Full wwPDB EM Validation Report (i)

Feb 22, 2024 – 09:35 PM EST

PDB ID	:	4V69
EMDB ID	:	EMD-5036
Title	:	Ternary complex-bound E.coli 70S ribosome.
Authors	:	Villa, E.; Sengupta, J.; Trabuco, L.G.; LeBarron, J.; Baxter, W.T.; Shaikh, T.R.; Grassucci, R.A.; Nissen, P.; Ehrenberg, M.; Schulten, K.; Frank, J.
Deposited on	:	2008-12-11
Resolution	:	6.70 Å(reported)
Based on initial models	:	2I2V, 2I2U, 1OB2, 2J00

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

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

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

The following versions of software and data (see references (1)) were used in the production of this report:

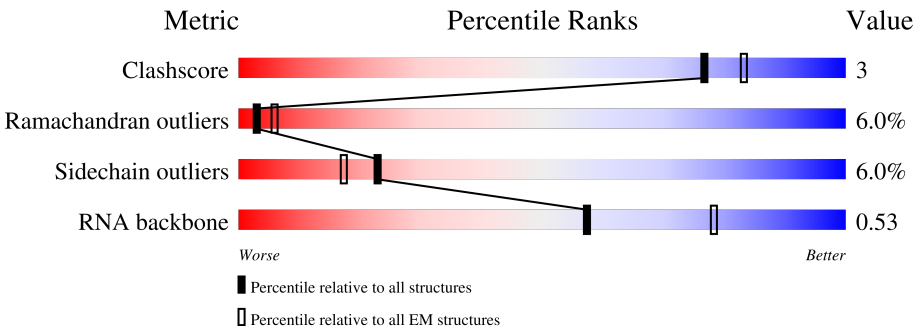
EMDB validation analysis	:	0.0.1.dev70
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 6.70 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826
RNA backbone	4643	859

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	AJ	98	38%; 66%; 26%; 7%; •
2	AK	117	34%; 69%; 26%; • •
3	AL	123	37%; 67%; 26%; 7%; •
4	AM	113	22%; 58%; 28%; 13%
5	AN	96	22%; 58%; 28%; 12%; •
6	AO	88	13%; 65%; 27%; 6%; •
7	AP	80	22%; 65%; 29%; 6%

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Mol	Chain	Length	Quality of chain
8	AQ	80	11% 74% 18% 9%
9	AR	55	27% 67% 22% 11%
10	AS	79	19% 65% 27% 9%
11	AT	85	20% 76% 20%
12	AU	51	16% 59% 29% 12%
13	AB	218	22% 70% 23% 7%
14	AC	206	20% 70% 24% 5%
15	AD	205	39% 62% 26% 10%
16	AE	150	28% 68% 29%
17	AF	100	19% 69% 25% 5%
18	AG	150	25% 60% 33% 6%
19	AH	129	23% 68% 27% 5%
20	AI	127	23% 65% 28% 6%
21	AA	1530	36% 47% 17%
22	AY	76	24% 54% 22%
23	AW	76	12% 24% 47% 29%
24	AX	11	18% 55% 27% 18%
25	AZ	393	37% 64% 28% 7%
26	AV	77	5% 39% 48% 13%
27	B5	234	66% 74% 22%
28	BI	141	48% 67% 28%
29	BJ	142	18% 65% 24% 8%
30	BK	121	45% 67% 27% 6%
31	BL	143	33% 66% 28% 5%
32	BM	136	26% 71% 23% 5%

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Mol	Chain	Length	Quality of chain
33	BN	120	10% 62% 29% 8%
34	BO	116	11% 67% 27%
35	BP	114	25% 61% 33% 5%
36	BQ	117	16% 64% 32%
37	BR	103	15% 66% 26% 6%
38	BS	110	20% 70% 27%
39	BT	93	15% 66% 27% 5%
40	BU	102	17% 68% 27%
41	BV	94	7% 66% 29% 5%
42	BW	79	34% 54% 32% 10%
43	BX	77	18% 65% 19% 14%
44	BY	63	6% 70% 24% 6%
45	BC	271	28% 62% 32%
46	BZ	58	17% 72% 21% 7%
47	B0	56	30% 64% 23% 9%
48	B1	50	20% 60% 38%
49	B2	46	22% 57% 39%
50	B3	64	23% 75% 17% 8%
51	B4	38	47% 74% 26%
52	BD	209	22% 62% 31% 7%
53	BE	201	17% 68% 25% 5%
54	BF	178	9% 58% 33% 7%
55	BG	176	14% 65% 24% 10%
56	BH	149	52% 64% 28% 6%
57	BB	2903	38% 44% 18%

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Mol	Chain	Length	Quality of chain
58	BA	117	38% 46% 15%

2 Entry composition (i)

There are 59 unique types of molecules in this entry. The entry contains 152250 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	AJ	98	787	493	150	143	1	0	0

- Molecule 2 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	AK	117	877	540	174	160	3	0	0

- Molecule 3 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	AL	123	955	590	196	165	4	0	0

- Molecule 4 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AM	113	877	541	177	156	3	0	0

- Molecule 5 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AN	96	774	483	160	128	3	0	0

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
AN	?	-	SER	deletion	UNP P0AG59
AN	?	-	ASP	deletion	UNP P0AG59
AN	?	-	GLU	deletion	UNP P0AG59

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Chain	Residue	Modelled	Actual	Comment	Reference
AN	?	-	ASP	deletion	UNP P0AG59

- Molecule 6 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	AO	88	716	440	146	129	1	0	0

- Molecule 7 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	AP	80	639	400	126	112	1	0	0

- Molecule 8 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	AQ	80	649	411	121	114	3	0	0

- Molecule 9 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
9	AR	55	456	288	86	82	0	0

- Molecule 10 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	AS	79	638	408	120	108	2	0	0

- Molecule 11 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	AT	85	665	411	137	114	3	0	0

- Molecule 12 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	AU	51	426	265	86	74	1	0	0

- Molecule 13 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	AB	218	1705	1081	305	312	7	0	0

- Molecule 14 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	AC	206	1625	1028	305	289	3	0	0

- Molecule 15 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	AD	205	1643	1026	315	298	4	0	0

- Molecule 16 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	AE	150	1106	687	211	202	6	0	0

- Molecule 17 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	AF	100	818	515	148	149	6	0	0

- Molecule 18 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	AG	150	1175	730	226	215	4	0	0

- Molecule 19 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	AH	129	979	616	173	184	6	0	0

- Molecule 20 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	AI	127	1022	634	206	179	3	0	0

- Molecule 21 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
21	AA	1530	32832	14642	6024	10636	1530	0	0

- Molecule 22 is a RNA chain called A/T-site tRNA Phe.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
22	AY	76	1622	725	293	529	75	0	0

- Molecule 23 is a RNA chain called P-site tRNA fMet (Unmodified bases except for Thymine 54).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
23	AW	76	1619	723	290	531	75	0	0

- Molecule 24 is a RNA chain called mRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
24	AX	11	232	106	44	72	10	0	0

- Molecule 25 is a protein called Elongation factor Tu.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
25	AZ	393	3035	1918	523	581	13	0	0

- Molecule 26 is a RNA chain called E-site tRNA Phe.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
26	AV	77	1645	733	297	538	77	0	0

- Molecule 27 is a protein called 50S ribosomal protein L1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
27	B5	234	1733	1081	315	330	7	0	0

- Molecule 28 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
28	BI	141	1032	651	179	196	6	0	0

- Molecule 29 is a protein called 50S ribosomal protein L13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
29	BJ	142	1129	714	212	199	4	0	0

- Molecule 30 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
30	BK	121	931	582	179	165	5	0	0

- Molecule 31 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
31	BL	143	1045	649	206	189	1	0	0

- Molecule 32 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
32	BM	136	1074	686	205	177	6	0	0

- Molecule 33 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
33	BN	120	961	593	196	167	5	0	0

- Molecule 34 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
34	BO	116	892	552	178	162	0	0

- Molecule 35 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
35	BP	114	917	574	179	163	1	0	0

- Molecule 36 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
36	BQ	117	947	604	192	151	0	0

- Molecule 37 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
37	BR	103	816	516	153	145	2	0	0

- Molecule 38 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
38	BS	110	857	532	166	156	3	0	0

- Molecule 39 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
39	BT	93	739	466	139	132	2	0	0

- Molecule 40 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
40	BU	102	780	492	146	142	0	0

- Molecule 41 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
41	BV	94	753	479	137	134	3	0	0

- Molecule 42 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
42	BW	79	596	367	120	108	1	0	0

- Molecule 43 is a protein called 50S ribosomal protein L28.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
43	BX	77	625	388	129	106	2	0	0

- Molecule 44 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
44	BY	63	509	313	99	95	2	0	0

- Molecule 45 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
45	BC	271	2083	1288	423	365	7	0	0

- Molecule 46 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
46	BZ	58	449	281	87	79	2	0	0

- Molecule 47 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
47	B0	56	444	269	94	80	1	0	0

- Molecule 48 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
48	B1	50	410	263	75	72	0	0

- Molecule 49 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
49	B2	46	377	228	90	57	2	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
50	B3	64	504	323	105	74	2	0	0

- Molecule 51 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
51	B4	38	302	185	65	48	4	0	0

- Molecule 52 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
52	BD	209	1565	979	288	294	4	0	0

- Molecule 53 is a protein called 50S ribosomal protein L4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
53	BE	201	1552	974	283	290	5	0	0

- Molecule 54 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
54	BF	178	1420	905	251	258	6	0	0

- Molecule 55 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
55	BG	176	1323	832	243	246	2	0	0

- Molecule 56 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
56	BH	149	1111	699	197	214	1	0	0

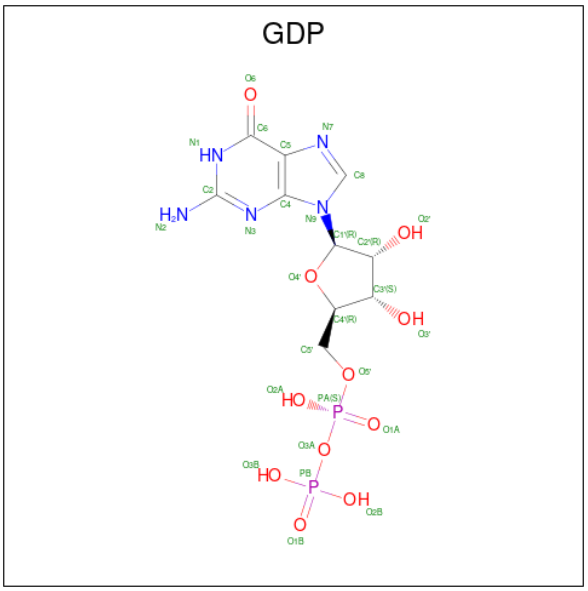
- Molecule 57 is a RNA chain called 23S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
57	BB	2903	62321	27801	11467	20150	2903	0	0

- Molecule 58 is a RNA chain called 5S ribosomal RNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
58	BA	117	2508	1116	459	816	117	0	0

- Molecule 59 is GUANOSINE-5'-DIPHOSPHATE (three-letter code: GDP) (formula: $C_{10}H_{15}N_5O_{11}P_2$).



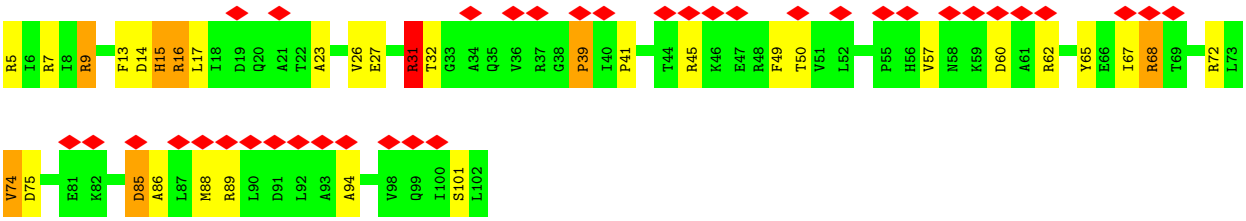
Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
59	AZ	1	28	10	5	11	2	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

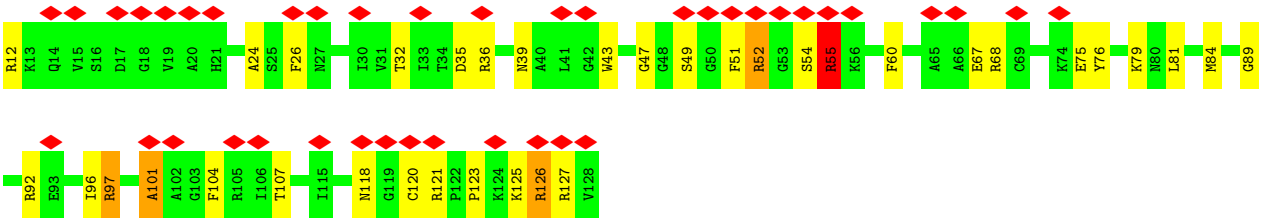
- Molecule 1: 30S ribosomal protein S10

Chain AJ:



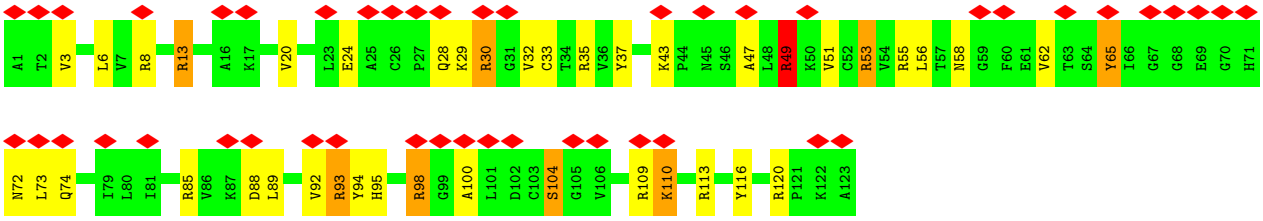
- Molecule 2: 30S ribosomal protein S11

Chain AK:



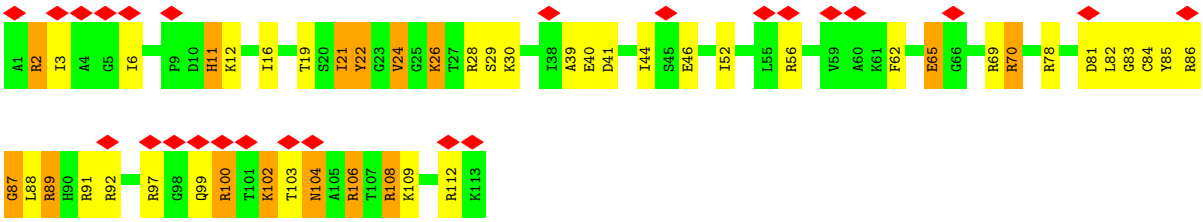
- Molecule 3: 30S ribosomal protein S12

Chain AL:



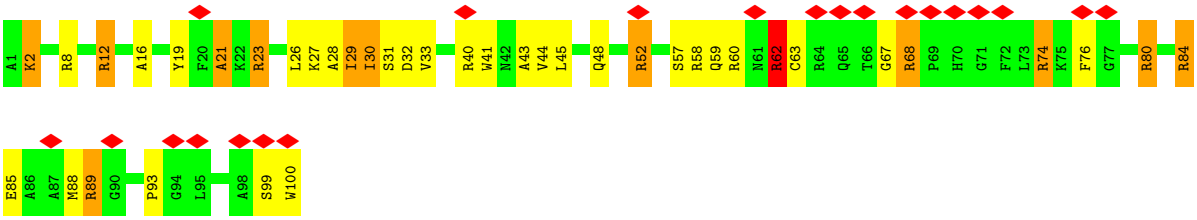
- Molecule 4: 30S ribosomal protein S13

Chain AM:



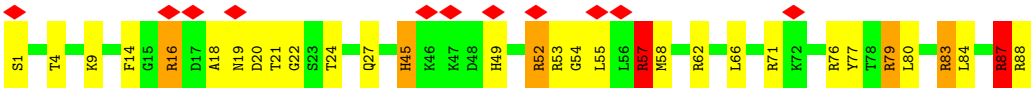
• Molecule 5: 30S ribosomal protein S14

Chain AN:



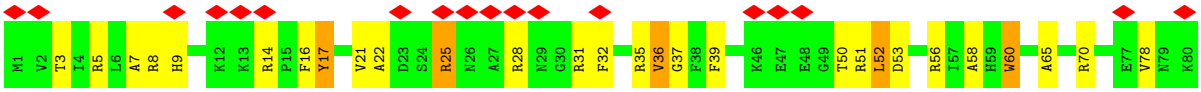
• Molecule 6: 30S ribosomal protein S15

Chain AO:



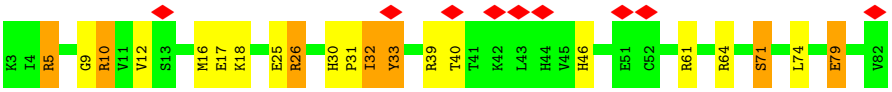
• Molecule 7: 30S ribosomal protein S16

Chain AP:



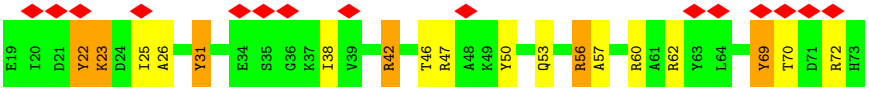
• Molecule 8: 30S ribosomal protein S17

Chain AQ:



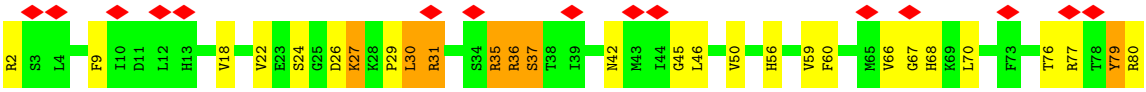
• Molecule 9: 30S ribosomal protein S18

Chain AR:



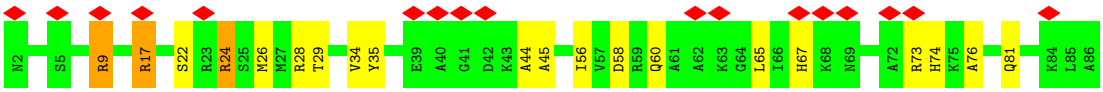
• Molecule 10: 30S ribosomal protein S19

Chain AS: 19% 65% 27% 9%



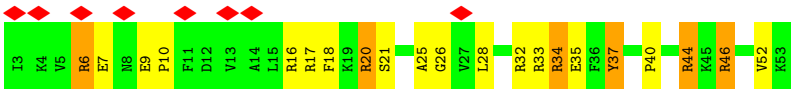
• Molecule 11: 30S ribosomal protein S20

Chain AT: 20% 76% 20% •



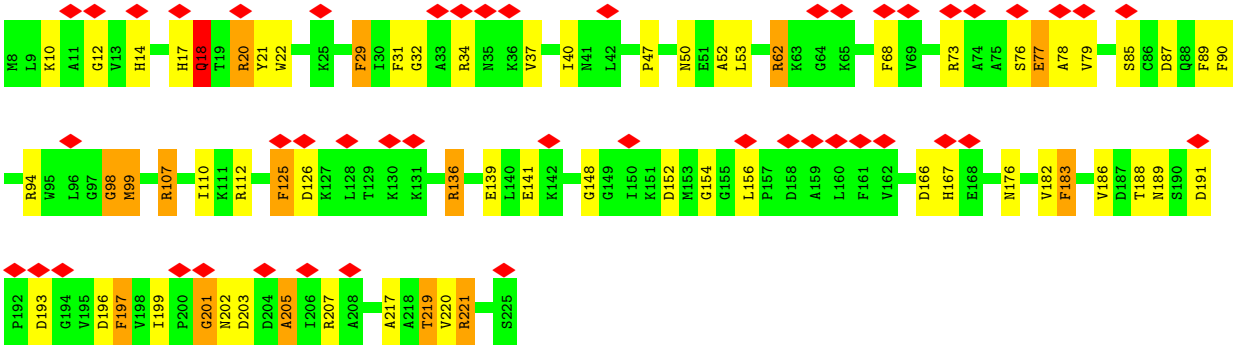
• Molecule 12: 30S ribosomal protein S21

Chain AU: 16% 59% 29% 12%



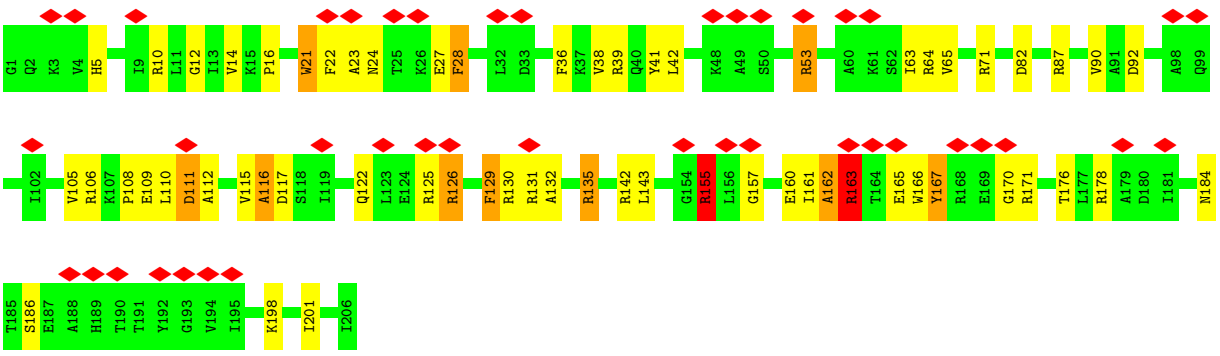
• Molecule 13: 30S ribosomal protein S2

Chain AB: 22% 70% 23% 7%



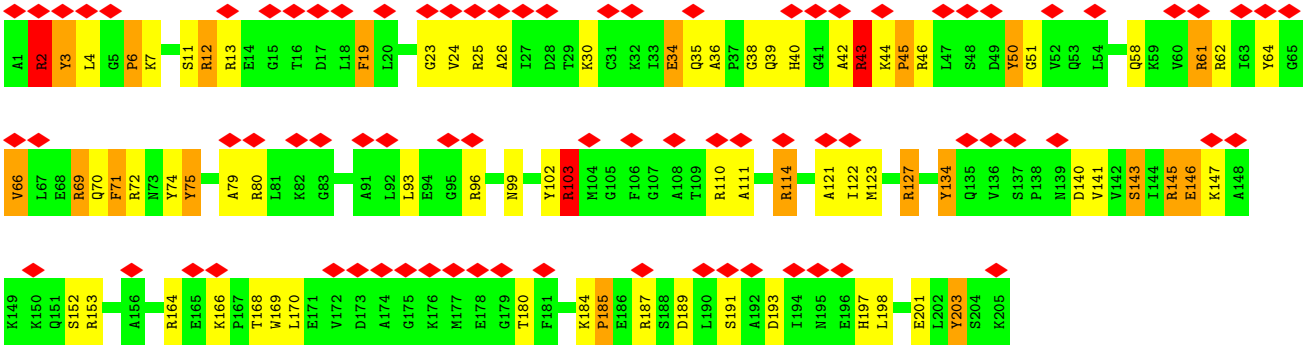
• Molecule 14: 30S ribosomal protein S3

Chain AC: 20% 70% 24% 5% •



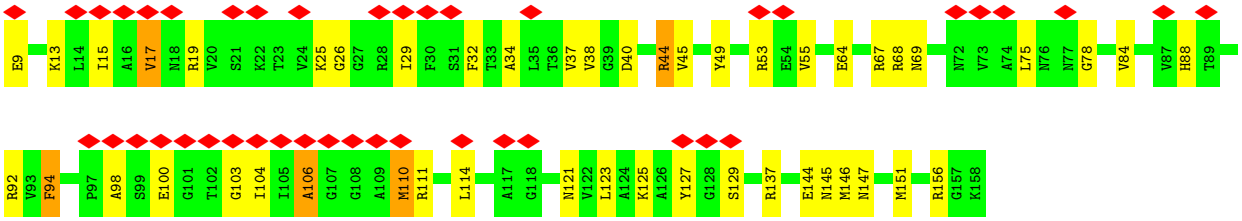
- Molecule 15: 30S ribosomal protein S4

Chain AD:



- Molecule 16: 30S ribosomal protein S5

Chain AE:

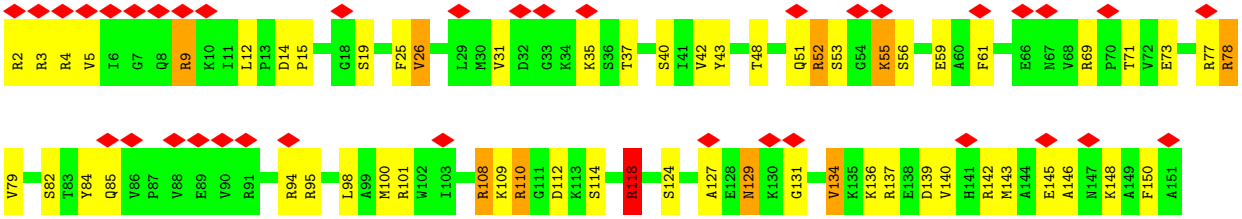


- Molecule 17: 30S ribosomal protein S6

Chain AF:

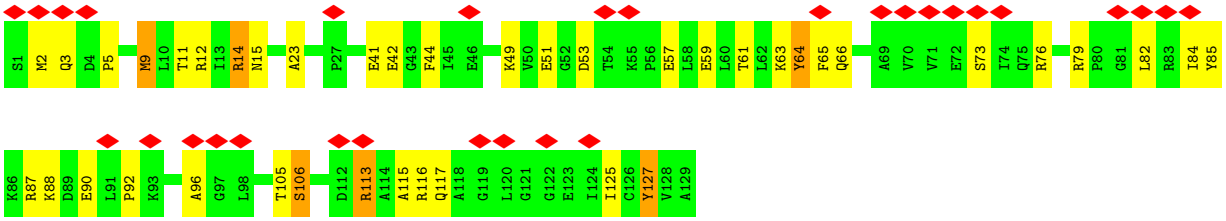
- Molecule 18: 30S ribosomal protein S7

Chain AG:



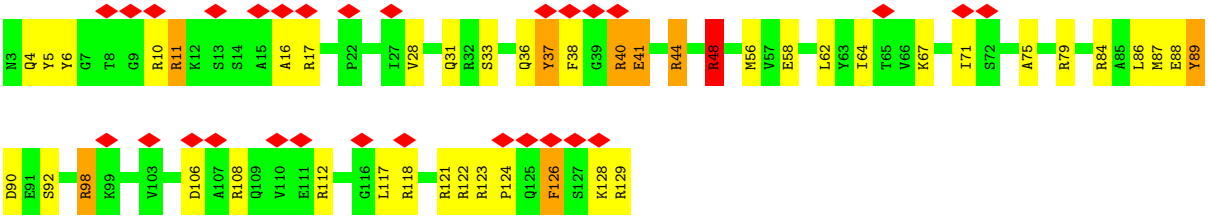
- Molecule 19: 30S ribosomal protein S8

Chain AH:



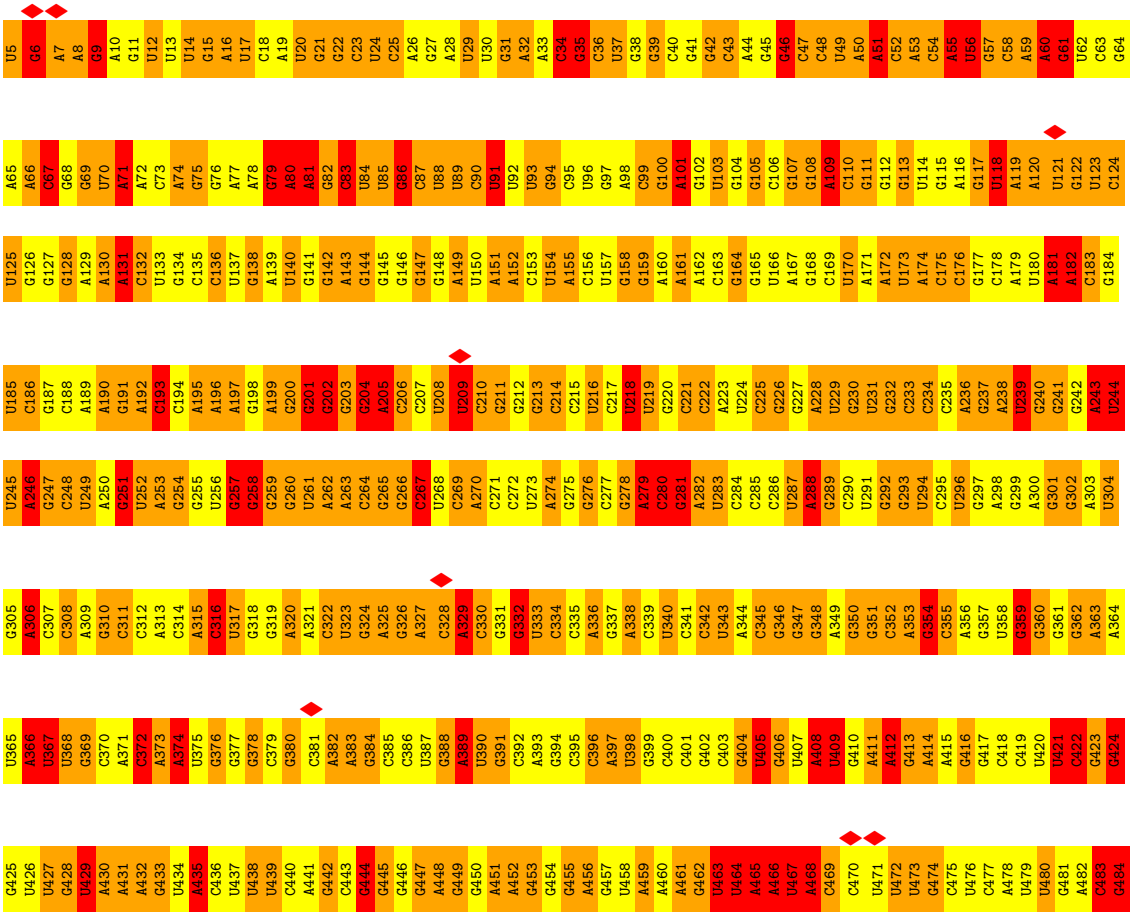
- Molecule 20: 30S ribosomal protein S9

Chain AI:



- Molecule 21: 16S rRNA

Chain AA:



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C545 A546 A547 G548 C549 G550 U551 U552 A553 A554 U555 C556 G557 G558 A559 A560 U561 U562 A563 C564 U565 G566 G567 G568 C569 G570 U571 A572 A573 A574 G575 G576 G577 C578 A579 C580 G581 C582 A583 G584 C585 C586 G587 A588 U589 U590 U591 G592 U593 U594 A595 A596 G597 U598 C599 A600 G601 A602 U603 G604
U605 G606 A607 A608 A609 U610 C611 C612 C613 C614 G615 G616 G617 C618 U619 C620 A621 A622 C623 C624 U625 G626 G627 G628 A629 A630 C631 U632 G633 C634 A635 U636 C637 U638 G639 A640 U641 A642 C643 U644 G645 G646 C647 A648 A649 G650 C651 U652 U653 G654 A655 G656 U657 C658 U659 C660 G661 U662 A663 G664
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G725 C726 G727 A728 A729 G730 G731 C732 G733 G734 C735 C736 C737 C738 C739 U740 G741 G742 A743 C744 G745 A746 A747 G748 A749 C750 U751 G752 A753 G754 G755 C756 U757 G758 A759 G760 G761 U762 G763 C764 G765 A766 A767 A768 G769 C770 G771 U772 G773 G774 G775 G776 A777 G778 C779 A780 A781 A782 C783 A784
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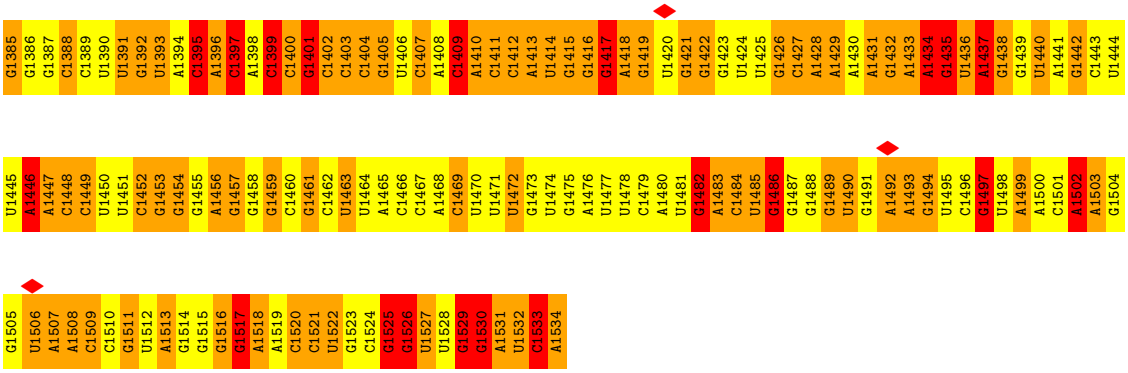
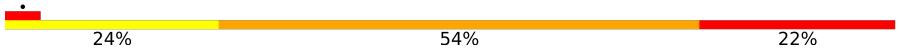
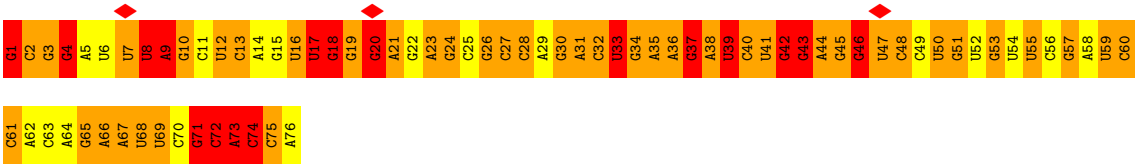
C1265 G1266 C1267 G1268 A1269 G1270 A1271 G1272 C1273 A1274 A1275 G1276 C1277 G1278 G1279 A1280 C1281 C1282 U1283 C1284 A1285 U1286 A1287 A1288 A1289 G1290 U1291 G1292 C1293 G1294 U1295 C1296 G1297 U1298 A1299 G1300 U1301 A1302 C1303 G1304 G1305 A1306 U1307 U1308 G1309 G1310 A1311 G1312 U1313 C1314 U1315 G1316 C1317 A1318 A1319 C1320 U1321 C1322 G1323 A1324
C1325 U1326 C1327 C1328 A1329 U1330 G1331 A1332 A1333 G1334 U1335 C1336 G1337 G1338 A1339 A1340 U1341 C1342 G1343 C1344 U1345 A1346 G1347 U1348 A1349 A1350 U1351 C1352 G1353 U1354 G1355 G1356 A1357 U1358 C1359 A1360 G1361 A1362 A1363 U1364 G1365 C1366 C1367 A1368 C1369 G1370 G1371 U1372 G1373 A1374 A1375 U1376 A1377 C1378 G1379 U1380 U1381 C1382 C1383 C1384



- Molecule 22: A/T-site tRNA Phe

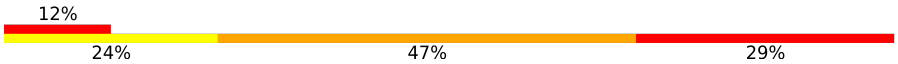
Chain AY:

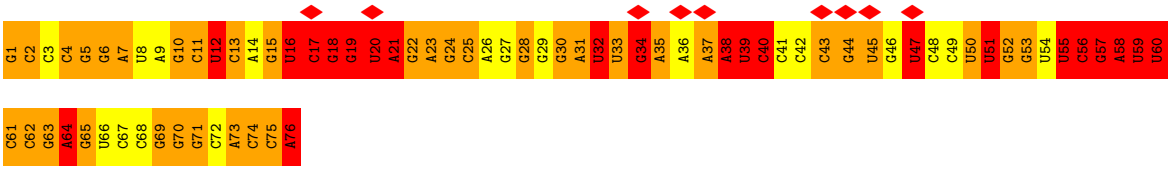




- Molecule 23: P-site tRNA fMet (Unmodified bases except for Thymine 54)

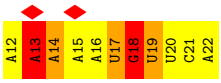
Chain AW:





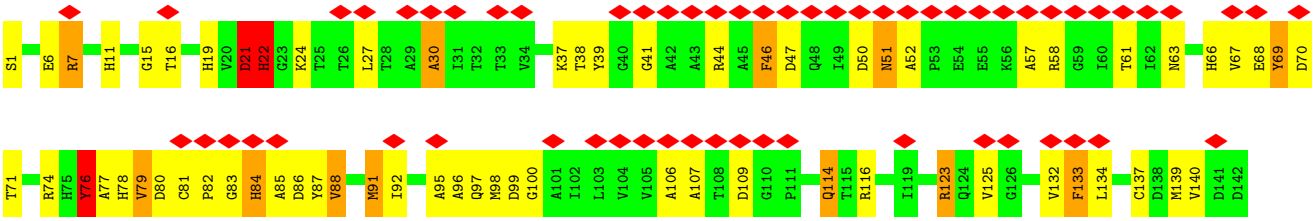
- Molecule 24: mRNA

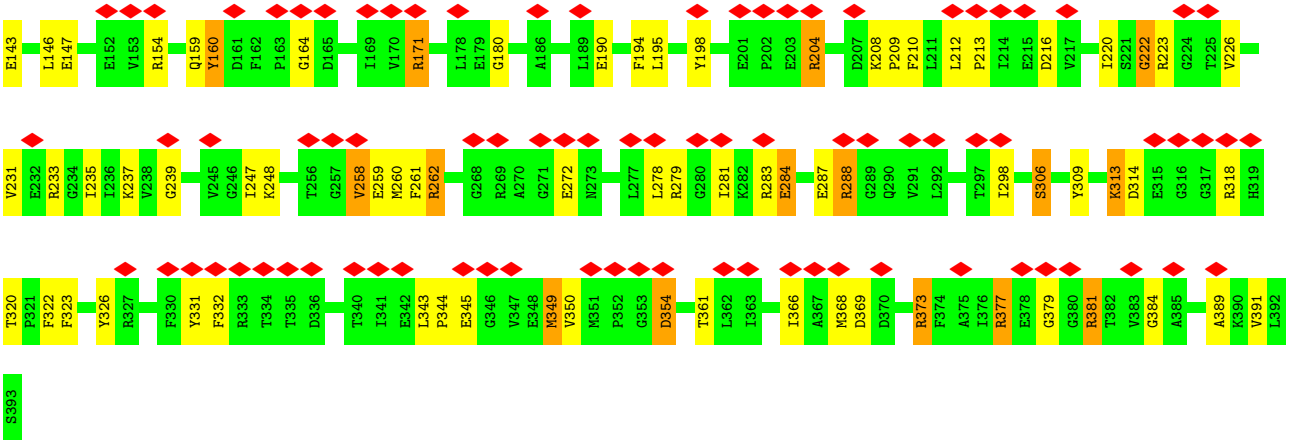
Chain AX:



- Molecule 25: Elongation factor Tu

Chain AZ:



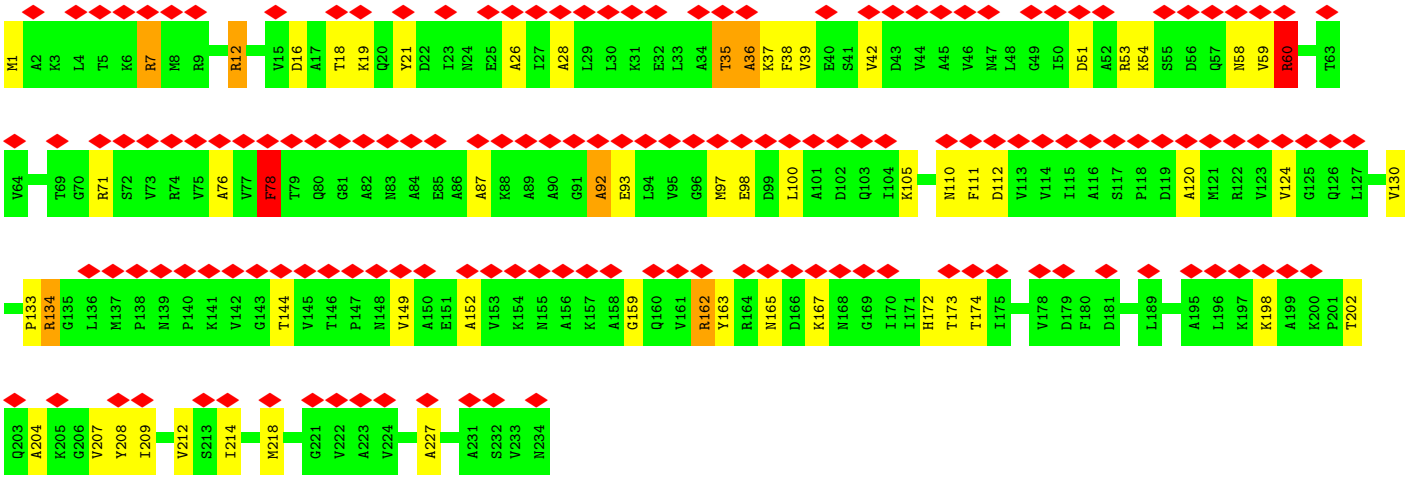


• Molecule 26: E-site tRNA Phe

Chain AV:

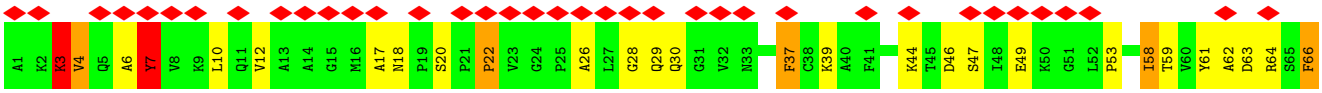
• Molecule 27: 50S ribosomal protein L1

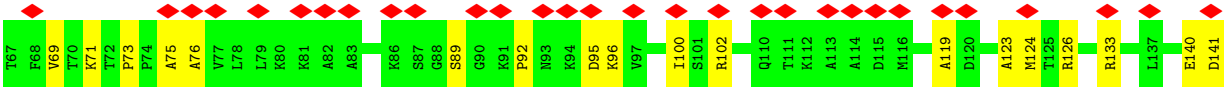
Chain B5:



• Molecule 28: 50S ribosomal protein L11

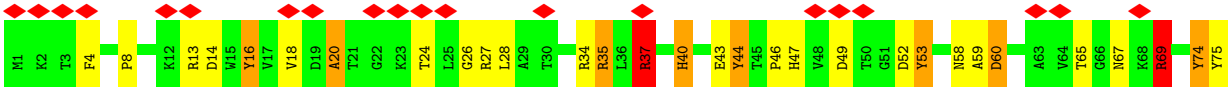
Chain BI:

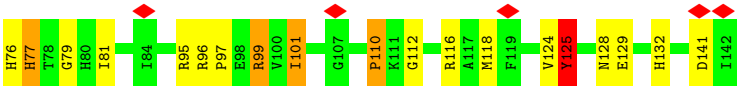




• Molecule 29: 50S ribosomal protein L13

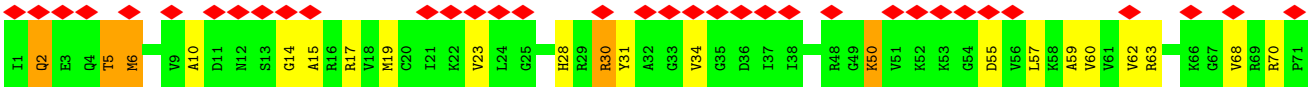
Chain BJ:

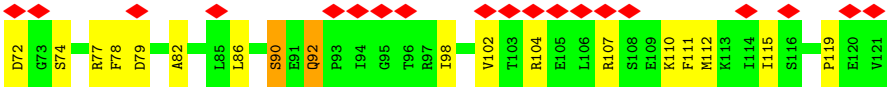




• Molecule 30: 50S ribosomal protein L14

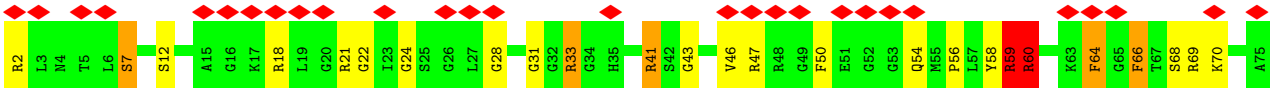
Chain BK:

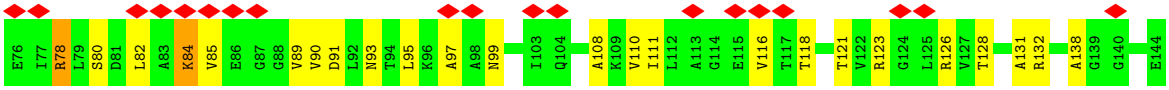




• Molecule 31: 50S ribosomal protein L15

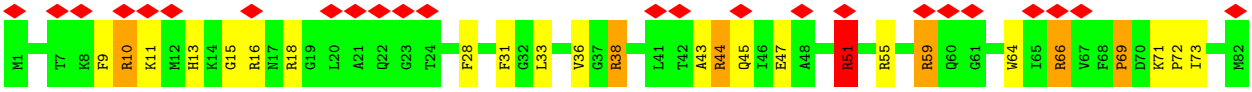
Chain BL:

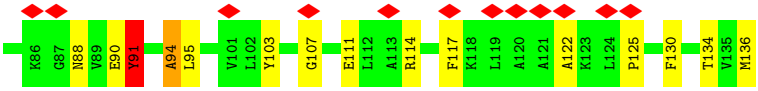




• Molecule 32: 50S ribosomal protein L16

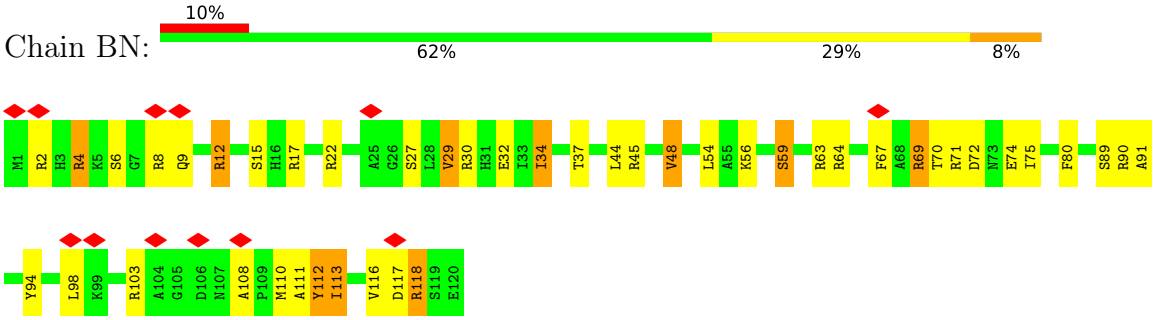
Chain BM:





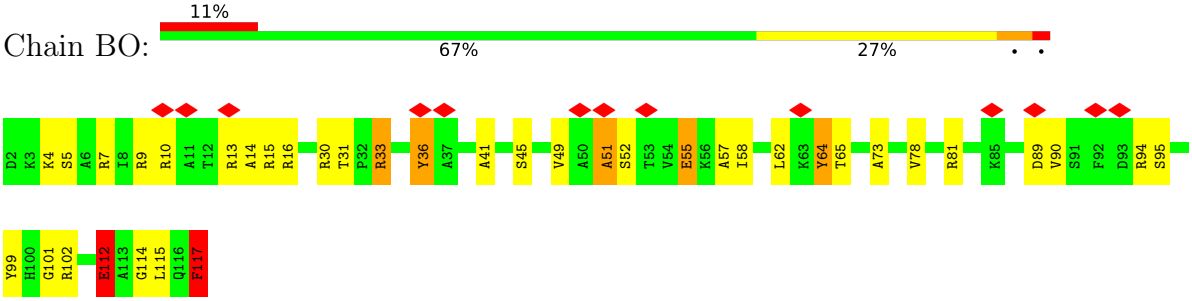
• Molecule 33: 50S ribosomal protein L17

Chain BN:



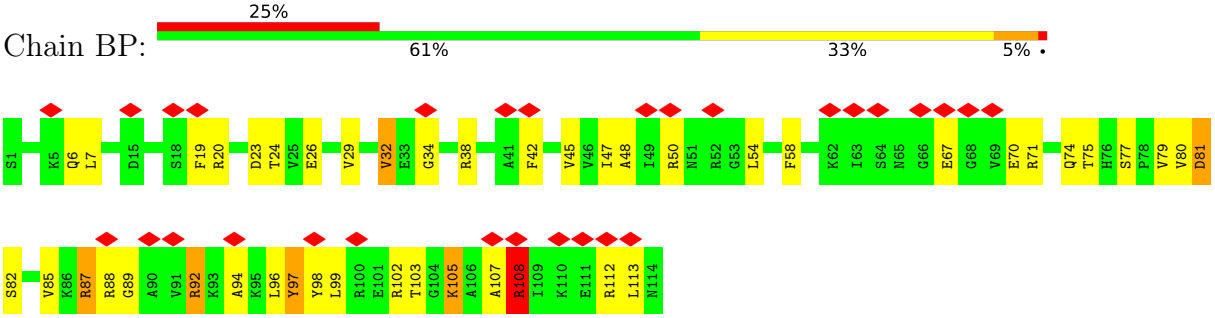
- Molecule 34: 50S ribosomal protein L18

Chain BO:



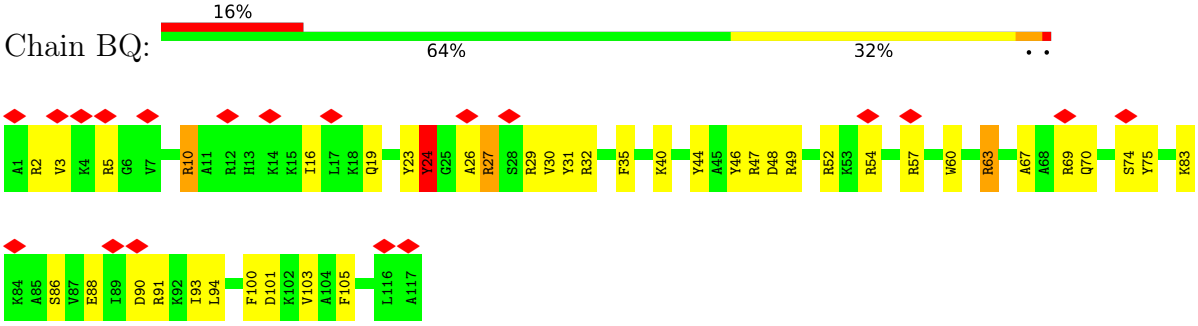
- Molecule 35: 50S ribosomal protein L19

Chain BP:



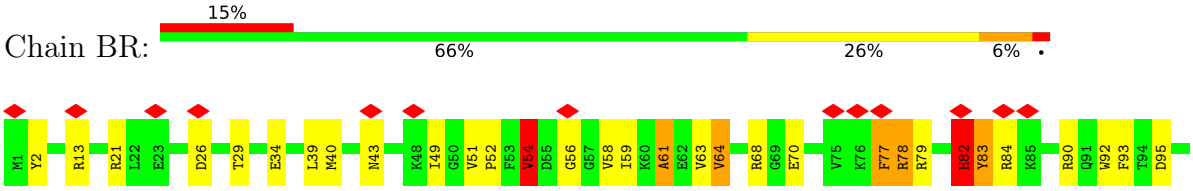
- Molecule 36: 50S ribosomal protein L20

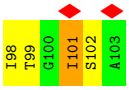
Chain BQ:



- Molecule 37: 50S ribosomal protein L21

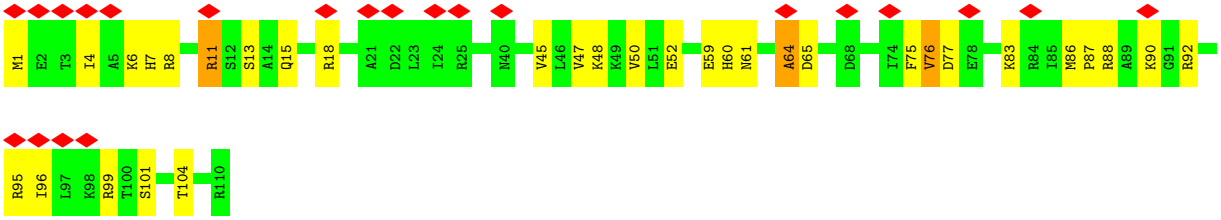
Chain BR:





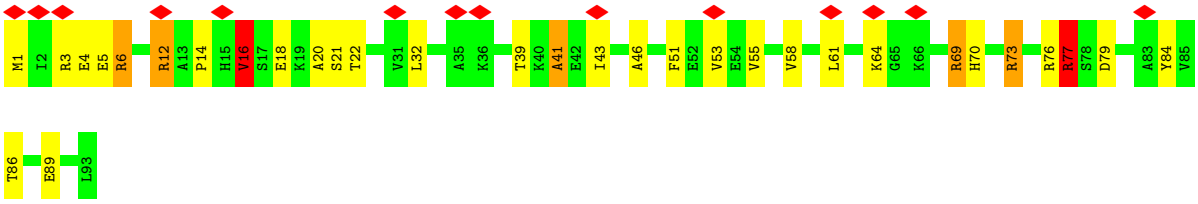
• Molecule 38: 50S ribosomal protein L22

Chain BS:



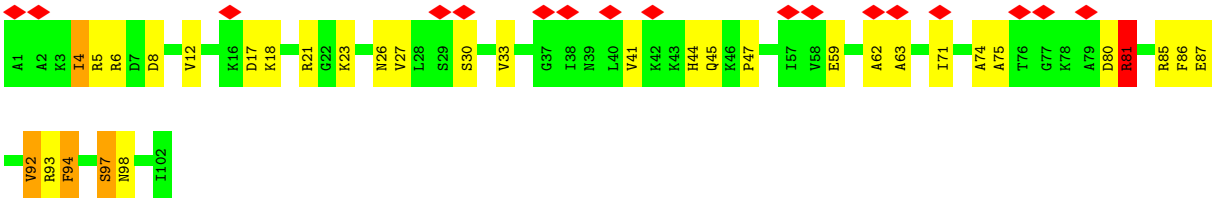
• Molecule 39: 50S ribosomal protein L23

Chain BT:



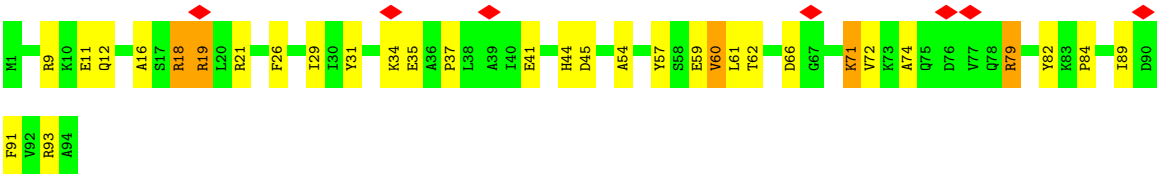
• Molecule 40: 50S ribosomal protein L24

Chain BU:



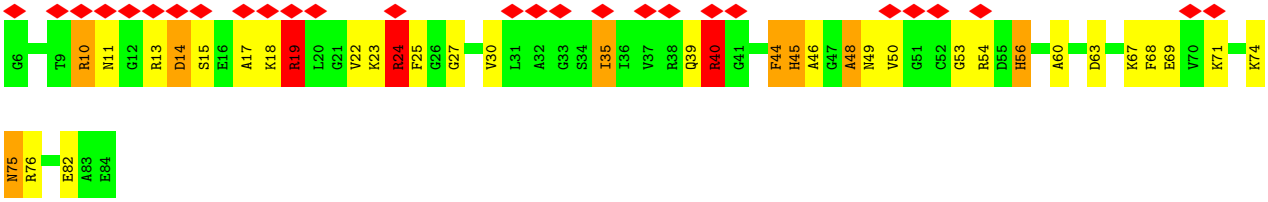
• Molecule 41: 50S ribosomal protein L25

Chain BV:



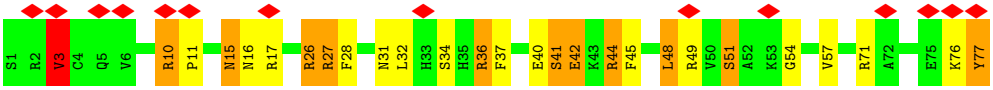
• Molecule 42: 50S ribosomal protein L27

Chain BW:



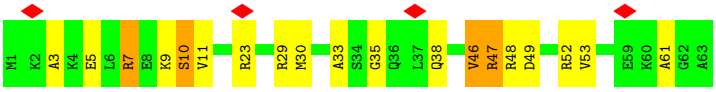
• Molecule 43: 50S ribosomal protein L28

Chain BX:



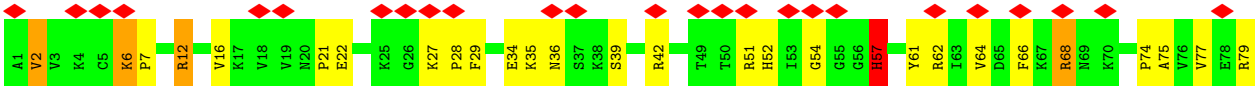
• Molecule 44: 50S ribosomal protein L29

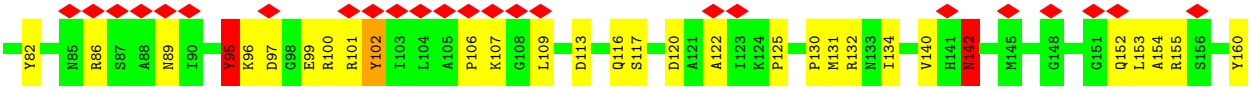
Chain BY:

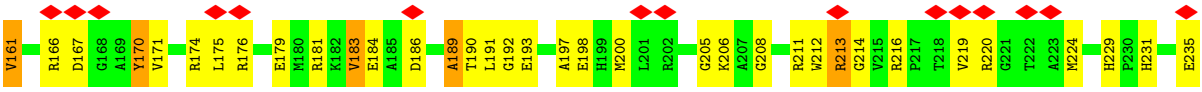


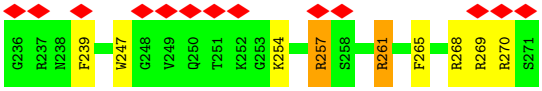
• Molecule 45: 50S ribosomal protein L2

Chain BC:



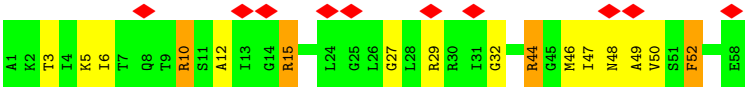






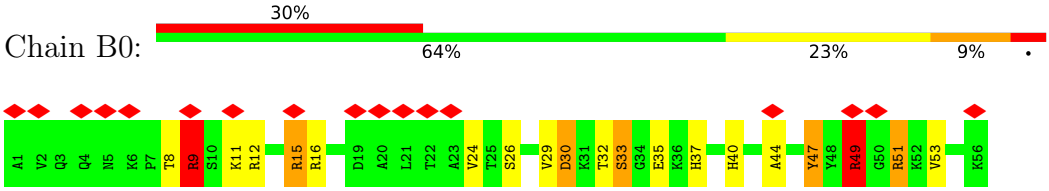
• Molecule 46: 50S ribosomal protein L30

Chain BZ:



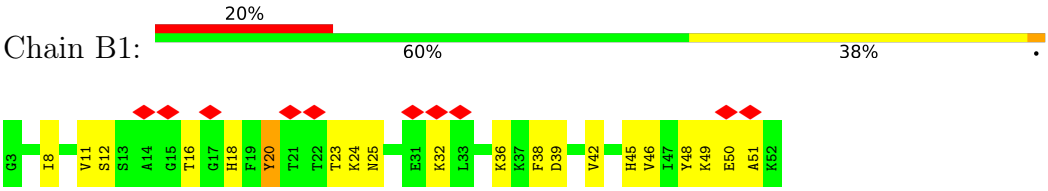
• Molecule 47: 50S ribosomal protein L32

Chain B0:



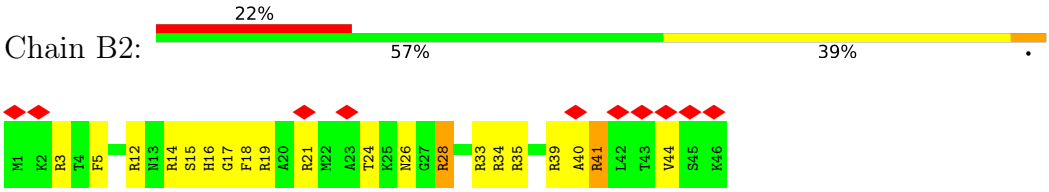
- Molecule 48: 50S ribosomal protein L33

Chain B1:



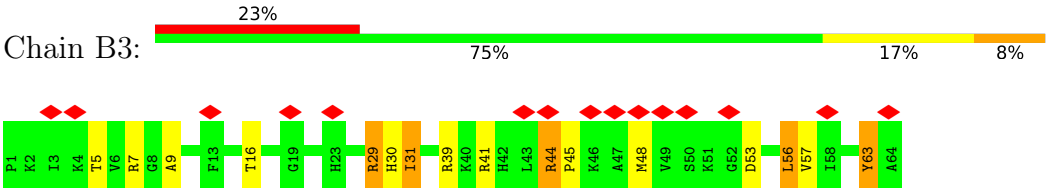
- Molecule 49: 50S ribosomal protein L34

Chain B2:



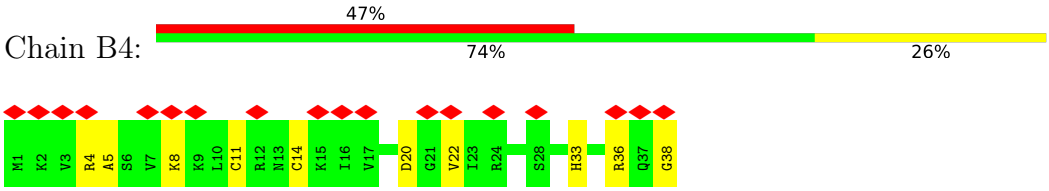
- Molecule 50: 50S ribosomal protein L35

Chain B3:



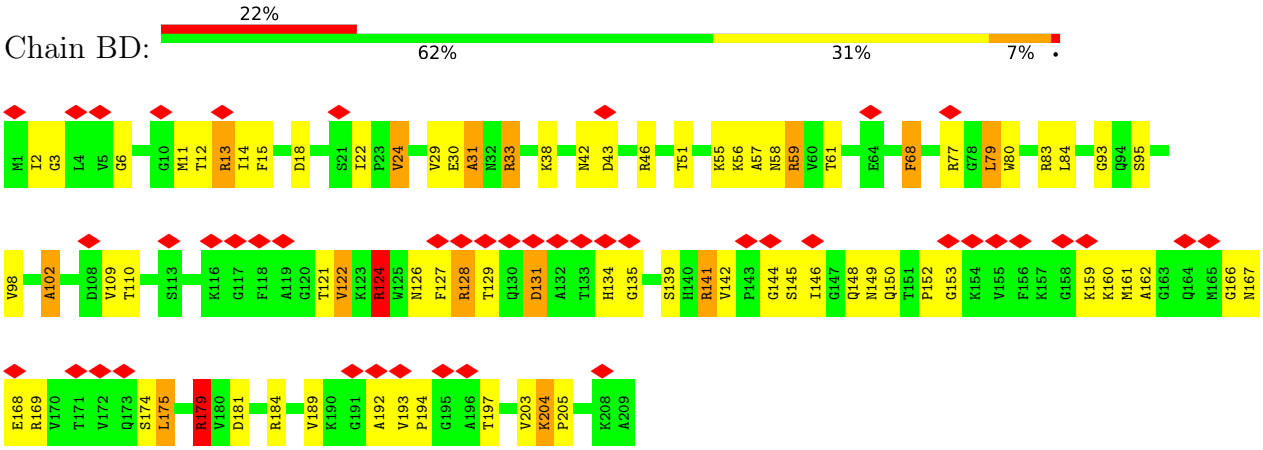
- Molecule 51: 50S ribosomal protein L36

Chain B4:



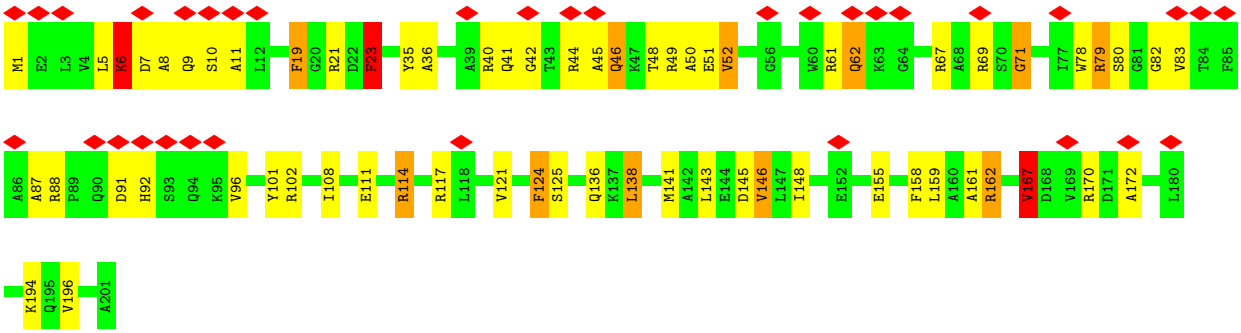
- Molecule 52: 50S ribosomal protein L3

Chain BD:



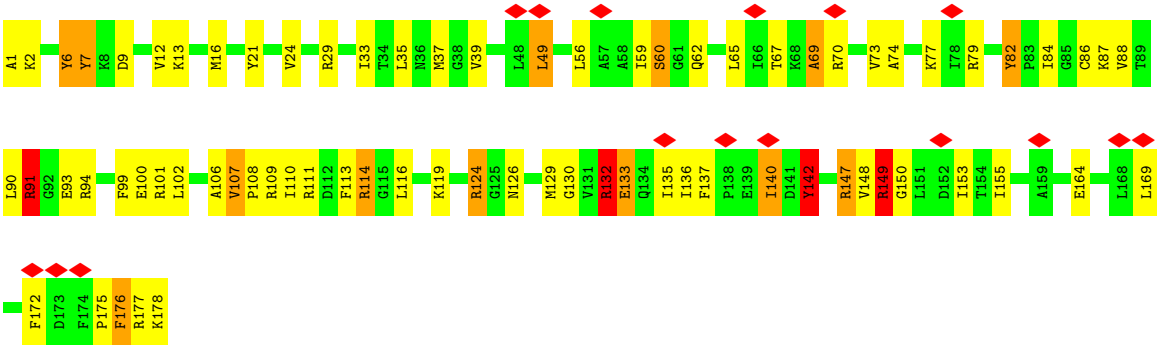
- Molecule 53: 50S ribosomal protein L4

Chain BE:



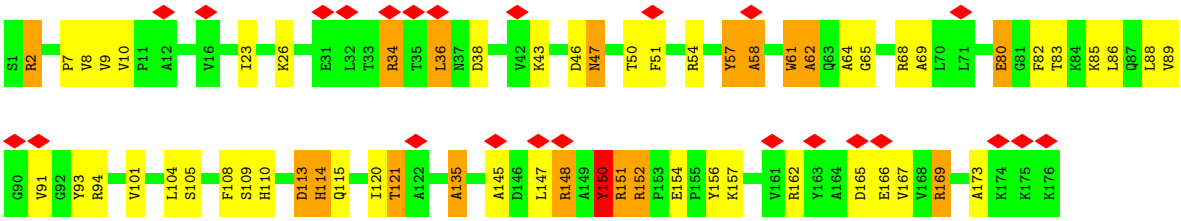
- Molecule 54: 50S ribosomal protein L5

Chain BF:



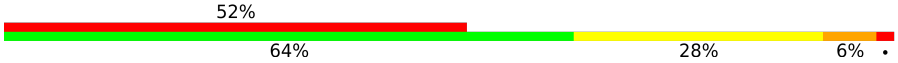
- Molecule 55: 50S ribosomal protein L6

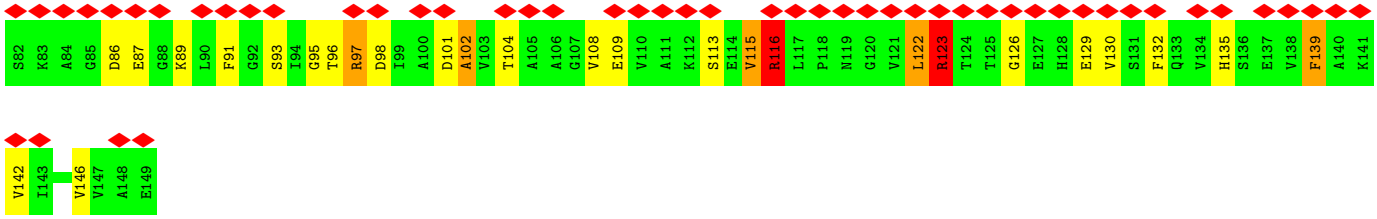
Chain BG:



- Molecule 56: 50S ribosomal protein L9

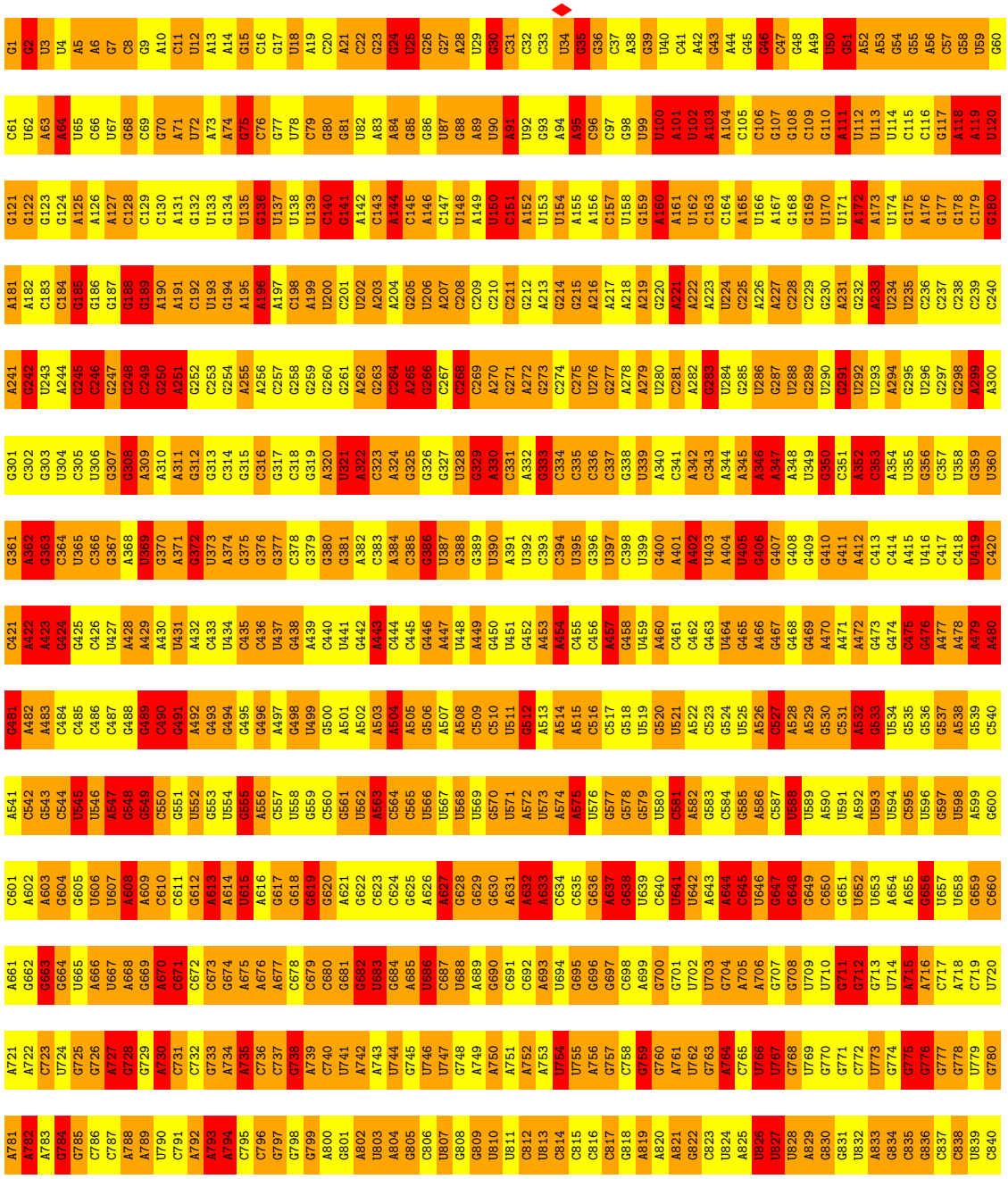
Chain BH:

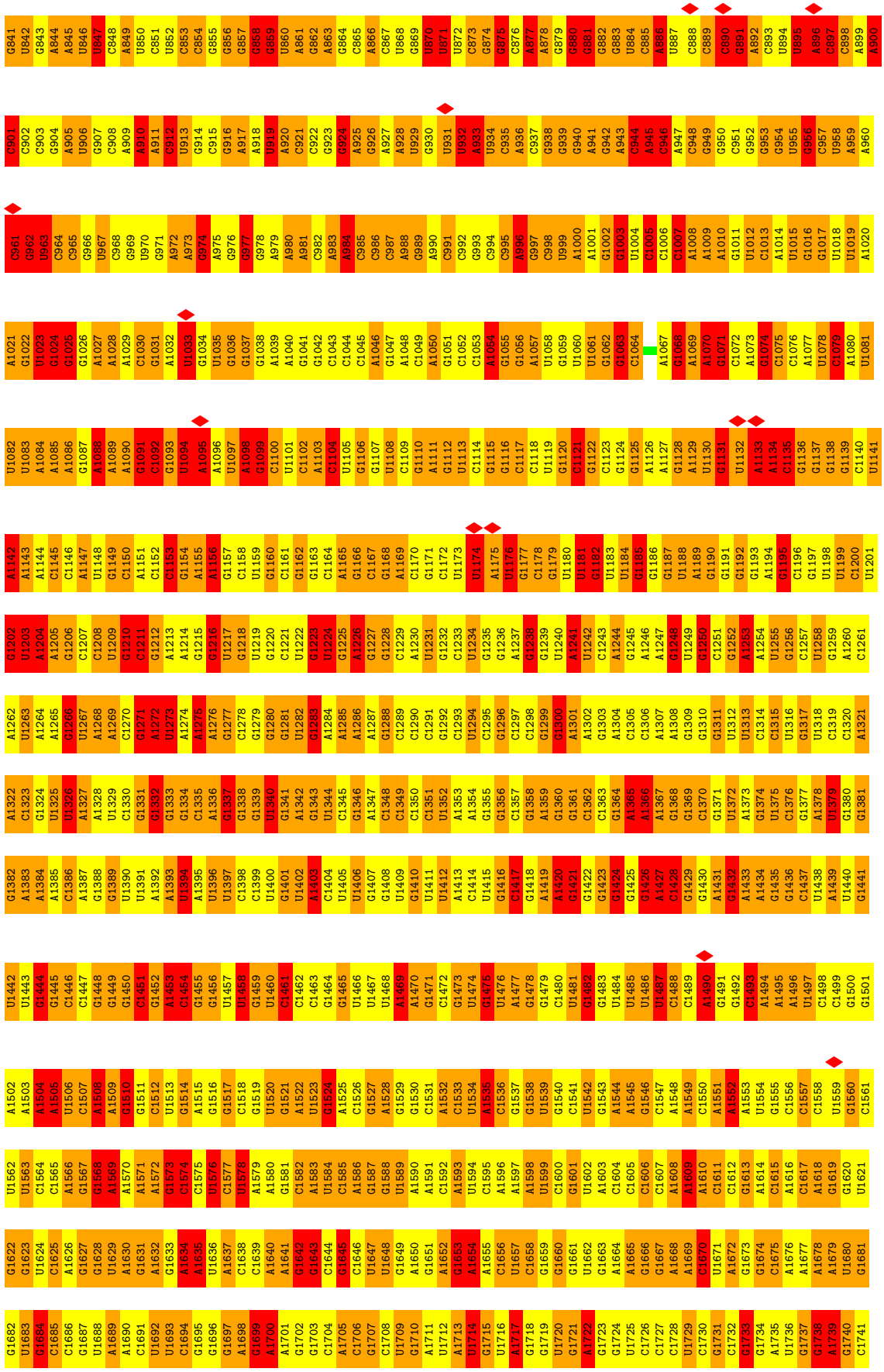




• Molecule 57: 23S ribosomal RNA

Chain BB:

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C901 C902 C903 G904 A905 U906 G907 C908 A909 A910 A911 C912 U913 G914 C915 G916 A917 A918 U919 A920 C921 C922 G923 G924 A925 G926 A927 A928 U929 G930 U931 U932 A933 U934 C935 A936 C937 G938 G939 G940 A941 G942 A943 C944 A945 C946 A947 C948 G949 U950 C951 G952 G953 G954 U955 G956 C957 U958 A959 A960
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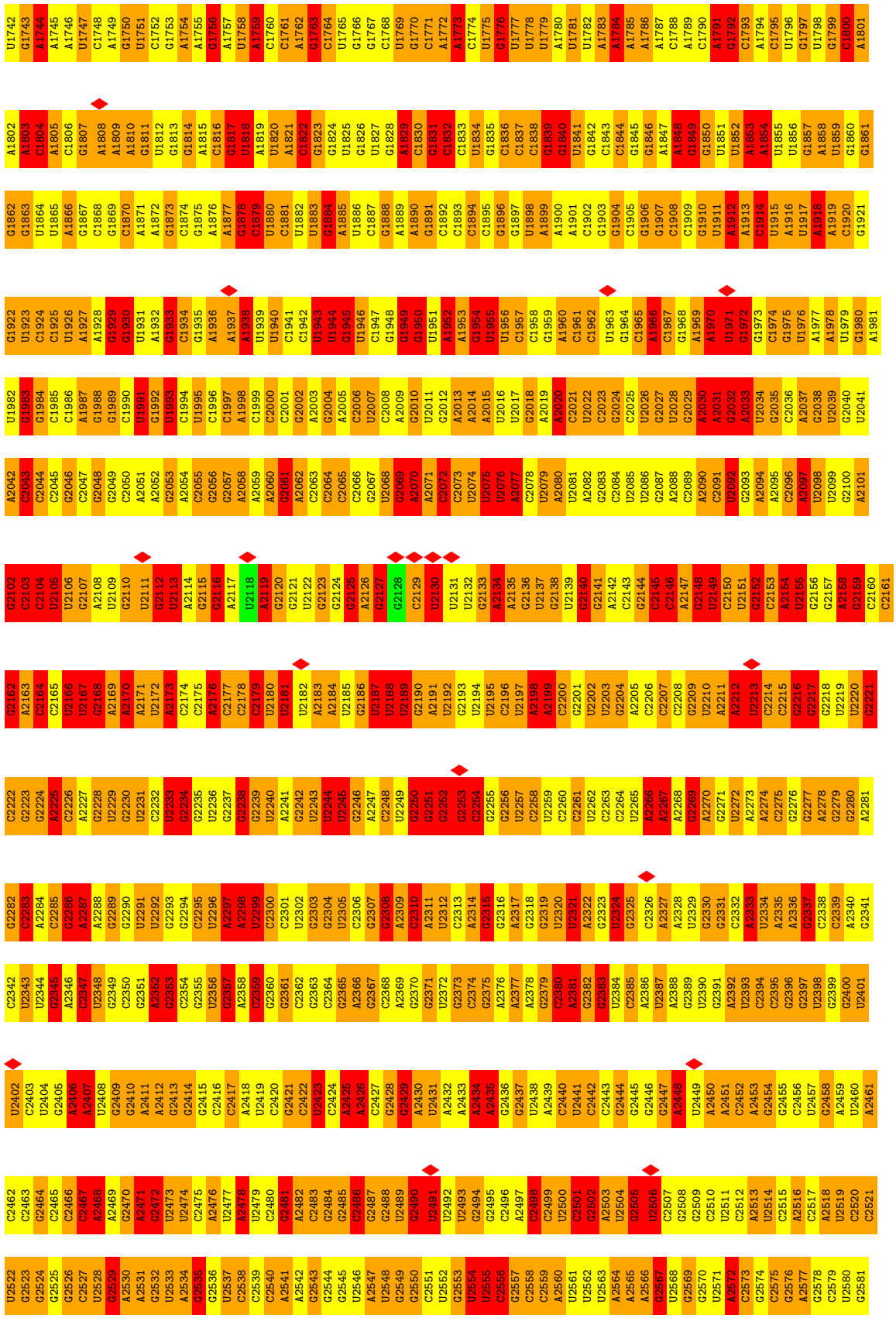
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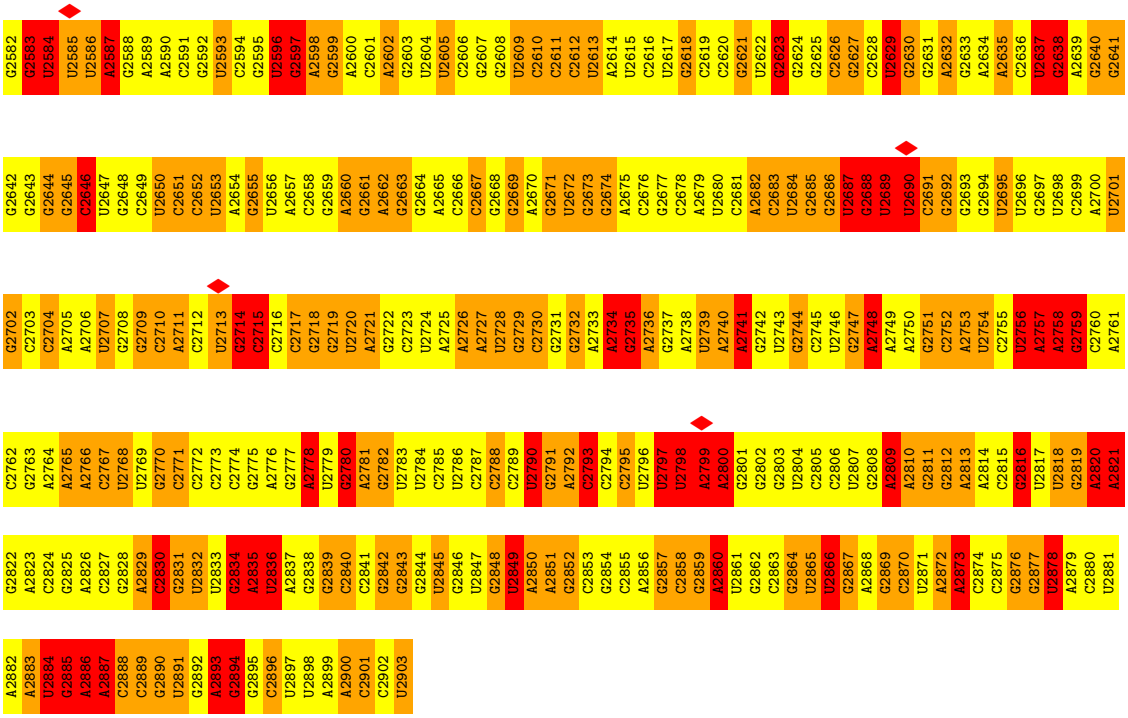
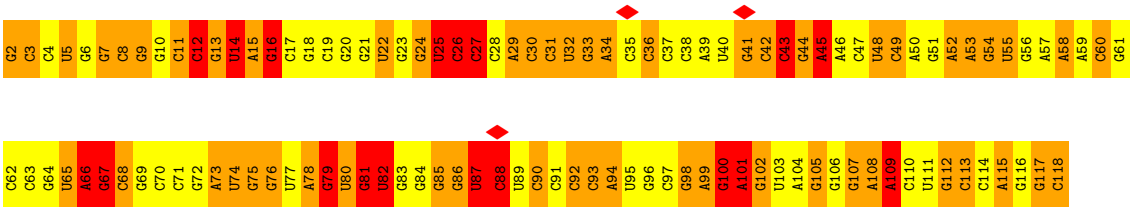
C2462 C2463 G2464 C2465 C2466 C2467 A2468 A2469 G2470 A2471 G2472 U2473 U2474 C2475 A2476 U2477 A2478 U2479 C2480 G2481 A2482 C2483 G2484 G2485 C2486 G2487 G2488 U2489 G2490 U2491 U2492 U2493 G2494 G2495 C2496 A2497 G2498 C2499 U2500 C2501 G2502 A2503 U2504 G2505 U2506 C2507 G2508 G2509 C2510 U2511 C2512 A2513 U2514 C2515 A2516 C2517 A2518 U2519 C2520 C2521
U2522 G2523 G2524 G2525 G2526 C2527 U2528 G2529 A2530 A2531 G2532 U2533 A2534 G2535 G2536 U2537 C2538 C2539 C2540 A2541 A2542 G2543 G2544 G2545 U2546 A2547 U2548 G2549 G2550 C2551 U2552 G2553 U2554 U2555 C2556 G2557 C2558 C2559 A2560 U2561 U2562 U2563 A2564 A2565 A2566 G2567 U2568 G2569 G2570 U2571 A2572 C2573 G2574 C2575 G2576 A2577 G2578 C2579 U2580 G2581



