	20	U	N1-C2	-5.44	1.33	1.38
36	5	1177	G	C5-C4	-5.44	1.34	1.38
36	5	2934	A	N9-C4	-5.44	1.34	1.37
36	1	1306	G	C5-C6	-5.44	1.36	1.42
1	6	1638	G	N3-C4	-5.44	1.31	1.35
36	5	633	C	C5-C6	-5.44	1.29	1.34
36	5	943	U	C2-O2	-5.44	1.17	1.22
36	5	1175	C	C2-O2	-5.44	1.19	1.24
36	5	1382	G	N9-C4	-5.44	1.33	1.38
36	5	2369	G	N9-C8	-5.44	1.34	1.37
52	m6	135	TYR	CD1-CE1	-5.44	1.31	1.39
1	2	1782	A	N9-C4	-5.44	1.34	1.37
1	6	399	A	N9-C4	-5.44	1.34	1.37
36	5	2242	A	C5-C4	-5.44	1.34	1.38
37	7	39	C	C4-C5	-5.44	1.38	1.43
36	1	1513	G	N7-C5	-5.44	1.35	1.39
36	1	2107	A	C6-N1	-5.44	1.31	1.35
1	6	294	C	N1-C6	-5.44	1.33	1.37
36	5	1435	A	C6-N1	-5.44	1.31	1.35
36	1	2603	G	N7-C5	-5.44	1.35	1.39
36	1	2702	A	N7-C5	-5.44	1.35	1.39
36	5	2601	A	C5-C4	-5.44	1.34	1.38
36	1	935	U	N1-C6	-5.43	1.33	1.38
36	1	1210	U	C2-N3	-5.43	1.33	1.37
36	5	2422	C	N1-C6	-5.43	1.33	1.37
36	5	2819	A	N1-C2	-5.43	1.29	1.34
36	1	1353	U	N1-C2	5.43	1.43	1.38
36	1	958	C	N1-C6	-5.43	1.33	1.37
36	1	272	G	C2-N3	-5.43	1.28	1.32
36	1	985	U	C2-O2	-5.43	1.17	1.22
36	1	1928	G	N9-C4	-5.43	1.33	1.38
1	6	317	C	N1-C6	-5.43	1.33	1.37
4	s2	120	GLU	CG-CD	5.43	1.60	1.51
36	5	1135	A	N3-C4	-5.43	1.31	1.34
36	5	1203	A	C5-C4	-5.43	1.34	1.38
36	5	3046	A	C6-N6	-5.43	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
48	m1	157	GLU	CB-CG	5.43	1.62	1.52
36	1	2157	G	N9-C8	-5.43	1.34	1.37
36	1	2605	G	C5-C4	-5.43	1.34	1.38
36	5	804	C	C2-N3	5.43	1.40	1.35
36	5	1487	G	N7-C5	-5.43	1.35	1.39
36	1	638	C	C5-C6	-5.42	1.30	1.34
36	1	2639	G	N7-C5	-5.42	1.35	1.39
36	1	2799	A	C6-N1	-5.42	1.31	1.35
36	1	644	G	N1-C2	-5.42	1.33	1.37
36	1	934	G	N1-C2	-5.42	1.33	1.37
36	1	2954	U	N1-C6	5.42	1.42	1.38
1	6	1118	G	N3-C4	-5.42	1.31	1.35
36	5	418	A	C5-C4	-5.42	1.34	1.38
36	5	518	G	N9-C4	-5.42	1.33	1.38
38	8	44	A	N7-C5	-5.42	1.35	1.39
36	1	931	C	C4-C5	-5.42	1.38	1.43
36	1	2918	G	N7-C5	-5.42	1.35	1.39
36	5	661	G	C6-N1	-5.42	1.35	1.39
36	5	3060	C	N1-C6	-5.42	1.33	1.37
36	1	206	G	N9-C8	-5.42	1.34	1.37
36	1	2812	C	C2-O2	-5.42	1.19	1.24
1	6	407	A	C5-C6	-5.42	1.36	1.41
21	c9	144	GLU	CB-CG	5.42	1.62	1.52
36	5	1107	C	N3-C4	-5.42	1.30	1.33
36	1	512	U	C4-O4	5.42	1.27	1.23
36	1	2755	C	N1-C6	-5.42	1.33	1.37
36	1	3098	G	N1-C2	-5.42	1.33	1.37
36	5	325	A	N9-C4	-5.42	1.34	1.37
36	5	1320	C	C4-C5	-5.42	1.38	1.43
36	5	2358	A	N3-C4	-5.42	1.31	1.34
36	1	2639	G	C5-C6	-5.42	1.36	1.42
36	5	1293	U	C4-O4	-5.42	1.19	1.23
37	3	97	A	C5-C4	-5.41	1.34	1.38
1	6	1	U	N1-C2	5.41	1.43	1.38
36	5	2917	G	C2-N3	-5.41	1.28	1.32
36	1	3007	U	C2-N3	-5.41	1.33	1.37
36	1	2156	C	N3-C4	-5.41	1.30	1.33
1	6	1645	G	N9-C4	5.41	1.42	1.38
36	1	1135	A	C6-N1	-5.41	1.31	1.35
36	5	1901	A	N1-C2	-5.41	1.29	1.34
36	5	2110	G	C5-C4	-5.41	1.34	1.38
36	5	2915	U	N1-C6	-5.41	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2323	G	N9-C8	-5.41	1.34	1.37
36	1	284	A	N7-C5	-5.41	1.36	1.39
1	6	1028	C	N3-C4	-5.41	1.30	1.33
36	5	2418	G	C2-N3	5.41	1.37	1.32
1	6	746	A	C6-N1	-5.40	1.31	1.35
36	5	2343	C	C2-N3	-5.40	1.31	1.35
36	5	2936	A	N7-C5	-5.40	1.36	1.39
36	5	3310	A	N9-C8	-5.40	1.33	1.37
1	2	974	A	N9-C4	-5.40	1.34	1.37
36	1	2332	A	C5-C6	-5.40	1.36	1.41
36	1	2917	G	C5-C4	-5.40	1.34	1.38
36	5	344	A	N7-C5	-5.40	1.36	1.39
36	5	1161	G	N3-C4	-5.40	1.31	1.35
36	5	1422	G	N7-C5	-5.40	1.36	1.39
37	7	42	A	N9-C8	-5.40	1.33	1.37
1	6	28	A	C6-N1	-5.40	1.31	1.35
1	6	1655	A	N9-C4	-5.40	1.34	1.37
36	5	998	A	C6-N1	-5.40	1.31	1.35
36	5	2185	G	N3-C4	-5.40	1.31	1.35
36	1	2848	G	C5-C4	-5.40	1.34	1.38
1	6	1634	C	N1-C2	5.40	1.45	1.40
36	5	3182	G	N1-C2	-5.40	1.33	1.37
38	8	15	G	N9-C8	-5.40	1.34	1.37
36	1	93	C	C4-C5	-5.40	1.38	1.43
37	7	88	G	C5-C4	-5.40	1.34	1.38
36	1	375	A	N9-C4	-5.39	1.34	1.37
36	1	2659	G	C5-C6	-5.39	1.36	1.42
38	4	13	A	C6-N1	-5.39	1.31	1.35
36	1	333	G	C6-N1	-5.39	1.35	1.39
36	1	1295	G	N1-C2	-5.39	1.33	1.37
36	1	2803	A	C5-C4	-5.39	1.34	1.38
36	1	2958	A	C6-N1	-5.39	1.31	1.35
37	7	90	U	P-O5'	-5.39	1.54	1.59
1	2	470	A	N9-C4	-5.39	1.34	1.37
36	1	2922	G	N1-C2	-5.39	1.33	1.37
36	5	2994	A	C5-C6	-5.39	1.36	1.41
36	5	3199	G	N7-C5	-5.39	1.36	1.39
36	1	941	G	N9-C8	-5.39	1.34	1.37
36	5	66	A	N9-C4	-5.39	1.34	1.37
36	5	589	A	N9-C4	-5.39	1.34	1.37
36	5	2311	G	N3-C4	-5.39	1.31	1.35
37	7	102	A	N3-C4	-5.39	1.31	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1003	A	C5-C6	-5.39	1.36	1.41
36	5	755	A	C5-C6	-5.39	1.36	1.41
1	2	632	U	C2-N3	-5.39	1.33	1.37
1	2	1322	A	N9-C4	-5.39	1.34	1.37
36	1	2229	A	C5-C6	-5.39	1.36	1.41
36	5	1025	A	N9-C4	5.39	1.41	1.37
36	5	423	A	N3-C4	-5.38	1.31	1.34
36	5	2933	A	N7-C5	-5.38	1.36	1.39
1	2	1795	U	N1-C2	5.38	1.43	1.38
1	6	1631	A	C5-C4	-5.38	1.34	1.38
36	5	1060	U	C4-O4	-5.38	1.19	1.23
36	5	1881	A	N7-C5	-5.38	1.36	1.39
36	5	2367	A	C5-C6	-5.38	1.36	1.41
76	q0	115	CYS	CB-SG	-5.38	1.73	1.81
36	1	920	A	C5-C4	-5.38	1.34	1.38
36	1	1341	U	C4-C5	-5.38	1.38	1.43
36	1	2988	C	C2-N3	-5.38	1.31	1.35
36	5	1376	C	N1-C6	-5.38	1.33	1.37
36	5	2637	A	C5-C4	-5.38	1.34	1.38
1	6	100	A	N9-C4	-5.38	1.34	1.37
36	5	984	G	C5-C4	-5.38	1.34	1.38
36	5	1178	G	C5-C4	-5.38	1.34	1.38
36	5	1304	A	P-O5'	-5.38	1.54	1.59
36	5	2348	A	N3-C4	-5.38	1.31	1.34
36	1	3049	A	C5-C4	-5.37	1.34	1.38
36	1	1402	C	N1-C6	-5.37	1.33	1.37
36	1	2344	U	C2-N3	-5.37	1.33	1.37
36	5	969	C	N1-C2	-5.37	1.34	1.40
44	17	78	GLU	CG-CD	5.37	1.60	1.51
36	1	3049	A	N9-C8	-5.37	1.33	1.37
1	6	1547	A	C5-C6	-5.37	1.36	1.41
1	6	1610	G	C8-N7	-5.37	1.27	1.30
36	5	1443	G	N9-C4	-5.37	1.33	1.38
36	1	677	A	C5-C4	-5.37	1.34	1.38
36	1	1440	G	C6-N1	-5.37	1.35	1.39
36	1	3141	A	N9-C4	-5.37	1.34	1.37
37	3	10	C	C4-C5	-5.37	1.38	1.43
37	3	25	G	C6-N1	-5.37	1.35	1.39
38	4	4	C	C2-O2	-5.37	1.19	1.24
1	6	1460	A	N9-C4	-5.37	1.34	1.37
36	5	40	A	N3-C4	-5.37	1.31	1.34
36	1	1613	A	N9-C4	-5.37	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2259	A	C5-C6	-5.37	1.36	1.41
36	5	2641	U	N1-C6	-5.37	1.33	1.38
36	1	1296	C	N3-C4	-5.37	1.30	1.33
36	1	2423	U	C2-N3	5.37	1.41	1.37
36	5	1461	A	C5-C4	-5.37	1.34	1.38
36	5	2411	U	C2-O2	-5.37	1.17	1.22
37	7	25	G	C6-O6	-5.37	1.19	1.24
37	7	99	G	N9-C4	-5.37	1.33	1.38
1	2	7	G	N7-C5	-5.36	1.36	1.39
36	1	2143	A	C5-C6	-5.36	1.36	1.41
36	1	3244	A	C5-C6	-5.36	1.36	1.41
36	5	2631	U	N1-C2	-5.36	1.33	1.38
36	1	2880	U	C2-N3	-5.36	1.33	1.37
36	1	365	A	C6-N1	-5.36	1.31	1.35
36	1	949	C	N1-C6	-5.36	1.33	1.37
36	1	1911	A	C5-C4	-5.36	1.34	1.38
1	6	415	C	N3-C4	-5.36	1.30	1.33
1	6	815	G	N9-C4	-5.36	1.33	1.38
36	5	981	U	N1-C6	5.36	1.42	1.38
36	5	1332	A	C8-N7	-5.36	1.27	1.31
36	5	2956	A	C6-N6	-5.36	1.29	1.33
36	5	3272	C	N1-C6	-5.36	1.33	1.37
36	1	1460	A	N3-C4	-5.36	1.31	1.34
37	3	89	G	N9-C8	-5.36	1.34	1.37
36	5	916	G	C5-C4	-5.36	1.34	1.38
36	5	917	A	C5-C4	-5.36	1.35	1.38
36	5	1153	A	C5-C6	-5.36	1.36	1.41
36	5	1200	A	C6-N1	-5.36	1.31	1.35
36	5	2255	A	C5-C4	-5.36	1.34	1.38
46	19	181	VAL	CB-CG2	-5.36	1.41	1.52
52	m6	40	GLU	CD-OE2	5.36	1.31	1.25
36	1	1135	A	N7-C5	-5.36	1.36	1.39
36	1	1349	G	N9-C4	5.36	1.42	1.38
36	1	1915	A	N3-C4	-5.36	1.31	1.34
36	1	2146	C	N1-C6	-5.36	1.33	1.37
1	6	1580	C	N1-C6	-5.36	1.33	1.37
36	5	1062	A	C5-C6	-5.36	1.36	1.41
36	5	1860	G	C6-N1	-5.36	1.35	1.39
36	5	2167	A	N3-C4	-5.36	1.31	1.34
36	1	205	C	N1-C6	-5.35	1.33	1.37
1	6	1004	U	N3-C4	-5.35	1.33	1.38
36	5	3314	A	N7-C5	-5.35	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	1133	A	N3-C4	-5.35	1.31	1.34
36	1	1175	C	N1-C2	-5.35	1.34	1.40
36	5	2317	A	N3-C4	-5.35	1.31	1.34
36	5	2996	U	C2-O2	5.35	1.27	1.22
36	5	3211	C	N1-C6	-5.35	1.33	1.37
36	1	1886	A	C2-N3	-5.35	1.28	1.33
36	1	3175	U	N1-C2	5.35	1.43	1.38
38	8	14	C	N1-C2	-5.35	1.34	1.40
40	13	358	TRP	CB-CG	-5.35	1.40	1.50
36	1	402	A	C6-N6	-5.35	1.29	1.33
36	5	353	G	N9-C4	-5.35	1.33	1.38
36	5	400	G	N9-C4	-5.35	1.33	1.38
36	5	1056	U	N1-C2	5.35	1.43	1.38
36	5	1085	A	C5-C6	-5.35	1.36	1.41
37	7	45	A	N7-C5	5.35	1.42	1.39
1	6	1117	U	N1-C2	-5.35	1.33	1.38
36	1	411	U	N1-C2	-5.34	1.33	1.38
36	1	1836	C	N1-C6	-5.34	1.33	1.37
1	6	1004	U	C2-N3	-5.34	1.34	1.37
36	5	916	G	N7-C5	-5.34	1.36	1.39
36	5	2387	A	N9-C4	-5.34	1.34	1.37
36	5	1099	A	N3-C4	-5.34	1.31	1.34
36	5	2995	A	N3-C4	-5.34	1.31	1.34
36	1	2357	A	C3'-C2'	-5.34	1.46	1.52
36	1	3125	U	C2-N3	-5.34	1.34	1.37
36	1	3127	A	C6-N1	-5.34	1.31	1.35
36	1	3341	U	N1-C2	5.34	1.43	1.38
1	6	1100	G	N9-C8	-5.34	1.34	1.37
1	6	1778	G	N9-C4	-5.34	1.33	1.38
36	5	1117	G	C6-O6	-5.34	1.19	1.24
36	5	2304	C	N1-C6	-5.34	1.33	1.37
37	7	95	A	N9-C8	-5.34	1.33	1.37
36	5	888	A	N3-C4	-5.34	1.31	1.34
36	5	2202	C	N1-C6	-5.34	1.33	1.37
36	5	2722	U	C4-C5	-5.34	1.38	1.43
36	5	2982	A	N9-C4	-5.34	1.34	1.37
36	5	3090	U	C4-C5	-5.34	1.38	1.43
37	7	83	U	C4-O4	-5.34	1.19	1.23
36	5	2902	A	C6-N1	-5.34	1.31	1.35
36	1	960	U	N1-C2	5.34	1.43	1.38
1	6	1322	A	N9-C4	-5.34	1.34	1.37
1	6	1610	G	N7-C5	-5.34	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	1780	G	C8-N7	-5.34	1.27	1.30
36	5	1175	C	N1-C2	-5.34	1.34	1.40
36	5	3257	C	N3-C4	-5.34	1.30	1.33
37	7	112	G	N1-C2	-5.34	1.33	1.37
37	7	13	A	N7-C5	-5.33	1.36	1.39
36	1	2972	G	N3-C4	-5.33	1.31	1.35
1	6	1780	G	N7-C5	-5.33	1.36	1.39
36	5	1337	A	C6-N1	-5.33	1.31	1.35
36	5	1451	C	N3-C4	-5.33	1.30	1.33
36	5	2639	G	N9-C4	-5.33	1.33	1.38
36	1	2955	U	N1-C2	5.33	1.43	1.38
1	6	1309	C	N1-C6	-5.33	1.33	1.37
36	5	277	G	N3-C4	-5.33	1.31	1.35
36	5	916	G	C8-N7	-5.33	1.27	1.30
36	5	1185	C	N3-C4	-5.33	1.30	1.33
36	5	1369	A	N7-C5	-5.33	1.36	1.39
52	m6	34	VAL	CB-CG1	-5.33	1.41	1.52
36	1	1794	G	N9-C8	-5.33	1.34	1.37
52	m6	75	ALA	CA-CB	-5.33	1.41	1.52
1	2	397	A	N9-C4	-5.33	1.34	1.37
36	1	70	A	C5-C4	-5.33	1.35	1.38
36	1	537	A	N9-C4	-5.33	1.34	1.37
36	1	1102	A	N9-C4	-5.33	1.34	1.37
36	5	951	A	C6-N6	-5.33	1.29	1.33
1	6	1652	C	N1-C6	-5.33	1.33	1.37
36	1	499	G	C2-N3	-5.33	1.28	1.32
36	1	1154	A	C5-C6	-5.33	1.36	1.41
37	3	46	A	N9-C4	-5.33	1.34	1.37
1	6	408	C	N1-C2	-5.33	1.34	1.40
52	m6	4	GLU	CD-OE2	5.33	1.31	1.25
1	2	550	A	N7-C5	-5.32	1.36	1.39
36	1	367	A	N3-C4	-5.32	1.31	1.34
36	5	353	G	C5-C4	-5.32	1.34	1.38
36	5	1604	G	C6-N1	-5.32	1.35	1.39
36	5	3332	U	N1-C2	-5.32	1.33	1.38
37	7	104	A	N7-C5	-5.32	1.36	1.39
46	19	27	VAL	CB-CG2	-5.32	1.41	1.52
36	1	2419	A	N9-C4	-5.32	1.34	1.37
36	5	2212	C	N1-C2	5.32	1.45	1.40
36	5	952	A	N9-C4	-5.32	1.34	1.37
38	8	138	A	N7-C5	-5.32	1.36	1.39
36	1	2877	G	C6-N1	-5.32	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	551	G	N3-C4	-5.32	1.31	1.35
36	1	952	A	N7-C5	-5.32	1.36	1.39
1	6	441	A	N9-C8	-5.32	1.33	1.37
1	6	1521	G	C5-C4	-5.32	1.34	1.38
1	6	1556	A	C5-C6	-5.32	1.36	1.41
36	1	2159	U	N3-C4	5.32	1.43	1.38
36	1	2834	G	C2-N3	-5.32	1.28	1.32
38	4	89	A	N9-C4	-5.32	1.34	1.37
36	5	1140	G	N9-C8	-5.32	1.34	1.37
36	5	3115	C	N1-C2	-5.32	1.34	1.40
36	1	1134	G	C6-N1	-5.31	1.35	1.39
1	6	48	G	N3-C4	-5.31	1.31	1.35
1	2	1119	G	C6-N1	-5.31	1.35	1.39
36	1	1893	A	N9-C4	-5.31	1.34	1.37
36	5	2234	G	C5-C4	-5.31	1.34	1.38
36	5	2658	G	C6-N1	-5.31	1.35	1.39
36	5	2718	U	C2-N3	-5.31	1.34	1.37
36	5	3124	G	N7-C5	-5.31	1.36	1.39
37	7	89	G	C8-N7	-5.31	1.27	1.30
59	n3	96	GLU	CG-CD	5.31	1.59	1.51
36	1	3197	G	N9-C4	-5.31	1.33	1.38
36	1	2619	G	C8-N7	-5.31	1.27	1.30
36	1	2896	A	N7-C5	-5.31	1.36	1.39
36	1	2918	G	C5-C4	-5.31	1.34	1.38
36	5	2339	C	N1-C6	-5.31	1.33	1.37
36	5	2971	A	N9-C4	5.31	1.41	1.37
36	1	2164	A	C5-C4	-5.31	1.35	1.38
36	5	1051	U	N1-C2	-5.31	1.33	1.38
36	5	2329	C	N1-C2	-5.31	1.34	1.40
36	5	1366	A	N3-C4	-5.31	1.31	1.34
36	5	3037	U	N1-C2	-5.31	1.33	1.38
36	1	44	U	C5'-C4'	-5.30	1.45	1.51
36	1	2939	G	N9-C4	5.30	1.42	1.38
50	m4	66	THR	CA-CB	-5.30	1.39	1.53
1	2	1139	A	N9-C4	-5.30	1.34	1.37
36	1	881	C	N3-C4	-5.30	1.30	1.33
1	6	755	A	C5-C6	-5.30	1.36	1.41
1	6	1399	C	N1-C6	5.30	1.40	1.37
1	6	1629	G	C6-N1	-5.30	1.35	1.39
36	5	360	G	N3-C4	-5.30	1.31	1.35
36	5	644	G	C6-N1	-5.30	1.35	1.39
36	5	1307	G	N9-C4	-5.30	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2938	G	N9-C8	-5.30	1.34	1.37
36	1	896	A	N7-C5	-5.30	1.36	1.39
1	6	751	G	N9-C4	-5.30	1.33	1.38
36	5	588	G	N1-C2	-5.30	1.33	1.37
36	5	3049	A	N3-C4	-5.30	1.31	1.34
36	1	943	U	N3-C4	-5.30	1.33	1.38
36	1	2918	G	N9-C8	-5.30	1.34	1.37
1	6	609	U	N1-C6	-5.30	1.33	1.38
36	1	583	G	N1-C2	-5.30	1.33	1.37
36	5	2707	C	C4-C5	-5.30	1.38	1.43
36	1	2283	G	C2-N3	-5.29	1.28	1.32
36	5	1203	A	N9-C4	-5.29	1.34	1.37
36	5	2307	G	C5-C6	-5.29	1.37	1.42
36	5	2930	A	N9-C4	-5.29	1.34	1.37
36	5	2316	G	N1-C2	-5.29	1.33	1.37
36	1	2801	A	N3-C4	-5.29	1.31	1.34
36	5	983	A	N9-C4	-5.29	1.34	1.37
36	5	1188	U	C2-N3	-5.29	1.34	1.37
36	1	937	G	N3-C4	-5.29	1.31	1.35
36	5	1295	G	N7-C5	-5.29	1.36	1.39
36	5	1432	C	C2-N3	-5.29	1.31	1.35
36	5	1545	A	N7-C5	-5.29	1.36	1.39
36	5	2659	G	C5-C6	-5.29	1.37	1.42
36	5	2906	C	N3-C4	5.29	1.37	1.33
36	1	1656	A	N3-C4	-5.29	1.31	1.34
1	6	152	U	N1-C2	-5.29	1.33	1.38
36	5	1296	C	C2-O2	-5.29	1.19	1.24
36	5	1430	U	C2-N3	-5.29	1.34	1.37
36	5	1865	A	C5-C6	-5.29	1.36	1.41
36	5	2397	A	N7-C5	-5.29	1.36	1.39
36	5	3063	C	N1-C6	-5.29	1.33	1.37
36	1	372	A	N7-C5	-5.28	1.36	1.39
36	1	574	U	N1-C2	-5.28	1.33	1.38
36	1	887	G	C6-O6	-5.28	1.19	1.24
36	1	1400	G	C5-C4	-5.28	1.34	1.38
36	1	3011	A	N9-C8	-5.28	1.33	1.37
36	5	1374	G	C5-C4	-5.28	1.34	1.38
36	5	2916	U	C2-O2	5.28	1.27	1.22
1	6	678	A	N9-C4	5.28	1.41	1.37
36	5	2611	U	N1-C2	-5.28	1.33	1.38
36	1	654	C	C2-N3	-5.28	1.31	1.35
36	1	2386	A	C6-N1	-5.28	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3221	C	N1-C6	-5.28	1.33	1.37
1	6	103	A	C5-C6	-5.28	1.36	1.41
1	6	1491	U	C2-N3	5.28	1.41	1.37
36	5	1085	A	N7-C5	-5.28	1.36	1.39
36	5	1435	A	C5-C4	-5.28	1.35	1.38
36	5	2834	G	C5-C4	-5.28	1.34	1.38
36	5	2341	A	C6-N6	-5.28	1.29	1.33
36	5	2375	G	C2-N3	-5.28	1.28	1.32
1	2	1084	A	C5-C4	-5.28	1.35	1.38
36	1	985	U	N1-C2	-5.28	1.33	1.38
36	1	3141	A	N7-C5	-5.28	1.36	1.39
1	6	407	A	N9-C4	-5.28	1.34	1.37
1	6	1100	G	C5-C4	-5.28	1.34	1.38
1	6	1768	G	C2-N3	-5.28	1.28	1.32
36	5	1889	G	N7-C5	-5.28	1.36	1.39
36	5	3295	A	C5-C4	-5.28	1.35	1.38
37	7	25	G	N1-C2	-5.28	1.33	1.37
36	1	2399	A	C5-C6	-5.27	1.36	1.41
36	1	3260	G	N7-C5	-5.27	1.36	1.39
1	6	139	C	N3-C4	-5.27	1.30	1.33
36	5	1161	G	N9-C4	-5.27	1.33	1.38
36	1	220	G	N9-C8	-5.27	1.34	1.37
36	1	409	A	N9-C4	-5.27	1.34	1.37
36	1	2121	G	C5-C6	5.27	1.47	1.42
36	1	2370	G	N9-C8	-5.27	1.34	1.37
36	5	1288	U	C2-N3	-5.27	1.34	1.37
36	5	3144	G	N1-C2	-5.27	1.33	1.37
37	7	51	A	N7-C5	-5.27	1.36	1.39
1	6	1445	G	N9-C4	-5.27	1.33	1.38
36	5	1173	U	C2-N3	-5.27	1.34	1.37
36	5	2691	A	N9-C4	-5.27	1.34	1.37
36	1	2905	U	N1-C2	-5.27	1.33	1.38
1	6	1418	G	C6-O6	5.27	1.28	1.24
36	5	2298	U	N1-C6	-5.27	1.33	1.38
36	5	3179	U	N1-C6	-5.27	1.33	1.38
36	1	74	G	C6-N1	-5.27	1.35	1.39
36	1	200	C	N3-C4	-5.27	1.30	1.33
36	1	2376	G	C6-N1	-5.27	1.35	1.39
36	1	2819	A	N1-C2	-5.27	1.29	1.34
52	M6	100	GLU	CD-OE1	5.27	1.31	1.25
36	5	1915	A	C6-N1	-5.27	1.31	1.35
36	5	2368	A	N7-C5	-5.27	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2912	G	N3-C4	-5.27	1.31	1.35
1	6	1031	U	C2-N3	-5.27	1.34	1.37
36	5	1040	A	N3-C4	-5.27	1.31	1.34
36	5	3275	U	C2-N3	5.27	1.41	1.37
36	5	595	G	C8-N7	-5.26	1.27	1.30
36	5	1310	G	C5-C4	-5.26	1.34	1.38
36	5	3125	U	N3-C4	-5.26	1.33	1.38
37	7	94	C	N3-C4	-5.26	1.30	1.33
36	5	521	A	N7-C5	-5.26	1.36	1.39
36	5	1184	A	N3-C4	-5.26	1.31	1.34
1	2	597	G	C5-C6	-5.26	1.37	1.42
36	1	2643	A	N9-C4	-5.26	1.34	1.37
36	5	1843	C	N1-C6	-5.26	1.33	1.37
36	5	3058	U	N1-C2	-5.26	1.33	1.38
36	1	712	G	N9-C8	-5.26	1.34	1.37
36	1	2843	U	N1-C2	5.26	1.43	1.38
37	3	79	A	N9-C4	-5.26	1.34	1.37
1	6	78	A	C6-N1	-5.26	1.31	1.35
1	6	1543	A	C6-N1	-5.26	1.31	1.35
36	5	2636	A	N9-C4	-5.26	1.34	1.37
1	2	577	G	C5-C6	-5.26	1.37	1.42
36	1	433	A	N9-C4	-5.26	1.34	1.37
36	1	2938	G	C8-N7	-5.26	1.27	1.30
36	5	654	C	C2-O2	-5.26	1.19	1.24
36	5	3310	A	C8-N7	-5.26	1.27	1.31
36	5	3326	G	N9-C8	-5.26	1.34	1.37
36	5	884	A	C8-N7	-5.26	1.27	1.31
36	5	920	A	C6-N1	-5.26	1.31	1.35
36	5	2954	U	C4-C5	5.26	1.48	1.43
36	1	3140	G	C5-C6	-5.25	1.37	1.42
36	5	3096	C	N3-C4	-5.25	1.30	1.33
36	1	334	A	C6-N6	-5.25	1.29	1.33
36	5	796	U	C2-N3	-5.25	1.34	1.37
36	5	1183	C	C4-C5	-5.25	1.38	1.43
36	5	2644	C	N3-C4	-5.25	1.30	1.33
1	2	1589	C	N3-C4	-5.25	1.30	1.33
36	1	1207	G	C5-C6	-5.25	1.37	1.42
36	1	2963	C	C4-C5	-5.25	1.38	1.43
36	5	2100	A	N9-C4	5.25	1.41	1.37
36	5	2320	A	N3-C4	-5.25	1.31	1.34
36	5	2858	U	N1-C6	-5.25	1.33	1.38
36	1	41	G	N7-C5	-5.25	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3009	G	C5-C6	-5.25	1.37	1.42
36	5	2705	A	C6-N6	-5.25	1.29	1.33
37	7	26	C	N1-C2	5.25	1.45	1.40
36	1	1891	A	C6-N1	-5.25	1.31	1.35
59	N3	52	ALA	CA-CB	-5.25	1.41	1.52
36	5	944	C	C2-N3	-5.25	1.31	1.35
36	5	1892	G	N9-C8	-5.25	1.34	1.37
1	2	983	A	N9-C4	5.25	1.41	1.37
36	1	368	G	C6-N1	-5.25	1.35	1.39
36	1	751	A	N7-C5	-5.25	1.36	1.39
36	1	2385	G	P-O5'	-5.25	1.54	1.59
38	4	53	A	C5-C4	-5.25	1.35	1.38
1	6	147	A	C5-C6	-5.25	1.36	1.41
36	5	1059	G	N3-C4	-5.25	1.31	1.35
36	5	1891	A	N3-C4	-5.25	1.31	1.34
36	1	994	G	C6-N1	-5.24	1.35	1.39
36	5	951	A	C5-C4	-5.24	1.35	1.38
36	5	990	U	C4-O4	-5.24	1.19	1.23
36	5	2262	A	C5-C6	-5.24	1.36	1.41
36	5	2697	A	C5-C4	-5.24	1.35	1.38
36	5	3177	G	C6-N1	-5.24	1.35	1.39
36	1	899	U	N3-C4	-5.24	1.33	1.38
36	1	2627	C	N1-C2	-5.24	1.34	1.40
37	7	86	U	N1-C2	-5.24	1.33	1.38
1	2	1375	A	N9-C4	-5.24	1.34	1.37
36	1	627	U	N1-C2	-5.24	1.33	1.38
1	6	1403	C	N1-C6	-5.24	1.34	1.37
36	5	2799	A	C6-N1	-5.24	1.31	1.35
36	1	2805	G	C5-C4	-5.24	1.34	1.38
36	1	3147	G	N3-C4	-5.24	1.31	1.35
36	5	1311	G	N7-C5	-5.24	1.36	1.39
36	5	2381	G	C5-C4	-5.24	1.34	1.38
36	5	2328	U	C4-O4	-5.24	1.19	1.23
1	2	529	A	N9-C4	-5.24	1.34	1.37
36	1	1299	U	N1-C2	-5.24	1.33	1.38
36	1	2761	G	N7-C5	-5.24	1.36	1.39
1	6	865	A	C5-C4	-5.24	1.35	1.38
36	5	3103	A	N9-C4	-5.24	1.34	1.37
59	n3	53	SER	CA-CB	-5.24	1.45	1.52
36	1	573	C	N3-C4	-5.23	1.30	1.33
1	6	332	U	C2-N3	-5.23	1.34	1.37
1	6	1537	C	N3-C4	5.23	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3299	A	N9-C4	-5.23	1.34	1.37
36	5	1290	A	N7-C5	-5.23	1.36	1.39
36	5	1386	A	N9-C4	-5.23	1.34	1.37
36	5	2167	A	N9-C4	-5.23	1.34	1.37
36	5	3118	C	C4-C5	-5.23	1.38	1.43
36	5	357	A	N3-C4	-5.23	1.31	1.34
36	5	629	U	N1-C2	-5.23	1.33	1.38
36	5	2967	A	N7-C5	-5.23	1.36	1.39
36	1	1171	G	C6-N1	-5.23	1.35	1.39
36	1	2894	C	N1-C6	-5.23	1.34	1.37
36	5	21	G	N9-C4	-5.23	1.33	1.38
36	5	1401	A	C5-C4	-5.23	1.35	1.38
36	5	2688	U	N1-C6	-5.23	1.33	1.38
37	7	49	G	C6-O6	5.23	1.28	1.24
36	1	635	G	C5-C4	-5.23	1.34	1.38
36	1	1153	A	C6-N1	-5.23	1.31	1.35
1	6	1658	G	N9-C4	-5.23	1.33	1.38
36	5	816	A	N9-C4	5.23	1.41	1.37
36	5	1884	A	N3-C4	-5.23	1.31	1.34
37	7	2	G	C6-N1	-5.23	1.35	1.39
36	1	2377	G	C5-C6	-5.22	1.37	1.42
36	1	2404	A	N1-C2	5.22	1.39	1.34
36	5	583	G	C5-C6	-5.22	1.37	1.42
36	5	1431	G	C5-C6	-5.22	1.37	1.42
36	5	2611	U	N1-C6	-5.22	1.33	1.38
36	1	1410	U	C4-C5	-5.22	1.38	1.43
1	6	788	A	N3-C4	-5.22	1.31	1.34
36	5	501	A	C6-N1	-5.22	1.31	1.35
36	5	3033	A	N7-C5	-5.22	1.36	1.39
36	5	2694	A	N9-C4	-5.22	1.34	1.37
36	1	1456	A	N9-C4	-5.22	1.34	1.37
36	1	1657	C	N1-C6	-5.22	1.34	1.37
1	6	383	G	N7-C5	-5.22	1.36	1.39
36	5	668	G	C6-N1	-5.22	1.35	1.39
36	5	2931	C	N3-C4	-5.22	1.30	1.33
36	1	1481	A	N7-C5	-5.22	1.36	1.39
1	2	1650	U	N1-C2	-5.22	1.33	1.38
36	1	2872	A	N9-C4	5.22	1.41	1.37
36	1	2930	A	C5-C4	-5.22	1.35	1.38
1	6	331	A	N7-C5	-5.22	1.36	1.39
36	5	523	A	N7-C5	-5.22	1.36	1.39
36	5	1456	A	N7-C5	-5.22	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	7	8	G	C6-N1	-5.22	1.35	1.39
53	m7	4	TYR	CD1-CE1	-5.22	1.31	1.39
36	1	2800	G	C5-C6	-5.21	1.37	1.42
36	1	2991	A	N7-C5	-5.21	1.36	1.39
36	5	595	G	N7-C5	-5.21	1.36	1.39
36	5	788	C	N3-C4	-5.21	1.30	1.33
36	5	1149	G	N7-C5	-5.21	1.36	1.39
38	8	133	G	C5-C4	-5.21	1.34	1.38
36	5	1468	A	N9-C4	-5.21	1.34	1.37
36	1	2389	C	N3-C4	-5.21	1.30	1.33
36	1	2631	U	C2-N3	-5.21	1.34	1.37
1	6	1670	G	N9-C8	-5.21	1.34	1.37
37	7	24	A	C6-N6	-5.21	1.29	1.33
65	n9	16	ALA	CA-CB	-5.21	1.41	1.52
36	1	2521	U	C2-N3	-5.21	1.34	1.37
36	5	3017	A	N3-C4	-5.21	1.31	1.34
48	m1	157	GLU	CG-CD	5.21	1.59	1.51
36	1	1658	G	N3-C4	-5.21	1.31	1.35
36	1	2307	G	C5-C4	-5.21	1.34	1.38
36	1	2318	U	C4-O4	-5.21	1.19	1.23
36	1	2641	U	C5-C6	-5.21	1.29	1.34
36	1	3135	U	N3-C4	-5.21	1.33	1.38
36	5	1299	U	N1-C2	-5.21	1.33	1.38
36	5	1846	C	P-O5'	-5.21	1.54	1.59
36	1	860	G	C5-C4	-5.21	1.34	1.38
1	6	1584	G	N9-C8	-5.21	1.34	1.37
37	7	5	G	N1-C2	-5.21	1.33	1.37
52	m6	166	GLU	CG-CD	5.21	1.59	1.51
36	1	1446	A	N7-C5	-5.21	1.36	1.39
36	5	3094	A	C5-C6	-5.21	1.36	1.41
36	1	715	A	N3-C4	-5.20	1.31	1.34
36	1	2826	U	N1-C2	-5.20	1.33	1.38
36	1	2914	G	C6-N1	-5.20	1.35	1.39
1	6	307	G	C6-N1	-5.20	1.35	1.39
1	6	1086	A	C6-N1	-5.20	1.31	1.35
36	5	3373	U	N3-C4	-5.20	1.33	1.38
36	1	2187	G	N1-C2	-5.20	1.33	1.37
1	6	1504	G	C6-N1	-5.20	1.35	1.39
36	1	1061	A	C8-N7	-5.20	1.27	1.31
36	1	1141	C	N3-C4	-5.20	1.30	1.33
36	5	1190	A	C5-C6	-5.20	1.36	1.41
36	5	1851	G	C2-N3	-5.20	1.28	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2690	G	N3-C4	-5.20	1.31	1.35
36	1	2371	G	C5-C4	-5.20	1.34	1.38
1	6	1194	A	N3-C4	-5.20	1.31	1.34
36	5	1128	U	N3-C4	-5.20	1.33	1.38
36	5	2299	A	N3-C4	-5.20	1.31	1.34
36	5	2629	U	N1-C6	-5.20	1.33	1.38
36	5	2821	C	C2-O2	5.20	1.29	1.24
36	5	3005	A	N9-C4	-5.20	1.34	1.37
1	2	1750	A	N7-C5	-5.20	1.36	1.39
36	1	1120	A	C5-C4	-5.20	1.35	1.38
36	1	1411	C	N1-C6	-5.20	1.34	1.37
36	1	3197	G	C2-N3	-5.20	1.28	1.32
36	5	906	A	N3-C4	-5.20	1.31	1.34
36	1	2805	G	N1-C2	-5.20	1.33	1.37
1	6	320	U	C2-O2	5.20	1.27	1.22
36	5	1375	G	N7-C5	-5.20	1.36	1.39
36	5	2391	G	N9-C8	-5.20	1.34	1.37
36	5	2703	A	C5-C4	-5.19	1.35	1.38
36	1	3135	U	N1-C6	-5.19	1.33	1.38
36	5	651	G	N9-C8	-5.19	1.34	1.37
36	5	2309	A	N9-C4	-5.19	1.34	1.37
36	1	433	A	C5-C4	-5.19	1.35	1.38
36	1	1143	A	C6-N1	-5.19	1.31	1.35
1	6	1116	A	C6-N1	-5.19	1.31	1.35
1	6	1781	A	N7-C5	-5.19	1.36	1.39
36	1	1404	G	N9-C4	-5.19	1.33	1.38
1	2	1659	A	C6-N1	-5.19	1.31	1.35
36	1	33	G	C6-N1	-5.19	1.35	1.39
36	1	643	U	C4-C5	-5.19	1.38	1.43
36	1	987	U	N1-C2	-5.19	1.33	1.38
36	1	1156	C	C4-C5	-5.19	1.38	1.43
36	1	3206	C	N1-C2	-5.19	1.34	1.40
1	6	1537	C	C2-O2	5.19	1.29	1.24
36	5	512	U	N1-C6	-5.19	1.33	1.38
36	1	2125	A	N9-C4	-5.19	1.34	1.37
36	1	1123	U	N1-C2	-5.18	1.33	1.38
36	5	523	A	C5-C4	-5.18	1.35	1.38
36	5	2177	G	C6-O6	-5.18	1.19	1.24
37	7	99	G	N9-C8	-5.18	1.34	1.37
36	1	144	A	N3-C4	-5.18	1.31	1.34
43	L6	59	GLU	CD-OE2	5.18	1.31	1.25
1	6	796	A	N9-C4	-5.18	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	6	998	A	C6-N1	-5.18	1.31	1.35
1	6	1800	A	N9-C4	5.18	1.41	1.37
36	5	569	A	C5-C6	-5.18	1.36	1.41
36	5	718	G	N7-C5	-5.18	1.36	1.39
36	5	1431	G	C5-C4	-5.18	1.34	1.38
1	6	1152	A	N3-C4	-5.18	1.31	1.34
1	6	1750	A	N7-C5	-5.18	1.36	1.39
38	8	57	C	N3-C4	-5.18	1.30	1.33
36	1	1372	C	N1-C6	-5.18	1.34	1.37
36	1	2356	A	C5-C6	-5.18	1.36	1.41
1	6	1602	C	N3-C4	-5.18	1.30	1.33
36	5	1784	G	N9-C8	-5.18	1.34	1.37
36	5	2375	G	C5-C4	-5.18	1.34	1.38
57	n1	149	GLN	CG-CD	5.18	1.62	1.51
36	1	557	A	N9-C4	-5.18	1.34	1.37
1	6	326	G	N7-C5	-5.18	1.36	1.39
36	5	3015	G	N9-C8	-5.18	1.34	1.37
36	1	2888	U	N1-C6	-5.18	1.33	1.38
1	6	441	A	C5-C4	-5.18	1.35	1.38
1	6	859	A	N9-C4	-5.18	1.34	1.37
36	5	2947	G	C5-C6	-5.18	1.37	1.42
1	2	1739	C	N1-C2	-5.17	1.34	1.40
36	1	890	C	C2-N3	-5.17	1.31	1.35
36	1	1303	A	N3-C4	-5.17	1.31	1.34
1	6	152	U	N3-C4	-5.17	1.33	1.38
36	5	811	U	N1-C6	-5.17	1.33	1.38
36	5	2144	A	N9-C4	5.17	1.41	1.37
36	1	1046	A	N7-C5	-5.17	1.36	1.39
48	M1	52	TYR	CD1-CE1	-5.17	1.31	1.39
36	5	518	G	N7-C5	-5.17	1.36	1.39
36	5	587	U	C4'-C3'	-5.17	1.47	1.52
36	5	595	G	N9-C8	-5.17	1.34	1.37
36	5	3392	U	C2-N3	-5.17	1.34	1.37
38	8	7	U	N1-C2	-5.17	1.33	1.38
1	2	1524	A	N7-C5	-5.17	1.36	1.39
36	1	612	U	C2-O2	-5.17	1.17	1.22
36	5	904	A	C5-C6	-5.17	1.36	1.41
36	5	2157	G	N9-C4	-5.17	1.33	1.38
36	5	2197	C	C5-C6	-5.17	1.30	1.34
36	1	973	A	C6-N1	-5.17	1.31	1.35
36	1	1411	C	C4-N4	-5.17	1.29	1.33
76	Q0	110	CYS	CB-SG	-5.17	1.73	1.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	651	G	N3-C4	-5.17	1.31	1.35
36	1	646	A	C6-N1	-5.17	1.31	1.35
36	1	2941	A	N9-C4	5.17	1.41	1.37
43	L6	104	GLU	CD-OE1	5.17	1.31	1.25
36	5	799	G	C5-C4	-5.17	1.34	1.38
36	5	869	G	N3-C4	-5.17	1.31	1.35
36	5	1794	G	N3-C4	-5.17	1.31	1.35
36	5	2647	A	C5-C6	-5.17	1.36	1.41
36	1	2388	U	N1-C6	-5.17	1.33	1.38
61	N5	86	VAL	CB-CG1	-5.17	1.42	1.52
36	5	1300	G	N3-C4	-5.17	1.31	1.35
36	5	2399	A	N9-C4	-5.17	1.34	1.37
36	1	433	A	C5-C6	-5.17	1.36	1.41
1	6	1467	C	C4-C5	-5.17	1.38	1.43
36	5	820	A	N3-C4	-5.17	1.31	1.34
36	5	2731	U	N1-C6	-5.17	1.33	1.38
59	n3	68	GLU	CD-OE2	5.17	1.31	1.25
1	2	433	C	N1-C6	-5.16	1.34	1.37
1	2	440	U	N1-C2	-5.16	1.33	1.38
1	2	1658	G	C6-N1	-5.16	1.35	1.39
36	1	358	G	C5-C4	-5.16	1.34	1.38
36	1	1608	C	N3-C4	-5.16	1.30	1.33
36	1	2297	U	C2-O2	-5.16	1.17	1.22
38	4	4	C	N1-C6	-5.16	1.34	1.37
36	5	425	G	C6-N1	-5.16	1.35	1.39
36	5	1139	G	C6-N1	-5.16	1.35	1.39
36	5	3382	U	C2-N3	5.16	1.41	1.37
36	5	2631	U	C4-C5	-5.16	1.39	1.43
36	1	2387	A	C6-N1	-5.16	1.31	1.35
36	1	3127	A	N3-C4	-5.16	1.31	1.34
36	1	3305	A	C6-N6	-5.16	1.29	1.33
1	6	609	U	N3-C4	-5.16	1.33	1.38
36	5	2964	G	N7-C5	-5.16	1.36	1.39
36	5	3065	G	N9-C4	-5.16	1.33	1.38
36	1	803	C	N3-C4	-5.16	1.30	1.33
36	1	1442	U	C2-N3	5.16	1.41	1.37
1	6	1487	A	N9-C4	5.16	1.41	1.37
36	5	866	A	C5-C4	-5.16	1.35	1.38
36	5	980	A	N7-C5	5.16	1.42	1.39
36	1	580	C	N3-C4	-5.16	1.30	1.33
37	7	43	U	C2-N3	-5.16	1.34	1.37
36	1	349	A	C6-N1	-5.16	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2761	G	N9-C8	-5.16	1.34	1.37
36	1	2999	U	N3-C4	-5.16	1.33	1.38
36	1	3010	U	C4-C5	-5.16	1.39	1.43
1	6	1787	C	N1-C6	-5.16	1.34	1.37
36	5	2283	G	N7-C5	5.16	1.42	1.39
37	7	95	A	C5-C4	-5.16	1.35	1.38
47	m0	46	PHE	CB-CG	-5.16	1.42	1.51
36	1	628	A	N7-C5	-5.15	1.36	1.39
36	5	787	G	N7-C5	-5.15	1.36	1.39
37	7	94	C	C2-N3	-5.15	1.31	1.35
36	1	900	G	N9-C8	-5.15	1.34	1.37
36	5	1140	G	C6-N1	-5.15	1.35	1.39
36	5	2149	A	N7-C5	-5.15	1.36	1.39
36	5	2621	G	N3-C4	-5.15	1.31	1.35
36	1	611	A	N9-C4	-5.15	1.34	1.37
36	1	1850	A	N7-C5	-5.15	1.36	1.39
36	1	2884	C	N1-C2	-5.15	1.34	1.40
1	6	314	C	N3-C4	-5.15	1.30	1.33
1	6	761	G	C6-N1	-5.15	1.35	1.39
1	6	1765	A	N9-C4	-5.15	1.34	1.37
36	5	1303	A	N1-C2	-5.15	1.29	1.34
36	5	2343	C	C2-O2	-5.15	1.19	1.24
1	6	1124	A	C6-N6	-5.15	1.29	1.33
36	5	3004	C	N1-C2	-5.15	1.35	1.40
36	5	3299	A	N9-C4	-5.15	1.34	1.37
1	2	1615	C	N1-C2	5.15	1.45	1.40
1	6	876	G	N9-C4	-5.15	1.33	1.38
1	6	1502	G	C6-N1	-5.15	1.35	1.39
36	5	998	A	N3-C4	-5.15	1.31	1.34
36	5	1050	U	N1-C6	-5.15	1.33	1.38
37	7	101	G	C2-N3	-5.15	1.28	1.32
36	1	1174	G	N9-C8	-5.15	1.34	1.37
36	5	1366	A	C5-C6	-5.15	1.36	1.41
36	5	1514	G	C8-N7	-5.15	1.27	1.30
36	5	2607	G	C6-N1	-5.15	1.35	1.39
36	5	2956	A	C5-C4	-5.15	1.35	1.38
36	1	1385	C	N3-C4	-5.14	1.30	1.33
36	1	1473	G	C5-C4	-5.14	1.34	1.38
36	5	218	G	P-OP2	-5.14	1.40	1.49
36	5	648	C	N1-C6	-5.14	1.34	1.37
36	5	2912	G	N7-C5	-5.14	1.36	1.39
36	5	2918	G	N9-C8	-5.14	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	104	G	N9-C4	-5.14	1.33	1.38
36	1	915	A	N3-C4	-5.14	1.31	1.34
37	3	65	G	N9-C8	-5.14	1.34	1.37
1	6	1007	C	C2-N3	-5.14	1.31	1.35
1	6	1762	A	N7-C5	-5.14	1.36	1.39
36	5	848	A	C5-C6	-5.14	1.36	1.41
36	5	2826	U	C2-N3	-5.14	1.34	1.37
36	5	3017	A	N7-C5	-5.14	1.36	1.39
36	5	3200	G	N3-C4	-5.14	1.31	1.35
59	n3	39	VAL	CB-CG1	-5.14	1.42	1.52
36	1	1150	A	N9-C4	-5.14	1.34	1.37
1	6	1135	U	C2-N3	-5.14	1.34	1.37
36	5	1403	C	N1-C2	-5.14	1.35	1.40
36	5	1429	G	N9-C8	-5.14	1.34	1.37
36	1	89	A	N7-C5	-5.14	1.36	1.39
1	6	1776	A	N9-C4	5.14	1.41	1.37
36	5	1374	G	C6-N1	-5.14	1.35	1.39
36	5	3043	C	C2-N3	-5.14	1.31	1.35
1	2	346	G	N3-C4	-5.14	1.31	1.35
36	1	970	A	C6-N1	-5.14	1.31	1.35
36	5	2667	A	C6-N1	-5.14	1.31	1.35
36	1	1607	U	N3-C4	-5.14	1.33	1.38
36	1	2398	A	C6-N6	-5.14	1.29	1.33
36	1	2706	G	C8-N7	-5.14	1.27	1.30
36	1	3060	C	N1-C6	-5.14	1.34	1.37
36	1	3226	A	N3-C4	-5.14	1.31	1.34
36	5	1344	G	N3-C4	-5.14	1.31	1.35
36	5	2422	C	N3-C4	-5.14	1.30	1.33
36	5	3146	G	C5-C4	-5.14	1.34	1.38
56	n0	166	LYS	CD-CE	5.14	1.64	1.51
36	1	2143	A	N1-C2	-5.13	1.29	1.34
1	6	1133	A	N9-C4	-5.13	1.34	1.37
36	5	1399	A	N3-C4	-5.13	1.31	1.34
36	5	1431	G	C6-N1	-5.13	1.35	1.39
36	5	2636	A	N3-C4	-5.13	1.31	1.34
1	6	552	G	N7-C5	-5.13	1.36	1.39
36	1	107	A	C5-C6	-5.13	1.36	1.41
36	5	2393	G	C5-C6	-5.13	1.37	1.42
36	5	2797	C	N1-C6	-5.13	1.34	1.37
36	5	2926	A	N7-C5	-5.13	1.36	1.39
36	5	3139	A	C5-C4	-5.13	1.35	1.38
36	1	1899	G	N7-C5	-5.13	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	1177	G	N1-C2	-5.13	1.33	1.37
36	5	1913	A	N7-C5	-5.13	1.36	1.39
36	5	2882	U	N3-C4	-5.13	1.33	1.38
36	5	2918	G	C5-C4	-5.13	1.34	1.38
36	5	2959	C	C2-O2	-5.13	1.19	1.24
36	5	3088	G	N9-C8	-5.13	1.34	1.37
36	5	3328	G	C5-C4	-5.13	1.34	1.38
36	1	1103	A	C6-N1	5.12	1.39	1.35
39	L2	219	ILE	CA-CB	-5.12	1.43	1.54
36	1	641	C	P-O5'	-5.12	1.54	1.59
36	1	2969	A	C5-C4	-5.12	1.35	1.38
1	6	407	A	N7-C5	-5.12	1.36	1.39
1	6	1642	G	N9-C4	-5.12	1.33	1.38
36	5	2122	G	C2-N3	-5.12	1.28	1.32
37	7	101	G	N7-C5	-5.12	1.36	1.39
37	3	102	A	C5-C6	-5.12	1.36	1.41
36	5	3108	G	N7-C5	-5.12	1.36	1.39
36	5	1289	G	C5-C4	-5.12	1.34	1.38
36	1	2607	G	N7-C5	-5.12	1.36	1.39
36	5	2282	U	C5'-C4'	-5.12	1.45	1.51
38	4	56	G	C6-N1	-5.12	1.35	1.39
36	5	2197	C	C4-C5	-5.12	1.38	1.43
36	5	2874	G	N9-C4	5.12	1.42	1.38
36	1	615	U	N1-C6	-5.12	1.33	1.38
36	1	1153	A	C5-C6	-5.12	1.36	1.41
36	1	1784	G	N3-C4	-5.12	1.31	1.35
1	6	1271	G	C8-N7	-5.12	1.27	1.30
36	5	596	C	N3-C4	-5.12	1.30	1.33
36	5	2811	A	C6-N1	-5.12	1.31	1.35
36	5	3094	A	N7-C5	-5.12	1.36	1.39
38	8	133	G	N9-C8	-5.12	1.34	1.37
36	1	2386	A	N9-C8	-5.11	1.33	1.37
1	6	1493	A	N9-C4	-5.11	1.34	1.37
36	5	883	A	N9-C4	-5.11	1.34	1.37
36	5	889	U	N1-C6	-5.11	1.33	1.38
36	5	1111	U	C2-N3	-5.11	1.34	1.37
36	5	1320	C	N1-C2	-5.11	1.35	1.40
36	5	1431	G	N7-C5	-5.11	1.36	1.39
36	5	2883	U	N3-C4	-5.11	1.33	1.38
36	5	3017	A	N9-C8	-5.11	1.33	1.37
38	8	9	A	N9-C4	-5.11	1.34	1.37
36	1	3066	U	N1-C2	-5.11	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	100	A	N9-C4	-5.11	1.34	1.37
36	5	2984	C	N1-C6	-5.11	1.34	1.37
36	5	3139	A	N3-C4	-5.11	1.31	1.34
36	1	370	U	N1-C2	-5.11	1.33	1.38
36	1	969	C	N1-C6	-5.11	1.34	1.37
36	1	1313	G	N3-C4	-5.11	1.31	1.35
36	1	2627	C	N3-C4	-5.11	1.30	1.33
36	5	856	G	N7-C5	-5.11	1.36	1.39
36	5	2357	A	N9-C8	-5.11	1.33	1.37
36	5	2983	C	N3-C4	-5.11	1.30	1.33
36	1	2324	A	N7-C5	-5.11	1.36	1.39
1	6	401	A	N7-C5	-5.11	1.36	1.39
36	5	679	U	N3-C4	-5.11	1.33	1.38
36	1	3126	C	N3-C4	-5.11	1.30	1.33
36	5	1128	U	N1-C6	-5.11	1.33	1.38
36	5	1128	U	C2-N3	-5.11	1.34	1.37
36	5	2335	G	C6-N1	-5.11	1.35	1.39
36	1	272	G	N3-C4	-5.11	1.31	1.35
1	6	160	C	N3-C4	-5.11	1.30	1.33
36	5	949	C	N1-C6	-5.11	1.34	1.37
37	7	96	U	N1-C6	-5.11	1.33	1.38
67	o1	75	ILE	CA-CB	-5.11	1.43	1.54
1	6	1457	C	N1-C2	5.10	1.45	1.40
1	2	1133	A	C5-C4	-5.10	1.35	1.38
36	1	719	U	C2-O2	5.10	1.26	1.22
36	1	900	G	N9-C4	-5.10	1.33	1.38
36	1	1752	A	N3-C4	-5.10	1.31	1.34
36	1	2888	U	N1-C2	-5.10	1.33	1.38
36	1	1059	G	C5-C4	-5.10	1.34	1.38
59	N3	4	ASN	CB-CG	5.10	1.62	1.51
36	5	1211	U	C5-C6	-5.10	1.29	1.34
1	2	1032	G	N3-C4	-5.10	1.31	1.35
36	1	943	U	C2-N3	-5.10	1.34	1.37
36	1	2425	G	C5-C4	-5.10	1.34	1.38
36	5	651	G	N1-C2	-5.10	1.33	1.37
36	5	806	A	C5-C4	-5.10	1.35	1.38
36	5	1314	C	N3-C4	-5.10	1.30	1.33
36	1	1197	A	C2-N3	-5.10	1.28	1.33
36	1	2324	A	N3-C4	-5.10	1.31	1.34
36	5	1208	U	N3-C4	-5.10	1.33	1.38
36	5	2679	A	C5-C4	-5.10	1.35	1.38
36	1	370	U	N1-C6	-5.10	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3267	A	N3-C4	-5.10	1.31	1.34
1	6	94	U	N1-C2	-5.10	1.33	1.38
36	5	347	G	P-O5'	-5.10	1.54	1.59
36	5	391	A	C5-C4	-5.10	1.35	1.38
36	5	511	G	N3-C4	-5.10	1.31	1.35
36	5	1193	A	C5-C6	-5.10	1.36	1.41
36	5	1370	G	N9-C4	-5.10	1.33	1.38
36	5	2369	G	N7-C5	-5.10	1.36	1.39
36	5	2857	C	C2-N3	-5.10	1.31	1.35
36	1	656	A	C6-N6	-5.09	1.29	1.33
36	1	2979	U	P-OP2	-5.09	1.40	1.49
36	5	1497	C	N1-C6	-5.09	1.34	1.37
36	5	2649	A	C6-N1	-5.09	1.31	1.35
36	1	2302	G	N3-C4	-5.09	1.31	1.35
36	5	378	A	N3-C4	-5.09	1.31	1.34
37	7	99	G	N3-C4	-5.09	1.31	1.35
36	5	2819	A	C6-N1	-5.09	1.31	1.35
1	2	1291	G	N3-C4	-5.09	1.31	1.35
36	1	626	U	N1-C2	-5.09	1.33	1.38
36	1	2223	A	N3-C4	-5.09	1.31	1.34
36	1	2845	A	N9-C4	5.09	1.41	1.37
36	1	3098	G	N7-C5	-5.09	1.36	1.39
36	1	3138	U	N1-C6	-5.09	1.33	1.38
1	6	998	A	N3-C4	-5.09	1.31	1.34
1	6	1606	C	N1-C6	-5.09	1.34	1.37
36	1	404	G	C5-C6	-5.09	1.37	1.42
36	1	2156	C	C2-N3	-5.09	1.31	1.35
36	5	510	G	N3-C4	-5.09	1.31	1.35
52	m6	54	TYR	CE1-CZ	-5.09	1.31	1.38
1	6	160	C	C4-N4	-5.09	1.29	1.33
36	5	559	A	C5-C6	-5.09	1.36	1.41
36	5	2946	A	C5-C6	-5.09	1.36	1.41
38	4	140	G	C2-N3	-5.08	1.28	1.32
36	5	1856	C	N1-C6	-5.08	1.34	1.37
36	5	2512	C	N1-C6	-5.08	1.34	1.37
69	o3	53	TYR	CD2-CE2	-5.08	1.31	1.39
36	1	587	U	C2-O2	-5.08	1.17	1.22
36	5	1047	A	C5-C6	-5.08	1.36	1.41
36	5	1898	G	N7-C5	5.08	1.42	1.39
36	1	725	G	N9-C8	-5.08	1.34	1.37
36	1	1884	A	N3-C4	-5.08	1.31	1.34
36	1	649	A	C6-N1	-5.08	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	1144	U	C4-C5	-5.08	1.39	1.43
36	1	2312	A	C5-C4	-5.08	1.35	1.38
36	1	2636	A	N7-C5	-5.08	1.36	1.39
36	5	563	U	N1-C6	-5.08	1.33	1.38
36	5	774	G	C5-C6	-5.08	1.37	1.42
36	5	1912	U	N1-C2	-5.08	1.33	1.38
36	5	3075	G	N3-C4	-5.08	1.31	1.35
36	5	3319	U	N1-C2	5.08	1.43	1.38
36	5	393	U	N1-C2	-5.08	1.33	1.38
36	5	515	C	N3-C4	-5.08	1.30	1.33
47	m0	17	TYR	CD2-CE2	5.08	1.47	1.39
36	1	1159	A	C5-C4	-5.08	1.35	1.38
36	1	2333	C	N1-C6	-5.08	1.34	1.37
36	5	948	C	N3-C4	-5.08	1.30	1.33
36	5	1203	A	C4'-C3'	-5.08	1.47	1.52
36	5	1339	C	C2-N3	-5.08	1.31	1.35
36	5	2331	C	N1-C6	-5.08	1.34	1.37
36	5	1391	C	N1-C6	-5.07	1.34	1.37
36	5	2924	U	C4-C5	-5.07	1.39	1.43
36	1	787	G	C6-N1	-5.07	1.35	1.39
36	1	936	A	C6-N6	-5.07	1.29	1.33
36	1	744	A	C5-C6	-5.07	1.36	1.41
36	1	2727	A	C5-C6	5.07	1.45	1.41
36	5	417	A	N9-C4	-5.07	1.34	1.37
36	5	638	C	N1-C6	-5.07	1.34	1.37
36	5	1896	A	P-O5'	-5.07	1.54	1.59
36	5	3223	A	N3-C4	-5.07	1.31	1.34
36	1	820	A	N9-C4	-5.07	1.34	1.37
36	1	1047	A	N3-C4	-5.07	1.31	1.34
36	1	1136	A	N9-C8	-5.07	1.33	1.37
36	1	1308	A	C6-N6	5.07	1.38	1.33
36	1	2954	U	C4-C5	5.07	1.48	1.43
1	6	1139	A	C5-C4	-5.07	1.35	1.38
36	5	1485	G	C6-N1	-5.07	1.36	1.39
36	5	3012	A	C8-N7	-5.07	1.28	1.31
36	1	792	G	N3-C4	-5.07	1.31	1.35
36	1	1143	A	C5-C6	-5.07	1.36	1.41
38	4	4	C	N3-C4	-5.07	1.30	1.33
38	4	99	C	N1-C6	-5.07	1.34	1.37
36	5	904	A	N3-C4	-5.07	1.31	1.34
36	5	2656	A	N3-C4	-5.07	1.31	1.34
36	5	3047	U	N1-C6	-5.07	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
37	7	89	G	C2-N3	-5.07	1.28	1.32
40	l3	92	TYR	CE1-CZ	-5.07	1.31	1.38
1	6	109	G	N9-C4	-5.07	1.33	1.38
1	6	1681	A	N9-C4	-5.07	1.34	1.37
36	5	941	G	N7-C5	-5.07	1.36	1.39
36	5	2855	U	N1-C6	-5.07	1.33	1.38
56	n0	78	TRP	CE3-CZ3	-5.07	1.29	1.38
1	2	1299	G	C2-N3	5.06	1.36	1.32
36	1	2796	G	C2-N2	-5.06	1.29	1.34
1	6	1171	A	C6-N1	-5.06	1.32	1.35
1	6	1794	A	N9-C4	-5.06	1.34	1.37
36	5	942	U	N1-C6	-5.06	1.33	1.38
36	5	1320	C	N3-C4	-5.06	1.30	1.33
36	1	317	A	C6-N6	-5.06	1.29	1.33
36	1	815	G	N9-C8	-5.06	1.34	1.37
36	1	2937	G	C2-N3	-5.06	1.28	1.32
1	6	544	A	N9-C4	5.06	1.40	1.37
1	6	1137	A	C1'-N9	-5.06	1.39	1.46
36	1	2123	G	C5-C4	-5.06	1.34	1.38
36	5	1134	G	C2-N3	-5.06	1.28	1.32
36	5	3016	A	N9-C4	-5.06	1.34	1.37
36	5	3211	C	N1-C2	-5.06	1.35	1.40
68	o2	76	VAL	CB-CG1	-5.06	1.42	1.52
1	2	337	G	N3-C4	-5.06	1.31	1.35
36	1	680	G	C2-N3	-5.06	1.28	1.32
36	1	2368	A	N9-C4	5.06	1.40	1.37
38	4	20	U	C2-O2	-5.06	1.17	1.22
1	6	1753	A	C2'-C1'	5.06	1.58	1.53
36	5	39	A	N3-C4	-5.06	1.31	1.34
36	5	519	A	N3-C4	-5.06	1.31	1.34
36	5	1127	G	C2-N3	5.06	1.36	1.32
36	5	1404	G	C5-C6	-5.06	1.37	1.42
36	1	1522	U	N1-C6	-5.06	1.33	1.38
36	5	940	G	N1-C2	-5.06	1.33	1.37
36	5	1047	A	C6-N6	-5.06	1.29	1.33
36	5	2941	A	C6-N1	-5.06	1.32	1.35
36	1	2962	U	C2-N3	-5.06	1.34	1.37
1	6	29	U	C2-N3	-5.06	1.34	1.37
36	5	2948	C	N3-C4	-5.06	1.30	1.33
36	1	1134	G	C5-C4	-5.05	1.34	1.38
36	5	927	C	C2-O2	-5.05	1.20	1.24
48	m1	18	VAL	CA-CB	-5.05	1.44	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	2	555	A	N9-C4	5.05	1.40	1.37
44	17	78	GLU	CB-CG	5.05	1.61	1.52
36	1	1524	A	C5-C6	5.05	1.45	1.41
36	1	2702	A	N9-C8	-5.05	1.33	1.37
1	6	352	A	N3-C4	-5.05	1.31	1.34
36	5	585	A	C6-N1	-5.05	1.32	1.35
36	5	1001	G	N7-C5	5.05	1.42	1.39
36	5	1197	A	C5-C6	-5.05	1.36	1.41
36	5	2840	C	N1-C6	-5.05	1.34	1.37
36	5	2907	G	C6-N1	-5.05	1.36	1.39
36	5	2938	G	C5-C6	-5.05	1.37	1.42
36	1	2698	G	C5-C4	-5.05	1.34	1.38
53	M7	46	LYS	CD-CE	5.05	1.63	1.51
36	5	284	A	N3-C4	-5.05	1.31	1.34
36	5	349	A	C5-C4	-5.05	1.35	1.38
36	5	1141	C	P-O5'	-5.05	1.54	1.59
36	5	1290	A	C6-N1	-5.05	1.32	1.35
36	5	2163	C	N3-C4	-5.05	1.30	1.33
36	5	2295	A	C5-C4	-5.05	1.35	1.38
36	5	2320	A	N9-C8	-5.05	1.33	1.37
36	5	2364	G	C5-C4	-5.05	1.34	1.38
36	5	2942	C	C4-C5	5.05	1.47	1.43
37	7	68	C	N3-C4	-5.05	1.30	1.33
36	1	1116	G	N9-C8	-5.05	1.34	1.37
36	1	2818	U	N1-C2	-5.05	1.34	1.38
1	6	55	A	N9-C4	-5.05	1.34	1.37
1	6	1118	G	C2-N3	-5.05	1.28	1.32
1	6	1787	C	C2-O2	-5.05	1.20	1.24
36	5	755	A	C6-N1	-5.05	1.32	1.35
36	5	1892	G	N3-C4	-5.05	1.31	1.35
36	5	3143	C	C2-N3	5.05	1.39	1.35
41	14	117	GLU	CG-CD	5.05	1.59	1.51
36	1	583	G	N9-C8	-5.04	1.34	1.37
1	6	968	U	C2-N3	-5.04	1.34	1.37
36	5	2116	G	C2-N3	-5.04	1.28	1.32
36	1	2236	G	C8-N7	-5.04	1.27	1.30
1	6	1147	A	C6-N1	-5.04	1.32	1.35
25	d3	125	VAL	CA-CB	-5.04	1.44	1.54
36	5	648	C	N3-C4	-5.04	1.30	1.33
36	5	1156	C	C4-C5	-5.04	1.39	1.43
36	5	2863	G	C2-N3	-5.04	1.28	1.32
36	1	808	A	N7-C5	-5.04	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	3045	G	C6-O6	-5.04	1.19	1.24
36	5	1317	A	C5-C6	-5.04	1.36	1.41
1	6	407	A	C5-C4	-5.04	1.35	1.38
36	5	1413	G	N9-C8	-5.04	1.34	1.37
36	5	1451	C	N1-C6	-5.04	1.34	1.37
36	1	2891	U	N1-C6	-5.04	1.33	1.38
36	1	3005	A	N9-C4	-5.04	1.34	1.37
36	1	3267	A	N7-C5	-5.04	1.36	1.39
38	8	102	U	C2-N3	-5.04	1.34	1.37
46	19	153	ASP	CB-CG	5.04	1.62	1.51
36	1	824	C	N1-C6	-5.04	1.34	1.37
36	5	1141	C	C4-C5	-5.04	1.39	1.43
36	1	2209	U	C2-N3	5.04	1.41	1.37
36	1	2980	U	N1-C2	-5.04	1.34	1.38
36	5	1202	A	C5-C6	-5.04	1.36	1.41
36	5	1473	G	C5-C4	-5.04	1.34	1.38
36	5	2276	G	N9-C4	-5.04	1.33	1.38
36	5	2318	U	N1-C2	-5.04	1.34	1.38
37	7	37	G	N3-C4	5.04	1.39	1.35
57	n1	63	VAL	CB-CG2	-5.04	1.42	1.52
36	1	1906	G	N3-C4	-5.03	1.31	1.35
36	1	2764	C	N1-C2	-5.03	1.35	1.40
1	6	1569	A	N7-C5	-5.03	1.36	1.39
36	5	2394	G	N3-C4	-5.03	1.31	1.35
36	5	2643	A	P-O5'	-5.03	1.54	1.59
36	5	2869	U	N3-C4	-5.03	1.33	1.38
36	1	935	U	C2-N3	-5.03	1.34	1.37
36	1	3318	G	N7-C5	-5.03	1.36	1.39
1	6	1136	U	N1-C2	-5.03	1.34	1.38
36	1	968	G	C2-N3	5.03	1.36	1.32
36	1	1604	G	N9-C4	5.03	1.42	1.38
1	6	1128	C	N3-C4	-5.03	1.30	1.33
36	5	437	G	O3'-P	5.03	1.67	1.61
36	5	900	G	C5-C4	-5.03	1.34	1.38
54	m8	74	GLU	CG-CD	5.03	1.59	1.51
36	1	983	A	N3-C4	-5.03	1.31	1.34
36	5	1891	A	C5-C4	-5.03	1.35	1.38
1	2	1555	A	N3-C4	-5.03	1.31	1.34
4	S2	232	GLU	CB-CG	5.03	1.61	1.52
36	1	880	G	N9-C8	-5.03	1.34	1.37
36	1	953	G	N9-C4	-5.03	1.33	1.38
36	1	1177	G	N1-C2	-5.03	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	1	2135	U	C2-N3	-5.03	1.34	1.37
1	6	558	U	C2-N3	5.03	1.41	1.37
36	5	2311	G	N9-C4	-5.03	1.33	1.38
36	5	2880	U	O3'-P	-5.03	1.55	1.61
37	7	118	A	N3-C4	-5.03	1.31	1.34
38	8	4	C	C2-O2	-5.03	1.20	1.24
36	1	2113	A	C5-C6	5.03	1.45	1.41
1	6	1658	G	C2-N3	-5.03	1.28	1.32
37	7	61	G	C6-N1	-5.03	1.36	1.39
36	1	2785	A	C6-N1	-5.02	1.32	1.35
36	5	1923	C	C4-C5	-5.02	1.39	1.43
36	1	2850	G	C6-N1	-5.02	1.36	1.39
68	O2	41	VAL	CA-CB	-5.02	1.44	1.54
36	5	585	A	N9-C4	-5.02	1.34	1.37
36	5	2239	G	C2-N3	-5.02	1.28	1.32
36	5	2399	A	C6-N6	-5.02	1.29	1.33
36	5	3322	A	N7-C5	-5.02	1.36	1.39
36	1	505	G	N9-C4	-5.02	1.33	1.38
36	1	625	G	N3-C4	-5.02	1.31	1.35
36	1	652	G	C6-N1	-5.02	1.36	1.39
36	1	860	G	N9-C8	-5.02	1.34	1.37
36	1	2804	A	C5-C4	-5.02	1.35	1.38
36	1	3379	C	N1-C6	-5.02	1.34	1.37
36	1	1119	C	N1-C6	-5.02	1.34	1.37
1	6	160	C	C2-N3	-5.02	1.31	1.35
36	5	417	A	C5-C4	-5.02	1.35	1.38
36	5	754	G	C6-N1	-5.02	1.36	1.39
36	5	798	G	C5-C6	-5.02	1.37	1.42
36	5	3025	C	C2-N3	-5.02	1.31	1.35
36	1	2321	A	N3-C4	-5.02	1.31	1.34
36	1	3129	A	N9-C4	-5.02	1.34	1.37
36	5	876	A	C6-N6	-5.02	1.29	1.33
36	5	1190	A	N7-C5	-5.02	1.36	1.39
40	l3	5	LYS	CD-CE	5.02	1.63	1.51
1	2	47	A	N3-C4	-5.02	1.31	1.34
36	1	1204	A	N3-C4	-5.02	1.31	1.34
36	1	2924	U	C2-O2	-5.02	1.17	1.22
36	5	1914	G	N3-C4	-5.02	1.31	1.35
36	1	649	A	N9-C8	-5.01	1.33	1.37
1	6	760	A	N9-C4	-5.01	1.34	1.37
38	4	104	A	C6-N1	-5.01	1.32	1.35
71	O5	64	GLU	CB-CG	5.01	1.61	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
36	5	2696	A	N3-C4	-5.01	1.31	1.34
37	7	22	A	N3-C4	-5.01	1.31	1.34
36	1	1362	G	C5-C4	-5.01	1.34	1.38
36	1	2663	G	C5-C4	-5.01	1.34	1.38
36	1	3012	A	C5-C4	-5.01	1.35	1.38
36	5	283	G	C6-N1	-5.01	1.36	1.39
36	5	1064	A	N7-C5	-5.01	1.36	1.39
36	5	2131	A	C5-C4	-5.01	1.35	1.38
36	5	2607	G	C5-C6	-5.01	1.37	1.42
36	1	1313	G	C6-O6	-5.01	1.19	1.24
36	1	1905	G	C2-N3	-5.01	1.28	1.32
36	1	2201	G	C5-C4	-5.01	1.34	1.38
36	1	2613	U	N1-C6	-5.01	1.33	1.38
36	1	2923	U	N1-C2	-5.01	1.34	1.38
36	5	1446	A	N9-C8	-5.01	1.33	1.37
36	5	2270	A	C5-C6	-5.01	1.36	1.41
36	5	2392	C	N1-C2	-5.01	1.35	1.40
36	5	3189	G	C8-N7	-5.01	1.27	1.30
36	5	3320	A	N7-C5	-5.01	1.36	1.39
1	2	1761	U	N3-C4	-5.01	1.33	1.38
36	5	511	G	C8-N7	-5.01	1.27	1.30
36	1	648	C	N3-C4	-5.01	1.30	1.33
36	1	1050	U	C5'-C4'	-5.01	1.45	1.51
36	1	3207	U	C4-C5	5.01	1.48	1.43
1	6	1732	A	N7-C5	-5.01	1.36	1.39
36	5	356	C	N3-C4	-5.01	1.30	1.33
36	5	914	A	N9-C4	-5.01	1.34	1.37
1	2	367	A	N3-C4	-5.00	1.31	1.34
1	6	971	A	C5-C6	-5.00	1.36	1.41
36	5	3048	A	N3-C4	-5.00	1.31	1.34
36	1	2300	G	N3-C4	-5.00	1.31	1.35
36	5	650	C	C4-N4	-5.00	1.29	1.33
36	5	1136	A	N9-C4	-5.00	1.34	1.37
36	5	2370	G	C5-C4	-5.00	1.34	1.38
36	1	3227	A	N7-C5	-5.00	1.36	1.39
36	5	1915	A	N7-C5	-5.00	1.36	1.39
36	5	3223	A	C6-N1	-5.00	1.32	1.35

All (22469) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1152	G	N3-C4-N9	-25.15	110.91	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	44	C	C6-N1-C2	24.27	130.01	120.30
36	5	648	C	N3-C4-C5	-23.62	112.45	121.90
36	5	884	A	N1-C6-N6	23.07	132.44	118.60
38	4	94	C	C6-N1-C2	22.99	129.50	120.30
36	5	1897	G	N1-C6-O6	21.43	132.75	119.90
36	1	2831	G	N1-C6-O6	21.37	132.72	119.90
36	5	424	G	C5-C6-O6	-21.05	115.97	128.60
36	5	1152	G	N3-C4-C5	20.71	138.95	128.60
36	5	3196	U	O5'-P-OP2	-20.22	86.43	110.70
36	5	1589	A	N1-C6-N6	19.86	130.52	118.60
36	5	40	A	O5'-P-OP1	-19.50	87.30	110.70
36	1	1308	A	O5'-P-OP2	-19.14	87.73	110.70
36	1	2726	C	N3-C4-N4	-19.14	104.60	118.00
36	5	1303	A	C5-C6-N6	-18.88	108.60	123.70
36	5	1115	G	C5-C6-O6	-18.78	117.33	128.60
36	5	1179	A	O5'-P-OP1	-18.71	88.25	110.70
37	7	49	G	N1-C6-O6	18.44	130.96	119.90
36	1	211	A	O5'-P-OP1	-18.36	88.67	110.70
36	1	3217	C	C2-N1-C1'	18.32	138.95	118.80
36	5	1149	G	N1-C6-O6	18.22	130.83	119.90
36	1	2811	A	C6-N1-C2	-18.10	107.74	118.60
36	5	632	G	O5'-P-OP2	-18.10	88.97	110.70
36	5	1897	G	C5-C6-O6	-18.09	117.75	128.60
36	5	3115	C	N1-C2-O2	-18.09	108.05	118.90
36	5	1556	C	N1-C2-O2	17.99	129.69	118.90
1	6	1579	U	O5'-P-OP1	-17.98	89.12	110.70
36	5	1115	G	N3-C4-N9	17.90	136.74	126.00
36	5	2140	U	O5'-P-OP2	-17.80	89.34	110.70
38	4	20	U	O5'-P-OP2	-17.77	89.38	110.70
36	1	2726	C	C5-C4-N4	17.72	132.61	120.20
36	5	648	C	C5-C4-N4	17.55	132.48	120.20
37	7	89	G	C5-C6-N1	-17.51	102.75	111.50
1	6	1137	A	C8-N9-C4	17.43	112.77	105.80
36	5	2937	G	O5'-P-OP2	-17.38	89.84	110.70
36	5	661	G	O5'-P-OP1	-17.38	89.85	110.70
36	1	2305	G	N1-C6-O6	-17.35	109.49	119.90
1	6	1131	A	N1-C6-N6	17.29	128.98	118.60
36	1	583	G	N1-C6-O6	-17.27	109.54	119.90
36	5	218	G	O5'-P-OP2	-17.26	89.99	110.70
36	1	1307	G	O5'-P-OP1	-17.23	90.03	110.70
36	5	1407	A	O5'-P-OP2	-17.21	90.05	110.70
36	5	3245	A	N1-C6-N6	17.18	128.91	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2315	G	O5'-P-OP1	-17.14	90.13	110.70
36	5	1303	A	N1-C6-N6	17.09	128.85	118.60
36	1	2963	C	C6-N1-C2	-16.99	113.50	120.30
36	1	2871	G	O5'-P-OP2	-16.91	90.41	110.70
36	1	2953	U	N3-C4-C5	-16.86	104.49	114.60
36	1	101	G	N1-C6-O6	16.83	130.00	119.90
36	1	2353	G	N1-C6-O6	16.77	129.96	119.90
38	4	26	U	C6-N1-C2	-16.72	110.97	121.00
37	7	89	G	N1-C6-O6	16.67	129.90	119.90
1	6	163	G	N3-C4-N9	-16.51	116.09	126.00
36	1	2941	A	O5'-P-OP2	-16.51	90.84	105.70
36	1	1371	G	O5'-P-OP2	-16.46	90.89	105.70
36	1	2811	A	N1-C2-N3	16.45	137.52	129.30
38	4	26	U	N3-C4-C5	-16.43	104.74	114.60
1	6	385	A	O5'-P-OP2	-16.37	90.97	105.70
36	5	1852	G	C5-C6-O6	-16.32	118.81	128.60
36	5	2199	G	N1-C6-O6	16.31	129.69	119.90
36	1	2942	C	C5-C6-N1	16.26	129.13	121.00
36	5	2689	A	C8-N9-C4	-16.25	99.30	105.80
36	1	2871	G	C4-C5-N7	16.15	117.26	110.80
36	5	2212	C	N1-C2-O2	16.11	128.57	118.90
36	1	1905	G	N3-C4-N9	-16.11	116.34	126.00
36	1	959	C	C6-N1-C2	16.09	126.74	120.30
36	5	2936	A	C6-N1-C2	-16.08	108.95	118.60
36	1	2623	G	N1-C6-O6	16.07	129.54	119.90
36	5	961	C	O5'-P-OP1	-16.02	91.28	105.70
36	5	884	A	C5-C6-N6	-16.02	110.89	123.70
36	5	1115	G	C6-C5-N7	-15.99	120.81	130.40
36	1	1542	G	C4-C5-N7	15.95	117.18	110.80
36	5	437	G	C8-N9-C4	-15.94	100.03	106.40
36	5	994	G	N9-C4-C5	-15.93	99.03	105.40
36	1	639	G	C2-N3-C4	-15.77	104.01	111.90
36	5	1330	A	C2-N3-C4	-15.72	102.74	110.60
36	5	3032	A	N1-C6-N6	-15.71	109.17	118.60
36	5	1373	A	N1-C6-N6	15.70	128.02	118.60
36	5	695	C	C6-N1-C2	15.64	126.56	120.30
36	1	1386	A	N1-C6-N6	-15.63	109.22	118.60
36	5	2353	G	C4-C5-N7	15.61	117.04	110.80
36	1	964	G	C5-C6-O6	-15.53	119.28	128.60
36	5	1321	G	N1-C6-O6	15.49	129.19	119.90
36	5	578	A	N1-C6-N6	-15.47	109.32	118.60
36	5	1303	A	C4-C5-N7	15.43	118.42	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1208	U	C5-C4-O4	15.41	135.15	125.90
36	1	2625	C	C6-N1-C2	15.40	126.46	120.30
36	5	994	G	C5-C6-O6	-15.31	119.41	128.60
36	1	979	U	C6-N1-C2	-15.28	111.83	121.00
36	5	2620	G	C5-C6-O6	15.25	137.75	128.60
36	1	2727	A	N9-C4-C5	15.23	111.89	105.80
36	1	1000	C	C6-N1-C2	15.19	126.38	120.30
37	3	88	G	N1-C6-O6	-15.19	110.78	119.90
36	5	1115	G	N9-C4-C5	-15.19	99.33	105.40
36	1	2726	C	C6-N1-C2	-15.18	114.23	120.30
36	1	2939	G	C4-C5-N7	-15.18	104.73	110.80
36	5	3146	G	N1-C6-O6	15.18	129.00	119.90
36	5	2803	A	O5'-P-OP2	-15.17	92.05	105.70
36	1	3325	G	C8-N9-C4	15.16	112.47	106.40
36	5	1151	U	C5-C6-N1	15.14	130.27	122.70
36	5	3146	G	C5-C6-O6	-15.12	119.53	128.60
36	1	1392	G	N1-C6-O6	-15.12	110.83	119.90
36	5	3144	G	O5'-P-OP1	-15.12	92.09	105.70
1	6	1778	G	C4-C5-N7	15.10	116.84	110.80
36	5	1897	G	C6-C5-N7	-15.08	121.35	130.40
36	1	608	A	N1-C6-N6	15.06	127.64	118.60
36	1	2379	U	O5'-P-OP2	-15.04	92.17	105.70
36	5	1604	G	N1-C6-O6	-15.04	110.88	119.90
36	5	1556	C	N3-C2-O2	-15.02	111.39	121.90
1	2	73	U	O4'-C1'-N1	14.96	120.17	108.20
36	5	330	G	C8-N9-C4	14.95	112.38	106.40
36	5	971	G	N1-C6-O6	-14.93	110.94	119.90
36	1	2609	A	O5'-P-OP2	-14.92	92.28	105.70
36	5	2638	C	C6-N1-C2	-14.91	114.34	120.30
36	5	2821	C	N1-C2-O2	14.90	127.84	118.90
36	1	1178	G	N3-C4-N9	14.89	134.94	126.00
36	5	884	A	N9-C4-C5	-14.88	99.85	105.80
36	5	1000	C	C6-N1-C2	14.88	126.25	120.30
36	5	1152	G	C2-N3-C4	-14.86	104.47	111.90
38	8	20	U	O5'-P-OP2	-14.86	92.33	105.70
36	5	2715	A	N9-C4-C5	14.85	111.74	105.80
36	5	994	G	C4-C5-N7	14.81	116.72	110.80
36	5	3245	A	C2-N3-C4	-14.80	103.20	110.60
36	5	1129	A	N1-C6-N6	14.79	127.48	118.60
36	5	2943	G	N1-C6-O6	14.78	128.77	119.90
36	5	437	G	N3-C4-C5	-14.77	121.22	128.60
36	1	2930	A	O5'-P-OP2	-14.76	92.42	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1211	U	C6-N1-C2	14.75	129.85	121.00
1	6	1778	G	C5-C6-O6	-14.68	119.79	128.60
36	5	2715	A	N1-C6-N6	-14.68	109.79	118.60
36	5	1295	G	C4-C5-N7	14.68	116.67	110.80
36	5	1589	A	C5-C6-N6	-14.66	111.97	123.70
36	1	1435	A	C8-N9-C4	-14.65	99.94	105.80
36	5	1151	U	C6-N1-C2	-14.65	112.21	121.00
1	6	1463	C	C6-N1-C2	14.64	126.16	120.30
36	1	917	A	N1-C6-N6	-14.64	109.82	118.60
36	5	1116	G	O5'-P-OP1	-14.62	92.54	105.70
36	5	2139	A	N1-C2-N3	14.62	136.61	129.30
36	5	1127	G	N3-C4-C5	-14.62	121.29	128.60
1	6	1731	A	O5'-P-OP2	-14.61	92.55	105.70
1	6	1131	A	C5-C6-N6	-14.60	112.02	123.70
36	1	2618	G	N1-C6-O6	-14.59	111.14	119.90
36	5	3096	C	C6-N1-C2	-14.56	114.48	120.30
38	8	38	U	N3-C2-O2	-14.55	112.01	122.20
36	5	818	C	C6-N1-C2	14.53	126.11	120.30
36	1	2374	C	N1-C2-O2	14.52	127.61	118.90
36	5	1115	G	N1-C6-O6	14.51	128.61	119.90
36	5	1149	G	C6-C5-N7	-14.48	121.71	130.40
36	1	2981	U	N3-C2-O2	-14.46	112.08	122.20
1	6	360	A	O5'-P-OP2	-14.44	92.70	105.70
36	1	1508	C	C6-N1-C2	-14.42	114.53	120.30
37	7	49	G	C6-C5-N7	-14.41	121.76	130.40
1	2	1195	C	N3-C2-O2	-14.39	111.83	121.90
36	5	363	G	C5-C6-O6	-14.37	119.98	128.60
1	2	1280	C	C6-N1-C2	-14.36	114.56	120.30
36	1	206	G	C8-N9-C4	14.34	112.14	106.40
36	5	101	G	O5'-P-OP2	-14.33	92.80	105.70
36	1	651	G	N3-C4-N9	14.32	134.59	126.00
36	1	3181	C	C5-C4-N4	14.32	130.23	120.20
1	6	1535	U	N3-C2-O2	-14.30	112.19	122.20
36	1	92	G	N1-C6-O6	14.30	128.48	119.90
36	5	2334	U	N3-C2-O2	-14.30	112.19	122.20
36	5	2945	G	C8-N9-C4	-14.28	100.69	106.40
36	1	3217	C	N3-C2-O2	-14.27	111.91	121.90
38	4	27	U	O5'-P-OP1	-14.25	92.88	105.70
36	1	2939	G	N3-C4-C5	-14.23	121.48	128.60
1	6	1644	C	N3-C2-O2	-14.23	111.94	121.90
36	1	2639	G	N3-C2-N2	-14.22	109.94	119.90
36	5	1897	G	C4-C5-N7	14.22	116.49	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2617	U	C4-C5-C6	14.21	128.23	119.70
36	5	2689	A	N1-C2-N3	14.21	136.41	129.30
36	5	2875	U	C4-C5-C6	14.21	128.23	119.70
36	5	1151	U	N3-C4-C5	-14.21	106.08	114.60
1	6	1108	G	C8-N9-C4	-14.19	100.72	106.40
36	1	423	A	C6-N1-C2	-14.16	110.11	118.60
36	1	1298	C	O5'-P-OP1	-14.15	92.97	105.70
36	1	1594	A	N1-C6-N6	-14.14	110.11	118.60
36	5	2312	A	N1-C6-N6	-14.14	110.11	118.60
36	5	1165	A	C8-N9-C4	-14.12	100.15	105.80
36	1	2871	G	C5-C6-O6	-14.11	120.13	128.60
36	5	1054	A	C8-N9-C4	14.09	111.44	105.80
36	5	2340	U	O5'-P-OP1	-14.09	93.02	105.70
36	5	2615	G	C5-C6-O6	-14.07	120.16	128.60
36	5	2954	U	O5'-P-OP1	-14.07	93.04	105.70
36	5	64	G	C6-C5-N7	-14.06	121.96	130.40
36	1	421	G	N1-C6-O6	-14.05	111.47	119.90
36	5	82	C	C6-N1-C2	14.02	125.91	120.30
36	1	2871	G	C5-N7-C8	-13.99	97.30	104.30
36	5	2275	A	C8-N9-C4	-13.98	100.21	105.80
38	4	18	U	O5'-P-OP1	-13.96	93.13	105.70
36	1	2409	G	C8-N9-C1'	-13.94	108.88	127.00
36	1	644	G	C5-C6-O6	13.93	136.96	128.60
36	1	2622	C	C6-N1-C2	-13.93	114.73	120.30
36	5	2703	A	C4-C5-C6	13.92	123.96	117.00
36	1	2280	A	O5'-P-OP2	13.91	127.40	110.70
36	5	2851	A	N1-C6-N6	-13.91	110.25	118.60
1	6	1753	A	N3-C4-C5	-13.91	117.06	126.80
36	1	1132	C	O5'-P-OP1	-13.90	93.19	105.70
36	5	2689	A	N1-C6-N6	-13.89	110.27	118.60
36	1	2726	C	N3-C2-O2	-13.89	112.18	121.90
36	1	366	A	C8-N9-C4	-13.88	100.25	105.80
36	5	3014	U	O5'-P-OP2	-13.87	93.22	105.70
36	1	2136	C	N3-C4-C5	-13.86	116.36	121.90
36	5	2902	A	N1-C2-N3	13.86	136.23	129.30
36	1	2727	A	N1-C6-N6	-13.86	110.28	118.60
36	5	366	A	C2-N3-C4	-13.85	103.67	110.60
36	5	424	G	N1-C6-O6	13.85	128.21	119.90
36	1	2394	G	C4-C5-N7	-13.83	105.27	110.80
36	5	884	A	C6-C5-N7	-13.81	122.63	132.30
36	5	2139	A	N1-C6-N6	-13.78	110.33	118.60
1	6	1732	A	C2-N3-C4	-13.78	103.71	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2202	C	C6-N1-C2	-13.77	114.79	120.30
36	1	1340	G	C5-C6-O6	-13.75	120.35	128.60
36	5	2816	G	N3-C4-C5	13.74	135.47	128.60
36	1	806	A	C2-N3-C4	-13.74	103.73	110.60
36	1	1178	G	N3-C4-C5	-13.74	121.73	128.60
37	7	101	G	N1-C6-O6	13.73	128.13	119.90
1	6	1742	U	O5'-P-OP2	-13.70	93.37	105.70
36	1	1406	A	N1-C6-N6	13.69	126.82	118.60
37	3	98	C	C5-C6-N1	-13.69	114.15	121.00
36	5	2689	A	N9-C4-C5	13.68	111.27	105.80
36	1	2869	U	N3-C2-O2	13.66	131.76	122.20
36	1	1111	U	C5-C6-N1	-13.66	115.87	122.70
36	5	1310	G	C5-C6-O6	-13.66	120.41	128.60
36	5	1296	C	C6-N1-C2	-13.65	114.84	120.30
37	7	84	A	C8-N9-C4	-13.65	100.34	105.80
36	5	2615	G	N1-C6-O6	13.65	128.09	119.90
36	1	40	A	N1-C6-N6	-13.63	110.42	118.60
36	5	2970	C	O5'-P-OP1	-13.62	93.44	105.70
36	1	2371	G	O5'-P-OP2	-13.62	93.44	105.70
36	5	3085	G	N1-C6-O6	-13.62	111.73	119.90
36	5	867	G	N1-C6-O6	13.61	128.07	119.90
36	5	3245	A	C5-N7-C8	-13.57	97.11	103.90
36	1	3277	U	N3-C2-O2	-13.56	112.71	122.20
36	1	2385	G	C5-C6-O6	-13.54	120.47	128.60
36	5	1156	C	C6-N1-C2	-13.52	114.89	120.30
36	5	1115	G	C4-C5-N7	13.52	116.21	110.80
36	1	645	A	C5-C6-N1	13.51	124.46	117.70
36	5	2940	A	C8-N9-C4	-13.51	100.40	105.80
1	6	1730	A	N1-C6-N6	-13.50	110.50	118.60
36	1	3092	C	C6-N1-C2	13.49	125.70	120.30
36	5	1303	A	N9-C4-C5	-13.49	100.40	105.80
1	6	1467	C	C6-N1-C2	-13.49	114.91	120.30
36	5	1896	A	N1-C6-N6	-13.49	110.51	118.60
1	6	1572	G	N1-C6-O6	13.48	127.99	119.90
1	6	1112	G	N1-C6-O6	-13.48	111.81	119.90
36	1	2363	A	N9-C4-C5	13.47	111.19	105.80
36	5	2416	U	O5'-P-OP2	-13.47	93.58	105.70
36	1	780	A	N9-C4-C5	13.45	111.18	105.80
36	1	2168	A	N1-C6-N6	-13.44	110.54	118.60
37	7	93	C	C6-N1-C2	-13.43	114.93	120.30
36	5	2278	C	N1-C2-O2	13.42	126.95	118.90
36	5	3245	A	C5-C6-N1	-13.42	110.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	101	G	C4-C5-N7	13.40	116.16	110.80
36	1	2356	A	C5-N7-C8	-13.40	97.20	103.90
36	5	2393	G	C6-C5-N7	-13.40	122.36	130.40
36	1	635	G	C5-C6-O6	-13.38	120.57	128.60
36	5	2298	U	N1-C2-O2	13.38	132.17	122.80
36	1	3217	C	C6-N1-C1'	-13.38	104.75	120.80
1	6	1457	C	N1-C2-O2	13.38	126.93	118.90
1	2	310	C	C6-N1-C2	-13.35	114.96	120.30
36	5	924	G	O5'-P-OP1	-13.35	93.68	105.70
36	5	1152	G	C8-N9-C1'	13.33	144.33	127.00
36	5	339	C	C6-N1-C2	13.33	125.63	120.30
36	5	2400	G	N3-C4-N9	-13.33	118.00	126.00
36	5	2393	G	C4-C5-N7	13.32	116.13	110.80
1	6	1463	C	N3-C4-C5	13.31	127.23	121.90
36	1	892	U	O5'-P-OP1	13.31	126.67	110.70
36	5	669	U	N1-C2-O2	13.30	132.11	122.80
36	1	2399	A	C5-C6-N6	-13.30	113.06	123.70
1	2	1195	C	N1-C2-O2	13.29	126.87	118.90
36	5	1327	C	O5'-P-OP2	-13.28	93.75	105.70
36	5	1901	A	C5-C6-N1	13.28	124.34	117.70
36	5	3200	G	C5-C6-N1	-13.27	104.86	111.50
36	1	1542	G	N1-C6-O6	13.27	127.86	119.90
36	1	2930	A	C5-C6-N6	-13.26	113.09	123.70
36	5	1589	A	C6-C5-N7	-13.26	123.02	132.30
36	1	1392	G	C4-C5-N7	-13.26	105.50	110.80
37	7	45	A	N1-C6-N6	-13.24	110.66	118.60
36	1	2241	U	C5-C4-O4	13.22	133.83	125.90
36	5	2353	G	C5-N7-C8	-13.21	97.70	104.30
36	1	146	U	N3-C2-O2	-13.19	112.97	122.20
36	1	942	U	N3-C4-C5	-13.18	106.69	114.60
36	1	651	G	N9-C4-C5	-13.16	100.14	105.40
1	2	1096	C	N1-C2-O2	13.15	126.79	118.90
36	1	435	C	C6-N1-C2	13.15	125.56	120.30
36	1	2605	G	C2-N3-C4	-13.15	105.32	111.90
36	1	2617	U	N1-C2-N3	13.15	122.79	114.90
36	1	1103	A	O5'-P-OP1	-13.14	93.87	105.70
36	5	2137	U	O5'-P-OP1	-13.10	93.91	105.70
36	5	2139	A	N9-C4-C5	13.10	111.04	105.80
36	5	2212	C	N3-C2-O2	-13.10	112.73	121.90
36	1	1305	U	N1-C2-N3	13.09	122.76	114.90
36	1	3179	U	O5'-P-OP1	-13.09	93.92	105.70
36	5	942	U	N3-C4-C5	-13.09	106.75	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2356	A	N7-C8-N9	13.08	120.34	113.80
36	1	633	C	C6-N1-C2	-13.08	115.07	120.30
36	5	1330	A	C8-N9-C4	13.08	111.03	105.80
36	1	2631	U	N3-C2-O2	-13.07	113.05	122.20
36	5	940	G	C5-C6-N1	13.04	118.02	111.50
37	7	92	A	N1-C6-N6	13.03	126.42	118.60
36	1	1129	A	C8-N9-C4	-13.02	100.59	105.80
36	1	697	A	C8-N9-C4	13.02	111.01	105.80
1	6	1131	A	C4-C5-N7	13.01	117.20	110.70
36	5	2329	C	C6-N1-C2	13.01	125.50	120.30
36	5	2383	C	C6-N1-C2	-13.00	115.10	120.30
1	6	160	C	N3-C4-C5	13.00	127.10	121.90
36	1	635	G	C4-C5-N7	13.00	116.00	110.80
36	1	2353	G	C6-C5-N7	-12.99	122.60	130.40
36	5	578	A	N9-C4-C5	12.97	110.99	105.80
36	5	2943	G	C6-C5-N7	-12.96	122.62	130.40
36	1	423	A	N1-C2-N3	12.95	135.77	129.30
1	6	621	A	N1-C6-N6	-12.94	110.84	118.60
36	5	2932	U	N3-C4-O4	-12.94	110.34	119.40
36	1	2880	U	C5-C4-O4	12.94	133.66	125.90
1	6	1506	G	O5'-P-OP1	-12.94	94.06	105.70
36	1	2811	A	C5-C6-N6	-12.92	113.36	123.70
36	5	669	U	N3-C2-O2	-12.90	113.17	122.20
36	1	596	C	N3-C2-O2	-12.90	112.87	121.90
36	1	2368	A	N1-C6-N6	12.89	126.33	118.60
36	1	1433	A	C6-N1-C2	-12.89	110.87	118.60
1	6	1025	A	N1-C6-N6	12.87	126.32	118.60
36	5	1303	A	O5'-P-OP1	-12.86	94.12	105.70
36	5	2942	C	C5-C4-N4	12.87	129.21	120.20
36	5	929	A	C2-N3-C4	12.86	117.03	110.60
36	5	2400	G	C8-N9-C1'	12.86	143.72	127.00
1	6	1614	A	N1-C6-N6	12.85	126.31	118.60
36	5	1165	A	N7-C8-N9	12.84	120.22	113.80
1	6	1484	G	O5'-P-OP1	-12.83	94.15	105.70
36	1	101	G	C6-C5-N7	-12.83	122.70	130.40
1	6	321	C	C6-N1-C2	-12.83	115.17	120.30
36	1	2939	G	C5-N7-C8	12.82	110.71	104.30
36	5	1295	G	C6-C5-N7	-12.82	122.70	130.40
36	5	2310	U	O5'-P-OP1	-12.82	94.16	105.70
36	5	2353	G	C8-N9-C4	-12.82	101.27	106.40
37	3	7	G	N1-C6-O6	-12.82	112.21	119.90
1	6	1100	G	C8-N9-C4	12.82	111.53	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2305	G	N9-C4-C5	12.82	110.53	105.40
36	1	3217	C	N1-C2-O2	12.81	126.58	118.90
36	5	1403	C	C6-N1-C2	12.80	125.42	120.30
36	1	780	A	N1-C6-N6	-12.79	110.92	118.60
36	1	101	G	C5-C6-O6	-12.79	120.93	128.60
36	1	2334	U	O5'-P-OP2	-12.78	94.20	105.70
36	5	1198	C	N3-C2-O2	-12.77	112.96	121.90
36	5	2897	A	N1-C6-N6	12.77	126.26	118.60
36	5	1365	G	N3-C2-N2	-12.77	110.96	119.90
36	1	2953	U	C6-N1-C2	-12.77	113.34	121.00
36	1	2980	U	N1-C2-N3	12.76	122.56	114.90
36	1	942	U	N3-C4-O4	12.75	128.33	119.40
36	1	69	C	O5'-P-OP1	-12.75	94.22	105.70
36	1	651	G	C5-C6-O6	-12.75	120.95	128.60
36	1	938	C	C6-N1-C2	-12.74	115.20	120.30
36	5	1156	C	C5-C6-N1	12.73	127.37	121.00
36	1	3181	C	C6-N1-C2	-12.73	115.21	120.30
36	5	2811	A	C6-N1-C2	-12.73	110.97	118.60
36	5	1310	G	C4-C5-N7	12.72	115.89	110.80
1	6	1470	C	C6-N1-C2	-12.70	115.22	120.30
1	6	1607	G	O5'-P-OP1	-12.70	94.27	105.70
36	5	2353	G	C5-C6-O6	-12.70	120.98	128.60
36	5	639	G	C2-N3-C4	-12.70	105.55	111.90
36	1	937	G	C4-C5-N7	12.69	115.88	110.80
36	5	911	C	C2-N3-C4	-12.68	113.56	119.90
36	5	2278	C	O5'-P-OP2	-12.68	94.29	105.70
1	2	1291	G	N7-C8-N9	12.68	119.44	113.10
1	6	163	G	C2-N3-C4	-12.68	105.56	111.90
1	6	419	G	O5'-P-OP1	-12.68	94.29	105.70
36	5	2950	G	C4-C5-N7	12.68	115.87	110.80
1	6	321	C	N3-C2-O2	-12.67	113.03	121.90
1	6	1494	C	C6-N1-C2	-12.67	115.23	120.30
36	5	2936	A	C5-C6-N1	12.65	124.02	117.70
36	5	2412	G	C8-N9-C4	-12.64	101.34	106.40
36	5	2875	U	N3-C2-O2	-12.64	113.35	122.20
36	1	2197	C	N3-C4-C5	12.63	126.95	121.90
36	1	1594	A	N9-C4-C5	12.63	110.85	105.80
36	5	2799	A	N1-C2-N3	12.63	135.61	129.30
1	6	1640	C	N1-C2-O2	12.62	126.47	118.90
36	5	2943	G	C4-C5-N7	12.62	115.85	110.80
36	5	2886	U	C5-C6-N1	-12.62	116.39	122.70
1	6	608	U	N3-C2-O2	-12.60	113.38	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	583	G	C5-C6-O6	12.59	136.16	128.60
36	1	780	A	C8-N9-C4	-12.59	100.77	105.80
36	1	1905	G	N9-C4-C5	12.59	110.44	105.40
36	5	1295	G	N1-C6-O6	12.59	127.45	119.90
36	1	1487	G	C8-N9-C4	-12.59	101.37	106.40
36	1	1556	C	N3-C2-O2	-12.58	113.09	121.90
36	1	2314	U	C5-C4-O4	-12.58	118.35	125.90
36	1	2385	G	N1-C6-O6	12.57	127.44	119.90
36	1	3075	G	N1-C6-O6	12.57	127.44	119.90
36	5	2847	A	N1-C6-N6	12.57	126.14	118.60
36	5	2611	U	N3-C4-C5	-12.56	107.06	114.60
36	1	751	A	C8-N9-C4	-12.55	100.78	105.80
36	1	2772	C	C2-N1-C1'	12.55	132.60	118.80
1	2	331	A	N1-C6-N6	-12.53	111.08	118.60
37	7	49	G	C5-C6-N1	-12.53	105.24	111.50
36	5	404	G	C5-C6-N1	-12.53	105.24	111.50
36	5	2978	U	O5'-P-OP2	-12.53	94.43	105.70
36	5	650	C	N3-C4-C5	12.52	126.91	121.90
36	5	2875	U	C6-N1-C2	-12.52	113.49	121.00
36	5	3026	G	C6-C5-N7	-12.51	122.89	130.40
37	7	44	C	N1-C2-N3	-12.51	110.44	119.20
36	5	1520	G	N3-C4-C5	-12.51	122.34	128.60
36	1	648	C	O5'-P-OP1	-12.46	94.48	105.70
36	1	2613	U	N3-C4-C5	-12.45	107.13	114.60
1	6	1640	C	C2-N1-C1'	12.45	132.50	118.80
36	1	1208	U	N1-C2-O2	12.45	131.51	122.80
36	5	2935	U	C5-C6-N1	12.44	128.92	122.70
36	1	1500	G	C4-C5-N7	12.44	115.77	110.80
36	1	3278	C	N1-C2-O2	12.43	126.36	118.90
36	1	65	A	C8-N9-C4	12.43	110.77	105.80
36	5	2705	A	N1-C6-N6	-12.43	111.14	118.60
36	5	2393	G	N1-C6-O6	12.42	127.35	119.90
36	1	3186	A	N1-C6-N6	-12.42	111.15	118.60
36	5	363	G	C6-C5-N7	-12.41	122.95	130.40
36	1	1120	A	O5'-P-OP1	-12.41	94.53	105.70
36	5	1198	C	C6-N1-C2	-12.40	115.34	120.30
36	5	1848	G	C8-N9-C4	12.40	111.36	106.40
36	1	3248	C	O5'-P-OP1	-12.40	94.54	105.70
36	1	964	G	C4-C5-N7	12.38	115.75	110.80
36	1	3093	C	N3-C4-C5	-12.38	116.95	121.90
36	5	874	U	N3-C4-C5	-12.37	107.18	114.60
36	1	3132	C	C6-N1-C2	12.36	125.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1424	C	N3-C4-C5	-12.36	116.96	121.90
36	5	2199	G	C6-C5-N7	-12.35	122.99	130.40
36	5	2620	G	N9-C4-C5	12.35	110.34	105.40
36	5	2947	G	C5-C6-O6	-12.34	121.19	128.60
36	1	2306	C	N1-C2-O2	12.34	126.30	118.90
36	5	2397	A	C2-N3-C4	-12.33	104.43	110.60
1	2	1212	G	N1-C6-O6	12.33	127.30	119.90
36	5	971	G	C5-C6-O6	12.33	136.00	128.60
36	5	3067	C	C5-C6-N1	-12.33	114.84	121.00
36	5	1127	G	C2-N3-C4	12.32	118.06	111.90
36	5	2119	A	N1-C6-N6	12.32	125.99	118.60
36	5	2346	C	N3-C4-C5	-12.32	116.97	121.90
36	1	2874	G	N3-C4-C5	-12.31	122.44	128.60
1	6	1191	U	N3-C2-O2	-12.31	113.58	122.20
36	1	873	C	C6-N1-C2	-12.31	115.38	120.30
36	5	2610	G	N3-C2-N2	-12.31	111.28	119.90
36	1	2827	U	C5-C4-O4	12.30	133.28	125.90
36	1	2869	U	C5-C4-O4	-12.30	118.52	125.90
36	1	2639	G	N3-C4-N9	-12.29	118.62	126.00
36	5	2707	C	N3-C4-C5	12.29	126.82	121.90
36	1	397	A	N1-C6-N6	-12.29	111.23	118.60
36	5	363	G	N1-C6-O6	12.28	127.27	119.90
36	5	940	G	N1-C6-O6	-12.28	112.53	119.90
36	5	3140	G	N1-C6-O6	12.27	127.26	119.90
36	5	1137	C	O5'-P-OP2	-12.26	94.67	105.70
36	1	2403	G	C5-C6-O6	-12.26	121.25	128.60
37	3	98	C	C2-N3-C4	-12.24	113.78	119.90
36	1	638	C	O5'-P-OP2	-12.22	94.70	105.70
36	1	2831	G	C6-C5-N7	-12.22	123.07	130.40
36	1	2359	C	N3-C4-C5	-12.20	117.02	121.90
37	7	76	A	O5'-P-OP2	-12.20	94.72	105.70
36	5	2757	U	O5'-P-OP1	-12.20	94.72	105.70
36	5	3129	A	C2-N3-C4	-12.20	104.50	110.60
36	5	942	U	N3-C4-O4	12.18	127.93	119.40
36	1	1720	U	N3-C2-O2	-12.18	113.67	122.20
36	5	802	C	N3-C4-C5	12.17	126.77	121.90
36	1	1901	A	C5-C6-N1	12.17	123.79	117.70
36	1	2380	U	C5-C6-N1	-12.17	116.61	122.70
36	5	2880	U	C5-C4-O4	12.17	133.20	125.90
1	6	1457	C	N3-C2-O2	-12.16	113.39	121.90
37	3	97	A	C8-N9-C4	12.16	110.67	105.80
36	5	3026	G	N1-C6-O6	12.16	127.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3067	C	C6-N1-C2	12.16	125.17	120.30
1	6	1622	G	N1-C6-O6	12.16	127.20	119.90
36	5	1166	G	C4-C5-N7	12.16	115.66	110.80
36	5	951	A	N1-C6-N6	-12.15	111.31	118.60
36	5	424	G	C4-C5-N7	12.15	115.66	110.80
36	1	3142	A	N1-C6-N6	-12.14	111.32	118.60
36	5	1883	A	N1-C2-N3	12.13	135.37	129.30
36	1	628	A	N1-C2-N3	12.12	135.36	129.30
36	5	1152	G	N3-C2-N2	-12.12	111.42	119.90
36	5	2848	G	O5'-P-OP1	-12.12	94.79	105.70
36	1	1061	A	C8-N9-C4	12.12	110.65	105.80
36	5	2263	C	C6-N1-C2	-12.11	115.46	120.30
36	5	957	C	C6-N1-C2	-12.11	115.46	120.30
36	1	1392	G	C5-C6-O6	12.10	135.86	128.60
36	5	2950	G	N1-C6-O6	12.10	127.16	119.90
36	5	3245	A	C4-C5-N7	12.10	116.75	110.70
1	6	338	C	C6-N1-C2	-12.10	115.46	120.30
36	1	2325	G	C6-C5-N7	-12.10	123.14	130.40
1	6	1753	A	C2-N3-C4	12.10	116.65	110.60
36	5	1489	A	N1-C2-N3	12.09	135.35	129.30
36	5	1879	A	O5'-P-OP1	12.08	125.19	110.70
36	5	2656	A	N1-C6-N6	-12.07	111.36	118.60
36	5	2136	C	N3-C4-C5	-12.07	117.07	121.90
1	6	1634	C	N1-C2-O2	12.06	126.14	118.90
36	1	28	C	C5-C6-N1	-12.06	114.97	121.00
36	1	1182	A	C8-N9-C4	12.06	110.62	105.80
36	1	281	G	C8-N9-C4	-12.05	101.58	106.40
36	5	2188	A	O5'-P-OP1	-12.05	94.85	105.70
36	5	50	U	N3-C2-O2	-12.05	113.76	122.20
36	1	1178	G	N3-C2-N2	12.05	128.33	119.90
36	1	28	C	C6-N1-C2	12.04	125.12	120.30
36	5	639	G	N1-C2-N3	12.04	131.13	123.90
36	5	1481	A	C8-N9-C4	-12.04	100.98	105.80
36	5	2353	G	N7-C8-N9	12.04	119.12	113.10
36	1	2377	G	N1-C6-O6	-12.02	112.69	119.90
36	1	1482	A	N1-C6-N6	12.02	125.81	118.60
36	1	2881	C	C6-N1-C2	12.02	125.11	120.30
1	6	140	A	C8-N9-C4	-12.02	100.99	105.80
36	1	2943	G	N1-C6-O6	12.01	127.11	119.90
36	1	1448	U	C5-C6-N1	-12.01	116.70	122.70
36	1	2727	A	C8-N9-C4	-12.01	101.00	105.80
36	5	2724	U	O5'-P-OP2	-12.01	94.89	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1456	C	N3-C4-C5	-12.00	117.10	121.90
36	1	1429	G	N1-C2-N2	-12.00	105.40	116.20
36	1	2199	G	N3-C4-C5	-12.00	122.60	128.60
36	1	2772	C	C6-N1-C1'	-12.00	106.40	120.80
36	1	2930	A	N1-C6-N6	12.00	125.80	118.60
36	5	1212	A	C5-N7-C8	-11.99	97.90	103.90
36	5	3125	U	C5-C4-O4	11.99	133.09	125.90
36	5	1149	G	N7-C8-N9	11.98	119.09	113.10
1	6	1535	U	N3-C4-O4	-11.98	111.02	119.40
36	1	35	A	N1-C6-N6	11.97	125.78	118.60
36	5	2816	G	N3-C4-N9	-11.97	118.81	126.00
36	5	1520	G	N3-C4-N9	11.97	133.18	126.00
36	1	1594	A	C8-N9-C4	-11.97	101.01	105.80
1	6	1535	U	C5-C4-O4	11.97	133.08	125.90
1	6	1524	A	C8-N9-C4	-11.97	101.01	105.80
36	1	1846	C	N1-C2-O2	-11.96	111.72	118.90
36	1	2871	G	N1-C6-O6	11.95	127.07	119.90
36	1	2241	U	N3-C4-C5	-11.95	107.43	114.60
36	5	2929	C	C5-C4-N4	-11.95	111.83	120.20
36	1	1542	G	C5-N7-C8	-11.95	98.33	104.30
1	6	139	C	C6-N1-C2	-11.95	115.52	120.30
1	2	1455	G	C5-C6-N1	-11.94	105.53	111.50
36	1	2363	A	O5'-P-OP1	-11.93	94.97	105.70
1	6	1137	A	N7-C8-N9	-11.93	107.84	113.80
1	6	29	U	N3-C2-O2	-11.92	113.85	122.20
36	1	2705	A	N1-C6-N6	-11.92	111.45	118.60
1	6	1121	C	O5'-P-OP2	-11.92	94.97	105.70
36	5	1901	A	C2-N3-C4	11.91	116.56	110.60
1	6	431	C	N1-C2-O2	-11.91	111.76	118.90
37	3	88	G	C8-N9-C4	-11.90	101.64	106.40
36	5	3242	G	O5'-P-OP2	-11.90	94.99	105.70
36	1	2159	U	N1-C2-O2	11.90	131.13	122.80
36	1	1333	C	O5'-P-OP2	-11.90	94.99	105.70
37	7	109	G	C4-C5-N7	11.90	115.56	110.80
36	5	2728	G	O5'-P-OP2	-11.90	94.99	105.70
1	6	321	C	N1-C2-O2	11.89	126.03	118.90
1	2	1600	A	N1-C6-N6	11.88	125.73	118.60
36	5	1906	G	N1-C6-O6	-11.88	112.77	119.90
36	5	3146	G	N9-C4-C5	-11.88	100.65	105.40
36	1	1542	G	C5-C6-O6	-11.88	121.47	128.60
38	4	26	U	C4-C5-C6	11.87	126.82	119.70
1	6	597	G	N1-C6-O6	11.86	127.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	827	A	C8-N9-C4	-11.86	101.06	105.80
38	4	140	G	C8-N9-C4	-11.85	101.66	106.40
36	1	2407	C	N1-C2-O2	-11.85	111.79	118.90
1	6	1418	G	C5-C6-N1	-11.84	105.58	111.50
36	5	96	G	N3-C4-C5	11.82	134.51	128.60
38	8	107	G	N1-C6-O6	11.82	126.99	119.90
36	5	1940	G	O5'-P-OP2	-11.82	95.06	105.70
36	5	994	G	C8-N9-C4	11.81	111.12	106.40
36	1	1386	A	N9-C4-C5	11.80	110.52	105.80
1	2	566	C	C6-N1-C2	11.80	125.02	120.30
36	1	2417	U	N1-C2-O2	-11.80	114.54	122.80
36	5	2117	A	N1-C2-N3	11.80	135.20	129.30
36	5	3182	G	N1-C6-O6	-11.80	112.82	119.90
36	1	806	A	C8-N9-C4	11.79	110.52	105.80
36	1	2942	C	N3-C4-N4	11.79	126.26	118.00
37	7	15	C	C6-N1-C2	-11.79	115.58	120.30
36	1	2352	A	C5-C6-N6	-11.79	114.27	123.70
36	5	1152	G	N9-C4-C5	11.79	110.12	105.40
36	5	2874	G	C8-N9-C4	-11.78	101.69	106.40
36	1	2880	U	N1-C2-N3	11.78	121.97	114.90
36	5	61	A	C5-C6-N6	11.78	133.12	123.70
36	5	1794	G	C8-N9-C4	11.78	111.11	106.40
36	5	2415	C	N3-C4-C5	-11.78	117.19	121.90
36	1	2919	A	C5-C6-N1	-11.77	111.81	117.70
36	5	2794	G	C5-C6-N1	11.77	117.39	111.50
1	6	1747	G	O5'-P-OP2	-11.77	95.11	105.70
36	1	2305	G	C5-C6-O6	11.77	135.66	128.60
36	1	2635	A	C8-N9-C4	-11.77	101.09	105.80
36	5	1379	G	N1-C2-N3	11.76	130.96	123.90
36	1	3209	A	N1-C6-N6	11.76	125.66	118.60
36	5	986	U	N3-C2-O2	-11.76	113.97	122.20
36	5	61	A	N1-C6-N6	-11.76	111.55	118.60
36	5	1852	G	C4-C5-N7	11.76	115.50	110.80
36	1	636	C	N1-C2-O2	-11.75	111.85	118.90
36	1	3004	C	N1-C2-O2	-11.75	111.85	118.90
1	6	1098	U	O5'-P-OP1	-11.75	95.12	105.70
36	5	366	A	N1-C2-N3	11.75	135.18	129.30
36	5	3166	C	C6-N1-C2	-11.75	115.60	120.30
37	7	85	G	C5-C6-O6	-11.75	121.55	128.60
36	1	3210	A	N1-C6-N6	-11.75	111.55	118.60
1	6	1663	G	O5'-P-OP2	-11.75	95.13	105.70
36	5	632	G	O5'-P-OP1	11.75	124.80	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1166	G	C5-N7-C8	-11.75	98.43	104.30
36	5	2874	G	C4-C5-C6	11.75	125.85	118.80
36	5	1310	G	C5-C6-N1	11.73	117.37	111.50
36	5	1336	U	C5-C4-O4	-11.73	118.86	125.90
36	1	2831	G	C4-C5-N7	11.73	115.49	110.80
36	1	1500	G	N9-C4-C5	-11.72	100.71	105.40
36	1	2765	C	C6-N1-C2	-11.72	115.61	120.30
1	6	967	A	N1-C6-N6	11.72	125.63	118.60
1	6	301	A	N1-C6-N6	-11.71	111.57	118.60
36	5	3140	G	C4-C5-N7	11.71	115.48	110.80
36	5	409	A	O5'-P-OP2	-11.71	95.17	105.70
36	1	3076	C	C6-N1-C2	-11.70	115.62	120.30
36	1	2374	C	N3-C2-O2	-11.69	113.72	121.90
36	1	2831	G	C5-C6-N1	-11.67	105.66	111.50
36	1	3004	C	N3-C2-O2	11.67	130.07	121.90
38	4	70	G	O5'-P-OP2	-11.66	95.20	105.70
36	5	2353	G	C6-C5-N7	-11.66	123.40	130.40
36	5	3140	G	C6-C5-N7	-11.66	123.40	130.40
36	5	2278	C	N1-C2-N3	-11.66	111.04	119.20
36	5	2976	A	C6-N1-C2	-11.66	111.61	118.60
36	1	277	G	C2-N3-C4	11.65	117.73	111.90
36	5	648	C	C2-N3-C4	11.64	125.72	119.90
36	1	2831	G	C5-C6-O6	-11.64	121.62	128.60
36	5	2363	A	C5-C6-N6	11.64	133.01	123.70
52	M6	110	PRO	C-N-CD	-11.62	95.03	120.60
1	6	163	G	N3-C2-N2	-11.62	111.77	119.90
36	5	2632	G	N9-C4-C5	-11.62	100.75	105.40
1	6	1610	G	N3-C4-N9	11.62	132.97	126.00
36	1	1143	A	C2-N3-C4	-11.62	104.79	110.60
36	1	1905	G	N3-C2-N2	-11.60	111.78	119.90
36	5	2913	C	O5'-P-OP1	-11.60	95.26	105.70
36	5	515	C	C6-N1-C2	11.59	124.94	120.30
36	5	959	C	N3-C4-C5	-11.59	117.26	121.90
36	1	2813	A	N1-C6-N6	-11.59	111.65	118.60
38	4	20	U	N1-C2-O2	-11.59	114.69	122.80
36	5	2305	G	C5-C6-O6	11.58	135.55	128.60
36	1	2623	G	C4-C5-N7	11.58	115.43	110.80
36	1	2811	A	C4-C5-C6	11.58	122.79	117.00
36	5	2874	G	N3-C4-C5	-11.58	122.81	128.60
36	5	2892	A	O5'-P-OP2	-11.57	95.28	105.70
36	5	938	C	N3-C4-C5	11.57	126.53	121.90
36	1	2305	G	N9-C4-C5	11.56	110.03	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1537	C	N3-C4-C5	-11.56	117.27	121.90
36	5	1367	G	C4-N9-C1'	11.56	141.53	126.50
36	5	2758	A	O5'-P-OP2	-11.56	95.29	105.70
37	7	85	G	N1-C6-O6	11.56	126.83	119.90
36	1	2618	G	C5-C6-O6	11.55	135.53	128.60
36	5	1372	C	C6-N1-C2	11.55	124.92	120.30
36	5	2308	C	N1-C2-O2	-11.55	111.97	118.90
36	5	1450	G	C8-N9-C4	-11.55	101.78	106.40
36	1	1493	G	N1-C6-O6	-11.55	112.97	119.90
36	5	2877	G	N3-C4-C5	-11.55	122.83	128.60
36	1	937	G	C5-C6-O6	-11.55	121.67	128.60
36	5	608	A	N1-C6-N6	11.55	125.53	118.60
36	1	2409	G	C4-N9-C1'	11.55	141.51	126.50
36	1	2877	G	N3-C4-N9	-11.54	119.07	126.00
36	5	1208	U	N3-C4-O4	-11.53	111.33	119.40
1	6	78	A	N1-C6-N6	-11.52	111.69	118.60
36	5	2665	U	C5-C4-O4	-11.52	118.99	125.90
36	1	2368	A	C5-C6-N6	-11.52	114.49	123.70
36	1	2382	G	N1-C6-O6	-11.52	112.99	119.90
36	5	2400	G	N3-C4-C5	11.52	134.36	128.60
36	1	1380	G	C2-N3-C4	-11.51	106.14	111.90
38	4	26	U	N1-C2-N3	11.51	121.81	114.90
36	5	1894	U	C5-C4-O4	-11.51	118.99	125.90
36	5	3245	A	C6-C5-N7	-11.51	124.25	132.30
36	1	612	U	C5-C6-N1	-11.50	116.95	122.70
1	6	1131	A	C6-C5-N7	-11.50	124.25	132.30
36	5	2617	U	C6-N1-C2	-11.50	114.10	121.00
1	6	385	A	N1-C6-N6	-11.50	111.70	118.60
36	5	2308	C	O5'-P-OP1	-11.49	95.35	105.70
36	1	2396	G	C8-N9-C4	-11.49	101.80	106.40
1	6	1631	A	O5'-P-OP1	-11.49	95.36	105.70
1	2	577	G	N1-C6-O6	11.48	126.79	119.90
37	3	106	U	O5'-P-OP1	-11.48	95.37	105.70
36	5	521	A	C2-N3-C4	-11.48	104.86	110.60
36	5	2875	U	N1-C2-N3	11.48	121.79	114.90
36	5	3061	G	N1-C6-O6	11.48	126.79	119.90
36	1	2869	U	N3-C4-O4	11.47	127.43	119.40
36	5	3146	G	C4-C5-N7	11.47	115.39	110.80
36	1	608	A	C5-C6-N6	-11.46	114.53	123.70
36	5	1114	U	N3-C4-C5	-11.46	107.72	114.60
36	5	2400	G	N1-C2-N2	11.45	126.51	116.20
36	1	1888	U	N3-C2-O2	-11.45	114.18	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2377	G	C5-C6-N1	11.45	117.23	111.50
36	1	1100	U	C5-C6-N1	-11.44	116.98	122.70
36	5	2173	U	O5'-P-OP2	-11.44	95.40	105.70
36	5	2411	U	C5-C4-O4	-11.44	119.03	125.90
36	1	1149	G	C4-C5-C6	11.44	125.67	118.80
36	5	2197	C	C6-N1-C2	11.44	124.88	120.30
36	5	256	G	C8-N9-C4	-11.44	101.83	106.40
36	5	1306	G	C8-N9-C4	-11.44	101.83	106.40
36	1	408	A	N1-C2-N3	11.43	135.02	129.30
36	5	330	G	N9-C4-C5	-11.43	100.83	105.40
1	6	163	G	N3-C4-C5	11.43	134.32	128.60
1	6	1773	C	N3-C4-C5	-11.43	117.33	121.90
36	1	1050	U	N3-C2-O2	-11.43	114.20	122.20
36	5	1317	A	C5-C6-N1	11.43	123.41	117.70
36	1	1152	G	N1-C6-O6	-11.41	113.05	119.90
1	6	991	G	O5'-P-OP2	-11.41	95.43	105.70
38	4	5	U	C6-N1-C2	11.41	127.85	121.00
36	5	695	C	C5-C6-N1	-11.41	115.30	121.00
36	1	1851	G	N1-C6-O6	11.41	126.74	119.90
1	6	927	C	N1-C2-O2	11.41	125.74	118.90
1	2	1773	C	C6-N1-C2	-11.40	115.74	120.30
1	2	1006	C	N1-C2-O2	11.40	125.74	118.90
36	5	2376	G	C5-N7-C8	-11.40	98.60	104.30
1	6	26	A	C5-C6-N1	11.39	123.40	117.70
36	5	2283	G	C4-C5-N7	11.39	115.36	110.80
36	5	1408	G	C6-C5-N7	-11.39	123.57	130.40
36	1	2623	G	C2-N3-C4	-11.39	106.21	111.90
36	5	884	A	C4-C5-N7	11.38	116.39	110.70
36	5	2799	A	C6-N1-C2	-11.38	111.77	118.60
36	5	2953	U	N3-C4-C5	-11.38	107.77	114.60
1	2	1457	C	O5'-P-OP2	-11.38	95.46	105.70
36	1	2625	C	N3-C4-C5	11.38	126.45	121.90
36	1	933	A	C4-C5-C6	11.37	122.69	117.00
36	5	2920	U	N3-C4-O4	-11.37	111.44	119.40
38	4	16	G	O5'-P-OP2	-11.37	95.47	105.70
36	5	1307	G	C6-C5-N7	-11.36	123.58	130.40
36	5	1108	U	N3-C2-O2	-11.36	114.25	122.20
36	1	1520	G	N1-C6-O6	11.36	126.72	119.90
36	5	1379	G	C6-C5-N7	-11.36	123.58	130.40
36	5	2726	C	C5-C4-N4	11.36	128.15	120.20
36	5	187	A	C8-N9-C4	-11.36	101.26	105.80
36	1	1542	G	C6-C5-N7	-11.36	123.59	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	633	U	N3-C2-O2	-11.35	114.26	122.20
1	2	1212	G	C6-C5-N7	-11.34	123.59	130.40
36	5	2957	G	C2-N3-C4	-11.34	106.23	111.90
37	7	44	C	N3-C2-O2	11.34	129.84	121.90
36	1	1149	G	C5-C6-N1	-11.34	105.83	111.50
37	7	105	C	C6-N1-C2	-11.34	115.77	120.30
36	1	2402	A	O4'-C1'-N9	11.33	117.27	108.20
36	1	2257	C	C2-N1-C1'	11.32	131.26	118.80
1	6	96	G	C8-N9-C4	-11.32	101.87	106.40
36	1	2930	A	C8-N9-C4	11.32	110.33	105.80
36	5	2700	G	C5-C6-N1	11.32	117.16	111.50
36	5	568	G	C5-C6-O6	-11.32	121.81	128.60
36	1	595	G	O5'-P-OP1	-11.31	95.52	105.70
36	1	2241	U	O5'-P-OP1	-11.31	95.52	105.70
36	5	1367	G	C4-C5-C6	11.30	125.58	118.80
36	1	964	G	N1-C6-O6	11.30	126.68	119.90
36	5	798	G	N1-C6-O6	11.30	126.68	119.90
36	1	2148	U	O5'-P-OP2	-11.29	95.54	105.70
36	1	1312	C	N3-C4-C5	-11.29	117.39	121.90
36	1	652	G	N3-C4-C5	-11.29	122.96	128.60
36	1	890	C	N3-C2-O2	-11.28	114.01	121.90
36	5	2944	U	N3-C2-O2	-11.28	114.31	122.20
36	5	1902	G	N1-C6-O6	11.28	126.67	119.90
36	5	630	A	C8-N9-C4	11.27	110.31	105.80
36	5	2715	A	C4-C5-N7	-11.27	105.07	110.70
36	5	437	G	N7-C8-N9	11.27	118.73	113.10
36	1	427	C	N3-C4-N4	11.26	125.88	118.00
1	6	1778	G	C5-N7-C8	-11.26	98.67	104.30
1	6	1556	A	C8-N9-C4	11.26	110.30	105.80
36	5	1585	C	C6-N1-C2	-11.26	115.80	120.30
36	5	3092	C	C5-C4-N4	-11.26	112.32	120.20
38	8	138	A	N1-C6-N6	-11.26	111.84	118.60
37	7	104	A	O5'-P-OP1	11.26	124.21	110.70
36	5	2620	G	C8-N9-C4	-11.26	101.90	106.40
36	5	1385	C	C6-N1-C2	-11.25	115.80	120.30
36	1	1198	C	O5'-P-OP1	-11.24	95.58	105.70
1	6	1108	G	O5'-P-OP2	-11.24	95.58	105.70
36	5	832	G	N1-C6-O6	-11.24	113.15	119.90
36	5	842	G	C8-N9-C4	11.24	110.90	106.40
1	6	583	C	C6-N1-C2	-11.24	115.81	120.30
36	1	198	A	C8-N9-C4	-11.23	101.31	105.80
36	5	1060	U	C5-C6-N1	-11.23	117.09	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	99	C	N1-C2-O2	11.23	125.64	118.90
36	5	2727	A	N1-C6-N6	-11.23	111.86	118.60
36	5	816	A	O5'-P-OP2	-11.22	95.60	105.70
36	5	96	G	C2-N3-C4	-11.22	106.29	111.90
36	5	1589	A	C4-C5-N7	11.21	116.31	110.70
36	1	2887	A	C8-N9-C4	-11.21	101.31	105.80
36	5	640	U	N1-C2-O2	-11.21	114.96	122.80
36	1	3176	G	N1-C6-O6	11.20	126.62	119.90
36	1	780	A	O5'-P-OP2	-11.19	95.63	105.70
36	1	3180	A	N1-C6-N6	-11.19	111.89	118.60
36	5	3140	G	C5-C6-O6	-11.19	121.89	128.60
36	5	939	U	OP1-P-OP2	-11.19	102.82	119.60
36	5	3019	U	N3-C2-O2	-11.19	114.37	122.20
36	1	1149	G	C6-C5-N7	-11.18	123.69	130.40
36	1	93	C	N1-C2-N3	-11.18	111.38	119.20
36	5	2199	G	C4-C5-C6	11.18	125.51	118.80
36	1	2197	C	C6-N1-C2	11.18	124.77	120.30
36	1	2613	U	N1-C2-N3	11.18	121.61	114.90
36	1	929	A	N1-C6-N6	11.17	125.30	118.60
36	1	1901	A	C6-N1-C2	-11.17	111.90	118.60
36	5	1199	C	O5'-P-OP2	-11.17	95.64	105.70
1	2	1273	G	O5'-P-OP1	-11.16	95.65	105.70
36	1	146	U	N1-C2-O2	11.16	130.61	122.80
36	1	1173	U	O5'-P-OP2	-11.16	95.66	105.70
36	5	3242	G	N1-C6-O6	-11.16	113.21	119.90
36	1	2623	G	C5-C6-O6	-11.15	121.91	128.60
36	5	637	C	C6-N1-C2	11.15	124.76	120.30
36	5	3012	A	C5-C6-N6	-11.15	114.78	123.70
36	1	2622	C	N3-C2-O2	-11.15	114.10	121.90
36	1	423	A	N9-C4-C5	11.15	110.26	105.80
36	1	1442	U	N3-C4-O4	11.15	127.20	119.40
36	5	3326	G	C8-N9-C4	11.15	110.86	106.40
1	2	1615	C	N1-C2-O2	11.14	125.59	118.90
37	7	45	A	N1-C2-N3	11.14	134.87	129.30
1	6	1645	G	N3-C4-N9	11.14	132.69	126.00
36	5	3144	G	N1-C2-N3	11.14	130.58	123.90
36	1	1448	U	C2-N3-C4	-11.14	120.32	127.00
36	1	2936	A	N1-C6-N6	-11.14	111.92	118.60
36	5	2402	A	N1-C2-N3	11.14	134.87	129.30
1	6	996	U	C5-C6-N1	11.13	128.27	122.70
36	1	2644	C	C5-C6-N1	-11.13	115.43	121.00
36	1	1306	G	C6-C5-N7	-11.13	123.72	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	994	G	N1-C6-O6	11.13	126.58	119.90
1	6	144	U	N3-C2-O2	-11.13	114.41	122.20
36	5	2280	A	N1-C6-N6	11.12	125.28	118.60
36	1	2818	U	O5'-P-OP2	-11.12	95.69	105.70
36	1	908	G	C8-N9-C4	-11.12	101.95	106.40
36	1	1393	A	N1-C2-N3	11.12	134.86	129.30
36	1	2168	A	N9-C4-C5	11.12	110.25	105.80
1	6	1781	A	C8-N9-C4	-11.12	101.35	105.80
36	5	2940	A	N7-C8-N9	11.12	119.36	113.80
36	1	2948	C	C6-N1-C2	-11.12	115.85	120.30
36	5	1142	G	C8-N9-C4	-11.11	101.95	106.40
36	5	2382	G	N3-C4-N9	-11.11	119.33	126.00
36	5	2931	C	N3-C4-C5	11.11	126.34	121.90
36	1	2380	U	C2-N3-C4	-11.11	120.34	127.00
36	5	2512	C	C6-N1-C2	11.11	124.74	120.30
36	1	3096	C	C6-N1-C2	-11.10	115.86	120.30
36	1	798	G	C5-N7-C8	-11.10	98.75	104.30
36	5	1527	C	C6-N1-C2	11.10	124.74	120.30
36	1	585	A	C6-N1-C2	-11.10	111.94	118.60
36	5	2346	C	N3-C4-N4	11.09	125.76	118.00
36	1	1411	C	N3-C2-O2	-11.09	114.14	121.90
36	1	806	A	N1-C2-N3	11.08	134.84	129.30
1	6	1753	A	C8-N9-C4	-11.08	101.37	105.80
38	4	5	U	C5-C6-N1	-11.08	117.16	122.70
36	5	1430	U	C5-C6-N1	-11.08	117.16	122.70
36	5	1441	G	O5'-P-OP1	-11.08	95.73	105.70
36	5	1321	G	N3-C2-N2	-11.07	112.15	119.90
37	7	88	G	C8-N9-C4	-11.07	101.97	106.40
36	5	1323	G	C8-N9-C4	-11.07	101.97	106.40
1	2	1486	G	C4-N9-C1'	11.07	140.89	126.50
36	1	89	A	N1-C2-N3	11.07	134.83	129.30
36	1	2396	G	N7-C8-N9	11.07	118.64	113.10
36	1	796	U	O5'-P-OP1	-11.07	95.74	105.70
36	5	578	A	C5-C6-N6	11.07	132.55	123.70
36	5	2886	U	N1-C2-N3	11.06	121.54	114.90
36	5	842	G	C5-C6-N1	11.06	117.03	111.50
36	1	2356	A	C8-N9-C4	-11.06	101.38	105.80
36	5	517	G	N1-C6-O6	11.06	126.54	119.90
67	o1	97	LEU	CA-CB-CG	-11.06	89.86	115.30
36	5	927	C	C5-C4-N4	-11.06	112.46	120.20
36	5	2816	G	N3-C2-N2	-11.06	112.16	119.90
36	5	3061	G	C5-C6-O6	-11.05	121.97	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3122	A	C5-N7-C8	-11.05	98.38	103.90
36	1	2399	A	N1-C6-N6	11.05	125.23	118.60
36	1	1306	G	N1-C6-O6	11.04	126.53	119.90
36	5	1292	C	C6-N1-C2	11.04	124.72	120.30
36	5	66	A	C8-N9-C4	11.04	110.22	105.80
36	5	2863	G	N3-C4-N9	-11.04	119.38	126.00
36	5	3383	G	C5-C6-O6	-11.04	121.98	128.60
36	1	1120	A	C6-N1-C2	-11.04	111.98	118.60
36	5	2895	G	N1-C2-N3	11.04	130.52	123.90
36	1	3274	A	C8-N9-C4	-11.03	101.39	105.80
36	5	928	C	O5'-P-OP2	-11.04	95.77	105.70
1	6	1777	G	C6-C5-N7	-11.03	123.78	130.40
36	5	2298	U	N3-C2-O2	-11.03	114.48	122.20
36	5	2943	G	C5-C6-O6	-11.03	121.98	128.60
1	6	576	G	N1-C6-O6	11.02	126.52	119.90
36	5	1852	G	N1-C6-O6	11.02	126.51	119.90
38	4	94	C	N3-C4-C5	11.02	126.31	121.90
36	5	638	C	C6-N1-C2	-11.02	115.89	120.30
36	1	1442	U	N3-C2-O2	11.01	129.91	122.20
36	1	1658	G	N3-C2-N2	-11.01	112.19	119.90
36	1	2187	G	C5-C6-O6	11.01	135.21	128.60
36	1	3208	G	N3-C4-N9	11.01	132.61	126.00
36	5	3393	U	C5-C6-N1	-11.01	117.19	122.70
36	5	994	G	C6-C5-N7	-11.01	123.80	130.40
36	1	220	G	C5-C6-N1	-11.01	106.00	111.50
36	1	2927	C	N3-C2-O2	11.01	129.60	121.90
36	5	933	A	O5'-P-OP2	-11.01	95.79	105.70
36	5	1307	G	N1-C6-O6	11.01	126.50	119.90
36	5	1435	A	N1-C6-N6	-11.01	112.00	118.60
36	5	2278	C	C5-C4-N4	-11.01	112.50	120.20
36	5	2879	C	N1-C2-O2	-11.01	112.30	118.90
36	5	3206	C	N3-C2-O2	-11.01	114.20	121.90
36	5	994	G	N3-C4-N9	11.00	132.60	126.00
36	1	693	A	O5'-P-OP1	-11.00	95.80	105.70
36	5	1927	G	O5'-P-OP2	-10.99	95.81	105.70
36	5	2741	C	C6-N1-C2	-10.99	115.90	120.30
36	1	2093	A	C2-N3-C4	10.99	116.10	110.60
36	1	1050	U	C5-C6-N1	-10.99	117.20	122.70
36	1	3025	C	O5'-P-OP1	-10.99	95.81	105.70
36	5	2149	A	C2-N3-C4	-10.98	105.11	110.60
36	5	2708	C	C5-C4-N4	-10.98	112.51	120.20
36	1	2727	A	C4-C5-N7	-10.98	105.21	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1139	G	N3-C4-N9	-10.98	119.41	126.00
36	5	2275	A	O5'-P-OP1	-10.98	95.82	105.70
36	1	1429	G	C8-N9-C4	10.98	110.79	106.40
36	1	2877	G	N9-C4-C5	10.98	109.79	105.40
36	5	2341	A	N1-C2-N3	10.98	134.79	129.30
36	5	2875	U	N3-C4-C5	-10.98	108.01	114.60
36	1	2199	G	N3-C4-N9	10.97	132.58	126.00
1	6	393	C	N3-C4-C5	10.97	126.29	121.90
36	5	2970	C	N3-C4-C5	-10.97	117.51	121.90
1	6	891	A	C8-N9-C4	10.97	110.19	105.80
36	5	644	G	C5-C6-O6	10.97	135.18	128.60
36	5	1149	G	C5-C6-O6	-10.97	122.02	128.60
36	5	854	G	N3-C2-N2	-10.96	112.22	119.90
36	1	2727	A	C5-C6-N6	10.96	132.47	123.70
36	1	1152	G	C5-C6-N1	10.96	116.98	111.50
36	1	35	A	C4-C5-N7	10.95	116.17	110.70
36	5	1152	G	C4-N9-C1'	-10.95	112.27	126.50
36	1	104	G	N1-C6-O6	10.94	126.47	119.90
36	5	2816	G	O5'-P-OP2	-10.94	95.85	105.70
1	6	1640	C	N3-C2-O2	-10.94	114.25	121.90
36	5	2341	A	C2-N3-C4	-10.94	105.13	110.60
36	5	2728	G	C6-C5-N7	-10.94	123.84	130.40
36	5	3140	G	C8-N9-C1'	-10.94	112.78	127.00
36	1	2363	A	C5-C6-N6	10.93	132.45	123.70
36	5	2376	G	N7-C8-N9	10.93	118.57	113.10
36	5	64	G	N7-C8-N9	10.93	118.57	113.10
36	1	585	A	N1-C2-N3	10.93	134.76	129.30
36	5	1902	G	O5'-P-OP1	-10.93	95.86	105.70
36	5	2296	A	C8-N9-C4	10.93	110.17	105.80
1	6	1637	C	N1-C2-O2	10.93	125.45	118.90
36	5	64	G	C8-N9-C4	-10.93	102.03	106.40
36	5	784	A	N1-C6-N6	10.92	125.16	118.60
36	1	2635	A	N9-C4-C5	10.92	110.17	105.80
1	6	697	C	C6-N1-C2	-10.92	115.93	120.30
36	5	3041	U	N3-C4-C5	10.92	121.15	114.60
38	8	38	U	C6-N1-C2	-10.92	114.45	121.00
36	1	25	U	N3-C4-C5	-10.91	108.05	114.60
36	5	2906	C	N3-C4-N4	10.91	125.64	118.00
36	1	2887	A	C5-C6-N1	10.91	123.16	117.70
38	4	99	C	C6-N1-C2	10.91	124.66	120.30
36	5	3146	G	C6-C5-N7	-10.91	123.85	130.40
36	1	2613	U	O5'-P-OP2	-10.90	95.89	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2661	G	C8-N9-C1'	-10.89	112.84	127.00
36	5	3091	A	C2-N3-C4	-10.89	105.15	110.60
36	5	1004	U	O5'-P-OP1	-10.89	95.90	105.70
36	5	3091	A	C6-C5-N7	-10.89	124.68	132.30
1	2	967	A	N1-C6-N6	10.88	125.13	118.60
36	5	1203	A	O5'-P-OP1	-10.88	95.90	105.70
36	1	1429	G	N1-C2-N3	10.88	130.43	123.90
36	5	1293	U	O5'-P-OP1	-10.88	95.91	105.70
36	5	2139	A	C6-N1-C2	-10.88	112.07	118.60
36	5	1178	G	N1-C6-O6	-10.88	113.37	119.90
36	5	2971	A	N1-C6-N6	-10.88	112.07	118.60
36	1	281	G	N9-C4-C5	10.87	109.75	105.40
36	1	1002	A	C8-N9-C4	10.87	110.15	105.80
36	1	2979	U	C2-N1-C1'	-10.87	104.65	117.70
36	1	423	A	C8-N9-C4	-10.87	101.45	105.80
36	5	2616	C	C6-N1-C2	-10.87	115.95	120.30
36	1	729	C	C6-N1-C2	-10.87	115.95	120.30
36	1	1178	G	C6-C5-N7	-10.86	123.88	130.40
36	5	639	G	C6-C5-N7	-10.86	123.89	130.40
36	5	2376	G	C8-N9-C4	-10.86	102.06	106.40
36	1	1116	G	C6-C5-N7	-10.86	123.89	130.40
38	4	12	A	N1-C6-N6	10.86	125.11	118.60
36	5	2811	A	N1-C6-N6	-10.86	112.09	118.60
36	1	224	C	C6-N1-C2	-10.85	115.96	120.30
36	1	691	A	C2-N3-C4	-10.85	105.17	110.60
36	5	2847	A	C2-N3-C4	-10.85	105.17	110.60
37	7	116	C	N3-C4-C5	10.85	126.24	121.90
36	1	2898	G	O5'-P-OP2	-10.85	95.94	105.70
36	1	86	G	O5'-P-OP2	-10.85	95.94	105.70
36	5	857	G	C5-C6-N1	-10.84	106.08	111.50
36	5	3065	G	C2-N3-C4	-10.84	106.48	111.90
36	1	962	A	O5'-P-OP1	-10.84	95.94	105.70
36	1	2145	A	C5-C6-N1	10.84	123.12	117.70
36	5	2700	G	N3-C4-C5	-10.84	123.18	128.60
36	5	1374	G	N3-C4-C5	10.83	134.02	128.60
36	5	2397	A	C5-N7-C8	-10.83	98.48	103.90
36	5	969	C	N1-C2-O2	-10.83	112.40	118.90
36	5	2661	G	N3-C4-N9	10.83	132.50	126.00
36	5	2877	G	N1-C2-N2	-10.83	106.45	116.20
37	7	92	A	O5'-P-OP1	-10.83	95.95	105.70
36	5	94	G	N3-C4-N9	-10.82	119.51	126.00
37	3	82	G	N1-C2-N3	10.82	130.39	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	758	U	C5-C4-O4	10.81	132.39	125.90
38	4	26	U	C5-C4-O4	10.81	132.39	125.90
1	6	1025	A	C6-C5-N7	-10.81	124.73	132.30
36	1	2400	G	N1-C6-O6	10.81	126.38	119.90
36	1	2617	U	C5-C6-N1	-10.81	117.30	122.70
36	5	1151	U	N3-C4-O4	10.81	126.97	119.40
36	1	832	G	O5'-P-OP2	-10.80	95.97	105.70
36	1	1414	G	C4-C5-N7	10.80	115.12	110.80
36	1	2385	G	C4-C5-N7	10.80	115.12	110.80
36	5	2386	A	C5-N7-C8	-10.80	98.50	103.90
36	5	3383	G	C4-C5-N7	10.80	115.12	110.80
36	1	939	U	C5-C6-N1	10.80	128.10	122.70
36	1	651	G	N1-C6-O6	10.80	126.38	119.90
36	1	1000	C	N3-C2-O2	10.80	129.46	121.90
36	5	2391	G	N1-C6-O6	-10.80	113.42	119.90
36	5	1665	C	C6-N1-C2	10.79	124.62	120.30
36	5	2278	C	C6-N1-C1'	-10.79	107.85	120.80
36	1	652	G	O5'-P-OP2	-10.78	95.99	105.70
36	5	1196	C	C5-C4-N4	10.78	127.75	120.20
36	5	2354	C	N3-C4-C5	-10.78	117.59	121.90
36	5	2927	C	N1-C2-O2	-10.78	112.43	118.90
36	5	2246	G	C8-N9-C4	-10.78	102.09	106.40
36	1	2869	U	N1-C2-O2	-10.77	115.26	122.80
38	4	32	C	N3-C4-C5	-10.77	117.59	121.90
38	4	12	A	C5-N7-C8	-10.77	98.52	103.90
36	5	2870	C	C6-N1-C2	10.77	124.61	120.30
36	5	2945	G	N7-C8-N9	10.77	118.48	113.10
36	1	979	U	N3-C2-O2	-10.76	114.67	122.20
36	1	1152	G	C2-N3-C4	10.76	117.28	111.90
36	1	2931	C	C6-N1-C2	10.76	124.60	120.30
1	6	1127	G	N1-C6-O6	10.76	126.36	119.90
1	6	1622	G	C5-C6-O6	-10.76	122.14	128.60
36	5	2278	C	O5'-P-OP1	10.76	123.61	110.70
36	1	2280	A	O5'-P-OP1	-10.76	96.02	105.70
36	5	1546	A	N1-C2-N3	10.75	134.68	129.30
36	5	189	G	N1-C6-O6	-10.75	113.45	119.90
36	5	3079	U	C5-C4-O4	10.75	132.35	125.90
38	4	4	C	C2-N3-C4	-10.75	114.53	119.90
36	5	1107	C	C4-C5-C6	10.74	122.77	117.40
36	5	1156	C	O5'-P-OP1	-10.74	96.03	105.70
36	1	1204	A	C2-N3-C4	-10.74	105.23	110.60
36	1	2655	U	C6-N1-C2	-10.74	114.56	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2363	A	N1-C6-N6	-10.74	112.16	118.60
36	5	2644	C	N1-C2-O2	-10.74	112.46	118.90
1	6	1509	C	O5'-P-OP2	-10.74	96.04	105.70
36	5	2403	G	N1-C6-O6	10.74	126.34	119.90
36	5	1373	A	C5-C6-N6	-10.73	115.11	123.70
36	5	2662	G	C8-N9-C1'	-10.73	113.05	127.00
36	1	828	A	C5-N7-C8	-10.73	98.54	103.90
36	5	3188	G	N3-C4-C5	-10.72	123.24	128.60
36	5	3307	A	N1-C6-N6	10.72	125.03	118.60
36	5	640	U	C6-N1-C2	-10.72	114.57	121.00
36	5	2870	C	C5-C6-N1	-10.72	115.64	121.00
1	2	449	C	C6-N1-C2	-10.71	116.01	120.30
36	1	36	C	N1-C2-O2	10.71	125.33	118.90
36	1	1420	C	N1-C2-O2	-10.71	112.47	118.90
36	1	101	G	N9-C4-C5	-10.71	101.11	105.40
36	1	808	A	C6-N1-C2	-10.71	112.18	118.60
1	6	431	C	N3-C4-C5	-10.71	117.62	121.90
36	5	2623	G	C8-N9-C4	10.71	110.68	106.40
36	1	2996	U	C2-N1-C1'	10.70	130.54	117.70
36	1	3217	C	C6-N1-C2	-10.71	116.02	120.30
38	4	12	A	C4-C5-N7	10.70	116.05	110.70
36	5	1321	G	C5-C6-N1	-10.70	106.15	111.50
36	1	1061	A	N7-C8-N9	-10.70	108.45	113.80
36	1	1116	G	N1-C2-N2	-10.70	106.57	116.20
36	1	651	G	C6-C5-N7	-10.70	123.98	130.40
36	1	2985	C	N1-C2-O2	-10.69	112.48	118.90
1	6	1610	G	N3-C4-C5	-10.70	123.25	128.60
36	5	1203	A	N1-C6-N6	10.69	125.02	118.60
36	5	932	U	N3-C4-C5	10.69	121.02	114.60
36	5	1590	G	C8-N9-C4	10.69	110.68	106.40
36	5	2363	A	N9-C4-C5	10.69	110.08	105.80
36	5	3096	C	N3-C4-C5	-10.69	117.62	121.90
1	6	1664	C	N3-C4-C5	-10.69	117.62	121.90
36	1	187	A	N1-C6-N6	-10.68	112.19	118.60
36	1	1151	U	N3-C4-C5	-10.68	108.19	114.60
36	5	567	G	N1-C6-O6	10.68	126.31	119.90
36	5	1310	G	C6-C5-N7	-10.68	124.00	130.40
36	5	2684	C	C6-N1-C2	-10.68	116.03	120.30
1	6	1280	C	N3-C4-C5	-10.67	117.63	121.90
36	5	1377	G	C5-C6-O6	10.67	135.00	128.60
36	5	2698	G	C8-N9-C4	10.67	110.67	106.40
37	7	15	C	C2-N1-C1'	10.67	130.54	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1047	A	O5'-P-OP2	-10.67	96.10	105.70
36	1	645	A	C8-N9-C4	-10.66	101.53	105.80
1	6	144	U	N1-C2-O2	10.66	130.26	122.80
36	5	2393	G	C5-C6-O6	-10.66	122.20	128.60
36	5	2689	A	C6-N1-C2	-10.66	112.20	118.60
36	5	2852	C	C6-N1-C2	10.66	124.57	120.30
36	5	2700	G	N1-C6-O6	-10.66	113.50	119.90
1	6	1278	G	C8-N9-C4	-10.66	102.14	106.40
36	5	3045	G	C8-N9-C4	-10.66	102.14	106.40
1	2	1615	C	N3-C2-O2	-10.66	114.44	121.90
36	5	2395	G	C4-C5-N7	10.66	115.06	110.80
36	5	3137	C	N3-C4-N4	10.66	125.46	118.00
36	1	1438	U	N1-C2-N3	10.65	121.29	114.90
36	5	796	U	N3-C2-O2	-10.65	114.74	122.20
36	5	2634	U	C5-C4-O4	-10.65	119.51	125.90
36	1	1065	A	N1-C2-N3	10.65	134.62	129.30
36	1	3142	A	C5-C6-N6	10.65	132.22	123.70
36	5	960	U	N1-C2-O2	10.65	130.26	122.80
36	5	2921	U	C6-N1-C2	10.65	127.39	121.00
36	5	3124	G	C8-N9-C4	-10.65	102.14	106.40
36	1	609	G	C6-C5-N7	-10.65	124.01	130.40
36	1	1307	G	P-O3'-C3'	10.65	132.48	119.70
36	5	1196	C	C5-C6-N1	-10.65	115.68	121.00
36	5	3078	U	C5-C4-O4	10.64	132.29	125.90
36	1	1414	G	N1-C6-O6	10.64	126.28	119.90
36	5	1050	U	C5-C6-N1	-10.64	117.38	122.70
36	1	2957	G	O5'-P-OP2	-10.63	96.13	105.70
36	5	998	A	N1-C2-N3	10.63	134.62	129.30
36	5	3182	G	C5-C6-O6	10.63	134.98	128.60
36	1	1585	C	C6-N1-C2	10.63	124.55	120.30
36	5	2942	C	N3-C4-N4	-10.62	110.56	118.00
36	1	2644	C	C2-N3-C4	-10.62	114.59	119.90
37	7	84	A	N7-C8-N9	10.62	119.11	113.80
36	1	205	C	C5-C6-N1	-10.62	115.69	121.00
36	1	2414	G	C2-N3-C4	-10.62	106.59	111.90
36	1	2707	C	C6-N1-C2	-10.62	116.05	120.30
36	1	1592	G	N3-C4-C5	-10.62	123.29	128.60
1	6	1644	C	N1-C2-O2	10.62	125.27	118.90
36	5	667	C	N3-C4-N4	-10.62	110.57	118.00
36	5	3245	A	N7-C8-N9	10.62	119.11	113.80
36	5	1176	C	C2-N1-C1'	-10.62	107.12	118.80
1	6	1758	U	O5'-P-OP2	-10.61	96.15	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2378	C	O5'-P-OP1	-10.61	96.15	105.70
36	5	857	G	C8-N9-C4	-10.61	102.16	106.40
36	1	316	U	C6-N1-C2	-10.61	114.64	121.00
36	5	2428	U	C5-C6-N1	-10.61	117.40	122.70
36	1	651	G	C8-N9-C1'	-10.60	113.22	127.00
36	1	1386	A	C5-C6-N6	10.60	132.18	123.70
36	1	1224	C	C6-N1-C2	-10.60	116.06	120.30
1	2	543	C	N1-C2-O2	10.60	125.26	118.90
1	6	142	G	C4-C5-N7	-10.60	106.56	110.80
1	6	474	A	N1-C2-N3	-10.60	124.00	129.30
36	5	2246	G	N7-C8-N9	10.60	118.40	113.10
36	5	1794	G	N3-C4-C5	10.59	133.90	128.60
36	1	890	C	N1-C2-O2	10.59	125.25	118.90
36	1	220	G	N1-C6-O6	10.59	126.25	119.90
36	1	1387	G	N1-C2-N3	10.59	130.25	123.90
1	6	139	C	N3-C2-O2	-10.59	114.49	121.90
36	5	2936	A	N3-C4-C5	-10.59	119.39	126.80
36	5	917	A	O5'-P-OP2	-10.58	96.18	105.70
36	1	1149	G	N1-C6-O6	10.58	126.25	119.90
36	5	637	C	N3-C4-C5	10.58	126.13	121.90
36	1	2811	A	C6-C5-N7	-10.58	124.90	132.30
36	5	595	G	C6-C5-N7	-10.58	124.05	130.40
36	5	1141	C	O5'-P-OP2	-10.58	96.18	105.70
36	1	2390	A	N1-C6-N6	-10.57	112.25	118.60
36	5	648	C	C6-N1-C2	-10.57	116.07	120.30
36	5	2941	A	O5'-P-OP2	-10.57	96.18	105.70
1	6	1005	A	N1-C2-N3	10.57	134.59	129.30
36	1	625	G	O5'-P-OP2	-10.57	96.19	105.70
36	5	1486	G	N3-C4-C5	10.57	133.88	128.60
1	2	377	G	N3-C4-N9	-10.56	119.66	126.00
36	5	512	U	C5-C6-N1	-10.56	117.42	122.70
36	5	1339	C	O5'-P-OP1	-10.56	96.19	105.70
36	5	3140	G	N9-C4-C5	-10.56	101.18	105.40
1	2	1291	G	C8-N9-C4	-10.56	102.18	106.40
36	1	1182	A	N1-C6-N6	10.56	124.93	118.60
36	1	818	C	N3-C4-C5	-10.55	117.68	121.90
36	1	345	G	C4-C5-C6	10.54	125.12	118.80
36	5	1292	C	N1-C2-O2	-10.54	112.58	118.90
36	5	2637	A	N1-C2-N3	10.54	134.57	129.30
36	1	1377	G	N1-C6-O6	10.54	126.22	119.90
36	5	3069	G	C4-C5-N7	10.54	115.02	110.80
38	8	133	G	C8-N9-C4	10.53	110.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1340	G	C5-C6-N1	10.53	116.77	111.50
36	1	1141	C	C6-N1-C2	-10.53	116.09	120.30
36	5	521	A	C8-N9-C4	-10.53	101.59	105.80
36	1	1408	G	N1-C6-O6	10.53	126.22	119.90
1	6	421	A	C8-N9-C4	10.53	110.01	105.80
36	1	394	G	N9-C4-C5	10.52	109.61	105.40
36	1	895	A	C8-N9-C4	-10.51	101.59	105.80
1	6	1296	A	O5'-P-OP1	-10.51	96.24	105.70
36	5	3227	A	N1-C6-N6	10.51	124.91	118.60
36	1	938	C	N3-C2-O2	-10.51	114.54	121.90
36	1	335	G	C8-N9-C4	-10.50	102.20	106.40
36	1	656	A	C5-C6-N1	10.50	122.95	117.70
36	1	1398	U	N1-C2-N3	10.50	121.20	114.90
36	5	874	U	N1-C2-N3	10.50	121.20	114.90
36	5	3092	C	C6-N1-C2	10.50	124.50	120.30
1	6	794	U	C2-N1-C1'	10.50	130.29	117.70
36	1	973	A	N1-C6-N6	-10.49	112.30	118.60
36	1	3018	C	C6-N1-C2	10.49	124.50	120.30
1	6	337	G	C5-N7-C8	-10.49	99.05	104.30
36	1	2408	U	C6-N1-C2	-10.49	114.70	121.00
36	1	645	A	C6-N1-C2	-10.49	112.31	118.60
36	1	1500	G	C5-C6-O6	-10.49	122.31	128.60
36	5	2715	A	O5'-P-OP1	-10.49	96.26	105.70
36	5	94	G	N3-C4-C5	10.48	133.84	128.60
36	5	3323	A	C8-N9-C4	-10.48	101.61	105.80
1	6	1426	C	C6-N1-C2	10.48	124.49	120.30
36	5	1129	A	C5-C6-N6	-10.48	115.31	123.70
36	5	3016	A	C2-N3-C4	-10.48	105.36	110.60
36	5	3061	G	N3-C4-C5	10.48	133.84	128.60
37	7	44	C	N3-C4-C5	10.48	126.09	121.90
1	6	163	G	N9-C4-C5	10.48	109.59	105.40
36	5	2934	A	N1-C6-N6	10.48	124.89	118.60
36	5	1900	A	C5-C6-N1	10.47	122.94	117.70
36	5	2762	A	O5'-P-OP1	-10.47	96.27	105.70
38	4	41	A	C6-N1-C2	-10.47	112.32	118.60
36	5	867	G	O5'-P-OP2	10.47	123.27	110.70
36	1	1495	U	N1-C2-O2	-10.47	115.47	122.80
36	1	2810	C	N3-C4-C5	-10.47	117.71	121.90
36	5	227	G	O5'-P-OP2	-10.47	96.28	105.70
36	5	293	C	N3-C4-C5	10.47	126.09	121.90
36	5	2950	G	C5-C6-O6	-10.47	122.32	128.60
36	1	2605	G	N3-C4-C5	10.46	133.83	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	998	A	N1-C6-N6	-10.46	112.32	118.60
1	6	1556	A	N1-C6-N6	10.46	124.88	118.60
36	5	1209	G	N1-C6-O6	10.47	126.18	119.90
36	5	2130	G	N3-C4-C5	10.46	133.83	128.60
1	6	972	G	N1-C6-O6	10.46	126.18	119.90
36	1	424	G	C5-C6-O6	-10.46	122.33	128.60
36	1	35	A	C5-C6-N6	-10.46	115.33	123.70
36	5	994	G	C8-N9-C1'	-10.46	113.41	127.00
36	1	1547	G	N3-C4-N9	10.46	132.27	126.00
36	1	2880	U	C6-N1-C2	-10.46	114.73	121.00
36	5	2906	C	C5-C4-N4	-10.45	112.88	120.20
36	5	283	G	C8-N9-C1'	-10.45	113.41	127.00
36	1	2692	A	C8-N9-C4	-10.45	101.62	105.80
36	1	1178	G	N1-C2-N2	-10.45	106.80	116.20
36	1	272	G	N3-C4-N9	-10.44	119.73	126.00
36	5	27	C	O5'-P-OP1	-10.45	96.30	105.70
36	5	2708	C	N1-C2-O2	-10.45	112.63	118.90
36	1	358	G	C4-C5-N7	10.44	114.98	110.80
36	5	2707	C	C6-N1-C2	10.44	124.48	120.30
36	1	663	C	O5'-P-OP1	10.44	123.23	110.70
36	1	2651	G	N1-C6-O6	10.44	126.16	119.90
36	1	3313	U	O5'-P-OP2	-10.44	96.31	105.70
38	4	20	U	N1-C2-N3	10.44	121.16	114.90
37	7	37	G	N3-C4-N9	10.44	132.26	126.00
36	5	1196	C	N3-C2-O2	-10.44	114.60	121.90
36	1	1134	G	C4-C5-N7	-10.43	106.63	110.80
36	1	1433	A	C5-C6-N1	10.43	122.92	117.70
36	5	502	U	O5'-P-OP2	-10.43	96.31	105.70
36	5	52	A	O5'-P-OP1	-10.43	96.31	105.70
36	5	192	C	C6-N1-C2	-10.43	116.13	120.30
36	5	2234	G	C8-N9-C4	10.43	110.57	106.40
36	5	3362	A	C8-N9-C4	-10.43	101.63	105.80
36	1	1048	A	N1-C6-N6	-10.42	112.35	118.60
36	1	979	U	N1-C2-N3	10.42	121.15	114.90
36	1	937	G	N1-C6-O6	10.42	126.15	119.90
36	1	2281	A	O5'-P-OP2	-10.42	96.33	105.70
36	5	2187	G	N9-C4-C5	10.42	109.57	105.40
36	5	3085	G	N7-C8-N9	-10.42	107.89	113.10
1	6	1536	G	O5'-P-OP1	-10.41	96.33	105.70
36	5	940	G	C6-C5-N7	10.41	136.65	130.40
36	5	2900	A	O5'-P-OP2	-10.41	96.33	105.70
36	1	2753	G	N1-C6-O6	-10.41	113.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	4	C	C6-N1-C2	-10.41	116.14	120.30
36	1	2409	G	N3-C4-N9	10.41	132.24	126.00
1	6	359	A	C4-C5-C6	-10.41	111.80	117.00
36	5	2400	G	C4-N9-C1'	-10.41	112.97	126.50
36	5	2976	A	C5-C6-N1	10.40	122.90	117.70
36	1	305	U	C5-C6-N1	-10.40	117.50	122.70
36	1	1887	A	C8-N9-C4	10.40	109.96	105.80
36	5	2353	G	N1-C6-O6	10.40	126.14	119.90
36	1	860	G	N1-C6-O6	10.40	126.14	119.90
36	5	1367	G	C8-N9-C1'	-10.40	113.48	127.00
37	7	109	G	C5-C6-O6	-10.40	122.36	128.60
1	2	1196	A	O5'-P-OP1	-10.39	96.35	105.70
1	6	905	A	N1-C6-N6	-10.39	112.36	118.60
1	6	337	G	N7-C8-N9	10.39	118.30	113.10
36	5	344	A	C8-N9-C4	-10.39	101.64	105.80
36	1	344	A	C5-N7-C8	-10.39	98.70	103.90
36	5	64	G	N1-C6-O6	10.39	126.13	119.90
36	5	2381	G	C4-C5-N7	-10.39	106.64	110.80
36	5	3210	A	N1-C6-N6	-10.39	112.36	118.60
36	1	421	G	C5-C6-N1	10.39	116.69	111.50
36	5	1861	G	O5'-P-OP2	-10.39	96.35	105.70
36	5	2927	C	N3-C2-O2	10.39	129.17	121.90
37	7	84	A	C5-N7-C8	-10.39	98.71	103.90
36	1	2363	A	C8-N9-C4	-10.39	101.65	105.80
1	6	1614	A	C2-N3-C4	-10.38	105.41	110.60
36	5	2116	G	C8-N9-C4	-10.38	102.25	106.40
36	5	2953	U	N3-C2-O2	10.38	129.47	122.20
36	1	2385	G	O5'-P-OP2	-10.38	96.36	105.70
1	6	597	G	C6-C5-N7	-10.38	124.17	130.40
36	5	3219	G	C8-N9-C4	-10.38	102.25	106.40
36	5	2953	U	N3-C4-O4	10.38	126.66	119.40
36	1	206	G	N7-C8-N9	-10.37	107.91	113.10
36	1	630	A	O5'-P-OP2	-10.37	96.36	105.70
36	1	1708	C	C6-N1-C2	10.37	124.45	120.30
36	1	2306	C	C2-N1-C1'	10.37	130.21	118.80
36	5	1931	U	C2-N1-C1'	-10.37	105.25	117.70
36	5	1379	G	N1-C2-N2	-10.37	106.87	116.20
1	2	543	C	C6-N1-C2	-10.37	116.15	120.30
36	1	404	G	C6-C5-N7	-10.37	124.18	130.40
36	5	3085	G	C5-C6-N1	10.36	116.68	111.50
1	2	14	C	C6-N1-C2	-10.36	116.16	120.30
1	2	338	C	N3-C4-C5	-10.36	117.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1761	U	N3-C2-O2	-10.36	114.95	122.20
36	1	1448	U	N1-C2-N3	10.36	121.12	114.90
36	5	3180	A	C2-N3-C4	-10.36	105.42	110.60
36	1	1846	C	N3-C2-O2	10.36	129.15	121.90
36	5	86	G	C5-C6-N1	10.36	116.68	111.50
36	1	425	G	N1-C6-O6	-10.35	113.69	119.90
36	1	860	G	C5-C6-O6	-10.35	122.39	128.60
36	5	2247	G	O5'-P-OP1	-10.35	96.38	105.70
36	5	2808	A	O5'-P-OP1	-10.35	96.39	105.70
36	5	2818	U	O5'-P-OP1	-10.35	96.39	105.70
36	1	2827	U	C4-C5-C6	10.35	125.91	119.70
36	5	1497	C	O5'-P-OP1	-10.35	96.39	105.70
36	5	2290	C	C6-N1-C2	10.35	124.44	120.30
36	1	644	G	N1-C6-O6	-10.34	113.69	119.90
1	6	1640	C	C6-N1-C1'	-10.34	108.39	120.80
36	5	927	C	N3-C4-N4	10.34	125.24	118.00
36	5	2305	G	C8-N9-C4	-10.33	102.27	106.40
36	5	2119	A	C6-C5-N7	-10.33	125.07	132.30
36	1	2811	A	N1-C6-N6	10.32	124.80	118.60
36	5	1367	G	C6-C5-N7	-10.32	124.21	130.40
36	5	2996	U	N1-C2-N3	-10.32	108.71	114.90
36	1	994	G	N1-C6-O6	-10.32	113.71	119.90
36	1	3181	C	N3-C4-N4	-10.32	110.78	118.00
36	5	731	U	N3-C2-O2	-10.32	114.98	122.20
36	5	922	U	C2-N1-C1'	-10.32	105.32	117.70
36	5	938	C	C4-C5-C6	-10.32	112.24	117.40
36	5	2673	A	C8-N9-C4	10.31	109.92	105.80
36	1	1195	A	C8-N9-C4	-10.31	101.68	105.80
36	1	2185	G	C6-C5-N7	-10.31	124.22	130.40
36	1	2672	G	N1-C6-O6	-10.31	113.72	119.90
36	5	2689	A	N7-C8-N9	10.31	118.95	113.80
36	5	668	G	N7-C8-N9	-10.31	107.95	113.10
36	1	2409	G	C4-C5-C6	10.30	124.98	118.80
36	1	2628	A	C8-N9-C4	-10.30	101.68	105.80
36	5	858	A	N1-C6-N6	-10.31	112.42	118.60
36	5	1592	G	C4-C5-N7	-10.30	106.68	110.80
36	1	395	A	O5'-P-OP2	-10.30	96.43	105.70
37	7	106	U	C5-C6-N1	-10.30	117.55	122.70
36	1	3273	A	C5-C6-N1	10.30	122.85	117.70
37	3	95	A	C2-N3-C4	-10.30	105.45	110.60
36	1	2831	G	N3-C4-C5	10.29	133.75	128.60
36	1	967	A	N1-C2-N3	10.29	134.45	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2947	G	C5-C6-N1	10.29	116.65	111.50
36	1	1316	C	C4-C5-C6	10.29	122.54	117.40
36	5	1163	A	O5'-P-OP2	-10.29	96.44	105.70
36	1	209	A	C2-N3-C4	-10.29	105.46	110.60
36	1	2811	A	N3-C4-C5	-10.29	119.60	126.80
36	5	1181	U	N1-C2-N3	10.29	121.07	114.90
36	1	2175	U	O5'-P-OP1	-10.28	96.45	105.70
1	6	144	U	C2-N1-C1'	10.28	130.04	117.70
36	5	3041	U	C2-N3-C4	-10.28	120.83	127.00
36	1	908	G	C4-N9-C1'	10.28	139.86	126.50
36	1	942	U	C4-C5-C6	10.28	125.87	119.70
36	1	2352	A	N1-C6-N6	10.28	124.77	118.60
36	5	860	G	C4-C5-N7	10.28	114.91	110.80
36	5	2272	G	O4'-C1'-N9	10.28	116.42	108.20
36	1	923	C	C6-N1-C2	10.27	124.41	120.30
36	5	3385	U	C5-C6-N1	-10.27	117.56	122.70
36	1	1519	G	C4-C5-N7	10.27	114.91	110.80
36	5	2117	A	C2-N3-C4	-10.27	105.47	110.60
37	7	109	G	N1-C6-O6	10.27	126.06	119.90
1	6	1730	A	N9-C4-C5	10.27	109.91	105.80
36	5	526	C	N1-C2-O2	10.27	125.06	118.90
36	5	3122	A	C8-N9-C4	-10.27	101.69	105.80
1	6	554	C	C2-N3-C4	-10.26	114.77	119.90
36	1	674	G	N1-C6-O6	10.26	126.05	119.90
36	5	806	A	C2-N3-C4	-10.26	105.47	110.60
36	5	1196	C	N3-C4-N4	-10.26	110.82	118.00
36	5	2872	A	C4-C5-C6	-10.25	111.87	117.00
36	5	787	G	C2-N3-C4	-10.25	106.78	111.90
1	6	179	A	C8-N9-C4	-10.25	101.70	105.80
36	5	3309	G	N3-C4-N9	10.25	132.15	126.00
36	1	1307	G	N9-C4-C5	10.24	109.50	105.40
38	4	4	C	N1-C2-N3	10.24	126.37	119.20
36	5	2621	G	C5-C6-N1	-10.24	106.38	111.50
36	1	808	A	C5-C6-N1	10.24	122.82	117.70
1	6	554	C	C5-C6-N1	-10.24	115.88	121.00
36	5	1379	G	C2-N3-C4	-10.24	106.78	111.90
36	5	1113	G	C2-N3-C4	-10.24	106.78	111.90
36	5	3086	A	O5'-P-OP1	-10.24	96.48	105.70
36	5	3150	A	N1-C6-N6	10.24	124.74	118.60
36	5	2620	G	N1-C6-O6	-10.24	113.76	119.90
36	1	1139	G	N3-C4-N9	-10.23	119.86	126.00
38	8	1	A	N1-C6-N6	-10.23	112.46	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2927	C	N1-C2-O2	-10.23	112.76	118.90
1	6	1148	C	C6-N1-C2	-10.23	116.21	120.30
36	5	1450	G	N7-C8-N9	10.22	118.21	113.10
36	5	2879	C	N3-C2-O2	10.22	129.06	121.90
36	5	64	G	C4-C5-C6	10.22	124.93	118.80
36	5	2646	C	O5'-P-OP2	-10.22	96.50	105.70
36	1	2379	U	O5'-P-OP1	10.22	122.96	110.70
36	5	1934	G	C8-N9-C4	10.22	110.49	106.40
36	5	2728	G	N3-C4-N9	10.22	132.13	126.00
36	1	907	G	N1-C6-O6	-10.21	113.77	119.90
36	5	1212	A	N7-C8-N9	10.21	118.91	113.80
36	5	1433	A	N1-C6-N6	10.21	124.73	118.60
36	5	1310	G	C6-N1-C2	-10.21	118.97	125.10
38	4	4	C	N3-C2-O2	-10.21	114.75	121.90
36	1	613	G	O5'-P-OP1	-10.20	96.52	105.70
1	6	1773	C	N3-C4-N4	10.20	125.14	118.00
36	5	1060	U	C2-N3-C4	-10.20	120.88	127.00
36	1	1443	G	N1-C6-O6	10.20	126.02	119.90
36	1	290	G	N3-C2-N2	-10.19	112.76	119.90
1	6	1121	C	N3-C2-O2	-10.20	114.76	121.90
36	5	637	C	C5-C4-N4	-10.19	113.06	120.20
36	5	1367	G	C5-C6-N1	-10.20	106.40	111.50
36	5	2244	A	O5'-P-OP1	-10.20	96.52	105.70
37	7	89	G	C6-N1-C2	10.20	131.22	125.10
38	4	32	C	C6-N1-C2	-10.19	116.22	120.30
36	5	1310	G	C5-N7-C8	-10.19	99.20	104.30
1	2	543	C	C2-N1-C1'	10.19	130.01	118.80
36	5	2335	G	C5-N7-C8	10.19	109.39	104.30
36	5	649	A	N1-C6-N6	10.19	124.71	118.60
36	1	635	G	C5-C6-N1	10.18	116.59	111.50
36	5	2920	U	N3-C4-C5	10.18	120.71	114.60
1	6	474	A	C4-C5-C6	-10.18	111.91	117.00
36	1	1917	C	C6-N1-C2	10.18	124.37	120.30
36	5	883	A	C6-N1-C2	-10.17	112.50	118.60
36	5	2694	A	O5'-P-OP1	-10.17	96.55	105.70
36	5	2195	C	N3-C4-N4	-10.17	110.88	118.00
1	6	1753	A	N3-C4-N9	10.17	135.53	127.40
36	1	1341	U	O5'-P-OP2	-10.17	96.55	105.70
36	5	2946	A	C2-N3-C4	-10.16	105.52	110.60
36	1	27	C	C6-N1-C2	-10.16	116.24	120.30
38	4	81	U	N3-C2-O2	-10.16	115.09	122.20
36	5	682	U	C5-C4-O4	10.16	132.00	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2335	G	N7-C8-N9	-10.16	108.02	113.10
36	1	1208	U	C2-N1-C1'	10.16	129.89	117.70
36	1	2617	U	N3-C2-O2	-10.16	115.09	122.20
36	5	940	G	C4-C5-C6	-10.16	112.70	118.80
1	6	1112	G	C5-C6-O6	10.16	134.69	128.60
36	1	1493	G	C5-C6-O6	10.15	134.69	128.60
37	7	26	C	C4-C5-C6	10.15	122.48	117.40
37	7	98	C	O5'-P-OP2	-10.15	96.56	105.70
36	1	632	G	C5-C6-O6	-10.15	122.51	128.60
36	5	1159	A	C2-N3-C4	-10.15	105.53	110.60
36	5	2187	G	C8-N9-C4	-10.15	102.34	106.40
36	5	3227	A	C2-N3-C4	-10.15	105.52	110.60
36	5	3285	C	N1-C2-O2	10.15	124.99	118.90
36	1	2308	C	C5-C6-N1	-10.15	115.93	121.00
36	5	1176	C	C6-N1-C2	10.15	124.36	120.30
36	1	967	A	C2-N3-C4	-10.15	105.53	110.60
36	1	2880	U	N3-C4-O4	-10.15	112.30	119.40
36	1	2168	A	C5-C6-N6	10.14	131.81	123.70
36	5	52	A	N1-C2-N3	10.14	134.37	129.30
36	5	578	A	C8-N9-C4	-10.14	101.74	105.80
38	4	3	A	C2-N3-C4	10.14	115.67	110.60
36	5	1149	G	C4-C5-C6	10.14	124.88	118.80
36	1	2306	C	N3-C2-O2	-10.14	114.81	121.90
36	1	1366	A	N1-C2-N3	10.13	134.37	129.30
36	1	2327	U	O5'-P-OP1	-10.13	96.58	105.70
38	4	26	U	N3-C2-O2	-10.14	115.11	122.20
36	1	2889	C	N3-C4-C5	-10.13	117.85	121.90
36	5	945	C	O5'-P-OP2	-10.13	96.58	105.70
36	5	2428	U	C6-N1-C2	10.13	127.08	121.00
1	6	1615	C	N3-C4-C5	10.13	125.95	121.90
36	1	1419	A	O5'-P-OP1	10.13	122.86	110.70
36	5	1003	A	N1-C6-N6	10.13	124.68	118.60
36	1	1001	G	O5'-P-OP1	-10.13	96.59	105.70
36	1	2946	A	N1-C2-N3	10.13	134.36	129.30
36	5	938	C	C6-N1-C2	10.13	124.35	120.30
36	5	2358	A	C8-N9-C4	10.13	109.85	105.80
1	2	1096	C	N3-C2-O2	-10.12	114.81	121.90
36	1	1192	C	N1-C2-O2	10.12	124.97	118.90
36	5	200	C	N1-C2-O2	10.12	124.97	118.90
36	5	2130	G	N3-C4-N9	-10.12	119.93	126.00
36	1	639	G	N3-C4-C5	10.12	133.66	128.60
36	1	908	G	N3-C4-C5	-10.12	123.54	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2396	G	C5-N7-C8	-10.12	99.24	104.30
1	6	105	A	O5'-P-OP1	-10.12	96.59	105.70
36	1	2942	C	C5-C4-N4	-10.12	113.12	120.20
36	5	347	G	O5'-P-OP2	-10.12	96.59	105.70
36	5	2897	A	C6-N1-C2	-10.12	112.53	118.60
1	6	1108	G	N9-C4-C5	10.11	109.44	105.40
36	1	2963	C	N3-C2-O2	-10.11	114.82	121.90
36	1	3262	U	N3-C2-O2	-10.11	115.12	122.20
36	5	1107	C	N3-C2-O2	-10.11	114.82	121.90
36	5	595	G	C4-N9-C1'	10.11	139.64	126.50
36	1	1419	A	C8-N9-C4	-10.11	101.76	105.80
36	5	2283	G	N1-C6-O6	10.11	125.96	119.90
36	1	939	U	OP1-P-OP2	-10.10	104.44	119.60
36	1	2827	U	N1-C2-N3	10.10	120.96	114.90
36	5	2393	G	N9-C4-C5	-10.10	101.36	105.40
36	5	2662	G	C4-N9-C1'	10.10	139.63	126.50
36	5	2192	C	N3-C4-C5	-10.10	117.86	121.90
36	5	1155	C	N1-C2-O2	-10.10	112.84	118.90
36	5	2168	A	N1-C6-N6	10.10	124.66	118.60
37	7	105	C	N3-C4-C5	-10.10	117.86	121.90
36	1	2726	C	N1-C2-N3	10.10	126.27	119.20
1	6	36	C	C6-N1-C2	10.09	124.34	120.30
36	5	1489	A	C4-C5-C6	10.09	122.05	117.00
1	2	378	A	N1-C6-N6	10.09	124.66	118.60
36	5	1295	G	N9-C4-C5	-10.09	101.36	105.40
36	1	2919	A	C2-N3-C4	-10.09	105.56	110.60
36	1	3094	A	O5'-P-OP1	-10.09	96.62	105.70
36	1	1166	G	N1-C6-O6	10.08	125.95	119.90
1	2	1737	G	N1-C6-O6	10.08	125.95	119.90
36	1	147	U	N3-C2-O2	-10.08	115.14	122.20
36	1	693	A	N1-C2-N3	10.08	134.34	129.30
36	1	1108	U	O5'-P-OP1	-10.08	96.63	105.70
36	5	2816	G	N1-C6-O6	10.08	125.95	119.90
36	1	897	U	N1-C2-O2	10.07	129.85	122.80
36	5	2887	A	N1-C6-N6	-10.07	112.56	118.60
1	6	1774	G	C8-N9-C4	-10.07	102.37	106.40
36	5	2189	U	O5'-P-OP1	-10.07	96.64	105.70
36	5	2897	A	C5-C6-N6	-10.07	115.64	123.70
36	1	3172	A	C6-N1-C2	-10.07	112.56	118.60
37	3	30	G	N3-C4-C5	-10.07	123.57	128.60
36	1	413	U	C5-C6-N1	-10.06	117.67	122.70
36	1	575	G	O5'-P-OP1	-10.06	96.64	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3261	C	N3-C4-C5	-10.06	117.88	121.90
36	1	606	C	N1-C2-O2	-10.06	112.86	118.90
36	1	2378	C	C6-N1-C2	10.06	124.32	120.30
36	5	2959	C	C6-N1-C2	-10.06	116.28	120.30
36	1	1443	G	C4-C5-N7	10.06	114.82	110.80
36	5	1148	G	C6-C5-N7	-10.06	124.37	130.40
1	2	75	U	N1-C2-O2	10.05	129.84	122.80
36	1	718	G	C5-N7-C8	-10.05	99.27	104.30
36	5	3333	G	O5'-P-OP2	-10.05	96.65	105.70
36	1	2637	A	N1-C6-N6	-10.05	112.57	118.60
36	5	567	G	C4-C5-N7	10.04	114.82	110.80
36	1	608	A	C6-C5-N7	-10.04	125.27	132.30
1	6	1498	G	N1-C6-O6	10.04	125.92	119.90
37	7	97	A	C6-N1-C2	-10.04	112.58	118.60
36	1	1182	A	C5-C6-N6	-10.04	115.67	123.70
38	4	18	U	C2-N1-C1'	10.04	129.75	117.70
36	5	1485	G	N1-C6-O6	-10.04	113.88	119.90
36	5	2620	G	N1-C2-N3	10.04	129.92	123.90
36	5	609	G	O5'-P-OP2	-10.03	96.67	105.70
36	1	707	U	C5-C4-O4	10.03	131.92	125.90
36	1	2824	G	C6-C5-N7	-10.03	124.38	130.40
36	5	2584	G	C8-N9-C4	-10.03	102.39	106.40
36	5	2661	G	C4-N9-C1'	10.03	139.53	126.50
36	5	3043	C	C6-N1-C2	10.03	124.31	120.30
38	8	53	A	C6-N1-C2	-10.03	112.58	118.60
36	5	1129	A	N9-C4-C5	-10.02	101.79	105.80
36	1	3100	U	C6-N1-C2	10.02	127.01	121.00
36	1	394	G	C8-N9-C4	-10.02	102.39	106.40
36	1	3092	C	C5-C6-N1	-10.02	115.99	121.00
36	1	2764	C	N3-C4-C5	-10.01	117.89	121.90
36	1	3054	U	N3-C4-C5	-10.01	108.59	114.60
36	5	1897	G	C5-N7-C8	-10.01	99.30	104.30
36	1	102	C	N1-C2-O2	10.01	124.90	118.90
36	5	2426	U	N3-C4-C5	-10.01	108.60	114.60
36	5	3144	G	N3-C4-C5	-10.00	123.60	128.60
1	2	377	G	N3-C4-C5	10.00	133.60	128.60
36	5	345	G	C8-N9-C1'	-10.00	114.00	127.00
36	5	856	G	O5'-P-OP1	-10.00	96.70	105.70
36	5	1592	G	C5-C6-N1	-10.00	106.50	111.50
36	1	641	C	C2-N3-C4	10.00	124.90	119.90
1	2	1291	G	C6-C5-N7	-9.99	124.40	130.40
36	5	345	G	N1-C6-O6	9.99	125.90	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	885	U	C5-C6-N1	-9.99	117.70	122.70
1	6	388	G	C5-C6-N1	-9.99	106.50	111.50
36	5	1429	G	C6-N1-C2	-9.99	119.10	125.10
36	5	2811	A	N1-C2-N3	9.99	134.30	129.30
36	1	1405	U	N3-C4-O4	-9.99	112.41	119.40
37	7	69	C	C6-N1-C2	9.99	124.30	120.30
36	1	2703	A	C4-C5-C6	9.99	121.99	117.00
1	6	597	G	C4-C5-N7	9.99	114.79	110.80
36	5	1336	U	N3-C4-O4	9.99	126.39	119.40
38	8	42	G	O5'-P-OP2	-9.98	96.72	105.70
36	1	2874	G	C4-N9-C1'	9.98	139.48	126.50
36	5	1128	U	N1-C2-N3	9.98	120.89	114.90
36	5	2934	A	C5-C6-N1	-9.98	112.71	117.70
36	1	211	A	N1-C6-N6	-9.97	112.62	118.60
36	1	3041	U	O5'-P-OP2	-9.97	96.72	105.70
37	3	98	C	C4-C5-C6	9.97	122.39	117.40
38	4	28	C	N3-C4-N4	9.97	124.98	118.00
36	5	1872	C	C6-N1-C2	-9.97	116.31	120.30
36	1	1178	G	C4-N9-C1'	9.97	139.46	126.50
1	6	967	A	C5-C6-N6	-9.97	115.73	123.70
36	5	1115	G	C8-N9-C1'	-9.97	114.04	127.00
36	5	1669	C	N3-C4-C5	-9.97	117.91	121.90
36	5	2610	G	N1-C2-N2	9.97	125.17	116.20
36	5	2916	U	N1-C2-O2	9.97	129.78	122.80
36	5	1152	G	C5-N7-C8	-9.97	99.32	104.30
36	1	1049	C	O5'-P-OP1	-9.96	96.73	105.70
36	5	1129	A	C4-C5-N7	9.96	115.68	110.70
36	5	2950	G	C5-N7-C8	-9.96	99.32	104.30
36	1	3344	A	C5-N7-C8	-9.96	98.92	103.90
1	6	1765	A	O5'-P-OP1	-9.96	96.73	105.70
36	5	2833	A	C6-N1-C2	-9.96	112.62	118.60
36	5	2879	C	N3-C4-N4	9.96	124.97	118.00
36	1	2241	U	C6-N1-C1'	9.96	135.14	121.20
36	1	1554	U	C5-C6-N1	9.96	127.68	122.70
1	2	1272	U	C6-N1-C2	-9.95	115.03	121.00
36	1	3142	A	N3-C4-N9	-9.96	119.44	127.40
36	5	3215	A	C8-N9-C4	9.95	109.78	105.80
36	1	345	G	C8-N9-C4	-9.95	102.42	106.40
36	1	2930	A	N9-C4-C5	-9.95	101.82	105.80
36	1	1149	G	O5'-P-OP2	-9.95	96.74	105.70
36	1	2417	U	N1-C2-N3	9.95	120.87	114.90
36	5	428	A	N1-C6-N6	9.95	124.57	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2804	A	N1-C6-N6	-9.95	112.63	118.60
36	5	3362	A	N7-C8-N9	9.95	118.78	113.80
36	5	289	A	N1-C6-N6	9.95	124.57	118.60
36	1	943	U	N1-C2-N3	9.94	120.87	114.90
36	1	1117	G	O5'-P-OP1	-9.95	96.75	105.70
36	1	3140	G	C4-C5-N7	9.94	114.78	110.80
36	5	2720	G	OP1-P-O3'	-9.94	83.32	105.20
36	5	1164	G	C5-C6-N1	9.94	116.47	111.50
36	5	2679	A	C8-N9-C4	9.94	109.78	105.80
36	5	2767	U	O5'-P-OP2	-9.94	96.75	105.70
36	5	3006	A	N1-C2-N3	9.94	134.27	129.30
36	1	220	G	C2-N3-C4	-9.94	106.93	111.90
1	6	427	C	C5-C6-N1	-9.94	116.03	121.00
36	1	2617	U	C5-C4-O4	9.94	131.86	125.90
36	1	2821	C	N3-C4-C5	-9.94	117.93	121.90
36	1	1429	G	C8-N9-C1'	-9.93	114.09	127.00
36	1	1192	C	O5'-P-OP2	-9.93	96.76	105.70
36	1	2996	U	N1-C2-O2	9.93	129.75	122.80
36	5	1149	G	C5-N7-C8	-9.93	99.33	104.30
36	5	2119	A	C4-C5-C6	9.93	121.97	117.00
1	2	1631	A	O5'-P-OP2	-9.93	96.77	105.70
36	5	286	U	C5-C6-N1	9.93	127.66	122.70
36	1	2400	G	O5'-P-OP1	-9.93	96.77	105.70
36	1	2953	U	C2-N3-C4	9.93	132.96	127.00
36	1	2997	G	C4-C5-N7	9.93	114.77	110.80
1	6	151	G	N3-C4-N9	-9.92	120.05	126.00
1	6	1535	U	N1-C2-N3	9.92	120.85	114.90
36	5	842	G	O5'-P-OP1	-9.92	96.77	105.70
36	1	2347	U	C5-C6-N1	9.92	127.66	122.70
1	6	444	C	C6-N1-C2	9.91	124.27	120.30
1	2	25	C	N1-C2-O2	-9.91	112.95	118.90
1	6	1542	G	O5'-P-OP1	-9.91	96.78	105.70
36	5	339	C	N3-C2-O2	9.91	128.84	121.90
36	5	2875	U	C5-C4-O4	9.91	131.85	125.90
36	1	1392	G	N9-C4-C5	9.91	109.36	105.40
36	5	813	G	O5'-P-OP2	-9.91	96.78	105.70
36	5	3010	U	N3-C2-O2	-9.91	115.26	122.20
38	8	107	G	C6-C5-N7	-9.91	124.45	130.40
36	1	2191	U	N3-C2-O2	-9.91	115.27	122.20
1	6	634	G	C8-N9-C4	-9.90	102.44	106.40
36	5	398	A	O5'-P-OP2	-9.90	96.79	105.70
36	1	1901	A	N1-C6-N6	-9.90	112.66	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2831	G	C2-N3-C4	-9.90	106.95	111.90
36	5	1481	A	N7-C8-N9	9.90	118.75	113.80
36	1	639	G	C5-C6-N1	-9.89	106.55	111.50
36	1	2639	G	N3-C4-C5	9.89	133.55	128.60
1	6	1787	C	C6-N1-C2	-9.89	116.34	120.30
36	5	2889	C	N1-C2-O2	9.89	124.83	118.90
36	1	334	A	C5-C6-N1	9.89	122.64	117.70
1	6	609	U	O4'-C1'-N1	-9.89	100.29	108.20
36	5	668	G	C8-N9-C4	9.89	110.36	106.40
38	4	62	C	C6-N1-C2	9.88	124.25	120.30
1	6	1131	A	C5-N7-C8	-9.88	98.96	103.90
36	5	796	U	N1-C2-O2	9.88	129.72	122.80
36	5	1793	C	C5-C4-N4	-9.88	113.28	120.20
37	3	115	G	C5-C6-O6	-9.88	122.67	128.60
38	4	38	U	C6-N1-C2	-9.88	115.07	121.00
36	5	1113	G	N3-C2-N2	-9.88	112.98	119.90
36	5	2874	G	C5-C6-N1	-9.88	106.56	111.50
1	6	1114	G	N1-C6-O6	-9.88	113.97	119.90
36	5	669	U	C2-N1-C1'	9.88	129.55	117.70
36	5	944	C	N3-C2-O2	-9.88	114.99	121.90
36	5	2155	G	C2-N3-C4	-9.88	106.96	111.90
36	1	928	C	C6-N1-C2	9.87	124.25	120.30
36	1	929	A	C5-C6-N6	-9.87	115.80	123.70
36	5	2199	G	C4-N9-C1'	9.87	139.34	126.50
36	1	2156	C	C6-N1-C2	9.87	124.25	120.30
36	5	1303	A	C8-N9-C4	9.87	109.75	105.80
36	5	1845	G	N3-C4-C5	-9.87	123.67	128.60
36	5	2940	A	C6-C5-N7	-9.87	125.39	132.30
37	3	97	A	N7-C8-N9	-9.86	108.87	113.80
36	5	1008	U	C6-N1-C2	9.86	126.92	121.00
1	6	337	G	C4-C5-N7	9.86	114.74	110.80
36	5	1399	A	N1-C6-N6	9.86	124.52	118.60
36	5	3091	A	N1-C6-N6	9.86	124.52	118.60
36	1	833	G	N1-C6-O6	-9.86	113.99	119.90
36	1	2347	U	C6-N1-C2	-9.86	115.09	121.00
36	5	2993	G	C8-N9-C4	-9.86	102.46	106.40
36	1	2960	C	C5-C6-N1	-9.85	116.07	121.00
36	1	3197	G	N3-C4-C5	9.85	133.53	128.60
36	5	521	A	C5-C6-N1	-9.85	112.77	117.70
36	5	2205	U	O4'-C1'-N1	9.85	116.08	108.20
36	1	2613	U	C4-C5-C6	9.85	125.61	119.70
1	6	1645	G	C5-C6-O6	-9.85	122.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	21	G	C8-N9-C4	-9.84	102.46	106.40
36	5	426	G	N7-C8-N9	-9.84	108.18	113.10
36	1	1552	G	N1-C6-O6	9.84	125.80	119.90
1	2	543	C	N3-C2-O2	-9.84	115.01	121.90
36	5	422	A	N1-C6-N6	-9.84	112.70	118.60
36	5	2994	A	C6-N1-C2	-9.84	112.70	118.60
36	1	397	A	C6-N1-C2	-9.84	112.70	118.60
36	1	798	G	C4-C5-N7	9.84	114.73	110.80
36	1	3277	U	N1-C2-N3	9.84	120.80	114.90
36	5	881	C	N1-C2-O2	9.84	124.80	118.90
36	5	2377	G	N1-C6-O6	-9.84	114.00	119.90
36	5	356	C	C2-N3-C4	-9.83	114.98	119.90
36	1	1170	A	N1-C6-N6	9.83	124.50	118.60
36	5	426	G	C8-N9-C4	9.83	110.33	106.40
36	5	576	C	C6-N1-C2	-9.83	116.37	120.30
1	6	797	G	N1-C6-O6	-9.83	114.00	119.90
36	5	363	G	O5'-P-OP2	9.83	122.49	110.70
36	5	644	G	C4-C5-N7	-9.83	106.87	110.80
36	5	2971	A	C2-N3-C4	9.83	115.51	110.60
36	1	609	G	N9-C4-C5	-9.82	101.47	105.40
1	6	448	C	C6-N1-C2	-9.82	116.37	120.30
1	6	1671	A	O5'-P-OP1	-9.82	96.86	105.70
38	8	38	U	C5-C4-O4	9.82	131.79	125.90
1	6	1456	C	C4-C5-C6	9.82	122.31	117.40
36	5	51	A	N1-C6-N6	9.82	124.49	118.60
36	1	41	G	N1-C6-O6	-9.82	114.01	119.90
36	5	2953	U	C2-N3-C4	9.82	132.89	127.00
36	5	216	G	N1-C6-O6	9.82	125.79	119.90
36	5	3015	G	N3-C2-N2	-9.82	113.03	119.90
36	1	609	G	N3-C4-N9	9.81	131.89	126.00
36	1	2278	C	N1-C2-O2	9.81	124.79	118.90
36	1	2697	A	C6-N1-C2	-9.81	112.71	118.60
36	1	3143	C	N1-C2-O2	9.81	124.78	118.90
36	1	3260	G	C2-N3-C4	-9.81	107.00	111.90
36	5	1429	G	N1-C2-N2	-9.81	107.37	116.20
36	5	2662	G	N3-C4-C5	-9.81	123.70	128.60
36	1	803	C	N3-C4-C5	9.81	125.82	121.90
36	1	1458	U	C6-N1-C2	9.81	126.88	121.00
36	1	1454	A	C2-N3-C4	-9.80	105.70	110.60
36	5	1487	G	C6-C5-N7	-9.80	124.52	130.40
1	6	554	C	C6-N1-C2	9.80	124.22	120.30
1	6	1201	G	N3-C4-C5	9.80	133.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	567	G	C6-C5-N7	-9.80	124.52	130.40
36	5	1076	C	C5-C6-N1	-9.80	116.10	121.00
1	2	334	G	C6-C5-N7	9.80	136.28	130.40
36	1	917	A	C4-C5-N7	-9.80	105.80	110.70
1	6	99	C	C6-N1-C2	9.80	124.22	120.30
36	5	2652	U	O5'-P-OP2	-9.80	96.88	105.70
36	5	3043	C	C5-C6-N1	-9.80	116.10	121.00
1	2	144	U	O4'-C1'-N1	9.79	116.04	108.20
36	1	1377	G	C5-C6-O6	-9.80	122.72	128.60
36	1	2608	G	N1-C6-O6	9.79	125.78	119.90
36	1	2934	A	C5-C6-N1	-9.80	112.80	117.70
36	5	2279	A	C4-C5-N7	9.80	115.60	110.70
36	5	803	C	C5-C4-N4	-9.79	113.34	120.20
36	1	1895	A	O5'-P-OP2	-9.79	96.89	105.70
36	5	2368	A	C4-C5-C6	9.79	121.90	117.00
36	1	67	A	C5-C6-N1	9.79	122.59	117.70
36	1	3261	C	C6-N1-C2	-9.79	116.38	120.30
1	6	960	U	N3-C2-O2	-9.79	115.35	122.20
36	5	579	G	O5'-P-OP2	-9.79	96.89	105.70
36	1	1323	G	C6-C5-N7	-9.79	124.53	130.40
38	4	3	A	C5-C6-N6	-9.79	115.87	123.70
36	5	3144	G	N3-C4-N9	9.79	131.87	126.00
36	1	311	C	N3-C4-N4	9.78	124.85	118.00
36	1	3325	G	N7-C8-N9	-9.78	108.21	113.10
36	1	2884	C	N3-C4-N4	-9.78	111.16	118.00
36	1	695	C	N3-C4-C5	9.78	125.81	121.90
36	5	1041	U	O5'-P-OP2	-9.78	96.90	105.70
36	5	2275	A	N7-C8-N9	9.78	118.69	113.80
36	5	35	A	N1-C6-N6	-9.77	112.74	118.60
36	5	805	G	C2-N3-C4	9.77	116.79	111.90
36	5	1187	C	N3-C4-C5	9.77	125.81	121.90
1	2	353	A	N1-C6-N6	9.77	124.46	118.60
36	5	3207	U	C5-C4-O4	9.77	131.76	125.90
36	1	609	G	N1-C6-O6	9.77	125.76	119.90
1	6	1480	G	C5-C6-O6	-9.77	122.74	128.60
36	5	1484	U	C2-N1-C1'	-9.77	105.98	117.70
36	5	1556	C	C2-N1-C1'	9.77	129.54	118.80
36	5	2125	A	C2-N3-C4	-9.77	105.72	110.60
36	5	3154	C	N1-C2-O2	9.77	124.76	118.90
36	1	2704	A	N1-C6-N6	-9.76	112.74	118.60
36	5	1665	C	N3-C4-C5	9.76	125.81	121.90
36	5	2943	G	C2-N3-C4	-9.76	107.02	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	624	G	O5'-P-OP2	-9.76	96.92	105.70
36	1	92	G	C6-C5-N7	-9.76	124.54	130.40
1	6	1483	A	C8-N9-C4	-9.76	101.90	105.80
36	5	1003	A	C5-C6-N6	-9.76	115.89	123.70
37	7	106	U	C6-N1-C2	9.76	126.86	121.00
36	1	2353	G	C5-C6-N1	-9.76	106.62	111.50
36	5	918	C	C4-C5-C6	9.75	122.28	117.40
36	1	427	C	N3-C4-C5	-9.75	118.00	121.90
36	1	2899	C	N1-C2-N3	9.75	126.03	119.20
1	6	407	A	N1-C6-N6	9.75	124.45	118.60
37	3	116	C	C6-N1-C2	-9.75	116.40	120.30
1	6	1541	G	O5'-P-OP1	-9.75	96.93	105.70
36	5	832	G	N3-C4-C5	-9.75	123.73	128.60
36	5	1117	G	O5'-P-OP1	-9.75	96.93	105.70
36	5	3220	G	N1-C6-O6	-9.75	114.05	119.90
36	5	3374	U	C6-N1-C2	9.75	126.85	121.00
36	1	939	U	C5-C4-O4	-9.74	120.05	125.90
36	1	2872	A	C5-C6-N6	-9.74	115.91	123.70
1	6	697	C	C5-C6-N1	9.74	125.87	121.00
36	5	2816	G	C2-N3-C4	-9.74	107.03	111.90
1	6	565	C	C2-N3-C4	-9.74	115.03	119.90
36	5	2278	C	C6-N1-C2	9.74	124.20	120.30
36	5	2796	G	O5'-P-OP1	-9.74	96.93	105.70
36	5	1841	A	O5'-P-OP1	-9.74	96.94	105.70
36	1	1887	A	C2-N3-C4	-9.74	105.73	110.60
36	1	2895	G	N3-C4-C5	-9.74	123.73	128.60
36	5	188	U	C6-N1-C2	-9.73	115.16	121.00
36	5	806	A	N3-C4-N9	-9.73	119.61	127.40
36	1	400	G	C8-N9-C4	-9.73	102.51	106.40
36	5	1085	A	O5'-P-OP1	-9.73	96.94	105.70
36	1	622	A	N1-C6-N6	9.73	124.44	118.60
36	1	1458	U	C5-C6-N1	-9.73	117.84	122.70
36	1	652	G	N3-C4-N9	9.72	131.83	126.00
1	6	927	C	N3-C2-O2	-9.72	115.09	121.90
36	5	213	A	C5-C6-N1	9.72	122.56	117.70
36	5	2827	U	O5'-P-OP2	-9.72	96.95	105.70
1	2	399	A	N1-C6-N6	-9.72	112.77	118.60
36	1	349	A	N1-C6-N6	-9.72	112.77	118.60
36	5	998	A	N1-C6-N6	-9.72	112.77	118.60
36	5	2305	G	N1-C6-O6	-9.72	114.07	119.90
36	1	218	G	N3-C4-N9	-9.72	120.17	126.00
1	6	163	G	C5-C6-N1	-9.71	106.64	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	93	C	C5-C4-N4	-9.71	113.40	120.20
36	1	342	A	C8-N9-C4	9.71	109.69	105.80
36	1	2278	C	N3-C4-C5	9.71	125.78	121.90
36	5	2632	G	C8-N9-C4	9.71	110.28	106.40
36	1	404	G	N1-C6-O6	9.71	125.73	119.90
36	1	676	G	N3-C4-C5	-9.71	123.75	128.60
36	5	1148	G	C2-N3-C4	-9.71	107.05	111.90
36	5	1290	A	C2-N3-C4	-9.71	105.75	110.60
36	5	2856	G	C5-C6-N1	-9.71	106.65	111.50
1	6	40	A	C2-N3-C4	-9.70	105.75	110.60
1	2	1199	G	O5'-P-OP1	-9.70	96.97	105.70
36	5	1303	A	C5-C6-N1	9.70	122.55	117.70
38	4	75	G	O5'-P-OP1	-9.70	96.97	105.70
36	1	2908	G	C8-N9-C4	-9.69	102.52	106.40
36	5	50	U	C2-N1-C1'	9.69	129.33	117.70
1	2	1655	A	C8-N9-C4	9.69	109.68	105.80
36	1	1367	G	N1-C6-O6	9.69	125.71	119.90
36	5	1376	C	O5'-P-OP1	-9.69	96.98	105.70
36	5	2897	A	N1-C2-N3	9.69	134.14	129.30
38	8	17	A	C8-N9-C4	9.69	109.68	105.80
36	1	2623	G	C6-C5-N7	-9.69	124.59	130.40
36	5	3122	A	N7-C8-N9	9.69	118.64	113.80
36	1	1432	C	O5'-P-OP1	-9.68	96.99	105.70
36	1	1524	A	N1-C6-N6	-9.68	112.79	118.60
36	1	1542	G	C2-N3-C4	-9.68	107.06	111.90
36	5	648	C	C4-C5-C6	9.68	122.24	117.40
36	5	3127	A	C2-N3-C4	-9.68	105.76	110.60
36	1	2874	G	C4-C5-C6	9.68	124.61	118.80
36	5	3091	A	N1-C2-N3	9.68	134.14	129.30
36	5	3179	U	C4-C5-C6	9.68	125.51	119.70
36	1	1301	A	N1-C6-N6	9.68	124.41	118.60
36	5	2624	G	C4-C5-N7	9.68	114.67	110.80
36	5	2914	G	N7-C8-N9	9.67	117.94	113.10
36	1	2325	G	N1-C6-O6	9.67	125.70	119.90
36	1	2814	G	C4-C5-N7	-9.67	106.93	110.80
36	5	1212	A	C5-C6-N1	9.67	122.53	117.70
37	7	88	G	C5-C6-N1	9.67	116.33	111.50
36	5	1603	A	C4-C5-C6	9.67	121.83	117.00
36	1	189	G	N1-C6-O6	-9.66	114.10	119.90
36	5	213	A	O5'-P-OP1	-9.66	97.00	105.70
36	1	2803	A	N1-C6-N6	-9.66	112.80	118.60
36	5	2395	G	C6-C5-N7	-9.66	124.60	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1278	G	N3-C4-C5	-9.66	123.77	128.60
36	5	2583	C	C6-N1-C2	-9.66	116.44	120.30
36	5	3063	C	C6-N1-C2	9.66	124.16	120.30
36	5	3200	G	C6-C5-N7	-9.66	124.60	130.40
36	5	1370	G	N1-C6-O6	-9.66	114.11	119.90
36	1	1364	C	N3-C4-C5	9.66	125.76	121.90
36	1	2186	U	O5'-P-OP2	-9.66	97.01	105.70
36	5	816	A	N1-C6-N6	-9.66	112.81	118.60
36	1	883	A	N1-C6-N6	-9.65	112.81	118.60
38	4	54	A	C8-N9-C4	-9.65	101.94	105.80
36	5	2871	G	O5'-P-OP2	-9.65	97.01	105.70
1	6	1792	G	N1-C6-O6	-9.65	114.11	119.90
36	1	2402	A	C5-C6-N1	9.65	122.53	117.70
1	6	1457	C	C2-N1-C1'	9.65	129.41	118.80
36	5	645	A	C8-N9-C4	-9.65	101.94	105.80
36	5	2400	G	N1-C2-N3	-9.65	118.11	123.90
36	1	2377	G	N9-C4-C5	9.65	109.26	105.40
36	1	2899	C	C6-N1-C2	-9.65	116.44	120.30
1	2	1146	G	N3-C4-C5	-9.64	123.78	128.60
36	5	1350	A	C8-N9-C4	-9.64	101.94	105.80
36	5	1372	C	C5-C6-N1	-9.64	116.18	121.00
36	1	2184	U	C5-C6-N1	9.64	127.52	122.70
36	1	2627	C	C5-C6-N1	-9.64	116.18	121.00
36	1	2831	G	C5-N7-C8	-9.64	99.48	104.30
36	5	1637	A	N1-C6-N6	-9.64	112.82	118.60
36	5	2945	G	C5-C6-O6	9.64	134.38	128.60
1	6	991	G	N3-C2-N2	-9.64	113.15	119.90
36	5	2288	G	C5-C6-O6	-9.64	122.82	128.60
36	5	2950	G	C6-C5-N7	-9.64	124.62	130.40
1	6	1583	A	N1-C6-N6	-9.64	112.82	118.60
36	5	1548	C	N1-C2-O2	-9.63	113.12	118.90
36	5	2700	G	C2-N3-C4	9.64	116.72	111.90
38	8	52	A	N1-C2-N3	9.63	134.12	129.30
36	1	636	C	N3-C4-N4	9.63	124.74	118.00
36	5	2679	A	N7-C8-N9	-9.63	108.98	113.80
36	1	793	C	N1-C2-O2	-9.63	113.12	118.90
36	1	1151	U	C5-C6-N1	9.63	127.52	122.70
36	5	2147	A	O5'-P-OP1	-9.63	97.03	105.70
36	1	826	G	C5-C6-O6	-9.62	122.83	128.60
38	4	53	A	C6-N1-C2	-9.62	112.83	118.60
36	5	650	C	C2-N3-C4	-9.62	115.09	119.90
36	1	961	C	N1-C2-O2	9.62	124.67	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	39	A	C5-C6-N1	9.62	122.51	117.70
36	1	61	A	C8-N9-C4	-9.62	101.95	105.80
36	5	1151	U	C2-N3-C4	9.62	132.77	127.00
36	5	1907	C	N1-C2-O2	-9.62	113.13	118.90
36	1	1442	U	O5'-P-OP2	9.62	122.24	110.70
1	6	1537	C	C6-N1-C2	-9.62	116.45	120.30
36	5	2971	A	C8-N9-C4	-9.62	101.95	105.80
57	n1	17	ARG	NE-CZ-NH1	9.62	125.11	120.30
36	5	3213	A	C8-N9-C4	9.62	109.65	105.80
36	1	2661	G	C4-C5-N7	9.61	114.65	110.80
36	5	345	G	C6-C5-N7	-9.62	124.63	130.40
36	1	1432	C	N1-C2-N3	9.61	125.93	119.20
36	1	2315	G	C4-C5-N7	-9.61	106.95	110.80
36	5	2111	G	N3-C4-C5	9.61	133.41	128.60
36	5	2906	C	N1-C2-O2	-9.61	113.13	118.90
36	5	3044	G	C6-C5-N7	-9.61	124.63	130.40
1	2	554	C	N1-C2-O2	9.61	124.67	118.90
36	1	1514	G	C4-N9-C1'	9.61	138.99	126.50
38	4	94	C	C5-C6-N1	-9.61	116.19	121.00
36	5	293	C	C6-N1-C2	9.61	124.14	120.30
36	1	3344	A	N7-C8-N9	9.61	118.60	113.80
36	1	1453	A	C6-N1-C2	-9.61	112.84	118.60
36	1	3273	A	N1-C6-N6	-9.61	112.84	118.60
38	4	16	G	N1-C6-O6	9.61	125.66	119.90
36	5	276	U	O5'-P-OP1	-9.61	97.06	105.70
36	5	3061	G	C8-N9-C4	9.61	110.24	106.40
1	2	1486	G	C8-N9-C1'	-9.60	114.52	127.00
36	5	2917	G	N3-C2-N2	-9.60	113.18	119.90
36	1	612	U	N1-C2-N3	9.60	120.66	114.90
36	5	1592	G	N3-C4-C5	-9.60	123.80	128.60
36	5	2719	U	N3-C2-O2	9.60	128.92	122.20
1	2	1751	C	N3-C4-C5	9.59	125.74	121.90
36	1	92	G	C4-C5-N7	9.59	114.64	110.80
36	1	793	C	C6-N1-C2	-9.59	116.46	120.30
36	1	1446	A	C8-N9-C4	-9.59	101.96	105.80
38	4	62	C	C5-C6-N1	-9.59	116.20	121.00
1	6	1602	C	C6-N1-C2	-9.59	116.46	120.30
36	5	2945	G	N9-C4-C5	9.59	109.24	105.40
36	1	952	A	C8-N9-C4	-9.59	101.96	105.80
36	1	2696	A	N1-C2-N3	-9.59	124.50	129.30
36	1	2998	U	N3-C2-O2	9.59	128.91	122.20
36	5	1289	G	N1-C6-O6	-9.59	114.15	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1778	G	C5-C6-N1	9.59	116.30	111.50
36	5	2339	C	N1-C2-O2	-9.59	113.15	118.90
36	1	812	G	N1-C2-N3	9.59	129.65	123.90
1	2	1587	A	C8-N9-C4	-9.59	101.97	105.80
36	1	96	G	C8-N9-C4	9.59	110.23	106.40
36	1	1050	U	C2-N3-C4	-9.59	121.25	127.00
1	6	1013	A	N1-C6-N6	-9.59	112.85	118.60
36	5	732	C	C6-N1-C2	-9.59	116.47	120.30
36	5	995	U	C5-C6-N1	-9.59	117.91	122.70
1	6	1457	C	C6-N1-C2	-9.58	116.47	120.30
36	1	693	A	C5-N7-C8	-9.58	99.11	103.90
36	5	878	G	N3-C4-C5	-9.58	123.81	128.60
36	5	1374	G	C4-C5-N7	9.58	114.63	110.80
36	1	1519	G	C5-N7-C8	-9.58	99.51	104.30
36	5	281	G	N1-C6-O6	-9.58	114.15	119.90
36	5	2653	C	N3-C2-O2	9.58	128.61	121.90
36	1	1196	C	C6-N1-C2	9.58	124.13	120.30
1	6	119	A	C2-N3-C4	-9.58	105.81	110.60
36	5	1872	C	N3-C2-O2	-9.58	115.19	121.90
36	5	1885	U	C6-N1-C2	-9.58	115.25	121.00
37	3	3	U	O5'-P-OP2	-9.57	97.08	105.70
36	5	2887	A	N9-C4-C5	9.57	109.63	105.80
36	5	2381	G	C5-N7-C8	9.57	109.09	104.30
36	1	495	G	N3-C4-N9	-9.57	120.26	126.00
36	5	582	G	C5-C6-O6	9.57	134.34	128.60
36	5	2420	C	C5-C6-N1	9.57	125.78	121.00
36	1	963	G	C4-C5-N7	9.57	114.63	110.80
36	5	2312	A	N9-C4-C5	9.57	109.63	105.80
36	5	1300	G	N1-C6-O6	9.56	125.64	119.90
1	2	1096	C	C2-N1-C1'	9.56	129.32	118.80
36	1	1303	A	N1-C6-N6	9.56	124.34	118.60
36	5	2155	G	C5-C6-N1	-9.56	106.72	111.50
36	5	1391	C	C6-N1-C2	9.56	124.12	120.30
36	1	2982	A	C6-N1-C2	-9.56	112.86	118.60
36	5	521	A	N1-C2-N3	9.56	134.08	129.30
36	5	1367	G	N1-C6-O6	9.56	125.64	119.90
36	5	595	G	C8-N9-C1'	-9.56	114.58	127.00
1	2	1299	G	N3-C4-C5	-9.55	123.82	128.60
36	1	2197	C	C4-C5-C6	-9.56	112.62	117.40
1	6	1473	U	O5'-P-OP1	9.55	122.17	110.70
36	5	645	A	C2-N3-C4	9.55	115.38	110.60
36	5	913	A	C6-N1-C2	-9.55	112.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1099	A	N1-C6-N6	9.55	124.33	118.60
36	5	3085	G	C8-N9-C4	9.55	110.22	106.40
36	5	1444	G	N3-C4-C5	-9.55	123.82	128.60
38	8	1	A	C4-C5-N7	-9.55	105.92	110.70
1	2	1757	G	N3-C4-C5	-9.55	123.83	128.60
36	1	1111	U	C6-N1-C2	9.55	126.73	121.00
36	1	2614	G	N1-C2-N2	-9.55	107.60	116.20
36	5	2283	G	C5-C6-O6	-9.55	122.87	128.60
36	5	2283	G	C5-N7-C8	-9.55	99.53	104.30
36	1	975	C	C6-N1-C2	-9.55	116.48	120.30
1	6	163	G	C8-N9-C4	-9.55	102.58	106.40
1	6	758	U	C5-C6-N1	-9.54	117.93	122.70
1	6	972	G	C6-C5-N7	-9.54	124.67	130.40
36	5	2943	G	C5-N7-C8	-9.54	99.53	104.30
36	1	428	A	N1-C6-N6	9.54	124.33	118.60
38	4	117	C	N1-C2-O2	-9.54	113.18	118.90
36	5	283	G	N3-C4-C5	-9.54	123.83	128.60
37	7	109	G	N9-C4-C5	-9.54	101.58	105.40
36	5	283	G	C4-N9-C1'	9.54	138.90	126.50
36	5	1780	G	O5'-P-OP2	-9.54	97.11	105.70
1	6	1146	G	C8-N9-C4	-9.54	102.58	106.40
1	6	1159	C	C6-N1-C2	9.54	124.11	120.30
36	5	1883	A	C2-N3-C4	-9.54	105.83	110.60
36	1	718	G	C4-C5-N7	9.54	114.61	110.80
36	1	905	U	N1-C2-O2	-9.54	116.13	122.80
36	1	2866	U	N1-C2-N3	9.53	120.62	114.90
36	5	874	U	C6-N1-C2	-9.53	115.28	121.00
36	1	2182	A	N1-C6-N6	9.53	124.32	118.60
36	1	2798	C	C6-N1-C2	-9.53	116.49	120.30
1	6	388	G	N1-C6-O6	9.53	125.62	119.90
36	5	2584	G	C4-N9-C1'	9.53	138.88	126.50
36	1	1340	G	C4-C5-N7	9.53	114.61	110.80
1	6	624	G	C4-C5-N7	9.53	114.61	110.80
36	5	396	A	C2-N3-C4	-9.53	105.84	110.60
36	1	1367	G	C5-C6-N1	-9.52	106.74	111.50
1	6	1447	C	C6-N1-C2	-9.52	116.49	120.30
36	5	3294	A	N1-C6-N6	-9.52	112.89	118.60
1	6	1729	C	C5-C6-N1	-9.52	116.24	121.00
36	1	583	G	C4-C5-N7	-9.51	106.99	110.80
36	1	2409	G	C6-C5-N7	-9.51	124.69	130.40
36	5	3091	A	C4-C5-C6	9.51	121.76	117.00
36	5	1902	G	C6-C5-N7	-9.51	124.69	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	856	G	C5-C6-O6	9.51	134.31	128.60
36	1	2374	C	O5'-P-OP2	-9.51	97.14	105.70
36	1	1173	U	N3-C2-O2	-9.51	115.54	122.20
36	1	1928	G	N3-C4-C5	9.51	133.35	128.60
36	1	1196	C	O4'-C1'-N1	-9.51	100.59	108.20
1	6	1031	U	N3-C2-O2	-9.51	115.54	122.20
36	5	2549	G	C6-C5-N7	-9.51	124.70	130.40
1	6	308	C	C2-N1-C1'	-9.50	108.35	118.80
1	2	1555	A	N1-C6-N6	-9.50	112.90	118.60
36	1	423	A	N1-C6-N6	-9.50	112.90	118.60
1	2	1277	G	C8-N9-C4	-9.50	102.60	106.40
36	1	1888	U	N1-C2-O2	9.50	129.45	122.80
37	3	36	C	C2-N1-C1'	9.50	129.25	118.80
36	1	3373	U	C6-N1-C2	9.50	126.70	121.00
1	6	1786	G	N1-C6-O6	-9.50	114.20	119.90
36	5	1498	A	N1-C6-N6	-9.50	112.90	118.60
36	5	2915	U	N3-C4-O4	9.50	126.05	119.40
36	5	1212	A	C5-C6-N6	-9.49	116.11	123.70
36	5	1408	G	C2-N3-C4	-9.49	107.15	111.90
36	5	2400	G	O4'-C1'-N9	9.49	115.80	108.20
36	5	811	U	C5-C6-N1	-9.49	117.95	122.70
36	5	1108	U	C6-N1-C2	-9.49	115.31	121.00
36	1	101	G	C5-N7-C8	-9.49	99.56	104.30
1	6	1086	A	C5-C6-N6	9.49	131.29	123.70
36	1	1122	U	N1-C2-N3	9.49	120.59	114.90
1	6	1142	A	N1-C6-N6	-9.49	112.91	118.60
36	5	879	U	N3-C2-O2	9.49	128.84	122.20
36	5	2630	C	O5'-P-OP1	-9.49	97.16	105.70
36	1	189	G	N9-C4-C5	9.49	109.19	105.40
36	1	615	U	N3-C2-O2	-9.49	115.56	122.20
36	5	3057	U	O5'-P-OP2	-9.49	97.16	105.70
36	1	937	G	C5-N7-C8	-9.48	99.56	104.30
36	1	1116	G	N3-C4-C5	-9.48	123.86	128.60
36	1	2335	G	N3-C4-C5	-9.48	123.86	128.60
36	1	929	A	OP1-P-O3'	9.48	126.06	105.20
36	1	2403	G	N1-C6-O6	9.48	125.59	119.90
36	5	1867	A	C2-N3-C4	-9.48	105.86	110.60
36	5	821	U	C6-N1-C2	-9.48	115.31	121.00
36	1	3208	G	N3-C2-N2	9.48	126.53	119.90
36	1	2824	G	N1-C6-O6	9.48	125.59	119.90
1	2	111	U	C5-C4-O4	-9.47	120.22	125.90
36	1	3181	C	N3-C2-O2	-9.47	115.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	680	G	O5'-P-OP2	-9.47	97.17	105.70
36	5	808	A	C6-N1-C2	-9.47	112.92	118.60
36	1	2697	A	N1-C2-N3	9.47	134.04	129.30
36	1	342	A	N9-C4-C5	-9.47	102.01	105.80
36	1	1396	C	C5-C4-N4	-9.47	113.57	120.20
1	6	1634	C	C2-N1-C1'	9.47	129.22	118.80
36	1	2333	C	C5-C6-N1	-9.47	116.27	121.00
1	6	1480	G	C4-C5-N7	9.47	114.59	110.80
36	5	2705	A	C5-C6-N1	9.47	122.43	117.70
36	5	2799	A	N9-C4-C5	9.47	109.59	105.80
36	5	2887	A	C6-N1-C2	-9.46	112.92	118.60
1	2	342	C	C5-C6-N1	-9.46	116.27	121.00
36	1	2762	A	C6-N1-C2	-9.46	112.92	118.60
36	5	2957	G	N3-C4-C5	9.46	133.33	128.60
36	1	1840	U	C2-N3-C4	-9.46	121.32	127.00
1	6	1063	U	C5-C6-N1	9.46	127.43	122.70
1	6	419	G	C5-C6-N1	9.46	116.23	111.50
36	5	3295	A	C6-N1-C2	-9.46	112.92	118.60
36	1	3118	C	O5'-P-OP1	-9.46	97.19	105.70
1	6	1729	C	C6-N1-C2	9.45	124.08	120.30
36	5	1127	G	N1-C6-O6	-9.45	114.23	119.90
36	1	2280	A	C8-N9-C4	-9.45	102.02	105.80
36	5	1429	G	N1-C2-N3	9.45	129.57	123.90
36	1	37	U	C6-N1-C2	9.45	126.67	121.00
36	1	2377	G	C8-N9-C4	-9.45	102.62	106.40
36	1	3197	G	N1-C6-O6	9.45	125.57	119.90
36	5	3054	U	N1-C2-O2	-9.45	116.19	122.80
36	1	432	G	C5-C6-N1	-9.45	106.78	111.50
36	1	857	G	C4-C5-N7	-9.45	107.02	110.80
36	1	2974	U	C5-C6-N1	9.45	127.42	122.70
36	5	891	G	C8-N9-C4	-9.45	102.62	106.40
36	5	1839	A	O5'-P-OP1	-9.45	97.20	105.70
36	5	3004	C	C5-C4-N4	-9.44	113.59	120.20
36	5	2584	G	N7-C8-N9	9.44	117.82	113.10
1	2	1615	C	C6-N1-C2	-9.44	116.52	120.30
36	5	283	G	N3-C4-N9	9.44	131.66	126.00
36	5	2991	A	C6-N1-C2	-9.44	112.94	118.60
36	1	435	C	C5-C6-N1	-9.44	116.28	121.00
36	1	798	G	O5'-P-OP1	-9.44	97.20	105.70
36	5	127	G	N1-C6-O6	9.44	125.56	119.90
36	5	278	U	N3-C2-O2	-9.44	115.59	122.20
36	1	2625	C	N1-C2-N3	-9.44	112.59	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1136	U	C5-C4-O4	-9.44	120.24	125.90
36	5	1512	U	O5'-P-OP1	-9.44	97.21	105.70
36	5	1898	G	N1-C6-O6	-9.44	114.24	119.90
36	5	3065	G	N1-C2-N3	9.44	129.56	123.90
38	4	27	U	O5'-P-OP2	9.43	122.02	110.70
1	2	967	A	N9-C4-C5	-9.43	102.03	105.80
36	5	2305	G	C4-C5-N7	-9.43	107.03	110.80
36	5	1139	G	N1-C6-O6	-9.43	114.24	119.90
36	5	3323	A	N1-C6-N6	-9.43	112.94	118.60
36	1	2729	U	O5'-P-OP1	-9.43	97.22	105.70
36	1	2823	G	N1-C2-N3	9.43	129.56	123.90
36	5	2118	C	C6-N1-C2	-9.43	116.53	120.30
36	1	1002	A	N7-C8-N9	-9.42	109.09	113.80
36	1	3010	U	C5-C6-N1	9.42	127.41	122.70
36	5	189	G	N9-C4-C5	9.42	109.17	105.40
36	5	945	C	N3-C4-C5	-9.42	118.13	121.90
36	1	2871	G	N3-C4-C5	9.42	133.31	128.60
36	1	344	A	N7-C8-N9	9.42	118.51	113.80
36	1	1180	A	N1-C6-N6	-9.42	112.95	118.60
36	5	2283	G	N9-C4-C5	-9.42	101.63	105.40
36	1	1906	G	O5'-P-OP1	-9.42	97.22	105.70
36	1	2959	C	N3-C2-O2	9.42	128.49	121.90
1	6	1086	A	N1-C6-N6	-9.42	112.95	118.60
1	6	456	A	N1-C2-N3	9.41	134.01	129.30
36	5	1847	A	N3-C4-C5	9.41	133.39	126.80
36	1	879	U	N1-C2-O2	-9.41	116.21	122.80
36	5	3377	G	C5-C6-N1	9.41	116.21	111.50
36	1	1175	C	N1-C2-O2	-9.41	113.25	118.90
36	1	2305	G	C8-N9-C4	-9.41	102.64	106.40
36	1	1930	A	C8-N9-C4	9.41	109.56	105.80
1	6	992	A	C2-N3-C4	-9.41	105.90	110.60
36	5	2395	G	N1-C6-O6	9.41	125.54	119.90
36	5	2820	A	OP1-P-O3'	-9.41	84.51	105.20
36	1	691	A	O5'-P-OP1	-9.40	97.24	105.70
1	2	334	G	C4-N9-C1'	-9.40	114.28	126.50
1	2	573	C	N3-C4-C5	-9.40	118.14	121.90
36	1	1191	U	C6-N1-C2	9.40	126.64	121.00
36	1	3193	C	C6-N1-C2	-9.40	116.54	120.30
36	5	3208	G	C4-C5-C6	9.40	124.44	118.80
37	7	15	C	O5'-P-OP2	-9.40	97.24	105.70
1	2	830	U	N1-C2-O2	9.39	129.37	122.80
36	1	1224	C	N3-C2-O2	-9.39	115.33	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2880	U	C6-N1-C1'	9.39	134.35	121.20
37	7	88	G	N3-C4-C5	-9.39	123.91	128.60
36	1	2309	A	N1-C6-N6	9.39	124.23	118.60
36	1	3137	C	N3-C4-C5	9.39	125.66	121.90
37	3	26	C	O5'-P-OP2	-9.39	97.25	105.70
36	1	1039	U	C5-C6-N1	-9.38	118.01	122.70
36	1	1157	G	C8-N9-C4	-9.38	102.65	106.40
36	1	3204	C	N3-C2-O2	-9.38	115.33	121.90
36	5	2877	G	N1-C2-N3	9.38	129.53	123.90
1	6	1768	G	C5-N7-C8	-9.38	99.61	104.30
36	1	805	G	N1-C6-O6	9.38	125.53	119.90
36	1	933	A	C8-N9-C4	-9.38	102.05	105.80
36	5	562	C	C6-N1-C2	9.38	124.05	120.30
36	5	2963	C	N1-C2-O2	-9.38	113.27	118.90
36	1	2895	G	N3-C4-N9	9.38	131.62	126.00
1	6	175	G	N1-C6-O6	9.38	125.53	119.90
1	6	1572	G	C2-N3-C4	-9.37	107.21	111.90
36	5	3182	G	N1-C2-N3	9.37	129.52	123.90
1	2	47	A	C8-N9-C4	-9.37	102.05	105.80
36	5	1895	A	C5-C6-N1	9.37	122.39	117.70
36	5	2164	A	N1-C6-N6	-9.37	112.98	118.60
36	5	2858	U	C6-N1-C2	-9.37	115.38	121.00
37	7	112	G	N1-C6-O6	-9.37	114.28	119.90
1	6	95	G	N1-C6-O6	-9.37	114.28	119.90
36	5	1046	A	O5'-P-OP2	9.37	121.94	110.70
36	1	1178	G	C4-C5-N7	9.37	114.55	110.80
36	1	1877	U	C6-N1-C2	9.37	126.62	121.00
36	5	2419	A	O5'-P-OP1	9.37	121.94	110.70
36	1	883	A	N1-C2-N3	9.37	133.98	129.30
36	1	1423	C	N3-C4-C5	-9.37	118.15	121.90
38	4	53	A	C4-C5-N7	-9.36	106.02	110.70
36	5	89	A	O5'-P-OP1	9.36	121.94	110.70
36	5	1212	A	C8-N9-C4	-9.37	102.05	105.80
36	5	2620	G	N3-C4-N9	-9.37	120.38	126.00
36	5	2874	G	C4-N9-C1'	9.36	138.67	126.50
36	5	1520	G	C4-N9-C1'	9.36	138.67	126.50
36	5	1896	A	O5'-P-OP1	-9.36	97.28	105.70
36	5	2678	A	C5-C6-N6	9.36	131.19	123.70
36	5	2699	G	C5-C6-O6	-9.36	122.98	128.60
37	7	84	A	N1-C2-N3	9.36	133.98	129.30
36	1	285	A	N1-C6-N6	9.36	124.21	118.60
36	1	2168	A	C4-C5-N7	-9.36	106.02	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	804	C	OP1-P-O3'	9.36	125.78	105.20
36	5	2886	U	C2-N3-C4	-9.36	121.39	127.00
36	1	2383	C	N1-C2-O2	-9.35	113.29	118.90
36	1	3027	A	C2-N3-C4	-9.35	105.92	110.60
36	5	959	C	C4-C5-C6	9.35	122.08	117.40
36	5	2618	G	N1-C6-O6	-9.35	114.29	119.90
36	5	1142	G	OP1-P-OP2	9.35	133.62	119.60
36	5	2914	G	C5-N7-C8	-9.35	99.63	104.30
36	5	168	U	O5'-P-OP1	-9.35	97.29	105.70
36	1	691	A	N1-C6-N6	9.35	124.21	118.60
36	1	833	G	C5-C6-O6	9.35	134.21	128.60
36	1	1208	U	C6-N1-C1'	-9.34	108.12	121.20
36	5	2281	A	O4'-C1'-N9	9.34	115.68	108.20
36	5	2816	G	C4-N9-C1'	-9.34	114.35	126.50
36	1	2759	U	N3-C2-O2	-9.34	115.66	122.20
1	2	331	A	C5-C6-N6	9.34	131.17	123.70
36	1	350	C	N1-C2-O2	9.34	124.50	118.90
36	1	1149	G	N1-C2-N3	9.34	129.50	123.90
36	1	2390	A	C5-C6-N1	9.34	122.37	117.70
36	1	2866	U	N3-C2-O2	-9.34	115.66	122.20
36	1	3199	G	O5'-P-OP1	-9.34	97.29	105.70
36	5	568	G	N3-C4-N9	9.34	131.60	126.00
36	5	3012	A	N1-C6-N6	9.34	124.20	118.60
36	1	1431	G	N7-C8-N9	-9.34	108.43	113.10
36	5	1115	G	N3-C4-C5	-9.34	123.93	128.60
1	2	1782	A	C8-N9-C4	-9.33	102.07	105.80
36	1	3383	G	N3-C4-N9	-9.33	120.40	126.00
36	5	1151	U	N3-C2-O2	-9.33	115.67	122.20
36	5	2306	C	C6-N1-C1'	-9.33	109.60	120.80
36	5	880	G	O5'-P-OP2	-9.33	97.30	105.70
37	3	25	G	N3-C4-C5	-9.33	123.94	128.60
36	1	1153	A	C2-N3-C4	-9.33	105.94	110.60
1	2	967	A	C8-N9-C4	9.32	109.53	105.80
36	1	99	A	O4'-C1'-N9	9.32	115.66	108.20
36	5	1156	C	N3-C4-N4	9.32	124.53	118.00
36	1	2943	G	C5-C6-O6	-9.32	123.01	128.60
36	5	1136	A	N1-C2-N3	9.32	133.96	129.30
36	5	2741	C	C5-C6-N1	9.32	125.66	121.00
36	1	93	C	C4-C5-C6	-9.32	112.74	117.40
36	1	1153	A	N1-C2-N3	9.32	133.96	129.30
36	5	1514	G	C6-C5-N7	-9.32	124.81	130.40
36	1	693	A	C2-N3-C4	-9.31	105.94	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2683	U	C5-C6-N1	9.31	127.36	122.70
37	7	13	A	C2-N3-C4	-9.31	105.94	110.60
36	1	366	A	N7-C8-N9	9.31	118.46	113.80
36	1	47	C	N3-C4-C5	-9.31	118.18	121.90
36	1	1157	G	C5-C6-N1	-9.31	106.84	111.50
36	1	1177	G	C4-C5-N7	9.31	114.52	110.80
36	1	2925	C	C2-N1-C1'	-9.31	108.56	118.80
36	5	575	G	C5-C6-O6	-9.31	123.01	128.60
36	5	2837	A	N7-C8-N9	-9.31	109.14	113.80
36	5	1536	G	C8-N9-C4	9.31	110.12	106.40
36	5	1907	C	N3-C4-C5	-9.31	118.18	121.90
36	5	1317	A	C6-N1-C2	-9.31	113.02	118.60
1	2	1241	G	O4'-C1'-N9	9.31	115.65	108.20
36	5	425	G	N3-C2-N2	-9.31	113.38	119.90
36	5	2991	A	N1-C6-N6	-9.31	113.02	118.60
36	5	1176	C	C5-C6-N1	-9.30	116.35	121.00
36	5	3269	U	C6-N1-C2	9.31	126.58	121.00
38	8	7	U	C5-C6-N1	-9.31	118.05	122.70
36	5	1101	G	N3-C4-N9	9.30	131.58	126.00
36	5	1322	U	O5'-P-OP1	-9.30	97.33	105.70
36	1	629	U	C5-C6-N1	-9.30	118.05	122.70
36	5	372	A	N1-C6-N6	-9.30	113.02	118.60
36	1	682	U	O5'-P-OP1	-9.30	97.33	105.70
36	5	1150	A	C6-N1-C2	-9.30	113.02	118.60
36	5	3050	U	C5-C6-N1	-9.30	118.05	122.70
37	3	98	C	O5'-P-OP2	-9.30	97.33	105.70
1	6	636	A	N1-C6-N6	-9.29	113.02	118.60
36	5	349	A	N1-C6-N6	-9.29	113.02	118.60
36	5	2403	G	C5-C6-O6	-9.29	123.02	128.60
36	5	2897	A	C4-C5-C6	9.29	121.65	117.00
52	m6	101	ARG	NE-CZ-NH1	9.29	124.95	120.30
36	1	2394	G	N1-C6-O6	-9.29	114.33	119.90
36	5	1468	A	N1-C2-N3	9.29	133.95	129.30
36	1	689	U	N1-C2-N3	-9.29	109.33	114.90
36	5	885	U	N1-C2-N3	9.29	120.47	114.90
36	1	1867	A	C2-N3-C4	-9.29	105.96	110.60
36	5	1430	U	C6-N1-C2	9.29	126.57	121.00
18	C6	40	GLU	C-N-CD	-9.28	100.17	120.60
36	1	1769	G	C8-N9-C4	-9.28	102.69	106.40
36	1	3028	G	O5'-P-OP1	-9.28	97.34	105.70
36	1	751	A	N1-C6-N6	-9.28	113.03	118.60
36	5	2728	G	N3-C4-C5	-9.28	123.96	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2147	A	O5'-P-OP1	-9.28	97.35	105.70
1	6	1639	C	N3-C4-C5	9.28	125.61	121.90
36	5	2352	A	C6-N1-C2	-9.28	113.03	118.60
1	6	1355	C	C5-C6-N1	9.28	125.64	121.00
36	5	3010	U	N1-C2-O2	9.28	129.29	122.80
1	6	1784	C	N3-C4-C5	9.28	125.61	121.90
36	5	1405	U	C5-C4-O4	9.28	131.47	125.90
36	5	3211	C	O5'-P-OP1	-9.28	97.35	105.70
36	1	660	A	N1-C6-N6	-9.28	113.03	118.60
36	1	877	C	C6-N1-C2	-9.28	116.59	120.30
36	1	1182	A	N9-C4-C5	-9.28	102.09	105.80
36	1	2850	G	N1-C6-O6	-9.28	114.33	119.90
36	5	283	G	O4'-C1'-N9	-9.28	100.78	108.20
36	5	1054	A	O5'-P-OP2	-9.28	97.35	105.70
36	1	2355	G	N1-C6-O6	9.27	125.46	119.90
36	1	1301	A	C5-C6-N6	-9.27	116.28	123.70
1	6	453	U	C2-N1-C1'	9.27	128.82	117.70
36	5	289	A	C4-C5-N7	9.27	115.34	110.70
38	8	31	G	C5-C6-O6	9.27	134.16	128.60
36	1	798	G	N7-C8-N9	9.27	117.73	113.10
36	1	1305	U	C6-N1-C2	-9.27	115.44	121.00
1	6	1700	C	N1-C2-O2	9.27	124.46	118.90
36	5	364	G	O5'-P-OP2	9.27	121.82	110.70
36	1	213	A	N1-C6-N6	9.27	124.16	118.60
36	1	1057	A	C5-C6-N1	-9.27	113.07	117.70
36	1	2953	U	N3-C4-O4	9.27	125.89	119.40
36	5	1046	A	O5'-P-OP1	-9.27	97.36	105.70
36	5	1163	A	N1-C2-N3	9.27	133.93	129.30
36	5	2376	G	C4-C5-N7	9.27	114.51	110.80
36	5	2387	A	O5'-P-OP1	-9.27	97.36	105.70
36	5	2392	C	N1-C2-O2	-9.27	113.34	118.90
36	1	2980	U	N1-C2-O2	-9.26	116.31	122.80
36	5	2794	G	C5-C6-O6	-9.26	123.04	128.60
1	6	326	G	C5-C6-N1	-9.26	106.87	111.50
36	5	2279	A	C5-N7-C8	-9.26	99.27	103.90
36	5	3036	G	C5-C6-N1	-9.26	106.87	111.50
36	5	1794	G	N7-C8-N9	-9.26	108.47	113.10
36	1	1177	G	N9-C4-C5	-9.26	101.70	105.40
69	O3	7	LEU	CA-CB-CG	-9.26	94.00	115.30
36	5	688	G	C6-C5-N7	-9.26	124.84	130.40
36	5	875	G	N3-C2-N2	-9.26	113.42	119.90
36	5	3295	A	N1-C2-N3	9.26	133.93	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1213	G	N9-C4-C5	9.26	109.10	105.40
36	5	2340	U	O5'-P-OP2	9.26	121.81	110.70
36	1	1905	G	N3-C4-C5	9.26	133.23	128.60
36	1	3202	G	C8-N9-C4	9.26	110.10	106.40
36	5	3206	C	N1-C2-O2	9.26	124.45	118.90
36	1	32	U	C6-N1-C2	9.25	126.55	121.00
36	1	2156	C	C5-C6-N1	-9.25	116.37	121.00
36	5	921	A	C8-N9-C4	-9.25	102.10	105.80
36	1	2414	G	N1-C6-O6	9.25	125.45	119.90
1	6	815	G	N3-C4-C5	9.25	133.22	128.60
36	5	2849	C	N3-C4-C5	-9.25	118.20	121.90
1	6	1139	A	C5-C6-N6	-9.25	116.30	123.70
36	5	636	C	N1-C2-O2	-9.25	113.35	118.90
36	5	1095	U	C6-N1-C2	-9.25	115.45	121.00
36	5	1375	G	N3-C4-C5	-9.24	123.98	128.60
36	5	2638	C	N3-C4-C5	-9.24	118.20	121.90
36	5	2830	G	C2-N3-C4	-9.24	107.28	111.90
36	1	1336	U	O5'-P-OP1	-9.24	97.38	105.70
36	1	2641	U	N1-C2-O2	9.24	129.27	122.80
36	1	645	A	N3-C4-C5	-9.24	120.33	126.80
36	1	801	A	N1-C6-N6	9.24	124.14	118.60
36	1	835	G	C4-C5-N7	9.24	114.49	110.80
36	1	2187	G	C8-N9-C4	-9.24	102.70	106.40
36	1	227	G	N3-C4-N9	9.23	131.54	126.00
36	1	1192	C	C2-N1-C1'	9.23	128.96	118.80
36	1	2198	A	O5'-P-OP1	-9.23	97.39	105.70
36	5	935	U	C6-N1-C2	-9.23	115.46	121.00
36	5	1286	A	C8-N9-C4	9.23	109.49	105.80
36	5	1295	G	C5-C6-O6	-9.23	123.06	128.60
36	1	693	A	N7-C8-N9	9.23	118.42	113.80
36	1	3308	C	C6-N1-C2	-9.23	116.61	120.30
36	1	952	A	N9-C4-C5	9.23	109.49	105.80
36	1	2308	C	C6-N1-C2	9.23	123.99	120.30
36	1	1408	G	C6-C5-N7	-9.23	124.86	130.40
36	1	229	G	O5'-P-OP1	-9.23	97.40	105.70
36	1	370	U	N3-C4-O4	9.23	125.86	119.40
36	1	1054	A	O5'-P-OP1	9.23	121.77	110.70
36	1	1176	C	N1-C2-O2	-9.23	113.36	118.90
36	5	2986	U	N1-C2-N3	9.23	120.44	114.90
36	1	306	A	N1-C6-N6	-9.22	113.06	118.60
36	1	720	A	O5'-P-OP1	-9.22	97.40	105.70
36	5	1142	G	O5'-P-OP1	-9.22	97.40	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2682	C	C6-N1-C2	-9.22	116.61	120.30
36	5	3046	A	N1-C6-N6	-9.22	113.06	118.60
36	5	1126	G	C5-C6-N1	-9.22	106.89	111.50
36	1	518	G	N3-C4-N9	-9.22	120.47	126.00
36	5	1307	G	C5-C6-O6	-9.22	123.07	128.60
36	5	2632	G	C5-C6-O6	-9.22	123.07	128.60
1	6	1601	G	C8-N9-C4	-9.21	102.71	106.40
36	5	395	A	C8-N9-C4	-9.21	102.11	105.80
36	1	2942	C	C6-N1-C2	-9.21	116.61	120.30
36	5	1897	G	N9-C4-C5	-9.21	101.72	105.40
36	5	1116	G	C6-C5-N7	-9.21	124.87	130.40
36	1	365	A	N1-C2-N3	9.21	133.90	129.30
36	1	757	C	O5'-P-OP2	-9.21	97.42	105.70
36	1	1103	A	O5'-P-OP2	9.20	121.75	110.70
36	5	2108	C	C5-C6-N1	-9.20	116.40	121.00
36	5	2138	A	N1-C2-N3	9.20	133.90	129.30
36	5	2300	G	O5'-P-OP2	-9.20	97.42	105.70
37	7	49	G	C5-N7-C8	-9.20	99.70	104.30
37	7	91	G	C2-N3-C4	-9.20	107.30	111.90
36	1	1077	U	C5-C6-N1	-9.20	118.10	122.70
37	7	99	G	C4-C5-N7	-9.20	107.12	110.80
36	1	2188	A	C6-N1-C2	-9.20	113.08	118.60
36	1	358	G	C5-C6-O6	-9.19	123.08	128.60
36	1	693	A	N1-C6-N6	9.19	124.12	118.60
36	5	1000	C	N3-C4-C5	9.19	125.58	121.90
36	5	1147	G	C4-C5-N7	9.20	114.48	110.80
36	5	1604	G	C5-C6-O6	9.19	134.12	128.60
36	1	839	C	C6-N1-C2	9.19	123.98	120.30
36	1	2611	U	N3-C4-C5	-9.19	109.08	114.60
36	1	1170	A	C5-C6-N6	-9.19	116.35	123.70
1	6	1100	G	N9-C4-C5	-9.19	101.72	105.40
36	5	1373	A	C6-C5-N7	-9.19	125.87	132.30
36	1	40	A	C8-N9-C4	-9.19	102.13	105.80
36	5	1881	A	C6-N1-C2	-9.18	113.09	118.60
36	5	3343	G	C4-N9-C1'	9.18	138.44	126.50
36	1	2732	G	O5'-P-OP2	-9.18	97.44	105.70
36	5	197	G	C4-C5-N7	9.18	114.47	110.80
36	5	3325	G	C8-N9-C4	9.18	110.07	106.40
36	1	3091	A	C8-N9-C4	-9.18	102.13	105.80
36	5	2212	C	C2-N1-C1'	9.18	128.90	118.80
36	5	3079	U	N1-C2-N3	9.18	120.41	114.90
36	5	1306	G	N7-C8-N9	9.18	117.69	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	C8-N9-C4	-9.18	102.13	105.80
36	1	937	G	C6-C5-N7	-9.17	124.90	130.40
36	1	1100	U	C2-N3-C4	-9.17	121.50	127.00
36	1	2323	G	C4-C5-N7	9.17	114.47	110.80
36	1	3263	G	N3-C4-N9	9.17	131.50	126.00
36	5	289	A	C5-N7-C8	-9.17	99.31	103.90
36	5	695	C	C2-N3-C4	-9.17	115.31	119.90
36	5	920	A	OP2-P-O3'	9.17	125.38	105.20
36	5	3024	A	C8-N9-C4	9.17	109.47	105.80
36	5	3147	G	N9-C4-C5	-9.17	101.73	105.40
36	1	1151	U	N3-C4-O4	9.17	125.82	119.40
36	1	2863	G	C2-N3-C4	-9.17	107.31	111.90
36	5	2972	G	OP1-P-O3'	9.17	125.37	105.20
36	5	3009	G	C8-N9-C4	-9.17	102.73	106.40
36	5	363	G	C4-C5-N7	9.17	114.47	110.80
36	5	1391	C	C5-C6-N1	-9.17	116.42	121.00
36	5	3214	U	N3-C2-O2	-9.17	115.78	122.20
36	5	2637	A	C2-N3-C4	-9.16	106.02	110.60
36	5	3200	G	N1-C6-O6	9.16	125.40	119.90
36	1	2356	A	C6-C5-N7	-9.16	125.89	132.30
36	1	3142	A	C2-N3-C4	-9.16	106.02	110.60
36	1	2988	C	N3-C2-O2	-9.16	115.49	121.90
36	1	2996	U	C6-N1-C1'	-9.16	108.38	121.20
36	5	2428	U	N1-C2-O2	-9.16	116.39	122.80
36	1	1140	G	C2-N3-C4	-9.16	107.32	111.90
1	6	1546	G	C6-C5-N7	-9.16	124.91	130.40
36	5	1211	U	C5-C6-N1	-9.16	118.12	122.70
36	5	2661	G	C6-C5-N7	-9.16	124.91	130.40
36	5	3246	G	N7-C8-N9	9.16	117.68	113.10
36	5	2715	A	C8-N9-C4	-9.16	102.14	105.80
36	1	697	A	N9-C4-C5	-9.15	102.14	105.80
36	5	1129	A	C6-C5-N7	-9.15	125.89	132.30
36	5	1473	G	N9-C4-C5	-9.15	101.74	105.40
36	1	1183	C	C6-N1-C2	9.15	123.96	120.30
36	1	439	C	C2-N1-C1'	9.15	128.87	118.80
36	1	655	C	N3-C4-C5	-9.15	118.24	121.90
1	6	1564	U	C5-C4-O4	-9.15	120.41	125.90
36	5	506	U	N1-C2-O2	-9.15	116.39	122.80
36	5	1906	G	C5-C6-N1	9.15	116.07	111.50
36	5	650	C	N1-C2-O2	-9.15	113.41	118.90
36	1	1451	C	C6-N1-C2	9.14	123.96	120.30
36	5	2841	G	N1-C6-O6	-9.14	114.41	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1751	C	C2-N3-C4	-9.14	115.33	119.90
36	1	2609	A	O5'-P-OP1	9.14	121.67	110.70
36	1	107	A	C5-N7-C8	-9.14	99.33	103.90
36	5	990	U	N3-C2-O2	-9.14	115.80	122.20
36	5	1059	G	N9-C4-C5	9.14	109.06	105.40
36	5	2346	C	N1-C2-O2	-9.14	113.42	118.90
36	5	1311	G	O5'-P-OP2	-9.14	97.48	105.70
36	1	2378	C	N3-C4-C5	9.13	125.55	121.90
36	1	2644	C	C4-C5-C6	9.13	121.97	117.40
36	1	2813	A	O5'-P-OP2	-9.14	97.48	105.70
36	1	2827	U	C5-C6-N1	-9.14	118.13	122.70
36	5	911	C	N1-C2-N3	9.14	125.59	119.20
36	1	2883	U	N3-C2-O2	-9.13	115.81	122.20
1	6	1602	C	N3-C2-O2	-9.13	115.51	121.90
36	5	3037	U	N3-C2-O2	9.13	128.59	122.20
36	1	2129	U	N3-C2-O2	-9.13	115.81	122.20
36	5	1548	C	N3-C2-O2	9.13	128.29	121.90
1	6	151	G	N3-C2-N2	-9.13	113.51	119.90
36	5	33	G	C5-C6-O6	9.13	134.08	128.60
36	5	857	G	C4-C5-C6	9.13	124.28	118.80
38	8	38	U	N1-C2-N3	9.13	120.38	114.90
36	1	3202	G	C5-C6-O6	-9.13	123.12	128.60
36	1	933	A	N3-C4-C5	-9.12	120.41	126.80
36	1	1408	G	C5-C6-O6	-9.12	123.12	128.60
1	6	1662	G	C8-N9-C4	9.12	110.05	106.40
36	1	714	G	N9-C4-C5	-9.12	101.75	105.40
36	1	860	G	C6-C5-N7	-9.12	124.93	130.40
36	1	917	A	O5'-P-OP2	-9.12	97.49	105.70
36	1	2308	C	C2-N3-C4	-9.12	115.34	119.90
1	6	7	G	O5'-P-OP2	-9.12	97.49	105.70
1	6	1274	C	C6-N1-C2	-9.12	116.65	120.30
1	6	1040	G	O5'-P-OP2	-9.12	97.49	105.70
36	5	2817	A	C2-N3-C4	9.12	115.16	110.60
36	1	3062	G	N1-C6-O6	9.12	125.37	119.90
38	4	140	G	N9-C4-C5	9.12	109.05	105.40
36	1	2138	A	N1-C6-N6	9.12	124.07	118.60
36	1	2238	G	C5-C6-N1	9.12	116.06	111.50
36	1	1851	G	C5-C6-O6	-9.11	123.13	128.60
36	5	208	C	O5'-P-OP1	-9.12	97.50	105.70
36	5	827	A	N1-C6-N6	-9.11	113.13	118.60
36	5	726	G	C8-N9-C4	-9.11	102.75	106.40
36	5	784	A	C4-C5-N7	9.11	115.26	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2315	G	O5'-P-OP2	9.11	121.63	110.70
36	1	2661	G	C5-C6-O6	-9.11	123.13	128.60
1	6	41	A	N1-C6-N6	-9.11	113.14	118.60
36	1	1414	G	N9-C4-C5	-9.11	101.76	105.40
36	1	1507	G	N9-C4-C5	-9.11	101.76	105.40
36	1	2280	A	N7-C8-N9	9.11	118.35	113.80
36	5	1213	G	N3-C2-N2	-9.11	113.53	119.90
1	6	1007	C	N3-C4-C5	9.11	125.54	121.90
36	5	1063	G	N3-C4-C5	9.11	133.15	128.60
37	7	85	G	C8-N9-C4	-9.11	102.76	106.40
36	5	2327	U	C5-C6-N1	-9.11	118.15	122.70
36	1	1418	A	O5'-P-OP1	-9.10	97.51	105.70
36	5	1188	U	N1-C2-N3	9.10	120.36	114.90
36	1	679	U	N3-C4-O4	-9.10	113.03	119.40
36	1	2422	C	C5-C4-N4	9.10	126.57	120.20
36	1	2934	A	N1-C6-N6	9.10	124.06	118.60
36	5	941	G	C5-C6-N1	9.10	116.05	111.50
36	5	1389	G	N9-C4-C5	-9.10	101.76	105.40
36	5	2737	C	N1-C2-O2	-9.10	113.44	118.90
36	5	2934	A	C6-N1-C2	9.10	124.06	118.60
36	5	3040	A	N1-C2-N3	9.10	133.85	129.30
36	5	559	A	N1-C6-N6	9.10	124.06	118.60
1	6	1005	A	C6-N1-C2	-9.10	113.14	118.60
36	5	879	U	N1-C2-O2	-9.10	116.43	122.80
36	5	2621	G	C2-N3-C4	-9.10	107.35	111.90
36	5	3136	G	C4-C5-N7	9.10	114.44	110.80
36	5	2996	U	O5'-P-OP1	9.09	121.61	110.70
36	5	3376	A	N1-C2-N3	9.09	133.85	129.30
36	1	1443	G	C6-C5-N7	-9.09	124.95	130.40
36	5	592	A	O5'-P-OP2	-9.09	97.52	105.70
36	5	1099	A	C5-C6-N6	-9.09	116.43	123.70
36	5	1116	G	C2-N3-C4	-9.09	107.36	111.90
1	6	1572	G	C5-C6-N1	-9.09	106.96	111.50
36	5	784	A	C5-C6-N6	-9.09	116.43	123.70
36	1	1466	G	C6-C5-N7	-9.09	124.95	130.40
36	5	651	G	C6-C5-N7	-9.09	124.95	130.40
36	5	2334	U	N1-C2-N3	9.09	120.35	114.90
36	5	2192	C	O5'-P-OP2	-9.08	97.53	105.70
1	2	577	G	C6-C5-N7	-9.08	124.95	130.40
1	6	266	A	O5'-P-OP1	-9.08	97.53	105.70
36	5	287	G	C8-N9-C4	-9.08	102.77	106.40
36	1	3054	U	N1-C2-N3	9.08	120.35	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	891	A	N9-C4-C5	-9.08	102.17	105.80
36	5	1211	U	N1-C2-N3	-9.08	109.45	114.90
36	5	2241	U	O5'-P-OP1	-9.08	97.53	105.70
36	5	3166	C	C5-C6-N1	9.08	125.54	121.00
1	6	972	G	C5-C6-O6	-9.07	123.16	128.60
36	5	1898	G	C2-N3-C4	9.07	116.44	111.90
36	1	1829	G	N9-C4-C5	9.07	109.03	105.40
36	5	2393	G	N3-C4-N9	9.07	131.44	126.00
36	1	1406	A	C6-C5-N7	-9.07	125.95	132.30
1	6	1361	U	C2-N1-C1'	9.07	128.58	117.70
36	5	907	G	C8-N9-C4	9.07	110.03	106.40
36	5	2656	A	N9-C4-C5	9.07	109.43	105.80
36	5	1589	A	N9-C4-C5	-9.06	102.17	105.80
36	5	3095	U	C4-C5-C6	9.06	125.14	119.70
36	5	1049	C	N3-C4-C5	-9.06	118.28	121.90
36	5	3148	U	N3-C4-O4	-9.06	113.06	119.40
36	1	2886	U	C5-C4-O4	-9.06	120.46	125.90
36	1	3144	G	C5-C6-O6	-9.06	123.16	128.60
36	5	398	A	C8-N9-C4	9.06	109.42	105.80
36	5	1894	U	N3-C4-O4	9.06	125.74	119.40
36	1	2380	U	N3-C4-C5	9.06	120.03	114.60
36	1	2659	G	C6-C5-N7	-9.06	124.97	130.40
36	1	2283	G	C5-N7-C8	-9.05	99.77	104.30
36	1	2818	U	OP2-P-O3'	9.05	125.12	105.20
1	6	1778	G	C6-C5-N7	-9.05	124.97	130.40
1	6	1784	C	C6-N1-C2	9.05	123.92	120.30
36	5	1556	C	C6-N1-C1'	-9.05	109.94	120.80
36	5	2936	A	O5'-P-OP2	9.05	121.57	110.70
1	2	470	A	C8-N9-C4	9.05	109.42	105.80
36	1	1884	A	C5-C6-N6	9.05	130.94	123.70
36	5	825	U	O5'-P-OP1	-9.05	97.55	105.70
36	5	3200	G	C2-N3-C4	-9.05	107.38	111.90
1	2	1264	G	N1-C6-O6	-9.05	114.47	119.90
36	1	640	U	N3-C4-O4	9.05	125.73	119.40
36	1	2932	U	C5-C6-N1	-9.05	118.18	122.70
1	6	1332	C	N3-C4-C5	-9.05	118.28	121.90
36	5	985	U	O5'-P-OP2	-9.05	97.56	105.70
36	5	2770	G	C8-N9-C4	-9.05	102.78	106.40
36	1	1337	A	C6-N1-C2	-9.05	113.17	118.60
36	1	2980	U	C2-N3-C4	-9.05	121.57	127.00
36	1	3049	A	C8-N9-C4	9.04	109.42	105.80
1	6	456	A	C6-N1-C2	-9.05	113.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1163	A	N9-C4-C5	9.04	109.42	105.80
36	5	2111	G	N3-C4-N9	-9.04	120.57	126.00
36	5	64	G	C4-N9-C1'	9.04	138.25	126.50
36	5	1428	A	N1-C2-N3	9.04	133.82	129.30
36	5	3095	U	O5'-P-OP1	-9.04	97.56	105.70
36	1	65	A	N1-C6-N6	9.04	124.02	118.60
36	1	1374	G	N3-C4-C5	-9.04	124.08	128.60
36	1	699	A	C2-N3-C4	-9.04	106.08	110.60
36	1	1829	G	C8-N9-C4	-9.04	102.78	106.40
36	1	2326	A	C2-N3-C4	-9.04	106.08	110.60
36	1	2627	C	N1-C2-O2	-9.04	113.48	118.90
1	6	1614	A	C6-C5-N7	-9.04	125.97	132.30
1	6	1747	G	C8-N9-C4	9.04	110.01	106.40
36	5	963	G	O5'-P-OP1	9.04	121.54	110.70
36	5	1107	C	C2-N3-C4	-9.04	115.38	119.90
36	1	227	G	C8-N9-C1'	-9.03	115.25	127.00
36	5	1544	G	O5'-P-OP2	-9.03	97.57	105.70
36	5	1922	A	C2-N3-C4	-9.04	106.08	110.60
36	1	719	U	C6-N1-C2	9.03	126.42	121.00
36	5	214	G	O5'-P-OP2	-9.03	97.57	105.70
36	5	1005	G	C2-N3-C4	-9.03	107.38	111.90
36	5	3335	A	O5'-P-OP2	-9.03	97.57	105.70
1	2	341	A	O5'-P-OP1	-9.03	97.57	105.70
36	1	2421	U	N3-C2-O2	-9.03	115.88	122.20
36	1	272	G	N3-C4-C5	9.03	133.11	128.60
36	5	2290	C	C2-N1-C1'	-9.03	108.87	118.80
37	3	79	A	C2-N3-C4	-9.03	106.09	110.60
36	1	2701	U	N1-C2-N3	9.02	120.31	114.90
36	1	1306	G	O5'-P-OP2	-9.02	97.58	105.70
36	5	640	U	OP2-P-O3'	9.02	125.05	105.20
36	5	1076	C	C6-N1-C2	9.02	123.91	120.30
36	5	2335	G	C4-C5-N7	-9.02	107.19	110.80
36	1	1432	C	C4-C5-C6	9.02	121.91	117.40
1	6	1367	G	C5-C6-O6	-9.02	123.19	128.60
36	5	2963	C	N3-C2-O2	9.02	128.21	121.90
36	1	2291	A	C8-N9-C4	-9.02	102.19	105.80
36	5	2924	U	C2-N1-C1'	9.02	128.52	117.70
1	2	475	A	C8-N9-C4	9.01	109.41	105.80
36	1	1552	G	C6-C5-N7	-9.01	124.99	130.40
36	5	2728	G	C4-C5-C6	9.01	124.21	118.80
36	1	1932	A	C5-C6-N1	9.01	122.21	117.70
1	6	758	U	N3-C4-O4	-9.01	113.09	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1163	A	C8-N9-C4	-9.01	102.19	105.80
36	5	2426	U	C4-C5-C6	9.01	125.11	119.70
36	1	978	G	N1-C6-O6	9.01	125.31	119.90
36	1	2814	G	N3-C2-N2	-9.01	113.59	119.90
1	2	1737	G	N3-C4-C5	9.01	133.10	128.60
36	1	644	G	C4-C5-N7	-9.01	107.20	110.80
36	1	806	A	N7-C8-N9	-9.01	109.30	113.80
1	6	1565	C	C2-N3-C4	-9.01	115.40	119.90
36	1	2400	G	C6-C5-N7	-9.01	125.00	130.40
36	5	798	G	C6-C5-N7	-9.01	125.00	130.40
36	5	3127	A	N1-C2-N3	9.01	133.80	129.30
37	3	88	G	N3-C4-C5	-9.00	124.10	128.60
36	5	2819	A	O5'-P-OP2	-9.00	97.60	105.70
38	4	103	G	N3-C4-N9	9.00	131.40	126.00
36	5	1190	A	O4'-C1'-N9	-9.00	101.00	108.20
36	1	595	G	C4-N9-C1'	9.00	138.20	126.50
36	1	1305	U	N1-C2-O2	-9.00	116.50	122.80
36	1	2979	U	N3-C4-O4	-9.00	113.10	119.40
1	6	1025	A	C4-C5-C6	9.00	121.50	117.00
36	5	507	U	C6-N1-C2	-9.00	115.60	121.00
36	1	431	U	O5'-P-OP1	-8.99	97.61	105.70
36	5	2880	U	N1-C2-O2	-8.99	116.50	122.80
36	1	3006	A	C2-N3-C4	-8.99	106.10	110.60
1	6	1191	U	N1-C2-O2	8.99	129.09	122.80
36	5	2199	G	C5-C6-O6	-8.99	123.20	128.60
36	1	964	G	C6-C5-N7	-8.99	125.01	130.40
36	1	1058	U	N3-C2-O2	-8.99	115.91	122.20
36	1	2647	A	N1-C6-N6	8.99	123.99	118.60
1	6	1191	U	C2-N1-C1'	8.99	128.48	117.70
36	5	1101	G	N3-C4-C5	-8.99	124.11	128.60
36	5	2329	C	N3-C2-O2	8.99	128.19	121.90
36	5	2626	A	C2-N3-C4	-8.99	106.11	110.60
36	1	406	G	O4'-C1'-N9	8.98	115.39	108.20
36	1	943	U	C4-C5-C6	8.98	125.09	119.70
36	1	1552	G	N3-C4-N9	8.98	131.39	126.00
1	6	420	A	C5-N7-C8	-8.98	99.41	103.90
36	1	2918	G	C5-C6-N1	8.98	115.99	111.50
1	6	1787	C	N1-C2-O2	-8.98	113.51	118.90
36	5	648	C	C6-N1-C1'	8.98	131.58	120.80
36	5	2726	C	C6-N1-C2	-8.98	116.71	120.30
36	5	2853	A	N1-C6-N6	8.98	123.99	118.60
36	5	3308	C	C2-N1-C1'	8.98	128.68	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	881	C	N1-C2-O2	8.98	124.29	118.90
36	1	1349	G	C2-N3-C4	8.98	116.39	111.90
37	3	98	C	N1-C2-O2	-8.98	113.51	118.90
1	6	1129	U	N3-C4-C5	-8.98	109.21	114.60
36	5	963	G	C5-C6-N1	8.98	115.99	111.50
36	5	2248	C	C6-N1-C2	8.98	123.89	120.30
36	5	2358	A	N3-C4-C5	8.98	133.09	126.80
36	5	677	A	C4-C5-N7	8.98	115.19	110.70
36	1	793	C	N3-C4-C5	-8.97	118.31	121.90
36	5	2288	G	N3-C4-N9	8.97	131.38	126.00
36	5	2993	G	C4-C5-N7	8.97	114.39	110.80
36	1	377	A	N1-C6-N6	8.97	123.98	118.60
36	1	3092	C	C2-N3-C4	-8.97	115.41	119.90
36	1	3202	G	N1-C6-O6	8.97	125.28	119.90
1	2	75	U	N3-C2-O2	-8.97	115.92	122.20
37	7	29	C	C5-C6-N1	-8.97	116.51	121.00
1	2	582	U	N1-C2-O2	8.97	129.08	122.80
36	1	1887	A	N1-C6-N6	8.97	123.98	118.60
1	6	578	U	C5-C6-N1	-8.97	118.22	122.70
36	5	3246	G	C8-N9-C4	-8.97	102.81	106.40
38	8	80	A	C8-N9-C4	-8.97	102.21	105.80
1	6	247	A	N1-C6-N6	8.97	123.98	118.60
36	5	3014	U	C5-C4-O4	-8.97	120.52	125.90
36	1	2399	A	C8-N9-C4	8.96	109.39	105.80
1	6	1539	G	O5'-P-OP1	-8.96	97.63	105.70
36	5	430	U	C2-N3-C4	-8.96	121.62	127.00
36	5	2761	G	C5-C6-N1	8.97	115.98	111.50
36	1	1468	A	N1-C2-N3	8.96	133.78	129.30
36	5	2624	G	C5-C6-O6	-8.96	123.22	128.60
36	5	3025	C	N3-C4-N4	-8.96	111.73	118.00
36	1	1395	G	O5'-P-OP1	8.96	121.45	110.70
36	1	1929	G	C4-C5-N7	8.96	114.38	110.80
1	6	1603	U	C5-C4-O4	-8.96	120.52	125.90
36	1	2912	G	N1-C6-O6	-8.96	114.52	119.90
36	5	1368	U	N3-C4-O4	8.96	125.67	119.40
36	5	1793	C	N3-C4-N4	8.96	124.27	118.00
36	5	1907	C	C6-N1-C2	-8.96	116.72	120.30
36	1	2943	G	C6-C5-N7	-8.96	125.03	130.40
36	5	102	C	C6-N1-C2	8.96	123.88	120.30
36	5	402	A	C4-C5-C6	8.96	121.48	117.00
36	5	591	G	C4-C5-C6	8.96	124.17	118.80
36	5	1331	U	C5-C6-N1	-8.96	118.22	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	629	U	C6-N1-C2	8.96	126.37	121.00
36	1	1307	G	C8-N9-C4	-8.95	102.82	106.40
1	6	1158	C	O5'-P-OP2	-8.96	97.64	105.70
1	6	1664	C	C4-C5-C6	8.96	121.88	117.40
40	13	196	ARG	NE-CZ-NH2	-8.95	115.82	120.30
36	1	1949	G	O5'-P-OP1	-8.95	97.65	105.70
36	5	832	G	C5-C6-O6	8.95	133.97	128.60
36	5	1212	A	C4-C5-N7	8.95	115.17	110.70
36	5	1604	G	C4-C5-N7	-8.95	107.22	110.80
36	5	2852	C	N3-C4-C5	8.95	125.48	121.90
36	1	2872	A	C5-C6-N1	8.95	122.17	117.70
36	1	2283	G	N7-C8-N9	8.95	117.57	113.10
36	1	2842	U	O5'-P-OP1	-8.95	97.65	105.70
36	1	3001	C	C5-C6-N1	-8.95	116.53	121.00
36	5	581	U	C5-C6-N1	8.95	127.17	122.70
36	5	655	C	C6-N1-C2	-8.95	116.72	120.30
36	5	3088	G	N1-C6-O6	8.95	125.27	119.90
37	7	89	G	C6-C5-N7	-8.95	125.03	130.40
37	7	117	A	C2-N3-C4	-8.95	106.13	110.60
1	6	911	U	N3-C2-O2	-8.94	115.94	122.20
36	5	2395	G	C5-C6-O6	-8.94	123.23	128.60
36	1	828	A	C4-C5-N7	8.94	115.17	110.70
36	1	1392	G	N3-C4-C5	-8.94	124.13	128.60
36	5	2887	A	OP2-P-O3'	8.94	124.87	105.20
36	1	1392	G	C5-N7-C8	8.94	108.77	104.30
36	1	2875	U	C6-N1-C2	-8.94	115.64	121.00
36	5	1615	C	N3-C2-O2	-8.94	115.64	121.90
36	5	2335	G	O5'-P-OP1	-8.94	97.66	105.70
36	1	790	U	C4-C5-C6	8.94	125.06	119.70
36	5	2640	A	N1-C6-N6	8.94	123.96	118.60
36	1	52	A	N1-C6-N6	-8.94	113.24	118.60
1	6	618	U	O5'-P-OP1	-8.94	97.66	105.70
36	5	1323	G	N1-C2-N3	8.94	129.26	123.90
36	1	419	G	C8-N9-C4	8.93	109.97	106.40
36	1	1316	C	O5'-P-OP1	-8.93	97.66	105.70
36	1	2373	A	C5-N7-C8	-8.93	99.43	103.90
36	5	511	G	N1-C2-N3	8.93	129.26	123.90
36	5	1722	U	O5'-P-OP1	-8.93	97.66	105.70
36	5	2303	A	N1-C6-N6	8.93	123.96	118.60
36	5	3140	G	C4-N9-C1'	8.93	138.11	126.50
36	1	3379	C	C6-N1-C2	8.93	123.87	120.30
1	6	1131	A	N9-C4-C5	-8.93	102.23	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2180	G	O5'-P-OP2	-8.93	97.66	105.70
36	5	2394	G	N1-C6-O6	8.93	125.26	119.90
36	1	911	C	C2-N3-C4	-8.93	115.44	119.90
36	1	1139	G	N3-C4-C5	8.92	133.06	128.60
1	6	1730	A	C8-N9-C4	-8.92	102.23	105.80
36	5	916	G	N3-C4-C5	-8.92	124.14	128.60
36	5	1195	A	N1-C2-N3	8.92	133.76	129.30
36	5	2400	G	C4-C5-C6	-8.92	113.45	118.80
36	5	2708	C	N3-C4-N4	8.92	124.25	118.00
36	1	3093	C	C6-N1-C2	-8.92	116.73	120.30
36	1	36	C	N3-C2-O2	-8.92	115.66	121.90
36	1	357	A	N1-C2-N3	8.92	133.76	129.30
36	5	1137	C	N3-C4-N4	8.92	124.24	118.00
1	2	419	G	C5-C6-O6	-8.92	123.25	128.60
36	1	2364	G	C6-N1-C2	-8.92	119.75	125.10
36	5	974	G	C6-C5-N7	-8.92	125.05	130.40
36	5	1879	A	C8-N9-C4	-8.92	102.23	105.80
36	5	3026	G	N9-C4-C5	-8.92	101.83	105.40
36	1	3217	C	N3-C4-N4	8.92	124.24	118.00
1	6	805	U	O5'-P-OP1	-8.91	97.68	105.70
36	1	33	G	C2-N3-C4	-8.91	107.44	111.90
36	1	2393	G	C6-C5-N7	-8.91	125.05	130.40
37	3	84	A	C8-N9-C4	-8.91	102.23	105.80
38	4	28	C	C5-C6-N1	8.91	125.46	121.00
36	5	3187	A	O5'-P-OP2	-8.91	97.68	105.70
36	1	1129	A	N7-C8-N9	8.91	118.25	113.80
36	1	1294	A	O5'-P-OP2	-8.91	97.68	105.70
36	5	1604	G	N9-C4-C5	8.91	108.96	105.40
36	5	2888	U	N1-C2-N3	8.91	120.25	114.90
36	1	272	G	N3-C2-N2	-8.91	113.67	119.90
36	1	2296	A	C2-N3-C4	-8.91	106.15	110.60
36	1	1429	G	N7-C8-N9	-8.91	108.65	113.10
1	6	611	U	N3-C2-O2	-8.91	115.97	122.20
1	6	1440	C	N3-C4-C5	8.91	125.46	121.90
1	6	1644	C	O5'-P-OP2	-8.91	97.68	105.70
37	7	85	G	N7-C8-N9	8.91	117.55	113.10
36	5	1407	A	N7-C8-N9	-8.91	109.35	113.80
38	4	27	U	C5-C4-O4	-8.90	120.56	125.90
36	5	2629	U	C4-C5-C6	8.90	125.04	119.70
36	5	1101	G	N1-C2-N2	-8.90	108.19	116.20
36	1	596	C	C6-N1-C2	-8.90	116.74	120.30
36	1	1116	G	OP2-P-O3'	8.90	124.78	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1622	G	C4-C5-N7	8.90	114.36	110.80
36	1	427	C	C6-N1-C2	-8.90	116.74	120.30
1	2	1594	G	O5'-P-OP1	-8.90	97.69	105.70
36	1	35	A	C5-N7-C8	-8.90	99.45	103.90
38	4	53	A	C5-N7-C8	8.90	108.35	103.90
38	8	4	C	N1-C2-O2	-8.90	113.56	118.90
37	7	93	C	N3-C2-O2	-8.89	115.67	121.90
36	1	101	G	C2-N3-C4	-8.89	107.45	111.90
46	19	168	ARG	NE-CZ-NH2	8.89	124.75	120.30
36	1	356	C	C5-C4-N4	-8.89	113.98	120.20
36	1	2387	A	C5-C6-N1	8.89	122.14	117.70
36	5	787	G	C5-C6-N1	-8.89	107.06	111.50
36	1	1498	A	C5-C6-N1	8.89	122.14	117.70
36	5	2386	A	C4-C5-N7	8.89	115.14	110.70
36	1	428	A	C5-C6-N6	-8.88	116.59	123.70
36	1	2159	U	C2-N1-C1'	8.88	128.36	117.70
36	1	3182	G	N3-C4-N9	8.89	131.33	126.00
1	2	331	A	N9-C4-C5	8.88	109.35	105.80
36	1	883	A	C6-N1-C2	-8.88	113.27	118.60
36	1	2937	G	N7-C8-N9	-8.88	108.66	113.10
36	5	371	G	N3-C4-N9	-8.88	120.67	126.00
36	1	507	U	N1-C2-O2	8.88	129.01	122.80
36	1	622	A	C4-C5-N7	8.88	115.14	110.70
36	1	3206	C	N1-C2-O2	-8.88	113.57	118.90
36	5	1550	C	C5-C6-N1	8.88	125.44	121.00
36	5	667	C	C5-C4-N4	8.88	126.41	120.20
36	1	1604	G	N3-C4-C5	-8.88	124.16	128.60
36	5	1127	G	C8-N9-C4	-8.88	102.85	106.40
36	5	1913	A	N1-C6-N6	8.88	123.93	118.60
36	1	3377	G	N1-C6-O6	-8.87	114.58	119.90
36	5	97	U	C5-C4-O4	-8.87	120.58	125.90
1	2	1200	G	N1-C6-O6	8.87	125.22	119.90
36	5	3393	U	C2-N1-C1'	-8.87	107.05	117.70
36	5	1520	G	C8-N9-C1'	-8.87	115.47	127.00
36	1	793	C	C4-C5-C6	8.87	121.83	117.40
1	6	1130	G	C5-C6-N1	8.87	115.93	111.50
36	5	974	G	N3-C4-N9	8.87	131.32	126.00
36	5	1128	U	N1-C2-O2	-8.87	116.59	122.80
36	1	2847	A	C2-N3-C4	-8.86	106.17	110.60
36	1	3135	U	C5-C6-N1	-8.87	118.27	122.70
36	5	3271	G	N1-C6-O6	8.87	125.22	119.90
1	6	332	U	N3-C2-O2	-8.86	116.00	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	942	U	C6-N1-C2	-8.86	115.68	121.00
36	1	2637	A	N9-C4-C5	8.86	109.34	105.80
36	1	2831	G	N3-C2-N2	-8.86	113.70	119.90
36	1	2939	G	N9-C4-C5	8.86	108.94	105.40
36	5	2837	A	C6-N1-C2	-8.86	113.28	118.60
1	6	209	U	N3-C4-O4	8.86	125.60	119.40
1	6	1418	G	N1-C6-O6	8.86	125.22	119.90
1	6	1634	C	N3-C2-O2	-8.86	115.70	121.90
36	5	2980	U	N3-C4-O4	-8.86	113.20	119.40
1	6	1187	U	C5-C6-N1	8.86	127.13	122.70
36	5	857	G	N1-C6-O6	8.86	125.21	119.90
1	2	577	G	C4-C5-N7	8.85	114.34	110.80
36	1	61	A	N7-C8-N9	8.85	118.23	113.80
36	1	1172	G	OP1-P-O3'	8.85	124.68	105.20
36	1	2629	U	N1-C2-O2	-8.85	116.60	122.80
36	1	1366	A	C2-N3-C4	-8.85	106.17	110.60
36	1	1414	G	C5-C6-O6	-8.85	123.29	128.60
36	1	2689	A	O5'-P-OP1	-8.85	97.73	105.70
37	7	48	U	C5-C4-O4	-8.85	120.59	125.90
36	1	344	A	C8-N9-C4	-8.85	102.26	105.80
1	6	1668	G	C2-N3-C4	-8.85	107.47	111.90
1	2	1146	G	C4-N9-C1'	8.85	138.00	126.50
36	1	2983	C	C5-C6-N1	-8.85	116.58	121.00
36	5	1905	G	N1-C6-O6	-8.85	114.59	119.90
36	5	2341	A	O5'-P-OP1	-8.85	97.74	105.70
1	2	1655	A	C4-C5-C6	-8.84	112.58	117.00
36	1	1528	G	N3-C4-C5	-8.84	124.18	128.60
36	5	1017	C	C2-N1-C1'	8.84	128.53	118.80
36	1	826	G	N1-C6-O6	8.84	125.20	119.90
36	1	3075	G	C5-C6-N1	-8.84	107.08	111.50
36	5	1148	G	N1-C2-N3	8.84	129.21	123.90
36	5	2306	C	O5'-P-OP2	-8.84	97.74	105.70
36	5	2726	C	O5'-P-OP1	8.84	121.31	110.70
36	1	407	A	C2-N3-C4	8.84	115.02	110.60
36	5	608	A	C5-C6-N6	-8.84	116.63	123.70
36	5	1151	U	C2-N1-C1'	8.84	128.31	117.70
36	5	2358	A	C2-N3-C4	-8.84	106.18	110.60
1	2	334	G	C4-C5-N7	-8.84	107.27	110.80
36	5	1165	A	C5-N7-C8	-8.84	99.48	103.90
36	1	1929	G	C5-C6-O6	-8.84	123.30	128.60
36	5	827	A	N9-C4-C5	8.84	109.33	105.80
36	5	3015	G	N1-C6-O6	8.84	125.20	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	17	C	N1-C2-O2	-8.83	113.60	118.90
1	2	1272	U	N3-C2-O2	-8.83	116.02	122.20
36	1	52	A	C5-C6-N6	8.83	130.77	123.70
36	5	1172	G	C6-C5-N7	-8.83	125.10	130.40
37	7	93	C	C2-N1-C1'	8.83	128.52	118.80
36	1	934	G	C8-N9-C4	-8.83	102.87	106.40
1	6	1295	G	N1-C6-O6	8.83	125.20	119.90
36	5	364	G	O5'-P-OP1	-8.83	97.75	105.70
36	1	1414	G	C2-N3-C4	-8.83	107.49	111.90
36	5	1582	C	C5-C6-N1	8.83	125.41	121.00
36	5	2924	U	C5-C4-O4	-8.83	120.60	125.90
1	2	21	U	N3-C4-O4	8.82	125.58	119.40
36	5	2375	G	N9-C4-C5	8.82	108.93	105.40
36	1	1201	C	C5-C4-N4	-8.82	114.02	120.20
36	1	2394	G	C5-N7-C8	8.82	108.71	104.30
36	5	2407	C	C5-C4-N4	-8.82	114.02	120.20
36	1	642	U	C5-C6-N1	8.82	127.11	122.70
36	1	2296	A	N1-C6-N6	8.82	123.89	118.60
36	5	1155	C	N3-C2-O2	8.82	128.07	121.90
36	5	791	A	N1-C6-N6	8.82	123.89	118.60
36	5	2888	U	C2-N3-C4	-8.82	121.71	127.00
36	5	3245	A	C6-N1-C2	8.82	123.89	118.60
36	1	1522	U	N3-C2-O2	-8.82	116.03	122.20
36	1	2636	A	O5'-P-OP2	8.82	121.28	110.70
36	5	1047	A	N1-C2-N3	8.82	133.71	129.30
36	5	2946	A	N1-C2-N3	8.82	133.71	129.30
1	2	820	U	C5-C6-N1	8.81	127.11	122.70
36	1	193	C	N3-C4-C5	-8.81	118.38	121.90
36	1	290	G	N1-C6-O6	8.81	125.19	119.90
36	1	1386	A	C8-N9-C4	-8.81	102.28	105.80
36	1	2714	G	N3-C4-N9	-8.81	120.71	126.00
37	3	88	G	C6-N1-C2	-8.81	119.81	125.10
36	5	2825	C	N3-C4-N4	8.81	124.17	118.00
36	1	2363	A	O5'-P-OP2	8.81	121.28	110.70
1	6	322	G	C8-N9-C4	-8.81	102.88	106.40
36	5	360	G	C4-C5-C6	8.81	124.09	118.80
36	5	1046	A	N1-C2-N3	8.81	133.71	129.30
36	5	1947	G	C5-C6-N1	8.81	115.91	111.50
38	8	44	A	N1-C6-N6	8.81	123.89	118.60
36	1	971	G	N3-C4-C5	-8.81	124.20	128.60
36	5	2346	C	N3-C2-O2	8.81	128.07	121.90
36	1	1453	A	N1-C2-N3	8.81	133.70	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2904	U	N3-C4-C5	8.81	119.88	114.60
38	8	15	G	C4-C5-N7	-8.81	107.28	110.80
36	1	507	U	N3-C2-O2	-8.80	116.04	122.20
36	5	1116	G	OP1-P-O3'	-8.81	85.83	105.20
36	5	2814	G	C5-C6-O6	-8.80	123.32	128.60
37	7	80	G	C8-N9-C4	8.80	109.92	106.40
37	3	98	C	N1-C2-N3	8.80	125.36	119.20
36	5	3208	G	N1-C2-N3	8.80	129.18	123.90
1	2	573	C	C6-N1-C2	-8.80	116.78	120.30
36	1	596	C	C4-C5-C6	8.80	121.80	117.40
36	5	216	G	C5-C6-O6	-8.80	123.32	128.60
36	5	3373	U	N1-C2-N3	8.80	120.18	114.90
1	6	315	A	C8-N9-C4	8.80	109.32	105.80
36	5	33	G	N1-C6-O6	-8.80	114.62	119.90
36	5	922	U	C5-C6-N1	-8.80	118.30	122.70
36	5	1114	U	C6-N1-C2	-8.80	115.72	121.00
36	5	2287	C	C4-C5-C6	8.80	121.80	117.40
1	2	1284	C	N1-C2-O2	-8.80	113.62	118.90
36	1	226	C	N1-C2-O2	-8.79	113.62	118.90
36	1	408	A	C6-N1-C2	-8.79	113.32	118.60
36	1	3083	G	C8-N9-C4	8.79	109.92	106.40
36	5	2132	C	N3-C2-O2	-8.79	115.74	121.90
36	5	3047	U	O5'-P-OP1	-8.79	97.78	105.70
36	5	3203	U	C5-C4-O4	8.79	131.18	125.90
1	2	144	U	C6-N1-C1'	8.79	133.51	121.20
36	1	960	U	C5-C6-N1	-8.79	118.30	122.70
36	5	2811	A	C5-C6-N1	8.79	122.09	117.70
36	5	3053	G	O5'-P-OP1	-8.79	97.79	105.70
36	5	3129	A	C8-N9-C4	-8.79	102.28	105.80
38	8	7	U	N1-C2-O2	-8.79	116.64	122.80
1	2	144	U	C5-C4-O4	8.79	131.17	125.90
36	1	414	U	C2-N3-C4	-8.79	121.73	127.00
36	5	957	C	C2-N1-C1'	8.79	128.47	118.80
37	7	27	A	N1-C6-N6	-8.79	113.33	118.60
36	1	439	C	C5-C6-N1	8.79	125.39	121.00
36	1	3050	U	N1-C2-N3	8.79	120.17	114.90
1	6	1414	U	N3-C2-O2	-8.79	116.05	122.20
1	6	1428	G	O5'-P-OP1	-8.79	97.79	105.70
36	5	2139	A	C5-C6-N6	8.79	130.73	123.70
36	5	2697	A	C5-C6-N6	-8.79	116.67	123.70
36	5	2830	G	C5-C6-O6	8.79	133.87	128.60
36	1	1116	G	N3-C2-N2	8.79	126.05	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2678	A	N1-C6-N6	-8.79	113.33	118.60
36	1	2797	C	N3-C4-C5	-8.79	118.39	121.90
36	5	437	G	N3-C4-N9	8.79	131.27	126.00
36	5	795	G	O5'-P-OP2	-8.79	97.79	105.70
38	8	1	A	C5-N7-C8	8.79	108.29	103.90
36	5	2305	G	N1-C2-N3	8.78	129.17	123.90
36	1	2351	U	N3-C2-O2	-8.78	116.05	122.20
36	5	2808	A	N7-C8-N9	8.78	118.19	113.80
36	5	3390	G	O5'-P-OP1	-8.78	97.80	105.70
36	5	884	A	C8-N9-C4	8.78	109.31	105.80
36	5	3041	U	C6-N1-C2	8.78	126.27	121.00
36	1	648	C	C2-N3-C4	-8.78	115.51	119.90
1	6	1700	C	C2-N1-C1'	8.78	128.45	118.80
36	5	1196	C	C4-C5-C6	8.78	121.79	117.40
36	5	2199	G	C5-C6-N1	-8.78	107.11	111.50
36	5	2373	A	N1-C6-N6	-8.78	113.33	118.60
36	5	2620	G	C2-N3-C4	-8.78	107.51	111.90
36	5	3005	A	C4-C5-C6	8.78	121.39	117.00
1	2	610	G	C8-N9-C1'	-8.77	115.59	127.00
1	2	1114	G	N3-C4-N9	8.77	131.26	126.00
1	2	334	G	N7-C8-N9	-8.77	108.71	113.10
36	1	828	A	N7-C8-N9	8.77	118.19	113.80
36	1	1187	C	C6-N1-C2	8.77	123.81	120.30
36	1	1209	G	N3-C4-N9	8.77	131.26	126.00
36	1	1433	A	C8-N9-C4	-8.77	102.29	105.80
36	5	2932	U	C2-N3-C4	-8.77	121.74	127.00
36	1	962	A	N1-C2-N3	8.77	133.69	129.30
38	4	3	A	C5-C6-N1	8.77	122.08	117.70
36	1	2289	U	C4-C5-C6	8.77	124.96	119.70
36	1	187	A	N9-C4-C5	8.77	109.31	105.80
36	1	1376	C	O5'-P-OP2	-8.77	97.81	105.70
36	5	286	U	C6-N1-C2	-8.77	115.74	121.00
36	5	990	U	N1-C2-O2	8.77	128.94	122.80
36	5	1217	A	O5'-P-OP1	8.77	121.22	110.70
36	5	2306	C	C2-N1-C1'	8.77	128.44	118.80
36	1	3245	A	C2-N3-C4	-8.76	106.22	110.60
36	5	1364	C	C6-N1-C2	-8.76	116.79	120.30
36	1	964	G	C5-N7-C8	-8.76	99.92	104.30
36	1	2642	A	C8-N9-C4	8.76	109.31	105.80
36	5	2426	U	C5-C4-O4	8.76	131.16	125.90
36	1	635	G	C6-C5-N7	-8.76	125.14	130.40
36	5	1111	U	C5-C6-N1	-8.76	118.32	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	35	A	C6-C5-N7	-8.76	126.17	132.30
36	1	2985	C	C6-N1-C2	-8.76	116.80	120.30
36	1	1880	U	C2-N3-C4	-8.76	121.75	127.00
36	1	2179	C	N3-C2-O2	-8.76	115.77	121.90
36	5	2743	A	N1-C2-N3	8.76	133.68	129.30
36	5	3039	C	N3-C4-N4	8.76	124.13	118.00
36	5	3328	G	C4-C5-N7	8.76	114.30	110.80
36	5	3362	A	C5-N7-C8	-8.76	99.52	103.90
36	1	400	G	N9-C4-C5	8.75	108.90	105.40
36	5	528	U	C6-N1-C2	-8.75	115.75	121.00
36	5	1170	A	C2-N3-C4	-8.75	106.22	110.60
1	6	1498	G	C8-N9-C1'	-8.75	115.62	127.00
36	5	3189	G	C8-N9-C4	8.75	109.90	106.40
37	7	49	G	C4-C5-C6	8.75	124.05	118.80
38	8	111	A	C8-N9-C4	8.75	109.30	105.80
1	2	507	U	N3-C2-O2	-8.75	116.07	122.20
36	1	220	G	C6-C5-N7	-8.75	125.15	130.40
36	1	1380	G	C5-C6-N1	-8.75	107.12	111.50
36	1	2827	U	O5'-P-OP2	-8.75	97.83	105.70
41	L4	182	LEU	CA-CB-CG	8.75	135.42	115.30
1	6	321	C	O5'-P-OP1	-8.75	97.83	105.70
36	5	2678	A	N1-C6-N6	-8.75	113.35	118.60
38	8	41	A	N1-C2-N3	8.75	133.67	129.30
36	1	1177	G	C5-C6-O6	-8.74	123.35	128.60
36	5	2700	G	C6-N1-C2	-8.74	119.85	125.10
36	1	57	A	N1-C2-N3	8.74	133.67	129.30
36	1	780	A	N1-C2-N3	8.74	133.67	129.30
36	1	1178	G	C8-N9-C1'	-8.74	115.63	127.00
36	5	3200	G	C4-C5-C6	8.74	124.05	118.80
36	1	3362	A	C5-N7-C8	-8.74	99.53	103.90
36	5	2307	G	O5'-P-OP2	-8.74	97.83	105.70
36	1	2918	G	N3-C4-C5	-8.74	124.23	128.60
36	1	23	A	N3-C4-C5	-8.74	120.68	126.80
36	1	397	A	C5-C6-N1	8.74	122.07	117.70
36	1	2283	G	C8-N9-C4	-8.74	102.91	106.40
36	5	3218	A	N1-C6-N6	8.74	123.84	118.60
36	1	640	U	N3-C4-C5	-8.73	109.36	114.60
36	1	971	G	N3-C4-N9	8.73	131.24	126.00
1	6	29	U	N1-C2-N3	8.73	120.14	114.90
36	1	3362	A	N7-C8-N9	8.73	118.17	113.80
36	5	630	A	N7-C8-N9	-8.73	109.43	113.80
38	8	136	G	C8-N9-C4	8.73	109.89	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2821	C	N3-C2-O2	-8.73	115.79	121.90
36	5	3140	G	N3-C4-N9	8.73	131.24	126.00
1	2	3	U	O5'-P-OP1	-8.73	97.85	105.70
1	6	142	G	C5-C6-O6	8.73	133.84	128.60
36	5	249	U	O4'-C1'-N1	8.73	115.18	108.20
36	5	2824	G	N9-C4-C5	-8.72	101.91	105.40
36	1	3096	C	N3-C4-C5	-8.72	118.41	121.90
36	1	107	A	C4-C5-N7	8.72	115.06	110.70
36	1	3172	A	C4-C5-C6	8.72	121.36	117.00
36	5	360	G	C5-C6-N1	-8.72	107.14	111.50
36	5	1165	A	N1-C2-N3	8.72	133.66	129.30
36	5	2662	G	N1-C2-N3	8.72	129.13	123.90
36	1	1134	G	N1-C2-N3	8.72	129.13	123.90
36	1	1431	G	N1-C6-O6	-8.72	114.67	119.90
38	4	111	A	C8-N9-C4	8.72	109.29	105.80
1	6	431	C	N3-C2-O2	8.72	128.00	121.90
36	5	96	G	C5-C6-N1	-8.71	107.14	111.50
36	5	1178	G	C5-C6-O6	8.71	133.83	128.60
36	5	1685	C	C6-N1-C2	8.71	123.79	120.30
36	5	2122	G	N1-C6-O6	8.71	125.13	119.90
1	6	1189	A	C8-N9-C4	8.71	109.28	105.80
38	8	4	C	N3-C4-C5	-8.71	118.42	121.90
36	5	2878	G	N3-C4-C5	-8.71	124.24	128.60
1	2	317	C	C6-N1-C2	-8.71	116.82	120.30
36	1	22	G	C2-N3-C4	-8.71	107.55	111.90
1	6	553	G	N1-C6-O6	8.71	125.12	119.90
36	5	1182	A	OP1-P-OP2	8.71	132.66	119.60
36	5	3010	U	N3-C4-O4	-8.71	113.30	119.40
36	5	1149	G	C5-C6-N1	-8.71	107.15	111.50
36	5	2937	G	N9-C4-C5	-8.70	101.92	105.40
36	5	3278	C	C2-N1-C1'	-8.71	109.22	118.80
36	1	718	G	N1-C6-O6	8.70	125.12	119.90
36	5	3144	G	C4-C5-C6	8.70	124.02	118.80
36	5	3343	G	C8-N9-C1'	-8.70	115.69	127.00
36	1	640	U	N1-C2-O2	-8.70	116.71	122.80
36	5	664	U	N3-C4-C5	-8.70	109.38	114.60
36	5	863	C	C6-N1-C2	8.70	123.78	120.30
36	1	880	G	C4-N9-C1'	-8.70	115.19	126.50
36	1	276	U	N3-C4-O4	8.70	125.49	119.40
36	1	674	G	C5-C6-N1	-8.70	107.15	111.50
36	1	3390	G	C4-N9-C1'	8.70	137.81	126.50
36	1	2353	G	C5-C6-O6	-8.69	123.38	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	808	A	C5-C6-N1	8.70	122.05	117.70
1	6	43	A	C8-N9-C4	8.69	109.28	105.80
36	5	856	G	C4-N9-C1'	8.69	137.80	126.50
36	5	1127	G	C4-C5-N7	-8.69	107.32	110.80
36	5	2126	A	C5-C6-N1	8.69	122.05	117.70
37	7	13	A	N1-C6-N6	8.69	123.81	118.60
36	1	2599	U	O5'-P-OP1	-8.69	97.88	105.70
1	6	1535	U	O5'-P-OP2	-8.69	97.88	105.70
36	5	155	G	N3-C4-N9	8.69	131.21	126.00
36	5	3199	G	C5-C6-N1	8.69	115.84	111.50
36	1	861	C	C6-N1-C2	-8.69	116.83	120.30
36	5	3036	G	O5'-P-OP2	-8.69	97.88	105.70
36	5	3383	G	N1-C6-O6	8.69	125.11	119.90
36	5	300	G	N1-C6-O6	-8.69	114.69	119.90
36	5	1149	G	O5'-P-OP2	-8.69	97.88	105.70
36	5	1202	A	C4-C5-C6	8.69	121.34	117.00
1	2	1291	G	C5-N7-C8	-8.68	99.96	104.30
36	5	1342	C	O5'-P-OP1	-8.68	97.88	105.70
36	1	102	C	O5'-P-OP1	8.68	121.12	110.70
36	5	900	G	C8-N9-C4	-8.68	102.93	106.40
36	5	1127	G	C4-N9-C1'	8.68	137.79	126.50
1	6	972	G	N3-C4-N9	8.68	131.21	126.00
36	5	2295	A	O5'-P-OP2	-8.68	97.89	105.70
36	5	3115	C	C6-N1-C1'	8.68	131.22	120.80
36	5	804	C	N3-C4-N4	8.68	124.07	118.00
36	5	2157	G	C8-N9-C4	8.68	109.87	106.40
36	5	2895	G	C6-N1-C2	-8.68	119.89	125.10
36	1	354	U	N3-C2-O2	-8.68	116.13	122.20
1	6	1029	U	C5-C4-O4	8.68	131.11	125.90
36	1	3245	A	N1-C2-N3	8.68	133.64	129.30
36	5	2428	U	N3-C2-O2	8.68	128.27	122.20
36	5	3115	C	N3-C2-O2	8.68	127.97	121.90
1	2	1073	G	C8-N9-C4	8.67	109.87	106.40
38	4	18	U	C6-N1-C2	-8.67	115.80	121.00
36	1	2195	C	O5'-P-OP1	-8.67	97.89	105.70
36	5	1337	A	N1-C6-N6	-8.67	113.40	118.60
36	5	2244	A	N7-C8-N9	-8.67	109.46	113.80
1	6	54	C	N3-C2-O2	-8.67	115.83	121.90
1	2	1146	G	C6-C5-N7	-8.67	125.20	130.40
36	1	413	U	C6-N1-C2	8.67	126.20	121.00
1	6	1474	G	C8-N9-C1'	-8.67	115.73	127.00
36	5	1173	U	N1-C2-N3	8.67	120.10	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1879	A	C5-N7-C8	-8.67	99.56	103.90
36	5	3193	C	O5'-P-OP1	-8.67	97.90	105.70
36	1	916	G	C5-C6-N1	8.67	115.83	111.50
36	1	916	G	N1-C6-O6	-8.67	114.70	119.90
36	1	2631	U	N1-C2-O2	8.67	128.87	122.80
36	1	1103	A	C2-N3-C4	8.67	114.93	110.60
36	1	1487	G	N7-C8-N9	8.67	117.43	113.10
1	6	1187	U	C6-N1-C2	-8.67	115.80	121.00
36	5	2634	U	N3-C4-C5	8.67	119.80	114.60
1	2	1190	C	C6-N1-C2	8.66	123.77	120.30
1	2	1768	G	C8-N9-C4	-8.66	102.93	106.40
1	2	353	A	C6-C5-N7	-8.66	126.24	132.30
36	1	2627	C	C2-N3-C4	-8.66	115.57	119.90
36	5	289	A	C5-C6-N6	-8.66	116.77	123.70
36	5	1130	A	N1-C2-N3	-8.66	124.97	129.30
36	1	676	G	C4-N9-C1'	8.66	137.76	126.50
36	1	2863	G	O5'-P-OP2	-8.66	97.91	105.70
36	5	595	G	N1-C2-N2	-8.66	108.41	116.20
36	5	2865	U	N1-C2-O2	8.66	128.86	122.80
36	1	205	C	C6-N1-C2	8.66	123.76	120.30
36	1	693	A	C6-C5-N7	-8.66	126.24	132.30
1	6	326	G	C6-C5-N7	-8.66	125.20	130.40
36	5	592	A	C8-N9-C4	8.66	109.26	105.80
36	5	594	U	C6-N1-C2	-8.66	115.81	121.00
36	5	1095	U	N3-C2-O2	-8.66	116.14	122.20
36	5	1196	C	N1-C2-O2	8.66	124.09	118.90
36	1	499	G	O5'-P-OP2	-8.65	97.91	105.70
36	1	1930	A	N9-C4-C5	-8.65	102.34	105.80
36	1	3045	G	N1-C2-N3	-8.65	118.71	123.90
1	6	41	A	N9-C4-C5	8.65	109.26	105.80
36	5	583	G	O5'-P-OP1	-8.65	97.91	105.70
36	5	1152	G	N1-C2-N2	8.65	123.99	116.20
38	8	8	C	C6-N1-C2	-8.65	116.84	120.30
36	1	655	C	C2-N1-C1'	8.65	128.32	118.80
36	1	2601	A	C6-N1-C2	-8.65	113.41	118.60
36	5	2715	A	C5-C6-N6	8.65	130.62	123.70
36	5	1192	C	N1-C2-O2	8.65	124.09	118.90
36	5	2940	A	C5-N7-C8	-8.65	99.58	103.90
36	5	3040	A	C8-N9-C4	8.65	109.26	105.80
36	5	3361	G	N1-C6-O6	8.65	125.09	119.90
1	6	621	A	C6-C5-N7	8.65	138.35	132.30
1	6	1208	A	C8-N9-C4	-8.65	102.34	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2246	G	C5-N7-C8	-8.65	99.98	104.30
36	5	2689	A	C5-C6-N6	8.65	130.62	123.70
36	5	2789	U	N1-C2-O2	-8.64	116.75	122.80
36	5	2871	G	C4-C5-N7	8.64	114.26	110.80
36	1	2284	C	N1-C2-O2	8.64	124.09	118.90
36	5	774	G	C4-C5-N7	8.64	114.26	110.80
36	5	1910	A	C5-C6-N6	-8.64	116.79	123.70
37	7	104	A	OP1-P-O3'	-8.64	86.18	105.20
36	1	2314	U	N3-C4-O4	8.64	125.45	119.40
36	1	3085	G	C5-C6-O6	-8.64	123.42	128.60
36	1	3201	C	C6-N1-C2	-8.64	116.84	120.30
1	6	383	G	C6-C5-N7	-8.64	125.22	130.40
36	5	424	G	C5-C6-N1	8.64	115.82	111.50
1	6	1629	G	N3-C4-C5	-8.64	124.28	128.60
36	5	1851	G	C5-N7-C8	-8.64	99.98	104.30
36	1	1116	G	C4-N9-C1'	8.64	137.73	126.50
36	1	2816	G	N1-C2-N2	-8.64	108.43	116.20
1	6	351	C	C6-N1-C2	8.64	123.75	120.30
36	5	96	G	C8-N9-C4	8.64	109.86	106.40
36	5	2285	C	C5-C6-N1	-8.64	116.68	121.00
36	5	2945	G	N1-C6-O6	-8.64	114.72	119.90
36	1	644	G	N1-C2-N3	8.63	129.08	123.90
36	1	1100	U	N1-C2-N3	8.64	120.08	114.90
36	1	1483	G	C5-C6-N1	8.63	115.82	111.50
1	6	1474	G	C4-N9-C1'	8.63	137.73	126.50
36	5	1694	U	N3-C2-O2	8.63	128.24	122.20
1	6	788	A	C8-N9-C4	8.63	109.25	105.80
38	8	21	C	N3-C4-C5	8.63	125.35	121.90
36	1	3001	C	C2-N3-C4	-8.63	115.58	119.90
36	5	2278	C	N3-C4-N4	8.63	124.04	118.00
36	5	3043	C	C2-N3-C4	-8.63	115.58	119.90
36	1	2764	C	C2-N3-C4	8.63	124.21	119.90
36	1	3049	A	N7-C8-N9	-8.63	109.49	113.80
36	5	345	G	N9-C4-C5	-8.63	101.95	105.40
36	5	2895	G	N1-C2-N2	-8.63	108.43	116.20
36	5	384	A	N1-C6-N6	8.63	123.78	118.60
36	1	41	G	C5-C6-N1	8.63	115.81	111.50
36	1	699	A	N3-C4-C5	8.63	132.84	126.80
36	1	2385	G	N9-C4-C5	-8.63	101.95	105.40
1	6	1731	A	O5'-P-OP1	8.63	121.05	110.70
1	2	1300	A	N1-C6-N6	-8.62	113.43	118.60
1	6	1729	C	C2-N3-C4	-8.62	115.59	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1310	G	N3-C4-N9	8.62	131.17	126.00
36	5	1902	G	N1-C2-N3	8.62	129.07	123.90
36	5	3185	U	C4-C5-C6	8.62	124.87	119.70
1	2	15	U	N3-C2-O2	-8.62	116.17	122.20
36	5	1178	G	N9-C4-C5	8.62	108.85	105.40
36	5	1181	U	C4-C5-C6	8.62	124.87	119.70
36	5	1514	G	N9-C4-C5	-8.62	101.95	105.40
1	2	507	U	N1-C2-O2	8.62	128.83	122.80
1	6	1491	U	P-O3'-C3'	8.62	130.04	119.70
1	6	1630	U	N3-C4-O4	8.62	125.43	119.40
36	5	2379	U	N3-C4-O4	-8.62	113.37	119.40
36	1	3374	U	C5-C6-N1	-8.62	118.39	122.70
36	5	2693	C	C2-N3-C4	-8.62	115.59	119.90
36	5	2942	C	N3-C2-O2	-8.62	115.87	121.90
36	1	1395	G	O5'-P-OP2	-8.61	97.95	105.70
36	1	2198	A	C2-N3-C4	-8.61	106.29	110.60
36	1	2386	A	O5'-P-OP1	-8.61	97.95	105.70
1	6	1478	G	C4-N9-C1'	8.61	137.70	126.50
36	5	568	G	C4-C5-N7	8.61	114.24	110.80
36	5	2812	C	O5'-P-OP2	8.61	121.03	110.70
36	5	1060	U	N3-C4-O4	-8.61	113.37	119.40
36	5	718	G	C6-C5-N7	-8.61	125.23	130.40
36	5	996	A	O5'-P-OP2	-8.61	97.95	105.70
36	5	1124	U	N3-C4-O4	-8.61	113.37	119.40
36	1	639	G	C5-N7-C8	-8.61	100.00	104.30
36	1	865	U	C5-C6-N1	-8.61	118.40	122.70
36	1	2310	U	O5'-P-OP1	-8.61	97.95	105.70
36	1	1146	C	N1-C2-N3	-8.61	113.18	119.20
1	6	856	A	N1-C6-N6	8.61	123.76	118.60
1	6	1000	C	C6-N1-C2	-8.61	116.86	120.30
36	5	1376	C	N3-C4-N4	8.61	124.02	118.00
36	5	2624	G	N1-C6-O6	8.61	125.06	119.90
36	1	1043	C	N3-C4-C5	8.60	125.34	121.90
1	6	1354	G	C8-N9-C4	-8.60	102.96	106.40
37	3	74	C	C6-N1-C2	8.60	123.74	120.30
36	5	672	A	C5-C6-N1	8.60	122.00	117.70
36	5	851	C	N3-C4-C5	8.60	125.34	121.90
1	2	1761	U	N1-C2-N3	8.60	120.06	114.90
36	1	887	G	N3-C4-N9	8.60	131.16	126.00
36	1	2629	U	N3-C4-C5	-8.60	109.44	114.60
36	1	2887	A	N7-C8-N9	8.60	118.10	113.80
38	4	103	G	N3-C4-C5	-8.60	124.30	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	344	A	N7-C8-N9	8.60	118.10	113.80
36	5	961	C	O5'-P-OP2	8.60	121.02	110.70
36	5	2244	A	N1-C6-N6	-8.60	113.44	118.60
37	7	109	G	N3-C4-C5	8.60	132.90	128.60
36	1	1061	A	C5-N7-C8	8.60	108.20	103.90
36	1	1420	C	C2-N3-C4	-8.60	115.60	119.90
36	1	3266	G	C8-N9-C4	-8.60	102.96	106.40
36	5	213	A	C6-N1-C2	-8.60	113.44	118.60
1	6	16	G	C4-C5-N7	8.59	114.24	110.80
37	7	73	C	C6-N1-C2	-8.59	116.86	120.30
36	1	691	A	C5-N7-C8	-8.59	99.60	103.90
36	1	2913	C	N3-C4-C5	-8.59	118.46	121.90
1	6	1086	A	N9-C4-C5	8.59	109.23	105.80
36	5	330	G	N1-C6-O6	8.59	125.05	119.90
36	5	1181	U	C5-C4-O4	8.59	131.06	125.90
36	1	938	C	C2-N1-C1'	8.59	128.24	118.80
1	6	1264	G	N1-C6-O6	8.59	125.05	119.90
36	1	1905	G	C8-N9-C1'	8.58	138.16	127.00
36	1	2877	G	O5'-P-OP2	-8.58	97.97	105.70
36	1	1151	U	C6-N1-C2	-8.58	115.85	121.00
36	1	2614	G	N3-C4-C5	-8.58	124.31	128.60
36	1	2904	U	N3-C4-O4	-8.58	113.39	119.40
1	6	1623	C	C5-C6-N1	8.58	125.29	121.00
36	5	301	G	N1-C6-O6	8.58	125.05	119.90
36	1	73	C	N1-C2-O2	-8.58	113.75	118.90
36	1	641	C	N1-C2-N3	-8.58	113.19	119.20
36	5	256	G	N7-C8-N9	8.58	117.39	113.10
36	5	2684	C	N3-C4-C5	-8.58	118.47	121.90
36	5	3041	U	C5-C6-N1	-8.58	118.41	122.70
1	6	1282	U	N1-C2-N3	8.58	120.05	114.90
36	5	71	A	N1-C6-N6	-8.58	113.45	118.60
36	5	2943	G	N1-C2-N3	8.58	129.05	123.90
36	5	3143	C	N3-C4-N4	8.58	124.00	118.00
36	1	2936	A	C5-C6-N1	8.58	121.99	117.70
36	5	3096	C	N1-C2-N3	8.58	125.20	119.20
36	5	665	A	C8-N9-C4	-8.57	102.37	105.80
36	5	865	U	N1-C2-O2	-8.57	116.80	122.80
36	5	906	A	N9-C4-C5	8.57	109.23	105.80
36	5	3202	G	N1-C6-O6	-8.57	114.75	119.90
1	6	575	C	C6-N1-C2	8.57	123.73	120.30
36	1	751	A	C5-C6-N1	8.57	121.98	117.70
36	1	1380	G	N3-C4-C5	8.57	132.88	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1807	G	N1-C6-O6	8.57	125.04	119.90
1	6	9	U	O5'-P-OP1	-8.57	97.99	105.70
1	6	1510	U	O5'-P-OP2	-8.57	97.99	105.70
36	5	2280	A	C5-C6-N6	-8.57	116.84	123.70
36	5	2335	G	N1-C6-O6	-8.57	114.76	119.90
36	1	65	A	N9-C4-C5	-8.57	102.37	105.80
36	1	908	G	N7-C8-N9	8.57	117.38	113.10
36	1	2330	C	N3-C4-C5	8.57	125.33	121.90
36	1	3050	U	N3-C2-O2	-8.57	116.20	122.20
1	6	1139	A	N1-C6-N6	8.57	123.74	118.60
36	5	2904	U	N1-C2-N3	8.57	120.04	114.90
48	m1	112	LEU	CA-CB-CG	8.57	135.01	115.30
36	5	2835	U	C6-N1-C2	-8.57	115.86	121.00
36	1	2314	U	C5-C6-N1	8.56	126.98	122.70
1	6	1572	G	C6-C5-N7	-8.56	125.26	130.40
1	6	1777	G	C4-C5-N7	8.56	114.22	110.80
36	5	707	U	N3-C4-C5	-8.56	109.46	114.60
36	5	2383	C	N3-C2-O2	-8.56	115.91	121.90
36	5	2695	A	N1-C6-N6	-8.56	113.46	118.60
36	1	414	U	N3-C4-C5	8.56	119.74	114.60
36	1	3273	A	C6-N1-C2	-8.56	113.46	118.60
36	1	2159	U	C6-N1-C1'	-8.56	109.22	121.20
36	5	1085	A	C6-C5-N7	-8.56	126.31	132.30
36	5	1719	G	N1-C6-O6	8.56	125.04	119.90
36	5	2195	C	N3-C4-C5	8.56	125.32	121.90
36	5	2697	A	N1-C6-N6	8.56	123.74	118.60
36	5	2848	G	C2-N3-C4	-8.56	107.62	111.90
36	5	2975	U	O5'-P-OP1	-8.56	98.00	105.70
36	5	371	G	C4-N9-C1'	-8.56	115.37	126.50
1	6	858	G	O4'-C1'-N9	8.56	115.05	108.20
1	2	1146	G	C8-N9-C4	-8.55	102.98	106.40
36	1	1442	U	N1-C2-O2	-8.56	116.81	122.80
1	6	1178	G	N3-C4-C5	-8.56	124.32	128.60
36	5	2908	G	C5-N7-C8	-8.56	100.02	104.30
36	1	326	U	N3-C4-C5	-8.55	109.47	114.60
36	5	2187	G	C5-C6-O6	8.55	133.73	128.60
37	3	88	G	N7-C8-N9	8.55	117.38	113.10
36	5	2243	A	N3-C4-C5	-8.55	120.81	126.80
36	1	719	U	N1-C2-N3	-8.55	109.77	114.90
36	1	1858	A	C2-N3-C4	8.55	114.88	110.60
36	5	1444	G	C4-C5-C6	8.55	123.93	118.80
36	5	2659	G	N1-C6-O6	8.55	125.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2871	G	C5-N7-C8	-8.55	100.03	104.30
1	2	610	G	C4-N9-C1'	8.55	137.61	126.50
36	1	217	U	C6-N1-C2	-8.55	115.87	121.00
36	5	1183	C	N3-C4-N4	8.55	123.98	118.00
36	5	2880	U	C2-N1-C1'	-8.55	107.44	117.70
36	1	857	G	N9-C4-C5	8.55	108.82	105.40
36	5	3085	G	OP1-P-O3'	8.55	124.00	105.20
36	1	2618	G	N9-C4-C5	8.55	108.82	105.40
36	5	713	U	N3-C2-O2	-8.55	116.22	122.20
36	5	2351	U	N1-C2-N3	8.55	120.03	114.90
36	5	2386	A	N1-C6-N6	8.55	123.73	118.60
36	1	3182	G	N1-C2-N2	-8.54	108.51	116.20
36	5	278	U	C5-C4-O4	8.54	131.03	125.90
1	2	1654	G	N3-C4-N9	8.54	131.13	126.00
1	2	1737	G	N3-C4-N9	-8.54	120.88	126.00
36	1	2939	G	OP2-P-O3'	8.54	124.00	105.20
36	1	2960	C	N3-C2-O2	-8.54	115.92	121.90
36	5	3324	C	C5-C6-N1	-8.54	116.73	121.00
36	5	3367	C	C6-N1-C2	8.54	123.72	120.30
36	1	3132	C	OP1-P-OP2	-8.54	106.79	119.60
36	5	2803	A	C5-C6-N1	-8.54	113.43	117.70
1	2	317	C	N3-C2-O2	-8.54	115.92	121.90
36	1	2640	A	N1-C2-N3	8.54	133.57	129.30
36	5	2732	G	C4-C5-N7	-8.54	107.39	110.80
36	5	3102	G	C8-N9-C4	8.54	109.81	106.40
36	1	1387	G	C6-N1-C2	-8.53	119.98	125.10
36	5	1298	C	C5-C4-N4	-8.53	114.23	120.20
36	1	2953	U	C5-C6-N1	8.53	126.97	122.70
36	5	2347	U	N3-C2-O2	-8.53	116.23	122.20
36	1	2639	G	C2-N3-C4	-8.53	107.64	111.90
36	5	1102	A	C6-N1-C2	-8.53	113.48	118.60
36	5	1131	G	N1-C6-O6	8.53	125.02	119.90
36	5	1209	G	N3-C2-N2	-8.53	113.93	119.90
36	5	2139	A	C8-N9-C4	-8.53	102.39	105.80
1	2	1114	G	N3-C4-C5	-8.53	124.34	128.60
36	1	714	G	C8-N9-C1'	-8.53	115.92	127.00
1	6	78	A	N9-C4-C5	8.53	109.21	105.80
36	5	2395	G	C5-N7-C8	-8.53	100.04	104.30
36	1	765	C	N1-C2-O2	8.52	124.01	118.90
37	3	88	G	C5-C6-O6	8.52	133.71	128.60
36	5	2379	U	C5-C4-O4	8.52	131.01	125.90
36	5	2692	A	C5-C6-N1	8.52	121.96	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	638	C	C6-N1-C2	8.52	123.71	120.30
36	1	744	A	C2-N3-C4	-8.52	106.34	110.60
1	6	1483	A	N9-C4-C5	8.52	109.21	105.80
36	5	848	A	C4-C5-C6	8.52	121.26	117.00
36	1	2312	A	C5-C6-N1	8.52	121.96	117.70
36	1	2399	A	N9-C4-C5	-8.52	102.39	105.80
36	1	2960	C	C2-N3-C4	-8.52	115.64	119.90
1	6	22	A	C8-N9-C4	-8.52	102.39	105.80
1	6	423	G	N9-C4-C5	8.52	108.81	105.40
36	5	526	C	N3-C2-O2	-8.52	115.94	121.90
36	5	2112	U	O5'-P-OP2	-8.52	98.03	105.70
36	5	2728	G	C4-N9-C1'	8.52	137.58	126.50
36	1	210	U	N3-C2-O2	-8.52	116.24	122.20
36	5	1527	C	C2-N1-C1'	-8.52	109.43	118.80
36	1	2383	C	N3-C2-O2	8.52	127.86	121.90
36	5	2853	A	C4-C5-N7	8.52	114.96	110.70
36	1	909	G	C4-C5-N7	8.52	114.21	110.80
36	1	2193	U	N1-C2-O2	-8.52	116.84	122.80
36	1	2880	U	C6-N1-C1'	8.52	133.12	121.20
36	5	662	U	C5-C4-O4	-8.52	120.79	125.90
1	2	144	U	N1-C2-N3	8.51	120.01	114.90
36	1	2231	C	C6-N1-C2	8.51	123.70	120.30
36	5	371	G	N1-C6-O6	-8.51	114.79	119.90
36	5	422	A	N1-C2-N3	8.51	133.56	129.30
36	5	1330	A	N1-C6-N6	8.51	123.71	118.60
36	5	1879	A	N7-C8-N9	8.51	118.06	113.80
36	5	2634	U	C2-N3-C4	-8.51	121.89	127.00
36	5	2702	A	C8-N9-C4	-8.51	102.39	105.80
36	5	2813	A	C2-N3-C4	-8.51	106.34	110.60
36	5	2973	G	N3-C2-N2	-8.51	113.94	119.90
36	1	2959	C	N1-C2-O2	-8.51	113.79	118.90
36	5	918	C	N3-C4-N4	8.51	123.96	118.00
36	5	2994	A	N1-C2-N3	8.51	133.56	129.30
36	1	1428	A	C2-N3-C4	-8.51	106.35	110.60
38	4	38	U	C2-N1-C1'	8.51	127.91	117.70
36	5	1786	G	C5-N7-C8	-8.51	100.05	104.30
36	1	2136	C	C4-C5-C6	8.51	121.65	117.40
36	5	646	A	N1-C2-N3	8.51	133.55	129.30
36	5	687	U	C5-C4-O4	8.51	131.00	125.90
36	5	973	A	C5-N7-C8	-8.51	99.65	103.90
36	5	2640	A	C5-C6-N6	-8.51	116.90	123.70
36	1	1551	C	N3-C4-C5	8.50	125.30	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2329	C	N3-C4-N4	8.50	123.95	118.00
36	5	2151	C	N1-C2-O2	-8.50	113.80	118.90
36	1	907	G	C5-C6-N1	8.50	115.75	111.50
36	1	971	G	C4-N9-C1'	8.50	137.55	126.50
36	1	2974	U	C6-N1-C2	-8.50	115.90	121.00
1	6	1111	G	N1-C2-N3	8.50	129.00	123.90
1	6	1566	U	C6-N1-C2	8.50	126.10	121.00
36	1	3137	C	N3-C4-N4	-8.50	112.05	118.00
36	5	2863	G	N3-C4-C5	8.50	132.85	128.60
36	5	1192	C	N3-C4-C5	-8.50	118.50	121.90
36	1	833	G	C4-C5-N7	-8.50	107.40	110.80
36	5	2205	U	C5-C6-N1	8.50	126.95	122.70
1	2	334	G	N3-C4-N9	-8.49	120.90	126.00
36	5	2354	C	N1-C2-O2	-8.49	113.80	118.90
36	5	2922	G	C8-N9-C4	-8.49	103.00	106.40
36	5	3261	C	N3-C2-O2	8.49	127.84	121.90
36	1	1877	U	C5-C6-N1	-8.49	118.45	122.70
36	5	656	A	C5-C6-N6	-8.49	116.91	123.70
36	5	2168	A	C5-C6-N6	-8.49	116.91	123.70
37	7	104	A	C2-N3-C4	-8.49	106.35	110.60
36	1	2623	G	N9-C4-C5	-8.49	102.00	105.40
37	3	36	C	N3-C2-O2	-8.49	115.96	121.90
36	5	1141	C	N3-C4-C5	8.49	125.30	121.90
36	5	1692	U	O5'-P-OP2	-8.49	98.06	105.70
36	5	2638	C	C5-C4-N4	8.49	126.14	120.20
36	5	2876	C	C4-C5-C6	-8.49	113.16	117.40
1	2	99	C	C6-N1-C2	8.49	123.69	120.30
36	1	872	U	N1-C2-N3	8.49	119.99	114.90
36	1	1304	A	C4-C5-C6	-8.49	112.76	117.00
1	6	1600	A	C2-N3-C4	-8.49	106.36	110.60
36	5	645	A	N9-C4-C5	8.49	109.19	105.80
36	5	906	A	C8-N9-C4	-8.49	102.41	105.80
36	5	1166	G	N3-C4-C5	8.49	132.84	128.60
36	5	994	G	O4'-C1'-N9	-8.49	101.41	108.20
36	5	2366	C	N1-C2-O2	-8.49	113.81	118.90
36	5	2699	G	N3-C2-N2	-8.49	113.96	119.90
36	5	2735	U	N1-C2-N3	8.49	119.99	114.90
1	2	55	A	N1-C6-N6	8.48	123.69	118.60
36	5	2382	G	C8-N9-C1'	8.48	138.03	127.00
36	5	2792	A	C8-N9-C4	-8.48	102.41	105.80
36	1	688	G	N3-C4-N9	8.48	131.09	126.00
36	1	2682	C	O5'-P-OP2	-8.48	98.06	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	728	G	C5-C6-O6	-8.48	123.51	128.60
36	5	2761	G	C6-N1-C2	-8.48	120.01	125.10
37	7	42	A	C4-C5-C6	8.48	121.24	117.00
36	1	1172	G	C8-N9-C4	-8.48	103.01	106.40
36	5	644	G	N3-C4-C5	-8.48	124.36	128.60
36	5	1195	A	C2-N3-C4	-8.48	106.36	110.60
36	5	2145	A	C2-N3-C4	-8.48	106.36	110.60
36	5	960	U	N3-C2-O2	-8.48	116.27	122.20
36	5	1417	G	C8-N9-C4	-8.48	103.01	106.40
36	5	2904	U	C2-N3-C4	-8.48	121.91	127.00
36	5	3278	C	C6-N1-C2	8.48	123.69	120.30
36	5	3308	C	C6-N1-C1'	-8.48	110.63	120.80
36	5	2304	C	N3-C2-O2	8.47	127.83	121.90
36	1	2363	A	N1-C6-N6	-8.47	113.52	118.60
36	5	921	A	N1-C2-N3	8.47	133.54	129.30
36	5	1187	C	C6-N1-C2	8.47	123.69	120.30
36	1	651	G	OP2-P-O3'	8.47	123.84	105.20
36	1	1070	U	N3-C2-O2	-8.47	116.27	122.20
36	1	2093	A	N1-C6-N6	-8.47	113.52	118.60
36	1	2605	G	OP2-P-O3'	8.47	123.84	105.20
1	2	1129	U	C5-C4-O4	8.47	130.98	125.90
36	1	3091	A	C5-N7-C8	-8.47	99.66	103.90
36	5	1337	A	C2-N3-C4	-8.47	106.36	110.60
36	5	2952	G	N1-C6-O6	8.47	124.98	119.90
36	1	2867	C	C6-N1-C2	-8.47	116.91	120.30
36	5	1332	A	C2-N3-C4	-8.47	106.37	110.60
36	5	2286	U	C5-C6-N1	-8.47	118.47	122.70
37	7	49	G	C4-C5-N7	8.47	114.19	110.80
36	1	608	A	N3-C4-N9	8.47	134.17	127.40
36	1	1006	A	N1-C6-N6	8.47	123.68	118.60
36	5	2865	U	N3-C2-O2	-8.47	116.27	122.20
1	6	541	A	N1-C6-N6	8.46	123.68	118.60
36	5	1546	A	O5'-P-OP1	-8.46	98.08	105.70
36	5	2761	G	N1-C6-O6	-8.46	114.82	119.90
36	1	2830	G	C8-N9-C4	8.46	109.78	106.40
36	5	2936	A	N1-C2-N3	8.46	133.53	129.30
36	5	3006	A	N9-C4-C5	8.46	109.18	105.80
36	5	3271	G	C6-C5-N7	-8.46	125.32	130.40
36	1	1116	G	C4-C5-C6	8.46	123.88	118.80
36	1	3091	A	N7-C8-N9	8.46	118.03	113.80
1	6	1753	A	C4-N9-C1'	8.46	141.53	126.30
36	1	3174	A	C5-C6-N1	-8.46	113.47	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	639	G	N1-C2-N2	-8.46	108.59	116.20
36	1	3277	U	C6-N1-C2	-8.46	115.93	121.00
1	2	576	G	N1-C6-O6	8.45	124.97	119.90
1	2	1280	C	C5-C6-N1	8.45	125.23	121.00
36	5	1918	C	O5'-P-OP2	-8.46	98.09	105.70
1	2	1675	C	C6-N1-C2	8.45	123.68	120.30
36	1	1720	U	N1-C2-O2	8.45	128.72	122.80
36	1	2981	U	N1-C2-N3	8.45	119.97	114.90
36	5	35	A	O5'-P-OP2	-8.45	98.09	105.70
36	5	1719	G	N3-C4-C5	8.45	132.83	128.60
1	2	144	U	C2-N1-C1'	-8.45	107.56	117.70
36	1	350	C	C2-N1-C1'	8.45	128.10	118.80
36	1	1916	U	C5-C6-N1	-8.45	118.47	122.70
36	1	3152	U	C5-C4-O4	8.45	130.97	125.90
36	5	2610	G	C5-C6-O6	-8.45	123.53	128.60
36	5	2851	A	C4-C5-N7	-8.45	106.47	110.70
36	5	3079	U	C5-C6-N1	-8.45	118.47	122.70
1	2	311	U	C6-N1-C2	-8.45	115.93	121.00
36	1	1174	G	C8-N9-C1'	-8.45	116.02	127.00
36	5	784	A	C5-N7-C8	-8.45	99.67	103.90
36	1	1437	C	N1-C2-O2	8.45	123.97	118.90
36	5	1604	G	N3-C4-C5	-8.45	124.38	128.60
36	5	1786	G	C8-N9-C4	-8.45	103.02	106.40
36	5	2986	U	N3-C4-C5	-8.45	109.53	114.60
1	2	1203	A	O5'-P-OP1	-8.45	98.10	105.70
37	7	10	C	C5-C4-N4	-8.45	114.29	120.20
37	7	56	A	N1-C6-N6	8.45	123.67	118.60
36	5	1115	G	C4-N9-C1'	8.44	137.47	126.50
1	2	1439	C	O5'-P-OP1	-8.44	98.10	105.70
36	1	342	A	N1-C6-N6	8.44	123.67	118.60
1	6	905	A	C5-C6-N6	8.44	130.45	123.70
36	5	218	G	N9-C4-C5	8.44	108.78	105.40
36	5	1345	G	C2-N3-C4	-8.44	107.68	111.90
36	5	3093	C	C5-C6-N1	-8.44	116.78	121.00
36	5	3322	A	C2-N3-C4	-8.44	106.38	110.60
38	8	138	A	N9-C4-C5	8.44	109.18	105.80
36	1	1127	G	C2-N3-C4	-8.44	107.68	111.90
36	5	2940	A	C4-C5-C6	8.44	121.22	117.00
36	5	3187	A	C8-N9-C4	8.44	109.18	105.80
36	5	2942	C	N1-C2-N3	8.44	125.11	119.20
36	5	642	U	O5'-P-OP2	-8.44	98.11	105.70
36	5	867	G	C5-C6-N1	-8.44	107.28	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3144	G	N1-C2-N2	-8.44	108.61	116.20
1	6	1759	C	N3-C4-C5	-8.43	118.53	121.90
36	1	1604	G	N1-C6-O6	-8.43	114.84	119.90
36	1	3098	G	C5-C6-N1	8.43	115.72	111.50
1	6	308	C	C5-C6-N1	-8.43	116.78	121.00
36	5	35	A	C4-C5-N7	-8.43	106.48	110.70
36	5	278	U	C6-N1-C2	-8.43	115.94	121.00
37	7	49	G	N7-C8-N9	8.43	117.32	113.10
12	C0	88	PRO	N-CA-CB	8.43	113.42	103.30
36	1	394	G	N1-C6-O6	-8.43	114.84	119.90
36	1	639	G	N1-C2-N3	8.43	128.96	123.90
38	4	4	C	C6-N1-C2	-8.43	116.93	120.30
1	6	317	C	O5'-P-OP2	-8.43	98.11	105.70
36	1	1164	G	O5'-P-OP2	-8.43	98.11	105.70
36	1	2942	C	C4-C5-C6	-8.43	113.19	117.40
1	6	636	A	N1-C2-N3	8.43	133.51	129.30
36	1	1010	G	N3-C4-C5	8.43	132.81	128.60
36	1	2679	A	N1-C6-N6	8.43	123.66	118.60
36	1	1043	C	C6-N1-C2	8.43	123.67	120.30
36	5	50	U	N1-C2-O2	8.43	128.70	122.80
36	5	784	A	C6-C5-N7	-8.43	126.40	132.30
36	1	198	A	O5'-P-OP1	-8.42	98.12	105.70
36	1	372	A	C8-N9-C4	-8.42	102.43	105.80
36	1	1164	G	N3-C2-N2	-8.42	114.00	119.90
36	1	1311	G	O5'-P-OP1	-8.42	98.12	105.70
1	6	1447	C	N3-C2-O2	-8.42	116.00	121.90
36	5	1174	G	OP1-P-OP2	8.42	132.24	119.60
36	5	1473	G	C4-C5-N7	8.42	114.17	110.80
36	5	1780	G	C8-N9-C4	-8.42	103.03	106.40
36	5	2367	A	C2-N3-C4	-8.42	106.39	110.60
36	5	3285	C	C2-N1-C1'	8.42	128.07	118.80
1	2	1127	G	C8-N9-C4	-8.42	103.03	106.40
1	6	942	G	C8-N9-C4	-8.42	103.03	106.40
36	1	635	G	C5-N7-C8	-8.42	100.09	104.30
36	1	1205	A	O5'-P-OP1	8.42	120.80	110.70
36	1	1435	A	N9-C4-C5	8.42	109.17	105.80
36	1	2860	U	O5'-P-OP1	-8.42	98.12	105.70
36	5	357	A	N1-C2-N3	8.42	133.51	129.30
36	5	2662	G	N3-C4-N9	8.42	131.05	126.00
41	14	339	LEU	CA-CB-CG	8.42	134.66	115.30
36	1	1194	G	C2-N3-C4	8.41	116.11	111.90
36	1	2159	U	N1-C2-N3	-8.41	109.85	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	973	A	C8-N9-C4	8.41	109.17	105.80
1	6	1257	U	N1-C2-O2	8.41	128.69	122.80
36	5	974	G	C5-C6-O6	-8.41	123.55	128.60
36	5	1904	C	N3-C4-C5	8.41	125.27	121.90
37	7	90	U	O5'-P-OP2	-8.41	98.13	105.70
36	1	2356	A	C4-C5-N7	8.41	114.91	110.70
36	1	3307	A	O5'-P-OP2	-8.41	98.13	105.70
1	6	1536	G	N3-C4-N9	8.41	131.05	126.00
36	5	97	U	N3-C2-O2	8.41	128.09	122.20
36	5	1139	G	N3-C4-C5	8.41	132.81	128.60
36	1	1483	G	N3-C4-C5	-8.41	124.40	128.60
36	1	2884	C	C2-N1-C1'	-8.41	109.55	118.80
36	1	2979	U	C6-N1-C1'	8.41	132.97	121.20
1	6	1172	G	N1-C6-O6	-8.41	114.85	119.90
1	6	1185	U	N3-C2-O2	-8.41	116.31	122.20
36	5	36	C	O5'-P-OP1	-8.41	98.13	105.70
36	5	2212	C	C6-N1-C1'	-8.41	110.71	120.80
36	1	2323	G	C5-C6-O6	-8.41	123.56	128.60
36	5	948	C	N3-C4-C5	8.41	125.26	121.90
36	5	2126	A	C6-N1-C2	-8.41	113.56	118.60
36	5	2886	U	C4-C5-C6	8.41	124.75	119.70
36	5	1330	A	N3-C4-C5	8.41	132.68	126.80
36	1	1884	A	N1-C6-N6	-8.40	113.56	118.60
36	1	2779	A	C2-N3-C4	-8.40	106.40	110.60
36	5	2842	U	C2-N1-C1'	8.40	127.79	117.70
36	5	645	A	C6-N1-C2	-8.40	113.56	118.60
36	5	1377	G	N9-C4-C5	8.40	108.76	105.40
36	5	1884	A	C4-C5-C6	8.40	121.20	117.00
36	5	3211	C	C6-N1-C2	8.40	123.66	120.30
36	1	3383	G	N3-C4-C5	8.40	132.80	128.60
36	5	1107	C	C5-C6-N1	-8.40	116.80	121.00
36	1	1316	C	N3-C4-N4	8.40	123.88	118.00
36	1	1429	G	N3-C4-N9	8.40	131.04	126.00
36	1	2655	U	N1-C2-N3	8.40	119.94	114.90
1	6	922	G	N1-C6-O6	8.40	124.94	119.90
36	5	971	G	N1-C2-N2	-8.40	108.64	116.20
36	5	1165	A	C2-N3-C4	-8.40	106.40	110.60
36	5	1447	G	O5'-P-OP1	-8.40	98.14	105.70
36	5	2991	A	C5-C6-N1	8.40	121.90	117.70
36	5	3374	U	C5-C6-N1	-8.40	118.50	122.70
1	2	103	A	N1-C6-N6	8.40	123.64	118.60
38	4	53	A	N9-C4-C5	8.40	109.16	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	650	C	N3-C4-N4	-8.40	112.12	118.00
36	5	1848	G	N9-C4-C5	-8.40	102.04	105.40
36	5	3329	U	C4-C5-C6	8.40	124.74	119.70
38	8	26	U	C6-N1-C2	-8.40	115.96	121.00
36	1	198	A	N9-C4-C5	8.39	109.16	105.80
36	1	981	U	C6-N1-C2	-8.39	115.96	121.00
36	1	1141	C	O5'-P-OP1	-8.39	98.14	105.70
36	1	2192	C	N3-C2-O2	-8.39	116.03	121.90
1	6	315	A	N7-C8-N9	-8.39	109.60	113.80
1	6	1626	U	C5-C6-N1	-8.39	118.50	122.70
36	5	3137	C	C5-C4-N4	-8.39	114.32	120.20
36	1	87	U	N1-C2-N3	8.39	119.93	114.90
36	1	2311	G	C6-C5-N7	-8.39	125.37	130.40
1	6	1083	G	C8-N9-C4	-8.39	103.04	106.40
1	2	1479	A	N1-C6-N6	8.39	123.63	118.60
36	1	1304	A	N1-C2-N3	-8.39	125.11	129.30
36	1	1508	C	N3-C4-C5	-8.39	118.55	121.90
36	1	3150	A	C4-C5-N7	8.39	114.89	110.70
36	1	1057	A	N1-C6-N6	8.39	123.63	118.60
1	6	1145	U	N1-C2-O2	-8.39	116.93	122.80
1	6	1456	C	O5'-P-OP2	8.39	120.76	110.70
36	5	2155	G	N1-C2-N3	8.39	128.93	123.90
36	5	2212	C	O5'-P-OP1	8.39	120.76	110.70
36	1	205	C	C4-C5-C6	8.38	121.59	117.40
36	1	938	C	OP1-P-O3'	8.38	123.64	105.20
36	5	802	C	C2-N3-C4	-8.38	115.71	119.90
36	5	1364	C	OP2-P-O3'	8.38	123.64	105.20
36	1	506	U	C4-C5-C6	8.38	124.73	119.70
36	1	2864	A	O5'-P-OP1	-8.38	98.16	105.70
36	5	188	U	N3-C2-O2	-8.38	116.33	122.20
36	5	1400	G	N3-C4-C5	-8.38	124.41	128.60
36	5	2844	C	C6-N1-C2	-8.38	116.95	120.30
36	5	3179	U	N1-C2-N3	8.38	119.93	114.90
36	5	1599	G	C8-N9-C4	8.38	109.75	106.40
36	5	3309	G	C8-N9-C1'	-8.38	116.10	127.00
1	6	41	A	C8-N9-C4	-8.38	102.45	105.80
1	6	1086	A	C8-N9-C4	-8.38	102.45	105.80
1	6	1542	G	C4-C5-N7	-8.38	107.45	110.80
36	5	3377	G	C5-C6-O6	-8.38	123.57	128.60
38	8	61	A	N1-C6-N6	-8.38	113.57	118.60
1	2	1190	C	C5-C6-N1	-8.38	116.81	121.00
36	1	424	G	C5-C6-N1	8.38	115.69	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	496	C	C5-C6-N1	8.38	125.19	121.00
36	1	585	A	C4-C5-C6	8.38	121.19	117.00
36	1	1328	C	C5-C4-N4	-8.38	114.34	120.20
36	1	2296	A	C5-C6-N1	-8.38	113.51	117.70
36	1	2378	C	O5'-P-OP2	8.38	120.75	110.70
36	1	2618	G	O5'-P-OP2	-8.38	98.16	105.70
36	1	3318	G	C4-N9-C1'	8.38	137.39	126.50
36	1	3390	G	O5'-P-OP1	-8.38	98.16	105.70
38	4	30	C	N3-C4-C5	8.38	125.25	121.90
1	6	1004	U	N1-C2-N3	8.38	119.92	114.90
36	1	1520	G	C6-C5-N7	-8.37	125.38	130.40
36	1	2872	A	O5'-P-OP2	8.37	120.75	110.70
36	1	2187	G	N9-C4-C5	8.37	108.75	105.40
36	1	2908	G	N7-C8-N9	8.37	117.29	113.10
36	1	2937	G	N3-C2-N2	-8.37	114.04	119.90
36	5	1307	G	C4-C5-N7	8.37	114.15	110.80
36	1	1432	C	N3-C4-C5	-8.37	118.55	121.90
36	5	931	C	N3-C4-C5	-8.37	118.55	121.90
36	5	2632	G	N1-C6-O6	8.37	124.92	119.90
36	1	3006	A	N1-C2-N3	8.37	133.48	129.30
36	5	1924	U	N3-C2-O2	8.37	128.06	122.20
36	5	2667	A	N1-C6-N6	-8.37	113.58	118.60
36	1	2364	G	O5'-P-OP1	-8.37	98.17	105.70
36	1	798	G	N1-C6-O6	8.36	124.92	119.90
36	1	2314	U	N1-C2-N3	-8.37	109.88	114.90
1	6	442	C	N1-C2-O2	-8.37	113.88	118.90
36	1	2874	G	C8-N9-C4	-8.36	103.05	106.40
36	5	1482	A	C5-C6-N6	-8.37	117.01	123.70
36	5	2923	U	OP1-P-O3'	8.37	123.60	105.20
37	7	84	A	C6-N1-C2	-8.37	113.58	118.60
37	7	92	A	C4-C5-N7	8.37	114.88	110.70
36	1	223	U	O5'-P-OP2	-8.36	98.17	105.70
36	1	2605	G	C5-C6-N1	-8.36	107.32	111.50
36	5	1150	A	C8-N9-C4	-8.36	102.45	105.80
36	5	2872	A	O5'-P-OP1	-8.36	98.17	105.70
37	7	35	C	C6-N1-C2	8.36	123.64	120.30
36	1	1466	G	N1-C6-O6	8.36	124.92	119.90
37	3	82	G	C6-N1-C2	-8.36	120.08	125.10
36	5	1418	A	O5'-P-OP1	-8.36	98.18	105.70
36	5	3218	A	C6-C5-N7	-8.36	126.45	132.30
36	1	229	G	C8-N9-C4	-8.36	103.06	106.40
36	1	1503	A	N1-C2-N3	8.36	133.48	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	998	A	C6-N1-C2	-8.36	113.58	118.60
38	8	27	U	O5'-P-OP1	-8.36	98.18	105.70
1	6	402	C	C2-N3-C4	-8.36	115.72	119.90
36	1	1556	C	C6-N1-C2	-8.35	116.96	120.30
36	1	1658	G	N1-C2-N2	8.35	123.72	116.20
36	1	2877	G	C8-N9-C1'	8.35	137.86	127.00
1	6	1540	G	N1-C6-O6	-8.35	114.89	119.90
36	5	433	A	N1-C6-N6	8.35	123.61	118.60
36	5	1114	U	OP2-P-O3'	8.35	123.57	105.20
36	1	2843	U	N1-C2-O2	8.35	128.64	122.80
36	1	3106	A	O5'-P-OP1	-8.35	98.19	105.70
37	3	36	C	C6-N1-C2	-8.35	116.96	120.30
36	5	867	G	C6-C5-N7	-8.35	125.39	130.40
36	5	1149	G	C8-N9-C4	-8.35	103.06	106.40
36	5	1923	C	N1-C2-O2	-8.35	113.89	118.90
37	7	58	C	O5'-P-OP2	-8.35	98.19	105.70
36	1	37	U	C5-C6-N1	-8.35	118.53	122.70
36	1	1160	C	N3-C4-C5	-8.35	118.56	121.90
36	1	2115	G	C5-C6-O6	-8.35	123.59	128.60
36	1	3216	G	C8-N9-C4	8.35	109.74	106.40
36	5	1181	U	N3-C2-O2	-8.35	116.36	122.20
36	5	3062	G	N1-C6-O6	8.35	124.91	119.90
36	1	2417	U	C2-N3-C4	-8.34	121.99	127.00
38	4	4	C	O5'-P-OP2	-8.34	98.19	105.70
1	6	1614	A	C5-N7-C8	-8.34	99.73	103.90
36	5	1847	A	N3-C4-N9	-8.34	120.72	127.40
36	1	628	A	OP2-P-O3'	8.34	123.55	105.20
36	1	1542	G	N9-C4-C5	-8.34	102.06	105.40
1	6	776	G	N1-C6-O6	8.34	124.90	119.90
1	6	1542	G	C5-N7-C8	8.34	108.47	104.30
36	5	1099	A	N9-C4-C5	-8.34	102.46	105.80
36	5	1292	C	N3-C2-O2	8.34	127.74	121.90
36	5	2703	A	C6-C5-N7	-8.34	126.46	132.30
36	5	2968	G	N3-C2-N2	-8.34	114.06	119.90
1	6	300	A	N1-C6-N6	-8.34	113.60	118.60
1	6	1112	G	N9-C4-C5	8.34	108.73	105.40
36	1	372	A	N7-C8-N9	8.34	117.97	113.80
36	1	608	A	N9-C4-C5	-8.34	102.47	105.80
36	1	651	G	C4-N9-C1'	8.34	137.34	126.50
36	1	1457	U	O5'-P-OP1	-8.34	98.20	105.70
36	1	2910	A	C2-N3-C4	-8.34	106.43	110.60
36	5	2190	U	N1-C2-N3	8.34	119.90	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2243	A	C2-N3-C4	8.34	114.77	110.60
36	1	1937	U	C5-C6-N1	-8.34	118.53	122.70
1	6	1107	G	N1-C6-O6	-8.34	114.90	119.90
36	5	595	G	N3-C2-N2	8.34	125.73	119.90
36	5	3088	G	N3-C2-N2	-8.34	114.06	119.90
36	1	719	U	O4'-C1'-N1	-8.33	101.53	108.20
36	1	2339	C	C6-N1-C2	-8.33	116.97	120.30
1	6	402	C	C5-C4-N4	-8.33	114.37	120.20
36	5	651	G	N3-C4-C5	-8.33	124.43	128.60
36	5	3144	G	O5'-P-OP2	8.33	120.70	110.70
36	5	3129	A	N3-C4-N9	-8.33	120.73	127.40
36	1	41	G	C8-N9-C1'	8.33	137.83	127.00
36	1	806	A	O5'-P-OP1	-8.33	98.20	105.70
36	1	1003	A	O5'-P-OP1	-8.33	98.20	105.70
36	1	2901	G	C4-C5-N7	-8.33	107.47	110.80
36	5	339	C	C5-C6-N1	-8.33	116.84	121.00
36	5	1834	U	N3-C4-C5	-8.33	109.60	114.60
36	5	2397	A	N1-C6-N6	8.33	123.60	118.60
38	8	53	A	C5-C6-N1	8.33	121.86	117.70
36	1	329	U	N1-C2-N3	8.33	119.90	114.90
36	1	1104	G	C8-N9-C4	-8.33	103.07	106.40
36	1	2331	C	C2-N1-C1'	8.33	127.96	118.80
36	1	2420	C	O5'-P-OP1	-8.33	98.20	105.70
36	1	2794	G	N3-C4-C5	-8.33	124.44	128.60
38	4	41	A	N3-C4-C5	-8.33	120.97	126.80
1	6	1003	A	C8-N9-C4	8.33	109.13	105.80
36	5	842	G	C4-C5-C6	-8.33	113.80	118.80
36	5	3146	G	N3-C4-N9	8.33	131.00	126.00
36	5	1319	G	C5-N7-C8	8.33	108.46	104.30
36	1	1349	G	N3-C4-C5	-8.32	124.44	128.60
36	1	1406	A	C5-C6-N6	-8.32	117.04	123.70
36	1	3219	G	O5'-P-OP2	-8.32	98.21	105.70
36	5	1422	G	C4-C5-N7	8.32	114.13	110.80
36	1	331	G	N3-C2-N2	-8.32	114.08	119.90
1	6	420	A	N1-C6-N6	8.32	123.59	118.60
36	5	2278	C	C2-N1-C1'	8.32	127.95	118.80
36	5	2902	A	C6-N1-C2	-8.32	113.61	118.60
36	5	2920	U	N3-C2-O2	-8.32	116.38	122.20
36	5	3147	G	C2-N3-C4	-8.32	107.74	111.90
38	8	133	G	N7-C8-N9	-8.32	108.94	113.10
36	1	1191	U	C5-C6-N1	-8.32	118.54	122.70
36	1	2419	A	C5-N7-C8	-8.32	99.74	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	C5-C6-N1	8.32	121.86	117.70
36	1	2139	A	N1-C2-N3	8.32	133.46	129.30
36	1	2912	G	C8-N9-C4	-8.32	103.07	106.40
36	5	961	C	C6-N1-C2	-8.32	116.97	120.30
1	2	334	G	C8-N9-C4	8.31	109.73	106.40
1	2	1077	C	C5-C6-N1	8.31	125.16	121.00
36	1	324	A	O5'-P-OP2	8.31	120.68	110.70
36	1	596	C	N1-C2-N3	8.31	125.02	119.20
36	1	2823	G	C2-N3-C4	-8.31	107.74	111.90
1	6	552	G	C5-C6-O6	-8.31	123.61	128.60
36	5	633	C	N3-C4-C5	8.31	125.23	121.90
36	5	992	A	C2-N3-C4	-8.31	106.44	110.60
36	5	3329	U	N3-C4-C5	-8.31	109.61	114.60
36	1	916	G	C6-N1-C2	-8.31	120.11	125.10
36	1	1488	G	N1-C6-O6	8.31	124.89	119.90
1	6	913	G	N1-C6-O6	8.31	124.89	119.90
1	6	1594	G	C5-C6-O6	-8.31	123.61	128.60
36	5	429	U	O5'-P-OP2	-8.31	98.22	105.70
36	5	1408	G	C4-C5-C6	8.31	123.79	118.80
36	5	2572	C	N1-C2-O2	8.31	123.89	118.90
36	1	1010	G	C8-N9-C4	8.31	109.72	106.40
36	1	2187	G	N1-C2-N3	8.31	128.88	123.90
1	6	608	U	N1-C2-O2	8.31	128.62	122.80
36	5	643	U	N1-C2-O2	8.31	128.62	122.80
36	1	2729	U	C5-C6-N1	-8.30	118.55	122.70
36	5	588	G	N3-C4-C5	-8.30	124.45	128.60
36	1	50	U	C6-N1-C2	-8.30	116.02	121.00
36	1	2895	G	C4-N9-C1'	8.30	137.29	126.50
36	5	2359	C	O5'-P-OP2	-8.30	98.23	105.70
36	1	2883	U	N1-C2-O2	8.30	128.61	122.80
1	6	983	A	C8-N9-C4	-8.30	102.48	105.80
36	5	555	U	N1-C2-O2	-8.30	116.99	122.80
36	5	639	G	C4-C5-C6	8.30	123.78	118.80
36	1	1046	A	C2-N3-C4	-8.30	106.45	110.60
36	1	2286	U	C5-C6-N1	-8.30	118.55	122.70
36	1	1446	A	N9-C4-C5	8.29	109.12	105.80
36	1	817	A	O5'-P-OP1	-8.29	98.24	105.70
36	1	943	U	O5'-P-OP1	-8.29	98.24	105.70
1	6	100	A	N1-C2-N3	8.29	133.45	129.30
1	6	765	G	N9-C4-C5	-8.29	102.08	105.40
36	5	555	U	N3-C2-O2	8.29	128.00	122.20
36	5	1085	A	C8-N9-C4	-8.29	102.48	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1139	G	C5-C6-O6	8.29	133.58	128.60
36	1	1507	G	C8-N9-C4	8.29	109.72	106.40
36	1	2185	G	N1-C6-O6	8.29	124.87	119.90
1	6	326	G	C4-C5-C6	8.29	123.77	118.80
36	5	588	G	C6-N1-C2	-8.29	120.13	125.10
36	5	636	C	C4-C5-C6	8.29	121.54	117.40
36	5	1138	U	C5-C6-N1	-8.29	118.56	122.70
36	1	1369	A	N1-C2-N3	8.29	133.44	129.30
1	6	967	A	N9-C4-C5	-8.29	102.49	105.80
1	6	1768	G	N3-C4-N9	-8.29	121.03	126.00
36	5	1212	A	C6-N1-C2	-8.29	113.63	118.60
36	1	1432	C	C6-N1-C2	-8.28	116.99	120.30
36	1	1720	U	C5-C4-O4	8.28	130.87	125.90
36	1	3209	A	C5-C6-N1	-8.28	113.56	117.70
1	6	678	A	C8-N9-C4	-8.28	102.49	105.80
36	5	3103	A	C2-N3-C4	-8.28	106.46	110.60
1	2	1082	C	C6-N1-C2	-8.28	116.99	120.30
36	1	2811	A	C5-C6-N1	8.28	121.84	117.70
36	5	367	A	C2-N3-C4	-8.28	106.46	110.60
36	5	1044	U	N1-C2-N3	8.28	119.87	114.90
36	5	1943	C	C6-N1-C2	-8.28	116.99	120.30
36	5	2626	A	N1-C2-N3	8.28	133.44	129.30
36	1	2334	U	OP1-P-O3'	8.28	123.41	105.20
36	1	2344	U	C5-C4-O4	8.28	130.87	125.90
36	1	25	U	N3-C4-O4	8.28	125.19	119.40
36	1	1840	U	N1-C2-N3	8.28	119.86	114.90
36	1	2182	A	C5-C6-N6	-8.28	117.08	123.70
1	6	106	U	C5-C4-O4	8.28	130.87	125.90
36	5	1080	A	C8-N9-C4	8.28	109.11	105.80
36	5	2136	C	C6-N1-C2	-8.28	116.99	120.30
36	5	2656	A	N1-C2-N3	8.28	133.44	129.30
36	5	1586	G	N1-C6-O6	-8.28	114.94	119.90
36	1	2241	U	C2-N1-C1'	-8.27	107.77	117.70
1	6	1420	C	N3-C2-O2	-8.27	116.11	121.90
37	3	30	G	C8-N9-C4	-8.27	103.09	106.40
36	5	3024	A	C2-N3-C4	-8.27	106.46	110.60
36	5	3055	U	C2-N3-C4	-8.27	122.04	127.00
36	5	3139	A	C6-N1-C2	-8.27	113.64	118.60
1	2	1146	G	N3-C4-N9	8.27	130.96	126.00
1	6	301	A	C5-C6-N1	8.27	121.83	117.70
1	2	1787	C	N3-C4-C5	8.27	125.21	121.90
36	1	1547	G	C6-C5-N7	-8.27	125.44	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3227	A	C4-C5-N7	8.27	114.83	110.70
36	1	2772	C	N1-C1'-C2'	8.27	124.75	114.00
36	5	647	A	C5-C6-N6	8.27	130.31	123.70
1	2	529	A	C8-N9-C4	8.27	109.11	105.80
36	5	676	G	O5'-P-OP1	-8.27	98.26	105.70
36	5	2174	G	O5'-P-OP1	-8.27	98.26	105.70
1	2	1143	A	O5'-P-OP2	-8.26	98.26	105.70
38	4	51	G	C5-C6-N1	-8.26	107.37	111.50
1	6	352	A	O5'-P-OP2	-8.26	98.26	105.70
36	5	2638	C	C5-C6-N1	8.26	125.13	121.00
36	5	3216	G	N1-C6-O6	-8.26	114.94	119.90
36	1	1412	G	C5-C6-N1	-8.26	107.37	111.50
36	1	289	A	O5'-P-OP1	-8.26	98.27	105.70
38	4	144	G	C8-N9-C4	8.26	109.70	106.40
1	6	335	U	C2-N1-C1'	8.26	127.61	117.70
36	5	2710	C	N1-C2-O2	-8.26	113.94	118.90
36	1	780	A	C5-C6-N6	8.26	130.31	123.70
38	4	40	A	C2-N3-C4	8.26	114.73	110.60
36	5	86	G	O4'-C1'-N9	8.26	114.81	108.20
36	5	1786	G	N7-C8-N9	8.26	117.23	113.10
36	5	2397	A	N3-C4-C5	8.26	132.58	126.80
37	7	24	A	N1-C6-N6	-8.26	113.64	118.60
36	1	2870	C	N3-C2-O2	8.26	127.68	121.90
37	3	26	C	N3-C2-O2	-8.26	116.12	121.90
1	6	1765	A	N1-C2-N3	8.26	133.43	129.30
36	5	209	A	C5-C6-N6	-8.26	117.09	123.70
36	1	85	A	C2-N3-C4	-8.26	106.47	110.60
36	1	2162	U	C5-C6-N1	-8.26	118.57	122.70
36	5	2136	C	N3-C4-N4	8.26	123.78	118.00
36	5	2673	A	N7-C8-N9	-8.26	109.67	113.80
36	5	3195	U	P-O3'-C3'	8.26	129.61	119.70
36	5	89	A	C2-N3-C4	-8.25	106.47	110.60
36	1	40	A	N9-C4-C5	8.25	109.10	105.80
36	1	975	C	N3-C4-C5	-8.25	118.60	121.90
37	3	97	A	N1-C6-N6	8.25	123.55	118.60
36	5	1186	G	O5'-P-OP2	-8.25	98.27	105.70
36	5	2631	U	OP2-P-O3'	8.25	123.35	105.20
36	1	1139	G	C4-N9-C1'	-8.25	115.77	126.50
36	1	693	A	O5'-P-OP2	8.25	120.60	110.70
36	1	3388	C	N3-C4-C5	8.25	125.20	121.90
36	5	1373	A	C5-N7-C8	-8.25	99.77	103.90
36	5	404	G	N1-C6-O6	8.25	124.85	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2377	G	C6-C5-N7	8.25	135.35	130.40
36	1	522	A	C2-N3-C4	-8.25	106.48	110.60
36	1	2899	C	C2-N3-C4	-8.25	115.78	119.90
1	6	922	G	C6-C5-N7	-8.25	125.45	130.40
36	1	3121	U	N3-C2-O2	-8.25	116.43	122.20
36	5	339	C	C2-N1-C1'	-8.25	109.73	118.80
36	5	2979	U	C5-C6-N1	-8.25	118.58	122.70
36	1	1127	G	OP1-P-OP2	8.24	131.97	119.60
36	1	1897	G	N7-C8-N9	8.24	117.22	113.10
36	5	868	C	N1-C2-O2	-8.24	113.95	118.90
36	1	1516	C	C4-C5-C6	8.24	121.52	117.40
36	1	2722	U	N3-C4-O4	8.24	125.17	119.40
1	6	962	C	N1-C2-O2	-8.24	113.95	118.90
1	6	1536	G	C4-N9-C1'	8.24	137.22	126.50
36	1	2120	A	N1-C6-N6	-8.24	113.66	118.60
36	1	2572	C	C6-N1-C2	-8.24	117.00	120.30
36	5	1840	U	C2-N3-C4	-8.24	122.05	127.00
37	7	88	G	C6-N1-C2	-8.24	120.15	125.10
1	2	1761	U	C6-N1-C2	-8.24	116.06	121.00
38	4	38	U	N3-C2-O2	-8.24	116.43	122.20
36	5	394	G	C4-C5-N7	-8.24	107.50	110.80
36	1	2813	A	N9-C4-C5	8.24	109.10	105.80
1	6	1143	A	N1-C6-N6	8.24	123.54	118.60
36	5	874	U	N1-C2-O2	-8.24	117.03	122.80
36	5	2197	C	C5-C4-N4	-8.24	114.43	120.20
36	1	1346	G	O5'-P-OP2	-8.24	98.29	105.70
36	1	3344	A	C2-N3-C4	-8.24	106.48	110.60
37	3	87	G	N3-C2-N2	-8.24	114.13	119.90
36	1	424	G	N3-C4-N9	8.24	130.94	126.00
1	6	1070	C	N3-C4-C5	8.24	125.19	121.90
36	5	71	A	C5-N7-C8	8.24	108.02	103.90
36	5	1373	A	C4-C5-N7	8.24	114.82	110.70
36	1	52	A	C4-C5-N7	-8.23	106.58	110.70
36	1	1313	G	N3-C4-C5	8.23	132.72	128.60
36	1	2376	G	OP1-P-OP2	8.23	131.95	119.60
36	1	3050	U	C5-C4-O4	8.23	130.84	125.90
36	1	3311	C	C6-N1-C2	8.23	123.59	120.30
36	5	433	A	C6-C5-N7	-8.23	126.54	132.30
36	5	2187	G	N1-C2-N3	8.23	128.84	123.90
36	1	227	G	C4-N9-C1'	8.23	137.20	126.50
1	6	946	U	C5-C6-N1	8.23	126.82	122.70
71	o5	36	LEU	CA-CB-CG	8.23	134.24	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	322	U	N3-C2-O2	-8.23	116.44	122.20
36	1	1166	G	C2-N3-C4	-8.23	107.78	111.90
38	4	20	U	C2-N3-C4	-8.23	122.06	127.00
1	6	1655	A	C8-N9-C4	-8.23	102.51	105.80
36	5	1593	A	O5'-P-OP2	-8.23	98.30	105.70
36	5	2303	A	C4-C5-N7	8.23	114.81	110.70
37	3	92	A	N1-C6-N6	8.23	123.54	118.60
1	6	1663	G	N3-C4-C5	8.23	132.71	128.60
36	1	357	A	C6-N1-C2	-8.22	113.67	118.60
36	1	1408	G	C4-C5-N7	8.22	114.09	110.80
36	1	304	G	N1-C6-O6	-8.22	114.97	119.90
36	1	357	A	N1-C6-N6	-8.22	113.67	118.60
36	1	676	G	N3-C4-N9	8.22	130.94	126.00
36	1	1533	U	N1-C2-N3	8.22	119.83	114.90
36	1	2772	C	O4'-C1'-N1	8.22	114.78	108.20
36	5	760	G	N1-C6-O6	8.22	124.83	119.90
1	6	473	A	N1-C6-N6	-8.22	113.67	118.60
36	5	644	G	C5-N7-C8	8.22	108.41	104.30
36	5	3387	U	C4-C5-C6	8.22	124.64	119.70
36	5	645	A	O5'-P-OP1	-8.22	98.30	105.70
36	5	707	U	C6-N1-C2	-8.22	116.07	121.00
36	5	2149	A	C8-N9-C4	8.22	109.09	105.80
36	1	40	A	C5-C6-N6	8.22	130.28	123.70
1	6	427	C	C6-N1-C2	8.22	123.59	120.30
36	1	92	G	C5-C6-O6	-8.22	123.67	128.60
36	1	2639	G	N1-C2-N2	8.22	123.60	116.20
36	1	2916	U	N1-C2-N3	-8.22	109.97	114.90
36	5	371	G	N3-C4-C5	8.22	132.71	128.60
36	5	531	G	C4-N9-C1'	8.22	137.19	126.50
36	5	3177	G	N1-C2-N2	-8.22	108.80	116.20
36	1	1136	A	C5-N7-C8	8.22	108.01	103.90
37	7	52	G	C8-N9-C4	8.22	109.69	106.40
1	6	424	C	O5'-P-OP2	-8.22	98.31	105.70
1	6	1284	C	C4-C5-C6	8.22	121.51	117.40
36	5	609	G	C6-N1-C2	8.22	130.03	125.10
36	5	2610	G	C8-N9-C1'	8.22	137.68	127.00
36	1	667	C	C2-N3-C4	8.22	124.01	119.90
36	1	780	A	C6-N1-C2	-8.21	113.67	118.60
36	1	857	G	C8-N9-C4	-8.21	103.11	106.40
36	1	3181	C	N1-C2-N3	8.21	124.95	119.20
1	6	1137	A	O4'-C1'-N9	-8.21	101.63	108.20
1	6	1409	G	O5'-P-OP1	-8.21	98.31	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2428	U	C2-N3-C4	-8.21	122.07	127.00
36	5	2656	A	C5-C6-N6	8.22	130.27	123.70
36	5	2659	G	C2-N3-C4	-8.21	107.79	111.90
1	2	515	A	C8-N9-C4	-8.21	102.52	105.80
1	2	1782	A	N7-C8-N9	8.21	117.91	113.80
1	6	1645	G	C2-N3-C4	8.21	116.01	111.90
36	5	1514	G	N3-C4-N9	8.21	130.93	126.00
36	5	1694	U	N1-C2-O2	-8.21	117.05	122.80
36	5	1874	A	C5-C6-N1	-8.21	113.59	117.70
36	5	2993	G	N7-C8-N9	8.21	117.21	113.10
36	1	375	A	N1-C6-N6	8.21	123.53	118.60
36	1	643	U	O5'-P-OP2	-8.21	98.31	105.70
1	6	1556	A	N9-C4-C5	-8.21	102.52	105.80
36	5	672	A	O5'-P-OP2	-8.21	98.31	105.70
36	5	1608	C	C2-N1-C1'	8.21	127.83	118.80
36	5	3216	G	C5-C6-N1	8.21	115.60	111.50
1	6	1000	C	N3-C2-O2	-8.21	116.16	121.90
36	5	1224	C	C6-N1-C2	-8.21	117.02	120.30
36	5	2393	G	C5-N7-C8	-8.21	100.20	104.30
36	1	1607	U	P-O3'-C3'	8.20	129.54	119.70
36	5	2632	G	C4-C5-N7	8.21	114.08	110.80
36	1	2377	G	C5-C6-N1	8.20	115.60	111.50
38	4	40	A	C8-N9-C4	-8.20	102.52	105.80
36	5	649	A	C5-C6-N6	-8.20	117.14	123.70
36	1	2879	C	N3-C4-N4	8.20	123.74	118.00
1	6	349	U	N3-C2-O2	-8.20	116.46	122.20
36	5	2908	G	N7-C8-N9	8.20	117.20	113.10
36	5	1172	G	C4-N9-C1'	8.20	137.16	126.50
36	5	1695	U	O5'-P-OP1	-8.20	98.32	105.70
36	5	2720	G	OP2-P-O3'	8.20	123.24	105.20
36	5	595	G	N3-C4-N9	8.20	130.92	126.00
36	5	1333	C	C2-N1-C1'	8.20	127.82	118.80
36	5	2105	G	C5-C6-O6	-8.20	123.68	128.60
36	5	2741	C	C2-N3-C4	8.20	124.00	119.90
36	1	2641	U	N3-C4-O4	-8.20	113.66	119.40
1	6	1540	G	C5-C6-O6	8.20	133.52	128.60
36	1	1514	G	C8-N9-C4	-8.20	103.12	106.40
36	1	2969	A	C2-N3-C4	-8.20	106.50	110.60
36	1	3307	A	O5'-P-OP1	8.20	120.53	110.70
1	6	1590	G	C5-C6-N1	8.20	115.60	111.50
36	1	1585	C	N1-C2-N3	-8.19	113.46	119.20
36	5	2400	G	C5-N7-C8	-8.20	100.20	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2662	G	C4-C5-C6	8.20	123.72	118.80
1	2	1337	A	O5'-P-OP2	-8.19	98.33	105.70
36	1	2129	U	N1-C2-O2	8.19	128.53	122.80
36	5	2280	A	C4-C5-N7	8.19	114.80	110.70
36	1	19	U	N1-C2-N3	8.19	119.81	114.90
36	1	1339	C	N1-C2-O2	-8.19	113.99	118.90
37	7	43	U	N3-C4-O4	-8.19	113.67	119.40
36	5	91	G	C4-C5-N7	8.19	114.08	110.80
36	5	864	G	N3-C4-N9	8.19	130.91	126.00
36	5	916	G	N3-C4-N9	8.19	130.91	126.00
36	1	1146	C	C2-N3-C4	8.19	123.99	119.90
36	5	2638	C	C2-N3-C4	8.19	123.99	119.90
36	5	2653	C	N1-C2-O2	-8.19	113.99	118.90
36	5	2887	A	C2-N3-C4	8.19	114.69	110.60
36	5	3208	G	C6-C5-N7	-8.19	125.49	130.40
1	6	1642	G	O5'-P-OP2	-8.19	98.33	105.70
36	5	2893	C	C2-N3-C4	8.19	123.99	119.90
36	1	2121	G	C5-C6-O6	8.18	133.51	128.60
36	5	644	G	N1-C6-O6	-8.18	114.99	119.90
36	5	2855	U	N1-C2-O2	-8.18	117.07	122.80
36	5	3209	A	O4'-C1'-N9	8.18	114.75	108.20
1	2	1654	G	N3-C4-C5	-8.18	124.51	128.60
36	1	326	U	N3-C4-O4	8.18	125.12	119.40
38	4	94	C	N1-C2-N3	-8.18	113.47	119.20
37	3	99	G	N9-C4-C5	8.18	108.67	105.40
36	5	1530	U	N3-C2-O2	8.18	127.92	122.20
36	1	622	A	C5-N7-C8	-8.18	99.81	103.90
36	1	913	A	C6-C5-N7	-8.18	126.58	132.30
36	1	929	A	C4-C5-N7	8.18	114.79	110.70
36	1	3055	U	C5-C4-O4	-8.18	120.99	125.90
69	O3	21	ARG	NE-CZ-NH1	8.18	124.39	120.30
36	5	2623	G	N9-C4-C5	-8.18	102.13	105.40
36	1	1136	A	C6-N1-C2	-8.17	113.69	118.60
36	1	1559	A	N1-C6-N6	8.17	123.50	118.60
36	1	2855	U	C5-C6-N1	-8.17	118.61	122.70
38	8	31	G	N1-C6-O6	-8.17	115.00	119.90
36	1	3135	U	C2-N3-C4	-8.17	122.10	127.00
1	6	453	U	N3-C2-O2	-8.17	116.48	122.20
36	5	585	A	OP2-P-O3'	8.17	123.18	105.20
36	5	2934	A	C4-C5-N7	8.17	114.79	110.70
36	5	2952	G	C6-C5-N7	-8.17	125.50	130.40
36	1	813	G	C4-C5-N7	8.17	114.07	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1525	G	C4-N9-C1'	8.17	137.12	126.50
1	6	453	U	N1-C2-O2	8.17	128.52	122.80
36	5	1301	A	C8-N9-C4	-8.17	102.53	105.80
36	5	1408	G	N1-C2-N3	8.17	128.80	123.90
36	5	2793	G	N3-C4-N9	-8.17	121.10	126.00
36	5	2808	A	C8-N9-C4	-8.17	102.53	105.80
36	5	3393	U	C2-N3-C4	-8.17	122.10	127.00
36	5	3268	A	O4'-C1'-N9	-8.17	101.67	108.20
36	1	276	U	O5'-P-OP1	-8.17	98.35	105.70
36	1	1487	G	N9-C4-C5	8.17	108.67	105.40
36	5	1059	G	C4-C5-N7	-8.17	107.53	110.80
36	5	1185	C	OP1-P-OP2	-8.17	107.35	119.60
36	1	2418	G	C2-N3-C4	8.16	115.98	111.90
1	2	1438	G	C2-N3-C4	-8.16	107.82	111.90
36	1	1217	A	O5'-P-OP2	-8.16	98.35	105.70
36	1	2867	C	C5-C6-N1	8.16	125.08	121.00
37	3	92	A	C5-C6-N1	-8.16	113.62	117.70
36	5	1902	G	C5-C6-O6	-8.16	123.70	128.60
36	5	2122	G	C5-C6-O6	-8.16	123.70	128.60
36	5	2854	U	N3-C2-O2	-8.16	116.48	122.20
36	1	644	G	N9-C4-C5	8.16	108.67	105.40
36	1	2764	C	C5-C6-N1	8.16	125.08	121.00
36	5	561	C	N3-C4-C5	-8.16	118.64	121.90
36	5	1408	G	C8-N9-C1'	-8.16	116.39	127.00
36	1	960	U	C2-N3-C4	-8.16	122.10	127.00
36	5	831	G	N1-C6-O6	8.16	124.80	119.90
37	7	45	A	O5'-P-OP2	-8.16	98.36	105.70
37	7	92	A	C5-N7-C8	-8.16	99.82	103.90
36	1	1425	U	C5-C6-N1	-8.16	118.62	122.70
36	1	2132	C	N1-C2-O2	-8.16	114.00	118.90
1	6	1542	G	C5-C6-O6	8.16	133.50	128.60
36	5	1495	U	N3-C2-O2	-8.16	116.49	122.20
36	1	1508	C	C4-C5-C6	8.16	121.48	117.40
36	1	2394	G	N9-C4-C5	8.16	108.66	105.40
36	5	2199	G	C8-N9-C1'	-8.16	116.40	127.00
36	5	2422	C	C5-C6-N1	-8.16	116.92	121.00
36	1	922	U	O5'-P-OP1	-8.15	98.36	105.70
36	1	1307	G	N1-C6-O6	-8.15	115.01	119.90
36	1	2828	G	N1-C6-O6	-8.15	115.01	119.90
36	1	2790	A	O5'-P-OP2	-8.15	98.36	105.70
1	6	1624	C	C6-N1-C2	8.15	123.56	120.30
36	5	423	A	C4-C5-C6	8.15	121.08	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1514	G	C8-N9-C1'	-8.15	116.40	127.00
36	1	3293	U	C2-N1-C1'	-8.15	107.92	117.70
36	5	2377	G	C4-C5-C6	-8.15	113.91	118.80
36	5	3102	G	O5'-P-OP1	-8.15	98.36	105.70
36	1	866	A	C2-N3-C4	-8.15	106.53	110.60
36	1	1442	U	C5-C4-O4	-8.15	121.01	125.90
36	5	3322	A	N1-C6-N6	8.15	123.49	118.60
36	1	2639	G	C8-N9-C4	-8.15	103.14	106.40
1	6	1278	G	C4-C5-C6	8.15	123.69	118.80
36	1	796	U	C5-C4-O4	-8.15	121.01	125.90
36	1	2639	G	C5-N7-C8	-8.15	100.23	104.30
1	6	341	A	N1-C6-N6	-8.15	113.71	118.60
36	5	2382	G	N3-C4-C5	8.15	132.67	128.60
36	5	2632	G	O5'-P-OP2	-8.15	98.37	105.70
36	1	979	U	P-O3'-C3'	8.14	129.47	119.70
36	5	971	G	N1-C2-N3	8.14	128.79	123.90
36	1	2193	U	C5-C6-N1	-8.14	118.63	122.70
1	6	1787	C	N1-C2-N3	8.14	124.90	119.20
36	5	1912	U	C6-N1-C2	8.14	125.89	121.00
36	5	2392	C	C6-N1-C2	8.14	123.56	120.30
36	1	1604	G	C4-N9-C1'	8.14	137.09	126.50
38	4	18	U	N3-C2-O2	-8.14	116.50	122.20
1	6	1668	G	N1-C6-O6	8.14	124.78	119.90
1	2	1413	U	C5-C6-N1	8.14	126.77	122.70
36	1	495	G	N3-C4-C5	8.14	132.67	128.60
1	6	971	A	C2-N3-C4	-8.14	106.53	110.60
36	1	802	C	N3-C2-O2	-8.14	116.20	121.90
36	1	904	A	C2-N3-C4	-8.14	106.53	110.60
36	1	1210	U	N3-C2-O2	-8.14	116.50	122.20
36	1	1905	G	C2-N3-C4	-8.14	107.83	111.90
36	1	2197	C	N1-C2-N3	-8.14	113.50	119.20
36	1	2760	C	O5'-P-OP2	-8.14	98.38	105.70
36	1	856	G	N3-C4-C5	-8.13	124.53	128.60
36	5	910	G	O5'-P-OP2	-8.13	98.38	105.70
36	5	920	A	C5-C6-N1	-8.13	113.63	117.70
36	5	2665	U	N3-C4-C5	8.14	119.48	114.60
36	1	1178	G	C5-C6-N1	8.13	115.57	111.50
36	1	1883	A	C8-N9-C4	8.13	109.05	105.80
1	6	554	C	N3-C4-C5	8.13	125.15	121.90
36	5	404	G	C4-C5-C6	8.13	123.68	118.80
36	1	2403	G	OP2-P-O3'	8.13	123.09	105.20
37	7	1	G	N7-C8-N9	8.13	117.17	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1321	G	C2-N3-C4	-8.13	107.83	111.90
36	1	1482	A	C5-C6-N6	-8.13	117.20	123.70
36	5	965	A	C5-C6-N6	-8.13	117.20	123.70
36	5	2824	G	C4-C5-N7	8.13	114.05	110.80
36	1	2376	G	C5-N7-C8	-8.13	100.24	104.30
36	1	2628	A	N7-C8-N9	8.13	117.86	113.80
36	1	3142	A	N9-C4-C5	8.13	109.05	105.80
36	5	2684	C	N3-C2-O2	-8.13	116.21	121.90
37	7	1	G	C4-N9-C1'	8.13	137.07	126.50
36	1	517	G	C8-N9-C4	-8.13	103.15	106.40
36	1	609	G	C5-C6-O6	-8.13	123.72	128.60
36	1	907	G	N3-C4-C5	-8.12	124.54	128.60
36	5	927	C	O5'-P-OP1	-8.13	98.39	105.70
36	5	1353	U	O4'-C1'-N1	8.12	114.70	108.20
36	5	2411	U	O5'-P-OP2	-8.12	98.39	105.70
36	5	2895	G	C6-C5-N7	-8.12	125.53	130.40
36	1	229	G	N9-C4-C5	8.12	108.65	105.40
36	1	1144	U	N3-C4-O4	8.12	125.08	119.40
36	1	2150	G	C5-C6-N1	-8.12	107.44	111.50
36	5	728	G	OP2-P-O3'	8.12	123.07	105.20
36	5	2352	A	O5'-P-OP2	-8.12	98.39	105.70
1	2	49	C	N3-C4-C5	-8.12	118.65	121.90
36	5	372	A	C5-C6-N6	8.12	130.20	123.70
36	5	1408	G	N9-C4-C5	-8.12	102.15	105.40
36	1	2332	A	N1-C6-N6	8.12	123.47	118.60
1	6	356	G	N3-C4-N9	8.12	130.87	126.00
36	5	1408	G	N1-C6-O6	8.12	124.77	119.90
36	1	639	G	N1-C6-O6	8.12	124.77	119.90
36	1	887	G	C5-C6-O6	-8.11	123.73	128.60
36	1	1448	U	N1-C2-O2	-8.12	117.12	122.80
36	1	1894	U	N1-C2-O2	-8.12	117.12	122.80
36	1	2827	U	C6-N1-C1'	8.11	132.56	121.20
1	6	251	A	N1-C6-N6	8.11	123.47	118.60
36	5	776	U	C5-C6-N1	-8.11	118.64	122.70
36	5	1330	A	N9-C4-C5	-8.11	102.56	105.80
36	5	1408	G	N1-C2-N2	-8.11	108.90	116.20
36	5	2615	G	N3-C2-N2	-8.11	114.22	119.90
36	5	2897	A	C6-C5-N7	-8.11	126.62	132.30
36	1	906	A	C8-N9-C4	-8.11	102.56	105.80
36	1	1495	U	C2-N1-C1'	-8.11	107.97	117.70
36	5	1150	A	C5-C6-N1	8.11	121.75	117.70
36	5	2991	A	N3-C4-C5	-8.11	121.12	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1537	C	C4-C5-C6	-8.11	113.35	117.40
36	1	2889	C	C2-N3-C4	8.11	123.95	119.90
1	6	1112	G	N3-C4-N9	-8.11	121.14	126.00
36	5	1370	G	C6-N1-C2	-8.11	120.23	125.10
36	1	838	G	C2-N3-C4	-8.11	107.85	111.90
36	1	2122	G	C5-N7-C8	-8.11	100.25	104.30
36	1	1898	G	C2-N3-C4	8.11	115.95	111.90
36	1	2198	A	N1-C2-N3	8.11	133.35	129.30
36	1	2874	G	N3-C4-N9	8.11	130.86	126.00
1	6	316	A	O5'-P-OP1	-8.11	98.41	105.70
1	6	1524	A	N9-C4-C5	8.10	109.04	105.80
36	5	2983	C	O5'-P-OP1	-8.10	98.41	105.70
1	2	1778	G	C2-N3-C4	8.10	115.95	111.90
36	1	419	G	C6-N1-C2	-8.10	120.24	125.10
36	1	2353	G	C4-C5-N7	8.10	114.04	110.80
36	1	2572	C	N3-C2-O2	-8.10	116.23	121.90
36	1	2756	C	C6-N1-C2	-8.10	117.06	120.30
38	4	12	A	O5'-P-OP1	-8.10	98.41	105.70
36	5	562	C	N3-C4-C5	8.10	125.14	121.90
36	5	3271	G	C8-N9-C1'	-8.10	116.46	127.00
36	5	1898	G	C6-C5-N7	8.10	135.26	130.40
36	5	881	C	C2-N3-C4	8.10	123.95	119.90
1	6	6	G	N1-C6-O6	8.10	124.76	119.90
1	6	1101	G	N1-C2-N3	8.10	128.76	123.90
36	5	1905	G	C4-C5-N7	-8.10	107.56	110.80
36	5	3314	A	N1-C2-N3	8.10	133.35	129.30
37	7	56	A	C5-N7-C8	-8.10	99.85	103.90
36	1	978	G	C5-C6-O6	-8.10	123.74	128.60
36	1	1439	U	N3-C2-O2	-8.10	116.53	122.20
36	1	3262	U	C6-N1-C2	-8.10	116.14	121.00
1	6	566	C	C5-C6-N1	-8.10	116.95	121.00
36	5	651	G	N3-C4-N9	8.10	130.86	126.00
36	5	2181	C	N3-C2-O2	8.10	127.57	121.90
36	1	591	G	N3-C4-N9	8.09	130.86	126.00
1	6	597	G	C5-C6-O6	-8.09	123.74	128.60
1	6	636	A	C5-N7-C8	8.09	107.95	103.90
46	19	129	ARG	NE-CZ-NH1	8.09	124.35	120.30
36	5	1852	G	C5-N7-C8	-8.09	100.25	104.30
36	1	292	U	C5-C6-N1	-8.09	118.66	122.70
36	5	679	U	C5-C4-O4	8.09	130.75	125.90
36	5	1148	G	C4-C5-C6	8.09	123.65	118.80
36	1	2956	A	C8-N9-C4	-8.09	102.56	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3208	G	N9-C4-C5	-8.09	102.16	105.40
37	3	91	G	C8-N9-C4	-8.09	103.16	106.40
1	6	321	C	C2-N1-C1'	8.09	127.70	118.80
36	1	2875	U	N3-C4-C5	-8.09	109.75	114.60
38	4	20	U	C5-C6-N1	-8.09	118.66	122.70
36	5	1755	C	C5-C6-N1	8.09	125.04	121.00
36	5	3050	U	C4-C5-C6	8.09	124.55	119.70
36	5	656	A	C6-N1-C2	-8.09	113.75	118.60
36	5	2698	G	N3-C4-C5	8.09	132.64	128.60
36	1	41	G	O4'-C1'-N9	8.08	114.67	108.20
36	1	2610	G	O5'-P-OP1	8.08	120.40	110.70
36	1	30	G	C5-C6-N1	8.08	115.54	111.50
36	1	57	A	C4-C5-C6	8.08	121.04	117.00
36	1	2172	A	N1-C6-N6	8.08	123.45	118.60
36	1	2624	G	N1-C6-O6	8.08	124.75	119.90
36	1	2819	A	C5-C6-N1	8.08	121.74	117.70
36	1	2827	U	N3-C4-C5	-8.08	109.75	114.60
1	6	388	G	C2-N3-C4	-8.08	107.86	111.90
1	6	1778	G	C6-N1-C2	-8.08	120.25	125.10
7	s5	92	ARG	NE-CZ-NH1	8.08	124.34	120.30
36	5	51	A	C6-C5-N7	-8.08	126.64	132.30
36	5	1386	A	C8-N9-C4	-8.08	102.57	105.80
36	5	2837	A	C8-N9-C4	8.08	109.03	105.80
36	5	3376	A	C6-N1-C2	-8.08	113.75	118.60
37	7	10	C	N1-C2-O2	8.08	123.75	118.90
1	6	1019	A	C8-N9-C4	8.08	109.03	105.80
1	6	1580	C	O5'-P-OP1	-8.08	98.43	105.70
36	5	591	G	N3-C4-N9	8.08	130.85	126.00
37	7	102	A	C4-C5-N7	8.08	114.74	110.70
36	1	399	A	C4-C5-C6	-8.08	112.96	117.00
36	1	1449	A	C2-N3-C4	8.08	114.64	110.60
1	6	583	C	C5-C6-N1	8.08	125.04	121.00
36	5	1903	U	OP1-P-OP2	-8.08	107.48	119.60
36	1	697	A	N7-C8-N9	-8.08	109.76	113.80
36	1	2606	G	N1-C2-N2	-8.08	108.93	116.20
36	1	1905	G	OP2-P-O3'	8.08	122.97	105.20
36	1	2811	A	C8-N9-C4	-8.08	102.57	105.80
36	5	651	G	C4-C5-C6	8.08	123.65	118.80
36	5	1592	G	C4-C5-C6	8.08	123.65	118.80
36	5	3387	U	N3-C4-C5	-8.08	109.75	114.60
46	19	129	ARG	NE-CZ-NH2	-8.08	116.26	120.30
36	1	264	G	C4-C5-N7	-8.07	107.57	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2605	G	N3-C4-N9	-8.07	121.16	126.00
1	6	1476	C	C6-N1-C2	-8.07	117.07	120.30
1	6	1650	U	N3-C4-O4	8.07	125.05	119.40
36	1	2702	A	O4'-C1'-N9	-8.07	101.74	108.20
1	6	1145	U	N3-C4-O4	8.07	125.05	119.40
36	5	2635	A	C8-N9-C4	-8.07	102.57	105.80
36	5	371	G	C6-C5-N7	8.07	135.24	130.40
36	5	2858	U	N3-C4-C5	-8.07	109.76	114.60
36	5	1375	G	N3-C4-N9	8.07	130.84	126.00
36	5	1434	G	C5-N7-C8	-8.07	100.27	104.30
36	5	1080	A	N7-C8-N9	-8.07	109.77	113.80
36	5	2597	U	N3-C2-O2	-8.07	116.55	122.20
1	2	1490	C	C2-N1-C1'	8.07	127.67	118.80
36	1	939	U	N3-C4-O4	8.07	125.05	119.40
36	1	1907	C	C5-C6-N1	-8.07	116.97	121.00
36	5	1120	A	N1-C2-N3	8.07	133.33	129.30
36	5	2350	C	O5'-P-OP2	-8.07	98.44	105.70
36	1	102	C	OP2-P-O3'	8.06	122.94	105.20
36	1	583	G	C6-C5-N7	8.06	135.24	130.40
1	6	779	U	N1-C2-O2	8.06	128.45	122.80
1	6	1479	A	N1-C6-N6	8.06	123.44	118.60
36	1	93	C	C5-C6-N1	8.06	125.03	121.00
36	1	421	G	N3-C4-C5	-8.06	124.57	128.60
36	1	1119	C	N3-C4-C5	-8.06	118.67	121.90
36	5	2635	A	C2-N3-C4	8.06	114.63	110.60
38	8	19	C	O5'-P-OP2	-8.06	98.44	105.70
36	1	592	A	C4-C5-N7	8.06	114.73	110.70
1	6	804	A	N1-C6-N6	8.06	123.44	118.60
36	5	860	G	C5-C6-O6	-8.06	123.76	128.60
36	5	2423	U	O5'-P-OP2	-8.06	98.44	105.70
1	2	49	C	C6-N1-C2	-8.06	117.08	120.30
1	2	1272	U	N3-C4-C5	-8.06	109.76	114.60
36	1	2289	U	N3-C2-O2	-8.06	116.56	122.20
36	1	2939	G	C6-N1-C2	-8.06	120.26	125.10
36	1	3145	C	N3-C4-C5	-8.06	118.68	121.90
1	6	765	G	C8-N9-C4	8.06	109.62	106.40
1	6	1004	U	C5-C6-N1	-8.06	118.67	122.70
1	6	1525	A	C5-C6-N1	8.06	121.73	117.70
1	6	1584	G	N1-C6-O6	8.06	124.74	119.90
1	6	1753	A	C5-C6-N1	8.06	121.73	117.70
36	1	1610	G	N1-C6-O6	8.06	124.73	119.90
36	1	2908	G	C5-N7-C8	-8.06	100.27	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3062	G	C5-C6-O6	-8.06	123.77	128.60
36	5	339	C	N1-C2-O2	-8.06	114.06	118.90
36	5	569	A	N1-C6-N6	8.06	123.43	118.60
36	5	877	C	C6-N1-C2	8.06	123.52	120.30
36	5	1099	A	C8-N9-C4	8.06	109.02	105.80
36	1	2423	U	N3-C4-C5	-8.06	109.77	114.60
36	5	430	U	C5-C6-N1	-8.05	118.67	122.70
36	5	2876	C	N3-C2-O2	-8.05	116.26	121.90
36	1	193	C	N3-C4-N4	8.05	123.64	118.00
36	1	710	A	N1-C6-N6	8.05	123.43	118.60
36	1	1333	C	N1-C2-O2	-8.05	114.07	118.90
36	1	2257	C	C6-N1-C2	-8.05	117.08	120.30
36	5	3314	A	C4-C5-C6	8.05	121.03	117.00
36	5	1148	G	C8-N9-C1'	-8.05	116.53	127.00
36	5	1148	G	N9-C4-C5	-8.05	102.18	105.40
36	5	3050	U	N1-C2-N3	8.05	119.73	114.90
36	1	2899	C	N3-C2-O2	-8.05	116.27	121.90
36	5	1910	A	N1-C6-N6	8.05	123.43	118.60
36	5	2303	A	N9-C4-C5	-8.05	102.58	105.80
36	5	2318	U	C6-N1-C2	8.05	125.83	121.00
36	1	394	G	C4-C5-N7	-8.05	107.58	110.80
36	1	1450	G	N3-C2-N2	-8.04	114.27	119.90
1	6	449	C	N1-C2-O2	8.05	123.73	118.90
36	5	3111	U	N1-C2-O2	8.05	128.43	122.80
36	1	2701	U	C4-C5-C6	8.04	124.53	119.70
36	1	2826	U	N3-C4-O4	-8.04	113.77	119.40
36	5	2309	A	N1-C2-N3	8.04	133.32	129.30
36	5	2602	G	N1-C6-O6	8.04	124.73	119.90
36	5	2828	G	OP2-P-O3'	8.04	122.90	105.20
36	5	2836	C	C4-C5-C6	8.04	121.42	117.40
37	7	5	G	C5-C6-N1	8.05	115.52	111.50
37	7	14	U	C5-C6-N1	-8.04	118.68	122.70
38	8	138	A	N1-C2-N3	8.04	133.32	129.30
1	2	577	G	C5-C6-O6	-8.04	123.78	128.60
36	1	927	C	OP2-P-O3'	8.04	122.90	105.20
36	1	609	G	C8-N9-C1'	-8.04	116.55	127.00
36	1	2696	A	O5'-P-OP2	-8.04	98.46	105.70
36	1	2979	U	O4'-C1'-N1	8.04	114.63	108.20
38	4	28	C	C6-N1-C2	-8.04	117.08	120.30
1	6	1456	C	C6-N1-C2	-8.04	117.08	120.30
36	5	877	C	N3-C4-C5	8.04	125.12	121.90
36	5	1124	U	OP2-P-O3'	8.04	122.89	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1368	U	N3-C2-O2	8.04	127.83	122.20
36	5	1374	G	C2-N3-C4	-8.04	107.88	111.90
36	5	2908	G	C8-N9-C4	-8.04	103.18	106.40
1	6	175	G	C6-C5-N7	-8.04	125.58	130.40
1	2	311	U	N3-C2-O2	-8.04	116.57	122.20
36	1	1431	G	C5-C6-N1	8.04	115.52	111.50
36	5	3024	A	N3-C4-C5	8.04	132.43	126.80
36	5	3144	G	C6-C5-N7	-8.04	125.58	130.40
36	1	2802	A	C2-N3-C4	-8.04	106.58	110.60
38	4	9	A	O5'-P-OP1	8.04	120.34	110.70
1	6	1284	C	N3-C4-C5	-8.03	118.69	121.90
36	5	645	A	C5-C6-N1	8.04	121.72	117.70
36	5	2799	A	C8-N9-C4	-8.04	102.59	105.80
36	5	3124	G	N7-C8-N9	8.04	117.12	113.10
36	1	2953	U	C4-C5-C6	8.03	124.52	119.70
36	1	70	A	C6-N1-C2	-8.03	113.78	118.60
36	1	1192	C	C2-N3-C4	8.03	123.92	119.90
36	1	1194	G	C8-N9-C4	-8.03	103.19	106.40
1	2	1584	G	C8-N9-C4	8.03	109.61	106.40
36	1	680	G	N1-C6-O6	8.03	124.72	119.90
36	1	797	U	OP1-P-OP2	8.03	131.65	119.60
36	1	88	A	C8-N9-C4	8.03	109.01	105.80
36	1	1116	G	C8-N9-C4	-8.03	103.19	106.40
36	1	1345	G	N7-C8-N9	8.03	117.11	113.10
36	5	710	A	C8-N9-C4	-8.03	102.59	105.80
36	1	2331	C	N3-C2-O2	-8.03	116.28	121.90
36	1	3288	G	N3-C4-C5	8.03	132.61	128.60
38	4	52	A	N1-C2-N3	8.03	133.31	129.30
36	5	1793	C	C6-N1-C1'	-8.03	111.17	120.80
36	5	2927	C	C5-C4-N4	-8.03	114.58	120.20
36	5	3308	C	N3-C2-O2	-8.03	116.28	121.90
36	5	3382	U	N1-C2-O2	8.03	128.42	122.80
36	1	38	U	O5'-P-OP1	-8.02	98.48	105.70
36	1	1417	G	C4-C5-N7	8.02	114.01	110.80
36	5	565	U	C5-C6-N1	-8.02	118.69	122.70
36	5	1546	A	C6-N1-C2	-8.02	113.79	118.60
36	1	669	U	O5'-P-OP2	-8.02	98.48	105.70
36	1	2112	U	P-O3'-C3'	8.02	129.33	119.70
36	1	2406	C	N3-C4-C5	-8.02	118.69	121.90
36	1	3188	G	C8-N9-C4	8.02	109.61	106.40
1	6	940	A	N1-C6-N6	-8.02	113.79	118.60
1	6	1212	G	N1-C6-O6	-8.02	115.09	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	353	G	N3-C4-N9	-8.02	121.19	126.00
36	5	2774	C	C6-N1-C2	-8.02	117.09	120.30
36	5	2757	U	N1-C2-N3	8.02	119.71	114.90
1	2	1212	G	C5-C6-O6	-8.02	123.79	128.60
36	1	2288	G	O5'-P-OP1	-8.02	98.48	105.70
36	1	2325	G	C4-C5-C6	8.02	123.61	118.80
1	6	140	A	N7-C8-N9	8.02	117.81	113.80
1	6	423	G	N3-C4-N9	-8.02	121.19	126.00
1	6	633	U	N1-C2-N3	8.02	119.71	114.90
36	5	816	A	C5-N7-C8	8.02	107.91	103.90
36	5	1152	G	O5'-P-OP1	-8.02	98.48	105.70
36	5	3227	A	C6-C5-N7	-8.02	126.69	132.30
36	1	595	G	C8-N9-C1'	-8.02	116.58	127.00
36	1	2330	C	N3-C2-O2	-8.02	116.29	121.90
36	5	2404	A	C8-N9-C4	-8.02	102.59	105.80
36	1	1500	G	C8-N9-C4	8.02	109.61	106.40
36	5	3172	A	N1-C6-N6	8.02	123.41	118.60
36	1	637	C	P-O3'-C3'	8.01	129.31	119.70
36	5	631	U	O5'-P-OP1	8.01	120.32	110.70
36	5	874	U	C4-C5-C6	8.01	124.51	119.70
36	5	2778	G	N1-C2-N2	8.01	123.41	116.20
1	6	14	C	C6-N1-C2	-8.01	117.09	120.30
36	5	1535	A	N1-C6-N6	-8.01	113.79	118.60
36	5	1894	U	C2-N3-C4	-8.01	122.19	127.00
1	2	969	C	C6-N1-C2	-8.01	117.10	120.30
1	6	1178	G	N1-C6-O6	-8.01	115.09	119.90
36	5	1128	U	C2-N3-C4	-8.01	122.19	127.00
38	8	142	C	C6-N1-C2	-8.01	117.09	120.30
36	1	356	C	N3-C4-N4	8.01	123.61	118.00
36	1	2994	A	N1-C2-N3	8.01	133.30	129.30
38	4	31	G	C8-N9-C4	8.01	109.60	106.40
36	5	1473	G	C8-N9-C4	8.01	109.60	106.40
36	5	2692	A	N1-C6-N6	-8.01	113.80	118.60
36	5	2703	A	O5'-P-OP1	-8.01	98.49	105.70
36	5	2741	C	N3-C4-C5	-8.01	118.70	121.90
36	5	3335	A	C2-N3-C4	-8.01	106.59	110.60
37	7	99	G	N9-C4-C5	8.01	108.60	105.40
36	1	2772	C	N1-C2-O2	8.01	123.70	118.90
36	1	3228	C	O5'-P-OP2	-8.01	98.49	105.70
1	6	1191	U	C6-N1-C2	-8.01	116.19	121.00
36	1	594	U	C5-C6-N1	-8.01	118.70	122.70
36	1	1313	G	N3-C4-N9	-8.01	121.20	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1453	A	C4-C5-C6	8.01	121.00	117.00
36	1	2399	A	C5-C6-N1	8.01	121.70	117.70
36	5	677	A	C5-N7-C8	-8.01	99.90	103.90
36	5	1116	G	OP1-P-OP2	8.01	131.61	119.60
36	5	1182	A	O5'-P-OP2	-8.01	98.49	105.70
36	5	1851	G	N7-C8-N9	8.01	117.10	113.10
36	5	1900	A	C5-N7-C8	-8.01	99.90	103.90
36	5	2333	C	C6-N1-C2	8.01	123.50	120.30
36	5	2334	U	C2-N3-C4	-8.01	122.20	127.00
36	1	1139	G	C8-N9-C1'	8.00	137.41	127.00
36	1	1202	A	N1-C6-N6	8.00	123.40	118.60
37	3	88	G	C5-C6-N1	8.00	115.50	111.50
1	2	615	A	N1-C6-N6	-8.00	113.80	118.60
36	1	1807	G	C5-C6-O6	-8.00	123.80	128.60
36	1	1926	C	O5'-P-OP2	-8.00	98.50	105.70
1	6	359	A	N1-C2-N3	-8.00	125.30	129.30
1	6	1498	G	C6-C5-N7	-8.00	125.60	130.40
36	5	321	C	C2-N1-C1'	8.00	127.60	118.80
36	5	935	U	C2-N1-C1'	8.00	127.30	117.70
36	5	1902	G	C8-N9-C1'	-8.00	116.60	127.00
36	5	2944	U	N1-C2-N3	8.00	119.70	114.90
36	1	1169	A	N1-C6-N6	-8.00	113.80	118.60
36	1	1180	A	N7-C8-N9	-8.00	109.80	113.80
36	1	1358	C	C6-N1-C2	-8.00	117.10	120.30
36	1	1789	G	N1-C6-O6	-8.00	115.10	119.90
36	5	507	U	N3-C4-C5	-8.00	109.80	114.60
36	5	646	A	C5-C6-N6	8.00	130.10	123.70
36	5	2863	G	C2-N3-C4	-8.00	107.90	111.90
36	1	92	G	N9-C4-C5	-8.00	102.20	105.40
1	6	1577	A	C2-N3-C4	-8.00	106.60	110.60
36	5	1010	G	C4-C5-N7	8.00	114.00	110.80
36	5	2929	C	N3-C4-C5	8.00	125.10	121.90
37	7	49	G	C5-C6-O6	-8.00	123.80	128.60
36	1	1497	C	N3-C4-C5	-7.99	118.70	121.90
36	5	1050	U	C4-C5-C6	7.99	124.50	119.70
36	5	1111	U	C6-N1-C2	7.99	125.80	121.00
36	5	3285	C	C6-N1-C1'	-7.99	111.21	120.80
38	8	4	C	N1-C2-N3	7.99	124.80	119.20
1	6	1025	A	C5-C6-N6	-7.99	117.31	123.70
36	5	2926	A	N1-C2-N3	7.99	133.30	129.30
36	1	981	U	C5-C6-N1	7.99	126.70	122.70
1	6	1445	G	N3-C4-C5	7.99	132.59	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2978	U	N3-C2-O2	-7.99	116.61	122.20
36	5	3265	C	N1-C2-O2	-7.99	114.11	118.90
36	1	1306	G	C5-N7-C8	-7.99	100.31	104.30
36	1	3260	G	C6-C5-N7	-7.99	125.61	130.40
1	6	866	G	C5-C6-O6	-7.99	123.81	128.60
1	6	1536	G	C8-N9-C1'	-7.99	116.61	127.00
36	5	1194	G	C5-N7-C8	-7.99	100.31	104.30
1	6	1614	A	C4-C5-N7	7.99	114.69	110.70
36	1	2391	G	C8-N9-C4	7.99	109.59	106.40
36	5	45	A	C2-N3-C4	-7.99	106.61	110.60
36	5	2352	A	C5-C6-N1	7.99	121.69	117.70
37	7	101	G	C5-C6-N1	-7.99	107.51	111.50
36	1	1153	A	C4-C5-C6	7.98	120.99	117.00
36	1	3172	A	O5'-P-OP2	-7.98	98.52	105.70
1	6	1768	G	N1-C6-O6	7.98	124.69	119.90
36	5	2122	G	N3-C4-C5	7.98	132.59	128.60
36	5	2793	G	N3-C4-C5	7.98	132.59	128.60
36	5	2936	A	C5-C6-N6	-7.98	117.31	123.70
36	1	936	A	N1-C2-N3	-7.98	125.31	129.30
36	5	874	U	C5-C4-O4	7.98	130.69	125.90
36	5	1344	G	N3-C2-N2	-7.98	114.31	119.90
36	5	1433	A	C4-C5-C6	7.98	120.99	117.00
36	5	1914	G	C8-N9-C4	-7.98	103.21	106.40
37	7	45	A	C5-C6-N6	7.98	130.08	123.70
36	1	2421	U	N1-C2-N3	7.98	119.69	114.90
1	6	1592	A	C2-N3-C4	-7.98	106.61	110.60
36	5	2940	A	N1-C6-N6	7.98	123.39	118.60
1	2	1761	U	C5-C4-O4	7.98	130.69	125.90
36	1	1148	G	C5-C6-N1	7.98	115.49	111.50
36	1	2780	A	C8-N9-C4	7.98	108.99	105.80
1	6	864	U	C6-N1-C2	-7.98	116.21	121.00
36	1	18	G	N3-C2-N2	-7.97	114.32	119.90
37	3	69	C	C6-N1-C2	-7.97	117.11	120.30
38	4	110	C	C6-N1-C2	7.97	123.49	120.30
1	6	1523	G	N3-C4-C5	-7.97	124.61	128.60
36	5	1613	A	O5'-P-OP2	-7.97	98.52	105.70
36	1	1177	G	N3-C4-N9	7.97	130.78	126.00
38	4	46	G	N3-C4-N9	7.97	130.78	126.00
36	5	2872	A	C6-C5-N7	7.97	137.88	132.30
37	7	10	C	C6-N1-C1'	-7.97	111.23	120.80
36	5	2351	U	N3-C2-O2	-7.97	116.62	122.20
36	1	1161	G	N3-C4-C5	-7.97	124.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2190	U	N1-C2-N3	7.97	119.68	114.90
36	1	2940	A	N1-C6-N6	-7.97	113.82	118.60
1	6	120	U	N1-C2-N3	7.97	119.68	114.90
1	6	431	C	C2-N1-C1'	-7.97	110.03	118.80
36	5	206	G	C2-N3-C4	7.97	115.89	111.90
36	5	728	G	C4-C5-N7	7.97	113.99	110.80
36	5	796	U	C2-N1-C1'	7.97	127.26	117.70
36	5	2166	A	C2-N3-C4	-7.97	106.61	110.60
36	5	3004	C	N1-C2-O2	-7.97	114.12	118.90
36	5	1523	U	C5-C4-O4	-7.97	121.12	125.90
36	1	349	A	N9-C4-C5	7.97	108.99	105.80
36	1	1325	U	O5'-P-OP2	-7.97	98.53	105.70
36	1	2371	G	C6-N1-C2	-7.97	120.32	125.10
36	5	957	C	N3-C4-C5	-7.97	118.71	121.90
36	5	1374	G	N3-C4-N9	-7.97	121.22	126.00
36	5	2905	U	OP2-P-O3'	7.97	122.72	105.20
36	5	3026	G	C4-C5-C6	7.97	123.58	118.80
36	1	645	A	N1-C6-N6	-7.96	113.82	118.60
36	1	714	G	C8-N9-C4	7.96	109.59	106.40
36	1	2703	A	C4-C5-N7	-7.96	106.72	110.70
36	1	3060	C	C6-N1-C2	7.96	123.48	120.30
38	4	1	A	C8-N9-C4	7.96	108.99	105.80
1	6	1604	U	C6-N1-C2	-7.96	116.22	121.00
1	6	1750	A	O5'-P-OP2	-7.96	98.53	105.70
36	5	845	G	C5-C6-O6	7.96	133.38	128.60
36	5	1147	G	C6-C5-N7	-7.96	125.62	130.40
36	5	2971	A	N9-C4-C5	7.96	108.99	105.80
38	8	122	U	C6-N1-C2	-7.96	116.22	121.00
36	1	1379	G	N1-C2-N3	7.96	128.68	123.90
36	5	2986	U	N3-C4-O4	7.96	124.97	119.40
1	2	1615	C	C2-N1-C1'	7.96	127.56	118.80
36	1	2659	G	N1-C6-O6	7.96	124.68	119.90
36	1	2811	A	C4-N9-C1'	7.96	140.63	126.30
1	6	1623	C	C6-N1-C2	-7.96	117.12	120.30
36	5	529	A	O5'-P-OP2	7.96	120.25	110.70
36	5	755	A	O5'-P-OP1	-7.96	98.53	105.70
36	5	803	C	C2-N1-C1'	7.96	127.56	118.80
36	5	2684	C	N1-C2-N3	7.96	124.77	119.20
36	5	3229	G	N3-C2-N2	7.96	125.47	119.90
38	8	31	G	C4-C5-N7	-7.96	107.61	110.80
36	1	873	C	N3-C4-N4	7.96	123.57	118.00
36	5	2644	C	N3-C4-C5	-7.96	118.72	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	57	A	C2-N3-C4	-7.96	106.62	110.60
1	6	1027	A	N1-C2-N3	7.96	133.28	129.30
36	5	3124	G	C2-N3-C4	-7.96	107.92	111.90
36	1	1505	C	OP2-P-O3'	7.96	122.70	105.20
36	1	2871	G	N7-C8-N9	7.96	117.08	113.10
36	5	1303	A	C5-N7-C8	-7.96	99.92	103.90
37	7	26	C	N3-C4-N4	7.96	123.57	118.00
1	2	453	U	C2-N1-C1'	7.96	127.25	117.70
36	5	2116	G	N7-C8-N9	7.96	117.08	113.10
36	5	3067	C	C2-N3-C4	-7.96	115.92	119.90
37	7	85	G	C5-N7-C8	-7.96	100.32	104.30
1	2	1460	A	N1-C6-N6	-7.95	113.83	118.60
36	1	2121	G	C6-C5-N7	7.95	135.17	130.40
36	1	2138	A	C4-C5-C6	7.95	120.98	117.00
1	6	1121	C	N1-C2-O2	7.95	123.67	118.90
1	6	1351	G	N1-C6-O6	-7.95	115.13	119.90
36	5	776	U	N3-C2-O2	-7.95	116.63	122.20
36	1	1313	G	C5-N7-C8	-7.95	100.33	104.30
36	1	3328	G	C5-C6-O6	-7.95	123.83	128.60
36	5	1506	A	N1-C6-N6	-7.95	113.83	118.60
36	5	2789	U	N3-C2-O2	7.95	127.77	122.20
36	1	236	G	O5'-P-OP2	-7.95	98.55	105.70
36	1	342	A	C5-C6-N1	-7.95	113.72	117.70
36	1	1725	C	N3-C4-C5	-7.95	118.72	121.90
36	5	2283	G	C8-N9-C4	7.95	109.58	106.40
37	7	40	C	C6-N1-C2	7.95	123.48	120.30
36	5	884	A	C4-C5-C6	7.95	120.97	117.00
36	5	2874	G	C4-C5-N7	-7.95	107.62	110.80
36	5	3122	A	OP2-P-O3'	7.95	122.68	105.20
36	1	719	U	N3-C2-O2	7.95	127.76	122.20
36	5	1001	G	O5'-P-OP2	7.95	120.23	110.70
1	2	342	C	C4-C5-C6	7.94	121.37	117.40
1	2	1299	G	N3-C4-N9	7.94	130.76	126.00
36	1	1115	G	O5'-P-OP2	-7.94	98.55	105.70
36	1	1145	G	O5'-P-OP2	-7.94	98.55	105.70
36	1	1412	G	C6-C5-N7	-7.94	125.63	130.40
36	1	1803	C	C6-N1-C2	7.94	123.48	120.30
52	M6	125	ARG	NE-CZ-NH1	-7.94	116.33	120.30
36	5	507	U	N3-C4-O4	7.94	124.96	119.40
36	5	2665	U	C4-C5-C6	-7.94	114.94	119.70
36	1	639	G	C6-C5-N7	-7.94	125.64	130.40
36	1	1196	C	O5'-P-OP1	-7.94	98.55	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2887	A	OP2-P-O3'	7.94	122.67	105.20
36	5	1054	A	N7-C8-N9	-7.94	109.83	113.80
36	1	645	A	O5'-P-OP1	-7.94	98.56	105.70
36	1	2422	C	N3-C4-N4	-7.94	112.44	118.00
36	1	2950	G	O4'-C1'-N9	7.94	114.55	108.20
36	1	3001	C	C6-N1-C2	7.94	123.48	120.30
1	6	789	A	N1-C6-N6	-7.94	113.84	118.60
36	5	371	G	C8-N9-C1'	7.94	137.32	127.00
65	n9	23	LYS	C-N-CD	7.94	145.07	128.40
1	2	111	U	C2-N1-C1'	7.94	127.22	117.70
36	1	1377	G	C6-C5-N7	-7.94	125.64	130.40
36	1	1907	C	C4-C5-C6	7.94	121.37	117.40
36	1	2634	U	N3-C2-O2	-7.94	116.64	122.20
36	5	798	G	C5-C6-N1	-7.94	107.53	111.50
36	5	2702	A	N1-C2-N3	7.94	133.27	129.30
36	1	86	G	O5'-P-OP1	7.94	120.22	110.70
36	1	1635	G	C6-C5-N7	-7.94	125.64	130.40
37	3	93	C	C5-C6-N1	-7.94	117.03	121.00
36	5	1130	A	C2-N3-C4	7.94	114.57	110.60
36	5	2411	U	C2-N3-C4	-7.94	122.24	127.00
36	1	104	G	C4-C5-N7	7.93	113.97	110.80
36	1	766	U	C6-N1-C2	-7.93	116.24	121.00
36	1	888	A	O5'-P-OP1	-7.93	98.56	105.70
36	1	1604	G	C8-N9-C4	-7.93	103.23	106.40
36	1	3208	G	N1-C2-N2	-7.93	109.06	116.20
36	5	595	G	C4-C5-C6	7.93	123.56	118.80
36	5	934	G	C6-C5-N7	-7.93	125.64	130.40
36	5	1049	C	C5-C6-N1	7.93	124.97	121.00
36	5	3096	C	OP2-P-O3'	7.93	122.66	105.20
36	1	860	G	C4-C5-N7	7.93	113.97	110.80
36	5	200	C	C6-N1-C1'	-7.93	111.28	120.80
1	6	1107	G	C5-C6-O6	7.93	133.36	128.60
36	1	955	U	O5'-P-OP2	-7.93	98.56	105.70
1	6	142	G	N1-C6-O6	-7.93	115.14	119.90
1	6	1572	G	O5'-P-OP2	-7.93	98.56	105.70
37	7	35	C	N3-C4-C5	7.93	125.07	121.90
36	1	2819	A	O5'-P-OP2	-7.93	98.56	105.70
36	5	776	U	C4-C5-C6	7.93	124.46	119.70
36	5	1608	C	O5'-P-OP1	-7.93	98.56	105.70
36	1	1168	U	OP2-P-O3'	7.93	122.64	105.20
36	1	1393	A	N9-C4-C5	7.93	108.97	105.80
36	5	832	G	C4-C5-N7	-7.93	107.63	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1840	U	N3-C4-C5	7.93	119.36	114.60
36	5	2893	C	O5'-P-OP1	-7.93	98.56	105.70
36	1	585	A	N9-C4-C5	7.92	108.97	105.80
36	1	1115	G	C4-N9-C1'	7.92	136.80	126.50
36	1	1725	C	C6-N1-C2	-7.92	117.13	120.30
37	3	78	U	C6-N1-C2	-7.92	116.25	121.00
1	6	1050	G	N3-C4-N9	-7.92	121.25	126.00
1	6	1524	A	N7-C8-N9	7.92	117.76	113.80
1	6	1537	C	C2-N3-C4	7.92	123.86	119.90
1	6	1604	U	N3-C4-C5	-7.92	109.84	114.60
36	5	1453	A	N1-C2-N3	7.92	133.26	129.30
36	5	3078	U	N3-C2-O2	-7.92	116.65	122.20
36	1	718	G	N3-C4-C5	7.92	132.56	128.60
1	6	405	C	C6-N1-C2	-7.92	117.13	120.30
36	5	2986	U	N1-C2-O2	-7.92	117.25	122.80
1	2	50	C	N1-C2-O2	7.92	123.65	118.90
36	1	2874	G	C8-N9-C1'	-7.92	116.70	127.00
1	6	1594	G	N1-C6-O6	7.92	124.65	119.90
36	5	920	A	C2-N3-C4	-7.92	106.64	110.60
36	5	1537	A	C5-C6-N1	-7.92	113.74	117.70
36	5	3207	U	C6-N1-C1'	7.92	132.29	121.20
36	1	838	G	N3-C4-C5	7.92	132.56	128.60
36	1	1385	C	C2-N1-C1'	-7.92	110.09	118.80
36	1	2633	U	C5-C4-O4	7.92	130.65	125.90
36	5	1136	A	C6-N1-C2	-7.92	113.85	118.60
36	5	2981	U	N1-C2-N3	7.92	119.65	114.90
36	1	1880	U	C5-C6-N1	-7.92	118.74	122.70
36	1	1149	G	C4-N9-C1'	7.92	136.79	126.50
36	1	1720	U	C6-N1-C2	-7.92	116.25	121.00
38	4	12	A	C6-C5-N7	-7.92	126.76	132.30
1	6	1002	G	N3-C4-N9	-7.92	121.25	126.00
36	5	2895	G	N3-C4-C5	-7.92	124.64	128.60
36	5	3009	G	O5'-P-OP2	-7.92	98.58	105.70
36	1	587	U	N1-C2-O2	-7.92	117.26	122.80
36	5	3115	C	C2-N1-C1'	-7.92	110.09	118.80
1	2	561	G	N1-C6-O6	7.91	124.65	119.90
36	1	913	A	N1-C6-N6	7.91	123.35	118.60
38	4	53	A	N3-C4-C5	-7.91	121.26	126.80
36	5	2746	A	C2-N3-C4	-7.91	106.64	110.60
36	5	2841	G	C5-C6-O6	7.91	133.35	128.60
36	1	877	C	N1-C2-O2	7.91	123.65	118.90
1	6	209	U	N1-C2-O2	-7.91	117.26	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	35	A	N1-C2-N3	7.91	133.26	129.30
36	5	71	A	C4-C5-N7	-7.91	106.74	110.70
36	5	2877	G	N3-C4-N9	7.91	130.75	126.00
36	1	331	G	C4-C5-N7	-7.91	107.64	110.80
36	1	1363	A	N1-C6-N6	7.91	123.35	118.60
36	1	1413	G	C8-N9-C4	7.91	109.56	106.40
1	6	1528	U	N3-C2-O2	-7.91	116.66	122.20
36	5	588	G	N3-C4-N9	7.91	130.75	126.00
36	1	224	C	C5-C6-N1	7.91	124.95	121.00
36	1	979	U	C5-C4-O4	7.91	130.65	125.90
36	1	1501	U	C2-N1-C1'	7.91	127.19	117.70
36	1	3278	C	N3-C2-O2	-7.91	116.36	121.90
36	5	1134	G	C4-C5-N7	-7.91	107.64	110.80
1	6	1753	A	C6-N1-C2	-7.91	113.86	118.60
36	5	2388	U	C6-N1-C2	7.91	125.74	121.00
36	1	2759	U	N1-C2-O2	7.91	128.33	122.80
36	5	755	A	C2-N3-C4	-7.91	106.65	110.60
36	5	1845	G	N3-C4-N9	7.91	130.74	126.00
1	6	1393	C	N3-C4-C5	-7.90	118.74	121.90
36	5	848	A	C6-C5-N7	-7.90	126.77	132.30
37	7	84	A	O5'-P-OP1	-7.90	98.59	105.70
36	1	3127	A	N1-C2-N3	7.90	133.25	129.30
36	1	3176	G	C5-C6-O6	-7.90	123.86	128.60
52	m6	28	LEU	CB-CG-CD1	-7.90	97.56	111.00
36	1	41	G	C2-N3-C4	7.90	115.85	111.90
1	6	1129	U	C5-C4-O4	7.90	130.64	125.90
36	5	714	G	O5'-P-OP1	-7.90	98.59	105.70
36	5	2199	G	N3-C2-N2	-7.90	114.37	119.90
36	5	1924	U	N1-C2-O2	-7.90	117.27	122.80
36	1	2607	G	O5'-P-OP1	-7.90	98.59	105.70
36	5	857	G	N3-C2-N2	-7.90	114.37	119.90
36	1	1371	G	C8-N9-C4	7.89	109.56	106.40
36	1	2362	C	N1-C2-O2	7.89	123.64	118.90
36	1	2661	G	N1-C6-O6	7.89	124.64	119.90
36	1	2838	A	C2-N3-C4	-7.89	106.65	110.60
36	1	2882	U	N3-C4-O4	-7.89	113.87	119.40
1	6	43	A	N9-C4-C5	-7.89	102.64	105.80
1	6	96	G	C6-C5-N7	-7.89	125.66	130.40
1	6	1158	C	C2-N1-C1'	7.89	127.48	118.80
36	5	1399	A	C5-N7-C8	-7.89	99.95	103.90
36	5	2409	G	OP1-P-OP2	7.89	131.44	119.60
36	5	3020	U	N1-C2-O2	-7.89	117.27	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3344	A	N1-C6-N6	7.89	123.33	118.60
1	6	233	C	C6-N1-C2	-7.89	117.14	120.30
1	6	415	C	N3-C4-N4	-7.89	112.48	118.00
36	5	1198	C	N1-C2-O2	7.89	123.64	118.90
36	5	1295	G	C5-N7-C8	-7.89	100.35	104.30
36	1	1608	C	C6-N1-C2	-7.89	117.14	120.30
36	1	2283	G	C4-C5-N7	7.89	113.96	110.80
36	1	2811	A	N3-C4-N9	7.89	133.71	127.40
36	1	2823	G	OP1-P-O3'	7.89	122.56	105.20
36	1	3186	A	N9-C4-C5	7.89	108.96	105.80
36	1	1120	A	N1-C2-N3	7.89	133.24	129.30
1	6	1212	G	C5-C6-N1	7.89	115.44	111.50
36	5	643	U	N3-C2-O2	-7.89	116.68	122.20
36	5	973	A	N1-C6-N6	7.89	123.33	118.60
36	5	1158	A	O5'-P-OP1	7.89	120.17	110.70
36	5	2908	G	C4-C5-N7	7.89	113.95	110.80
38	8	13	A	C8-N9-C4	7.89	108.95	105.80
1	2	1757	G	C4-N9-C1'	7.89	136.75	126.50
36	1	419	G	N7-C8-N9	-7.89	109.16	113.10
36	1	2167	A	C5-C6-N1	-7.89	113.76	117.70
36	1	3098	G	C6-N1-C2	-7.89	120.37	125.10
36	5	1325	U	C5-C6-N1	-7.89	118.76	122.70
36	5	2572	C	C2-N1-C1'	7.89	127.48	118.80
1	2	415	C	C6-N1-C2	7.88	123.45	120.30
36	1	226	C	N3-C2-O2	7.88	127.42	121.90
36	1	351	A	C2-N3-C4	-7.88	106.66	110.60
36	5	2635	A	C5-C6-N1	7.88	121.64	117.70
36	5	3044	G	N1-C6-O6	7.88	124.63	119.90
36	5	3223	A	N1-C6-N6	-7.88	113.87	118.60
38	8	119	C	C6-N1-C2	7.88	123.45	120.30
1	6	876	G	N3-C2-N2	-7.88	114.38	119.90
36	5	703	G	N1-C6-O6	7.88	124.63	119.90
36	5	1152	G	C8-N9-C4	-7.88	103.25	106.40
36	5	2400	G	C8-N9-C4	-7.88	103.25	106.40
1	6	126	A	C8-N9-C4	7.88	108.95	105.80
1	6	575	C	C5-C6-N1	-7.88	117.06	121.00
36	5	2382	G	C4-N9-C1'	-7.88	116.25	126.50
1	2	830	U	N3-C2-O2	-7.88	116.68	122.20
1	6	1090	C	N3-C4-N4	-7.88	112.48	118.00
36	1	1099	A	N1-C6-N6	7.88	123.33	118.60
36	5	1300	G	C8-N9-C4	7.88	109.55	106.40
36	5	2838	A	N1-C6-N6	-7.88	113.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	15	U	N1-C2-O2	7.88	128.31	122.80
36	1	751	A	N9-C4-C5	7.88	108.95	105.80
36	1	1607	U	N3-C4-O4	-7.88	113.89	119.40
36	5	585	A	OP1-P-O3'	-7.88	87.87	105.20
36	5	1386	A	C2-N3-C4	-7.88	106.66	110.60
37	7	92	A	C5-C6-N6	-7.88	117.40	123.70
1	6	1758	U	N3-C4-O4	7.88	124.91	119.40
1	6	1537	C	C6-N1-C1'	7.87	130.25	120.80
36	5	57	A	O5'-P-OP1	7.87	120.15	110.70
36	5	503	C	C5-C6-N1	-7.87	117.06	121.00
1	2	1215	C	N3-C2-O2	-7.87	116.39	121.90
36	1	1624	G	C4-C5-N7	7.87	113.95	110.80
36	5	640	U	N3-C4-O4	7.87	124.91	119.40
36	5	2852	C	N1-C2-O2	7.87	123.62	118.90
36	5	1108	U	N1-C2-N3	7.87	119.62	114.90
36	5	2123	G	N1-C6-O6	-7.87	115.18	119.90
36	5	3049	A	C5-C6-N1	-7.87	113.77	117.70
36	1	983	A	N1-C6-N6	7.87	123.32	118.60
36	1	2987	A	C2-N3-C4	7.87	114.53	110.60
36	1	3172	A	C8-N9-C4	-7.87	102.65	105.80
36	1	3319	U	C2-N1-C1'	7.87	127.14	117.70
1	6	1661	U	C5-C6-N1	-7.87	118.77	122.70
36	5	345	G	C4-N9-C1'	7.87	136.73	126.50
36	5	405	U	O5'-P-OP1	-7.87	98.62	105.70
36	5	1871	U	C5-C6-N1	7.87	126.63	122.70
36	5	2942	C	C6-N1-C1'	7.87	130.24	120.80
36	1	580	C	N3-C4-C5	7.87	125.05	121.90
1	2	551	G	N3-C4-N9	-7.87	121.28	126.00
1	2	1774	G	N3-C4-N9	7.87	130.72	126.00
36	1	1907	C	N3-C2-O2	-7.87	116.39	121.90
36	1	2944	U	O5'-P-OP2	7.87	120.14	110.70
37	3	75	G	N3-C4-N9	-7.87	121.28	126.00
36	5	2939	G	N3-C2-N2	-7.87	114.39	119.90
36	1	3246	G	C8-N9-C4	-7.86	103.25	106.40
36	5	1166	G	C5-C6-O6	-7.86	123.88	128.60
36	5	1433	A	C6-C5-N7	-7.86	126.80	132.30
36	1	1887	A	N9-C4-C5	-7.86	102.66	105.80
36	1	2762	A	C5-C6-N1	7.86	121.63	117.70
36	1	2765	C	N3-C2-O2	-7.86	116.40	121.90
36	5	795	G	N1-C6-O6	-7.86	115.18	119.90
36	1	1337	A	C5-C6-N6	-7.86	117.41	123.70
36	1	2199	G	O5'-P-OP1	-7.86	98.63	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3188	G	C2-N3-C4	7.86	115.83	111.90
1	2	1148	C	C6-N1-C2	-7.86	117.16	120.30
36	1	696	C	C5-C6-N1	7.86	124.93	121.00
36	1	2736	A	C2-N3-C4	-7.86	106.67	110.60
36	5	423	A	C6-N1-C2	-7.86	113.89	118.60
36	5	3025	C	C5-C6-N1	-7.86	117.07	121.00
1	2	18	C	C6-N1-C2	-7.86	117.16	120.30
1	2	1600	A	N9-C4-C5	-7.86	102.66	105.80
36	1	1224	C	C2-N1-C1'	7.86	127.44	118.80
36	5	788	C	C6-N1-C2	-7.86	117.16	120.30
36	1	932	U	N3-C4-C5	7.85	119.31	114.60
36	1	2664	C	C5-C6-N1	7.85	124.93	121.00
36	5	521	A	N9-C4-C5	7.85	108.94	105.80
36	1	394	G	C5-C6-O6	7.85	133.31	128.60
36	1	2572	C	C2-N1-C1'	7.85	127.44	118.80
36	1	2808	A	N1-C6-N6	7.85	123.31	118.60
36	5	2816	G	C5-C6-O6	-7.85	123.89	128.60
36	5	2857	C	N3-C2-O2	-7.85	116.40	121.90
36	1	400	G	N3-C4-N9	-7.85	121.29	126.00
36	1	3086	A	N1-C2-N3	7.85	133.22	129.30
36	5	2139	A	C4-C5-N7	-7.85	106.78	110.70
1	2	351	C	N3-C4-N4	-7.85	112.51	118.00
36	1	395	A	C8-N9-C4	-7.85	102.66	105.80
36	1	936	A	O5'-P-OP2	-7.85	98.64	105.70
36	1	1307	G	C6-N1-C2	-7.85	120.39	125.10
36	5	1931	U	C5-C6-N1	-7.85	118.78	122.70
36	5	3124	G	N3-C2-N2	-7.85	114.41	119.90
36	5	3171	U	C5-C6-N1	-7.85	118.78	122.70
1	6	1673	G	C8-N9-C4	7.84	109.54	106.40
36	5	986	U	C6-N1-C2	-7.84	116.29	121.00
36	1	906	A	C6-N1-C2	-7.84	113.89	118.60
36	1	2978	U	OP1-P-O3'	7.84	122.45	105.20
36	5	2262	A	N1-C6-N6	7.84	123.31	118.60
36	5	3144	G	C8-N9-C1'	-7.84	116.80	127.00
37	7	56	A	N7-C8-N9	7.84	117.72	113.80
36	1	350	C	C6-N1-C1'	-7.84	111.39	120.80
36	1	2147	A	C5-C6-N6	-7.84	117.43	123.70
36	1	3306	U	N3-C2-O2	-7.84	116.71	122.20
1	6	1114	G	C5-C6-O6	7.84	133.30	128.60
36	5	2122	G	C4-C5-N7	7.84	113.94	110.80
36	5	3032	A	N9-C4-C5	7.84	108.94	105.80
36	5	588	G	C5-C6-N1	7.84	115.42	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1665	C	O5'-P-OP1	-7.84	98.64	105.70
36	1	3137	C	C6-N1-C2	7.84	123.44	120.30
1	6	33	U	C5-C4-O4	-7.84	121.20	125.90
1	6	1546	G	N1-C6-O6	7.84	124.60	119.90
36	1	2997	G	C5-N7-C8	-7.83	100.38	104.30
1	6	458	G	O5'-P-OP1	7.83	120.10	110.70
1	6	1414	U	N1-C2-O2	7.83	128.28	122.80
36	5	1506	A	O5'-P-OP2	-7.83	98.65	105.70
36	5	1785	U	O5'-P-OP1	-7.83	98.65	105.70
36	5	2966	G	C5-C6-O6	7.83	133.30	128.60
36	5	679	U	N3-C4-O4	-7.83	113.92	119.40
36	5	908	G	C8-N9-C4	-7.83	103.27	106.40
36	5	2851	A	C5-C6-N6	7.83	129.97	123.70
36	1	887	G	N3-C4-C5	-7.83	124.68	128.60
36	5	75	G	O5'-P-OP1	7.83	120.10	110.70
36	5	974	G	N3-C4-C5	-7.83	124.68	128.60
36	5	1870	C	N3-C2-O2	7.83	127.38	121.90
36	5	2246	G	C4-C5-N7	7.83	113.93	110.80
38	4	109	A	C4-C5-N7	7.83	114.61	110.70
36	1	1392	G	C2-N3-C4	7.83	115.81	111.90
36	1	1905	G	C4-C5-N7	-7.83	107.67	110.80
36	1	2199	G	C4-N9-C1'	7.83	136.68	126.50
52	m6	78	ARG	NE-CZ-NH1	-7.83	116.39	120.30
1	2	1788	G	C5-C6-N1	7.83	115.41	111.50
36	1	1594	A	C6-N1-C2	-7.83	113.90	118.60
36	1	397	A	N9-C4-C5	7.83	108.93	105.80
36	1	1607	U	N3-C2-O2	-7.83	116.72	122.20
36	1	2378	C	C4-C5-C6	-7.83	113.49	117.40
1	6	151	G	N9-C4-C5	7.83	108.53	105.40
36	1	2404	A	O4'-C1'-N9	7.82	114.46	108.20
18	C6	28	LEU	CA-CB-CG	7.82	133.29	115.30
36	1	2873	U	N3-C4-O4	-7.82	113.93	119.40
36	1	3216	G	N1-C2-N3	7.82	128.59	123.90
36	1	3216	G	N9-C4-C5	-7.82	102.27	105.40
1	6	388	G	C6-C5-N7	-7.82	125.71	130.40
36	5	785	G	C8-N9-C4	-7.82	103.27	106.40
36	5	2168	A	C6-C5-N7	-7.82	126.83	132.30
36	5	2392	C	C5-C6-N1	-7.82	117.09	121.00
36	5	3229	G	N3-C4-N9	7.82	130.69	126.00
36	1	14	U	O5'-P-OP2	-7.82	98.66	105.70
36	1	2315	G	N9-C4-C5	7.82	108.53	105.40
36	1	2955	U	N3-C2-O2	-7.82	116.73	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
40	L3	275	ARG	NE-CZ-NH1	-7.82	116.39	120.30
1	6	1483	A	N1-C6-N6	-7.82	113.91	118.60
36	5	718	G	O4'-C1'-N9	7.82	114.46	108.20
36	5	2877	G	C4-C5-C6	7.82	123.49	118.80
1	2	1490	C	O5'-P-OP1	-7.82	98.66	105.70
36	1	506	U	OP2-P-O3'	7.82	122.40	105.20
36	1	1907	C	N1-C2-N3	7.82	124.67	119.20
36	5	1926	C	N1-C2-O2	7.82	123.59	118.90
36	5	2379	U	N1-C2-N3	7.82	119.59	114.90
36	1	1113	G	C2-N3-C4	-7.82	107.99	111.90
1	6	441	A	O5'-P-OP2	-7.82	98.67	105.70
36	5	1514	G	C4-N9-C1'	7.82	136.66	126.50
36	1	655	C	N3-C4-N4	7.81	123.47	118.00
36	1	2856	G	N3-C4-C5	7.81	132.51	128.60
36	5	667	C	C6-N1-C2	-7.81	117.17	120.30
36	5	2672	G	O5'-P-OP1	-7.81	98.67	105.70
36	5	2918	G	N1-C6-O6	-7.81	115.21	119.90
44	17	232	ARG	NE-CZ-NH2	-7.81	116.39	120.30
36	1	889	U	C4-C5-C6	7.81	124.39	119.70
36	5	3226	A	C2-N3-C4	-7.81	106.69	110.60
1	2	1085	G	N1-C6-O6	-7.81	115.21	119.90
36	1	2940	A	N3-C4-C5	-7.81	121.33	126.80
36	5	1085	A	N7-C8-N9	7.81	117.70	113.80
36	5	3193	C	C6-N1-C2	-7.81	117.18	120.30
36	1	2722	U	C6-N1-C2	-7.81	116.31	121.00
36	1	3388	C	N3-C4-N4	-7.81	112.53	118.00
1	6	65	A	C2-N3-C4	-7.81	106.70	110.60
36	5	1181	U	N3-C4-C5	-7.81	109.92	114.60
36	5	2915	U	C5-C4-O4	-7.81	121.22	125.90
36	1	877	C	N3-C2-O2	-7.81	116.44	121.90
36	5	2129	U	O5'-P-OP1	-7.81	98.67	105.70
36	1	1403	C	N3-C4-C5	7.80	125.02	121.90
36	1	2186	U	C5-C6-N1	-7.80	118.80	122.70
36	1	2409	G	N3-C4-C5	-7.80	124.70	128.60
36	5	1340	G	C8-N9-C4	-7.80	103.28	106.40
36	5	1794	G	O5'-P-OP1	-7.80	98.67	105.70
36	5	2737	C	O5'-P-OP2	-7.80	98.68	105.70
36	1	393	U	O5'-P-OP1	-7.80	98.68	105.70
36	1	650	C	N3-C4-N4	7.80	123.46	118.00
36	1	1151	U	C2-N3-C4	7.80	131.68	127.00
1	6	1271	G	C5-C6-N1	-7.80	107.60	111.50
36	5	1178	G	C8-N9-C4	-7.80	103.28	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1378	U	N3-C4-O4	7.80	124.86	119.40
36	1	3082	C	OP1-P-O3'	7.80	122.36	105.20
1	6	573	C	C5-C4-N4	-7.80	114.74	120.20
1	6	1470	C	N3-C2-O2	-7.80	116.44	121.90
36	5	183	G	C4-C5-N7	-7.80	107.68	110.80
36	5	2427	U	N3-C4-O4	-7.80	113.94	119.40
36	5	2826	U	C5-C6-N1	-7.80	118.80	122.70
1	2	6	G	N3-C4-C5	-7.80	124.70	128.60
36	1	335	G	C4-C5-N7	7.80	113.92	110.80
36	1	1329	U	N3-C2-O2	-7.80	116.74	122.20
1	6	58	U	O5'-P-OP1	-7.80	98.68	105.70
1	6	1183	A	C4-C5-C6	7.80	120.90	117.00
36	5	287	G	N7-C8-N9	7.80	117.00	113.10
36	1	279	U	OP1-P-O3'	7.79	122.35	105.20
36	1	1362	G	N7-C8-N9	-7.79	109.20	113.10
36	1	3172	A	N1-C2-N3	7.79	133.20	129.30
1	6	1127	G	C5-C6-O6	-7.79	123.92	128.60
36	5	3076	C	N3-C4-C5	-7.79	118.78	121.90
1	2	342	C	C6-N1-C2	7.79	123.42	120.30
1	2	1291	G	C4-N9-C1'	7.79	136.63	126.50
36	1	2510	U	O4'-C1'-N1	7.79	114.43	108.20
1	6	1535	U	C5-C6-N1	-7.79	118.80	122.70
36	5	115	A	N1-C6-N6	-7.79	113.92	118.60
36	5	1592	G	C2-N3-C4	7.79	115.80	111.90
36	5	2287	C	C5-C6-N1	-7.79	117.10	121.00
36	5	2926	A	C6-N1-C2	-7.79	113.92	118.60
36	5	2246	G	C5-C6-O6	-7.79	123.93	128.60
36	1	651	G	O5'-P-OP2	-7.79	98.69	105.70
65	N9	20	GLY	N-CA-C	7.79	132.57	113.10
1	2	1025	A	C4-N9-C1'	7.79	140.32	126.30
36	5	1637	A	N9-C4-C5	7.79	108.92	105.80
36	5	2302	G	OP1-P-OP2	-7.79	107.92	119.60
37	7	44	C	C5-C6-N1	-7.79	117.11	121.00
36	1	545	U	C5-C6-N1	7.79	126.59	122.70
36	1	2353	G	C2-N3-C4	-7.79	108.01	111.90
36	1	2707	C	C4-C5-C6	7.79	121.29	117.40
36	5	433	A	C2-N3-C4	-7.79	106.71	110.60
36	5	994	G	OP1-P-O3'	7.79	122.33	105.20
36	5	2362	C	N3-C4-C5	7.78	125.01	121.90
36	5	2879	C	C5-C4-N4	-7.78	114.75	120.20
36	1	416	A	C2-N3-C4	-7.78	106.71	110.60
36	1	3316	A	C5-N7-C8	-7.78	100.01	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	43	A	N1-C6-N6	7.78	123.27	118.60
1	2	1198	G	C8-N9-C4	-7.78	103.29	106.40
36	1	207	U	C5-C6-N1	7.78	126.59	122.70
36	1	636	C	C6-N1-C2	-7.78	117.19	120.30
36	1	2703	A	N3-C4-C5	-7.78	121.35	126.80
36	1	2940	A	C6-N1-C2	-7.78	113.93	118.60
36	1	2137	U	C5-C6-N1	-7.78	118.81	122.70
36	1	3055	U	C6-N1-C1'	-7.78	110.31	121.20
36	5	2302	G	C5-C6-O6	7.78	133.27	128.60
36	5	2692	A	O5'-P-OP1	-7.78	98.70	105.70
36	1	656	A	C5-C6-N6	-7.78	117.48	123.70
36	1	1422	G	N1-C6-O6	7.78	124.57	119.90
36	1	2356	A	O5'-P-OP1	7.78	120.03	110.70
1	6	351	C	C5-C4-N4	-7.78	114.75	120.20
36	5	1755	C	C4-C5-C6	-7.78	113.51	117.40
36	5	3298	C	C6-N1-C2	7.78	123.41	120.30
1	2	1654	G	N1-C2-N2	-7.78	109.20	116.20
36	1	2175	U	N1-C2-N3	7.78	119.57	114.90
36	1	3031	G	N3-C4-N9	-7.78	121.33	126.00
1	6	194	U	C2-N1-C1'	7.78	127.03	117.70
36	5	25	U	N3-C4-O4	7.78	124.84	119.40
36	5	71	A	N7-C8-N9	-7.78	109.91	113.80
36	5	131	C	C6-N1-C2	-7.78	117.19	120.30
36	5	3088	G	C5-C6-N1	-7.78	107.61	111.50
36	1	1191	U	C2-N1-C1'	-7.77	108.37	117.70
36	1	1361	U	N3-C4-O4	7.77	124.84	119.40
36	1	121	A	O5'-P-OP2	-7.77	98.70	105.70
1	6	901	G	O4'-C1'-N9	7.77	114.42	108.20
1	6	1024	U	O5'-P-OP2	-7.77	98.70	105.70
36	5	692	A	C6-C5-N7	-7.77	126.86	132.30
36	5	978	G	O5'-P-OP1	-7.77	98.70	105.70
36	5	1052	U	C5-C6-N1	7.77	126.59	122.70
1	6	1100	G	N1-C6-O6	7.77	124.56	119.90
1	2	424	C	C2-N1-C1'	7.77	127.35	118.80
36	1	1428	A	C4-C5-N7	7.77	114.58	110.70
36	1	3093	C	C4-C5-C6	7.77	121.28	117.40
36	1	3325	G	N9-C4-C5	-7.77	102.29	105.40
1	6	1648	A	C8-N9-C4	7.77	108.91	105.80
36	5	1537	A	N1-C6-N6	7.77	123.26	118.60
36	5	2608	G	OP2-P-O3'	7.77	122.30	105.20
40	13	356	LEU	CA-CB-CG	-7.77	97.43	115.30
36	1	1126	G	N1-C6-O6	7.77	124.56	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1393	A	N1-C6-N6	-7.77	113.94	118.60
36	5	2375	G	N3-C4-N9	-7.77	121.34	126.00
1	6	1050	G	N3-C4-C5	7.77	132.48	128.60
36	5	345	G	N3-C4-N9	7.77	130.66	126.00
36	5	1318	A	N1-C2-N3	7.77	133.18	129.30
36	5	1851	G	C8-N9-C4	-7.77	103.29	106.40
36	5	3099	C	C6-N1-C2	7.77	123.41	120.30
36	1	38	U	C6-N1-C2	7.76	125.66	121.00
36	1	93	C	C6-N1-C2	7.76	123.41	120.30
1	6	553	G	C4-C5-N7	7.76	113.91	110.80
36	5	3038	U	C2-N3-C4	-7.76	122.34	127.00
36	1	422	A	C6-N1-C2	-7.76	113.94	118.60
36	1	652	G	C6-N1-C2	-7.76	120.44	125.10
36	1	2770	G	C8-N9-C4	-7.76	103.30	106.40
1	6	36	C	O5'-P-OP2	-7.76	98.71	105.70
1	6	1000	C	N1-C2-N3	7.76	124.63	119.20
36	5	776	U	N1-C2-N3	7.76	119.56	114.90
36	5	943	U	C5-C6-N1	-7.76	118.82	122.70
36	5	983	A	N1-C2-N3	7.76	133.18	129.30
36	5	2611	U	C4-C5-C6	7.76	124.36	119.70
36	5	2743	A	C2-N3-C4	-7.76	106.72	110.60
36	5	3050	U	N3-C2-O2	-7.76	116.77	122.20
36	1	697	A	C6-N1-C2	7.76	123.25	118.60
36	1	1438	U	N1-C2-O2	-7.76	117.37	122.80
36	1	2371	G	N3-C4-C5	-7.76	124.72	128.60
1	6	1029	U	O5'-P-OP2	-7.76	98.72	105.70
36	5	365	A	N1-C6-N6	7.76	123.26	118.60
36	5	1370	G	C5-C6-N1	7.76	115.38	111.50
36	5	2290	C	C5-C4-N4	7.76	125.63	120.20
36	5	3136	G	C5-C6-O6	-7.76	123.94	128.60
36	1	624	G	C6-C5-N7	-7.76	125.75	130.40
36	1	965	A	N1-C2-N3	7.76	133.18	129.30
1	6	1243	G	C4-N9-C1'	7.76	136.59	126.50
36	5	1063	G	O5'-P-OP1	-7.76	98.72	105.70
36	5	131	C	C5-C6-N1	7.76	124.88	121.00
36	5	2302	G	N1-C2-N3	7.76	128.55	123.90
36	5	2851	A	C6-C5-N7	7.76	137.73	132.30
36	1	2939	G	C4-C5-C6	7.75	123.45	118.80
36	1	277	G	N1-C2-N2	7.75	123.18	116.20
36	1	2380	U	C6-N1-C2	7.75	125.65	121.00
36	1	2708	C	C6-N1-C2	-7.75	117.20	120.30
37	3	25	G	N3-C4-N9	7.75	130.65	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	331	A	C8-N9-C4	-7.75	102.70	105.80
1	6	420	A	C4-C5-N7	7.75	114.58	110.70
1	6	1022	C	O5'-P-OP1	-7.75	98.72	105.70
36	5	2403	G	N9-C4-C5	-7.75	102.30	105.40
36	5	3245	A	N3-C4-C5	7.75	132.23	126.80
37	7	47	C	N3-C4-C5	7.75	125.00	121.90
36	1	2985	C	C6-N1-C1'	7.75	130.10	120.80
37	3	102	A	C5-N7-C8	-7.75	100.02	103.90
43	L6	159	LEU	CA-CB-CG	-7.75	97.47	115.30
1	6	1038	U	N3-C2-O2	7.75	127.63	122.20
36	5	559	A	C6-C5-N7	-7.75	126.87	132.30
36	5	2910	A	OP1-P-OP2	-7.75	107.97	119.60
36	5	2936	A	N3-C4-N9	7.75	133.60	127.40
37	7	104	A	N1-C6-N6	7.75	123.25	118.60
36	1	2703	A	N1-C2-N3	7.75	133.18	129.30
1	6	402	C	C4-C5-C6	7.75	121.28	117.40
36	5	2368	A	N1-C2-N3	7.75	133.18	129.30
1	6	1610	G	C5-C6-O6	-7.75	123.95	128.60
36	5	200	C	C2-N1-C1'	7.75	127.32	118.80
1	2	1426	C	C5-C6-N1	7.75	124.87	121.00
36	1	1344	G	C8-N9-C4	7.75	109.50	106.40
36	1	1412	G	N1-C6-O6	7.75	124.55	119.90
36	1	1414	G	C6-C5-N7	-7.75	125.75	130.40
36	1	3289	G	C8-N9-C4	-7.75	103.30	106.40
37	3	87	G	OP2-P-O3'	7.75	122.24	105.20
1	6	370	A	N1-C6-N6	-7.75	113.95	118.60
36	5	40	A	C2-N3-C4	-7.75	106.73	110.60
36	5	818	C	C5-C6-N1	-7.75	117.13	121.00
36	5	2172	A	C2-N3-C4	-7.75	106.73	110.60
36	1	3034	C	N3-C2-O2	-7.75	116.48	121.90
36	5	197	G	C5-N7-C8	-7.75	100.43	104.30
36	5	713	U	N3-C4-O4	-7.75	113.98	119.40
1	2	583	C	N1-C2-O2	-7.74	114.25	118.90
36	1	1387	G	N1-C6-O6	-7.74	115.25	119.90
36	1	2181	C	C6-N1-C2	-7.74	117.20	120.30
36	1	2778	G	N1-C6-O6	-7.74	115.25	119.90
36	5	971	G	C4-C5-N7	-7.74	107.70	110.80
36	5	1403	C	C2-N3-C4	-7.74	116.03	119.90
37	7	40	C	N3-C4-C5	7.74	125.00	121.90
36	1	269	G	N1-C6-O6	-7.74	115.25	119.90
36	1	342	A	C6-N1-C2	7.74	123.24	118.60
36	1	942	U	C2-N1-C1'	7.74	126.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1201	C	N3-C4-C5	7.74	125.00	121.90
36	1	3344	A	C4-C5-N7	7.74	114.57	110.70
36	1	3390	G	C6-C5-N7	-7.74	125.75	130.40
1	6	466	U	N1-C2-N3	7.74	119.55	114.90
1	6	998	A	C6-N1-C2	-7.74	113.96	118.60
1	6	1490	C	C6-N1-C2	-7.74	117.20	120.30
36	5	937	G	OP1-P-OP2	7.74	131.21	119.60
36	5	1172	G	C4-C5-C6	7.74	123.44	118.80
36	5	2674	A	N1-C6-N6	-7.74	113.96	118.60
36	5	2955	U	N1-C2-O2	-7.74	117.38	122.80
36	1	1917	C	C5-C6-N1	-7.74	117.13	121.00
36	1	2138	A	C6-C5-N7	-7.74	126.88	132.30
36	1	2387	A	C8-N9-C4	-7.74	102.70	105.80
36	5	707	U	N3-C2-O2	-7.74	116.78	122.20
36	5	919	U	O5'-P-OP1	7.74	119.99	110.70
1	2	1029	U	C2-N1-C1'	-7.74	108.42	117.70
36	1	2887	A	C5-N7-C8	-7.74	100.03	103.90
37	3	91	G	C6-C5-N7	-7.74	125.76	130.40
36	1	358	G	C5-N7-C8	-7.74	100.43	104.30
36	1	2633	U	O5'-P-OP2	7.74	119.98	110.70
1	2	1596	C	C2-N1-C1'	7.73	127.31	118.80
36	1	1475	A	C8-N9-C4	7.73	108.89	105.80
36	5	2984	C	C2-N3-C4	-7.73	116.03	119.90
36	1	2119	A	N1-C6-N6	7.73	123.24	118.60
36	1	3109	G	C2-N3-C4	7.73	115.77	111.90
1	6	47	A	O5'-P-OP1	-7.73	98.74	105.70
36	5	2644	C	C4-C5-C6	7.73	121.27	117.40
36	1	1401	A	C6-N1-C2	-7.73	113.96	118.60
36	5	899	U	C5-C6-N1	-7.73	118.84	122.70
36	1	1207	G	C4-C5-N7	7.73	113.89	110.80
1	6	1169	G	N3-C4-C5	-7.73	124.74	128.60
36	5	1473	G	N3-C2-N2	7.73	125.31	119.90
36	1	792	G	N3-C4-N9	-7.73	121.36	126.00
36	1	1180	A	N3-C4-N9	-7.72	121.22	127.40
36	1	2322	C	C6-N1-C2	-7.72	117.21	120.30
1	6	576	G	C6-C5-N7	-7.72	125.77	130.40
36	5	668	G	N1-C6-O6	-7.72	115.27	119.90
36	5	2937	G	C8-N9-C4	7.72	109.49	106.40
36	1	909	G	C5-N7-C8	-7.72	100.44	104.30
36	5	2885	C	O5'-P-OP2	-7.72	98.75	105.70
1	2	414	C	N3-C4-N4	7.72	123.41	118.00
36	1	718	G	C5-C6-O6	-7.72	123.97	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	20	U	O5'-P-OP1	7.72	119.97	110.70
36	5	2988	C	C2-N1-C1'	7.72	127.29	118.80
36	1	1323	G	O5'-P-OP1	7.72	119.96	110.70
36	1	1422	G	C6-C5-N7	-7.72	125.77	130.40
38	4	85	G	N3-C4-C5	-7.72	124.74	128.60
1	6	998	A	N9-C4-C5	7.72	108.89	105.80
36	5	788	C	C4-C5-C6	7.72	121.26	117.40
36	5	2934	A	C6-C5-N7	-7.72	126.90	132.30
36	5	267	G	N1-C6-O6	-7.72	115.27	119.90
1	2	353	A	C4-C5-C6	7.72	120.86	117.00
1	2	468	A	C8-N9-C4	7.72	108.89	105.80
36	1	3361	G	N1-C6-O6	-7.72	115.27	119.90
1	6	1645	G	N3-C4-C5	-7.72	124.74	128.60
36	5	923	C	N3-C4-C5	7.72	124.99	121.90
36	5	1139	G	C4-N9-C1'	-7.72	116.47	126.50
36	5	2295	A	C8-N9-C4	-7.72	102.71	105.80
36	5	3256	G	N1-C6-O6	7.72	124.53	119.90
36	1	2919	A	C6-N1-C2	7.71	123.23	118.60
36	1	3244	A	OP2-P-O3'	7.71	122.17	105.20
1	6	1421	A	C8-N9-C4	7.71	108.89	105.80
37	7	97	A	C5-C6-N6	-7.71	117.53	123.70
36	1	192	C	C6-N1-C2	-7.71	117.22	120.30
36	1	277	G	N9-C4-C5	7.71	108.48	105.40
36	1	3136	G	C8-N9-C4	-7.71	103.31	106.40
37	7	80	G	N7-C8-N9	-7.71	109.24	113.10
1	2	1555	A	N9-C4-C5	7.71	108.89	105.80
36	1	324	A	O5'-P-OP1	-7.71	98.76	105.70
36	1	2633	U	O5'-P-OP1	-7.71	98.76	105.70
36	5	895	A	C2-N3-C4	-7.71	106.74	110.60
36	5	1085	A	N1-C6-N6	7.71	123.23	118.60
36	5	1406	A	N1-C2-N3	7.71	133.16	129.30
36	5	2919	A	C2-N3-C4	-7.71	106.74	110.60
36	5	3374	U	N3-C4-C5	7.71	119.23	114.60
36	1	1498	A	C6-N1-C2	-7.71	113.97	118.60
36	1	2250	G	O5'-P-OP1	-7.71	98.76	105.70
36	5	324	A	O4'-C1'-N9	-7.71	102.03	108.20
36	5	1211	U	N3-C2-O2	7.71	127.60	122.20
36	5	1389	G	N3-C4-N9	7.71	130.62	126.00
36	5	1913	A	C5-C6-N6	-7.71	117.53	123.70
36	5	2678	A	C2-N3-C4	-7.71	106.75	110.60
36	1	797	U	C5-C6-N1	-7.71	118.85	122.70
36	1	1070	U	C6-N1-C2	-7.71	116.38	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1208	U	N3-C2-O2	-7.71	116.81	122.20
36	1	1422	G	C4-N9-C1'	7.71	136.52	126.50
36	5	591	G	C5-N7-C8	7.71	108.15	104.30
36	5	2584	G	N3-C4-C5	-7.71	124.75	128.60
36	1	887	G	C5-C6-N1	7.71	115.35	111.50
36	5	2287	C	C5-C4-N4	7.71	125.59	120.20
36	5	2690	G	N3-C4-C5	7.71	132.45	128.60
36	1	2298	U	O4'-C1'-N1	7.70	114.36	108.20
36	1	3042	U	C2-N1-C1'	-7.70	108.45	117.70
36	5	3383	G	N9-C4-C5	-7.70	102.32	105.40
1	2	1587	A	N7-C8-N9	7.70	117.65	113.80
36	1	971	G	C8-N9-C1'	-7.70	116.99	127.00
36	1	1115	G	C8-N9-C4	-7.70	103.32	106.40
36	1	1311	G	C5-N7-C8	7.70	108.15	104.30
36	1	1541	G	C6-C5-N7	-7.70	125.78	130.40
36	1	2814	G	N3-C4-C5	-7.70	124.75	128.60
1	2	1422	A	C8-N9-C4	7.70	108.88	105.80
36	1	2186	U	N3-C4-O4	-7.70	114.01	119.40
36	5	780	A	N1-C6-N6	-7.70	113.98	118.60
36	5	2925	C	N3-C2-O2	7.70	127.29	121.90
36	1	872	U	C4-C5-C6	7.70	124.32	119.70
36	1	2132	C	N3-C4-C5	-7.70	118.82	121.90
1	6	34	G	C8-N9-C4	7.70	109.48	106.40
1	6	48	G	C4-C5-N7	-7.70	107.72	110.80
1	6	630	A	N1-C6-N6	7.70	123.22	118.60
1	6	1124	A	C2-N3-C4	-7.70	106.75	110.60
36	5	2935	U	C2-N3-C4	7.70	131.62	127.00
36	5	3343	G	C6-C5-N7	-7.70	125.78	130.40
36	1	1137	C	N3-C4-C5	-7.70	118.82	121.90
36	5	1370	G	N9-C4-C5	7.70	108.48	105.40
36	5	2847	A	C6-C5-N7	-7.70	126.91	132.30
36	5	3309	G	N9-C4-C5	-7.70	102.32	105.40
1	2	386	G	N1-C6-O6	-7.70	115.28	119.90
1	2	1591	C	N3-C4-N4	-7.70	112.61	118.00
36	1	499	G	N3-C2-N2	-7.70	114.51	119.90
1	6	1112	G	C6-C5-N7	7.70	135.02	130.40
36	5	211	A	C8-N9-C4	7.70	108.88	105.80
37	3	17	A	C8-N9-C4	-7.69	102.72	105.80
1	6	1580	C	C6-N1-C2	7.69	123.38	120.30
38	8	35	C	N3-C2-O2	-7.69	116.51	121.90
36	1	872	U	C6-N1-C2	-7.69	116.39	121.00
36	5	2303	A	C2-N3-C4	-7.69	106.75	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2602	G	C5-C6-N1	-7.69	107.65	111.50
36	5	2925	C	N1-C2-O2	-7.69	114.28	118.90
36	5	2932	U	N3-C4-C5	7.69	119.22	114.60
36	5	3309	G	N1-C2-N2	-7.69	109.28	116.20
36	1	370	U	C5-C4-O4	-7.69	121.29	125.90
36	1	1057	A	C6-N1-C2	7.69	123.21	118.60
36	1	1323	G	N3-C4-N9	7.69	130.61	126.00
36	1	1369	A	C2-N3-C4	-7.69	106.75	110.60
36	1	1434	G	C8-N9-C4	-7.69	103.32	106.40
36	1	2335	G	N1-C6-O6	-7.69	115.29	119.90
36	1	2896	A	C4-C5-C6	7.69	120.84	117.00
36	1	3180	A	N9-C4-C5	7.69	108.88	105.80
1	6	457	G	N9-C4-C5	-7.69	102.32	105.40
36	5	2131	A	C8-N9-C4	7.69	108.88	105.80
36	5	2617	U	C5-C6-N1	7.69	126.55	122.70
36	5	2735	U	O5'-P-OP2	-7.69	98.78	105.70
36	1	2738	A	C6-N1-C2	-7.69	113.99	118.60
1	2	601	A	N1-C6-N6	7.69	123.21	118.60
36	1	796	U	N1-C2-N3	-7.69	110.29	114.90
36	1	2911	A	C8-N9-C4	7.69	108.88	105.80
1	6	402	C	N3-C4-N4	7.69	123.38	118.00
1	6	1270	G	N1-C6-O6	7.69	124.51	119.90
36	5	610	G	C8-N9-C4	-7.69	103.33	106.40
36	5	2821	C	C6-N1-C1'	-7.69	111.58	120.80
36	5	3067	C	C2-N1-C1'	-7.69	110.34	118.80
36	5	3147	G	C8-N9-C4	7.69	109.47	106.40
1	6	609	U	N1-C2-N3	7.68	119.51	114.90
36	5	640	U	C5-C6-N1	7.68	126.54	122.70
36	5	1116	G	C4-C5-C6	7.68	123.41	118.80
36	5	1441	G	O5'-P-OP2	7.68	119.92	110.70
36	5	2683	U	C4-C5-C6	-7.68	115.09	119.70
36	5	3214	U	N3-C4-O4	-7.68	114.02	119.40
36	1	744	A	N3-C4-C5	7.68	132.18	126.80
36	1	1373	A	OP2-P-O3'	7.68	122.10	105.20
36	1	1782	U	C5-C4-O4	7.68	130.51	125.90
36	5	867	G	O5'-P-OP1	-7.68	98.79	105.70
36	5	3343	G	N3-C4-N9	7.68	130.61	126.00
1	2	1006	C	C2-N1-C1'	7.68	127.25	118.80
36	1	93	C	C2-N3-C4	7.68	123.74	119.90
5	s3	198	GLY	N-CA-C	-7.68	93.90	113.10
36	5	1148	G	N1-C2-N2	-7.68	109.29	116.20
36	1	1316	C	N1-C2-N3	7.68	124.58	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2284	C	C2-N1-C1'	7.68	127.25	118.80
1	6	639	U	O5'-P-OP2	-7.68	98.79	105.70
1	6	1753	A	C4-C5-C6	7.68	120.84	117.00
36	5	425	G	N3-C4-N9	-7.68	121.39	126.00
36	5	1429	G	N3-C4-C5	-7.68	124.76	128.60
36	5	2234	G	N9-C4-C5	-7.68	102.33	105.40
36	5	2816	G	C8-N9-C1'	7.68	136.98	127.00
36	1	2813	A	N1-C2-N3	7.68	133.14	129.30
36	5	2412	G	N7-C8-N9	7.68	116.94	113.10
1	2	1179	G	N1-C6-O6	-7.68	115.29	119.90
1	6	96	G	N7-C8-N9	7.68	116.94	113.10
36	5	1165	A	C6-C5-N7	-7.68	126.93	132.30
36	5	1905	G	C6-C5-N7	7.68	135.01	130.40
36	5	2193	U	C6-N1-C1'	-7.68	110.45	121.20
36	5	2387	A	N1-C2-N3	7.68	133.14	129.30
36	1	2649	A	N1-C6-N6	7.67	123.20	118.60
36	5	2197	C	N1-C2-N3	-7.67	113.83	119.20
36	5	3093	C	N1-C2-O2	-7.67	114.30	118.90
36	1	585	A	N1-C6-N6	-7.67	114.00	118.60
36	1	2849	C	N1-C2-O2	-7.67	114.30	118.90
1	6	1355	C	C6-N1-C2	-7.67	117.23	120.30
1	6	1704	U	C2-N1-C1'	7.67	126.91	117.70
36	5	1127	G	N9-C4-C5	7.67	108.47	105.40
36	5	2813	A	C6-C5-N7	-7.67	126.93	132.30
36	1	80	G	C6-N1-C2	-7.67	120.50	125.10
36	1	1495	U	C6-N1-C1'	7.67	131.94	121.20
36	1	1783	U	N3-C2-O2	-7.67	116.83	122.20
36	5	1056	U	N3-C4-O4	-7.67	114.03	119.40
36	5	1900	A	C6-N1-C2	-7.67	114.00	118.60
36	5	2403	G	C4-C5-N7	7.67	113.87	110.80
52	m6	27	LEU	CA-CB-CG	-7.67	97.66	115.30
36	1	914	A	C5-C6-N1	7.67	121.53	117.70
36	1	953	G	N1-C6-O6	-7.67	115.30	119.90
36	1	2368	A	C4-C5-N7	7.67	114.53	110.70
36	5	647	A	OP1-P-O3'	7.67	122.07	105.20
36	5	1007	U	C6-N1-C2	7.67	125.60	121.00
36	5	1044	U	C6-N1-C2	-7.67	116.40	121.00
36	5	1518	U	N3-C4-O4	7.67	124.77	119.40
36	1	386	A	N1-C6-N6	7.66	123.20	118.60
36	5	345	G	C4-C5-C6	7.66	123.40	118.80
36	5	3377	G	C4-C5-N7	7.66	113.87	110.80
1	2	1753	A	N1-C6-N6	7.66	123.20	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	91	G	N3-C4-C5	-7.66	124.77	128.60
1	6	1643	U	C5-C6-N1	-7.66	118.87	122.70
36	5	3067	C	N3-C4-N4	-7.66	112.64	118.00
36	1	1525	G	C8-N9-C1'	-7.66	117.04	127.00
1	6	876	G	N1-C2-N2	7.66	123.09	116.20
36	5	1163	A	N1-C6-N6	-7.66	114.00	118.60
36	5	1794	G	C4-N9-C1'	-7.66	116.54	126.50
36	1	76	G	N1-C6-O6	7.66	124.50	119.90
36	1	3055	U	N3-C4-O4	7.66	124.76	119.40
1	6	339	C	N1-C2-O2	-7.66	114.31	118.90
1	6	1372	U	N3-C2-O2	-7.66	116.84	122.20
36	1	404	G	O5'-P-OP2	-7.66	98.81	105.70
36	1	2937	G	C8-N9-C4	7.66	109.46	106.40
36	5	1496	C	C6-N1-C2	-7.66	117.24	120.30
36	5	2212	C	O5'-P-OP2	-7.66	98.81	105.70
36	5	3203	U	C5-C6-N1	-7.66	118.87	122.70
1	2	377	G	C8-N9-C1'	7.66	136.95	127.00
36	1	914	A	C2-N3-C4	7.66	114.43	110.60
36	1	917	A	C6-C5-N7	7.66	137.66	132.30
36	1	1926	C	N3-C4-C5	-7.66	118.84	121.90
1	6	1525	A	C6-N1-C2	-7.66	114.01	118.60
1	6	1768	G	C8-N9-C4	-7.66	103.34	106.40
36	5	3004	C	N3-C4-N4	7.66	123.36	118.00
24	D2	104	LEU	CA-CB-CG	7.65	132.91	115.30
36	5	36	C	C6-N1-C2	-7.65	117.24	120.30
36	5	1164	G	C6-C5-N7	7.65	134.99	130.40
36	5	3271	G	C4-N9-C1'	7.65	136.45	126.50
1	2	1789	G	C8-N9-C1'	-7.65	117.05	127.00
36	1	345	G	N3-C4-C5	-7.65	124.77	128.60
36	5	371	G	C4-C5-C6	-7.65	114.21	118.80
36	5	396	A	N1-C2-N3	7.65	133.13	129.30
36	5	2614	G	N9-C4-C5	-7.65	102.34	105.40
1	2	1438	G	N3-C4-C5	7.65	132.43	128.60
36	1	1880	U	O5'-P-OP2	-7.65	98.81	105.70
36	5	1049	C	C6-N1-C2	-7.65	117.24	120.30
36	5	2969	A	N1-C2-N3	7.65	133.12	129.30
36	1	639	G	N3-C4-N9	-7.65	121.41	126.00
36	1	1872	C	N1-C2-O2	-7.65	114.31	118.90
36	5	1399	A	C2-N3-C4	-7.65	106.78	110.60
36	1	38	U	N1-C2-N3	-7.65	110.31	114.90
36	1	752	C	N3-C2-O2	-7.65	116.55	121.90
36	1	866	A	N1-C2-N3	7.65	133.12	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2872	A	N1-C2-N3	-7.65	125.48	129.30
36	5	2966	G	C5-C6-N1	-7.65	107.68	111.50
1	6	1117	U	N1-C2-O2	-7.64	117.45	122.80
36	5	2120	A	C2-N3-C4	-7.64	106.78	110.60
36	5	2191	U	C6-N1-C2	-7.64	116.41	121.00
36	5	868	C	N3-C4-N4	7.64	123.35	118.00
36	5	2391	G	C6-C5-N7	7.64	134.99	130.40
36	5	2673	A	N1-C2-N3	7.64	133.12	129.30
1	2	597	G	C6-C5-N7	-7.64	125.81	130.40
36	5	404	G	C4-N9-C1'	7.64	136.43	126.50
36	1	649	A	C5-C6-N6	7.64	129.81	123.70
36	1	650	C	C5-C4-N4	-7.64	114.85	120.20
36	1	1113	G	N3-C4-C5	7.64	132.42	128.60
36	1	3261	C	O5'-P-OP1	7.64	119.87	110.70
1	6	1740	A	N1-C2-N3	7.64	133.12	129.30
36	5	978	G	N3-C2-N2	-7.64	114.55	119.90
36	5	1175	C	N1-C2-N3	7.64	124.55	119.20
36	5	2851	A	N1-C2-N3	7.64	133.12	129.30
36	5	2924	U	C6-N1-C1'	-7.64	110.50	121.20
36	1	2351	U	C6-N1-C2	-7.64	116.42	121.00
36	1	212	G	N3-C4-C5	-7.64	124.78	128.60
36	5	677	A	C5-C6-N6	-7.64	117.59	123.70
36	5	976	U	C6-N1-C2	-7.64	116.42	121.00
36	5	1323	G	N7-C8-N9	7.64	116.92	113.10
1	2	394	C	N1-C2-O2	7.63	123.48	118.90
36	1	1444	G	C8-N9-C4	-7.63	103.35	106.40
1	6	35	U	N3-C2-O2	-7.63	116.86	122.20
36	5	3092	C	N3-C4-C5	7.63	124.95	121.90
36	1	637	C	N1-C2-O2	7.63	123.48	118.90
36	1	2385	G	C6-C5-N7	-7.63	125.82	130.40
36	1	2756	C	N1-C2-N3	7.63	124.54	119.20
36	5	366	A	OP1-P-OP2	-7.63	108.15	119.60
36	5	3044	G	OP2-P-O3'	7.63	121.99	105.20
36	1	1419	A	C6-N1-C2	-7.63	114.02	118.60
36	1	3323	A	N1-C2-N3	7.63	133.12	129.30
36	5	2352	A	N1-C2-N3	7.63	133.12	129.30
36	5	3076	C	N1-C2-O2	-7.63	114.32	118.90
1	2	382	C	C6-N1-C2	-7.63	117.25	120.30
36	1	424	G	OP1-P-O3'	7.63	121.98	105.20
36	1	1880	U	N3-C2-O2	-7.63	116.86	122.20
36	1	2229	A	N1-C6-N6	7.63	123.18	118.60
36	1	2329	C	N3-C4-C5	-7.63	118.85	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	947	G	N1-C6-O6	7.63	124.48	119.90
36	5	1903	U	O5'-P-OP2	7.63	119.85	110.70
36	5	3314	A	C6-N1-C2	-7.63	114.02	118.60
36	1	358	G	C6-C5-N7	-7.63	125.82	130.40
36	1	688	G	C6-C5-N7	-7.63	125.82	130.40
36	5	646	A	C2-N3-C4	-7.63	106.79	110.60
36	5	2524	A	O4'-C1'-N9	7.63	114.30	108.20
36	5	2854	U	C4-C5-C6	7.63	124.28	119.70
36	5	3148	U	C5-C4-O4	7.63	130.48	125.90
36	1	2418	G	OP1-P-O3'	7.62	121.97	105.20
36	5	2607	G	C6-C5-N7	-7.62	125.83	130.40
36	1	627	U	N1-C2-O2	-7.62	117.46	122.80
36	1	2213	A	OP1-P-OP2	7.62	131.03	119.60
36	5	883	A	C5-C6-N1	7.62	121.51	117.70
36	5	2297	U	C5-C6-N1	7.62	126.51	122.70
1	2	403	G	C8-N9-C4	-7.62	103.35	106.40
36	1	80	G	N3-C4-C5	-7.62	124.79	128.60
1	6	577	G	N7-C8-N9	7.62	116.91	113.10
36	5	2332	A	C2-N3-C4	7.62	114.41	110.60
36	5	2932	U	N1-C2-N3	7.62	119.47	114.90
36	5	3322	A	C4-C5-C6	7.62	120.81	117.00
36	1	209	A	C5-C6-N6	7.62	129.80	123.70
36	5	1901	A	C4-C5-C6	-7.62	113.19	117.00
1	2	438	A	N1-C6-N6	-7.62	114.03	118.60
36	1	2317	A	O5'-P-OP2	-7.62	98.84	105.70
36	1	3054	U	C4-C5-C6	7.62	124.27	119.70
1	6	402	C	C5-C6-N1	-7.62	117.19	121.00
36	5	666	A	C4-C5-N7	-7.62	106.89	110.70
36	5	709	A	N1-C6-N6	7.62	123.17	118.60
36	5	1310	G	N7-C8-N9	7.62	116.91	113.10
36	1	1434	G	C5-N7-C8	-7.62	100.49	104.30
36	1	1792	C	C6-N1-C2	-7.62	117.25	120.30
36	1	2257	C	C6-N1-C1'	-7.62	111.66	120.80
36	5	1434	G	C4-C5-N7	7.62	113.85	110.80
36	1	709	A	C5-C6-N6	-7.62	117.61	123.70
36	1	963	G	C5-N7-C8	-7.62	100.49	104.30
36	1	2827	U	C2-N1-C1'	-7.62	108.56	117.70
36	5	645	A	N3-C4-C5	-7.62	121.47	126.80
36	5	969	C	C5-C6-N1	-7.62	117.19	121.00
36	5	2322	C	N3-C4-C5	-7.62	118.85	121.90
36	5	2621	G	C6-C5-N7	-7.62	125.83	130.40
36	5	2691	A	C5-C6-N1	7.62	121.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2358	A	N3-C4-N9	-7.61	121.31	127.40
1	2	1148	C	N3-C2-O2	-7.61	116.57	121.90
36	1	790	U	N3-C4-C5	-7.61	110.03	114.60
36	1	408	A	N9-C4-C5	7.61	108.84	105.80
36	1	2603	G	C6-C5-N7	-7.61	125.83	130.40
36	1	2856	G	C5-C6-N1	-7.61	107.69	111.50
36	5	2727	A	C4-C5-N7	-7.61	106.89	110.70
36	5	2897	A	N3-C4-N9	7.61	133.49	127.40
1	6	1777	G	C4-N9-C1'	7.61	136.39	126.50
36	5	1062	A	C2-N3-C4	-7.61	106.80	110.60
36	1	651	G	C8-N9-C4	7.61	109.44	106.40
36	1	1344	G	O5'-P-OP2	-7.61	98.85	105.70
36	1	2329	C	O5'-P-OP1	7.61	119.83	110.70
38	4	51	G	C5-C6-O6	7.61	133.16	128.60
38	4	86	U	C2-N1-C1'	7.61	126.83	117.70
36	5	64	G	C5-C6-N1	-7.61	107.70	111.50
36	5	1195	A	C8-N9-C4	-7.61	102.76	105.80
36	5	1495	U	C2-N1-C1'	7.61	126.83	117.70
36	5	2262	A	N9-C4-C5	-7.61	102.76	105.80
36	5	3327	G	C5-C6-N1	-7.61	107.70	111.50
1	2	1541	G	N1-C6-O6	7.61	124.46	119.90
36	1	612	U	C2-N3-C4	-7.61	122.44	127.00
36	1	2332	A	N9-C4-C5	-7.61	102.76	105.80
36	1	3150	A	N1-C6-N6	7.61	123.16	118.60
1	6	100	A	C2-N3-C4	-7.61	106.80	110.60
36	1	654	C	O5'-P-OP2	-7.60	98.86	105.70
36	5	957	C	N3-C4-N4	7.60	123.32	118.00
36	5	1429	G	N3-C4-N9	7.60	130.56	126.00
36	5	2934	A	C5-N7-C8	-7.60	100.10	103.90
1	2	1462	G	C8-N9-C4	7.60	109.44	106.40
36	1	2306	C	C6-N1-C2	-7.60	117.26	120.30
36	5	512	U	N3-C4-O4	-7.60	114.08	119.40
36	5	973	A	C4-C5-N7	7.60	114.50	110.70
36	5	2938	G	C5-C6-O6	-7.60	124.04	128.60
37	7	50	U	N3-C2-O2	-7.60	116.88	122.20
1	2	1756	A	N1-C6-N6	7.60	123.16	118.60
36	1	3260	G	C5-C6-N1	-7.60	107.70	111.50
1	6	999	U	N3-C4-C5	7.60	119.16	114.60
36	5	2397	A	C4-C5-N7	7.60	114.50	110.70
36	1	240	U	C6-N1-C2	-7.60	116.44	121.00
36	1	1144	U	N1-C2-O2	-7.60	117.48	122.80
36	1	1411	C	N1-C2-O2	7.60	123.46	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	585	A	N1-C6-N6	7.60	123.16	118.60
1	6	595	G	O5'-P-OP1	-7.60	98.86	105.70
1	6	1235	C	C6-N1-C2	-7.60	117.26	120.30
36	5	1253	U	N3-C2-O2	-7.60	116.88	122.20
36	5	1500	G	N9-C4-C5	-7.60	102.36	105.40
36	5	1884	A	O5'-P-OP1	-7.60	98.86	105.70
37	7	85	G	N3-C2-N2	-7.60	114.58	119.90
36	1	798	G	C8-N9-C4	-7.60	103.36	106.40
36	1	2631	U	C5-C6-N1	-7.60	118.90	122.70
1	6	26	A	C6-N1-C2	-7.60	114.04	118.60
1	6	1542	G	N3-C4-C5	-7.60	124.80	128.60
36	5	1213	G	O5'-P-OP2	-7.60	98.86	105.70
36	5	2129	U	C5-C6-N1	7.60	126.50	122.70
36	5	2808	A	OP1-P-O3'	7.60	121.91	105.20
36	5	3144	G	C4-N9-C1'	7.60	136.38	126.50
36	1	1828	A	N1-C6-N6	7.60	123.16	118.60
36	1	3248	C	N1-C2-O2	-7.60	114.34	118.90
1	6	316	A	C4-C5-N7	7.60	114.50	110.70
36	5	1461	A	N7-C8-N9	-7.60	110.00	113.80
36	1	2659	G	C5-C6-O6	-7.59	124.04	128.60
36	5	564	G	O5'-P-OP1	-7.59	98.86	105.70
36	5	2847	A	C5-C6-N1	-7.59	113.90	117.70
38	8	30	C	O5'-P-OP2	-7.59	98.86	105.70
36	1	2635	A	N7-C8-N9	7.59	117.60	113.80
36	5	437	G	C4-C5-C6	7.59	123.36	118.80
36	5	3032	A	C5-C6-N6	7.59	129.78	123.70
1	2	378	A	C2-N3-C4	-7.59	106.81	110.60
36	1	2826	U	C5-C4-O4	7.59	130.45	125.90
36	1	3000	A	O5'-P-OP2	-7.59	98.87	105.70
36	5	943	U	N1-C2-O2	-7.59	117.48	122.80
36	5	2619	G	N1-C2-N3	7.59	128.46	123.90
37	7	94	C	N3-C4-C5	7.59	124.94	121.90
1	2	1651	A	N3-C4-C5	7.59	132.11	126.80
36	1	281	G	C2-N3-C4	7.59	115.69	111.90
36	1	931	C	C5-C4-N4	-7.59	114.89	120.20
36	1	2814	G	C6-N1-C2	-7.59	120.55	125.10
36	5	1059	G	C5-C6-O6	7.59	133.15	128.60
36	5	1934	G	N7-C8-N9	-7.59	109.31	113.10
36	5	3208	G	N3-C4-N9	7.59	130.55	126.00
1	2	825	U	C5-C6-N1	7.59	126.49	122.70
36	1	1316	C	N3-C2-O2	-7.59	116.59	121.90
52	M6	141	LEU	CB-CG-CD2	-7.59	98.10	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	35	A	C5-N7-C8	7.59	107.69	103.90
36	5	62	A	N1-C6-N6	7.59	123.15	118.60
36	5	1379	G	C8-N9-C1'	-7.59	117.14	127.00
36	1	400	G	C8-N9-C1'	7.58	136.86	127.00
36	1	1924	U	N3-C4-O4	-7.58	114.09	119.40
36	1	3099	C	N1-C2-O2	-7.58	114.35	118.90
1	6	1634	C	C6-N1-C1'	-7.58	111.70	120.80
1	6	1777	G	C5-C6-O6	-7.58	124.05	128.60
36	5	2110	G	C6-N1-C2	-7.58	120.55	125.10
36	5	2118	C	N3-C2-O2	-7.58	116.59	121.90
36	5	2830	G	C5-C6-N1	-7.58	107.71	111.50
36	1	3206	C	N3-C4-N4	7.58	123.31	118.00
36	5	1211	U	N3-C4-C5	7.58	119.15	114.60
36	5	1455	U	O5'-P-OP2	7.58	119.80	110.70
36	5	3118	C	C6-N1-C2	-7.58	117.27	120.30
1	6	1668	G	O5'-P-OP2	-7.58	98.88	105.70
36	5	398	A	N7-C8-N9	-7.58	110.01	113.80
36	1	917	A	C5-N7-C8	7.58	107.69	103.90
36	1	2175	U	C6-N1-C2	-7.58	116.45	121.00
1	6	75	U	N1-C2-O2	7.58	128.10	122.80
36	1	1404	G	C8-N9-C4	7.58	109.43	106.40
36	1	1713	G	C8-N9-C4	7.58	109.43	106.40
1	6	322	G	N7-C8-N9	7.58	116.89	113.10
1	2	377	G	C4-N9-C1'	-7.58	116.65	126.50
36	1	632	G	C5-C6-N1	7.58	115.29	111.50
36	1	2353	G	C4-C5-C6	7.58	123.34	118.80
1	6	309	C	C6-N1-C2	7.58	123.33	120.30
36	5	899	U	C2-N3-C4	-7.58	122.45	127.00
36	5	3001	C	C6-N1-C2	7.58	123.33	120.30
36	5	3099	C	C2-N1-C1'	-7.58	110.47	118.80
36	1	1690	C	N3-C2-O2	-7.57	116.60	121.90
36	1	1937	U	C6-N1-C2	7.57	125.54	121.00
36	1	2654	C	C5-C4-N4	-7.57	114.90	120.20
36	1	3132	C	C5-C6-N1	-7.57	117.21	121.00
38	4	59	A	C8-N9-C4	-7.57	102.77	105.80
1	6	876	G	C4-N9-C1'	-7.57	116.65	126.50
36	5	921	A	N9-C4-C5	7.57	108.83	105.80
36	5	1381	A	N1-C2-N3	7.57	133.09	129.30
36	5	1486	G	O5'-P-OP1	-7.57	98.88	105.70
36	5	3029	A	N3-C4-N9	-7.57	121.34	127.40
36	5	423	A	O5'-P-OP2	7.57	119.79	110.70
1	2	696	C	C6-N1-C2	-7.57	117.27	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1462	G	C4-N9-C1'	-7.57	116.66	126.50
7	s5	165	LEU	CA-CB-CG	-7.57	97.89	115.30
36	5	884	A	N3-C4-N9	7.57	133.46	127.40
37	7	75	G	C8-N9-C4	7.57	109.43	106.40
37	7	105	C	C2-N1-C1'	7.57	127.13	118.80
36	1	3276	G	C5-N7-C8	-7.57	100.52	104.30
36	5	1885	U	N3-C4-C5	-7.57	110.06	114.60
36	1	1417	G	C5-C6-O6	-7.57	124.06	128.60
36	1	1505	C	C6-N1-C2	7.57	123.33	120.30
36	1	2839	G	C8-N9-C4	-7.57	103.37	106.40
1	6	1777	G	N3-C4-N9	7.57	130.54	126.00
36	5	1335	C	C6-N1-C2	-7.57	117.27	120.30
36	5	1379	G	C4-N9-C1'	7.57	136.34	126.50
36	5	2134	G	N3-C4-C5	-7.57	124.82	128.60
36	5	3172	A	C5-C6-N6	-7.57	117.65	123.70
36	5	3288	G	O4'-C1'-N9	7.57	114.25	108.20
36	1	770	G	C8-N9-C4	-7.57	103.37	106.40
36	1	1112	A	N1-C6-N6	-7.57	114.06	118.60
36	1	2801	A	C5-C6-N6	-7.57	117.65	123.70
36	5	3124	G	C5-N7-C8	-7.57	100.52	104.30
36	5	3174	A	N7-C8-N9	7.57	117.58	113.80
36	1	1156	C	C5-C6-N1	-7.56	117.22	121.00
36	5	2193	U	C2-N1-C1'	7.56	126.78	117.70
37	7	92	A	N9-C4-C5	-7.56	102.77	105.80
1	2	332	U	C5-C6-N1	-7.56	118.92	122.70
36	1	593	C	C6-N1-C2	-7.56	117.28	120.30
38	4	14	C	O5'-P-OP2	-7.56	98.89	105.70
1	6	876	G	N3-C4-N9	-7.56	121.46	126.00
36	5	652	G	N3-C4-N9	7.56	130.54	126.00
36	5	787	G	O5'-P-OP1	-7.56	98.89	105.70
36	5	3323	A	N9-C4-C5	7.56	108.83	105.80
36	1	2312	A	C2-N3-C4	7.56	114.38	110.60
37	7	14	U	C6-N1-C2	7.56	125.54	121.00
36	1	1194	G	C5-C6-N1	7.56	115.28	111.50
36	1	1360	C	C6-N1-C2	7.56	123.32	120.30
36	1	2150	G	N1-C6-O6	7.56	124.44	119.90
36	1	2609	A	N1-C2-N3	7.56	133.08	129.30
36	5	66	A	N7-C8-N9	-7.56	110.02	113.80
36	5	720	A	N1-C6-N6	-7.56	114.06	118.60
36	5	1059	G	N1-C6-O6	-7.56	115.36	119.90
37	7	68	C	N3-C2-O2	-7.56	116.61	121.90
1	2	967	A	C5-C6-N6	-7.56	117.66	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	608	A	C4-C5-N7	7.56	114.48	110.70
36	1	2426	U	C5-C4-O4	7.56	130.44	125.90
36	5	400	G	C5-N7-C8	-7.56	100.52	104.30
36	5	2168	A	C4-C5-N7	7.56	114.48	110.70
36	5	2932	U	C5-C4-O4	7.56	130.43	125.90
38	8	12	A	N1-C6-N6	7.56	123.14	118.60
36	1	668	G	N1-C6-O6	-7.56	115.37	119.90
36	1	2813	A	C5-C6-N6	7.56	129.75	123.70
36	1	1376	C	C4-C5-C6	7.55	121.18	117.40
36	5	300	G	C5-C6-O6	7.55	133.13	128.60
36	5	320	G	OP1-P-O3'	7.55	121.82	105.20
36	1	1419	A	N3-C4-C5	-7.55	121.51	126.80
36	1	2906	C	C2-N3-C4	-7.55	116.12	119.90
36	5	692	A	N1-C6-N6	7.55	123.13	118.60
36	1	2856	G	N1-C6-O6	7.55	124.43	119.90
36	1	3085	G	N9-C4-C5	-7.55	102.38	105.40
1	6	797	G	C6-C5-N7	7.55	134.93	130.40
1	6	815	G	C4-C5-N7	7.55	113.82	110.80
1	6	1560	U	N3-C2-O2	-7.55	116.92	122.20
36	5	577	C	C2-N3-C4	-7.55	116.12	119.90
36	5	1316	C	C2-N3-C4	-7.55	116.12	119.90
36	5	1496	C	C2-N1-C1'	7.55	127.11	118.80
36	5	2624	G	C6-C5-N7	-7.55	125.87	130.40
36	5	2870	C	C2-N3-C4	-7.55	116.12	119.90
36	5	2886	U	N3-C2-O2	-7.55	116.91	122.20
37	7	93	C	N1-C2-N3	7.55	124.49	119.20
36	1	67	A	N7-C8-N9	-7.55	110.03	113.80
36	5	263	C	C6-N1-C2	7.55	123.32	120.30
36	5	400	G	N3-C4-C5	7.55	132.38	128.60
36	5	424	G	OP2-P-O3'	7.55	121.81	105.20
36	5	986	U	N1-C2-O2	7.55	128.09	122.80
36	5	1010	G	C6-C5-N7	-7.55	125.87	130.40
1	2	103	A	C5-C6-N6	-7.55	117.66	123.70
36	5	2130	G	O5'-P-OP2	-7.55	98.91	105.70
36	5	2675	C	O5'-P-OP1	-7.55	98.91	105.70
1	6	1007	C	C6-N1-C2	7.55	123.32	120.30
36	5	1632	A	C5-N7-C8	7.55	107.67	103.90
1	6	943	C	N3-C4-C5	7.54	124.92	121.90
1	6	1572	G	N3-C4-C5	7.54	132.37	128.60
36	5	1453	A	C8-N9-C4	7.54	108.82	105.80
36	5	2108	C	C4-C5-C6	7.54	121.17	117.40
37	7	29	C	N1-C2-O2	-7.54	114.37	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2647	A	C6-C5-N7	-7.54	127.02	132.30
36	1	3085	G	C8-N9-C4	7.54	109.42	106.40
36	5	591	G	C8-N9-C1'	-7.54	117.19	127.00
36	5	2121	G	C8-N9-C4	-7.54	103.38	106.40
36	5	2991	A	N9-C4-C5	7.54	108.82	105.80
38	8	33	A	O5'-P-OP2	7.54	119.75	110.70
36	1	345	G	C5-C6-N1	-7.54	107.73	111.50
1	6	358	U	N3-C2-O2	-7.54	116.92	122.20
36	5	89	A	N1-C2-N3	7.54	133.07	129.30
36	5	131	C	N1-C2-O2	7.54	123.42	118.90
36	5	2357	A	C6-N1-C2	-7.54	114.08	118.60
1	6	1484	G	C8-N9-C4	-7.54	103.38	106.40
36	5	2388	U	C5-C6-N1	-7.54	118.93	122.70
1	2	1632	C	N3-C2-O2	7.54	127.18	121.90
36	1	1501	U	N3-C4-O4	7.54	124.68	119.40
36	1	2400	G	C5-N7-C8	-7.54	100.53	104.30
36	1	2701	U	N3-C4-C5	-7.54	110.08	114.60
36	1	3272	C	N1-C2-O2	-7.54	114.38	118.90
36	5	12	A	O5'-P-OP1	-7.54	98.92	105.70
36	5	431	U	N1-C2-N3	7.54	119.42	114.90
36	5	1351	U	C6-N1-C2	-7.54	116.48	121.00
36	5	1673	G	C5-C6-O6	-7.54	124.08	128.60
36	5	1904	C	C6-N1-C2	7.54	123.32	120.30
36	5	2160	G	C5-C6-O6	-7.54	124.08	128.60
36	5	2874	G	C5-C6-O6	7.54	133.12	128.60
36	5	3012	A	C4-C5-N7	7.54	114.47	110.70
38	8	107	G	C4-C5-C6	7.54	123.32	118.80
36	1	653	A	O5'-P-OP2	-7.54	98.92	105.70
1	6	75	U	C2-N1-C1'	7.54	126.74	117.70
36	5	1306	G	C5-N7-C8	-7.54	100.53	104.30
36	5	1370	G	N1-C2-N3	7.54	128.42	123.90
36	5	1389	G	C6-C5-N7	-7.54	125.88	130.40
36	5	3343	G	N3-C4-C5	-7.54	124.83	128.60
1	2	771	A	C8-N9-C4	-7.53	102.79	105.80
36	1	721	G	C4-C5-N7	7.53	113.81	110.80
36	1	2877	G	N1-C2-N2	7.53	122.98	116.20
38	4	10	A	O5'-P-OP1	7.53	119.74	110.70
37	7	89	G	C8-N9-C1'	-7.53	117.21	127.00
36	1	1144	U	N3-C2-O2	7.53	127.47	122.20
36	5	817	A	O5'-P-OP2	7.53	119.74	110.70
36	5	1382	G	N1-C6-O6	7.53	124.42	119.90
36	5	1886	A	C5-C6-N6	7.53	129.73	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1200	G	C4-C5-C6	7.53	123.32	118.80
36	1	3018	C	OP2-P-O3'	7.53	121.77	105.20
1	6	1783	C	N1-C2-O2	-7.53	114.38	118.90
36	5	1918	C	N3-C4-C5	-7.53	118.89	121.90
36	1	968	G	N1-C2-N2	-7.53	109.42	116.20
36	1	2218	G	C8-N9-C4	7.53	109.41	106.40
36	1	3235	C	O5'-P-OP1	-7.53	98.92	105.70
36	5	330	G	N7-C8-N9	-7.53	109.33	113.10
1	2	424	C	C6-N1-C2	-7.53	117.29	120.30
1	2	1004	U	N3-C2-O2	-7.53	116.93	122.20
36	1	924	G	O4'-C1'-N9	-7.53	102.18	108.20
36	1	2994	A	C2-N3-C4	-7.53	106.84	110.60
1	6	1113	A	O5'-P-OP1	-7.53	98.92	105.70
1	6	1271	G	C8-N9-C1'	-7.53	117.21	127.00
36	5	321	C	N1-C2-O2	7.53	123.42	118.90
36	5	659	G	O5'-P-OP2	-7.53	98.92	105.70
36	5	3044	G	O5'-P-OP2	-7.53	98.92	105.70
36	1	87	U	C6-N1-C2	-7.53	116.48	121.00
36	1	1308	A	C5-C6-N1	-7.53	113.94	117.70
36	1	2843	U	C2-N1-C1'	7.53	126.73	117.70
38	4	38	U	C5-C6-N1	7.53	126.46	122.70
38	4	104	A	N9-C4-C5	7.53	108.81	105.80
36	5	787	G	N3-C2-N2	-7.53	114.63	119.90
36	5	2116	G	N3-C4-N9	-7.53	121.48	126.00
36	5	2689	A	C5-N7-C8	-7.53	100.14	103.90
36	5	3188	G	N3-C4-N9	7.53	130.51	126.00
36	1	2952	G	N3-C2-N2	-7.52	114.63	119.90
36	1	277	G	C5-C6-N1	7.52	115.26	111.50
36	1	2394	G	C5-C6-O6	7.52	133.11	128.60
36	1	2611	U	C6-N1-C2	-7.52	116.49	121.00
1	6	638	U	N1-C2-O2	-7.52	117.53	122.80
36	5	1395	G	OP2-P-O3'	7.52	121.75	105.20
36	5	3179	U	N3-C4-O4	7.52	124.67	119.40
37	7	101	G	N3-C2-N2	-7.52	114.63	119.90
36	5	61	A	C4-C5-N7	-7.52	106.94	110.70
36	5	1419	A	N1-C2-N3	7.52	133.06	129.30
36	1	1487	G	N3-C2-N2	-7.52	114.64	119.90
38	4	5	U	N3-C2-O2	7.52	127.46	122.20
36	5	214	G	N1-C2-N2	7.52	122.97	116.20
36	5	875	G	O5'-P-OP2	-7.52	98.93	105.70
36	5	1931	U	N3-C4-O4	-7.52	114.14	119.40
36	5	2661	G	N1-C2-N2	-7.52	109.43	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3037	U	C6-N1-C2	7.52	125.51	121.00
36	5	3129	A	C5-C6-N6	7.52	129.72	123.70
36	5	3296	A	C8-N9-C4	7.52	108.81	105.80
36	1	368	G	C2-N3-C4	-7.52	108.14	111.90
36	1	1120	A	C5-C6-N1	7.52	121.46	117.70
25	d3	54	LEU	CA-CB-CG	-7.52	98.01	115.30
36	5	734	C	N1-C2-O2	7.52	123.41	118.90
36	5	1159	A	N1-C2-N3	7.52	133.06	129.30
36	5	1551	C	C4-C5-C6	7.52	121.16	117.40
36	5	2151	C	C6-N1-C2	7.52	123.31	120.30
36	5	2919	A	C5-C6-N6	7.52	129.72	123.70
36	5	3061	G	C2-N3-C4	-7.52	108.14	111.90
1	6	1466	G	C5-C6-O6	-7.52	124.09	128.60
36	5	1166	G	O5'-P-OP2	-7.52	98.94	105.70
36	5	2244	A	C5-N7-C8	7.52	107.66	103.90
36	5	3049	A	N1-C6-N6	7.52	123.11	118.60
36	1	1170	A	N1-C2-N3	-7.51	125.54	129.30
36	1	1335	C	C6-N1-C2	-7.51	117.29	120.30
36	1	2199	G	C6-N1-C2	-7.51	120.59	125.10
36	1	2858	U	N3-C2-O2	-7.51	116.94	122.20
36	5	1891	A	C8-N9-C4	7.51	108.81	105.80
36	5	2130	G	N3-C2-N2	-7.51	114.64	119.90
36	5	2372	A	P-O3'-C3'	7.51	128.72	119.70
36	1	983	A	C5-C6-N1	-7.51	113.94	117.70
1	6	1108	G	N7-C8-N9	7.51	116.86	113.10
36	5	369	A	C8-N9-C4	-7.51	102.80	105.80
36	5	3079	U	C4-C5-C6	7.51	124.21	119.70
36	1	1482	A	C4-C5-N7	7.51	114.46	110.70
36	1	3031	G	C4-N9-C1'	-7.51	116.73	126.50
37	3	6	C	C5-C4-N4	-7.51	114.94	120.20
38	4	61	A	O5'-P-OP1	-7.51	98.94	105.70
1	6	600	U	C5-C4-O4	-7.51	121.39	125.90
36	5	115	A	C5-C6-N6	7.51	129.71	123.70
36	5	1523	U	C5-C6-N1	7.51	126.46	122.70
36	5	3029	A	N3-C4-C5	7.51	132.06	126.80
36	5	3308	C	C4-C5-C6	7.51	121.16	117.40
1	2	883	C	C5-C6-N1	7.51	124.75	121.00
36	1	293	C	C5-C6-N1	-7.51	117.25	121.00
36	1	611	A	O5'-P-OP2	-7.51	98.94	105.70
36	1	1381	A	C2-N3-C4	-7.51	106.84	110.60
36	1	2289	U	O5'-P-OP1	-7.51	98.94	105.70
36	1	3217	C	N3-C4-C5	-7.51	118.90	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	922	U	N3-C2-O2	7.51	127.46	122.20
36	5	2263	C	C5-C6-N1	7.51	124.75	121.00
36	5	2973	G	C5-C6-N1	-7.51	107.75	111.50
1	6	1323	C	O5'-P-OP1	-7.51	98.94	105.70
1	6	1525	A	N1-C6-N6	-7.51	114.09	118.60
36	5	110	G	N3-C4-N9	7.51	130.50	126.00
36	1	935	U	O5'-P-OP1	-7.51	98.94	105.70
36	1	1116	G	OP1-P-O3'	-7.51	88.69	105.20
36	1	2424	A	C5-C6-N1	-7.51	113.95	117.70
38	4	125	U	O4'-C1'-N1	7.51	114.21	108.20
1	6	1614	A	O4'-C1'-N9	7.51	114.20	108.20
36	5	56	G	C8-N9-C4	7.51	109.40	106.40
36	5	659	G	C8-N9-C4	-7.51	103.40	106.40
1	2	110	U	N1-C2-O2	-7.50	117.55	122.80
36	1	856	G	C4-C5-N7	-7.50	107.80	110.80
36	1	917	A	N9-C4-C5	7.50	108.80	105.80
1	6	1498	G	C4-N9-C1'	7.50	136.25	126.50
36	5	976	U	N3-C2-O2	-7.50	116.95	122.20
36	5	1892	G	N1-C2-N3	7.50	128.40	123.90
36	5	2839	G	N1-C6-O6	-7.50	115.40	119.90
37	7	88	G	N9-C4-C5	7.50	108.40	105.40
37	7	89	G	C4-C5-C6	7.50	123.30	118.80
1	2	1127	G	N1-C2-N3	7.50	128.40	123.90
1	2	1773	C	C5-C6-N1	7.50	124.75	121.00
36	1	335	G	C5-N7-C8	-7.50	100.55	104.30
36	1	1602	A	O5'-P-OP1	-7.50	98.95	105.70
36	1	2127	U	C5-C6-N1	7.50	126.45	122.70
36	1	2979	U	C5-C4-O4	7.50	130.40	125.90
36	1	2993	G	C8-N9-C1'	-7.50	117.25	127.00
1	6	917	U	C6-N1-C2	-7.50	116.50	121.00
36	5	895	A	N1-C2-N3	7.50	133.05	129.30
36	5	1310	G	N3-C4-C5	-7.50	124.85	128.60
1	2	632	U	N3-C2-O2	-7.50	116.95	122.20
36	1	2298	U	O5'-P-OP2	-7.50	98.95	105.70
1	6	1769	U	O5'-P-OP2	-7.50	98.95	105.70
36	1	614	C	C6-N1-C2	-7.50	117.30	120.30
36	1	2359	C	N1-C2-O2	-7.50	114.40	118.90
1	6	797	G	C5-C6-N1	7.50	115.25	111.50
1	6	1518	C	N3-C4-C5	7.50	124.90	121.90
36	5	659	G	N7-C8-N9	7.50	116.85	113.10
36	5	871	U	N1-C2-O2	7.50	128.05	122.80
36	5	1001	G	N1-C6-O6	-7.50	115.40	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1887	A	C6-N1-C2	-7.50	114.10	118.60
36	1	1053	A	O5'-P-OP2	-7.50	98.95	105.70
36	1	2824	G	C5-C6-N1	-7.50	107.75	111.50
1	6	98	U	C4-C5-C6	7.50	124.20	119.70
38	8	80	A	C2-N3-C4	7.50	114.35	110.60
36	5	1006	A	C6-N1-C2	-7.50	114.10	118.60
36	5	1330	A	N7-C8-N9	-7.50	110.05	113.80
36	1	2113	A	N1-C6-N6	-7.49	114.10	118.60
36	1	3390	G	C8-N9-C1'	-7.49	117.26	127.00
1	6	301	A	N9-C4-C5	7.49	108.80	105.80
1	6	1592	A	C8-N9-C4	-7.49	102.80	105.80
1	6	1796	C	C2-N1-C1'	7.49	127.04	118.80
36	5	35	A	N9-C4-C5	7.49	108.80	105.80
36	5	3393	U	N3-C4-O4	-7.49	114.16	119.40
1	2	1150	G	N9-C4-C5	7.49	108.40	105.40
1	2	1749	A	C2-N3-C4	-7.49	106.85	110.60
36	1	3151	U	C5-C4-O4	7.49	130.40	125.90
36	5	935	U	C5-C6-N1	7.49	126.45	122.70
36	5	2155	G	C4-C5-C6	7.49	123.30	118.80
36	1	376	G	C4-C5-N7	-7.49	107.80	110.80
36	1	892	U	O5'-P-OP2	-7.49	98.96	105.70
36	1	962	A	C4-C5-C6	7.49	120.75	117.00
37	3	75	G	C2-N3-C4	-7.49	108.15	111.90
36	5	264	G	N3-C4-N9	7.49	130.49	126.00
36	5	667	C	N3-C2-O2	-7.49	116.66	121.90
36	5	696	C	N3-C2-O2	-7.49	116.66	121.90
36	5	1115	G	N1-C2-N2	-7.49	109.46	116.20
36	5	1594	A	N1-C2-N3	7.49	133.05	129.30
36	1	2916	U	N1-C2-O2	7.49	128.04	122.80
1	6	139	C	N1-C2-N3	7.49	124.44	119.20
1	6	561	G	C8-N9-C4	-7.49	103.40	106.40
36	5	1451	C	C6-N1-C2	-7.49	117.31	120.30
36	5	2421	U	N1-C2-N3	7.49	119.39	114.90
36	5	2877	G	C4-N9-C1'	7.49	136.24	126.50
37	7	21	G	N3-C2-N2	-7.49	114.66	119.90
36	5	1170	A	N1-C2-N3	7.49	133.04	129.30
36	5	1482	A	C5-C6-N1	7.49	121.44	117.70
36	5	2910	A	N1-C2-N3	-7.49	125.56	129.30
36	1	1143	A	N1-C2-N3	7.49	133.04	129.30
36	1	1174	G	C4-N9-C1'	7.49	136.23	126.50
36	1	1307	G	C2'-C3'-O3'	7.49	125.97	109.50
36	1	2614	G	N1-C2-N3	7.49	128.39	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1165	A	C4-C5-C6	7.49	120.74	117.00
36	5	1435	A	N9-C4-C5	7.49	108.79	105.80
36	5	2375	G	C8-N9-C4	-7.49	103.41	106.40
36	5	3214	U	N1-C2-N3	7.49	119.39	114.90
37	7	112	G	N3-C4-C5	-7.49	124.86	128.60
1	6	548	G	N1-C6-O6	7.48	124.39	119.90
36	5	1484	U	C6-N1-C1'	7.48	131.68	121.20
37	7	75	G	C2-N3-C4	-7.48	108.16	111.90
1	2	421	A	C8-N9-C4	7.48	108.79	105.80
1	2	1420	C	N1-C2-O2	7.48	123.39	118.90
1	2	1433	G	N3-C4-N9	7.48	130.49	126.00
36	1	148	G	C6-C5-N7	-7.48	125.91	130.40
36	5	1175	C	O5'-P-OP1	-7.48	98.97	105.70
36	5	2566	C	C6-N1-C2	-7.48	117.31	120.30
36	5	3376	A	C8-N9-C4	-7.48	102.81	105.80
36	1	50	U	N3-C4-C5	-7.48	110.11	114.60
36	1	612	U	C4-C5-C6	7.48	124.19	119.70
36	1	1791	C	C2-N1-C1'	-7.48	110.57	118.80
36	1	2186	U	O5'-P-OP1	7.48	119.68	110.70
1	6	1651	A	C5-N7-C8	-7.48	100.16	103.90
36	5	911	C	N3-C2-O2	-7.48	116.66	121.90
36	5	941	G	C6-N1-C2	-7.48	120.61	125.10
36	1	2628	A	C4-C5-C6	7.48	120.74	117.00
36	5	2727	A	O5'-P-OP1	-7.48	98.97	105.70
52	m6	141	LEU	CB-CG-CD2	-7.48	98.28	111.00
36	1	1483	G	N3-C4-N9	7.48	130.49	126.00
36	1	1881	A	N1-C2-N3	7.48	133.04	129.30
1	6	432	G	N3-C4-C5	-7.48	124.86	128.60
1	6	608	U	N3-C4-O4	-7.48	114.17	119.40
1	6	1197	C	C6-N1-C2	7.48	123.29	120.30
29	d7	7	LEU	CA-CB-CG	-7.48	98.10	115.30
36	5	232	G	N3-C4-N9	-7.48	121.51	126.00
36	5	976	U	N1-C2-N3	7.48	119.39	114.90
36	5	998	A	C4-C5-N7	-7.48	106.96	110.70
36	5	1013	G	N1-C6-O6	-7.48	115.41	119.90
36	5	1407	A	C8-N9-C4	7.48	108.79	105.80
36	1	3326	G	N7-C8-N9	-7.48	109.36	113.10
1	2	334	G	N3-C2-N2	-7.47	114.67	119.90
1	2	1125	A	N1-C6-N6	-7.47	114.12	118.60
36	1	939	U	OP2-P-O3'	7.47	121.64	105.20
38	4	104	A	N3-C4-N9	-7.47	121.42	127.40
1	6	1330	G	C5-C6-N1	-7.47	107.76	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2690	G	N3-C2-N2	-7.47	114.67	119.90
38	8	76	C	N3-C4-C5	-7.47	118.91	121.90
1	2	373	G	C8-N9-C4	-7.47	103.41	106.40
36	1	512	U	N3-C4-C5	-7.47	110.12	114.60
36	1	1435	A	N7-C8-N9	7.47	117.54	113.80
36	1	1547	G	N1-C2-N2	-7.47	109.47	116.20
36	1	2400	G	OP2-P-O3'	7.47	121.64	105.20
36	5	889	U	C5-C6-N1	-7.47	118.96	122.70
36	5	2829	U	OP1-P-O3'	-7.47	88.76	105.20
1	6	636	A	C4-C5-N7	-7.47	106.97	110.70
36	1	281	G	N1-C6-O6	-7.47	115.42	119.90
36	1	1898	G	N1-C6-O6	-7.47	115.42	119.90
36	1	2263	C	O5'-P-OP2	-7.47	98.98	105.70
36	1	2837	A	C2-N3-C4	-7.47	106.87	110.60
36	1	2940	A	C8-N9-C4	-7.47	102.81	105.80
36	1	3222	U	C5-C4-O4	7.47	130.38	125.90
1	6	264	G	C5-C6-O6	-7.47	124.12	128.60
36	5	227	G	C4-C5-N7	-7.47	107.81	110.80
37	7	45	A	N9-C4-C5	7.47	108.79	105.80
36	1	148	G	N3-C4-N9	7.47	130.48	126.00
38	4	12	A	N7-C8-N9	7.47	117.53	113.80
1	2	360	A	C4-C5-N7	7.47	114.43	110.70
36	1	2283	G	N1-C6-O6	7.47	124.38	119.90
36	1	2930	A	N7-C8-N9	-7.47	110.07	113.80
36	5	421	G	N3-C4-C5	-7.47	124.87	128.60
36	5	2286	U	C2-N3-C4	-7.47	122.52	127.00
36	1	1362	G	N3-C4-N9	-7.46	121.52	126.00
36	1	3157	U	N3-C4-O4	-7.46	114.17	119.40
36	5	1374	G	C5-N7-C8	-7.46	100.57	104.30
36	1	823	C	N1-C2-O2	-7.46	114.42	118.90
36	1	2172	A	C5-C6-N6	-7.46	117.73	123.70
36	1	2647	A	C4-C5-C6	7.46	120.73	117.00
36	5	1338	C	N1-C2-O2	-7.46	114.42	118.90
36	1	3305	A	C8-N9-C4	-7.46	102.81	105.80
36	1	3393	U	N1-C2-O2	-7.46	117.58	122.80
36	5	2698	G	N7-C8-N9	-7.46	109.37	113.10
37	7	42	A	C6-N1-C2	-7.46	114.12	118.60
36	1	1490	A	N1-C2-N3	7.46	133.03	129.30
1	6	905	A	N9-C4-C5	7.46	108.78	105.80
36	5	405	U	N1-C2-N3	-7.46	110.42	114.90
36	1	1064	A	N1-C6-N6	-7.46	114.12	118.60
36	1	2662	G	O5'-P-OP2	-7.46	98.99	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2785	A	N1-C2-N3	7.46	133.03	129.30
1	6	1146	G	N7-C8-N9	7.46	116.83	113.10
36	5	520	U	N1-C2-O2	7.46	128.02	122.80
36	5	636	C	N3-C4-C5	-7.46	118.92	121.90
36	5	3052	G	N3-C2-N2	7.46	125.12	119.90
37	7	97	A	C4-C5-C6	7.46	120.73	117.00
36	1	523	A	C8-N9-C4	7.46	108.78	105.80
36	1	3316	A	C4-C5-N7	7.46	114.43	110.70
1	6	565	C	N3-C4-C5	7.46	124.88	121.90
36	5	1498	A	N1-C2-N3	7.46	133.03	129.30
36	5	1740	U	C5-C6-N1	-7.46	118.97	122.70
36	5	2313	A	C6-N1-C2	-7.46	114.13	118.60
37	7	38	U	C5-C4-O4	-7.46	121.43	125.90
36	1	1210	U	C5-C4-O4	7.46	130.37	125.90
36	5	595	G	C5-C6-N1	-7.46	107.77	111.50
37	7	56	A	O5'-P-OP2	7.46	119.65	110.70
36	1	1867	A	N1-C2-N3	7.45	133.03	129.30
36	1	2400	G	C4-C5-N7	7.45	113.78	110.80
36	1	2606	G	N7-C8-N9	7.45	116.83	113.10
36	1	2826	U	C2-N1-C1'	-7.45	108.75	117.70
36	5	330	G	C5-C6-O6	-7.45	124.13	128.60
36	5	512	U	C5-C4-O4	7.45	130.37	125.90
36	5	798	G	C2-N3-C4	-7.45	108.17	111.90
36	1	939	U	N1-C2-O2	-7.45	117.58	122.80
1	6	1278	G	C4-N9-C1'	7.45	136.19	126.50
36	5	718	G	C4-N9-C1'	7.45	136.19	126.50
36	1	316	U	N3-C4-C5	-7.45	110.13	114.60
36	1	2239	G	N1-C6-O6	-7.45	115.43	119.90
1	6	1664	C	O5'-P-OP1	-7.45	98.99	105.70
36	5	1203	A	C4-C5-N7	7.45	114.42	110.70
57	n1	17	ARG	NE-CZ-NH2	-7.45	116.58	120.30
36	1	2610	G	N1-C6-O6	7.45	124.37	119.90
36	5	1737	U	N1-C2-O2	-7.45	117.59	122.80
36	5	1881	A	C5-C6-N6	-7.45	117.74	123.70
36	5	2895	G	C4-N9-C1'	7.45	136.18	126.50
36	1	2168	A	N1-C2-N3	7.45	133.02	129.30
36	5	507	U	N3-C2-O2	-7.45	116.99	122.20
36	1	1377	G	N9-C4-C5	-7.45	102.42	105.40
36	1	3209	A	N9-C4-C5	-7.45	102.82	105.80
36	1	312	C	C6-N1-C2	7.44	123.28	120.30
36	1	1007	U	C6-N1-C2	7.44	125.47	121.00
36	1	1512	U	O5'-P-OP1	-7.44	99.00	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2984	C	N3-C2-O2	-7.44	116.69	121.90
36	5	699	A	C8-N9-C4	-7.44	102.82	105.80
36	5	2297	U	C6-N1-C2	-7.44	116.53	121.00
36	5	2327	U	O5'-P-OP2	-7.44	99.00	105.70
36	1	925	A	O5'-P-OP2	7.44	119.63	110.70
36	1	1136	A	N7-C8-N9	-7.44	110.08	113.80
36	1	1499	C	N3-C4-N4	7.44	123.21	118.00
36	1	2572	C	N1-C2-O2	7.44	123.36	118.90
1	6	1498	G	N3-C4-N9	7.44	130.46	126.00
1	6	1653	C	C6-N1-C2	7.44	123.28	120.30
36	5	591	G	N3-C4-C5	-7.44	124.88	128.60
36	5	2524	A	C5-N7-C8	-7.44	100.18	103.90
36	5	2995	A	C8-N9-C4	7.44	108.78	105.80
36	1	1702	U	N3-C2-O2	7.44	127.41	122.20
36	1	2589	G	C6-C5-N7	-7.44	125.94	130.40
36	1	1863	G	C5-C6-O6	-7.44	124.14	128.60
36	1	2956	A	C6-C5-N7	-7.44	127.09	132.30
36	5	863	C	O5'-P-OP1	-7.44	99.01	105.70
36	5	1045	C	O5'-P-OP1	-7.44	99.01	105.70
36	5	1200	A	N1-C6-N6	7.44	123.06	118.60
36	1	345	G	C6-C5-N7	-7.44	125.94	130.40
1	6	922	G	C4-N9-C1'	7.44	136.17	126.50
36	1	382	U	N1-C2-O2	-7.43	117.60	122.80
36	1	414	U	C5-C6-N1	-7.43	118.98	122.70
36	1	1546	A	C8-N9-C4	-7.43	102.83	105.80
36	1	2824	G	N9-C4-C5	-7.43	102.43	105.40
36	1	2892	A	C6-N1-C2	-7.43	114.14	118.60
36	1	2909	U	C6-N1-C2	7.43	125.46	121.00
36	1	3034	C	O5'-P-OP2	-7.43	99.01	105.70
37	3	102	A	C4-C5-N7	7.43	114.42	110.70
38	4	110	C	C2-N1-C1'	-7.43	110.62	118.80
1	6	1534	G	O4'-C1'-N9	7.43	114.15	108.20
36	5	523	A	C2-N3-C4	-7.43	106.88	110.60
36	5	669	U	C6-N1-C1'	-7.43	110.79	121.20
36	5	851	C	C5-C4-N4	-7.43	115.00	120.20
36	5	1665	C	N3-C4-N4	-7.43	112.80	118.00
38	8	12	A	C5-C6-N6	-7.43	117.75	123.70
36	1	2941	A	C2-N3-C4	7.43	114.32	110.60
36	1	3153	U	C5-C4-O4	7.43	130.36	125.90
36	5	2282	U	C6-N1-C2	7.43	125.46	121.00
36	5	2728	G	C8-N9-C1'	-7.43	117.34	127.00
36	5	2901	G	O5'-P-OP2	-7.43	99.01	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1750	A	N1-C2-N3	7.43	133.02	129.30
36	1	3263	G	C8-N9-C1'	-7.43	117.34	127.00
36	5	2190	U	C5-C4-O4	7.43	130.36	125.90
1	2	414	C	C5-C6-N1	7.43	124.72	121.00
36	1	806	A	N3-C4-C5	7.43	132.00	126.80
36	1	1180	A	N9-C4-C5	7.43	108.77	105.80
36	5	1838	G	N1-C6-O6	7.43	124.36	119.90
36	5	2675	C	N3-C4-C5	7.43	124.87	121.90
36	1	38	U	N3-C2-O2	7.43	127.40	122.20
36	1	1936	A	N1-C6-N6	-7.43	114.14	118.60
36	1	2375	G	C2-N3-C4	-7.43	108.19	111.90
36	1	2738	A	C8-N9-C4	-7.43	102.83	105.80
36	5	522	A	C8-N9-C4	7.43	108.77	105.80
36	5	1407	A	O5'-P-OP1	7.43	119.61	110.70
36	5	1919	G	C6-C5-N7	-7.43	125.94	130.40
1	2	1108	G	N1-C6-O6	-7.43	115.44	119.90
1	6	1033	C	O5'-P-OP1	-7.43	99.02	105.70
1	6	1272	U	N1-C2-N3	7.43	119.36	114.90
36	5	329	U	N1-C2-O2	7.43	128.00	122.80
36	5	1477	A	C6-N1-C2	-7.43	114.14	118.60
37	7	43	U	C5-C4-O4	7.43	130.36	125.90
57	n1	10	ARG	NE-CZ-NH1	7.43	124.01	120.30
36	1	1317	A	C5-N7-C8	-7.42	100.19	103.90
36	1	2623	G	N3-C4-C5	7.42	132.31	128.60
1	6	384	G	C8-N9-C4	-7.42	103.43	106.40
36	5	1480	G	C8-N9-C4	7.42	109.37	106.40
36	5	2907	G	N1-C2-N3	7.42	128.35	123.90
36	5	3154	C	N3-C2-O2	-7.42	116.70	121.90
36	5	3346	U	N1-C2-O2	7.42	128.00	122.80
36	1	1117	G	C5-C6-O6	-7.42	124.15	128.60
36	1	1578	C	C2-N1-C1'	7.42	126.97	118.80
36	5	216	G	O5'-P-OP1	-7.42	99.02	105.70
36	5	578	A	C4-C5-N7	-7.42	106.99	110.70
36	5	1185	C	C5-C6-N1	-7.42	117.29	121.00
36	5	2375	G	O5'-P-OP1	-7.42	99.02	105.70
36	1	41	G	C8-N9-C4	-7.42	103.43	106.40
36	1	406	G	N1-C6-O6	-7.42	115.45	119.90
36	1	933	A	C4-N9-C1'	7.42	139.66	126.30
36	1	1897	G	C8-N9-C4	-7.42	103.43	106.40
36	1	2632	G	O5'-P-OP2	-7.42	99.02	105.70
36	1	2995	A	C8-N9-C4	7.42	108.77	105.80
36	1	3139	A	C8-N9-C4	-7.42	102.83	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1011	A	C8-N9-C4	-7.42	102.83	105.80
36	5	3218	A	C4-C5-C6	7.42	120.71	117.00
76	q0	102	ARG	NE-CZ-NH1	-7.42	116.59	120.30
36	1	585	A	C4-C5-N7	-7.42	106.99	110.70
36	5	514	G	O5'-P-OP1	7.42	119.60	110.70
36	5	959	C	N1-C2-N3	7.42	124.39	119.20
36	5	3069	G	C5-N7-C8	-7.42	100.59	104.30
37	7	13	A	C6-C5-N7	-7.42	127.11	132.30
1	2	1782	A	C2-N3-C4	-7.42	106.89	110.60
36	1	227	G	N3-C4-C5	-7.42	124.89	128.60
36	5	511	G	C2-N3-C4	-7.42	108.19	111.90
36	5	787	G	C8-N9-C4	7.42	109.37	106.40
36	5	2327	U	OP2-P-O3'	7.42	121.52	105.20
36	1	2777	G	C8-N9-C4	-7.42	103.43	106.40
1	6	1139	A	C5-N7-C8	-7.42	100.19	103.90
36	5	577	C	N3-C4-C5	7.42	124.87	121.90
36	5	1047	A	C6-N1-C2	-7.42	114.15	118.60
36	5	1604	G	C2-N3-C4	7.42	115.61	111.90
36	1	1955	U	C5-C6-N1	7.42	126.41	122.70
1	6	330	G	N1-C6-O6	7.42	124.35	119.90
36	5	1894	U	N1-C2-O2	-7.42	117.61	122.80
36	5	2613	U	N3-C4-O4	7.42	124.59	119.40
36	5	2957	G	N1-C6-O6	7.42	124.35	119.90
36	1	231	G	C5-C6-O6	-7.41	124.15	128.60
36	1	2849	C	N3-C4-C5	-7.41	118.94	121.90
1	6	866	G	N1-C6-O6	7.41	124.35	119.90
36	5	437	G	C4-N9-C1'	7.41	136.14	126.50
36	5	919	U	O5'-P-OP2	-7.41	99.03	105.70
36	5	1453	A	C6-N1-C2	-7.41	114.15	118.60
36	5	2414	G	C5-C6-N1	-7.41	107.79	111.50
36	1	2179	C	N3-C4-C5	-7.41	118.94	121.90
1	6	142	G	N9-C4-C5	7.41	108.36	105.40
40	l3	266	ARG	NE-CZ-NH2	7.41	124.01	120.30
1	2	1757	G	N3-C4-N9	7.41	130.45	126.00
36	1	425	G	N1-C2-N2	-7.41	109.53	116.20
36	1	793	C	N3-C4-N4	7.41	123.19	118.00
36	1	2918	G	N3-C4-N9	7.41	130.45	126.00
36	5	696	C	N1-C2-O2	7.41	123.35	118.90
36	5	1863	G	C5-C6-N1	7.41	115.20	111.50
36	5	2661	G	N9-C4-C5	-7.41	102.44	105.40
36	1	818	C	C4-C5-C6	7.41	121.10	117.40
36	1	1124	U	N3-C2-O2	-7.41	117.02	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2288	G	C8-N9-C1'	-7.41	117.37	127.00
36	1	2614	G	N3-C4-N9	7.41	130.44	126.00
36	5	1283	C	C6-N1-C2	7.41	123.26	120.30
36	5	1383	G	C5-C6-N1	-7.41	107.80	111.50
36	1	2364	G	C5-C6-N1	7.41	115.20	111.50
36	5	406	G	N3-C4-N9	-7.41	121.56	126.00
36	5	3262	U	N1-C2-N3	7.41	119.34	114.90
37	7	49	G	C2-N3-C4	-7.41	108.20	111.90
1	2	1572	G	N9-C4-C5	-7.41	102.44	105.40
36	1	662	U	C5-C6-N1	-7.41	119.00	122.70
36	1	697	A	N1-C2-N3	-7.41	125.60	129.30
36	1	1136	A	N1-C2-N3	7.41	133.00	129.30
36	1	3266	G	N1-C2-N3	7.41	128.34	123.90
37	3	85	G	N1-C6-O6	7.41	124.34	119.90
1	6	1480	G	N1-C6-O6	7.41	124.34	119.90
36	5	517	G	C6-C5-N7	-7.41	125.96	130.40
36	5	640	U	N3-C4-C5	-7.41	110.16	114.60
36	5	2643	A	C8-N9-C4	7.41	108.76	105.80
36	5	2715	A	OP2-P-O3'	7.41	121.49	105.20
36	5	422	A	C6-N1-C2	-7.40	114.16	118.60
36	5	1201	C	C2-N3-C4	7.40	123.60	119.90
36	5	1486	G	C4-N9-C1'	-7.40	116.88	126.50
36	1	2705	A	OP1-P-OP2	-7.40	108.50	119.60
36	1	2856	G	C8-N9-C4	7.40	109.36	106.40
1	6	1542	G	N1-C6-O6	-7.40	115.46	119.90
36	5	1344	G	C2-N3-C4	-7.40	108.20	111.90
36	1	1113	G	OP2-P-O3'	7.40	121.48	105.20
36	1	1380	G	N1-C6-O6	7.40	124.34	119.90
36	1	2981	U	C6-N1-C2	-7.40	116.56	121.00
1	6	922	G	C5-C6-O6	-7.40	124.16	128.60
1	6	950	C	C6-N1-C2	-7.40	117.34	120.30
36	5	41	G	C8-N9-C4	-7.40	103.44	106.40
36	5	1332	A	C8-N9-C4	7.40	108.76	105.80
36	5	1364	C	OP1-P-O3'	-7.40	88.93	105.20
36	5	1847	A	C2-N3-C4	-7.40	106.90	110.60
36	5	2288	G	N1-C6-O6	7.40	124.34	119.90
36	5	2937	G	O5'-P-OP1	7.40	119.58	110.70
1	2	19	A	N1-C6-N6	7.40	123.04	118.60
1	2	348	U	O5'-P-OP2	-7.40	99.04	105.70
36	1	2160	G	C8-N9-C4	7.40	109.36	106.40
36	1	2606	G	C6-N1-C2	-7.40	120.66	125.10
36	5	806	A	N3-C4-C5	7.40	131.98	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2948	C	C6-N1-C2	-7.40	117.34	120.30
36	5	3125	U	N3-C4-O4	-7.40	114.22	119.40
36	1	38	U	C2-N1-C1'	-7.39	108.83	117.70
36	5	1715	A	OP1-P-O3'	7.39	121.47	105.20
36	1	1131	G	C5-C6-O6	-7.39	124.17	128.60
36	1	1329	U	P-O3'-C3'	7.39	128.57	119.70
36	1	1928	G	C2-N3-C4	-7.39	108.20	111.90
36	1	2756	C	N1-C2-O2	-7.39	114.46	118.90
36	1	3050	U	C4-C5-C6	7.39	124.14	119.70
36	5	1324	U	O5'-P-OP2	-7.39	99.05	105.70
36	1	2121	G	N1-C6-O6	-7.39	115.47	119.90
1	6	695	U	N3-C2-O2	-7.39	117.03	122.20
36	5	871	U	N3-C2-O2	-7.39	117.03	122.20
36	1	351	A	C8-N9-C4	7.39	108.75	105.80
36	1	396	A	C6-N1-C2	-7.39	114.17	118.60
36	1	1001	G	N1-C6-O6	7.39	124.33	119.90
36	1	1372	C	C6-N1-C2	7.39	123.26	120.30
37	3	88	G	N1-C2-N3	7.39	128.33	123.90
39	L2	25	GLY	N-CA-C	-7.39	94.62	113.10
36	5	657	A	C5-C6-N1	7.39	121.39	117.70
36	5	858	A	N9-C4-C5	7.39	108.76	105.80
36	5	1926	C	N3-C2-O2	-7.39	116.73	121.90
36	5	2302	G	N1-C6-O6	-7.39	115.47	119.90
1	2	415	C	C5-C6-N1	-7.39	117.31	121.00
36	1	714	G	C6-C5-N7	-7.39	125.97	130.40
36	1	1792	C	C4-C5-C6	7.39	121.09	117.40
36	5	2428	U	C2-N1-C1'	-7.39	108.83	117.70
36	5	1148	G	N3-C4-N9	7.39	130.43	126.00
36	5	1438	U	N1-C2-N3	7.39	119.33	114.90
36	1	213	A	C4-C5-N7	7.38	114.39	110.70
36	1	2879	C	N3-C2-O2	7.38	127.07	121.90
1	6	1465	C	N3-C4-C5	-7.38	118.95	121.90
36	5	1113	G	C5-C6-N1	-7.38	107.81	111.50
36	5	3004	C	N3-C2-O2	7.38	127.07	121.90
36	1	2309	A	C6-C5-N7	-7.38	127.13	132.30
36	5	388	G	N3-C2-N2	-7.38	114.73	119.90
36	5	1422	G	C6-C5-N7	-7.38	125.97	130.40
1	2	310	C	N3-C4-C5	-7.38	118.95	121.90
1	2	458	G	N3-C4-C5	7.38	132.29	128.60
36	5	93	C	N1-C2-O2	7.38	123.33	118.90
36	5	1399	A	C4-C5-N7	7.38	114.39	110.70
36	5	2191	U	C5-C4-O4	7.38	130.33	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2243	A	C6-N1-C2	-7.38	114.17	118.60
1	2	1006	C	N3-C2-O2	-7.38	116.73	121.90
1	2	1436	A	C8-N9-C4	7.38	108.75	105.80
1	2	1748	G	C2-N3-C4	-7.38	108.21	111.90
36	1	1103	A	N1-C6-N6	-7.38	114.17	118.60
36	1	2904	U	C5-C6-N1	-7.38	119.01	122.70
1	6	425	A	N1-C6-N6	-7.38	114.17	118.60
1	6	1029	U	C2-N1-C1'	-7.38	108.84	117.70
36	1	523	A	O5'-P-OP2	-7.38	99.06	105.70
36	1	567	G	C8-N9-C4	-7.38	103.45	106.40
36	1	2139	A	N1-C6-N6	7.38	123.03	118.60
36	1	2153	U	C6-N1-C2	-7.38	116.57	121.00
36	1	2378	C	N3-C2-O2	7.38	127.06	121.90
36	1	2403	G	C4-C5-N7	7.38	113.75	110.80
36	1	2614	G	O5'-P-OP2	-7.38	99.06	105.70
36	1	2964	G	O5'-P-OP2	-7.38	99.06	105.70
36	1	3390	G	N1-C6-O6	7.38	124.33	119.90
1	6	480	G	C4-N9-C1'	7.38	136.09	126.50
36	5	1083	G	N1-C6-O6	-7.38	115.47	119.90
36	5	1345	G	C5-C6-N1	-7.38	107.81	111.50
36	5	2700	G	N3-C4-N9	7.38	130.43	126.00
36	1	885	U	C6-N1-C2	7.38	125.43	121.00
36	1	2331	C	N1-C2-O2	7.38	123.33	118.90
36	1	3003	G	C5-C6-O6	-7.38	124.17	128.60
1	6	1135	U	C5-C6-N1	-7.38	119.01	122.70
36	5	1085	A	C5-N7-C8	-7.38	100.21	103.90
1	2	1558	U	C2-N1-C1'	7.38	126.55	117.70
36	1	1408	G	N9-C4-C5	-7.38	102.45	105.40
36	1	1433	A	N1-C2-N3	7.38	132.99	129.30
1	6	1209	C	O5'-P-OP1	-7.38	99.06	105.70
36	5	2190	U	C4-C5-C6	7.38	124.12	119.70
36	5	2848	G	N3-C4-N9	-7.38	121.58	126.00
36	5	3329	U	C6-N1-C2	-7.38	116.58	121.00
37	7	103	A	OP2-P-O3'	7.38	121.42	105.20
36	1	105	C	C2-N3-C4	-7.37	116.21	119.90
36	1	1884	A	C2-N3-C4	-7.37	106.91	110.60
36	1	2238	G	C2-N3-C4	7.37	115.59	111.90
36	5	2132	C	O5'-P-OP2	-7.37	99.06	105.70
37	3	82	G	C6-C5-N7	-7.37	125.98	130.40
1	6	1091	A	O4'-C1'-N9	7.37	114.10	108.20
36	5	333	G	C8-N9-C4	7.37	109.35	106.40
36	5	377	A	N1-C6-N6	-7.37	114.18	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	880	G	O4'-C1'-N9	7.37	114.10	108.20
36	5	965	A	N1-C6-N6	7.37	123.02	118.60
37	7	109	G	C5-N7-C8	-7.37	100.61	104.30
1	2	1177	C	C6-N1-C2	7.37	123.25	120.30
36	1	718	G	N7-C8-N9	7.37	116.78	113.10
36	1	2413	A	C2-N3-C4	-7.37	106.92	110.60
36	5	979	U	C5-C4-O4	7.37	130.32	125.90
36	1	2379	U	N1-C2-N3	7.37	119.32	114.90
1	6	78	A	C5-C6-N6	7.37	129.59	123.70
36	5	395	A	O5'-P-OP2	-7.37	99.07	105.70
36	5	1017	C	C5-C6-N1	7.37	124.68	121.00
36	5	1403	C	C5-C6-N1	-7.37	117.31	121.00
36	5	1878	G	C2-N3-C4	7.37	115.58	111.90
36	1	1371	G	N7-C8-N9	-7.37	109.42	113.10
36	5	2838	A	C6-N1-C2	-7.37	114.18	118.60
36	1	416	A	C5-C6-N1	-7.36	114.02	117.70
36	1	2144	A	O4'-C1'-N9	7.36	114.09	108.20
37	3	115	G	C4-C5-N7	7.36	113.75	110.80
1	6	1109	G	O5'-P-OP1	-7.36	99.07	105.70
36	5	582	G	N1-C6-O6	-7.36	115.48	119.90
36	5	651	G	C4-N9-C1'	7.36	136.07	126.50
36	5	1101	G	N3-C2-N2	7.36	125.05	119.90
36	5	2694	A	O5'-P-OP2	7.36	119.54	110.70
36	5	3085	G	C6-C5-N7	7.36	134.82	130.40
36	1	1375	G	O5'-P-OP2	-7.36	99.07	105.70
36	1	1429	G	C5-N7-C8	7.36	107.98	104.30
36	5	673	U	N1-C2-O2	-7.36	117.65	122.80
36	1	802	C	C2-N3-C4	-7.36	116.22	119.90
36	1	1328	C	N3-C4-N4	7.36	123.15	118.00
36	1	2165	G	C6-C5-N7	-7.36	125.98	130.40
36	1	3107	U	C2-N1-C1'	-7.36	108.87	117.70
36	5	424	G	N9-C4-C5	-7.36	102.46	105.40
36	5	864	G	N1-C2-N2	-7.36	109.58	116.20
36	5	941	G	OP1-P-O3'	7.36	121.39	105.20
36	5	3036	G	O5'-P-OP1	7.36	119.53	110.70
1	2	398	G	N3-C4-C5	-7.36	124.92	128.60
36	1	750	G	O5'-P-OP2	-7.36	99.08	105.70
1	6	1758	U	C5-C6-N1	7.36	126.38	122.70
36	5	1897	G	N7-C8-N9	7.36	116.78	113.10
36	1	233	C	C2-N3-C4	-7.36	116.22	119.90
36	5	253	A	O4'-C1'-N9	7.36	114.09	108.20
36	5	1417	G	N3-C4-C5	-7.36	124.92	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	113	U	C6-N1-C2	-7.36	116.58	121.00
36	1	62	A	N1-C6-N6	7.36	123.01	118.60
36	1	386	A	C4-C5-C6	7.36	120.68	117.00
36	1	628	A	C2-N3-C4	-7.36	106.92	110.60
36	1	2813	A	C4-C5-N7	-7.36	107.02	110.70
36	5	869	G	N1-C2-N3	7.36	128.31	123.90
36	5	1131	G	C5-C6-N1	-7.36	107.82	111.50
36	5	3022	G	O4'-C1'-N9	7.36	114.08	108.20
36	1	1192	C	C5-C6-N1	7.35	124.68	121.00
1	6	1313	A	C5-N7-C8	-7.35	100.22	103.90
1	6	1412	G	N1-C6-O6	-7.35	115.49	119.90
1	6	1572	G	C5-N7-C8	-7.35	100.62	104.30
36	5	937	G	O5'-P-OP2	-7.35	99.08	105.70
36	5	2936	A	C2-N3-C4	7.35	114.28	110.60
36	1	2520	A	C5-N7-C8	-7.35	100.22	103.90
1	6	1787	C	O5'-P-OP1	-7.35	99.08	105.70
36	5	2726	C	N3-C4-N4	-7.35	112.85	118.00
36	1	1116	G	N7-C8-N9	7.35	116.78	113.10
36	1	1725	C	C4-C5-C6	7.35	121.08	117.40
36	5	723	U	N3-C2-O2	-7.35	117.05	122.20
36	1	788	C	C5-C6-N1	-7.35	117.33	121.00
36	1	790	U	C5-C4-O4	7.35	130.31	125.90
36	1	1424	C	N3-C4-N4	7.35	123.14	118.00
36	1	3106	A	N1-C6-N6	-7.35	114.19	118.60
36	5	718	G	C8-N9-C1'	-7.35	117.44	127.00
36	5	1437	C	C6-N1-C2	-7.35	117.36	120.30
36	5	1550	C	C6-N1-C2	-7.35	117.36	120.30
36	5	2363	A	C8-N9-C4	-7.35	102.86	105.80
36	5	3050	U	C2-N3-C4	-7.35	122.59	127.00
37	7	97	A	N1-C2-N3	7.35	132.97	129.30
36	1	1376	C	N3-C4-C5	-7.35	118.96	121.90
36	1	2122	G	C4-C5-C6	-7.35	114.39	118.80
36	5	1450	G	C4-N9-C1'	7.35	136.05	126.50
1	2	1172	G	O5'-P-OP1	-7.35	99.09	105.70
36	1	627	U	N3-C2-O2	7.35	127.34	122.20
36	1	2353	G	N9-C4-C5	-7.35	102.46	105.40
38	4	5	U	C2-N1-C1'	-7.35	108.89	117.70
36	5	1714	A	C8-N9-C4	7.35	108.74	105.80
1	2	1654	G	C8-N9-C1'	-7.34	117.45	127.00
36	1	835	G	C5-C6-O6	-7.34	124.19	128.60
1	6	578	U	O4'-C1'-N1	7.34	114.08	108.20
36	5	1332	A	O5'-P-OP1	-7.34	99.09	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2996	U	C2-N3-C4	7.34	131.41	127.00
36	5	3003	G	C4-C5-C6	-7.34	114.39	118.80
36	1	25	U	N1-C2-O2	-7.34	117.66	122.80
36	1	721	G	C5-C6-O6	-7.34	124.19	128.60
36	1	908	G	C6-N1-C2	-7.34	120.69	125.10
36	1	1311	G	C4-C5-N7	-7.34	107.86	110.80
37	7	84	A	N9-C4-C5	7.34	108.74	105.80
1	6	378	A	N1-C6-N6	-7.34	114.19	118.60
1	6	1002	G	C8-N9-C1'	7.34	136.54	127.00
1	6	1124	A	C4-C5-N7	7.34	114.37	110.70
1	6	1512	G	C6-C5-N7	-7.34	126.00	130.40
36	5	614	C	N3-C4-C5	7.34	124.84	121.90
36	5	1477	A	N1-C6-N6	-7.34	114.19	118.60
1	2	1141	G	C5-C6-O6	-7.34	124.20	128.60
36	1	73	C	N3-C4-C5	-7.34	118.96	121.90
36	1	1791	C	C6-N1-C1'	7.34	129.61	120.80
36	1	2193	U	C2-N3-C4	-7.34	122.60	127.00
36	1	2300	G	C5-C6-N1	-7.34	107.83	111.50
36	1	2984	C	C6-N1-C2	-7.34	117.36	120.30
1	6	440	U	C5-C6-N1	-7.34	119.03	122.70
36	5	515	C	N3-C4-C5	7.34	124.84	121.90
36	5	1147	G	N9-C4-C5	-7.34	102.46	105.40
36	5	3080	G	C5-C6-N1	7.34	115.17	111.50
36	1	2363	A	C5-C6-N1	-7.34	114.03	117.70
36	1	421	G	N3-C2-N2	7.34	125.03	119.90
36	1	496	C	C6-N1-C2	-7.34	117.36	120.30
37	3	88	G	N9-C4-C5	7.34	108.33	105.40
1	6	1474	G	N1-C6-O6	7.34	124.30	119.90
36	5	1709	C	C6-N1-C2	7.34	123.23	120.30
36	1	1851	G	N3-C2-N2	-7.33	114.77	119.90
37	3	115	G	C5-C6-N1	7.33	115.17	111.50
36	5	2282	U	N3-C4-C5	7.33	119.00	114.60
1	2	420	A	N1-C6-N6	7.33	123.00	118.60
36	1	649	A	C4-C5-N7	-7.33	107.03	110.70
1	6	389	G	C4-C5-N7	7.33	113.73	110.80
1	6	432	G	N3-C4-N9	7.33	130.40	126.00
1	6	868	G	N1-C6-O6	7.33	124.30	119.90
36	5	330	G	N3-C4-C5	7.33	132.27	128.60
36	5	421	G	N1-C2-N3	7.33	128.30	123.90
36	5	731	U	N1-C2-N3	7.33	119.30	114.90
36	5	1444	G	C6-C5-N7	-7.33	126.00	130.40
36	5	1601	U	N3-C2-O2	-7.33	117.07	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2294	U	N3-C4-O4	-7.33	114.27	119.40
36	5	2610	G	N3-C4-N9	-7.33	121.60	126.00
1	2	1602	C	C6-N1-C2	-7.33	117.37	120.30
36	1	3134	A	C8-N9-C4	-7.33	102.87	105.80
36	5	2873	U	N3-C4-C5	-7.33	110.20	114.60
36	1	2733	A	C5-C6-N1	7.33	121.36	117.70
36	5	1138	U	C4-C5-C6	7.33	124.10	119.70
36	1	424	G	C6-N1-C2	-7.33	120.70	125.10
36	1	652	G	C5-N7-C8	7.33	107.96	104.30
36	1	654	C	C5-C6-N1	-7.33	117.33	121.00
36	1	883	A	N9-C4-C5	7.33	108.73	105.80
36	1	1495	U	C5-C4-O4	7.33	130.30	125.90
36	1	2624	G	C4-C5-N7	7.33	113.73	110.80
36	5	27	C	C6-N1-C2	-7.33	117.37	120.30
36	5	530	G	O5'-P-OP1	-7.33	99.11	105.70
36	5	973	A	C5-C6-N6	-7.33	117.84	123.70
36	5	2817	A	N9-C4-C5	7.33	108.73	105.80
36	5	3025	C	C5-C4-N4	7.33	125.33	120.20
38	8	139	U	N3-C4-O4	-7.33	114.27	119.40
36	1	2311	G	C8-N9-C4	-7.33	103.47	106.40
36	1	3211	C	OP1-P-O3'	7.33	121.32	105.20
1	6	1749	A	N1-C2-N3	7.33	132.96	129.30
36	5	1085	A	C2-N3-C4	-7.33	106.94	110.60
36	1	1321	G	C5-C6-O6	-7.33	124.20	128.60
4	s2	229	LEU	CA-CB-CG	7.33	132.15	115.30
36	1	3174	A	C6-N1-C2	7.32	122.99	118.60
1	6	1002	G	C4-N9-C1'	-7.32	116.98	126.50
36	5	2130	G	C4-N9-C1'	-7.32	116.98	126.50
36	1	1632	A	C8-N9-C4	-7.32	102.87	105.80
36	1	1880	U	N1-C2-N3	7.32	119.29	114.90
36	1	2651	G	C6-C5-N7	-7.32	126.01	130.40
36	5	909	G	C5-C6-N1	-7.32	107.84	111.50
1	2	287	G	O4'-C1'-N9	7.32	114.06	108.20
36	1	2841	G	N3-C4-C5	-7.32	124.94	128.60
36	1	2981	U	N1-C2-O2	7.32	127.92	122.80
1	6	289	U	C6-N1-C2	-7.32	116.61	121.00
1	6	1058	U	P-O3'-C3'	7.32	128.49	119.70
1	6	1101	G	N3-C4-C5	-7.32	124.94	128.60
36	5	1213	G	N1-C2-N3	7.32	128.29	123.90
36	5	3182	G	C4-C5-N7	-7.32	107.87	110.80
1	2	598	U	C5-C6-N1	7.32	126.36	122.70
36	1	2664	C	C4-C5-C6	-7.32	113.74	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	52	A	N1-C2-N3	7.32	132.96	129.30
36	1	519	A	C5-N7-C8	-7.32	100.24	103.90
1	6	27	U	C6-N1-C2	-7.32	116.61	121.00
1	6	565	C	C6-N1-C2	7.32	123.23	120.30
1	6	794	U	C6-N1-C2	-7.32	116.61	121.00
36	5	760	G	C8-N9-C4	7.32	109.33	106.40
36	5	1408	G	C5-C6-N1	-7.32	107.84	111.50
36	5	3028	G	N1-C2-N2	-7.32	109.61	116.20
1	2	1572	G	C4-C5-N7	7.32	113.73	110.80
36	1	2241	U	N1-C2-N3	7.32	119.29	114.90
36	5	183	G	N3-C4-C5	-7.32	124.94	128.60
36	5	926	A	N1-C6-N6	-7.32	114.21	118.60
37	7	99	G	C6-C5-N7	7.32	134.79	130.40
1	6	1408	G	C2-N3-C4	-7.31	108.24	111.90
36	5	640	U	N1-C2-N3	7.31	119.29	114.90
36	5	1298	C	N3-C4-N4	7.31	123.12	118.00
36	1	707	U	N3-C4-C5	-7.31	110.21	114.60
36	1	909	G	C6-C5-N7	-7.31	126.01	130.40
36	1	2691	A	N1-C6-N6	-7.31	114.21	118.60
36	1	2707	C	N3-C4-C5	-7.31	118.97	121.90
36	1	2955	U	OP2-P-O3'	7.31	121.29	105.20
1	6	313	U	N1-C2-N3	7.31	119.29	114.90
36	5	1589	A	C4-C5-C6	7.31	120.66	117.00
36	5	2876	C	C5-C6-N1	7.31	124.66	121.00
36	5	2938	G	C4-C5-N7	7.31	113.72	110.80
37	7	84	A	OP1-P-O3'	7.31	121.29	105.20
36	1	3122	A	N1-C2-N3	-7.31	125.64	129.30
36	5	2817	A	C8-N9-C4	-7.31	102.88	105.80
38	8	2	A	C8-N9-C4	-7.31	102.88	105.80
1	2	1651	A	C6-N1-C2	7.31	122.98	118.60
36	5	421	G	C4-N9-C1'	7.31	136.00	126.50
36	5	1368	U	C5-C4-O4	-7.31	121.51	125.90
36	5	1411	C	N3-C2-O2	-7.31	116.78	121.90
36	5	2288	G	C8-N9-C1'	-7.31	117.50	127.00
36	5	2611	U	N3-C4-O4	7.31	124.52	119.40
36	5	2778	G	N3-C2-N2	-7.31	114.78	119.90
37	7	76	A	N7-C8-N9	-7.31	110.14	113.80
36	1	601	U	N1-C2-O2	7.31	127.92	122.80
36	1	1319	G	N1-C6-O6	-7.31	115.52	119.90
36	1	1406	A	C4-C5-N7	7.31	114.35	110.70
36	1	2610	G	C6-C5-N7	-7.31	126.02	130.40
36	1	2934	A	C6-N1-C2	7.31	122.98	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	93	C	N1-C2-N3	-7.31	114.08	119.20
36	5	2151	C	C2-N1-C1'	-7.31	110.76	118.80
36	5	2833	A	C5-C6-N1	7.31	121.35	117.70
36	5	2965	U	N3-C2-O2	7.31	127.31	122.20
36	1	693	A	C5-C6-N1	-7.30	114.05	117.70
36	1	1192	C	C6-N1-C1'	-7.30	112.03	120.80
36	1	1592	G	C4-N9-C1'	7.30	136.00	126.50
36	1	2382	G	C5-C6-N1	7.30	115.15	111.50
36	1	2803	A	C5-C6-N1	7.30	121.35	117.70
36	1	3326	G	C8-N9-C4	7.30	109.32	106.40
38	4	20	U	OP2-P-O3'	7.30	121.27	105.20
36	5	1010	G	N1-C6-O6	7.30	124.28	119.90
36	5	1443	G	N7-C8-N9	7.30	116.75	113.10
36	5	2754	G	C5-C6-N1	7.30	115.15	111.50
36	5	2993	G	C5-N7-C8	-7.30	100.65	104.30
36	5	3294	A	N9-C4-C5	7.30	108.72	105.80
36	1	1122	U	N3-C2-O2	-7.30	117.09	122.20
36	5	941	G	O5'-P-OP2	-7.30	99.13	105.70
36	5	1277	C	C6-N1-C2	-7.30	117.38	120.30
36	5	2130	G	N1-C2-N2	7.30	122.77	116.20
36	1	813	G	C2-N3-C4	-7.30	108.25	111.90
36	1	3197	G	C2-N3-C4	-7.30	108.25	111.90
1	6	324	U	N3-C2-O2	7.30	127.31	122.20
1	6	634	G	N9-C4-C5	7.30	108.32	105.40
1	6	1557	U	N3-C2-O2	-7.30	117.09	122.20
1	6	1616	G	OP2-P-O3'	7.30	121.26	105.20
1	2	793	A	C8-N9-C4	-7.30	102.88	105.80
36	1	92	G	C5-C6-N1	-7.30	107.85	111.50
36	1	1150	A	N1-C6-N6	-7.30	114.22	118.60
36	1	1420	C	OP2-P-O3'	7.30	121.26	105.20
36	1	1556	C	C5-C4-N4	7.30	125.31	120.20
36	1	2644	C	N1-C2-N3	7.30	124.31	119.20
36	5	1357	G	C8-N9-C4	-7.30	103.48	106.40
36	5	1473	G	C5-C6-O6	-7.30	124.22	128.60
36	5	2108	C	C5-C4-N4	7.30	125.31	120.20
36	5	2869	U	O5'-P-OP1	-7.30	99.13	105.70
36	5	3092	C	C6-N1-C1'	-7.30	112.04	120.80
1	2	49	C	N3-C4-N4	7.30	123.11	118.00
36	1	2651	G	O5'-P-OP1	-7.30	99.13	105.70
1	6	1636	C	O5'-P-OP1	-7.30	99.13	105.70
36	5	2126	A	N3-C4-C5	-7.30	121.69	126.80
36	5	3036	G	N1-C2-N3	7.30	128.28	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3131	U	C5-C6-N1	-7.30	119.05	122.70
1	2	572	C	N1-C2-O2	-7.30	114.52	118.90
36	1	908	G	C6-C5-N7	-7.30	126.02	130.40
36	1	2634	U	C2-N1-C1'	7.30	126.45	117.70
36	5	1319	G	C4-C5-N7	-7.30	107.88	110.80
36	5	2835	U	N1-C2-N3	7.30	119.28	114.90
36	5	3148	U	C5-C6-N1	-7.30	119.05	122.70
36	1	659	G	OP2-P-O3'	7.29	121.25	105.20
36	1	2897	A	C5-C6-N1	7.29	121.35	117.70
1	6	1093	A	N1-C6-N6	-7.29	114.22	118.60
36	5	688	G	N1-C6-O6	7.29	124.28	119.90
1	6	1214	U	N3-C4-O4	7.29	124.51	119.40
36	5	1938	U	C5-C6-N1	-7.29	119.05	122.70
36	1	691	A	C4-C5-N7	7.29	114.35	110.70
1	6	326	G	N1-C6-O6	7.29	124.28	119.90
1	6	995	A	C5-C6-N1	7.29	121.35	117.70
36	5	3214	U	C5-C4-O4	7.29	130.28	125.90
36	1	1176	C	C2-N3-C4	-7.29	116.25	119.90
36	5	1142	G	N7-C8-N9	7.29	116.75	113.10
36	5	2979	U	C2-N1-C1'	-7.29	108.95	117.70
1	2	1460	A	C5-C6-N6	7.29	129.53	123.70
36	1	2895	G	N1-C2-N2	-7.29	109.64	116.20
36	1	1111	U	C2-N3-C4	-7.29	122.63	127.00
36	1	3084	C	C6-N1-C2	-7.29	117.39	120.30
1	6	3	U	C6-N1-C2	7.29	125.37	121.00
1	6	1618	C	N1-C2-O2	7.29	123.27	118.90
36	5	1120	A	C2-N3-C4	-7.29	106.96	110.60
41	14	244	LEU	CA-CB-CG	-7.29	98.54	115.30
1	2	1363	U	C2-N1-C1'	7.29	126.44	117.70
36	1	2956	A	OP1-P-OP2	-7.29	108.67	119.60
36	1	3182	G	N9-C4-C5	-7.29	102.49	105.40
36	1	3252	G	C8-N9-C4	7.29	109.31	106.40
36	5	607	A	N1-C2-N3	7.29	132.94	129.30
36	5	1008	U	N1-C2-N3	-7.29	110.53	114.90
36	5	1850	A	C8-N9-C4	7.29	108.71	105.80
36	5	2826	U	N1-C2-N3	7.29	119.27	114.90
36	1	1330	A	O5'-P-OP1	-7.28	99.14	105.70
36	1	1410	U	O5'-P-OP1	7.28	119.44	110.70
36	1	3046	A	N1-C6-N6	7.28	122.97	118.60
1	6	862	A	C5-C6-N1	7.28	121.34	117.70
36	5	531	G	C8-N9-C1'	-7.28	117.53	127.00
36	5	1178	G	N1-C2-N3	7.28	128.27	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2715	A	C6-N1-C2	-7.28	114.23	118.60
36	1	223	U	O5'-P-OP1	7.28	119.44	110.70
36	1	1520	G	N9-C4-C5	-7.28	102.49	105.40
36	1	1594	A	N3-C4-C5	-7.28	121.70	126.80
36	5	900	G	N9-C4-C5	7.28	108.31	105.40
36	5	3013	U	OP2-P-O3'	7.28	121.22	105.20
36	1	966	U	C6-N1-C2	-7.28	116.63	121.00
36	1	2821	C	C5-C6-N1	7.28	124.64	121.00
1	6	1543	A	N1-C2-N3	7.28	132.94	129.30
1	2	1109	G	C4-C5-N7	7.28	113.71	110.80
36	1	89	A	C6-N1-C2	-7.28	114.23	118.60
36	1	1402	C	C5-C6-N1	-7.28	117.36	121.00
36	1	936	A	C4-N9-C1'	-7.28	113.20	126.30
36	1	1209	G	N3-C4-C5	-7.28	124.96	128.60
36	1	2238	G	N1-C2-N3	-7.28	119.53	123.90
36	1	3216	G	C8-N9-C1'	-7.28	117.54	127.00
1	6	1787	C	N3-C4-C5	-7.28	118.99	121.90
1	2	360	A	C5-N7-C8	-7.28	100.26	103.90
36	1	903	U	N1-C2-N3	7.28	119.27	114.90
1	6	1308	G	O5'-P-OP2	-7.28	99.15	105.70
36	5	631	U	N3-C4-O4	7.28	124.49	119.40
36	5	2808	A	C5-N7-C8	-7.28	100.26	103.90
1	2	1245	G	C2-N3-C4	7.27	115.54	111.90
1	2	1463	C	C6-N1-C2	7.27	123.21	120.30
36	1	1364	C	OP2-P-O3'	7.27	121.20	105.20
36	1	2715	A	O5'-P-OP1	-7.27	99.15	105.70
36	1	3263	G	C4-N9-C1'	7.27	135.96	126.50
1	6	1478	G	C8-N9-C1'	-7.27	117.54	127.00
36	5	187	A	N7-C8-N9	7.27	117.44	113.80
36	5	567	G	C5-N7-C8	-7.27	100.66	104.30
36	5	2991	A	C2-N3-C4	7.27	114.24	110.60
36	5	3373	U	N1-C2-O2	-7.27	117.71	122.80
36	1	833	G	N9-C4-C5	7.27	108.31	105.40
36	5	2952	G	C5-C6-O6	-7.27	124.24	128.60
36	1	427	C	C5-C6-N1	7.27	124.64	121.00
36	1	1393	A	C6-N1-C2	-7.27	114.24	118.60
36	1	2311	G	N7-C8-N9	7.27	116.73	113.10
36	1	2968	G	OP1-P-OP2	-7.27	108.70	119.60
36	1	3197	G	N3-C4-N9	-7.27	121.64	126.00
1	6	526	A	C2-N3-C4	-7.27	106.97	110.60
36	5	406	G	N3-C4-C5	7.27	132.24	128.60
36	5	1365	G	N1-C2-N3	7.27	128.26	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1870	C	N3-C4-N4	7.27	123.09	118.00
36	5	2135	U	O5'-P-OP2	-7.27	99.16	105.70
36	5	2874	G	N7-C8-N9	7.27	116.73	113.10
36	5	3196	U	O5'-P-OP1	7.27	119.42	110.70
36	1	2376	G	C8-N9-C4	-7.27	103.49	106.40
38	4	19	C	C4-C5-C6	7.27	121.03	117.40
36	5	771	A	C8-N9-C4	7.27	108.71	105.80
36	5	1136	A	C4-C5-C6	7.27	120.63	117.00
36	5	1444	G	C4-N9-C1'	7.27	135.95	126.50
36	5	2312	A	C5-C6-N6	7.27	129.51	123.70
36	5	2401	A	O4'-C1'-N9	7.27	114.01	108.20
36	1	948	C	N3-C4-C5	-7.27	118.99	121.90
36	5	404	G	C6-C5-N7	-7.27	126.04	130.40
36	1	787	G	N3-C4-C5	-7.26	124.97	128.60
1	6	606	A	O5'-P-OP1	-7.26	99.16	105.70
1	6	1083	G	N7-C8-N9	7.26	116.73	113.10
36	5	217	U	OP1-P-O3'	7.26	121.18	105.20
36	5	905	U	O5'-P-OP1	-7.26	99.16	105.70
36	5	1143	A	O5'-P-OP1	-7.26	99.16	105.70
36	5	1160	C	O5'-P-OP2	-7.26	99.16	105.70
36	5	1918	C	C4-C5-C6	7.26	121.03	117.40
36	5	2726	C	N3-C4-C5	-7.26	119.00	121.90
36	1	1125	U	C6-N1-C2	-7.26	116.64	121.00
36	5	3217	C	C5-C6-N1	-7.26	117.37	121.00
36	1	1429	G	O4'-C1'-N9	-7.26	102.39	108.20
36	5	396	A	N1-C6-N6	-7.26	114.24	118.60
36	5	3081	C	C6-N1-C2	7.26	123.20	120.30
36	5	3245	A	O5'-P-OP2	7.26	119.41	110.70
40	l3	196	ARG	NE-CZ-NH1	7.26	123.93	120.30
46	l9	184	LYS	CD-CE-NZ	7.26	128.40	111.70
36	1	537	A	C2-N3-C4	-7.26	106.97	110.60
1	6	925	G	C8-N9-C4	-7.26	103.50	106.40
1	6	1002	G	O5'-P-OP1	-7.26	99.17	105.70
36	5	2409	G	N1-C6-O6	7.26	124.26	119.90
19	C7	85	VAL	C-N-CD	-7.26	104.63	120.60
36	1	1361	U	N1-C2-O2	-7.26	117.72	122.80
1	6	1271	G	C6-C5-N7	-7.26	126.05	130.40
1	6	1465	C	C4-C5-C6	7.26	121.03	117.40
1	6	1552	U	C5-C6-N1	7.26	126.33	122.70
36	5	1302	A	N9-C4-C5	7.26	108.70	105.80
36	5	2856	G	N1-C6-O6	7.26	124.25	119.90
36	5	2911	A	C6-N1-C2	-7.26	114.25	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3054	U	C6-N1-C1'	7.26	131.36	121.20
36	1	656	A	C6-N1-C2	-7.26	114.25	118.60
36	1	1514	G	N3-C4-C5	-7.26	124.97	128.60
36	1	1870	C	C6-N1-C2	7.26	123.20	120.30
1	6	1019	A	N7-C8-N9	-7.26	110.17	113.80
36	5	61	A	N9-C4-C5	7.26	108.70	105.80
36	5	132	C	N3-C4-C5	-7.26	119.00	121.90
36	5	298	U	O5'-P-OP2	-7.26	99.17	105.70
36	5	521	A	N3-C4-N9	-7.26	121.59	127.40
36	5	1043	C	C6-N1-C2	7.26	123.20	120.30
36	1	2196	C	N3-C4-C5	7.25	124.80	121.90
36	1	2748	A	C2-N3-C4	-7.25	106.97	110.60
36	1	2939	G	C4-N9-C1'	7.25	135.93	126.50
1	6	1139	A	C2-N3-C4	7.25	114.23	110.60
36	1	45	A	C5-N7-C8	-7.25	100.27	103.90
36	1	944	C	N1-C2-O2	-7.25	114.55	118.90
36	1	1482	A	C5-N7-C8	-7.25	100.27	103.90
36	1	2326	A	N1-C2-N3	7.25	132.93	129.30
36	1	3181	C	N3-C4-C5	-7.25	119.00	121.90
38	4	53	A	C2-N3-C4	7.25	114.23	110.60
1	6	1639	C	C5-C4-N4	-7.25	115.12	120.20
36	5	2764	C	C4-C5-C6	-7.25	113.77	117.40
36	1	57	A	C5-C6-N1	-7.25	114.08	117.70
36	1	348	A	C2-N3-C4	-7.25	106.97	110.60
36	1	828	A	C8-N9-C4	-7.25	102.90	105.80
36	1	952	A	N3-C4-N9	-7.25	121.60	127.40
1	6	419	G	C5-C6-O6	-7.25	124.25	128.60
1	6	616	G	C8-N9-C4	-7.25	103.50	106.40
36	5	2629	U	C5-C6-N1	-7.25	119.08	122.70
36	5	3326	G	N9-C4-C5	-7.25	102.50	105.40
36	1	344	A	N3-C4-N9	-7.25	121.60	127.40
36	1	578	A	OP1-P-OP2	7.25	130.47	119.60
36	1	978	G	N3-C4-C5	7.25	132.22	128.60
36	5	925	A	O5'-P-OP1	-7.25	99.17	105.70
36	1	878	G	N9-C4-C5	7.25	108.30	105.40
36	1	2918	G	C5-C6-O6	-7.25	124.25	128.60
1	6	1672	G	O5'-P-OP2	-7.25	99.18	105.70
36	5	356	C	N1-C2-N3	7.25	124.28	119.20
36	5	934	G	C4-C5-N7	7.25	113.70	110.80
36	5	1478	C	C4-C5-C6	-7.25	113.78	117.40
36	5	3337	G	C6-C5-N7	-7.25	126.05	130.40
1	2	1291	G	N1-C2-N3	7.25	128.25	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1292	C	C6-N1-C2	7.25	123.20	120.30
36	1	1306	G	N7-C8-N9	7.25	116.72	113.10
36	1	1365	G	OP1-P-OP2	-7.25	108.73	119.60
36	1	2788	C	O5'-P-OP1	-7.25	99.18	105.70
1	6	1547	A	C2-N3-C4	-7.25	106.98	110.60
36	5	888	A	N1-C2-N3	7.25	132.92	129.30
36	5	2765	C	C6-N1-C2	-7.25	117.40	120.30
36	5	2972	G	C8-N9-C4	7.25	109.30	106.40
36	5	3180	A	C8-N9-C4	7.25	108.70	105.80
37	7	15	C	N3-C4-C5	-7.25	119.00	121.90
36	1	2851	A	O4'-C1'-N9	7.25	114.00	108.20
36	1	3076	C	C5-C6-N1	7.25	124.62	121.00
36	5	610	G	N1-C6-O6	-7.25	115.55	119.90
36	5	1049	C	C2-N3-C4	7.25	123.52	119.90
36	5	1164	G	N9-C4-C5	7.25	108.30	105.40
36	5	3235	C	C6-N1-C2	7.25	123.20	120.30
36	1	794	U	O5'-P-OP2	-7.24	99.18	105.70
36	1	3328	G	C4-C5-N7	7.24	113.70	110.80
36	5	878	G	C8-N9-C4	-7.24	103.50	106.40
36	5	916	G	O5'-P-OP1	-7.24	99.18	105.70
36	5	1845	G	C6-N1-C2	-7.24	120.75	125.10
36	5	3142	A	N1-C2-N3	7.24	132.92	129.30
36	1	904	A	N1-C2-N3	7.24	132.92	129.30
36	1	949	C	N3-C4-C5	-7.24	119.00	121.90
36	5	1389	G	C5-C6-O6	-7.24	124.25	128.60
36	5	2993	G	O5'-P-OP1	-7.24	99.18	105.70
36	1	1102	A	C2-N3-C4	-7.24	106.98	110.60
36	1	1316	C	N3-C4-C5	-7.24	119.00	121.90
36	1	1547	G	C8-N9-C1'	-7.24	117.59	127.00
1	6	1539	G	O4'-C1'-N9	-7.24	102.41	108.20
36	5	801	A	O4'-C1'-N9	-7.24	102.41	108.20
36	5	1385	C	C5-C6-N1	7.24	124.62	121.00
36	5	2283	G	N3-C4-C5	7.24	132.22	128.60
36	5	2929	C	N3-C4-N4	7.24	123.07	118.00
36	1	206	G	N9-C4-C5	-7.24	102.50	105.40
36	1	853	G	N1-C6-O6	-7.24	115.56	119.90
36	1	1466	G	N3-C4-N9	7.24	130.34	126.00
36	1	2838	A	N1-C2-N3	7.24	132.92	129.30
36	5	972	A	C8-N9-C4	-7.24	102.90	105.80
36	1	105	C	N3-C4-C5	7.24	124.80	121.90
36	1	215	G	C8-N9-C4	-7.24	103.50	106.40
36	1	2801	A	N1-C6-N6	7.24	122.94	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	65	G	OP2-P-O3'	7.24	121.12	105.20
36	1	636	C	C5-C4-N4	-7.24	115.13	120.20
36	1	937	G	C2-N3-C4	-7.24	108.28	111.90
36	1	2983	C	N3-C4-N4	-7.24	112.94	118.00
36	1	3216	G	N1-C6-O6	7.23	124.24	119.90
36	1	67	A	N1-C6-N6	-7.23	114.26	118.60
36	1	1794	G	C4-C5-N7	-7.23	107.91	110.80
36	5	41	G	C5-N7-C8	-7.23	100.68	104.30
36	5	992	A	C5-C6-N1	-7.23	114.08	117.70
36	5	3119	U	C6-N1-C2	-7.23	116.66	121.00
38	8	107	G	C5-C6-O6	-7.23	124.26	128.60
36	1	1435	A	O5'-P-OP1	-7.23	99.19	105.70
1	6	1099	U	N3-C2-O2	-7.23	117.14	122.20
36	5	1517	G	C2-N3-C4	-7.23	108.28	111.90
36	5	3330	A	N3-C4-C5	-7.23	121.74	126.80
36	1	2847	A	N1-C6-N6	7.23	122.94	118.60
1	6	448	C	N1-C2-O2	-7.23	114.56	118.90
36	5	641	C	C2-N3-C4	-7.23	116.28	119.90
36	5	1765	U	C6-N1-C2	-7.23	116.66	121.00
37	7	102	A	C5-C6-N6	-7.23	117.92	123.70
36	1	2300	G	C2-N3-C4	-7.23	108.29	111.90
36	1	2345	A	O5'-P-OP2	-7.23	99.20	105.70
36	1	2877	G	N3-C2-N2	-7.23	114.84	119.90
36	5	613	G	C2-N3-C4	-7.23	108.29	111.90
36	5	2396	G	N1-C6-O6	-7.23	115.56	119.90
36	5	2850	G	N7-C8-N9	-7.23	109.49	113.10
36	5	3232	G	O5'-P-OP1	7.23	119.37	110.70
36	1	1321	G	O5'-P-OP2	-7.23	99.20	105.70
38	4	109	A	C5-C6-N6	-7.23	117.92	123.70
36	1	875	G	N1-C2-N3	7.22	128.24	123.90
36	1	954	U	OP2-P-O3'	7.22	121.09	105.20
36	1	973	A	N3-C4-N9	-7.22	121.62	127.40
36	1	2647	A	C5-C6-N6	-7.22	117.92	123.70
36	1	2799	A	C8-N9-C4	-7.22	102.91	105.80
36	1	517	G	N7-C8-N9	7.22	116.71	113.10
36	1	2257	C	O4'-C1'-N1	7.22	113.98	108.20
36	1	2394	G	C6-C5-N7	7.22	134.73	130.40
36	1	2606	G	C8-N9-C4	-7.22	103.51	106.40
1	6	511	A	C8-N9-C4	7.22	108.69	105.80
1	6	752	A	N9-C4-C5	-7.22	102.91	105.80
1	6	1596	C	C6-N1-C2	7.22	123.19	120.30
36	5	2617	U	N1-C2-N3	7.22	119.23	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	N3-C4-C5	-7.22	121.74	126.80
1	2	111	U	C6-N1-C1'	-7.22	111.09	121.20
36	1	3046	A	C5-C6-N6	-7.22	117.92	123.70
36	5	560	G	N9-C4-C5	7.22	108.29	105.40
36	5	2916	U	N3-C4-C5	7.22	118.93	114.60
1	2	1272	U	C5-C4-O4	7.22	130.23	125.90
36	1	1137	C	C2-N1-C1'	7.22	126.74	118.80
36	1	1651	U	OP1-P-OP2	-7.22	108.77	119.60
36	1	2661	G	N9-C4-C5	-7.22	102.51	105.40
36	1	3262	U	N1-C2-N3	7.22	119.23	114.90
36	5	751	A	O5'-P-OP2	-7.22	99.20	105.70
36	5	1156	C	C2-N1-C1'	7.22	126.74	118.80
36	5	1389	G	C4-C5-N7	7.22	113.69	110.80
36	1	701	G	C5-C6-N1	-7.22	107.89	111.50
36	1	1152	G	N3-C4-C5	-7.22	124.99	128.60
1	6	16	G	C5-C6-O6	-7.22	124.27	128.60
1	6	884	A	N1-C6-N6	7.22	122.93	118.60
36	5	3103	A	N1-C2-N3	7.22	132.91	129.30
36	1	1312	C	C2-N3-C4	7.22	123.51	119.90
1	6	144	U	O5'-P-OP1	-7.22	99.20	105.70
1	6	1426	C	N3-C2-O2	7.22	126.95	121.90
36	5	2847	A	C4-C5-N7	7.22	114.31	110.70
1	2	18	C	N3-C4-N4	7.21	123.05	118.00
36	1	81	C	N3-C4-C5	-7.21	119.01	121.90
36	1	89	A	C4-C5-C6	7.21	120.61	117.00
36	1	594	U	C4-C5-C6	7.21	124.03	119.70
38	4	16	G	C6-C5-N7	-7.21	126.07	130.40
1	6	393	C	C4-C5-C6	-7.21	113.79	117.40
36	5	217	U	N1-C2-N3	7.21	119.23	114.90
36	5	869	G	C2-N3-C4	-7.21	108.29	111.90
36	5	942	U	C4-C5-C6	7.21	124.03	119.70
36	5	1786	G	C4-C5-N7	7.21	113.69	110.80
36	5	2735	U	C6-N1-C2	-7.21	116.67	121.00
36	5	2757	U	N3-C2-O2	-7.21	117.15	122.20
36	1	39	A	C5-C6-N6	-7.21	117.93	123.70
36	1	2982	A	C5-C6-N6	-7.21	117.93	123.70
1	6	919	A	N1-C6-N6	7.21	122.93	118.60
36	5	856	G	N3-C4-C5	-7.21	124.99	128.60
36	5	1379	G	N3-C4-N9	7.21	130.33	126.00
36	5	3060	C	C5-C4-N4	-7.21	115.15	120.20
37	7	22	A	N1-C2-N3	7.21	132.91	129.30
1	2	1270	G	C8-N9-C4	-7.21	103.52	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	751	A	N7-C8-N9	7.21	117.41	113.80
36	1	856	G	N1-C6-O6	-7.21	115.57	119.90
36	1	908	G	C8-N9-C1'	-7.21	117.62	127.00
36	1	2760	C	N1-C2-O2	-7.21	114.57	118.90
36	1	2870	C	C6-N1-C2	7.21	123.19	120.30
36	5	2864	A	O5'-P-OP2	7.21	119.35	110.70
36	1	1305	U	N3-C4-C5	-7.21	110.27	114.60
36	1	2704	A	N9-C4-C5	7.21	108.68	105.80
36	5	2237	C	C6-N1-C2	-7.21	117.42	120.30
36	5	2284	C	O5'-P-OP2	7.21	119.35	110.70
1	2	116	U	N3-C2-O2	-7.21	117.16	122.20
36	1	221	A	O5'-P-OP2	-7.21	99.21	105.70
36	1	721	G	N1-C6-O6	7.21	124.22	119.90
36	1	953	G	C8-N9-C4	7.21	109.28	106.40
36	1	962	A	C6-N1-C2	-7.21	114.27	118.60
36	1	1491	A	C4-C5-C6	7.21	120.61	117.00
36	1	3201	C	O5'-P-OP1	-7.21	99.21	105.70
36	1	3208	G	C5-C6-N1	7.21	115.10	111.50
15	c3	149	LEU	CA-CB-CG	7.21	131.88	115.30
36	5	2401	A	C5-C6-N1	-7.21	114.10	117.70
36	5	2728	G	OP1-P-OP2	7.21	130.41	119.60
36	5	3175	U	C5-C4-O4	7.21	130.23	125.90
36	1	1398	U	C5-C6-N1	-7.21	119.10	122.70
36	1	2872	A	C2-N3-C4	7.21	114.20	110.60
1	6	313	U	C4-C5-C6	7.21	124.02	119.70
1	6	1074	G	C5-C6-N1	-7.21	107.90	111.50
36	5	2298	U	OP1-P-OP2	7.21	130.41	119.60
36	5	2390	A	OP1-P-OP2	7.21	130.41	119.60
36	1	705	A	C8-N9-C4	7.21	108.68	105.80
1	6	797	G	C8-N9-C4	7.21	109.28	106.40
36	1	439	C	C6-N1-C1'	-7.20	112.16	120.80
36	1	1834	U	C2-N1-C1'	-7.20	109.06	117.70
36	1	2291	A	N7-C8-N9	7.20	117.40	113.80
36	1	2346	C	N3-C4-C5	-7.20	119.02	121.90
36	5	1162	U	O5'-P-OP2	-7.20	99.22	105.70
36	5	1165	A	O5'-P-OP1	-7.20	99.22	105.70
36	5	2710	C	N3-C2-O2	7.20	126.94	121.90
1	2	610	G	N3-C4-N9	7.20	130.32	126.00
1	6	980	G	N9-C4-C5	-7.20	102.52	105.40
36	5	55	G	C6-C5-N7	-7.20	126.08	130.40
36	5	1308	A	N1-C2-N3	-7.20	125.70	129.30
1	2	1565	C	N1-C2-O2	-7.20	114.58	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	628	A	C6-N1-C2	-7.20	114.28	118.60
36	5	2403	G	C6-C5-N7	-7.20	126.08	130.40
36	5	2853	A	N9-C4-C5	-7.20	102.92	105.80
36	5	2967	A	N1-C2-N3	7.20	132.90	129.30
36	5	3062	G	C5-C6-O6	-7.20	124.28	128.60
38	8	138	A	C6-N1-C2	-7.20	114.28	118.60
1	2	1279	C	C6-N1-C2	-7.20	117.42	120.30
36	1	1876	U	C2-N1-C1'	7.20	126.34	117.70
36	1	2646	C	O5'-P-OP2	-7.20	99.22	105.70
38	4	44	A	C8-N9-C4	-7.20	102.92	105.80
1	6	1271	G	C4-N9-C1'	7.20	135.86	126.50
36	5	35	A	C5-C6-N6	7.20	129.46	123.70
36	5	96	G	N3-C4-N9	-7.20	121.68	126.00
36	5	1327	C	C2-N3-C4	-7.20	116.30	119.90
36	5	1378	U	N3-C2-O2	7.20	127.24	122.20
36	5	1923	C	C6-N1-C2	-7.20	117.42	120.30
36	5	2757	U	C6-N1-C2	-7.20	116.68	121.00
36	5	3390	G	C5-C6-N1	-7.20	107.90	111.50
36	1	635	G	C6-N1-C2	-7.20	120.78	125.10
36	1	1307	G	O5'-P-OP2	-7.20	99.22	105.70
36	1	2963	C	C2-N1-C1'	7.20	126.72	118.80
1	6	858	G	C4-N9-C1'	7.20	135.86	126.50
36	5	1102	A	N1-C2-N3	7.20	132.90	129.30
36	5	1422	G	C5-N7-C8	-7.20	100.70	104.30
36	1	416	A	C4-C5-C6	7.20	120.60	117.00
36	1	1456	A	N1-C6-N6	-7.20	114.28	118.60
36	1	1547	G	N3-C2-N2	7.20	124.94	119.90
36	1	1549	U	N1-C2-O2	-7.20	117.76	122.80
36	1	2923	U	C2-N1-C1'	-7.20	109.07	117.70
1	6	431	C	C6-N1-C1'	7.20	129.44	120.80
36	5	1478	C	N3-C2-O2	7.19	126.94	121.90
36	5	2391	G	N7-C8-N9	-7.19	109.50	113.10
37	7	37	G	C6-C5-N7	-7.19	126.08	130.40
1	2	1594	G	C5-C6-O6	-7.19	124.28	128.60
36	1	1049	C	N3-C4-C5	7.19	124.78	121.90
36	1	1225	A	C8-N9-C4	7.19	108.68	105.80
1	6	1368	G	N9-C4-C5	-7.19	102.52	105.40
36	5	1884	A	N1-C2-N3	7.19	132.90	129.30
36	5	3219	G	C5-C6-N1	7.19	115.10	111.50
1	2	1462	G	N3-C4-C5	7.19	132.19	128.60
36	1	1431	G	C5-N7-C8	7.19	107.89	104.30
36	1	2940	A	C2-N3-C4	7.19	114.20	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	23	U	N3-C4-C5	-7.19	110.29	114.60
1	6	294	C	C4-C5-C6	7.19	121.00	117.40
36	5	1598	G	C5-C6-N1	7.19	115.09	111.50
36	5	2549	G	N1-C6-O6	7.19	124.21	119.90
36	5	2670	G	N1-C6-O6	7.19	124.21	119.90
36	5	3322	A	C5-C6-N1	-7.19	114.11	117.70
36	1	1442	U	C5-C6-N1	7.19	126.29	122.70
36	5	1114	U	N1-C2-O2	-7.19	117.77	122.80
36	5	3177	G	N1-C6-O6	-7.19	115.59	119.90
36	1	425	G	OP1-P-OP2	-7.19	108.82	119.60
36	1	3220	G	N1-C6-O6	-7.19	115.59	119.90
1	6	1572	G	C4-C5-N7	7.19	113.67	110.80
36	5	520	U	N3-C2-O2	-7.19	117.17	122.20
36	5	864	G	N3-C2-N2	7.19	124.93	119.90
36	5	3221	C	N3-C2-O2	-7.19	116.87	121.90
36	1	3086	A	C4-C5-C6	7.19	120.59	117.00
36	5	95	A	N3-C4-C5	7.19	131.83	126.80
36	5	646	A	N1-C6-N6	-7.19	114.29	118.60
36	5	2396	G	C6-N1-C2	-7.19	120.79	125.10
1	2	1745	G	C5-C6-N1	7.18	115.09	111.50
36	1	688	G	N3-C4-C5	-7.18	125.01	128.60
36	1	1397	C	C2-N3-C4	-7.18	116.31	119.90
36	1	1411	C	OP1-P-O3'	7.18	121.00	105.20
36	5	2690	G	N3-C4-N9	-7.18	121.69	126.00
36	1	421	G	N1-C2-N2	-7.18	109.74	116.20
36	1	1104	G	O5'-P-OP1	-7.18	99.24	105.70
36	1	1881	A	C6-N1-C2	-7.18	114.29	118.60
36	1	2400	G	C5-C6-N1	-7.18	107.91	111.50
36	1	2979	U	N1-C1'-C2'	7.18	123.34	114.00
1	6	1111	G	C6-N1-C2	-7.18	120.79	125.10
1	6	1478	G	C6-C5-N7	-7.18	126.09	130.40
36	5	1107	C	N1-C2-N3	7.18	124.23	119.20
36	5	2817	A	N3-C4-C5	-7.18	121.77	126.80
36	1	2108	C	C6-N1-C2	7.18	123.17	120.30
36	1	3144	G	OP2-P-O3'	7.18	121.00	105.20
36	5	1291	A	N1-C6-N6	-7.18	114.29	118.60
36	1	615	U	N1-C2-N3	7.18	119.21	114.90
36	1	709	A	C8-N9-C4	7.18	108.67	105.80
36	1	1411	C	N3-C4-C5	7.18	124.77	121.90
36	1	2914	G	C5-C6-N1	-7.18	107.91	111.50
1	6	1375	A	C2-N3-C4	-7.18	107.01	110.60
36	5	935	U	O5'-P-OP2	-7.18	99.24	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2115	G	C5-C6-O6	-7.18	124.29	128.60
36	5	3320	A	C4-C5-C6	7.18	120.59	117.00
36	1	751	A	C6-N1-C2	-7.18	114.29	118.60
36	1	3256	G	N1-C6-O6	7.18	124.21	119.90
36	5	426	G	C5-C6-N1	7.18	115.09	111.50
36	5	1048	A	C8-N9-C4	-7.18	102.93	105.80
36	5	1196	C	O4'-C1'-N1	7.18	113.94	108.20
36	5	1332	A	N1-C2-N3	7.18	132.89	129.30
36	5	2386	A	C6-C5-N7	-7.18	127.28	132.30
36	1	999	G	C5-C6-O6	-7.18	124.29	128.60
36	1	1552	G	N9-C4-C5	-7.18	102.53	105.40
36	5	2816	G	N1-C2-N2	7.18	122.66	116.20
36	5	2897	A	C8-N9-C1'	-7.18	114.78	127.70
1	2	1085	G	N3-C2-N2	7.17	124.92	119.90
36	1	696	C	C4-C5-C6	-7.17	113.81	117.40
36	1	952	A	C2-N3-C4	-7.17	107.01	110.60
36	1	1157	G	C2-N3-C4	-7.17	108.31	111.90
36	1	1400	G	C4-C5-C6	7.17	123.11	118.80
1	6	977	A	N1-C6-N6	7.17	122.91	118.60
36	5	321	C	C6-N1-C1'	-7.17	112.19	120.80
36	5	331	G	N1-C6-O6	7.17	124.20	119.90
36	5	425	G	N9-C4-C5	7.17	108.27	105.40
36	5	691	A	N1-C6-N6	-7.17	114.30	118.60
38	8	101	U	N1-C2-N3	7.17	119.20	114.90
36	1	838	G	C5-C6-N1	-7.17	107.91	111.50
36	1	2841	G	N3-C4-N9	7.17	130.30	126.00
1	6	275	C	C6-N1-C2	-7.17	117.43	120.30
1	6	1123	C	C5-C4-N4	-7.17	115.18	120.20
1	6	1201	G	N3-C4-N9	-7.17	121.70	126.00
36	5	3332	U	N1-C2-O2	-7.17	117.78	122.80
36	1	2225	U	O5'-P-OP2	-7.17	99.25	105.70
1	6	397	A	C2-N3-C4	-7.17	107.01	110.60
1	6	583	C	N3-C4-C5	-7.17	119.03	121.90
1	6	1605	G	OP2-P-O3'	7.17	120.98	105.20
1	6	1780	G	N3-C4-N9	7.17	130.30	126.00
36	5	403	C	N1-C2-O2	-7.17	114.60	118.90
36	5	519	A	C4-C5-C6	7.17	120.58	117.00
36	5	1061	A	C5-C6-N1	7.17	121.28	117.70
36	5	1293	U	O5'-P-OP2	7.17	119.31	110.70
36	5	1433	A	C5-C6-N6	-7.17	117.96	123.70
36	5	2207	A	C2-N3-C4	-7.17	107.01	110.60
36	1	287	G	C6-C5-N7	-7.17	126.10	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	725	G	C8-N9-C4	7.17	109.27	106.40
36	1	2185	G	N9-C4-C5	-7.17	102.53	105.40
36	1	2931	C	C5-C6-N1	-7.17	117.42	121.00
1	6	48	G	C5-C6-O6	7.17	132.90	128.60
1	6	595	G	C8-N9-C4	-7.17	103.53	106.40
1	6	595	G	N7-C8-N9	7.17	116.68	113.10
36	5	1443	G	C8-N9-C4	-7.17	103.53	106.40
36	5	1452	A	O5'-P-OP1	-7.17	99.25	105.70
37	7	75	G	C5-C6-N1	-7.17	107.92	111.50
36	1	385	A	N1-C6-N6	-7.17	114.30	118.60
36	1	838	G	N1-C6-O6	7.17	124.20	119.90
36	1	2803	A	C6-N1-C2	-7.17	114.30	118.60
1	6	460	A	C8-N9-C4	-7.17	102.93	105.80
1	6	1610	G	C6-C5-N7	-7.17	126.10	130.40
36	1	313	A	N1-C6-N6	7.17	122.90	118.60
36	1	660	A	C8-N9-C4	-7.17	102.93	105.80
36	5	507	U	N1-C2-N3	7.17	119.20	114.90
36	5	1590	G	N7-C8-N9	-7.17	109.52	113.10
36	5	3366	G	C8-N9-C4	-7.17	103.53	106.40
36	1	1552	G	C5-C6-O6	-7.16	124.30	128.60
36	1	2799	A	C2-N3-C4	-7.16	107.02	110.60
1	6	175	G	N9-C4-C5	-7.16	102.53	105.40
1	6	611	U	C2-N1-C1'	7.16	126.30	117.70
1	6	788	A	N7-C8-N9	-7.16	110.22	113.80
36	5	1148	G	N1-C6-O6	7.16	124.20	119.90
36	5	1408	G	C4-N9-C1'	7.16	135.81	126.50
36	5	1592	G	C4-N9-C1'	7.16	135.81	126.50
36	5	3115	C	C2-N3-C4	-7.16	116.32	119.90
36	5	3220	G	C5-C6-O6	7.16	132.90	128.60
36	5	3303	G	N9-C4-C5	7.16	108.27	105.40
37	7	37	G	N3-C4-C5	-7.16	125.02	128.60
36	1	3100	U	N1-C2-N3	-7.16	110.60	114.90
1	6	389	G	C5-C6-O6	-7.16	124.30	128.60
36	5	1906	G	N1-C2-N2	-7.16	109.75	116.20
36	5	2917	G	O5'-P-OP2	-7.16	99.25	105.70
1	2	577	G	C5-N7-C8	-7.16	100.72	104.30
1	2	1454	G	N7-C8-N9	-7.16	109.52	113.10
36	1	1482	A	C6-C5-N7	-7.16	127.29	132.30
36	1	2315	G	C8-N9-C4	-7.16	103.54	106.40
36	1	2398	A	C5-N7-C8	7.16	107.48	103.90
1	6	1023	A	C8-N9-C4	-7.16	102.94	105.80
1	6	1340	U	N3-C4-O4	-7.16	114.39	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	517	G	C2-N3-C4	-7.16	108.32	111.90
36	5	675	C	C5-C6-N1	7.16	124.58	121.00
36	5	1367	G	N3-C4-C5	-7.16	125.02	128.60
36	5	1922	A	C8-N9-C4	7.16	108.66	105.80
36	5	2742	C	O5'-P-OP2	-7.16	99.26	105.70
1	2	554	C	N3-C2-O2	-7.16	116.89	121.90
36	1	1592	G	C4-C5-N7	-7.16	107.94	110.80
36	1	2981	U	O5'-P-OP2	-7.16	99.26	105.70
1	6	342	C	N3-C4-C5	-7.16	119.04	121.90
36	5	2110	G	C5-C6-N1	7.16	115.08	111.50
36	5	2150	G	C8-N9-C4	-7.16	103.54	106.40
36	5	2419	A	OP1-P-OP2	-7.16	108.86	119.60
36	5	2664	C	C5-C4-N4	-7.16	115.19	120.20
36	5	2896	A	N1-C6-N6	7.16	122.89	118.60
36	1	640	U	N3-C2-O2	7.16	127.21	122.20
36	1	1166	G	C8-N9-C4	7.16	109.26	106.40
36	1	426	G	C8-N9-C4	7.16	109.26	106.40
36	1	1365	G	C8-N9-C4	-7.16	103.54	106.40
36	1	1547	G	N9-C4-C5	-7.16	102.54	105.40
36	1	1607	U	N1-C2-O2	7.16	127.81	122.80
37	3	25	G	C4-N9-C1'	7.16	135.80	126.50
1	6	119	A	N1-C2-N3	7.16	132.88	129.30
36	5	2964	G	N1-C6-O6	-7.16	115.61	119.90
36	1	1508	C	N1-C2-N3	7.15	124.21	119.20
36	1	2887	A	C2-N3-C4	7.15	114.18	110.60
36	1	3319	U	N1-C2-O2	7.15	127.81	122.80
36	5	3308	C	O5'-P-OP2	-7.15	99.26	105.70
36	1	643	U	N3-C4-O4	7.15	124.41	119.40
36	1	1191	U	N3-C2-O2	7.15	127.21	122.20
36	1	1337	A	C5-C6-N1	7.15	121.28	117.70
36	1	3383	G	N3-C2-N2	-7.15	114.89	119.90
1	6	337	G	C8-N9-C4	-7.15	103.54	106.40
1	6	630	A	C6-C5-N7	-7.15	127.29	132.30
36	5	1203	A	C6-C5-N7	-7.15	127.29	132.30
36	1	301	G	C8-N9-C4	-7.15	103.54	106.40
36	1	2179	C	N1-C2-O2	7.15	123.19	118.90
36	1	2211	U	O5'-P-OP1	-7.15	99.26	105.70
36	1	2368	A	C2-N3-C4	7.15	114.17	110.60
1	6	1012	U	N3-C2-O2	-7.15	117.19	122.20
36	5	1159	A	N1-C6-N6	7.15	122.89	118.60
1	6	1112	G	C4-C5-N7	-7.15	107.94	110.80
36	1	2839	G	N7-C8-N9	7.15	116.67	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	49	C	OP1-P-OP2	-7.15	108.88	119.60
1	6	423	G	N1-C2-N2	7.15	122.63	116.20
1	6	1660	A	N1-C2-N3	7.15	132.87	129.30
36	5	1052	U	C2-N3-C4	7.15	131.29	127.00
65	n9	54	LEU	CA-CB-CG	-7.15	98.86	115.30
36	5	725	G	N1-C6-O6	-7.15	115.61	119.90
36	5	1411	C	O5'-P-OP1	7.15	119.28	110.70
36	1	2419	A	N1-C6-N6	7.14	122.89	118.60
38	4	56	G	N3-C4-C5	-7.14	125.03	128.60
1	6	879	G	N9-C4-C5	-7.14	102.54	105.40
36	5	2830	G	N3-C4-N9	-7.14	121.71	126.00
36	5	3044	G	C5-C6-N1	-7.14	107.93	111.50
52	m6	101	ARG	NE-CZ-NH2	-7.14	116.73	120.30
1	2	1426	C	C5-C4-N4	-7.14	115.20	120.20
36	1	982	C	N3-C2-O2	-7.14	116.90	121.90
36	1	1431	G	C2-N3-C4	7.14	115.47	111.90
36	5	1902	G	C4-N9-C1'	7.14	135.79	126.50
36	1	680	G	C5-C6-N1	-7.14	107.93	111.50
1	6	1171	A	N1-C6-N6	-7.14	114.31	118.60
1	6	1490	C	O5'-P-OP1	-7.14	99.27	105.70
36	5	3098	G	C6-N1-C2	-7.14	120.81	125.10
36	1	146	U	C2-N1-C1'	7.14	126.27	117.70
36	1	2187	G	C5-C6-N1	-7.14	107.93	111.50
36	1	2407	C	N3-C4-N4	7.14	123.00	118.00
36	1	2952	G	C5-C6-N1	-7.14	107.93	111.50
1	6	371	G	N1-C6-O6	7.14	124.18	119.90
1	6	1007	C	N3-C4-N4	-7.14	113.00	118.00
36	5	957	C	OP1-P-O3'	7.14	120.91	105.20
36	5	2850	G	C8-N9-C4	7.14	109.26	106.40
36	5	3322	A	N1-C2-N3	7.14	132.87	129.30
37	3	89	G	N7-C8-N9	-7.14	109.53	113.10
1	6	246	G	C8-N9-C4	-7.14	103.55	106.40
36	5	1149	G	N3-C2-N2	-7.14	114.90	119.90
36	5	3078	U	N1-C2-N3	7.14	119.18	114.90
36	1	607	A	C4-C5-C6	7.14	120.57	117.00
36	1	3269	U	P-O3'-C3'	7.14	128.26	119.70
36	1	3387	U	N1-C2-O2	-7.14	117.81	122.80
36	5	606	C	C6-N1-C2	-7.14	117.44	120.30
36	5	922	U	N1-C2-O2	-7.14	117.80	122.80
36	5	1838	G	N9-C4-C5	-7.14	102.55	105.40
36	5	1944	U	N3-C4-O4	7.14	124.40	119.40
1	2	1631	A	N9-C4-C5	7.13	108.65	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	609	G	C4-C5-N7	7.13	113.65	110.80
36	1	2664	C	C5-C4-N4	-7.13	115.20	120.20
36	1	2939	G	N1-C6-O6	-7.13	115.62	119.90
1	6	51	A	N1-C2-N3	7.13	132.87	129.30
36	5	2858	U	N3-C2-O2	-7.13	117.21	122.20
36	1	934	G	N7-C8-N9	7.13	116.67	113.10
36	1	1865	A	C2-N3-C4	-7.13	107.03	110.60
1	6	1566	U	C5-C6-N1	-7.13	119.13	122.70
36	5	866	A	C8-N9-C4	7.13	108.65	105.80
1	2	1728	A	C6-N1-C2	-7.13	114.32	118.60
36	1	1299	U	N1-C2-O2	-7.13	117.81	122.80
37	3	7	G	C5-C6-O6	7.13	132.88	128.60
36	5	1902	G	N3-C4-N9	7.13	130.28	126.00
36	5	2768	U	N3-C4-O4	-7.13	114.41	119.40
1	2	334	G	N3-C4-C5	7.13	132.16	128.60
1	2	1486	G	C6-C5-N7	-7.13	126.12	130.40
1	2	1623	C	O5'-P-OP1	-7.13	99.28	105.70
36	1	3245	A	OP1-P-OP2	-7.13	108.91	119.60
1	6	3	U	N3-C4-C5	7.13	118.88	114.60
36	5	1139	G	C8-N9-C1'	7.13	136.27	127.00
1	2	993	A	N1-C6-N6	7.13	122.88	118.60
36	1	591	G	N3-C4-C5	-7.13	125.04	128.60
36	1	2606	G	C4-N9-C1'	7.13	135.76	126.50
1	6	1304	G	C8-N9-C4	7.13	109.25	106.40
36	5	1102	A	N9-C4-C5	7.13	108.65	105.80
36	5	1130	A	C4-C5-C6	-7.13	113.44	117.00
36	5	1176	C	N3-C4-N4	-7.13	113.01	118.00
36	5	2380	U	N1-C2-O2	-7.13	117.81	122.80
36	5	2979	U	C6-N1-C2	7.13	125.28	121.00
1	2	566	C	C5-C6-N1	-7.12	117.44	121.00
36	1	973	A	C5-C6-N6	7.12	129.40	123.70
36	1	1398	U	C5-C4-O4	7.12	130.18	125.90
36	5	41	G	N7-C8-N9	7.12	116.66	113.10
36	5	2334	U	C4-C5-C6	7.12	123.97	119.70
36	5	3093	C	C4-C5-C6	7.12	120.96	117.40
1	2	1029	U	C5-C4-O4	7.12	130.18	125.90
36	1	1614	C	N3-C2-O2	-7.12	116.91	121.90
36	1	2192	C	C6-N1-C2	-7.12	117.45	120.30
36	1	2415	C	O5'-P-OP2	-7.12	99.29	105.70
36	1	2802	A	N1-C2-N3	7.12	132.86	129.30
1	6	1	U	N3-C2-O2	-7.12	117.21	122.20
1	6	57	G	C4-N9-C1'	7.12	135.76	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3177	G	C5-C6-O6	7.12	132.87	128.60
36	1	145	G	N1-C6-O6	7.12	124.17	119.90
1	6	19	A	N1-C6-N6	7.12	122.87	118.60
1	6	1124	A	C5-N7-C8	-7.12	100.34	103.90
1	6	1586	A	N1-C6-N6	-7.12	114.33	118.60
36	5	774	G	N9-C4-C5	-7.12	102.55	105.40
36	5	1160	C	N1-C2-O2	-7.12	114.63	118.90
36	5	1172	G	N1-C6-O6	7.12	124.17	119.90
36	5	2784	G	N1-C6-O6	7.12	124.17	119.90
36	5	3043	C	N3-C4-C5	7.12	124.75	121.90
36	5	3304	U	N3-C4-O4	7.12	124.39	119.40
37	7	37	G	C4-N9-C1'	7.12	135.76	126.50
37	3	6	C	N3-C4-C5	7.12	124.75	121.90
1	6	142	G	C6-C5-N7	7.12	134.67	130.40
36	1	346	C	C6-N1-C2	-7.12	117.45	120.30
36	1	1317	A	O5'-P-OP1	-7.12	99.29	105.70
36	1	2521	U	C5-C6-N1	-7.12	119.14	122.70
38	4	24	G	C8-N9-C1'	-7.12	117.75	127.00
36	5	1782	U	C6-N1-C2	-7.12	116.73	121.00
36	1	942	U	C6-N1-C2	-7.12	116.73	121.00
1	6	337	G	C6-C5-N7	-7.12	126.13	130.40
1	6	1271	G	C4-C5-C6	7.12	123.07	118.80
36	5	1379	G	C4-C5-C6	7.12	123.07	118.80
36	1	93	C	N3-C4-N4	7.12	122.98	118.00
36	1	2830	G	N3-C4-C5	7.12	132.16	128.60
1	6	1003	A	N1-C6-N6	7.12	122.87	118.60
36	5	641	C	N3-C4-C5	7.12	124.75	121.90
36	5	1316	C	N1-C2-N3	7.12	124.18	119.20
36	5	2693	C	N3-C4-C5	7.12	124.75	121.90
37	7	117	A	N1-C2-N3	7.12	132.86	129.30
1	2	552	G	C4-C5-N7	7.11	113.65	110.80
36	1	917	A	C5-C6-N6	7.11	129.39	123.70
36	1	1179	A	C8-N9-C4	7.11	108.64	105.80
36	1	1581	C	N3-C4-C5	-7.11	119.06	121.90
36	5	1665	C	OP2-P-O3'	7.11	120.85	105.20
36	5	1680	G	C8-N9-C1'	-7.11	117.75	127.00
1	2	1272	U	N1-C2-N3	7.11	119.17	114.90
36	1	2950	G	C8-N9-C4	-7.11	103.56	106.40
36	5	1673	G	N1-C6-O6	7.11	124.17	119.90
36	5	3026	G	C2-N3-C4	-7.11	108.34	111.90
36	1	95	A	C5-C6-N6	7.11	129.39	123.70
36	1	721	G	C5-N7-C8	-7.11	100.74	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	784	A	C2-N3-C4	-7.11	107.05	110.60
36	1	2873	U	N3-C2-O2	-7.11	117.22	122.20
1	6	1628	U	N3-C2-O2	-7.11	117.22	122.20
36	5	816	A	C4-C5-N7	-7.11	107.14	110.70
36	5	1148	G	C4-N9-C1'	7.11	135.74	126.50
36	5	2280	A	N9-C4-C5	-7.11	102.96	105.80
36	5	2770	G	N7-C8-N9	7.11	116.66	113.10
36	5	3366	G	N3-C4-C5	-7.11	125.05	128.60
36	1	3050	U	N3-C4-C5	-7.11	110.33	114.60
1	6	415	C	C5-C4-N4	7.11	125.18	120.20
1	6	1418	G	C6-C5-N7	-7.11	126.14	130.40
36	5	1405	U	C6-N1-C1'	7.11	131.15	121.20
36	5	1514	G	C4-C5-N7	7.11	113.64	110.80
36	5	3120	C	N3-C2-O2	-7.11	116.92	121.90
36	1	2131	A	N1-C2-N3	7.11	132.85	129.30
36	1	2772	C	C3'-C2'-C1'	-7.11	95.81	101.50
36	1	2940	A	C5-C6-N1	7.11	121.25	117.70
38	4	2	A	C8-N9-C4	-7.11	102.96	105.80
38	4	9	A	C8-N9-C4	7.11	108.64	105.80
36	5	1194	G	N7-C8-N9	7.11	116.65	113.10
38	8	99	C	C6-N1-C1'	-7.11	112.27	120.80
1	2	620	A	N1-C6-N6	-7.11	114.34	118.60
1	2	1127	G	N9-C4-C5	7.11	108.24	105.40
36	1	345	G	C4-N9-C1'	7.11	135.74	126.50
36	1	2846	U	N3-C2-O2	-7.11	117.23	122.20
1	6	982	U	N3-C4-O4	-7.11	114.43	119.40
1	6	1480	G	C6-C5-N7	-7.11	126.14	130.40
36	5	687	U	N3-C4-O4	-7.11	114.43	119.40
36	5	752	C	N3-C4-C5	-7.11	119.06	121.90
36	5	1194	G	C4-C5-N7	7.11	113.64	110.80
1	2	419	G	C4-C5-N7	7.10	113.64	110.80
36	1	1165	A	N9-C4-C5	7.10	108.64	105.80
36	1	2638	C	C6-N1-C2	-7.10	117.46	120.30
36	1	2875	U	C5-C6-N1	7.10	126.25	122.70
36	1	3029	A	C2-N3-C4	-7.10	107.05	110.60
1	6	963	A	N1-C6-N6	7.10	122.86	118.60
36	5	2706	G	N1-C6-O6	-7.10	115.64	119.90
36	5	2863	G	C8-N9-C4	-7.10	103.56	106.40
1	2	350	U	C5-C4-O4	7.10	130.16	125.90
36	1	108	A	N9-C4-C5	-7.10	102.96	105.80
36	1	1773	C	C6-N1-C2	7.10	123.14	120.30
36	1	3215	A	C8-N9-C4	7.10	108.64	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	948	C	C2-N3-C4	-7.10	116.35	119.90
36	5	1177	G	C6-N1-C2	-7.10	120.84	125.10
36	5	2592	G	N1-C6-O6	7.10	124.16	119.90
36	1	2922	G	OP1-P-O3'	7.10	120.82	105.20
36	1	2953	U	OP1-P-OP2	-7.10	108.95	119.60
1	6	410	A	C6-N1-C2	-7.10	114.34	118.60
36	5	3232	G	N3-C4-C5	7.10	132.15	128.60
36	1	2661	G	C5-N7-C8	-7.10	100.75	104.30
1	6	811	A	C4-C5-C6	7.10	120.55	117.00
36	5	521	A	N7-C8-N9	7.10	117.35	113.80
36	5	973	A	N7-C8-N9	7.10	117.35	113.80
36	5	1481	A	C6-C5-N7	-7.10	127.33	132.30
36	5	2180	G	C8-N9-C4	7.10	109.24	106.40
36	1	861	C	N3-C4-C5	-7.10	119.06	121.90
52	M6	27	LEU	CB-CG-CD1	-7.10	98.94	111.00
1	6	1477	G	C2-N3-C4	7.10	115.45	111.90
36	1	321	C	C6-N1-C2	-7.09	117.46	120.30
36	1	1007	U	N1-C2-N3	-7.09	110.64	114.90
36	1	1843	C	C6-N1-C2	-7.09	117.46	120.30
1	6	1655	A	C2-N3-C4	-7.09	107.05	110.60
37	7	13	A	O5'-P-OP1	-7.09	99.31	105.70
36	1	183	G	N3-C4-C5	-7.09	125.05	128.60
36	1	2704	A	C5-C6-N6	7.09	129.37	123.70
36	5	1100	U	C5-C6-N1	-7.09	119.15	122.70
1	2	909	U	C5-C6-N1	-7.09	119.15	122.70
36	1	589	A	N1-C6-N6	-7.09	114.34	118.60
36	1	1728	G	C4-N9-C1'	7.09	135.72	126.50
36	1	2641	U	N3-C2-O2	-7.09	117.24	122.20
1	6	811	A	C6-C5-N7	-7.09	127.33	132.30
36	5	396	A	N7-C8-N9	-7.09	110.25	113.80
36	5	944	C	N1-C2-O2	7.09	123.16	118.90
38	8	47	C	N3-C2-O2	-7.09	116.94	121.90
1	2	1025	A	C4-C5-C6	7.09	120.55	117.00
1	2	1200	G	C4-N9-C1'	7.09	135.72	126.50
36	1	2618	G	N1-C2-N3	7.09	128.15	123.90
36	1	2624	G	C6-C5-N7	-7.09	126.15	130.40
1	6	1106	U	C5-C6-N1	7.09	126.25	122.70
36	5	728	G	N1-C6-O6	7.09	124.15	119.90
36	5	1367	G	N3-C4-N9	7.09	130.25	126.00
36	1	1511	U	C5-C6-N1	-7.09	119.16	122.70
36	1	3226	A	N1-C6-N6	-7.09	114.35	118.60
36	5	1492	G	C2-N3-C4	-7.09	108.36	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1898	G	C5-C6-N1	7.09	115.04	111.50
1	2	1241	G	C4-N9-C1'	7.09	135.71	126.50
36	1	872	U	N3-C4-O4	7.09	124.36	119.40
36	1	1094	U	O4'-C1'-N1	7.09	113.87	108.20
36	1	2919	A	N3-C4-C5	7.09	131.76	126.80
36	1	2919	A	O5'-P-OP2	-7.09	99.32	105.70
1	6	1176	G	N9-C4-C5	-7.09	102.56	105.40
36	5	1131	G	O5'-P-OP2	-7.09	99.32	105.70
36	5	1400	G	C8-N9-C4	-7.09	103.57	106.40
36	5	2268	U	N3-C4-O4	-7.09	114.44	119.40
36	5	2864	A	O5'-P-OP1	-7.09	99.32	105.70
36	5	2886	U	O5'-P-OP2	-7.09	99.32	105.70
36	5	3125	U	C2-N1-C1'	-7.09	109.20	117.70
36	5	913	A	N1-C2-N3	7.08	132.84	129.30
36	5	2294	U	C5-C4-O4	7.08	130.15	125.90
36	1	499	G	N3-C4-N9	-7.08	121.75	126.00
36	1	1155	C	C2-N3-C4	-7.08	116.36	119.90
1	6	396	G	N9-C4-C5	7.08	108.23	105.40
1	6	902	G	N1-C6-O6	7.08	124.15	119.90
1	6	1041	G	C2-N3-C4	-7.08	108.36	111.90
15	c3	42	ARG	NE-CZ-NH1	7.08	123.84	120.30
36	5	1299	U	O5'-P-OP2	-7.08	99.33	105.70
36	5	2172	A	C6-C5-N7	-7.08	127.34	132.30
36	5	2337	C	N3-C2-O2	-7.08	116.94	121.90
36	5	2385	G	C2-N3-C4	-7.08	108.36	111.90
36	5	3227	A	N9-C4-C5	-7.08	102.97	105.80
37	7	116	C	C4-C5-C6	-7.08	113.86	117.40
36	1	2641	U	N3-C4-C5	7.08	118.85	114.60
1	6	1150	G	C5-C6-O6	-7.08	124.35	128.60
1	6	1193	A	C8-N9-C4	-7.08	102.97	105.80
36	5	927	C	C6-N1-C2	-7.08	117.47	120.30
36	5	1471	U	C4-C5-C6	7.08	123.95	119.70
36	5	1865	A	N1-C6-N6	7.08	122.85	118.60
36	5	2791	G	N3-C2-N2	-7.08	114.94	119.90
38	8	94	C	C6-N1-C2	7.08	123.13	120.30
36	1	2326	A	N3-C4-N9	-7.08	121.74	127.40
36	5	856	G	C8-N9-C1'	-7.08	117.80	127.00
36	5	1010	G	C5-C6-O6	-7.08	124.35	128.60
36	1	22	G	N1-C2-N3	7.08	128.15	123.90
36	1	396	A	N1-C2-N3	7.08	132.84	129.30
36	1	972	A	C2-N3-C4	-7.08	107.06	110.60
36	1	1511	U	N3-C4-O4	-7.08	114.44	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3142	A	N7-C8-N9	-7.08	110.26	113.80
38	4	24	G	N1-C2-N3	7.08	128.15	123.90
1	6	156	A	C8-N9-C4	7.08	108.63	105.80
1	6	923	A	N1-C6-N6	-7.08	114.35	118.60
1	6	1295	G	C5-C6-O6	-7.08	124.35	128.60
1	6	1730	A	C6-N1-C2	-7.08	114.35	118.60
36	5	1924	U	O5'-P-OP2	-7.08	99.33	105.70
36	5	3006	A	C8-N9-C4	-7.08	102.97	105.80
36	5	3208	G	C8-N9-C1'	-7.08	117.80	127.00
1	2	615	A	C2-N3-C4	7.08	114.14	110.60
1	2	1484	G	N1-C6-O6	-7.08	115.65	119.90
36	1	1466	G	C4-C5-N7	7.08	113.63	110.80
1	6	1512	G	C5-C6-O6	-7.08	124.35	128.60
36	5	1198	C	C2-N1-C1'	7.08	126.58	118.80
36	5	1365	G	N3-C4-N9	-7.08	121.75	126.00
36	1	628	A	C4-C5-C6	7.08	120.54	117.00
36	1	821	U	N3-C2-O2	-7.08	117.25	122.20
36	1	2606	G	N3-C4-C5	-7.08	125.06	128.60
36	1	3330	A	C4-C5-N7	-7.08	107.16	110.70
37	3	91	G	N7-C8-N9	7.08	116.64	113.10
1	6	356	G	C2-N3-C4	7.08	115.44	111.90
36	5	504	A	C2-N3-C4	-7.08	107.06	110.60
36	5	1115	G	N3-C2-N2	7.08	124.85	119.90
36	5	2293	C	C5-C4-N4	-7.08	115.25	120.20
37	7	101	G	C5-C6-O6	-7.08	124.36	128.60
36	1	705	A	OP1-P-O3'	7.07	120.76	105.20
36	1	1514	G	C8-N9-C1'	-7.07	117.81	127.00
37	3	103	A	N1-C6-N6	-7.07	114.36	118.60
1	6	1420	C	N1-C2-O2	7.07	123.14	118.90
1	6	1583	A	C5-C6-N6	7.07	129.36	123.70
1	6	1781	A	C4-C5-C6	7.07	120.54	117.00
36	5	326	U	N3-C4-C5	-7.07	110.36	114.60
36	5	1113	G	OP2-P-O3'	7.07	120.76	105.20
36	5	1147	G	N1-C2-N2	-7.07	109.83	116.20
36	1	1906	G	N1-C6-O6	7.07	124.14	119.90
37	3	88	G	O5'-P-OP1	-7.07	99.33	105.70
1	2	597	G	N1-C6-O6	7.07	124.14	119.90
36	1	2862	U	OP1-P-OP2	-7.07	109.00	119.60
36	1	2993	G	N3-C4-N9	7.07	130.24	126.00
38	4	15	G	C8-N9-C4	-7.07	103.57	106.40
43	L6	154	LEU	CB-CG-CD1	-7.07	98.98	111.00
1	6	1145	U	O5'-P-OP2	-7.07	99.34	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	610	G	N9-C4-C5	7.07	108.23	105.40
36	5	2387	A	C6-N1-C2	-7.07	114.36	118.60
36	5	3024	A	O5'-P-OP1	-7.07	99.34	105.70
36	5	3202	G	N9-C4-C5	7.07	108.23	105.40
36	1	1308	A	C6-N1-C2	7.07	122.84	118.60
36	1	2956	A	C5-N7-C8	-7.07	100.36	103.90
1	6	325	G	C2-N3-C4	-7.07	108.37	111.90
36	5	891	G	N7-C8-N9	7.07	116.63	113.10
36	5	1101	G	C6-N1-C2	-7.07	120.86	125.10
36	5	2301	U	N3-C4-C5	-7.07	110.36	114.60
36	1	680	G	C8-N9-C4	7.07	109.23	106.40
36	1	1380	G	O5'-P-OP1	7.07	119.18	110.70
36	1	2772	C	N3-C4-N4	7.07	122.95	118.00
1	6	1645	G	N9-C4-C5	-7.07	102.57	105.40
36	5	574	U	OP2-P-O3'	7.07	120.75	105.20
36	5	1902	G	N9-C4-C5	-7.07	102.57	105.40
36	5	2661	G	N3-C4-C5	-7.07	125.07	128.60
36	5	2973	G	OP1-P-OP2	-7.07	109.00	119.60
36	1	218	G	C8-N9-C1'	7.07	136.18	127.00
36	1	970	A	N9-C1'-C2'	-7.07	104.23	112.00
36	1	1362	G	C8-N9-C4	7.07	109.23	106.40
36	1	1633	C	C5-C6-N1	7.07	124.53	121.00
36	1	3307	A	N1-C6-N6	7.07	122.84	118.60
1	6	407	A	C5-C6-N6	-7.07	118.05	123.70
1	6	480	G	C8-N9-C1'	-7.07	117.82	127.00
1	6	1272	U	N3-C4-C5	-7.07	110.36	114.60
36	5	60	A	N1-C6-N6	7.07	122.84	118.60
36	5	422	A	O4'-C1'-N9	-7.07	102.55	108.20
36	5	1838	G	C6-C5-N7	-7.07	126.16	130.40
36	1	93	C	N3-C2-O2	7.06	126.84	121.90
36	1	1884	A	N3-C4-N9	-7.06	121.75	127.40
36	1	2818	U	N3-C2-O2	7.06	127.14	122.20
36	5	756	U	N1-C2-N3	7.06	119.14	114.90
36	5	1151	U	N1-C2-O2	7.06	127.75	122.80
36	1	2408	U	N1-C2-N3	7.06	119.14	114.90
36	1	2427	U	N3-C4-C5	7.06	118.84	114.60
36	1	2877	G	C4-N9-C1'	-7.06	117.32	126.50
36	1	3045	G	C2-N3-C4	7.06	115.43	111.90
37	3	99	G	N3-C4-N9	-7.06	121.76	126.00
1	6	325	G	C8-N9-C4	7.06	109.22	106.40
36	5	2750	U	N3-C2-O2	-7.06	117.26	122.20
36	5	2796	G	N3-C4-N9	7.06	130.24	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	70	A	C8-N9-C4	-7.06	102.98	105.80
36	5	2777	G	C4-C5-N7	-7.06	107.98	110.80
36	1	895	A	N7-C8-N9	7.06	117.33	113.80
36	1	2745	G	N3-C4-C5	-7.06	125.07	128.60
1	6	1447	C	C2-N1-C1'	7.06	126.56	118.80
36	5	383	G	N7-C8-N9	-7.06	109.57	113.10
36	5	811	U	C2-N3-C4	-7.06	122.77	127.00
36	5	1537	A	C4-C5-C6	7.06	120.53	117.00
36	5	2645	G	N3-C2-N2	-7.06	114.96	119.90
36	1	154	U	O5'-P-OP1	-7.06	99.35	105.70
36	1	593	C	N3-C2-O2	-7.06	116.96	121.90
36	1	2715	A	C8-N9-C4	-7.06	102.98	105.80
37	3	82	G	C8-N9-C4	-7.06	103.58	106.40
36	5	1205	A	N7-C8-N9	-7.06	110.27	113.80
36	5	1774	C	C6-N1-C2	7.06	123.12	120.30
36	5	2623	G	C8-N9-C1'	-7.06	117.83	127.00
36	5	3366	G	C6-C5-N7	-7.06	126.17	130.40
36	1	2213	A	O5'-P-OP1	-7.06	99.35	105.70
36	1	3179	U	C5-C6-N1	-7.06	119.17	122.70
36	5	2183	A	C2-N3-C4	-7.06	107.07	110.60
36	1	358	G	N1-C6-O6	7.05	124.13	119.90
36	1	3049	A	C5-N7-C8	7.05	107.43	103.90
36	5	750	G	O5'-P-OP2	-7.05	99.35	105.70
36	5	1443	G	C5-N7-C8	-7.05	100.77	104.30
36	5	1733	G	C6-C5-N7	-7.05	126.17	130.40
36	5	2194	G	N3-C4-C5	-7.05	125.07	128.60
36	5	2400	G	C4-C5-N7	7.05	113.62	110.80
36	5	2659	G	C8-N9-C4	7.05	109.22	106.40
36	5	2856	G	C8-N9-C4	-7.05	103.58	106.40
36	5	1142	G	C4-C5-N7	7.05	113.62	110.80
36	1	27	C	N3-C2-O2	-7.05	116.96	121.90
36	1	3383	G	N1-C2-N2	7.05	122.55	116.20
37	3	58	C	N3-C4-C5	7.05	124.72	121.90
38	4	17	A	N1-C6-N6	7.05	122.83	118.60
38	4	31	G	N7-C8-N9	-7.05	109.57	113.10
1	6	1781	A	N7-C8-N9	7.05	117.33	113.80
36	5	760	G	N9-C4-C5	-7.05	102.58	105.40
36	5	2764	C	OP1-P-OP2	-7.05	109.02	119.60
37	7	105	C	C5-C6-N1	7.05	124.53	121.00
1	2	1127	G	C2-N3-C4	-7.05	108.38	111.90
36	1	45	A	N3-C4-N9	-7.05	121.76	127.40
36	1	3320	A	N1-C2-N3	7.05	132.82	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	672	A	C6-N1-C2	-7.05	114.37	118.60
36	5	709	A	C5-C6-N6	-7.05	118.06	123.70
36	5	927	C	C5-C6-N1	7.05	124.53	121.00
36	5	1597	C	C6-N1-C2	-7.05	117.48	120.30
36	5	2827	U	N1-C2-N3	-7.05	110.67	114.90
36	1	879	U	N3-C2-O2	7.05	127.13	122.20
36	1	2131	A	C6-N1-C2	-7.05	114.37	118.60
1	6	34	G	N3-C4-C5	7.05	132.12	128.60
1	6	1673	G	C4-C5-N7	7.05	113.62	110.80
1	2	1453	G	O5'-P-OP1	-7.05	99.36	105.70
36	1	41	G	N9-C4-C5	7.05	108.22	105.40
36	1	194	U	O5'-P-OP1	-7.05	99.36	105.70
36	1	655	C	C6-N1-C2	-7.05	117.48	120.30
36	1	1284	C	C6-N1-C2	-7.05	117.48	120.30
36	1	1363	A	C5-C6-N6	-7.05	118.06	123.70
36	1	2870	C	C2-N1-C1'	-7.05	111.05	118.80
1	6	1537	C	N1-C2-O2	-7.05	114.67	118.90
36	5	1327	C	N3-C4-C5	7.05	124.72	121.90
36	5	2215	A	C8-N9-C4	7.05	108.62	105.80
36	1	1446	A	C6-N1-C2	-7.04	114.37	118.60
1	6	120	U	C5-C4-O4	7.04	130.13	125.90
37	7	59	U	O5'-P-OP2	-7.04	99.36	105.70
36	1	662	U	OP2-P-O3'	7.04	120.69	105.20
36	1	2712	U	C6-N1-C2	7.04	125.23	121.00
1	6	93	A	N1-C6-N6	-7.04	114.37	118.60
1	6	1201	G	C4-N9-C1'	-7.04	117.34	126.50
36	5	1300	G	C8-N9-C1'	-7.04	117.84	127.00
36	5	1172	G	C8-N9-C4	-7.04	103.58	106.40
36	5	2625	C	N1-C2-O2	-7.04	114.67	118.90
1	2	378	A	C6-C5-N7	-7.04	127.37	132.30
36	5	1323	G	N3-C4-C5	-7.04	125.08	128.60
1	2	351	C	C5-C6-N1	-7.04	117.48	121.00
1	2	1454	G	C8-N9-C4	7.04	109.22	106.40
36	1	671	U	OP2-P-O3'	7.04	120.68	105.20
36	5	155	G	N3-C2-N2	7.04	124.83	119.90
36	5	521	A	C5-C6-N6	7.04	129.33	123.70
36	5	2357	A	N1-C2-N3	7.04	132.82	129.30
36	5	2370	G	C2-N3-C4	-7.04	108.38	111.90
37	7	107	C	O5'-P-OP1	7.04	119.14	110.70
1	6	1158	C	N3-C4-N4	7.04	122.93	118.00
36	5	1483	G	C6-C5-N7	-7.04	126.18	130.40
36	1	23	A	C4-C5-C6	7.04	120.52	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	399	A	N1-C2-N3	-7.04	125.78	129.30
36	1	2339	C	C2-N1-C1'	7.04	126.54	118.80
36	1	2393	G	C4-C5-N7	7.04	113.61	110.80
36	5	808	A	N1-C6-N6	-7.04	114.38	118.60
36	5	1152	G	C5-C6-N1	-7.04	107.98	111.50
36	1	821	U	C6-N1-C2	-7.03	116.78	121.00
1	6	621	A	C5-C6-N6	7.03	129.33	123.70
1	6	1297	G	O5'-P-OP1	-7.03	99.37	105.70
1	6	1332	C	C4-C5-C6	7.03	120.92	117.40
36	5	653	A	N1-C6-N6	7.03	122.82	118.60
38	8	45	C	O5'-P-OP1	-7.03	99.37	105.70
36	5	1506	A	O5'-P-OP1	7.03	119.14	110.70
36	5	2140	U	C4-C5-C6	7.03	123.92	119.70
36	5	2362	C	N1-C2-O2	7.03	123.12	118.90
36	1	256	G	N1-C6-O6	-7.03	115.68	119.90
36	1	385	A	C8-N9-C4	-7.03	102.99	105.80
36	1	688	G	C4-N9-C1'	7.03	135.64	126.50
36	1	709	A	N1-C6-N6	7.03	122.82	118.60
38	4	54	A	N9-C4-C5	7.03	108.61	105.80
36	5	228	U	N3-C2-O2	-7.03	117.28	122.20
36	5	1092	C	C6-N1-C2	-7.03	117.49	120.30
36	5	2524	A	C4-C5-N7	7.03	114.22	110.70
36	5	2947	G	OP1-P-O3'	7.03	120.67	105.20
1	2	21	U	C2-N1-C1'	7.03	126.14	117.70
36	1	50	U	N1-C2-N3	7.03	119.12	114.90
36	1	2760	C	C2-N1-C1'	-7.03	111.07	118.80
1	6	771	A	C2-N3-C4	7.03	114.11	110.60
36	5	2125	A	N1-C2-N3	7.03	132.81	129.30
36	5	2351	U	O5'-P-OP2	-7.03	99.37	105.70
36	5	2713	U	C5-C6-N1	7.03	126.21	122.70
36	1	2601	A	O5'-P-OP2	-7.03	99.38	105.70
36	1	3327	G	C4-C5-N7	-7.03	107.99	110.80
38	4	99	C	N3-C4-C5	7.03	124.71	121.90
4	s2	61	LEU	CA-CB-CG	-7.03	99.14	115.30
36	5	1213	G	C4-C5-N7	-7.03	107.99	110.80
36	5	1848	G	N7-C8-N9	-7.03	109.59	113.10
36	5	2828	G	OP1-P-O3'	-7.03	89.74	105.20
36	5	2837	A	C5-C6-N1	7.03	121.21	117.70
36	1	2400	G	N7-C8-N9	7.03	116.61	113.10
36	1	3276	G	N7-C8-N9	7.03	116.61	113.10
1	6	29	U	C4-C5-C6	7.03	123.92	119.70
36	5	1465	A	N1-C6-N6	7.03	122.81	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
59	n3	48	ARG	NE-CZ-NH1	7.03	123.81	120.30
1	2	1218	G	O4'-C1'-N9	7.02	113.82	108.20
36	1	1076	C	C6-N1-C2	7.02	123.11	120.30
36	1	1164	G	N3-C4-N9	-7.02	121.79	126.00
36	1	1422	G	C8-N9-C1'	-7.02	117.87	127.00
36	1	1592	G	C4-C5-C6	7.02	123.02	118.80
36	1	2912	G	C5-C6-O6	7.02	132.81	128.60
36	5	787	G	N7-C8-N9	-7.02	109.59	113.10
36	5	2724	U	O5'-P-OP1	7.02	119.13	110.70
1	2	318	U	C5-C6-N1	-7.02	119.19	122.70
36	1	325	A	C5-C6-N1	7.02	121.21	117.70
36	1	625	G	C5-C6-N1	-7.02	107.99	111.50
36	1	2145	A	C5-C6-N6	-7.02	118.08	123.70
36	1	3344	A	C6-C5-N7	-7.02	127.38	132.30
48	M1	112	LEU	CA-CB-CG	7.02	131.45	115.30
36	5	424	G	C6-N1-C2	-7.02	120.89	125.10
36	5	784	A	N7-C8-N9	7.02	117.31	113.80
36	5	979	U	C6-N1-C2	-7.02	116.79	121.00
36	5	31	C	N3-C2-O2	-7.02	116.98	121.90
36	5	858	A	N3-C4-C5	-7.02	121.89	126.80
37	7	50	U	N1-C2-O2	7.02	127.72	122.80
1	2	1025	A	C8-N9-C1'	-7.02	115.07	127.70
1	2	1165	G	N3-C4-N9	7.02	130.21	126.00
1	6	158	U	C2-N1-C1'	7.02	126.12	117.70
1	6	1047	G	N3-C4-C5	-7.02	125.09	128.60
36	5	676	G	C8-N9-C4	-7.02	103.59	106.40
36	5	3107	U	OP2-P-O3'	7.02	120.64	105.20
36	1	1374	G	N3-C4-N9	7.02	130.21	126.00
36	1	2381	G	C5-C6-O6	-7.02	124.39	128.60
36	1	2606	G	N1-C2-N3	7.02	128.11	123.90
1	6	335	U	N3-C2-O2	-7.02	117.29	122.20
1	6	1030	A	C2-N3-C4	-7.02	107.09	110.60
36	5	1003	A	C4-C5-N7	7.02	114.21	110.70
36	5	3174	A	C8-N9-C4	-7.02	102.99	105.80
36	5	3261	C	C6-N1-C2	7.02	123.11	120.30
36	1	293	C	C6-N1-C2	7.02	123.11	120.30
36	1	826	G	C4-C5-N7	7.02	113.61	110.80
36	5	210	U	C5-C6-N1	-7.02	119.19	122.70
36	5	1108	U	N3-C4-C5	-7.02	110.39	114.60
36	5	1896	A	C5-C6-N6	7.02	129.31	123.70
1	2	574	G	N1-C6-O6	-7.01	115.69	119.90
1	2	1600	A	C6-C5-N7	-7.01	127.39	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	815	G	C8-N9-C4	-7.01	103.59	106.40
36	1	1443	G	O5'-P-OP2	7.01	119.12	110.70
36	1	1488	G	C5-C6-O6	-7.01	124.39	128.60
36	1	1587	A	N1-C6-N6	-7.01	114.39	118.60
36	1	2363	A	C4-C5-N7	-7.01	107.19	110.70
1	6	1050	G	C2-N3-C4	-7.01	108.39	111.90
1	6	1600	A	O4'-C1'-N9	7.01	113.81	108.20
36	5	1762	C	C6-N1-C2	-7.01	117.49	120.30
36	5	2733	A	N1-C6-N6	7.01	122.81	118.60
36	1	1924	U	C5-C6-N1	-7.01	119.19	122.70
36	5	436	A	N1-C2-N3	7.01	132.81	129.30
36	5	960	U	OP2-P-O3'	7.01	120.63	105.20
1	2	373	G	C4-N9-C1'	7.01	135.62	126.50
1	2	513	U	C6-N1-C2	-7.01	116.79	121.00
1	2	1774	G	N3-C4-C5	-7.01	125.09	128.60
36	1	212	G	C4-N9-C1'	7.01	135.62	126.50
36	1	917	A	C2-N3-C4	7.01	114.11	110.60
36	1	1905	G	C4-N9-C1'	-7.01	117.39	126.50
36	1	2277	C	C4-C5-C6	7.01	120.91	117.40
36	1	2844	C	C6-N1-C2	7.01	123.11	120.30
36	1	2893	C	O5'-P-OP2	-7.01	99.39	105.70
36	1	2940	A	N9-C4-C5	7.01	108.61	105.80
36	1	3373	U	C5-C6-N1	-7.01	119.19	122.70
1	6	464	A	N1-C6-N6	7.01	122.81	118.60
36	5	586	C	N3-C4-C5	-7.01	119.09	121.90
36	5	1127	G	N3-C4-N9	7.01	130.21	126.00
36	5	1604	G	C5-C6-N1	7.01	115.00	111.50
36	5	2549	G	C4-N9-C1'	7.01	135.62	126.50
36	5	2963	C	C4-C5-C6	-7.01	113.89	117.40
36	5	3119	U	O5'-P-OP2	-7.01	99.39	105.70
59	n3	120	LYS	CD-CE-NZ	7.01	127.83	111.70
1	2	104	A	C2-N3-C4	7.01	114.11	110.60
36	1	218	G	N9-C4-C5	7.01	108.20	105.40
36	1	1106	G	O5'-P-OP1	7.01	119.11	110.70
36	1	1433	A	N3-C4-C5	-7.01	121.89	126.80
36	1	2192	C	C4-C5-C6	7.01	120.90	117.40
36	1	2392	C	C6-N1-C2	7.01	123.10	120.30
1	6	810	G	O5'-P-OP2	-7.01	99.39	105.70
36	5	15	C	N3-C4-C5	7.01	124.70	121.90
36	5	1444	G	N3-C4-N9	7.01	130.21	126.00
37	7	26	C	N3-C4-C5	-7.01	119.10	121.90
38	8	4	C	O5'-P-OP2	-7.01	99.39	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1537	C	C5-C6-N1	7.01	124.50	121.00
52	M6	78	ARG	NE-CZ-NH1	7.01	123.80	120.30
1	6	13	C	N3-C2-O2	-7.01	117.00	121.90
1	6	619	A	N1-C6-N6	-7.01	114.39	118.60
1	2	1526	A	C8-N9-C4	7.01	108.60	105.80
1	6	864	U	N3-C4-C5	-7.01	110.40	114.60
36	5	858	A	C6-N1-C2	-7.01	114.40	118.60
36	5	3122	A	C4-C5-N7	7.01	114.20	110.70
1	2	1782	A	C5-C6-N1	-7.00	114.20	117.70
36	1	2323	G	C6-C5-N7	-7.00	126.20	130.40
1	6	884	A	N9-C4-C5	-7.00	103.00	105.80
36	5	1116	G	OP2-P-O3'	7.00	120.61	105.20
1	2	18	C	C5-C6-N1	7.00	124.50	121.00
1	2	1486	G	N3-C4-N9	7.00	130.20	126.00
36	1	2363	A	N3-C4-N9	-7.00	121.80	127.40
1	6	264	G	C8-N9-C4	7.00	109.20	106.40
36	5	613	G	N3-C4-C5	7.00	132.10	128.60
36	5	2244	A	C8-N9-C4	7.00	108.60	105.80
36	5	2280	A	C5-N7-C8	-7.00	100.40	103.90
36	5	2371	G	C5-C6-O6	-7.00	124.40	128.60
1	2	378	A	N9-C4-C5	-7.00	103.00	105.80
36	1	644	G	C2-N3-C4	-7.00	108.40	111.90
1	6	1034	C	C6-N1-C2	-7.00	117.50	120.30
36	5	528	U	N3-C4-C5	-7.00	110.40	114.60
36	5	1142	G	C5-N7-C8	-7.00	100.80	104.30
36	5	1407	A	C5-N7-C8	7.00	107.40	103.90
36	5	2412	G	C6-C5-N7	-7.00	126.20	130.40
36	5	2662	G	C5-N7-C8	7.00	107.80	104.30
36	5	2666	C	C6-N1-C2	7.00	123.10	120.30
36	5	3244	A	O4'-C1'-N9	-7.00	102.60	108.20
36	1	1172	G	N3-C4-C5	-7.00	125.10	128.60
36	1	2241	U	N1-C2-O2	-7.00	117.90	122.80
1	6	1362	U	C6-N1-C2	-7.00	116.80	121.00
36	1	105	C	C6-N1-C2	7.00	123.10	120.30
36	1	108	A	C8-N9-C4	7.00	108.60	105.80
36	1	589	A	C4-C5-N7	-7.00	107.20	110.70
36	1	1833	G	C5-C6-N1	-7.00	108.00	111.50
36	1	2779	A	N1-C2-N3	7.00	132.80	129.30
36	1	2804	A	C5-C6-N1	7.00	121.20	117.70
36	1	3376	A	N1-C6-N6	-7.00	114.40	118.60
37	3	89	G	C8-N9-C4	7.00	109.20	106.40
1	6	686	C	C6-N1-C2	-7.00	117.50	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	789	A	C6-N1-C2	-7.00	114.40	118.60
36	5	2969	A	C2-N3-C4	-7.00	107.10	110.60
36	5	3124	G	N3-C4-N9	-7.00	121.80	126.00
36	5	3362	A	O4'-C1'-N9	7.00	113.80	108.20
37	7	44	C	C2-N1-C1'	-7.00	111.10	118.80
36	1	537	A	N3-C4-C5	7.00	131.70	126.80
36	1	942	U	N3-C2-O2	-7.00	117.30	122.20
36	1	2885	C	N3-C4-N4	7.00	122.90	118.00
36	5	639	G	C8-N9-C1'	-7.00	117.91	127.00
36	5	940	G	C4-N9-C1'	-7.00	117.40	126.50
36	5	1192	C	C2-N3-C4	7.00	123.40	119.90
36	5	2661	G	C4-C5-C6	7.00	123.00	118.80
36	5	3335	A	N1-C2-N3	7.00	132.80	129.30
36	1	104	G	C5-C6-O6	-7.00	124.40	128.60
36	1	1306	G	C4-C5-N7	7.00	113.60	110.80
36	1	2274	U	N3-C4-O4	-7.00	114.50	119.40
36	5	422	A	N9-C4-C5	7.00	108.60	105.80
36	5	1303	A	C4-C5-C6	-7.00	113.50	117.00
1	2	162	A	C2-N3-C4	6.99	114.10	110.60
1	6	533	U	O5'-P-OP1	-6.99	99.41	105.70
1	6	600	U	N3-C4-O4	6.99	124.30	119.40
1	6	1653	C	N1-C2-O2	6.99	123.10	118.90
36	5	278	U	N1-C2-N3	6.99	119.10	114.90
36	5	1682	U	O5'-P-OP1	-6.99	99.41	105.70
36	5	2902	A	C2-N3-C4	-6.99	107.10	110.60
36	5	3207	U	C2-N1-C1'	-6.99	109.31	117.70
1	6	421	A	N9-C4-C5	-6.99	103.00	105.80
36	5	1499	C	N1-C2-O2	-6.99	114.70	118.90
36	5	2552	C	C6-N1-C2	6.99	123.10	120.30
36	5	2689	A	N3-C4-N9	-6.99	121.81	127.40
36	1	947	G	C5-C6-O6	6.99	132.79	128.60
36	1	2243	A	C4-C5-C6	6.99	120.50	117.00
36	1	2377	G	OP1-P-OP2	-6.99	109.11	119.60
36	1	2918	G	C6-N1-C2	-6.99	120.91	125.10
37	3	115	G	N9-C4-C5	-6.99	102.60	105.40
1	6	1132	A	N7-C8-N9	-6.99	110.31	113.80
36	5	2902	A	N9-C4-C5	6.99	108.60	105.80
36	5	3079	U	N3-C2-O2	-6.99	117.31	122.20
36	5	3315	G	N7-C8-N9	6.99	116.59	113.10
1	2	411	C	C6-N1-C2	6.99	123.10	120.30
1	2	581	U	C2-N1-C1'	6.99	126.08	117.70
36	1	864	G	N3-C2-N2	6.99	124.79	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
68	O2	115	LEU	CA-CB-CG	-6.99	99.23	115.30
1	6	316	A	N1-C6-N6	6.99	122.79	118.60
1	6	411	C	N3-C4-C5	-6.99	119.11	121.90
36	5	400	G	N3-C4-N9	-6.99	121.81	126.00
36	5	728	G	N9-C4-C5	-6.99	102.60	105.40
1	2	1737	G	C2-N3-C4	-6.99	108.41	111.90
36	1	2657	A	N1-C6-N6	-6.99	114.41	118.60
36	5	228	U	N1-C2-O2	6.99	127.69	122.80
36	5	497	C	C6-N1-C2	-6.99	117.50	120.30
36	5	1802	C	C6-N1-C2	-6.99	117.50	120.30
1	2	555	A	C8-N9-C4	-6.99	103.01	105.80
36	1	372	A	C6-C5-N7	-6.99	127.41	132.30
36	1	2999	U	C5-C6-N1	-6.99	119.21	122.70
36	1	3009	G	C6-C5-N7	-6.99	126.21	130.40
1	6	1504	G	C2-N3-C4	-6.99	108.41	111.90
36	5	774	G	C5-C6-O6	-6.99	124.41	128.60
36	5	1461	A	C8-N9-C4	6.99	108.59	105.80
36	5	920	A	OP1-P-OP2	-6.98	109.12	119.60
36	5	2601	A	C8-N9-C4	6.98	108.59	105.80
1	2	401	A	C8-N9-C4	6.98	108.59	105.80
36	1	1382	G	OP2-P-O3'	6.98	120.56	105.20
36	1	2550	U	N3-C2-O2	-6.98	117.31	122.20
37	3	82	G	N3-C4-C5	-6.98	125.11	128.60
1	6	758	U	O5'-P-OP1	-6.98	99.42	105.70
1	6	1138	A	C6-N1-C2	6.98	122.79	118.60
36	5	932	U	C2-N3-C4	-6.98	122.81	127.00
36	5	989	A	C5-C6-N6	-6.98	118.11	123.70
36	5	1119	C	O5'-P-OP2	-6.98	99.42	105.70
36	5	3366	G	C4-N9-C1'	6.98	135.58	126.50
38	8	15	G	N7-C8-N9	-6.98	109.61	113.10
36	1	62	A	C6-N1-C2	6.98	122.79	118.60
36	1	2611	U	C4-C5-C6	6.98	123.89	119.70
44	L7	108	LEU	CA-CB-CG	-6.98	99.24	115.30
1	6	1027	A	C2-N3-C4	-6.98	107.11	110.60
36	5	291	C	N3-C4-N4	-6.98	113.11	118.00
36	5	296	A	C8-N9-C4	-6.98	103.01	105.80
36	5	421	G	C8-N9-C1'	-6.98	117.92	127.00
36	5	1213	G	C8-N9-C4	-6.98	103.61	106.40
36	5	1453	A	N7-C8-N9	-6.98	110.31	113.80
36	5	1455	U	N3-C4-O4	6.98	124.29	119.40
36	1	3278	C	O5'-P-OP1	-6.98	99.42	105.70
1	6	607	G	C8-N9-C4	-6.98	103.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1599	C	N3-C2-O2	-6.98	117.02	121.90
36	5	1317	A	C5-C6-N6	-6.98	118.12	123.70
36	5	2396	G	C5-C6-N1	6.98	114.99	111.50
1	2	332	U	N3-C4-O4	-6.98	114.52	119.40
1	2	1127	G	C5-C6-N1	-6.98	108.01	111.50
36	1	104	G	C6-C5-N7	-6.98	126.21	130.40
36	1	1323	G	C5-C6-O6	-6.98	124.41	128.60
36	1	1895	A	O5'-P-OP1	6.98	119.07	110.70
36	1	3197	G	N3-C2-N2	-6.98	115.02	119.90
1	6	382	C	N1-C2-O2	-6.98	114.71	118.90
1	6	423	G	N3-C2-N2	-6.98	115.02	119.90
36	5	61	A	N1-C2-N3	6.98	132.79	129.30
36	5	1892	G	C6-N1-C2	-6.98	120.91	125.10
36	5	3020	U	N3-C2-O2	6.98	127.08	122.20
36	1	365	A	C8-N9-C4	-6.98	103.01	105.80
1	6	1480	G	C5-N7-C8	-6.98	100.81	104.30
36	5	804	C	C4-C5-C6	6.98	120.89	117.40
36	5	1615	C	N3-C4-N4	-6.98	113.12	118.00
36	5	2656	A	C4-C5-N7	-6.98	107.21	110.70
36	1	311	C	C5-C4-N4	-6.97	115.32	120.20
36	1	733	G	C4-C5-N7	6.97	113.59	110.80
36	5	198	A	C8-N9-C4	-6.97	103.01	105.80
36	5	432	G	C5-C6-N1	-6.97	108.01	111.50
36	5	1113	G	N1-C2-N3	6.97	128.09	123.90
36	5	1716	U	P-O3'-C3'	6.97	128.07	119.70
36	1	2117	A	C6-N1-C2	-6.97	114.42	118.60
36	1	2340	U	C5-C4-O4	-6.97	121.72	125.90
38	4	18	U	O5'-P-OP2	6.97	119.07	110.70
1	6	610	G	C8-N9-C1'	-6.97	117.94	127.00
36	5	937	G	N3-C2-N2	6.97	124.78	119.90
36	5	2853	A	C5-C6-N6	-6.97	118.12	123.70
36	5	3003	G	C5-C6-N1	6.97	114.99	111.50
36	1	24	G	C8-N9-C4	6.97	109.19	106.40
36	5	2650	U	O5'-P-OP2	-6.97	99.43	105.70
1	2	1206	U	N3-C4-C5	-6.97	110.42	114.60
36	1	4	U	N3-C4-O4	-6.97	114.52	119.40
36	1	87	U	N3-C2-O2	-6.97	117.32	122.20
36	1	2895	G	C8-N9-C1'	-6.97	117.94	127.00
36	1	3107	U	OP2-P-O3'	6.97	120.53	105.20
37	3	85	G	O5'-P-OP2	-6.97	99.43	105.70
36	5	851	C	C6-N1-C2	6.97	123.09	120.30
36	5	1502	C	N3-C4-C5	6.97	124.69	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2850	G	C5-N7-C8	6.97	107.78	104.30
36	5	2855	U	N1-C2-N3	6.97	119.08	114.90
1	2	1789	G	C4-N9-C1'	6.97	135.56	126.50
36	1	702	C	N1-C2-O2	6.97	123.08	118.90
36	1	860	G	N9-C4-C5	-6.97	102.61	105.40
36	1	1311	G	N7-C8-N9	-6.97	109.62	113.10
36	5	424	G	C6-C5-N7	-6.97	126.22	130.40
36	5	2194	G	N1-C2-N3	6.97	128.08	123.90
36	5	3392	U	N3-C2-O2	-6.97	117.32	122.20
1	2	639	U	N1-C2-O2	6.97	127.68	122.80
36	1	1477	A	C5-C6-N1	6.97	121.18	117.70
36	1	2655	U	N3-C4-C5	-6.97	110.42	114.60
1	6	371	G	C6-C5-N7	-6.97	126.22	130.40
36	5	1184	A	C4-C5-C6	-6.97	113.52	117.00
1	6	1026	A	O5'-P-OP1	-6.96	99.43	105.70
36	5	1115	G	C4-C5-C6	6.96	122.98	118.80
37	7	67	G	C5-C6-N1	-6.96	108.02	111.50
38	8	15	G	C5-C6-O6	6.96	132.78	128.60
1	2	419	G	N1-C6-O6	6.96	124.08	119.90
36	5	1318	A	C8-N9-C4	6.96	108.58	105.80
36	5	2922	G	OP1-P-O3'	6.96	120.52	105.20
1	2	1625	C	C2-N1-C1'	-6.96	111.14	118.80
36	1	913	A	C4-C5-C6	6.96	120.48	117.00
1	6	400	A	N1-C6-N6	6.96	122.78	118.60
1	6	1396	U	C5-C4-O4	6.96	130.08	125.90
1	6	1671	A	N1-C2-N3	6.96	132.78	129.30
36	5	515	C	N3-C4-N4	-6.96	113.13	118.00
36	5	1004	U	C6-N1-C2	-6.96	116.82	121.00
36	5	1300	G	C5-C6-N1	-6.96	108.02	111.50
40	13	5	LYS	CD-CE-NZ	6.96	127.71	111.70
36	1	14	U	N3-C2-O2	-6.96	117.33	122.20
36	1	394	G	C2-N3-C4	6.96	115.38	111.90
36	1	495	G	C2-N3-C4	-6.96	108.42	111.90
36	1	3271	G	N3-C2-N2	6.96	124.77	119.90
1	6	1730	A	N1-C2-N3	6.96	132.78	129.30
36	5	1065	A	O5'-P-OP1	-6.96	99.44	105.70
36	5	2662	G	C6-N1-C2	-6.96	120.92	125.10
36	5	2714	G	OP1-P-O3'	6.96	120.51	105.20
36	5	3005	A	C6-C5-N7	-6.96	127.43	132.30
1	2	377	G	N3-C2-N2	-6.96	115.03	119.90
1	2	1147	A	C8-N9-C4	-6.96	103.02	105.80
36	1	63	A	N1-C6-N6	6.96	122.78	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	197	G	O5'-P-OP1	-6.96	99.44	105.70
36	1	1544	G	O5'-P-OP2	-6.96	99.44	105.70
36	1	1665	C	C6-N1-C2	6.96	123.08	120.30
36	1	2720	G	OP2-P-O3'	6.96	120.51	105.20
36	1	3083	G	N7-C8-N9	-6.96	109.62	113.10
1	6	609	U	C5-C6-N1	-6.96	119.22	122.70
36	5	3129	A	OP2-P-O3'	6.96	120.51	105.20
36	1	1920	U	N1-C2-N3	6.96	119.07	114.90
36	1	3009	G	C2-N3-C4	-6.96	108.42	111.90
1	6	175	G	C5-C6-O6	-6.96	124.43	128.60
1	6	578	U	C2-N1-C1'	-6.96	109.35	117.70
1	6	1354	G	N7-C8-N9	6.96	116.58	113.10
1	6	1525	A	N9-C4-C5	6.96	108.58	105.80
1	6	1663	G	O5'-P-OP1	6.96	119.05	110.70
1	6	1730	A	C5-C6-N6	6.96	129.27	123.70
36	5	940	G	C2-N3-C4	6.96	115.38	111.90
36	5	1544	G	N1-C2-N3	6.96	128.07	123.90
36	5	2698	G	N1-C6-O6	6.96	124.07	119.90
36	5	2988	C	N3-C4-N4	6.96	122.87	118.00
36	5	3172	A	C8-N9-C4	6.96	108.58	105.80
36	5	3295	A	N1-C6-N6	-6.96	114.43	118.60
1	2	1143	A	C4-C5-C6	-6.96	113.52	117.00
36	1	339	C	N1-C2-N3	6.96	124.07	119.20
36	1	754	G	C8-N9-C4	6.96	109.18	106.40
36	1	1898	G	C5-C6-N1	6.95	114.98	111.50
36	1	2866	U	N3-C4-O4	-6.95	114.53	119.40
36	1	2881	C	C2-N1-C1'	-6.95	111.15	118.80
36	1	2997	G	C6-C5-N7	-6.95	126.23	130.40
1	6	392	G	C5-C6-O6	-6.95	124.43	128.60
1	6	1448	G	O5'-P-OP2	-6.95	99.44	105.70
1	6	1527	C	O5'-P-OP2	-6.95	99.44	105.70
36	5	2391	G	C4-C5-N7	-6.95	108.02	110.80
37	7	46	A	C5-C6-N1	6.95	121.18	117.70
3	s1	115	ARG	NE-CZ-NH1	6.95	123.78	120.30
36	5	2743	A	C6-N1-C2	-6.95	114.43	118.60
37	7	45	A	O5'-P-OP1	6.95	119.04	110.70
36	1	61	A	C5-N7-C8	-6.95	100.42	103.90
36	1	1936	A	C5-C6-N1	6.95	121.17	117.70
1	6	789	A	N9-C4-C5	6.95	108.58	105.80
1	6	1484	G	N1-C6-O6	-6.95	115.73	119.90
36	5	375	A	OP1-P-O3'	6.95	120.49	105.20
36	5	2204	C	C6-N1-C2	-6.95	117.52	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	133	G	N3-C4-C5	6.95	132.08	128.60
36	1	215	G	O5'-P-OP2	-6.95	99.45	105.70
36	1	1399	A	C5-C6-N1	-6.95	114.23	117.70
36	1	2299	A	C8-N9-C4	-6.95	103.02	105.80
36	1	2935	U	N3-C4-C5	-6.95	110.43	114.60
1	6	1074	G	C2-N3-C4	-6.95	108.42	111.90
1	6	1622	G	C6-C5-N7	-6.95	126.23	130.40
36	5	553	U	N3-C2-O2	-6.95	117.34	122.20
36	5	2279	A	N1-C6-N6	6.95	122.77	118.60
36	5	2851	A	N7-C8-N9	-6.95	110.33	113.80
36	5	3197	G	N1-C6-O6	6.95	124.07	119.90
36	1	208	C	C5-C4-N4	-6.95	115.34	120.20
36	1	1155	C	OP1-P-O3'	6.95	120.48	105.20
36	1	1213	G	C5-C6-O6	-6.95	124.43	128.60
36	5	2722	U	P-O3'-C3'	6.95	128.04	119.70
1	2	458	G	N3-C4-N9	-6.95	121.83	126.00
38	4	104	A	N1-C6-N6	-6.95	114.43	118.60
1	6	58	U	C6-N1-C2	-6.95	116.83	121.00
1	6	942	G	N9-C4-C5	6.95	108.18	105.40
1	6	971	A	N3-C4-C5	6.95	131.66	126.80
36	5	910	G	N3-C4-C5	6.95	132.07	128.60
36	5	969	C	N1-C2-N3	6.95	124.06	119.20
36	5	3084	C	OP2-P-O3'	6.95	120.48	105.20
36	1	1396	C	N3-C4-N4	6.94	122.86	118.00
1	6	1498	G	N9-C4-C5	-6.94	102.62	105.40
36	5	1135	A	O5'-P-OP2	-6.94	99.45	105.70
36	5	2764	C	C5-C6-N1	6.94	124.47	121.00
36	1	225	C	C2-N1-C1'	6.94	126.44	118.80
36	1	699	A	N3-C4-N9	-6.94	121.85	127.40
36	1	963	G	N9-C4-C5	-6.94	102.62	105.40
36	1	2306	C	C6-N1-C1'	-6.94	112.47	120.80
36	5	2937	G	C5-C6-O6	-6.94	124.43	128.60
36	5	3136	G	N1-C6-O6	6.94	124.07	119.90
38	8	100	U	C2-N1-C1'	6.94	126.03	117.70
1	2	515	A	N7-C8-N9	6.94	117.27	113.80
1	2	990	C	C6-N1-C2	-6.94	117.52	120.30
36	1	39	A	C5-N7-C8	-6.94	100.43	103.90
36	1	889	U	C5-C6-N1	-6.94	119.23	122.70
36	1	1355	A	N1-C6-N6	6.94	122.76	118.60
36	1	1893	A	N1-C2-N3	6.94	132.77	129.30
36	1	2423	U	C5-C6-N1	6.94	126.17	122.70
36	5	1342	C	OP1-P-OP2	6.94	130.01	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1498	A	N9-C4-C5	6.94	108.58	105.80
36	1	404	G	N9-C4-C5	-6.94	102.62	105.40
36	1	2182	A	O5'-P-OP2	6.94	119.03	110.70
36	1	2983	C	C5-C4-N4	6.94	125.06	120.20
36	1	3230	G	N3-C4-N9	-6.94	121.84	126.00
36	1	3305	A	C4-C5-C6	6.94	120.47	117.00
1	6	1586	A	C5-C6-N1	6.94	121.17	117.70
36	5	951	A	N9-C4-C5	6.94	108.58	105.80
37	3	79	A	C5-C6-N1	-6.94	114.23	117.70
1	6	752	A	N1-C6-N6	6.94	122.76	118.60
36	5	197	G	N7-C8-N9	6.94	116.57	113.10
36	5	3366	G	C4-C5-C6	6.94	122.96	118.80
1	2	1572	G	N1-C6-O6	6.94	124.06	119.90
36	1	1127	G	N1-C2-N3	6.94	128.06	123.90
36	1	1783	U	C5-C4-O4	6.94	130.06	125.90
36	1	2627	C	N1-C2-N3	6.94	124.06	119.20
36	1	3362	A	C8-N9-C4	-6.94	103.03	105.80
36	5	1386	A	N7-C8-N9	6.94	117.27	113.80
1	2	1186	U	C5-C4-O4	6.93	130.06	125.90
1	2	1558	U	N1-C2-O2	6.93	127.65	122.80
1	2	1610	G	N3-C4-N9	6.93	130.16	126.00
36	1	26	A	C8-N9-C4	-6.93	103.03	105.80
36	1	112	U	C5-C6-N1	-6.93	119.23	122.70
36	1	594	U	C5-C4-O4	6.93	130.06	125.90
36	1	712	G	C8-N9-C4	6.93	109.17	106.40
36	1	2880	U	N3-C2-O2	-6.93	117.35	122.20
36	1	2974	U	N1-C2-O2	-6.93	117.95	122.80
36	1	3085	G	C4-C5-N7	6.93	113.57	110.80
53	M7	138	LYS	CD-CE-NZ	6.93	127.65	111.70
36	5	2244	A	C5-C6-N1	6.93	121.17	117.70
37	7	67	G	N1-C6-O6	6.93	124.06	119.90
36	1	53	G	C8-N9-C1'	-6.93	117.99	127.00
36	1	873	C	N1-C2-O2	-6.93	114.74	118.90
36	1	1443	G	N9-C4-C5	-6.93	102.63	105.40
36	1	2698	G	N1-C6-O6	6.93	124.06	119.90
1	6	1025	A	C2-N3-C4	-6.93	107.13	110.60
36	5	1899	G	C8-N9-C4	6.93	109.17	106.40
36	5	2613	U	C6-N1-C2	-6.93	116.84	121.00
36	5	2706	G	C5-C6-N1	6.93	114.97	111.50
36	5	3052	G	N1-C2-N2	-6.93	109.96	116.20
37	7	25	G	C5-C6-N1	6.93	114.97	111.50
38	8	80	A	N7-C8-N9	6.93	117.27	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	921	A	C6-N1-C2	-6.93	114.44	118.60
36	5	927	C	C2-N1-C1'	6.93	126.42	118.80
36	5	1060	U	N1-C2-N3	6.93	119.06	114.90
36	5	1582	C	C5-C4-N4	-6.93	115.35	120.20
36	5	2164	A	N9-C4-C5	6.93	108.57	105.80
36	5	2375	G	N1-C2-N3	6.93	128.06	123.90
36	5	2984	C	N1-C2-N3	6.93	124.05	119.20
38	8	47	C	N3-C4-N4	-6.93	113.15	118.00
36	1	700	C	C2-N1-C1'	-6.93	111.18	118.80
36	1	865	U	N3-C4-O4	-6.93	114.55	119.40
38	4	39	G	C5-C6-O6	-6.93	124.44	128.60
36	5	817	A	OP2-P-O3'	6.93	120.45	105.20
36	5	2677	G	N1-C6-O6	6.93	124.06	119.90
36	1	369	A	C8-N9-C4	-6.93	103.03	105.80
36	1	1204	A	N1-C2-N3	6.93	132.76	129.30
36	1	2405	C	N3-C4-C5	-6.93	119.13	121.90
1	2	1217	A	C5-N7-C8	-6.93	100.44	103.90
1	2	1558	U	C6-N1-C1'	-6.93	111.50	121.20
36	5	718	G	C4-C5-N7	6.93	113.57	110.80
36	5	2905	U	C5-C6-N1	-6.93	119.24	122.70
36	5	2930	A	O4'-C1'-N9	6.93	113.74	108.20
36	1	1313	G	C4-C5-N7	6.92	113.57	110.80
36	1	3178	A	C2-N3-C4	-6.92	107.14	110.60
75	O9	13	MET	CB-CG-SD	-6.92	91.62	112.40
1	6	553	G	C5-C6-O6	-6.92	124.45	128.60
1	6	876	G	C8-N9-C1'	6.92	136.00	127.00
36	5	1332	A	N1-C6-N6	6.92	122.75	118.60
36	5	2368	A	C8-N9-C4	-6.92	103.03	105.80
36	5	3337	G	O5'-P-OP2	-6.92	99.47	105.70
1	2	1631	A	C8-N9-C4	-6.92	103.03	105.80
36	1	978	G	C8-N9-C4	6.92	109.17	106.40
36	5	3052	G	OP2-P-O3'	6.92	120.43	105.20
36	1	1667	A	C8-N9-C4	-6.92	103.03	105.80
36	1	2775	U	N3-C4-O4	-6.92	114.56	119.40
38	4	10	A	C5-N7-C8	6.92	107.36	103.90
1	6	1108	G	N1-C6-O6	-6.92	115.75	119.90
36	5	421	G	C6-N1-C2	-6.92	120.95	125.10
36	5	779	G	C8-N9-C4	-6.92	103.63	106.40
36	5	821	U	N3-C4-C5	-6.92	110.45	114.60
36	5	1046	A	N9-C4-C5	6.92	108.57	105.80
36	1	2322	C	C5-C6-N1	6.92	124.46	121.00
38	4	30	C	C6-N1-C2	6.92	123.07	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	138	A	C4-C5-N7	-6.92	107.24	110.70
36	1	386	A	C6-C5-N7	-6.92	127.46	132.30
36	1	953	G	C6-C5-N7	6.92	134.55	130.40
1	6	410	A	N1-C2-N3	6.92	132.76	129.30
1	6	1350	U	C5-C6-N1	-6.92	119.24	122.70
1	6	1673	G	N9-C4-C5	-6.92	102.63	105.40
1	6	1774	G	N3-C2-N2	-6.92	115.06	119.90
36	5	2939	G	N1-C6-O6	6.92	124.05	119.90
37	7	56	A	C6-C5-N7	-6.92	127.46	132.30
37	7	68	C	N1-C2-N3	6.92	124.04	119.20
37	7	104	A	O5'-P-OP2	-6.92	99.47	105.70
1	2	48	G	C8-N9-C4	-6.92	103.63	106.40
36	1	75	G	N1-C6-O6	6.92	124.05	119.90
36	1	802	C	N1-C2-N3	6.92	124.04	119.20
36	1	1365	G	N7-C8-N9	6.92	116.56	113.10
36	1	2635	A	C5-C6-N6	6.92	129.23	123.70
36	1	3013	U	O5'-P-OP2	-6.92	99.48	105.70
36	5	2354	C	C6-N1-C2	-6.92	117.53	120.30
36	5	3188	G	C5-C6-N1	6.92	114.96	111.50
36	1	2941	A	OP1-P-O3'	6.92	120.41	105.20
36	1	2964	G	C2-N3-C4	-6.92	108.44	111.90
36	5	1160	C	OP2-P-O3'	6.92	120.41	105.20
36	5	3346	U	C2-N1-C1'	6.92	126.00	117.70
1	2	1152	A	C8-N9-C4	6.91	108.56	105.80
36	1	512	U	N3-C4-O4	6.91	124.24	119.40
36	1	885	U	OP1-P-O3'	6.91	120.41	105.20
36	1	1134	G	N9-C4-C5	6.91	108.17	105.40
36	1	1170	A	C4-C5-N7	6.91	114.16	110.70
36	1	1670	C	N1-C2-O2	-6.91	114.75	118.90
36	1	3319	U	C6-N1-C1'	-6.91	111.52	121.20
1	6	144	U	C6-N1-C1'	-6.91	111.52	121.20
1	6	1572	G	N3-C2-N2	-6.91	115.06	119.90
1	6	1604	U	N3-C4-O4	6.91	124.24	119.40
36	5	364	G	N1-C2-N2	-6.91	109.98	116.20
36	5	726	G	N7-C8-N9	6.91	116.56	113.10
36	5	1321	G	C4-C5-C6	6.91	122.95	118.80
36	5	2636	A	N1-C2-N3	6.91	132.76	129.30
36	1	3266	G	N7-C8-N9	6.91	116.56	113.10
37	3	82	G	N1-C2-N2	-6.91	109.98	116.20
36	5	968	G	C8-N9-C4	6.91	109.17	106.40
36	5	1508	C	C6-N1-C2	-6.91	117.53	120.30
36	1	2884	C	N3-C4-C5	6.91	124.66	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3203	U	N3-C4-C5	-6.91	110.45	114.60
36	5	1582	C	C4-C5-C6	-6.91	113.94	117.40
1	2	551	G	C5-C6-N1	-6.91	108.05	111.50
36	1	233	C	C5-C6-N1	-6.91	117.55	121.00
36	1	601	U	N3-C2-O2	-6.91	117.36	122.20
36	1	1432	C	N3-C2-O2	-6.91	117.06	121.90
36	1	2808	A	O4'-C1'-N9	-6.91	102.67	108.20
1	6	448	C	C6-N1-C1'	6.91	129.09	120.80
1	6	461	G	N3-C4-N9	6.91	130.15	126.00
1	6	549	G	N1-C6-O6	6.91	124.05	119.90
36	5	805	G	N3-C4-N9	6.91	130.15	126.00
36	5	1205	A	C2-N3-C4	-6.91	107.15	110.60
36	5	1886	A	N9-C4-C5	6.91	108.56	105.80
36	5	2225	U	N3-C2-O2	-6.91	117.36	122.20
36	5	3246	G	C5-N7-C8	-6.91	100.85	104.30
36	5	3389	U	C5-C6-N1	6.91	126.16	122.70
37	7	2	G	C5-C6-O6	6.91	132.75	128.60
36	1	2961	G	N1-C2-N2	-6.91	109.98	116.20
36	5	1076	C	C2-N3-C4	-6.91	116.45	119.90
36	5	1834	U	C4-C5-C6	6.91	123.84	119.70
36	5	2116	G	N3-C2-N2	-6.91	115.06	119.90
36	5	2729	U	C5-C4-O4	6.91	130.04	125.90
36	5	3010	U	C5-C4-O4	6.91	130.04	125.90
36	1	199	A	O4'-C1'-N9	6.91	113.72	108.20
36	1	1190	A	C2-N3-C4	6.91	114.05	110.60
36	1	1317	A	N7-C8-N9	6.91	117.25	113.80
36	1	1880	U	O5'-P-OP1	6.91	118.99	110.70
36	1	2839	G	C5-N7-C8	-6.91	100.85	104.30
36	1	2932	U	N3-C4-O4	-6.91	114.57	119.40
36	5	32	U	N3-C2-O2	-6.91	117.37	122.20
36	5	56	G	N7-C8-N9	-6.91	109.65	113.10
36	5	65	A	P-O3'-C3'	6.91	127.99	119.70
36	5	2288	G	C4-C5-N7	6.91	113.56	110.80
1	2	1339	C	N3-C4-C5	6.90	124.66	121.90
36	1	2210	G	N1-C6-O6	-6.90	115.76	119.90
36	1	2326	A	C5-N7-C8	-6.90	100.45	103.90
1	6	55	A	N1-C6-N6	-6.90	114.46	118.60
1	6	427	C	N3-C4-N4	-6.90	113.17	118.00
36	5	584	G	N7-C8-N9	6.90	116.55	113.10
36	5	2524	A	N7-C8-N9	6.90	117.25	113.80
36	5	3315	G	N1-C2-N2	-6.90	109.99	116.20
37	7	56	A	C2-N3-C4	-6.90	107.15	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1208	A	C2-N3-C4	-6.90	107.15	110.60
1	2	1214	U	N3-C2-O2	-6.90	117.37	122.20
36	1	2802	A	OP2-P-O3'	6.90	120.38	105.20
36	5	2906	C	N3-C2-O2	6.90	126.73	121.90
38	8	15	G	N1-C6-O6	-6.90	115.76	119.90
1	2	1579	U	N1-C2-O2	6.90	127.63	122.80
36	5	3096	C	OP1-P-O3'	-6.90	90.02	105.20
1	2	1745	G	C8-N9-C4	6.90	109.16	106.40
36	1	640	U	OP1-P-OP2	-6.90	109.25	119.60
36	1	2296	A	O5'-P-OP1	-6.90	99.49	105.70
36	1	2857	C	C6-N1-C2	-6.90	117.54	120.30
36	1	2994	A	C4-C5-C6	6.90	120.45	117.00
36	1	3137	C	C2-N1-C1'	-6.90	111.21	118.80
1	6	1535	U	C2-N3-C4	-6.90	122.86	127.00
36	5	139	G	O5'-P-OP1	-6.90	99.49	105.70
1	2	60	U	C5-C6-N1	6.90	126.15	122.70
36	1	345	G	N1-C6-O6	6.90	124.04	119.90
36	1	1530	U	C6-N1-C2	6.90	125.14	121.00
1	6	1207	C	P-O3'-C3'	6.90	127.97	119.70
36	5	1040	A	C8-N9-C4	6.90	108.56	105.80
36	5	3298	C	C5-C6-N1	-6.90	117.55	121.00
36	1	183	G	N3-C4-N9	6.89	130.14	126.00
36	1	803	C	C5-C4-N4	-6.89	115.37	120.20
36	1	1166	G	N9-C4-C5	-6.89	102.64	105.40
36	1	1658	G	N9-C4-C5	6.89	108.16	105.40
36	1	1920	U	C6-N1-C2	-6.89	116.86	121.00
36	1	2380	U	N3-C4-O4	-6.89	114.57	119.40
1	6	107	C	N3-C4-C5	-6.89	119.14	121.90
36	5	1439	U	N1-C2-O2	-6.89	117.97	122.80
36	5	1725	C	N3-C4-N4	6.89	122.83	118.00
1	2	1541	G	C6-C5-N7	-6.89	126.27	130.40
36	1	622	A	N9-C4-C5	-6.89	103.04	105.80
36	1	949	C	C4-C5-C6	6.89	120.85	117.40
36	1	2605	G	N1-C6-O6	6.89	124.03	119.90
36	1	2946	A	C8-N9-C4	-6.89	103.04	105.80
36	5	2821	C	C2-N1-C1'	6.89	126.38	118.80
36	5	2878	G	C8-N9-C4	-6.89	103.64	106.40
36	5	3063	C	C5-C6-N1	-6.89	117.55	121.00
36	1	1556	C	N1-C2-N3	6.89	124.02	119.20
36	1	2236	G	C6-C5-N7	-6.89	126.27	130.40
73	O7	5	THR	C-N-CD	6.89	142.87	128.40
1	6	816	G	C8-N9-C4	6.89	109.16	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1486	G	N3-C4-N9	-6.89	121.87	126.00
36	5	2898	G	OP2-P-O3'	6.89	120.36	105.20
36	1	1365	G	C5-N7-C8	-6.89	100.86	104.30
36	1	1885	U	C5-C6-N1	-6.89	119.25	122.70
36	5	2161	G	N3-C4-C5	-6.89	125.16	128.60
36	5	2386	A	N7-C8-N9	6.89	117.25	113.80
36	5	2870	C	N3-C4-C5	6.89	124.66	121.90
36	5	2934	A	C2-N3-C4	-6.89	107.16	110.60
1	2	507	U	C2-N1-C1'	6.89	125.97	117.70
36	1	2787	G	C5-C6-O6	-6.89	124.47	128.60
36	1	2993	G	C4-N9-C1'	6.89	135.45	126.50
38	4	17	A	OP2-P-O3'	6.89	120.35	105.20
36	5	2403	G	O5'-P-OP2	-6.89	99.50	105.70
36	5	2614	G	C4-C5-N7	6.89	113.56	110.80
36	5	2926	A	C4-C5-C6	6.89	120.44	117.00
36	1	285	A	C5-C6-N6	-6.89	118.19	123.70
36	1	574	U	N1-C2-O2	-6.89	117.98	122.80
36	1	1893	A	O5'-P-OP2	-6.89	99.50	105.70
36	1	3361	G	N3-C4-C5	-6.89	125.16	128.60
1	6	542	A	C8-N9-C4	-6.89	103.05	105.80
36	5	1381	A	O5'-P-OP2	6.89	118.97	110.70
36	5	2247	G	N1-C2-N2	-6.89	110.00	116.20
36	5	2977	G	C5-N7-C8	-6.89	100.86	104.30
1	2	1498	G	C8-N9-C1'	-6.88	118.05	127.00
38	4	46	G	C4-N9-C1'	6.88	135.45	126.50
36	5	744	A	N1-C6-N6	6.88	122.73	118.60
36	5	874	U	C6-N1-C1'	6.88	130.84	121.20
36	5	1355	A	C5-C6-N6	6.88	129.21	123.70
36	5	2851	A	N9-C4-C5	6.88	108.55	105.80
36	1	41	G	N1-C2-N3	-6.88	119.77	123.90
36	1	2957	G	C5-N7-C8	-6.88	100.86	104.30
1	6	1241	G	C6-C5-N7	-6.88	126.27	130.40
36	5	1272	C	C6-N1-C2	-6.88	117.55	120.30
36	1	284	A	C4-C5-C6	6.88	120.44	117.00
36	1	750	G	OP2-P-O3'	6.88	120.34	105.20
1	6	1086	A	N3-C4-N9	-6.88	121.89	127.40
36	5	1311	G	C4-C5-C6	6.88	122.93	118.80
36	5	1422	G	N1-C6-O6	6.88	124.03	119.90
36	5	2966	G	N1-C2-N3	6.88	128.03	123.90
36	5	3148	U	N3-C2-O2	-6.88	117.38	122.20
37	7	1	G	N3-C4-N9	6.88	130.13	126.00
37	7	69	C	C5-C4-N4	-6.88	115.38	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
56	N0	115	ARG	NE-CZ-NH1	6.88	123.74	120.30
36	5	724	U	N1-C2-N3	6.88	119.03	114.90
36	5	1206	G	N3-C4-C5	-6.88	125.16	128.60
36	5	2274	U	N3-C2-O2	6.88	127.02	122.20
36	1	272	G	C4-N9-C1'	-6.88	117.56	126.50
36	1	3374	U	C6-N1-C2	6.88	125.13	121.00
1	6	54	C	C2-N3-C4	-6.88	116.46	119.90
1	6	1028	C	C2-N3-C4	-6.88	116.46	119.90
36	5	349	A	N9-C4-C5	6.88	108.55	105.80
36	5	569	A	C5-C6-N6	-6.88	118.20	123.70
36	5	2673	A	C5-N7-C8	6.88	107.34	103.90
36	5	2828	G	C5-C6-N1	6.88	114.94	111.50
1	2	51	A	C8-N9-C4	6.88	108.55	105.80
36	1	33	G	N3-C4-N9	-6.88	121.87	126.00
38	4	27	U	C5-C6-N1	6.88	126.14	122.70
36	5	842	G	N7-C8-N9	-6.88	109.66	113.10
36	5	1239	C	C5-C6-N1	6.88	124.44	121.00
37	7	10	C	C2-N1-C1'	6.88	126.36	118.80
37	7	47	C	C2-N3-C4	-6.88	116.46	119.90
36	1	1148	G	C4-C5-N7	6.88	113.55	110.80
36	5	718	G	N1-C6-O6	6.88	124.03	119.90
1	2	1358	G	C8-N9-C4	6.87	109.15	106.40
36	1	131	C	C6-N1-C2	-6.87	117.55	120.30
36	1	655	C	N3-C2-O2	-6.87	117.09	121.90
36	1	1157	G	OP2-P-O3'	6.87	120.32	105.20
36	1	2196	C	C6-N1-C2	6.87	123.05	120.30
36	1	2934	A	C2-N3-C4	-6.87	107.16	110.60
1	6	403	G	N3-C2-N2	-6.87	115.09	119.90
36	5	404	G	C8-N9-C1'	-6.87	118.06	127.00
36	5	689	U	OP2-P-O3'	6.87	120.32	105.20
36	5	1005	G	N3-C4-C5	6.87	132.04	128.60
36	5	1178	G	OP1-P-OP2	6.87	129.91	119.60
36	5	2135	U	N1-C2-O2	6.87	127.61	122.80
36	5	2392	C	N3-C2-O2	6.87	126.71	121.90
36	5	2410	U	C4-C5-C6	-6.87	115.58	119.70
36	5	2613	U	N1-C2-N3	6.87	119.02	114.90
1	2	1200	G	C6-C5-N7	-6.87	126.28	130.40
36	1	1337	A	N1-C2-N3	6.87	132.74	129.30
36	1	1345	G	C6-C5-N7	-6.87	126.28	130.40
36	1	1407	A	C5-C6-N1	6.87	121.14	117.70
36	1	1501	U	C5-C6-N1	6.87	126.14	122.70
36	1	2824	G	C8-N9-C1'	-6.87	118.07	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1197	C	O5'-P-OP2	-6.87	99.52	105.70
36	5	2919	A	N1-C6-N6	-6.87	114.48	118.60
36	5	2955	U	N3-C4-O4	6.87	124.21	119.40
37	7	101	G	C2-N3-C4	-6.87	108.47	111.90
37	7	102	A	N9-C4-C5	-6.87	103.05	105.80
36	1	48	A	N1-C2-N3	6.87	132.74	129.30
38	4	53	A	O5'-P-OP2	-6.87	99.52	105.70
1	6	779	U	N3-C2-O2	-6.87	117.39	122.20
36	5	2855	U	C4-C5-C6	6.87	123.82	119.70
1	2	111	U	N3-C4-O4	6.87	124.21	119.40
36	1	84	U	C5-C6-N1	-6.87	119.27	122.70
36	1	1154	A	C8-N9-C4	-6.87	103.05	105.80
36	1	1177	G	N1-C6-O6	6.87	124.02	119.90
36	1	1449	A	C8-N9-C4	-6.87	103.05	105.80
36	1	1661	G	N1-C2-N2	-6.87	110.02	116.20
36	5	1045	C	C2-N3-C4	-6.87	116.47	119.90
36	5	1931	U	C5-C4-O4	6.87	130.02	125.90
36	5	3197	G	N3-C2-N2	-6.87	115.09	119.90
36	5	3212	C	C2-N1-C1'	-6.87	111.24	118.80
36	1	3031	G	N3-C4-C5	6.87	132.03	128.60
1	6	746	A	C6-C5-N7	-6.87	127.49	132.30
1	6	1346	A	O4'-C1'-N9	6.87	113.69	108.20
36	5	1364	C	N3-C2-O2	-6.87	117.09	121.90
1	2	1135	U	C5-C4-O4	6.87	130.02	125.90
36	5	2617	U	N3-C4-C5	-6.87	110.48	114.60
36	5	2633	U	N3-C4-C5	-6.87	110.48	114.60
36	1	707	U	C4-C5-C6	6.86	123.82	119.70
36	1	907	G	N3-C4-N9	6.86	130.12	126.00
36	5	1199	C	C4-C5-C6	6.86	120.83	117.40
38	8	38	U	N1-C2-O2	6.86	127.60	122.80
36	1	223	U	N3-C4-O4	-6.86	114.60	119.40
36	1	2240	G	C5-C6-N1	-6.86	108.07	111.50
1	6	1546	G	N3-C4-N9	6.86	130.12	126.00
36	5	189	G	C5-C6-O6	6.86	132.72	128.60
36	5	1508	C	N3-C4-C5	-6.86	119.16	121.90
36	5	2637	A	C6-N1-C2	-6.86	114.48	118.60
36	5	3322	A	C6-C5-N7	-6.86	127.50	132.30
1	2	1150	G	C8-N9-C4	-6.86	103.66	106.40
36	1	112	U	O4'-C1'-N1	6.86	113.69	108.20
36	1	1493	G	N3-C4-N9	-6.86	121.88	126.00
36	1	2613	U	N3-C4-O4	6.86	124.20	119.40
38	4	4	C	C2-N1-C1'	6.86	126.35	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	359	A	C4-N9-C1'	-6.86	113.95	126.30
1	6	1735	U	N1-C2-N3	6.86	119.02	114.90
1	2	1271	G	C8-N9-C4	6.86	109.14	106.40
36	1	2787	G	C4-C5-N7	6.86	113.54	110.80
1	6	1282	U	C6-N1-C2	-6.86	116.88	121.00
36	5	1510	G	O5'-P-OP1	-6.86	99.53	105.70
36	5	2756	C	N3-C4-C5	6.86	124.64	121.90
36	5	3040	A	N7-C8-N9	-6.86	110.37	113.80
36	5	342	A	C2-N3-C4	6.86	114.03	110.60
36	5	432	G	N1-C6-O6	6.86	124.01	119.90
36	5	712	G	C5-C6-O6	-6.86	124.48	128.60
36	5	2190	U	N3-C4-C5	-6.86	110.48	114.60
36	5	2276	G	N1-C6-O6	-6.86	115.78	119.90
36	1	2112	U	O5'-P-OP2	-6.86	99.53	105.70
36	1	2304	C	C6-N1-C2	6.86	123.04	120.30
36	1	2368	A	O5'-P-OP1	6.86	118.93	110.70
36	1	2812	C	O5'-P-OP2	6.86	118.93	110.70
36	5	1126	G	N1-C6-O6	6.86	124.01	119.90
36	5	3013	U	C2-N1-C1'	6.86	125.93	117.70
36	5	3219	G	N1-C6-O6	-6.86	115.79	119.90
1	6	569	C	N3-C2-O2	-6.85	117.10	121.90
1	6	1512	G	N1-C6-O6	6.85	124.01	119.90
36	1	881	C	N3-C2-O2	-6.85	117.10	121.90
36	1	1886	A	C5-N7-C8	-6.85	100.47	103.90
1	6	160	C	C6-N1-C2	6.85	123.04	120.30
36	5	1101	G	C5-C6-N1	6.85	114.93	111.50
36	5	1192	C	C4-C5-C6	6.85	120.83	117.40
36	5	2330	C	C2-N1-C1'	6.85	126.34	118.80
36	1	2278	C	C4-C5-C6	-6.85	113.97	117.40
36	1	2418	G	N3-C4-C5	-6.85	125.17	128.60
36	5	962	A	C2-N3-C4	-6.85	107.17	110.60
36	5	3129	A	N9-C4-C5	6.85	108.54	105.80
36	5	3226	A	C5-C6-N6	6.85	129.18	123.70
38	8	2	A	C5-N7-C8	-6.85	100.47	103.90
1	2	1212	G	C4-C5-N7	6.85	113.54	110.80
36	1	1224	C	N1-C2-O2	6.85	123.01	118.90
36	1	2608	G	C5-C6-O6	-6.85	124.49	128.60
36	1	3256	G	C6-C5-N7	-6.85	126.29	130.40
1	6	797	G	C4-N9-C1'	-6.85	117.59	126.50
36	5	407	A	O4'-C1'-N9	-6.85	102.72	108.20
36	5	1794	G	N3-C4-N9	-6.85	121.89	126.00
36	5	2285	C	N3-C2-O2	-6.85	117.11	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2404	A	C5-C6-N6	6.85	129.18	123.70
36	5	3201	C	N3-C4-C5	-6.85	119.16	121.90
1	2	1515	A	N1-C6-N6	-6.85	114.49	118.60
36	1	102	C	C6-N1-C1'	-6.85	112.58	120.80
36	1	3117	C	C6-N1-C2	-6.85	117.56	120.30
1	6	1110	G	C4-N9-C1'	6.85	135.40	126.50
1	6	1274	C	N3-C4-C5	-6.85	119.16	121.90
36	5	913	A	C4-C5-N7	-6.85	107.28	110.70
36	5	1150	A	C5-N7-C8	-6.85	100.48	103.90
36	5	1485	G	N3-C2-N2	6.85	124.69	119.90
36	5	2290	C	C5-C6-N1	-6.85	117.58	121.00
36	5	2296	A	N9-C4-C5	-6.85	103.06	105.80
36	5	2830	G	N1-C2-N3	6.85	128.01	123.90
36	5	2921	U	C5-C6-N1	-6.85	119.28	122.70
1	2	111	U	N1-C2-N3	-6.85	110.79	114.90
1	2	433	C	C6-N1-C2	6.85	123.04	120.30
1	2	1517	U	N3-C4-C5	-6.85	110.49	114.60
36	1	1436	U	OP1-P-OP2	-6.85	109.33	119.60
36	1	2315	G	C5-C6-N1	-6.85	108.08	111.50
36	1	2887	A	C6-N1-C2	-6.85	114.49	118.60
36	1	3055	U	C6-N1-C2	6.85	125.11	121.00
36	5	345	G	C8-N9-C4	6.85	109.14	106.40
36	5	1139	G	OP2-P-O3'	6.85	120.26	105.20
1	2	119	A	C8-N9-C4	6.84	108.54	105.80
36	1	952	A	N1-C6-N6	-6.84	114.49	118.60
36	1	1209	G	C8-N9-C1'	-6.84	118.10	127.00
36	1	1282	G	C5-C6-O6	-6.84	124.49	128.60
36	1	1525	G	O5'-P-OP2	-6.84	99.54	105.70
36	1	2179	C	OP2-P-O3'	6.84	120.26	105.20
36	1	2964	G	OP1-P-OP2	6.84	129.87	119.60
1	6	1168	U	C5-C6-N1	6.84	126.12	122.70
36	5	1376	C	C5-C6-N1	6.84	124.42	121.00
36	5	2914	G	C8-N9-C4	-6.84	103.66	106.40
36	5	3045	G	N7-C8-N9	6.84	116.52	113.10
36	5	3099	C	N1-C2-O2	-6.84	114.79	118.90
36	5	3218	A	N1-C2-N3	6.84	132.72	129.30
36	1	1001	G	O5'-P-OP2	6.84	118.91	110.70
36	1	1547	G	N3-C4-C5	-6.84	125.18	128.60
1	6	27	U	O5'-P-OP2	-6.84	99.54	105.70
36	5	3174	A	C5-N7-C8	-6.84	100.48	103.90
1	2	1000	C	C2-N1-C1'	6.84	126.33	118.80
1	2	1757	G	N1-C6-O6	-6.84	115.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1431	G	C8-N9-C4	6.84	109.14	106.40
36	1	1446	A	N1-C2-N3	6.84	132.72	129.30
36	1	1534	A	C6-C5-N7	-6.84	127.51	132.30
36	5	223	U	N1-C2-N3	6.84	119.00	114.90
36	5	1340	G	N7-C8-N9	6.84	116.52	113.10
1	2	307	G	C5-C6-N1	6.84	114.92	111.50
36	1	50	U	N3-C2-O2	-6.84	117.41	122.20
36	1	1366	A	C6-C5-N7	-6.84	127.51	132.30
36	1	2669	G	N3-C4-N9	-6.84	121.90	126.00
36	1	2697	A	O5'-P-OP1	-6.84	99.54	105.70
36	5	192	C	N3-C2-O2	-6.84	117.11	121.90
36	5	845	G	N3-C2-N2	6.84	124.69	119.90
36	5	1900	A	C8-N9-C4	-6.84	103.06	105.80
36	5	2727	A	C5-N7-C8	6.84	107.32	103.90
36	5	3367	C	C2-N1-C1'	-6.84	111.28	118.80
36	5	3388	C	C6-N1-C2	6.84	123.04	120.30
1	2	1426	C	C4-C5-C6	-6.84	113.98	117.40
36	1	1168	U	O5'-P-OP2	6.84	118.91	110.70
1	6	1539	G	C8-N9-C1'	-6.84	118.11	127.00
1	6	1644	C	C4-C5-C6	6.84	120.82	117.40
36	5	1402	C	O5'-P-OP1	-6.84	99.55	105.70
36	5	2420	C	O5'-P-OP1	-6.84	99.55	105.70
1	2	29	U	C5-C6-N1	-6.84	119.28	122.70
36	1	335	G	N7-C8-N9	6.84	116.52	113.10
36	1	385	A	N9-C4-C5	6.84	108.53	105.80
36	1	688	G	C5-C6-O6	-6.84	124.50	128.60
36	1	878	G	C4-C5-N7	-6.84	108.07	110.80
36	1	1125	U	N1-C2-N3	6.84	119.00	114.90
37	3	36	C	N1-C2-O2	6.84	123.00	118.90
37	3	50	U	C2-N1-C1'	6.84	125.90	117.70
1	6	1527	C	N1-C2-O2	-6.84	114.80	118.90
36	5	802	C	C6-N1-C2	6.84	123.03	120.30
36	5	920	A	C5-N7-C8	-6.84	100.48	103.90
36	5	1784	G	N3-C4-N9	6.84	130.10	126.00
36	5	2256	A	C8-N9-C4	6.84	108.53	105.80
36	5	3054	U	C2-N1-C1'	-6.84	109.50	117.70
1	2	1274	C	N1-C2-O2	6.83	123.00	118.90
1	2	1481	C	C6-N1-C2	-6.83	117.57	120.30
1	2	1610	G	N3-C4-C5	-6.83	125.18	128.60
36	1	1046	A	C4-C5-N7	6.83	114.12	110.70
38	4	12	A	C5-C6-N6	-6.83	118.23	123.70
1	2	1270	G	C4-N9-C1'	6.83	135.38	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1537	C	C5-C4-N4	-6.83	115.42	120.20
36	1	184	U	C5-C6-N1	-6.83	119.28	122.70
36	1	2951	G	C5-C6-O6	6.83	132.70	128.60
36	1	3305	A	OP2-P-O3'	6.83	120.23	105.20
36	5	201	A	C8-N9-C4	6.83	108.53	105.80
36	5	1333	C	C6-N1-C2	-6.83	117.57	120.30
36	1	1084	A	O5'-P-OP1	-6.83	99.55	105.70
36	1	2861	U	N3-C2-O2	-6.83	117.42	122.20
36	1	3112	G	C8-N9-C4	6.83	109.13	106.40
1	6	371	G	C4-N9-C1'	6.83	135.38	126.50
1	6	1111	G	C8-N9-C4	-6.83	103.67	106.40
1	6	1111	G	N3-C4-C5	-6.83	125.18	128.60
36	5	969	C	C4-C5-C6	6.83	120.82	117.40
36	5	3038	U	N3-C4-C5	6.83	118.70	114.60
36	5	3171	U	N3-C4-O4	-6.83	114.62	119.40
38	8	8	C	C5-C6-N1	6.83	124.42	121.00
36	1	3081	C	N3-C2-O2	-6.83	117.12	121.90
37	3	7	G	C5-C6-N1	6.83	114.92	111.50
1	6	1000	C	C4-C5-C6	6.83	120.81	117.40
36	5	501	A	N1-C6-N6	-6.83	114.50	118.60
1	2	334	G	C8-N9-C1'	6.83	135.88	127.00
36	1	911	C	N3-C4-C5	6.83	124.63	121.90
36	1	1293	U	N3-C4-C5	6.83	118.70	114.60
36	1	1365	G	C4-C5-N7	6.83	113.53	110.80
36	1	2289	U	C2-N1-C1'	6.83	125.89	117.70
36	1	3052	G	O5'-P-OP2	6.83	118.89	110.70
38	4	3	A	C6-N1-C2	-6.83	114.50	118.60
38	4	18	U	N3-C4-C5	-6.83	110.50	114.60
1	6	338	C	C5-C6-N1	6.83	124.41	121.00
36	5	810	A	N1-C6-N6	6.83	122.70	118.60
36	5	857	G	C6-C5-N7	-6.83	126.30	130.40
36	5	3115	C	N1-C2-N3	6.83	123.98	119.20
1	2	600	U	C6-N1-C2	-6.83	116.90	121.00
1	6	1490	C	C5-C6-N1	6.83	124.41	121.00
36	5	3111	U	C2-N1-C1'	6.83	125.89	117.70
36	1	908	G	N3-C4-N9	6.82	130.09	126.00
36	1	2238	G	C4-C5-C6	-6.82	114.71	118.80
36	1	2419	A	C4-C5-N7	6.82	114.11	110.70
36	1	2738	A	C5-N7-C8	-6.82	100.49	103.90
1	6	1117	U	N3-C2-O2	6.82	126.98	122.20
36	5	648	C	OP1-P-O3'	6.82	120.21	105.20
37	7	102	A	C8-N9-C4	6.82	108.53	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1116	G	N3-C4-N9	6.82	130.09	126.00
38	4	57	C	OP2-P-O3'	6.82	120.21	105.20
36	5	2845	A	N7-C8-N9	6.82	117.21	113.80
1	2	994	G	C4-C5-N7	-6.82	108.07	110.80
36	1	1049	C	C5-C4-N4	-6.82	115.42	120.20
36	1	1472	U	C6-N1-C2	6.82	125.09	121.00
36	1	2863	G	N1-C2-N2	-6.82	110.06	116.20
36	1	2930	A	C5-C6-N1	6.82	121.11	117.70
1	6	385	A	C5-C6-N6	6.82	129.16	123.70
1	6	402	C	OP1-P-OP2	-6.82	109.37	119.60
1	6	1700	C	C6-N1-C1'	-6.82	112.61	120.80
36	5	1006	A	N1-C2-N3	6.82	132.71	129.30
36	5	3036	G	C5-C6-O6	6.82	132.69	128.60
36	5	3390	G	O5'-P-OP2	6.82	118.88	110.70
36	5	227	G	C5-N7-C8	6.82	107.71	104.30
36	5	1376	C	C2-N1-C1'	6.82	126.30	118.80
36	5	2161	G	N3-C2-N2	-6.82	115.13	119.90
36	5	2720	G	N3-C4-N9	6.82	130.09	126.00
36	5	3026	G	C4-C5-N7	6.82	113.53	110.80
36	1	14	U	C6-N1-C2	-6.82	116.91	121.00
36	1	392	G	N7-C8-N9	6.82	116.51	113.10
36	1	644	G	N1-C2-N2	-6.82	110.06	116.20
36	1	1146	C	C6-N1-C2	6.82	123.03	120.30
36	1	1362	G	N3-C4-C5	6.82	132.01	128.60
36	1	2122	G	C8-N9-C1'	6.82	135.86	127.00
36	1	2414	G	N3-C4-C5	6.82	132.01	128.60
1	6	811	A	N1-C6-N6	6.82	122.69	118.60
1	6	1768	G	N7-C8-N9	6.82	116.51	113.10
36	5	192	C	O5'-P-OP2	-6.82	99.56	105.70
36	5	400	G	C4-C5-N7	6.82	113.53	110.80
36	5	531	G	N3-C4-N9	6.82	130.09	126.00
36	5	998	A	N9-C4-C5	6.82	108.53	105.80
36	5	1348	U	N1-C2-O2	6.82	127.57	122.80
36	5	1551	C	N3-C4-C5	-6.82	119.17	121.90
36	5	2182	A	O5'-P-OP1	-6.82	99.56	105.70
36	5	2922	G	C5-N7-C8	-6.82	100.89	104.30
36	1	1466	G	C5-C6-O6	-6.82	124.51	128.60
36	1	2658	G	N3-C4-N9	6.82	130.09	126.00
36	1	3087	A	N1-C2-N3	6.82	132.71	129.30
36	1	3204	C	N1-C2-O2	6.82	122.99	118.90
1	6	1090	C	N3-C4-C5	6.82	124.63	121.90
36	5	1439	U	N3-C2-O2	6.82	126.97	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2178	A	C5-C6-N1	6.82	121.11	117.70
36	5	3024	A	O5'-P-OP2	6.82	118.88	110.70
36	1	1442	U	O5'-P-OP1	-6.81	99.57	105.70
36	1	2167	A	N1-C6-N6	6.81	122.69	118.60
36	1	2830	G	C4-N9-C1'	-6.81	117.64	126.50
1	6	751	G	C8-N9-C4	6.81	109.13	106.40
36	5	1554	U	N1-C2-N3	-6.81	110.81	114.90
36	5	1917	C	N3-C4-C5	6.81	124.63	121.90
1	2	17	C	C2-N3-C4	-6.81	116.49	119.90
36	1	583	G	C5-N7-C8	6.81	107.71	104.30
36	1	1713	G	C4-N9-C1'	-6.81	117.64	126.50
36	1	2664	C	N3-C4-C5	6.81	124.62	121.90
1	6	1622	G	N9-C4-C5	-6.81	102.67	105.40
36	5	2306	C	N1-C2-O2	6.81	122.99	118.90
36	5	3136	G	C5-N7-C8	-6.81	100.89	104.30
36	1	798	G	C5-C6-O6	-6.81	124.51	128.60
36	1	2303	A	N9-C4-C5	6.81	108.52	105.80
36	1	2629	U	C4-C5-C6	6.81	123.79	119.70
1	6	396	G	C5-C6-O6	6.81	132.69	128.60
36	5	3046	A	N9-C4-C5	6.81	108.52	105.80
36	1	1122	U	C6-N1-C2	-6.81	116.91	121.00
36	1	2918	G	C2-N3-C4	6.81	115.31	111.90
1	6	1038	U	C5-C4-O4	-6.81	121.81	125.90
36	5	1293	U	N1-C2-O2	-6.81	118.03	122.80
36	5	1344	G	N3-C4-N9	-6.81	121.91	126.00
36	1	213	A	C5-N7-C8	-6.81	100.50	103.90
36	1	273	A	C8-N9-C4	6.81	108.52	105.80
36	1	305	U	C2-N3-C4	-6.81	122.92	127.00
36	1	392	G	C8-N9-C4	-6.81	103.68	106.40
1	6	1271	G	N1-C6-O6	6.81	123.98	119.90
36	5	94	G	C2-N3-C4	-6.81	108.50	111.90
36	5	978	G	N1-C2-N2	6.81	122.33	116.20
36	5	1220	U	C2-N3-C4	-6.81	122.92	127.00
36	5	1293	U	C2-N3-C4	-6.81	122.92	127.00
36	5	2325	G	N1-C6-O6	6.81	123.98	119.90
36	5	2573	G	C5-C6-O6	-6.81	124.52	128.60
36	1	67	A	C2-N3-C4	6.81	114.00	110.60
36	1	375	A	C4-C5-N7	6.81	114.10	110.70
36	5	2316	G	N1-C2-N2	-6.81	110.08	116.20
36	1	344	A	OP2-P-O3'	6.80	120.17	105.20
36	1	865	U	C2-N1-C1'	-6.80	109.53	117.70
36	1	2669	G	C4-C5-N7	-6.80	108.08	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2967	A	C5-C6-N6	-6.80	118.26	123.70
36	1	2983	C	C4-C5-C6	6.80	120.80	117.40
37	3	93	C	C2-N3-C4	-6.80	116.50	119.90
38	4	24	G	C4-N9-C1'	6.80	135.35	126.50
38	4	55	U	C6-N1-C2	-6.80	116.92	121.00
36	5	835	G	O4'-C1'-N9	6.80	113.64	108.20
36	5	1604	G	C6-N1-C2	-6.80	121.02	125.10
36	5	2608	G	N1-C6-O6	6.80	123.98	119.90
36	1	1408	G	N3-C4-N9	6.80	130.08	126.00
1	2	1423	U	N3-C2-O2	-6.80	117.44	122.20
36	1	1045	C	N1-C2-O2	-6.80	114.82	118.90
36	1	1551	C	N1-C2-O2	-6.80	114.82	118.90
36	1	3326	G	C5-N7-C8	6.80	107.70	104.30
1	6	621	A	N9-C4-C5	6.80	108.52	105.80
1	6	1679	G	N3-C4-C5	-6.80	125.20	128.60
36	5	34	A	C8-N9-C4	-6.80	103.08	105.80
36	5	1847	A	C6-N1-C2	6.80	122.68	118.60
36	5	2129	U	C6-N1-C2	-6.80	116.92	121.00
36	1	983	A	O4'-C1'-N9	-6.80	102.76	108.20
36	1	1483	G	C2-N3-C4	6.80	115.30	111.90
36	1	1507	G	C4-C5-N7	6.80	113.52	110.80
36	1	1894	U	C2-N1-C1'	-6.80	109.54	117.70
36	1	2199	G	N7-C8-N9	6.80	116.50	113.10
36	1	2773	C	C6-N1-C2	6.80	123.02	120.30
1	6	1093	A	C5-C6-N1	6.80	121.10	117.70
36	5	608	A	N3-C4-N9	6.80	132.84	127.40
36	5	1473	G	N1-C2-N2	-6.80	110.08	116.20
37	7	113	C	O5'-P-OP1	-6.80	99.58	105.70
1	2	1007	C	C6-N1-C2	6.80	123.02	120.30
36	1	939	U	C5'-C4'-O4'	6.80	117.26	109.10
36	1	1522	U	N1-C2-O2	6.80	127.56	122.80
38	4	40	A	N7-C8-N9	6.80	117.20	113.80
36	5	428	A	OP2-P-O3'	6.80	120.16	105.20
36	5	531	G	C6-C5-N7	-6.80	126.32	130.40
36	5	2334	U	C2-N1-C1'	6.80	125.86	117.70
36	5	2833	A	N1-C2-N3	6.80	132.70	129.30
36	1	1523	U	N1-C2-O2	6.80	127.56	122.80
36	1	2777	G	N9-C4-C5	6.80	108.12	105.40
36	5	1155	C	OP1-P-OP2	6.80	129.79	119.60
36	5	1158	A	N7-C8-N9	-6.80	110.40	113.80
36	5	3164	C	C5-C4-N4	-6.80	115.44	120.20
36	1	1373	A	OP1-P-O3'	-6.79	90.25	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1505	C	C5-C6-N1	-6.79	117.60	121.00
36	5	2397	A	N1-C2-N3	6.79	132.70	129.30
38	8	66	A	C5-C6-N1	-6.79	114.30	117.70
36	1	197	G	C4-C5-N7	6.79	113.52	110.80
36	1	353	G	N1-C6-O6	-6.79	115.82	119.90
1	6	1006	C	C2-N3-C4	-6.79	116.50	119.90
36	5	2341	A	C6-N1-C2	-6.79	114.52	118.60
36	5	2754	G	N3-C4-N9	6.79	130.08	126.00
36	5	2895	G	C4-C5-C6	6.79	122.88	118.80
36	5	2935	U	C4-C5-C6	-6.79	115.62	119.70
36	5	3045	G	C2-N3-C4	-6.79	108.50	111.90
1	2	377	G	N1-C2-N2	6.79	122.31	116.20
36	1	349	A	C8-N9-C4	-6.79	103.08	105.80
36	1	2622	C	C2-N1-C1'	6.79	126.27	118.80
36	1	3090	U	O5'-P-OP2	-6.79	99.59	105.70
38	4	63	G	O5'-P-OP2	-6.79	99.59	105.70
1	6	1206	U	N3-C4-O4	6.79	124.15	119.40
36	5	129	U	C6-N1-C2	-6.79	116.93	121.00
36	5	425	G	N1-C2-N3	6.79	127.97	123.90
36	5	1296	C	N1-C2-N3	6.79	123.95	119.20
38	8	15	G	C5-N7-C8	6.79	107.70	104.30
36	1	2871	G	C4-C5-C6	-6.79	114.73	118.80
36	1	2922	G	C5-C6-N1	6.79	114.89	111.50
36	1	3271	G	O5'-P-OP1	6.79	118.85	110.70
36	5	1142	G	O5'-P-OP2	-6.79	99.59	105.70
36	5	1664	G	OP2-P-O3'	6.79	120.14	105.20
1	2	157	A	C8-N9-C4	6.79	108.52	105.80
36	1	696	C	O4'-C1'-N1	6.79	113.63	108.20
36	1	2828	G	C5-C6-O6	6.79	132.67	128.60
36	1	3083	G	O5'-P-OP2	-6.79	99.59	105.70
1	6	1086	A	C2-N3-C4	-6.79	107.21	110.60
1	6	1503	A	O5'-P-OP1	-6.79	99.59	105.70
36	5	315	C	C6-N1-C2	6.79	123.02	120.30
36	5	1126	G	C4-C5-C6	6.79	122.87	118.80
36	1	940	G	C5-C6-N1	6.79	114.89	111.50
38	4	10	A	O5'-P-OP2	-6.79	99.59	105.70
40	L3	244	ARG	NE-CZ-NH2	-6.79	116.91	120.30
36	5	2895	G	N3-C4-N9	6.79	130.07	126.00
36	1	366	A	C4-C5-C6	6.79	120.39	117.00
36	1	1052	U	N3-C4-O4	-6.79	114.65	119.40
36	1	2651	G	C5-C6-O6	-6.79	124.53	128.60
1	6	759	U	N3-C2-O2	-6.79	117.45	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1668	G	N3-C2-N2	-6.79	115.15	119.90
36	5	1367	G	O5'-P-OP1	-6.79	99.59	105.70
36	5	1468	A	C2-N3-C4	-6.79	107.21	110.60
36	5	2763	U	OP2-P-O3'	6.79	120.13	105.20
1	2	582	U	N3-C2-O2	-6.78	117.45	122.20
36	1	1594	A	C5-C6-N6	6.78	129.13	123.70
1	6	396	G	N1-C6-O6	-6.78	115.83	119.90
36	5	608	A	C6-C5-N7	-6.78	127.55	132.30
36	5	1669	C	C6-N1-C2	-6.78	117.59	120.30
36	5	2188	A	C8-N9-C4	6.78	108.51	105.80
37	7	99	G	N1-C6-O6	-6.78	115.83	119.90
38	8	28	C	N3-C4-N4	6.78	122.75	118.00
36	1	697	A	C4-C5-C6	-6.78	113.61	117.00
36	1	813	G	C5-N7-C8	-6.78	100.91	104.30
36	1	3104	U	O5'-P-OP1	-6.78	99.60	105.70
1	6	1528	U	C5-C6-N1	-6.78	119.31	122.70
36	5	857	G	N9-C4-C5	6.78	108.11	105.40
36	5	1060	U	N3-C4-C5	6.78	118.67	114.60
36	5	1498	A	C8-N9-C4	-6.78	103.09	105.80
36	5	2752	U	N3-C4-C5	6.78	118.67	114.60
1	2	1658	G	O5'-P-OP1	-6.78	99.60	105.70
36	1	50	U	C4-C5-C6	6.78	123.77	119.70
36	1	121	A	C8-N9-C4	6.78	108.51	105.80
36	1	637	C	N3-C2-O2	-6.78	117.15	121.90
1	6	555	A	C8-N9-C4	-6.78	103.09	105.80
1	6	1580	C	C2-N1-C1'	-6.78	111.34	118.80
36	5	1914	G	N1-C6-O6	-6.78	115.83	119.90
36	5	2285	C	C4-C5-C6	6.78	120.79	117.40
36	5	3246	G	OP1-P-OP2	-6.78	109.43	119.60
36	5	3312	U	C6-N1-C2	6.78	125.07	121.00
36	1	2107	A	N1-C2-N3	6.78	132.69	129.30
36	1	2156	C	C2-N3-C4	-6.78	116.51	119.90
36	1	2738	A	C5-C6-N1	6.78	121.09	117.70
37	3	7	G	C6-C5-N7	6.78	134.47	130.40
36	5	2890	A	N9-C4-C5	6.78	108.51	105.80
1	2	1212	G	C4-C5-C6	6.78	122.87	118.80
36	1	344	A	O5'-P-OP1	-6.78	99.60	105.70
36	1	714	G	C4-C5-N7	6.78	113.51	110.80
36	1	2102	U	C6-N1-C2	6.78	125.07	121.00
36	1	2121	G	N3-C4-N9	-6.78	121.93	126.00
36	1	3309	G	N9-C1'-C2'	-6.78	104.55	112.00
1	6	1639	C	C4-C5-C6	-6.78	114.01	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1670	G	N3-C4-C5	-6.78	125.21	128.60
1	6	1747	G	C2-N3-C4	-6.78	108.51	111.90
36	5	62	A	C5-N7-C8	-6.78	100.51	103.90
36	5	187	A	N9-C4-C5	6.78	108.51	105.80
36	5	517	G	C5-C6-O6	-6.78	124.53	128.60
36	5	787	G	C5-N7-C8	6.78	107.69	104.30
36	5	1150	A	N7-C8-N9	6.78	117.19	113.80
36	5	1316	C	C5-C6-N1	-6.78	117.61	121.00
1	2	1412	G	N3-C4-N9	-6.78	121.93	126.00
36	1	222	A	OP2-P-O3'	6.78	120.10	105.20
36	1	2199	G	C8-N9-C4	-6.78	103.69	106.40
1	6	576	G	C5-C6-O6	-6.78	124.53	128.60
36	5	298	U	C5-C6-N1	6.78	126.09	122.70
36	5	833	G	O5'-P-OP2	-6.78	99.60	105.70
36	5	2993	G	C6-C5-N7	-6.78	126.33	130.40
36	1	691	A	N3-C4-C5	6.77	131.54	126.80
36	1	2557	A	N1-C6-N6	-6.77	114.53	118.60
36	1	2894	C	O5'-P-OP2	-6.77	99.60	105.70
1	6	1696	G	P-O3'-C3'	6.77	127.83	119.70
36	5	3275	U	C5-C6-N1	6.77	126.09	122.70
1	2	390	G	N3-C4-N9	-6.77	121.94	126.00
36	1	220	G	C4-C5-C6	6.77	122.86	118.80
37	3	38	U	O5'-P-OP2	-6.77	99.60	105.70
1	6	996	U	N3-C4-O4	6.77	124.14	119.40
36	5	860	G	N9-C4-C5	-6.77	102.69	105.40
36	5	891	G	N9-C4-C5	6.77	108.11	105.40
36	5	1525	G	C4-N9-C1'	6.77	135.31	126.50
36	5	1870	C	N1-C2-O2	-6.77	114.84	118.90
36	5	2796	G	C8-N9-C4	6.77	109.11	106.40
36	5	2957	G	N9-C1'-C2'	-6.77	104.55	112.00
36	5	2980	U	C5-C4-O4	6.77	129.96	125.90
38	8	17	A	N9-C4-C5	-6.77	103.09	105.80
38	8	48	A	N1-C2-N3	-6.77	125.91	129.30
1	6	315	A	C5-N7-C8	6.77	107.29	103.90
1	6	1418	G	C2-N3-C4	-6.77	108.51	111.90
36	5	1905	G	C5-N7-C8	6.77	107.69	104.30
1	2	568	G	N1-C6-O6	-6.77	115.84	119.90
36	1	689	U	C5-C4-O4	-6.77	121.84	125.90
36	1	1878	G	N3-C2-N2	-6.77	115.16	119.90
36	1	2122	G	C5-C6-N1	6.77	114.89	111.50
1	6	466	U	C6-N1-C2	-6.77	116.94	121.00
36	5	744	A	C4-C5-N7	6.77	114.08	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	860	G	N1-C6-O6	6.77	123.96	119.90
36	5	2522	G	N1-C6-O6	6.77	123.96	119.90
36	1	1440	G	OP2-P-O3'	6.77	120.09	105.20
36	1	3285	C	C6-N1-C2	6.77	123.01	120.30
36	1	3306	U	C2-N1-C1'	6.77	125.82	117.70
1	6	1393	C	C6-N1-C2	-6.77	117.59	120.30
36	5	1122	U	N1-C2-N3	6.77	118.96	114.90
36	5	1282	G	N3-C4-C5	6.77	131.98	128.60
36	5	2132	C	C6-N1-C2	-6.77	117.59	120.30
36	5	2824	G	N3-C2-N2	6.77	124.64	119.90
36	1	683	U	C5-C6-N1	-6.77	119.32	122.70
36	1	2956	A	N1-C6-N6	6.77	122.66	118.60
36	1	3184	A	C8-N9-C4	-6.77	103.09	105.80
1	6	506	A	C8-N9-C4	-6.77	103.09	105.80
1	6	1087	A	N1-C6-N6	-6.77	114.54	118.60
36	5	1461	A	N1-C6-N6	-6.77	114.54	118.60
36	5	1481	A	C4-C5-C6	6.77	120.38	117.00
36	5	2584	G	OP2-P-O3'	6.77	120.08	105.20
37	7	102	A	C5-N7-C8	-6.77	100.52	103.90
36	1	802	C	N3-C4-N4	-6.76	113.27	118.00
36	1	1177	G	C6-C5-N7	-6.76	126.34	130.40
36	1	3263	G	N3-C4-C5	-6.76	125.22	128.60
36	5	1236	G	N3-C4-N9	6.76	130.06	126.00
36	5	1861	G	N1-C2-N2	-6.76	110.11	116.20
36	5	2872	A	N1-C6-N6	-6.76	114.54	118.60
37	7	15	C	N3-C2-O2	-6.76	117.17	121.90
36	1	96	G	N3-C4-C5	6.76	131.98	128.60
36	5	567	G	C5-C6-N1	-6.76	108.12	111.50
36	5	1149	G	C4-N9-C1'	6.76	135.29	126.50
36	5	1536	G	C2-N3-C4	-6.76	108.52	111.90
36	5	2371	G	N1-C6-O6	6.76	123.96	119.90
36	5	3271	G	N3-C4-N9	6.76	130.06	126.00
36	1	432	G	C2-N3-C4	-6.76	108.52	111.90
36	1	1114	U	OP1-P-O3'	6.76	120.07	105.20
36	1	1151	U	OP1-P-OP2	-6.76	109.46	119.60
36	1	3318	G	C4-C5-N7	6.76	113.50	110.80
1	6	543	C	N3-C4-N4	-6.76	113.27	118.00
1	6	1156	C	C6-N1-C2	-6.76	117.59	120.30
1	6	1470	C	C2-N1-C1'	6.76	126.24	118.80
36	5	155	G	C5-C6-N1	6.76	114.88	111.50
36	5	1490	A	N9-C4-C5	6.76	108.50	105.80
36	5	2341	A	C8-N9-C4	6.76	108.50	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2610	G	C8-N9-C4	-6.76	103.69	106.40
36	5	3075	G	C5-C6-N1	-6.76	108.12	111.50
36	1	1527	C	C5-C6-N1	6.76	124.38	121.00
36	1	2333	C	N3-C4-N4	-6.76	113.27	118.00
36	1	2730	G	N1-C6-O6	6.76	123.96	119.90
1	6	420	A	N7-C8-N9	6.76	117.18	113.80
1	6	1272	U	C6-N1-C2	-6.76	116.94	121.00
36	5	38	U	C6-N1-C2	6.76	125.06	121.00
36	5	1399	A	N3-C4-C5	6.76	131.53	126.80
36	5	1868	G	C4-C5-N7	6.76	113.50	110.80
36	5	2873	U	C4-C5-C6	6.76	123.76	119.70
1	2	1737	G	C5-C6-N1	-6.76	108.12	111.50
36	1	676	G	C8-N9-C4	-6.76	103.70	106.40
36	1	2967	A	N1-C6-N6	6.76	122.66	118.60
36	5	3194	C	N3-C4-N4	6.76	122.73	118.00
1	2	1631	A	N3-C4-N9	-6.76	121.99	127.40
36	1	616	G	N9-C4-C5	-6.76	102.70	105.40
36	1	660	A	C5-C6-N6	6.76	129.11	123.70
36	1	664	U	N3-C4-C5	-6.76	110.55	114.60
36	1	2888	U	O5'-P-OP1	-6.76	99.62	105.70
1	6	1650	U	N3-C4-C5	-6.76	110.55	114.60
12	c0	83	PRO	N-CA-CB	6.76	111.41	103.30
36	5	209	A	N1-C6-N6	6.76	122.65	118.60
36	5	1366	A	C5-C6-N6	-6.76	118.29	123.70
36	5	1845	G	OP1-P-O3'	6.76	120.06	105.20
36	1	691	A	C6-C5-N7	-6.75	127.57	132.30
36	1	2411	U	C2-N3-C4	-6.75	122.95	127.00
36	1	3316	A	N3-C4-C5	6.75	131.53	126.80
36	5	97	U	N3-C4-O4	6.75	124.13	119.40
36	5	808	A	N9-C4-C5	6.75	108.50	105.80
36	5	2288	G	C4-N9-C1'	6.75	135.28	126.50
36	1	668	G	OP1-P-OP2	6.75	129.73	119.60
36	1	1858	A	N3-C4-N9	6.75	132.80	127.40
36	1	2847	A	N3-C4-C5	6.75	131.53	126.80
36	1	3305	A	N3-C4-C5	-6.75	122.07	126.80
36	5	713	U	C2-N3-C4	-6.75	122.95	127.00
36	5	3092	C	N3-C4-N4	6.75	122.73	118.00
36	1	2305	G	C2-N3-C4	6.75	115.28	111.90
38	4	46	G	C6-C5-N7	-6.75	126.35	130.40
1	6	1100	G	C5-C6-O6	-6.75	124.55	128.60
36	5	306	A	O5'-P-OP1	6.75	118.80	110.70
36	5	421	G	N3-C4-N9	6.75	130.05	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	560	G	C4-C5-N7	-6.75	108.10	110.80
36	5	803	C	N3-C4-C5	6.75	124.60	121.90
36	5	832	G	C5-N7-C8	6.75	107.68	104.30
36	5	1162	U	N1-C2-N3	6.75	118.95	114.90
1	6	316	A	C5-N7-C8	-6.75	100.53	103.90
1	6	1409	G	N3-C4-N9	6.75	130.05	126.00
1	6	1546	G	C4-N9-C1'	6.75	135.27	126.50
36	5	52	A	C2-N3-C4	-6.75	107.22	110.60
36	5	2421	U	C5-C6-N1	-6.75	119.33	122.70
36	1	3122	A	C5-N7-C8	-6.75	100.53	103.90
1	6	1368	G	C4-C5-N7	6.75	113.50	110.80
36	5	897	U	N1-C2-O2	-6.75	118.08	122.80
36	5	3329	U	N1-C2-N3	6.75	118.95	114.90
36	1	1393	A	C4-C5-C6	6.75	120.37	117.00
36	1	2241	U	C4-C5-C6	6.75	123.75	119.70
1	6	635	A	N1-C6-N6	-6.75	114.55	118.60
36	5	2796	G	N9-C4-C5	-6.75	102.70	105.40
1	2	1418	G	C4-C5-N7	6.74	113.50	110.80
36	1	1920	U	C4-C5-C6	6.74	123.75	119.70
36	1	2413	A	C5-N7-C8	-6.74	100.53	103.90
1	6	312	A	C8-N9-C4	-6.74	103.10	105.80
36	5	155	G	N9-C4-C5	-6.74	102.70	105.40
36	5	956	U	N1-C2-O2	-6.74	118.08	122.80
36	5	1868	G	C6-C5-N7	-6.74	126.35	130.40
36	5	2620	G	C4-C5-N7	-6.74	108.10	110.80
36	5	2940	A	C6-N1-C2	-6.74	114.55	118.60
1	2	1486	G	N3-C4-C5	-6.74	125.23	128.60
36	1	54	C	C6-N1-C2	6.74	123.00	120.30
36	1	2395	G	N7-C8-N9	6.74	116.47	113.10
37	3	78	U	N3-C4-O4	6.74	124.12	119.40
36	1	649	A	N1-C6-N6	-6.74	114.56	118.60
36	1	2303	A	C8-N9-C4	-6.74	103.10	105.80
36	1	2917	G	N7-C8-N9	-6.74	109.73	113.10
36	1	3208	G	N3-C4-C5	-6.74	125.23	128.60
36	5	91	G	C5-C6-O6	-6.74	124.56	128.60
36	5	1422	G	N7-C8-N9	6.74	116.47	113.10
36	5	2658	G	O5'-P-OP2	-6.74	99.63	105.70
1	2	1011	G	C8-N9-C4	-6.74	103.70	106.40
1	2	1195	C	C2-N1-C1'	6.74	126.21	118.80
36	1	334	A	C2-N3-C4	6.74	113.97	110.60
36	1	2199	G	C5-C6-N1	6.74	114.87	111.50
36	1	2816	G	N3-C2-N2	6.74	124.62	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	761	G	C5-C6-O6	6.74	132.64	128.60
1	6	960	U	N1-C2-O2	6.74	127.52	122.80
36	5	866	A	N1-C6-N6	6.74	122.64	118.60
36	5	1051	U	O5'-P-OP1	-6.74	99.64	105.70
36	5	2358	A	N7-C8-N9	-6.74	110.43	113.80
36	5	2389	C	C5-C4-N4	-6.74	115.48	120.20
36	1	52	A	C5-N7-C8	6.74	107.27	103.90
36	1	1929	G	N9-C4-C5	-6.74	102.71	105.40
36	1	1951	C	N1-C2-O2	6.74	122.94	118.90
36	1	2193	U	C2-N1-C1'	-6.74	109.62	117.70
37	3	7	G	N9-C4-C5	6.74	108.09	105.40
1	6	11	A	N1-C6-N6	-6.74	114.56	118.60
1	6	357	G	N1-C6-O6	6.74	123.94	119.90
1	6	630	A	C4-C5-C6	6.74	120.37	117.00
1	6	1111	G	N1-C2-N2	-6.74	110.14	116.20
36	5	266	A	N1-C6-N6	6.74	122.64	118.60
36	5	1400	G	N3-C4-N9	6.74	130.04	126.00
36	5	1546	A	N9-C4-C5	6.74	108.50	105.80
36	5	2420	C	OP1-P-O3'	6.74	120.02	105.20
36	5	2942	C	C6-N1-C2	-6.74	117.61	120.30
36	5	3091	A	C5-N7-C8	-6.74	100.53	103.90
37	7	111	U	C4-C5-C6	6.74	123.74	119.70
36	1	1190	A	C8-N9-C4	-6.73	103.11	105.80
36	1	3137	C	C5-C6-N1	-6.73	117.63	121.00
1	6	800	U	N1-C2-O2	-6.73	118.09	122.80
36	5	2339	C	C5-C4-N4	-6.73	115.49	120.20
1	2	1140	G	N1-C6-O6	6.73	123.94	119.90
36	1	3053	G	C5-C6-N1	-6.73	108.13	111.50
1	6	383	G	C4-C5-N7	6.73	113.49	110.80
1	6	1477	G	C5-C6-N1	6.73	114.87	111.50
36	5	1139	G	C6-C5-N7	6.73	134.44	130.40
36	5	1793	C	C2-N1-C1'	6.73	126.20	118.80
36	5	2243	A	C4-C5-N7	-6.73	107.33	110.70
36	5	2623	G	N7-C8-N9	-6.73	109.73	113.10
37	7	121	U	C2-N1-C1'	6.73	125.78	117.70
38	8	111	A	N9-C4-C5	-6.73	103.11	105.80
1	2	1728	A	N1-C6-N6	-6.73	114.56	118.60
36	1	352	A	O4'-C1'-N9	6.73	113.58	108.20
36	1	787	G	C4-N9-C1'	6.73	135.25	126.50
1	6	1535	U	OP2-P-O3'	6.73	120.01	105.20
36	5	424	G	O5'-P-OP2	-6.73	99.64	105.70
36	5	2335	G	C2-N3-C4	6.73	115.27	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	76	A	C5-N7-C8	6.73	107.27	103.90
36	1	642	U	N3-C4-C5	-6.73	110.56	114.60
36	1	1049	C	C2-N3-C4	-6.73	116.53	119.90
1	6	597	G	C5-N7-C8	-6.73	100.94	104.30
36	5	2159	U	N1-C2-O2	6.73	127.51	122.80
36	5	2282	U	O5'-P-OP1	-6.73	99.64	105.70
1	2	261	U	N1-C2-O2	6.73	127.51	122.80
36	1	651	G	C4-C5-C6	6.73	122.84	118.80
36	1	2402	A	C6-N1-C2	-6.73	114.56	118.60
36	1	2627	C	OP1-P-OP2	-6.73	109.51	119.60
36	1	3251	U	C5-C6-N1	-6.73	119.34	122.70
36	1	3318	G	C8-N9-C1'	-6.73	118.25	127.00
37	3	52	G	C8-N9-C4	-6.73	103.71	106.40
1	6	209	U	N3-C2-O2	6.73	126.91	122.20
1	6	1774	G	N9-C4-C5	6.73	108.09	105.40
36	5	996	A	OP2-P-O3'	6.73	120.00	105.20
36	5	2168	A	C5-N7-C8	-6.73	100.54	103.90
36	5	2888	U	C5-C6-N1	-6.73	119.34	122.70
1	2	432	G	N1-C6-O6	-6.73	115.86	119.90
36	1	108	A	N1-C6-N6	6.73	122.64	118.60
36	1	329	U	C4-C5-C6	6.73	123.73	119.70
1	6	1651	A	C2-N3-C4	-6.73	107.24	110.60
36	5	2409	G	O5'-P-OP2	-6.73	99.65	105.70
36	1	1594	A	C4-C5-N7	-6.72	107.34	110.70
36	1	2113	A	C5-C6-N6	6.72	129.08	123.70
36	5	877	C	C5-C4-N4	-6.72	115.49	120.20
36	5	1126	G	C6-C5-N7	-6.72	126.36	130.40
36	5	1897	G	N3-C4-N9	6.72	130.03	126.00
36	5	2614	G	N3-C4-N9	6.72	130.03	126.00
36	5	2961	G	C4-N9-C1'	6.72	135.24	126.50
47	m0	182	LEU	CA-CB-CG	-6.72	99.83	115.30
36	1	1167	U	N1-C2-N3	6.72	118.93	114.90
36	1	1930	A	N1-C6-N6	6.72	122.63	118.60
36	1	2937	G	C6-C5-N7	6.72	134.43	130.40
37	3	118	A	N1-C6-N6	-6.72	114.57	118.60
1	6	326	G	C4-N9-C1'	6.72	135.24	126.50
1	6	608	U	C6-N1-C2	-6.72	116.97	121.00
1	6	1145	U	N3-C2-O2	6.72	126.91	122.20
36	5	1500	G	C8-N9-C4	6.72	109.09	106.40
36	5	1548	C	C5-C6-N1	6.72	124.36	121.00
37	7	37	G	N9-C4-C5	-6.72	102.71	105.40
36	1	1307	G	N1-C2-N3	6.72	127.93	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	648	C	OP1-P-OP2	6.72	129.68	119.60
36	1	693	A	C8-N9-C4	-6.72	103.11	105.80
36	1	2190	U	C4-C5-C6	6.72	123.73	119.70
1	6	923	A	N9-C4-C5	6.72	108.49	105.80
1	6	1013	A	N9-C4-C5	6.72	108.49	105.80
36	5	649	A	N9-C4-C5	-6.72	103.11	105.80
36	5	1592	G	C5-N7-C8	6.72	107.66	104.30
36	5	2618	G	O5'-P-OP2	-6.72	99.65	105.70
36	5	2699	G	C5-C6-N1	6.72	114.86	111.50
36	5	3315	G	C6-C5-N7	-6.72	126.37	130.40
1	2	1555	A	C5-C6-N6	6.72	129.07	123.70
36	1	1147	G	O5'-P-OP2	6.72	118.76	110.70
1	6	310	C	O5'-P-OP1	-6.72	99.65	105.70
1	6	1028	C	C5-C6-N1	-6.72	117.64	121.00
1	6	1527	C	C2-N1-C1'	-6.72	111.41	118.80
36	5	1671	C	N3-C4-C5	-6.72	119.21	121.90
37	7	51	A	C8-N9-C4	-6.72	103.11	105.80
1	2	75	U	C2-N1-C1'	6.72	125.76	117.70
1	2	1632	C	N1-C2-O2	-6.72	114.87	118.90
36	1	1097	G	O5'-P-OP2	-6.72	99.66	105.70
36	1	1901	A	C2-N3-C4	6.72	113.96	110.60
36	1	2288	G	N3-C4-N9	6.72	130.03	126.00
36	1	2692	A	N7-C8-N9	6.72	117.16	113.80
36	1	3180	A	N3-C4-N9	-6.72	122.03	127.40
1	6	33	U	N3-C4-O4	6.72	124.10	119.40
1	6	825	U	N3-C2-O2	6.72	126.90	122.20
1	6	1171	A	C8-N9-C4	-6.72	103.11	105.80
36	5	578	A	N1-C2-N3	6.72	132.66	129.30
36	5	2373	A	O5'-P-OP2	6.72	118.76	110.70
36	1	305	U	N3-C4-O4	-6.71	114.70	119.40
36	1	779	G	OP2-P-O3'	6.71	119.97	105.20
36	1	2184	U	N3-C4-O4	6.71	124.10	119.40
36	5	1210	U	C5-C4-O4	6.71	129.93	125.90
36	5	2893	C	N3-C2-O2	6.71	126.60	121.90
36	5	2930	A	OP2-P-O3'	6.71	119.97	105.20
36	1	39	A	C4-C5-C6	-6.71	113.64	117.00
36	1	2344	U	C2-N1-C1'	-6.71	109.64	117.70
36	1	3331	U	O5'-P-OP2	-6.71	99.66	105.70
36	5	428	A	C5-C6-N6	-6.71	118.33	123.70
1	2	1197	C	O5'-P-OP2	-6.71	99.66	105.70
36	1	27	C	N1-C2-N3	6.71	123.90	119.20
36	1	1459	C	N3-C2-O2	-6.71	117.20	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2704	A	N1-C2-N3	6.71	132.66	129.30
1	6	163	G	N1-C2-N3	6.71	127.93	123.90
1	6	1773	C	C6-N1-C2	-6.71	117.62	120.30
36	5	609	G	C5-C6-N1	-6.71	108.14	111.50
36	5	657	A	OP1-P-OP2	-6.71	109.53	119.60
36	5	3215	A	N9-C4-C5	-6.71	103.12	105.80
1	2	1324	G	N1-C2-N2	6.71	122.24	116.20
36	1	677	A	N7-C8-N9	-6.71	110.44	113.80
36	1	3101	G	C5-C6-N1	6.71	114.86	111.50
36	1	1792	C	N3-C2-O2	-6.71	117.20	121.90
36	1	2174	G	C6-C5-N7	-6.71	126.37	130.40
36	1	2393	G	N1-C6-O6	6.71	123.92	119.90
1	6	1476	C	N3-C4-C5	-6.71	119.22	121.90
36	5	1788	C	N1-C2-O2	-6.71	114.87	118.90
36	5	2364	G	C5-C6-O6	-6.71	124.58	128.60
37	7	82	G	C5-C6-O6	-6.71	124.58	128.60
37	7	85	G	C4-C5-N7	6.71	113.48	110.80
36	1	662	U	OP1-P-O3'	-6.71	90.44	105.20
36	1	2119	A	C5-C6-N6	-6.71	118.33	123.70
1	6	917	U	N3-C4-C5	-6.71	110.58	114.60
1	6	1418	G	O5'-P-OP2	6.71	118.75	110.70
36	5	1156	C	C5-C4-N4	-6.71	115.51	120.20
36	5	3032	A	C5-C6-N1	6.71	121.05	117.70
36	1	1124	U	C6-N1-C2	-6.71	116.98	121.00
36	1	2933	A	C5-C6-N6	-6.71	118.34	123.70
1	6	610	G	C4-N9-C1'	6.71	135.22	126.50
36	5	27	C	OP1-P-OP2	6.71	129.66	119.60
36	5	1612	A	C4-C5-C6	6.71	120.35	117.00
36	5	2291	A	C5-N7-C8	-6.71	100.55	103.90
36	1	123	A	N1-C6-N6	-6.70	114.58	118.60
36	1	2368	A	N9-C4-C5	-6.70	103.12	105.80
1	6	35	U	C5-C4-O4	6.70	129.92	125.90
36	5	248	U	C5-C6-N1	6.70	126.05	122.70
36	5	2756	C	C2-N3-C4	-6.70	116.55	119.90
36	1	1109	U	C2-N1-C1'	6.70	125.74	117.70
36	1	1269	U	N1-C2-O2	6.70	127.49	122.80
36	5	697	A	C8-N9-C4	6.70	108.48	105.80
36	5	974	G	C6-N1-C2	-6.70	121.08	125.10
36	5	1319	G	N3-C2-N2	-6.70	115.21	119.90
36	5	1433	A	O4'-C1'-N9	-6.70	102.84	108.20
36	5	2796	G	N3-C2-N2	6.70	124.59	119.90
36	5	3219	G	N7-C8-N9	6.70	116.45	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	322	U	N1-C2-O2	6.70	127.49	122.80
36	1	518	G	N3-C4-C5	6.70	131.95	128.60
36	1	651	G	N3-C4-C5	-6.70	125.25	128.60
36	1	2889	C	C6-N1-C2	6.70	122.98	120.30
38	4	30	C	C2-N3-C4	-6.70	116.55	119.90
1	6	1573	A	C6-N1-C2	-6.70	114.58	118.60
36	5	1209	G	C5-C6-N1	-6.70	108.15	111.50
36	5	2116	G	C5-N7-C8	-6.70	100.95	104.30
1	2	89	G	N3-C4-C5	6.70	131.95	128.60
36	1	796	U	N3-C2-O2	6.70	126.89	122.20
36	1	1065	A	N9-C4-C5	6.70	108.48	105.80
36	1	1269	U	C2-N1-C1'	6.70	125.74	117.70
36	1	2998	U	N1-C2-O2	-6.70	118.11	122.80
36	5	900	G	N3-C4-C5	-6.70	125.25	128.60
36	5	2187	G	N3-C4-N9	-6.70	121.98	126.00
36	5	2290	C	N3-C4-N4	-6.70	113.31	118.00
36	5	3292	A	O5'-P-OP2	-6.70	99.67	105.70
36	1	2847	A	C4-C5-N7	6.70	114.05	110.70
36	5	629	U	C5-C4-O4	6.70	129.92	125.90
36	5	3005	A	N1-C6-N6	6.70	122.62	118.60
36	1	583	G	O5'-P-OP1	-6.70	99.67	105.70
36	1	1137	C	OP2-P-O3'	6.70	119.93	105.20
36	1	1695	U	C5-C6-N1	-6.70	119.35	122.70
36	1	2305	G	C5-C6-N1	6.70	114.85	111.50
37	3	79	A	N3-C4-C5	6.70	131.49	126.80
36	5	3026	G	C5-C6-N1	-6.70	108.15	111.50
36	5	3089	C	N3-C4-N4	6.70	122.69	118.00
36	1	1419	A	N7-C8-N9	6.69	117.15	113.80
36	1	1520	G	C5-C6-N1	-6.69	108.15	111.50
36	1	1522	U	C5-C6-N1	-6.69	119.35	122.70
36	5	973	A	C6-C5-N7	-6.69	127.61	132.30
36	5	2893	C	N1-C2-N3	-6.69	114.51	119.20
36	1	1046	A	O4'-C1'-N9	-6.69	102.85	108.20
36	1	1326	A	O5'-P-OP1	6.69	118.73	110.70
1	6	1150	G	N1-C6-O6	6.69	123.92	119.90
36	5	362	U	N1-C2-N3	6.69	118.92	114.90
36	5	1323	G	O5'-P-OP1	6.69	118.73	110.70
36	5	2120	A	C5-C6-N1	-6.69	114.35	117.70
36	5	2735	U	N3-C2-O2	-6.69	117.52	122.20
36	1	1490	A	C8-N9-C4	-6.69	103.12	105.80
36	1	1906	G	C5-C6-O6	-6.69	124.59	128.60
36	1	2210	G	C6-C5-N7	6.69	134.41	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2641	U	O5'-P-OP1	6.69	118.73	110.70
38	4	51	G	C2-N3-C4	-6.69	108.56	111.90
1	6	1472	C	C2-N3-C4	-6.69	116.56	119.90
36	5	264	G	N3-C4-C5	-6.69	125.25	128.60
36	5	1113	G	N3-C4-N9	-6.69	121.99	126.00
36	5	2278	C	C2-N3-C4	6.69	123.25	119.90
36	5	2285	C	C2-N3-C4	-6.69	116.56	119.90
1	2	12	U	N1-C2-O2	-6.69	118.12	122.80
1	2	424	C	C5-C6-N1	6.69	124.34	121.00
36	1	372	A	O5'-P-OP2	-6.69	99.68	105.70
36	1	796	U	C4-C5-C6	-6.69	115.69	119.70
36	1	1323	G	N1-C6-O6	6.69	123.91	119.90
36	1	3032	A	N1-C6-N6	-6.69	114.59	118.60
1	6	1288	G	C8-N9-C4	6.69	109.08	106.40
1	6	1517	U	O5'-P-OP2	-6.69	99.68	105.70
1	6	1582	U	O5'-P-OP1	-6.69	99.68	105.70
1	6	1619	C	N1-C2-O2	6.69	122.91	118.90
36	1	2743	A	C8-N9-C4	6.69	108.47	105.80
1	6	1456	C	C5-C4-N4	6.69	124.88	120.20
12	c0	97	PRO	N-CA-CB	6.69	111.33	103.30
36	5	1038	C	C6-N1-C2	-6.69	117.62	120.30
36	5	1073	U	N3-C4-O4	-6.69	114.72	119.40
36	5	1096	U	C5-C4-O4	-6.69	121.89	125.90
36	5	2652	U	N3-C4-O4	6.69	124.08	119.40
37	7	29	C	C4-C5-C6	6.69	120.74	117.40
1	2	1789	G	O4'-C1'-N9	-6.69	102.85	108.20
1	6	1735	U	N3-C2-O2	-6.68	117.52	122.20
36	5	2291	A	N3-C4-C5	6.68	131.48	126.80
36	5	3031	G	O5'-P-OP2	-6.68	99.68	105.70
36	1	350	C	N3-C2-O2	-6.68	117.22	121.90
36	1	580	C	N1-C2-O2	-6.68	114.89	118.90
36	1	957	C	O5'-P-OP2	-6.68	99.69	105.70
36	1	998	A	C5-C6-N6	-6.68	118.35	123.70
36	1	1311	G	C5-C6-N1	-6.68	108.16	111.50
36	1	3144	G	N1-C6-O6	6.68	123.91	119.90
36	1	3295	A	C8-N9-C4	-6.68	103.13	105.80
37	3	92	A	C6-N1-C2	6.68	122.61	118.60
38	4	34	U	C5-C6-N1	-6.68	119.36	122.70
1	6	1055	U	C6-N1-C2	-6.68	116.99	121.00
1	6	1654	G	N3-C2-N2	-6.68	115.22	119.90
36	1	1434	G	N7-C8-N9	6.68	116.44	113.10
36	1	2641	U	C5-C6-N1	-6.68	119.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	745	C	N3-C4-N4	6.68	122.68	118.00
36	5	952	A	N3-C4-N9	-6.68	122.06	127.40
36	5	2995	A	O5'-P-OP2	-6.68	99.69	105.70
36	1	406	G	C5-C6-O6	6.68	132.61	128.60
36	1	705	A	N1-C6-N6	6.68	122.61	118.60
36	1	1908	A	C4-C5-C6	6.68	120.34	117.00
36	1	2946	A	N7-C8-N9	6.68	117.14	113.80
1	6	6	G	C5-C6-O6	-6.68	124.59	128.60
1	6	98	U	N3-C4-C5	-6.68	110.59	114.60
1	6	1189	A	N7-C8-N9	-6.68	110.46	113.80
1	6	1226	A	C8-N9-C4	-6.68	103.13	105.80
36	5	1838	G	N3-C4-N9	6.68	130.01	126.00
36	5	2363	A	N3-C4-N9	-6.68	122.06	127.40
36	5	2898	G	C4-C5-N7	-6.68	108.13	110.80
38	4	109	A	N9-C4-C5	-6.68	103.13	105.80
36	5	581	U	C6-N1-C2	-6.68	116.99	121.00
36	5	947	G	C8-N9-C1'	-6.68	118.32	127.00
36	5	1144	U	C5-C6-N1	-6.68	119.36	122.70
36	1	1605	A	P-O3'-C3'	6.68	127.71	119.70
1	6	29	U	C5-C4-O4	6.68	129.91	125.90
1	6	577	G	C5-N7-C8	-6.68	100.96	104.30
36	5	269	G	C4-C5-N7	6.68	113.47	110.80
36	5	504	A	N1-C6-N6	6.68	122.61	118.60
36	5	845	G	N1-C2-N2	-6.68	110.19	116.20
36	5	1770	G	C8-N9-C1'	-6.68	118.32	127.00
37	7	65	G	N1-C6-O6	6.68	123.91	119.90
36	5	182	U	C5-C4-O4	6.67	129.91	125.90
36	5	1108	U	C5-C4-O4	6.67	129.91	125.90
36	5	3041	U	N3-C4-O4	-6.67	114.73	119.40
37	7	104	A	N3-C4-C5	6.67	131.47	126.80
36	1	189	G	C5-C6-O6	6.67	132.60	128.60
36	5	706	A	C8-N9-C4	6.67	108.47	105.80
36	5	2369	G	C5-C6-O6	-6.67	124.60	128.60
1	2	1096	C	C6-N1-C2	-6.67	117.63	120.30
36	1	966	U	N3-C2-O2	-6.67	117.53	122.20
36	1	1499	C	OP1-P-OP2	-6.67	109.59	119.60
1	6	40	A	N1-C2-N3	6.67	132.64	129.30
1	6	1778	G	N1-C6-O6	6.67	123.90	119.90
36	5	878	G	N3-C4-N9	6.67	130.00	126.00
36	5	2706	G	C6-N1-C2	-6.67	121.10	125.10
37	7	37	G	C8-N9-C1'	-6.67	118.33	127.00
1	2	934	C	C2-N1-C1'	6.67	126.14	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	798	G	C6-C5-N7	-6.67	126.40	130.40
36	1	2611	U	N1-C2-N3	6.67	118.90	114.90
54	M8	178	ARG	NE-CZ-NH1	-6.67	116.97	120.30
1	6	678	A	P-O3'-C3'	6.67	127.70	119.70
36	5	913	A	N1-C6-N6	-6.67	114.60	118.60
36	5	3057	U	N1-C2-O2	6.67	127.47	122.80
36	5	3195	U	N3-C4-O4	6.67	124.07	119.40
36	1	2207	A	C2-N3-C4	6.67	113.93	110.60
36	1	2386	A	C6-N1-C2	-6.67	114.60	118.60
36	1	2609	A	OP2-P-O3'	-6.67	90.53	105.20
1	6	294	C	N3-C4-C5	-6.67	119.23	121.90
1	6	606	A	N1-C6-N6	6.67	122.60	118.60
1	6	1172	G	C4-C5-N7	-6.67	108.13	110.80
1	6	1732	A	N3-C4-C5	6.67	131.47	126.80
36	5	1199	C	N3-C4-N4	6.67	122.67	118.00
36	5	1326	A	OP2-P-O3'	6.67	119.87	105.20
36	5	1330	A	N1-C2-N3	6.67	132.63	129.30
36	5	2715	A	C5-N7-C8	6.67	107.23	103.90
36	5	3309	G	C6-N1-C2	-6.67	121.10	125.10
1	2	240	U	C5-C6-N1	6.67	126.03	122.70
36	1	689	U	C6-N1-C2	6.67	125.00	121.00
36	1	1624	G	C5-C6-O6	-6.67	124.60	128.60
36	1	2147	A	C5-C6-N1	6.67	121.03	117.70
36	1	2299	A	N1-C6-N6	6.67	122.60	118.60
36	1	2314	U	N3-C2-O2	6.67	126.87	122.20
36	1	2395	G	C8-N9-C4	-6.67	103.73	106.40
36	1	2821	C	C2-N3-C4	6.67	123.23	119.90
36	1	2883	U	C5-C6-N1	6.67	126.03	122.70
37	3	61	G	O5'-P-OP1	-6.67	99.70	105.70
1	6	1324	G	C8-N9-C4	-6.67	103.73	106.40
36	5	210	U	N3-C4-O4	-6.67	114.73	119.40
36	5	3327	G	N1-C6-O6	6.67	123.90	119.90
1	2	98	U	C5-C6-N1	6.67	126.03	122.70
36	1	1152	G	O5'-P-OP1	-6.67	99.70	105.70
36	1	1257	C	C6-N1-C2	-6.67	117.63	120.30
1	6	970	A	O5'-P-OP1	-6.67	99.70	105.70
1	6	1780	G	C8-N9-C1'	-6.67	118.34	127.00
1	2	1659	A	N1-C6-N6	-6.66	114.60	118.60
36	1	23	A	C6-N1-C2	-6.66	114.60	118.60
36	1	587	U	C5-C4-O4	-6.66	121.90	125.90
36	1	641	C	C5-C6-N1	6.66	124.33	121.00
36	1	1141	C	C2-N1-C1'	6.66	126.13	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2323	G	N9-C4-C5	-6.66	102.73	105.40
36	1	3293	U	O4'-C1'-N1	6.66	113.53	108.20
1	6	1550	A	C5-N7-C8	-6.66	100.57	103.90
36	5	283	G	C5-C6-N1	6.66	114.83	111.50
36	5	1492	G	O5'-P-OP1	-6.66	99.70	105.70
36	5	2165	G	N3-C4-N9	6.66	130.00	126.00
36	5	2914	G	C4-C5-N7	6.66	113.47	110.80
36	5	3270	U	N1-C2-O2	6.66	127.47	122.80
1	2	311	U	N1-C2-N3	6.66	118.90	114.90
36	1	872	U	N3-C4-C5	-6.66	110.60	114.60
37	7	118	A	O5'-P-OP2	-6.66	99.70	105.70
1	2	375	U	C5-C6-N1	-6.66	119.37	122.70
36	1	353	G	C5-C6-O6	6.66	132.60	128.60
36	1	499	G	N9-C4-C5	6.66	108.06	105.40
36	1	1482	A	N9-C4-C5	-6.66	103.14	105.80
36	1	3216	G	N3-C4-N9	6.66	130.00	126.00
1	6	1732	A	N1-C2-N3	6.66	132.63	129.30
36	5	809	G	C5-C6-N1	-6.66	108.17	111.50
36	5	2648	G	OP1-P-O3'	6.66	119.85	105.20
36	5	2732	G	N9-C4-C5	6.66	108.06	105.40
36	5	3213	A	N7-C8-N9	-6.66	110.47	113.80
36	1	349	A	C5-C6-N6	6.66	129.03	123.70
36	1	1311	G	N1-C6-O6	6.66	123.89	119.90
36	5	619	A	C8-N9-C4	6.66	108.46	105.80
36	5	1545	A	C8-N9-C4	-6.66	103.14	105.80
36	5	3208	G	C4-N9-C1'	6.66	135.16	126.50
36	5	790	U	C5-C6-N1	-6.66	119.37	122.70
38	8	111	A	N1-C6-N6	6.66	122.59	118.60
1	2	240	U	OP2-P-O3'	6.66	119.84	105.20
36	1	147	U	N1-C2-N3	6.66	118.89	114.90
36	1	1726	C	N3-C4-C5	-6.66	119.24	121.90
36	1	2153	U	O5'-P-OP2	-6.66	99.71	105.70
36	1	2904	U	C6-N1-C2	6.66	124.99	121.00
1	6	1095	U	O5'-P-OP1	-6.66	99.71	105.70
1	6	1538	U	O5'-P-OP2	-6.66	99.71	105.70
36	5	749	C	O5'-P-OP1	-6.66	99.71	105.70
36	5	1112	A	C4-C5-C6	6.66	120.33	117.00
36	5	1289	G	N7-C8-N9	-6.66	109.77	113.10
36	5	1900	A	N7-C8-N9	6.66	117.13	113.80
36	5	1907	C	C4-C5-C6	6.66	120.73	117.40
36	5	2362	C	N3-C2-O2	-6.66	117.24	121.90
37	7	75	G	N3-C4-C5	6.66	131.93	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	112	U	C4-C5-C6	6.65	123.69	119.70
36	1	1197	A	C4-C5-N7	6.65	114.03	110.70
36	1	2374	C	O5'-P-OP1	6.65	118.69	110.70
36	5	282	G	C5-C6-N1	-6.65	108.17	111.50
36	5	1157	G	N3-C2-N2	-6.65	115.24	119.90
36	5	2130	G	N1-C6-O6	6.65	123.89	119.90
36	1	699	A	O5'-P-OP1	-6.65	99.71	105.70
36	1	716	A	C8-N9-C4	6.65	108.46	105.80
36	1	871	U	C5-C6-N1	-6.65	119.37	122.70
36	1	1150	A	OP1-P-OP2	-6.65	109.62	119.60
36	1	2305	G	C6-C5-N7	6.65	134.39	130.40
36	1	2818	U	C5'-C4'-O4'	-6.65	101.12	109.10
38	4	13	A	O4'-C1'-N9	6.65	113.52	108.20
36	5	1120	A	C8-N9-C4	-6.65	103.14	105.80
36	5	1861	G	N1-C2-N3	6.65	127.89	123.90
36	5	2914	G	C6-C5-N7	-6.65	126.41	130.40
36	5	3099	C	C5-C6-N1	-6.65	117.67	121.00
36	5	3303	G	N3-C4-N9	-6.65	122.01	126.00
1	2	1550	A	N1-C6-N6	6.65	122.59	118.60
36	1	21	G	N1-C6-O6	-6.65	115.91	119.90
36	1	910	G	O5'-P-OP2	-6.65	99.71	105.70
36	1	1393	A	C5-C6-N6	6.65	129.02	123.70
1	6	1763	A	C6-N1-C2	-6.65	114.61	118.60
36	5	907	G	N9-C4-C5	-6.65	102.74	105.40
36	5	1120	A	N9-C4-C5	6.65	108.46	105.80
36	5	1148	G	C5-C6-N1	-6.65	108.17	111.50
36	5	2344	U	O5'-P-OP2	-6.65	99.71	105.70
36	5	2596	U	C2-N1-C1'	6.65	125.68	117.70
36	1	1114	U	N3-C2-O2	-6.65	117.55	122.20
36	1	2618	G	C8-N9-C4	-6.65	103.74	106.40
36	1	2794	G	N1-C6-O6	-6.65	115.91	119.90
1	6	65	A	C8-N9-C4	6.65	108.46	105.80
36	5	1195	A	C5-N7-C8	-6.65	100.58	103.90
36	1	438	A	N1-C6-N6	6.65	122.59	118.60
36	1	2620	G	N1-C2-N3	6.65	127.89	123.90
37	3	91	G	N1-C2-N3	6.65	127.89	123.90
1	6	1278	G	N9-C4-C5	6.65	108.06	105.40
36	5	773	G	C8-N9-C4	-6.65	103.74	106.40
36	5	1292	C	O4'-C1'-N1	-6.65	102.88	108.20
36	5	2334	U	N1-C2-O2	6.65	127.45	122.80
36	5	2767	U	N1-C2-N3	6.65	118.89	114.90
36	5	2916	U	N3-C4-O4	-6.65	114.75	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	765	G	O4'-C1'-N9	-6.65	102.88	108.20
1	2	1029	U	O4'-C1'-N1	6.65	113.52	108.20
36	1	286	U	C6-N1-C2	-6.65	117.01	121.00
36	1	3150	A	C5-N7-C8	-6.65	100.58	103.90
1	6	794	U	C5-C6-N1	6.65	126.02	122.70
1	6	1147	A	N1-C2-N3	6.65	132.62	129.30
7	s5	92	ARG	NE-CZ-NH2	-6.65	116.98	120.30
36	5	2550	U	C5-C4-O4	6.65	129.89	125.90
36	1	1405	U	N1-C2-N3	6.64	118.89	114.90
36	1	1552	G	C4-C5-C6	6.64	122.79	118.80
37	3	56	A	C8-N9-C4	6.64	108.46	105.80
38	4	97	A	N1-C2-N3	6.64	132.62	129.30
1	6	752	A	C8-N9-C4	6.64	108.46	105.80
36	5	732	C	N3-C2-O2	-6.64	117.25	121.90
36	5	1322	U	N1-C2-O2	-6.64	118.15	122.80
36	5	1403	C	C5-C4-N4	-6.64	115.55	120.20
36	5	2155	G	C6-C5-N7	-6.64	126.41	130.40
36	5	2420	C	N3-C4-N4	6.64	122.65	118.00
36	5	3115	C	O5'-P-OP1	-6.64	99.72	105.70
36	1	277	G	N1-C2-N3	-6.64	119.92	123.90
36	1	901	G	C6-C5-N7	6.64	134.38	130.40
36	1	2703	A	O4'-C1'-N9	-6.64	102.89	108.20
36	1	2877	G	O4'-C1'-N9	6.64	113.51	108.20
1	6	1640	C	N3-C4-C5	6.64	124.56	121.90
36	5	189	G	C4-C5-N7	-6.64	108.14	110.80
36	5	328	U	N1-C2-O2	6.64	127.45	122.80
36	5	860	G	C6-C5-N7	-6.64	126.42	130.40
36	5	1465	A	C6-C5-N7	-6.64	127.65	132.30
36	5	2694	A	C8-N9-C4	6.64	108.46	105.80
36	1	372	A	C5-N7-C8	-6.64	100.58	103.90
36	1	864	G	N3-C4-N9	6.64	129.98	126.00
36	1	3367	C	N3-C4-C5	6.64	124.56	121.90
36	5	827	A	N7-C8-N9	6.64	117.12	113.80
36	5	951	A	C5-C6-N6	6.64	129.01	123.70
36	5	1592	G	C5-C6-O6	6.64	132.59	128.60
36	1	2865	U	C5-C6-N1	-6.64	119.38	122.70
1	6	35	U	N1-C2-N3	6.64	118.88	114.90
1	6	1473	U	N3-C4-O4	-6.64	114.75	119.40
36	1	676	G	C8-N9-C1'	-6.64	118.37	127.00
36	1	2631	U	C2-N3-C4	-6.64	123.02	127.00
36	1	3322	A	C8-N9-C4	6.64	108.45	105.80
38	8	13	A	N9-C4-C5	-6.64	103.14	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	874	U	O5'-P-OP2	6.64	118.66	110.70
36	1	1414	G	N3-C4-C5	6.64	131.92	128.60
36	1	1449	A	N9-C4-C5	6.64	108.45	105.80
36	1	1908	A	N1-C2-N3	6.64	132.62	129.30
36	1	2746	A	C4-C5-C6	-6.64	113.68	117.00
36	1	2896	A	N1-C6-N6	6.64	122.58	118.60
36	1	3139	A	O5'-P-OP1	-6.64	99.73	105.70
36	5	2235	C	C6-N1-C2	-6.64	117.64	120.30
36	1	2093	A	N3-C4-C5	-6.63	122.16	126.80
36	1	2196	C	N3-C4-N4	-6.63	113.36	118.00
1	6	1631	A	N1-C2-N3	-6.63	125.98	129.30
36	5	1137	C	C4-C5-C6	6.63	120.72	117.40
36	5	1166	G	N1-C6-O6	6.63	123.88	119.90
36	1	834	U	C2-N1-C1'	-6.63	109.74	117.70
36	5	848	A	N1-C6-N6	6.63	122.58	118.60
36	1	198	A	N7-C8-N9	6.63	117.11	113.80
36	1	1713	G	N3-C4-C5	6.63	131.92	128.60
1	6	777	C	C5-C4-N4	-6.63	115.56	120.20
1	6	1392	U	C6-N1-C2	6.63	124.98	121.00
36	5	358	G	N9-C1'-C2'	-6.63	104.70	112.00
36	5	633	C	C6-N1-C2	6.63	122.95	120.30
36	5	1185	C	C2-N3-C4	-6.63	116.58	119.90
36	1	880	G	C8-N9-C1'	6.63	135.62	127.00
36	1	3266	G	C5-C6-O6	6.63	132.58	128.60
1	6	1642	G	C5-C6-N1	6.63	114.81	111.50
36	5	917	A	N3-C4-N9	-6.63	122.10	127.40
36	5	1144	U	C6-N1-C2	6.63	124.98	121.00
36	5	2824	G	N1-C2-N2	-6.63	110.23	116.20
36	1	337	G	C5-C6-O6	-6.63	124.62	128.60
36	1	945	C	C4-C5-C6	6.63	120.71	117.40
36	1	1556	C	N1-C2-O2	6.63	122.88	118.90
36	1	3142	A	N3-C4-C5	6.63	131.44	126.80
36	5	110	G	N3-C4-C5	-6.63	125.29	128.60
36	5	2401	A	N7-C8-N9	6.63	117.11	113.80
37	7	93	C	O5'-P-OP1	6.63	118.65	110.70
1	2	1750	A	C2-N3-C4	-6.63	107.29	110.60
36	1	2190	U	N3-C4-C5	-6.63	110.62	114.60
37	3	84	A	O5'-P-OP2	6.63	118.65	110.70
1	6	397	A	N1-C6-N6	6.63	122.58	118.60
36	5	664	U	C6-N1-C2	-6.63	117.02	121.00
36	5	730	C	C4-C5-C6	6.63	120.71	117.40
36	5	1709	C	C5-C6-N1	-6.63	117.69	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2237	C	N3-C4-C5	-6.63	119.25	121.90
36	5	2313	A	N1-C2-N3	6.63	132.61	129.30
36	5	3012	A	C5-C6-N1	6.63	121.01	117.70
36	5	3099	C	OP1-P-OP2	6.63	129.54	119.60
36	1	2807	U	N3-C4-O4	6.62	124.04	119.40
36	1	3256	G	C4-N9-C1'	6.62	135.11	126.50
1	6	1142	A	N9-C4-C5	6.62	108.45	105.80
36	5	1394	A	C5-C6-N6	-6.62	118.40	123.70
38	8	115	C	C6-N1-C2	6.62	122.95	120.30
36	1	1329	U	OP1-P-OP2	6.62	129.54	119.60
36	1	1366	A	C6-N1-C2	-6.62	114.63	118.60
36	1	3226	A	N9-C4-C5	6.62	108.45	105.80
36	5	831	G	N3-C4-C5	6.62	131.91	128.60
36	5	963	G	N1-C6-O6	-6.62	115.92	119.90
36	5	3110	C	O5'-P-OP1	-6.62	99.74	105.70
37	7	42	A	N3-C4-C5	-6.62	122.16	126.80
36	1	188	U	N3-C4-O4	6.62	124.03	119.40
36	1	496	C	C4-C5-C6	-6.62	114.09	117.40
36	1	586	C	N3-C4-N4	6.62	122.64	118.00
36	1	1139	G	C2-N3-C4	-6.62	108.59	111.90
36	1	1503	A	C2-N3-C4	-6.62	107.29	110.60
36	1	3009	G	C4-C5-N7	6.62	113.45	110.80
1	6	1454	G	N1-C6-O6	6.62	123.87	119.90
1	6	1637	C	C6-N1-C2	6.62	122.95	120.30
36	5	1096	U	C6-N1-C2	6.62	124.97	121.00
36	5	2573	G	N1-C6-O6	6.62	123.87	119.90
36	5	3098	G	N1-C6-O6	-6.62	115.93	119.90
36	5	3111	U	N3-C2-O2	-6.62	117.56	122.20
36	1	2777	G	N3-C4-N9	-6.62	122.03	126.00
1	6	420	A	C6-C5-N7	-6.62	127.67	132.30
1	6	1602	C	OP1-P-OP2	-6.62	109.67	119.60
36	5	2702	A	O5'-P-OP1	-6.62	99.74	105.70
36	5	2829	U	C5-C4-O4	-6.62	121.93	125.90
36	5	2995	A	C2-N3-C4	-6.62	107.29	110.60
36	5	3218	A	C4-N9-C1'	6.62	138.22	126.30
1	2	1103	U	N3-C4-O4	-6.62	114.77	119.40
1	2	1589	C	N3-C4-C5	6.62	124.55	121.90
36	1	1168	U	N3-C2-O2	-6.62	117.57	122.20
1	6	934	C	C5-C4-N4	6.62	124.83	120.20
36	5	937	G	O5'-P-OP1	-6.62	99.74	105.70
36	5	1055	A	C5-N7-C8	6.62	107.21	103.90
36	5	2386	A	C8-N9-C4	-6.62	103.15	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1374	C	C6-N1-C2	6.62	122.95	120.30
36	1	925	A	C4-C5-C6	6.62	120.31	117.00
36	1	2403	G	C8-N9-C4	-6.62	103.75	106.40
37	3	88	G	N1-C2-N2	-6.62	110.25	116.20
1	6	382	C	N3-C2-O2	6.62	126.53	121.90
1	6	584	C	C4-C5-C6	6.62	120.71	117.40
36	5	1872	C	N1-C2-N3	6.62	123.83	119.20
36	1	592	A	C5-N7-C8	-6.62	100.59	103.90
36	1	609	G	O5'-P-OP2	-6.62	99.75	105.70
36	1	928	C	N3-C2-O2	6.62	126.53	121.90
36	1	2384	A	C4-C5-C6	6.62	120.31	117.00
36	1	2720	G	C4-C5-N7	6.62	113.45	110.80
36	1	3327	G	C5-C6-N1	-6.62	108.19	111.50
1	6	1135	U	N3-C2-O2	-6.62	117.57	122.20
1	6	1235	C	C5-C6-N1	6.62	124.31	121.00
36	5	568	G	N9-C4-C5	-6.62	102.75	105.40
36	5	890	C	C4-C5-C6	6.62	120.71	117.40
36	5	1190	A	C8-N9-C1'	-6.62	115.79	127.70
36	5	3304	U	N3-C4-C5	-6.62	110.63	114.60
1	2	470	A	N7-C8-N9	-6.61	110.49	113.80
1	2	1386	G	C8-N9-C4	6.61	109.05	106.40
36	1	2633	U	N1-C2-O2	-6.61	118.17	122.80
36	1	3070	A	N1-C2-N3	6.61	132.61	129.30
36	5	2713	U	N3-C4-O4	6.61	124.03	119.40
36	5	2829	U	OP2-P-O3'	6.61	119.75	105.20
37	7	101	G	C6-C5-N7	-6.61	126.43	130.40
36	1	2669	G	C5-C6-O6	6.61	132.57	128.60
36	1	2955	U	N1-C2-O2	6.61	127.43	122.80
1	6	310	C	C5-C6-N1	6.61	124.31	121.00
1	6	1599	C	N1-C2-O2	6.61	122.87	118.90
36	5	3346	U	N3-C2-O2	-6.61	117.57	122.20
1	2	1004	U	C5-C4-O4	6.61	129.87	125.90
36	1	264	G	C5-N7-C8	6.61	107.61	104.30
36	1	3051	U	C5-C6-N1	6.61	126.00	122.70
37	3	97	A	C5-N7-C8	6.61	107.20	103.90
1	6	301	A	C2-N3-C4	6.61	113.91	110.60
1	6	1169	G	N1-C2-N2	-6.61	110.25	116.20
36	5	2312	A	C6-C5-N7	6.61	136.93	132.30
36	1	2598	G	C2-N3-C4	6.61	115.20	111.90
70	O4	51	LEU	CA-CB-CG	6.61	130.50	115.30
36	5	404	G	C2-N3-C4	-6.61	108.60	111.90
36	5	945	C	C4-C5-C6	6.61	120.70	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2699	G	N1-C2-N2	6.61	122.15	116.20
36	5	2848	G	N3-C4-C5	6.61	131.91	128.60
38	8	24	G	N1-C6-O6	-6.61	115.94	119.90
1	2	1274	C	C2-N1-C1'	6.61	126.07	118.80
1	6	1041	G	N3-C2-N2	-6.61	115.28	119.90
1	6	1452	U	N3-C4-O4	6.61	124.03	119.40
1	6	1766	A	N1-C6-N6	6.61	122.56	118.60
36	5	214	G	C4-N9-C1'	-6.61	117.91	126.50
36	5	424	G	C5-N7-C8	-6.61	101.00	104.30
36	5	821	U	C5-C6-N1	6.61	126.00	122.70
36	5	1513	G	C5-C6-O6	-6.61	124.64	128.60
36	5	2896	A	C8-N9-C4	6.61	108.44	105.80
1	2	1747	G	N1-C6-O6	-6.61	115.94	119.90
36	1	978	G	N1-C2-N2	6.61	122.14	116.20
36	1	1508	C	N3-C2-O2	-6.61	117.28	121.90
36	1	3130	A	C2-N3-C4	-6.61	107.30	110.60
1	6	1001	A	OP1-P-O3'	6.61	119.73	105.20
36	5	1373	A	N7-C8-N9	6.61	117.10	113.80
36	5	2192	C	N3-C4-N4	6.61	122.62	118.00
36	5	2404	A	N9-C4-C5	6.61	108.44	105.80
36	5	2630	C	N3-C4-C5	6.61	124.54	121.90
36	5	3044	G	C2-N3-C4	-6.61	108.60	111.90
1	2	453	U	C5-C6-N1	6.60	126.00	122.70
36	1	414	U	N3-C4-O4	-6.60	114.78	119.40
36	1	2999	U	N3-C4-O4	-6.60	114.78	119.40
36	5	127	G	N3-C2-N2	-6.60	115.28	119.90
36	1	55	G	N3-C4-N9	6.60	129.96	126.00
36	1	982	C	N1-C2-O2	6.60	122.86	118.90
40	L3	233	TRP	CA-CB-CG	-6.60	101.16	113.70
1	6	149	C	C5-C6-N1	-6.60	117.70	121.00
1	6	440	U	N1-C2-O2	-6.60	118.18	122.80
37	7	37	G	C5-C6-O6	-6.60	124.64	128.60
36	1	1020	G	C5-C6-O6	-6.60	124.64	128.60
36	1	3087	A	C4-C5-C6	6.60	120.30	117.00
36	5	363	G	O5'-P-OP1	-6.60	99.76	105.70
36	5	2629	U	N3-C4-C5	-6.60	110.64	114.60
36	5	3036	G	C2-N3-C4	-6.60	108.60	111.90
1	2	550	A	C8-N9-C4	-6.60	103.16	105.80
36	1	345	G	N7-C8-N9	6.60	116.40	113.10
36	1	608	A	C4-N9-C1'	6.60	138.18	126.30
36	1	1761	C	C6-N1-C2	6.60	122.94	120.30
38	4	34	U	N1-C2-N3	6.60	118.86	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	104	A	N1-C6-N6	6.60	122.56	118.60
36	5	314	U	C5-C4-O4	6.60	129.86	125.90
36	5	416	A	N3-C4-C5	6.60	131.42	126.80
36	5	1490	A	N1-C6-N6	-6.60	114.64	118.60
36	5	1931	U	C6-N1-C1'	6.60	130.44	121.20
36	5	2656	A	C6-N1-C2	-6.60	114.64	118.60
36	5	3102	G	C2-N3-C4	-6.60	108.60	111.90
1	2	360	A	N1-C6-N6	6.60	122.56	118.60
36	1	70	A	N1-C2-N3	6.60	132.60	129.30
36	1	338	A	C6-N1-C2	-6.60	114.64	118.60
36	1	2284	C	C6-N1-C1'	-6.60	112.88	120.80
36	1	2375	G	N1-C2-N3	6.60	127.86	123.90
36	1	2644	C	N1-C2-O2	-6.60	114.94	118.90
36	5	1834	U	N1-C2-O2	-6.60	118.18	122.80
36	5	2099	A	C8-N9-C4	-6.60	103.16	105.80
36	5	2414	G	C2-N3-C4	-6.60	108.60	111.90
36	5	2719	U	N1-C2-O2	-6.60	118.18	122.80
36	5	3177	G	N1-C2-N3	6.60	127.86	123.90
36	1	384	A	C8-N9-C4	-6.60	103.16	105.80
36	1	973	A	C2-N3-C4	-6.60	107.30	110.60
36	1	2862	U	C6-N1-C2	6.60	124.96	121.00
36	5	805	G	C5-C6-N1	6.60	114.80	111.50
36	5	1206	G	N3-C4-N9	6.60	129.96	126.00
36	5	1440	G	OP2-P-O3'	6.60	119.71	105.20
36	1	504	A	C6-N1-C2	-6.59	114.64	118.60
36	1	1196	C	C6-N1-C1'	-6.59	112.89	120.80
36	1	2696	A	C2-N3-C4	6.59	113.90	110.60
36	1	2894	C	C6-N1-C2	6.59	122.94	120.30
36	1	2897	A	O4'-C1'-N9	6.59	113.47	108.20
1	6	1728	A	N1-C6-N6	6.59	122.56	118.60
36	5	346	C	N3-C2-O2	-6.59	117.28	121.90
36	5	388	G	N9-C4-C5	6.59	108.04	105.40
36	5	1093	A	C8-N9-C4	-6.59	103.16	105.80
36	5	1113	G	N1-C6-O6	6.59	123.86	119.90
36	5	1293	U	C5-C6-N1	-6.59	119.40	122.70
36	5	1393	A	N1-C2-N3	6.59	132.60	129.30
36	5	1401	A	C6-N1-C2	-6.59	114.64	118.60
36	5	1406	A	C4-C5-C6	6.59	120.30	117.00
36	5	1699	A	C8-N9-C4	6.59	108.44	105.80
36	5	3172	A	N9-C4-C5	-6.59	103.16	105.80
36	5	3361	G	C6-C5-N7	-6.59	126.44	130.40
36	1	727	G	O5'-P-OP1	-6.59	99.77	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3375	A	N1-C6-N6	-6.59	114.64	118.60
36	5	1005	G	N3-C4-N9	-6.59	122.04	126.00
36	5	2614	G	N1-C2-N2	-6.59	110.27	116.20
36	1	815	G	N9-C4-C5	6.59	108.04	105.40
1	6	1645	G	C5-C6-N1	6.59	114.80	111.50
36	5	1203	A	C2-N3-C4	-6.59	107.31	110.60
1	2	1751	C	C5-C6-N1	-6.59	117.71	121.00
36	1	92	G	C2-N3-C4	-6.59	108.61	111.90
36	1	1020	G	N9-C4-C5	-6.59	102.76	105.40
38	4	50	C	C6-N1-C2	6.59	122.94	120.30
36	5	867	G	C5-C6-O6	-6.59	124.65	128.60
36	5	902	G	N3-C4-C5	6.59	131.90	128.60
36	5	1436	U	N1-C2-O2	6.59	127.41	122.80
36	5	2249	G	C8-N9-C4	-6.59	103.76	106.40
36	5	2746	A	OP2-P-O3'	6.59	119.70	105.20
36	5	2911	A	N9-C4-C5	6.59	108.44	105.80
36	1	961	C	C5-C6-N1	6.59	124.29	121.00
36	1	1544	G	N1-C6-O6	6.59	123.85	119.90
36	1	2869	U	C5-C6-N1	6.59	125.99	122.70
1	6	876	G	N3-C4-C5	6.59	131.89	128.60
36	5	233	C	C2-N1-C1'	-6.59	111.55	118.80
36	5	2383	C	N1-C2-O2	6.59	122.85	118.90
36	5	3026	G	C5-C6-O6	-6.59	124.65	128.60
1	2	1345	A	C2-N3-C4	-6.59	107.31	110.60
36	1	1885	U	C4-C5-C6	6.59	123.65	119.70
38	4	16	G	C5-C6-O6	-6.59	124.65	128.60
55	M9	129	GLY	N-CA-C	-6.59	96.63	113.10
1	6	575	C	O5'-P-OP1	-6.59	99.77	105.70
1	6	858	G	N7-C8-N9	6.59	116.39	113.10
1	6	1149	G	N1-C2-N3	6.59	127.85	123.90
36	5	937	G	N1-C6-O6	-6.59	115.95	119.90
36	5	1849	C	N1-C2-O2	-6.59	114.95	118.90
36	1	211	A	O5'-P-OP2	6.58	118.60	110.70
36	1	1524	A	C4-C5-N7	-6.58	107.41	110.70
36	1	1665	C	C2-N1-C1'	-6.58	111.56	118.80
36	1	2357	A	C8-N9-C4	-6.58	103.17	105.80
36	1	2983	C	C2-N3-C4	-6.58	116.61	119.90
36	1	3362	A	O4'-C1'-N9	6.58	113.47	108.20
38	8	99	C	C6-N1-C2	6.58	122.93	120.30
1	2	694	U	C2-N1-C1'	6.58	125.60	117.70
1	2	1177	C	N3-C2-O2	6.58	126.51	121.90
36	1	662	U	C6-N1-C2	6.58	124.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	103	A	C5-N7-C8	-6.58	100.61	103.90
1	6	1196	A	C8-N9-C4	-6.58	103.17	105.80
1	6	1614	A	C5-C6-N1	-6.58	114.41	117.70
36	5	884	A	OP1-P-O3'	6.58	119.68	105.20
36	5	968	G	N3-C4-N9	6.58	129.95	126.00
36	5	1883	A	C4-C5-C6	6.58	120.29	117.00
38	8	66	A	C4-C5-C6	6.58	120.29	117.00
1	2	618	U	O5'-P-OP1	-6.58	99.78	105.70
36	1	65	A	OP1-P-O3'	6.58	119.68	105.20
36	1	357	A	N9-C4-C5	6.58	108.43	105.80
36	1	1169	A	C8-N9-C4	-6.58	103.17	105.80
36	1	1656	A	C8-N9-C4	6.58	108.43	105.80
36	1	1869	C	N3-C4-C5	-6.58	119.27	121.90
36	1	2238	G	C6-C5-N7	6.58	134.35	130.40
36	1	2651	G	N9-C4-C5	-6.58	102.77	105.40
1	6	60	U	N1-C2-O2	6.58	127.41	122.80
36	5	924	G	C5-C6-N1	-6.58	108.21	111.50
36	5	2122	G	C5-N7-C8	-6.58	101.01	104.30
44	17	83	LEU	CA-CB-CG	6.58	130.44	115.30
36	1	3280	U	O4'-C1'-N1	6.58	113.46	108.20
36	1	3375	A	C5'-C4'-O4'	-6.58	101.20	109.10
38	4	46	G	C8-N9-C1'	-6.58	118.45	127.00
36	5	101	G	O5'-P-OP1	6.58	118.60	110.70
36	5	1603	A	C5-N7-C8	6.58	107.19	103.90
36	5	1847	A	C4-C5-C6	-6.58	113.71	117.00
36	5	2894	C	C2-N3-C4	-6.58	116.61	119.90
36	5	2950	G	N9-C4-C5	-6.58	102.77	105.40
1	2	1271	G	N3-C4-C5	6.58	131.89	128.60
1	2	1758	U	N1-C2-O2	6.58	127.41	122.80
36	1	324	A	OP2-P-O3'	6.58	119.67	105.20
36	1	1429	G	N9-C4-C5	-6.58	102.77	105.40
36	1	1488	G	C6-C5-N7	-6.58	126.45	130.40
36	1	2257	C	N3-C2-O2	-6.58	117.30	121.90
36	1	2395	G	C5-N7-C8	-6.58	101.01	104.30
36	1	3322	A	N1-C6-N6	6.58	122.55	118.60
1	6	423	G	C8-N9-C1'	6.58	135.55	127.00
1	6	1141	G	C5-C6-O6	-6.58	124.65	128.60
36	5	210	U	C6-N1-C2	6.58	124.95	121.00
36	5	792	G	N1-C6-O6	-6.58	115.95	119.90
36	1	909	G	N7-C8-N9	6.58	116.39	113.10
36	1	2597	U	N1-C2-O2	-6.58	118.20	122.80
36	5	643	U	C2-N1-C1'	6.58	125.59	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3188	G	C6-N1-C2	-6.58	121.15	125.10
36	1	1505	C	C2-N1-C1'	-6.58	111.57	118.80
37	3	32	U	N3-C4-O4	6.58	124.00	119.40
38	4	30	C	C5-C6-N1	-6.58	117.71	121.00
36	5	1530	U	N1-C2-N3	-6.58	110.95	114.90
36	5	2393	G	C8-N9-C1'	-6.58	118.45	127.00
36	5	2899	C	C2-N3-C4	-6.58	116.61	119.90
36	1	102	C	N3-C2-O2	-6.57	117.30	121.90
36	1	196	G	N7-C8-N9	-6.57	109.81	113.10
36	1	1515	A	N1-C6-N6	6.57	122.54	118.60
36	1	1755	C	C6-N1-C2	-6.57	117.67	120.30
36	1	2614	G	C6-C5-N7	-6.57	126.46	130.40
36	1	2981	U	C2-N1-C1'	6.57	125.59	117.70
36	1	3277	U	C5-C4-O4	6.57	129.84	125.90
41	L4	259	ASP	CB-CG-OD1	-6.57	112.38	118.30
36	5	1915	A	C8-N9-C4	-6.57	103.17	105.80
36	5	2392	C	C2-N3-C4	-6.57	116.61	119.90
38	8	139	U	C2-N3-C4	-6.57	123.06	127.00
36	1	240	U	C5-C6-N1	6.57	125.99	122.70
36	1	632	G	N3-C4-N9	6.57	129.94	126.00
36	1	2241	U	C6-N1-C2	-6.57	117.06	121.00
36	5	1321	G	C5-C6-O6	-6.57	124.66	128.60
36	1	358	G	C2-N3-C4	-6.57	108.61	111.90
36	1	2176	U	N3-C4-O4	6.57	124.00	119.40
36	1	2867	C	C4-C5-C6	-6.57	114.11	117.40
36	1	2956	A	N7-C8-N9	6.57	117.08	113.80
1	6	555	A	N1-C6-N6	-6.57	114.66	118.60
1	6	770	A	O5'-P-OP2	-6.57	99.79	105.70
1	6	972	G	C8-N9-C1'	-6.57	118.46	127.00
36	5	514	G	C6-N1-C2	-6.57	121.16	125.10
36	5	866	A	C5-C6-N6	-6.57	118.44	123.70
36	5	2615	G	C8-N9-C4	6.57	109.03	106.40
36	1	187	A	C8-N9-C4	-6.57	103.17	105.80
36	1	1130	A	N1-C6-N6	-6.57	114.66	118.60
36	1	1305	U	C5-C4-O4	6.57	129.84	125.90
36	1	3182	G	N1-C2-N3	6.57	127.84	123.90
36	1	3270	U	C6-N1-C2	6.57	124.94	121.00
36	5	397	A	C5-N7-C8	6.57	107.19	103.90
36	5	1198	C	OP1-P-OP2	-6.57	109.75	119.60
36	5	2395	G	O5'-P-OP1	6.57	118.58	110.70
36	1	760	G	N3-C4-N9	-6.57	122.06	126.00
36	1	1431	G	N3-C4-N9	6.57	129.94	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1607	U	C5-C6-N1	-6.57	119.42	122.70
36	1	3378	C	O5'-P-OP1	-6.57	99.79	105.70
1	6	435	C	OP1-P-OP2	6.57	129.45	119.60
36	5	1199	C	N3-C4-C5	-6.57	119.27	121.90
36	5	1450	G	N3-C4-C5	-6.57	125.32	128.60
36	5	2417	U	N1-C2-O2	-6.57	118.20	122.80
36	5	2522	G	C5-C6-O6	-6.57	124.66	128.60
36	5	3189	G	OP1-P-OP2	-6.57	109.75	119.60
1	2	628	G	C5-C6-N1	-6.57	108.22	111.50
36	1	1156	C	C2-N3-C4	-6.57	116.62	119.90
36	1	1411	C	C6-N1-C2	-6.57	117.67	120.30
36	1	2516	U	C5-C4-O4	6.57	129.84	125.90
36	1	2818	U	C5-C4-O4	-6.57	121.96	125.90
38	4	19	C	C5-C6-N1	-6.57	117.72	121.00
44	L7	100	ARG	NE-CZ-NH2	-6.57	117.02	120.30
1	6	452	A	C8-N9-C4	6.57	108.43	105.80
1	6	616	G	N7-C8-N9	6.57	116.38	113.10
36	5	1476	G	C4-C5-N7	6.57	113.43	110.80
36	1	1353	U	O4'-C1'-N1	6.56	113.45	108.20
36	1	1905	G	N1-C2-N2	6.56	122.11	116.20
36	1	2269	U	N3-C2-O2	-6.56	117.61	122.20
36	5	2188	A	C4-C5-C6	6.56	120.28	117.00
36	1	1154	A	N9-C4-C5	6.56	108.42	105.80
36	1	2637	A	O4'-C1'-N9	6.56	113.45	108.20
1	6	328	A	O5'-P-OP2	-6.56	99.79	105.70
1	6	1008	G	C5-C6-O6	-6.56	124.66	128.60
1	6	1649	G	O5'-P-OP2	-6.56	99.79	105.70
36	5	511	G	N1-C2-N2	-6.56	110.29	116.20
36	5	2922	G	N7-C8-N9	6.56	116.38	113.10
37	7	45	A	C6-N1-C2	-6.56	114.66	118.60
1	2	1466	G	C5-N7-C8	-6.56	101.02	104.30
36	1	2296	A	O5'-P-OP2	6.56	118.57	110.70
36	1	2911	A	N7-C8-N9	-6.56	110.52	113.80
36	1	3231	U	C5-C4-O4	6.56	129.84	125.90
36	1	3372	A	C5-N7-C8	6.56	107.18	103.90
36	5	3194	C	C4-C5-C6	6.56	120.68	117.40
36	1	156	G	N3-C4-N9	6.56	129.94	126.00
36	1	2982	A	C8-N9-C4	6.56	108.42	105.80
36	5	162	G	N1-C6-O6	-6.56	115.96	119.90
36	5	1581	C	N1-C2-O2	6.56	122.83	118.90
36	5	2371	G	N3-C4-N9	6.56	129.94	126.00
36	5	3082	C	N3-C4-C5	6.56	124.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	905	U	C6-N1-C1'	6.56	130.38	121.20
36	1	1152	G	N1-C2-N3	-6.56	119.97	123.90
36	1	1316	C	C2-N3-C4	-6.56	116.62	119.90
36	1	2627	C	OP2-P-O3'	6.56	119.63	105.20
38	4	28	C	N1-C2-O2	-6.56	114.97	118.90
1	6	1110	G	C4-C5-C6	6.56	122.73	118.80
1	6	1566	U	C2-N1-C1'	-6.56	109.83	117.70
36	5	1526	U	N1-C2-O2	-6.56	118.21	122.80
37	7	82	G	C5-C6-N1	6.56	114.78	111.50
37	7	87	G	N3-C2-N2	-6.56	115.31	119.90
1	2	758	U	N3-C2-O2	-6.56	117.61	122.20
36	1	556	U	N3-C2-O2	6.56	126.79	122.20
36	1	1916	U	N1-C2-N3	6.56	118.83	114.90
1	6	969	C	O5'-P-OP1	6.56	118.57	110.70
36	5	1317	A	C8-N9-C4	-6.56	103.18	105.80
36	5	3038	U	C5-C6-N1	-6.56	119.42	122.70
37	7	65	G	N3-C2-N2	-6.56	115.31	119.90
1	2	1096	C	C6-N1-C1'	-6.55	112.93	120.80
1	2	1363	U	N3-C2-O2	-6.55	117.61	122.20
36	1	761	A	C5-N7-C8	-6.55	100.62	103.90
36	1	1330	A	C2-N3-C4	-6.55	107.32	110.60
36	1	1345	G	C8-N9-C4	-6.55	103.78	106.40
36	1	1553	U	C4-C5-C6	6.55	123.63	119.70
36	1	1704	A	C2-N3-C4	-6.55	107.32	110.60
36	1	2315	G	C4-C5-C6	6.55	122.73	118.80
36	1	2343	C	N1-C2-O2	6.55	122.83	118.90
36	1	2409	G	N1-C6-O6	6.55	123.83	119.90
38	4	55	U	N3-C2-O2	-6.55	117.61	122.20
1	6	440	U	O5'-P-OP2	-6.55	99.80	105.70
1	6	444	C	N3-C2-O2	6.55	126.49	121.90
36	5	425	G	C2-N3-C4	-6.55	108.62	111.90
36	5	502	U	O5'-P-OP1	6.55	118.57	110.70
36	5	3209	A	C8-N9-C4	-6.55	103.18	105.80
1	2	320	U	N1-C2-O2	6.55	127.39	122.80
36	1	1858	A	N3-C4-C5	-6.55	122.21	126.80
1	6	1257	U	N3-C2-O2	-6.55	117.61	122.20
36	5	569	A	O5'-P-OP2	-6.55	99.80	105.70
36	5	750	G	OP1-P-O3'	6.55	119.62	105.20
36	1	968	G	N3-C2-N2	6.55	124.49	119.90
36	1	1296	C	C6-N1-C2	-6.55	117.68	120.30
36	1	2778	G	N1-C2-N2	-6.55	110.30	116.20
36	1	2885	C	C5-C4-N4	-6.55	115.61	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2931	C	O5'-P-OP2	-6.55	99.81	105.70
36	1	2959	C	C6-N1-C2	6.55	122.92	120.30
41	L4	182	LEU	CB-CG-CD2	-6.55	99.86	111.00
1	6	301	A	C6-C5-N7	6.55	136.89	132.30
1	6	776	G	C5-C6-O6	-6.55	124.67	128.60
36	5	1116	G	N1-C2-N3	6.55	127.83	123.90
36	5	3061	G	N9-C4-C5	-6.55	102.78	105.40
38	8	44	A	C5-C6-N6	-6.55	118.46	123.70
36	1	909	G	C8-N9-C4	-6.55	103.78	106.40
36	1	1331	U	O5'-P-OP2	-6.55	99.81	105.70
36	1	1546	A	N7-C8-N9	6.55	117.07	113.80
36	5	848	A	C8-N9-C4	-6.55	103.18	105.80
36	5	1041	U	N1-C2-O2	-6.55	118.22	122.80
36	5	1459	C	C6-N1-C2	6.55	122.92	120.30
36	5	1542	G	N7-C8-N9	6.55	116.38	113.10
36	5	2163	C	C6-N1-C2	-6.55	117.68	120.30
36	5	2305	G	N3-C2-N2	-6.55	115.32	119.90
36	5	2388	U	N3-C4-O4	6.55	123.98	119.40
36	5	3217	C	C6-N1-C2	6.55	122.92	120.30
38	8	8	C	N3-C4-N4	6.55	122.58	118.00
1	6	1186	U	N3-C4-O4	-6.55	114.82	119.40
36	5	1889	G	C4-C5-N7	6.55	113.42	110.80
1	2	346	G	N3-C4-N9	-6.55	122.07	126.00
1	2	1484	G	N1-C2-N3	6.55	127.83	123.90
36	1	1305	U	C6-N1-C1'	6.55	130.37	121.20
36	1	2827	U	N1-C2-O2	-6.55	118.22	122.80
36	1	2961	G	N1-C2-N3	6.55	127.83	123.90
36	5	592	A	N1-C2-N3	-6.55	126.03	129.30
36	5	1329	U	P-O3'-C3'	6.55	127.56	119.70
36	5	1894	U	C5-C6-N1	-6.55	119.43	122.70
36	5	2172	A	C4-C5-C6	6.55	120.27	117.00
36	5	2682	C	O5'-P-OP1	6.55	118.56	110.70
36	5	3337	G	N3-C4-N9	6.55	129.93	126.00
36	1	55	G	N9-C4-C5	-6.54	102.78	105.40
36	5	827	A	C6-N1-C2	-6.54	114.67	118.60
36	5	877	C	N1-C2-O2	6.54	122.83	118.90
36	1	790	U	C5-C6-N1	-6.54	119.43	122.70
36	1	3180	A	C5-C6-N6	6.54	128.94	123.70
36	1	3307	A	C5-C6-N6	-6.54	118.47	123.70
1	6	16	G	C5-N7-C8	-6.54	101.03	104.30
1	6	936	G	C8-N9-C4	-6.54	103.78	106.40
1	6	1498	G	C4-C5-C6	6.54	122.73	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1056	U	N3-C2-O2	-6.54	117.62	122.20
36	5	2801	A	C5-N7-C8	-6.54	100.63	103.90
36	5	2883	U	C5-C6-N1	-6.54	119.43	122.70
36	1	2872	A	OP2-P-O3'	6.54	119.59	105.20
1	6	429	G	OP2-P-O3'	6.54	119.59	105.20
1	6	1621	U	N3-C2-O2	6.54	126.78	122.20
36	5	3243	A	O4'-C1'-N9	-6.54	102.97	108.20
37	7	28	C	C4-C5-C6	6.54	120.67	117.40
36	1	202	G	O5'-P-OP1	-6.54	99.81	105.70
36	1	1853	U	C5-C6-N1	6.54	125.97	122.70
1	6	1246	C	N1-C2-O2	6.54	122.82	118.90
1	2	262	U	O5'-P-OP2	-6.54	99.82	105.70
36	1	832	G	C8-N9-C4	6.54	109.02	106.40
36	1	2188	A	OP2-P-O3'	6.54	119.59	105.20
1	6	54	C	N1-C2-N3	6.54	123.78	119.20
36	5	656	A	C5-C6-N1	6.54	120.97	117.70
36	5	2902	A	C4-C5-C6	6.54	120.27	117.00
1	2	6	G	C5-C6-N1	6.54	114.77	111.50
36	1	703	G	N3-C4-N9	-6.54	122.08	126.00
36	1	3308	C	N3-C4-N4	-6.54	113.42	118.00
36	5	2130	G	C5-C6-O6	-6.54	124.68	128.60
1	2	47	A	N7-C8-N9	6.54	117.07	113.80
1	2	976	G	N1-C6-O6	-6.54	115.98	119.90
1	2	1201	G	C4-C5-N7	-6.54	108.19	110.80
1	2	1749	A	N1-C2-N3	6.54	132.57	129.30
36	1	23	A	C2-N3-C4	6.54	113.87	110.60
36	1	3361	G	C8-N9-C4	-6.54	103.79	106.40
1	6	998	A	N1-C2-N3	6.54	132.57	129.30
1	6	1645	G	N3-C2-N2	6.54	124.47	119.90
36	5	503	C	C2-N3-C4	-6.54	116.63	119.90
36	5	1175	C	C2-N3-C4	-6.54	116.63	119.90
36	5	1200	A	C5-C6-N6	-6.54	118.47	123.70
36	5	3057	U	C2-N1-C1'	6.54	125.54	117.70
1	2	1413	U	C2-N1-C1'	6.53	125.54	117.70
36	1	1136	A	C4-C5-N7	-6.53	107.43	110.70
36	1	1879	A	O5'-P-OP1	6.53	118.54	110.70
54	M8	138	LEU	CA-CB-CG	6.53	130.33	115.30
1	6	1132	A	C8-N9-C4	6.53	108.41	105.80
1	6	1641	C	C2-N3-C4	-6.53	116.63	119.90
36	5	27	C	N3-C4-C5	-6.53	119.29	121.90
36	5	1429	G	C8-N9-C1'	-6.53	118.51	127.00
36	5	1473	G	N3-C4-N9	6.53	129.92	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3337	G	C4-N9-C1'	6.53	134.99	126.50
37	7	93	C	C5-C4-N4	-6.53	115.63	120.20
38	8	136	G	OP1-P-OP2	-6.53	109.80	119.60
38	8	144	G	N3-C4-C5	-6.53	125.33	128.60
1	2	1086	A	N1-C6-N6	-6.53	114.68	118.60
36	1	1338	C	C4-C5-C6	-6.53	114.13	117.40
36	5	760	G	C2-N3-C4	-6.53	108.63	111.90
36	5	795	G	C5-C6-O6	6.53	132.52	128.60
37	7	38	U	C5-C6-N1	6.53	125.97	122.70
1	2	1029	U	C6-N1-C1'	6.53	130.34	121.20
1	2	1435	G	N3-C4-C5	-6.53	125.33	128.60
1	2	1789	G	N3-C4-N9	6.53	129.92	126.00
36	1	596	C	C2-N3-C4	-6.53	116.64	119.90
36	1	619	A	N1-C6-N6	6.53	122.52	118.60
36	1	1127	G	N3-C4-C5	6.53	131.87	128.60
36	1	1633	C	C6-N1-C2	-6.53	117.69	120.30
36	1	2276	G	N1-C6-O6	-6.53	115.98	119.90
36	1	2327	U	C6-N1-C2	6.53	124.92	121.00
36	1	2799	A	N1-C6-N6	-6.53	114.68	118.60
1	6	1027	A	C4-C5-C6	6.53	120.27	117.00
36	5	673	U	N1-C2-N3	6.53	118.82	114.90
36	5	2342	U	OP2-P-O3'	6.53	119.56	105.20
36	5	2864	A	OP2-P-O3'	6.53	119.57	105.20
38	8	93	U	C5-C6-N1	-6.53	119.44	122.70
36	1	3209	A	C6-C5-N7	-6.53	127.73	132.30
1	6	1034	C	N1-C2-O2	-6.53	114.98	118.90
36	5	720	A	C8-N9-C4	-6.53	103.19	105.80
36	5	2300	G	OP1-P-O3'	6.53	119.56	105.20
36	5	2699	G	C6-N1-C2	-6.53	121.18	125.10
36	1	659	G	N3-C4-C5	-6.53	125.34	128.60
36	1	693	A	C4-C5-C6	6.53	120.26	117.00
36	1	835	G	N9-C4-C5	-6.53	102.79	105.40
36	1	2153	U	N1-C2-N3	6.53	118.82	114.90
36	5	2136	C	C4-C5-C6	6.53	120.66	117.40
36	5	2614	G	C6-C5-N7	-6.53	126.48	130.40
36	5	3040	A	C2-N3-C4	-6.53	107.34	110.60
36	1	421	G	C6-N1-C2	-6.53	121.19	125.10
36	1	571	U	N1-C2-N3	6.53	118.81	114.90
36	1	1311	G	C8-N9-C4	6.53	109.01	106.40
36	5	1124	U	N3-C4-C5	6.53	118.52	114.60
36	5	2706	G	N3-C4-C5	-6.53	125.34	128.60
36	5	2869	U	OP2-P-O3'	6.53	119.56	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2943	G	N7-C8-N9	6.53	116.36	113.10
36	5	3055	U	N3-C4-C5	6.53	118.52	114.60
37	7	1	G	C8-N9-C4	-6.53	103.79	106.40
37	7	59	U	N1-C2-N3	6.53	118.82	114.90
36	1	1602	A	C8-N9-C4	6.52	108.41	105.80
36	1	1907	C	O5'-P-OP2	-6.52	99.83	105.70
36	1	3109	G	N3-C4-C5	-6.52	125.34	128.60
1	6	351	C	C6-N1-C1'	-6.52	112.97	120.80
1	6	1598	U	N1-C2-O2	6.52	127.37	122.80
1	6	1609	U	C2-N1-C1'	-6.52	109.87	117.70
36	5	1485	G	N1-C2-N2	-6.52	110.33	116.20
36	1	47	C	N1-C2-O2	-6.52	114.99	118.90
36	1	897	U	N3-C2-O2	-6.52	117.63	122.20
36	1	2178	A	C8-N9-C4	6.52	108.41	105.80
36	1	2370	G	N1-C6-O6	-6.52	115.99	119.90
36	1	2384	A	C5-N7-C8	6.52	107.16	103.90
1	6	552	G	N1-C6-O6	6.52	123.81	119.90
36	5	131	C	N3-C2-O2	-6.52	117.33	121.90
36	5	1166	G	O5'-P-OP1	6.52	118.53	110.70
36	5	2108	C	C6-N1-C2	6.52	122.91	120.30
36	5	2376	G	C6-C5-N7	-6.52	126.49	130.40
36	5	2761	G	C4-C5-N7	-6.52	108.19	110.80
6	S4	20	LEU	CA-CB-CG	-6.52	100.30	115.30
36	1	2424	A	C2-N3-C4	-6.52	107.34	110.60
36	5	788	C	N3-C4-C5	-6.52	119.29	121.90
36	5	2825	C	OP2-P-O3'	6.52	119.55	105.20
37	7	52	G	N7-C8-N9	-6.52	109.84	113.10
36	1	979	U	O5'-P-OP1	6.52	118.52	110.70
36	1	1754	G	N1-C6-O6	6.52	123.81	119.90
36	1	2199	G	C2-N3-C4	6.52	115.16	111.90
36	1	2336	U	N3-C2-O2	-6.52	117.64	122.20
36	1	2344	U	C5-C6-N1	-6.52	119.44	122.70
1	6	154	G	C5-C6-O6	-6.52	124.69	128.60
1	6	466	U	N3-C4-C5	-6.52	110.69	114.60
1	6	1142	A	C6-N1-C2	-6.52	114.69	118.60
1	6	1533	C	N3-C4-C5	6.52	124.51	121.90
1	6	1748	G	O5'-P-OP1	6.52	118.52	110.70
30	d8	16	LEU	CA-CB-CG	-6.52	100.31	115.30
36	5	214	G	C8-N9-C4	6.52	109.01	106.40
36	5	2181	C	N1-C2-O2	-6.52	114.99	118.90
36	5	2313	A	OP1-P-OP2	-6.52	109.82	119.60
36	5	2418	G	C5-C6-N1	-6.52	108.24	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2982	A	C8-N9-C4	6.52	108.41	105.80
1	2	1390	U	O4'-C1'-N1	6.52	113.41	108.20
36	1	776	U	C4-C5-C6	6.52	123.61	119.70
36	1	1899	G	C8-N9-C4	-6.52	103.79	106.40
38	4	73	U	N1-C2-O2	6.52	127.36	122.80
1	6	397	A	N9-C4-C5	-6.52	103.19	105.80
1	6	608	U	C5-C4-O4	6.52	129.81	125.90
1	6	1409	G	C4-N9-C1'	6.52	134.97	126.50
1	6	1485	C	N1-C2-O2	-6.52	114.99	118.90
36	5	526	C	N3-C4-C5	6.52	124.51	121.90
36	5	1011	A	C4-C5-C6	6.52	120.26	117.00
36	5	1017	C	C6-N1-C2	-6.52	117.69	120.30
36	5	2117	A	C6-N1-C2	-6.52	114.69	118.60
36	5	3350	C	C6-N1-C2	-6.52	117.69	120.30
36	5	3383	G	C5-N7-C8	-6.52	101.04	104.30
36	1	961	C	C2-N1-C1'	6.52	125.97	118.80
36	1	1854	C	C4-C5-C6	6.52	120.66	117.40
36	1	2209	U	C5-C6-N1	6.52	125.96	122.70
36	1	3031	G	N3-C2-N2	-6.52	115.34	119.90
36	5	2125	A	C8-N9-C4	6.52	108.41	105.80
36	5	2797	C	C4-C5-C6	6.52	120.66	117.40
36	5	2876	C	N1-C2-O2	6.52	122.81	118.90
36	5	3229	G	C8-N9-C1'	-6.52	118.53	127.00
36	1	420	G	O5'-P-OP2	-6.51	99.84	105.70
36	1	1472	U	C5-C6-N1	-6.51	119.44	122.70
36	1	2168	A	C6-C5-N7	6.51	136.86	132.30
36	1	2847	A	N9-C4-C5	-6.51	103.19	105.80
1	6	754	A	C5-C6-N6	-6.51	118.49	123.70
36	5	2624	G	C5-N7-C8	-6.51	101.04	104.30
36	5	2715	A	C6-C5-N7	6.51	136.86	132.30
36	1	518	G	N3-C2-N2	-6.51	115.34	119.90
36	1	2423	U	C6-N1-C2	-6.51	117.09	121.00
1	6	68	A	C5-N7-C8	-6.51	100.64	103.90
1	6	1673	G	N3-C4-C5	6.51	131.86	128.60
36	5	999	G	C2-N3-C4	6.51	115.16	111.90
36	5	1658	G	N1-C2-N3	6.51	127.81	123.90
36	5	2645	G	C5-C6-O6	-6.51	124.69	128.60
36	1	731	U	C4-C5-C6	6.51	123.61	119.70
36	1	736	A	N1-C6-N6	-6.51	114.69	118.60
36	1	3091	A	O5'-P-OP2	-6.51	99.84	105.70
36	5	651	G	C8-N9-C1'	-6.51	118.54	127.00
36	5	1112	A	OP1-P-O3'	6.51	119.53	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1909	A	C4-C5-C6	-6.51	113.74	117.00
36	5	3164	C	O4'-C1'-N1	6.51	113.41	108.20
36	5	3316	A	OP1-P-O3'	6.51	119.53	105.20
36	1	997	A	C6-N1-C2	-6.51	114.69	118.60
36	1	2105	G	C5-C6-O6	-6.51	124.69	128.60
36	1	3054	U	C5-C4-O4	6.51	129.81	125.90
52	M6	33	ILE	CG1-CB-CG2	-6.51	97.08	111.40
1	6	913	G	N7-C8-N9	6.51	116.36	113.10
1	6	1536	G	C6-C5-N7	-6.51	126.49	130.40
36	5	388	G	C4-C5-N7	-6.51	108.20	110.80
36	5	642	U	N1-C1'-C2'	-6.51	104.84	112.00
36	1	2167	A	C2-N3-C4	-6.51	107.35	110.60
36	1	2871	G	C8-N9-C1'	6.51	135.46	127.00
1	6	165	G	C6-C5-N7	-6.51	126.50	130.40
36	5	1164	G	N1-C6-O6	-6.51	116.00	119.90
36	5	1209	G	N1-C2-N2	6.51	122.06	116.20
36	1	2677	G	C4-C5-N7	6.51	113.40	110.80
1	6	334	G	C8-N9-C4	-6.51	103.80	106.40
1	6	967	A	C4-C5-N7	6.51	113.95	110.70
36	5	650	C	C2-N1-C1'	-6.51	111.64	118.80
36	5	1010	G	C5-N7-C8	-6.51	101.05	104.30
36	5	1050	U	C5-C4-O4	6.51	129.80	125.90
36	5	2431	C	N3-C4-C5	6.51	124.50	121.90
1	2	1553	G	C8-N9-C4	6.50	109.00	106.40
36	1	2799	A	N1-C2-N3	6.50	132.55	129.30
1	6	1149	G	C2-N3-C4	-6.50	108.65	111.90
36	5	1353	U	C6-N1-C2	-6.50	117.10	121.00
1	2	1673	G	C6-C5-N7	-6.50	126.50	130.40
1	2	1773	C	N3-C4-C5	-6.50	119.30	121.90
36	1	930	U	N1-C2-O2	-6.50	118.25	122.80
36	1	1444	G	N9-C4-C5	6.50	108.00	105.40
36	1	2325	G	C5-C6-O6	-6.50	124.70	128.60
36	1	3295	A	C2-N3-C4	-6.50	107.35	110.60
37	3	75	G	N9-C4-C5	6.50	108.00	105.40
1	6	90	C	C6-N1-C2	-6.50	117.70	120.30
1	6	1128	C	OP2-P-O3'	6.50	119.51	105.20
36	5	1149	G	C4-C5-N7	6.50	113.40	110.80
36	5	1220	U	N3-C2-O2	-6.50	117.65	122.20
36	5	1372	C	C2-N3-C4	-6.50	116.65	119.90
36	5	3274	A	OP1-P-O3'	-6.50	90.89	105.20
36	5	3308	C	N1-C2-O2	6.50	122.80	118.90
37	7	43	U	C5-C6-N1	-6.50	119.45	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	33	A	O5'-P-OP1	-6.50	99.85	105.70
1	2	575	C	N3-C4-C5	6.50	124.50	121.90
1	2	1302	U	C6-N1-C2	6.50	124.90	121.00
36	1	643	U	O5'-P-OP1	6.50	118.50	110.70
36	1	2143	A	C5-C6-N6	-6.50	118.50	123.70
36	1	2511	A	C8-N9-C4	6.50	108.40	105.80
36	1	2982	A	C5-C6-N1	6.50	120.95	117.70
1	6	1471	A	C8-N9-C4	-6.50	103.20	105.80
1	6	1600	A	C5-N7-C8	-6.50	100.65	103.90
1	6	1658	G	N3-C4-C5	6.50	131.85	128.60
36	5	920	A	C4-C5-N7	6.50	113.95	110.70
36	5	2613	U	C4-C5-C6	6.50	123.60	119.70
36	5	3166	C	C2-N3-C4	6.50	123.15	119.90
36	1	3182	G	C8-N9-C4	6.50	109.00	106.40
36	5	74	G	C4-C5-N7	6.50	113.40	110.80
36	5	269	G	N3-C4-C5	6.50	131.85	128.60
36	5	322	U	C6-N1-C2	6.50	124.90	121.00
36	5	1765	U	C5-C6-N1	6.50	125.95	122.70
36	5	1887	A	N1-C2-N3	6.50	132.55	129.30
1	2	1291	G	C4-C5-C6	6.50	122.70	118.80
36	1	33	G	N9-C1'-C2'	-6.50	104.85	112.00
36	1	2714	G	N3-C4-C5	6.50	131.85	128.60
36	1	2746	A	N1-C6-N6	-6.50	114.70	118.60
1	6	1487	A	N1-C6-N6	6.50	122.50	118.60
36	5	824	C	N3-C4-C5	-6.50	119.30	121.90
36	5	2330	C	C6-N1-C2	-6.50	117.70	120.30
36	5	2391	G	C5-C6-O6	6.50	132.50	128.60
36	5	2584	G	C8-N9-C1'	-6.50	118.55	127.00
36	5	2623	G	N3-C4-N9	6.50	129.90	126.00
38	8	122	U	N3-C2-O2	-6.50	117.65	122.20
1	2	19	A	C5-N7-C8	-6.50	100.65	103.90
1	2	1654	G	C4-N9-C1'	6.50	134.94	126.50
36	1	1902	G	C5-C6-O6	6.50	132.50	128.60
36	1	2355	G	C6-C5-N7	-6.50	126.50	130.40
1	6	1160	A	N1-C6-N6	-6.50	114.70	118.60
36	5	115	A	N9-C4-C5	6.50	108.40	105.80
36	5	371	G	C5-C6-O6	6.50	132.50	128.60
36	5	783	A	C4-C5-N7	6.50	113.95	110.70
36	5	1379	G	N9-C4-C5	-6.50	102.80	105.40
36	5	2367	A	N1-C2-N3	6.50	132.55	129.30
36	5	2400	G	N3-C2-N2	-6.50	115.35	119.90
36	5	3179	U	N3-C4-C5	-6.50	110.70	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	45	C	N3-C4-C5	6.50	124.50	121.90
38	8	138	A	C5-C6-N6	6.50	128.90	123.70
36	1	2191	U	C5-C4-O4	6.50	129.80	125.90
38	4	38	U	N3-C4-O4	6.50	123.95	119.40
1	6	797	G	N7-C8-N9	-6.50	109.85	113.10
36	5	1507	G	C4-C5-N7	6.50	113.40	110.80
36	5	1695	U	O5'-P-OP2	6.50	118.49	110.70
36	5	3125	U	C6-N1-C1'	6.50	130.29	121.20
36	1	681	U	N3-C4-O4	6.49	123.95	119.40
36	1	2179	C	C2-N1-C1'	6.49	125.94	118.80
36	1	2935	U	O5'-P-OP2	-6.49	99.86	105.70
36	1	3256	G	C8-N9-C1'	-6.49	118.56	127.00
1	6	1582	U	C2-N1-C1'	6.49	125.49	117.70
36	5	1852	G	C6-C5-N7	-6.49	126.50	130.40
36	5	3069	G	C6-C5-N7	-6.49	126.50	130.40
1	2	1655	A	N3-C4-C5	6.49	131.34	126.80
36	1	608	A	C4-C5-C6	6.49	120.25	117.00
36	1	636	C	C4-C5-C6	6.49	120.65	117.40
36	1	3147	G	C6-N1-C2	-6.49	121.20	125.10
1	6	634	G	C2-N3-C4	6.49	115.15	111.90
36	5	1496	C	N3-C2-O2	-6.49	117.36	121.90
36	5	1634	G	N3-C4-C5	-6.49	125.35	128.60
36	1	316	U	C5-C6-N1	6.49	125.94	122.70
36	1	426	G	O5'-P-OP1	-6.49	99.86	105.70
36	1	1171	G	N1-C2-N3	6.49	127.79	123.90
36	1	2810	C	C2-N3-C4	6.49	123.14	119.90
36	1	2937	G	C4-N9-C1'	-6.49	118.06	126.50
36	1	3144	G	C4-C5-N7	6.49	113.40	110.80
38	4	28	C	C5-C4-N4	-6.49	115.66	120.20
1	6	96	G	C4-C5-C6	6.49	122.69	118.80
1	6	955	A	O5'-P-OP2	-6.49	99.86	105.70
1	6	1406	A	N1-C6-N6	-6.49	114.70	118.60
36	5	2110	G	N3-C4-C5	-6.49	125.36	128.60
36	5	2703	A	N3-C4-C5	-6.49	122.26	126.80
36	5	2896	A	C2-N3-C4	-6.49	107.36	110.60
44	17	151	ARG	NE-CZ-NH1	-6.49	117.06	120.30
1	2	627	C	C2-N1-C1'	6.49	125.94	118.80
1	2	1206	U	C4-C5-C6	6.49	123.59	119.70
36	1	231	G	N1-C6-O6	6.49	123.79	119.90
36	1	1795	U	C2-N1-C1'	-6.49	109.91	117.70
36	1	3131	U	OP2-P-O3'	6.49	119.47	105.20
36	1	3269	U	O5'-P-OP2	-6.49	99.86	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	989	A	C5-C6-N1	6.49	120.94	117.70
36	5	1284	C	O5'-P-OP1	-6.49	99.86	105.70
36	5	2312	A	C4-C5-N7	-6.49	107.46	110.70
18	C6	40	GLU	C-N-CA	6.49	149.24	122.00
1	6	349	U	N1-C2-O2	6.49	127.34	122.80
1	6	1546	G	C8-N9-C1'	-6.49	118.57	127.00
36	5	2772	C	OP1-P-O3'	-6.49	90.93	105.20
36	5	2937	G	N1-C6-O6	6.49	123.79	119.90
36	1	317	A	N1-C6-N6	-6.49	114.71	118.60
36	1	2368	A	N3-C4-N9	6.49	132.59	127.40
36	1	3186	A	C6-N1-C2	-6.49	114.71	118.60
36	1	3372	A	C4-C5-N7	-6.49	107.46	110.70
1	6	930	A	N1-C6-N6	-6.49	114.71	118.60
36	5	2125	A	C5-C6-N1	-6.49	114.46	117.70
36	5	2618	G	N3-C4-C5	-6.49	125.36	128.60
36	5	3026	G	N3-C4-N9	6.49	129.89	126.00
36	5	3208	G	N1-C2-N2	-6.49	110.36	116.20
36	5	3335	A	C4-C5-C6	6.49	120.24	117.00
36	1	1120	A	N3-C4-C5	-6.48	122.26	126.80
36	1	1920	U	O5'-P-OP2	-6.48	99.86	105.70
36	1	2302	G	N1-C6-O6	-6.48	116.01	119.90
36	1	2836	C	OP2-P-O3'	6.48	119.46	105.20
36	5	344	A	O5'-P-OP1	-6.48	99.86	105.70
36	5	1377	G	C4-C5-N7	-6.48	108.21	110.80
1	2	1113	A	O4'-C1'-N9	6.48	113.39	108.20
1	2	1643	U	C2-N3-C4	-6.48	123.11	127.00
36	1	635	G	OP1-P-OP2	6.48	129.32	119.60
36	1	875	G	C5-C6-N1	-6.48	108.26	111.50
36	1	2925	C	C6-N1-C1'	6.48	128.58	120.80
36	1	3277	U	C4-C5-C6	6.48	123.59	119.70
38	4	53	A	O5'-P-OP1	6.48	118.48	110.70
1	6	1546	G	C4-C5-C6	6.48	122.69	118.80
1	6	1650	U	C4-C5-C6	6.48	123.59	119.70
36	5	399	A	C8-N9-C4	-6.48	103.21	105.80
36	5	610	G	N3-C4-C5	-6.48	125.36	128.60
36	5	2395	G	N1-C2-N3	6.48	127.79	123.90
36	5	2434	U	C5-C4-O4	6.48	129.79	125.90
36	5	3136	G	C6-C5-N7	-6.48	126.51	130.40
38	8	102	U	N1-C2-O2	6.48	127.34	122.80
1	2	548	G	C8-N9-C4	-6.48	103.81	106.40
1	2	968	U	N3-C2-O2	-6.48	117.66	122.20
36	1	45	A	C8-N9-C4	-6.48	103.21	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2895	G	C6-C5-N7	-6.48	126.51	130.40
36	1	3086	A	C6-N1-C2	-6.48	114.71	118.60
36	5	1405	U	C2-N1-C1'	-6.48	109.92	117.70
36	5	1405	U	N1-C2-N3	6.48	118.79	114.90
36	5	3381	U	C5-C6-N1	-6.48	119.46	122.70
36	1	647	A	C4-C5-C6	6.48	120.24	117.00
36	1	969	C	C4-C5-C6	6.48	120.64	117.40
36	5	1114	U	N1-C2-N3	6.48	118.79	114.90
36	5	1597	C	C5-C6-N1	6.48	124.24	121.00
36	5	1620	U	N3-C2-O2	-6.48	117.67	122.20
1	2	930	A	N1-C6-N6	-6.48	114.71	118.60
36	1	419	G	C5-N7-C8	6.48	107.54	104.30
36	1	1297	C	C6-N1-C2	-6.48	117.71	120.30
36	1	1344	G	C4-N9-C1'	-6.48	118.08	126.50
36	1	2875	U	N3-C4-O4	6.48	123.93	119.40
1	6	1759	C	C4-C5-C6	6.48	120.64	117.40
36	5	2364	G	C6-C5-N7	-6.48	126.51	130.40
36	5	2621	G	O5'-P-OP1	6.48	118.47	110.70
36	5	2693	C	C5-C6-N1	-6.48	117.76	121.00
36	5	3078	U	C6-N1-C2	-6.48	117.11	121.00
37	7	113	C	C5-C6-N1	-6.48	117.76	121.00
70	o4	78	GLY	N-CA-C	-6.48	96.91	113.10
1	2	555	A	C6-N1-C2	-6.48	114.72	118.60
36	1	344	A	C2-N3-C4	-6.48	107.36	110.60
1	6	1473	U	C5-C6-N1	-6.48	119.46	122.70
36	5	1350	A	N7-C8-N9	6.48	117.04	113.80
36	5	2794	G	O5'-P-OP1	-6.48	99.87	105.70
1	2	1142	A	N1-C6-N6	-6.47	114.72	118.60
36	1	113	C	N3-C2-O2	6.47	126.43	121.90
36	1	953	G	N3-C4-C5	6.47	131.84	128.60
36	1	2274	U	N3-C2-O2	-6.47	117.67	122.20
36	1	2627	C	C4-C5-C6	6.47	120.64	117.40
36	1	2922	G	C6-N1-C2	-6.47	121.22	125.10
1	6	359	A	C8-N9-C1'	6.47	139.35	127.70
1	6	1616	G	C8-N9-C4	-6.47	103.81	106.40
17	c5	124	THR	C-N-CD	-6.47	106.36	120.60
36	5	1101	G	N1-C6-O6	-6.47	116.02	119.90
36	5	1289	G	C5-C6-N1	6.47	114.74	111.50
36	5	1507	G	C6-C5-N7	-6.47	126.52	130.40
36	5	2829	U	N3-C2-O2	6.47	126.73	122.20
36	5	3254	G	C5-C6-N1	-6.47	108.26	111.50
1	2	331	A	C4-C5-N7	-6.47	107.46	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	969	C	N3-C2-O2	-6.47	117.37	121.90
1	2	1273	G	OP1-P-O3'	6.47	119.44	105.20
36	1	715	A	O4'-C1'-N9	6.47	113.38	108.20
36	1	2185	G	C4-C5-C6	6.47	122.68	118.80
36	1	2368	A	OP2-P-O3'	6.47	119.44	105.20
36	1	2619	G	C5-C6-N1	6.47	114.74	111.50
36	1	3031	G	C6-C5-N7	6.47	134.28	130.40
36	5	558	U	C5-C6-N1	-6.47	119.46	122.70
36	5	1487	G	C4-C5-C6	6.47	122.68	118.80
36	5	1846	C	OP1-P-OP2	-6.47	109.89	119.60
36	5	2793	G	C8-N9-C1'	6.47	135.41	127.00
36	5	2864	A	N9-C4-C5	-6.47	103.21	105.80
36	5	3015	G	N3-C4-C5	6.47	131.84	128.60
36	1	427	C	C2-N1-C1'	6.47	125.92	118.80
36	1	818	C	OP1-P-OP2	-6.47	109.89	119.60
36	1	1695	U	N1-C2-O2	6.47	127.33	122.80
36	5	1239	C	C2-N1-C1'	6.47	125.92	118.80
36	5	1387	G	OP1-P-OP2	6.47	129.31	119.60
36	5	2199	G	N3-C4-N9	6.47	129.88	126.00
36	1	1050	U	N1-C2-O2	6.47	127.33	122.80
36	1	1161	G	N3-C4-N9	6.47	129.88	126.00
36	1	2814	G	N9-C4-C5	6.47	107.99	105.40
38	4	33	A	O5'-P-OP2	6.47	118.46	110.70
1	6	120	U	C6-N1-C2	-6.47	117.12	121.00
1	6	973	A	N7-C8-N9	-6.47	110.56	113.80
1	6	1630	U	OP1-P-O3'	6.47	119.43	105.20
1	6	1668	G	O5'-P-OP1	6.47	118.46	110.70
36	5	2303	A	C5-N7-C8	-6.47	100.67	103.90
36	5	2363	A	C4-C5-N7	-6.47	107.47	110.70
36	5	2401	A	C8-N9-C4	-6.47	103.21	105.80
36	5	2609	A	N1-C6-N6	6.47	122.48	118.60
36	5	2659	G	N9-C4-C5	-6.47	102.81	105.40
36	5	3307	A	N9-C4-C5	-6.47	103.21	105.80
36	1	614	C	O4'-C1'-N1	6.47	113.37	108.20
36	1	857	G	C5-C6-N1	-6.47	108.27	111.50
36	1	3009	G	N1-C6-O6	6.47	123.78	119.90
36	1	3176	G	C6-C5-N7	-6.47	126.52	130.40
1	6	1223	A	C8-N9-C4	-6.47	103.21	105.80
1	6	1547	A	C5-N7-C8	-6.47	100.67	103.90
1	6	1765	A	N1-C6-N6	-6.47	114.72	118.60
36	5	2186	U	N3-C2-O2	-6.47	117.67	122.20
37	7	84	A	O5'-P-OP2	6.47	118.46	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	377	A	C5-C6-N6	-6.47	118.53	123.70
36	1	935	U	N3-C2-O2	-6.47	117.67	122.20
36	1	1170	A	N9-C4-C5	-6.47	103.21	105.80
36	1	2933	A	N1-C6-N6	6.47	122.48	118.60
36	1	3172	A	N3-C4-C5	-6.47	122.27	126.80
37	3	89	G	C5-C6-O6	-6.47	124.72	128.60
1	6	1029	U	C5-C6-N1	-6.47	119.47	122.70
36	5	136	G	N1-C6-O6	6.47	123.78	119.90
36	5	868	C	N3-C2-O2	6.47	126.43	121.90
36	5	922	U	C5-C4-O4	6.47	129.78	125.90
36	5	2911	A	N1-C2-N3	6.47	132.53	129.30
36	5	2954	U	OP1-P-O3'	6.47	119.42	105.20
37	7	1	G	N3-C4-C5	-6.47	125.37	128.60
38	8	115	C	C5-C6-N1	-6.47	117.77	121.00
36	1	217	U	C5-C6-N1	6.46	125.93	122.70
36	1	1180	A	C5-C6-N6	6.46	128.87	123.70
36	1	1798	A	N1-C2-N3	6.46	132.53	129.30
36	1	1858	A	C5-C6-N1	6.46	120.93	117.70
36	1	3142	A	C6-C5-N7	6.46	136.82	132.30
36	5	1038	C	N3-C2-O2	-6.46	117.38	121.90
36	5	3126	C	O5'-P-OP2	-6.46	99.88	105.70
36	1	9	U	C5-C6-N1	-6.46	119.47	122.70
36	1	906	A	N3-C4-C5	-6.46	122.28	126.80
36	1	1380	G	O5'-P-OP2	-6.46	99.88	105.70
36	1	2172	A	C4-C5-N7	6.46	113.93	110.70
36	5	2849	C	OP2-P-O3'	6.46	119.42	105.20
36	1	1142	G	C4-C5-N7	6.46	113.39	110.80
1	6	163	G	C8-N9-C1'	6.46	135.40	127.00
36	5	1152	G	N1-C6-O6	6.46	123.78	119.90
36	5	2248	C	C2-N1-C1'	-6.46	111.69	118.80
52	m6	4	GLU	N-CA-C	-6.46	93.56	111.00
1	6	1380	U	N3-C4-O4	6.46	123.92	119.40
36	5	1851	G	C4-C5-N7	6.46	113.38	110.80
36	5	3030	G	C8-N9-C4	6.46	108.98	106.40
1	2	1200	G	N3-C4-C5	-6.46	125.37	128.60
36	1	95	A	N1-C6-N6	-6.46	114.72	118.60
36	1	662	U	C6-N1-C1'	-6.46	112.16	121.20
36	1	953	G	C4-C5-C6	-6.46	114.92	118.80
36	1	1794	G	C5-N7-C8	6.46	107.53	104.30
36	1	2399	A	C6-N1-C2	-6.46	114.72	118.60
36	1	2402	A	N1-C6-N6	-6.46	114.72	118.60
36	1	3040	A	C4-C5-N7	-6.46	107.47	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3270	U	C5-C6-N1	-6.46	119.47	122.70
1	6	1157	A	C8-N9-C4	-6.46	103.22	105.80
1	6	1523	G	N3-C4-N9	6.46	129.88	126.00
1	6	1537	C	OP1-P-OP2	-6.46	109.91	119.60
36	5	559	A	C4-C5-C6	6.46	120.23	117.00
36	5	777	U	O5'-P-OP1	-6.46	99.89	105.70
36	5	1947	G	N3-C4-N9	6.46	129.88	126.00
36	1	1182	A	O5'-P-OP1	-6.46	99.89	105.70
36	1	1306	G	C4-C5-C6	6.46	122.67	118.80
36	1	1547	G	C4-N9-C1'	6.46	134.89	126.50
1	6	58	U	O5'-P-OP2	6.46	118.45	110.70
1	6	1048	G	C8-N9-C4	6.46	108.98	106.40
1	6	1403	C	C5-C6-N1	-6.46	117.77	121.00
1	6	1792	G	C5-C6-N1	6.46	114.73	111.50
36	5	609	G	N1-C6-O6	6.46	123.77	119.90
36	5	651	G	N1-C2-N2	-6.46	110.39	116.20
36	5	1137	C	C2-N1-C1'	6.46	125.90	118.80
36	5	1158	A	C8-N9-C4	6.46	108.38	105.80
36	5	1377	G	N1-C6-O6	-6.46	116.03	119.90
36	5	2880	U	N3-C4-O4	-6.46	114.88	119.40
36	5	3077	A	C2-N3-C4	-6.46	107.37	110.60
36	5	3136	G	N9-C4-C5	-6.46	102.82	105.40
38	8	52	A	C6-N1-C2	-6.46	114.73	118.60
1	2	579	A	C5-C6-N1	6.46	120.93	117.70
37	3	99	G	C6-C5-N7	6.46	134.27	130.40
1	6	170	U	N3-C2-O2	-6.46	117.68	122.20
36	5	1183	C	C5-C4-N4	-6.46	115.68	120.20
36	5	1953	G	C8-N9-C4	6.46	108.98	106.40
36	5	2173	U	OP2-P-O3'	6.46	119.40	105.20
36	5	2945	G	O4'-C1'-N9	6.46	113.36	108.20
36	5	3379	C	C6-N1-C2	6.46	122.88	120.30
1	2	1281	G	O5'-P-OP1	-6.45	99.89	105.70
36	1	1920	U	N3-C2-O2	-6.45	117.68	122.20
36	1	2289	U	N1-C2-N3	6.45	118.77	114.90
36	1	2352	A	C5-C6-N1	6.45	120.93	117.70
36	1	2405	C	C4-C5-C6	6.45	120.63	117.40
1	6	1765	A	C2-N3-C4	-6.45	107.37	110.60
36	5	92	G	N9-C4-C5	-6.45	102.82	105.40
36	5	608	A	C4-C5-C6	6.45	120.23	117.00
36	5	1484	U	N3-C2-O2	6.45	126.72	122.20
36	5	2395	G	C2-N3-C4	-6.45	108.67	111.90
36	5	2940	A	C5-C6-N6	-6.45	118.54	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1650	U	N1-C2-O2	-6.45	118.28	122.80
36	5	752	C	C4-C5-C6	6.45	120.63	117.40
36	5	822	G	C6-C5-N7	-6.45	126.53	130.40
36	5	888	A	C2-N3-C4	-6.45	107.37	110.60
36	5	1910	A	C6-C5-N7	-6.45	127.78	132.30
36	1	222	A	O5'-P-OP2	-6.45	99.89	105.70
36	1	970	A	OP2-P-O3'	6.45	119.39	105.20
36	1	2315	G	N3-C2-N2	-6.45	115.39	119.90
36	1	2720	G	C5-C6-O6	-6.45	124.73	128.60
36	1	3180	A	C2-N3-C4	-6.45	107.38	110.60
36	1	3391	A	OP1-P-OP2	6.45	129.28	119.60
36	5	923	C	C2-N3-C4	-6.45	116.67	119.90
36	5	1867	A	N1-C2-N3	6.45	132.53	129.30
36	5	2955	U	OP2-P-O3'	6.45	119.39	105.20
36	1	2641	U	C6-N1-C2	6.45	124.87	121.00
36	1	3123	A	C5-C6-N1	6.45	120.92	117.70
57	N1	20	ARG	NE-CZ-NH1	-6.45	117.08	120.30
1	6	1201	G	C8-N9-C4	6.45	108.98	106.40
36	5	1172	G	N1-C2-N3	6.45	127.77	123.90
36	5	1175	C	OP1-P-OP2	6.45	129.27	119.60
36	5	2119	A	C5-C6-N6	-6.45	118.54	123.70
36	5	2874	G	C6-C5-N7	-6.45	126.53	130.40
36	5	3150	A	C6-C5-N7	-6.45	127.79	132.30
37	7	115	G	C5-C6-N1	6.45	114.72	111.50
36	1	2978	U	N1-C2-N3	6.45	118.77	114.90
36	1	3202	G	N9-C4-C5	-6.45	102.82	105.40
36	5	346	C	OP2-P-O3'	6.45	119.38	105.20
36	5	2308	C	N3-C2-O2	6.45	126.41	121.90
36	1	1834	U	N1-C2-O2	-6.45	118.29	122.80
36	1	2339	C	O5'-P-OP2	-6.45	99.90	105.70
36	1	2351	U	N1-C2-N3	6.45	118.77	114.90
36	1	2794	G	C2-N3-C4	6.45	115.12	111.90
1	6	21	U	C4-C5-C6	6.45	123.57	119.70
1	6	179	A	N3-C4-C5	-6.45	122.29	126.80
36	5	61	A	C2-N3-C4	-6.45	107.38	110.60
36	5	851	C	N1-C2-N3	-6.45	114.69	119.20
36	5	1114	U	C5-C4-O4	6.45	129.77	125.90
36	5	2689	A	O4'-C1'-N9	6.45	113.36	108.20
36	5	3269	U	N3-C2-O2	6.45	126.71	122.20
1	2	424	C	N1-C2-O2	6.44	122.77	118.90
1	2	1670	G	C4-C5-C6	6.44	122.67	118.80
36	1	1440	G	C2-N3-C4	-6.44	108.68	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	36	C	N1-C2-N3	-6.44	114.69	119.20
1	6	1331	A	N9-C4-C5	6.44	108.38	105.80
36	5	1437	C	C2-N1-C1'	6.44	125.89	118.80
36	5	2358	A	C4-N9-C1'	-6.44	114.70	126.30
36	5	2420	C	C5-C4-N4	-6.44	115.69	120.20
36	1	1602	A	N7-C8-N9	-6.44	110.58	113.80
36	1	2174	G	C4-C5-N7	6.44	113.38	110.80
36	1	2403	G	C6-C5-N7	-6.44	126.53	130.40
36	1	2840	C	C4-C5-C6	6.44	120.62	117.40
1	6	1272	U	C4-C5-C6	6.44	123.56	119.70
36	5	890	C	C6-N1-C1'	-6.44	113.07	120.80
36	5	1680	G	C4-N9-C1'	6.44	134.88	126.50
36	5	2354	C	C6-N1-C1'	6.44	128.53	120.80
36	5	2988	C	C6-N1-C1'	-6.44	113.07	120.80
36	5	3280	U	N3-C4-C5	6.44	118.47	114.60
1	2	402	C	OP1-P-OP2	-6.44	109.94	119.60
1	6	1099	U	C2-N1-C1'	6.44	125.43	117.70
36	5	423	A	C6-C5-N7	-6.44	127.79	132.30
36	5	938	C	N1-C2-N3	-6.44	114.69	119.20
36	5	947	G	C6-C5-N7	-6.44	126.53	130.40
36	5	1386	A	C5-N7-C8	-6.44	100.68	103.90
36	5	2235	C	N3-C4-C5	-6.44	119.32	121.90
36	5	2856	G	C6-C5-N7	-6.44	126.54	130.40
36	5	3041	U	O5'-P-OP2	-6.44	99.90	105.70
36	5	3081	C	N3-C2-O2	6.44	126.41	121.90
36	5	3271	G	N9-C4-C5	-6.44	102.82	105.40
38	8	109	A	O5'-P-OP2	-6.44	99.90	105.70
36	1	371	G	N1-C6-O6	-6.44	116.04	119.90
36	1	1853	U	C6-N1-C2	-6.44	117.14	121.00
36	5	1857	C	O5'-P-OP2	-6.44	99.91	105.70
36	1	148	G	N3-C4-C5	-6.44	125.38	128.60
36	1	1166	G	C6-C5-N7	-6.44	126.54	130.40
38	4	103	G	C4-N9-C1'	6.44	134.87	126.50
1	6	26	A	C5-C6-N6	-6.44	118.55	123.70
36	5	682	U	C2-N1-C1'	-6.44	109.97	117.70
36	5	1435	A	C8-N9-C4	-6.44	103.22	105.80
36	5	2666	C	O5'-P-OP2	-6.44	99.91	105.70
38	8	12	A	N3-C4-N9	6.44	132.55	127.40
1	6	1037	C	C4-C5-C6	6.44	120.62	117.40
36	5	953	G	N1-C6-O6	-6.44	116.04	119.90
36	5	1666	G	N1-C6-O6	6.44	123.76	119.90
1	2	1757	G	C8-N9-C1'	-6.43	118.64	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1534	A	C5-N7-C8	-6.43	100.68	103.90
36	1	2620	G	N3-C2-N2	-6.43	115.40	119.90
36	1	2804	A	C6-N1-C2	-6.43	114.74	118.60
36	1	2812	C	OP1-P-O3'	6.43	119.36	105.20
1	6	297	U	C6-N1-C2	-6.43	117.14	121.00
1	6	797	G	C4-C5-C6	-6.43	114.94	118.80
36	5	40	A	OP1-P-OP2	6.43	129.25	119.60
36	5	994	G	N7-C8-N9	-6.43	109.88	113.10
36	5	1470	U	C5-C6-N1	6.43	125.92	122.70
36	5	1607	U	N3-C4-C5	-6.43	110.74	114.60
36	5	2384	A	C2-N3-C4	6.43	113.82	110.60
1	2	1302	U	C5-C4-O4	-6.43	122.04	125.90
36	1	747	A	O5'-P-OP1	-6.43	99.91	105.70
36	1	2406	C	O5'-P-OP2	-6.43	99.91	105.70
1	6	57	G	N3-C4-C5	-6.43	125.38	128.60
1	6	1138	A	C8-N9-C4	6.43	108.37	105.80
1	6	1796	C	C6-N1-C1'	-6.43	113.08	120.80
36	5	353	G	N3-C4-C5	6.43	131.82	128.60
36	5	503	C	C4-C5-C6	6.43	120.62	117.40
36	5	1124	U	N3-C2-O2	-6.43	117.70	122.20
36	5	1881	A	N1-C2-N3	6.43	132.52	129.30
36	1	595	G	N3-C4-C5	-6.43	125.39	128.60
36	1	2238	G	C8-N9-C1'	6.43	135.36	127.00
36	1	3288	G	N3-C4-N9	-6.43	122.14	126.00
1	6	1408	G	C5-C6-N1	-6.43	108.28	111.50
36	5	1653	G	N3-C4-N9	-6.43	122.14	126.00
36	5	1654	A	N1-C6-N6	-6.43	114.74	118.60
36	5	2754	G	C6-N1-C2	-6.43	121.24	125.10
36	5	3315	G	C8-N9-C4	-6.43	103.83	106.40
36	5	3385	U	C4-C5-C6	6.43	123.56	119.70
36	1	1328	C	N3-C2-O2	6.43	126.40	121.90
36	1	1484	U	P-O3'-C3'	6.43	127.42	119.70
36	1	2917	G	C5-N7-C8	6.43	107.51	104.30
36	1	3214	U	C6-N1-C2	-6.43	117.14	121.00
1	6	1414	U	C2-N1-C1'	6.43	125.42	117.70
36	5	607	A	C6-N1-C2	-6.43	114.74	118.60
36	5	728	G	C6-C5-N7	-6.43	126.54	130.40
36	5	742	G	N3-C4-C5	-6.43	125.39	128.60
36	5	1127	G	C4-C5-C6	6.43	122.66	118.80
36	5	1219	C	C6-N1-C2	6.43	122.87	120.30
36	5	3085	G	C5-N7-C8	6.43	107.52	104.30
37	7	57	G	C5-C6-N1	6.43	114.72	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	82	U	N1-C2-O2	6.43	127.30	122.80
1	2	1141	G	C8-N9-C4	6.43	108.97	106.40
36	1	224	C	N3-C4-N4	6.43	122.50	118.00
36	1	2811	A	N7-C8-N9	6.43	117.01	113.80
1	6	1122	G	N3-C4-N9	6.43	129.86	126.00
36	5	1043	C	C5-C6-N1	-6.43	117.79	121.00
36	5	1103	A	O5'-P-OP1	6.43	118.41	110.70
36	5	3332	U	C2-N1-C1'	-6.43	109.99	117.70
36	1	2681	U	N3-C2-O2	-6.43	117.70	122.20
36	1	2714	G	C8-N9-C1'	6.43	135.35	127.00
36	1	3221	C	C6-N1-C2	-6.43	117.73	120.30
1	6	43	A	C5-C6-N6	-6.43	118.56	123.70
1	6	1172	G	C6-C5-N7	6.43	134.26	130.40
36	5	644	G	N9-C4-C5	6.43	107.97	105.40
36	5	3030	G	N7-C8-N9	-6.43	109.89	113.10
36	1	365	A	N9-C4-C5	6.42	108.37	105.80
36	1	870	G	C4-C5-N7	-6.42	108.23	110.80
36	1	936	A	C4-C5-C6	-6.42	113.79	117.00
36	1	1107	C	C5-C4-N4	-6.42	115.70	120.20
36	1	2433	U	C2-N1-C1'	6.42	125.41	117.70
36	1	2962	U	N1-C2-O2	6.42	127.30	122.80
38	4	74	U	C5-C4-O4	-6.42	122.05	125.90
1	6	1512	G	C4-C5-N7	6.42	113.37	110.80
1	6	1727	G	C8-N9-C4	6.42	108.97	106.40
1	6	1777	G	N1-C6-O6	6.42	123.75	119.90
36	5	512	U	C2-N1-C1'	-6.42	109.99	117.70
36	5	523	A	N1-C2-N3	6.42	132.51	129.30
36	5	1608	C	C6-N1-C1'	-6.42	113.09	120.80
36	5	1917	C	O5'-P-OP1	6.42	118.41	110.70
36	5	2288	G	C6-C5-N7	-6.42	126.55	130.40
36	5	2855	U	C5-C6-N1	-6.42	119.49	122.70
36	1	360	G	C8-N9-C4	-6.42	103.83	106.40
36	1	1222	G	C8-N9-C4	6.42	108.97	106.40
36	1	2377	G	C6-N1-C2	-6.42	121.25	125.10
1	6	1140	G	N3-C4-N9	6.42	129.85	126.00
36	5	788	C	N1-C2-O2	-6.42	115.05	118.90
36	5	1284	C	C6-N1-C2	-6.42	117.73	120.30
1	2	1729	C	O5'-P-OP2	-6.42	99.92	105.70
36	1	664	U	N3-C4-O4	6.42	123.89	119.40
36	1	1204	A	N3-C4-N9	-6.42	122.26	127.40
36	1	1357	G	C6-C5-N7	-6.42	126.55	130.40
36	1	2634	U	C4-C5-C6	6.42	123.55	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2672	G	C5-C6-N1	6.42	114.71	111.50
1	6	78	A	C8-N9-C4	-6.42	103.23	105.80
1	6	781	U	C2-N1-C1'	6.42	125.41	117.70
1	6	1070	C	C6-N1-C2	6.42	122.87	120.30
1	6	1142	A	C5-C6-N1	6.42	120.91	117.70
36	5	586	C	C6-N1-C2	-6.42	117.73	120.30
36	5	1603	A	C8-N9-C1'	-6.42	116.14	127.70
36	5	1792	C	O5'-P-OP1	-6.42	99.92	105.70
36	5	2916	U	OP1-P-O3'	6.42	119.33	105.20
36	1	880	G	N3-C4-C5	6.42	131.81	128.60
36	1	2154	U	N1-C2-O2	-6.42	118.31	122.80
36	1	2659	G	C4-C5-N7	6.42	113.37	110.80
38	4	98	U	C4-C5-C6	6.42	123.55	119.70
1	6	913	G	C6-C5-N7	-6.42	126.55	130.40
36	5	420	G	C5-C6-N1	-6.42	108.29	111.50
36	5	2382	G	N9-C4-C5	6.42	107.97	105.40
36	5	2856	G	C4-C5-C6	6.42	122.65	118.80
36	5	3074	G	C8-N9-C4	6.42	108.97	106.40
37	7	13	A	C5-N7-C8	-6.42	100.69	103.90
38	8	15	G	N1-C2-N3	6.42	127.75	123.90
36	1	712	G	N7-C8-N9	-6.42	109.89	113.10
36	1	1140	G	C6-C5-N7	-6.42	126.55	130.40
36	1	1534	A	N1-C6-N6	6.42	122.45	118.60
36	1	2162	U	C2-N3-C4	-6.42	123.15	127.00
36	1	3079	U	C5-C4-O4	6.42	129.75	125.90
1	6	999	U	C5-C4-O4	-6.42	122.05	125.90
1	6	1127	G	N9-C4-C5	-6.42	102.83	105.40
1	6	1610	G	OP1-P-OP2	6.42	129.23	119.60
36	5	675	C	N3-C4-N4	6.42	122.49	118.00
36	5	1507	G	O4'-C1'-N9	-6.42	103.06	108.20
36	5	2355	G	C4-C5-N7	6.42	113.37	110.80
36	5	3187	A	N7-C8-N9	-6.42	110.59	113.80
36	5	3310	A	C6-C5-N7	-6.42	127.81	132.30
37	7	9	C	C5-C6-N1	6.42	124.21	121.00
37	7	85	G	C6-C5-N7	-6.42	126.55	130.40
36	1	650	C	O4'-C1'-N1	-6.42	103.07	108.20
36	1	1059	G	O5'-P-OP1	-6.42	99.93	105.70
1	6	1633	A	C2-N3-C4	-6.42	107.39	110.60
2	s0	146	LEU	CA-CB-CG	6.42	130.06	115.30
36	5	968	G	N9-C4-C5	-6.42	102.83	105.40
36	5	2285	C	N3-C4-N4	-6.42	113.51	118.00
36	5	2728	G	O4'-C1'-N9	6.42	113.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1436	A	O5'-P-OP1	-6.42	99.93	105.70
1	2	1550	A	C4-C5-N7	6.42	113.91	110.70
36	1	1377	G	C8-N9-C4	6.42	108.97	106.40
36	5	2242	A	N1-C2-N3	6.42	132.51	129.30
36	5	3053	G	C4-C5-N7	-6.42	108.23	110.80
36	1	663	C	N1-C2-O2	-6.41	115.05	118.90
36	1	675	C	N3-C2-O2	-6.41	117.41	121.90
36	1	965	A	C6-N1-C2	-6.41	114.75	118.60
36	1	1392	G	C6-C5-N7	6.41	134.25	130.40
36	1	2156	C	N3-C4-C5	6.41	124.47	121.90
36	1	2372	A	N3-C4-C5	-6.41	122.31	126.80
36	1	3110	C	O5'-P-OP2	6.41	118.40	110.70
1	6	72	A	C2-N3-C4	6.41	113.81	110.60
1	6	469	C	N1-C2-O2	6.41	122.75	118.90
1	6	761	G	C4-C5-N7	-6.41	108.23	110.80
1	6	943	C	C4-C5-C6	-6.41	114.19	117.40
36	5	974	G	C4-N9-C1'	6.41	134.84	126.50
36	5	3337	G	N3-C4-C5	-6.41	125.39	128.60
36	1	376	G	N9-C4-C5	6.41	107.97	105.40
36	1	645	A	N9-C4-C5	6.41	108.36	105.80
1	6	1753	A	N7-C8-N9	6.41	117.01	113.80
36	5	827	A	C5-C6-N1	6.41	120.91	117.70
1	2	1119	G	N1-C2-N3	6.41	127.75	123.90
35	SM	167	PRO	N-CA-CB	6.41	110.99	103.30
36	1	691	A	C5-C6-N1	-6.41	114.50	117.70
36	1	962	A	N9-C4-C5	6.41	108.36	105.80
36	1	1493	G	C6-C5-N7	6.41	134.25	130.40
36	1	1867	A	N1-C6-N6	6.41	122.45	118.60
36	1	2406	C	N3-C4-N4	6.41	122.49	118.00
37	3	82	G	C4-N9-C1'	6.41	134.84	126.50
1	6	340	U	N3-C4-C5	-6.41	110.75	114.60
1	6	1116	A	C6-C5-N7	-6.41	127.81	132.30
36	5	56	G	N1-C6-O6	-6.41	116.05	119.90
36	5	350	C	C2-N1-C1'	6.41	125.85	118.80
36	5	1658	G	C8-N9-C4	-6.41	103.84	106.40
36	5	2166	A	C8-N9-C4	6.41	108.36	105.80
36	5	2426	U	N1-C2-N3	6.41	118.75	114.90
36	5	3332	U	OP2-P-O3'	6.41	119.31	105.20
37	7	97	A	N3-C4-C5	-6.41	122.31	126.80
36	1	978	G	C4-N9-C1'	-6.41	118.17	126.50
36	1	2270	A	C4-C5-N7	6.41	113.90	110.70
36	5	1146	C	C5-C4-N4	-6.41	115.72	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1300	G	C4-C5-C6	6.41	122.64	118.80
36	5	1654	A	C4-C5-N7	-6.41	107.50	110.70
36	5	2149	A	N7-C8-N9	-6.41	110.59	113.80
36	5	3092	C	O5'-P-OP2	-6.41	99.93	105.70
1	2	1399	C	N1-C2-O2	6.41	122.74	118.90
1	2	1579	U	N3-C2-O2	-6.41	117.72	122.20
36	1	1716	U	P-O3'-C3'	6.41	127.39	119.70
1	6	1148	C	N3-C4-N4	-6.41	113.52	118.00
1	2	756	A	C8-N9-C4	-6.41	103.24	105.80
1	2	1011	G	N3-C4-C5	-6.41	125.40	128.60
36	1	674	G	OP1-P-OP2	-6.41	109.99	119.60
36	1	1377	G	C4-C5-N7	6.41	113.36	110.80
1	6	794	U	N1-C1'-C2'	6.41	122.33	114.00
1	6	1449	U	N3-C4-C5	-6.41	110.76	114.60
36	5	2621	G	N1-C6-O6	6.41	123.74	119.90
57	n1	151	LEU	CB-CG-CD2	-6.41	100.11	111.00
36	1	2381	G	N1-C2-N3	6.40	127.74	123.90
1	6	617	U	C6-N1-C2	-6.40	117.16	121.00
36	5	384	A	C6-C5-N7	-6.40	127.82	132.30
36	5	994	G	OP2-P-O3'	-6.40	91.11	105.20
36	5	3268	A	N1-C2-N3	6.40	132.50	129.30
36	5	3329	U	N3-C2-O2	-6.40	117.72	122.20
47	m0	90	ARG	NE-CZ-NH1	-6.40	117.10	120.30
1	2	344	A	C8-N9-C4	6.40	108.36	105.80
36	1	293	C	C4-C5-C6	6.40	120.60	117.40
36	1	577	C	C4-C5-C6	6.40	120.60	117.40
36	1	2285	C	C6-N1-C2	6.40	122.86	120.30
36	1	2517	U	OP1-P-O3'	6.40	119.29	105.20
1	6	808	U	N3-C4-C5	-6.40	110.76	114.60
36	5	2645	G	C6-N1-C2	-6.40	121.26	125.10
36	5	3390	G	C2-N3-C4	-6.40	108.70	111.90
37	7	39	C	C2-N1-C1'	6.40	125.84	118.80
37	7	73	C	O5'-P-OP1	-6.40	99.94	105.70
1	2	298	C	C4-C5-C6	-6.40	114.20	117.40
1	2	1245	G	N3-C4-C5	-6.40	125.40	128.60
36	1	573	C	C5-C6-N1	-6.40	117.80	121.00
36	1	637	C	C5'-C4'-O4'	-6.40	101.42	109.10
36	1	1499	C	O5'-P-OP1	6.40	118.38	110.70
36	1	2851	A	C5-C6-N1	-6.40	114.50	117.70
36	1	2941	A	O4'-C1'-N9	-6.40	103.08	108.20
36	1	3060	C	N3-C4-C5	6.40	124.46	121.90
37	3	55	A	C4-C5-C6	6.40	120.20	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	2	A	C8-N9-C4	-6.40	103.24	105.80
1	6	1000	C	C2-N3-C4	-6.40	116.70	119.90
36	5	1487	G	C4-N9-C1'	6.40	134.82	126.50
36	5	1882	G	C5-N7-C8	-6.40	101.10	104.30
36	5	2288	G	N9-C4-C5	-6.40	102.84	105.40
36	5	2818	U	OP2-P-O3'	6.40	119.28	105.20
36	5	2923	U	C5-C4-O4	-6.40	122.06	125.90
36	5	3011	A	N1-C6-N6	6.40	122.44	118.60
38	4	24	G	C4-C5-C6	6.40	122.64	118.80
1	6	1182	U	N3-C2-O2	-6.40	117.72	122.20
36	5	826	G	C8-N9-C4	6.40	108.96	106.40
36	5	3009	G	O4'-C1'-N9	6.40	113.32	108.20
38	8	1	A	N9-C4-C5	6.40	108.36	105.80
1	2	206	A	C2-N3-C4	-6.40	107.40	110.60
36	1	120	G	N3-C4-C5	-6.40	125.40	128.60
36	1	1121	U	C5-C6-N1	-6.40	119.50	122.70
36	1	1212	A	C5-C6-N1	6.40	120.90	117.70
1	6	389	G	N1-C2-N2	6.40	121.96	116.20
1	6	864	U	N1-C2-N3	6.40	118.74	114.90
1	6	1139	A	C4-C5-N7	6.40	113.90	110.70
1	6	1303	U	C2-N1-C1'	-6.40	110.02	117.70
1	6	1523	G	C4-N9-C1'	6.40	134.82	126.50
1	6	1655	A	N7-C8-N9	6.40	117.00	113.80
36	5	1848	G	C5-C6-O6	-6.40	124.76	128.60
1	2	994	G	C5-N7-C8	6.40	107.50	104.30
49	M3	172	LEU	CA-CB-CG	-6.40	100.59	115.30
36	5	423	A	N3-C4-C5	-6.40	122.32	126.80
36	5	658	G	O5'-P-OP1	-6.40	99.94	105.70
36	5	1443	G	N3-C4-N9	-6.40	122.16	126.00
36	5	2931	C	N1-C2-N3	-6.40	114.72	119.20
1	2	1600	A	C5-C6-N6	-6.39	118.58	123.70
36	1	416	A	N1-C6-N6	6.39	122.44	118.60
36	1	869	G	C8-N9-C4	6.39	108.96	106.40
36	1	1001	G	N9-C4-C5	-6.39	102.84	105.40
36	1	1349	G	N3-C4-N9	6.39	129.84	126.00
36	1	2843	U	N3-C2-O2	-6.39	117.72	122.20
38	4	26	U	C2-N3-C4	6.39	130.84	127.00
1	6	136	C	C2-N1-C1'	6.39	125.83	118.80
1	6	267	U	N3-C4-C5	-6.39	110.76	114.60
1	6	437	A	C8-N9-C4	6.39	108.36	105.80
1	6	583	C	C2-N3-C4	6.39	123.10	119.90
36	5	1939	G	N1-C2-N2	-6.39	110.44	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2978	U	OP1-P-O3'	6.39	119.27	105.20
1	2	827	C	C6-N1-C2	-6.39	117.74	120.30
36	1	513	G	O5'-P-OP1	6.39	118.37	110.70
36	1	1367	G	N3-C2-N2	-6.39	115.42	119.90
36	1	2904	U	C2-N3-C4	-6.39	123.17	127.00
36	1	3331	U	C5-C4-O4	6.39	129.74	125.90
38	4	55	U	N3-C4-C5	-6.39	110.77	114.60
36	5	1203	A	C5-C6-N6	-6.39	118.59	123.70
36	5	1933	A	N1-C2-N3	6.39	132.50	129.30
36	5	2115	G	O4'-C1'-N9	-6.39	103.09	108.20
36	5	2737	C	OP1-P-OP2	6.39	129.19	119.60
1	6	147	A	C5-N7-C8	-6.39	100.70	103.90
1	6	330	G	O5'-P-OP1	-6.39	99.95	105.70
1	6	440	U	C2-N1-C1'	-6.39	110.03	117.70
36	5	1510	G	C8-N9-C4	-6.39	103.84	106.40
36	5	2842	U	C5-C6-N1	6.39	125.90	122.70
36	5	2977	G	C4-C5-N7	6.39	113.36	110.80
36	5	3056	U	O5'-P-OP2	6.39	118.37	110.70
36	1	32	U	C5-C4-O4	-6.39	122.07	125.90
36	1	521	A	OP2-P-O3'	6.39	119.26	105.20
36	1	1320	C	N1-C2-N3	6.39	123.67	119.20
36	1	3354	U	O5'-P-OP2	-6.39	99.95	105.70
1	6	815	G	C5-N7-C8	-6.39	101.11	104.30
1	6	1168	U	N3-C4-O4	6.39	123.87	119.40
36	5	378	A	C2-N3-C4	-6.39	107.41	110.60
36	5	1376	C	C2-N3-C4	6.39	123.09	119.90
36	5	1446	A	OP1-P-O3'	6.39	119.26	105.20
36	5	1450	G	C5-N7-C8	-6.39	101.11	104.30
36	5	2374	C	C6-N1-C2	6.39	122.86	120.30
36	5	2891	U	N3-C2-O2	-6.39	117.73	122.20
36	5	3073	A	N1-C2-N3	6.39	132.50	129.30
1	2	163	G	C4-N9-C1'	6.39	134.80	126.50
1	2	1466	G	C4-C5-N7	6.39	113.36	110.80
1	2	1728	A	C5-C6-N1	6.39	120.89	117.70
36	1	585	A	O5'-P-OP2	-6.39	99.95	105.70
36	5	222	A	N1-C6-N6	-6.39	114.77	118.60
36	5	2186	U	C4-C5-C6	6.39	123.53	119.70
68	o2	128	LEU	CA-CB-CG	6.39	129.99	115.30
1	2	317	C	C2-N1-C1'	6.39	125.83	118.80
1	2	1774	G	C4-N9-C1'	6.39	134.80	126.50
36	1	342	A	C2-N3-C4	-6.39	107.41	110.60
36	1	1422	G	C4-C5-C6	6.39	122.63	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	54	A	O5'-P-OP1	-6.39	99.95	105.70
1	6	121	U	C2-N1-C1'	6.39	125.36	117.70
1	6	371	G	C8-N9-C1'	-6.39	118.70	127.00
36	5	364	G	N3-C2-N2	6.39	124.37	119.90
36	5	793	C	OP2-P-O3'	6.39	119.25	105.20
36	5	938	C	OP1-P-O3'	6.39	119.25	105.20
36	5	1486	G	C8-N9-C4	6.39	108.95	106.40
36	5	2239	G	N1-C6-O6	6.39	123.73	119.90
36	1	39	A	C4-C5-N7	6.38	113.89	110.70
36	1	1926	C	C6-N1-C2	-6.38	117.75	120.30
1	6	1280	C	C6-N1-C2	-6.38	117.75	120.30
1	6	1777	G	C8-N9-C4	-6.38	103.85	106.40
36	5	359	U	O5'-P-OP2	6.38	118.36	110.70
36	5	590	G	C6-C5-N7	6.38	134.23	130.40
36	5	1005	G	C5-C6-N1	-6.38	108.31	111.50
36	5	2846	U	C5-C6-N1	6.38	125.89	122.70
36	5	2916	U	N1-C2-N3	-6.38	111.07	114.90
36	5	3382	U	C5-C6-N1	6.38	125.89	122.70
36	1	1635	G	N3-C4-N9	6.38	129.83	126.00
36	1	3206	C	N3-C4-C5	-6.38	119.35	121.90
36	1	3253	G	N1-C2-N2	6.38	121.94	116.20
36	1	3375	A	N9-C4-C5	6.38	108.35	105.80
1	6	318	U	N1-C2-O2	-6.38	118.33	122.80
1	6	1027	A	C5-C6-N1	-6.38	114.51	117.70
36	5	1835	A	C8-N9-C4	-6.38	103.25	105.80
36	5	2925	C	OP1-P-OP2	-6.38	110.03	119.60
36	1	311	C	C5-C6-N1	6.38	124.19	121.00
36	1	797	U	C6-N1-C2	6.38	124.83	121.00
36	1	901	G	C2-N3-C4	6.38	115.09	111.90
36	1	2705	A	C5-C6-N1	6.38	120.89	117.70
36	1	2863	G	C5-C6-O6	6.38	132.43	128.60
1	6	275	C	C2-N1-C1'	6.38	125.82	118.80
1	6	394	C	N1-C2-O2	6.38	122.73	118.90
36	5	39	A	C2-N3-C4	-6.38	107.41	110.60
36	5	642	U	C5-C6-N1	-6.38	119.51	122.70
38	8	26	U	N1-C2-N3	6.38	118.73	114.90
36	1	516	A	OP2-P-O3'	6.38	119.24	105.20
36	1	1307	G	C8-N9-C1'	6.38	135.29	127.00
1	6	474	A	C4-C5-N7	6.38	113.89	110.70
1	6	1785	U	N3-C4-O4	6.38	123.87	119.40
36	5	499	G	O5'-P-OP1	-6.38	99.96	105.70
36	5	590	G	N1-C6-O6	-6.38	116.07	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2606	G	O4'-C1'-N9	-6.38	103.10	108.20
37	7	39	C	C6-N1-C1'	-6.38	113.14	120.80
36	1	407	A	N3-C4-C5	-6.38	122.33	126.80
36	1	1410	U	C6-N1-C2	-6.38	117.17	121.00
36	1	2713	U	C6-N1-C2	6.38	124.83	121.00
36	1	2958	A	N1-C6-N6	-6.38	114.77	118.60
36	5	423	A	C4-N9-C1'	6.38	137.78	126.30
36	5	744	A	N9-C4-C5	-6.38	103.25	105.80
36	5	1885	U	N1-C2-N3	6.38	118.73	114.90
36	1	585	A	N3-C4-C5	-6.38	122.34	126.80
36	1	589	A	C2-N3-C4	6.38	113.79	110.60
36	1	700	C	N3-C2-O2	6.38	126.36	121.90
36	1	1951	C	C2-N1-C1'	6.38	125.81	118.80
36	1	2419	A	O5'-P-OP1	-6.38	99.96	105.70
36	1	2956	A	N1-C2-N3	6.38	132.49	129.30
38	4	40	A	C5-C6-N1	6.38	120.89	117.70
38	4	104	A	C5-C6-N6	6.38	128.80	123.70
1	6	1655	A	C5-N7-C8	-6.38	100.71	103.90
36	5	639	G	C4-N9-C1'	6.38	134.79	126.50
36	1	28	C	C4-C5-C6	6.38	120.59	117.40
1	6	1116	A	C4-C5-C6	6.38	120.19	117.00
1	6	1158	C	C6-N1-C1'	-6.38	113.15	120.80
36	5	227	G	C5-C6-O6	6.38	132.43	128.60
36	5	635	G	OP1-P-OP2	6.38	129.16	119.60
36	5	902	G	N3-C4-N9	-6.38	122.17	126.00
36	1	655	C	N1-C2-O2	6.37	122.72	118.90
36	1	1084	A	C8-N9-C4	-6.37	103.25	105.80
36	1	2992	U	N3-C4-O4	6.37	123.86	119.40
36	1	3187	A	N1-C6-N6	-6.37	114.78	118.60
1	6	474	A	C5-C6-N6	-6.37	118.60	123.70
36	5	573	C	N3-C4-C5	6.37	124.45	121.90
36	5	806	A	N9-C4-C5	6.37	108.35	105.80
36	5	1495	U	C4-C5-C6	6.37	123.52	119.70
36	5	2355	G	N7-C8-N9	6.37	116.29	113.10
36	5	2957	G	C4-C5-N7	6.37	113.35	110.80
36	5	3264	G	C5-C6-O6	6.37	132.42	128.60
38	8	31	G	C5-N7-C8	6.37	107.49	104.30
1	2	111	U	C5-C6-N1	6.37	125.89	122.70
1	2	310	C	C4-C5-C6	6.37	120.59	117.40
1	2	1489	U	C6-N1-C2	-6.37	117.18	121.00
36	1	99	A	N1-C6-N6	-6.37	114.78	118.60
36	1	629	U	OP2-P-O3'	6.37	119.22	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	998	A	N1-C6-N6	6.37	122.42	118.60
36	1	1631	C	N3-C2-O2	-6.37	117.44	121.90
1	6	323	A	C8-N9-C4	-6.37	103.25	105.80
36	5	51	A	C4-C5-N7	6.37	113.89	110.70
36	5	647	A	N9-C4-C5	6.37	108.35	105.80
36	1	1096	U	P-O3'-C3'	6.37	127.34	119.70
36	5	242	C	C6-N1-C2	-6.37	117.75	120.30
36	5	851	C	C4-C5-C6	-6.37	114.22	117.40
36	5	2996	U	N1-C2-O2	6.37	127.26	122.80
36	5	3343	G	C4-C5-C6	6.37	122.62	118.80
36	1	631	U	C4-C5-C6	6.37	123.52	119.70
36	1	3267	A	N1-C2-N3	6.37	132.48	129.30
1	6	824	G	C4-N9-C1'	6.37	134.78	126.50
36	5	3218	A	C8-N9-C1'	-6.37	116.24	127.70
36	5	3332	U	C6-N1-C1'	6.37	130.12	121.20
38	8	1	A	C5-C6-N6	6.37	128.79	123.70
1	2	942	G	N1-C6-O6	-6.37	116.08	119.90
36	1	795	G	OP2-P-O3'	6.37	119.21	105.20
36	1	2663	G	N1-C6-O6	-6.37	116.08	119.90
37	3	82	G	C4-C5-C6	6.37	122.62	118.80
1	6	750	U	N3-C2-O2	6.37	126.66	122.20
36	5	2370	G	C5-C6-O6	6.37	132.42	128.60
36	5	2675	C	N1-C2-O2	6.37	122.72	118.90
36	5	3208	G	N3-C4-C5	-6.37	125.42	128.60
36	1	590	G	C2-N3-C4	-6.37	108.72	111.90
36	1	1149	G	N7-C8-N9	6.37	116.28	113.10
36	1	1907	C	C5-C4-N4	6.37	124.66	120.20
36	1	2655	U	N1-C2-O2	-6.37	118.34	122.80
36	1	3100	U	N3-C2-O2	6.37	126.66	122.20
1	6	98	U	N1-C2-N3	6.37	118.72	114.90
1	6	1663	G	C4-N9-C1'	-6.37	118.22	126.50
36	5	353	G	C8-N9-C1'	6.37	135.28	127.00
36	5	524	U	O5'-P-OP2	-6.37	99.97	105.70
36	5	920	A	C6-C5-N7	-6.37	127.84	132.30
36	5	1379	G	C4-C5-N7	6.37	113.35	110.80
36	5	2221	G	N3-C4-C5	6.37	131.78	128.60
36	1	166	C	N1-C2-O2	6.36	122.72	118.90
36	1	2427	U	C6-N1-C2	6.36	124.82	121.00
36	1	2825	C	C5-C4-N4	-6.36	115.75	120.20
36	1	3208	G	C8-N9-C1'	-6.36	118.73	127.00
36	1	3274	A	N7-C8-N9	6.36	116.98	113.80
1	6	957	G	N3-C2-N2	-6.36	115.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1244	A	C8-N9-C4	-6.36	103.25	105.80
36	5	132	C	C6-N1-C2	-6.36	117.75	120.30
36	5	367	A	N3-C4-N9	-6.36	122.31	127.40
36	5	894	G	N9-C4-C5	6.36	107.95	105.40
36	5	1843	C	C6-N1-C2	-6.36	117.75	120.30
36	5	1902	G	C4-C5-C6	6.36	122.62	118.80
36	5	1909	A	N1-C6-N6	-6.36	114.78	118.60
36	5	2892	A	N1-C2-N3	6.36	132.48	129.30
36	1	2804	A	N9-C4-C5	6.36	108.34	105.80
36	1	3125	U	C5-C4-O4	6.36	129.72	125.90
1	6	1768	G	C4-C5-N7	6.36	113.34	110.80
36	5	675	C	N1-C2-O2	-6.36	115.08	118.90
36	5	2161	G	C4-C5-N7	-6.36	108.25	110.80
1	2	316	A	C8-N9-C4	6.36	108.34	105.80
36	1	1296	C	O5'-P-OP2	-6.36	99.97	105.70
36	1	1551	C	N3-C2-O2	6.36	126.35	121.90
36	1	2407	C	N3-C2-O2	6.36	126.35	121.90
1	6	21	U	N3-C2-O2	-6.36	117.75	122.20
1	6	1758	U	C2-N1-C1'	6.36	125.33	117.70
1	6	1768	G	N3-C4-C5	6.36	131.78	128.60
36	5	425	G	C4-C5-N7	-6.36	108.25	110.80
36	5	3127	A	O5'-P-OP2	-6.36	99.97	105.70
38	8	55	U	C6-N1-C2	-6.36	117.18	121.00
36	1	76	G	N3-C2-N2	-6.36	115.45	119.90
36	1	851	C	C5-C6-N1	6.36	124.18	121.00
36	5	726	G	C6-C5-N7	-6.36	126.58	130.40
36	5	2258	U	N3-C2-O2	-6.36	117.75	122.20
37	7	82	G	C4-C5-N7	6.36	113.34	110.80
1	2	1006	C	C6-N1-C1'	-6.36	113.17	120.80
36	1	355	A	OP1-P-O3'	6.36	119.19	105.20
36	1	2425	G	N9-C4-C5	6.36	107.94	105.40
36	1	3263	G	C6-C5-N7	-6.36	126.58	130.40
38	4	41	A	N1-C2-N3	6.36	132.48	129.30
1	6	609	U	C4-C5-C6	6.36	123.52	119.70
1	6	1556	A	N3-C4-C5	6.36	131.25	126.80
36	5	536	U	N1-C2-O2	6.36	127.25	122.80
36	5	659	G	C5-N7-C8	-6.36	101.12	104.30
36	5	687	U	C5-C6-N1	-6.36	119.52	122.70
36	5	1396	C	O5'-P-OP2	-6.36	99.98	105.70
36	5	2823	G	N1-C6-O6	6.36	123.72	119.90
36	5	2865	U	N3-C4-O4	-6.36	114.95	119.40
36	5	3039	C	N1-C2-O2	-6.36	115.08	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3202	G	C4-C5-N7	-6.36	108.26	110.80
1	2	512	A	C8-N9-C4	-6.36	103.26	105.80
36	1	1929	G	C6-C5-N7	-6.36	126.59	130.40
36	1	2859	U	C5-C6-N1	-6.36	119.52	122.70
36	1	2963	C	N1-C2-N3	6.36	123.65	119.20
1	6	1145	U	N3-C4-C5	-6.36	110.79	114.60
36	5	1376	C	N3-C4-C5	-6.36	119.36	121.90
36	5	2284	C	C6-N1-C2	-6.36	117.76	120.30
36	5	2929	C	C4-C5-C6	-6.36	114.22	117.40
36	5	3308	C	N3-C4-N4	6.36	122.45	118.00
61	n5	133	LEU	CA-CB-CG	6.36	129.92	115.30
36	1	1773	C	C5-C6-N1	-6.35	117.82	121.00
36	1	2409	G	C6-N1-C2	-6.35	121.29	125.10
36	1	3368	U	C2-N1-C1'	-6.35	110.08	117.70
1	6	695	U	N1-C2-N3	6.35	118.71	114.90
36	5	213	A	C5-C6-N6	-6.35	118.62	123.70
36	5	1929	G	N3-C4-N9	-6.35	122.19	126.00
36	5	3216	G	C6-N1-C2	-6.35	121.29	125.10
1	2	1146	G	C5-C6-O6	-6.35	124.79	128.60
1	2	1299	G	C4-N9-C1'	6.35	134.76	126.50
36	1	656	A	C2-N3-C4	6.35	113.78	110.60
36	1	797	U	C2-N3-C4	-6.35	123.19	127.00
36	1	3318	G	N7-C8-N9	6.35	116.28	113.10
1	6	1659	A	N1-C2-N3	6.35	132.48	129.30
36	5	367	A	C5-C6-N6	6.35	128.78	123.70
36	5	594	U	C2-N1-C1'	6.35	125.32	117.70
36	5	1331	U	C2-N3-C4	-6.35	123.19	127.00
36	5	1599	G	N7-C8-N9	-6.35	109.92	113.10
36	5	1719	G	C2-N3-C4	-6.35	108.72	111.90
36	5	2610	G	C4-N9-C1'	-6.35	118.24	126.50
37	7	44	C	C5-C4-N4	-6.35	115.75	120.20
36	1	929	A	N9-C4-C5	-6.35	103.26	105.80
36	5	298	U	N3-C4-O4	6.35	123.85	119.40
36	5	954	U	C5-C6-N1	-6.35	119.52	122.70
36	5	1733	G	O5'-P-OP2	-6.35	99.98	105.70
36	5	3025	C	C2-N1-C1'	-6.35	111.81	118.80
36	5	3329	U	C5-C4-O4	6.35	129.71	125.90
1	2	1611	A	C2-N3-C4	-6.35	107.43	110.60
36	1	225	C	C6-N1-C2	-6.35	117.76	120.30
36	1	2352	A	N9-C4-C5	-6.35	103.26	105.80
36	5	1892	G	C6-C5-N7	-6.35	126.59	130.40
36	5	3195	U	O4'-C1'-N1	6.35	113.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	172	G	N3-C4-N9	6.35	129.81	126.00
36	1	404	G	C8-N9-C1'	-6.35	118.75	127.00
36	1	1138	U	N3-C2-O2	-6.35	117.76	122.20
36	1	1713	G	C6-C5-N7	6.35	134.21	130.40
36	1	2109	U	N3-C4-C5	-6.35	110.79	114.60
36	1	2877	G	C6-C5-N7	6.35	134.21	130.40
38	4	58	G	C8-N9-C4	-6.35	103.86	106.40
1	6	422	G	O5'-P-OP2	-6.35	99.99	105.70
1	6	1479	A	C5-C6-N6	-6.35	118.62	123.70
36	5	104	G	C5-C6-O6	-6.35	124.79	128.60
36	5	2373	A	N9-C4-C5	6.35	108.34	105.80
36	5	2957	G	C5-N7-C8	-6.35	101.13	104.30
36	1	1883	A	N7-C8-N9	-6.35	110.63	113.80
36	1	3210	A	C5-C6-N1	6.35	120.87	117.70
1	2	1600	A	C4-C5-N7	6.34	113.87	110.70
36	1	657	A	C4-C5-N7	6.34	113.87	110.70
36	1	1554	U	N1-C2-N3	-6.34	111.09	114.90
36	1	1592	G	N3-C4-N9	6.34	129.81	126.00
36	1	1911	A	O5'-P-OP2	-6.34	99.99	105.70
36	1	2287	C	N3-C2-O2	-6.34	117.46	121.90
36	1	2605	G	C6-C5-N7	-6.34	126.59	130.40
36	1	2789	U	N1-C2-N3	6.34	118.71	114.90
36	1	2814	G	C5-N7-C8	6.34	107.47	104.30
38	4	28	C	N3-C4-C5	-6.34	119.36	121.90
1	6	45	U	C5-C4-O4	-6.34	122.09	125.90
1	6	891	A	N1-C6-N6	6.34	122.41	118.60
1	6	1347	U	C5-C4-O4	6.34	129.71	125.90
1	6	1603	U	C5-C6-N1	6.34	125.87	122.70
36	5	1311	G	C5-C6-N1	-6.34	108.33	111.50
37	7	74	C	C6-N1-C2	6.34	122.84	120.30
36	1	132	C	N3-C4-C5	-6.34	119.36	121.90
36	1	2385	G	C8-N9-C4	6.34	108.94	106.40
36	5	935	U	C5-C4-O4	-6.34	122.09	125.90
36	5	2705	A	C6-N1-C2	-6.34	114.79	118.60
36	5	3269	U	N1-C2-N3	-6.34	111.09	114.90
36	1	1306	G	C5-C6-O6	-6.34	124.80	128.60
36	1	3267	A	C4-C5-C6	6.34	120.17	117.00
36	5	96	G	O4'-C1'-N9	-6.34	103.13	108.20
36	5	1532	C	N1-C2-O2	-6.34	115.09	118.90
36	5	1822	C	N3-C4-C5	-6.34	119.36	121.90
1	2	95	G	N1-C6-O6	-6.34	116.10	119.90
1	2	191	C	N1-C2-O2	-6.34	115.10	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	187	A	C5-C6-N6	6.34	128.77	123.70
36	1	1846	C	O5'-P-OP2	-6.34	100.00	105.70
36	1	2311	G	N1-C6-O6	6.34	123.70	119.90
36	1	3043	C	C5-C4-N4	-6.34	115.76	120.20
1	6	330	G	N3-C2-N2	-6.34	115.46	119.90
1	6	1148	C	N1-C2-N3	6.34	123.64	119.20
36	5	426	G	C5-N7-C8	6.34	107.47	104.30
36	5	568	G	N1-C6-O6	6.34	123.70	119.90
36	5	2126	A	C5-C6-N6	-6.34	118.63	123.70
36	5	2977	G	C5-C6-O6	-6.34	124.80	128.60
38	8	21	C	C4-C5-C6	-6.34	114.23	117.40
36	1	145	G	C8-N9-C4	-6.34	103.86	106.40
36	5	2185	G	N3-C2-N2	-6.34	115.46	119.90
36	5	2988	C	C2-N3-C4	-6.34	116.73	119.90
1	2	576	G	C5-C6-O6	-6.34	124.80	128.60
1	2	1786	G	N9-C4-C5	6.34	107.94	105.40
36	1	423	A	OP1-P-OP2	6.34	129.10	119.60
36	1	2355	G	C2-N3-C4	-6.34	108.73	111.90
36	1	3255	U	C2-N1-C1'	-6.34	110.10	117.70
1	6	1178	G	N3-C4-N9	6.34	129.80	126.00
1	6	1662	G	O5'-P-OP1	6.34	118.30	110.70
36	5	1852	G	C5-C6-N1	6.34	114.67	111.50
36	5	2386	A	C5-C6-N6	-6.34	118.63	123.70
36	5	3262	U	C6-N1-C2	-6.34	117.20	121.00
36	1	2300	G	N1-C2-N3	6.33	127.70	123.90
1	6	1440	C	C6-N1-C2	6.33	122.83	120.30
36	5	3295	A	C5-C6-N1	6.33	120.87	117.70
36	1	272	G	C2-N3-C4	-6.33	108.73	111.90
36	1	1359	C	N1-C2-O2	-6.33	115.10	118.90
36	1	1952	G	C8-N9-C4	-6.33	103.87	106.40
38	4	85	G	C8-N9-C4	-6.33	103.87	106.40
1	6	461	G	N3-C4-C5	-6.33	125.43	128.60
1	6	1023	A	N9-C4-C5	6.33	108.33	105.80
1	6	1425	A	C2-N3-C4	-6.33	107.43	110.60
1	6	1610	G	C2-N3-C4	6.33	115.07	111.90
1	6	1697	G	N3-C4-N9	6.33	129.80	126.00
36	5	1391	C	C2-N3-C4	-6.33	116.73	119.90
36	5	1514	G	N3-C2-N2	6.33	124.33	119.90
36	5	2922	G	OP1-P-OP2	-6.33	110.10	119.60
1	2	315	A	O4'-C1'-N9	6.33	113.27	108.20
36	1	19	U	N1-C2-O2	-6.33	118.37	122.80
36	1	67	A	C6-N1-C2	-6.33	114.80	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	326	U	O5'-P-OP2	-6.33	100.00	105.70
36	1	677	A	C2-N3-C4	6.33	113.77	110.60
36	1	1439	U	OP1-P-O3'	6.33	119.13	105.20
36	1	1887	A	C5-C6-N1	-6.33	114.53	117.70
1	6	462	G	O5'-P-OP1	-6.33	100.00	105.70
1	6	1774	G	N7-C8-N9	6.33	116.27	113.10
36	5	46	U	OP2-P-O3'	6.33	119.13	105.20
36	5	90	C	C6-N1-C2	-6.33	117.77	120.30
36	5	708	G	N3-C4-N9	6.33	129.80	126.00
36	5	1138	U	N1-C2-N3	6.33	118.70	114.90
36	5	1432	C	OP1-P-O3'	6.33	119.13	105.20
36	5	2116	G	N1-C6-O6	6.33	123.70	119.90
36	5	2275	A	N9-C4-C5	6.33	108.33	105.80
36	5	2319	U	N1-C2-O2	6.33	127.23	122.80
36	5	2772	C	P-O3'-C3'	6.33	127.30	119.70
36	5	3055	U	C5-C6-N1	-6.33	119.53	122.70
36	1	1552	G	C8-N9-C1'	-6.33	118.77	127.00
36	1	1928	G	N3-C4-N9	-6.33	122.20	126.00
38	4	81	U	N1-C2-O2	6.33	127.23	122.80
1	6	623	A	O5'-P-OP1	-6.33	100.00	105.70
36	5	990	U	C2-N1-C1'	6.33	125.30	117.70
36	5	3045	G	N9-C4-C5	6.33	107.93	105.40
70	o4	4	ARG	NE-CZ-NH2	-6.33	117.14	120.30
1	2	1786	G	N3-C4-N9	-6.33	122.20	126.00
36	1	311	C	C6-N1-C2	-6.33	117.77	120.30
36	1	397	A	N1-C2-N3	6.33	132.47	129.30
36	1	783	A	N1-C6-N6	6.33	122.40	118.60
36	1	939	U	C6-N1-C2	-6.33	117.20	121.00
36	1	2188	A	C5-C6-N1	6.33	120.86	117.70
36	1	2229	A	C4-C5-N7	6.33	113.86	110.70
36	1	2550	U	C6-N1-C2	-6.33	117.20	121.00
36	1	2881	C	N1-C2-N3	-6.33	114.77	119.20
36	5	64	G	N3-C4-C5	-6.33	125.44	128.60
36	5	360	G	N1-C2-N3	6.33	127.70	123.90
36	5	383	G	N1-C6-O6	-6.33	116.10	119.90
36	5	1485	G	C5-C6-O6	6.33	132.40	128.60
36	5	3143	C	OP1-P-O3'	6.33	119.12	105.20
36	1	2962	U	C4-C5-C6	-6.33	115.90	119.70
36	5	962	A	C8-N9-C4	-6.33	103.27	105.80
36	5	1443	G	OP1-P-O3'	6.33	119.12	105.20
36	5	2884	C	N1-C2-O2	-6.33	115.10	118.90
36	5	3303	G	C5-C6-O6	6.33	132.40	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	611	A	O5'-P-OP1	6.33	118.29	110.70
36	1	1519	G	N1-C6-O6	6.33	123.70	119.90
36	1	2820	A	C4-C5-C6	-6.33	113.84	117.00
1	6	286	C	N3-C4-C5	6.33	124.43	121.90
36	5	1011	A	N1-C2-N3	6.33	132.46	129.30
36	5	1101	G	C8-N9-C1'	-6.33	118.78	127.00
36	5	1899	G	N7-C8-N9	-6.33	109.94	113.10
36	5	2871	G	OP1-P-O3'	6.33	119.11	105.20
36	1	706	A	O5'-P-OP1	-6.32	100.01	105.70
36	1	2329	C	O5'-P-OP2	-6.32	100.01	105.70
36	1	2396	G	N9-C4-C5	6.32	107.93	105.40
36	1	2796	G	N1-C6-O6	-6.32	116.11	119.90
38	4	18	U	N1-C2-O2	6.32	127.23	122.80
36	5	413	U	N3-C2-O2	6.32	126.63	122.20
36	5	714	G	OP1-P-O3'	-6.32	91.29	105.20
36	5	2584	G	N3-C4-N9	6.32	129.79	126.00
36	5	3015	G	C2-N3-C4	-6.32	108.74	111.90
36	5	3088	G	C4-C5-C6	6.32	122.59	118.80
38	4	144	G	N7-C8-N9	-6.32	109.94	113.10
36	5	2727	A	OP1-P-OP2	6.32	129.08	119.60
36	5	2849	C	N1-C2-O2	-6.32	115.11	118.90
1	2	6	G	C8-N9-C4	-6.32	103.87	106.40
36	1	560	G	C2-N3-C4	6.32	115.06	111.90
36	1	2661	G	C6-C5-N7	-6.32	126.61	130.40
36	1	2816	G	C4-C5-C6	6.32	122.59	118.80
71	O5	21	LEU	CA-CB-CG	6.32	129.84	115.30
1	6	778	G	N1-C6-O6	-6.32	116.11	119.90
1	6	904	G	N1-C6-O6	-6.32	116.11	119.90
1	6	1304	G	N7-C8-N9	-6.32	109.94	113.10
36	5	1004	U	C5-C6-N1	6.32	125.86	122.70
36	5	1177	G	N1-C2-N3	6.32	127.69	123.90
36	5	1892	G	C2-N3-C4	-6.32	108.74	111.90
36	5	2416	U	N1-C2-N3	6.32	118.69	114.90
38	8	93	U	C2-N1-C1'	-6.32	110.12	117.70
36	1	2421	U	C2-N3-C4	-6.32	123.21	127.00
36	1	2640	A	O4'-C1'-N9	-6.32	103.14	108.20
36	1	2899	C	N3-C4-N4	-6.32	113.58	118.00
37	3	33	U	C5-C4-O4	-6.32	122.11	125.90
1	6	1600	A	C4-C5-N7	6.32	113.86	110.70
36	5	978	G	N3-C4-N9	-6.32	122.21	126.00
36	5	1177	G	N1-C6-O6	-6.32	116.11	119.90
36	5	1366	A	N1-C6-N6	6.32	122.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1548	C	C6-N1-C2	-6.32	117.77	120.30
36	5	2412	G	C4-N9-C1'	6.32	134.72	126.50
36	5	3330	A	C2-N3-C4	6.32	113.76	110.60
36	5	3362	A	O5'-P-OP2	-6.32	100.01	105.70
1	2	1435	G	N3-C4-N9	6.32	129.79	126.00
36	1	905	U	N1-C2-N3	6.32	118.69	114.90
36	1	1303	A	C8-N9-C4	6.32	108.33	105.80
36	1	3130	A	C8-N9-C4	-6.32	103.27	105.80
56	N0	82	ASP	CB-CG-OD2	-6.32	112.61	118.30
36	5	832	G	N3-C4-N9	6.32	129.79	126.00
36	5	2836	C	N3-C4-C5	-6.32	119.37	121.90
36	5	2931	C	C6-N1-C2	6.32	122.83	120.30
1	2	144	U	N3-C4-O4	-6.32	114.98	119.40
1	2	390	G	N3-C2-N2	-6.32	115.48	119.90
1	2	399	A	C4-C5-N7	-6.32	107.54	110.70
36	1	1576	G	N3-C4-C5	-6.32	125.44	128.60
36	1	1876	U	C6-N1-C2	-6.32	117.21	121.00
36	1	2272	G	N1-C2-N3	6.32	127.69	123.90
36	1	2285	C	C2-N1-C1'	-6.32	111.85	118.80
36	1	2833	A	N1-C2-N3	6.32	132.46	129.30
36	1	2863	G	N1-C2-N3	6.32	127.69	123.90
36	1	2958	A	N9-C4-C5	6.32	108.33	105.80
36	1	3007	U	C2-N3-C4	-6.32	123.21	127.00
36	1	3273	A	N9-C4-C5	6.32	108.33	105.80
1	6	417	A	N1-C2-N3	6.32	132.46	129.30
1	6	569	C	C2-N3-C4	-6.32	116.74	119.90
36	5	1099	A	C4-C5-N7	6.32	113.86	110.70
36	5	2662	G	N1-C2-N2	-6.32	110.52	116.20
37	7	29	C	C2-N3-C4	-6.32	116.74	119.90
40	l3	4	ARG	NE-CZ-NH1	6.32	123.46	120.30
1	2	574	G	C5-N7-C8	6.31	107.46	104.30
36	1	424	G	N3-C4-C5	-6.31	125.44	128.60
36	1	2375	G	O4'-C1'-N9	6.31	113.25	108.20
38	4	91	C	N3-C4-C5	-6.31	119.38	121.90
1	6	1498	G	C5-C6-O6	-6.31	124.81	128.60
36	5	606	C	N1-C2-O2	-6.31	115.11	118.90
36	5	1236	G	C8-N9-C1'	-6.31	118.79	127.00
1	2	1466	G	N7-C8-N9	6.31	116.26	113.10
36	1	189	G	O5'-P-OP2	-6.31	100.02	105.70
36	1	360	G	N9-C4-C5	6.31	107.92	105.40
36	1	2617	U	C6-N1-C2	-6.31	117.21	121.00
1	6	298	C	C5-C4-N4	-6.31	115.78	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	291	C	N3-C4-C5	6.31	124.42	121.90
36	5	433	A	C5-N7-C8	-6.31	100.74	103.90
36	5	1102	A	C8-N9-C4	-6.31	103.28	105.80
36	5	1860	G	N1-C6-O6	-6.31	116.11	119.90
1	2	767	U	C5-C4-O4	6.31	129.69	125.90
36	5	1748	G	C4-C5-N7	6.31	113.32	110.80
36	5	2325	G	C6-C5-N7	-6.31	126.61	130.40
36	5	2422	C	C2-N1-C1'	-6.31	111.86	118.80
36	5	2876	C	C6-N1-C2	-6.31	117.78	120.30
1	2	1673	G	N3-C4-C5	-6.31	125.44	128.60
36	1	696	C	C6-N1-C2	-6.31	117.78	120.30
36	1	2388	U	OP2-P-O3'	6.31	119.08	105.20
36	1	3092	C	O5'-P-OP1	-6.31	100.02	105.70
36	1	3269	U	N1-C2-N3	6.31	118.69	114.90
36	5	1926	C	N3-C4-C5	6.31	124.42	121.90
36	5	2812	C	N3-C4-C5	6.31	124.42	121.90
36	5	2830	G	C4-C5-N7	-6.31	108.28	110.80
36	5	2982	A	N1-C6-N6	6.31	122.39	118.60
68	o2	45	ARG	NE-CZ-NH1	-6.31	117.14	120.30
1	2	1177	C	N3-C4-N4	6.31	122.42	118.00
1	2	1255	G	N9-C4-C5	6.31	107.92	105.40
1	2	1655	A	N7-C8-N9	-6.31	110.65	113.80
36	1	705	A	N9-C4-C5	-6.31	103.28	105.80
36	1	1589	A	C6-N1-C2	-6.31	114.82	118.60
36	1	1758	G	O5'-P-OP2	-6.31	100.02	105.70
36	1	2332	A	C2-N3-C4	-6.31	107.45	110.60
36	1	2696	A	C4-C5-C6	-6.31	113.85	117.00
36	1	2891	U	N3-C4-O4	6.31	123.82	119.40
36	1	3060	C	N1-C2-O2	6.31	122.68	118.90
1	6	1491	U	OP1-P-O3'	6.31	119.08	105.20
1	6	1592	A	N3-C4-N9	-6.31	122.36	127.40
1	6	1780	G	C2-N3-C4	6.31	115.05	111.90
36	5	926	A	C5-C6-N6	6.31	128.75	123.70
36	5	1632	A	C4-C5-N7	-6.31	107.55	110.70
36	5	2105	G	N1-C6-O6	6.31	123.68	119.90
36	1	1413	G	N9-C4-C5	-6.31	102.88	105.40
36	5	1468	A	C6-N1-C2	-6.31	114.82	118.60
36	5	2666	C	C5-C4-N4	-6.31	115.79	120.20
36	5	3131	U	C6-N1-C2	6.31	124.78	121.00
1	2	399	A	N9-C4-C5	6.30	108.32	105.80
36	1	1955	U	C6-N1-C2	-6.30	117.22	121.00
36	1	2616	C	N3-C4-C5	-6.30	119.38	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3361	G	C5-C6-O6	6.30	132.38	128.60
38	4	32	C	N3-C2-O2	-6.30	117.49	121.90
1	6	194	U	C5-C6-N1	6.30	125.85	122.70
1	6	1293	U	C5-C6-N1	-6.30	119.55	122.70
36	5	39	A	N3-C4-N9	-6.30	122.36	127.40
36	5	82	C	C5-C6-N1	-6.30	117.85	121.00
36	5	842	G	C4-N9-C1'	-6.30	118.30	126.50
36	5	987	U	N3-C4-C5	-6.30	110.82	114.60
36	5	1190	A	C4-N9-C1'	6.30	137.65	126.30
36	5	1840	U	OP2-P-O3'	6.30	119.07	105.20
36	5	2718	U	N3-C2-O2	-6.30	117.79	122.20
36	1	23	A	C8-N9-C4	-6.30	103.28	105.80
36	1	590	G	C8-N9-C4	6.30	108.92	106.40
36	1	1307	G	C4-C5-N7	-6.30	108.28	110.80
36	5	1157	G	OP2-P-O3'	6.30	119.07	105.20
36	5	1375	G	C2-N3-C4	6.30	115.05	111.90
36	5	2221	G	N3-C4-N9	-6.30	122.22	126.00
36	5	3189	G	N1-C2-N3	6.30	127.68	123.90
1	2	1177	C	C5-C4-N4	-6.30	115.79	120.20
1	2	1336	A	C8-N9-C4	6.30	108.32	105.80
1	2	1795	U	N3-C2-O2	-6.30	117.79	122.20
36	1	404	G	C4-C5-C6	6.30	122.58	118.80
36	1	1477	A	C6-N1-C2	-6.30	114.82	118.60
36	1	1689	U	O5'-P-OP1	-6.30	100.03	105.70
36	1	1926	C	N3-C2-O2	-6.30	117.49	121.90
37	3	93	C	N3-C4-C5	6.30	124.42	121.90
1	6	621	A	C4-C5-C6	-6.30	113.85	117.00
1	6	1395	G	N1-C6-O6	6.30	123.68	119.90
36	5	226	C	N1-C2-O2	6.30	122.68	118.90
36	5	2884	C	C6-N1-C2	6.30	122.82	120.30
36	5	3229	G	C4-N9-C1'	6.30	134.69	126.50
36	5	3309	G	N3-C4-C5	-6.30	125.45	128.60
36	1	335	G	O5'-P-OP2	6.30	118.26	110.70
36	1	498	A	C5-C6-N6	-6.30	118.66	123.70
36	1	589	A	C5-N7-C8	6.30	107.05	103.90
36	1	616	G	N1-C6-O6	6.30	123.68	119.90
36	1	796	U	C5-C6-N1	6.30	125.85	122.70
36	1	834	U	C6-N1-C2	6.30	124.78	121.00
36	1	1095	U	O5'-P-OP2	-6.30	100.03	105.70
36	1	1865	A	C5-C6-N1	-6.30	114.55	117.70
36	1	2315	G	N1-C2-N3	6.30	127.68	123.90
1	6	163	G	N7-C8-N9	6.30	116.25	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	714	G	N1-C6-O6	6.30	123.68	119.90
36	5	2346	C	C2-N3-C4	6.30	123.05	119.90
36	5	2911	A	C8-N9-C4	-6.30	103.28	105.80
36	5	3053	G	O5'-P-OP2	6.30	118.26	110.70
36	5	3173	G	N1-C6-O6	-6.30	116.12	119.90
36	5	3220	G	N9-C4-C5	6.30	107.92	105.40
36	1	686	G	N9-C4-C5	6.30	107.92	105.40
36	1	1269	U	N3-C2-O2	-6.30	117.79	122.20
36	1	2860	U	N1-C2-N3	-6.30	111.12	114.90
1	6	1517	U	N1-C2-N3	6.30	118.68	114.90
36	5	1329	U	N1-C1'-C2'	-6.30	105.07	112.00
36	5	2702	A	N7-C8-N9	6.30	116.95	113.80
36	1	25	U	N3-C2-O2	6.30	126.61	122.20
36	1	62	A	OP2-P-O3'	6.30	119.05	105.20
36	1	416	A	N1-C2-N3	6.30	132.45	129.30
36	1	793	C	N1-C2-N3	6.30	123.61	119.20
36	1	1046	A	N1-C6-N6	6.30	122.38	118.60
36	1	1297	C	O5'-P-OP1	-6.30	100.03	105.70
36	1	1635	G	C4-N9-C1'	6.30	134.68	126.50
36	1	2941	A	C5-C6-N6	-6.30	118.66	123.70
1	6	794	U	C6-N1-C1'	-6.30	112.39	121.20
1	6	1354	G	C4-C5-N7	6.30	113.32	110.80
1	6	1642	G	C4-C5-N7	6.30	113.32	110.80
36	5	1589	A	N3-C4-N9	6.30	132.44	127.40
36	5	2205	U	C2-N1-C1'	6.30	125.26	117.70
36	5	3129	A	C5-C6-N1	-6.30	114.55	117.70
37	7	52	G	O5'-P-OP1	-6.30	100.03	105.70
36	1	3087	A	C6-N1-C2	-6.29	114.82	118.60
1	6	1527	C	C5-C6-N1	-6.29	117.85	121.00
36	5	43	A	C5-N7-C8	-6.29	100.75	103.90
36	5	500	C	N3-C4-C5	-6.29	119.38	121.90
36	5	3117	C	N1-C2-O2	6.29	122.68	118.90
36	5	3303	G	C8-N9-C4	-6.29	103.88	106.40
36	1	375	A	N9-C4-C5	-6.29	103.28	105.80
36	1	608	A	C8-N9-C1'	-6.29	116.37	127.70
36	1	803	C	C2-N1-C1'	6.29	125.72	118.80
36	1	1043	C	C2-N3-C4	-6.29	116.75	119.90
36	1	2172	A	C5-N7-C8	-6.29	100.75	103.90
36	1	2365	C	C6-N1-C2	6.29	122.82	120.30
36	1	2410	U	OP2-P-O3'	6.29	119.05	105.20
1	6	1028	C	C4-C5-C6	6.29	120.55	117.40
1	6	1183	A	O5'-P-OP1	-6.29	100.03	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1546	G	N1-C2-N3	6.29	127.68	123.90
36	5	129	U	N1-C2-N3	6.29	118.68	114.90
36	5	1163	A	C5-C6-N6	6.29	128.74	123.70
36	5	1906	G	C6-N1-C2	-6.29	121.32	125.10
36	1	659	G	O5'-P-OP2	-6.29	100.04	105.70
36	1	2549	G	C4-C5-N7	-6.29	108.28	110.80
36	1	2880	U	O4'-C1'-N1	6.29	113.23	108.20
36	1	2901	G	C5-C6-O6	6.29	132.38	128.60
1	6	1106	U	C6-N1-C2	-6.29	117.22	121.00
36	5	2387	A	C5-N7-C8	-6.29	100.75	103.90
36	1	2566	C	C6-N1-C2	-6.29	117.78	120.30
36	5	2335	G	C8-N9-C1'	-6.29	118.82	127.00
36	5	3172	A	O5'-P-OP2	-6.29	100.04	105.70
1	2	1771	U	C6-N1-C2	6.29	124.77	121.00
36	1	880	G	C8-N9-C4	6.29	108.92	106.40
36	1	1334	U	N1-C2-O2	-6.29	118.40	122.80
36	1	2280	A	C6-C5-N7	-6.29	127.90	132.30
1	6	1150	G	C4-C5-N7	6.29	113.32	110.80
1	6	1564	U	C6-N1-C2	6.29	124.77	121.00
36	5	229	G	C8-N9-C4	-6.29	103.89	106.40
36	5	421	G	N1-C2-N2	-6.29	110.54	116.20
36	5	580	C	C4-C5-C6	6.29	120.54	117.40
36	5	644	G	C8-N9-C4	-6.29	103.89	106.40
36	5	2365	C	C5-C6-N1	-6.29	117.86	121.00
36	5	2670	G	N3-C2-N2	-6.29	115.50	119.90
1	2	1210	C	C5-C6-N1	6.29	124.14	121.00
36	1	3066	U	C5-C6-N1	-6.29	119.56	122.70
36	1	3117	C	N3-C2-O2	-6.29	117.50	121.90
36	5	363	G	C4-C5-C6	6.29	122.57	118.80
36	5	1201	C	C5-C6-N1	6.29	124.14	121.00
36	5	3062	G	C4-C5-N7	6.29	113.31	110.80
36	5	3289	G	N9-C1'-C2'	-6.29	105.08	112.00
36	1	1095	U	O4'-C1'-N1	-6.29	103.17	108.20
36	1	2182	A	C6-C5-N7	-6.29	127.90	132.30
1	6	338	C	N3-C4-C5	-6.29	119.39	121.90
36	5	356	C	C5-C6-N1	-6.29	117.86	121.00
36	5	630	A	C5-C6-N1	-6.29	114.56	117.70
36	5	808	A	C2-N3-C4	6.29	113.74	110.60
36	5	2835	U	N3-C4-C5	-6.29	110.83	114.60
36	5	3029	A	C2-N3-C4	-6.29	107.46	110.60
36	1	81	C	C6-N1-C2	-6.28	117.79	120.30
36	1	1201	C	C6-N1-C2	6.28	122.81	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2122	G	C8-N9-C4	-6.28	103.89	106.40
36	1	2177	G	N1-C6-O6	-6.28	116.13	119.90
36	1	2609	A	OP1-P-O3'	6.28	119.02	105.20
36	1	3190	C	N3-C4-C5	6.28	124.41	121.90
36	1	3197	G	C5-C6-O6	-6.28	124.83	128.60
1	6	308	C	O4'-C1'-N1	-6.28	103.17	108.20
1	6	392	G	N3-C2-N2	-6.28	115.50	119.90
36	5	864	G	OP1-P-OP2	-6.28	110.17	119.60
36	5	1480	G	N9-C4-C5	-6.28	102.89	105.40
36	5	2279	A	N9-C4-C5	-6.28	103.29	105.80
37	7	80	G	C5-N7-C8	6.28	107.44	104.30
1	2	1665	U	N1-C2-N3	6.28	118.67	114.90
36	1	1180	A	C4-N9-C1'	-6.28	114.99	126.30
36	1	2192	C	N1-C2-N3	6.28	123.60	119.20
36	1	2856	G	C2-N3-C4	-6.28	108.76	111.90
36	1	3054	U	C6-N1-C2	-6.28	117.23	121.00
36	1	3368	U	C5-C4-O4	6.28	129.67	125.90
1	6	1565	C	N3-C4-C5	6.28	124.41	121.90
36	5	1916	U	N3-C2-O2	-6.28	117.80	122.20
36	5	2549	G	C4-C5-C6	6.28	122.57	118.80
36	5	2796	G	C8-N9-C1'	-6.28	118.83	127.00
36	5	3383	G	C6-C5-N7	-6.28	126.63	130.40
1	2	620	A	C5-C6-N6	6.28	128.72	123.70
1	2	1008	G	N1-C6-O6	6.28	123.67	119.90
36	1	419	G	N1-C2-N3	6.28	127.67	123.90
36	1	616	G	C8-N9-C4	6.28	108.91	106.40
36	1	2360	C	OP2-P-O3'	6.28	119.02	105.20
36	1	2944	U	OP1-P-OP2	-6.28	110.18	119.60
36	1	3309	G	O5'-P-OP1	-6.28	100.05	105.70
1	6	1148	C	C5-C4-N4	6.28	124.60	120.20
1	6	1524	A	N1-C2-N3	6.28	132.44	129.30
36	5	376	G	N3-C4-C5	-6.28	125.46	128.60
36	5	1138	U	C5-C4-O4	6.28	129.67	125.90
36	5	1772	U	C5-C6-N1	-6.28	119.56	122.70
36	5	2371	G	C8-N9-C1'	-6.28	118.84	127.00
36	5	2399	A	C5-N7-C8	-6.28	100.76	103.90
36	5	2611	U	OP2-P-O3'	6.28	119.02	105.20
36	5	2613	U	N3-C4-C5	-6.28	110.83	114.60
36	5	2865	U	OP2-P-O3'	6.28	119.02	105.20
37	7	99	G	N3-C2-N2	-6.28	115.50	119.90
36	1	1514	G	N7-C8-N9	6.28	116.24	113.10
36	5	2309	A	O5'-P-OP2	-6.28	100.05	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2644	C	N1-C2-N3	6.28	123.59	119.20
36	5	2687	G	C6-C5-N7	-6.28	126.63	130.40
36	5	3335	A	O4'-C1'-N9	-6.28	103.18	108.20
36	1	219	A	O5'-P-OP1	-6.28	100.05	105.70
36	1	615	U	C4-C5-C6	6.28	123.47	119.70
36	1	1437	C	N3-C2-O2	-6.28	117.51	121.90
36	1	2121	G	C4-N9-C1'	-6.28	118.34	126.50
36	1	2207	A	O4'-C1'-N9	6.28	113.22	108.20
36	1	2874	G	C4-C5-N7	-6.28	108.29	110.80
36	1	2910	A	N1-C2-N3	6.28	132.44	129.30
36	5	787	G	C4-C5-N7	-6.28	108.29	110.80
36	5	857	G	N7-C8-N9	6.28	116.24	113.10
36	5	1429	G	C4-N9-C1'	6.28	134.66	126.50
36	5	1737	U	N3-C2-O2	6.28	126.59	122.20
36	5	1922	A	O5'-P-OP2	-6.28	100.05	105.70
36	5	2433	U	N1-C2-O2	6.28	127.19	122.80
36	5	2669	G	O5'-P-OP1	6.28	118.23	110.70
37	7	42	A	O5'-P-OP2	6.28	118.23	110.70
36	1	1101	G	N9-C4-C5	6.28	107.91	105.40
36	1	1758	G	N1-C6-O6	-6.28	116.13	119.90
36	1	2313	A	OP1-P-OP2	-6.28	110.19	119.60
36	1	3100	U	N3-C4-C5	6.28	118.36	114.60
1	6	1027	A	C5-C6-N6	6.28	128.72	123.70
1	6	1698	G	N1-C6-O6	-6.28	116.14	119.90
36	5	803	C	C6-N1-C1'	-6.28	113.27	120.80
36	5	804	C	C5-C4-N4	-6.28	115.81	120.20
36	5	1133	A	C8-N9-C4	-6.28	103.29	105.80
36	5	1241	U	C5-C6-N1	6.28	125.84	122.70
36	5	2140	U	N3-C4-C5	-6.28	110.83	114.60
36	5	2316	G	N1-C2-N3	6.28	127.67	123.90
36	5	2377	G	C2-N3-C4	6.28	115.04	111.90
36	5	2640	A	C8-N9-C4	6.28	108.31	105.80
1	6	1150	G	C6-C5-N7	-6.27	126.64	130.40
36	1	413	U	C2-N3-C4	-6.27	123.24	127.00
36	1	807	A	OP1-P-O3'	6.27	119.00	105.20
36	1	1466	G	N9-C4-C5	-6.27	102.89	105.40
1	6	1748	G	OP2-P-O3'	6.27	119.00	105.20
36	5	105	C	C6-N1-C2	6.27	122.81	120.30
36	5	405	U	C4-C5-C6	-6.27	115.94	119.70
36	5	2815	G	C5-C6-N1	-6.27	108.36	111.50
36	1	1058	U	N1-C2-O2	6.27	127.19	122.80
36	1	1134	G	C5-N7-C8	6.27	107.44	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1420	C	N1-C2-N3	6.27	123.59	119.20
36	1	2145	A	C6-N1-C2	-6.27	114.84	118.60
1	6	1278	G	N7-C8-N9	6.27	116.24	113.10
36	5	1046	A	N1-C6-N6	-6.27	114.84	118.60
36	5	2689	A	C2-N3-C4	-6.27	107.47	110.60
36	5	3022	G	C8-N9-C4	6.27	108.91	106.40