- Molecule 58: 5S ribosomal RNA

Chain BA:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	131599	Depositor
Resolution determination method	Not provided	
CTF correction method	Correction of reconstruction of each defocus group	Depositor
Microscope	FEI POLARA 300	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	20	Depositor
Minimum defocus (nm)	4520	Depositor
Maximum defocus (nm)	1200	Depositor
Magnification	58279	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	303.004	Depositor
Minimum map value	-114.578	Depositor
Average map value	6.031	Depositor
Map value standard deviation	29.145	Depositor
Recommended contour level	90.0	Depositor
Map size (Å)	370.80002, 370.80002, 370.80002	wwPDB
Map dimensions	309, 309, 309	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.2, 1.2, 1.2	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: GDP, 5MU

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	AJ	1.80	12/797 (1.5%)	1.89	19/1077 (1.8%)
2	AK	1.83	17/893 (1.9%)	2.02	24/1205 (2.0%)
3	AL	1.73	7/969 (0.7%)	1.96	24/1300 (1.8%)
4	AM	1.83	12/885 (1.4%)	2.12	35/1181 (3.0%)
5	AN	1.84	13/786 (1.7%)	2.19	27/1046 (2.6%)
6	AO	1.75	9/724 (1.2%)	1.94	16/966 (1.7%)
7	AP	1.90	14/649 (2.2%)	2.07	22/870 (2.5%)
8	AQ	1.80	10/658 (1.5%)	1.95	11/881 (1.2%)
9	AR	1.81	5/463 (1.1%)	2.10	16/621 (2.6%)
10	AS	1.77	6/653 (0.9%)	1.98	15/877 (1.7%)
11	AT	1.70	8/671 (1.2%)	1.88	12/888 (1.4%)
12	AU	1.95	8/431 (1.9%)	2.14	13/570 (2.3%)
13	AB	1.69	20/1736 (1.2%)	2.01	42/2338 (1.8%)
14	AC	1.76	18/1652 (1.1%)	1.95	34/2225 (1.5%)
15	AD	1.79	20/1665 (1.2%)	2.02	46/2227 (2.1%)
16	AE	1.75	12/1119 (1.1%)	2.03	28/1504 (1.9%)
17	AF	1.80	5/836 (0.6%)	1.98	19/1128 (1.7%)
18	AG	1.83	15/1188 (1.3%)	2.09	34/1591 (2.1%)
19	AH	1.72	10/989 (1.0%)	2.00	24/1326 (1.8%)
20	AI	1.77	10/1034 (1.0%)	2.01	29/1375 (2.1%)
21	AA	3.42	4975/36763 (13.5%)	3.74	8350/57350 (14.6%)
22	AY	4.00	354/1814 (19.5%)	4.28	526/2827 (18.6%)
23	AW	5.13	269/1809 (14.9%)	3.87	451/2819 (16.0%)
24	AX	3.54	39/260 (15.0%)	3.68	65/403 (16.1%)
25	AZ	1.79	30/3091 (1.0%)	2.04	97/4182 (2.3%)
26	AV	3.50	261/1814 (14.4%)	3.81	416/2825 (14.7%)
27	B5	1.66	6/1748 (0.3%)	2.01	42/2355 (1.8%)
28	BI	1.69	5/1046 (0.5%)	2.02	30/1410 (2.1%)
29	BJ	1.75	9/1152 (0.8%)	1.97	27/1551 (1.7%)
30	BK	1.76	6/940 (0.6%)	2.06	30/1258 (2.4%)
31	BL	1.85	17/1054 (1.6%)	2.05	30/1403 (2.1%)
32	BM	1.83	16/1093 (1.5%)	2.20	29/1460 (2.0%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
33	BN	1.87	16/974 (1.6%)	2.12	35/1301 (2.7%)
34	BO	1.87	15/902 (1.7%)	2.04	26/1209 (2.2%)
35	BP	1.78	6/929 (0.6%)	2.00	27/1242 (2.2%)
36	BQ	1.78	14/960 (1.5%)	2.16	38/1278 (3.0%)
37	BR	1.86	14/829 (1.7%)	2.09	25/1107 (2.3%)
38	BS	1.71	14/864 (1.6%)	1.97	19/1156 (1.6%)
39	BT	1.61	3/745 (0.4%)	2.03	23/994 (2.3%)
40	BU	1.72	5/788 (0.6%)	1.96	14/1051 (1.3%)
41	BV	1.70	7/766 (0.9%)	1.99	27/1025 (2.6%)
42	BW	1.85	15/603 (2.5%)	2.15	22/797 (2.8%)
43	BX	1.85	11/635 (1.7%)	1.98	18/848 (2.1%)
44	BY	1.67	5/510 (1.0%)	1.93	14/677 (2.1%)
45	BC	1.78	22/2122 (1.0%)	2.01	50/2852 (1.8%)
46	BZ	1.64	4/453 (0.9%)	1.99	11/605 (1.8%)
47	B0	1.78	2/450 (0.4%)	2.04	14/599 (2.3%)
48	B1	1.75	2/417 (0.5%)	1.91	8/554 (1.4%)
49	B2	1.87	7/380 (1.8%)	2.44	22/498 (4.4%)
50	B3	1.63	5/513 (1.0%)	1.85	10/676 (1.5%)
51	B4	1.88	3/303 (1.0%)	1.98	8/397 (2.0%)
52	BD	1.71	15/1586 (0.9%)	2.02	39/2134 (1.8%)
53	BE	1.71	13/1571 (0.8%)	1.99	42/2113 (2.0%)
54	BF	1.75	12/1444 (0.8%)	2.09	40/1937 (2.1%)
55	BG	1.76	21/1343 (1.6%)	2.07	37/1816 (2.0%)
56	BH	1.65	10/1122 (0.9%)	2.01	37/1515 (2.4%)
57	BB	3.38	9332/69800 (13.4%)	3.73	15942/108892 (14.6%)
58	BA	3.35	371/2804 (13.2%)	3.76	649/4371 (14.8%)
All	All	3.03	16162/165195 (9.8%)	3.37	27780/246683 (11.3%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
1	AJ	0	3
2	AK	0	4
3	AL	0	7
4	AM	0	5
5	AN	0	5
6	AO	0	5
7	AP	0	3
8	AQ	0	1

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Mol	Chain	#Chirality outliers	#Planarity outliers
9	AR	0	4
10	AS	0	1
11	AT	0	3
12	AU	0	5
13	AB	0	4
14	AC	0	5
15	AD	0	9
16	AE	0	1
17	AF	0	2
18	AG	0	4
19	AH	0	4
20	AI	0	6
21	AA	0	713
22	AY	0	40
23	AW	3	39
24	AX	0	3
25	AZ	0	8
26	AV	0	37
27	B5	1	7
28	BI	0	3
29	BJ	0	9
30	BK	0	1
31	BL	0	8
32	BM	0	4
33	BN	0	3
34	BO	0	4
35	BP	0	2
36	BQ	0	4
37	BR	0	6
38	BS	0	1
39	BT	0	2
40	BU	0	2
41	BV	0	4
42	BW	0	3
43	BX	0	3
44	BY	0	2
45	BC	0	9
46	BZ	0	3
47	B0	0	4
48	B1	0	2
49	B2	0	1
50	B3	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
51	B4	0	1
52	BD	0	5
53	BE	0	7
54	BF	0	9
55	BG	0	5
56	BH	0	3
57	BB	0	1349
58	BA	0	56
All	All	4	2445