1	2	50	C	N3-C2-O2	-6.27	117.51	121.90
36	1	648	C	C4-C5-C6	6.27	120.53	117.40
36	1	2287	C	C2-N1-C1'	6.27	125.70	118.80
1	6	140	A	N9-C4-C5	6.27	108.31	105.80
36	5	202	G	N1-C6-O6	-6.27	116.14	119.90
36	5	902	G	C8-N9-C1'	6.27	135.15	127.00
36	5	1345	G	N1-C6-O6	6.27	123.66	119.90
36	5	2515	A	N1-C6-N6	-6.27	114.84	118.60
36	5	3132	C	C2-N3-C4	-6.27	116.77	119.90
37	7	28	C	C5-C6-N1	-6.27	117.87	121.00
44	17	179	LEU	CA-CB-CG	6.27	129.72	115.30
1	2	1140	G	C6-C5-N7	-6.27	126.64	130.40
36	1	389	A	C2-N3-C4	-6.27	107.47	110.60
36	1	521	A	O5'-P-OP1	-6.27	100.06	105.70
36	1	1528	G	C8-N9-C4	-6.27	103.89	106.40
36	1	2384	A	C4-C5-N7	-6.27	107.57	110.70
36	1	2399	A	N3-C4-N9	6.27	132.41	127.40
36	1	2410	U	N1-C2-O2	-6.27	118.41	122.80
1	6	616	G	C5-N7-C8	-6.27	101.17	104.30
1	6	1504	G	C5-C6-N1	-6.27	108.37	111.50
36	5	497	C	N1-C2-O2	-6.27	115.14	118.90
36	5	676	G	N7-C8-N9	6.27	116.23	113.10
36	5	891	G	C5-N7-C8	-6.27	101.17	104.30
36	5	2105	G	O5'-P-OP1	-6.27	100.06	105.70
36	1	1516	C	N3-C4-C5	-6.27	119.39	121.90
36	5	819	U	N3-C4-C5	-6.27	110.84	114.60
36	5	2277	C	C2-N3-C4	-6.27	116.77	119.90
36	5	2717	U	N1-C2-O2	-6.27	118.41	122.80
36	1	905	U	N3-C4-C5	-6.26	110.84	114.60
36	1	2215	A	C8-N9-C4	6.26	108.31	105.80
36	1	3271	G	N3-C4-C5	-6.26	125.47	128.60
1	6	1013	A	C5-C6-N1	6.26	120.83	117.70
1	6	1113	A	C5-C6-N1	6.26	120.83	117.70
1	6	1663	G	C8-N9-C4	6.26	108.91	106.40
36	5	1333	C	C4-C5-C6	6.26	120.53	117.40
36	5	1343	A	C2-N3-C4	-6.26	107.47	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2246	G	C6-C5-N7	-6.26	126.64	130.40
36	5	2897	A	C4-N9-C1'	6.26	137.57	126.30
36	1	34	A	C5-N7-C8	-6.26	100.77	103.90
1	2	734	A	OP1-P-O3'	6.26	118.98	105.20
1	2	1050	G	N3-C4-C5	6.26	131.73	128.60
1	2	1419	G	N1-C6-O6	6.26	123.66	119.90
36	1	854	G	N3-C2-N2	-6.26	115.52	119.90
36	1	936	A	N1-C6-N6	-6.26	114.84	118.60
36	1	977	C	C6-N1-C2	-6.26	117.80	120.30
36	1	1432	C	OP2-P-O3'	6.26	118.97	105.20
36	1	2908	G	C4-C5-N7	6.26	113.30	110.80
1	6	400	A	OP2-P-O3'	6.26	118.98	105.20
36	5	297	G	C6-C5-N7	-6.26	126.64	130.40
36	5	2157	G	N9-C4-C5	-6.26	102.89	105.40
36	5	2371	G	C6-C5-N7	-6.26	126.64	130.40
1	2	444	C	C6-N1-C2	6.26	122.80	120.30
36	1	2799	A	N9-C4-C5	6.26	108.30	105.80
36	1	2927	C	C2-N1-C1'	-6.26	111.92	118.80
38	4	53	A	N1-C2-N3	6.26	132.43	129.30
1	6	577	G	C8-N9-C4	-6.26	103.90	106.40
1	6	1491	U	C5-C6-N1	6.26	125.83	122.70
21	c9	68	ARG	NE-CZ-NH1	-6.26	117.17	120.30
36	5	1321	G	C6-C5-N7	-6.26	126.64	130.40
36	5	2427	U	C2-N1-C1'	-6.26	110.19	117.70
36	5	2762	A	C2-N3-C4	-6.26	107.47	110.60
1	2	1132	A	N1-C6-N6	-6.26	114.84	118.60
36	1	1416	C	N1-C2-O2	-6.26	115.14	118.90
36	1	1796	G	O5'-P-OP2	-6.26	100.07	105.70
36	5	1172	G	C8-N9-C1'	-6.26	118.86	127.00
36	5	1347	U	N1-C2-O2	-6.26	118.42	122.80
36	5	2242	A	C6-N1-C2	-6.26	114.84	118.60
1	2	734	A	P-O3'-C3'	6.26	127.21	119.70
36	1	1126	G	C6-C5-N7	-6.26	126.65	130.40
36	1	2823	G	OP2-P-O3'	-6.26	91.43	105.20
36	5	1162	U	C2-N3-C4	-6.26	123.25	127.00
36	5	1766	G	C4-N9-C1'	6.26	134.63	126.50
36	5	2838	A	O5'-P-OP1	6.26	118.21	110.70
36	5	3045	G	O5'-P-OP1	-6.26	100.07	105.70
1	2	1324	G	N3-C4-N9	-6.25	122.25	126.00
36	1	884	A	C2-N3-C4	6.25	113.73	110.60
36	1	2799	A	O5'-P-OP2	-6.25	100.07	105.70
36	1	2909	U	C5-C6-N1	-6.25	119.57	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	320	U	C5-C4-O4	6.25	129.65	125.90
1	6	1770	U	N1-C2-N3	-6.25	111.15	114.90
36	5	1471	U	C5-C6-N1	-6.25	119.57	122.70
36	5	2170	U	N1-C2-N3	6.25	118.65	114.90
36	5	2900	A	C2-N3-C4	-6.25	107.47	110.60
1	2	376	C	C4-C5-C6	6.25	120.53	117.40
1	2	1591	C	C6-N1-C2	-6.25	117.80	120.30
36	1	431	U	OP1-P-OP2	6.25	128.98	119.60
36	1	609	G	C4-N9-C1'	6.25	134.63	126.50
36	1	934	G	C4-C5-N7	6.25	113.30	110.80
36	1	1344	G	N3-C4-C5	6.25	131.73	128.60
36	1	1554	U	N3-C4-O4	6.25	123.78	119.40
36	1	2753	G	C5-C6-O6	6.25	132.35	128.60
1	6	103	A	C4-C5-N7	6.25	113.83	110.70
1	6	1789	G	C4-N9-C1'	6.25	134.63	126.50
36	5	2395	G	O5'-P-OP2	-6.25	100.07	105.70
36	5	2825	C	C5-C6-N1	6.25	124.13	121.00
36	5	3342	A	C5-C6-N6	-6.25	118.70	123.70
38	8	107	G	C8-N9-C4	-6.25	103.90	106.40
36	1	1165	A	C8-N9-C4	-6.25	103.30	105.80
36	1	2516	U	N1-C2-N3	6.25	118.65	114.90
36	1	2549	G	N1-C6-O6	-6.25	116.15	119.90
36	1	2996	U	N1-C2-N3	-6.25	111.15	114.90
36	1	3050	U	OP1-P-O3'	6.25	118.95	105.20
36	1	3063	C	N3-C2-O2	-6.25	117.52	121.90
1	6	48	G	N9-C4-C5	6.25	107.90	105.40
1	6	1601	G	N1-C6-O6	-6.25	116.15	119.90
36	5	566	G	N1-C2-N2	-6.25	110.57	116.20
36	5	1305	U	C6-N1-C2	6.25	124.75	121.00
36	5	1365	G	C2-N3-C4	-6.25	108.77	111.90
36	5	2420	C	C6-N1-C2	-6.25	117.80	120.30
36	5	3128	G	N1-C2-N3	6.25	127.65	123.90
36	5	3380	U	C5-C4-O4	6.25	129.65	125.90
36	1	400	G	N1-C6-O6	-6.25	116.15	119.90
36	1	415	G	C2-N3-C4	-6.25	108.78	111.90
36	1	552	G	C8-N9-C4	-6.25	103.90	106.40
36	1	780	A	C4-C5-N7	-6.25	107.58	110.70
36	1	2694	A	N1-C6-N6	-6.25	114.85	118.60
36	1	2813	A	C6-N1-C2	-6.25	114.85	118.60
36	1	3216	G	C6-C5-N7	-6.25	126.65	130.40
1	6	389	G	C5-N7-C8	-6.25	101.17	104.30
36	5	707	U	C5-C4-O4	6.25	129.65	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1332	A	C6-C5-N7	-6.25	127.92	132.30
36	5	1375	G	C4-N9-C1'	6.25	134.62	126.50
36	5	2126	A	N3-C4-N9	6.25	132.40	127.40
36	5	3065	G	N3-C4-C5	6.25	131.72	128.60
36	5	3127	A	C8-N9-C4	-6.25	103.30	105.80
1	2	1737	G	C5-N7-C8	-6.25	101.18	104.30
36	1	1399	A	C2-N3-C4	-6.25	107.48	110.60
36	1	1715	A	N1-C6-N6	6.25	122.35	118.60
36	1	2648	G	C5-C6-N1	6.25	114.62	111.50
1	6	1180	C	C6-N1-C2	-6.25	117.80	120.30
1	6	1245	G	C8-N9-C4	-6.25	103.90	106.40
36	5	1332	A	C4-C5-C6	6.25	120.12	117.00
36	5	1456	A	OP2-P-O3'	6.25	118.95	105.20
36	5	2434	U	N3-C2-O2	-6.25	117.83	122.20
37	7	53	U	N1-C2-O2	-6.25	118.43	122.80
40	13	342	LEU	CA-CB-CG	-6.25	100.93	115.30
36	1	283	G	C4-C5-N7	6.25	113.30	110.80
36	1	912	G	C4-C5-N7	-6.25	108.30	110.80
36	1	1316	C	C2-N1-C1'	6.25	125.67	118.80
36	1	2212	C	N3-C4-C5	6.25	124.40	121.90
36	1	2807	U	C6-N1-C2	-6.25	117.25	121.00
36	1	2895	G	C4-C5-C6	6.25	122.55	118.80
36	1	3050	U	C6-N1-C2	-6.25	117.25	121.00
38	4	145	U	C5-C6-N1	-6.25	119.58	122.70
1	6	1286	U	C4-C5-C6	6.25	123.45	119.70
36	5	94	G	C4-N9-C1'	-6.25	118.38	126.50
36	5	2111	G	N1-C6-O6	6.25	123.65	119.90
36	5	2863	G	C8-N9-C1'	6.25	135.12	127.00
36	5	3157	U	C2-N1-C1'	6.25	125.20	117.70
36	5	3157	U	N1-C2-O2	6.25	127.17	122.80
36	1	359	U	N1-C2-N3	6.25	118.65	114.90
36	1	1003	A	C8-N9-C4	-6.25	103.30	105.80
36	1	2380	U	C2-N1-C1'	-6.25	110.21	117.70
73	O7	65	ARG	NE-CZ-NH1	6.25	123.42	120.30
36	5	798	G	C4-C5-C6	6.25	122.55	118.80
36	5	994	G	C4-N9-C1'	6.25	134.62	126.50
36	5	1537	A	C6-C5-N7	-6.25	127.93	132.30
36	5	2702	A	C4-C5-C6	6.25	120.12	117.00
36	5	3054	U	C5-C4-O4	6.25	129.65	125.90
36	5	3342	A	N1-C6-N6	6.25	122.35	118.60
36	1	350	C	N3-C4-C5	-6.24	119.40	121.90
36	1	911	C	C5-C6-N1	-6.24	117.88	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	964	G	N7-C8-N9	6.24	116.22	113.10
36	1	1346	G	OP2-P-O3'	6.24	118.94	105.20
36	1	2601	A	N9-C4-C5	6.24	108.30	105.80
36	5	894	G	N3-C4-N9	-6.24	122.25	126.00
36	5	907	G	N7-C8-N9	-6.24	109.98	113.10
36	5	1535	A	O5'-P-OP1	-6.24	100.08	105.70
36	5	2370	G	N3-C4-N9	-6.24	122.25	126.00
36	5	3203	U	N3-C4-O4	-6.24	115.03	119.40
36	5	3324	C	C4-C5-C6	6.24	120.52	117.40
1	2	115	G	N9-C4-C5	-6.24	102.90	105.40
36	5	364	G	C6-C5-N7	-6.24	126.66	130.40
36	5	1168	U	C4-C5-C6	-6.24	115.95	119.70
1	2	1375	A	C8-N9-C4	6.24	108.30	105.80
36	1	120	G	N3-C4-N9	6.24	129.74	126.00
36	1	676	G	C6-C5-N7	-6.24	126.66	130.40
36	1	1157	G	N7-C8-N9	6.24	116.22	113.10
36	1	2926	A	N1-C2-N3	6.24	132.42	129.30
1	6	1303	U	N1-C2-O2	-6.24	118.43	122.80
36	5	590	G	N3-C4-N9	-6.24	122.26	126.00
36	5	961	C	C2-N1-C1'	6.24	125.66	118.80
36	5	3134	A	N1-C2-N3	6.24	132.42	129.30
36	5	3309	G	C4-N9-C1'	6.24	134.61	126.50
36	1	632	G	N9-C4-C5	-6.24	102.91	105.40
36	1	810	A	N1-C6-N6	-6.24	114.86	118.60
37	3	42	A	C2-N3-C4	-6.24	107.48	110.60
1	6	389	G	N1-C2-N3	-6.24	120.16	123.90
1	6	425	A	OP2-P-O3'	6.24	118.93	105.20
1	6	611	U	N3-C4-C5	-6.24	110.86	114.60
36	5	1304	A	C5-C6-N1	6.24	120.82	117.70
1	2	1775	U	O5'-P-OP2	-6.24	100.09	105.70
36	1	1500	G	C4-C5-C6	-6.24	115.06	118.80
36	5	1408	G	N3-C4-N9	6.24	129.74	126.00
38	8	66	A	N1-C2-N3	6.24	132.42	129.30
1	2	309	C	N1-C2-O2	-6.24	115.16	118.90
36	1	1312	C	N3-C4-N4	6.24	122.36	118.00
36	1	3060	C	C5-C6-N1	-6.24	117.88	121.00
1	6	788	A	N1-C2-N3	6.24	132.42	129.30
1	6	1147	A	O5'-P-OP1	-6.24	100.09	105.70
36	5	71	A	C5-C6-N6	6.24	128.69	123.70
36	5	675	C	N3-C2-O2	6.24	126.27	121.90
36	1	21	G	N7-C8-N9	6.23	116.22	113.10
36	5	717	C	C5-C4-N4	-6.23	115.84	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	944	C	N3-C4-N4	-6.23	113.64	118.00
36	5	2156	C	N3-C4-C5	-6.23	119.41	121.90
36	5	2965	U	C5-C6-N1	6.23	125.82	122.70
1	2	1539	G	O4'-C1'-N9	-6.23	103.21	108.20
1	2	1742	U	C6-N1-C2	-6.23	117.26	121.00
36	1	1141	C	N3-C2-O2	-6.23	117.54	121.90
36	1	1149	G	C8-N9-C1'	-6.23	118.90	127.00
36	1	1888	U	C2-N1-C1'	6.23	125.18	117.70
36	1	2521	U	N3-C4-O4	-6.23	115.04	119.40
36	1	2966	G	O5'-P-OP2	-6.23	100.09	105.70
37	3	77	G	C8-N9-C4	6.23	108.89	106.40
37	3	93	C	C6-N1-C2	6.23	122.79	120.30
37	3	95	A	C5-C6-N1	-6.23	114.58	117.70
1	6	308	C	C6-N1-C2	6.23	122.79	120.30
1	6	396	G	C4-C5-N7	-6.23	108.31	110.80
1	6	710	U	C2-N1-C1'	6.23	125.18	117.70
1	6	751	G	C5-C6-O6	-6.23	124.86	128.60
36	5	431	U	N3-C2-O2	-6.23	117.84	122.20
36	5	1338	C	N3-C2-O2	6.23	126.26	121.90
36	5	3096	C	C4-C5-C6	6.23	120.52	117.40
36	1	885	U	C2-N3-C4	-6.23	123.26	127.00
36	1	1101	G	C4-C5-N7	-6.23	108.31	110.80
36	1	1220	U	C6-N1-C2	-6.23	117.26	121.00
1	6	415	C	C2-N1-C1'	-6.23	111.95	118.80
1	6	1085	G	C8-N9-C4	6.23	108.89	106.40
1	6	1563	C	N1-C2-O2	6.23	122.64	118.90
1	6	1580	C	C5-C6-N1	-6.23	117.88	121.00
36	5	192	C	C2-N1-C1'	6.23	125.65	118.80
36	5	816	A	N9-C4-C5	6.23	108.29	105.80
36	5	980	A	C8-N9-C4	6.23	108.29	105.80
36	5	1654	A	C5-N7-C8	6.23	107.02	103.90
36	5	1719	G	N3-C2-N2	-6.23	115.54	119.90
36	5	2246	G	N1-C6-O6	6.23	123.64	119.90
36	5	2549	G	N7-C8-N9	6.23	116.22	113.10
37	7	105	C	C2-N3-C4	6.23	123.02	119.90
1	2	1541	G	C5-C6-N1	-6.23	108.39	111.50
36	1	1173	U	N1-C2-O2	6.23	127.16	122.80
36	1	2850	G	C5-C6-N1	6.23	114.61	111.50
36	1	3330	A	OP2-P-O3'	6.23	118.90	105.20
1	6	1509	C	N3-C2-O2	-6.23	117.54	121.90
36	5	637	C	C6-N1-C1'	-6.23	113.33	120.80
36	5	2793	G	N3-C2-N2	-6.23	115.54	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	810	G	C6-C5-N7	-6.23	126.66	130.40
36	1	722	G	N3-C4-C5	-6.23	125.49	128.60
36	1	2365	C	C5-C6-N1	-6.23	117.89	121.00
36	1	2420	C	C2-N3-C4	-6.23	116.79	119.90
36	1	2821	C	N1-C2-O2	6.23	122.64	118.90
36	1	3244	A	N1-C2-N3	6.23	132.41	129.30
38	4	4	C	C4-C5-C6	6.23	120.51	117.40
1	6	1550	A	C4-C5-C6	-6.23	113.89	117.00
36	5	856	G	N1-C6-O6	-6.23	116.16	119.90
36	5	1186	G	C8-N9-C4	-6.23	103.91	106.40
36	5	2684	C	C4-C5-C6	6.23	120.51	117.40
36	5	2921	U	N3-C2-O2	6.23	126.56	122.20
36	1	209	A	N3-C4-N9	-6.23	122.42	127.40
36	1	936	A	O5'-P-OP1	6.23	118.17	110.70
36	1	1171	G	N1-C6-O6	-6.23	116.16	119.90
36	1	1408	G	C5-N7-C8	-6.23	101.19	104.30
36	1	2158	A	N1-C6-N6	-6.23	114.86	118.60
36	1	2837	A	N1-C2-N3	6.23	132.41	129.30
36	5	1375	G	C8-N9-C4	-6.23	103.91	106.40
36	5	2397	A	N3-C4-N9	-6.23	122.42	127.40
1	2	240	U	C2-N1-C1'	6.22	125.17	117.70
1	2	1297	G	N9-C1'-C2'	-6.22	105.15	112.00
36	1	1663	C	N3-C4-C5	6.22	124.39	121.90
36	1	2122	G	N7-C8-N9	6.22	116.21	113.10
36	1	2409	G	C8-N9-C4	6.22	108.89	106.40
36	1	2411	U	N1-C2-O2	-6.22	118.44	122.80
36	1	2909	U	N3-C4-C5	6.22	118.33	114.60
38	4	54	A	C4-C5-C6	6.22	120.11	117.00
1	6	617	U	C2-N1-C1'	6.22	125.17	117.70
1	6	1670	G	C4-C5-C6	6.22	122.53	118.80
36	5	359	U	O5'-P-OP1	-6.22	100.10	105.70
36	5	1578	C	C2-N1-C1'	6.22	125.65	118.80
36	5	2803	A	C2-N3-C4	-6.22	107.49	110.60
36	1	404	G	C5-C6-O6	-6.22	124.87	128.60
36	1	2280	A	C5-N7-C8	-6.22	100.79	103.90
36	1	2414	G	C5-C6-N1	-6.22	108.39	111.50
36	1	2831	G	N1-C2-N2	6.22	121.80	116.20
36	1	2981	U	OP2-P-O3'	6.22	118.89	105.20
1	6	1295	G	N3-C2-N2	-6.22	115.54	119.90
1	6	1361	U	C5-C6-N1	6.22	125.81	122.70
36	5	43	A	C2-N3-C4	-6.22	107.49	110.60
36	5	2135	U	N3-C4-O4	-6.22	115.04	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2733	A	C8-N9-C4	6.22	108.29	105.80
36	5	2837	A	N1-C2-N3	6.22	132.41	129.30
36	5	2871	G	N7-C8-N9	6.22	116.21	113.10
36	5	3122	A	N3-C4-N9	-6.22	122.42	127.40
37	7	111	U	N1-C2-N3	6.22	118.63	114.90
1	2	1430	U	N1-C2-N3	6.22	118.63	114.90
36	1	2431	C	C6-N1-C2	-6.22	117.81	120.30
36	1	2764	C	C6-N1-C2	-6.22	117.81	120.30
36	1	2881	C	N3-C4-C5	6.22	124.39	121.90
1	6	1744	A	C5-C6-N1	6.22	120.81	117.70
36	5	724	U	N3-C4-C5	-6.22	110.87	114.60
36	1	14	U	N1-C2-N3	6.22	118.63	114.90
36	1	582	G	N1-C6-O6	-6.22	116.17	119.90
36	1	2315	G	C5-C6-O6	6.22	132.33	128.60
1	6	298	C	C5-C6-N1	6.22	124.11	121.00
36	5	948	C	O5'-P-OP2	-6.22	100.10	105.70
36	5	1366	A	N1-C2-N3	6.22	132.41	129.30
36	5	2874	G	N9-C4-C5	6.22	107.89	105.40
36	5	2967	A	OP2-P-O3'	6.22	118.88	105.20
36	5	3301	U	C6-N1-C2	6.22	124.73	121.00
36	1	2374	C	C2-N1-C1'	6.22	125.64	118.80
36	1	3269	U	C4-C5-C6	6.22	123.43	119.70
36	5	530	G	C5-C6-N1	6.22	114.61	111.50
36	5	2895	G	C8-N9-C1'	-6.22	118.92	127.00
36	5	3139	A	C5-C6-N1	6.22	120.81	117.70
38	8	80	A	N3-C4-C5	-6.22	122.45	126.80
1	2	759	U	C2-N1-C1'	-6.22	110.24	117.70
1	2	883	C	C6-N1-C2	-6.22	117.81	120.30
36	1	357	A	C5-C6-N1	6.22	120.81	117.70
36	1	366	A	C6-C5-N7	-6.22	127.95	132.30
36	1	747	A	C8-N9-C4	-6.22	103.31	105.80
36	1	964	G	OP1-P-O3'	-6.22	91.52	105.20
36	1	2173	U	C6-N1-C2	-6.22	117.27	121.00
36	1	2331	C	C6-N1-C1'	-6.22	113.34	120.80
36	1	2949	U	C5-C6-N1	-6.22	119.59	122.70
36	1	3195	U	N1-C2-N3	-6.22	111.17	114.90
1	6	1117	U	N3-C4-O4	6.22	123.75	119.40
36	5	1055	A	OP1-P-O3'	6.22	118.88	105.20
36	5	1373	A	N9-C4-C5	-6.22	103.31	105.80
36	5	1810	A	N9-C4-C5	-6.22	103.31	105.80
36	5	3166	C	C2-N1-C1'	6.22	125.64	118.80
36	5	3272	C	C5-C4-N4	6.22	124.55	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3274	A	N1-C2-N3	-6.22	126.19	129.30
36	5	3391	A	OP2-P-O3'	6.22	118.88	105.20
1	2	1002	G	N1-C2-N2	-6.21	110.61	116.20
36	1	651	G	C6-N1-C2	-6.21	121.37	125.10
37	3	84	A	N7-C8-N9	6.21	116.91	113.80
1	6	158	U	N3-C2-O2	-6.21	117.85	122.20
1	6	170	U	C6-N1-C2	-6.21	117.27	121.00
36	5	580	C	N3-C4-C5	-6.21	119.41	121.90
36	5	1003	A	N9-C4-C5	-6.21	103.31	105.80
36	5	1377	G	C8-N9-C4	-6.21	103.91	106.40
36	5	2245	C	N3-C4-C5	-6.21	119.41	121.90
36	5	2368	A	C5-C6-N1	-6.21	114.59	117.70
36	5	3057	U	O5'-P-OP1	6.21	118.16	110.70
36	5	3310	A	C4-C5-C6	6.21	120.11	117.00
36	1	632	G	C4-C5-N7	6.21	113.28	110.80
36	1	2953	U	C5-C4-O4	6.21	129.63	125.90
39	L2	191	LEU	CA-CB-CG	-6.21	101.01	115.30
1	6	324	U	N1-C2-O2	-6.21	118.45	122.80
1	2	1420	C	N3-C2-O2	-6.21	117.55	121.90
36	1	669	U	N3-C4-O4	6.21	123.75	119.40
36	1	1169	A	N9-C4-C5	6.21	108.28	105.80
36	1	1330	A	N3-C4-C5	6.21	131.15	126.80
36	1	1549	U	OP2-P-O3'	6.21	118.86	105.20
36	1	1658	G	N3-C4-N9	-6.21	122.27	126.00
36	1	2978	U	N1-C1'-C2'	6.21	122.08	114.00
36	1	2983	C	O4'-C1'-N1	6.21	113.17	108.20
37	3	25	G	C6-N1-C2	-6.21	121.37	125.10
1	6	1477	G	N7-C8-N9	-6.21	109.99	113.10
36	5	526	C	C6-N1-C2	6.21	122.78	120.30
36	5	1772	U	C2-N1-C1'	-6.21	110.25	117.70
36	5	3129	A	O4'-C1'-N9	6.21	113.17	108.20
36	5	3391	A	OP1-P-O3'	-6.21	91.54	105.20
1	2	332	U	N3-C4-C5	6.21	118.33	114.60
36	1	52	A	N9-C4-C5	6.21	108.28	105.80
77	Q1	14	LYS	CD-CE-NZ	6.21	125.98	111.70
1	6	848	C	C6-N1-C2	-6.21	117.82	120.30
36	5	920	A	N1-C6-N6	6.21	122.33	118.60
36	5	1176	C	O4'-C1'-N1	6.21	113.17	108.20
36	5	1306	G	N9-C4-C5	6.21	107.88	105.40
36	5	2755	C	N3-C4-N4	6.21	122.35	118.00
1	2	571	G	N3-C4-N9	-6.21	122.28	126.00
1	2	936	G	N3-C4-C5	-6.21	125.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	297	G	C5-C6-N1	6.21	114.60	111.50
36	1	406	G	O5'-P-OP2	-6.21	100.11	105.70
36	1	1131	G	N1-C6-O6	6.21	123.63	119.90
36	1	3252	G	N7-C8-N9	-6.21	110.00	113.10
1	6	1019	A	C5-N7-C8	6.21	107.00	103.90
1	6	1159	C	C5-C6-N1	-6.21	117.90	121.00
1	6	1620	C	N3-C4-N4	6.21	122.35	118.00
36	5	523	A	C5-C6-N6	6.21	128.67	123.70
36	5	808	A	N3-C4-C5	-6.21	122.45	126.80
36	5	1368	U	N1-C2-O2	-6.21	118.45	122.80
36	5	2360	C	N3-C2-O2	6.21	126.25	121.90
1	2	1123	C	N3-C4-N4	6.21	122.34	118.00
1	2	1498	G	N3-C4-N9	6.21	129.72	126.00
1	2	1752	U	C5-C6-N1	-6.21	119.60	122.70
1	2	1780	G	N1-C6-O6	6.21	123.62	119.90
36	1	2640	A	C2-N3-C4	-6.21	107.50	110.60
36	1	2818	U	O4'-C1'-N1	-6.21	103.23	108.20
36	1	2963	C	N3-C4-C5	-6.21	119.42	121.90
1	6	57	G	C6-C5-N7	-6.21	126.68	130.40
1	6	972	G	C4-N9-C1'	6.21	134.57	126.50
36	5	1127	G	C8-N9-C1'	-6.21	118.93	127.00
36	5	1297	C	N3-C4-C5	6.21	124.38	121.90
36	5	2745	G	C5-C6-N1	6.21	114.60	111.50
36	5	2776	C	C5-C6-N1	6.21	124.10	121.00
36	5	3320	A	O5'-P-OP1	-6.21	100.11	105.70
36	1	887	G	C6-N1-C2	-6.21	121.38	125.10
36	1	2982	A	N1-C2-N3	6.21	132.40	129.30
36	5	404	G	OP1-P-OP2	6.21	128.91	119.60
36	5	922	U	C4-C5-C6	6.21	123.42	119.70
36	5	2253	G	C4-N9-C1'	6.21	134.57	126.50
36	5	2690	G	C5-N7-C8	-6.21	101.20	104.30
1	2	115	G	C2-N3-C4	-6.20	108.80	111.90
1	2	458	G	C2-N3-C4	-6.20	108.80	111.90
36	1	935	U	N1-C2-N3	6.20	118.62	114.90
36	1	1443	G	C5-C6-O6	-6.20	124.88	128.60
36	1	2695	A	O5'-P-OP1	-6.20	100.12	105.70
36	1	3182	G	C6-N1-C2	-6.20	121.38	125.10
1	6	1527	C	C6-N1-C2	6.20	122.78	120.30
1	6	1747	G	O5'-P-OP1	6.20	118.14	110.70
36	5	799	G	C5-N7-C8	-6.20	101.20	104.30
36	5	2132	C	N1-C2-N3	6.20	123.54	119.20
36	5	2917	G	N1-C2-N3	6.20	127.62	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2933	A	N1-C2-N3	6.20	132.40	129.30
36	1	212	G	OP2-P-O3'	6.20	118.84	105.20
36	1	2277	C	N3-C4-C5	-6.20	119.42	121.90
1	6	601	A	O5'-P-OP2	-6.20	100.12	105.70
1	6	1651	A	C4-C5-N7	6.20	113.80	110.70
36	5	1303	A	O4'-C1'-N9	-6.20	103.24	108.20
36	1	402	A	O5'-P-OP1	-6.20	100.12	105.70
36	1	563	U	N3-C2-O2	-6.20	117.86	122.20
36	1	2161	G	C5-C6-O6	-6.20	124.88	128.60
36	1	3133	C	O5'-P-OP2	-6.20	100.12	105.70
37	3	114	U	N1-C2-O2	6.20	127.14	122.80
1	6	751	G	N3-C4-C5	6.20	131.70	128.60
36	5	2247	G	N1-C6-O6	-6.20	116.18	119.90
36	5	2651	G	N1-C6-O6	6.20	123.62	119.90
37	7	102	A	N1-C6-N6	6.20	122.32	118.60
1	2	1668	G	C5-C6-N1	-6.20	108.40	111.50
36	1	1004	U	OP1-P-OP2	6.20	128.90	119.60
36	1	1301	A	N9-C4-C5	-6.20	103.32	105.80
36	5	363	G	OP1-P-O3'	6.20	118.84	105.20
36	5	2412	G	N3-C4-C5	-6.20	125.50	128.60
1	2	17	C	C2-N1-C1'	-6.20	111.98	118.80
36	1	826	G	C6-C5-N7	-6.20	126.68	130.40
1	6	558	U	N1-C2-N3	-6.20	111.18	114.90
36	5	875	G	N1-C2-N2	6.20	121.78	116.20
36	5	1115	G	OP1-P-OP2	-6.20	110.31	119.60
36	5	2670	G	OP2-P-O3'	6.20	118.83	105.20
36	5	3298	C	C4-C5-C6	6.20	120.50	117.40
1	2	126	A	C2-N3-C4	-6.20	107.50	110.60
1	2	795	U	N3-C2-O2	-6.20	117.86	122.20
1	2	1212	G	N7-C8-N9	6.20	116.20	113.10
36	1	681	U	OP2-P-O3'	6.20	118.83	105.20
36	1	960	U	OP2-P-O3'	6.20	118.83	105.20
36	1	1399	A	O5'-P-OP2	6.20	118.14	110.70
38	4	111	A	N7-C8-N9	-6.20	110.70	113.80
1	6	427	C	C2-N3-C4	-6.20	116.80	119.90
36	5	136	G	C5-C6-O6	-6.20	124.88	128.60
36	5	642	U	C6-N1-C2	6.20	124.72	121.00
36	5	1380	G	C8-N9-C1'	-6.20	118.95	127.00
36	5	1654	A	C6-N1-C2	-6.20	114.88	118.60
36	5	2111	G	C5-C6-N1	-6.20	108.40	111.50
36	5	2295	A	C2-N3-C4	6.20	113.70	110.60
36	5	3166	C	N1-C2-O2	6.20	122.62	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	65	A	N1-C6-N6	-6.20	114.88	118.60
36	5	3016	A	C8-N9-C4	-6.19	103.32	105.80
1	2	261	U	C2-N1-C1'	6.19	125.13	117.70
36	1	1423	C	C4-C5-C6	6.19	120.50	117.40
36	1	1526	U	N1-C2-O2	6.19	127.14	122.80
36	1	1762	C	C6-N1-C2	-6.19	117.82	120.30
36	1	2390	A	C6-N1-C2	-6.19	114.88	118.60
36	5	101	G	C5-C6-O6	-6.19	124.89	128.60
36	5	402	A	C8-N9-C4	-6.19	103.32	105.80
36	5	420	G	N3-C4-N9	-6.19	122.28	126.00
36	5	1317	A	C5-N7-C8	-6.19	100.80	103.90
36	5	2698	G	N3-C2-N2	-6.19	115.56	119.90
36	5	3119	U	N1-C2-N3	6.19	118.62	114.90
36	5	3209	A	N7-C8-N9	6.19	116.90	113.80
1	2	552	G	C5-N7-C8	-6.19	101.20	104.30
36	1	33	G	N3-C4-C5	6.19	131.69	128.60
36	1	277	G	C6-C5-N7	6.19	134.11	130.40
36	1	1850	A	C4-C5-C6	6.19	120.09	117.00
36	1	1929	G	C6-N1-C2	-6.19	121.39	125.10
36	1	2243	A	C6-C5-N7	-6.19	127.97	132.30
36	1	2381	G	C5-N7-C8	-6.19	101.20	104.30
36	1	2637	A	C6-N1-C2	-6.19	114.89	118.60
1	6	360	A	C8-N9-C4	6.19	108.28	105.80
1	6	1020	A	C8-N9-C4	-6.19	103.32	105.80
36	5	1613	A	C8-N9-C4	-6.19	103.32	105.80
36	5	2243	A	N9-C4-C5	6.19	108.28	105.80
36	5	2403	G	O5'-P-OP1	6.19	118.13	110.70
36	5	2414	G	N1-C2-N3	6.19	127.61	123.90
36	5	3254	G	C2-N3-C4	-6.19	108.81	111.90
1	2	875	G	N3-C4-N9	6.19	129.71	126.00
36	1	1351	U	C5-C6-N1	6.19	125.80	122.70
36	1	1411	C	C2-N3-C4	-6.19	116.81	119.90
1	6	1542	G	N1-C2-N2	-6.19	110.63	116.20
36	5	610	G	C5-C6-O6	6.19	132.31	128.60
36	5	1044	U	N1-C2-O2	-6.19	118.47	122.80
1	2	1572	G	C5-C6-O6	-6.19	124.89	128.60
36	1	1852	G	C5-C6-N1	-6.19	108.41	111.50
36	1	2402	A	C8-N9-C4	-6.19	103.33	105.80
36	1	2419	A	N7-C8-N9	6.19	116.89	113.80
36	1	2982	A	N3-C4-N9	6.19	132.35	127.40
36	1	2983	C	N1-C2-N3	6.19	123.53	119.20
36	1	3333	G	C8-N9-C4	6.19	108.88	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	565	U	O5'-P-OP1	6.19	118.12	110.70
36	5	1386	A	N3-C4-N9	-6.19	122.45	127.40
36	5	1395	G	C5-C6-N1	-6.19	108.41	111.50
36	5	1403	C	OP1-P-O3'	6.19	118.81	105.20
36	5	1483	G	OP1-P-O3'	6.19	118.81	105.20
36	5	1653	G	N3-C2-N2	-6.19	115.57	119.90
36	5	2339	C	N3-C2-O2	6.19	126.23	121.90
36	5	2703	A	C4-N9-C1'	6.19	137.44	126.30
37	7	65	G	C5-C6-O6	-6.19	124.89	128.60
38	8	20	U	C4-C5-C6	6.19	123.41	119.70
36	1	1114	U	N1-C2-O2	6.19	127.13	122.80
36	1	2187	G	N1-C2-N2	-6.19	110.63	116.20
38	4	85	G	N3-C4-N9	6.19	129.71	126.00
1	6	558	U	N1-C2-O2	6.19	127.13	122.80
36	5	3209	A	N9-C1'-C2'	6.19	122.04	114.00
59	n3	88	ARG	NE-CZ-NH2	-6.19	117.21	120.30
36	1	104	G	N9-C1'-C2'	-6.18	105.20	112.00
36	1	508	U	O5'-P-OP2	-6.18	100.14	105.70
36	1	1724	U	N1-C2-N3	6.18	118.61	114.90
36	1	2288	G	C4-N9-C1'	6.18	134.54	126.50
36	1	2362	C	OP1-P-O3'	6.18	118.80	105.20
1	6	39	A	C6-N1-C2	-6.18	114.89	118.60
1	6	68	A	N1-C6-N6	6.18	122.31	118.60
36	5	782	U	C5-C4-O4	-6.18	122.19	125.90
36	5	1085	A	N1-C2-N3	6.18	132.39	129.30
36	5	1258	U	C5-C4-O4	6.18	129.61	125.90
36	5	1878	G	C4-N9-C1'	6.18	134.54	126.50
36	5	2856	G	C2-N3-C4	-6.18	108.81	111.90
36	5	3022	G	OP2-P-O3'	6.18	118.81	105.20
36	5	3104	U	C5-C4-O4	-6.18	122.19	125.90
36	5	3189	G	C8-N9-C1'	-6.18	118.96	127.00
1	2	875	G	N3-C4-C5	-6.18	125.51	128.60
1	2	1092	A	N7-C8-N9	6.18	116.89	113.80
1	2	1215	C	O5'-P-OP2	-6.18	100.14	105.70
36	1	435	C	C2-N3-C4	-6.18	116.81	119.90
36	1	637	C	N3-C4-C5	6.18	124.37	121.90
36	1	683	U	C2-N3-C4	-6.18	123.29	127.00
36	1	917	A	C5-C6-N1	6.18	120.79	117.70
36	1	2271	A	C2-N3-C4	-6.18	107.51	110.60
36	1	2678	A	C2-N3-C4	6.18	113.69	110.60
36	1	3009	G	C5-N7-C8	-6.18	101.21	104.30
36	1	3362	A	C4-C5-N7	6.18	113.79	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	293	U	C5-C6-N1	-6.18	119.61	122.70
36	5	2556	C	N3-C2-O2	-6.18	117.57	121.90
36	5	2917	G	N3-C4-N9	-6.18	122.29	126.00
36	1	3172	A	C6-C5-N7	-6.18	127.97	132.30
1	6	624	G	C5-C6-O6	-6.18	124.89	128.60
36	5	1770	G	N3-C4-N9	6.18	129.71	126.00
36	5	1778	G	C8-N9-C4	6.18	108.87	106.40
36	5	2138	A	C5-C6-N1	-6.18	114.61	117.70
36	5	3391	A	C2-N3-C4	-6.18	107.51	110.60
1	2	632	U	N1-C2-O2	6.18	127.12	122.80
1	2	758	U	C5-C4-O4	6.18	129.61	125.90
1	2	1083	G	N9-C4-C5	-6.18	102.93	105.40
36	1	223	U	C5-C4-O4	6.18	129.61	125.90
36	1	1157	G	N1-C2-N3	6.18	127.61	123.90
36	1	1874	A	C4-C5-C6	6.18	120.09	117.00
36	1	2174	G	N7-C8-N9	6.18	116.19	113.10
36	1	2398	A	C6-N1-C2	-6.18	114.89	118.60
36	1	2617	U	N3-C4-C5	-6.18	110.89	114.60
36	1	2800	G	O5'-P-OP1	6.18	118.12	110.70
1	6	385	A	N9-C4-C5	6.18	108.27	105.80
36	5	363	G	C6-N1-C2	-6.18	121.39	125.10
36	5	568	G	C6-C5-N7	-6.18	126.69	130.40
36	5	1040	A	O5'-P-OP2	6.18	118.12	110.70
36	5	1476	G	N9-C4-C5	-6.18	102.93	105.40
38	4	42	G	O5'-P-OP1	6.18	118.11	110.70
1	6	1070	C	N3-C4-N4	-6.18	113.67	118.00
36	5	987	U	O5'-P-OP2	-6.18	100.14	105.70
36	5	1520	G	C4-C5-C6	6.18	122.51	118.80
36	5	2379	U	O5'-P-OP2	-6.18	100.14	105.70
36	5	2825	C	C5-C4-N4	-6.18	115.88	120.20
36	1	404	G	OP1-P-OP2	6.18	128.86	119.60
36	1	2261	G	N3-C4-N9	6.18	129.71	126.00
36	1	2678	A	C5-C6-N1	6.18	120.79	117.70
36	1	3308	C	OP2-P-O3'	6.18	118.79	105.20
1	6	1100	G	O5'-P-OP1	-6.18	100.14	105.70
1	6	1627	U	N3-C4-O4	6.18	123.72	119.40
36	5	1138	U	N3-C2-O2	-6.18	117.88	122.20
36	5	1313	G	N1-C6-O6	6.18	123.61	119.90
36	5	3089	C	C5-C6-N1	6.18	124.09	121.00
1	2	1789	G	C6-C5-N7	-6.17	126.70	130.40
36	1	290	G	N1-C2-N2	6.17	121.76	116.20
36	1	1098	A	C5-C6-N1	6.17	120.79	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1119	C	O5'-P-OP1	6.17	118.11	110.70
36	1	2637	A	C4-C5-N7	-6.17	107.61	110.70
36	1	2868	U	OP2-P-O3'	6.17	118.78	105.20
36	1	3217	C	C5-C6-N1	6.17	124.09	121.00
34	sR	59	ARG	NE-CZ-NH1	6.17	123.39	120.30
36	5	44	U	C5-C6-N1	6.17	125.79	122.70
36	5	283	G	C2-N3-C4	6.17	114.99	111.90
36	5	2116	G	C5-C6-N1	-6.17	108.41	111.50
36	5	2126	A	C2-N3-C4	6.17	113.69	110.60
36	5	2814	G	C8-N9-C4	6.17	108.87	106.40
36	1	835	G	N1-C6-O6	6.17	123.60	119.90
36	1	2639	G	N7-C8-N9	6.17	116.19	113.10
1	6	103	A	P-O3'-C3'	6.17	127.11	119.70
1	6	1199	G	C2-N3-C4	-6.17	108.81	111.90
1	6	1451	C	C6-N1-C2	6.17	122.77	120.30
36	5	685	G	N1-C2-N2	-6.17	110.64	116.20
1	2	1198	G	N7-C8-N9	6.17	116.19	113.10
1	2	1214	U	C5-C4-O4	6.17	129.60	125.90
36	1	1743	G	C4-N9-C1'	-6.17	118.48	126.50
36	1	1789	G	C5-C6-N1	6.17	114.59	111.50
36	1	1894	U	C6-N1-C1'	6.17	129.84	121.20
36	1	1924	U	C5-C4-O4	6.17	129.60	125.90
36	1	2335	G	C2-N3-C4	6.17	114.99	111.90
36	1	2925	C	C6-N1-C2	6.17	122.77	120.30
36	5	2657	A	N1-C6-N6	-6.17	114.90	118.60
36	5	2661	G	OP1-P-O3'	6.17	118.78	105.20
36	5	2842	U	C6-N1-C1'	-6.17	112.56	121.20
38	8	22	U	C5-C6-N1	-6.17	119.61	122.70
1	2	1654	G	N3-C2-N2	6.17	124.22	119.90
36	1	651	G	N1-C2-N3	6.17	127.60	123.90
36	1	2753	G	N3-C4-C5	-6.17	125.52	128.60
36	1	2959	C	P-O3'-C3'	-6.17	112.30	119.70
1	6	170	U	N1-C2-O2	6.17	127.12	122.80
1	6	1626	U	C6-N1-C2	6.17	124.70	121.00
36	5	1802	C	C5-C6-N1	6.17	124.08	121.00
36	5	2131	A	N7-C8-N9	-6.17	110.72	113.80
36	5	3120	C	N3-C4-C5	6.17	124.37	121.90
1	2	1418	G	C6-C5-N7	-6.17	126.70	130.40
36	1	1000	C	N1-C2-N3	-6.17	114.88	119.20
36	1	1627	U	O5'-P-OP1	-6.17	100.15	105.70
36	1	2659	G	C8-N9-C1'	-6.17	118.98	127.00
36	1	2817	A	C4-C5-N7	-6.17	107.61	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3007	U	N1-C2-N3	6.17	118.60	114.90
37	3	85	G	C5-C6-O6	-6.17	124.90	128.60
38	4	41	A	C4-C5-C6	6.17	120.08	117.00
1	6	377	G	C8-N9-C4	-6.17	103.93	106.40
1	6	469	C	C6-N1-C2	6.17	122.77	120.30
1	6	1474	G	C6-C5-N7	-6.17	126.70	130.40
36	5	50	U	C6-N1-C1'	-6.17	112.56	121.20
36	5	757	C	N3-C4-N4	6.17	122.32	118.00
36	5	890	C	OP1-P-O3'	6.17	118.77	105.20
36	5	1000	C	N1-C2-N3	-6.17	114.88	119.20
36	5	1441	G	N3-C2-N2	-6.17	115.58	119.90
36	5	2567	C	N1-C2-O2	6.17	122.60	118.90
36	5	2653	C	C4-C5-C6	-6.17	114.32	117.40
37	3	78	U	N1-C2-N3	6.17	118.60	114.90
1	6	65	A	N3-C4-C5	6.17	131.12	126.80
1	6	573	C	N3-C4-C5	6.17	124.37	121.90
1	6	636	A	N7-C8-N9	-6.17	110.72	113.80
1	6	781	U	C5-C6-N1	6.17	125.78	122.70
1	6	1700	C	C5-C6-N1	6.17	124.08	121.00
36	5	218	G	C5-C6-O6	6.17	132.30	128.60
36	5	638	C	N3-C2-O2	-6.17	117.58	121.90
36	5	832	G	C4-N9-C1'	6.17	134.52	126.50
36	5	1913	A	C6-C5-N7	-6.17	127.98	132.30
36	5	3003	G	C4-N9-C1'	-6.17	118.48	126.50
1	2	111	U	N1-C2-O2	6.17	127.12	122.80
1	2	1274	C	N3-C2-O2	-6.17	117.58	121.90
36	1	2373	A	C2-N3-C4	-6.17	107.52	110.60
36	1	2776	C	C6-N1-C2	6.17	122.77	120.30
1	6	764	U	C4-C5-C6	6.17	123.40	119.70
38	8	4	C	C4-C5-C6	6.17	120.48	117.40
1	2	390	G	N9-C4-C5	6.16	107.86	105.40
36	1	314	U	C5-C6-N1	-6.16	119.62	122.70
36	1	399	A	C5-C6-N1	6.16	120.78	117.70
36	1	835	G	C5-N7-C8	-6.16	101.22	104.30
36	1	936	A	C8-N9-C1'	6.16	138.79	127.70
36	1	942	U	N1-C2-N3	6.16	118.60	114.90
36	1	1115	G	C8-N9-C1'	-6.16	118.99	127.00
36	1	1702	U	N1-C2-O2	-6.16	118.49	122.80
1	6	761	G	N1-C6-O6	-6.16	116.20	119.90
36	5	1224	C	N3-C4-C5	-6.16	119.43	121.90
36	5	2652	U	C5-C4-O4	-6.16	122.20	125.90
36	5	3107	U	C5-C4-O4	-6.16	122.20	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1430	U	C5-C4-O4	6.16	129.60	125.90
36	1	1076	C	C6-N1-C1'	-6.16	113.41	120.80
36	1	1119	C	N1-C2-O2	-6.16	115.20	118.90
36	1	1386	A	N3-C4-N9	-6.16	122.47	127.40
38	4	34	U	C5-C4-O4	6.16	129.60	125.90
38	4	49	G	N1-C6-O6	6.16	123.60	119.90
36	5	660	A	C4-C5-C6	6.16	120.08	117.00
36	5	1896	A	C6-C5-N7	6.16	136.61	132.30
36	5	3296	A	N9-C4-C5	-6.16	103.33	105.80
1	6	142	G	C5-N7-C8	6.16	107.38	104.30
1	6	1143	A	C4-C5-C6	6.16	120.08	117.00
1	6	1777	G	N3-C4-C5	-6.16	125.52	128.60
36	5	506	U	N3-C2-O2	6.16	126.51	122.20
36	5	523	A	N3-C4-N9	-6.16	122.47	127.40
36	5	666	A	C5-N7-C8	6.16	106.98	103.90
36	5	880	G	N3-C4-N9	-6.16	122.30	126.00
36	5	1220	U	C6-N1-C1'	-6.16	112.58	121.20
38	8	99	C	N3-C2-O2	-6.16	117.59	121.90
1	2	110	U	N3-C2-O2	6.16	126.51	122.20
1	2	1757	G	N1-C2-N2	-6.16	110.66	116.20
36	1	815	G	N3-C2-N2	-6.16	115.59	119.90
36	1	1006	A	N9-C4-C5	-6.16	103.34	105.80
36	1	2240	G	OP1-P-O3'	6.16	118.75	105.20
36	1	2374	C	C6-N1-C1'	-6.16	113.41	120.80
36	1	2376	G	N7-C8-N9	6.16	116.18	113.10
36	1	2882	U	N3-C2-O2	-6.16	117.89	122.20
36	1	3318	G	C5-N7-C8	-6.16	101.22	104.30
37	3	69	C	C5-C6-N1	6.16	124.08	121.00
1	6	1025	A	N1-C2-N3	6.16	132.38	129.30
36	5	888	A	C6-N1-C2	-6.16	114.91	118.60
36	5	1157	G	C4-C5-N7	-6.16	108.34	110.80
36	5	1901	A	C5-C6-N6	-6.16	118.77	123.70
36	5	2915	U	O5'-P-OP1	6.16	118.09	110.70
37	7	89	G	C4-N9-C1'	6.16	134.50	126.50
36	1	622	A	C5-C6-N6	-6.16	118.77	123.70
36	1	3095	U	O5'-P-OP2	6.16	118.09	110.70
38	4	98	U	N1-C2-N3	6.16	118.59	114.90
1	6	1024	U	P-O3'-C3'	6.16	127.09	119.70
36	5	1180	A	C6-N1-C2	-6.16	114.91	118.60
36	5	1779	C	C6-N1-C2	-6.16	117.84	120.30
1	2	1146	G	C8-N9-C1'	-6.16	119.00	127.00
36	1	75	G	N9-C4-C5	-6.16	102.94	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	834	U	N3-C4-O4	-6.16	115.09	119.40
36	1	902	G	C4-C5-N7	6.16	113.26	110.80
36	1	2800	G	O5'-P-OP2	-6.16	100.16	105.70
36	1	2811	A	C8-N9-C1'	-6.16	116.62	127.70
36	1	2939	G	N1-C2-N3	6.16	127.59	123.90
1	6	50	C	C6-N1-C2	6.16	122.76	120.30
1	6	891	A	C5-C6-N6	-6.16	118.78	123.70
1	6	1800	A	N1-C6-N6	6.16	122.29	118.60
36	5	979	U	N1-C2-N3	6.16	118.59	114.90
36	5	2282	U	OP2-P-O3'	6.16	118.74	105.20
36	5	2743	A	O5'-P-OP2	-6.16	100.16	105.70
36	5	2950	G	O4'-C1'-N9	6.16	113.12	108.20
36	5	3068	U	N1-C2-N3	6.16	118.59	114.90
36	5	3173	G	C5-C6-O6	6.16	132.29	128.60
36	5	3325	G	N7-C8-N9	-6.16	110.02	113.10
1	6	1025	A	C5-N7-C8	-6.15	100.82	103.90
1	6	1765	A	C5-C6-N6	6.15	128.62	123.70
1	6	1780	G	N1-C2-N3	-6.15	120.21	123.90
36	5	3098	G	C5-C6-N1	6.15	114.58	111.50
36	5	3278	C	N1-C2-O2	-6.15	115.21	118.90
1	2	1155	G	C8-N9-C4	6.15	108.86	106.40
1	2	1774	G	C6-C5-N7	-6.15	126.71	130.40
36	1	964	G	OP2-P-O3'	6.15	118.74	105.20
36	1	1155	C	N3-C4-C5	6.15	124.36	121.90
36	1	1374	G	C6-C5-N7	-6.15	126.71	130.40
36	1	2335	G	C4-N9-C1'	6.15	134.50	126.50
1	6	922	G	N7-C8-N9	6.15	116.18	113.10
1	6	943	C	C5-C4-N4	-6.15	115.89	120.20
36	5	940	G	C8-N9-C1'	6.15	135.00	127.00
36	5	1085	A	C4-C5-N7	6.15	113.78	110.70
36	5	2107	A	C8-N9-C4	-6.15	103.34	105.80
36	5	2327	U	C6-N1-C2	6.15	124.69	121.00
1	2	1778	G	C5-C6-N1	6.15	114.58	111.50
36	1	423	A	C5-C6-N1	6.15	120.78	117.70
36	1	643	U	N3-C4-C5	-6.15	110.91	114.60
36	1	998	A	OP2-P-O3'	6.15	118.73	105.20
36	1	1116	G	C8-N9-C1'	-6.15	119.00	127.00
36	1	2250	G	N1-C6-O6	-6.15	116.21	119.90
36	1	3344	A	C5-C6-N1	-6.15	114.62	117.70
1	6	1383	G	N3-C4-C5	-6.15	125.52	128.60
1	6	1645	G	C4-C5-N7	6.15	113.26	110.80
36	5	70	A	N7-C8-N9	6.15	116.88	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	330	G	C4-C5-N7	6.15	113.26	110.80
36	5	1369	A	C5-N7-C8	-6.15	100.83	103.90
36	5	2393	G	C4-N9-C1'	6.15	134.50	126.50
36	5	3392	U	N1-C2-O2	6.15	127.11	122.80
1	6	1630	U	C5-C6-N1	6.15	125.77	122.70
36	5	3242	G	C5-C6-N1	6.15	114.57	111.50
38	8	87	G	N3-C4-N9	6.15	129.69	126.00
1	2	1280	C	N3-C4-C5	-6.15	119.44	121.90
36	1	206	G	N9-C1'-C2'	-6.15	105.24	112.00
36	1	612	U	N3-C2-O2	-6.15	117.90	122.20
36	1	638	C	C5-C6-N1	-6.15	117.93	121.00
36	1	1724	U	C5-C6-N1	-6.15	119.63	122.70
36	1	2394	G	N7-C8-N9	-6.15	110.03	113.10
36	1	2601	A	N1-C2-N3	6.15	132.37	129.30
37	3	25	G	C8-N9-C1'	-6.15	119.01	127.00
36	5	48	A	N1-C6-N6	-6.15	114.91	118.60
36	5	2851	A	C6-N1-C2	-6.15	114.91	118.60
36	1	3209	A	O5'-P-OP2	-6.15	100.17	105.70
1	6	457	G	N3-C4-N9	6.15	129.69	126.00
36	5	630	A	C2-N3-C4	-6.15	107.53	110.60
36	5	688	G	N7-C8-N9	6.15	116.17	113.10
36	5	1322	U	N3-C4-O4	6.15	123.70	119.40
36	5	2847	A	N3-C4-C5	6.15	131.10	126.80
36	5	3242	G	N3-C2-N2	6.15	124.20	119.90
36	1	372	A	C5-C6-N6	-6.14	118.78	123.70
36	1	619	A	P-O3'-C3'	6.14	127.07	119.70
36	1	1477	A	C5-C6-N6	-6.14	118.78	123.70
36	1	3313	U	C6-N1-C2	6.14	124.69	121.00
36	5	1008	U	C5-C6-N1	-6.14	119.63	122.70
36	5	2199	G	N7-C8-N9	6.14	116.17	113.10
36	5	2586	G	C4-N9-C1'	-6.14	118.51	126.50
36	5	2596	U	N3-C2-O2	-6.14	117.90	122.20
37	7	60	G	C8-N9-C4	-6.14	103.94	106.40
1	2	79	C	O4'-C1'-N1	6.14	113.11	108.20
36	1	710	A	N9-C4-C5	-6.14	103.34	105.80
36	1	897	U	C6-N1-C1'	-6.14	112.60	121.20
36	1	1003	A	N7-C8-N9	6.14	116.87	113.80
36	1	1039	U	C6-N1-C2	6.14	124.69	121.00
36	1	2121	G	C4-C5-N7	-6.14	108.34	110.80
36	1	2964	G	N1-C6-O6	6.14	123.59	119.90
57	N1	151	LEU	CA-CB-CG	-6.14	101.17	115.30
1	6	308	C	C6-N1-C1'	6.14	128.17	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	526	A	C5-C6-N1	-6.14	114.63	117.70
1	6	1003	A	C2-N3-C4	-6.14	107.53	110.60
1	6	1770	U	C6-N1-C2	6.14	124.69	121.00
36	5	2838	A	C4-C5-N7	-6.14	107.63	110.70
36	5	3315	G	C5-N7-C8	-6.14	101.23	104.30
36	1	2330	C	C2-N3-C4	-6.14	116.83	119.90
36	1	3094	A	C2-N3-C4	6.14	113.67	110.60
38	4	18	U	N3-C4-O4	6.14	123.70	119.40
1	6	999	U	C4-C5-C6	-6.14	116.02	119.70
73	o7	32	LYS	CD-CE-NZ	6.14	125.83	111.70
1	2	983	A	C2-N3-C4	6.14	113.67	110.60
1	2	1295	G	C5-C6-O6	-6.14	124.92	128.60
36	1	45	A	N7-C8-N9	6.14	116.87	113.80
36	1	875	G	C2-N3-C4	-6.14	108.83	111.90
36	1	1176	C	OP1-P-OP2	-6.14	110.39	119.60
36	1	1908	A	C6-C5-N7	-6.14	128.00	132.30
36	1	2311	G	C4-C5-N7	6.14	113.26	110.80
1	6	250	C	C2-N1-C1'	6.14	125.55	118.80
1	6	610	G	N3-C4-N9	6.14	129.68	126.00
36	5	660	A	N1-C2-N3	6.14	132.37	129.30
36	5	949	C	C4-C5-C6	6.14	120.47	117.40
36	5	1332	A	O4'-C1'-N9	-6.14	103.29	108.20
36	5	2159	U	O4'-C1'-N1	6.14	113.11	108.20
36	1	1104	G	N9-C4-C5	6.14	107.86	105.40
37	3	13	A	O5'-P-OP2	-6.14	100.18	105.70
38	4	32	C	OP2-P-O3'	6.14	118.70	105.20
36	5	3044	G	P-O3'-C3'	6.14	127.07	119.70
36	1	1545	A	N1-C6-N6	6.14	122.28	118.60
36	1	1695	U	N3-C2-O2	-6.14	117.91	122.20
36	1	2359	C	C4-C5-C6	6.14	120.47	117.40
36	1	3153	U	N3-C4-O4	-6.14	115.11	119.40
36	1	3230	G	N3-C2-N2	-6.14	115.61	119.90
1	6	1123	C	N3-C4-N4	6.14	122.30	118.00
1	6	1439	C	C5-C4-N4	-6.14	115.91	120.20
36	5	559	A	C5-C6-N6	-6.14	118.79	123.70
36	5	2297	U	N3-C4-C5	-6.14	110.92	114.60
36	5	2777	G	C6-C5-N7	6.14	134.08	130.40
36	5	2816	G	OP1-P-OP2	6.14	128.81	119.60
38	8	144	G	N3-C4-N9	6.14	129.68	126.00
1	2	1082	C	OP2-P-O3'	6.13	118.69	105.20
36	1	85	A	C5-C6-N1	-6.13	114.63	117.70
36	1	978	G	N1-C2-N3	-6.13	120.22	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2120	A	C6-N1-C2	-6.13	114.92	118.60
36	1	2352	A	C4-C5-N7	6.13	113.77	110.70
1	6	16	G	N1-C6-O6	6.13	123.58	119.90
1	6	425	A	C8-N9-C4	-6.13	103.35	105.80
1	6	1071	U	N3-C4-C5	-6.13	110.92	114.60
36	5	2601	A	C5-C6-N1	6.13	120.77	117.70
36	5	2782	U	N3-C2-O2	6.13	126.50	122.20
1	2	163	G	O4'-C1'-N9	6.13	113.11	108.20
1	2	1583	A	N1-C6-N6	-6.13	114.92	118.60
1	2	1631	A	N1-C6-N6	-6.13	114.92	118.60
36	1	754	G	N1-C6-O6	6.13	123.58	119.90
36	1	2246	G	OP1-P-O3'	6.13	118.69	105.20
36	1	3306	U	O5'-P-OP2	-6.13	100.18	105.70
1	6	1743	U	C5-C6-N1	-6.13	119.63	122.70
36	5	947	G	N1-C2-N3	6.13	127.58	123.90
36	5	1040	A	N7-C8-N9	-6.13	110.73	113.80
36	5	1843	C	N3-C4-N4	6.13	122.29	118.00
36	1	908	G	O4'-C1'-N9	-6.13	103.30	108.20
36	1	1808	G	C5-C6-O6	6.13	132.28	128.60
36	1	2649	A	C6-C5-N7	-6.13	128.01	132.30
1	6	1013	A	C6-C5-N7	6.13	136.59	132.30
1	6	1587	A	N1-C6-N6	6.13	122.28	118.60
36	5	842	G	N9-C4-C5	-6.13	102.95	105.40
36	5	1755	C	C2-N3-C4	6.13	122.97	119.90
67	o1	42	LEU	CA-CB-CG	-6.13	101.20	115.30
36	1	616	G	C5-C6-O6	-6.13	124.92	128.60
36	1	2095	G	N1-C6-O6	6.13	123.58	119.90
36	1	3361	G	N9-C4-C5	6.13	107.85	105.40
1	6	1025	A	C4-C5-N7	6.13	113.77	110.70
36	5	183	G	C4-C5-C6	6.13	122.48	118.80
36	5	1598	G	N1-C6-O6	-6.13	116.22	119.90
36	5	2932	U	C2-N1-C1'	-6.13	110.34	117.70
1	2	298	C	N3-C2-O2	6.13	126.19	121.90
36	1	1112	A	C6-N1-C2	-6.13	114.92	118.60
36	1	2706	G	C8-N9-C1'	-6.13	119.03	127.00
36	1	3230	G	N9-C4-C5	6.13	107.85	105.40
44	L7	215	GLY	N-CA-C	-6.13	97.78	113.10
1	6	418	G	O5'-P-OP1	-6.13	100.19	105.70
1	6	620	A	OP2-P-O3'	6.13	118.68	105.20
25	d3	121	ARG	NE-CZ-NH1	-6.13	117.24	120.30
36	5	54	C	C6-N1-C2	-6.13	117.85	120.30
36	5	911	C	C5-C6-N1	-6.13	117.94	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2215	A	O5'-P-OP2	-6.13	100.18	105.70
36	5	3102	G	N9-C4-C5	-6.13	102.95	105.40
36	5	3373	U	C5-C6-N1	-6.13	119.64	122.70
1	2	1764	C	N3-C4-C5	6.13	124.35	121.90
36	1	14	U	C4-C5-C6	6.13	123.38	119.70
36	1	2311	G	C5-N7-C8	-6.13	101.24	104.30
36	1	2762	A	C5-C6-N6	-6.13	118.80	123.70
36	1	2922	G	N1-C2-N2	-6.13	110.69	116.20
1	6	474	A	C8-N9-C4	6.13	108.25	105.80
36	5	351	A	C5-C6-N1	6.13	120.76	117.70
36	5	922	U	C6-N1-C1'	6.13	129.78	121.20
36	5	1688	U	N3-C4-O4	-6.13	115.11	119.40
36	5	2869	U	O5'-P-OP2	6.13	118.05	110.70
36	1	429	U	N1-C2-O2	6.12	127.09	122.80
36	1	2671	A	O5'-P-OP2	-6.12	100.19	105.70
71	O5	28	LEU	CA-CB-CG	6.12	129.39	115.30
1	6	40	A	C8-N9-C4	6.12	108.25	105.80
1	6	187	G	P-O3'-C3'	6.12	127.05	119.70
1	6	402	C	C6-N1-C1'	-6.12	113.45	120.80
1	6	1536	G	N3-C2-N2	6.12	124.19	119.90
36	5	1860	G	C8-N9-C4	-6.12	103.95	106.40
36	1	2111	G	N1-C6-O6	-6.12	116.23	119.90
36	1	2174	G	N1-C6-O6	6.12	123.57	119.90
38	4	98	U	N3-C4-C5	-6.12	110.93	114.60
1	6	1007	C	C5-C6-N1	-6.12	117.94	121.00
36	5	372	A	N9-C4-C5	6.12	108.25	105.80
36	5	394	G	C5-N7-C8	6.12	107.36	104.30
36	5	1620	U	O5'-P-OP2	-6.12	100.19	105.70
36	5	2987	A	C8-N9-C4	6.12	108.25	105.80
38	8	15	G	OP1-P-O3'	6.12	118.67	105.20
36	1	194	U	C6-N1-C2	-6.12	117.33	121.00
36	1	697	A	N3-C4-C5	6.12	131.09	126.80
36	1	1048	A	C6-C5-N7	6.12	136.59	132.30
36	1	2817	A	N1-C2-N3	6.12	132.36	129.30
36	1	2934	A	N9-C4-C5	-6.12	103.35	105.80
1	6	1610	G	C4-N9-C1'	6.12	134.46	126.50
36	5	64	G	N3-C4-N9	6.12	129.67	126.00
36	5	885	U	N1-C2-O2	-6.12	118.52	122.80
36	5	982	C	C4-C5-C6	-6.12	114.34	117.40
36	5	1929	G	C5-C6-N1	-6.12	108.44	111.50
36	5	3132	C	C4-C5-C6	6.12	120.46	117.40
36	5	3315	G	C4-C5-N7	6.12	113.25	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	549	G	N3-C2-N2	-6.12	115.62	119.90
36	5	281	G	C5-C6-O6	6.12	132.27	128.60
36	5	2377	G	O5'-P-OP2	-6.12	100.19	105.70
36	1	919	U	O5'-P-OP2	-6.12	100.19	105.70
36	1	1438	U	O5'-P-OP2	-6.12	100.19	105.70
36	1	1594	A	C5-C6-N1	6.12	120.76	117.70
36	1	2824	G	C4-N9-C1'	6.12	134.45	126.50
1	6	43	A	OP1-P-OP2	6.12	128.78	119.60
36	5	76	G	O5'-P-OP1	-6.12	100.19	105.70
36	5	349	A	C2-N3-C4	6.12	113.66	110.60
36	5	647	A	N1-C6-N6	-6.12	114.93	118.60
36	5	837	A	OP2-P-O3'	6.12	118.66	105.20
36	5	1164	G	C8-N9-C1'	6.12	134.95	127.00
36	5	1302	A	OP1-P-OP2	-6.12	110.42	119.60
36	5	1475	A	O5'-P-OP2	-6.12	100.19	105.70
36	5	1846	C	N3-C4-C5	6.12	124.35	121.90
38	8	3	A	O5'-P-OP1	-6.12	100.19	105.70
1	2	1464	G	C6-C5-N7	-6.12	126.73	130.40
36	1	657	A	C5-N7-C8	-6.12	100.84	103.90
36	1	1330	A	O5'-P-OP2	-6.12	100.19	105.70
36	1	1798	A	C2-N3-C4	-6.12	107.54	110.60
36	1	2826	U	C6-N1-C1'	6.12	129.76	121.20
36	5	584	G	C8-N9-C4	-6.12	103.95	106.40
36	5	1120	A	OP2-P-O3'	6.12	118.66	105.20
36	5	2247	G	N3-C2-N2	6.12	124.18	119.90
1	2	610	G	C6-C5-N7	-6.12	126.73	130.40
36	1	1521	G	C4-N9-C1'	-6.12	118.55	126.50
36	1	1819	U	C5-C6-N1	6.12	125.76	122.70
36	1	1929	G	N3-C4-N9	6.12	129.67	126.00
36	1	2966	G	C2-N3-C4	-6.12	108.84	111.90
36	1	3120	C	C6-N1-C2	6.12	122.75	120.30
42	L5	24	ARG	NE-CZ-NH1	-6.12	117.24	120.30
64	N8	56	VAL	CB-CA-C	-6.12	99.78	111.40
36	5	890	C	C2-N1-C1'	6.12	125.53	118.80
36	5	1477	A	N1-C2-N3	6.12	132.36	129.30
36	5	2379	U	N3-C2-O2	-6.12	117.92	122.20
36	5	3208	G	C2-N3-C4	-6.12	108.84	111.90
36	1	1306	G	C8-N9-C4	-6.11	103.95	106.40
36	1	1895	A	C8-N9-C4	6.11	108.25	105.80
36	1	1896	A	OP2-P-O3'	6.11	118.65	105.20
36	1	1937	U	C2-N1-C1'	-6.11	110.36	117.70
36	1	2420	C	N3-C4-C5	6.11	124.35	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3261	C	N1-C2-O2	-6.11	115.23	118.90
36	5	523	A	C5-C6-N1	-6.11	114.64	117.70
36	5	902	G	O5'-P-OP1	-6.11	100.20	105.70
36	5	976	U	O5'-P-OP2	-6.11	100.20	105.70
36	5	1681	U	N1-C2-N3	6.11	118.57	114.90
36	5	1884	A	N1-C6-N6	6.11	122.27	118.60
36	5	3063	C	N3-C4-C5	6.11	124.34	121.90
1	2	1523	G	C4-C5-N7	6.11	113.25	110.80
36	1	624	G	C4-C5-C6	6.11	122.47	118.80
36	1	660	A	N9-C4-C5	6.11	108.25	105.80
36	1	869	G	C6-N1-C2	-6.11	121.43	125.10
36	1	1394	A	N1-C6-N6	6.11	122.27	118.60
36	1	2980	U	OP1-P-O3'	6.11	118.65	105.20
36	1	3269	U	N3-C2-O2	-6.11	117.92	122.20
1	6	789	A	C8-N9-C4	-6.11	103.36	105.80
36	5	183	G	N1-C2-N3	6.11	127.57	123.90
36	5	3185	U	N3-C4-C5	-6.11	110.93	114.60
36	1	27	C	C4-C5-C6	6.11	120.46	117.40
36	1	401	U	N3-C2-O2	-6.11	117.92	122.20
36	1	2295	A	C8-N9-C4	-6.11	103.36	105.80
68	O2	8	LYS	CD-CE-NZ	6.11	125.75	111.70
1	6	753	A	C8-N9-C4	6.11	108.24	105.80
36	5	1296	C	O5'-P-OP1	6.11	118.03	110.70
36	5	1357	G	N7-C8-N9	6.11	116.16	113.10
36	5	2593	A	P-O3'-C3'	6.11	127.03	119.70
36	5	3019	U	N1-C2-N3	6.11	118.57	114.90
36	5	3053	G	C5-C6-N1	-6.11	108.44	111.50
1	2	389	G	C8-N9-C4	-6.11	103.96	106.40
1	2	1774	G	C8-N9-C1'	-6.11	119.06	127.00
36	1	1208	U	C5-C6-N1	6.11	125.75	122.70
36	1	2138	A	C5-C6-N6	-6.11	118.81	123.70
36	1	2185	G	C8-N9-C1'	-6.11	119.06	127.00
1	6	877	G	C8-N9-C4	6.11	108.84	106.40
1	6	1212	G	C2-N3-C4	6.11	114.95	111.90
1	6	1791	A	C8-N9-C4	6.11	108.24	105.80
36	5	306	A	O5'-P-OP2	-6.11	100.20	105.70
36	5	502	U	C6-N1-C2	6.11	124.67	121.00
36	5	921	A	C4-C5-C6	6.11	120.06	117.00
36	5	2572	C	C6-N1-C1'	-6.11	113.47	120.80
37	7	107	C	C6-N1-C2	6.11	122.74	120.30
1	2	323	A	O5'-P-OP2	-6.11	100.20	105.70
36	1	1112	A	C5-C6-N1	6.11	120.75	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1385	C	C6-N1-C1'	6.11	128.13	120.80
36	1	1524	A	N9-C4-C5	6.11	108.24	105.80
36	1	1818	U	N3-C2-O2	-6.11	117.92	122.20
36	1	2333	C	OP2-P-O3'	6.11	118.64	105.20
36	1	2881	C	N3-C2-O2	6.11	126.18	121.90
40	L3	270	ARG	NE-CZ-NH1	-6.11	117.25	120.30
1	6	750	U	N1-C2-O2	-6.11	118.53	122.80
1	6	1704	U	C5-C6-N1	6.11	125.75	122.70
7	s5	118	LEU	CA-CB-CG	-6.11	101.25	115.30
36	5	731	U	N3-C4-O4	-6.11	115.12	119.40
36	5	2640	A	N9-C4-C5	-6.11	103.36	105.80
36	5	2969	A	C4-C5-C6	6.11	120.05	117.00
1	2	260	U	C2-N1-C1'	6.11	125.03	117.70
36	1	1097	G	C6-C5-N7	-6.11	126.74	130.40
36	5	197	G	O5'-P-OP2	6.11	118.03	110.70
36	5	708	G	C6-C5-N7	-6.11	126.74	130.40
36	5	1370	G	C8-N9-C4	-6.11	103.96	106.40
36	5	2383	C	C2-N1-C1'	6.11	125.52	118.80
36	5	2896	A	N9-C4-C5	-6.11	103.36	105.80
36	1	521	A	O5'-P-OP2	6.10	118.02	110.70
36	5	922	U	C6-N1-C2	6.10	124.66	121.00
36	5	2877	G	C5-C6-O6	6.10	132.26	128.60
36	5	2943	G	O4'-C1'-N9	-6.10	103.32	108.20
36	5	2944	U	C4-C5-C6	6.10	123.36	119.70
36	5	3303	G	N1-C6-O6	-6.10	116.24	119.90
1	2	155	U	O4'-C1'-N1	6.10	113.08	108.20
1	2	577	G	N7-C8-N9	6.10	116.15	113.10
36	1	183	G	N1-C2-N2	-6.10	110.71	116.20
36	1	642	U	C2-N3-C4	6.10	130.66	127.00
36	1	652	G	N1-C6-O6	-6.10	116.24	119.90
36	1	918	C	N3-C4-C5	6.10	124.34	121.90
36	1	1400	G	OP2-P-O3'	6.10	118.62	105.20
36	1	2706	G	C4-N9-C1'	6.10	134.43	126.50
1	6	1463	C	C4-C5-C6	-6.10	114.35	117.40
1	6	1557	U	C5-C4-O4	6.10	129.56	125.90
1	6	1575	G	C4-N9-C1'	-6.10	118.57	126.50
36	5	1916	U	C5-C4-O4	6.10	129.56	125.90
36	5	2777	G	N7-C8-N9	-6.10	110.05	113.10
36	5	2898	G	N1-C2-N3	6.10	127.56	123.90
37	7	83	U	C6-N1-C2	-6.10	117.34	121.00
1	2	1148	C	C4-C5-C6	6.10	120.45	117.40
36	1	766	U	C5-C6-N1	6.10	125.75	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2701	U	N1-C2-O2	-6.10	118.53	122.80
36	1	3369	G	C4-N9-C1'	6.10	134.43	126.50
1	6	98	U	C5-C6-N1	-6.10	119.65	122.70
1	6	678	A	N7-C8-N9	6.10	116.85	113.80
1	6	1442	U	N3-C2-O2	-6.10	117.93	122.20
36	5	2414	G	C6-C5-N7	-6.10	126.74	130.40
25	D3	45	GLY	N-CA-C	-6.10	97.85	113.10
36	1	557	A	C2-N3-C4	-6.10	107.55	110.60
36	1	1197	A	C5-N7-C8	-6.10	100.85	103.90
36	1	2296	A	C6-C5-N7	-6.10	128.03	132.30
36	1	2325	G	C4-C5-N7	6.10	113.24	110.80
36	1	2900	A	N1-C6-N6	-6.10	114.94	118.60
36	1	2957	G	C4-C5-N7	6.10	113.24	110.80
36	1	3318	G	C6-C5-N7	-6.10	126.74	130.40
1	6	460	A	N7-C8-N9	6.10	116.85	113.80
36	5	513	G	C5-C6-N1	6.10	114.55	111.50
36	5	1205	A	C8-N9-C4	6.10	108.24	105.80
36	5	1637	A	C4-C5-N7	-6.10	107.65	110.70
36	5	2813	A	C4-C5-N7	6.10	113.75	110.70
36	5	2837	A	C5-N7-C8	6.10	106.95	103.90
37	7	1	G	C8-N9-C1'	-6.10	119.07	127.00
1	2	992	A	N1-C6-N6	6.10	122.26	118.60
36	1	102	C	OP1-P-OP2	-6.10	110.45	119.60
36	1	404	G	C4-C5-N7	6.10	113.24	110.80
36	1	2875	U	C2-N3-C4	6.10	130.66	127.00
36	1	2937	G	N3-C4-N9	-6.10	122.34	126.00
36	1	3120	C	C2-N1-C1'	-6.10	112.09	118.80
38	4	113	U	C5-C4-O4	6.10	129.56	125.90
1	6	1418	G	C4-C5-C6	6.10	122.46	118.80
1	6	1644	C	C5-C6-N1	-6.10	117.95	121.00
36	5	720	A	N9-C4-C5	6.10	108.24	105.80
36	5	1176	C	C6-N1-C1'	6.10	128.12	120.80
36	5	2145	A	C6-C5-N7	-6.10	128.03	132.30
1	2	19	A	C5-C6-N6	-6.10	118.82	123.70
1	2	25	C	N1-C2-N3	6.10	123.47	119.20
36	1	657	A	C5-C6-N6	-6.10	118.82	123.70
36	1	2374	C	C4-C5-C6	6.10	120.45	117.40
1	6	1002	G	N3-C4-C5	6.10	131.65	128.60
36	5	218	G	C8-N9-C4	-6.10	103.96	106.40
36	5	2769	A	C8-N9-C4	-6.10	103.36	105.80
36	1	1172	G	N7-C8-N9	6.09	116.15	113.10
36	1	1514	G	C6-C5-N7	-6.09	126.74	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2148	U	OP1-P-OP2	6.09	128.74	119.60
36	1	2866	U	C5-C4-O4	6.09	129.56	125.90
36	1	3232	G	C5-C6-N1	-6.09	108.45	111.50
37	3	104	A	C4-C5-N7	-6.09	107.65	110.70
44	L7	131	GLU	C-N-CD	6.09	141.20	128.40
1	6	1	U	N1-C2-O2	6.09	127.07	122.80
1	6	1243	G	N3-C4-C5	-6.09	125.55	128.60
1	6	1556	A	C5-C6-N6	-6.09	118.82	123.70
36	5	890	C	N1-C2-O2	6.09	122.56	118.90
36	5	960	U	OP1-P-O3'	-6.09	91.79	105.20
36	5	1433	A	OP1-P-OP2	-6.09	110.46	119.60
36	5	2355	G	C5-N7-C8	-6.09	101.25	104.30
36	5	2370	G	C5-C6-N1	-6.09	108.45	111.50
36	5	2794	G	C6-N1-C2	-6.09	121.44	125.10
36	5	2824	G	C5-N7-C8	-6.09	101.25	104.30
36	5	3067	C	N3-C4-C5	6.09	124.34	121.90
37	7	91	G	N1-C2-N2	-6.09	110.72	116.20
38	8	126	A	N1-C6-N6	-6.09	114.94	118.60
36	1	3061	G	C4-C5-N7	6.09	113.24	110.80
36	5	95	A	C2-N3-C4	-6.09	107.55	110.60
36	5	648	C	C2-N1-C1'	-6.09	112.10	118.80
36	5	1405	U	N1-C2-O2	-6.09	118.53	122.80
36	5	2945	G	C4-N9-C1'	6.09	134.42	126.50
36	5	3276	G	O5'-P-OP2	6.09	118.01	110.70
1	2	1029	U	C5-C6-N1	-6.09	119.65	122.70
1	2	1599	C	N3-C2-O2	-6.09	117.64	121.90
36	1	157	A	C6-N1-C2	-6.09	114.94	118.60
36	1	364	G	C5-N7-C8	-6.09	101.25	104.30
36	1	1374	G	C6-N1-C2	-6.09	121.44	125.10
36	1	1453	A	O5'-P-OP2	-6.09	100.22	105.70
36	1	3126	C	O5'-P-OP2	-6.09	100.22	105.70
1	6	922	G	C8-N9-C1'	-6.09	119.08	127.00
1	6	1362	U	N3-C2-O2	-6.09	117.94	122.20
1	6	1547	A	N3-C4-C5	6.09	131.06	126.80
36	5	504	A	C8-N9-C4	6.09	108.24	105.80
36	5	830	A	C2-N3-C4	-6.09	107.55	110.60
36	5	850	U	N3-C2-O2	6.09	126.46	122.20
36	5	943	U	N1-C2-N3	6.09	118.56	114.90
36	5	1113	G	N3-C4-C5	6.09	131.65	128.60
36	5	3019	U	N1-C2-O2	6.09	127.06	122.80
1	2	334	G	C5-N7-C8	6.09	107.34	104.30
1	2	1252	C	C6-N1-C2	6.09	122.74	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	278	U	N1-C2-N3	6.09	118.55	114.90
36	1	803	C	N3-C2-O2	-6.09	117.64	121.90
36	1	963	G	N1-C2-N2	-6.09	110.72	116.20
36	1	1098	A	C6-N1-C2	-6.09	114.95	118.60
36	1	1164	G	N1-C2-N2	6.09	121.68	116.20
36	1	1207	G	C5-N7-C8	-6.09	101.25	104.30
36	1	1301	A	O5'-P-OP1	-6.09	100.22	105.70
36	1	1329	U	OP1-P-O3'	6.09	118.59	105.20
36	1	1452	A	O5'-P-OP1	-6.09	100.22	105.70
36	1	1526	U	C6-N1-C1'	-6.09	112.67	121.20
36	1	2609	A	C4-C5-C6	6.09	120.05	117.00
36	1	3031	G	C8-N9-C1'	6.09	134.92	127.00
1	6	1026	A	OP2-P-O3'	6.09	118.60	105.20
1	6	1576	A	N1-C6-N6	6.09	122.25	118.60
1	6	1765	A	N9-C4-C5	6.09	108.24	105.80
36	5	333	G	OP2-P-O3'	6.09	118.60	105.20
36	5	1606	U	C5-C6-N1	-6.09	119.66	122.70
36	5	2347	U	C5-C4-O4	6.09	129.55	125.90
36	5	2682	C	OP1-P-OP2	-6.09	110.47	119.60
36	5	2881	C	O5'-P-OP2	6.09	118.01	110.70
36	5	3323	A	C6-N1-C2	-6.09	114.95	118.60
38	8	87	G	N3-C4-C5	-6.09	125.56	128.60
1	2	1784	C	C6-N1-C2	-6.09	117.86	120.30
36	1	789	A	O5'-P-OP2	-6.09	100.22	105.70
36	1	2175	U	C4-C5-C6	6.09	123.35	119.70
36	1	2652	U	N1-C2-O2	-6.09	118.54	122.80
50	M4	121	MET	CB-CG-SD	-6.09	94.14	112.40
1	6	1485	C	N3-C2-O2	6.09	126.16	121.90
36	5	2381	G	N7-C8-N9	-6.09	110.06	113.10
36	5	289	A	C6-C5-N7	-6.09	128.04	132.30
36	5	1798	A	N1-C6-N6	6.09	122.25	118.60
36	5	2845	A	C5-N7-C8	-6.09	100.86	103.90
36	5	2920	U	N1-C2-O2	6.09	127.06	122.80
36	1	1521	G	C8-N9-C1'	6.08	134.91	127.00
36	1	2376	G	C5-C6-N1	6.08	114.54	111.50
36	1	3053	G	N1-C2-N3	6.08	127.55	123.90
36	1	3147	G	N1-C6-O6	-6.08	116.25	119.90
36	1	3270	U	O5'-P-OP1	-6.08	100.22	105.70
38	4	42	G	OP1-P-OP2	-6.08	110.47	119.60
1	6	1106	U	N3-C4-O4	6.08	123.66	119.40
1	6	1513	G	C4-C5-C6	6.08	122.45	118.80
36	5	796	U	C5-C6-N1	6.08	125.74	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2861	U	N1-C2-N3	-6.08	111.25	114.90
1	2	880	C	N3-C4-C5	-6.08	119.47	121.90
1	2	1670	G	N3-C4-C5	-6.08	125.56	128.60
36	1	25	U	C4-C5-C6	6.08	123.35	119.70
36	1	503	C	O4'-C1'-N1	6.08	113.07	108.20
36	1	1429	G	N3-C2-N2	6.08	124.16	119.90
36	1	1542	G	N3-C4-C5	6.08	131.64	128.60
36	1	3243	A	N1-C2-N3	-6.08	126.26	129.30
1	6	115	G	C2-N3-C4	-6.08	108.86	111.90
1	6	1178	G	C8-N9-C1'	-6.08	119.09	127.00
1	6	1324	G	N7-C8-N9	6.08	116.14	113.10
36	5	217	U	N3-C2-O2	-6.08	117.94	122.20
36	5	1420	C	C2-N1-C1'	-6.08	112.11	118.80
36	5	2859	U	N3-C4-O4	-6.08	115.14	119.40
36	5	3046	A	C6-N1-C2	-6.08	114.95	118.60
1	2	730	G	C4-N9-C1'	6.08	134.41	126.50
36	1	383	G	N1-C6-O6	-6.08	116.25	119.90
36	1	1379	G	C2-N3-C4	-6.08	108.86	111.90
36	1	1399	A	N3-C4-N9	-6.08	122.53	127.40
38	4	40	A	N3-C4-C5	-6.08	122.54	126.80
1	6	1128	C	N1-C2-O2	-6.08	115.25	118.90
1	6	1176	G	N1-C6-O6	6.08	123.55	119.90
1	6	1534	G	N1-C2-N2	6.08	121.67	116.20
36	5	776	U	C5-C4-O4	6.08	129.55	125.90
36	5	963	G	OP1-P-OP2	-6.08	110.48	119.60
36	5	1260	A	C8-N9-C4	-6.08	103.37	105.80
36	5	1489	A	C4-N9-C1'	6.08	137.25	126.30
36	5	2628	A	C8-N9-C4	-6.08	103.37	105.80
36	5	2799	A	N1-C6-N6	-6.08	114.95	118.60
36	5	2932	U	C5-C6-N1	-6.08	119.66	122.70
44	17	100	ARG	NE-CZ-NH2	-6.08	117.26	120.30
36	1	372	A	N1-C6-N6	6.08	122.25	118.60
36	1	2910	A	C5-C6-N6	6.08	128.56	123.70
36	1	3142	A	C4-C5-N7	-6.08	107.66	110.70
38	4	13	A	N1-C2-N3	6.08	132.34	129.30
38	4	98	U	N3-C4-O4	6.08	123.66	119.40
36	5	1922	A	N3-C4-C5	6.08	131.06	126.80
36	5	2709	C	N3-C4-N4	6.08	122.26	118.00
1	2	1541	G	C4-C5-C6	6.08	122.45	118.80
36	1	1210	U	C5-C6-N1	-6.08	119.66	122.70
36	1	1858	A	C5-C6-N6	-6.08	118.84	123.70
36	1	2541	U	P-O3'-C3'	6.08	126.99	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2846	U	C2-N1-C1'	6.08	125.00	117.70
79	Q3	23	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	6	597	G	N9-C4-C5	-6.08	102.97	105.40
1	6	611	U	N3-C4-O4	6.08	123.65	119.40
1	6	858	G	C6-C5-N7	-6.08	126.75	130.40
1	6	1038	U	N3-C4-O4	6.08	123.66	119.40
1	6	1495	C	O5'-P-OP1	-6.08	100.23	105.70
36	5	675	C	C5-C4-N4	-6.08	115.94	120.20
36	5	2408	U	N3-C4-O4	6.08	123.65	119.40
36	5	3032	A	C6-C5-N7	6.08	136.56	132.30
37	7	118	A	N1-C2-N3	6.08	132.34	129.30
36	1	226	C	C2-N1-C1'	-6.08	112.11	118.80
36	1	3102	G	N1-C6-O6	-6.08	116.25	119.90
36	1	3266	G	C4-C5-C6	6.08	122.45	118.80
36	5	396	A	N3-C4-N9	-6.08	122.54	127.40
36	5	552	G	N3-C2-N2	-6.08	115.65	119.90
36	5	934	G	C5-N7-C8	-6.08	101.26	104.30
36	5	2727	A	C5-C6-N6	6.08	128.56	123.70
1	2	420	A	C5-C6-N6	-6.08	118.84	123.70
1	2	1277	G	N7-C8-N9	6.08	116.14	113.10
36	1	9	U	C6-N1-C2	6.08	124.65	121.00
36	1	1509	A	N9-C4-C5	-6.08	103.37	105.80
36	1	2743	A	N7-C8-N9	-6.08	110.76	113.80
36	1	2820	A	N3-C4-N9	-6.08	122.54	127.40
38	4	30	C	N3-C4-N4	-6.08	113.75	118.00
79	Q3	29	LEU	CA-CB-CG	-6.08	101.33	115.30
1	6	457	G	C6-C5-N7	-6.08	126.75	130.40
36	5	501	A	C6-N1-C2	-6.08	114.95	118.60
36	5	511	G	C5-C6-N1	-6.08	108.46	111.50
36	5	639	G	N1-C6-O6	6.08	123.55	119.90
36	5	688	G	C8-N9-C4	-6.08	103.97	106.40
36	5	822	G	C4-N9-C1'	6.08	134.40	126.50
36	5	1848	G	OP1-P-OP2	6.08	128.72	119.60
36	5	2434	U	C4-C5-C6	6.08	123.34	119.70
36	5	2672	G	OP1-P-OP2	6.08	128.71	119.60
1	2	1200	G	C5-C6-O6	-6.07	124.96	128.60
36	1	625	G	N7-C8-N9	-6.07	110.06	113.10
36	1	648	C	C2-N1-C1'	6.07	125.48	118.80
36	1	1478	C	N3-C4-C5	-6.07	119.47	121.90
36	5	234	G	O5'-P-OP2	-6.07	100.23	105.70
36	5	1056	U	N1-C2-O2	6.07	127.05	122.80
36	5	1382	G	C4-C5-N7	6.07	113.23	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1914	G	N9-C4-C5	6.07	107.83	105.40
77	q1	17	ARG	NE-CZ-NH1	-6.07	117.26	120.30
1	2	360	A	C6-N1-C2	6.07	122.24	118.60
36	1	30	G	C4-C5-C6	-6.07	115.16	118.80
36	1	2978	U	C6-N1-C2	-6.07	117.36	121.00
36	1	3156	U	C6-N1-C2	6.07	124.64	121.00
36	5	713	U	C5-C6-N1	-6.07	119.66	122.70
36	5	3310	A	C2-N3-C4	-6.07	107.56	110.60
1	2	167	U	C6-N1-C2	6.07	124.64	121.00
1	2	1112	G	N1-C6-O6	6.07	123.54	119.90
1	2	1191	U	N1-C2-N3	6.07	118.54	114.90
36	1	926	A	C4-C5-N7	6.07	113.74	110.70
36	1	3349	C	N1-C2-O2	6.07	122.54	118.90
1	6	1006	C	C5-C6-N1	-6.07	117.97	121.00
1	6	1199	G	O5'-P-OP2	-6.07	100.24	105.70
36	5	723	U	N1-C2-N3	6.07	118.54	114.90
36	5	854	G	N1-C2-N2	6.07	121.66	116.20
36	5	1385	C	N3-C4-C5	-6.07	119.47	121.90
36	5	1599	G	OP1-P-O3'	6.07	118.55	105.20
36	5	1807	G	C8-N9-C4	6.07	108.83	106.40
36	5	1873	U	C6-N1-C2	-6.07	117.36	121.00
36	5	2760	C	O5'-P-OP2	-6.07	100.24	105.70
37	7	9	C	OP1-P-OP2	-6.07	110.49	119.60
36	1	2622	C	N1-C2-N3	6.07	123.45	119.20
1	6	593	U	C6-N1-C2	-6.07	117.36	121.00
36	5	2413	A	O5'-P-OP2	6.07	117.98	110.70
36	5	2866	U	N3-C2-O2	-6.07	117.95	122.20
36	5	2947	G	C4-C5-N7	6.07	113.23	110.80
36	5	3044	G	C4-C5-C6	6.07	122.44	118.80
1	2	1647	U	N3-C2-O2	-6.07	117.95	122.20
36	1	80	G	OP2-P-O3'	6.07	118.55	105.20
36	1	1526	U	C2-N1-C1'	6.07	124.98	117.70
1	6	359	A	C6-C5-N7	6.07	136.55	132.30
1	6	457	G	N1-C6-O6	6.07	123.54	119.90
1	6	1759	C	N3-C4-N4	6.07	122.25	118.00
36	5	95	A	N3-C4-N9	-6.07	122.55	127.40
36	5	1389	G	O5'-P-OP2	6.07	117.98	110.70
36	5	2920	U	C2-N3-C4	-6.07	123.36	127.00
36	5	3105	U	OP1-P-O3'	-6.07	91.85	105.20
36	5	3272	C	N1-C2-N3	6.07	123.45	119.20
1	2	191	C	C2-N1-C1'	-6.07	112.13	118.80
1	2	1354	G	C8-N9-C4	-6.07	103.97	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	368	G	N1-C2-N3	6.07	127.54	123.90
36	1	981	U	N3-C4-C5	-6.07	110.96	114.60
36	1	2427	U	N3-C4-O4	-6.07	115.15	119.40
36	1	3011	A	N3-C4-N9	-6.07	122.55	127.40
36	1	3260	G	C4-C5-C6	6.07	122.44	118.80
36	1	3388	C	N1-C2-O2	6.07	122.54	118.90
69	O3	21	ARG	NE-CZ-NH2	-6.07	117.27	120.30
36	5	1423	C	C6-N1-C2	-6.07	117.87	120.30
36	5	2173	U	C6-N1-C2	-6.07	117.36	121.00
36	5	2428	U	N3-C4-C5	6.07	118.24	114.60
36	1	681	U	C2-N1-C1'	6.06	124.98	117.70
36	1	1439	U	OP2-P-O3'	-6.06	91.86	105.20
36	5	1177	G	C8-N9-C1'	-6.06	119.12	127.00
36	5	1236	G	C4-N9-C1'	6.06	134.38	126.50
36	5	1430	U	C2-N3-C4	-6.06	123.36	127.00
36	1	24	G	C5-C6-N1	-6.06	108.47	111.50
36	1	805	G	C5-C6-N1	-6.06	108.47	111.50
36	1	1519	G	N3-C4-C5	6.06	131.63	128.60
36	1	2755	C	N3-C4-C5	6.06	124.33	121.90
36	1	3059	G	C8-N9-C4	6.06	108.83	106.40
36	1	3184	A	C5-C6-N1	6.06	120.73	117.70
1	6	1	U	C6-N1-C2	-6.06	117.36	121.00
1	6	1031	U	C5-C4-O4	6.06	129.54	125.90
1	6	1121	C	C2-N1-C1'	6.06	125.47	118.80
1	6	1303	U	N3-C2-O2	6.06	126.44	122.20
1	6	1409	G	C8-N9-C1'	-6.06	119.12	127.00
36	5	712	G	C5-C6-N1	6.06	114.53	111.50
36	5	911	C	C4-C5-C6	6.06	120.43	117.40
36	5	1164	G	N3-C2-N2	-6.06	115.66	119.90
36	5	1448	U	C2-N3-C4	-6.06	123.36	127.00
36	5	1632	A	N7-C8-N9	-6.06	110.77	113.80
36	5	1719	G	N3-C4-N9	-6.06	122.36	126.00
36	5	2431	C	C4-C5-C6	-6.06	114.37	117.40
36	5	3040	A	O5'-P-OP1	-6.06	100.24	105.70
36	5	3143	C	C5-C6-N1	6.06	124.03	121.00
36	1	1439	U	C2-N1-C1'	6.06	124.97	117.70
36	1	3112	G	OP1-P-O3'	6.06	118.53	105.20
36	5	2195	C	N3-C2-O2	-6.06	117.66	121.90
42	15	15	ARG	NE-CZ-NH1	-6.06	117.27	120.30
1	2	967	A	C4-C5-N7	6.06	113.73	110.70
1	2	1438	G	C8-N9-C4	6.06	108.82	106.40
36	1	317	A	C8-N9-C4	-6.06	103.38	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1838	G	N1-C2-N3	6.06	127.54	123.90
36	1	3007	U	C5-C6-N1	-6.06	119.67	122.70
1	6	310	C	C5-C4-N4	-6.06	115.96	120.20
1	6	1000	C	C5-C4-N4	6.06	124.44	120.20
36	5	376	G	C4-C5-C6	6.06	122.44	118.80
36	5	865	U	N1-C2-N3	6.06	118.53	114.90
36	5	972	A	N9-C4-C5	6.06	108.22	105.80
36	5	1620	U	N1-C2-O2	6.06	127.04	122.80
36	5	1793	C	O4'-C1'-N1	-6.06	103.35	108.20
36	5	1830	G	OP1-P-O3'	6.06	118.53	105.20
36	5	3026	G	C8-N9-C1'	-6.06	119.12	127.00
1	2	1456	C	C6-N1-C2	-6.06	117.88	120.30
36	1	1209	G	N1-C2-N2	-6.06	110.75	116.20
37	3	92	A	C5-N7-C8	-6.06	100.87	103.90
1	6	1031	U	N1-C2-N3	6.06	118.53	114.90
1	6	1679	G	C8-N9-C4	-6.06	103.98	106.40
36	5	881	C	C2-N1-C1'	6.06	125.46	118.80
36	5	3304	U	C4-C5-C6	6.06	123.33	119.70
1	2	6	G	N3-C4-N9	6.06	129.63	126.00
36	1	2698	G	C5-C6-O6	-6.06	124.97	128.60
36	5	1879	A	O5'-P-OP2	-6.06	100.25	105.70
36	5	2200	U	N1-C2-N3	6.06	118.53	114.90
36	5	2381	G	O5'-P-OP1	6.06	117.97	110.70
36	5	2418	G	C8-N9-C4	6.06	108.82	106.40
37	7	28	C	C2-N3-C4	-6.06	116.87	119.90
1	2	163	G	C8-N9-C4	-6.05	103.98	106.40
36	1	78	U	O5'-P-OP2	6.05	117.97	110.70
36	1	1050	U	OP2-P-O3'	6.05	118.52	105.20
36	1	1153	A	C6-C5-N7	-6.05	128.06	132.30
36	1	1428	A	C5-N7-C8	-6.05	100.87	103.90
36	1	1939	G	N1-C2-N2	-6.05	110.75	116.20
36	1	2639	G	N9-C4-C5	6.05	107.82	105.40
36	1	2936	A	C4-C5-C6	-6.05	113.97	117.00
36	1	3226	A	N1-C2-N3	6.05	132.33	129.30
38	4	89	A	C8-N9-C4	6.05	108.22	105.80
1	6	764	U	N3-C4-C5	-6.05	110.97	114.60
36	5	355	A	N1-C2-N3	6.05	132.33	129.30
36	5	1518	U	C4-C5-C6	6.05	123.33	119.70
36	5	2839	G	C6-C5-N7	6.05	134.03	130.40
36	5	3171	U	OP2-P-O3'	6.05	118.52	105.20
37	7	97	A	C5-C6-N1	6.05	120.73	117.70
1	2	579	A	N1-C6-N6	-6.05	114.97	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	966	U	C6-N1-C2	-6.05	117.37	121.00
1	2	386	G	C5-C6-O6	6.05	132.23	128.60
1	2	1417	A	C8-N9-C4	6.05	108.22	105.80
1	2	1550	A	C5-N7-C8	-6.05	100.87	103.90
1	2	1749	A	O5'-P-OP1	-6.05	100.25	105.70
36	1	787	G	C4-C5-C6	6.05	122.43	118.80
36	1	1417	G	C5-N7-C8	-6.05	101.27	104.30
36	1	1835	A	O4'-C1'-N9	-6.05	103.36	108.20
36	1	2958	A	C8-N9-C4	-6.05	103.38	105.80
36	1	3032	A	C4-C5-N7	-6.05	107.67	110.70
37	3	36	C	C6-N1-C1'	-6.05	113.54	120.80
1	6	901	G	N1-C2-N3	-6.05	120.27	123.90
1	6	1340	U	C5-C4-O4	6.05	129.53	125.90
36	5	285	A	C8-N9-C4	-6.05	103.38	105.80
36	5	354	U	C6-N1-C1'	-6.05	112.73	121.20
36	5	2756	C	C2-N1-C1'	6.05	125.46	118.80
36	5	2942	C	C2-N1-C1'	-6.05	112.14	118.80
1	2	1455	G	C5-C6-O6	6.05	132.23	128.60
36	1	1180	A	C4-C5-N7	-6.05	107.68	110.70
36	1	2115	G	N1-C6-O6	6.05	123.53	119.90
1	6	555	A	N9-C4-C5	6.05	108.22	105.80
1	6	891	A	N7-C8-N9	-6.05	110.78	113.80
1	6	1207	C	C6-N1-C1'	-6.05	113.54	120.80
1	6	1615	C	C2-N3-C4	-6.05	116.88	119.90
36	5	42	C	C2-N1-C1'	6.05	125.45	118.80
36	5	196	G	C8-N9-C4	-6.05	103.98	106.40
36	5	752	C	OP1-P-O3'	6.05	118.51	105.20
36	5	3001	C	N3-C4-C5	6.05	124.32	121.90
36	5	3307	A	C2-N3-C4	-6.05	107.58	110.60
36	1	583	G	N7-C8-N9	-6.05	110.08	113.10
36	1	688	G	C8-N9-C1'	-6.05	119.14	127.00
36	1	865	U	C5-C4-O4	6.05	129.53	125.90
36	1	2278	C	OP1-P-O3'	6.05	118.50	105.20
55	M9	103	ARG	NE-CZ-NH1	-6.05	117.28	120.30
1	6	1746	A	OP1-P-OP2	-6.05	110.53	119.60
36	5	630	A	C5-N7-C8	6.05	106.92	103.90
36	5	690	A	C8-N9-C4	6.05	108.22	105.80
36	5	2647	A	C2-N3-C4	-6.05	107.58	110.60
1	2	61	A	N1-C6-N6	6.05	122.23	118.60
1	2	1777	G	C8-N9-C4	-6.05	103.98	106.40
36	1	99	A	C5-C6-N6	6.05	128.54	123.70
36	1	430	U	C2-N3-C4	-6.05	123.37	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	674	G	C6-C5-N7	-6.05	126.77	130.40
36	1	722	G	N3-C4-N9	6.05	129.63	126.00
36	1	2160	G	C2-N3-C4	-6.05	108.88	111.90
1	6	407	A	C6-C5-N7	-6.05	128.07	132.30
1	6	1136	U	O5'-P-OP2	6.05	117.96	110.70
1	6	1200	G	OP1-P-O3'	6.05	118.50	105.20
1	6	1523	G	C6-N1-C2	-6.05	121.47	125.10
36	5	788	C	OP2-P-O3'	6.05	118.50	105.20
36	5	935	U	N3-C4-O4	6.05	123.63	119.40
36	5	982	C	C5-C4-N4	-6.05	115.97	120.20
36	5	1186	G	OP1-P-OP2	6.05	128.67	119.60
36	5	1525	G	C8-N9-C1'	-6.05	119.14	127.00
36	5	3307	A	N1-C2-N3	6.05	132.32	129.30
37	7	89	G	N9-C4-C5	-6.05	102.98	105.40
66	o0	104	LEU	CA-CB-CG	6.05	129.21	115.30
36	1	100	A	C4-C5-C6	6.04	120.02	117.00
36	1	358	G	N9-C4-C5	-6.04	102.98	105.40
36	1	729	C	N1-C2-N3	6.04	123.43	119.20
36	1	1389	G	O5'-P-OP1	-6.04	100.26	105.70
36	5	2827	U	C6-N1-C2	6.04	124.63	121.00
36	5	3215	A	O4'-C1'-N9	-6.04	103.36	108.20
36	1	1179	A	N7-C8-N9	-6.04	110.78	113.80
36	1	1204	A	N3-C4-C5	6.04	131.03	126.80
36	1	1429	G	C4-N9-C1'	6.04	134.36	126.50
36	1	2223	A	N1-C2-N3	6.04	132.32	129.30
36	1	2679	A	O4'-C1'-N9	6.04	113.04	108.20
36	1	2813	A	C5-N7-C8	6.04	106.92	103.90
37	3	7	G	C4-C5-N7	-6.04	108.38	110.80
1	6	948	G	N9-C4-C5	-6.04	102.98	105.40
36	5	63	A	C4-C5-C6	6.04	120.02	117.00
36	5	297	G	C4-N9-C1'	6.04	134.35	126.50
36	5	646	A	O5'-P-OP1	-6.04	100.26	105.70
36	5	971	G	C6-N1-C2	-6.04	121.47	125.10
36	5	1434	G	N7-C8-N9	6.04	116.12	113.10
36	5	1884	A	C6-C5-N7	-6.04	128.07	132.30
38	8	2	A	C2-N3-C4	-6.04	107.58	110.60
36	1	1502	C	C6-N1-C2	-6.04	117.88	120.30
36	1	1548	C	C5-C4-N4	-6.04	115.97	120.20
1	6	800	U	N1-C2-N3	6.04	118.53	114.90
36	5	355	A	C5-C6-N1	-6.04	114.68	117.70
36	5	1333	C	N3-C4-N4	6.04	122.23	118.00
36	5	1856	C	N3-C4-N4	6.04	122.23	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3002	C	C5-C4-N4	-6.04	115.97	120.20
36	5	3207	U	O4'-C1'-N1	6.04	113.03	108.20
36	5	3232	G	N1-C6-O6	6.04	123.53	119.90
1	2	1456	C	O4'-C1'-N1	6.04	113.03	108.20
36	1	151	A	C8-N9-C4	-6.04	103.38	105.80
36	1	2906	C	O5'-P-OP1	-6.04	100.26	105.70
1	6	16	G	O5'-P-OP2	-6.04	100.26	105.70
1	6	542	A	N1-C2-N3	6.04	132.32	129.30
36	5	963	G	C6-N1-C2	-6.04	121.48	125.10
36	5	1465	A	N1-C2-N3	6.04	132.32	129.30
1	2	307	G	N1-C6-O6	-6.04	116.28	119.90
36	1	75	G	O5'-P-OP1	6.04	117.95	110.70
36	1	589	A	N7-C8-N9	-6.04	110.78	113.80
36	1	641	C	C4-C5-C6	-6.04	114.38	117.40
36	1	1195	A	N9-C4-C5	6.04	108.22	105.80
36	1	1323	G	C8-N9-C1'	-6.04	119.15	127.00
36	1	1482	A	N7-C8-N9	6.04	116.82	113.80
36	1	3363	U	N3-C2-O2	-6.04	117.97	122.20
38	4	38	U	N3-C4-C5	-6.04	110.98	114.60
36	5	1323	G	O5'-P-OP2	-6.04	100.27	105.70
36	5	2641	U	N3-C2-O2	-6.04	117.97	122.20
36	5	2919	A	N3-C4-N9	-6.04	122.57	127.40
36	5	3036	G	C4-C5-N7	-6.04	108.38	110.80
36	1	2234	G	C8-N9-C4	6.04	108.81	106.40
36	1	2753	G	C4-C5-N7	-6.04	108.39	110.80
36	1	2770	G	OP2-P-O3'	6.04	118.48	105.20
36	5	774	G	C6-C5-N7	-6.04	126.78	130.40
36	5	1777	U	O5'-P-OP1	-6.04	100.27	105.70
38	8	113	U	N3-C4-C5	-6.04	110.98	114.60
36	1	1414	G	C5-N7-C8	-6.04	101.28	104.30
36	1	2818	U	P-O3'-C3'	6.04	126.94	119.70
36	1	3075	G	C2-N3-C4	-6.04	108.88	111.90
37	3	26	C	N1-C2-O2	6.04	122.52	118.90
49	M3	21	ARG	NE-CZ-NH2	-6.04	117.28	120.30
1	6	319	U	P-O3'-C3'	-6.04	112.46	119.70
14	c2	58	LEU	CA-CB-CG	6.04	129.18	115.30
36	5	1465	A	N7-C8-N9	6.04	116.82	113.80
36	5	1535	A	C5-C6-N1	6.04	120.72	117.70
36	5	3159	C	C2-N3-C4	-6.04	116.88	119.90
1	2	360	A	N3-C4-C5	6.03	131.02	126.80
1	2	1002	G	N3-C4-N9	6.03	129.62	126.00
1	2	1757	G	C6-N1-C2	-6.03	121.48	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	156	G	C8-N9-C1'	-6.03	119.16	127.00
36	1	645	A	O5'-P-OP2	6.03	117.94	110.70
36	1	1084	A	N7-C8-N9	6.03	116.82	113.80
36	1	1388	U	C5-C6-N1	-6.03	119.68	122.70
36	1	2409	G	N9-C4-C5	-6.03	102.99	105.40
36	1	2555	G	C8-N9-C4	6.03	108.81	106.40
36	1	2626	A	O4'-C1'-N9	-6.03	103.37	108.20
36	1	2772	C	C2-N3-C4	6.03	122.92	119.90
1	6	1698	G	P-O3'-C3'	6.03	126.94	119.70
34	sR	274	LEU	CA-CB-CG	-6.03	101.42	115.30
36	5	592	A	N9-C4-C5	-6.03	103.39	105.80
36	5	922	U	O5'-P-OP1	-6.03	100.27	105.70
36	5	2426	U	C6-N1-C2	-6.03	117.38	121.00
36	5	2646	C	O5'-P-OP1	6.03	117.94	110.70
36	5	3091	A	N7-C8-N9	6.03	116.82	113.80
36	5	433	A	C4-C5-C6	6.03	120.02	117.00
36	5	3242	G	C5-C6-O6	6.03	132.22	128.60
37	7	25	G	N1-C6-O6	-6.03	116.28	119.90
36	1	1142	G	C5-N7-C8	-6.03	101.28	104.30
36	1	1385	C	N3-C4-N4	-6.03	113.78	118.00
36	1	1450	G	C5-N7-C8	-6.03	101.28	104.30
36	1	1520	G	C4-C5-N7	6.03	113.21	110.80
36	1	2174	G	OP1-P-O3'	6.03	118.47	105.20
36	1	2714	G	C8-N9-C4	-6.03	103.99	106.40
36	1	2834	G	N1-C2-N3	6.03	127.52	123.90
36	1	3103	A	N1-C6-N6	-6.03	114.98	118.60
1	6	103	A	C6-C5-N7	-6.03	128.08	132.30
1	6	176	C	C2-N1-C1'	6.03	125.43	118.80
1	6	880	C	N3-C2-O2	-6.03	117.68	121.90
1	6	1601	G	N7-C8-N9	6.03	116.12	113.10
1	6	1773	C	C2-N3-C4	6.03	122.92	119.90
36	5	39	A	N1-C6-N6	-6.03	114.98	118.60
36	5	588	G	C8-N9-C1'	-6.03	119.16	127.00
36	5	1670	C	N1-C2-O2	6.03	122.52	118.90
36	5	2185	G	N1-C2-N3	6.03	127.52	123.90
36	5	2908	G	C6-C5-N7	-6.03	126.78	130.40
36	5	3362	A	C6-C5-N7	-6.03	128.08	132.30
1	2	1186	U	N3-C4-O4	-6.03	115.18	119.40
36	1	227	G	C4-C5-C6	6.03	122.42	118.80
36	1	2602	G	N1-C6-O6	-6.03	116.28	119.90
36	1	2635	A	N1-C2-N3	6.03	132.31	129.30
1	6	1552	U	N3-C4-O4	6.03	123.62	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1439	U	C5-C4-O4	-6.03	122.28	125.90
36	1	1166	G	C5-C6-N1	-6.03	108.49	111.50
36	1	2891	U	N3-C2-O2	6.03	126.42	122.20
36	1	2943	G	OP1-P-O3'	6.03	118.46	105.20
36	1	2971	A	N1-C6-N6	6.03	122.22	118.60
1	6	1300	A	C5-C6-N6	-6.03	118.88	123.70
36	5	1303	A	C6-C5-N7	-6.03	128.08	132.30
36	1	96	G	C2-N3-C4	-6.03	108.89	111.90
36	1	3028	G	O5'-P-OP2	6.03	117.93	110.70
1	6	1311	U	N1-C2-N3	6.03	118.52	114.90
36	5	1751	G	C8-N9-C4	6.03	108.81	106.40
36	5	2243	A	N1-C6-N6	-6.03	114.98	118.60
36	5	2952	G	C8-N9-C1'	-6.03	119.17	127.00
1	2	316	A	C2-N3-C4	-6.02	107.59	110.60
1	2	566	C	N3-C2-O2	6.02	126.12	121.90
36	1	375	A	C5-N7-C8	-6.02	100.89	103.90
36	1	2352	A	C6-N1-C2	-6.02	114.98	118.60
36	5	3215	A	N7-C8-N9	-6.02	110.79	113.80
1	2	373	G	N3-C4-C5	-6.02	125.59	128.60
1	2	1423	U	C2-N1-C1'	6.02	124.93	117.70
1	2	1744	A	N1-C2-N3	6.02	132.31	129.30
36	1	269	G	C5-C6-O6	6.02	132.21	128.60
36	1	373	A	N1-C2-N3	6.02	132.31	129.30
36	1	652	G	C2-N3-C4	6.02	114.91	111.90
36	1	1323	G	C4-N9-C1'	6.02	134.33	126.50
36	1	2757	U	O4'-C1'-N1	6.02	113.02	108.20
36	1	2824	G	C4-C5-C6	6.02	122.41	118.80
36	1	3044	G	N3-C4-N9	-6.02	122.39	126.00
36	1	3295	A	N1-C2-N3	6.02	132.31	129.30
1	6	194	U	N1-C2-O2	6.02	127.02	122.80
1	6	627	C	N3-C4-C5	6.02	124.31	121.90
1	6	1474	G	C4-C5-C6	6.02	122.41	118.80
36	5	1188	U	N1-C2-O2	-6.02	118.58	122.80
36	5	3073	A	C6-N1-C2	-6.02	114.99	118.60
1	2	987	G	N3-C4-N9	6.02	129.61	126.00
1	2	1203	A	C8-N9-C4	-6.02	103.39	105.80
1	6	1610	G	C6-N1-C2	-6.02	121.49	125.10
1	2	790	U	O5'-P-OP2	-6.02	100.28	105.70
1	2	993	A	C5-C6-N6	-6.02	118.88	123.70
36	1	218	G	N3-C4-C5	6.02	131.61	128.60
36	1	580	C	C2-N1-C1'	-6.02	112.18	118.80
36	1	2276	G	O5'-P-OP2	-6.02	100.28	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2281	A	O4'-C1'-N9	6.02	113.02	108.20
36	1	2414	G	N1-C2-N3	6.02	127.51	123.90
36	1	2956	A	C2-N3-C4	-6.02	107.59	110.60
36	5	966	U	C5-C6-N1	6.02	125.71	122.70
36	5	1188	U	C4-C5-C6	6.02	123.31	119.70
36	5	1220	U	C2-N1-C1'	6.02	124.92	117.70
36	5	1447	G	O4'-C1'-N9	6.02	113.02	108.20
36	5	2952	G	C4-C5-C6	6.02	122.41	118.80
36	5	2990	G	C2-N3-C4	6.02	114.91	111.90
37	7	59	U	N3-C2-O2	-6.02	117.99	122.20
1	2	787	G	C8-N9-C4	-6.02	103.99	106.40
36	1	652	G	C5-C6-N1	6.02	114.51	111.50
36	1	2857	C	N3-C4-C5	-6.02	119.49	121.90
36	1	2979	U	OP1-P-O3'	-6.02	91.96	105.20
36	5	1675	G	N3-C4-N9	6.02	129.61	126.00
36	5	2620	G	C5-C6-N1	-6.02	108.49	111.50
36	5	2626	A	C8-N9-C4	6.02	108.21	105.80
36	5	2877	G	C8-N9-C1'	-6.02	119.18	127.00
36	5	3243	A	O5'-P-OP2	6.02	117.92	110.70
36	1	2248	C	OP1-P-O3'	6.02	118.44	105.20
1	6	1592	A	N1-C2-N3	6.02	132.31	129.30
36	5	396	A	C8-N9-C4	6.02	108.21	105.80
36	5	1171	G	N1-C2-N2	6.02	121.61	116.20
36	5	1668	G	C8-N9-C4	-6.02	103.99	106.40
52	m6	14	HIS	CB-CA-C	-6.02	98.37	110.40
1	2	417	A	P-O3'-C3'	6.01	126.92	119.70
1	2	1471	A	O5'-P-OP1	-6.01	100.29	105.70
36	1	592	A	C5-C6-N6	-6.01	118.89	123.70
36	1	1466	G	C8-N9-C1'	-6.01	119.18	127.00
36	1	2805	G	C5-C6-N1	6.01	114.51	111.50
36	1	2924	U	N1-C2-N3	6.01	118.51	114.90
1	6	798	C	N3-C4-C5	6.01	124.31	121.90
1	6	972	G	N9-C4-C5	-6.01	103.00	105.40
1	6	1090	C	N3-C2-O2	-6.01	117.69	121.90
36	5	1001	G	N3-C2-N2	6.01	124.11	119.90
36	5	2151	C	N3-C2-O2	6.01	126.11	121.90
36	5	2647	A	N9-C1'-C2'	-6.01	105.38	112.00
36	5	2914	G	C5-C6-N1	-6.01	108.49	111.50
36	1	1796	G	C4-C5-N7	-6.01	108.39	110.80
36	1	2923	U	C6-N1-C1'	6.01	129.62	121.20
37	3	45	A	O5'-P-OP2	-6.01	100.29	105.70
1	6	1114	G	C2-N3-C4	6.01	114.91	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	361	A	C4-C5-C6	6.01	120.01	117.00
36	5	1503	A	C8-N9-C4	6.01	108.20	105.80
1	2	1620	C	O5'-P-OP1	-6.01	100.29	105.70
36	1	218	G	C4-N9-C1'	-6.01	118.69	126.50
36	1	812	G	N1-C2-N2	-6.01	110.79	116.20
36	1	1005	G	N1-C2-N3	6.01	127.51	123.90
36	1	1137	C	N1-C2-O2	6.01	122.51	118.90
36	1	1180	A	C2-N3-C4	-6.01	107.59	110.60
36	1	1461	A	N1-C6-N6	6.01	122.21	118.60
36	1	1525	G	N3-C4-N9	6.01	129.61	126.00
36	1	1617	G	C8-N9-C4	6.01	108.81	106.40
36	1	2201	G	N3-C4-C5	-6.01	125.59	128.60
36	1	2349	U	N3-C2-O2	6.01	126.41	122.20
36	1	2414	G	N3-C4-N9	-6.01	122.39	126.00
36	1	3259	U	C6-N1-C2	-6.01	117.39	121.00
36	1	3344	A	O4'-C1'-N9	6.01	113.01	108.20
1	6	1243	G	C8-N9-C1'	-6.01	119.18	127.00
1	6	1422	A	O5'-P-OP1	-6.01	100.29	105.70
36	5	188	U	C2-N1-C1'	6.01	124.92	117.70
36	5	1005	G	N1-C2-N3	6.01	127.51	123.90
36	5	1149	G	O5'-P-OP1	6.01	117.92	110.70
36	5	1367	G	OP2-P-O3'	6.01	118.42	105.20
36	5	2654	C	C5-C6-N1	6.01	124.01	121.00
36	5	2947	G	N1-C2-N2	6.01	121.61	116.20
36	5	3373	U	C4-C5-C6	6.01	123.31	119.70
37	7	106	U	N3-C4-O4	-6.01	115.19	119.40
1	2	1146	G	N7-C8-N9	6.01	116.11	113.10
1	2	1217	A	N7-C8-N9	6.01	116.80	113.80
1	2	1765	A	N1-C6-N6	-6.01	115.00	118.60
36	1	1339	C	C6-N1-C1'	6.01	128.01	120.80
36	1	2287	C	OP2-P-O3'	6.01	118.42	105.20
37	3	8	G	N3-C4-N9	-6.01	122.39	126.00
1	6	102	U	OP1-P-O3'	6.01	118.42	105.20
1	6	1003	A	N3-C4-C5	6.01	131.01	126.80
1	6	1126	G	OP1-P-OP2	-6.01	110.59	119.60
1	6	1564	U	C2-N3-C4	-6.01	123.39	127.00
36	5	581	U	N3-C4-O4	6.01	123.61	119.40
36	5	1224	C	C5-C4-N4	6.01	124.41	120.20
36	5	1514	G	N1-C6-O6	6.01	123.51	119.90
36	5	1882	G	C8-N9-C4	-6.01	104.00	106.40
36	5	2686	A	C6-N1-C2	-6.01	115.00	118.60
36	5	2882	U	OP1-P-O3'	6.01	118.42	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3232	G	C4-C5-N7	6.01	113.20	110.80
36	5	3283	U	N3-C4-O4	6.01	123.61	119.40
36	1	2720	G	O5'-P-OP2	-6.01	100.29	105.70
36	1	2847	A	C5-N7-C8	-6.01	100.90	103.90
36	1	3185	U	N3-C4-O4	6.01	123.61	119.40
36	1	3316	A	C4-C5-C6	-6.01	114.00	117.00
1	6	288	A	O5'-P-OP1	-6.01	100.29	105.70
36	5	1017	C	N1-C2-O2	6.01	122.50	118.90
36	5	1061	A	C6-N1-C2	-6.01	115.00	118.60
36	5	2296	A	N3-C4-N9	6.01	132.21	127.40
43	16	175	LYS	CD-CE-NZ	6.01	125.52	111.70
1	2	1112	G	O5'-P-OP1	6.01	117.91	110.70
1	2	1197	C	C5-C6-N1	6.01	124.00	121.00
36	1	76	G	C4-C5-C6	6.01	122.40	118.80
36	1	934	G	C4-N9-C1'	6.01	134.31	126.50
36	1	1379	G	C8-N9-C1'	-6.01	119.19	127.00
36	1	3079	U	C2-N1-C1'	-6.01	110.49	117.70
36	1	3112	G	N7-C8-N9	-6.01	110.10	113.10
36	1	3186	A	C5-C6-N6	6.01	128.50	123.70
48	M1	30	LEU	CA-CB-CG	6.01	129.11	115.30
36	5	834	U	C5-C4-O4	6.01	129.50	125.90
36	5	2147	A	C5-C6-N6	-6.01	118.89	123.70
36	5	2573	G	C6-C5-N7	-6.01	126.80	130.40
36	5	3147	G	C6-C5-N7	-6.01	126.80	130.40
36	5	3328	G	C5-C6-N1	6.01	114.50	111.50
36	1	41	G	N3-C4-N9	-6.00	122.40	126.00
36	1	318	A	C5-N7-C8	-6.00	100.90	103.90
36	1	1500	G	C5-C6-N1	6.00	114.50	111.50
36	1	2431	C	N3-C2-O2	-6.00	117.70	121.90
36	5	1000	C	O5'-P-OP2	-6.00	100.30	105.70
36	5	3314	A	N1-C6-N6	6.00	122.20	118.60
36	1	1419	A	N1-C2-N3	6.00	132.30	129.30
36	1	2693	C	C6-N1-C2	6.00	122.70	120.30
36	1	2824	G	C4-C5-N7	6.00	113.20	110.80
36	1	3126	C	C4-C5-C6	6.00	120.40	117.40
1	6	356	G	C5-C6-O6	-6.00	125.00	128.60
1	6	867	G	N1-C6-O6	-6.00	116.30	119.90
1	6	1740	A	C4-C5-C6	6.00	120.00	117.00
36	5	3059	G	N1-C6-O6	-6.00	116.30	119.90
1	2	158	U	P-O3'-C3'	6.00	126.90	119.70
36	1	2202	C	N3-C2-O2	-6.00	117.70	121.90
36	1	2677	G	C5-N7-C8	-6.00	101.30	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2809	C	N1-C2-O2	-6.00	115.30	118.90
36	1	2863	G	C8-N9-C4	6.00	108.80	106.40
36	1	3320	A	C8-N9-C4	-6.00	103.40	105.80
37	3	25	G	N1-C2-N2	-6.00	110.80	116.20
1	6	884	A	C4-C5-N7	6.00	113.70	110.70
1	6	1478	G	N7-C8-N9	6.00	116.10	113.10
20	c8	131	LEU	CA-CB-CG	-6.00	101.50	115.30
36	5	102	C	C5-C6-N1	-6.00	118.00	121.00
36	5	1452	A	OP1-P-OP2	6.00	128.60	119.60
36	5	2243	A	C5-N7-C8	6.00	106.90	103.90
36	5	3173	G	N1-C2-N2	-6.00	110.80	116.20
37	7	29	C	C6-N1-C2	6.00	122.70	120.30
38	8	44	A	C6-C5-N7	-6.00	128.10	132.30
1	2	160	C	O5'-P-OP1	-6.00	100.30	105.70
1	2	1651	A	C5-C6-N1	-6.00	114.70	117.70
36	5	282	G	C2-N3-C4	-6.00	108.90	111.90
36	5	3045	G	N1-C2-N3	6.00	127.50	123.90
36	5	3307	A	C6-C5-N7	-6.00	128.10	132.30
38	8	116	G	C6-C5-N7	-6.00	126.80	130.40
1	2	1668	G	C8-N9-C4	6.00	108.80	106.40
36	1	59	G	C6-C5-N7	-6.00	126.80	130.40
36	1	425	G	C5-C6-O6	6.00	132.20	128.60
36	1	869	G	N1-C2-N3	6.00	127.50	123.90
36	5	596	C	C6-N1-C1'	6.00	128.00	120.80
36	5	1180	A	O4'-C1'-N9	-6.00	103.40	108.20
36	5	2635	A	N7-C8-N9	6.00	116.80	113.80
36	5	2715	A	N3-C4-C5	-6.00	122.60	126.80
36	5	3315	G	C6-N1-C2	-6.00	121.50	125.10
36	1	92	G	C5-N7-C8	-6.00	101.30	104.30
36	1	1820	U	P-O3'-C3'	6.00	126.89	119.70
36	1	2334	U	OP1-P-OP2	6.00	128.59	119.60
36	1	2754	G	N1-C2-N2	-6.00	110.80	116.20
36	1	2842	U	O5'-P-OP2	6.00	117.90	110.70
36	1	3305	A	C6-N1-C2	-6.00	115.00	118.60
1	6	1288	G	N7-C8-N9	-6.00	110.10	113.10
36	5	350	C	C5-C6-N1	6.00	124.00	121.00
36	5	518	G	C5-C6-O6	-6.00	125.00	128.60
36	5	588	G	C4-N9-C1'	6.00	134.29	126.50
36	5	595	G	N7-C8-N9	6.00	116.10	113.10
36	5	1783	U	N1-C2-N3	6.00	118.50	114.90
36	5	1793	C	N3-C2-O2	6.00	126.10	121.90
36	5	2164	A	C5-C6-N6	6.00	128.50	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2391	G	OP1-P-OP2	6.00	128.59	119.60
36	5	3088	G	C2-N3-C4	-6.00	108.90	111.90
36	5	3374	U	C2-N3-C4	-6.00	123.40	127.00
36	1	41	G	C4-N9-C1'	-6.00	118.71	126.50
36	1	1468	A	C2-N3-C4	-6.00	107.60	110.60
36	1	1838	G	C8-N9-C1'	-6.00	119.21	127.00
1	6	389	G	N1-C6-O6	6.00	123.50	119.90
9	s7	64	VAL	C-N-CD	6.00	140.99	128.40
36	5	1847	A	C4-N9-C1'	-6.00	115.51	126.30
36	5	2603	G	C6-C5-N7	-6.00	126.80	130.40
36	5	3185	U	N3-C4-O4	6.00	123.60	119.40
1	2	178	U	N3-C4-O4	5.99	123.60	119.40
1	2	1051	G	P-O3'-C3'	5.99	126.89	119.70
36	1	211	A	C5-C6-N6	5.99	128.50	123.70
36	1	624	G	N1-C2-N2	-5.99	110.81	116.20
36	1	1387	G	N3-C4-C5	-5.99	125.60	128.60
1	6	921	U	O5'-P-OP1	5.99	117.89	110.70
1	6	1504	G	N1-C2-N3	5.99	127.50	123.90
1	6	1778	G	N7-C8-N9	5.99	116.10	113.10
36	5	67	A	N1-C6-N6	-5.99	115.00	118.60
36	5	214	G	C6-C5-N7	5.99	134.00	130.40
36	5	586	C	C4-C5-C6	5.99	120.40	117.40
36	5	632	G	C4-N9-C1'	5.99	134.29	126.50
36	5	710	A	N7-C8-N9	5.99	116.80	113.80
36	5	980	A	C5-C6-N1	5.99	120.70	117.70
36	5	2145	A	N1-C2-N3	5.99	132.30	129.30
36	5	2305	G	N3-C4-N9	-5.99	122.40	126.00
36	5	2872	A	O4'-C1'-N9	-5.99	103.41	108.20
36	5	3003	G	C6-C5-N7	5.99	134.00	130.40
1	2	620	A	N3-C4-N9	-5.99	122.61	127.40
36	1	28	C	C2-N1-C1'	-5.99	112.21	118.80
36	1	935	U	C2-N1-C1'	5.99	124.89	117.70
36	1	1323	G	N1-C2-N3	5.99	127.50	123.90
36	1	3270	U	C2-N1-C1'	-5.99	110.51	117.70
37	3	112	G	N1-C6-O6	-5.99	116.31	119.90
1	6	307	G	N1-C2-N3	5.99	127.50	123.90
36	5	1305	U	C5-C6-N1	-5.99	119.70	122.70
36	5	1366	A	C6-N1-C2	-5.99	115.00	118.60
36	5	2129	U	OP1-P-OP2	5.99	128.59	119.60
36	5	2195	C	C5-C6-N1	-5.99	118.00	121.00
1	2	425	A	C5-C6-N1	5.99	120.70	117.70
36	1	182	U	O4'-C1'-N1	5.99	112.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	213	A	N9-C4-C5	-5.99	103.40	105.80
36	1	278	U	C5-C4-O4	5.99	129.49	125.90
36	1	500	C	C4-C5-C6	5.99	120.39	117.40
36	1	1460	A	C6-N1-C2	-5.99	115.01	118.60
36	1	2229	A	C5-C6-N6	-5.99	118.91	123.70
36	1	2618	G	C4-C5-N7	-5.99	108.40	110.80
36	1	2801	A	C4-C5-N7	5.99	113.69	110.70
1	6	179	A	N7-C8-N9	5.99	116.80	113.80
1	6	1047	G	N3-C4-N9	5.99	129.59	126.00
36	5	983	A	C2-N3-C4	-5.99	107.61	110.60
36	5	1137	C	N3-C4-C5	-5.99	119.50	121.90
36	5	1323	G	C6-N1-C2	-5.99	121.50	125.10
36	5	2247	G	O5'-P-OP2	5.99	117.89	110.70
36	5	2377	G	C8-N9-C1'	5.99	134.79	127.00
36	5	2937	G	C4-C5-N7	5.99	113.20	110.80
36	5	3078	U	N1-C1'-C2'	-5.99	105.41	112.00
36	5	3091	A	O5'-P-OP2	-5.99	100.31	105.70
36	1	102	C	C2-N1-C1'	5.99	125.39	118.80
36	1	667	C	N3-C4-C5	-5.99	119.50	121.90
36	1	1115	G	N3-C4-C5	-5.99	125.61	128.60
36	1	1529	A	C5-C6-N6	5.99	128.49	123.70
36	1	1877	U	N3-C4-C5	5.99	118.19	114.60
36	1	2185	G	N3-C4-N9	5.99	129.59	126.00
36	1	2727	A	N1-C2-N3	5.99	132.29	129.30
36	1	2866	U	C6-N1-C2	-5.99	117.41	121.00
36	1	3328	G	C6-C5-N7	-5.99	126.81	130.40
1	6	952	A	O5'-P-OP2	-5.99	100.31	105.70
36	5	292	U	N3-C2-O2	5.99	126.39	122.20
36	5	575	G	C6-N1-C2	-5.99	121.51	125.10
36	5	666	A	C4-C5-C6	5.99	119.99	117.00
36	5	697	A	N7-C8-N9	-5.99	110.81	113.80
41	14	141	ARG	NE-CZ-NH2	-5.99	117.31	120.30
1	2	534	A	C8-N9-C4	5.99	108.19	105.80
36	1	272	G	C8-N9-C1'	5.99	134.78	127.00
36	1	654	C	C2-N3-C4	-5.99	116.91	119.90
36	1	719	U	P-O3'-C3'	-5.99	112.52	119.70
1	6	323	A	C5-N7-C8	-5.99	100.91	103.90
1	6	417	A	C8-N9-C4	-5.99	103.41	105.80
36	5	1002	A	C2-N3-C4	-5.99	107.61	110.60
36	5	2678	A	N3-C4-N9	-5.99	122.61	127.40
1	2	555	A	N1-C6-N6	-5.99	115.01	118.60
36	1	375	A	O5'-P-OP2	-5.99	100.31	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	867	G	C4-N9-C1'	5.99	134.28	126.50
36	1	1338	C	N3-C4-C5	5.99	124.29	121.90
36	1	1431	G	N3-C4-C5	-5.99	125.61	128.60
36	1	1725	C	N1-C2-N3	5.99	123.39	119.20
36	1	2287	C	C2-N3-C4	-5.99	116.91	119.90
36	1	2652	U	N3-C2-O2	5.99	126.39	122.20
36	1	3163	A	N1-C6-N6	5.99	122.19	118.60
36	1	3393	U	N3-C2-O2	5.99	126.39	122.20
1	6	405	C	OP2-P-O3'	5.99	118.37	105.20
36	5	863	C	OP1-P-OP2	5.99	128.58	119.60
36	5	910	G	C5-N7-C8	-5.99	101.31	104.30
36	5	1942	U	N3-C2-O2	-5.99	118.01	122.20
36	1	712	G	C4-C5-N7	-5.98	108.41	110.80
36	1	1453	A	N3-C4-C5	-5.98	122.61	126.80
36	1	1553	U	N1-C2-N3	5.98	118.49	114.90
36	1	2728	G	C8-N9-C4	-5.98	104.01	106.40
37	3	58	C	N1-C2-O2	5.98	122.49	118.90
36	5	1465	A	C8-N9-C4	-5.98	103.41	105.80
36	5	2606	G	N3-C4-N9	-5.98	122.41	126.00
1	2	340	U	O5'-P-OP1	-5.98	100.31	105.70
36	1	145	G	C5-C6-O6	-5.98	125.01	128.60
36	1	398	A	C4-C5-C6	-5.98	114.01	117.00
36	1	639	G	C4-C5-N7	5.98	113.19	110.80
36	1	790	U	N1-C2-O2	-5.98	118.61	122.80
36	1	2238	G	C4-N9-C1'	-5.98	118.72	126.50
36	1	2856	G	OP2-P-O3'	5.98	118.36	105.20
36	1	2946	A	C4-C5-C6	5.98	119.99	117.00
1	6	1185	U	N1-C2-O2	5.98	126.99	122.80
1	6	1478	G	N1-C2-N2	-5.98	110.82	116.20
36	5	108	A	N1-C6-N6	-5.98	115.01	118.60
36	5	802	C	C5-C6-N1	-5.98	118.01	121.00
36	5	986	U	OP2-P-O3'	5.98	118.36	105.20
36	5	1358	C	C6-N1-C2	5.98	122.69	120.30
36	5	2872	A	C2-N3-C4	5.98	113.59	110.60
36	5	2988	C	C4-C5-C6	5.98	120.39	117.40
36	5	3176	G	N1-C2-N3	5.98	127.49	123.90
38	8	53	A	N1-C2-N3	5.98	132.29	129.30
1	2	598	U	N3-C4-O4	5.98	123.59	119.40
36	1	50	U	C2-N1-C1'	5.98	124.88	117.70
36	1	354	U	N1-C2-O2	5.98	126.99	122.80
36	1	364	G	O5'-P-OP1	-5.98	100.32	105.70
36	1	1050	U	O5'-P-OP1	-5.98	100.32	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1149	G	OP1-P-O3'	5.98	118.36	105.20
36	1	1208	U	C4-C5-C6	-5.98	116.11	119.70
36	1	1380	G	C8-N9-C4	5.98	108.79	106.40
36	1	1791	C	N1-C2-O2	-5.98	115.31	118.90
36	1	2526	C	C6-N1-C2	-5.98	117.91	120.30
36	1	2674	A	C8-N9-C4	-5.98	103.41	105.80
1	6	795	U	N3-C2-O2	-5.98	118.01	122.20
1	6	923	A	C8-N9-C4	-5.98	103.41	105.80
1	6	1558	U	O5'-P-OP1	-5.98	100.32	105.70
1	6	1615	C	C2-N1-C1'	-5.98	112.22	118.80
36	5	638	C	N1-C2-N3	5.98	123.39	119.20
36	5	921	A	OP2-P-O3'	5.98	118.36	105.20
36	5	2842	U	C5-C4-O4	-5.98	122.31	125.90
36	5	3132	C	C5-C6-N1	-5.98	118.01	121.00
36	5	3330	A	C4-C5-C6	5.98	119.99	117.00
37	7	80	G	N1-C2-N3	5.98	127.49	123.90
52	m6	58	LEU	CA-CB-CG	5.98	129.06	115.30
1	2	467	G	N1-C6-O6	-5.98	116.31	119.90
36	1	983	A	C4-C5-C6	5.98	119.99	117.00
36	1	2295	A	N9-C4-C5	5.98	108.19	105.80
36	1	3047	U	N3-C2-O2	-5.98	118.02	122.20
36	5	64	G	OP2-P-O3'	5.98	118.36	105.20
36	5	1502	C	C5-C4-N4	-5.98	116.02	120.20
36	5	2234	G	N7-C8-N9	-5.98	110.11	113.10
36	5	2542	U	O4'-C1'-N1	5.98	112.98	108.20
1	2	590	C	C5-C6-N1	5.98	123.99	121.00
1	2	870	C	N3-C2-O2	5.98	126.08	121.90
1	2	1086	A	C8-N9-C4	-5.98	103.41	105.80
36	1	699	A	C4-N9-C1'	-5.98	115.54	126.30
36	1	783	A	N9-C4-C5	-5.98	103.41	105.80
36	1	1111	U	N3-C4-C5	5.98	118.19	114.60
36	1	1749	A	C8-N9-C4	-5.98	103.41	105.80
36	1	2697	A	C5-C6-N1	5.98	120.69	117.70
36	1	2893	C	N3-C2-O2	-5.98	117.72	121.90
1	6	331	A	C4-C5-C6	5.98	119.99	117.00
1	6	569	C	N3-C4-C5	5.98	124.29	121.90
1	6	879	G	C4-C5-N7	5.98	113.19	110.80
36	5	182	U	O4'-C1'-N1	5.98	112.98	108.20
36	5	223	U	C5-C4-O4	5.98	129.49	125.90
36	5	531	G	N3-C4-C5	-5.98	125.61	128.60
36	5	900	G	O5'-P-OP2	-5.98	100.32	105.70
36	5	1277	C	C2-N1-C1'	5.98	125.38	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1770	G	N9-C4-C5	-5.98	103.01	105.40
36	5	2402	A	C6-N1-C2	-5.98	115.01	118.60
36	5	2805	G	C8-N9-C4	-5.98	104.01	106.40
36	5	3138	U	N3-C2-O2	5.98	126.38	122.20
36	5	3282	U	N1-C2-O2	5.98	126.98	122.80
36	1	1136	A	C8-N9-C4	5.98	108.19	105.80
36	1	2291	A	C4-C5-C6	5.98	119.99	117.00
36	1	3067	C	C6-N1-C2	5.98	122.69	120.30
1	6	1031	U	N3-C4-O4	-5.98	115.22	119.40
1	6	1381	U	O5'-P-OP1	-5.98	100.32	105.70
36	5	1122	U	N3-C2-O2	-5.98	118.02	122.20
37	7	56	A	C8-N9-C4	-5.98	103.41	105.80
76	q0	79	GLU	C-N-CD	-5.98	107.45	120.60
1	2	1128	C	N1-C2-O2	-5.97	115.32	118.90
1	2	1428	G	O5'-P-OP1	-5.97	100.32	105.70
36	1	827	A	N1-C6-N6	-5.97	115.02	118.60
64	N8	133	LEU	CA-CB-CG	5.97	129.04	115.30
70	O4	10	ARG	NE-CZ-NH1	-5.97	117.31	120.30
36	5	789	A	N1-C6-N6	-5.97	115.02	118.60
36	5	793	C	N1-C2-O2	-5.97	115.31	118.90
36	5	909	G	C4-C5-C6	5.97	122.39	118.80
36	5	1198	C	N1-C2-N3	5.97	123.38	119.20
36	5	2977	G	C8-N9-C4	-5.97	104.01	106.40
36	5	2977	G	N1-C6-O6	5.97	123.48	119.90
37	7	57	G	C4-C5-N7	5.97	113.19	110.80
68	o2	41	VAL	CB-CA-C	-5.97	100.05	111.40
1	2	820	U	C6-N1-C2	-5.97	117.42	121.00
36	1	2893	C	C5-C6-N1	-5.97	118.01	121.00
36	1	2901	G	N1-C6-O6	-5.97	116.32	119.90
1	6	1631	A	N1-C6-N6	5.97	122.18	118.60
1	6	1656	U	C5-C4-O4	-5.97	122.32	125.90
1	6	1794	A	C8-N9-C4	5.97	108.19	105.80
36	5	651	G	N1-C2-N3	5.97	127.48	123.90
36	5	2790	A	C8-N9-C4	5.97	108.19	105.80
36	5	182	U	C6-N1-C1'	5.97	129.56	121.20
36	5	2844	C	N3-C4-C5	-5.97	119.51	121.90
36	5	2932	U	C6-N1-C1'	5.97	129.56	121.20
1	2	1086	A	C2-N3-C4	5.97	113.58	110.60
36	1	19	U	C6-N1-C2	-5.97	117.42	121.00
36	1	497	C	N1-C2-O2	-5.97	115.32	118.90
36	1	813	G	N1-C2-N3	5.97	127.48	123.90
36	1	1121	U	O5'-P-OP2	-5.97	100.33	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1387	G	N1-C2-N2	-5.97	110.83	116.20
36	1	2705	A	C6-C5-N7	5.97	136.48	132.30
37	3	74	C	N1-C2-O2	5.97	122.48	118.90
1	6	432	G	C2-N3-C4	5.97	114.89	111.90
1	6	1331	A	C8-N9-C4	-5.97	103.41	105.80
1	6	1440	C	C4-C5-C6	-5.97	114.42	117.40
36	5	388	G	C8-N9-C4	-5.97	104.01	106.40
36	5	918	C	N3-C4-C5	-5.97	119.51	121.90
36	5	1044	U	C6-N1-C1'	5.97	129.56	121.20
36	5	1077	U	C6-N1-C2	5.97	124.58	121.00
36	5	2948	C	C2-N1-C1'	5.97	125.37	118.80
36	5	3294	A	C8-N9-C4	-5.97	103.41	105.80
56	n0	82	ASP	CB-CG-OD1	-5.97	112.93	118.30
1	2	1445	G	O4'-C1'-N9	5.97	112.97	108.20
36	1	344	A	N3-C4-C5	5.97	130.98	126.80
37	3	99	G	C4-C5-N7	-5.97	108.41	110.80
38	4	17	A	C4-C5-C6	5.97	119.98	117.00
36	5	515	C	O4'-C1'-N1	-5.97	103.43	108.20
36	5	698	U	N1-C2-O2	-5.97	118.62	122.80
36	5	1753	G	N7-C8-N9	-5.97	110.12	113.10
36	5	2362	C	O5'-P-OP1	-5.97	100.33	105.70
36	5	2601	A	C5-C6-N6	-5.97	118.92	123.70
37	7	3	U	C5-C6-N1	-5.97	119.72	122.70
1	2	1486	G	C5-C6-O6	-5.97	125.02	128.60
1	2	1546	G	N3-C4-C5	-5.97	125.62	128.60
1	2	1638	G	C8-N9-C4	-5.97	104.01	106.40
36	1	1726	C	C6-N1-C2	-5.97	117.91	120.30
36	1	2110	G	N3-C4-C5	-5.97	125.62	128.60
36	1	2408	U	C4-C5-C6	5.97	123.28	119.70
36	1	2792	A	O5'-P-OP1	5.97	117.86	110.70
36	1	2991	A	O5'-P-OP1	-5.97	100.33	105.70
38	4	125	U	N1-C2-O2	5.97	126.98	122.80
41	L4	190	GLY	N-CA-C	5.97	128.02	113.10
1	6	356	G	N3-C4-C5	-5.97	125.62	128.60
1	6	746	A	C4-C5-C6	5.97	119.98	117.00
1	6	984	G	C8-N9-C4	5.97	108.79	106.40
36	5	393	U	C5-C6-N1	5.97	125.68	122.70
36	5	668	G	C5-N7-C8	5.97	107.28	104.30
36	5	936	A	C2-N3-C4	-5.97	107.62	110.60
36	5	1481	A	N1-C2-N3	5.97	132.28	129.30
36	5	2416	U	N3-C2-O2	-5.97	118.02	122.20
36	5	3071	U	O5'-P-OP2	-5.97	100.33	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3090	U	O5'-P-OP2	-5.97	100.33	105.70
1	2	43	A	C8-N9-C4	-5.96	103.42	105.80
1	2	1031	U	OP2-P-O3'	5.96	118.32	105.20
1	2	1284	C	C2-N1-C1'	-5.96	112.24	118.80
36	1	50	U	N3-C4-O4	5.96	123.58	119.40
36	1	2823	G	N3-C4-N9	-5.96	122.42	126.00
36	1	3010	U	C4-C5-C6	-5.96	116.12	119.70
1	6	1305	U	N1-C2-O2	-5.96	118.62	122.80
1	6	1521	G	C5-C6-N1	5.96	114.48	111.50
36	5	360	G	C4-C5-N7	-5.96	108.41	110.80
36	5	1339	C	C4-C5-C6	-5.96	114.42	117.40
36	5	2199	G	N3-C4-C5	-5.96	125.62	128.60
36	5	2303	A	C6-C5-N7	-5.96	128.12	132.30
36	5	2864	A	O4'-C1'-N9	-5.96	103.43	108.20
36	1	98	G	C6-N1-C2	-5.96	121.52	125.10
36	1	1054	A	OP1-P-OP2	-5.96	110.66	119.60
36	1	1374	G	C8-N9-C4	-5.96	104.02	106.40
36	1	3363	U	OP1-P-O3'	5.96	118.32	105.20
1	6	41	A	C5-C6-N6	5.96	128.47	123.70
36	5	2840	C	N1-C2-O2	5.96	122.48	118.90
1	2	1241	G	N7-C8-N9	5.96	116.08	113.10
36	1	2166	A	OP2-P-O3'	5.96	118.31	105.20
36	1	3010	U	C6-N1-C2	-5.96	117.42	121.00
36	1	3093	C	O4'-C1'-N1	5.96	112.97	108.20
1	6	922	G	N3-C4-N9	5.96	129.58	126.00
36	5	568	G	C5-C6-N1	5.96	114.48	111.50
36	5	688	G	C4-C5-C6	5.96	122.38	118.80
36	5	773	G	N7-C8-N9	5.96	116.08	113.10
36	5	961	C	N3-C2-O2	-5.96	117.73	121.90
36	5	1178	G	C6-N1-C2	-5.96	121.52	125.10
36	5	1289	G	C6-N1-C2	-5.96	121.52	125.10
36	5	1429	G	C6-C5-N7	-5.96	126.82	130.40
36	5	1853	U	N3-C2-O2	5.96	126.37	122.20
36	5	2973	G	N1-C6-O6	5.96	123.48	119.90
36	5	3118	C	N3-C4-C5	-5.96	119.52	121.90
36	5	3315	G	N3-C4-C5	-5.96	125.62	128.60
36	1	96	G	N7-C8-N9	-5.96	110.12	113.10
37	3	65	G	O4'-C1'-N9	-5.96	103.43	108.20
1	6	877	G	N9-C1'-C2'	-5.96	105.44	112.00
1	6	962	C	N3-C2-O2	5.96	126.07	121.90
1	6	1331	A	N1-C6-N6	-5.96	115.02	118.60
1	6	1337	A	N3-C4-C5	5.96	130.97	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1774	G	O5'-P-OP1	-5.96	100.34	105.70
35	sM	167	PRO	N-CA-CB	5.96	110.45	103.30
36	5	2671	A	N1-C6-N6	5.96	122.18	118.60
36	5	3275	U	N1-C2-O2	5.96	126.97	122.80
36	1	23	A	O5'-P-OP1	5.96	117.85	110.70
36	1	1354	G	N9-C4-C5	-5.96	103.02	105.40
1	6	1123	C	N1-C2-O2	-5.96	115.33	118.90
1	6	1592	A	N9-C4-C5	5.96	108.18	105.80
36	5	939	U	OP2-P-O3'	5.96	118.31	105.20
36	5	1207	G	N9-C4-C5	-5.96	103.02	105.40
36	5	1327	C	N3-C4-N4	-5.96	113.83	118.00
36	5	2618	G	C6-N1-C2	-5.96	121.53	125.10
36	5	2624	G	N7-C8-N9	5.96	116.08	113.10
36	1	1619	A	C4-C5-C6	-5.96	114.02	117.00
36	1	1697	A	C8-N9-C4	-5.96	103.42	105.80
36	1	2886	U	N1-C2-O2	-5.96	118.63	122.80
36	1	3189	G	C2-N3-C4	5.96	114.88	111.90
1	6	971	A	N1-C6-N6	5.96	122.17	118.60
1	6	1020	A	N1-C6-N6	-5.96	115.03	118.60
36	5	2317	A	O5'-P-OP1	5.96	117.85	110.70
1	2	376	C	N3-C4-C5	-5.96	119.52	121.90
1	2	763	G	N1-C6-O6	5.96	123.47	119.90
1	2	1672	G	C8-N9-C4	5.96	108.78	106.40
36	1	1323	G	N1-C2-N2	-5.96	110.84	116.20
36	1	1519	G	N7-C8-N9	5.96	116.08	113.10
36	5	1620	U	C6-N1-C2	-5.96	117.43	121.00
1	2	17	C	N3-C4-C5	5.95	124.28	121.90
1	2	575	C	C4-C5-C6	-5.95	114.42	117.40
1	2	1180	C	C6-N1-C2	-5.95	117.92	120.30
36	1	231	G	N9-C4-C5	-5.95	103.02	105.40
36	1	293	C	N1-C2-O2	-5.95	115.33	118.90
36	1	651	G	C4-C5-N7	5.95	113.18	110.80
36	1	943	U	OP1-P-O3'	5.95	118.30	105.20
36	1	2315	G	N3-C4-C5	-5.95	125.62	128.60
36	1	2410	U	C6-N1-C2	-5.95	117.43	121.00
36	1	2694	A	OP1-P-OP2	5.95	128.53	119.60
36	1	3031	G	N1-C2-N2	5.95	121.56	116.20
1	6	322	G	C6-C5-N7	-5.95	126.83	130.40
1	6	419	G	C4-C5-C6	-5.95	115.23	118.80
36	5	383	G	C8-N9-C4	5.95	108.78	106.40
36	5	1927	G	O5'-P-OP1	5.95	117.84	110.70
36	5	2160	G	N1-C6-O6	5.95	123.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	133	G	C4-N9-C1'	-5.95	118.76	126.50
36	1	1050	U	N1-C2-N3	5.95	118.47	114.90
36	1	1405	U	C5-C4-O4	5.95	129.47	125.90
36	1	1440	G	C4-C5-N7	5.95	113.18	110.80
36	1	2801	A	O5'-P-OP2	-5.95	100.34	105.70
36	5	1080	A	C5-N7-C8	5.95	106.88	103.90
37	7	99	G	N7-C8-N9	-5.95	110.12	113.10
38	8	13	A	O5'-P-OP2	-5.95	100.34	105.70
36	1	354	U	C2-N1-C1'	5.95	124.84	117.70
36	1	761	A	C4-C5-N7	5.95	113.68	110.70
36	1	2376	G	OP2-P-O3'	5.95	118.29	105.20
36	1	2910	A	C8-N9-C4	-5.95	103.42	105.80
36	1	2939	G	N3-C4-N9	5.95	129.57	126.00
1	6	584	C	C5-C6-N1	-5.95	118.03	121.00
1	6	1594	G	C8-N9-C4	5.95	108.78	106.40
28	d6	51	ARG	NE-CZ-NH2	5.95	123.28	120.30
36	5	235	A	N3-C4-N9	-5.95	122.64	127.40
36	5	256	G	C6-C5-N7	-5.95	126.83	130.40
36	5	1139	G	N9-C4-C5	5.95	107.78	105.40
36	5	2889	C	C4-C5-C6	-5.95	114.42	117.40
36	5	3143	C	N3-C4-C5	-5.95	119.52	121.90
38	8	85	G	N1-C6-O6	5.95	123.47	119.90
36	1	287	G	C4-N9-C1'	5.95	134.23	126.50
36	1	1390	A	C5-C6-N6	-5.95	118.94	123.70
36	1	1501	U	C5-C4-O4	-5.95	122.33	125.90
36	1	2418	G	N1-C6-O6	-5.95	116.33	119.90
36	1	3034	C	N1-C2-O2	5.95	122.47	118.90
36	1	3227	A	OP2-P-O3'	5.95	118.29	105.20
73	O7	11	ARG	NE-CZ-NH1	-5.95	117.33	120.30
36	5	345	G	O5'-P-OP1	-5.95	100.35	105.70
36	5	1505	C	OP2-P-O3'	5.95	118.29	105.20
36	5	3015	G	C8-N9-C4	5.95	108.78	106.40
36	5	3393	U	N1-C2-O2	-5.95	118.64	122.80
36	1	2997	G	C5-C6-O6	-5.95	125.03	128.60
1	6	1103	U	C5-C6-N1	-5.95	119.73	122.70
1	6	1747	G	N9-C4-C5	-5.95	103.02	105.40
36	5	591	G	N7-C8-N9	-5.95	110.13	113.10
36	5	961	C	N3-C4-C5	-5.95	119.52	121.90
1	2	1514	U	N1-C2-O2	5.95	126.96	122.80
1	2	1793	G	N3-C4-C5	-5.95	125.63	128.60
36	1	1171	G	C6-N1-C2	-5.95	121.53	125.10
36	1	1635	G	C4-C5-C6	5.95	122.37	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2290	C	C6-N1-C2	5.95	122.68	120.30
36	1	3322	A	N9-C4-C5	-5.95	103.42	105.80
1	6	624	G	C5-N7-C8	-5.95	101.33	104.30
1	6	778	G	C5-C6-N1	5.95	114.47	111.50
1	6	1542	G	N7-C8-N9	-5.95	110.13	113.10
1	6	1547	A	C4-C5-N7	5.95	113.67	110.70
36	5	112	U	O4'-C1'-N1	5.95	112.96	108.20
36	5	369	A	N7-C8-N9	5.95	116.77	113.80
36	5	844	G	N9-C1'-C2'	-5.95	105.46	112.00
36	5	1483	G	N1-C6-O6	5.95	123.47	119.90
36	5	1489	A	C2-N3-C4	-5.95	107.63	110.60
36	5	2370	G	N9-C4-C5	5.95	107.78	105.40
38	8	14	C	N1-C2-O2	-5.95	115.33	118.90
38	8	139	U	N1-C2-N3	5.95	118.47	114.90
36	1	2642	A	N7-C8-N9	-5.94	110.83	113.80
36	5	875	G	OP1-P-OP2	5.94	128.51	119.60
36	5	1737	U	N3-C4-O4	5.94	123.56	119.40
1	2	386	G	OP1-P-O3'	5.94	118.27	105.20
1	2	1198	G	O5'-P-OP1	-5.94	100.35	105.70
36	1	407	A	C8-N9-C1'	-5.94	117.00	127.70
64	N8	42	ARG	NE-CZ-NH2	-5.94	117.33	120.30
1	6	798	C	C6-N1-C2	5.94	122.68	120.30
1	6	1025	A	OP1-P-OP2	-5.94	110.69	119.60
1	6	1420	C	N3-C4-C5	-5.94	119.52	121.90
36	5	2335	G	C5-C6-O6	5.94	132.16	128.60
38	8	21	C	C6-N1-C2	-5.94	117.92	120.30
1	2	26	A	C5-N7-C8	-5.94	100.93	103.90
36	1	1887	A	N7-C8-N9	-5.94	110.83	113.80
36	1	1901	A	N9-C4-C5	5.94	108.18	105.80
36	1	2518	C	N1-C2-O2	-5.94	115.34	118.90
36	1	3006	A	C5-C6-N1	-5.94	114.73	117.70
36	1	3193	C	N3-C4-N4	5.94	122.16	118.00
1	6	1063	U	N3-C4-O4	5.94	123.56	119.40
1	6	1138	A	N3-C4-C5	5.94	130.96	126.80
1	6	1277	G	C6-C5-N7	-5.94	126.84	130.40
1	6	1550	A	C5-C6-N1	5.94	120.67	117.70
36	5	36	C	O5'-P-OP2	5.94	117.83	110.70
36	5	132	C	C4-C5-C6	5.94	120.37	117.40
36	5	299	G	O5'-P-OP1	-5.94	100.35	105.70
36	5	395	A	N7-C8-N9	5.94	116.77	113.80
36	5	514	G	C5-C6-N1	5.94	114.47	111.50
36	5	858	A	C8-N9-C4	-5.94	103.42	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1017	C	C6-N1-C1'	-5.94	113.67	120.80
36	5	1181	U	C5-C6-N1	-5.94	119.73	122.70
36	5	2279	A	C5-C6-N6	-5.94	118.95	123.70
36	5	3309	G	N1-C2-N3	5.94	127.47	123.90
36	1	1544	G	N9-C4-C5	-5.94	103.02	105.40
36	1	1838	G	C4-C5-C6	5.94	122.36	118.80
36	1	2305	G	C4-C5-N7	-5.94	108.42	110.80
36	1	2371	G	C4-C5-C6	5.94	122.36	118.80
1	6	948	G	N1-C6-O6	5.94	123.46	119.90
1	6	1668	G	N1-C2-N3	5.94	127.46	123.90
36	5	2397	A	C6-C5-N7	-5.94	128.14	132.30
36	5	2522	G	N9-C4-C5	-5.94	103.03	105.40
1	2	55	A	C5-C6-N6	-5.94	118.95	123.70
1	2	346	G	C5-C6-O6	5.94	132.16	128.60
36	1	913	A	C5-C6-N6	-5.94	118.95	123.70
36	1	1386	A	C6-C5-N7	5.94	136.46	132.30
36	5	1095	U	C5-C6-N1	5.94	125.67	122.70
36	5	1310	G	C8-N9-C4	-5.94	104.03	106.40
36	5	2121	G	N7-C8-N9	5.94	116.07	113.10
36	5	2167	A	N9-C4-C5	5.94	108.17	105.80
36	5	2897	A	N3-C4-C5	-5.94	122.64	126.80
36	1	1443	G	C5-N7-C8	-5.94	101.33	104.30
1	6	542	A	P-O3'-C3'	5.94	126.82	119.70
1	6	631	G	N1-C6-O6	5.94	123.46	119.90
1	6	1563	C	N3-C4-C5	5.94	124.27	121.90
36	5	713	U	N1-C2-N3	5.94	118.46	114.90
36	5	1079	A	O5'-P-OP1	-5.94	100.36	105.70
36	5	2627	C	O4'-C1'-N1	-5.94	103.45	108.20
36	5	3102	G	N1-C2-N3	5.94	127.46	123.90
1	2	104	A	N3-C4-C5	-5.93	122.65	126.80
1	2	552	G	C6-C5-N7	-5.93	126.84	130.40
36	1	212	G	C4-C5-C6	5.93	122.36	118.80
36	1	287	G	C4-C5-C6	5.93	122.36	118.80
36	1	533	A	OP2-P-O3'	5.93	118.25	105.20
36	1	1133	A	C5-C6-N6	-5.93	118.95	123.70
36	1	1213	G	N1-C6-O6	5.93	123.46	119.90
36	1	1909	A	N3-C4-N9	-5.93	122.65	127.40
36	1	3384	U	O5'-P-OP1	-5.93	100.36	105.70
1	6	796	A	C8-N9-C4	5.93	108.17	105.80
1	6	1172	G	C5-N7-C8	5.93	107.27	104.30
1	6	1520	U	N3-C2-O2	5.93	126.36	122.20
36	5	898	U	C2-N3-C4	-5.93	123.44	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1083	G	C5-C6-N1	5.93	114.47	111.50
36	5	2892	A	C2-N3-C4	-5.93	107.63	110.60
36	5	2945	G	C5-N7-C8	-5.93	101.33	104.30
36	5	3024	A	N3-C4-N9	-5.93	122.65	127.40
36	5	3039	C	C5-C4-N4	-5.93	116.05	120.20
1	2	404	G	C5-C6-N1	5.93	114.47	111.50
1	2	1119	G	N1-C2-N2	-5.93	110.86	116.20
36	1	94	G	C5-C6-O6	-5.93	125.04	128.60
36	1	96	G	N3-C2-N2	-5.93	115.75	119.90
36	1	1545	A	C6-C5-N7	-5.93	128.15	132.30
36	1	2518	C	N3-C4-C5	-5.93	119.53	121.90
36	1	3208	G	C8-N9-C4	5.93	108.77	106.40
1	6	325	G	OP2-P-O3'	5.93	118.25	105.20
1	6	370	A	C4-C5-N7	-5.93	107.73	110.70
1	6	466	U	C4-C5-C6	5.93	123.26	119.70
36	5	1476	G	N1-C6-O6	5.93	123.46	119.90
36	5	1905	G	C5-C6-O6	5.93	132.16	128.60
36	5	2397	A	C5-C6-N1	-5.93	114.73	117.70
36	5	2786	G	N1-C2-N3	5.93	127.46	123.90
36	5	3328	G	C5-C6-O6	-5.93	125.04	128.60
37	7	5	G	C8-N9-C4	5.93	108.77	106.40
38	8	5	U	N3-C4-O4	5.93	123.55	119.40
1	2	1436	A	N9-C4-C5	-5.93	103.43	105.80
36	1	518	G	N1-C2-N2	5.93	121.54	116.20
36	1	1449	A	N3-C4-C5	-5.93	122.65	126.80
36	1	1550	C	N3-C2-O2	-5.93	117.75	121.90
36	1	2387	A	C6-N1-C2	-5.93	115.04	118.60
1	6	363	G	N3-C4-N9	5.93	129.56	126.00
1	6	908	U	N1-C2-O2	5.93	126.95	122.80
1	6	1504	G	N1-C2-N2	-5.93	110.86	116.20
1	6	1660	A	C4-C5-C6	5.93	119.97	117.00
36	5	377	A	N9-C4-C5	5.93	108.17	105.80
36	5	787	G	N3-C4-C5	5.93	131.56	128.60
36	5	998	A	C5-C6-N6	5.93	128.44	123.70
36	1	218	G	O5'-P-OP1	-5.93	100.36	105.70
36	1	273	A	N7-C8-N9	-5.93	110.83	113.80
36	1	979	U	O5'-P-OP2	-5.93	100.36	105.70
36	1	1446	A	N7-C8-N9	5.93	116.77	113.80
36	1	2443	A	N1-C6-N6	5.93	122.16	118.60
36	1	3093	C	C6-N1-C1'	5.93	127.92	120.80
61	N5	34	LEU	CA-CB-CG	5.93	128.94	115.30
1	6	66	U	P-O3'-C3'	5.93	126.82	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	619	A	N9-C4-C5	5.93	108.17	105.80
1	6	1282	U	N1-C2-O2	-5.93	118.65	122.80
36	5	23	A	N1-C6-N6	5.93	122.16	118.60
36	5	823	C	C6-N1-C2	5.93	122.67	120.30
36	5	1542	G	C8-N9-C4	-5.93	104.03	106.40
36	5	2831	G	C5-C6-N1	-5.93	108.54	111.50
36	5	3068	U	N3-C2-O2	-5.93	118.05	122.20
37	7	106	U	N3-C4-C5	5.93	118.16	114.60
1	2	152	U	N3-C4-O4	-5.93	115.25	119.40
36	1	2209	U	N1-C2-N3	-5.93	111.34	114.90
36	1	2703	A	C5-N7-C8	5.93	106.86	103.90
38	4	56	G	N3-C4-N9	5.93	129.56	126.00
1	6	317	C	C6-N1-C2	5.93	122.67	120.30
1	6	610	G	N3-C4-C5	-5.93	125.64	128.60
36	5	1573	G	N1-C6-O6	-5.93	116.34	119.90
1	2	1561	U	C2-N1-C1'	5.93	124.81	117.70
36	1	887	G	C5-N7-C8	5.93	107.26	104.30
36	1	1405	U	N3-C2-O2	-5.93	118.05	122.20
36	1	2199	G	C5-C6-O6	-5.93	125.04	128.60
36	1	2337	C	N3-C4-N4	-5.93	113.85	118.00
36	1	2622	C	N1-C2-O2	5.93	122.46	118.90
36	1	2707	C	C2-N1-C1'	5.93	125.32	118.80
38	4	150	G	N3-C4-N9	5.93	129.56	126.00
1	6	25	C	C6-N1-C2	5.93	122.67	120.30
1	6	1100	G	C2-N3-C4	-5.93	108.94	111.90
1	6	1372	U	C6-N1-C2	-5.93	117.44	121.00
1	6	1398	U	C5-C4-O4	5.93	129.46	125.90
25	d3	73	ARG	NE-CZ-NH1	-5.93	117.34	120.30
36	5	1140	G	N1-C6-O6	-5.93	116.34	119.90
36	5	1672	U	C2-N1-C1'	-5.93	110.59	117.70
36	5	2122	G	O5'-P-OP2	-5.93	100.37	105.70
36	5	3204	C	C2-N3-C4	-5.93	116.94	119.90
36	1	227	G	C6-C5-N7	-5.92	126.85	130.40
36	1	870	G	OP2-P-O3'	5.92	118.23	105.20
36	1	934	G	C5-N7-C8	-5.92	101.34	104.30
1	6	17	C	C6-N1-C2	-5.92	117.93	120.30
1	6	89	G	N3-C2-N2	-5.92	115.75	119.90
1	6	326	G	C8-N9-C1'	-5.92	119.30	127.00
36	5	787	G	N1-C6-O6	5.92	123.45	119.90
36	5	941	G	N1-C6-O6	-5.92	116.34	119.90
36	5	1313	G	C6-C5-N7	-5.92	126.84	130.40
36	5	2421	U	C2-N3-C4	-5.92	123.44	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2766	U	O5'-P-OP2	-5.92	100.37	105.70
36	5	2768	U	C5-C6-N1	-5.92	119.74	122.70
36	5	2839	G	C5-C6-O6	5.92	132.16	128.60
37	7	95	A	N1-C6-N6	5.92	122.16	118.60
64	n8	73	LEU	CA-CB-CG	5.92	128.93	115.30
1	2	730	G	C8-N9-C4	-5.92	104.03	106.40
36	1	197	G	OP2-P-O3'	5.92	118.23	105.20
1	6	397	A	C4-C5-N7	5.92	113.66	110.70
1	6	1284	C	N3-C4-N4	5.92	122.15	118.00
36	5	944	C	C5-C4-N4	5.92	124.35	120.20
36	5	3210	A	N1-C2-N3	5.92	132.26	129.30
1	2	21	U	C5-C4-O4	-5.92	122.35	125.90
36	1	943	U	OP1-P-OP2	5.92	128.48	119.60
36	1	2198	A	P-O5'-C5'	-5.92	111.42	120.90
36	1	2603	G	N1-C6-O6	5.92	123.45	119.90
36	1	2718	U	C5-C4-O4	-5.92	122.35	125.90
37	3	92	A	N3-C4-C5	5.92	130.94	126.80
1	6	209	U	C5-C4-O4	-5.92	122.35	125.90
1	6	964	U	C6-N1-C2	5.92	124.55	121.00
1	6	1121	C	C6-N1-C2	-5.92	117.93	120.30
1	6	1781	A	C6-C5-N7	-5.92	128.16	132.30
36	5	568	G	N3-C4-C5	-5.92	125.64	128.60
36	5	608	A	N9-C4-C5	-5.92	103.43	105.80
36	5	695	C	C6-N1-C1'	-5.92	113.69	120.80
36	5	940	G	OP2-P-O3'	5.92	118.23	105.20
36	5	1321	G	N1-C2-N2	5.92	121.53	116.20
36	5	1724	U	O4'-C1'-N1	5.92	112.94	108.20
36	5	2327	U	C2-N3-C4	-5.92	123.45	127.00
36	5	2872	A	C5-C6-N1	5.92	120.66	117.70
36	5	3029	A	C5-N7-C8	-5.92	100.94	103.90
36	1	591	G	C4-C5-C6	5.92	122.35	118.80
36	1	2650	U	C5-C4-O4	5.92	129.45	125.90
36	1	2663	G	C5-C6-N1	5.92	114.46	111.50
38	4	97	A	C6-N1-C2	-5.92	115.05	118.60
51	M5	73	ARG	NE-CZ-NH1	-5.92	117.34	120.30
1	6	109	G	O5'-P-OP1	5.92	117.80	110.70
36	5	155	G	C8-N9-C4	5.92	108.77	106.40
36	5	654	C	N3-C4-C5	-5.92	119.53	121.90
36	5	854	G	N3-C4-N9	-5.92	122.45	126.00
36	1	402	A	C6-C5-N7	-5.92	128.16	132.30
36	1	1937	U	N3-C4-O4	-5.92	115.26	119.40
37	3	102	A	C5-C6-N6	-5.92	118.97	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	946	U	C6-N1-C2	-5.92	117.45	121.00
1	6	1214	U	C5-C4-O4	-5.92	122.35	125.90
1	6	1750	A	C4-C5-C6	5.92	119.96	117.00
36	5	567	G	C2-N3-C4	-5.92	108.94	111.90
36	5	1014	U	N1-C2-O2	5.92	126.94	122.80
36	5	2108	C	N3-C4-C5	-5.92	119.53	121.90
36	5	2402	A	C2-N3-C4	-5.92	107.64	110.60
36	5	2797	C	N3-C4-C5	-5.92	119.53	121.90
36	5	3124	G	N1-C2-N3	5.92	127.45	123.90
36	5	3393	U	C6-N1-C1'	5.92	129.49	121.20
38	8	97	A	N1-C2-N3	5.92	132.26	129.30
45	l8	48	ARG	NE-CZ-NH1	-5.92	117.34	120.30
62	n6	126	LEU	CA-CB-CG	5.92	128.91	115.30
1	2	19	A	C4-C5-N7	5.92	113.66	110.70
1	2	542	A	N1-C2-N3	5.92	132.26	129.30
1	2	637	C	C2-N3-C4	5.92	122.86	119.90
36	1	1093	A	N1-C6-N6	-5.92	115.05	118.60
36	1	3336	A	C8-N9-C4	-5.92	103.43	105.80
37	3	56	A	N3-C4-C5	5.92	130.94	126.80
1	6	43	A	N1-C6-N6	5.92	122.15	118.60
1	6	298	C	N1-C2-O2	5.92	122.45	118.90
36	5	585	A	O5'-P-OP2	-5.92	100.37	105.70
36	5	1832	C	N1-C2-O2	-5.92	115.35	118.90
36	5	2225	U	C6-N1-C2	-5.92	117.45	121.00
36	5	2517	U	OP1-P-O3'	5.92	118.21	105.20
36	5	2624	G	N3-C4-N9	5.92	129.55	126.00
36	5	3061	G	C4-C5-N7	5.92	113.17	110.80
36	5	3323	A	N7-C8-N9	5.92	116.76	113.80
39	l2	237	LEU	CA-CB-CG	-5.92	101.69	115.30
36	1	281	G	O4'-C1'-N9	5.92	112.93	108.20
36	1	2797	C	C4-C5-C6	5.92	120.36	117.40
36	5	1487	G	C8-N9-C4	-5.92	104.03	106.40
36	5	2140	U	N3-C2-O2	-5.92	118.06	122.20
1	2	1556	A	N1-C6-N6	-5.91	115.05	118.60
36	1	967	A	C4-C5-C6	5.91	119.96	117.00
36	1	1386	A	C4-C5-N7	-5.91	107.74	110.70
36	1	1560	G	O5'-P-OP2	-5.91	100.38	105.70
36	1	1728	G	C4-C5-C6	5.91	122.35	118.80
36	1	2762	A	N3-C4-C5	-5.91	122.66	126.80
36	1	2937	G	N1-C2-N2	5.91	121.52	116.20
36	1	3147	G	N7-C8-N9	-5.91	110.14	113.10
1	6	1117	U	O5'-P-OP2	-5.91	100.38	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1548	G	C8-N9-C4	5.91	108.77	106.40
1	6	1572	G	C5-C6-O6	-5.91	125.05	128.60
36	5	781	G	C8-N9-C4	-5.91	104.03	106.40
36	5	1073	U	N1-C2-O2	5.91	126.94	122.80
36	5	1195	A	N7-C8-N9	5.91	116.76	113.80
36	5	1344	G	N3-C4-C5	5.91	131.56	128.60
36	5	1383	G	C4-C5-C6	5.91	122.35	118.80
36	5	1465	A	C5-C6-N6	-5.91	118.97	123.70
36	5	2146	C	O5'-P-OP2	-5.91	100.38	105.70
36	5	2903	A	O5'-P-OP1	5.91	117.80	110.70
37	7	25	G	C6-N1-C2	-5.91	121.55	125.10
38	8	102	U	N3-C2-O2	-5.91	118.06	122.20
36	1	1323	G	C4-C5-C6	5.91	122.35	118.80
36	1	3020	U	C5-C6-N1	5.91	125.66	122.70
1	6	799	A	C2-N3-C4	-5.91	107.64	110.60
36	5	365	A	C6-C5-N7	-5.91	128.16	132.30
36	5	1302	A	C8-N9-C4	-5.91	103.44	105.80
36	5	2851	A	C5-N7-C8	5.91	106.86	103.90
36	5	3331	U	N3-C4-O4	5.91	123.54	119.40
1	2	1641	C	C5-C6-N1	-5.91	118.05	121.00
36	1	372	A	C6-N1-C2	-5.91	115.05	118.60
36	1	714	G	C4-N9-C1'	5.91	134.19	126.50
36	1	874	U	OP1-P-OP2	-5.91	110.73	119.60
36	1	1463	U	N1-C2-N3	5.91	118.45	114.90
36	1	2174	G	C8-N9-C4	-5.91	104.03	106.40
36	1	2303	A	C6-N1-C2	-5.91	115.05	118.60
36	1	2355	G	C5-C6-N1	-5.91	108.54	111.50
36	1	2722	U	C2-N1-C1'	5.91	124.79	117.70
36	1	3219	G	C8-N9-C1'	-5.91	119.31	127.00
37	3	17	A	N9-C4-C5	5.91	108.16	105.80
1	6	50	C	OP1-P-OP2	-5.91	110.73	119.60
1	6	1484	G	C2-N3-C4	5.91	114.86	111.90
36	5	51	A	C5-N7-C8	-5.91	100.94	103.90
36	5	660	A	C5-N7-C8	5.91	106.86	103.90
36	5	938	C	N3-C2-O2	5.91	126.04	121.90
36	5	2409	G	C6-C5-N7	-5.91	126.85	130.40
36	5	2548	C	C6-N1-C2	-5.91	117.94	120.30
36	5	2674	A	N7-C8-N9	-5.91	110.84	113.80
36	5	2920	U	C4-C5-C6	-5.91	116.15	119.70
36	1	189	G	C6-N1-C2	-5.91	121.55	125.10
36	1	225	C	N3-C2-O2	-5.91	117.77	121.90
36	1	405	U	N3-C4-C5	-5.91	111.06	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	633	C	N3-C2-O2	-5.91	117.76	121.90
36	1	1099	A	C4-C5-C6	5.91	119.95	117.00
36	1	1111	U	N3-C4-O4	-5.91	115.27	119.40
36	1	1378	U	C5-C4-O4	-5.91	122.36	125.90
36	1	1419	A	C5'-C4'-O4'	5.91	116.19	109.10
1	6	1180	C	N3-C4-N4	5.91	122.14	118.00
1	6	1264	G	N3-C4-C5	5.91	131.55	128.60
1	6	1542	G	N1-C2-N3	5.91	127.44	123.90
36	5	61	A	C5-N7-C8	5.91	106.86	103.90
36	5	1126	G	C2-N3-C4	-5.91	108.95	111.90
36	5	2978	U	O5'-P-OP1	5.91	117.79	110.70
37	7	60	G	O4'-C1'-N9	5.91	112.93	108.20
38	8	1	A	N3-C4-C5	-5.91	122.66	126.80
36	1	366	A	N9-C4-C5	5.91	108.16	105.80
36	1	1909	A	N3-C4-C5	5.91	130.94	126.80
36	1	2908	G	C5-C6-O6	-5.91	125.06	128.60
1	6	1753	A	C8-N9-C1'	-5.91	117.07	127.70
36	5	848	A	N7-C8-N9	5.91	116.75	113.80
1	2	1432	U	O4'-C1'-N1	5.91	112.92	108.20
1	2	1591	C	C5-C4-N4	5.91	124.33	120.20
1	2	1613	U	N3-C2-O2	-5.91	118.07	122.20
36	1	511	G	C5-C6-O6	-5.91	125.06	128.60
36	1	595	G	C4-C5-C6	5.91	122.34	118.80
36	1	595	G	N3-C4-N9	5.91	129.54	126.00
36	1	856	G	N1-C2-N2	-5.91	110.88	116.20
36	1	932	U	N3-C4-O4	-5.91	115.27	119.40
36	1	1157	G	C4-C5-C6	5.91	122.34	118.80
36	1	2443	A	C5-C6-N6	-5.91	118.97	123.70
36	1	2560	C	C6-N1-C2	-5.91	117.94	120.30
1	6	175	G	C8-N9-C1'	-5.91	119.32	127.00
1	6	603	U	O5'-P-OP1	-5.91	100.39	105.70
1	6	971	A	C4-C5-N7	5.91	113.65	110.70
1	6	1389	C	C6-N1-C2	-5.91	117.94	120.30
1	6	1645	G	N1-C2-N3	-5.91	120.36	123.90
36	5	94	G	C8-N9-C1'	5.91	134.68	127.00
36	5	1372	C	O5'-P-OP1	5.91	117.79	110.70
36	5	1653	G	C4-C5-N7	-5.91	108.44	110.80
36	5	2953	U	N1-C2-O2	-5.91	118.67	122.80
36	5	3260	G	N1-C2-N3	5.91	127.44	123.90
1	2	280	U	P-O3'-C3'	5.90	126.78	119.70
36	1	1525	G	N3-C4-C5	-5.90	125.65	128.60
36	1	1755	C	C5-C6-N1	5.90	123.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2731	U	OP2-P-O3'	5.90	118.19	105.20
36	1	3295	A	N1-C6-N6	-5.90	115.06	118.60
1	2	332	U	C6-N1-C2	5.90	124.54	121.00
1	2	1789	G	N1-C6-O6	5.90	123.44	119.90
36	1	375	A	C5-C6-N6	-5.90	118.98	123.70
36	1	517	G	C5-N7-C8	-5.90	101.35	104.30
36	1	989	A	C4-C5-C6	-5.90	114.05	117.00
36	1	1065	A	N1-C6-N6	-5.90	115.06	118.60
36	1	1147	G	C6-N1-C2	-5.90	121.56	125.10
36	1	1510	G	N3-C4-C5	-5.90	125.65	128.60
36	1	1789	G	C2-N3-C4	5.90	114.85	111.90
36	1	1900	A	C8-N9-C4	5.90	108.16	105.80
36	1	2623	G	C5-C6-N1	-5.90	108.55	111.50
36	1	2669	G	C6-C5-N7	5.90	133.94	130.40
38	4	53	A	N1-C6-N6	-5.90	115.06	118.60
52	M6	58	LEU	CA-CB-CG	5.90	128.87	115.30
1	6	310	C	N1-C2-N3	-5.90	115.07	119.20
1	6	576	G	C4-C5-C6	5.90	122.34	118.80
1	6	1518	C	O5'-P-OP1	-5.90	100.39	105.70
36	5	952	A	C5-C6-N6	5.90	128.42	123.70
36	5	1343	A	O5'-P-OP2	-5.90	100.39	105.70
36	5	2197	C	N3-C4-C5	5.90	124.26	121.90
36	5	2397	A	N7-C8-N9	5.90	116.75	113.80
36	5	2618	G	OP1-P-OP2	5.90	128.46	119.60
1	2	766	U	N1-C2-O2	5.90	126.93	122.80
36	1	53	G	C4-N9-C1'	5.90	134.17	126.50
36	1	146	U	C6-N1-C2	-5.90	117.46	121.00
36	1	1311	G	N3-C2-N2	-5.90	115.77	119.90
36	1	1718	G	N3-C4-N9	-5.90	122.46	126.00
36	1	2646	C	O5'-P-OP1	5.90	117.78	110.70
1	6	295	A	C8-N9-C4	5.90	108.16	105.80
1	6	453	U	C5-C6-N1	5.90	125.65	122.70
36	5	770	G	C8-N9-C4	-5.90	104.04	106.40
36	5	975	C	N1-C2-O2	-5.90	115.36	118.90
36	5	1322	U	C5-C4-O4	-5.90	122.36	125.90
36	5	1389	G	N1-C2-N2	-5.90	110.89	116.20
36	5	1395	G	O5'-P-OP1	-5.90	100.39	105.70
36	5	2165	G	C5-C6-O6	-5.90	125.06	128.60
36	5	2826	U	C2-N3-C4	-5.90	123.46	127.00
36	5	3117	C	C2-N1-C1'	5.90	125.29	118.80
1	2	937	C	C6-N1-C2	-5.90	117.94	120.30
1	2	1539	G	N1-C6-O6	5.90	123.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2392	C	N3-C4-C5	5.90	124.26	121.90
36	1	2794	G	C8-N9-C4	-5.90	104.04	106.40
36	1	2939	G	C2-N3-C4	5.90	114.85	111.90
37	3	2	G	O5'-P-OP1	-5.90	100.39	105.70
36	5	613	G	N3-C4-N9	-5.90	122.46	126.00
36	5	923	C	C5-C6-N1	-5.90	118.05	121.00
36	5	2549	G	C8-N9-C4	-5.90	104.04	106.40
36	5	2922	G	N9-C4-C5	5.90	107.76	105.40
36	5	3314	A	C6-C5-N7	-5.90	128.17	132.30
1	2	1768	G	N3-C4-C5	-5.90	125.65	128.60
36	1	105	C	C5-C6-N1	-5.90	118.05	121.00
36	1	613	G	C4-C5-N7	5.90	113.16	110.80
36	1	2949	U	C4-C5-C6	5.90	123.24	119.70
36	1	3177	G	C5-C6-N1	5.90	114.45	111.50
36	1	3285	C	N1-C2-O2	5.90	122.44	118.90
38	4	56	G	N1-C2-N2	-5.90	110.89	116.20
1	6	1130	G	C6-N1-C2	-5.90	121.56	125.10
36	5	290	G	O5'-P-OP1	-5.90	100.39	105.70
36	5	1307	G	O4'-C1'-N9	5.90	112.92	108.20
36	5	3219	G	N9-C4-C5	5.90	107.76	105.40
47	m0	156	ARG	NE-CZ-NH1	5.90	123.25	120.30
1	2	1409	G	N1-C6-O6	5.90	123.44	119.90
36	1	609	G	C8-N9-C4	5.90	108.76	106.40
36	1	1381	A	N1-C2-N3	5.90	132.25	129.30
38	4	109	A	C5-N7-C8	-5.90	100.95	103.90
1	6	154	G	C4-C5-N7	5.90	113.16	110.80
1	6	919	A	C5-C6-N6	-5.90	118.98	123.70
36	5	658	G	C6-C5-N7	-5.90	126.86	130.40
36	5	1379	G	O4'-C1'-N9	-5.90	103.48	108.20
36	5	1712	G	C5-C6-O6	5.90	132.14	128.60
36	5	1905	G	N7-C8-N9	-5.90	110.15	113.10
36	5	2285	C	C5-C4-N4	5.90	124.33	120.20
38	8	38	U	N3-C4-O4	-5.90	115.27	119.40
1	2	972	G	N1-C6-O6	5.89	123.44	119.90
1	2	1582	U	C5-C4-O4	-5.89	122.36	125.90
36	1	839	C	N3-C4-C5	5.89	124.26	121.90
36	1	1077	U	C2-N3-C4	-5.89	123.46	127.00
36	1	1362	G	C6-C5-N7	5.89	133.94	130.40
36	1	2165	G	N1-C6-O6	5.89	123.44	119.90
36	1	2372	A	N3-C4-N9	5.89	132.12	127.40
36	1	2619	G	OP1-P-O3'	5.89	118.17	105.20
36	1	3213	A	C6-C5-N7	-5.89	128.17	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1789	G	C8-N9-C1'	-5.89	119.34	127.00
36	5	52	A	OP1-P-OP2	5.89	128.44	119.60
36	5	695	C	N3-C4-C5	5.89	124.26	121.90
36	5	1319	G	N7-C8-N9	-5.89	110.15	113.10
36	5	2264	U	OP1-P-OP2	-5.89	110.76	119.60
1	2	311	U	C2-N1-C1'	5.89	124.77	117.70
36	1	415	G	C6-C5-N7	-5.89	126.86	130.40
36	1	421	G	C2-N3-C4	5.89	114.85	111.90
36	1	1005	G	C6-C5-N7	5.89	133.94	130.40
36	1	2093	A	C5-C6-N1	5.89	120.65	117.70
52	M6	78	ARG	NE-CZ-NH2	-5.89	117.35	120.30
1	6	371	G	C5-C6-N1	-5.89	108.55	111.50
1	6	1622	G	C5-N7-C8	-5.89	101.35	104.30
36	5	632	G	N3-C4-N9	5.89	129.53	126.00
36	5	1404	G	C4-C5-N7	5.89	113.16	110.80
36	5	1886	A	N1-C6-N6	-5.89	115.06	118.60
36	5	2827	U	C2-N3-C4	5.89	130.54	127.00
36	5	3344	A	N1-C6-N6	-5.89	115.06	118.60
36	1	1005	G	C5-C6-O6	5.89	132.13	128.60
36	1	2238	G	N1-C2-N2	5.89	121.50	116.20
36	1	2721	A	N7-C8-N9	5.89	116.75	113.80
36	1	2860	U	N1-C2-O2	5.89	126.92	122.80
1	6	1463	C	C2-N1-C1'	-5.89	112.32	118.80
1	6	1673	G	C5-C6-O6	-5.89	125.06	128.60
36	5	939	U	O5'-P-OP1	5.89	117.77	110.70
36	5	1120	A	OP1-P-O3'	-5.89	92.24	105.20
36	5	1166	G	N7-C8-N9	5.89	116.05	113.10
36	5	1475	A	N1-C2-N3	5.89	132.25	129.30
1	2	1389	C	N1-C2-O2	5.89	122.43	118.90
36	1	27	C	OP1-P-OP2	5.89	128.44	119.60
36	1	754	G	N3-C4-C5	5.89	131.54	128.60
36	1	1423	C	C6-N1-C2	-5.89	117.94	120.30
36	1	2371	G	C4-N9-C1'	5.89	134.16	126.50
36	1	2979	U	OP2-P-O3'	5.89	118.16	105.20
1	6	301	A	C6-N1-C2	-5.89	115.07	118.60
1	6	565	C	C5-C6-N1	-5.89	118.06	121.00
1	6	1395	G	C5-C6-O6	-5.89	125.07	128.60
36	5	783	A	C5-C6-N6	-5.89	118.99	123.70
36	5	812	G	N1-C2-N3	5.89	127.43	123.90
36	5	852	U	N1-C2-O2	5.89	126.92	122.80
36	5	1114	U	C2-N3-C4	5.89	130.53	127.00
36	5	2149	A	N3-C4-C5	5.89	130.92	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2316	G	C5-C6-O6	5.89	132.13	128.60
36	5	2616	C	N1-C2-N3	5.89	123.32	119.20
36	5	3200	G	N7-C8-N9	5.89	116.04	113.10
72	o6	45	ARG	NE-CZ-NH1	5.89	123.25	120.30
1	2	103	A	C6-C5-N7	-5.89	128.18	132.30
36	1	780	A	N7-C8-N9	5.89	116.74	113.80
36	1	1304	A	N1-C6-N6	-5.89	115.07	118.60
1	6	22	A	N7-C8-N9	5.89	116.74	113.80
1	6	156	A	C2-N3-C4	-5.89	107.66	110.60
36	5	2287	C	N1-C2-N3	5.89	123.32	119.20
36	5	2688	U	C5-C4-O4	-5.89	122.37	125.90
36	5	2927	C	N3-C4-C5	5.89	124.25	121.90
1	2	1598	U	N1-C2-O2	-5.89	118.68	122.80
36	1	290	G	C5-C6-O6	-5.89	125.07	128.60
36	1	1728	G	C8-N9-C1'	-5.89	119.35	127.00
36	1	2651	G	C8-N9-C4	5.89	108.75	106.40
36	1	3088	G	C5-N7-C8	5.89	107.24	104.30
36	1	3260	G	N1-C2-N3	5.89	127.43	123.90
1	6	95	G	C5-C6-O6	5.89	132.13	128.60
1	6	545	A	N1-C6-N6	-5.89	115.07	118.60
36	5	2247	G	C5-C6-N1	5.89	114.44	111.50
36	5	2282	U	P-O5'-C5'	-5.89	111.48	120.90
36	5	3380	U	N3-C4-C5	-5.89	111.07	114.60
38	8	2	A	N7-C8-N9	5.89	116.74	113.80
1	2	449	C	C6-N1-C1'	5.88	127.86	120.80
1	2	1015	U	C5-C6-N1	-5.88	119.76	122.70
1	2	1503	A	N1-C6-N6	5.88	122.13	118.60
1	2	1671	A	C8-N9-C4	5.88	108.15	105.80
1	2	1793	G	N3-C4-N9	5.88	129.53	126.00
36	1	197	G	C6-C5-N7	-5.88	126.87	130.40
36	1	610	G	C6-C5-N7	-5.88	126.87	130.40
36	1	1794	G	N7-C8-N9	-5.88	110.16	113.10
37	3	30	G	N3-C4-N9	5.88	129.53	126.00
1	6	1671	A	N9-C4-C5	5.88	108.15	105.80
36	5	647	A	C5-C6-N1	-5.88	114.76	117.70
36	5	820	A	N1-C2-N3	5.88	132.24	129.30
36	5	971	G	C5-N7-C8	5.88	107.24	104.30
36	5	1154	A	N9-C4-C5	5.88	108.15	105.80
36	5	2971	A	C5-C6-N6	5.88	128.41	123.70
1	2	1739	C	C6-N1-C2	5.88	122.65	120.30
36	1	2866	U	C2-N3-C4	-5.88	123.47	127.00
37	3	30	G	OP1-P-O3'	5.88	118.14	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1316	C	C4-C5-C6	5.88	120.34	117.40
36	5	1839	A	O5'-P-OP2	5.88	117.76	110.70
36	5	1906	G	O5'-P-OP2	-5.88	100.41	105.70
36	5	2832	C	O5'-P-OP1	-5.88	100.41	105.70
36	5	2977	G	C6-C5-N7	-5.88	126.87	130.40
1	2	1431	C	C6-N1-C1'	-5.88	113.74	120.80
36	1	419	G	N1-C2-N2	-5.88	110.91	116.20
36	1	601	U	C2-N1-C1'	5.88	124.76	117.70
36	1	669	U	C5-C4-O4	-5.88	122.37	125.90
36	1	2102	U	C5-C6-N1	-5.88	119.76	122.70
36	1	2554	A	N1-C6-N6	-5.88	115.07	118.60
36	1	2829	U	C5-C4-O4	5.88	129.43	125.90
1	6	926	A	C2-N3-C4	-5.88	107.66	110.60
1	6	972	G	C4-C5-C6	5.88	122.33	118.80
1	6	1110	G	C6-C5-N7	-5.88	126.87	130.40
36	5	2518	C	C5-C4-N4	-5.88	116.08	120.20
36	5	3062	G	C6-C5-N7	-5.88	126.87	130.40
36	5	3188	G	C4-N9-C1'	5.88	134.15	126.50
36	5	3228	C	P-O3'-C3'	5.88	126.76	119.70
36	1	1604	G	C8-N9-C1'	-5.88	119.36	127.00
36	1	2633	U	N3-C4-C5	-5.88	111.07	114.60
36	5	2403	G	OP1-P-O3'	5.88	118.14	105.20
36	5	2630	C	N1-C2-O2	5.88	122.43	118.90
36	5	3309	G	OP1-P-OP2	-5.88	110.78	119.60
1	2	392	G	C5-C6-O6	-5.88	125.07	128.60
36	1	941	G	C5-N7-C8	5.88	107.24	104.30
36	1	1313	G	C2-N3-C4	-5.88	108.96	111.90
36	1	1385	C	N1-C2-O2	-5.88	115.37	118.90
36	1	1592	G	C8-N9-C1'	-5.88	119.36	127.00
36	1	2820	A	OP1-P-OP2	-5.88	110.78	119.60
36	1	3353	G	OP2-P-O3'	5.88	118.13	105.20
1	6	34	G	C2-N3-C4	-5.88	108.96	111.90
1	6	670	U	N3-C2-O2	-5.88	118.08	122.20
1	6	1786	G	OP2-P-O3'	5.88	118.13	105.20
36	5	294	U	C2-N1-C1'	-5.88	110.64	117.70
36	5	978	G	C8-N9-C1'	5.88	134.64	127.00
36	5	1875	G	N3-C4-C5	5.88	131.54	128.60
36	5	3003	G	N1-C6-O6	-5.88	116.37	119.90
1	2	1498	G	C4-N9-C1'	5.88	134.14	126.50
36	1	609	G	C4-C5-C6	5.88	122.33	118.80
36	1	1443	G	C2-N3-C4	-5.88	108.96	111.90
36	1	1499	C	C2-N3-C4	5.88	122.84	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	755	A	C6-C5-N7	-5.88	128.19	132.30
1	6	1445	G	N1-C6-O6	5.88	123.43	119.90
36	5	68	C	C5-C6-N1	5.88	123.94	121.00
36	5	1286	A	N7-C8-N9	-5.88	110.86	113.80
36	5	1304	A	C6-N1-C2	-5.88	115.07	118.60
36	5	1322	U	O5'-P-OP2	5.88	117.75	110.70
36	5	1729	A	O4'-C1'-N9	-5.88	103.50	108.20
36	5	2201	G	C8-N9-C4	5.88	108.75	106.40
36	5	2792	A	N7-C8-N9	5.88	116.74	113.80
36	5	3197	G	OP1-P-OP2	-5.88	110.79	119.60
1	2	1651	A	C2-N3-C4	-5.88	107.66	110.60
36	1	624	G	N3-C4-N9	5.88	129.53	126.00
36	1	2132	C	O5'-P-OP2	-5.88	100.41	105.70
36	1	2984	C	N1-C2-N3	5.88	123.31	119.20
36	1	3210	A	N9-C4-C5	5.88	108.15	105.80
36	1	3295	A	C5-C6-N6	5.88	128.40	123.70
37	3	117	A	C2-N3-C4	-5.88	107.66	110.60
38	4	41	A	C5-C6-N1	5.88	120.64	117.70
36	5	1906	G	O4'-C1'-N9	-5.88	103.50	108.20
36	5	2877	G	N3-C2-N2	5.88	124.01	119.90
36	5	3060	C	N3-C4-N4	5.88	122.11	118.00
1	2	1358	G	N7-C8-N9	-5.87	110.16	113.10
1	2	1430	U	N3-C4-C5	-5.87	111.08	114.60
36	1	727	G	C6-N1-C2	-5.87	121.58	125.10
36	1	1446	A	C4-C5-C6	5.87	119.94	117.00
36	1	1610	G	C5-C6-N1	-5.87	108.56	111.50
36	1	2366	C	N3-C4-C5	5.87	124.25	121.90
36	1	2960	C	N1-C2-N3	5.87	123.31	119.20
36	1	3056	U	N3-C2-O2	5.87	126.31	122.20
1	6	440	U	N1-C2-N3	5.87	118.42	114.90
1	6	1002	G	C5-C6-N1	5.87	114.44	111.50
1	6	1786	G	C5-C6-O6	5.87	132.12	128.60
36	5	339	C	O5'-P-OP2	-5.87	100.41	105.70
36	5	656	A	N1-C6-N6	5.87	122.12	118.60
36	5	2642	A	N1-C6-N6	5.87	122.12	118.60
36	5	3150	A	N9-C4-C5	-5.87	103.45	105.80
1	2	25	C	C2-N3-C4	-5.87	116.96	119.90
1	2	191	C	C6-N1-C1'	5.87	127.84	120.80
1	2	1290	U	O4'-C1'-N1	5.87	112.90	108.20
36	1	715	A	C5-N7-C8	-5.87	100.96	103.90
36	1	1065	A	C6-N1-C2	-5.87	115.08	118.60
36	1	1296	C	O5'-P-OP1	5.87	117.75	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2384	A	N3-C4-C5	-5.87	122.69	126.80
36	1	2738	A	N7-C8-N9	5.87	116.73	113.80
36	1	3388	C	N3-C2-O2	-5.87	117.79	121.90
1	6	1615	C	N1-C2-O2	-5.87	115.38	118.90
36	5	1143	A	C5-N7-C8	-5.87	100.96	103.90
36	5	3330	A	N3-C4-N9	5.87	132.10	127.40
36	5	3361	G	C5-C6-O6	-5.87	125.08	128.60
36	1	670	C	C6-N1-C2	5.87	122.65	120.30
36	1	916	G	N9-C4-C5	5.87	107.75	105.40
36	1	1345	G	C5-N7-C8	-5.87	101.36	104.30
1	6	1125	A	OP1-P-OP2	5.87	128.41	119.60
4	s2	233	GLN	C-N-CD	5.87	140.73	128.40
13	c1	5	LEU	CA-CB-CG	5.87	128.80	115.30
36	5	101	G	N1-C6-O6	5.87	123.42	119.90
36	5	1345	G	N3-C4-C5	5.87	131.53	128.60
36	5	2407	C	C5-C6-N1	5.87	123.94	121.00
1	2	548	G	N7-C8-N9	5.87	116.03	113.10
1	2	797	G	N3-C4-C5	5.87	131.53	128.60
36	1	129	U	N3-C4-O4	5.87	123.51	119.40
36	1	1405	U	N3-C4-C5	5.87	118.12	114.60
36	1	1466	G	C4-N9-C1'	5.87	134.13	126.50
36	1	2614	G	C6-N1-C2	-5.87	121.58	125.10
36	1	2729	U	C6-N1-C2	5.87	124.52	121.00
36	1	3143	C	C6-N1-C1'	-5.87	113.76	120.80
1	6	297	U	C5-C6-N1	5.87	125.63	122.70
1	6	773	C	O5'-P-OP2	-5.87	100.42	105.70
1	6	887	A	C5-C6-N1	-5.87	114.77	117.70
1	6	1567	U	C2-N1-C1'	5.87	124.74	117.70
1	6	1637	C	O4'-C1'-N1	-5.87	103.50	108.20
36	5	882	A	P-O3'-C3'	5.87	126.74	119.70
36	5	1313	G	C2-N3-C4	5.87	114.83	111.90
36	5	1615	C	C5-C4-N4	5.87	124.31	120.20
36	5	2917	G	C5-N7-C8	-5.87	101.36	104.30
36	5	3146	G	C8-N9-C1'	-5.87	119.37	127.00
36	1	2793	G	C8-N9-C4	-5.87	104.05	106.40
36	1	3134	A	N7-C8-N9	5.87	116.73	113.80
36	5	2103	U	N3-C2-O2	-5.87	118.09	122.20
36	5	3269	U	C5-C6-N1	-5.87	119.77	122.70
1	2	311	U	C4-C5-C6	5.87	123.22	119.70
36	1	28	C	C2-N3-C4	-5.87	116.97	119.90
36	1	301	G	N9-C4-C5	5.87	107.75	105.40
36	1	1100	U	N3-C2-O2	-5.87	118.09	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1304	A	N3-C4-N9	-5.87	122.71	127.40
36	1	1551	C	C2-N1-C1'	-5.87	112.35	118.80
36	1	1824	U	C6-N1-C2	-5.87	117.48	121.00
36	1	2216	G	C5-C6-O6	-5.87	125.08	128.60
36	1	2398	A	C4-C5-C6	5.87	119.93	117.00
36	1	2761	G	O5'-P-OP2	-5.87	100.42	105.70
36	1	2938	G	N1-C6-O6	5.87	123.42	119.90
36	1	3083	G	C5-C6-O6	-5.87	125.08	128.60
51	M5	116	LEU	CA-CB-CG	-5.87	101.81	115.30
70	O4	8	ARG	NE-CZ-NH2	-5.87	117.37	120.30
1	6	913	G	C8-N9-C4	-5.87	104.05	106.40
1	6	1746	A	N3-C4-N9	-5.87	122.71	127.40
36	5	1500	G	N1-C6-O6	5.87	123.42	119.90
36	5	3139	A	N1-C2-N3	5.87	132.23	129.30
37	7	10	C	N3-C4-C5	5.87	124.25	121.90
1	2	353	A	C2-N3-C4	-5.86	107.67	110.60
1	2	1010	C	C2-N1-C1'	-5.86	112.35	118.80
1	2	1324	G	N3-C2-N2	-5.86	115.80	119.90
1	2	1433	G	N3-C4-C5	-5.86	125.67	128.60
1	2	1656	U	N3-C4-O4	5.86	123.50	119.40
36	1	97	U	C2-N3-C4	-5.86	123.48	127.00
36	1	1191	U	N3-C4-C5	5.86	118.12	114.60
36	1	1411	C	N3-C4-N4	-5.86	113.89	118.00
36	1	1907	C	C2-N3-C4	-5.86	116.97	119.90
36	1	2614	G	N3-C2-N2	5.86	124.00	119.90
36	1	2794	G	C4-C5-N7	-5.86	108.45	110.80
36	1	3103	A	C5-C6-N1	5.86	120.63	117.70
1	6	154	G	N1-C6-O6	5.86	123.42	119.90
1	6	351	C	C4-C5-C6	-5.86	114.47	117.40
1	6	589	C	N1-C2-O2	-5.86	115.38	118.90
1	6	1642	G	C4-C5-C6	-5.86	115.28	118.80
1	6	1746	A	C5-C6-N6	5.86	128.39	123.70
36	5	112	U	C6-N1-C2	-5.86	117.48	121.00
36	5	717	C	C2-N1-C1'	5.86	125.25	118.80
36	5	959	C	O4'-C1'-N1	5.86	112.89	108.20
36	5	1048	A	N9-C4-C5	5.86	108.14	105.80
36	5	1118	C	OP1-P-OP2	-5.86	110.81	119.60
36	5	1590	G	O4'-C1'-N9	-5.86	103.51	108.20
36	5	1834	U	N1-C2-N3	5.86	118.42	114.90
36	5	1881	A	C6-C5-N7	-5.86	128.19	132.30
36	5	2367	A	OP1-P-OP2	5.86	128.39	119.60
36	5	2991	A	C4-C5-N7	-5.86	107.77	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3058	U	C5-C4-O4	5.86	129.42	125.90
36	5	3150	A	C4-C5-N7	5.86	113.63	110.70
37	7	84	A	C6-C5-N7	-5.86	128.19	132.30
37	7	95	A	C6-C5-N7	-5.86	128.20	132.30
1	2	978	A	C2-N3-C4	5.86	113.53	110.60
36	1	2181	C	N3-C2-O2	-5.86	117.80	121.90
36	1	2778	G	N1-C2-N3	5.86	127.42	123.90
36	5	1668	G	C6-C5-N7	-5.86	126.88	130.40
1	2	543	C	C6-N1-C1'	-5.86	113.77	120.80
1	2	704	C	N1-C2-O2	5.86	122.42	118.90
36	1	48	A	N9-C4-C5	5.86	108.14	105.80
36	1	62	A	C5-C6-N1	-5.86	114.77	117.70
36	1	648	C	N1-C2-N3	5.86	123.30	119.20
36	1	929	A	C6-C5-N7	-5.86	128.20	132.30
36	1	2143	A	N1-C6-N6	5.86	122.12	118.60
36	1	2370	G	C5-C6-O6	5.86	132.12	128.60
36	1	2768	U	O5'-P-OP2	-5.86	100.43	105.70
36	1	3383	G	C4-N9-C1'	-5.86	118.88	126.50
1	6	96	G	C4-N9-C1'	5.86	134.12	126.50
1	6	575	C	C2-N3-C4	-5.86	116.97	119.90
1	6	1130	G	C2-N3-C4	5.86	114.83	111.90
1	6	1390	U	O4'-C1'-N1	5.86	112.89	108.20
1	6	1502	G	O5'-P-OP2	-5.86	100.43	105.70
36	5	820	A	C6-N1-C2	-5.86	115.08	118.60
36	5	856	G	C8-N9-C4	-5.86	104.06	106.40
36	5	1518	U	OP2-P-O3'	5.86	118.09	105.20
36	5	2130	G	C8-N9-C1'	5.86	134.62	127.00
36	5	2657	A	C5-C6-N1	5.86	120.63	117.70
36	5	3393	U	N1-C2-N3	5.86	118.42	114.90
38	8	19	C	N3-C2-O2	-5.86	117.80	121.90
1	2	379	U	N1-C2-O2	5.86	126.90	122.80
36	1	19	U	C5-C4-O4	5.86	129.41	125.90
36	1	677	A	C8-N9-C4	5.86	108.14	105.80
36	1	1550	C	N1-C2-O2	5.86	122.42	118.90
36	1	2779	A	N1-C6-N6	5.86	122.12	118.60
36	5	787	G	C4-C5-C6	5.86	122.32	118.80
36	5	1134	G	N9-C4-C5	5.86	107.74	105.40
36	5	2734	A	OP1-P-OP2	-5.86	110.81	119.60
36	1	731	U	N3-C4-C5	-5.86	111.08	114.60
36	1	1105	A	C8-N9-C4	5.86	108.14	105.80
36	1	2756	C	C2-N3-C4	-5.86	116.97	119.90
36	1	3184	A	C6-N1-C2	-5.86	115.08	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	3	78	U	C2-N1-C1'	5.86	124.73	117.70
36	5	2247	G	C8-N9-C4	5.86	108.74	106.40
36	5	2912	G	N1-C2-N3	5.86	127.41	123.90
1	2	361	C	N1-C2-O2	-5.86	115.39	118.90
1	2	804	A	C5-C6-N1	-5.86	114.77	117.70
1	2	991	G	N1-C6-O6	-5.86	116.39	119.90
1	2	993	A	C6-C5-N7	-5.86	128.20	132.30
1	2	1780	G	C6-C5-N7	-5.86	126.89	130.40
36	1	232	G	C4-C5-N7	-5.86	108.46	110.80
36	1	1403	C	OP1-P-O3'	5.86	118.08	105.20
36	1	1453	A	N3-C4-N9	5.86	132.09	127.40
36	1	3120	C	O5'-P-OP2	-5.86	100.43	105.70
37	3	29	C	N3-C2-O2	-5.86	117.80	121.90
37	3	89	G	N1-C6-O6	5.86	123.41	119.90
38	4	12	A	N1-C2-N3	-5.86	126.37	129.30
38	4	52	A	O5'-P-OP1	-5.86	100.43	105.70
36	5	1150	A	O5'-P-OP1	5.86	117.73	110.70
36	5	2691	A	C5-C6-N6	-5.86	119.02	123.70
36	5	2867	C	O5'-P-OP1	-5.86	100.43	105.70
1	2	159	U	OP1-P-OP2	-5.85	110.82	119.60
1	2	475	A	N7-C8-N9	-5.85	110.87	113.80
36	1	1115	G	N7-C8-N9	5.85	116.03	113.10
36	1	2119	A	C5-N7-C8	-5.85	100.97	103.90
36	1	2608	G	C6-C5-N7	-5.85	126.89	130.40
36	1	2832	C	C6-N1-C2	5.85	122.64	120.30
36	1	3124	G	C8-N9-C4	-5.85	104.06	106.40
1	6	553	G	N9-C4-C5	-5.85	103.06	105.40
1	6	670	U	N1-C2-O2	5.85	126.90	122.80
36	5	591	G	OP1-P-O3'	5.85	118.08	105.20
36	5	805	G	C8-N9-C4	5.85	108.74	106.40
36	5	1470	U	C2-N1-C1'	5.85	124.72	117.70
36	5	2378	C	OP1-P-OP2	-5.85	110.82	119.60
36	5	2607	G	C4-C5-C6	5.85	122.31	118.80
1	2	162	A	N3-C4-C5	-5.85	122.70	126.80
1	2	361	C	C6-N1-C1'	5.85	127.82	120.80
36	1	1165	A	N1-C2-N3	5.85	132.23	129.30
36	1	1554	U	C5-C4-O4	-5.85	122.39	125.90
37	3	98	C	C2-N1-C1'	-5.85	112.36	118.80
1	6	1178	G	C4-N9-C1'	5.85	134.11	126.50
1	6	1466	G	C4-C5-N7	5.85	113.14	110.80
36	5	780	A	N9-C4-C5	5.85	108.14	105.80
36	5	1435	A	C5-C6-N1	5.85	120.63	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2117	A	N1-C6-N6	-5.85	115.09	118.60
36	5	2329	C	C5-C4-N4	-5.85	116.10	120.20
36	5	2863	G	C5-N7-C8	-5.85	101.37	104.30
36	5	3245	A	N9-C4-C5	-5.85	103.46	105.80
36	5	3384	U	N3-C2-O2	5.85	126.30	122.20
1	2	1619	C	C6-N1-C2	-5.85	117.96	120.30
23	D1	78	LEU	CA-CB-CG	5.85	128.76	115.30
36	1	1135	A	C8-N9-C4	-5.85	103.46	105.80
36	1	3260	G	C8-N9-C1'	-5.85	119.39	127.00
36	5	41	G	O5'-P-OP2	-5.85	100.43	105.70
36	5	2628	A	C2-N3-C4	-5.85	107.67	110.60
37	7	91	G	N3-C4-C5	5.85	131.53	128.60
1	2	144	U	C5-C6-N1	-5.85	119.78	122.70
36	1	1052	U	N3-C4-C5	5.85	118.11	114.60
36	1	1293	U	C2-N3-C4	-5.85	123.49	127.00
36	1	1581	C	C6-N1-C2	-5.85	117.96	120.30
36	1	1588	A	C4-C5-N7	-5.85	107.78	110.70
36	1	1829	G	N1-C6-O6	-5.85	116.39	119.90
36	1	2186	U	C5-C4-O4	5.85	129.41	125.90
36	1	2751	G	C8-N9-C1'	5.85	134.60	127.00
37	3	25	G	C5-C6-N1	5.85	114.42	111.50
1	6	805	U	O5'-P-OP2	5.85	117.72	110.70
1	6	1061	A	N1-C6-N6	5.85	122.11	118.60
1	6	1185	U	C2-N1-C1'	5.85	124.72	117.70
36	5	594	U	C5-C6-N1	5.85	125.62	122.70
36	5	1121	U	OP1-P-OP2	5.85	128.37	119.60
36	5	2339	C	N3-C4-N4	5.85	122.09	118.00
36	5	2611	U	O5'-P-OP2	-5.85	100.44	105.70
36	5	2621	G	N1-C2-N3	5.85	127.41	123.90
36	5	2874	G	C8-N9-C1'	-5.85	119.40	127.00
36	5	3096	C	N3-C2-O2	-5.85	117.81	121.90
37	7	22	A	C8-N9-C4	-5.85	103.46	105.80
1	2	987	G	N3-C4-C5	-5.85	125.68	128.60
36	1	642	U	C6-N1-C2	-5.85	117.49	121.00
36	1	752	C	N3-C4-N4	-5.85	113.91	118.00
36	1	894	G	N9-C4-C5	5.85	107.74	105.40
36	1	1288	U	C5-C6-N1	-5.85	119.78	122.70
36	1	1905	G	C8-N9-C4	-5.85	104.06	106.40
36	1	1927	G	N9-C4-C5	-5.85	103.06	105.40
37	3	25	G	N1-C6-O6	-5.85	116.39	119.90
1	6	396	G	C8-N9-C4	-5.85	104.06	106.40
1	6	634	G	N1-C6-O6	-5.85	116.39	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1164	G	C4-C5-C6	-5.85	115.29	118.80
36	5	1170	A	O5'-P-OP1	-5.85	100.44	105.70
36	5	2808	A	C6-N1-C2	5.85	122.11	118.60
36	5	3094	A	O5'-P-OP1	-5.85	100.44	105.70
36	1	195	U	N3-C4-C5	-5.85	111.09	114.60
36	1	752	C	N3-C4-C5	5.85	124.24	121.90
36	1	2190	U	OP2-P-O3'	5.85	118.06	105.20
1	6	903	U	N3-C2-O2	5.85	126.29	122.20
36	5	3110	C	O5'-P-OP2	5.85	117.72	110.70
36	1	730	C	N3-C2-O2	-5.84	117.81	121.90
36	1	915	A	OP1-P-OP2	5.84	128.37	119.60
36	1	1164	G	C5-C6-N1	5.84	114.42	111.50
36	1	2274	U	N3-C4-C5	5.84	118.11	114.60
36	1	2332	A	C4-C5-N7	5.84	113.62	110.70
36	1	3100	U	C2-N1-C1'	-5.84	110.69	117.70
36	1	3288	G	N1-C2-N3	-5.84	120.39	123.90
1	6	939	A	N1-C2-N3	5.84	132.22	129.30
1	6	1504	G	C5-C6-O6	5.84	132.11	128.60
36	5	780	A	O5'-P-OP2	-5.84	100.44	105.70
36	5	1654	A	N1-C2-N3	5.84	132.22	129.30
36	5	2584	G	C6-C5-N7	-5.84	126.89	130.40
36	5	2920	U	O5'-P-OP1	-5.84	100.44	105.70
37	7	45	A	C4-C5-N7	-5.84	107.78	110.70
36	1	652	G	C8-N9-C1'	-5.84	119.40	127.00
1	6	370	A	C5-C6-N6	5.84	128.37	123.70
36	5	77	A	OP2-P-O3'	5.84	118.05	105.20
36	5	298	U	C6-N1-C2	-5.84	117.49	121.00
36	5	1194	G	C5-C6-N1	5.84	114.42	111.50
36	5	3202	G	C6-C5-N7	5.84	133.91	130.40
1	2	1030	A	C6-C5-N7	-5.84	128.21	132.30
36	1	439	C	C2-N3-C4	5.84	122.82	119.90
36	1	697	A	C4-N9-C1'	-5.84	115.79	126.30
36	1	1195	A	N3-C4-C5	-5.84	122.71	126.80
36	1	1436	U	O4'-C1'-N1	5.84	112.87	108.20
36	1	1883	A	N3-C4-C5	5.84	130.89	126.80
36	1	2425	G	C8-N9-C4	-5.84	104.06	106.40
36	1	2721	A	C5-N7-C8	-5.84	100.98	103.90
36	1	2901	G	N9-C4-C5	5.84	107.74	105.40
1	6	1732	A	C5-C6-N1	-5.84	114.78	117.70
36	5	206	G	N3-C4-C5	-5.84	125.68	128.60
36	5	567	G	N7-C8-N9	5.84	116.02	113.10
36	5	1193	A	C2-N3-C4	-5.84	107.68	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1550	C	C2-N3-C4	5.84	122.82	119.90
36	5	1868	G	N9-C4-C5	-5.84	103.06	105.40
36	5	1922	A	N7-C8-N9	-5.84	110.88	113.80
36	5	3015	G	C5-C6-O6	-5.84	125.09	128.60
36	5	3266	G	N3-C4-N9	-5.84	122.50	126.00
37	7	13	A	C4-C5-N7	5.84	113.62	110.70
37	7	46	A	OP2-P-O3'	5.84	118.05	105.20
1	2	1094	G	C8-N9-C4	5.84	108.74	106.40
1	2	1486	G	O4'-C1'-N9	5.84	112.87	108.20
1	2	1547	A	N1-C6-N6	-5.84	115.10	118.60
1	2	1751	C	N3-C4-N4	-5.84	113.91	118.00
36	1	59	G	P-O3'-C3'	5.84	126.71	119.70
36	1	383	G	C5-N7-C8	5.84	107.22	104.30
36	1	427	C	C5-C4-N4	-5.84	116.11	120.20
36	1	794	U	C5-C6-N1	-5.84	119.78	122.70
36	1	936	A	N3-C4-C5	5.84	130.89	126.80
36	1	1195	A	C4-C5-C6	5.84	119.92	117.00
36	1	2922	G	C4-C5-N7	5.84	113.14	110.80
1	6	522	U	C2-N1-C1'	-5.84	110.69	117.70
1	6	636	A	C6-N1-C2	-5.84	115.10	118.60
1	6	637	C	C2-N1-C1'	5.84	125.22	118.80
1	6	1031	U	C5-C6-N1	-5.84	119.78	122.70
1	6	1206	U	N3-C4-C5	-5.84	111.10	114.60
1	6	1560	U	N1-C2-O2	5.84	126.89	122.80
36	5	194	U	N3-C2-O2	-5.84	118.11	122.20
36	5	397	A	C4-C5-C6	5.84	119.92	117.00
36	5	2243	A	C5-C6-N1	5.84	120.62	117.70
36	5	2982	A	N9-C4-C5	-5.84	103.46	105.80
36	5	3226	A	N1-C2-N3	5.84	132.22	129.30
36	5	3242	G	N1-C2-N2	-5.84	110.94	116.20
36	1	369	A	N1-C2-N3	5.84	132.22	129.30
36	1	2952	G	C4-C5-N7	-5.84	108.47	110.80
38	4	25	G	O5'-P-OP2	-5.84	100.45	105.70
1	6	128	U	C2-N1-C1'	-5.84	110.69	117.70
1	6	300	A	C5-C6-N1	5.84	120.62	117.70
1	6	448	C	O4'-C1'-N1	5.84	112.87	108.20
1	6	937	C	C6-N1-C2	-5.84	117.97	120.30
36	5	888	A	C6-C5-N7	-5.84	128.21	132.30
36	5	1225	A	C8-N9-C4	5.84	108.14	105.80
36	5	1686	U	N3-C4-O4	5.84	123.49	119.40
36	1	381	U	O5'-P-OP1	-5.84	100.45	105.70
36	1	404	G	C2-N3-C4	-5.84	108.98	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2881	C	O5'-P-OP1	-5.84	100.45	105.70
36	1	3370	A	C8-N9-C4	-5.84	103.47	105.80
1	6	1494	C	N3-C2-O2	-5.84	117.81	121.90
36	5	691	A	C8-N9-C4	-5.84	103.47	105.80
36	5	2134	G	C4-N9-C1'	5.84	134.09	126.50
36	5	2727	A	N9-C4-C5	5.84	108.14	105.80
36	5	2863	G	N9-C4-C5	5.84	107.73	105.40
37	7	31	U	O5'-P-OP2	5.84	117.70	110.70
36	1	621	A	N7-C8-N9	5.83	116.72	113.80
36	1	1006	A	C6-C5-N7	-5.83	128.22	132.30
36	1	1552	G	C4-N9-C1'	5.83	134.09	126.50
36	1	2172	A	C2-N3-C4	-5.83	107.68	110.60
36	5	637	C	N1-C2-N3	-5.83	115.12	119.20
36	5	1167	U	N1-C2-N3	-5.83	111.40	114.90
36	5	2144	A	O5'-P-OP1	-5.83	100.45	105.70
1	2	435	C	N3-C4-C5	5.83	124.23	121.90
36	1	292	U	C6-N1-C2	5.83	124.50	121.00
36	1	2884	C	C6-N1-C1'	5.83	127.80	120.80
36	1	3271	G	C2-N3-C4	5.83	114.82	111.90
38	4	34	U	O4'-C1'-N1	5.83	112.87	108.20
36	5	18	G	N7-C8-N9	5.83	116.02	113.10
36	5	1085	A	C4-C5-C6	5.83	119.92	117.00
36	5	1147	G	C2-N3-C4	-5.83	108.98	111.90
36	5	1784	G	C5-C6-O6	-5.83	125.10	128.60
36	5	2667	A	C5-C6-N6	5.83	128.37	123.70
36	5	2852	C	C2-N3-C4	-5.83	116.98	119.90
36	5	2967	A	C6-N1-C2	-5.83	115.10	118.60
1	2	1589	C	N3-C4-N4	-5.83	113.92	118.00
36	1	107	A	C5-C6-N6	-5.83	119.03	123.70
36	1	934	G	N3-C4-C5	-5.83	125.68	128.60
36	1	1210	U	N3-C4-O4	-5.83	115.32	119.40
36	1	1543	G	C5-N7-C8	-5.83	101.39	104.30
36	1	1624	G	C5-N7-C8	-5.83	101.38	104.30
36	1	2884	C	C6-N1-C2	5.83	122.63	120.30
1	6	307	G	N1-C2-N2	-5.83	110.95	116.20
36	5	1158	A	O5'-P-OP2	-5.83	100.45	105.70
36	5	1301	A	N9-C4-C5	5.83	108.13	105.80
36	5	2169	G	O5'-P-OP2	5.83	117.70	110.70
37	7	94	C	C2-N3-C4	-5.83	116.98	119.90
1	2	361	C	C2-N1-C1'	-5.83	112.39	118.80
36	1	1020	G	N1-C6-O6	5.83	123.40	119.90
36	1	1078	U	O5'-P-OP2	-5.83	100.45	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	883	C	OP1-P-OP2	-5.83	110.86	119.60
36	5	1190	A	C6-C5-N7	-5.83	128.22	132.30
36	5	1396	C	OP2-P-O3'	5.83	118.03	105.20
36	5	2205	U	N1-C2-O2	5.83	126.88	122.80
36	5	2223	A	C8-N9-C4	-5.83	103.47	105.80
37	7	121	U	N1-C2-O2	5.83	126.88	122.80
1	2	611	U	C2-N1-C1'	5.83	124.69	117.70
36	1	1045	C	OP2-P-O3'	5.83	118.02	105.20
36	1	1070	U	N1-C2-O2	5.83	126.88	122.80
36	1	1858	A	C6-N1-C2	-5.83	115.10	118.60
62	N6	83	ASP	CB-CG-OD2	5.83	123.55	118.30
1	6	175	G	N3-C4-N9	5.83	129.50	126.00
1	6	1070	C	C2-N1-C1'	-5.83	112.39	118.80
1	6	1378	U	C5-C6-N1	-5.83	119.79	122.70
1	6	1583	A	C6-C5-N7	5.83	136.38	132.30
1	6	1600	A	N9-C1'-C2'	5.83	121.58	114.00
36	5	62	A	C5-C6-N1	-5.83	114.79	117.70
36	5	671	U	OP2-P-O3'	5.83	118.02	105.20
36	5	1480	G	C4-C5-N7	5.83	113.13	110.80
36	5	2426	U	N3-C2-O2	-5.83	118.12	122.20
36	5	2813	A	N1-C6-N6	5.83	122.10	118.60
1	2	49	C	C5-C6-N1	5.83	123.91	121.00
36	1	1449	A	OP1-P-O3'	-5.83	92.38	105.20
36	1	2820	A	C5-N7-C8	-5.83	100.99	103.90
36	1	3086	A	C4-C5-N7	-5.83	107.79	110.70
36	5	430	U	N3-C4-C5	5.83	118.10	114.60
36	5	3049	A	C5-N7-C8	-5.83	100.99	103.90
1	2	720	G	OP1-P-O3'	5.83	118.02	105.20
36	1	39	A	O5'-P-OP1	5.83	117.69	110.70
36	1	86	G	C6-N1-C2	-5.83	121.60	125.10
36	1	306	A	C5-C6-N1	5.83	120.61	117.70
36	1	882	A	N1-C6-N6	-5.83	115.10	118.60
36	1	1594	A	N1-C2-N3	5.83	132.21	129.30
36	1	1849	C	N1-C2-N3	5.83	123.28	119.20
36	1	1939	G	C8-N9-C1'	-5.83	119.43	127.00
1	6	21	U	N3-C4-C5	-5.83	111.11	114.60
1	6	474	A	N1-C6-N6	5.83	122.09	118.60
1	6	744	U	C6-N1-C2	-5.83	117.50	121.00
1	6	827	C	C6-N1-C1'	5.83	127.79	120.80
1	6	1165	G	N1-C2-N3	5.83	127.40	123.90
1	6	1493	A	N3-C4-N9	-5.83	122.74	127.40
1	6	1535	U	N1-C2-O2	5.83	126.88	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1629	G	C6-N1-C2	-5.83	121.60	125.10
36	5	620	U	N1-C2-O2	5.83	126.88	122.80
36	5	782	U	N3-C4-C5	5.83	118.10	114.60
36	5	813	G	C5-C6-N1	-5.83	108.59	111.50
36	5	1310	G	C4-N9-C1'	5.83	134.07	126.50
36	5	2340	U	C6-N1-C2	-5.83	117.50	121.00
36	5	3047	U	N3-C4-C5	-5.83	111.11	114.60
36	5	3140	G	N9-C1'-C2'	-5.83	105.59	112.00
38	8	7	U	N3-C2-O2	5.83	126.28	122.20
1	2	1786	G	C4-C5-N7	-5.82	108.47	110.80
36	1	287	G	N1-C6-O6	5.82	123.39	119.90
36	1	415	G	N1-C2-N3	5.82	127.39	123.90
36	1	2906	C	N1-C2-O2	-5.82	115.41	118.90
1	6	1286	U	N1-C2-N3	5.82	118.39	114.90
36	5	1164	G	N3-C4-N9	-5.82	122.51	126.00
36	5	1379	G	C6-N1-C2	-5.82	121.61	125.10
36	5	1404	G	C5-N7-C8	-5.82	101.39	104.30
36	5	1443	G	C2-N3-C4	-5.82	108.99	111.90
36	5	1514	G	N1-C2-N2	-5.82	110.96	116.20
36	5	2204	C	N3-C4-C5	-5.82	119.57	121.90
36	5	2717	U	N1-C2-N3	5.82	118.39	114.90
36	5	3034	C	N3-C4-N4	5.82	122.08	118.00
36	5	3310	A	N1-C2-N3	5.82	132.21	129.30
37	7	93	C	N3-C4-N4	5.82	122.08	118.00
38	8	136	G	N9-C4-C5	-5.82	103.07	105.40
36	1	2326	A	O5'-P-OP1	-5.82	100.46	105.70
1	6	880	C	C4-C5-C6	5.82	120.31	117.40
36	5	1224	C	N3-C2-O2	-5.82	117.82	121.90
1	2	1044	U	C5-C4-O4	5.82	129.39	125.90
36	1	377	A	N9-C4-C5	-5.82	103.47	105.80
36	1	651	G	N1-C2-N2	-5.82	110.96	116.20
36	1	940	G	N1-C6-O6	-5.82	116.41	119.90
36	1	2418	G	N3-C2-N2	5.82	123.97	119.90
36	1	2625	C	N1-C2-O2	5.82	122.39	118.90
36	1	2704	A	C4-C5-N7	-5.82	107.79	110.70
1	6	308	C	N3-C4-N4	-5.82	113.93	118.00
1	6	1542	G	C8-N9-C1'	-5.82	119.43	127.00
36	5	51	A	C5-C6-N6	-5.82	119.04	123.70
36	5	2351	U	C6-N1-C2	-5.82	117.51	121.00
36	1	283	G	C5-C6-O6	-5.82	125.11	128.60
36	1	2406	C	C6-N1-C2	-5.82	117.97	120.30
1	6	948	G	C5-C6-O6	-5.82	125.11	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1171	A	OP1-P-OP2	-5.82	110.87	119.60
1	6	1537	C	N3-C2-O2	5.82	125.97	121.90
36	5	437	G	C6-C5-N7	-5.82	126.91	130.40
36	5	722	G	C8-N9-C1'	5.82	134.56	127.00
36	5	1050	U	N1-C2-N3	5.82	118.39	114.90
36	5	1584	U	C5-C4-O4	-5.82	122.41	125.90
36	5	1829	G	N1-C6-O6	-5.82	116.41	119.90
73	o7	65	ARG	NE-CZ-NH2	-5.82	117.39	120.30
36	1	302	U	C5-C6-N1	-5.82	119.79	122.70
36	1	860	G	N3-C4-N9	5.82	129.49	126.00
36	1	1458	U	N3-C4-O4	-5.82	115.33	119.40
36	1	1610	G	C6-C5-N7	-5.82	126.91	130.40
36	1	1840	U	C5-C6-N1	-5.82	119.79	122.70
36	1	1905	G	O4'-C1'-N9	5.82	112.85	108.20
36	1	2415	C	C2-N3-C4	-5.82	116.99	119.90
36	1	3192	U	C2-N1-C1'	5.82	124.68	117.70
38	4	39	G	C6-N1-C2	-5.82	121.61	125.10
38	4	41	A	C2-N3-C4	5.82	113.51	110.60
36	5	237	G	N3-C4-C5	-5.82	125.69	128.60
36	5	528	U	C5-C6-N1	5.82	125.61	122.70
36	5	2377	G	C4-N9-C1'	-5.82	118.94	126.50
36	5	2934	A	N3-C4-C5	5.82	130.87	126.80
36	5	2966	G	C2-N3-C4	-5.82	108.99	111.90
36	5	3377	G	C5-N7-C8	-5.82	101.39	104.30
37	7	1	G	C6-C5-N7	-5.82	126.91	130.40
37	7	15	C	C6-N1-C1'	-5.82	113.82	120.80
38	8	99	C	N3-C4-C5	5.82	124.23	121.90
1	2	1463	C	N3-C4-C5	5.82	124.23	121.90
36	1	680	G	C2-N3-C4	-5.82	108.99	111.90
36	1	1377	G	C8-N9-C1'	-5.82	119.44	127.00
36	1	1424	C	N1-C2-O2	-5.82	115.41	118.90
36	1	1733	G	N1-C6-O6	5.82	123.39	119.90
36	1	2134	G	N1-C6-O6	5.82	123.39	119.90
36	1	3071	U	C2-N1-C1'	-5.82	110.72	117.70
1	6	106	U	C6-N1-C2	-5.82	117.51	121.00
1	6	585	A	N9-C4-C5	-5.82	103.47	105.80
36	5	1909	A	C5-C6-N1	5.82	120.61	117.70
36	5	2600	C	C6-N1-C2	-5.82	117.97	120.30
36	1	1103	A	C6-C5-N7	5.81	136.37	132.30
36	1	1292	C	N3-C4-C5	5.81	124.22	121.90
1	6	13	C	N1-C2-O2	5.81	122.39	118.90
1	6	23	G	N3-C2-N2	-5.81	115.83	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	170	U	C5-C6-N1	5.81	125.61	122.70
1	6	1283	U	N3-C4-O4	-5.81	115.33	119.40
1	6	1366	U	N3-C4-O4	5.81	123.47	119.40
1	6	1637	C	N1-C2-N3	-5.81	115.13	119.20
36	5	433	A	N7-C8-N9	5.81	116.71	113.80
36	5	1056	U	O4'-C1'-N1	5.81	112.85	108.20
36	5	3330	A	C5-N7-C8	5.81	106.81	103.90
36	1	35	A	O5'-P-OP2	-5.81	100.47	105.70
36	1	67	A	C5-N7-C8	5.81	106.81	103.90
36	1	399	A	O5'-P-OP1	5.81	117.67	110.70
36	1	878	G	N1-C6-O6	-5.81	116.41	119.90
36	1	1792	C	N1-C2-N3	5.81	123.27	119.20
1	6	273	G	C6-C5-N7	-5.81	126.91	130.40
1	6	621	A	C4-C5-N7	-5.81	107.79	110.70
1	6	897	C	C6-N1-C2	5.81	122.62	120.30
1	6	1592	A	N1-C6-N6	-5.81	115.11	118.60
36	5	1272	C	C5-C6-N1	5.81	123.91	121.00
36	5	1585	C	O5'-P-OP1	-5.81	100.47	105.70
36	5	2174	G	N1-C6-O6	5.81	123.39	119.90
36	5	2270	A	C4-C5-N7	5.81	113.61	110.70
36	5	2309	A	C2-N3-C4	-5.81	107.69	110.60
37	7	107	C	C5-C6-N1	-5.81	118.09	121.00
36	1	1323	G	C4-C5-N7	5.81	113.12	110.80
1	6	177	U	C5-C4-O4	-5.81	122.41	125.90
1	6	626	U	N1-C2-N3	5.81	118.39	114.90
36	5	899	U	N3-C2-O2	-5.81	118.13	122.20
36	5	2626	A	O4'-C1'-N9	-5.81	103.55	108.20
1	2	1000	C	C6-N1-C1'	-5.81	113.83	120.80
1	2	1490	C	N1-C2-O2	5.81	122.39	118.90
36	1	274	G	OP1-P-O3'	5.81	117.98	105.20
36	1	650	C	O5'-P-OP2	5.81	117.67	110.70
36	1	996	A	OP2-P-O3'	5.81	117.98	105.20
36	1	1838	G	N1-C6-O6	5.81	123.39	119.90
36	1	2423	U	C2-N3-C4	5.81	130.49	127.00
36	1	2940	A	C4-C5-N7	-5.81	107.80	110.70
38	4	28	C	N3-C2-O2	5.81	125.97	121.90
1	6	992	A	N3-C4-C5	5.81	130.87	126.80
36	5	512	U	N1-C2-N3	5.81	118.39	114.90
36	5	1205	A	N1-C2-N3	5.81	132.21	129.30
41	14	340	GLY	N-CA-C	-5.81	98.58	113.10
1	2	331	A	N1-C2-N3	5.81	132.20	129.30
36	1	189	G	C8-N9-C4	-5.81	104.08	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1104	G	N3-C2-N2	-5.81	115.83	119.90
36	1	1368	U	C4-C5-C6	5.81	123.19	119.70
36	1	1829	G	OP2-P-O3'	5.81	117.97	105.20
36	1	1898	G	N3-C4-C5	-5.81	125.70	128.60
38	4	56	G	N1-C2-N3	5.81	127.39	123.90
38	4	86	U	C6-N1-C1'	-5.81	113.07	121.20
1	6	586	G	N9-C4-C5	5.81	107.72	105.40
1	6	595	G	C6-C5-N7	-5.81	126.92	130.40
1	6	1598	U	C2-N1-C1'	5.81	124.67	117.70
36	5	85	A	C5-C6-N1	-5.81	114.80	117.70
36	5	500	C	C6-N1-C2	-5.81	117.98	120.30
36	5	502	U	OP1-P-OP2	-5.81	110.89	119.60
36	5	517	G	N1-C2-N3	5.81	127.38	123.90
36	5	688	G	C5-C6-O6	-5.81	125.12	128.60
36	5	928	C	C4-C5-C6	5.81	120.30	117.40
36	5	1612	A	C5-C6-N1	-5.81	114.80	117.70
36	5	2639	G	C5-C6-N1	-5.81	108.60	111.50
36	5	2835	U	N1-C2-O2	-5.81	118.73	122.80
36	5	3287	U	N3-C2-O2	-5.81	118.14	122.20
59	n3	34	LEU	CA-CB-CG	-5.81	101.94	115.30
36	1	938	C	C5-C6-N1	5.81	123.90	121.00
1	6	426	G	N1-C2-N3	5.81	127.38	123.90
1	6	558	U	P-O3'-C3'	5.81	126.67	119.70
36	5	228	U	C2-N1-C1'	5.81	124.67	117.70
36	5	1051	U	OP1-P-OP2	5.81	128.31	119.60
36	5	1601	U	N1-C2-O2	5.81	126.86	122.80
1	2	362	G	N3-C2-N2	-5.80	115.84	119.90
1	2	1490	C	C6-N1-C2	-5.80	117.98	120.30
36	1	1182	A	C4-C5-N7	5.80	113.60	110.70
36	1	2196	C	C2-N1-C1'	-5.80	112.41	118.80
36	1	2835	U	OP2-P-O3'	5.80	117.97	105.20
36	1	3245	A	O5'-P-OP1	5.80	117.67	110.70
37	3	99	G	N3-C2-N2	-5.80	115.84	119.90
38	4	113	U	C5-C6-N1	-5.80	119.80	122.70
1	6	1219	A	N1-C6-N6	5.80	122.08	118.60
1	6	1402	G	N3-C4-C5	-5.80	125.70	128.60
1	6	1472	C	N3-C4-N4	-5.80	113.94	118.00
36	5	185	C	C6-N1-C2	5.80	122.62	120.30
36	5	227	G	N7-C8-N9	-5.80	110.20	113.10
36	5	1481	A	C5-N7-C8	-5.80	101.00	103.90
36	5	2847	A	N9-C4-C5	-5.80	103.48	105.80
36	5	3097	C	N3-C4-C5	-5.80	119.58	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	29	U	N1-C2-O2	-5.80	118.74	122.80
1	6	1206	U	C6-N1-C2	-5.80	117.52	121.00
1	2	1201	G	N7-C8-N9	-5.80	110.20	113.10
36	1	620	U	P-O3'-C3'	5.80	126.66	119.70
36	1	634	C	OP2-P-O3'	5.80	117.97	105.20
36	1	2803	A	N9-C4-C5	5.80	108.12	105.80
36	1	2883	U	N3-C4-C5	-5.80	111.12	114.60
37	3	45	A	N1-C6-N6	-5.80	115.12	118.60
38	4	116	G	C5-C6-N1	5.80	114.40	111.50
1	6	11	A	N7-C8-N9	-5.80	110.90	113.80
1	6	758	U	C2-N1-C1'	-5.80	110.74	117.70
36	5	1185	C	C6-N1-C2	5.80	122.62	120.30
36	5	2312	A	C8-N9-C4	-5.80	103.48	105.80
36	5	2823	G	N3-C2-N2	-5.80	115.84	119.90
38	8	44	A	C4-C5-N7	5.80	113.60	110.70
42	15	131	LEU	CB-CG-CD2	-5.80	101.14	111.00
36	1	93	C	C6-N1-C1'	-5.80	113.84	120.80
36	1	148	G	C4-N9-C1'	5.80	134.04	126.50
36	1	1495	U	C4-C5-C6	5.80	123.18	119.70
36	1	2113	A	C6-C5-N7	5.80	136.36	132.30
36	1	2648	G	OP1-P-O3'	5.80	117.96	105.20
36	5	573	C	C6-N1-C2	5.80	122.62	120.30
36	5	775	A	O5'-P-OP1	-5.80	100.48	105.70
36	5	1383	G	N3-C2-N2	-5.80	115.84	119.90
36	5	1582	C	C6-N1-C2	-5.80	117.98	120.30
36	5	2186	U	C5-C4-O4	5.80	129.38	125.90
36	5	2247	G	N3-C4-N9	5.80	129.48	126.00
36	5	2761	G	N3-C4-C5	-5.80	125.70	128.60
37	7	36	C	N3-C2-O2	5.80	125.96	121.90
38	8	31	G	C8-N9-C4	5.80	108.72	106.40
1	2	39	A	O4'-C1'-N9	5.80	112.84	108.20
1	2	1196	A	O5'-P-OP2	5.80	117.66	110.70
36	5	614	C	C6-N1-C2	5.80	122.62	120.30
36	5	652	G	C5-C6-N1	5.80	114.40	111.50
36	1	209	A	O5'-P-OP2	-5.80	100.48	105.70
36	1	1458	U	N3-C4-C5	5.80	118.08	114.60
36	1	1499	C	N3-C4-C5	-5.80	119.58	121.90
36	1	2175	U	C6-N1-C1'	5.80	129.31	121.20
36	1	2652	U	C2-N1-C1'	-5.80	110.75	117.70
36	1	2943	G	O5'-P-OP1	5.80	117.66	110.70
36	1	3110	C	C6-N1-C2	-5.80	117.98	120.30
37	3	87	G	O4'-C1'-N9	-5.80	103.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	392	G	OP2-P-O3'	5.80	117.95	105.20
1	6	1000	C	N3-C4-N4	-5.80	113.94	118.00
36	5	280	U	N1-C2-O2	5.80	126.86	122.80
36	5	798	G	OP1-P-OP2	-5.80	110.91	119.60
36	5	934	G	N1-C6-O6	5.80	123.38	119.90
36	5	1118	C	N1-C2-O2	-5.80	115.42	118.90
36	5	1131	G	OP1-P-OP2	5.80	128.29	119.60
36	5	1173	U	C2-N3-C4	-5.80	123.52	127.00
36	1	897	U	C2-N1-C1'	5.79	124.65	117.70
36	1	1439	U	N1-C2-O2	5.79	126.86	122.80
36	1	1514	G	C4-C5-C6	5.79	122.28	118.80
36	1	2859	U	C4-C5-C6	5.79	123.18	119.70
36	1	3383	G	C8-N9-C1'	5.79	134.53	127.00
1	6	42	G	O5'-P-OP1	-5.79	100.48	105.70
1	6	407	A	N9-C4-C5	-5.79	103.48	105.80
1	6	1662	G	N7-C8-N9	-5.79	110.20	113.10
36	5	86	G	O5'-P-OP1	5.79	117.65	110.70
36	5	238	A	N1-C6-N6	5.79	122.08	118.60
36	5	928	C	OP2-P-O3'	-5.79	92.45	105.20
36	5	2273	G	C8-N9-C1'	5.79	134.53	127.00
36	1	283	G	C5-N7-C8	-5.79	101.40	104.30
36	1	567	G	N3-C4-C5	-5.79	125.70	128.60
36	1	1621	A	C5-N7-C8	5.79	106.80	103.90
36	1	2738	A	C5-C6-N6	-5.79	119.06	123.70
36	1	3109	G	N3-C4-N9	5.79	129.48	126.00
1	6	96	G	N1-C6-O6	5.79	123.38	119.90
1	6	1769	U	C4-C5-C6	5.79	123.18	119.70
9	s7	131	PHE	C-N-CD	5.79	140.57	128.40
36	5	1588	A	C2-N3-C4	-5.79	107.70	110.60
36	5	1764	U	O4'-C1'-N1	5.79	112.83	108.20
43	l6	46	ARG	NE-CZ-NH2	-5.79	117.40	120.30
53	m7	131	ARG	NE-CZ-NH2	-5.79	117.40	120.30
36	1	907	G	C5-N7-C8	5.79	107.20	104.30
36	1	1549	U	O5'-P-OP2	-5.79	100.49	105.70
36	1	1927	G	C4-C5-N7	5.79	113.12	110.80
36	1	2613	U	N1-C2-O2	-5.79	118.75	122.80
36	1	2649	A	C5-C6-N6	-5.79	119.07	123.70
1	6	264	G	N1-C6-O6	5.79	123.38	119.90
1	6	1002	G	C4-C5-C6	-5.79	115.33	118.80
1	6	1058	U	OP1-P-O3'	5.79	117.94	105.20
1	6	1186	U	O5'-P-OP2	-5.79	100.49	105.70
36	5	64	G	C5-N7-C8	-5.79	101.41	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	286	U	N3-C4-O4	5.79	123.45	119.40
36	5	741	U	N3-C4-C5	-5.79	111.12	114.60
36	5	1323	G	N3-C2-N2	-5.79	115.85	119.90
36	5	2399	A	O4'-C1'-N9	5.79	112.83	108.20
36	5	2404	A	N7-C8-N9	5.79	116.70	113.80
36	5	2610	G	N9-C4-C5	5.79	107.72	105.40
36	5	2662	G	C4-C5-N7	-5.79	108.48	110.80
36	5	2952	G	N3-C4-N9	5.79	129.47	126.00
1	2	1345	A	C5-C6-N1	-5.79	114.81	117.70
36	1	692	A	OP1-P-O3'	5.79	117.94	105.20
36	1	1319	G	C5-C6-N1	5.79	114.39	111.50
36	1	2614	G	C4-N9-C1'	5.79	134.03	126.50
36	1	2823	G	C5-C6-O6	5.79	132.07	128.60
38	4	73	U	N3-C4-C5	5.79	118.07	114.60
1	6	75	U	C6-N1-C1'	-5.79	113.09	121.20
1	6	996	U	C2-N3-C4	5.79	130.47	127.00
36	5	1046	A	C4-C5-N7	-5.79	107.81	110.70
36	5	2696	A	C8-N9-C4	-5.79	103.48	105.80
37	7	15	C	N3-C4-N4	5.79	122.05	118.00
46	19	168	ARG	NE-CZ-NH1	-5.79	117.41	120.30
47	m0	17	TYR	CA-CB-CG	5.79	124.40	113.40
1	2	1322	A	N1-C6-N6	-5.79	115.13	118.60
36	1	396	A	OP2-P-O3'	5.79	117.93	105.20
36	1	1101	G	N3-C4-N9	-5.79	122.53	126.00
36	1	2875	U	P-O3'-C3'	-5.79	112.75	119.70
36	1	2973	G	P-O3'-C3'	-5.79	112.75	119.70
36	1	3139	A	N7-C8-N9	5.79	116.69	113.80
1	6	104	A	C6-C5-N7	-5.79	128.25	132.30
1	6	1375	A	N3-C4-C5	5.79	130.85	126.80
1	6	1469	A	N1-C6-N6	-5.79	115.13	118.60
36	5	54	C	OP1-P-OP2	-5.79	110.92	119.60
36	5	984	G	N3-C2-N2	-5.79	115.85	119.90
36	5	1516	C	C5-C4-N4	-5.79	116.15	120.20
36	5	1850	A	N7-C8-N9	-5.79	110.91	113.80
36	5	2161	G	C2-N3-C4	5.79	114.79	111.90
36	5	2296	A	OP1-P-O3'	5.79	117.93	105.20
36	5	3014	U	C5-C6-N1	-5.79	119.81	122.70
1	2	1200	G	N3-C4-N9	5.79	129.47	126.00
36	1	535	G	N3-C4-C5	-5.79	125.71	128.60
36	5	601	U	C2-N1-C1'	5.79	124.64	117.70
36	5	684	G	N3-C4-C5	5.79	131.49	128.60
36	5	1192	C	N1-C1'-C2'	-5.79	105.63	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	317	C	N3-C4-C5	-5.79	119.59	121.90
1	2	586	G	N1-C6-O6	5.79	123.37	119.90
36	1	276	U	N3-C4-C5	-5.79	111.13	114.60
36	1	290	G	OP2-P-O3'	5.79	117.93	105.20
36	1	1116	G	N1-C2-N3	5.79	127.37	123.90
36	1	1379	G	C5-C6-N1	-5.79	108.61	111.50
36	1	1413	G	C5-C6-O6	-5.79	125.13	128.60
36	1	1851	G	N1-C2-N2	5.79	121.41	116.20
36	1	2127	U	N3-C2-O2	5.79	126.25	122.20
36	1	2166	A	C5-C6-N1	5.79	120.59	117.70
36	1	2751	G	N3-C4-N9	-5.79	122.53	126.00
1	6	23	G	N9-C4-C5	5.79	107.71	105.40
1	6	474	A	C4-N9-C1'	-5.79	115.89	126.30
1	6	600	U	OP2-P-O3'	5.79	117.93	105.20
1	6	1449	U	C2-N3-C4	5.79	130.47	127.00
1	6	1676	U	C6-N1-C2	5.79	124.47	121.00
1	6	1768	G	C8-N9-C1'	5.79	134.52	127.00
36	5	1293	U	N3-C2-O2	5.79	126.25	122.20
36	5	1301	A	N1-C2-N3	5.79	132.19	129.30
36	5	2399	A	OP2-P-O3'	5.79	117.93	105.20
1	2	1788	G	N1-C6-O6	-5.78	116.43	119.90
36	1	383	G	N1-C2-N2	-5.78	110.99	116.20
36	1	676	G	N7-C8-N9	5.78	115.99	113.10
36	1	933	A	C2-N3-C4	5.78	113.49	110.60
36	1	1520	G	C5-C6-O6	-5.78	125.13	128.60
36	1	1769	G	N3-C2-N2	-5.78	115.85	119.90
36	1	2371	G	OP2-P-O3'	5.78	117.92	105.20
38	4	73	U	N3-C2-O2	-5.78	118.15	122.20
1	6	375	U	C2-N1-C1'	-5.78	110.76	117.70
1	6	606	A	C5-C6-N6	-5.78	119.07	123.70
1	6	1033	C	N3-C2-O2	-5.78	117.85	121.90
36	5	1455	U	OP2-P-O3'	5.78	117.92	105.20
36	5	2834	G	C8-N9-C4	5.78	108.71	106.40
36	5	3212	C	C5-C6-N1	-5.78	118.11	121.00
1	2	608	U	N3-C2-O2	-5.78	118.15	122.20
36	1	211	A	N3-C4-N9	-5.78	122.77	127.40
36	1	1156	C	C4-C5-C6	5.78	120.29	117.40
36	1	1929	G	C5-C6-N1	5.78	114.39	111.50
36	1	3276	G	C8-N9-C4	-5.78	104.09	106.40
38	4	55	U	O5'-P-OP1	-5.78	100.50	105.70
1	6	377	G	N9-C4-C5	5.78	107.71	105.40
36	5	928	C	O4'-C1'-N1	5.78	112.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	932	U	OP1-P-OP2	-5.78	110.93	119.60
36	5	1288	U	N3-C2-O2	-5.78	118.15	122.20
36	5	1831	U	N3-C4-O4	5.78	123.45	119.40
1	2	1284	C	C6-N1-C1'	5.78	127.74	120.80
1	2	1654	G	O5'-P-OP2	-5.78	100.50	105.70
36	1	649	A	C5-N7-C8	5.78	106.79	103.90
36	1	1650	G	C8-N9-C4	5.78	108.71	106.40
36	1	2760	C	N3-C2-O2	5.78	125.95	121.90
36	1	2987	A	N1-C2-N3	-5.78	126.41	129.30
1	6	208	U	C5-C6-N1	5.78	125.59	122.70
36	5	1003	A	O5'-P-OP1	-5.78	100.50	105.70
36	5	1041	U	O5'-P-OP1	5.78	117.64	110.70
36	5	1478	C	C5-C6-N1	5.78	123.89	121.00
36	5	2873	U	C5-C4-O4	5.78	129.37	125.90
36	5	3016	A	N3-C4-N9	-5.78	122.78	127.40
36	5	3035	A	C2-N3-C4	-5.78	107.71	110.60
40	l3	21	ARG	NE-CZ-NH2	-5.78	117.41	120.30
36	1	91	G	N3-C4-N9	5.78	129.47	126.00
36	1	810	A	C8-N9-C4	-5.78	103.49	105.80
62	N6	27	ARG	NE-CZ-NH1	-5.78	117.41	120.30
1	6	1085	G	C8-N9-C1'	-5.78	119.49	127.00
36	5	1420	C	C5-C4-N4	5.78	124.25	120.20
36	5	2612	U	C2-N3-C4	-5.78	123.53	127.00
36	5	2621	G	C4-C5-C6	5.78	122.27	118.80
1	2	562	G	N1-C2-N3	5.78	127.37	123.90
1	2	1412	G	N3-C4-C5	5.78	131.49	128.60
1	2	1471	A	O5'-P-OP2	5.78	117.63	110.70
36	1	59	G	C4-C5-N7	5.78	113.11	110.80
36	1	812	G	C4-C5-C6	5.78	122.27	118.80
36	1	1174	G	N3-C4-N9	5.78	129.47	126.00
36	1	1338	C	O5'-P-OP2	-5.78	100.50	105.70
36	1	1762	C	O4'-C1'-N1	5.78	112.82	108.20
36	1	2182	A	C4-C5-N7	5.78	113.59	110.70
36	1	2191	U	N3-C4-C5	-5.78	111.13	114.60
36	1	3038	U	N3-C4-C5	-5.78	111.13	114.60
38	4	34	U	C2-N1-C1'	-5.78	110.77	117.70
78	Q2	88	CYS	CA-CB-SG	-5.78	103.60	114.00
36	5	50	U	OP1-P-O3'	5.78	117.91	105.20
36	5	820	A	O5'-P-OP2	-5.78	100.50	105.70
36	5	1369	A	N1-C6-N6	5.78	122.07	118.60
36	5	1482	A	N9-C4-C5	-5.78	103.49	105.80
36	5	1595	U	C5-C4-O4	-5.78	122.43	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	176	C	C5-C6-N1	5.78	123.89	121.00
1	2	553	G	N1-C6-O6	5.78	123.37	119.90
1	2	610	G	N3-C4-C5	-5.78	125.71	128.60
36	1	1379	G	C4-N9-C1'	5.78	134.01	126.50
36	1	1690	C	N1-C2-O2	5.78	122.37	118.90
36	1	2655	U	C5-C6-N1	5.78	125.59	122.70
36	1	2916	U	N3-C4-C5	5.78	118.07	114.60
52	M6	101	ARG	NE-CZ-NH2	-5.78	117.41	120.30
1	6	1301	U	N3-C4-O4	5.78	123.44	119.40
1	6	1581	C	N3-C2-O2	-5.78	117.86	121.90
1	6	1609	U	N1-C2-O2	-5.78	118.76	122.80
1	6	1698	G	C5-C6-O6	5.78	132.06	128.60
36	5	96	G	N1-C6-O6	5.78	123.36	119.90
36	5	803	C	N3-C4-N4	5.78	122.04	118.00
36	5	2858	U	N3-C4-O4	5.78	123.44	119.40
36	5	2947	G	OP2-P-O3'	-5.78	92.49	105.20
36	5	3043	C	OP2-P-O3'	5.78	117.91	105.20
36	1	335	G	C8-N9-C1'	5.77	134.51	127.00
36	1	2339	C	C5-C6-N1	5.77	123.89	121.00
36	1	2354	C	N1-C2-O2	-5.77	115.44	118.90
36	1	2685	C	N3-C4-C5	-5.77	119.59	121.90
36	1	3330	A	N9-C4-C5	5.77	108.11	105.80
1	6	457	G	C4-C5-N7	5.77	113.11	110.80
36	5	591	G	C6-C5-N7	-5.77	126.94	130.40
36	5	629	U	N3-C4-C5	-5.77	111.14	114.60
36	5	966	U	C5-C4-O4	-5.77	122.44	125.90
36	5	2852	C	C5-C6-N1	-5.77	118.11	121.00
1	2	322	G	O4'-C1'-N9	-5.77	103.58	108.20
36	1	1442	U	OP1-P-OP2	-5.77	110.94	119.60
36	1	2391	G	N7-C8-N9	-5.77	110.21	113.10
36	1	2948	C	N3-C4-C5	-5.77	119.59	121.90
36	1	3150	A	N3-C4-C5	5.77	130.84	126.80
1	6	458	G	C4-C5-N7	-5.77	108.49	110.80
1	6	1093	A	C8-N9-C4	-5.77	103.49	105.80
36	5	1116	G	N1-C6-O6	5.77	123.36	119.90
36	5	1490	A	C8-N9-C4	-5.77	103.49	105.80
36	5	2286	U	N3-C4-O4	-5.77	115.36	119.40
36	5	3030	G	N1-C2-N3	-5.77	120.44	123.90
36	5	3080	G	C5-N7-C8	-5.77	101.41	104.30
36	1	636	C	N1-C2-N3	5.77	123.24	119.20
36	1	1207	G	O5'-P-OP1	-5.77	100.51	105.70
36	1	2617	U	C2-N3-C4	-5.77	123.54	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3152	U	C2-N1-C1'	-5.77	110.77	117.70
1	6	1604	U	C5-C6-N1	5.77	125.59	122.70
36	5	576	C	OP2-P-O3'	5.77	117.90	105.20
1	2	597	G	C4-C5-N7	5.77	113.11	110.80
1	2	1663	G	O5'-P-OP2	-5.77	100.51	105.70
36	1	894	G	C8-N9-C4	-5.77	104.09	106.40
36	1	1874	A	C8-N9-C4	-5.77	103.49	105.80
36	1	2182	A	C5-N7-C8	-5.77	101.02	103.90
36	1	2386	A	N1-C2-N3	5.77	132.19	129.30
36	1	2723	U	C5-C6-N1	-5.77	119.82	122.70
36	1	3206	C	N3-C2-O2	5.77	125.94	121.90
36	1	3363	U	N1-C2-O2	5.77	126.84	122.80
1	6	464	A	O5'-P-OP1	-5.77	100.51	105.70
36	5	1477	A	C5-C6-N1	5.77	120.58	117.70
36	5	3016	A	C5-N7-C8	-5.77	101.02	103.90
36	5	3051	U	C5-C6-N1	-5.77	119.81	122.70
36	5	3380	U	C6-N1-C1'	5.77	129.28	121.20
1	2	964	U	N1-C2-O2	5.77	126.84	122.80
1	2	1128	C	C5-C6-N1	-5.77	118.12	121.00
36	1	76	G	C5-C6-N1	-5.77	108.62	111.50
36	1	512	U	N1-C2-O2	-5.77	118.76	122.80
36	1	637	C	C2-N1-C1'	5.77	125.14	118.80
36	1	1192	C	N1-C2-N3	-5.77	115.16	119.20
36	1	1810	A	C2-N3-C4	-5.77	107.72	110.60
36	1	2131	A	N1-C6-N6	-5.77	115.14	118.60
52	M6	84	LEU	CB-CG-CD2	-5.77	101.20	111.00
1	6	25	C	N3-C4-C5	5.77	124.21	121.90
1	6	247	A	C6-C5-N7	-5.77	128.26	132.30
1	6	811	A	C4-N9-C1'	5.77	136.68	126.30
1	6	1541	G	O5'-P-OP2	5.77	117.62	110.70
36	5	423	A	OP1-P-OP2	-5.77	110.95	119.60
36	5	700	C	N1-C2-O2	5.77	122.36	118.90
36	5	1307	G	C4-C5-C6	5.77	122.26	118.80
36	5	2190	U	C6-N1-C2	-5.77	117.54	121.00
36	5	2431	C	N1-C2-O2	5.77	122.36	118.90
36	5	2852	C	C6-N1-C1'	-5.77	113.88	120.80
36	5	3350	C	N3-C4-C5	-5.77	119.59	121.90
37	7	56	A	C4-C5-N7	5.77	113.58	110.70
62	n6	87	LYS	CD-CE-NZ	5.77	124.97	111.70
36	1	193	C	N1-C2-O2	-5.77	115.44	118.90
36	1	939	U	N3-C2-O2	5.77	126.24	122.20
36	1	1629	U	O5'-P-OP2	-5.77	100.51	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1824	U	N3-C2-O2	-5.77	118.16	122.20
36	1	2794	G	C5-C6-N1	5.77	114.38	111.50
1	6	1326	A	N1-C6-N6	5.77	122.06	118.60
36	5	682	U	C6-N1-C1'	5.77	129.27	121.20
36	5	1886	A	O5'-P-OP2	-5.77	100.51	105.70
36	5	2782	U	N1-C2-O2	-5.77	118.76	122.80
1	2	1389	C	N3-C2-O2	-5.76	117.86	121.90
36	1	803	C	N1-C2-O2	5.76	122.36	118.90
36	1	1142	G	OP1-P-OP2	5.76	128.25	119.60
36	1	1331	U	C2-N3-C4	-5.76	123.54	127.00
36	1	1903	U	OP1-P-O3'	5.76	117.88	105.20
36	1	2748	A	N3-C4-C5	5.76	130.84	126.80
36	1	2816	G	C6-C5-N7	-5.76	126.94	130.40
36	1	3015	G	C8-N9-C4	5.76	108.71	106.40
36	1	3167	A	N1-C6-N6	5.76	122.06	118.60
1	6	354	C	C5-C6-N1	5.76	123.88	121.00
1	6	1571	C	N1-C2-O2	-5.76	115.44	118.90
1	6	1584	G	N9-C4-C5	-5.76	103.09	105.40
36	5	232	G	C8-N9-C1'	5.76	134.49	127.00
36	5	864	G	N3-C4-C5	-5.76	125.72	128.60
36	5	1578	C	C6-N1-C1'	-5.76	113.88	120.80
36	5	3022	G	OP1-P-O3'	-5.76	92.52	105.20
36	5	3260	G	N3-C4-C5	-5.76	125.72	128.60
36	1	1419	A	C4-C5-C6	5.76	119.88	117.00
36	1	2659	G	N9-C4-C5	-5.76	103.09	105.40
36	1	2917	G	C4-C5-N7	-5.76	108.50	110.80
36	1	2988	C	N1-C2-O2	5.76	122.36	118.90
1	6	932	U	N3-C2-O2	-5.76	118.17	122.20
36	5	2407	C	N3-C4-N4	5.76	122.03	118.00
36	5	2838	A	N1-C2-N3	5.76	132.18	129.30
36	5	2926	A	C6-C5-N7	-5.76	128.27	132.30
36	5	2986	U	C6-N1-C2	-5.76	117.54	121.00
36	5	3014	U	O5'-P-OP1	5.76	117.61	110.70
36	1	325	A	C6-N1-C2	-5.76	115.14	118.60
36	1	423	A	C4-C5-C6	5.76	119.88	117.00
36	1	1103	A	C5-N7-C8	5.76	106.78	103.90
36	1	1401	A	C5-C6-N6	-5.76	119.09	123.70
36	1	1507	G	N1-C2-N2	-5.76	111.01	116.20
36	1	1906	G	C4-C5-N7	5.76	113.11	110.80
36	1	3065	G	C8-N9-C4	-5.76	104.09	106.40
36	1	3230	G	C8-N9-C1'	5.76	134.49	127.00
1	6	384	G	N7-C8-N9	5.76	115.98	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	432	G	N3-C2-N2	5.76	123.93	119.90
1	6	1122	G	C5-C6-O6	-5.76	125.14	128.60
1	6	1124	A	N3-C4-C5	5.76	130.83	126.80
36	5	18	G	C8-N9-C4	-5.76	104.09	106.40
36	5	64	G	C4-C5-N7	5.76	113.10	110.80
36	5	210	U	N3-C4-C5	5.76	118.06	114.60
36	5	344	A	C5-N7-C8	-5.76	101.02	103.90
36	5	1902	G	O4'-C1'-N9	-5.76	103.59	108.20
36	5	3174	A	C4-C5-N7	5.76	113.58	110.70
36	5	3325	G	N1-C6-O6	-5.76	116.44	119.90
1	2	116	U	N1-C2-N3	5.76	118.36	114.90
36	1	867	G	C6-C5-N7	-5.76	126.94	130.40
36	1	929	A	C5-N7-C8	-5.76	101.02	103.90
36	1	1891	A	C2-N3-C4	-5.76	107.72	110.60
36	1	2730	G	C2-N3-C4	-5.76	109.02	111.90
36	1	3008	A	O5'-P-OP1	5.76	117.61	110.70
1	6	289	U	N1-C2-N3	5.76	118.36	114.90
1	6	1104	U	O5'-P-OP2	-5.76	100.52	105.70
1	6	1408	G	N1-C2-N3	5.76	127.36	123.90
1	6	1655	A	C6-C5-N7	-5.76	128.27	132.30
36	5	397	A	C4-C5-N7	-5.76	107.82	110.70
36	5	1475	A	C6-N1-C2	-5.76	115.14	118.60
36	5	1666	G	C8-N9-C4	5.76	108.70	106.40
36	5	1906	G	N3-C4-N9	5.76	129.46	126.00
38	8	90	U	N1-C2-O2	5.76	126.83	122.80
36	1	710	A	C5-C6-N6	-5.76	119.09	123.70
36	1	3293	U	N3-C2-O2	5.76	126.23	122.20
1	6	890	C	N3-C2-O2	-5.76	117.87	121.90
36	5	1853	U	N1-C2-O2	-5.76	118.77	122.80
36	5	2690	G	N1-C2-N2	5.76	121.38	116.20
36	5	3279	A	N9-C1'-C2'	-5.76	105.67	112.00
36	5	3289	G	C8-N9-C4	-5.76	104.10	106.40
1	2	1200	G	N3-C2-N2	-5.76	115.87	119.90
1	2	1614	A	N1-C6-N6	5.76	122.05	118.60
36	1	792	G	O5'-P-OP1	-5.76	100.52	105.70
36	1	1441	G	C5-C6-N1	5.76	114.38	111.50
36	1	2308	C	N1-C2-O2	-5.76	115.45	118.90
36	1	3191	G	C5-C6-N1	-5.76	108.62	111.50
1	6	415	C	C6-N1-C1'	5.76	127.71	120.80
36	5	866	A	N9-C4-C5	-5.76	103.50	105.80
36	5	1293	U	C2-N1-C1'	-5.76	110.79	117.70
36	5	1615	C	N1-C2-N3	5.76	123.23	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2678	A	N1-C2-N3	5.76	132.18	129.30
36	5	2979	U	N3-C4-O4	-5.76	115.37	119.40
37	7	106	U	C2-N3-C4	-5.76	123.55	127.00
59	n3	88	ARG	NE-CZ-NH1	5.76	123.18	120.30
36	1	1548	C	C5-C6-N1	5.75	123.88	121.00
36	1	2321	A	N3-C4-N9	-5.75	122.80	127.40
36	1	3013	U	O5'-P-OP1	5.75	117.61	110.70
36	1	744	A	C8-N9-C4	5.75	108.10	105.80
36	1	1661	G	N3-C4-N9	5.75	129.45	126.00
36	1	2119	A	C4-C5-N7	5.75	113.58	110.70
36	1	2173	U	N3-C4-C5	-5.75	111.15	114.60
36	1	2700	G	N3-C4-N9	5.75	129.45	126.00
36	1	2745	G	N3-C4-N9	5.75	129.45	126.00
1	6	558	U	C5-C6-N1	5.75	125.58	122.70
1	6	1139	A	N1-C2-N3	-5.75	126.42	129.30
1	6	1466	G	N1-C6-O6	5.75	123.35	119.90
36	5	576	C	C2-N1-C1'	5.75	125.13	118.80
36	5	694	C	N3-C4-N4	-5.75	113.97	118.00
36	5	821	U	N1-C2-N3	5.75	118.35	114.90
36	5	1603	A	C4-N9-C1'	5.75	136.66	126.30
36	5	3023	U	N3-C2-O2	5.75	126.23	122.20
36	5	3086	A	C5-C6-N1	-5.75	114.82	117.70
1	2	389	G	N7-C8-N9	5.75	115.97	113.10
36	1	423	A	N7-C8-N9	5.75	116.68	113.80
36	1	870	G	N7-C8-N9	-5.75	110.22	113.10
36	1	1131	G	C2-N3-C4	5.75	114.78	111.90
36	1	1554	U	C2-N1-C1'	5.75	124.60	117.70
36	1	2550	U	C5-C4-O4	5.75	129.35	125.90
36	1	2706	G	N3-C4-N9	5.75	129.45	126.00
36	1	3010	U	N1-C2-O2	-5.75	118.77	122.80
36	1	3118	C	C2-N1-C1'	5.75	125.13	118.80
37	3	117	A	C8-N9-C4	5.75	108.10	105.80
1	6	303	U	OP2-P-O3'	5.75	117.85	105.20
1	6	566	C	C6-N1-C2	5.75	122.60	120.30
1	6	1354	G	C5-N7-C8	-5.75	101.42	104.30
1	6	1564	U	C5-C6-N1	-5.75	119.82	122.70
1	6	1654	G	O5'-P-OP1	5.75	117.60	110.70
1	6	1760	G	C5-C6-N1	5.75	114.38	111.50
36	5	95	A	C5-N7-C8	-5.75	101.02	103.90
36	5	552	G	OP1-P-O3'	5.75	117.85	105.20
36	5	1370	G	N3-C4-N9	-5.75	122.55	126.00
36	5	1428	A	C2-N3-C4	-5.75	107.72	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1637	A	C6-N1-C2	-5.75	115.15	118.60
36	5	3166	C	N3-C4-C5	-5.75	119.60	121.90
37	7	54	U	C6-N1-C1'	5.75	129.25	121.20
37	3	81	U	N3-C4-C5	5.75	118.05	114.60
36	5	581	U	C2-N3-C4	5.75	130.45	127.00
36	5	2801	A	N7-C8-N9	5.75	116.67	113.80
36	1	229	G	N1-C6-O6	-5.75	116.45	119.90
36	1	317	A	C6-N1-C2	-5.75	115.15	118.60
36	1	628	A	N9-C4-C5	5.75	108.10	105.80
36	1	1425	U	O5'-P-OP1	-5.75	100.53	105.70
36	1	2144	A	OP1-P-O3'	5.75	117.85	105.20
36	1	2376	G	N9-C4-C5	5.75	107.70	105.40
36	1	2886	U	N3-C4-O4	5.75	123.42	119.40
36	1	3246	G	O5'-P-OP2	-5.75	100.53	105.70
36	1	3266	G	N3-C4-C5	-5.75	125.73	128.60
1	6	1743	U	OP1-P-OP2	5.75	128.22	119.60
36	5	68	C	C4-C5-C6	-5.75	114.53	117.40
36	5	154	U	O4'-C1'-N1	5.75	112.80	108.20
36	5	2834	G	N7-C8-N9	-5.75	110.23	113.10
36	5	3332	U	C5-C4-O4	5.75	129.35	125.90
1	2	401	A	N9-C4-C5	-5.75	103.50	105.80
36	1	39	A	C6-N1-C2	-5.75	115.15	118.60
36	1	936	A	O4'-C1'-N9	5.75	112.80	108.20
36	1	2631	U	OP2-P-O3'	5.75	117.84	105.20
36	5	952	A	N3-C4-C5	5.75	130.82	126.80
36	5	2209	U	OP1-P-O3'	5.75	117.84	105.20
36	5	2898	G	C5-N7-C8	5.75	107.17	104.30
37	7	73	C	O4'-C1'-N1	5.75	112.80	108.20
36	1	2298	U	N1-C2-O2	-5.75	118.78	122.80
36	1	2648	G	N3-C4-N9	5.75	129.45	126.00
36	1	3266	G	C4-N9-C1'	5.75	133.97	126.50
1	6	991	G	O5'-P-OP1	5.75	117.59	110.70
36	5	896	A	O5'-P-OP2	-5.75	100.53	105.70
36	5	3107	U	N3-C4-O4	5.75	123.42	119.40
37	7	12	U	OP1-P-OP2	-5.75	110.98	119.60
36	1	95	A	N3-C4-N9	-5.74	122.81	127.40
36	1	807	A	O4'-C1'-N9	5.74	112.79	108.20
36	1	2185	G	C4-C5-N7	5.74	113.10	110.80
36	1	2643	A	O5'-P-OP1	-5.74	100.53	105.70
1	6	576	G	N7-C8-N9	5.74	115.97	113.10
1	6	880	C	C2-N1-C1'	5.74	125.12	118.80
36	5	23	A	C5-C6-N6	-5.74	119.11	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	554	A	C8-N9-C4	-5.74	103.50	105.80
36	5	801	A	C2-N3-C4	-5.74	107.73	110.60
36	5	946	U	N1-C2-N3	5.74	118.35	114.90
36	5	1164	G	C4-N9-C1'	-5.74	119.03	126.50
36	5	1482	A	C6-N1-C2	-5.74	115.15	118.60
36	5	1861	G	C5-C6-O6	5.74	132.05	128.60
36	5	1863	G	C8-N9-C4	5.74	108.70	106.40
36	5	3184	A	N3-C4-C5	5.74	130.82	126.80
36	5	3200	G	N1-C2-N3	5.74	127.35	123.90
37	7	13	A	N7-C8-N9	5.74	116.67	113.80
37	7	37	G	C4-C5-N7	5.74	113.10	110.80
36	1	1137	C	C6-N1-C1'	-5.74	113.91	120.80
1	6	516	G	C5-N7-C8	-5.74	101.43	104.30
36	5	1690	C	N3-C2-O2	5.74	125.92	121.90
1	2	576	G	C5-N7-C8	-5.74	101.43	104.30
1	2	1142	A	C5-C6-N6	5.74	128.29	123.70
36	1	98	G	O5'-P-OP2	-5.74	100.53	105.70
36	1	2266	U	N3-C4-C5	5.74	118.04	114.60
1	6	1494	C	N1-C2-N3	5.74	123.22	119.20
36	5	1204	A	N1-C6-N6	5.74	122.05	118.60
36	5	2187	G	O5'-P-OP1	-5.74	100.53	105.70
36	5	2363	A	C5-C6-N1	-5.74	114.83	117.70
36	5	2741	C	C2-N1-C1'	5.74	125.11	118.80
37	7	59	U	O5'-P-OP1	5.74	117.59	110.70
36	1	2199	G	C8-N9-C1'	-5.74	119.54	127.00
36	1	2339	C	N3-C2-O2	-5.74	117.88	121.90
36	1	2762	A	C2-N3-C4	5.74	113.47	110.60
36	1	2879	C	N3-C4-C5	-5.74	119.60	121.90
1	6	30	G	C2-N3-C4	-5.74	109.03	111.90
1	6	1644	C	N3-C4-N4	-5.74	113.98	118.00
36	5	42	C	C6-N1-C1'	-5.74	113.91	120.80
36	5	962	A	O5'-P-OP1	-5.74	100.54	105.70
36	5	1197	A	C4-C5-C6	5.74	119.87	117.00
36	5	1873	U	C5-C6-N1	5.74	125.57	122.70
36	5	2122	G	C2-N3-C4	-5.74	109.03	111.90
36	5	2714	G	C8-N9-C4	-5.74	104.11	106.40
36	5	2995	A	N7-C8-N9	-5.74	110.93	113.80
37	7	83	U	N1-C2-N3	5.74	118.34	114.90
37	7	99	G	N3-C4-N9	-5.74	122.56	126.00
38	8	107	G	N7-C8-N9	5.74	115.97	113.10
36	1	30	G	C5-N7-C8	-5.74	101.43	104.30
36	1	909	G	C5-C6-O6	-5.74	125.16	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1469	C	C2-N3-C4	-5.74	117.03	119.90
36	1	2765	C	N1-C2-N3	5.74	123.22	119.20
1	6	1513	G	C6-C5-N7	-5.74	126.96	130.40
36	5	335	G	N3-C2-N2	-5.74	115.88	119.90
36	5	350	C	C5-C4-N4	-5.74	116.18	120.20
36	5	808	A	C8-N9-C4	-5.74	103.50	105.80
36	5	910	G	N3-C4-N9	-5.74	122.56	126.00
1	2	1751	C	N3-C2-O2	-5.74	117.89	121.90
36	1	1433	A	N7-C8-N9	5.74	116.67	113.80
36	1	2772	C	C5-C6-N1	5.74	123.87	121.00
36	1	2895	G	N1-C2-N3	5.74	127.34	123.90
36	1	3390	G	C4-C5-C6	5.74	122.24	118.80
43	L6	174	LEU	CB-CG-CD2	-5.74	101.25	111.00
1	6	1219	A	N9-C4-C5	-5.74	103.51	105.80
36	5	512	U	N3-C2-O2	-5.74	118.19	122.20
36	5	1495	U	OP1-P-O3'	5.74	117.82	105.20
36	5	1653	G	C4-N9-C1'	-5.74	119.04	126.50
36	5	1769	G	N3-C2-N2	-5.74	115.89	119.90
36	5	2776	C	C4-C5-C6	-5.74	114.53	117.40
36	5	2825	C	N3-C2-O2	5.74	125.92	121.90
36	1	1400	G	N1-C6-O6	5.73	123.34	119.90
36	1	1446	A	N1-C6-N6	-5.73	115.16	118.60
36	1	1522	U	O4'-C1'-N1	5.73	112.79	108.20
64	N8	42	ARG	NE-CZ-NH1	5.73	123.17	120.30
1	6	385	A	C4-C5-N7	-5.73	107.83	110.70
1	6	619	A	OP2-P-O3'	5.73	117.81	105.20
1	6	1035	G	C4-N9-C1'	-5.73	119.05	126.50
36	5	1150	A	O5'-P-OP2	-5.73	100.54	105.70
36	5	1487	G	N1-C6-O6	5.73	123.34	119.90
1	2	1127	G	C5-C6-O6	5.73	132.04	128.60
1	2	1647	U	C6-N1-C2	-5.73	117.56	121.00
36	1	517	G	C5-C6-O6	5.73	132.04	128.60
36	1	1305	U	C4-C5-C6	5.73	123.14	119.70
36	1	2240	G	C2-N3-C4	-5.73	109.03	111.90
36	1	2372	A	C5-N7-C8	5.73	106.77	103.90
36	1	2381	G	C4-C5-N7	5.73	113.09	110.80
36	1	2389	C	N1-C2-N3	5.73	123.21	119.20
36	1	2516	U	N3-C4-O4	-5.73	115.39	119.40
36	1	2872	A	O5'-P-OP1	-5.73	100.54	105.70
38	4	109	A	OP2-P-O3'	5.73	117.81	105.20
1	6	33	U	C2-N1-C1'	5.73	124.58	117.70
36	5	423	A	C8-N9-C1'	-5.73	117.38	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	782	U	C6-N1-C2	5.73	124.44	121.00
36	5	886	C	N1-C2-N3	-5.73	115.19	119.20
36	5	2195	C	C2-N3-C4	-5.73	117.03	119.90
36	5	2288	G	N3-C4-C5	-5.73	125.73	128.60
36	5	2596	U	N1-C2-O2	5.73	126.81	122.80
36	5	3309	G	C5-C6-N1	5.73	114.37	111.50
39	12	248	GLY	N-CA-C	5.73	127.43	113.10
1	2	1733	C	N3-C4-C5	-5.73	119.61	121.90
36	1	851	C	C6-N1-C2	-5.73	118.01	120.30
36	1	921	A	OP2-P-O3'	5.73	117.81	105.20
36	1	1301	A	C4-C5-N7	5.73	113.57	110.70
36	1	1407	A	N1-C6-N6	-5.73	115.16	118.60
36	1	1525	G	C6-C5-N7	-5.73	126.96	130.40
36	1	2188	A	N1-C2-N3	5.73	132.16	129.30
36	1	3055	U	C2-N1-C1'	5.73	124.58	117.70
38	4	3	A	N1-C6-N6	5.73	122.04	118.60
1	6	97	C	N3-C4-C5	-5.73	119.61	121.90
1	6	449	C	N3-C2-O2	-5.73	117.89	121.90
1	6	781	U	C6-N1-C2	-5.73	117.56	121.00
36	5	370	U	C5-C4-O4	-5.73	122.46	125.90
36	5	512	U	C2-N3-C4	-5.73	123.56	127.00
36	5	618	C	C6-N1-C2	-5.73	118.01	120.30
36	5	694	C	C2-N3-C4	-5.73	117.03	119.90
36	5	1073	U	N3-C2-O2	-5.73	118.19	122.20
36	5	1290	A	C6-C5-N7	-5.73	128.29	132.30
36	5	1914	G	N7-C8-N9	5.73	115.97	113.10
1	2	192	U	O4'-C1'-N1	5.73	112.78	108.20
36	1	1365	G	N1-C6-O6	5.73	123.34	119.90
36	1	1450	G	OP1-P-OP2	5.73	128.19	119.60
36	1	1495	U	N3-C2-O2	5.73	126.21	122.20
36	1	2299	A	C5-C6-N6	-5.73	119.12	123.70
36	1	2337	C	C6-N1-C2	5.73	122.59	120.30
36	1	2736	A	N1-C2-N3	5.73	132.16	129.30
36	1	2939	G	C5-C6-O6	5.73	132.04	128.60
36	5	952	A	C6-N1-C2	5.73	122.04	118.60
36	5	3081	C	C2-N1-C1'	-5.73	112.50	118.80
36	5	3099	C	N3-C2-O2	5.73	125.91	121.90
1	2	1431	C	C6-N1-C2	5.73	122.59	120.30
36	1	734	C	C5-C6-N1	5.73	123.86	121.00
36	1	1852	G	C4-C5-C6	5.73	122.24	118.80
36	1	3336	A	C4-C5-C6	5.73	119.86	117.00
1	6	939	A	C6-N1-C2	-5.73	115.16	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	385	A	C2-N3-C4	-5.73	107.74	110.60
36	5	858	A	C2-N3-C4	5.73	113.46	110.60
36	5	942	U	C5-C6-N1	5.73	125.56	122.70
36	5	1132	C	OP2-P-O3'	5.73	117.80	105.20
36	5	2404	A	C4-C5-N7	-5.73	107.84	110.70
37	7	33	U	N3-C4-C5	5.73	118.04	114.60
36	1	1422	G	O4'-C1'-N9	-5.73	103.62	108.20
36	1	2408	U	N3-C4-C5	-5.73	111.16	114.60
36	1	2939	G	C8-N9-C1'	-5.73	119.56	127.00
36	1	3306	U	C2-N3-C4	-5.73	123.56	127.00
38	4	1	A	N7-C8-N9	-5.73	110.94	113.80
1	6	151	G	N1-C2-N2	5.73	121.35	116.20
1	6	1769	U	N3-C4-C5	-5.73	111.16	114.60
36	5	632	G	C8-N9-C1'	-5.73	119.56	127.00
36	5	1112	A	C6-C5-N7	-5.73	128.29	132.30
1	2	1477	G	C8-N9-C4	-5.72	104.11	106.40
36	1	2636	A	C5-N7-C8	-5.72	101.04	103.90
36	1	3044	G	N3-C4-C5	5.72	131.46	128.60
37	3	88	G	C4-N9-C1'	5.72	133.94	126.50
38	4	27	U	N1-C2-O2	5.72	126.81	122.80
76	Q0	122	ARG	NE-CZ-NH1	5.72	123.16	120.30
1	6	344	A	C8-N9-C4	5.72	108.09	105.80
1	6	421	A	N1-C6-N6	5.72	122.03	118.60
36	5	1206	G	C8-N9-C1'	-5.72	119.56	127.00
36	5	2177	G	C5-C6-N1	5.72	114.36	111.50
36	5	2295	A	C5-C6-N1	5.72	120.56	117.70
1	2	393	C	N1-C2-O2	5.72	122.33	118.90
1	2	756	A	N7-C8-N9	5.72	116.66	113.80
1	2	1267	G	N3-C2-N2	-5.72	115.89	119.90
1	2	1584	G	C4-N9-C1'	-5.72	119.06	126.50
36	1	1529	A	N1-C6-N6	-5.72	115.17	118.60
36	1	1878	G	N1-C6-O6	5.72	123.33	119.90
36	1	1916	U	C2-N3-C4	-5.72	123.57	127.00
36	1	2703	A	C6-N1-C2	-5.72	115.17	118.60
36	1	3045	G	C5-C6-N1	5.72	114.36	111.50
1	6	29	U	OP2-P-O3'	5.72	117.79	105.20
1	6	545	A	N9-C4-C5	5.72	108.09	105.80
1	6	1185	U	C6-N1-C2	-5.72	117.57	121.00
36	5	25	U	N3-C4-C5	-5.72	111.17	114.60
36	5	776	U	C2-N3-C4	-5.72	123.57	127.00
36	5	1216	C	C2-N3-C4	-5.72	117.04	119.90
36	5	1302	A	O5'-P-OP2	5.72	117.57	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1476	G	C6-C5-N7	-5.72	126.97	130.40
36	5	1476	G	O5'-P-OP2	-5.72	100.55	105.70
36	5	1545	A	N7-C8-N9	5.72	116.66	113.80
36	5	2957	G	C6-C5-N7	-5.72	126.97	130.40
36	5	3142	A	C4-C5-N7	-5.72	107.84	110.70
36	5	3217	C	C4-C5-C6	5.72	120.26	117.40
37	7	16	U	C5-C6-N1	-5.72	119.84	122.70
37	7	21	G	N9-C4-C5	5.72	107.69	105.40
38	8	139	U	N3-C4-C5	5.72	118.03	114.60
1	2	21	U	C5-C6-N1	5.72	125.56	122.70
36	1	2278	C	O5'-P-OP2	-5.72	100.55	105.70
36	1	2704	A	OP1-P-O3'	5.72	117.79	105.20
36	1	3079	U	C6-N1-C1'	5.72	129.21	121.20
36	5	395	A	N9-C4-C5	5.72	108.09	105.80
36	5	1939	G	N3-C2-N2	5.72	123.91	119.90
37	7	5	G	C6-N1-C2	-5.72	121.67	125.10
36	1	89	A	C2-N3-C4	-5.72	107.74	110.60
36	1	562	C	C6-N1-C2	5.72	122.59	120.30
36	1	691	A	N7-C8-N9	5.72	116.66	113.80
36	1	898	U	N3-C2-O2	-5.72	118.20	122.20
36	1	914	A	N3-C4-C5	-5.72	122.80	126.80
36	1	1112	A	N3-C4-C5	-5.72	122.80	126.80
36	1	1525	G	N1-C2-N3	5.72	127.33	123.90
36	1	1783	U	C4-C5-C6	5.72	123.13	119.70
36	1	2624	G	C5-C6-O6	-5.72	125.17	128.60
36	1	2770	G	N7-C8-N9	5.72	115.96	113.10
36	1	2942	C	N3-C2-O2	5.72	125.90	121.90
1	6	1114	G	N3-C4-C5	-5.72	125.74	128.60
1	6	1533	C	N1-C2-O2	5.72	122.33	118.90
1	6	1575	G	C8-N9-C1'	5.72	134.44	127.00
36	5	942	U	N1-C2-N3	5.72	118.33	114.90
36	5	2330	C	C5-C6-N1	5.72	123.86	121.00
36	5	2703	A	N1-C6-N6	5.72	122.03	118.60
36	5	3223	A	N9-C4-C5	5.72	108.09	105.80
1	2	1120	U	N1-C2-N3	5.72	118.33	114.90
36	1	277	G	N3-C4-C5	-5.72	125.74	128.60
36	1	1117	G	C8-N9-C4	5.72	108.69	106.40
36	1	2414	G	N3-C2-N2	-5.72	115.90	119.90
1	6	597	G	C2-N3-C4	-5.72	109.04	111.90
1	6	1340	U	O5'-P-OP1	5.72	117.56	110.70
1	6	1392	U	C2-N1-C1'	-5.72	110.84	117.70
36	5	144	A	N1-C6-N6	-5.72	115.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1840	U	C5-C6-N1	-5.72	119.84	122.70
36	5	2421	U	N1-C2-O2	-5.72	118.80	122.80
1	2	611	U	N3-C4-O4	5.72	123.40	119.40
1	2	1423	U	C6-N1-C2	-5.72	117.57	121.00
36	1	590	G	OP2-P-O3'	5.72	117.78	105.20
36	1	1328	C	N1-C2-O2	-5.72	115.47	118.90
36	1	1713	G	N7-C8-N9	-5.72	110.24	113.10
36	1	2333	C	C2-N3-C4	-5.72	117.04	119.90
36	1	2572	C	O4'-C1'-N1	5.72	112.77	108.20
36	1	3369	G	C8-N9-C4	-5.72	104.11	106.40
1	6	313	U	C5-C6-N1	-5.72	119.84	122.70
1	6	748	U	N1-C2-O2	5.72	126.80	122.80
1	6	988	A	OP1-P-O3'	5.72	117.78	105.20
36	5	429	U	C6-N1-C2	5.72	124.43	121.00
36	5	883	A	O5'-P-OP1	-5.72	100.56	105.70
36	5	1890	U	N3-C4-C5	-5.72	111.17	114.60
36	5	2640	A	C2-N3-C4	-5.72	107.74	110.60
36	5	2695	A	N9-C4-C5	5.72	108.09	105.80
36	5	2758	A	C5-C6-N1	-5.72	114.84	117.70
37	7	33	U	O5'-P-OP1	-5.72	100.56	105.70
38	8	17	A	N7-C8-N9	-5.72	110.94	113.80
38	8	110	C	N1-C2-O2	5.72	122.33	118.90
40	13	282	ILE	CG1-CB-CG2	-5.72	98.82	111.40
1	2	1290	U	N3-C2-O2	-5.71	118.20	122.20
1	2	1493	A	O4'-C1'-N9	5.71	112.77	108.20
36	1	743	C	C5-C4-N4	5.71	124.20	120.20
36	1	873	C	C5-C4-N4	-5.71	116.20	120.20
36	1	2692	A	N9-C4-C5	5.71	108.09	105.80
36	1	2840	C	N3-C2-O2	-5.71	117.90	121.90
36	1	3175	U	N1-C2-O2	5.71	126.80	122.80
1	6	27	U	N3-C4-C5	-5.71	111.17	114.60
1	6	558	U	C2-N1-C1'	5.71	124.56	117.70
1	6	1648	A	N1-C6-N6	5.71	122.03	118.60
36	5	272	G	C4-N9-C1'	-5.71	119.07	126.50
36	5	883	A	N9-C4-C5	5.71	108.09	105.80
36	5	1665	C	C5-C6-N1	-5.71	118.14	121.00
36	5	2160	G	N1-C2-N2	5.71	121.34	116.20
36	5	2330	C	N3-C4-C5	-5.71	119.61	121.90
36	5	2588	U	N3-C4-C5	-5.71	111.17	114.60
36	5	2630	C	N3-C2-O2	-5.71	117.90	121.90
36	5	2715	A	N1-C2-N3	5.71	132.16	129.30
36	5	2835	U	N3-C4-O4	5.71	123.40	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2993	G	C5-C6-O6	-5.71	125.17	128.60
38	8	20	U	O5'-P-OP1	5.71	117.56	110.70
36	1	274	G	O5'-P-OP1	5.71	117.56	110.70
36	1	980	A	OP1-P-OP2	-5.71	111.03	119.60
36	1	3213	A	C5-N7-C8	-5.71	101.04	103.90
38	4	115	C	C6-N1-C2	5.71	122.58	120.30
1	6	1243	G	C6-C5-N7	-5.71	126.97	130.40
1	6	1744	A	C8-N9-C4	5.71	108.08	105.80
36	5	307	A	N1-C6-N6	-5.71	115.17	118.60
36	5	1119	C	OP1-P-O3'	-5.71	92.63	105.20
36	5	1698	C	C6-N1-C2	-5.71	118.02	120.30
36	5	2191	U	N3-C2-O2	-5.71	118.20	122.20
1	2	931	C	C2-N3-C4	5.71	122.76	119.90
36	1	573	C	N3-C4-N4	-5.71	114.00	118.00
36	1	2433	U	N1-C2-O2	5.71	126.80	122.80
36	1	3298	C	C6-N1-C2	5.71	122.58	120.30
43	L6	29	LYS	CD-CE-NZ	5.71	124.84	111.70
1	6	51	A	O4'-C1'-N9	-5.71	103.63	108.20
1	6	983	A	N7-C8-N9	5.71	116.66	113.80
1	6	1572	G	N7-C8-N9	5.71	115.95	113.10
1	6	1647	U	O5'-P-OP1	5.71	117.55	110.70
36	5	97	U	OP2-P-O3'	5.71	117.77	105.20
36	5	395	A	C5-C6-N1	-5.71	114.84	117.70
36	5	1683	A	C2-N3-C4	-5.71	107.74	110.60
36	5	3091	A	C4-C5-N7	5.71	113.56	110.70
37	7	37	G	N3-C2-N2	5.71	123.90	119.90
36	1	212	G	C8-N9-C1'	-5.71	119.58	127.00
36	1	2910	A	OP2-P-O3'	5.71	117.76	105.20
38	4	103	G	C8-N9-C1'	-5.71	119.58	127.00
36	5	1195	A	N9-C4-C5	5.71	108.08	105.80
36	5	2674	A	C8-N9-C4	5.71	108.08	105.80
36	5	2988	C	N3-C2-O2	-5.71	117.90	121.90
36	5	3121	U	OP1-P-O3'	5.71	117.76	105.20
36	5	3167	A	C8-N9-C4	-5.71	103.52	105.80
36	5	3175	U	N1-C2-N3	5.71	118.33	114.90
1	2	1280	C	O5'-P-OP2	5.71	117.55	110.70
1	2	1572	G	C6-C5-N7	-5.71	126.97	130.40
36	1	639	G	OP1-P-O3'	5.71	117.76	105.20
36	1	700	C	C6-N1-C1'	5.71	127.65	120.80
36	1	1152	G	N3-C4-N9	5.71	129.43	126.00
36	1	1176	C	N3-C4-C5	5.71	124.18	121.90
36	1	1374	G	C5-C6-N1	5.71	114.35	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1650	G	N9-C4-C5	-5.71	103.12	105.40
36	1	2697	A	P-O3'-C3'	-5.71	112.85	119.70
36	1	2703	A	C4-N9-C1'	5.71	136.57	126.30
1	6	176	C	N1-C2-O2	5.71	122.33	118.90
1	6	1269	U	C6-N1-C2	-5.71	117.58	121.00
1	6	1337	A	N3-C4-N9	-5.71	122.83	127.40
1	6	1477	G	N1-C2-N3	-5.71	120.47	123.90
36	5	398	A	O4'-C1'-N9	-5.71	103.63	108.20
36	5	1079	A	N1-C6-N6	-5.71	115.17	118.60
36	5	1313	G	C5-C6-O6	-5.71	125.17	128.60
36	5	1592	G	C8-N9-C1'	-5.71	119.58	127.00
36	5	1680	G	C6-C5-N7	-5.71	126.97	130.40
36	5	2988	C	C5-C4-N4	-5.71	116.20	120.20
36	5	3019	U	C4-C5-C6	5.71	123.12	119.70
38	8	2	A	C4-C5-N7	5.71	113.55	110.70
1	2	1004	U	C6-N1-C2	-5.71	117.58	121.00
36	1	1521	G	N3-C4-C5	5.71	131.45	128.60
36	1	1830	G	O5'-P-OP1	-5.71	100.56	105.70
36	1	2416	U	C5-C4-O4	-5.71	122.48	125.90
36	1	2650	U	C6-N1-C2	-5.71	117.58	121.00
36	1	2703	A	C8-N9-C4	-5.71	103.52	105.80
36	1	2800	G	C5-N7-C8	-5.71	101.45	104.30
36	1	2964	G	C4-C5-C6	5.71	122.22	118.80
38	4	10	A	N7-C8-N9	-5.71	110.95	113.80
1	6	1178	G	C4-C5-N7	-5.71	108.52	110.80
1	6	1391	A	C6-N1-C2	-5.71	115.18	118.60
1	6	1663	G	N3-C4-N9	-5.71	122.58	126.00
8	s6	165	GLY	N-CA-C	-5.71	98.83	113.10
36	5	126	U	O5'-P-OP2	-5.71	100.56	105.70
36	5	692	A	C4-C5-C6	5.71	119.85	117.00
36	5	1848	G	O5'-P-OP2	-5.71	100.56	105.70
36	5	2343	C	N1-C2-N3	5.71	123.19	119.20
1	2	1022	C	N3-C4-N4	-5.71	114.01	118.00
1	2	1412	G	C8-N9-C1'	5.71	134.42	127.00
36	1	48	A	C8-N9-C4	-5.71	103.52	105.80
36	1	639	G	N7-C8-N9	5.71	115.95	113.10
37	3	110	G	C8-N9-C4	5.71	108.68	106.40
1	6	432	G	C8-N9-C1'	-5.71	119.58	127.00
1	6	1127	G	C4-C5-N7	5.71	113.08	110.80
1	6	1539	G	C4-N9-C1'	5.71	133.92	126.50
36	5	1114	U	C6-N1-C1'	5.71	129.19	121.20
36	5	2774	C	O5'-P-OP1	-5.71	100.56	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2887	A	O4'-C1'-N9	-5.71	103.64	108.20
1	2	987	G	C2-N3-C4	5.70	114.75	111.90
1	2	1140	G	C5-C6-N1	-5.70	108.65	111.50
36	1	425	G	N3-C2-N2	5.70	123.89	119.90
36	1	862	U	N3-C4-O4	5.70	123.39	119.40
36	1	2299	A	C2-N3-C4	5.70	113.45	110.60
36	1	3174	A	N1-C6-N6	5.70	122.02	118.60
38	4	109	A	C4-C5-C6	-5.70	114.15	117.00
44	L7	177	GLY	N-CA-C	-5.70	98.84	113.10
1	6	1337	A	C4-N9-C1'	-5.70	116.03	126.30
1	6	1361	U	N3-C2-O2	-5.70	118.21	122.20
36	5	1793	C	C6-N1-C2	5.70	122.58	120.30
36	5	1942	U	O5'-P-OP1	-5.70	100.57	105.70
36	5	3130	A	N1-C6-N6	5.70	122.02	118.60
36	5	3333	G	C5-N7-C8	5.70	107.15	104.30
36	1	281	G	OP1-P-O3'	5.70	117.75	105.20
36	1	959	C	N1-C2-N3	-5.70	115.21	119.20
1	2	419	G	C6-C5-N7	-5.70	126.98	130.40
1	2	573	C	C4-C5-C6	5.70	120.25	117.40
36	1	649	A	N9-C4-C5	5.70	108.08	105.80
36	1	744	A	N3-C4-N9	-5.70	122.84	127.40
36	1	994	G	C5-C6-O6	5.70	132.02	128.60
36	1	1867	A	C4-C5-C6	5.70	119.85	117.00
36	1	1916	U	C4-C5-C6	5.70	123.12	119.70
36	1	2159	U	C5-C6-N1	5.70	125.55	122.70
36	1	2247	G	N1-C6-O6	5.70	123.32	119.90
36	1	3178	A	C5-C6-N1	-5.70	114.85	117.70
1	6	1442	U	C5-C4-O4	5.70	129.32	125.90
1	6	1600	A	N1-C2-N3	5.70	132.15	129.30
36	5	687	U	C2-N1-C1'	-5.70	110.86	117.70
36	5	805	G	N3-C4-C5	-5.70	125.75	128.60
36	5	890	C	N3-C2-O2	-5.70	117.91	121.90
36	5	978	G	C5-C6-O6	-5.70	125.18	128.60
36	5	1403	C	C6-N1-C1'	-5.70	113.96	120.80
36	5	3159	C	C5-C6-N1	-5.70	118.15	121.00
38	8	56	G	N1-C6-O6	5.70	123.32	119.90
1	2	1083	G	C8-N9-C4	5.70	108.68	106.40
1	2	1431	C	C5-C4-N4	-5.70	116.21	120.20
36	1	26	A	N7-C8-N9	5.70	116.65	113.80
36	1	801	A	C4-C5-N7	5.70	113.55	110.70
36	1	919	U	N3-C4-C5	5.70	118.02	114.60
36	1	1149	G	P-O3'-C3'	5.70	126.54	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1336	U	OP2-P-O3'	5.70	117.74	105.20
36	1	2354	C	N3-C4-C5	-5.70	119.62	121.90
36	1	3328	G	C5-N7-C8	-5.70	101.45	104.30
38	4	54	A	N7-C8-N9	5.70	116.65	113.80
64	N8	59	ARG	NE-CZ-NH1	-5.70	117.45	120.30
1	6	596	C	C2-N1-C1'	-5.70	112.53	118.80
1	6	881	A	O5'-P-OP1	-5.70	100.57	105.70
1	6	1782	A	N7-C8-N9	5.70	116.65	113.80
36	5	115	A	N1-C2-N3	5.70	132.15	129.30
36	5	582	G	N3-C4-N9	-5.70	122.58	126.00
36	5	2417	U	N3-C2-O2	5.70	126.19	122.20
36	5	2654	C	O5'-P-OP1	-5.70	100.57	105.70
36	5	2779	A	O5'-P-OP2	-5.70	100.57	105.70
36	5	2947	G	N3-C2-N2	-5.70	115.91	119.90
1	2	745	U	O5'-P-OP2	-5.70	100.57	105.70
36	1	682	U	C5-C4-O4	5.70	129.32	125.90
36	1	1724	U	C2-N3-C4	-5.70	123.58	127.00
36	1	1869	C	C2-N3-C4	5.70	122.75	119.90
36	1	2310	U	OP1-P-OP2	5.70	128.15	119.60
1	6	417	A	N3-C4-C5	-5.70	122.81	126.80
1	6	718	U	N1-C2-O2	5.70	126.79	122.80
1	6	1504	G	C6-C5-N7	-5.70	126.98	130.40
1	6	1625	C	C6-N1-C2	5.70	122.58	120.30
1	6	1796	C	N1-C2-O2	5.70	122.32	118.90
36	5	1845	G	C4-C5-C6	5.70	122.22	118.80
36	5	2273	G	N9-C4-C5	5.70	107.68	105.40
1	2	576	G	N3-C2-N2	-5.70	115.91	119.90
1	2	1595	U	O4'-C1'-N1	5.70	112.76	108.20
36	1	112	U	N1-C2-N3	5.70	118.32	114.90
36	1	283	G	OP1-P-O3'	5.70	117.73	105.20
36	1	515	C	C2-N1-C1'	5.70	125.06	118.80
36	1	973	A	N1-C2-N3	5.70	132.15	129.30
36	1	1108	U	OP1-P-OP2	5.70	128.14	119.60
36	1	1396	C	N1-C2-N3	-5.70	115.21	119.20
36	1	1465	A	C4-N9-C1'	-5.70	116.05	126.30
36	1	1556	C	C4-C5-C6	5.70	120.25	117.40
36	1	3362	A	C6-C5-N7	-5.70	128.31	132.30
1	6	30	G	N1-C2-N3	5.70	127.32	123.90
1	6	956	C	C6-N1-C2	5.70	122.58	120.30
1	6	959	U	N3-C2-O2	5.70	126.19	122.20
36	5	182	U	N3-C4-C5	-5.70	111.18	114.60
36	5	1000	C	N3-C2-O2	5.70	125.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1270	A	N1-C6-N6	-5.70	115.18	118.60
36	5	2155	G	N1-C6-O6	5.70	123.32	119.90
36	5	2838	A	C5-N7-C8	5.70	106.75	103.90
36	5	2880	U	N3-C2-O2	5.70	126.19	122.20
37	7	26	C	C2-N1-C1'	5.70	125.06	118.80
48	m1	37	LEU	CA-CB-CG	-5.70	102.20	115.30
73	o7	65	ARG	NE-CZ-NH1	5.70	123.15	120.30
36	1	1454	A	N1-C2-N3	5.69	132.15	129.30
36	1	2292	U	N1-C2-N3	5.69	118.32	114.90
1	6	1122	G	C6-C5-N7	-5.69	126.98	130.40
1	2	1006	C	OP1-P-OP2	-5.69	111.06	119.60
36	1	205	C	C2-N3-C4	-5.69	117.05	119.90
36	1	1405	U	C2-N3-C4	-5.69	123.58	127.00
36	1	1542	G	N7-C8-N9	5.69	115.95	113.10
36	1	1849	C	C2-N3-C4	-5.69	117.05	119.90
36	1	2138	A	OP1-P-OP2	5.69	128.14	119.60
36	1	2179	C	C6-N1-C2	-5.69	118.02	120.30
36	1	2323	G	OP1-P-OP2	-5.69	111.06	119.60
36	1	2707	C	N1-C2-N3	5.69	123.19	119.20
36	1	3020	U	C6-N1-C2	-5.69	117.58	121.00
36	1	3223	A	C2-N3-C4	5.69	113.45	110.60
36	1	3300	U	C6-N1-C1'	-5.69	113.23	121.20
37	3	79	A	N1-C6-N6	5.69	122.02	118.60
1	6	34	G	N7-C8-N9	-5.69	110.25	113.10
1	6	123	G	N1-C6-O6	5.69	123.32	119.90
1	6	1662	G	N9-C4-C5	-5.69	103.12	105.40
1	6	1697	G	N3-C4-C5	-5.69	125.75	128.60
36	5	323	A	O5'-P-OP1	-5.69	100.58	105.70
36	5	666	A	N1-C2-N3	5.69	132.15	129.30
36	5	1132	C	C6-N1-C2	5.69	122.58	120.30
36	5	1815	U	P-O3'-C3'	5.69	126.53	119.70
36	5	2201	G	C8-N9-C1'	-5.69	119.60	127.00
36	5	2698	G	C4-N9-C1'	-5.69	119.10	126.50
36	5	2733	A	C5-C6-N6	-5.69	119.15	123.70
1	2	1241	G	C6-C5-N7	-5.69	126.99	130.40
1	2	1780	G	O4'-C1'-N9	-5.69	103.65	108.20
36	1	178	U	C5-C6-N1	5.69	125.55	122.70
36	1	277	G	C4-C5-N7	-5.69	108.52	110.80
36	1	1795	U	O4'-C1'-N1	5.69	112.75	108.20
37	3	110	G	C5-C6-N1	5.69	114.34	111.50
1	6	57	G	C8-N9-C1'	-5.69	119.60	127.00
1	6	1575	G	N1-C6-O6	-5.69	116.49	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	384	A	C2-N3-C4	-5.69	107.75	110.60
36	5	570	A	C8-N9-C4	5.69	108.08	105.80
36	5	642	U	C2-N3-C4	-5.69	123.59	127.00
36	5	660	A	N1-C6-N6	-5.69	115.19	118.60
36	5	1082	U	N1-C2-O2	5.69	126.78	122.80
36	5	1172	G	N3-C4-C5	-5.69	125.75	128.60
36	5	2111	G	C6-N1-C2	5.69	128.51	125.10
36	5	2732	G	N3-C2-N2	-5.69	115.92	119.90
36	5	2914	G	O5'-P-OP2	-5.69	100.58	105.70
36	5	3173	G	C4-N9-C1'	5.69	133.90	126.50
38	8	55	U	N3-C4-O4	5.69	123.38	119.40
36	1	276	U	C6-N1-C2	-5.69	117.59	121.00
36	1	434	U	C5-C4-O4	5.69	129.31	125.90
36	1	1929	G	C5-N7-C8	-5.69	101.45	104.30
36	1	2394	G	C6-N1-C2	-5.69	121.69	125.10
36	1	2647	A	N3-C4-C5	-5.69	122.82	126.80
36	5	2842	U	N3-C4-O4	5.69	123.38	119.40
36	5	3124	G	N9-C4-C5	5.69	107.67	105.40
36	1	227	G	C5-C6-O6	-5.69	125.19	128.60
36	1	398	A	N1-C2-N3	-5.69	126.46	129.30
36	1	794	U	OP2-P-O3'	5.69	117.71	105.20
36	1	835	G	C6-C5-N7	-5.69	126.99	130.40
36	1	855	U	C5-C4-O4	-5.69	122.49	125.90
36	1	985	U	N1-C2-N3	5.69	118.31	114.90
36	1	1838	G	C6-C5-N7	-5.69	126.99	130.40
36	1	1886	A	O5'-P-OP2	-5.69	100.58	105.70
36	1	2943	G	C4-C5-N7	5.69	113.08	110.80
36	1	3150	A	N9-C4-C5	-5.69	103.53	105.80
36	1	3240	C	N1-C2-O2	-5.69	115.49	118.90
36	1	3320	A	N7-C8-N9	5.69	116.64	113.80
38	4	18	U	OP1-P-OP2	-5.69	111.07	119.60
36	5	102	C	C2-N1-C1'	-5.69	112.54	118.80
36	5	1897	G	C4-N9-C1'	5.69	133.89	126.50
36	5	2441	A	N7-C8-N9	5.69	116.64	113.80
36	5	3027	A	N1-C6-N6	5.69	122.01	118.60
36	5	3285	C	N3-C2-O2	-5.69	117.92	121.90
36	5	3309	G	C8-N9-C4	5.69	108.67	106.40
1	2	822	U	C5-C6-N1	5.69	125.54	122.70
36	1	943	U	N1-C2-O2	-5.69	118.82	122.80
36	1	1191	U	C2-N3-C4	-5.69	123.59	127.00
36	1	3244	A	C2-N3-C4	-5.69	107.76	110.60
36	1	3288	G	C4-C5-N7	5.69	113.07	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	901	G	C5-C6-O6	-5.69	125.19	128.60
1	6	983	A	O5'-P-OP2	-5.69	100.58	105.70
36	5	546	C	C6-N1-C2	-5.69	118.03	120.30
36	5	1013	G	N9-C4-C5	5.69	107.67	105.40
36	5	1129	A	C5-N7-C8	-5.69	101.06	103.90
36	5	1215	U	O5'-P-OP2	-5.69	100.58	105.70
36	5	1673	G	C4-C5-N7	5.69	113.08	110.80
36	5	1833	G	O5'-P-OP2	-5.69	100.58	105.70
36	5	1886	A	C4-C5-N7	-5.69	107.86	110.70
36	1	595	G	N1-C2-N2	-5.68	111.08	116.20
36	1	1208	U	C5-C4-O4	-5.68	122.49	125.90
36	1	1340	G	OP2-P-O3'	5.68	117.71	105.20
36	1	1524	A	C5-N7-C8	5.68	106.74	103.90
36	1	1607	U	OP1-P-O3'	5.68	117.70	105.20
36	1	2175	U	C5-C4-O4	5.68	129.31	125.90
36	1	2206	G	N9-C4-C5	-5.68	103.13	105.40
36	1	2990	G	C5-C6-O6	-5.68	125.19	128.60
36	1	3134	A	OP2-P-O3'	5.68	117.71	105.20
1	6	1169	G	N3-C4-N9	5.68	129.41	126.00
3	s1	207	LEU	CB-CG-CD2	-5.68	101.34	111.00
36	5	790	U	C2-N3-C4	-5.68	123.59	127.00
36	5	1947	G	C6-N1-C2	-5.68	121.69	125.10
36	5	2381	G	OP1-P-O3'	5.68	117.71	105.20
36	5	3182	G	N1-C2-N2	-5.68	111.08	116.20
36	5	3197	G	C5-C6-O6	-5.68	125.19	128.60
36	1	277	G	C8-N9-C4	-5.68	104.13	106.40
36	1	701	G	C4-C5-C6	5.68	122.21	118.80
36	1	1161	G	C6-N1-C2	-5.68	121.69	125.10
36	1	2257	C	N1-C2-O2	5.68	122.31	118.90
36	1	2809	C	N3-C4-C5	-5.68	119.63	121.90
36	1	2882	U	O5'-P-OP1	5.68	117.52	110.70
36	1	2884	C	C5-C4-N4	5.68	124.18	120.20
36	1	3107	U	C5-C4-O4	5.68	129.31	125.90
36	1	3306	U	N3-C4-C5	5.68	118.01	114.60
38	4	117	C	N3-C2-O2	5.68	125.88	121.90
1	6	25	C	N1-C2-O2	5.68	122.31	118.90
1	6	1320	U	C2-N1-C1'	5.68	124.52	117.70
36	5	64	G	C8-N9-C1'	-5.68	119.61	127.00
36	5	437	G	C2-N3-C4	5.68	114.74	111.90
36	5	746	A	C2-N3-C4	-5.68	107.76	110.60
36	5	890	C	O5'-P-OP2	-5.68	100.58	105.70
36	5	1147	G	C5-N7-C8	-5.68	101.46	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1755	C	N1-C2-N3	-5.68	115.22	119.20
36	5	1848	G	O5'-P-OP1	-5.68	100.59	105.70
36	5	2151	C	C5-C6-N1	-5.68	118.16	121.00
36	5	3269	U	N1-C1'-C2'	-5.68	105.75	112.00
41	14	194	TYR	CA-CB-CG	5.68	124.20	113.40
19	C7	46	LEU	CA-CB-CG	5.68	128.37	115.30
36	1	959	C	C5-C6-N1	-5.68	118.16	121.00
36	1	1320	C	N3-C4-N4	-5.68	114.02	118.00
36	1	1435	A	O5'-P-OP2	5.68	117.52	110.70
36	1	1541	G	C4-C5-N7	5.68	113.07	110.80
20	c8	116	LEU	CB-CG-CD2	-5.68	101.34	111.00
36	5	984	G	C5-C6-O6	-5.68	125.19	128.60
36	5	1171	G	N9-C4-C5	5.68	107.67	105.40
1	2	909	U	C2-N1-C1'	-5.68	110.89	117.70
1	2	1092	A	C8-N9-C4	-5.68	103.53	105.80
1	2	1302	U	N1-C2-N3	-5.68	111.49	114.90
1	2	1553	G	C4-N9-C1'	-5.68	119.12	126.50
36	1	705	A	C5-C6-N6	-5.68	119.16	123.70
36	1	957	C	C2-N3-C4	-5.68	117.06	119.90
36	1	2313	A	O5'-P-OP2	5.68	117.52	110.70
36	1	3238	G	C5-C6-O6	5.68	132.01	128.60
38	4	35	C	N1-C2-O2	-5.68	115.49	118.90
38	4	110	C	C5-C6-N1	-5.68	118.16	121.00
1	6	637	C	C6-N1-C1'	-5.68	113.98	120.80
1	6	1038	U	N1-C2-O2	-5.68	118.82	122.80
36	5	227	G	OP1-P-OP2	5.68	128.12	119.60
36	5	423	A	N3-C4-N9	5.68	131.94	127.40
36	5	1208	U	N3-C2-O2	-5.68	118.22	122.20
36	5	1339	C	N1-C2-O2	5.68	122.31	118.90
36	5	1537	A	C2-N3-C4	-5.68	107.76	110.60
36	5	1554	U	N1-C2-O2	5.68	126.78	122.80
36	5	1890	U	C2-N3-C4	5.68	130.41	127.00
36	5	2557	A	N1-C6-N6	-5.68	115.19	118.60
36	5	2961	G	C8-N9-C1'	-5.68	119.62	127.00
36	5	3095	U	OP1-P-O3'	5.68	117.69	105.20
36	5	3271	G	C5-C6-N1	-5.68	108.66	111.50
1	2	1080	U	N3-C4-C5	-5.68	111.19	114.60
1	2	1782	A	C5-C6-N6	5.68	128.24	123.70
36	1	580	C	N3-C2-O2	5.68	125.88	121.90
36	1	729	C	N3-C4-C5	-5.68	119.63	121.90
36	1	1314	C	N3-C4-N4	5.68	121.97	118.00
1	6	408	C	C2-N1-C1'	-5.68	112.56	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	418	G	C4-N9-C1'	5.68	133.88	126.50
36	5	842	G	C6-C5-N7	5.68	133.81	130.40
36	5	905	U	C5-C6-N1	-5.68	119.86	122.70
36	1	361	A	C5-C6-N6	-5.68	119.16	123.70
36	1	732	C	N1-C2-O2	5.68	122.31	118.90
36	1	979	U	C5-C6-N1	5.68	125.54	122.70
36	1	1049	C	N1-C2-O2	-5.68	115.49	118.90
36	1	2244	A	C6-N1-C2	-5.68	115.19	118.60
36	1	2914	G	C5-C6-O6	5.68	132.01	128.60
36	1	3018	C	C5-C6-N1	-5.68	118.16	121.00
36	1	3291	G	N1-C2-N2	5.68	121.31	116.20
38	4	109	A	N1-C6-N6	5.68	122.01	118.60
1	6	11	A	C5-C6-N6	5.68	128.24	123.70
1	6	1774	G	N1-C2-N3	5.68	127.31	123.90
10	s8	90	LEU	CA-CB-CG	-5.68	102.25	115.30
36	5	1933	A	C2-N3-C4	-5.68	107.76	110.60
36	5	3097	C	N3-C4-N4	5.68	121.97	118.00
1	2	401	A	OP2-P-O3'	5.67	117.68	105.20
1	2	776	G	C8-N9-C4	5.67	108.67	106.40
1	2	1594	G	N1-C6-O6	5.67	123.31	119.90
36	1	968	G	N3-C4-N9	5.67	129.41	126.00
36	1	1150	A	O5'-P-OP1	5.67	117.51	110.70
36	1	1213	G	C4-C5-N7	5.67	113.07	110.80
36	1	3304	U	C2-N3-C4	-5.67	123.59	127.00
38	4	102	U	O5'-P-OP2	-5.67	100.59	105.70
1	6	108	A	N1-C6-N6	5.67	122.00	118.60
36	5	43	A	C4-C5-N7	5.67	113.54	110.70
36	5	234	G	N7-C8-N9	5.67	115.94	113.10
36	5	637	C	O5'-P-OP2	-5.67	100.59	105.70
36	5	935	U	N1-C2-N3	5.67	118.31	114.90
36	5	1306	G	N3-C4-N9	-5.67	122.59	126.00
36	5	1444	G	C8-N9-C1'	-5.67	119.62	127.00
36	5	2144	A	C2-N3-C4	5.67	113.44	110.60
36	5	2847	A	C5-N7-C8	-5.67	101.06	103.90
37	7	60	G	N7-C8-N9	5.67	115.94	113.10
36	1	131	C	C5-C6-N1	5.67	123.84	121.00
36	1	1713	G	N3-C4-N9	-5.67	122.60	126.00
36	1	1902	G	C5-C6-N1	-5.67	108.66	111.50
36	1	2598	G	C8-N9-C4	-5.67	104.13	106.40
36	1	3261	C	N3-C4-N4	5.67	121.97	118.00
1	6	901	G	C2-N3-C4	5.67	114.74	111.90
36	5	3230	G	N3-C4-C5	-5.67	125.76	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	197	G	N1-C2-N2	-5.67	111.10	116.20
36	1	938	C	N1-C2-O2	5.67	122.30	118.90
36	1	1454	A	N1-C6-N6	5.67	122.00	118.60
36	1	1460	A	C5-C6-N1	5.67	120.54	117.70
36	1	2699	G	N3-C4-C5	5.67	131.44	128.60
1	6	395	U	C6-N1-C2	-5.67	117.60	121.00
1	6	577	G	N1-C6-O6	5.67	123.30	119.90
36	5	88	A	C5-C6-N6	-5.67	119.16	123.70
36	5	2138	A	C2-N3-C4	-5.67	107.76	110.60
36	5	2948	C	N3-C2-O2	-5.67	117.93	121.90
36	5	3057	U	N3-C2-O2	-5.67	118.23	122.20
42	l5	248	ARG	NE-CZ-NH1	5.67	123.14	120.30
54	m8	11	LYS	CD-CE-NZ	5.67	124.74	111.70
37	3	84	A	OP1-P-OP2	-5.67	111.09	119.60
1	6	103	A	N7-C8-N9	5.67	116.64	113.80
36	5	967	A	C8-N9-C4	-5.67	103.53	105.80
36	5	2836	C	C5-C6-N1	-5.67	118.17	121.00
1	2	240	U	P-O3'-C3'	5.67	126.50	119.70
36	1	42	C	C2-N3-C4	-5.67	117.06	119.90
36	1	840	C	N3-C4-C5	5.67	124.17	121.90
36	1	886	C	C6-N1-C2	-5.67	118.03	120.30
36	1	945	C	N3-C4-C5	-5.67	119.63	121.90
36	1	1463	U	C4-C5-C6	5.67	123.10	119.70
36	1	2814	G	N1-C2-N3	5.67	127.30	123.90
36	1	3104	U	N1-C1'-C2'	-5.67	105.77	112.00
41	L4	156	LEU	CA-CB-CG	5.67	128.34	115.30
1	6	176	C	C6-N1-C1'	-5.67	114.00	120.80
1	6	755	A	C4-C5-N7	5.67	113.53	110.70
1	6	777	C	C4-C5-C6	-5.67	114.57	117.40
36	5	1203	A	N9-C4-C5	-5.67	103.53	105.80
36	5	1913	A	C4-C5-N7	5.67	113.53	110.70
36	5	2427	U	C5-C4-O4	5.67	129.30	125.90
1	2	48	G	N7-C8-N9	5.67	115.93	113.10
1	2	581	U	N3-C4-O4	5.67	123.37	119.40
1	2	1682	U	O4'-C1'-N1	5.67	112.73	108.20
36	1	317	A	N1-C2-N3	5.67	132.13	129.30
36	1	775	A	C2-N3-C4	5.67	113.43	110.60
36	1	879	U	O5'-P-OP2	-5.67	100.60	105.70
36	1	901	G	N1-C2-N2	5.67	121.30	116.20
36	1	1549	U	N3-C2-O2	5.67	126.17	122.20
36	1	1553	U	C5-C6-N1	-5.67	119.87	122.70
36	1	2909	U	C2-N3-C4	-5.67	123.60	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3240	C	C2-N1-C1'	-5.67	112.57	118.80
1	6	757	A	N3-C4-N9	-5.67	122.87	127.40
1	6	1504	G	C4-C5-C6	5.67	122.20	118.80
36	5	1361	U	C5-C6-N1	-5.67	119.87	122.70
36	5	1780	G	N7-C8-N9	5.67	115.93	113.10
36	5	3307	A	C5-C6-N6	-5.67	119.17	123.70
36	1	1377	G	N3-C4-N9	5.67	129.40	126.00
36	1	2831	G	N9-C4-C5	-5.67	103.13	105.40
1	6	1409	G	N3-C4-C5	-5.67	125.77	128.60
36	5	404	G	O5'-P-OP2	-5.67	100.60	105.70
36	5	989	A	C8-N9-C4	5.67	108.07	105.80
1	2	1791	A	C8-N9-C4	5.66	108.06	105.80
36	1	106	A	C8-N9-C4	5.66	108.06	105.80
36	1	370	U	C2-N1-C1'	5.66	124.50	117.70
36	1	633	C	C5-C6-N1	5.66	123.83	121.00
36	1	937	G	N9-C4-C5	-5.66	103.13	105.40
36	1	1182	A	N7-C8-N9	-5.66	110.97	113.80
36	1	1321	G	N1-C2-N2	5.66	121.30	116.20
36	1	2335	G	C8-N9-C4	-5.66	104.14	106.40
36	1	2639	G	N1-C6-O6	5.66	123.30	119.90
36	1	3053	G	C2-N3-C4	-5.66	109.07	111.90
36	1	3266	G	N1-C2-N2	-5.66	111.10	116.20
38	4	52	A	C2-N3-C4	-5.66	107.77	110.60
1	6	1110	G	C8-N9-C1'	-5.66	119.64	127.00
36	5	2280	A	OP2-P-O3'	5.66	117.66	105.20
36	5	2286	U	N1-C2-N3	5.66	118.30	114.90
36	5	2992	U	O5'-P-OP2	-5.66	100.60	105.70
36	1	1048	A	OP1-P-O3'	5.66	117.66	105.20
36	1	1507	G	N3-C2-N2	5.66	123.86	119.90
36	1	1940	G	N1-C6-O6	-5.66	116.50	119.90
36	1	2939	G	N3-C2-N2	-5.66	115.94	119.90
36	1	3135	U	C4-C5-C6	5.66	123.10	119.70
1	6	1172	G	C5-C6-O6	5.66	132.00	128.60
1	6	1536	G	N3-C4-C5	-5.66	125.77	128.60
36	5	637	C	N1-C2-O2	5.66	122.30	118.90
36	5	832	G	C8-N9-C1'	-5.66	119.64	127.00
36	5	2422	C	OP2-P-O3'	5.66	117.66	105.20
36	5	2811	A	N9-C4-C5	5.66	108.06	105.80
36	5	2910	A	C8-N9-C4	5.66	108.06	105.80
36	5	2943	G	O5'-P-OP1	5.66	117.49	110.70
38	8	55	U	C2-N1-C1'	5.66	124.50	117.70
1	2	360	A	N1-C2-N3	-5.66	126.47	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	569	C	C6-N1-C2	5.66	122.56	120.30
1	2	1363	U	N1-C2-O2	5.66	126.76	122.80
36	1	919	U	N3-C4-O4	-5.66	115.44	119.40
36	1	1333	C	C2-N3-C4	-5.66	117.07	119.90
36	1	1467	A	C5-C6-N1	5.66	120.53	117.70
36	1	2278	C	C6-N1-C2	5.66	122.56	120.30
36	1	2298	U	N1-C2-N3	5.66	118.30	114.90
36	1	2316	G	C5-C6-N1	-5.66	108.67	111.50
36	1	2769	A	C2-N3-C4	-5.66	107.77	110.60
1	6	1604	U	C2-N1-C1'	5.66	124.49	117.70
1	6	1636	C	C6-N1-C2	5.66	122.56	120.30
36	5	395	A	C5-C6-N6	5.66	128.23	123.70
36	5	618	C	N3-C2-O2	-5.66	117.94	121.90
36	5	974	G	C4-C5-N7	5.66	113.06	110.80
36	5	3291	G	N1-C6-O6	-5.66	116.50	119.90
37	7	85	G	N1-C2-N2	5.66	121.29	116.20
1	2	1037	C	C5-C6-N1	5.66	123.83	121.00
36	1	404	G	O4'-C1'-N9	-5.66	103.67	108.20
36	1	659	G	N1-C6-O6	-5.66	116.50	119.90
36	1	807	A	C4-C5-N7	5.66	113.53	110.70
36	1	1359	C	N3-C2-O2	5.66	125.86	121.90
36	1	1765	U	C5-C4-O4	5.66	129.29	125.90
36	1	2296	A	C6-N1-C2	5.66	122.00	118.60
36	1	2685	C	C5-C4-N4	5.66	124.16	120.20
1	6	316	A	C5-C6-N6	-5.66	119.17	123.70
1	6	330	G	C2-N3-C4	-5.66	109.07	111.90
1	6	1119	G	N1-C2-N3	5.66	127.30	123.90
1	6	1362	U	C5-C6-N1	5.66	125.53	122.70
36	5	894	G	N3-C2-N2	-5.66	115.94	119.90
36	5	2112	U	N1-C2-N3	5.66	118.30	114.90
36	5	2816	G	C8-N9-C4	5.66	108.66	106.40
36	5	3150	A	C5-C6-N6	-5.66	119.17	123.70
36	5	3182	G	O5'-P-OP1	5.66	117.49	110.70
69	o3	49	ILE	CG1-CB-CG2	-5.66	98.95	111.40
36	1	699	A	C4-C5-C6	-5.66	114.17	117.00
36	1	2300	G	C4-C5-C6	5.66	122.19	118.80
36	1	2323	G	N3-C4-N9	5.66	129.39	126.00
38	4	17	A	C6-C5-N7	-5.66	128.34	132.30
1	6	1115	U	N1-C2-O2	5.66	126.76	122.80
36	5	1399	A	C5-C6-N6	-5.66	119.17	123.70
36	5	1603	A	N3-C4-N9	5.66	131.93	127.40
36	5	2236	G	C4-N9-C1'	5.66	133.85	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2763	U	N3-C2-O2	5.66	126.16	122.20
36	5	2921	U	O4'-C1'-N1	-5.66	103.67	108.20
1	2	1282	U	C5-C6-N1	-5.66	119.87	122.70
36	1	225	C	N3-C4-C5	-5.66	119.64	121.90
36	1	272	G	O5'-P-OP1	-5.66	100.61	105.70
36	1	303	G	C5-C6-N1	5.66	114.33	111.50
36	1	680	G	N7-C8-N9	-5.66	110.27	113.10
36	1	871	U	C2-N1-C1'	-5.66	110.91	117.70
36	1	1306	G	C5-C6-N1	-5.66	108.67	111.50
36	1	1513	G	C4-C5-N7	5.66	113.06	110.80
36	1	2391	G	OP2-P-O3'	5.66	117.64	105.20
36	1	2556	C	C5-C4-N4	5.66	124.16	120.20
36	1	2893	C	OP1-P-OP2	5.66	128.08	119.60
36	1	3015	G	OP2-P-O3'	5.66	117.64	105.20
1	6	1422	A	N1-C6-N6	-5.66	115.21	118.60
1	6	1521	G	C6-N1-C2	-5.66	121.71	125.10
1	6	1777	G	C8-N9-C1'	-5.66	119.65	127.00
36	5	804	C	O5'-P-OP1	-5.66	100.61	105.70
36	5	963	G	N3-C4-C5	-5.66	125.77	128.60
36	5	1215	U	N3-C2-O2	5.66	126.16	122.20
36	5	1518	U	N1-C2-N3	5.66	118.29	114.90
36	5	2150	G	C6-C5-N7	-5.66	127.01	130.40
36	5	2524	A	N1-C6-N6	5.66	121.99	118.60
36	5	2850	G	N3-C4-N9	5.66	129.39	126.00
36	5	3146	G	O4'-C1'-N9	-5.66	103.68	108.20
38	8	2	A	N1-C2-N3	5.66	132.13	129.30
38	8	70	G	C5-C6-O6	5.66	131.99	128.60
77	q1	15	ARG	NE-CZ-NH1	-5.66	117.47	120.30
36	1	810	A	N1-C2-N3	5.65	132.13	129.30
36	1	2754	G	N3-C2-N2	5.65	123.86	119.90
36	5	2856	G	N3-C2-N2	-5.65	115.94	119.90
1	2	625	C	N1-C2-O2	5.65	122.29	118.90
1	2	1002	G	N3-C4-C5	-5.65	125.77	128.60
1	2	1589	C	N3-C2-O2	-5.65	117.94	121.90
36	1	591	G	C8-N9-C1'	-5.65	119.65	127.00
36	1	1154	A	P-O3'-C3'	-5.65	112.92	119.70
36	1	1370	G	C8-N9-C1'	5.65	134.35	127.00
36	1	1470	U	O5'-P-OP1	-5.65	100.61	105.70
36	1	2191	U	N1-C2-N3	5.65	118.29	114.90
1	6	144	U	C5-C6-N1	5.65	125.53	122.70
1	6	1270	G	C5-C6-O6	-5.65	125.21	128.60
36	5	993	G	N9-C4-C5	5.65	107.66	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1455	U	C5-C4-O4	-5.65	122.51	125.90
36	5	2381	G	N3-C2-N2	-5.65	115.94	119.90
36	5	3053	G	C5-C6-O6	5.65	131.99	128.60
36	5	3394	U	C6-N1-C2	-5.65	117.61	121.00
36	1	1061	A	C4-C5-N7	-5.65	107.88	110.70
36	1	2119	A	C6-C5-N7	-5.65	128.34	132.30
36	1	2237	C	C2-N3-C4	-5.65	117.07	119.90
36	1	2675	C	C6-N1-C2	5.65	122.56	120.30
1	6	337	G	N1-C2-N3	-5.65	120.51	123.90
1	6	453	U	C6-N1-C1'	-5.65	113.29	121.20
1	6	575	C	N3-C4-C5	5.65	124.16	121.90
1	6	1644	C	C5-C4-N4	5.65	124.16	120.20
1	6	1780	G	C4-N9-C1'	5.65	133.84	126.50
36	5	850	U	C5-C4-O4	-5.65	122.51	125.90
36	5	916	G	C6-N1-C2	-5.65	121.71	125.10
36	5	1902	G	C2-N3-C4	-5.65	109.08	111.90
36	5	2175	U	C5-C6-N1	-5.65	119.88	122.70
36	5	2377	G	N3-C4-N9	-5.65	122.61	126.00
36	5	2387	A	C6-C5-N7	-5.65	128.34	132.30
36	5	3142	A	O5'-P-OP2	5.65	117.48	110.70
37	7	88	G	C2-N3-C4	5.65	114.72	111.90
1	2	1788	G	C4-C5-C6	-5.65	115.41	118.80
6	S4	38	LEU	CA-CB-CG	5.65	128.29	115.30
36	1	1316	C	C5-C6-N1	-5.65	118.18	121.00
36	1	1927	G	N1-C2-N2	-5.65	111.12	116.20
36	1	2371	G	N1-C2-N3	5.65	127.29	123.90
36	1	2711	C	N1-C2-O2	-5.65	115.51	118.90
36	5	405	U	C5-C4-O4	-5.65	122.51	125.90
36	5	2831	G	C4-N9-C1'	5.65	133.84	126.50
36	5	2923	U	N3-C4-O4	5.65	123.35	119.40
36	5	3029	A	OP1-P-O3'	5.65	117.63	105.20
76	q0	106	ARG	NE-CZ-NH1	-5.65	117.47	120.30
36	1	1310	G	N3-C4-N9	-5.65	122.61	126.00
36	1	2610	G	N7-C8-N9	5.65	115.92	113.10
36	1	2666	C	C2-N3-C4	5.65	122.72	119.90
36	1	2864	A	N3-C4-N9	-5.65	122.88	127.40
56	N0	24	LEU	CA-CB-CG	5.65	128.29	115.30
1	6	692	C	C6-N1-C2	5.65	122.56	120.30
36	5	424	G	OP1-P-O3'	-5.65	92.78	105.20
36	5	954	U	C4-C5-C6	5.65	123.09	119.70
36	5	1784	G	N3-C4-C5	-5.65	125.78	128.60
36	5	2833	A	N7-C8-N9	-5.65	110.98	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2859	U	C5-C6-N1	-5.65	119.88	122.70
36	5	2924	U	N3-C4-O4	5.65	123.35	119.40
36	5	3249	C	C5-C6-N1	-5.65	118.18	121.00
36	1	1530	U	OP2-P-O3'	5.65	117.62	105.20
36	1	1871	U	O5'-P-OP2	5.65	117.48	110.70
36	1	1947	G	C4-C5-N7	5.65	113.06	110.80
1	6	718	U	N3-C2-O2	-5.65	118.25	122.20
36	5	677	A	N1-C6-N6	5.65	121.99	118.60
36	5	1792	C	OP1-P-OP2	5.65	128.07	119.60
36	5	2936	A	C4-C5-C6	5.65	119.82	117.00
1	2	1121	C	N3-C2-O2	-5.64	117.95	121.90
36	1	86	G	C5-C6-O6	-5.64	125.21	128.60
36	1	1194	G	N3-C4-C5	-5.64	125.78	128.60
1	6	94	U	N3-C2-O2	5.64	126.15	122.20
1	6	112	A	N9-C4-C5	-5.64	103.54	105.80
1	6	474	A	C6-N1-C2	5.64	121.99	118.60
1	6	1569	A	O4'-C1'-N9	-5.64	103.68	108.20
1	6	1654	G	O5'-P-OP2	-5.64	100.62	105.70
36	5	182	U	N1-C2-N3	5.64	118.29	114.90
36	5	326	U	N3-C2-O2	-5.64	118.25	122.20
36	5	1337	A	N3-C4-N9	-5.64	122.88	127.40
36	5	2973	G	N1-C2-N2	5.64	121.28	116.20
36	5	3128	G	OP1-P-OP2	-5.64	111.13	119.60
1	2	322	G	O5'-P-OP1	-5.64	100.62	105.70
1	2	1163	A	C2-N3-C4	-5.64	107.78	110.60
36	1	962	A	C8-N9-C4	-5.64	103.54	105.80
36	1	2113	A	N9-C4-C5	5.64	108.06	105.80
36	1	2348	A	C2-N3-C4	-5.64	107.78	110.60
36	1	2914	G	N9-C4-C5	5.64	107.66	105.40
36	1	3119	U	O5'-P-OP1	-5.64	100.62	105.70
1	6	151	G	N3-C4-C5	5.64	131.42	128.60
1	6	474	A	N3-C4-C5	5.64	130.75	126.80
1	6	598	U	C5-C4-O4	-5.64	122.51	125.90
1	6	827	C	N1-C2-O2	-5.64	115.51	118.90
1	6	1060	U	N1-C2-O2	5.64	126.75	122.80
36	5	718	G	N9-C4-C5	-5.64	103.14	105.40
36	5	1653	G	C8-N9-C1'	5.64	134.34	127.00
1	2	1272	U	C4-C5-C6	5.64	123.08	119.70
36	1	178	U	C6-N1-C2	-5.64	117.62	121.00
36	1	1404	G	N1-C2-N2	-5.64	111.12	116.20
36	1	1511	U	C2-N3-C4	-5.64	123.62	127.00
1	6	351	C	OP1-P-O3'	5.64	117.61	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	827	C	C2-N1-C1'	-5.64	112.59	118.80
1	6	1780	G	N9-C4-C5	-5.64	103.14	105.40
36	5	1137	C	C5-C4-N4	-5.64	116.25	120.20
36	5	1900	A	C5-C6-N6	-5.64	119.19	123.70
36	5	2578	U	N1-C2-O2	5.64	126.75	122.80
36	5	2644	C	OP2-P-O3'	5.64	117.61	105.20
38	8	7	U	O5'-P-OP1	-5.64	100.62	105.70
1	2	822	U	C2-N1-C1'	5.64	124.47	117.70
1	2	891	A	C8-N9-C4	5.64	108.06	105.80
1	2	1486	G	N7-C8-N9	5.64	115.92	113.10
36	1	636	C	OP1-P-O3'	5.64	117.61	105.20
36	1	1295	G	N3-C2-N2	5.64	123.85	119.90
36	1	1587	A	N9-C4-C5	5.64	108.06	105.80
36	1	1786	G	OP2-P-O3'	5.64	117.61	105.20
36	1	2232	A	N1-C6-N6	5.64	121.98	118.60
36	1	2277	C	N3-C2-O2	-5.64	117.95	121.90
36	1	2921	U	C2-N1-C1'	5.64	124.47	117.70
1	6	419	G	C4-C5-N7	5.64	113.06	110.80
1	6	1782	A	C8-N9-C4	-5.64	103.54	105.80
36	5	416	A	OP2-P-O3'	5.64	117.61	105.20
36	5	995	U	N3-C2-O2	-5.64	118.25	122.20
36	5	1877	U	C5-C4-O4	5.64	129.28	125.90
36	5	3226	A	N3-C4-N9	-5.64	122.89	127.40
37	7	81	U	N3-C2-O2	-5.64	118.25	122.20
37	7	95	A	C4-C5-C6	5.64	119.82	117.00
59	n3	70	ARG	NE-CZ-NH2	-5.64	117.48	120.30
36	1	1205	A	N1-C6-N6	5.64	121.98	118.60
36	1	2101	C	P-O3'-C3'	5.64	126.47	119.70
36	1	2272	G	C2-N3-C4	-5.64	109.08	111.90
36	1	2343	C	C2-N1-C1'	5.64	125.00	118.80
36	5	2393	G	N3-C2-N2	5.64	123.85	119.90
1	2	1484	G	C5-C6-O6	5.64	131.98	128.60
36	1	348	A	OP1-P-O3'	5.64	117.60	105.20
36	1	611	A	C8-N9-C4	5.64	108.06	105.80
36	1	683	U	N1-C2-O2	-5.64	118.85	122.80
36	1	1362	G	C4-N9-C1'	-5.64	119.17	126.50
36	1	1527	C	O5'-P-OP1	-5.64	100.63	105.70
36	1	1855	U	OP1-P-O3'	5.64	117.60	105.20
36	1	2174	G	C5-N7-C8	-5.64	101.48	104.30
36	1	2309	A	C5-C6-N6	-5.64	119.19	123.70
36	1	2352	A	C6-C5-N7	-5.64	128.35	132.30
36	1	2872	A	C8-N9-C4	5.64	108.06	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2897	A	C6-N1-C2	-5.64	115.22	118.60
1	6	965	U	N3-C2-O2	-5.64	118.25	122.20
1	6	1169	G	C5-C6-O6	5.64	131.98	128.60
1	6	1457	C	C6-N1-C1'	-5.64	114.03	120.80
1	6	1656	U	C6-N1-C2	5.64	124.38	121.00
20	c8	116	LEU	CA-CB-CG	5.64	128.26	115.30
36	5	874	U	O4'-C1'-N1	5.64	112.71	108.20
36	5	2140	U	C6-N1-C2	-5.64	117.62	121.00
36	5	2303	A	C5-C6-N6	-5.64	119.19	123.70
36	5	3037	U	O5'-P-OP2	-5.64	100.63	105.70
36	5	3181	C	N3-C4-C5	-5.64	119.64	121.90
36	5	3195	U	OP1-P-O3'	5.64	117.60	105.20
40	l3	246	LEU	CA-CB-CG	-5.64	102.34	115.30
62	n6	30	LEU	CA-CB-CG	5.64	128.26	115.30
1	2	65	A	C8-N9-C4	-5.63	103.55	105.80
1	2	378	A	C5-C6-N1	-5.63	114.88	117.70
1	2	449	C	N3-C4-N4	-5.63	114.06	118.00
1	2	825	U	N3-C4-O4	5.63	123.34	119.40
36	1	44	U	C5-C6-N1	-5.63	119.88	122.70
36	1	883	A	C2-N3-C4	-5.63	107.78	110.60
36	1	938	C	N1-C2-N3	5.63	123.14	119.20
36	1	1010	G	N9-C4-C5	-5.63	103.15	105.40
36	1	1947	G	N1-C6-O6	5.63	123.28	119.90
36	1	2157	G	O5'-P-OP2	-5.63	100.63	105.70
36	1	2694	A	O5'-P-OP1	-5.63	100.63	105.70
36	1	2964	G	C6-C5-N7	-5.63	127.02	130.40
36	1	3207	U	N1-C2-N3	5.63	118.28	114.90
37	3	92	A	C4-C5-N7	5.63	113.52	110.70
38	4	81	U	C2-N1-C1'	5.63	124.46	117.70
67	O1	55	LEU	CA-CB-CG	5.63	128.26	115.30
1	6	250	C	C5-C6-N1	5.63	123.82	121.00
1	6	1658	G	N3-C4-N9	-5.63	122.62	126.00
1	6	1676	U	C5-C6-N1	-5.63	119.88	122.70
36	5	714	G	C8-N9-C1'	-5.63	119.67	127.00
36	5	969	C	C2-N3-C4	-5.63	117.08	119.90
36	5	2825	C	OP1-P-O3'	-5.63	92.80	105.20
36	5	3337	G	O5'-P-OP1	5.63	117.46	110.70
38	8	65	A	C8-N9-C4	-5.63	103.55	105.80
40	l3	62	ARG	NE-CZ-NH2	-5.63	117.48	120.30
1	2	73	U	P-O3'-C3'	5.63	126.46	119.70
1	2	119	A	N7-C8-N9	-5.63	110.98	113.80
1	2	463	U	N1-C2-N3	5.63	118.28	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	422	A	C8-N9-C4	-5.63	103.55	105.80
36	1	1363	A	N9-C4-C5	-5.63	103.55	105.80
36	1	2727	A	C5-N7-C8	5.63	106.72	103.90
1	6	318	U	N3-C4-O4	5.63	123.34	119.40
36	5	592	A	C4-C5-C6	-5.63	114.18	117.00
36	5	1369	A	N7-C8-N9	5.63	116.62	113.80
37	7	108	A	OP2-P-O3'	5.63	117.59	105.20
38	8	33	A	OP2-P-O3'	5.63	117.59	105.20
47	m0	3	ARG	NE-CZ-NH1	5.63	123.12	120.30
36	1	918	C	N3-C4-N4	-5.63	114.06	118.00
36	1	1086	C	O5'-P-OP2	-5.63	100.63	105.70
36	1	1383	G	C8-N9-C4	-5.63	104.15	106.40
36	1	2139	A	C6-C5-N7	-5.63	128.36	132.30
36	1	2924	U	N1-C2-O2	-5.63	118.86	122.80
36	1	3196	U	N3-C4-O4	-5.63	115.46	119.40
1	6	163	G	C5-N7-C8	-5.63	101.48	104.30
1	6	800	U	C6-N1-C1'	5.63	129.09	121.20
1	6	862	A	N1-C6-N6	-5.63	115.22	118.60
1	6	1324	G	C2-N3-C4	-5.63	109.08	111.90
36	5	589	A	N9-C4-C5	5.63	108.05	105.80
36	5	965	A	N3-C4-N9	5.63	131.91	127.40
36	5	2325	G	C2-N3-C4	-5.63	109.08	111.90
36	5	3312	U	N3-C4-C5	5.63	117.98	114.60
36	5	3327	G	N3-C2-N2	-5.63	115.96	119.90
38	8	23	U	C6-N1-C2	5.63	124.38	121.00
54	m8	49	LEU	CA-CB-CG	5.63	128.25	115.30
1	2	404	G	N1-C6-O6	-5.63	116.52	119.90
36	1	95	A	N9-C4-C5	5.63	108.05	105.80
36	1	2135	U	N3-C2-O2	-5.63	118.26	122.20
1	6	787	G	N1-C6-O6	-5.63	116.52	119.90
1	6	982	U	N3-C4-C5	5.63	117.98	114.60
36	5	794	U	C5-C6-N1	5.63	125.52	122.70
36	5	1397	C	C4-C5-C6	5.63	120.22	117.40
36	5	1847	A	C5-C6-N6	5.63	128.20	123.70
36	5	2647	A	C5-N7-C8	-5.63	101.08	103.90
1	2	352	A	C6-N1-C2	-5.63	115.22	118.60
36	1	85	A	C8-N9-C4	-5.63	103.55	105.80
36	1	196	G	N1-C6-O6	-5.63	116.52	119.90
36	1	1315	U	C5-C6-N1	-5.63	119.89	122.70
36	1	1838	G	OP1-P-O3'	5.63	117.58	105.20
36	1	1911	A	C8-N9-C4	-5.63	103.55	105.80
36	1	2830	G	N3-C4-N9	-5.63	122.62	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2914	G	C8-N9-C4	-5.63	104.15	106.40
36	1	3309	G	C2-N3-C4	-5.63	109.09	111.90
38	4	27	U	C4-C5-C6	-5.63	116.32	119.70
1	6	972	G	N3-C4-C5	-5.63	125.79	128.60
1	6	1623	C	N3-C4-N4	5.63	121.94	118.00
36	5	569	A	C4-C5-N7	5.63	113.52	110.70
36	5	1880	U	C5-C4-O4	-5.63	122.52	125.90
36	5	2208	A	C4-C5-N7	5.63	113.51	110.70
36	5	2343	C	C2-N3-C4	-5.63	117.08	119.90
37	7	20	A	OP1-P-OP2	-5.63	111.16	119.60
37	7	88	G	OP2-P-O3'	5.63	117.58	105.20
1	2	182	A	N7-C8-N9	5.63	116.61	113.80
36	1	517	G	O5'-P-OP1	-5.63	100.64	105.70
36	1	1361	U	C5-C4-O4	-5.63	122.53	125.90
36	1	2204	C	C2-N1-C1'	5.63	124.99	118.80
36	1	2635	A	C4-C5-C6	5.63	119.81	117.00
36	1	3260	G	C4-N9-C1'	5.63	133.81	126.50
36	1	3264	G	C4-N9-C1'	5.63	133.81	126.50
41	L4	244	LEU	CA-CB-CG	5.63	128.24	115.30
44	L7	90	LYS	CD-CE-NZ	5.63	124.64	111.70
1	6	1101	G	N3-C4-N9	5.63	129.38	126.00
1	6	1396	U	C6-N1-C2	-5.63	117.62	121.00
13	c1	63	LEU	CA-CB-CG	-5.63	102.36	115.30
36	5	591	G	C5-C6-N1	-5.63	108.69	111.50
36	5	2706	G	O5'-P-OP1	-5.63	100.64	105.70
36	5	2999	U	O5'-P-OP1	-5.63	100.64	105.70
37	7	88	G	N1-C6-O6	-5.63	116.53	119.90
38	8	22	U	C2-N3-C4	-5.63	123.62	127.00
36	1	1095	U	C5-C6-N1	5.62	125.51	122.70
36	1	1521	G	O4'-C1'-N9	5.62	112.70	108.20
36	1	2210	G	C4-N9-C1'	-5.62	119.19	126.50
1	6	332	U	N1-C2-O2	5.62	126.74	122.80
1	6	1569	A	C4-C5-C6	5.62	119.81	117.00
1	6	1660	A	OP2-P-O3'	5.62	117.58	105.20
1	2	797	G	N3-C4-N9	-5.62	122.63	126.00
36	1	34	A	OP2-P-O3'	5.62	117.57	105.20
36	1	813	G	C6-C5-N7	-5.62	127.03	130.40
36	1	861	C	N1-C2-N3	5.62	123.14	119.20
36	1	1059	G	C8-N9-C4	5.62	108.65	106.40
36	1	1110	U	C6-N1-C2	5.62	124.37	121.00
36	1	1379	G	O4'-C1'-N9	-5.62	103.70	108.20
36	1	1635	G	C8-N9-C1'	-5.62	119.69	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1651	U	O4'-C1'-N1	5.62	112.70	108.20
36	5	368	G	N1-C2-N3	5.62	127.27	123.90
36	5	612	U	N1-C2-O2	-5.62	118.86	122.80
36	5	1860	G	N9-C4-C5	5.62	107.65	105.40
36	5	2262	A	C4-C5-N7	5.62	113.51	110.70
36	5	2335	G	C8-N9-C4	5.62	108.65	106.40
36	5	2354	C	N3-C2-O2	5.62	125.84	121.90
36	5	2728	G	C8-N9-C4	-5.62	104.15	106.40
36	5	2860	U	N1-C2-O2	5.62	126.74	122.80
36	5	2881	C	C2-N1-C1'	-5.62	112.61	118.80
36	5	2931	C	OP1-P-O3'	5.62	117.57	105.20
36	5	3184	A	C4-C5-N7	5.62	113.51	110.70
43	16	20	LYS	CD-CE-NZ	5.62	124.63	111.70
1	2	567	A	C8-N9-C4	5.62	108.05	105.80
36	1	308	A	O5'-P-OP1	5.62	117.45	110.70
36	1	1020	G	C4-C5-N7	5.62	113.05	110.80
36	1	1856	C	N1-C2-O2	5.62	122.27	118.90
36	1	2267	C	O5'-P-OP2	5.62	117.45	110.70
36	1	2554	A	C8-N9-C4	5.62	108.05	105.80
36	1	3375	A	N1-C2-N3	5.62	132.11	129.30
38	4	44	A	N7-C8-N9	5.62	116.61	113.80
1	6	611	U	C4-C5-C6	5.62	123.07	119.70
36	5	191	U	O5'-P-OP1	5.62	117.45	110.70
36	5	1411	C	C2-N3-C4	-5.62	117.09	119.90
36	5	1598	G	N3-C4-C5	-5.62	125.79	128.60
36	5	3044	G	N7-C8-N9	5.62	115.91	113.10
36	5	3207	U	N1-C2-N3	5.62	118.27	114.90
36	5	3295	A	N9-C4-C5	5.62	108.05	105.80
36	1	1436	U	N3-C2-O2	-5.62	118.27	122.20
1	6	107	C	N1-C2-N3	5.62	123.13	119.20
36	5	868	C	O5'-P-OP2	5.62	117.44	110.70
36	5	1216	C	C5-C4-N4	-5.62	116.27	120.20
36	5	1498	A	C5-C6-N6	5.62	128.20	123.70
36	5	2514	U	C6-N1-C1'	5.62	129.07	121.20
36	5	3379	C	C5-C6-N1	-5.62	118.19	121.00
1	2	30	G	C4-C5-N7	5.62	113.05	110.80
1	2	551	G	N3-C4-C5	5.62	131.41	128.60
1	2	555	A	N9-C4-C5	5.62	108.05	105.80
36	1	299	G	C4-C5-N7	5.62	113.05	110.80
36	1	647	A	N1-C2-N3	5.62	132.11	129.30
36	1	754	G	N9-C4-C5	-5.62	103.15	105.40
36	1	830	A	C2-N3-C4	-5.62	107.79	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	996	A	C5-C6-N6	-5.62	119.20	123.70
36	1	3017	A	OP2-P-O3'	5.62	117.56	105.20
36	1	3186	A	C8-N9-C4	-5.62	103.55	105.80
38	4	99	C	C5-C4-N4	-5.62	116.27	120.20
1	6	313	U	C5-C4-O4	5.62	129.27	125.90
1	6	1089	U	C5-C6-N1	5.62	125.51	122.70
36	5	649	A	C6-C5-N7	-5.62	128.37	132.30
36	5	718	G	C5-C6-O6	-5.62	125.23	128.60
36	5	1410	U	O5'-P-OP1	5.62	117.44	110.70
36	5	2865	U	C5-C4-O4	5.62	129.27	125.90
36	5	2867	C	O4'-C1'-N1	5.62	112.69	108.20
37	7	5	G	N1-C6-O6	-5.62	116.53	119.90
1	2	529	A	N7-C8-N9	-5.62	110.99	113.80
36	1	412	G	C8-N9-C4	-5.62	104.15	106.40
36	1	651	G	O5'-P-OP1	5.62	117.44	110.70
36	1	1000	C	C5-C4-N4	-5.62	116.27	120.20
36	1	1174	G	N3-C2-N2	5.62	123.83	119.90
1	6	786	C	N3-C2-O2	-5.62	117.97	121.90
36	5	769	G	N3-C4-C5	5.62	131.41	128.60
36	5	1340	G	C5-N7-C8	-5.62	101.49	104.30
36	5	1491	A	N1-C2-N3	5.62	132.11	129.30
36	5	2626	A	N1-C6-N6	5.62	121.97	118.60
36	5	3127	A	OP2-P-O3'	5.62	117.56	105.20
38	8	42	G	O5'-P-OP1	5.62	117.44	110.70
1	2	1080	U	C6-N1-C2	-5.62	117.63	121.00
36	1	387	A	C5-N7-C8	-5.62	101.09	103.90
36	1	414	U	N3-C2-O2	-5.62	118.27	122.20
36	1	1048	A	C2-N3-C4	5.62	113.41	110.60
36	1	1386	A	C8-N9-C1'	5.62	137.81	127.70
36	1	2323	G	O5'-P-OP1	5.62	117.44	110.70
36	1	3119	U	C6-N1-C2	-5.62	117.63	121.00
36	1	3186	A	N1-C2-N3	5.62	132.11	129.30
1	6	31	C	N3-C4-C5	-5.62	119.65	121.90
1	6	1443	U	N1-C2-O2	5.62	126.73	122.80
1	6	1576	A	C8-N9-C4	5.62	108.05	105.80
36	5	526	C	C6-N1-C1'	-5.62	114.06	120.80
36	5	639	G	OP1-P-O3'	5.62	117.55	105.20
36	5	966	U	N3-C4-O4	5.62	123.33	119.40
36	5	1475	A	N1-C6-N6	-5.62	115.23	118.60
36	5	2514	U	C6-N1-C2	-5.62	117.63	121.00
36	5	2620	G	N7-C8-N9	5.62	115.91	113.10
36	5	2659	G	C5-C6-O6	-5.62	125.23	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3164	C	C6-N1-C1'	-5.62	114.06	120.80
36	5	3184	A	OP2-P-O3'	5.62	117.56	105.20
36	1	873	C	N1-C2-N3	5.61	123.13	119.20
36	1	1364	C	C6-N1-C2	5.61	122.55	120.30
36	1	1443	G	OP1-P-O3'	5.61	117.55	105.20
36	1	2740	A	C5-C6-N1	5.61	120.51	117.70
36	1	3372	A	N7-C8-N9	-5.61	110.99	113.80
1	6	1168	U	C6-N1-C2	-5.61	117.63	121.00
1	6	1592	A	C5-C6-N6	5.61	128.19	123.70
36	5	297	G	N3-C4-N9	5.61	129.37	126.00
36	5	1365	G	N9-C4-C5	5.61	107.65	105.40
36	5	1505	C	N1-C2-O2	-5.61	115.53	118.90
36	5	1924	U	C2-N1-C1'	-5.61	110.96	117.70
36	5	2825	C	C2-N3-C4	5.61	122.71	119.90
1	2	458	G	C5-C6-N1	-5.61	108.69	111.50
36	1	675	C	C6-N1-C2	-5.61	118.06	120.30
36	1	861	C	N3-C2-O2	-5.61	117.97	121.90
36	1	3054	U	C6-N1-C1'	5.61	129.06	121.20
36	1	3216	G	N1-C2-N2	-5.61	111.15	116.20
36	5	636	C	N3-C4-N4	5.61	121.93	118.00
36	5	831	G	C8-N9-C4	5.61	108.64	106.40
36	5	1733	G	N1-C6-O6	5.61	123.27	119.90
36	1	29	C	N3-C4-N4	5.61	121.93	118.00
36	1	334	A	C4-C5-C6	-5.61	114.19	117.00
36	1	1056	U	N1-C2-N3	5.61	118.27	114.90
36	1	2272	G	N1-C6-O6	5.61	123.27	119.90
36	1	2808	A	C8-N9-C1'	-5.61	117.60	127.70
36	1	2893	C	O5'-P-OP1	-5.61	100.65	105.70
36	1	3040	A	C5-N7-C8	5.61	106.70	103.90
1	6	23	G	N3-C4-N9	-5.61	122.63	126.00
1	6	430	G	N3-C4-C5	-5.61	125.80	128.60
1	6	993	A	C2-N3-C4	-5.61	107.79	110.60
1	6	1650	U	P-O3'-C3'	-5.61	112.97	119.70
36	5	408	A	N1-C2-N3	5.61	132.10	129.30
36	5	1138	U	C2-N3-C4	-5.61	123.63	127.00
36	5	2938	G	C6-C5-N7	-5.61	127.03	130.40
36	1	231	G	C8-N9-C4	5.61	108.64	106.40
36	1	299	G	C5-C6-O6	-5.61	125.23	128.60
1	6	865	A	C5-C6-N1	5.61	120.50	117.70
1	6	1117	U	N3-C4-C5	-5.61	111.23	114.60
1	6	1186	U	N3-C4-C5	5.61	117.97	114.60
36	5	1634	G	N3-C4-N9	5.61	129.37	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1661	G	C8-N9-C4	5.61	108.64	106.40
36	1	637	C	O5'-P-OP1	-5.61	100.65	105.70
36	1	709	A	N7-C8-N9	-5.61	111.00	113.80
36	1	973	A	C6-C5-N7	5.61	136.22	132.30
36	1	1893	A	C6-C5-N7	-5.61	128.38	132.30
36	1	1927	G	N3-C2-N2	5.61	123.83	119.90
36	1	2193	U	N1-C2-N3	5.61	118.27	114.90
36	1	2675	C	N3-C2-O2	5.61	125.83	121.90
36	1	3114	A	C4-C5-C6	5.61	119.80	117.00
1	6	457	G	C5-C6-O6	-5.61	125.24	128.60
1	6	1118	G	O5'-P-OP2	-5.61	100.65	105.70
1	6	1775	U	C5-C6-N1	-5.61	119.90	122.70
36	5	365	A	C5-C6-N6	-5.61	119.21	123.70
36	5	2208	A	C6-C5-N7	-5.61	128.37	132.30
36	5	2304	C	C5-C6-N1	5.61	123.80	121.00
36	5	2391	G	C5-N7-C8	5.61	107.10	104.30
36	5	2817	A	C6-N1-C2	-5.61	115.23	118.60
36	5	2918	G	C5-C6-N1	5.61	114.30	111.50
38	8	105	A	N1-C6-N6	5.61	121.96	118.60
1	2	982	U	OP2-P-O3'	5.61	117.53	105.20
36	1	238	A	C8-N9-C4	-5.61	103.56	105.80
36	1	973	A	C4-N9-C1'	-5.61	116.21	126.30
36	1	1220	U	N1-C2-N3	5.61	118.26	114.90
36	1	1307	G	O4'-C1'-N9	-5.61	103.72	108.20
36	1	2874	G	C5-C6-O6	5.61	131.96	128.60
1	6	746	A	C8-N9-C4	-5.61	103.56	105.80
36	5	189	G	C6-N1-C2	-5.61	121.74	125.10
36	5	199	A	O4'-C1'-N9	5.61	112.68	108.20
36	5	276	U	C5-C4-O4	-5.61	122.54	125.90
36	5	567	G	N9-C4-C5	-5.61	103.16	105.40
36	5	2389	C	N3-C4-C5	5.61	124.14	121.90
36	5	3129	A	N3-C4-C5	5.61	130.72	126.80
36	5	3272	C	C4-C5-C6	5.61	120.20	117.40
36	1	870	G	N3-C4-N9	-5.60	122.64	126.00
36	1	1064	A	C6-C5-N7	5.60	136.22	132.30
36	1	1851	G	C4-C5-N7	5.60	113.04	110.80
36	1	1922	A	C5-C6-N6	-5.60	119.22	123.70
1	6	211	U	O5'-P-OP2	-5.60	100.66	105.70
36	5	632	G	N3-C4-C5	-5.60	125.80	128.60
36	5	702	C	C6-N1-C2	-5.60	118.06	120.30
36	5	883	A	N1-C6-N6	-5.60	115.24	118.60
36	5	998	A	C5-N7-C8	5.60	106.70	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2601	A	N7-C8-N9	-5.60	111.00	113.80
1	2	1217	A	C4-C5-N7	5.60	113.50	110.70
36	1	621	A	C8-N9-C4	-5.60	103.56	105.80
36	1	2139	A	C2-N3-C4	-5.60	107.80	110.60
36	1	2611	U	N3-C2-O2	-5.60	118.28	122.20
36	1	2831	G	N7-C8-N9	5.60	115.90	113.10
36	1	2932	U	C2-N1-C1'	-5.60	110.98	117.70
36	1	3135	U	N1-C2-N3	5.60	118.26	114.90
36	1	3340	G	C8-N9-C4	-5.60	104.16	106.40
37	3	33	U	C2-N1-C1'	5.60	124.42	117.70
38	4	82	U	P-O3'-C3'	5.60	126.42	119.70
1	6	381	C	N3-C4-C5	5.60	124.14	121.90
1	6	1277	G	C4-C5-N7	5.60	113.04	110.80
1	6	1658	G	C2-N3-C4	-5.60	109.10	111.90
36	5	1400	G	N7-C8-N9	5.60	115.90	113.10
36	5	1592	G	N9-C4-C5	5.60	107.64	105.40
36	5	1910	A	C4-C5-N7	5.60	113.50	110.70
36	5	2202	C	N1-C2-O2	-5.60	115.54	118.90
36	5	2413	A	C8-N9-C4	-5.60	103.56	105.80
36	5	2572	C	N3-C2-O2	-5.60	117.98	121.90
36	5	2610	G	N1-C6-O6	5.60	123.26	119.90
36	5	3093	C	C2-N3-C4	-5.60	117.10	119.90
36	5	3245	A	C8-N9-C4	-5.60	103.56	105.80
38	8	5	U	N3-C2-O2	5.60	126.12	122.20
38	8	26	U	C5-C4-O4	5.60	129.26	125.90
1	2	628	G	N1-C6-O6	5.60	123.26	119.90
36	1	595	G	C6-C5-N7	-5.60	127.04	130.40
36	1	623	U	C6-N1-C2	-5.60	117.64	121.00
36	1	2893	C	C4-C5-C6	5.60	120.20	117.40
36	1	3075	G	N3-C2-N2	-5.60	115.98	119.90
36	1	3324	C	C5-C4-N4	5.60	124.12	120.20
1	6	383	G	N1-C6-O6	5.60	123.26	119.90
1	6	1700	C	C2-N3-C4	5.60	122.70	119.90
36	5	2677	G	C5-C6-O6	-5.60	125.24	128.60
36	1	823	C	N3-C2-O2	5.60	125.82	121.90
36	1	973	A	N9-C4-C5	5.60	108.04	105.80
36	1	1127	G	N3-C4-N9	-5.60	122.64	126.00
36	1	2216	G	C5-C6-N1	5.60	114.30	111.50
36	1	2775	U	C2-N1-C1'	-5.60	110.98	117.70
36	1	3006	A	N9-C4-C5	5.60	108.04	105.80
1	6	391	A	C5-C6-N1	-5.60	114.90	117.70
1	6	540	G	C4-N9-C1'	-5.60	119.22	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	956	C	C5-C6-N1	-5.60	118.20	121.00
1	6	969	C	C5-C4-N4	-5.60	116.28	120.20
1	6	1424	A	O5'-P-OP1	5.60	117.42	110.70
36	5	883	A	N1-C2-N3	5.60	132.10	129.30
36	5	913	A	N3-C4-C5	-5.60	122.88	126.80
36	5	1320	C	N3-C4-C5	-5.60	119.66	121.90
36	5	1403	C	O4'-C1'-N1	-5.60	103.72	108.20
36	5	2362	C	OP1-P-O3'	5.60	117.52	105.20
36	5	2394	G	C5-C6-N1	-5.60	108.70	111.50
36	5	2890	A	C5-C6-N6	5.60	128.18	123.70
36	5	3213	A	N9-C4-C5	-5.60	103.56	105.80
1	2	1080	U	C5-C4-O4	5.60	129.26	125.90
36	1	233	C	OP1-P-OP2	5.60	128.00	119.60
36	1	885	U	O5'-P-OP1	-5.60	100.66	105.70
36	1	950	G	N3-C2-N2	-5.60	115.98	119.90
36	1	1402	C	C4-C5-C6	5.60	120.20	117.40
36	1	2304	C	C5-C6-N1	-5.60	118.20	121.00
36	1	2556	C	N3-C4-N4	-5.60	114.08	118.00
36	1	2839	G	OP2-P-O3'	5.60	117.52	105.20
1	6	1106	U	C2-N1-C1'	5.60	124.42	117.70
1	6	1576	A	N9-C4-C5	-5.60	103.56	105.80
1	6	1777	G	N7-C8-N9	5.60	115.90	113.10
18	c6	30	LYS	CD-CE-NZ	5.60	124.57	111.70
20	c8	115	ARG	NE-CZ-NH1	-5.60	117.50	120.30
36	5	1238	C	P-O3'-C3'	5.60	126.42	119.70
36	5	1476	G	C8-N9-C4	5.60	108.64	106.40
36	5	1498	A	C6-N1-C2	-5.60	115.24	118.60
36	5	2380	U	N1-C2-N3	5.60	118.26	114.90
36	5	2418	G	C4-C5-C6	5.60	122.16	118.80
36	5	2600	C	C5-C6-N1	5.60	123.80	121.00
36	5	3061	G	N3-C2-N2	-5.60	115.98	119.90
36	5	3176	G	C4-N9-C1'	5.60	133.78	126.50
37	7	113	C	C4-C5-C6	5.60	120.20	117.40
1	2	1727	G	OP1-P-OP2	5.60	127.99	119.60
1	6	1167	G	C6-C5-N7	-5.60	127.04	130.40
36	5	34	A	C4-C5-C6	5.60	119.80	117.00
36	5	429	U	C5-C6-N1	-5.60	119.90	122.70
36	5	698	U	OP2-P-O3'	5.60	117.51	105.20
36	5	1810	A	N1-C6-N6	5.60	121.96	118.60
36	5	2208	A	N7-C8-N9	5.60	116.60	113.80
36	5	2754	G	N3-C4-C5	-5.60	125.80	128.60
1	2	1137	A	C4-C5-C6	-5.59	114.20	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1466	G	C8-N9-C4	-5.59	104.16	106.40
36	1	693	A	C4-C5-N7	5.59	113.50	110.70
36	1	2820	A	N3-C4-C5	5.59	130.72	126.80
36	1	3042	U	C6-N1-C1'	5.59	129.03	121.20
36	1	3163	A	C4-C5-N7	5.59	113.50	110.70
1	6	867	G	C6-C5-N7	5.59	133.76	130.40
36	5	404	G	O4'-C1'-N9	-5.59	103.72	108.20
36	5	647	A	C8-N9-C4	-5.59	103.56	105.80
36	5	1301	A	C4-C5-C6	5.59	119.80	117.00
36	5	1848	G	O4'-C1'-N9	-5.59	103.72	108.20
36	5	2197	C	N3-C2-O2	5.59	125.82	121.90
36	5	2392	C	P-O3'-C3'	5.59	126.41	119.70
36	5	2400	G	N9-C4-C5	5.59	107.64	105.40
36	1	1792	C	C2-N1-C1'	5.59	124.95	118.80
1	6	1668	G	C5-C6-O6	-5.59	125.24	128.60
36	5	1318	A	N7-C8-N9	-5.59	111.00	113.80
36	5	1603	A	N3-C4-C5	-5.59	122.89	126.80
36	5	2263	C	N3-C4-C5	-5.59	119.66	121.90
36	5	2889	C	C6-N1-C2	5.59	122.54	120.30
37	7	75	G	N7-C8-N9	-5.59	110.30	113.10
1	2	1385	G	C8-N9-C4	5.59	108.64	106.40
36	1	47	C	N3-C4-N4	5.59	121.91	118.00
36	1	523	A	O4'-C1'-N9	-5.59	103.73	108.20
36	1	857	G	C5-C6-O6	5.59	131.96	128.60
36	1	865	U	C6-N1-C2	5.59	124.36	121.00
36	1	2433	U	N3-C2-O2	-5.59	118.29	122.20
1	6	1101	G	C6-N1-C2	-5.59	121.75	125.10
1	6	1123	C	N3-C2-O2	5.59	125.81	121.90
1	6	1243	G	C4-C5-C6	5.59	122.16	118.80
1	6	1361	U	C6-N1-C1'	-5.59	113.37	121.20
1	6	1642	G	C5-N7-C8	-5.59	101.50	104.30
36	5	214	G	N1-C2-N3	-5.59	120.55	123.90
36	5	362	U	C6-N1-C2	-5.59	117.64	121.00
36	5	590	G	C4-C5-N7	-5.59	108.56	110.80
36	5	1127	G	C6-N1-C2	-5.59	121.75	125.10
36	5	1355	A	C5-C6-N1	-5.59	114.90	117.70
36	5	1527	C	N3-C2-O2	5.59	125.81	121.90
37	7	90	U	N3-C4-O4	5.59	123.31	119.40
36	1	369	A	C6-N1-C2	-5.59	115.25	118.60
36	1	2324	A	N1-C6-N6	5.59	121.95	118.60
36	1	3132	C	O5'-P-OP2	5.59	117.41	110.70
36	1	3140	G	C5-N7-C8	-5.59	101.51	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3366	G	N3-C4-C5	-5.59	125.81	128.60
38	4	43	A	OP1-P-OP2	-5.59	111.22	119.60
1	6	408	C	O5'-P-OP1	5.59	117.41	110.70
1	6	1470	C	O5'-P-OP1	-5.59	100.67	105.70
36	5	1058	U	C6-N1-C2	5.59	124.35	121.00
36	5	1184	A	OP2-P-O3'	5.59	117.50	105.20
36	5	1293	U	N3-C4-C5	5.59	117.95	114.60
36	5	2295	A	OP1-P-OP2	5.59	127.98	119.60
36	5	3065	G	N1-C2-N2	-5.59	111.17	116.20
36	5	3192	U	N1-C2-O2	-5.59	118.89	122.80
1	6	1002	G	C6-C5-N7	5.59	133.75	130.40
36	5	697	A	C5-N7-C8	5.59	106.69	103.90
36	5	717	C	C6-N1-C1'	-5.59	114.09	120.80
36	5	835	G	N9-C4-C5	5.59	107.64	105.40
36	5	1376	C	OP1-P-OP2	5.59	127.98	119.60
36	5	1573	G	C5-C6-O6	5.59	131.95	128.60
36	5	2219	A	C8-N9-C4	5.59	108.03	105.80
1	2	22	A	N1-C6-N6	-5.59	115.25	118.60
36	1	820	A	N1-C6-N6	-5.59	115.25	118.60
36	1	1292	C	N3-C2-O2	5.59	125.81	121.90
36	1	1371	G	C5-N7-C8	5.59	107.09	104.30
36	1	2733	A	OP1-P-OP2	-5.59	111.22	119.60
36	1	3136	G	N7-C8-N9	5.59	115.89	113.10
36	1	3330	A	C5-N7-C8	5.59	106.69	103.90
1	6	574	G	C8-N9-C4	5.59	108.63	106.40
1	6	1207	C	C6-N1-C2	5.59	122.53	120.30
36	5	78	U	N3-C4-O4	5.59	123.31	119.40
36	5	953	G	C8-N9-C4	5.59	108.64	106.40
36	5	1186	G	C6-C5-N7	-5.59	127.05	130.40
36	5	1513	G	C6-C5-N7	-5.59	127.05	130.40
36	5	2848	G	C5-C6-N1	-5.59	108.71	111.50
36	5	2856	G	N7-C8-N9	5.59	115.89	113.10
36	5	3056	U	O4'-C1'-N1	-5.59	103.73	108.20
38	8	156	U	C2-N1-C1'	5.59	124.41	117.70
36	1	281	G	N7-C8-N9	5.58	115.89	113.10
36	1	1345	G	C4-C5-N7	5.58	113.03	110.80
36	1	2275	A	C5-N7-C8	-5.58	101.11	103.90
36	1	2299	A	OP1-P-O3'	5.58	117.49	105.20
36	1	2348	A	OP2-P-O3'	5.58	117.49	105.20
1	6	398	G	C2-N3-C4	5.58	114.69	111.90
1	6	1565	C	N1-C2-N3	5.58	123.11	119.20
36	5	421	G	C6-C5-N7	-5.58	127.05	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1871	U	C2-N1-C1'	5.58	124.40	117.70
36	5	2679	A	C5-N7-C8	5.58	106.69	103.90
1	2	441	A	N1-C6-N6	-5.58	115.25	118.60
36	1	685	G	N3-C2-N2	5.58	123.81	119.90
36	1	1163	A	C8-N9-C4	5.58	108.03	105.80
36	1	1188	U	N3-C2-O2	-5.58	118.29	122.20
36	1	1495	U	N1-C2-N3	5.58	118.25	114.90
36	1	2371	G	N1-C6-O6	-5.58	116.55	119.90
36	1	2634	U	C6-N1-C1'	-5.58	113.38	121.20
36	1	2821	C	N3-C4-N4	5.58	121.91	118.00
1	6	1550	A	C4-C5-N7	5.58	113.49	110.70
36	5	971	G	OP2-P-O3'	5.58	117.48	105.20
36	5	1239	C	O5'-P-OP2	-5.58	100.67	105.70
36	5	2663	G	C6-N1-C2	-5.58	121.75	125.10
36	5	3301	U	N3-C2-O2	5.58	126.11	122.20
37	7	22	A	N9-C4-C5	5.58	108.03	105.80
37	7	111	U	N3-C4-C5	-5.58	111.25	114.60
38	8	73	U	N3-C2-O2	-5.58	118.29	122.20
1	2	993	A	C4-C5-N7	5.58	113.49	110.70
36	1	80	G	C5-C6-N1	5.58	114.29	111.50
36	1	209	A	N1-C2-N3	5.58	132.09	129.30
36	1	676	G	C4-C5-C6	5.58	122.15	118.80
36	1	722	G	C4-N9-C1'	5.58	133.76	126.50
36	1	926	A	C4-C5-C6	-5.58	114.21	117.00
36	1	2952	G	N3-C4-N9	-5.58	122.65	126.00
1	6	87	C	C6-N1-C2	-5.58	118.07	120.30
36	5	638	C	N3-C4-C5	-5.58	119.67	121.90
36	5	1186	G	C4-C5-N7	5.58	113.03	110.80
36	5	2248	C	N3-C2-O2	5.58	125.81	121.90
36	5	2296	A	N7-C8-N9	-5.58	111.01	113.80
1	2	95	G	C5-C6-O6	5.58	131.95	128.60
1	2	598	U	C6-N1-C2	-5.58	117.65	121.00
1	2	807	A	C5-C6-N6	-5.58	119.24	123.70
1	2	1209	C	N3-C4-C5	5.58	124.13	121.90
36	1	2284	C	C2-N3-C4	5.58	122.69	119.90
36	1	2374	C	C5-C6-N1	-5.58	118.21	121.00
36	5	80	G	OP2-P-O3'	5.58	117.48	105.20
36	5	217	U	C5-C4-O4	5.58	129.25	125.90
36	5	232	G	C4-N9-C1'	-5.58	119.25	126.50
36	5	726	G	C4-N9-C1'	5.58	133.75	126.50
36	5	954	U	C5-C4-O4	5.58	129.25	125.90
36	5	1896	A	C4-C5-C6	-5.58	114.21	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2609	A	O5'-P-OP2	-5.58	100.68	105.70
36	5	2883	U	C5-C4-O4	5.58	129.25	125.90
36	1	323	A	N1-C6-N6	-5.58	115.25	118.60
36	1	897	U	O5'-P-OP2	-5.58	100.68	105.70
36	1	1511	U	C5-C4-O4	5.58	129.25	125.90
36	1	2199	G	N1-C2-N2	-5.58	111.18	116.20
36	1	2276	G	C4-C5-N7	-5.58	108.57	110.80
36	1	2424	A	OP1-P-O3'	5.58	117.47	105.20
37	3	72	A	O5'-P-OP1	-5.58	100.68	105.70
38	4	104	A	C8-N9-C4	-5.58	103.57	105.80
1	6	39	A	C4-C5-C6	5.58	119.79	117.00
36	5	1370	G	N3-C2-N2	-5.58	116.00	119.90
36	5	2356	A	N1-C6-N6	-5.58	115.25	118.60
36	5	2401	A	C6-N1-C2	5.58	121.95	118.60
36	5	2411	U	N1-C2-O2	-5.58	118.89	122.80
36	5	3061	G	N9-C1'-C2'	-5.58	105.86	112.00
36	1	1367	G	C6-C5-N7	-5.58	127.05	130.40
36	1	2185	G	C2-N3-C4	-5.58	109.11	111.90
1	6	34	G	C5-C6-O6	5.58	131.95	128.60
1	6	1409	G	N1-C6-O6	5.58	123.25	119.90
36	5	240	U	C5-C4-O4	5.58	129.25	125.90
36	5	295	A	O4'-C1'-N9	-5.58	103.74	108.20
36	5	917	A	N3-C4-C5	5.58	130.70	126.80
36	5	2835	U	C4-C5-C6	5.58	123.05	119.70
38	8	57	C	C5-C6-N1	-5.58	118.21	121.00
1	2	825	U	C6-N1-C2	-5.58	117.66	121.00
36	1	108	A	C5-C6-N6	-5.58	119.24	123.70
36	1	657	A	N7-C8-N9	5.58	116.59	113.80
36	1	1453	A	C8-N9-C1'	-5.58	117.67	127.70
36	1	2713	U	C5-C4-O4	-5.58	122.55	125.90
1	6	413	U	N1-C2-N3	5.58	118.25	114.90
1	6	1136	U	C6-N1-C2	5.58	124.34	121.00
36	5	2801	A	C4-C5-N7	5.58	113.49	110.70
36	5	3173	G	O5'-P-OP2	-5.58	100.68	105.70
56	n0	128	GLU	OE1-CD-OE2	-5.58	116.61	123.30
1	2	100	A	C6-N1-C2	-5.57	115.25	118.60
36	1	6	A	N7-C8-N9	5.57	116.59	113.80
36	1	339	C	N3-C2-O2	-5.57	118.00	121.90
36	1	2954	U	N1-C2-N3	-5.57	111.56	114.90
54	M8	159	LYS	CD-CE-NZ	5.57	124.52	111.70
1	6	565	C	C5-C4-N4	-5.57	116.30	120.20
1	6	1601	G	C5-C6-N1	5.57	114.29	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1727	G	N7-C8-N9	-5.57	110.31	113.10
36	5	20	A	C6-N1-C2	-5.57	115.26	118.60
36	5	192	C	N1-C2-O2	5.57	122.24	118.90
36	5	355	A	C2-N3-C4	-5.57	107.81	110.60
36	5	1426	C	C5-C6-N1	-5.57	118.21	121.00
36	5	1476	G	C8-N9-C1'	-5.57	119.75	127.00
36	5	2899	C	N3-C2-O2	-5.57	118.00	121.90
36	5	2951	G	C5-N7-C8	-5.57	101.51	104.30
37	7	15	C	C5-C6-N1	5.57	123.79	121.00
61	n5	40	LEU	CB-CG-CD2	5.57	120.47	111.00
36	1	366	A	N1-C2-N3	5.57	132.09	129.30
36	1	1180	A	C6-C5-N7	5.57	136.20	132.30
36	1	3259	U	N3-C4-C5	-5.57	111.26	114.60
38	4	13	A	C8-N9-C4	-5.57	103.57	105.80
53	M7	3	ARG	NE-CZ-NH2	-5.57	117.51	120.30
1	6	251	A	C6-C5-N7	-5.57	128.40	132.30
1	6	454	U	C5-C6-N1	-5.57	119.91	122.70
1	6	1139	A	C6-C5-N7	-5.57	128.40	132.30
1	6	1464	G	OP2-P-O3'	5.57	117.46	105.20
36	5	1766	G	N7-C8-N9	5.57	115.89	113.10
36	5	2155	G	C4-N9-C1'	5.57	133.74	126.50
36	5	3143	C	C2-N3-C4	5.57	122.69	119.90
1	2	372	G	N1-C2-N2	-5.57	111.19	116.20
1	2	994	G	N7-C8-N9	-5.57	110.31	113.10
36	1	806	A	N3-C4-N9	-5.57	122.94	127.40
36	1	1304	A	C6-C5-N7	5.57	136.20	132.30
36	1	1646	G	C4-N9-C1'	-5.57	119.26	126.50
36	1	2127	U	OP1-P-O3'	5.57	117.45	105.20
36	1	2437	G	N1-C6-O6	5.57	123.24	119.90
72	O6	45	ARG	NE-CZ-NH1	5.57	123.08	120.30
1	6	623	A	N1-C6-N6	-5.57	115.26	118.60
36	5	872	U	C5-C4-O4	-5.57	122.56	125.90
37	7	2	G	N1-C6-O6	-5.57	116.56	119.90
36	1	44	U	C4-C5-C6	5.57	123.04	119.70
36	1	192	C	N3-C2-O2	-5.57	118.00	121.90
36	1	709	A	N3-C4-N9	5.57	131.85	127.40
36	1	792	G	C8-N9-C4	-5.57	104.17	106.40
36	1	1656	A	N1-C2-N3	5.57	132.08	129.30
36	1	3009	G	N3-C4-C5	5.57	131.38	128.60
38	4	9	A	O5'-P-OP2	-5.57	100.69	105.70
40	L3	232	ARG	NE-CZ-NH1	-5.57	117.52	120.30
1	6	423	G	C8-N9-C4	-5.57	104.17	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	354	U	C5-C4-O4	-5.57	122.56	125.90
36	5	1040	A	C2-N3-C4	-5.57	107.81	110.60
36	5	1191	U	N1-C2-N3	5.57	118.24	114.90
36	5	1193	A	C5-C6-N1	-5.57	114.92	117.70
36	5	3161	C	C6-N1-C2	-5.57	118.07	120.30
36	5	3367	C	N3-C4-C5	5.57	124.13	121.90
1	2	36	C	N3-C2-O2	5.57	125.80	121.90
1	2	468	A	N9-C4-C5	-5.57	103.57	105.80
1	2	1245	G	N1-C6-O6	-5.57	116.56	119.90
1	2	1670	G	N1-C2-N3	5.57	127.24	123.90
36	1	216	G	C4-C5-N7	5.57	113.03	110.80
36	1	589	A	C6-C5-N7	5.57	136.20	132.30
36	1	923	C	N1-C2-O2	5.57	122.24	118.90
36	1	1408	G	N7-C8-N9	5.57	115.88	113.10
36	1	1850	A	C8-N9-C4	-5.57	103.57	105.80
36	1	2960	C	N3-C4-N4	-5.57	114.10	118.00
36	1	3055	U	O4'-C1'-N1	-5.57	103.75	108.20
38	4	16	G	C4-C5-N7	5.57	113.03	110.80
1	6	160	C	C4-C5-C6	-5.57	114.62	117.40
1	6	297	U	N3-C2-O2	-5.57	118.30	122.20
1	6	1036	A	C2-N3-C4	-5.57	107.82	110.60
36	5	234	G	C8-N9-C4	-5.57	104.17	106.40
36	5	297	G	C4-C5-N7	5.57	113.03	110.80
36	5	1295	G	N3-C4-N9	5.57	129.34	126.00
36	5	1300	G	C6-C5-N7	-5.57	127.06	130.40
36	5	1665	C	OP1-P-O3'	-5.57	92.95	105.20
36	5	2755	C	C5-C4-N4	-5.57	116.30	120.20
36	5	2772	C	N3-C4-C5	-5.57	119.67	121.90
36	5	3227	A	C5-C6-N1	-5.57	114.92	117.70
1	2	1201	G	C5-C6-O6	5.57	131.94	128.60
36	1	53	G	N3-C4-C5	-5.57	125.82	128.60
36	1	351	A	N3-C4-C5	5.57	130.70	126.80
36	1	804	C	C2-N3-C4	-5.57	117.12	119.90
36	1	1255	C	C2-N1-C1'	5.57	124.92	118.80
36	1	2113	A	C4-C5-N7	-5.57	107.92	110.70
36	1	2626	A	N9-C4-C5	5.57	108.03	105.80
36	1	3080	G	C8-N9-C4	5.57	108.63	106.40
36	1	3093	C	N1-C2-N3	5.57	123.10	119.20
37	3	89	G	O5'-P-OP2	-5.57	100.69	105.70
1	6	175	G	C4-C5-N7	5.57	113.03	110.80
1	6	418	G	OP1-P-O3'	5.57	117.44	105.20
1	6	992	A	C5-N7-C8	-5.57	101.12	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1243	G	C8-N9-C4	-5.57	104.17	106.40
36	5	771	A	N7-C8-N9	-5.57	111.02	113.80
36	5	1146	C	N1-C2-N3	-5.57	115.30	119.20
36	5	2307	G	OP2-P-O3'	5.57	117.44	105.20
36	5	3028	G	C6-C5-N7	-5.57	127.06	130.40
36	5	3035	A	N1-C2-N3	5.57	132.08	129.30
36	5	3138	U	N1-C2-O2	-5.57	118.91	122.80
1	2	191	C	O4'-C1'-N1	5.56	112.65	108.20
36	1	1355	A	P-O3'-C3'	5.56	126.38	119.70
36	1	1365	G	C6-C5-N7	-5.56	127.06	130.40
1	6	1101	G	N1-C2-N2	-5.56	111.19	116.20
36	5	2325	G	C4-C5-C6	5.56	122.14	118.80
36	5	2359	C	OP1-P-O3'	5.56	117.44	105.20
1	2	320	U	C4-C5-C6	-5.56	116.36	119.70
1	2	1279	C	N3-C2-O2	-5.56	118.01	121.90
1	2	1452	U	C6-N1-C2	-5.56	117.66	121.00
36	1	351	A	C5-C6-N1	-5.56	114.92	117.70
36	1	517	G	N9-C4-C5	5.56	107.62	105.40
36	1	625	G	N3-C2-N2	-5.56	116.01	119.90
36	1	684	G	C5-C6-O6	-5.56	125.26	128.60
36	1	1773	C	C2-N1-C1'	-5.56	112.68	118.80
36	1	1908	A	C8-N9-C4	-5.56	103.58	105.80
36	1	2167	A	OP2-P-O3'	5.56	117.44	105.20
36	1	2337	C	N3-C4-C5	5.56	124.12	121.90
36	1	2403	G	N3-C4-N9	5.56	129.34	126.00
36	1	2883	U	OP1-P-OP2	-5.56	111.26	119.60
36	1	3056	U	N1-C2-O2	-5.56	118.91	122.80
36	1	3143	C	N3-C2-O2	-5.56	118.01	121.90
1	6	1025	A	O5'-P-OP2	5.56	117.37	110.70
1	6	1343	U	C6-N1-C2	5.56	124.34	121.00
1	6	1598	U	C5-C4-O4	-5.56	122.56	125.90
1	6	1786	G	N9-C4-C5	5.56	107.62	105.40
36	5	1496	C	N1-C2-O2	5.56	122.24	118.90
36	5	1875	G	C2-N3-C4	-5.56	109.12	111.90
36	5	2986	U	C4-C5-C6	5.56	123.04	119.70
36	5	3195	U	N1-C2-N3	-5.56	111.56	114.90
36	5	3212	C	C6-N1-C2	5.56	122.53	120.30
36	1	1149	G	C2-N3-C4	-5.56	109.12	111.90
36	1	1295	G	N3-C4-C5	-5.56	125.82	128.60
36	1	1353	U	N1-C2-O2	5.56	126.69	122.80
1	6	930	A	N9-C4-C5	5.56	108.02	105.80
1	6	1024	U	N1-C2-O2	-5.56	118.91	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1536	G	N9-C4-C5	-5.56	103.18	105.40
36	5	634	C	C6-N1-C2	-5.56	118.08	120.30
36	5	1084	A	C5-C6-N1	5.56	120.48	117.70
36	5	1584	U	C6-N1-C2	5.56	124.34	121.00
36	5	2289	U	N3-C2-O2	-5.56	118.31	122.20
36	5	2800	G	N3-C4-C5	-5.56	125.82	128.60
36	5	2872	A	C4-N9-C1'	-5.56	116.29	126.30
38	8	7	U	C4-C5-C6	5.56	123.04	119.70
1	2	250	C	C2-N1-C1'	5.56	124.92	118.80
1	2	1539	G	C4-C5-N7	5.56	113.02	110.80
36	1	219	A	OP1-P-OP2	5.56	127.94	119.60
36	1	317	A	C5-C6-N1	5.56	120.48	117.70
36	1	583	G	C5-C6-N1	5.56	114.28	111.50
36	1	1402	C	C2-N3-C4	-5.56	117.12	119.90
36	1	2394	G	OP1-P-OP2	5.56	127.94	119.60
36	1	2940	A	O5'-P-OP2	-5.56	100.70	105.70
36	1	3307	A	C4-C5-N7	5.56	113.48	110.70
36	5	406	G	N1-C2-N3	5.56	127.23	123.90
36	5	1178	G	N1-C2-N2	-5.56	111.20	116.20
36	5	1879	A	C2-N3-C4	-5.56	107.82	110.60
36	5	1897	G	C4-C5-C6	5.56	122.14	118.80
36	5	2293	C	N3-C4-N4	5.56	121.89	118.00
36	5	3249	C	C6-N1-C2	5.56	122.52	120.30
38	8	109	A	O5'-P-OP1	5.56	117.37	110.70
40	13	19	ARG	NE-CZ-NH1	5.56	123.08	120.30
36	1	924	G	C2-N3-C4	5.56	114.68	111.90
36	1	1368	U	C6-N1-C1'	-5.56	113.42	121.20
36	1	1524	A	C6-C5-N7	5.56	136.19	132.30
36	1	2997	G	N7-C8-N9	5.56	115.88	113.10
36	1	3175	U	N3-C2-O2	-5.56	118.31	122.20
1	6	29	U	C5-C6-N1	-5.56	119.92	122.70
1	6	103	A	C8-N9-C4	-5.56	103.58	105.80
1	6	1243	G	N3-C4-N9	5.56	129.33	126.00
36	5	879	U	O5'-P-OP2	-5.56	100.70	105.70
36	5	2160	G	N3-C2-N2	-5.56	116.01	119.90
36	5	2208	A	N1-C6-N6	5.56	121.93	118.60
36	5	2556	C	C6-N1-C2	-5.56	118.08	120.30
36	5	2666	C	C6-N1-C1'	-5.56	114.13	120.80
36	5	2741	C	O5'-P-OP2	5.56	117.37	110.70
38	8	116	G	C4-N9-C1'	5.56	133.72	126.50
38	8	136	G	O5'-P-OP1	5.56	117.37	110.70
1	2	1245	G	C5-C6-N1	5.56	114.28	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1438	U	C4-C5-C6	5.56	123.03	119.70
36	1	2699	G	N3-C2-N2	-5.56	116.01	119.90
1	6	1650	U	O5'-P-OP1	5.56	117.37	110.70
17	c5	43	ARG	NE-CZ-NH1	5.56	123.08	120.30
36	5	699	A	N7-C8-N9	5.56	116.58	113.80
36	5	2710	C	C5-C4-N4	-5.56	116.31	120.20
37	7	54	U	C2-N1-C1'	-5.56	111.03	117.70
1	2	30	G	N1-C6-O6	5.55	123.23	119.90
1	2	993	A	C8-N9-C4	-5.55	103.58	105.80
1	2	1462	G	C6-C5-N7	5.55	133.73	130.40
1	2	1583	A	C5-C6-N6	5.55	128.14	123.70
36	1	31	C	N3-C4-C5	-5.55	119.68	121.90
36	1	1542	G	N1-C2-N3	5.55	127.23	123.90
36	1	1634	G	C8-N9-C4	-5.55	104.18	106.40
36	1	1656	A	N7-C8-N9	-5.55	111.02	113.80
36	1	2120	A	C5-N7-C8	5.55	106.68	103.90
36	1	2167	A	C6-C5-N7	-5.55	128.41	132.30
1	6	1008	G	C4-C5-N7	5.55	113.02	110.80
36	5	735	A	N1-C6-N6	5.55	121.93	118.60
36	5	1500	G	C5-C6-O6	-5.55	125.27	128.60
36	5	3246	G	OP1-P-O3'	5.55	117.42	105.20
36	1	209	A	C5-C6-N1	-5.55	114.92	117.70
36	1	506	U	N3-C4-C5	-5.55	111.27	114.60
36	1	1617	G	C2-N3-C4	-5.55	109.12	111.90
36	5	1102	A	N3-C4-C5	-5.55	122.91	126.80
36	5	1527	C	C5-C6-N1	-5.55	118.22	121.00
36	5	2524	A	N9-C1'-C2'	5.55	121.22	114.00
36	5	2756	C	C6-N1-C1'	-5.55	114.14	120.80
1	2	870	C	N1-C2-O2	-5.55	115.57	118.90
36	1	495	G	C4-N9-C1'	-5.55	119.28	126.50
36	1	1160	C	C2-N3-C4	5.55	122.68	119.90
36	1	3305	A	C5-C6-N1	5.55	120.48	117.70
1	6	158	U	N3-C4-O4	5.55	123.29	119.40
1	6	1041	G	N1-C6-O6	5.55	123.23	119.90
1	6	1641	C	C6-N1-C2	5.55	122.52	120.30
1	6	1768	G	N3-C2-N2	-5.55	116.01	119.90
36	5	55	G	N1-C6-O6	5.55	123.23	119.90
36	5	394	G	OP1-P-OP2	5.55	127.93	119.60
36	5	650	C	C6-N1-C1'	5.55	127.46	120.80
36	5	746	A	OP2-P-O3'	5.55	117.41	105.20
36	5	835	G	C4-C5-N7	-5.55	108.58	110.80
36	5	988	U	C2-N3-C4	-5.55	123.67	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1155	C	C5-C4-N4	-5.55	116.31	120.20
36	5	1175	C	C6-N1-C2	-5.55	118.08	120.30
36	5	1465	A	C5-N7-C8	-5.55	101.12	103.90
36	5	1620	U	C2-N1-C1'	5.55	124.36	117.70
36	5	1835	A	O5'-P-OP1	-5.55	100.70	105.70
36	5	2388	U	C5-C4-O4	-5.55	122.57	125.90
36	5	3061	G	N7-C8-N9	-5.55	110.33	113.10
40	l3	328	ILE	C-N-CD	5.55	140.06	128.40
69	o3	45	LEU	CA-CB-CG	-5.55	102.53	115.30
1	2	429	G	C6-C5-N7	-5.55	127.07	130.40
1	2	747	C	N1-C2-O2	5.55	122.23	118.90
1	2	1768	G	N7-C8-N9	5.55	115.88	113.10
36	1	399	A	OP1-P-OP2	-5.55	111.28	119.60
36	1	407	A	O5'-P-OP1	-5.55	100.71	105.70
36	1	638	C	C2-N3-C4	-5.55	117.12	119.90
36	1	1367	G	C4-N9-C1'	5.55	133.72	126.50
38	4	2	A	N7-C8-N9	5.55	116.58	113.80
1	6	408	C	C5-C6-N1	-5.55	118.22	121.00
1	6	1431	C	C6-N1-C2	5.55	122.52	120.30
1	6	1513	G	C8-N9-C4	-5.55	104.18	106.40
36	5	717	C	N1-C2-O2	5.55	122.23	118.90
36	5	1211	U	C2-N1-C1'	-5.55	111.04	117.70
36	5	1585	C	C5-C6-N1	5.55	123.78	121.00
36	5	2877	G	C6-C5-N7	-5.55	127.07	130.40
36	5	2995	A	N3-C4-C5	5.55	130.68	126.80
68	o2	4	LEU	C-N-CD	5.55	140.06	128.40
1	2	1179	G	C5-C6-N1	5.55	114.27	111.50
36	1	329	U	C5-C6-N1	-5.55	119.93	122.70
36	1	613	G	N7-C8-N9	5.55	115.87	113.10
36	1	1906	G	C6-C5-N7	-5.55	127.07	130.40
36	1	3152	U	N3-C4-O4	-5.55	115.52	119.40
1	6	119	A	C5-C6-N1	-5.55	114.93	117.70
1	6	758	U	N1-C2-N3	5.55	118.23	114.90
1	6	1279	C	O5'-P-OP2	-5.55	100.71	105.70
1	6	1641	C	C5-C6-N1	-5.55	118.23	121.00
36	5	742	G	N3-C4-N9	5.55	129.33	126.00
1	2	1782	A	N9-C4-C5	5.55	108.02	105.80
36	1	689	U	C4-C5-C6	-5.55	116.37	119.70
36	1	1085	A	OP2-P-O3'	5.55	117.40	105.20
36	1	1149	G	C8-N9-C4	-5.55	104.18	106.40
36	1	1305	U	OP2-P-O3'	5.55	117.40	105.20
36	1	1453	A	C4-N9-C1'	5.55	136.28	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1716	U	OP1-P-O3'	5.55	117.40	105.20
36	1	1933	A	C5-N7-C8	-5.55	101.13	103.90
36	1	2993	G	C6-C5-N7	-5.55	127.07	130.40
1	6	50	C	O5'-P-OP2	5.55	117.36	110.70
1	6	372	G	C4-C5-N7	-5.55	108.58	110.80
1	6	948	G	C4-C5-N7	5.55	113.02	110.80
1	6	1696	G	OP1-P-O3'	5.55	117.40	105.20
36	5	1212	A	C6-C5-N7	-5.55	128.42	132.30
36	5	1852	G	N7-C8-N9	5.55	115.87	113.10
36	5	2134	G	C8-N9-C1'	-5.55	119.79	127.00
36	5	3012	A	C6-N1-C2	-5.55	115.27	118.60
36	5	3189	G	C6-N1-C2	-5.55	121.77	125.10
36	1	3137	C	P-O3'-C3'	-5.54	113.05	119.70
1	6	610	G	O4'-C1'-N9	5.54	112.64	108.20
1	6	759	U	N1-C2-O2	5.54	126.68	122.80
36	5	439	C	C4-C5-C6	5.54	120.17	117.40
36	5	1159	A	OP2-P-O3'	5.54	117.40	105.20
36	5	1598	G	N3-C2-N2	5.54	123.78	119.90
36	5	1714	A	C2-N3-C4	-5.54	107.83	110.60
36	5	3296	A	O4'-C1'-N9	-5.54	103.76	108.20
38	8	107	G	C4-N9-C1'	5.54	133.71	126.50
1	2	756	A	C5-N7-C8	-5.54	101.13	103.90
1	2	1412	G	C4-N9-C1'	-5.54	119.29	126.50
36	1	315	C	C6-N1-C2	-5.54	118.08	120.30
36	1	586	C	C5-C4-N4	-5.54	116.32	120.20
36	1	1559	A	C5-N7-C8	-5.54	101.13	103.90
36	1	1701	C	C6-N1-C2	5.54	122.52	120.30
36	1	1804	A	N1-C2-N3	5.54	132.07	129.30
36	1	2270	A	C5-N7-C8	-5.54	101.13	103.90
36	1	2714	G	C5-N7-C8	-5.54	101.53	104.30
36	1	2930	A	N3-C4-N9	5.54	131.84	127.40
36	1	2958	A	OP2-P-O3'	5.54	117.40	105.20
57	N1	12	ARG	NE-CZ-NH1	-5.54	117.53	120.30
1	6	596	C	N3-C4-C5	5.54	124.12	121.90
1	6	1183	A	N1-C2-N3	5.54	132.07	129.30
1	6	1200	G	C5-C6-N1	-5.54	108.73	111.50
1	6	1424	A	OP1-P-O3'	5.54	117.40	105.20
1	6	1514	U	C5-C6-N1	-5.54	119.93	122.70
36	5	211	A	N7-C8-N9	-5.54	111.03	113.80
36	5	588	G	C6-C5-N7	-5.54	127.07	130.40
36	5	635	G	O5'-P-OP1	-5.54	100.71	105.70
36	5	849	C	C6-N1-C2	5.54	122.52	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	958	C	OP2-P-O3'	5.54	117.40	105.20
36	5	1064	A	C5-N7-C8	-5.54	101.13	103.90
36	5	1079	A	OP1-P-OP2	5.54	127.92	119.60
36	5	1160	C	C5-C6-N1	-5.54	118.23	121.00
36	5	1323	G	C4-C5-C6	5.54	122.13	118.80
36	5	2208	A	C8-N9-C4	-5.54	103.58	105.80
36	5	3376	A	C4-C5-C6	5.54	119.77	117.00
1	2	399	A	C5-C6-N6	5.54	128.13	123.70
1	2	1033	C	N3-C2-O2	-5.54	118.02	121.90
1	2	1135	U	C2-N1-C1'	-5.54	111.05	117.70
36	1	55	G	N1-C6-O6	5.54	123.22	119.90
36	1	111	C	C5-C6-N1	5.54	123.77	121.00
36	1	294	U	C5-C6-N1	5.54	125.47	122.70
36	1	856	G	N9-C4-C5	5.54	107.62	105.40
36	1	890	C	C2-N1-C1'	5.54	124.90	118.80
36	1	994	G	C5-C6-N1	5.54	114.27	111.50
36	1	1326	A	C2-N3-C4	5.54	113.37	110.60
36	1	2700	G	N9-C4-C5	-5.54	103.18	105.40
36	1	2823	G	N9-C4-C5	5.54	107.62	105.40
36	1	2859	U	OP2-P-O3'	5.54	117.39	105.20
36	1	3006	A	N3-C4-N9	-5.54	122.97	127.40
38	4	82	U	C6-N1-C2	-5.54	117.67	121.00
1	6	57	G	N3-C4-N9	5.54	129.32	126.00
1	6	865	A	C6-N1-C2	-5.54	115.28	118.60
36	5	182	U	C6-N1-C2	-5.54	117.67	121.00
36	5	209	A	C6-N1-C2	-5.54	115.28	118.60
36	5	351	A	N1-C2-N3	-5.54	126.53	129.30
36	5	1306	G	O5'-P-OP2	-5.54	100.71	105.70
36	5	3030	G	C6-C5-N7	5.54	133.72	130.40
36	1	1309	U	N1-C2-N3	5.54	118.22	114.90
36	1	1315	U	OP1-P-O3'	5.54	117.39	105.20
62	N6	111	LEU	CA-CB-CG	-5.54	102.56	115.30
1	6	611	U	OP1-P-OP2	-5.54	111.29	119.60
1	6	902	G	C5-C6-N1	-5.54	108.73	111.50
1	6	969	C	N3-C4-N4	5.54	121.88	118.00
1	6	1192	C	C6-N1-C2	-5.54	118.08	120.30
36	5	1903	U	N3-C4-O4	5.54	123.28	119.40
36	5	2208	A	C5-N7-C8	-5.54	101.13	103.90
36	5	3191	G	N3-C4-C5	5.54	131.37	128.60
1	2	1657	U	OP2-P-O3'	5.54	117.39	105.20
36	1	209	A	N1-C6-N6	-5.54	115.28	118.60
36	1	700	C	N1-C2-O2	-5.54	115.58	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	717	C	O5'-P-OP2	-5.54	100.72	105.70
36	1	857	G	N3-C2-N2	-5.54	116.02	119.90
36	1	1438	U	C2-N3-C4	-5.54	123.68	127.00
36	1	1500	G	C4-N9-C1'	-5.54	119.30	126.50
36	1	3112	G	N3-C4-N9	5.54	129.32	126.00
36	1	3220	G	N3-C4-C5	-5.54	125.83	128.60
36	1	3295	A	N9-C4-C5	5.54	108.02	105.80
38	4	101	U	N3-C2-O2	-5.54	118.32	122.20
1	6	553	G	C6-C5-N7	-5.54	127.08	130.40
1	6	746	A	N1-C6-N6	5.54	121.92	118.60
36	5	430	U	OP2-P-O3'	5.54	117.38	105.20
36	5	705	A	OP1-P-O3'	5.54	117.39	105.20
36	5	864	G	C8-N9-C1'	-5.54	119.80	127.00
36	5	916	G	OP2-P-O3'	5.54	117.39	105.20
36	5	1260	A	N7-C8-N9	5.54	116.57	113.80
36	5	2419	A	N9-C4-C5	5.54	108.02	105.80
36	5	2676	A	C8-N9-C4	-5.54	103.58	105.80
36	5	3054	U	N3-C4-C5	-5.54	111.28	114.60
36	5	3259	U	C4-C5-C6	-5.54	116.38	119.70
36	5	3314	A	C5-C6-N6	-5.54	119.27	123.70
36	5	3335	A	C6-C5-N7	-5.54	128.42	132.30
1	2	586	G	C5-C6-O6	-5.54	125.28	128.60
1	2	1568	C	P-O3'-C3'	5.54	126.34	119.70
36	1	1310	G	C5-N7-C8	-5.54	101.53	104.30
36	1	1928	G	O5'-P-OP2	-5.54	100.72	105.70
36	1	2639	G	C8-N9-C1'	5.54	134.20	127.00
1	6	1282	U	N3-C4-C5	-5.54	111.28	114.60
1	6	1621	U	C6-N1-C2	5.54	124.32	121.00
36	5	1737	U	C5-C4-O4	-5.54	122.58	125.90
36	5	3313	U	N3-C2-O2	5.54	126.08	122.20
1	2	686	C	C6-N1-C2	-5.54	118.09	120.30
1	2	1561	U	N3-C2-O2	-5.54	118.33	122.20
36	1	329	U	N3-C2-O2	-5.54	118.33	122.20
36	1	1005	G	N9-C4-C5	5.54	107.61	105.40
36	1	1149	G	N3-C4-C5	-5.54	125.83	128.60
36	1	1577	G	N3-C4-C5	-5.54	125.83	128.60
1	6	911	U	N1-C2-O2	5.54	126.67	122.80
1	6	1375	A	C8-N9-C4	5.54	108.01	105.80
36	5	266	A	C6-C5-N7	-5.54	128.43	132.30
36	5	1045	C	O5'-P-OP2	5.54	117.34	110.70
36	5	1064	A	N7-C8-N9	5.54	116.57	113.80
36	5	2166	A	N3-C4-C5	5.54	130.68	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2277	C	N1-C2-N3	5.54	123.08	119.20
36	5	2347	U	N1-C2-O2	5.54	126.67	122.80
36	5	2349	U	OP1-P-O3'	5.54	117.38	105.20
36	5	2399	A	C8-N9-C4	-5.54	103.59	105.80
36	5	2709	C	C5-C4-N4	-5.54	116.33	120.20
36	5	2996	U	C6-N1-C2	5.54	124.32	121.00
62	n6	57	LEU	CA-CB-CG	5.54	128.03	115.30
1	2	1787	C	C6-N1-C2	5.53	122.51	120.30
36	1	2727	A	O5'-P-OP1	-5.53	100.72	105.70
47	M0	139	ARG	NE-CZ-NH1	5.53	123.07	120.30
1	6	1763	A	N1-C6-N6	-5.53	115.28	118.60
36	5	407	A	C6-N1-C2	-5.53	115.28	118.60
36	5	418	A	C2-N3-C4	5.53	113.37	110.60
36	5	1681	U	N3-C4-C5	-5.53	111.28	114.60
36	5	1741	A	N1-C6-N6	-5.53	115.28	118.60
36	5	2375	G	C8-N9-C1'	5.53	134.19	127.00
36	5	3052	G	C4-C5-N7	5.53	113.01	110.80
36	5	3315	G	N3-C4-N9	5.53	129.32	126.00
36	1	703	G	N3-C4-C5	5.53	131.37	128.60
36	1	1897	G	C6-C5-N7	-5.53	127.08	130.40
1	6	1527	C	N3-C4-C5	5.53	124.11	121.90
1	6	1529	C	O5'-P-OP2	-5.53	100.72	105.70
36	5	2530	G	C6-C5-N7	-5.53	127.08	130.40
36	5	2640	A	C4-C5-N7	5.53	113.47	110.70
36	1	154	U	C2-N1-C1'	-5.53	111.06	117.70
36	1	731	U	N3-C4-O4	5.53	123.27	119.40
36	1	2556	C	C6-N1-C2	-5.53	118.09	120.30
36	1	2780	A	N9-C4-C5	-5.53	103.59	105.80
36	1	3179	U	C6-N1-C2	5.53	124.32	121.00
1	6	76	A	O4'-C1'-N9	5.53	112.62	108.20
1	6	313	U	N3-C2-O2	-5.53	118.33	122.20
36	5	324	A	C8-N9-C1'	-5.53	117.75	127.70
36	5	692	A	C5-N7-C8	-5.53	101.14	103.90
36	5	971	G	C8-N9-C4	5.53	108.61	106.40
36	5	1431	G	C5-C6-N1	5.53	114.27	111.50
36	5	1470	U	C5-C4-O4	-5.53	122.58	125.90
36	5	1603	A	C5-C6-N1	-5.53	114.93	117.70
36	5	1916	U	O5'-P-OP1	-5.53	100.72	105.70
36	5	2404	A	N1-C6-N6	-5.53	115.28	118.60
36	5	2441	A	N1-C6-N6	5.53	121.92	118.60
36	5	2917	G	P-O3'-C3'	5.53	126.34	119.70
38	8	2	A	C6-C5-N7	-5.53	128.43	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	793	A	N7-C8-N9	5.53	116.56	113.80
36	1	2279	A	O5'-P-OP2	-5.53	100.72	105.70
1	6	1782	A	C5-C6-N1	-5.53	114.94	117.70
36	5	55	G	C4-C5-C6	5.53	122.12	118.80
36	5	356	C	C4-C5-C6	5.53	120.17	117.40
36	5	858	A	C4-C5-N7	-5.53	107.94	110.70
1	2	436	A	N1-C6-N6	5.53	121.92	118.60
1	2	1422	A	N9-C4-C5	-5.53	103.59	105.80
1	2	1492	A	N1-C6-N6	-5.53	115.28	118.60
36	1	832	G	N9-C4-C5	-5.53	103.19	105.40
36	1	1104	G	OP2-P-O3'	5.53	117.36	105.20
36	1	1148	G	C5-C6-O6	-5.53	125.28	128.60
36	1	1371	G	O5'-P-OP1	5.53	117.33	110.70
36	1	2138	A	N3-C4-N9	5.53	131.82	127.40
36	1	2165	G	C4-C5-C6	5.53	122.12	118.80
36	1	2891	U	C5-C4-O4	-5.53	122.58	125.90
1	6	109	G	C5-C6-N1	-5.53	108.74	111.50
1	6	1647	U	O5'-P-OP2	-5.53	100.72	105.70
36	5	913	A	N9-C4-C5	5.53	108.01	105.80
36	5	2615	G	C2-N3-C4	-5.53	109.14	111.90
36	1	1245	A	C8-N9-C4	-5.53	103.59	105.80
36	1	1332	A	C6-C5-N7	-5.53	128.43	132.30
36	1	1528	G	N3-C4-N9	5.53	129.32	126.00
36	1	1547	G	C4-C5-C6	5.53	122.11	118.80
36	1	1672	U	C5-C4-O4	5.53	129.22	125.90
36	1	1775	G	C5-C6-O6	5.53	131.91	128.60
36	1	3102	G	OP1-P-O3'	5.53	117.36	105.20
36	1	3204	C	O5'-P-OP2	-5.53	100.73	105.70
36	1	3232	G	C6-C5-N7	-5.53	127.08	130.40
1	6	1177	C	C6-N1-C2	5.53	122.51	120.30
36	5	44	U	C6-N1-C2	-5.53	117.69	121.00
36	5	345	G	C5-C6-N1	-5.53	108.74	111.50
36	5	1615	C	C6-N1-C2	-5.53	118.09	120.30
36	5	3203	U	N3-C2-O2	-5.53	118.33	122.20
37	7	27	A	C8-N9-C4	-5.53	103.59	105.80
36	1	324	A	N7-C8-N9	5.52	116.56	113.80
36	1	904	A	N3-C4-N9	-5.52	122.98	127.40
36	1	2606	G	N1-C6-O6	-5.52	116.58	119.90
36	1	2849	C	C6-N1-C1'	5.52	127.43	120.80
36	1	3258	U	C5-C4-O4	-5.52	122.59	125.90
1	6	303	U	C5-C4-O4	5.52	129.21	125.90
1	6	549	G	C5-C6-N1	-5.52	108.74	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	195	U	N3-C4-O4	-5.52	115.53	119.40
36	5	996	A	OP1-P-O3'	-5.52	93.05	105.20
36	5	2667	A	O5'-P-OP1	-5.52	100.73	105.70
1	2	28	A	C5-C6-N1	5.52	120.46	117.70
1	2	951	A	C8-N9-C4	5.52	108.01	105.80
36	1	64	G	O5'-P-OP1	-5.52	100.73	105.70
36	1	293	C	C2-N1-C1'	-5.52	112.72	118.80
36	1	402	A	C8-N9-C4	-5.52	103.59	105.80
36	1	613	G	C6-C5-N7	-5.52	127.09	130.40
36	1	1828	A	C6-C5-N7	-5.52	128.43	132.30
36	1	2874	G	C6-C5-N7	-5.52	127.09	130.40
1	6	476	U	C6-N1-C2	-5.52	117.69	121.00
1	6	1298	U	C2-N1-C1'	5.52	124.33	117.70
1	6	1610	G	N3-C2-N2	5.52	123.77	119.90
1	6	1614	A	C5-C6-N6	-5.52	119.28	123.70
1	6	1624	C	N3-C4-N4	-5.52	114.13	118.00
36	5	192	C	C5-C6-N1	5.52	123.76	121.00
36	5	846	A	N1-C6-N6	-5.52	115.29	118.60
36	5	902	G	C4-N9-C1'	-5.52	119.32	126.50
36	5	1258	U	C6-N1-C2	-5.52	117.69	121.00
36	5	1372	C	N1-C2-O2	-5.52	115.59	118.90
36	5	2335	G	N3-C4-C5	-5.52	125.84	128.60
36	5	2723	U	N3-C2-O2	-5.52	118.33	122.20
1	2	1776	A	N1-C2-N3	-5.52	126.54	129.30
36	1	1541	G	C4-N9-C1'	5.52	133.68	126.50
36	1	3389	U	N1-C2-N3	-5.52	111.59	114.90
53	M7	73	GLY	N-CA-C	-5.52	99.30	113.10
1	6	1521	G	N3-C4-N9	5.52	129.31	126.00
36	5	1145	G	C8-N9-C1'	-5.52	119.82	127.00
36	5	3061	G	OP2-P-O3'	5.52	117.35	105.20
36	5	3389	U	OP1-P-OP2	-5.52	111.32	119.60
1	2	55	A	N9-C4-C5	-5.52	103.59	105.80
1	2	1085	G	N1-C2-N2	-5.52	111.23	116.20
36	1	2298	U	N3-C4-O4	-5.52	115.54	119.40
36	1	2514	U	O5'-P-OP1	-5.52	100.73	105.70
36	1	2895	G	C6-N1-C2	-5.52	121.79	125.10
36	1	3022	G	N1-C6-O6	5.52	123.21	119.90
44	L7	83	LEU	CA-CB-CG	5.52	127.99	115.30
51	M5	105	ARG	NE-CZ-NH1	-5.52	117.54	120.30
1	6	154	G	N9-C4-C5	-5.52	103.19	105.40
1	6	307	G	C8-N9-C1'	-5.52	119.83	127.00
1	6	776	G	C8-N9-C4	5.52	108.61	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	964	U	C5-C6-N1	-5.52	119.94	122.70
1	6	1058	U	C5-C4-O4	5.52	129.21	125.90
1	6	1178	G	C5-N7-C8	5.52	107.06	104.30
1	6	1367	G	N1-C6-O6	5.52	123.21	119.90
1	6	1591	C	N1-C2-O2	-5.52	115.59	118.90
1	6	1642	G	OP2-P-O3'	5.52	117.34	105.20
1	6	1671	A	N1-C6-N6	-5.52	115.29	118.60
36	5	786	A	C5-N7-C8	-5.52	101.14	103.90
36	5	1045	C	OP1-P-O3'	-5.52	93.06	105.20
36	5	1206	G	C4-N9-C1'	5.52	133.68	126.50
36	5	1380	G	C8-N9-C4	5.52	108.61	106.40
36	5	3042	U	N3-C4-C5	5.52	117.91	114.60
76	q0	121	LEU	CB-CG-CD2	-5.52	101.62	111.00
1	2	72	A	C8-N9-C4	5.52	108.01	105.80
1	2	597	G	C8-N9-C4	-5.52	104.19	106.40
1	2	1277	G	N9-C4-C5	5.52	107.61	105.40
1	2	1425	A	O5'-P-OP1	5.52	117.32	110.70
36	1	915	A	C5-N7-C8	-5.52	101.14	103.90
36	1	1385	C	C5-C4-N4	5.52	124.06	120.20
36	1	1400	G	N3-C4-C5	-5.52	125.84	128.60
36	1	1453	A	O5'-P-OP1	5.52	117.32	110.70
36	1	1841	A	N1-C6-N6	-5.52	115.29	118.60
36	1	2320	A	OP2-P-O3'	5.52	117.34	105.20
36	1	2810	C	C5-C4-N4	5.52	124.06	120.20
36	1	2872	A	N1-C6-N6	5.52	121.91	118.60
36	1	2944	U	O5'-P-OP1	-5.52	100.73	105.70
36	1	3225	C	N3-C2-O2	-5.52	118.04	121.90
37	3	121	U	N3-C2-O2	-5.52	118.34	122.20
1	6	1	U	C2-N1-C1'	5.52	124.32	117.70
1	6	335	U	C6-N1-C2	-5.52	117.69	121.00
1	6	1487	A	C4-C5-C6	5.52	119.76	117.00
36	5	85	A	C2-N3-C4	-5.52	107.84	110.60
36	5	590	G	N9-C4-C5	5.52	107.61	105.40
36	5	1920	U	C5-C4-O4	5.52	129.21	125.90
36	5	3015	G	N3-C4-N9	-5.52	122.69	126.00
36	5	3377	G	C4-C5-C6	-5.52	115.49	118.80
1	2	552	G	N7-C8-N9	5.52	115.86	113.10
36	1	787	G	C8-N9-C4	-5.52	104.19	106.40
36	1	836	A	N1-C6-N6	-5.52	115.29	118.60
36	1	1909	A	C2-N3-C4	-5.52	107.84	110.60
1	6	1278	G	C4-C5-N7	-5.52	108.59	110.80
36	5	802	C	N3-C4-N4	-5.52	114.14	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1332	A	N9-C4-C5	-5.52	103.59	105.80
36	5	1383	G	C8-N9-C4	-5.52	104.19	106.40
36	5	1901	A	C6-N1-C2	-5.52	115.29	118.60
36	5	2838	A	N7-C8-N9	-5.52	111.04	113.80
36	5	3037	U	N1-C2-O2	-5.52	118.94	122.80
1	2	77	U	O4'-C1'-N1	-5.51	103.79	108.20
1	2	514	G	C6-C5-N7	5.51	133.71	130.40
1	2	1596	C	C5-C6-N1	5.51	123.76	121.00
1	2	1750	A	C4-C5-C6	5.51	119.76	117.00
36	1	304	G	C8-N9-C4	-5.51	104.19	106.40
36	1	783	A	C8-N9-C4	5.51	108.01	105.80
36	1	1310	G	C5-C6-N1	5.51	114.26	111.50
36	1	1624	G	C6-C5-N7	-5.51	127.09	130.40
36	1	1893	A	N1-C6-N6	5.51	121.91	118.60
36	1	2159	U	C5-C4-O4	-5.51	122.59	125.90
36	1	2428	U	C5-C6-N1	-5.51	119.94	122.70
36	1	3042	U	C5-C4-O4	5.51	129.21	125.90
1	6	532	U	N1-C2-N3	5.51	118.21	114.90
1	6	1682	U	C5-C6-N1	5.51	125.46	122.70
36	5	54	C	N1-C2-N3	5.51	123.06	119.20
36	5	1055	A	C4-C5-N7	-5.51	107.94	110.70
36	5	1364	C	N1-C2-O2	5.51	122.21	118.90
36	5	2320	A	N1-C2-N3	5.51	132.06	129.30
36	5	2387	A	C8-N9-C4	-5.51	103.59	105.80
36	5	3089	C	N3-C4-C5	-5.51	119.69	121.90
36	1	655	C	C6-N1-C1'	-5.51	114.19	120.80
36	1	686	G	OP1-P-OP2	-5.51	111.33	119.60
36	1	1046	A	N9-C4-C5	-5.51	103.59	105.80
36	1	1133	A	N1-C6-N6	5.51	121.91	118.60
36	5	264	G	C4-N9-C1'	5.51	133.67	126.50
37	7	55	A	OP1-P-OP2	5.51	127.87	119.60
1	2	1130	G	O5'-P-OP1	-5.51	100.74	105.70
1	2	1215	C	N1-C2-O2	5.51	122.21	118.90
36	1	407	A	N3-C4-N9	5.51	131.81	127.40
36	1	754	G	C2-N3-C4	-5.51	109.14	111.90
36	1	1372	C	N3-C4-C5	-5.51	119.69	121.90
36	1	1516	C	OP1-P-OP2	5.51	127.87	119.60
36	1	1526	U	O5'-P-OP2	-5.51	100.74	105.70
36	1	1584	U	N3-C2-O2	5.51	126.06	122.20
36	1	2291	A	N9-C4-C5	5.51	108.00	105.80
36	1	2693	C	N3-C4-C5	5.51	124.11	121.90
36	1	2864	A	C5-N7-C8	-5.51	101.14	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3263	G	C5-C6-O6	-5.51	125.29	128.60
36	1	3394	U	N1-C2-N3	5.51	118.21	114.90
38	4	18	U	C4-C5-C6	5.51	123.01	119.70
38	4	62	C	N1-C2-O2	5.51	122.21	118.90
1	6	922	G	C4-C5-N7	5.51	113.00	110.80
1	6	1295	G	N3-C4-C5	5.51	131.35	128.60
1	6	1584	G	C5-C6-O6	-5.51	125.29	128.60
36	5	256	G	C4-C5-C6	5.51	122.11	118.80
36	5	974	G	C8-N9-C1'	-5.51	119.84	127.00
36	5	1304	A	C5-C6-N6	-5.51	119.29	123.70
36	5	1499	C	N1-C2-N3	5.51	123.06	119.20
36	5	2134	G	N3-C4-N9	5.51	129.31	126.00
36	5	2659	G	C6-C5-N7	-5.51	127.09	130.40
36	5	2673	A	C4-C5-N7	-5.51	107.94	110.70
36	5	3384	U	N3-C4-O4	5.51	123.26	119.40
38	8	102	U	C2-N1-C1'	5.51	124.31	117.70
1	2	1077	C	C6-N1-C2	-5.51	118.10	120.30
36	1	97	U	N1-C2-O2	-5.51	118.94	122.80
36	1	260	C	C5-C6-N1	5.51	123.75	121.00
36	1	580	C	N3-C4-N4	-5.51	114.14	118.00
36	1	775	A	N3-C4-C5	-5.51	122.94	126.80
36	1	1195	A	N7-C8-N9	5.51	116.56	113.80
36	1	3144	G	OP1-P-O3'	-5.51	93.08	105.20
1	6	51	A	C4-C5-C6	5.51	119.75	117.00
1	6	633	U	C4-C5-C6	5.51	123.01	119.70
1	6	1165	G	C8-N9-C1'	-5.51	119.84	127.00
1	6	1615	C	C6-N1-C2	5.51	122.50	120.30
1	6	1670	G	C4-N9-C1'	5.51	133.66	126.50
36	5	365	A	OP1-P-O3'	5.51	117.32	105.20
36	5	967	A	C5-N7-C8	-5.51	101.14	103.90
36	5	1585	C	N3-C2-O2	-5.51	118.04	121.90
36	5	2125	A	N1-C6-N6	5.51	121.91	118.60
36	5	2247	G	C6-N1-C2	-5.51	121.79	125.10
36	5	2249	G	C3'-C2'-C1'	-5.51	97.09	101.50
36	5	2621	G	OP1-P-OP2	-5.51	111.34	119.60
36	5	2676	A	C2-N3-C4	-5.51	107.84	110.60
36	5	3271	G	C4-C5-C6	5.51	122.11	118.80
36	5	3334	U	OP2-P-O3'	5.51	117.32	105.20
36	5	3381	U	C6-N1-C2	5.51	124.31	121.00
38	8	107	G	C5-C6-N1	-5.51	108.75	111.50
36	1	271	C	N1-C2-O2	5.51	122.20	118.90
36	1	1209	G	C4-N9-C1'	5.51	133.66	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2807	U	C5-C6-N1	5.51	125.45	122.70
37	3	85	G	C6-C5-N7	-5.51	127.09	130.40
1	6	904	G	C5-C6-O6	5.51	131.91	128.60
1	6	1610	G	C5-C6-N1	5.51	114.25	111.50
36	5	43	A	C5-C6-N6	-5.51	119.29	123.70
36	5	1050	U	C2-N3-C4	-5.51	123.69	127.00
36	5	1907	C	N1-C2-N3	5.51	123.06	119.20
36	5	2275	A	C4-C5-C6	5.51	119.75	117.00
36	5	2727	A	N7-C8-N9	-5.51	111.05	113.80
36	5	2770	G	C5-C6-O6	-5.51	125.30	128.60
1	2	945	U	N1-C2-O2	5.51	126.65	122.80
36	1	953	G	N7-C8-N9	-5.51	110.35	113.10
36	1	1113	G	C4-C5-N7	5.51	113.00	110.80
36	1	1134	G	N3-C2-N2	-5.51	116.05	119.90
36	1	1294	A	O5'-P-OP1	5.51	117.31	110.70
1	6	402	C	C6-N1-C2	5.51	122.50	120.30
1	6	755	A	N1-C6-N6	5.51	121.90	118.60
36	5	692	A	N7-C8-N9	5.51	116.55	113.80
36	5	832	G	C2-N3-C4	5.51	114.65	111.90
36	5	2112	U	P-O3'-C3'	5.51	126.31	119.70
36	5	2175	U	C2-N1-C1'	-5.51	111.09	117.70
36	5	2720	G	N3-C4-C5	-5.51	125.85	128.60
36	5	2944	U	O5'-P-OP1	-5.51	100.74	105.70
37	7	26	C	C6-N1-C2	-5.51	118.10	120.30
37	7	108	A	N1-C2-N3	5.51	132.05	129.30
52	m6	49	ARG	NE-CZ-NH1	-5.51	117.55	120.30
1	2	582	U	C2-N1-C1'	5.50	124.31	117.70
36	1	109	A	OP1-P-O3'	5.50	117.31	105.20
36	1	355	A	O5'-P-OP1	-5.50	100.75	105.70
36	1	1136	A	C4-C5-C6	5.50	119.75	117.00
36	1	3153	U	N3-C2-O2	-5.50	118.35	122.20
36	1	3224	G	C4-C5-N7	-5.50	108.60	110.80
36	5	783	A	N1-C6-N6	5.50	121.90	118.60
36	5	1895	A	C6-N1-C2	-5.50	115.30	118.60
36	5	1947	G	N3-C2-N2	5.50	123.75	119.90
36	5	3254	G	C8-N9-C4	5.50	108.60	106.40
1	2	347	G	C8-N9-C4	-5.50	104.20	106.40
36	1	372	A	C4-C5-C6	5.50	119.75	117.00
36	1	403	C	O5'-P-OP2	-5.50	100.75	105.70
36	1	757	C	N3-C4-N4	5.50	121.85	118.00
36	1	2364	G	N3-C4-C5	-5.50	125.85	128.60
36	1	3240	C	O5'-P-OP2	-5.50	100.75	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	4	C	N3-C4-C5	5.50	124.10	121.90
1	6	576	G	N3-C2-N2	-5.50	116.05	119.90
1	6	1100	G	N7-C8-N9	-5.50	110.35	113.10
1	6	1472	C	N3-C4-C5	5.50	124.10	121.90
1	6	1609	U	N3-C4-O4	-5.50	115.55	119.40
36	5	127	G	C5-C6-O6	-5.50	125.30	128.60
36	5	531	G	C4-C5-C6	5.50	122.10	118.80
36	5	857	G	C2-N3-C4	-5.50	109.15	111.90
36	5	1112	A	C8-N9-C1'	-5.50	117.79	127.70
36	5	1133	A	N7-C8-N9	5.50	116.55	113.80
36	5	1535	A	N7-C8-N9	-5.50	111.05	113.80
36	5	2524	A	C6-C5-N7	-5.50	128.45	132.30
36	5	2855	U	C2-N3-C4	-5.50	123.70	127.00
36	1	325	A	OP2-P-O3'	5.50	117.30	105.20
36	1	883	A	C5-C6-N1	5.50	120.45	117.70
36	1	1517	G	C4-C5-N7	5.50	113.00	110.80
36	1	2300	G	O5'-P-OP2	5.50	117.30	110.70
36	1	2330	C	N3-C4-N4	-5.50	114.15	118.00
36	1	2915	U	OP1-P-OP2	5.50	127.85	119.60
36	1	3081	C	C2-N3-C4	-5.50	117.15	119.90
36	1	3197	G	C4-N9-C1'	-5.50	119.35	126.50
38	4	90	U	C6-N1-C2	5.50	124.30	121.00
1	6	347	G	C4-C5-N7	5.50	113.00	110.80
1	6	1746	A	N9-C4-C5	5.50	108.00	105.80
36	5	570	A	C2-N3-C4	-5.50	107.85	110.60
36	5	709	A	C6-C5-N7	-5.50	128.45	132.30
36	5	1953	G	C4-N9-C1'	-5.50	119.35	126.50
36	5	3002	C	N3-C4-N4	5.50	121.85	118.00
36	5	3092	C	C4-C5-C6	-5.50	114.65	117.40
36	5	3255	U	C5-C4-O4	5.50	129.20	125.90
37	7	38	U	C4-C5-C6	-5.50	116.40	119.70
1	2	408	C	O5'-P-OP1	5.50	117.30	110.70
36	1	657	A	C8-N9-C4	-5.50	103.60	105.80
41	L4	187	LEU	CA-CB-CG	5.50	127.95	115.30
36	5	54	C	N3-C2-O2	-5.50	118.05	121.90
36	5	961	C	C5-C6-N1	5.50	123.75	121.00
36	5	2760	C	C6-N1-C2	5.50	122.50	120.30
36	5	3313	U	OP1-P-OP2	5.50	127.85	119.60
1	2	99	C	C2-N1-C1'	-5.50	112.75	118.80
23	D1	79	LEU	CA-CB-CG	5.50	127.95	115.30
36	1	242	C	N1-C1'-C2'	-5.50	105.95	112.00
36	1	667	C	O5'-P-OP2	-5.50	100.75	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	815	G	N1-C2-N2	5.50	121.15	116.20
36	1	904	A	C8-N9-C4	-5.50	103.60	105.80
36	1	1107	C	C6-N1-C2	5.50	122.50	120.30
36	1	1202	A	C6-C5-N7	-5.50	128.45	132.30
36	1	1365	G	N1-C2-N3	5.50	127.20	123.90
36	1	1752	A	N1-C2-N3	5.50	132.05	129.30
36	1	1839	A	N1-C6-N6	-5.50	115.30	118.60
36	1	2394	G	N3-C4-C5	-5.50	125.85	128.60
36	1	2865	U	OP2-P-O3'	5.50	117.30	105.20
37	3	49	G	N3-C4-N9	5.50	129.30	126.00
37	3	91	G	C2-N3-C4	-5.50	109.15	111.90
1	6	578	U	C4-C5-C6	5.50	123.00	119.70
1	6	981	U	N1-C2-N3	5.50	118.20	114.90
1	6	991	G	N9-C4-C5	5.50	107.60	105.40
1	6	1629	G	OP2-P-O3'	5.50	117.30	105.20
36	5	313	A	O5'-P-OP1	-5.50	100.75	105.70
36	5	2874	G	N3-C4-N9	5.50	129.30	126.00
36	5	2940	A	N1-C2-N3	5.50	132.05	129.30
1	2	535	A	C8-N9-C4	-5.50	103.60	105.80
1	2	1050	G	N1-C6-O6	5.50	123.20	119.90
36	1	393	U	C5-C6-N1	5.50	125.45	122.70
36	1	407	A	OP1-P-OP2	5.50	127.85	119.60
36	1	685	G	N1-C2-N2	-5.50	111.25	116.20
36	1	896	A	C8-N9-C4	-5.50	103.60	105.80
36	1	1315	U	C4-C5-C6	5.50	123.00	119.70
36	1	1424	C	C4-C5-C6	5.50	120.15	117.40
36	1	1558	A	O5'-P-OP2	-5.50	100.75	105.70
36	1	1634	G	C5-C6-O6	-5.50	125.30	128.60
36	1	2205	U	N1-C2-O2	5.50	126.65	122.80
36	1	3027	A	N1-C2-N3	5.50	132.05	129.30
36	1	3046	A	C6-C5-N7	-5.50	128.45	132.30
62	N6	126	LEU	CA-CB-CG	5.50	127.94	115.30
11	s9	3	ARG	NE-CZ-NH2	5.50	123.05	120.30
36	5	294	U	N3-C4-O4	-5.50	115.55	119.40
36	5	433	A	C4-C5-N7	5.50	113.45	110.70
36	5	1041	U	N3-C2-O2	5.50	126.05	122.20
36	5	1213	G	C6-N1-C2	-5.50	121.80	125.10
36	5	3080	G	C4-C5-N7	5.50	113.00	110.80
37	7	112	G	C5-C6-O6	5.50	131.90	128.60
36	1	2204	C	C6-N1-C1'	-5.50	114.21	120.80
36	1	2399	A	C4-C5-N7	5.50	113.45	110.70
36	1	2943	G	C8-N9-C1'	-5.50	119.86	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3064	U	C6-N1-C1'	5.50	128.89	121.20
36	1	3291	G	N3-C2-N2	-5.50	116.05	119.90
38	4	140	G	N3-C2-N2	-5.50	116.05	119.90
1	6	45	U	O5'-P-OP2	-5.50	100.75	105.70
1	6	857	U	N3-C2-O2	5.50	126.05	122.20
1	6	946	U	C2-N1-C1'	5.50	124.29	117.70
36	5	578	A	C6-C5-N7	5.50	136.15	132.30
36	5	1726	C	C6-N1-C2	5.50	122.50	120.30
36	5	1838	G	C8-N9-C4	5.50	108.60	106.40
36	5	3030	G	N1-C2-N2	5.50	121.15	116.20
1	2	255	U	C6-N1-C2	-5.49	117.70	121.00
1	2	1539	G	C5-C6-O6	-5.49	125.30	128.60
36	1	624	G	C4-N9-C1'	5.49	133.64	126.50
36	1	1060	U	N3-C4-O4	-5.49	115.56	119.40
36	1	1736	G	C5-N7-C8	-5.49	101.55	104.30
36	1	1799	A	C2-N3-C4	-5.49	107.85	110.60
36	1	1923	C	O5'-P-OP1	-5.49	100.76	105.70
36	1	2286	U	C5-C4-O4	5.49	129.20	125.90
36	1	3089	C	N1-C2-N3	5.49	123.05	119.20
1	6	432	G	C4-N9-C1'	5.49	133.64	126.50
1	6	972	G	C4-C5-N7	5.49	113.00	110.80
1	6	1143	A	C6-C5-N7	-5.49	128.46	132.30
1	6	1630	U	C6-N1-C2	-5.49	117.70	121.00
36	5	196	G	OP1-P-O3'	5.49	117.29	105.20
36	5	388	G	C5-C6-O6	5.49	131.90	128.60
36	5	1318	A	C6-N1-C2	-5.49	115.30	118.60
36	5	2794	G	C4-N9-C1'	-5.49	119.36	126.50
36	5	2952	G	C4-N9-C1'	5.49	133.64	126.50
36	5	3328	G	N9-C4-C5	-5.49	103.20	105.40
37	7	97	A	N3-C4-N9	5.49	131.79	127.40
36	1	907	G	O4'-C1'-N9	5.49	112.59	108.20
36	1	1709	C	N3-C4-C5	-5.49	119.70	121.90
36	1	1887	A	C6-C5-N7	-5.49	128.46	132.30
36	1	3082	C	OP1-P-OP2	-5.49	111.36	119.60
1	6	16	G	O5'-P-OP1	5.49	117.29	110.70
1	6	567	A	O5'-P-OP2	-5.49	100.76	105.70
36	5	509	U	C6-N1-C2	5.49	124.30	121.00
36	5	890	C	O5'-P-OP1	5.49	117.29	110.70
36	5	1336	U	C5-C6-N1	5.49	125.45	122.70
36	5	2682	C	N3-C4-C5	-5.49	119.70	121.90
36	5	2687	G	N3-C4-N9	5.49	129.29	126.00
1	2	310	C	N3-C2-O2	-5.49	118.06	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1073	G	N7-C8-N9	-5.49	110.36	113.10
1	2	1462	G	N7-C8-N9	-5.49	110.36	113.10
36	1	3152	U	C6-N1-C1'	5.49	128.89	121.20
37	3	41	G	O4'-C1'-N9	5.49	112.59	108.20
37	3	91	G	C4-N9-C1'	5.49	133.64	126.50
1	6	23	G	C5-C6-N1	-5.49	108.75	111.50
36	5	1042	U	C6-N1-C2	5.49	124.30	121.00
36	5	1264	G	N1-C6-O6	-5.49	116.61	119.90
36	5	1350	A	N1-C6-N6	-5.49	115.31	118.60
36	5	1883	A	C6-N1-C2	-5.49	115.31	118.60
36	5	2320	A	C2-N3-C4	-5.49	107.86	110.60
36	5	2361	A	C5-C6-N1	5.49	120.45	117.70
36	5	2915	U	O5'-P-OP2	-5.49	100.76	105.70
36	5	2952	G	N9-C4-C5	-5.49	103.20	105.40
36	5	3062	G	N9-C4-C5	-5.49	103.20	105.40
1	2	238	U	O4'-C1'-N1	5.49	112.59	108.20
1	2	619	A	OP2-P-O3'	5.49	117.28	105.20
36	1	1295	G	C4-N9-C1'	5.49	133.63	126.50
36	1	1475	A	N1-C6-N6	5.49	121.89	118.60
36	1	1751	G	N9-C4-C5	5.49	107.59	105.40
38	4	43	A	C2-N3-C4	5.49	113.34	110.60
63	N7	51	LEU	CA-CB-CG	-5.49	102.67	115.30
1	6	21	U	N1-C2-N3	5.49	118.19	114.90
1	6	93	A	C5-C6-N1	5.49	120.44	117.70
1	6	435	C	N1-C2-O2	5.49	122.19	118.90
1	6	602	U	OP2-P-O3'	5.49	117.27	105.20
1	6	980	G	C8-N9-C4	5.49	108.59	106.40
1	6	1447	C	N1-C2-O2	5.49	122.19	118.90
36	5	653	A	N9-C4-C5	-5.49	103.60	105.80
36	5	1202	A	C6-C5-N7	-5.49	128.46	132.30
37	7	33	U	C2-N3-C4	-5.49	123.71	127.00
36	1	399	A	C4-C5-N7	5.49	113.44	110.70
36	1	655	C	O5'-P-OP1	5.49	117.28	110.70
36	1	908	G	C4-C5-C6	5.49	122.09	118.80
36	1	3013	U	C6-N1-C2	5.49	124.29	121.00
1	6	425	A	N9-C4-C5	5.49	108.00	105.80
1	6	1283	U	C5-C4-O4	5.49	129.19	125.90
1	6	1564	U	N3-C4-C5	5.49	117.89	114.60
36	5	39	A	N1-C2-N3	5.49	132.04	129.30
36	5	52	A	C6-N1-C2	-5.49	115.31	118.60
36	5	830	A	N1-C2-N3	5.49	132.04	129.30
36	5	2167	A	C8-N9-C4	-5.49	103.61	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	115	G	OP2-P-O3'	5.49	117.27	105.20
38	8	10	A	N7-C8-N9	-5.49	111.06	113.80
1	2	311	U	N3-C4-C5	-5.49	111.31	114.60
1	2	1608	U	C6-N1-C2	-5.49	117.71	121.00
1	2	1752	U	C6-N1-C2	5.49	124.29	121.00
36	1	113	C	N3-C4-N4	5.49	121.84	118.00
36	1	404	G	C4-N9-C1'	5.49	133.63	126.50
36	1	1050	U	C4-C5-C6	5.49	122.99	119.70
36	1	1321	G	N1-C6-O6	5.49	123.19	119.90
36	1	2610	G	N1-C2-N3	5.49	127.19	123.90
36	1	3222	U	N3-C4-O4	-5.49	115.56	119.40
36	1	3276	G	C4-C5-N7	5.49	112.99	110.80
36	1	3329	U	O5'-P-OP1	-5.49	100.76	105.70
38	4	52	A	N1-C6-N6	-5.49	115.31	118.60
38	4	73	U	N3-C4-O4	-5.49	115.56	119.40
1	6	1039	A	C5-N7-C8	-5.49	101.16	103.90
1	6	1192	C	N3-C4-N4	5.49	121.84	118.00
36	5	406	G	C2-N3-C4	-5.49	109.16	111.90
36	5	667	C	N1-C2-O2	5.49	122.19	118.90
36	5	1668	G	N1-C6-O6	5.49	123.19	119.90
36	5	2957	G	N3-C4-N9	-5.49	122.71	126.00
1	2	1720	G	N1-C6-O6	5.48	123.19	119.90
36	1	1893	A	C2-N3-C4	-5.48	107.86	110.60
36	5	2163	C	N3-C2-O2	-5.48	118.06	121.90
1	2	1004	U	N1-C2-N3	5.48	118.19	114.90
1	2	1201	G	C5-N7-C8	5.48	107.04	104.30
36	1	52	A	O5'-P-OP1	-5.48	100.77	105.70
36	1	125	C	C6-N1-C2	5.48	122.49	120.30
36	1	932	U	C2-N3-C4	-5.48	123.71	127.00
36	1	1177	G	P-O3'-C3'	5.48	126.28	119.70
36	1	1334	U	O5'-P-OP2	-5.48	100.77	105.70
36	1	1367	G	C8-N9-C4	-5.48	104.21	106.40
36	1	1500	G	N1-C6-O6	5.48	123.19	119.90
1	6	561	G	N7-C8-N9	5.48	115.84	113.10
1	6	804	A	C5-C6-N6	-5.48	119.31	123.70
1	6	858	G	C8-N9-C1'	-5.48	119.87	127.00
1	6	1100	G	C4-C5-N7	5.48	112.99	110.80
36	5	768	C	C5-C6-N1	5.48	123.74	121.00
36	5	867	G	C4-C5-C6	5.48	122.09	118.80
36	5	943	U	C4-C5-C6	5.48	122.99	119.70
36	5	1155	C	C5-C6-N1	5.48	123.74	121.00
36	5	1215	U	N3-C4-O4	5.48	123.24	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1860	G	O4'-C1'-N9	5.48	112.59	108.20
36	5	1863	G	N1-C6-O6	-5.48	116.61	119.90
36	5	2396	G	N9-C4-C5	5.48	107.59	105.40
1	2	1029	U	N3-C4-O4	-5.48	115.56	119.40
36	1	628	A	OP1-P-O3'	-5.48	93.14	105.20
36	1	641	C	C6-N1-C2	5.48	122.49	120.30
36	1	651	G	O4'-C1'-N9	-5.48	103.82	108.20
36	1	1205	A	O5'-P-OP2	-5.48	100.77	105.70
36	1	2877	G	OP1-P-OP2	5.48	127.82	119.60
37	3	103	A	OP2-P-O3'	5.48	117.26	105.20
1	6	1656	U	N3-C4-O4	5.48	123.24	119.40
1	2	336	G	N1-C6-O6	5.48	123.19	119.90
36	1	362	U	C2-N1-C1'	-5.48	111.13	117.70
36	1	929	A	N1-C2-N3	-5.48	126.56	129.30
36	1	1153	A	N1-C6-N6	5.48	121.89	118.60
36	1	2095	G	C6-C5-N7	-5.48	127.11	130.40
36	1	2870	C	P-O3'-C3'	5.48	126.27	119.70
1	6	1625	C	N3-C2-O2	5.48	125.74	121.90
36	5	2318	U	N1-C2-N3	-5.48	111.61	114.90
1	2	581	U	C5-C6-N1	5.48	125.44	122.70
36	1	805	G	C6-C5-N7	-5.48	127.11	130.40
36	1	943	U	N3-C4-C5	-5.48	111.31	114.60
36	1	1429	G	C4-C5-C6	5.48	122.09	118.80
36	1	1521	G	N3-C4-N9	-5.48	122.71	126.00
36	1	1618	G	N9-C4-C5	5.48	107.59	105.40
36	1	2520	A	C4-C5-N7	5.48	113.44	110.70
38	4	41	A	N3-C4-N9	5.48	131.78	127.40
1	6	757	A	C2-N3-C4	-5.48	107.86	110.60
1	6	1509	C	C2-N3-C4	-5.48	117.16	119.90
36	5	419	G	N3-C4-C5	-5.48	125.86	128.60
36	5	595	G	N3-C4-C5	-5.48	125.86	128.60
36	5	1816	A	C2-N3-C4	5.48	113.34	110.60
36	5	3114	A	N3-C4-C5	5.48	130.63	126.80
36	5	3225	C	N3-C4-N4	5.48	121.83	118.00
1	2	287	G	N9-C1'-C2'	-5.48	105.98	112.00
1	2	1108	G	C5-C6-N1	5.48	114.24	111.50
1	2	1173	C	N3-C2-O2	-5.48	118.07	121.90
1	2	1303	U	C2-N1-C1'	-5.48	111.13	117.70
36	1	419	G	N3-C4-N9	5.48	129.28	126.00
36	1	815	G	C4-C5-N7	-5.48	108.61	110.80
36	1	2127	U	O5'-P-OP2	5.48	117.27	110.70
36	1	2229	A	C5-N7-C8	-5.48	101.16	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	157	A	N1-C6-N6	-5.48	115.31	118.60
1	2	378	A	C4-C5-N7	5.47	113.44	110.70
1	2	1656	U	N3-C2-O2	5.47	126.03	122.20
36	1	73	C	O4'-C1'-N1	-5.47	103.82	108.20
36	1	353	G	N3-C4-N9	-5.47	122.72	126.00
36	1	2164	A	C8-N9-C4	-5.47	103.61	105.80
36	1	2243	A	N1-C6-N6	5.47	121.89	118.60
36	1	2419	A	C5-C6-N6	-5.47	119.32	123.70
36	1	2634	U	N3-C4-O4	5.47	123.23	119.40
37	3	109	G	C4-N9-C1'	-5.47	119.38	126.50
1	6	989	U	N3-C2-O2	-5.47	118.37	122.20
1	6	1226	A	N3-C4-C5	-5.47	122.97	126.80
36	5	217	U	N3-C4-O4	-5.47	115.57	119.40
36	5	1847	A	O5'-P-OP2	-5.47	100.77	105.70
1	2	1266	U	OP1-P-O3'	5.47	117.24	105.20
36	1	1374	G	C5-C6-O6	-5.47	125.32	128.60
36	1	1448	U	C4-C5-C6	5.47	122.98	119.70
36	1	1525	G	N1-C2-N2	-5.47	111.27	116.20
36	1	1665	C	N3-C2-O2	5.47	125.73	121.90
37	3	75	G	N1-C2-N3	5.47	127.18	123.90
40	L3	117	ARG	NE-CZ-NH1	5.47	123.04	120.30
1	6	52	U	C2-N1-C1'	5.47	124.27	117.70
1	6	639	U	O4'-C1'-N1	5.47	112.58	108.20
36	5	183	G	N9-C4-C5	5.47	107.59	105.40
36	5	617	G	C8-N9-C4	5.47	108.59	106.40
36	5	1082	U	C2-N1-C1'	5.47	124.27	117.70
36	5	1318	A	OP2-P-O3'	5.47	117.24	105.20
36	5	1896	A	N9-C4-C5	5.47	107.99	105.80
36	5	3074	G	O5'-P-OP1	-5.47	100.78	105.70
52	m6	138	LEU	CB-CG-CD2	-5.47	101.70	111.00
1	2	574	G	C4-C5-N7	-5.47	108.61	110.80
1	2	1329	A	N9-C4-C5	-5.47	103.61	105.80
36	1	788	C	C4-C5-C6	5.47	120.14	117.40
36	1	1070	U	C5-C4-O4	5.47	129.18	125.90
1	6	546	U	N1-C2-N3	5.47	118.18	114.90
36	5	712	G	C2-N3-C4	5.47	114.64	111.90
36	5	1489	A	C6-N1-C2	-5.47	115.32	118.60
36	5	2287	C	N3-C4-N4	-5.47	114.17	118.00
36	5	2860	U	C6-N1-C2	5.47	124.28	121.00
1	2	1744	A	O5'-P-OP1	-5.47	100.78	105.70
36	1	933	A	N3-C4-N9	5.47	131.78	127.40
36	1	1046	A	C6-C5-N7	-5.47	128.47	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1303	A	OP1-P-O3'	5.47	117.23	105.20
36	1	1523	U	O4'-C1'-N1	5.47	112.58	108.20
36	1	2586	G	N3-C4-C5	-5.47	125.86	128.60
36	1	2624	G	C4-N9-C1'	5.47	133.61	126.50
36	1	3321	C	O5'-P-OP1	5.47	117.26	110.70
36	1	3393	U	C2-N1-C1'	-5.47	111.14	117.70
1	6	57	G	N7-C8-N9	5.47	115.83	113.10
1	6	325	G	N1-C2-N3	5.47	127.18	123.90
1	6	1148	C	N3-C2-O2	-5.47	118.07	121.90
1	6	1228	G	C4-N9-C1'	5.47	133.61	126.50
36	5	1881	A	C5-C6-N1	5.47	120.44	117.70
36	5	2351	U	C2-N3-C4	-5.47	123.72	127.00
36	5	2374	C	OP2-P-O3'	5.47	117.23	105.20
36	5	3315	G	N1-C2-N3	5.47	127.18	123.90
38	8	12	A	C6-C5-N7	-5.47	128.47	132.30
1	2	1030	A	N1-C6-N6	5.47	121.88	118.60
36	1	881	C	OP1-P-O3'	5.47	117.23	105.20
36	1	3323	A	C4-C5-C6	5.47	119.73	117.00
38	4	13	A	C2-N3-C4	-5.47	107.87	110.60
1	6	331	A	O5'-P-OP2	-5.47	100.78	105.70
1	6	388	G	N1-C2-N3	5.47	127.18	123.90
1	6	554	C	N1-C2-O2	-5.47	115.62	118.90
1	6	1361	U	N1-C2-O2	5.47	126.63	122.80
36	5	1668	G	N7-C8-N9	5.47	115.83	113.10
36	5	2518	C	N3-C2-O2	5.47	125.73	121.90
36	5	3117	C	N3-C2-O2	-5.47	118.07	121.90
1	2	1044	U	N1-C2-N3	5.47	118.18	114.90
1	2	1773	C	N1-C2-O2	-5.47	115.62	118.90
36	1	1005	G	C4-C5-N7	-5.47	108.61	110.80
36	1	2627	C	C2-N1-C1'	-5.47	112.79	118.80
36	1	2844	C	N3-C4-C5	5.47	124.09	121.90
36	1	3269	U	C5-C4-O4	5.47	129.18	125.90
38	4	77	A	C2-N3-C4	-5.47	107.87	110.60
1	6	420	A	C8-N9-C4	-5.47	103.61	105.80
1	6	1245	G	N3-C4-C5	-5.47	125.87	128.60
36	5	543	C	C6-N1-C2	-5.47	118.11	120.30
36	5	591	G	C4-N9-C1'	5.47	133.61	126.50
36	5	1173	U	C5-C6-N1	-5.47	119.97	122.70
36	5	1889	G	C5-C6-O6	-5.47	125.32	128.60
36	5	2106	A	C8-N9-C4	-5.47	103.61	105.80
36	5	2265	C	N3-C4-C5	-5.47	119.71	121.90
36	5	2377	G	N1-C2-N3	-5.47	120.62	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2386	A	C2-N3-C4	-5.47	107.87	110.60
36	5	2722	U	C6-N1-C2	-5.47	117.72	121.00
36	5	2923	U	OP2-P-O3'	-5.47	93.17	105.20
36	5	3128	G	OP2-P-O3'	5.47	117.23	105.20
36	5	3181	C	C5-C4-N4	5.47	124.03	120.20
1	2	233	C	C6-N1-C2	-5.46	118.11	120.30
36	1	320	G	C4-C5-N7	5.46	112.99	110.80
36	1	1002	A	C4-C5-C6	-5.46	114.27	117.00
36	1	1346	G	N3-C2-N2	-5.46	116.08	119.90
36	1	1905	G	C5-C6-N1	-5.46	108.77	111.50
36	1	2286	U	C4-C5-C6	5.46	122.98	119.70
36	1	2886	U	N3-C2-O2	5.46	126.03	122.20
36	1	3142	A	C4-N9-C1'	-5.46	116.47	126.30
36	1	3261	C	C5-C6-N1	5.46	123.73	121.00
1	6	440	U	C2-N3-C4	-5.46	123.72	127.00
1	6	874	C	N1-C2-O2	5.46	122.18	118.90
1	6	903	U	N3-C4-O4	5.46	123.22	119.40
36	5	801	A	C5-C6-N1	-5.46	114.97	117.70
36	5	987	U	N1-C2-N3	5.46	118.18	114.90
36	5	2347	U	C4-C5-C6	5.46	122.98	119.70
37	7	25	G	N3-C4-C5	-5.46	125.87	128.60
38	8	17	A	N1-C6-N6	5.46	121.88	118.60
36	1	936	A	C8-N9-C4	5.46	107.98	105.80
36	1	2163	C	N3-C4-C5	5.46	124.08	121.90
36	1	2368	A	C6-C5-N7	-5.46	128.48	132.30
36	1	2655	U	C6-N1-C1'	5.46	128.85	121.20
36	1	3288	G	C5-N7-C8	-5.46	101.57	104.30
36	5	235	A	N3-C4-C5	5.46	130.62	126.80
36	5	651	G	OP2-P-O3'	5.46	117.22	105.20
36	5	1656	A	N1-C2-N3	5.46	132.03	129.30
36	5	1929	G	C2-N3-C4	-5.46	109.17	111.90
68	o2	27	ARG	NE-CZ-NH1	-5.46	117.57	120.30
1	2	622	A	C2-N3-C4	5.46	113.33	110.60
36	1	38	U	O5'-P-OP2	5.46	117.25	110.70
36	1	94	G	N1-C6-O6	5.46	123.18	119.90
36	1	416	A	C6-C5-N7	-5.46	128.48	132.30
36	1	695	C	C2-N3-C4	-5.46	117.17	119.90
36	1	907	G	N3-C2-N2	5.46	123.72	119.90
36	1	1099	A	C8-N9-C4	5.46	107.98	105.80
36	1	2149	A	N1-C6-N6	-5.46	115.32	118.60
36	1	2423	U	N3-C4-O4	5.46	123.22	119.40
36	1	2652	U	OP2-P-O3'	5.46	117.22	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2684	C	C6-N1-C2	-5.46	118.11	120.30
36	1	2964	G	C5-C6-N1	-5.46	108.77	111.50
36	1	3375	A	P-O3'-C3'	5.46	126.25	119.70
1	6	635	A	C5-C6-N6	5.46	128.07	123.70
1	6	858	G	C8-N9-C4	-5.46	104.22	106.40
1	6	865	A	C8-N9-C4	-5.46	103.61	105.80
1	6	980	G	N1-C6-O6	5.46	123.18	119.90
1	6	1126	G	N3-C2-N2	-5.46	116.08	119.90
1	6	1467	C	C5-C6-N1	5.46	123.73	121.00
1	6	1796	C	N3-C2-O2	-5.46	118.08	121.90
36	5	595	G	N9-C4-C5	-5.46	103.22	105.40
36	5	702	C	C5-C6-N1	5.46	123.73	121.00
36	5	1043	C	C2-N3-C4	-5.46	117.17	119.90
36	5	1489	A	C8-N9-C1'	-5.46	117.87	127.70
36	5	1691	U	C6-N1-C2	-5.46	117.72	121.00
36	5	2190	U	OP2-P-O3'	5.46	117.21	105.20
36	5	2199	G	C8-N9-C4	-5.46	104.22	106.40
36	5	2365	C	C4-C5-C6	5.46	120.13	117.40
1	2	100	A	N1-C6-N6	-5.46	115.32	118.60
36	1	115	A	O4'-C1'-N9	-5.46	103.83	108.20
36	1	1869	C	N3-C2-O2	5.46	125.72	121.90
36	1	2239	G	N3-C2-N2	5.46	123.72	119.90
36	1	2990	G	N3-C4-N9	5.46	129.28	126.00
36	1	3173	G	C4-N9-C1'	5.46	133.60	126.50
1	6	885	G	OP1-P-O3'	5.46	117.21	105.20
36	5	342	A	N3-C4-N9	5.46	131.77	127.40
36	5	356	C	N1-C2-O2	-5.46	115.62	118.90
36	5	1095	U	C2-N1-C1'	5.46	124.25	117.70
36	5	1881	A	O4'-C1'-N9	-5.46	103.83	108.20
36	5	2664	C	N3-C4-C5	5.46	124.08	121.90
36	5	3095	U	C5-C6-N1	-5.46	119.97	122.70
36	1	128	G	N1-C6-O6	5.46	123.17	119.90
36	1	622	A	N1-C2-N3	-5.46	126.57	129.30
36	1	1196	C	N1-C2-N3	-5.46	115.38	119.20
36	1	3242	G	C2-N3-C4	-5.46	109.17	111.90
40	L3	284	ARG	NE-CZ-NH1	5.46	123.03	120.30
61	N5	115	ARG	NE-CZ-NH1	5.46	123.03	120.30
1	6	165	G	C4-C5-C6	5.46	122.08	118.80
1	6	1454	G	C6-C5-N7	-5.46	127.12	130.40
36	5	1431	G	N3-C4-N9	5.46	129.28	126.00
36	5	1752	A	O5'-P-OP1	-5.46	100.79	105.70
36	5	1884	A	C6-N1-C2	-5.46	115.33	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2300	G	C4-C5-N7	5.46	112.98	110.80
36	5	2374	C	C6-N1-C1'	-5.46	114.25	120.80
36	5	2624	G	N9-C4-C5	-5.46	103.22	105.40
36	5	2729	U	C5-C6-N1	-5.46	119.97	122.70
37	7	87	G	C8-N9-C1'	-5.46	119.90	127.00
1	2	314	C	OP1-P-O3'	5.46	117.20	105.20
1	2	783	G	N9-C4-C5	-5.46	103.22	105.40
36	1	429	U	OP2-P-O3'	5.46	117.20	105.20
36	1	875	G	N3-C2-N2	-5.46	116.08	119.90
36	1	1444	G	N3-C4-C5	-5.46	125.87	128.60
36	1	3008	A	OP1-P-OP2	-5.46	111.41	119.60
36	1	3145	C	N1-C2-O2	-5.46	115.63	118.90
37	3	56	A	C4-C5-C6	-5.46	114.27	117.00
38	4	33	A	O5'-P-OP1	-5.46	100.79	105.70
38	4	46	G	N3-C4-C5	-5.46	125.87	128.60
38	4	81	U	C6-N1-C2	-5.46	117.73	121.00
38	4	83	C	N3-C4-C5	-5.46	119.72	121.90
36	5	53	G	N1-C6-O6	-5.46	116.63	119.90
36	5	528	U	N3-C4-O4	5.46	123.22	119.40
36	5	936	A	O5'-P-OP1	5.46	117.25	110.70
36	5	1280	C	C6-N1-C2	5.46	122.48	120.30
36	5	2370	G	C8-N9-C4	-5.46	104.22	106.40
36	1	1103	A	C4-C5-N7	-5.46	107.97	110.70
36	1	1147	G	N1-C2-N3	5.46	127.17	123.90
36	1	1431	G	C8-N9-C1'	-5.46	119.91	127.00
36	1	1893	A	C5-N7-C8	-5.46	101.17	103.90
1	6	411	C	C6-N1-C2	-5.46	118.12	120.30
36	5	1452	A	N1-C2-N3	5.46	132.03	129.30
36	5	3142	A	N1-C6-N6	-5.46	115.33	118.60
1	2	275	C	C5-C6-N1	5.45	123.73	121.00
1	2	1112	G	OP1-P-OP2	-5.45	111.42	119.60
14	C2	103	LEU	CA-CB-CG	5.45	127.84	115.30
36	1	275	U	OP1-P-OP2	-5.45	111.42	119.60
36	1	515	C	N3-C4-C5	-5.45	119.72	121.90
36	1	613	G	C5-N7-C8	-5.45	101.57	104.30
36	1	951	A	C8-N9-C4	5.45	107.98	105.80
36	1	1082	U	N3-C2-O2	-5.45	118.38	122.20
36	1	1456	A	O4'-C1'-N9	-5.45	103.84	108.20
36	1	1524	A	C5-C6-N1	5.45	120.43	117.70
36	1	1553	U	N1-C2-O2	-5.45	118.98	122.80
36	1	3122	A	C4-C5-N7	5.45	113.43	110.70
1	6	322	G	O4'-C1'-N9	-5.45	103.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	761	G	N9-C4-C5	5.45	107.58	105.40
1	6	1178	G	C5-C6-O6	5.45	131.87	128.60
1	6	1772	C	C4-C5-C6	5.45	120.13	117.40
36	5	110	G	C4-N9-C1'	5.45	133.59	126.50
36	5	1389	G	C8-N9-C4	5.45	108.58	106.40
36	5	1551	C	O4'-C1'-N1	5.45	112.56	108.20
36	5	2119	A	C2-N3-C4	-5.45	107.87	110.60
36	5	2274	U	N3-C4-O4	5.45	123.22	119.40
37	7	106	U	OP1-P-OP2	5.45	127.78	119.60
1	2	770	A	O5'-P-OP2	-5.45	100.79	105.70
36	1	1618	G	C4-C5-N7	-5.45	108.62	110.80
36	1	1795	U	N1-C2-O2	-5.45	118.98	122.80
36	1	3304	U	OP1-P-OP2	5.45	127.78	119.60
36	1	3320	A	C5-N7-C8	-5.45	101.17	103.90
1	6	1100	G	N3-C4-C5	5.45	131.33	128.60
36	5	1522	U	C2-N1-C1'	-5.45	111.16	117.70
36	5	1652	G	N1-C6-O6	5.45	123.17	119.90
36	5	2907	G	C6-N1-C2	-5.45	121.83	125.10
37	7	17	A	C6-N1-C2	-5.45	115.33	118.60
1	2	27	U	N1-C2-O2	5.45	126.61	122.80
36	1	10	C	C6-N1-C2	5.45	122.48	120.30
36	1	80	G	C8-N9-C4	-5.45	104.22	106.40
36	1	518	G	N9-C4-C5	5.45	107.58	105.40
36	1	828	A	N1-C6-N6	5.45	121.87	118.60
36	1	906	A	C5-C6-N1	5.45	120.42	117.70
36	1	944	C	C2-N3-C4	-5.45	117.17	119.90
36	1	1330	A	OP2-P-O3'	5.45	117.19	105.20
36	1	1545	A	C4-C5-C6	5.45	119.73	117.00
36	1	2197	C	N3-C2-O2	5.45	125.72	121.90
36	1	2339	C	N1-C2-O2	5.45	122.17	118.90
36	1	3189	G	N3-C4-N9	5.45	129.27	126.00
36	1	3242	G	O5'-P-OP2	-5.45	100.80	105.70
36	1	3304	U	N1-C2-N3	5.45	118.17	114.90
52	M6	99	LEU	CA-CB-CG	-5.45	102.76	115.30
1	6	55	A	C5-C6-N6	5.45	128.06	123.70
1	6	217	A	P-O3'-C3'	5.45	126.24	119.70
1	6	1774	G	OP2-P-O3'	5.45	117.19	105.20
36	5	1313	G	N3-C4-C5	-5.45	125.87	128.60
36	5	1397	C	C2-N1-C1'	5.45	124.80	118.80
36	5	2372	A	N3-C4-N9	5.45	131.76	127.40
36	5	2828	G	O5'-P-OP2	5.45	117.24	110.70
36	5	2918	G	N7-C8-N9	-5.45	110.38	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3060	C	N3-C2-O2	5.45	125.72	121.90
1	2	755	A	C4-C5-N7	-5.45	107.98	110.70
1	2	1104	U	N3-C2-O2	5.45	126.01	122.20
36	1	1178	G	C6-N1-C2	-5.45	121.83	125.10
36	1	1367	G	C4-C5-C6	5.45	122.07	118.80
36	1	2824	G	C2-N3-C4	-5.45	109.18	111.90
36	1	3189	G	N3-C4-C5	-5.45	125.88	128.60
37	3	115	G	C8-N9-C4	5.45	108.58	106.40
1	6	3	U	C5-C6-N1	-5.45	119.98	122.70
1	6	760	A	C2-N3-C4	-5.45	107.88	110.60
1	6	1583	A	N9-C4-C5	5.45	107.98	105.80
36	5	81	C	C5-C6-N1	-5.45	118.28	121.00
36	5	957	C	N3-C2-O2	-5.45	118.09	121.90
36	5	2908	G	OP1-P-O3'	-5.45	93.21	105.20
36	5	3100	U	N3-C4-C5	5.45	117.87	114.60
36	5	3243	A	N1-C6-N6	5.45	121.87	118.60
36	1	2332	A	C5-C6-N6	-5.45	119.34	123.70
1	6	52	U	C6-N1-C2	-5.45	117.73	121.00
36	5	1362	G	C5-C6-O6	-5.45	125.33	128.60
36	5	1383	G	N1-C6-O6	5.45	123.17	119.90
36	5	2735	U	O5'-P-OP1	5.45	117.24	110.70
1	2	728	U	C2-N1-C1'	5.45	124.23	117.70
1	2	1427	A	C2-N3-C4	5.45	113.32	110.60
36	1	236	G	N1-C6-O6	-5.45	116.63	119.90
36	1	1412	G	OP1-P-OP2	-5.45	111.43	119.60
36	1	1527	C	N3-C2-O2	5.45	125.71	121.90
36	1	2247	G	O5'-P-OP1	-5.45	100.80	105.70
36	1	2916	U	C5-C4-O4	-5.45	122.63	125.90
36	1	2991	A	O5'-P-OP2	5.45	117.23	110.70
36	1	3022	G	O4'-C1'-N9	5.45	112.56	108.20
36	1	3114	A	N1-C2-N3	5.45	132.02	129.30
36	1	3318	G	N9-C1'-C2'	-5.45	106.01	112.00
38	4	63	G	N1-C2-N3	5.45	127.17	123.90
1	6	417	A	OP2-P-O3'	5.45	117.18	105.20
1	6	574	G	N7-C8-N9	-5.45	110.38	113.10
1	6	777	C	C5-C6-N1	5.45	123.72	121.00
1	6	1004	U	C4-C5-C6	5.45	122.97	119.70
36	5	96	G	C6-N1-C2	5.45	128.37	125.10
36	5	212	G	N3-C4-C5	-5.45	125.88	128.60
36	5	947	G	C4-N9-C1'	5.45	133.58	126.50
36	5	1400	G	C6-C5-N7	-5.45	127.13	130.40
36	5	2728	G	N7-C8-N9	5.45	115.82	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3390	G	N1-C2-N3	5.45	127.17	123.90
37	7	93	C	C2-N3-C4	-5.45	117.18	119.90
38	8	101	U	N3-C2-O2	-5.45	118.39	122.20
50	m4	38	ILE	CG1-CB-CG2	-5.45	99.42	111.40
1	2	43	A	N1-C6-N6	-5.44	115.33	118.60
36	1	329	U	C2-N3-C4	-5.44	123.73	127.00
36	1	587	U	N3-C2-O2	5.44	126.01	122.20
36	1	592	A	O5'-P-OP2	-5.44	100.80	105.70
36	1	696	C	P-O3'-C3'	5.44	126.23	119.70
36	1	1099	A	C5-C6-N6	-5.44	119.34	123.70
36	1	2235	C	N1-C2-O2	-5.44	115.63	118.90
36	1	2356	A	N1-C6-N6	5.44	121.87	118.60
36	5	817	A	C8-N9-C4	-5.44	103.62	105.80
36	5	2354	C	C2-N3-C4	5.44	122.62	119.90
36	1	573	C	O5'-P-OP2	-5.44	100.80	105.70
36	1	994	G	OP1-P-O3'	5.44	117.17	105.20
36	1	1621	A	N7-C8-N9	-5.44	111.08	113.80
36	1	3312	U	C5-C6-N1	5.44	125.42	122.70
1	6	417	A	C4-C5-C6	5.44	119.72	117.00
1	6	1070	C	C2-N3-C4	-5.44	117.18	119.90
1	6	1772	C	C5-C6-N1	-5.44	118.28	121.00
36	5	1343	A	C8-N9-C4	5.44	107.98	105.80
36	5	2208	A	O4'-C1'-N9	5.44	112.56	108.20
36	5	2285	C	N1-C2-N3	5.44	123.01	119.20
36	5	3061	G	N1-C2-N2	5.44	121.10	116.20
36	5	3290	G	C4-N9-C1'	5.44	133.57	126.50
1	2	1241	G	C8-N9-C1'	-5.44	119.93	127.00
1	2	1255	G	C4-C5-N7	-5.44	108.62	110.80
36	1	361	A	C6-N1-C2	-5.44	115.34	118.60
36	1	679	U	C5-C4-O4	5.44	129.16	125.90
36	1	1296	C	N3-C4-C5	5.44	124.08	121.90
36	1	2799	A	C5-C6-N6	5.44	128.05	123.70
36	1	2882	U	N1-C2-N3	5.44	118.17	114.90
1	6	1376	C	C2-N1-C1'	-5.44	112.82	118.80
36	5	62	A	N7-C8-N9	5.44	116.52	113.80
36	5	515	C	C5-C6-N1	-5.44	118.28	121.00
36	5	521	A	O5'-P-OP1	-5.44	100.80	105.70
36	5	677	A	C5-C6-N1	5.44	120.42	117.70
36	5	1040	A	N9-C1'-C2'	-5.44	106.02	112.00
36	5	1174	G	O5'-P-OP2	-5.44	100.80	105.70
36	5	1672	U	C5-C6-N1	-5.44	119.98	122.70
36	5	2584	G	O4'-C1'-N9	-5.44	103.85	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2978	U	N1-C2-N3	5.44	118.16	114.90
36	5	3153	U	C2-N1-C1'	5.44	124.23	117.70
36	5	3324	C	C6-N1-C2	5.44	122.48	120.30
37	7	68	C	O5'-P-OP1	-5.44	100.80	105.70
37	7	80	G	C8-N9-C1'	-5.44	119.93	127.00
38	8	31	G	N7-C8-N9	-5.44	110.38	113.10
62	n6	6	LEU	CA-CB-CG	-5.44	102.79	115.30
36	1	404	G	N3-C4-N9	5.44	129.26	126.00
36	1	504	A	C5-C6-N1	5.44	120.42	117.70
36	1	2121	G	C8-N9-C1'	5.44	134.07	127.00
36	1	2163	C	C5-C6-N1	-5.44	118.28	121.00
36	1	2210	G	C8-N9-C1'	5.44	134.07	127.00
36	1	2341	A	C8-N9-C4	5.44	107.97	105.80
1	6	361	C	N3-C2-O2	-5.44	118.09	121.90
1	6	613	G	C5-C6-O6	-5.44	125.34	128.60
36	5	507	U	C4-C5-C6	5.44	122.96	119.70
36	5	3147	G	N1-C2-N2	-5.44	111.31	116.20
40	l3	14	LEU	CB-CG-CD2	-5.44	101.75	111.00
1	2	1625	C	C5-C6-N1	-5.44	118.28	121.00
36	1	91	G	C4-N9-C1'	5.44	133.57	126.50
36	1	142	C	OP1-P-OP2	5.44	127.75	119.60
36	1	839	C	C5-C4-N4	-5.44	116.39	120.20
36	1	1762	C	N1-C2-O2	5.44	122.16	118.90
1	6	1309	C	C4-C5-C6	5.44	120.12	117.40
36	5	33	G	N9-C4-C5	5.44	107.58	105.40
36	5	694	C	C5-C6-N1	-5.44	118.28	121.00
36	5	878	G	C2-N3-C4	5.44	114.62	111.90
36	5	949	C	C5-C6-N1	-5.44	118.28	121.00
36	5	1195	A	C6-N1-C2	-5.44	115.34	118.60
36	5	1329	U	N1-C2-O2	-5.44	118.99	122.80
36	5	1439	U	N3-C4-C5	5.44	117.86	114.60
36	5	3030	G	OP2-P-O3'	5.44	117.16	105.20
36	5	3340	G	C8-N9-C4	-5.44	104.22	106.40
50	m4	66	THR	C-N-CD	5.44	139.82	128.40
1	2	1136	U	C2-N1-C1'	-5.44	111.18	117.70
36	1	1146	C	N3-C2-O2	5.44	125.70	121.90
1	6	1277	G	C5-C6-O6	-5.44	125.34	128.60
36	5	379	C	C2-N1-C1'	5.44	124.78	118.80
36	5	572	A	C4-C5-C6	5.44	119.72	117.00
36	5	1220	U	O4'-C1'-N1	-5.44	103.85	108.20
36	5	1877	U	N3-C4-C5	-5.44	111.34	114.60
36	5	2761	G	N9-C4-C5	5.44	107.58	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	8	39	G	C8-N9-C1'	-5.44	119.93	127.00
47	m0	76	MET	CG-SD-CE	-5.44	91.50	100.20
1	2	839	U	C6-N1-C2	-5.43	117.74	121.00
1	2	1414	U	O4'-C1'-N1	5.43	112.55	108.20
36	1	304	G	N9-C4-C5	5.43	107.57	105.40
36	1	1056	U	O5'-P-OP2	-5.43	100.81	105.70
36	1	1128	U	C2-N3-C4	-5.43	123.74	127.00
36	1	1199	C	N1-C2-N3	5.43	123.00	119.20
36	1	1520	G	C8-N9-C1'	-5.43	119.94	127.00
36	1	1543	G	C4-C5-N7	5.43	112.97	110.80
36	1	3276	G	N3-C4-C5	5.43	131.32	128.60
1	6	151	G	C8-N9-C1'	5.43	134.06	127.00
1	6	310	C	N3-C4-N4	5.43	121.80	118.00
1	6	953	G	C8-N9-C4	5.43	108.57	106.40
1	6	970	A	C5-C6-N6	-5.43	119.35	123.70
1	6	1177	C	N1-C2-O2	-5.43	115.64	118.90
1	6	1536	G	N1-C2-N2	-5.43	111.31	116.20
1	6	1629	G	N1-C6-O6	-5.43	116.64	119.90
36	5	574	U	OP1-P-O3'	-5.43	93.25	105.20
36	5	720	A	OP1-P-OP2	5.43	127.75	119.60
36	5	1391	C	C6-N1-C1'	-5.43	114.28	120.80
36	5	2371	G	N9-C4-C5	-5.43	103.23	105.40
37	7	79	A	OP1-P-OP2	5.43	127.75	119.60
38	8	99	C	C2-N1-C1'	5.43	124.78	118.80
1	2	1165	G	N9-C4-C5	-5.43	103.23	105.40
1	2	1479	A	N9-C4-C5	-5.43	103.63	105.80
36	1	537	A	C8-N9-C4	5.43	107.97	105.80
36	1	624	G	C8-N9-C1'	-5.43	119.94	127.00
36	1	746	A	OP2-P-O3'	5.43	117.15	105.20
36	1	804	C	C4-C5-C6	5.43	120.12	117.40
36	1	1148	G	C4-N9-C1'	-5.43	119.44	126.50
36	1	1308	A	C5-N7-C8	-5.43	101.18	103.90
36	1	1892	G	C4-C5-N7	-5.43	108.63	110.80
36	1	2118	C	C4-C5-C6	-5.43	114.68	117.40
36	1	2899	C	C5-C4-N4	5.43	124.00	120.20
38	4	112	U	N3-C2-O2	5.43	126.00	122.20
1	6	272	U	P-O3'-C3'	5.43	126.22	119.70
36	5	232	G	N9-C4-C5	5.43	107.57	105.40
36	5	353	G	OP1-P-OP2	5.43	127.75	119.60
36	5	401	U	C6-N1-C2	-5.43	117.74	121.00
36	5	884	A	C5-N7-C8	-5.43	101.18	103.90
36	5	1195	A	N3-C4-N9	-5.43	123.05	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1307	G	C6-N1-C2	-5.43	121.84	125.10
36	5	1415	U	OP1-P-O3'	5.43	117.15	105.20
36	5	1748	G	C6-C5-N7	-5.43	127.14	130.40
36	5	2262	A	OP2-P-O3'	5.43	117.15	105.20
36	1	1120	A	N1-C6-N6	-5.43	115.34	118.60
36	1	3022	G	C5-C6-O6	-5.43	125.34	128.60
36	5	437	G	N1-C2-N2	-5.43	111.31	116.20
36	5	617	G	N9-C4-C5	-5.43	103.23	105.40
36	5	2155	G	OP1-P-O3'	-5.43	93.25	105.20
36	5	2194	G	C4-N9-C1'	5.43	133.56	126.50
36	5	2618	G	C5-C6-O6	5.43	131.86	128.60
36	5	3194	C	N3-C2-O2	-5.43	118.10	121.90
37	7	111	U	N3-C4-O4	5.43	123.20	119.40
1	2	429	G	C8-N9-C4	-5.43	104.23	106.40
36	1	1748	G	O5'-P-OP1	-5.43	100.81	105.70
36	1	2907	G	OP2-P-O3'	5.43	117.15	105.20
36	1	3326	G	N1-C6-O6	-5.43	116.64	119.90
1	6	1586	A	C6-N1-C2	-5.43	115.34	118.60
36	5	352	A	N3-C4-C5	5.43	130.60	126.80
36	5	967	A	N7-C8-N9	5.43	116.52	113.80
36	5	1171	G	N3-C2-N2	-5.43	116.10	119.90
36	5	1361	U	OP2-P-O3'	5.43	117.14	105.20
36	5	1445	U	N1-C2-O2	-5.43	119.00	122.80
36	5	1906	G	N3-C2-N2	5.43	123.70	119.90
36	5	2656	A	C8-N9-C4	-5.43	103.63	105.80
36	5	2794	G	C4-C5-C6	-5.43	115.54	118.80
1	2	931	C	C5-C6-N1	5.43	123.71	121.00
36	1	233	C	N1-C2-O2	-5.43	115.64	118.90
36	1	2382	G	C5-C6-O6	5.43	131.86	128.60
36	1	2621	G	O5'-P-OP1	5.43	117.21	110.70
36	1	2705	A	O4'-C1'-N9	-5.43	103.86	108.20
36	1	2808	A	C4-N9-C1'	5.43	136.07	126.30
1	6	1504	G	C4-N9-C1'	5.43	133.56	126.50
1	6	1535	U	C4-C5-C6	5.43	122.96	119.70
36	5	2833	A	C8-N9-C4	5.43	107.97	105.80
36	5	2939	G	N1-C2-N2	5.43	121.08	116.20
36	5	3333	G	N7-C8-N9	-5.43	110.39	113.10
36	1	570	A	OP2-P-O3'	5.43	117.14	105.20
36	1	1140	G	N1-C2-N3	5.43	127.16	123.90
36	1	2240	G	C4-C5-C6	5.43	122.06	118.80
36	1	2751	G	OP1-P-OP2	5.43	127.74	119.60
36	1	2798	C	C5-C6-N1	5.43	123.71	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3168	A	O5'-P-OP2	-5.43	100.81	105.70
1	6	41	A	C4-C5-N7	-5.43	107.99	110.70
36	5	1115	G	C6-N1-C2	-5.43	121.84	125.10
36	5	2422	C	C4-C5-C6	5.43	120.11	117.40
36	5	2793	G	N1-C6-O6	5.43	123.16	119.90
36	5	2970	C	C4-C5-C6	5.43	120.11	117.40
36	5	3202	G	C5-C6-O6	5.43	131.85	128.60
37	7	112	G	C6-N1-C2	-5.43	121.84	125.10
38	8	111	A	C4-C5-N7	5.43	113.41	110.70
36	1	204	A	OP2-P-O3'	5.42	117.13	105.20
36	1	220	G	N3-C4-C5	5.42	131.31	128.60
36	1	2185	G	C4-N9-C1'	5.42	133.55	126.50
36	1	2963	C	C5-C6-N1	5.42	123.71	121.00
38	4	42	G	C8-N9-C4	5.42	108.57	106.40
1	6	1029	U	C6-N1-C1'	5.42	128.79	121.20
36	5	30	G	C5-N7-C8	-5.42	101.59	104.30
36	5	118	U	O5'-P-OP2	5.42	117.21	110.70
36	5	840	C	O5'-P-OP1	-5.42	100.82	105.70
36	5	903	U	C5-C4-O4	5.42	129.16	125.90
36	5	1107	C	C2-N1-C1'	5.42	124.77	118.80
36	5	1335	C	N3-C4-N4	5.42	121.80	118.00
36	5	1346	G	OP2-P-O3'	5.42	117.13	105.20
38	8	94	C	N3-C2-O2	5.42	125.70	121.90
1	2	1373	C	C2-N1-C1'	5.42	124.77	118.80
1	2	1789	G	N9-C4-C5	-5.42	103.23	105.40
36	1	1834	U	N3-C2-O2	5.42	126.00	122.20
36	5	1313	G	C8-N9-C4	-5.42	104.23	106.40
36	5	2727	A	C6-C5-N7	5.42	136.10	132.30
36	5	2777	G	C5-N7-C8	5.42	107.01	104.30
36	1	183	G	C4-N9-C1'	5.42	133.55	126.50
36	1	714	G	N1-C2-N2	-5.42	111.32	116.20
36	1	970	A	C6-N1-C2	-5.42	115.35	118.60
36	1	1167	U	C5-C6-N1	-5.42	119.99	122.70
36	1	1468	A	OP1-P-OP2	5.42	127.73	119.60
36	1	1601	U	C5-C6-N1	5.42	125.41	122.70
36	1	1826	C	N1-C2-O2	5.42	122.15	118.90
36	1	1877	U	C2-N3-C4	-5.42	123.75	127.00
36	1	2187	G	C2-N3-C4	-5.42	109.19	111.90
36	1	2691	A	C4-C5-N7	-5.42	107.99	110.70
36	1	2805	G	OP1-P-O3'	5.42	117.13	105.20
36	1	3026	G	C4-C5-C6	5.42	122.05	118.80
36	1	3278	C	C2-N1-C1'	5.42	124.76	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	57	C	N3-C2-O2	-5.42	118.11	121.90
1	6	35	U	N3-C4-O4	-5.42	115.61	119.40
17	c5	95	GLY	N-CA-C	-5.42	99.54	113.10
36	5	1177	G	O4'-C1'-N9	5.42	112.54	108.20
36	5	1209	G	C4-C5-C6	5.42	122.05	118.80
36	5	1782	U	N3-C4-O4	5.42	123.19	119.40
36	5	1861	G	N3-C4-C5	-5.42	125.89	128.60
36	5	2715	A	C2-N3-C4	5.42	113.31	110.60
36	5	2915	U	C2-N1-C1'	5.42	124.20	117.70
36	5	3100	U	C2-N3-C4	-5.42	123.75	127.00
36	5	3108	G	N1-C6-O6	5.42	123.15	119.90
1	2	1356	U	C5-C4-O4	5.42	129.15	125.90
1	2	1501	C	C5-C4-N4	-5.42	116.41	120.20
36	1	151	A	C4-C5-C6	5.42	119.71	117.00
36	1	2120	A	C5-C6-N1	5.42	120.41	117.70
36	1	2302	G	C8-N9-C4	-5.42	104.23	106.40
38	4	24	G	O5'-P-OP1	-5.42	100.82	105.70
1	6	1753	A	O5'-P-OP1	-5.42	100.82	105.70
21	c9	57	ARG	NE-CZ-NH1	5.42	123.01	120.30
36	5	635	G	C4-C5-N7	-5.42	108.63	110.80
36	5	1678	G	N7-C8-N9	5.42	115.81	113.10
36	5	2110	G	N3-C4-N9	5.42	129.25	126.00
36	5	2850	G	N1-C2-N2	-5.42	111.32	116.20
36	5	2976	A	C2-N3-C4	5.42	113.31	110.60
36	5	3268	A	C2-N3-C4	-5.42	107.89	110.60
37	7	101	G	N3-C4-C5	5.42	131.31	128.60
36	1	373	A	C4-C5-C6	5.42	119.71	117.00
36	1	379	C	O5'-P-OP2	-5.42	100.82	105.70
36	1	593	C	N3-C4-C5	-5.42	119.73	121.90
36	1	1481	A	C5-N7-C8	-5.42	101.19	103.90
36	1	1834	U	C6-N1-C1'	5.42	128.78	121.20
1	6	609	U	N3-C2-O2	-5.42	118.41	122.20
1	6	943	C	C6-N1-C2	5.42	122.47	120.30
36	5	601	U	C5-C6-N1	5.42	125.41	122.70
36	5	1163	A	C4-C5-C6	5.42	119.71	117.00
36	5	1897	G	N3-C2-N2	-5.42	116.11	119.90
36	5	2329	C	N1-C2-O2	-5.42	115.65	118.90
36	5	2752	U	C6-N1-C2	5.42	124.25	121.00
36	5	3229	G	N1-C2-N2	-5.42	111.32	116.20
36	5	3319	U	N3-C2-O2	-5.42	118.41	122.20
37	7	68	C	C6-N1-C2	-5.42	118.13	120.30
44	17	98	LYS	C-N-CD	5.42	139.78	128.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	100	A	N1-C6-N6	5.42	121.85	118.60
36	1	1000	C	N1-C2-O2	-5.42	115.65	118.90
36	1	1498	A	N1-C6-N6	-5.42	115.35	118.60
36	1	2187	G	C4-C5-C6	5.42	122.05	118.80
1	6	1138	A	C5-C6-N1	-5.42	114.99	117.70
1	6	1174	C	N1-C2-O2	5.42	122.15	118.90
36	5	349	A	C4-C5-N7	-5.42	107.99	110.70
36	5	575	G	N1-C6-O6	5.42	123.15	119.90
36	5	937	G	C5-C6-N1	5.42	114.21	111.50
36	5	1470	U	N3-C4-O4	5.42	123.19	119.40
36	5	1740	U	C6-N1-C2	5.42	124.25	121.00
36	5	2324	A	C6-N1-C2	5.42	121.85	118.60
36	5	2541	U	P-O3'-C3'	5.42	126.20	119.70
36	5	3261	C	N1-C2-O2	-5.42	115.65	118.90
38	8	132	G	N3-C4-N9	-5.42	122.75	126.00
36	1	684	G	N1-C6-O6	5.42	123.15	119.90
36	1	761	A	N1-C6-N6	5.42	121.85	118.60
36	1	908	G	C5-C6-N1	5.42	114.21	111.50
36	1	3110	C	N1-C2-O2	5.42	122.15	118.90
37	3	30	G	C4-N9-C1'	5.42	133.54	126.50
1	6	1327	C	O5'-P-OP2	-5.42	100.83	105.70
1	6	1633	A	C5-C6-N1	-5.42	114.99	117.70
36	5	1011	A	N7-C8-N9	5.42	116.51	113.80
36	5	2799	A	C4-C5-C6	5.42	119.71	117.00
36	5	2858	U	O5'-P-OP1	5.42	117.20	110.70
37	7	82	G	C6-N1-C2	-5.42	121.85	125.10
1	2	1785	U	N3-C2-O2	-5.41	118.41	122.20
36	1	299	G	N1-C6-O6	5.41	123.15	119.90
36	1	686	G	O4'-C1'-N9	5.41	112.53	108.20
36	1	975	C	N3-C4-N4	5.41	121.79	118.00
36	1	1203	A	N1-C6-N6	5.41	121.85	118.60
36	1	1314	C	C2-N1-C1'	5.41	124.75	118.80
36	1	1784	G	O5'-P-OP2	-5.41	100.83	105.70
36	1	2202	C	C2-N1-C1'	5.41	124.75	118.80
36	1	2628	A	C4-N9-C1'	5.41	136.04	126.30
36	1	2651	G	C2-N3-C4	-5.41	109.19	111.90
36	1	3216	G	C2-N3-C4	-5.41	109.19	111.90
38	4	24	G	C6-C5-N7	-5.41	127.15	130.40
1	6	370	A	C5-N7-C8	5.41	106.61	103.90
1	6	1111	G	C6-C5-N7	-5.41	127.15	130.40
1	6	1273	G	O4'-C1'-N9	5.41	112.53	108.20
36	5	282	G	C6-N1-C2	5.41	128.35	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1550	C	OP1-P-O3'	5.41	117.11	105.20
36	5	2265	C	N3-C4-N4	5.41	121.79	118.00
36	5	2360	C	C5-C6-N1	5.41	123.71	121.00
36	5	2600	C	C2-N1-C1'	5.41	124.76	118.80
36	5	2681	U	OP1-P-O3'	5.41	117.11	105.20
36	5	2944	U	C2-N1-C1'	5.41	124.20	117.70
36	5	3120	C	C2-N3-C4	-5.41	117.19	119.90
36	5	3229	G	C6-C5-N7	-5.41	127.15	130.40
37	7	82	G	N3-C4-C5	-5.41	125.89	128.60
1	2	1215	C	C6-N1-C2	-5.41	118.14	120.30
36	1	790	U	N1-C2-N3	5.41	118.15	114.90
36	1	2301	U	C6-N1-C2	-5.41	117.75	121.00
59	N3	63	LYS	CD-CE-NZ	5.41	124.15	111.70
1	6	1025	A	N7-C8-N9	5.41	116.51	113.80
1	6	1039	A	N7-C8-N9	5.41	116.51	113.80
1	6	1436	A	N1-C6-N6	5.41	121.85	118.60
36	5	631	U	O5'-P-OP2	-5.41	100.83	105.70
36	5	1316	C	N1-C2-O2	-5.41	115.65	118.90
36	5	1604	G	C4-N9-C1'	5.41	133.54	126.50
36	5	1653	G	C6-C5-N7	5.41	133.65	130.40
36	5	2868	U	N1-C2-O2	5.41	126.59	122.80
36	5	3189	G	N7-C8-N9	-5.41	110.39	113.10
36	5	3228	C	C4-C5-C6	5.41	120.11	117.40
1	2	250	C	N1-C2-O2	5.41	122.15	118.90
1	2	317	C	C4-C5-C6	5.41	120.11	117.40
1	2	1077	C	C2-N3-C4	5.41	122.61	119.90
1	2	1255	G	N1-C6-O6	-5.41	116.65	119.90
36	1	806	A	O4'-C1'-N9	-5.41	103.87	108.20
36	1	867	G	C8-N9-C1'	-5.41	119.97	127.00
36	1	943	U	C5-C6-N1	-5.41	120.00	122.70
36	1	1311	G	C4-C5-C6	5.41	122.05	118.80
36	1	1516	C	C6-N1-C2	-5.41	118.14	120.30
36	1	2289	U	C5-C6-N1	-5.41	120.00	122.70
36	1	2853	A	C4-C5-N7	5.41	113.41	110.70
36	1	3127	A	C6-N1-C2	-5.41	115.35	118.60
1	6	158	U	P-O3'-C3'	5.41	126.19	119.70
1	6	1116	A	N1-C2-N3	5.41	132.00	129.30
1	6	1137	A	C5-N7-C8	5.41	106.61	103.90
1	6	1200	G	C2-N3-C4	-5.41	109.19	111.90
1	6	1300	A	N1-C6-N6	5.41	121.85	118.60
36	5	875	G	C4-N9-C1'	-5.41	119.47	126.50
36	5	1147	G	C5-C6-O6	-5.41	125.35	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1313	G	C4-N9-C1'	5.41	133.53	126.50
36	5	1709	C	C2-N1-C1'	-5.41	112.85	118.80
36	5	2221	G	C2-N3-C4	-5.41	109.19	111.90
36	5	2411	U	N3-C4-C5	5.41	117.85	114.60
36	5	3046	A	C5-C6-N1	5.41	120.41	117.70
36	5	3246	G	C4-C5-N7	5.41	112.96	110.80
38	8	20	U	N1-C2-N3	5.41	118.15	114.90
1	2	566	C	C2-N1-C1'	-5.41	112.85	118.80
1	2	1793	G	OP1-P-O3'	5.41	117.10	105.20
36	1	667	C	C5-C4-N4	5.41	123.99	120.20
36	1	688	G	C6-N1-C2	-5.41	121.86	125.10
36	1	1395	G	OP2-P-O3'	5.41	117.10	105.20
36	1	1660	C	C5-C4-N4	-5.41	116.41	120.20
38	4	64	U	N3-C2-O2	-5.41	118.41	122.20
1	6	44	U	C2-N3-C4	-5.41	123.75	127.00
1	6	585	A	C5-C6-N6	-5.41	119.37	123.70
1	6	1529	C	O5'-P-OP1	5.41	117.19	110.70
1	6	1537	C	C5-C4-N4	5.41	123.99	120.20
36	5	677	A	O5'-P-OP2	5.41	117.19	110.70
36	5	1163	A	OP1-P-OP2	5.41	127.71	119.60
36	5	1402	C	C5-C6-N1	-5.41	118.30	121.00
36	5	1569	U	O4'-C1'-N1	5.41	112.53	108.20
36	5	3278	C	C5-C6-N1	-5.41	118.30	121.00
52	m6	140	LYS	CD-CE-NZ	5.41	124.14	111.70
1	2	370	A	C4-C5-N7	-5.41	108.00	110.70
1	2	1745	G	N9-C4-C5	-5.41	103.24	105.40
36	1	428	A	C5-N7-C8	-5.41	101.20	103.90
36	1	1213	G	C5-N7-C8	-5.41	101.60	104.30
36	1	1293	U	O5'-P-OP1	-5.41	100.83	105.70
36	1	2883	U	C2-N3-C4	5.41	130.24	127.00
37	3	30	G	N1-C6-O6	-5.41	116.66	119.90
1	6	1274	C	C5-C6-N1	5.41	123.70	121.00
36	5	391	A	C5-C6-N1	5.41	120.40	117.70
36	5	1134	G	C5-C6-O6	5.41	131.84	128.60
36	5	2653	C	C2-N1-C1'	-5.41	112.85	118.80
36	5	3338	C	N3-C4-C5	5.41	124.06	121.90
1	2	1780	G	C5-C6-N1	-5.41	108.80	111.50
36	1	23	A	N3-C4-N9	5.41	131.72	127.40
36	1	32	U	N3-C4-C5	5.41	117.84	114.60
36	1	42	C	C2-N1-C1'	5.41	124.75	118.80
36	1	99	A	C8-N9-C1'	5.41	137.43	127.70
36	1	1176	C	OP1-P-O3'	5.41	117.09	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1576	G	N3-C4-N9	5.41	129.24	126.00
36	1	2146	C	C6-N1-C2	-5.41	118.14	120.30
36	1	2281	A	P-O3'-C3'	-5.41	113.21	119.70
36	1	2623	G	C5-N7-C8	-5.41	101.60	104.30
36	1	2637	A	C5-C6-N6	5.41	128.02	123.70
36	1	2873	U	C5-C4-O4	5.41	129.14	125.90
36	1	3275	U	C5-C6-N1	5.41	125.40	122.70
1	6	695	U	C6-N1-C2	-5.41	117.76	121.00
1	6	1118	G	C8-N9-C4	5.41	108.56	106.40
1	6	1313	A	N7-C8-N9	5.41	116.50	113.80
1	6	1747	G	C5-C6-N1	-5.41	108.80	111.50
36	5	950	G	C4-C5-N7	5.41	112.96	110.80
36	5	973	A	C8-N9-C4	-5.41	103.64	105.80
36	5	1348	U	N3-C2-O2	-5.41	118.42	122.20
36	5	3119	U	N1-C2-O2	-5.41	119.02	122.80
36	5	3375	A	C6-N1-C2	-5.41	115.36	118.60
37	7	53	U	N3-C4-C5	-5.41	111.36	114.60
36	5	896	A	OP2-P-O3'	5.40	117.09	105.20
36	5	1606	U	O5'-P-OP1	-5.40	100.84	105.70
37	7	49	G	N9-C4-C5	-5.40	103.24	105.40
66	o0	86	ARG	NE-CZ-NH1	-5.40	117.60	120.30
1	2	120	U	C6-N1-C2	-5.40	117.76	121.00
36	1	246	U	C5-C4-O4	-5.40	122.66	125.90
36	1	1431	G	N3-C2-N2	5.40	123.68	119.90
36	1	2283	G	C5-C6-O6	-5.40	125.36	128.60
36	1	2688	U	C6-N1-C2	5.40	124.24	121.00
36	1	2860	U	C2'-C3'-O3'	5.40	122.34	113.70
36	1	2986	U	N3-C2-O2	5.40	125.98	122.20
37	3	26	C	C2-N3-C4	-5.40	117.20	119.90
38	4	80	A	P-O3'-C3'	5.40	126.18	119.70
36	5	322	U	C5-C4-O4	-5.40	122.66	125.90
36	5	345	G	C5-C6-O6	-5.40	125.36	128.60
36	5	699	A	N9-C4-C5	5.40	107.96	105.80
36	5	707	U	O5'-P-OP1	-5.40	100.84	105.70
36	5	1200	A	OP1-P-OP2	5.40	127.70	119.60
36	5	1344	G	N1-C2-N3	5.40	127.14	123.90
36	5	1681	U	C4-C5-C6	5.40	122.94	119.70
36	5	1772	U	C4-C5-C6	5.40	122.94	119.70
36	5	2142	A	C2-N3-C4	5.40	113.30	110.60
36	5	2858	U	C5-C6-N1	5.40	125.40	122.70
1	2	572	C	N3-C2-O2	5.40	125.68	121.90
1	2	865	A	N1-C2-N3	5.40	132.00	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	929	A	N1-C6-N6	-5.40	115.36	118.60
1	2	1282	U	C2-N3-C4	-5.40	123.76	127.00
1	2	1306	C	C5-C6-N1	5.40	123.70	121.00
36	1	622	A	N3-C4-C5	5.40	130.58	126.80
36	1	2433	U	N3-C4-O4	5.40	123.18	119.40
36	1	3028	G	C5-C6-O6	-5.40	125.36	128.60
1	6	65	A	C5-C6-N1	-5.40	115.00	117.70
1	6	561	G	N3-C4-C5	-5.40	125.90	128.60
1	6	858	G	C5-N7-C8	-5.40	101.60	104.30
1	6	884	A	C5-C6-N6	-5.40	119.38	123.70
1	6	1516	A	C5-C6-N1	5.40	120.40	117.70
36	5	1177	G	C5-C6-N1	5.40	114.20	111.50
36	5	1290	A	C4-C5-N7	5.40	113.40	110.70
36	5	1643	A	C8-N9-C4	-5.40	103.64	105.80
36	5	1837	U	N3-C2-O2	5.40	125.98	122.20
36	5	2255	A	C4-C5-N7	5.40	113.40	110.70
36	5	2376	G	C5-C6-N1	5.40	114.20	111.50
36	5	2609	A	N9-C4-C5	-5.40	103.64	105.80
36	5	2796	G	OP1-P-OP2	5.40	127.70	119.60
36	5	2836	C	N3-C2-O2	-5.40	118.12	121.90
36	5	2983	C	C6-N1-C2	-5.40	118.14	120.30
36	5	3036	G	C4-C5-C6	5.40	122.04	118.80
38	8	10	A	C8-N9-C4	5.40	107.96	105.80
1	2	260	U	C6-N1-C1'	-5.40	113.64	121.20
1	2	1665	U	N1-C2-O2	-5.40	119.02	122.80
36	1	788	C	C6-N1-C2	5.40	122.46	120.30
36	1	1342	C	C6-N1-C2	5.40	122.46	120.30
36	1	2325	G	N3-C4-N9	5.40	129.24	126.00
37	3	75	G	N3-C2-N2	-5.40	116.12	119.90
36	5	632	G	C4-C5-C6	5.40	122.04	118.80
38	8	70	G	C4-C5-N7	-5.40	108.64	110.80
1	2	1200	G	C8-N9-C1'	-5.40	119.98	127.00
1	2	1299	G	C8-N9-C4	-5.40	104.24	106.40
1	2	1455	G	C8-N9-C1'	-5.40	119.98	127.00
1	2	1601	G	O5'-P-OP2	-5.40	100.84	105.70
36	1	674	G	C2-N3-C4	-5.40	109.20	111.90
36	1	721	G	N7-C8-N9	5.40	115.80	113.10
36	1	1372	C	OP2-P-O3'	5.40	117.08	105.20
36	1	1807	G	C4-C5-N7	5.40	112.96	110.80
36	1	2365	C	C2-N3-C4	-5.40	117.20	119.90
36	1	2703	A	N9-C4-C5	5.40	107.96	105.80
36	1	2730	G	C5-C6-N1	-5.40	108.80	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3145	C	N3-C4-N4	5.40	121.78	118.00
36	1	3202	G	N7-C8-N9	-5.40	110.40	113.10
36	1	3221	C	O5'-P-OP2	5.40	117.18	110.70
1	6	58	U	C5-C6-N1	5.40	125.40	122.70
1	6	794	U	N3-C2-O2	-5.40	118.42	122.20
1	6	1097	U	P-O3'-C3'	5.40	126.18	119.70
36	5	57	A	N1-C2-N3	5.40	132.00	129.30
36	5	1100	U	C2-N3-C4	-5.40	123.76	127.00
36	5	1834	U	N3-C4-O4	5.40	123.18	119.40
36	5	2574	G	C5-C6-O6	-5.40	125.36	128.60
36	5	3264	G	C4-C5-N7	-5.40	108.64	110.80
37	7	9	C	C6-N1-C2	-5.40	118.14	120.30
1	2	176	C	C6-N1-C2	-5.40	118.14	120.30
36	1	421	G	C5-C6-O6	5.40	131.84	128.60
36	1	498	A	N1-C6-N6	5.40	121.84	118.60
36	1	2998	U	N3-C4-O4	5.40	123.18	119.40
36	5	1838	G	C8-N9-C1'	-5.40	119.98	127.00
1	2	847	A	N1-C6-N6	5.39	121.84	118.60
36	1	209	A	OP1-P-OP2	5.39	127.69	119.60
36	1	917	A	N3-C4-C5	-5.39	123.02	126.80
36	1	1523	U	C5-C6-N1	5.39	125.40	122.70
36	1	1928	G	O5'-P-OP1	5.39	117.17	110.70
36	1	3063	C	C4-C5-C6	5.39	120.10	117.40
38	4	110	C	N3-C4-N4	-5.39	114.22	118.00
1	6	717	C	C2-N1-C1'	5.39	124.73	118.80
1	6	958	U	C4-C5-C6	5.39	122.94	119.70
1	6	1471	A	N7-C8-N9	5.39	116.50	113.80
1	6	1478	G	N3-C4-N9	5.39	129.24	126.00
36	5	52	A	C4-C5-C6	5.39	119.70	117.00
36	5	344	A	N9-C4-C5	5.39	107.96	105.80
36	5	908	G	N1-C6-O6	-5.39	116.66	119.90
36	5	960	U	C2-N1-C1'	5.39	124.17	117.70
36	5	1763	U	N3-C2-O2	-5.39	118.42	122.20
36	5	2868	U	C5-C6-N1	5.39	125.40	122.70
36	5	3226	A	N9-C4-C5	5.39	107.96	105.80
1	2	115	G	C4-C5-N7	5.39	112.96	110.80
1	2	1418	G	N1-C6-O6	5.39	123.14	119.90
5	S3	109	LEU	CA-CB-CG	-5.39	102.89	115.30
36	1	1079	A	C6-N1-C2	-5.39	115.36	118.60
36	1	1135	A	C5-N7-C8	-5.39	101.20	103.90
36	1	2591	A	C8-N9-C4	-5.39	103.64	105.80
36	1	2638	C	N3-C2-O2	-5.39	118.12	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2785	A	C6-N1-C2	-5.39	115.36	118.60
36	1	2809	C	N3-C2-O2	5.39	125.67	121.90
36	1	2871	G	C4-N9-C1'	-5.39	119.49	126.50
36	1	2932	U	C5-C4-O4	5.39	129.14	125.90
36	1	3188	G	N7-C8-N9	-5.39	110.40	113.10
1	6	1318	G	C4-C5-N7	5.39	112.96	110.80
1	6	1546	G	C5-C6-O6	-5.39	125.36	128.60
36	5	652	G	N9-C4-C5	-5.39	103.24	105.40
36	5	3286	G	N9-C4-C5	-5.39	103.24	105.40
37	7	26	C	N3-C2-O2	-5.39	118.12	121.90
36	1	1121	U	C4-C5-C6	5.39	122.94	119.70
36	1	1184	A	C5-C6-N1	-5.39	115.00	117.70
36	1	1190	A	N3-C4-C5	-5.39	123.03	126.80
36	1	2870	C	N1-C2-N3	-5.39	115.43	119.20
37	3	8	G	N9-C4-C5	5.39	107.56	105.40
1	6	1588	G	N3-C2-N2	-5.39	116.13	119.90
36	5	314	U	OP1-P-OP2	5.39	127.69	119.60
36	5	2147	A	N9-C4-C5	-5.39	103.64	105.80
36	5	2812	C	N3-C4-N4	-5.39	114.23	118.00
37	7	87	G	O4'-C1'-N9	-5.39	103.89	108.20
1	2	424	C	N3-C2-O2	-5.39	118.13	121.90
1	2	730	G	N7-C8-N9	5.39	115.80	113.10
1	2	1140	G	N7-C8-N9	5.39	115.80	113.10
1	2	1596	C	N1-C2-O2	5.39	122.13	118.90
36	1	45	A	N9-C4-C5	5.39	107.96	105.80
36	1	1493	G	N9-C4-C5	5.39	107.56	105.40
36	1	1507	G	OP2-P-O3'	5.39	117.06	105.20
36	1	1516	C	N1-C2-O2	-5.39	115.67	118.90
36	1	2303	A	N1-C2-N3	5.39	132.00	129.30
36	1	2412	G	O5'-P-OP2	-5.39	100.85	105.70
36	1	2593	A	O4'-C1'-N9	-5.39	103.89	108.20
36	1	3124	G	N7-C8-N9	5.39	115.80	113.10
1	6	1619	C	C2-N1-C1'	5.39	124.73	118.80
36	5	298	U	C2-N1-C1'	5.39	124.17	117.70
36	5	366	A	C8-N9-C4	5.39	107.96	105.80
36	5	541	U	N3-C2-O2	5.39	125.97	122.20
36	5	1139	G	C2-N3-C4	-5.39	109.21	111.90
36	5	1709	C	C2-N3-C4	-5.39	117.20	119.90
36	5	2323	G	N3-C2-N2	-5.39	116.13	119.90
36	5	2863	G	N7-C8-N9	5.39	115.80	113.10
36	5	2918	G	C6-N1-C2	-5.39	121.87	125.10
36	5	3264	G	C5-C6-N1	-5.39	108.81	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3320	A	N1-C2-N3	5.39	132.00	129.30
1	2	425	A	C8-N9-C4	-5.39	103.64	105.80
36	1	1010	G	C2-N3-C4	-5.39	109.21	111.90
36	1	2415	C	N3-C4-C5	5.39	124.06	121.90
36	1	2785	A	C2-N3-C4	-5.39	107.91	110.60
1	6	185	U	C2-N1-C1'	5.39	124.17	117.70
1	6	660	G	C8-N9-C4	-5.39	104.25	106.40
1	6	1415	U	N1-C2-O2	5.39	126.57	122.80
36	5	1614	C	N1-C2-O2	5.39	122.13	118.90
36	5	2690	G	O5'-P-OP1	-5.39	100.85	105.70
1	2	1270	G	C6-C5-N7	-5.39	127.17	130.40
1	2	1273	G	C4-C5-N7	5.39	112.95	110.80
36	1	168	U	C5-C4-O4	5.39	129.13	125.90
36	1	946	U	C6-N1-C1'	-5.39	113.66	121.20
36	1	1514	G	N1-C2-N3	5.39	127.13	123.90
36	1	2935	U	C2-N3-C4	5.39	130.23	127.00
38	4	140	G	N7-C8-N9	5.39	115.79	113.10
58	N2	89	LEU	CA-CB-CG	5.39	127.69	115.30
1	6	523	G	C5-C6-O6	-5.39	125.37	128.60
1	6	1488	G	C5-N7-C8	5.39	106.99	104.30
36	5	226	C	C6-N1-C2	5.39	122.45	120.30
36	5	953	G	C4-C5-C6	-5.39	115.57	118.80
36	5	1822	C	C4-C5-C6	5.39	120.09	117.40
36	5	2304	C	N1-C2-N3	-5.39	115.43	119.20
36	5	2688	U	C2-N3-C4	-5.39	123.77	127.00
36	5	3377	G	OP2-P-O3'	5.39	117.05	105.20
36	5	3391	A	C5-C6-N6	5.39	128.01	123.70
37	7	87	G	N1-C6-O6	5.39	123.13	119.90
56	n0	167	ARG	C-N-CA	-5.39	99.38	122.00
1	2	275	C	C6-N1-C2	-5.38	118.15	120.30
1	2	1612	U	C6-N1-C2	-5.38	117.77	121.00
1	2	1615	C	C5-C6-N1	5.38	123.69	121.00
36	1	300	G	N1-C6-O6	-5.38	116.67	119.90
36	1	901	G	C5-C6-N1	5.38	114.19	111.50
36	1	1172	G	C4-N9-C1'	5.38	133.50	126.50
36	1	1300	G	N3-C4-N9	5.38	129.23	126.00
36	1	1406	A	C4-C5-C6	5.38	119.69	117.00
36	1	1897	G	N3-C4-C5	-5.38	125.91	128.60
36	1	2403	G	N7-C8-N9	5.38	115.79	113.10
36	1	3049	A	O5'-P-OP2	5.38	117.16	110.70
1	6	616	G	C4-C5-N7	5.38	112.95	110.80
1	6	1001	A	N3-C4-N9	5.38	131.71	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1171	A	N9-C4-C5	5.38	107.95	105.80
36	5	772	U	N3-C4-O4	5.38	123.17	119.40
36	5	984	G	N1-C6-O6	5.38	123.13	119.90
36	5	1320	C	OP1-P-O3'	-5.38	93.35	105.20
36	5	1858	A	N9-C4-C5	-5.38	103.65	105.80
36	5	2253	G	C8-N9-C1'	-5.38	120.00	127.00
36	5	2965	U	N3-C4-O4	5.38	123.17	119.40
36	5	3028	G	N1-C2-N3	5.38	127.13	123.90
36	5	3315	G	C5-C6-N1	5.38	114.19	111.50
36	1	1346	G	O5'-P-OP1	5.38	117.16	110.70
36	1	1385	C	C5-C6-N1	-5.38	118.31	121.00
36	1	2234	G	N7-C8-N9	-5.38	110.41	113.10
36	1	2956	A	C4-C5-C6	5.38	119.69	117.00
1	6	75	U	N3-C2-O2	-5.38	118.43	122.20
1	6	420	A	OP1-P-OP2	-5.38	111.53	119.60
1	6	1177	C	N3-C4-N4	5.38	121.77	118.00
36	5	162	G	N7-C8-N9	-5.38	110.41	113.10
36	5	1043	C	C2-N1-C1'	-5.38	112.88	118.80
36	5	1353	U	OP1-P-OP2	-5.38	111.53	119.60
36	5	2114	C	OP1-P-OP2	5.38	127.67	119.60
36	5	2364	G	C6-N1-C2	-5.38	121.87	125.10
36	5	2864	A	C8-N9-C4	5.38	107.95	105.80
36	1	624	G	N1-C6-O6	5.38	123.13	119.90
36	1	862	U	C6-N1-C1'	-5.38	113.67	121.20
36	1	958	C	N3-C4-N4	5.38	121.77	118.00
36	1	1203	A	C2-N3-C4	-5.38	107.91	110.60
36	1	1355	A	N3-C4-C5	5.38	130.57	126.80
36	1	1581	C	N1-C2-O2	5.38	122.13	118.90
36	1	1667	A	N7-C8-N9	5.38	116.49	113.80
36	1	2329	C	C4-C5-C6	5.38	120.09	117.40
75	O9	46	ARG	NE-CZ-NH1	5.38	122.99	120.30
1	6	101	U	N3-C4-O4	-5.38	115.63	119.40
1	6	387	A	C4-C5-N7	-5.38	108.01	110.70
1	6	1311	U	N1-C2-O2	-5.38	119.03	122.80
36	5	518	G	N1-C6-O6	5.38	123.13	119.90
36	5	617	G	O5'-P-OP2	5.38	117.16	110.70
36	5	1158	A	C5-N7-C8	5.38	106.59	103.90
36	5	1166	G	N3-C4-N9	-5.38	122.77	126.00
36	5	1389	G	N1-C6-O6	5.38	123.13	119.90
36	5	1397	C	N3-C4-C5	-5.38	119.75	121.90
36	5	1414	G	C8-N9-C4	-5.38	104.25	106.40
36	5	1757	A	C5-C6-N1	-5.38	115.01	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2391	G	C8-N9-C4	5.38	108.55	106.40
1	2	145	A	C8-N9-C4	-5.38	103.65	105.80
1	2	1346	A	N7-C8-N9	5.38	116.49	113.80
36	1	193	C	N3-C2-O2	5.38	125.67	121.90
36	1	1886	A	C4-C5-C6	-5.38	114.31	117.00
36	1	2410	U	C5-C6-N1	5.38	125.39	122.70
36	1	3052	G	N3-C2-N2	-5.38	116.13	119.90
36	1	3097	C	O5'-P-OP1	-5.38	100.86	105.70
37	3	50	U	N3-C2-O2	-5.38	118.43	122.20
1	6	1513	G	C4-N9-C1'	5.38	133.49	126.50
36	5	796	U	C6-N1-C2	-5.38	117.77	121.00
36	5	1172	G	N7-C8-N9	5.38	115.79	113.10
36	5	1889	G	O5'-P-OP2	-5.38	100.86	105.70
36	5	2294	U	C6-N1-C2	5.38	124.23	121.00
36	5	3015	G	N1-C2-N2	5.38	121.04	116.20
36	5	3044	G	C5-N7-C8	-5.38	101.61	104.30
36	5	3157	U	C6-N1-C1'	-5.38	113.67	121.20
36	5	3318	G	O5'-P-OP1	-5.38	100.86	105.70
37	7	50	U	C2-N1-C1'	5.38	124.16	117.70
1	2	75	U	C6-N1-C1'	-5.38	113.67	121.20
1	2	1596	C	C6-N1-C2	-5.38	118.15	120.30
36	1	891	G	N3-C4-N9	-5.38	122.77	126.00
36	1	1137	C	O5'-P-OP2	-5.38	100.86	105.70
36	1	2120	A	C4-C5-N7	-5.38	108.01	110.70
36	1	2371	G	C8-N9-C1'	-5.38	120.01	127.00
36	1	2598	G	N3-C4-C5	-5.38	125.91	128.60
36	1	2669	G	N3-C4-C5	5.38	131.29	128.60
36	1	2901	G	N3-C4-C5	-5.38	125.91	128.60
36	1	2962	U	N1-C2-N3	-5.38	111.67	114.90
36	1	3098	G	N3-C4-N9	5.38	129.23	126.00
36	1	3230	G	N1-C2-N2	5.38	121.04	116.20
36	5	526	C	C5-C6-N1	-5.38	118.31	121.00
36	5	1364	C	P-O3'-C3'	5.38	126.15	119.70
36	5	1640	G	C8-N9-C4	-5.38	104.25	106.40
36	5	2692	A	C8-N9-C4	-5.38	103.65	105.80
36	5	2752	U	C2-N1-C1'	-5.38	111.25	117.70
36	5	2966	G	C4-C5-N7	-5.38	108.65	110.80
36	5	3180	A	N7-C8-N9	-5.38	111.11	113.80
46	19	38	LEU	CB-CG-CD2	-5.38	101.86	111.00
1	2	472	U	O4'-C1'-N1	5.38	112.50	108.20
1	2	1490	C	C6-N1-C1'	-5.38	114.35	120.80
36	1	659	G	OP1-P-O3'	-5.38	93.37	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1751	G	C6-C5-N7	5.38	133.62	130.40
36	1	1844	C	O5'-P-OP1	-5.38	100.86	105.70
36	1	2632	G	OP1-P-O3'	5.38	117.03	105.20
36	1	3202	G	N3-C4-C5	5.38	131.29	128.60
38	4	3	A	N3-C4-N9	5.38	131.70	127.40
1	6	397	A	C8-N9-C4	5.38	107.95	105.80
1	6	433	C	C6-N1-C1'	-5.38	114.35	120.80
1	6	619	A	O4'-C1'-N9	5.38	112.50	108.20
36	5	656	A	C6-C5-N7	-5.38	128.54	132.30
36	5	658	G	C4-C5-N7	5.38	112.95	110.80
36	5	1208	U	C6-N1-C1'	5.38	128.73	121.20
36	5	1466	G	C5-C6-O6	-5.38	125.37	128.60
36	5	1517	G	N3-C4-C5	5.38	131.29	128.60
36	5	2841	G	C4-C5-N7	-5.38	108.65	110.80
36	5	2955	U	C6-N1-C2	-5.38	117.77	121.00
36	5	2984	C	OP2-P-O3'	5.38	117.03	105.20
36	5	3069	G	N9-C4-C5	-5.38	103.25	105.40
1	2	1109	G	C5-N7-C8	-5.38	101.61	104.30
38	4	27	U	C2-N1-C1'	5.38	124.15	117.70
36	5	1112	A	C4-N9-C1'	5.38	135.97	126.30
36	5	2979	U	OP2-P-O3'	5.38	117.03	105.20
1	2	548	G	C5-C6-O6	-5.37	125.38	128.60
1	2	1466	G	C5-C6-O6	-5.37	125.38	128.60
36	1	186	U	C4-C5-C6	-5.37	116.48	119.70
36	1	411	U	N3-C4-C5	-5.37	111.38	114.60
36	1	892	U	N1-C2-O2	5.37	126.56	122.80
36	1	1506	A	C8-N9-C4	-5.37	103.65	105.80
36	1	1559	A	N7-C8-N9	5.37	116.49	113.80
36	1	1784	G	N3-C4-N9	-5.37	122.78	126.00
36	1	1884	A	N9-C4-C5	5.37	107.95	105.80
36	1	1899	G	N7-C8-N9	5.37	115.79	113.10
36	1	2366	C	O5'-P-OP2	-5.37	100.86	105.70
36	1	2843	U	C5-C4-O4	-5.37	122.68	125.90
37	3	107	C	N3-C4-C5	5.37	124.05	121.90
60	N4	80	ARG	C-N-CA	5.37	144.56	122.00
1	6	1282	U	C4-C5-C6	5.37	122.92	119.70
36	5	522	A	O5'-P-OP2	-5.37	100.86	105.70
36	5	2708	C	C2-N3-C4	-5.37	117.21	119.90
36	5	2710	C	N3-C4-N4	5.37	121.76	118.00
36	5	2759	U	O4'-C1'-N1	-5.37	103.90	108.20
36	5	3120	C	N1-C2-O2	5.37	122.12	118.90
55	m9	62	ARG	NE-CZ-NH1	5.37	122.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	60	U	N1-C2-O2	5.37	126.56	122.80
1	2	1299	G	C2-N3-C4	5.37	114.58	111.90
1	2	1589	C	C2-N3-C4	-5.37	117.21	119.90
1	2	1752	U	O5'-P-OP2	-5.37	100.87	105.70
36	1	347	G	C8-N9-C4	5.37	108.55	106.40
36	1	757	C	O5'-P-OP1	5.37	117.15	110.70
36	1	960	U	P-O3'-C3'	5.37	126.14	119.70
36	1	1119	C	C4-C5-C6	5.37	120.09	117.40
36	1	1172	G	C6-N1-C2	-5.37	121.88	125.10
36	1	1478	C	C4-C5-C6	5.37	120.09	117.40
36	1	2293	C	C5-C6-N1	5.37	123.69	121.00
36	1	3237	U	N3-C2-O2	-5.37	118.44	122.20
36	1	3240	C	C2-N3-C4	-5.37	117.21	119.90
1	6	430	G	N1-C2-N2	-5.37	111.37	116.20
1	6	1335	U	C5-C4-O4	5.37	129.12	125.90
36	5	118	U	O5'-P-OP1	-5.37	100.87	105.70
36	5	785	G	N7-C8-N9	5.37	115.78	113.10
36	5	842	G	N1-C6-O6	-5.37	116.68	119.90
36	5	1671	C	C6-N1-C2	-5.37	118.15	120.30
36	5	2172	A	C8-N9-C4	-5.37	103.65	105.80
36	5	2759	U	C2-N1-C1'	5.37	124.14	117.70
36	5	2801	A	C5-C6-N6	-5.37	119.40	123.70
36	5	3072	C	N3-C4-N4	5.37	121.76	118.00
1	2	536	C	C5-C6-N1	5.37	123.69	121.00
36	1	55	G	C5-C6-O6	-5.37	125.38	128.60
36	1	300	G	C8-N9-C1'	5.37	133.98	127.00
36	1	1416	C	C2-N1-C1'	-5.37	112.89	118.80
36	1	2339	C	O4'-C1'-N1	-5.37	103.90	108.20
36	1	2598	G	C5-C6-O6	-5.37	125.38	128.60
36	1	2855	U	N1-C2-N3	5.37	118.12	114.90
36	1	3001	C	N3-C4-C5	5.37	124.05	121.90
36	5	1770	G	C4-N9-C1'	5.37	133.48	126.50
36	5	2643	A	N7-C8-N9	-5.37	111.11	113.80
36	5	2976	A	C5-C6-N6	-5.37	119.40	123.70
1	2	1306	C	C6-N1-C2	-5.37	118.15	120.30
36	1	803	C	C6-N1-C1'	-5.37	114.36	120.80
36	1	2195	C	N1-C2-O2	-5.37	115.68	118.90
36	1	2216	G	C8-N9-C4	-5.37	104.25	106.40
36	1	2353	G	C8-N9-C1'	-5.37	120.02	127.00
37	3	107	C	N3-C4-N4	-5.37	114.24	118.00
1	6	331	A	N7-C8-N9	5.37	116.48	113.80
1	6	356	G	C5-C6-N1	5.37	114.18	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1101	G	C4-N9-C1'	5.37	133.48	126.50
1	6	1673	G	N7-C8-N9	-5.37	110.42	113.10
29	d7	41	LEU	CA-CB-CG	5.37	127.65	115.30
36	5	235	A	C2-N3-C4	-5.37	107.92	110.60
36	5	366	A	C5-C6-N1	-5.37	115.02	117.70
36	5	800	G	O4'-C1'-N9	-5.37	103.91	108.20
36	5	816	A	C5-C6-N6	5.37	127.99	123.70
36	5	1077	U	N3-C2-O2	5.37	125.96	122.20
36	5	2101	C	N1-C2-O2	5.37	122.12	118.90
36	5	2294	U	N1-C2-O2	5.37	126.56	122.80
36	5	2702	A	N9-C4-C5	5.37	107.95	105.80
36	5	2789	U	C2-N1-C1'	-5.37	111.26	117.70
1	2	1661	U	OP2-P-O3'	5.37	117.01	105.20
36	1	1401	A	C8-N9-C1'	-5.37	118.04	127.70
36	1	3093	C	N1-C2-O2	-5.37	115.68	118.90
36	1	3246	G	N7-C8-N9	5.37	115.78	113.10
1	6	61	A	C4-C5-C6	5.37	119.68	117.00
1	6	1727	G	C4-C5-N7	-5.37	108.65	110.80
36	5	1316	C	OP1-P-O3'	5.37	117.01	105.20
36	5	1891	A	N7-C8-N9	-5.37	111.12	113.80
36	5	2925	C	O5'-P-OP2	5.37	117.14	110.70
36	5	3326	G	C8-N9-C1'	-5.37	120.02	127.00
54	m8	179	ARG	NE-CZ-NH2	-5.37	117.62	120.30
36	1	347	G	N9-C4-C5	-5.37	103.25	105.40
36	1	372	A	N1-C2-N3	5.37	131.98	129.30
36	1	709	A	N9-C4-C5	-5.37	103.65	105.80
36	1	733	G	C5-N7-C8	-5.37	101.62	104.30
36	1	741	U	N3-C2-O2	5.37	125.96	122.20
36	1	856	G	C4-N9-C1'	5.37	133.47	126.50
36	1	1114	U	C2-N3-C4	5.37	130.22	127.00
36	1	2207	A	N3-C4-C5	-5.37	123.04	126.80
36	1	2516	U	C5-C6-N1	-5.37	120.02	122.70
36	1	3150	A	C2-N3-C4	-5.37	107.92	110.60
36	1	3241	G	N1-C6-O6	-5.37	116.68	119.90
36	1	3325	G	N9-C1'-C2'	-5.37	106.10	112.00
1	6	31	C	O5'-P-OP1	5.37	117.14	110.70
1	6	899	G	C8-N9-C4	5.37	108.55	106.40
1	6	1241	G	C4-C5-N7	5.37	112.95	110.80
1	6	1646	C	C4-C5-C6	5.37	120.08	117.40
36	5	1450	G	N1-C2-N3	5.37	127.12	123.90
36	5	1734	G	N1-C6-O6	-5.37	116.68	119.90
36	5	1794	G	OP1-P-OP2	5.37	127.65	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2878	G	OP1-P-O3'	5.37	117.00	105.20
36	5	2940	A	C4-C5-N7	5.37	113.38	110.70
36	5	2960	C	P-O3'-C3'	5.37	126.14	119.70
37	7	34	C	O4'-C1'-N1	5.37	112.49	108.20
38	8	45	C	C6-N1-C2	5.37	122.45	120.30
1	2	694	U	N1-C2-O2	5.36	126.56	122.80
1	2	755	A	N1-C6-N6	-5.36	115.38	118.60
1	2	959	U	N1-C2-O2	5.36	126.56	122.80
1	2	1291	G	N1-C2-N2	-5.36	111.37	116.20
1	2	1584	G	N3-C4-C5	5.36	131.28	128.60
36	1	2135	U	O5'-P-OP2	-5.36	100.87	105.70
36	1	2190	U	N1-C2-O2	-5.36	119.05	122.80
36	1	3209	A	C4-C5-C6	5.36	119.68	117.00
36	1	3253	G	N3-C4-C5	5.36	131.28	128.60
36	1	3284	G	N9-C4-C5	5.36	107.55	105.40
36	1	3308	C	N3-C2-O2	-5.36	118.15	121.90
37	3	111	U	C6-N1-C2	-5.36	117.78	121.00
1	6	323	A	N7-C8-N9	5.36	116.48	113.80
1	6	1111	G	N3-C4-N9	5.36	129.22	126.00
1	6	1285	U	C5-C6-N1	5.36	125.38	122.70
1	6	1583	A	C4-C5-N7	-5.36	108.02	110.70
1	6	1665	U	C2-N1-C1'	-5.36	111.26	117.70
36	5	183	G	C5-C6-O6	5.36	131.82	128.60
36	5	324	A	C4-N9-C1'	5.36	135.96	126.30
36	5	1376	C	C6-N1-C1'	-5.36	114.36	120.80
36	5	1858	A	C8-N9-C1'	-5.36	118.05	127.70
36	5	1916	U	C5-C6-N1	-5.36	120.02	122.70
36	5	2289	U	C5-C6-N1	-5.36	120.02	122.70
36	5	3077	A	N3-C4-N9	-5.36	123.11	127.40
36	5	3293	U	O5'-P-OP1	-5.36	100.87	105.70
36	5	3294	A	C6-N1-C2	-5.36	115.38	118.60
36	5	3307	A	C8-N9-C4	5.36	107.94	105.80
1	2	1010	C	C6-N1-C1'	5.36	127.23	120.80
1	2	1753	A	C5-C6-N6	-5.36	119.41	123.70
36	1	1208	U	N1-C2-N3	-5.36	111.68	114.90
36	1	1589	A	O4'-C1'-N9	-5.36	103.91	108.20
36	1	3305	A	OP1-P-O3'	-5.36	93.40	105.20
38	4	32	C	C4-C5-C6	5.36	120.08	117.40
36	5	201	A	N1-C6-N6	5.36	121.82	118.60
36	5	685	G	N9-C4-C5	-5.36	103.25	105.40
36	5	881	C	C5-C6-N1	5.36	123.68	121.00
36	5	979	U	C6-N1-C1'	5.36	128.71	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2907	G	OP2-P-O3'	5.36	117.00	105.20
56	n0	166	LYS	CD-CE-NZ	5.36	124.03	111.70
1	2	402	C	C4-C5-C6	5.36	120.08	117.40
1	2	428	A	O4'-C1'-N9	5.36	112.49	108.20
36	1	217	U	N3-C4-C5	-5.36	111.38	114.60
36	1	383	G	N3-C4-N9	5.36	129.22	126.00
36	1	1481	A	C6-C5-N7	-5.36	128.55	132.30
36	1	1646	G	N3-C4-C5	5.36	131.28	128.60
36	1	1670	C	N3-C4-C5	5.36	124.04	121.90
36	1	3151	U	N3-C4-O4	-5.36	115.65	119.40
36	1	3394	U	C6-N1-C2	-5.36	117.78	121.00
38	4	101	U	C2-N1-C1'	5.36	124.13	117.70
1	6	1516	A	O4'-C1'-N9	5.36	112.49	108.20
1	6	1657	U	N1-C2-O2	5.36	126.55	122.80
36	5	58	G	C5-C6-N1	-5.36	108.82	111.50
36	5	545	U	N1-C2-N3	-5.36	111.68	114.90
36	5	860	G	N1-C2-N3	-5.36	120.68	123.90
36	5	875	G	N9-C1'-C2'	-5.36	106.10	112.00
36	5	1130	A	C5-C6-N1	5.36	120.38	117.70
36	5	1542	G	C5-N7-C8	-5.36	101.62	104.30
36	5	2338	C	C6-N1-C2	-5.36	118.16	120.30
36	5	2597	U	C5-C4-O4	5.36	129.12	125.90
36	5	2617	U	N3-C2-O2	-5.36	118.45	122.20
36	5	2900	A	OP2-P-O3'	5.36	116.99	105.20
1	2	360	A	N9-C4-C5	-5.36	103.66	105.80
1	2	551	G	N3-C2-N2	-5.36	116.15	119.90
36	1	1578	C	C5-C6-N1	5.36	123.68	121.00
36	1	2941	A	N3-C4-N9	5.36	131.69	127.40
1	6	683	C	N1-C2-O2	5.36	122.12	118.90
1	6	1060	U	N3-C2-O2	-5.36	118.45	122.20
1	6	1609	U	N3-C2-O2	5.36	125.95	122.20
36	5	657	A	C2-N3-C4	5.36	113.28	110.60
36	5	784	A	N9-C4-C5	-5.36	103.66	105.80
36	5	1590	G	N9-C4-C5	-5.36	103.26	105.40
36	5	2165	G	N3-C4-C5	-5.36	125.92	128.60
36	5	2850	G	C6-N1-C2	-5.36	121.89	125.10
36	5	2945	G	N3-C4-C5	-5.36	125.92	128.60
37	7	90	U	C2-N1-C1'	5.36	124.13	117.70
1	2	614	C	C6-N1-C2	-5.36	118.16	120.30
36	1	324	A	C8-N9-C4	-5.36	103.66	105.80
36	1	923	C	C5-C6-N1	-5.36	118.32	121.00
36	1	1310	G	C8-N9-C4	-5.36	104.26	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1929	G	N1-C2-N2	-5.36	111.38	116.20
49	M3	110	ASP	CB-CG-OD1	-5.36	113.48	118.30
1	6	796	A	O5'-P-OP2	-5.36	100.88	105.70
1	6	1167	G	C8-N9-C1'	-5.36	120.03	127.00
36	5	38	U	N1-C2-N3	-5.36	111.69	114.90
36	5	413	U	C6-N1-C2	5.36	124.22	121.00
36	5	1160	C	C2-N1-C1'	-5.36	112.91	118.80
36	5	1292	C	C2-N3-C4	-5.36	117.22	119.90
36	5	1888	U	OP2-P-O3'	5.36	116.98	105.20
36	5	2120	A	N1-C6-N6	5.36	121.81	118.60
36	5	2135	U	N3-C2-O2	-5.36	118.45	122.20
36	5	2143	A	OP1-P-O3'	5.36	116.99	105.20
36	5	2399	A	C8-N9-C1'	5.36	137.34	127.70
36	5	2751	G	C8-N9-C4	-5.36	104.26	106.40
36	5	2974	U	C5-C6-N1	-5.36	120.02	122.70
36	5	3269	U	P-O3'-C3'	5.36	126.13	119.70
36	1	211	A	C6-C5-N7	5.36	136.05	132.30
36	1	606	C	N3-C4-C5	-5.36	119.76	121.90
36	1	988	U	C5-C6-N1	-5.36	120.02	122.70
36	1	1148	G	C8-N9-C1'	5.36	133.96	127.00
36	1	1764	U	P-O3'-C3'	5.36	126.13	119.70
36	1	2269	U	N1-C2-N3	5.36	118.11	114.90
36	1	2415	C	C5-C6-N1	-5.36	118.32	121.00
36	1	3051	U	C6-N1-C2	-5.36	117.79	121.00
36	1	3180	A	N1-C2-N3	5.36	131.98	129.30
36	1	3313	U	O5'-P-OP1	5.36	117.13	110.70
38	4	39	G	C5-C6-N1	5.36	114.18	111.50
1	6	797	G	N3-C4-C5	5.36	131.28	128.60
1	6	1473	U	C2-N3-C4	-5.36	123.79	127.00
1	6	1548	G	N7-C8-N9	-5.36	110.42	113.10
1	6	1638	G	C8-N9-C4	-5.36	104.26	106.40
36	5	146	U	N1-C2-O2	5.36	126.55	122.80
36	5	1413	G	C8-N9-C4	5.36	108.54	106.40
36	5	1436	U	N3-C2-O2	-5.36	118.45	122.20
36	5	1881	A	N1-C6-N6	5.36	121.81	118.60
36	5	2209	U	C2-N1-C1'	-5.36	111.27	117.70
36	5	2283	G	O5'-P-OP1	-5.36	100.88	105.70
36	5	2325	G	C5-C6-N1	-5.36	108.82	111.50
36	5	2388	U	OP1-P-OP2	-5.36	111.57	119.60
36	5	3178	A	O5'-P-OP2	-5.36	100.88	105.70
38	8	13	A	O5'-P-OP1	5.36	117.13	110.70
1	2	600	U	N1-C2-O2	-5.35	119.05	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1183	A	C4-C5-C6	-5.35	114.32	117.00
12	C0	15	LEU	CA-CB-CG	-5.35	102.99	115.30
36	1	316	U	N3-C4-O4	5.35	123.15	119.40
36	1	997	A	C5-C6-N1	5.35	120.38	117.70
36	1	1324	U	C5-C6-N1	-5.35	120.02	122.70
36	1	1646	G	C8-N9-C4	5.35	108.54	106.40
36	1	2754	G	N9-C4-C5	-5.35	103.26	105.40
36	1	2791	G	C8-N9-C4	-5.35	104.26	106.40
36	1	3182	G	N3-C2-N2	5.35	123.65	119.90
1	6	998	A	C4-C5-N7	-5.35	108.02	110.70
36	5	1838	G	C5-C6-O6	-5.35	125.39	128.60
36	5	2676	A	C5-N7-C8	-5.35	101.22	103.90
1	2	1010	C	N1-C2-O2	-5.35	115.69	118.90
1	2	1237	G	C4-C5-N7	-5.35	108.66	110.80
36	1	619	A	N9-C4-C5	-5.35	103.66	105.80
36	1	915	A	N7-C8-N9	5.35	116.48	113.80
36	1	1140	G	N9-C4-C5	-5.35	103.26	105.40
36	1	2134	G	C5-C6-N1	-5.35	108.82	111.50
36	1	2371	G	C5-N7-C8	5.35	106.98	104.30
36	1	2376	G	N1-C6-O6	-5.35	116.69	119.90
36	1	2619	G	C2-N3-C4	5.35	114.58	111.90
36	1	2966	G	C6-C5-N7	-5.35	127.19	130.40
36	1	3032	A	C5-C6-N6	5.35	127.98	123.70
36	1	3096	C	C5-C6-N1	5.35	123.68	121.00
1	6	42	G	C4-C5-N7	5.35	112.94	110.80
1	6	104	A	C5-C6-N6	-5.35	119.42	123.70
1	6	151	G	C5-C6-N1	-5.35	108.82	111.50
1	6	1001	A	C2-N3-C4	5.35	113.28	110.60
36	5	2745	G	N3-C4-N9	5.35	129.21	126.00
36	5	2794	G	OP1-P-OP2	5.35	127.63	119.60
76	q0	108	THR	N-CA-C	-5.35	96.55	111.00
1	2	864	U	N3-C2-O2	-5.35	118.45	122.20
36	1	182	U	C2-N1-C1'	-5.35	111.28	117.70
36	1	2988	C	N3-C4-N4	-5.35	114.25	118.00
36	1	3306	U	C6-N1-C1'	-5.35	113.71	121.20
1	6	1027	A	N9-C4-C5	5.35	107.94	105.80
36	5	2623	G	P-O3'-C3'	-5.35	113.28	119.70
37	7	32	U	O5'-P-OP2	-5.35	100.88	105.70
1	2	399	A	C5-N7-C8	5.35	106.58	103.90
1	2	612	U	O5'-P-OP1	5.35	117.12	110.70
1	2	978	A	C8-N9-C4	-5.35	103.66	105.80
1	2	1673	G	N3-C4-N9	5.35	129.21	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	135	C	C6-N1-C2	-5.35	118.16	120.30
36	1	933	A	OP1-P-OP2	5.35	127.62	119.60
36	1	1180	A	C8-N9-C1'	5.35	137.33	127.70
36	1	1417	G	N3-C4-C5	5.35	131.28	128.60
36	1	1440	G	N1-C2-N2	-5.35	111.39	116.20
36	1	3278	C	C6-N1-C1'	-5.35	114.38	120.80
38	4	54	A	C6-N1-C2	-5.35	115.39	118.60
1	6	185	U	C6-N1-C1'	-5.35	113.71	121.20
1	6	592	A	C2-N3-C4	5.35	113.28	110.60
36	5	865	U	OP1-P-OP2	-5.35	111.58	119.60
36	5	2713	U	C2-N3-C4	5.35	130.21	127.00
36	5	2981	U	C4-C5-C6	5.35	122.91	119.70
36	5	3020	U	C5-C4-O4	-5.35	122.69	125.90
37	7	51	A	N7-C8-N9	5.35	116.47	113.80
1	2	1455	G	C4-C5-C6	5.35	122.01	118.80
1	2	1758	U	C2-N1-C1'	5.35	124.12	117.70
36	1	213	A	O5'-P-OP1	-5.35	100.89	105.70
36	1	407	A	C5-C6-N1	5.35	120.37	117.70
36	1	1163	A	C5-C6-N6	-5.35	119.42	123.70
36	1	2139	A	C4-C5-C6	5.35	119.67	117.00
36	1	2382	G	N1-C2-N2	-5.35	111.39	116.20
1	6	609	U	C2-N3-C4	-5.35	123.79	127.00
36	5	57	A	O5'-P-OP2	-5.35	100.89	105.70
36	5	188	U	C5-C6-N1	5.35	125.37	122.70
36	5	1147	G	N3-C2-N2	5.35	123.64	119.90
36	5	1164	G	N1-C2-N2	5.35	121.01	116.20
36	5	1428	A	OP1-P-O3'	5.35	116.96	105.20
36	5	1476	G	C5-C6-O6	-5.35	125.39	128.60
36	5	1532	C	C4-C5-C6	5.35	120.07	117.40
36	5	2322	C	C4-C5-C6	5.35	120.07	117.40
36	5	3309	G	N9-C1'-C2'	-5.35	106.12	112.00
37	7	48	U	N3-C4-O4	5.35	123.14	119.40
39	12	200	ARG	NE-CZ-NH2	5.35	122.97	120.30
36	1	815	G	N3-C4-C5	-5.35	125.93	128.60
36	1	2301	U	C5-C6-N1	5.35	125.37	122.70
36	1	2517	U	N3-C2-O2	-5.35	118.46	122.20
36	1	2934	A	OP1-P-OP2	5.35	127.62	119.60
1	6	593	U	N3-C2-O2	-5.35	118.46	122.20
1	6	1665	U	C4-C5-C6	5.35	122.91	119.70
36	5	1134	G	N1-C2-N3	5.35	127.11	123.90
36	5	1159	A	C6-C5-N7	-5.35	128.56	132.30
36	5	2430	A	C4-C5-C6	5.35	119.67	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2838	A	C6-C5-N7	5.35	136.04	132.30
36	5	3310	A	C6-N1-C2	-5.35	115.39	118.60
36	1	65	A	N7-C8-N9	-5.34	111.13	113.80
36	1	1366	A	C4-C5-C6	5.34	119.67	117.00
36	1	2199	G	C6-C5-N7	-5.34	127.19	130.40
36	1	3030	G	N3-C4-C5	5.34	131.27	128.60
38	4	1	A	C4-C5-C6	-5.34	114.33	117.00
59	N3	17	LEU	CA-CB-CG	-5.34	103.01	115.30
1	6	115	G	C6-C5-N7	-5.34	127.19	130.40
1	6	124	A	N1-C6-N6	5.34	121.81	118.60
1	6	385	A	C6-C5-N7	5.34	136.04	132.30
1	6	553	G	N3-C4-C5	5.34	131.27	128.60
1	6	996	U	C2-N1-C1'	5.34	124.11	117.70
1	6	1021	C	N3-C4-C5	5.34	124.04	121.90
1	6	1619	C	C5-C6-N1	5.34	123.67	121.00
36	5	127	G	N1-C2-N2	5.34	121.01	116.20
36	5	845	G	C4-C5-N7	-5.34	108.66	110.80
36	5	1307	G	N1-C2-N3	5.34	127.11	123.90
36	5	1348	U	N3-C4-O4	5.34	123.14	119.40
36	5	1417	G	N1-C6-O6	-5.34	116.69	119.90
36	5	1861	G	C4-N9-C1'	5.34	133.45	126.50
36	5	2187	G	C4-C5-N7	-5.34	108.66	110.80
36	5	2188	A	N1-C2-N3	5.34	131.97	129.30
36	5	2796	G	N1-C2-N3	-5.34	120.69	123.90
36	5	2966	G	C4-C5-C6	5.34	122.01	118.80
36	5	3000	A	OP1-P-O3'	-5.34	93.44	105.20
36	5	3143	C	C6-N1-C2	-5.34	118.16	120.30
36	1	582	G	C5-C6-O6	5.34	131.81	128.60
36	1	596	C	N1-C2-O2	5.34	122.11	118.90
36	1	2244	A	C8-N9-C4	-5.34	103.66	105.80
1	6	308	C	C5-C4-N4	5.34	123.94	120.20
36	5	799	G	O5'-P-OP1	-5.34	100.89	105.70
36	5	1723	A	OP2-P-O3'	5.34	116.95	105.20
36	5	1886	A	N1-C2-N3	5.34	131.97	129.30
36	5	3377	G	O5'-P-OP2	-5.34	100.89	105.70
38	8	2	A	OP1-P-OP2	-5.34	111.59	119.60
1	2	975	C	C6-N1-C2	-5.34	118.16	120.30
1	2	1240	U	C5-C6-N1	-5.34	120.03	122.70
1	2	1389	C	C2-N1-C1'	5.34	124.68	118.80
36	1	48	A	O4'-C1'-N9	5.34	112.47	108.20
36	1	254	A	N1-C6-N6	-5.34	115.39	118.60
36	1	419	G	C5-C6-N1	5.34	114.17	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	420	G	C8-N9-C1'	-5.34	120.06	127.00
36	1	1102	A	N1-C2-N3	5.34	131.97	129.30
36	1	1581	C	C2-N3-C4	5.34	122.57	119.90
36	1	2100	A	N9-C1'-C2'	-5.34	106.12	112.00
38	4	56	G	C6-N1-C2	-5.34	121.89	125.10
1	6	1683	C	N1-C2-O2	5.34	122.11	118.90
36	5	183	G	C5-N7-C8	5.34	106.97	104.30
36	5	639	G	C5-C6-N1	-5.34	108.83	111.50
36	5	644	G	C4-N9-C1'	5.34	133.44	126.50
36	5	1064	A	O4'-C1'-N9	-5.34	103.93	108.20
36	5	1517	G	N1-C6-O6	5.34	123.10	119.90
36	5	2434	U	OP1-P-O3'	5.34	116.95	105.20
36	5	3028	G	N3-C4-N9	5.34	129.21	126.00
36	5	3047	U	C4-C5-C6	5.34	122.91	119.70
38	8	110	C	N3-C4-C5	5.34	124.04	121.90
1	2	1270	G	C4-C5-C6	5.34	122.00	118.80
36	1	21	G	N9-C4-C5	5.34	107.54	105.40
36	1	715	A	N7-C8-N9	5.34	116.47	113.80
36	1	1284	C	C2-N1-C1'	5.34	124.67	118.80
36	1	1799	A	N1-C2-N3	5.34	131.97	129.30
36	1	2388	U	C5-C6-N1	-5.34	120.03	122.70
36	1	2603	G	C5-C6-N1	-5.34	108.83	111.50
36	1	2896	A	N1-C2-N3	5.34	131.97	129.30
36	1	3221	C	N3-C4-C5	-5.34	119.76	121.90
36	1	3232	G	C4-C5-C6	5.34	122.00	118.80
37	3	109	G	C8-N9-C1'	5.34	133.94	127.00
1	6	26	A	OP2-P-O3'	5.34	116.95	105.20
1	6	1074	G	N1-C6-O6	5.34	123.10	119.90
1	6	1672	G	C5-C6-N1	5.34	114.17	111.50
36	5	92	G	C4-C5-N7	5.34	112.94	110.80
36	5	218	G	C4-C5-N7	-5.34	108.66	110.80
36	5	725	G	N1-C2-N2	-5.34	111.39	116.20
36	5	1164	G	C6-N1-C2	-5.34	121.90	125.10
36	5	1202	A	N1-C6-N6	5.34	121.80	118.60
36	5	1317	A	C4-C5-N7	5.34	113.37	110.70
36	5	2254	U	OP1-P-O3'	5.34	116.95	105.20
36	5	2420	C	C2-N1-C1'	5.34	124.67	118.80
36	5	2917	G	C8-N9-C4	-5.34	104.26	106.40
36	5	3061	G	C4-N9-C1'	-5.34	119.56	126.50
1	2	1342	C	C5-C6-N1	5.34	123.67	121.00
1	6	1489	U	N3-C2-O2	-5.34	118.46	122.20
36	5	2420	C	C4-C5-C6	-5.34	114.73	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3237	U	N1-C2-O2	-5.34	119.06	122.80
36	5	3324	C	C2-N3-C4	-5.34	117.23	119.90
52	m6	51	LYS	CD-CE-NZ	5.34	123.98	111.70
1	2	17	C	C6-N1-C1'	5.34	127.20	120.80
1	2	1123	C	C2-N3-C4	5.34	122.57	119.90
1	2	1568	C	N3-C4-N4	-5.34	114.26	118.00
36	1	812	G	O5'-P-OP2	-5.34	100.90	105.70
36	1	933	A	C6-C5-N7	-5.34	128.56	132.30
36	1	1152	G	N3-C2-N2	5.34	123.64	119.90
36	1	1377	G	N1-C2-N3	5.34	127.10	123.90
36	1	3034	C	OP1-P-O3'	5.34	116.94	105.20
36	1	3075	G	C6-C5-N7	-5.34	127.20	130.40
38	4	53	A	N7-C8-N9	-5.34	111.13	113.80
41	L4	101	ALA	C-N-CD	-5.34	108.86	120.60
1	6	57	G	N1-C2-N3	5.34	127.10	123.90
1	6	420	A	C5-C6-N6	-5.34	119.43	123.70
1	6	1157	A	N9-C4-C5	5.34	107.93	105.80
1	6	1426	C	N1-C2-N3	-5.34	115.46	119.20
36	5	35	A	C6-N1-C2	-5.34	115.40	118.60
36	5	529	A	OP1-P-OP2	-5.34	111.60	119.60
36	5	1054	A	N9-C4-C5	-5.34	103.67	105.80
36	5	2174	G	C8-N9-C4	5.34	108.53	106.40
36	5	2824	G	N3-C4-N9	5.34	129.20	126.00
38	8	93	U	N3-C4-O4	-5.34	115.67	119.40
1	2	980	G	C8-N9-C4	5.33	108.53	106.40
1	2	1537	C	N1-C2-N3	-5.33	115.47	119.20
36	1	73	C	C6-N1-C2	-5.33	118.17	120.30
36	1	3321	C	N3-C4-C5	-5.33	119.77	121.90
1	6	17	C	N3-C4-N4	5.33	121.73	118.00
36	5	860	G	C5-N7-C8	-5.33	101.63	104.30
36	5	987	U	C4-C5-C6	5.33	122.90	119.70
36	5	1363	A	C5-N7-C8	5.33	106.57	103.90
36	5	2891	U	N1-C2-O2	5.33	126.53	122.80
1	2	332	U	C2-N3-C4	-5.33	123.80	127.00
1	2	1436	A	N1-C6-N6	5.33	121.80	118.60
1	2	1558	U	C5-C4-O4	-5.33	122.70	125.90
36	1	30	G	C4-C5-N7	5.33	112.93	110.80
36	1	411	U	N1-C2-O2	-5.33	119.07	122.80
36	1	428	A	C2-N3-C4	5.33	113.27	110.60
36	1	925	A	N1-C6-N6	5.33	121.80	118.60
36	1	1544	G	C5-C6-O6	-5.33	125.40	128.60
36	1	1952	G	OP2-P-O3'	5.33	116.94	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2722	U	OP1-P-OP2	-5.33	111.60	119.60
36	1	3088	G	C4-C5-N7	-5.33	108.67	110.80
36	1	3312	U	N1-C2-O2	-5.33	119.07	122.80
36	1	3316	A	OP2-P-O3'	5.33	116.94	105.20
54	M8	111	ARG	NE-CZ-NH1	-5.33	117.63	120.30
1	6	172	C	O5'-P-OP1	-5.33	100.90	105.70
1	6	1070	C	C5-C6-N1	-5.33	118.33	121.00
1	6	1598	U	C6-N1-C1'	-5.33	113.73	121.20
36	5	274	G	C6-C5-N7	5.33	133.60	130.40
36	5	281	G	N1-C2-N3	5.33	127.10	123.90
36	5	1891	A	N1-C6-N6	5.33	121.80	118.60
36	5	2118	C	C2-N1-C1'	5.33	124.67	118.80
36	5	2966	G	O5'-P-OP1	5.33	117.10	110.70
36	5	3120	C	C2-N1-C1'	5.33	124.67	118.80
1	2	763	G	C5-C6-O6	-5.33	125.40	128.60
1	2	1102	G	C5-C6-O6	-5.33	125.40	128.60
1	2	1109	G	C6-C5-N7	-5.33	127.20	130.40
1	2	1148	C	N1-C2-N3	5.33	122.93	119.20
36	1	882	A	C5-C6-N6	5.33	127.97	123.70
36	1	1065	A	O5'-P-OP1	-5.33	100.90	105.70
36	1	1168	U	OP1-P-OP2	-5.33	111.60	119.60
36	1	2284	C	N3-C4-C5	-5.33	119.77	121.90
36	1	2889	C	O5'-P-OP2	5.33	117.10	110.70
36	1	2953	U	N3-C2-O2	-5.33	118.47	122.20
36	1	3140	G	N9-C4-C5	-5.33	103.27	105.40
1	6	825	U	C5-C4-O4	-5.33	122.70	125.90
1	6	934	C	N3-C4-N4	-5.33	114.27	118.00
36	5	281	G	C6-N1-C2	-5.33	121.90	125.10
36	5	1337	A	N3-C4-C5	5.33	130.53	126.80
36	5	1420	C	OP2-P-O3'	5.33	116.93	105.20
36	5	3278	C	N3-C2-O2	5.33	125.63	121.90
1	2	422	G	O4'-C1'-N9	-5.33	103.94	108.20
1	2	1108	G	C6-C5-N7	5.33	133.60	130.40
36	1	1488	G	C4-C5-N7	5.33	112.93	110.80
1	6	1142	A	C8-N9-C4	-5.33	103.67	105.80
36	5	416	A	C4-C5-C6	-5.33	114.33	117.00
36	5	851	C	N3-C2-O2	5.33	125.63	121.90
36	5	1062	A	O5'-P-OP1	5.33	117.10	110.70
36	5	1332	A	OP1-P-O3'	5.33	116.93	105.20
36	5	1333	C	N3-C4-C5	-5.33	119.77	121.90
36	5	1889	G	OP1-P-OP2	-5.33	111.61	119.60
36	5	3079	U	N3-C4-O4	-5.33	115.67	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	260	U	C5-C4-O4	-5.33	122.70	125.90
36	1	89	A	O5'-P-OP1	5.33	117.09	110.70
36	1	697	A	OP1-P-OP2	5.33	127.59	119.60
36	1	1320	C	C2-N3-C4	-5.33	117.24	119.90
36	1	1437	C	C2-N1-C1'	5.33	124.66	118.80
36	1	1643	A	C8-N9-C4	5.33	107.93	105.80
36	1	2828	G	N3-C4-C5	-5.33	125.94	128.60
36	1	3361	G	C4-C5-N7	-5.33	108.67	110.80
1	6	16	G	C6-C5-N7	-5.33	127.20	130.40
1	6	372	G	C5-C6-O6	5.33	131.80	128.60
1	6	1129	U	C6-N1-C1'	5.33	128.66	121.20
1	6	1264	G	C5-C6-O6	-5.33	125.40	128.60
1	6	1569	A	C4-N9-C1'	5.33	135.89	126.30
36	5	538	G	C6-C5-N7	-5.33	127.20	130.40
36	5	1124	U	C4-C5-C6	-5.33	116.50	119.70
36	5	1339	C	N3-C4-C5	5.33	124.03	121.90
36	5	1486	G	C8-N9-C1'	5.33	133.93	127.00
36	5	2149	A	C5-C6-N1	-5.33	115.04	117.70
36	5	2187	G	N7-C8-N9	5.33	115.76	113.10
1	2	548	G	N1-C6-O6	5.33	123.10	119.90
36	1	278	U	OP1-P-OP2	-5.33	111.61	119.60
36	1	1548	C	N3-C4-N4	5.33	121.73	118.00
36	1	2643	A	C4-C5-C6	-5.33	114.34	117.00
1	6	2	A	N9-C4-C5	5.33	107.93	105.80
1	6	1665	U	OP2-P-O3'	5.33	116.92	105.20
36	5	1207	G	C4-C5-N7	5.33	112.93	110.80
36	5	2663	G	C5-C6-N1	5.33	114.16	111.50
36	5	2918	G	N1-C2-N3	5.33	127.10	123.90
1	2	1606	C	O5'-P-OP2	-5.33	100.91	105.70
36	1	644	G	C5-N7-C8	5.33	106.96	104.30
36	1	876	A	C6-N1-C2	-5.33	115.41	118.60
36	1	975	C	N1-C2-O2	-5.33	115.70	118.90
36	1	1428	A	OP1-P-OP2	5.33	127.59	119.60
36	1	1517	G	C5-C6-N1	5.33	114.16	111.50
36	1	1544	G	C4-C5-N7	5.33	112.93	110.80
36	1	1585	C	N3-C2-O2	5.33	125.63	121.90
36	1	2305	G	OP2-P-O3'	5.33	116.92	105.20
36	1	2705	A	N9-C4-C5	5.33	107.93	105.80
36	1	3362	A	N1-C6-N6	5.33	121.80	118.60
38	4	10	A	N1-C6-N6	-5.33	115.41	118.60
38	4	34	U	C6-N1-C1'	5.33	128.66	121.20
1	6	48	G	OP2-P-O3'	5.33	116.92	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	403	G	OP1-P-O3'	5.33	116.92	105.20
1	6	1180	C	C5-C6-N1	5.33	123.66	121.00
1	6	1521	G	C5-C6-O6	-5.33	125.40	128.60
1	6	1543	A	C2-N3-C4	-5.33	107.94	110.60
1	6	1569	A	C6-C5-N7	-5.33	128.57	132.30
36	5	374	A	C8-N9-C4	-5.33	103.67	105.80
36	5	746	A	N1-C2-N3	5.33	131.96	129.30
36	5	1168	U	N3-C4-C5	5.33	117.80	114.60
36	5	1277	C	C5-C6-N1	5.33	123.66	121.00
36	5	1323	G	C6-C5-N7	-5.33	127.20	130.40
36	5	2312	A	C5-C6-N1	5.33	120.36	117.70
38	8	51	G	N1-C2-N3	5.33	127.09	123.90
1	2	41	A	C8-N9-C4	-5.32	103.67	105.80
36	1	679	U	N3-C4-C5	5.32	117.79	114.60
36	1	946	U	N3-C4-O4	5.32	123.13	119.40
36	1	1506	A	C2-N3-C4	-5.32	107.94	110.60
36	1	2321	A	C6-N1-C2	5.32	121.79	118.60
36	1	2802	A	C6-N1-C2	-5.32	115.41	118.60
36	1	2817	A	C6-N1-C2	-5.32	115.41	118.60
36	1	3293	U	C6-N1-C1'	5.32	128.65	121.20
1	6	580	A	C2-N3-C4	5.32	113.26	110.60
1	6	1777	G	C4-C5-C6	5.32	121.99	118.80
36	5	349	A	C6-N1-C2	-5.32	115.41	118.60
36	5	1420	C	OP1-P-O3'	-5.32	93.49	105.20
36	5	1487	G	N7-C8-N9	5.32	115.76	113.10
36	5	2207	A	N9-C4-C5	-5.32	103.67	105.80
36	5	3242	G	N3-C4-C5	-5.32	125.94	128.60
38	8	8	C	N3-C4-C5	-5.32	119.77	121.90
38	8	115	C	C2-N3-C4	-5.32	117.24	119.90
38	8	116	G	C8-N9-C4	-5.32	104.27	106.40
36	1	2234	G	C4-C5-N7	-5.32	108.67	110.80
36	1	2341	A	N7-C8-N9	-5.32	111.14	113.80
36	1	3052	G	O5'-P-OP1	-5.32	100.91	105.70
37	3	97	A	N9-C4-C5	-5.32	103.67	105.80
1	6	1146	G	N1-C6-O6	-5.32	116.71	119.90
36	5	731	U	C2-N3-C4	-5.32	123.81	127.00
36	5	1319	G	N1-C2-N2	5.32	120.99	116.20
36	5	1761	C	N1-C2-O2	5.32	122.09	118.90
36	5	2938	G	C5-C6-N1	5.32	114.16	111.50
36	5	3143	C	C5-C4-N4	-5.32	116.47	120.20
38	8	77	A	C8-N9-C4	5.32	107.93	105.80
1	2	100	A	C5-C6-N1	5.32	120.36	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	576	G	N7-C8-N9	5.32	115.76	113.10
36	1	865	U	C2-N3-C4	-5.32	123.81	127.00
36	1	1043	C	C5-C6-N1	-5.32	118.34	121.00
36	1	1498	A	OP2-P-O3'	5.32	116.91	105.20
36	1	2778	G	C6-N1-C2	-5.32	121.91	125.10
36	1	2966	G	C5-C6-N1	-5.32	108.84	111.50
36	1	3360	C	C5-C6-N1	5.32	123.66	121.00
1	6	68	A	C4-C5-N7	5.32	113.36	110.70
1	6	777	C	N1-C2-O2	5.32	122.09	118.90
1	6	1273	G	OP1-P-OP2	-5.32	111.62	119.60
1	6	1665	U	C5-C6-N1	-5.32	120.04	122.70
36	5	396	A	N3-C4-C5	5.32	130.52	126.80
36	5	929	A	C5-C6-N1	5.32	120.36	117.70
36	5	1510	G	C4-C5-N7	5.32	112.93	110.80
36	5	2371	G	C4-N9-C1'	5.32	133.42	126.50
36	5	2556	C	O4'-C1'-N1	5.32	112.46	108.20
36	5	2622	C	C5-C4-N4	5.32	123.92	120.20
36	5	2723	U	C2-N1-C1'	5.32	124.08	117.70
36	5	2754	G	C8-N9-C4	5.32	108.53	106.40
36	5	2803	A	C6-N1-C2	5.32	121.79	118.60
36	5	2819	A	C2-N3-C4	5.32	113.26	110.60
36	5	3362	A	C4-C5-N7	5.32	113.36	110.70
1	2	1264	G	N9-C4-C5	5.32	107.53	105.40
36	1	53	G	C4-C5-C6	5.32	121.99	118.80
36	1	1947	G	C6-C5-N7	-5.32	127.21	130.40
36	1	3265	C	C5-C6-N1	-5.32	118.34	121.00
36	1	3322	A	C2-N3-C4	-5.32	107.94	110.60
37	3	30	G	C6-N1-C2	-5.32	121.91	125.10
38	4	110	C	C5-C4-N4	5.32	123.92	120.20
1	6	757	A	N3-C4-C5	5.32	130.52	126.80
36	5	965	A	N3-C4-C5	-5.32	123.08	126.80
36	5	1081	U	C5-C6-N1	5.32	125.36	122.70
1	2	347	G	N1-C2-N3	5.32	127.09	123.90
1	2	1307	U	C5-C4-O4	5.32	129.09	125.90
36	1	232	G	N3-C4-C5	-5.32	125.94	128.60
36	1	584	G	OP1-P-O3'	5.32	116.90	105.20
36	1	628	A	C8-N9-C4	-5.32	103.67	105.80
36	1	1473	G	C8-N9-C4	5.32	108.53	106.40
36	1	1476	G	C8-N9-C1'	-5.32	120.09	127.00
36	1	2420	C	O5'-P-OP2	5.32	117.08	110.70
36	1	3040	A	C4-C5-C6	5.32	119.66	117.00
38	4	34	U	C4-C5-C6	5.32	122.89	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1020	A	N9-C4-C5	5.32	107.93	105.80
1	6	1083	G	C4-N9-C1'	5.32	133.41	126.50
1	6	1119	G	C6-N1-C2	-5.32	121.91	125.10
1	6	1336	A	C8-N9-C4	5.32	107.93	105.80
36	5	504	A	N9-C4-C5	-5.32	103.67	105.80
36	5	1094	U	C5-C6-N1	5.32	125.36	122.70
36	5	1348	U	O5'-P-OP2	5.32	117.08	110.70
36	5	1589	A	C5-N7-C8	-5.32	101.24	103.90
36	5	1832	C	C5-C4-N4	-5.32	116.48	120.20
36	5	2311	G	C2-N3-C4	-5.32	109.24	111.90
36	5	3124	G	C6-C5-N7	-5.32	127.21	130.40
37	7	21	G	OP1-P-O3'	5.32	116.90	105.20
37	7	46	A	C5-C6-N6	-5.32	119.45	123.70
37	7	65	G	C5-N7-C8	-5.32	101.64	104.30
38	8	108	C	O5'-P-OP2	-5.32	100.92	105.70
1	2	936	G	C8-N9-C4	-5.32	104.27	106.40
1	2	1573	A	P-O3'-C3'	5.32	126.08	119.70
1	2	1599	C	C6-N1-C2	-5.32	118.17	120.30
1	2	1764	C	N1-C2-O2	5.32	122.09	118.90
36	1	747	A	C4-C5-C6	-5.32	114.34	117.00
36	1	792	G	C2-N3-C4	-5.32	109.24	111.90
36	1	1794	G	C8-N9-C4	5.32	108.53	106.40
36	1	1906	G	N9-C4-C5	-5.32	103.27	105.40
36	1	2231	C	C5-C6-N1	-5.32	118.34	121.00
36	1	2373	A	N7-C8-N9	5.32	116.46	113.80
36	1	2389	C	C2-N3-C4	-5.32	117.24	119.90
36	1	2554	A	O4'-C1'-N9	-5.32	103.95	108.20
36	1	2843	U	C6-N1-C1'	-5.32	113.76	121.20
36	1	2937	G	N3-C4-C5	5.32	131.26	128.60
37	3	10	C	C6-N1-C2	5.32	122.43	120.30
37	3	26	C	C5-C6-N1	-5.32	118.34	121.00
38	4	139	U	N1-C2-O2	5.32	126.52	122.80
1	6	454	U	N3-C2-O2	-5.32	118.48	122.20
1	6	1662	G	O5'-P-OP2	-5.32	100.92	105.70
36	5	40	A	N3-C4-C5	5.32	130.52	126.80
36	5	74	G	O5'-P-OP1	-5.32	100.92	105.70
36	5	525	C	OP2-P-O3'	5.32	116.89	105.20
36	5	601	U	N3-C4-O4	5.32	123.12	119.40
36	5	677	A	C4-C5-C6	-5.32	114.34	117.00
36	5	813	G	O5'-P-OP1	5.32	117.08	110.70
36	5	1248	C	C6-N1-C2	-5.32	118.17	120.30
36	5	2236	G	N3-C4-C5	-5.32	125.94	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2317	A	N9-C4-C5	5.32	107.93	105.80
36	5	2670	G	OP1-P-O3'	-5.32	93.50	105.20
36	5	3080	G	C5-C6-O6	-5.32	125.41	128.60
36	5	3227	A	OP2-P-O3'	5.32	116.90	105.20
37	7	24	A	N9-C4-C5	5.32	107.93	105.80
1	2	318	U	N1-C2-O2	-5.31	119.08	122.80
36	1	408	A	C4-C5-N7	-5.31	108.04	110.70
36	1	1178	G	N9-C4-C5	-5.31	103.27	105.40
36	1	2233	A	N9-C4-C5	5.31	107.93	105.80
38	4	36	G	C4-C5-N7	5.31	112.93	110.80
36	5	399	A	C2-N3-C4	5.31	113.26	110.60
36	5	788	C	N1-C2-N3	5.31	122.92	119.20
36	5	2674	A	O5'-P-OP1	-5.31	100.92	105.70
36	5	2904	U	OP2-P-O3'	5.31	116.89	105.20
1	2	615	A	N9-C4-C5	5.31	107.92	105.80
1	2	1086	A	N9-C4-C5	5.31	107.92	105.80
36	1	1736	G	N7-C8-N9	5.31	115.76	113.10
36	1	2370	G	C5-N7-C8	5.31	106.96	104.30
36	1	3180	A	C8-N9-C4	-5.31	103.67	105.80
36	1	3294	A	N1-C6-N6	-5.31	115.41	118.60
1	6	187	G	OP1-P-O3'	5.31	116.89	105.20
1	6	1001	A	C5-C6-N6	-5.31	119.45	123.70
1	6	1367	G	OP2-P-O3'	5.31	116.89	105.20
36	5	40	A	N3-C4-N9	-5.31	123.15	127.40
36	5	188	U	N1-C2-N3	5.31	118.09	114.90
36	5	947	G	C5-C6-O6	-5.31	125.41	128.60
36	5	1422	G	C2-N3-C4	-5.31	109.24	111.90
36	5	2275	A	O4'-C1'-N9	5.31	112.45	108.20
36	5	2647	A	N1-C2-N3	5.31	131.96	129.30
36	5	2857	C	N1-C2-O2	5.31	122.09	118.90
36	5	3164	C	N3-C4-C5	5.31	124.03	121.90
36	5	3313	U	N3-C4-C5	-5.31	111.41	114.60
37	7	40	C	C5-C4-N4	-5.31	116.48	120.20
1	2	357	G	O5'-P-OP2	5.31	117.07	110.70
36	1	650	C	N1-C2-O2	-5.31	115.71	118.90
36	1	2761	G	N1-C6-O6	-5.31	116.71	119.90
36	1	2963	C	O5'-P-OP2	-5.31	100.92	105.70
36	1	3219	G	N9-C4-C5	-5.31	103.28	105.40
1	6	79	C	C6-N1-C2	5.31	122.42	120.30
36	5	30	G	N7-C8-N9	5.31	115.76	113.10
36	5	230	U	C5-C4-O4	5.31	129.09	125.90
36	5	1637	A	C8-N9-C4	-5.31	103.68	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
37	7	65	G	N3-C4-C5	5.31	131.26	128.60
1	2	806	A	C5-C6-N1	5.31	120.36	117.70
1	2	913	G	P-O3'-C3'	5.31	126.07	119.70
1	2	1146	G	C4-C5-C6	5.31	121.99	118.80
36	1	378	A	C8-N9-C4	5.31	107.92	105.80
36	1	1207	G	O5'-P-OP2	5.31	117.07	110.70
36	1	1386	A	N1-C2-N3	5.31	131.96	129.30
36	1	1419	A	O4'-C1'-N9	5.31	112.45	108.20
36	1	1529	A	N9-C4-C5	5.31	107.92	105.80
36	1	1594	A	C2-N3-C4	5.31	113.25	110.60
1	6	1082	C	C4-C5-C6	5.31	120.06	117.40
1	6	1097	U	N1-C2-N3	5.31	118.08	114.90
1	6	1357	A	C8-N9-C4	5.31	107.92	105.80
1	6	1614	A	N7-C8-N9	5.31	116.45	113.80
36	5	97	U	N1-C2-O2	-5.31	119.08	122.80
36	5	689	U	OP1-P-O3'	-5.31	93.52	105.20
36	5	1085	A	C5-C6-N1	-5.31	115.05	117.70
36	5	2411	U	N3-C4-O4	5.31	123.12	119.40
36	5	2745	G	C4-C5-N7	5.31	112.92	110.80
1	2	514	G	C4-N9-C1'	-5.31	119.60	126.50
1	2	1200	G	C8-N9-C4	-5.31	104.28	106.40
1	2	1418	G	C5-C6-O6	-5.31	125.42	128.60
1	2	1764	C	O5'-P-OP1	-5.31	100.92	105.70
36	1	287	G	OP1-P-O3'	5.31	116.88	105.20
36	1	325	A	O5'-P-OP1	-5.31	100.92	105.70
36	1	1118	C	C6-N1-C2	-5.31	118.18	120.30
36	1	1314	C	N3-C4-C5	-5.31	119.78	121.90
36	1	2202	C	C5-C6-N1	5.31	123.65	121.00
36	1	2266	U	C4-C5-C6	-5.31	116.52	119.70
36	1	2648	G	N3-C4-C5	-5.31	125.95	128.60
36	1	2654	C	N3-C4-N4	5.31	121.72	118.00
1	6	90	C	N1-C2-N3	5.31	122.92	119.20
1	6	340	U	N3-C4-O4	5.31	123.11	119.40
1	6	440	U	OP1-P-OP2	5.31	127.56	119.60
1	6	1122	G	N1-C6-O6	5.31	123.08	119.90
1	6	1524	A	C6-N1-C2	-5.31	115.42	118.60
1	6	1631	A	OP1-P-O3'	5.31	116.88	105.20
1	6	1650	U	N1-C2-N3	5.31	118.08	114.90
36	5	217	U	C5-C6-N1	-5.31	120.05	122.70
36	5	326	U	OP2-P-O3'	5.31	116.88	105.20
36	5	957	C	C5-C6-N1	5.31	123.65	121.00
36	5	983	A	C8-N9-C4	5.31	107.92	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2344	U	C4-C5-C6	5.31	122.88	119.70
36	5	3044	G	C4-C5-N7	5.31	112.92	110.80
36	5	3326	G	N3-C2-N2	5.31	123.62	119.90
36	5	3386	G	N9-C4-C5	5.31	107.52	105.40
1	2	654	C	C6-N1-C2	-5.31	118.18	120.30
36	1	1465	A	C8-N9-C4	5.31	107.92	105.80
36	1	3141	A	C5-N7-C8	-5.31	101.25	103.90
1	6	151	G	C4-C5-N7	-5.31	108.68	110.80
1	6	1030	A	C8-N9-C4	5.31	107.92	105.80
36	5	1867	A	N3-C4-N9	-5.31	123.16	127.40
36	5	2933	A	N9-C4-C5	5.31	107.92	105.80
1	2	22	A	C2-N3-C4	5.30	113.25	110.60
36	1	379	C	N1-C2-O2	-5.30	115.72	118.90
36	1	2333	C	C4-C5-C6	5.30	120.05	117.40
36	1	2776	C	C6-N1-C1'	-5.30	114.43	120.80
1	6	765	G	O4'-C1'-N9	-5.30	103.96	108.20
1	6	784	C	O5'-P-OP1	-5.30	100.92	105.70
1	6	1136	U	N3-C4-C5	5.30	117.78	114.60
1	6	1337	A	C8-N9-C1'	5.30	137.25	127.70
1	6	1484	G	N9-C4-C5	5.30	107.52	105.40
36	5	383	G	C5-C6-O6	5.30	131.78	128.60
36	5	2677	G	C6-C5-N7	-5.30	127.22	130.40
37	7	87	G	O5'-P-OP1	-5.30	100.93	105.70
36	1	225	C	N1-C2-O2	5.30	122.08	118.90
36	1	1344	G	O5'-P-OP1	5.30	117.06	110.70
36	1	1409	G	C4-C5-N7	5.30	112.92	110.80
36	1	1554	U	C2-N3-C4	5.30	130.18	127.00
36	1	1670	C	C2-N3-C4	-5.30	117.25	119.90
36	1	2161	G	N1-C6-O6	5.30	123.08	119.90
36	1	3263	G	N9-C4-C5	-5.30	103.28	105.40
36	5	1163	A	C6-N1-C2	-5.30	115.42	118.60
78	q2	93	LEU	CB-CG-CD2	-5.30	101.98	111.00
1	2	469	C	O5'-P-OP2	-5.30	100.93	105.70
1	2	966	A	N1-C2-N3	5.30	131.95	129.30
36	1	132	C	C6-N1-C2	-5.30	118.18	120.30
36	1	643	U	C5-C6-N1	5.30	125.35	122.70
36	1	933	A	C8-N9-C1'	-5.30	118.16	127.70
36	1	1709	C	C6-N1-C2	-5.30	118.18	120.30
36	1	2398	A	N7-C8-N9	-5.30	111.15	113.80
68	O2	47	ARG	NE-CZ-NH1	5.30	122.95	120.30
73	O7	65	ARG	NE-CZ-NH2	-5.30	117.65	120.30
1	6	509	G	O5'-P-OP1	-5.30	100.93	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	989	U	N1-C2-O2	5.30	126.51	122.80
1	6	1374	C	N3-C4-C5	-5.30	119.78	121.90
36	5	41	G	C8-N9-C1'	5.30	133.89	127.00
36	5	535	G	O4'-C1'-N9	-5.30	103.96	108.20
36	5	560	G	N3-C2-N2	-5.30	116.19	119.90
36	5	1171	G	C8-N9-C4	-5.30	104.28	106.40
36	5	1183	C	C2-N1-C1'	5.30	124.63	118.80
36	5	2333	C	C5-C6-N1	-5.30	118.35	121.00
36	5	2615	G	N9-C4-C5	-5.30	103.28	105.40
36	5	2649	A	C4-C5-N7	5.30	113.35	110.70
36	5	2727	A	C6-N1-C2	-5.30	115.42	118.60
36	5	3180	A	N3-C4-C5	5.30	130.51	126.80
36	5	3382	U	N3-C2-O2	-5.30	118.49	122.20
1	2	630	A	O4'-C1'-N9	-5.30	103.96	108.20
1	2	1250	U	P-O3'-C3'	5.30	126.06	119.70
36	1	145	G	N7-C8-N9	5.30	115.75	113.10
36	1	402	A	C4-C5-N7	5.30	113.35	110.70
36	1	970	A	C5-C6-N1	5.30	120.35	117.70
36	1	1145	G	N9-C4-C5	5.30	107.52	105.40
36	1	1463	U	C5-C6-N1	-5.30	120.05	122.70
36	1	2147	A	C6-N1-C2	-5.30	115.42	118.60
36	1	2659	G	C4-N9-C1'	5.30	133.39	126.50
36	1	2896	A	C6-C5-N7	-5.30	128.59	132.30
38	4	94	C	C2-N1-C1'	-5.30	112.97	118.80
38	4	125	U	C2-N1-C1'	5.30	124.06	117.70
6	s4	167	GLY	N-CA-C	-5.30	99.85	113.10
36	5	673	U	C4-C5-C6	5.30	122.88	119.70
36	5	1411	C	N1-C2-O2	5.30	122.08	118.90
36	5	1603	A	O5'-P-OP1	5.30	117.06	110.70
36	5	2197	C	C6-N1-C1'	-5.30	114.44	120.80
36	5	3026	G	N1-C2-N2	-5.30	111.43	116.20
36	5	3189	G	N1-C2-N2	-5.30	111.43	116.20
37	7	32	U	C5-C4-O4	-5.30	122.72	125.90
37	7	42	A	C4-N9-C1'	5.30	135.84	126.30
1	2	551	G	C2-N3-C4	-5.30	109.25	111.90
36	1	1201	C	N1-C2-N3	-5.30	115.49	119.20
36	5	1295	G	N3-C2-N2	5.30	123.61	119.90
36	5	2776	C	C6-N1-C1'	-5.30	114.44	120.80
36	5	3127	A	C6-N1-C2	-5.30	115.42	118.60
36	5	3130	A	C5-C6-N6	-5.30	119.46	123.70
36	5	3137	C	C2-N1-C1'	5.30	124.63	118.80
1	2	350	U	N1-C2-O2	-5.30	119.09	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	630	A	C2-N3-C4	-5.30	107.95	110.60
36	1	904	A	N9-C4-C5	5.30	107.92	105.80
36	1	967	A	C6-N1-C2	-5.30	115.42	118.60
36	1	1463	U	N3-C2-O2	-5.30	118.49	122.20
36	1	1534	A	C2-N3-C4	-5.30	107.95	110.60
36	1	2209	U	C2-N3-C4	5.30	130.18	127.00
36	1	2316	G	C4-C5-C6	5.30	121.98	118.80
36	1	2931	C	N1-C1'-C2'	-5.30	106.17	112.00
36	1	2932	U	OP1-P-OP2	5.30	127.55	119.60
36	1	3186	A	C5-C6-N1	5.30	120.35	117.70
1	6	1209	C	N1-C2-O2	-5.30	115.72	118.90
36	5	422	A	C5-C6-N6	5.30	127.94	123.70
36	5	513	G	C6-N1-C2	-5.30	121.92	125.10
36	5	854	G	N1-C6-O6	5.30	123.08	119.90
36	5	1101	G	C4-N9-C1'	5.30	133.39	126.50
36	5	1199	C	C2-N1-C1'	5.30	124.63	118.80
36	5	1199	C	C6-N1-C1'	-5.30	114.44	120.80
36	5	1616	U	N3-C4-C5	-5.30	111.42	114.60
36	5	1838	G	C4-C5-C6	5.30	121.98	118.80
36	5	2530	G	N1-C6-O6	5.30	123.08	119.90
36	5	2557	A	N1-C2-N3	5.30	131.95	129.30
36	5	2573	G	C4-C5-N7	5.30	112.92	110.80
36	5	3044	G	N1-C2-N3	5.30	127.08	123.90
1	2	969	C	OP2-P-O3'	5.29	116.85	105.20
1	2	1316	G	N1-C6-O6	-5.29	116.72	119.90
36	1	422	A	O4'-C1'-N9	-5.29	103.96	108.20
36	1	1364	C	C2-N3-C4	-5.29	117.25	119.90
36	1	1791	C	O4'-C1'-N1	5.29	112.44	108.20
36	1	2899	C	C4-C5-C6	5.29	120.05	117.40
1	6	417	A	P-O3'-C3'	5.29	126.05	119.70
36	5	1055	A	N7-C8-N9	-5.29	111.15	113.80
36	5	2948	C	C5-C6-N1	5.29	123.65	121.00
1	2	1775	U	OP2-P-O3'	5.29	116.85	105.20
36	1	856	G	N1-C2-N3	5.29	127.08	123.90
36	1	1461	A	C2-N3-C4	-5.29	107.95	110.60
36	1	1709	C	C4-C5-C6	5.29	120.05	117.40
36	1	1909	A	OP1-P-OP2	-5.29	111.66	119.60
36	1	2353	G	C4-N9-C1'	5.29	133.38	126.50
1	6	21	U	C2-N1-C1'	5.29	124.05	117.70
1	6	594	A	C6-N1-C2	-5.29	115.42	118.60
1	6	980	G	C4-C5-N7	5.29	112.92	110.80
36	5	800	G	C5-C6-N1	5.29	114.15	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1507	G	OP2-P-O3'	5.29	116.85	105.20
36	5	1605	A	C2-N3-C4	-5.29	107.95	110.60
36	5	1911	A	C4-C5-C6	5.29	119.65	117.00
36	5	2583	C	C5-C6-N1	5.29	123.65	121.00
1	2	1206	U	C6-N1-C2	-5.29	117.83	121.00
36	1	731	U	N1-C2-N3	5.29	118.08	114.90
36	1	1583	A	C5-C6-N6	5.29	127.93	123.70
36	1	2157	G	N3-C4-N9	5.29	129.18	126.00
36	1	2172	A	N9-C4-C5	-5.29	103.68	105.80
36	1	2404	A	N3-C4-N9	5.29	131.63	127.40
36	1	2610	G	C8-N9-C4	-5.29	104.28	106.40
36	1	2761	G	C4-C5-N7	-5.29	108.68	110.80
36	1	3116	G	C4-N9-C1'	5.29	133.38	126.50
36	1	3157	U	N3-C4-C5	5.29	117.77	114.60
36	1	3174	A	N9-C4-C5	-5.29	103.68	105.80
38	4	118	C	N3-C4-N4	5.29	121.70	118.00
1	6	374	U	OP1-P-OP2	5.29	127.54	119.60
1	6	789	A	N3-C4-C5	-5.29	123.09	126.80
1	6	1174	C	C2-N1-C1'	5.29	124.62	118.80
36	5	326	U	C2-N1-C1'	5.29	124.05	117.70
36	5	673	U	C6-N1-C1'	5.29	128.61	121.20
36	5	909	G	C4-N9-C1'	5.29	133.38	126.50
36	5	1155	C	O5'-P-OP1	-5.29	100.94	105.70
36	5	1312	C	N3-C4-N4	5.29	121.70	118.00
36	5	3060	C	O5'-P-OP1	-5.29	100.94	105.70
36	1	2890	A	N3-C4-C5	-5.29	123.10	126.80
36	1	3272	C	N3-C2-O2	5.29	125.60	121.90
1	6	566	C	C2-N3-C4	-5.29	117.25	119.90
1	6	1746	A	O5'-P-OP2	5.29	117.05	110.70
36	5	831	G	C5-C6-N1	-5.29	108.86	111.50
36	5	1444	G	C8-N9-C4	-5.29	104.28	106.40
36	5	1594	A	C6-N1-C2	-5.29	115.43	118.60
36	5	2833	A	O5'-P-OP1	5.29	117.05	110.70
1	2	1044	U	C6-N1-C2	-5.29	117.83	121.00
36	1	104	G	N3-C4-C5	5.29	131.25	128.60
36	1	623	U	C5-C4-O4	5.29	129.07	125.90
36	1	1202	A	C5-C6-N6	-5.29	119.47	123.70
59	N3	87	ARG	NE-CZ-NH2	-5.29	117.66	120.30
1	6	30	G	N1-C6-O6	5.29	123.07	119.90
1	6	430	G	N1-C2-N3	5.29	127.07	123.90
1	6	1534	G	N1-C2-N3	-5.29	120.73	123.90
36	5	591	G	C8-N9-C4	5.29	108.52	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	591	G	N1-C2-N3	5.29	127.07	123.90
36	5	722	G	C4-N9-C1'	-5.29	119.62	126.50
36	5	1414	G	C5-N7-C8	-5.29	101.66	104.30
36	5	1660	C	O5'-P-OP1	-5.29	100.94	105.70
36	5	2418	G	OP2-P-O3'	-5.29	93.56	105.20
36	5	2765	C	C5-C6-N1	5.29	123.64	121.00
36	5	2870	C	C2-N1-C1'	-5.29	112.98	118.80
77	q1	11	ARG	NE-CZ-NH2	-5.29	117.66	120.30
36	1	279	U	OP2-P-O3'	-5.29	93.57	105.20
36	1	1393	A	C4-C5-N7	-5.29	108.06	110.70
36	1	1769	G	N7-C8-N9	5.29	115.74	113.10
36	1	1836	C	N3-C4-C5	-5.29	119.78	121.90
1	6	968	U	C2-N3-C4	-5.29	123.83	127.00
36	5	433	A	C8-N9-C4	-5.29	103.69	105.80
36	5	2361	A	OP2-P-O3'	5.29	116.83	105.20
1	2	1756	A	C5-C6-N6	-5.29	119.47	123.70
36	1	176	G	C8-N9-C4	-5.29	104.29	106.40
36	1	2309	A	C4-C5-C6	5.29	119.64	117.00
36	1	3093	C	OP1-P-O3'	5.29	116.83	105.20
36	1	3193	C	N3-C4-C5	-5.29	119.79	121.90
1	6	393	C	C6-N1-C2	5.29	122.41	120.30
1	6	1079	U	C2-N1-C1'	-5.29	111.36	117.70
1	6	1169	G	C4-N9-C1'	5.29	133.37	126.50
36	5	792	G	C6-C5-N7	5.29	133.57	130.40
36	5	896	A	N1-C2-N3	-5.29	126.66	129.30
36	5	1437	C	O5'-P-OP1	-5.29	100.94	105.70
36	5	2301	U	C5-C4-O4	5.29	129.07	125.90
36	5	2801	A	C6-C5-N7	-5.29	128.60	132.30
36	5	2840	C	N3-C2-O2	-5.29	118.20	121.90
36	5	3362	A	C4-N9-C1'	5.29	135.81	126.30
1	2	430	G	C6-C5-N7	-5.28	127.23	130.40
1	2	1311	U	N3-C4-C5	5.28	117.77	114.60
1	2	1499	G	N3-C4-N9	5.28	129.17	126.00
36	1	399	A	O5'-P-OP2	-5.28	100.94	105.70
36	1	418	A	C5-C6-N1	5.28	120.34	117.70
36	1	650	C	O5'-P-OP1	-5.28	100.95	105.70
36	1	670	C	C5-C6-N1	-5.28	118.36	121.00
36	1	1064	A	C5-C6-N6	5.28	127.93	123.70
36	1	1905	G	C5-C6-O6	5.28	131.77	128.60
36	1	2278	C	N1-C2-N3	-5.28	115.50	119.20
36	1	2434	U	C2-N1-C1'	5.28	124.04	117.70
36	1	2610	G	C2-N3-C4	-5.28	109.26	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2662	G	C6-C5-N7	-5.28	127.23	130.40
1	6	756	A	C5-N7-C8	-5.28	101.26	103.90
1	6	959	U	OP2-P-O3'	5.28	116.83	105.20
1	6	1129	U	C6-N1-C2	-5.28	117.83	121.00
36	5	633	C	N3-C2-O2	5.28	125.60	121.90
36	5	641	C	N1-C2-O2	-5.28	115.73	118.90
36	5	888	A	C4-C5-C6	5.28	119.64	117.00
36	5	1882	G	N7-C8-N9	5.28	115.74	113.10
36	5	1912	U	N1-C2-N3	-5.28	111.73	114.90
36	5	1919	G	C2-N3-C4	-5.28	109.26	111.90
36	5	2320	A	C4-C5-C6	5.28	119.64	117.00
37	7	65	G	OP1-P-O3'	-5.28	93.58	105.20
50	m4	135	LEU	CA-CB-CG	5.28	127.45	115.30
1	2	247	A	C4-C5-C6	5.28	119.64	117.00
1	6	40	A	N1-C6-N6	5.28	121.77	118.60
1	6	1142	A	N1-C2-N3	5.28	131.94	129.30
36	5	342	A	N3-C4-C5	-5.28	123.10	126.80
36	5	972	A	N1-C2-N3	5.28	131.94	129.30
36	5	2209	U	C5-C6-N1	-5.28	120.06	122.70
36	5	2414	G	C4-C5-C6	5.28	121.97	118.80
36	5	2696	A	OP2-P-O3'	5.28	116.82	105.20
36	5	3018	C	N3-C4-C5	-5.28	119.79	121.90
37	7	48	U	C6-N1-C1'	-5.28	113.81	121.20
36	1	193	C	C5-C6-N1	5.28	123.64	121.00
36	1	569	A	C2-N3-C4	5.28	113.24	110.60
36	1	1102	A	C8-N9-C4	5.28	107.91	105.80
36	1	1175	C	N3-C2-O2	5.28	125.60	121.90
36	1	1886	A	N1-C6-N6	-5.28	115.43	118.60
36	1	2182	A	C6-N1-C2	-5.28	115.43	118.60
36	1	2210	G	C5-C6-O6	5.28	131.77	128.60
36	1	2276	G	C6-C5-N7	5.28	133.57	130.40
36	1	2803	A	C6-C5-N7	5.28	136.00	132.30
36	1	3328	G	N7-C8-N9	5.28	115.74	113.10
1	6	516	G	N7-C8-N9	5.28	115.74	113.10
1	6	752	A	C5-C6-N6	-5.28	119.48	123.70
1	6	825	U	N3-C4-O4	5.28	123.10	119.40
1	6	1059	U	N1-C2-N3	-5.28	111.73	114.90
1	6	1070	C	O5'-P-OP2	-5.28	100.95	105.70
1	6	1790	A	N1-C6-N6	5.28	121.77	118.60
36	5	594	U	N3-C2-O2	-5.28	118.50	122.20
36	5	889	U	OP2-P-O3'	5.28	116.82	105.20
36	5	969	C	N3-C4-C5	-5.28	119.79	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1192	C	C2-N1-C1'	5.28	124.61	118.80
36	5	2236	G	O5'-P-OP1	-5.28	100.95	105.70
36	5	2713	U	C6-N1-C2	-5.28	117.83	121.00
36	5	2985	C	OP1-P-OP2	-5.28	111.68	119.60
37	7	53	U	N3-C4-O4	5.28	123.10	119.40
1	2	604	A	C2-N3-C4	5.28	113.24	110.60
1	2	1212	G	C4-N9-C1'	5.28	133.36	126.50
36	1	1541	G	N7-C8-N9	5.28	115.74	113.10
1	6	1112	G	C6-N1-C2	-5.28	121.93	125.10
1	6	1789	G	C4-C5-C6	5.28	121.97	118.80
36	5	271	C	O4'-C1'-N1	5.28	112.42	108.20
36	5	2286	U	OP1-P-O3'	5.28	116.81	105.20
36	5	2743	A	C4-C5-C6	5.28	119.64	117.00
36	5	3229	G	N3-C4-C5	-5.28	125.96	128.60
36	5	3234	A	O5'-P-OP1	5.28	117.03	110.70
36	5	3286	G	N3-C4-N9	5.28	129.17	126.00
1	2	104	A	O4'-C1'-N9	5.28	112.42	108.20
1	2	431	C	C2-N3-C4	5.28	122.54	119.90
36	1	287	G	N3-C4-C5	-5.28	125.96	128.60
36	1	1121	U	O5'-P-OP1	5.28	117.03	110.70
36	1	1320	C	C5-C6-N1	-5.28	118.36	121.00
36	1	1399	A	C5-C6-N6	5.28	127.92	123.70
36	1	3217	C	N1-C1'-C2'	5.28	120.86	114.00
1	6	17	C	C2-N1-C1'	5.28	124.61	118.80
36	5	627	U	N1-C2-O2	-5.28	119.11	122.80
36	5	822	G	C8-N9-C1'	-5.28	120.14	127.00
36	5	2148	U	C6-N1-C2	5.28	124.17	121.00
36	5	3045	G	C5-C6-O6	5.28	131.77	128.60
36	5	3187	A	C2-N3-C4	-5.28	107.96	110.60
36	1	67	A	C6-C5-N7	5.28	135.99	132.30
36	1	1533	U	C4-C5-C6	5.28	122.87	119.70
36	1	1634	G	C4-C5-N7	5.28	112.91	110.80
68	O2	66	LEU	CB-CG-CD2	-5.28	102.03	111.00
1	6	337	G	C4-N9-C1'	5.28	133.36	126.50
1	6	1576	A	C5-C6-N6	-5.28	119.48	123.70
36	5	933	A	OP1-P-OP2	5.28	127.51	119.60
36	5	959	C	C6-N1-C1'	5.28	127.13	120.80
36	5	977	C	C6-N1-C2	-5.28	118.19	120.30
36	5	2127	U	N1-C2-N3	5.28	118.06	114.90
36	5	2279	A	C2-N3-C4	-5.28	107.96	110.60
36	5	2284	C	O5'-P-OP1	-5.28	100.95	105.70
36	5	2988	C	O5'-P-OP2	-5.28	100.95	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3085	G	C4-C5-C6	-5.28	115.64	118.80
36	5	3122	A	N3-C4-C5	5.28	130.49	126.80
36	5	3123	A	O5'-P-OP2	-5.28	100.95	105.70
38	8	90	U	C6-N1-C1'	-5.28	113.81	121.20
40	13	300	ARG	NE-CZ-NH2	-5.28	117.66	120.30
36	1	1323	G	N3-C4-C5	-5.27	125.96	128.60
36	1	1820	U	N3-C2-O2	-5.27	118.51	122.20
36	1	2250	G	N1-C2-N2	-5.27	111.45	116.20
36	1	2417	U	OP2-P-O3'	5.27	116.80	105.20
1	6	397	A	N3-C4-C5	5.27	130.49	126.80
1	6	1601	G	N9-C4-C5	5.27	107.51	105.40
36	5	806	A	C5-C6-N6	5.27	127.92	123.70
36	5	1164	G	C5'-C4'-O4'	-5.27	102.77	109.10
36	5	2145	A	C4-C5-C6	5.27	119.64	117.00
1	2	5	U	O5'-P-OP1	5.27	117.03	110.70
1	2	449	C	N1-C2-N3	5.27	122.89	119.20
1	2	1673	G	C4-N9-C1'	5.27	133.35	126.50
36	1	191	U	C2-N1-C1'	5.27	124.03	117.70
36	1	964	G	C8-N9-C4	-5.27	104.29	106.40
36	1	1841	A	O5'-P-OP2	-5.27	100.95	105.70
36	1	2421	U	C5-C6-N1	-5.27	120.06	122.70
36	1	2554	A	N7-C8-N9	-5.27	111.16	113.80
36	1	2864	A	OP2-P-O3'	5.27	116.80	105.20
36	1	2938	G	C5-C6-O6	-5.27	125.44	128.60
38	4	7	U	OP2-P-O3'	5.27	116.80	105.20
1	6	298	C	C2-N1-C1'	5.27	124.60	118.80
1	6	637	C	C5-C4-N4	-5.27	116.51	120.20
36	5	27	C	C2-N3-C4	5.27	122.54	119.90
36	5	365	A	C2-N3-C4	-5.27	107.96	110.60
36	5	656	A	C5-N7-C8	-5.27	101.26	103.90
36	5	1934	G	N9-C4-C5	-5.27	103.29	105.40
36	5	2251	G	N1-C2-N2	-5.27	111.45	116.20
36	5	2726	C	O4'-C1'-N1	5.27	112.42	108.20
36	5	3083	G	N3-C4-C5	5.27	131.24	128.60
37	7	104	A	C5-C6-N1	-5.27	115.06	117.70
37	7	118	A	OP2-P-O3'	5.27	116.80	105.20
38	8	45	C	C2-N3-C4	-5.27	117.26	119.90
1	2	61	A	C4-C5-N7	5.27	113.34	110.70
1	2	1655	A	C4-N9-C1'	-5.27	116.81	126.30
36	1	1134	G	C6-N1-C2	-5.27	121.94	125.10
36	1	2824	G	N3-C4-N9	5.27	129.16	126.00
36	1	2978	U	N3-C2-O2	-5.27	118.51	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	410	A	C6-C5-N7	-5.27	128.61	132.30
1	6	452	A	N1-C2-N3	5.27	131.94	129.30
36	5	52	A	C4-C5-N7	-5.27	108.06	110.70
36	5	590	G	N3-C2-N2	-5.27	116.21	119.90
37	7	109	G	N9-C1'-C2'	-5.27	106.20	112.00
1	2	5	U	C2-N1-C1'	5.27	124.02	117.70
1	2	1002	G	N3-C2-N2	5.27	123.59	119.90
36	1	197	G	C5-N7-C8	-5.27	101.67	104.30
36	1	306	A	C6-N1-C2	-5.27	115.44	118.60
36	1	500	C	N1-C2-O2	-5.27	115.74	118.90
36	1	652	G	N7-C8-N9	-5.27	110.47	113.10
36	1	2323	G	N1-C6-O6	5.27	123.06	119.90
36	1	2631	U	N1-C2-N3	5.27	118.06	114.90
36	1	2660	G	N1-C2-N2	-5.27	111.46	116.20
36	1	2842	U	C2-N1-C1'	5.27	124.02	117.70
36	1	2944	U	N3-C4-C5	5.27	117.76	114.60
38	4	54	A	N1-C2-N3	5.27	131.94	129.30
1	6	112	A	N1-C6-N6	5.27	121.76	118.60
1	6	542	A	N1-C6-N6	-5.27	115.44	118.60
1	6	634	G	N3-C4-C5	-5.27	125.97	128.60
1	6	1198	G	O5'-P-OP1	-5.27	100.96	105.70
36	5	1289	G	C5-N7-C8	5.27	106.94	104.30
36	5	2187	G	N1-C6-O6	-5.27	116.74	119.90
36	5	2653	C	N3-C4-C5	5.27	124.01	121.90
38	8	149	A	C8-N9-C4	-5.27	103.69	105.80
1	2	49	C	C2-N3-C4	5.27	122.53	119.90
1	2	414	C	C6-N1-C2	-5.27	118.19	120.30
1	2	469	C	O5'-P-OP1	5.27	117.02	110.70
1	2	543	C	C5-C6-N1	5.27	123.63	121.00
1	2	1030	A	C5-N7-C8	-5.27	101.27	103.90
36	1	210	U	C6-N1-C2	-5.27	117.84	121.00
36	1	337	G	N1-C2-N3	-5.27	120.74	123.90
36	1	525	C	C5-C6-N1	-5.27	118.37	121.00
36	1	1323	G	C6-N1-C2	-5.27	121.94	125.10
36	1	1545	A	N1-C2-N3	5.27	131.93	129.30
36	1	3288	G	N1-C2-N2	5.27	120.94	116.20
1	6	246	G	N7-C8-N9	5.27	115.73	113.10
1	6	991	G	N3-C4-N9	-5.27	122.84	126.00
1	6	1005	A	N1-C6-N6	-5.27	115.44	118.60
1	6	1180	C	C2-N1-C1'	5.27	124.59	118.80
1	6	1717	G	N1-C6-O6	5.27	123.06	119.90
36	5	394	G	N3-C2-N2	-5.27	116.21	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	888	A	N1-C6-N6	5.27	121.76	118.60
36	5	1653	G	N9-C4-C5	5.27	107.51	105.40
36	5	1885	U	C4-C5-C6	5.27	122.86	119.70
36	5	1947	G	C4-C5-N7	5.27	112.91	110.80
36	5	2755	C	C2-N3-C4	-5.27	117.27	119.90
37	7	69	C	N1-C2-N3	-5.27	115.51	119.20
38	8	24	G	C6-C5-N7	5.27	133.56	130.40
36	1	1143	A	C4-C5-C6	5.27	119.63	117.00
36	1	2174	G	C5-C6-O6	-5.27	125.44	128.60
36	1	2395	G	C4-C5-N7	5.27	112.91	110.80
37	3	67	G	OP2-P-O3'	5.27	116.79	105.20
1	6	880	C	N3-C4-C5	-5.27	119.79	121.90
36	5	968	G	C5-C6-O6	-5.27	125.44	128.60
36	5	2139	A	OP1-P-O3'	5.27	116.78	105.20
36	5	2786	G	C2-N3-C4	-5.27	109.27	111.90
36	5	3172	A	C6-C5-N7	-5.27	128.61	132.30
1	2	535	A	N7-C8-N9	5.26	116.43	113.80
1	2	576	G	C2-N3-C4	-5.26	109.27	111.90
1	2	915	A	N7-C8-N9	5.26	116.43	113.80
36	1	367	A	C8-N9-C4	5.26	107.91	105.80
36	1	2630	C	N3-C4-C5	5.26	124.01	121.90
36	1	3375	A	OP1-P-O3'	5.26	116.78	105.20
1	6	147	A	N7-C8-N9	5.26	116.43	113.80
1	6	608	U	OP1-P-O3'	5.26	116.78	105.20
36	5	1461	A	C5-C6-N1	5.26	120.33	117.70
36	5	1461	A	N9-C1'-C2'	-5.26	106.21	112.00
36	5	1881	A	C4-C5-C6	5.26	119.63	117.00
36	5	2402	A	OP1-P-O3'	5.26	116.78	105.20
38	8	138	A	C5-N7-C8	5.26	106.53	103.90
1	2	1565	C	N3-C2-O2	5.26	125.58	121.90
36	1	2202	C	N3-C4-C5	-5.26	119.80	121.90
38	4	101	U	O5'-P-OP2	-5.26	100.96	105.70
41	L4	150	LEU	CA-CB-CG	5.26	127.41	115.30
1	6	704	C	C6-N1-C2	-5.26	118.19	120.30
36	5	294	U	O4'-C1'-N1	5.26	112.41	108.20
36	5	372	A	C8-N9-C4	-5.26	103.69	105.80
1	2	1127	G	N3-C4-N9	-5.26	122.84	126.00
1	2	1462	G	N3-C4-N9	-5.26	122.84	126.00
36	1	53	G	C5-N7-C8	5.26	106.93	104.30
36	1	377	A	C6-C5-N7	-5.26	128.62	132.30
36	1	438	A	N9-C4-C5	-5.26	103.70	105.80
36	1	1195	A	O4'-C1'-N9	5.26	112.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1320	C	C5-C4-N4	5.26	123.88	120.20
36	1	1401	A	C6-C5-N7	-5.26	128.62	132.30
36	1	1796	G	OP1-P-O3'	5.26	116.78	105.20
36	1	2313	A	OP2-P-O3'	5.26	116.78	105.20
36	1	3277	U	N1-C2-O2	5.26	126.48	122.80
36	5	569	A	C8-N9-C4	5.26	107.91	105.80
36	5	870	G	C4-C5-N7	5.26	112.91	110.80
36	5	966	U	C2-N1-C1'	5.26	124.01	117.70
36	5	1554	U	C6-N1-C1'	-5.26	113.83	121.20
36	5	1766	G	C8-N9-C4	-5.26	104.30	106.40
38	8	107	G	N3-C2-N2	-5.26	116.22	119.90
1	2	1161	C	N3-C2-O2	5.26	125.58	121.90
1	2	1673	G	C8-N9-C4	-5.26	104.30	106.40
36	1	227	G	O5'-P-OP2	-5.26	100.97	105.70
36	1	305	U	C2-N1-C1'	-5.26	111.39	117.70
36	1	1308	A	N3-C4-C5	5.26	130.48	126.80
36	1	1690	C	P-O3'-C3'	-5.26	113.39	119.70
36	1	1838	G	C2-N3-C4	-5.26	109.27	111.90
36	1	1911	A	C5-C6-N1	5.26	120.33	117.70
36	1	3045	G	C8-N9-C4	-5.26	104.30	106.40
38	4	56	G	C8-N9-C1'	-5.26	120.16	127.00
1	6	341	A	O4'-C1'-N9	5.26	112.41	108.20
1	6	795	U	C5-C4-O4	5.26	129.06	125.90
36	5	1051	U	C2-N1-C1'	-5.26	111.39	117.70
36	5	1058	U	C5-C4-O4	-5.26	122.74	125.90
36	5	1126	G	N1-C2-N3	5.26	127.06	123.90
36	5	1208	U	C5-C6-N1	-5.26	120.07	122.70
36	5	2958	A	C6-N1-C2	-5.26	115.44	118.60
36	5	3054	U	N1-C2-N3	5.26	118.06	114.90
36	5	3242	G	C5-N7-C8	5.26	106.93	104.30
38	8	16	G	C5-C6-N1	-5.26	108.87	111.50
36	1	1222	G	N9-C4-C5	-5.26	103.30	105.40
1	6	1035	G	N7-C8-N9	-5.26	110.47	113.10
36	5	854	G	C2-N3-C4	-5.26	109.27	111.90
36	5	2376	G	C6-N1-C2	-5.26	121.94	125.10
36	5	2855	U	N3-C4-O4	5.26	123.08	119.40
40	13	4	ARG	NE-CZ-NH2	-5.26	117.67	120.30
1	2	533	U	OP1-P-OP2	-5.26	111.72	119.60
1	2	1150	G	N3-C4-N9	-5.26	122.85	126.00
36	1	30	G	C8-N9-C1'	5.26	133.83	127.00
36	1	385	A	C5-C6-N6	5.26	127.91	123.70
36	1	428	A	C4-C5-N7	5.26	113.33	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1224	C	N3-C4-C5	-5.26	119.80	121.90
36	1	1540	U	N3-C4-O4	5.26	123.08	119.40
36	1	1715	A	OP1-P-O3'	5.26	116.76	105.20
36	1	1775	G	C4-C5-N7	-5.26	108.70	110.80
36	1	1820	U	N1-C2-O2	5.26	126.48	122.80
36	1	2280	A	C4-C5-C6	5.26	119.63	117.00
36	1	2817	A	N1-C6-N6	-5.26	115.45	118.60
36	1	2893	C	C5-C4-N4	5.26	123.88	120.20
36	1	3044	G	C5-N7-C8	-5.26	101.67	104.30
36	1	3106	A	OP1-P-OP2	5.26	127.49	119.60
36	1	3276	G	C2-N3-C4	-5.26	109.27	111.90
37	3	103	A	N9-C4-C5	5.26	107.90	105.80
54	M8	22	ASP	CB-CG-OD2	5.26	123.03	118.30
77	Q1	13	LEU	CA-CB-CG	5.26	127.39	115.30
1	6	214	G	N3-C4-C5	5.26	131.23	128.60
1	6	415	C	C5-C6-N1	-5.26	118.37	121.00
1	6	1338	C	C5-C4-N4	-5.26	116.52	120.20
8	s6	32	ILE	CB-CA-C	-5.26	101.09	111.60
36	5	609	G	OP1-P-OP2	5.26	127.48	119.60
36	5	992	A	C8-N9-C4	-5.26	103.70	105.80
36	5	1311	G	C4-N9-C1'	5.26	133.33	126.50
36	5	1796	G	N3-C4-C5	-5.26	125.97	128.60
36	5	2253	G	O4'-C1'-N9	-5.26	104.00	108.20
36	5	2282	U	C5-C6-N1	-5.26	120.07	122.70
36	5	2354	C	OP1-P-OP2	5.26	127.49	119.60
36	5	2552	C	N1-C2-O2	5.26	122.05	118.90
36	5	3102	G	O5'-P-OP2	5.26	117.01	110.70
36	5	3112	G	N3-C4-C5	-5.26	125.97	128.60
37	7	14	U	OP1-P-OP2	5.26	127.48	119.60
38	8	12	A	C4-C5-N7	5.26	113.33	110.70
1	2	18	C	C5-C4-N4	-5.25	116.52	120.20
1	2	766	U	N3-C2-O2	-5.25	118.52	122.20
36	1	1534	A	C4-C5-N7	5.25	113.33	110.70
36	1	2828	G	C4-N9-C1'	5.25	133.33	126.50
36	1	2854	U	C5-C6-N1	-5.25	120.07	122.70
36	1	3256	G	O4'-C1'-N9	-5.25	104.00	108.20
1	6	294	C	C5-C6-N1	-5.25	118.37	121.00
1	6	430	G	C6-N1-C2	-5.25	121.95	125.10
36	5	794	U	OP1-P-O3'	5.25	116.76	105.20
36	5	806	A	C5-N7-C8	-5.25	101.27	103.90
36	5	1542	G	N1-C2-N3	5.25	127.05	123.90
36	5	1877	U	C4-C5-C6	5.25	122.85	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	429	G	N7-C8-N9	5.25	115.73	113.10
36	1	148	G	N1-C2-N2	-5.25	111.47	116.20
36	1	928	C	C2-N1-C1'	-5.25	113.02	118.80
36	1	942	U	OP1-P-OP2	-5.25	111.72	119.60
36	1	1905	G	C6-C5-N7	5.25	133.55	130.40
36	1	2384	A	C2-N3-C4	5.25	113.23	110.60
36	1	2649	A	O5'-P-OP1	-5.25	100.97	105.70
36	1	2912	G	N9-C4-C5	5.25	107.50	105.40
1	6	107	C	N3-C4-N4	5.25	121.68	118.00
1	6	811	A	C8-N9-C4	-5.25	103.70	105.80
1	6	1671	A	C6-N1-C2	-5.25	115.45	118.60
36	5	71	A	C8-N9-C4	5.25	107.90	105.80
36	5	729	C	C6-N1-C2	-5.25	118.20	120.30
36	5	749	C	C6-N1-C2	-5.25	118.20	120.30
36	5	1185	C	N1-C2-O2	-5.25	115.75	118.90
36	5	1783	U	O5'-P-OP2	-5.25	100.97	105.70
36	5	2901	G	OP1-P-OP2	-5.25	111.72	119.60
36	5	2944	U	C6-N1-C2	-5.25	117.85	121.00
36	5	3200	G	C4-N9-C1'	5.25	133.33	126.50
36	5	3312	U	C5-C6-N1	-5.25	120.07	122.70
36	1	385	A	N3-C4-N9	-5.25	123.20	127.40
36	1	592	A	N1-C6-N6	5.25	121.75	118.60
36	1	1124	U	N1-C2-N3	5.25	118.05	114.90
36	1	1927	G	N3-C4-N9	5.25	129.15	126.00
36	1	2701	U	N3-C4-O4	5.25	123.08	119.40
36	1	3106	A	N9-C4-C5	5.25	107.90	105.80
37	3	118	A	O5'-P-OP2	-5.25	100.97	105.70
38	4	41	A	C8-N9-C4	-5.25	103.70	105.80
1	6	120	U	OP2-P-O3'	5.25	116.75	105.20
36	5	907	G	C5-C6-O6	-5.25	125.45	128.60
36	5	1053	A	OP2-P-O3'	5.25	116.75	105.20
36	5	1154	A	C6-N1-C2	-5.25	115.45	118.60
36	5	1282	G	C2-N3-C4	-5.25	109.27	111.90
36	5	2748	A	C2-N3-C4	-5.25	107.97	110.60
36	5	3058	U	C2-N3-C4	5.25	130.15	127.00
36	5	3060	C	N1-C2-O2	-5.25	115.75	118.90
36	5	3378	C	N3-C4-C5	5.25	124.00	121.90
38	8	12	A	OP2-P-O3'	5.25	116.75	105.20
1	2	11	A	C6-N1-C2	-5.25	115.45	118.60
1	2	346	G	N3-C4-C5	5.25	131.22	128.60
36	1	2755	C	C2-N3-C4	-5.25	117.28	119.90
38	4	111	A	N1-C2-N3	-5.25	126.67	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1452	U	C5-C4-O4	-5.25	122.75	125.90
1	6	1609	U	C6-N1-C1'	5.25	128.55	121.20
36	5	959	C	OP1-P-OP2	-5.25	111.72	119.60
36	5	1716	U	OP1-P-O3'	5.25	116.75	105.20
36	5	2302	G	N1-C2-N2	-5.25	111.47	116.20
36	5	3065	G	C5-C6-N1	-5.25	108.88	111.50
1	2	338	C	C6-N1-C2	-5.25	118.20	120.30
1	2	362	G	N1-C6-O6	5.25	123.05	119.90
36	1	107	A	C4-C5-C6	-5.25	114.38	117.00
36	1	321	C	N3-C4-C5	-5.25	119.80	121.90
36	1	342	A	N3-C4-C5	5.25	130.47	126.80
36	1	996	A	N3-C4-N9	5.25	131.60	127.40
36	1	1115	G	O4'-C1'-N9	-5.25	104.00	108.20
36	1	2184	U	C2-N1-C1'	5.25	124.00	117.70
36	1	2238	G	N1-C6-O6	-5.25	116.75	119.90
36	1	2714	G	C2-N3-C4	-5.25	109.28	111.90
36	1	2760	C	C6-N1-C1'	5.25	127.10	120.80
36	1	3248	C	O5'-P-OP2	5.25	117.00	110.70
36	1	3308	C	C5-C4-N4	5.25	123.88	120.20
1	6	1137	A	N9-C4-C5	-5.25	103.70	105.80
1	6	1704	U	N1-C2-O2	5.25	126.47	122.80
36	5	201	A	C2-N3-C4	-5.25	107.98	110.60
36	5	229	G	C5-N7-C8	-5.25	101.67	104.30
36	5	1152	G	P-O3'-C3'	5.25	126.00	119.70
36	5	1525	G	N3-C4-C5	-5.25	125.98	128.60
36	5	1871	U	C5-C4-O4	-5.25	122.75	125.90
36	5	2357	A	N1-C6-N6	-5.25	115.45	118.60
38	8	14	C	N3-C4-C5	-5.25	119.80	121.90
1	2	601	A	C4-C5-C6	5.25	119.62	117.00
1	2	1027	A	C8-N9-C4	-5.25	103.70	105.80
1	2	1266	U	N3-C2-O2	5.25	125.87	122.20
36	1	403	C	N1-C2-N3	5.25	122.87	119.20
36	1	558	U	O5'-P-OP2	-5.25	100.98	105.70
36	1	906	A	C4-C5-C6	5.25	119.62	117.00
36	1	1153	A	C8-N9-C1'	-5.25	118.26	127.70
36	1	1524	A	C2-N3-C4	5.25	113.22	110.60
36	1	2127	U	C4-C5-C6	-5.25	116.55	119.70
36	1	2865	U	C4-C5-C6	5.25	122.85	119.70
36	1	3310	A	C5-N7-C8	-5.25	101.28	103.90
36	1	3395	G	O5'-P-OP2	-5.25	100.98	105.70
38	4	104	A	O5'-P-OP2	5.25	117.00	110.70
40	L3	146	ARG	NE-CZ-NH1	5.25	122.92	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	360	A	C2-N3-C4	-5.25	107.98	110.60
1	6	1155	G	N1-C6-O6	5.25	123.05	119.90
1	6	1551	U	N1-C2-O2	-5.25	119.13	122.80
1	6	1614	A	N9-C4-C5	-5.25	103.70	105.80
36	5	351	A	C2-N3-C4	5.25	113.22	110.60
36	5	962	A	N7-C8-N9	5.25	116.42	113.80
36	5	1191	U	C5-C4-O4	5.25	129.05	125.90
36	5	1329	U	C5-C4-O4	-5.25	122.75	125.90
36	5	1398	U	N3-C2-O2	-5.25	118.53	122.20
36	5	2243	A	C4-C5-C6	5.25	119.62	117.00
36	5	2394	G	C4-C5-N7	5.25	112.90	110.80
36	5	2620	G	N1-C2-N2	-5.25	111.48	116.20
36	5	2768	U	C2-N1-C1'	-5.25	111.41	117.70
36	5	2886	U	OP1-P-OP2	5.25	127.47	119.60
38	8	66	A	C2-N3-C4	-5.25	107.98	110.60
58	n2	50	LEU	CA-CB-CG	5.25	127.37	115.30
1	2	615	A	N3-C4-C5	-5.25	123.13	126.80
1	2	1201	G	C8-N9-C4	5.25	108.50	106.40
36	1	166	C	N3-C2-O2	-5.25	118.23	121.90
36	1	625	G	C8-N9-C4	5.25	108.50	106.40
36	1	1060	U	N1-C2-N3	5.25	118.05	114.90
36	1	1367	G	N7-C8-N9	5.25	115.72	113.10
36	1	1881	A	OP2-P-O3'	5.25	116.74	105.20
36	1	2343	C	C6-N1-C1'	-5.25	114.50	120.80
36	1	2882	U	C5-C4-O4	5.25	129.05	125.90
36	5	347	G	OP1-P-O3'	5.25	116.74	105.20
36	5	928	C	OP1-P-O3'	5.25	116.74	105.20
36	5	1536	G	C5-C6-N1	-5.25	108.88	111.50
37	7	10	C	C6-N1-C2	5.25	122.40	120.30
1	2	350	U	C6-N1-C1'	5.24	128.54	121.20
36	1	24	G	N7-C8-N9	-5.24	110.48	113.10
36	1	58	G	OP1-P-OP2	-5.24	111.73	119.60
36	1	1939	G	N1-C2-N3	5.24	127.05	123.90
36	1	3263	G	N3-C2-N2	5.24	123.57	119.90
37	3	17	A	N1-C2-N3	5.24	131.92	129.30
1	6	62	A	N1-C6-N6	-5.24	115.45	118.60
1	6	533	U	C5-C6-N1	-5.24	120.08	122.70
1	6	555	A	C5-C6-N1	5.24	120.32	117.70
1	6	560	U	N3-C4-O4	5.24	123.07	119.40
1	6	1077	C	C6-N1-C2	5.24	122.40	120.30
1	6	1298	U	N1-C2-O2	5.24	126.47	122.80
1	6	1420	C	C4-C5-C6	5.24	120.02	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1512	G	N9-C4-C5	-5.24	103.30	105.40
36	5	590	G	C5-C6-O6	5.24	131.75	128.60
36	5	656	A	C4-C5-N7	5.24	113.32	110.70
36	5	918	C	C5-C4-N4	-5.24	116.53	120.20
36	5	1658	G	C4-C5-C6	5.24	121.95	118.80
36	5	2989	U	OP1-P-O3'	5.24	116.74	105.20
36	5	3196	U	C2-N1-C1'	-5.24	111.41	117.70
1	2	414	C	C5-C4-N4	-5.24	116.53	120.20
1	2	1071	U	N3-C4-C5	-5.24	111.45	114.60
36	1	809	G	OP1-P-O3'	5.24	116.73	105.20
36	1	2396	G	O5'-P-OP2	-5.24	100.98	105.70
1	6	797	G	N3-C4-N9	-5.24	122.86	126.00
1	6	1753	A	O5'-P-OP2	5.24	116.99	110.70
36	5	387	A	N1-C6-N6	-5.24	115.45	118.60
36	5	1290	A	N1-C6-N6	5.24	121.75	118.60
36	5	2186	U	N3-C4-C5	-5.24	111.45	114.60
36	5	2276	G	C5-C6-O6	5.24	131.75	128.60
36	5	3146	G	C8-N9-C4	5.24	108.50	106.40
1	2	696	C	N3-C2-O2	-5.24	118.23	121.90
1	2	1291	G	C4-C5-N7	5.24	112.90	110.80
1	2	1462	G	C8-N9-C1'	5.24	133.81	127.00
36	1	1456	A	N9-C4-C5	5.24	107.90	105.80
36	1	1543	G	N7-C8-N9	5.24	115.72	113.10
36	1	1566	A	C8-N9-C4	-5.24	103.70	105.80
37	3	15	C	C6-N1-C2	5.24	122.40	120.30
38	4	139	U	N3-C2-O2	-5.24	118.53	122.20
1	6	68	A	N7-C8-N9	5.24	116.42	113.80
1	6	555	A	C2-N3-C4	5.24	113.22	110.60
1	6	996	U	C6-N1-C2	-5.24	117.86	121.00
1	6	1445	G	N3-C4-N9	-5.24	122.86	126.00
36	5	396	A	C5-C6-N6	5.24	127.89	123.70
36	5	398	A	OP1-P-O3'	5.24	116.73	105.20
36	5	813	G	N3-C2-N2	-5.24	116.23	119.90
36	5	1715	A	O4'-C1'-N9	-5.24	104.01	108.20
36	5	2900	A	C6-C5-N7	-5.24	128.63	132.30
1	2	1101	G	N1-C6-O6	-5.24	116.76	119.90
1	2	1464	G	N7-C8-N9	5.24	115.72	113.10
36	1	577	C	C5-C6-N1	-5.24	118.38	121.00
36	1	966	U	N3-C4-O4	5.24	123.07	119.40
36	1	1400	G	C6-C5-N7	-5.24	127.26	130.40
36	1	1559	A	C4-C5-N7	5.24	113.32	110.70
36	1	1924	U	N3-C2-O2	-5.24	118.53	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2157	G	C4-C5-C6	5.24	121.94	118.80
37	3	79	A	C6-N1-C2	5.24	121.74	118.60
52	M6	149	TYR	N-CA-C	5.24	125.15	111.00
1	6	1035	G	C8-N9-C4	5.24	108.50	106.40
1	6	1041	G	N1-C2-N3	5.24	127.04	123.90
1	6	1794	A	OP1-P-O3'	5.24	116.73	105.20
36	5	373	A	C8-N9-C4	-5.24	103.70	105.80
36	5	990	U	O5'-P-OP1	5.24	116.99	110.70
36	5	1113	G	O5'-P-OP2	5.24	116.99	110.70
36	5	1598	G	N3-C4-N9	5.24	129.14	126.00
36	5	1927	G	N9-C4-C5	-5.24	103.30	105.40
36	5	1947	G	C5-C6-O6	-5.24	125.46	128.60
36	5	2793	G	N1-C2-N2	5.24	120.92	116.20
36	5	2943	G	O5'-P-OP2	-5.24	100.98	105.70
36	5	3369	G	N1-C2-N3	5.24	127.04	123.90
37	7	1	G	C5-N7-C8	-5.24	101.68	104.30
37	7	38	U	N3-C4-C5	5.24	117.74	114.60
51	m5	67	ARG	N-CA-C	5.24	125.15	111.00
1	2	73	U	OP1-P-O3'	5.24	116.72	105.20
36	1	495	G	N3-C2-N2	-5.24	116.23	119.90
36	1	3330	A	N3-C4-C5	-5.24	123.13	126.80
1	6	617	U	N3-C4-O4	5.24	123.07	119.40
1	6	1269	U	C2-N1-C1'	5.24	123.98	117.70
36	5	947	G	C4-C5-C6	5.24	121.94	118.80
36	5	996	A	O5'-P-OP1	5.24	116.98	110.70
36	5	1693	C	C6-N1-C2	5.24	122.39	120.30
36	5	1711	C	C6-N1-C2	5.24	122.39	120.30
36	5	2404	A	P-O3'-C3'	-5.24	113.42	119.70
36	5	2751	G	O5'-P-OP2	5.24	116.98	110.70
1	2	347	G	N7-C8-N9	5.24	115.72	113.10
1	2	403	G	N9-C4-C5	5.24	107.49	105.40
36	1	625	G	C4-C5-N7	-5.24	108.71	110.80
36	1	2335	G	O5'-P-OP1	-5.24	100.99	105.70
36	1	2600	C	C2-N1-C1'	5.24	124.56	118.80
36	1	2740	A	C5-N7-C8	-5.24	101.28	103.90
36	1	2922	G	OP2-P-O3'	-5.24	93.68	105.20
36	1	2987	A	N1-C6-N6	5.24	121.74	118.60
36	1	3117	C	N1-C2-O2	5.24	122.04	118.90
36	1	3250	U	N1-C2-O2	5.24	126.46	122.80
37	3	52	G	P-O3'-C3'	5.24	125.98	119.70
37	3	79	A	C5-N7-C8	-5.24	101.28	103.90
1	6	395	U	OP2-P-O3'	5.24	116.72	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1149	G	N3-C2-N2	-5.24	116.23	119.90
1	6	1604	U	C2-N3-C4	5.24	130.14	127.00
36	5	3325	G	N3-C2-N2	5.24	123.56	119.90
36	5	3343	G	N1-C2-N2	-5.24	111.49	116.20
37	7	7	G	N3-C2-N2	-5.24	116.23	119.90
1	2	571	G	N3-C4-C5	5.23	131.22	128.60
1	2	1127	G	N7-C8-N9	5.23	115.72	113.10
1	2	1643	U	C5-C6-N1	-5.23	120.08	122.70
36	1	1845	G	N3-C2-N2	-5.23	116.24	119.90
36	1	2860	U	C2-N3-C4	5.23	130.14	127.00
37	3	55	A	C8-N9-C4	-5.23	103.71	105.80
1	6	633	U	C5-C6-N1	-5.23	120.08	122.70
36	5	1466	G	C4-C5-N7	5.23	112.89	110.80
36	5	2291	A	P-O3'-C3'	-5.23	113.42	119.70
37	7	101	G	C4-C5-N7	5.23	112.89	110.80
1	2	62	A	N1-C6-N6	5.23	121.74	118.60
1	2	89	G	N3-C4-N9	-5.23	122.86	126.00
1	2	453	U	C6-N1-C2	-5.23	117.86	121.00
36	1	41	G	C4-C5-C6	-5.23	115.66	118.80
36	1	622	A	C6-N1-C2	5.23	121.74	118.60
36	1	1216	C	C6-N1-C2	-5.23	118.21	120.30
36	1	1430	U	C5-C4-O4	-5.23	122.76	125.90
36	1	1459	C	N1-C2-O2	5.23	122.04	118.90
36	1	2218	G	N9-C4-C5	-5.23	103.31	105.40
36	1	2312	A	C4-C5-C6	-5.23	114.38	117.00
36	1	2598	G	C4-C5-N7	5.23	112.89	110.80
36	1	2803	A	C4-C5-N7	-5.23	108.08	110.70
36	1	2969	A	N3-C4-C5	5.23	130.46	126.80
37	3	101	G	N3-C4-C5	5.23	131.22	128.60
38	4	148	G	C4-C5-N7	5.23	112.89	110.80
1	6	1409	G	O5'-P-OP2	5.23	116.98	110.70
36	5	533	A	C2-N3-C4	5.23	113.22	110.60
36	5	1407	A	N1-C6-N6	-5.23	115.46	118.60
36	5	3019	U	C6-N1-C2	-5.23	117.86	121.00
1	2	440	U	N3-C2-O2	5.23	125.86	122.20
1	2	555	A	N3-C4-C5	-5.23	123.14	126.80
1	2	1438	G	N1-C6-O6	5.23	123.04	119.90
36	1	45	A	C2-N3-C4	-5.23	107.98	110.60
36	1	2348	A	N1-C2-N3	5.23	131.91	129.30
36	1	2420	C	N3-C2-O2	-5.23	118.24	121.90
36	1	2979	U	O5'-P-OP2	-5.23	100.99	105.70
1	6	1403	C	C6-N1-C2	5.23	122.39	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	784	A	OP2-P-O3'	5.23	116.71	105.20
36	5	915	A	N3-C4-C5	-5.23	123.14	126.80
36	5	1518	U	N3-C4-C5	-5.23	111.46	114.60
36	5	1939	G	OP2-P-O3'	5.23	116.71	105.20
36	5	2230	C	C6-N1-C2	5.23	122.39	120.30
36	5	2411	U	O5'-P-OP1	5.23	116.98	110.70
36	5	2622	C	N3-C4-C5	-5.23	119.81	121.90
36	5	2678	A	OP2-P-O3'	5.23	116.71	105.20
36	5	3016	A	O5'-P-OP2	-5.23	100.99	105.70
36	5	3044	G	C8-N9-C4	-5.23	104.31	106.40
36	5	3083	G	C5-C6-O6	-5.23	125.46	128.60
1	6	768	C	N3-C2-O2	5.23	125.56	121.90
1	6	1753	A	C4-C5-N7	-5.23	108.08	110.70
36	5	297	G	C8-N9-C1'	-5.23	120.20	127.00
36	5	1127	G	C5-C6-O6	5.23	131.74	128.60
36	5	2280	A	O5'-P-OP2	-5.23	100.99	105.70
36	5	3387	U	N3-C4-O4	5.23	123.06	119.40
1	2	849	C	N3-C4-C5	-5.23	119.81	121.90
36	1	207	U	C2-N3-C4	5.23	130.14	127.00
36	1	1606	U	O5'-P-OP1	-5.23	101.00	105.70
36	1	1775	G	C5-C6-N1	-5.23	108.89	111.50
36	1	2391	G	C2-N3-C4	-5.23	109.29	111.90
37	3	117	A	N1-C6-N6	5.23	121.74	118.60
38	4	113	U	C4-C5-C6	5.23	122.84	119.70
1	6	1750	A	C5-C6-N1	-5.23	115.09	117.70
36	5	89	A	C5-C6-N6	5.23	127.88	123.70
36	5	962	A	N1-C2-N3	5.23	131.91	129.30
36	5	1220	U	N3-C4-C5	5.23	117.74	114.60
36	5	3171	U	C2-N3-C4	-5.23	123.86	127.00
36	5	3247	G	N3-C4-N9	5.23	129.14	126.00
39	12	9	ARG	NE-CZ-NH2	-5.23	117.69	120.30
1	2	570	A	N1-C6-N6	5.23	121.74	118.60
36	1	402	A	C5-N7-C8	-5.23	101.29	103.90
36	1	425	G	C5-C6-N1	5.23	114.11	111.50
36	1	1728	G	C6-C5-N7	-5.23	127.27	130.40
36	1	2629	U	C6-N1-C2	-5.23	117.86	121.00
36	1	3079	U	O5'-P-OP2	5.23	116.97	110.70
38	4	90	U	O4'-C1'-N1	-5.23	104.02	108.20
36	5	101	G	OP2-P-O3'	5.23	116.70	105.20
36	5	596	C	O5'-P-OP1	-5.23	101.00	105.70
36	5	641	C	OP1-P-O3'	5.23	116.70	105.20
36	5	1217	A	O5'-P-OP2	-5.23	101.00	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2254	U	C6-N1-C2	5.23	124.14	121.00
1	2	830	U	C2-N1-C1'	5.22	123.97	117.70
1	2	1134	C	C4-C5-C6	5.22	120.01	117.40
36	1	342	A	OP1-P-O3'	5.22	116.69	105.20
36	1	2651	G	C8-N9-C1'	-5.22	120.21	127.00
36	1	2908	G	C6-C5-N7	-5.22	127.27	130.40
36	1	3106	A	C5-C6-N6	5.22	127.88	123.70
36	1	3308	C	N1-C2-N3	5.22	122.86	119.20
42	L5	21	ARG	NE-CZ-NH2	-5.22	117.69	120.30
1	6	312	A	N9-C4-C5	5.22	107.89	105.80
1	6	453	U	C6-N1-C2	-5.22	117.86	121.00
1	6	625	C	OP2-P-O3'	5.22	116.69	105.20
1	6	1280	C	N1-C2-O2	-5.22	115.77	118.90
1	6	1523	G	C6-C5-N7	-5.22	127.27	130.40
25	d3	57	LEU	CA-CB-CG	-5.22	103.28	115.30
36	5	880	G	N9-C4-C5	5.22	107.49	105.40
36	5	1530	U	N3-C4-O4	5.22	123.06	119.40
36	5	1942	U	C6-N1-C2	-5.22	117.86	121.00
36	5	2248	C	C5-C6-N1	-5.22	118.39	121.00
36	5	2661	G	N3-C2-N2	5.22	123.56	119.90
36	5	2922	G	N1-C2-N3	5.22	127.03	123.90
36	5	3391	A	C5-C6-N1	-5.22	115.09	117.70
59	n3	17	LEU	CA-CB-CG	-5.22	103.29	115.30
36	1	2145	A	C4-C5-N7	5.22	113.31	110.70
36	1	2378	C	C5-C4-N4	-5.22	116.54	120.20
1	6	452	A	N7-C8-N9	-5.22	111.19	113.80
36	5	649	A	N3-C4-N9	5.22	131.58	127.40
36	5	2280	A	C6-C5-N7	-5.22	128.65	132.30
36	5	3026	G	N1-C2-N3	5.22	127.03	123.90
36	5	3290	G	N7-C8-N9	5.22	115.71	113.10
37	7	98	C	C4-C5-C6	5.22	120.01	117.40
1	2	468	A	N7-C8-N9	-5.22	111.19	113.80
36	1	368	G	N1-C2-N2	-5.22	111.50	116.20
36	1	1317	A	C8-N9-C4	-5.22	103.71	105.80
36	1	1578	C	C6-N1-C1'	-5.22	114.53	120.80
36	1	2648	G	C5-C6-O6	-5.22	125.47	128.60
36	1	2828	G	C8-N9-C4	-5.22	104.31	106.40
1	6	393	C	N3-C4-N4	-5.22	114.34	118.00
1	6	1469	A	C5-C6-N1	5.22	120.31	117.70
36	5	1401	A	C5-C6-N1	5.22	120.31	117.70
36	5	2200	U	N3-C2-O2	-5.22	118.55	122.20
1	2	810	G	N7-C8-N9	5.22	115.71	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1241	G	C4-C5-N7	5.22	112.89	110.80
36	1	1171	G	C6-C5-N7	5.22	133.53	130.40
36	1	2912	G	O5'-P-OP1	-5.22	101.00	105.70
36	1	2980	U	C6-N1-C2	-5.22	117.87	121.00
36	1	3080	G	C5-C6-N1	5.22	114.11	111.50
38	4	60	U	C2-N1-C1'	-5.22	111.44	117.70
1	6	11	A	C8-N9-C4	5.22	107.89	105.80
1	6	969	C	C2-N1-C1'	5.22	124.54	118.80
1	6	1413	U	OP2-P-O3'	5.22	116.68	105.20
1	6	1489	U	N3-C4-O4	-5.22	115.75	119.40
1	6	1764	C	C2-N3-C4	-5.22	117.29	119.90
36	5	162	G	C5-C6-N1	5.22	114.11	111.50
36	5	1046	A	C5-C6-N6	5.22	127.88	123.70
36	5	1159	A	N3-C4-C5	5.22	130.45	126.80
36	5	2802	A	O4'-C1'-N9	5.22	112.38	108.20
37	7	53	U	C4-C5-C6	5.22	122.83	119.70
37	7	68	C	C5-C4-N4	5.22	123.85	120.20
36	1	1488	G	N7-C8-N9	5.22	115.71	113.10
36	1	2194	G	OP2-P-O3'	5.22	116.68	105.20
36	1	2198	A	C5-C6-N6	5.22	127.87	123.70
36	1	2326	A	N3-C4-C5	5.22	130.45	126.80
36	1	2522	G	C4-N9-C1'	5.22	133.28	126.50
36	1	2699	G	C5-C6-O6	-5.22	125.47	128.60
36	1	2753	G	C2-N3-C4	5.22	114.51	111.90
37	3	90	U	OP2-P-O3'	5.22	116.68	105.20
36	5	390	G	OP2-P-O3'	5.22	116.68	105.20
36	5	1193	A	OP2-P-O3'	5.22	116.68	105.20
36	5	1222	G	N3-C4-C5	-5.22	125.99	128.60
67	o1	64	VAL	CB-CA-C	-5.22	101.49	111.40
1	2	352	A	O4'-C1'-N9	-5.22	104.03	108.20
1	2	397	A	C8-N9-C4	5.22	107.89	105.80
1	2	1764	C	C6-N1-C2	5.22	122.39	120.30
36	1	315	C	C2-N3-C4	5.22	122.51	119.90
36	1	1155	C	C6-N1-C2	5.22	122.39	120.30
36	1	2283	G	N3-C2-N2	-5.22	116.25	119.90
36	1	2678	A	C6-N1-C2	-5.22	115.47	118.60
36	1	2716	U	OP2-P-O3'	5.22	116.68	105.20
37	3	63	A	C8-N9-C4	5.22	107.89	105.80
38	4	145	U	C6-N1-C2	5.22	124.13	121.00
1	6	6	G	C6-C5-N7	-5.22	127.27	130.40
1	6	144	U	C6-N1-C2	-5.22	117.87	121.00
1	6	144	U	O4'-C1'-N1	5.22	112.37	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	538	A	N1-C6-N6	5.22	121.73	118.60
1	6	1247	U	N1-C2-O2	5.22	126.45	122.80
1	6	1522	U	OP1-P-OP2	5.22	127.42	119.60
1	6	1700	C	P-O3'-C3'	5.22	125.96	119.70
36	5	810	A	C6-C5-N7	-5.22	128.65	132.30
36	5	1329	U	OP1-P-O3'	5.22	116.68	105.20
36	5	1520	G	C2-N3-C4	5.22	114.51	111.90
36	5	1931	U	C6-N1-C2	5.22	124.13	121.00
36	5	2674	A	C6-C5-N7	5.22	135.95	132.30
36	5	2703	A	C8-N9-C1'	-5.22	118.31	127.70
36	5	2705	A	N9-C4-C5	5.22	107.89	105.80
36	5	2768	U	C2-N3-C4	-5.22	123.87	127.00
36	5	3006	A	C6-N1-C2	-5.22	115.47	118.60
36	5	3227	A	C5-N7-C8	-5.22	101.29	103.90
37	7	102	A	C4-C5-C6	-5.22	114.39	117.00
38	8	38	U	C2-N1-C1'	5.22	123.96	117.70
1	2	546	U	OP2-P-O3'	5.21	116.67	105.20
1	2	1596	C	C6-N1-C1'	-5.21	114.54	120.80
36	1	85	A	N3-C4-N9	-5.21	123.23	127.40
36	1	331	G	O4'-C1'-N9	-5.21	104.03	108.20
36	1	1065	A	C2-N3-C4	-5.21	107.99	110.60
36	1	1233	G	C8-N9-C4	-5.21	104.31	106.40
36	1	2368	A	C5-N7-C8	-5.21	101.29	103.90
36	1	2424	A	N3-C4-N9	-5.21	123.23	127.40
36	1	2713	U	C6-N1-C1'	-5.21	113.90	121.20
36	1	3221	C	O5'-P-OP1	-5.21	101.01	105.70
41	L4	327	LEU	CA-CB-CG	5.21	127.29	115.30
1	6	109	G	C8-N9-C4	5.21	108.49	106.40
1	6	347	G	C5-C6-O6	-5.21	125.47	128.60
1	6	1004	U	C2-N3-C4	-5.21	123.87	127.00
1	6	1431	C	N1-C2-O2	5.21	122.03	118.90
36	5	642	U	C2-N1-C1'	-5.21	111.44	117.70
36	5	858	A	C5-C6-N1	5.21	120.31	117.70
36	5	1007	U	O5'-P-OP2	5.21	116.96	110.70
36	5	1125	U	O5'-P-OP1	-5.21	101.01	105.70
36	5	2944	U	C2-N3-C4	-5.21	123.87	127.00
1	2	1114	G	C2-N3-C4	5.21	114.51	111.90
1	2	1789	G	C5-C6-O6	-5.21	125.47	128.60
36	5	647	A	C2-N3-C4	-5.21	107.99	110.60
36	5	2815	G	N1-C6-O6	5.21	123.03	119.90
37	7	97	A	N1-C6-N6	5.21	121.73	118.60
1	2	162	A	C8-N9-C4	-5.21	103.72	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1594	G	N7-C8-N9	5.21	115.70	113.10
36	1	504	A	N1-C2-N3	5.21	131.91	129.30
36	1	742	G	C8-N9-C4	-5.21	104.31	106.40
36	1	1307	G	N3-C2-N2	-5.21	116.25	119.90
36	1	1355	A	C6-N1-C2	5.21	121.73	118.60
36	1	2650	U	N3-C2-O2	-5.21	118.55	122.20
36	1	2750	U	N3-C2-O2	-5.21	118.55	122.20
36	1	2957	G	C8-N9-C4	-5.21	104.31	106.40
1	6	128	U	O4'-C1'-N1	5.21	112.37	108.20
1	6	179	A	C4-C5-C6	5.21	119.61	117.00
1	6	247	A	C2-N3-C4	-5.21	107.99	110.60
1	6	473	A	C5-N7-C8	5.21	106.51	103.90
1	6	639	U	C4-C5-C6	-5.21	116.57	119.70
1	6	972	G	N1-C2-N3	5.21	127.03	123.90
1	6	1134	C	C4-C5-C6	5.21	120.01	117.40
3	s1	233	GLY	N-CA-C	5.21	126.13	113.10
36	5	1176	C	N3-C4-C5	5.21	123.98	121.90
36	5	3124	G	N1-C6-O6	5.21	123.03	119.90
38	8	48	A	C4-C5-C6	-5.21	114.39	117.00
36	1	645	A	N1-C2-N3	5.21	131.91	129.30
36	1	697	A	N9-C1'-C2'	-5.21	106.27	112.00
36	1	1316	C	OP1-P-OP2	5.21	127.42	119.60
36	1	2137	U	C4-C5-C6	5.21	122.83	119.70
36	1	2183	A	C6-N1-C2	-5.21	115.47	118.60
36	1	2407	C	N3-C4-C5	-5.21	119.82	121.90
1	6	1139	A	N7-C8-N9	5.21	116.41	113.80
1	6	1366	U	C6-N1-C2	5.21	124.13	121.00
36	5	2322	C	N3-C2-O2	-5.21	118.25	121.90
37	7	21	G	N3-C4-N9	-5.21	122.87	126.00
1	2	98	U	N3-C4-O4	5.21	123.05	119.40
1	2	536	C	C2-N1-C1'	5.21	124.53	118.80
1	2	949	C	C5-C6-N1	5.21	123.60	121.00
1	2	1773	C	N3-C4-N4	5.21	121.65	118.00
36	1	276	U	N1-C2-O2	-5.21	119.15	122.80
36	1	652	G	C4-C5-N7	-5.21	108.72	110.80
36	1	979	U	C6-N1-C1'	5.21	128.49	121.20
36	1	1175	C	OP1-P-OP2	5.21	127.41	119.60
36	1	1787	A	C8-N9-C4	5.21	107.88	105.80
36	1	2407	C	C4-C5-C6	5.21	120.00	117.40
38	4	55	U	OP2-P-O3'	5.21	116.66	105.20
38	4	103	G	C6-C5-N7	-5.21	127.27	130.40
56	N0	144	LEU	CA-CB-CG	-5.21	103.32	115.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	751	G	C4-N9-C1'	-5.21	119.73	126.50
1	6	1276	U	OP1-P-OP2	-5.21	111.79	119.60
1	6	1475	A	C2-N3-C4	-5.21	108.00	110.60
1	6	1556	A	C2-N3-C4	-5.21	108.00	110.60
36	5	514	G	O4'-C1'-N9	5.21	112.37	108.20
36	5	3218	A	C2-N3-C4	-5.21	108.00	110.60
1	2	333	A	C6-N1-C2	-5.21	115.48	118.60
1	2	777	C	N1-C2-O2	5.21	122.02	118.90
36	1	330	G	N3-C4-C5	-5.21	126.00	128.60
36	1	402	A	C5-C6-N1	5.21	120.30	117.70
36	1	1525	G	C6-N1-C2	-5.21	121.98	125.10
36	1	1760	A	N1-C6-N6	-5.21	115.48	118.60
36	1	2243	A	C6-N1-C2	-5.21	115.48	118.60
36	1	2647	A	N3-C4-N9	5.21	131.56	127.40
36	1	2871	G	N9-C4-C5	-5.21	103.32	105.40
36	1	2941	A	N1-C6-N6	5.21	121.72	118.60
36	1	2946	A	C6-N1-C2	-5.21	115.48	118.60
36	1	2985	C	C2-N1-C1'	-5.21	113.07	118.80
36	1	3127	A	N9-C4-C5	5.21	107.88	105.80
38	4	2	A	C2-N3-C4	-5.21	108.00	110.60
1	6	799	A	N1-C2-N3	5.21	131.90	129.30
1	6	905	A	C4-C5-N7	-5.21	108.10	110.70
1	6	1116	A	C8-N9-C4	-5.21	103.72	105.80
1	6	1501	C	OP2-P-O3'	5.21	116.65	105.20
36	5	277	G	N1-C2-N3	5.21	127.02	123.90
36	5	514	G	O5'-P-OP2	-5.21	101.01	105.70
36	5	519	A	C6-N1-C2	-5.21	115.48	118.60
36	5	531	G	N1-C2-N3	5.21	127.02	123.90
36	5	2116	G	N9-C4-C5	5.21	107.48	105.40
36	5	2137	U	O5'-P-OP2	5.21	116.95	110.70
36	5	2522	G	C8-N9-C4	5.21	108.48	106.40
36	5	2978	U	O4'-C1'-N1	5.21	112.36	108.20
36	5	3039	C	N3-C4-C5	-5.21	119.82	121.90
48	m1	166	LYS	N-CA-C	-5.21	96.94	111.00
1	2	1027	A	N1-C6-N6	-5.21	115.48	118.60
1	2	1757	G	C5-C6-N1	5.21	114.10	111.50
36	1	1329	U	N1-C2-N3	5.21	118.02	114.90
36	1	3085	G	C5-C6-N1	5.21	114.10	111.50
36	1	3390	G	N3-C4-N9	5.21	129.12	126.00
1	6	980	G	C6-C5-N7	-5.21	127.28	130.40
36	5	41	G	N1-C6-O6	-5.21	116.78	119.90
36	5	1019	G	N3-C4-C5	5.21	131.20	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1692	U	N3-C4-C5	5.21	117.72	114.60
36	5	1870	C	N3-C4-C5	-5.21	119.82	121.90
1	2	1022	C	N3-C2-O2	-5.20	118.26	121.90
1	2	1610	G	C6-C5-N7	-5.20	127.28	130.40
36	1	305	U	C5-C4-O4	5.20	129.02	125.90
36	1	495	G	C8-N9-C1'	5.20	133.76	127.00
36	1	894	G	N3-C4-C5	-5.20	126.00	128.60
36	1	2191	U	N1-C2-O2	5.20	126.44	122.80
36	1	2875	U	C4-C5-C6	5.20	122.82	119.70
36	1	3173	G	C8-N9-C1'	-5.20	120.24	127.00
36	1	3372	A	N1-C6-N6	-5.20	115.48	118.60
38	4	53	A	C4-C5-C6	5.20	119.60	117.00
1	6	12	U	C5-C4-O4	-5.20	122.78	125.90
1	6	1372	U	N1-C2-N3	5.20	118.02	114.90
36	5	421	G	C4-C5-C6	5.20	121.92	118.80
36	5	913	A	C5-N7-C8	5.20	106.50	103.90
36	5	1489	A	C6-C5-N7	-5.20	128.66	132.30
36	5	1508	C	C4-C5-C6	5.20	120.00	117.40
36	5	1517	G	N1-C2-N3	5.20	127.02	123.90
36	5	2147	A	N1-C6-N6	5.20	121.72	118.60
36	5	2433	U	N3-C2-O2	-5.20	118.56	122.20
36	5	2702	A	OP1-P-O3'	5.20	116.65	105.20
36	5	2767	U	N3-C2-O2	-5.20	118.56	122.20
56	n0	170	THR	C-N-CA	-5.20	108.69	121.70
1	2	435	C	C6-N1-C2	5.20	122.38	120.30
36	1	2971	A	N7-C8-N9	5.20	116.40	113.80
38	4	18	U	C5-C6-N1	5.20	125.30	122.70
1	6	176	C	C2-N3-C4	5.20	122.50	119.90
1	6	1638	G	O5'-P-OP2	-5.20	101.02	105.70
36	5	62	A	C4-C5-N7	5.20	113.30	110.70
36	5	974	G	N1-C6-O6	5.20	123.02	119.90
36	5	995	U	C6-N1-C2	5.20	124.12	121.00
36	5	1520	G	C5-C6-O6	-5.20	125.48	128.60
36	5	1836	C	OP2-P-O3'	5.20	116.64	105.20
36	5	2178	A	C6-N1-C2	-5.20	115.48	118.60
36	5	2713	U	N3-C4-C5	-5.20	111.48	114.60
1	2	465	G	C8-N9-C4	-5.20	104.32	106.40
1	2	625	C	C2-N3-C4	5.20	122.50	119.90
1	2	897	C	C2-N1-C1'	5.20	124.52	118.80
1	2	1092	A	O4'-C1'-N9	5.20	112.36	108.20
36	1	113	C	O5'-P-OP1	-5.20	101.02	105.70
36	1	1005	G	N3-C4-N9	-5.20	122.88	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1401	A	N1-C6-N6	5.20	121.72	118.60
36	1	2396	G	OP1-P-O3'	5.20	116.64	105.20
36	1	2893	C	N3-C4-N4	-5.20	114.36	118.00
36	1	3039	C	OP2-P-O3'	5.20	116.64	105.20
36	1	3075	G	C5-C6-O6	-5.20	125.48	128.60
36	1	3142	A	N1-C2-N3	5.20	131.90	129.30
36	1	3262	U	OP1-P-OP2	-5.20	111.80	119.60
1	6	1588	G	C4-C5-N7	-5.20	108.72	110.80
1	6	1758	U	C6-N1-C2	-5.20	117.88	121.00
4	s2	233	GLN	C-N-CA	-5.20	100.16	122.00
36	5	52	A	C5-C6-N6	5.20	127.86	123.70
36	5	209	A	N9-C4-C5	-5.20	103.72	105.80
36	5	514	G	N1-C2-N3	5.20	127.02	123.90
36	5	534	U	N1-C2-O2	5.20	126.44	122.80
36	5	1331	U	C4-C5-C6	5.20	122.82	119.70
36	5	1907	C	C6-N1-C1'	5.20	127.04	120.80
36	5	2125	A	O4'-C1'-N9	-5.20	104.04	108.20
36	5	2262	A	O5'-P-OP2	-5.20	101.02	105.70
36	5	2549	G	C8-N9-C1'	-5.20	120.24	127.00
36	5	2607	G	C8-N9-C1'	-5.20	120.24	127.00
36	5	2857	C	N3-C4-N4	-5.20	114.36	118.00
65	n9	20	GLY	N-CA-C	5.20	126.10	113.10
1	2	1215	C	N3-C4-N4	-5.20	114.36	118.00
36	1	891	G	C8-N9-C1'	5.20	133.76	127.00
36	1	1480	G	N3-C4-C5	5.20	131.20	128.60
36	1	1761	C	N3-C4-C5	5.20	123.98	121.90
36	1	2287	C	C6-N1-C1'	-5.20	114.56	120.80
36	1	2362	C	N3-C2-O2	-5.20	118.26	121.90
36	1	2700	G	C8-N9-C1'	-5.20	120.24	127.00
36	1	2703	A	C8-N9-C1'	-5.20	118.34	127.70
36	1	2757	U	N1-C2-N3	5.20	118.02	114.90
36	1	2800	G	C4-C5-N7	5.20	112.88	110.80
36	1	3040	A	N1-C2-N3	5.20	131.90	129.30
1	6	611	U	N1-C2-O2	5.20	126.44	122.80
36	5	1084	A	C5-C6-N6	-5.20	119.54	123.70
36	5	1944	U	C5-C6-N1	5.20	125.30	122.70
36	5	2646	C	C2-N3-C4	-5.20	117.30	119.90
36	5	2845	A	C8-N9-C4	-5.20	103.72	105.80
36	5	3126	C	C6-N1-C2	5.20	122.38	120.30
37	7	68	C	C2-N3-C4	-5.20	117.30	119.90
47	m0	204	GLY	N-CA-C	5.20	126.10	113.10
64	n8	46	ASP	CB-CG-OD1	5.20	122.98	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	318	A	N3-C4-C5	5.20	130.44	126.80
79	Q3	49	ARG	NE-CZ-NH2	-5.20	117.70	120.30
1	6	624	G	N1-C2-N3	-5.20	120.78	123.90
36	5	73	C	C5-C6-N1	-5.20	118.40	121.00
36	5	1839	A	OP1-P-O3'	5.20	116.63	105.20
36	5	2361	A	P-O3'-C3'	5.20	125.94	119.70
36	5	2938	G	C5-N7-C8	-5.20	101.70	104.30
36	5	2982	A	N1-C2-N3	-5.20	126.70	129.30
36	1	1155	C	C5-C6-N1	-5.20	118.40	121.00
36	1	1164	G	C5-C6-O6	-5.20	125.48	128.60
36	1	2817	A	C5-N7-C8	5.20	106.50	103.90
1	6	13	C	C6-N1-C2	-5.20	118.22	120.30
1	6	233	C	C5-C6-N1	5.20	123.60	121.00
1	6	1383	G	N3-C4-N9	5.20	129.12	126.00
1	6	1582	U	C6-N1-C1'	-5.20	113.92	121.20
1	6	1745	G	C6-C5-N7	-5.20	127.28	130.40
36	5	794	U	N3-C4-C5	-5.20	111.48	114.60
36	5	1506	A	N9-C4-C5	5.20	107.88	105.80
36	5	1554	U	C2-N1-C1'	5.20	123.94	117.70
36	5	2166	A	N9-C4-C5	-5.20	103.72	105.80
36	5	2940	A	N3-C4-C5	-5.20	123.16	126.80
36	5	2952	G	OP1-P-O3'	-5.20	93.77	105.20
36	5	3319	U	C6-N1-C2	-5.20	117.88	121.00
1	2	1082	C	N3-C2-O2	-5.19	118.26	121.90
36	1	2925	C	N1-C2-O2	-5.19	115.78	118.90
1	6	341	A	C5-C6-N1	5.19	120.30	117.70
1	6	1582	U	C5-C4-O4	-5.19	122.78	125.90
1	6	1715	G	C4-C5-N7	5.19	112.88	110.80
36	5	1854	C	N3-C4-C5	-5.19	119.82	121.90
36	5	3129	A	N7-C8-N9	5.19	116.40	113.80
1	2	381	C	O5'-P-OP1	-5.19	101.03	105.70
1	2	1192	C	C2-N1-C1'	-5.19	113.09	118.80
1	2	1658	G	C4-C5-N7	5.19	112.88	110.80
36	1	43	A	N9-C4-C5	5.19	107.88	105.80
36	1	100	A	C6-C5-N7	-5.19	128.66	132.30
36	1	107	A	N7-C8-N9	5.19	116.40	113.80
36	1	363	G	C6-N1-C2	-5.19	121.98	125.10
36	1	1116	G	O5'-P-OP1	-5.19	101.03	105.70
36	1	1555	U	N3-C2-O2	5.19	125.83	122.20
36	1	1878	G	N1-C2-N2	5.19	120.87	116.20
36	1	2352	A	N3-C4-N9	5.19	131.55	127.40
36	1	2970	C	OP1-P-OP2	5.19	127.39	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3318	G	C8-N9-C4	-5.19	104.32	106.40
1	6	752	A	C2-N3-C4	-5.19	108.00	110.60
1	6	860	U	C4-C5-C6	5.19	122.81	119.70
1	6	883	C	C5-C6-N1	5.19	123.60	121.00
1	6	1484	G	N3-C4-C5	-5.19	126.00	128.60
1	6	1523	G	C8-N9-C1'	-5.19	120.25	127.00
1	6	1547	A	C4-C5-C6	-5.19	114.40	117.00
36	5	362	U	N3-C2-O2	-5.19	118.57	122.20
36	5	428	A	C6-C5-N7	-5.19	128.66	132.30
36	5	657	A	OP2-P-O3'	5.19	116.62	105.20
36	5	1142	G	C6-C5-N7	-5.19	127.28	130.40
36	5	1158	A	N1-C6-N6	-5.19	115.48	118.60
36	5	1192	C	N3-C4-N4	5.19	121.64	118.00
36	5	1820	U	C6-N1-C2	-5.19	117.88	121.00
36	5	1904	C	C2-N3-C4	-5.19	117.30	119.90
36	5	2189	U	N1-C2-N3	-5.19	111.78	114.90
36	5	2793	G	C4-N9-C1'	-5.19	119.75	126.50
36	5	3172	A	C4-C5-N7	5.19	113.30	110.70
36	1	411	U	N3-C2-O2	5.19	125.83	122.20
36	1	1099	A	N9-C4-C5	-5.19	103.72	105.80
36	1	1186	G	N1-C6-O6	-5.19	116.78	119.90
36	1	1736	G	C4-C5-N7	5.19	112.88	110.80
36	1	2957	G	C4-C5-C6	-5.19	115.69	118.80
36	1	3034	C	O5'-P-OP1	5.19	116.93	110.70
37	3	40	C	C5-C4-N4	-5.19	116.57	120.20
40	L3	25	ILE	CB-CA-C	-5.19	101.22	111.60
51	M5	12	ARG	NE-CZ-NH1	-5.19	117.70	120.30
57	N1	83	ARG	NE-CZ-NH2	-5.19	117.70	120.30
1	6	559	C	OP1-P-OP2	-5.19	111.81	119.60
1	6	1027	A	C4-C5-N7	-5.19	108.10	110.70
1	6	1673	G	C4-C5-C6	-5.19	115.69	118.80
36	5	872	U	O5'-P-OP1	5.19	116.93	110.70
36	5	1115	G	C8-N9-C4	5.19	108.48	106.40
36	5	1719	G	C5-C6-O6	-5.19	125.49	128.60
36	5	2210	G	C8-N9-C4	-5.19	104.32	106.40
36	5	2337	C	O5'-P-OP2	-5.19	101.03	105.70
36	5	2697	A	N9-C4-C5	-5.19	103.72	105.80
38	8	26	U	N3-C2-O2	-5.19	118.57	122.20
1	2	1205	C	C6-N1-C2	5.19	122.38	120.30
36	1	1097	G	N1-C6-O6	5.19	123.01	119.90
36	1	2244	A	C5-C6-N1	5.19	120.30	117.70
36	1	2610	G	C5-C6-O6	-5.19	125.49	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3174	A	O4'-C1'-N9	5.19	112.35	108.20
37	3	52	G	O5'-P-OP2	-5.19	101.03	105.70
1	6	811	A	N3-C4-C5	-5.19	123.17	126.80
36	5	338	A	N9-C4-C5	5.19	107.88	105.80
36	5	1777	U	O5'-P-OP2	5.19	116.93	110.70
36	5	1790	G	C8-N9-C1'	-5.19	120.25	127.00
36	5	2628	A	N1-C2-N3	5.19	131.90	129.30
36	5	3137	C	O5'-P-OP2	-5.19	101.03	105.70
1	2	1297	G	C8-N9-C4	5.19	108.47	106.40
1	2	1462	G	C4-C5-C6	-5.19	115.69	118.80
36	1	316	U	N3-C2-O2	-5.19	118.57	122.20
36	1	585	A	C5-N7-C8	5.19	106.49	103.90
36	1	1172	G	OP2-P-O3'	-5.19	93.79	105.20
36	1	2932	U	C2-N3-C4	-5.19	123.89	127.00
36	1	3169	U	P-O3'-C3'	5.19	125.92	119.70
1	6	3	U	N1-C2-O2	5.19	126.43	122.80
1	6	331	A	N3-C4-C5	-5.19	123.17	126.80
1	6	556	A	C2-N3-C4	-5.19	108.01	110.60
36	5	537	A	N1-C6-N6	5.19	121.71	118.60
36	5	1121	U	N3-C4-C5	5.19	117.71	114.60
36	5	2877	G	C6-N1-C2	-5.19	121.99	125.10
36	5	2967	A	N9-C4-C5	5.19	107.88	105.80
37	7	116	C	C5-C4-N4	-5.19	116.57	120.20
36	1	13	A	C6-C5-N7	-5.19	128.67	132.30
36	1	773	G	C8-N9-C4	-5.19	104.33	106.40
36	1	792	G	N9-C4-C5	5.19	107.47	105.40
36	1	2243	A	C4-N9-C1'	5.19	135.63	126.30
36	1	2917	G	C8-N9-C4	5.19	108.47	106.40
36	1	3119	U	N3-C4-C5	-5.19	111.49	114.60
1	6	565	C	N3-C2-O2	-5.19	118.27	121.90
36	5	1320	C	C4-C5-C6	5.19	119.99	117.40
36	5	3028	G	N9-C4-C5	-5.19	103.33	105.40
36	5	3366	G	N7-C8-N9	5.19	115.69	113.10
1	2	1771	U	C5-C6-N1	-5.18	120.11	122.70
1	2	1776	A	OP1-P-O3'	5.18	116.61	105.20
11	S9	109	LEU	CA-CB-CG	5.18	127.22	115.30
36	1	207	U	C4-C5-C6	-5.18	116.59	119.70
36	1	335	G	O4'-C1'-N9	5.18	112.35	108.20
36	1	637	C	N3-C4-N4	-5.18	114.37	118.00
36	1	686	G	C8-N9-C1'	5.18	133.74	127.00
36	1	1717	U	C5-C6-N1	-5.18	120.11	122.70
36	1	2116	G	C4-C5-N7	-5.18	108.73	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
51	M5	113	LEU	CA-CB-CG	5.18	127.23	115.30
1	6	1093	A	C2-N3-C4	5.18	113.19	110.60
36	5	519	A	N1-C2-N3	5.18	131.89	129.30
36	5	631	U	OP2-P-O3'	5.18	116.61	105.20
36	5	876	A	OP1-P-O3'	-5.18	93.79	105.20
36	5	1535	A	C6-C5-N7	5.18	135.93	132.30
36	5	1827	C	C6-N1-C2	-5.18	118.23	120.30
36	5	2224	A	C5-C6-N1	5.18	120.29	117.70
36	5	2283	G	C4-C5-C6	-5.18	115.69	118.80
36	5	2614	G	N3-C2-N2	5.18	123.53	119.90
36	5	2696	A	N9-C4-C5	5.18	107.87	105.80
36	5	2784	G	C5-C6-O6	-5.18	125.49	128.60
36	5	2841	G	N9-C4-C5	5.18	107.47	105.40
36	5	3145	C	C4-C5-C6	5.18	119.99	117.40
37	7	58	C	C5-C6-N1	5.18	123.59	121.00
38	8	156	U	C5-C6-N1	5.18	125.29	122.70
52	m6	170	LYS	CD-CE-NZ	5.18	123.62	111.70
1	2	994	G	C8-N9-C4	5.18	108.47	106.40
1	2	1210	C	N3-C2-O2	5.18	125.53	121.90
1	2	1455	G	C4-C5-N7	-5.18	108.73	110.80
36	1	318	A	C4-C5-N7	5.18	113.29	110.70
36	1	624	G	N1-C2-N3	5.18	127.01	123.90
36	1	837	A	C2-N3-C4	-5.18	108.01	110.60
36	1	1057	A	C6-C5-N7	-5.18	128.67	132.30
36	1	2332	A	O5'-P-OP2	-5.18	101.03	105.70
36	1	2396	G	OP1-P-OP2	5.18	127.37	119.60
36	1	2751	G	C4-N9-C1'	-5.18	119.76	126.50
36	1	3320	A	C2-N3-C4	-5.18	108.01	110.60
38	4	36	G	C5-C6-O6	-5.18	125.49	128.60
1	6	1010	C	N1-C2-O2	-5.18	115.79	118.90
1	6	1442	U	C6-N1-C2	-5.18	117.89	121.00
36	5	373	A	N1-C2-N3	5.18	131.89	129.30
36	5	408	A	N9-C4-C5	5.18	107.87	105.80
36	5	893	C	N3-C4-N4	5.18	121.63	118.00
36	5	1063	G	N3-C4-N9	-5.18	122.89	126.00
36	5	1093	A	N1-C2-N3	5.18	131.89	129.30
36	5	1223	A	O5'-P-OP1	-5.18	101.04	105.70
36	5	1592	G	OP2-P-O3'	5.18	116.60	105.20
36	5	2329	C	N3-C4-N4	5.18	121.63	118.00
36	5	2741	C	N1-C2-O2	5.18	122.01	118.90
1	2	1191	U	C6-N1-C2	-5.18	117.89	121.00
1	2	1458	G	C8-N9-C1'	-5.18	120.27	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	308	A	N1-C6-N6	-5.18	115.49	118.60
36	1	1379	G	P-O3'-C3'	-5.18	113.48	119.70
36	1	1475	A	N9-C4-C5	-5.18	103.73	105.80
36	1	2321	A	OP1-P-OP2	-5.18	111.83	119.60
36	1	2720	G	N9-C4-C5	-5.18	103.33	105.40
37	3	93	C	N3-C2-O2	-5.18	118.27	121.90
38	4	141	C	C2-N1-C1'	5.18	124.50	118.80
1	6	64	U	N1-C2-O2	5.18	126.43	122.80
1	6	617	U	OP2-P-O3'	5.18	116.60	105.20
36	5	816	A	N7-C8-N9	-5.18	111.21	113.80
36	5	1347	U	N3-C4-C5	-5.18	111.49	114.60
36	5	3248	C	N3-C4-C5	-5.18	119.83	121.90
38	8	79	A	C4-C5-C6	-5.18	114.41	117.00
1	2	262	U	C4-C5-C6	5.18	122.81	119.70
1	2	1589	C	C5-C6-N1	-5.18	118.41	121.00
36	1	4	U	C4-C5-C6	-5.18	116.59	119.70
36	1	555	U	C2-N1-C1'	5.18	123.92	117.70
36	1	1095	U	O5'-P-OP1	5.18	116.92	110.70
36	1	1157	G	C6-C5-N7	-5.18	127.29	130.40
36	1	2157	G	C8-N9-C1'	-5.18	120.27	127.00
36	1	3031	G	N7-C8-N9	-5.18	110.51	113.10
37	3	65	G	C8-N9-C4	5.18	108.47	106.40
1	6	106	U	N3-C4-O4	-5.18	115.78	119.40
1	6	581	U	C2-N1-C1'	-5.18	111.48	117.70
1	6	1470	C	P-O3'-C3'	5.18	125.92	119.70
1	6	1510	U	N1-C2-N3	5.18	118.01	114.90
1	6	1603	U	C4-C5-C6	-5.18	116.59	119.70
36	5	939	U	C6-N1-C2	-5.18	117.89	121.00
36	5	1917	C	C4-C5-C6	-5.18	114.81	117.40
36	5	2101	C	N3-C2-O2	-5.18	118.27	121.90
36	5	2210	G	N7-C8-N9	5.18	115.69	113.10
36	5	2248	C	OP1-P-O3'	5.18	116.60	105.20
1	2	1291	G	N1-C6-O6	5.18	123.01	119.90
36	1	582	G	N3-C4-N9	-5.18	122.89	126.00
36	1	1166	G	N1-C2-N3	5.18	127.01	123.90
36	1	2130	G	N3-C2-N2	-5.18	116.28	119.90
1	6	357	G	C6-C5-N7	-5.18	127.29	130.40
36	5	1898	G	C4-C5-C6	-5.18	115.69	118.80
1	2	163	G	N3-C4-C5	-5.18	126.01	128.60
1	2	1136	U	C6-N1-C1'	5.18	128.45	121.20
1	2	1212	G	C5-C6-N1	-5.18	108.91	111.50
1	2	1521	G	C4-C5-N7	-5.18	108.73	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	311	C	N3-C4-C5	-5.18	119.83	121.90
36	1	514	G	OP1-P-OP2	-5.18	111.83	119.60
36	1	1335	C	O5'-P-OP1	5.18	116.91	110.70
36	1	1469	C	C4-C5-C6	5.18	119.99	117.40
36	1	1895	A	C5-N7-C8	5.18	106.49	103.90
36	1	2363	A	N7-C8-N9	5.18	116.39	113.80
36	1	2872	A	N3-C4-N9	5.18	131.54	127.40
44	L7	163	LEU	CA-CB-CG	-5.18	103.40	115.30
1	6	858	G	C4-C5-N7	5.18	112.87	110.80
1	6	877	G	N7-C8-N9	-5.18	110.51	113.10
1	6	1657	U	OP1-P-O3'	5.18	116.59	105.20
36	5	63	A	C5-C6-N1	-5.18	115.11	117.70
36	5	152	U	C5-C6-N1	-5.18	120.11	122.70
36	5	508	U	C4-C5-C6	5.18	122.81	119.70
36	5	1087	G	N3-C4-N9	-5.18	122.89	126.00
36	5	1096	U	C5-C6-N1	-5.18	120.11	122.70
36	5	1348	U	C5-C4-O4	-5.18	122.79	125.90
36	5	2260	U	OP2-P-O3'	5.18	116.59	105.20
36	5	2375	G	C2-N3-C4	-5.18	109.31	111.90
36	5	3210	A	C6-N1-C2	-5.18	115.49	118.60
36	5	3243	A	C8-N9-C4	5.18	107.87	105.80
36	5	3304	U	O5'-P-OP2	-5.18	101.04	105.70
38	8	87	G	N1-C2-N2	-5.18	111.54	116.20
38	8	107	G	N1-C2-N3	5.18	127.01	123.90
1	2	615	A	C4-C5-N7	-5.17	108.11	110.70
1	2	1426	C	N3-C4-N4	5.17	121.62	118.00
36	1	113	C	N1-C2-O2	-5.17	115.80	118.90
36	1	291	C	N1-C2-O2	-5.17	115.80	118.90
36	1	301	G	N7-C8-N9	5.17	115.69	113.10
36	1	335	G	C5-C6-O6	-5.17	125.50	128.60
36	1	869	G	N7-C8-N9	-5.17	110.51	113.10
36	1	961	C	N3-C2-O2	-5.17	118.28	121.90
36	1	1437	C	C6-N1-C1'	-5.17	114.59	120.80
36	1	2115	G	C4-C5-N7	5.17	112.87	110.80
36	1	2537	U	P-O3'-C3'	5.17	125.91	119.70
36	1	2589	G	N1-C2-N3	5.17	127.00	123.90
36	1	2936	A	C6-C5-N7	5.17	135.92	132.30
36	1	3071	U	C5-C6-N1	-5.17	120.11	122.70
37	3	95	A	N1-C6-N6	5.17	121.70	118.60
1	6	885	G	N1-C6-O6	5.17	123.00	119.90
36	5	45	A	N1-C2-N3	5.17	131.89	129.30
36	5	437	G	N9-C4-C5	5.17	107.47	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	692	A	C4-C5-N7	5.17	113.29	110.70
36	5	1011	A	C6-C5-N7	-5.17	128.68	132.30
36	5	1187	C	C5-C4-N4	-5.17	116.58	120.20
36	5	2661	G	N1-C2-N3	5.17	127.00	123.90
36	5	2684	C	O5'-P-OP1	5.17	116.91	110.70
36	5	2708	C	N3-C2-O2	5.17	125.52	121.90
36	5	2918	G	C5-N7-C8	5.17	106.89	104.30
36	5	2922	G	N1-C6-O6	-5.17	116.80	119.90
37	7	5	G	N7-C8-N9	-5.17	110.51	113.10
1	2	376	C	O5'-P-OP1	-5.17	101.04	105.70
36	1	1198	C	O4'-C1'-N1	5.17	112.34	108.20
36	1	1215	U	C5-C6-N1	-5.17	120.11	122.70
36	1	2642	A	C2-N3-C4	-5.17	108.01	110.60
36	1	3266	G	N9-C4-C5	5.17	107.47	105.40
36	5	1606	U	N1-C2-O2	-5.17	119.18	122.80
37	7	35	C	C2-N3-C4	-5.17	117.31	119.90
1	2	822	U	C6-N1-C2	-5.17	117.90	121.00
1	2	830	U	C6-N1-C1'	-5.17	113.96	121.20
1	2	1046	G	C8-N9-C4	-5.17	104.33	106.40
36	1	42	C	C4-C5-C6	5.17	119.99	117.40
36	1	971	G	N1-C2-N2	-5.17	111.55	116.20
36	1	1282	G	N1-C6-O6	5.17	123.00	119.90
36	1	1829	G	C4-C5-N7	-5.17	108.73	110.80
36	1	2348	A	C8-N9-C4	5.17	107.87	105.80
1	6	1476	C	N3-C4-N4	5.17	121.62	118.00
1	6	1624	C	N3-C4-C5	5.17	123.97	121.90
36	5	915	A	C4-C5-C6	5.17	119.59	117.00
36	5	952	A	C4-C5-C6	-5.17	114.41	117.00
36	5	1333	C	C6-N1-C1'	-5.17	114.59	120.80
36	5	1431	G	C8-N9-C4	5.17	108.47	106.40
36	5	1491	A	C4-C5-C6	5.17	119.58	117.00
36	5	2237	C	O5'-P-OP2	-5.17	101.05	105.70
36	5	2599	U	N3-C4-C5	-5.17	111.50	114.60
36	5	2717	U	C2-N3-C4	-5.17	123.90	127.00
36	5	3173	G	N3-C2-N2	5.17	123.52	119.90
37	7	52	G	OP1-P-O3'	5.17	116.58	105.20
36	1	104	G	C5-N7-C8	-5.17	101.72	104.30
36	1	1077	U	C4-C5-C6	5.17	122.80	119.70
1	6	7	G	C6-C5-N7	-5.17	127.30	130.40
1	6	474	A	N9-C4-C5	-5.17	103.73	105.80
1	6	811	A	C5-C6-N6	-5.17	119.56	123.70
1	6	967	A	N3-C4-N9	5.17	131.54	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	1202	A	C4-C5-C6	5.17	119.58	117.00
36	5	1867	A	C5-C6-N6	5.17	127.84	123.70
36	5	2309	A	C5-C6-N1	-5.17	115.11	117.70
1	2	619	A	N7-C8-N9	-5.17	111.22	113.80
36	1	973	A	C8-N9-C1'	5.17	137.00	127.70
36	1	1171	G	N3-C2-N2	-5.17	116.28	119.90
36	1	1202	A	C4-C5-N7	5.17	113.28	110.70
36	1	1583	A	N9-C4-C5	5.17	107.87	105.80
36	1	1897	G	C5-N7-C8	-5.17	101.72	104.30
36	1	2985	C	N1-C2-N3	5.17	122.82	119.20
36	1	3177	G	C5-C6-O6	-5.17	125.50	128.60
1	6	576	G	C8-N9-C4	-5.17	104.33	106.40
1	6	973	A	OP1-P-O3'	5.17	116.57	105.20
22	d0	63	LEU	CA-CB-CG	-5.17	103.41	115.30
36	5	71	A	C6-C5-N7	5.17	135.92	132.30
36	5	353	G	C4-N9-C1'	-5.17	119.78	126.50
36	5	872	U	N3-C4-O4	5.17	123.02	119.40
36	5	885	U	C4-C5-C6	5.17	122.80	119.70
36	5	925	A	N1-C6-N6	5.17	121.70	118.60
36	5	1186	G	N7-C8-N9	5.17	115.69	113.10
36	5	1397	C	N3-C4-N4	5.17	121.62	118.00
36	5	2124	G	OP2-P-O3'	5.17	116.57	105.20
36	5	2313	A	N9-C4-C5	5.17	107.87	105.80
36	5	2597	U	N1-C2-O2	5.17	126.42	122.80
36	5	2851	A	OP2-P-O3'	5.17	116.57	105.20
36	5	3065	G	N3-C4-N9	-5.17	122.90	126.00
36	5	3280	U	C6-N1-C2	5.17	124.10	121.00
37	7	54	U	C5-C4-O4	5.17	129.00	125.90
1	2	6	G	C2-N3-C4	5.17	114.48	111.90
1	2	1561	U	N1-C2-O2	5.17	126.42	122.80
36	1	192	C	N3-C4-C5	-5.17	119.83	121.90
36	1	1340	G	C5-N7-C8	-5.17	101.72	104.30
36	1	1670	C	C2-N1-C1'	-5.17	113.12	118.80
36	1	2377	G	C5-C6-O6	5.17	131.70	128.60
36	1	2633	U	N1-C2-N3	5.17	118.00	114.90
36	1	2990	G	N3-C4-C5	-5.17	126.02	128.60
36	1	3226	A	C5-C6-N6	5.17	127.83	123.70
1	6	331	A	C6-N1-C2	-5.17	115.50	118.60
1	6	608	U	N1-C2-N3	5.17	118.00	114.90
1	6	1556	A	C4-C5-N7	5.17	113.28	110.70
36	5	216	G	C6-C5-N7	-5.17	127.30	130.40
36	5	323	A	P-O3'-C3'	-5.17	113.50	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	799	G	N1-C6-O6	5.17	123.00	119.90
36	5	814	U	OP1-P-OP2	-5.17	111.85	119.60
36	5	955	U	N3-C2-O2	5.17	125.82	122.20
36	5	2271	A	C5-C6-N6	-5.17	119.57	123.70
36	5	2831	G	C4-C5-C6	5.17	121.90	118.80
1	2	982	U	OP1-P-O3'	-5.17	93.84	105.20
36	1	149	U	C5-C6-N1	5.17	125.28	122.70
36	1	870	G	C6-C5-N7	5.17	133.50	130.40
36	1	882	A	N1-C2-N3	-5.17	126.72	129.30
36	1	1426	C	N3-C4-C5	-5.17	119.83	121.90
36	1	2522	G	N9-C1'-C2'	5.17	120.71	114.00
36	1	3158	G	N1-C6-O6	5.17	123.00	119.90
61	N5	78	ASP	CB-CG-OD1	5.17	122.95	118.30
1	6	96	G	N3-C4-C5	-5.17	126.02	128.60
1	6	1304	G	C6-C5-N7	5.17	133.50	130.40
1	6	1574	G	N1-C6-O6	5.17	123.00	119.90
36	5	1111	U	N3-C4-C5	5.17	117.70	114.60
36	5	1330	A	OP1-P-OP2	5.17	127.35	119.60
36	5	3255	U	N3-C4-C5	-5.17	111.50	114.60
37	7	65	G	N3-C4-N9	-5.17	122.90	126.00
37	7	75	G	O4'-C1'-N9	-5.17	104.07	108.20
1	2	555	A	N1-C2-N3	5.16	131.88	129.30
4	S2	235	LEU	CA-CB-CG	5.16	127.18	115.30
36	1	4	U	N3-C4-C5	5.16	117.70	114.60
36	1	105	C	O5'-P-OP2	-5.16	101.05	105.70
36	1	403	C	N3-C2-O2	-5.16	118.29	121.90
36	1	624	G	C5-C6-N1	-5.16	108.92	111.50
36	1	714	G	N3-C4-N9	5.16	129.10	126.00
36	1	856	G	C8-N9-C4	-5.16	104.33	106.40
36	1	1490	A	N9-C4-C5	5.16	107.86	105.80
36	1	1847	A	N1-C2-N3	5.16	131.88	129.30
36	1	2373	A	N3-C4-C5	5.16	130.41	126.80
36	1	2389	C	N1-C2-O2	-5.16	115.80	118.90
36	1	2649	A	C5-N7-C8	-5.16	101.32	103.90
1	6	297	U	C2-N1-C1'	5.16	123.89	117.70
36	5	290	G	C8-N9-C4	-5.16	104.33	106.40
36	5	774	G	C8-N9-C1'	-5.16	120.29	127.00
36	5	810	A	C5-N7-C8	-5.16	101.32	103.90
36	5	2193	U	O4'-C1'-N1	-5.16	104.07	108.20
36	5	2914	G	N1-C6-O6	5.16	123.00	119.90
36	5	3114	A	N1-C2-N3	-5.16	126.72	129.30
38	8	102	U	C6-N1-C1'	-5.16	113.97	121.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	255	U	C5-C6-N1	5.16	125.28	122.70
1	2	390	G	N1-C2-N2	5.16	120.85	116.20
1	2	1679	G	N1-C6-O6	-5.16	116.80	119.90
36	1	11	A	C2-N3-C4	-5.16	108.02	110.60
36	1	201	A	C8-N9-C4	5.16	107.86	105.80
36	1	634	C	O5'-P-OP1	-5.16	101.05	105.70
36	1	1690	C	OP1-P-O3'	5.16	116.56	105.20
36	1	1707	A	O5'-P-OP2	5.16	116.89	110.70
36	1	2280	A	OP2-P-O3'	5.16	116.56	105.20
36	5	406	G	C5-N7-C8	-5.16	101.72	104.30
36	5	1080	A	P-O3'-C3'	5.16	125.89	119.70
36	5	1204	A	OP1-P-O3'	-5.16	93.84	105.20
36	5	2611	U	C2-N3-C4	5.16	130.10	127.00
36	5	2727	A	C2-N3-C4	5.16	113.18	110.60
36	5	3367	C	N3-C4-N4	-5.16	114.39	118.00
1	2	620	A	N9-C4-C5	5.16	107.86	105.80
36	1	172	G	N3-C4-C5	-5.16	126.02	128.60
36	1	1134	G	C5-C6-O6	5.16	131.70	128.60
36	1	2249	G	C4-C5-N7	-5.16	108.74	110.80
36	1	2417	U	C4-C5-C6	5.16	122.80	119.70
37	3	7	G	C6-N1-C2	-5.16	122.00	125.10
38	4	15	G	O5'-P-OP1	-5.16	101.06	105.70
1	6	60	U	C5-C6-N1	5.16	125.28	122.70
1	6	147	A	C4-C5-N7	5.16	113.28	110.70
1	6	925	G	N7-C8-N9	5.16	115.68	113.10
1	6	1226	A	C2-N3-C4	5.16	113.18	110.60
1	6	1634	C	OP1-P-O3'	5.16	116.55	105.20
36	5	965	A	C6-N1-C2	-5.16	115.50	118.60
36	5	1317	A	N7-C8-N9	5.16	116.38	113.80
36	5	1420	C	C6-N1-C1'	5.16	126.99	120.80
36	5	2301	U	C2-N3-C4	5.16	130.10	127.00
36	5	2388	U	C4-C5-C6	5.16	122.80	119.70
36	5	2690	G	OP2-P-O3'	5.16	116.56	105.20
36	5	3049	A	C6-C5-N7	-5.16	128.69	132.30
36	5	3102	G	N1-C6-O6	5.16	123.00	119.90
36	5	3315	G	C4-N9-C1'	5.16	133.21	126.50
1	2	937	C	C5-C6-N1	5.16	123.58	121.00
1	2	1235	C	O5'-P-OP1	-5.16	101.06	105.70
1	2	1634	C	C6-N1-C2	-5.16	118.24	120.30
1	2	1757	G	OP2-P-O3'	5.16	116.55	105.20
35	SM	134	ASP	CB-CG-OD2	5.16	122.94	118.30
36	1	37	U	C2-N1-C1'	-5.16	111.51	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	99	A	C4-N9-C1'	-5.16	117.02	126.30
36	1	720	A	C6-N1-C2	-5.16	115.50	118.60
36	1	760	G	N3-C4-C5	5.16	131.18	128.60
36	1	1461	A	O5'-P-OP2	-5.16	101.06	105.70
36	1	2409	G	C5-C6-O6	-5.16	125.50	128.60
38	4	15	G	C6-N1-C2	-5.16	122.00	125.10
49	M3	7	LEU	C-N-CD	5.16	139.23	128.40
1	6	109	G	N3-C4-C5	5.16	131.18	128.60
1	6	610	G	C6-N1-C2	-5.16	122.00	125.10
1	6	1746	A	N1-C6-N6	-5.16	115.50	118.60
36	5	707	U	C2-N3-C4	5.16	130.09	127.00
36	5	1686	U	C2-N1-C1'	5.16	123.89	117.70
36	5	1778	G	N7-C8-N9	-5.16	110.52	113.10
36	5	3323	A	C5-C6-N1	5.16	120.28	117.70
36	1	14	U	C2-N1-C1'	5.16	123.89	117.70
36	1	996	A	C2-N3-C4	5.16	113.18	110.60
1	6	903	U	N1-C2-O2	-5.16	119.19	122.80
1	6	958	U	C5-C6-N1	-5.16	120.12	122.70
1	6	1361	U	C6-N1-C2	-5.16	117.91	121.00
1	6	1745	G	N3-C4-N9	5.16	129.09	126.00
36	5	2391	G	C5-C6-N1	5.16	114.08	111.50
36	5	2415	C	N3-C4-N4	5.16	121.61	118.00
1	2	1342	C	C6-N1-C2	-5.16	118.24	120.30
1	2	1431	C	O4'-C1'-N1	-5.16	104.08	108.20
36	1	195	U	OP1-P-O3'	5.16	116.54	105.20
36	1	366	A	C6-N1-C2	-5.16	115.51	118.60
36	1	807	A	C5-C6-N6	-5.16	119.58	123.70
36	1	1196	C	OP1-P-O3'	5.16	116.54	105.20
36	1	1435	A	P-O3'-C3'	5.16	125.89	119.70
36	1	2396	G	N3-C4-N9	-5.16	122.91	126.00
36	1	2620	G	OP1-P-O3'	5.16	116.54	105.20
36	1	2628	A	C6-C5-N7	-5.16	128.69	132.30
36	1	2754	G	C8-N9-C4	5.16	108.46	106.40
36	1	2968	G	C5-C6-N1	5.16	114.08	111.50
36	1	3054	U	O4'-C1'-N1	5.16	112.32	108.20
37	3	17	A	C6-N1-C2	-5.16	115.51	118.60
1	6	43	A	N3-C4-N9	5.16	131.52	127.40
1	6	296	U	N3-C2-O2	-5.16	118.59	122.20
1	6	756	A	N7-C8-N9	5.16	116.38	113.80
36	5	969	C	OP1-P-O3'	5.16	116.54	105.20
36	5	1092	C	O4'-C1'-N1	5.16	112.32	108.20
36	5	2119	A	C4-N9-C1'	5.16	135.58	126.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2255	A	C5-C6-N6	-5.16	119.58	123.70
36	5	2364	G	C4-C5-N7	5.16	112.86	110.80
36	5	2643	A	O5'-P-OP1	-5.16	101.06	105.70
36	5	2652	U	OP1-P-OP2	5.16	127.33	119.60
36	5	2664	C	C2-N3-C4	-5.16	117.32	119.90
36	5	2719	U	C2-N1-C1'	-5.16	111.51	117.70
36	5	3275	U	N1-C2-N3	-5.16	111.81	114.90
37	7	24	A	C5-C6-N1	5.16	120.28	117.70
37	7	99	G	C5-N7-C8	5.16	106.88	104.30
1	2	77	U	C5-C4-O4	-5.15	122.81	125.90
36	1	905	U	C2-N1-C1'	-5.15	111.52	117.70
36	1	1213	G	C6-C5-N7	-5.15	127.31	130.40
36	1	1895	A	N7-C8-N9	-5.15	111.22	113.80
36	1	2295	A	C5-C6-N6	5.15	127.82	123.70
37	3	41	G	C8-N9-C1'	-5.15	120.30	127.00
36	5	86	G	C2-N3-C4	5.15	114.48	111.90
36	5	183	G	C8-N9-C4	-5.15	104.34	106.40
36	5	1194	G	C8-N9-C4	-5.15	104.34	106.40
36	5	2899	C	C5-C6-N1	-5.15	118.42	121.00
1	2	1206	U	N3-C2-O2	-5.15	118.59	122.20
36	1	196	G	C5-N7-C8	5.15	106.88	104.30
36	1	295	A	C8-N9-C4	-5.15	103.74	105.80
36	1	1001	G	C5-C6-O6	-5.15	125.51	128.60
36	1	1173	U	C5-C6-N1	-5.15	120.12	122.70
36	1	1375	G	C6-N1-C2	-5.15	122.01	125.10
36	1	1795	U	C5-C6-N1	-5.15	120.12	122.70
36	1	2110	G	C4-N9-C1'	5.15	133.20	126.50
36	1	2713	U	N3-C4-O4	5.15	123.01	119.40
36	1	3318	G	C3'-C2'-C1'	5.15	105.62	101.50
1	6	1777	G	OP2-P-O3'	5.15	116.54	105.20
36	5	326	U	C6-N1-C2	-5.15	117.91	121.00
36	5	432	G	N3-C2-N2	-5.15	116.29	119.90
36	5	1003	A	C6-C5-N7	-5.15	128.69	132.30
36	5	1193	A	C4-C5-C6	5.15	119.58	117.00
36	5	1348	U	O4'-C1'-N1	5.15	112.32	108.20
36	5	2159	U	OP1-P-O3'	5.15	116.53	105.20
36	5	2306	C	OP2-P-O3'	5.15	116.53	105.20
36	5	3298	C	C5-C4-N4	5.15	123.81	120.20
1	2	47	A	C6-N1-C2	-5.15	115.51	118.60
1	2	1517	U	N3-C4-O4	5.15	123.00	119.40
36	1	59	G	N1-C6-O6	5.15	122.99	119.90
36	1	223	U	C2-N1-C1'	-5.15	111.52	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	499	G	N1-C2-N2	5.15	120.83	116.20
36	1	669	U	C5-C6-N1	-5.15	120.12	122.70
36	1	902	G	C5-N7-C8	-5.15	101.72	104.30
36	1	1010	G	N1-C6-O6	5.15	122.99	119.90
36	1	1082	U	C6-N1-C2	-5.15	117.91	121.00
36	1	1334	U	N3-C4-C5	-5.15	111.51	114.60
36	1	1369	A	C4-C5-C6	5.15	119.58	117.00
36	1	1546	A	C5-N7-C8	-5.15	101.33	103.90
36	1	1752	A	C2-N3-C4	-5.15	108.03	110.60
36	1	1913	A	N1-C6-N6	5.15	121.69	118.60
36	1	2364	G	N1-C6-O6	-5.15	116.81	119.90
36	1	2805	G	C2-N3-C4	5.15	114.47	111.90
36	1	2830	G	N7-C8-N9	-5.15	110.52	113.10
36	1	3196	U	C5-C4-O4	5.15	128.99	125.90
38	4	119	C	N3-C2-O2	5.15	125.50	121.90
1	6	110	U	O5'-P-OP1	-5.15	101.06	105.70
1	6	516	G	C8-N9-C4	-5.15	104.34	106.40
36	5	875	G	N3-C4-N9	-5.15	122.91	126.00
36	5	906	A	OP1-P-OP2	5.15	127.33	119.60
36	5	1060	U	N3-C2-O2	-5.15	118.59	122.20
36	5	2353	G	P-O3'-C3'	-5.15	113.52	119.70
36	5	2671	A	C2-N3-C4	-5.15	108.03	110.60
36	5	2813	A	N1-C2-N3	5.15	131.88	129.30
37	7	65	G	N1-C2-N2	5.15	120.83	116.20
38	8	136	G	N7-C8-N9	-5.15	110.52	113.10
1	2	561	G	C5-C6-O6	-5.15	125.51	128.60
1	2	904	G	C8-N9-C1'	-5.15	120.31	127.00
4	S2	58	LEU	CA-CB-CG	5.15	127.14	115.30
36	1	337	G	C2-N3-C4	5.15	114.47	111.90
36	1	995	U	N1-C2-N3	5.15	117.99	114.90
36	1	1076	C	C5-C6-N1	-5.15	118.43	121.00
1	6	254	A	O5'-P-OP1	5.15	116.88	110.70
1	6	334	G	N9-C4-C5	5.15	107.46	105.40
1	6	1321	A	OP1-P-O3'	5.15	116.53	105.20
36	5	921	A	N1-C6-N6	-5.15	115.51	118.60
36	5	1582	C	O4'-C1'-N1	5.15	112.32	108.20
36	5	2914	G	OP1-P-OP2	5.15	127.32	119.60
36	5	3089	C	C2-N3-C4	5.15	122.47	119.90
1	2	1052	U	C2-N1-C1'	5.15	123.88	117.70
36	1	1114	U	N3-C4-C5	-5.15	111.51	114.60
36	1	1144	U	C5-C6-N1	5.15	125.27	122.70
36	1	1151	U	C2-N1-C1'	5.15	123.88	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1833	G	C4-C5-N7	-5.15	108.74	110.80
36	1	3268	A	O4'-C1'-N9	-5.15	104.08	108.20
37	3	52	G	N7-C8-N9	5.15	115.67	113.10
1	6	1428	G	N3-C4-N9	-5.15	122.91	126.00
1	6	1456	C	N1-C2-N3	5.15	122.80	119.20
36	5	769	G	C5-C6-O6	-5.15	125.51	128.60
36	5	886	C	C4-C5-C6	-5.15	114.83	117.40
36	5	1124	U	O4'-C1'-N1	5.15	112.32	108.20
36	5	1192	C	C6-N1-C2	-5.15	118.24	120.30
36	5	1300	G	N9-C4-C5	-5.15	103.34	105.40
36	5	1916	U	N1-C2-O2	5.15	126.40	122.80
36	5	2291	A	C6-N1-C2	5.15	121.69	118.60
36	5	2409	G	N9-C4-C5	-5.15	103.34	105.40
36	5	2670	G	C5-C6-O6	-5.15	125.51	128.60
36	5	2758	A	C8-N9-C4	5.15	107.86	105.80
36	5	2866	U	N1-C2-O2	5.15	126.40	122.80
36	1	591	G	C4-N9-C1'	5.15	133.19	126.50
36	1	810	A	C5-C6-N6	5.15	127.82	123.70
36	1	1360	C	N3-C2-O2	5.15	125.50	121.90
36	1	3009	G	C5-C6-O6	-5.15	125.51	128.60
36	5	916	G	C5-C6-N1	5.15	114.07	111.50
36	5	1095	U	N1-C2-O2	5.15	126.40	122.80
36	5	1734	G	N7-C8-N9	-5.15	110.53	113.10
36	5	3095	U	N1-C2-N3	5.15	117.99	114.90
36	5	3289	G	C3'-C2'-C1'	-5.15	97.38	101.50
1	2	1081	A	O4'-C1'-N9	5.14	112.31	108.20
1	2	1195	C	C4-C5-C6	5.14	119.97	117.40
1	2	1486	G	C4-C5-C6	5.14	121.89	118.80
1	2	1555	A	C8-N9-C4	-5.14	103.74	105.80
36	1	891	G	N3-C4-C5	5.14	131.17	128.60
36	1	931	C	C2-N3-C4	-5.14	117.33	119.90
36	1	936	A	N3-C4-N9	-5.14	123.28	127.40
36	1	1475	A	C5-C6-N6	-5.14	119.58	123.70
36	1	2328	U	N3-C4-O4	-5.14	115.80	119.40
36	1	2930	A	C4-C5-N7	5.14	113.27	110.70
36	1	3005	A	N9-C4-C5	5.14	107.86	105.80
36	1	3289	G	N7-C8-N9	5.14	115.67	113.10
1	6	619	A	N1-C2-N3	-5.14	126.73	129.30
36	5	41	G	N3-C4-N9	-5.14	122.91	126.00
36	5	186	U	N1-C2-O2	5.14	126.40	122.80
36	5	588	G	C5-C6-O6	-5.14	125.51	128.60
36	5	974	G	C4-C5-C6	5.14	121.89	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1215	U	C5-C4-O4	-5.14	122.81	125.90
36	5	1733	G	C8-N9-C1'	-5.14	120.31	127.00
36	5	2278	C	C4-C5-C6	-5.14	114.83	117.40
37	7	95	A	N1-C2-N3	5.14	131.87	129.30
1	2	993	A	N7-C8-N9	5.14	116.37	113.80
1	2	1144	U	C5-C4-O4	-5.14	122.81	125.90
36	1	692	A	C8-N9-C4	-5.14	103.74	105.80
36	1	827	A	C5-C6-N1	5.14	120.27	117.70
36	1	2517	U	N1-C2-O2	5.14	126.40	122.80
36	1	2745	G	O4'-C1'-N9	5.14	112.31	108.20
37	3	118	A	O5'-P-OP1	5.14	116.87	110.70
1	6	316	A	OP1-P-OP2	5.14	127.31	119.60
36	5	312	C	C5-C4-N4	5.14	123.80	120.20
36	5	510	G	C5-C6-N1	5.14	114.07	111.50
36	5	635	G	O5'-P-OP2	-5.14	101.07	105.70
36	5	960	U	C4-C5-C6	5.14	122.78	119.70
36	5	1431	G	OP2-P-O3'	5.14	116.52	105.20
36	5	1473	G	C6-C5-N7	-5.14	127.31	130.40
36	5	2678	A	C4-C5-N7	-5.14	108.13	110.70
36	5	2765	C	C2-N1-C1'	5.14	124.46	118.80
36	5	2788	C	C4-C5-C6	5.14	119.97	117.40
37	7	82	G	N3-C4-N9	5.14	129.09	126.00
38	8	13	A	C6-N1-C2	5.14	121.69	118.60
1	2	628	G	C6-N1-C2	5.14	128.19	125.10
36	1	893	C	C2-N1-C1'	5.14	124.45	118.80
36	1	969	C	N3-C4-C5	-5.14	119.84	121.90
36	1	1779	C	N3-C2-O2	-5.14	118.30	121.90
36	1	2117	A	C5-C6-N6	-5.14	119.59	123.70
36	5	76	G	N3-C4-C5	-5.14	126.03	128.60
36	5	109	A	C2-N3-C4	-5.14	108.03	110.60
36	5	707	U	OP2-P-O3'	5.14	116.51	105.20
36	5	3365	U	OP2-P-O3'	5.14	116.51	105.20
37	7	109	G	C8-N9-C4	5.14	108.46	106.40
1	2	261	U	C6-N1-C1'	-5.14	114.01	121.20
1	2	1291	G	C2-N3-C4	-5.14	109.33	111.90
36	1	18	G	N3-C4-N9	-5.14	122.92	126.00
36	1	216	G	N1-C6-O6	5.14	122.98	119.90
36	1	1145	G	C8-N9-C4	-5.14	104.34	106.40
36	1	1428	A	N3-C4-C5	5.14	130.40	126.80
36	1	1922	A	C5-C6-N1	5.14	120.27	117.70
36	1	2274	U	C2-N3-C4	-5.14	123.92	127.00
36	1	2558	U	C5-C6-N1	-5.14	120.13	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2698	G	C8-N9-C4	5.14	108.46	106.40
36	1	2754	G	C4-C5-N7	5.14	112.86	110.80
36	1	2990	G	C6-N1-C2	-5.14	122.02	125.10
38	4	46	G	N9-C4-C5	-5.14	103.34	105.40
1	6	1780	G	C5-C6-O6	-5.14	125.52	128.60
36	5	517	G	C5-C6-N1	-5.14	108.93	111.50
36	5	632	G	C6-C5-N7	-5.14	127.32	130.40
36	5	794	U	C6-N1-C2	-5.14	117.92	121.00
36	5	864	G	OP2-P-O3'	5.14	116.51	105.20
36	5	980	A	C4-C5-C6	-5.14	114.43	117.00
36	5	1208	U	N1-C2-N3	5.14	117.98	114.90
36	5	1520	G	C6-C5-N7	-5.14	127.32	130.40
36	5	1543	G	C8-N9-C4	-5.14	104.34	106.40
36	5	2165	G	C4-N9-C1'	5.14	133.18	126.50
36	5	2334	U	C5-C6-N1	-5.14	120.13	122.70
36	5	2926	A	N1-C6-N6	5.14	121.68	118.60
36	5	2980	U	C2-N1-C1'	-5.14	111.53	117.70
36	5	3110	C	N3-C4-C5	5.14	123.96	121.90
36	5	3176	G	C6-C5-N7	-5.14	127.32	130.40
36	5	3367	C	N3-C2-O2	5.14	125.50	121.90
38	8	61	A	C5-C6-N6	5.14	127.81	123.70
57	n1	152	ALA	C-N-CD	5.14	139.19	128.40
1	2	339	C	OP2-P-O3'	5.14	116.50	105.20
1	2	934	C	C6-N1-C1'	-5.14	114.63	120.80
1	2	1130	G	OP2-P-O3'	5.14	116.50	105.20
36	1	587	U	N3-C4-O4	5.14	123.00	119.40
36	1	1929	G	O5'-P-OP2	-5.14	101.08	105.70
36	1	3094	A	O5'-P-OP2	5.14	116.87	110.70
1	6	157	A	C2-N3-C4	-5.14	108.03	110.60
1	6	361	C	C5-C6-N1	-5.14	118.43	121.00
1	6	788	A	C5-N7-C8	5.14	106.47	103.90
1	6	1132	A	C5-N7-C8	5.14	106.47	103.90
1	6	1176	G	C8-N9-C4	5.14	108.45	106.40
36	5	1161	G	N1-C6-O6	-5.14	116.82	119.90
36	5	1929	G	N9-C4-C5	5.14	107.45	105.40
36	5	2281	A	C8-N9-C4	5.14	107.86	105.80
1	2	349	U	C6-N1-C2	5.14	124.08	121.00
1	2	1605	G	C8-N9-C4	-5.14	104.35	106.40
1	2	1748	G	N1-C2-N3	5.14	126.98	123.90
36	1	440	A	C8-N9-C4	-5.14	103.75	105.80
36	1	595	G	O5'-P-OP2	5.14	116.86	110.70
36	1	1048	A	C5-C6-N1	5.14	120.27	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1306	G	OP2-P-O3'	5.14	116.50	105.20
36	1	1330	A	C8-N9-C4	5.14	107.85	105.80
36	1	1578	C	C6-N1-C2	-5.14	118.25	120.30
36	1	2520	A	N7-C8-N9	5.14	116.37	113.80
36	1	2658	G	N9-C4-C5	-5.14	103.35	105.40
36	1	3186	A	C4-C5-N7	-5.14	108.13	110.70
1	6	337	G	N3-C2-N2	5.14	123.50	119.90
1	6	456	A	O4'-C1'-N9	-5.14	104.09	108.20
1	6	1201	G	C8-N9-C1'	5.14	133.68	127.00
1	6	1733	C	C5-C6-N1	-5.14	118.43	121.00
36	5	70	A	C4-N9-C1'	5.14	135.54	126.30
36	5	191	U	N3-C2-O2	5.14	125.80	122.20
36	5	1119	C	C2-N3-C4	-5.14	117.33	119.90
36	5	1173	U	C5-C4-O4	5.14	128.98	125.90
36	5	2729	U	C2-N1-C1'	-5.14	111.54	117.70
36	5	2959	C	N1-C2-N3	5.14	122.80	119.20
36	5	2990	G	N3-C4-C5	-5.14	126.03	128.60
36	5	3047	U	N3-C4-O4	5.14	123.00	119.40
36	5	3343	G	N1-C2-N3	5.14	126.98	123.90
37	7	107	C	OP2-P-O3'	5.14	116.50	105.20
78	q2	97	LYS	CD-CE-NZ	5.14	123.51	111.70
1	2	458	G	N3-C2-N2	-5.13	116.31	119.90
1	2	1386	G	C4-N9-C1'	-5.13	119.83	126.50
36	1	65	A	C5-C6-N6	-5.13	119.59	123.70
36	1	297	G	C6-N1-C2	-5.13	122.02	125.10
36	1	674	G	N3-C2-N2	-5.13	116.31	119.90
36	1	1317	A	C4-C5-N7	5.13	113.27	110.70
36	1	1328	C	O5'-P-OP1	-5.13	101.08	105.70
36	1	1390	A	N1-C6-N6	5.13	121.68	118.60
36	1	1469	C	C5-C6-N1	-5.13	118.43	121.00
36	1	1913	A	C5-N7-C8	-5.13	101.33	103.90
36	1	2593	A	P-O3'-C3'	5.13	125.86	119.70
36	1	2787	G	C5-N7-C8	-5.13	101.73	104.30
36	1	2863	G	O5'-P-OP1	5.13	116.86	110.70
36	1	2883	U	C2-N1-C1'	5.13	123.86	117.70
36	1	2943	G	C4-C5-C6	5.13	121.88	118.80
36	1	3125	U	N3-C4-O4	-5.13	115.81	119.40
36	1	3215	A	C6-N1-C2	-5.13	115.52	118.60
1	6	580	A	C5-C6-N1	5.13	120.27	117.70
1	6	860	U	N1-C2-O2	-5.13	119.20	122.80
36	5	233	C	C6-N1-C1'	5.13	126.96	120.80
36	5	760	G	N3-C4-C5	5.13	131.17	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1146	C	C6-N1-C2	5.13	122.35	120.30
36	5	1587	A	C8-N9-C4	5.13	107.85	105.80
36	5	1782	U	C2-N1-C1'	5.13	123.86	117.70
36	5	2236	G	N3-C4-N9	5.13	129.08	126.00
36	5	3229	G	N9-C4-C5	-5.13	103.35	105.40
36	5	3330	A	C4-N9-C1'	5.13	135.54	126.30
1	2	610	G	C5-C6-O6	-5.13	125.52	128.60
1	2	1299	G	C4-C5-C6	5.13	121.88	118.80
36	1	229	G	N3-C2-N2	-5.13	116.31	119.90
36	1	707	U	N3-C2-O2	-5.13	118.61	122.20
36	1	1288	U	C4-C5-C6	5.13	122.78	119.70
36	1	2638	C	N1-C2-O2	5.13	121.98	118.90
1	6	270	C	C5-C6-N1	5.13	123.57	121.00
36	5	3214	U	C2-N3-C4	-5.13	123.92	127.00
1	2	315	A	N1-C2-N3	-5.13	126.73	129.30
1	2	328	A	C8-N9-C4	-5.13	103.75	105.80
1	2	1639	C	N3-C4-N4	-5.13	114.41	118.00
1	2	1772	C	N3-C4-C5	5.13	123.95	121.90
36	1	357	A	C8-N9-C4	-5.13	103.75	105.80
36	1	947	G	N1-C2-N3	5.13	126.98	123.90
36	1	1443	G	OP2-P-O3'	-5.13	93.91	105.20
36	1	2154	U	C5-C4-O4	-5.13	122.82	125.90
36	1	2155	G	N1-C2-N2	-5.13	111.58	116.20
36	1	2934	A	C6-C5-N7	-5.13	128.71	132.30
36	1	2942	C	N1-C2-O2	-5.13	115.82	118.90
36	1	2976	A	OP1-P-OP2	-5.13	111.90	119.60
36	1	3259	U	C2-N1-C1'	5.13	123.86	117.70
36	1	3353	G	P-O3'-C3'	5.13	125.86	119.70
38	4	8	C	C5-C4-N4	-5.13	116.61	120.20
48	M1	12	LEU	CA-CB-CG	5.13	127.10	115.30
1	6	5	U	OP2-P-O3'	5.13	116.49	105.20
1	6	112	A	C4-C5-N7	5.13	113.27	110.70
1	6	327	U	O5'-P-OP2	-5.13	101.08	105.70
1	6	613	G	C8-N9-C4	-5.13	104.35	106.40
1	6	759	U	C6-N1-C2	-5.13	117.92	121.00
36	5	507	U	O4'-C1'-N1	5.13	112.31	108.20
36	5	582	G	N9-C4-C5	5.13	107.45	105.40
36	5	1523	U	C2-N1-C1'	5.13	123.86	117.70
36	5	1847	A	C8-N9-C4	5.13	107.85	105.80
36	5	2806	U	N3-C4-C5	5.13	117.68	114.60
37	7	120	C	C6-N1-C2	5.13	122.35	120.30
38	8	91	C	C6-N1-C2	-5.13	118.25	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1037	C	C5-C4-N4	-5.13	116.61	120.20
36	1	959	C	N3-C2-O2	5.13	125.49	121.90
1	6	149	C	C2-N1-C1'	-5.13	113.16	118.80
1	6	897	C	C2-N1-C1'	-5.13	113.16	118.80
36	5	230	U	N1-C2-N3	5.13	117.98	114.90
36	5	705	A	N1-C6-N6	-5.13	115.52	118.60
36	5	1878	G	N1-C2-N3	-5.13	120.82	123.90
36	5	3009	G	C2-N3-C4	-5.13	109.33	111.90
36	5	3052	G	C5'-C4'-O4'	5.13	115.26	109.10
36	5	3380	U	C2-N3-C4	5.13	130.08	127.00
36	1	213	A	C5-C6-N6	-5.13	119.60	123.70
36	1	341	G	C8-N9-C4	-5.13	104.35	106.40
36	1	432	G	C4-C5-C6	5.13	121.88	118.80
36	1	968	G	C6-N1-C2	-5.13	122.02	125.10
36	1	1112	A	C8-N9-C4	-5.13	103.75	105.80
36	1	1357	G	C4-C5-C6	5.13	121.88	118.80
36	1	1422	G	C5-C6-N1	-5.13	108.94	111.50
36	1	1550	C	N3-C4-C5	-5.13	119.85	121.90
36	1	2239	G	N1-C2-N2	-5.13	111.58	116.20
36	1	2610	G	C4-C5-C6	5.13	121.88	118.80
1	6	480	G	N3-C4-N9	5.13	129.08	126.00
1	6	800	U	C6-N1-C2	-5.13	117.92	121.00
1	6	824	G	C8-N9-C4	-5.13	104.35	106.40
1	6	1280	C	C2-N3-C4	5.13	122.46	119.90
1	6	1407	U	C5-C6-N1	-5.13	120.14	122.70
1	6	1513	G	N3-C4-C5	-5.13	126.04	128.60
36	5	210	U	C2-N3-C4	-5.13	123.92	127.00
36	5	932	U	N3-C4-O4	-5.13	115.81	119.40
36	5	1058	U	OP2-P-O3'	5.13	116.48	105.20
36	5	1081	U	N1-C2-O2	5.13	126.39	122.80
36	5	1198	C	OP1-P-O3'	5.13	116.48	105.20
36	5	1788	C	N3-C2-O2	5.13	125.49	121.90
36	5	2260	U	N3-C2-O2	-5.13	118.61	122.20
36	5	2518	C	N3-C4-N4	5.13	121.59	118.00
36	5	2933	A	O5'-P-OP1	-5.13	101.08	105.70
36	5	3254	G	N1-C2-N3	5.13	126.98	123.90
37	7	32	U	N3-C4-O4	5.13	122.99	119.40
1	2	458	G	C8-N9-C4	5.13	108.45	106.40
36	1	15	C	OP1-P-OP2	-5.13	111.91	119.60
36	1	297	G	N3-C4-N9	5.13	129.08	126.00
36	1	422	A	N1-C2-N3	5.13	131.86	129.30
36	1	741	U	N3-C4-C5	-5.13	111.52	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	944	C	C4-C5-C6	5.13	119.96	117.40
36	1	963	G	C6-C5-N7	-5.13	127.32	130.40
36	1	1404	G	OP1-P-O3'	5.13	116.48	105.20
36	1	1446	A	OP2-P-O3'	5.13	116.48	105.20
36	1	2995	A	C2-N3-C4	-5.13	108.04	110.60
36	1	3086	A	C5-N7-C8	5.13	106.46	103.90
36	1	3099	C	C5-C4-N4	-5.13	116.61	120.20
36	1	3105	U	N3-C4-O4	-5.13	115.81	119.40
37	3	112	G	C6-C5-N7	5.13	133.48	130.40
38	4	25	G	C4-C5-N7	-5.13	108.75	110.80
1	6	595	G	C5-N7-C8	-5.13	101.74	104.30
1	6	1387	G	C5-C6-O6	5.13	131.68	128.60
1	6	1606	C	O5'-P-OP2	-5.13	101.09	105.70
36	5	33	G	C4-C5-N7	-5.13	108.75	110.80
36	5	101	G	C4-C5-N7	5.13	112.85	110.80
36	5	790	U	C6-N1-C2	5.13	124.08	121.00
36	5	1117	G	OP2-P-O3'	5.13	116.48	105.20
36	5	1225	A	C6-N1-C2	-5.13	115.52	118.60
36	5	1344	G	OP2-P-O3'	5.13	116.48	105.20
36	5	1376	C	C5-C4-N4	-5.13	116.61	120.20
36	5	1586	G	C5-C6-O6	5.13	131.68	128.60
36	5	3035	A	N1-C6-N6	5.13	121.67	118.60
36	5	3205	G	N3-C2-N2	5.13	123.49	119.90
36	1	1163	A	C2-N3-C4	-5.12	108.04	110.60
36	1	1712	G	C8-N9-C4	-5.12	104.35	106.40
36	1	2356	A	N1-C2-N3	5.12	131.86	129.30
36	1	2943	G	C4-N9-C1'	5.12	133.16	126.50
78	Q2	8	ARG	NE-CZ-NH1	5.12	122.86	120.30
1	6	312	A	N1-C6-N6	-5.12	115.53	118.60
1	6	1383	G	C4-N9-C1'	5.12	133.16	126.50
36	5	684	G	N9-C1'-C2'	-5.12	106.36	112.00
36	5	878	G	N7-C8-N9	5.12	115.66	113.10
36	5	1299	U	N3-C4-O4	5.12	122.99	119.40
36	5	1753	G	C8-N9-C4	5.12	108.45	106.40
36	5	2608	G	C5-C6-O6	-5.12	125.53	128.60
48	m1	12	LEU	CA-CB-CG	5.12	127.09	115.30
1	2	1467	C	N3-C2-O2	-5.12	118.31	121.90
36	1	32	U	C2-N3-C4	-5.12	123.93	127.00
36	1	389	A	C6-C5-N7	-5.12	128.71	132.30
36	1	670	C	O5'-P-OP2	5.12	116.85	110.70
36	1	813	G	N1-C6-O6	5.12	122.97	119.90
36	1	2395	G	O4'-C1'-N9	-5.12	104.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	324	U	C2-N1-C1'	-5.12	111.55	117.70
1	6	607	G	C4-C5-C6	5.12	121.87	118.80
1	6	742	U	C2-N1-C1'	5.12	123.85	117.70
36	5	25	U	C4-C5-C6	5.12	122.77	119.70
36	5	54	C	C4-C5-C6	5.12	119.96	117.40
36	5	524	U	N3-C4-C5	5.12	117.67	114.60
36	5	2372	A	C8-N9-C1'	-5.12	118.48	127.70
36	5	2614	G	C8-N9-C1'	-5.12	120.34	127.00
36	5	2838	A	C5-C6-N1	5.12	120.26	117.70
36	5	2928	C	C5-C4-N4	-5.12	116.61	120.20
36	5	3123	A	N1-C6-N6	5.12	121.67	118.60
37	7	111	U	C2-N1-C1'	5.12	123.85	117.70
1	2	1076	A	C2-N3-C4	-5.12	108.04	110.60
36	1	1345	G	C4-N9-C1'	5.12	133.16	126.50
36	1	1501	U	C6-N1-C1'	-5.12	114.03	121.20
36	1	1599	G	N1-C2-N3	5.12	126.97	123.90
36	1	2847	A	C8-N9-C4	5.12	107.85	105.80
36	1	2978	U	C4-C5-C6	5.12	122.77	119.70
36	1	3129	A	C2-N3-C4	-5.12	108.04	110.60
1	6	401	A	OP2-P-O3'	5.12	116.47	105.20
1	6	1283	U	N1-C2-N3	5.12	117.97	114.90
1	6	1457	C	O5'-P-OP2	-5.12	101.09	105.70
1	6	1518	C	N3-C2-O2	-5.12	118.32	121.90
1	6	1704	U	C6-N1-C1'	-5.12	114.03	121.20
36	5	432	G	OP2-P-O3'	5.12	116.47	105.20
36	5	686	G	O4'-C1'-N9	5.12	112.30	108.20
36	5	688	G	C4-N9-C1'	5.12	133.16	126.50
36	5	1492	G	N1-C2-N3	5.12	126.97	123.90
36	5	1664	G	N1-C6-O6	-5.12	116.83	119.90
36	5	2195	C	C5-C4-N4	5.12	123.78	120.20
36	5	2284	C	OP1-P-O3'	5.12	116.47	105.20
36	5	3140	G	C8-N9-C4	5.12	108.45	106.40
37	7	8	G	N3-C4-C5	-5.12	126.04	128.60
36	1	1434	G	N9-C4-C5	5.12	107.45	105.40
36	1	3126	C	C5-C6-N1	-5.12	118.44	121.00
1	6	646	C	C5-C6-N1	5.12	123.56	121.00
36	5	957	C	C4-C5-C6	5.12	119.96	117.40
36	5	1226	G	C4-C5-N7	-5.12	108.75	110.80
36	5	1325	U	C6-N1-C2	5.12	124.07	121.00
36	5	1415	U	N1-C2-O2	-5.12	119.22	122.80
36	5	2171	G	P-O3'-C3'	-5.12	113.56	119.70
36	5	3306	U	C2-N1-C1'	5.12	123.84	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3320	A	OP1-P-OP2	5.12	127.28	119.60
38	8	90	U	C2-N1-C1'	5.12	123.84	117.70
1	2	950	C	N3-C4-N4	5.12	121.58	118.00
1	2	1131	A	OP2-P-O3'	5.12	116.46	105.20
1	2	1756	A	C6-C5-N7	-5.12	128.72	132.30
36	1	383	G	N3-C2-N2	5.12	123.48	119.90
36	1	419	G	C4-C5-N7	-5.12	108.75	110.80
36	1	654	C	N3-C2-O2	-5.12	118.32	121.90
36	1	792	G	N3-C4-C5	5.12	131.16	128.60
36	1	890	C	N3-C4-C5	5.12	123.95	121.90
36	1	1149	G	N1-C2-N2	-5.12	111.59	116.20
36	1	1355	A	C5-C6-N1	-5.12	115.14	117.70
36	1	1363	A	C4-C5-N7	5.12	113.26	110.70
36	1	2316	G	OP1-P-O3'	5.12	116.46	105.20
36	1	2382	G	O5'-P-OP1	5.12	116.84	110.70
36	1	2872	A	P-O3'-C3'	5.12	125.84	119.70
36	1	3241	G	C5-C6-N1	5.12	114.06	111.50
37	3	104	A	N9-C4-C5	5.12	107.85	105.80
1	6	62	A	N9-C4-C5	5.12	107.85	105.80
1	6	341	A	N9-C4-C5	5.12	107.85	105.80
1	6	596	C	N3-C2-O2	5.12	125.48	121.90
36	5	320	G	N9-C1'-C2'	-5.12	106.37	112.00
36	5	1013	G	C4-C5-N7	-5.12	108.75	110.80
36	5	1484	U	C5-C4-O4	5.12	128.97	125.90
36	5	2875	U	O4'-C1'-N1	5.12	112.29	108.20
36	5	2910	A	OP2-P-O3'	5.12	116.46	105.20
36	5	3044	G	O5'-P-OP1	5.12	116.84	110.70
36	5	3150	A	C5-N7-C8	-5.12	101.34	103.90
37	7	18	C	C6-N1-C2	5.12	122.35	120.30
10	S8	9	HIS	N-CA-C	-5.12	97.19	111.00
36	1	1417	G	C5-C6-N1	5.12	114.06	111.50
36	1	2653	C	C2-N1-C1'	5.12	124.43	118.80
1	6	130	C	N1-C2-O2	5.12	121.97	118.90
1	6	1644	C	N1-C2-N3	5.12	122.78	119.20
36	5	566	G	N3-C2-N2	5.12	123.48	119.90
36	5	867	G	C8-N9-C1'	-5.12	120.35	127.00
36	5	2586	G	C8-N9-C1'	5.12	133.65	127.00
36	5	2819	A	OP2-P-O3'	5.12	116.46	105.20
36	5	2994	A	C4-C5-C6	5.12	119.56	117.00
1	2	5	U	C5-C6-N1	5.12	125.26	122.70
36	1	81	C	C4-C5-C6	5.12	119.96	117.40
36	1	809	G	O5'-P-OP1	5.12	116.84	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	876	A	C4-N9-C1'	5.12	135.51	126.30
36	1	1103	A	C8-N9-C4	5.12	107.85	105.80
36	1	2330	C	C6-N1-C2	-5.12	118.25	120.30
36	1	2698	G	N7-C8-N9	-5.12	110.54	113.10
36	1	2865	U	OP1-P-OP2	-5.12	111.93	119.60
36	1	3088	G	OP1-P-O3'	-5.12	93.95	105.20
36	1	3276	G	N3-C4-N9	-5.12	122.93	126.00
1	6	105	A	OP1-P-OP2	5.12	127.27	119.60
1	6	555	A	N3-C4-C5	-5.12	123.22	126.80
1	6	572	C	C6-N1-C2	5.12	122.35	120.30
1	6	1600	A	N1-C6-N6	5.12	121.67	118.60
36	5	267	G	C2-N3-C4	5.12	114.46	111.90
36	5	283	G	N1-C6-O6	-5.12	116.83	119.90
36	5	1057	A	C2-N3-C4	-5.12	108.04	110.60
36	5	1159	A	C5-N7-C8	-5.12	101.34	103.90
36	5	1350	A	N9-C4-C5	5.12	107.85	105.80
36	5	2608	G	OP1-P-O3'	-5.12	93.94	105.20
36	5	2855	U	O4'-C1'-N1	-5.12	104.11	108.20
38	8	101	U	C5-C6-N1	-5.12	120.14	122.70
1	2	1199	G	O4'-C1'-N9	5.11	112.29	108.20
36	1	348	A	N3-C4-C5	5.11	130.38	126.80
36	1	649	A	N7-C8-N9	-5.11	111.24	113.80
36	1	1138	U	C2-N3-C4	-5.11	123.93	127.00
36	1	1513	G	C6-C5-N7	-5.11	127.33	130.40
36	1	1620	U	C2-N1-C1'	5.11	123.84	117.70
36	1	1774	C	C6-N1-C2	5.11	122.35	120.30
36	1	1815	U	P-O3'-C3'	5.11	125.84	119.70
36	1	2364	G	N1-C2-N2	-5.11	111.60	116.20
36	1	2387	A	N7-C8-N9	5.11	116.36	113.80
36	1	3330	A	N1-C6-N6	-5.11	115.53	118.60
38	4	126	A	O5'-P-OP1	-5.11	101.10	105.70
1	6	302	U	P-O3'-C3'	-5.11	113.56	119.70
1	6	1140	G	OP2-P-O3'	5.11	116.45	105.20
1	6	1432	U	N3-C2-O2	-5.11	118.62	122.20
36	5	137	G	N3-C2-N2	-5.11	116.32	119.90
36	5	747	A	O5'-P-OP1	5.11	116.83	110.70
36	5	834	U	N1-C2-N3	5.11	117.97	114.90
36	5	2615	G	OP2-P-O3'	5.11	116.45	105.20
36	5	2829	U	N3-C4-O4	5.11	122.98	119.40
38	8	110	C	O5'-P-OP2	-5.11	101.10	105.70
1	2	766	U	C2-N1-C1'	5.11	123.83	117.70
1	2	1766	A	O4'-C1'-N9	5.11	112.29	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	78	U	O5'-P-OP1	-5.11	101.10	105.70
36	1	864	G	C8-N9-C1'	-5.11	120.35	127.00
36	1	997	A	OP2-P-O3'	5.11	116.45	105.20
36	1	1460	A	N1-C6-N6	-5.11	115.53	118.60
36	1	2177	G	N1-C2-N2	-5.11	111.60	116.20
36	1	2275	A	C8-N9-C4	-5.11	103.75	105.80
36	1	2589	G	C4-N9-C1'	5.11	133.15	126.50
38	4	98	U	N3-C2-O2	-5.11	118.62	122.20
36	5	1100	U	C2-N1-C1'	-5.11	111.57	117.70
36	5	2422	C	C2-N3-C4	-5.11	117.34	119.90
37	7	100	C	N1-C2-O2	-5.11	115.83	118.90
1	2	861	U	N3-C2-O2	5.11	125.78	122.20
1	2	1240	U	O5'-P-OP2	-5.11	101.10	105.70
36	1	44	U	OP2-P-O3'	5.11	116.44	105.20
36	1	76	G	OP1-P-O3'	5.11	116.44	105.20
36	1	223	U	C5-C6-N1	-5.11	120.14	122.70
36	1	351	A	O4'-C1'-N9	-5.11	104.11	108.20
36	1	1116	G	C5-N7-C8	-5.11	101.75	104.30
36	1	1124	U	C5-C6-N1	5.11	125.25	122.70
36	1	1430	U	N3-C4-O4	5.11	122.98	119.40
36	1	2122	G	N3-C4-N9	-5.11	122.93	126.00
36	1	2357	A	N7-C8-N9	5.11	116.36	113.80
1	6	1630	U	C5-C4-O4	-5.11	122.83	125.90
36	5	576	C	N1-C2-N3	5.11	122.78	119.20
36	5	728	G	N9-C1'-C2'	-5.11	106.38	112.00
36	5	1115	G	C5-C6-N1	5.11	114.06	111.50
36	5	1790	G	C5-C6-N1	-5.11	108.94	111.50
36	5	2282	U	C2-N3-C4	-5.11	123.93	127.00
36	5	2950	G	N7-C8-N9	5.11	115.66	113.10
36	1	708	G	N3-C4-C5	-5.11	126.05	128.60
36	1	714	G	C2-N3-C4	-5.11	109.35	111.90
36	1	840	C	C2-N1-C1'	-5.11	113.18	118.80
36	1	1060	U	C2-N3-C4	-5.11	123.94	127.00
36	1	1744	G	C2-N3-C4	-5.11	109.35	111.90
36	1	2178	A	OP2-P-O3'	5.11	116.44	105.20
36	1	2894	C	N1-C2-O2	5.11	121.97	118.90
38	4	94	C	N1-C2-O2	5.11	121.97	118.90
1	6	247	A	N9-C4-C5	-5.11	103.76	105.80
36	5	3024	A	C6-N1-C2	5.11	121.67	118.60
38	8	32	C	C6-N1-C2	5.11	122.34	120.30
44	17	45	LEU	CB-CG-CD1	5.11	119.69	111.00
55	m9	62	ARG	NE-CZ-NH2	-5.11	117.75	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	587	C	C6-N1-C2	-5.11	118.26	120.30
36	1	1743	G	C6-C5-N7	5.11	133.47	130.40
36	1	2105	G	C4-C5-N7	5.11	112.84	110.80
36	1	2415	C	N3-C4-N4	-5.11	114.42	118.00
36	1	2864	A	C2-N3-C4	-5.11	108.05	110.60
36	1	2881	C	C5-C6-N1	-5.11	118.45	121.00
36	1	2895	G	OP1-P-OP2	-5.11	111.94	119.60
36	1	3248	C	N3-C2-O2	5.11	125.47	121.90
70	O4	30	LEU	CA-CB-CG	-5.11	103.55	115.30
1	6	204	G	C4-N9-C1'	5.11	133.14	126.50
1	6	474	A	C5-N7-C8	-5.11	101.35	103.90
1	6	566	C	C4-C5-C6	5.11	119.95	117.40
1	6	603	U	N1-C2-N3	5.11	117.96	114.90
36	5	532	A	C2-N3-C4	-5.11	108.05	110.60
36	5	731	U	C5-C4-O4	5.11	128.96	125.90
36	5	1160	C	C2-N3-C4	-5.11	117.35	119.90
36	5	1202	A	C8-N9-C1'	-5.11	118.51	127.70
36	5	1287	A	C4-C5-C6	5.11	119.55	117.00
36	5	1546	A	O5'-P-OP2	5.11	116.83	110.70
36	5	2185	G	C5-N7-C8	-5.11	101.75	104.30
36	5	2364	G	C8-N9-C4	-5.11	104.36	106.40
36	5	3149	G	O5'-P-OP2	-5.11	101.10	105.70
37	7	90	U	C5-C4-O4	-5.11	122.83	125.90
1	2	1776	A	C5-C6-N1	5.11	120.25	117.70
36	1	240	U	N3-C4-C5	-5.11	111.54	114.60
36	1	500	C	C5-C6-N1	-5.11	118.45	121.00
36	1	796	U	N3-C4-C5	5.11	117.66	114.60
36	1	1577	G	C8-N9-C4	-5.11	104.36	106.40
36	1	2876	C	N3-C4-C5	-5.11	119.86	121.90
40	L3	150	ARG	NE-CZ-NH1	-5.11	117.75	120.30
1	6	204	G	N1-C6-O6	5.11	122.96	119.90
1	6	340	U	C4-C5-C6	5.11	122.76	119.70
1	6	1454	G	C5-C6-O6	-5.11	125.54	128.60
1	6	1610	G	N1-C2-N2	-5.11	111.61	116.20
36	5	1764	U	N3-C2-O2	-5.11	118.63	122.20
36	5	1810	A	C4-C5-N7	5.11	113.25	110.70
36	5	1854	C	C4-C5-C6	5.11	119.95	117.40
36	5	2125	A	N3-C4-C5	5.11	130.37	126.80
36	5	2258	U	N1-C2-O2	5.11	126.37	122.80
36	1	197	G	C2-N3-C4	-5.10	109.35	111.90
36	1	319	A	N1-C6-N6	-5.10	115.54	118.60
36	1	952	A	N1-C2-N3	5.10	131.85	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1412	G	C4-C5-N7	5.10	112.84	110.80
36	1	1456	A	C5-C6-N6	5.10	127.78	123.70
36	1	2370	G	C4-C5-N7	-5.10	108.76	110.80
1	6	1421	A	N7-C8-N9	-5.10	111.25	113.80
36	5	43	A	O4'-C1'-N9	5.10	112.28	108.20
36	5	274	G	C8-N9-C4	5.10	108.44	106.40
36	5	1911	A	N1-C2-N3	5.10	131.85	129.30
36	5	2420	C	O5'-P-OP2	5.10	116.83	110.70
36	5	2863	G	N3-C2-N2	-5.10	116.33	119.90
37	7	1	G	C4-C5-N7	5.10	112.84	110.80
37	7	77	G	OP1-P-O3'	5.10	116.43	105.20
38	8	5	U	N1-C2-O2	-5.10	119.23	122.80
1	2	144	U	C4-C5-C6	5.10	122.76	119.70
1	2	351	C	C2-N1-C1'	-5.10	113.19	118.80
1	2	1758	U	N3-C2-O2	-5.10	118.63	122.20
36	1	287	G	N7-C8-N9	5.10	115.65	113.10
36	1	379	C	O5'-P-OP1	5.10	116.82	110.70
36	1	407	A	O4'-C1'-N9	-5.10	104.12	108.20
36	1	876	A	N1-C2-N3	5.10	131.85	129.30
36	1	877	C	OP2-P-O3'	5.10	116.43	105.20
36	1	953	G	N3-C4-N9	-5.10	122.94	126.00
36	1	1166	G	N9-C1'-C2'	-5.10	106.39	112.00
36	1	1909	A	O5'-P-OP2	5.10	116.82	110.70
36	1	2771	U	C5-C6-N1	5.10	125.25	122.70
36	1	2772	C	N1-C2-N3	-5.10	115.63	119.20
36	1	2808	A	C6-C5-N7	-5.10	128.73	132.30
36	1	2837	A	O4'-C1'-N9	-5.10	104.12	108.20
1	6	104	A	C8-N9-C4	-5.10	103.76	105.80
1	6	539	G	O4'-C1'-N9	-5.10	104.12	108.20
1	6	594	A	C5-C6-N1	5.10	120.25	117.70
1	6	761	G	N3-C4-C5	-5.10	126.05	128.60
1	6	1477	G	C8-N9-C4	5.10	108.44	106.40
11	s9	3	ARG	NE-CZ-NH1	-5.10	117.75	120.30
36	5	305	U	C4-C5-C6	5.10	122.76	119.70
36	5	946	U	N3-C4-O4	5.10	122.97	119.40
36	5	1208	U	C2-N1-C1'	-5.10	111.58	117.70
36	5	2409	G	C4-C5-C6	5.10	121.86	118.80
36	5	2657	A	OP1-P-O3'	5.10	116.43	105.20
36	5	2917	G	N9-C4-C5	5.10	107.44	105.40
36	5	3089	C	N3-C2-O2	5.10	125.47	121.90
1	2	1165	G	C8-N9-C1'	-5.10	120.37	127.00
1	2	1241	G	C8-N9-C4	-5.10	104.36	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1550	C	OP1-P-OP2	-5.10	111.95	119.60
36	1	2371	G	C4-C5-N7	-5.10	108.76	110.80
36	1	3057	U	N1-C2-N3	5.10	117.96	114.90
36	1	3209	A	C8-N9-C1'	-5.10	118.52	127.70
1	6	85	A	C5-N7-C8	-5.10	101.35	103.90
1	6	576	G	C5-C6-N1	-5.10	108.95	111.50
1	6	1631	A	C4-C5-N7	5.10	113.25	110.70
36	5	501	A	OP2-P-O3'	5.10	116.42	105.20
36	5	675	C	OP1-P-OP2	-5.10	111.95	119.60
36	5	1045	C	O4'-C1'-N1	-5.10	104.12	108.20
36	5	2834	G	N1-C6-O6	-5.10	116.84	119.90
36	1	612	U	OP1-P-O3'	5.10	116.42	105.20
36	1	1599	G	C2-N3-C4	-5.10	109.35	111.90
36	1	2177	G	C8-N9-C4	-5.10	104.36	106.40
36	1	2324	A	O4'-C1'-N9	-5.10	104.12	108.20
36	1	2748	A	C8-N9-C4	5.10	107.84	105.80
36	1	2843	U	C5-C6-N1	5.10	125.25	122.70
36	1	2925	C	O4'-C1'-N1	5.10	112.28	108.20
1	6	1031	U	O5'-P-OP1	-5.10	101.11	105.70
36	5	229	G	N7-C8-N9	5.10	115.65	113.10
36	5	363	G	N3-C4-N9	5.10	129.06	126.00
36	5	811	U	C4-C5-C6	5.10	122.76	119.70
36	5	1119	C	C5-C6-N1	-5.10	118.45	121.00
36	5	1122	U	C2-N1-C1'	5.10	123.82	117.70
36	5	1134	G	N3-C2-N2	-5.10	116.33	119.90
36	5	1154	A	C4-C5-C6	5.10	119.55	117.00
36	5	1371	G	C6-N1-C2	-5.10	122.04	125.10
36	5	1471	U	C5-C4-O4	5.10	128.96	125.90
36	5	2407	C	N3-C4-C5	5.10	123.94	121.90
36	5	3024	A	C4-N9-C1'	-5.10	117.12	126.30
38	8	31	G	N1-C2-N2	-5.10	111.61	116.20
1	2	315	A	C2-N3-C4	5.10	113.15	110.60
1	2	985	G	N3-C4-C5	-5.10	126.05	128.60
36	1	353	G	N7-C8-N9	-5.10	110.55	113.10
36	1	1515	A	C8-N9-C4	5.10	107.84	105.80
36	1	2292	U	O5'-P-OP1	-5.10	101.11	105.70
36	1	3107	U	N1-C1'-C2'	-5.10	106.39	112.00
36	1	3395	G	OP1-P-OP2	5.10	127.25	119.60
1	6	55	A	N9-C4-C5	5.10	107.84	105.80
1	6	425	A	C5-C6-N1	5.10	120.25	117.70
36	5	209	A	C5-C6-N1	5.10	120.25	117.70
36	5	984	G	C4-C5-C6	5.10	121.86	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	993	G	O5'-P-OP2	-5.10	101.11	105.70
36	5	1204	A	N3-C4-C5	5.10	130.37	126.80
36	5	2247	G	C8-N9-C1'	-5.10	120.37	127.00
36	5	3011	A	C8-N9-C4	5.10	107.84	105.80
36	5	3336	A	C5-N7-C8	-5.10	101.35	103.90
46	19	166	ARG	NE-CZ-NH1	5.10	122.85	120.30
1	2	1264	G	C5-C6-O6	5.10	131.66	128.60
36	1	2714	G	N9-C4-C5	5.10	107.44	105.40
40	L3	43	LEU	CA-CB-CG	5.10	127.02	115.30
1	6	128	U	C5-C6-N1	-5.10	120.15	122.70
1	6	473	A	C4-C5-N7	-5.10	108.15	110.70
1	6	697	C	N3-C4-C5	-5.10	119.86	121.90
36	5	559	A	C5-N7-C8	-5.10	101.35	103.90
36	5	1929	G	N7-C8-N9	5.10	115.65	113.10
36	5	2099	A	O4'-C1'-N9	5.10	112.28	108.20
36	5	2765	C	C5-C4-N4	-5.10	116.63	120.20
36	1	318	A	O5'-P-OP1	-5.09	101.11	105.70
36	1	407	A	C4-N9-C1'	5.09	135.47	126.30
36	1	991	G	N1-C2-N3	5.09	126.96	123.90
36	1	1332	A	C6-N1-C2	-5.09	115.54	118.60
36	1	1883	A	C2-N3-C4	-5.09	108.05	110.60
36	1	2300	G	C5-C6-O6	5.09	131.66	128.60
36	1	3063	C	OP2-P-O3'	5.09	116.41	105.20
36	1	3377	G	C5-C6-O6	5.09	131.66	128.60
1	6	908	U	N3-C2-O2	-5.09	118.63	122.20
1	6	963	A	N9-C4-C5	-5.09	103.76	105.80
1	6	1643	U	C4-C5-C6	5.09	122.76	119.70
20	c8	135	GLY	N-CA-C	5.09	125.84	113.10
36	5	155	G	N3-C4-C5	-5.09	126.05	128.60
36	5	286	U	C2-N1-C1'	5.09	123.81	117.70
36	5	661	G	C8-N9-C4	-5.09	104.36	106.40
36	5	1177	G	N3-C4-C5	-5.09	126.05	128.60
36	5	1322	U	N3-C2-O2	5.09	125.77	122.20
36	5	1637	A	C5-C6-N6	5.09	127.78	123.70
36	5	1685	C	C5-C6-N1	-5.09	118.45	121.00
36	5	2866	U	C6-N1-C2	-5.09	117.94	121.00
36	5	2976	A	N3-C4-C5	-5.09	123.23	126.80
36	5	3124	G	O5'-P-OP2	-5.09	101.11	105.70
36	5	3166	C	N3-C2-O2	-5.09	118.33	121.90
48	m1	94	ARG	NE-CZ-NH1	5.09	122.85	120.30
1	2	196	G	O4'-C1'-N9	5.09	112.27	108.20
1	2	441	A	C8-N9-C4	-5.09	103.76	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	828	A	C6-C5-N7	-5.09	128.74	132.30
36	1	947	G	C4-C5-N7	-5.09	108.76	110.80
36	1	1364	C	N1-C2-O2	5.09	121.96	118.90
36	1	2858	U	C2-N1-C1'	5.09	123.81	117.70
37	3	95	A	OP1-P-OP2	-5.09	111.96	119.60
1	6	214	G	C4-N9-C1'	-5.09	119.88	126.50
1	6	1537	C	C2-N1-C1'	-5.09	113.20	118.80
1	6	1663	G	N7-C8-N9	-5.09	110.55	113.10
36	5	1073	U	N3-C4-C5	5.09	117.66	114.60
36	5	2968	G	N1-C2-N3	5.09	126.96	123.90
1	2	45	U	C5-C4-O4	5.09	128.95	125.90
1	2	947	U	C2-N1-C1'	-5.09	111.59	117.70
1	2	970	A	OP2-P-O3'	5.09	116.40	105.20
1	2	1746	A	OP1-P-O3'	5.09	116.40	105.20
1	2	1796	C	N3-C4-C5	-5.09	119.86	121.90
36	1	42	C	C5-C4-N4	-5.09	116.64	120.20
36	1	71	A	O5'-P-OP2	5.09	116.81	110.70
36	1	2417	U	C5-C6-N1	-5.09	120.15	122.70
36	1	2656	A	OP1-P-OP2	5.09	127.24	119.60
36	1	2816	G	N1-C2-N3	5.09	126.95	123.90
61	N5	115	ARG	NE-CZ-NH2	-5.09	117.75	120.30
1	6	112	A	C5-C6-N6	-5.09	119.63	123.70
1	6	1387	G	C4-C5-N7	-5.09	108.76	110.80
1	6	1571	C	C4-C5-C6	5.09	119.95	117.40
1	6	1760	G	N1-C6-O6	-5.09	116.84	119.90
36	5	23	A	C5-N7-C8	-5.09	101.35	103.90
36	5	650	C	C5-C6-N1	-5.09	118.45	121.00
36	5	1061	A	O4'-C1'-N9	5.09	112.27	108.20
36	5	1063	G	C2-N3-C4	-5.09	109.36	111.90
36	5	1914	G	C5-N7-C8	-5.09	101.75	104.30
36	5	2245	C	C4-C5-C6	5.09	119.95	117.40
36	5	2746	A	C5-C6-N6	5.09	127.77	123.70
36	5	2835	U	OP2-P-O3'	5.09	116.40	105.20
36	5	2848	G	C5-N7-C8	-5.09	101.75	104.30
36	5	3145	C	O5'-P-OP2	-5.09	101.12	105.70
1	2	1071	U	C5-C4-O4	5.09	128.95	125.90
36	1	992	A	C4-C5-C6	-5.09	114.45	117.00
36	1	1189	C	N1-C2-O2	-5.09	115.85	118.90
36	1	1461	A	C5-C6-N6	-5.09	119.63	123.70
36	1	2738	A	O5'-P-OP2	-5.09	101.12	105.70
36	1	2895	G	N7-C8-N9	5.09	115.64	113.10
36	1	3300	U	C2-N1-C1'	5.09	123.81	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	52	A	P-O3'-C3'	-5.09	113.59	119.70
1	6	286	C	C5-C4-N4	-5.09	116.64	120.20
1	6	369	A	N1-C6-N6	5.09	121.65	118.60
1	6	977	A	C6-C5-N7	-5.09	128.74	132.30
1	6	1173	C	N3-C4-C5	5.09	123.94	121.90
1	6	1284	C	O5'-P-OP2	-5.09	101.12	105.70
36	5	155	G	C2-N3-C4	5.09	114.44	111.90
36	5	770	G	O5'-P-OP2	5.09	116.81	110.70
36	5	1448	U	N3-C2-O2	-5.09	118.64	122.20
36	5	1578	C	N1-C2-O2	5.09	121.95	118.90
36	5	1582	C	N3-C4-C5	5.09	123.94	121.90
36	5	1760	A	C5-C6-N6	5.09	127.77	123.70
36	5	2678	A	N9-C4-C5	5.09	107.84	105.80
36	5	3266	G	N9-C4-C5	5.09	107.44	105.40
37	7	105	C	N3-C2-O2	-5.09	118.34	121.90
36	1	661	G	OP1-P-OP2	5.09	127.23	119.60
36	1	2383	C	N3-C4-N4	5.09	121.56	118.00
36	1	3213	A	C8-N9-C4	-5.09	103.77	105.80
38	4	129	C	OP2-P-O3'	5.09	116.39	105.20
1	6	409	C	C6-N1-C2	-5.09	118.27	120.30
1	6	783	G	C8-N9-C1'	-5.09	120.39	127.00
36	5	1889	G	C5-N7-C8	-5.09	101.76	104.30
36	5	2947	G	C2-N3-C4	5.09	114.44	111.90
1	2	350	U	C2-N1-C1'	-5.09	111.60	117.70
1	2	1274	C	OP1-P-O3'	-5.09	94.01	105.20
1	2	1427	A	N3-C4-C5	-5.09	123.24	126.80
36	1	823	C	O5'-P-OP1	5.09	116.80	110.70
36	1	980	A	C4-C5-C6	5.09	119.54	117.00
36	1	1628	C	C6-N1-C2	-5.09	118.27	120.30
36	1	1661	G	N1-C2-N3	5.09	126.95	123.90
36	1	1704	A	C5-C6-N1	-5.09	115.16	117.70
36	1	2297	U	C2-N3-C4	-5.09	123.95	127.00
36	1	2579	G	N1-C6-O6	-5.09	116.85	119.90
36	1	2819	A	C4-C5-C6	-5.09	114.46	117.00
36	1	2986	U	N3-C4-O4	5.09	122.96	119.40
1	6	555	A	C6-N1-C2	-5.09	115.55	118.60
1	6	586	G	C4-C5-N7	-5.09	108.77	110.80
1	6	927	C	C2-N1-C1'	5.09	124.40	118.80
1	6	1515	A	O4'-C1'-N9	-5.09	104.13	108.20
1	6	1516	A	C6-N1-C2	-5.09	115.55	118.60
1	6	1602	C	N1-C2-N3	5.09	122.76	119.20
36	5	577	C	N3-C4-N4	-5.09	114.44	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	614	C	C4-C5-C6	-5.09	114.86	117.40
36	5	619	A	O4'-C1'-N9	-5.09	104.13	108.20
36	5	684	G	C4-N9-C1'	-5.09	119.89	126.50
36	5	819	U	C2-N3-C4	5.09	130.05	127.00
36	5	825	U	C2-N1-C1'	-5.09	111.60	117.70
36	5	872	U	OP1-P-OP2	-5.09	111.97	119.60
36	5	919	U	N1-C2-O2	-5.09	119.24	122.80
36	5	1922	A	N3-C4-N9	-5.09	123.33	127.40
36	5	2654	C	C4-C5-C6	-5.09	114.86	117.40
37	7	87	G	C5-C6-O6	-5.09	125.55	128.60
1	2	21	U	C6-N1-C1'	-5.08	114.08	121.20
36	1	300	G	N3-C4-N9	-5.08	122.95	126.00
36	1	1743	G	C8-N9-C1'	5.08	133.61	127.00
36	1	2625	C	C4-C5-C6	-5.08	114.86	117.40
36	1	2953	U	C2-N1-C1'	5.08	123.80	117.70
36	1	3064	U	N3-C2-O2	5.08	125.76	122.20
62	N6	7	ASP	CB-CG-OD1	-5.08	113.72	118.30
1	6	1624	C	C5-C6-N1	-5.08	118.46	121.00
36	5	110	G	C6-C5-N7	-5.08	127.35	130.40
36	5	956	U	OP1-P-OP2	5.08	127.23	119.60
36	5	1658	G	N3-C4-C5	-5.08	126.06	128.60
36	5	2337	C	N1-C2-N3	5.08	122.76	119.20
36	1	28	C	O5'-P-OP2	-5.08	101.12	105.70
36	1	98	G	C5-C6-N1	5.08	114.04	111.50
36	1	211	A	C4-N9-C1'	-5.08	117.15	126.30
36	1	1180	A	N1-C2-N3	5.08	131.84	129.30
36	1	1374	G	O5'-P-OP2	-5.08	101.12	105.70
36	1	2211	U	C6-N1-C2	-5.08	117.95	121.00
36	1	3213	A	N7-C8-N9	5.08	116.34	113.80
41	L4	230	VAL	CB-CA-C	-5.08	101.74	111.40
1	6	905	A	O4'-C1'-N9	5.08	112.27	108.20
1	6	1627	U	N3-C4-C5	-5.08	111.55	114.60
36	5	1480	G	C5-C6-O6	-5.08	125.55	128.60
36	5	1900	A	C2-N3-C4	5.08	113.14	110.60
36	5	2102	U	C6-N1-C2	-5.08	117.95	121.00
36	5	2142	A	O4'-C1'-N9	-5.08	104.13	108.20
36	5	2327	U	OP1-P-O3'	-5.08	94.02	105.20
36	5	2331	C	N3-C4-C5	-5.08	119.87	121.90
36	5	2633	U	C4-C5-C6	5.08	122.75	119.70
36	5	3140	G	C5-N7-C8	-5.08	101.76	104.30
38	8	54	A	C5-N7-C8	-5.08	101.36	103.90
38	8	116	G	N7-C8-N9	5.08	115.64	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	2	1235	C	N1-C2-O2	-5.08	115.85	118.90
36	1	429	U	N3-C2-O2	-5.08	118.64	122.20
36	1	495	G	C5-C6-O6	5.08	131.65	128.60
36	1	1209	G	C6-N1-C2	-5.08	122.05	125.10
36	1	2187	G	N1-C6-O6	-5.08	116.85	119.90
36	1	2349	U	OP2-P-O3'	5.08	116.38	105.20
36	1	2933	A	C4-C5-N7	5.08	113.24	110.70
36	1	3272	C	C4-C5-C6	5.08	119.94	117.40
38	4	59	A	N9-C4-C5	5.08	107.83	105.80
38	4	117	C	C2-N1-C1'	-5.08	113.21	118.80
1	6	400	A	C4-C5-C6	5.08	119.54	117.00
1	6	571	G	OP1-P-OP2	-5.08	111.98	119.60
1	6	1192	C	C5-C4-N4	-5.08	116.64	120.20
36	5	867	G	C4-N9-C1'	5.08	133.11	126.50
36	5	1618	G	O5'-P-OP2	-5.08	101.13	105.70
36	5	2418	G	C8-N9-C1'	-5.08	120.39	127.00
36	5	2419	A	C8-N9-C4	-5.08	103.77	105.80
36	5	2850	G	N1-C6-O6	-5.08	116.85	119.90
36	5	3189	G	N3-C4-N9	5.08	129.05	126.00
1	2	423	G	C2-N3-C4	5.08	114.44	111.90
36	1	83	U	O5'-P-OP2	-5.08	101.13	105.70
36	1	1524	A	C6-N1-C2	-5.08	115.55	118.60
36	1	2347	U	C2-N3-C4	5.08	130.05	127.00
36	5	89	A	N1-C6-N6	-5.08	115.55	118.60
36	5	631	U	C5-C4-O4	-5.08	122.85	125.90
36	5	647	A	OP1-P-OP2	-5.08	111.98	119.60
36	5	952	A	N1-C6-N6	-5.08	115.55	118.60
36	5	1086	C	N3-C4-C5	-5.08	119.87	121.90
36	5	1163	A	C2-N3-C4	-5.08	108.06	110.60
36	5	1920	U	N1-C2-N3	5.08	117.95	114.90
36	5	2119	A	N1-C2-N3	5.08	131.84	129.30
36	5	3042	U	C2-N3-C4	-5.08	123.95	127.00
1	2	534	A	C4-C5-C6	-5.08	114.46	117.00
1	2	1610	G	C4-C5-C6	5.08	121.85	118.80
36	1	326	U	C2-N1-C1'	5.08	123.79	117.70
36	1	335	G	N3-C4-N9	-5.08	122.95	126.00
36	1	410	U	N3-C4-O4	-5.08	115.84	119.40
36	1	583	G	N1-C2-N2	-5.08	111.63	116.20
36	1	636	C	O5'-P-OP2	5.08	116.79	110.70
36	1	831	G	C5-C6-O6	-5.08	125.55	128.60
36	1	945	C	C2-N1-C1'	5.08	124.39	118.80
36	1	2403	G	O3'-P-O5'	-5.08	94.35	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2701	U	C6-N1-C2	-5.08	117.95	121.00
36	1	3319	U	N3-C2-O2	-5.08	118.64	122.20
1	6	803	A	C8-N9-C4	-5.08	103.77	105.80
1	6	1052	U	O5'-P-OP1	-5.08	101.13	105.70
1	6	1570	A	N9-C1'-C2'	-5.08	106.41	112.00
1	6	1651	A	N7-C8-N9	5.08	116.34	113.80
36	5	409	A	O4'-C1'-N9	5.08	112.26	108.20
36	5	864	G	N9-C4-C5	-5.08	103.37	105.40
36	5	1045	C	OP2-P-O3'	5.08	116.37	105.20
36	5	1365	G	N1-C2-N2	5.08	120.77	116.20
36	5	1377	G	C5-C6-N1	-5.08	108.96	111.50
36	5	1394	A	N1-C6-N6	5.08	121.65	118.60
36	5	1486	G	C2-N3-C4	-5.08	109.36	111.90
36	5	2813	A	C5-N7-C8	-5.08	101.36	103.90
36	5	2854	U	N3-C4-C5	-5.08	111.55	114.60
36	5	2937	G	N3-C4-N9	5.08	129.05	126.00
36	5	3164	C	C6-N1-C2	5.08	122.33	120.30
37	7	13	A	C8-N9-C4	-5.08	103.77	105.80
36	1	752	C	C2-N3-C4	-5.08	117.36	119.90
36	1	3270	U	N3-C4-O4	-5.08	115.85	119.40
1	6	402	C	N3-C2-O2	-5.08	118.35	121.90
1	6	1079	U	N3-C2-O2	5.08	125.75	122.20
36	5	208	C	N1-C2-O2	-5.08	115.85	118.90
36	5	425	G	OP2-P-O3'	5.08	116.37	105.20
36	5	650	C	N1-C2-N3	5.08	122.75	119.20
36	5	1929	G	N1-C2-N3	5.08	126.95	123.90
37	7	30	G	N1-C2-N3	5.08	126.95	123.90
38	8	41	A	C2-N3-C4	-5.08	108.06	110.60
1	2	1102	G	C4-C5-N7	5.08	112.83	110.80
1	2	1324	G	C8-N9-C1'	5.08	133.60	127.00
1	2	1520	U	C5-C4-O4	-5.08	122.86	125.90
1	2	1582	U	C2-N1-C1'	5.08	123.79	117.70
36	1	25	U	C2-N3-C4	5.08	130.04	127.00
36	1	964	G	C5-C6-N1	5.08	114.04	111.50
36	1	1303	A	N1-C2-N3	5.08	131.84	129.30
36	1	1520	G	OP2-P-O3'	5.08	116.36	105.20
36	1	2957	G	N7-C8-N9	5.08	115.64	113.10
36	1	3006	A	C4-C5-C6	5.08	119.54	117.00
36	1	3075	G	N3-C4-C5	5.08	131.14	128.60
1	6	62	A	C4-C5-N7	-5.08	108.16	110.70
1	6	246	G	N3-C4-C5	-5.08	126.06	128.60
1	6	305	C	C6-N1-C2	5.08	122.33	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	930	A	C6-N1-C2	-5.08	115.55	118.60
1	6	1575	G	C4-C5-C6	-5.08	115.75	118.80
1	6	1785	U	O5'-P-OP2	5.08	116.79	110.70
36	5	303	G	N3-C4-C5	-5.08	126.06	128.60
36	5	561	C	C4-C5-C6	5.08	119.94	117.40
36	5	1335	C	C5-C6-N1	5.08	123.54	121.00
36	5	2863	G	C5-C6-N1	-5.08	108.96	111.50
36	5	3012	A	N9-C4-C5	-5.08	103.77	105.80
36	5	3207	U	N3-C4-O4	-5.08	115.85	119.40
38	8	70	G	N1-C6-O6	-5.08	116.86	119.90
1	2	985	G	N3-C4-N9	5.07	129.04	126.00
36	1	35	A	N9-C4-C5	-5.07	103.77	105.80
36	1	63	A	N1-C2-N3	-5.07	126.76	129.30
36	1	515	C	C6-N1-C1'	-5.07	114.71	120.80
36	1	921	A	O4'-C1'-N9	-5.07	104.14	108.20
36	1	1938	U	N3-C2-O2	5.07	125.75	122.20
36	1	2171	G	C4-C5-N7	-5.07	108.77	110.80
36	1	2184	U	C5-C4-O4	-5.07	122.86	125.90
36	1	2604	U	C4-C5-C6	5.07	122.75	119.70
36	1	2879	C	C6-N1-C2	5.07	122.33	120.30
38	4	62	C	N3-C2-O2	-5.07	118.35	121.90
38	4	85	G	N3-C2-N2	5.07	123.45	119.90
1	6	953	G	N9-C4-C5	-5.07	103.37	105.40
1	6	1071	U	OP1-P-OP2	5.07	127.21	119.60
1	6	1418	G	C6-N1-C2	5.07	128.14	125.10
1	6	1629	G	N3-C4-N9	5.07	129.04	126.00
1	6	1716	C	C6-N1-C2	5.07	122.33	120.30
36	5	49	A	C8-N9-C4	5.07	107.83	105.80
36	5	188	U	N3-C4-O4	5.07	122.95	119.40
36	5	1008	U	N3-C2-O2	5.07	125.75	122.20
36	5	1530	U	C5-C4-O4	-5.07	122.86	125.90
36	5	1652	G	O5'-P-OP1	5.07	116.79	110.70
36	5	1733	G	C4-N9-C1'	5.07	133.09	126.50
36	5	1866	C	C6-N1-C2	-5.07	118.27	120.30
36	5	2150	G	C4-C5-C6	5.07	121.84	118.80
36	5	2858	U	C4-C5-C6	5.07	122.74	119.70
36	5	2859	U	C2-N1-C1'	-5.07	111.61	117.70
36	5	3323	A	N3-C4-C5	-5.07	123.25	126.80
36	1	871	U	N1-C2-O2	-5.07	119.25	122.80
36	1	1190	A	N9-C4-C5	5.07	107.83	105.80
36	1	1471	U	C5-C6-N1	-5.07	120.16	122.70
36	1	1939	G	N3-C4-N9	5.07	129.04	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1951	C	C5-C6-N1	5.07	123.54	121.00
36	1	2686	A	N7-C8-N9	5.07	116.34	113.80
44	L7	202	LEU	CA-CB-CG	-5.07	103.64	115.30
1	6	1584	G	C4-C5-N7	5.07	112.83	110.80
36	5	367	A	N9-C4-C5	5.07	107.83	105.80
36	5	1066	G	O5'-P-OP2	5.07	116.79	110.70
36	5	1363	A	C4-C5-N7	-5.07	108.16	110.70
36	5	1892	G	N1-C2-N2	-5.07	111.64	116.20
36	5	2650	U	N1-C2-N3	5.07	117.94	114.90
36	5	2688	U	C4-C5-C6	5.07	122.74	119.70
29	D7	41	LEU	CA-CB-CG	5.07	126.96	115.30
36	1	369	A	N9-C4-C5	5.07	107.83	105.80
36	1	813	G	C5-C6-O6	-5.07	125.56	128.60
36	1	896	A	C6-N1-C2	-5.07	115.56	118.60
36	1	1100	U	C4-C5-C6	5.07	122.74	119.70
36	1	1423	C	N3-C2-O2	-5.07	118.35	121.90
36	1	1534	A	N7-C8-N9	5.07	116.33	113.80
36	1	1760	A	C8-N9-C4	-5.07	103.77	105.80
36	1	1791	C	N3-C4-N4	-5.07	114.45	118.00
36	1	2858	U	N1-C2-O2	5.07	126.35	122.80
36	1	3296	A	C8-N9-C4	5.07	107.83	105.80
38	4	21	C	C6-N1-C2	5.07	122.33	120.30
75	O9	6	SER	N-CA-C	-5.07	97.31	111.00
1	6	342	C	C4-C5-C6	5.07	119.94	117.40
1	6	410	A	C5-C6-N6	-5.07	119.64	123.70
1	6	457	G	C8-N9-C4	5.07	108.43	106.40
1	6	628	G	N9-C4-C5	-5.07	103.37	105.40
1	6	967	A	C8-N9-C4	5.07	107.83	105.80
1	6	1003	A	N9-C4-C5	-5.07	103.77	105.80
1	6	1508	U	C4-C5-C6	5.07	122.74	119.70
1	6	1791	A	O5'-P-OP1	5.07	116.78	110.70
36	5	182	U	C4-C5-C6	5.07	122.74	119.70
36	5	804	C	N1-C1'-C2'	-5.07	106.42	112.00
36	5	1041	U	C6-N1-C2	5.07	124.04	121.00
36	5	1078	U	OP1-P-OP2	-5.07	112.00	119.60
36	5	1607	U	N3-C4-O4	5.07	122.95	119.40
36	5	1897	G	C8-N9-C1'	-5.07	120.41	127.00
36	5	2737	C	C2-N3-C4	-5.07	117.36	119.90
36	5	2793	G	C5-N7-C8	-5.07	101.77	104.30
36	5	3082	C	C5-C4-N4	-5.07	116.65	120.20
36	5	3094	A	OP2-P-O3'	5.07	116.35	105.20
36	1	683	U	C6-N1-C2	5.07	124.04	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2248	C	C6-N1-C2	5.07	122.33	120.30
36	1	3141	A	C4-C5-N7	5.07	113.23	110.70
1	6	1194	A	C4-C5-C6	5.07	119.53	117.00
36	5	1724	U	N1-C2-O2	-5.07	119.25	122.80
36	5	2255	A	C5-C6-N1	5.07	120.23	117.70
36	5	3184	A	C2-N3-C4	-5.07	108.06	110.60
1	2	18	C	C2-N1-C1'	5.07	124.37	118.80
1	2	30	G	C5-C6-O6	-5.07	125.56	128.60
1	2	440	U	N1-C2-O2	-5.07	119.25	122.80
1	2	880	C	C6-N1-C2	-5.07	118.27	120.30
1	2	1358	G	C4-N9-C1'	-5.07	119.91	126.50
36	1	637	C	C6-N1-C1'	-5.07	114.72	120.80
36	1	960	U	C6-N1-C2	5.07	124.04	121.00
36	1	1184	A	C2-N3-C4	-5.07	108.07	110.60
36	1	1417	G	O4'-C1'-N9	-5.07	104.14	108.20
36	1	1708	C	C2-N1-C1'	-5.07	113.23	118.80
36	1	2433	U	C5-C6-N1	5.07	125.23	122.70
36	1	2636	A	N9-C4-C5	5.07	107.83	105.80
36	1	3193	C	C5-C6-N1	5.07	123.53	121.00
55	M9	44	LEU	CA-CB-CG	5.07	126.96	115.30
1	6	136	C	C6-N1-C1'	-5.07	114.72	120.80
1	6	1169	G	N1-C2-N3	5.07	126.94	123.90
1	6	1582	U	O4'-C1'-N1	5.07	112.25	108.20
1	6	1730	A	C5-C6-N1	5.07	120.23	117.70
1	6	1766	A	C6-C5-N7	-5.07	128.75	132.30
24	d2	57	ARG	NE-CZ-NH2	-5.07	117.77	120.30
36	5	674	G	C5-C6-N1	5.07	114.03	111.50
36	5	1111	U	C2-N1-C1'	-5.07	111.62	117.70
36	5	1225	A	N7-C8-N9	-5.07	111.27	113.80
36	5	1303	A	N3-C4-C5	5.07	130.35	126.80
36	5	1433	A	N7-C8-N9	5.07	116.33	113.80
36	5	1443	G	N3-C2-N2	-5.07	116.35	119.90
36	5	1604	G	C8-N9-C4	-5.07	104.37	106.40
36	5	1654	A	N7-C8-N9	-5.07	111.27	113.80
36	5	1791	C	N3-C4-N4	5.07	121.55	118.00
36	5	2238	G	C4-C5-N7	5.07	112.83	110.80
36	5	2416	U	C5-C4-O4	5.07	128.94	125.90
36	5	2801	A	N1-C6-N6	5.07	121.64	118.60
36	5	3083	G	C4-C5-N7	5.07	112.83	110.80
36	5	3117	C	C6-N1-C1'	-5.07	114.72	120.80
36	5	3394	U	C5-C4-O4	5.07	128.94	125.90
37	7	8	G	N1-C2-N3	5.07	126.94	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	C7	73	LEU	CA-CB-CG	5.07	126.95	115.30
36	1	347	G	N3-C2-N2	5.07	123.45	119.90
36	1	605	U	N1-C2-N3	5.07	117.94	114.90
36	1	688	G	N7-C8-N9	5.07	115.63	113.10
36	1	1150	A	C5-C6-N6	5.07	127.75	123.70
36	1	1511	U	N1-C2-N3	5.07	117.94	114.90
36	1	1656	A	OP1-P-OP2	5.07	127.20	119.60
36	1	1774	C	C5-C4-N4	-5.07	116.66	120.20
36	1	1843	C	C5-C6-N1	5.07	123.53	121.00
36	1	2114	C	O5'-P-OP1	5.07	116.78	110.70
36	1	2879	C	C5-C4-N4	-5.07	116.66	120.20
36	1	3094	A	C8-N9-C4	-5.07	103.77	105.80
36	1	3304	U	C2-N1-C1'	5.07	123.78	117.70
1	6	71	A	C8-N9-C4	-5.07	103.77	105.80
1	6	119	A	O5'-P-OP1	-5.07	101.14	105.70
1	6	1596	C	C6-N1-C1'	-5.07	114.72	120.80
36	5	1332	A	C6-N1-C2	-5.07	115.56	118.60
36	5	1356	U	C5-C6-N1	5.07	125.23	122.70
36	5	2365	C	C6-N1-C2	5.07	122.33	120.30
36	5	2756	C	N3-C2-O2	-5.07	118.35	121.90
36	5	2864	A	C4-C5-N7	5.07	113.23	110.70
1	2	360	A	C4-C5-C6	-5.06	114.47	117.00
1	2	964	U	C6-N1-C1'	-5.06	114.11	121.20
36	1	803	C	C2-N3-C4	-5.06	117.37	119.90
36	1	877	C	OP1-P-OP2	-5.06	112.00	119.60
36	1	932	U	O4'-C1'-N1	5.06	112.25	108.20
36	1	1632	A	N7-C8-N9	5.06	116.33	113.80
36	1	1728	G	N3-C4-C5	-5.06	126.07	128.60
36	1	2946	A	C5'-C4'-O4'	5.06	115.18	109.10
1	6	596	C	N1-C2-O2	-5.06	115.86	118.90
1	6	984	G	N7-C8-N9	-5.06	110.57	113.10
1	6	1733	C	C6-N1-C2	5.06	122.33	120.30
36	5	668	G	C6-C5-N7	5.06	133.44	130.40
36	5	2375	G	O4'-C1'-N9	5.06	112.25	108.20
1	2	1165	G	C8-N9-C4	5.06	108.42	106.40
1	2	1220	C	C6-N1-C2	-5.06	118.28	120.30
1	2	1550	A	C6-C5-N7	-5.06	128.76	132.30
36	1	67	A	C8-N9-C4	5.06	107.83	105.80
36	1	267	G	C8-N9-C1'	5.06	133.58	127.00
36	1	513	G	C5-C6-N1	-5.06	108.97	111.50
36	1	1142	G	O5'-P-OP2	-5.06	101.14	105.70
36	1	1863	G	C4-C5-N7	5.06	112.83	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2280	A	C5'-C4'-O4'	5.06	115.17	109.10
36	1	2519	A	C8-N9-C4	-5.06	103.78	105.80
36	1	2882	U	O4'-C1'-N1	5.06	112.25	108.20
1	6	250	C	C6-N1-C1'	-5.06	114.72	120.80
1	6	253	A	C4-C5-C6	-5.06	114.47	117.00
1	6	957	G	C5-C6-O6	-5.06	125.56	128.60
1	6	1301	U	C5-C4-O4	-5.06	122.86	125.90
1	6	1304	G	C4-C5-N7	-5.06	108.78	110.80
1	6	1717	G	C5-C6-O6	-5.06	125.56	128.60
1	6	1732	A	N3-C4-N9	-5.06	123.35	127.40
36	5	303	G	N3-C4-N9	5.06	129.04	126.00
36	5	340	C	N1-C2-O2	-5.06	115.86	118.90
36	5	652	G	N3-C2-N2	5.06	123.44	119.90
36	5	682	U	N3-C4-C5	-5.06	111.56	114.60
36	5	683	U	N3-C4-O4	5.06	122.94	119.40
36	5	832	G	P-O3'-C3'	-5.06	113.62	119.70
36	5	835	G	C6-C5-N7	5.06	133.44	130.40
36	5	1048	A	N1-C2-N3	5.06	131.83	129.30
36	5	1382	G	C5-C6-O6	-5.06	125.56	128.60
36	5	1447	G	N3-C4-C5	5.06	131.13	128.60
36	5	1484	U	N1-C2-O2	-5.06	119.26	122.80
36	5	1947	G	N1-C2-N2	-5.06	111.64	116.20
36	5	2119	A	N9-C4-C5	-5.06	103.78	105.80
36	5	2379	U	O5'-P-OP1	5.06	116.78	110.70
36	5	2905	U	OP1-P-OP2	-5.06	112.01	119.60
37	7	76	A	C8-N9-C4	5.06	107.83	105.80
36	1	73	C	N3-C4-N4	5.06	121.54	118.00
36	1	876	A	C4-C5-C6	5.06	119.53	117.00
36	1	1166	G	C5-C6-O6	-5.06	125.56	128.60
46	L9	23	ARG	NE-CZ-NH1	5.06	122.83	120.30
1	6	139	C	P-O3'-C3'	5.06	125.77	119.70
1	6	342	C	N3-C4-N4	5.06	121.54	118.00
36	5	1127	G	C5-C6-N1	5.06	114.03	111.50
36	5	1869	C	N3-C4-C5	-5.06	119.88	121.90
36	5	1871	U	N3-C4-O4	5.06	122.94	119.40
36	1	592	A	O5'-P-OP1	-5.06	101.15	105.70
36	1	686	G	C8-N9-C4	-5.06	104.38	106.40
36	1	954	U	N3-C2-O2	5.06	125.74	122.20
36	1	1176	C	N3-C2-O2	5.06	125.44	121.90
36	1	1319	G	N3-C2-N2	5.06	123.44	119.90
36	1	1380	G	N3-C4-N9	-5.06	122.96	126.00
36	1	1911	A	C6-N1-C2	-5.06	115.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	158	U	N1-C2-N3	5.06	117.94	114.90
1	6	301	A	C4-C5-N7	-5.06	108.17	110.70
1	6	440	U	P-O3'-C3'	5.06	125.77	119.70
1	6	557	G	C3'-C2'-C1'	5.06	105.55	101.50
1	6	814	A	O5'-P-OP2	-5.06	101.15	105.70
1	6	1113	A	C6-N1-C2	-5.06	115.56	118.60
1	6	1165	G	OP2-P-O3'	5.06	116.33	105.20
1	6	1640	C	C5-C4-N4	-5.06	116.66	120.20
36	5	1209	G	C6-C5-N7	-5.06	127.36	130.40
36	5	1307	G	C5-N7-C8	-5.06	101.77	104.30
36	5	2303	A	N3-C4-C5	5.06	130.34	126.80
36	5	2801	A	O5'-P-OP1	-5.06	101.15	105.70
36	5	2899	C	N1-C2-N3	5.06	122.74	119.20
1	2	1595	U	OP1-P-O3'	5.06	116.33	105.20
1	2	1645	G	N1-C6-O6	-5.06	116.86	119.90
36	1	41	G	C6-C5-N7	5.06	133.43	130.40
36	1	63	A	N9-C4-C5	-5.06	103.78	105.80
36	1	77	A	OP2-P-O3'	5.06	116.33	105.20
36	1	193	C	C2-N3-C4	5.06	122.43	119.90
36	1	213	A	N9-C1'-C2'	-5.06	106.44	112.00
36	1	364	G	C4-C5-N7	5.06	112.82	110.80
36	1	571	U	C6-N1-C2	-5.06	117.97	121.00
36	1	663	C	O5'-P-OP2	-5.06	101.15	105.70
36	1	1512	U	OP1-P-O3'	-5.06	94.07	105.20
36	1	1774	C	C6-N1-C1'	-5.06	114.73	120.80
36	1	1796	G	N9-C4-C5	5.06	107.42	105.40
36	1	1876	U	N1-C2-N3	5.06	117.94	114.90
36	1	1906	G	C8-N9-C4	5.06	108.42	106.40
36	1	2723	U	N1-C2-N3	5.06	117.93	114.90
36	1	2825	C	N3-C4-N4	5.06	121.54	118.00
38	4	21	C	N3-C4-C5	5.06	123.92	121.90
1	6	627	C	C6-N1-C2	5.06	122.32	120.30
36	5	209	A	C8-N9-C4	5.06	107.82	105.80
36	5	564	G	C4-N9-C1'	5.06	133.08	126.50
36	5	658	G	C5-N7-C8	-5.06	101.77	104.30
36	5	785	G	N9-C4-C5	5.06	107.42	105.40
36	5	1173	U	O5'-P-OP2	-5.06	101.15	105.70
36	5	1293	U	C6-N1-C2	5.06	124.03	121.00
36	5	1302	A	OP2-P-O3'	5.06	116.33	105.20
36	5	1311	G	C6-C5-N7	-5.06	127.36	130.40
36	5	1381	A	C4-C5-C6	5.06	119.53	117.00
36	5	1746	U	C5-C6-N1	5.06	125.23	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1879	A	OP1-P-OP2	-5.06	112.01	119.60
36	5	2349	U	C2-N1-C1'	5.06	123.77	117.70
36	5	3059	G	C5-C6-N1	5.06	114.03	111.50
36	5	3077	A	N3-C4-C5	5.06	130.34	126.80
36	1	912	G	N1-C2-N3	5.06	126.93	123.90
36	1	952	A	N7-C8-N9	5.06	116.33	113.80
36	1	1295	G	OP1-P-OP2	5.06	127.18	119.60
36	1	1328	C	C5-C6-N1	5.06	123.53	121.00
36	1	1458	U	C2-N3-C4	-5.06	123.97	127.00
36	1	1509	A	N1-C6-N6	5.06	121.63	118.60
36	1	1926	C	C4-C5-C6	5.06	119.93	117.40
36	1	2227	C	P-O3'-C3'	5.06	125.77	119.70
36	1	3316	A	N1-C6-N6	5.06	121.63	118.60
37	3	37	G	N9-C4-C5	-5.06	103.38	105.40
36	5	206	G	O5'-P-OP1	-5.06	101.15	105.70
36	5	735	A	C5-C6-N1	-5.06	115.17	117.70
36	5	2945	G	OP1-P-O3'	5.06	116.32	105.20
38	8	41	A	OP2-P-O3'	5.06	116.32	105.20
36	1	147	U	C4-C5-C6	5.05	122.73	119.70
36	1	291	C	C6-N1-C1'	5.05	126.86	120.80
36	1	733	G	C6-C5-N7	-5.05	127.37	130.40
36	1	917	A	C5'-C4'-O4'	5.05	115.17	109.10
36	1	1129	A	C5-N7-C8	-5.05	101.37	103.90
36	1	1947	G	C5-C6-O6	-5.05	125.57	128.60
36	1	2373	A	N3-C4-N9	-5.05	123.36	127.40
36	1	2660	G	C2-N3-C4	-5.05	109.37	111.90
36	1	2808	A	N9-C4-C5	-5.05	103.78	105.80
36	1	2855	U	C4-C5-C6	5.05	122.73	119.70
36	1	3121	U	OP1-P-O3'	5.05	116.32	105.20
1	6	159	U	N3-C2-O2	5.05	125.74	122.20
1	6	754	A	C5-C6-N1	5.05	120.23	117.70
1	6	829	A	P-O3'-C3'	5.05	125.77	119.70
18	c6	116	LEU	N-CA-C	5.05	124.65	111.00
36	5	366	A	C4-C5-C6	5.05	119.53	117.00
36	5	415	G	C4-C5-N7	5.05	112.82	110.80
36	5	816	A	O5'-P-OP1	5.05	116.77	110.70
36	5	1044	U	O5'-P-OP2	-5.05	101.15	105.70
36	5	1918	C	O4'-C1'-N1	5.05	112.24	108.20
36	5	2645	G	C5-C6-N1	5.05	114.03	111.50
36	5	2735	U	C4-C5-C6	5.05	122.73	119.70
36	5	2948	C	C4-C5-C6	-5.05	114.87	117.40
36	5	2953	U	N1-C2-N3	-5.05	111.87	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	3041	U	OP1-P-OP2	5.05	127.18	119.60
38	8	38	U	C4-C5-C6	5.05	122.73	119.70
1	2	453	U	N1-C2-O2	5.05	126.34	122.80
36	1	182	U	C6-N1-C1'	5.05	128.27	121.20
36	1	1025	A	C8-N9-C4	-5.05	103.78	105.80
36	1	1461	A	C4-C5-N7	5.05	113.23	110.70
1	6	425	A	C4-C5-C6	-5.05	114.47	117.00
1	6	1001	A	N3-C4-C5	-5.05	123.26	126.80
1	6	1171	A	C5-C6-N6	5.05	127.74	123.70
1	6	1286	U	C5-C6-N1	-5.05	120.17	122.70
36	5	694	C	N3-C4-C5	5.05	123.92	121.90
36	5	955	U	OP2-P-O3'	5.05	116.32	105.20
36	5	2875	U	O5'-P-OP2	-5.05	101.15	105.70
40	13	240	ARG	CG-CD-NE	-5.05	101.19	111.80
1	2	370	A	N1-C6-N6	-5.05	115.57	118.60
1	2	771	A	N7-C8-N9	5.05	116.33	113.80
1	2	1363	U	O4'-C1'-N1	5.05	112.24	108.20
36	1	198	A	C4-C5-C6	5.05	119.53	117.00
36	1	1002	A	C6-C5-N7	5.05	135.84	132.30
36	1	1205	A	C5-C6-N6	-5.05	119.66	123.70
36	1	1670	C	N3-C2-O2	5.05	125.44	121.90
36	1	1682	U	O5'-P-OP1	-5.05	101.15	105.70
36	1	1839	A	N1-C2-N3	5.05	131.83	129.30
36	1	2891	U	N1-C2-O2	-5.05	119.26	122.80
36	1	2920	U	OP2-P-O3'	5.05	116.31	105.20
36	1	3325	G	C5-N7-C8	5.05	106.83	104.30
37	3	3	U	OP1-P-OP2	5.05	127.18	119.60
41	L4	325	LEU	CA-CB-CG	-5.05	103.68	115.30
1	6	153	G	O5'-P-OP2	5.05	116.76	110.70
36	5	93	C	C6-N1-C2	5.05	122.32	120.30
36	5	197	G	C6-N1-C2	5.05	128.13	125.10
36	5	386	A	C5-N7-C8	5.05	106.43	103.90
36	5	1196	C	C2-N1-C1'	-5.05	113.24	118.80
36	5	1888	U	N1-C1'-C2'	-5.05	106.44	112.00
36	5	2161	G	O5'-P-OP2	5.05	116.76	110.70
36	5	2304	C	C5-C4-N4	-5.05	116.66	120.20
36	5	2964	G	C5-C6-O6	5.05	131.63	128.60
36	5	3054	U	N3-C2-O2	5.05	125.74	122.20
36	5	3331	U	O5'-P-OP1	-5.05	101.15	105.70
1	2	862	A	C8-N9-C4	5.05	107.82	105.80
36	1	64	G	OP2-P-O3'	5.05	116.31	105.20
36	1	151	A	C6-C5-N7	-5.05	128.76	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	694	C	N3-C4-C5	5.05	123.92	121.90
36	1	931	C	C6-N1-C2	-5.05	118.28	120.30
36	1	1381	A	C5-C6-N1	-5.05	115.17	117.70
36	1	1724	U	N3-C2-O2	-5.05	118.67	122.20
36	1	2249	G	C5-C6-O6	5.05	131.63	128.60
36	1	2309	A	C4-C5-N7	5.05	113.22	110.70
36	1	2969	A	N3-C4-N9	-5.05	123.36	127.40
36	1	3209	A	C6-N1-C2	5.05	121.63	118.60
36	1	3271	G	N1-C6-O6	-5.05	116.87	119.90
1	6	19	A	C4-C5-C6	5.05	119.53	117.00
1	6	66	U	OP1-P-O3'	5.05	116.31	105.20
1	6	176	C	C5-C6-N1	5.05	123.52	121.00
1	6	357	G	C5-C6-O6	-5.05	125.57	128.60
1	6	1017	U	OP1-P-O3'	5.05	116.31	105.20
1	6	1115	U	N3-C4-C5	5.05	117.63	114.60
36	5	350	C	N1-C2-O2	5.05	121.93	118.90
36	5	589	A	C4-C5-C6	5.05	119.53	117.00
36	5	985	U	O5'-P-OP1	5.05	116.76	110.70
36	5	2585	G	C2-N3-C4	5.05	114.42	111.90
36	5	3134	A	C6-N1-C2	-5.05	115.57	118.60
37	7	2	G	C4-C5-N7	-5.05	108.78	110.80
51	m5	38	ARG	NE-CZ-NH1	-5.05	117.78	120.30
36	1	1429	G	C5-C6-N1	-5.05	108.98	111.50
36	1	3101	G	C5-C6-O6	-5.05	125.57	128.60
36	1	3341	U	C5-C4-O4	5.05	128.93	125.90
38	4	10	A	C4-C5-N7	-5.05	108.18	110.70
1	6	784	C	N3-C4-C5	-5.05	119.88	121.90
1	6	1169	G	N1-C6-O6	-5.05	116.87	119.90
36	5	1170	A	C5-C6-N1	-5.05	115.18	117.70
36	5	1519	G	C5-C6-O6	-5.05	125.57	128.60
36	5	1836	C	C6-N1-C2	-5.05	118.28	120.30
1	2	61	A	C5-N7-C8	-5.05	101.38	103.90
1	2	581	U	C6-N1-C1'	-5.05	114.14	121.20
1	2	1355	C	C6-N1-C2	-5.05	118.28	120.30
1	2	1517	U	C4-C5-C6	5.05	122.73	119.70
36	1	589	A	C5-C6-N1	5.05	120.22	117.70
36	1	2361	A	N7-C8-N9	-5.05	111.28	113.80
36	1	2513	U	P-O3'-C3'	5.05	125.76	119.70
36	1	2877	G	N3-C4-C5	5.05	131.12	128.60
1	6	687	G	N3-C2-N2	-5.05	116.37	119.90
1	6	1007	C	C2-N3-C4	-5.05	117.38	119.90
1	6	1438	G	C4-C5-N7	5.05	112.82	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	578	A	N3-C4-N9	-5.05	123.36	127.40
36	5	591	G	N1-C2-N2	-5.05	111.66	116.20
36	5	716	A	OP2-P-O3'	5.05	116.30	105.20
36	5	1634	G	C4-N9-C1'	5.05	133.06	126.50
36	5	1791	C	C5-C4-N4	-5.05	116.67	120.20
36	5	2225	U	C2-N1-C1'	5.05	123.76	117.70
36	1	842	G	C4-C5-C6	5.04	121.83	118.80
36	1	1552	G	N3-C4-C5	-5.04	126.08	128.60
36	1	2379	U	OP2-P-O3'	5.04	116.30	105.20
1	6	102	U	C2-N3-C4	-5.04	123.97	127.00
1	6	558	U	C6-N1-C1'	-5.04	114.14	121.20
1	6	1001	A	C4-N9-C1'	5.04	135.38	126.30
1	6	1746	A	C6-C5-N7	5.04	135.83	132.30
36	5	567	G	C5-C6-O6	-5.04	125.57	128.60
36	5	2206	G	C8-N9-C4	5.04	108.42	106.40
36	5	3147	G	N1-C6-O6	5.04	122.93	119.90
1	2	401	A	C5-C6-N6	-5.04	119.67	123.70
1	2	1268	G	N1-C6-O6	-5.04	116.87	119.90
36	1	313	A	C5-C6-N6	-5.04	119.66	123.70
36	1	694	C	C2-N3-C4	-5.04	117.38	119.90
36	1	889	U	N3-C4-C5	-5.04	111.57	114.60
36	1	968	G	C8-N9-C1'	-5.04	120.44	127.00
36	1	1199	C	C4-C5-C6	5.04	119.92	117.40
36	1	1636	U	C6-N1-C2	-5.04	117.97	121.00
36	1	2302	G	N3-C4-C5	-5.04	126.08	128.60
36	1	2310	U	N3-C2-O2	-5.04	118.67	122.20
36	1	2406	C	C5-C6-N1	5.04	123.52	121.00
1	6	179	A	N9-C4-C5	5.04	107.82	105.80
36	5	777	U	OP1-P-OP2	5.04	127.17	119.60
36	5	1057	A	C8-N9-C4	5.04	107.82	105.80
36	5	1308	A	C4-C5-C6	-5.04	114.48	117.00
36	5	1336	U	N1-C2-O2	-5.04	119.27	122.80
36	5	1400	G	C4-N9-C1'	5.04	133.06	126.50
36	5	2140	U	N3-C4-O4	5.04	122.93	119.40
1	2	402	C	N3-C4-N4	5.04	121.53	118.00
1	2	775	G	C6-C5-N7	-5.04	127.38	130.40
1	2	1010	C	O5'-P-OP1	5.04	116.75	110.70
1	2	1015	U	C5-C4-O4	5.04	128.93	125.90
36	1	166	C	C6-N1-C2	-5.04	118.28	120.30
36	1	349	A	C4-C5-N7	-5.04	108.18	110.70
36	1	690	A	N1-C6-N6	-5.04	115.58	118.60
36	1	769	G	OP1-P-OP2	5.04	127.16	119.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1146	C	N3-C4-N4	5.04	121.53	118.00
36	1	2127	U	N1-C2-N3	-5.04	111.88	114.90
36	1	2342	U	C5-C6-N1	-5.04	120.18	122.70
36	1	2555	G	C2-N3-C4	-5.04	109.38	111.90
36	1	2699	G	N1-C2-N2	5.04	120.74	116.20
36	1	2805	G	N1-C6-O6	-5.04	116.88	119.90
36	1	2916	U	OP2-P-O3'	5.04	116.29	105.20
36	1	3128	G	OP2-P-O3'	5.04	116.29	105.20
37	3	50	U	C5-C6-N1	5.04	125.22	122.70
1	6	1367	G	N3-C4-N9	5.04	129.03	126.00
1	6	1542	G	N3-C4-N9	5.04	129.03	126.00
1	6	1652	C	C6-N1-C2	-5.04	118.28	120.30
36	5	516	A	C5-C6-N6	-5.04	119.67	123.70
36	5	647	A	N1-C2-N3	5.04	131.82	129.30
36	5	751	A	C5-C6-N1	5.04	120.22	117.70
36	5	1112	A	N1-C6-N6	5.04	121.62	118.60
36	5	2958	A	N1-C2-N3	5.04	131.82	129.30
36	5	3286	G	C5-C6-O6	-5.04	125.58	128.60
38	8	85	G	C5-C6-O6	-5.04	125.58	128.60
36	1	506	U	N1-C2-N3	5.04	117.92	114.90
36	1	1198	C	N3-C4-C5	-5.04	119.88	121.90
1	6	1751	C	C6-N1-C2	5.04	122.32	120.30
36	5	89	A	O5'-P-OP2	-5.04	101.16	105.70
36	5	1425	U	C2-N3-C4	-5.04	123.98	127.00
36	5	1545	A	C6-C5-N7	-5.04	128.77	132.30
36	5	2135	U	C5-C6-N1	-5.04	120.18	122.70
36	5	2347	U	OP2-P-O3'	5.04	116.29	105.20
1	2	152	U	N1-C2-O2	5.04	126.33	122.80
1	2	1583	A	C4-C5-N7	-5.04	108.18	110.70
36	1	211	A	C2-N3-C4	-5.04	108.08	110.60
36	1	677	A	N1-C2-N3	-5.04	126.78	129.30
36	1	695	C	N1-C2-O2	5.04	121.92	118.90
36	1	1939	G	C4-N9-C1'	5.04	133.05	126.50
36	1	2381	G	C6-N1-C2	-5.04	122.08	125.10
36	1	2635	A	N1-C6-N6	-5.04	115.58	118.60
36	1	2829	U	N1-C2-N3	5.04	117.92	114.90
1	6	448	C	N1-C2-N3	5.04	122.73	119.20
1	6	635	A	OP2-P-O3'	5.04	116.29	105.20
1	6	1108	G	N3-C4-N9	-5.04	122.98	126.00
1	6	1188	G	N1-C6-O6	-5.04	116.88	119.90
1	6	1773	C	C5-C6-N1	5.04	123.52	121.00
36	5	1191	U	N1-C2-O2	-5.04	119.27	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1382	G	N3-C4-C5	5.04	131.12	128.60
36	5	2191	U	N1-C2-N3	5.04	117.92	114.90
36	5	2598	G	C6-C5-N7	-5.04	127.38	130.40
36	5	2841	G	N3-C4-C5	-5.04	126.08	128.60
36	5	3086	A	O5'-P-OP2	5.04	116.75	110.70
36	5	3131	U	N3-C4-O4	-5.04	115.87	119.40
53	m7	67	ILE	CG1-CB-CG2	-5.04	100.31	111.40
1	2	298	C	C6-N1-C2	5.04	122.31	120.30
1	2	1636	C	C5-C6-N1	5.04	123.52	121.00
36	1	709	A	N9-C1'-C2'	-5.04	106.46	112.00
36	1	804	C	N3-C2-O2	-5.04	118.37	121.90
36	1	1157	G	N3-C2-N2	-5.04	116.37	119.90
36	1	1708	C	C5-C6-N1	-5.04	118.48	121.00
1	6	1007	C	C2-N1-C1'	-5.04	113.26	118.80
36	5	3	U	N3-C2-O2	-5.04	118.67	122.20
36	5	1114	U	C5-C6-N1	5.04	125.22	122.70
36	5	1137	C	C6-N1-C1'	-5.04	114.76	120.80
36	5	1345	G	C6-C5-N7	-5.04	127.38	130.40
36	5	1377	G	N3-C4-N9	-5.04	122.98	126.00
36	5	2853	A	C8-N9-C4	5.04	107.81	105.80
36	5	3013	U	N1-C2-O2	5.04	126.33	122.80
36	5	3317	U	N3-C4-O4	-5.04	115.87	119.40
1	2	915	A	C5-N7-C8	-5.04	101.38	103.90
1	2	1146	G	C4-C5-N7	5.04	112.81	110.80
1	2	1339	C	P-O3'-C3'	5.04	125.74	119.70
1	2	1583	A	N9-C4-C5	5.04	107.81	105.80
36	1	227	G	C6-N1-C2	-5.04	122.08	125.10
36	1	642	U	N3-C4-O4	5.04	122.92	119.40
36	1	955	U	C5-C6-N1	-5.04	120.18	122.70
36	1	1043	C	C2-N1-C1'	-5.04	113.26	118.80
36	1	1435	A	N3-C4-C5	-5.04	123.28	126.80
36	1	1497	C	C2-N3-C4	5.04	122.42	119.90
38	4	38	U	N1-C2-O2	5.04	126.33	122.80
1	6	194	U	C6-N1-C1'	-5.04	114.15	121.20
1	6	769	A	N1-C6-N6	5.04	121.62	118.60
1	6	1021	C	OP1-P-O3'	5.04	116.28	105.20
1	6	1387	G	N3-C4-C5	-5.04	126.08	128.60
36	5	503	C	N1-C2-O2	-5.04	115.88	118.90
36	5	640	U	N3-C2-O2	5.04	125.72	122.20
36	5	806	A	C5-C6-N1	-5.04	115.18	117.70
36	5	1431	G	C8-N9-C1'	-5.04	120.45	127.00
36	5	1478	C	C2-N3-C4	5.04	122.42	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	1675	G	N3-C2-N2	5.04	123.42	119.90
36	5	2601	A	C2-N3-C4	5.04	113.12	110.60
36	5	3086	A	C8-N9-C4	5.04	107.81	105.80
36	5	3241	G	C8-N9-C4	5.04	108.41	106.40
38	8	7	U	OP1-P-OP2	5.04	127.15	119.60
1	2	115	G	N1-C2-N2	-5.03	111.67	116.20
1	2	597	G	O5'-P-OP2	5.03	116.74	110.70
1	2	1083	G	N3-C4-N9	5.03	129.02	126.00
1	2	1747	G	C5-C6-O6	5.03	131.62	128.60
36	1	74	G	C8-N9-C4	-5.03	104.39	106.40
36	1	591	G	OP1-P-O3'	5.03	116.27	105.20
36	1	779	G	P-O3'-C3'	5.03	125.74	119.70
36	1	1527	C	N1-C2-O2	-5.03	115.88	118.90
36	1	1544	G	C8-N9-C4	5.03	108.41	106.40
36	1	2195	C	C5-C4-N4	-5.03	116.68	120.20
36	1	2829	U	N3-C4-C5	-5.03	111.58	114.60
36	1	3101	G	C2-N3-C4	5.03	114.42	111.90
36	1	3214	U	N1-C2-N3	5.03	117.92	114.90
36	1	3344	A	C8-N9-C4	-5.03	103.79	105.80
1	6	327	U	OP2-P-O3'	5.03	116.27	105.20
1	6	750	U	C2-N1-C1'	-5.03	111.66	117.70
1	6	1241	G	C8-N9-C4	-5.03	104.39	106.40
36	5	1131	G	C6-C5-N7	-5.03	127.38	130.40
36	5	1209	G	C8-N9-C4	-5.03	104.39	106.40
36	5	1513	G	N1-C6-O6	5.03	122.92	119.90
36	5	1606	U	C4-C5-C6	5.03	122.72	119.70
36	5	1886	A	C4-C5-C6	5.03	119.52	117.00
36	5	2320	A	N1-C6-N6	5.03	121.62	118.60
36	5	2861	U	N3-C4-O4	5.03	122.92	119.40
36	5	2979	U	C2-N3-C4	-5.03	123.98	127.00
36	5	3012	A	C6-C5-N7	-5.03	128.78	132.30
36	5	3095	U	N3-C4-C5	-5.03	111.58	114.60
36	5	3237	U	N3-C2-O2	5.03	125.72	122.20
38	8	12	A	C2-N3-C4	5.03	113.12	110.60
1	2	351	C	C5-C4-N4	5.03	123.72	120.20
1	2	398	G	C4-N9-C1'	5.03	133.04	126.50
36	1	862	U	C2-N1-C1'	5.03	123.74	117.70
36	1	962	A	C2-N3-C4	-5.03	108.08	110.60
36	1	1786	G	C5-C6-O6	-5.03	125.58	128.60
36	1	2294	U	O5'-P-OP2	-5.03	101.17	105.70
36	1	2585	G	N3-C4-C5	-5.03	126.08	128.60
36	1	2710	C	C5-C4-N4	-5.03	116.68	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	2902	A	N7-C8-N9	-5.03	111.28	113.80
1	6	167	U	N3-C2-O2	5.03	125.72	122.20
1	6	764	U	N1-C2-N3	5.03	117.92	114.90
36	5	2703	A	N1-C2-N3	5.03	131.82	129.30
36	5	3324	C	OP1-P-O3'	-5.03	94.13	105.20
37	7	41	G	C5-C6-N1	-5.03	108.98	111.50
37	7	50	U	C6-N1-C2	-5.03	117.98	121.00
1	2	106	U	O5'-P-OP1	-5.03	101.17	105.70
1	2	429	G	N1-C6-O6	5.03	122.92	119.90
1	2	595	G	C4-C5-N7	-5.03	108.79	110.80
1	2	1408	G	C8-N9-C1'	5.03	133.54	127.00
1	2	1730	A	OP2-P-O3'	5.03	116.27	105.20
36	1	287	G	C8-N9-C4	-5.03	104.39	106.40
36	1	377	A	C4-C5-N7	5.03	113.22	110.70
36	1	626	U	N1-C2-O2	-5.03	119.28	122.80
36	1	635	G	N9-C4-C5	-5.03	103.39	105.40
36	1	697	A	O5'-P-OP1	-5.03	101.17	105.70
36	1	985	U	O5'-P-OP1	-5.03	101.17	105.70
36	1	1293	U	C6-N1-C2	5.03	124.02	121.00
36	1	3141	A	C2-N3-C4	-5.03	108.08	110.60
36	1	3244	A	C4-C5-C6	5.03	119.52	117.00
1	6	480	G	C6-C5-N7	-5.03	127.38	130.40
1	6	945	U	C5-C6-N1	-5.03	120.19	122.70
1	6	1248	C	N1-C2-O2	5.03	121.92	118.90
1	6	1786	G	C6-C5-N7	5.03	133.42	130.40
36	5	148	G	N1-C6-O6	5.03	122.92	119.90
36	5	645	A	O4'-C1'-N9	-5.03	104.18	108.20
36	5	769	G	O5'-P-OP1	-5.03	101.17	105.70
36	5	816	A	N3-C4-C5	-5.03	123.28	126.80
36	5	1863	G	C6-N1-C2	-5.03	122.08	125.10
36	5	2271	A	N1-C6-N6	5.03	121.62	118.60
36	5	3179	U	O4'-C1'-N1	-5.03	104.17	108.20
37	7	30	G	N9-C1'-C2'	-5.03	106.47	112.00
37	7	107	C	N3-C4-N4	-5.03	114.48	118.00
1	2	934	C	N1-C2-O2	5.03	121.92	118.90
36	1	715	A	C8-N9-C4	-5.03	103.79	105.80
36	1	1834	U	C5-C6-N1	-5.03	120.19	122.70
36	1	2326	A	N9-C4-C5	5.03	107.81	105.80
36	1	2635	A	C5-C6-N1	-5.03	115.19	117.70
36	1	2944	U	C4-C5-C6	-5.03	116.68	119.70
36	5	433	A	OP2-P-O3'	5.03	116.26	105.20
36	5	2814	G	N9-C4-C5	-5.03	103.39	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2904	U	C5-C6-N1	-5.03	120.19	122.70
37	7	121	U	N3-C2-O2	-5.03	118.68	122.20
1	2	553	G	C5-C6-N1	-5.03	108.99	111.50
1	2	1027	A	N9-C4-C5	5.03	107.81	105.80
1	2	1299	G	N3-C2-N2	5.03	123.42	119.90
1	2	1332	C	N1-C2-O2	5.03	121.92	118.90
36	1	26	A	N1-C6-N6	5.03	121.62	118.60
36	1	158	G	C2-N3-C4	-5.03	109.39	111.90
36	1	392	G	C5-N7-C8	-5.03	101.79	104.30
36	1	927	C	OP1-P-O3'	-5.03	94.14	105.20
36	1	2134	G	C8-N9-C1'	-5.03	120.46	127.00
36	1	2157	G	N3-C4-C5	-5.03	126.09	128.60
36	1	2521	U	N3-C4-C5	5.03	117.62	114.60
36	1	3121	U	N1-C2-N3	5.03	117.92	114.90
1	6	906	A	C4-C5-C6	-5.03	114.49	117.00
1	6	977	A	C5-N7-C8	-5.03	101.39	103.90
1	6	1412	G	N3-C4-N9	-5.03	122.98	126.00
1	6	1664	C	N3-C4-N4	5.03	121.52	118.00
1	6	1745	G	N3-C4-C5	-5.03	126.09	128.60
19	c7	100	LEU	CA-CB-CG	5.03	126.86	115.30
36	5	1133	A	C6-C5-N7	-5.03	128.78	132.30
36	5	1175	C	N1-C2-O2	-5.03	115.88	118.90
36	5	1190	A	C5-C6-N6	-5.03	119.68	123.70
36	5	1206	G	C6-N1-C2	-5.03	122.08	125.10
36	5	1224	C	O5'-P-OP1	-5.03	101.17	105.70
36	5	1348	U	C5'-C4'-O4'	5.03	115.13	109.10
36	5	1690	C	N3-C4-C5	-5.03	119.89	121.90
36	5	2643	A	C4-C5-C6	-5.03	114.49	117.00
36	5	3006	A	C5-C6-N6	5.03	127.72	123.70
1	2	370	A	C5-N7-C8	5.03	106.41	103.90
1	2	1757	G	O4'-C1'-N9	-5.03	104.18	108.20
36	1	369	A	N3-C4-C5	-5.03	123.28	126.80
36	1	525	C	C6-N1-C2	5.03	122.31	120.30
36	1	593	C	N1-C2-O2	5.03	121.92	118.90
36	1	1838	G	C4-N9-C1'	5.03	133.03	126.50
36	1	2314	U	O5'-P-OP1	5.03	116.73	110.70
36	1	2796	G	OP1-P-OP2	5.03	127.14	119.60
36	1	2902	A	C4-C5-N7	-5.03	108.19	110.70
36	1	2956	A	C4-C5-N7	5.03	113.21	110.70
36	1	3134	A	C6-N1-C2	-5.03	115.58	118.60
36	1	3276	G	O4'-C1'-N9	-5.03	104.18	108.20
1	6	395	U	N3-C4-C5	-5.03	111.58	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	579	A	P-O3'-C3'	5.03	125.73	119.70
1	6	607	G	C5-C6-O6	5.03	131.62	128.60
1	6	1218	G	C4-N9-C1'	-5.03	119.97	126.50
1	6	1478	G	N3-C2-N2	5.03	123.42	119.90
1	6	1493	A	N3-C4-C5	5.03	130.32	126.80
1	6	1661	U	C6-N1-C2	5.03	124.02	121.00
36	5	416	A	C5-N7-C8	-5.03	101.39	103.90
36	5	986	U	N1-C2-N3	5.03	117.92	114.90
36	5	1065	A	C2-N3-C4	-5.03	108.09	110.60
36	5	2954	U	C6-N1-C2	5.03	124.02	121.00
36	5	3006	A	C4-C5-N7	-5.03	108.19	110.70
38	8	87	G	C4-N9-C1'	5.03	133.03	126.50
1	2	1321	A	N1-C6-N6	-5.02	115.59	118.60
36	1	269	G	C8-N9-C1'	5.02	133.53	127.00
36	1	326	U	C4-C5-C6	5.02	122.72	119.70
36	1	567	G	N9-C4-C5	5.02	107.41	105.40
36	1	699	A	C8-N9-C1'	5.02	136.74	127.70
36	1	849	C	OP2-P-O3'	5.02	116.25	105.20
36	5	180	C	N1-C2-O2	5.02	121.91	118.90
36	5	857	G	N1-C2-N3	5.02	126.91	123.90
1	2	1419	G	C8-N9-C1'	-5.02	120.47	127.00
36	1	209	A	N9-C4-C5	5.02	107.81	105.80
36	1	401	U	N1-C2-O2	5.02	126.32	122.80
36	1	605	U	N3-C2-O2	-5.02	118.68	122.20
36	1	1453	A	C6-C5-N7	-5.02	128.78	132.30
36	1	1819	U	C2-N1-C1'	5.02	123.73	117.70
36	1	2520	A	N1-C6-N6	5.02	121.61	118.60
36	1	3240	C	C5-C6-N1	-5.02	118.49	121.00
37	3	3	U	OP1-P-O3'	5.02	116.25	105.20
37	3	49	G	O4'-C1'-N9	5.02	112.22	108.20
36	5	819	U	N3-C2-O2	5.02	125.72	122.20
36	5	1165	A	N9-C4-C5	5.02	107.81	105.80
36	5	1519	G	N3-C2-N2	-5.02	116.38	119.90
36	5	1617	G	N1-C6-O6	5.02	122.91	119.90
36	5	1704	A	O5'-P-OP1	-5.02	101.18	105.70
36	5	3098	G	N1-C2-N2	-5.02	111.68	116.20
36	5	3220	G	O5'-P-OP2	-5.02	101.18	105.70
37	7	121	U	O4'-C1'-N1	-5.02	104.18	108.20
1	2	1189	A	C8-N9-C4	5.02	107.81	105.80
1	2	1455	G	C5-N7-C8	5.02	106.81	104.30
36	1	625	G	C5-N7-C8	5.02	106.81	104.30
36	1	1362	G	OP2-P-O3'	5.02	116.25	105.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	3003	G	C5-C6-N1	5.02	114.01	111.50
38	4	86	U	N3-C4-O4	5.02	122.92	119.40
38	4	108	C	OP2-P-O3'	5.02	116.25	105.20
41	L4	244	LEU	CB-CG-CD2	-5.02	102.47	111.00
1	6	396	G	N3-C4-C5	-5.02	126.09	128.60
1	6	553	G	N1-C2-N3	-5.02	120.89	123.90
1	6	1093	A	N9-C4-C5	5.02	107.81	105.80
36	5	1886	A	C5-C6-N1	-5.02	115.19	117.70
36	5	2123	G	C5-C6-O6	5.02	131.61	128.60
36	5	2995	A	N1-C6-N6	5.02	121.61	118.60
1	2	401	A	N1-C6-N6	5.02	121.61	118.60
1	2	449	C	O4'-C1'-N1	5.02	112.22	108.20
1	2	608	U	C5-C4-O4	5.02	128.91	125.90
1	2	823	G	C5-C6-N1	5.02	114.01	111.50
1	2	1373	C	N3-C4-C5	-5.02	119.89	121.90
1	2	1670	G	C4-N9-C1'	5.02	133.03	126.50
36	1	211	A	C4-C5-C6	-5.02	114.49	117.00
36	1	224	C	OP1-P-OP2	-5.02	112.07	119.60
36	1	596	C	C5-C6-N1	-5.02	118.49	121.00
36	1	757	C	C4-C5-C6	5.02	119.91	117.40
36	1	973	A	N3-C4-C5	5.02	130.31	126.80
36	1	1322	U	N3-C4-C5	-5.02	111.59	114.60
36	1	1338	C	C5-C6-N1	5.02	123.51	121.00
36	1	1449	A	N1-C6-N6	-5.02	115.59	118.60
36	1	1518	U	C4-C5-C6	5.02	122.71	119.70
36	1	1795	U	O5'-P-OP1	-5.02	101.18	105.70
36	1	3103	A	C6-N1-C2	-5.02	115.59	118.60
36	1	3134	A	C5-C6-N1	5.02	120.21	117.70
36	1	3160	U	N3-C2-O2	-5.02	118.69	122.20
36	1	3245	A	C5-C6-N1	-5.02	115.19	117.70
37	3	97	A	C5-C6-N1	-5.02	115.19	117.70
1	6	455	C	O4'-C1'-N1	-5.02	104.18	108.20
1	6	586	G	C5-C6-O6	5.02	131.61	128.60
1	6	676	G	O4'-C1'-N9	5.02	112.22	108.20
36	5	45	A	C5-N7-C8	-5.02	101.39	103.90
36	5	201	A	O4'-C1'-N9	-5.02	104.18	108.20
36	5	326	U	N1-C2-O2	5.02	126.31	122.80
36	5	929	A	C8-N9-C4	5.02	107.81	105.80
36	5	1007	U	N1-C2-N3	-5.02	111.89	114.90
36	5	1311	G	N1-C6-O6	5.02	122.91	119.90
36	5	1312	C	N3-C2-O2	5.02	125.41	121.90
36	5	2114	C	N3-C4-N4	5.02	121.51	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	5	2404	A	C2-N3-C4	5.02	113.11	110.60
36	5	2668	U	N3-C4-O4	5.02	122.91	119.40
36	5	2858	U	N1-C2-N3	5.02	117.91	114.90
38	8	108	C	OP2-P-O3'	5.02	116.24	105.20
1	2	73	U	C1'-O4'-C4'	-5.02	105.89	109.90
1	2	963	A	N1-C2-N3	-5.02	126.79	129.30
36	1	22	G	N3-C4-N9	-5.02	122.99	126.00
36	1	158	G	C5-C6-N1	-5.02	108.99	111.50
36	1	769	G	O5'-P-OP1	-5.02	101.19	105.70
36	1	1109	U	OP1-P-OP2	5.02	127.12	119.60
36	1	1259	A	N1-C6-N6	-5.02	115.59	118.60
36	1	1492	G	C8-N9-C4	-5.02	104.39	106.40
36	1	1849	C	O5'-P-OP1	-5.02	101.19	105.70
36	1	3098	G	O5'-P-OP2	-5.02	101.18	105.70
36	1	3126	C	C5-C4-N4	5.02	123.71	120.20
36	1	3280	U	C4-C5-C6	-5.02	116.69	119.70
37	3	85	G	C4-C5-N7	5.02	112.81	110.80
36	5	858	A	N1-C2-N3	5.02	131.81	129.30
36	5	1130	A	C5-N7-C8	-5.02	101.39	103.90
36	5	3068	U	C4-C5-C6	5.02	122.71	119.70
36	5	3094	A	C2-N3-C4	-5.02	108.09	110.60
1	2	57	G	N1-C2-N3	5.02	126.91	123.90
1	2	990	C	C5-C6-N1	5.02	123.51	121.00
36	1	1377	G	C2-N3-C4	-5.02	109.39	111.90
36	1	1764	U	C6-N1-C2	5.02	124.01	121.00
36	1	1849	C	C4-C5-C6	5.02	119.91	117.40
36	1	2326	A	N1-C6-N6	-5.02	115.59	118.60
36	1	2775	U	C5-C4-O4	5.02	128.91	125.90
1	6	1063	U	C5-C4-O4	-5.02	122.89	125.90
36	5	868	C	N3-C4-C5	-5.02	119.89	121.90
36	5	1320	C	OP2-P-O3'	5.02	116.23	105.20
36	5	1446	A	N1-C6-N6	-5.02	115.59	118.60
36	5	1725	C	N3-C4-C5	-5.02	119.89	121.90
36	5	2382	G	C4-C5-C6	-5.02	115.79	118.80
36	5	2805	G	C5-C6-N1	-5.02	108.99	111.50
1	2	337	G	OP1-P-O3'	5.01	116.23	105.20
1	2	794	U	C5-C6-N1	5.01	125.21	122.70
1	2	1200	G	N7-C8-N9	5.01	115.61	113.10
36	1	801	A	N9-C4-C5	-5.01	103.80	105.80
36	1	1167	U	C2-N3-C4	-5.01	123.99	127.00
36	1	1400	G	C8-N9-C1'	-5.01	120.48	127.00
36	1	1410	U	C5-C6-N1	5.01	125.21	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1474	A	OP1-P-OP2	-5.01	112.08	119.60
36	1	1933	A	C8-N9-C4	-5.01	103.79	105.80
36	1	2971	A	C2-N3-C4	5.01	113.11	110.60
36	1	3163	A	N9-C1'-C2'	-5.01	106.48	112.00
36	1	3382	U	N1-C2-O2	5.01	126.31	122.80
62	N6	53	ASP	CB-CG-OD1	-5.01	113.79	118.30
1	6	407	A	C8-N9-C4	5.01	107.81	105.80
1	6	565	C	C6-N1-C1'	-5.01	114.78	120.80
1	6	1077	C	N3-C4-C5	5.01	123.91	121.90
36	5	12	A	O5'-P-OP2	5.01	116.72	110.70
36	5	1246	G	N1-C6-O6	5.01	122.91	119.90
36	5	1513	G	OP1-P-O3'	5.01	116.23	105.20
36	5	2194	G	N1-C2-N2	-5.01	111.69	116.20
36	5	2401	A	OP2-P-O3'	5.01	116.23	105.20
36	5	2894	C	OP1-P-OP2	5.01	127.12	119.60
36	5	3326	G	N7-C8-N9	-5.01	110.59	113.10
46	19	34	LEU	CA-CB-CG	-5.01	103.77	115.30
1	2	1617	U	C2-N1-C1'	-5.01	111.69	117.70
36	1	156	G	C4-N9-C1'	5.01	133.02	126.50
36	1	772	U	C6-N1-C2	5.01	124.01	121.00
36	1	961	C	C2-N3-C4	5.01	122.41	119.90
36	1	1295	G	N1-C2-N2	-5.01	111.69	116.20
36	1	1353	U	C5-C4-O4	-5.01	122.89	125.90
36	1	2801	A	C5-N7-C8	-5.01	101.39	103.90
36	1	3370	A	N7-C8-N9	5.01	116.31	113.80
38	4	99	C	N1-C2-N3	-5.01	115.69	119.20
1	6	1202	A	N3-C4-C5	-5.01	123.29	126.80
1	6	1743	U	C4-C5-C6	5.01	122.71	119.70
36	5	936	A	N1-C2-N3	5.01	131.81	129.30
36	5	2763	U	N1-C2-O2	-5.01	119.29	122.80
1	2	626	U	N1-C2-N3	5.01	117.91	114.90
1	2	849	C	C2-N3-C4	5.01	122.41	119.90
36	1	275	U	C5-C4-O4	-5.01	122.89	125.90
36	1	347	G	N1-C2-N2	-5.01	111.69	116.20
36	1	1310	G	C6-N1-C2	-5.01	122.09	125.10
36	1	1485	G	C4-C5-N7	5.01	112.81	110.80
36	1	1759	C	C6-N1-C2	-5.01	118.30	120.30
36	1	2636	A	N3-C4-N9	-5.01	123.39	127.40
36	1	3288	G	O4'-C1'-N9	5.01	112.21	108.20
36	1	3325	G	N1-C2-N2	-5.01	111.69	116.20
37	3	37	G	N1-C6-O6	5.01	122.91	119.90
1	6	682	C	N1-C2-O2	-5.01	115.89	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	6	782	U	N1-C2-O2	5.01	126.31	122.80
1	6	862	A	P-O3'-C3'	5.01	125.71	119.70
1	6	1180	C	O5'-P-OP1	-5.01	101.19	105.70
1	6	1246	C	N3-C2-O2	-5.01	118.39	121.90
36	5	252	U	C5-C6-N1	5.01	125.20	122.70
36	5	668	G	C5-C6-O6	5.01	131.61	128.60
36	5	908	G	N7-C8-N9	5.01	115.61	113.10
36	5	1214	U	OP2-P-O3'	5.01	116.23	105.20
36	5	2252	A	N1-C6-N6	-5.01	115.59	118.60
36	5	2594	C	C2-N1-C1'	5.01	124.31	118.80
36	5	2609	A	C5-C6-N6	-5.01	119.69	123.70
36	5	2703	A	C5-C6-N1	-5.01	115.19	117.70
36	5	2704	A	OP1-P-OP2	5.01	127.12	119.60
36	5	2991	A	C8-N9-C4	-5.01	103.80	105.80
36	5	3226	A	N1-C6-N6	-5.01	115.59	118.60
36	5	3378	C	C6-N1-C1'	-5.01	114.79	120.80
37	7	114	U	N3-C4-O4	5.01	122.91	119.40
38	8	30	C	N3-C2-O2	-5.01	118.39	121.90
1	2	334	G	N1-C2-N2	5.01	120.71	116.20
1	2	571	G	C8-N9-C1'	5.01	133.51	127.00
1	2	909	U	C6-N1-C2	5.01	124.01	121.00
1	2	1112	G	C4-C5-N7	5.01	112.80	110.80
1	2	1199	G	N3-C2-N2	-5.01	116.39	119.90
36	1	394	G	O4'-C1'-N9	5.01	112.21	108.20
36	1	1299	U	C5-C4-O4	-5.01	122.89	125.90
36	1	1322	U	C5-C6-N1	-5.01	120.19	122.70
36	1	1390	A	C5-N7-C8	-5.01	101.39	103.90
36	1	2166	A	C4-C5-C6	-5.01	114.50	117.00
36	1	2773	C	C5-C4-N4	-5.01	116.69	120.20
36	1	2824	G	C5-N7-C8	-5.01	101.80	104.30
36	1	3137	C	C2-N3-C4	-5.01	117.39	119.90
1	6	547	U	N3-C4-O4	-5.01	115.89	119.40
1	6	1592	A	C5-N7-C8	-5.01	101.39	103.90
36	5	998	A	C4-C5-C6	5.01	119.50	117.00
36	5	1056	U	N3-C4-C5	5.01	117.61	114.60
36	5	2193	U	N1-C2-O2	5.01	126.31	122.80
36	5	2371	G	O4'-C1'-N9	-5.01	104.19	108.20
36	5	2897	A	N9-C4-C5	-5.01	103.80	105.80
36	5	2905	U	C2-N3-C4	-5.01	124.00	127.00
36	5	3297	U	C5-C6-N1	5.01	125.20	122.70
1	2	1517	U	N1-C2-O2	-5.01	119.30	122.80
36	1	2621	G	N1-C2-N3	5.01	126.91	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
38	4	35	C	N3-C2-O2	5.01	125.41	121.90
38	4	68	G	N3-C2-N2	-5.01	116.39	119.90
56	N0	115	ARG	NE-CZ-NH2	-5.01	117.80	120.30
1	6	626	U	C6-N1-C2	-5.01	118.00	121.00
1	6	1565	C	C5-C6-N1	-5.01	118.50	121.00
36	5	431	U	C5-C4-O4	5.01	128.91	125.90
36	5	569	A	OP1-P-OP2	5.01	127.11	119.60
36	5	1236	G	N3-C4-C5	-5.01	126.10	128.60
36	5	1399	A	C6-C5-N7	-5.01	128.79	132.30
36	5	1613	A	C6-N1-C2	-5.01	115.59	118.60
36	5	1681	U	N1-C2-O2	-5.01	119.30	122.80
36	5	1807	G	C8-N9-C1'	-5.01	120.49	127.00
36	5	2837	A	N1-C6-N6	-5.01	115.59	118.60
1	2	561	G	N3-C2-N2	-5.01	116.40	119.90
1	2	875	G	C4-N9-C1'	5.01	133.01	126.50
36	1	167	U	C5-C4-O4	5.01	128.90	125.90
36	1	499	G	C8-N9-C4	-5.01	104.40	106.40
36	1	2579	G	N3-C4-C5	-5.01	126.10	128.60
36	1	2767	U	O5'-P-OP2	-5.01	101.19	105.70
36	1	2887	A	N9-C4-C5	5.01	107.80	105.80
36	1	3252	G	C4-N9-C1'	-5.01	119.99	126.50
37	3	49	G	N3-C4-C5	-5.01	126.10	128.60
1	6	448	C	N3-C4-C5	-5.01	119.90	121.90
1	6	1740	A	C5-C6-N1	-5.01	115.20	117.70
36	5	994	G	C5-C6-N1	5.01	114.00	111.50
36	5	994	G	N3-C2-N2	5.01	123.41	119.90
36	5	1525	G	N3-C4-N9	5.01	129.00	126.00
36	5	1620	U	C5-C6-N1	5.01	125.20	122.70
36	5	2611	U	C6-N1-C2	-5.01	118.00	121.00
36	5	2960	C	N1-C2-N3	5.01	122.70	119.20
36	1	1738	C	N3-C4-N4	-5.00	114.50	118.00
36	1	2110	G	N3-C4-N9	5.00	129.00	126.00
36	1	2126	A	C5-C6-N1	5.00	120.20	117.70
36	5	1013	G	C5-C6-O6	5.00	131.60	128.60
36	5	1256	G	C8-N9-C4	5.00	108.40	106.40
38	8	76	C	C4-C5-C6	5.00	119.90	117.40
1	2	351	C	C6-N1-C2	5.00	122.30	120.30
1	2	1674	C	O5'-P-OP1	-5.00	101.20	105.70
36	1	228	U	O5'-P-OP1	-5.00	101.20	105.70
36	1	734	C	N1-C2-O2	5.00	121.90	118.90
36	1	974	G	C5-C6-N1	5.00	114.00	111.50
36	1	1099	A	C8-N9-C1'	-5.00	118.69	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	1	1507	G	O5'-P-OP1	-5.00	101.20	105.70
36	1	1736	G	C8-N9-C4	-5.00	104.40	106.40
36	1	1808	G	N9-C4-C5	5.00	107.40	105.40
36	1	2210	G	N3-C4-N9	-5.00	123.00	126.00
1	6	260	U	N1-C2-N3	-5.00	111.90	114.90
1	6	424	C	C4-C5-C6	-5.00	114.90	117.40
1	6	1678	A	N1-C6-N6	5.00	121.60	118.60
36	5	1257	C	C2-N1-C1'	-5.00	113.30	118.80
36	5	1311	G	C8-N9-C1'	-5.00	120.49	127.00
36	5	1853	U	C5-C6-N1	-5.00	120.20	122.70
36	5	2642	A	OP2-P-O3'	5.00	116.21	105.20
36	5	3009	G	N9-C4-C5	5.00	107.40	105.40
38	8	21	C	O4'-C1'-N1	5.00	112.20	108.20
1	2	320	U	C5-C6-N1	5.00	125.20	122.70
36	1	23	A	C4-N9-C1'	5.00	135.30	126.30
36	1	148	G	C8-N9-C1'	-5.00	120.50	127.00
36	1	851	C	C2-N1-C1'	5.00	124.30	118.80
36	1	2287	C	N1-C2-N3	5.00	122.70	119.20
36	1	2297	U	N1-C2-N3	5.00	117.90	114.90
36	1	2354	C	C6-N1-C2	-5.00	118.30	120.30
36	1	2382	G	N3-C2-N2	5.00	123.40	119.90
1	6	415	C	O4'-C1'-N1	5.00	112.20	108.20
1	6	556	A	C5-C6-N1	-5.00	115.20	117.70
1	6	622	A	O4'-C1'-N9	-5.00	104.20	108.20
1	6	1439	C	N3-C2-O2	5.00	125.40	121.90
1	6	1584	G	C8-N9-C4	5.00	108.40	106.40
36	5	885	U	C6-N1-C2	-5.00	118.00	121.00
36	5	974	G	N1-C2-N2	-5.00	111.70	116.20
36	5	1117	G	O4'-C1'-N9	-5.00	104.20	108.20
36	5	1134	G	C5-N7-C8	5.00	106.80	104.30
36	5	1295	G	C8-N9-C1'	-5.00	120.50	127.00
36	5	1699	A	N9-C4-C5	-5.00	103.80	105.80
36	5	2288	G	C6-N1-C2	-5.00	122.10	125.10
36	5	2392	C	N3-C4-C5	5.00	123.90	121.90
36	5	2654	C	OP1-P-O3'	5.00	116.20	105.20
36	5	2759	U	C6-N1-C1'	-5.00	114.20	121.20
36	5	3093	C	N1-C2-N3	5.00	122.70	119.20
36	5	3333	G	C4-C5-N7	-5.00	108.80	110.80
36	5	3337	G	C8-N9-C1'	-5.00	120.50	127.00
38	8	73	U	N1-C2-O2	5.00	126.30	122.80

There are no chirality outliers.



All (130) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
12	C0	26	ASP	Peptide
12	C0	87	VAL	Peptide
16	C4	38	THR	Peptide
18	C6	113	ASP	Peptide
19	C7	85	VAL	Peptide
23	D1	11	LEU	Peptide
24	D2	98	GLN	Peptide
25	D3	143	PRO	Peptide
25	D3	2	GLY	Peptide
26	D4	60	PHE	Peptide
27	D5	94	LYS	Peptide
28	D6	97	PRO	Peptide
33	E1	105	TYR	Peptide
33	E1	146	SER	Peptide
40	L3	204	ALA	Peptide
40	L3	346	THR	Peptide
40	L3	41	VAL	Peptide
41	L4	129	THR	Peptide
41	L4	13	GLY	Peptide
41	L4	131	VAL	Peptide
41	L4	174	ALA	Peptide
41	L4	83	GLY	Peptide
42	L5	58	LYS	Peptide
43	L6	89	THR	Peptide
43	L6	97	ASN	Peptide
44	L7	37	ASN	Peptide
44	L7	92	ILE	Peptide
47	M0	196	PHE	Peptide
47	M0	217	PHE	Peptide
52	M6	110	PRO	Peptide
52	M6	111	PRO	Peptide
53	M7	55	GLN	Peptide
57	N1	16	GLN	Peptide
63	N7	23	VAL	Peptide
63	N7	6	LYS	Peptide
64	N8	116	GLY	Peptide
64	N8	55	LYS	Peptide
64	N8	83	PRO	Peptide
64	N8	95	SER	Peptide
65	N9	20	GLY	Peptide
65	N9	25	LYS	Peptide
69	O3	29	LEU	Peptide