All (16162) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	63	G	N9-C8	84.56	1.97	1.37
23	AW	63	G	N7-C5	78.06	1.86	1.39
23	AW	63	G	C5-C4	69.51	1.87	1.38
23	AW	63	G	N9-C4	65.35	1.90	1.38
23	AW	63	G	C8-N7	61.20	1.67	1.30
57	BB	2846	G	N7-C5	-20.78	1.26	1.39
57	BB	556	A	N9-C4	19.53	1.49	1.37
21	AA	1339	A	C8-N7	-19.41	1.18	1.31
57	BB	1977	A	N7-C5	-18.82	1.27	1.39
57	BB	537	G	N7-C5	-18.73	1.28	1.39
21	AA	344	A	N9-C4	-18.39	1.26	1.37
21	AA	383	A	N7-C5	-18.24	1.28	1.39
21	AA	495	A	N7-C5	-18.13	1.28	1.39
21	AA	251	G	N7-C5	-17.56	1.28	1.39
57	BB	618	G	C6-N1	17.41	1.51	1.39
21	AA	573	A	N7-C5	-17.30	1.28	1.39
57	BB	2706	A	N7-C5	-17.12	1.28	1.39
57	BB	949	G	N7-C5	-17.03	1.29	1.39
21	AA	34	C	N3-C4	17.00	1.45	1.33
21	AA	482	A	N7-C5	-17.00	1.29	1.39
57	BB	1154	G	N7-C5	-16.93	1.29	1.39
57	BB	2848	G	C2-N3	16.90	1.46	1.32
57	BB	428	A	N7-C5	-16.90	1.29	1.39
57	BB	628	G	C6-N1	16.79	1.51	1.39
21	AA	981	U	C2-N3	16.77	1.49	1.37
57	BB	2352	A	N7-C5	-16.75	1.29	1.39
57	BB	1342	A	N7-C5	-16.70	1.29	1.39
57	BB	2268	A	N7-C5	-16.61	1.29	1.39
21	AA	525	C	N1-C6	16.59	1.47	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	482	A	C8-N7	-16.45	1.20	1.31
57	BB	1090	A	N9-C4	-16.30	1.28	1.37
21	AA	1340	A	N7-C5	-16.29	1.29	1.39
57	BB	218	A	N9-C4	16.28	1.47	1.37
57	BB	2095	A	N7-C5	-16.20	1.29	1.39
57	BB	2198	A	C6-N6	16.20	1.47	1.33
57	BB	1876	A	N7-C5	-16.08	1.29	1.39
57	BB	1799	G	C6-N1	16.02	1.50	1.39
57	BB	2011	U	C2-N3	16.01	1.49	1.37
21	AA	771	G	C6-N1	15.95	1.50	1.39
57	BB	1872	A	N9-C4	15.90	1.47	1.37
57	BB	2598	A	N7-C5	-15.86	1.29	1.39
57	BB	310	A	N7-C5	-15.79	1.29	1.39
57	BB	2707	U	C2-N3	15.78	1.48	1.37
57	BB	1652	A	N7-C5	-15.78	1.29	1.39
57	BB	2012	G	N9-C8	15.72	1.48	1.37
21	AA	550	G	N7-C5	-15.68	1.29	1.39
21	AA	289	G	N7-C5	-15.66	1.29	1.39
21	AA	836	G	N7-C5	-15.57	1.29	1.39
58	BA	29	A	N7-C5	-15.48	1.29	1.39
21	AA	665	A	N7-C5	-15.46	1.29	1.39
22	AY	76	A	N7-C5	-15.41	1.30	1.39
22	AY	48	C	C4'-C3'	15.33	1.70	1.53
57	BB	260	G	C2-N3	15.28	1.45	1.32
21	AA	1055	A	N7-C5	-15.26	1.30	1.39
21	AA	247	G	N7-C5	-15.26	1.30	1.39
57	BB	269	C	N3-C4	15.21	1.44	1.33
57	BB	2523	G	C2'-C1'	-15.15	1.36	1.53
57	BB	1552	A	N7-C5	-15.14	1.30	1.39
21	AA	675	A	N7-C5	-15.09	1.30	1.39
26	AV	32	C	N3-C4	15.06	1.44	1.33
21	AA	1421	G	N7-C5	-14.93	1.30	1.39
57	BB	764	A	N7-C5	-14.86	1.30	1.39
21	AA	149	A	C6-N1	14.84	1.46	1.35
26	AV	15	G	N7-C5	-14.82	1.30	1.39
57	BB	2531	A	N7-C5	-14.77	1.30	1.39
57	BB	944	C	N1-C6	14.76	1.46	1.37
57	BB	1609	A	N7-C5	-14.76	1.30	1.39
57	BB	2444	G	N7-C5	-14.75	1.30	1.39
57	BB	513	A	N7-C5	-14.74	1.30	1.39
57	BB	2450	A	N7-C5	-14.73	1.30	1.39
21	AA	1365	G	N7-C5	-14.69	1.30	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	44	A	C2'-C1'	-14.69	1.37	1.53
57	BB	1705	A	N7-C5	-14.67	1.30	1.39
57	BB	2436	G	C6-N1	14.64	1.49	1.39
57	BB	2466	C	N1-C6	14.60	1.46	1.37
58	BA	31	C	N1-C6	14.59	1.46	1.37
57	BB	1698	A	N9-C4	14.56	1.46	1.37
57	BB	2589	A	C6-N6	14.56	1.45	1.33
21	AA	109	A	N3-C4	-14.55	1.26	1.34
57	BB	1706	C	C4-N4	14.55	1.47	1.33
57	BB	2429	G	C6-N1	14.52	1.49	1.39
57	BB	266	G	N7-C5	-14.50	1.30	1.39
22	AY	29	A	N7-C5	-14.46	1.30	1.39
57	BB	2043	C	N1-C6	14.45	1.45	1.37
57	BB	1244	A	N7-C5	-14.42	1.30	1.39
21	AA	1163	A	N7-C5	-14.38	1.30	1.39
57	BB	1361	G	C6-N1	14.38	1.49	1.39
21	AA	608	A	N7-C5	-14.34	1.30	1.39
21	AA	1452	C	N1-C6	14.34	1.45	1.37
57	BB	1165	A	N3-C4	-14.32	1.26	1.34
21	AA	958	A	N7-C5	-14.31	1.30	1.39
57	BB	1762	A	C6-N6	14.29	1.45	1.33
21	AA	1094	G	N7-C5	-14.29	1.30	1.39
21	AA	74	A	C5-C4	14.27	1.48	1.38
57	BB	2199	A	N9-C4	14.25	1.46	1.37
22	AY	58	A	C6-N6	14.23	1.45	1.33
21	AA	1101	A	N3-C4	-14.21	1.26	1.34
23	AW	61	C	N1-C6	14.22	1.45	1.37
23	AW	23	A	N7-C5	-14.21	1.30	1.39
21	AA	19	A	N7-C5	-14.21	1.30	1.39
21	AA	735	C	N1-C6	14.20	1.45	1.37
57	BB	1790	C	N1-C6	14.20	1.45	1.37
57	BB	247	G	C6-N1	14.18	1.49	1.39
57	BB	940	G	C5-C4	-14.18	1.28	1.38
57	BB	1981	A	C8-N7	-14.14	1.21	1.31
57	BB	52	A	N7-C5	-14.12	1.30	1.39
21	AA	257	G	C6-N1	14.11	1.49	1.39
57	BB	172	A	N3-C4	-14.11	1.26	1.34
21	AA	200	G	C6-N1	14.08	1.49	1.39
21	AA	681	A	N7-C5	-14.07	1.30	1.39
57	BB	1785	A	N7-C5	-14.06	1.30	1.39
21	AA	794	A	N7-C5	-14.06	1.30	1.39
57	BB	129	C	N1-C6	14.05	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	357	G	N7-C5	-14.03	1.30	1.39
57	BB	824	U	N1-C2	14.00	1.51	1.38
57	BB	2120	G	N7-C5	-14.00	1.30	1.39
26	AV	20	U	C2-N3	13.99	1.47	1.37
57	BB	751	A	N7-C5	-13.98	1.30	1.39
57	BB	892	A	N7-C5	-13.94	1.30	1.39
57	BB	973	A	N7-C5	-13.94	1.30	1.39
21	AA	80	A	N7-C5	-13.93	1.30	1.39
21	AA	546	A	C6-N1	13.93	1.45	1.35
57	BB	1697	G	C6-N1	13.91	1.49	1.39
21	AA	500	G	C2-N3	13.90	1.43	1.32
21	AA	996	A	N9-C4	13.90	1.46	1.37
21	AA	1257	A	N7-C5	-13.88	1.30	1.39
21	AA	858	G	N7-C5	-13.87	1.30	1.39
57	BB	222	A	N9-C4	-13.86	1.29	1.37
21	AA	1175	G	N7-C5	-13.84	1.30	1.39
58	BA	2	G	OP3-P	-13.82	1.44	1.61
21	AA	1438	G	N7-C5	-13.80	1.30	1.39
21	AA	873	A	N7-C5	-13.80	1.30	1.39
21	AA	144	G	C6-N1	13.79	1.49	1.39
21	AA	841	C	N1-C6	13.77	1.45	1.37
57	BB	2399	G	N7-C5	-13.77	1.30	1.39
21	AA	1201	A	N9-C4	13.76	1.46	1.37
26	AV	15	G	N1-C2	13.74	1.48	1.37
57	BB	2095	A	C5-C4	13.72	1.48	1.38
57	BB	1088	A	N7-C5	-13.71	1.31	1.39
21	AA	377	G	N7-C5	-13.71	1.31	1.39
21	AA	532	A	N9-C4	13.71	1.46	1.37
21	AA	1104	G	C6-N1	13.70	1.49	1.39
21	AA	656	G	N7-C5	-13.68	1.31	1.39
57	BB	260	G	N7-C5	-13.68	1.31	1.39
57	BB	1354	A	N9-C4	13.65	1.46	1.37
57	BB	1296	G	N7-C5	-13.65	1.31	1.39
57	BB	2837	A	N7-C5	-13.63	1.31	1.39
57	BB	2810	A	N3-C4	13.63	1.43	1.34
57	BB	1609	A	N9-C4	-13.62	1.29	1.37
57	BB	2661	G	C2'-C1'	-13.62	1.38	1.53
24	AX	14	A	N9-C4	13.62	1.46	1.37
21	AA	1083	U	C2-N3	13.62	1.47	1.37
21	AA	943	U	C2-N3	13.60	1.47	1.37
21	AA	704	A	C5-C4	13.58	1.48	1.38
57	BB	173	A	N3-C4	13.56	1.43	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2309	A	N7-C5	-13.56	1.31	1.39
57	BB	1637	A	C2'-C1'	-13.55	1.38	1.53
57	BB	822	G	C8-N7	13.55	1.39	1.30
57	BB	2675	A	N9-C4	-13.54	1.29	1.37
57	BB	2379	G	N3-C4	-13.50	1.26	1.35
21	AA	388	G	N7-C5	-13.48	1.31	1.39
21	AA	1024	G	N7-C5	-13.48	1.31	1.39
57	BB	577	G	N1-C2	13.42	1.48	1.37
57	BB	2541	A	N7-C5	-13.41	1.31	1.39
57	BB	1051	G	N7-C5	13.40	1.47	1.39
21	AA	5	U	OP3-P	-13.39	1.45	1.61
21	AA	1525	G	N9-C8	13.38	1.47	1.37
21	AA	752	G	C8-N7	-13.37	1.23	1.30
21	AA	1068	G	C5-C4	13.37	1.47	1.38
57	BB	1034	G	C2-N3	13.37	1.43	1.32
57	BB	2894	G	N7-C5	-13.36	1.31	1.39
21	AA	1346	A	N9-C4	-13.34	1.29	1.37
23	AW	66	U	N3-C4	13.29	1.50	1.38
57	BB	775	G	C8-N7	-13.29	1.23	1.30
57	BB	1151	A	C6-N6	13.27	1.44	1.33
21	AA	370	C	N3-C4	13.26	1.43	1.33
21	AA	861	G	N7-C5	-13.26	1.31	1.39
57	BB	1690	A	N9-C4	-13.24	1.29	1.37
57	BB	2446	G	N7-C5	-13.24	1.31	1.39
22	AY	29	A	C6-N1	13.23	1.44	1.35
57	BB	2378	A	N7-C5	-13.23	1.31	1.39
21	AA	425	G	N7-C5	-13.21	1.31	1.39
21	AA	210	C	C4-C5	13.21	1.53	1.43
57	BB	1028	A	N7-C5	-13.20	1.31	1.39
57	BB	2726	A	C6-N1	13.19	1.44	1.35
57	BB	732	C	N1-C6	13.17	1.45	1.37
21	AA	262	A	N7-C5	-13.16	1.31	1.39
57	BB	1661	G	C5-C4	-13.16	1.29	1.38
21	AA	1000	A	N7-C5	-13.15	1.31	1.39
57	BB	254	G	N9-C4	-13.14	1.27	1.38
57	BB	1628	G	N7-C5	-13.13	1.31	1.39
57	BB	436	C	N3-C4	13.13	1.43	1.33
57	BB	607	U	N1-C6	-13.12	1.26	1.38
57	BB	744	U	C2-N3	13.11	1.47	1.37
22	AY	57	G	C2-N3	13.11	1.43	1.32
21	AA	958	A	C5-C4	13.10	1.48	1.38
57	BB	2837	A	P-O5'	-13.10	1.46	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2498	C	N1-C6	13.08	1.45	1.37
21	AA	423	G	C8-N7	13.08	1.38	1.30
57	BB	2873	A	N3-C4	-13.08	1.27	1.34
57	BB	1032	A	C6-N6	13.06	1.44	1.33
57	BB	1807	G	N7-C5	-13.04	1.31	1.39
21	AA	1130	A	N7-C5	-13.03	1.31	1.39
57	BB	212	G	N7-C5	-13.02	1.31	1.39
57	BB	2770	G	N7-C5	-13.02	1.31	1.39
57	BB	1630	A	N3-C4	-13.01	1.27	1.34
21	AA	532	A	N3-C4	-13.01	1.27	1.34
57	BB	1445	G	C2-N3	13.00	1.43	1.32
21	AA	1219	A	N7-C5	12.99	1.47	1.39
57	BB	625	G	N9-C8	12.99	1.47	1.37
57	BB	93	G	C8-N7	-12.98	1.23	1.30
57	BB	2156	G	C6-N1	12.95	1.48	1.39
57	BB	214	G	N7-C5	-12.95	1.31	1.39
57	BB	282	A	N7-C5	-12.94	1.31	1.39
57	BB	1421	G	C6-N1	12.94	1.48	1.39
21	AA	953	G	C8-N7	-12.94	1.23	1.30
57	BB	1339	G	N1-C2	12.93	1.48	1.37
57	BB	2663	G	C8-N7	12.93	1.38	1.30
57	BB	330	A	C6-N1	12.92	1.44	1.35
57	BB	2729	G	N7-C5	-12.92	1.31	1.39
21	AA	1140	C	C2-N3	12.88	1.46	1.35
57	BB	2603	G	C2-N3	12.88	1.43	1.32
21	AA	1057	G	N7-C5	-12.86	1.31	1.39
57	BB	1053	C	N1-C6	12.84	1.44	1.37
57	BB	1155	A	N7-C5	-12.84	1.31	1.39
21	AA	454	G	N7-C5	-12.84	1.31	1.39
57	BB	2	G	C6-N1	12.84	1.48	1.39
57	BB	2469	A	N7-C5	-12.83	1.31	1.39
57	BB	2879	A	C6-N1	12.82	1.44	1.35
21	AA	246	A	N7-C5	-12.82	1.31	1.39
21	AA	281	G	C6-N1	12.81	1.48	1.39
21	AA	797	C	N3-C4	12.81	1.43	1.33
22	AY	19	G	C2-N3	12.79	1.43	1.32
57	BB	1375	U	N3-C4	12.79	1.50	1.38
57	BB	250	G	C6-N1	12.79	1.48	1.39
21	AA	484	G	C2-N3	12.78	1.43	1.32
21	AA	1519	A	N7-C5	-12.78	1.31	1.39
57	BB	1038	G	C2-N3	12.78	1.43	1.32
57	BB	2809	A	C6-N6	12.78	1.44	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1024	G	C2'-C1'	-12.77	1.39	1.53
57	BB	122	G	N9-C8	12.77	1.46	1.37
57	BB	2600	A	N7-C5	-12.75	1.31	1.39
57	BB	1713	A	C2'-C1'	-12.74	1.39	1.53
57	BB	1205	A	C8-N7	-12.73	1.22	1.31
57	BB	1904	G	P-O5'	-12.71	1.47	1.59
21	AA	104	G	C2'-C1'	-12.70	1.39	1.53
21	AA	442	G	N9-C4	12.70	1.48	1.38
57	BB	517	C	C4-N4	12.69	1.45	1.33
57	BB	1940	U	C2-N3	12.68	1.46	1.37
21	AA	656	G	C8-N7	12.67	1.38	1.30
57	BB	1848	A	N7-C5	-12.65	1.31	1.39
21	AA	523	A	C6-N1	12.65	1.44	1.35
21	AA	300	A	N9-C4	-12.65	1.30	1.37
57	BB	1900	A	N7-C5	-12.65	1.31	1.39
21	AA	994	A	N7-C5	-12.64	1.31	1.39
57	BB	2047	C	N3-C4	12.63	1.42	1.33
57	BB	1895	C	C2-N3	12.63	1.45	1.35
21	AA	837	U	C2-N3	12.62	1.46	1.37
22	AY	71	G	N7-C5	-12.61	1.31	1.39
57	BB	619	G	C5-C4	12.61	1.47	1.38
58	BA	117	G	N7-C5	-12.60	1.31	1.39
57	BB	2702	G	N7-C5	-12.60	1.31	1.39
21	AA	347	G	C2-N3	12.59	1.42	1.32
21	AA	710	G	N7-C5	-12.59	1.31	1.39
57	BB	1791	A	N7-C5	-12.59	1.31	1.39
21	AA	563	A	N9-C4	12.59	1.45	1.37
21	AA	1416	G	C8-N7	12.59	1.38	1.30
57	BB	1084	A	N7-C5	-12.58	1.31	1.39
21	AA	968	A	C6-N1	12.58	1.44	1.35
57	BB	410	G	C2-N3	12.58	1.42	1.32
21	AA	928	G	N7-C5	-12.57	1.31	1.39
21	AA	1513	A	N3-C4	-12.54	1.27	1.34
26	AV	46	G	C6-N1	12.54	1.48	1.39
57	BB	2124	G	C6-N1	12.54	1.48	1.39
57	BB	480	A	N9-C4	12.54	1.45	1.37
57	BB	1846	G	N9-C8	12.53	1.46	1.37
57	BB	2170	A	N7-C5	-12.53	1.31	1.39
21	AA	724	G	N7-C5	-12.52	1.31	1.39
57	BB	2290	G	N9-C8	12.52	1.46	1.37
21	AA	1274	A	N3-C4	-12.51	1.27	1.34
58	BA	86	G	N9-C8	-12.50	1.29	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	818	G	N7-C5	-12.50	1.31	1.39
57	BB	2175	C	N3-C4	12.49	1.42	1.33
21	AA	735	C	N3-C4	12.49	1.42	1.33
57	BB	621	A	C6-N1	12.48	1.44	1.35
57	BB	2734	A	N3-C4	-12.46	1.27	1.34
57	BB	2242	G	N1-C2	12.46	1.47	1.37
57	BB	2049	G	C2-N3	12.46	1.42	1.32
57	BB	521	U	C2-N3	12.45	1.46	1.37
57	BB	384	A	C6-N1	12.45	1.44	1.35
57	BB	1102	C	N1-C6	12.43	1.44	1.37
58	BA	88	C	C4-C5	12.43	1.52	1.43
21	AA	1008	U	C2-N3	12.42	1.46	1.37
57	BB	1164	C	N1-C6	12.39	1.44	1.37
57	BB	638	G	C5-C4	12.39	1.47	1.38
21	AA	175	C	C2-N3	12.39	1.45	1.35
57	BB	690	G	N1-C2	12.39	1.47	1.37
26	AV	74	C	N1-C6	-12.38	1.29	1.37
57	BB	2818	U	C2-N3	12.38	1.46	1.37
57	BB	698	C	N3-C4	12.38	1.42	1.33
24	AX	13	A	C6-N6	12.36	1.43	1.33
57	BB	117	G	N7-C5	-12.36	1.31	1.39
57	BB	1150	C	N1-C6	-12.36	1.29	1.37
57	BB	231	A	C6-N1	12.35	1.44	1.35
21	AA	786	G	C8-N7	-12.35	1.23	1.30
57	BB	1563	U	C2-N3	12.35	1.46	1.37
21	AA	1127	G	N7-C5	-12.35	1.31	1.39
57	BB	2415	G	N9-C8	-12.34	1.29	1.37
21	AA	933	G	C6-N1	12.34	1.48	1.39
22	AY	54	U	C2-N3	12.33	1.46	1.37
57	BB	1171	G	C2-N3	12.33	1.42	1.32
57	BB	1936	A	N7-C5	-12.31	1.31	1.39
26	AV	50	U	C2-N3	12.31	1.46	1.37
57	BB	547	A	N9-C4	12.30	1.45	1.37
57	BB	1581	G	C2-N3	12.28	1.42	1.32
57	BB	155	A	N3-C4	12.28	1.42	1.34
21	AA	1281	C	N1-C6	12.27	1.44	1.37
57	BB	649	G	N7-C5	-12.27	1.31	1.39
21	AA	151	A	C5-C4	12.27	1.47	1.38
21	AA	616	G	N7-C5	-12.27	1.31	1.39
22	AY	14	A	C8-N7	-12.27	1.23	1.31
57	BB	2604	U	C2-N3	12.27	1.46	1.37
21	AA	468	A	N7-C5	-12.26	1.31	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2669	G	N7-C5	-12.26	1.31	1.39
21	AA	669	G	C8-N7	-12.26	1.23	1.30
57	BB	1115	G	N1-C2	12.26	1.47	1.37
57	BB	2114	A	C6-N6	12.26	1.43	1.33
21	AA	1419	G	N9-C8	12.25	1.46	1.37
21	AA	969	A	P-O5'	-12.24	1.47	1.59
21	AA	497	G	C8-N7	12.23	1.38	1.30
57	BB	663	G	C2-N3	12.23	1.42	1.32
57	BB	543	G	N7-C5	-12.23	1.31	1.39
57	BB	2812	G	N7-C5	12.22	1.46	1.39
22	AY	8	U	C2-N3	12.22	1.46	1.37
57	BB	1569	A	C6-N6	12.22	1.43	1.33
57	BB	757	G	N9-C4	-12.21	1.28	1.38
21	AA	462	G	C6-N1	12.21	1.48	1.39
57	BB	182	A	C6-N1	12.19	1.44	1.35
21	AA	712	A	N9-C4	-12.19	1.30	1.37
21	AA	1437	A	N7-C5	-12.19	1.31	1.39
21	AA	260	G	N1-C2	12.18	1.47	1.37
21	AA	664	G	C5-C4	12.18	1.46	1.38
57	BB	1696	G	N9-C8	-12.18	1.29	1.37
57	BB	536	G	N9-C8	12.17	1.46	1.37
57	BB	2849	U	N3-C4	12.17	1.49	1.38
57	BB	637	A	C8-N7	-12.16	1.23	1.31
57	BB	326	G	C6-N1	12.15	1.48	1.39
21	AA	413	G	C8-N7	-12.15	1.23	1.30
21	AA	1350	A	N7-C5	-12.14	1.31	1.39
57	BB	1118	C	C4'-C3'	-12.14	1.39	1.53
57	BB	565	C	N1-C6	12.13	1.44	1.37
57	BB	803	U	N3-C4	12.13	1.49	1.38
57	BB	805	G	N9-C8	12.13	1.46	1.37
21	AA	1156	G	N9-C8	12.13	1.46	1.37
21	AA	460	A	C6-N1	12.12	1.44	1.35
21	AA	640	A	C6-N6	12.12	1.43	1.33
57	BB	251	A	C8-N7	-12.12	1.23	1.31
21	AA	1044	A	C8-N7	-12.11	1.23	1.31
57	BB	404	A	C6-N1	12.11	1.44	1.35
21	AA	1257	A	C6-N1	12.10	1.44	1.35
57	BB	1842	G	C8-N7	-12.10	1.23	1.30
57	BB	2054	A	N7-C5	-12.09	1.31	1.39
21	AA	1169	A	N7-C5	-12.08	1.32	1.39
21	AA	164	G	N7-C5	-12.08	1.32	1.39
21	AA	1005	A	N7-C5	-12.07	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2260	C	N1-C6	12.07	1.44	1.37
57	BB	1270	C	N3-C4	12.07	1.42	1.33
21	AA	1413	A	N7-C5	-12.06	1.32	1.39
21	AA	1167	A	C5-C4	12.04	1.47	1.38
57	BB	1291	C	N1-C6	-12.05	1.29	1.37
21	AA	870	U	C2-N3	12.04	1.46	1.37
58	BA	44	G	C2-N3	12.04	1.42	1.32
57	BB	1463	C	N3-C4	12.04	1.42	1.33
21	AA	1216	A	N9-C4	-12.03	1.30	1.37
57	BB	561	G	N7-C5	-12.03	1.32	1.39
21	AA	1453	G	N7-C5	-12.03	1.32	1.39
21	AA	1491	G	N1-C2	12.03	1.47	1.37
57	BB	110	G	C6-N1	12.03	1.48	1.39
57	BB	1564	C	N1-C6	12.03	1.44	1.37
57	BB	612	G	C8-N7	-12.02	1.23	1.30
57	BB	834	G	N7-C5	-12.02	1.32	1.39
57	BB	1682	G	C6-N1	12.02	1.48	1.39
57	BB	1653	G	C5-C4	12.01	1.46	1.38
57	BB	2421	G	C5-C4	-12.01	1.29	1.38
21	AA	624	C	C2'-C1'	-12.00	1.40	1.53
21	AA	635	A	C6-N6	11.99	1.43	1.33
57	BB	1904	G	N7-C5	-11.99	1.32	1.39
21	AA	747	A	N7-C5	-11.99	1.32	1.39
57	BB	580	U	C2-N3	11.99	1.46	1.37
23	AW	76	A	N7-C5	-11.98	1.32	1.39
57	BB	1290	C	P-O5'	-11.98	1.47	1.59
57	BB	2281	A	C5-C4	-11.98	1.30	1.38
21	AA	676	A	N9-C4	-11.98	1.30	1.37
58	BA	104	A	C8-N7	-11.98	1.23	1.31
57	BB	2597	G	C2-N3	11.97	1.42	1.32
21	AA	244	U	N3-C4	11.97	1.49	1.38
57	BB	1610	A	N9-C8	-11.97	1.28	1.37
57	BB	56	A	C6-N1	11.96	1.44	1.35
23	AW	57	G	N7-C5	-11.96	1.32	1.39
57	BB	1973	G	N7-C5	-11.96	1.32	1.39
57	BB	1029	A	N3-C4	11.95	1.42	1.34
21	AA	410	G	N7-C5	-11.95	1.32	1.39
57	BB	2495	G	N7-C5	-11.94	1.32	1.39
57	BB	472	A	N7-C5	-11.93	1.32	1.39
57	BB	193	U	C2-N3	11.91	1.46	1.37
57	BB	1484	U	C2-N3	11.91	1.46	1.37
21	AA	931	C	C4-C5	11.91	1.52	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	704	A	C6-N6	11.90	1.43	1.33
21	AA	771	G	N9-C8	11.90	1.46	1.37
57	BB	467	G	N7-C5	-11.89	1.32	1.39
21	AA	786	G	N7-C5	-11.89	1.32	1.39
57	BB	2407	A	N7-C5	-11.89	1.32	1.39
21	AA	1280	A	C6-N6	11.89	1.43	1.33
21	AA	1290	G	C2-N3	11.87	1.42	1.32
57	BB	801	G	N7-C5	-11.87	1.32	1.39
21	AA	116	A	N7-C5	-11.87	1.32	1.39
21	AA	1423	G	N9-C8	-11.87	1.29	1.37
21	AA	115	G	C5-C4	11.86	1.46	1.38
57	BB	2669	G	C2-N3	11.86	1.42	1.32
57	BB	328	U	C2-N3	11.86	1.46	1.37
26	AV	35	A	N7-C5	-11.85	1.32	1.39
57	BB	1791	A	N9-C4	11.85	1.45	1.37
21	AA	183	C	C4-N4	11.84	1.44	1.33
57	BB	873	C	N3-C4	11.84	1.42	1.33
21	AA	1016	A	N7-C5	-11.83	1.32	1.39
57	BB	311	A	N3-C4	-11.82	1.27	1.34
21	AA	47	C	N1-C6	-11.82	1.30	1.37
21	AA	1362	A	N7-C5	-11.82	1.32	1.39
57	BB	1020	A	N9-C4	11.81	1.45	1.37
57	BB	1287	A	C5-C4	11.81	1.47	1.38
57	BB	648	G	C2-N2	11.80	1.46	1.34
57	BB	578	G	N9-C8	-11.80	1.29	1.37
57	BB	1026	G	N7-C5	-11.80	1.32	1.39
57	BB	502	A	N7-C5	-11.80	1.32	1.39
57	BB	1160	G	C6-N1	11.80	1.47	1.39
21	AA	38	G	C6-N1	11.79	1.47	1.39
57	BB	980	A	N3-C4	-11.79	1.27	1.34
21	AA	1453	G	C8-N7	-11.78	1.23	1.30
21	AA	1406	U	N1-C6	11.78	1.48	1.38
57	BB	1477	A	N7-C5	-11.78	1.32	1.39
57	BB	875	G	C2-N3	11.77	1.42	1.32
57	BB	2822	G	N7-C5	-11.77	1.32	1.39
57	BB	997	G	N3-C4	11.77	1.43	1.35
57	BB	233	A	N7-C5	-11.76	1.32	1.39
21	AA	1297	G	N7-C5	-11.74	1.32	1.39
21	AA	1329	A	C6-N6	11.74	1.43	1.33
22	AY	10	G	P-O5'	-11.74	1.48	1.59
21	AA	495	A	N3-C4	-11.74	1.27	1.34
21	AA	1334	G	N7-C5	-11.73	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	484	G	N7-C5	-11.73	1.32	1.39
58	BA	91	C	N1-C6	11.73	1.44	1.37
57	BB	1491	G	C8-N7	11.72	1.38	1.30
57	BB	1195	G	C2-N3	11.71	1.42	1.32
57	BB	173	A	N7-C5	11.71	1.46	1.39
22	AY	22	G	N1-C2	11.71	1.47	1.37
21	AA	1435	G	C2-N3	11.70	1.42	1.32
57	BB	88	G	C6-N1	-11.70	1.31	1.39
57	BB	2379	G	C2'-C1'	-11.69	1.40	1.53
57	BB	885	C	C4-N4	11.69	1.44	1.33
57	BB	1084	A	C6-N1	11.68	1.43	1.35
57	BB	1591	A	P-O5'	-11.67	1.48	1.59
58	BA	64	G	C2-N3	11.66	1.42	1.32
21	AA	829	G	C2-N3	11.66	1.42	1.32
21	AA	691	G	N7-C5	-11.66	1.32	1.39
21	AA	903	G	N9-C8	11.65	1.46	1.37
57	BB	1293	C	N1-C6	11.64	1.44	1.37
57	BB	1977	A	N9-C4	-11.64	1.30	1.37
21	AA	926	G	C2-N3	11.64	1.42	1.32
22	AY	28	C	N1-C6	-11.63	1.30	1.37
26	AV	32	C	C4-C5	11.63	1.52	1.43
21	AA	1285	A	N7-C5	-11.62	1.32	1.39
57	BB	1377	G	N9-C4	11.61	1.47	1.38
21	AA	9	G	C2'-C1'	-11.61	1.40	1.53
21	AA	270	A	N9-C4	11.61	1.44	1.37
21	AA	819	A	N9-C4	11.60	1.44	1.37
57	BB	2386	A	N7-C5	-11.60	1.32	1.39
21	AA	603	U	N1-C6	-11.60	1.27	1.38
22	AY	57	G	C8-N7	11.60	1.38	1.30
57	BB	492	A	C5-C4	11.60	1.46	1.38
57	BB	2579	C	N3-C4	11.60	1.42	1.33
21	AA	809	G	N7-C5	-11.59	1.32	1.39
57	BB	933	A	N7-C5	-11.59	1.32	1.39
57	BB	2666	C	N3-C4	11.59	1.42	1.33
57	BB	427	U	C2-N3	11.59	1.45	1.37
57	BB	2437	G	N1-C2	11.59	1.47	1.37
57	BB	1118	C	N3-C4	11.59	1.42	1.33
57	BB	1193	G	C2-N3	11.59	1.42	1.32
58	BA	106	G	N7-C5	-11.58	1.32	1.39
57	BB	144	A	N3-C4	-11.58	1.27	1.34
21	AA	969	A	C6-N6	11.56	1.43	1.33
57	BB	1129	A	N7-C5	-11.56	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1256	A	C5-C4	11.56	1.46	1.38
57	BB	2876	G	N1-C2	11.56	1.47	1.37
21	AA	1512	U	C2-N3	11.56	1.45	1.37
57	BB	1280	G	N1-C2	11.55	1.47	1.37
57	BB	1763	G	N9-C8	-11.55	1.29	1.37
57	BB	15	G	C6-N1	11.55	1.47	1.39
57	BB	2655	G	N7-C5	-11.55	1.32	1.39
21	AA	416	G	C5-C4	11.54	1.46	1.38
21	AA	138	G	C8-N7	-11.53	1.24	1.30
21	AA	1126	U	N3-C4	11.53	1.48	1.38
57	BB	386	G	C6-N1	11.52	1.47	1.39
21	AA	1274	A	C6-N6	11.48	1.43	1.33
21	AA	700	G	C2-N3	11.48	1.42	1.32
22	AY	9	A	N7-C5	-11.48	1.32	1.39
57	BB	520	G	N7-C5	-11.47	1.32	1.39
57	BB	1223	G	C2'-C1'	-11.47	1.40	1.53
57	BB	2378	A	N9-C4	11.47	1.44	1.37
57	BB	2771	C	N1-C6	11.46	1.44	1.37
57	BB	1597	A	C6-N6	11.46	1.43	1.33
21	AA	173	U	N3-C4	11.46	1.48	1.38
21	AA	558	G	P-O5'	-11.46	1.48	1.59
21	AA	1020	G	C2-N3	11.46	1.42	1.32
21	AA	1044	A	N7-C5	-11.45	1.32	1.39
57	BB	218	A	N7-C5	-11.45	1.32	1.39
57	BB	2820	A	C6-N6	11.46	1.43	1.33
21	AA	77	A	N3-C4	-11.45	1.27	1.34
58	BA	79	G	C5-C4	-11.45	1.30	1.38
57	BB	1739	A	N9-C4	-11.45	1.30	1.37
57	BB	726	G	O4'-C1'	-11.44	1.26	1.41
57	BB	1102	C	N3-C4	11.44	1.42	1.33
57	BB	2200	C	C4-N4	11.44	1.44	1.33
21	AA	623	C	N1-C6	-11.43	1.30	1.37
57	BB	1829	A	C6-N1	11.43	1.43	1.35
57	BB	2433	A	C8-N7	-11.43	1.23	1.31
57	BB	2799	A	N9-C4	11.43	1.44	1.37
57	BB	387	U	C2-N3	11.43	1.45	1.37
21	AA	1492	A	C6-N6	11.43	1.43	1.33
57	BB	1836	C	N3-C4	11.43	1.42	1.33
21	AA	119	A	N7-C5	-11.42	1.32	1.39
26	AV	70	G	C8-N7	11.42	1.37	1.30
57	BB	1011	G	N7-C5	-11.41	1.32	1.39
21	AA	570	G	C6-N1	11.41	1.47	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1667	G	N7-C5	-11.41	1.32	1.39
57	BB	30	G	C2-N3	11.40	1.41	1.32
21	AA	54	C	N1-C6	11.40	1.44	1.37
21	AA	179	A	N3-C4	-11.40	1.28	1.34
57	BB	697	G	N7-C5	-11.39	1.32	1.39
21	AA	633	G	C2-N3	11.38	1.41	1.32
21	AA	1468	A	N7-C5	-11.39	1.32	1.39
57	BB	1138	G	C8-N7	-11.38	1.24	1.30
21	AA	142	G	N9-C8	11.38	1.45	1.37
57	BB	260	G	N3-C4	-11.38	1.27	1.35
21	AA	1338	G	N7-C5	-11.38	1.32	1.39
57	BB	441	U	C4'-O4'	11.38	1.60	1.45
21	AA	951	G	N1-C2	11.36	1.46	1.37
21	AA	1186	G	N7-C5	-11.34	1.32	1.39
57	BB	1972	G	N7-C5	-11.34	1.32	1.39
57	BB	1688	U	O3'-P	-11.34	1.47	1.61
57	BB	2029	G	C6-N1	11.34	1.47	1.39
57	BB	2471	A	N3-C4	-11.34	1.28	1.34
57	BB	2304	G	N7-C5	-11.33	1.32	1.39
26	AV	59	A	N7-C5	-11.33	1.32	1.39
57	BB	209	C	N1-C6	11.32	1.44	1.37
57	BB	1411	U	C2'-C1'	-11.32	1.40	1.53
57	BB	1896	G	C6-N1	11.31	1.47	1.39
21	AA	1117	A	N7-C5	-11.31	1.32	1.39
21	AA	951	G	N9-C8	11.31	1.45	1.37
57	BB	2163	A	P-O5'	-11.31	1.48	1.59
57	BB	2787	C	N3-C4	11.30	1.41	1.33
21	AA	128	G	N3-C4	-11.30	1.27	1.35
57	BB	231	A	C8-N7	-11.30	1.23	1.31
21	AA	944	G	C2-N3	11.29	1.41	1.32
57	BB	2373	G	C2-N3	11.29	1.41	1.32
57	BB	345	A	C6-N1	11.29	1.43	1.35
22	AY	71	G	C2-N3	11.28	1.41	1.32
21	AA	41	G	N1-C2	11.28	1.46	1.37
57	BB	1859	U	C2-N3	11.28	1.45	1.37
21	AA	184	G	N7-C5	-11.27	1.32	1.39
21	AA	592	G	N7-C5	-11.27	1.32	1.39
57	BB	433	C	N3-C4	11.26	1.41	1.33
58	BA	58	A	C6-N1	11.25	1.43	1.35
57	BB	2827	C	N1-C6	11.25	1.43	1.37
23	AW	72	C	C2-N3	11.25	1.44	1.35
57	BB	1916	A	C6-N6	11.25	1.43	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	297	G	N9-C4	-11.24	1.28	1.38
57	BB	969	G	C2-N3	11.24	1.41	1.32
57	BB	2573	C	N1-C6	11.24	1.43	1.37
57	BB	303	G	C6-N1	11.23	1.47	1.39
57	BB	1009	A	C6-N1	11.23	1.43	1.35
21	AA	656	G	C2'-C1'	-11.23	1.41	1.53
57	BB	1300	G	N7-C5	-11.23	1.32	1.39
21	AA	1318	A	N3-C4	11.22	1.41	1.34
57	BB	1501	G	N7-C5	-11.22	1.32	1.39
57	BB	2705	A	N7-C5	-11.22	1.32	1.39
21	AA	1256	A	N7-C5	-11.22	1.32	1.39
22	AY	25	C	C2'-C1'	-11.22	1.41	1.53
57	BB	1627	G	N7-C5	-11.21	1.32	1.39
57	BB	2801	G	C2-N3	11.21	1.41	1.32
21	AA	1255	G	N9-C8	-11.21	1.30	1.37
57	BB	425	G	C5-C6	11.21	1.53	1.42
57	BB	1331	G	N7-C5	-11.21	1.32	1.39
57	BB	2528	U	C4-C5	11.21	1.53	1.43
57	BB	2581	G	C2-N2	11.20	1.45	1.34
57	BB	309	A	C6-N1	11.20	1.43	1.35
21	AA	1514	G	N1-C2	11.19	1.46	1.37
21	AA	35	G	C6-N1	11.19	1.47	1.39
57	BB	465	G	N7-C5	-11.19	1.32	1.39
21	AA	1131	G	C2-N3	11.19	1.41	1.32
57	BB	2834	G	C2-N3	11.19	1.41	1.32
21	AA	944	G	N7-C5	-11.18	1.32	1.39
21	AA	338	A	N7-C5	-11.18	1.32	1.39
57	BB	1185	G	C6-N1	11.18	1.47	1.39
57	BB	1516	G	N7-C5	-11.17	1.32	1.39
21	AA	1337	G	C6-N1	11.17	1.47	1.39
57	BB	644	A	N9-C4	-11.17	1.31	1.37
57	BB	1322	A	C5-C4	11.16	1.46	1.38
21	AA	41	G	C8-N7	-11.16	1.24	1.30
26	AV	58	A	C6-N1	11.16	1.43	1.35
57	BB	1885	A	C4'-C3'	11.16	1.65	1.53
23	AW	35	A	N9-C4	-11.15	1.31	1.37
57	BB	959	A	N7-C5	-11.14	1.32	1.39
21	AA	390	U	C2-N3	11.14	1.45	1.37
57	BB	205	G	C5-C4	11.14	1.46	1.38
21	AA	297	G	C6-N1	11.13	1.47	1.39
21	AA	597	G	C8-N7	-11.13	1.24	1.30
57	BB	857	G	C2-N3	11.13	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	430	A	N9-C4	11.13	1.44	1.37
57	BB	2322	A	N7-C5	-11.13	1.32	1.39
58	BA	37	C	N1-C6	11.13	1.43	1.37
21	AA	1309	G	N7-C5	-11.13	1.32	1.39
58	BA	50	A	N3-C4	-11.12	1.28	1.34
21	AA	628	G	N7-C5	-11.12	1.32	1.39
57	BB	176	A	C6-N6	11.12	1.42	1.33
23	AW	58	A	N9-C8	-11.11	1.28	1.37
57	BB	1343	G	C6-N1	11.11	1.47	1.39
21	AA	625	U	C2-N3	11.11	1.45	1.37
21	AA	630	A	C5-C4	-11.10	1.30	1.38
57	BB	9	G	C5-C4	11.09	1.46	1.38
57	BB	920	A	N3-C4	11.09	1.41	1.34
57	BB	1144	A	N7-C5	-11.09	1.32	1.39
57	BB	2406	A	N9-C4	11.09	1.44	1.37
57	BB	596	U	C3'-C2'	-11.08	1.40	1.52
57	BB	2316	G	N1-C2	11.08	1.46	1.37
21	AA	914	A	C8-N7	-11.08	1.23	1.31
57	BB	265	A	C6-N1	11.08	1.43	1.35
57	BB	1717	A	N9-C8	11.07	1.46	1.37
57	BB	514	A	N9-C4	-11.07	1.31	1.37
21	AA	423	G	C6-N1	11.06	1.47	1.39
21	AA	616	G	N9-C8	-11.04	1.30	1.37
21	AA	473	U	C4-C5	11.04	1.53	1.43
21	AA	1447	A	N7-C5	-11.04	1.32	1.39
57	BB	916	G	C8-N7	-11.04	1.24	1.30
22	AY	64	A	C4'-C3'	-11.03	1.41	1.53
22	AY	5	A	P-O5'	-11.03	1.48	1.59
21	AA	667	G	N1-C2	11.03	1.46	1.37
26	AV	17	C	N1-C6	11.03	1.43	1.37
22	AY	13	C	C2'-C1'	-11.02	1.41	1.53
57	BB	911	A	N7-C5	-11.02	1.32	1.39
57	BB	549	G	N9-C8	11.02	1.45	1.37
21	AA	945	G	C2-N3	11.02	1.41	1.32
57	BB	2146	C	C2-N3	11.01	1.44	1.35
21	AA	572	A	N9-C4	11.01	1.44	1.37
26	AV	65	C	P-O5'	-11.01	1.48	1.59
21	AA	699	C	C4-N4	11.00	1.43	1.33
21	AA	1353	G	C6-N1	11.00	1.47	1.39
21	AA	559	A	N7-C5	-11.00	1.32	1.39
57	BB	35	G	N1-C2	10.99	1.46	1.37
57	BB	2454	G	N1-C2	10.99	1.46	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2576	G	N9-C4	10.99	1.46	1.38
57	BB	858	G	N7-C5	-10.99	1.32	1.39
58	BA	73	A	C8-N7	-10.99	1.23	1.31
57	BB	1732	C	N1-C6	10.99	1.43	1.37
57	BB	2057	G	N7-C5	-10.99	1.32	1.39
21	AA	844	G	C6-N1	10.98	1.47	1.39
57	BB	53	A	N9-C4	10.98	1.44	1.37
21	AA	521	G	C6-N1	10.98	1.47	1.39
21	AA	658	C	N1-C6	10.98	1.43	1.37
23	AW	35	A	N7-C5	-10.98	1.32	1.39
21	AA	128	G	N9-C4	-10.98	1.29	1.38
57	BB	9	G	N9-C8	10.98	1.45	1.37
57	BB	2738	A	C6-N6	10.98	1.42	1.33
26	AV	6	G	N7-C5	-10.98	1.32	1.39
57	BB	2370	G	N1-C2	10.97	1.46	1.37
57	BB	470	A	N7-C5	-10.97	1.32	1.39
57	BB	1504	A	N7-C5	-10.96	1.32	1.39
21	AA	533	A	C6-N1	10.95	1.43	1.35
21	AA	425	G	N9-C4	-10.95	1.29	1.38
21	AA	33	A	N7-C5	-10.95	1.32	1.39
26	AV	73	A	C6-N6	10.95	1.42	1.33
23	AW	31	A	C6-N6	10.94	1.42	1.33
22	AY	23	A	C8-N7	-10.94	1.23	1.31
57	BB	1586	A	C2'-C1'	-10.94	1.41	1.53
57	BB	770	G	N9-C8	-10.94	1.30	1.37
57	BB	2678	C	C4-N4	10.94	1.43	1.33
57	BB	1413	A	N7-C5	-10.93	1.32	1.39
21	AA	862	C	P-O5'	-10.93	1.48	1.59
57	BB	1881	C	N1-C6	10.93	1.43	1.37
21	AA	98	A	N3-C4	-10.92	1.28	1.34
21	AA	626	G	N1-C2	10.92	1.46	1.37
21	AA	1306	A	N3-C4	-10.92	1.28	1.34
57	BB	2195	U	C2-N3	10.92	1.45	1.37
21	AA	721	G	C2-N2	10.91	1.45	1.34
26	AV	47	U	C2-N3	10.91	1.45	1.37
57	BB	1052	C	N3-C4	10.91	1.41	1.33
57	BB	2540	C	N3-C4	10.91	1.41	1.33
21	AA	1066	C	N1-C6	10.90	1.43	1.37
57	BB	2671	G	N7-C5	-10.90	1.32	1.39
57	BB	608	A	N7-C5	-10.90	1.32	1.39
57	BB	629	G	N7-C5	-10.90	1.32	1.39
21	AA	301	G	C8-N7	-10.90	1.24	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	994	C	O3'-P	-10.90	1.48	1.61
57	BB	2852	G	C6-N1	10.90	1.47	1.39
57	BB	1810	A	N7-C5	-10.90	1.32	1.39
57	BB	2829	A	C6-N6	10.90	1.42	1.33
57	BB	1966	A	N9-C4	-10.89	1.31	1.37
23	AW	63	G	C5-C6	-10.89	1.31	1.42
57	BB	656	G	C6-N1	10.89	1.47	1.39
57	BB	2293	G	N9-C4	10.89	1.46	1.38
57	BB	849	A	N3-C4	-10.88	1.28	1.34
57	BB	1764	C	C4-N4	10.88	1.43	1.33
57	BB	2400	G	C6-N1	10.87	1.47	1.39
57	BB	2300	C	C4-N4	10.87	1.43	1.33
57	BB	1339	G	C6-N1	10.87	1.47	1.39
57	BB	2901	C	N3-C4	10.86	1.41	1.33
57	BB	2176	A	C6-N6	10.86	1.42	1.33
57	BB	1557	C	N1-C6	10.86	1.43	1.37
21	AA	927	G	N9-C8	10.86	1.45	1.37
57	BB	1168	G	N7-C5	10.86	1.45	1.39
57	BB	1678	A	N7-C5	-10.85	1.32	1.39
57	BB	984	A	C8-N7	-10.85	1.24	1.31
57	BB	1109	C	C4-C5	10.84	1.51	1.43
57	BB	1517	G	N1-C2	10.84	1.46	1.37
57	BB	1644	C	N3-C4	10.84	1.41	1.33
57	BB	278	A	N7-C5	-10.84	1.32	1.39
57	BB	910	A	N7-C5	-10.84	1.32	1.39
57	BB	1426	G	C6-N1	10.83	1.47	1.39
57	BB	2247	A	N9-C4	10.83	1.44	1.37
21	AA	76	G	C2'-C1'	-10.83	1.41	1.53
57	BB	1745	A	N3-C4	-10.83	1.28	1.34
57	BB	219	A	P-O5'	-10.83	1.49	1.59
21	AA	170	U	C4'-C3'	10.82	1.65	1.53
21	AA	1279	G	C8-N7	-10.82	1.24	1.30
57	BB	1719	G	N7-C5	-10.82	1.32	1.39
21	AA	466	A	N7-C5	-10.82	1.32	1.39
22	AY	23	A	C6-N1	10.82	1.43	1.35
57	BB	2383	G	C2'-C1'	-10.82	1.41	1.53
21	AA	362	G	C2-N3	10.80	1.41	1.32
21	AA	1386	G	C6-N1	10.80	1.47	1.39
26	AV	3	C	N1-C6	10.80	1.43	1.37
21	AA	1300	G	C5-C4	10.80	1.46	1.38
21	AA	357	G	N1-C2	10.80	1.46	1.37
22	AY	7	U	C2-N3	10.80	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1826	G	C2-N3	10.80	1.41	1.32
21	AA	786	G	N9-C4	-10.79	1.29	1.38
21	AA	1346	A	C2'-C1'	-10.79	1.41	1.53
57	BB	1	G	OP3-P	-10.79	1.48	1.61
57	BB	823	C	C2-N3	10.79	1.44	1.35
57	BB	1493	C	N1-C6	10.79	1.43	1.37
57	BB	2634	A	N3-C4	10.79	1.41	1.34
21	AA	847	G	N7-C5	-10.78	1.32	1.39
57	BB	2536	G	C2-N3	10.78	1.41	1.32
57	BB	2879	A	N7-C5	-10.78	1.32	1.39
21	AA	160	A	N7-C5	-10.78	1.32	1.39
21	AA	900	A	N7-C5	-10.78	1.32	1.39
57	BB	265	A	N3-C4	-10.78	1.28	1.34
21	AA	303	A	C6-N1	10.78	1.43	1.35
57	BB	181	A	N7-C5	-10.78	1.32	1.39
57	BB	2417	C	N1-C6	-10.77	1.30	1.37
21	AA	1103	C	C4-N4	10.77	1.43	1.33
21	AA	739	C	C5'-C4'	10.76	1.64	1.51
57	BB	761	A	N3-C4	-10.76	1.28	1.34
22	AY	45	G	N3-C4	10.76	1.43	1.35
57	BB	2103	C	O3'-P	-10.76	1.48	1.61
22	AY	5	A	N9-C4	10.76	1.44	1.37
57	BB	561	G	C5-C6	-10.76	1.31	1.42
57	BB	2395	C	C2-N3	10.76	1.44	1.35
21	AA	781	A	C6-N6	10.76	1.42	1.33
21	AA	1133	G	C6-N1	10.76	1.47	1.39
22	AY	59	U	P-O5'	-10.76	1.49	1.59
23	AW	72	C	C2'-C1'	-10.75	1.41	1.53
21	AA	384	G	C8-N7	10.75	1.37	1.30
57	BB	1690	A	N7-C5	-10.75	1.32	1.39
57	BB	786	C	C2'-C1'	-10.75	1.41	1.53
57	BB	2563	U	C2-N3	10.75	1.45	1.37
57	BB	2378	A	C6-N6	10.74	1.42	1.33
57	BB	2088	A	N3-C4	10.74	1.41	1.34
57	BB	2602	A	N3-C4	-10.74	1.28	1.34
57	BB	1299	G	N7-C5	-10.74	1.32	1.39
21	AA	60	A	C6-N6	10.73	1.42	1.33
57	BB	1161	C	N3-C4	10.73	1.41	1.33
23	AW	67	C	C4-C5	10.72	1.51	1.43
21	AA	107	G	N9-C8	-10.72	1.30	1.37
57	BB	1483	G	N7-C5	-10.72	1.32	1.39
57	BB	1444	G	N7-C5	-10.71	1.32	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2577	A	N7-C5	-10.71	1.32	1.39
21	AA	764	C	O3'-P	-10.71	1.48	1.61
57	BB	2805	C	N1-C6	-10.71	1.30	1.37
57	BB	270	A	N9-C4	-10.70	1.31	1.37
57	BB	1276	A	C6-N6	10.70	1.42	1.33
21	AA	457	G	C6-N1	10.70	1.47	1.39
57	BB	647	G	C6-N1	10.70	1.47	1.39
22	AY	34	G	P-O5'	-10.69	1.49	1.59
57	BB	2750	A	C3'-C2'	10.69	1.64	1.52
58	BA	72	G	N3-C4	-10.69	1.27	1.35
57	BB	1041	G	C2-N3	10.69	1.41	1.32
57	BB	1938	A	N3-C4	-10.69	1.28	1.34
57	BB	2553	G	C2-N3	10.69	1.41	1.32
57	BB	2631	G	C5'-C4'	10.69	1.64	1.51
57	BB	2722	G	C2-N3	10.68	1.41	1.32
23	AW	75	C	N3-C4	10.68	1.41	1.33
21	AA	738	C	N3-C4	10.67	1.41	1.33
21	AA	786	G	P-O5'	-10.67	1.49	1.59
57	BB	1429	G	N1-C2	10.67	1.46	1.37
57	BB	1507	C	C4-N4	10.67	1.43	1.33
21	AA	753	A	C6-N6	10.67	1.42	1.33
57	BB	2301	C	C2-N3	-10.67	1.27	1.35
57	BB	2803	G	N9-C8	10.67	1.45	1.37
22	AY	26	G	N9-C8	-10.66	1.30	1.37
57	BB	652	U	N3-C4	10.66	1.48	1.38
57	BB	1642	G	N7-C5	-10.66	1.32	1.39
57	BB	83	A	C6-N6	10.66	1.42	1.33
23	AW	10	G	C8-N7	10.66	1.37	1.30
26	AV	63	G	C6-N1	10.65	1.47	1.39
57	BB	2269	G	N7-C5	-10.65	1.32	1.39
21	AA	69	G	N9-C4	-10.64	1.29	1.38
21	AA	572	A	C6-N6	10.64	1.42	1.33
57	BB	2802	G	N7-C5	-10.64	1.32	1.39
57	BB	1317	G	C6-N1	10.64	1.47	1.39
57	BB	2256	G	C2-N3	10.63	1.41	1.32
57	BB	2043	C	N3-C4	10.63	1.41	1.33
57	BB	51	G	C3'-C2'	-10.63	1.41	1.52
57	BB	1695	G	P-O5'	10.63	1.70	1.59
58	BA	81	G	C8-N7	-10.63	1.24	1.30
57	BB	1289	C	N3-C4	10.62	1.41	1.33
57	BB	2645	G	C2-N3	10.62	1.41	1.32
21	AA	615	G	C2-N3	10.62	1.41	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	338	G	C6-N1	10.62	1.47	1.39
57	BB	439	A	N7-C5	-10.62	1.32	1.39
23	AW	70	G	C8-N7	-10.62	1.24	1.30
57	BB	2832	U	N1-C6	10.62	1.47	1.38
57	BB	2434	A	C8-N7	-10.61	1.24	1.31
21	AA	849	G	N9-C8	10.61	1.45	1.37
21	AA	817	C	N1-C6	10.61	1.43	1.37
21	AA	437	U	N3-C4	10.60	1.48	1.38
22	AY	30	G	N9-C4	10.60	1.46	1.38
57	BB	2250	G	C6-N1	10.60	1.47	1.39
58	BA	79	G	N3-C4	-10.60	1.28	1.35
57	BB	1275	A	N7-C5	-10.59	1.32	1.39
21	AA	1370	G	C2-N3	10.59	1.41	1.32
57	BB	362	A	C6-N1	10.59	1.43	1.35
57	BB	2590	A	C6-N6	10.59	1.42	1.33
57	BB	80	G	N7-C5	-10.59	1.32	1.39
57	BB	184	C	N3-C4	10.59	1.41	1.33
57	BB	507	A	C8-N7	-10.58	1.24	1.31
23	AW	1	G	N9-C8	10.58	1.45	1.37
57	BB	712	G	N7-C5	-10.58	1.32	1.39
57	BB	1205	A	C6-N6	10.58	1.42	1.33
57	BB	1803	A	N7-C5	-10.58	1.32	1.39
58	BA	92	C	C2'-C1'	-10.58	1.41	1.53
57	BB	1661	G	C2'-C1'	-10.57	1.41	1.53
21	AA	299	G	N1-C2	10.57	1.46	1.37
57	BB	878	A	C2'-C1'	-10.56	1.41	1.53
21	AA	1134	G	N1-C2	10.55	1.46	1.37
57	BB	184	C	N1-C6	-10.55	1.30	1.37
57	BB	945	A	N3-C4	-10.55	1.28	1.34
21	AA	1447	A	C5-C4	10.55	1.46	1.38
57	BB	578	G	C2'-C1'	-10.55	1.41	1.53
57	BB	1676	A	P-O5'	-10.55	1.49	1.59
57	BB	2633	G	N7-C5	-10.55	1.32	1.39
57	BB	1732	C	C4-N4	10.54	1.43	1.33
21	AA	977	A	C6-N6	10.54	1.42	1.33
57	BB	2382	G	N9-C4	10.54	1.46	1.38
22	AY	61	C	C4-C5	10.54	1.51	1.43
57	BB	2569	G	N1-C2	10.54	1.46	1.37
57	BB	2677	G	C8-N7	10.54	1.37	1.30
22	AY	26	G	C3'-C2'	-10.54	1.41	1.52
57	BB	681	G	C4'-C3'	10.53	1.64	1.53
21	AA	564	C	C2'-C1'	-10.53	1.41	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	845	A	N3-C4	-10.53	1.28	1.34
21	AA	221	C	N1-C6	10.53	1.43	1.37
57	BB	2192	U	N1-C2	10.52	1.48	1.38
21	AA	1396	A	N1-C2	10.52	1.43	1.34
24	AX	20	U	C2-N3	10.52	1.45	1.37
57	BB	2052	A	N7-C5	-10.52	1.32	1.39
21	AA	851	G	N1-C2	10.51	1.46	1.37
21	AA	58	C	N3-C4	10.51	1.41	1.33
22	AY	40	C	N1-C6	10.51	1.43	1.37
26	AV	35	A	C6-N6	10.51	1.42	1.33
57	BB	150	U	C2-N3	10.50	1.45	1.37
57	BB	1670	C	N1-C6	10.50	1.43	1.37
57	BB	221	A	N7-C5	-10.50	1.32	1.39
21	AA	192	A	C8-N7	-10.49	1.24	1.31
58	BA	81	G	C2-N2	10.49	1.45	1.34
57	BB	1627	G	N3-C4	-10.49	1.28	1.35
57	BB	1648	U	C2-N3	10.48	1.45	1.37
57	BB	2104	C	N1-C6	10.48	1.43	1.37
57	BB	2791	G	N3-C4	-10.48	1.28	1.35
57	BB	2453	A	N7-C5	-10.48	1.32	1.39
57	BB	879	G	N7-C5	-10.47	1.32	1.39
21	AA	681	A	N3-C4	10.47	1.41	1.34
57	BB	1808	A	N7-C5	-10.47	1.32	1.39
23	AW	19	G	C5'-C4'	10.47	1.64	1.51
57	BB	1	G	C6-N1	10.47	1.46	1.39
57	BB	89	A	N7-C5	-10.47	1.32	1.39
21	AA	447	G	N3-C4	-10.46	1.28	1.35
57	BB	1535	A	N9-C4	-10.46	1.31	1.37
57	BB	1819	A	N7-C5	-10.46	1.32	1.39
57	BB	2821	A	N7-C5	-10.46	1.32	1.39
57	BB	2822	G	N1-C2	10.46	1.46	1.37
57	BB	1968	G	N3-C4	-10.46	1.28	1.35
57	BB	1007	C	N1-C6	10.46	1.43	1.37
57	BB	1361	G	N7-C5	-10.45	1.32	1.39
57	BB	2013	A	N7-C5	-10.45	1.32	1.39
57	BB	2757	A	N7-C5	-10.46	1.32	1.39
57	BB	1516	G	N1-C2	10.45	1.46	1.37
21	AA	805	C	N1-C6	10.45	1.43	1.37
57	BB	843	G	C2-N3	10.45	1.41	1.32
21	AA	124	C	C4'-C3'	10.45	1.64	1.53
57	BB	1634	A	N7-C5	-10.45	1.32	1.39
57	BB	13	A	C6-N1	10.45	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1651	G	N1-C2	10.44	1.46	1.37
21	AA	1034	G	N9-C8	10.44	1.45	1.37
21	AA	1514	G	C5-C4	10.44	1.45	1.38
26	AV	35	A	N9-C4	-10.44	1.31	1.37
58	BA	22	U	N3-C4	10.44	1.47	1.38
57	BB	2237	G	N1-C2	10.44	1.46	1.37
57	BB	813	U	N3-C4	10.44	1.47	1.38
57	BB	2665	A	N9-C4	10.44	1.44	1.37
57	BB	299	A	N7-C5	-10.43	1.32	1.39
21	AA	260	G	C8-N7	-10.43	1.24	1.30
21	AA	1125	U	C2-N3	10.43	1.45	1.37
57	BB	1261	C	N3-C4	10.43	1.41	1.33
21	AA	415	A	C6-N6	10.43	1.42	1.33
57	BB	305	C	N3-C4	10.43	1.41	1.33
21	AA	760	G	N7-C5	-10.42	1.32	1.39
57	BB	2145	C	N1-C6	-10.42	1.30	1.37
57	BB	2258	C	C5'-C4'	10.42	1.63	1.51
57	BB	522	A	C2'-C1'	-10.42	1.41	1.53
57	BB	279	A	N7-C5	-10.42	1.33	1.39
57	BB	862	G	C6-N1	10.41	1.46	1.39
21	AA	1084	G	C4'-C3'	-10.41	1.41	1.53
57	BB	843	G	C5'-C4'	10.41	1.63	1.51
57	BB	2424	C	C2-N3	10.41	1.44	1.35
57	BB	2547	A	C6-N6	10.40	1.42	1.33
21	AA	907	A	N7-C5	-10.40	1.33	1.39
57	BB	763	G	C6-N1	10.40	1.46	1.39
57	BB	1301	A	N7-C5	-10.40	1.33	1.39
22	AY	13	C	N1-C6	10.40	1.43	1.37
57	BB	853	C	C4-N4	10.40	1.43	1.33
57	BB	1948	G	N9-C4	-10.39	1.29	1.38
21	AA	1108	G	C2-N3	10.38	1.41	1.32
57	BB	1494	A	C8-N7	10.38	1.38	1.31
57	BB	1569	A	N7-C5	-10.38	1.33	1.39
58	BA	66	A	N7-C5	-10.38	1.33	1.39
22	AY	11	C	N3-C4	10.38	1.41	1.33
57	BB	23	G	C6-N1	10.37	1.46	1.39
21	AA	547	A	N9-C4	-10.37	1.31	1.37
21	AA	1422	G	N7-C5	-10.37	1.33	1.39
57	BB	384	A	N9-C4	-10.37	1.31	1.37
23	AW	6	G	C6-N1	10.37	1.46	1.39
21	AA	343	U	C2-N3	10.37	1.45	1.37
21	AA	490	C	N1-C6	10.37	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	652	U	C2'-C1'	-10.36	1.42	1.53
57	BB	576	U	C2-N3	10.36	1.45	1.37
57	BB	2009	A	C8-N7	-10.36	1.24	1.31
57	BB	743	A	N9-C4	-10.36	1.31	1.37
21	AA	639	G	N7-C5	-10.35	1.33	1.39
57	BB	525	U	N3-C4	10.35	1.47	1.38
57	BB	1429	G	C5-C4	10.35	1.45	1.38
21	AA	1309	G	C2'-C1'	-10.34	1.42	1.53
57	BB	1390	U	C2'-C1'	-10.34	1.42	1.53
57	BB	2060	A	C4'-C3'	10.34	1.64	1.53
57	BB	1671	U	C2-N3	10.34	1.45	1.37
57	BB	1413	A	C6-N6	10.34	1.42	1.33
57	BB	2315	G	N7-C5	10.34	1.45	1.39
57	BB	1043	C	N1-C6	10.33	1.43	1.37
57	BB	2652	C	N1-C6	-10.33	1.30	1.37
21	AA	184	G	P-O5'	-10.33	1.49	1.59
57	BB	53	A	C6-N1	10.33	1.42	1.35
57	BB	2390	U	C2-N3	10.33	1.45	1.37
58	BA	14	U	C2-N3	10.33	1.45	1.37
23	AW	22	G	N3-C4	10.33	1.42	1.35
57	BB	537	G	N9-C4	-10.33	1.29	1.38
22	AY	24	G	C6-N1	10.32	1.46	1.39
57	BB	498	G	C3'-C2'	10.32	1.64	1.52
57	BB	1266	G	N7-C5	-10.32	1.33	1.39
21	AA	919	A	N7-C5	-10.32	1.33	1.39
21	AA	1486	G	N9-C8	-10.32	1.30	1.37
57	BB	190	A	N7-C5	-10.32	1.33	1.39
21	AA	830	G	C6-N1	10.31	1.46	1.39
21	AA	1223	C	N1-C6	10.31	1.43	1.37
57	BB	465	G	C2-N3	10.31	1.41	1.32
57	BB	431	U	C2-N3	10.31	1.45	1.37
57	BB	1582	C	C2'-C1'	-10.31	1.42	1.53
21	AA	932	C	N1-C6	10.30	1.43	1.37
57	BB	1757	A	C6-N6	10.30	1.42	1.33
57	BB	2211	A	C6-N1	10.30	1.42	1.35
21	AA	1039	G	C6-N1	10.30	1.46	1.39
57	BB	2050	C	N1-C6	10.30	1.43	1.37
57	BB	2456	C	C5'-C4'	10.30	1.63	1.51
57	BB	1261	C	N1-C6	10.30	1.43	1.37
57	BB	110	G	C5-C4	10.29	1.45	1.38
57	BB	1766	G	N9-C8	10.29	1.45	1.37
57	BB	1387	A	N7-C5	-10.29	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1327	A	C8-N7	-10.29	1.24	1.31
57	BB	2294	G	C8-N7	10.29	1.37	1.30
57	BB	2807	U	C2'-C1'	-10.29	1.42	1.53
57	BB	1722	A	N7-C5	-10.28	1.33	1.39
57	BB	1805	A	N7-C5	-10.28	1.33	1.39
57	BB	754	U	C2-N3	10.28	1.45	1.37
57	BB	1054	A	C8-N7	-10.28	1.24	1.31
57	BB	1599	U	N3-C4	10.27	1.47	1.38
21	AA	676	A	C6-N6	10.27	1.42	1.33
57	BB	703	U	C2-N3	10.27	1.45	1.37
21	AA	72	A	C6-N1	10.27	1.42	1.35
21	AA	523	A	C6-N6	10.27	1.42	1.33
21	AA	602	A	N7-C5	-10.27	1.33	1.39
57	BB	2777	G	N7-C5	-10.26	1.33	1.39
21	AA	275	G	N7-C5	-10.26	1.33	1.39
21	AA	1299	A	N7-C5	-10.26	1.33	1.39
57	BB	2051	A	N7-C5	10.26	1.45	1.39
21	AA	1534	A	N3-C4	-10.26	1.28	1.34
57	BB	930	G	N3-C4	10.26	1.42	1.35
57	BB	1580	A	N7-C5	-10.26	1.33	1.39
57	BB	2147	A	N7-C5	-10.26	1.33	1.39
57	BB	2211	A	N7-C5	-10.25	1.33	1.39
21	AA	913	A	N7-C5	-10.25	1.33	1.39
57	BB	1612	C	N1-C6	10.25	1.43	1.37
57	BB	2576	G	C6-N1	10.25	1.46	1.39
57	BB	199	A	C8-N7	-10.25	1.24	1.31
57	BB	2687	U	C3'-C2'	-10.25	1.41	1.52
21	AA	447	G	C8-N7	-10.24	1.24	1.30
21	AA	1042	A	N3-C4	-10.24	1.28	1.34
21	AA	1179	A	C8-N7	-10.24	1.24	1.31
22	AY	5	A	C6-N6	10.24	1.42	1.33
26	AV	64	G	C3'-C2'	-10.24	1.41	1.52
21	AA	252	U	C3'-C2'	10.24	1.64	1.52
22	AY	39	U	C2-N3	10.24	1.45	1.37
22	AY	40	C	P-O5'	-10.24	1.49	1.59
21	AA	901	A	N7-C5	-10.23	1.33	1.39
57	BB	769	U	N3-C4	10.23	1.47	1.38
57	BB	2700	A	C6-N6	10.23	1.42	1.33
57	BB	1907	G	N7-C5	-10.23	1.33	1.39
21	AA	629	A	N7-C5	-10.23	1.33	1.39
57	BB	1410	G	N9-C8	10.23	1.45	1.37
21	AA	764	C	C2-N3	10.23	1.44	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2396	G	C6-N1	10.23	1.46	1.39
21	AA	328	C	N3-C4	10.22	1.41	1.33
21	AA	890	G	C8-N7	10.22	1.37	1.30
57	BB	1399	C	N3-C4	10.22	1.41	1.33
57	BB	2001	C	P-O5'	-10.22	1.49	1.59
57	BB	2873	A	N7-C5	-10.22	1.33	1.39
21	AA	934	C	C4-N4	10.22	1.43	1.33
57	BB	1483	G	C8-N7	-10.22	1.24	1.30
21	AA	329	A	N9-C4	-10.21	1.31	1.37
21	AA	839	C	C2-N3	10.21	1.44	1.35
57	BB	405	U	C2-N3	10.21	1.44	1.37
57	BB	1510	G	O3'-P	-10.21	1.48	1.61
21	AA	1099	G	C6-N1	10.21	1.46	1.39
57	BB	1632	A	N7-C5	-10.21	1.33	1.39
57	BB	1983	G	C5'-C4'	10.21	1.63	1.51
57	BB	1867	G	C2'-C1'	-10.20	1.42	1.53
57	BB	1122	G	N7-C5	10.19	1.45	1.39
57	BB	1797	G	N1-C2	10.19	1.46	1.37
57	BB	2623	G	C2-N3	10.19	1.41	1.32
21	AA	727	G	N7-C5	-10.19	1.33	1.39
57	BB	458	G	N1-C2	10.19	1.45	1.37
57	BB	1286	A	C6-N6	10.19	1.42	1.33
21	AA	282	A	C6-N6	10.18	1.42	1.33
57	BB	2085	U	C2'-C1'	-10.18	1.42	1.53
57	BB	848	C	N3-C4	10.18	1.41	1.33
57	BB	2624	G	C4'-C3'	10.18	1.64	1.53
57	BB	2701	U	C2-N3	10.18	1.44	1.37
21	AA	763	G	N3-C4	-10.18	1.28	1.35
21	AA	773	G	C6-N1	10.18	1.46	1.39
58	BA	39	A	N7-C5	-10.18	1.33	1.39
57	BB	1133	A	C6-N6	10.17	1.42	1.33
57	BB	2336	A	C5-C6	-10.17	1.31	1.41
57	BB	1616	A	C6-N1	10.17	1.42	1.35
57	BB	2070	A	N9-C4	-10.17	1.31	1.37
21	AA	1201	A	N7-C5	-10.17	1.33	1.39
57	BB	863	A	N7-C5	-10.17	1.33	1.39
57	BB	962	G	N7-C5	10.16	1.45	1.39
58	BA	29	A	N9-C4	-10.16	1.31	1.37
57	BB	1375	U	C5'-C4'	10.15	1.63	1.51
57	BB	1529	G	N9-C8	10.15	1.45	1.37
21	AA	507	C	N3-C4	10.15	1.41	1.33
57	BB	1739	A	N7-C5	-10.15	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	323	C	N3-C4	10.15	1.41	1.33
57	BB	698	C	C4-N4	10.15	1.43	1.33
57	BB	1256	G	C8-N7	-10.15	1.24	1.30
57	BB	2887	A	C5-C4	10.15	1.45	1.38
21	AA	1312	G	N1-C2	10.15	1.45	1.37
21	AA	120	A	N9-C4	-10.14	1.31	1.37
22	AY	37	G	N7-C5	-10.14	1.33	1.39
57	BB	307	G	N9-C8	10.14	1.45	1.37
21	AA	262	A	N9-C4	-10.14	1.31	1.37
57	BB	72	U	C2-N3	10.14	1.44	1.37
57	BB	897	C	C5'-C4'	10.14	1.63	1.51
21	AA	1233	G	N7-C5	-10.13	1.33	1.39
21	AA	1407	C	N1-C6	10.13	1.43	1.37
21	AA	844	G	N7-C5	-10.13	1.33	1.39
21	AA	1374	A	C6-N6	10.12	1.42	1.33
57	BB	605	G	C5-C4	10.12	1.45	1.38
58	BA	76	G	C2-N3	10.12	1.40	1.32
21	AA	1394	A	C6-N6	10.12	1.42	1.33
57	BB	2782	G	C2-N3	10.12	1.40	1.32
21	AA	1214	C	P-O5'	-10.12	1.49	1.59
26	AV	31	G	N7-C5	-10.12	1.33	1.39
57	BB	1684	G	C6-N1	10.12	1.46	1.39
57	BB	244	A	N9-C4	10.12	1.44	1.37
57	BB	1446	C	N3-C4	10.12	1.41	1.33
57	BB	1453	A	C6-N6	10.11	1.42	1.33
57	BB	2852	G	C8-N7	-10.11	1.24	1.30
21	AA	918	A	N9-C4	-10.11	1.31	1.37
57	BB	500	G	N7-C5	-10.11	1.33	1.39
57	BB	1637	A	N7-C5	-10.11	1.33	1.39
57	BB	2762	C	N1-C6	10.11	1.43	1.37
58	BA	107	G	N7-C5	-10.11	1.33	1.39
57	BB	167	A	N7-C5	-10.11	1.33	1.39
21	AA	700	G	N7-C5	-10.11	1.33	1.39
21	AA	1046	A	C6-N1	10.11	1.42	1.35
21	AA	1355	G	N7-C5	-10.11	1.33	1.39
57	BB	757	G	C6-N1	10.11	1.46	1.39
57	BB	989	G	C2-N2	10.10	1.44	1.34
57	BB	2825	G	N7-C5	-10.10	1.33	1.39
26	AV	61	C	C5-C6	10.10	1.42	1.34
58	BA	59	A	C6-N6	10.10	1.42	1.33
57	BB	237	C	C4-C5	-10.10	1.34	1.43
21	AA	255	G	C6-N1	10.09	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	34	U	N3-C4	10.09	1.47	1.38
21	AA	1301	U	C3'-C2'	10.09	1.64	1.52
57	BB	864	G	C5-C4	10.09	1.45	1.38
57	BB	627	A	N3-C4	-10.09	1.28	1.34
57	BB	1829	A	N9-C4	-10.09	1.31	1.37
57	BB	2407	A	P-O5'	-10.09	1.49	1.59
57	BB	2471	A	C8-N7	-10.09	1.24	1.31
57	BB	2349	G	N3-C4	-10.08	1.28	1.35
57	BB	411	G	N7-C5	10.08	1.45	1.39
57	BB	2749	A	N9-C4	-10.08	1.31	1.37
57	BB	2509	G	C2'-C1'	-10.08	1.42	1.53
57	BB	46	G	C6-N1	10.07	1.46	1.39
57	BB	466	A	N3-C4	-10.07	1.28	1.34
57	BB	2030	A	C6-N6	10.07	1.42	1.33
26	AV	37	A	N7-C5	-10.07	1.33	1.39
21	AA	267	C	N1-C6	10.07	1.43	1.37
57	BB	467	G	C6-N1	10.07	1.46	1.39
57	BB	1236	G	C2-N3	10.07	1.40	1.32
57	BB	24	G	C2'-C1'	-10.07	1.42	1.53
57	BB	2017	U	P-O5'	10.07	1.69	1.59
57	BB	279	A	C6-N1	10.06	1.42	1.35
21	AA	163	C	P-O5'	-10.06	1.49	1.59
57	BB	663	G	N7-C5	-10.06	1.33	1.39
21	AA	622	A	N7-C5	-10.06	1.33	1.39
57	BB	1657	U	C4'-C3'	-10.06	1.42	1.53
57	BB	2158	A	N3-C4	-10.06	1.28	1.34
21	AA	1383	C	N1-C6	10.05	1.43	1.37
57	BB	407	G	C5-C4	-10.05	1.31	1.38
57	BB	2517	C	N3-C4	10.05	1.41	1.33
21	AA	609	A	C6-N6	10.05	1.42	1.33
21	AA	1270	G	N7-C5	-10.05	1.33	1.39
21	AA	602	A	C6-N6	10.05	1.42	1.33
57	BB	1280	G	N9-C4	10.05	1.46	1.38
57	BB	734	A	N7-C5	-10.04	1.33	1.39
58	BA	49	C	C2'-C1'	-10.04	1.42	1.53
57	BB	953	G	C2-N3	10.04	1.40	1.32
24	AX	16	A	C6-N1	10.04	1.42	1.35
57	BB	751	A	C8-N7	-10.04	1.24	1.31
57	BB	1765	U	C2-N3	10.04	1.44	1.37
21	AA	128	G	C8-N7	-10.03	1.25	1.30
57	BB	192	C	P-O5'	-10.03	1.49	1.59
21	AA	1460	C	N1-C6	10.03	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	494	G	N1-C2	10.03	1.45	1.37
57	BB	981	A	N3-C4	-10.03	1.28	1.34
57	BB	370	G	C4'-C3'	10.03	1.64	1.53
57	BB	622	G	C6-N1	10.03	1.46	1.39
21	AA	1143	G	C2-N3	10.02	1.40	1.32
22	AY	76	A	C8-N7	-10.02	1.24	1.31
57	BB	241	A	N7-C5	-10.02	1.33	1.39
57	BB	799	G	C8-N7	-10.02	1.25	1.30
57	BB	366	C	C3'-C2'	10.02	1.64	1.52
57	BB	1477	A	C6-N6	10.02	1.42	1.33
21	AA	253	A	N9-C4	-10.02	1.31	1.37
57	BB	2508	G	C4'-C3'	10.02	1.64	1.53
57	BB	2858	C	N3-C4	10.01	1.41	1.33
57	BB	624	C	N3-C4	10.01	1.41	1.33
57	BB	2759	G	N1-C2	10.01	1.45	1.37
57	BB	878	A	C3'-C2'	-10.00	1.41	1.52
57	BB	2735	G	C6-N1	10.00	1.46	1.39
21	AA	130	A	P-O5'	-10.00	1.49	1.59
57	BB	1462	C	C2-N3	-10.00	1.27	1.35
57	BB	366	C	C2'-C1'	-10.00	1.42	1.53
57	BB	1862	G	C8-N7	-10.00	1.25	1.30
21	AA	741	G	C2-N3	9.99	1.40	1.32
57	BB	926	G	N1-C2	9.99	1.45	1.37
57	BB	2211	A	C6-N6	9.99	1.42	1.33
57	BB	2413	G	C5-C4	9.99	1.45	1.38
21	AA	584	G	C5-C6	-9.99	1.32	1.42
21	AA	871	U	N3-C4	9.99	1.47	1.38
57	BB	392	U	C4-C5	9.98	1.52	1.43
57	BB	1321	A	N7-C5	-9.98	1.33	1.39
57	BB	246	C	C4-N4	9.98	1.43	1.33
21	AA	1489	G	C2'-C1'	-9.98	1.42	1.53
58	BA	70	C	N3-C4	9.98	1.41	1.33
57	BB	983	A	C6-N6	9.98	1.42	1.33
57	BB	430	A	P-O5'	-9.98	1.49	1.59
57	BB	2008	C	C4'-C3'	9.97	1.64	1.53
57	BB	136	G	N1-C2	9.97	1.45	1.37
21	AA	256	U	N3-C4	9.97	1.47	1.38
21	AA	121	U	N3-C4	9.97	1.47	1.38
21	AA	230	G	C6-N1	9.97	1.46	1.39
21	AA	683	G	N9-C8	9.96	1.44	1.37
21	AA	753	A	C4'-C3'	9.96	1.64	1.53
22	AY	53	G	N3-C4	9.96	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1026	G	C8-N7	-9.96	1.25	1.30
21	AA	301	G	N7-C5	9.96	1.45	1.39
58	BA	83	G	N9-C8	9.96	1.44	1.37
21	AA	925	G	N7-C5	-9.96	1.33	1.39
22	AY	70	C	C2-N3	9.96	1.43	1.35
57	BB	1786	A	N9-C8	9.96	1.45	1.37
57	BB	932	U	N3-C4	9.96	1.47	1.38
57	BB	993	G	N7-C5	-9.96	1.33	1.39
57	BB	2460	U	C2-N3	9.96	1.44	1.37
21	AA	931	C	N3-C4	9.96	1.41	1.33
57	BB	478	A	N3-C4	9.96	1.40	1.34
57	BB	1416	G	N7-C5	-9.96	1.33	1.39
57	BB	2093	G	C8-N7	9.96	1.36	1.30
26	AV	9	G	N1-C2	9.95	1.45	1.37
57	BB	1239	G	C2-N3	9.95	1.40	1.32
57	BB	1696	G	C5-C4	-9.95	1.31	1.38
21	AA	954	G	N7-C5	-9.95	1.33	1.39
57	BB	927	A	N3-C4	-9.95	1.28	1.34
26	AV	38	A	C6-N6	9.95	1.42	1.33
57	BB	1418	G	C8-N7	-9.95	1.25	1.30
57	BB	1654	A	N7-C5	-9.94	1.33	1.39
21	AA	444	G	N1-C2	9.94	1.45	1.37
22	AY	26	G	C2-N3	9.94	1.40	1.32
57	BB	2706	A	N9-C4	-9.94	1.31	1.37
57	BB	2686	G	C6-N1	9.94	1.46	1.39
21	AA	296	U	P-O5'	-9.94	1.49	1.59
21	AA	1009	U	C4-C5	-9.93	1.34	1.43
57	BB	272	A	C6-N1	9.93	1.42	1.35
57	BB	442	G	C2-N3	9.93	1.40	1.32
21	AA	629	A	N3-C4	-9.93	1.28	1.34
21	AA	1198	G	C5-C4	9.93	1.45	1.38
57	BB	1661	G	N1-C2	9.93	1.45	1.37
21	AA	1189	U	C2-N3	9.92	1.44	1.37
21	AA	995	C	N1-C6	-9.92	1.31	1.37
57	BB	927	A	N7-C5	-9.92	1.33	1.39
57	BB	114	U	C2-N3	9.91	1.44	1.37
57	BB	1539	U	C2-N3	9.91	1.44	1.37
57	BB	2562	U	C2-N3	9.91	1.44	1.37
21	AA	220	G	C6-N1	9.91	1.46	1.39
21	AA	1459	G	N3-C4	-9.91	1.28	1.35
21	AA	91	U	N1-C2	9.90	1.47	1.38
57	BB	1262	A	C6-N6	9.90	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1891	G	N9-C8	9.90	1.44	1.37
21	AA	782	A	P-O5'	-9.90	1.49	1.59
22	AY	26	G	N7-C5	-9.90	1.33	1.39
57	BB	19	A	C6-N6	9.90	1.41	1.33
57	BB	1691	C	C4-N4	9.90	1.42	1.33
57	BB	2639	A	N3-C4	-9.90	1.28	1.34
21	AA	546	A	N9-C4	-9.90	1.31	1.37
21	AA	864	A	C6-N1	9.90	1.42	1.35
57	BB	568	U	C2-N3	9.90	1.44	1.37
57	BB	750	A	C6-N6	9.90	1.41	1.33
57	BB	1849	G	C2-N3	9.90	1.40	1.32
57	BB	113	U	C2-N3	9.90	1.44	1.37
57	BB	2230	G	C2-N3	9.90	1.40	1.32
21	AA	1055	A	P-O5'	-9.89	1.49	1.59
57	BB	2193	G	N3-C4	-9.89	1.28	1.35
21	AA	406	G	N1-C2	9.89	1.45	1.37
57	BB	2859	G	C6-N1	9.89	1.46	1.39
21	AA	1053	G	C5-C4	9.88	1.45	1.38
57	BB	2711	A	N7-C5	-9.88	1.33	1.39
21	AA	51	A	N7-C5	-9.88	1.33	1.39
21	AA	849	G	C8-N7	-9.88	1.25	1.30
57	BB	289	G	N9-C4	9.88	1.45	1.38
57	BB	843	G	N7-C5	-9.88	1.33	1.39
57	BB	1883	U	C2-N3	9.88	1.44	1.37
57	BB	2087	G	C2-N2	9.88	1.44	1.34
57	BB	76	C	P-O5'	-9.88	1.49	1.59
58	BA	73	A	N9-C4	-9.88	1.31	1.37
23	AW	73	A	N3-C4	-9.87	1.28	1.34
57	BB	2002	G	N7-C5	-9.87	1.33	1.39
57	BB	2887	A	N7-C5	-9.87	1.33	1.39
57	BB	2695	U	N3-C4	9.87	1.47	1.38
26	AV	62	C	N1-C6	9.87	1.43	1.37
57	BB	340	A	C6-N6	9.86	1.41	1.33
57	BB	976	G	N3-C4	-9.86	1.28	1.35
57	BB	934	U	C4'-C3'	9.85	1.64	1.53
21	AA	230	G	C3'-C2'	-9.85	1.42	1.52
57	BB	1678	A	N3-C4	-9.85	1.28	1.34
57	BB	2388	A	P-O5'	-9.85	1.49	1.59
21	AA	1220	G	N1-C2	9.85	1.45	1.37
57	BB	862	G	C2-N3	9.85	1.40	1.32
57	BB	2617	U	N3-C4	9.85	1.47	1.38
21	AA	553	A	C2'-C1'	-9.85	1.42	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	830	G	C2-N3	9.85	1.40	1.32
21	AA	354	G	N9-C8	-9.84	1.30	1.37
57	BB	725	G	P-O5'	-9.84	1.50	1.59
57	BB	2623	G	N1-C2	9.84	1.45	1.37
57	BB	1699	G	C2-N3	9.84	1.40	1.32
21	AA	828	U	C2-N3	9.84	1.44	1.37
21	AA	1199	U	C1'-N1	9.84	1.63	1.48
57	BB	347	A	C5-C4	9.84	1.45	1.38
21	AA	765	G	N7-C5	9.83	1.45	1.39
57	BB	1345	C	C4-N4	9.83	1.42	1.33
57	BB	2544	G	C2-N3	9.83	1.40	1.32
57	BB	1373	A	C6-N1	9.83	1.42	1.35
21	AA	818	G	C8-N7	9.83	1.36	1.30
22	AY	42	G	N7-C5	-9.83	1.33	1.39
57	BB	1805	A	C6-N6	9.83	1.41	1.33
21	AA	818	G	C6-N1	9.83	1.46	1.39
21	AA	487	A	C5-C4	9.82	1.45	1.38
21	AA	1524	C	C2-N3	9.82	1.43	1.35
57	BB	2309	A	N9-C4	-9.82	1.31	1.37
58	BA	117	G	C2-N3	9.82	1.40	1.32
21	AA	1436	U	C2-N3	9.82	1.44	1.37
57	BB	2359	C	C2-N3	9.82	1.43	1.35
22	AY	19	G	N1-C2	9.82	1.45	1.37
57	BB	2224	G	N3-C4	-9.82	1.28	1.35
57	BB	2246	G	N9-C8	9.81	1.44	1.37
21	AA	537	G	N9-C8	9.81	1.44	1.37
21	AA	1225	A	N9-C4	9.81	1.43	1.37
21	AA	432	A	N9-C4	9.81	1.43	1.37
21	AA	1124	G	C6-N1	9.81	1.46	1.39
57	BB	1553	A	N7-C5	-9.81	1.33	1.39
21	AA	129	A	N9-C8	-9.80	1.29	1.37
21	AA	991	U	C2-N3	9.81	1.44	1.37
57	BB	528	A	N7-C5	9.81	1.45	1.39
21	AA	1443	C	C4-N4	9.80	1.42	1.33
22	AY	41	U	C4-C5	9.80	1.52	1.43
26	AV	63	G	N7-C5	-9.80	1.33	1.39
21	AA	918	A	N7-C5	-9.80	1.33	1.39
21	AA	477	C	C2-N3	9.80	1.43	1.35
21	AA	864	A	N3-C4	-9.80	1.28	1.34
57	BB	1210	G	C4'-C3'	9.80	1.64	1.53
21	AA	491	G	C6-N1	9.79	1.46	1.39
57	BB	735	A	N7-C5	-9.80	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	751	U	C2-N3	9.79	1.44	1.37
21	AA	435	A	C6-N6	9.79	1.41	1.33
57	BB	1365	A	C5-C4	9.79	1.45	1.38
57	BB	1671	U	N3-C4	9.79	1.47	1.38
57	BB	175	G	C2'-C1'	-9.79	1.42	1.53
23	AW	64	A	N7-C5	-9.79	1.33	1.39
57	BB	389	G	C5-C4	-9.79	1.31	1.38
58	BA	10	G	N9-C8	-9.79	1.30	1.37
57	BB	820	A	O3'-P	-9.79	1.49	1.61
57	BB	1677	A	C6-N6	9.78	1.41	1.33
21	AA	454	G	O3'-P	-9.78	1.49	1.61
21	AA	541	G	P-O5'	-9.78	1.50	1.59
57	BB	2121	G	C8-N7	-9.78	1.25	1.30
57	BB	2377	A	N3-C4	-9.78	1.28	1.34
57	BB	799	G	C6-N1	9.78	1.46	1.39
21	AA	1074	G	C8-N7	9.77	1.36	1.30
21	AA	126	G	C2-N3	9.77	1.40	1.32
21	AA	924	C	C4-N4	9.77	1.42	1.33
21	AA	1221	G	N9-C4	-9.77	1.30	1.38
21	AA	200	G	C5-C4	9.77	1.45	1.38
21	AA	1001	C	N1-C6	9.77	1.43	1.37
57	BB	1486	U	C2-N3	9.77	1.44	1.37
57	BB	1674	G	C6-N1	9.77	1.46	1.39
21	AA	1037	C	C4-N4	9.76	1.42	1.33
57	BB	102	U	N1-C6	9.76	1.46	1.38
57	BB	1009	A	N7-C5	-9.76	1.33	1.39
21	AA	295	C	N1-C6	9.76	1.43	1.37
21	AA	1329	A	N7-C5	-9.76	1.33	1.39
57	BB	2464	G	C6-N1	9.76	1.46	1.39
26	AV	16	C	N1-C6	9.75	1.43	1.37
57	BB	203	A	N9-C4	9.75	1.43	1.37
57	BB	711	G	C8-N7	-9.75	1.25	1.30
21	AA	61	G	N3-C4	-9.75	1.28	1.35
57	BB	2090	A	N9-C4	-9.75	1.32	1.37
57	BB	988	A	C6-N6	9.74	1.41	1.33
57	BB	1492	G	N1-C2	9.74	1.45	1.37
23	AW	46	G	C4'-C3'	9.74	1.63	1.53
21	AA	1418	A	C8-N7	-9.74	1.24	1.31