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Mol	Chain	Res	Type	Group
69	O3	90	PRO	Peptide
70	O4	22	VAL	Peptide
70	O4	71	THR	Peptide
72	O6	2	THR	Peptide
2	S0	29	VAL	Peptide
2	S0	6	THR	Peptide
5	S3	144	ALA	Peptide
5	S3	42	THR	Peptide
11	S9	15	PRO	Peptide
11	S9	92	LYS	Peptide
35	SM	89	ARG	Peptide
15	c3	140	LYS	Peptide
17	c5	8	LYS	Peptide
18	c6	115	THR	Peptide
18	c6	140	LYS	Peptide
18	c6	41	PRO	Peptide
19	c7	103	ASP	Peptide
19	c7	87	GLU	Peptide
20	c8	63	GLN	Peptide
21	c9	141	GLU	Peptide
22	d0	70	THR	Peptide
24	d2	120	HIS	Peptide
24	d2	58	SER	Peptide
26	d4	123	LYS	Peptide
26	d4	29	HIS	Peptide
27	d5	83	LEU	Peptide
28	d6	10	ARG	Peptide
80	e0	2	ALA	Peptide
80	e0	6	GLY	Peptide
81	e1	146	SER	Peptide
39	l2	141	PRO	Peptide
39	l2	215	ASN	Peptide
40	l3	139	GLN	Peptide
40	l3	234	GLY	Peptide
40	l3	262	TRP	Peptide
40	l3	27	ALA	Peptide
40	l3	346	THR	Peptide
41	l4	132	ALA	Peptide
41	l4	352	ALA	Peptide
42	l5	133	GLU	Peptide
42	l5	258	LYS	Peptide
42	l5	270	LYS	Peptide