57	BB	1835	G	C6-N1	9.74	1.46	1.39
26	AV	26	G	N3-C4	-9.74	1.28	1.35
57	BB	487	C	C4-N4	9.74	1.42	1.33
57	BB	2436	G	C2-N3	9.74	1.40	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1238	G	C5'-C4'	9.74	1.63	1.51
21	AA	114	U	N3-C4	9.73	1.47	1.38
57	BB	2002	G	C6-N1	9.73	1.46	1.39
57	BB	1628	G	N9-C4	-9.73	1.30	1.38
57	BB	844	A	N7-C5	-9.73	1.33	1.39
21	AA	150	U	C2'-C1'	-9.73	1.42	1.53
21	AA	1442	G	N1-C2	9.73	1.45	1.37
26	AV	73	A	N3-C4	9.73	1.40	1.34
57	BB	214	G	N1-C2	9.73	1.45	1.37
21	AA	162	A	N3-C4	9.72	1.40	1.34
21	AA	761	G	C2-N3	9.72	1.40	1.32
21	AA	584	G	C8-N7	9.72	1.36	1.30
21	AA	1241	G	C2-N3	9.72	1.40	1.32
57	BB	1269	A	C3'-O3'	9.72	1.55	1.42
57	BB	2770	G	N9-C4	-9.72	1.30	1.38
57	BB	142	A	N7-C5	-9.72	1.33	1.39
57	BB	1888	G	C2-N3	9.72	1.40	1.32
57	BB	2235	G	C2-N3	9.72	1.40	1.32
57	BB	176	A	C6-N1	9.71	1.42	1.35
57	BB	1890	A	C6-N6	9.71	1.41	1.33
57	BB	2176	A	N7-C5	-9.71	1.33	1.39
57	BB	2669	G	N3-C4	9.71	1.42	1.35
57	BB	685	A	C5'-C4'	9.71	1.63	1.51
57	BB	2628	C	C4-N4	9.71	1.42	1.33
21	AA	1305	G	N7-C5	-9.71	1.33	1.39
57	BB	2612	C	N1-C6	-9.71	1.31	1.37
21	AA	959	A	N7-C5	-9.70	1.33	1.39
21	AA	586	C	N3-C4	9.70	1.40	1.33
22	AY	62	A	C6-N6	9.70	1.41	1.33
26	AV	52	G	C5-C4	9.70	1.45	1.38
57	BB	98	G	C6-N1	9.70	1.46	1.39
57	BB	821	A	N3-C4	9.70	1.40	1.34
57	BB	1392	A	C8-N7	-9.70	1.24	1.31
57	BB	2773	C	N3-C4	9.70	1.40	1.33
21	AA	81	A	C4'-C3'	-9.70	1.42	1.53
21	AA	711	G	C2'-C1'	-9.70	1.42	1.53
57	BB	160	A	N9-C4	9.70	1.43	1.37
57	BB	220	G	C2'-C1'	-9.70	1.42	1.53
57	BB	963	U	C2'-C1'	-9.70	1.42	1.53
57	BB	291	G	C2-N3	9.70	1.40	1.32
57	BB	2160	C	C4-N4	9.70	1.42	1.33
57	BB	2244	U	C2-N3	9.70	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	515	G	C8-N7	9.69	1.36	1.30
57	BB	1783	A	N7-C5	-9.69	1.33	1.39
57	BB	1977	A	P-O5'	-9.69	1.50	1.59
21	AA	1140	C	N3-C4	9.69	1.40	1.33
21	AA	1269	A	C6-N6	9.69	1.41	1.33
57	BB	1353	A	C6-N6	9.69	1.41	1.33
57	BB	1555	G	N1-C2	9.69	1.45	1.37
57	BB	1595	C	C4-C5	9.69	1.50	1.43
21	AA	245	U	C5'-C4'	9.69	1.62	1.51
57	BB	566	U	N3-C4	9.68	1.47	1.38
57	BB	1113	U	C2-N3	9.68	1.44	1.37
21	AA	406	G	N7-C5	-9.68	1.33	1.39
57	BB	168	G	C6-N1	9.68	1.46	1.39
57	BB	1763	G	C2-N3	9.68	1.40	1.32
58	BA	31	C	P-O5'	-9.68	1.50	1.59
21	AA	45	G	N3-C4	-9.68	1.28	1.35
21	AA	1176	A	N7-C5	-9.68	1.33	1.39
57	BB	618	G	C2-N3	9.68	1.40	1.32
57	BB	2107	G	C6-N1	-9.68	1.32	1.39
57	BB	2414	G	C6-N1	9.68	1.46	1.39
57	BB	2204	G	C6-N1	9.68	1.46	1.39
21	AA	332	G	C2-N2	9.68	1.44	1.34
57	BB	866	A	C6-N6	9.68	1.41	1.33
21	AA	1068	G	C8-N7	9.67	1.36	1.30
57	BB	359	G	N7-C5	-9.67	1.33	1.39
57	BB	2358	A	C2'-C1'	-9.67	1.42	1.53
57	BB	367	G	C6-N1	9.67	1.46	1.39
57	BB	1549	A	C6-N6	9.67	1.41	1.33
57	BB	2542	A	C6-N1	9.67	1.42	1.35
57	BB	377	G	N1-C2	9.67	1.45	1.37
21	AA	122	G	N7-C5	-9.66	1.33	1.39
21	AA	1199	U	C2-N3	9.66	1.44	1.37
22	AY	58	A	O3'-P	-9.66	1.49	1.61
57	BB	1287	A	N7-C5	-9.66	1.33	1.39
23	AW	57	G	C6-N1	9.66	1.46	1.39
57	BB	2287	A	N7-C5	-9.66	1.33	1.39
21	AA	1416	G	C2'-C1'	-9.65	1.42	1.53
57	BB	1640	A	C2'-C1'	-9.65	1.42	1.53
57	BB	1787	A	C5-C4	9.65	1.45	1.38
57	BB	1661	G	C2-N3	9.65	1.40	1.32
21	AA	336	A	N3-C4	-9.65	1.29	1.34
57	BB	2	G	N1-C2	9.65	1.45	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2895	G	N7-C5	-9.65	1.33	1.39
57	BB	878	A	N3-C4	-9.65	1.29	1.34
57	BB	2577	A	N9-C4	-9.64	1.32	1.37
21	AA	242	G	N7-C5	9.64	1.45	1.39
57	BB	421	C	N3-C4	9.64	1.40	1.33
57	BB	711	G	N7-C5	-9.64	1.33	1.39
57	BB	2710	C	N3-C4	9.64	1.40	1.33
21	AA	336	A	C5-C4	-9.64	1.32	1.38
57	BB	1493	C	C4-N4	9.64	1.42	1.33
22	AY	72	C	N3-C4	9.63	1.40	1.33
57	BB	1310	G	C6-N1	9.63	1.46	1.39
57	BB	2141	G	C2-N2	9.63	1.44	1.34
58	BA	108	A	C6-N1	9.63	1.42	1.35
57	BB	1681	G	C8-N7	-9.63	1.25	1.30
57	BB	2885	G	C8-N7	-9.63	1.25	1.30
21	AA	1356	G	N7-C5	-9.63	1.33	1.39
57	BB	2137	U	C2-N3	9.63	1.44	1.37
26	AV	52	G	N9-C8	9.63	1.44	1.37
57	BB	2810	A	P-O5'	-9.62	1.50	1.59
21	AA	1245	C	C2-N3	9.62	1.43	1.35
57	BB	371	A	N3-C4	-9.62	1.29	1.34
57	BB	1561	C	N1-C6	9.62	1.43	1.37
21	AA	945	G	N9-C4	-9.62	1.30	1.38
21	AA	1174	G	C2-N3	9.62	1.40	1.32
57	BB	192	C	C5'-C4'	9.62	1.62	1.51
21	AA	821	G	N7-C5	-9.61	1.33	1.39
57	BB	652	U	C2-O2	9.61	1.31	1.22
57	BB	2436	G	N7-C5	-9.61	1.33	1.39
21	AA	1417	G	N7-C5	-9.61	1.33	1.39
57	BB	642	U	C2-N3	9.61	1.44	1.37
21	AA	1534	A	N7-C5	-9.61	1.33	1.39
22	AY	24	G	C3'-C2'	9.61	1.63	1.52
57	BB	1241	A	N7-C5	-9.61	1.33	1.39
57	BB	440	C	N1-C6	9.60	1.43	1.37
57	BB	299	A	C6-N1	9.60	1.42	1.35
57	BB	742	A	N3-C4	-9.60	1.29	1.34
58	BA	117	G	N3-C4	-9.60	1.28	1.35
57	BB	2390	U	N3-C4	9.60	1.47	1.38
21	AA	691	G	N9-C8	9.59	1.44	1.37
57	BB	681	G	C6-N1	9.59	1.46	1.39
57	BB	1801	A	N3-C4	-9.59	1.29	1.34
57	BB	1909	C	O3'-P	-9.59	1.49	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1044	A	N9-C4	-9.59	1.32	1.37
57	BB	477	A	N9-C4	-9.59	1.32	1.37
57	BB	666	A	N7-C5	-9.59	1.33	1.39
57	BB	2333	A	N7-C5	-9.59	1.33	1.39
57	BB	1063	G	N1-C2	9.59	1.45	1.37
57	BB	1218	G	C2-N3	9.58	1.40	1.32
57	BB	2763	G	C2-N3	9.58	1.40	1.32
57	BB	454	A	N7-C5	-9.58	1.33	1.39
57	BB	174	U	C2-N3	9.57	1.44	1.37
57	BB	2323	G	C4'-C3'	9.57	1.63	1.53
21	AA	873	A	C6-N6	9.57	1.41	1.33
57	BB	2542	A	N7-C5	-9.57	1.33	1.39
57	BB	536	G	C6-N1	9.57	1.46	1.39
57	BB	1609	A	C8-N7	-9.57	1.24	1.31
57	BB	2538	C	N3-C4	9.57	1.40	1.33
57	BB	17	G	N3-C4	-9.57	1.28	1.35
57	BB	734	A	C8-N7	-9.57	1.24	1.31
21	AA	1172	C	C4-N4	9.56	1.42	1.33
23	AW	51	U	N1-C2	-9.56	1.29	1.38
57	BB	2285	C	N3-C4	9.56	1.40	1.33
21	AA	798	U	C2'-C1'	-9.56	1.42	1.53
23	AW	31	A	C4'-C3'	9.56	1.63	1.53
26	AV	19	G	C6-N1	9.56	1.46	1.39
57	BB	38	A	N7-C5	-9.56	1.33	1.39
57	BB	2119	A	N3-C4	9.56	1.40	1.34
21	AA	299	G	C8-N7	9.55	1.36	1.30
57	BB	986	C	N3-C4	9.55	1.40	1.33
57	BB	1907	G	C2-N2	9.55	1.44	1.34
57	BB	2826	A	N7-C5	-9.55	1.33	1.39
21	AA	1247	U	C2-N3	9.55	1.44	1.37
21	AA	1388	C	P-O5'	-9.54	1.50	1.59
21	AA	1487	G	C2-N3	9.54	1.40	1.32
23	AW	46	G	C8-N7	9.54	1.36	1.30
21	AA	1374	A	C6-N1	9.54	1.42	1.35
57	BB	215	G	C6-N1	9.54	1.46	1.39
21	AA	147	G	N1-C2	9.54	1.45	1.37
26	AV	1	C	OP3-P	-9.54	1.49	1.61
21	AA	368	U	C2'-C1'	-9.53	1.42	1.53
21	AA	364	A	N7-C5	-9.53	1.33	1.39
21	AA	465	A	O3'-P	-9.53	1.49	1.61
21	AA	1514	G	N9-C8	-9.53	1.31	1.37
57	BB	2517	C	C2-N3	9.53	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	294	A	N7-C5	-9.53	1.33	1.39
21	AA	701	U	C2-N3	9.53	1.44	1.37
21	AA	1499	A	C6-N6	9.53	1.41	1.33
57	BB	2005	A	N3-C4	9.53	1.40	1.34
57	BB	632	A	C2'-C1'	-9.53	1.42	1.53
57	BB	1724	G	N9-C8	9.53	1.44	1.37
57	BB	2386	A	C6-N6	9.53	1.41	1.33
21	AA	509	A	N9-C4	9.53	1.43	1.37
57	BB	1368	G	C6-N1	9.53	1.46	1.39
57	BB	2264	C	N3-C4	9.52	1.40	1.33
57	BB	2481	G	N3-C4	-9.52	1.28	1.35
57	BB	94	A	P-O5'	9.52	1.69	1.59
57	BB	2037	A	N9-C4	9.52	1.43	1.37
57	BB	1559	U	O3'-P	-9.52	1.49	1.61
57	BB	1678	A	C6-N6	9.52	1.41	1.33
57	BB	1720	U	C2-N3	9.52	1.44	1.37
57	BB	2250	G	N7-C5	-9.52	1.33	1.39
21	AA	827	U	C4-C5	9.51	1.52	1.43
21	AA	1192	C	N3-C4	9.51	1.40	1.33
57	BB	210	C	C2-N3	9.51	1.43	1.35
21	AA	1421	G	C2-N3	9.51	1.40	1.32
57	BB	142	A	C6-N6	9.50	1.41	1.33
21	AA	1377	A	C8-N7	9.50	1.38	1.31
57	BB	452	G	C2-N3	9.50	1.40	1.32
57	BB	1540	G	N1-C2	9.50	1.45	1.37
57	BB	2751	G	N1-C2	9.50	1.45	1.37
21	AA	792	A	C6-N6	9.49	1.41	1.33
57	BB	2772	C	N1-C6	-9.49	1.31	1.37
57	BB	2277	G	C6-N1	9.49	1.46	1.39
57	BB	34	U	N1-C2	9.49	1.47	1.38
57	BB	1147	A	N9-C4	-9.49	1.32	1.37
21	AA	176	C	P-O5'	-9.49	1.50	1.59
57	BB	12	U	C2-N3	9.48	1.44	1.37
57	BB	856	G	N7-C5	-9.48	1.33	1.39
57	BB	2104	C	P-O5'	-9.48	1.50	1.59
21	AA	908	A	N3-C4	-9.48	1.29	1.34
21	AA	57	G	C2-N3	9.48	1.40	1.32
21	AA	451	A	N7-C5	-9.48	1.33	1.39
57	BB	1511	G	C6-N1	9.48	1.46	1.39
21	AA	659	U	C5'-C4'	9.48	1.62	1.51
57	BB	1106	G	N9-C4	9.48	1.45	1.38
57	BB	2751	G	P-O5'	-9.48	1.50	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	665	A	C6-N1	9.47	1.42	1.35
57	BB	1612	C	C4'-C3'	9.47	1.63	1.53
21	AA	1101	A	C6-N6	9.47	1.41	1.33
57	BB	1460	U	C2-N3	9.47	1.44	1.37
57	BB	1989	G	C8-N7	9.47	1.36	1.30
21	AA	649	A	N9-C4	-9.46	1.32	1.37
21	AA	1500	A	C6-N6	9.46	1.41	1.33
24	AX	15	A	N3-C4	-9.46	1.29	1.34
57	BB	461	C	C5'-C4'	9.46	1.62	1.51
57	BB	1721	G	N1-C2	9.46	1.45	1.37
57	BB	1171	G	N3-C4	-9.46	1.28	1.35
57	BB	532	A	C6-N6	9.46	1.41	1.33
57	BB	2179	C	N3-C4	9.46	1.40	1.33
21	AA	639	G	C8-N7	-9.46	1.25	1.30
21	AA	573	A	N9-C4	-9.45	1.32	1.37
57	BB	470	A	C2'-C1'	-9.46	1.43	1.53
57	BB	1905	C	C4-N4	9.46	1.42	1.33
21	AA	14	U	C5'-C4'	9.45	1.62	1.51
21	AA	1256	A	N9-C8	9.45	1.45	1.37
22	AY	38	A	N7-C5	-9.45	1.33	1.39
57	BB	624	C	N1-C6	9.45	1.42	1.37
57	BB	1399	C	C4'-O4'	9.45	1.57	1.45
57	BB	1574	C	C4-N4	9.45	1.42	1.33
57	BB	17	G	C2'-C1'	-9.45	1.43	1.53
57	BB	1594	U	C2-N3	9.45	1.44	1.37
57	BB	396	G	C8-N7	9.45	1.36	1.30
57	BB	668	A	C6-N1	9.45	1.42	1.35
57	BB	2700	A	N7-C5	-9.44	1.33	1.39
21	AA	1116	U	N3-C4	9.44	1.47	1.38
21	AA	1282	C	N1-C6	9.44	1.42	1.37
21	AA	1394	A	N9-C4	9.44	1.43	1.37
57	BB	2371	G	C6-N1	9.44	1.46	1.39
21	AA	1032	G	N7-C5	-9.44	1.33	1.39
57	BB	2588	G	C2-N3	9.44	1.40	1.32
58	BA	42	C	C2'-C1'	-9.44	1.43	1.53
57	BB	2042	A	C6-N1	9.43	1.42	1.35
21	AA	500	G	C5-C4	9.43	1.45	1.38
57	BB	1840	G	C2-N3	9.43	1.40	1.32
21	AA	57	G	N1-C2	9.43	1.45	1.37
57	BB	1950	G	N1-C2	9.43	1.45	1.37
21	AA	912	C	N1-C6	-9.42	1.31	1.37
15	AD	50	TYR	CZ-OH	9.42	1.53	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	355	U	C4'-C3'	9.42	1.63	1.53
57	BB	1329	U	C2-N3	9.42	1.44	1.37
58	BA	8	C	C2-N3	-9.42	1.28	1.35
57	BB	1557	C	N3-C4	9.42	1.40	1.33
57	BB	2621	G	C2-N3	9.42	1.40	1.32
21	AA	325	A	C6-N1	9.41	1.42	1.35
21	AA	1236	A	C6-N6	9.41	1.41	1.33
21	AA	1524	C	N1-C6	-9.41	1.31	1.37
57	BB	379	G	C8-N7	-9.41	1.25	1.30
57	BB	892	A	C5'-C4'	9.41	1.62	1.51
57	BB	2028	U	C5'-C4'	9.41	1.62	1.51
21	AA	1035	A	C8-N7	-9.41	1.25	1.31
21	AA	1188	A	P-O5'	-9.41	1.50	1.59
57	BB	476	G	N9-C8	9.41	1.44	1.37
57	BB	1235	G	C5-C4	9.41	1.45	1.38
57	BB	1667	G	C5-C4	9.41	1.45	1.38
57	BB	1888	G	C5-C4	9.41	1.45	1.38
57	BB	1337	G	N7-C5	-9.41	1.33	1.39
21	AA	1222	G	N7-C5	9.40	1.44	1.39
57	BB	1094	U	C2-N3	9.40	1.44	1.37
57	BB	2148	G	N9-C8	9.40	1.44	1.37
21	AA	709	U	C2-N3	9.40	1.44	1.37
57	BB	623	C	C4-C5	9.40	1.50	1.43
57	BB	935	C	N1-C6	9.40	1.42	1.37
57	BB	1156	A	C6-N6	9.40	1.41	1.33
21	AA	774	G	C6-N1	9.40	1.46	1.39
57	BB	2093	G	C6-N1	9.40	1.46	1.39
21	AA	598	U	C2-N3	9.40	1.44	1.37
21	AA	93	U	N3-C4	9.39	1.47	1.38
23	AW	31	A	N7-C5	-9.39	1.33	1.39
57	BB	2087	G	N1-C2	9.39	1.45	1.37
57	BB	2276	G	C6-N1	9.39	1.46	1.39
21	AA	718	A	C6-N6	9.39	1.41	1.33
57	BB	223	A	N7-C5	-9.39	1.33	1.39
21	AA	126	G	C6-N1	9.39	1.46	1.39
21	AA	168	G	N7-C5	-9.39	1.33	1.39
21	AA	721	G	N1-C2	9.39	1.45	1.37
21	AA	814	A	N3-C4	-9.39	1.29	1.34
57	BB	1356	G	N7-C5	-9.39	1.33	1.39
57	BB	458	G	C8-N7	9.38	1.36	1.30
57	BB	1979	U	O3'-P	-9.38	1.49	1.61
57	BB	2170	A	N1-C2	-9.39	1.25	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	85	G	P-O5'	-9.38	1.50	1.59
57	BB	1551	A	C6-N6	9.38	1.41	1.33
57	BB	643	A	N7-C5	-9.38	1.33	1.39
57	BB	919	U	P-O5'	-9.38	1.50	1.59
21	AA	80	A	N3-C4	-9.37	1.29	1.34
21	AA	620	C	N1-C6	9.37	1.42	1.37
21	AA	78	A	N3-C4	-9.37	1.29	1.34
57	BB	392	U	C2-N3	9.37	1.44	1.37
57	BB	554	U	C4-C5	9.37	1.51	1.43
21	AA	897	C	C4'-C3'	9.36	1.63	1.53
57	BB	38	A	C6-N1	9.36	1.42	1.35
57	BB	231	A	N9-C4	-9.36	1.32	1.37
57	BB	1649	G	N1-C2	9.36	1.45	1.37
23	AW	7	A	N3-C4	-9.36	1.29	1.34
57	BB	1530	G	N7-C5	-9.36	1.33	1.39
57	BB	2224	G	C5-C4	9.36	1.45	1.38
21	AA	347	G	C8-N7	-9.36	1.25	1.30
21	AA	544	G	N7-C5	9.36	1.44	1.39
21	AA	1231	G	C2'-C1'	-9.36	1.43	1.53
57	BB	1003	G	C6-N1	9.36	1.46	1.39
57	BB	893	C	P-O5'	9.35	1.69	1.59
21	AA	213	G	C2-N3	9.35	1.40	1.32
57	BB	971	G	N7-C5	9.35	1.44	1.39
57	BB	1833	C	C4-C5	9.35	1.50	1.43
21	AA	1372	U	C2'-C1'	-9.35	1.43	1.53
57	BB	319	G	C2'-C1'	-9.35	1.43	1.53
57	BB	2861	U	C2'-C1'	-9.35	1.43	1.53
57	BB	1043	C	C4'-C3'	9.35	1.63	1.53
57	BB	1540	G	C2-N2	9.35	1.44	1.34
57	BB	2012	G	C2-N3	9.35	1.40	1.32
21	AA	1501	C	N1-C6	-9.35	1.31	1.37
21	AA	451	A	N1-C2	9.35	1.42	1.34
21	AA	1098	C	P-O5'	-9.35	1.50	1.59
22	AY	31	A	C6-N6	9.35	1.41	1.33
22	AY	42	G	N3-C4	9.35	1.42	1.35
57	BB	2033	A	N3-C4	9.35	1.40	1.34
57	BB	284	U	C2-N3	9.35	1.44	1.37
57	BB	2507	C	N1-C6	-9.35	1.31	1.37
21	AA	965	U	C2-N3	9.34	1.44	1.37
21	AA	852	G	C5-C4	-9.34	1.31	1.38
57	BB	532	A	N3-C4	-9.34	1.29	1.34
57	BB	814	C	C2'-C1'	-9.34	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2018	G	C6-N1	9.34	1.46	1.39
57	BB	1653	G	N1-C2	9.34	1.45	1.37
57	BB	1013	C	N1-C6	-9.33	1.31	1.37
57	BB	2867	G	N9-C8	-9.33	1.31	1.37
21	AA	1319	A	N3-C4	-9.33	1.29	1.34
26	AV	39	C	N1-C6	9.33	1.42	1.37
21	AA	868	C	N3-C4	9.33	1.40	1.33
57	BB	1747	U	N3-C4	9.33	1.46	1.38
21	AA	725	G	N3-C4	-9.33	1.28	1.35
57	BB	2756	U	C5'-C4'	9.33	1.62	1.51
21	AA	823	C	C2'-C1'	-9.32	1.43	1.53
57	BB	262	A	O3'-P	-9.32	1.50	1.61
57	BB	468	G	C2'-C1'	-9.32	1.43	1.53
57	BB	676	A	C6-N1	9.32	1.42	1.35
57	BB	2322	A	C6-N1	9.32	1.42	1.35
57	BB	1915	U	O3'-P	-9.32	1.50	1.61
57	BB	2370	G	O4'-C1'	-9.32	1.29	1.41
21	AA	849	G	C5-C4	9.32	1.44	1.38
23	AW	47	U	N1-C2	9.32	1.47	1.38
57	BB	1310	G	N1-C2	9.32	1.45	1.37
57	BB	2557	G	C6-N1	9.32	1.46	1.39
21	AA	1286	U	N3-C4	9.31	1.46	1.38
21	AA	553	A	C6-N1	9.31	1.42	1.35
58	BA	116	G	C2-N3	9.31	1.40	1.32
57	BB	1845	G	C2-N3	9.31	1.40	1.32
21	AA	67	C	C1'-N1	9.31	1.62	1.48
21	AA	1533	C	C4-N4	9.31	1.42	1.33
57	BB	143	C	N1-C6	-9.31	1.31	1.37
57	BB	825	A	N9-C4	-9.31	1.32	1.37
26	AV	16	C	C2'-C1'	-9.30	1.43	1.53
21	AA	83	C	N3-C4	9.30	1.40	1.33
57	BB	1335	C	C4-C5	-9.30	1.35	1.43
57	BB	1828	G	N1-C2	9.30	1.45	1.37
26	AV	19	G	N3-C4	-9.29	1.28	1.35
57	BB	2260	C	N3-C4	9.30	1.40	1.33
57	BB	508	A	C6-N6	9.29	1.41	1.33
21	AA	1476	A	N9-C8	9.29	1.45	1.37
57	BB	575	A	N7-C5	9.29	1.44	1.39
57	BB	1530	G	C2'-C1'	-9.29	1.43	1.53
57	BB	2349	G	C5-C4	9.29	1.44	1.38
21	AA	872	A	N7-C5	-9.29	1.33	1.39
57	BB	495	G	C6-N1	9.29	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1341	G	C2-N3	9.29	1.40	1.32
57	BB	1815	A	C8-N7	9.29	1.38	1.31
21	AA	937	A	N9-C4	9.28	1.43	1.37
57	BB	979	A	C5-C4	9.28	1.45	1.38
21	AA	861	G	C6-N1	9.28	1.46	1.39
26	AV	51	C	N3-C4	9.28	1.40	1.33
57	BB	1099	G	C2-N3	9.28	1.40	1.32
57	BB	2333	A	C6-N1	9.28	1.42	1.35
57	BB	2262	U	C2-N3	9.28	1.44	1.37
21	AA	375	U	C4'-C3'	-9.28	1.43	1.53
57	BB	222	A	N7-C5	-9.28	1.33	1.39
57	BB	1051	G	C8-N7	-9.28	1.25	1.30
57	BB	1662	U	N3-C4	9.28	1.46	1.38
21	AA	235	C	N1-C6	-9.27	1.31	1.37
57	BB	161	A	N9-C4	-9.27	1.32	1.37
57	BB	2657	A	N9-C4	-9.27	1.32	1.37
57	BB	1322	A	C6-N6	9.27	1.41	1.33
21	AA	711	G	C2-N3	9.27	1.40	1.32
57	BB	83	A	N7-C5	-9.27	1.33	1.39
58	BA	42	C	N1-C6	9.27	1.42	1.37
57	BB	45	G	C2-N3	9.27	1.40	1.32
57	BB	453	A	C8-N7	-9.27	1.25	1.31
57	BB	1051	G	N9-C8	9.27	1.44	1.37
57	BB	2616	C	N3-C4	9.27	1.40	1.33
21	AA	815	A	N7-C5	-9.26	1.33	1.39
57	BB	1969	A	C6-N6	9.26	1.41	1.33
21	AA	984	C	C2'-C1'	-9.26	1.43	1.53
21	AA	1025	U	C4'-C3'	9.26	1.63	1.53
57	BB	1695	G	C5-C6	-9.26	1.33	1.42
57	BB	2251	G	N7-C5	-9.26	1.33	1.39
21	AA	1139	G	N1-C2	9.26	1.45	1.37
21	AA	1238	A	O3'-P	-9.26	1.50	1.61
57	BB	49	A	C6-N1	9.26	1.42	1.35
57	BB	1297	C	C2-N3	9.26	1.43	1.35
57	BB	1751	U	C5'-C4'	9.26	1.62	1.51
57	BB	2228	G	C5-C4	9.26	1.44	1.38
57	BB	2250	G	C2-N2	9.26	1.43	1.34
21	AA	640	A	N3-C4	-9.25	1.29	1.34
21	AA	881	G	N7-C5	-9.25	1.33	1.39
21	AA	902	G	C6-N1	9.25	1.46	1.39
57	BB	1308	A	C6-N1	9.25	1.42	1.35
57	BB	2119	A	N9-C4	9.25	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	442	G	C2-N3	9.25	1.40	1.32
21	AA	493	A	C5'-C4'	9.25	1.62	1.51
21	AA	1110	A	C6-N6	9.25	1.41	1.33
57	BB	1000	A	C6-N1	9.25	1.42	1.35
21	AA	1058	G	C2-N3	9.25	1.40	1.32
21	AA	577	G	N7-C5	-9.25	1.33	1.39
21	AA	1191	A	N7-C5	-9.25	1.33	1.39
21	AA	1394	A	N7-C5	-9.25	1.33	1.39
21	AA	1467	C	C4-N4	9.25	1.42	1.33
57	BB	1688	U	C2'-C1'	-9.24	1.43	1.53
57	BB	2263	C	C2'-C1'	-9.24	1.43	1.53
21	AA	1357	A	N7-C5	-9.24	1.33	1.39
26	AV	42	G	C6-N1	9.24	1.46	1.39
57	BB	605	G	N7-C5	-9.24	1.33	1.39
57	BB	1269	A	P-O5'	-9.24	1.50	1.59
21	AA	338	A	C6-N6	9.24	1.41	1.33
21	AA	441	A	N9-C4	-9.24	1.32	1.37
24	AX	22	A	C6-N1	9.24	1.42	1.35
57	BB	677	A	C2'-C1'	-9.24	1.43	1.53
57	BB	1846	G	C6-N1	9.24	1.46	1.39
57	BB	2009	A	N9-C4	-9.24	1.32	1.37
21	AA	64	G	N1-C2	9.23	1.45	1.37
21	AA	844	G	C4'-O4'	-9.23	1.33	1.45
21	AA	1088	G	C2-N3	9.23	1.40	1.32
22	AY	34	G	N7-C5	-9.23	1.33	1.39
26	AV	55	U	C4-C5	9.23	1.51	1.43
57	BB	70	G	N1-C2	9.23	1.45	1.37
57	BB	1225	G	C2-N3	9.23	1.40	1.32
57	BB	1689	A	N7-C5	-9.23	1.33	1.39
57	BB	2364	C	N1-C6	9.23	1.42	1.37
21	AA	1355	G	N3-C4	9.22	1.42	1.35
57	BB	175	G	N3-C4	-9.22	1.28	1.35
57	BB	1271	G	N1-C2	9.22	1.45	1.37
57	BB	1733	G	C5-C4	-9.22	1.31	1.38
57	BB	1205	A	N9-C4	-9.22	1.32	1.37
57	BB	1635	A	C8-N7	-9.22	1.25	1.31
57	BB	1291	C	C4-C5	-9.22	1.35	1.43
57	BB	1721	G	C5-C4	9.21	1.44	1.38
57	BB	2107	G	C2-N3	9.21	1.40	1.32
57	BB	2831	G	C2-N3	9.21	1.40	1.32
21	AA	562	U	C5'-C4'	9.21	1.62	1.51
57	BB	2319	G	N7-C5	-9.21	1.33	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2774	C	C5'-C4'	9.21	1.62	1.51
57	BB	637	A	N9-C4	-9.21	1.32	1.37
57	BB	2409	G	N1-C2	9.21	1.45	1.37
58	BA	96	G	C2-N3	9.21	1.40	1.32
21	AA	1494	G	C5-C4	-9.21	1.31	1.38
57	BB	2148	G	C4'-C3'	9.21	1.63	1.53
21	AA	794	A	C6-N6	9.20	1.41	1.33
57	BB	2775	G	C5-C4	-9.21	1.31	1.38
21	AA	1024	G	C6-N1	9.20	1.46	1.39
21	AA	1156	G	C6-N1	9.20	1.46	1.39
57	BB	1859	U	P-O5'	-9.20	1.50	1.59
21	AA	574	A	N7-C5	-9.20	1.33	1.39
57	BB	2314	A	N9-C8	-9.20	1.30	1.37
21	AA	100	G	C4'-C3'	-9.20	1.43	1.53
23	AW	9	A	N9-C4	9.20	1.43	1.37
57	BB	2361	G	N7-C5	-9.20	1.33	1.39
21	AA	780	A	C6-N6	9.19	1.41	1.33
21	AA	831	A	C8-N7	-9.19	1.25	1.31
57	BB	694	U	N3-C4	9.19	1.46	1.38
57	BB	2069	G	N9-C8	9.19	1.44	1.37
21	AA	249	U	P-O5'	-9.19	1.50	1.59
21	AA	976	G	C8-N7	-9.19	1.25	1.30
21	AA	64	G	N9-C4	-9.19	1.30	1.38
21	AA	1254	A	C5-C4	9.19	1.45	1.38
21	AA	817	C	C5'-C4'	9.19	1.62	1.51
21	AA	1241	G	C2'-C1'	-9.19	1.43	1.53
57	BB	2278	A	N7-C5	-9.19	1.33	1.39
21	AA	51	A	C5-C4	9.18	1.45	1.38
21	AA	892	A	N7-C5	-9.18	1.33	1.39
57	BB	1387	A	P-O5'	-9.18	1.50	1.59
57	BB	1889	A	C6-N1	9.18	1.42	1.35
57	BB	248	G	N1-C2	9.18	1.45	1.37
57	BB	2123	G	N3-C4	-9.18	1.29	1.35
23	AW	30	G	C6-N1	9.18	1.46	1.39
57	BB	1075	C	N1-C6	-9.18	1.31	1.37
57	BB	2776	A	C2'-C1'	-9.18	1.43	1.53
22	AY	42	G	C2-N2	9.18	1.43	1.34
57	BB	640	C	C4-N4	9.18	1.42	1.33
57	BB	2442	C	N1-C6	-9.18	1.31	1.37
21	AA	89	U	C4-C5	9.17	1.51	1.43
57	BB	1583	A	C6-N1	-9.17	1.29	1.35
57	BB	1751	U	N1-C2	9.17	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2040	G	C2-N3	9.17	1.40	1.32
57	BB	2273	A	C6-N6	9.17	1.41	1.33
57	BB	894	U	C2-N3	9.17	1.44	1.37
21	AA	1068	G	N7-C5	-9.17	1.33	1.39
57	BB	1893	C	C4-N4	9.17	1.42	1.33
21	AA	21	G	N7-C5	-9.16	1.33	1.39
21	AA	300	A	N7-C5	-9.16	1.33	1.39
57	BB	197	A	N7-C5	-9.16	1.33	1.39
57	BB	1369	G	C8-N7	-9.16	1.25	1.30
21	AA	1260	G	N1-C2	9.16	1.45	1.37
22	AY	60	C	N1-C6	-9.16	1.31	1.37
57	BB	739	A	N7-C5	-9.16	1.33	1.39
57	BB	2495	G	N9-C8	-9.16	1.31	1.37
21	AA	424	G	C5'-C4'	9.16	1.62	1.51
21	AA	657	U	C2-N3	9.16	1.44	1.37
21	AA	947	G	N3-C4	-9.16	1.29	1.35
57	BB	2834	G	C2'-C1'	-9.16	1.43	1.53
21	AA	1448	C	C4-N4	9.16	1.42	1.33
57	BB	1547	C	C4-N4	9.16	1.42	1.33
57	BB	1926	U	C2'-C1'	-9.16	1.43	1.53
57	BB	2490	G	C8-N7	-9.16	1.25	1.30
21	AA	1104	G	C2-N3	9.15	1.40	1.32
57	BB	226	A	C5-C4	9.15	1.45	1.38
21	AA	288	A	N3-C4	9.15	1.40	1.34
21	AA	351	G	C2-N3	9.15	1.40	1.32
21	AA	1501	C	O3'-P	-9.15	1.50	1.61
57	BB	1601	G	N1-C2	9.15	1.45	1.37
57	BB	2379	G	N7-C5	-9.15	1.33	1.39
21	AA	698	G	N1-C2	9.15	1.45	1.37
57	BB	2694	G	N9-C8	9.15	1.44	1.37
21	AA	686	U	C2-N3	9.15	1.44	1.37
57	BB	1269	A	N9-C8	-9.15	1.30	1.37
57	BB	2491	U	C4'-C3'	9.14	1.63	1.53
21	AA	224	U	N3-C4	9.14	1.46	1.38
57	BB	2284	A	N3-C4	-9.14	1.29	1.34
57	BB	2623	G	N9-C8	-9.14	1.31	1.37
21	AA	431	A	C8-N7	-9.14	1.25	1.31
57	BB	1272	A	C6-N6	9.14	1.41	1.33
21	AA	240	G	N9-C8	-9.14	1.31	1.37
21	AA	1006	G	C2-N3	9.14	1.40	1.32
57	BB	745	G	C2-N3	9.14	1.40	1.32
23	AW	47	U	C4'-C3'	9.14	1.63	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	43	G	N9-C4	-9.13	1.30	1.38
22	AY	57	G	C5-C4	9.13	1.44	1.38
57	BB	75	G	C2-N2	9.13	1.43	1.34
21	AA	1243	C	C2-N3	9.13	1.43	1.35
57	BB	860	U	C2-N3	9.13	1.44	1.37
57	BB	1287	A	C6-N6	9.13	1.41	1.33
57	BB	2049	G	C6-N1	9.13	1.46	1.39
21	AA	322	C	N3-C4	9.13	1.40	1.33
21	AA	1181	G	C2-N3	9.13	1.40	1.32
57	BB	933	A	N3-C4	-9.13	1.29	1.34
57	BB	1421	G	N1-C2	9.13	1.45	1.37
58	BA	44	G	C8-N7	-9.13	1.25	1.30
57	BB	404	A	N7-C5	-9.13	1.33	1.39
57	BB	1608	A	N7-C5	-9.13	1.33	1.39
57	BB	924	G	P-O5'	-9.12	1.50	1.59
57	BB	2534	A	C6-N1	9.12	1.42	1.35
57	BB	2785	C	N1-C6	9.12	1.42	1.37
21	AA	228	A	C6-N6	9.12	1.41	1.33
21	AA	736	C	N1-C6	9.12	1.42	1.37
57	BB	619	G	N7-C5	-9.12	1.33	1.39
57	BB	1521	G	C8-N7	9.12	1.36	1.30
21	AA	1479	C	N1-C6	9.12	1.42	1.37
57	BB	2162	G	N9-C4	9.12	1.45	1.38
21	AA	1518	A	C6-N6	9.12	1.41	1.33
57	BB	1269	A	N7-C5	9.11	1.44	1.39
57	BB	2153	C	N1-C2	9.12	1.49	1.40
57	BB	2598	A	C8-N7	-9.12	1.25	1.31
21	AA	57	G	N3-C4	-9.11	1.29	1.35
21	AA	768	A	N7-C5	-9.11	1.33	1.39
21	AA	1171	A	N3-C4	9.11	1.40	1.34
57	BB	7	G	N9-C4	9.11	1.45	1.38
21	AA	884	U	N1-C2	-9.11	1.30	1.38
57	BB	457	A	C8-N7	-9.11	1.25	1.31
57	BB	1699	G	C5-C4	9.11	1.44	1.38
57	BB	1769	U	P-O5'	-9.11	1.50	1.59
57	BB	2592	G	P-O5'	-9.11	1.50	1.59
57	BB	2532	G	C8-N7	-9.11	1.25	1.30
57	BB	2820	A	N9-C4	-9.11	1.32	1.37
21	AA	125	U	C2'-C1'	-9.10	1.43	1.53
57	BB	197	A	C4'-O4'	9.10	1.57	1.45
57	BB	363	G	C2-N3	9.10	1.40	1.32
57	BB	1031	G	C3'-C2'	9.10	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	451	A	C6-N1	9.10	1.42	1.35
57	BB	1700	A	C2'-C1'	-9.10	1.43	1.53
57	BB	2841	C	N3-C4	9.10	1.40	1.33
57	BB	1123	C	C4-N4	9.09	1.42	1.33
57	BB	1780	A	N9-C4	-9.09	1.32	1.37
57	BB	2311	A	C6-N1	9.09	1.42	1.35
57	BB	2855	C	P-O5'	-9.09	1.50	1.59
57	BB	145	C	N3-C4	9.08	1.40	1.33
57	BB	254	G	N1-C2	9.08	1.45	1.37
57	BB	706	A	N7-C5	-9.08	1.33	1.39
57	BB	111	A	N7-C5	-9.08	1.33	1.39
57	BB	2582	G	N9-C8	-9.08	1.31	1.37
21	AA	718	A	N7-C5	-9.08	1.33	1.39
26	AV	10	G	C6-N1	9.08	1.46	1.39
57	BB	1331	G	C6-N1	9.08	1.46	1.39
21	AA	1392	G	N7-C5	-9.07	1.33	1.39
57	BB	101	A	C5-C4	-9.07	1.32	1.38
57	BB	111	A	C6-N6	9.07	1.41	1.33
21	AA	60	A	N7-C5	-9.07	1.33	1.39
21	AA	539	A	C6-N6	9.07	1.41	1.33
57	BB	715	A	C6-N1	9.07	1.42	1.35
57	BB	2167	U	C3'-C2'	-9.07	1.42	1.52
57	BB	1522	A	C2'-C1'	-9.07	1.43	1.53
58	BA	59	A	N1-C2	9.07	1.42	1.34
22	AY	1	G	N7-C5	9.07	1.44	1.39
51	B4	4	ARG	CZ-NH2	9.07	1.44	1.33
57	BB	950	G	C8-N7	-9.07	1.25	1.30
57	BB	2040	G	N1-C2	9.07	1.45	1.37
21	AA	1424	U	C4-C5	9.07	1.51	1.43
57	BB	2494	G	N3-C4	-9.07	1.29	1.35
57	BB	2676	C	C2'-C1'	-9.07	1.43	1.53
26	AV	28	C	N1-C6	9.06	1.42	1.37
57	BB	674	G	C2'-C1'	-9.06	1.43	1.53
57	BB	695	G	N9-C4	9.06	1.45	1.38
57	BB	330	A	N7-C5	-9.06	1.33	1.39
57	BB	1652	A	C6-N6	9.06	1.41	1.33
57	BB	2405	G	C2-N3	9.06	1.40	1.32
57	BB	2784	U	P-O5'	-9.06	1.50	1.59
21	AA	1003	G	C6-N1	9.06	1.45	1.39
57	BB	325	G	C6-N1	9.06	1.45	1.39
21	AA	465	A	N9-C4	-9.05	1.32	1.37
21	AA	545	C	N3-C4	9.06	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	66	C	N1-C6	9.06	1.42	1.37
57	BB	1323	C	C4-N4	9.06	1.42	1.33
57	BB	1888	G	P-O5'	-9.05	1.50	1.59
57	BB	2341	G	N1-C2	9.06	1.45	1.37
57	BB	820	A	N7-C5	-9.05	1.33	1.39
57	BB	1022	G	C8-N7	-9.05	1.25	1.30
58	BA	108	A	N7-C5	-9.05	1.33	1.39
57	BB	472	A	C3'-C2'	9.04	1.62	1.52
57	BB	964	C	C4-N4	9.05	1.42	1.33
57	BB	989	G	C8-N7	-9.04	1.25	1.30
57	BB	2019	A	N7-C5	-9.04	1.33	1.39
57	BB	2581	G	N1-C2	9.04	1.45	1.37
21	AA	7	A	N7-C5	9.04	1.44	1.39
22	AY	56	C	C2'-C1'	-9.04	1.43	1.53
57	BB	717	C	N1-C6	9.04	1.42	1.37
57	BB	1128	G	N1-C2	9.04	1.45	1.37
57	BB	2648	G	P-O5'	-9.04	1.50	1.59
21	AA	988	G	C6-N1	9.04	1.45	1.39
57	BB	1323	C	N3-C4	9.04	1.40	1.33
57	BB	1429	G	N7-C5	9.04	1.44	1.39
57	BB	2414	G	N7-C5	-9.04	1.33	1.39
21	AA	1020	G	C5-C4	-9.03	1.32	1.38
57	BB	393	C	C2'-C1'	-9.03	1.43	1.53
57	BB	1323	C	C2'-C1'	-9.03	1.43	1.53
21	AA	462	G	C8-N7	-9.03	1.25	1.30
21	AA	184	G	O3'-P	-9.03	1.50	1.61
57	BB	1461	C	N3-C4	9.03	1.40	1.33
21	AA	498	A	N3-C4	-9.03	1.29	1.34
57	BB	547	A	N7-C5	9.03	1.44	1.39
21	AA	689	C	C4'-C3'	-9.02	1.43	1.53
57	BB	411	G	C6-N1	9.02	1.45	1.39
57	BB	1308	A	P-O5'	-9.02	1.50	1.59
57	BB	1323	C	N1-C6	-9.02	1.31	1.37
57	BB	1898	U	C4-O4	-9.02	1.16	1.23
57	BB	2864	G	C4'-C3'	-9.02	1.43	1.53
21	AA	1321	U	C4-O4	9.02	1.30	1.23
21	AA	1401	G	C6-N1	9.02	1.45	1.39
57	BB	1031	G	N1-C2	9.02	1.45	1.37
57	BB	1228	G	N1-C2	9.02	1.45	1.37
57	BB	1420	A	N9-C4	9.02	1.43	1.37
57	BB	1858	A	N9-C4	9.02	1.43	1.37
57	BB	2778	A	N3-C4	-9.02	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2266	A	C8-N7	-9.02	1.25	1.31
57	BB	2284	A	C6-N6	9.02	1.41	1.33
57	BB	2425	A	N3-C4	-9.02	1.29	1.34
57	BB	2797	U	C2-N3	9.02	1.44	1.37
57	BB	2852	G	C2'-C1'	-9.01	1.43	1.53
57	BB	2850	A	N3-C4	-9.01	1.29	1.34
21	AA	1035	A	C6-N1	9.01	1.41	1.35
57	BB	2173	A	C6-N6	9.01	1.41	1.33
57	BB	2775	G	C8-N7	9.01	1.36	1.30
21	AA	131	A	C6-N6	9.01	1.41	1.33
21	AA	168	G	C4'-C3'	-9.01	1.43	1.53
21	AA	1313	U	C4-C5	9.01	1.51	1.43
57	BB	1332	G	N1-C2	9.01	1.45	1.37
21	AA	376	G	N7-C5	-9.01	1.33	1.39
22	AY	29	A	C8-N7	-9.01	1.25	1.31
57	BB	1247	A	N1-C2	9.01	1.42	1.34
21	AA	403	C	N1-C6	-9.00	1.31	1.37
21	AA	460	A	P-O5'	-9.00	1.50	1.59
57	BB	1556	C	C2'-C1'	-9.00	1.43	1.53
57	BB	2221	G	C5-C4	9.00	1.44	1.38
57	BB	2464	G	N9-C8	-9.00	1.31	1.37
21	AA	1462	C	N3-C4	9.00	1.40	1.33
57	BB	1074	G	N9-C8	9.00	1.44	1.37
57	BB	1322	A	N9-C4	-9.00	1.32	1.37
21	AA	106	C	C2-N3	9.00	1.43	1.35
21	AA	11	G	N1-C2	9.00	1.45	1.37
21	AA	448	A	N7-C5	-9.00	1.33	1.39
21	AA	1283	U	C4'-C3'	9.00	1.63	1.53
21	AA	1314	C	N3-C4	9.00	1.40	1.33
57	BB	942	G	C2-N3	9.00	1.40	1.32
21	AA	848	C	C4-N4	8.99	1.42	1.33
23	AW	34	G	N7-C5	-8.99	1.33	1.39
57	BB	281	C	C4-N4	8.99	1.42	1.33
57	BB	481	G	N9-C8	8.99	1.44	1.37
57	BB	1016	G	N9-C4	-8.99	1.30	1.38
21	AA	863	U	C4-C5	8.99	1.51	1.43
57	BB	756	A	N7-C5	-8.99	1.33	1.39
57	BB	1109	C	C2-N3	8.99	1.43	1.35
57	BB	2854	G	N7-C5	-8.99	1.33	1.39
21	AA	499	A	C5-C4	-8.98	1.32	1.38
21	AA	925	G	C2-N3	8.98	1.40	1.32
22	AY	6	U	N3-C4	8.98	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	65	G	N7-C5	-8.98	1.33	1.39
57	BB	26	G	N7-C5	-8.98	1.33	1.39
57	BB	273	G	N7-C5	-8.98	1.33	1.39
57	BB	1689	A	N9-C4	-8.98	1.32	1.37
57	BB	2466	C	C2'-C1'	-8.98	1.43	1.53
22	AY	51	G	N9-C8	-8.98	1.31	1.37
57	BB	274	C	N1-C6	8.98	1.42	1.37
57	BB	874	G	C2-N2	8.98	1.43	1.34
57	BB	2848	G	C6-N1	8.98	1.45	1.39
57	BB	1260	A	N7-C5	-8.98	1.33	1.39
21	AA	690	G	N9-C4	-8.98	1.30	1.38
57	BB	1864	U	C2'-C1'	-8.98	1.43	1.53
57	BB	2550	G	N7-C5	-8.98	1.33	1.39
57	BB	2835	A	N9-C4	8.98	1.43	1.37
57	BB	404	A	N3-C4	8.98	1.40	1.34
57	BB	718	A	N9-C4	8.98	1.43	1.37
21	AA	691	G	C2-N3	8.97	1.40	1.32
23	AW	69	G	N1-C2	8.97	1.45	1.37
57	BB	187	G	C2-N3	8.97	1.40	1.32
57	BB	577	G	C2'-C1'	-8.97	1.43	1.53
21	AA	425	G	C8-N7	-8.97	1.25	1.30
21	AA	792	A	N9-C8	-8.97	1.30	1.37
57	BB	783	A	N3-C4	8.97	1.40	1.34
21	AA	1227	A	C6-N6	8.97	1.41	1.33
57	BB	625	G	N7-C5	-8.97	1.33	1.39
21	AA	238	A	C6-N1	8.96	1.41	1.35
57	BB	168	G	P-O5'	-8.96	1.50	1.59
57	BB	321	U	C2-N3	8.96	1.44	1.37
57	BB	2282	G	C6-N1	8.96	1.45	1.39
21	AA	282	A	N7-C5	-8.96	1.33	1.39
21	AA	1425	U	C2-N3	8.96	1.44	1.37
22	AY	38	A	C6-N6	8.96	1.41	1.33
57	BB	217	A	O3'-P	-8.96	1.50	1.61
57	BB	251	A	C6-N6	8.96	1.41	1.33
57	BB	877	A	C2'-C1'	-8.96	1.43	1.53
57	BB	831	G	N7-C5	-8.96	1.33	1.39
57	BB	2867	G	C2-N3	8.96	1.40	1.32
21	AA	836	G	N9-C8	8.96	1.44	1.37
26	AV	1	C	P-OP2	8.96	1.64	1.49
57	BB	2082	A	C5-C4	8.96	1.45	1.38
21	AA	1035	A	N9-C4	-8.95	1.32	1.37
57	BB	2234	G	C8-N7	8.95	1.36	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1204	A	C6-N1	8.95	1.41	1.35
57	BB	1970	A	N7-C5	-8.95	1.33	1.39
57	BB	2840	C	C2-N3	8.95	1.43	1.35
21	AA	893	C	N3-C4	8.95	1.40	1.33
21	AA	1012	A	C6-N1	8.95	1.41	1.35
57	BB	445	C	C2-N3	8.95	1.43	1.35
57	BB	1753	G	C6-N1	8.95	1.45	1.39
57	BB	953	G	P-O5'	-8.95	1.50	1.59
57	BB	2430	A	N9-C4	-8.95	1.32	1.37
57	BB	2572	A	C6-N1	8.95	1.41	1.35
57	BB	534	U	N3-C4	8.94	1.46	1.38
57	BB	848	C	C2'-C1'	-8.94	1.43	1.53
22	AY	14	A	N9-C4	8.94	1.43	1.37
58	BA	106	G	C3'-C2'	8.94	1.62	1.52
21	AA	661	G	C2-N3	8.94	1.39	1.32
21	AA	1369	C	N3-C4	8.94	1.40	1.33
57	BB	1596	A	C5-C6	-8.94	1.33	1.41
57	BB	856	G	N9-C4	-8.94	1.30	1.38
21	AA	1190	G	C2-N2	8.93	1.43	1.34
57	BB	2418	A	C5'-C4'	8.93	1.62	1.51
57	BB	2625	G	C8-N7	-8.93	1.25	1.30
21	AA	85	U	C2-N3	8.93	1.44	1.37
21	AA	200	G	N9-C8	8.93	1.44	1.37
57	BB	215	G	O3'-P	-8.93	1.50	1.61
57	BB	273	G	N9-C8	8.93	1.44	1.37
57	BB	2448	A	N9-C4	8.93	1.43	1.37
22	AY	10	G	C8-N7	-8.93	1.25	1.30
57	BB	2042	A	C4'-O4'	-8.93	1.33	1.45
22	AY	44	A	C6-N6	8.92	1.41	1.33
21	AA	507	C	C4-N4	8.92	1.42	1.33
26	AV	45	G	C6-N1	8.92	1.45	1.39
57	BB	2440	C	C2'-C1'	-8.92	1.43	1.53
57	BB	2641	G	N1-C2	8.92	1.44	1.37
21	AA	93	U	C2-N3	8.92	1.44	1.37
22	AY	47	U	C4-C5	8.92	1.51	1.43
57	BB	2237	G	C5-C4	8.92	1.44	1.38
23	AW	52	G	C2-N3	8.92	1.39	1.32
57	BB	760	G	C2'-C1'	-8.92	1.43	1.53
22	AY	47	U	N3-C4	8.92	1.46	1.38
57	BB	2761	A	C5'-C4'	8.92	1.62	1.51
21	AA	44	A	C5-C4	8.91	1.45	1.38
21	AA	38	G	N9-C8	8.91	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	793	U	C2-N3	8.91	1.44	1.37
57	BB	2495	G	N1-C2	8.91	1.44	1.37
22	AY	66	A	C5'-C4'	8.91	1.62	1.51
57	BB	2885	G	N3-C4	-8.91	1.29	1.35
21	AA	69	G	O3'-P	-8.91	1.50	1.61
21	AA	875	U	P-O5'	-8.91	1.50	1.59
57	BB	1227	G	N9-C8	-8.91	1.31	1.37
57	BB	1789	A	N7-C5	-8.91	1.33	1.39
21	AA	649	A	C6-N1	8.91	1.41	1.35
57	BB	17	G	N7-C5	-8.91	1.33	1.39
57	BB	690	G	C5-C4	8.91	1.44	1.38
57	BB	1155	A	N3-C4	8.91	1.40	1.34
57	BB	2051	A	N9-C4	-8.91	1.32	1.37
57	BB	2283	C	N3-C4	8.91	1.40	1.33
57	BB	2713	U	C2-N3	8.91	1.44	1.37
57	BB	2016	U	C4-C5	8.90	1.51	1.43
21	AA	928	G	N1-C2	8.90	1.44	1.37
21	AA	1296	C	C3'-C2'	8.90	1.62	1.52
57	BB	482	A	C2-N3	8.90	1.41	1.33
57	BB	2532	G	C5-C6	-8.90	1.33	1.42
21	AA	1377	A	O3'-P	-8.90	1.50	1.61
57	BB	107	G	N1-C2	8.90	1.44	1.37
57	BB	804	A	N7-C5	-8.90	1.33	1.39
57	BB	2116	G	N1-C2	8.90	1.44	1.37
57	BB	2884	U	C4-C5	8.90	1.51	1.43
21	AA	349	A	C2'-C1'	-8.90	1.43	1.53
21	AA	1098	C	C3'-C2'	-8.90	1.43	1.52
57	BB	2670	A	N7-C5	-8.90	1.33	1.39
57	BB	2787	C	C4-N4	8.90	1.42	1.33
21	AA	596	A	N7-C5	-8.90	1.33	1.39
57	BB	2799	A	N7-C5	-8.90	1.33	1.39
21	AA	51	A	C2'-C1'	-8.89	1.43	1.53
21	AA	650	G	N9-C8	-8.89	1.31	1.37
21	AA	663	A	C6-N6	8.89	1.41	1.33
21	AA	1331	G	C6-N1	8.89	1.45	1.39
21	AA	428	G	C2-N3	8.89	1.39	1.32
21	AA	1494	G	C6-N1	8.89	1.45	1.39
21	AA	1516	G	N9-C8	8.89	1.44	1.37
57	BB	178	G	C6-N1	8.89	1.45	1.39
57	BB	991	C	C4-C5	8.89	1.50	1.43
57	BB	1498	C	C4-N4	8.89	1.42	1.33
57	BB	826	U	N3-C4	8.89	1.46	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	270	A	C2'-C1'	-8.89	1.43	1.53
57	BB	707	G	C2-N3	8.89	1.39	1.32
57	BB	1452	G	N1-C2	8.89	1.44	1.37
57	BB	230	G	N7-C5	-8.88	1.33	1.39
57	BB	1280	G	C5-C4	8.88	1.44	1.38
57	BB	1644	C	N1-C6	-8.88	1.31	1.37
57	BB	2567	G	C2-N3	8.88	1.39	1.32
57	BB	2800	A	C6-N1	8.88	1.41	1.35
57	BB	1731	G	N1-C2	8.88	1.44	1.37
57	BB	2217	G	N7-C5	-8.88	1.33	1.39
57	BB	2294	G	C5-C4	8.88	1.44	1.38
57	BB	2641	G	C5-C4	-8.88	1.32	1.38
57	BB	2780	G	C6-N1	8.88	1.45	1.39
57	BB	350	G	C6-N1	8.88	1.45	1.39
57	BB	2694	G	C4'-C3'	8.88	1.62	1.53
21	AA	499	A	N7-C5	-8.88	1.33	1.39
21	AA	608	A	N9-C4	-8.88	1.32	1.37
21	AA	1451	U	C2-N3	8.88	1.44	1.37
57	BB	282	A	C6-N1	8.88	1.41	1.35
57	BB	1633	G	C6-N1	8.88	1.45	1.39
57	BB	1960	A	C6-N1	8.88	1.41	1.35
21	AA	1272	G	N1-C2	8.88	1.44	1.37
57	BB	984	A	C6-N6	8.87	1.41	1.33
57	BB	804	A	N3-C4	-8.87	1.29	1.34
57	BB	869	G	C2-N3	8.87	1.39	1.32
57	BB	878	A	C6-N6	8.87	1.41	1.33
57	BB	2470	G	C6-N1	8.87	1.45	1.39
58	BA	21	G	N7-C5	-8.87	1.33	1.39
21	AA	131	A	O3'-P	-8.87	1.50	1.61
57	BB	6	A	C2'-C1'	-8.87	1.43	1.53
21	AA	615	G	C6-N1	8.86	1.45	1.39
58	BA	61	G	N1-C2	8.87	1.44	1.37
21	AA	1310	G	P-O5'	-8.86	1.50	1.59
22	AY	52	U	N3-C4	8.86	1.46	1.38
58	BA	91	C	N3-C4	8.86	1.40	1.33
21	AA	1460	C	C5'-C4'	8.86	1.61	1.51
21	AA	1513	A	C6-N6	8.86	1.41	1.33
21	AA	266	G	N9-C4	-8.86	1.30	1.38
21	AA	1240	U	C2-N3	8.85	1.44	1.37
21	AA	1455	G	C5-C4	8.85	1.44	1.38
23	AW	49	C	C3'-C2'	8.85	1.62	1.52
57	BB	23	G	C5-C4	8.85	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1104	C	P-O5'	8.85	1.68	1.59
57	BB	2583	G	N1-C2	8.85	1.44	1.37
57	BB	1230	A	C6-N6	8.85	1.41	1.33
57	BB	1244	A	C6-N1	8.85	1.41	1.35
57	BB	1867	G	C2-N3	8.85	1.39	1.32
57	BB	2348	U	C2-N3	8.85	1.44	1.37
57	BB	1804	C	N3-C4	8.85	1.40	1.33
57	BB	2557	G	N9-C4	8.85	1.45	1.38
57	BB	2022	U	C2'-C1'	-8.85	1.43	1.53
57	BB	1521	G	C5'-C4'	8.84	1.61	1.51
57	BB	463	G	C2-N3	8.84	1.39	1.32
21	AA	134	G	C6-N1	8.84	1.45	1.39
57	BB	68	G	C5-C4	8.84	1.44	1.38
21	AA	406	G	P-O5'	-8.84	1.50	1.59
57	BB	810	U	N1-C2	8.84	1.46	1.38
57	BB	1159	U	C2-N3	8.84	1.44	1.37
21	AA	1227	A	O3'-P	-8.84	1.50	1.61
23	AW	41	C	N1-C6	8.84	1.42	1.37
57	BB	1906	G	N9-C4	-8.84	1.30	1.38
21	AA	61	G	N1-C2	8.84	1.44	1.37
57	BB	1017	G	C2'-C1'	-8.83	1.43	1.53
21	AA	1288	A	C5-C4	8.83	1.45	1.38
57	BB	39	G	C2-N3	8.83	1.39	1.32
21	AA	822	U	P-O5'	-8.83	1.50	1.59
57	BB	1028	A	C6-N6	8.83	1.41	1.33
57	BB	2035	G	N3-C4	-8.83	1.29	1.35
21	AA	550	G	P-O5'	-8.83	1.50	1.59
21	AA	850	U	C4-C5	8.83	1.51	1.43
21	AA	670	G	N9-C8	8.83	1.44	1.37
21	AA	1101	A	C5-C4	-8.83	1.32	1.38
57	BB	909	A	N9-C4	-8.83	1.32	1.37
21	AA	533	A	P-O5'	-8.82	1.50	1.59
57	BB	1814	G	C2-N3	8.82	1.39	1.32
21	AA	380	G	N9-C8	8.82	1.44	1.37
57	BB	1723	G	N7-C5	-8.82	1.33	1.39
57	BB	2570	G	N1-C2	8.82	1.44	1.37
57	BB	2767	C	N1-C6	8.82	1.42	1.37
21	AA	140	U	C4-O4	8.82	1.30	1.23
57	BB	2170	A	N3-C4	8.82	1.40	1.34
21	AA	1524	C	N3-C4	8.82	1.40	1.33
57	BB	1407	G	C2-N3	8.82	1.39	1.32
57	BB	2574	G	N9-C8	-8.82	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	847	U	C2-N3	8.82	1.44	1.37
57	BB	961	C	C4-N4	8.82	1.41	1.33
21	AA	126	G	C3'-C2'	-8.81	1.43	1.52
26	AV	42	G	P-O5'	-8.81	1.50	1.59
57	BB	2697	G	N7-C5	-8.81	1.33	1.39
21	AA	771	G	C8-N7	8.81	1.36	1.30
57	BB	676	A	O3'-P	-8.81	1.50	1.61
57	BB	207	A	N7-C5	-8.81	1.33	1.39
57	BB	1418	G	N7-C5	-8.81	1.33	1.39
57	BB	1419	A	N9-C4	8.81	1.43	1.37
57	BB	1723	G	C2-N2	8.81	1.43	1.34
57	BB	2598	A	C6-N1	8.81	1.41	1.35
57	BB	2728	U	C2-N3	8.81	1.44	1.37
57	BB	2800	A	N3-C4	-8.81	1.29	1.34
21	AA	1251	A	C6-N6	8.81	1.41	1.33
57	BB	435	C	C4-N4	8.81	1.41	1.33
23	AW	44	G	N1-C2	8.81	1.44	1.37
57	BB	600	G	N1-C2	8.81	1.44	1.37
57	BB	1002	G	C2'-C1'	-8.81	1.43	1.53
21	AA	968	A	N9-C8	-8.80	1.30	1.37
57	BB	236	C	C2'-C1'	-8.80	1.43	1.53
57	BB	817	C	N1-C6	8.80	1.42	1.37
57	BB	156	A	N9-C4	8.80	1.43	1.37
22	AY	38	A	C6-N1	8.80	1.41	1.35
23	AW	49	C	N3-C4	8.80	1.40	1.33
26	AV	42	G	N9-C8	-8.80	1.31	1.37
57	BB	577	G	C2-N3	8.79	1.39	1.32
21	AA	908	A	N9-C4	8.79	1.43	1.37
57	BB	1968	G	N9-C8	8.79	1.44	1.37
21	AA	936	C	C4-N4	8.79	1.41	1.33
57	BB	28	A	C8-N7	-8.79	1.25	1.31
57	BB	2024	G	N9-C8	-8.79	1.31	1.37
57	BB	2696	U	C2-N3	-8.79	1.31	1.37
57	BB	2899	A	C6-N6	8.79	1.41	1.33
57	BB	1499	C	P-O5'	-8.79	1.50	1.59
57	BB	1803	A	C2'-C1'	-8.79	1.43	1.53
21	AA	122	G	C6-N1	8.79	1.45	1.39
21	AA	474	G	N1-C2	8.78	1.44	1.37
21	AA	497	G	C2'-C1'	-8.78	1.43	1.53
57	BB	282	A	N3-C4	-8.78	1.29	1.34
57	BB	1087	G	C2-N2	8.78	1.43	1.34
21	AA	575	G	C6-N1	8.78	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2271	G	C8-N7	-8.78	1.25	1.30
57	BB	258	G	N1-C2	8.78	1.44	1.37
57	BB	2516	A	C6-N6	8.78	1.41	1.33
57	BB	447	A	N9-C4	8.78	1.43	1.37
57	BB	738	G	N9-C8	8.78	1.44	1.37
57	BB	2010	G	N3-C4	-8.78	1.29	1.35
21	AA	906	A	C6-N1	8.77	1.41	1.35
57	BB	1769	U	C2-N3	8.77	1.43	1.37
21	AA	19	A	N9-C4	-8.77	1.32	1.37
57	BB	1977	A	O3'-P	-8.77	1.50	1.61
57	BB	1387	A	N3-C4	8.77	1.40	1.34
57	BB	1404	C	C2'-C1'	-8.77	1.43	1.53
21	AA	635	A	C2'-C1'	-8.77	1.43	1.53
57	BB	1088	A	N9-C4	8.77	1.43	1.37
57	BB	1696	G	C5-C6	-8.77	1.33	1.42
37	BR	83	TYR	CE2-CZ	8.77	1.50	1.38
21	AA	98	A	C6-N6	8.77	1.41	1.33
21	AA	315	A	C6-N6	8.77	1.41	1.33
21	AA	542	G	P-O5'	8.77	1.68	1.59
21	AA	988	G	C2-N3	8.77	1.39	1.32
57	BB	561	G	C6-N1	8.77	1.45	1.39
22	AY	9	A	P-O5'	-8.76	1.50	1.59
57	BB	785	G	N7-C5	-8.76	1.33	1.39
57	BB	1279	G	C6-N1	8.76	1.45	1.39
57	BB	205	G	N7-C5	-8.76	1.33	1.39
57	BB	1371	G	N9-C8	8.76	1.44	1.37
57	BB	1565	C	C4-N4	8.76	1.41	1.33
57	BB	2182	U	O3'-P	-8.76	1.50	1.61
21	AA	551	U	C2'-C1'	-8.76	1.43	1.53
21	AA	1105	A	N7-C5	-8.76	1.33	1.39
57	BB	846	U	C2-N3	8.76	1.43	1.37
57	BB	1800	C	P-O5'	-8.76	1.50	1.59
57	BB	2588	G	N7-C5	-8.76	1.33	1.39
58	BA	51	G	C5'-C4'	8.76	1.61	1.51
21	AA	616	G	C2-N3	8.76	1.39	1.32
57	BB	1536	C	N3-C4	8.76	1.40	1.33
57	BB	2480	C	N3-C4	8.76	1.40	1.33
21	AA	605	U	C2-N3	8.76	1.43	1.37
57	BB	962	G	C5-C4	8.75	1.44	1.38
57	BB	1464	G	N9-C8	8.75	1.44	1.37
21	AA	642	A	C6-N6	8.75	1.41	1.33
57	BB	2738	A	N9-C8	8.75	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	23	G	N9-C4	-8.75	1.30	1.38
57	BB	753	A	C2'-C1'	-8.75	1.43	1.53
57	BB	793	A	C6-N1	8.75	1.41	1.35
57	BB	2221	G	N1-C2	8.75	1.44	1.37
24	AX	13	A	C5'-C4'	8.75	1.61	1.51
26	AV	13	C	N1-C6	-8.75	1.31	1.37
57	BB	125	A	C6-N6	8.75	1.41	1.33
57	BB	818	G	N1-C2	8.75	1.44	1.37
57	BB	1188	U	C1'-N1	8.75	1.61	1.48
58	BA	109	A	C2'-C1'	-8.75	1.43	1.53
57	BB	1018	U	P-O5'	-8.74	1.51	1.59
57	BB	1213	A	C6-N6	8.74	1.41	1.33
21	AA	667	G	N7-C5	-8.74	1.34	1.39
57	BB	323	C	C5-C6	8.74	1.41	1.34
57	BB	2837	A	N3-C4	8.74	1.40	1.34
57	BB	1227	G	N1-C2	8.74	1.44	1.37
57	BB	2368	C	C4-C5	8.74	1.50	1.43
58	BA	102	G	N1-C2	8.74	1.44	1.37
57	BB	1740	G	N7-C5	-8.73	1.34	1.39
21	AA	240	G	N7-C5	-8.73	1.34	1.39
21	AA	987	G	C2'-C1'	-8.73	1.43	1.53
57	BB	1239	G	C5-C4	-8.73	1.32	1.38
57	BB	2208	C	N3-C4	8.73	1.40	1.33
57	BB	2541	A	N9-C4	-8.73	1.32	1.37
57	BB	119	A	C6-N1	8.73	1.41	1.35
57	BB	725	G	N7-C5	-8.73	1.34	1.39
57	BB	1886	U	C2-N3	8.73	1.43	1.37
57	BB	2065	C	C2'-C1'	-8.73	1.43	1.53
57	BB	2888	C	C2-N3	8.73	1.42	1.35
21	AA	917	G	C2-N3	8.73	1.39	1.32
21	AA	937	A	C6-N6	8.73	1.41	1.33
21	AA	1445	U	C2-N3	8.73	1.43	1.37
57	BB	1454	C	N3-C4	8.73	1.40	1.33
57	BB	2336	A	C6-N6	8.73	1.41	1.33
57	BB	957	C	C4-N4	8.72	1.41	1.33
57	BB	1074	G	N9-C4	8.72	1.45	1.38
57	BB	264	C	C4-N4	8.72	1.41	1.33
57	BB	401	A	C2-N3	8.72	1.41	1.33
21	AA	1159	U	C5-C6	8.72	1.42	1.34
57	BB	1187	G	N7-C5	-8.72	1.34	1.39
57	BB	1413	A	C8-N7	-8.72	1.25	1.31
57	BB	1422	G	C8-N7	8.72	1.36	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1456	G	N3-C4	-8.72	1.29	1.35
21	AA	413	G	C6-N1	8.72	1.45	1.39
21	AA	1166	G	N7-C5	-8.72	1.34	1.39
57	BB	896	A	C5'-C4'	8.72	1.61	1.51
57	BB	2120	G	N1-C2	8.72	1.44	1.37
57	BB	2250	G	C8-N7	-8.72	1.25	1.30
57	BB	2010	G	N1-C2	8.71	1.44	1.37
57	BB	1225	G	C6-N1	8.71	1.45	1.39
21	AA	632	U	C2-N3	8.71	1.43	1.37
57	BB	147	C	C4-N4	8.71	1.41	1.33
57	BB	970	U	C2'-C1'	-8.71	1.43	1.53
57	BB	2836	U	C2-N3	8.71	1.43	1.37
57	BB	2167	U	P-O5'	-8.71	1.51	1.59
21	AA	501	C	N3-C4	8.71	1.40	1.33
21	AA	1427	C	N1-C6	8.71	1.42	1.37
57	BB	2031	A	N7-C5	-8.71	1.34	1.39
57	BB	526	A	N7-C5	-8.71	1.34	1.39
57	BB	1162	G	C8-N7	-8.70	1.25	1.30
57	BB	1408	G	N9-C8	8.70	1.44	1.37
57	BB	2459	A	N3-C4	-8.71	1.29	1.34
21	AA	328	C	P-O5'	-8.70	1.51	1.59
57	BB	879	G	N1-C2	8.70	1.44	1.37
57	BB	997	G	C6-N1	8.70	1.45	1.39
21	AA	697	U	P-O5'	-8.70	1.51	1.59
57	BB	1130	U	C3'-C2'	-8.70	1.43	1.52
57	BB	2274	A	C5-C4	8.70	1.44	1.38
57	BB	2542	A	N3-C4	-8.70	1.29	1.34
58	BA	69	G	N3-C4	-8.70	1.29	1.35
57	BB	417	C	N1-C6	8.70	1.42	1.37
57	BB	2708	G	N7-C5	-8.70	1.34	1.39
57	BB	127	A	P-O5'	-8.69	1.51	1.59
57	BB	768	G	N3-C4	8.70	1.41	1.35
57	BB	1688	U	C2-N3	8.69	1.43	1.37
57	BB	1986	C	C2'-C1'	-8.69	1.43	1.53
57	BB	2456	C	N3-C4	8.70	1.40	1.33
57	BB	2862	G	N7-C5	-8.69	1.34	1.39
21	AA	546	A	N3-C4	-8.69	1.29	1.34
23	AW	31	A	C6-N1	8.69	1.41	1.35
57	BB	862	G	C4'-C3'	-8.69	1.43	1.53
57	BB	1032	A	N9-C4	-8.69	1.32	1.37
57	BB	2597	G	C5-C4	8.69	1.44	1.38
26	AV	11	A	N3-C4	-8.69	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	5	U	P-OP2	8.69	1.63	1.49
57	BB	1063	G	C8-N7	-8.69	1.25	1.30
57	BB	1490	A	N7-C5	-8.69	1.34	1.39
57	BB	1848	A	C8-N7	-8.69	1.25	1.31
21	AA	146	G	N7-C5	-8.69	1.34	1.39
21	AA	1511	G	N7-C5	-8.69	1.34	1.39
57	BB	2184	A	N1-C2	8.69	1.42	1.34
57	BB	2781	A	P-O5'	-8.69	1.51	1.59
21	AA	121	U	C2-N3	8.68	1.43	1.37
57	BB	952	G	N7-C5	-8.68	1.34	1.39
57	BB	1576	U	C2-N3	8.68	1.43	1.37
57	BB	2147	A	N3-C4	-8.68	1.29	1.34
57	BB	2318	G	C2-N3	8.68	1.39	1.32
57	BB	1027	A	C6-N6	8.68	1.40	1.33
21	AA	440	C	C4-C5	8.67	1.49	1.43
21	AA	816	A	N7-C5	-8.67	1.34	1.39
57	BB	629	G	C4'-O4'	8.67	1.56	1.45
57	BB	2256	G	N3-C4	-8.67	1.29	1.35
57	BB	2514	U	C2-N3	8.67	1.43	1.37
21	AA	771	G	N7-C5	-8.67	1.34	1.39
21	AA	1244	G	C5-C6	-8.67	1.33	1.42
21	AA	1365	G	N1-C2	8.67	1.44	1.37
57	BB	2783	U	C2-N3	8.67	1.43	1.37
57	BB	925	A	C6-N1	8.67	1.41	1.35
21	AA	274	A	C2'-C1'	-8.67	1.43	1.53
21	AA	626	G	C2'-C1'	-8.67	1.43	1.53
21	AA	1265	C	N3-C4	8.67	1.40	1.33
57	BB	1330	C	C2-N3	8.67	1.42	1.35
58	BA	41	G	N1-C2	8.66	1.44	1.37
21	AA	807	A	C6-N1	8.66	1.41	1.35
21	AA	848	C	N3-C4	8.66	1.40	1.33
57	BB	1256	G	N7-C5	8.66	1.44	1.39
57	BB	1701	A	C5-C4	8.66	1.44	1.38
57	BB	1212	G	C8-N7	-8.66	1.25	1.30
57	BB	2721	A	C6-N6	8.66	1.40	1.33
57	BB	1991	U	C2'-C1'	-8.66	1.43	1.53
21	AA	865	A	N9-C4	8.66	1.43	1.37
21	AA	1413	A	N9-C8	-8.66	1.30	1.37
21	AA	1500	A	P-O5'	-8.66	1.51	1.59
57	BB	687	C	C4-N4	8.66	1.41	1.33
57	BB	2218	G	N3-C4	-8.66	1.29	1.35
21	AA	751	U	C2'-C1'	-8.65	1.43	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	483	A	N7-C5	-8.65	1.34	1.39
57	BB	1386	C	N3-C4	8.65	1.40	1.33
57	BB	2241	A	C2'-C1'	-8.65	1.43	1.53
21	AA	763	G	N1-C2	8.65	1.44	1.37
21	AA	1276	G	N9-C8	8.65	1.44	1.37
57	BB	2632	A	O3'-P	-8.65	1.50	1.61
21	AA	619	U	N3-C4	8.65	1.46	1.38
21	AA	893	C	N1-C6	8.65	1.42	1.37
57	BB	723	C	N3-C4	8.65	1.40	1.33
57	BB	1121	C	N3-C4	8.65	1.40	1.33
57	BB	1514	G	N9-C4	-8.65	1.31	1.38
57	BB	590	A	N7-C5	-8.64	1.34	1.39
21	AA	259	G	N7-C5	8.64	1.44	1.39
22	AY	9	A	C2'-C1'	-8.64	1.43	1.53
57	BB	2277	G	N3-C4	-8.64	1.29	1.35
21	AA	101	A	C6-N1	8.64	1.41	1.35
24	AX	13	A	N3-C4	8.64	1.40	1.34
57	BB	502	A	C6-N6	8.64	1.40	1.33
57	BB	1320	C	C2'-C1'	-8.64	1.43	1.53
57	BB	2751	G	N7-C5	-8.64	1.34	1.39
21	AA	580	C	N3-C4	8.64	1.40	1.33
21	AA	1061	G	N1-C2	8.64	1.44	1.37
57	BB	2012	G	N7-C5	-8.64	1.34	1.39
57	BB	2706	A	C6-N6	8.64	1.40	1.33
57	BB	2745	C	N1-C6	-8.64	1.31	1.37
21	AA	637	C	N3-C4	8.64	1.40	1.33
21	AA	682	G	C6-N1	8.64	1.45	1.39
57	BB	2024	G	C6-N1	8.64	1.45	1.39
21	AA	1393	U	P-O5'	8.64	1.68	1.59
23	AW	47	U	N3-C4	8.64	1.46	1.38
23	AW	8	U	N1-C2	8.63	1.46	1.38
57	BB	1036	G	N1-C2	8.63	1.44	1.37
21	AA	625	U	N1-C6	8.63	1.45	1.38
57	BB	7	G	C2-N3	8.63	1.39	1.32
57	BB	905	A	C2'-C1'	-8.63	1.43	1.53
57	BB	273	G	C2'-C1'	-8.63	1.43	1.53
57	BB	1163	G	N3-C4	-8.63	1.29	1.35
57	BB	2181	U	C2-N3	8.63	1.43	1.37
57	BB	1341	G	N1-C2	8.63	1.44	1.37
57	BB	1794	A	C6-N6	8.63	1.40	1.33
57	BB	424	G	C8-N7	-8.63	1.25	1.30
21	AA	1220	G	C6-N1	8.63	1.45	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	895	U	N3-C4	8.63	1.46	1.38
57	BB	1420	A	N7-C5	-8.63	1.34	1.39
57	BB	1660	G	C5-C6	-8.63	1.33	1.42
57	BB	2532	G	C2'-C1'	-8.63	1.43	1.53
21	AA	188	C	N3-C4	8.62	1.40	1.33
26	AV	56	C	C4-N4	8.63	1.41	1.33
57	BB	1213	A	N7-C5	-8.62	1.34	1.39
57	BB	1254	A	C6-N1	8.63	1.41	1.35
57	BB	1465	G	C6-N1	8.62	1.45	1.39
21	AA	282	A	N3-C4	8.62	1.40	1.34
57	BB	383	C	N1-C6	8.62	1.42	1.37
57	BB	708	G	C5-C4	8.62	1.44	1.38
57	BB	1751	U	N3-C4	8.62	1.46	1.38
57	BB	2309	A	C6-N1	8.62	1.41	1.35
21	AA	165	G	C6-N1	8.62	1.45	1.39
21	AA	373	A	C5'-C4'	8.62	1.61	1.51
21	AA	602	A	P-O5'	-8.62	1.51	1.59
21	AA	1059	C	C2'-C1'	-8.62	1.43	1.53
21	AA	1080	A	N9-C4	-8.62	1.32	1.37
21	AA	1329	A	C5-C4	8.62	1.44	1.38
21	AA	1531	A	C5'-C4'	8.62	1.61	1.51
57	BB	891	G	C2-N3	8.62	1.39	1.32
57	BB	1499	C	C2'-C1'	-8.62	1.43	1.53
57	BB	2620	C	N1-C6	8.62	1.42	1.37
57	BB	2246	G	C2-N3	8.62	1.39	1.32
57	BB	2325	G	C6-N1	8.62	1.45	1.39
21	AA	218	U	N3-C4	8.61	1.46	1.38
21	AA	1339	A	C6-N6	8.62	1.40	1.33
57	BB	488	G	O3'-P	-8.62	1.50	1.61
57	BB	2365	G	N7-C5	-8.61	1.34	1.39
21	AA	13	U	C2'-C1'	-8.61	1.43	1.53
21	AA	195	A	C6-N1	8.61	1.41	1.35
21	AA	1277	C	N1-C6	8.61	1.42	1.37
57	BB	1076	C	C2'-C1'	-8.61	1.43	1.53
57	BB	2071	A	N7-C5	-8.61	1.34	1.39
57	BB	2833	U	C2-N3	8.61	1.43	1.37
21	AA	680	C	N3-C4	8.61	1.40	1.33
57	BB	1922	G	C2-N3	8.61	1.39	1.32
57	BB	2488	G	N9-C4	8.61	1.44	1.38
21	AA	1448	C	C4-C5	8.61	1.49	1.43
22	AY	51	G	C6-O6	-8.61	1.16	1.24
57	BB	63	A	P-O5'	-8.61	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	689	A	N3-C4	-8.61	1.29	1.34
57	BB	317	G	C5-C4	8.61	1.44	1.38
57	BB	808	G	C2-N3	8.61	1.39	1.32
57	BB	2767	C	N3-C4	8.61	1.40	1.33
57	BB	2879	A	C6-N6	8.61	1.40	1.33
21	AA	795	C	N3-C4	8.60	1.40	1.33
21	AA	1108	G	N1-C2	8.60	1.44	1.37
57	BB	2065	C	N1-C6	8.60	1.42	1.37
57	BB	2249	U	C2-N3	8.60	1.43	1.37
22	AY	22	G	C5-C6	-8.60	1.33	1.42
57	BB	2104	C	O3'-P	-8.60	1.50	1.61
21	AA	322	C	C2'-O2'	-8.60	1.30	1.41
21	AA	566	G	N7-C5	-8.60	1.34	1.39
21	AA	977	A	N7-C5	-8.60	1.34	1.39
57	BB	660	C	C2'-C1'	-8.60	1.43	1.53
21	AA	573	A	O4'-C1'	8.60	1.52	1.41
21	AA	1057	G	C4'-O4'	-8.60	1.34	1.45
21	AA	1248	A	C6-N1	8.60	1.41	1.35
21	AA	1251	A	N7-C5	-8.60	1.34	1.39
23	AW	65	G	P-O5'	-8.60	1.51	1.59
57	BB	943	A	C6-N6	8.60	1.40	1.33
57	BB	1905	C	C1'-N1	-8.60	1.34	1.46
57	BB	859	G	C5-C4	8.59	1.44	1.38
57	BB	169	G	N7-C5	-8.59	1.34	1.39
57	BB	728	G	N9-C4	-8.59	1.31	1.38
58	BA	72	G	C6-N1	8.59	1.45	1.39
21	AA	233	C	N3-C4	8.59	1.40	1.33
57	BB	1329	U	C4-C5	8.59	1.51	1.43
21	AA	76	G	N7-C5	-8.59	1.34	1.39
21	AA	952	U	N1-C2	-8.59	1.30	1.38
22	AY	49	C	O3'-P	-8.59	1.50	1.61
57	BB	705	A	N9-C4	-8.59	1.32	1.37
57	BB	919	U	C2-N3	8.59	1.43	1.37
57	BB	1617	C	N3-C4	8.59	1.40	1.33
57	BB	2738	A	C5-C4	8.59	1.44	1.38
58	BA	105	G	C2-N2	8.59	1.43	1.34
21	AA	1271	A	C6-N1	8.58	1.41	1.35
57	BB	2590	A	N7-C5	-8.58	1.34	1.39
57	BB	298	G	C2-N2	8.58	1.43	1.34
57	BB	545	U	N1-C2	8.58	1.46	1.38
57	BB	1520	U	N3-C4	8.58	1.46	1.38
57	BB	2504	U	C4-C5	8.58	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2727	A	C6-N6	8.58	1.40	1.33
57	BB	2838	G	O3'-P	-8.58	1.50	1.61
21	AA	1234	C	N3-C4	8.58	1.40	1.33
57	BB	856	G	C6-O6	-8.58	1.16	1.24
57	BB	1817	G	C2-N3	8.58	1.39	1.32
21	AA	769	G	C2-N3	8.58	1.39	1.32
21	AA	1506	U	C2'-C1'	-8.57	1.44	1.53
57	BB	1225	G	O3'-P	-8.57	1.50	1.61
57	BB	2422	C	C4'-C3'	8.57	1.62	1.53
57	BB	309	A	N7-C5	-8.57	1.34	1.39
57	BB	626	A	C6-N1	8.57	1.41	1.35
57	BB	2307	G	N9-C8	-8.57	1.31	1.37
57	BB	2862	G	N3-C4	8.57	1.41	1.35
21	AA	164	G	P-O5'	-8.57	1.51	1.59
57	BB	188	G	C5-C4	8.57	1.44	1.38
57	BB	311	A	C5-C6	8.57	1.48	1.41
57	BB	2470	G	N3-C4	-8.57	1.29	1.35
57	BB	2571	U	C2-N3	8.57	1.43	1.37
21	AA	435	A	N9-C4	-8.56	1.32	1.37
22	AY	18	G	C5'-C4'	8.56	1.61	1.51
57	BB	2479	U	P-O5'	-8.56	1.51	1.59
21	AA	1185	G	N9-C4	-8.56	1.31	1.38
57	BB	121	G	C5-C6	-8.56	1.33	1.42
22	AY	75	C	C2'-C1'	8.56	1.62	1.53
57	BB	293	U	C4-C5	-8.56	1.35	1.43
22	AY	18	G	C5-C6	-8.56	1.33	1.42
57	BB	2753	A	C6-N1	8.56	1.41	1.35
21	AA	383	A	N9-C4	-8.56	1.32	1.37
21	AA	911	U	C4-C5	-8.56	1.35	1.43
57	BB	2021	C	N1-C6	-8.56	1.32	1.37
57	BB	416	U	C2-N3	8.55	1.43	1.37
57	BB	1598	A	C6-N6	8.56	1.40	1.33
57	BB	1729	U	N1-C2	8.55	1.46	1.38
21	AA	719	C	C2-N3	8.55	1.42	1.35
21	AA	167	A	C6-N1	8.55	1.41	1.35
21	AA	1384	C	C4-N4	8.55	1.41	1.33
57	BB	4	U	C3'-C2'	8.55	1.62	1.52
57	BB	476	G	N3-C4	-8.55	1.29	1.35
57	BB	1467	U	C4-C5	8.55	1.51	1.43
21	AA	497	G	C2-N3	8.55	1.39	1.32
57	BB	798	G	N7-C5	-8.55	1.34	1.39
57	BB	2254	C	N3-C4	8.55	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	3	G	C4'-O4'	8.55	1.56	1.45
57	BB	482	A	N7-C5	-8.55	1.34	1.39
57	BB	1970	A	C6-N1	8.54	1.41	1.35
57	BB	2487	G	P-O5'	-8.54	1.51	1.59
57	BB	217	A	N9-C4	-8.54	1.32	1.37
57	BB	933	A	O3'-P	-8.54	1.50	1.61
57	BB	1058	U	N1-C2	8.54	1.46	1.38
57	BB	1339	G	N9-C8	8.54	1.43	1.37
58	BA	51	G	C5-C4	-8.54	1.32	1.38
21	AA	839	C	C4'-O4'	-8.54	1.34	1.45
57	BB	960	A	N3-C4	8.54	1.40	1.34
57	BB	1704	C	C4-C5	8.54	1.49	1.43
57	BB	2836	U	C3'-C2'	8.54	1.62	1.52
21	AA	1193	G	C2-N3	-8.54	1.25	1.32
22	AY	52	U	C4'-C3'	8.54	1.62	1.53
28	BI	47	SER	CA-CB	8.54	1.65	1.52
57	BB	902	C	O3'-P	-8.54	1.50	1.61
57	BB	2005	A	C8-N7	-8.54	1.25	1.31
57	BB	2607	G	N7-C5	-8.54	1.34	1.39
57	BB	2903	U	C2-N3	8.54	1.43	1.37
21	AA	159	G	C3'-C2'	-8.54	1.43	1.52
21	AA	1455	G	C6-N1	8.54	1.45	1.39
57	BB	2463	C	N3-C4	8.53	1.40	1.33
21	AA	416	G	C6-N1	8.53	1.45	1.39
21	AA	581	G	C2-N3	8.53	1.39	1.32
21	AA	888	G	C6-N1	8.53	1.45	1.39
57	BB	311	A	C4'-C3'	8.53	1.62	1.53
57	BB	1583	A	C8-N7	-8.53	1.25	1.31
57	BB	2276	G	C5-C6	-8.53	1.33	1.42
57	BB	2733	A	C6-N6	8.53	1.40	1.33
21	AA	358	U	N3-C4	8.53	1.46	1.38
21	AA	453	G	C8-N7	8.53	1.36	1.30
21	AA	645	G	C2-N3	8.53	1.39	1.32
57	BB	1723	G	N3-C4	-8.53	1.29	1.35
57	BB	2678	C	O3'-P	-8.53	1.50	1.61
57	BB	1418	G	C6-N1	8.53	1.45	1.39
21	AA	240	G	N3-C4	-8.53	1.29	1.35
21	AA	384	G	N9-C8	-8.53	1.31	1.37
57	BB	979	A	N7-C5	-8.53	1.34	1.39
57	BB	1869	G	C5-C4	8.53	1.44	1.38
21	AA	1149	C	O3'-P	-8.52	1.50	1.61
57	BB	1283	G	N7-C5	-8.52	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1445	U	C2'-C1'	-8.52	1.44	1.53
57	BB	1634	A	C5-C4	8.52	1.44	1.38
21	AA	1328	C	C2-N3	-8.52	1.28	1.35
57	BB	876	C	P-O5'	-8.52	1.51	1.59
57	BB	1667	G	N3-C4	-8.52	1.29	1.35
57	BB	2771	C	C2'-C1'	-8.52	1.44	1.53
21	AA	259	G	C2-N3	8.52	1.39	1.32
57	BB	560	C	P-O5'	-8.52	1.51	1.59
57	BB	1341	G	N7-C5	-8.52	1.34	1.39
57	BB	2734	A	N1-C2	8.52	1.42	1.34
57	BB	2782	G	C2-N2	8.52	1.43	1.34
22	AY	26	G	N9-C4	8.51	1.44	1.38
26	AV	49	G	C2-N2	-8.51	1.26	1.34
57	BB	1112	G	N9-C8	8.51	1.43	1.37
57	BB	1779	U	N1-C6	8.51	1.45	1.38
57	BB	2653	U	C2'-C1'	-8.51	1.44	1.53
23	AW	68	C	N1-C6	-8.51	1.32	1.37
21	AA	457	G	C2-N3	8.51	1.39	1.32
21	AA	1101	A	N7-C5	-8.51	1.34	1.39
21	AA	1219	A	C8-N7	-8.51	1.25	1.31
21	AA	446	G	N1-C2	8.51	1.44	1.37
21	AA	695	A	C5'-C4'	8.51	1.61	1.51
57	BB	394	C	C2-N3	8.51	1.42	1.35
57	BB	918	A	O3'-P	-8.51	1.50	1.61
57	BB	1064	C	C2-N3	8.51	1.42	1.35
21	AA	1200	C	C5'-C4'	8.50	1.61	1.51
57	BB	1738	G	O3'-P	-8.50	1.50	1.61
57	BB	287	G	C6-N1	8.50	1.45	1.39
57	BB	2206	C	N1-C6	-8.50	1.32	1.37
57	BB	2367	G	C6-N1	8.50	1.45	1.39
58	BA	39	A	C8-N7	-8.50	1.25	1.31
22	AY	2	C	N1-C6	8.50	1.42	1.37
21	AA	446	G	C6-N1	8.50	1.45	1.39
57	BB	1157	G	P-O5'	-8.50	1.51	1.59
57	BB	2486	C	C3'-C2'	-8.50	1.43	1.52
57	BB	2633	G	N1-C2	8.50	1.44	1.37
57	BB	2660	A	N7-C5	-8.50	1.34	1.39
57	BB	2806	C	C2'-C1'	-8.50	1.44	1.53
21	AA	1155	A	C2'-C1'	-8.50	1.44	1.53
57	BB	1098	A	N3-C4	-8.50	1.29	1.34
21	AA	106	C	C4'-C3'	8.49	1.62	1.53
21	AA	986	U	P-O5'	-8.49	1.51	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1566	A	O3'-P	-8.49	1.50	1.61
57	BB	1793	C	N3-C4	8.49	1.39	1.33
57	BB	1434	A	N9-C4	8.49	1.43	1.37
57	BB	1612	C	O3'-P	-8.49	1.50	1.61
21	AA	569	C	O3'-P	-8.49	1.50	1.61
21	AA	1481	U	C3'-C2'	-8.49	1.43	1.52
57	BB	955	U	N1-C2	-8.49	1.30	1.38