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>	<b>Group</b>
43	l6	31	ARG	Peptide
44	l7	129	LEU	Peptide
44	l7	157	ASN	Peptide
44	l7	226	GLY	Peptide
45	l8	98	ARG	Peptide
47	m0	111	LEU	Peptide
48	m1	8	PRO	Peptide
82	m2	29	UNK	Peptide
82	m2	36	UNK	Peptide
82	m2	85	UNK	Peptide
49	m3	138	VAL	Peptide
49	m3	148	ALA	Peptide
52	m6	182	ASN	Peptide
52	m6	89	SER	Peptide
53	m7	123	PRO	Peptide
53	m7	55	GLN	Peptide
54	m8	185	LYS	Peptide
56	n0	133	ALA	Peptide
56	n0	3	HIS	Peptide
57	n1	147	VAL	Peptide
60	n4	77	LYS	Peptide
61	n5	57	LEU	Peptide
64	n8	23	GLY	Peptide
64	n8	66	ALA	Peptide
65	n9	19	ASN	Peptide
67	o1	23	VAL	Peptide
68	o2	126	LEU	Peptide
68	o2	15	LYS	Peptide
70	o4	33	GLN	Peptide
70	o4	46	ASP	Peptide
83	p0	101	VAL	Peptide
76	q0	78	ILE	Peptide
2	s0	5	ALA	Peptide
2	s0	72	ASP	Peptide
3	s1	130	SER	Peptide
3	s1	131	ASP	Peptide
3	s1	200	ALA	Peptide
5	s3	203	PRO	Peptide
5	s3	53	THR	Peptide
6	s4	159	THR	Peptide
6	s4	219	VAL	Peptide
7	s5	36	ALA	Peptide