57	BB	1846	G	C5-C6	-8.49	1.33	1.42
57	BB	2329	U	N1-C2	8.49	1.46	1.38
57	BB	2723	C	C2'-C1'	8.49	1.62	1.53
21	AA	1144	G	N7-C5	-8.49	1.34	1.39
21	AA	1482	G	N7-C5	-8.49	1.34	1.39
57	BB	250	G	N9-C8	8.49	1.43	1.37
57	BB	2510	C	N3-C4	8.49	1.39	1.33
21	AA	166	U	C2-N3	8.48	1.43	1.37
21	AA	1271	A	C5-C4	8.48	1.44	1.38
21	AA	1405	G	N7-C5	-8.48	1.34	1.39
57	BB	1482	G	C2-N3	8.48	1.39	1.32
57	BB	2503	A	N3-C4	-8.48	1.29	1.34
23	AW	72	C	C4-N4	8.48	1.41	1.33
57	BB	310	A	C5'-C4'	8.48	1.61	1.51
57	BB	555	G	C2-N3	8.48	1.39	1.32
57	BB	726	G	C6-N1	8.48	1.45	1.39
57	BB	1180	U	C2-N3	8.48	1.43	1.37
57	BB	1700	A	N3-C4	-8.48	1.29	1.34
21	AA	436	C	C5'-C4'	8.47	1.61	1.51
57	BB	439	A	N1-C2	8.47	1.42	1.34
57	BB	1733	G	C2-N3	8.47	1.39	1.32
58	BA	7	G	P-O5'	-8.47	1.51	1.59
21	AA	1094	G	C6-N1	8.47	1.45	1.39
23	AW	15	G	C5-C4	8.47	1.44	1.38
57	BB	1706	C	N3-C4	8.47	1.39	1.33
22	AY	71	G	C8-N7	-8.47	1.25	1.30
57	BB	255	A	C6-N1	8.47	1.41	1.35
57	BB	2060	A	N3-C4	8.47	1.40	1.34
57	BB	1250	G	N1-C2	8.47	1.44	1.37
21	AA	1004	A	C6-N1	8.46	1.41	1.35
57	BB	1622	G	C2-N2	8.46	1.43	1.34
57	BB	2460	U	C2'-C1'	-8.47	1.44	1.53
57	BB	1871	A	N9-C4	8.46	1.43	1.37
57	BB	2673	G	N7-C5	-8.46	1.34	1.39
26	AV	6	G	C2-N3	8.46	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	114	U	N3-C4	8.46	1.46	1.38
57	BB	1549	A	N7-C5	-8.46	1.34	1.39
21	AA	21	G	C8-N7	-8.46	1.25	1.30
57	BB	584	C	N3-C4	8.46	1.39	1.33
57	BB	679	C	C4-N4	8.46	1.41	1.33
57	BB	2340	A	N9-C4	8.46	1.43	1.37
57	BB	862	G	C6-O6	-8.46	1.16	1.24
57	BB	1828	G	C6-N1	8.46	1.45	1.39
57	BB	2175	C	P-O5'	-8.46	1.51	1.59
21	AA	221	C	C2'-C1'	-8.46	1.44	1.53
57	BB	762	U	C2-N3	8.45	1.43	1.37
57	BB	1972	G	C8-N7	-8.45	1.25	1.30
22	AY	45	G	C5-C4	8.45	1.44	1.38
57	BB	487	C	O3'-P	-8.45	1.51	1.61
57	BB	1321	A	C6-N1	8.45	1.41	1.35
57	BB	2215	C	C4-C5	-8.45	1.36	1.43
21	AA	310	G	C2'-C1'	-8.45	1.44	1.53
21	AA	1067	A	N7-C5	-8.45	1.34	1.39
57	BB	732	C	N3-C4	8.45	1.39	1.33
21	AA	15	G	O3'-P	-8.45	1.51	1.61
21	AA	1429	A	N3-C4	8.45	1.40	1.34
57	BB	771	G	N1-C2	8.45	1.44	1.37
57	BB	1894	C	N3-C4	8.45	1.39	1.33
57	BB	735	A	P-O5'	-8.44	1.51	1.59
57	BB	2038	G	C2-N3	8.44	1.39	1.32
58	BA	7	G	C8-N7	8.44	1.36	1.30
21	AA	77	A	N7-C5	-8.44	1.34	1.39
57	BB	493	G	N7-C5	-8.44	1.34	1.39
21	AA	115	G	N7-C5	-8.44	1.34	1.39
21	AA	241	G	N1-C2	8.44	1.44	1.37
21	AA	1170	A	P-O5'	-8.44	1.51	1.59
21	AA	1411	C	C4-N4	8.44	1.41	1.33
57	BB	1358	G	C2-N3	-8.44	1.25	1.32
57	BB	2484	G	N1-C2	8.44	1.44	1.37
21	AA	1478	U	C2'-C1'	-8.44	1.44	1.53
57	BB	454	A	C6-N1	8.44	1.41	1.35
57	BB	1153	C	N3-C4	8.44	1.39	1.33
57	BB	133	U	C2-N3	8.44	1.43	1.37
57	BB	175	G	C2-N3	8.44	1.39	1.32
57	BB	2641	G	C8-N7	-8.44	1.25	1.30
21	AA	846	G	C2-N2	8.43	1.43	1.34
57	BB	2209	G	P-O5'	8.43	1.68	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2564	A	C6-N6	8.43	1.40	1.33
57	BB	1573	G	C6-N1	8.43	1.45	1.39
57	BB	2456	C	C4-C5	8.43	1.49	1.43
21	AA	34	C	C3'-O3'	8.43	1.53	1.42
21	AA	1163	A	C6-N1	8.43	1.41	1.35
57	BB	602	A	C6-N6	8.43	1.40	1.33
57	BB	2062	A	N7-C5	-8.43	1.34	1.39
21	AA	159	G	O3'-P	-8.43	1.51	1.61
21	AA	491	G	N9-C8	-8.42	1.31	1.37
21	AA	655	A	N3-C4	8.42	1.40	1.34
21	AA	812	G	N3-C4	-8.42	1.29	1.35
57	BB	1968	G	C6-N1	-8.42	1.33	1.39
57	BB	1969	A	N3-C4	8.42	1.40	1.34
21	AA	1096	C	C2'-C1'	-8.42	1.44	1.53
21	AA	1134	G	C2-N3	8.42	1.39	1.32
58	BA	13	G	N3-C4	8.42	1.41	1.35
57	BB	439	A	N9-C4	-8.42	1.32	1.37
57	BB	1497	U	C4'-C3'	8.42	1.62	1.53
57	BB	1722	A	N3-C4	-8.42	1.29	1.34
21	AA	122	G	N9-C8	-8.41	1.31	1.37
21	AA	812	G	N7-C5	-8.41	1.34	1.39
57	BB	858	G	N9-C4	-8.41	1.31	1.38
57	BB	2627	G	N9-C4	-8.41	1.31	1.38
57	BB	225	C	N1-C6	8.41	1.42	1.37
57	BB	2560	A	C6-N6	8.41	1.40	1.33
22	AY	21	A	C6-N6	8.41	1.40	1.33
57	BB	825	A	N7-C5	-8.41	1.34	1.39
57	BB	875	G	N9-C8	8.41	1.43	1.37
57	BB	1268	A	C6-N6	8.41	1.40	1.33
57	BB	1685	C	N3-C4	8.41	1.39	1.33
21	AA	354	G	N3-C4	-8.41	1.29	1.35
57	BB	1238	G	C3'-O3'	8.41	1.53	1.42
57	BB	1473	G	N7-C5	-8.41	1.34	1.39
34	BO	114	GLY	CA-C	-8.41	1.38	1.51
57	BB	482	A	C6-N6	8.40	1.40	1.33
21	AA	176	C	C2-N3	8.40	1.42	1.35
26	AV	69	C	C4-N4	8.40	1.41	1.33
57	BB	254	G	N7-C5	-8.40	1.34	1.39
57	BB	2609	U	C5'-C4'	8.40	1.61	1.51
57	BB	2831	G	C6-N1	8.40	1.45	1.39
57	BB	830	G	C5-C4	8.40	1.44	1.38
21	AA	437	U	C2'-C1'	-8.40	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1330	U	N1-C6	8.40	1.45	1.38
22	AY	34	G	C8-N7	-8.40	1.25	1.30
57	BB	586	A	N7-C5	-8.40	1.34	1.39
57	BB	1543	G	N1-C2	8.40	1.44	1.37
57	BB	2882	A	P-O5'	-8.40	1.51	1.59
21	AA	1253	G	C8-N7	8.40	1.35	1.30
21	AA	1241	G	C8-N7	-8.40	1.25	1.30
21	AA	1317	C	N3-C4	8.40	1.39	1.33
57	BB	1742	U	C5-C6	8.40	1.41	1.34
57	BB	2897	U	O3'-P	-8.40	1.51	1.61
57	BB	1389	G	N3-C4	-8.39	1.29	1.35
57	BB	1552	A	C5-C4	8.39	1.44	1.38
57	BB	2712	C	O3'-P	-8.39	1.51	1.61
57	BB	2830	C	C5'-C4'	8.39	1.61	1.51
58	BA	112	G	N3-C4	8.39	1.41	1.35
21	AA	1012	A	C4'-C3'	8.39	1.62	1.53
58	BA	61	G	C6-N1	8.39	1.45	1.39
57	BB	449	A	C2'-C1'	-8.39	1.44	1.53
57	BB	612	G	N7-C5	-8.39	1.34	1.39
57	BB	2648	G	N9-C4	-8.39	1.31	1.38
57	BB	2747	G	N7-C5	8.38	1.44	1.39
57	BB	2815	C	N3-C4	8.38	1.39	1.33
21	AA	350	G	C6-N1	8.38	1.45	1.39
57	BB	2072	C	C4-N4	8.38	1.41	1.33
21	AA	990	C	N1-C6	-8.38	1.32	1.37
26	AV	53	G	C6-N1	8.38	1.45	1.39
57	BB	600	G	C2'-C1'	-8.38	1.44	1.53
57	BB	1297	C	C4-N4	8.38	1.41	1.33
57	BB	2154	A	C4'-O4'	-8.38	1.34	1.45
21	AA	568	G	C6-N1	8.38	1.45	1.39
57	BB	302	C	N3-C4	8.38	1.39	1.33
57	BB	2414	G	C4'-O4'	8.38	1.56	1.45
21	AA	351	G	N7-C5	-8.37	1.34	1.39
21	AA	908	A	N7-C5	-8.37	1.34	1.39
21	AA	1228	C	N3-C4	8.37	1.39	1.33
57	BB	1520	U	C4'-C3'	-8.38	1.44	1.53
21	AA	301	G	C2-N3	8.37	1.39	1.32
21	AA	879	C	C2-N3	8.37	1.42	1.35
21	AA	1115	U	C2-N3	8.37	1.43	1.37
26	AV	2	G	N1-C2	8.37	1.44	1.37
57	BB	10	A	C6-N1	8.37	1.41	1.35
57	BB	1192	G	C2-N3	8.37	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2427	C	C4-C5	8.37	1.49	1.43
21	AA	461	A	C6-N6	8.37	1.40	1.33
22	AY	51	G	N9-C4	8.37	1.44	1.38
57	BB	2287	A	C5'-C4'	8.37	1.61	1.51
57	BB	2848	G	N7-C5	-8.37	1.34	1.39
57	BB	470	A	C4'-O4'	-8.37	1.34	1.45
57	BB	1285	A	C6-N6	8.37	1.40	1.33
57	BB	1331	G	N3-C4	8.37	1.41	1.35
57	BB	2184	A	C6-N6	8.37	1.40	1.33
21	AA	1178	G	N7-C5	-8.37	1.34	1.39
58	BA	79	G	C2-N3	8.37	1.39	1.32
57	BB	48	G	N7-C5	-8.36	1.34	1.39
57	BB	256	A	C6-N6	8.36	1.40	1.33
57	BB	1783	A	C4'-C3'	8.37	1.62	1.53
21	AA	887	G	N9-C8	8.36	1.43	1.37
57	BB	1968	G	C2'-C1'	-8.36	1.44	1.53
57	BB	81	G	N7-C5	-8.36	1.34	1.39
57	BB	1182	G	N3-C4	-8.36	1.29	1.35
57	BB	2625	G	N9-C8	8.36	1.43	1.37
21	AA	139	A	C6-N6	8.36	1.40	1.33
57	BB	705	A	C2'-C1'	-8.36	1.44	1.53
57	BB	2634	A	N9-C8	-8.36	1.31	1.37
57	BB	1964	G	N7-C5	-8.36	1.34	1.39
21	AA	41	G	N3-C4	-8.36	1.29	1.35
21	AA	240	G	C2-N3	8.36	1.39	1.32
21	AA	455	G	N9-C8	-8.36	1.32	1.37
21	AA	794	A	C5-C6	-8.36	1.33	1.41
57	BB	1626	A	C8-N7	-8.36	1.25	1.31
57	BB	1277	G	C5-C4	-8.35	1.32	1.38
21	AA	232	G	C2-N3	8.35	1.39	1.32
24	AX	16	A	C8-N7	8.35	1.37	1.31
57	BB	56	A	N7-C5	-8.35	1.34	1.39
57	BB	71	A	C6-N6	8.35	1.40	1.33
57	BB	2154	A	N9-C8	8.35	1.44	1.37
58	BA	43	C	C2'-C1'	8.35	1.62	1.53
21	AA	898	G	C8-N7	8.35	1.35	1.30
21	AA	811	C	N1-C6	8.35	1.42	1.37
57	BB	324	A	C3'-C2'	8.35	1.62	1.52
57	BB	380	G	N1-C2	8.35	1.44	1.37
57	BB	1136	G	C6-N1	8.35	1.45	1.39
57	BB	1496	A	C6-N6	8.35	1.40	1.33
21	AA	1069	C	N1-C6	-8.35	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2231	U	P-O5'	-8.35	1.51	1.59
57	BB	466	A	N9-C8	-8.34	1.31	1.37
21	AA	651	C	N3-C4	8.34	1.39	1.33
21	AA	1411	C	N1-C6	8.34	1.42	1.37
22	AY	26	G	C2'-O2'	-8.34	1.30	1.41
57	BB	1437	C	C4-N4	8.34	1.41	1.33
57	BB	2467	C	C4'-C3'	-8.34	1.44	1.53
57	BB	108	G	N7-C5	-8.34	1.34	1.39
57	BB	774	G	C5-C4	8.34	1.44	1.38
57	BB	1651	G	O3'-P	-8.34	1.51	1.61
57	BB	874	G	N1-C2	8.34	1.44	1.37
57	BB	2038	G	C3'-C2'	-8.34	1.43	1.52
21	AA	262	A	C5-C4	8.34	1.44	1.38
21	AA	860	A	C4'-C3'	8.34	1.62	1.53
21	AA	1324	A	N7-C5	-8.34	1.34	1.39
57	BB	727	A	C6-N6	8.34	1.40	1.33
57	BB	1868	C	C2-N3	-8.34	1.29	1.35
21	AA	292	G	C6-N1	8.33	1.45	1.39
21	AA	460	A	C6-N6	8.33	1.40	1.33
23	AW	68	C	C4-N4	8.33	1.41	1.33
57	BB	487	C	P-O5'	-8.33	1.51	1.59
57	BB	524	G	C6-N1	8.33	1.45	1.39
57	BB	965	C	N1-C6	8.33	1.42	1.37
57	BB	1822	C	N3-C4	8.33	1.39	1.33
21	AA	963	G	C6-N1	8.33	1.45	1.39
57	BB	772	C	C4-N4	8.33	1.41	1.33
21	AA	755	G	C2'-C1'	-8.33	1.44	1.53
57	BB	530	G	C2'-C1'	-8.33	1.44	1.53
57	BB	820	A	C6-N1	8.33	1.41	1.35
57	BB	1689	A	C5'-C4'	8.33	1.61	1.51
57	BB	2714	G	C6-N1	8.33	1.45	1.39
21	AA	1238	A	N7-C5	-8.32	1.34	1.39
57	BB	1701	A	C6-N6	8.32	1.40	1.33
57	BB	2741	A	N7-C5	-8.32	1.34	1.39
21	AA	156	C	N1-C6	8.32	1.42	1.37
21	AA	263	A	C8-N7	-8.32	1.25	1.31
21	AA	346	G	C2-N3	8.32	1.39	1.32
22	AY	25	C	N3-C4	8.32	1.39	1.33
57	BB	27	G	O4'-C1'	-8.32	1.30	1.41
57	BB	931	U	O3'-P	-8.32	1.51	1.61
57	BB	1586	A	C2-N3	8.32	1.41	1.33
21	AA	229	U	C2-N3	8.32	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	731	G	C6-N1	8.32	1.45	1.39
21	AA	1503	A	C6-N6	8.32	1.40	1.33
57	BB	1595	C	N3-C4	8.32	1.39	1.33
57	BB	222	A	C5-C4	8.32	1.44	1.38
57	BB	1661	G	N9-C4	8.32	1.44	1.38
57	BB	279	A	C8-N7	-8.31	1.25	1.31
57	BB	1650	A	P-O5'	8.31	1.68	1.59
21	AA	1107	C	C4'-C3'	-8.31	1.44	1.53
21	AA	1363	A	C2'-C1'	-8.31	1.44	1.53
57	BB	384	A	C5'-C4'	8.31	1.61	1.51
57	BB	1933	G	C8-N7	-8.31	1.25	1.30
22	AY	27	C	C2-N3	8.31	1.42	1.35
57	BB	2209	G	C4'-C3'	-8.30	1.44	1.53
57	BB	1487	U	N1-C6	-8.30	1.30	1.38
21	AA	587	G	N9-C8	8.30	1.43	1.37
57	BB	107	G	C5-C4	8.30	1.44	1.38
57	BB	399	U	N1-C2	8.30	1.46	1.38
57	BB	432	A	N7-C5	-8.30	1.34	1.39
57	BB	793	A	C8-N7	-8.30	1.25	1.31
57	BB	969	G	N1-C2	8.30	1.44	1.37
57	BB	2416	C	N3-C4	8.30	1.39	1.33
57	BB	2337	G	N1-C2	8.30	1.44	1.37
21	AA	476	U	C2'-C1'	-8.29	1.44	1.53
57	BB	578	G	N1-C2	8.30	1.44	1.37
57	BB	2709	G	O3'-P	-8.30	1.51	1.61
57	BB	2873	A	N9-C4	8.30	1.42	1.37
58	BA	118	C	C2'-C1'	-8.29	1.44	1.53
26	AV	13	C	C4-N4	8.29	1.41	1.33
57	BB	349	U	P-O5'	-8.29	1.51	1.59
57	BB	2107	G	C2'-C1'	-8.29	1.44	1.53
57	BB	2788	C	C2-N3	8.29	1.42	1.35
57	BB	2829	A	C8-N7	-8.29	1.25	1.31
21	AA	186	C	C3'-C2'	-8.29	1.43	1.52
26	AV	63	G	C5-C6	-8.29	1.34	1.42
57	BB	2063	C	N1-C6	8.29	1.42	1.37
57	BB	2832	U	C5'-C4'	8.29	1.61	1.51
57	BB	2847	U	C4'-O4'	-8.29	1.34	1.45
57	BB	1673	G	N7-C5	-8.29	1.34	1.39
21	AA	884	U	N3-C4	8.28	1.46	1.38
21	AA	1517	G	C2-N2	8.28	1.42	1.34
57	BB	1954	G	C6-N1	8.29	1.45	1.39
21	AA	982	U	C2'-C1'	-8.28	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1646	C	O3'-P	-8.28	1.51	1.61
57	BB	2250	G	C2-N3	8.28	1.39	1.32
57	BB	2437	G	N3-C4	-8.28	1.29	1.35
21	AA	266	G	N1-C2	8.28	1.44	1.37
57	BB	1620	G	C2'-C1'	-8.28	1.44	1.53
21	AA	1210	C	N3-C4	8.28	1.39	1.33
57	BB	105	C	N3-C4	8.28	1.39	1.33
57	BB	2422	C	N3-C4	8.28	1.39	1.33
57	BB	489	G	N1-C2	8.28	1.44	1.37
21	AA	765	G	C8-N7	-8.28	1.25	1.30
57	BB	810	U	C2-N3	8.28	1.43	1.37
57	BB	1733	G	C4'-C3'	-8.28	1.44	1.53
57	BB	2703	C	N3-C4	8.28	1.39	1.33
57	BB	2749	A	P-O5'	-8.28	1.51	1.59
21	AA	704	A	N7-C5	-8.27	1.34	1.39
57	BB	954	G	C5-C6	-8.27	1.34	1.42
57	BB	2416	C	P-O5'	-8.27	1.51	1.59
37	BR	83	TYR	CG-CD2	8.27	1.50	1.39
57	BB	270	A	N3-C4	-8.27	1.29	1.34
57	BB	954	G	C8-N7	-8.27	1.25	1.30
57	BB	1418	G	P-O5'	-8.27	1.51	1.59
21	AA	350	G	N1-C2	8.27	1.44	1.37
21	AA	764	C	C2'-C1'	-8.27	1.44	1.53
57	BB	208	C	C1'-N1	8.27	1.61	1.48
21	AA	461	A	C5-C4	8.27	1.44	1.38
57	BB	745	G	N7-C5	-8.27	1.34	1.39
57	BB	2207	C	N1-C6	8.27	1.42	1.37
57	BB	2601	C	C2'-C1'	-8.27	1.44	1.53
21	AA	890	G	N3-C4	8.27	1.41	1.35
57	BB	2630	G	N7-C5	-8.27	1.34	1.39
58	BA	2	G	P-O5'	-8.27	1.51	1.59
57	BB	517	C	C2-N3	8.26	1.42	1.35
21	AA	371	A	C5-C4	-8.26	1.32	1.38
21	AA	1070	U	C2-N3	8.26	1.43	1.37
57	BB	233	A	C6-N6	8.26	1.40	1.33
21	AA	768	A	P-O5'	-8.26	1.51	1.59
21	AA	1415	G	N9-C8	-8.26	1.32	1.37
57	BB	444	C	C4-N4	8.26	1.41	1.33
57	BB	2631	G	N9-C8	8.26	1.43	1.37
21	AA	1170	A	N7-C5	-8.26	1.34	1.39
57	BB	926	G	N7-C5	-8.26	1.34	1.39
57	BB	2518	A	C6-N1	8.26	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2583	G	N9-C8	8.26	1.43	1.37
57	BB	2608	G	C3'-O3'	8.26	1.53	1.42
57	BB	2800	A	P-O5'	-8.26	1.51	1.59
22	AY	58	A	C8-N7	-8.26	1.25	1.31
57	BB	542	C	N1-C6	8.26	1.42	1.37
57	BB	9	G	C6-N1	8.25	1.45	1.39
57	BB	622	G	N1-C2	8.25	1.44	1.37
57	BB	2492	U	N3-C4	8.25	1.45	1.38
57	BB	786	C	N3-C4	8.25	1.39	1.33
57	BB	1232	G	C6-N1	8.25	1.45	1.39
57	BB	2288	A	N9-C8	8.25	1.44	1.37
57	BB	2751	G	N3-C4	8.25	1.41	1.35
21	AA	1033	G	N7-C5	-8.24	1.34	1.39
22	AY	56	C	C5-C6	8.24	1.41	1.34
57	BB	51	G	C4'-C3'	-8.24	1.44	1.53
57	BB	1543	G	N3-C4	8.24	1.41	1.35
57	BB	2590	A	N3-C4	-8.24	1.29	1.34
21	AA	151	A	C6-N6	8.24	1.40	1.33
21	AA	1158	C	N3-C4	8.24	1.39	1.33
21	AA	1489	G	N9-C8	8.24	1.43	1.37
57	BB	893	C	N1-C6	8.24	1.42	1.37
57	BB	1218	G	C5-C4	-8.24	1.32	1.38
57	BB	1424	G	C5'-C4'	8.24	1.61	1.51
21	AA	1053	G	N3-C4	-8.24	1.29	1.35
21	AA	1184	G	C5-C4	-8.24	1.32	1.38
57	BB	1377	G	O3'-P	-8.24	1.51	1.61
57	BB	2582	G	C2-N3	8.24	1.39	1.32
57	BB	2676	C	N3-C4	8.24	1.39	1.33
9	AR	50	TYR	CG-CD2	8.23	1.49	1.39
57	BB	171	U	P-O5'	-8.23	1.51	1.59
57	BB	429	A	C6-N6	8.23	1.40	1.33
57	BB	794	A	C2'-C1'	-8.23	1.44	1.53
57	BB	987	C	C2'-C1'	-8.23	1.44	1.53
21	AA	579	A	C6-N6	8.23	1.40	1.33
21	AA	803	G	C2-N3	8.23	1.39	1.32
21	AA	1403	C	N3-C4	8.23	1.39	1.33
57	BB	8	C	C2-N3	8.23	1.42	1.35
57	BB	1623	G	C5-C4	8.23	1.44	1.38
57	BB	829	A	C6-N6	8.23	1.40	1.33
57	BB	1259	G	N7-C5	-8.23	1.34	1.39
57	BB	1656	C	C4-N4	8.23	1.41	1.33
21	AA	1018	G	N7-C5	-8.22	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1020	A	C6-N6	8.22	1.40	1.33
57	BB	1561	C	C4-N4	8.22	1.41	1.33
57	BB	1166	G	C2'-C1'	-8.22	1.44	1.53
57	BB	1666	G	C6-N1	8.22	1.45	1.39
57	BB	1734	G	N7-C5	-8.22	1.34	1.39
57	BB	2137	U	C4-O4	-8.22	1.17	1.23
21	AA	383	A	C6-N1	8.22	1.41	1.35
21	AA	1201	A	O3'-P	-8.22	1.51	1.61
57	BB	1699	G	N9-C4	8.22	1.44	1.38
57	BB	2488	G	C6-N1	8.22	1.45	1.39
57	BB	2697	G	N9-C8	-8.22	1.32	1.37
21	AA	200	G	N9-C4	-8.22	1.31	1.38
21	AA	885	G	N7-C5	-8.22	1.34	1.39
57	BB	1521	G	C5-C4	8.22	1.44	1.38
57	BB	798	G	N9-C4	-8.22	1.31	1.38
57	BB	1364	G	N3-C4	-8.22	1.29	1.35
57	BB	2670	A	C3'-C2'	-8.22	1.43	1.52
21	AA	97	G	C5-C4	8.22	1.44	1.38
21	AA	700	G	N3-C4	-8.21	1.29	1.35
26	AV	48	C	C5-C6	8.21	1.41	1.34
57	BB	1028	A	C3'-C2'	-8.22	1.43	1.52
57	BB	1169	A	N3-C4	8.22	1.39	1.34
57	BB	623	C	N3-C4	8.21	1.39	1.33
57	BB	1568	G	C6-N1	8.21	1.45	1.39
57	BB	1221	C	C2'-C1'	-8.21	1.44	1.53
21	AA	77	A	C2'-C1'	-8.21	1.44	1.53
21	AA	511	C	N3-C4	8.21	1.39	1.33
21	AA	942	G	N7-C5	-8.21	1.34	1.39
22	AY	31	A	N3-C4	-8.21	1.29	1.34
57	BB	107	G	P-O5'	-8.21	1.51	1.59
57	BB	180	G	C5'-C4'	8.21	1.61	1.51
57	BB	232	G	N7-C5	8.21	1.44	1.39
21	AA	505	G	N1-C2	8.21	1.44	1.37
26	AV	46	G	N9-C8	8.21	1.43	1.37
21	AA	195	A	N3-C4	-8.21	1.29	1.34
23	AW	52	G	C4'-C3'	8.21	1.62	1.53
57	BB	84	A	C6-N6	8.21	1.40	1.33
57	BB	2303	G	P-O5'	-8.21	1.51	1.59
21	AA	29	U	C5'-C4'	8.20	1.61	1.51
22	AY	2	C	C4-N4	8.20	1.41	1.33
57	BB	834	G	C2-N3	8.20	1.39	1.32
57	BB	1191	G	N9-C8	-8.20	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1619	G	N7-C5	-8.20	1.34	1.39
57	BB	1622	G	N9-C8	8.20	1.43	1.37
57	BB	1812	U	N3-C4	8.20	1.45	1.38
21	AA	859	G	C8-N7	-8.20	1.26	1.30
21	AA	1099	G	N7-C5	-8.20	1.34	1.39
26	AV	75	C	C2-N3	8.20	1.42	1.35
57	BB	689	A	N9-C4	8.20	1.42	1.37
57	BB	2103	C	N3-C4	8.20	1.39	1.33
21	AA	257	G	C2'-C1'	-8.20	1.44	1.53
21	AA	524	G	N9-C4	-8.20	1.31	1.38
21	AA	1151	A	N3-C4	-8.20	1.29	1.34
57	BB	976	G	C5-C4	8.20	1.44	1.38
57	BB	1862	G	P-O5'	-8.20	1.51	1.59
22	AY	64	A	C5'-C4'	8.20	1.61	1.51
21	AA	910	C	N3-C4	8.19	1.39	1.33
21	AA	356	A	N7-C5	-8.19	1.34	1.39
57	BB	367	G	N9-C4	-8.19	1.31	1.38
57	BB	1432	G	N1-C2	8.19	1.44	1.37
57	BB	1762	A	N7-C5	-8.19	1.34	1.39
57	BB	2433	A	C6-N6	8.19	1.40	1.33
57	BB	2674	G	P-O5'	-8.19	1.51	1.59
57	BB	1815	A	C6-N6	8.19	1.40	1.33
57	BB	2190	G	C2'-C1'	-8.19	1.44	1.53
57	BB	2596	U	N1-C6	-8.19	1.30	1.38
21	AA	456	A	C6-N6	8.19	1.40	1.33
57	BB	1483	G	C2'-C1'	-8.19	1.44	1.53
57	BB	2107	G	C4'-O4'	8.19	1.56	1.45
57	BB	2348	U	C2'-C1'	-8.19	1.44	1.53
21	AA	753	A	C6-N1	8.19	1.41	1.35
21	AA	991	U	P-O5'	8.19	1.68	1.59
21	AA	1000	A	C5-C4	8.19	1.44	1.38
57	BB	916	G	P-O5'	-8.19	1.51	1.59
57	BB	2318	G	C8-N7	-8.19	1.26	1.30
21	AA	94	G	C6-N1	8.18	1.45	1.39
57	BB	1556	C	N3-C4	8.18	1.39	1.33
57	BB	2062	A	C6-N1	8.18	1.41	1.35
57	BB	2302	U	C2-N3	8.18	1.43	1.37
57	BB	2431	U	C3'-O3'	8.18	1.53	1.42
21	AA	1174	G	C6-N1	8.18	1.45	1.39
57	BB	410	G	C3'-C2'	-8.18	1.43	1.52
57	BB	953	G	N7-C5	-8.18	1.34	1.39
21	AA	309	A	C8-N7	-8.18	1.25	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1090	U	C2-N3	8.18	1.43	1.37
57	BB	1462	C	C4-N4	8.18	1.41	1.33
57	BB	2286	G	C2-N3	8.18	1.39	1.32
21	AA	811	C	N3-C4	8.18	1.39	1.33
21	AA	1458	G	C2-N3	8.18	1.39	1.32
21	AA	1476	A	C6-N6	8.18	1.40	1.33
57	BB	234	U	N3-C4	8.18	1.45	1.38
57	BB	395	U	C3'-C2'	-8.18	1.43	1.52
57	BB	491	G	N1-C2	8.18	1.44	1.37
57	BB	2663	G	N9-C8	8.18	1.43	1.37
21	AA	446	G	C5-C4	8.17	1.44	1.38
57	BB	1845	G	N9-C8	-8.17	1.32	1.37
21	AA	714	G	C2'-C1'	-8.17	1.44	1.53
57	BB	21	A	C2'-C1'	-8.17	1.44	1.53
57	BB	640	C	N1-C6	8.17	1.42	1.37
57	BB	2308	G	C4'-C3'	8.17	1.62	1.53
57	BB	218	A	C6-N1	8.17	1.41	1.35
57	BB	1028	A	N9-C8	-8.17	1.31	1.37
57	BB	1966	A	C4'-C3'	8.17	1.62	1.53
57	BB	2152	G	O3'-P	-8.17	1.51	1.61
57	BB	2161	C	C4-N4	8.17	1.41	1.33
21	AA	1170	A	C6-N6	8.17	1.40	1.33
57	BB	312	G	C2-N3	8.17	1.39	1.32
57	BB	457	A	N3-C4	8.17	1.39	1.34
57	BB	1042	G	N9-C4	-8.17	1.31	1.38
57	BB	2363	G	C6-N1	8.17	1.45	1.39
21	AA	24	U	P-O5'	-8.16	1.51	1.59
21	AA	306	A	O3'-P	-8.16	1.51	1.61
21	AA	371	A	C6-N6	8.16	1.40	1.33
57	BB	2249	U	O3'-P	-8.16	1.51	1.61
57	BB	670	A	C5-C4	8.16	1.44	1.38
57	BB	713	G	N7-C5	-8.16	1.34	1.39
57	BB	1120	G	C2-N3	8.16	1.39	1.32
57	BB	1768	C	P-O5'	-8.16	1.51	1.59
21	AA	724	G	C6-N1	8.16	1.45	1.39
21	AA	1136	C	N3-C4	8.16	1.39	1.33
57	BB	2513	A	P-O5'	-8.16	1.51	1.59
33	BN	118	ARG	CZ-NH2	8.16	1.43	1.33
57	BB	1361	G	O3'-P	-8.16	1.51	1.61
57	BB	1413	A	N3-C4	-8.16	1.29	1.34
57	BB	1715	G	N9-C8	-8.16	1.32	1.37
57	BB	2267	A	N7-C5	-8.16	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1525	G	C2-N3	8.15	1.39	1.32
57	BB	2568	U	C2-N3	8.15	1.43	1.37
22	AY	34	G	N9-C4	-8.15	1.31	1.38
43	BX	51	SER	CA-CB	8.15	1.65	1.52
57	BB	183	C	C2'-C1'	-8.15	1.44	1.53
57	BB	2481	G	C6-N1	8.15	1.45	1.39
21	AA	268	U	C4'-C3'	8.15	1.62	1.53
21	AA	237	G	C6-N1	8.15	1.45	1.39
57	BB	1730	C	N1-C6	8.15	1.42	1.37
21	AA	609	A	N3-C4	-8.15	1.29	1.34
57	BB	1573	G	N3-C4	-8.15	1.29	1.35
57	BB	1784	A	P-O5'	-8.15	1.51	1.59
21	AA	875	U	N3-C4	8.15	1.45	1.38
21	AA	923	A	C4'-C3'	8.15	1.62	1.53
57	BB	1764	C	N1-C6	8.15	1.42	1.37
57	BB	1773	A	C6-N6	8.15	1.40	1.33
57	BB	182	A	C2'-C1'	-8.14	1.44	1.53
21	AA	322	C	N1-C6	8.14	1.42	1.37
21	AA	1369	C	C4-C5	8.14	1.49	1.43
57	BB	2777	G	O3'-P	-8.14	1.51	1.61
57	BB	2833	U	C4-O4	8.14	1.30	1.23
21	AA	135	C	C2-N3	8.14	1.42	1.35
21	AA	264	C	N1-C6	8.14	1.42	1.37
21	AA	412	A	C5-C4	8.14	1.44	1.38
57	BB	2003	A	C5-C4	8.14	1.44	1.38
21	AA	242	G	N1-C2	8.14	1.44	1.37
21	AA	1084	G	C8-N7	8.14	1.35	1.30
57	BB	195	A	C8-N7	-8.14	1.25	1.31
57	BB	473	G	N7-C5	-8.14	1.34	1.39
57	BB	1575	C	C2'-C1'	-8.14	1.44	1.53
57	BB	2605	U	C2-N3	8.14	1.43	1.37
21	AA	1272	G	N9-C8	8.14	1.43	1.37
22	AY	55	U	C1'-N1	8.13	1.60	1.48
57	BB	712	G	N3-C4	-8.14	1.29	1.35
57	BB	1899	A	C6-N1	8.14	1.41	1.35
21	AA	317	U	C2'-C1'	-8.13	1.44	1.53
21	AA	683	G	N1-C2	8.13	1.44	1.37
21	AA	840	C	C5'-C4'	8.13	1.61	1.51
57	BB	513	A	C6-N6	8.13	1.40	1.33
21	AA	324	G	N7-C5	-8.13	1.34	1.39
21	AA	1222	G	C6-N1	8.13	1.45	1.39
57	BB	2589	A	N9-C8	-8.13	1.31	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	111	G	C2-N3	8.13	1.39	1.32
21	AA	1104	G	N1-C2	8.13	1.44	1.37
57	BB	44	A	N7-C5	-8.13	1.34	1.39
57	BB	253	C	C3'-C2'	-8.13	1.43	1.52
57	BB	311	A	N9-C4	-8.13	1.32	1.37
57	BB	1252	G	C5-C4	8.13	1.44	1.38
57	BB	1515	A	N7-C5	-8.13	1.34	1.39
21	AA	68	G	C5'-C4'	8.13	1.61	1.51
21	AA	480	U	C1'-N1	8.12	1.60	1.48
21	AA	693	G	C2-N3	8.12	1.39	1.32
21	AA	1462	C	C2'-C1'	-8.12	1.44	1.53
57	BB	1443	U	C1'-N1	8.12	1.60	1.48
57	BB	1558	C	C4-C5	8.13	1.49	1.43
57	BB	2816	G	C5'-C4'	8.12	1.61	1.51
57	BB	2882	A	N9-C4	8.12	1.42	1.37
21	AA	398	U	C4-C5	8.12	1.50	1.43
21	AA	1193	G	N1-C2	8.12	1.44	1.37
21	AA	1428	A	C6-N6	8.12	1.40	1.33
57	BB	95	A	N3-C4	8.12	1.39	1.34
57	BB	2299	U	P-O5'	-8.12	1.51	1.59
57	BB	2386	A	N9-C4	8.12	1.42	1.37
58	BA	76	G	N3-C4	-8.12	1.29	1.35
57	BB	88	G	C2-N3	8.12	1.39	1.32
57	BB	836	G	N7-C5	8.12	1.44	1.39
57	BB	1941	C	C3'-O3'	8.12	1.53	1.42
21	AA	289	G	N1-C2	8.12	1.44	1.37
21	AA	517	G	N7-C5	-8.12	1.34	1.39
57	BB	367	G	C5-C6	-8.12	1.34	1.42
22	AY	56	C	O4'-C1'	8.12	1.52	1.41
23	AW	5	G	C2-N3	8.12	1.39	1.32
57	BB	66	C	P-O5'	-8.12	1.51	1.59
21	AA	1187	G	N9-C4	8.12	1.44	1.38
21	AA	1264	U	P-O5'	-8.12	1.51	1.59
57	BB	2353	G	C2'-C1'	-8.12	1.44	1.53
21	AA	725	G	N1-C2	8.11	1.44	1.37
57	BB	909	A	N7-C5	-8.12	1.34	1.39
57	BB	983	A	C2'-C1'	-8.11	1.44	1.53
57	BB	1019	U	C2-N3	8.12	1.43	1.37
57	BB	1254	A	N7-C5	-8.12	1.34	1.39
21	AA	195	A	N9-C4	8.11	1.42	1.37
21	AA	951	G	C8-N7	8.11	1.35	1.30
22	AY	67	A	N7-C5	-8.11	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	69	G	O3'-P	-8.11	1.51	1.61
21	AA	236	A	C6-N6	8.11	1.40	1.33
21	AA	459	A	N3-C4	8.11	1.39	1.34
26	AV	61	C	C4-N4	8.11	1.41	1.33
57	BB	1353	A	C6-N1	8.11	1.41	1.35
21	AA	20	U	C2-N3	8.11	1.43	1.37
21	AA	1057	G	C6-N1	8.11	1.45	1.39
57	BB	141	G	C8-N7	-8.11	1.26	1.30
57	BB	575	A	C6-N6	8.11	1.40	1.33
57	BB	1871	A	C5-C6	-8.11	1.33	1.41
57	BB	2144	G	N9-C8	-8.11	1.32	1.37
57	BB	1918	A	N7-C5	-8.11	1.34	1.39
57	BB	2084	C	N3-C4	8.11	1.39	1.33
57	BB	2726	A	N7-C5	-8.11	1.34	1.39
21	AA	576	C	N3-C4	8.11	1.39	1.33
57	BB	223	A	C6-N1	8.11	1.41	1.35
57	BB	1198	U	O3'-P	-8.11	1.51	1.61
21	AA	890	G	N1-C2	8.11	1.44	1.37
21	AA	939	G	N1-C2	8.11	1.44	1.37
57	BB	1400	U	C2'-C1'	-8.10	1.44	1.53
21	AA	1420	U	C2-N3	8.10	1.43	1.37
57	BB	1892	C	N1-C6	8.10	1.42	1.37
57	BB	2624	G	C2-N2	8.10	1.42	1.34
21	AA	69	G	N1-C2	8.10	1.44	1.37
21	AA	1285	A	O3'-P	-8.10	1.51	1.61
22	AY	30	G	C2-N3	8.10	1.39	1.32
57	BB	1726	C	C4-C5	8.10	1.49	1.43
57	BB	2595	G	C8-N7	-8.10	1.26	1.30
21	AA	404	G	C5-C6	-8.09	1.34	1.42
1	AJ	62	ARG	NE-CZ	8.09	1.43	1.33
21	AA	424	G	O3'-P	-8.09	1.51	1.61
21	AA	1051	C	N3-C4	8.09	1.39	1.33
57	BB	186	G	C3'-C2'	8.09	1.61	1.52
57	BB	463	G	N3-C4	-8.09	1.29	1.35
57	BB	629	G	C3'-O3'	8.09	1.53	1.42
57	BB	1388	G	N7-C5	-8.09	1.34	1.39
21	AA	571	U	N1-C6	-8.09	1.30	1.38
57	BB	2142	A	C6-N6	8.09	1.40	1.33
57	BB	2221	G	C5'-C4'	8.09	1.61	1.51
22	AY	29	A	C5-C4	8.09	1.44	1.38
57	BB	522	A	O3'-P	-8.09	1.51	1.61
21	AA	314	C	C4-N4	8.09	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1442	G	C3'-C2'	8.09	1.61	1.52
57	BB	972	A	C6-N6	8.09	1.40	1.33
57	BB	1102	C	C4'-O4'	-8.09	1.35	1.45
57	BB	1541	C	C4-N4	8.09	1.41	1.33
21	AA	1173	U	N3-C4	8.09	1.45	1.38
21	AA	1176	A	C2'-C1'	-8.09	1.44	1.53
57	BB	475	C	N3-C4	8.09	1.39	1.33
57	BB	621	A	C6-N6	8.09	1.40	1.33
57	BB	1040	A	N7-C5	-8.09	1.34	1.39
57	BB	1904	G	C2-N3	8.09	1.39	1.32
57	BB	1939	U	C2'-C1'	-8.09	1.44	1.53
21	AA	702	A	C5-C4	8.08	1.44	1.38
57	BB	992	C	C4-N4	8.08	1.41	1.33
57	BB	1804	C	N1-C6	-8.08	1.32	1.37
57	BB	2540	C	C4'-O4'	8.08	1.56	1.45
21	AA	772	U	O4'-C1'	8.08	1.52	1.41
21	AA	841	C	C4-N4	8.08	1.41	1.33
21	AA	995	C	C3'-C2'	-8.08	1.43	1.52
21	AA	1171	A	C6-N6	8.08	1.40	1.33
22	AY	16	U	N1-C2	8.08	1.45	1.38
57	BB	1824	G	C5-C4	-8.08	1.32	1.38
57	BB	2531	A	N9-C4	8.08	1.42	1.37
21	AA	421	U	C2'-C1'	-8.08	1.44	1.53
57	BB	1929	G	P-O5'	-8.08	1.51	1.59
21	AA	1021	A	C3'-C2'	-8.08	1.43	1.52
57	BB	101	A	C6-N1	8.08	1.41	1.35
57	BB	2326	C	O3'-P	-8.08	1.51	1.61
57	BB	2636	C	C4-N4	8.08	1.41	1.33
57	BB	2854	G	N1-C2	8.08	1.44	1.37
21	AA	424	G	N1-C2	8.07	1.44	1.37
57	BB	468	G	N3-C4	-8.07	1.29	1.35
57	BB	1333	G	C2'-C1'	-8.07	1.44	1.53
57	BB	1544	A	C6-N1	8.07	1.41	1.35
57	BB	2467	C	O3'-P	-8.07	1.51	1.61
57	BB	2156	G	N1-C2	8.07	1.44	1.37
57	BB	2183	A	C6-N1	8.07	1.41	1.35
57	BB	1847	A	C3'-C2'	8.07	1.61	1.52
57	BB	2732	G	C2-N3	8.07	1.39	1.32
57	BB	409	G	C2-N3	8.07	1.39	1.32
57	BB	1008	A	N7-C5	-8.07	1.34	1.39
22	AY	25	C	C4'-O4'	-8.06	1.35	1.45
57	BB	1418	G	C2'-C1'	-8.06	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2154	A	C8-N7	-8.06	1.25	1.31
26	AV	15	G	N9-C8	8.06	1.43	1.37
57	BB	485	C	C4-N4	8.06	1.41	1.33
57	BB	2885	G	C2-N3	8.06	1.39	1.32
57	BB	1365	A	C6-N1	8.06	1.41	1.35
57	BB	1761	C	P-O5'	-8.06	1.51	1.59
57	BB	737	C	N3-C4	8.06	1.39	1.33
57	BB	2590	A	C6-N1	8.06	1.41	1.35
21	AA	715	A	C6-N1	8.06	1.41	1.35
57	BB	1643	G	C6-N1	8.06	1.45	1.39
57	BB	2300	C	C2'-C1'	-8.05	1.44	1.53
57	BB	2328	A	C4'-C3'	8.06	1.62	1.53
21	AA	187	G	C5'-C4'	8.05	1.61	1.51
21	AA	250	A	N3-C4	-8.05	1.30	1.34
21	AA	1337	G	N7-C5	-8.05	1.34	1.39
21	AA	1349	A	C5-C4	8.05	1.44	1.38
21	AA	1509	C	C5'-C4'	8.05	1.61	1.51
57	BB	2742	G	C2-N3	8.06	1.39	1.32
21	AA	38	G	N7-C5	-8.05	1.34	1.39
21	AA	473	U	C5'-C4'	8.05	1.61	1.51
21	AA	1525	G	N1-C2	8.05	1.44	1.37
57	BB	1672	A	N7-C5	-8.05	1.34	1.39
57	BB	1974	C	P-O5'	-8.05	1.51	1.59
57	BB	103	A	C5-C6	8.05	1.48	1.41
21	AA	453	G	N9-C8	-8.05	1.32	1.37
21	AA	599	C	N3-C4	8.05	1.39	1.33
57	BB	764	A	C4'-C3'	8.05	1.62	1.53
21	AA	222	C	C2-N3	8.05	1.42	1.35
21	AA	373	A	N7-C5	-8.05	1.34	1.39
57	BB	165	A	C8-N7	-8.05	1.25	1.31
57	BB	1162	G	P-O5'	-8.05	1.51	1.59
21	AA	662	U	P-O5'	-8.05	1.51	1.59
21	AA	1283	U	C2'-C1'	-8.04	1.44	1.53
57	BB	57	C	N3-C4	8.04	1.39	1.33
57	BB	894	U	C4'-O4'	-8.04	1.35	1.45
57	BB	2199	A	P-O5'	-8.04	1.51	1.59
57	BB	2328	A	C6-N6	8.04	1.40	1.33
21	AA	1046	A	C6-N6	8.04	1.40	1.33
57	BB	105	C	C2'-C1'	-8.04	1.44	1.53
57	BB	470	A	C5-C6	-8.04	1.33	1.41
57	BB	863	A	C6-N1	8.04	1.41	1.35
57	BB	2351	G	P-O5'	8.04	1.67	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1216	G	O3'-P	-8.04	1.51	1.61
57	BB	1270	C	P-O5'	-8.04	1.51	1.59
22	AY	15	G	C5-C6	8.03	1.50	1.42
57	BB	1588	G	N1-C2	8.04	1.44	1.37
57	BB	2490	G	C5-C4	8.03	1.44	1.38
21	AA	1422	G	N1-C2	8.03	1.44	1.37
57	BB	181	A	C2'-C1'	-8.03	1.44	1.53
57	BB	578	G	N7-C5	-8.03	1.34	1.39
21	AA	366	A	N9-C4	8.03	1.42	1.37
21	AA	727	G	C2-N3	8.03	1.39	1.32
21	AA	1395	C	N3-C4	8.03	1.39	1.33
57	BB	605	G	C8-N7	8.03	1.35	1.30
57	BB	651	G	N3-C4	8.03	1.41	1.35
21	AA	399	G	C3'-O3'	8.03	1.53	1.42
57	BB	46	G	C2'-C1'	-8.03	1.44	1.53
57	BB	1363	C	O4'-C1'	8.03	1.52	1.41
57	BB	1632	A	C6-N1	8.03	1.41	1.35
57	BB	1999	C	C4-N4	8.03	1.41	1.33
10	AS	36	ARG	CZ-NH2	8.03	1.43	1.33
22	AY	20	G	N7-C5	8.03	1.44	1.39
57	BB	730	A	C8-N7	-8.03	1.25	1.31
57	BB	757	G	N7-C5	8.03	1.44	1.39
57	BB	977	G	C6-N1	8.03	1.45	1.39
57	BB	1142	A	N3-C4	-8.03	1.30	1.34
57	BB	1600	C	C3'-C2'	-8.03	1.44	1.52
57	BB	1623	G	C6-N1	8.03	1.45	1.39
21	AA	901	A	N1-C2	-8.02	1.27	1.34
21	AA	1515	G	C6-N1	8.02	1.45	1.39
57	BB	1188	U	C4-C5	-8.02	1.36	1.43
57	BB	2609	U	N3-C4	8.02	1.45	1.38
21	AA	402	G	C5-C4	-8.02	1.32	1.38
57	BB	1285	A	C2'-C1'	-8.02	1.44	1.53
57	BB	1357	C	N1-C6	8.02	1.42	1.37
57	BB	1664	A	N9-C8	8.02	1.44	1.37
21	AA	905	U	N1-C2	8.02	1.45	1.38
57	BB	695	G	C2'-C1'	-8.02	1.44	1.53
21	AA	1436	U	N1-C2	8.02	1.45	1.38
22	AY	67	A	N9-C8	-8.02	1.31	1.37
57	BB	1374	G	N9-C8	8.02	1.43	1.37
57	BB	1466	U	C2-N3	8.02	1.43	1.37
57	BB	1923	U	C2-N3	8.02	1.43	1.37
21	AA	478	A	N7-C5	-8.01	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1614	A	N1-C2	8.01	1.41	1.34
21	AA	876	C	N3-C4	8.01	1.39	1.33
57	BB	2461	A	N9-C4	8.01	1.42	1.37
21	AA	27	G	N7-C5	-8.01	1.34	1.39
57	BB	503	A	N7-C5	-8.01	1.34	1.39
21	AA	188	C	N1-C6	8.01	1.42	1.37
57	BB	1431	A	N3-C4	-8.01	1.30	1.34
57	BB	2643	G	C8-N7	8.01	1.35	1.30
57	BB	1547	C	N1-C6	8.01	1.42	1.37
57	BB	1911	U	C3'-C2'	8.01	1.61	1.52
21	AA	360	G	C6-N1	8.01	1.45	1.39
21	AA	795	C	N1-C6	-8.01	1.32	1.37
21	AA	495	A	N9-C8	8.01	1.44	1.37
21	AA	1229	A	N3-C4	8.01	1.39	1.34
57	BB	20	C	C4-C5	8.01	1.49	1.43
57	BB	2610	C	N3-C4	8.01	1.39	1.33
21	AA	177	G	C8-N7	-8.00	1.26	1.30
21	AA	537	G	C2'-C1'	-8.00	1.44	1.53
21	AA	790	A	C6-N1	8.00	1.41	1.35
57	BB	2393	U	N1-C6	8.00	1.45	1.38
21	AA	700	G	C2-N2	8.00	1.42	1.34
21	AA	1204	A	C6-N1	8.00	1.41	1.35
21	AA	1343	G	C5'-C4'	8.00	1.60	1.51
22	AY	49	C	C4-N4	8.00	1.41	1.33
57	BB	525	U	C4-C5	8.00	1.50	1.43
57	BB	2269	G	C8-N7	-8.00	1.26	1.30
58	BA	84	G	N9-C8	-8.00	1.32	1.37
57	BB	680	C	C5'-C4'	8.00	1.60	1.51
57	BB	803	U	C2-N3	8.00	1.43	1.37
21	AA	567	G	C5-C4	8.00	1.44	1.38
21	AA	674	G	C2'-C1'	-8.00	1.44	1.53
21	AA	1301	U	C1'-N1	8.00	1.60	1.48
57	BB	407	G	C2-N3	8.00	1.39	1.32
57	BB	2710	C	N1-C6	-8.00	1.32	1.37
21	AA	9	G	P-O5'	-8.00	1.51	1.59
21	AA	108	G	C2-N3	8.00	1.39	1.32
21	AA	742	G	P-O5'	-8.00	1.51	1.59
21	AA	394	G	N1-C2	8.00	1.44	1.37
57	BB	567	U	C2-N3	8.00	1.43	1.37
21	AA	1013	G	C2-N3	7.99	1.39	1.32
21	AA	1309	G	N9-C4	7.99	1.44	1.38
57	BB	20	C	C4-N4	7.99	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	27	G	C5'-C4'	7.99	1.60	1.51
21	AA	748	G	C2-N3	7.99	1.39	1.32
57	BB	548	G	N3-C4	7.99	1.41	1.35
57	BB	691	C	C3'-C2'	7.99	1.61	1.52
57	BB	950	G	C6-N1	7.99	1.45	1.39
57	BB	1186	G	C6-N1	7.99	1.45	1.39
57	BB	1731	G	N3-C4	-7.99	1.29	1.35
57	BB	2204	G	P-O5'	-7.99	1.51	1.59
57	BB	367	G	N1-C2	7.99	1.44	1.37
57	BB	1521	G	C5-C6	-7.99	1.34	1.42
21	AA	566	G	C2'-C1'	-7.99	1.44	1.53
21	AA	1329	A	C2-N3	7.99	1.40	1.33
57	BB	45	G	C6-N1	7.99	1.45	1.39
21	AA	912	C	C4-N4	7.99	1.41	1.33
23	AW	44	G	N3-C4	7.99	1.41	1.35
57	BB	794	A	C6-N6	7.99	1.40	1.33
57	BB	1664	A	P-O5'	-7.99	1.51	1.59
57	BB	2235	G	O3'-P	-7.99	1.51	1.61
57	BB	2364	C	N3-C4	7.99	1.39	1.33
57	BB	2386	A	C2-N3	7.99	1.40	1.33
57	BB	203	A	C6-N6	7.98	1.40	1.33
21	AA	968	A	C2-N3	7.98	1.40	1.33
57	BB	2360	G	C5'-C4'	7.98	1.60	1.51
26	AV	19	G	O4'-C1'	-7.98	1.31	1.41
57	BB	2708	G	C2'-C1'	-7.98	1.44	1.53
21	AA	625	U	C5'-C4'	7.98	1.60	1.51
57	BB	834	G	N1-C2	7.98	1.44	1.37
57	BB	1863	G	N9-C8	7.98	1.43	1.37
57	BB	2452	C	C5-C6	7.98	1.40	1.34
57	BB	2709	G	C5'-C4'	7.98	1.60	1.51
57	BB	2082	A	N7-C5	-7.98	1.34	1.39
57	BB	2802	G	C5-C4	7.98	1.44	1.38
57	BB	2840	C	P-O5'	-7.98	1.51	1.59
57	BB	540	C	C4-N4	7.97	1.41	1.33
57	BB	806	C	P-O5'	-7.97	1.51	1.59
57	BB	1334	G	C2-N3	7.97	1.39	1.32
21	AA	948	C	C5'-C4'	7.97	1.60	1.51
21	AA	1081	A	N3-C4	7.97	1.39	1.34
21	AA	1369	C	N1-C6	7.97	1.42	1.37
57	BB	2487	G	C5-C4	7.97	1.44	1.38
57	BB	2673	G	C8-N7	7.97	1.35	1.30
21	AA	948	C	N1-C6	7.97	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	824	G	C2'-C1'	-7.97	1.44	1.53
57	BB	498	G	N1-C2	7.97	1.44	1.37
57	BB	1326	U	C5'-C4'	7.97	1.60	1.51
22	AY	41	U	C3'-C2'	7.97	1.61	1.52
21	AA	289	G	C6-N1	7.97	1.45	1.39
21	AA	715	A	N9-C4	-7.97	1.33	1.37
21	AA	1523	G	C6-N1	7.97	1.45	1.39
23	AW	21	A	C5-C4	7.97	1.44	1.38
21	AA	490	C	P-O5'	-7.96	1.51	1.59
21	AA	748	G	N3-C4	7.96	1.41	1.35
57	BB	116	C	N3-C4	7.96	1.39	1.33
57	BB	1089	A	C6-N6	7.96	1.40	1.33
57	BB	1598	A	O3'-P	-7.96	1.51	1.61
57	BB	1697	G	N3-C4	7.96	1.41	1.35
58	BA	6	G	N1-C2	7.96	1.44	1.37
58	BA	13	G	N9-C4	7.96	1.44	1.38
21	AA	1488	G	N7-C5	-7.96	1.34	1.39
57	BB	1126	A	C5-C4	7.96	1.44	1.38
21	AA	730	G	P-O5'	-7.96	1.51	1.59
21	AA	1387	G	N9-C4	-7.96	1.31	1.38
21	AA	1410	A	N7-C5	-7.96	1.34	1.39
26	AV	59	A	C8-N7	-7.96	1.25	1.31
57	BB	1853	A	C5-C4	7.96	1.44	1.38
57	BB	2691	C	N1-C6	7.96	1.42	1.37
21	AA	86	G	N1-C2	7.96	1.44	1.37
21	AA	249	U	C2'-C1'	-7.96	1.44	1.53
21	AA	1089	G	C6-N1	7.96	1.45	1.39
21	AA	1489	G	C6-N1	7.96	1.45	1.39
57	BB	170	U	C2-N3	7.96	1.43	1.37
57	BB	465	G	N1-C2	7.96	1.44	1.37
57	BB	1048	A	N1-C2	-7.96	1.27	1.34
57	BB	657	U	C2-N3	7.96	1.43	1.37
57	BB	503	A	C6-N1	7.95	1.41	1.35
57	BB	2538	C	C4-N4	7.95	1.41	1.33
57	BB	1229	C	N1-C6	-7.95	1.32	1.37
57	BB	317	G	C6-N1	7.95	1.45	1.39
57	BB	1560	G	C5-C6	-7.95	1.34	1.42
57	BB	2582	G	C4'-C3'	-7.95	1.44	1.53
57	BB	2754	U	C2-N3	7.95	1.43	1.37
57	BB	664	G	N7-C5	-7.95	1.34	1.39
57	BB	2100	G	C2'-C1'	-7.95	1.44	1.53
21	AA	378	G	N9-C8	7.95	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	824	G	C2-N3	7.95	1.39	1.32
57	BB	256	A	N9-C4	7.95	1.42	1.37
57	BB	2564	A	C2'-C1'	-7.95	1.44	1.53
22	AY	39	U	C4-C5	7.95	1.50	1.43
57	BB	533	G	N3-C4	-7.95	1.29	1.35
57	BB	581	C	N1-C6	7.95	1.42	1.37
57	BB	1377	G	N7-C5	-7.95	1.34	1.39
57	BB	1810	A	C4'-C3'	-7.94	1.44	1.53
23	AW	26	A	C6-N6	7.94	1.40	1.33
57	BB	71	A	N1-C2	-7.94	1.27	1.34
57	BB	1998	A	C8-N7	7.94	1.37	1.31
57	BB	2866	U	O3'-P	-7.94	1.51	1.61
57	BB	789	A	P-O5'	-7.94	1.51	1.59
57	BB	1492	G	C5-C6	7.94	1.50	1.42
57	BB	2470	G	C5-C4	-7.94	1.32	1.38
21	AA	1506	U	C2-N3	7.94	1.43	1.37
24	AX	18	G	C2-N3	7.94	1.39	1.32
57	BB	161	A	C2'-C1'	-7.94	1.44	1.53
57	BB	1686	C	C2-N3	7.94	1.42	1.35
57	BB	2125	G	N9-C8	7.94	1.43	1.37
57	BB	2188	U	C2-N3	7.94	1.43	1.37
57	BB	2311	A	N3-C4	-7.94	1.30	1.34
58	BA	58	A	P-O5'	-7.94	1.51	1.59
21	AA	1332	A	C5-C4	7.93	1.44	1.38
57	BB	63	A	C5-C4	7.93	1.44	1.38
57	BB	1437	C	C4'-O4'	7.93	1.55	1.45
21	AA	339	C	N1-C2	7.93	1.48	1.40
21	AA	1234	C	P-O5'	-7.93	1.51	1.59
57	BB	1718	G	C3'-C2'	-7.93	1.44	1.52
57	BB	580	U	C2'-C1'	-7.93	1.44	1.53
57	BB	2416	C	C4-N4	7.93	1.41	1.33
21	AA	776	G	C2'-C1'	-7.93	1.44	1.53
40	BU	30	SER	CA-CB	7.93	1.64	1.52
57	BB	292	U	C4-C5	7.93	1.50	1.43
57	BB	1553	A	C6-N6	7.93	1.40	1.33
57	BB	1663	G	C4'-C3'	-7.93	1.44	1.53
21	AA	407	U	O3'-P	-7.93	1.51	1.61
21	AA	1029	U	C2-N3	7.93	1.43	1.37
23	AW	50	U	O3'-P	-7.93	1.51	1.61
57	BB	19	A	N9-C4	-7.93	1.33	1.37
57	BB	1718	G	N1-C2	7.93	1.44	1.37
57	BB	1992	G	C8-N7	7.93	1.35	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2017	U	C2-N3	7.93	1.43	1.37
21	AA	135	C	C4'-C3'	-7.92	1.44	1.53
21	AA	157	U	C3'-C2'	-7.92	1.44	1.52
57	BB	1494	A	N3-C4	7.92	1.39	1.34
57	BB	1903	G	C2-N3	7.92	1.39	1.32
57	BB	2064	C	O4'-C1'	7.92	1.51	1.41
21	AA	593	U	C2-N3	7.92	1.43	1.37
57	BB	2107	G	C8-N7	7.92	1.35	1.30
57	BB	2705	A	P-O5'	-7.92	1.51	1.59
21	AA	1103	C	C2-N3	7.92	1.42	1.35
21	AA	496	A	C6-N1	7.92	1.41	1.35
21	AA	637	C	N1-C6	7.92	1.42	1.37
21	AA	1093	A	C4'-C3'	7.92	1.61	1.53
57	BB	1583	A	C2'-C1'	-7.92	1.44	1.53
57	BB	2158	A	N7-C5	-7.92	1.34	1.39
21	AA	568	G	C8-N7	-7.92	1.26	1.30
57	BB	1322	A	N3-C4	-7.92	1.30	1.34
58	BA	79	G	N7-C5	7.92	1.44	1.39
21	AA	589	U	C4'-C3'	7.91	1.61	1.53
23	AW	2	C	P-O5'	-7.91	1.51	1.59
57	BB	940	G	C2-N2	7.91	1.42	1.34
57	BB	2409	G	C4'-C3'	7.91	1.61	1.53
21	AA	544	G	C2-N3	7.91	1.39	1.32
21	AA	1487	G	C5'-C4'	7.91	1.60	1.51
26	AV	49	G	C6-N1	7.91	1.45	1.39
21	AA	1506	U	N1-C6	7.91	1.45	1.38
57	BB	204	A	C6-N1	7.91	1.41	1.35
57	BB	1945	G	C6-N1	7.91	1.45	1.39
57	BB	2665	A	N7-C5	-7.91	1.34	1.39
21	AA	312	C	P-O5'	-7.91	1.51	1.59
21	AA	983	A	C6-N6	7.91	1.40	1.33
57	BB	1383	A	N7-C5	-7.91	1.34	1.39
57	BB	2404	U	C3'-C2'	-7.91	1.44	1.52
21	AA	314	C	N3-C4	7.91	1.39	1.33
57	BB	1858	A	N7-C5	7.91	1.44	1.39
57	BB	825	A	C6-N6	7.91	1.40	1.33
57	BB	1268	A	C5-C4	-7.90	1.33	1.38
21	AA	535	A	N7-C5	-7.90	1.34	1.39
21	AA	807	A	P-O5'	-7.90	1.51	1.59
21	AA	1456	A	C6-N1	7.90	1.41	1.35
57	BB	1787	A	C6-N6	7.90	1.40	1.33
57	BB	1977	A	C5-C6	7.90	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2357	G	N1-C2	7.90	1.44	1.37
21	AA	1341	U	C2-N3	7.90	1.43	1.37
57	BB	2617	U	C2'-C1'	-7.90	1.44	1.53
57	BB	2643	G	N1-C2	7.90	1.44	1.37
58	BA	21	G	C2-N3	7.90	1.39	1.32
21	AA	560	A	C6-N6	7.90	1.40	1.33
57	BB	289	G	C6-N1	7.90	1.45	1.39
57	BB	1055	G	N9-C4	-7.90	1.31	1.38
57	BB	1179	G	N7-C5	-7.90	1.34	1.39
57	BB	1585	C	N1-C6	7.90	1.41	1.37
57	BB	1717	A	C6-N1	7.90	1.41	1.35
21	AA	557	G	N1-C2	7.90	1.44	1.37
57	BB	204	A	O3'-P	-7.90	1.51	1.61
21	AA	138	G	C2-N3	7.89	1.39	1.32
21	AA	1048	G	C2-N3	7.89	1.39	1.32
57	BB	239	C	C4'-C3'	-7.89	1.44	1.53
57	BB	2792	A	C6-N6	7.89	1.40	1.33
21	AA	868	C	C5'-C4'	7.89	1.60	1.51
57	BB	967	U	C2-N3	7.89	1.43	1.37
21	AA	207	C	C4-N4	7.89	1.41	1.33
21	AA	907	A	N3-C4	7.89	1.39	1.34
57	BB	50	U	N1-C2	-7.89	1.31	1.38
57	BB	2258	C	C4'-C3'	-7.89	1.44	1.53
21	AA	250	A	C5-C4	7.89	1.44	1.38
21	AA	721	G	C6-N1	7.89	1.45	1.39
21	AA	963	G	N9-C8	7.89	1.43	1.37
57	BB	54	G	N1-C2	7.89	1.44	1.37
21	AA	288	A	N7-C5	-7.89	1.34	1.39
57	BB	719	C	C4-C5	-7.89	1.36	1.43
57	BB	2736	A	C5-C4	7.89	1.44	1.38
21	AA	143	A	N7-C5	7.88	1.44	1.39
21	AA	205	A	N9-C4	7.88	1.42	1.37
21	AA	326	G	N9-C8	7.88	1.43	1.37
57	BB	851	C	N3-C4	7.88	1.39	1.33
57	BB	956	G	N7-C5	-7.88	1.34	1.39
57	BB	1296	G	C2'-C1'	-7.88	1.44	1.53
57	BB	2557	G	C2-N2	7.88	1.42	1.34
57	BB	1912	A	C4'-C3'	-7.88	1.44	1.53
58	BA	105	G	C2'-C1'	-7.88	1.44	1.53
57	BB	147	C	P-O5'	-7.88	1.51	1.59
57	BB	1416	G	N1-C2	7.88	1.44	1.37
21	AA	363	A	N3-C4	-7.88	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1421	G	C5-C4	7.88	1.43	1.38
58	BA	38	C	C5'-C4'	7.88	1.60	1.51
21	AA	55	A	C6-N1	7.88	1.41	1.35
21	AA	1174	G	N3-C4	-7.88	1.29	1.35
57	BB	1896	G	N9-C4	-7.88	1.31	1.38
57	BB	2097	A	N3-C4	-7.88	1.30	1.34
57	BB	2294	G	N9-C8	7.88	1.43	1.37
21	AA	724	G	C2-N3	7.88	1.39	1.32
21	AA	741	G	C6-N1	7.88	1.45	1.39
21	AA	872	A	N9-C4	-7.88	1.33	1.37
26	AV	49	G	N3-C4	7.88	1.41	1.35
57	BB	288	U	C4'-C3'	7.88	1.61	1.53
57	BB	550	C	C4'-O4'	7.88	1.55	1.45
57	BB	1259	G	C2-N3	7.88	1.39	1.32
57	BB	2734	A	C6-N6	7.88	1.40	1.33
21	AA	960	U	C2-N3	7.87	1.43	1.37
22	AY	49	C	C4-C5	7.87	1.49	1.43
57	BB	389	G	N9-C4	7.87	1.44	1.38
57	BB	1187	G	N3-C4	-7.87	1.29	1.35
57	BB	2186	G	C6-N1	7.87	1.45	1.39
21	AA	294	U	N1-C2	7.87	1.45	1.38
21	AA	972	C	C4-N4	7.87	1.41	1.33
57	BB	77	G	N9-C4	7.87	1.44	1.38
21	AA	1229	A	N7-C5	-7.87	1.34	1.39
21	AA	367	U	C2-N3	7.87	1.43	1.37
21	AA	1262	C	P-O5'	-7.87	1.51	1.59
57	BB	161	A	C5'-C4'	7.87	1.60	1.51
57	BB	603	A	C6-N6	7.87	1.40	1.33
57	BB	750	A	N9-C4	7.87	1.42	1.37
57	BB	2819	G	N9-C8	-7.87	1.32	1.37
57	BB	1282	U	C2'-C1'	-7.87	1.44	1.53
57	BB	1548	A	P-O5'	-7.87	1.51	1.59
57	BB	820	A	N9-C4	7.86	1.42	1.37
21	AA	1367	C	C4-N4	7.86	1.41	1.33
57	BB	580	U	O3'-P	-7.86	1.51	1.61
57	BB	1210	G	C6-N1	7.86	1.45	1.39
21	AA	1392	G	C2-N3	7.86	1.39	1.32
57	BB	51	G	N1-C2	7.86	1.44	1.37
57	BB	448	U	C2-N3	7.86	1.43	1.37
58	BA	21	G	N9-C8	7.86	1.43	1.37
57	BB	342	A	C2'-C1'	-7.86	1.44	1.53
57	BB	1655	A	C2-N3	7.86	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	939	G	N9-C8	-7.86	1.32	1.37
21	AA	1038	C	N1-C6	7.86	1.41	1.37
21	AA	1144	G	C3'-C2'	-7.86	1.44	1.52
57	BB	1733	G	N9-C8	7.86	1.43	1.37
21	AA	1097	C	C2'-C1'	-7.86	1.44	1.53
57	BB	1666	G	P-O5'	-7.86	1.51	1.59
21	AA	925	G	N3-C4	7.85	1.41	1.35
57	BB	2003	A	C8-N7	-7.85	1.26	1.31
57	BB	2564	A	C5-C4	7.85	1.44	1.38
21	AA	896	C	N3-C4	7.85	1.39	1.33
57	BB	19	A	N9-C8	7.85	1.44	1.37
57	BB	452	G	N7-C5	-7.85	1.34	1.39
15	AD	12	ARG	CZ-NH1	7.85	1.43	1.33
57	BB	297	G	C8-N7	7.85	1.35	1.30
57	BB	696	G	C6-N1	7.85	1.45	1.39
57	BB	2423	U	C3'-C2'	7.85	1.61	1.52
21	AA	615	G	N9-C8	7.85	1.43	1.37
21	AA	1276	G	P-O5'	-7.85	1.51	1.59
57	BB	322	A	N7-C5	-7.85	1.34	1.39
57	BB	2844	G	O3'-P	-7.85	1.51	1.61
57	BB	1527	G	N9-C8	7.85	1.43	1.37
21	AA	279	A	N1-C2	7.84	1.41	1.34
21	AA	776	G	N7-C5	-7.84	1.34	1.39
57	BB	1179	G	N1-C2	7.84	1.44	1.37
57	BB	1976	U	N1-C2	-7.84	1.31	1.38
57	BB	2802	G	C2-N3	7.84	1.39	1.32
57	BB	2369	A	C6-N6	7.84	1.40	1.33
21	AA	85	U	O3'-P	-7.84	1.51	1.61
57	BB	537	G	C2-N3	7.84	1.39	1.32
57	BB	2830	C	C2-N3	7.84	1.42	1.35
21	AA	1145	A	C6-N1	7.84	1.41	1.35
22	AY	52	U	O4'-C1'	7.84	1.51	1.41
57	BB	293	U	C4-O4	7.84	1.29	1.23
21	AA	1458	G	C8-N7	-7.84	1.26	1.30
23	AW	44	G	C2-N2	7.84	1.42	1.34
57	BB	1746	A	N9-C4	7.84	1.42	1.37
57	BB	1874	C	N3-C4	7.84	1.39	1.33
57	BB	2453	A	C6-N6	7.84	1.40	1.33
21	AA	393	A	C1'-N9	7.83	1.60	1.48
57	BB	849	A	O3'-P	-7.83	1.51	1.61
21	AA	371	A	C8-N7	-7.83	1.26	1.31
22	AY	27	C	C2'-C1'	-7.83	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1029	A	N7-C5	-7.83	1.34	1.39
57	BB	1064	C	N3-C4	7.83	1.39	1.33
57	BB	2397	G	C2-N3	7.83	1.39	1.32
57	BB	772	C	N3-C4	7.83	1.39	1.33
57	BB	2069	G	C8-N7	-7.83	1.26	1.30
57	BB	2674	G	N9-C4	-7.83	1.31	1.38
21	AA	1454	G	N1-C2	7.83	1.44	1.37
57	BB	1972	G	C2-N3	7.83	1.39	1.32
57	BB	2463	C	C4'-C3'	7.83	1.61	1.53
21	AA	835	U	O4'-C1'	7.83	1.51	1.41
57	BB	188	G	N3-C4	-7.83	1.29	1.35
21	AA	109	A	C6-N1	7.83	1.41	1.35
21	AA	800	G	C4'-O4'	-7.83	1.35	1.45
21	AA	967	C	C5'-C4'	7.83	1.60	1.51
57	BB	1500	G	N1-C2	7.83	1.44	1.37
21	AA	298	A	C6-N1	7.82	1.41	1.35
57	BB	108	G	P-O5'	-7.82	1.51	1.59
57	BB	2200	C	N1-C6	7.82	1.41	1.37
57	BB	1957	C	C2-N3	7.82	1.42	1.35
21	AA	51	A	C2-N3	7.82	1.40	1.33
21	AA	457	G	N3-C4	-7.82	1.29	1.35
21	AA	1403	C	C5'-C4'	7.82	1.60	1.51
54	BF	60	SER	CA-CB	7.82	1.64	1.52
57	BB	907	G	O3'-P	-7.82	1.51	1.61
57	BB	2060	A	C6-N6	7.82	1.40	1.33
57	BB	2507	C	P-O5'	-7.82	1.51	1.59
57	BB	727	A	C2'-C1'	-7.82	1.44	1.53
21	AA	812	G	N1-C2	7.82	1.44	1.37
57	BB	858	G	C2-N3	7.82	1.39	1.32
57	BB	901	C	P-O5'	-7.82	1.51	1.59
57	BB	1464	G	N1-C2	7.82	1.44	1.37
57	BB	2107	G	P-O5'	7.82	1.67	1.59
57	BB	2153	C	N1-C6	7.82	1.41	1.37
57	BB	2770	G	C6-N1	7.82	1.45	1.39
22	AY	13	C	N3-C4	7.82	1.39	1.33
57	BB	365	U	C2-N3	7.82	1.43	1.37
57	BB	826	U	C2-N3	7.82	1.43	1.37
57	BB	337	C	N3-C4	7.81	1.39	1.33
57	BB	998	C	N1-C6	7.81	1.41	1.37
57	BB	1879	C	P-O5'	-7.81	1.51	1.59
21	AA	1279	G	C6-N1	7.81	1.45	1.39
57	BB	263	G	C2-N3	7.81	1.39	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1419	A	N7-C5	-7.81	1.34	1.39
57	BB	2161	C	C3'-C2'	-7.81	1.44	1.52
57	BB	2737	G	N7-C5	-7.81	1.34	1.39
21	AA	305	G	C6-N1	7.81	1.45	1.39
57	BB	746	U	P-O5'	-7.81	1.51	1.59
57	BB	2602	A	C6-N6	7.81	1.40	1.33
57	BB	557	C	C5'-C4'	7.81	1.60	1.51
57	BB	2766	A	C6-N6	7.81	1.40	1.33
21	AA	1421	G	N9-C8	-7.81	1.32	1.37
57	BB	14	A	C6-N6	7.81	1.40	1.33
57	BB	600	G	N9-C8	7.81	1.43	1.37
57	BB	1435	G	C8-N7	-7.81	1.26	1.30
57	BB	2269	G	C6-N1	7.81	1.45	1.39
21	AA	836	G	P-O5'	-7.81	1.51	1.59
57	BB	2734	A	O3'-P	-7.81	1.51	1.61
21	AA	332	G	C2-N3	7.80	1.39	1.32
57	BB	2437	G	C6-N1	7.80	1.45	1.39
57	BB	2825	G	C6-N1	7.80	1.45	1.39
26	AV	34	C	C5'-C4'	7.80	1.60	1.51
57	BB	1838	C	C2'-C1'	-7.80	1.44	1.53
57	BB	2327	A	C4'-C3'	7.80	1.61	1.53
21	AA	334	C	C2-N3	7.80	1.42	1.35
21	AA	1271	A	N3-C4	-7.80	1.30	1.34
26	AV	42	G	C8-N7	-7.80	1.26	1.30
57	BB	2011	U	N1-C2	7.80	1.45	1.38
57	BB	2705	A	C6-N6	7.80	1.40	1.33
21	AA	1518	A	O3'-P	-7.80	1.51	1.61
58	BA	85	G	C5-C4	-7.80	1.32	1.38
57	BB	760	G	N3-C4	7.80	1.41	1.35
21	AA	364	A	C6-N6	7.80	1.40	1.33
21	AA	880	C	C2-N3	7.80	1.42	1.35
21	AA	951	G	N7-C5	-7.80	1.34	1.39
21	AA	1405	G	C2-N3	7.80	1.39	1.32
57	BB	1916	A	N7-C5	-7.80	1.34	1.39
21	AA	336	A	C6-N1	7.79	1.41	1.35
57	BB	674	G	C5-C6	-7.79	1.34	1.42
57	BB	2732	G	C8-N7	7.79	1.35	1.30
21	AA	69	G	N7-C5	-7.79	1.34	1.39
22	AY	41	U	C2-N3	7.79	1.43	1.37
57	BB	1447	C	C4-N4	7.79	1.41	1.33
21	AA	133	U	C4-O4	-7.79	1.17	1.23
21	AA	1475	G	C5'-C4'	7.79	1.60	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	66	U	N1-C6	-7.79	1.30	1.38
57	BB	188	G	C8-N7	7.79	1.35	1.30
57	BB	1249	U	N3-C4	7.79	1.45	1.38
57	BB	1319	C	C3'-C2'	-7.79	1.44	1.52
57	BB	1633	G	N7-C5	-7.79	1.34	1.39
57	BB	2406	A	N3-C4	-7.79	1.30	1.34
57	BB	2409	G	C2'-C1'	-7.79	1.44	1.53
21	AA	687	A	C6-N6	7.79	1.40	1.33
57	BB	964	C	C2'-C1'	-7.79	1.44	1.53
57	BB	1946	U	N3-C4	7.79	1.45	1.38
21	AA	440	C	P-O5'	-7.79	1.51	1.59
57	BB	2240	U	C2-N3	7.79	1.43	1.37
21	AA	1142	G	C2'-C1'	-7.78	1.44	1.53
21	AA	1235	U	N3-C4	7.78	1.45	1.38
21	AA	1239	A	O3'-P	-7.78	1.51	1.61
21	AA	1385	G	C8-N7	7.78	1.35	1.30
57	BB	805	G	C6-N1	7.78	1.45	1.39
57	BB	2266	A	C2-N3	7.78	1.40	1.33
21	AA	702	A	N7-C5	-7.78	1.34	1.39
57	BB	1455	G	C2-N3	7.78	1.39	1.32
57	BB	1750	G	N1-C2	7.78	1.44	1.37
21	AA	22	G	N7-C5	-7.78	1.34	1.39
21	AA	399	G	C5'-C4'	7.78	1.60	1.51
21	AA	493	A	N7-C5	-7.78	1.34	1.39
21	AA	745	G	N3-C4	-7.78	1.30	1.35
57	BB	1076	C	C4-N4	7.78	1.41	1.33
57	BB	2124	G	C2-N3	7.78	1.39	1.32
57	BB	2828	G	C4'-O4'	-7.78	1.35	1.45
58	BA	78	A	N3-C4	-7.78	1.30	1.34
57	BB	252	G	C2-N3	7.78	1.39	1.32
57	BB	1116	G	C5-C4	7.78	1.43	1.38
57	BB	1425	G	C2'-C1'	-7.78	1.44	1.53
57	BB	2625	G	C2-N3	7.77	1.39	1.32
21	AA	394	G	N3-C4	-7.77	1.30	1.35
21	AA	844	G	N9-C8	-7.77	1.32	1.37
57	BB	303	G	N3-C4	-7.77	1.30	1.35
57	BB	1178	C	N1-C2	7.77	1.48	1.40
57	BB	1572	A	N9-C4	7.77	1.42	1.37
21	AA	234	C	C2'-C1'	-7.77	1.44	1.53
21	AA	311	C	C4-N4	7.77	1.41	1.33
21	AA	361	G	C8-N7	-7.77	1.26	1.30
21	AA	488	C	C4'-O4'	7.77	1.55	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	919	U	C4-C5	-7.77	1.36	1.43
57	BB	2578	G	C8-N7	7.77	1.35	1.30
57	BB	2793	C	N3-C4	7.77	1.39	1.33
21	AA	1119	C	P-O5'	-7.77	1.51	1.59
57	BB	862	G	C5-C4	7.77	1.43	1.38
57	BB	1852	U	N3-C4	7.77	1.45	1.38
57	BB	2053	G	N1-C2	7.77	1.44	1.37
58	BA	98	G	C6-N1	7.77	1.45	1.39
57	BB	332	A	N9-C8	7.77	1.44	1.37
57	BB	2413	G	C2-N3	7.77	1.39	1.32
21	AA	354	G	N1-C2	7.76	1.44	1.37
21	AA	680	C	N1-C6	-7.76	1.32	1.37
21	AA	894	G	C2-N3	7.76	1.39	1.32
32	BM	59	ARG	NE-CZ	7.76	1.43	1.33
57	BB	755	U	N1-C2	7.76	1.45	1.38
57	BB	1791	A	C6-N1	7.76	1.41	1.35
57	BB	2545	G	P-O5'	-7.76	1.51	1.59
21	AA	411	A	N9-C4	-7.76	1.33	1.37
21	AA	1102	A	C2'-C1'	-7.76	1.44	1.53
21	AA	1165	U	C2'-C1'	-7.76	1.44	1.53
21	AA	1173	U	O3'-P	-7.76	1.51	1.61
57	BB	960	A	N9-C4	7.76	1.42	1.37
57	BB	966	G	C8-N7	7.76	1.35	1.30
57	BB	1364	G	C2-N3	7.76	1.39	1.32
57	BB	1802	A	C2'-C1'	-7.76	1.44	1.53
21	AA	1129	C	N3-C4	7.76	1.39	1.33
57	BB	1190	G	C6-N1	7.76	1.45	1.39
57	BB	1465	G	C2-N3	7.76	1.39	1.32
57	BB	2332	C	C4'-C3'	7.76	1.61	1.53
58	BA	13	G	N7-C5	-7.76	1.34	1.39
21	AA	112	G	N3-C4	-7.76	1.30	1.35
57	BB	721	A	O3'-P	-7.76	1.51	1.61
21	AA	181	A	C4'-C3'	7.76	1.61	1.53
57	BB	1277	G	N7-C5	-7.76	1.34	1.39
57	BB	2738	A	P-O5'	-7.76	1.51	1.59
57	BB	2750	A	C6-N1	7.75	1.41	1.35
57	BB	299	A	C6-N6	7.75	1.40	1.33
57	BB	722	A	P-O5'	-7.75	1.51	1.59
57	BB	2610	C	N1-C6	7.75	1.41	1.37
21	AA	852	G	N7-C5	-7.75	1.34	1.39
57	BB	1459	G	C6-N1	7.75	1.45	1.39
57	BB	2317	A	C2'-C1'	-7.75	1.44	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2599	G	C3'-C2'	-7.75	1.44	1.52
57	BB	1436	G	C2-N2	-7.75	1.26	1.34
57	BB	2018	G	N3-C4	-7.75	1.30	1.35
57	BB	2182	U	C4-C5	7.75	1.50	1.43
21	AA	113	G	C6-N1	7.75	1.45	1.39
21	AA	1373	G	C2-N3	7.75	1.39	1.32
57	BB	1273	U	C4'-C3'	-7.75	1.44	1.53
57	BB	2581	G	N3-C4	-7.75	1.30	1.35
57	BB	2709	G	C2-N3	7.75	1.39	1.32
57	BB	2854	G	N3-C4	7.75	1.40	1.35
21	AA	1220	G	C6-O6	7.75	1.31	1.24
21	AA	1410	A	C2'-C1'	-7.75	1.44	1.53
21	AA	1484	C	C4-N4	7.75	1.41	1.33
21	AA	402	G	C5'-C4'	-7.75	1.42	1.51
57	BB	2875	C	C2'-C1'	-7.75	1.44	1.53
57	BB	1755	A	N3-C4	-7.74	1.30	1.34
57	BB	2628	C	P-O5'	-7.74	1.52	1.59
21	AA	810	C	N3-C4	7.74	1.39	1.33
21	AA	1337	G	N3-C4	-7.74	1.30	1.35
21	AA	1508	A	C5-C4	7.74	1.44	1.38
22	AY	64	A	N3-C4	7.74	1.39	1.34
57	BB	541	A	P-O5'	-7.74	1.52	1.59
57	BB	597	G	N7-C5	-7.74	1.34	1.39
57	BB	1707	G	N7-C5	-7.74	1.34	1.39
57	BB	1801	A	C6-N1	7.74	1.41	1.35
57	BB	2201	G	N1-C2	7.74	1.44	1.37
57	BB	2279	G	N9-C4	-7.74	1.31	1.38
57	BB	2513	A	C6-N6	7.74	1.40	1.33
57	BB	2566	A	N7-C5	-7.74	1.34	1.39
21	AA	227	G	N1-C2	7.74	1.44	1.37
21	AA	324	G	C5-C4	7.74	1.43	1.38
21	AA	1332	A	C4'-O4'	7.74	1.55	1.45
23	AW	32	U	N3-C4	7.74	1.45	1.38
57	BB	947	A	N7-C5	7.74	1.43	1.39
57	BB	1215	G	N3-C4	7.74	1.40	1.35
57	BB	1854	A	N7-C5	-7.74	1.34	1.39
57	BB	1992	G	C5-C6	-7.74	1.34	1.42
57	BB	1469	A	C5-C6	-7.74	1.34	1.41
57	BB	1811	G	C5-C6	-7.74	1.34	1.42
21	AA	147	G	C5'-C4'	7.74	1.60	1.51
21	AA	298	A	C8-N7	7.74	1.36	1.31
21	AA	1312	G	P-O5'	-7.74	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	733	G	C2-N3	7.74	1.39	1.32
57	BB	1233	C	P-O5'	-7.74	1.52	1.59
57	BB	1644	C	C4-N4	7.74	1.41	1.33
57	BB	1687	G	C4'-O4'	7.74	1.55	1.45
57	BB	2206	C	C4'-C3'	-7.74	1.44	1.53
57	BB	2214	C	C5'-C4'	7.74	1.60	1.51
57	BB	2228	G	N7-C5	-7.74	1.34	1.39
57	BB	2767	C	C4-C5	-7.74	1.36	1.43
21	AA	1156	G	C8-N7	-7.73	1.26	1.30
23	AW	10	G	C2-N3	7.73	1.39	1.32
57	BB	964	C	C2-N3	7.73	1.42	1.35
57	BB	1570	A	C2-N3	7.73	1.40	1.33
57	BB	2177	C	C3'-C2'	7.73	1.61	1.52
57	BB	2433	A	P-O5'	7.73	1.67	1.59
57	BB	1047	G	O3'-P	-7.73	1.51	1.61
57	BB	1643	G	N7-C5	-7.73	1.34	1.39
57	BB	1776	G	C6-N1	7.73	1.45	1.39
57	BB	2717	C	C2'-C1'	-7.73	1.44	1.53
21	AA	66	A	C4'-C3'	7.73	1.61	1.53
57	BB	107	G	C4'-C3'	7.73	1.61	1.53
57	BB	586	A	C2'-C1'	-7.73	1.44	1.53
57	BB	795	C	C4-C5	-7.73	1.36	1.43
57	BB	2034	U	C2'-C1'	-7.73	1.44	1.53
57	BB	2567	G	C6-O6	-7.73	1.17	1.24
57	BB	262	A	C4'-C3'	-7.73	1.44	1.53
57	BB	1686	C	C1'-N1	7.73	1.60	1.48
22	AY	14	A	N9-C8	7.72	1.44	1.37
43	BX	27	ARG	CZ-NH1	7.72	1.43	1.33
57	BB	599	A	N1-C2	-7.72	1.27	1.34
57	BB	858	G	N1-C2	7.72	1.44	1.37
57	BB	1089	A	N9-C4	7.72	1.42	1.37
21	AA	629	A	C5-C4	7.72	1.44	1.38
21	AA	997	U	C2-N3	7.72	1.43	1.37
57	BB	669	G	O4'-C1'	-7.72	1.31	1.41
57	BB	694	U	P-O5'	-7.72	1.52	1.59
57	BB	1798	U	O4'-C1'	7.72	1.51	1.41
21	AA	60	A	N9-C8	-7.72	1.31	1.37
21	AA	642	A	N3-C4	-7.72	1.30	1.34
26	AV	46	G	N3-C4	-7.72	1.30	1.35
57	BB	307	G	C6-N1	7.72	1.45	1.39
21	AA	775	G	P-O5'	-7.72	1.52	1.59
57	BB	5	A	N9-C8	7.72	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	655	A	N3-C4	7.72	1.39	1.34
57	BB	819	A	C6-N6	7.72	1.40	1.33
57	BB	1831	G	C8-N7	-7.72	1.26	1.30
57	BB	2359	C	C5'-C4'	7.72	1.60	1.51
21	AA	260	G	C6-N1	7.72	1.45	1.39
57	BB	985	C	N3-C4	7.72	1.39	1.33
57	BB	1127	A	N7-C5	-7.72	1.34	1.39
57	BB	1248	G	C3'-O3'	7.72	1.52	1.42
57	BB	1844	C	N1-C6	-7.72	1.32	1.37
21	AA	1185	G	N3-C4	7.71	1.40	1.35
23	AW	43	C	N1-C6	7.71	1.41	1.37
57	BB	14	A	N7-C5	-7.71	1.34	1.39
57	BB	1876	A	N3-C4	7.71	1.39	1.34
57	BB	2207	C	O4'-C1'	-7.71	1.31	1.41
57	BB	2823	A	C6-N1	7.71	1.41	1.35
58	BA	37	C	C4'-O4'	-7.71	1.35	1.45
57	BB	1017	G	N1-C2	7.71	1.44	1.37
57	BB	2780	G	C5-C4	7.71	1.43	1.38
21	AA	1077	G	C1'-N9	7.71	1.60	1.48
57	BB	1218	G	C6-N1	7.71	1.45	1.39
24	AX	22	A	N3-C4	-7.71	1.30	1.34
57	BB	1694	C	C2'-C1'	-7.71	1.44	1.53
57	BB	1837	C	C5-C6	7.71	1.40	1.34
21	AA	785	G	N7-C5	-7.71	1.34	1.39
26	AV	61	C	O4'-C1'	7.71	1.51	1.41
57	BB	51	G	C2-N3	7.71	1.39	1.32
57	BB	1391	U	C2-N3	7.71	1.43	1.37
57	BB	1844	C	C4-C5	7.71	1.49	1.43
57	BB	2021	C	C5'-C4'	7.71	1.60	1.51
57	BB	2065	C	C4-C5	-7.71	1.36	1.43
21	AA	315	A	C5'-C4'	7.71	1.60	1.51
21	AA	780	A	C2'-C1'	-7.71	1.44	1.53
57	BB	572	A	C8-N7	-7.71	1.26	1.31
21	AA	1003	G	N9-C4	-7.71	1.31	1.38
21	AA	1373	G	N7-C5	-7.71	1.34	1.39
57	BB	13	A	N9-C8	-7.71	1.31	1.37
57	BB	2602	A	N9-C4	-7.71	1.33	1.37
21	AA	1249	C	N1-C6	7.70	1.41	1.37
57	BB	1024	G	N7-C5	-7.70	1.34	1.39
57	BB	1254	A	C6-N6	7.70	1.40	1.33
57	BB	2749	A	N7-C5	-7.70	1.34	1.39
21	AA	1064	G	N1-C2	7.70	1.44	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	867	G	N7-C5	-7.70	1.34	1.39
21	AA	1112	C	C4-C5	7.70	1.49	1.43
22	AY	48	C	C2-N3	7.70	1.42	1.35
23	AW	34	G	C1'-N9	7.70	1.60	1.48
57	BB	1514	G	C2-N2	7.70	1.42	1.34
57	BB	1925	C	N3-C4	7.70	1.39	1.33
21	AA	132	C	C4-N4	7.70	1.40	1.33
21	AA	419	C	N3-C4	7.70	1.39	1.33
57	BB	748	G	N3-C4	7.70	1.40	1.35
57	BB	777	G	C2-N3	7.70	1.39	1.32
57	BB	2381	A	C8-N7	-7.70	1.26	1.31
57	BB	2576	G	N3-C4	-7.70	1.30	1.35
21	AA	1292	G	C2'-C1'	-7.70	1.44	1.53
57	BB	13	A	N9-C4	7.70	1.42	1.37
57	BB	2337	G	P-O5'	-7.70	1.52	1.59
57	BB	496	G	C2-N2	7.70	1.42	1.34
57	BB	658	U	C2'-C1'	-7.70	1.44	1.53
57	BB	1452	G	C2-N3	7.70	1.39	1.32
58	BA	84	G	N1-C2	7.70	1.44	1.37
57	BB	1807	G	N1-C2	7.69	1.44	1.37
57	BB	2033	A	P-O5'	-7.69	1.52	1.59
57	BB	2060	A	N9-C8	-7.69	1.31	1.37
38	BS	99	ARG	CZ-NH1	7.69	1.43	1.33
57	BB	357	C	C5-C6	-7.69	1.28	1.34
57	BB	1137	G	N9-C8	7.69	1.43	1.37
57	BB	2201	G	N7-C5	7.69	1.43	1.39
57	BB	2286	G	C2-N2	7.69	1.42	1.34
57	BB	2744	G	C2-N3	7.69	1.39	1.32
21	AA	292	G	O3'-P	-7.69	1.51	1.61
21	AA	1122	U	C2-N3	7.69	1.43	1.37
57	BB	525	U	C2-N3	7.69	1.43	1.37
57	BB	1012	U	C4-C5	7.69	1.50	1.43
57	BB	1781	U	O3'-P	-7.69	1.51	1.61
57	BB	2038	G	C8-N7	-7.69	1.26	1.30
58	BA	66	A	N3-C4	-7.69	1.30	1.34
31	BL	18	ARG	NE-CZ	7.69	1.43	1.33
57	BB	1135	C	C4'-C3'	-7.69	1.44	1.53
57	BB	1777	U	C5'-C4'	7.69	1.60	1.51
57	BB	2042	A	N7-C5	-7.69	1.34	1.39
57	BB	2141	G	N7-C5	-7.69	1.34	1.39
21	AA	86	G	C2-N3	7.68	1.38	1.32
21	AA	147	G	C8-N7	-7.68	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	74	C	C4-N4	7.68	1.40	1.33
57	BB	214	G	O3'-P	-7.68	1.51	1.61
57	BB	572	A	C4'-C3'	7.68	1.61	1.53
57	BB	712	G	N1-C2	7.68	1.43	1.37
21	AA	682	G	N9-C4	-7.68	1.31	1.38
57	BB	731	C	O3'-P	-7.68	1.51	1.61
57	BB	2366	A	N3-C4	-7.68	1.30	1.34
57	BB	2653	U	N1-C2	7.68	1.45	1.38
21	AA	190	A	N9-C8	7.68	1.43	1.37
57	BB	1221	C	N3-C4	7.68	1.39	1.33
57	BB	1832	C	N1-C6	7.68	1.41	1.37
21	AA	558	G	C8-N7	-7.68	1.26	1.30
21	AA	974	A	C6-N6	7.68	1.40	1.33
22	AY	10	G	O3'-P	-7.68	1.51	1.61
57	BB	400	G	C6-N1	7.68	1.45	1.39
21	AA	129	A	N7-C5	7.68	1.43	1.39
57	BB	1877	A	O4'-C1'	7.68	1.51	1.41
57	BB	2723	C	P-O5'	-7.68	1.52	1.59
22	AY	58	A	C5-C4	7.67	1.44	1.38
57	BB	1211	C	C4-N4	7.67	1.40	1.33
21	AA	280	C	C5-C6	-7.67	1.28	1.34
21	AA	292	G	N9-C4	7.67	1.44	1.38
57	BB	518	G	C5-C6	-7.67	1.34	1.42
57	BB	2412	A	N3-C4	7.67	1.39	1.34
21	AA	162	A	C6-N6	7.67	1.40	1.33
21	AA	1214	C	C3'-C2'	7.67	1.61	1.52
57	BB	943	A	C4'-C3'	7.67	1.61	1.53
57	BB	1912	A	C4'-O4'	-7.67	1.35	1.45
57	BB	2	G	C2-N2	7.67	1.42	1.34
57	BB	347	A	N9-C4	-7.67	1.33	1.37
57	BB	973	A	C4'-C3'	7.67	1.61	1.53
57	BB	2290	G	C2-N3	7.67	1.38	1.32
21	AA	1149	C	C4-N4	7.67	1.40	1.33
57	BB	356	G	N1-C2	7.67	1.43	1.37
57	BB	790	U	C4'-C3'	7.67	1.61	1.53
57	BB	1250	G	N3-C4	-7.67	1.30	1.35
57	BB	1860	G	C6-N1	7.67	1.45	1.39
21	AA	574	A	C6-N6	7.67	1.40	1.33
57	BB	239	C	P-O5'	-7.67	1.52	1.59
57	BB	1597	A	C8-N7	-7.67	1.26	1.31
57	BB	652	U	C2-N3	7.66	1.43	1.37
57	BB	963	U	N1-C2	7.66	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1816	C	C4-N4	7.66	1.40	1.33
57	BB	2408	U	N1-C6	7.66	1.44	1.38
58	BA	61	G	N9-C8	7.66	1.43	1.37
21	AA	84	U	N1-C6	-7.66	1.31	1.38
26	AV	30	G	O3'-P	-7.66	1.51	1.61
57	BB	929	U	C2'-C1'	-7.66	1.45	1.53
57	BB	2447	G	C2-N2	7.66	1.42	1.34
57	BB	2864	G	N7-C5	-7.66	1.34	1.39
22	AY	42	G	C6-N1	7.66	1.45	1.39
57	BB	1422	G	N1-C2	7.66	1.43	1.37
57	BB	1677	A	C6-N1	7.66	1.41	1.35
57	BB	2336	A	C5-C4	7.66	1.44	1.38
57	BB	2370	G	N7-C5	7.66	1.43	1.39
57	BB	2785	C	P-O5'	-7.66	1.52	1.59
21	AA	1005	A	N3-C4	7.66	1.39	1.34
57	BB	49	A	N7-C5	-7.66	1.34	1.39
57	BB	2037	A	N3-C4	7.66	1.39	1.34
57	BB	2255	G	C2-N2	7.66	1.42	1.34
57	BB	2332	C	P-O5'	-7.66	1.52	1.59
57	BB	2784	U	C5-C6	7.66	1.41	1.34
57	BB	1531	C	C2-N3	-7.66	1.29	1.35
57	BB	1564	C	C2-N3	-7.66	1.29	1.35
57	BB	1863	G	N7-C5	7.66	1.43	1.39
57	BB	2282	G	O3'-P	-7.66	1.51	1.61
21	AA	1525	G	N3-C4	-7.65	1.30	1.35
57	BB	126	A	P-O5'	-7.65	1.52	1.59
57	BB	2731	G	N1-C2	7.65	1.43	1.37
4	AM	78	ARG	NE-CZ	7.65	1.43	1.33
21	AA	1043	G	N1-C2	7.65	1.43	1.37
21	AA	1165	U	N1-C6	7.65	1.44	1.38
23	AW	9	A	C6-N6	7.65	1.40	1.33
57	BB	95	A	N9-C8	7.65	1.43	1.37
57	BB	1274	A	O3'-P	-7.65	1.51	1.61
57	BB	1138	G	N3-C4	-7.65	1.30	1.35
57	BB	2602	A	N9-C8	7.65	1.43	1.37
57	BB	2763	G	N1-C2	7.65	1.43	1.37
57	BB	2860	A	N3-C4	-7.65	1.30	1.34
21	AA	921	U	C5-C6	7.65	1.41	1.34
21	AA	964	A	C6-N6	7.65	1.40	1.33
57	BB	2119	A	C5-C4	7.65	1.44	1.38
21	AA	505	G	C5'-C4'	7.65	1.60	1.51
21	AA	632	U	N1-C2	7.65	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1494	G	N7-C5	-7.65	1.34	1.39
57	BB	2714	G	N9-C8	-7.64	1.32	1.37
21	AA	815	A	N9-C4	-7.64	1.33	1.37
21	AA	1229	A	C2-N3	7.64	1.40	1.33
57	BB	1791	A	O3'-P	-7.64	1.51	1.61
57	BB	1895	C	C5'-C4'	7.64	1.60	1.51
21	AA	624	C	N1-C6	7.64	1.41	1.37
57	BB	1074	G	P-O5'	7.64	1.67	1.59
57	BB	1786	A	N7-C5	-7.64	1.34	1.39
21	AA	538	G	N1-C2	7.64	1.43	1.37
21	AA	1327	C	O3'-P	-7.64	1.51	1.61
57	BB	1360	G	N7-C5	-7.64	1.34	1.39
57	BB	2495	G	N3-C4	-7.64	1.30	1.35
21	AA	198	G	C8-N7	7.64	1.35	1.30
21	AA	389	A	C6-N1	7.64	1.40	1.35
23	AW	69	G	N9-C8	-7.64	1.32	1.37
57	BB	1744	A	N9-C4	7.64	1.42	1.37
57	BB	2172	U	N3-C4	7.64	1.45	1.38
57	BB	801	G	C2-N3	7.64	1.38	1.32
57	BB	1041	G	N9-C4	-7.64	1.31	1.38
57	BB	2032	G	N7-C5	-7.64	1.34	1.39
57	BB	2190	G	N9-C4	-7.64	1.31	1.38
57	BB	2565	A	C8-N7	-7.64	1.26	1.31
58	BA	53	A	P-O5'	-7.64	1.52	1.59
57	BB	1532	A	N3-C4	-7.63	1.30	1.34
57	BB	2059	A	O3'-P	-7.63	1.51	1.61
57	BB	2722	G	C2-N2	7.63	1.42	1.34
21	AA	478	A	N1-C2	-7.63	1.27	1.34
21	AA	1180	A	N3-C4	-7.63	1.30	1.34
57	BB	11	C	O3'-P	-7.63	1.51	1.61
57	BB	751	A	C4'-C3'	7.63	1.61	1.53
21	AA	8	A	N7-C5	-7.63	1.34	1.39
21	AA	716	A	C5-C4	-7.63	1.33	1.38
22	AY	9	A	C6-N6	-7.63	1.27	1.33
57	BB	648	G	N1-C2	7.63	1.43	1.37
57	BB	1246	A	O3'-P	7.63	1.70	1.61
57	BB	1469	A	C5-C4	7.63	1.44	1.38
57	BB	1727	C	N3-C4	7.63	1.39	1.33
58	BA	57	A	C3'-C2'	-7.63	1.44	1.52
22	AY	5	A	O3'-P	7.63	1.70	1.61
57	BB	1287	A	C5-C6	-7.63	1.34	1.41
57	BB	1677	A	N7-C5	-7.63	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1824	G	N3-C4	7.63	1.40	1.35
21	AA	500	G	N7-C5	-7.62	1.34	1.39
57	BB	655	A	C6-N6	7.62	1.40	1.33
57	BB	2876	G	C2-N3	7.62	1.38	1.32
21	AA	1488	G	N1-C2	7.62	1.43	1.37
57	BB	1189	A	N9-C4	-7.62	1.33	1.37
58	BA	56	G	N9-C8	-7.62	1.32	1.37
21	AA	205	A	C5'-C4'	7.62	1.60	1.51
57	BB	697	G	N9-C8	-7.62	1.32	1.37
57	BB	1472	C	N1-C6	-7.62	1.32	1.37
57	BB	1567	G	O3'-P	-7.62	1.52	1.61
21	AA	13	U	P-O5'	-7.62	1.52	1.59
21	AA	147	G	C2'-C1'	-7.62	1.45	1.53
21	AA	617	G	C8-N7	-7.62	1.26	1.30
21	AA	1468	A	C6-N6	7.62	1.40	1.33
57	BB	1991	U	C4'-O4'	-7.62	1.35	1.45
57	BB	693	A	N7-C5	-7.62	1.34	1.39
21	AA	835	U	N1-C6	7.62	1.44	1.38
21	AA	1138	G	C6-N1	7.62	1.44	1.39
57	BB	384	A	C8-N7	-7.62	1.26	1.31
57	BB	2037	A	C4'-C3'	7.62	1.61	1.53
21	AA	479	U	N1-C6	7.61	1.44	1.38
21	AA	529	G	O3'-P	-7.61	1.52	1.61
57	BB	89	A	C2'-C1'	-7.61	1.45	1.53
57	BB	1622	G	C2'-C1'	-7.61	1.45	1.53
57	BB	1936	A	N9-C4	7.61	1.42	1.37
21	AA	593	U	C4'-C3'	7.61	1.61	1.53
21	AA	1073	U	C4-C5	-7.61	1.36	1.43
21	AA	1499	A	N7-C5	-7.61	1.34	1.39
57	BB	400	G	N7-C5	-7.61	1.34	1.39
57	BB	1284	A	C2-N3	7.61	1.40	1.33
57	BB	1394	U	C3'-O3'	7.61	1.52	1.42
57	BB	1896	G	C5-C4	7.61	1.43	1.38
57	BB	2331	G	C8-N7	-7.61	1.26	1.30
57	BB	2637	U	C1'-N1	7.61	1.60	1.48
57	BB	374	A	C3'-C2'	7.61	1.61	1.52
57	BB	742	A	N1-C2	7.61	1.41	1.34
57	BB	1863	G	C2-N3	7.61	1.38	1.32
57	BB	523	C	N3-C4	7.61	1.39	1.33
57	BB	1984	G	N9-C4	7.61	1.44	1.38
21	AA	843	U	N3-C4	7.61	1.45	1.38
23	AW	57	G	C5-C4	7.61	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	142	A	C6-N1	7.61	1.40	1.35
57	BB	515	A	N3-C4	7.61	1.39	1.34
57	BB	2148	G	N7-C5	-7.61	1.34	1.39
57	BB	2430	A	C3'-C2'	7.61	1.61	1.52
21	AA	1036	A	N3-C4	-7.60	1.30	1.34
57	BB	228	C	C4'-O4'	7.60	1.55	1.45
57	BB	1978	A	N9-C4	-7.60	1.33	1.37
21	AA	1239	A	C6-N6	7.60	1.40	1.33
22	AY	65	G	N1-C2	7.60	1.43	1.37
57	BB	362	A	C5-C4	7.60	1.44	1.38
57	BB	2587	A	N9-C4	7.60	1.42	1.37
57	BB	713	G	C3'-C2'	-7.60	1.44	1.52
57	BB	2273	A	C8-N7	-7.60	1.26	1.31
57	BB	2759	G	P-O5'	-7.60	1.52	1.59
21	AA	160	A	C6-N1	-7.60	1.30	1.35
21	AA	659	U	C4'-C3'	7.60	1.61	1.53
21	AA	1154	G	N9-C4	7.60	1.44	1.38
24	AX	21	C	N3-C4	7.60	1.39	1.33
57	BB	122	G	C8-N7	7.60	1.35	1.30
57	BB	752	A	N7-C5	-7.60	1.34	1.39
57	BB	1150	C	C2-N3	7.60	1.41	1.35
57	BB	1735	A	N3-C4	-7.60	1.30	1.34
57	BB	2794	C	N1-C6	7.60	1.41	1.37
57	BB	543	G	C2-N3	7.60	1.38	1.32
21	AA	852	G	N9-C8	-7.59	1.32	1.37
21	AA	1182	G	N3-C4	7.59	1.40	1.35
21	AA	776	G	C4'-O4'	-7.59	1.35	1.45
21	AA	165	G	N1-C2	7.59	1.43	1.37
57	BB	222	A	C2'-C1'	-7.59	1.45	1.53
57	BB	474	G	C5-C4	-7.59	1.33	1.38
57	BB	1071	G	O3'-P	-7.59	1.52	1.61
57	BB	1470	A	N9-C4	-7.59	1.33	1.37
57	BB	2811	G	N1-C2	7.59	1.43	1.37
21	AA	1243	C	N3-C4	7.59	1.39	1.33
21	AA	1279	G	N9-C8	-7.59	1.32	1.37
41	BV	35	GLU	CG-CD	7.59	1.63	1.51
57	BB	556	A	C6-N6	7.59	1.40	1.33
57	BB	948	C	N3-C4	7.59	1.39	1.33
57	BB	1828	G	N3-C4	7.59	1.40	1.35
57	BB	1853	A	C8-N7	7.59	1.36	1.31
21	AA	105	G	C2-N3	7.59	1.38	1.32
21	AA	1314	C	N1-C6	7.59	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	65	G	N3-C4	7.59	1.40	1.35
26	AV	12	G	N7-C5	-7.59	1.34	1.39
41	BV	19	ARG	CZ-NH1	7.59	1.43	1.33
57	BB	81	G	C2-N3	7.59	1.38	1.32
57	BB	1627	G	N1-C2	7.59	1.43	1.37
21	AA	1304	G	C5'-C4'	7.58	1.60	1.51
57	BB	466	A	N7-C5	-7.58	1.34	1.39
57	BB	525	U	C5'-C4'	7.58	1.60	1.51
57	BB	979	A	C2-N3	7.58	1.40	1.33
57	BB	1621	U	N1-C2	7.58	1.45	1.38
57	BB	2705	A	C2'-O2'	-7.58	1.31	1.41
57	BB	85	G	C2'-C1'	-7.58	1.45	1.53
57	BB	661	A	C6-N1	7.58	1.40	1.35
57	BB	1811	G	C2-N3	7.58	1.38	1.32
58	BA	34	A	C5-C4	7.58	1.44	1.38
21	AA	159	G	C2-N3	7.58	1.38	1.32
57	BB	2388	A	N7-C5	-7.58	1.34	1.39
34	BO	94	ARG	CD-NE	7.58	1.59	1.46
57	BB	1199	U	C2-N3	7.58	1.43	1.37
57	BB	1745	A	N7-C5	-7.58	1.34	1.39
57	BB	500	G	O3'-P	-7.58	1.52	1.61
57	BB	784	G	C2-N3	7.58	1.38	1.32
57	BB	1820	U	C2'-C1'	-7.58	1.45	1.53
21	AA	34	C	N1-C6	-7.58	1.32	1.37
26	AV	44	A	C8-N7	7.58	1.36	1.31
26	AV	50	U	P-O5'	7.58	1.67	1.59
57	BB	804	A	C6-N6	7.58	1.40	1.33
57	BB	1133	A	N7-C5	7.58	1.43	1.39
21	AA	59	A	N3-C4	-7.57	1.30	1.34
21	AA	1417	G	C5-C4	7.57	1.43	1.38
26	AV	31	G	C5-C6	-7.57	1.34	1.42
57	BB	454	A	N9-C4	7.57	1.42	1.37
57	BB	970	U	N3-C4	7.57	1.45	1.38
57	BB	1861	G	C5'-C4'	7.57	1.60	1.51
57	BB	2822	G	C6-N1	7.57	1.44	1.39
21	AA	1134	G	O3'-P	-7.57	1.52	1.61
57	BB	208	C	C2'-C1'	-7.57	1.45	1.53
57	BB	515	A	C2'-C1'	-7.57	1.45	1.53
57	BB	1367	A	N9-C8	7.57	1.43	1.37
57	BB	2569	G	C5-C6	-7.57	1.34	1.42
57	BB	2842	G	N9-C8	7.57	1.43	1.37
21	AA	753	A	N7-C5	-7.57	1.34	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1164	C	N3-C4	7.57	1.39	1.33
57	BB	2799	A	C5-C4	7.57	1.44	1.38
21	AA	258	G	N7-C5	-7.57	1.34	1.39
21	AA	573	A	O3'-P	-7.57	1.52	1.61
57	BB	343	C	P-O5'	-7.57	1.52	1.59
57	BB	655	A	C6-N1	7.57	1.40	1.35
57	BB	1617	C	C2'-C1'	-7.57	1.45	1.53
57	BB	127	A	N7-C5	-7.57	1.34	1.39
57	BB	216	A	C8-N7	-7.57	1.26	1.31
57	BB	730	A	C2'-C1'	-7.57	1.45	1.53
57	BB	1327	A	N7-C5	-7.57	1.34	1.39
57	BB	1877	A	P-O5'	-7.57	1.52	1.59
57	BB	835	C	C2'-C1'	-7.56	1.45	1.53
57	BB	618	G	C8-N7	-7.56	1.26	1.30
57	BB	748	G	N9-C8	-7.56	1.32	1.37
57	BB	1819	A	C2'-C1'	-7.56	1.45	1.53
57	BB	762	U	N3-C4	7.56	1.45	1.38
57	BB	2763	G	C4'-C3'	7.56	1.61	1.53
21	AA	222	C	C5-C6	7.56	1.40	1.34
21	AA	842	U	C2'-C1'	-7.56	1.45	1.53
57	BB	333	G	C2-N3	7.56	1.38	1.32
57	BB	501	A	C4'-C3'	7.56	1.61	1.53
21	AA	281	G	P-O5'	-7.56	1.52	1.59
22	AY	30	G	C3'-O3'	7.56	1.52	1.42
22	AY	72	C	N1-C6	7.56	1.41	1.37
57	BB	223	A	C4'-C3'	-7.56	1.44	1.53
57	BB	1873	G	C2-N3	7.56	1.38	1.32
21	AA	611	C	N3-C4	7.56	1.39	1.33
21	AA	951	G	C6-N1	7.56	1.44	1.39
57	BB	1571	A	N7-C5	-7.56	1.34	1.39
21	AA	958	A	P-O5'	-7.55	1.52	1.59
57	BB	529	A	N9-C4	-7.55	1.33	1.37
57	BB	548	G	C3'-C2'	-7.55	1.44	1.52
57	BB	899	A	C5-C4	7.55	1.44	1.38
57	BB	1101	U	N3-C4	7.55	1.45	1.38
57	BB	1718	G	N7-C5	-7.55	1.34	1.39
57	BB	2783	U	C3'-C2'	7.55	1.61	1.52
21	AA	1124	G	N7-C5	-7.55	1.34	1.39
57	BB	409	G	N9-C8	-7.55	1.32	1.37
57	BB	828	U	C4-C5	7.55	1.50	1.43
7	AP	31	ARG	CZ-NH1	7.55	1.42	1.33
21	AA	81	A	P-O5'	-7.55	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1935	G	C6-N1	7.55	1.44	1.39
21	AA	305	G	N1-C2	7.55	1.43	1.37
57	BB	1014	A	C6-N1	7.55	1.40	1.35
57	BB	1303	G	N1-C2	7.55	1.43	1.37
57	BB	2451	A	P-O5'	-7.55	1.52	1.59
57	BB	332	A	C5-C6	-7.55	1.34	1.41
57	BB	617	G	N7-C5	-7.54	1.34	1.39
57	BB	1568	G	N1-C2	7.54	1.43	1.37
57	BB	472	A	C5-C6	7.54	1.47	1.41
57	BB	2844	G	C2-N3	7.54	1.38	1.32
57	BB	1389	G	C6-N1	7.54	1.44	1.39
57	BB	1630	A	C3'-C2'	-7.54	1.44	1.52
57	BB	2062	A	C5-C4	7.54	1.44	1.38
57	BB	2505	G	C5-C4	-7.54	1.33	1.38
57	BB	1226	A	N7-C5	-7.54	1.34	1.39
21	AA	233	C	C5-C6	-7.54	1.28	1.34
21	AA	941	G	C6-N1	7.54	1.44	1.39
57	BB	1616	A	C6-N6	7.54	1.40	1.33
57	BB	2387	U	N1-C2	-7.54	1.31	1.38
21	AA	23	C	C4-N4	7.54	1.40	1.33
57	BB	501	A	N3-C4	-7.54	1.30	1.34
57	BB	636	G	C2'-C1'	-7.54	1.45	1.53
57	BB	2329	U	C3'-C2'	-7.54	1.44	1.52
21	AA	705	G	N1-C2	7.54	1.43	1.37
57	BB	212	G	C6-N1	7.54	1.44	1.39
57	BB	402	A	N3-C4	-7.54	1.30	1.34
57	BB	2828	G	N1-C2	7.54	1.43	1.37
21	AA	348	G	C8-N7	7.53	1.35	1.30
21	AA	647	C	C2-N3	7.53	1.41	1.35
21	AA	1084	G	N9-C8	-7.53	1.32	1.37
23	AW	10	G	C4'-C3'	-7.53	1.44	1.53
23	AW	16	U	C2-N3	7.53	1.43	1.37
57	BB	2636	C	N1-C6	7.53	1.41	1.37
57	BB	680	C	N1-C6	-7.53	1.32	1.37
21	AA	146	G	N9-C8	7.53	1.43	1.37
21	AA	1140	C	C4-N4	7.53	1.40	1.33
23	AW	28	G	C4'-C3'	7.53	1.61	1.53
57	BB	493	G	C2'-C1'	-7.53	1.45	1.53
57	BB	551	G	N9-C4	7.53	1.44	1.38
22	AY	58	A	N3-C4	-7.53	1.30	1.34
57	BB	2552	U	N1-C6	7.53	1.44	1.38
21	AA	77	A	C5-C4	7.53	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1309	G	C6-N1	-7.53	1.34	1.39
26	AV	24	U	P-O5'	-7.53	1.52	1.59
57	BB	1385	A	N9-C4	-7.53	1.33	1.37
57	BB	1780	A	N7-C5	-7.53	1.34	1.39
57	BB	60	G	C6-N1	7.53	1.44	1.39
57	BB	1766	G	C3'-C2'	7.53	1.61	1.52
21	AA	949	A	C8-N7	-7.52	1.26	1.31
21	AA	31	G	C6-N1	7.52	1.44	1.39
57	BB	209	C	N3-C4	7.52	1.39	1.33
57	BB	755	U	C5'-C4'	7.52	1.60	1.51
57	BB	1420	A	C4'-C3'	7.52	1.61	1.53
57	BB	2316	G	C5-C4	7.52	1.43	1.38
21	AA	1256	A	C6-N6	7.52	1.40	1.33
22	AY	48	C	N1-C6	-7.52	1.32	1.37
26	AV	46	G	N1-C2	7.52	1.43	1.37
57	BB	1558	C	C2-N3	-7.52	1.29	1.35
57	BB	2393	U	N1-C2	7.52	1.45	1.38
22	AY	7	U	N3-C4	7.52	1.45	1.38
57	BB	496	G	N9-C8	7.52	1.43	1.37
57	BB	1227	G	N3-C4	7.52	1.40	1.35
57	BB	1716	U	N3-C4	7.52	1.45	1.38
57	BB	2819	G	P-O5'	-7.52	1.52	1.59
21	AA	495	A	C5-C4	-7.52	1.33	1.38
21	AA	565	U	C2-N3	7.52	1.43	1.37
21	AA	1130	A	C8-N7	-7.52	1.26	1.31
57	BB	398	C	C5'-C4'	7.52	1.60	1.51
57	BB	912	C	N1-C6	7.52	1.41	1.37
21	AA	326	G	C6-N1	7.52	1.44	1.39
22	AY	64	A	C2'-C1'	-7.52	1.45	1.53
57	BB	2229	U	C4'-O4'	7.52	1.55	1.45
57	BB	2501	C	N1-C6	-7.52	1.32	1.37
21	AA	393	A	N7-C5	-7.51	1.34	1.39
21	AA	790	A	C1'-N9	-7.51	1.36	1.46
22	AY	67	A	C6-N6	7.51	1.40	1.33
23	AW	16	U	C2'-C1'	-7.51	1.45	1.53
57	BB	1442	U	C2'-C1'	-7.51	1.45	1.53
57	BB	1890	A	N9-C4	-7.51	1.33	1.37
57	BB	1983	G	N1-C2	7.51	1.43	1.37
21	AA	748	G	N7-C5	-7.51	1.34	1.39
21	AA	1443	C	N3-C4	7.51	1.39	1.33
57	BB	1353	A	C2'-C1'	-7.51	1.45	1.53
57	BB	1834	U	C2-N3	7.51	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1455	G	C2-N2	7.51	1.42	1.34
57	BB	272	A	O3'-P	-7.51	1.52	1.61
57	BB	1297	C	N3-C4	7.51	1.39	1.33
57	BB	2543	G	C2-N3	7.51	1.38	1.32
57	BB	2597	G	P-O5'	-7.51	1.52	1.59
21	AA	40	C	C4-N4	7.51	1.40	1.33
21	AA	414	A	C3'-O3'	7.51	1.52	1.42
21	AA	1342	C	N3-C4	7.51	1.39	1.33
21	AA	1389	C	N3-C4	7.51	1.39	1.33
57	BB	1515	A	N9-C4	7.51	1.42	1.37
57	BB	1722	A	C6-N6	7.51	1.40	1.33
57	BB	2293	G	C2-N3	7.51	1.38	1.32
21	AA	1323	G	C8-N7	-7.51	1.26	1.30
57	BB	530	G	C5-C6	-7.51	1.34	1.42
57	BB	1527	G	N7-C5	-7.51	1.34	1.39
57	BB	2168	G	O3'-P	-7.51	1.52	1.61
21	AA	173	U	C5-C6	-7.50	1.27	1.34
21	AA	660	C	C4-N4	7.50	1.40	1.33
57	BB	5	A	N3-C4	-7.50	1.30	1.34
57	BB	364	C	O3'-P	-7.50	1.52	1.61
57	BB	975	A	C8-N7	-7.50	1.26	1.31
57	BB	1248	G	C2-N2	7.50	1.42	1.34
21	AA	928	G	C2'-C1'	-7.50	1.45	1.53
21	AA	1125	U	C2'-C1'	-7.50	1.45	1.53
57	BB	23	G	C2-N3	7.50	1.38	1.32
57	BB	2508	G	C2-N2	7.50	1.42	1.34
57	BB	2725	A	C6-N1	7.50	1.40	1.35
57	BB	2820	A	C6-N1	7.50	1.40	1.35
7	AP	37	GLY	CA-C	-7.50	1.39	1.51
21	AA	179	A	C6-N6	7.50	1.40	1.33
21	AA	404	G	C2-N3	7.50	1.38	1.32
21	AA	608	A	C3'-C2'	-7.50	1.44	1.52
57	BB	530	G	N1-C2	7.50	1.43	1.37
57	BB	1971	U	C4-C5	7.50	1.50	1.43
21	AA	227	G	N9-C8	7.50	1.43	1.37
57	BB	805	G	N7-C5	-7.50	1.34	1.39
57	BB	583	G	C5-C4	7.50	1.43	1.38
57	BB	1604	C	P-O5'	-7.50	1.52	1.59
57	BB	1721	G	C6-N1	7.50	1.44	1.39
57	BB	1848	A	C6-N6	7.50	1.40	1.33
57	BB	2670	A	C6-N6	7.50	1.40	1.33
58	BA	109	A	P-O5'	-7.50	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	347	G	C6-O6	-7.49	1.17	1.24
21	AA	363	A	C8-N7	-7.49	1.26	1.31
57	BB	122	G	C5-C6	-7.49	1.34	1.42
57	BB	1441	G	N1-C2	7.49	1.43	1.37
57	BB	983	A	O4'-C1'	-7.49	1.31	1.41
57	BB	1972	G	C6-N1	7.49	1.44	1.39
22	AY	73	A	C3'-O3'	7.49	1.52	1.42
57	BB	149	A	C2'-C1'	-7.49	1.45	1.53
57	BB	1329	U	N1-C2	7.49	1.45	1.38
57	BB	2126	A	C6-N6	7.49	1.40	1.33
21	AA	629	A	C2'-C1'	-7.49	1.45	1.53
26	AV	2	G	C6-N1	7.49	1.44	1.39
57	BB	277	G	C2-N3	7.49	1.38	1.32
57	BB	288	U	C2-N3	7.49	1.43	1.37
57	BB	1250	G	N7-C5	-7.49	1.34	1.39
57	BB	2742	G	N9-C4	-7.49	1.31	1.38
21	AA	561	U	N3-C4	7.49	1.45	1.38
57	BB	274	C	C3'-C2'	7.49	1.61	1.52
57	BB	1061	U	C3'-C2'	-7.49	1.44	1.52
21	AA	1050	G	N7-C5	-7.49	1.34	1.39
22	AY	3	G	C5'-C4'	7.49	1.60	1.51
57	BB	90	U	C2-N3	7.49	1.43	1.37
57	BB	896	A	C6-N6	7.49	1.40	1.33
57	BB	1962	C	N3-C4	7.49	1.39	1.33
57	BB	625	G	C2-N3	7.48	1.38	1.32
57	BB	924	G	N1-C2	7.48	1.43	1.37
57	BB	1749	A	C5-C4	7.48	1.44	1.38
21	AA	102	G	C8-N7	-7.48	1.26	1.30
21	AA	190	A	P-O5'	-7.48	1.52	1.59
21	AA	456	A	N9-C4	-7.48	1.33	1.37
57	BB	1509	A	N3-C4	-7.48	1.30	1.34
21	AA	384	G	N9-C4	7.48	1.44	1.38
21	AA	862	C	N3-C4	7.48	1.39	1.33
57	BB	133	U	P-O5'	-7.48	1.52	1.59
57	BB	166	U	C4'-C3'	-7.48	1.45	1.53
57	BB	180	G	C8-N7	-7.48	1.26	1.30
57	BB	401	A	N9-C4	-7.48	1.33	1.37
57	BB	1251	C	N3-C4	7.48	1.39	1.33
57	BB	1757	A	N3-C4	7.48	1.39	1.34
57	BB	1838	C	C3'-C2'	7.48	1.61	1.52
57	BB	2377	A	N7-C5	-7.48	1.34	1.39
21	AA	1383	C	P-O5'	-7.48	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1900	A	P-O5'	7.48	1.67	1.59
21	AA	288	A	C2'-C1'	7.48	1.61	1.53
21	AA	442	G	C5-C4	7.48	1.43	1.38
26	AV	65	C	C5'-C4'	7.48	1.60	1.51
57	BB	68	G	O3'-P	-7.48	1.52	1.61
57	BB	1904	G	C5-C4	-7.48	1.33	1.38
57	BB	1210	G	C5-C6	-7.48	1.34	1.42
57	BB	2168	G	N7-C5	-7.48	1.34	1.39
21	AA	21	G	C3'-C2'	-7.47	1.44	1.52
21	AA	771	G	C2'-C1'	-7.47	1.45	1.53
22	AY	14	A	N7-C5	-7.47	1.34	1.39
57	BB	146	A	N9-C8	-7.47	1.31	1.37
57	BB	1432	G	P-O5'	-7.47	1.52	1.59
57	BB	1633	G	C5-C4	7.47	1.43	1.38
8	AQ	61	ARG	CZ-NH2	7.47	1.42	1.33
57	BB	1299	G	C2'-C1'	-7.47	1.45	1.53
21	AA	927	G	C2'-C1'	-7.47	1.45	1.53
57	BB	976	G	N1-C2	7.47	1.43	1.37
57	BB	1507	C	N3-C4	7.47	1.39	1.33
57	BB	2073	C	C4'-O4'	-7.47	1.35	1.45
21	AA	127	G	C8-N7	7.47	1.35	1.30
21	AA	412	A	O3'-P	-7.47	1.52	1.61
21	AA	836	G	C3'-C2'	-7.47	1.44	1.52
21	AA	1097	C	C2-N3	-7.47	1.29	1.35
21	AA	1157	A	C4'-C3'	7.47	1.61	1.53
57	BB	1787	A	C5'-C4'	7.47	1.60	1.51
21	AA	430	A	N7-C5	-7.47	1.34	1.39
21	AA	85	U	N3-C4	7.47	1.45	1.38
26	AV	38	A	N7-C5	7.47	1.43	1.39
57	BB	604	G	C8-N7	7.47	1.35	1.30
57	BB	633	A	C4'-C3'	-7.47	1.45	1.53
57	BB	2436	G	N9-C4	7.47	1.44	1.38
21	AA	70	U	N3-C4	7.46	1.45	1.38
21	AA	1101	A	O3'-P	-7.46	1.52	1.61
57	BB	232	G	C2-N3	7.46	1.38	1.32
57	BB	348	A	C8-N7	-7.46	1.26	1.31
57	BB	722	A	C5'-C4'	7.46	1.60	1.51
57	BB	2330	G	N9-C4	-7.46	1.31	1.38
58	BA	35	C	C4-C5	7.46	1.49	1.43
57	BB	231	A	C5'-C4'	7.46	1.60	1.51
57	BB	2238	G	C2-N3	7.46	1.38	1.32
58	BA	79	G	N9-C4	7.46	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	419	C	C4-N4	7.46	1.40	1.33
21	AA	530	G	C8-N7	-7.46	1.26	1.30
21	AA	1089	G	C2-N3	7.46	1.38	1.32
23	AW	50	U	C4-O4	7.46	1.29	1.23
57	BB	290	U	C2-N3	7.46	1.43	1.37
58	BA	41	G	C5-C4	7.46	1.43	1.38
7	AP	39	PHE	CG-CD2	7.46	1.50	1.38
21	AA	99	C	N3-C4	7.46	1.39	1.33
21	AA	145	G	N1-C2	7.46	1.43	1.37
57	BB	2752	C	C5'-C4'	7.46	1.60	1.51
21	AA	474	G	P-O5'	-7.45	1.52	1.59
21	AA	760	G	C3'-O3'	7.45	1.52	1.42
21	AA	833	G	N9-C8	7.45	1.43	1.37
21	AA	1262	C	C2'-C1'	-7.45	1.45	1.53
57	BB	1504	A	C2'-C1'	-7.45	1.45	1.53
57	BB	1572	A	C5'-C4'	7.45	1.60	1.51
21	AA	857	C	C4-C5	7.45	1.49	1.43
21	AA	1209	C	C4-N4	7.45	1.40	1.33
57	BB	1225	G	C5-C6	-7.45	1.34	1.42
57	BB	1720	U	C3'-O3'	7.45	1.52	1.42
21	AA	1298	U	O3'-P	-7.45	1.52	1.61
26	AV	70	G	P-O5'	7.45	1.67	1.59
57	BB	908	C	C4'-C3'	7.45	1.61	1.53
57	BB	2561	U	N1-C6	-7.45	1.31	1.38
57	BB	2848	G	C1'-N9	-7.45	1.36	1.46
58	BA	104	A	C5-C6	-7.45	1.34	1.41
13	AB	136	ARG	CD-NE	7.45	1.59	1.46
21	AA	45	G	C2-N2	7.45	1.42	1.34
57	BB	879	G	C2-N2	7.45	1.42	1.34
57	BB	1248	G	N9-C8	-7.45	1.32	1.37
57	BB	1610	A	N9-C4	7.45	1.42	1.37
57	BB	2600	A	N3-C4	-7.45	1.30	1.34
21	AA	199	A	N3-C4	-7.45	1.30	1.34
57	BB	355	U	C4-C5	7.45	1.50	1.43
57	BB	2813	A	C4'-C3'	7.45	1.61	1.53
26	AV	66	C	C2-N3	7.45	1.41	1.35
57	BB	1857	G	C3'-C2'	-7.45	1.44	1.52
57	BB	2444	G	C2-N2	7.45	1.42	1.34
57	BB	2642	G	N1-C2	7.45	1.43	1.37
58	BA	29	A	C8-N7	-7.45	1.26	1.31
21	AA	460	A	C2'-C1'	-7.44	1.45	1.53
21	AA	712	A	C6-N6	7.44	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1845	G	C8-N7	-7.44	1.26	1.30
22	AY	33	U	N3-C4	7.44	1.45	1.38
23	AW	29	G	C4'-C3'	7.44	1.61	1.53
57	BB	128	C	N1-C6	7.44	1.41	1.37
57	BB	1064	C	P-O5'	-7.44	1.52	1.59
57	BB	1784	A	N9-C4	-7.44	1.33	1.37
21	AA	1058	G	C6-O6	-7.44	1.17	1.24
57	BB	1311	G	C4'-C3'	-7.44	1.45	1.53
57	BB	1425	G	C2-N3	7.44	1.38	1.32
57	BB	2329	U	C4'-O4'	7.44	1.55	1.45
21	AA	623	C	N3-C4	7.44	1.39	1.33
21	AA	1500	A	C5-C4	7.44	1.44	1.38
57	BB	993	G	C2-N3	7.44	1.38	1.32
21	AA	752	G	C2'-C1'	-7.44	1.45	1.53
21	AA	888	G	C5-C6	-7.44	1.34	1.42
21	AA	1302	C	C4'-O4'	7.44	1.55	1.45
21	AA	1408	A	C8-N7	-7.44	1.26	1.31
57	BB	538	A	C2-N3	7.44	1.40	1.33
57	BB	1089	A	C8-N7	-7.44	1.26	1.31
57	BB	1422	G	N9-C8	-7.44	1.32	1.37
57	BB	1428	C	C4-C5	7.44	1.49	1.43
57	BB	2855	C	N3-C4	7.44	1.39	1.33
21	AA	41	G	C6-N1	7.44	1.44	1.39
57	BB	481	G	C5'-C4'	7.44	1.60	1.51
54	BF	79	ARG	CZ-NH2	7.43	1.42	1.33
57	BB	2287	A	C6-N1	7.43	1.40	1.35
57	BB	597	G	C6-N1	7.43	1.44	1.39
57	BB	1497	U	C4-C5	7.43	1.50	1.43
21	AA	72	A	C2'-C1'	-7.43	1.45	1.53
57	BB	176	A	C8-N7	-7.43	1.26	1.31
57	BB	295	G	C4'-C3'	7.43	1.61	1.53
57	BB	1782	U	C4'-O4'	-7.43	1.35	1.45
57	BB	2385	C	N3-C4	7.43	1.39	1.33
57	BB	2858	C	C2'-C1'	-7.43	1.45	1.53
57	BB	715	A	C6-N6	7.43	1.39	1.33
57	BB	1901	A	N9-C4	7.43	1.42	1.37
57	BB	2223	G	N1-C2	7.43	1.43	1.37
21	AA	823	C	N1-C6	7.42	1.41	1.37
21	AA	897	C	O3'-P	-7.42	1.52	1.61
21	AA	1134	G	N9-C4	-7.42	1.32	1.38
57	BB	467	G	N1-C2	7.42	1.43	1.37
57	BB	2798	U	C4'-C3'	7.42	1.61	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	641	U	N3-C4	7.42	1.45	1.38
26	AV	21	A	C6-N6	7.42	1.39	1.33
57	BB	774	G	N9-C8	7.42	1.43	1.37
57	BB	1125	G	P-O5'	-7.42	1.52	1.59
57	BB	1160	G	O3'-P	-7.42	1.52	1.61
57	BB	2085	U	C2-N3	7.42	1.43	1.37
22	AY	8	U	C3'-C2'	-7.42	1.44	1.52
21	AA	1039	G	C2'-C1'	-7.42	1.45	1.53
21	AA	1483	A	C5-C4	7.42	1.44	1.38
21	AA	1529	G	C8-N7	-7.42	1.26	1.30
57	BB	2218	G	C3'-O3'	7.42	1.52	1.42
21	AA	1297	G	C2-N3	7.42	1.38	1.32
26	AV	69	C	P-O5'	-7.42	1.52	1.59
57	BB	669	G	N3-C4	7.42	1.40	1.35
57	BB	933	A	C3'-C2'	-7.42	1.44	1.52
57	BB	2891	U	P-O5'	-7.42	1.52	1.59
57	BB	734	A	N3-C4	-7.42	1.30	1.34
57	BB	2077	A	N3-C4	7.42	1.39	1.34
58	BA	3	C	N3-C4	7.42	1.39	1.33
21	AA	69	G	C5-C4	7.41	1.43	1.38
21	AA	143	A	O3'-P	-7.41	1.52	1.61
21	AA	1352	C	N3-C4	7.41	1.39	1.33
26	AV	46	G	N7-C5	-7.41	1.34	1.39
57	BB	292	U	C2-N3	7.41	1.43	1.37
57	BB	1277	G	N9-C8	-7.41	1.32	1.37
57	BB	1291	C	P-O5'	-7.41	1.52	1.59
57	BB	1323	C	P-O5'	-7.41	1.52	1.59
57	BB	2513	A	N9-C8	7.41	1.43	1.37
57	BB	2753	A	N9-C4	-7.41	1.33	1.37
21	AA	1253	G	N1-C2	7.41	1.43	1.37
57	BB	549	G	N3-C4	7.41	1.40	1.35
57	BB	1484	U	N3-C4	7.41	1.45	1.38
21	AA	237	G	C5-C6	-7.41	1.34	1.42
21	AA	511	C	N1-C6	7.41	1.41	1.37
21	AA	779	C	C4-C5	7.41	1.48	1.43
21	AA	1015	G	N7-C5	-7.41	1.34	1.39
21	AA	1475	G	C5-C6	-7.41	1.34	1.42
21	AA	1516	G	C5-C4	-7.41	1.33	1.38
57	BB	867	C	C2-O2	7.41	1.31	1.24
21	AA	1087	G	C6-N1	7.41	1.44	1.39
57	BB	407	G	N9-C4	7.41	1.43	1.38
57	BB	1153	C	P-O5'	-7.41	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2897	U	O4'-C1'	7.41	1.51	1.41
21	AA	199	A	N7-C5	-7.41	1.34	1.39
57	BB	215	G	C2'-C1'	-7.41	1.45	1.53
57	BB	1780	A	C3'-C2'	7.41	1.61	1.52
57	BB	790	U	N1-C2	7.41	1.45	1.38
57	BB	1157	G	C2'-C1'	-7.41	1.45	1.53
57	BB	1260	A	C6-N6	7.40	1.39	1.33
57	BB	1571	A	C6-N6	7.40	1.39	1.33
21	AA	1215	G	C6-N1	7.40	1.44	1.39
21	AA	1302	C	C3'-O3'	7.40	1.52	1.42
26	AV	20	U	O3'-P	-7.40	1.52	1.61
33	BN	69	ARG	CZ-NH1	7.40	1.42	1.33
57	BB	1857	G	C6-N1	7.40	1.44	1.39
57	BB	2471	A	N9-C4	-7.40	1.33	1.37
57	BB	1660	G	C5-C4	7.40	1.43	1.38
58	BA	30	C	N1-C6	7.40	1.41	1.37
21	AA	151	A	N7-C5	-7.40	1.34	1.39
21	AA	280	C	N1-C2	7.40	1.47	1.40
21	AA	423	G	P-O5'	-7.40	1.52	1.59
21	AA	679	C	C4'-O4'	7.40	1.55	1.45
21	AA	1293	C	N3-C4	7.40	1.39	1.33
57	BB	170	U	C5'-C4'	7.40	1.60	1.51
57	BB	2425	A	C8-N7	-7.40	1.26	1.31
57	BB	2569	G	C6-N1	7.40	1.44	1.39
21	AA	1015	G	N1-C2	7.40	1.43	1.37
21	AA	1139	G	C6-N1	7.40	1.44	1.39
23	AW	73	A	C6-N1	7.40	1.40	1.35
26	AV	46	G	C2'-C1'	-7.40	1.45	1.53
57	BB	1622	G	C2-N3	7.40	1.38	1.32
57	BB	2332	C	C4-C5	7.40	1.48	1.43
21	AA	527	G	N1-C2	7.40	1.43	1.37
21	AA	249	U	C2-N3	7.39	1.43	1.37
22	AY	20	G	N3-C4	7.39	1.40	1.35
22	AY	23	A	C5-C4	7.39	1.44	1.38
26	AV	29	G	N9-C8	7.39	1.43	1.37
57	BB	627	A	N7-C5	-7.39	1.34	1.39
57	BB	1773	A	C6-N1	7.39	1.40	1.35
57	BB	2221	G	N9-C8	7.39	1.43	1.37
21	AA	399	G	P-O5'	-7.39	1.52	1.59
21	AA	500	G	C2-N2	7.39	1.42	1.34
21	AA	734	G	N3-C4	7.39	1.40	1.35
21	AA	765	G	C6-N1	7.39	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1033	G	O3'-P	-7.39	1.52	1.61
57	BB	301	G	N7-C5	-7.39	1.34	1.39
57	BB	774	G	P-O5'	-7.39	1.52	1.59
57	BB	1032	A	N7-C5	-7.39	1.34	1.39
57	BB	350	G	O3'-P	-7.39	1.52	1.61
57	BB	613	A	N3-C4	-7.39	1.30	1.34
57	BB	2550	G	C5-C4	7.39	1.43	1.38
57	BB	2830	C	C2'-C1'	-7.39	1.45	1.53
57	BB	2897	U	C4-C5	7.39	1.50	1.43
21	AA	308	C	N3-C4	7.39	1.39	1.33
21	AA	1247	U	C2'-C1'	-7.39	1.45	1.53
57	BB	95	A	O3'-P	-7.39	1.52	1.61
21	AA	772	U	C4'-C3'	7.39	1.61	1.53
21	AA	1348	U	P-O5'	-7.39	1.52	1.59
21	AA	1488	G	N9-C8	7.39	1.43	1.37
57	BB	1912	A	N9-C4	-7.39	1.33	1.37
57	BB	1936	A	N3-C4	7.39	1.39	1.34
57	BB	1953	A	C2'-C1'	-7.39	1.45	1.53
57	BB	2895	G	C6-N1	7.39	1.44	1.39
58	BA	34	A	C2'-C1'	-7.39	1.45	1.53
21	AA	397	A	C6-N6	7.38	1.39	1.33
21	AA	1449	C	C4-N4	7.38	1.40	1.33
23	AW	64	A	C4'-O4'	7.38	1.55	1.45
26	AV	18	G	N7-C5	-7.38	1.34	1.39
57	BB	1574	C	N3-C4	7.38	1.39	1.33
57	BB	2139	U	N3-C4	7.38	1.45	1.38
57	BB	2284	A	N9-C4	-7.38	1.33	1.37
21	AA	865	A	C2-N3	7.38	1.40	1.33
57	BB	1393	A	C4'-O4'	7.38	1.55	1.45
57	BB	1847	A	N3-C4	-7.38	1.30	1.34
21	AA	34	C	C3'-C2'	-7.38	1.44	1.52
21	AA	42	G	N9-C8	7.38	1.43	1.37
21	AA	831	A	C5'-C4'	7.38	1.60	1.51
23	AW	2	C	N3-C4	7.38	1.39	1.33
23	AW	53	G	C5-C6	-7.38	1.34	1.42
57	BB	2045	C	C4-N4	7.38	1.40	1.33
57	BB	2346	A	N9-C8	7.38	1.43	1.37
57	BB	2388	A	C6-N6	7.38	1.39	1.33
57	BB	2586	U	N1-C6	-7.38	1.31	1.38
21	AA	1118	U	C4-C5	7.38	1.50	1.43
57	BB	1620	G	C6-N1	7.38	1.44	1.39
21	AA	1113	C	C3'-C2'	-7.38	1.44	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	26	G	C2'-C1'	-7.38	1.45	1.53
57	BB	2072	C	N3-C4	7.38	1.39	1.33
57	BB	2108	A	C6-N1	-7.38	1.30	1.35
57	BB	2341	G	N7-C5	-7.38	1.34	1.39
57	BB	2610	C	C2-N3	7.38	1.41	1.35
57	BB	252	G	N7-C5	-7.38	1.34	1.39
57	BB	1142	A	C5-C6	-7.38	1.34	1.41
57	BB	1439	A	N7-C5	-7.38	1.34	1.39
21	AA	1428	A	N9-C4	7.37	1.42	1.37
57	BB	879	G	C5'-C4'	7.37	1.60	1.51
57	BB	1011	G	N1-C2	7.37	1.43	1.37
21	AA	429	U	O3'-P	-7.37	1.52	1.61
21	AA	1134	G	N7-C5	-7.37	1.34	1.39
22	AY	5	A	N9-C8	-7.37	1.31	1.37
57	BB	490	C	O3'-P	-7.37	1.52	1.61
57	BB	701	G	C2-N3	7.37	1.38	1.32
57	BB	1987	A	C2-N3	7.37	1.40	1.33
21	AA	229	U	C2'-C1'	-7.37	1.45	1.53
57	BB	821	A	C6-N6	7.37	1.39	1.33
57	BB	1532	A	C6-N1	7.37	1.40	1.35
21	AA	1047	G	C2-N3	7.37	1.38	1.32
57	BB	1177	G	C6-N1	7.37	1.44	1.39
57	BB	1260	A	N3-C4	7.37	1.39	1.34
57	BB	1715	G	C8-N7	7.37	1.35	1.30
57	BB	2374	C	C2-N3	7.37	1.41	1.35
21	AA	651	C	N1-C6	7.37	1.41	1.37
57	BB	591	U	O3'-P	-7.37	1.52	1.61
57	BB	1934	C	C4-N4	7.37	1.40	1.33
57	BB	2077	A	C4'-C3'	-7.37	1.45	1.53
57	BB	2124	G	N1-C2	7.37	1.43	1.37
21	AA	1113	C	N3-C4	7.36	1.39	1.33
21	AA	1335	U	C4'-C3'	7.36	1.61	1.53
26	AV	58	A	C5-C4	7.36	1.44	1.38
57	BB	904	G	P-O5'	-7.36	1.52	1.59
57	BB	1210	G	O3'-P	-7.36	1.52	1.61
57	BB	2093	G	P-O5'	-7.36	1.52	1.59
45	BC	68	ARG	CZ-NH1	7.36	1.42	1.33
21	AA	459	A	C6-N1	7.36	1.40	1.35
21	AA	521	G	C2'-C1'	-7.36	1.45	1.53
21	AA	851	G	O4'-C1'	7.36	1.51	1.41
22	AY	62	A	N7-C5	-7.36	1.34	1.39
57	BB	1193	G	C8-N7	-7.36	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1491	G	C2-N3	7.36	1.38	1.32
57	BB	2173	A	P-O5'	-7.36	1.52	1.59
6	AO	76	ARG	NE-CZ	7.36	1.42	1.33
21	AA	151	A	C6-N1	7.36	1.40	1.35
57	BB	847	U	N3-C4	7.36	1.45	1.38
57	BB	1219	U	C2-N3	7.36	1.43	1.37
1	AJ	101	SER	CA-CB	7.36	1.64	1.52
21	AA	951	G	C5-C4	7.36	1.43	1.38
57	BB	1264	A	N1-C2	7.36	1.41	1.34
57	BB	1293	C	C4-N4	7.36	1.40	1.33
57	BB	1697	G	N1-C2	7.36	1.43	1.37
57	BB	2425	A	C6-N6	7.36	1.39	1.33
57	BB	2814	A	C6-N6	7.36	1.39	1.33
21	AA	306	A	C5-C4	7.36	1.43	1.38
57	BB	1378	A	N3-C4	-7.36	1.30	1.34
57	BB	1514	G	C2-N3	7.36	1.38	1.32
57	BB	1888	G	C8-N7	-7.36	1.26	1.30
57	BB	2618	G	N9-C8	7.36	1.43	1.37
21	AA	834	U	N3-C4	7.35	1.45	1.38
57	BB	2208	C	N1-C6	-7.35	1.32	1.37
57	BB	2787	C	P-O5'	-7.35	1.52	1.59
21	AA	1312	G	N7-C5	7.35	1.43	1.39
23	AW	53	G	N9-C8	7.35	1.43	1.37
26	AV	11	A	O3'-P	-7.35	1.52	1.61
57	BB	1526	C	N3-C4	7.35	1.39	1.33
57	BB	2019	A	P-O5'	-7.35	1.52	1.59
57	BB	2454	G	N3-C4	-7.35	1.30	1.35
21	AA	330	C	P-O5'	-7.35	1.52	1.59
21	AA	391	G	C3'-C2'	7.35	1.61	1.52
57	BB	1149	G	C8-N7	-7.35	1.26	1.30
23	AW	13	C	C4-C5	7.35	1.48	1.43
57	BB	157	C	N3-C4	7.35	1.39	1.33
57	BB	1422	G	N3-C4	-7.35	1.30	1.35
57	BB	2825	G	O3'-P	-7.35	1.52	1.61
21	AA	162	A	C4'-O4'	7.35	1.55	1.45
57	BB	497	A	C6-N1	7.35	1.40	1.35
57	BB	1086	A	C4'-O4'	-7.35	1.36	1.45
57	BB	1345	C	N3-C4	7.35	1.39	1.33
57	BB	1725	U	N3-C4	7.35	1.45	1.38
21	AA	1254	A	C5'-C4'	7.34	1.60	1.51
57	BB	774	G	N3-C4	-7.34	1.30	1.35
57	BB	945	A	C6-N1	7.34	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2518	A	C6-N6	7.34	1.39	1.33
57	BB	2642	G	O3'-P	7.34	1.70	1.61
57	BB	2885	G	C6-N1	7.34	1.44	1.39
57	BB	2899	A	C6-N1	7.34	1.40	1.35
21	AA	39	G	C2-N2	7.34	1.41	1.34
57	BB	2280	G	N1-C2	7.34	1.43	1.37
57	BB	2837	A	C2'-C1'	-7.34	1.45	1.53
21	AA	470	C	C2-N3	7.34	1.41	1.35
21	AA	893	C	C2-N3	7.34	1.41	1.35
21	AA	1106	G	N1-C2	7.34	1.43	1.37
57	BB	274	C	N3-C4	7.34	1.39	1.33
57	BB	959	A	C6-N6	7.34	1.39	1.33
57	BB	983	A	N7-C5	-7.34	1.34	1.39
57	BB	1154	G	C5-C6	-7.34	1.35	1.42
57	BB	1194	A	C6-N6	7.34	1.39	1.33
57	BB	1415	U	N3-C4	7.34	1.45	1.38
57	BB	2742	G	C5'-C4'	7.34	1.60	1.51
57	BB	2769	U	C4'-O4'	-7.34	1.36	1.45
21	AA	171	A	O3'-P	-7.34	1.52	1.61
21	AA	738	C	N1-C6	7.34	1.41	1.37
57	BB	216	A	C6-N6	7.34	1.39	1.33
57	BB	2502	G	C2-N3	7.34	1.38	1.32
57	BB	2853	C	C2'-C1'	-7.34	1.45	1.53
21	AA	303	A	N9-C4	-7.34	1.33	1.37
27	B5	163	TYR	CE2-CZ	7.34	1.48	1.38
57	BB	117	G	C2-N2	7.34	1.41	1.34
57	BB	1322	A	C2'-C1'	-7.34	1.45	1.53
57	BB	2333	A	N3-C4	7.34	1.39	1.34
57	BB	2688	G	C8-N7	-7.34	1.26	1.30
58	BA	114	C	C4-C5	7.34	1.48	1.43
21	AA	738	C	C4-N4	7.34	1.40	1.33
21	AA	1285	A	C4'-C3'	-7.34	1.45	1.53
23	AW	29	G	C3'-C2'	7.34	1.61	1.52
57	BB	227	A	N7-C5	-7.34	1.34	1.39
57	BB	653	U	C4'-C3'	7.34	1.61	1.53
22	AY	10	G	C2'-O2'	7.33	1.51	1.41
57	BB	1363	C	C4-N4	7.33	1.40	1.33
57	BB	1846	G	N3-C4	-7.33	1.30	1.35
21	AA	979	C	C2'-C1'	-7.33	1.45	1.53
57	BB	1468	U	C2-N3	7.33	1.42	1.37
57	BB	1593	A	N9-C8	7.33	1.43	1.37
57	BB	2544	G	N9-C8	-7.33	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	338	A	C6-N1	7.33	1.40	1.35
57	BB	506	G	C5-C6	7.33	1.49	1.42
57	BB	518	G	N1-C2	7.33	1.43	1.37
57	BB	600	G	C8-N7	-7.33	1.26	1.30
57	BB	716	A	N3-C4	-7.33	1.30	1.34
57	BB	1281	G	N1-C2	7.33	1.43	1.37
57	BB	1303	G	N7-C5	-7.33	1.34	1.39
57	BB	1784	A	C5'-C4'	7.33	1.60	1.51
57	BB	2657	A	C8-N7	-7.33	1.26	1.31
21	AA	818	G	N7-C5	-7.33	1.34	1.39
22	AY	19	G	C4'-C3'	7.33	1.61	1.53
57	BB	1982	U	N1-C6	7.33	1.44	1.38
57	BB	2899	A	N9-C4	7.33	1.42	1.37
21	AA	110	C	C5-C6	-7.33	1.28	1.34
21	AA	211	G	C3'-C2'	7.33	1.61	1.52
21	AA	627	G	C5'-C4'	7.33	1.60	1.51
21	AA	641	U	C4'-O4'	-7.33	1.36	1.45
57	BB	2120	G	C8-N7	-7.33	1.26	1.30
57	BB	2309	A	C6-N6	7.33	1.39	1.33
21	AA	464	U	C2'-C1'	-7.33	1.45	1.53
57	BB	132	G	N3-C4	-7.33	1.30	1.35
57	BB	572	A	P-O5'	-7.33	1.52	1.59
57	BB	2563	U	C4'-C3'	-7.33	1.45	1.53
21	AA	318	G	N1-C2	7.33	1.43	1.37
57	BB	227	A	C2'-C1'	-7.33	1.45	1.53
57	BB	367	G	C2-N3	7.33	1.38	1.32
57	BB	375	G	N9-C8	-7.33	1.32	1.37
57	BB	1768	C	N3-C4	7.33	1.39	1.33
21	AA	392	C	C4-C5	-7.32	1.37	1.43
21	AA	1071	C	P-O5'	-7.32	1.52	1.59
22	AY	35	A	P-O5'	7.32	1.67	1.59
57	BB	113	U	P-O5'	-7.32	1.52	1.59
57	BB	416	U	N3-C4	7.32	1.45	1.38
57	BB	601	C	C4-N4	7.32	1.40	1.33
57	BB	655	A	O3'-P	-7.32	1.52	1.61
57	BB	755	U	O3'-P	-7.32	1.52	1.61
57	BB	901	C	C3'-C2'	-7.32	1.44	1.52
57	BB	1656	C	C2'-C1'	-7.32	1.45	1.53
57	BB	2839	G	N9-C4	-7.32	1.32	1.38
21	AA	22	G	C3'-C2'	-7.32	1.44	1.52
21	AA	631	C	N3-C4	7.32	1.39	1.33
21	AA	1419	G	C2'-C1'	-7.32	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2517	C	N1-C6	-7.32	1.32	1.37
21	AA	407	U	N3-C4	7.32	1.45	1.38
21	AA	672	U	N3-C4	7.32	1.45	1.38
57	BB	818	G	C8-N7	-7.32	1.26	1.30
57	BB	833	A	C8-N7	-7.32	1.26	1.31
57	BB	1952	A	C2'-C1'	-7.32	1.45	1.53
21	AA	53	A	C3'-C2'	7.32	1.61	1.52
57	BB	2621	G	C4'-O4'	-7.32	1.36	1.45
21	AA	223	A	C6-N1	7.32	1.40	1.35
21	AA	355	C	N3-C4	7.32	1.39	1.33
57	BB	1087	G	C6-N1	7.32	1.44	1.39
57	BB	1758	U	C4-O4	7.32	1.29	1.23
57	BB	1897	G	N7-C5	7.32	1.43	1.39
58	BA	60	C	C2'-C1'	-7.32	1.45	1.53
21	AA	31	G	C2-N3	7.32	1.38	1.32
21	AA	1136	C	N1-C6	7.32	1.41	1.37
57	BB	1189	A	C8-N7	-7.32	1.26	1.31
57	BB	1206	G	N9-C8	7.32	1.43	1.37
57	BB	1681	G	C2-N3	7.32	1.38	1.32
57	BB	2653	U	P-O5'	-7.32	1.52	1.59
21	AA	1018	G	N1-C2	7.31	1.43	1.37
37	BR	90	ARG	CZ-NH2	7.31	1.42	1.33
57	BB	356	G	N7-C5	-7.31	1.34	1.39
57	BB	2459	A	N7-C5	-7.31	1.34	1.39
21	AA	417	G	C5-C4	-7.31	1.33	1.38
23	AW	69	G	N7-C5	-7.31	1.34	1.39
57	BB	1427	A	C5-C4	7.31	1.43	1.38
21	AA	506	G	C4'-O4'	-7.31	1.36	1.45
57	BB	841	G	N9-C8	7.31	1.43	1.37
21	AA	455	G	N1-C2	7.31	1.43	1.37
21	AA	870	U	C2'-C1'	-7.31	1.45	1.53
23	AW	3	C	C1'-N1	7.31	1.59	1.48
57	BB	340	A	O3'-P	-7.31	1.52	1.61
57	BB	1001	A	N3-C4	-7.31	1.30	1.34
57	BB	1805	A	P-O5'	-7.31	1.52	1.59
57	BB	2272	U	N1-C2	7.31	1.45	1.38
21	AA	930	C	C5'-C4'	7.31	1.60	1.51
57	BB	169	G	C6-N1	7.31	1.44	1.39
57	BB	247	G	N9-C8	7.31	1.43	1.37
57	BB	1718	G	C2-N2	7.31	1.41	1.34
21	AA	327	A	N3-C4	-7.30	1.30	1.34
57	BB	25	U	O3'-P	-7.30	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	884	U	C2'-C1'	-7.30	1.45	1.53
57	BB	1288	G	N7-C5	-7.30	1.34	1.39
57	BB	1309	G	C4'-O4'	7.30	1.55	1.45
57	BB	2179	C	C4-N4	7.30	1.40	1.33
57	BB	2462	C	N3-C4	7.30	1.39	1.33
57	BB	2298	A	C2'-C1'	7.30	1.61	1.53
26	AV	9	G	N7-C5	-7.30	1.34	1.39
57	BB	276	U	N3-C4	7.30	1.45	1.38
57	BB	496	G	N9-C4	7.30	1.43	1.38
57	BB	919	U	N1-C6	7.30	1.44	1.38
57	BB	1705	A	N3-C4	-7.30	1.30	1.34
57	BB	1850	G	C5-C4	-7.30	1.33	1.38
21	AA	535	A	C6-N6	7.30	1.39	1.33
57	BB	940	G	C6-N1	7.30	1.44	1.39
57	BB	2138	G	P-O5'	-7.30	1.52	1.59
21	AA	371	A	C6-N1	7.30	1.40	1.35
57	BB	360	U	C4'-C3'	7.30	1.61	1.53
21	AA	672	U	C2'-C1'	-7.30	1.45	1.53
21	AA	966	G	C4'-O4'	-7.30	1.36	1.45
22	AY	7	U	C1'-N1	7.30	1.59	1.48
22	AY	22	G	P-O5'	-7.30	1.52	1.59
53	BE	162	ARG	CD-NE	7.30	1.58	1.46
57	BB	893	C	N3-C4	7.30	1.39	1.33
21	AA	678	U	C2-N3	7.29	1.42	1.37
57	BB	1299	G	C6-N1	7.29	1.44	1.39
57	BB	1631	G	C4'-C3'	7.29	1.61	1.53
21	AA	1044	A	C5'-C4'	7.29	1.60	1.51
57	BB	1935	G	N1-C2	7.29	1.43	1.37
21	AA	633	G	C5-C4	7.29	1.43	1.38
21	AA	1055	A	C6-N6	7.29	1.39	1.33
57	BB	221	A	C5-C4	7.29	1.43	1.38
57	BB	518	G	C6-N1	7.29	1.44	1.39
57	BB	2703	C	C4-N4	7.29	1.40	1.33
21	AA	1463	U	C4'-C3'	-7.29	1.45	1.53
57	BB	2418	A	C3'-O3'	7.29	1.52	1.42
21	AA	13	U	C2'-O2'	7.29	1.51	1.41
57	BB	2879	A	N1-C2	7.29	1.41	1.34
57	BB	2065	C	O3'-P	-7.29	1.52	1.61
21	AA	946	A	P-O5'	-7.28	1.52	1.59
22	AY	1	G	C8-N7	7.28	1.35	1.30
57	BB	313	G	C6-N1	7.28	1.44	1.39
21	AA	1128	C	C2-N3	-7.28	1.29	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	887	G	C2-N3	7.28	1.38	1.32
21	AA	935	A	C6-N6	7.28	1.39	1.33
21	AA	1074	G	P-O5'	-7.28	1.52	1.59
21	AA	543	U	C4-C5	7.28	1.50	1.43
57	BB	489	G	C6-N1	7.28	1.44	1.39
57	BB	1292	G	N9-C8	7.28	1.43	1.37
57	BB	1677	A	N3-C4	-7.28	1.30	1.34
57	BB	2758	A	N9-C8	-7.28	1.31	1.37
57	BB	2893	A	C6-N6	7.28	1.39	1.33
21	AA	592	G	N9-C8	7.28	1.43	1.37
21	AA	897	C	N1-C6	-7.28	1.32	1.37
57	BB	798	G	N3-C4	-7.28	1.30	1.35
57	BB	1106	G	N9-C8	7.28	1.43	1.37
57	BB	1421	G	P-O5'	-7.28	1.52	1.59
57	BB	1860	G	C2-N2	7.28	1.41	1.34
57	BB	2433	A	C5'-C4'	7.28	1.60	1.51
21	AA	1307	U	C2'-C1'	-7.28	1.45	1.53
57	BB	461	C	C4-N4	7.28	1.40	1.33
57	BB	695	G	C8-N7	7.28	1.35	1.30
32	BM	10	ARG	CZ-NH2	7.27	1.42	1.33
57	BB	1036	G	P-O5'	-7.27	1.52	1.59
57	BB	1523	U	C4'-O4'	7.27	1.55	1.45
57	BB	1884	G	N7-C5	-7.27	1.34	1.39
57	BB	156	A	N3-C4	-7.27	1.30	1.34
57	BB	469	G	C6-N1	7.27	1.44	1.39
58	BA	2	G	P-OP2	7.27	1.61	1.49
57	BB	520	G	P-O5'	-7.27	1.52	1.59
57	BB	822	G	C5-C4	7.27	1.43	1.38
57	BB	1219	U	C4-C5	7.27	1.50	1.43
57	BB	1251	C	C3'-C2'	7.27	1.60	1.52
57	BB	1311	G	C6-N1	7.27	1.44	1.39
57	BB	1811	G	C4'-C3'	7.27	1.61	1.53
57	BB	1841	U	C5-C6	7.27	1.40	1.34
58	BA	24	G	C5-C6	-7.27	1.35	1.42
21	AA	601	G	N9-C4	7.27	1.43	1.38
21	AA	1530	G	C6-N1	7.27	1.44	1.39
23	AW	74	C	N1-C6	7.27	1.41	1.37
57	BB	681	G	C2'-C1'	-7.27	1.45	1.53
57	BB	1408	G	C2-N3	7.27	1.38	1.32
57	BB	1661	G	C6-N1	7.27	1.44	1.39
57	BB	2550	G	N1-C2	7.27	1.43	1.37
57	BB	1971	U	N1-C2	7.27	1.45	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2282	G	N7-C5	-7.27	1.34	1.39
57	BB	2824	C	C2-O2	7.27	1.30	1.24
58	BA	117	G	C5-C6	-7.27	1.35	1.42
21	AA	781	A	C5-C4	7.26	1.43	1.38
21	AA	787	A	N9-C4	7.26	1.42	1.37
21	AA	1416	G	N7-C5	-7.26	1.34	1.39
57	BB	10	A	N7-C5	-7.26	1.34	1.39
57	BB	120	U	C3'-O3'	7.26	1.52	1.42
57	BB	153	U	C3'-C2'	-7.26	1.44	1.52
57	BB	622	G	C2-N2	7.26	1.41	1.34
57	BB	875	G	N1-C2	7.26	1.43	1.37
57	BB	2061	G	C5-C6	7.26	1.49	1.42
21	AA	1074	G	N9-C4	-7.26	1.32	1.38
57	BB	636	G	N9-C4	7.26	1.43	1.38
21	AA	656	G	C6-N1	7.26	1.44	1.39
57	BB	136	G	C2'-C1'	7.26	1.61	1.53
57	BB	600	G	C2-N3	7.26	1.38	1.32
21	AA	501	C	C3'-O3'	7.26	1.52	1.42
21	AA	805	C	N3-C4	7.26	1.39	1.33
21	AA	1222	G	C2-N2	7.26	1.41	1.34
22	AY	67	A	O3'-P	-7.26	1.52	1.61
57	BB	938	G	C6-N1	7.26	1.44	1.39
57	BB	1394	U	C2-N3	7.26	1.42	1.37
57	BB	1593	A	C6-N1	7.26	1.40	1.35
57	BB	1610	A	C4'-O4'	-7.26	1.36	1.45
57	BB	2231	U	C2-O2	7.26	1.28	1.22
21	AA	786	G	N1-C2	7.26	1.43	1.37
21	AA	902	G	N7-C5	-7.26	1.34	1.39
21	AA	1036	A	N9-C4	7.26	1.42	1.37
21	AA	1141	C	C5'-C4'	7.26	1.60	1.51
57	BB	1920	C	N1-C6	7.26	1.41	1.37
57	BB	2382	G	C6-N1	7.25	1.44	1.39
22	AY	36	A	C6-N1	7.25	1.40	1.35
21	AA	226	G	N9-C8	7.25	1.43	1.37
21	AA	1248	A	C8-N7	7.25	1.36	1.31
22	AY	17	U	N3-C4	7.25	1.45	1.38
57	BB	906	U	C5'-C4'	7.25	1.60	1.51
57	BB	1220	G	C5-C4	-7.25	1.33	1.38
57	BB	2265	U	C3'-C2'	7.25	1.60	1.52
57	BB	2661	G	C6-N1	7.25	1.44	1.39
57	BB	2772	C	N3-C4	7.25	1.39	1.33
21	AA	536	C	C4-N4	7.25	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	829	G	N3-C4	-7.25	1.30	1.35
21	AA	1174	G	N9-C8	7.25	1.43	1.37
32	BM	16	ARG	CZ-NH1	7.25	1.42	1.33
57	BB	1793	C	C4-N4	7.25	1.40	1.33
57	BB	2153	C	C2-N3	7.25	1.41	1.35
58	BA	27	C	N1-C6	7.25	1.41	1.37
21	AA	1531	A	C6-N6	7.25	1.39	1.33
57	BB	259	G	N3-C4	-7.25	1.30	1.35
21	AA	1043	G	O3'-P	-7.25	1.52	1.61
57	BB	1521	G	C2'-C1'	-7.25	1.45	1.53
57	BB	2011	U	C4'-C3'	7.25	1.61	1.53
57	BB	2319	G	C2-N2	7.25	1.41	1.34
21	AA	212	G	N1-C2	7.24	1.43	1.37
57	BB	238	C	N1-C6	7.24	1.41	1.37
57	BB	776	G	N3-C4	7.24	1.40	1.35
57	BB	1658	C	N3-C4	7.24	1.39	1.33
57	BB	2083	G	N3-C4	-7.24	1.30	1.35
58	BA	75	G	C6-N1	7.24	1.44	1.39
21	AA	867	G	C6-N1	7.24	1.44	1.39
57	BB	1477	A	C5-C4	-7.24	1.33	1.38
57	BB	2779	U	C2-N3	7.24	1.42	1.37
21	AA	524	G	C2-N3	7.24	1.38	1.32
57	BB	277	G	C8-N7	7.24	1.35	1.30
57	BB	1051	G	C5'-C4'	7.24	1.60	1.51
57	BB	1778	U	N3-C4	7.24	1.45	1.38
21	AA	878	A	N7-C5	-7.24	1.34	1.39
23	AW	55	U	N3-C4	7.24	1.45	1.38
57	BB	144	A	N1-C2	7.24	1.40	1.34
57	BB	1517	G	C5-C4	7.24	1.43	1.38
58	BA	51	G	C6-N1	7.24	1.44	1.39
21	AA	1105	A	N9-C8	-7.24	1.31	1.37
21	AA	1504	G	N9-C4	-7.24	1.32	1.38
21	AA	162	A	C5-C4	7.24	1.43	1.38
23	AW	53	G	C5-C4	7.24	1.43	1.38
57	BB	1206	G	N7-C5	-7.24	1.34	1.39
57	BB	1559	U	C2'-C1'	-7.24	1.45	1.53
57	BB	1587	G	C6-N1	-7.24	1.34	1.39
57	BB	1763	G	C4'-O4'	7.24	1.54	1.45
21	AA	366	A	N7-C5	-7.23	1.34	1.39
21	AA	612	C	C4-N4	7.23	1.40	1.33
21	AA	1073	U	C2'-C1'	-7.23	1.45	1.53
57	BB	530	G	N9-C8	7.23	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	711	G	C2-N3	7.23	1.38	1.32
57	BB	1717	A	C6-N6	7.23	1.39	1.33
57	BB	1835	G	C2-N3	7.23	1.38	1.32
21	AA	121	U	N1-C2	7.23	1.45	1.38
21	AA	194	C	C2'-C1'	-7.23	1.45	1.53
21	AA	506	G	C5'-C4'	7.23	1.60	1.51
21	AA	544	G	N1-C2	7.23	1.43	1.37
21	AA	546	A	N7-C5	-7.23	1.34	1.39
21	AA	671	G	N9-C8	7.23	1.43	1.37
22	AY	11	C	C5'-C4'	7.23	1.60	1.51
57	BB	6	A	N7-C5	-7.23	1.34	1.39
57	BB	155	A	C8-N7	7.23	1.36	1.31
57	BB	286	U	N1-C6	-7.23	1.31	1.38
57	BB	1193	G	C6-N1	7.23	1.44	1.39
57	BB	1384	A	O3'-P	-7.23	1.52	1.61
57	BB	1825	U	C2-N3	7.23	1.42	1.37
57	BB	2202	U	C2-N3	7.23	1.42	1.37
58	BA	82	U	C1'-N1	7.23	1.59	1.48
21	AA	68	G	N9-C8	-7.23	1.32	1.37
57	BB	444	C	C3'-O3'	7.23	1.52	1.42
57	BB	2000	C	N3-C4	7.23	1.39	1.33
57	BB	2825	G	N9-C4	7.23	1.43	1.38
21	AA	102	G	N9-C8	7.23	1.43	1.37
21	AA	505	G	O3'-P	-7.23	1.52	1.61
21	AA	1297	G	P-O5'	-7.23	1.52	1.59
22	AY	19	G	C6-N1	7.23	1.44	1.39
58	BA	94	A	N9-C8	-7.23	1.31	1.37
21	AA	9	G	C5-C6	-7.23	1.35	1.42
21	AA	102	G	C3'-C2'	-7.23	1.44	1.52
21	AA	757	U	C2'-C1'	-7.23	1.45	1.53
21	AA	813	U	C3'-C2'	-7.23	1.44	1.52
21	AA	1278	G	C5-C4	-7.23	1.33	1.38
21	AA	1526	G	N7-C5	-7.23	1.34	1.39
26	AV	7	G	C5-C6	-7.23	1.35	1.42
57	BB	648	G	N3-C4	7.23	1.40	1.35
57	BB	1585	C	N3-C4	7.23	1.39	1.33
57	BB	2472	G	N9-C4	7.23	1.43	1.38
58	BA	67	G	N7-C5	-7.23	1.34	1.39
57	BB	1524	G	C8-N7	-7.23	1.26	1.30
57	BB	2109	U	N3-C4	7.23	1.45	1.38
21	AA	984	C	C4-C5	7.22	1.48	1.43
21	AA	1365	G	C2'-C1'	-7.22	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	242	G	N7-C5	-7.22	1.34	1.39
57	BB	570	G	O3'-P	-7.22	1.52	1.61
57	BB	2124	G	C2'-C1'	-7.22	1.45	1.53
57	BB	2526	G	N7-C5	-7.22	1.34	1.39
57	BB	2770	G	N1-C2	7.22	1.43	1.37
57	BB	981	A	C6-N1	7.22	1.40	1.35
57	BB	2038	G	N9-C8	7.22	1.43	1.37
21	AA	155	A	N9-C4	-7.22	1.33	1.37
57	BB	2755	C	C4-C5	7.22	1.48	1.43
21	AA	530	G	C2-N3	7.22	1.38	1.32
21	AA	919	A	C5-C4	7.22	1.43	1.38
21	AA	1320	C	N1-C6	7.22	1.41	1.37
21	AA	347	G	C5-C6	7.22	1.49	1.42
21	AA	779	C	C3'-C2'	-7.22	1.44	1.52
21	AA	946	A	N7-C5	-7.22	1.34	1.39
57	BB	972	A	N7-C5	-7.22	1.34	1.39
57	BB	658	U	C4'-C3'	7.21	1.61	1.53
57	BB	2070	A	C6-N1	7.21	1.40	1.35
57	BB	2385	C	C2-N3	7.21	1.41	1.35
57	BB	1745	A	N9-C4	-7.21	1.33	1.37
21	AA	476	U	N3-C4	7.21	1.45	1.38
21	AA	741	G	C2'-C1'	-7.21	1.45	1.53
21	AA	807	A	C5-C4	-7.21	1.33	1.38
57	BB	195	A	C6-N6	7.21	1.39	1.33
57	BB	362	A	N9-C4	-7.21	1.33	1.37
57	BB	1531	C	O3'-P	-7.21	1.52	1.61
57	BB	1727	C	C2-O2	7.21	1.30	1.24
21	AA	925	G	C6-N1	7.21	1.44	1.39
21	AA	408	A	C5-C4	7.21	1.43	1.38
21	AA	865	A	C2'-C1'	-7.21	1.45	1.53
21	AA	1489	G	C2-N3	-7.21	1.26	1.32
57	BB	1690	A	N3-C4	-7.21	1.30	1.34
57	BB	2284	A	N7-C5	-7.21	1.34	1.39
57	BB	2702	G	O3'-P	-7.21	1.52	1.61
21	AA	27	G	C3'-C2'	-7.21	1.44	1.52
21	AA	537	G	N1-C2	7.21	1.43	1.37
21	AA	1408	A	C2'-C1'	-7.21	1.45	1.53
57	BB	294	A	C6-N1	7.21	1.40	1.35
57	BB	481	G	N9-C4	-7.21	1.32	1.38
57	BB	756	A	C6-N1	7.21	1.40	1.35
57	BB	1627	G	C2-N3	7.21	1.38	1.32
57	BB	2374	C	N3-C4	7.21	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2609	U	C3'-C2'	7.21	1.60	1.52
57	BB	9	G	N1-C2	7.21	1.43	1.37
57	BB	96	C	C4'-C3'	-7.21	1.45	1.53
57	BB	609	A	N7-C5	-7.21	1.34	1.39
21	AA	644	U	C2-N3	7.20	1.42	1.37
21	AA	1418	A	C6-N6	7.20	1.39	1.33
22	AY	9	A	N9-C4	-7.20	1.33	1.37
23	AW	22	G	N7-C5	-7.20	1.34	1.39
57	BB	2452	C	N1-C6	7.20	1.41	1.37
57	BB	2802	G	N3-C4	7.20	1.40	1.35
21	AA	665	A	N9-C8	-7.20	1.31	1.37
57	BB	465	G	C5-C4	7.20	1.43	1.38
57	BB	2441	U	C2-N3	7.20	1.42	1.37
57	BB	1501	G	C2-N3	7.20	1.38	1.32
57	BB	2281	A	C2'-C1'	-7.20	1.45	1.53
57	BB	2630	G	C5'-C4'	7.20	1.59	1.51
21	AA	644	U	P-O5'	-7.20	1.52	1.59
21	AA	677	U	C2-N3	7.20	1.42	1.37
21	AA	845	A	N3-C4	-7.20	1.30	1.34
21	AA	1289	A	C6-N6	7.20	1.39	1.33
57	BB	911	A	C6-N6	7.20	1.39	1.33
57	BB	1214	A	C6-N1	-7.20	1.30	1.35
57	BB	1424	G	C2-N2	7.20	1.41	1.34
57	BB	1746	A	N9-C8	7.20	1.43	1.37
57	BB	2406	A	C6-N6	7.20	1.39	1.33
57	BB	2599	G	O3'-P	-7.20	1.52	1.61
21	AA	504	C	N1-C6	7.20	1.41	1.37
57	BB	725	G	N9-C8	-7.20	1.32	1.37
57	BB	783	A	C5'-C4'	7.20	1.59	1.51
57	BB	2289	G	C2-N2	7.20	1.41	1.34
58	BA	46	A	C6-N1	7.20	1.40	1.35
22	AY	63	C	N3-C4	7.19	1.39	1.33
57	BB	2468	A	N7-C5	-7.19	1.34	1.39
21	AA	1074	G	N7-C5	-7.19	1.34	1.39
58	BA	62	C	C5'-C4'	7.19	1.59	1.51
57	BB	928	A	C2'-C1'	-7.19	1.45	1.53
57	BB	1033	U	C2-N3	7.19	1.42	1.37
21	AA	164	G	C2-N3	7.19	1.38	1.32
57	BB	242	G	N1-C2	7.19	1.43	1.37
57	BB	2349	G	C2-N3	7.19	1.38	1.32
21	AA	837	U	C5'-C4'	7.19	1.59	1.51
23	AW	31	A	C5'-C4'	7.19	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
42	BW	67	LYS	N-CA	-7.19	1.31	1.46
57	BB	874	G	N3-C4	-7.19	1.30	1.35
57	BB	1154	G	O3'-P	-7.19	1.52	1.61
57	BB	1833	C	C5-C6	-7.19	1.28	1.34
57	BB	2417	C	C2-N3	-7.19	1.29	1.35
21	AA	201	G	C2-N3	7.19	1.38	1.32
21	AA	1428	A	N7-C5	-7.19	1.34	1.39
24	AX	15	A	N9-C4	7.19	1.42	1.37
57	BB	610	C	C1'-N1	7.19	1.59	1.48
57	BB	2759	G	N7-C5	-7.19	1.34	1.39
11	AT	73	ARG	CD-NE	7.18	1.58	1.46
26	AV	6	G	O3'-P	-7.18	1.52	1.61
57	BB	779	U	C5'-C4'	7.18	1.59	1.51
57	BB	983	A	C6-N1	7.18	1.40	1.35
57	BB	1306	C	N1-C6	7.18	1.41	1.37
57	BB	2214	C	N1-C6	7.18	1.41	1.37
38	BS	95	ARG	NE-CZ	7.18	1.42	1.33
57	BB	67	U	C2-N3	7.18	1.42	1.37
57	BB	1506	U	N1-C6	7.18	1.44	1.38
21	AA	975	A	C8-N7	7.18	1.36	1.31
57	BB	1601	G	C2-N3	7.18	1.38	1.32
57	BB	1920	C	C4-N4	7.18	1.40	1.33
57	BB	630	G	C2-N3	7.18	1.38	1.32
57	BB	2340	A	C2'-C1'	-7.18	1.45	1.53
21	AA	601	G	C5-C4	-7.18	1.33	1.38
57	BB	662	G	C2-N3	7.18	1.38	1.32
57	BB	730	A	C6-N1	7.18	1.40	1.35
57	BB	1575	C	C2-O2	7.18	1.30	1.24
58	BA	110	C	N3-C4	7.18	1.39	1.33
21	AA	636	U	C4'-O4'	-7.18	1.36	1.45
21	AA	1277	C	N3-C4	7.18	1.39	1.33
57	BB	499	U	C3'-C2'	7.18	1.60	1.52
57	BB	919	U	N1-C2	-7.18	1.32	1.38
57	BB	1047	G	C2-N2	7.18	1.41	1.34
57	BB	2373	G	C4'-C3'	-7.18	1.45	1.53
21	AA	116	A	N9-C4	-7.17	1.33	1.37
21	AA	577	G	C5-C4	-7.17	1.33	1.38
21	AA	592	G	C5'-C4'	7.17	1.59	1.51
57	BB	341	C	P-O5'	-7.17	1.52	1.59
57	BB	429	A	C5-C4	7.17	1.43	1.38
57	BB	1493	C	C2-N3	-7.17	1.30	1.35
57	BB	2067	G	N9-C4	7.17	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	756	C	N1-C6	-7.17	1.32	1.37
21	AA	1255	G	C6-N1	7.17	1.44	1.39
57	BB	201	C	C2'-C1'	-7.17	1.45	1.53
57	BB	1580	A	P-O5'	-7.17	1.52	1.59
57	BB	1919	A	N9-C4	7.17	1.42	1.37
57	BB	2462	C	P-O5'	-7.17	1.52	1.59
21	AA	348	G	N1-C2	7.17	1.43	1.37
21	AA	663	A	N9-C8	7.17	1.43	1.37
21	AA	695	A	N3-C4	-7.17	1.30	1.34
21	AA	776	G	C2-N3	7.17	1.38	1.32
26	AV	31	G	C2-N3	7.17	1.38	1.32
57	BB	386	G	C2-N3	7.17	1.38	1.32
57	BB	831	G	C5'-C4'	7.17	1.59	1.51
21	AA	1122	U	P-O5'	-7.17	1.52	1.59
57	BB	1111	A	C6-N1	7.17	1.40	1.35
57	BB	1115	G	P-O5'	-7.17	1.52	1.59
57	BB	1810	A	N9-C8	7.17	1.43	1.37
21	AA	822	U	N1-C2	7.17	1.45	1.38
21	AA	995	C	P-O5'	-7.17	1.52	1.59
57	BB	94	A	C6-N1	7.17	1.40	1.35
57	BB	798	G	P-O5'	-7.17	1.52	1.59
57	BB	2885	G	C5-C4	-7.17	1.33	1.38
58	BA	48	U	C2-N3	7.17	1.42	1.37
21	AA	1238	A	N9-C4	-7.17	1.33	1.37
57	BB	1175	A	C5-C4	-7.17	1.33	1.38
57	BB	1511	G	C2'-C1'	-7.17	1.45	1.53
21	AA	119	A	N9-C8	-7.16	1.32	1.37
21	AA	471	U	C2'-C1'	-7.16	1.45	1.53
21	AA	1261	A	N7-C5	-7.16	1.34	1.39
57	BB	85	G	N7-C5	-7.16	1.34	1.39
57	BB	1973	G	C5-C4	7.16	1.43	1.38
57	BB	2168	G	N9-C8	7.16	1.42	1.37
57	BB	582	A	C6-N6	7.16	1.39	1.33
57	BB	611	C	C4'-O4'	7.16	1.54	1.45
21	AA	1128	C	N3-C4	7.16	1.39	1.33
57	BB	328	U	N1-C2	-7.16	1.32	1.38
57	BB	332	A	N3-C4	7.16	1.39	1.34
21	AA	1097	C	C4-C5	7.16	1.48	1.43
21	AA	1148	U	C4-C5	7.16	1.50	1.43
30	BK	31	TYR	CE1-CZ	7.16	1.47	1.38
44	BY	52	ARG	CD-NE	7.16	1.58	1.46
57	BB	844	A	C5-C4	7.16	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1046	A	C8-N7	-7.16	1.26	1.31
57	BB	1645	G	C8-N7	7.16	1.35	1.30
57	BB	2312	U	O3'-P	-7.16	1.52	1.61
57	BB	2714	G	N1-C2	7.16	1.43	1.37
57	BB	2846	G	C2-N3	7.16	1.38	1.32
58	BA	117	G	C8-N7	-7.16	1.26	1.30
19	AH	57	GLU	CG-CD	7.16	1.62	1.51
21	AA	536	C	C5-C6	-7.16	1.28	1.34
21	AA	734	G	P-O5'	-7.16	1.52	1.59
21	AA	1473	G	C5'-C4'	7.16	1.59	1.51
21	AA	1528	U	C2-O2	7.16	1.28	1.22
57	BB	359	G	C2'-C1'	-7.16	1.45	1.53
21	AA	756	C	C4-N4	7.15	1.40	1.33
21	AA	1006	G	C6-O6	-7.15	1.17	1.24
57	BB	662	G	N9-C8	7.15	1.42	1.37
57	BB	734	A	O3'-P	-7.15	1.52	1.61
57	BB	1219	U	N1-C6	-7.15	1.31	1.38
57	BB	2898	U	N1-C2	7.15	1.45	1.38
21	AA	396	C	N1-C6	7.15	1.41	1.37
21	AA	524	G	C6-N1	7.15	1.44	1.39
21	AA	780	A	N7-C5	-7.15	1.34	1.39
21	AA	1126	U	C4'-O4'	7.15	1.54	1.45
57	BB	396	G	N9-C4	7.15	1.43	1.38
57	BB	699	A	N7-C5	-7.15	1.34	1.39
57	BB	1022	G	C2-N3	7.15	1.38	1.32
57	BB	1905	C	C2-N3	7.15	1.41	1.35
57	BB	2798	U	C2-N3	7.15	1.42	1.37
21	AA	427	U	N1-C2	7.15	1.45	1.38
21	AA	1066	C	N3-C4	7.15	1.39	1.33
57	BB	260	G	N9-C8	-7.15	1.32	1.37
57	BB	512	G	N7-C5	-7.15	1.34	1.39
57	BB	979	A	O3'-P	-7.15	1.52	1.61
58	BA	45	A	C6-N6	7.15	1.39	1.33
21	AA	464	U	C5'-C4'	7.15	1.59	1.51
26	AV	61	C	C2'-C1'	-7.15	1.45	1.53
57	BB	1309	G	N7-C5	-7.15	1.34	1.39
57	BB	1419	A	C6-N6	7.15	1.39	1.33
57	BB	2294	G	C2'-C1'	-7.15	1.45	1.53
58	BA	106	G	C8-N7	-7.15	1.26	1.30
21	AA	184	G	C2-N3	7.14	1.38	1.32
26	AV	5	G	C2'-C1'	-7.14	1.45	1.53
57	BB	795	C	N1-C6	-7.14	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1002	G	N3-C4	7.14	1.40	1.35
57	BB	1215	G	N9-C8	7.14	1.42	1.37
57	BB	1528	A	N7-C5	-7.14	1.34	1.39
57	BB	1591	A	C2'-C1'	-7.14	1.45	1.53
21	AA	537	G	C6-N1	7.14	1.44	1.39
21	AA	957	U	C3'-O3'	7.14	1.52	1.42
21	AA	1440	U	N1-C6	-7.14	1.31	1.38
57	BB	1721	G	C8-N7	-7.14	1.26	1.30
57	BB	2083	G	C8-N7	7.14	1.35	1.30
57	BB	2337	G	C8-N7	-7.14	1.26	1.30
21	AA	995	C	C5'-C4'	7.14	1.59	1.51
57	BB	308	G	C2-N3	7.14	1.38	1.32
57	BB	849	A	C3'-C2'	7.14	1.60	1.52
57	BB	1420	A	C5-C4	7.14	1.43	1.38
57	BB	1900	A	C2'-C1'	-7.14	1.45	1.53
21	AA	376	G	C2-N3	7.14	1.38	1.32
21	AA	665	A	C5-C4	-7.14	1.33	1.38
57	BB	150	U	O3'-P	-7.14	1.52	1.61
21	AA	439	U	C1'-N1	7.14	1.59	1.48
57	BB	976	G	C2-N2	7.14	1.41	1.34
57	BB	2278	A	N3-C4	7.14	1.39	1.34
57	BB	2725	A	N7-C5	-7.14	1.34	1.39
57	BB	2815	C	N1-C6	-7.14	1.32	1.37
21	AA	1504	G	N1-C2	7.13	1.43	1.37
57	BB	99	U	C4-C5	7.13	1.50	1.43
57	BB	453	A	N9-C8	-7.13	1.32	1.37