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Mol	Chain	Res	Type	Group
7	s5	44	ASN	Peptide
7	s5	99	MET	Peptide
9	s7	130	VAL	Peptide
11	s9	89	ASP	Peptide

## 5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

## 5.3 Torsion angles [i](#)

### 5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
2	S0	204/251 (81%)	137 (67%)	42 (21%)	25 (12%)	0	5
2	s0	204/251 (81%)	139 (68%)	31 (15%)	34 (17%)	0	3
3	S1	212/254 (84%)	142 (67%)	42 (20%)	28 (13%)	0	4
3	s1	214/254 (84%)	155 (72%)	39 (18%)	20 (9%)	0	9
4	S2	215/253 (85%)	148 (69%)	47 (22%)	20 (9%)	0	9
4	s2	215/253 (85%)	156 (73%)	30 (14%)	29 (14%)	0	4
5	S3	221/239 (92%)	154 (70%)	48 (22%)	19 (9%)	1	10
5	s3	221/239 (92%)	147 (66%)	51 (23%)	23 (10%)	0	7
6	S4	258/260 (99%)	184 (71%)	44 (17%)	30 (12%)	0	6
6	s4	258/260 (99%)	175 (68%)	53 (20%)	30 (12%)	0	6
7	S5	204/224 (91%)	129 (63%)	46 (22%)	29 (14%)	0	4
7	s5	204/224 (91%)	124 (61%)	51 (25%)	29 (14%)	0	4
8	S6	224/236 (95%)	166 (74%)	37 (16%)	21 (9%)	0	8
8	s6	216/236 (92%)	165 (76%)	36 (17%)	15 (7%)	1	14
9	S7	182/189 (96%)	131 (72%)	35 (19%)	16 (9%)	1	9

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	s7	184/189 (97%)	126 (68%)	37 (20%)	21 (11%)	0	6
10	S8	184/200 (92%)	132 (72%)	32 (17%)	20 (11%)	0	6
10	s8	184/200 (92%)	144 (78%)	26 (14%)	14 (8%)	1	12
11	S9	183/196 (93%)	128 (70%)	36 (20%)	19 (10%)	0	7
11	s9	183/196 (93%)	122 (67%)	42 (23%)	19 (10%)	0	7
12	C0	94/105 (90%)	54 (57%)	21 (22%)	19 (20%)	0	1
12	c0	92/105 (88%)	56 (61%)	17 (18%)	19 (21%)	0	1
13	C1	153/155 (99%)	113 (74%)	22 (14%)	18 (12%)	0	5
13	c1	144/155 (93%)	108 (75%)	20 (14%)	16 (11%)	0	6
14	C2	122/142 (86%)	71 (58%)	22 (18%)	29 (24%)	0	0
14	c2	122/142 (86%)	65 (53%)	36 (30%)	21 (17%)	0	2
15	C3	148/150 (99%)	107 (72%)	29 (20%)	12 (8%)	1	11
15	c3	148/150 (99%)	95 (64%)	28 (19%)	25 (17%)	0	2
16	C4	125/136 (92%)	80 (64%)	25 (20%)	20 (16%)	0	3
16	c4	126/136 (93%)	90 (71%)	24 (19%)	12 (10%)	0	8
17	C5	122/141 (86%)	78 (64%)	26 (21%)	18 (15%)	0	3
17	c5	133/141 (94%)	75 (56%)	29 (22%)	29 (22%)	0	1
18	C6	139/142 (98%)	105 (76%)	22 (16%)	12 (9%)	1	10
18	c6	140/142 (99%)	97 (69%)	24 (17%)	19 (14%)	0	4
19	C7	116/136 (85%)	76 (66%)	22 (19%)	18 (16%)	0	3
19	c7	113/136 (83%)	73 (65%)	29 (26%)	11 (10%)	0	8
20	C8	143/145 (99%)	107 (75%)	27 (19%)	9 (6%)	1	17
20	c8	143/145 (99%)	98 (68%)	27 (19%)	18 (13%)	0	5
21	C9	141/143 (99%)	99 (70%)	31 (22%)	11 (8%)	1	11
21	c9	141/143 (99%)	98 (70%)	36 (26%)	7 (5%)	2	21
22	D0	105/120 (88%)	74 (70%)	22 (21%)	9 (9%)	1	10
22	d0	108/120 (90%)	75 (69%)	15 (14%)	18 (17%)	0	3
23	D1	85/87 (98%)	53 (62%)	18 (21%)	14 (16%)	0	3
23	d1	85/87 (98%)	64 (75%)	14 (16%)	7 (8%)	1	10
24	D2	127/129 (98%)	91 (72%)	28 (22%)	8 (6%)	1	17
24	d2	127/129 (98%)	105 (83%)	17 (13%)	5 (4%)	3	27

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
25	D3	142/144 (99%)	87 (61%)	29 (20%)	26 (18%)	0	2
25	d3	142/144 (99%)	119 (84%)	16 (11%)	7 (5%)	2	21
26	D4	132/134 (98%)	98 (74%)	25 (19%)	9 (7%)	1	15
26	d4	132/134 (98%)	101 (76%)	17 (13%)	14 (11%)	0	7
27	D5	68/107 (64%)	43 (63%)	16 (24%)	9 (13%)	0	4
27	d5	67/107 (63%)	45 (67%)	14 (21%)	8 (12%)	0	5
28	D6	95/97 (98%)	53 (56%)	18 (19%)	24 (25%)	0	0
28	d6	95/97 (98%)	71 (75%)	16 (17%)	8 (8%)	1	10
29	D7	79/81 (98%)	58 (73%)	14 (18%)	7 (9%)	1	9
29	d7	79/81 (98%)	61 (77%)	11 (14%)	7 (9%)	1	9
30	D8	61/66 (92%)	45 (74%)	11 (18%)	5 (8%)	1	10
30	d8	61/66 (92%)	39 (64%)	14 (23%)	8 (13%)	0	4
31	D9	51/55 (93%)	32 (63%)	11 (22%)	8 (16%)	0	3
31	d9	51/55 (93%)	35 (69%)	8 (16%)	8 (16%)	0	3
32	E0	58/60 (97%)	34 (59%)	16 (28%)	8 (14%)	0	4
33	E1	69/76 (91%)	39 (56%)	13 (19%)	17 (25%)	0	0
34	SR	316/318 (99%)	237 (75%)	56 (18%)	23 (7%)	1	13
34	sR	316/318 (99%)	251 (79%)	46 (15%)	19 (6%)	1	17
35	SM	155/273 (57%)	90 (58%)	40 (26%)	25 (16%)	0	3
35	sM	98/273 (36%)	59 (60%)	20 (20%)	19 (19%)	0	2
39	L2	250/253 (99%)	197 (79%)	31 (12%)	22 (9%)	1	9
39	l2	250/253 (99%)	192 (77%)	42 (17%)	16 (6%)	1	17
40	L3	384/386 (100%)	290 (76%)	63 (16%)	31 (8%)	1	11
40	l3	384/386 (100%)	299 (78%)	53 (14%)	32 (8%)	1	10
41	L4	359/361 (99%)	260 (72%)	62 (17%)	37 (10%)	0	7
41	l4	359/361 (99%)	251 (70%)	68 (19%)	40 (11%)	0	6
42	L5	294/296 (99%)	200 (68%)	58 (20%)	36 (12%)	0	5
42	l5	292/296 (99%)	221 (76%)	44 (15%)	27 (9%)	1	9
43	L6	152/175 (87%)	123 (81%)	17 (11%)	12 (8%)	1	11
43	l6	153/175 (87%)	107 (70%)	27 (18%)	19 (12%)	0	5
44	L7	220/243 (90%)	154 (70%)	45 (20%)	21 (10%)	0	8

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
44	l7	221/243 (91%)	165 (75%)	34 (15%)	22 (10%)	0	8
45	L8	231/255 (91%)	137 (59%)	65 (28%)	29 (13%)	0	5
45	l8	229/255 (90%)	155 (68%)	52 (23%)	22 (10%)	0	8
46	L9	189/191 (99%)	137 (72%)	30 (16%)	22 (12%)	0	6
46	l9	189/191 (99%)	142 (75%)	27 (14%)	20 (11%)	0	7
47	M0	207/220 (94%)	148 (72%)	38 (18%)	21 (10%)	0	7
47	m0	209/220 (95%)	149 (71%)	41 (20%)	19 (9%)	1	9
48	M1	167/173 (96%)	116 (70%)	27 (16%)	24 (14%)	0	4
48	m1	167/173 (96%)	120 (72%)	27 (16%)	20 (12%)	0	5
49	M3	191/198 (96%)	134 (70%)	46 (24%)	11 (6%)	1	18
49	m3	192/198 (97%)	126 (66%)	37 (19%)	29 (15%)	0	3
50	M4	134/137 (98%)	97 (72%)	25 (19%)	12 (9%)	1	9
50	m4	135/137 (98%)	92 (68%)	35 (26%)	8 (6%)	1	18
51	M5	201/203 (99%)	151 (75%)	38 (19%)	12 (6%)	1	17
51	m5	201/203 (99%)	151 (75%)	35 (17%)	15 (8%)	1	12
52	M6	195/198 (98%)	146 (75%)	36 (18%)	13 (7%)	1	15
52	m6	195/198 (98%)	151 (77%)	26 (13%)	18 (9%)	1	9
53	M7	181/183 (99%)	128 (71%)	34 (19%)	19 (10%)	0	7
53	m7	153/183 (84%)	111 (72%)	29 (19%)	13 (8%)	1	10
54	M8	183/185 (99%)	132 (72%)	36 (20%)	15 (8%)	1	10
54	m8	183/185 (99%)	134 (73%)	36 (20%)	13 (7%)	1	14
55	M9	186/188 (99%)	136 (73%)	33 (18%)	17 (9%)	1	9
55	m9	186/188 (99%)	125 (67%)	40 (22%)	21 (11%)	0	6
56	N0	170/172 (99%)	139 (82%)	21 (12%)	10 (6%)	1	18
56	n0	170/172 (99%)	145 (85%)	16 (9%)	9 (5%)	2	19
57	N1	157/159 (99%)	115 (73%)	28 (18%)	14 (9%)	1	9
57	n1	157/159 (99%)	121 (77%)	27 (17%)	9 (6%)	1	18
58	N2	98/120 (82%)	65 (66%)	26 (26%)	7 (7%)	1	14
58	n2	96/120 (80%)	64 (67%)	24 (25%)	8 (8%)	1	10
59	N3	134/136 (98%)	109 (81%)	16 (12%)	9 (7%)	1	15
59	n3	134/136 (98%)	113 (84%)	12 (9%)	9 (7%)	1	15

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
60	N4	96/155 (62%)	63 (66%)	16 (17%)	17 (18%)	0	2
60	n4	133/155 (86%)	88 (66%)	25 (19%)	20 (15%)	0	3
61	N5	119/141 (84%)	81 (68%)	30 (25%)	8 (7%)	1	15
61	n5	118/141 (84%)	91 (77%)	17 (14%)	10 (8%)	1	10
62	N6	124/126 (98%)	94 (76%)	18 (14%)	12 (10%)	0	8
62	n6	124/126 (98%)	92 (74%)	17 (14%)	15 (12%)	0	5
63	N7	133/135 (98%)	98 (74%)	19 (14%)	16 (12%)	0	5
63	n7	133/135 (98%)	94 (71%)	26 (20%)	13 (10%)	0	8
64	N8	146/148 (99%)	100 (68%)	30 (20%)	16 (11%)	0	6
64	n8	146/148 (99%)	104 (71%)	28 (19%)	14 (10%)	0	8
65	N9	56/58 (97%)	40 (71%)	11 (20%)	5 (9%)	1	9
65	n9	56/58 (97%)	33 (59%)	14 (25%)	9 (16%)	0	3
66	O0	95/104 (91%)	82 (86%)	10 (10%)	3 (3%)	4	31
66	o0	98/104 (94%)	75 (76%)	18 (18%)	5 (5%)	2	20
67	O1	107/112 (96%)	86 (80%)	12 (11%)	9 (8%)	1	10
67	o1	107/112 (96%)	73 (68%)	14 (13%)	20 (19%)	0	2
68	O2	125/129 (97%)	95 (76%)	20 (16%)	10 (8%)	1	11
68	o2	125/129 (97%)	89 (71%)	23 (18%)	13 (10%)	0	7
69	O3	104/106 (98%)	90 (86%)	7 (7%)	7 (7%)	1	15
69	o3	104/106 (98%)	82 (79%)	13 (12%)	9 (9%)	1	9
70	O4	110/119 (92%)	80 (73%)	19 (17%)	11 (10%)	0	8
70	o4	110/119 (92%)	75 (68%)	24 (22%)	11 (10%)	0	8
71	O5	117/119 (98%)	75 (64%)	28 (24%)	14 (12%)	0	5
71	o5	117/119 (98%)	80 (68%)	18 (15%)	19 (16%)	0	3
72	O6	97/99 (98%)	69 (71%)	16 (16%)	12 (12%)	0	5
72	o6	97/99 (98%)	67 (69%)	18 (19%)	12 (12%)	0	5
73	O7	85/87 (98%)	63 (74%)	16 (19%)	6 (7%)	1	14
73	o7	85/87 (98%)	60 (71%)	14 (16%)	11 (13%)	0	5
74	O8	75/77 (97%)	55 (73%)	12 (16%)	8 (11%)	0	7
74	o8	75/77 (97%)	53 (71%)	18 (24%)	4 (5%)	2	19
75	O9	48/50 (96%)	34 (71%)	10 (21%)	4 (8%)	1	10

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
75	o9	48/50 (96%)	36 (75%)	8 (17%)	4 (8%)	1	10
76	Q0	50/52 (96%)	32 (64%)	12 (24%)	6 (12%)	0	5
76	q0	50/52 (96%)	39 (78%)	6 (12%)	5 (10%)	0	8
77	Q1	23/25 (92%)	18 (78%)	3 (13%)	2 (9%)	1	9
77	q1	23/25 (92%)	16 (70%)	3 (13%)	4 (17%)	0	2
78	Q2	103/105 (98%)	75 (73%)	20 (19%)	8 (8%)	1	11
78	q2	103/105 (98%)	83 (81%)	14 (14%)	6 (6%)	1	18
79	Q3	89/91 (98%)	59 (66%)	16 (18%)	14 (16%)	0	3
79	q3	89/91 (98%)	71 (80%)	9 (10%)	9 (10%)	0	7
80	e0	60/62 (97%)	37 (62%)	14 (23%)	9 (15%)	0	3
81	e1	74/76 (97%)	28 (38%)	26 (35%)	20 (27%)	0	0
83	p0	139/311 (45%)	103 (74%)	27 (19%)	9 (6%)	1	16
All	All	22333/24141 (92%)	15914 (71%)	4073 (18%)	2346 (10%)	0	7

All (2346) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
2	S0	4	PRO
2	S0	30	GLN
2	S0	39	ASN
2	S0	95	ALA
2	S0	132	ALA
2	S0	140	ASN
2	S0	158	VAL
2	S0	190	ASP
2	S0	191	ARG
3	S1	49	ASN
3	S1	63	GLY
3	S1	82	ARG
3	S1	177	GLN
3	S1	179	SER
3	S1	206	PRO
3	S1	207	LEU
4	S2	121	VAL
4	S2	135	SER
4	S2	148	LEU
4	S2	163	GLY
4	S2	208	GLU

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Mol	Chain	Res	Type
4	S2	236	PRO
5	S3	44	THR
5	S3	129	SER
5	S3	211	PRO
5	S3	216	PRO
5	S3	220	PRO
6	S4	104	ASP
6	S4	119	ALA
6	S4	142	HIS
6	S4	188	ASN
6	S4	245	LYS
7	S5	31	GLU
7	S5	37	GLN
7	S5	63	GLN
7	S5	78	ALA
7	S5	81	ARG
7	S5	98	MET
7	S5	101	GLY
7	S5	109	LYS
8	S6	10	ASN
8	S6	25	ARG
8	S6	138	ALA
8	S6	154	ARG
8	S6	173	PRO
8	S6	174	LYS
9	S7	5	GLN
9	S7	64	VAL
9	S7	73	VAL
9	S7	116	ARG
9	S7	131	PHE
10	S8	22	ARG
10	S8	137	LYS
10	S8	199	LYS
11	S9	100	LYS
11	S9	134	ILE
11	S9	153	GLU
11	S9	156	ILE
11	S9	164	PHE
11	S9	168	ARG
12	C0	60	SER
12	C0	61	TRP
12	C0	81	ASN

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Mol	Chain	Res	Type
12	C0	87	VAL
12	C0	88	PRO
13	C1	3	THR
13	C1	6	THR
13	C1	7	VAL
13	C1	29	LYS
13	C1	96	LYS
13	C1	144	ALA
13	C1	146	ALA
13	C1	149	ALA
13	C1	154	ALA
14	C2	87	PRO
14	C2	91	VAL
14	C2	113	ARG
14	C2	141	SER
15	C3	27	LYS
15	C3	28	LEU
15	C3	118	ILE
16	C4	18	ARG
16	C4	48	VAL
16	C4	50	ALA
16	C4	51	ASP
16	C4	94	PRO
17	C5	11	VAL
17	C5	22	LEU
17	C5	29	SER
17	C5	125	PRO
17	C5	126	VAL
17	C5	127	ARG
18	C6	39	VAL
18	C6	41	PRO
18	C6	42	GLU
18	C6	113	ASP
19	C7	85	VAL
19	C7	86	PRO
19	C7	88	VAL
19	C7	124	VAL
20	C8	14	ILE
20	C8	92	ILE
20	C8	144	ARG
21	C9	39	THR
21	C9	41	SER

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Mol	Chain	Res	Type
21	C9	69	LYS
22	D0	16	GLN
22	D0	17	GLN
22	D0	117	VAL
22	D0	118	VAL
23	D1	2	GLU
23	D1	4	ASP
23	D1	10	GLU
23	D1	28	ASP
24	D2	29	PRO
24	D2	30	SER
24	D2	83	ILE
25	D3	3	LYS
25	D3	5	LYS
25	D3	36	THR
25	D3	78	LYS
25	D3	99	ASN
25	D3	137	LYS
25	D3	138	GLU
25	D3	144	ARG
26	D4	33	ALA
26	D4	35	VAL
26	D4	104	SER
27	D5	43	ASP
27	D5	44	GLN
27	D5	71	ILE
27	D5	97	LYS
28	D6	5	ARG
28	D6	45	VAL
28	D6	47	ALA
28	D6	84	VAL
28	D6	86	VAL
29	D7	18	LYS
29	D7	38	PRO
29	D7	63	LEU
31	D9	11	PRO
31	D9	25	SER
31	D9	26	SER
31	D9	27	HIS
31	D9	34	TYR
33	E1	84	VAL
33	E1	106	TYR

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Mol	Chain	Res	Type
33	E1	107	LYS
33	E1	110	ALA
33	E1	111	GLU
33	E1	137	ASP
34	SR	51	ASP
34	SR	80	ALA
34	SR	94	VAL
34	SR	162	ALA
35	SM	52	PRO
35	SM	54	PRO
35	SM	64	LYS
35	SM	65	THR
35	SM	69	ARG
35	SM	90	ALA
35	SM	91	THR
35	SM	116	GLU
35	SM	140	ASP
35	SM	166	VAL
35	SM	167	PRO
35	SM	173	GLU
39	L2	17	THR
39	L2	20	THR
39	L2	144	ASN
39	L2	229	ALA
40	L3	83	PRO
40	L3	96	PRO
40	L3	140	ASP
40	L3	188	ILE
40	L3	240	ARG
40	L3	289	ASP
40	L3	308	MET
40	L3	310	GLY
40	L3	333	LYS
41	L4	4	PRO
41	L4	24	ALA
41	L4	61	SER
41	L4	72	ALA
41	L4	130	ALA
41	L4	132	ALA
41	L4	184	SER
41	L4	190	GLY
41	L4	197	ARG

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Mol	Chain	Res	Type
41	L4	220	ARG
41	L4	349	THR
41	L4	361	HIS
42	L5	19	PRO
42	L5	37	VAL
42	L5	57	ASN
42	L5	85	ARG
42	L5	125	VAL
42	L5	178	ASN
42	L5	234	ASP
42	L5	236	LEU
42	L5	260	PHE
42	L5	263	GLU
43	L6	93	VAL
43	L6	98	VAL
43	L6	100	LYS
43	L6	107	ALA
44	L7	24	GLU
44	L7	25	GLN
44	L7	38	LYS
44	L7	112	ASN
44	L7	129	LEU
44	L7	171	ALA
44	L7	175	LYS
44	L7	217	PRO
45	L8	31	PRO
45	L8	36	ILE
45	L8	37	GLY
45	L8	40	VAL
45	L8	64	ILE
45	L8	92	LYS
45	L8	121	SER
46	L9	48	VAL
46	L9	49	ASN
46	L9	50	ASN
46	L9	110	LYS
46	L9	162	GLN
46	L9	189	GLU
47	M0	16	PRO
47	M0	38	LYS
47	M0	145	LYS
47	M0	207	GLU

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Mol	Chain	Res	Type
48	M1	8	PRO
48	M1	11	ASP
48	M1	12	LEU
48	M1	24	GLY
48	M1	94	ARG
48	M1	95	ASN
48	M1	112	LEU
49	M3	50	PRO
49	M3	164	GLU
50	M4	8	LYS
50	M4	62	GLN
50	M4	99	TRP
50	M4	134	ALA
50	M4	135	LEU
50	M4	136	ALA
51	M5	81	TYR
51	M5	158	HIS
51	M5	166	ALA
52	M6	85	ARG
52	M6	111	PRO
52	M6	149	TYR
52	M6	182	ASN
53	M7	9	THR
53	M7	37	ASN
53	M7	158	ALA
53	M7	163	LYS
53	M7	177	ALA
54	M8	41	ASP
54	M8	99	THR
54	M8	116	LYS
54	M8	151	ARG
54	M8	152	HIS
55	M9	15	VAL
55	M9	35	ALA
55	M9	66	HIS
55	M9	121	HIS
56	N0	59	VAL
57	N1	55	LYS
57	N1	101	CYS
57	N1	119	ALA
57	N1	120	LYS
57	N1	122	GLN

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Mol	Chain	Res	Type
57	N1	133	ALA
57	N1	138	SER
58	N2	11	ILE
58	N2	51	GLY
58	N2	91	ASP
59	N3	9	THR
59	N3	10	LYS
59	N3	66	LYS
59	N3	67	PRO
59	N3	82	ALA
60	N4	25	ASP
60	N4	35	LYS
60	N4	77	LYS
60	N4	81	PRO
60	N4	86	SER
61	N5	36	LYS
61	N5	62	VAL
62	N6	31	LEU
62	N6	37	LYS
62	N6	91	ASN
62	N6	92	GLY
63	N7	18	TYR
63	N7	35	SER
63	N7	59	ALA
63	N7	98	THR
63	N7	105	SER
63	N7	128	GLN
64	N8	15	VAL
64	N8	30	GLY
64	N8	79	TRP
64	N8	93	SER
64	N8	117	ARG
65	N9	5	LYS
65	N9	24	PRO
67	O1	6	ASP
67	O1	7	VAL
67	O1	46	THR
68	O2	41	VAL
68	O2	62	LYS
69	O3	33	GLU
69	O3	90	PRO
69	O3	94	PHE

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Mol	Chain	Res	Type
70	O4	46	ASP
70	O4	108	GLN
70	O4	109	THR
71	O5	30	GLU
71	O5	31	LEU
71	O5	86	ARG
71	O5	96	GLU
71	O5	97	ALA
71	O5	119	LYS
72	O6	11	LEU
72	O6	21	THR
72	O6	27	SER
72	O6	89	GLU
73	O7	32	LYS
73	O7	51	ALA
74	O8	33	LYS
75	O9	4	GLN
75	O9	10	LYS
75	O9	27	ILE
76	Q0	78	ILE
76	Q0	117	HIS
77	Q1	23	ARG
78	Q2	15	LYS
78	Q2	17	CYS
78	Q2	60	LYS
78	Q2	100	LYS
79	Q3	21	SER
79	Q3	53	GLY
79	Q3	60	CYS
79	Q3	61	LYS
2	s0	4	PRO
2	s0	95	ALA
2	s0	97	PRO
2	s0	111	ILE
2	s0	114	SER
2	s0	152	PRO
2	s0	155	PHE
2	s0	158	VAL
2	s0	164	ASN
2	s0	177	LEU
2	s0	178	ALA
2	s0	189	VAL

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Mol	Chain	Res	Type
2	s0	194	PRO
2	s0	206	ASP
3	s1	26	ARG
3	s1	81	PHE
3	s1	82	ARG
3	s1	93	GLY
3	s1	108	ASP
3	s1	147	ALA
3	s1	206	PRO
4	s2	106	ASP
4	s2	121	VAL
4	s2	148	LEU
4	s2	149	GLY
4	s2	164	SER
4	s2	228	ASN
4	s2	234	PRO
4	s2	236	PRO
5	s3	9	ARG
5	s3	30	ALA
5	s3	115	ILE
5	s3	142	LEU
5	s3	144	ALA
5	s3	177	MET
5	s3	219	ALA
5	s3	220	PRO
5	s3	221	SER
6	s4	57	ASN
6	s4	80	THR
6	s4	142	HIS
6	s4	150	PRO
6	s4	163	ASP
6	s4	171	ASP
6	s4	177	ALA
6	s4	178	GLY
6	s4	196	VAL
7	s5	28	PRO
7	s5	33	VAL
7	s5	34	GLN
7	s5	36	ALA
7	s5	37	GLN
7	s5	41	LYS
7	s5	55	ASP

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Mol	Chain	Res	Type
7	s5	100	ASN
7	s5	151	GLY
7	s5	155	ALA
7	s5	184	PHE
8	s6	58	LYS
8	s6	70	PRO
8	s6	122	GLU
8	s6	154	ARG
8	s6	156	PHE
8	s6	173	PRO
8	s6	174	LYS
9	s7	64	VAL
9	s7	74	GLN
9	s7	112	ARG
9	s7	113	PRO
9	s7	118	LEU
9	s7	131	PHE
9	s7	147	ASN
9	s7	149	ILE
9	s7	158	ASP
9	s7	165	LYS
10	s8	3	ILE
10	s8	100	ALA
10	s8	101	ILE
10	s8	107	THR
10	s8	147	ALA
10	s8	148	ALA
11	s9	118	LEU
11	s9	167	ALA
11	s9	182	GLU
12	c0	24	LYS
12	c0	25	LYS
12	c0	35	ILE
12	c0	82	LEU
12	c0	83	PRO
12	c0	88	PRO
12	c0	92	ILE
12	c0	94	GLU
12	c0	97	PRO
13	c1	8	GLN
13	c1	75	VAL
13	c1	144	ALA

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Mol	Chain	Res	Type
14	c2	22	VAL
14	c2	39	ASP
14	c2	66	VAL
14	c2	82	PRO
14	c2	101	ALA
14	c2	131	ASP
15	c3	12	SER
15	c3	19	SER
15	c3	60	VAL
15	c3	62	GLN
15	c3	66	ILE
15	c3	87	ASP
15	c3	106	ARG
15	c3	122	ILE
15	c3	139	TRP
15	c3	149	LEU
16	c4	39	ILE
16	c4	50	ALA
16	c4	126	THR
16	c4	132	ARG
17	c5	7	ALA
17	c5	18	ARG
17	c5	26	LEU
17	c5	27	GLU
17	c5	41	VAL
17	c5	49	MET
17	c5	51	SER
17	c5	71	GLU
17	c5	75	PRO
17	c5	125	PRO
17	c5	126	VAL
17	c5	127	ARG
18	c6	39	VAL
18	c6	106	LYS
18	c6	110	THR
19	c7	63	LYS
19	c7	88	VAL
19	c7	99	VAL
19	c7	116	LYS
20	c8	9	GLY
20	c8	29	VAL
20	c8	46	VAL

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Mol	Chain	Res	Type
20	c8	91	ASP
20	c8	128	PHE
20	c8	145	ARG
21	c9	11	ALA
21	c9	29	GLU
22	d0	15	GLN
22	d0	16	GLN
22	d0	17	GLN
22	d0	49	ASN
22	d0	51	VAL
22	d0	96	PRO
22	d0	97	VAL
22	d0	118	VAL
22	d0	119	ALA
22	d0	120	SER
23	d1	43	GLY
23	d1	66	ASP
23	d1	67	ASP
24	d2	68	ARG
24	d2	95	PRO
25	d3	131	SER
25	d3	138	GLU
26	d4	4	ALA
26	d4	30	PRO
26	d4	33	ALA
26	d4	54	ALA
26	d4	68	LYS
26	d4	125	LEU
27	d5	38	HIS
27	d5	85	LYS
27	d5	87	GLY
27	d5	104	ALA
28	d6	28	LYS
28	d6	63	ALA
29	d7	4	VAL
29	d7	38	PRO
29	d7	57	GLU
29	d7	60	SER
30	d8	52	ASP
31	d9	6	VAL
31	d9	7	TRP
80	e0	48	THR

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Mol	Chain	Res	Type
80	e0	49	LEU
80	e0	60	PRO
81	e1	83	LYS
81	e1	84	VAL
81	e1	87	THR
81	e1	100	LEU
81	e1	102	VAL
81	e1	103	LEU
81	e1	106	TYR
81	e1	124	PRO
81	e1	125	THR
81	e1	127	GLY
81	e1	148	TYR
34	sR	4	ASN
34	sR	75	ALA
34	sR	149	ASP
34	sR	160	GLU
34	sR	162	ALA
34	sR	165	ASP
34	sR	166	SER
34	sR	226	ALA
34	sR	285	ALA
34	sR	318	ALA
35	sM	41	SER
35	sM	47	ALA
35	sM	48	ARG
35	sM	50	ASN
35	sM	64	LYS
35	sM	172	VAL
39	l2	24	GLN
39	l2	130	SER
39	l2	143	GLU
39	l2	212	GLY
39	l2	249	SER
40	l3	23	ALA
40	l3	129	ALA
40	l3	140	ASP
40	l3	142	ALA
40	l3	170	PRO
40	l3	188	ILE
40	l3	235	THR
40	l3	252	ILE

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Mol	Chain	Res	Type
40	13	263	SER
40	13	302	LYS
41	14	15	ALA
41	14	17	ALA
41	14	74	ILE
41	14	132	ALA
41	14	133	SER
41	14	193	LYS
41	14	301	PRO
41	14	305	ALA
41	14	349	THR
42	15	57	ASN
42	15	116	ASP
42	15	178	ASN
42	15	212	ALA
42	15	216	GLU
42	15	228	ALA
43	16	8	LYS
43	16	24	ALA
43	16	26	ARG
43	16	32	ALA
43	16	81	ALA
43	16	98	VAL
43	16	107	ALA
43	16	129	GLU
43	16	142	ASP
43	16	171	PRO
44	17	66	LYS
44	17	67	ARG
44	17	130	ILE
44	17	168	ILE
44	17	178	ILE
44	17	180	SER
44	17	193	PRO
45	18	25	PRO
45	18	26	LEU
45	18	34	PHE
45	18	122	LYS
45	18	240	ASN
45	18	241	LYS
46	19	2	LYS
46	19	77	ASN

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Mol	Chain	Res	Type
46	l9	144	ILE
47	m0	16	PRO
47	m0	38	LYS
47	m0	77	THR
47	m0	78	THR
47	m0	79	VAL
47	m0	82	ARG
47	m0	91	VAL
47	m0	118	ALA
48	m1	8	PRO
48	m1	9	MET
48	m1	10	ARG
48	m1	23	VAL
48	m1	115	LYS
48	m1	117	ASP
48	m1	173	ASP
49	m3	19	GLN
49	m3	47	ALA
49	m3	50	PRO
49	m3	133	PRO
49	m3	134	GLU
49	m3	141	ALA
49	m3	150	PRO
49	m3	152	THR
49	m3	161	ASP
49	m3	186	ARG
50	m4	90	VAL
50	m4	136	ALA
51	m5	17	ASP
51	m5	77	LYS
51	m5	81	TYR
51	m5	183	THR
51	m5	187	ARG
52	m6	4	GLU
52	m6	63	ALA
52	m6	94	ARG
52	m6	122	GLN
52	m6	178	VAL
52	m6	196	ALA
53	m7	12	ALA
53	m7	34	GLN
53	m7	67	ILE

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Mol	Chain	Res	Type
53	m7	109	ALA
54	m8	99	THR
54	m8	108	ALA
54	m8	112	ALA
54	m8	149	ALA
55	m9	7	GLN
55	m9	36	ASN
55	m9	47	ASN
55	m9	55	VAL
55	m9	117	LYS
55	m9	130	ASN
55	m9	182	ASP
55	m9	183	ALA
56	n0	98	SER
56	n0	142	GLN
57	n1	38	ASP
57	n1	55	LYS
57	n1	126	VAL
57	n1	127	GLN
57	n1	146	ASN
58	n2	50	LEU
59	n3	124	ASP
60	n4	14	TYR
60	n4	16	GLY
60	n4	25	ASP
60	n4	57	LYS
60	n4	71	ARG
60	n4	77	LYS
60	n4	133	THR
60	n4	134	GLN
61	n5	44	PRO
61	n5	45	LYS
61	n5	46	TYR
62	n6	25	SER
62	n6	37	LYS
62	n6	62	SER
62	n6	71	SER
62	n6	83	ASP
62	n6	84	LYS
62	n6	96	PRO
62	n6	125	LYS
62	n6	126	LEU

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Mol	Chain	Res	Type
63	n7	5	LEU
63	n7	36	HIS
63	n7	103	GLN
63	n7	130	PHE
64	n8	12	ARG
64	n8	76	ASP
64	n8	78	LEU
64	n8	79	TRP
65	n9	23	LYS
65	n9	39	PHE
65	n9	42	ASN
67	o1	5	LYS
67	o1	33	VAL
67	o1	45	GLY
67	o1	63	GLY
67	o1	84	ASP
67	o1	86	LYS
67	o1	99	ALA
68	o2	6	HIS
68	o2	27	ARG
68	o2	124	GLY
69	o3	40	ASP
69	o3	60	ARG
69	o3	90	PRO
70	o4	32	ALA
70	o4	35	VAL
71	o5	6	ALA
71	o5	39	PRO
71	o5	43	LYS
71	o5	83	LYS
71	o5	87	ALA
71	o5	99	GLN
71	o5	119	LYS
72	o6	13	LYS
72	o6	64	SER
72	o6	91	ASN
72	o6	98	ARG
73	o7	12	HIS
73	o7	67	LEU
73	o7	86	ALA
75	o9	30	ARG
75	o9	35	ILE

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Mol	Chain	Res	Type
76	q0	78	ILE
76	q0	80	PRO
76	q0	81	SER
76	q0	120	GLN
77	q1	14	LYS
78	q2	73	GLU
79	q3	10	ILE
79	q3	20	SER
79	q3	21	SER
79	q3	45	LYS
79	q3	51	ALA
83	p0	206	ASP
2	S0	26	ALA
2	S0	36	TYR
2	S0	37	VAL
2	S0	130	ALA
3	S1	21	VAL
3	S1	54	LEU
3	S1	158	SER
3	S1	213	ARG
3	S1	224	ASP
4	S2	75	GLY
4	S2	182	PRO
4	S2	200	SER
4	S2	207	LEU
5	S3	31	GLU
5	S3	61	GLU
5	S3	78	LYS
5	S3	130	GLY
5	S3	217	ILE
6	S4	12	LEU
6	S4	66	MET
6	S4	87	MET
6	S4	95	THR
6	S4	178	GLY
6	S4	231	GLN
6	S4	260	GLY
7	S5	39	GLU
7	S5	43	PHE
7	S5	45	LYS
7	S5	127	GLN
8	S6	44	GLU

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Mol	Chain	Res	Type
8	S6	148	SER
8	S6	149	LYS
9	S7	32	PRO
9	S7	98	ILE
9	S7	111	LYS
9	S7	118	LEU
9	S7	133	THR
9	S7	167	GLU
10	S8	10	LYS
10	S8	41	LYS
10	S8	152	ILE
11	S9	67	PRO
11	S9	122	VAL
11	S9	150	LEU
11	S9	162	SER
11	S9	163	PRO
11	S9	169	PRO
12	C0	25	LYS
12	C0	31	LYS
12	C0	33	GLU
12	C0	64	TYR
12	C0	84	GLU
13	C1	55	ASP
13	C1	88	ARG
13	C1	95	PRO
13	C1	145	ALA
13	C1	147	ALA
14	C2	67	THR
14	C2	126	TRP
14	C2	127	GLY
14	C2	131	ASP
14	C2	142	GLN
15	C3	68	GLY
15	C3	117	LEU
16	C4	35	GLY
16	C4	36	LYS
16	C4	47	LYS
16	C4	64	ALA
16	C4	75	GLY
16	C4	79	VAL
16	C4	123	SER
17	C5	52	LYS

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Mol	Chain	Res	Type
17	C5	53	PRO
17	C5	69	GLU
18	C6	40	GLU
18	C6	59	LYS
18	C6	107	LYS
19	C7	6	THR
19	C7	23	LYS
19	C7	113	LEU
19	C7	120	SER
20	C8	8	GLN
20	C8	70	VAL
20	C8	119	ILE
20	C8	120	ARG
21	C9	40	SER
21	C9	119	LYS
25	D3	79	ASN
25	D3	131	SER
26	D4	5	VAL
26	D4	11	LYS
27	D5	37	GLN
27	D5	88	ILE
28	D6	32	LYS
28	D6	53	LEU
28	D6	61	GLU
28	D6	62	TYR
28	D6	65	PRO
28	D6	80	HIS
28	D6	85	ARG
28	D6	97	PRO
29	D7	51	GLN
30	D8	36	THR
31	D9	6	VAL
31	D9	8	PHE
32	E0	6	GLY
32	E0	13	LYS
32	E0	47	VAL
32	E0	52	GLY
33	E1	83	LYS
33	E1	98	VAL
33	E1	102	VAL
33	E1	118	ARG
34	SR	217	ASP

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	SR	237	GLN
35	SM	41	SER
35	SM	71	ASN
35	SM	87	THR
35	SM	89	ARG
35	SM	133	GLU
35	SM	139	GLU
39	L2	7	ASN
39	L2	13	GLY
39	L2	133	TYR
39	L2	146	THR
39	L2	175	VAL
39	L2	220	GLY
40	L3	139	GLN
40	L3	142	ALA
40	L3	245	GLY
40	L3	348	ARG
40	L3	351	LEU
40	L3	378	ALA
40	L3	385	LYS
40	L3	386	ASP
41	L4	14	GLU
41	L4	26	PHE
41	L4	82	THR
41	L4	174	ALA
41	L4	291	ASN
41	L4	295	ILE
41	L4	311	HIS
41	L4	317	PRO
42	L5	7	ALA
42	L5	59	ASP
42	L5	115	LEU
42	L5	126	GLU
42	L5	177	GLU
42	L5	221	GLU
42	L5	231	ILE
42	L5	256	THR
42	L5	258	LYS
43	L6	59	GLU
43	L6	61	ASN
43	L6	90	LYS
44	L7	91	GLY

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Mol	Chain	Res	Type
44	L7	122	ALA
44	L7	185	ILE
44	L7	193	PRO
44	L7	241	LYS
45	L8	78	PHE
45	L8	103	ALA
45	L8	182	GLY
45	L8	209	ALA
45	L8	240	ASN
46	L9	39	LYS
46	L9	66	ALA
46	L9	67	ALA
46	L9	161	LEU
46	L9	169	ASN
47	M0	41	ALA
47	M0	84	ALA
47	M0	117	GLY
47	M0	149	VAL
47	M0	155	ALA
47	M0	208	ASN
48	M1	115	LYS
48	M1	138	VAL
48	M1	139	THR
48	M1	140	ARG
48	M1	167	TYR
48	M1	171	VAL
49	M3	47	ALA
49	M3	193	ALA
51	M5	94	TYR
52	M6	191	ALA
52	M6	195	ALA
53	M7	36	ILE
53	M7	54	HIS
53	M7	157	VAL
53	M7	161	ALA
53	M7	164	LYS
53	M7	178	ALA
54	M8	44	PHE
54	M8	46	LYS
54	M8	91	ALA
54	M8	183	GLY
55	M9	14	VAL

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Mol	Chain	Res	Type
55	M9	20	ARG
55	M9	65	ALA
55	M9	67	ALA
56	N0	139	TYR
57	N1	16	GLN
57	N1	18	ASP
57	N1	81	GLY
57	N1	124	VAL
58	N2	27	VAL
58	N2	52	ASN
59	N3	6	ALA
60	N4	16	GLY
60	N4	36	SER
60	N4	46	PRO
60	N4	62	GLY
60	N4	76	VAL
62	N6	45	ILE
62	N6	90	VAL
62	N6	101	PRO
63	N7	3	LYS
63	N7	28	PRO
63	N7	55	LYS
64	N8	4	ARG
64	N8	27	LYS
64	N8	29	PRO
64	N8	81	LEU
64	N8	84	GLU
66	O0	71	GLN
67	O1	5	LYS
67	O1	31	ARG
67	O1	47	ASP
67	O1	61	LYS
68	O2	13	HIS
68	O2	27	ARG
70	O4	33	GLN
70	O4	98	GLN
71	O5	8	GLU
71	O5	43	LYS
71	O5	75	TYR
71	O5	82	ALA
71	O5	95	PHE
72	O6	94	ILE

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Mol	Chain	Res	Type
73	O7	77	GLY
73	O7	85	LYS
73	O7	86	ALA
74	O8	37	PRO
74	O8	74	LYS
76	Q0	120	GLN
77	Q1	3	ALA
78	Q2	32	LYS
78	Q2	34	SER
79	Q3	74	ALA
79	Q3	85	ARG
79	Q3	89	MET
2	s0	9	LEU
2	s0	31	VAL
2	s0	65	ALA
2	s0	115	PHE
2	s0	130	ALA
2	s0	185	ARG
2	s0	196	SER
3	s1	21	VAL
3	s1	107	THR
3	s1	191	GLU
3	s1	218	LEU
3	s1	224	ASP
4	s2	91	ARG
4	s2	92	ALA
4	s2	163	GLY
4	s2	192	GLY
4	s2	204	THR
4	s2	233	GLN
5	s3	161	GLY
5	s3	211	PRO
5	s3	216	PRO
5	s3	217	ILE
6	s4	12	LEU
6	s4	31	PRO
6	s4	168	LYS
6	s4	195	ILE
6	s4	248	ILE
6	s4	259	GLN
7	s5	43	PHE
7	s5	75	GLY

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Mol	Chain	Res	Type
7	s5	204	GLY
7	s5	224	ASN
8	s6	68	LEU
8	s6	153	VAL
8	s6	157	VAL
8	s6	195	VAL
9	s7	9	LEU
9	s7	25	VAL
9	s7	35	LYS
9	s7	54	GLY
9	s7	145	GLY
9	s7	160	GLN
10	s8	88	ASN
10	s8	153	GLU
10	s8	174	GLY
11	s9	121	SER
11	s9	128	LEU
11	s9	158	PHE
12	c0	23	ALA
12	c0	30	ALA
12	c0	51	SER
12	c0	73	VAL
13	c1	53	TYR
13	c1	61	THR
13	c1	82	ARG
13	c1	114	ALA
13	c1	119	VAL
13	c1	128	CYS
14	c2	45	LEU
14	c2	103	LEU
14	c2	113	ARG
14	c2	115	VAL
15	c3	18	TYR
15	c3	88	LEU
15	c3	89	TYR
15	c3	137	PRO
15	c3	138	ASN
15	c3	140	LYS
16	c4	32	ASP
16	c4	36	LYS
16	c4	124	ASP
17	c5	13	LYS

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Mol	Chain	Res	Type
17	c5	29	SER
17	c5	38	PRO
17	c5	52	LYS
17	c5	69	GLU
17	c5	72	LYS
18	c6	37	THR
18	c6	42	GLU
18	c6	101	SER
18	c6	107	LYS
18	c6	113	ASP
18	c6	115	THR
18	c6	116	LEU
18	c6	142	TYR
19	c7	42	GLN
19	c7	67	ARG
20	c8	14	ILE
20	c8	115	ARG
20	c8	127	HIS
21	c9	86	ARG
22	d0	18	GLN
22	d0	35	GLU
22	d0	39	SER
22	d0	43	LYS
22	d0	53	LYS
23	d1	4	ASP
25	d3	101	GLU
25	d3	119	GLY
25	d3	125	VAL
26	d4	53	ASP
26	d4	58	PHE
26	d4	67	GLY
28	d6	9	GLY
28	d6	58	VAL
28	d6	62	TYR
29	d7	3	LEU
29	d7	59	CYS
30	d8	32	PHE
31	d9	11	PRO
80	e0	47	VAL
81	e1	98	VAL
81	e1	128	ALA
81	e1	129	GLY

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Mol	Chain	Res	Type
81	e1	136	LYS
81	e1	137	ASP
34	sR	163	ASP
34	sR	231	MET
34	sR	297	ASP
35	sM	63	ASP
35	sM	67	GLY
39	l2	14	SER
39	l2	15	ILE
39	l2	115	ASN
39	l2	182	ALA
39	l2	240	ALA
40	l3	3	HIS
40	l3	24	SER
40	l3	131	THR
40	l3	330	GLY
40	l3	385	LYS
41	l4	24	ALA
41	l4	25	VAL
41	l4	172	VAL
41	l4	259	ASP
41	l4	272	VAL
41	l4	311	HIS
41	l4	327	LEU
41	l4	329	PRO
42	l5	29	ASP
42	l5	72	ASP
42	l5	123	GLU
42	l5	125	VAL
42	l5	249	ALA
42	l5	294	ALA
43	l6	31	ARG
43	l6	94	GLU
43	l6	141	VAL
44	l7	28	ALA
44	l7	91	GLY
44	l7	207	LEU
44	l7	223	PHE
45	l8	79	GLN
45	l8	121	SER
45	l8	162	LEU
45	l8	225	LYS

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Mol	Chain	Res	Type
45	l8	239	GLY
45	l8	253	SER
46	l9	5	GLN
46	l9	40	HIS
46	l9	76	ASP
46	l9	151	VAL
46	l9	190	ASP
47	m0	3	ARG
47	m0	25	ALA
47	m0	27	PRO
47	m0	113	GLN
47	m0	176	LEU
48	m1	39	GLN
48	m1	111	ASP
48	m1	145	LYS
48	m1	153	LYS
49	m3	76	THR
49	m3	157	ARG
50	m4	133	LYS
51	m5	23	GLN
51	m5	42	PRO
51	m5	57	GLN
52	m6	16	VAL
52	m6	62	THR
52	m6	110	PRO
52	m6	113	ASP
52	m6	186	ALA
53	m7	23	ARG
53	m7	33	ALA
53	m7	54	HIS
53	m7	86	LYS
53	m7	89	LYS
54	m8	46	LYS
54	m8	84	VAL
54	m8	109	GLY
54	m8	180	ARG
54	m8	183	GLY
55	m9	6	THR
55	m9	94	VAL
55	m9	97	ARG
55	m9	120	TYR
56	n0	12	ARG

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Mol	Chain	Res	Type
56	n0	45	LEU
56	n0	50	LYS
56	n0	145	THR
56	n0	168	PRO
58	n2	41	ILE
58	n2	51	GLY
59	n3	54	LEU
60	n4	64	THR
60	n4	72	SER
60	n4	76	VAL
61	n5	47	ALA
61	n5	55	ASN
61	n5	116	PRO
63	n7	7	ALA
63	n7	92	PHE
63	n7	105	SER
63	n7	134	LEU
64	n8	65	GLN
64	n8	70	LYS
64	n8	85	ASP
64	n8	109	TYR
65	n9	24	PRO
65	n9	30	PRO
65	n9	41	ARG
66	o0	12	GLN
66	o0	19	LYS
66	o0	71	GLN
67	o1	7	VAL
67	o1	18	LYS
67	o1	34	LYS
67	o1	40	ALA
67	o1	60	TRP
68	o2	12	LYS
68	o2	41	VAL
68	o2	125	ARG
69	o3	26	ASN
70	o4	10	ARG
70	o4	33	GLN
70	o4	62	TYR
70	o4	79	SER
70	o4	83	ASN
71	o5	12	LYS

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Mol	Chain	Res	Type
72	o6	28	TYR
72	o6	65	GLY
73	o7	32	LYS
73	o7	55	ARG
73	o7	73	ARG
74	o8	18	ALA
75	o9	3	ALA
76	q0	107	ALA
78	q2	78	LYS
79	q3	18	TYR
79	q3	77	ALA
83	p0	201	ILE
2	S0	66	ALA
2	S0	162	CYS
2	S0	195	TRP
2	S0	196	SER
3	S1	35	PRO
3	S1	64	ARG
3	S1	73	LEU
3	S1	79	HIS
3	S1	194	ASN
3	S1	199	ASN
4	S2	41	LEU
4	S2	106	ASP
4	S2	145	GLY
5	S3	46	THR
5	S3	74	GLN
5	S3	81	PRO
5	S3	118	ALA
6	S4	3	ARG
6	S4	24	SER
6	S4	26	CYS
6	S4	195	ILE
6	S4	200	ARG
6	S4	242	LYS
6	S4	250	GLU
7	S5	25	LEU
7	S5	58	LEU
7	S5	64	VAL
7	S5	108	LEU
8	S6	58	LYS
8	S6	196	ARG

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Mol	Chain	Res	Type
9	S7	103	SER
9	S7	166	LEU
10	S8	12	SER
10	S8	58	LEU
10	S8	106	ALA
10	S8	120	THR
10	S8	154	SER
11	S9	91	LYS
11	S9	149	ARG
11	S9	167	ALA
12	C0	36	ASP
13	C1	30	ARG
14	C2	54	ARG
14	C2	55	GLY
14	C2	68	GLU
14	C2	84	ASN
14	C2	125	ASN
15	C3	95	ALA
15	C3	128	TYR
16	C4	40	ALA
17	C5	23	GLU
17	C5	51	SER
17	C5	54	ALA
18	C6	74	HIS
18	C6	115	THR
18	C6	120	ASP
19	C7	12	ALA
19	C7	24	LEU
19	C7	84	TYR
20	C8	61	LEU
21	C9	28	LEU
22	D0	21	LYS
22	D0	120	SER
23	D1	7	GLN
23	D1	15	ARG
23	D1	16	LYS
23	D1	44	ARG
23	D1	81	ASN
24	D2	66	ASN
24	D2	67	GLY
24	D2	96	ALA
25	D3	16	ARG

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Mol	Chain	Res	Type
25	D3	40	SER
25	D3	41	SER
25	D3	67	ALA
25	D3	70	LYS
25	D3	128	SER
26	D4	16	PRO
26	D4	34	ASN
28	D6	11	ASN
28	D6	36	ILE
28	D6	52	ASP
28	D6	64	LEU
28	D6	94	ASN
29	D7	70	LYS
30	D8	34	GLU
31	D9	5	ASN
32	E0	16	SER
32	E0	33	ARG
33	E1	85	TYR
33	E1	87	THR
33	E1	99	LYS
33	E1	100	LEU
34	SR	48	THR
34	SR	79	TYR
34	SR	111	MET
34	SR	117	LYS
34	SR	128	ASP
34	SR	194	GLY
35	SM	17	VAL
35	SM	88	ARG
39	L2	34	TYR
39	L2	47	GLN
39	L2	227	ARG
39	L2	246	LEU
39	L2	251	LYS
40	L3	69	LYS
40	L3	127	LYS
40	L3	138	ALA
40	L3	155	ALA
40	L3	244	ARG
40	L3	246	LEU
41	L4	5	GLN
41	L4	175	HIS

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Mol	Chain	Res	Type
41	L4	185	LYS
41	L4	189	ALA
41	L4	215	ILE
41	L4	292	SER
41	L4	339	LEU
42	L5	6	ASP
42	L5	78	ALA
42	L5	108	ARG
42	L5	110	LEU
42	L5	162	ALA
42	L5	255	PRO
43	L6	36	PRO
43	L6	154	LEU
44	L7	79	ALA
44	L7	148	VAL
44	L7	163	LEU
44	L7	210	PRO
45	L8	25	PRO
45	L8	79	GLN
45	L8	99	PRO
45	L8	168	ALA
45	L8	169	LEU
45	L8	226	TYR
46	L9	2	LYS
47	M0	26	VAL
47	M0	27	PRO
47	M0	71	CYS
47	M0	122	PRO
47	M0	146	ASP
48	M1	39	GLN
48	M1	118	PRO
48	M1	165	GLN
48	M1	166	LYS
49	M3	30	GLY
49	M3	51	LEU
49	M3	136	GLU
50	M4	4	ASP
50	M4	9	ALA
50	M4	79	ALA
50	M4	125	LYS
51	M5	22	LEU
51	M5	171	SER

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Mol	Chain	Res	Type
51	M5	181	ASN
52	M6	41	LEU
52	M6	63	ALA
52	M6	196	ALA
54	M8	51	ALA
55	M9	26	PRO
55	M9	53	LYS
56	N0	104	GLU
59	N3	68	GLU
59	N3	109	MET
60	N4	9	SER
60	N4	14	TYR
60	N4	70	LYS
60	N4	96	LEU
60	N4	97	LYS
61	N5	100	LYS
61	N5	108	LEU
61	N5	137	ASN
62	N6	44	GLY
63	N7	78	ASN
64	N8	83	PRO
64	N8	104	THR
64	N8	116	GLY
66	O0	20	SER
66	O0	97	ASP
67	O1	83	GLU
68	O2	29	ALA
68	O2	80	LYS
69	O3	42	GLN
70	O4	47	CYS
70	O4	48	GLY
70	O4	67	LYS
72	O6	3	VAL
72	O6	18	THR
72	O6	28	TYR
73	O7	70	VAL
74	O8	48	SER
74	O8	63	LYS
78	Q2	62	ALA
79	Q3	40	SER
79	Q3	71	VAL
2	s0	68	PRO

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Mol	Chain	Res	Type
2	s0	127	ARG
2	s0	179	ARG
3	s1	154	SER
3	s1	160	HIS
3	s1	192	VAL
4	s2	37	PRO
4	s2	146	THR
5	s3	145	ALA
5	s3	163	PRO
5	s3	195	SER
6	s4	90	ILE
6	s4	94	ALA
7	s5	26	ALA
7	s5	56	ALA
7	s5	67	PRO
7	s5	129	PRO
7	s5	209	TYR
8	s6	131	LYS
8	s6	208	TYR
9	s7	10	SER
10	s8	70	GLU
11	s9	67	PRO
11	s9	110	GLN
11	s9	144	PRO
12	c0	31	LYS
12	c0	93	GLN
12	c0	95	ARG
13	c1	130	PRO
13	c1	133	LYS
14	c2	90	LYS
14	c2	107	ASP
14	c2	108	ARG
14	c2	109	GLU
14	c2	125	ASN
15	c3	47	PRO
15	c3	57	ALA
17	c5	34	VAL
17	c5	54	ALA
17	c5	66	ALA
17	c5	98	ASN
17	c5	133	ALA
17	c5	135	THR

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Mol	Chain	Res	Type
18	c6	3	ALA
18	c6	40	GLU
18	c6	141	SER
19	c7	68	GLY
19	c7	104	ASN
20	c8	3	LEU
20	c8	7	GLU
20	c8	60	GLU
20	c8	121	ALA
22	d0	72	ASN
23	d1	41	GLU
23	d1	44	ARG
24	d2	4	SER
24	d2	70	ASN
25	d3	137	LYS
26	d4	35	VAL
26	d4	52	LYS
27	d5	54	VAL
27	d5	57	TYR
27	d5	103	ARG
30	d8	6	PRO
30	d8	36	THR
31	d9	25	SER
80	e0	15	LYS
80	e0	50	VAL
81	e1	91	ILE
81	e1	97	LYS
34	sR	17	ASN
35	sM	42	ALA
35	sM	68	ARG
39	l2	35	ALA
39	l2	180	LEU
40	l3	111	SER
40	l3	197	GLU
40	l3	200	GLU
40	l3	262	TRP
40	l3	386	ASP
41	l4	5	GLN
41	l4	16	THR
41	l4	18	ASN
41	l4	67	THR
41	l4	90	PHE

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Mol	Chain	Res	Type
41	14	146	PRO
41	14	189	ALA
41	14	215	ILE
41	14	247	PHE
41	14	252	GLU
41	14	320	ASN
41	14	326	ARG
41	14	330	TYR
41	14	331	ALA
41	14	353	ALA
42	15	9	SER
42	15	132	THR
42	15	227	LEU
42	15	245	GLU
42	15	280	GLU
43	16	10	TYR
43	16	84	VAL
44	17	54	GLU
44	17	124	LEU
44	17	217	PRO
44	17	228	SER
45	18	163	VAL
45	18	203	VAL
45	18	237	ILE
46	19	117	PHE
46	19	120	ASP
46	19	137	SER
46	19	152	GLU
47	m0	12	GLN
47	m0	18	PRO
48	m1	11	ASP
48	m1	26	SER
48	m1	82	ARG
48	m1	108	GLU
48	m1	138	VAL
49	m3	51	LEU
49	m3	130	GLY
49	m3	135	ALA
49	m3	162	ASN
49	m3	187	ALA
49	m3	193	ALA
50	m4	86	ALA

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Mol	Chain	Res	Type
50	m4	87	ALA
51	m5	68	ARG
51	m5	201	ARG
52	m6	12	LYS
52	m6	100	GLU
52	m6	175	THR
52	m6	195	ALA
53	m7	37	ASN
53	m7	55	GLN
54	m8	61	PRO
55	m9	112	ALA
56	n0	133	ALA
57	n1	135	PRO
57	n1	143	THR
58	n2	52	ASN
58	n2	91	ASP
59	n3	46	LEU
59	n3	47	ASN
59	n3	94	TYR
60	n4	46	PRO
61	n5	48	SER
61	n5	117	ASN
62	n6	24	SER
62	n6	102	SER
63	n7	28	PRO
64	n8	15	VAL
64	n8	29	PRO
64	n8	47	LYS
67	o1	47	ASP
67	o1	61	LYS
67	o1	82	GLU
67	o1	83	GLU
68	o2	26	HIS
68	o2	40	SER
68	o2	45	ARG
68	o2	66	LEU
68	o2	87	MET
70	o4	76	TYR
71	o5	88	LEU
71	o5	89	ARG
71	o5	101	THR
72	o6	29	LYS

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Mol	Chain	Res	Type
72	o6	76	ARG
73	o7	58	THR
73	o7	87	SER
75	o9	45	ARG
78	q2	33	ALA
78	q2	76	LYS
78	q2	96	GLU
83	p0	93	LEU
2	S0	5	ALA
2	S0	80	THR
3	S1	26	ARG
3	S1	176	VAL
3	S1	209	ASN
4	S2	60	SER
4	S2	85	PRO
4	S2	91	ARG
5	S3	8	LYS
5	S3	99	VAL
5	S3	193	ALA
6	S4	83	PRO
6	S4	165	ALA
6	S4	179	LYS
6	S4	259	GLN
7	S5	62	VAL
7	S5	74	ALA
7	S5	174	LEU
8	S6	11	GLY
8	S6	104	PRO
8	S6	152	ASP
8	S6	199	GLN
10	S8	151	LYS
10	S8	153	GLU
10	S8	155	SER
10	S8	186	GLY
11	S9	84	GLY
11	S9	118	LEU
12	C0	18	GLU
12	C0	26	ASP
12	C0	28	ASN
14	C2	101	ALA
14	C2	105	LYS
14	C2	106	ILE

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Mol	Chain	Res	Type
14	C2	108	ARG
14	C2	111	ASN
14	C2	119	SER
15	C3	3	ARG
15	C3	22	ALA
15	C3	24	ALA
15	C3	32	SER
16	C4	90	ARG
16	C4	126	THR
17	C5	20	VAL
19	C7	13	SER
19	C7	14	LYS
19	C7	83	GLN
20	C8	83	ALA
21	C9	29	GLU
21	C9	130	ARG
22	D0	73	GLY
23	D1	49	GLU
23	D1	66	ASP
23	D1	82	VAL
25	D3	20	ARG
25	D3	92	CYS
25	D3	109	ARG
25	D3	112	LYS
26	D4	51	GLU
28	D6	35	ALA
28	D6	54	SER
28	D6	58	VAL
30	D8	21	SER
30	D8	22	ARG
32	E0	54	ARG
34	SR	10	ARG
34	SR	63	GLY
34	SR	105	GLY
35	SM	100	THR
35	SM	153	ASP
39	L2	35	ALA
39	L2	174	ARG
39	L2	180	LEU
40	L3	8	ALA
40	L3	144	ILE
40	L3	241	LYS

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Mol	Chain	Res	Type
41	L4	29	PRO
41	L4	90	PHE
41	L4	140	HIS
41	L4	306	THR
42	L5	11	ALA
42	L5	107	ARG
42	L5	119	TYR
42	L5	268	GLU
43	L6	30	LEU
44	L7	178	ILE
44	L7	205	PHE
44	L7	216	VAL
44	L7	239	LEU
45	L8	53	PRO
45	L8	76	ALA
45	L8	157	VAL
45	L8	161	GLU
45	L8	180	VAL
46	L9	5	GLN
46	L9	30	PRO
46	L9	72	LYS
46	L9	85	GLY
46	L9	127	PRO
46	L9	190	ASP
47	M0	7	ARG
47	M0	70	ILE
47	M0	220	GLN
48	M1	74	PRO
48	M1	114	ILE
49	M3	85	LEU
51	M5	21	PHE
51	M5	75	VAL
53	M7	3	ARG
53	M7	44	ALA
53	M7	143	PRO
54	M8	77	ALA
54	M8	112	ALA
54	M8	162	ALA
54	M8	171	LYS
55	M9	3	ASN
55	M9	34	GLN
55	M9	151	ARG

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Mol	Chain	Res	Type
55	M9	178	ALA
56	N0	24	LEU
56	N0	167	ARG
57	N1	110	LYS
57	N1	127	GLN
60	N4	23	ARG
61	N5	116	PRO
62	N6	107	THR
62	N6	126	LEU
63	N7	70	PRO
63	N7	117	ALA
63	N7	127	ASN
64	N8	65	GLN
65	N9	25	LYS
65	N9	32	LEU
67	O1	60	TRP
68	O2	40	SER
68	O2	65	PHE
70	O4	112	ALA
72	O6	29	LYS
72	O6	84	LYS
72	O6	88	GLU
74	O8	34	ALA
76	Q0	79	GLU
76	Q0	88	LYS
78	Q2	30	ALA
79	Q3	84	ARG
2	s0	5	ALA
2	s0	80	THR
2	s0	103	THR
2	s0	167	LYS
3	s1	41	ARG
4	s2	95	ARG
4	s2	147	ASN
4	s2	223	GLY
4	s2	238	SER
5	s3	59	LEU
5	s3	62	ASN
5	s3	107	PHE
6	s4	3	ARG
6	s4	30	ARG
6	s4	96	ASN

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Mol	Chain	Res	Type
6	s4	143	ASP
6	s4	157	ASN
6	s4	166	SER
7	s5	60	ASP
7	s5	84	LYS
9	s7	11	GLN
9	s7	24	PHE
9	s7	170	GLN
10	s8	78	ILE
10	s8	108	PRO
11	s9	25	ASP
11	s9	26	ALA
11	s9	44	ARG
11	s9	115	LYS
11	s9	178	ALA
11	s9	183	ALA
13	c1	7	VAL
13	c1	15	LYS
13	c1	129	ARG
14	c2	25	GLU
14	c2	40	GLY
14	c2	89	ILE
14	c2	106	ILE
16	c4	72	LYS
16	c4	92	LYS
16	c4	123	SER
17	c5	6	ASN
17	c5	31	GLU
18	c6	112	TYR
19	c7	117	LEU
20	c8	64	GLU
20	c8	102	ALA
20	c8	109	LEU
21	c9	34	VAL
21	c9	143	ASP
22	d0	44	ASN
22	d0	100	VAL
23	d1	42	GLU
26	d4	78	SER
26	d4	82	ALA
28	d6	59	TYR
34	sR	153	GLN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
34	sR	296	ALA
35	sM	65	THR
35	sM	79	SER
35	sM	132	ALA
35	sM	168	GLU
39	l2	34	TYR
40	l3	10	ARG
40	l3	34	LYS
40	l3	108	GLU
40	l3	187	SER
41	l4	190	GLY
41	l4	328	ASN
41	l4	351	PRO
42	l5	11	ALA
42	l5	15	ARG
42	l5	119	TYR
42	l5	197	SER
42	l5	234	ASP
42	l5	258	LYS
42	l5	265	TYR
43	l6	36	PRO
43	l6	72	ASN
43	l6	108	LYS
44	l7	39	GLU
44	l7	47	ARG
44	l7	159	GLN
44	l7	191	VAL
45	l8	74	THR
45	l8	140	VAL
46	l9	14	GLU
46	l9	110	LYS
46	l9	167	VAL
47	m0	207	GLU
48	m1	116	TYR
49	m3	60	ALA
49	m3	101	ARG
49	m3	140	SER
50	m4	49	PRO
50	m4	97	SER
51	m5	12	ARG
51	m5	33	LYS
52	m6	20	ALA

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Mol	Chain	Res	Type
53	m7	134	GLY
54	m8	97	PRO
54	m8	150	VAL
55	m9	61	SER
55	m9	155	LEU
55	m9	157	GLU
56	n0	97	VAL
58	n2	33	TYR
58	n2	45	GLY
59	n3	16	GLY
59	n3	123	ALA
59	n3	131	SER
60	n4	63	ILE
60	n4	68	ALA
60	n4	83	THR
60	n4	86	SER
60	n4	132	GLY
62	n6	26	GLN
62	n6	116	LYS
63	n7	91	ALA
64	n8	89	GLN
65	n9	29	TYR
66	o0	27	TYR
67	o1	37	LYS
68	o2	50	ILE
68	o2	65	PHE
69	o3	19	SER
69	o3	58	GLU
69	o3	94	PHE
70	o4	28	GLY
71	o5	71	LYS
72	o6	34	SER
72	o6	67	LYS
73	o7	65	ARG
73	o7	85	LYS
74	o8	46	ARG
78	q2	77	CYS
83	p0	72	ASP
83	p0	193	ASN
2	S0	118	PRO
2	S0	203	PHE
3	S1	93	GLY

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Mol	Chain	Res	Type
3	S1	116	LYS
3	S1	127	VAL
4	S2	92	ALA
4	S2	227	PRO
5	S3	59	LEU
6	S4	9	LEU
6	S4	35	PRO
6	S4	77	ARG
6	S4	201	HIS
6	S4	205	PHE
6	S4	214	LEU
6	S4	233	LYS
7	S5	27	THR
7	S5	34	GLN
7	S5	36	ALA
7	S5	163	SER
8	S6	9	VAL
8	S6	70	PRO
8	S6	126	ASP
8	S6	200	ALA
9	S7	39	ARG
9	S7	85	PHE
10	S8	11	ARG
10	S8	52	ASN
10	S8	173	PRO
11	S9	30	LEU
11	S9	82	ARG
12	C0	70	GLU
12	C0	94	GLU
13	C1	9	SER
13	C1	108	PRO
14	C2	92	ALA
14	C2	107	ASP
14	C2	112	ALA
14	C2	140	PHE
15	C3	21	ASN
16	C4	25	ASP
16	C4	42	VAL
17	C5	10	ARG
17	C5	71	GLU
18	C6	85	ILE
19	C7	9	VAL

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Mol	Chain	Res	Type
19	C7	42	GLN
19	C7	44	LYS
21	C9	105	LEU
24	D2	22	LYS
25	D3	11	SER
25	D3	143	PRO
26	D4	63	GLN
27	D5	42	LEU
28	D6	3	LYS
28	D6	59	TYR
29	D7	60	SER
32	E0	27	PRO
33	E1	125	THR
34	SR	160	GLU
34	SR	186	PHE
34	SR	230	ALA
34	SR	232	TYR
34	SR	307	ASP
39	L2	69	TYR
39	L2	206	PRO
40	L3	111	SER
40	L3	116	ARG
40	L3	185	GLY
41	L4	96	GLY
41	L4	233	LEU
41	L4	318	LEU
42	L5	58	LYS
42	L5	132	THR
42	L5	187	THR
45	L8	86	THR
45	L8	91	PHE
45	L8	97	TYR
45	L8	114	ALA
45	L8	156	ASP
46	L9	13	PRO
46	L9	15	GLY
46	L9	81	GLY
47	M0	24	ARG
47	M0	156	ARG
47	M0	196	PHE
48	M1	172	LEU
49	M3	76	THR

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Mol	Chain	Res	Type
49	M3	163	GLY
50	M4	6	ILE
51	M5	73	ARG
52	M6	181	ALA
53	M7	45	GLN
53	M7	121	GLN
55	M9	107	ALA
56	N0	124	LEU
57	N1	126	VAL
58	N2	20	SER
58	N2	38	ILE
62	N6	15	ALA
62	N6	84	LYS
64	N8	47	LYS
64	N8	66	ALA
68	O2	4	LEU
68	O2	45	ARG
69	O3	59	VAL
69	O3	91	ALA
71	O5	90	ARG
71	O5	91	ALA
72	O6	52	PRO
74	O8	18	ALA
75	O9	28	ARG
79	Q3	18	TYR
79	Q3	35	ALA
79	Q3	51	ALA
79	Q3	75	ALA
2	s0	202	TYR
2	s0	205	ARG
3	s1	159	SER
3	s1	193	ILE
4	s2	242	ILE
4	s2	245	ASP
5	s3	45	LYS
6	s4	149	TYR
6	s4	164	LEU
6	s4	204	GLY
6	s4	223	ASN
7	s5	29	ILE
7	s5	39	GLU
8	s6	69	LEU

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Mol	Chain	Res	Type
9	s7	161	GLN
10	s8	112	TRP
10	s8	158	SER
11	s9	162	SER
13	c1	120	GLY
15	c3	29	SER
15	c3	116	ILE
15	c3	145	THR
16	c4	114	ARG
17	c5	14	THR
17	c5	28	MET
18	c6	99	GLU
18	c6	109	PHE
18	c6	124	PRO
19	c7	51	ALA
19	c7	86	PRO
20	c8	90	ASN
21	c9	19	ALA
25	d3	39	LYS
28	d6	35	ALA
28	d6	46	GLU
30	d8	51	ASN
30	d8	61	ARG
31	d9	12	ARG
31	d9	27	HIS
80	e0	13	LYS
80	e0	14	VAL
81	e1	85	TYR
34	sR	48	THR
35	sM	39	PRO
35	sM	46	LYS
39	l2	238	ILE
40	l3	5	LYS
40	l3	40	PRO
40	l3	297	SER
40	l3	358	TRP
41	l4	72	ALA
41	l4	233	LEU
42	l5	260	PHE
44	l7	97	PRO
45	l8	81	THR
45	l8	93	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
45	l8	133	LYS
46	l9	43	VAL
46	l9	48	VAL
46	l9	116	ASN
46	l9	158	ALA
48	m1	85	LYS
48	m1	114	ILE
49	m3	5	LYS
49	m3	62	THR
49	m3	124	ILE
49	m3	153	ASP
51	m5	7	LEU
51	m5	32	GLN
51	m5	125	SER
54	m8	24	VAL
55	m9	65	ALA
57	n1	122	GLN
60	n4	56	ARG
60	n4	85	ALA
61	n5	39	LYS
61	n5	115	ARG
62	n6	91	ASN
63	n7	17	ARG
64	n8	129	PHE
65	n9	25	LYS
67	o1	24	SER
67	o1	103	GLY
69	o3	10	LYS
70	o4	58	ARG
71	o5	42	PRO
71	o5	51	ILE
71	o5	65	ALA
72	o6	33	ALA
73	o7	66	TYR
74	o8	32	ASN
74	o8	76	ASN
77	q1	7	LYS
77	q1	13	LEU
79	q3	49	ARG
79	q3	59	CYS
83	p0	33	VAL
83	p0	47	GLY

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Mol	Chain	Res	Type
83	p0	210	VAL
2	S0	68	PRO
2	S0	78	SER
2	S0	103	THR
2	S0	206	ASP
3	S1	58	SER
3	S1	62	LYS
7	S5	51	VAL
7	S5	79	ASN
7	S5	137	ILE
7	S5	150	GLY
10	S8	34	ALA
10	S8	194	ARG
12	C0	17	GLN
14	C2	66	VAL
14	C2	85	LYS
17	C5	97	TYR
19	C7	61	ILE
21	C9	95	ASP
23	D1	48	GLY
24	D2	98	GLN
25	D3	8	GLY
27	D5	74	SER
33	E1	88	PRO
33	E1	148	TYR
35	SM	12	VAL
35	SM	152	GLN
40	L3	170	PRO
40	L3	317	ILE
41	L4	162	THR
41	L4	232	SER
41	L4	320	ASN
42	L5	91	GLY
42	L5	106	ALA
43	L6	92	SER
45	L8	72	PRO
48	M1	13	LYS
48	M1	55	ARG
48	M1	101	ASN
48	M1	152	HIS
51	M5	46	ASP
52	M6	83	ALA

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Mol	Chain	Res	Type
53	M7	63	PHE
53	M7	160	ALA
55	M9	184	LEU
56	N0	22	PRO
56	N0	69	PRO
63	N7	103	GLN
70	O4	82	ALA
74	O8	8	ILE
2	s0	10	THR
3	s1	22	ASP
3	s1	99	ASN
4	s2	48	GLY
4	s2	85	PRO
4	s2	246	GLU
5	s3	43	PRO
5	s3	179	GLN
6	s4	213	SER
6	s4	245	LYS
7	s5	102	ARG
7	s5	180	ARG
8	s6	86	PRO
11	s9	184	SER
15	c3	10	GLY
15	c3	150	VAL
17	c5	43	ARG
21	c9	46	PRO
26	d4	11	LYS
27	d5	63	SER
30	d8	24	GLY
31	d9	24	CYS
31	d9	41	GLN
39	l2	248	GLY
40	l3	12	GLY
41	l4	196	ASN
42	l5	237	GLU
43	l6	158	TYR
44	l7	27	ALA
44	l7	231	ASN
45	l8	39	ALA
47	m0	101	LYS
49	m3	43	ALA
49	m3	49	ARG

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Mol	Chain	Res	Type
50	m4	134	ALA
52	m6	111	PRO
52	m6	176	LYS
55	m9	93	VAL
55	m9	172	ARG
57	n1	101	CYS
60	n4	131	ALA
62	n6	90	VAL
64	n8	56	VAL
67	o1	17	HIS
71	o5	21	LEU
71	o5	54	VAL
71	o5	112	PRO
77	q1	21	ARG
9	S7	63	PRO
14	C2	63	VAL
16	C4	39	ILE
17	C5	68	PRO
17	C5	129	GLY
18	C6	33	GLY
21	C9	118	PRO
23	D1	23	ILE
30	D8	12	VAL
34	SR	49	GLY
35	SM	20	LEU
39	L2	196	TRP
42	L5	87	GLY
50	M4	75	GLY
51	M5	151	ILE
52	M6	16	VAL
53	M7	88	VAL
63	N7	104	PRO
2	s0	58	VAL
2	s0	139	VAL
2	s0	186	GLY
7	s5	21	THR
12	c0	3	MET
16	c4	131	GLY
29	d7	68	GLY
34	sR	15	GLY
39	l2	210	PRO
40	l3	239	PRO

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Mol	Chain	Res	Type
47	m0	214	PRO
59	n3	104	ASN
63	n7	70	PRO
63	n7	89	VAL
65	n9	21	ILE
66	o0	87	VAL
70	o4	48	GLY
71	o5	22	VAL
7	S5	164	PRO
8	S6	69	LEU
12	C0	86	ILE
14	C2	115	VAL
16	C4	122	PRO
22	D0	95	ALA
27	D5	41	ILE
28	D6	60	PRO
34	SR	20	VAL
42	L5	295	GLY
49	M3	133	PRO
52	M6	70	PRO
54	M8	43	PRO
56	N0	135	VAL
63	N7	36	HIS
65	N9	21	ILE
71	O5	41	LEU
76	Q0	123	PRO
4	s2	104	VAL
4	s2	145	GLY
4	s2	239	PRO
6	s4	227	VAL
7	s5	59	VAL
14	c2	63	VAL
14	c2	87	PRO
24	d2	6	VAL
80	e0	4	VAL
34	sR	193	ILE
35	sM	43	ASP
40	l3	166	ILE
40	l3	245	GLY
49	m3	84	GLY
55	m9	101	VAL
55	m9	113	GLY

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Mol	Chain	Res	Type
83	p0	204	ILE
3	S1	210	ILE
5	S3	84	ILE
7	S5	172	ILE
12	C0	92	ILE
13	C1	41	GLY
16	C4	67	VAL
25	D3	88	PRO
29	D7	62	ILE
43	L6	171	PRO
46	L9	187	ILE
55	M9	143	ILE
56	N0	21	GLU
11	s9	134	ILE
18	c6	4	VAL
20	c8	76	PRO
30	d8	12	VAL
41	l4	145	ILE
45	l8	98	ARG
47	m0	194	GLY
48	m1	113	GLY
49	m3	159	VAL
53	m7	88	VAL
58	n2	27	VAL
69	o3	59	VAL
4	S2	234	PRO
8	S6	162	VAL
14	C2	89	ILE
25	D3	17	VAL
25	D3	96	VAL
34	SR	206	PRO
61	N5	79	GLY
4	s2	235	LEU
5	s3	81	PRO
11	s9	168	ARG
12	c0	11	ILE
13	c1	54	ILE
81	e1	130	VAL
35	sM	51	ARG
41	l4	23	PRO
72	o6	9	ILE
3	S1	43	VAL

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Mol	Chain	Res	Type
4	S2	150	GLN
22	D0	108	ILE
39	L2	98	VAL
59	N3	3	GLY
60	N4	80	ARG
61	N5	44	PRO
70	O4	89	ILE
7	s5	152	GLY
12	c0	72	GLY
15	c3	22	ALA
15	c3	52	VAL
35	sM	40	PRO
42	l5	255	PRO
46	l9	30	PRO
69	O3	104	PRO

### 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 X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	S0	164/209 (78%)	117 (71%)	47 (29%)	0	3
2	s0	165/209 (79%)	123 (74%)	42 (26%)	0	4
3	S1	191/223 (86%)	139 (73%)	52 (27%)	0	3
3	s1	192/223 (86%)	147 (77%)	45 (23%)	1	5
4	S2	176/204 (86%)	126 (72%)	50 (28%)	0	3
4	s2	176/204 (86%)	119 (68%)	57 (32%)	0	2
5	S3	182/194 (94%)	133 (73%)	49 (27%)	0	3
5	s3	182/194 (94%)	131 (72%)	51 (28%)	0	3
6	S4	221/221 (100%)	170 (77%)	51 (23%)	1	5
6	s4	221/221 (100%)	165 (75%)	56 (25%)	0	4
7	S5	173/190 (91%)	136 (79%)	37 (21%)	1	7
7	s5	173/190 (91%)	125 (72%)	48 (28%)	0	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
8	S6	188/201 (94%)	139 (74%)	49 (26%)	0	4
8	s6	187/201 (93%)	132 (71%)	55 (29%)	0	2
9	S7	165/169 (98%)	127 (77%)	38 (23%)	1	5
9	s7	165/169 (98%)	122 (74%)	43 (26%)	0	4
10	S8	150/161 (93%)	118 (79%)	32 (21%)	1	7
10	s8	150/161 (93%)	106 (71%)	44 (29%)	0	2
11	S9	158/165 (96%)	121 (77%)	37 (23%)	1	5
11	s9	158/165 (96%)	116 (73%)	42 (27%)	0	3
12	C0	77/98 (79%)	58 (75%)	19 (25%)	0	4
12	c0	73/98 (74%)	54 (74%)	19 (26%)	0	4
13	C1	129/136 (95%)	111 (86%)	18 (14%)	3	21
13	c1	129/136 (95%)	98 (76%)	31 (24%)	0	4
14	C2	88/118 (75%)	66 (75%)	22 (25%)	0	4
14	c2	88/118 (75%)	62 (70%)	26 (30%)	0	2
15	C3	127/127 (100%)	101 (80%)	26 (20%)	1	7
15	c3	127/127 (100%)	96 (76%)	31 (24%)	0	4
16	C4	81/104 (78%)	58 (72%)	23 (28%)	0	3
16	c4	97/104 (93%)	67 (69%)	30 (31%)	0	2
17	C5	101/117 (86%)	72 (71%)	29 (29%)	0	3
17	c5	103/117 (88%)	73 (71%)	30 (29%)	0	2
18	C6	117/118 (99%)	83 (71%)	34 (29%)	0	2
18	c6	118/118 (100%)	87 (74%)	31 (26%)	0	4
19	C7	94/124 (76%)	65 (69%)	29 (31%)	0	2
19	c7	92/124 (74%)	61 (66%)	31 (34%)	0	1
20	C8	128/128 (100%)	101 (79%)	27 (21%)	1	7
20	c8	128/128 (100%)	96 (75%)	32 (25%)	0	4
21	C9	115/115 (100%)	83 (72%)	32 (28%)	0	3
21	c9	115/115 (100%)	85 (74%)	30 (26%)	0	4
22	D0	100/113 (88%)	74 (74%)	26 (26%)	0	4
22	d0	103/113 (91%)	67 (65%)	36 (35%)	0	1
23	D1	74/74 (100%)	59 (80%)	15 (20%)	1	8

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
23	d1	74/74 (100%)	52 (70%)	22 (30%)	0	2
24	D2	110/110 (100%)	81 (74%)	29 (26%)	0	4
24	d2	110/110 (100%)	88 (80%)	22 (20%)	1	8
25	D3	119/119 (100%)	79 (66%)	40 (34%)	0	1
25	d3	119/119 (100%)	89 (75%)	30 (25%)	0	4
26	D4	112/112 (100%)	88 (79%)	24 (21%)	1	7
26	d4	112/112 (100%)	89 (80%)	23 (20%)	1	7
27	D5	61/88 (69%)	47 (77%)	14 (23%)	1	5
27	d5	61/88 (69%)	47 (77%)	14 (23%)	1	5
28	D6	83/83 (100%)	60 (72%)	23 (28%)	0	3
28	d6	83/83 (100%)	51 (61%)	32 (39%)	0	0
29	D7	70/70 (100%)	57 (81%)	13 (19%)	1	10
29	d7	70/70 (100%)	54 (77%)	16 (23%)	1	5
30	D8	56/59 (95%)	39 (70%)	17 (30%)	0	2
30	d8	56/59 (95%)	42 (75%)	14 (25%)	0	4
31	D9	47/48 (98%)	34 (72%)	13 (28%)	0	3
31	d9	47/48 (98%)	32 (68%)	15 (32%)	0	2
32	E0	51/51 (100%)	35 (69%)	16 (31%)	0	2
33	E1	62/66 (94%)	47 (76%)	15 (24%)	0	4
34	SR	260/261 (100%)	216 (83%)	44 (17%)	2	14
34	sR	260/261 (100%)	213 (82%)	47 (18%)	1	11
35	SM	97/228 (42%)	68 (70%)	29 (30%)	0	2
35	sM	54/228 (24%)	39 (72%)	15 (28%)	0	3
39	L2	193/195 (99%)	138 (72%)	55 (28%)	0	3
39	l2	192/195 (98%)	137 (71%)	55 (29%)	0	3
40	L3	321/322 (100%)	229 (71%)	92 (29%)	0	3
40	l3	321/322 (100%)	235 (73%)	86 (27%)	0	3
41	L4	288/288 (100%)	212 (74%)	76 (26%)	0	4
41	l4	288/288 (100%)	208 (72%)	80 (28%)	0	3
42	L5	244/244 (100%)	195 (80%)	49 (20%)	1	8
42	l5	243/244 (100%)	176 (72%)	67 (28%)	0	3

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
43	L6	134/152 (88%)	110 (82%)	24 (18%)	2	11
43	l6	135/152 (89%)	105 (78%)	30 (22%)	1	6
44	L7	186/204 (91%)	138 (74%)	48 (26%)	0	4
44	l7	187/204 (92%)	146 (78%)	41 (22%)	1	6
45	L8	187/207 (90%)	144 (77%)	43 (23%)	1	5
45	l8	177/207 (86%)	134 (76%)	43 (24%)	0	4
46	L9	171/171 (100%)	110 (64%)	61 (36%)	0	1
46	l9	171/171 (100%)	119 (70%)	52 (30%)	0	2
47	M0	177/186 (95%)	135 (76%)	42 (24%)	1	5
47	m0	179/186 (96%)	131 (73%)	48 (27%)	0	3
48	M1	147/150 (98%)	111 (76%)	36 (24%)	0	4
48	m1	147/150 (98%)	91 (62%)	56 (38%)	0	0
49	M3	154/158 (98%)	114 (74%)	40 (26%)	0	4
49	m3	154/158 (98%)	102 (66%)	52 (34%)	0	1
50	M4	107/108 (99%)	78 (73%)	29 (27%)	0	3
50	m4	108/108 (100%)	81 (75%)	27 (25%)	0	4
51	M5	175/175 (100%)	143 (82%)	32 (18%)	1	10
51	m5	175/175 (100%)	132 (75%)	43 (25%)	0	4
52	M6	160/161 (99%)	120 (75%)	40 (25%)	0	4
52	m6	160/161 (99%)	119 (74%)	41 (26%)	0	4
53	M7	140/145 (97%)	98 (70%)	42 (30%)	0	2
53	m7	125/145 (86%)	83 (66%)	42 (34%)	0	1
54	M8	150/150 (100%)	115 (77%)	35 (23%)	1	5
54	m8	150/150 (100%)	104 (69%)	46 (31%)	0	2
55	M9	153/153 (100%)	112 (73%)	41 (27%)	0	3
55	m9	153/153 (100%)	113 (74%)	40 (26%)	0	4
56	N0	156/156 (100%)	108 (69%)	48 (31%)	0	2
56	n0	156/156 (100%)	114 (73%)	42 (27%)	0	3
57	N1	136/136 (100%)	100 (74%)	36 (26%)	0	3
57	n1	136/136 (100%)	100 (74%)	36 (26%)	0	3
58	N2	87/106 (82%)	68 (78%)	19 (22%)	1	6

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
58	n2	85/106 (80%)	68 (80%)	17 (20%)	1	8
59	N3	104/104 (100%)	79 (76%)	25 (24%)	0	4
59	n3	104/104 (100%)	78 (75%)	26 (25%)	0	4
60	N4	57/129 (44%)	45 (79%)	12 (21%)	1	7
60	n4	100/129 (78%)	69 (69%)	31 (31%)	0	2
61	N5	104/117 (89%)	83 (80%)	21 (20%)	1	8
61	n5	104/117 (89%)	70 (67%)	34 (33%)	0	2
62	N6	109/109 (100%)	80 (73%)	29 (27%)	0	3
62	n6	109/109 (100%)	75 (69%)	34 (31%)	0	2
63	N7	115/115 (100%)	92 (80%)	23 (20%)	1	8
63	n7	115/115 (100%)	93 (81%)	22 (19%)	1	9
64	N8	118/118 (100%)	95 (80%)	23 (20%)	1	9
64	n8	118/118 (100%)	85 (72%)	33 (28%)	0	3
65	N9	46/46 (100%)	30 (65%)	16 (35%)	0	1
65	n9	46/46 (100%)	23 (50%)	23 (50%)	0	0
66	O0	81/87 (93%)	62 (76%)	19 (24%)	1	5
66	o0	84/87 (97%)	54 (64%)	30 (36%)	0	1
67	O1	92/96 (96%)	67 (73%)	25 (27%)	0	3
67	o1	94/96 (98%)	67 (71%)	27 (29%)	0	3
68	O2	109/110 (99%)	73 (67%)	36 (33%)	0	2
68	o2	109/110 (99%)	78 (72%)	31 (28%)	0	3
69	O3	90/90 (100%)	71 (79%)	19 (21%)	1	7
69	o3	90/90 (100%)	62 (69%)	28 (31%)	0	2
70	O4	95/101 (94%)	66 (70%)	29 (30%)	0	2
70	o4	95/101 (94%)	70 (74%)	25 (26%)	0	4
71	O5	104/104 (100%)	69 (66%)	35 (34%)	0	1
71	o5	103/104 (99%)	77 (75%)	26 (25%)	0	4
72	O6	81/81 (100%)	56 (69%)	25 (31%)	0	2
72	o6	80/81 (99%)	55 (69%)	25 (31%)	0	2
73	O7	70/70 (100%)	51 (73%)	19 (27%)	0	3
73	o7	70/70 (100%)	48 (69%)	22 (31%)	0	2

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
74	O8	68/68 (100%)	53 (78%)	15 (22%)	1	6
74	o8	67/68 (98%)	52 (78%)	15 (22%)	1	6
75	O9	45/45 (100%)	35 (78%)	10 (22%)	1	6
75	o9	45/45 (100%)	34 (76%)	11 (24%)	0	4
76	Q0	47/47 (100%)	36 (77%)	11 (23%)	1	5
76	q0	47/47 (100%)	33 (70%)	14 (30%)	0	2
77	Q1	23/23 (100%)	15 (65%)	8 (35%)	0	1
77	q1	23/23 (100%)	14 (61%)	9 (39%)	0	0
78	Q2	90/90 (100%)	65 (72%)	25 (28%)	0	3
78	q2	90/90 (100%)	58 (64%)	32 (36%)	0	1
79	Q3	71/71 (100%)	54 (76%)	17 (24%)	0	4
79	q3	71/71 (100%)	49 (69%)	22 (31%)	0	2
80	e0	53/53 (100%)	41 (77%)	12 (23%)	1	6
81	e1	66/66 (100%)	41 (62%)	25 (38%)	0	1
83	p0	105/253 (42%)	79 (75%)	26 (25%)	0	4
All	All	18730/20239 (92%)	13794 (74%)	4936 (26%)	0	4

All (4936) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	S0	6	THR
2	S0	7	PHE
2	S0	8	ASP
2	S0	16	LEU
2	S0	21	ASN
2	S0	22	THR
2	S0	27	ARG
2	S0	34	GLU
2	S0	37	VAL
2	S0	43	ASP
2	S0	45	VAL
2	S0	50	VAL
2	S0	62	ARG
2	S0	84	ARG
2	S0	87	LEU
2	S0	88	LYS
2	S0	96	THR

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Mol	Chain	Res	Type
2	S0	98	ILE
2	S0	101	ARG
2	S0	103	THR
2	S0	106	SER
2	S0	110	TYR
2	S0	111	ILE
2	S0	124	THR
2	S0	129	ASP
2	S0	135	GLU
2	S0	137	SER
2	S0	141	ILE
2	S0	143	VAL
2	S0	146	LEU
2	S0	150	ASP
2	S0	156	VAL
2	S0	157	ASP
2	S0	165	ARG
2	S0	169	SER
2	S0	170	ILE
2	S0	172	LEU
2	S0	177	LEU
2	S0	181	VAL
2	S0	184	LEU
2	S0	185	ARG
2	S0	188	LEU
2	S0	189	VAL
2	S0	196	SER
2	S0	197	ILE
2	S0	198	MET
2	S0	203	PHE
3	S1	21	VAL
3	S1	25	THR
3	S1	37	THR
3	S1	38	PHE
3	S1	40	ASN
3	S1	46	THR
3	S1	59	ASP
3	S1	61	LEU
3	S1	70	LEU
3	S1	73	LEU
3	S1	78	ASP
3	S1	80	SER

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Mol	Chain	Res	Type
3	S1	81	PHE
3	S1	82	ARG
3	S1	85	LYS
3	S1	89	ASP
3	S1	95	ASN
3	S1	96	LEU
3	S1	97	LEU
3	S1	101	HIS
3	S1	104	ASP
3	S1	105	PHE
3	S1	111	ARG
3	S1	119	THR
3	S1	125	VAL
3	S1	129	THR
3	S1	130	SER
3	S1	131	ASP
3	S1	137	ILE
3	S1	149	GLN
3	S1	154	SER
3	S1	155	TYR
3	S1	169	SER
3	S1	173	THR
3	S1	176	VAL
3	S1	177	GLN
3	S1	180	THR
3	S1	181	LEU
3	S1	186	SER
3	S1	188	LEU
3	S1	191	GLU
3	S1	193	ILE
3	S1	198	GLU
3	S1	199	ASN
3	S1	202	LYS
3	S1	212	VAL
3	S1	214	LYS
3	S1	218	LEU
3	S1	219	LYS
3	S1	220	GLN
3	S1	223	PHE
3	S1	228	LEU
4	S2	38	VAL
4	S2	41	LEU

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Mol	Chain	Res	Type
4	S2	53	ILE
4	S2	54	GLU
4	S2	60	SER
4	S2	61	LEU
4	S2	70	ASP
4	S2	72	LEU
4	S2	76	LEU
4	S2	77	GLN
4	S2	86	VAL
4	S2	87	GLN
4	S2	89	GLN
4	S2	90	THR
4	S2	95	ARG
4	S2	96	THR
4	S2	97	ARG
4	S2	111	VAL
4	S2	113	LEU
4	S2	117	THR
4	S2	125	ILE
4	S2	131	ILE
4	S2	134	LEU
4	S2	137	ILE
4	S2	139	ILE
4	S2	141	ARG
4	S2	146	THR
4	S2	148	LEU
4	S2	150	GLN
4	S2	152	HIS
4	S2	153	SER
4	S2	158	THR
4	S2	166	THR
4	S2	168	ARG
4	S2	174	ARG
4	S2	187	LEU
4	S2	188	LEU
4	S2	201	ASN
4	S2	205	ARG
4	S2	207	LEU
4	S2	218	ILE
4	S2	222	TYR
4	S2	224	PHE
4	S2	229	LEU

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Mol	Chain	Res	Type
4	S2	234	PRO
4	S2	236	PRO
4	S2	237	VAL
4	S2	242	ILE
4	S2	246	GLU
4	S2	248	SER
5	S3	4	LEU
5	S3	6	SER
5	S3	7	LYS
5	S3	9	ARG
5	S3	16	VAL
5	S3	21	LEU
5	S3	26	THR
5	S3	37	VAL
5	S3	38	GLU
5	S3	39	VAL
5	S3	42	THR
5	S3	44	THR
5	S3	57	ASP
5	S3	65	ARG
5	S3	66	ILE
5	S3	67	ASN
5	S3	76	ARG
5	S3	79	TYR
5	S3	84	ILE
5	S3	92	GLN
5	S3	93	ASP
5	S3	94	ARG
5	S3	99	VAL
5	S3	108	LYS
5	S3	113	LEU
5	S3	115	ILE
5	S3	117	ARG
5	S3	127	MET
5	S3	128	GLU
5	S3	137	VAL
5	S3	139	SER
5	S3	143	ARG
5	S3	158	ILE
5	S3	160	SER
5	S3	169	ASP
5	S3	172	THR

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Mol	Chain	Res	Type
5	S3	175	VAL
5	S3	176	LEU
5	S3	178	ARG
5	S3	181	VAL
5	S3	182	LEU
5	S3	187	LYS
5	S3	190	ARG
5	S3	204	ASP
5	S3	207	THR
5	S3	212	LYS
5	S3	218	LEU
5	S3	221	SER
5	S3	224	ASP
6	S4	7	LYS
6	S4	9	LEU
6	S4	12	LEU
6	S4	21	ASP
6	S4	22	LYS
6	S4	38	LEU
6	S4	39	ARG
6	S4	42	LEU
6	S4	45	ILE
6	S4	49	ARG
6	S4	54	TYR
6	S4	68	ARG
6	S4	69	HIS
6	S4	71	LYS
6	S4	77	ARG
6	S4	88	ASP
6	S4	102	VAL
6	S4	105	VAL
6	S4	108	ARG
6	S4	109	PHE
6	S4	131	LEU
6	S4	133	LYS
6	S4	140	VAL
6	S4	143	ASP
6	S4	162	ILE
6	S4	174	LYS
6	S4	176	ASP
6	S4	180	LEU
6	S4	182	TYR

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Mol	Chain	Res	Type
6	S4	187	ARG
6	S4	189	LEU
6	S4	191	ARG
6	S4	199	GLU
6	S4	200	ARG
6	S4	211	LYS
6	S4	217	THR
6	S4	219	VAL
6	S4	221	ARG
6	S4	226	PHE
6	S4	227	VAL
6	S4	228	ILE
6	S4	240	LYS
6	S4	242	LYS
6	S4	244	ILE
6	S4	246	LEU
6	S4	248	ILE
6	S4	252	ARG
6	S4	253	ASP
6	S4	256	ARG
6	S4	259	GLN
6	S4	261	LEU
7	S5	23	VAL
7	S5	25	LEU
7	S5	32	GLU
7	S5	41	LYS
7	S5	43	PHE
7	S5	45	LYS
7	S5	48	PHE
7	S5	49	GLU
7	S5	52	GLU
7	S5	65	ARG
7	S5	66	GLN
7	S5	70	VAL
7	S5	76	ARG
7	S5	83	ARG
7	S5	86	GLN
7	S5	87	CYS
7	S5	89	ILE
7	S5	97	LEU
7	S5	112	ARG
7	S5	114	ILE

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Mol	Chain	Res	Type
7	S5	119	ASP
7	S5	122	ASN
7	S5	130	ILE
7	S5	131	GLN
7	S5	139	ASN
7	S5	147	THR
7	S5	148	ARG
7	S5	149	VAL
7	S5	156	ARG
7	S5	157	ARG
7	S5	160	VAL
7	S5	165	LEU
7	S5	170	GLN
7	S5	188	LYS
7	S5	194	LEU
7	S5	196	GLU
7	S5	216	GLU
8	S6	2	LYS
8	S6	5	ILE
8	S6	7	TYR
8	S6	15	THR
8	S6	18	ILE
8	S6	21	GLU
8	S6	25	ARG
8	S6	29	ASP
8	S6	30	LYS
8	S6	34	GLN
8	S6	37	ASP
8	S6	45	PHE
8	S6	67	VAL
8	S6	71	THR
8	S6	72	ARG
8	S6	74	LYS
8	S6	76	LEU
8	S6	78	THR
8	S6	98	ARG
8	S6	108	VAL
8	S6	115	LYS
8	S6	124	LEU
8	S6	125	THR
8	S6	127	THR
8	S6	128	THR

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Mol	Chain	Res	Type
8	S6	132	ARG
8	S6	133	LEU
8	S6	137	ARG
8	S6	141	ILE
8	S6	142	ARG
8	S6	150	GLU
8	S6	151	ASP
8	S6	154	ARG
8	S6	163	THR
8	S6	164	LYS
8	S6	169	TYR
8	S6	170	THR
8	S6	175	ILE
8	S6	176	GLN
8	S6	177	ARG
8	S6	180	THR
8	S6	182	GLN
8	S6	184	LEU
8	S6	193	LEU
8	S6	201	GLN
8	S6	202	ARG
8	S6	211	LEU
8	S6	216	LEU
8	S6	223	LYS
9	S7	11	GLN
9	S7	14	THR
9	S7	20	VAL
9	S7	34	LEU
9	S7	37	GLU
9	S7	38	LEU
9	S7	50	ASP
9	S7	77	LEU
9	S7	79	ARG
9	S7	80	GLU
9	S7	85	PHE
9	S7	97	ARG
9	S7	103	SER
9	S7	108	GLN
9	S7	109	VAL
9	S7	110	GLN
9	S7	112	ARG
9	S7	113	PRO

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Mol	Chain	Res	Type
9	S7	114	ARG
9	S7	115	SER
9	S7	116	ARG
9	S7	118	LEU
9	S7	130	VAL
9	S7	131	PHE
9	S7	136	VAL
9	S7	139	ARG
9	S7	141	ARG
9	S7	144	VAL
9	S7	147	ASN
9	S7	152	VAL
9	S7	156	SER
9	S7	157	LYS
9	S7	160	GLN
9	S7	168	SER
9	S7	174	ASN
9	S7	180	GLN
9	S7	181	ILE
9	S7	185	ILE
10	S8	3	ILE
10	S8	7	SER
10	S8	8	ARG
10	S8	9	HIS
10	S8	11	ARG
10	S8	20	GLN
10	S8	21	PHE
10	S8	22	ARG
10	S8	23	LYS
10	S8	25	ARG
10	S8	26	LYS
10	S8	29	LEU
10	S8	31	ARG
10	S8	36	THR
10	S8	48	THR
10	S8	58	LEU
10	S8	60	ILE
10	S8	72	ILE
10	S8	95	THR
10	S8	97	THR
10	S8	110	ARG
10	S8	121	LEU

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Mol	Chain	Res	Type
10	S8	138	ASN
10	S8	140	GLU
10	S8	142	LYS
10	S8	151	LYS
10	S8	152	ILE
10	S8	154	SER
10	S8	172	ARG
10	S8	176	SER
10	S8	178	ARG
10	S8	194	ARG
11	S9	3	ARG
11	S9	6	ARG
11	S9	7	THR
11	S9	14	THR
11	S9	21	SER
11	S9	22	SER
11	S9	28	LEU
11	S9	36	LEU
11	S9	40	LYS
11	S9	58	ASP
11	S9	60	LEU
11	S9	69	ARG
11	S9	78	ARG
11	S9	80	LEU
11	S9	88	GLU
11	S9	89	ASP
11	S9	91	LYS
11	S9	93	LEU
11	S9	95	TYR
11	S9	109	LEU
11	S9	113	VAL
11	S9	120	LYS
11	S9	130	THR
11	S9	134	ILE
11	S9	138	LYS
11	S9	140	ILE
11	S9	145	SER
11	S9	149	ARG
11	S9	155	HIS
11	S9	156	ILE
11	S9	157	ASP
11	S9	161	THR

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Mol	Chain	Res	Type
11	S9	171	ARG
11	S9	172	VAL
11	S9	180	LYS
11	S9	182	GLU
11	S9	186	GLU
12	C0	5	LYS
12	C0	8	ARG
12	C0	26	ASP
12	C0	27	PHE
12	C0	31	LYS
12	C0	32	HIS
12	C0	47	GLN
12	C0	52	LYS
12	C0	55	VAL
12	C0	56	LYS
12	C0	65	TYR
12	C0	68	LEU
12	C0	69	THR
12	C0	70	GLU
12	C0	74	GLU
12	C0	76	LEU
12	C0	77	ARG
12	C0	78	GLU
12	C0	82	LEU
13	C1	11	ARG
13	C1	29	LYS
13	C1	37	ASN
13	C1	44	THR
13	C1	63	LEU
13	C1	67	ARG
13	C1	69	LYS
13	C1	74	THR
13	C1	76	VAL
13	C1	80	MET
13	C1	83	THR
13	C1	87	ARG
13	C1	99	ARG
13	C1	108	PRO
13	C1	112	SER
13	C1	115	PHE
13	C1	131	ILE
13	C1	134	THR

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Mol	Chain	Res	Type
14	C2	28	LEU
14	C2	30	VAL
14	C2	39	ASP
14	C2	43	ARG
14	C2	46	ARG
14	C2	54	ARG
14	C2	62	LEU
14	C2	64	SER
14	C2	71	ILE
14	C2	73	LYS
14	C2	81	ASP
14	C2	83	GLU
14	C2	89	ILE
14	C2	97	LEU
14	C2	103	LEU
14	C2	121	VAL
14	C2	124	LYS
14	C2	126	TRP
14	C2	131	ASP
14	C2	135	MET
14	C2	137	MET
14	C2	139	HIS
15	C3	9	LYS
15	C3	16	ILE
15	C3	27	LYS
15	C3	30	SER
15	C3	35	GLU
15	C3	39	LYS
15	C3	45	LEU
15	C3	61	THR
15	C3	64	ARG
15	C3	66	ILE
15	C3	72	MET
15	C3	76	LYS
15	C3	83	GLU
15	C3	84	ILE
15	C3	97	SER
15	C3	102	LEU
15	C3	105	ASN
15	C3	114	ARG
15	C3	115	LEU
15	C3	121	ARG

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Mol	Chain	Res	Type
15	C3	125	LEU
15	C3	127	ARG
15	C3	132	VAL
15	C3	134	VAL
15	C3	135	LEU
15	C3	149	LEU
16	C4	13	VAL
16	C4	16	VAL
16	C4	24	ASN
16	C4	26	THR
16	C4	29	HIS
16	C4	31	THR
16	C4	39	ILE
16	C4	42	VAL
16	C4	43	THR
16	C4	51	ASP
16	C4	52	ARG
16	C4	55	SER
16	C4	56	SER
16	C4	86	THR
16	C4	92	LYS
16	C4	103	ARG
16	C4	111	ARG
16	C4	119	THR
16	C4	123	SER
16	C4	126	THR
16	C4	132	ARG
16	C4	133	ARG
16	C4	137	LEU
17	C5	13	LYS
17	C5	14	THR
17	C5	18	ARG
17	C5	20	VAL
17	C5	22	LEU
17	C5	29	SER
17	C5	32	ASP
17	C5	34	VAL
17	C5	36	LEU
17	C5	40	ARG
17	C5	43	ARG
17	C5	52	LYS
17	C5	58	LYS

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Mol	Chain	Res	Type
17	C5	60	LEU
17	C5	78	THR
17	C5	84	ILE
17	C5	86	VAL
17	C5	89	MET
17	C5	93	VAL
17	C5	106	GLU
17	C5	108	ARG
17	C5	110	GLU
17	C5	111	MET
17	C5	120	SER
17	C5	123	TYR
17	C5	124	THR
17	C5	125	PRO
17	C5	127	ARG
17	C5	128	HIS
18	C6	4	VAL
18	C6	7	VAL
18	C6	14	LYS
18	C6	15	SER
18	C6	17	THR
18	C6	28	LEU
18	C6	34	SER
18	C6	36	ILE
18	C6	40	GLU
18	C6	43	ILE
18	C6	52	LEU
18	C6	54	LEU
18	C6	57	LEU
18	C6	59	LYS
18	C6	66	ARG
18	C6	68	ARG
18	C6	69	VAL
18	C6	70	THR
18	C6	76	SER
18	C6	93	HIS
18	C6	97	VAL
18	C6	98	ASP
18	C6	104	GLU
18	C6	109	PHE
18	C6	110	THR
18	C6	114	ARG

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Mol	Chain	Res	Type
18	C6	116	LEU
18	C6	118	ILE
18	C6	123	ARG
18	C6	125	GLU
18	C6	136	SER
18	C6	137	ARG
18	C6	138	PHE
18	C6	143	ARG
19	C7	3	ARG
19	C7	5	ARG
19	C7	6	THR
19	C7	8	THR
19	C7	16	LEU
19	C7	26	LEU
19	C7	29	GLN
19	C7	34	LEU
19	C7	36	ASP
19	C7	37	GLU
19	C7	38	ILE
19	C7	40	THR
19	C7	43	SER
19	C7	49	LYS
19	C7	54	THR
19	C7	55	THR
19	C7	57	LEU
19	C7	62	GLN
19	C7	69	ILE
19	C7	72	LYS
19	C7	76	GLU
19	C7	77	GLU
19	C7	78	ARG
19	C7	83	GLN
19	C7	86	PRO
19	C7	88	VAL
19	C7	105	GLN
19	C7	115	LEU
19	C7	119	LEU
20	C8	3	LEU
20	C8	11	PHE
20	C8	13	HIS
20	C8	14	ILE
20	C8	15	LEU

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Mol	Chain	Res	Type
20	C8	16	ARG
20	C8	28	ILE
20	C8	32	LEU
20	C8	38	VAL
20	C8	40	ARG
20	C8	44	ASN
20	C8	61	LEU
20	C8	63	GLN
20	C8	71	GLN
20	C8	77	THR
20	C8	80	LYS
20	C8	86	LEU
20	C8	88	ARG
20	C8	90	ASN
20	C8	92	ILE
20	C8	98	TYR
20	C8	100	THR
20	C8	105	VAL
20	C8	108	LYS
20	C8	132	ARG
20	C8	136	GLN
20	C8	143	ARG
21	C9	4	VAL
21	C9	13	ASP
21	C9	15	ILE
21	C9	16	ASN
21	C9	18	TYR
21	C9	22	LEU
21	C9	28	LEU
21	C9	29	GLU
21	C9	30	VAL
21	C9	33	TYR
21	C9	35	ASP
21	C9	36	ILE
21	C9	37	VAL
21	C9	39	THR
21	C9	54	PHE
21	C9	57	ARG
21	C9	66	TYR
21	C9	70	GLN
21	C9	71	VAL
21	C9	75	LYS

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Mol	Chain	Res	Type
21	C9	84	LYS
21	C9	88	VAL
21	C9	89	ARG
21	C9	94	ILE
21	C9	100	ILE
21	C9	124	ILE
21	C9	130	ARG
21	C9	134	ARG
21	C9	139	THR
21	C9	140	LEU
21	C9	142	GLU
21	C9	144	GLU
22	D0	16	GLN
22	D0	17	GLN
22	D0	18	GLN
22	D0	19	ILE
22	D0	22	ILE
22	D0	23	ARG
22	D0	27	THR
22	D0	31	VAL
22	D0	39	SER
22	D0	40	ASN
22	D0	42	VAL
22	D0	47	GLN
22	D0	57	ARG
22	D0	61	LYS
22	D0	64	LYS
22	D0	74	GLU
22	D0	76	SER
22	D0	80	GLU
22	D0	81	THR
22	D0	84	MET
22	D0	85	ARG
22	D0	89	ARG
22	D0	99	ILE
22	D0	100	VAL
22	D0	103	ILE
22	D0	121	ASN
23	D1	5	LYS
23	D1	7	GLN
23	D1	16	LYS
23	D1	17	CYS

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Mol	Chain	Res	Type
23	D1	27	ASP
23	D1	31	SER
23	D1	41	GLU
23	D1	44	ARG
23	D1	51	VAL
23	D1	52	THR
23	D1	62	ARG
23	D1	75	ASN
23	D1	76	ASP
23	D1	78	LEU
23	D1	80	LYS
24	D2	4	SER
24	D2	7	LEU
24	D2	19	LYS
24	D2	20	THR
24	D2	22	LYS
24	D2	24	GLN
24	D2	25	VAL
24	D2	26	LEU
24	D2	36	LYS
24	D2	37	PHE
24	D2	53	ILE
24	D2	65	LEU
24	D2	68	ARG
24	D2	72	CYS
24	D2	76	SER
24	D2	81	VAL
24	D2	82	LYS
24	D2	93	LEU
24	D2	97	ARG
24	D2	99	PHE
24	D2	103	ILE
24	D2	104	LEU
24	D2	107	SER
24	D2	110	ILE
24	D2	111	MET
24	D2	121	VAL
24	D2	124	LYS
24	D2	126	LEU
24	D2	129	VAL
25	D3	7	ARG
25	D3	9	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
25	D3	14	LYS
25	D3	17	VAL
25	D3	19	ARG
25	D3	30	LYS
25	D3	34	LEU
25	D3	38	PHE
25	D3	40	SER
25	D3	43	PHE
25	D3	54	LEU
25	D3	57	LEU
25	D3	59	ILE
25	D3	63	GLN
25	D3	70	LYS
25	D3	72	VAL
25	D3	74	VAL
25	D3	77	ILE
25	D3	78	LYS
25	D3	82	LYS
25	D3	83	VAL
25	D3	84	THR
25	D3	86	PHE
25	D3	87	VAL
25	D3	94	ASN
25	D3	96	VAL
25	D3	99	ASN
25	D3	100	ASP
25	D3	107	PHE
25	D3	109	ARG
25	D3	110	LYS
25	D3	114	LYS
25	D3	116	ASP
25	D3	117	ILE
25	D3	126	LYS
25	D3	130	VAL
25	D3	132	LEU
25	D3	133	LEU
25	D3	138	GLU
25	D3	140	LYS
26	D4	2	SER
26	D4	3	ASP
26	D4	5	VAL
26	D4	8	ARG

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Mol	Chain	Res	Type
26	D4	10	ARG
26	D4	11	LYS
26	D4	14	SER
26	D4	17	LEU
26	D4	21	LYS
26	D4	32	ARG
26	D4	34	ASN
26	D4	51	GLU
26	D4	61	ARG
26	D4	62	THR
26	D4	63	GLN
26	D4	77	ASN
26	D4	79	VAL
26	D4	100	VAL
26	D4	102	LYS
26	D4	111	LYS
26	D4	123	LYS
26	D4	124	ARG
26	D4	127	LYS
26	D4	129	VAL
27	D5	40	VAL
27	D5	42	LEU
27	D5	63	SER
27	D5	69	LEU
27	D5	71	ILE
27	D5	75	LEU
27	D5	77	ARG
27	D5	84	GLU
27	D5	85	LYS
27	D5	88	ILE
27	D5	92	ILE
27	D5	95	HIS
27	D5	98	GLN
27	D5	100	ILE
28	D6	5	ARG
28	D6	30	ILE
28	D6	36	ILE
28	D6	38	ARG
28	D6	41	ILE
28	D6	44	ILE
28	D6	45	VAL
28	D6	46	GLU

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Mol	Chain	Res	Type
28	D6	53	LEU
28	D6	57	SER
28	D6	58	VAL
28	D6	61	GLU
28	D6	64	LEU
28	D6	66	LYS
28	D6	68	TYR
28	D6	69	ASN
28	D6	76	SER
28	D6	77	CYS
28	D6	82	ARG
28	D6	86	VAL
28	D6	88	SER
28	D6	89	ARG
28	D6	91	ASP
29	D7	3	LEU
29	D7	8	LEU
29	D7	15	GLU
29	D7	23	THR
29	D7	33	LEU
29	D7	34	ASP
29	D7	35	VAL
29	D7	52	THR
29	D7	55	THR
29	D7	57	GLU
29	D7	58	SER
29	D7	63	LEU
29	D7	73	LEU
30	D8	7	VAL
30	D8	8	THR
30	D8	14	LYS
30	D8	19	THR
30	D8	28	VAL
30	D8	29	ARG
30	D8	30	VAL
30	D8	32	PHE
30	D8	33	LEU
30	D8	34	GLU
30	D8	36	THR
30	D8	39	THR
30	D8	49	ARG
30	D8	55	VAL

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Mol	Chain	Res	Type
30	D8	58	GLU
30	D8	64	ARG
30	D8	65	ARG
31	D9	5	ASN
31	D9	8	PHE
31	D9	10	HIS
31	D9	12	ARG
31	D9	19	ARG
31	D9	20	GLN
31	D9	21	CYS
31	D9	23	VAL
31	D9	27	HIS
31	D9	28	THR
31	D9	30	LEU
31	D9	31	ILE
31	D9	41	GLN
32	E0	3	LYS
32	E0	14	VAL
32	E0	16	SER
32	E0	20	LYS
32	E0	21	VAL
32	E0	22	GLU
32	E0	24	THR
32	E0	26	LYS
32	E0	38	LEU
32	E0	39	LEU
32	E0	42	ARG
32	E0	48	THR
32	E0	49	LEU
32	E0	50	VAL
32	E0	55	ARG
32	E0	56	MET
33	E1	82	LYS
33	E1	84	VAL
33	E1	91	ILE
33	E1	97	LYS
33	E1	103	LEU
33	E1	108	VAL
33	E1	109	ASP
33	E1	115	THR
33	E1	118	ARG
33	E1	130	VAL

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Mol	Chain	Res	Type
33	E1	134	ASN
33	E1	137	ASP
33	E1	140	TYR
33	E1	149	LYS
33	E1	150	VAL
34	SR	6	VAL
34	SR	9	LEU
34	SR	10	ARG
34	SR	16	HIS
34	SR	25	THR
34	SR	26	SER
34	SR	29	GLN
34	SR	32	LEU
34	SR	51	ASP
34	SR	52	GLN
34	SR	58	VAL
34	SR	60	SER
34	SR	66	HIS
34	SR	70	ASP
34	SR	72	THR
34	SR	73	LEU
34	SR	76	ASP
34	SR	87	LYS
34	SR	96	THR
34	SR	103	PHE
34	SR	110	VAL
34	SR	117	LYS
34	SR	135	THR
34	SR	140	CYS
34	SR	144	LEU
34	SR	149	ASP
34	SR	152	SER
34	SR	153	GLN
34	SR	154	VAL
34	SR	178	VAL
34	SR	191	ASP
34	SR	200	ASN
34	SR	216	LYS
34	SR	220	ILE
34	SR	238	ASP
34	SR	242	SER
34	SR	246	SER

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Mol	Chain	Res	Type
34	SR	263	PHE
34	SR	272	ASP
34	SR	283	LYS
34	SR	288	HIS
34	SR	314	GLN
34	SR	317	THR
34	SR	319	ASN
35	SM	25	ILE
35	SM	27	LYS
35	SM	28	SER
35	SM	30	THR
35	SM	43	ASP
35	SM	45	SER
35	SM	48	ARG
35	SM	50	ASN
35	SM	55	SER
35	SM	62	ARG
35	SM	74	LYS
35	SM	78	ASP
35	SM	81	THR
35	SM	82	THR
35	SM	83	LYS
35	SM	84	LYS
35	SM	85	SER
35	SM	87	THR
35	SM	88	ARG
35	SM	89	ARG
35	SM	91	THR
35	SM	92	ASP
35	SM	100	THR
35	SM	102	THR
35	SM	106	VAL
35	SM	112	ASP
35	SM	113	ASP
35	SM	115	LYS
35	SM	120	GLU
39	L2	8	GLN
39	L2	17	THR
39	L2	18	SER
39	L2	19	HIS
39	L2	21	ARG
39	L2	29	LEU

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Mol	Chain	Res	Type
39	L2	31	THR
39	L2	32	LEU
39	L2	37	ARG
39	L2	41	ILE
39	L2	44	ILE
39	L2	45	VAL
39	L2	49	VAL
39	L2	52	SER
39	L2	62	VAL
39	L2	68	LYS
39	L2	70	ARG
39	L2	71	LEU
39	L2	74	GLU
39	L2	79	ASN
39	L2	84	THR
39	L2	86	GLN
39	L2	88	ILE
39	L2	96	LEU
39	L2	97	ASN
39	L2	98	VAL
39	L2	101	VAL
39	L2	104	LEU
39	L2	109	GLU
39	L2	114	SER
39	L2	118	GLU
39	L2	122	ASP
39	L2	137	ILE
39	L2	142	ASP
39	L2	143	GLU
39	L2	148	VAL
39	L2	152	SER
39	L2	157	VAL
39	L2	158	ILE
39	L2	163	ARG
39	L2	168	VAL
39	L2	175	VAL
39	L2	179	LEU
39	L2	181	LYS
39	L2	192	LYS
39	L2	199	THR
39	L2	200	ARG
39	L2	204	MET

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Mol	Chain	Res	Type
39	L2	207	VAL
39	L2	227	ARG
39	L2	230	VAL
39	L2	242	ARG
39	L2	245	LEU
39	L2	250	GLN
39	L2	251	LYS
40	L3	3	HIS
40	L3	10	ARG
40	L3	17	LEU
40	L3	19	ARG
40	L3	25	ILE
40	L3	34	LYS
40	L3	37	ARG
40	L3	39	LYS
40	L3	40	PRO
40	L3	43	LEU
40	L3	47	LEU
40	L3	50	LYS
40	L3	56	ILE
40	L3	58	ARG
40	L3	67	PHE
40	L3	73	VAL
40	L3	76	VAL
40	L3	77	THR
40	L3	80	ASP
40	L3	83	PRO
40	L3	84	VAL
40	L3	85	VAL
40	L3	87	VAL
40	L3	97	ARG
40	L3	102	LEU
40	L3	109	HIS
40	L3	114	VAL
40	L3	116	ARG
40	L3	126	LYS
40	L3	128	LYS
40	L3	134	SER
40	L3	139	GLN
40	L3	144	ILE
40	L3	147	GLU
40	L3	150	ARG

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Mol	Chain	Res	Type
40	L3	156	SER
40	L3	157	VAL
40	L3	159	ARG
40	L3	167	ARG
40	L3	168	LYS
40	L3	169	THR
40	L3	184	ASN
40	L3	187	SER
40	L3	188	ILE
40	L3	192	VAL
40	L3	201	LYS
40	L3	205	VAL
40	L3	206	ASP
40	L3	210	GLU
40	L3	211	GLN
40	L3	212	ASN
40	L3	215	ILE
40	L3	216	ASP
40	L3	226	PHE
40	L3	229	VAL
40	L3	230	THR
40	L3	232	ARG
40	L3	235	THR
40	L3	236	LYS
40	L3	241	LYS
40	L3	242	THR
40	L3	246	LEU
40	L3	248	LYS
40	L3	261	MET
40	L3	264	VAL
40	L3	270	ARG
40	L3	272	TYR
40	L3	274	SER
40	L3	284	ARG
40	L3	287	LYS
40	L3	291	GLU
40	L3	297	SER
40	L3	305	ILE
40	L3	319	ASN
40	L3	320	ASP
40	L3	324	VAL
40	L3	327	CYS

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Mol	Chain	Res	Type
40	L3	328	ILE
40	L3	332	ARG
40	L3	335	ILE
40	L3	337	THR
40	L3	342	LEU
40	L3	344	THR
40	L3	351	LEU
40	L3	353	GLU
40	L3	356	LEU
40	L3	359	ILE
40	L3	364	LYS
40	L3	370	PHE
40	L3	372	THR
40	L3	379	PHE
40	L3	382	THR
41	L4	6	VAL
41	L4	11	LEU
41	L4	22	LEU
41	L4	25	VAL
41	L4	27	SER
41	L4	30	ILE
41	L4	35	VAL
41	L4	39	PHE
41	L4	44	LYS
41	L4	60	THR
41	L4	63	GLU
41	L4	67	THR
41	L4	71	VAL
41	L4	73	ARG
41	L4	74	ILE
41	L4	77	VAL
41	L4	92	ASN
41	L4	93	MET
41	L4	95	ARG
41	L4	99	MET
41	L4	105	THR
41	L4	107	ARG
41	L4	112	LYS
41	L4	120	TYR
41	L4	124	SER
41	L4	138	ARG
41	L4	148	ILE

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Mol	Chain	Res	Type
41	L4	150	LEU
41	L4	151	VAL
41	L4	154	THR
41	L4	159	ILE
41	L4	176	SER
41	L4	178	LEU
41	L4	179	LEU
41	L4	180	LYS
41	L4	182	LEU
41	L4	187	LEU
41	L4	188	ARG
41	L4	193	LYS
41	L4	194	TYR
41	L4	198	ARG
41	L4	200	THR
41	L4	220	ARG
41	L4	222	VAL
41	L4	223	PRO
41	L4	227	THR
41	L4	230	VAL
41	L4	244	LEU
41	L4	246	ARG
41	L4	256	THR
41	L4	259	ASP
41	L4	275	THR
41	L4	278	SER
41	L4	281	ILE
41	L4	282	SER
41	L4	283	THR
41	L4	287	THR
41	L4	292	SER
41	L4	297	SER
41	L4	300	ARG
41	L4	311	HIS
41	L4	313	LEU
41	L4	314	LYS
41	L4	321	LYS
41	L4	323	VAL
41	L4	324	LEU
41	L4	326	ARG
41	L4	327	LEU
41	L4	339	LEU

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Mol	Chain	Res	Type
41	L4	345	GLU
41	L4	346	LYS
41	L4	347	THR
41	L4	349	THR
41	L4	350	LYS
41	L4	354	VAL
41	L4	362	ASP
42	L5	8	LYS
42	L5	9	SER
42	L5	19	PRO
42	L5	23	ARG
42	L5	32	GLN
42	L5	33	ARG
42	L5	35	ARG
42	L5	41	LYS
42	L5	50	ARG
42	L5	52	VAL
42	L5	64	ILE
42	L5	66	SER
42	L5	69	ILE
42	L5	70	THR
42	L5	80	SER
42	L5	81	HIS
42	L5	92	LEU
42	L5	94	ASN
42	L5	95	TRP
42	L5	105	ILE
42	L5	110	LEU
42	L5	112	LYS
42	L5	115	LEU
42	L5	117	GLU
42	L5	125	VAL
42	L5	131	LEU
42	L5	135	VAL
42	L5	140	ARG
42	L5	146	LEU
42	L5	151	GLN
42	L5	163	LEU
42	L5	168	ASP
42	L5	185	PHE
42	L5	188	GLU
42	L5	189	GLU

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Mol	Chain	Res	Type
42	L5	194	LEU
42	L5	196	ARG
42	L5	207	TYR
42	L5	217	GLU
42	L5	219	PHE
42	L5	220	SER
42	L5	222	LEU
42	L5	231	ILE
42	L5	232	ASP
42	L5	257	GLU
42	L5	259	LYS
42	L5	263	GLU
42	L5	264	GLN
42	L5	276	LYS
43	L6	4	GLN
43	L6	5	LYS
43	L6	19	LYS
43	L6	21	THR
43	L6	29	LYS
43	L6	41	ILE
43	L6	46	ARG
43	L6	52	VAL
43	L6	65	ILE
43	L6	78	ARG
43	L6	84	VAL
43	L6	88	SER
43	L6	89	THR
43	L6	92	SER
43	L6	98	VAL
43	L6	99	GLU
43	L6	129	GLU
43	L6	134	ARG
43	L6	146	ILE
43	L6	151	LYS
43	L6	154	LEU
43	L6	155	LEU
43	L6	163	PHE
43	L6	174	LEU
44	L7	24	GLU
44	L7	25	GLN
44	L7	29	GLU
44	L7	30	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
44	L7	33	ARG
44	L7	34	LYS
44	L7	38	LYS
44	L7	39	GLU
44	L7	40	LYS
44	L7	43	ILE
44	L7	44	ILE
44	L7	47	ARG
44	L7	59	GLU
44	L7	60	ARG
44	L7	63	ILE
44	L7	77	VAL
44	L7	80	GLN
44	L7	83	LEU
44	L7	88	ARG
44	L7	89	ILE
44	L7	92	ILE
44	L7	97	PRO
44	L7	98	LYS
44	L7	101	LYS
44	L7	110	ARG
44	L7	112	ASN
44	L7	113	SER
44	L7	121	LYS
44	L7	123	THR
44	L7	124	LEU
44	L7	127	LEU
44	L7	134	VAL
44	L7	153	PHE
44	L7	157	ASN
44	L7	158	LYS
44	L7	160	ARG
44	L7	163	LEU
44	L7	164	SER
44	L7	179	LEU
44	L7	181	ILE
44	L7	183	ASP
44	L7	184	LEU
44	L7	185	ILE
44	L7	202	LEU
44	L7	216	VAL
44	L7	219	LYS