57	BB	1617	C	C4-N4	7.13	1.40	1.33
57	BB	1870	C	P-O5'	-7.13	1.52	1.59
58	BA	112	G	N1-C2	7.13	1.43	1.37
21	AA	70	U	C2-N3	7.13	1.42	1.37
57	BB	2271	G	N1-C2	7.13	1.43	1.37
26	AV	48	C	C4'-C3'	7.13	1.60	1.53
57	BB	1008	A	O3'-P	-7.13	1.52	1.61
57	BB	1307	A	N9-C8	7.13	1.43	1.37
57	BB	1374	G	N3-C4	-7.13	1.30	1.35
57	BB	836	G	C2-N3	7.13	1.38	1.32
21	AA	764	C	N1-C6	7.13	1.41	1.37
21	AA	933	G	N9-C8	7.13	1.42	1.37
21	AA	1407	C	N3-C4	7.13	1.39	1.33
57	BB	460	A	N9-C4	7.13	1.42	1.37
57	BB	1193	G	C5-C4	-7.13	1.33	1.38
57	BB	1417	C	C4'-C3'	-7.13	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2603	G	C8-N7	7.13	1.35	1.30
21	AA	587	G	C2-N3	7.13	1.38	1.32
21	AA	1242	G	N7-C5	-7.13	1.34	1.39
22	AY	19	G	N9-C4	7.13	1.43	1.38
57	BB	497	A	N3-C4	-7.13	1.30	1.34
57	BB	538	A	N3-C4	-7.13	1.30	1.34
57	BB	561	G	C4'-C3'	7.13	1.60	1.53
57	BB	1263	U	C2'-C1'	7.13	1.61	1.53
57	BB	1635	A	C5'-C4'	-7.13	1.42	1.51
57	BB	1755	A	N9-C4	7.13	1.42	1.37
57	BB	2270	A	C2'-C1'	-7.13	1.45	1.53
57	BB	2351	G	C8-N7	-7.13	1.26	1.30
57	BB	2627	G	C5-C4	7.13	1.43	1.38
57	BB	438	G	C5'-C4'	7.12	1.59	1.51
57	BB	1155	A	C3'-C2'	7.12	1.60	1.52
57	BB	2735	G	C5-C4	7.12	1.43	1.38
21	AA	1317	C	C2-N3	7.12	1.41	1.35
21	AA	1418	A	N7-C5	-7.12	1.34	1.39
57	BB	315	G	C8-N7	-7.12	1.26	1.30
57	BB	570	G	C6-N1	7.12	1.44	1.39
57	BB	1479	G	C5-C4	7.12	1.43	1.38
57	BB	1538	G	P-O5'	-7.12	1.52	1.59
57	BB	1588	G	C5-C4	7.12	1.43	1.38
21	AA	1165	U	N1-C2	7.12	1.45	1.38
21	AA	1212	U	C4-C5	7.12	1.50	1.43
21	AA	1526	G	C6-N1	7.12	1.44	1.39
57	BB	179	C	N3-C4	7.12	1.39	1.33
57	BB	2741	A	C8-N7	-7.12	1.26	1.31
21	AA	1237	C	P-O5'	-7.12	1.52	1.59
21	AA	1274	A	C5-C4	7.12	1.43	1.38
57	BB	924	G	C8-N7	-7.12	1.26	1.30
21	AA	53	A	C6-N6	7.12	1.39	1.33
21	AA	925	G	C2'-C1'	-7.12	1.45	1.53
21	AA	1088	G	C5-C4	-7.12	1.33	1.38
57	BB	59	U	C2-N3	7.12	1.42	1.37
57	BB	1471	G	N9-C8	-7.12	1.32	1.37
57	BB	1668	A	C4'-C3'	7.12	1.60	1.53
57	BB	1860	G	N3-C4	7.12	1.40	1.35
57	BB	2547	A	N3-C4	7.12	1.39	1.34
57	BB	1314	C	C4-N4	7.12	1.40	1.33
57	BB	1381	G	C2-N2	7.12	1.41	1.34
21	AA	1184	G	C2-N2	7.12	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1349	A	C2'-C1'	-7.12	1.45	1.53
57	BB	139	U	P-O5'	-7.12	1.52	1.59
57	BB	633	A	N7-C5	-7.12	1.34	1.39
57	BB	1444	G	N1-C2	7.12	1.43	1.37
57	BB	1684	G	C5-C4	7.12	1.43	1.38
57	BB	1950	G	N7-C5	7.12	1.43	1.39
58	BA	85	G	C8-N7	-7.12	1.26	1.30
21	AA	116	A	C6-N1	7.11	1.40	1.35
57	BB	220	G	C6-N1	7.11	1.44	1.39
57	BB	559	G	C5-C4	7.11	1.43	1.38
57	BB	953	G	O3'-P	-7.11	1.52	1.61
57	BB	1936	A	N1-C2	-7.11	1.27	1.34
57	BB	2150	C	C2-N3	7.11	1.41	1.35
57	BB	2259	U	N3-C4	7.11	1.44	1.38
58	BA	17	C	C4-C5	7.11	1.48	1.43
58	BA	118	C	N3-C4	7.11	1.39	1.33
21	AA	273	U	P-O5'	-7.11	1.52	1.59
21	AA	555	U	C2-N3	7.11	1.42	1.37
57	BB	1544	A	N9-C4	-7.11	1.33	1.37
57	BB	2278	A	C5-C4	7.11	1.43	1.38
21	AA	337	G	C2-N3	7.11	1.38	1.32
21	AA	836	G	N3-C4	7.11	1.40	1.35
21	AA	903	G	C4'-O4'	-7.11	1.36	1.45
22	AY	13	C	C5-C6	-7.11	1.28	1.34
57	BB	87	U	C4-C5	7.11	1.50	1.43
57	BB	424	G	N1-C2	7.11	1.43	1.37
57	BB	2596	U	O3'-P	-7.11	1.52	1.61
57	BB	1870	C	C4-N4	7.11	1.40	1.33
57	BB	1873	G	C2-N2	7.11	1.41	1.34
58	BA	81	G	C5'-C4'	7.11	1.59	1.51
21	AA	195	A	C2-N3	7.11	1.40	1.33
21	AA	791	G	N1-C2	7.11	1.43	1.37
21	AA	821	G	N1-C2	7.11	1.43	1.37
21	AA	966	G	C5-C6	-7.11	1.35	1.42
57	BB	697	G	N9-C4	-7.11	1.32	1.38
57	BB	1643	G	C4'-O4'	-7.11	1.36	1.45
21	AA	1211	U	C4'-O4'	-7.11	1.36	1.45
21	AA	1359	C	N1-C6	7.11	1.41	1.37
26	AV	42	G	C2'-C1'	-7.11	1.45	1.53
29	BJ	53	TYR	CE2-CZ	7.11	1.47	1.38
57	BB	455	C	N3-C4	7.11	1.39	1.33
57	BB	1606	C	P-O5'	-7.11	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	724	G	P-O5'	-7.10	1.52	1.59
57	BB	1407	G	C5'-C4'	7.10	1.59	1.51
57	BB	2791	G	N7-C5	-7.10	1.34	1.39
57	BB	2813	A	C6-N6	7.10	1.39	1.33
21	AA	170	U	C4-C5	7.10	1.50	1.43
21	AA	190	A	C5-C4	7.10	1.43	1.38
21	AA	416	G	P-O5'	-7.10	1.52	1.59
21	AA	468	A	C5'-C4'	7.10	1.59	1.51
21	AA	906	A	O3'-P	-7.10	1.52	1.61
22	AY	39	U	C4-O4	-7.10	1.18	1.23
57	BB	2582	G	N7-C5	-7.10	1.34	1.39
57	BB	2809	A	P-O5'	-7.10	1.52	1.59
21	AA	208	U	C1'-N1	7.10	1.59	1.48
21	AA	559	A	N3-C4	-7.10	1.30	1.34
21	AA	1498	U	C5'-C4'	7.10	1.59	1.51
57	BB	604	G	C2-N2	7.10	1.41	1.34
57	BB	1930	G	P-O5'	-7.10	1.52	1.59
57	BB	2119	A	C8-N7	7.10	1.36	1.31
22	AY	50	U	C4'-C3'	-7.10	1.45	1.53
57	BB	1107	G	C8-N7	-7.10	1.26	1.30
57	BB	1601	G	N9-C8	7.10	1.42	1.37
21	AA	1119	C	N3-C4	7.10	1.39	1.33
57	BB	411	G	N9-C4	7.10	1.43	1.38
57	BB	743	A	C2'-C1'	-7.10	1.45	1.53
57	BB	1723	G	C5-C4	7.10	1.43	1.38
57	BB	2719	G	N7-C5	-7.10	1.34	1.39
57	BB	2851	A	N7-C5	-7.10	1.34	1.39
57	BB	931	U	N3-C4	7.10	1.44	1.38
57	BB	1031	G	C6-N1	7.10	1.44	1.39
21	AA	1303	C	N3-C4	7.09	1.39	1.33
21	AA	1505	G	C5-C4	7.09	1.43	1.38
24	AX	22	A	N7-C5	-7.09	1.34	1.39
26	AV	3	C	C5-C6	-7.09	1.28	1.34
57	BB	615	U	O3'-P	-7.09	1.52	1.61
57	BB	768	G	C3'-C2'	-7.09	1.45	1.52
57	BB	943	A	C2-N3	7.09	1.40	1.33
57	BB	1383	A	N9-C8	-7.09	1.32	1.37
57	BB	1517	G	N7-C5	-7.09	1.34	1.39
57	BB	2665	A	C6-N6	7.09	1.39	1.33
57	BB	1116	G	N1-C2	7.09	1.43	1.37
57	BB	1516	G	C6-N1	7.09	1.44	1.39
21	AA	184	G	C8-N7	-7.09	1.26	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	744	C	C3'-C2'	-7.09	1.45	1.52
21	AA	874	G	C2-N3	-7.09	1.27	1.32
21	AA	1195	C	C5'-C4'	7.09	1.59	1.51
57	BB	2297	A	C5-C4	7.09	1.43	1.38
57	BB	2323	G	N9-C4	7.09	1.43	1.38
57	BB	2805	C	C2-N3	7.09	1.41	1.35
21	AA	500	G	N3-C4	-7.09	1.30	1.35
21	AA	1518	A	N9-C4	7.09	1.42	1.37
57	BB	1878	G	C6-O6	-7.09	1.17	1.24
57	BB	2543	G	N1-C2	7.09	1.43	1.37
21	AA	1204	A	N9-C4	7.09	1.42	1.37
57	BB	140	C	N3-C4	7.09	1.39	1.33
57	BB	458	G	N7-C5	-7.09	1.34	1.39
57	BB	512	G	N1-C2	7.09	1.43	1.37
57	BB	595	C	C4'-C3'	7.09	1.60	1.53
57	BB	1538	G	N1-C2	7.09	1.43	1.37
57	BB	2367	G	C2'-C1'	-7.09	1.45	1.53
57	BB	2411	A	C6-N1	7.09	1.40	1.35
57	BB	2802	G	N9-C8	7.09	1.42	1.37
21	AA	409	U	C4-C5	7.08	1.50	1.43
57	BB	472	A	N9-C4	-7.08	1.33	1.37
57	BB	1261	C	C2'-C1'	-7.08	1.45	1.53
57	BB	1307	A	N3-C4	-7.08	1.30	1.34
57	BB	2714	G	N7-C5	-7.08	1.34	1.39
22	AY	34	G	N9-C8	7.08	1.42	1.37
57	BB	91	A	N9-C8	-7.08	1.32	1.37
57	BB	1127	A	C6-N6	7.08	1.39	1.33
57	BB	1668	A	N3-C4	-7.08	1.30	1.34
57	BB	2280	G	C2'-C1'	-7.08	1.45	1.53
57	BB	2402	U	P-O5'	-7.08	1.52	1.59
57	BB	2470	G	N7-C5	7.08	1.43	1.39
7	AP	51	ARG	CZ-NH1	7.08	1.42	1.33
21	AA	1064	G	C3'-C2'	7.08	1.60	1.52
21	AA	1164	G	C5-C4	-7.08	1.33	1.38
57	BB	1655	A	N7-C5	-7.08	1.35	1.39
57	BB	1904	G	N3-C4	-7.08	1.30	1.35
57	BB	2279	G	N7-C5	-7.08	1.35	1.39
21	AA	839	C	C5-C6	7.08	1.40	1.34
57	BB	1103	A	C6-N6	7.08	1.39	1.33
57	BB	1794	A	C2'-C1'	-7.08	1.45	1.53
21	AA	141	G	C5-C4	7.08	1.43	1.38
21	AA	815	A	C6-N1	7.08	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	253	C	N3-C4	7.08	1.39	1.33
57	BB	532	A	N7-C5	-7.08	1.35	1.39
57	BB	1433	A	P-O5'	-7.08	1.52	1.59
57	BB	1935	G	N7-C5	-7.08	1.35	1.39
58	BA	2	G	N1-C2	7.08	1.43	1.37
1	AJ	45	ARG	CZ-NH2	7.08	1.42	1.33
23	AW	23	A	C4'-C3'	7.08	1.60	1.53
21	AA	668	G	N3-C4	7.08	1.40	1.35
21	AA	1215	G	N7-C5	-7.08	1.35	1.39
26	AV	72	A	C2'-C1'	-7.08	1.45	1.53
57	BB	177	G	C5-C4	7.08	1.43	1.38
57	BB	2733	A	P-O5'	-7.08	1.52	1.59
21	AA	442	G	C8-N7	7.07	1.35	1.30
21	AA	461	A	N3-C4	-7.07	1.30	1.34
21	AA	672	U	C1'-N1	7.07	1.59	1.48
21	AA	724	G	N1-C2	7.07	1.43	1.37
57	BB	37	C	C4-N4	7.07	1.40	1.33
57	BB	1456	G	C8-N7	-7.07	1.26	1.30
57	BB	1730	C	P-O5'	-7.07	1.52	1.59
57	BB	2063	C	C4-N4	7.07	1.40	1.33
58	BA	70	C	C2-O2	7.07	1.30	1.24
58	BA	90	C	N3-C4	7.07	1.39	1.33
21	AA	495	A	O3'-P	-7.07	1.52	1.61
21	AA	790	A	C8-N7	-7.07	1.26	1.31
21	AA	1488	G	C4'-C3'	7.07	1.60	1.53
33	BN	30	ARG	NE-CZ	7.07	1.42	1.33
57	BB	1350	C	N3-C4	7.07	1.38	1.33
21	AA	682	G	N3-C4	-7.07	1.30	1.35
21	AA	1198	G	N7-C5	-7.07	1.35	1.39
57	BB	1486	U	P-O5'	-7.07	1.52	1.59
57	BB	1773	A	N9-C8	-7.07	1.32	1.37
57	BB	2209	G	C6-N1	7.07	1.44	1.39
57	BB	2689	U	C4'-C3'	7.07	1.60	1.53
57	BB	2741	A	N3-C4	-7.07	1.30	1.34
21	AA	12	U	C4'-O4'	7.07	1.54	1.45
57	BB	1217	U	C2-N3	7.07	1.42	1.37
58	BA	48	U	C4-C5	-7.07	1.37	1.43
21	AA	110	C	C5'-C4'	7.06	1.59	1.51
57	BB	351	C	C3'-C2'	-7.06	1.45	1.52
57	BB	915	C	N1-C2	7.06	1.47	1.40
57	BB	1829	A	N9-C8	-7.06	1.32	1.37
57	BB	1912	A	C3'-C2'	7.06	1.60	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2869	G	C3'-C2'	-7.06	1.45	1.52
21	AA	839	C	N1-C6	7.06	1.41	1.37
21	AA	1123	U	N1-C2	7.06	1.45	1.38
22	AY	56	C	C4-N4	7.06	1.40	1.33
57	BB	903	C	C2'-C1'	-7.06	1.45	1.53
57	BB	1071	G	N1-C2	7.06	1.43	1.37
57	BB	1173	U	N1-C2	7.06	1.45	1.38
57	BB	2153	C	C4-C5	-7.06	1.37	1.43
21	AA	158	G	O3'-P	-7.06	1.52	1.61
21	AA	442	G	P-O5'	-7.06	1.52	1.59
55	BG	162	ARG	NE-CZ	7.06	1.42	1.33
57	BB	878	A	C8-N7	7.06	1.36	1.31
57	BB	974	G	C2-N2	7.06	1.41	1.34
57	BB	2698	U	C4'-O4'	7.06	1.54	1.45
3	AL	98	ARG	CZ-NH2	7.06	1.42	1.33
21	AA	259	G	C2'-C1'	-7.06	1.45	1.53
22	AY	35	A	C6-N1	7.06	1.40	1.35
57	BB	84	A	N9-C4	7.06	1.42	1.37
57	BB	193	U	C4'-C3'	-7.06	1.45	1.53
57	BB	641	U	N1-C6	7.06	1.44	1.38
57	BB	1081	U	C4-C5	7.06	1.50	1.43
58	BA	77	U	P-O5'	7.06	1.66	1.59
57	BB	2569	G	N7-C5	7.06	1.43	1.39
21	AA	320	A	N7-C5	-7.05	1.35	1.39
21	AA	380	G	P-O5'	-7.05	1.52	1.59
21	AA	858	G	C8-N7	7.05	1.35	1.30
21	AA	1268	G	C6-N1	7.05	1.44	1.39
21	AA	1302	C	C5-C6	-7.05	1.28	1.34
23	AW	15	G	C2-N3	7.05	1.38	1.32
57	BB	1839	G	N1-C2	7.05	1.43	1.37
57	BB	2292	U	C4'-C3'	7.05	1.60	1.53
57	BB	2381	A	N3-C4	-7.05	1.30	1.34
57	BB	2442	C	C4-C5	-7.05	1.37	1.43
19	AH	79	ARG	C-N	-7.05	1.20	1.34
21	AA	981	U	N1-C2	7.05	1.44	1.38
21	AA	1488	G	C6-N1	7.05	1.44	1.39
57	BB	420	C	N3-C4	7.05	1.38	1.33
57	BB	827	U	C2-N3	7.05	1.42	1.37
57	BB	1360	G	N3-C4	-7.05	1.30	1.35
57	BB	1366	A	N7-C5	-7.05	1.35	1.39
57	BB	2453	A	P-O5'	7.05	1.66	1.59
21	AA	886	G	C6-N1	7.05	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	822	G	O3'-P	-7.05	1.52	1.61
57	BB	1119	U	N1-C2	7.05	1.44	1.38
57	BB	1121	C	N1-C6	7.05	1.41	1.37
21	AA	454	G	C2-N3	-7.05	1.27	1.32
21	AA	1425	U	P-O5'	-7.05	1.52	1.59
57	BB	352	A	N1-C2	7.05	1.40	1.34
57	BB	1160	G	C2'-C1'	-7.05	1.45	1.53
57	BB	2033	A	C6-N6	7.05	1.39	1.33
57	BB	2635	A	P-O5'	-7.05	1.52	1.59
21	AA	363	A	C2'-C1'	-7.05	1.45	1.53
21	AA	1099	G	C8-N7	-7.05	1.26	1.30
57	BB	664	G	O4'-C1'	-7.05	1.32	1.41
57	BB	1583	A	O3'-P	-7.05	1.52	1.61
58	BA	21	G	C3'-C2'	-7.05	1.45	1.52
21	AA	1143	G	N9-C4	-7.04	1.32	1.38
57	BB	2059	A	N9-C4	7.04	1.42	1.37
21	AA	1064	G	N3-C4	-7.04	1.30	1.35
21	AA	1083	U	N3-C4	7.04	1.44	1.38
21	AA	1484	C	O4'-C1'	-7.04	1.32	1.41
52	BD	128	ARG	CZ-NH1	7.04	1.42	1.33
57	BB	798	G	O3'-P	-7.04	1.52	1.61
57	BB	1945	G	N9-C4	7.04	1.43	1.38
57	BB	2639	A	N7-C5	-7.04	1.35	1.39
21	AA	1073	U	N3-C4	7.04	1.44	1.38
57	BB	673	C	C2-N3	7.04	1.41	1.35
57	BB	1958	C	N3-C4	7.04	1.38	1.33
57	BB	1981	A	P-O5'	-7.04	1.52	1.59
57	BB	2145	C	O3'-P	-7.04	1.52	1.61
21	AA	1111	A	N3-C4	-7.04	1.30	1.34
10	AS	80	ARG	CD-NE	7.04	1.58	1.46
21	AA	559	A	C2'-C1'	-7.04	1.45	1.53
21	AA	772	U	C2-N3	-7.04	1.32	1.37
21	AA	901	A	N3-C4	-7.04	1.30	1.34
57	BB	10	A	N9-C4	-7.04	1.33	1.37
57	BB	1106	G	N1-C2	7.04	1.43	1.37
57	BB	1646	C	N3-C4	7.04	1.38	1.33
57	BB	1671	U	O3'-P	-7.04	1.52	1.61
57	BB	1864	U	P-O5'	-7.04	1.52	1.59
57	BB	2090	A	C4'-C3'	7.04	1.60	1.53
58	BA	95	U	C5'-C4'	7.04	1.59	1.51
21	AA	978	A	C8-N7	-7.04	1.26	1.31
21	AA	1276	G	N1-C2	7.04	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
4	AM	85	TYR	CE1-CZ	7.04	1.47	1.38
21	AA	105	G	N7-C5	-7.04	1.35	1.39
21	AA	844	G	C8-N7	7.04	1.35	1.30
21	AA	1428	A	C6-N1	7.04	1.40	1.35
23	AW	50	U	P-O5'	-7.04	1.52	1.59
57	BB	732	C	C4-N4	7.04	1.40	1.33
57	BB	2164	C	C4-N4	7.04	1.40	1.33
57	BB	2405	G	C6-N1	7.04	1.44	1.39
57	BB	2470	G	N9-C8	7.04	1.42	1.37
21	AA	1137	C	N1-C6	7.03	1.41	1.37
21	AA	1146	A	C2-N3	-7.03	1.27	1.33
57	BB	116	C	C2-N3	-7.03	1.30	1.35
57	BB	429	A	N7-C5	-7.03	1.35	1.39
57	BB	733	G	C4'-C3'	-7.03	1.45	1.53
57	BB	1098	A	C2'-C1'	-7.03	1.45	1.53
57	BB	1187	G	C5'-C4'	7.03	1.59	1.51
57	BB	1943	U	C5'-C4'	7.03	1.59	1.51
57	BB	2823	A	N7-C5	-7.03	1.35	1.39
57	BB	2237	G	C6-N1	7.03	1.44	1.39
21	AA	52	C	C2'-C1'	-7.03	1.45	1.53
21	AA	568	G	C2-N3	7.03	1.38	1.32
57	BB	261	G	N1-C2	7.03	1.43	1.37
57	BB	976	G	N7-C5	-7.03	1.35	1.39
57	BB	2179	C	C4-C5	7.03	1.48	1.43
57	BB	2517	C	C4-C5	7.03	1.48	1.43
21	AA	773	G	C4'-C3'	7.03	1.60	1.53
57	BB	294	A	C4'-C3'	-7.03	1.45	1.53
57	BB	390	U	C2-N3	7.03	1.42	1.37
57	BB	833	A	N3-C4	7.03	1.39	1.34
57	BB	1472	C	N3-C4	7.03	1.38	1.33
57	BB	1509	A	N9-C4	7.03	1.42	1.37
57	BB	2301	C	N1-C6	-7.03	1.32	1.37
57	BB	2315	G	C6-N1	7.03	1.44	1.39
57	BB	470	A	C6-N1	7.02	1.40	1.35
57	BB	926	G	P-O5'	-7.02	1.52	1.59
57	BB	1759	A	C4'-O4'	7.02	1.54	1.45
57	BB	2068	U	N3-C4	7.02	1.44	1.38
57	BB	2722	G	C4'-C3'	7.02	1.60	1.53
21	AA	661	G	C6-N1	7.02	1.44	1.39
21	AA	972	C	C2'-C1'	-7.02	1.45	1.53
21	AA	1319	A	C6-N6	7.02	1.39	1.33
57	BB	432	A	N3-C4	-7.02	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	639	U	P-O5'	-7.02	1.52	1.59
57	BB	1050	A	C6-N6	7.02	1.39	1.33
57	BB	2101	A	C5'-C4'	7.02	1.59	1.51
57	BB	2806	C	C4-N4	7.02	1.40	1.33
57	BB	1400	U	C2-N3	7.02	1.42	1.37
57	BB	911	A	N3-C4	-7.02	1.30	1.34
57	BB	1016	G	N7-C5	-7.02	1.35	1.39
21	AA	558	G	C6-N1	7.02	1.44	1.39
21	AA	1401	G	N7-C5	-7.02	1.35	1.39
57	BB	210	C	C4-N4	7.02	1.40	1.33
57	BB	862	G	C2'-C1'	-7.02	1.45	1.53
57	BB	1319	C	P-O5'	-7.02	1.52	1.59
57	BB	2421	G	C2-N3	7.02	1.38	1.32
21	AA	222	C	N1-C6	7.02	1.41	1.37
21	AA	1172	C	O3'-P	-7.02	1.52	1.61
21	AA	1410	A	C5-C4	7.02	1.43	1.38
21	AA	1436	U	P-O5'	-7.02	1.52	1.59
57	BB	661	A	N9-C4	-7.02	1.33	1.37
21	AA	747	A	C6-N1	7.01	1.40	1.35
21	AA	1313	U	C4'-C3'	7.01	1.60	1.53
21	AA	1493	A	C1'-N9	-7.01	1.37	1.46
57	BB	93	G	N7-C5	7.01	1.43	1.39
57	BB	748	G	C2-N3	7.01	1.38	1.32
57	BB	2586	U	N1-C2	7.01	1.44	1.38
57	BB	2831	G	N1-C2	7.01	1.43	1.37
58	BA	69	G	C5-C4	7.01	1.43	1.38
21	AA	791	G	C2-N2	7.01	1.41	1.34
21	AA	1001	C	C4-C5	7.01	1.48	1.43
57	BB	2747	G	C8-N7	7.01	1.35	1.30
21	AA	96	U	O3'-P	-7.01	1.52	1.61
21	AA	366	A	C8-N7	-7.01	1.26	1.31
21	AA	1180	A	N9-C4	7.01	1.42	1.37
57	BB	2888	C	C2'-C1'	-7.01	1.45	1.53
57	BB	188	G	C6-N1	7.01	1.44	1.39
57	BB	1445	G	C1'-N9	7.01	1.59	1.48
57	BB	2319	G	P-O5'	-7.01	1.52	1.59
21	AA	1221	G	N9-C8	7.01	1.42	1.37
57	BB	1061	U	C4'-O4'	-7.01	1.36	1.45
21	AA	548	G	O3'-P	-7.01	1.52	1.61
21	AA	1198	G	C2-N3	7.01	1.38	1.32
57	BB	477	A	N9-C8	7.01	1.43	1.37
57	BB	542	C	C4'-C3'	7.01	1.60	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1187	G	N9-C4	-7.01	1.32	1.38
57	BB	1268	A	O3'-P	-7.01	1.52	1.61
57	BB	2833	U	N3-C4	7.01	1.44	1.38
57	BB	1213	A	O3'-P	-7.00	1.52	1.61
57	BB	1761	C	C5-C6	-7.00	1.28	1.34
21	AA	919	A	C2'-C1'	-7.00	1.45	1.53
21	AA	1266	G	C6-N1	7.00	1.44	1.39
21	AA	1454	G	C3'-C2'	-7.00	1.45	1.52
57	BB	1254	A	N3-C4	-7.00	1.30	1.34
57	BB	1277	G	N1-C2	7.00	1.43	1.37
57	BB	1500	G	N9-C8	7.00	1.42	1.37
57	BB	1990	C	N1-C6	-7.00	1.32	1.37
57	BB	2161	C	N3-C4	7.00	1.38	1.33
57	BB	2404	U	C2-N3	7.00	1.42	1.37
58	BA	6	G	C2-N2	7.00	1.41	1.34
21	AA	50	A	N7-C5	-7.00	1.35	1.39
21	AA	402	G	O3'-P	7.00	1.69	1.61
21	AA	848	C	C5-C6	7.00	1.40	1.34
22	AY	74	C	N3-C4	7.00	1.38	1.33
34	BO	7	ARG	CD-NE	7.00	1.58	1.46
57	BB	553	G	C6-N1	7.00	1.44	1.39
57	BB	1393	A	N7-C5	-7.00	1.35	1.39
57	BB	1482	G	C2-N2	7.00	1.41	1.34
57	BB	2503	A	N7-C5	-7.00	1.35	1.39
21	AA	471	U	N3-C4	7.00	1.44	1.38
57	BB	681	G	N9-C8	7.00	1.42	1.37
57	BB	428	A	C4'-C3'	7.00	1.60	1.53
57	BB	1329	U	N3-C4	7.00	1.44	1.38
57	BB	1346	G	C2-N2	7.00	1.41	1.34
57	BB	1350	C	C2'-C1'	-7.00	1.45	1.53
57	BB	1379	U	P-O5'	-7.00	1.52	1.59
57	BB	2458	G	N7-C5	-7.00	1.35	1.39
21	AA	383	A	N3-C4	-7.00	1.30	1.34
57	BB	1051	G	N3-C4	-7.00	1.30	1.35
57	BB	2419	U	O3'-P	-7.00	1.52	1.61
57	BB	2670	A	N3-C4	-7.00	1.30	1.34
23	AW	53	G	N3-C4	-7.00	1.30	1.35
57	BB	13	A	N3-C4	-7.00	1.30	1.34
57	BB	870	U	C2-N3	7.00	1.42	1.37
58	BA	38	C	P-O5'	-7.00	1.52	1.59
21	AA	126	G	N7-C5	-6.99	1.35	1.39
57	BB	530	G	C2-N3	6.99	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	843	G	P-O5'	-6.99	1.52	1.59
57	BB	921	C	C3'-C2'	-6.99	1.45	1.52
57	BB	1332	G	C2'-C1'	-6.99	1.45	1.53
57	BB	1674	G	N7-C5	-6.99	1.35	1.39
57	BB	1805	A	C8-N7	6.99	1.36	1.31
57	BB	2100	G	N9-C8	6.99	1.42	1.37
21	AA	1102	A	N7-C5	-6.99	1.35	1.39
23	AW	33	U	N1-C2	6.99	1.44	1.38
57	BB	1185	G	C2-N3	6.99	1.38	1.32
21	AA	487	A	N7-C5	-6.99	1.35	1.39
22	AY	73	A	N9-C8	6.99	1.43	1.37
57	BB	268	C	C4-N4	-6.99	1.27	1.33
57	BB	1517	G	C4'-C3'	-6.99	1.45	1.53
57	BB	1845	G	C2'-C1'	-6.99	1.45	1.53
58	BA	52	A	N1-C2	6.99	1.40	1.34
2	AK	121	ARG	CZ-NH2	6.99	1.42	1.33
57	BB	875	G	N7-C5	6.99	1.43	1.39
57	BB	1209	U	C2-O2	6.99	1.28	1.22
57	BB	1566	A	C6-N1	6.99	1.40	1.35
57	BB	2364	C	C5'-C4'	6.99	1.59	1.51
57	BB	2820	A	C5-C4	-6.99	1.33	1.38
21	AA	1082	A	N3-C4	-6.99	1.30	1.34
21	AA	1368	A	N7-C5	-6.99	1.35	1.39
57	BB	28	A	C5'-C4'	6.99	1.59	1.51
57	BB	91	A	N3-C4	-6.99	1.30	1.34
57	BB	570	G	C2'-C1'	-6.99	1.45	1.53
57	BB	1044	C	C2-O2	6.99	1.30	1.24
57	BB	2857	G	C2'-C1'	-6.99	1.45	1.53
21	AA	268	U	O4'-C1'	6.98	1.50	1.41
21	AA	760	G	P-O5'	6.98	1.66	1.59
57	BB	185	G	C2'-C1'	-6.98	1.45	1.53
57	BB	1996	C	C4-N4	6.98	1.40	1.33
57	BB	2382	G	N1-C2	6.98	1.43	1.37
21	AA	480	U	C3'-O3'	6.98	1.51	1.42
21	AA	1409	C	N3-C4	6.98	1.38	1.33
57	BB	403	U	P-O5'	-6.98	1.52	1.59
57	BB	617	G	C6-N1	6.98	1.44	1.39
21	AA	454	G	N9-C8	6.98	1.42	1.37
21	AA	670	G	C8-N7	-6.98	1.26	1.30
21	AA	1360	A	C2'-C1'	-6.98	1.45	1.53
57	BB	470	A	C5-C4	6.98	1.43	1.38
57	BB	917	A	N9-C4	-6.98	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1400	U	C4-C5	6.98	1.49	1.43
21	AA	1339	A	N7-C5	-6.98	1.35	1.39
57	BB	1037	G	N9-C8	6.98	1.42	1.37
57	BB	1334	G	C4'-O4'	6.98	1.54	1.45
21	AA	295	C	C4'-C3'	6.98	1.60	1.53
21	AA	1460	C	N3-C4	6.98	1.38	1.33
57	BB	847	U	P-O5'	6.98	1.66	1.59
57	BB	1098	A	N7-C5	-6.98	1.35	1.39
57	BB	1303	G	C3'-C2'	-6.98	1.45	1.52
57	BB	1423	G	C2-N3	6.98	1.38	1.32
57	BB	1575	C	C2-N3	6.98	1.41	1.35
57	BB	1826	G	C2'-C1'	-6.98	1.45	1.53
57	BB	2732	G	N1-C2	6.98	1.43	1.37
21	AA	91	U	C2-N3	6.98	1.42	1.37
22	AY	53	G	C8-N7	6.98	1.35	1.30
57	BB	133	U	N3-C4	6.98	1.44	1.38
57	BB	477	A	C8-N7	-6.98	1.26	1.31
57	BB	1661	G	C8-N7	-6.98	1.26	1.30
57	BB	1906	G	C8-N7	6.98	1.35	1.30
57	BB	2383	G	C6-O6	-6.98	1.17	1.24
21	AA	622	A	N3-C4	-6.97	1.30	1.34
21	AA	1212	U	C2-N3	6.97	1.42	1.37
57	BB	707	G	C6-N1	6.97	1.44	1.39
57	BB	1001	A	N9-C4	6.97	1.42	1.37
57	BB	1173	U	P-O5'	-6.97	1.52	1.59
57	BB	1589	U	C2'-C1'	-6.97	1.45	1.53
57	BB	2468	A	P-O5'	-6.97	1.52	1.59
57	BB	2588	G	C5'-C4'	6.97	1.59	1.51
21	AA	202	G	N9-C8	6.97	1.42	1.37
21	AA	346	G	C5'-C4'	6.97	1.59	1.51
21	AA	573	A	C5-C4	6.97	1.43	1.38
21	AA	955	U	C2'-C1'	-6.97	1.45	1.53
23	AW	34	G	C8-N7	6.97	1.35	1.30
57	BB	222	A	C4'-C3'	6.97	1.60	1.53
57	BB	1161	C	C4-N4	6.97	1.40	1.33
58	BA	56	G	C6-N1	6.97	1.44	1.39
21	AA	1195	C	N3-C4	6.97	1.38	1.33
57	BB	120	U	O4'-C1'	6.97	1.50	1.41
57	BB	2897	U	P-O5'	-6.97	1.52	1.59
21	AA	874	G	N1-C2	6.97	1.43	1.37
57	BB	967	U	C5-C6	6.97	1.40	1.34
57	BB	1052	C	C4-N4	6.97	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2059	A	C6-N6	6.97	1.39	1.33
57	BB	2482	A	N3-C4	-6.97	1.30	1.34
21	AA	1061	G	C5-C6	-6.97	1.35	1.42
57	BB	1221	C	C2-N3	6.97	1.41	1.35
57	BB	2053	G	N9-C4	6.97	1.43	1.38
26	AV	11	A	C6-N1	6.97	1.40	1.35
57	BB	637	A	C6-N6	6.97	1.39	1.33
57	BB	949	G	C5-C4	6.97	1.43	1.38
57	BB	1944	U	C5'-C4'	6.97	1.59	1.51
57	BB	2508	G	N3-C4	-6.97	1.30	1.35
58	BA	44	G	C2-N2	6.97	1.41	1.34
23	AW	27	G	C2'-C1'	-6.96	1.45	1.53
26	AV	75	C	N1-C2	-6.96	1.33	1.40
57	BB	18	U	N3-C4	6.96	1.44	1.38
57	BB	514	A	C6-N1	-6.96	1.30	1.35
57	BB	2119	A	C6-N6	6.96	1.39	1.33
57	BB	2425	A	N7-C5	-6.96	1.35	1.39
57	BB	2466	C	N3-C4	6.96	1.38	1.33
21	AA	28	A	P-O5'	-6.96	1.52	1.59
21	AA	230	G	C2'-C1'	-6.96	1.45	1.53
21	AA	453	G	C2-N2	6.96	1.41	1.34
21	AA	1215	G	N9-C4	6.96	1.43	1.38
21	AA	1428	A	C8-N7	-6.96	1.26	1.31
55	BG	68	ARG	CZ-NH2	6.96	1.42	1.33
57	BB	424	G	N7-C5	-6.96	1.35	1.39
57	BB	659	G	C6-N1	-6.96	1.34	1.39
57	BB	828	U	O3'-P	-6.96	1.52	1.61
57	BB	923	G	C6-N1	-6.96	1.34	1.39
58	BA	4	C	C2-N3	6.96	1.41	1.35
58	BA	105	G	C8-N7	-6.96	1.26	1.30
21	AA	74	A	N9-C4	6.96	1.42	1.37
57	BB	32	C	C2-N3	6.96	1.41	1.35
57	BB	1275	A	C2-N3	-6.96	1.27	1.33
57	BB	2162	G	C5'-C4'	6.96	1.59	1.51
57	BB	2392	A	C5'-C4'	6.96	1.59	1.51
21	AA	1068	G	C6-O6	-6.96	1.17	1.24
57	BB	546	U	C3'-C2'	-6.96	1.45	1.52
57	BB	2198	A	C5-C4	6.96	1.43	1.38
57	BB	2278	A	C6-N1	6.96	1.40	1.35
21	AA	331	G	P-O5'	-6.96	1.52	1.59
21	AA	1063	C	N3-C4	6.96	1.38	1.33
57	BB	156	A	P-O5'	-6.96	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	788	A	N7-C5	-6.96	1.35	1.39
57	BB	838	C	P-O5'	-6.96	1.52	1.59
57	BB	853	C	N1-C6	-6.96	1.32	1.37
57	BB	1184	U	C4'-O4'	6.96	1.54	1.45
57	BB	2136	G	N1-C2	6.96	1.43	1.37
57	BB	2759	G	O3'-P	-6.96	1.52	1.61
21	AA	21	G	N1-C2	6.95	1.43	1.37
21	AA	362	G	C6-N1	6.95	1.44	1.39
21	AA	401	C	N1-C6	6.95	1.41	1.37
23	AW	69	G	C2-N3	6.95	1.38	1.32
57	BB	941	A	C6-N6	6.95	1.39	1.33
21	AA	162	A	N1-C2	6.95	1.40	1.34
21	AA	1306	A	P-O5'	-6.95	1.52	1.59
57	BB	178	G	C2-N3	6.95	1.38	1.32
57	BB	1526	C	P-O5'	-6.95	1.52	1.59
57	BB	1710	G	N1-C2	6.95	1.43	1.37
57	BB	2671	G	C5'-C4'	6.95	1.59	1.51
57	BB	2682	A	C2'-C1'	-6.95	1.45	1.53
57	BB	2700	A	C5'-C4'	6.95	1.59	1.51
21	AA	969	A	N3-C4	6.95	1.39	1.34
21	AA	1216	A	C6-N6	6.95	1.39	1.33
21	AA	1504	G	C8-N7	6.95	1.35	1.30
22	AY	36	A	N9-C4	6.95	1.42	1.37
57	BB	165	A	C6-N6	6.95	1.39	1.33
57	BB	804	A	C8-N7	-6.95	1.26	1.31
23	AW	12	U	C3'-C2'	-6.95	1.45	1.52
57	BB	1838	C	C5'-C4'	6.95	1.59	1.51
57	BB	2502	G	N7-C5	-6.95	1.35	1.39
21	AA	408	A	C6-N6	6.95	1.39	1.33
57	BB	360	U	C3'-C2'	6.95	1.60	1.52
57	BB	996	A	N7-C5	6.95	1.43	1.39
57	BB	1275	A	C8-N7	-6.95	1.26	1.31
57	BB	1945	G	C3'-C2'	-6.95	1.45	1.52
22	AY	62	A	C6-N1	6.94	1.40	1.35
57	BB	415	A	N9-C4	6.94	1.42	1.37
57	BB	1125	G	C2-N3	6.94	1.38	1.32
21	AA	763	G	C2-N3	6.94	1.38	1.32
21	AA	1417	G	N9-C4	6.94	1.43	1.38
21	AA	283	U	N1-C2	-6.94	1.32	1.38
21	AA	725	G	O3'-P	-6.94	1.52	1.61
21	AA	1297	G	C5-C4	6.94	1.43	1.38
21	AA	1310	G	C2-N3	6.94	1.38	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	742	G	C2-N2	6.94	1.41	1.34
21	AA	1113	C	C2-N3	6.94	1.41	1.35
57	BB	1319	C	C4-N4	6.94	1.40	1.33
57	BB	1615	C	C2'-C1'	-6.94	1.45	1.53
57	BB	2856	A	C4'-O4'	6.94	1.54	1.45
21	AA	279	A	N9-C4	-6.94	1.33	1.37
21	AA	382	A	N9-C4	6.94	1.42	1.37
21	AA	514	C	N3-C4	6.94	1.38	1.33
21	AA	1088	G	N7-C5	-6.94	1.35	1.39
57	BB	835	C	N3-C4	6.94	1.38	1.33
57	BB	929	U	N3-C4	6.94	1.44	1.38
57	BB	1287	A	C6-N1	6.94	1.40	1.35
57	BB	2350	C	C4-C5	-6.94	1.37	1.43
21	AA	266	G	N7-C5	-6.93	1.35	1.39
57	BB	1921	G	N9-C8	-6.93	1.32	1.37
57	BB	2587	A	C6-N1	-6.93	1.30	1.35
58	BA	13	G	C3'-C2'	-6.93	1.45	1.52
21	AA	330	C	N3-C4	6.93	1.38	1.33
22	AY	76	A	C6-N1	6.93	1.40	1.35
57	BB	74	A	N9-C4	6.93	1.42	1.37
57	BB	1414	C	C4'-C3'	-6.93	1.45	1.53
57	BB	672	C	N3-C4	6.93	1.38	1.33
57	BB	930	G	P-O5'	-6.93	1.52	1.59
57	BB	1651	G	C6-O6	-6.93	1.18	1.24
21	AA	604	G	N1-C2	6.93	1.43	1.37
21	AA	912	C	C2'-C1'	-6.93	1.45	1.53
23	AW	5	G	N3-C4	-6.93	1.30	1.35
57	BB	1367	A	O3'-P	-6.93	1.52	1.61
57	BB	1668	A	C3'-O3'	6.93	1.51	1.42
58	BA	38	C	C4'-C3'	-6.93	1.45	1.53
21	AA	1220	G	N9-C8	-6.93	1.33	1.37
26	AV	52	G	N3-C4	-6.93	1.30	1.35
57	BB	1088	A	C5'-C4'	6.93	1.59	1.51
58	BA	2	G	C5'-C4'	6.93	1.59	1.51
21	AA	384	G	N7-C5	-6.93	1.35	1.39
21	AA	533	A	N1-C2	6.93	1.40	1.34
21	AA	563	A	C2'-C1'	-6.93	1.45	1.53
21	AA	1297	G	C8-N7	6.93	1.35	1.30
21	AA	1526	G	N9-C8	6.93	1.42	1.37
57	BB	217	A	C5-C4	6.93	1.43	1.38
57	BB	570	G	C5-C4	6.93	1.43	1.38
57	BB	1498	C	C2'-C1'	-6.93	1.45	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1676	A	N7-C5	-6.93	1.35	1.39
57	BB	1981	A	C6-N6	6.93	1.39	1.33
57	BB	2125	G	C6-N1	6.93	1.44	1.39
21	AA	441	A	N1-C2	-6.92	1.28	1.34
21	AA	749	A	C6-N1	6.92	1.40	1.35
23	AW	54	U	C2-N3	6.92	1.42	1.37
57	BB	6	A	C6-N6	6.92	1.39	1.33
57	BB	178	G	C1'-N9	-6.92	1.37	1.46
57	BB	626	A	N9-C8	-6.92	1.32	1.37
57	BB	900	A	C4'-O4'	6.92	1.54	1.45
57	BB	506	G	N7-C5	-6.92	1.35	1.39
57	BB	2452	C	N1-C2	6.92	1.47	1.40
21	AA	1122	U	O4'-C1'	6.92	1.50	1.41
21	AA	1355	G	C6-N1	6.92	1.44	1.39
22	AY	38	A	O3'-P	-6.92	1.52	1.61
57	BB	1	G	P-OP2	6.92	1.60	1.49
57	BB	173	A	C6-N1	6.92	1.40	1.35
57	BB	264	C	C3'-O3'	6.92	1.51	1.42
57	BB	1216	G	C2-N3	6.92	1.38	1.32
57	BB	1334	G	C6-N1	6.92	1.44	1.39
57	BB	1635	A	N9-C4	-6.92	1.33	1.37
57	BB	1714	U	C5-C6	6.92	1.40	1.34
57	BB	2237	G	P-O5'	-6.92	1.52	1.59
57	BB	2458	G	C5-C6	-6.92	1.35	1.42
57	BB	2733	A	C5-C6	6.92	1.47	1.41
57	BB	2444	G	N1-C2	6.92	1.43	1.37
21	AA	149	A	N3-C4	6.92	1.39	1.34
21	AA	305	G	N3-C4	-6.92	1.30	1.35
21	AA	1087	G	C5-C4	6.92	1.43	1.38
57	BB	653	U	N1-C6	6.92	1.44	1.38
57	BB	653	U	N3-C4	6.92	1.44	1.38
57	BB	2726	A	C2'-C1'	-6.92	1.45	1.53
57	BB	2894	G	C2'-C1'	-6.92	1.45	1.53
21	AA	765	G	O4'-C1'	6.92	1.50	1.41
21	AA	912	C	O3'-P	-6.92	1.52	1.61
57	BB	936	A	O3'-P	-6.92	1.52	1.61
57	BB	1167	C	N3-C4	6.92	1.38	1.33
57	BB	1335	C	N1-C6	-6.92	1.32	1.37
21	AA	736	C	N3-C4	6.92	1.38	1.33
21	AA	292	G	C2-N3	6.91	1.38	1.32
21	AA	1199	U	C4-O4	6.91	1.29	1.23
22	AY	5	A	N7-C5	-6.91	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	271	G	C5'-C4'	6.91	1.59	1.51
57	BB	938	G	N9-C4	-6.91	1.32	1.38
57	BB	1945	G	C5'-C4'	6.91	1.59	1.51
57	BB	2169	A	P-O5'	-6.91	1.52	1.59
57	BB	2670	A	C5-C6	6.91	1.47	1.41
58	BA	11	C	C3'-C2'	-6.91	1.45	1.52
21	AA	775	G	N1-C2	6.91	1.43	1.37
57	BB	1428	C	N1-C2	6.91	1.47	1.40
21	AA	1306	A	C6-N6	6.91	1.39	1.33
57	BB	674	G	P-O5'	-6.91	1.52	1.59
57	BB	1251	C	N1-C6	6.91	1.41	1.37
57	BB	1304	A	N9-C4	-6.91	1.33	1.37
57	BB	1534	U	C2-N3	6.91	1.42	1.37
57	BB	1679	A	N9-C4	-6.91	1.33	1.37
57	BB	1842	G	C3'-C2'	6.91	1.60	1.52
58	BA	77	U	N1-C2	-6.91	1.32	1.38
21	AA	483	C	P-O5'	-6.91	1.52	1.59
21	AA	577	G	C8-N7	-6.91	1.26	1.30
21	AA	1137	C	C4-N4	6.91	1.40	1.33
57	BB	117	G	O3'-P	-6.91	1.52	1.61
57	BB	583	G	C8-N7	6.91	1.35	1.30
57	BB	989	G	C5'-C4'	6.91	1.59	1.51
57	BB	1785	A	N3-C4	-6.91	1.30	1.34
57	BB	2271	G	N7-C5	-6.91	1.35	1.39
57	BB	54	G	C8-N7	-6.91	1.26	1.30
57	BB	2850	A	O4'-C1'	6.91	1.50	1.41
21	AA	544	G	N9-C8	6.91	1.42	1.37
57	BB	633	A	C6-N1	6.91	1.40	1.35
57	BB	2357	G	N9-C8	6.91	1.42	1.37
57	BB	2742	G	C5-C4	6.91	1.43	1.38
21	AA	1319	A	C4'-O4'	-6.90	1.36	1.45
21	AA	337	G	P-O5'	-6.90	1.52	1.59
21	AA	431	A	N7-C5	-6.90	1.35	1.39
26	AV	76	A	N3-C4	6.90	1.39	1.34
57	BB	931	U	N1-C2	6.90	1.44	1.38
57	BB	1311	G	C3'-C2'	-6.90	1.45	1.52
57	BB	1340	U	O4'-C1'	6.90	1.50	1.41
57	BB	1439	A	C5-C4	6.90	1.43	1.38
57	BB	2441	U	C2'-C1'	-6.90	1.45	1.53
21	AA	461	A	C4'-C3'	6.90	1.60	1.53
21	AA	705	G	C2'-C1'	-6.90	1.45	1.53
21	AA	927	G	N1-C2	6.90	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1973	G	N3-C4	-6.90	1.30	1.35
57	BB	2369	A	C6-N1	6.90	1.40	1.35
21	AA	716	A	N9-C4	6.90	1.42	1.37
31	BL	43	GLY	N-CA	6.90	1.56	1.46
57	BB	2077	A	C6-N6	6.90	1.39	1.33
21	AA	658	C	C5'-C4'	6.90	1.59	1.51
21	AA	673	A	C8-N7	-6.90	1.26	1.31
21	AA	1067	A	C2'-O2'	-6.90	1.32	1.41
21	AA	1182	G	C5'-C4'	6.90	1.59	1.51
21	AA	1331	G	N9-C8	6.90	1.42	1.37
21	AA	1418	A	P-O5'	-6.90	1.52	1.59
21	AA	1469	C	C4-N4	6.90	1.40	1.33
53	BE	79	ARG	NE-CZ	6.90	1.42	1.33
57	BB	1813	G	C8-N7	-6.90	1.26	1.30
57	BB	1927	A	C6-N6	6.90	1.39	1.33
57	BB	2228	G	C2'-C1'	-6.90	1.45	1.53
57	BB	2575	C	N3-C4	6.90	1.38	1.33
58	BA	19	C	C3'-C2'	-6.90	1.45	1.52
58	BA	81	G	C5-C6	-6.90	1.35	1.42
21	AA	75	G	N7-C5	-6.90	1.35	1.39
57	BB	397	U	N3-C4	6.90	1.44	1.38
57	BB	2261	C	C3'-C2'	-6.90	1.45	1.52
21	AA	888	G	N7-C5	-6.89	1.35	1.39
21	AA	994	A	P-O5'	-6.89	1.52	1.59
23	AW	46	G	O3'-P	-6.89	1.52	1.61
57	BB	724	U	N3-C4	6.89	1.44	1.38
57	BB	866	A	N9-C8	6.89	1.43	1.37
57	BB	998	C	C5'-C4'	-6.89	1.43	1.51
57	BB	2341	G	N3-C4	-6.89	1.30	1.35
21	AA	7	A	P-O5'	-6.89	1.52	1.59
21	AA	1102	A	N9-C4	6.89	1.42	1.37
58	BA	5	U	C2'-C1'	-6.89	1.45	1.53
21	AA	731	G	N7-C5	-6.89	1.35	1.39
57	BB	508	A	C6-N1	6.89	1.40	1.35
57	BB	1087	G	C8-N7	6.89	1.35	1.30
21	AA	543	U	N3-C4	6.89	1.44	1.38
57	BB	435	C	C2-N3	6.89	1.41	1.35
57	BB	841	G	C2'-C1'	-6.89	1.45	1.53
57	BB	1133	A	C6-N1	6.89	1.40	1.35
57	BB	1147	A	C2-N3	6.89	1.39	1.33
57	BB	1596	A	C6-N1	6.89	1.40	1.35
57	BB	1897	G	N9-C8	6.89	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2485	G	C6-N1	6.89	1.44	1.39
57	BB	2634	A	C6-N6	6.89	1.39	1.33
21	AA	104	G	N1-C2	6.89	1.43	1.37
57	BB	456	C	C4-N4	6.89	1.40	1.33
57	BB	945	A	N7-C5	-6.89	1.35	1.39
57	BB	1026	G	P-O5'	-6.89	1.52	1.59
57	BB	1912	A	N1-C2	-6.89	1.28	1.34
57	BB	2533	U	C2'-C1'	-6.89	1.45	1.53
21	AA	356	A	N9-C4	6.89	1.42	1.37
21	AA	369	G	C6-N1	6.89	1.44	1.39
21	AA	803	G	N1-C2	6.89	1.43	1.37
21	AA	1154	G	C2'-C1'	-6.89	1.45	1.53
21	AA	1358	U	C3'-C2'	-6.89	1.45	1.52
21	AA	1461	G	N9-C4	6.89	1.43	1.38
57	BB	213	A	N7-C5	6.89	1.43	1.39
57	BB	386	G	N1-C2	6.89	1.43	1.37
57	BB	442	G	C5-C4	6.89	1.43	1.38
57	BB	2764	A	N9-C4	6.89	1.42	1.37
57	BB	2820	A	N3-C4	-6.89	1.30	1.34
21	AA	634	C	N1-C6	-6.88	1.33	1.37
21	AA	1332	A	N9-C4	-6.88	1.33	1.37
21	AA	1449	C	C2'-C1'	-6.88	1.45	1.53
57	BB	7	G	C6-N1	6.88	1.44	1.39
57	BB	303	G	N1-C2	6.88	1.43	1.37
57	BB	1540	G	N7-C5	-6.88	1.35	1.39
57	BB	1733	G	N7-C5	-6.88	1.35	1.39
57	BB	2244	U	C4-O4	6.88	1.29	1.23
58	BA	77	U	C4-O4	-6.88	1.18	1.23
34	BO	14	ALA	CA-CB	6.88	1.67	1.52
57	BB	763	G	C4'-C3'	6.88	1.60	1.53
57	BB	2063	C	C5'-C4'	6.88	1.59	1.51
21	AA	14	U	C2'-C1'	-6.88	1.45	1.53
21	AA	305	G	C4'-C3'	6.88	1.60	1.53
21	AA	515	G	C2-N3	6.88	1.38	1.32
21	AA	829	G	N9-C4	6.88	1.43	1.38
21	AA	1425	U	C2'-C1'	-6.88	1.45	1.53
22	AY	42	G	P-O5'	6.88	1.66	1.59
57	BB	473	G	C5-C6	6.88	1.49	1.42
57	BB	1311	G	C2-N3	6.88	1.38	1.32
57	BB	1446	C	O3'-P	-6.88	1.52	1.61
57	BB	1481	U	C4'-C3'	6.88	1.60	1.53
57	BB	1023	U	C5'-C4'	6.88	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1228	G	N7-C5	-6.88	1.35	1.39
57	BB	2653	U	C2-N3	6.88	1.42	1.37
21	AA	15	G	N9-C8	-6.88	1.33	1.37
21	AA	712	A	N7-C5	-6.88	1.35	1.39
22	AY	29	A	C5'-C4'	6.88	1.59	1.51
57	BB	380	G	N3-C4	-6.88	1.30	1.35
57	BB	2030	A	N3-C4	-6.88	1.30	1.34
21	AA	949	A	C5-C4	6.88	1.43	1.38
23	AW	64	A	C8-N7	-6.88	1.26	1.31
57	BB	269	C	C5'-C4'	6.88	1.59	1.51
57	BB	307	G	C8-N7	6.88	1.35	1.30
57	BB	1109	C	P-O5'	-6.88	1.52	1.59
57	BB	1326	U	N3-C4	6.88	1.44	1.38
57	BB	207	A	N9-C8	6.88	1.43	1.37
21	AA	320	A	N9-C4	-6.87	1.33	1.37
21	AA	1370	G	C4'-C3'	6.87	1.60	1.53
57	BB	70	G	C5-C4	6.87	1.43	1.38
57	BB	217	A	C6-N1	6.87	1.40	1.35
57	BB	484	C	N1-C6	-6.87	1.33	1.37
57	BB	1288	G	C8-N7	-6.87	1.26	1.30
57	BB	1655	A	C5'-C4'	6.87	1.59	1.51
21	AA	602	A	C8-N7	-6.87	1.26	1.31
21	AA	1072	G	C2'-C1'	-6.87	1.45	1.53
21	AA	1311	A	C6-N6	6.87	1.39	1.33
57	BB	652	U	N1-C6	6.87	1.44	1.38
57	BB	802	A	C3'-C2'	-6.87	1.45	1.52
57	BB	1359	A	C5'-C4'	-6.87	1.43	1.51
57	BB	1267	U	C3'-C2'	-6.87	1.45	1.52
21	AA	398	U	O4'-C1'	6.87	1.50	1.41
21	AA	1172	C	P-O5'	-6.87	1.52	1.59
22	AY	73	A	C8-N7	-6.87	1.26	1.31
57	BB	2154	A	C6-N1	6.87	1.40	1.35
21	AA	338	A	C2'-C1'	-6.87	1.45	1.53
21	AA	756	C	C5-C6	-6.87	1.28	1.34
21	AA	852	G	C2'-C1'	-6.87	1.45	1.53
21	AA	1388	C	C3'-C2'	6.87	1.60	1.52
57	BB	470	A	C4'-C3'	-6.87	1.45	1.53
57	BB	1014	A	C2'-C1'	-6.87	1.45	1.53
57	BB	1204	A	N9-C4	6.87	1.42	1.37
57	BB	1265	A	C5-C4	-6.87	1.33	1.38
57	BB	1844	C	P-O5'	-6.87	1.52	1.59
57	BB	1906	G	N1-C2	6.87	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2055	C	C4-N4	6.87	1.40	1.33
57	BB	75	G	O4'-C1'	6.86	1.50	1.41
57	BB	301	G	C2-N3	6.86	1.38	1.32
57	BB	641	U	C2-N3	6.86	1.42	1.37
21	AA	593	U	N1-C2	6.86	1.44	1.38
21	AA	800	G	O3'-P	-6.86	1.52	1.61
57	BB	913	U	P-O5'	-6.86	1.52	1.59
57	BB	1264	A	C6-N6	6.86	1.39	1.33
57	BB	2614	A	C6-N6	6.86	1.39	1.33
3	AL	55	ARG	NE-CZ	6.86	1.42	1.33
57	BB	1392	A	N7-C5	-6.86	1.35	1.39
21	AA	31	G	N3-C4	-6.86	1.30	1.35
21	AA	98	A	N9-C8	6.86	1.43	1.37
21	AA	786	G	C5-C4	6.86	1.43	1.38
53	BE	51	GLU	CG-CD	6.86	1.62	1.51
57	BB	981	A	C5'-C4'	6.86	1.59	1.51
57	BB	1258	U	C5'-C4'	6.86	1.59	1.51
57	BB	1331	G	P-O5'	-6.86	1.52	1.59
57	BB	2067	G	C2'-C1'	-6.86	1.45	1.53
57	BB	2220	U	C2-O2	6.86	1.28	1.22
57	BB	2642	G	C6-N1	6.86	1.44	1.39
22	AY	56	C	C4-C5	-6.86	1.37	1.43
57	BB	474	G	O4'-C1'	6.86	1.50	1.41
57	BB	1170	C	C2-N3	6.86	1.41	1.35
57	BB	2059	A	C2'-C1'	-6.86	1.45	1.53
57	BB	2810	A	C2'-C1'	-6.86	1.45	1.53
23	AW	40	C	C2'-C1'	-6.85	1.45	1.53
57	BB	1498	C	C4'-C3'	-6.85	1.45	1.53
21	AA	603	U	P-O5'	-6.85	1.52	1.59
21	AA	1138	G	N3-C4	-6.85	1.30	1.35
57	BB	33	C	O3'-P	-6.85	1.52	1.61
57	BB	149	A	N7-C5	-6.85	1.35	1.39
57	BB	877	A	P-O5'	-6.85	1.52	1.59
21	AA	900	A	C6-N1	6.85	1.40	1.35
57	BB	54	G	C6-N1	6.85	1.44	1.39
57	BB	1383	A	C5-C4	6.85	1.43	1.38
57	BB	2396	G	C2'-C1'	-6.85	1.45	1.53
57	BB	2700	A	O3'-P	-6.85	1.52	1.61
21	AA	23	C	O4'-C1'	-6.85	1.32	1.41
26	AV	75	C	O3'-P	-6.85	1.52	1.61
57	BB	15	G	C4'-C3'	-6.85	1.45	1.53
57	BB	455	C	C4-N4	6.85	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	456	C	N3-C4	6.85	1.38	1.33
57	BB	465	G	N9-C8	-6.85	1.33	1.37
57	BB	2061	G	C2-N3	6.85	1.38	1.32
21	AA	596	A	N3-C4	6.85	1.39	1.34
21	AA	708	C	C2-N3	6.85	1.41	1.35
21	AA	771	G	P-O5'	-6.85	1.52	1.59
21	AA	825	A	C6-N6	6.85	1.39	1.33
21	AA	1014	A	C2'-C1'	-6.85	1.45	1.53
21	AA	1057	G	C2'-C1'	-6.85	1.45	1.53
21	AA	1529	G	N1-C2	6.85	1.43	1.37
57	BB	7	G	O3'-P	-6.85	1.52	1.61
57	BB	1146	C	C2'-C1'	-6.85	1.45	1.53
21	AA	714	G	N7-C5	-6.85	1.35	1.39
57	BB	671	C	C2-N3	6.85	1.41	1.35
57	BB	905	A	C6-N6	6.85	1.39	1.33
57	BB	1694	C	C4-N4	6.85	1.40	1.33
21	AA	987	G	C6-N1	6.84	1.44	1.39
57	BB	627	A	C6-N1	6.84	1.40	1.35
57	BB	1581	G	N1-C2	6.84	1.43	1.37
57	BB	1618	A	N3-C4	-6.84	1.30	1.34
57	BB	2585	U	P-O5'	-6.84	1.52	1.59
21	AA	411	A	C4'-C3'	6.84	1.60	1.53
21	AA	1398	A	N3-C4	-6.84	1.30	1.34
21	AA	1529	G	C2-N3	6.84	1.38	1.32
57	BB	501	A	N9-C4	6.84	1.42	1.37
21	AA	174	A	N7-C5	-6.84	1.35	1.39
21	AA	175	C	O3'-P	-6.84	1.52	1.61
21	AA	578	C	C2-N3	6.84	1.41	1.35
21	AA	1102	A	C4'-C3'	-6.84	1.45	1.53
21	AA	1342	C	C4'-C3'	6.84	1.60	1.53
57	BB	655	A	N9-C4	-6.84	1.33	1.37
57	BB	1076	C	N3-C4	6.84	1.38	1.33
57	BB	1306	C	N3-C4	6.84	1.38	1.33
57	BB	1564	C	P-O5'	-6.84	1.52	1.59
57	BB	2035	G	C5-C6	-6.84	1.35	1.42
57	BB	2360	G	C6-N1	6.84	1.44	1.39
57	BB	2579	C	C4'-C3'	6.84	1.60	1.53
57	BB	363	G	N1-C2	6.84	1.43	1.37
57	BB	2886	A	C6-N6	-6.84	1.28	1.33
21	AA	727	G	C6-N1	6.84	1.44	1.39
21	AA	1342	C	C2-O2	6.84	1.30	1.24
45	BC	66	PHE	CG-CD2	6.84	1.49	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2757	A	C2'-C1'	6.84	1.60	1.53
11	AT	17	ARG	CZ-NH2	6.84	1.42	1.33
21	AA	43	C	C2-N3	6.84	1.41	1.35
21	AA	123	U	C5'-C4'	6.84	1.59	1.51
21	AA	352	C	C2-N3	-6.84	1.30	1.35
21	AA	1145	A	C5-C4	6.84	1.43	1.38
57	BB	937	C	N3-C4	6.84	1.38	1.33
57	BB	1303	G	C2'-C1'	-6.84	1.45	1.53
21	AA	1212	U	O3'-P	-6.83	1.52	1.61
21	AA	1228	C	C2-N3	6.83	1.41	1.35
21	AA	1413	A	C6-N6	6.83	1.39	1.33
57	BB	1346	G	P-O5'	-6.83	1.52	1.59
21	AA	144	G	N7-C5	-6.83	1.35	1.39
21	AA	161	A	C5-C4	-6.83	1.33	1.38
21	AA	715	A	C6-N6	6.83	1.39	1.33
21	AA	747	A	O3'-P	-6.83	1.52	1.61
57	BB	253	C	C4-N4	6.83	1.40	1.33
57	BB	344	A	C6-N1	6.83	1.40	1.35
57	BB	475	C	C4'-C3'	-6.83	1.45	1.53
57	BB	967	U	C2'-C1'	-6.83	1.45	1.53
57	BB	1522	A	C8-N7	-6.83	1.26	1.31
57	BB	1585	C	C4-N4	6.83	1.40	1.33
57	BB	1734	G	N1-C2	6.83	1.43	1.37
57	BB	1884	G	P-O5'	-6.83	1.52	1.59
57	BB	2285	C	C5'-C4'	6.83	1.59	1.51
57	BB	2562	U	N1-C6	6.83	1.44	1.38
7	AP	25	ARG	CD-NE	6.83	1.58	1.46
21	AA	663	A	N3-C4	-6.83	1.30	1.34
21	AA	841	C	P-O5'	-6.83	1.52	1.59
57	BB	300	A	N9-C4	-6.83	1.33	1.37
57	BB	315	G	C2'-C1'	-6.83	1.45	1.53
57	BB	1016	G	C2'-C1'	-6.83	1.45	1.53
57	BB	1432	G	N9-C8	-6.83	1.33	1.37
21	AA	108	G	N7-C5	-6.83	1.35	1.39
21	AA	850	U	C2'-C1'	-6.83	1.45	1.53
57	BB	947	A	C8-N7	-6.83	1.26	1.31
21	AA	571	U	C2'-C1'	-6.83	1.45	1.53
26	AV	21	A	C6-N1	6.83	1.40	1.35
57	BB	577	G	P-O5'	-6.83	1.52	1.59
57	BB	691	C	C2'-O2'	-6.83	1.32	1.41
57	BB	974	G	C6-N1	6.83	1.44	1.39
57	BB	1046	A	N9-C4	6.83	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1737	G	N3-C4	6.83	1.40	1.35
57	BB	1980	G	N1-C2	6.83	1.43	1.37
57	BB	2033	A	C6-N1	6.83	1.40	1.35
57	BB	2367	G	N7-C5	-6.83	1.35	1.39
21	AA	650	G	N1-C2	6.83	1.43	1.37
51	B4	38	GLY	CA-C	6.83	1.62	1.51
57	BB	175	G	C5'-C4'	6.83	1.59	1.51
57	BB	252	G	C2'-C1'	-6.83	1.45	1.53
57	BB	1540	G	N9-C8	-6.83	1.33	1.37
58	BA	52	A	P-O5'	6.83	1.66	1.59
21	AA	1519	A	C6-N6	6.83	1.39	1.33
57	BB	1144	A	C6-N6	6.83	1.39	1.33
57	BB	1168	G	N1-C2	6.83	1.43	1.37
57	BB	2663	G	C2-N3	6.83	1.38	1.32
58	BA	26	C	N3-C4	6.83	1.38	1.33
58	BA	99	A	C4'-O4'	-6.83	1.36	1.45
21	AA	357	G	C5'-C4'	6.82	1.59	1.51
21	AA	497	G	C5-C4	6.82	1.43	1.38
21	AA	917	G	C6-N1	-6.82	1.34	1.39
21	AA	1151	A	C6-N1	6.82	1.40	1.35
26	AV	3	C	C4-C5	-6.82	1.37	1.43
57	BB	1314	C	C1'-N1	6.82	1.58	1.48
57	BB	2152	G	C5'-C4'	6.82	1.59	1.51
58	BA	101	A	C2'-C1'	-6.82	1.45	1.53
21	AA	945	G	N7-C5	-6.82	1.35	1.39
57	BB	1169	A	C6-N6	6.82	1.39	1.33
57	BB	2082	A	P-O5'	-6.82	1.52	1.59
21	AA	37	U	P-O5'	-6.82	1.52	1.59
21	AA	49	U	C2'-C1'	-6.82	1.45	1.53
21	AA	389	A	C8-N7	-6.82	1.26	1.31
21	AA	1310	G	N3-C4	-6.82	1.30	1.35
57	BB	647	G	C2-N3	6.82	1.38	1.32
57	BB	1744	A	N9-C8	6.82	1.43	1.37
57	BB	2154	A	C5'-C4'	6.82	1.59	1.51
57	BB	959	A	C5-C4	6.82	1.43	1.38
57	BB	1386	C	N1-C6	-6.82	1.33	1.37
57	BB	2553	G	C6-N1	6.82	1.44	1.39
57	BB	2667	C	N3-C4	6.82	1.38	1.33
58	BA	6	G	C2-N3	6.82	1.38	1.32
21	AA	432	A	O3'-P	-6.82	1.52	1.61
21	AA	894	G	C8-N7	-6.82	1.26	1.30
21	AA	1071	C	N1-C6	6.82	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	51	G	C2-N3	6.82	1.38	1.32
23	AW	47	U	P-O5'	-6.82	1.52	1.59
57	BB	2342	C	C5'-C4'	-6.82	1.43	1.51
57	BB	2709	G	N9-C8	6.82	1.42	1.37
21	AA	674	G	C6-N1	6.82	1.44	1.39
21	AA	950	U	C4-C5	-6.82	1.37	1.43
57	BB	188	G	C5-C6	-6.82	1.35	1.42
57	BB	350	G	C5-C6	-6.82	1.35	1.42
57	BB	2028	U	C4'-O4'	6.82	1.54	1.45
57	BB	2576	G	C5-C4	6.82	1.43	1.38
57	BB	9	G	N7-C5	-6.81	1.35	1.39
57	BB	2460	U	N3-C4	6.81	1.44	1.38
58	BA	55	U	C5'-C4'	6.81	1.59	1.51
57	BB	31	C	C5'-C4'	6.81	1.59	1.51
57	BB	306	U	P-O5'	-6.81	1.52	1.59
57	BB	1665	A	C2'-C1'	-6.81	1.45	1.53
57	BB	1923	U	C2'-C1'	-6.81	1.45	1.53
57	BB	2255	G	N9-C8	6.81	1.42	1.37
57	BB	2432	A	C1'-N9	6.81	1.58	1.48
57	BB	2523	G	N9-C4	6.81	1.43	1.38
57	BB	1861	G	C6-N1	6.81	1.44	1.39
57	BB	2808	G	N1-C2	6.81	1.43	1.37
21	AA	223	A	C5'-C4'	6.81	1.59	1.51
21	AA	232	G	N9-C8	-6.81	1.33	1.37
21	AA	1224	U	C4-O4	-6.81	1.18	1.23
21	AA	1267	C	C3'-C2'	-6.81	1.45	1.52
57	BB	1121	C	C3'-C2'	-6.81	1.45	1.52
57	BB	1143	A	N7-C5	-6.81	1.35	1.39
57	BB	1271	G	C5-C6	-6.81	1.35	1.42
57	BB	1922	G	C5-C4	-6.81	1.33	1.38
57	BB	2573	C	C4-N4	6.81	1.40	1.33
57	BB	2662	A	P-O5'	-6.81	1.52	1.59
21	AA	1137	C	P-O5'	-6.81	1.52	1.59
21	AA	1147	C	C2'-C1'	-6.81	1.45	1.53
25	AZ	318	ARG	NE-CZ	6.81	1.41	1.33
57	BB	18	U	C4-C5	6.81	1.49	1.43
57	BB	892	A	C2'-C1'	-6.81	1.45	1.53
57	BB	1407	G	C4'-C3'	6.81	1.60	1.53
57	BB	750	A	N3-C4	-6.81	1.30	1.34
57	BB	980	A	C8-N7	-6.81	1.26	1.31
57	BB	1302	A	N9-C4	-6.81	1.33	1.37
57	BB	1585	C	C5'-C4'	-6.81	1.43	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	939	G	C8-N7	6.80	1.35	1.30
21	AA	1322	C	C2'-C1'	-6.80	1.45	1.53
21	AA	1380	U	N3-C4	6.80	1.44	1.38
57	BB	338	G	N7-C5	-6.80	1.35	1.39
57	BB	1058	U	C5'-C4'	6.80	1.59	1.51
57	BB	2116	G	N7-C5	-6.80	1.35	1.39
57	BB	2416	C	C2-O2	6.80	1.30	1.24
21	AA	888	G	C2-N3	6.80	1.38	1.32
57	BB	212	G	N1-C2	6.80	1.43	1.37
57	BB	374	A	N9-C8	-6.80	1.32	1.37
57	BB	1664	A	N7-C5	-6.80	1.35	1.39
21	AA	113	G	P-O5'	-6.80	1.52	1.59
21	AA	498	A	O3'-P	-6.80	1.52	1.61
21	AA	1373	G	C5-C4	6.80	1.43	1.38
57	BB	2654	A	P-O5'	-6.80	1.52	1.59
22	AY	24	G	C4'-C3'	6.80	1.60	1.53
57	BB	181	A	C8-N7	-6.80	1.26	1.31
57	BB	778	G	N7-C5	-6.80	1.35	1.39
57	BB	1900	A	C3'-O3'	6.80	1.51	1.42
57	BB	2791	G	C5-C4	6.80	1.43	1.38
57	BB	2871	U	C2-N3	6.80	1.42	1.37
57	BB	2478	A	N3-C4	-6.80	1.30	1.34
12	AU	34	ARG	NE-CZ	6.80	1.41	1.33
21	AA	578	C	N1-C6	-6.80	1.33	1.37
21	AA	609	A	C4'-C3'	6.80	1.60	1.53
21	AA	800	G	N7-C5	-6.80	1.35	1.39
21	AA	912	C	C2-N3	6.80	1.41	1.35
21	AA	1268	G	C3'-C2'	-6.80	1.45	1.52
57	BB	522	A	N7-C5	-6.80	1.35	1.39
57	BB	1017	G	C8-N7	6.80	1.35	1.30
57	BB	2258	C	C4-C5	6.80	1.48	1.43
57	BB	2673	G	C6-N1	6.80	1.44	1.39
21	AA	396	C	C4-N4	6.79	1.40	1.33
21	AA	1258	G	C6-N1	6.79	1.44	1.39
21	AA	1448	C	N3-C4	6.79	1.38	1.33
57	BB	983	A	C5'-C4'	6.79	1.59	1.51
57	BB	1333	G	N9-C4	6.79	1.43	1.38
57	BB	105	C	C4-N4	6.79	1.40	1.33
57	BB	524	G	C2-N3	6.79	1.38	1.32
57	BB	2180	U	N1-C2	6.79	1.44	1.38
57	BB	2446	G	N1-C2	6.79	1.43	1.37
21	AA	318	G	C5-C4	-6.79	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	693	A	N1-C2	6.79	1.40	1.34
57	BB	1192	G	C8-N7	-6.79	1.26	1.30
57	BB	1681	G	N3-C4	-6.79	1.30	1.35
57	BB	1776	G	C8-N7	-6.79	1.26	1.30
58	BA	64	G	N3-C4	-6.79	1.30	1.35
21	AA	127	G	C2-N3	6.79	1.38	1.32
21	AA	191	G	C6-N1	6.79	1.44	1.39
21	AA	1358	U	O3'-P	-6.79	1.53	1.61
21	AA	1366	C	N3-C4	6.79	1.38	1.33
54	BF	101	ARG	CZ-NH2	6.79	1.41	1.33
57	BB	1138	G	N1-C2	6.79	1.43	1.37
57	BB	1210	G	N1-C2	6.79	1.43	1.37
58	BA	79	G	C8-N7	6.79	1.35	1.30
21	AA	1030	U	C2-N3	6.79	1.42	1.37
21	AA	1327	C	N1-C6	6.79	1.41	1.37
23	AW	16	U	N3-C4	6.79	1.44	1.38
21	AA	28	A	C6-N1	6.79	1.40	1.35
21	AA	59	A	N9-C4	6.79	1.42	1.37
57	BB	1850	G	C6-N1	-6.79	1.34	1.39
58	BA	23	G	C5'-C4'	6.79	1.59	1.51
21	AA	855	U	C2'-C1'	-6.78	1.45	1.53
57	BB	742	A	O4'-C1'	6.78	1.50	1.41
57	BB	1967	C	C2-N3	6.78	1.41	1.35
57	BB	2192	U	P-O5'	-6.78	1.52	1.59
21	AA	404	G	C2'-C1'	-6.78	1.45	1.53
57	BB	2214	C	O3'-P	-6.78	1.53	1.61
57	BB	148	U	C2-N3	6.78	1.42	1.37
57	BB	616	A	C4'-C3'	6.78	1.60	1.53
57	BB	677	A	C5-C6	-6.78	1.34	1.41
57	BB	2615	U	C2-N3	6.78	1.42	1.37
57	BB	2707	U	O4'-C1'	6.78	1.50	1.41
57	BB	1071	G	C5-C4	6.78	1.43	1.38
57	BB	2005	A	N9-C4	-6.78	1.33	1.37
21	AA	151	A	C5'-C4'	6.78	1.59	1.51
21	AA	1155	A	N7-C5	-6.78	1.35	1.39
57	BB	131	A	C6-N6	6.78	1.39	1.33
57	BB	225	C	C5-C6	-6.78	1.28	1.34
57	BB	380	G	C6-N1	6.78	1.44	1.39
57	BB	2173	A	N9-C8	6.78	1.43	1.37
57	BB	2174	C	N1-C6	6.78	1.41	1.37
21	AA	1196	A	C5-C4	-6.78	1.34	1.38
21	AA	1201	A	C8-N7	-6.78	1.26	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1471	U	C5-C6	-6.78	1.28	1.34
21	AA	1515	G	C2-N2	6.78	1.41	1.34
57	BB	1010	A	C2'-C1'	-6.78	1.45	1.53
57	BB	2020	A	C2'-C1'	-6.78	1.45	1.53
52	BD	139	SER	CA-CB	6.77	1.63	1.52
57	BB	2	G	C2-N3	6.77	1.38	1.32
57	BB	682	G	C4'-C3'	6.77	1.60	1.53
57	BB	707	G	N9-C4	6.77	1.43	1.38
57	BB	1469	A	N7-C5	-6.77	1.35	1.39
21	AA	690	G	C2-N3	6.77	1.38	1.32
21	AA	1171	A	C6-N1	6.77	1.40	1.35
21	AA	1187	G	N1-C2	6.77	1.43	1.37
21	AA	1408	A	N9-C4	-6.77	1.33	1.37
57	BB	94	A	N3-C4	6.77	1.39	1.34
57	BB	832	U	C2-N3	6.77	1.42	1.37
57	BB	1193	G	C4'-C3'	-6.77	1.45	1.53
57	BB	1317	G	C2'-C1'	-6.77	1.46	1.53
57	BB	2530	A	C2'-C1'	-6.77	1.45	1.53
57	BB	2696	U	C3'-C2'	-6.77	1.45	1.52
21	AA	189	A	C6-N6	6.77	1.39	1.33
21	AA	967	C	O3'-P	-6.77	1.53	1.61
57	BB	2060	A	C6-N1	6.77	1.40	1.35
57	BB	2816	G	N3-C4	-6.77	1.30	1.35
21	AA	1020	G	N7-C5	-6.77	1.35	1.39
57	BB	30	G	C8-N7	-6.77	1.26	1.30
57	BB	307	G	N7-C5	-6.77	1.35	1.39
57	BB	831	G	N1-C2	6.77	1.43	1.37
57	BB	1014	A	C5-C4	6.77	1.43	1.38
57	BB	1665	A	C6-N1	6.77	1.40	1.35
57	BB	2101	A	C8-N7	-6.77	1.26	1.31
57	BB	2541	A	O3'-P	-6.77	1.53	1.61
57	BB	2659	G	C5-C6	-6.77	1.35	1.42
57	BB	2663	G	N7-C5	-6.77	1.35	1.39
21	AA	1006	G	C6-N1	6.77	1.44	1.39
57	BB	634	C	O3'-P	-6.77	1.53	1.61
21	AA	38	G	C2-N3	6.76	1.38	1.32
21	AA	643	C	C2-N3	6.76	1.41	1.35
21	AA	1400	C	C2'-C1'	-6.76	1.46	1.53
57	BB	1555	G	C5-C6	-6.76	1.35	1.42
21	AA	274	A	C4'-C3'	6.76	1.60	1.53
21	AA	1040	U	C4-C5	-6.76	1.37	1.43
57	BB	202	U	C2'-C1'	-6.76	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1090	A	N3-C4	6.76	1.39	1.34
57	BB	2527	C	N3-C4	6.76	1.38	1.33
21	AA	192	A	N3-C4	6.76	1.39	1.34
21	AA	746	A	C6-N1	-6.76	1.30	1.35
21	AA	961	U	C2-N3	6.76	1.42	1.37
21	AA	1274	A	N9-C8	6.76	1.43	1.37
23	AW	63	G	C2'-C1'	-6.76	1.46	1.53
26	AV	52	G	N9-C4	-6.76	1.32	1.38
31	BL	47	ARG	CD-NE	6.76	1.57	1.46
57	BB	619	G	C2-N3	6.76	1.38	1.32
57	BB	1079	C	C4-N4	6.76	1.40	1.33
57	BB	1155	A	C5-C4	-6.76	1.34	1.38
57	BB	1489	C	N3-C4	6.76	1.38	1.33
57	BB	1782	U	P-O5'	-6.76	1.52	1.59
57	BB	2668	G	N7-C5	6.76	1.43	1.39
58	BA	103	U	C2-N3	6.76	1.42	1.37
21	AA	366	A	C4'-C3'	6.76	1.60	1.53
21	AA	925	G	C3'-C2'	-6.76	1.45	1.52
57	BB	239	C	O3'-P	-6.76	1.53	1.61
57	BB	362	A	O3'-P	-6.76	1.53	1.61
57	BB	1743	G	C5'-C4'	6.76	1.59	1.51
57	BB	1952	A	N7-C5	-6.76	1.35	1.39
21	AA	498	A	N9-C4	-6.76	1.33	1.37
21	AA	510	A	C4'-C3'	6.76	1.60	1.53
21	AA	513	C	C2-N3	6.76	1.41	1.35
21	AA	1485	U	C4'-O4'	-6.76	1.36	1.45
57	BB	778	G	P-O5'	-6.76	1.52	1.59
57	BB	1915	U	C3'-C2'	-6.76	1.45	1.52
57	BB	2308	G	C2-N3	6.76	1.38	1.32
21	AA	1107	C	O4'-C1'	6.75	1.50	1.41
21	AA	1198	G	O3'-P	-6.75	1.53	1.61
23	AW	32	U	C4-C5	6.75	1.49	1.43
57	BB	1682	G	N1-C2	6.75	1.43	1.37
21	AA	615	G	C5-C6	-6.75	1.35	1.42
57	BB	161	A	O3'-P	-6.75	1.53	1.61
57	BB	1762	A	O3'-P	-6.75	1.53	1.61
57	BB	1824	G	C6-N1	6.75	1.44	1.39
57	BB	1927	A	O4'-C1'	6.75	1.50	1.41
57	BB	2114	A	N7-C5	-6.75	1.35	1.39
58	BA	17	C	N3-C4	6.75	1.38	1.33
21	AA	87	C	C5'-C4'	6.75	1.59	1.51
21	AA	801	U	C4-C5	6.75	1.49	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	861	G	C2-N2	6.75	1.41	1.34
26	AV	44	A	C6-N1	6.75	1.40	1.35
57	BB	121	G	C5'-C4'	6.75	1.59	1.51
57	BB	531	C	N1-C6	6.75	1.41	1.37
57	BB	696	G	N9-C8	6.75	1.42	1.37
57	BB	169	G	N1-C2	6.75	1.43	1.37
57	BB	766	U	C4'-C3'	6.75	1.60	1.53
57	BB	1114	C	C5'-C4'	6.75	1.59	1.51
21	AA	621	A	N9-C4	-6.75	1.33	1.37
21	AA	1014	A	C5-C4	6.75	1.43	1.38
21	AA	1142	G	C5-C4	-6.75	1.33	1.38
26	AV	64	G	C2-N2	6.75	1.41	1.34
57	BB	318	C	C4'-C3'	6.75	1.60	1.53
57	BB	811	U	N3-C4	6.75	1.44	1.38
57	BB	911	A	C6-N1	6.75	1.40	1.35
57	BB	2595	G	C5-C4	6.75	1.43	1.38
15	AD	114	ARG	CZ-NH2	6.75	1.41	1.33
21	AA	309	A	C3'-C2'	6.75	1.60	1.52
22	AY	7	U	N1-C6	6.75	1.44	1.38
57	BB	35	G	N3-C4	-6.75	1.30	1.35
57	BB	944	C	C4-N4	6.75	1.40	1.33
57	BB	1473	G	C6-N1	6.75	1.44	1.39
57	BB	2041	U	C2-N3	6.75	1.42	1.37
21	AA	74	A	N7-C5	6.75	1.43	1.39
23	AW	19	G	C2-N2	6.75	1.41	1.34
57	BB	489	G	C2'-C1'	-6.75	1.46	1.53
57	BB	1382	G	N9-C4	-6.75	1.32	1.38
21	AA	1483	A	N3-C4	-6.74	1.30	1.34
24	AX	15	A	C2-N3	6.74	1.39	1.33
57	BB	727	A	P-O5'	-6.74	1.53	1.59
57	BB	914	G	O3'-P	6.74	1.69	1.61
57	BB	1469	A	N3-C4	-6.74	1.30	1.34
57	BB	2450	A	C1'-N9	-6.74	1.37	1.46
57	BB	2465	C	P-O5'	-6.74	1.53	1.59
21	AA	74	A	C3'-C2'	-6.74	1.45	1.52
21	AA	120	A	C2'-C1'	-6.74	1.46	1.53
21	AA	197	A	C3'-C2'	6.74	1.60	1.52
57	BB	151	C	C2'-C1'	-6.74	1.46	1.53
57	BB	289	G	N9-C8	6.74	1.42	1.37
57	BB	614	A	O3'-P	-6.74	1.53	1.61
57	BB	1638	C	O3'-P	-6.74	1.53	1.61
57	BB	1664	A	N3-C4	-6.74	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	236	A	N7-C5	-6.74	1.35	1.39
21	AA	362	G	C8-N7	-6.74	1.26	1.30
21	AA	755	G	N9-C8	-6.74	1.33	1.37
22	AY	7	U	O3'-P	6.74	1.69	1.61
31	BL	132	ARG	NE-CZ	6.74	1.41	1.33
57	BB	768	G	P-O5'	-6.74	1.53	1.59
57	BB	792	A	C6-N1	-6.74	1.30	1.35
57	BB	800	A	N7-C5	-6.74	1.35	1.39
57	BB	1422	G	C5-C4	-6.74	1.33	1.38
57	BB	2549	G	N1-C2	6.74	1.43	1.37
57	BB	2576	G	N7-C5	-6.74	1.35	1.39
57	BB	2678	C	C2-N3	6.74	1.41	1.35
21	AA	906	A	C6-N6	6.74	1.39	1.33
21	AA	959	A	O3'-P	-6.74	1.53	1.61
57	BB	345	A	C6-N6	6.74	1.39	1.33
57	BB	767	U	C2-N3	6.74	1.42	1.37
57	BB	1590	A	C6-N6	6.74	1.39	1.33
57	BB	2275	C	C5'-C4'	6.74	1.59	1.51
21	AA	1346	A	C6-N1	-6.74	1.30	1.35
57	BB	1416	G	C2-N3	6.74	1.38	1.32
21	AA	373	A	C6-N6	6.74	1.39	1.33
21	AA	437	U	O4'-C1'	-6.74	1.32	1.41
21	AA	1462	C	N1-C2	-6.74	1.33	1.40
26	AV	1	C	C2-N3	6.74	1.41	1.35
21	AA	58	C	C5'-C4'	6.73	1.59	1.51
21	AA	1295	U	C2'-C1'	-6.73	1.46	1.53
21	AA	1514	G	N9-C4	-6.73	1.32	1.38
57	BB	1630	A	C4'-C3'	6.73	1.60	1.53
21	AA	910	C	C3'-C2'	-6.73	1.45	1.52
21	AA	1003	G	N9-C8	6.73	1.42	1.37
57	BB	386	G	P-O5'	-6.73	1.53	1.59
57	BB	838	C	C3'-C2'	6.73	1.60	1.52
21	AA	311	C	N3-C4	6.73	1.38	1.33
21	AA	408	A	N7-C5	-6.73	1.35	1.39
21	AA	1408	A	N7-C5	-6.73	1.35	1.39
57	BB	208	C	N3-C4	6.73	1.38	1.33
57	BB	1626	A	C5'-C4'	6.73	1.59	1.51
57	BB	2193	G	N9-C4	-6.73	1.32	1.38
21	AA	254	G	C2-N3	6.73	1.38	1.32
21	AA	728	A	C6-N1	6.73	1.40	1.35
21	AA	769	G	N9-C4	6.73	1.43	1.38
57	BB	992	C	P-O5'	-6.73	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1541	C	C4'-O4'	6.73	1.54	1.45
57	BB	1717	A	C5-C4	6.73	1.43	1.38
57	BB	2334	U	O3'-P	-6.73	1.53	1.61
21	AA	1212	U	C2'-C1'	-6.73	1.46	1.53
21	AA	1276	G	C2-N2	6.73	1.41	1.34
57	BB	22	C	N3-C4	6.73	1.38	1.33
57	BB	1801	A	C2'-C1'	-6.73	1.46	1.53
21	AA	538	G	C2-N3	6.72	1.38	1.32
21	AA	1525	G	N7-C5	6.72	1.43	1.39
22	AY	10	G	O4'-C1'	6.72	1.50	1.41
22	AY	25	C	C1'-N1	6.72	1.58	1.48
57	BB	464	U	N3-C4	6.72	1.44	1.38
57	BB	643	A	N9-C4	-6.72	1.33	1.37
57	BB	1364	G	C3'-C2'	-6.72	1.45	1.52
57	BB	2155	U	N3-C4	6.72	1.44	1.38
57	BB	2192	U	C4-C5	6.72	1.49	1.43
21	AA	918	A	C5-C4	6.72	1.43	1.38
21	AA	920	U	C5-C6	6.72	1.40	1.34
21	AA	1249	C	P-O5'	-6.72	1.53	1.59
22	AY	58	A	C2'-C1'	-6.72	1.46	1.53
57	BB	23	G	C2'-C1'	-6.72	1.46	1.53
57	BB	596	U	N1-C6	6.72	1.44	1.38
57	BB	2217	G	C2-N3	6.72	1.38	1.32
57	BB	2890	G	C2-N3	6.72	1.38	1.32
58	BA	26	C	N1-C6	6.72	1.41	1.37
58	BA	64	G	N1-C2	6.72	1.43	1.37
21	AA	562	U	N1-C6	6.72	1.44	1.38
21	AA	1105	A	C2'-C1'	-6.72	1.46	1.53
57	BB	290	U	N1-C2	6.72	1.44	1.38
57	BB	783	A	N7-C5	-6.72	1.35	1.39
57	BB	1327	A	C5-C4	-6.72	1.34	1.38
21	AA	399	G	C4'-C3'	6.72	1.60	1.53
21	AA	890	G	C2-N3	6.72	1.38	1.32
21	AA	912	C	N3-C4	6.72	1.38	1.33
21	AA	1228	C	C3'-C2'	-6.72	1.45	1.52
21	AA	1463	U	P-O5'	-6.72	1.53	1.59
57	BB	267	C	C4-C5	6.72	1.48	1.43
57	BB	270	A	C3'-C2'	6.72	1.60	1.52
57	BB	1737	G	C2-N3	6.72	1.38	1.32
57	BB	2076	U	N1-C2	6.72	1.44	1.38
57	BB	2162	G	C5-C4	-6.72	1.33	1.38
57	BB	2190	G	C2-N2	6.72	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	896	C	C2-N3	6.72	1.41	1.35
21	AA	917	G	C2-N2	6.72	1.41	1.34
21	AA	1143	G	P-O5'	-6.72	1.53	1.59
57	BB	859	G	C4'-O4'	-6.72	1.36	1.45
57	BB	1540	G	C8-N7	-6.72	1.26	1.30
57	BB	1645	G	C5'-C4'	6.72	1.59	1.51
21	AA	766	A	N7-C5	-6.72	1.35	1.39
23	AW	54	U	C4-C5	6.72	1.49	1.43
49	B2	3	ARG	CZ-NH2	6.72	1.41	1.33
57	BB	1207	C	P-O5'	-6.72	1.53	1.59
57	BB	2205	A	N7-C5	-6.72	1.35	1.39
57	BB	2251	G	C8-N7	-6.72	1.26	1.30
2	AK	123	PRO	N-CD	-6.71	1.38	1.47
21	AA	768	A	C2'-C1'	-6.71	1.46	1.53
57	BB	702	U	C4-O4	-6.71	1.18	1.23
57	BB	1549	A	C8-N7	-6.71	1.26	1.31
57	BB	325	G	C2-N3	6.71	1.38	1.32
57	BB	2293	G	N9-C8	6.71	1.42	1.37
21	AA	362	G	C5-C4	6.71	1.43	1.38
57	BB	920	A	N7-C5	-6.71	1.35	1.39
57	BB	1018	U	C3'-C2'	6.71	1.60	1.52
57	BB	2301	C	C2'-C1'	-6.71	1.46	1.53
57	BB	2767	C	C4'-O4'	-6.71	1.36	1.45
21	AA	508	U	N1-C6	6.71	1.44	1.38
21	AA	954	G	C2'-C1'	-6.71	1.46	1.53
57	BB	145	C	C2-N3	6.71	1.41	1.35
57	BB	1419	A	C4'-C3'	6.71	1.60	1.53
57	BB	1700	A	C6-N6	6.71	1.39	1.33
21	AA	475	C	C2'-C1'	-6.71	1.46	1.53
21	AA	949	A	O3'-P	-6.71	1.53	1.61