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Mol	Chain	Res	Type
44	L7	224	ILE
44	L7	239	LEU
45	L8	26	LEU
45	L8	27	THR
45	L8	31	PRO
45	L8	36	ILE
45	L8	38	GLN
45	L8	41	GLN
45	L8	42	PRO
45	L8	47	SER
45	L8	49	TYR
45	L8	55	TYR
45	L8	67	ILE
45	L8	69	LEU
45	L8	71	VAL
45	L8	79	GLN
45	L8	81	THR
45	L8	83	ASP
45	L8	84	ARG
45	L8	95	ASN
45	L8	106	LYS
45	L8	108	ARG
45	L8	109	LEU
45	L8	110	THR
45	L8	132	VAL
45	L8	134	TYR
45	L8	136	LEU
45	L8	137	ASN
45	L8	150	LEU
45	L8	155	ASN
45	L8	156	ASP
45	L8	160	ILE
45	L8	164	VAL
45	L8	183	LYS
45	L8	185	ARG
45	L8	189	LEU
45	L8	190	VAL
45	L8	197	VAL
45	L8	203	VAL
45	L8	204	ARG
45	L8	214	LEU
45	L8	216	SER

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Mol	Chain	Res	Type
45	L8	218	ILE
45	L8	246	MET
45	L8	255	SER
46	L9	2	LYS
46	L9	5	GLN
46	L9	6	THR
46	L9	12	VAL
46	L9	14	GLU
46	L9	18	VAL
46	L9	19	SER
46	L9	20	ILE
46	L9	21	LYS
46	L9	24	ILE
46	L9	25	VAL
46	L9	41	ILE
46	L9	44	THR
46	L9	52	LEU
46	L9	53	ILE
46	L9	55	VAL
46	L9	63	LYS
46	L9	68	LEU
46	L9	69	ARG
46	L9	70	THR
46	L9	72	LYS
46	L9	78	MET
46	L9	79	ILE
46	L9	82	VAL
46	L9	90	MET
46	L9	92	TYR
46	L9	94	TYR
46	L9	102	ASN
46	L9	104	VAL
46	L9	106	LYS
46	L9	107	ASP
46	L9	111	PHE
46	L9	118	LEU
46	L9	120	ASP
46	L9	121	LYS
46	L9	122	LYS
46	L9	123	ILE
46	L9	125	ASN
46	L9	130	ASP

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Mol	Chain	Res	Type
46	L9	133	THR
46	L9	139	ASN
46	L9	146	LEU
46	L9	147	SER
46	L9	150	SER
46	L9	151	VAL
46	L9	154	VAL
46	L9	157	ASN
46	L9	161	LEU
46	L9	162	GLN
46	L9	163	GLN
46	L9	166	ARG
46	L9	168	ARG
46	L9	172	ILE
46	L9	173	ARG
46	L9	174	LYS
46	L9	176	LEU
46	L9	182	SER
46	L9	186	PHE
46	L9	188	THR
46	L9	189	GLU
46	L9	191	LEU
47	M0	7	ARG
47	M0	12	GLN
47	M0	15	LYS
47	M0	16	PRO
47	M0	20	SER
47	M0	21	ARG
47	M0	22	TYR
47	M0	26	VAL
47	M0	30	LYS
47	M0	31	ILE
47	M0	33	ILE
47	M0	39	LYS
47	M0	42	THR
47	M0	50	VAL
47	M0	52	LEU
47	M0	53	VAL
47	M0	61	SER
47	M0	63	GLU
47	M0	73	ASN
47	M0	82	ARG

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Mol	Chain	Res	Type
47	M0	87	LEU
47	M0	99	ILE
47	M0	102	MET
47	M0	128	ARG
47	M0	130	ASP
47	M0	133	GLN
47	M0	134	ILE
47	M0	138	VAL
47	M0	139	ARG
47	M0	143	SER
47	M0	146	ASP
47	M0	163	GLN
47	M0	165	ILE
47	M0	174	THR
47	M0	177	ASP
47	M0	191	LYS
47	M0	197	VAL
47	M0	200	LEU
47	M0	201	SER
47	M0	203	LYS
47	M0	208	ASN
47	M0	215	GLU
48	M1	6	GLN
48	M1	10	ARG
48	M1	12	LEU
48	M1	13	LYS
48	M1	19	LEU
48	M1	22	SER
48	M1	23	VAL
48	M1	26	SER
48	M1	28	ASP
48	M1	29	ARG
48	M1	30	LEU
48	M1	43	GLN
48	M1	46	VAL
48	M1	52	TYR
48	M1	56	THR
48	M1	59	ILE
48	M1	70	THR
48	M1	71	VAL
48	M1	77	GLU
48	M1	79	ILE

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
48	M1	85	LYS
48	M1	99	THR
48	M1	101	ASN
48	M1	106	ILE
48	M1	107	ASP
48	M1	119	SER
48	M1	137	ARG
48	M1	140	ARG
48	M1	142	LYS
48	M1	145	LYS
48	M1	147	THR
48	M1	150	ASN
48	M1	155	THR
48	M1	158	ASP
48	M1	166	LYS
48	M1	173	ASP
49	M3	9	ILE
49	M3	13	HIS
49	M3	15	ARG
49	M3	21	ARG
49	M3	22	VAL
49	M3	23	LYS
49	M3	24	VAL
49	M3	35	ARG
49	M3	41	THR
49	M3	46	ILE
49	M3	50	PRO
49	M3	53	LEU
49	M3	55	ARG
49	M3	58	VAL
49	M3	59	ARG
49	M3	69	VAL
49	M3	73	ARG
49	M3	86	THR
49	M3	91	ARG
49	M3	98	ASP
49	M3	101	ARG
49	M3	106	GLN
49	M3	110	ASP
49	M3	115	ARG
49	M3	120	GLN
49	M3	121	SER

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
49	M3	122	LYS
49	M3	124	ILE
49	M3	131	LYS
49	M3	136	GLU
49	M3	137	GLN
49	M3	138	VAL
49	M3	152	THR
49	M3	154	VAL
49	M3	157	ARG
49	M3	159	VAL
49	M3	168	ARG
49	M3	171	ARG
49	M3	174	ARG
49	M3	194	GLU
50	M4	5	SER
50	M4	11	ASN
50	M4	15	VAL
50	M4	27	GLN
50	M4	28	SER
50	M4	38	ILE
50	M4	44	VAL
50	M4	50	LYS
50	M4	53	VAL
50	M4	55	ARG
50	M4	66	THR
50	M4	68	LEU
50	M4	82	SER
50	M4	83	LYS
50	M4	90	VAL
50	M4	91	CYS
50	M4	92	GLU
50	M4	102	LYS
50	M4	106	ARG
50	M4	107	GLU
50	M4	108	ARG
50	M4	109	ARG
50	M4	113	THR
50	M4	117	ARG
50	M4	127	LYS
50	M4	131	VAL
50	M4	133	LYS
50	M4	135	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
50	M4	137	LYS
51	M5	5	LYS
51	M5	10	LEU
51	M5	22	LEU
51	M5	23	GLN
51	M5	25	VAL
51	M5	38	ARG
51	M5	43	THR
51	M5	49	ARG
51	M5	51	LEU
51	M5	54	LYS
51	M5	57	GLN
51	M5	62	TYR
51	M5	64	VAL
51	M5	80	THR
51	M5	90	ASN
51	M5	96	ARG
51	M5	101	THR
51	M5	104	GLU
51	M5	113	LEU
51	M5	117	ASN
51	M5	128	LYS
51	M5	133	ILE
51	M5	142	ILE
51	M5	151	ILE
51	M5	153	ASP
51	M5	155	VAL
51	M5	165	THR
51	M5	174	ILE
51	M5	184	LYS
51	M5	190	THR
51	M5	201	ARG
51	M5	204	LYS
52	M6	8	VAL
52	M6	16	VAL
52	M6	41	LEU
52	M6	42	ASN
52	M6	44	SER
52	M6	47	PHE
52	M6	57	PHE
52	M6	58	LEU
52	M6	59	ARG

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Mol	Chain	Res	Type
52	M6	67	THR
52	M6	68	ARG
52	M6	70	PRO
52	M6	78	ARG
52	M6	82	LYS
52	M6	85	ARG
52	M6	87	MET
52	M6	89	SER
52	M6	92	THR
52	M6	104	VAL
52	M6	105	PHE
52	M6	106	GLU
52	M6	110	PRO
52	M6	117	ARG
52	M6	118	VAL
52	M6	122	GLN
52	M6	124	LEU
52	M6	126	VAL
52	M6	141	LEU
52	M6	142	SER
52	M6	143	THR
52	M6	155	LYS
52	M6	156	LEU
52	M6	161	LYS
52	M6	164	SER
52	M6	166	GLU
52	M6	170	LYS
52	M6	177	LYS
52	M6	184	THR
52	M6	190	VAL
52	M6	194	LEU
53	M7	7	THR
53	M7	9	THR
53	M7	13	LYS
53	M7	14	SER
53	M7	16	SER
53	M7	20	SER
53	M7	21	TYR
53	M7	26	PHE
53	M7	34	GLN
53	M7	36	ILE
53	M7	42	THR

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Mol	Chain	Res	Type
53	M7	49	GLU
53	M7	52	LEU
53	M7	53	ASP
53	M7	54	HIS
53	M7	55	GLN
53	M7	56	ARG
53	M7	61	ARG
53	M7	62	ARG
53	M7	67	ILE
53	M7	69	ARG
53	M7	78	VAL
53	M7	79	THR
53	M7	86	LYS
53	M7	90	PHE
53	M7	91	VAL
53	M7	107	LEU
53	M7	111	LYS
53	M7	112	LEU
53	M7	125	GLN
53	M7	127	ARG
53	M7	128	ARG
53	M7	131	ARG
53	M7	136	ILE
53	M7	138	LYS
53	M7	141	SER
53	M7	144	SER
53	M7	154	GLU
53	M7	155	GLU
53	M7	168	LEU
53	M7	180	LYS
53	M7	181	ARG
54	M8	3	ILE
54	M8	6	THR
54	M8	7	SER
54	M8	8	LYS
54	M8	11	LYS
54	M8	20	LYS
54	M8	26	LEU
54	M8	29	LEU
54	M8	32	LEU
54	M8	34	THR
54	M8	39	ARG

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
54	M8	41	ASP
54	M8	46	LYS
54	M8	49	LEU
54	M8	55	SER
54	M8	56	LYS
54	M8	63	SER
54	M8	66	ARG
54	M8	67	ILE
54	M8	93	ILE
54	M8	100	THR
54	M8	105	ARG
54	M8	106	PHE
54	M8	107	THR
54	M8	111	ARG
54	M8	115	VAL
54	M8	124	LEU
54	M8	133	LYS
54	M8	146	SER
54	M8	147	ARG
54	M8	150	VAL
54	M8	174	ARG
54	M8	176	ARG
54	M8	180	ARG
54	M8	186	VAL
55	M9	4	LEU
55	M9	5	ARG
55	M9	10	LEU
55	M9	17	VAL
55	M9	24	LEU
55	M9	25	ASP
55	M9	28	GLU
55	M9	31	GLU
55	M9	37	SER
55	M9	41	ILE
55	M9	44	LEU
55	M9	46	LYS
55	M9	49	THR
55	M9	55	VAL
55	M9	57	VAL
55	M9	63	THR
55	M9	70	LYS
55	M9	71	ARG

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Mol	Chain	Res	Type
55	M9	74	ARG
55	M9	81	ARG
55	M9	84	THR
55	M9	89	LEU
55	M9	92	GLN
55	M9	100	ARG
55	M9	104	ARG
55	M9	105	LEU
55	M9	106	LEU
55	M9	116	ASP
55	M9	119	LEU
55	M9	125	LYS
55	M9	130	ASN
55	M9	134	HIS
55	M9	135	LYS
55	M9	139	VAL
55	M9	141	HIS
55	M9	164	LEU
55	M9	165	LYS
55	M9	167	ARG
55	M9	173	ARG
55	M9	176	ARG
55	M9	188	ASP
56	N0	1	MET
56	N0	3	HIS
56	N0	5	LYS
56	N0	7	TYR
56	N0	8	GLN
56	N0	16	THR
56	N0	17	GLU
56	N0	18	SER
56	N0	23	LYS
56	N0	34	GLU
56	N0	36	ILE
56	N0	45	LEU
56	N0	47	LYS
56	N0	51	VAL
56	N0	55	SER
56	N0	57	GLU
56	N0	58	ILE
56	N0	63	GLN
56	N0	71	LYS

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Mol	Chain	Res	Type
56	N0	81	TYR
56	N0	82	ASP
56	N0	87	THR
56	N0	88	HIS
56	N0	98	SER
56	N0	100	VAL
56	N0	106	LEU
56	N0	107	TYR
56	N0	108	GLN
56	N0	117	ARG
56	N0	119	ARG
56	N0	120	SER
56	N0	123	ILE
56	N0	137	ARG
56	N0	142	GLN
56	N0	145	THR
56	N0	148	LEU
56	N0	149	LYS
56	N0	155	ARG
56	N0	156	VAL
56	N0	158	LYS
56	N0	159	SER
56	N0	162	THR
56	N0	166	LYS
56	N0	167	ARG
56	N0	169	SER
56	N0	170	THR
56	N0	171	PHE
56	N0	172	TYR
57	N1	5	HIS
57	N1	9	SER
57	N1	12	ARG
57	N1	15	PHE
57	N1	25	VAL
57	N1	29	THR
57	N1	32	LYS
57	N1	35	LYS
57	N1	60	LYS
57	N1	69	LYS
57	N1	72	VAL
57	N1	74	VAL
57	N1	75	ILE

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Mol	Chain	Res	Type
57	N1	78	LYS
57	N1	79	MET
57	N1	88	ARG
57	N1	92	ARG
57	N1	93	VAL
57	N1	97	LYS
57	N1	98	HIS
57	N1	102	ARG
57	N1	103	GLN
57	N1	104	GLU
57	N1	106	LEU
57	N1	118	GLU
57	N1	120	LYS
57	N1	122	GLN
57	N1	124	VAL
57	N1	126	VAL
57	N1	127	GLN
57	N1	128	LEU
57	N1	130	ARG
57	N1	139	ARG
57	N1	141	VAL
57	N1	158	THR
57	N1	160	ILE
58	N2	14	THR
58	N2	27	VAL
58	N2	29	ASP
58	N2	32	SER
58	N2	35	LYS
58	N2	39	ASP
58	N2	43	VAL
58	N2	50	LEU
58	N2	52	ASN
58	N2	54	VAL
58	N2	68	THR
58	N2	70	LYS
58	N2	72	SER
58	N2	91	ASP
58	N2	93	ILE
58	N2	94	ARG
58	N2	95	PHE
58	N2	100	THR
58	N2	108	TYR

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Mol	Chain	Res	Type
59	N3	12	ARG
59	N3	13	ILE
59	N3	29	SER
59	N3	36	ILE
59	N3	40	LYS
59	N3	42	SER
59	N3	45	ARG
59	N3	54	LEU
59	N3	59	MET
59	N3	68	GLU
59	N3	70	ARG
59	N3	72	LYS
59	N3	74	MET
59	N3	86	ARG
59	N3	87	ARG
59	N3	96	GLU
59	N3	97	ASP
59	N3	102	ILE
59	N3	104	ASN
59	N3	114	ILE
59	N3	120	LYS
59	N3	124	ASP
59	N3	128	ARG
59	N3	136	VAL
59	N3	137	VAL
60	N4	4	GLU
60	N4	9	SER
60	N4	19	THR
60	N4	21	PHE
60	N4	23	ARG
60	N4	27	LYS
60	N4	38	SER
60	N4	39	LEU
60	N4	42	GLN
60	N4	45	ASN
60	N4	47	ARG
60	N4	52	THR
61	N5	24	LEU
61	N5	27	ARG
61	N5	32	PHE
61	N5	34	LEU
61	N5	38	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
61	N5	46	TYR
61	N5	58	ASP
61	N5	60	TYR
61	N5	61	LYS
61	N5	63	ILE
61	N5	65	GLN
61	N5	71	THR
61	N5	80	ASN
61	N5	85	GLN
61	N5	108	LEU
61	N5	115	ARG
61	N5	127	THR
61	N5	133	LEU
61	N5	134	ASP
61	N5	135	ILE
61	N5	139	ILE
62	N6	5	SER
62	N6	7	ASP
62	N6	8	VAL
62	N6	13	ARG
62	N6	25	SER
62	N6	26	GLN
62	N6	36	SER
62	N6	37	LYS
62	N6	38	GLU
62	N6	39	LEU
62	N6	42	GLN
62	N6	45	ILE
62	N6	46	LYS
62	N6	50	ILE
62	N6	51	ARG
62	N6	57	LEU
62	N6	60	ARG
62	N6	62	SER
62	N6	74	TYR
62	N6	80	VAL
62	N6	83	ASP
62	N6	88	GLU
62	N6	90	VAL
62	N6	94	SER
62	N6	95	VAL
62	N6	115	ARG

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Mol	Chain	Res	Type
62	N6	118	LEU
62	N6	126	LEU
62	N6	127	GLU
63	N7	9	LYS
63	N7	14	VAL
63	N7	33	SER
63	N7	34	LYS
63	N7	46	ILE
63	N7	52	LYS
63	N7	56	LYS
63	N7	57	HIS
63	N7	72	ILE
63	N7	75	VAL
63	N7	81	LEU
63	N7	88	ASP
63	N7	92	PHE
63	N7	99	GLU
63	N7	100	THR
63	N7	102	GLU
63	N7	107	ARG
63	N7	109	GLU
63	N7	121	ARG
63	N7	129	TRP
63	N7	132	SER
63	N7	134	LEU
63	N7	136	PHE
64	N8	8	THR
64	N8	15	VAL
64	N8	22	ILE
64	N8	38	GLN
64	N8	42	ARG
64	N8	43	ILE
64	N8	45	MET
64	N8	47	LYS
64	N8	56	VAL
64	N8	60	TYR
64	N8	75	LEU
64	N8	78	LEU
64	N8	83	PRO
64	N8	84	GLU
64	N8	86	LYS
64	N8	93	SER

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Mol	Chain	Res	Type
64	N8	96	LYS
64	N8	98	THR
64	N8	115	LYS
64	N8	120	ASN
64	N8	135	GLU
64	N8	136	GLU
64	N8	139	ARG
65	N9	3	LYS
65	N9	6	ASN
65	N9	10	HIS
65	N9	13	THR
65	N9	14	ARG
65	N9	22	LYS
65	N9	25	LYS
65	N9	26	THR
65	N9	28	LYS
65	N9	33	LYS
65	N9	35	VAL
65	N9	37	PRO
65	N9	38	LYS
65	N9	50	THR
65	N9	58	LYS
65	N9	59	LYS
66	O0	18	ILE
66	O0	30	THR
66	O0	32	LYS
66	O0	34	LEU
66	O0	40	LYS
66	O0	41	LEU
66	O0	43	ILE
66	O0	48	THR
66	O0	52	ARG
66	O0	61	MET
66	O0	62	LEU
66	O0	65	THR
66	O0	66	LYS
66	O0	83	LYS
66	O0	87	VAL
66	O0	90	VAL
66	O0	92	ILE
66	O0	97	ASP
66	O0	100	ILE

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Mol	Chain	Res	Type
67	O1	9	THR
67	O1	13	THR
67	O1	14	ILE
67	O1	16	LEU
67	O1	18	LYS
67	O1	21	HIS
67	O1	24	SER
67	O1	26	LYS
67	O1	31	ARG
67	O1	35	GLU
67	O1	41	LYS
67	O1	46	THR
67	O1	64	VAL
67	O1	73	LEU
67	O1	75	ILE
67	O1	79	ARG
67	O1	82	GLU
67	O1	83	GLU
67	O1	84	ASP
67	O1	86	LYS
67	O1	89	LEU
67	O1	93	VAL
67	O1	98	VAL
67	O1	100	SER
67	O1	110	GLU
68	O2	6	HIS
68	O2	10	VAL
68	O2	14	THR
68	O2	18	LYS
68	O2	19	ARG
68	O2	26	HIS
68	O2	33	ARG
68	O2	36	LYS
68	O2	38	ILE
68	O2	39	ASP
68	O2	41	VAL
68	O2	44	ARG
68	O2	47	ARG
68	O2	49	ASN
68	O2	50	ILE
68	O2	61	LYS
68	O2	62	LYS

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Mol	Chain	Res	Type
68	O2	67	SER
68	O2	68	PRO
68	O2	74	PHE
68	O2	75	LEU
68	O2	76	VAL
68	O2	78	ASN
68	O2	80	LYS
68	O2	82	LEU
68	O2	84	THR
68	O2	85	LEU
68	O2	86	THR
68	O2	96	ILE
68	O2	100	ILE
68	O2	103	LYS
68	O2	104	ASN
68	O2	105	ARG
68	O2	108	ILE
68	O2	109	LEU
68	O2	121	ASN
69	O3	20	LYS
69	O3	21	ARG
69	O3	22	VAL
69	O3	29	LEU
69	O3	31	LYS
69	O3	37	THR
69	O3	38	PRO
69	O3	56	SER
69	O3	59	VAL
69	O3	60	ARG
69	O3	62	SER
69	O3	67	MET
69	O3	70	LYS
69	O3	82	ARG
69	O3	84	THR
69	O3	86	ARG
69	O3	98	VAL
69	O3	106	ASN
69	O3	107	ILE
70	O4	4	ARG
70	O4	8	ARG
70	O4	10	ARG
70	O4	14	ASN

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Mol	Chain	Res	Type
70	O4	15	THR
70	O4	18	ASN
70	O4	20	ILE
70	O4	22	VAL
70	O4	29	ILE
70	O4	35	VAL
70	O4	38	LEU
70	O4	43	LYS
70	O4	44	CYS
70	O4	51	LEU
70	O4	52	GLN
70	O4	56	THR
70	O4	57	LEU
70	O4	58	ARG
70	O4	65	VAL
70	O4	66	SER
70	O4	68	THR
70	O4	71	THR
70	O4	81	CYS
70	O4	88	ARG
70	O4	89	ILE
70	O4	98	GLN
70	O4	102	LYS
70	O4	105	VAL
70	O4	110	GLU
71	O5	4	VAL
71	O5	7	TYR
71	O5	8	GLU
71	O5	11	THR
71	O5	13	SER
71	O5	15	GLU
71	O5	28	LEU
71	O5	36	LEU
71	O5	41	LEU
71	O5	45	LYS
71	O5	46	THR
71	O5	47	VAL
71	O5	48	ARG
71	O5	49	LYS
71	O5	50	SER
71	O5	51	ILE
71	O5	55	LEU

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Mol	Chain	Res	Type
71	O5	58	ILE
71	O5	62	GLN
71	O5	68	GLN
71	O5	69	LEU
71	O5	71	LYS
71	O5	73	LYS
71	O5	74	LYS
71	O5	81	ARG
71	O5	86	ARG
71	O5	89	ARG
71	O5	93	THR
71	O5	96	GLU
71	O5	101	THR
71	O5	102	GLU
71	O5	107	LYS
71	O5	115	LYS
71	O5	118	ILE
71	O5	119	LYS
72	O6	2	THR
72	O6	18	THR
72	O6	20	MET
72	O6	21	THR
72	O6	25	LYS
72	O6	28	TYR
72	O6	29	LYS
72	O6	43	LEU
72	O6	44	VAL
72	O6	45	ARG
72	O6	50	LEU
72	O6	52	PRO
72	O6	58	ILE
72	O6	59	ASP
72	O6	60	LEU
72	O6	64	SER
72	O6	68	ARG
72	O6	71	LYS
72	O6	76	ARG
72	O6	84	LYS
72	O6	87	VAL
72	O6	88	GLU
72	O6	90	MET
72	O6	98	ARG

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Mol	Chain	Res	Type
72	O6	99	ARG
73	O7	3	LYS
73	O7	11	ARG
73	O7	17	THR
73	O7	18	LEU
73	O7	24	ARG
73	O7	31	LYS
73	O7	32	LYS
73	O7	33	THR
73	O7	43	LYS
73	O7	45	ARG
73	O7	55	ARG
73	O7	58	THR
73	O7	65	ARG
73	O7	67	LEU
73	O7	74	PHE
73	O7	75	LYS
73	O7	80	THR
73	O7	82	SER
73	O7	85	LYS
74	O8	8	ILE
74	O8	14	LEU
74	O8	17	ARG
74	O8	20	VAL
74	O8	24	THR
74	O8	31	LEU
74	O8	32	ASN
74	O8	36	LYS
74	O8	41	THR
74	O8	53	THR
74	O8	61	LYS
74	O8	65	LEU
74	O8	69	LEU
74	O8	72	THR
74	O8	77	ARG
75	O9	7	PHE
75	O9	12	LYS
75	O9	17	LYS
75	O9	21	ARG
75	O9	23	LEU
75	O9	28	ARG
75	O9	29	LEU

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Mol	Chain	Res	Type
75	O9	41	ARG
75	O9	42	ARG
75	O9	45	ARG
76	Q0	85	LEU
76	Q0	88	LYS
76	Q0	89	TYR
76	Q0	92	ASP
76	Q0	94	SER
76	Q0	99	CYS
76	Q0	108	THR
76	Q0	113	ARG
76	Q0	114	LYS
76	Q0	122	ARG
76	Q0	127	LEU
77	Q1	1	MET
77	Q1	2	ARG
77	Q1	4	LYS
77	Q1	7	LYS
77	Q1	11	ARG
77	Q1	16	LYS
77	Q1	17	ARG
77	Q1	21	ARG
78	Q2	6	LYS
78	Q2	7	THR
78	Q2	8	ARG
78	Q2	15	LYS
78	Q2	16	THR
78	Q2	19	LYS
78	Q2	20	HIS
78	Q2	28	TYR
78	Q2	35	LEU
78	Q2	40	LYS
78	Q2	45	ARG
78	Q2	54	THR
78	Q2	55	LYS
78	Q2	57	VAL
78	Q2	58	PHE
78	Q2	61	LYS
78	Q2	64	THR
78	Q2	78	LYS
78	Q2	80	ARG
78	Q2	83	LEU

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Mol	Chain	Res	Type
78	Q2	85	LEU
78	Q2	90	HIS
78	Q2	93	LEU
78	Q2	96	GLU
78	Q2	105	GLN
79	Q3	5	THR
79	Q3	6	LYS
79	Q3	7	LYS
79	Q3	8	VAL
79	Q3	20	SER
79	Q3	21	SER
79	Q3	25	GLN
79	Q3	41	PHE
79	Q3	42	CYS
79	Q3	45	LYS
79	Q3	48	LYS
79	Q3	49	ARG
79	Q3	58	SER
79	Q3	70	THR
79	Q3	81	SER
79	Q3	84	ARG
79	Q3	91	GLU
2	s0	6	THR
2	s0	9	LEU
2	s0	12	GLU
2	s0	15	GLN
2	s0	22	THR
2	s0	24	LEU
2	s0	28	ASN
2	s0	29	VAL
2	s0	41	ARG
2	s0	50	VAL
2	s0	59	LEU
2	s0	62	ARG
2	s0	63	ILE
2	s0	69	ASN
2	s0	72	ASP
2	s0	84	ARG
2	s0	86	VAL
2	s0	87	LEU
2	s0	96	THR
2	s0	98	ILE

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Mol	Chain	Res	Type
2	s0	110	TYR
2	s0	111	ILE
2	s0	113	ARG
2	s0	119	ARG
2	s0	122	ILE
2	s0	128	SER
2	s0	129	ASP
2	s0	131	GLN
2	s0	133	ILE
2	s0	141	ILE
2	s0	153	SER
2	s0	156	VAL
2	s0	157	ASP
2	s0	165	ARG
2	s0	172	LEU
2	s0	177	LEU
2	s0	181	VAL
2	s0	183	ARG
2	s0	185	ARG
2	s0	188	LEU
2	s0	189	VAL
2	s0	196	SER
3	s1	21	VAL
3	s1	36	SER
3	s1	37	THR
3	s1	46	THR
3	s1	47	LEU
3	s1	50	LYS
3	s1	55	LYS
3	s1	59	ASP
3	s1	61	LEU
3	s1	62	LYS
3	s1	65	VAL
3	s1	66	VAL
3	s1	70	LEU
3	s1	73	LEU
3	s1	76	SER
3	s1	77	GLU
3	s1	79	HIS
3	s1	81	PHE
3	s1	89	ASP
3	s1	90	GLU

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Mol	Chain	Res	Type
3	s1	98	THR
3	s1	105	PHE
3	s1	108	ASP
3	s1	115	ARG
3	s1	126	THR
3	s1	129	THR
3	s1	137	ILE
3	s1	158	SER
3	s1	162	ARG
3	s1	173	THR
3	s1	180	THR
3	s1	181	LEU
3	s1	185	THR
3	s1	188	LEU
3	s1	193	ILE
3	s1	194	ASN
3	s1	202	LYS
3	s1	205	PHE
3	s1	208	GLN
3	s1	209	ASN
3	s1	211	HIS
3	s1	222	LYS
3	s1	223	PHE
3	s1	232	HIS
3	s1	234	GLU
4	s2	41	LEU
4	s2	43	ARG
4	s2	46	LYS
4	s2	51	THR
4	s2	52	THR
4	s2	53	ILE
4	s2	56	ILE
4	s2	58	LEU
4	s2	60	SER
4	s2	66	PHE
4	s2	69	ILE
4	s2	70	ASP
4	s2	72	LEU
4	s2	80	VAL
4	s2	83	ILE
4	s2	86	VAL
4	s2	89	GLN

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Mol	Chain	Res	Type
4	s2	90	THR
4	s2	91	ARG
4	s2	95	ARG
4	s2	96	THR
4	s2	97	ARG
4	s2	107	SER
4	s2	111	VAL
4	s2	113	LEU
4	s2	117	THR
4	s2	119	LYS
4	s2	130	ILE
4	s2	131	ILE
4	s2	139	ILE
4	s2	140	ARG
4	s2	141	ARG
4	s2	146	THR
4	s2	147	ASN
4	s2	150	GLN
4	s2	152	HIS
4	s2	154	LEU
4	s2	164	SER
4	s2	166	THR
4	s2	167	VAL
4	s2	170	ILE
4	s2	174	ARG
4	s2	179	VAL
4	s2	181	SER
4	s2	187	LEU
4	s2	189	GLN
4	s2	195	ASP
4	s2	205	ARG
4	s2	216	VAL
4	s2	222	TYR
4	s2	224	PHE
4	s2	225	LEU
4	s2	229	LEU
4	s2	232	GLU
4	s2	233	GLN
4	s2	246	GLU
4	s2	250	GLN
5	s3	4	LEU
5	s3	14	ASP

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Mol	Chain	Res	Type
5	s3	21	LEU
5	s3	26	THR
5	s3	32	GLU
5	s3	34	TYR
5	s3	37	VAL
5	s3	40	ARG
5	s3	41	VAL
5	s3	44	THR
5	s3	54	ARG
5	s3	57	ASP
5	s3	59	LEU
5	s3	66	ILE
5	s3	67	ASN
5	s3	69	LEU
5	s3	70	THR
5	s3	72	LEU
5	s3	74	GLN
5	s3	76	ARG
5	s3	84	ILE
5	s3	90	ARG
5	s3	94	ARG
5	s3	97	SER
5	s3	103	GLU
5	s3	109	LEU
5	s3	115	ILE
5	s3	117	ARG
5	s3	128	GLU
5	s3	139	SER
5	s3	142	LEU
5	s3	143	ARG
5	s3	148	LYS
5	s3	152	PHE
5	s3	154	ASP
5	s3	158	ILE
5	s3	162	GLN
5	s3	167	PHE
5	s3	168	ILE
5	s3	174	HIS
5	s3	178	ARG
5	s3	181	VAL
5	s3	189	MET
5	s3	195	SER

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Mol	Chain	Res	Type
5	s3	196	ARG
5	s3	197	THR
5	s3	207	THR
5	s3	212	LYS
5	s3	213	GLU
5	s3	217	ILE
5	s3	223	LYS
6	s4	12	LEU
6	s4	20	LEU
6	s4	23	LEU
6	s4	32	SER
6	s4	38	LEU
6	s4	39	ARG
6	s4	42	LEU
6	s4	45	ILE
6	s4	49	ARG
6	s4	56	LEU
6	s4	57	ASN
6	s4	65	LEU
6	s4	77	ARG
6	s4	80	THR
6	s4	82	TYR
6	s4	88	ASP
6	s4	100	ARG
6	s4	108	ARG
6	s4	113	ARG
6	s4	115	THR
6	s4	116	ASP
6	s4	127	LYS
6	s4	130	GLN
6	s4	131	LEU
6	s4	133	LYS
6	s4	140	VAL
6	s4	143	ASP
6	s4	147	ILE
6	s4	151	ASP
6	s4	156	VAL
6	s4	160	VAL
6	s4	164	LEU
6	s4	169	ILE
6	s4	170	THR
6	s4	171	ASP

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Mol	Chain	Res	Type
6	s4	174	LYS
6	s4	180	LEU
6	s4	182	TYR
6	s4	187	ARG
6	s4	194	THR
6	s4	195	ILE
6	s4	202	ASP
6	s4	209	HIS
6	s4	214	LEU
6	s4	217	THR
6	s4	219	VAL
6	s4	220	THR
6	s4	221	ARG
6	s4	227	VAL
6	s4	230	GLU
6	s4	240	LYS
6	s4	244	ILE
6	s4	246	LEU
6	s4	248	ILE
6	s4	254	ARG
6	s4	259	GLN
7	s5	20	PHE
7	s5	21	THR
7	s5	25	LEU
7	s5	28	PRO
7	s5	31	GLU
7	s5	32	GLU
7	s5	38	THR
7	s5	39	GLU
7	s5	40	ILE
7	s5	41	LYS
7	s5	44	ASN
7	s5	45	LYS
7	s5	53	VAL
7	s5	57	SER
7	s5	59	VAL
7	s5	63	GLN
7	s5	64	VAL
7	s5	65	ARG
7	s5	68	ILE
7	s5	70	VAL
7	s5	73	THR

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Mol	Chain	Res	Type
7	s5	76	ARG
7	s5	79	ASN
7	s5	89	ILE
7	s5	92	ARG
7	s5	93	LEU
7	s5	96	SER
7	s5	99	MET
7	s5	112	ARG
7	s5	119	ASP
7	s5	127	GLN
7	s5	146	THR
7	s5	147	THR
7	s5	148	ARG
7	s5	156	ARG
7	s5	157	ARG
7	s5	162	VAL
7	s5	166	ARG
7	s5	170	GLN
7	s5	187	ILE
7	s5	190	ILE
7	s5	194	LEU
7	s5	203	LYS
7	s5	205	SER
7	s5	217	LEU
7	s5	219	ARG
7	s5	223	SER
7	s5	225	ARG
8	s6	1	MET
8	s6	5	ILE
8	s6	6	SER
8	s6	7	TYR
8	s6	10	ASN
8	s6	15	THR
8	s6	19	ASP
8	s6	22	HIS
8	s6	24	ILE
8	s6	29	ASP
8	s6	44	GLU
8	s6	49	VAL
8	s6	50	PHE
8	s6	57	ASP
8	s6	67	VAL

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Mol	Chain	Res	Type
8	s6	71	THR
8	s6	73	ILE
8	s6	76	LEU
8	s6	78	THR
8	s6	79	LYS
8	s6	81	VAL
8	s6	93	LYS
8	s6	108	VAL
8	s6	111	LEU
8	s6	119	GLN
8	s6	120	GLU
8	s6	121	LEU
8	s6	122	GLU
8	s6	126	ASP
8	s6	127	THR
8	s6	129	VAL
8	s6	133	LEU
8	s6	143	LYS
8	s6	150	GLU
8	s6	151	ASP
8	s6	153	VAL
8	s6	154	ARG
8	s6	156	PHE
8	s6	157	VAL
8	s6	158	ILE
8	s6	162	VAL
8	s6	168	THR
8	s6	171	LYS
8	s6	173	PRO
8	s6	175	ILE
8	s6	177	ARG
8	s6	182	GLN
8	s6	184	LEU
8	s6	185	GLN
8	s6	197	ASN
8	s6	210	GLN
8	s6	211	LEU
8	s6	215	ARG
8	s6	216	LEU
8	s6	217	SER
9	s7	7	LYS
9	s7	11	GLN

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Mol	Chain	Res	Type
9	s7	16	LEU
9	s7	25	VAL
9	s7	26	GLU
9	s7	35	LYS
9	s7	37	GLU
9	s7	38	LEU
9	s7	39	ARG
9	s7	48	GLU
9	s7	49	ILE
9	s7	50	ASP
9	s7	67	LEU
9	s7	77	LEU
9	s7	79	ARG
9	s7	80	GLU
9	s7	84	LYS
9	s7	87	ASP
9	s7	90	VAL
9	s7	97	ARG
9	s7	104	ARG
9	s7	105	THR
9	s7	107	ARG
9	s7	108	GLN
9	s7	109	VAL
9	s7	114	ARG
9	s7	116	ARG
9	s7	118	LEU
9	s7	119	THR
9	s7	123	ASP
9	s7	125	ILE
9	s7	126	LEU
9	s7	129	LEU
9	s7	135	ILE
9	s7	144	VAL
9	s7	149	ILE
9	s7	154	LEU
9	s7	157	LYS
9	s7	160	GLN
9	s7	161	GLN
9	s7	166	LEU
9	s7	167	GLU
9	s7	185	ILE
10	s8	3	ILE

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Mol	Chain	Res	Type
10	s8	4	SER
10	s8	6	ASP
10	s8	8	ARG
10	s8	9	HIS
10	s8	11	ARG
10	s8	17	LYS
10	s8	18	ARG
10	s8	29	LEU
10	s8	36	THR
10	s8	38	ILE
10	s8	41	LYS
10	s8	43	ILE
10	s8	45	SER
10	s8	46	VAL
10	s8	47	ARG
10	s8	48	THR
10	s8	56	ARG
10	s8	59	ARG
10	s8	61	GLU
10	s8	62	THR
10	s8	64	ASN
10	s8	66	SER
10	s8	72	ILE
10	s8	76	THR
10	s8	89	GLU
10	s8	92	ARG
10	s8	93	THR
10	s8	101	ILE
10	s8	111	GLN
10	s8	120	THR
10	s8	121	LEU
10	s8	136	SER
10	s8	151	LYS
10	s8	152	ILE
10	s8	153	GLU
10	s8	155	SER
10	s8	158	SER
10	s8	169	ILE
10	s8	184	LEU
10	s8	193	LEU
10	s8	195	ARG
10	s8	196	LEU

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Mol	Chain	Res	Type
10	s8	197	THR
11	s9	3	ARG
11	s9	7	THR
11	s9	9	SER
11	s9	11	THR
11	s9	16	LYS
11	s9	17	ARG
11	s9	20	GLU
11	s9	28	LEU
11	s9	30	LEU
11	s9	39	LYS
11	s9	40	LYS
11	s9	45	ILE
11	s9	46	SER
11	s9	49	LEU
11	s9	53	ARG
11	s9	59	LEU
11	s9	60	LEU
11	s9	61	THR
11	s9	78	ARG
11	s9	82	ARG
11	s9	83	VAL
11	s9	90	LYS
11	s9	93	LEU
11	s9	101	VAL
11	s9	105	LEU
11	s9	109	LEU
11	s9	110	GLN
11	s9	112	GLN
11	s9	115	LYS
11	s9	126	ARG
11	s9	127	VAL
11	s9	130	THR
11	s9	134	ILE
11	s9	140	ILE
11	s9	150	LEU
11	s9	154	LYS
11	s9	155	HIS
11	s9	162	SER
11	s9	168	ARG
11	s9	171	ARG
11	s9	172	VAL

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Mol	Chain	Res	Type
11	s9	180	LYS
12	c0	2	LEU
12	c0	3	MET
12	c0	5	LYS
12	c0	6	GLU
12	c0	8	ARG
12	c0	15	LEU
12	c0	20	VAL
12	c0	33	GLU
12	c0	36	ASP
12	c0	49	LEU
12	c0	51	SER
12	c0	55	VAL
12	c0	57	THR
12	c0	64	TYR
12	c0	67	THR
12	c0	70	GLU
12	c0	73	VAL
12	c0	74	GLU
12	c0	75	TYR
13	c1	5	LEU
13	c1	8	GLN
13	c1	9	SER
13	c1	16	GLN
13	c1	19	ILE
13	c1	21	ASN
13	c1	25	VAL
13	c1	26	LYS
13	c1	30	ARG
13	c1	40	LEU
13	c1	44	THR
13	c1	47	THR
13	c1	56	LYS
13	c1	60	PHE
13	c1	63	LEU
13	c1	67	ARG
13	c1	72	THR
13	c1	74	THR
13	c1	77	SER
13	c1	80	MET
13	c1	86	ILE
13	c1	87	ARG

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Mol	Chain	Res	Type
13	c1	91	LEU
13	c1	103	ARG
13	c1	105	LYS
13	c1	111	VAL
13	c1	117	VAL
13	c1	123	VAL
13	c1	124	THR
13	c1	136	ARG
13	c1	143	SER
14	c2	28	LEU
14	c2	30	VAL
14	c2	36	LEU
14	c2	41	LEU
14	c2	43	ARG
14	c2	58	LEU
14	c2	59	LEU
14	c2	61	VAL
14	c2	62	LEU
14	c2	66	VAL
14	c2	71	ILE
14	c2	74	LEU
14	c2	83	GLU
14	c2	85	LYS
14	c2	89	ILE
14	c2	97	LEU
14	c2	103	LEU
14	c2	116	VAL
14	c2	119	SER
14	c2	121	VAL
14	c2	125	ASN
14	c2	126	TRP
14	c2	132	GLU
14	c2	135	MET
14	c2	136	ILE
14	c2	140	PHE
15	c3	13	SER
15	c3	16	ILE
15	c3	20	ARG
15	c3	26	PHE
15	c3	28	LEU
15	c3	30	SER
15	c3	35	GLU

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Mol	Chain	Res	Type
15	c3	36	GLN
15	c3	37	ILE
15	c3	42	ARG
15	c3	50	ILE
15	c3	64	ARG
15	c3	66	ILE
15	c3	67	THR
15	c3	71	ILE
15	c3	72	MET
15	c3	80	LEU
15	c3	82	PRO
15	c3	84	ILE
15	c3	94	LYS
15	c3	98	VAL
15	c3	102	LEU
15	c3	104	ARG
15	c3	110	ASP
15	c3	114	ARG
15	c3	115	LEU
15	c3	125	LEU
15	c3	127	ARG
15	c3	131	THR
15	c3	134	VAL
15	c3	138	ASN
16	c4	10	ASN
16	c4	13	VAL
16	c4	14	PHE
16	c4	18	ARG
16	c4	20	TYR
16	c4	22	SER
16	c4	43	THR
16	c4	49	LYS
16	c4	52	ARG
16	c4	55	SER
16	c4	58	TYR
16	c4	66	ASP
16	c4	67	VAL
16	c4	81	VAL
16	c4	82	LYS
16	c4	83	ILE
16	c4	90	ARG
16	c4	91	THR

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Mol	Chain	Res	Type
16	c4	92	LYS
16	c4	93	THR
16	c4	102	LEU
16	c4	107	ARG
16	c4	114	ARG
16	c4	123	SER
16	c4	124	ASP
16	c4	125	SER
16	c4	127	ARG
16	c4	133	ARG
16	c4	136	ARG
16	c4	137	LEU
17	c5	15	HIS
17	c5	16	SER
17	c5	20	VAL
17	c5	22	LEU
17	c5	24	LYS
17	c5	27	GLU
17	c5	29	SER
17	c5	34	VAL
17	c5	36	LEU
17	c5	41	VAL
17	c5	43	ARG
17	c5	45	PHE
17	c5	49	MET
17	c5	52	LYS
17	c5	60	LEU
17	c5	61	ARG
17	c5	64	LYS
17	c5	65	LEU
17	c5	69	GLU
17	c5	72	LYS
17	c5	76	VAL
17	c5	86	VAL
17	c5	92	SER
17	c5	93	VAL
17	c5	94	VAL
17	c5	110	GLU
17	c5	120	SER
17	c5	121	ILE
17	c5	124	THR
17	c5	127	ARG

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Mol	Chain	Res	Type
18	c6	8	GLN
18	c6	15	SER
18	c6	17	THR
18	c6	23	LYS
18	c6	26	LYS
18	c6	32	ASN
18	c6	36	ILE
18	c6	43	ILE
18	c6	50	GLU
18	c6	53	LEU
18	c6	54	LEU
18	c6	55	VAL
18	c6	57	LEU
18	c6	61	SER
18	c6	63	ILE
18	c6	68	ARG
18	c6	69	VAL
18	c6	81	ILE
18	c6	101	SER
18	c6	103	ASN
18	c6	105	LEU
18	c6	111	SER
18	c6	113	ASP
18	c6	114	ARG
18	c6	115	THR
18	c6	117	LEU
18	c6	118	ILE
18	c6	123	ARG
18	c6	132	LYS
18	c6	137	ARG
18	c6	143	ARG
19	c7	3	ARG
19	c7	4	VAL
19	c7	5	ARG
19	c7	6	THR
19	c7	7	LYS
19	c7	14	LYS
19	c7	25	THR
19	c7	29	GLN
19	c7	30	THR
19	c7	34	LEU
19	c7	35	CYS

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
19	c7	36	ASP
19	c7	38	ILE
19	c7	44	LYS
19	c7	46	LEU
19	c7	49	LYS
19	c7	54	THR
19	c7	55	THR
19	c7	56	HIS
19	c7	69	ILE
19	c7	72	LYS
19	c7	73	LEU
19	c7	78	ARG
19	c7	83	GLN
19	c7	88	VAL
19	c7	104	ASN
19	c7	105	GLN
19	c7	106	THR
19	c7	108	ASP
19	c7	112	SER
19	c7	113	LEU
20	c8	3	LEU
20	c8	5	VAL
20	c8	13	HIS
20	c8	17	LEU
20	c8	19	ASN
20	c8	25	ASN
20	c8	29	VAL
20	c8	36	LYS
20	c8	38	VAL
20	c8	40	ARG
20	c8	41	ARG
20	c8	53	ASP
20	c8	57	ARG
20	c8	61	LEU
20	c8	63	GLN
20	c8	65	GLU
20	c8	67	GLU
20	c8	75	ASN
20	c8	86	LEU
20	c8	89	GLN
20	c8	90	ASN
20	c8	94	ASP

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Mol	Chain	Res	Type
20	c8	96	LYS
20	c8	100	THR
20	c8	109	LEU
20	c8	112	ASP
20	c8	116	LEU
20	c8	134	ARG
20	c8	136	GLN
20	c8	138	THR
20	c8	141	THR
20	c8	145	ARG
21	c9	4	VAL
21	c9	5	SER
21	c9	6	VAL
21	c9	16	ASN
21	c9	25	GLN
21	c9	27	LYS
21	c9	33	TYR
21	c9	36	ILE
21	c9	41	SER
21	c9	44	GLU
21	c9	51	GLU
21	c9	57	ARG
21	c9	68	ARG
21	c9	70	GLN
21	c9	84	LYS
21	c9	86	ARG
21	c9	89	ARG
21	c9	94	ILE
21	c9	110	LYS
21	c9	111	ILE
21	c9	116	ILE
21	c9	123	ARG
21	c9	126	GLU
21	c9	130	ARG
21	c9	132	LEU
21	c9	133	ASP
21	c9	140	LEU
21	c9	141	GLU
21	c9	142	GLU
21	c9	144	GLU
22	d0	13	GLU
22	d0	14	GLN

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Mol	Chain	Res	Type
22	d0	15	GLN
22	d0	20	ILE
22	d0	21	LYS
22	d0	22	ILE
22	d0	23	ARG
22	d0	24	ILE
22	d0	27	THR
22	d0	33	GLN
22	d0	34	LEU
22	d0	43	LYS
22	d0	44	ASN
22	d0	46	GLU
22	d0	48	HIS
22	d0	50	LEU
22	d0	53	LYS
22	d0	62	VAL
22	d0	66	SER
22	d0	67	THR
22	d0	69	LYS
22	d0	70	THR
22	d0	74	GLU
22	d0	77	LYS
22	d0	78	THR
22	d0	94	GLU
22	d0	99	ILE
22	d0	102	ARG
22	d0	103	ILE
22	d0	105	GLN
22	d0	107	THR
22	d0	108	ILE
22	d0	109	GLU
22	d0	115	GLU
22	d0	116	VAL
22	d0	120	SER
23	d1	3	ASN
23	d1	4	ASP
23	d1	5	LYS
23	d1	7	GLN
23	d1	8	LEU
23	d1	10	GLU
23	d1	12	TYR
23	d1	21	ASN

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Mol	Chain	Res	Type
23	d1	23	ILE
23	d1	25	LYS
23	d1	32	VAL
23	d1	38	LYS
23	d1	42	GLU
23	d1	44	ARG
23	d1	52	THR
23	d1	53	TYR
23	d1	56	SER
23	d1	61	SER
23	d1	62	ARG
23	d1	75	ASN
23	d1	78	LEU
23	d1	86	SER
24	d2	4	SER
24	d2	6	VAL
24	d2	7	LEU
24	d2	9	ASP
24	d2	12	ASN
24	d2	15	ASN
24	d2	23	ARG
24	d2	25	VAL
24	d2	31	SER
24	d2	33	VAL
24	d2	37	PHE
24	d2	42	GLN
24	d2	43	LYS
24	d2	56	HIS
24	d2	65	LEU
24	d2	76	SER
24	d2	98	GLN
24	d2	103	ILE
24	d2	110	ILE
24	d2	117	ARG
24	d2	126	LEU
24	d2	129	VAL
25	d3	7	ARG
25	d3	9	LEU
25	d3	14	LYS
25	d3	16	ARG
25	d3	19	ARG
25	d3	33	LEU

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Mol	Chain	Res	Type
25	d3	36	THR
25	d3	40	SER
25	d3	50	LYS
25	d3	52	ILE
25	d3	55	GLU
25	d3	64	PRO
25	d3	73	ARG
25	d3	76	LEU
25	d3	77	ILE
25	d3	78	LYS
25	d3	83	VAL
25	d3	84	THR
25	d3	92	CYS
25	d3	97	ASP
25	d3	107	PHE
25	d3	109	ARG
25	d3	117	ILE
25	d3	123	LYS
25	d3	126	LYS
25	d3	132	LEU
25	d3	133	LEU
25	d3	140	LYS
25	d3	144	ARG
25	d3	145	SER
26	d4	3	ASP
26	d4	7	ILE
26	d4	10	ARG
26	d4	12	VAL
26	d4	13	ILE
26	d4	28	LEU
26	d4	30	PRO
26	d4	32	ARG
26	d4	43	LYS
26	d4	44	LEU
26	d4	47	VAL
26	d4	49	LYS
26	d4	51	GLU
26	d4	55	VAL
26	d4	58	PHE
26	d4	62	THR
26	d4	63	GLN
26	d4	88	THR

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Mol	Chain	Res	Type
26	d4	91	LEU
26	d4	104	SER
26	d4	125	LEU
26	d4	128	LYS
26	d4	132	ARG
27	d5	42	LEU
27	d5	51	LEU
27	d5	58	ARG
27	d5	60	VAL
27	d5	62	VAL
27	d5	63	SER
27	d5	68	ARG
27	d5	71	ILE
27	d5	74	SER
27	d5	81	ARG
27	d5	85	LYS
27	d5	92	ILE
27	d5	102	THR
27	d5	105	THR
28	d6	4	LYS
28	d6	5	ARG
28	d6	7	SER
28	d6	10	ARG
28	d6	12	LYS
28	d6	15	ARG
28	d6	18	VAL
28	d6	22	ARG
28	d6	27	SER
28	d6	33	ASP
28	d6	34	LYS
28	d6	36	ILE
28	d6	39	MET
28	d6	41	ILE
28	d6	42	ARG
28	d6	44	ILE
28	d6	46	GLU
28	d6	50	VAL
28	d6	51	ARG
28	d6	53	LEU
28	d6	55	GLU
28	d6	57	SER
28	d6	64	LEU

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Mol	Chain	Res	Type
28	d6	67	THR
28	d6	73	TYR
28	d6	76	SER
28	d6	83	ILE
28	d6	85	ARG
28	d6	86	VAL
28	d6	88	SER
28	d6	90	GLU
28	d6	95	ARG
29	d7	2	VAL
29	d7	3	LEU
29	d7	5	GLN
29	d7	18	LYS
29	d7	24	LEU
29	d7	31	TYR
29	d7	34	ASP
29	d7	35	VAL
29	d7	37	CYS
29	d7	41	LEU
29	d7	43	ILE
29	d7	45	THR
29	d7	48	SER
29	d7	49	HIS
29	d7	58	SER
29	d7	67	THR
30	d8	14	LYS
30	d8	15	VAL
30	d8	18	ARG
30	d8	22	ARG
30	d8	26	THR
30	d8	32	PHE
30	d8	33	LEU
30	d8	36	THR
30	d8	38	ARG
30	d8	49	ARG
30	d8	52	ASP
30	d8	53	ILE
30	d8	54	LEU
30	d8	65	ARG
31	d9	4	GLU
31	d9	6	VAL
31	d9	7	TRP

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Mol	Chain	Res	Type
31	d9	8	PHE
31	d9	10	HIS
31	d9	14	TYR
31	d9	19	ARG
31	d9	20	GLN
31	d9	28	THR
31	d9	31	ILE
31	d9	42	CYS
31	d9	44	ARG
31	d9	50	ILE
31	d9	54	LYS
31	d9	56	ARG
80	e0	5	HIS
80	e0	7	SER
80	e0	8	LEU
80	e0	13	LYS
80	e0	15	LYS
80	e0	26	LYS
80	e0	44	PHE
80	e0	45	VAL
80	e0	50	VAL
80	e0	53	LYS
80	e0	56	MET
80	e0	62	VAL
81	e1	78	LYS
81	e1	79	LYS
81	e1	80	ARG
81	e1	84	VAL
81	e1	86	THR
81	e1	89	LYS
81	e1	90	LYS
81	e1	92	LYS
81	e1	96	LYS
81	e1	98	VAL
81	e1	100	LEU
81	e1	102	VAL
81	e1	106	TYR
81	e1	108	VAL
81	e1	109	ASP
81	e1	113	LYS
81	e1	118	ARG
81	e1	119	ARG

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Mol	Chain	Res	Type
81	e1	121	CYS
81	e1	135	HIS
81	e1	140	TYR
81	e1	144	CYS
81	e1	147	VAL
81	e1	149	LYS
81	e1	151	ASN
34	sR	5	GLU
34	sR	8	VAL
34	sR	17	ASN
34	sR	20	VAL
34	sR	23	LEU
34	sR	25	THR
34	sR	29	GLN
34	sR	43	ILE
34	sR	56	VAL
34	sR	58	VAL
34	sR	59	ARG
34	sR	60	SER
34	sR	69	GLN
34	sR	72	THR
34	sR	82	SER
34	sR	96	THR
34	sR	98	GLU
34	sR	102	ARG
34	sR	104	VAL
34	sR	106	HIS
34	sR	108	SER
34	sR	115	ILE
34	sR	116	ASP
34	sR	128	ASP
34	sR	136	ILE
34	sR	145	LEU
34	sR	154	VAL
34	sR	159	ASN
34	sR	160	GLU
34	sR	164	ASP
34	sR	166	SER
34	sR	167	VAL
34	sR	170	ILE
34	sR	178	VAL
34	sR	205	SER

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Mol	Chain	Res	Type
34	sR	228	LYS
34	sR	232	TYR
34	sR	233	THR
34	sR	258	THR
34	sR	269	TYR
34	sR	275	ARG
34	sR	283	LYS
34	sR	297	ASP
34	sR	299	GLN
34	sR	314	GLN
34	sR	315	VAL
34	sR	317	THR
35	sM	25	ILE
35	sM	27	LYS
35	sM	30	THR
35	sM	41	SER
35	sM	43	ASP
35	sM	49	LYS
35	sM	51	ARG
35	sM	61	ILE
35	sM	64	LYS
35	sM	68	ARG
35	sM	72	ARG
35	sM	74	LYS
35	sM	77	THR
35	sM	81	THR
35	sM	82	THR
39	l2	18	SER
39	l2	23	ARG
39	l2	29	LEU
39	l2	45	VAL
39	l2	46	LYS
39	l2	48	ILE
39	l2	52	SER
39	l2	62	VAL
39	l2	67	TYR
39	l2	73	GLU
39	l2	74	GLU
39	l2	79	ASN
39	l2	82	VAL
39	l2	96	LEU
39	l2	101	VAL

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Mol	Chain	Res	Type
39	12	104	LEU
39	12	106	SER
39	12	107	VAL
39	12	109	GLU
39	12	111	THR
39	12	114	SER
39	12	119	LYS
39	12	126	LEU
39	12	128	ARG
39	12	134	VAL
39	12	136	ILE
39	12	142	ASP
39	12	147	ARG
39	12	152	SER
39	12	158	ILE
39	12	159	SER
39	12	161	ASP
39	12	179	LEU
39	12	180	LEU
39	12	186	PHE
39	12	188	LYS
39	12	193	ARG
39	12	196	TRP
39	12	200	ARG
39	12	204	MET
39	12	205	ASN
39	12	207	VAL
39	12	210	PRO
39	12	217	GLN
39	12	219	ILE
39	12	224	THR
39	12	225	ILE
39	12	238	ILE
39	12	242	ARG
39	12	243	THR
39	12	246	LEU
39	12	247	ARG
39	12	249	SER
39	12	250	GLN
39	12	251	LYS
40	13	3	HIS
40	13	4	ARG

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Mol	Chain	Res	Type
40	l3	10	ARG
40	l3	17	LEU
40	l3	19	ARG
40	l3	20	LYS
40	l3	24	SER
40	l3	25	ILE
40	l3	30	LYS
40	l3	34	LYS
40	l3	37	ARG
40	l3	40	PRO
40	l3	41	VAL
40	l3	47	LEU
40	l3	55	THR
40	l3	56	ILE
40	l3	65	SER
40	l3	66	LYS
40	l3	70	ARG
40	l3	72	VAL
40	l3	81	THR
40	l3	83	PRO
40	l3	85	VAL
40	l3	86	VAL
40	l3	87	VAL
40	l3	101	SER
40	l3	103	THR
40	l3	109	HIS
40	l3	112	ASP
40	l3	114	VAL
40	l3	120	LYS
40	l3	123	TYR
40	l3	125	SER
40	l3	127	LYS
40	l3	134	SER
40	l3	140	ASP
40	l3	146	ARG
40	l3	148	LEU
40	l3	150	ARG
40	l3	157	VAL
40	l3	162	VAL
40	l3	167	ARG
40	l3	183	LEU
40	l3	184	ASN

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Mol	Chain	Res	Type
40	l3	188	ILE
40	l3	192	VAL
40	l3	201	LYS
40	l3	202	THR
40	l3	207	SER
40	l3	208	VAL
40	l3	210	GLU
40	l3	211	GLN
40	l3	213	GLU
40	l3	214	MET
40	l3	221	THR
40	l3	226	PHE
40	l3	229	VAL
40	l3	231	HIS
40	l3	232	ARG
40	l3	235	THR
40	l3	236	LYS
40	l3	246	LEU
40	l3	247	ARG
40	l3	248	LYS
40	l3	252	ILE
40	l3	263	SER
40	l3	264	VAL
40	l3	270	ARG
40	l3	274	SER
40	l3	276	THR
40	l3	278	ILE
40	l3	284	ARG
40	l3	296	THR
40	l3	308	MET
40	l3	316	GLU
40	l3	328	ILE
40	l3	332	ARG
40	l3	344	THR
40	l3	345	ASN
40	l3	353	GLU
40	l3	359	ILE
40	l3	361	THR
40	l3	364	LYS
40	l3	379	PHE
40	l3	382	THR
40	l3	387	LEU

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Mol	Chain	Res	Type
41	14	3	ARG
41	14	12	THR
41	14	16	THR
41	14	18	ASN
41	14	22	LEU
41	14	25	VAL
41	14	33	ASP
41	14	37	THR
41	14	48	GLN
41	14	50	TYR
41	14	53	SER
41	14	54	GLU
41	14	64	SER
41	14	65	TRP
41	14	69	ARG
41	14	73	ARG
41	14	82	THR
41	14	93	MET
41	14	94	CYS
41	14	105	THR
41	14	110	ASN
41	14	112	LYS
41	14	113	VAL
41	14	120	TYR
41	14	134	LEU
41	14	136	LEU
41	14	138	ARG
41	14	142	VAL
41	14	144	LYS
41	14	145	ILE
41	14	148	ILE
41	14	150	LEU
41	14	153	SER
41	14	154	THR
41	14	172	VAL
41	14	178	LEU
41	14	179	LEU
41	14	183	LYS
41	14	184	SER
41	14	186	LYS
41	14	187	LEU
41	14	191	LYS

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Mol	Chain	Res	Type
41	14	193	LYS
41	14	194	TYR
41	14	197	ARG
41	14	203	ARG
41	14	206	LEU
41	14	217	LYS
41	14	222	VAL
41	14	223	PRO
41	14	230	VAL
41	14	246	ARG
41	14	247	PHE
41	14	256	THR
41	14	258	LEU
41	14	276	LEU
41	14	278	SER
41	14	279	HIS
41	14	280	ILE
41	14	289	ILE
41	14	292	SER
41	14	297	SER
41	14	304	GLN
41	14	306	THR
41	14	307	GLN
41	14	312	VAL
41	14	313	LEU
41	14	318	LEU
41	14	323	VAL
41	14	327	LEU
41	14	328	ASN
41	14	333	VAL
41	14	337	GLU
41	14	338	LYS
41	14	342	LYS
41	14	345	GLU
41	14	351	PRO
41	14	354	VAL
41	14	357	GLU
41	14	359	LEU
42	15	4	GLN
42	15	8	LYS
42	15	9	SER
42	15	10	SER

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Mol	Chain	Res	Type
42	15	24	ARG
42	15	32	GLN
42	15	34	LYS
42	15	35	ARG
42	15	36	LEU
42	15	51	LEU
42	15	66	SER
42	15	69	ILE
42	15	70	THR
42	15	75	LEU
42	15	81	HIS
42	15	82	GLU
42	15	85	ARG
42	15	89	THR
42	15	92	LEU
42	15	110	LEU
42	15	112	LYS
42	15	115	LEU
42	15	116	ASP
42	15	118	THR
42	15	120	LYS
42	15	123	GLU
42	15	129	TYR
42	15	130	GLU
42	15	131	LEU
42	15	132	THR
42	15	133	GLU
42	15	136	GLU
42	15	140	ARG
42	15	144	VAL
42	15	146	LEU
42	15	152	ARG
42	15	154	THR
42	15	155	THR
42	15	158	ARG
42	15	167	SER
42	15	176	SER
42	15	185	PHE
42	15	187	THR
42	15	189	GLU
42	15	190	ILE
42	15	194	LEU

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Mol	Chain	Res	Type
42	15	211	LEU
42	15	214	ASP
42	15	218	ARG
42	15	220	SER
42	15	227	LEU
42	15	236	LEU
42	15	237	GLU
42	15	239	ILE
42	15	245	GLU
42	15	254	LYS
42	15	256	THR
42	15	258	LYS
42	15	262	LYS
42	15	263	GLU
42	15	268	GLU
42	15	269	SER
42	15	271	LYS
42	15	273	ARG
42	15	276	LYS
42	15	279	LYS
42	15	281	GLU
43	16	4	GLN
43	16	13	GLU
43	16	15	VAL
43	16	20	LYS
43	16	21	THR
43	16	28	GLN
43	16	31	ARG
43	16	36	PRO
43	16	42	LEU
43	16	50	LYS
43	16	51	ARG
43	16	52	VAL
43	16	59	GLU
43	16	65	ILE
43	16	71	VAL
43	16	88	SER
43	16	89	THR
43	16	90	LYS
43	16	93	VAL
43	16	98	VAL
43	16	104	GLU

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Mol	Chain	Res	Type
43	16	108	LYS
43	16	109	GLU
43	16	130	ILE
43	16	137	ASP
43	16	140	VAL
43	16	150	LYS
43	16	155	LEU
43	16	157	GLN
43	16	171	PRO
44	17	22	THR
44	17	24	GLU
44	17	25	GLN
44	17	26	VAL
44	17	39	GLU
44	17	40	LYS
44	17	52	GLN
44	17	60	ARG
44	17	67	ARG
44	17	83	LEU
44	17	89	ILE
44	17	90	LYS
44	17	93	ASN
44	17	97	PRO
44	17	98	LYS
44	17	123	THR
44	17	124	LEU
44	17	127	LEU
44	17	129	LEU
44	17	130	ILE
44	17	142	SER
44	17	147	LEU
44	17	148	VAL
44	17	156	ILE
44	17	157	ASN
44	17	158	LYS
44	17	164	SER
44	17	165	ASP
44	17	173	LEU
44	17	176	TYR
44	17	178	ILE
44	17	179	LEU
44	17	180	SER

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Mol	Chain	Res	Type
44	17	181	ILE
44	17	184	LEU
44	17	196	LYS
44	17	207	LEU
44	17	229	PHE
44	17	232	ARG
44	17	234	GLU
44	17	239	LEU
45	18	26	LEU
45	18	38	GLN
45	18	50	VAL
45	18	64	ILE
45	18	67	ILE
45	18	71	VAL
45	18	74	THR
45	18	77	GLN
45	18	79	GLN
45	18	81	THR
45	18	83	ASP
45	18	85	ASN
45	18	89	GLU
45	18	90	THR
45	18	95	ASN
45	18	96	LYS
45	18	109	LEU
45	18	128	LYS
45	18	132	VAL
45	18	136	LEU
45	18	146	LYS
45	18	150	LEU
45	18	151	VAL
45	18	155	ASN
45	18	156	ASP
45	18	160	ILE
45	18	165	PHE
45	18	169	LEU
45	18	183	LYS
45	18	185	ARG
45	18	194	THR
45	18	197	VAL
45	18	200	LEU
45	18	211	LEU

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Mol	Chain	Res	Type
45	18	217	THR
45	18	224	ASP
45	18	228	GLU
45	18	230	LYS
45	18	232	HIS
45	18	240	ASN
45	18	241	LYS
45	18	245	LYS
45	18	248	LYS
46	19	5	GLN
46	19	6	THR
46	19	9	GLN
46	19	17	THR
46	19	18	VAL
46	19	31	ARG
46	19	33	THR
46	19	37	ASN
46	19	49	ASN
46	19	52	LEU
46	19	55	VAL
46	19	63	LYS
46	19	68	LEU
46	19	69	ARG
46	19	70	THR
46	19	71	VAL
46	19	72	LYS
46	19	73	SER
46	19	79	ILE
46	19	80	THR
46	19	84	LYS
46	19	90	MET
46	19	96	HIS
46	19	107	ASP
46	19	112	ILE
46	19	113	GLU
46	19	115	ARG
46	19	123	ILE
46	19	124	ARG
46	19	125	ASN
46	19	129	ARG
46	19	133	THR
46	19	144	ILE

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Mol	Chain	Res	Type
46	l9	146	LEU
46	l9	147	SER
46	l9	151	VAL
46	l9	152	GLU
46	l9	157	ASN
46	l9	161	LEU
46	l9	162	GLN
46	l9	163	GLN
46	l9	164	ILE
46	l9	168	ARG
46	l9	172	ILE
46	l9	174	LYS
46	l9	177	ASP
46	l9	182	SER
46	l9	183	HIS
46	l9	186	PHE
46	l9	187	ILE
46	l9	188	THR
46	l9	191	LEU
47	m0	4	ARG
47	m0	13	LYS
47	m0	22	TYR
47	m0	24	ARG
47	m0	36	LEU
47	m0	39	LYS
47	m0	42	THR
47	m0	46	PHE
47	m0	48	LEU
47	m0	52	LEU
47	m0	57	LEU
47	m0	58	GLU
47	m0	63	GLU
47	m0	71	CYS
47	m0	73	ASN
47	m0	74	LYS
47	m0	83	ASP
47	m0	87	LEU
47	m0	99	ILE
47	m0	103	LEU
47	m0	116	ARG
47	m0	125	LEU
47	m0	130	ASP

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Mol	Chain	Res	Type
47	m0	133	GLN
47	m0	141	LYS
47	m0	142	ASP
47	m0	144	ASN
47	m0	145	LYS
47	m0	152	LEU
47	m0	154	ARG
47	m0	156	ARG
47	m0	163	GLN
47	m0	165	ILE
47	m0	166	ILE
47	m0	167	LEU
47	m0	169	LYS
47	m0	176	LEU
47	m0	180	GLU
47	m0	183	LYS
47	m0	185	ARG
47	m0	192	ASP
47	m0	201	SER
47	m0	203	LYS
47	m0	206	LEU
47	m0	209	ASN
47	m0	210	ILE
47	m0	211	ARG
47	m0	217	PHE
48	m1	6	GLN
48	m1	9	MET
48	m1	10	ARG
48	m1	11	ASP
48	m1	12	LEU
48	m1	13	LYS
48	m1	16	LYS
48	m1	20	ASN
48	m1	25	GLU
48	m1	26	SER
48	m1	28	ASP
48	m1	30	LEU
48	m1	31	THR
48	m1	35	LYS
48	m1	44	THR
48	m1	46	VAL
48	m1	51	ARG

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Mol	Chain	Res	Type
48	m1	56	THR
48	m1	60	ARG
48	m1	62	ASN
48	m1	72	ARG
48	m1	79	ILE
48	m1	82	ARG
48	m1	85	LYS
48	m1	88	GLU
48	m1	92	ARG
48	m1	93	ASP
48	m1	94	ARG
48	m1	95	ASN
48	m1	99	THR
48	m1	101	ASN
48	m1	106	ILE
48	m1	107	ASP
48	m1	112	LEU
48	m1	115	LYS
48	m1	119	SER
48	m1	128	TYR
48	m1	129	VAL
48	m1	130	VAL
48	m1	133	ARG
48	m1	137	ARG
48	m1	138	VAL
48	m1	140	ARG
48	m1	142	LYS
48	m1	147	THR
48	m1	148	VAL
48	m1	151	SER
48	m1	152	HIS
48	m1	153	LYS
48	m1	155	THR
48	m1	156	LYS
48	m1	158	ASP
48	m1	159	THR
48	m1	165	GLN
48	m1	166	LYS
48	m1	174	LYS
49	m3	10	LEU
49	m3	11	LYS
49	m3	12	ASN

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Mol	Chain	Res	Type
49	m3	13	HIS
49	m3	15	ARG
49	m3	16	LYS
49	m3	23	LYS
49	m3	24	VAL
49	m3	41	THR
49	m3	45	LYS
49	m3	46	ILE
49	m3	52	ASP
49	m3	54	LEU
49	m3	57	VAL
49	m3	58	VAL
49	m3	59	ARG
49	m3	63	VAL
49	m3	67	ARG
49	m3	68	LYS
49	m3	69	VAL
49	m3	73	ARG
49	m3	76	THR
49	m3	80	VAL
49	m3	93	ILE
49	m3	95	ILE
49	m3	97	VAL
49	m3	100	ARG
49	m3	102	GLN
49	m3	113	VAL
49	m3	114	GLN
49	m3	115	ARG
49	m3	116	LEU
49	m3	123	ILE
49	m3	124	ILE
49	m3	125	VAL
49	m3	129	ASN
49	m3	138	VAL
49	m3	144	THR
49	m3	145	PHE
49	m3	149	GLN
49	m3	150	PRO
49	m3	153	ASP
49	m3	164	GLU
49	m3	168	ARG
49	m3	171	ARG

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Mol	Chain	Res	Type
49	m3	174	ARG
49	m3	177	LYS
49	m3	180	ARG
49	m3	184	GLU
49	m3	188	ARG
49	m3	189	GLU
49	m3	194	GLU
50	m4	3	THR
50	m4	5	SER
50	m4	6	ILE
50	m4	8	LYS
50	m4	15	VAL
50	m4	27	GLN
50	m4	32	LEU
50	m4	35	ILE
50	m4	44	VAL
50	m4	45	LEU
50	m4	53	VAL
50	m4	55	ARG
50	m4	60	LEU
50	m4	62	GLN
50	m4	64	VAL
50	m4	67	PRO
50	m4	68	LEU
50	m4	77	ARG
50	m4	80	THR
50	m4	82	SER
50	m4	103	ILE
50	m4	107	GLU
50	m4	108	ARG
50	m4	121	MET
50	m4	126	GLN
50	m4	127	LYS
50	m4	135	LEU
51	m5	5	LYS
51	m5	7	LEU
51	m5	10	LEU
51	m5	12	ARG
51	m5	18	VAL
51	m5	24	ARG
51	m5	31	ARG
51	m5	33	LYS

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Mol	Chain	Res	Type
51	m5	41	ARG
51	m5	43	THR
51	m5	53	TYR
51	m5	54	LYS
51	m5	57	GLN
51	m5	63	ARG
51	m5	71	ARG
51	m5	72	LYS
51	m5	80	THR
51	m5	83	LYS
51	m5	92	LEU
51	m5	96	ARG
51	m5	97	SER
51	m5	98	LEU
51	m5	105	ARG
51	m5	117	ASN
51	m5	121	VAL
51	m5	126	THR
51	m5	128	LYS
51	m5	129	TYR
51	m5	138	GLN
51	m5	152	CYS
51	m5	153	ASP
51	m5	156	HIS
51	m5	159	ARG
51	m5	160	GLU
51	m5	165	THR
51	m5	172	ARG
51	m5	175	ASN
51	m5	178	HIS
51	m5	180	PHE
51	m5	182	ASN
51	m5	184	LYS
51	m5	198	SER
51	m5	201	ARG
52	m6	3	VAL
52	m6	4	GLU
52	m6	7	VAL
52	m6	8	VAL
52	m6	12	LYS
52	m6	15	LEU
52	m6	28	LEU

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Mol	Chain	Res	Type
52	m6	41	LEU
52	m6	43	ILE
52	m6	46	GLU
52	m6	49	ARG
52	m6	52	LEU
52	m6	58	LEU
52	m6	66	LYS
52	m6	67	THR
52	m6	74	ARG
52	m6	77	SER
52	m6	78	ARG
52	m6	82	LYS
52	m6	85	ARG
52	m6	88	VAL
52	m6	91	LYS
52	m6	92	THR
52	m6	102	LEU
52	m6	106	GLU
52	m6	108	ILE
52	m6	116	LYS
52	m6	117	ARG
52	m6	124	LEU
52	m6	126	VAL
52	m6	128	ARG
52	m6	130	LYS
52	m6	140	LYS
52	m6	143	THR
52	m6	144	SER
52	m6	152	VAL
52	m6	170	LYS
52	m6	177	LYS
52	m6	180	SER
52	m6	182	ASN
52	m6	192	LYS
53	m7	3	ARG
53	m7	7	THR
53	m7	9	THR
53	m7	18	ARG
53	m7	21	TYR
53	m7	25	SER
53	m7	32	THR
53	m7	36	ILE

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Mol	Chain	Res	Type
53	m7	46	LYS
53	m7	48	LEU
53	m7	49	GLU
53	m7	51	VAL
53	m7	56	ARG
53	m7	66	SER
53	m7	69	ARG
53	m7	70	THR
53	m7	78	VAL
53	m7	79	THR
53	m7	87	SER
53	m7	89	LYS
53	m7	94	LEU
53	m7	96	GLN
53	m7	103	GLU
53	m7	107	LEU
53	m7	112	LEU
53	m7	113	TYR
53	m7	114	VAL
53	m7	115	SER
53	m7	116	HIS
53	m7	119	VAL
53	m7	120	ASN
53	m7	121	GLN
53	m7	125	GLN
53	m7	126	ARG
53	m7	127	ARG
53	m7	137	ASN
53	m7	138	LYS
53	m7	142	SER
53	m7	147	GLU
53	m7	148	LEU
53	m7	153	LYS
53	m7	155	GLU
54	m8	3	ILE
54	m8	8	LYS
54	m8	12	ARG
54	m8	17	THR
54	m8	22	ASP
54	m8	24	VAL
54	m8	26	LEU
54	m8	28	LEU

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Mol	Chain	Res	Type
54	m8	32	LEU
54	m8	34	THR
54	m8	44	PHE
54	m8	47	VAL
54	m8	49	LEU
54	m8	56	LYS
54	m8	57	ILE
54	m8	62	VAL
54	m8	63	SER
54	m8	64	VAL
54	m8	65	SER
54	m8	69	ARG
54	m8	80	THR
54	m8	82	VAL
54	m8	86	THR
54	m8	93	ILE
54	m8	98	LYS
54	m8	99	THR
54	m8	107	THR
54	m8	114	ILE
54	m8	129	VAL
54	m8	135	GLN
54	m8	138	LEU
54	m8	139	ILE
54	m8	144	ARG
54	m8	150	VAL
54	m8	155	MET
54	m8	165	ILE
54	m8	167	SER
54	m8	168	THR
54	m8	170	ARG
54	m8	171	LYS
54	m8	174	ARG
54	m8	178	ARG
54	m8	179	ARG
54	m8	180	ARG
54	m8	185	LYS
54	m8	186	VAL
55	m9	5	ARG
55	m9	7	GLN
55	m9	9	ARG
55	m9	10	LEU

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
55	m9	13	SER
55	m9	17	VAL
55	m9	20	ARG
55	m9	31	GLU
55	m9	32	ILE
55	m9	36	ASN
55	m9	41	ILE
55	m9	43	LYS
55	m9	56	THR
55	m9	57	VAL
55	m9	61	SER
55	m9	62	ARG
55	m9	70	LYS
55	m9	71	ARG
55	m9	74	ARG
55	m9	82	LYS
55	m9	88	ARG
55	m9	91	SER
55	m9	99	LEU
55	m9	102	LEU
55	m9	106	LEU
55	m9	108	LYS
55	m9	119	LEU
55	m9	121	HIS
55	m9	127	SER
55	m9	128	LYS
55	m9	134	HIS
55	m9	139	VAL
55	m9	151	ARG
55	m9	153	LYS
55	m9	164	LEU
55	m9	167	ARG
55	m9	171	ASP
55	m9	173	ARG
55	m9	182	ASP
55	m9	186	LYS
56	n0	1	MET
56	n0	3	HIS
56	n0	12	ARG
56	n0	16	THR
56	n0	21	GLU
56	n0	23	LYS

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Mol	Chain	Res	Type
56	n0	34	GLU
56	n0	45	LEU
56	n0	59	VAL
56	n0	61	ILE
56	n0	62	ASN
56	n0	70	THR
56	n0	80	ARG
56	n0	82	ASP
56	n0	87	THR
56	n0	88	HIS
56	n0	89	ASN
56	n0	90	MET
56	n0	92	LYS
56	n0	96	ASP
56	n0	98	SER
56	n0	105	THR
56	n0	107	TYR
56	n0	113	ARG
56	n0	117	ARG
56	n0	129	ILE
56	n0	130	GLU
56	n0	132	THR
56	n0	136	LYS
56	n0	137	ARG
56	n0	141	LYS
56	n0	145	THR
56	n0	148	LEU
56	n0	149	LYS
56	n0	155	ARG
56	n0	156	VAL
56	n0	158	LYS
56	n0	160	THR
56	n0	162	THR
56	n0	164	SER
56	n0	171	PHE
56	n0	172	TYR
57	n1	4	SER
57	n1	9	SER
57	n1	14	MET
57	n1	17	ARG
57	n1	19	PHE
57	n1	27	LEU

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Mol	Chain	Res	Type
57	n1	31	LEU
57	n1	33	VAL
57	n1	35	LYS
57	n1	36	VAL
57	n1	38	ASP
57	n1	48	ILE
57	n1	55	LYS
57	n1	64	VAL
57	n1	69	LYS
57	n1	75	ILE
57	n1	76	ILE
57	n1	83	ARG
57	n1	85	LEU
57	n1	87	LYS
57	n1	96	ILE
57	n1	97	LYS
57	n1	104	GLU
57	n1	106	LEU
57	n1	118	GLU
57	n1	122	GLN
57	n1	126	VAL
57	n1	127	GLN
57	n1	128	LEU
57	n1	132	PRO
57	n1	135	PRO
57	n1	136	ARG
57	n1	139	ARG
57	n1	143	THR
57	n1	154	VAL
57	n1	158	THR
58	n2	15	PHE
58	n2	19	VAL
58	n2	27	VAL
58	n2	28	PHE
58	n2	38	ILE
58	n2	47	VAL
58	n2	50	LEU
58	n2	55	THR
58	n2	58	GLU
58	n2	65	VAL
58	n2	72	SER
58	n2	74	LYS

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Mol	Chain	Res	Type
58	n2	75	TYR
58	n2	91	ASP
58	n2	93	ILE
58	n2	100	THR
58	n2	104	ARG
59	n3	13	ILE
59	n3	19	VAL
59	n3	22	ILE
59	n3	23	MET
59	n3	35	TYR
59	n3	37	ILE
59	n3	42	SER
59	n3	45	ARG
59	n3	46	LEU
59	n3	48	ARG
59	n3	61	THR
59	n3	67	PRO
59	n3	70	ARG
59	n3	72	LYS
59	n3	74	MET
59	n3	78	VAL
59	n3	83	LYS
59	n3	84	SER
59	n3	88	ARG
59	n3	91	VAL
59	n3	92	PHE
59	n3	102	ILE
59	n3	108	GLU
59	n3	115	THR
59	n3	124	ASP
59	n3	128	ARG
60	n4	1	MET
60	n4	3	VAL
60	n4	5	ILE
60	n4	17	ARG
60	n4	19	THR
60	n4	20	LEU
60	n4	39	LEU
60	n4	43	ARG
60	n4	46	PRO
60	n4	49	ILE
60	n4	52	THR

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Mol	Chain	Res	Type
60	n4	54	LEU
60	n4	57	LYS
60	n4	59	HIS
60	n4	61	LYS
60	n4	82	ILE
60	n4	87	LEU
60	n4	89	LEU
60	n4	93	ARG
60	n4	99	GLU
60	n4	100	VAL
60	n4	102	LYS
60	n4	107	GLU
60	n4	109	LEU
60	n4	112	ASN
60	n4	116	LYS
60	n4	123	ARG
60	n4	127	LYS
60	n4	129	LYS
60	n4	133	THR
60	n4	135	SER
61	n5	24	LEU
61	n5	25	LYS
61	n5	27	ARG
61	n5	28	THR
61	n5	31	THR
61	n5	34	LEU
61	n5	39	LYS
61	n5	40	LEU
61	n5	44	PRO
61	n5	45	LYS
61	n5	48	SER
61	n5	53	HIS
61	n5	56	ARG
61	n5	58	ASP
61	n5	59	SER
61	n5	63	ILE
61	n5	67	ILE
61	n5	73	MET
61	n5	81	ILE
61	n5	86	VAL
61	n5	95	ILE
61	n5	102	LEU

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Mol	Chain	Res	Type
61	n5	105	VAL
61	n5	106	ASP
61	n5	108	LEU
61	n5	113	LEU
61	n5	114	VAL
61	n5	115	ARG
61	n5	119	THR
61	n5	125	ARG
61	n5	126	LEU
61	n5	127	THR
61	n5	135	ILE
61	n5	138	ARG
62	n6	3	LYS
62	n6	5	SER
62	n6	8	VAL
62	n6	10	SER
62	n6	12	ARG
62	n6	13	ARG
62	n6	14	LYS
62	n6	17	LYS
62	n6	25	SER
62	n6	28	ARG
62	n6	32	SER
62	n6	37	LYS
62	n6	40	ARG
62	n6	48	LEU
62	n6	50	ILE
62	n6	51	ARG
62	n6	52	ARG
62	n6	55	GLU
62	n6	62	SER
62	n6	66	GLN
62	n6	70	ILE
62	n6	73	VAL
62	n6	74	TYR
62	n6	90	VAL
62	n6	94	SER
62	n6	95	VAL
62	n6	98	ASN
62	n6	102	SER
62	n6	105	VAL
62	n6	111	LEU

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Mol	Chain	Res	Type
62	n6	115	ARG
62	n6	120	GLN
62	n6	122	LYS
62	n6	127	GLU
63	n7	3	LYS
63	n7	14	VAL
63	n7	15	ARG
63	n7	17	ARG
63	n7	24	VAL
63	n7	25	ILE
63	n7	26	VAL
63	n7	30	ASP
63	n7	34	LYS
63	n7	46	ILE
63	n7	47	GLU
63	n7	52	LYS
63	n7	64	LYS
63	n7	66	THR
63	n7	72	ILE
63	n7	73	LYS
63	n7	74	VAL
63	n7	81	LEU
63	n7	94	SER
63	n7	102	GLU
63	n7	132	SER
63	n7	134	LEU
64	n8	4	ARG
64	n8	6	THR
64	n8	7	LYS
64	n8	8	THR
64	n8	10	LYS
64	n8	14	HIS
64	n8	22	ILE
64	n8	32	ARG
64	n8	34	MET
64	n8	42	ARG
64	n8	44	ASN
64	n8	46	ASP
64	n8	58	MET
64	n8	60	TYR
64	n8	65	GLN
64	n8	73	LEU

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Mol	Chain	Res	Type
64	n8	77	LYS
64	n8	78	LEU
64	n8	80	THR
64	n8	82	ILE
64	n8	91	LEU
64	n8	95	SER
64	n8	97	GLU
64	n8	101	VAL
64	n8	102	ILE
64	n8	117	ARG
64	n8	118	ILE
64	n8	120	ASN
64	n8	123	VAL
64	n8	124	ILE
64	n8	128	ARG
64	n8	133	LEU
64	n8	146	GLU
65	n9	3	LYS
65	n9	6	ASN
65	n9	10	HIS
65	n9	13	THR
65	n9	14	ARG
65	n9	15	LYS
65	n9	17	HIS
65	n9	18	ARG
65	n9	19	ASN
65	n9	21	ILE
65	n9	23	LYS
65	n9	28	LYS
65	n9	29	TYR
65	n9	33	LYS
65	n9	35	VAL
65	n9	37	PRO
65	n9	38	LYS
65	n9	40	ARG
65	n9	42	ASN
65	n9	48	HIS
65	n9	52	LYS
65	n9	58	LYS
65	n9	59	LYS
66	o0	7	GLN
66	o0	8	GLU

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Mol	Chain	Res	Type
66	o0	12	GLN
66	o0	14	LEU
66	o0	18	ILE
66	o0	19	LYS
66	o0	20	SER
66	o0	25	LEU
66	o0	29	SER
66	o0	33	SER
66	o0	34	LEU
66	o0	35	ARG
66	o0	40	LYS
66	o0	41	LEU
66	o0	44	ILE
66	o0	48	THR
66	o0	52	ARG
66	o0	54	SER
66	o0	55	GLU
66	o0	56	LEU
66	o0	58	TYR
66	o0	61	MET
66	o0	65	THR
66	o0	86	ARG
66	o0	91	SER
66	o0	92	ILE
66	o0	94	GLU
66	o0	99	ASP
66	o0	101	LEU
66	o0	102	THR
67	o1	16	LEU
67	o1	17	HIS
67	o1	24	SER
67	o1	26	LYS
67	o1	28	ARG
67	o1	31	ARG
67	o1	43	HIS
67	o1	44	MET
67	o1	50	ARG
67	o1	53	PRO
67	o1	55	LEU
67	o1	64	VAL
67	o1	74	ARG
67	o1	76	SER

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Mol	Chain	Res	Type
67	o1	79	ARG
67	o1	81	GLU
67	o1	83	GLU
67	o1	84	ASP
67	o1	90	PHE
67	o1	91	SER
67	o1	94	GLU
67	o1	96	VAL
67	o1	100	SER
67	o1	102	LYS
67	o1	104	LEU
67	o1	106	THR
67	o1	110	GLU
68	o2	4	LEU
68	o2	9	ILE
68	o2	10	VAL
68	o2	11	LYS
68	o2	19	ARG
68	o2	21	HIS
68	o2	24	ARG
68	o2	27	ARG
68	o2	28	VAL
68	o2	30	GLU
68	o2	33	ARG
68	o2	34	LYS
68	o2	40	SER
68	o2	41	VAL
68	o2	44	ARG
68	o2	49	ASN
68	o2	50	ILE
68	o2	51	SER
68	o2	54	LYS
68	o2	61	LYS
68	o2	73	THR
68	o2	75	LEU
68	o2	82	LEU
68	o2	84	THR
68	o2	86	THR
68	o2	87	MET
68	o2	88	HIS
68	o2	91	THR
68	o2	108	ILE

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Mol	Chain	Res	Type
68	o2	126	LEU
68	o2	128	LEU
69	o3	4	SER
69	o3	6	ARG
69	o3	9	VAL
69	o3	14	LEU
69	o3	15	SER
69	o3	19	SER
69	o3	22	VAL
69	o3	31	LYS
69	o3	37	THR
69	o3	42	GLN
69	o3	48	ARG
69	o3	49	ILE
69	o3	53	TYR
69	o3	57	LYS
69	o3	58	GLU
69	o3	60	ARG
69	o3	62	SER
69	o3	63	LYS
69	o3	66	VAL
69	o3	70	LYS
69	o3	72	THR
69	o3	78	SER
69	o3	84	THR
69	o3	86	ARG
69	o3	97	SER
69	o3	98	VAL
69	o3	105	SER
69	o3	107	ILE
70	o4	3	GLN
70	o4	9	ARG
70	o4	11	ASN
70	o4	20	ILE
70	o4	29	ILE
70	o4	30	LEU
70	o4	33	GLN
70	o4	36	LYS
70	o4	37	LYS
70	o4	38	LEU
70	o4	46	ASP
70	o4	57	LEU

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Mol	Chain	Res	Type
70	o4	58	ARG
70	o4	64	THR
70	o4	66	SER
70	o4	68	THR
70	o4	73	SER
70	o4	79	SER
70	o4	80	ARG
70	o4	81	CYS
70	o4	84	CYS
70	o4	86	LYS
70	o4	87	GLU
70	o4	109	THR
70	o4	110	GLU
71	o5	10	ARG
71	o5	15	GLU
71	o5	19	SER
71	o5	20	GLN
71	o5	21	LEU
71	o5	27	GLU
71	o5	31	LEU
71	o5	35	LYS
71	o5	36	LEU
71	o5	37	SER
71	o5	42	PRO
71	o5	45	LYS
71	o5	46	THR
71	o5	47	VAL
71	o5	62	GLN
71	o5	79	ASP
71	o5	81	ARG
71	o5	84	LYS
71	o5	89	ARG
71	o5	94	LYS
71	o5	96	GLU
71	o5	100	VAL
71	o5	101	THR
71	o5	107	LYS
71	o5	115	LYS
71	o5	119	LYS
72	o6	3	VAL
72	o6	9	ILE
72	o6	18	THR

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Mol	Chain	Res	Type
72	o6	21	THR
72	o6	34	SER
72	o6	36	ARG
72	o6	42	SER
72	o6	43	LEU
72	o6	45	ARG
72	o6	47	ILE
72	o6	55	ARG
72	o6	57	LEU
72	o6	58	ILE
72	o6	59	ASP
72	o6	62	ARG
72	o6	68	ARG
72	o6	71	LYS
72	o6	74	LYS
72	o6	76	ARG
72	o6	81	THR
72	o6	90	MET
72	o6	93	ILE
72	o6	94	ILE
72	o6	98	ARG
72	o6	100	HIS
73	o7	3	LYS
73	o7	5	THR
73	o7	12	HIS
73	o7	13	ASN
73	o7	16	HIS
73	o7	17	THR
73	o7	19	CYS
73	o7	25	ARG
73	o7	31	LYS
73	o7	36	SER
73	o7	45	ARG
73	o7	56	ARG
73	o7	58	THR
73	o7	64	MET
73	o7	65	ARG
73	o7	66	TYR
73	o7	67	LEU
73	o7	72	ARG
73	o7	74	PHE
73	o7	75	LYS

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Mol	Chain	Res	Type
73	o7	80	THR
73	o7	87	SER
74	o8	6	THR
74	o8	14	LEU
74	o8	17	ARG
74	o8	19	ASP
74	o8	24	THR
74	o8	32	ASN
74	o8	33	LYS
74	o8	38	PHE
74	o8	53	THR
74	o8	61	LYS
74	o8	64	LYS
74	o8	65	LEU
74	o8	73	LEU
74	o8	77	ARG
74	o8	78	LEU
75	o9	4	GLN
75	o9	5	LYS
75	o9	6	SER
75	o9	9	ILE
75	o9	12	LYS
75	o9	19	GLN
75	o9	21	ARG
75	o9	23	LEU
75	o9	27	ILE
75	o9	34	THR
75	o9	36	ARG
76	q0	81	SER
76	q0	83	LYS
76	q0	89	TYR
76	q0	92	ASP
76	q0	99	CYS
76	q0	109	ASN
76	q0	110	CYS
76	q0	112	LYS
76	q0	113	ARG
76	q0	114	LYS
76	q0	120	GLN
76	q0	122	ARG
76	q0	126	LYS
76	q0	128	LYS

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Mol	Chain	Res	Type
77	q1	2	ARG
77	q1	6	ARG
77	q1	9	ARG
77	q1	13	LEU
77	q1	14	LYS
77	q1	16	LYS
77	q1	19	LYS
77	q1	21	ARG
77	q1	25	LYS
78	q2	2	VAL
78	q2	7	THR
78	q2	8	ARG
78	q2	10	THR
78	q2	17	CYS
78	q2	19	LYS
78	q2	20	HIS
78	q2	26	THR
78	q2	28	TYR
78	q2	34	SER
78	q2	38	GLN
78	q2	47	GLN
78	q2	54	THR
78	q2	55	LYS
78	q2	61	LYS
78	q2	63	LYS
78	q2	71	ARG
78	q2	72	LEU
78	q2	74	CYS
78	q2	76	LYS
78	q2	78	LYS
78	q2	80	ARG
78	q2	84	THR
78	q2	85	LEU
78	q2	87	ARG
78	q2	93	LEU
78	q2	96	GLU
78	q2	98	LYS
78	q2	99	GLN
78	q2	100	LYS
78	q2	104	LEU
78	q2	105	GLN
79	q3	3	LYS

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Mol	Chain	Res	Type
79	q3	4	ARG
79	q3	6	LYS
79	q3	8	VAL
79	q3	16	VAL
79	q3	17	ARG
79	q3	18	TYR
79	q3	20	SER
79	q3	31	ILE
79	q3	40	SER
79	q3	42	CYS
79	q3	44	LYS
79	q3	46	THR
79	q3	49	ARG
79	q3	58	SER
79	q3	59	CYS
79	q3	60	CYS
79	q3	70	THR
79	q3	71	VAL
79	q3	78	THR
79	q3	81	SER
79	q3	82	THR
83	p0	4	ILE
83	p0	5	ARG
83	p0	7	LYS
83	p0	15	LEU
83	p0	19	LEU
83	p0	24	SER
83	p0	25	LEU
83	p0	28	VAL
83	p0	42	ARG
83	p0	43	LYS
83	p0	48	ARG
83	p0	57	THR
83	p0	63	ILE
83	p0	67	LEU
83	p0	69	ASP
83	p0	70	LEU
83	p0	72	ASP
83	p0	74	GLU
83	p0	76	LEU
83	p0	84	VAL
83	p0	93	LEU

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Mol	Chain	Res	Type
83	p0	101	VAL
83	p0	186	THR
83	p0	192	ASP
83	p0	193	ASN
83	p0	196	VAL

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (122) such sidechains are listed below:

Mol	Chain	Res	Type
2	S0	32	HIS
3	S1	177	GLN
4	S2	228	ASN
5	S3	62	ASN
6	S4	98	ASN
7	S5	103	ASN
10	S8	52	ASN
13	C1	14	GLN
13	C1	37	ASN
13	C1	110	HIS
19	C7	105	GLN
21	C9	70	GLN
22	D0	121	ASN
23	D1	29	HIS
25	D3	79	ASN
27	D5	38	HIS
27	D5	44	GLN
33	E1	123	ASN
35	SM	57	ASN
39	L2	8	GLN
39	L2	209	HIS
39	L2	211	HIS
43	L6	28	GLN
43	L6	167	ASN
44	L7	25	GLN
44	L7	48	ASN
44	L7	64	GLN
44	L7	112	ASN
44	L7	209	ASN
45	L8	145	ASN
46	L9	102	ASN
46	L9	156	GLN
48	M1	150	ASN

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<b>Mol</b>	<b>Chain</b>	<b>Res</b>	<b>Type</b>
49	M3	25	HIS
49	M3	99	HIS
49	M3	103	ASN
49	M3	106	GLN
49	M3	129	ASN
49	M3	149	GLN
51	M5	139	HIS
52	M6	90	HIS
53	M7	34	GLN
54	M8	73	GLN
55	M9	121	HIS
57	N1	122	GLN
59	N3	81	GLN
63	N7	127	ASN
64	N8	74	ASN
68	O2	13	HIS
70	O4	18	ASN
75	O9	11	GLN
78	Q2	47	GLN
3	s1	209	ASN
4	s2	94	GLN
4	s2	228	ASN
5	s3	74	GLN
5	s3	179	GLN
6	s4	36	HIS
6	s4	57	ASN
6	s4	142	HIS
6	s4	157	ASN
6	s4	224	ASN
6	s4	231	GLN
7	s5	44	ASN
9	s7	5	GLN
10	s8	35	ASN
11	s9	110	GLN
11	s9	112	GLN
13	c1	37	ASN
15	c3	5	HIS
15	c3	36	GLN
15	c3	49	GLN
16	c4	12	GLN
16	c4	29	HIS
18	c6	93	HIS

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Mol	Chain	Res	Type
19	c7	62	GLN
20	c8	6	GLN
20	c8	13	HIS
20	c8	90	ASN
21	c9	64	HIS
21	c9	70	GLN
22	d0	44	ASN
23	d1	3	ASN
24	d2	56	HIS
25	d3	75	GLN
26	d4	22	GLN
26	d4	63	GLN
26	d4	113	ASN
28	d6	69	ASN
34	sR	17	ASN
34	sR	159	ASN
35	sM	71	ASN
39	l2	8	GLN
39	l2	144	ASN
39	l2	250	GLN
41	l4	361	HIS
43	l6	4	GLN
44	l7	159	GLN
45	l8	192	GLN
45	l8	240	ASN
51	m5	86	ASN
52	m6	90	HIS
53	m7	121	GLN
54	m8	5	HIS
54	m8	9	GLN
55	m9	66	HIS
57	n1	90	ASN
57	n1	98	HIS
59	n3	33	ASN
62	n6	91	ASN
62	n6	120	GLN
63	n7	57	HIS
64	n8	25	HIS
64	n8	44	ASN
64	n8	49	HIS
65	n9	45	HIS
66	o0	12	GLN

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Mol	Chain	Res	Type
69	o3	106	ASN
73	o7	13	ASN
74	o8	32	ASN
78	q2	47	GLN
83	p0	195	GLN

### 5.3.3 RNA ⓘ

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	2	1747/1800 (97%)	613 (35%)	71 (4%)
1	6	1787/1800 (99%)	650 (36%)	64 (3%)
36	1	3145/3396 (92%)	1010 (32%)	106 (3%)
36	5	3145/3396 (92%)	1037 (32%)	115 (3%)
37	3	120/121 (99%)	34 (28%)	2 (1%)
37	7	120/121 (99%)	30 (25%)	3 (2%)
38	4	157/158 (99%)	51 (32%)	7 (4%)
38	8	157/158 (99%)	57 (36%)	3 (1%)
All	All	10378/10950 (94%)	3482 (33%)	371 (3%)

All (3482) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	2	2	A
1	2	4	C
1	2	5	U
1	2	25	C
1	2	26	A
1	2	27	U
1	2	34	G
1	2	39	A
1	2	46	A
1	2	47	A
1	2	49	C
1	2	50	C
1	2	57	G
1	2	61	A
1	2	63	G
1	2	66	U
1	2	67	A
1	2	68	A
1	2	69	G

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Mol	Chain	Res	Type
1	2	72	A
1	2	73	U
1	2	74	U
1	2	75	U
1	2	77	U
1	2	78	A
1	2	100	A
1	2	102	U
1	2	103	A
1	2	104	A
1	2	111	U
1	2	114	C
1	2	115	G
1	2	123	G
1	2	124	A
1	2	125	U
1	2	129	U
1	2	130	C
1	2	131	C
1	2	132	U
1	2	133	U
1	2	134	U
1	2	135	A
1	2	136	C
1	2	137	U
1	2	140	A
1	2	141	U
1	2	144	U
1	2	145	A
1	2	146	U
1	2	153	G
1	2	155	U
1	2	158	U
1	2	159	U
1	2	169	A
1	2	170	U
1	2	178	U
1	2	179	A
1	2	182	A
1	2	185	U
1	2	186	C
1	2	188	A

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Mol	Chain	Res	Type
1	2	190	C
1	2	191	C
1	2	192	U
1	2	193	U
1	2	194	U
1	2	195	G
1	2	196	G
1	2	197	A
1	2	198	A
1	2	199	G
1	2	200	A
1	2	215	A
1	2	217	A
1	2	218	A
1	2	219	A
1	2	222	A
1	2	228	G
1	2	229	U
1	2	231	U
1	2	233	C
1	2	234	G
1	2	235	G
1	2	236	A
1	2	238	U
1	2	239	C
1	2	240	U
1	2	241	U
1	2	242	U
1	2	247	A
1	2	250	C
1	2	257	A
1	2	260	U
1	2	261	U
1	2	265	A
1	2	266	A
1	2	267	U
1	2	269	G
1	2	270	C
1	2	271	A
1	2	272	U
1	2	275	C
1	2	276	C

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Mol	Chain	Res	Type
1	2	277	U
1	2	278	U
1	2	279	G
1	2	280	U
1	2	281	G
1	2	288	A
1	2	290	G
1	2	299	A
1	2	301	A
1	2	304	U
1	2	309	C
1	2	312	A
1	2	314	C
1	2	316	A
1	2	319	U
1	2	321	C
1	2	322	G
1	2	325	G
1	2	333	A
1	2	337	G
1	2	338	C
1	2	351	C
1	2	352	A
1	2	359	A
1	2	360	A
1	2	361	C
1	2	364	G
1	2	365	G
1	2	369	A
1	2	370	A
1	2	380	U
1	2	381	C
1	2	390	G
1	2	399	A
1	2	400	A
1	2	401	A
1	2	402	C
1	2	404	G
1	2	407	A
1	2	408	C
1	2	415	C
1	2	416	A

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Mol	Chain	Res	Type
1	2	417	A
1	2	418	G
1	2	421	A
1	2	423	G
1	2	424	C
1	2	425	A
1	2	426	G
1	2	428	A
1	2	433	C
1	2	434	G
1	2	435	C
1	2	436	A
1	2	437	A
1	2	438	A
1	2	439	U
1	2	440	U
1	2	441	A
1	2	444	C
1	2	448	C
1	2	452	A
1	2	454	U
1	2	459	G
1	2	470	A
1	2	473	A
1	2	477	A
1	2	484	C
1	2	485	A
1	2	486	G
1	2	487	G
1	2	488	G
1	2	493	U
1	2	494	U
1	2	495	C
1	2	496	G
1	2	497	G
1	2	498	G
1	2	499	U
1	2	500	C
1	2	501	U
1	2	502	U
1	2	504	U
1	2	505	A

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Mol	Chain	Res	Type
1	2	506	A
1	2	507	U
1	2	510	G
1	2	511	A
1	2	512	A
1	2	513	U
1	2	514	G
1	2	526	A
1	2	532	U
1	2	538	A
1	2	539	G
1	2	540	G
1	2	541	A
1	2	542	A
1	2	543	C
1	2	544	A
1	2	548	G
1	2	549	G
1	2	552	G
1	2	554	C
1	2	555	A
1	2	556	A
1	2	557	G
1	2	558	U
1	2	559	C
1	2	563	U
1	2	565	C
1	2	571	G
1	2	572	C
1	2	575	C
1	2	578	U
1	2	579	A
1	2	580	A
1	2	581	U
1	2	582	U
1	2	583	C
1	2	585	A
1	2	594	A
1	2	595	G
1	2	606	A
1	2	610	G
1	2	611	U

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Mol	Chain	Res	Type
1	2	619	A
1	2	620	A
1	2	621	A
1	2	622	A
1	2	623	A
1	2	624	G
1	2	630	A
1	2	633	U
1	2	635	A
1	2	637	C
1	2	638	U
1	2	639	U
1	2	640	U
1	2	643	G
1	2	645	C
1	2	648	G
1	2	650	U
1	2	652	G
1	2	656	G
1	2	657	U
1	2	658	C
1	2	677	G
1	2	679	U
1	2	680	U
1	2	684	A
1	2	686	C
1	2	687	G
1	2	692	C
1	2	694	U
1	2	695	U
1	2	696	C
1	2	697	C
1	2	698	U
1	2	701	U
1	2	702	G
1	2	703	G
1	2	704	C
1	2	705	U
1	2	707	A
1	2	709	C
1	2	710	U
1	2	711	U

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Mol	Chain	Res	Type
1	2	712	G
1	2	714	G
1	2	717	C
1	2	718	U
1	2	719	U
1	2	720	G
1	2	721	U
1	2	722	G
1	2	723	G
1	2	725	U
1	2	727	U
1	2	728	U
1	2	730	G
1	2	731	C
1	2	732	G
1	2	733	A
1	2	734	A
1	2	735	C
1	2	737	A
1	2	738	G
1	2	741	C
1	2	742	U
1	2	743	U
1	2	744	U
1	2	751	G
1	2	753	A
1	2	754	A
1	2	755	A
1	2	756	A
1	2	759	U
1	2	765	G
1	2	766	U
1	2	768	C
1	2	770	A
1	2	774	A
1	2	775	G
1	2	778	G
1	2	779	U
1	2	781	U
1	2	782	U
1	2	783	G
1	2	784	C

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Mol	Chain	Res	Type
1	2	789	A
1	2	791	A
1	2	794	U
1	2	795	U
1	2	803	A
1	2	806	A
1	2	812	A
1	2	814	A
1	2	815	G
1	2	816	G
1	2	818	C
1	2	819	G
1	2	820	U
1	2	821	U
1	2	824	G
1	2	829	A
1	2	830	U
1	2	831	U
1	2	833	U
1	2	837	G
1	2	840	U
1	2	846	G
1	2	854	U
1	2	856	A
1	2	860	U
1	2	863	A
1	2	864	U
1	2	873	U
1	2	876	G
1	2	885	G
1	2	886	U
1	2	892	A
1	2	893	U
1	2	896	U
1	2	898	A
1	2	906	A
1	2	912	U
1	2	913	G
1	2	914	G
1	2	915	A
1	2	916	U
1	2	920	U

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Mol	Chain	Res	Type
1	2	921	U
1	2	931	C
1	2	933	A
1	2	935	U
1	2	942	G
1	2	943	C
1	2	944	A
1	2	947	U
1	2	958	U
1	2	960	U
1	2	964	U
1	2	966	A
1	2	976	G
1	2	983	A
1	2	984	G
1	2	986	G
1	2	988	A
1	2	992	A
1	2	993	A
1	2	997	G
1	2	1000	C
1	2	1001	A
1	2	1003	A
1	2	1004	U
1	2	1005	A
1	2	1007	C
1	2	1016	C
1	2	1019	A
1	2	1020	A
1	2	1021	C
1	2	1024	U
1	2	1025	A
1	2	1026	A
1	2	1028	C
1	2	1029	U
1	2	1032	G
1	2	1039	A
1	2	1040	G
1	2	1043	A
1	2	1052	U
1	2	1053	G
1	2	1054	U

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Mol	Chain	Res	Type
1	2	1056	U
1	2	1058	U
1	2	1059	U
1	2	1060	U
1	2	1061	A
1	2	1062	A
1	2	1072	C
1	2	1074	G
1	2	1076	A
1	2	1078	C
1	2	1079	U
1	2	1080	U
1	2	1081	A
1	2	1082	C
1	2	1083	G
1	2	1085	G
1	2	1092	A
1	2	1093	A
1	2	1094	G
1	2	1096	C
1	2	1097	U
1	2	1098	U
1	2	1100	G
1	2	1101	G
1	2	1111	G
1	2	1138	A
1	2	1140	G
1	2	1143	A
1	2	1146	G
1	2	1149	G
1	2	1151	A
1	2	1155	G
1	2	1158	C
1	2	1159	C
1	2	1160	A
1	2	1161	C
1	2	1167	G
1	2	1168	U
1	2	1175	U
1	2	1182	U
1	2	1185	U
1	2	1189	A

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Mol	Chain	Res	Type
1	2	1194	A
1	2	1196	A
1	2	1199	G
1	2	1200	G
1	2	1201	G
1	2	1202	A
1	2	1205	C
1	2	1207	C
1	2	1212	G
1	2	1217	A
1	2	1218	G
1	2	1226	A
1	2	1227	A
1	2	1229	G
1	2	1235	C
1	2	1244	A
1	2	1245	G
1	2	1247	U
1	2	1250	U
1	2	1251	U
1	2	1258	U
1	2	1259	U
1	2	1261	G
1	2	1267	G
1	2	1274	C
1	2	1276	U
1	2	1286	U
1	2	1288	G
1	2	1306	C
1	2	1314	U
1	2	1315	U
1	2	1316	G
1	2	1320	U
1	2	1321	A
1	2	1336	A
1	2	1337	A
1	2	1339	C
1	2	1340	U
1	2	1341	A
1	2	1344	A
1	2	1345	A
1	2	1346	A

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Mol	Chain	Res	Type
1	2	1348	A
1	2	1354	G
1	2	1355	C
1	2	1360	A
1	2	1362	U
1	2	1363	U
1	2	1370	U
1	2	1371	A
1	2	1372	U
1	2	1378	U
1	2	1386	G
1	2	1390	U
1	2	1391	A
1	2	1393	C
1	2	1398	U
1	2	1399	C
1	2	1400	A
1	2	1407	U
1	2	1412	G
1	2	1413	U
1	2	1415	U
1	2	1418	G
1	2	1425	A
1	2	1427	A
1	2	1428	G
1	2	1432	U
1	2	1443	U
1	2	1445	G
1	2	1446	A
1	2	1448	G
1	2	1454	G
1	2	1456	C
1	2	1457	C
1	2	1459	C
1	2	1461	C
1	2	1469	A
1	2	1471	A
1	2	1473	U
1	2	1474	G
1	2	1475	A
1	2	1481	C
1	2	1482	C

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Mol	Chain	Res	Type
1	2	1485	C
1	2	1486	G
1	2	1489	U
1	2	1490	C
1	2	1491	U
1	2	1492	A
1	2	1493	A
1	2	1496	U
1	2	1501	C
1	2	1503	A
1	2	1505	A
1	2	1506	G
1	2	1515	A
1	2	1516	A
1	2	1517	U
1	2	1520	U
1	2	1523	G
1	2	1524	A
1	2	1530	C
1	2	1532	U
1	2	1533	C
1	2	1534	G
1	2	1535	U
1	2	1536	G
1	2	1537	C
1	2	1538	U
1	2	1542	G
1	2	1551	U
1	2	1552	U
1	2	1556	A
1	2	1557	U
1	2	1559	A
1	2	1560	U
1	2	1569	A
1	2	1571	C
1	2	1574	G
1	2	1583	A
1	2	1584	G
1	2	1590	G
1	2	1597	A
1	2	1600	A
1	2	1601	G

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Mol	Chain	Res	Type
1	2	1612	U
1	2	1614	A
1	2	1616	G
1	2	1624	C
1	2	1625	C
1	2	1631	A
1	2	1635	A
1	2	1637	C
1	2	1638	G
1	2	1648	A
1	2	1653	C
1	2	1655	A
1	2	1657	U
1	2	1658	G
1	2	1660	A
1	2	1664	C
1	2	1666	U
1	2	1672	G
1	2	1682	U
1	2	1683	C
1	2	1684	U
1	2	1720	G
1	2	1724	U
1	2	1729	C
1	2	1731	A
1	2	1735	U
1	2	1740	A
1	2	1741	U
1	2	1755	A
1	2	1757	G
1	2	1758	U
1	2	1760	G
1	2	1762	A
1	2	1764	C
1	2	1766	A
1	2	1769	U
1	2	1770	U
1	2	1772	C
1	2	1777	G
1	2	1780	G
1	2	1782	A
1	2	1783	C

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Mol	Chain	Res	Type
1	2	1790	A
1	2	1791	A
1	2	1792	G
1	2	1793	G
1	2	1794	A
1	2	1796	C
36	1	13	A
36	1	14	U
36	1	16	A
36	1	18	G
36	1	19	U
36	1	24	G
36	1	25	U
36	1	26	A
36	1	30	G
36	1	35	A
36	1	40	A
36	1	43	A
36	1	44	U
36	1	49	A
36	1	59	G
36	1	60	A
36	1	62	A
36	1	65	A
36	1	66	A
36	1	74	G
36	1	75	G
36	1	76	G
36	1	82	C
36	1	83	U
36	1	85	A
36	1	92	G
36	1	93	C
36	1	94	G
36	1	95	A
36	1	99	A
36	1	108	A
36	1	109	A
36	1	110	G
36	1	111	C
36	1	113	C
36	1	114	A

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Mol	Chain	Res	Type
36	1	116	A
36	1	117	U
36	1	118	U
36	1	121	A
36	1	122	A
36	1	123	A
36	1	124	U
36	1	125	C
36	1	133	U
36	1	135	C
36	1	136	G
36	1	147	U
36	1	148	G
36	1	150	A
36	1	154	U
36	1	156	G
36	1	157	A
36	1	161	G
36	1	166	C
36	1	167	U
36	1	169	U
36	1	170	G
36	1	172	G
36	1	184	U
36	1	185	C
36	1	186	U
36	1	187	A
36	1	190	U
36	1	191	U
36	1	197	G
36	1	199	A
36	1	200	C
36	1	207	U
36	1	210	U
36	1	214	G
36	1	216	G
36	1	218	G
36	1	219	A
36	1	220	G
36	1	224	C
36	1	227	G
36	1	236	G

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Mol	Chain	Res	Type
36	1	237	G
36	1	240	U
36	1	241	G
36	1	243	G
36	1	244	G
36	1	245	U
36	1	246	U
36	1	249	U
36	1	250	U
36	1	251	G
36	1	252	U
36	1	253	A
36	1	255	A
36	1	261	U
36	1	263	C
36	1	266	A
36	1	269	G
36	1	270	U
36	1	279	U
36	1	280	U
36	1	282	G
36	1	283	G
36	1	286	U
36	1	295	A
36	1	298	U
36	1	301	G
36	1	308	A
36	1	311	C
36	1	316	U
36	1	323	A
36	1	328	U
36	1	329	U
36	1	338	A
36	1	339	C
36	1	340	C
36	1	341	G
36	1	350	C
36	1	352	A
36	1	354	U
36	1	368	G
36	1	373	A
36	1	375	A

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Mol	Chain	Res	Type
36	1	376	G
36	1	387	A
36	1	390	G
36	1	395	A
36	1	396	A
36	1	397	A
36	1	398	A
36	1	399	A
36	1	401	U
36	1	402	A
36	1	403	C
36	1	404	G
36	1	409	A
36	1	419	G
36	1	421	G
36	1	422	A
36	1	438	A
36	1	440	A
36	1	495	G
36	1	496	C
36	1	512	U
36	1	519	A
36	1	520	U
36	1	521	A
36	1	534	U
36	1	535	G
36	1	541	U
36	1	543	C
36	1	546	C
36	1	547	G
36	1	548	G
36	1	549	U
36	1	552	G
36	1	554	A
36	1	557	A
36	1	558	U
36	1	559	A
36	1	560	G
36	1	564	G
36	1	568	G
36	1	578	A
36	1	579	G

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Mol	Chain	Res	Type
36	1	585	A
36	1	592	A
36	1	593	C
36	1	604	G
36	1	609	G
36	1	610	G
36	1	611	A
36	1	619	A
36	1	620	U
36	1	621	A
36	1	630	A
36	1	632	G
36	1	634	C
36	1	636	C
36	1	637	C
36	1	638	C
36	1	642	U
36	1	646	A
36	1	648	C
36	1	649	A
36	1	660	A
36	1	661	G
36	1	662	U
36	1	665	A
36	1	677	A
36	1	681	U
36	1	688	G
36	1	689	U
36	1	691	A
36	1	695	C
36	1	697	A
36	1	703	G
36	1	705	A
36	1	710	A
36	1	712	G
36	1	714	G
36	1	715	A
36	1	716	A
36	1	718	G
36	1	719	U
36	1	720	A
36	1	727	G

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Mol	Chain	Res	Type
36	1	736	A
36	1	737	G
36	1	740	G
36	1	763	G
36	1	764	U
36	1	766	U
36	1	767	U
36	1	776	U
36	1	777	U
36	1	780	A
36	1	781	G
36	1	782	U
36	1	783	A
36	1	785	G
36	1	787	G
36	1	791	A
36	1	803	C
36	1	806	A
36	1	808	A
36	1	809	G
36	1	810	A
36	1	817	A
36	1	823	C
36	1	830	A
36	1	831	G
36	1	842	G
36	1	848	A
36	1	849	C
36	1	861	C
36	1	870	G
36	1	874	U
36	1	879	U
36	1	881	C
36	1	882	A
36	1	883	A
36	1	891	G
36	1	894	G
36	1	895	A
36	1	896	A
36	1	900	G
36	1	901	G
36	1	907	G

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Mol	Chain	Res	Type
36	1	908	G
36	1	909	G
36	1	910	G
36	1	914	A
36	1	915	A
36	1	916	G
36	1	917	A
36	1	919	U
36	1	921	A
36	1	924	G
36	1	929	A
36	1	931	C
36	1	932	U
36	1	937	G
36	1	939	U
36	1	943	U
36	1	944	C
36	1	953	G
36	1	957	C
36	1	959	C
36	1	960	U
36	1	967	A
36	1	979	U
36	1	980	A
36	1	981	U
36	1	982	C
36	1	984	G
36	1	986	U
36	1	993	G
36	1	994	G
36	1	1001	G
36	1	1002	A
36	1	1010	G
36	1	1012	G
36	1	1013	G
36	1	1017	C
36	1	1018	G
36	1	1020	G
36	1	1021	G
36	1	1024	G
36	1	1025	A
36	1	1029	G

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Mol	Chain	Res	Type
36	1	1030	A
36	1	1037	C
36	1	1047	A
36	1	1049	C
36	1	1051	U
36	1	1052	U
36	1	1064	A
36	1	1065	A
36	1	1071	U
36	1	1072	G
36	1	1078	U
36	1	1081	U
36	1	1082	U
36	1	1083	G
36	1	1086	C
36	1	1088	U
36	1	1089	G
36	1	1093	A
36	1	1094	U
36	1	1095	U
36	1	1097	G
36	1	1098	A
36	1	1102	A
36	1	1103	A
36	1	1104	G
36	1	1106	G
36	1	1109	U
36	1	1111	U
36	1	1112	A
36	1	1115	G
36	1	1117	G
36	1	1118	C
36	1	1123	U
36	1	1126	G
36	1	1129	A
36	1	1131	G
36	1	1143	A
36	1	1144	U
36	1	1146	C
36	1	1147	G
36	1	1149	G
36	1	1151	U

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Mol	Chain	Res	Type
36	1	1153	A
36	1	1154	A
36	1	1156	C
36	1	1159	A
36	1	1162	U
36	1	1172	G
36	1	1174	G
36	1	1177	G
36	1	1178	G
36	1	1180	A
36	1	1181	U
36	1	1182	A
36	1	1184	A
36	1	1185	C
36	1	1191	U
36	1	1192	C
36	1	1196	C
36	1	1201	C
36	1	1202	A
36	1	1206	G
36	1	1209	G
36	1	1212	A
36	1	1213	G
36	1	1217	A
36	1	1218	U
36	1	1222	G
36	1	1225	A
36	1	1227	C
36	1	1232	C
36	1	1235	U
36	1	1236	G
36	1	1237	G
36	1	1238	C
36	1	1239	C
36	1	1241	U
36	1	1242	G
36	1	1243	G
36	1	1244	A
36	1	1245	A
36	1	1246	G
36	1	1248	C
36	1	1249	G

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Mol	Chain	Res	Type
36	1	1253	U
36	1	1254	C
36	1	1255	C
36	1	1258	U
36	1	1262	G
36	1	1263	A
36	1	1264	G
36	1	1266	G
36	1	1269	U
36	1	1270	A
36	1	1271	A
36	1	1273	A
36	1	1274	A
36	1	1276	U
36	1	1277	C
36	1	1278	A
36	1	1279	C
36	1	1285	G
36	1	1286	A
36	1	1287	A
36	1	1292	C
36	1	1295	G
36	1	1300	G
36	1	1301	A
36	1	1305	U
36	1	1307	G
36	1	1308	A
36	1	1309	U
36	1	1312	C
36	1	1313	G
36	1	1318	A
36	1	1322	U
36	1	1323	G
36	1	1325	U
36	1	1330	A
36	1	1331	U
36	1	1332	A
36	1	1336	U
36	1	1343	A
36	1	1344	G
36	1	1345	G
36	1	1348	U

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Mol	Chain	Res	Type
36	1	1349	G
36	1	1350	A
36	1	1351	U
36	1	1352	A
36	1	1353	U
36	1	1354	G
36	1	1355	A
36	1	1356	U
36	1	1357	G
36	1	1363	A
36	1	1372	C
36	1	1373	A
36	1	1375	G
36	1	1377	G
36	1	1379	G
36	1	1380	G
36	1	1385	C
36	1	1386	A
36	1	1387	G
36	1	1392	G
36	1	1399	A
36	1	1400	G
36	1	1403	C
36	1	1406	A
36	1	1411	C
36	1	1418	A
36	1	1419	A
36	1	1428	A
36	1	1429	G
36	1	1431	G
36	1	1433	A
36	1	1434	G
36	1	1437	C
36	1	1438	U
36	1	1444	G
36	1	1446	A
36	1	1450	G
36	1	1455	U
36	1	1461	A
36	1	1463	U
36	1	1469	C
36	1	1471	U

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Mol	Chain	Res	Type
36	1	1481	A
36	1	1482	A
36	1	1485	G
36	1	1490	A
36	1	1492	G
36	1	1505	C
36	1	1507	G
36	1	1508	C
36	1	1511	U
36	1	1513	G
36	1	1514	G
36	1	1519	G
36	1	1521	G
36	1	1527	C
36	1	1533	U
36	1	1534	A
36	1	1541	G
36	1	1546	A
36	1	1549	U
36	1	1554	U
36	1	1555	U
36	1	1556	C
36	1	1557	A
36	1	1558	A
36	1	1560	G
36	1	1561	G
36	1	1562	C
36	1	1563	C
36	1	1564	U
36	1	1566	A
36	1	1567	U
36	1	1568	U
36	1	1569	U
36	1	1570	U
36	1	1571	A
36	1	1572	U
36	1	1573	G
36	1	1575	A
36	1	1576	G
36	1	1580	A
36	1	1581	C
36	1	1582	C

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Mol	Chain	Res	Type
36	1	1583	A
36	1	1587	A
36	1	1589	A
36	1	1596	C
36	1	1603	A
36	1	1605	A
36	1	1607	U
36	1	1608	C
36	1	1620	U
36	1	1621	A
36	1	1623	G
36	1	1629	U
36	1	1631	C
36	1	1635	G
36	1	1639	C
36	1	1641	U
36	1	1643	A
36	1	1645	U
36	1	1657	C
36	1	1658	G
36	1	1662	G
36	1	1668	G
36	1	1669	C
36	1	1671	C
36	1	1683	A
36	1	1715	A
36	1	1716	U
36	1	1717	U
36	1	1724	U
36	1	1725	C
36	1	1729	A
36	1	1730	G
36	1	1741	A
36	1	1742	U
36	1	1750	A
36	1	1751	G
36	1	1762	C
36	1	1764	U
36	1	1765	U
36	1	1766	G
36	1	1767	C
36	1	1770	G

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Mol	Chain	Res	Type
36	1	1774	C
36	1	1775	G
36	1	1779	C
36	1	1780	G
36	1	1786	G
36	1	1789	G
36	1	1793	C
36	1	1794	G
36	1	1795	U
36	1	1796	G
36	1	1797	A
36	1	1810	A
36	1	1812	G
36	1	1813	A
36	1	1814	A
36	1	1816	A
36	1	1817	G
36	1	1818	U
36	1	1819	U
36	1	1820	U
36	1	1821	U
36	1	1835	A
36	1	1838	G
36	1	1839	A
36	1	1840	U
36	1	1842	A
36	1	1846	C
36	1	1848	G
36	1	1849	C
36	1	1851	G
36	1	1858	A
36	1	1863	G
36	1	1864	A
36	1	1866	C
36	1	1872	C
36	1	1878	G
36	1	1879	A
36	1	1889	G
36	1	1895	A
36	1	1906	G
36	1	1931	U
36	1	1935	G

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Mol	Chain	Res	Type
36	1	1936	A
36	1	1943	C
36	1	1948	G
36	1	1949	G
36	1	1951	C
36	1	1952	G
36	1	1953	G
36	1	1954	G
36	1	2094	C
36	1	2100	A
36	1	2101	C
36	1	2102	U
36	1	2111	G
36	1	2112	U
36	1	2113	A
36	1	2114	C
36	1	2116	G
36	1	2118	C
36	1	2121	G
36	1	2122	G
36	1	2131	A
36	1	2134	G
36	1	2136	C
36	1	2139	A
36	1	2140	U
36	1	2147	A
36	1	2148	U
36	1	2151	C
36	1	2158	A
36	1	2159	U
36	1	2168	A
36	1	2169	G
36	1	2171	G
36	1	2175	U
36	1	2185	G
36	1	2187	G
36	1	2188	A
36	1	2193	U
36	1	2194	G
36	1	2199	G
36	1	2200	U
36	1	2205	U

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Mol	Chain	Res	Type
36	1	2206	G
36	1	2207	A
36	1	2208	A
36	1	2209	U
36	1	2210	G
36	1	2215	A
36	1	2220	A
36	1	2223	A
36	1	2225	U
36	1	2228	A
36	1	2234	G
36	1	2244	A
36	1	2245	C
36	1	2246	G
36	1	2249	G
36	1	2250	G
36	1	2255	A
36	1	2256	A
36	1	2257	C
36	1	2272	G
36	1	2273	G
36	1	2276	G
36	1	2279	A
36	1	2280	A
36	1	2281	A
36	1	2282	U
36	1	2283	G
36	1	2287	C
36	1	2288	G
36	1	2298	U
36	1	2303	A
36	1	2307	G
36	1	2308	C
36	1	2310	U
36	1	2313	A
36	1	2314	U
36	1	2315	G
36	1	2323	G
36	1	2324	A
36	1	2331	C
36	1	2332	A
36	1	2335	G

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Mol	Chain	Res	Type
36	1	2336	U
36	1	2345	A
36	1	2347	U
36	1	2354	C
36	1	2366	C
36	1	2367	A
36	1	2369	G
36	1	2371	G
36	1	2372	A
36	1	2373	A
36	1	2374	C
36	1	2375	G
36	1	2379	U
36	1	2383	C
36	1	2385	G
36	1	2386	A
36	1	2387	A
36	1	2391	G
36	1	2392	C
36	1	2393	G
36	1	2397	A
36	1	2398	A
36	1	2401	A
36	1	2402	A
36	1	2403	G
36	1	2404	A
36	1	2405	C
36	1	2406	C
36	1	2410	U
36	1	2411	U
36	1	2413	A
36	1	2414	G
36	1	2418	G
36	1	2419	A
36	1	2421	U
36	1	2424	A
36	1	2425	G
36	1	2428	U
36	1	2435	G
36	1	2437	G
36	1	2443	A
36	1	2444	C

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Mol	Chain	Res	Type
36	1	2445	A
36	1	2502	A
36	1	2503	G
36	1	2504	U
36	1	2508	U
36	1	2511	A
36	1	2513	U
36	1	2514	U
36	1	2515	A
36	1	2522	G
36	1	2523	A
36	1	2524	A
36	1	2529	A
36	1	2532	U
36	1	2533	G
36	1	2537	U
36	1	2538	U
36	1	2539	C
36	1	2540	A
36	1	2541	U
36	1	2542	U
36	1	2543	U
36	1	2544	U
36	1	2547	A
36	1	2549	G
36	1	2552	C
36	1	2554	A
36	1	2555	G
36	1	2561	A
36	1	2565	U
36	1	2567	C
36	1	2568	C
36	1	2569	A
36	1	2570	U
36	1	2571	U
36	1	2572	C
36	1	2573	G
36	1	2581	U
36	1	2582	C
36	1	2585	G
36	1	2587	U
36	1	2593	A

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Mol	Chain	Res	Type
36	1	2594	C
36	1	2598	G
36	1	2603	G
36	1	2606	G
36	1	2607	G
36	1	2611	U
36	1	2613	U
36	1	2614	G
36	1	2615	G
36	1	2618	G
36	1	2620	G
36	1	2622	C
36	1	2627	C
36	1	2628	A
36	1	2629	U
36	1	2637	A
36	1	2642	A
36	1	2652	U
36	1	2653	C
36	1	2656	A
36	1	2657	A
36	1	2658	G
36	1	2661	G
36	1	2667	A
36	1	2672	G
36	1	2674	A
36	1	2676	A
36	1	2677	G
36	1	2681	U
36	1	2685	C
36	1	2689	A
36	1	2690	G
36	1	2691	A
36	1	2694	A
36	1	2696	A
36	1	2703	A
36	1	2705	A
36	1	2709	C
36	1	2713	U
36	1	2714	G
36	1	2719	U
36	1	2720	G

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Mol	Chain	Res	Type
36	1	2728	G
36	1	2729	U
36	1	2737	C
36	1	2752	U
36	1	2753	G
36	1	2754	G
36	1	2762	A
36	1	2772	C
36	1	2776	C
36	1	2777	G
36	1	2778	G
36	1	2779	A
36	1	2780	A
36	1	2796	G
36	1	2799	A
36	1	2800	G
36	1	2801	A
36	1	2802	A
36	1	2803	A
36	1	2806	U
36	1	2809	C
36	1	2810	C
36	1	2814	G
36	1	2817	A
36	1	2818	U
36	1	2819	A
36	1	2827	U
36	1	2828	G
36	1	2829	U
36	1	2834	G
36	1	2838	A
36	1	2842	U
36	1	2843	U
36	1	2845	A
36	1	2847	A
36	1	2851	A
36	1	2852	C
36	1	2853	A
36	1	2855	U
36	1	2860	U
36	1	2861	U
36	1	2869	U

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Mol	Chain	Res	Type
36	1	2871	G
36	1	2872	A
36	1	2873	U
36	1	2875	U
36	1	2876	C
36	1	2878	G
36	1	2880	U
36	1	2882	U
36	1	2883	U
36	1	2887	A
36	1	2888	U
36	1	2894	C
36	1	2898	G
36	1	2899	C
36	1	2900	A
36	1	2908	G
36	1	2912	G
36	1	2923	U
36	1	2925	C
36	1	2932	U
36	1	2935	U
36	1	2936	A
36	1	2941	A
36	1	2942	C
36	1	2945	G
36	1	2947	G
36	1	2952	G
36	1	2954	U
36	1	2955	U
36	1	2963	C
36	1	2965	U
36	1	2967	A
36	1	2970	C
36	1	2971	A
36	1	2974	U
36	1	2983	C
36	1	2992	U
36	1	2996	U
36	1	2997	G
36	1	3006	A
36	1	3011	A
36	1	3024	A

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Mol	Chain	Res	Type
36	1	3030	G
36	1	3040	A
36	1	3049	A
36	1	3051	U
36	1	3052	G
36	1	3056	U
36	1	3057	U
36	1	3059	G
36	1	3064	U
36	1	3065	G
36	1	3068	U
36	1	3078	U
36	1	3079	U
36	1	3080	G
36	1	3084	C
36	1	3086	A
36	1	3092	C
36	1	3093	C
36	1	3094	A
36	1	3104	U
36	1	3113	A
36	1	3115	C
36	1	3117	C
36	1	3120	C
36	1	3122	A
36	1	3128	G
36	1	3129	A
36	1	3130	A
36	1	3131	U
36	1	3134	A
36	1	3136	G
36	1	3139	A
36	1	3142	A
36	1	3143	C
36	1	3147	G
36	1	3148	U
36	1	3150	A
36	1	3151	U
36	1	3154	C
36	1	3155	U
36	1	3156	U
36	1	3157	U

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Mol	Chain	Res	Type
36	1	3164	C
36	1	3165	A
36	1	3167	A
36	1	3168	A
36	1	3170	A
36	1	3171	U
36	1	3173	G
36	1	3174	A
36	1	3176	G
36	1	3178	A
36	1	3180	A
36	1	3181	C
36	1	3187	A
36	1	3194	C
36	1	3196	U
36	1	3197	G
36	1	3198	U
36	1	3202	G
36	1	3207	U
36	1	3210	A
36	1	3217	C
36	1	3218	A
36	1	3219	G
36	1	3225	C
36	1	3228	C
36	1	3229	G
36	1	3234	A
36	1	3235	C
36	1	3236	U
36	1	3242	G
36	1	3244	A
36	1	3245	A
36	1	3246	G
36	1	3247	G
36	1	3256	G
36	1	3259	U
36	1	3260	G
36	1	3261	C
36	1	3262	U
36	1	3270	U
36	1	3273	A
36	1	3275	U

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Mol	Chain	Res	Type
36	1	3276	G
36	1	3278	C
36	1	3279	A
36	1	3281	U
36	1	3282	U
36	1	3287	U
36	1	3289	G
36	1	3290	G
36	1	3292	A
36	1	3293	U
36	1	3294	A
36	1	3295	A
36	1	3300	U
36	1	3303	G
36	1	3304	U
36	1	3307	A
36	1	3310	A
36	1	3313	U
36	1	3316	A
36	1	3317	U
36	1	3318	G
36	1	3319	U
36	1	3320	A
36	1	3335	A
36	1	3337	G
36	1	3341	U
36	1	3342	A
36	1	3345	G
36	1	3347	A
36	1	3350	C
36	1	3351	U
36	1	3352	U
36	1	3353	G
36	1	3354	U
36	1	3355	U
36	1	3356	G
36	1	3359	A
36	1	3360	C
36	1	3362	A
36	1	3369	G
36	1	3375	A
36	1	3376	A

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Mol	Chain	Res	Type
36	1	3378	C
36	1	3381	U
36	1	3382	U
36	1	3383	G
36	1	3386	G
36	1	3389	U
36	1	3390	G
36	1	3396	U
37	3	5	G
37	3	7	G
37	3	9	C
37	3	11	A
37	3	12	U
37	3	13	A
37	3	14	U
37	3	22	A
37	3	26	C
37	3	27	A
37	3	29	C
37	3	33	U
37	3	41	G
37	3	44	C
37	3	45	A
37	3	51	A
37	3	53	U
37	3	54	U
37	3	65	G
37	3	73	C
37	3	74	C
37	3	76	A
37	3	83	U
37	3	84	A
37	3	91	G
37	3	101	G
37	3	102	A
37	3	104	A
37	3	108	A
37	3	109	G
37	3	112	G
37	3	115	G
37	3	118	A
37	3	121	U

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Mol	Chain	Res	Type
38	4	4	C
38	4	13	A
38	4	14	C
38	4	15	G
38	4	16	G
38	4	22	U
38	4	23	U
38	4	31	G
38	4	32	C
38	4	34	U
38	4	35	C
38	4	39	G
38	4	42	G
38	4	48	A
38	4	52	A
38	4	59	A
38	4	62	C
38	4	63	G
38	4	64	U
38	4	70	G
38	4	75	G
38	4	79	A
38	4	80	A
38	4	81	U
38	4	82	U
38	4	83	C
38	4	84	C
38	4	86	U
38	4	87	G
38	4	90	U
38	4	93	U
38	4	95	G
38	4	96	A
38	4	97	A
38	4	102	U
38	4	104	A
38	4	106	C
38	4	111	A
38	4	113	U
38	4	116	G
38	4	122	U
38	4	125	U

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Mol	Chain	Res	Type
38	4	126	A
38	4	129	C
38	4	134	G
38	4	138	A
38	4	144	G
38	4	148	G
38	4	151	C
38	4	152	G
38	4	158	U
1	6	2	A
1	6	4	C
1	6	17	C
1	6	20	G
1	6	24	U
1	6	25	C
1	6	26	A
1	6	27	U
1	6	32	U
1	6	34	G
1	6	45	U
1	6	46	A
1	6	47	A
1	6	51	A
1	6	52	U
1	6	54	C
1	6	57	G
1	6	65	A
1	6	66	U
1	6	67	A
1	6	68	A
1	6	69	G
1	6	70	C
1	6	72	A
1	6	73	U
1	6	75	U
1	6	76	A
1	6	77	U
1	6	78	A
1	6	80	A
1	6	90	C
1	6	101	U
1	6	103	A

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Mol	Chain	Res	Type
1	6	104	A
1	6	110	U
1	6	114	C
1	6	115	G
1	6	120	U
1	6	126	A
1	6	128	U
1	6	129	U
1	6	137	U
1	6	138	A
1	6	140	A
1	6	141	U
1	6	142	G
1	6	143	G
1	6	144	U
1	6	145	A
1	6	146	U
1	6	148	A
1	6	158	U
1	6	159	U
1	6	166	C
1	6	168	A
1	6	170	U
1	6	171	A
1	6	178	U
1	6	179	A
1	6	185	U
1	6	188	A
1	6	190	C
1	6	191	C
1	6	192	U
1	6	193	U
1	6	194	U
1	6	195	G
1	6	200	A
1	6	201	G
1	6	212	U
1	6	215	A
1	6	217	A
1	6	218	A
1	6	219	A
1	6	220	A

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Mol	Chain	Res	Type
1	6	226	A
1	6	227	U
1	6	228	G
1	6	230	C
1	6	232	U
1	6	233	C
1	6	234	G
1	6	235	G
1	6	237	C
1	6	238	U
1	6	240	U
1	6	241	U
1	6	249	U
1	6	250	C
1	6	260	U
1	6	261	U
1	6	265	A
1	6	266	A
1	6	267	U
1	6	271	A
1	6	272	U
1	6	273	G
1	6	275	C
1	6	276	C
1	6	278	U
1	6	280	U
1	6	281	G
1	6	287	G
1	6	296	U
1	6	299	A
1	6	300	A
1	6	301	A
1	6	302	U
1	6	304	U
1	6	309	C
1	6	314	C
1	6	316	A
1	6	319	U
1	6	320	U
1	6	321	C
1	6	322	G
1	6	324	U

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Mol	Chain	Res	Type
1	6	325	G
1	6	331	A
1	6	333	A
1	6	337	G
1	6	338	C
1	6	341	A
1	6	343	C
1	6	344	A
1	6	346	G
1	6	352	A
1	6	359	A
1	6	360	A
1	6	361	C
1	6	370	A
1	6	380	U
1	6	387	A
1	6	388	G
1	6	397	A
1	6	400	A
1	6	401	A
1	6	402	C
1	6	403	G
1	6	404	G
1	6	411	C
1	6	412	A
1	6	416	A
1	6	417	A
1	6	418	G
1	6	424	C
1	6	425	A
1	6	426	G
1	6	432	G
1	6	434	G
1	6	437	A
1	6	439	U
1	6	440	U
1	6	444	C
1	6	448	C
1	6	454	U
1	6	455	C
1	6	459	G
1	6	465	G

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Mol	Chain	Res	Type
1	6	468	A
1	6	469	C
1	6	470	A
1	6	477	A
1	6	484	C
1	6	486	G
1	6	487	G
1	6	488	G
1	6	489	C
1	6	490	C
1	6	491	C
1	6	492	A
1	6	493	U
1	6	494	U
1	6	495	C
1	6	496	G
1	6	499	U
1	6	500	C
1	6	501	U
1	6	504	U
1	6	505	A
1	6	506	A
1	6	507	U
1	6	508	U
1	6	510	G
1	6	511	A
1	6	512	A
1	6	513	U
1	6	514	G
1	6	515	A
1	6	518	A
1	6	519	C
1	6	520	A
1	6	522	U
1	6	525	A
1	6	527	A
1	6	531	C
1	6	532	U
1	6	533	U
1	6	534	A
1	6	538	A
1	6	539	G

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Mol	Chain	Res	Type
1	6	540	G
1	6	541	A
1	6	542	A
1	6	543	C
1	6	544	A
1	6	545	A
1	6	546	U
1	6	548	G
1	6	555	A
1	6	556	A
1	6	557	G
1	6	558	U
1	6	559	C
1	6	561	G
1	6	562	G
1	6	565	C
1	6	574	G
1	6	575	C
1	6	579	A
1	6	580	A
1	6	582	U
1	6	583	C
1	6	584	C
1	6	585	A
1	6	594	A
1	6	595	G
1	6	606	A
1	6	609	U
1	6	610	G
1	6	617	U
1	6	619	A
1	6	620	A
1	6	623	A
1	6	624	G
1	6	630	A
1	6	639	U
1	6	648	G
1	6	650	U
1	6	651	G
1	6	652	G
1	6	653	C
1	6	658	C

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Mol	Chain	Res	Type
1	6	661	A
1	6	662	U
1	6	665	U
1	6	667	U
1	6	668	C
1	6	669	G
1	6	670	U
1	6	676	G
1	6	678	A
1	6	679	U
1	6	680	U
1	6	681	U
1	6	682	C
1	6	683	C
1	6	685	A
1	6	691	C
1	6	696	C
1	6	697	C
1	6	698	U
1	6	699	U
1	6	702	G
1	6	705	U
1	6	709	C
1	6	710	U
1	6	711	U
1	6	714	G
1	6	718	U
1	6	719	U
1	6	720	G
1	6	721	U
1	6	722	G
1	6	724	C
1	6	725	U
1	6	727	U
1	6	729	G
1	6	730	G
1	6	733	A
1	6	734	A
1	6	735	C
1	6	742	U
1	6	745	U
1	6	754	A

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Mol	Chain	Res	Type
1	6	755	A
1	6	756	A
1	6	758	U
1	6	765	G
1	6	774	A
1	6	775	G
1	6	777	C
1	6	778	G
1	6	779	U
1	6	780	A
1	6	781	U
1	6	782	U
1	6	783	G
1	6	784	C
1	6	787	G
1	6	789	A
1	6	790	U
1	6	793	A
1	6	794	U
1	6	795	U
1	6	803	A
1	6	808	U
1	6	811	A
1	6	812	A
1	6	814	A
1	6	815	G
1	6	816	G
1	6	821	U
1	6	822	U
1	6	823	G
1	6	825	U
1	6	826	U
1	6	829	A
1	6	830	U
1	6	831	U
1	6	832	U
1	6	834	G
1	6	835	U
1	6	856	A
1	6	857	U
1	6	863	A
1	6	864	U

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Mol	Chain	Res	Type
1	6	872	G
1	6	877	G
1	6	883	C
1	6	898	A
1	6	900	A
1	6	901	G
1	6	906	A
1	6	910	C
1	6	912	U
1	6	913	G
1	6	914	G
1	6	916	U
1	6	922	G
1	6	923	A
1	6	924	A
1	6	933	A
1	6	935	U
1	6	942	G
1	6	944	A
1	6	945	U
1	6	949	C
1	6	954	G
1	6	959	U
1	6	960	U
1	6	966	A
1	6	970	A
1	6	971	A
1	6	976	G
1	6	982	U
1	6	983	A
1	6	985	G
1	6	987	G
1	6	988	A
1	6	992	A
1	6	993	A
1	6	994	G
1	6	996	U
1	6	997	G
1	6	1003	A
1	6	1004	U
1	6	1005	A
1	6	1013	A

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Mol	Chain	Res	Type
1	6	1021	C
1	6	1025	A
1	6	1026	A
1	6	1028	C
1	6	1029	U
1	6	1030	A
1	6	1036	A
1	6	1038	U
1	6	1039	A
1	6	1040	G
1	6	1042	G
1	6	1052	U
1	6	1053	G
1	6	1056	U
1	6	1057	U
1	6	1058	U
1	6	1059	U
1	6	1060	U
1	6	1061	A
1	6	1063	U
1	6	1065	A
1	6	1069	A
1	6	1070	C
1	6	1072	C
1	6	1074	G
1	6	1076	A
1	6	1081	A
1	6	1082	C
1	6	1083	G
1	6	1092	A
1	6	1096	C
1	6	1097	U
1	6	1098	U
1	6	1100	G
1	6	1101	G
1	6	1103	U
1	6	1106	U
1	6	1109	G
1	6	1110	G
1	6	1111	G
1	6	1125	A
1	6	1130	G

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Mol	Chain	Res	Type
1	6	1132	A
1	6	1138	A
1	6	1140	G
1	6	1143	A
1	6	1146	G
1	6	1147	A
1	6	1155	G
1	6	1158	C
1	6	1159	C
1	6	1160	A
1	6	1162	C
1	6	1164	G
1	6	1166	A
1	6	1167	G
1	6	1172	G
1	6	1173	C
1	6	1175	U
1	6	1178	G
1	6	1183	A
1	6	1186	U
1	6	1191	U
1	6	1192	C
1	6	1193	A
1	6	1194	A
1	6	1196	A
1	6	1199	G
1	6	1200	G
1	6	1202	A
1	6	1203	A
1	6	1207	C
1	6	1208	A
1	6	1217	A
1	6	1218	G
1	6	1220	C
1	6	1228	G
1	6	1229	G
1	6	1236	A
1	6	1237	G
1	6	1239	U
1	6	1240	U
1	6	1241	G
1	6	1242	A

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Mol	Chain	Res	Type
1	6	1243	G
1	6	1244	A
1	6	1245	G
1	6	1246	C
1	6	1249	U
1	6	1255	G
1	6	1256	A
1	6	1257	U
1	6	1258	U
1	6	1259	U
1	6	1266	U
1	6	1267	G
1	6	1275	A
1	6	1284	C
1	6	1286	U
1	6	1298	U
1	6	1304	G
1	6	1307	U
1	6	1312	A
1	6	1314	U
1	6	1315	U
1	6	1316	G
1	6	1318	G
1	6	1321	A
1	6	1334	U
1	6	1336	A
1	6	1337	A
1	6	1338	C
1	6	1341	A
1	6	1344	A
1	6	1345	A
1	6	1346	A
1	6	1347	U
1	6	1354	G
1	6	1355	C
1	6	1359	C
1	6	1360	A
1	6	1362	U
1	6	1363	U
1	6	1364	G
1	6	1370	U
1	6	1371	A

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Mol	Chain	Res	Type
1	6	1372	U
1	6	1373	C
1	6	1374	C
1	6	1380	U
1	6	1382	A
1	6	1384	A
1	6	1385	G
1	6	1389	C
1	6	1390	U
1	6	1396	U
1	6	1398	U
1	6	1399	C
1	6	1400	A
1	6	1402	G
1	6	1404	C
1	6	1413	U
1	6	1414	U
1	6	1415	U
1	6	1421	A
1	6	1423	U
1	6	1424	A
1	6	1427	A
1	6	1428	G
1	6	1431	C
1	6	1433	G
1	6	1437	U
1	6	1438	G
1	6	1445	G
1	6	1446	A
1	6	1448	G
1	6	1451	C
1	6	1452	U
1	6	1454	G
1	6	1459	C
1	6	1460	A
1	6	1461	C
1	6	1471	A
1	6	1472	C
1	6	1474	G
1	6	1481	C
1	6	1482	C
1	6	1483	A

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Mol	Chain	Res	Type
1	6	1486	G
1	6	1489	U
1	6	1490	C
1	6	1491	U
1	6	1492	A
1	6	1493	A
1	6	1498	G
1	6	1503	A
1	6	1504	G
1	6	1506	G
1	6	1509	C
1	6	1514	U
1	6	1515	A
1	6	1516	A
1	6	1517	U
1	6	1521	G
1	6	1523	G
1	6	1524	A
1	6	1529	C
1	6	1531	G
1	6	1534	G
1	6	1535	U
1	6	1536	G
1	6	1537	C
1	6	1538	U
1	6	1540	G
1	6	1542	G
1	6	1543	A
1	6	1544	U
1	6	1548	G
1	6	1552	U
1	6	1554	U
1	6	1555	A
1	6	1557	U
1	6	1558	U
1	6	1559	A
1	6	1569	A
1	6	1571	C
1	6	1572	G
1	6	1573	A
1	6	1574	G
1	6	1575	G

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Mol	Chain	Res	Type
1	6	1577	A
1	6	1584	G
1	6	1590	G
1	6	1596	C
1	6	1601	G
1	6	1603	U
1	6	1605	G
1	6	1607	G
1	6	1631	A
1	6	1637	C
1	6	1640	C
1	6	1645	G
1	6	1647	U
1	6	1651	A
1	6	1655	A
1	6	1657	U
1	6	1658	G
1	6	1666	U
1	6	1668	G
1	6	1671	A
1	6	1673	G
1	6	1680	G
1	6	1692	G
1	6	1694	A
1	6	1695	G
1	6	1696	G
1	6	1697	G
1	6	1698	G
1	6	1699	G
1	6	1700	C
1	6	1701	A
1	6	1702	A
1	6	1710	U
1	6	1712	A
1	6	1715	G
1	6	1717	G
1	6	1719	A
1	6	1724	U
1	6	1725	U
1	6	1731	A
1	6	1732	A
1	6	1733	C

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Mol	Chain	Res	Type
1	6	1738	U
1	6	1742	U
1	6	1748	G
1	6	1750	A
1	6	1751	C
1	6	1753	A
1	6	1760	G
1	6	1762	A
1	6	1763	A
1	6	1766	A
1	6	1767	G
1	6	1769	U
1	6	1770	U
1	6	1772	C
1	6	1774	G
1	6	1777	G
1	6	1779	U
1	6	1780	G
1	6	1782	A
1	6	1783	C
1	6	1787	C
1	6	1789	G
1	6	1790	A
1	6	1792	G
1	6	1793	G
1	6	1794	A
1	6	1796	C
1	6	1799	U
1	6	1800	A
36	5	10	C
36	5	15	C
36	5	16	A
36	5	19	U
36	5	25	U
36	5	26	A
36	5	28	C
36	5	29	C
36	5	32	U
36	5	35	A
36	5	40	A
36	5	43	A
36	5	44	U

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Mol	Chain	Res	Type
36	5	45	A
36	5	47	C
36	5	49	A
36	5	52	A
36	5	57	A
36	5	59	G
36	5	60	A
36	5	62	A
36	5	64	G
36	5	65	A
36	5	66	A
36	5	67	A
36	5	68	C
36	5	69	C
36	5	73	C
36	5	74	G
36	5	76	G
36	5	92	G
36	5	93	C
36	5	94	G
36	5	95	A
36	5	96	G
36	5	97	U
36	5	99	A
36	5	101	G
36	5	109	A
36	5	110	G
36	5	113	C
36	5	116	A
36	5	117	U
36	5	118	U
36	5	119	U
36	5	121	A
36	5	122	A
36	5	123	A
36	5	133	U
36	5	134	U
36	5	135	C
36	5	136	G
36	5	142	C
36	5	147	U
36	5	151	A

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Mol	Chain	Res	Type
36	5	152	U
36	5	155	G
36	5	156	G
36	5	157	A
36	5	158	G
36	5	161	G
36	5	165	A
36	5	166	C
36	5	170	G
36	5	171	G
36	5	172	G
36	5	174	C
36	5	181	U
36	5	184	U
36	5	187	A
36	5	188	U
36	5	190	U
36	5	191	U
36	5	200	C
36	5	201	A
36	5	206	G
36	5	210	U
36	5	212	G
36	5	213	A
36	5	218	G
36	5	219	A
36	5	221	A
36	5	231	G
36	5	234	G
36	5	237	G
36	5	239	G
36	5	240	U
36	5	241	G
36	5	242	C
36	5	244	G
36	5	248	U
36	5	249	U
36	5	250	U
36	5	251	G
36	5	252	U
36	5	253	A
36	5	254	A

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Mol	Chain	Res	Type
36	5	255	A
36	5	258	G
36	5	259	C
36	5	261	U
36	5	267	G
36	5	269	G
36	5	270	U
36	5	272	G
36	5	275	U
36	5	282	G
36	5	283	G
36	5	284	A
36	5	286	U
36	5	295	A
36	5	297	G
36	5	299	G
36	5	311	C
36	5	315	C
36	5	323	A
36	5	329	U
36	5	334	A
36	5	338	A
36	5	339	C
36	5	344	A
36	5	347	G
36	5	349	A
36	5	350	C
36	5	351	A
36	5	354	U
36	5	358	G
36	5	359	U
36	5	365	A
36	5	368	G
36	5	370	U
36	5	372	A
36	5	376	G
36	5	381	U
36	5	390	G
36	5	397	A
36	5	398	A
36	5	399	A
36	5	401	U

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Mol	Chain	Res	Type
36	5	402	A
36	5	403	C
36	5	404	G
36	5	407	A
36	5	415	G
36	5	419	G
36	5	421	G
36	5	422	A
36	5	423	A
36	5	436	A
36	5	437	G
36	5	438	A
36	5	439	C
36	5	441	U
36	5	442	G
36	5	443	G
36	5	492	U
36	5	494	G
36	5	496	C
36	5	501	A
36	5	507	U
36	5	510	G
36	5	516	A
36	5	521	A
36	5	531	G
36	5	535	G
36	5	536	U
36	5	541	U
36	5	542	G
36	5	545	U
36	5	546	C
36	5	547	G
36	5	548	G
36	5	556	U
36	5	557	A
36	5	558	U
36	5	559	A
36	5	560	G
36	5	561	C
36	5	578	A
36	5	579	G
36	5	582	G

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Mol	Chain	Res	Type
36	5	586	C
36	5	587	U
36	5	588	G
36	5	589	A
36	5	592	A
36	5	594	U
36	5	595	G
36	5	596	C
36	5	604	G
36	5	607	A
36	5	609	G
36	5	610	G
36	5	611	A
36	5	618	C
36	5	619	A
36	5	620	U
36	5	621	A
36	5	626	U
36	5	632	G
36	5	634	C
36	5	635	G
36	5	636	C
36	5	646	A
36	5	648	C
36	5	649	A
36	5	660	A
36	5	662	U
36	5	666	A
36	5	677	A
36	5	681	U
36	5	683	U
36	5	685	G
36	5	691	A
36	5	699	A
36	5	705	A
36	5	706	A
36	5	708	G
36	5	712	G
36	5	715	A
36	5	716	A
36	5	726	G
36	5	727	G

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Mol	Chain	Res	Type
36	5	734	C
36	5	736	A
36	5	740	G
36	5	742	G
36	5	743	C
36	5	757	C
36	5	758	C
36	5	763	G
36	5	764	U
36	5	766	U
36	5	767	U
36	5	768	C
36	5	771	A
36	5	774	G
36	5	776	U
36	5	777	U
36	5	781	G
36	5	783	A
36	5	785	G
36	5	786	A
36	5	804	C
36	5	806	A
36	5	807	A
36	5	810	A
36	5	815	G
36	5	817	A
36	5	818	C
36	5	821	U
36	5	830	A
36	5	837	A
36	5	845	G
36	5	846	A
36	5	859	G
36	5	860	G
36	5	861	C
36	5	862	U
36	5	863	C
36	5	865	U
36	5	866	A
36	5	869	G
36	5	874	U
36	5	877	C

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Mol	Chain	Res	Type
36	5	879	U
36	5	881	C
36	5	882	A
36	5	884	A
36	5	887	G
36	5	888	A
36	5	890	C
36	5	895	A
36	5	896	A
36	5	897	U
36	5	901	G
36	5	904	A
36	5	907	G
36	5	908	G
36	5	914	A
36	5	916	G
36	5	917	A
36	5	921	A
36	5	923	C
36	5	924	G
36	5	935	U
36	5	937	G
36	5	938	C
36	5	941	G
36	5	944	C
36	5	947	G
36	5	955	U
36	5	959	C
36	5	960	U
36	5	965	A
36	5	966	U
36	5	979	U
36	5	980	A
36	5	981	U
36	5	983	A
36	5	990	U
36	5	992	A
36	5	993	G
36	5	994	G
36	5	1001	G
36	5	1002	A
36	5	1006	A

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Mol	Chain	Res	Type
36	5	1007	U
36	5	1009	A
36	5	1010	G
36	5	1014	U
36	5	1015	U
36	5	1016	C
36	5	1017	C
36	5	1018	G
36	5	1021	G
36	5	1023	C
36	5	1024	G
36	5	1025	A
36	5	1026	A
36	5	1028	U
36	5	1029	G
36	5	1033	U
36	5	1035	G
36	5	1040	A
36	5	1047	A
36	5	1049	C
36	5	1052	U
36	5	1060	U
36	5	1064	A
36	5	1065	A
36	5	1071	U
36	5	1072	G
36	5	1078	U
36	5	1081	U
36	5	1082	U
36	5	1085	A
36	5	1088	U
36	5	1093	A
36	5	1095	U
36	5	1096	U
36	5	1098	A
36	5	1103	A
36	5	1104	G
36	5	1109	U
36	5	1112	A
36	5	1117	G
36	5	1118	C
36	5	1131	G

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Mol	Chain	Res	Type
36	5	1141	C
36	5	1143	A
36	5	1144	U
36	5	1150	A
36	5	1151	U
36	5	1152	G
36	5	1153	A
36	5	1154	A
36	5	1155	C
36	5	1156	C
36	5	1159	A
36	5	1161	G
36	5	1165	A
36	5	1168	U
36	5	1175	C
36	5	1177	G
36	5	1180	A
36	5	1181	U
36	5	1182	A
36	5	1186	G
36	5	1190	A
36	5	1192	C
36	5	1196	C
36	5	1197	A
36	5	1198	C
36	5	1199	C
36	5	1201	C
36	5	1202	A
36	5	1206	G
36	5	1209	G
36	5	1212	A
36	5	1221	A
36	5	1222	G
36	5	1225	A
36	5	1232	C
36	5	1235	U
36	5	1236	G
36	5	1237	G
36	5	1239	C
36	5	1241	U
36	5	1242	G
36	5	1244	A

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Mol	Chain	Res	Type
36	5	1245	A
36	5	1246	G
36	5	1248	C
36	5	1249	G
36	5	1252	A
36	5	1253	U
36	5	1254	C
36	5	1255	C
36	5	1258	U
36	5	1259	A
36	5	1263	A
36	5	1264	G
36	5	1265	U
36	5	1266	G
36	5	1270	A
36	5	1281	G
36	5	1285	G
36	5	1286	A
36	5	1290	A
36	5	1295	G
36	5	1305	U
36	5	1307	G
36	5	1309	U
36	5	1311	G
36	5	1313	G
36	5	1322	U
36	5	1329	U
36	5	1330	A
36	5	1332	A
36	5	1334	U
36	5	1345	G
36	5	1348	U
36	5	1349	G
36	5	1351	U
36	5	1352	A
36	5	1353	U
36	5	1354	G
36	5	1356	U
36	5	1357	G
36	5	1386	A
36	5	1390	A
36	5	1391	C

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Mol	Chain	Res	Type
36	5	1392	G
36	5	1397	C
36	5	1398	U
36	5	1399	A
36	5	1400	G
36	5	1405	U
36	5	1408	G
36	5	1415	U
36	5	1418	A
36	5	1419	A
36	5	1428	A
36	5	1429	G
36	5	1431	G
36	5	1434	G
36	5	1437	C
36	5	1438	U
36	5	1444	G
36	5	1445	U
36	5	1446	A
36	5	1450	G
36	5	1460	A
36	5	1465	A
36	5	1467	A
36	5	1468	A
36	5	1472	U
36	5	1475	A
36	5	1481	A
36	5	1482	A
36	5	1483	G
36	5	1485	G
36	5	1490	A
36	5	1492	G
36	5	1500	G
36	5	1503	A
36	5	1508	C
36	5	1514	G
36	5	1515	A
36	5	1523	U
36	5	1527	C
36	5	1533	U
36	5	1536	G
36	5	1539	A

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Mol	Chain	Res	Type
36	5	1551	C
36	5	1552	G
36	5	1554	U
36	5	1555	U
36	5	1556	C
36	5	1557	A
36	5	1560	G
36	5	1561	G
36	5	1562	C
36	5	1564	U
36	5	1565	G
36	5	1566	A
36	5	1567	U
36	5	1568	U
36	5	1569	U
36	5	1570	U
36	5	1571	A
36	5	1572	U
36	5	1574	C
36	5	1575	A
36	5	1576	G
36	5	1577	G
36	5	1578	C
36	5	1579	C
36	5	1580	A
36	5	1581	C
36	5	1583	A
36	5	1584	U
36	5	1585	C
36	5	1587	A
36	5	1589	A
36	5	1596	C
36	5	1607	U
36	5	1619	A
36	5	1620	U
36	5	1621	A
36	5	1629	U
36	5	1639	C
36	5	1641	U
36	5	1643	A
36	5	1644	C
36	5	1645	U

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Mol	Chain	Res	Type
36	5	1651	U
36	5	1656	A
36	5	1658	G
36	5	1661	G
36	5	1675	G
36	5	1680	G
36	5	1683	A
36	5	1684	U
36	5	1687	U
36	5	1688	U
36	5	1689	U
36	5	1694	U
36	5	1700	G
36	5	1701	C
36	5	1703	U
36	5	1710	C
36	5	1713	G
36	5	1716	U
36	5	1717	U
36	5	1724	U
36	5	1726	C
36	5	1727	G
36	5	1736	G
36	5	1739	U
36	5	1750	A
36	5	1751	G
36	5	1752	A
36	5	1754	G
36	5	1756	C
36	5	1761	C
36	5	1762	C
36	5	1763	U
36	5	1764	U
36	5	1765	U
36	5	1766	G
36	5	1770	G
36	5	1773	C
36	5	1779	C
36	5	1780	G
36	5	1797	A
36	5	1804	A
36	5	1810	A

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Mol	Chain	Res	Type
36	5	1814	A
36	5	1815	U
36	5	1816	A
36	5	1817	G
36	5	1818	U
36	5	1820	U
36	5	1821	U
36	5	1823	A
36	5	1834	U
36	5	1839	A
36	5	1841	A
36	5	1842	A
36	5	1845	G
36	5	1846	C
36	5	1849	C
36	5	1851	G
36	5	1876	U
36	5	1878	G
36	5	1879	A
36	5	1880	U
36	5	1881	A
36	5	1888	U
36	5	1900	A
36	5	1901	A
36	5	1906	G
36	5	1912	U
36	5	1918	C
36	5	1920	U
36	5	1921	A
36	5	1922	A
36	5	1923	C
36	5	1926	C
36	5	1935	G
36	5	1936	A
36	5	1951	C
36	5	2100	A
36	5	2101	C
36	5	2102	U
36	5	2107	A
36	5	2112	U
36	5	2113	A
36	5	2116	G

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Mol	Chain	Res	Type
36	5	2121	G
36	5	2122	G
36	5	2126	A
36	5	2131	A
36	5	2132	C
36	5	2133	U
36	5	2134	G
36	5	2138	A
36	5	2140	U
36	5	2149	A
36	5	2155	G
36	5	2158	A
36	5	2163	C
36	5	2165	G
36	5	2166	A
36	5	2169	G
36	5	2173	U
36	5	2175	U
36	5	2176	U
36	5	2185	G
36	5	2187	G
36	5	2188	A
36	5	2189	U
36	5	2192	C
36	5	2193	U
36	5	2198	A
36	5	2202	C
36	5	2205	U
36	5	2206	G
36	5	2208	A
36	5	2209	U
36	5	2210	G
36	5	2211	U
36	5	2213	A
36	5	2218	G
36	5	2223	A
36	5	2225	U
36	5	2228	A
36	5	2229	A
36	5	2232	A
36	5	2234	G
36	5	2241	U

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Mol	Chain	Res	Type
36	5	2244	A
36	5	2246	G
36	5	2250	G
36	5	2252	A
36	5	2253	G
36	5	2255	A
36	5	2256	A
36	5	2270	A
36	5	2273	G
36	5	2274	U
36	5	2277	C
36	5	2278	C
36	5	2281	A
36	5	2282	U
36	5	2283	G
36	5	2287	C
36	5	2288	G
36	5	2295	A
36	5	2297	U
36	5	2298	U
36	5	2300	G
36	5	2301	U
36	5	2303	A
36	5	2307	G
36	5	2308	C
36	5	2310	U
36	5	2313	A
36	5	2315	G
36	5	2324	A
36	5	2330	C
36	5	2334	U
36	5	2335	G
36	5	2336	U
36	5	2350	C
36	5	2359	C
36	5	2362	C
36	5	2363	A
36	5	2366	C
36	5	2369	G
36	5	2373	A
36	5	2374	C
36	5	2375	G

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Mol	Chain	Res	Type
36	5	2383	C
36	5	2385	G
36	5	2386	A
36	5	2388	U
36	5	2392	C
36	5	2393	G
36	5	2394	G
36	5	2397	A
36	5	2401	A
36	5	2403	G
36	5	2405	C
36	5	2406	C
36	5	2411	U
36	5	2412	G
36	5	2413	A
36	5	2414	G
36	5	2415	C
36	5	2418	G
36	5	2419	A
36	5	2427	U
36	5	2437	G
36	5	2439	A
36	5	2440	G
36	5	2441	A
36	5	2442	G
36	5	2444	C
36	5	2505	U
36	5	2506	U
36	5	2508	U
36	5	2509	U
36	5	2510	U
36	5	2513	U
36	5	2514	U
36	5	2515	A
36	5	2523	A
36	5	2524	A
36	5	2525	G
36	5	2526	C
36	5	2529	A
36	5	2530	G
36	5	2531	C
36	5	2532	U

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Mol	Chain	Res	Type
36	5	2535	A
36	5	2538	U
36	5	2539	C
36	5	2540	A
36	5	2541	U
36	5	2543	U
36	5	2544	U
36	5	2545	C
36	5	2549	G
36	5	2552	C
36	5	2554	A
36	5	2555	G
36	5	2556	C
36	5	2558	U
36	5	2562	A
36	5	2566	C
36	5	2567	C
36	5	2569	A
36	5	2570	U
36	5	2571	U
36	5	2572	C
36	5	2573	G
36	5	2574	G
36	5	2581	U
36	5	2584	G
36	5	2585	G
36	5	2586	G
36	5	2587	U
36	5	2588	U
36	5	2593	A
36	5	2594	C
36	5	2599	U
36	5	2603	G
36	5	2605	G
36	5	2606	G
36	5	2607	G
36	5	2614	G
36	5	2618	G
36	5	2625	C
36	5	2626	A
36	5	2629	U
36	5	2632	G

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Mol	Chain	Res	Type
36	5	2637	A
36	5	2642	A
36	5	2647	A
36	5	2650	U
36	5	2652	U
36	5	2653	C
36	5	2656	A
36	5	2658	G
36	5	2668	U
36	5	2674	A
36	5	2676	A
36	5	2677	G
36	5	2679	A
36	5	2680	A
36	5	2681	U
36	5	2682	C
36	5	2683	U
36	5	2685	C
36	5	2689	A
36	5	2690	G
36	5	2691	A
36	5	2692	A
36	5	2694	A
36	5	2696	A
36	5	2702	A
36	5	2703	A
36	5	2705	A
36	5	2709	C
36	5	2714	G
36	5	2717	U
36	5	2720	G
36	5	2723	U
36	5	2725	U
36	5	2726	C
36	5	2727	A
36	5	2728	G
36	5	2729	U
36	5	2737	C
36	5	2752	U
36	5	2753	G
36	5	2755	C
36	5	2759	U

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Mol	Chain	Res	Type
36	5	2760	C
36	5	2762	A
36	5	2764	C
36	5	2769	A
36	5	2772	C
36	5	2773	C
36	5	2776	C
36	5	2777	G
36	5	2778	G
36	5	2783	U
36	5	2792	A
36	5	2796	G
36	5	2799	A
36	5	2800	G
36	5	2801	A
36	5	2802	A
36	5	2808	A
36	5	2809	C
36	5	2810	C
36	5	2816	G
36	5	2817	A
36	5	2818	U
36	5	2819	A
36	5	2820	A
36	5	2836	C
36	5	2837	A
36	5	2839	G
36	5	2843	U
36	5	2845	A
36	5	2853	A
36	5	2856	G
36	5	2858	U
36	5	2868	U
36	5	2869	U
36	5	2871	G
36	5	2872	A
36	5	2873	U
36	5	2874	G
36	5	2875	U
36	5	2876	C
36	5	2878	G
36	5	2880	U

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Mol	Chain	Res	Type
36	5	2881	C
36	5	2887	A
36	5	2889	C
36	5	2895	G
36	5	2896	A
36	5	2899	C
36	5	2900	A
36	5	2914	G
36	5	2918	G
36	5	2923	U
36	5	2927	C
36	5	2935	U
36	5	2936	A
36	5	2937	G
36	5	2939	G
36	5	2940	A
36	5	2941	A
36	5	2942	C
36	5	2944	U
36	5	2947	G
36	5	2948	C
36	5	2951	G
36	5	2954	U
36	5	2955	U
36	5	2961	G
36	5	2971	A
36	5	2972	G
36	5	2973	G
36	5	2979	U
36	5	2980	U
36	5	2982	A
36	5	2983	C
36	5	2985	C
36	5	2986	U
36	5	2990	G
36	5	2992	U
36	5	2995	A
36	5	2996	U
36	5	2997	G
36	5	2999	U
36	5	3004	C
36	5	3011	A

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Mol	Chain	Res	Type
36	5	3012	A
36	5	3014	U
36	5	3016	A
36	5	3025	C
36	5	3028	G
36	5	3039	C
36	5	3056	U
36	5	3057	U
36	5	3059	G
36	5	3069	G
36	5	3078	U
36	5	3079	U
36	5	3080	G
36	5	3084	C
36	5	3086	A
36	5	3088	G
36	5	3092	C
36	5	3094	A
36	5	3095	U
36	5	3100	U
36	5	3102	G
36	5	3104	U
36	5	3107	U
36	5	3115	C
36	5	3119	U
36	5	3120	C
36	5	3121	U
36	5	3122	A
36	5	3127	A
36	5	3128	G
36	5	3129	A
36	5	3130	A
36	5	3131	U
36	5	3142	A
36	5	3143	C
36	5	3147	G
36	5	3148	U
36	5	3150	A
36	5	3152	U
36	5	3153	U
36	5	3154	C
36	5	3155	U

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Mol	Chain	Res	Type
36	5	3156	U
36	5	3157	U
36	5	3158	G
36	5	3162	C
36	5	3164	C
36	5	3165	A
36	5	3168	A
36	5	3170	A
36	5	3171	U
36	5	3172	A
36	5	3173	G
36	5	3174	A
36	5	3175	U
36	5	3176	G
36	5	3179	U
36	5	3180	A
36	5	3181	C
36	5	3187	A
36	5	3194	C
36	5	3195	U
36	5	3196	U
36	5	3198	U
36	5	3199	G
36	5	3202	G
36	5	3207	U
36	5	3217	C
36	5	3218	A
36	5	3219	G
36	5	3222	U
36	5	3223	A
36	5	3229	G
36	5	3234	A
36	5	3235	C
36	5	3238	G
36	5	3240	C
36	5	3242	G
36	5	3243	A
36	5	3245	A
36	5	3246	G
36	5	3247	G
36	5	3250	U
36	5	3251	U

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Mol	Chain	Res	Type
36	5	3253	G
36	5	3259	U
36	5	3260	G
36	5	3263	G
36	5	3265	C
36	5	3266	G
36	5	3269	U
36	5	3270	U
36	5	3271	G
36	5	3273	A
36	5	3275	U
36	5	3276	G
36	5	3277	U
36	5	3278	C
36	5	3279	A
36	5	3281	U
36	5	3282	U
36	5	3283	U
36	5	3285	C
36	5	3286	G
36	5	3287	U
36	5	3288	G
36	5	3289	G
36	5	3290	G
36	5	3294	A
36	5	3303	G
36	5	3304	U
36	5	3307	A
36	5	3309	G
36	5	3315	G
36	5	3316	A
36	5	3317	U
36	5	3318	G
36	5	3319	U
36	5	3320	A
36	5	3323	A
36	5	3330	A
36	5	3333	G
36	5	3341	U
36	5	3342	A
36	5	3343	G
36	5	3345	G

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Mol	Chain	Res	Type
36	5	3348	G
36	5	3354	U
36	5	3355	U
36	5	3358	U
36	5	3361	G
36	5	3363	U
36	5	3368	U
36	5	3369	G
36	5	3378	C
36	5	3379	C
36	5	3383	G
36	5	3386	G
36	5	3387	U
36	5	3389	U
36	5	3390	G
36	5	3396	U
37	7	7	G
37	7	8	G
37	7	10	C
37	7	22	A
37	7	25	G
37	7	26	C
37	7	27	A
37	7	30	G
37	7	38	U
37	7	40	C
37	7	41	G
37	7	44	C
37	7	45	A
37	7	50	U
37	7	51	A
37	7	54	U
37	7	57	G
37	7	61	G
37	7	62	U
37	7	65	G
37	7	73	C
37	7	74	C
37	7	91	G
37	7	93	C
37	7	99	G
37	7	102	A

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Mol	Chain	Res	Type
37	7	103	A
37	7	104	A
37	7	112	G
37	7	116	C
38	8	2	A
38	8	12	A
38	8	13	A
38	8	15	G
38	8	21	C
38	8	23	U
38	8	26	U
38	8	31	G
38	8	34	U
38	8	35	C
38	8	39	G
38	8	42	G
38	8	46	G
38	8	50	C
38	8	51	G
38	8	52	A
38	8	53	A
38	8	59	A
38	8	60	U
38	8	62	C
38	8	63	G
38	8	71	A
38	8	80	A
38	8	81	U
38	8	82	U
38	8	83	C
38	8	84	C
38	8	86	U
38	8	87	G
38	8	91	C
38	8	95	G
38	8	96	A
38	8	97	A
38	8	99	C
38	8	100	U
38	8	103	G
38	8	104	A
38	8	106	C

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Mol	Chain	Res	Type
38	8	107	G
38	8	108	C
38	8	109	A
38	8	111	A
38	8	113	U
38	8	114	G
38	8	122	U
38	8	123	G
38	8	124	G
38	8	125	U
38	8	126	A
38	8	127	U
38	8	135	G
38	8	136	G
38	8	143	U
38	8	155	A
38	8	156	U
38	8	157	U
38	8	158	U

All (371) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	2	25	C
1	2	45	U
1	2	68	A
1	2	73	U
1	2	103	A
1	2	114	C
1	2	130	C
1	2	131	C
1	2	139	C
1	2	158	U
1	2	192	U
1	2	217	A
1	2	218	A
1	2	232	U
1	2	240	U
1	2	260	U
1	2	278	U
1	2	280	U
1	2	313	U

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Mol	Chain	Res	Type
1	2	321	C
1	2	417	A
1	2	423	G
1	2	484	C
1	2	497	G
1	2	499	U
1	2	501	U
1	2	503	G
1	2	512	A
1	2	555	A
1	2	558	U
1	2	580	A
1	2	582	U
1	2	685	A
1	2	704	C
1	2	720	G
1	2	721	U
1	2	731	C
1	2	734	A
1	2	738	G
1	2	782	U
1	2	811	A
1	2	829	A
1	2	840	U
1	2	859	A
1	2	913	G
1	2	1051	G
1	2	1058	U
1	2	1108	G
1	2	1157	A
1	2	1158	C
1	2	1226	A
1	2	1228	G
1	2	1244	A
1	2	1250	U
1	2	1314	U
1	2	1339	C
1	2	1344	A
1	2	1370	U
1	2	1474	G
1	2	1481	C
1	2	1489	U

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Mol	Chain	Res	Type
1	2	1491	U
1	2	1568	C
1	2	1573	A
1	2	1600	A
1	2	1615	C
1	2	1657	U
1	2	1757	G
1	2	1761	U
1	2	1768	G
1	2	1769	U
36	1	13	A
36	1	43	A
36	1	59	G
36	1	109	A
36	1	115	A
36	1	169	U
36	1	210	U
36	1	217	U
36	1	239	G
36	1	285	A
36	1	341	G
36	1	374	A
36	1	518	G
36	1	547	G
36	1	619	A
36	1	637	C
36	1	705	A
36	1	719	U
36	1	763	G
36	1	873	C
36	1	896	A
36	1	908	G
36	1	916	G
36	1	979	U
36	1	981	U
36	1	993	G
36	1	1064	A
36	1	1081	U
36	1	1094	U
36	1	1096	U
36	1	1097	G
36	1	1103	A

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Mol	Chain	Res	Type
36	1	1116	G
36	1	1154	A
36	1	1253	U
36	1	1268	G
36	1	1273	A
36	1	1307	G
36	1	1317	A
36	1	1329	U
36	1	1352	A
36	1	1355	A
36	1	1481	A
36	1	1484	U
36	1	1507	G
36	1	1514	G
36	1	1554	U
36	1	1556	C
36	1	1562	C
36	1	1589	A
36	1	1607	U
36	1	1656	A
36	1	1716	U
36	1	1815	U
36	1	1816	A
36	1	1820	U
36	1	1849	C
36	1	1930	A
36	1	2101	C
36	1	2111	G
36	1	2112	U
36	1	2209	U
36	1	2227	C
36	1	2314	U
36	1	2372	A
36	1	2374	C
36	1	2403	G
36	1	2404	A
36	1	2418	G
36	1	2513	U
36	1	2522	G
36	1	2523	A
36	1	2537	U
36	1	2541	U

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Mol	Chain	Res	Type
36	1	2554	A
36	1	2570	U
36	1	2586	G
36	1	2593	A
36	1	2677	G
36	1	2702	A
36	1	2752	U
36	1	2772	C
36	1	2817	A
36	1	2818	U
36	1	2842	U
36	1	2860	U
36	1	2872	A
36	1	3048	A
36	1	3055	U
36	1	3057	U
36	1	3065	G
36	1	3078	U
36	1	3093	C
36	1	3154	C
36	1	3217	C
36	1	3218	A
36	1	3228	C
36	1	3246	G
36	1	3259	U
36	1	3269	U
36	1	3275	U
36	1	3318	G
36	1	3350	C
36	1	3351	U
36	1	3353	G
36	1	3375	A
37	3	13	A
37	3	52	G
38	4	22	U
38	4	62	C
38	4	82	U
38	4	83	C
38	4	85	G
38	4	111	A
38	4	125	U
1	6	25	C

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Mol	Chain	Res	Type
1	6	66	U
1	6	103	A
1	6	114	C
1	6	139	C
1	6	158	U
1	6	187	G
1	6	217	A
1	6	240	U
1	6	260	U
1	6	272	U
1	6	321	C
1	6	322	G
1	6	345	U
1	6	400	A
1	6	417	A
1	6	512	A
1	6	542	A
1	6	555	A
1	6	557	G
1	6	558	U
1	6	664	U
1	6	681	U
1	6	697	C
1	6	717	C
1	6	755	A
1	6	815	G
1	6	829	A
1	6	834	G
1	6	1035	G
1	6	1051	G
1	6	1057	U
1	6	1058	U
1	6	1060	U
1	6	1081	A
1	6	1097	U
1	6	1137	A
1	6	1158	C
1	6	1196	A
1	6	1198	G
1	6	1207	C
1	6	1227	A
1	6	1238	A

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Mol	Chain	Res	Type
1	6	1244	A
1	6	1255	G
1	6	1274	C
1	6	1344	A
1	6	1346	A
1	6	1431	C
1	6	1470	C
1	6	1481	C
1	6	1489	U
1	6	1491	U
1	6	1517	U
1	6	1535	U
1	6	1568	C
1	6	1572	G
1	6	1573	A
1	6	1584	G
1	6	1657	U
1	6	1696	G
1	6	1697	G
1	6	1698	G
1	6	1700	C
36	5	43	A
36	5	59	G
36	5	65	A
36	5	67	A
36	5	93	C
36	5	151	A
36	5	183	G
36	5	221	A
36	5	282	G
36	5	350	C
36	5	369	A
36	5	520	U
36	5	557	A
36	5	558	U
36	5	588	G
36	5	714	G
36	5	765	C
36	5	766	U
36	5	816	A
36	5	896	A
36	5	916	G

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Mol	Chain	Res	Type
36	5	925	A
36	5	979	U
36	5	993	G
36	5	1017	C
36	5	1027	A
36	5	1064	A
36	5	1081	U
36	5	1152	G
36	5	1154	A
36	5	1236	G
36	5	1238	C
36	5	1241	U
36	5	1253	U
36	5	1284	C
36	5	1317	A
36	5	1329	U
36	5	1331	U
36	5	1348	U
36	5	1352	A
36	5	1355	A
36	5	1481	A
36	5	1514	G
36	5	1554	U
36	5	1560	G
36	5	1580	A
36	5	1715	A
36	5	1716	U
36	5	1815	U
36	5	1816	A
36	5	1817	G
36	5	1819	U
36	5	1841	A
36	5	1858	A
36	5	1878	G
36	5	1879	A
36	5	2101	C
36	5	2112	U
36	5	2121	G
36	5	2204	C
36	5	2205	U
36	5	2209	U
36	5	2249	G

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Mol	Chain	Res	Type
36	5	2255	A
36	5	2281	A
36	5	2282	U
36	5	2372	A
36	5	2374	C
36	5	2392	C
36	5	2440	G
36	5	2507	C
36	5	2513	U
36	5	2531	C
36	5	2539	C
36	5	2541	U
36	5	2572	C
36	5	2584	G
36	5	2586	G
36	5	2593	A
36	5	2677	G
36	5	2682	C
36	5	2689	A
36	5	2719	U
36	5	2752	U
36	5	2772	C
36	5	2801	A
36	5	2803	A
36	5	2817	A
36	5	2818	U
36	5	2842	U
36	5	2940	A
36	5	2971	A
36	5	3011	A
36	5	3078	U
36	5	3079	U
36	5	3121	U
36	5	3146	G
36	5	3154	C
36	5	3172	A
36	5	3173	G
36	5	3195	U
36	5	3196	U
36	5	3216	G
36	5	3218	A
36	5	3228	C

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Mol	Chain	Res	Type
36	5	3244	A
36	5	3269	U
36	5	3275	U
36	5	3276	G
36	5	3289	G
36	5	3317	U
36	5	3333	G
36	5	3340	G
36	5	3341	U
36	5	3357	U
37	7	49	G
37	7	73	C
37	7	111	U
38	8	45	C
38	8	113	U
38	8	126	A

## 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 [i](#)

Of 2558 ligands modelled in this entry, 1426 are monoatomic - leaving 1132 for Mogul analysis.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with  $|Z| > 2$  is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z  > 2$	Counts	RMSZ	$\# Z  > 2$
87	OHX	1	4019	-	0,6,6	0.00	-	-		
87	OHX	1	4150	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	6	2061	-	0,6,6	0.00	-	-		
87	OHX	2	2025	-	0,6,6	0.00	-	-		
87	OHX	1	3934	-	0,6,6	0.00	-	-		
87	OHX	5	4125	-	0,6,6	0.00	-	-		
87	OHX	5	4244	-	0,6,6	0.00	-	-		
87	OHX	6	2182	-	0,6,6	0.00	-	-		
87	OHX	2	2078	-	0,6,6	0.00	-	-		
87	OHX	8	225	-	0,6,6	0.00	-	-		
87	OHX	5	3992	-	0,6,6	0.00	-	-		
87	OHX	2	2135	-	0,6,6	0.00	-	-		
87	OHX	1	4191	-	0,6,6	0.00	-	-		
87	OHX	5	4033	-	0,6,6	0.00	-	-		
87	OHX	1	4004	-	0,6,6	0.00	-	-		
87	OHX	5	4036	-	0,6,6	0.00	-	-		
87	OHX	1	4064	-	0,6,6	0.00	-	-		
87	OHX	1	4069	-	0,6,6	0.00	-	-		
87	OHX	1	4049	-	0,6,6	0.00	-	-		
87	OHX	5	4064	-	0,6,6	0.00	-	-		
87	OHX	3	225	-	0,6,6	0.00	-	-		
87	OHX	5	4055	-	0,6,6	0.00	-	-		
87	OHX	5	4108	-	0,6,6	0.00	-	-		
87	OHX	1	3978	-	0,6,6	0.00	-	-		
87	OHX	5	4240	-	0,6,6	0.00	-	-		
87	OHX	6	2060	-	0,6,6	0.00	-	-		
87	OHX	5	3928	-	0,6,6	0.00	-	-		
87	OHX	6	2178	-	0,6,6	0.00	-	-		
87	OHX	5	4001	-	0,6,6	0.00	-	-		
87	OHX	5	3978	-	0,6,6	0.00	-	-		
87	OHX	6	2096	-	0,6,6	0.00	-	-		
87	OHX	5	3976	-	0,6,6	0.00	-	-		
87	OHX	4	228	-	0,6,6	0.00	-	-		
87	OHX	5	4139	-	0,6,6	0.00	-	-		
87	OHX	5	4223	-	0,6,6	0.00	-	-		
87	OHX	1	3941	-	0,6,6	0.00	-	-		
87	OHX	2	2034	-	0,6,6	0.00	-	-		
87	OHX	m0	303	-	0,6,6	0.00	-	-		
87	OHX	6	2076	-	0,6,6	0.00	-	-		
87	OHX	1	4100	-	0,6,6	0.00	-	-		
87	OHX	6	2198	-	0,6,6	0.00	-	-		
87	OHX	8	233	-	0,6,6	0.00	-	-		
87	OHX	5	4057	-	0,6,6	0.00	-	-		
87	OHX	5	4058	-	0,6,6	0.00	-	-		
87	OHX	5	4107	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4072	-	0,6,6	0.00	-	-		
87	OHX	2	2045	-	0,6,6	0.00	-	-		
87	OHX	1	4084	-	0,6,6	0.00	-	-		
87	OHX	5	3913	-	0,6,6	0.00	-	-		
87	OHX	sR	401	-	0,6,6	0.00	-	-		
87	OHX	2	2174	-	0,6,6	0.00	-	-		
87	OHX	5	3908	-	0,6,6	0.00	-	-		
87	OHX	5	4144	-	0,6,6	0.00	-	-		
87	OHX	5	3955	-	0,6,6	0.00	-	-		
87	OHX	19	202	-	0,6,6	0.00	-	-		
87	OHX	5	4191	-	0,6,6	0.00	-	-		
87	OHX	1	4158	-	0,6,6	0.00	-	-		
87	OHX	1	4037	-	0,6,6	0.00	-	-		
87	OHX	5	4123	-	0,6,6	0.00	-	-		
87	OHX	N9	102	-	0,6,6	0.00	-	-		
87	OHX	1	3995	-	0,6,6	0.00	-	-		
87	OHX	1	3904	-	0,6,6	0.00	-	-		
87	OHX	2	2116	-	0,6,6	0.00	-	-		
87	OHX	1	3887	-	0,6,6	0.00	-	-		
87	OHX	1	4209	-	0,6,6	0.00	-	-		
87	OHX	6	2200	-	0,6,6	0.00	-	-		
87	OHX	1	4042	-	0,6,6	0.00	-	-		
87	OHX	5	4088	-	0,6,6	0.00	-	-		
87	OHX	1	3928	-	0,6,6	0.00	-	-		
87	OHX	5	3963	-	0,6,6	0.00	-	-		
87	OHX	1	3903	-	0,6,6	0.00	-	-		
87	OHX	2	2151	-	0,6,6	0.00	-	-		
87	OHX	1	4104	-	0,6,6	0.00	-	-		
87	OHX	1	4182	-	0,6,6	0.00	-	-		
87	OHX	1	3932	-	0,6,6	0.00	-	-		
87	OHX	6	2053	-	0,6,6	0.00	-	-		
87	OHX	6	2144	-	0,6,6	0.00	-	-		
87	OHX	2	2120	-	0,6,6	0.00	-	-		
87	OHX	2	2133	-	0,6,6	0.00	-	-		
87	OHX	1	4148	-	0,6,6	0.00	-	-		
87	OHX	1	4105	-	0,6,6	0.00	-	-		
87	OHX	5	3895	-	0,6,6	0.00	-	-		
87	OHX	5	4042	-	0,6,6	0.00	-	-		
87	OHX	3	224	-	0,6,6	0.00	-	-		
87	OHX	6	2175	-	0,6,6	0.00	-	-		
87	OHX	1	4029	-	0,6,6	0.00	-	-		
87	OHX	6	2199	-	0,6,6	0.00	-	-		
87	OHX	1	3930	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	6	2203	-	0,6,6	0.00	-	-		
87	OHX	2	2060	-	0,6,6	0.00	-	-		
87	OHX	1	4068	-	0,6,6	0.00	-	-		
87	OHX	6	2114	-	0,6,6	0.00	-	-		
87	OHX	6	2055	-	0,6,6	0.00	-	-		
87	OHX	5	4186	-	0,6,6	0.00	-	-		
87	OHX	6	2195	-	0,6,6	0.00	-	-		
87	OHX	4	239	-	0,6,6	0.00	-	-		
87	OHX	5	4195	-	0,6,6	0.00	-	-		
87	OHX	1	3957	-	0,6,6	0.00	-	-		
87	OHX	5	4052	-	0,6,6	0.00	-	-		
87	OHX	5	4156	-	0,6,6	0.00	-	-		
87	OHX	L3	404	-	0,6,6	0.00	-	-		
87	OHX	5	4153	-	0,6,6	0.00	-	-		
87	OHX	1	4129	-	0,6,6	0.00	-	-		
87	OHX	6	2185	-	0,6,6	0.00	-	-		
87	OHX	7	221	-	0,6,6	0.00	-	-		
87	OHX	5	4018	-	0,6,6	0.00	-	-		
87	OHX	1	4051	-	0,6,6	0.00	-	-		
87	OHX	1	4135	-	0,6,6	0.00	-	-		
87	OHX	5	4193	-	0,6,6	0.00	-	-		
87	OHX	2	2081	-	0,6,6	0.00	-	-		
87	OHX	1	3910	-	0,6,6	0.00	-	-		
87	OHX	1	4190	-	0,6,6	0.00	-	-		
87	OHX	1	4034	-	0,6,6	0.00	-	-		
87	OHX	1	3939	-	0,6,6	0.00	-	-		
87	OHX	6	2194	-	0,6,6	0.00	-	-		
87	OHX	5	4120	-	0,6,6	0.00	-	-		
87	OHX	1	4178	-	0,6,6	0.00	-	-		
87	OHX	2	2112	-	0,6,6	0.00	-	-		
87	OHX	1	3884	-	0,6,6	0.00	-	-		
87	OHX	q2	502	-	0,6,6	0.00	-	-		
87	OHX	C5	201	-	0,6,6	0.00	-	-		
87	OHX	1	3948	-	0,6,6	0.00	-	-		
87	OHX	1	4091	-	0,6,6	0.00	-	-		
87	OHX	1	4086	-	0,6,6	0.00	-	-		
87	OHX	1	3909	-	0,6,6	0.00	-	-		
87	OHX	5	4065	-	0,6,6	0.00	-	-		
87	OHX	5	4104	-	0,6,6	0.00	-	-		
87	OHX	5	4137	-	0,6,6	0.00	-	-		
87	OHX	5	4090	-	0,6,6	0.00	-	-		
87	OHX	1	4059	-	0,6,6	0.00	-	-		
87	OHX	1	4053	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	2	2094	-	0,6,6	0.00	-	-		
87	OHX	1	4142	-	0,6,6	0.00	-	-		
87	OHX	6	2067	-	0,6,6	0.00	-	-		
87	OHX	5	4145	-	0,6,6	0.00	-	-		
87	OHX	5	4067	-	0,6,6	0.00	-	-		
87	OHX	5	4116	-	0,6,6	0.00	-	-		
87	OHX	5	4213	-	0,6,6	0.00	-	-		
87	OHX	5	4179	-	0,6,6	0.00	-	-		
87	OHX	2	2108	-	0,6,6	0.00	-	-		
87	OHX	1	4065	-	0,6,6	0.00	-	-		
87	OHX	5	4089	-	0,6,6	0.00	-	-		
87	OHX	5	3903	-	0,6,6	0.00	-	-		
87	OHX	5	4182	-	0,6,6	0.00	-	-		
87	OHX	5	4124	-	0,6,6	0.00	-	-		
87	OHX	5	3897	-	0,6,6	0.00	-	-		
87	OHX	2	2143	-	0,6,6	0.00	-	-		
87	OHX	1	3960	-	0,6,6	0.00	-	-		
87	OHX	6	2100	-	0,6,6	0.00	-	-		
87	OHX	1	4127	-	0,6,6	0.00	-	-		
87	OHX	5	3982	-	0,6,6	0.00	-	-		
87	OHX	1	4009	-	0,6,6	0.00	-	-		
87	OHX	O3	202	-	0,6,6	0.00	-	-		
87	OHX	5	4241	-	0,6,6	0.00	-	-		
87	OHX	5	3905	-	0,6,6	0.00	-	-		
87	OHX	1	4201	-	0,6,6	0.00	-	-		
87	OHX	1	4095	-	0,6,6	0.00	-	-		
87	OHX	5	4012	-	0,6,6	0.00	-	-		
87	OHX	2	2165	-	0,6,6	0.00	-	-		
87	OHX	1	4171	-	0,6,6	0.00	-	-		
87	OHX	1	4061	-	0,6,6	0.00	-	-		
87	OHX	15	306	-	0,6,6	0.00	-	-		
87	OHX	6	2063	-	0,6,6	0.00	-	-		
87	OHX	5	3936	-	0,6,6	0.00	-	-		
87	OHX	5	3898	-	0,6,6	0.00	-	-		
87	OHX	1	4207	-	0,6,6	0.00	-	-		
87	OHX	2	2059	-	0,6,6	0.00	-	-		
87	OHX	5	4118	-	0,6,6	0.00	-	-		
87	OHX	5	4079	-	0,6,6	0.00	-	-		
87	OHX	1	3891	-	0,6,6	0.00	-	-		
87	OHX	8	227	-	0,6,6	0.00	-	-		
87	OHX	6	2111	-	0,6,6	0.00	-	-		
87	OHX	8	231	-	0,6,6	0.00	-	-		
87	OHX	2	2097	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	4132	-	0,6,6	0.00	-	-		
87	OHX	5	4152	-	0,6,6	0.00	-	-		
87	OHX	5	4014	-	0,6,6	0.00	-	-		
87	OHX	2	2088	-	0,6,6	0.00	-	-		
87	OHX	1	4039	-	0,6,6	0.00	-	-		
87	OHX	5	4208	-	0,6,6	0.00	-	-		
87	OHX	1	4076	-	0,6,6	0.00	-	-		
88	GET	2	2181	-	33,36,36	0.49	0	43,55,55	1.87	12 (27%)
87	OHX	1	4177	-	0,6,6	0.00	-	-		
87	OHX	1	4056	-	0,6,6	0.00	-	-		
87	OHX	2	2037	-	0,6,6	0.00	-	-		
87	OHX	6	2071	-	0,6,6	0.00	-	-		
87	OHX	7	224	-	0,6,6	0.00	-	-		
87	OHX	5	3944	-	0,6,6	0.00	-	-		
87	OHX	2	2076	-	0,6,6	0.00	-	-		
87	OHX	1	4184	-	0,6,6	0.00	-	-		
87	OHX	5	4109	-	0,6,6	0.00	-	-		
87	OHX	5	4043	-	0,6,6	0.00	-	-		
87	OHX	6	2177	-	0,6,6	0.00	-	-		
87	OHX	6	2084	-	0,6,6	0.00	-	-		
87	OHX	1	4173	-	0,6,6	0.00	-	-		
87	OHX	5	3937	-	0,6,6	0.00	-	-		
87	OHX	1	3989	-	0,6,6	0.00	-	-		
87	OHX	5	3918	-	0,6,6	0.00	-	-		
87	OHX	5	4077	-	0,6,6	0.00	-	-		
87	OHX	6	2095	-	0,6,6	0.00	-	-		
87	OHX	2	2153	-	0,6,6	0.00	-	-		
87	OHX	4	230	-	0,6,6	0.00	-	-		
87	OHX	1	3890	-	0,6,6	0.00	-	-		
87	OHX	5	4040	-	0,6,6	0.00	-	-		
87	OHX	6	2050	-	0,6,6	0.00	-	-		
87	OHX	1	3901	-	0,6,6	0.00	-	-		
87	OHX	o7	502	-	0,6,6	0.00	-	-		
87	OHX	6	2204	-	0,6,6	0.00	-	-		
87	OHX	2	2026	-	0,6,6	0.00	-	-		
87	OHX	6	2197	-	0,6,6	0.00	-	-		
87	OHX	5	4049	-	0,6,6	0.00	-	-		
87	OHX	2	2080	-	0,6,6	0.00	-	-		
87	OHX	1	3946	-	0,6,6	0.00	-	-		
87	OHX	6	2187	-	0,6,6	0.00	-	-		
87	OHX	5	4076	-	0,6,6	0.00	-	-		
87	OHX	5	4114	-	0,6,6	0.00	-	-		
87	OHX	1	4141	-	0,6,6	0.00	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4063	-	0,6,6	0.00	-	-		
87	OHX	2	2047	-	0,6,6	0.00	-	-		
87	OHX	6	2066	-	0,6,6	0.00	-	-		
87	OHX	1	4062	-	0,6,6	0.00	-	-		
87	OHX	1	4111	-	0,6,6	0.00	-	-		
87	OHX	6	2148	-	0,6,6	0.00	-	-		
87	OHX	2	2139	-	0,6,6	0.00	-	-		
87	OHX	2	2083	-	0,6,6	0.00	-	-		
87	OHX	5	4219	-	0,6,6	0.00	-	-		
87	OHX	5	4176	-	0,6,6	0.00	-	-		
87	OHX	1	3875	-	0,6,6	0.00	-	-		
87	OHX	1	3958	-	0,6,6	0.00	-	-		
87	OHX	5	3907	-	0,6,6	0.00	-	-		
87	OHX	o3	203	-	0,6,6	0.00	-	-		
87	OHX	5	4027	-	0,6,6	0.00	-	-		
87	OHX	1	4024	-	0,6,6	0.00	-	-		
87	OHX	2	2130	-	0,6,6	0.00	-	-		
87	OHX	5	4013	-	0,6,6	0.00	-	-		
87	OHX	5	3998	-	0,6,6	0.00	-	-		
87	OHX	1	4092	-	0,6,6	0.00	-	-		
87	OHX	n3	202	-	0,6,6	0.00	-	-		
87	OHX	6	2059	-	0,6,6	0.00	-	-		
87	OHX	5	4200	-	0,6,6	0.00	-	-		
87	OHX	2	2105	-	0,6,6	0.00	-	-		
87	OHX	5	4205	-	0,6,6	0.00	-	-		
87	OHX	5	3902	-	0,6,6	0.00	-	-		
87	OHX	1	3869	-	0,6,6	0.00	-	-		
87	OHX	L3	405	-	0,6,6	0.00	-	-		
87	OHX	6	2072	-	0,6,6	0.00	-	-		
87	OHX	1	3888	-	0,6,6	0.00	-	-		
87	OHX	5	3979	-	0,6,6	0.00	-	-		
87	OHX	1	3886	-	0,6,6	0.00	-	-		
87	OHX	5	3974	-	0,6,6	0.00	-	-		
87	OHX	5	4054	-	0,6,6	0.00	-	-		
87	OHX	1	3919	-	0,6,6	0.00	-	-		
87	OHX	5	4192	-	0,6,6	0.00	-	-		
87	OHX	5	4174	-	0,6,6	0.00	-	-		
87	OHX	1	3873	-	0,6,6	0.00	-	-		
87	OHX	5	3980	-	0,6,6	0.00	-	-		
87	OHX	2	2150	-	0,6,6	0.00	-	-		
87	OHX	5	4024	-	0,6,6	0.00	-	-		
87	OHX	1	4134	-	0,6,6	0.00	-	-		
87	OHX	5	4021	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4200	-	0,6,6	0.00	-	-		
87	OHX	6	2116	-	0,6,6	0.00	-	-		
87	OHX	s8	303	-	0,6,6	0.00	-	-		
87	OHX	2	2024	-	0,6,6	0.00	-	-		
87	OHX	1	3880	-	0,6,6	0.00	-	-		
87	OHX	2	2121	-	0,6,6	0.00	-	-		
87	OHX	2	2102	-	0,6,6	0.00	-	-		
87	OHX	5	4129	-	0,6,6	0.00	-	-		
87	OHX	1	3945	-	0,6,6	0.00	-	-		
87	OHX	5	4202	-	0,6,6	0.00	-	-		
87	OHX	5	4099	-	0,6,6	0.00	-	-		
87	OHX	6	2070	-	0,6,6	0.00	-	-		
87	OHX	1	3927	-	0,6,6	0.00	-	-		
87	OHX	2	2127	-	0,6,6	0.00	-	-		
87	OHX	5	4060	-	0,6,6	0.00	-	-		
87	OHX	5	4204	-	0,6,6	0.00	-	-		
87	OHX	M0	304	-	0,6,6	0.00	-	-		
87	OHX	1	3922	-	0,6,6	0.00	-	-		
87	OHX	6	2129	-	0,6,6	0.00	-	-		
87	OHX	4	229	-	0,6,6	0.00	-	-		
87	OHX	5	4135	-	0,6,6	0.00	-	-		
87	OHX	2	2144	-	0,6,6	0.00	-	-		
87	OHX	d9	102	-	0,6,6	0.00	-	-		
87	OHX	1	4047	-	0,6,6	0.00	-	-		
87	OHX	1	3942	-	0,6,6	0.00	-	-		
87	OHX	1	4125	-	0,6,6	0.00	-	-		
87	OHX	1	3925	-	0,6,6	0.00	-	-		
87	OHX	5	4147	-	0,6,6	0.00	-	-		
87	OHX	2	2027	-	0,6,6	0.00	-	-		
87	OHX	1	3900	-	0,6,6	0.00	-	-		
87	OHX	6	2209	-	0,6,6	0.00	-	-		
87	OHX	5	3920	-	0,6,6	0.00	-	-		
87	OHX	1	4044	-	0,6,6	0.00	-	-		
87	OHX	1	4036	-	0,6,6	0.00	-	-		
87	OHX	1	4204	-	0,6,6	0.00	-	-		
87	OHX	2	2072	-	0,6,6	0.00	-	-		
87	OHX	1	4130	-	0,6,6	0.00	-	-		
87	OHX	1	4205	-	0,6,6	0.00	-	-		
87	OHX	6	2135	-	0,6,6	0.00	-	-		
87	OHX	6	2168	-	0,6,6	0.00	-	-		
87	OHX	5	4228	-	0,6,6	0.00	-	-		
87	OHX	1	4164	-	0,6,6	0.00	-	-		
87	OHX	1	4143	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	3974	-	0,6,6	0.00	-	-		
87	OHX	5	3977	-	0,6,6	0.00	-	-		
87	OHX	5	4006	-	0,6,6	0.00	-	-		
87	OHX	6	2154	-	0,6,6	0.00	-	-		
87	OHX	1	4117	-	0,6,6	0.00	-	-		
87	OHX	1	3879	-	0,6,6	0.00	-	-		
87	OHX	1	3991	-	0,6,6	0.00	-	-		
87	OHX	5	4029	-	0,6,6	0.00	-	-		
87	OHX	1	4172	-	0,6,6	0.00	-	-		
87	OHX	1	4054	-	0,6,6	0.00	-	-		
87	OHX	1	3951	-	0,6,6	0.00	-	-		
87	OHX	1	4187	-	0,6,6	0.00	-	-		
87	OHX	D9	102	-	0,6,6	0.00	-	-		
87	OHX	5	4242	-	0,6,6	0.00	-	-		
87	OHX	3	216	-	0,6,6	0.00	-	-		
87	OHX	2	2044	-	0,6,6	0.00	-	-		
87	OHX	1	3992	-	0,6,6	0.00	-	-		
87	OHX	5	4187	-	0,6,6	0.00	-	-		
87	OHX	5	3991	-	0,6,6	0.00	-	-		
87	OHX	5	4096	-	0,6,6	0.00	-	-		
87	OHX	1	4152	-	0,6,6	0.00	-	-		
87	OHX	2	2100	-	0,6,6	0.00	-	-		
87	OHX	o9	101	-	0,6,6	0.00	-	-		
87	OHX	1	4144	-	0,6,6	0.00	-	-		
87	OHX	1	3924	-	0,6,6	0.00	-	-		
87	OHX	2	2031	-	0,6,6	0.00	-	-		
87	OHX	1	3993	-	0,6,6	0.00	-	-		
87	OHX	5	4035	-	0,6,6	0.00	-	-		
87	OHX	1	4170	-	0,6,6	0.00	-	-		
87	OHX	1	4210	-	0,6,6	0.00	-	-		
87	OHX	1	4114	-	0,6,6	0.00	-	-		
87	OHX	6	2206	-	0,6,6	0.00	-	-		
87	OHX	5	3943	-	0,6,6	0.00	-	-		
87	OHX	2	2087	-	0,6,6	0.00	-	-		
87	OHX	1	3944	-	0,6,6	0.00	-	-		
87	OHX	1	4212	-	0,6,6	0.00	-	-		
87	OHX	1	3905	-	0,6,6	0.00	-	-		
87	OHX	5	4163	-	0,6,6	0.00	-	-		
87	OHX	1	3981	-	0,6,6	0.00	-	-		
87	OHX	1	3870	-	0,6,6	0.00	-	-		
87	OHX	6	2051	-	0,6,6	0.00	-	-		
87	OHX	L4	403	-	0,6,6	0.00	-	-		
87	OHX	5	3940	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	4164	-	0,6,6	0.00	-	-		
87	OHX	8	220	-	0,6,6	0.00	-	-		
87	OHX	1	4160	-	0,6,6	0.00	-	-		
87	OHX	6	2077	-	0,6,6	0.00	-	-		
87	OHX	5	4133	-	0,6,6	0.00	-	-		
87	OHX	5	4236	-	0,6,6	0.00	-	-		
87	OHX	1	4154	-	0,6,6	0.00	-	-		
87	OHX	5	4084	-	0,6,6	0.00	-	-		
87	OHX	2	2111	-	0,6,6	0.00	-	-		
87	OHX	1	4131	-	0,6,6	0.00	-	-		
87	OHX	2	2132	-	0,6,6	0.00	-	-		
87	OHX	5	4131	-	0,6,6	0.00	-	-		
87	OHX	6	2052	-	0,6,6	0.00	-	-		
87	OHX	5	4155	-	0,6,6	0.00	-	-		
87	OHX	6	2138	-	0,6,6	0.00	-	-		
87	OHX	1	3971	-	0,6,6	0.00	-	-		
87	OHX	2	2090	-	0,6,6	0.00	-	-		
87	OHX	5	4100	-	0,6,6	0.00	-	-		
87	OHX	6	2143	-	0,6,6	0.00	-	-		
87	OHX	1	4103	-	0,6,6	0.00	-	-		
87	OHX	L3	403	-	0,6,6	0.00	-	-		
87	OHX	5	3950	-	0,6,6	0.00	-	-		
87	OHX	1	4192	-	0,6,6	0.00	-	-		
87	OHX	O2	202	-	0,6,6	0.00	-	-		
87	OHX	1	3917	-	0,6,6	0.00	-	-		
87	OHX	1	3912	-	0,6,6	0.00	-	-		
87	OHX	5	4140	-	0,6,6	0.00	-	-		
87	OHX	2	2157	-	0,6,6	0.00	-	-		
87	OHX	5	4201	-	0,6,6	0.00	-	-		
87	OHX	5	4217	-	0,6,6	0.00	-	-		
87	OHX	5	3934	-	0,6,6	0.00	-	-		
87	OHX	6	2174	-	0,6,6	0.00	-	-		
87	OHX	1	3937	-	0,6,6	0.00	-	-		
87	OHX	2	2142	-	0,6,6	0.00	-	-		
87	OHX	1	4094	-	0,6,6	0.00	-	-		
87	OHX	2	2084	-	0,6,6	0.00	-	-		
87	OHX	5	4138	-	0,6,6	0.00	-	-		
87	OHX	1	3947	-	0,6,6	0.00	-	-		
87	OHX	5	4103	-	0,6,6	0.00	-	-		
87	OHX	1	3889	-	0,6,6	0.00	-	-		
87	OHX	5	4106	-	0,6,6	0.00	-	-		
87	OHX	5	3899	-	0,6,6	0.00	-	-		
87	OHX	1	4206	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	2	2046	-	0,6,6	0.00	-	-		
87	OHX	2	2061	-	0,6,6	0.00	-	-		
87	OHX	5	4243	-	0,6,6	0.00	-	-		
87	OHX	2	2159	-	0,6,6	0.00	-	-		
87	OHX	1	3866	-	0,6,6	0.00	-	-		
87	OHX	2	2073	-	0,6,6	0.00	-	-		
87	OHX	5	4168	-	0,6,6	0.00	-	-		
87	OHX	3	215	-	0,6,6	0.00	-	-		
87	OHX	5	3914	-	0,6,6	0.00	-	-		
87	OHX	5	4194	-	0,6,6	0.00	-	-		
87	OHX	5	4215	-	0,6,6	0.00	-	-		
87	OHX	13	408	-	0,6,6	0.00	-	-		
87	OHX	6	2207	-	0,6,6	0.00	-	-		
87	OHX	1	4082	-	0,6,6	0.00	-	-		
87	OHX	2	2030	-	0,6,6	0.00	-	-		
87	OHX	2	2071	-	0,6,6	0.00	-	-		
87	OHX	5	4066	-	0,6,6	0.00	-	-		
87	OHX	6	2189	-	0,6,6	0.00	-	-		
87	OHX	6	2132	-	0,6,6	0.00	-	-		
87	OHX	1	3983	-	0,6,6	0.00	-	-		
87	OHX	6	2102	-	0,6,6	0.00	-	-		
87	OHX	6	2147	-	0,6,6	0.00	-	-		
87	OHX	5	3984	-	0,6,6	0.00	-	-		
87	OHX	7	223	-	0,6,6	0.00	-	-		
87	OHX	5	4061	-	0,6,6	0.00	-	-		
87	OHX	5	4044	-	0,6,6	0.00	-	-		
87	OHX	1	3943	-	0,6,6	0.00	-	-		
87	OHX	1	4108	-	0,6,6	0.00	-	-		
87	OHX	M6	202	-	0,6,6	0.00	-	-		
87	OHX	5	4159	-	0,6,6	0.00	-	-		
87	OHX	SR	401	-	0,6,6	0.00	-	-		
87	OHX	5	3901	-	0,6,6	0.00	-	-		
87	OHX	1	4167	-	0,6,6	0.00	-	-		
87	OHX	5	4150	-	0,6,6	0.00	-	-		
87	OHX	1	4140	-	0,6,6	0.00	-	-		
87	OHX	1	3920	-	0,6,6	0.00	-	-		
87	OHX	1	4208	-	0,6,6	0.00	-	-		
87	OHX	2	2065	-	0,6,6	0.00	-	-		
87	OHX	5	4173	-	0,6,6	0.00	-	-		
87	OHX	5	4034	-	0,6,6	0.00	-	-		
87	OHX	6	2107	-	0,6,6	0.00	-	-		
87	OHX	5	4183	-	0,6,6	0.00	-	-		
87	OHX	4	238	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4107	-	0,6,6	0.00	-	-		
87	OHX	1	3931	-	0,6,6	0.00	-	-		
87	OHX	6	2106	-	0,6,6	0.00	-	-		
87	OHX	5	4227	-	0,6,6	0.00	-	-		
87	OHX	6	2079	-	0,6,6	0.00	-	-		
87	OHX	5	3997	-	0,6,6	0.00	-	-		
87	OHX	5	4094	-	0,6,6	0.00	-	-		
87	OHX	1	4099	-	0,6,6	0.00	-	-		
87	OHX	2	2161	-	0,6,6	0.00	-	-		
87	OHX	6	2191	-	0,6,6	0.00	-	-		
87	OHX	1	3913	-	0,6,6	0.00	-	-		
87	OHX	5	4170	-	0,6,6	0.00	-	-		
87	OHX	2	2122	-	0,6,6	0.00	-	-		
87	OHX	6	2183	-	0,6,6	0.00	-	-		
87	OHX	6	2083	-	0,6,6	0.00	-	-		
87	OHX	5	4196	-	0,6,6	0.00	-	-		
87	OHX	1	3921	-	0,6,6	0.00	-	-		
87	OHX	4	231	-	0,6,6	0.00	-	-		
87	OHX	5	4210	-	0,6,6	0.00	-	-		
87	OHX	2	2172	-	0,6,6	0.00	-	-		
87	OHX	1	4118	-	0,6,6	0.00	-	-		
87	OHX	5	4184	-	0,6,6	0.00	-	-		
87	OHX	1	4123	-	0,6,6	0.00	-	-		
87	OHX	1	3896	-	0,6,6	0.00	-	-		
87	OHX	2	2110	-	0,6,6	0.00	-	-		
87	OHX	1	3882	-	0,6,6	0.00	-	-		
87	OHX	4	227	-	0,6,6	0.00	-	-		
87	OHX	6	2176	-	0,6,6	0.00	-	-		
87	OHX	1	3916	-	0,6,6	0.00	-	-		
87	OHX	1	3984	-	0,6,6	0.00	-	-		
87	OHX	8	222	-	0,6,6	0.00	-	-		
87	OHX	5	4229	-	0,6,6	0.00	-	-		
87	OHX	5	4041	-	0,6,6	0.00	-	-		
87	OHX	2	2113	-	0,6,6	0.00	-	-		
87	OHX	5	4235	-	0,6,6	0.00	-	-		
87	OHX	5	4009	-	0,6,6	0.00	-	-		
87	OHX	C8	201	-	0,6,6	0.00	-	-		
87	OHX	5	3924	-	0,6,6	0.00	-	-		
87	OHX	1	3969	-	0,6,6	0.00	-	-		
87	OHX	2	2098	-	0,6,6	0.00	-	-		
87	OHX	6	2173	-	0,6,6	0.00	-	-		
87	OHX	5	4008	-	0,6,6	0.00	-	-		
87	OHX	5	4128	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	2	2171	-	0,6,6	0.00	-	-		
87	OHX	2	2038	-	0,6,6	0.00	-	-		
87	OHX	5	4142	-	0,6,6	0.00	-	-		
87	OHX	5	4239	-	0,6,6	0.00	-	-		
87	OHX	6	2093	-	0,6,6	0.00	-	-		
87	OHX	D3	202	-	0,6,6	0.00	-	-		
87	OHX	6	2179	-	0,6,6	0.00	-	-		
87	OHX	5	4111	-	0,6,6	0.00	-	-		
87	OHX	5	3968	-	0,6,6	0.00	-	-		
87	OHX	5	3926	-	0,6,6	0.00	-	-		
87	OHX	5	3990	-	0,6,6	0.00	-	-		
87	OHX	1	3906	-	0,6,6	0.00	-	-		
87	OHX	5	4086	-	0,6,6	0.00	-	-		
87	OHX	5	3957	-	0,6,6	0.00	-	-		
87	OHX	14	403	-	0,6,6	0.00	-	-		
87	OHX	2	2103	-	0,6,6	0.00	-	-		
87	OHX	1	4018	-	0,6,6	0.00	-	-		
87	OHX	5	3948	-	0,6,6	0.00	-	-		
87	OHX	1	3952	-	0,6,6	0.00	-	-		
87	OHX	5	4207	-	0,6,6	0.00	-	-		
87	OHX	1	4011	-	0,6,6	0.00	-	-		
87	OHX	5	4098	-	0,6,6	0.00	-	-		
87	OHX	1	4157	-	0,6,6	0.00	-	-		
87	OHX	1	4025	-	0,6,6	0.00	-	-		
87	OHX	6	2205	-	0,6,6	0.00	-	-		
87	OHX	2	2062	-	0,6,6	0.00	-	-		
87	OHX	5	4053	-	0,6,6	0.00	-	-		
87	OHX	Q2	502	-	0,6,6	0.00	-	-		
87	OHX	6	2120	-	0,6,6	0.00	-	-		
87	OHX	5	4056	-	0,6,6	0.00	-	-		
87	OHX	6	2081	-	0,6,6	0.00	-	-		
87	OHX	6	2125	-	0,6,6	0.00	-	-		
87	OHX	2	2175	-	0,6,6	0.00	-	-		
87	OHX	1	3872	-	0,6,6	0.00	-	-		
87	OHX	2	2050	-	0,6,6	0.00	-	-		
87	OHX	S8	302	-	0,6,6	0.00	-	-		
87	OHX	1	4013	-	0,6,6	0.00	-	-		
87	OHX	5	3981	-	0,6,6	0.00	-	-		
87	OHX	c8	202	-	0,6,6	0.00	-	-		
87	OHX	8	221	-	0,6,6	0.00	-	-		
87	OHX	1	3999	-	0,6,6	0.00	-	-		
87	OHX	2	2148	-	0,6,6	0.00	-	-		
87	OHX	5	3935	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	4148	-	0,6,6	0.00	-	-		
87	OHX	1	4139	-	0,6,6	0.00	-	-		
87	OHX	6	2117	-	0,6,6	0.00	-	-		
87	OHX	2	2068	-	0,6,6	0.00	-	-		
87	OHX	2	2104	-	0,6,6	0.00	-	-		
87	OHX	2	2125	-	0,6,6	0.00	-	-		
87	OHX	5	4051	-	0,6,6	0.00	-	-		
87	OHX	5	3945	-	0,6,6	0.00	-	-		
87	OHX	1	4145	-	0,6,6	0.00	-	-		
87	OHX	6	2082	-	0,6,6	0.00	-	-		
87	OHX	5	4046	-	0,6,6	0.00	-	-		
87	OHX	6	2089	-	0,6,6	0.00	-	-		
87	OHX	1	4077	-	0,6,6	0.00	-	-		
87	OHX	6	2139	-	0,6,6	0.00	-	-		
87	OHX	1	4050	-	0,6,6	0.00	-	-		
87	OHX	2	2089	-	0,6,6	0.00	-	-		
87	OHX	5	4082	-	0,6,6	0.00	-	-		
87	OHX	6	2099	-	0,6,6	0.00	-	-		
87	OHX	2	2033	-	0,6,6	0.00	-	-		
87	OHX	7	216	-	0,6,6	0.00	-	-		
87	OHX	1	4016	-	0,6,6	0.00	-	-		
87	OHX	6	2124	-	0,6,6	0.00	-	-		
87	OHX	6	2128	-	0,6,6	0.00	-	-		
87	OHX	1	4181	-	0,6,6	0.00	-	-		
87	OHX	5	4063	-	0,6,6	0.00	-	-		
87	OHX	3	219	-	0,6,6	0.00	-	-		
87	OHX	5	4095	-	0,6,6	0.00	-	-		
87	OHX	6	2196	-	0,6,6	0.00	-	-		
87	OHX	5	4017	-	0,6,6	0.00	-	-		
87	OHX	5	3941	-	0,6,6	0.00	-	-		
87	OHX	1	4128	-	0,6,6	0.00	-	-		
87	OHX	2	2119	-	0,6,6	0.00	-	-		
87	OHX	5	3989	-	0,6,6	0.00	-	-		
87	OHX	2	2032	-	0,6,6	0.00	-	-		
87	OHX	5	3970	-	0,6,6	0.00	-	-		
87	OHX	5	4167	-	0,6,6	0.00	-	-		
87	OHX	5	4007	-	0,6,6	0.00	-	-		
87	OHX	2	2134	-	0,6,6	0.00	-	-		
87	OHX	5	3993	-	0,6,6	0.00	-	-		
87	OHX	5	4081	-	0,6,6	0.00	-	-		
87	OHX	6	2058	-	0,6,6	0.00	-	-		
87	OHX	5	4080	-	0,6,6	0.00	-	-		
87	OHX	1	4045	-	0,6,6	0.00	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	2	2086	-	0,6,6	0.00	-	-		
87	OHX	5	4218	-	0,6,6	0.00	-	-		
87	OHX	c3	201	-	0,6,6	0.00	-	-		
87	OHX	2	2029	-	0,6,6	0.00	-	-		
87	OHX	1	3956	-	0,6,6	0.00	-	-		
87	OHX	6	2075	-	0,6,6	0.00	-	-		
87	OHX	1	3967	-	0,6,6	0.00	-	-		
87	OHX	5	4022	-	0,6,6	0.00	-	-		
87	OHX	1	3892	-	0,6,6	0.00	-	-		
87	OHX	5	3922	-	0,6,6	0.00	-	-		
87	OHX	2	2095	-	0,6,6	0.00	-	-		
87	OHX	2	2051	-	0,6,6	0.00	-	-		
87	OHX	1	3979	-	0,6,6	0.00	-	-		
87	OHX	1	3874	-	0,6,6	0.00	-	-		
87	OHX	2	2167	-	0,6,6	0.00	-	-		
87	OHX	6	2123	-	0,6,6	0.00	-	-		
87	OHX	4	225	-	0,6,6	0.00	-	-		
87	OHX	5	4026	-	0,6,6	0.00	-	-		
87	OHX	1	3994	-	0,6,6	0.00	-	-		
87	OHX	1	4060	-	0,6,6	0.00	-	-		
87	OHX	6	2098	-	0,6,6	0.00	-	-		
87	OHX	6	2184	-	0,6,6	0.00	-	-		
87	OHX	1	3895	-	0,6,6	0.00	-	-		
87	OHX	1	3883	-	0,6,6	0.00	-	-		
87	OHX	5	4197	-	0,6,6	0.00	-	-		
87	OHX	5	4212	-	0,6,6	0.00	-	-		
87	OHX	1	4194	-	0,6,6	0.00	-	-		
87	OHX	5	4074	-	0,6,6	0.00	-	-		
87	OHX	1	4116	-	0,6,6	0.00	-	-		
87	OHX	5	4169	-	0,6,6	0.00	-	-		
87	OHX	1	3876	-	0,6,6	0.00	-	-		
87	OHX	1	4113	-	0,6,6	0.00	-	-		
87	OHX	1	3950	-	0,6,6	0.00	-	-		
87	OHX	5	4069	-	0,6,6	0.00	-	-		
87	OHX	1	3977	-	0,6,6	0.00	-	-		
87	OHX	5	3912	-	0,6,6	0.00	-	-		
87	OHX	1	4070	-	0,6,6	0.00	-	-		
87	OHX	5	3986	-	0,6,6	0.00	-	-		
87	OHX	1	4052	-	0,6,6	0.00	-	-		
87	OHX	5	3983	-	0,6,6	0.00	-	-		
87	OHX	2	2096	-	0,6,6	0.00	-	-		
87	OHX	3	218	-	0,6,6	0.00	-	-		
87	OHX	1	3907	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	6	2110	-	0,6,6	0.00	-	-		
87	OHX	5	4117	-	0,6,6	0.00	-	-		
87	OHX	1	3881	-	0,6,6	0.00	-	-		
87	OHX	6	2057	-	0,6,6	0.00	-	-		
87	OHX	1	4124	-	0,6,6	0.00	-	-		
87	OHX	5	4071	-	0,6,6	0.00	-	-		
87	OHX	5	4222	-	0,6,6	0.00	-	-		
87	OHX	5	4162	-	0,6,6	0.00	-	-		
87	OHX	5	4025	-	0,6,6	0.00	-	-		
87	OHX	1	3962	-	0,6,6	0.00	-	-		
87	OHX	2	2145	-	0,6,6	0.00	-	-		
87	OHX	m1	202	-	0,6,6	0.00	-	-		
87	OHX	5	4246	-	0,6,6	0.00	-	-		
87	OHX	2	2126	-	0,6,6	0.00	-	-		
87	OHX	5	3925	-	0,6,6	0.00	-	-		
87	OHX	6	2186	-	0,6,6	0.00	-	-		
87	OHX	n9	103	-	0,6,6	0.00	-	-		
87	OHX	2	2158	-	0,6,6	0.00	-	-		
87	OHX	5	4004	-	0,6,6	0.00	-	-		
87	OHX	5	4062	-	0,6,6	0.00	-	-		
87	OHX	6	2190	-	0,6,6	0.00	-	-		
87	OHX	4	224	-	0,6,6	0.00	-	-		
87	OHX	5	4038	-	0,6,6	0.00	-	-		
87	OHX	m9	201	-	0,6,6	0.00	-	-		
87	OHX	6	2105	-	0,6,6	0.00	-	-		
87	OHX	6	2104	-	0,6,6	0.00	-	-		
87	OHX	1	4010	-	0,6,6	0.00	-	-		
87	OHX	5	3995	-	0,6,6	0.00	-	-		
87	OHX	5	3930	-	0,6,6	0.00	-	-		
87	OHX	q1	102	-	0,6,6	0.00	-	-		
87	OHX	6	2192	-	0,6,6	0.00	-	-		
87	OHX	5	4237	-	0,6,6	0.00	-	-		
87	OHX	1	3914	-	0,6,6	0.00	-	-		
87	OHX	2	2054	-	0,6,6	0.00	-	-		
87	OHX	1	4169	-	0,6,6	0.00	-	-		
87	OHX	4	234	-	0,6,6	0.00	-	-		
87	OHX	6	2166	-	0,6,6	0.00	-	-		
87	OHX	1	4041	-	0,6,6	0.00	-	-		
87	OHX	1	4007	-	0,6,6	0.00	-	-		
87	OHX	1	4102	-	0,6,6	0.00	-	-		
87	OHX	5	3927	-	0,6,6	0.00	-	-		
87	OHX	1	4093	-	0,6,6	0.00	-	-		
87	OHX	1	4096	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	3975	-	0,6,6	0.00	-	-		
87	OHX	2	2035	-	0,6,6	0.00	-	-		
87	OHX	8	226	-	0,6,6	0.00	-	-		
87	OHX	6	2121	-	0,6,6	0.00	-	-		
87	OHX	5	3959	-	0,6,6	0.00	-	-		
87	OHX	7	225	-	0,6,6	0.00	-	-		
87	OHX	5	4000	-	0,6,6	0.00	-	-		
87	OHX	5	4136	-	0,6,6	0.00	-	-		
87	OHX	2	2064	-	0,6,6	0.00	-	-		
87	OHX	6	2171	-	0,6,6	0.00	-	-		
87	OHX	1	4163	-	0,6,6	0.00	-	-		
87	OHX	7	219	-	0,6,6	0.00	-	-		
87	OHX	2	2055	-	0,6,6	0.00	-	-		
87	OHX	4	237	-	0,6,6	0.00	-	-		
87	OHX	1	3899	-	0,6,6	0.00	-	-		
87	OHX	1	4198	-	0,6,6	0.00	-	-		
87	OHX	1	4174	-	0,6,6	0.00	-	-		
87	OHX	1	3936	-	0,6,6	0.00	-	-		
87	OHX	2	2049	-	0,6,6	0.00	-	-		
87	OHX	5	3969	-	0,6,6	0.00	-	-		
87	OHX	5	4154	-	0,6,6	0.00	-	-		
87	OHX	1	4001	-	0,6,6	0.00	-	-		
87	OHX	5	4185	-	0,6,6	0.00	-	-		
87	OHX	2	2042	-	0,6,6	0.00	-	-		
87	OHX	8	228	-	0,6,6	0.00	-	-		
87	OHX	2	2152	-	0,6,6	0.00	-	-		
87	OHX	1	4132	-	0,6,6	0.00	-	-		
87	OHX	1	4161	-	0,6,6	0.00	-	-		
87	OHX	6	2073	-	0,6,6	0.00	-	-		
87	OHX	5	3951	-	0,6,6	0.00	-	-		
87	OHX	5	4166	-	0,6,6	0.00	-	-		
87	OHX	1	4033	-	0,6,6	0.00	-	-		
87	OHX	1	4002	-	0,6,6	0.00	-	-		
87	OHX	6	2056	-	0,6,6	0.00	-	-		
87	OHX	2	2070	-	0,6,6	0.00	-	-		
87	OHX	1	4008	-	0,6,6	0.00	-	-		
87	OHX	1	3871	-	0,6,6	0.00	-	-		
87	OHX	1	4071	-	0,6,6	0.00	-	-		
87	OHX	2	2109	-	0,6,6	0.00	-	-		
87	OHX	2	2155	-	0,6,6	0.00	-	-		
87	OHX	3	217	-	0,6,6	0.00	-	-		
87	OHX	5	4068	-	0,6,6	0.00	-	-		
87	OHX	5	4083	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	2	2117	-	0,6,6	0.00	-	-		
87	OHX	2	2118	-	0,6,6	0.00	-	-		
87	OHX	5	4110	-	0,6,6	0.00	-	-		
87	OHX	5	3896	-	0,6,6	0.00	-	-		
87	OHX	1	3918	-	0,6,6	0.00	-	-		
87	OHX	m7	205	-	0,6,6	0.00	-	-		
87	OHX	1	4081	-	0,6,6	0.00	-	-		
87	OHX	5	3900	-	0,6,6	0.00	-	-		
87	OHX	1	4003	-	0,6,6	0.00	-	-		
87	OHX	4	232	-	0,6,6	0.00	-	-		
87	OHX	6	2145	-	0,6,6	0.00	-	-		
87	OHX	1	4075	-	0,6,6	0.00	-	-		
87	OHX	1	4106	-	0,6,6	0.00	-	-		
87	OHX	5	4019	-	0,6,6	0.00	-	-		
87	OHX	1	4080	-	0,6,6	0.00	-	-		
87	OHX	5	4221	-	0,6,6	0.00	-	-		
87	OHX	5	3946	-	0,6,6	0.00	-	-		
87	OHX	2	2043	-	0,6,6	0.00	-	-		
87	OHX	5	4105	-	0,6,6	0.00	-	-		
87	OHX	6	2146	-	0,6,6	0.00	-	-		
87	OHX	6	2080	-	0,6,6	0.00	-	-		
87	OHX	5	3947	-	0,6,6	0.00	-	-		
87	OHX	2	2173	-	0,6,6	0.00	-	-		
87	OHX	5	4206	-	0,6,6	0.00	-	-		
87	OHX	6	2118	-	0,6,6	0.00	-	-		
87	OHX	5	4130	-	0,6,6	0.00	-	-		
87	OHX	6	2133	-	0,6,6	0.00	-	-		
87	OHX	1	3878	-	0,6,6	0.00	-	-		
87	OHX	5	4115	-	0,6,6	0.00	-	-		
87	OHX	2	2163	-	0,6,6	0.00	-	-		
87	OHX	5	4101	-	0,6,6	0.00	-	-		
87	OHX	1	4089	-	0,6,6	0.00	-	-		
87	OHX	5	3910	-	0,6,6	0.00	-	-		
87	OHX	2	2146	-	0,6,6	0.00	-	-		
87	OHX	5	3988	-	0,6,6	0.00	-	-		
87	OHX	2	2178	-	0,6,6	0.00	-	-		
87	OHX	6	2078	-	0,6,6	0.00	-	-		
87	OHX	1	4097	-	0,6,6	0.00	-	-		
87	OHX	1	4023	-	0,6,6	0.00	-	-		
87	OHX	5	4146	-	0,6,6	0.00	-	-		
87	OHX	1	3926	-	0,6,6	0.00	-	-		
87	OHX	5	3953	-	0,6,6	0.00	-	-		
87	OHX	6	2086	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	4165	-	0,6,6	0.00	-	-		
87	OHX	1	4057	-	0,6,6	0.00	-	-		
87	OHX	8	219	-	0,6,6	0.00	-	-		
87	OHX	5	4092	-	0,6,6	0.00	-	-		
87	OHX	5	4234	-	0,6,6	0.00	-	-		
87	OHX	6	2141	-	0,6,6	0.00	-	-		
87	OHX	1	4119	-	0,6,6	0.00	-	-		
87	OHX	1	4203	-	0,6,6	0.00	-	-		
87	OHX	3	223	-	0,6,6	0.00	-	-		
87	OHX	6	2113	-	0,6,6	0.00	-	-		
87	OHX	2	2091	-	0,6,6	0.00	-	-		
87	OHX	5	3964	-	0,6,6	0.00	-	-		
87	OHX	1	3908	-	0,6,6	0.00	-	-		
87	OHX	1	4156	-	0,6,6	0.00	-	-		
87	OHX	5	4199	-	0,6,6	0.00	-	-		
87	OHX	5	4102	-	0,6,6	0.00	-	-		
87	OHX	5	4230	-	0,6,6	0.00	-	-		
87	OHX	6	2115	-	0,6,6	0.00	-	-		
87	OHX	1	3935	-	0,6,6	0.00	-	-		
87	OHX	1	4155	-	0,6,6	0.00	-	-		
87	OHX	6	2164	-	0,6,6	0.00	-	-		
87	OHX	5	4180	-	0,6,6	0.00	-	-		
87	OHX	2	2041	-	0,6,6	0.00	-	-		
87	OHX	6	2064	-	0,6,6	0.00	-	-		
87	OHX	5	4047	-	0,6,6	0.00	-	-		
87	OHX	2	2138	-	0,6,6	0.00	-	-		
87	OHX	1	3929	-	0,6,6	0.00	-	-		
87	OHX	5	4037	-	0,6,6	0.00	-	-		
87	OHX	1	4202	-	0,6,6	0.00	-	-		
87	OHX	1	3877	-	0,6,6	0.00	-	-		
87	OHX	O1	202	-	0,6,6	0.00	-	-		
87	OHX	6	2119	-	0,6,6	0.00	-	-		
87	OHX	1	4133	-	0,6,6	0.00	-	-		
87	OHX	5	4188	-	0,6,6	0.00	-	-		
87	OHX	5	4161	-	0,6,6	0.00	-	-		
87	OHX	1	4074	-	0,6,6	0.00	-	-		
87	OHX	2	2180	-	0,6,6	0.00	-	-		
87	OHX	8	230	-	0,6,6	0.00	-	-		
87	OHX	1	4085	-	0,6,6	0.00	-	-		
87	OHX	5	4050	-	0,6,6	0.00	-	-		
87	OHX	1	4147	-	0,6,6	0.00	-	-		
87	OHX	6	2085	-	0,6,6	0.00	-	-		
87	OHX	2	2099	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	6	2062	-	0,6,6	0.00	-	-		
87	OHX	6	2094	-	0,6,6	0.00	-	-		
87	OHX	6	2127	-	0,6,6	0.00	-	-		
87	OHX	5	3996	-	0,6,6	0.00	-	-		
87	OHX	6	2170	-	0,6,6	0.00	-	-		
87	OHX	6	2054	-	0,6,6	0.00	-	-		
87	OHX	5	4157	-	0,6,6	0.00	-	-		
87	OHX	5	4032	-	0,6,6	0.00	-	-		
87	OHX	1	4166	-	0,6,6	0.00	-	-		
87	OHX	6	2149	-	0,6,6	0.00	-	-		
87	OHX	1	4122	-	0,6,6	0.00	-	-		
87	OHX	5	4127	-	0,6,6	0.00	-	-		
87	OHX	5	4091	-	0,6,6	0.00	-	-		
87	OHX	5	4011	-	0,6,6	0.00	-	-		
87	OHX	2	2028	-	0,6,6	0.00	-	-		
87	OHX	M9	203	-	0,6,6	0.00	-	-		
87	OHX	5	3967	-	0,6,6	0.00	-	-		
87	OHX	6	2091	-	0,6,6	0.00	-	-		
87	OHX	6	2161	-	0,6,6	0.00	-	-		
87	OHX	5	4203	-	0,6,6	0.00	-	-		
87	OHX	5	3938	-	0,6,6	0.00	-	-		
87	OHX	1	4138	-	0,6,6	0.00	-	-		
87	OHX	1	4195	-	0,6,6	0.00	-	-		
87	OHX	2	2179	-	0,6,6	0.00	-	-		
87	OHX	1	4035	-	0,6,6	0.00	-	-		
87	OHX	4	233	-	0,6,6	0.00	-	-		
87	OHX	2	2115	-	0,6,6	0.00	-	-		
87	OHX	O7	103	-	0,6,6	0.00	-	-		
87	OHX	5	4085	-	0,6,6	0.00	-	-		
87	OHX	5	4216	-	0,6,6	0.00	-	-		
87	OHX	1	4015	-	0,6,6	0.00	-	-		
87	OHX	5	4093	-	0,6,6	0.00	-	-		
87	OHX	5	3960	-	0,6,6	0.00	-	-		
87	OHX	2	2164	-	0,6,6	0.00	-	-		
87	OHX	6	2152	-	0,6,6	0.00	-	-		
87	OHX	1	4110	-	0,6,6	0.00	-	-		
87	OHX	l3	407	-	0,6,6	0.00	-	-		
87	OHX	1	4185	-	0,6,6	0.00	-	-		
87	OHX	1	4032	-	0,6,6	0.00	-	-		
87	OHX	l5	304	-	0,6,6	0.00	-	-		
87	OHX	5	4072	-	0,6,6	0.00	-	-		
87	OHX	2	2075	-	0,6,6	0.00	-	-		
87	OHX	1	3988	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	6	2211	-	0,6,6	0.00	-	-		
87	OHX	5	3911	-	0,6,6	0.00	-	-		
87	OHX	1	4088	-	0,6,6	0.00	-	-		
87	OHX	6	2136	-	0,6,6	0.00	-	-		
87	OHX	8	229	-	0,6,6	0.00	-	-		
87	OHX	1	4126	-	0,6,6	0.00	-	-		
87	OHX	8	234	-	0,6,6	0.00	-	-		
87	OHX	1	3949	-	0,6,6	0.00	-	-		
87	OHX	1	4196	-	0,6,6	0.00	-	-		
87	OHX	2	2154	-	0,6,6	0.00	-	-		
87	OHX	1	3954	-	0,6,6	0.00	-	-		
87	OHX	6	2134	-	0,6,6	0.00	-	-		
87	OHX	2	2092	-	0,6,6	0.00	-	-		
87	OHX	5	4238	-	0,6,6	0.00	-	-		
87	OHX	1	4146	-	0,6,6	0.00	-	-		
87	OHX	5	3949	-	0,6,6	0.00	-	-		
87	OHX	5	3971	-	0,6,6	0.00	-	-		
87	OHX	1	4005	-	0,6,6	0.00	-	-		
87	OHX	1	3893	-	0,6,6	0.00	-	-		
87	OHX	5	3956	-	0,6,6	0.00	-	-		
87	OHX	1	4159	-	0,6,6	0.00	-	-		
87	OHX	2	2106	-	0,6,6	0.00	-	-		
87	OHX	1	4193	-	0,6,6	0.00	-	-		
87	OHX	5	3954	-	0,6,6	0.00	-	-		
87	OHX	1	4040	-	0,6,6	0.00	-	-		
87	OHX	1	3985	-	0,6,6	0.00	-	-		
87	OHX	1	3997	-	0,6,6	0.00	-	-		
87	OHX	1	4149	-	0,6,6	0.00	-	-		
87	OHX	6	2169	-	0,6,6	0.00	-	-		
87	OHX	1	3996	36	0,6,6	0.00	-	-		
87	OHX	6	2172	-	0,6,6	0.00	-	-		
87	OHX	1	4020	-	0,6,6	0.00	-	-		
87	OHX	1	3986	-	0,6,6	0.00	-	-		
87	OHX	5	4078	-	0,6,6	0.00	-	-		
87	OHX	5	4226	-	0,6,6	0.00	-	-		
87	OHX	1	3938	-	0,6,6	0.00	-	-		
87	OHX	5	4126	-	0,6,6	0.00	-	-		
87	OHX	5	4141	-	0,6,6	0.00	-	-		
87	OHX	2	2077	-	0,6,6	0.00	-	-		
87	OHX	5	3952	-	0,6,6	0.00	-	-		
87	OHX	5	4059	-	0,6,6	0.00	-	-		
87	OHX	2	2168	-	0,6,6	0.00	-	-		
87	OHX	1	4211	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	4198	-	0,6,6	0.00	-	-		
87	OHX	2	2176	-	0,6,6	0.00	-	-		
87	OHX	5	4225	-	0,6,6	0.00	-	-		
87	OHX	1	4017	-	0,6,6	0.00	-	-		
87	OHX	1	3972	-	0,6,6	0.00	-	-		
87	OHX	2	2137	-	0,6,6	0.00	-	-		
87	OHX	1	4153	-	0,6,6	0.00	-	-		
87	OHX	5	4097	-	0,6,6	0.00	-	-		
87	OHX	5	3972	-	0,6,6	0.00	-	-		
87	OHX	5	4214	-	0,6,6	0.00	-	-		
87	OHX	1	4000	-	0,6,6	0.00	-	-		
87	OHX	5	3987	-	0,6,6	0.00	-	-		
87	OHX	6	2181	-	0,6,6	0.00	-	-		
87	OHX	6	2210	-	0,6,6	0.00	-	-		
87	OHX	5	4160	-	0,6,6	0.00	-	-		
87	OHX	5	4190	-	0,6,6	0.00	-	-		
87	OHX	1	3970	-	0,6,6	0.00	-	-		
87	OHX	1	4083	-	0,6,6	0.00	-	-		
87	OHX	6	2155	-	0,6,6	0.00	-	-		
87	OHX	m5	303	-	0,6,6	0.00	-	-		
87	OHX	5	4232	-	0,6,6	0.00	-	-		
87	OHX	6	2131	-	0,6,6	0.00	-	-		
87	OHX	M9	202	-	0,6,6	0.00	-	-		
87	OHX	5	3985	-	0,6,6	0.00	-	-		
87	OHX	5	4028	-	0,6,6	0.00	-	-		
87	OHX	1	3998	-	0,6,6	0.00	-	-		
87	OHX	1	3968	-	0,6,6	0.00	-	-		
87	OHX	5	4045	-	0,6,6	0.00	-	-		
87	OHX	M7	206	-	0,6,6	0.00	-	-		
87	OHX	1	4176	-	0,6,6	0.00	-	-		
87	OHX	5	4016	-	0,6,6	0.00	-	-		
87	OHX	5	4178	-	0,6,6	0.00	-	-		
87	OHX	6	2109	-	0,6,6	0.00	-	-		
87	OHX	1	4180	-	0,6,6	0.00	-	-		
87	OHX	5	4143	-	0,6,6	0.00	-	-		
87	OHX	1	4073	-	0,6,6	0.00	-	-		
87	OHX	1	4026	-	0,6,6	0.00	-	-		
87	OHX	1	3965	-	0,6,6	0.00	-	-		
87	OHX	5	4002	-	0,6,6	0.00	-	-		
87	OHX	1	3940	-	0,6,6	0.00	-	-		
87	OHX	2	2074	-	0,6,6	0.00	-	-		
87	OHX	1	4197	-	0,6,6	0.00	-	-		
87	OHX	1	4006	-	0,6,6	0.00	-	-		



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4079	-	0,6,6	0.00	-	-		
87	OHX	1	3868	-	0,6,6	0.00	-	-		
87	OHX	6	2163	-	0,6,6	0.00	-	-		
87	OHX	5	4233	-	0,6,6	0.00	-	-		
87	OHX	M5	303	-	0,6,6	0.00	-	-		
87	OHX	1	4028	-	0,6,6	0.00	-	-		
87	OHX	6	2101	-	0,6,6	0.00	-	-		
87	OHX	1	4179	-	0,6,6	0.00	-	-		
87	OHX	2	2066	-	0,6,6	0.00	-	-		
87	OHX	5	3994	-	0,6,6	0.00	-	-		
87	OHX	5	4039	-	0,6,6	0.00	-	-		
87	OHX	1	4090	-	0,6,6	0.00	-	-		
87	OHX	6	2065	-	0,6,6	0.00	-	-		
87	OHX	5	4113	-	0,6,6	0.00	-	-		
87	OHX	1	4043	-	0,6,6	0.00	-	-		
87	OHX	5	3904	-	0,6,6	0.00	-	-		
87	OHX	5	4073	-	0,6,6	0.00	-	-		
87	OHX	1	4058	-	0,6,6	0.00	-	-		
87	OHX	5	3973	-	0,6,6	0.00	-	-		
87	OHX	6	2092	-	0,6,6	0.00	-	-		
87	OHX	2	2101	-	0,6,6	0.00	-	-		
87	OHX	2	2063	-	0,6,6	0.00	-	-		
87	OHX	1	3961	-	0,6,6	0.00	-	-		
87	OHX	2	2149	-	0,6,6	0.00	-	-		
87	OHX	1	4046	-	0,6,6	0.00	-	-		
87	OHX	1	4199	-	0,6,6	0.00	-	-		
87	OHX	3	220	-	0,6,6	0.00	-	-		
87	OHX	2	2056	-	0,6,6	0.00	-	-		
87	OHX	5	4224	-	0,6,6	0.00	-	-		
87	OHX	m4	202	-	0,6,6	0.00	-	-		
87	OHX	5	4158	-	0,6,6	0.00	-	-		
87	OHX	1	4031	-	0,6,6	0.00	-	-		
87	OHX	5	4151	-	0,6,6	0.00	-	-		
87	OHX	1	3955	-	0,6,6	0.00	-	-		
87	OHX	6	2153	-	0,6,6	0.00	-	-		
87	OHX	2	2048	-	0,6,6	0.00	-	-		
87	OHX	6	2087	-	0,6,6	0.00	-	-		
87	OHX	7	218	-	0,6,6	0.00	-	-		
87	OHX	2	2162	-	0,6,6	0.00	-	-		
87	OHX	1	4175	-	0,6,6	0.00	-	-		
87	OHX	1	3885	-	0,6,6	0.00	-	-		
87	OHX	6	2112	-	0,6,6	0.00	-	-		
87	OHX	5	3966	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	3915	-	0,6,6	0.00	-	-		
87	OHX	5	3909	-	0,6,6	0.00	-	-		
87	OHX	6	2140	-	0,6,6	0.00	-	-		
87	OHX	1	4162	-	0,6,6	0.00	-	-		
87	OHX	8	223	-	0,6,6	0.00	-	-		
87	OHX	5	3933	-	0,6,6	0.00	-	-		
87	OHX	5	4070	-	0,6,6	0.00	-	-		
87	OHX	5	4030	-	0,6,6	0.00	-	-		
87	OHX	6	2142	-	0,6,6	0.00	-	-		
87	OHX	5	3932	-	0,6,6	0.00	-	-		
87	OHX	2	2128	-	0,6,6	0.00	-	-		
87	OHX	4	240	-	0,6,6	0.00	-	-		
87	OHX	5	3929	-	0,6,6	0.00	-	-		
87	OHX	2	2040	-	0,6,6	0.00	-	-		
87	OHX	6	2180	-	0,6,6	0.00	-	-		
87	OHX	5	3961	-	0,6,6	0.00	-	-		
87	OHX	1	4087	-	0,6,6	0.00	-	-		
87	OHX	1	3976	-	0,6,6	0.00	-	-		
87	OHX	6	2137	-	0,6,6	0.00	-	-		
87	OHX	2	2039	-	0,6,6	0.00	-	-		
87	OHX	5	4119	-	0,6,6	0.00	-	-		
87	OHX	1	4055	-	0,6,6	0.00	-	-		
87	OHX	6	2159	-	0,6,6	0.00	-	-		
87	OHX	1	3953	-	0,6,6	0.00	-	-		
87	OHX	2	2093	-	0,6,6	0.00	-	-		
87	OHX	5	4087	-	0,6,6	0.00	-	-		
87	OHX	8	224	-	0,6,6	0.00	-	-		
87	OHX	6	2069	-	0,6,6	0.00	-	-		
87	OHX	5	3975	-	0,6,6	0.00	-	-		
87	OHX	2	2177	-	0,6,6	0.00	-	-		
87	OHX	8	235	-	0,6,6	0.00	-	-		
87	OHX	1	4109	-	0,6,6	0.00	-	-		
87	OHX	1	4066	-	0,6,6	0.00	-	-		
87	OHX	1	4048	-	0,6,6	0.00	-	-		
87	OHX	5	4010	-	0,6,6	0.00	-	-		
87	OHX	5	3965	-	0,6,6	0.00	-	-		
87	OHX	6	2167	-	0,6,6	0.00	-	-		
87	OHX	1	4012	-	0,6,6	0.00	-	-		
87	OHX	2	2170	-	0,6,6	0.00	-	-		
87	OHX	1	4021	-	0,6,6	0.00	-	-		
87	OHX	1	3911	-	0,6,6	0.00	-	-		
87	OHX	2	2141	-	0,6,6	0.00	-	-		
87	OHX	1	3980	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4121	-	0,6,6	0.00	-	-		
87	OHX	6	2162	-	0,6,6	0.00	-	-		
87	OHX	6	2103	-	0,6,6	0.00	-	-		
87	OHX	6	2157	-	0,6,6	0.00	-	-		
87	OHX	5	4189	-	0,6,6	0.00	-	-		
87	OHX	1	4120	-	0,6,6	0.00	-	-		
87	OHX	2	2058	-	0,6,6	0.00	-	-		
87	OHX	6	2126	-	0,6,6	0.00	-	-		
87	OHX	1	4137	-	0,6,6	0.00	-	-		
87	OHX	2	2085	-	0,6,6	0.00	-	-		
87	OHX	6	2193	-	0,6,6	0.00	-	-		
87	OHX	2	2082	-	0,6,6	0.00	-	-		
87	OHX	2	2166	-	0,6,6	0.00	-	-		
87	OHX	1	3894	-	0,6,6	0.00	-	-		
87	OHX	5	4175	-	0,6,6	0.00	-	-		
87	OHX	4	235	-	0,6,6	0.00	-	-		
87	OHX	2	2057	-	0,6,6	0.00	-	-		
87	OHX	2	2156	-	0,6,6	0.00	-	-		
87	OHX	C3	201	-	0,6,6	0.00	-	-		
87	OHX	1	3990	-	0,6,6	0.00	-	-		
87	OHX	6	2160	-	0,6,6	0.00	-	-		
87	OHX	2	2131	-	0,6,6	0.00	-	-		
87	OHX	1	4151	-	0,6,6	0.00	-	-		
87	OHX	5	4015	-	0,6,6	0.00	-	-		
87	OHX	1	4027	-	0,6,6	0.00	-	-		
87	OHX	14	402	-	0,6,6	0.00	-	-		
87	OHX	1	3933	-	0,6,6	0.00	-	-		
87	OHX	2	2067	-	0,6,6	0.00	-	-		
87	OHX	2	2147	-	0,6,6	0.00	-	-		
87	OHX	5	4020	-	0,6,6	0.00	-	-		
87	OHX	1	4038	-	0,6,6	0.00	-	-		
87	OHX	1	3898	-	0,6,6	0.00	-	-		
87	OHX	15	305	-	0,6,6	0.00	-	-		
87	OHX	1	3897	-	0,6,6	0.00	-	-		
87	OHX	5	3894	-	0,6,6	0.00	-	-		
87	OHX	5	4211	-	0,6,6	0.00	-	-		
87	OHX	5	3916	-	0,6,6	0.00	-	-		
87	OHX	1	4112	-	0,6,6	0.00	-	-		
87	OHX	5	4172	-	0,6,6	0.00	-	-		
87	OHX	1	3964	-	0,6,6	0.00	-	-		
87	OHX	5	3931	-	0,6,6	0.00	-	-		
87	OHX	6	2074	-	0,6,6	0.00	-	-		
87	OHX	6	2122	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	3919	-	0,6,6	0.00	-	-		
87	OHX	1	3966	-	0,6,6	0.00	-	-		
87	OHX	m0	302	-	0,6,6	0.00	-	-		
87	OHX	1	4136	-	0,6,6	0.00	-	-		
87	OHX	6	2151	-	0,6,6	0.00	-	-		
87	OHX	1	4186	-	0,6,6	0.00	-	-		
87	OHX	1	4168	-	0,6,6	0.00	-	-		
87	OHX	1	3902	-	0,6,6	0.00	-	-		
87	OHX	1	3867	-	0,6,6	0.00	-	-		
87	OHX	1	4115	-	0,6,6	0.00	-	-		
87	OHX	2	2036	-	0,6,6	0.00	-	-		
87	OHX	4	236	-	0,6,6	0.00	-	-		
87	OHX	6	2201	-	0,6,6	0.00	-	-		
87	OHX	5	4031	-	0,6,6	0.00	-	-		
87	OHX	6	2202	-	0,6,6	0.00	-	-		
87	OHX	5	4134	-	0,6,6	0.00	-	-		
87	OHX	5	3906	-	0,6,6	0.00	-	-		
87	OHX	5	4181	-	0,6,6	0.00	-	-		
87	OHX	7	220	-	0,6,6	0.00	-	-		
87	OHX	1	4183	-	0,6,6	0.00	-	-		
87	OHX	1	4030	-	0,6,6	0.00	-	-		
87	OHX	1	4101	-	0,6,6	0.00	-	-		
87	OHX	2	2114	-	0,6,6	0.00	-	-		
87	OHX	5	4121	-	0,6,6	0.00	-	-		
87	OHX	6	2188	-	0,6,6	0.00	-	-		
87	OHX	1	3963	-	0,6,6	0.00	-	-		
87	OHX	2	2053	-	0,6,6	0.00	-	-		
87	OHX	2	2169	-	0,6,6	0.00	-	-		
87	OHX	6	2108	-	0,6,6	0.00	-	-		
87	OHX	d4	201	-	0,6,6	0.00	-	-		
87	OHX	s1	302	-	0,6,6	0.00	-	-		
87	OHX	7	217	-	0,6,6	0.00	-	-		
87	OHX	1	4067	-	0,6,6	0.00	-	-		
87	OHX	1	4022	-	0,6,6	0.00	-	-		
87	OHX	2	2136	-	0,6,6	0.00	-	-		
87	OHX	5	3921	-	0,6,6	0.00	-	-		
87	OHX	2	2160	-	0,6,6	0.00	-	-		
87	OHX	5	4171	-	0,6,6	0.00	-	-		
87	OHX	6	2130	-	0,6,6	0.00	-	-		
87	OHX	7	222	-	0,6,6	0.00	-	-		
87	OHX	3	222	-	0,6,6	0.00	-	-		
87	OHX	6	2165	-	0,6,6	0.00	-	-		
87	OHX	5	3942	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	1	4189	-	0,6,6	0.00	-	-		
87	OHX	5	3923	-	0,6,6	0.00	-	-		
87	OHX	5	3999	-	0,6,6	0.00	-	-		
87	OHX	2	2069	-	0,6,6	0.00	-	-		
87	OHX	5	4220	-	0,6,6	0.00	-	-		
87	OHX	1	4014	-	0,6,6	0.00	-	-		
87	OHX	1	4188	-	0,6,6	0.00	-	-		
87	OHX	2	2140	-	0,6,6	0.00	-	-		
87	OHX	5	4231	-	0,6,6	0.00	-	-		
87	OHX	6	2097	-	0,6,6	0.00	-	-		
87	OHX	6	2208	-	0,6,6	0.00	-	-		
87	OHX	c5	201	-	0,6,6	0.00	-	-		
87	OHX	l5	307	-	0,6,6	0.00	-	-		
87	OHX	1	4165	-	0,6,6	0.00	-	-		
87	OHX	2	2079	-	0,6,6	0.00	-	-		
87	OHX	5	4048	-	0,6,6	0.00	-	-		
87	OHX	5	4177	-	0,6,6	0.00	-	-		
87	OHX	5	3915	-	0,6,6	0.00	-	-		
87	OHX	6	2156	-	0,6,6	0.00	-	-		
87	OHX	6	2158	-	0,6,6	0.00	-	-		
87	OHX	6	2090	-	0,6,6	0.00	-	-		
87	OHX	5	3962	-	0,6,6	0.00	-	-		
87	OHX	2	2107	-	0,6,6	0.00	-	-		
87	OHX	8	232	-	0,6,6	0.00	-	-		
87	OHX	2	2052	-	0,6,6	0.00	-	-		
87	OHX	1	3973	-	0,6,6	0.00	-	-		
87	OHX	7	226	-	0,6,6	0.00	-	-		
87	OHX	O7	104	-	0,6,6	0.00	-	-		
87	OHX	6	2088	-	0,6,6	0.00	-	-		
87	OHX	3	221	-	0,6,6	0.00	-	-		
87	OHX	1	3923	-	0,6,6	0.00	-	-		
87	OHX	5	4075	-	0,6,6	0.00	-	-		
87	OHX	5	3939	-	0,6,6	0.00	-	-		
87	OHX	1	4098	-	0,6,6	0.00	-	-		
87	OHX	2	2124	-	0,6,6	0.00	-	-		
87	OHX	1	4078	-	0,6,6	0.00	-	-		
87	OHX	5	4005	-	0,6,6	0.00	-	-		
87	OHX	1	3959	-	0,6,6	0.00	-	-		
87	OHX	8	218	-	0,6,6	0.00	-	-		
87	OHX	5	4122	-	0,6,6	0.00	-	-		
87	OHX	2	2123	-	0,6,6	0.00	-	-		
87	OHX	5	4023	-	0,6,6	0.00	-	-		
87	OHX	5	4112	-	0,6,6	0.00	-	-		

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
87	OHX	5	3958	-	0,6,6	0.00	-	-		
87	OHX	5	3917	-	0,6,6	0.00	-	-		
87	OHX	6	2150	-	0,6,6	0.00	-	-		
87	OHX	5	4245	-	0,6,6	0.00	-	-		
87	OHX	6	2068	-	0,6,6	0.00	-	-		
87	OHX	4	226	-	0,6,6	0.00	-	-		
87	OHX	2	2129	-	0,6,6	0.00	-	-		
87	OHX	5	4149	-	0,6,6	0.00	-	-		
87	OHX	5	4209	-	0,6,6	0.00	-	-		
87	OHX	1	3982	-	0,6,6	0.00	-	-		
87	OHX	5	4003	-	0,6,6	0.00	-	-		
87	OHX	1	3987	-	0,6,6	0.00	-	-		

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
88	GET	2	2181	-	-	1/13/74/74	0/3/3/3

There are no bond length outliers.

All (12) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
88	2	2181	GET	C23-C33-N33	-6.00	94.93	110.84
88	2	2181	GET	O11-C42-C32	-5.70	95.57	109.18
88	2	2181	GET	O62-C62-C12	-3.45	100.96	109.18
88	2	2181	GET	O11-C11-C21	-3.34	102.47	108.22
88	2	2181	GET	C32-C22-C12	2.58	116.47	111.18
88	2	2181	GET	O51-C11-C21	2.47	115.61	110.06
88	2	2181	GET	O23-C23-C13	-2.42	104.17	110.05
88	2	2181	GET	C11-C21-N21	2.24	114.24	110.20
88	2	2181	GET	C13-O62-C62	-2.16	112.61	117.96
88	2	2181	GET	C41-C31-C21	-2.10	107.47	111.07
88	2	2181	GET	C71-C61-C51	2.09	114.47	112.02
88	2	2181	GET	C53-O53-C13	-2.08	108.19	111.53

There are no chirality outliers.

All (1) torsion outliers are listed below:

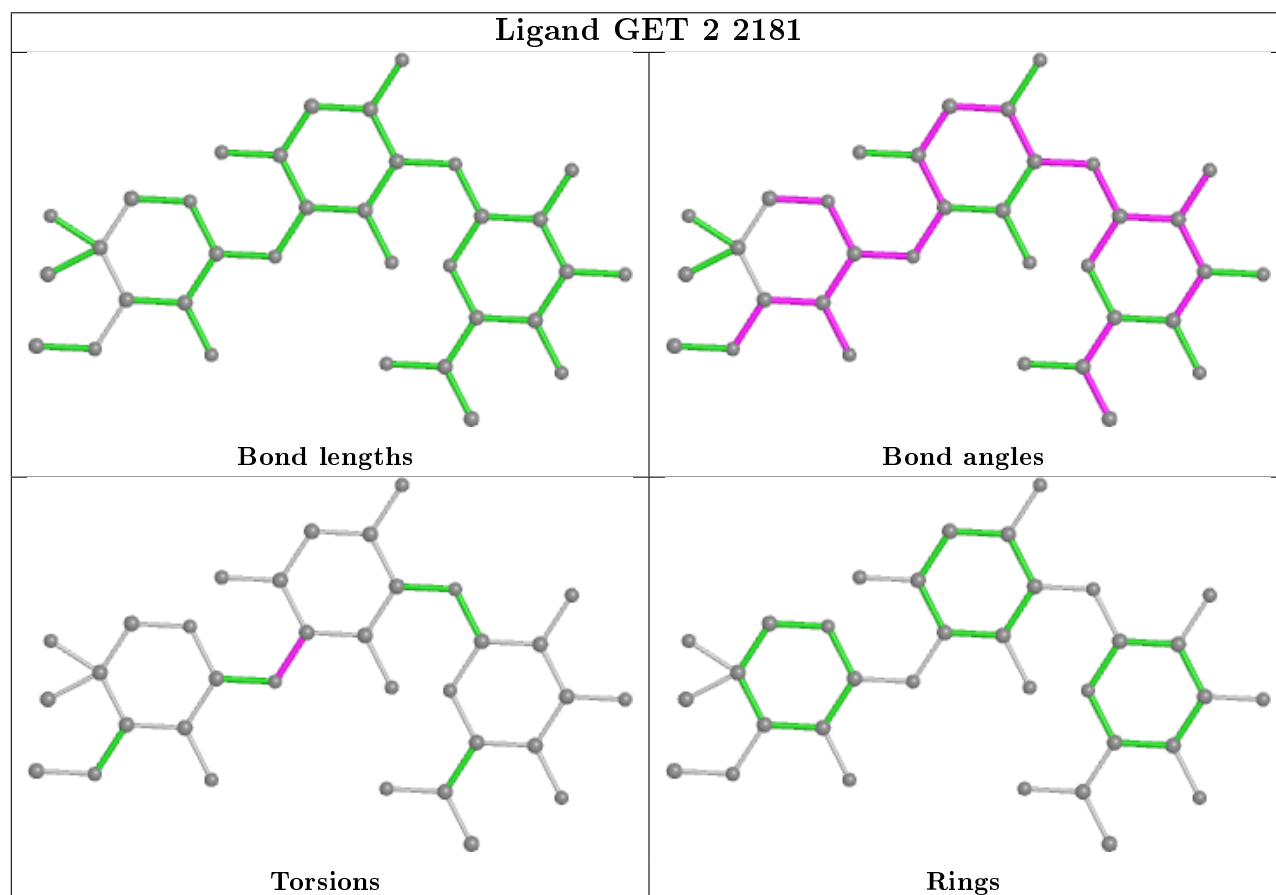
Mol	Chain	Res	Type	Atoms
88	2	2181	GET	C52-C62-O62-C13

There are no ring outliers.

1 monomer is involved in 1 short contact:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
87	1	4023	OHX	0	1

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



## 5.7 Other polymers [i](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.



## 6 Fit of model and data [i](#)

### 6.1 Protein, DNA and RNA chains [i](#)

EDS failed to run properly - this section is therefore empty.

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

EDS failed to run properly - this section is therefore empty.

### 6.3 Carbohydrates [i](#)

EDS failed to run properly - this section is therefore empty.

### 6.4 Ligands [i](#)

EDS failed to run properly - this section is therefore empty.

### 6.5 Other polymers [i](#)

EDS failed to run properly - this section is therefore empty.