21	AA	1369	C	P-O5'	-6.71	1.53	1.59
57	BB	551	G	C2-N3	6.71	1.38	1.32
57	BB	1245	G	N9-C8	6.71	1.42	1.37
57	BB	1274	A	C4'-C3'	6.71	1.60	1.53
57	BB	2420	C	C2'-C1'	-6.71	1.46	1.53
57	BB	2476	A	C6-N1	6.71	1.40	1.35
57	BB	2661	G	C8-N7	-6.71	1.26	1.30
58	BA	91	C	C2'-C1'	-6.71	1.46	1.53
21	AA	98	A	N7-C5	-6.71	1.35	1.39
57	BB	461	C	C4-C5	-6.71	1.37	1.43
57	BB	993	G	C6-N1	6.71	1.44	1.39
57	BB	1733	G	O3'-P	-6.71	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1857	G	C2-N3	6.71	1.38	1.32
57	BB	1861	G	N7-C5	-6.71	1.35	1.39
21	AA	404	G	N7-C5	-6.71	1.35	1.39
21	AA	812	G	C8-N7	-6.71	1.26	1.30
21	AA	1174	G	C4'-O4'	-6.71	1.36	1.45
22	AY	35	A	N3-C4	-6.71	1.30	1.34
57	BB	1304	A	C6-N1	6.71	1.40	1.35
57	BB	1874	C	C5-C6	6.71	1.39	1.34
21	AA	287	U	C2-O2	6.70	1.28	1.22
21	AA	378	G	N7-C5	-6.70	1.35	1.39
21	AA	633	G	C8-N7	-6.70	1.26	1.30
21	AA	1337	G	P-O5'	-6.70	1.53	1.59
57	BB	16	C	O4'-C1'	-6.70	1.32	1.41
57	BB	240	C	P-O5'	-6.70	1.53	1.59
57	BB	251	A	C6-N1	6.70	1.40	1.35
57	BB	305	C	N1-C6	6.70	1.41	1.37
57	BB	1038	G	N9-C8	-6.70	1.33	1.37
57	BB	1170	C	P-O5'	-6.70	1.53	1.59
57	BB	1286	A	C8-N7	-6.70	1.26	1.31
21	AA	287	U	C2-N3	6.70	1.42	1.37
21	AA	703	G	N7-C5	6.70	1.43	1.39
21	AA	357	G	N9-C8	6.70	1.42	1.37
21	AA	645	G	N7-C5	6.70	1.43	1.39
57	BB	823	C	N1-C6	6.70	1.41	1.37
57	BB	1733	G	C2'-C1'	-6.70	1.46	1.53
57	BB	2839	G	N7-C5	-6.70	1.35	1.39
21	AA	277	C	N3-C4	6.70	1.38	1.33
21	AA	1310	G	N1-C2	6.70	1.43	1.37
21	AA	1362	A	N9-C4	-6.70	1.33	1.37
57	BB	711	G	N1-C2	6.70	1.43	1.37
57	BB	802	A	N3-C4	-6.70	1.30	1.34
57	BB	1501	G	C2-N2	6.70	1.41	1.34
21	AA	145	G	N9-C8	6.70	1.42	1.37
21	AA	820	U	C5'-C4'	6.70	1.59	1.51
57	BB	797	G	N1-C2	6.70	1.43	1.37
57	BB	1000	A	N3-C4	-6.70	1.30	1.34
57	BB	2352	A	C5-C4	6.70	1.43	1.38
21	AA	1378	C	C4-C5	6.70	1.48	1.43
57	BB	86	G	N9-C8	6.70	1.42	1.37
57	BB	425	G	N7-C5	-6.70	1.35	1.39
57	BB	2603	G	N1-C2	6.70	1.43	1.37
58	BA	69	G	N1-C2	6.70	1.43	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	50	U	N1-C6	6.69	1.44	1.38
57	BB	168	G	C8-N7	6.69	1.34	1.30
57	BB	1704	C	C2'-C1'	-6.69	1.46	1.53
21	AA	456	A	N7-C5	-6.69	1.35	1.39
21	AA	616	G	C3'-O3'	6.69	1.51	1.42
57	BB	1407	G	N9-C8	6.69	1.42	1.37
57	BB	1871	A	C2'-C1'	-6.69	1.46	1.53
57	BB	2686	G	N9-C8	6.69	1.42	1.37
21	AA	23	C	C2-N3	6.69	1.41	1.35
21	AA	1009	U	C3'-C2'	-6.69	1.45	1.52
57	BB	1548	A	N9-C8	-6.69	1.32	1.37
57	BB	2227	A	N1-C2	-6.69	1.28	1.34
57	BB	337	C	C4'-C3'	-6.69	1.45	1.53
57	BB	2499	C	C4-N4	6.69	1.40	1.33
21	AA	417	G	N9-C8	6.69	1.42	1.37
21	AA	663	A	C2'-C1'	-6.69	1.46	1.53
21	AA	854	U	C2-N3	6.69	1.42	1.37
22	AY	59	U	C4-O4	-6.69	1.18	1.23
57	BB	933	A	C2'-C1'	-6.69	1.46	1.53
57	BB	1504	A	C5-C6	6.69	1.47	1.41
58	BA	46	A	C5-C4	6.69	1.43	1.38
21	AA	85	U	N1-C6	-6.69	1.31	1.38
57	BB	127	A	C3'-C2'	6.69	1.60	1.52
21	AA	460	A	N9-C4	-6.68	1.33	1.37
21	AA	1430	A	C6-N1	6.68	1.40	1.35
26	AV	47	U	N1-C2	6.68	1.44	1.38
57	BB	457	A	N7-C5	-6.68	1.35	1.39
57	BB	664	G	C2'-C1'	-6.68	1.46	1.53
57	BB	676	A	P-O5'	-6.68	1.53	1.59
57	BB	2231	U	O3'-P	-6.68	1.53	1.61
57	BB	2593	U	N3-C4	-6.68	1.32	1.38
57	BB	2651	C	C2-N3	-6.68	1.30	1.35
17	AF	24	ARG	CD-NE	6.68	1.57	1.46
21	AA	858	G	N1-C2	6.68	1.43	1.37
21	AA	962	C	N1-C6	6.68	1.41	1.37
21	AA	1487	G	C5-C6	6.68	1.49	1.42
57	BB	442	G	N3-C4	6.68	1.40	1.35
57	BB	1336	A	N9-C4	6.68	1.41	1.37
57	BB	1653	G	C6-N1	6.68	1.44	1.39
57	BB	1906	G	C2'-C1'	-6.68	1.46	1.53
57	BB	2333	A	C6-N6	6.68	1.39	1.33
57	BB	2539	C	C5-C6	6.68	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	20	C	C2'-C1'	-6.68	1.46	1.53
8	AQ	79	GLU	CG-CD	6.68	1.61	1.51
21	AA	728	A	N9-C4	6.68	1.41	1.37
21	AA	1176	A	C5-C6	-6.68	1.35	1.41
21	AA	1308	U	C5'-C4'	6.68	1.59	1.51
57	BB	1515	A	C4'-O4'	6.68	1.54	1.45
57	BB	1525	A	N9-C4	-6.68	1.33	1.37
57	BB	1999	C	C4'-C3'	6.68	1.60	1.53
57	BB	2054	A	C3'-C2'	-6.68	1.45	1.52
26	AV	47	U	C5'-C4'	6.68	1.59	1.51
57	BB	349	U	N3-C4	6.68	1.44	1.38
57	BB	405	U	N1-C6	6.68	1.44	1.38
57	BB	1023	U	N1-C6	-6.68	1.31	1.38
57	BB	1718	G	C8-N7	-6.68	1.26	1.30
57	BB	1990	C	C2-O2	6.68	1.30	1.24
57	BB	2599	G	N7-C5	-6.68	1.35	1.39
21	AA	1002	G	C2-N3	6.68	1.38	1.32
26	AV	32	C	N1-C6	6.68	1.41	1.37
55	BG	94	ARG	NE-CZ	6.68	1.41	1.33
57	BB	1151	A	C2'-C1'	-6.68	1.46	1.53
58	BA	8	C	N3-C4	6.68	1.38	1.33
58	BA	23	G	C2-N3	6.68	1.38	1.32
2	AK	52	ARG	NE-CZ	6.67	1.41	1.33
21	AA	34	C	C4-C5	-6.67	1.37	1.43
21	AA	645	G	N1-C2	6.67	1.43	1.37
21	AA	728	A	C6-N6	6.67	1.39	1.33
21	AA	1225	A	C8-N7	6.67	1.36	1.31
21	AA	1277	C	C2-O2	6.67	1.30	1.24
57	BB	1897	G	C8-N7	-6.67	1.26	1.30
57	BB	2187	U	C5'-C4'	6.67	1.59	1.51
57	BB	2590	A	C5'-C4'	6.67	1.59	1.51
57	BB	2901	C	N1-C2	6.67	1.46	1.40
21	AA	142	G	N7-C5	-6.67	1.35	1.39
21	AA	369	G	P-O5'	-6.67	1.53	1.59
57	BB	629	G	O3'-P	-6.67	1.53	1.61
57	BB	760	G	N9-C4	-6.67	1.32	1.38
21	AA	400	C	N3-C4	6.67	1.38	1.33
57	BB	293	U	N3-C4	6.67	1.44	1.38
57	BB	654	A	O3'-P	-6.67	1.53	1.61
57	BB	847	U	O3'-P	-6.67	1.53	1.61
57	BB	1216	G	C2'-C1'	-6.67	1.46	1.53
57	BB	2152	G	C5-C4	6.67	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2257	U	C2'-C1'	-6.67	1.46	1.53
58	BA	29	A	C4'-C3'	-6.67	1.45	1.53
21	AA	1035	A	C5-C6	-6.67	1.35	1.41
21	AA	1192	C	C2-N3	6.67	1.41	1.35
57	BB	962	G	C8-N7	-6.67	1.26	1.30
57	BB	1950	G	C1'-N9	-6.67	1.37	1.46
21	AA	802	A	C8-N7	6.67	1.36	1.31
57	BB	370	G	C6-O6	-6.67	1.18	1.24
57	BB	1620	G	C2-N2	6.67	1.41	1.34
57	BB	1929	G	C4'-C3'	-6.67	1.45	1.53
57	BB	2503	A	O3'-P	-6.67	1.53	1.61
12	AU	7	GLU	CG-CD	6.67	1.61	1.51
21	AA	1367	C	N3-C4	6.67	1.38	1.33
23	AW	5	G	N9-C8	6.67	1.42	1.37
57	BB	529	A	C3'-C2'	-6.67	1.45	1.52
57	BB	1288	G	N9-C8	-6.67	1.33	1.37
57	BB	1821	A	N3-C4	6.67	1.38	1.34
58	BA	90	C	C4-N4	6.67	1.40	1.33
21	AA	25	C	N3-C4	6.67	1.38	1.33
57	BB	648	G	C4'-C3'	6.67	1.60	1.53
21	AA	621	A	C4'-C3'	-6.66	1.45	1.53
21	AA	1138	G	C2'-C1'	-6.66	1.46	1.53
49	B2	21	ARG	NE-CZ	6.66	1.41	1.33
21	AA	172	A	C5-C4	6.66	1.43	1.38
21	AA	269	C	C4-N4	6.66	1.40	1.33
21	AA	544	G	C5'-C4'	6.66	1.59	1.51
21	AA	1278	G	P-O5'	-6.66	1.53	1.59
26	AV	67	C	C2-N3	-6.66	1.30	1.35
57	BB	47	C	C2'-C1'	-6.66	1.46	1.53
21	AA	185	U	N1-C2	6.66	1.44	1.38
21	AA	225	C	N3-C4	6.66	1.38	1.33
21	AA	834	U	C2-N3	6.66	1.42	1.37
21	AA	1004	A	N7-C5	-6.66	1.35	1.39
21	AA	1344	C	C2'-C1'	-6.66	1.46	1.53
26	AV	8	U	N1-C2	6.66	1.44	1.38
57	BB	1	G	C5'-C4'	6.66	1.59	1.51
57	BB	1295	C	N3-C4	6.66	1.38	1.33
57	BB	2635	A	C5-C4	6.66	1.43	1.38
57	BB	496	G	N7-C5	-6.66	1.35	1.39
57	BB	1195	G	C2'-C1'	-6.66	1.46	1.53
58	BA	77	U	C4'-C3'	-6.66	1.45	1.53
57	BB	864	G	N9-C8	6.66	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1453	A	C4'-C3'	6.66	1.60	1.53
57	BB	1878	G	N1-C2	6.66	1.43	1.37
57	BB	2310	C	C3'-C2'	-6.66	1.45	1.52
57	BB	764	A	P-O5'	-6.66	1.53	1.59
57	BB	1912	A	N7-C5	-6.66	1.35	1.39
57	BB	2872	A	N3-C4	-6.66	1.30	1.34
57	BB	713	G	C2'-C1'	-6.65	1.46	1.53
57	BB	1322	A	N9-C8	6.65	1.43	1.37
21	AA	266	G	C8-N7	-6.65	1.26	1.30
21	AA	325	A	N7-C5	-6.65	1.35	1.39
21	AA	816	A	C5-C6	6.65	1.47	1.41
57	BB	1718	G	N9-C4	-6.65	1.32	1.38
21	AA	1355	G	C5-C4	-6.65	1.33	1.38
57	BB	1098	A	O4'-C1'	-6.65	1.33	1.41
57	BB	2156	G	C2-N3	6.65	1.38	1.32
21	AA	728	A	P-O5'	-6.65	1.53	1.59
57	BB	262	A	C2-N3	6.65	1.39	1.33
57	BB	325	G	N9-C8	6.65	1.42	1.37
57	BB	1364	G	N9-C8	-6.65	1.33	1.37
57	BB	1854	A	C6-N1	6.65	1.40	1.35
21	AA	540	G	O3'-P	-6.65	1.53	1.61
21	AA	963	G	N3-C4	-6.65	1.30	1.35
21	AA	1145	A	N9-C8	6.65	1.43	1.37
32	BM	38	ARG	CD-NE	6.65	1.57	1.46
57	BB	41	C	C4-N4	6.65	1.40	1.33
57	BB	64	A	N3-C4	-6.65	1.30	1.34
57	BB	1037	G	N7-C5	-6.65	1.35	1.39
57	BB	1869	G	N3-C4	-6.65	1.30	1.35
57	BB	2018	G	C2-N3	6.65	1.38	1.32
57	BB	2617	U	N1-C6	6.65	1.44	1.38
57	BB	2686	G	C2-N2	6.65	1.41	1.34
57	BB	2809	A	N9-C4	6.65	1.41	1.37
21	AA	20	U	N3-C4	6.65	1.44	1.38
37	BR	102	SER	CB-OG	-6.65	1.33	1.42
57	BB	1364	G	N1-C2	6.65	1.43	1.37
57	BB	1654	A	N3-C4	-6.65	1.30	1.34
57	BB	2644	G	N9-C8	6.65	1.42	1.37
21	AA	388	G	C2'-C1'	-6.64	1.46	1.53
21	AA	1270	G	N9-C8	-6.64	1.33	1.37
22	AY	51	G	N1-C2	6.64	1.43	1.37
57	BB	163	C	N1-C6	6.64	1.41	1.37
57	BB	242	G	C5-C6	6.64	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1139	G	C5-C4	6.64	1.43	1.38
57	BB	1494	A	N9-C4	-6.64	1.33	1.37
57	BB	1954	G	C2'-C1'	-6.64	1.46	1.53
57	BB	2156	G	C5-C4	6.64	1.43	1.38
57	BB	2217	G	P-O5'	-6.64	1.53	1.59
21	AA	191	G	C2-N3	6.64	1.38	1.32
21	AA	571	U	C2-N3	6.64	1.42	1.37
21	AA	799	G	C6-N1	6.64	1.44	1.39
57	BB	683	U	C2'-C1'	-6.64	1.46	1.53
57	BB	1002	G	C3'-C2'	6.64	1.60	1.52
57	BB	2880	C	C2-O2	6.64	1.30	1.24
21	AA	982	U	C2-N3	6.64	1.42	1.37
21	AA	1050	G	C2-N3	6.64	1.38	1.32
21	AA	1221	G	N3-C4	-6.64	1.30	1.35
26	AV	17(A)	U	C3'-O3'	6.64	1.51	1.42
57	BB	394	C	C4-N4	6.64	1.40	1.33
57	BB	1267	U	N3-C4	6.64	1.44	1.38
57	BB	2124	G	C2-N2	6.64	1.41	1.34
21	AA	137	U	C3'-C2'	-6.64	1.45	1.52
21	AA	1008	U	N1-C6	6.64	1.44	1.38
21	AA	1191	A	C8-N7	-6.64	1.26	1.31
57	BB	585	G	N3-C4	6.64	1.40	1.35
57	BB	1309	G	C8-N7	6.64	1.34	1.30
57	BB	1811	G	C6-N1	6.64	1.44	1.39
57	BB	2257	U	C4-C5	6.64	1.49	1.43
57	BB	1397	U	C2'-C1'	-6.64	1.46	1.53
57	BB	2256	G	P-O5'	-6.64	1.53	1.59
57	BB	2326	C	C4'-O4'	-6.64	1.36	1.45
57	BB	2504	U	N3-C4	6.64	1.44	1.38
21	AA	536	C	C4-C5	6.64	1.48	1.43
21	AA	680	C	C4'-C3'	6.64	1.60	1.53
57	BB	119	A	N7-C5	-6.64	1.35	1.39
57	BB	763	G	C2'-C1'	-6.64	1.46	1.53
57	BB	1530	G	C8-N7	-6.64	1.26	1.30
57	BB	2775	G	N3-C4	-6.64	1.30	1.35
21	AA	450	G	O3'-P	-6.63	1.53	1.61
21	AA	485	U	N3-C4	6.63	1.44	1.38
21	AA	1037	C	N3-C4	6.63	1.38	1.33
21	AA	1092	A	C6-N6	6.63	1.39	1.33
21	AA	1194	U	C4'-O4'	-6.63	1.36	1.45
22	AY	26	G	C6-N1	6.63	1.44	1.39
57	BB	1410	G	C5-C4	6.63	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1491	G	C5-C4	-6.63	1.33	1.38
57	BB	1648	U	O4'-C1'	6.63	1.50	1.41
57	BB	1706	C	C2-N3	6.63	1.41	1.35
57	BB	1824	G	N1-C2	6.63	1.43	1.37
21	AA	484	G	N3-C4	-6.63	1.30	1.35
21	AA	594	U	N1-C6	-6.63	1.31	1.38
57	BB	668	A	N9-C4	6.63	1.41	1.37
57	BB	1698	A	C6-N6	6.63	1.39	1.33
21	AA	1420	U	N3-C4	6.63	1.44	1.38
57	BB	479	A	C4'-C3'	-6.63	1.45	1.53
57	BB	698	C	C2-N3	6.63	1.41	1.35
57	BB	2632	A	N1-C2	6.63	1.40	1.34
57	BB	2762	C	C5'-C4'	6.63	1.59	1.51
57	BB	2785	C	C5'-C4'	6.63	1.59	1.51
21	AA	311	C	C2'-C1'	-6.63	1.46	1.53
57	BB	492	A	C6-N1	6.63	1.40	1.35
57	BB	604	G	N3-C4	-6.63	1.30	1.35
57	BB	1535	A	N3-C4	6.63	1.38	1.34
57	BB	2671	G	N3-C4	-6.63	1.30	1.35
58	BA	86	G	C6-N1	6.63	1.44	1.39
49	B2	41	ARG	CZ-NH1	6.63	1.41	1.33
57	BB	370	G	N1-C2	6.63	1.43	1.37
57	BB	453	A	C2'-C1'	-6.63	1.46	1.53
57	BB	1242	U	N1-C2	6.63	1.44	1.38
57	BB	1503	A	N9-C4	-6.63	1.33	1.37
58	BA	41	G	C6-N1	6.63	1.44	1.39
21	AA	769	G	C6-N1	6.63	1.44	1.39
23	AW	4	C	C2-N3	-6.63	1.30	1.35
57	BB	62	U	N1-C6	6.63	1.44	1.38
57	BB	421	C	C5'-C4'	6.63	1.59	1.51
57	BB	1368	G	N1-C2	6.63	1.43	1.37
57	BB	1748	C	C4-N4	6.63	1.40	1.33
57	BB	1833	C	C2'-C1'	-6.63	1.46	1.53
57	BB	2209	G	C3'-C2'	-6.63	1.45	1.52
21	AA	1272	G	C5-C4	6.62	1.43	1.38
57	BB	1443	U	N3-C4	6.62	1.44	1.38
21	AA	1265	C	C5'-C4'	6.62	1.59	1.51
57	BB	359	G	N1-C2	6.62	1.43	1.37
57	BB	2152	G	P-O5'	-6.62	1.53	1.59
57	BB	2721	A	N9-C4	6.62	1.41	1.37
57	BB	2786	U	C2-N3	6.62	1.42	1.37
21	AA	225	C	C2-N3	6.62	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1393	U	C5'-C4'	6.62	1.59	1.51
57	BB	406	G	C6-N1	6.62	1.44	1.39
57	BB	2509	G	N7-C5	-6.62	1.35	1.39
57	BB	2634	A	N1-C2	6.62	1.40	1.34
58	BA	59	A	C8-N7	6.62	1.36	1.31
21	AA	717	U	N1-C2	6.62	1.44	1.38
57	BB	471	A	C2'-C1'	-6.62	1.46	1.53
57	BB	882	G	C2-N3	6.62	1.38	1.32
21	AA	935	A	N3-C4	-6.62	1.30	1.34
21	AA	1248	A	O3'-P	-6.62	1.53	1.61
21	AA	1331	G	O3'-P	-6.62	1.53	1.61
57	BB	287	G	C5-C6	-6.62	1.35	1.42
57	BB	683	U	N1-C6	6.62	1.44	1.38
57	BB	897	C	C4-C5	6.62	1.48	1.43
57	BB	1782	U	C2'-C1'	-6.62	1.46	1.53
21	AA	164	G	C2-N2	6.62	1.41	1.34
21	AA	461	A	C3'-O3'	6.62	1.51	1.42
57	BB	1268	A	N7-C5	-6.62	1.35	1.39
57	BB	1541	C	C4'-C3'	6.62	1.60	1.53
57	BB	1873	G	C4'-O4'	6.62	1.54	1.45
21	AA	216	U	C3'-C2'	-6.62	1.45	1.52
26	AV	43	A	N7-C5	-6.62	1.35	1.39
57	BB	219	A	C5'-C4'	6.62	1.59	1.51
57	BB	1378	A	P-O5'	6.62	1.66	1.59
57	BB	1591	A	C6-N6	6.62	1.39	1.33
21	AA	1177	G	C4'-C3'	-6.61	1.45	1.53
22	AY	3	G	C2-N2	6.61	1.41	1.34
23	AW	66	U	C2-O2	6.61	1.28	1.22
57	BB	938	G	N7-C5	-6.61	1.35	1.39
57	BB	1808	A	N3-C4	-6.61	1.30	1.34
57	BB	2324	U	C4-O4	6.61	1.28	1.23
57	BB	2496	C	N3-C4	6.61	1.38	1.33
57	BB	2711	A	C2-N3	6.61	1.39	1.33
21	AA	266	G	C4'-C3'	-6.61	1.45	1.53
21	AA	579	A	N9-C8	6.61	1.43	1.37
21	AA	713	G	N1-C2	6.61	1.43	1.37
21	AA	1483	A	N9-C4	-6.61	1.33	1.37
57	BB	1018	U	C4'-O4'	6.61	1.54	1.45
58	BA	99	A	C2'-C1'	-6.61	1.46	1.53
21	AA	39	G	N1-C2	6.61	1.43	1.37
21	AA	481	G	O3'-P	-6.61	1.53	1.61
21	AA	649	A	C2'-C1'	-6.61	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1260	G	C4'-C3'	6.61	1.60	1.53
21	AA	1517	G	C6-N1	-6.61	1.34	1.39
57	BB	191	A	C5-C4	6.61	1.43	1.38
57	BB	1348	C	C4-C5	-6.61	1.37	1.43
21	AA	170	U	N1-C6	-6.61	1.32	1.38
21	AA	1241	G	P-O5'	-6.61	1.53	1.59
57	BB	1736	U	N3-C4	6.61	1.44	1.38
57	BB	2343	U	C2'-C1'	6.61	1.60	1.53
57	BB	2543	G	N3-C4	-6.61	1.30	1.35
57	BB	2875	C	N3-C4	6.61	1.38	1.33
58	BA	12	C	N1-C6	6.61	1.41	1.37
21	AA	197	A	C4'-C3'	6.61	1.60	1.53
33	BN	74	GLU	CD-OE1	6.61	1.32	1.25
57	BB	1035	U	C2'-C1'	-6.61	1.46	1.53
57	BB	1078	U	O3'-P	-6.61	1.53	1.61
57	BB	1479	G	C8-N7	6.61	1.34	1.30
57	BB	1927	A	N7-C5	6.61	1.43	1.39
57	BB	2275	C	C1'-N1	6.61	1.58	1.48
58	BA	32	U	O3'-P	-6.61	1.53	1.61
21	AA	133	U	C3'-O3'	6.61	1.51	1.42
21	AA	183	C	C2'-C1'	6.61	1.60	1.53
21	AA	450	G	N1-C2	6.61	1.43	1.37
21	AA	527	G	C5-C6	-6.61	1.35	1.42
21	AA	1433	A	N7-C5	-6.61	1.35	1.39
22	AY	33	U	C2-O2	6.61	1.28	1.22
57	BB	317	G	C2'-C1'	-6.61	1.46	1.53
57	BB	673	C	N1-C6	6.61	1.41	1.37
57	BB	829	A	N9-C4	-6.61	1.33	1.37
57	BB	1438	U	C4-C5	6.61	1.49	1.43
57	BB	1555	G	C8-N7	-6.61	1.26	1.30
57	BB	2836	U	O3'-P	-6.61	1.53	1.61
57	BB	2525	G	N9-C8	6.60	1.42	1.37
21	AA	89	U	N1-C6	-6.60	1.32	1.38
21	AA	467	U	C2-N3	6.60	1.42	1.37
21	AA	731	G	C2'-C1'	-6.60	1.46	1.53
21	AA	985	C	C4-C5	6.60	1.48	1.43
21	AA	1156	G	C2-N3	6.60	1.38	1.32
23	AW	28	G	C8-N7	-6.60	1.26	1.30
26	AV	27	U	C4'-C3'	-6.60	1.45	1.53
57	BB	795	C	C2'-C1'	-6.60	1.46	1.53
57	BB	1965	C	N3-C4	-6.60	1.29	1.33
57	BB	2713	U	N1-C6	6.60	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2857	G	C8-N7	6.60	1.34	1.30
57	BB	1010	A	N9-C8	6.60	1.43	1.37
57	BB	1101	U	C2'-C1'	-6.60	1.46	1.53
57	BB	2218	G	N1-C2	6.60	1.43	1.37
57	BB	2685	G	N7-C5	-6.60	1.35	1.39
21	AA	251	G	C6-N1	6.60	1.44	1.39
21	AA	725	G	C2-N3	6.60	1.38	1.32
21	AA	1123	U	P-O5'	-6.60	1.53	1.59
21	AA	1454	G	C2-N3	6.60	1.38	1.32
57	BB	1786	A	C2'-C1'	-6.60	1.46	1.53
57	BB	1927	A	C5-C6	-6.60	1.35	1.41
21	AA	881	G	C8-N7	-6.60	1.26	1.30
45	BC	213	ARG	NE-CZ	6.60	1.41	1.33
57	BB	287	G	N9-C8	-6.60	1.33	1.37
57	BB	377	G	O4'-C1'	6.60	1.50	1.41
57	BB	987	C	N3-C4	6.60	1.38	1.33
57	BB	1147	A	C5-C4	6.60	1.43	1.38
57	BB	2565	A	C3'-C2'	6.60	1.60	1.52
21	AA	50	A	O4'-C1'	6.59	1.50	1.41
21	AA	113	G	C5-C4	-6.59	1.33	1.38
21	AA	861	G	N3-C4	6.59	1.40	1.35
57	BB	424	G	C6-N1	6.59	1.44	1.39
57	BB	1021	A	C5-C4	6.59	1.43	1.38
57	BB	1595	C	N1-C6	-6.59	1.33	1.37
57	BB	2235	G	C5-C6	-6.59	1.35	1.42
21	AA	782	A	C5-C4	6.59	1.43	1.38
21	AA	1517	G	C2-N3	6.59	1.38	1.32
23	AW	6	G	N1-C2	6.59	1.43	1.37
22	AY	5	A	N3-C4	6.59	1.38	1.34
57	BB	474	G	C4'-C3'	6.59	1.60	1.53
57	BB	1181	U	C2'-C1'	-6.59	1.46	1.53
57	BB	1303	G	N9-C4	-6.59	1.32	1.38
57	BB	2083	G	N9-C8	-6.59	1.33	1.37
57	BB	2290	G	C6-N1	-6.59	1.34	1.39
21	AA	612	C	C4'-O4'	-6.59	1.36	1.45
21	AA	1025	U	C4-C5	6.59	1.49	1.43
21	AA	1329	A	C3'-C2'	-6.59	1.45	1.52
57	BB	651	G	C8-N7	-6.59	1.26	1.30
57	BB	682	G	N7-C5	-6.59	1.35	1.39
57	BB	1236	G	C6-N1	-6.59	1.34	1.39
57	BB	1241	A	C6-N1	6.59	1.40	1.35
57	BB	1983	G	N7-C5	6.59	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2058	A	N9-C8	6.59	1.43	1.37
57	BB	2456	C	C3'-C2'	-6.59	1.45	1.52
57	BB	2689	U	C2-N3	6.59	1.42	1.37
57	BB	2863	C	C2'-C1'	-6.59	1.46	1.53
21	AA	1378	C	C4-N4	6.59	1.39	1.33
57	BB	2383	G	C5'-C4'	6.59	1.59	1.51
21	AA	165	G	C2'-C1'	-6.59	1.46	1.53
21	AA	1044	A	C6-N6	6.59	1.39	1.33
21	AA	1454	G	C8-N7	6.59	1.34	1.30
21	AA	1475	G	C4'-O4'	-6.59	1.36	1.45
57	BB	703	U	N3-C4	6.59	1.44	1.38
57	BB	1099	G	N7-C5	-6.59	1.35	1.39
21	AA	1157	A	O3'-P	-6.58	1.53	1.61
23	AW	40	C	C4'-C3'	6.58	1.60	1.53
57	BB	745	G	C4'-O4'	-6.58	1.36	1.45
57	BB	1332	G	C3'-O3'	6.58	1.51	1.42
57	BB	2038	G	C5-C4	-6.58	1.33	1.38
21	AA	278	G	C2-N3	6.58	1.38	1.32
57	BB	84	A	C5-C4	-6.58	1.34	1.38
57	BB	1222	U	O3'-P	-6.58	1.53	1.61
57	BB	1795	C	C4'-C3'	6.58	1.60	1.53
57	BB	2040	G	C5-C6	-6.58	1.35	1.42
13	AB	221	ARG	CZ-NH1	6.58	1.41	1.33
21	AA	711	G	N9-C8	-6.58	1.33	1.37
21	AA	925	G	O3'-P	-6.58	1.53	1.61
21	AA	1385	G	C6-N1	6.58	1.44	1.39
57	BB	668	A	N7-C5	6.58	1.43	1.39
57	BB	684	G	O4'-C1'	6.58	1.50	1.41
57	BB	1327	A	C6-N6	6.58	1.39	1.33
57	BB	1766	G	N1-C2	6.58	1.43	1.37
57	BB	2096	C	C2'-C1'	-6.58	1.46	1.53
57	BB	2581	G	N9-C8	-6.58	1.33	1.37
58	BA	18	G	N1-C2	6.58	1.43	1.37
57	BB	516	C	N3-C4	6.58	1.38	1.33
57	BB	1922	G	C2'-C1'	6.58	1.60	1.53
58	BA	87	U	C3'-C2'	-6.58	1.45	1.52
21	AA	818	G	C5-C4	-6.58	1.33	1.38
21	AA	984	C	C1'-N1	6.58	1.58	1.48
57	BB	1943	U	C2-N3	6.58	1.42	1.37
57	BB	2105	U	C2'-C1'	-6.58	1.46	1.53
57	BB	2655	G	O3'-P	-6.58	1.53	1.61
57	BB	2684	U	C2-N3	-6.58	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	924	C	N3-C4	6.58	1.38	1.33
57	BB	1326	U	C2'-C1'	6.58	1.60	1.53
57	BB	1878	G	C2-N3	6.58	1.38	1.32
57	BB	2782	G	C2'-C1'	-6.58	1.46	1.53
58	BA	21	G	C6-N1	6.58	1.44	1.39
21	AA	19	A	C6-N6	6.58	1.39	1.33
21	AA	252	U	O3'-P	-6.58	1.53	1.61
21	AA	897	C	N3-C4	6.58	1.38	1.33
21	AA	1041	G	C4'-C3'	6.58	1.60	1.53
22	AY	43	G	N7-C5	-6.58	1.35	1.39
57	BB	1337	G	N9-C8	6.58	1.42	1.37
57	BB	2490	G	N1-C2	6.58	1.43	1.37
57	BB	2568	U	N3-C4	6.58	1.44	1.38
21	AA	266	G	N9-C8	-6.57	1.33	1.37
21	AA	361	G	C2'-C1'	-6.57	1.46	1.53
57	BB	291	G	C2'-C1'	-6.57	1.46	1.53
57	BB	2578	G	C3'-C2'	-6.57	1.45	1.52
21	AA	206	C	C4-N4	6.57	1.39	1.33
21	AA	962	C	C2'-C1'	-6.57	1.46	1.53
22	AY	30	G	C6-N1	6.57	1.44	1.39
57	BB	2219	U	P-O5'	-6.57	1.53	1.59
21	AA	453	G	C5-C6	6.57	1.49	1.42
21	AA	1000	A	C2-N3	6.57	1.39	1.33
21	AA	1075	U	N3-C4	6.57	1.44	1.38
57	BB	126	A	C4'-C3'	6.57	1.60	1.53
57	BB	614	A	C6-N1	6.57	1.40	1.35
57	BB	2855	C	C4'-C3'	6.57	1.60	1.53
21	AA	323	U	C5'-C4'	6.57	1.59	1.51
57	BB	571	U	C2-N3	6.57	1.42	1.37
57	BB	783	A	C5-C6	-6.57	1.35	1.41
57	BB	902	C	C4-C5	-6.57	1.37	1.43
21	AA	821	G	N3-C4	-6.57	1.30	1.35
21	AA	1044	A	C5-C4	6.57	1.43	1.38
23	AW	6	G	N9-C4	-6.57	1.32	1.38
55	BG	34	ARG	CZ-NH1	6.57	1.41	1.33
57	BB	84	A	C2'-C1'	-6.57	1.46	1.53
57	BB	204	A	N7-C5	-6.57	1.35	1.39
57	BB	362	A	C4'-O4'	6.57	1.54	1.45
57	BB	492	A	O3'-P	-6.57	1.53	1.61
21	AA	15	G	N3-C4	-6.57	1.30	1.35
21	AA	1063	C	C2-N3	6.57	1.41	1.35
57	BB	66	C	C4-N4	6.57	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	94	A	C3'-O3'	6.57	1.51	1.42
57	BB	334	C	C4-N4	6.57	1.39	1.33
57	BB	435	C	C4-C5	6.57	1.48	1.43
57	BB	1004	U	C5-C6	6.57	1.40	1.34
57	BB	188	G	N9-C8	6.56	1.42	1.37
57	BB	189	G	N9-C8	-6.56	1.33	1.37
57	BB	348	A	C2'-C1'	-6.56	1.46	1.53
57	BB	1036	G	C2-N2	6.56	1.41	1.34
57	BB	2640	G	C2-N2	6.56	1.41	1.34
21	AA	1271	A	N7-C5	-6.56	1.35	1.39
57	BB	705	A	N9-C8	-6.56	1.32	1.37
57	BB	789	A	C5-C6	-6.56	1.35	1.41
57	BB	1044	C	C4'-O4'	-6.56	1.37	1.45
57	BB	1236	G	N7-C5	-6.56	1.35	1.39
57	BB	1384	A	C2'-C1'	6.56	1.60	1.53
57	BB	2584	U	C2'-C1'	-6.56	1.46	1.53
21	AA	885	G	C2'-C1'	-6.56	1.46	1.53
21	AA	1256	A	C6-N1	6.56	1.40	1.35
21	AA	1504	G	N7-C5	-6.56	1.35	1.39
57	BB	205	G	N9-C4	-6.56	1.32	1.38
57	BB	1537	G	C8-N7	6.56	1.34	1.30
57	BB	2238	G	N1-C2	6.56	1.43	1.37
21	AA	418	C	N1-C6	6.56	1.41	1.37
21	AA	949	A	P-O5'	-6.56	1.53	1.59
57	BB	1817	G	C5-C4	-6.56	1.33	1.38
57	BB	2019	A	C5'-C4'	6.56	1.59	1.51
57	BB	2249	U	C2'-C1'	-6.56	1.46	1.53
57	BB	2653	U	C4'-C3'	-6.56	1.46	1.53
21	AA	373	A	N3-C4	-6.56	1.30	1.34
21	AA	951	G	C2'-C1'	-6.56	1.46	1.53
21	AA	1006	G	N7-C5	-6.56	1.35	1.39
21	AA	1175	G	P-O5'	-6.56	1.53	1.59
57	BB	358	U	N3-C4	6.56	1.44	1.38
57	BB	389	G	C2-N3	6.56	1.38	1.32
57	BB	507	A	C2'-C1'	-6.56	1.46	1.53
57	BB	988	A	N9-C8	6.56	1.43	1.37
57	BB	2229	U	C2-N3	6.56	1.42	1.37
57	BB	2572	A	C2'-C1'	-6.56	1.46	1.53
58	BA	107	G	N9-C8	-6.56	1.33	1.37
21	AA	1295	U	C4-C5	6.56	1.49	1.43
57	BB	1917	U	C2-N3	6.56	1.42	1.37
57	BB	180	G	P-O5'	-6.55	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	948	C	C5'-C4'	6.55	1.59	1.51
57	BB	1308	A	N9-C4	6.55	1.41	1.37
57	BB	2283	C	C4'-C3'	6.55	1.60	1.53
21	AA	1006	G	N1-C2	6.55	1.43	1.37
21	AA	1087	G	O4'-C1'	6.55	1.50	1.41
57	BB	721	A	C6-N6	-6.55	1.28	1.33
57	BB	1323	C	N1-C2	6.55	1.46	1.40
57	BB	2556	C	C3'-O3'	6.55	1.51	1.42
1	AJ	72	ARG	CZ-NH2	6.55	1.41	1.33
21	AA	41	G	P-O5'	-6.55	1.53	1.59
21	AA	66	A	C5-C4	6.55	1.43	1.38
57	BB	430	A	N7-C5	6.55	1.43	1.39
57	BB	1256	G	C5'-C4'	6.55	1.59	1.51
57	BB	2310	C	O4'-C1'	6.55	1.50	1.41
21	AA	411	A	N3-C4	-6.55	1.30	1.34
21	AA	525	C	N1-C2	-6.55	1.33	1.40
21	AA	1031	C	C2'-C1'	-6.55	1.46	1.53
21	AA	1375	A	C5-C4	6.55	1.43	1.38
57	BB	45	G	C8-N7	-6.55	1.27	1.30
57	BB	341	C	C4-C5	-6.55	1.37	1.43
57	BB	501	A	C5-C4	6.55	1.43	1.38
57	BB	696	G	C5-C4	-6.55	1.33	1.38
57	BB	1004	U	C2'-C1'	-6.55	1.46	1.53
57	BB	1008	A	C3'-C2'	6.55	1.60	1.52
57	BB	1953	A	C6-N6	6.55	1.39	1.33
21	AA	268	U	C2-O2	6.55	1.28	1.22
21	AA	529	G	C2-N3	6.55	1.38	1.32
21	AA	695	A	C4'-C3'	-6.55	1.46	1.53
57	BB	605	G	N9-C4	-6.55	1.32	1.38
21	AA	465	A	C6-N6	6.55	1.39	1.33
21	AA	563	A	C4'-C3'	-6.55	1.46	1.53
21	AA	1153	G	C6-O6	-6.55	1.18	1.24
57	BB	338	G	N9-C4	-6.55	1.32	1.38
58	BA	28	C	C4-N4	6.55	1.39	1.33
25	AZ	306	SER	CA-CB	6.54	1.62	1.52
57	BB	239	C	N1-C2	6.54	1.46	1.40
57	BB	629	G	C4'-C3'	-6.54	1.46	1.53
57	BB	1596	A	C6-N6	6.54	1.39	1.33
57	BB	2260	C	C2-N3	6.54	1.41	1.35
21	AA	1252	A	N1-C2	6.54	1.40	1.34
21	AA	1336	C	C2-N3	-6.54	1.30	1.35
57	BB	99	U	N1-C2	6.54	1.44	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	266	G	C8-N7	6.54	1.34	1.30
57	BB	796	C	P-O5'	-6.54	1.53	1.59
57	BB	1363	C	N3-C4	6.54	1.38	1.33
57	BB	1671	U	P-O5'	-6.54	1.53	1.59
57	BB	2592	G	C2-N3	6.54	1.38	1.32
57	BB	2623	G	N3-C4	6.54	1.40	1.35
21	AA	171	A	N7-C5	-6.54	1.35	1.39
21	AA	1160	G	N7-C5	6.54	1.43	1.39
21	AA	1177	G	C2-N3	6.54	1.38	1.32
21	AA	1383	C	O3'-P	-6.54	1.53	1.61
22	AY	13	C	C4-N4	6.54	1.39	1.33
57	BB	980	A	N9-C4	6.54	1.41	1.37
57	BB	1038	G	C2-N2	6.54	1.41	1.34
57	BB	1142	A	P-O5'	6.54	1.66	1.59
57	BB	2136	G	C2-N3	6.54	1.38	1.32
22	AY	68	U	C2-N3	6.54	1.42	1.37
57	BB	627	A	N9-C4	-6.54	1.33	1.37
57	BB	777	G	C6-N1	6.54	1.44	1.39
57	BB	1250	G	C6-N1	6.54	1.44	1.39
57	BB	1410	G	N7-C5	-6.54	1.35	1.39
57	BB	2266	A	C6-N6	6.54	1.39	1.33
7	AP	8	ARG	NE-CZ	6.54	1.41	1.33
21	AA	1021	A	C8-N7	-6.54	1.26	1.31
57	BB	1226	A	O4'-C1'	-6.54	1.33	1.41
57	BB	1248	G	C2'-O2'	-6.54	1.33	1.41
57	BB	1851	U	N3-C4	6.54	1.44	1.38
57	BB	1908	C	C2'-C1'	-6.54	1.46	1.53
57	BB	2812	G	C5'-C4'	6.54	1.59	1.51
57	BB	2852	G	N9-C8	6.54	1.42	1.37
58	BA	93	C	C3'-C2'	-6.54	1.45	1.52
21	AA	1511	G	C4'-C3'	6.54	1.60	1.53
57	BB	866	A	C2'-C1'	-6.54	1.46	1.53
57	BB	1934	C	N3-C4	6.54	1.38	1.33
21	AA	425	G	N3-C4	-6.54	1.30	1.35
21	AA	663	A	N9-C4	6.54	1.41	1.37
57	BB	411	G	C4'-C3'	6.54	1.60	1.53
57	BB	490	C	C2-O2	6.54	1.30	1.24
57	BB	945	A	C8-N7	6.54	1.36	1.31
57	BB	1383	A	C6-N6	6.54	1.39	1.33
57	BB	1500	G	C5-C6	-6.54	1.35	1.42
57	BB	1586	A	N3-C4	6.54	1.38	1.34
57	BB	1813	G	O4'-C1'	-6.54	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1890	A	C2'-O2'	-6.54	1.33	1.41
57	BB	2247	A	P-O5'	-6.54	1.53	1.59
21	AA	109	A	N7-C5	-6.53	1.35	1.39
21	AA	978	A	N3-C4	-6.53	1.30	1.34
57	BB	483	A	N3-C4	-6.53	1.30	1.34
57	BB	1636	U	C4'-C3'	-6.53	1.46	1.53
57	BB	1654	A	C6-N6	6.53	1.39	1.33
57	BB	1875	G	C2'-C1'	-6.53	1.46	1.53
57	BB	2282	G	N9-C8	-6.53	1.33	1.37
10	AS	36	ARG	CD-NE	6.53	1.57	1.46
57	BB	528	A	C6-N6	6.53	1.39	1.33
57	BB	1286	A	N7-C5	-6.53	1.35	1.39
57	BB	1295	C	C4-C5	-6.53	1.37	1.43
21	AA	541	G	O3'-P	-6.53	1.53	1.61
21	AA	1062	U	N3-C4	6.53	1.44	1.38
57	BB	738	G	N7-C5	-6.53	1.35	1.39
57	BB	748	G	C4'-O4'	-6.53	1.37	1.45
57	BB	2801	G	C6-N1	6.53	1.44	1.39
21	AA	978	A	C5'-C4'	6.53	1.59	1.51
57	BB	2758	A	N7-C5	-6.53	1.35	1.39
58	BA	32	U	C4-O4	-6.53	1.18	1.23
21	AA	222	C	C2'-C1'	-6.53	1.46	1.53
21	AA	285	C	N3-C4	6.53	1.38	1.33
21	AA	682	G	C5-C4	6.53	1.43	1.38
57	BB	701	G	C3'-C2'	6.53	1.60	1.52
21	AA	728	A	C2'-C1'	-6.53	1.46	1.53
21	AA	1036	A	C6-N6	6.53	1.39	1.33
21	AA	1435	G	N1-C2	6.53	1.43	1.37
22	AY	9	A	C1'-N9	6.53	1.58	1.48
57	BB	498	G	C3'-O3'	6.53	1.51	1.42
57	BB	1270	C	N1-C6	6.53	1.41	1.37
57	BB	1517	G	O3'-P	-6.53	1.53	1.61
57	BB	2523	G	N1-C2	6.53	1.43	1.37
50	B3	63	TYR	CZ-OH	6.52	1.49	1.37
57	BB	189	G	N7-C5	-6.52	1.35	1.39
57	BB	1987	A	C6-N1	6.52	1.40	1.35
57	BB	2366	A	N9-C4	-6.52	1.33	1.37
31	BL	59	ARG	CD-NE	6.52	1.57	1.46
57	BB	233	A	C3'-O3'	6.52	1.51	1.42
57	BB	822	G	C6-N1	6.52	1.44	1.39
57	BB	987	C	C2-O2	6.52	1.30	1.24
57	BB	1093	G	C3'-O3'	6.52	1.51	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1586	A	P-O5'	-6.52	1.53	1.59
57	BB	2174	C	O3'-P	-6.52	1.53	1.61
57	BB	2314	A	C6-N6	6.52	1.39	1.33
57	BB	2389	G	C5-C6	-6.52	1.35	1.42
57	BB	242	G	C2-N2	6.52	1.41	1.34
57	BB	399	U	C4'-O4'	-6.52	1.37	1.45
57	BB	637	A	N3-C4	-6.52	1.30	1.34
57	BB	2845	U	C2'-C1'	6.52	1.60	1.53
7	AP	56	ARG	NE-CZ	6.52	1.41	1.33
57	BB	260	G	C5-C6	6.52	1.48	1.42
57	BB	2472	G	N3-C4	6.52	1.40	1.35
57	BB	2766	A	N3-C4	-6.52	1.30	1.34
24	AX	16	A	N9-C4	6.52	1.41	1.37
53	BE	69	ARG	CZ-NH2	6.52	1.41	1.33
57	BB	228	C	C2'-C1'	-6.52	1.46	1.53
57	BB	608	A	O3'-P	-6.52	1.53	1.61
57	BB	1349	C	C4'-O4'	6.52	1.54	1.45
21	AA	296	U	C2'-C1'	-6.52	1.46	1.53
57	BB	796	C	C2'-C1'	-6.52	1.46	1.53
57	BB	1567	G	N3-C4	6.52	1.40	1.35
21	AA	945	G	C8-N7	-6.51	1.27	1.30
21	AA	1132	C	C4-N4	-6.51	1.28	1.33
57	BB	986	C	C4'-C3'	6.51	1.60	1.53
57	BB	1689	A	N3-C4	6.51	1.38	1.34
57	BB	2344	U	N3-C4	6.51	1.44	1.38
58	BA	53	A	C8-N7	-6.51	1.26	1.31
21	AA	1477	U	O3'-P	-6.51	1.53	1.61
23	AW	47	U	C2-O2	-6.51	1.16	1.22
57	BB	261	G	C6-N1	6.51	1.44	1.39
57	BB	311	A	C6-N6	6.51	1.39	1.33
57	BB	404	A	C6-N6	6.51	1.39	1.33
57	BB	806	C	O3'-P	6.51	1.69	1.61
57	BB	1986	C	C2-N3	6.51	1.41	1.35
57	BB	2560	A	O4'-C1'	6.51	1.50	1.41
58	BA	98	G	N7-C5	-6.51	1.35	1.39
21	AA	100	G	O3'-P	-6.51	1.53	1.61
21	AA	1184	G	C2-N3	6.51	1.38	1.32
57	BB	60	G	C5-C4	-6.51	1.33	1.38
57	BB	755	U	C3'-O3'	6.51	1.51	1.42
21	AA	475	C	N1-C6	-6.51	1.33	1.37
21	AA	502	A	C6-N6	6.51	1.39	1.33
21	AA	1200	C	N3-C4	6.51	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1109	C	C4'-O4'	-6.51	1.37	1.45
57	BB	1555	G	N3-C4	6.51	1.40	1.35
21	AA	16	A	C5-C4	6.51	1.43	1.38
21	AA	506	G	C2-N3	6.51	1.38	1.32
21	AA	1183	U	C4-C5	-6.51	1.37	1.43
21	AA	1507	A	C6-N1	6.51	1.40	1.35
57	BB	1137	G	N1-C2	6.51	1.43	1.37
57	BB	2099	U	C4'-O4'	6.51	1.54	1.45
57	BB	2102	G	C2-N3	6.51	1.38	1.32
57	BB	2391	G	C6-N1	6.51	1.44	1.39
57	BB	2655	G	C6-N1	6.51	1.44	1.39
22	AY	61	C	N3-C4	6.50	1.38	1.33
21	AA	135	C	P-O5'	-6.50	1.53	1.59
21	AA	898	G	N3-C4	-6.50	1.30	1.35
57	BB	328	U	N3-C4	6.50	1.44	1.38
57	BB	946	C	C5'-C4'	6.50	1.59	1.51
57	BB	1263	U	C4'-O4'	6.50	1.54	1.45
57	BB	1509	A	C3'-C2'	6.50	1.60	1.52
57	BB	2001	C	O3'-P	-6.50	1.53	1.61
57	BB	2365	G	C6-N1	6.50	1.44	1.39
57	BB	2511	U	C4'-C3'	-6.50	1.46	1.53
57	BB	2643	G	C6-N1	6.50	1.44	1.39
57	BB	2878	U	P-O5'	-6.50	1.53	1.59
21	AA	553	A	N3-C4	6.50	1.38	1.34
21	AA	669	G	C6-N1	6.50	1.44	1.39
21	AA	1054	C	C2-N3	6.50	1.41	1.35
21	AA	1419	G	C5-C4	6.50	1.43	1.38
57	BB	644	A	C2'-C1'	-6.50	1.46	1.53
57	BB	1997	C	C4'-C3'	6.50	1.60	1.53
57	BB	2186	G	P-O5'	-6.50	1.53	1.59
57	BB	2812	G	C1'-N9	6.50	1.58	1.48
21	AA	1303	C	N1-C6	6.50	1.41	1.37
57	BB	689	A	C5'-C4'	6.50	1.59	1.51
20	AI	84	ARG	CZ-NH1	6.50	1.41	1.33
21	AA	1433	A	C5-C4	6.50	1.43	1.38
23	AW	60	U	C5-C6	6.50	1.40	1.34
57	BB	228	C	N3-C4	6.50	1.38	1.33
57	BB	1423	G	N1-C2	6.50	1.43	1.37
57	BB	1552	A	N9-C4	6.50	1.41	1.37
57	BB	2177	C	N1-C6	-6.50	1.33	1.37
57	BB	2379	G	N9-C8	6.50	1.42	1.37
57	BB	2597	G	C2'-C1'	-6.50	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	54	G	C2'-O2'	-6.50	1.33	1.41
21	AA	248	C	C5'-C4'	6.50	1.59	1.51
21	AA	1456	A	C6-N6	6.50	1.39	1.33
21	AA	1467	C	N3-C4	6.50	1.38	1.33
57	BB	620	G	C6-N1	6.50	1.44	1.39
57	BB	870	U	O3'-P	-6.50	1.53	1.61
57	BB	1678	A	C2'-C1'	-6.50	1.46	1.53
21	AA	303	A	N3-C4	6.50	1.38	1.34
21	AA	375	U	C5'-C4'	6.50	1.59	1.51
57	BB	107	G	C2-N2	6.50	1.41	1.34
57	BB	162	U	O3'-P	-6.50	1.53	1.61
57	BB	237	C	C4'-O4'	-6.50	1.37	1.45
57	BB	1426	G	C8-N7	6.50	1.34	1.30
57	BB	1613	G	P-O5'	6.50	1.66	1.59
57	BB	2415	G	N7-C5	-6.50	1.35	1.39
21	AA	196	A	C8-N7	-6.49	1.27	1.31
26	AV	35	A	C2-N3	-6.49	1.27	1.33
57	BB	1862	G	N1-C2	6.49	1.43	1.37
57	BB	2123	G	N1-C2	6.49	1.43	1.37
57	BB	2297	A	N9-C4	-6.49	1.33	1.37
57	BB	2349	G	N1-C2	6.49	1.43	1.37
57	BB	2627	G	C8-N7	-6.49	1.27	1.30
58	BA	82	U	C3'-C2'	-6.49	1.45	1.52
13	AB	34	ARG	NE-CZ	6.49	1.41	1.33
21	AA	741	G	C5-C4	6.49	1.42	1.38
21	AA	1502	A	O3'-P	-6.49	1.53	1.61
57	BB	396	G	C2'-C1'	-6.49	1.46	1.53
57	BB	774	G	C5'-C4'	6.49	1.59	1.51
57	BB	794	A	C4'-C3'	6.49	1.60	1.53
57	BB	1797	G	N3-C4	-6.49	1.30	1.35
21	AA	261	U	C2-N3	-6.49	1.33	1.37
37	BR	34	GLU	CD-OE2	6.49	1.32	1.25
44	BY	48	ARG	NE-CZ	6.49	1.41	1.33
57	BB	770	G	N3-C4	-6.49	1.30	1.35
21	AA	70	U	C2'-O2'	6.49	1.50	1.41
21	AA	729	A	N9-C8	-6.49	1.32	1.37
21	AA	874	G	P-O5'	-6.49	1.53	1.59
22	AY	53	G	N9-C4	6.49	1.43	1.38
57	BB	51	G	N3-C4	-6.49	1.30	1.35
57	BB	892	A	C6-N1	6.49	1.40	1.35
57	BB	915	C	P-O5'	-6.49	1.53	1.59
57	BB	1360	G	C3'-O3'	6.49	1.51	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1943	U	O3'-P	-6.49	1.53	1.61
57	BB	2574	G	N7-C5	-6.49	1.35	1.39
57	BB	2608	G	N9-C8	-6.49	1.33	1.37
57	BB	1273	U	C2-N3	6.49	1.42	1.37
57	BB	1432	G	C2-N3	6.49	1.38	1.32
57	BB	2382	G	N9-C8	-6.49	1.33	1.37
57	BB	2591	C	C2-N3	6.49	1.41	1.35
21	AA	733	G	N3-C4	-6.49	1.30	1.35
21	AA	1081	A	C6-N1	-6.49	1.31	1.35
23	AW	8	U	C2'-C1'	-6.49	1.46	1.53
57	BB	974	G	N7-C5	-6.49	1.35	1.39
57	BB	1582	C	N1-C6	-6.49	1.33	1.37
57	BB	1997	C	C3'-C2'	-6.49	1.45	1.52
21	AA	22	G	C6-N1	6.48	1.44	1.39
21	AA	170	U	C2'-C1'	-6.48	1.46	1.53
21	AA	1158	C	N1-C2	6.48	1.46	1.40
57	BB	822	G	N3-C4	-6.48	1.30	1.35
57	BB	1203	U	N3-C4	6.48	1.44	1.38
57	BB	1725	U	N1-C2	6.48	1.44	1.38
57	BB	2592	G	N1-C2	6.48	1.43	1.37
21	AA	148	G	N1-C2	6.48	1.43	1.37
21	AA	176	C	N1-C2	6.48	1.46	1.40
21	AA	892	A	C3'-O3'	6.48	1.51	1.42
21	AA	1515	G	N7-C5	-6.48	1.35	1.39
57	BB	661	A	C6-N6	6.48	1.39	1.33
57	BB	928	A	N9-C8	6.48	1.43	1.37
57	BB	1039	A	O4'-C1'	-6.48	1.33	1.41
57	BB	1279	G	C3'-C2'	-6.48	1.45	1.52
57	BB	1607	C	N1-C6	6.48	1.41	1.37
57	BB	1903	G	C5-C4	6.48	1.42	1.38
57	BB	1966	A	C6-N1	6.48	1.40	1.35
57	BB	2087	G	C6-N1	6.48	1.44	1.39
57	BB	2534	A	C2'-C1'	-6.48	1.46	1.53
21	AA	514	C	P-O5'	6.48	1.66	1.59
21	AA	655	A	O3'-P	-6.48	1.53	1.61
21	AA	733	G	N7-C5	-6.48	1.35	1.39
21	AA	1470	U	N3-C4	6.48	1.44	1.38
22	AY	50	U	N1-C2	6.48	1.44	1.38
57	BB	2059	A	C3'-C2'	6.48	1.60	1.52
57	BB	2739	U	C4-C5	6.48	1.49	1.43
21	AA	612	C	C2'-C1'	-6.48	1.46	1.53
26	AV	30	G	C5'-C4'	6.48	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	446	G	N1-C2	6.48	1.43	1.37
57	BB	1615	C	N3-C4	6.48	1.38	1.33
57	BB	1871	A	C8-N7	-6.48	1.27	1.31
21	AA	446	G	C2-N3	6.48	1.38	1.32
21	AA	462	G	C5'-C4'	6.48	1.59	1.51
21	AA	1042	A	C3'-O3'	6.48	1.51	1.42
57	BB	1412	U	C2-N3	6.48	1.42	1.37
21	AA	666	G	C2-N3	6.48	1.38	1.32
21	AA	1129	C	N1-C2	6.48	1.46	1.40
57	BB	1177	G	C2-N3	6.48	1.38	1.32
57	BB	1306	C	C4-N4	6.48	1.39	1.33
57	BB	1965	C	C2-N3	6.48	1.41	1.35
21	AA	782	A	N1-C2	6.47	1.40	1.34
23	AW	5	G	C5'-C4'	6.47	1.59	1.51
57	BB	667	U	C4-C5	-6.47	1.37	1.43
57	BB	1197	G	P-O5'	-6.47	1.53	1.59
57	BB	1515	A	C3'-O3'	-6.47	1.33	1.42
57	BB	2068	U	O3'-P	-6.47	1.53	1.61
57	BB	2806	C	C2-N3	6.47	1.41	1.35
21	AA	1422	G	N9-C4	-6.47	1.32	1.38
57	BB	1148	U	C4-C5	6.47	1.49	1.43
57	BB	1758	U	C3'-C2'	6.47	1.60	1.52
57	BB	1870	C	C3'-C2'	6.47	1.60	1.52
57	BB	2401	U	O3'-P	-6.47	1.53	1.61
5	AN	84	ARG	NE-CZ	6.47	1.41	1.33
22	AY	69	U	N1-C6	6.47	1.43	1.38
57	BB	258	G	C6-N1	6.47	1.44	1.39
57	BB	752	A	P-O5'	-6.47	1.53	1.59
57	BB	1749	A	N9-C4	-6.47	1.33	1.37
57	BB	1857	G	C8-N7	-6.47	1.27	1.30
21	AA	116	A	C6-N6	6.47	1.39	1.33
21	AA	1391	U	C4'-C3'	6.47	1.60	1.53
21	AA	1516	G	N7-C5	6.47	1.43	1.39
21	AA	1526	G	P-O5'	-6.47	1.53	1.59
57	BB	373	U	C2'-C1'	-6.47	1.46	1.53
57	BB	836	G	C5-C4	-6.47	1.33	1.38
57	BB	974	G	C3'-O3'	-6.47	1.33	1.42
57	BB	974	G	C5-C6	-6.47	1.35	1.42
57	BB	993	G	C6-O6	6.47	1.29	1.24
57	BB	1100	C	P-O5'	6.47	1.66	1.59
57	BB	1543	G	C8-N7	6.47	1.34	1.30
21	AA	610	U	C5-C6	6.47	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1259	C	C5-C6	6.47	1.39	1.34
21	AA	1131	G	C5-C4	-6.47	1.33	1.38
21	AA	1180	A	C6-N6	6.47	1.39	1.33
21	AA	1315	U	C2-N3	6.47	1.42	1.37
21	AA	1446	A	C6-N6	6.47	1.39	1.33
57	BB	31	C	C4'-C3'	6.47	1.60	1.53
57	BB	516	C	C5-C6	-6.47	1.29	1.34
57	BB	2288	A	C6-N6	6.47	1.39	1.33
57	BB	2317	A	N7-C5	-6.47	1.35	1.39
57	BB	2357	G	C5'-C4'	6.47	1.59	1.51
21	AA	1005	A	N9-C4	6.46	1.41	1.37
23	AW	14	A	N7-C5	-6.46	1.35	1.39
57	BB	81	G	C2'-C1'	-6.46	1.46	1.53
57	BB	213	A	C8-N7	-6.46	1.27	1.31
57	BB	1012	U	C4'-C3'	6.46	1.60	1.53
57	BB	1048	A	N7-C5	-6.46	1.35	1.39
57	BB	2627	G	N7-C5	-6.46	1.35	1.39
21	AA	790	A	C4'-O4'	-6.46	1.37	1.45
57	BB	93	G	C2-N3	6.46	1.38	1.32
57	BB	916	G	N3-C4	6.46	1.40	1.35
57	BB	1765	U	N1-C2	6.46	1.44	1.38
57	BB	2534	A	C6-N6	6.46	1.39	1.33
21	AA	1006	G	N3-C4	-6.46	1.30	1.35
21	AA	1352	C	C4-N4	6.46	1.39	1.33
57	BB	280	U	C3'-C2'	6.46	1.60	1.52
57	BB	468	G	C3'-O3'	6.46	1.51	1.42
57	BB	1163	G	C2'-C1'	-6.46	1.46	1.53
57	BB	2562	U	N3-C4	6.46	1.44	1.38
57	BB	863	A	C4'-O4'	6.46	1.53	1.45
57	BB	1033	U	C5'-C4'	6.46	1.59	1.51
57	BB	1253	A	C5-C4	-6.46	1.34	1.38
57	BB	2627	G	N1-C2	6.46	1.43	1.37
21	AA	20	U	C5'-C4'	6.46	1.59	1.51
21	AA	601	G	N1-C2	6.46	1.43	1.37
21	AA	627	G	C8-N7	-6.46	1.27	1.30
21	AA	918	A	P-O5'	-6.46	1.53	1.59
21	AA	983	A	C4'-C3'	-6.46	1.46	1.53
21	AA	1170	A	C2'-C1'	-6.46	1.46	1.53
21	AA	1346	A	N3-C4	6.46	1.38	1.34
21	AA	1484	C	C2'-C1'	-6.46	1.46	1.53
57	BB	1091	G	N3-C4	6.46	1.40	1.35
57	BB	2497	A	N1-C2	6.46	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	84	G	P-O5'	-6.46	1.53	1.59
57	BB	422	A	C6-N1	6.46	1.40	1.35
57	BB	749	A	C6-N6	6.46	1.39	1.33
57	BB	1049	C	C4'-C3'	6.46	1.60	1.53
21	AA	928	G	P-O5'	-6.46	1.53	1.59
21	AA	1316	G	C5-C4	6.46	1.42	1.38
26	AV	47	U	N3-C4	6.46	1.44	1.38
57	BB	494	G	C2-N2	6.46	1.41	1.34
57	BB	686	U	N1-C6	6.46	1.43	1.38
57	BB	1512	C	C2-N3	6.46	1.41	1.35
57	BB	1527	G	C2-N2	6.46	1.41	1.34
12	AU	32	ARG	NE-CZ	6.45	1.41	1.33
21	AA	175	C	C4'-C3'	6.45	1.60	1.53
21	AA	562	U	O3'-P	-6.45	1.53	1.61
21	AA	631	C	C4-N4	6.45	1.39	1.33
22	AY	32	C	C4-C5	6.45	1.48	1.43
52	BD	15	PHE	CG-CD2	6.45	1.48	1.38
57	BB	1081	U	N1-C6	6.45	1.43	1.38
57	BB	1392	A	C5'-C4'	6.45	1.59	1.51
21	AA	252	U	N1-C2	6.45	1.44	1.38
57	BB	513	A	N9-C8	-6.45	1.32	1.37
57	BB	681	G	C2-N3	6.45	1.38	1.32
57	BB	954	G	C5'-C4'	6.45	1.59	1.51
57	BB	2172	U	O3'-P	-6.45	1.53	1.61
21	AA	75	G	N9-C8	6.45	1.42	1.37
21	AA	747	A	C6-N6	6.45	1.39	1.33
57	BB	319	G	C3'-C2'	-6.45	1.45	1.52
57	BB	787	C	N3-C4	6.45	1.38	1.33
57	BB	1436	G	N9-C4	-6.45	1.32	1.38
57	BB	1911	U	O3'-P	-6.45	1.53	1.61
57	BB	2650	U	C2-N3	6.45	1.42	1.37
21	AA	1346	A	N7-C5	-6.45	1.35	1.39
26	AV	43	A	C6-N1	6.45	1.40	1.35
57	BB	508	A	N7-C5	-6.45	1.35	1.39
57	BB	710	U	C5'-C4'	6.45	1.59	1.51
57	BB	792	A	C6-N6	6.45	1.39	1.33
57	BB	1885	A	C2-N3	6.45	1.39	1.33
57	BB	2408	U	P-O5'	-6.45	1.53	1.59
57	BB	2836	U	C2'-C1'	-6.45	1.46	1.53
21	AA	185	U	C3'-O3'	6.45	1.51	1.42
21	AA	1062	U	C4-O4	-6.45	1.18	1.23
57	BB	724	U	C5-C6	6.45	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	825	A	C6-N1	6.45	1.40	1.35
58	BA	10	G	N7-C5	-6.45	1.35	1.39
21	AA	35	G	C2-N2	6.45	1.41	1.34
21	AA	611	C	N1-C6	6.45	1.41	1.37
21	AA	1086	U	C2-O2	6.45	1.28	1.22
21	AA	1093	A	C8-N7	6.45	1.36	1.31
21	AA	1137	C	C2-N3	6.45	1.41	1.35
57	BB	390	U	C4-C5	6.45	1.49	1.43
57	BB	514	A	N9-C8	-6.45	1.32	1.37
57	BB	1660	G	C5'-C4'	6.45	1.59	1.51
57	BB	1676	A	N9-C4	-6.45	1.33	1.37
57	BB	2715	C	C4-N4	6.45	1.39	1.33
21	AA	1514	G	N7-C5	-6.44	1.35	1.39
57	BB	865	C	N3-C4	6.44	1.38	1.33
57	BB	1540	G	C6-O6	-6.44	1.18	1.24
57	BB	1934	C	C4-C5	-6.44	1.37	1.43
57	BB	2687	U	C4-C5	6.44	1.49	1.43
21	AA	1041	G	C3'-C2'	-6.44	1.45	1.52
21	AA	1085	U	C2-N3	6.44	1.42	1.37
21	AA	1116	U	O3'-P	-6.44	1.53	1.61
21	AA	1276	G	C5-C4	6.44	1.42	1.38
26	AV	10	G	C1'-N9	-6.44	1.37	1.46
26	AV	11	A	P-O5'	6.44	1.66	1.59
57	BB	242	G	N3-C4	-6.44	1.30	1.35
57	BB	1436	G	N7-C5	-6.44	1.35	1.39
57	BB	1912	A	C6-N1	6.44	1.40	1.35
57	BB	2243	U	O3'-P	-6.44	1.53	1.61
57	BB	2520	C	N3-C4	6.44	1.38	1.33
57	BB	2561	U	C3'-C2'	6.44	1.60	1.52
21	AA	528	C	C4-N4	6.44	1.39	1.33
21	AA	570	G	N1-C2	6.44	1.43	1.37
21	AA	1004	A	C2'-C1'	-6.44	1.46	1.53
21	AA	1499	A	C5'-C4'	6.44	1.59	1.51
22	AY	4	G	N7-C5	-6.44	1.35	1.39
57	BB	441	U	C4-O4	-6.44	1.18	1.23
57	BB	647	G	C1'-N9	6.44	1.58	1.48
57	BB	794	A	O4'-C1'	6.44	1.50	1.41
57	BB	1838	C	C4-N4	6.44	1.39	1.33
57	BB	1897	G	C5-C4	-6.44	1.33	1.38
57	BB	1904	G	C2'-C1'	-6.44	1.46	1.53
57	BB	2232	C	N1-C6	6.44	1.41	1.37
21	AA	607	A	C6-N6	6.44	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	238	A	N7-C5	-6.44	1.35	1.39
21	AA	806	C	C2'-C1'	-6.44	1.46	1.53
21	AA	1364	U	C2-N3	6.44	1.42	1.37
21	AA	1432	G	C3'-C2'	6.44	1.60	1.52
57	BB	504	A	C6-N6	6.44	1.39	1.33
57	BB	699	A	N1-C2	6.44	1.40	1.34
57	BB	831	G	C2-N2	6.44	1.41	1.34
57	BB	1139	G	N7-C5	-6.44	1.35	1.39
57	BB	1448	G	C2'-C1'	-6.44	1.46	1.53
57	BB	2412	A	C8-N7	-6.44	1.27	1.31
57	BB	2574	G	C6-N1	6.44	1.44	1.39
21	AA	790	A	N7-C5	-6.44	1.35	1.39
57	BB	2293	G	C6-N1	6.44	1.44	1.39
57	BB	2337	G	C2-N3	6.44	1.37	1.32
57	BB	2399	G	O4'-C1'	-6.44	1.33	1.41
21	AA	1459	G	N1-C2	6.43	1.42	1.37
22	AY	43	G	C2'-C1'	-6.43	1.46	1.53
57	BB	635	C	C5-C6	6.43	1.39	1.34
57	BB	932	U	C2-N3	6.43	1.42	1.37
57	BB	1364	G	P-O5'	-6.43	1.53	1.59
57	BB	2028	U	N3-C4	6.43	1.44	1.38
57	BB	2484	G	N9-C8	-6.43	1.33	1.37
21	AA	650	G	C4'-O4'	-6.43	1.37	1.45
22	AY	67	A	C5-C4	-6.43	1.34	1.38
57	BB	66	C	C4'-O4'	-6.43	1.37	1.45
57	BB	310	A	C2-N3	6.43	1.39	1.33
57	BB	895	U	N1-C2	6.43	1.44	1.38
57	BB	1117	C	C4-N4	6.43	1.39	1.33
21	AA	483	C	C2-N3	-6.43	1.30	1.35
34	BO	102	ARG	CZ-NH2	6.43	1.41	1.33
38	BS	8	ARG	CD-NE	6.43	1.57	1.46
57	BB	272	A	N7-C5	-6.43	1.35	1.39
57	BB	1287	A	P-O5'	-6.43	1.53	1.59
57	BB	2082	A	C2'-C1'	-6.43	1.46	1.53
21	AA	453	G	C6-N1	6.43	1.44	1.39
21	AA	1216	A	C8-N7	-6.43	1.27	1.31
57	BB	899	A	C5-C6	-6.43	1.35	1.41
57	BB	2700	A	C1'-N9	-6.43	1.37	1.46
58	BA	88	C	O3'-P	-6.43	1.53	1.61
57	BB	722	A	C6-N1	6.43	1.40	1.35
57	BB	1194	A	C6-N1	-6.43	1.31	1.35
57	BB	2854	G	C2-N3	6.43	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2856	A	C6-N1	6.43	1.40	1.35
21	AA	510	A	O3'-P	-6.43	1.53	1.61
21	AA	1003	G	N1-C2	6.43	1.42	1.37
24	AX	21	C	P-O5'	-6.43	1.53	1.59
25	AZ	41	GLY	CA-C	-6.43	1.41	1.51
57	BB	1676	A	C5-C4	-6.43	1.34	1.38
57	BB	1789	A	C8-N7	-6.43	1.27	1.31
57	BB	2036	C	N3-C4	6.43	1.38	1.33
57	BB	2521	C	N3-C4	6.43	1.38	1.33
21	AA	787	A	C8-N7	6.42	1.36	1.31
21	AA	1266	G	P-O5'	-6.42	1.53	1.59
57	BB	1204	A	C4'-O4'	-6.42	1.37	1.45
21	AA	122	G	N1-C2	6.42	1.42	1.37
21	AA	1070	U	P-O5'	-6.42	1.53	1.59
57	BB	61	C	C4-N4	6.42	1.39	1.33
57	BB	1439	A	C6-N6	6.42	1.39	1.33
57	BB	2024	G	C6-O6	6.42	1.29	1.24
57	BB	288	U	C2'-C1'	-6.42	1.46	1.53
57	BB	781	A	C2'-C1'	-6.42	1.46	1.53
57	BB	2734	A	N9-C8	6.42	1.42	1.37
57	BB	2811	G	C8-N7	-6.42	1.27	1.30
21	AA	1011	C	N3-C4	6.42	1.38	1.33
57	BB	716	A	N9-C4	6.42	1.41	1.37
57	BB	2723	C	C4-N4	6.42	1.39	1.33
21	AA	645	G	C2'-C1'	-6.42	1.46	1.53
21	AA	650	G	C5'-C4'	6.42	1.59	1.51
26	AV	57	A	C5-C4	-6.42	1.34	1.38
31	BL	18	ARG	CZ-NH2	6.42	1.41	1.33
57	BB	196	A	C8-N7	-6.42	1.27	1.31
57	BB	2020	A	C6-N6	6.42	1.39	1.33
21	AA	258	G	C2-N2	6.42	1.41	1.34
21	AA	385	C	C5-C6	6.42	1.39	1.34
21	AA	527	G	C5-C4	6.42	1.42	1.38
21	AA	877	G	C5-C4	6.42	1.42	1.38
21	AA	1067	A	N9-C4	-6.42	1.33	1.37
21	AA	1393	U	C3'-C2'	6.42	1.60	1.52
57	BB	309	A	N1-C2	-6.42	1.28	1.34
57	BB	1712	U	C4-O4	-6.42	1.18	1.23
58	BA	54	G	N7-C5	6.42	1.43	1.39
21	AA	530	G	O4'-C1'	-6.42	1.33	1.41
21	AA	708	C	C4-N4	6.42	1.39	1.33
57	BB	520	G	C5-C6	-6.42	1.35	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1132	U	P-O5'	-6.42	1.53	1.59
57	BB	1354	A	C5-C6	6.42	1.46	1.41
21	AA	143	A	N9-C4	-6.41	1.34	1.37
21	AA	626	G	N7-C5	-6.41	1.35	1.39
21	AA	790	A	C6-N6	6.41	1.39	1.33
21	AA	1239	A	C5-C4	6.41	1.43	1.38
57	BB	648	G	C2-N3	6.41	1.37	1.32
57	BB	672	C	C4-N4	6.41	1.39	1.33
57	BB	709	U	C3'-O3'	6.41	1.51	1.42
57	BB	1430	G	N1-C2	6.41	1.42	1.37
22	AY	31	A	C6-N1	6.41	1.40	1.35
34	BO	81	ARG	NE-CZ	6.41	1.41	1.33
57	BB	1111	A	N9-C4	-6.41	1.34	1.37
57	BB	1300	G	N9-C4	-6.41	1.32	1.38
57	BB	1638	C	N1-C6	-6.41	1.33	1.37
21	AA	177	G	N7-C5	-6.41	1.35	1.39
21	AA	339	C	N3-C4	6.41	1.38	1.33
21	AA	1005	A	C8-N7	6.41	1.36	1.31
21	AA	1102	A	C5-C6	-6.41	1.35	1.41
21	AA	1378	C	N3-C4	6.41	1.38	1.33
23	AW	27	G	C2-N2	6.41	1.41	1.34
57	BB	26	G	N9-C8	6.41	1.42	1.37
57	BB	949	G	C2'-C1'	-6.41	1.46	1.53
57	BB	1225	G	C2-N2	6.41	1.41	1.34
57	BB	1395	A	C8-N7	-6.41	1.27	1.31
57	BB	2116	G	C5-C4	6.41	1.42	1.38
57	BB	2120	G	C5-C4	6.41	1.42	1.38
57	BB	2508	G	N7-C5	-6.41	1.35	1.39
57	BB	2668	G	C2'-C1'	-6.41	1.46	1.53
36	BQ	2	ARG	NE-CZ	6.41	1.41	1.33
57	BB	1122	G	C5-C4	-6.41	1.33	1.38
57	BB	1670	C	C2-N3	6.41	1.40	1.35
57	BB	2330	G	C4'-C3'	6.41	1.60	1.53
57	BB	2334	U	N3-C4	6.41	1.44	1.38
57	BB	1845	G	C6-N1	6.40	1.44	1.39
21	AA	442	G	N9-C8	-6.40	1.33	1.37
21	AA	697	U	C4-C5	6.40	1.49	1.43
21	AA	1241	G	N9-C8	-6.40	1.33	1.37
21	AA	1291	U	N3-C4	6.40	1.44	1.38
22	AY	49	C	C2-N3	6.40	1.40	1.35
57	BB	2654	A	N1-C2	6.40	1.40	1.34
57	BB	2858	C	N1-C6	-6.40	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	40	U	C4-C5	-6.40	1.37	1.43
58	BA	40	U	N3-C4	6.40	1.44	1.38
26	AV	63	G	N9-C8	6.40	1.42	1.37
57	BB	338	G	C5-C4	-6.40	1.33	1.38
57	BB	505	A	C5-C4	-6.40	1.34	1.38
57	BB	1893	C	C2-N3	6.40	1.40	1.35
57	BB	2694	G	N1-C2	6.40	1.42	1.37
21	AA	261	U	C4-C5	6.40	1.49	1.43
57	BB	2799	A	C8-N7	6.40	1.36	1.31
21	AA	160	A	N3-C4	-6.40	1.31	1.34
21	AA	613	C	P-O5'	-6.40	1.53	1.59
21	AA	961	U	C4-O4	6.40	1.28	1.23
21	AA	1058	G	N1-C2	6.40	1.42	1.37
57	BB	581	C	C4-C5	6.40	1.48	1.43
57	BB	1228	G	C5-C4	6.40	1.42	1.38
57	BB	2238	G	C5-C6	-6.40	1.35	1.42
57	BB	2751	G	C2-N3	6.40	1.37	1.32
58	BA	15	A	N9-C4	6.40	1.41	1.37
21	AA	484	G	C6-N1	6.40	1.44	1.39
57	BB	368	A	C5'-C4'	6.40	1.59	1.51
57	BB	1776	G	C2'-C1'	-6.40	1.46	1.53
57	BB	2440	C	C2-N3	6.40	1.40	1.35
57	BB	2673	G	N9-C4	-6.40	1.32	1.38
14	AC	10	ARG	NE-CZ	6.39	1.41	1.33
21	AA	115	G	C2-N3	6.39	1.37	1.32
21	AA	255	G	N7-C5	-6.39	1.35	1.39
21	AA	295	C	C4-C5	6.39	1.48	1.43
21	AA	1389	C	C1'-N1	6.39	1.58	1.48
57	BB	382	A	C4'-C3'	6.39	1.60	1.53
57	BB	804	A	C2'-C1'	-6.39	1.46	1.53
57	BB	1494	A	C6-N6	6.39	1.39	1.33
57	BB	1613	G	C4'-O4'	6.39	1.53	1.45
57	BB	1818	U	O3'-P	-6.39	1.53	1.61
57	BB	1941	C	O4'-C1'	6.39	1.50	1.41
57	BB	2729	G	N9-C4	-6.39	1.32	1.38
21	AA	1270	G	C8-N7	6.39	1.34	1.30
21	AA	1392	G	C2'-C1'	-6.39	1.46	1.53
21	AA	1526	G	C8-N7	-6.39	1.27	1.30
57	BB	469	G	N3-C4	-6.39	1.30	1.35
57	BB	476	G	C4'-C3'	6.39	1.60	1.53
57	BB	764	A	C8-N7	-6.39	1.27	1.31
57	BB	1022	G	N3-C4	-6.39	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1906	G	N3-C4	-6.39	1.30	1.35
57	BB	2021	C	O4'-C1'	6.39	1.50	1.41
57	BB	2060	A	C5-C4	6.39	1.43	1.38
58	BA	89	U	P-O5'	-6.39	1.53	1.59
21	AA	1283	U	N1-C6	-6.39	1.32	1.38
21	AA	245	U	N1-C6	6.39	1.43	1.38
21	AA	1085	U	C3'-C2'	6.39	1.59	1.52
21	AA	1390	U	C4-C5	6.39	1.49	1.43
57	BB	78	U	N3-C4	6.39	1.44	1.38
57	BB	396	G	C6-N1	6.39	1.44	1.39
57	BB	403	U	C5'-C4'	6.39	1.59	1.51
57	BB	697	G	O3'-P	-6.39	1.53	1.61
57	BB	733	G	N3-C4	6.39	1.40	1.35
57	BB	765	C	C3'-C2'	-6.39	1.45	1.52
57	BB	2288	A	N9-C4	-6.39	1.34	1.37
57	BB	2787	C	C2-N3	6.39	1.40	1.35
58	BA	41	G	C2'-O2'	6.39	1.50	1.41
21	AA	491	G	N7-C5	-6.39	1.35	1.39
21	AA	1123	U	O3'-P	-6.39	1.53	1.61
35	BP	97	TYR	CE1-CZ	6.39	1.46	1.38
57	BB	254	G	C8-N7	-6.39	1.27	1.30
57	BB	2842	G	C2-N3	6.39	1.37	1.32
21	AA	988	G	N1-C2	6.39	1.42	1.37
57	BB	70	G	C5-C6	-6.39	1.35	1.42
57	BB	670	A	N3-C4	-6.39	1.31	1.34
57	BB	1580	A	C2-N3	6.39	1.39	1.33
57	BB	1652	A	N1-C2	6.39	1.40	1.34
57	BB	1715	G	C6-N1	6.39	1.44	1.39
21	AA	21	G	C6-N1	6.38	1.44	1.39
21	AA	119	A	C3'-C2'	6.38	1.59	1.52
21	AA	131	A	C1'-N9	6.38	1.58	1.48
21	AA	286	C	C4-N4	6.38	1.39	1.33
21	AA	353	A	N9-C4	-6.38	1.34	1.37
57	BB	191	A	P-O5'	-6.38	1.53	1.59
57	BB	1042	G	C2'-C1'	-6.38	1.46	1.53
57	BB	1966	A	N7-C5	-6.38	1.35	1.39
57	BB	2777	G	C5-C6	-6.38	1.35	1.42
21	AA	1203	C	C4-C5	6.38	1.48	1.43
57	BB	255	A	N9-C8	-6.38	1.32	1.37
57	BB	1651	G	C2-N2	6.38	1.41	1.34
57	BB	2366	A	C5'-C4'	6.38	1.59	1.51
21	AA	487	A	C8-N7	-6.38	1.27	1.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1503	A	C6-N1	6.38	1.40	1.35
23	AW	5	G	O4'-C1'	6.38	1.50	1.41
57	BB	504	A	N9-C4	6.38	1.41	1.37
57	BB	2445	G	P-O5'	-6.38	1.53	1.59
21	AA	517	G	N3-C4	-6.38	1.30	1.35
57	BB	2270	A	C6-N1	6.38	1.40	1.35
57	BB	2502	G	N1-C2	6.38	1.42	1.37
26	AV	66	C	C2'-C1'	-6.38	1.46	1.53
57	BB	745	G	C6-N1	-6.38	1.35	1.39
57	BB	2902	C	C5'-C4'	6.38	1.59	1.51
21	AA	212	G	C8-N7	6.38	1.34	1.30
21	AA	397	A	N9-C8	6.38	1.42	1.37
21	AA	505	G	C8-N7	6.38	1.34	1.30
26	AV	70	G	C2-N3	6.38	1.37	1.32
57	BB	311	A	P-O5'	-6.38	1.53	1.59
57	BB	446	G	C8-N7	6.38	1.34	1.30
57	BB	1166	G	C8-N7	6.38	1.34	1.30
57	BB	1172	C	C2-N3	6.38	1.40	1.35
57	BB	1249	U	N1-C6	6.38	1.43	1.38
57	BB	1764	C	C5'-C4'	6.38	1.59	1.51
57	BB	2505	G	C5'-C4'	6.38	1.59	1.51
57	BB	2809	A	C5'-C4'	-6.38	1.43	1.51
21	AA	555	U	P-O5'	-6.38	1.53	1.59
57	BB	370	G	N9-C8	6.38	1.42	1.37
57	BB	589	U	P-O5'	-6.38	1.53	1.59
21	AA	1445	U	N3-C4	6.37	1.44	1.38
21	AA	1468	A	C2'-C1'	-6.37	1.46	1.53
22	AY	29	A	O3'-P	-6.37	1.53	1.61
22	AY	75	C	N1-C2	6.37	1.46	1.40
57	BB	925	A	N3-C4	6.37	1.38	1.34
57	BB	1308	A	N9-C8	6.37	1.42	1.37
57	BB	1447	C	C1'-N1	6.37	1.58	1.48
57	BB	2692	G	O4'-C1'	6.37	1.50	1.41
21	AA	362	G	N7-C5	6.37	1.43	1.39
21	AA	527	G	N7-C5	-6.37	1.35	1.39
21	AA	746	A	C5-C4	6.37	1.43	1.38
57	BB	822	G	C5'-C4'	6.37	1.58	1.51
57	BB	2013	A	C6-N1	6.37	1.40	1.35
57	BB	2442	C	C2-N3	-6.37	1.30	1.35
57	BB	682	G	P-O5'	-6.37	1.53	1.59
57	BB	869	G	N7-C5	-6.37	1.35	1.39
57	BB	948	C	C2'-C1'	-6.37	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2052	A	N3-C4	-6.37	1.31	1.34
57	BB	2711	A	N9-C8	-6.37	1.32	1.37
21	AA	54	C	N3-C4	6.37	1.38	1.33
21	AA	1123	U	N3-C4	6.37	1.44	1.38
21	AA	1296	C	C4-N4	-6.37	1.28	1.33
21	AA	1441	A	C3'-C2'	-6.37	1.45	1.52
23	AW	26	A	C6-N1	6.37	1.40	1.35
23	AW	67	C	C4-N4	6.37	1.39	1.33
45	BC	39	SER	CA-CB	6.37	1.62	1.52
16	AE	32	PHE	CG-CD1	6.37	1.48	1.38
21	AA	1014	A	N1-C2	6.37	1.40	1.34
23	AW	29	G	N9-C8	-6.37	1.33	1.37
57	BB	281	C	C2-O2	6.37	1.30	1.24
57	BB	1110	G	N1-C2	6.37	1.42	1.37
21	AA	866	C	C4-N4	6.37	1.39	1.33
21	AA	929	G	C4'-O4'	-6.37	1.37	1.45
21	AA	1448	C	C4'-O4'	6.37	1.53	1.45
57	BB	560	C	N1-C2	6.37	1.46	1.40
57	BB	1311	G	N9-C8	-6.37	1.33	1.37
57	BB	1436	G	C2'-C1'	-6.37	1.46	1.53
57	BB	2116	G	C5-C6	-6.37	1.35	1.42
57	BB	1110	G	C2'-C1'	-6.36	1.46	1.53
57	BB	1360	G	C4'-C3'	6.36	1.60	1.53
57	BB	1778	U	O3'-P	-6.36	1.53	1.61
57	BB	351	C	O4'-C1'	6.36	1.50	1.41
57	BB	1409	U	C2-O2	6.36	1.28	1.22
57	BB	2102	G	C1'-N9	6.36	1.58	1.48
21	AA	943	U	N1-C6	6.36	1.43	1.38
21	AA	1113	C	C4-N4	6.36	1.39	1.33
21	AA	1356	G	N1-C2	6.36	1.42	1.37
21	AA	1404	C	C2'-C1'	-6.36	1.46	1.53
24	AX	18	G	C5'-C4'	6.36	1.58	1.51
57	BB	379	G	C6-N1	-6.36	1.35	1.39
57	BB	1441	G	C8-N7	-6.36	1.27	1.30
57	BB	1602	U	C4-C5	6.36	1.49	1.43
57	BB	2472	G	N7-C5	-6.36	1.35	1.39
57	BB	1493	C	C3'-C2'	6.36	1.59	1.52
2	AK	127	ARG	NE-CZ	6.36	1.41	1.33
21	AA	620	C	C1'-N1	6.36	1.58	1.48
21	AA	1059	C	C2-N3	6.36	1.40	1.35
21	AA	1102	A	C6-N6	6.36	1.39	1.33
57	BB	289	G	C5-C4	6.36	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1551	A	C2'-C1'	-6.36	1.46	1.53
57	BB	2039	U	C5-C6	-6.36	1.28	1.34
57	BB	2189	U	C5'-C4'	6.36	1.58	1.51
21	AA	51	A	C4'-O4'	-6.36	1.37	1.45
21	AA	359	G	C8-N7	-6.36	1.27	1.30
57	BB	430	A	C4'-O4'	-6.36	1.37	1.45
57	BB	1407	G	N1-C2	6.36	1.42	1.37
21	AA	423	G	N3-C4	-6.35	1.31	1.35
57	BB	174	U	O3'-P	-6.35	1.53	1.61
57	BB	351	C	N3-C4	6.35	1.38	1.33
57	BB	1181	U	C5-C6	6.35	1.39	1.34
57	BB	1440	U	P-O5'	-6.35	1.53	1.59
6	AO	87	ARG	CZ-NH2	6.35	1.41	1.33
21	AA	14	U	C2-N3	6.35	1.42	1.37
21	AA	732	C	N1-C6	-6.35	1.33	1.37
21	AA	838	G	N1-C2	6.35	1.42	1.37
21	AA	1232	U	N1-C2	-6.35	1.32	1.38
57	BB	79	C	N1-C6	6.35	1.41	1.37
57	BB	517	C	C4'-C3'	6.35	1.60	1.53
57	BB	1864	U	C4-O4	6.35	1.28	1.23
21	AA	1228	C	N1-C6	6.35	1.41	1.37
21	AA	1395	C	P-O5'	-6.35	1.53	1.59
22	AY	33	U	C4'-O4'	-6.35	1.37	1.45
37	BR	79	ARG	CD-NE	6.35	1.57	1.46
57	BB	541	A	N9-C4	-6.35	1.34	1.37
57	BB	797	G	C2-N3	6.35	1.37	1.32
57	BB	1998	A	C2'-C1'	-6.35	1.46	1.53
21	AA	109	A	C2-N3	6.35	1.39	1.33
21	AA	194	C	N1-C6	6.35	1.41	1.37
21	AA	1106	G	N3-C4	6.35	1.39	1.35
21	AA	1187	G	P-O5'	-6.35	1.53	1.59
21	AA	1231	G	C6-N1	6.35	1.44	1.39
21	AA	1475	G	C8-N7	-6.35	1.27	1.30
45	BC	102	TYR	CD1-CE1	6.35	1.48	1.39
57	BB	344	A	C6-N6	6.35	1.39	1.33
57	BB	1307	A	N7-C5	6.35	1.43	1.39
57	BB	1419	A	C5-C4	-6.35	1.34	1.38
57	BB	2867	G	C4'-O4'	-6.35	1.37	1.45
57	BB	403	U	C2'-C1'	-6.35	1.46	1.53
57	BB	1147	A	N7-C5	-6.35	1.35	1.39
57	BB	1218	G	N7-C5	-6.35	1.35	1.39
57	BB	2642	G	C8-N7	6.35	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	56	U	C2'-C1'	-6.35	1.46	1.53
21	AA	773	G	N9-C8	-6.35	1.33	1.37
21	AA	1525	G	C2-N2	6.35	1.40	1.34
57	BB	35	G	C5-C4	6.35	1.42	1.38
57	BB	1240	U	N1-C2	6.35	1.44	1.38
16	AE	94	PHE	CB-CG	6.34	1.62	1.51
21	AA	48	C	N3-C4	-6.34	1.29	1.33
21	AA	400	C	C4-N4	6.34	1.39	1.33
21	AA	439	U	N1-C6	-6.34	1.32	1.38
21	AA	488	C	N3-C4	6.34	1.38	1.33
22	AY	54	U	C3'-C2'	6.34	1.59	1.52
57	BB	727	A	C5'-C4'	6.34	1.58	1.51
57	BB	2239	G	O3'-P	-6.34	1.53	1.61
57	BB	2559	C	C4-C5	6.34	1.48	1.43
21	AA	631	C	C2-N3	6.34	1.40	1.35
57	BB	1508	A	C6-N6	6.34	1.39	1.33
14	AC	171	ARG	CD-NE	6.34	1.57	1.46
21	AA	1055	A	N9-C4	-6.34	1.34	1.37
21	AA	1150	A	C8-N7	-6.34	1.27	1.31
21	AA	1516	G	N9-C4	6.34	1.43	1.38
21	AA	1523	G	N9-C4	-6.34	1.32	1.38
23	AW	17	C	C4-N4	6.34	1.39	1.33
57	BB	453	A	O5'-C5'	6.34	1.54	1.44
57	BB	570	G	N1-C2	6.34	1.42	1.37
57	BB	835	C	C4'-C3'	6.34	1.60	1.53
57	BB	1190	G	N3-C4	-6.34	1.31	1.35
57	BB	1205	A	N1-C2	6.34	1.40	1.34
57	BB	1406	U	C3'-C2'	-6.34	1.45	1.52
57	BB	1703	G	N1-C2	6.34	1.42	1.37
57	BB	1893	C	N3-C4	6.34	1.38	1.33
57	BB	2092	U	N1-C2	6.34	1.44	1.38
57	BB	2474	U	C4-C5	6.34	1.49	1.43
21	AA	714	G	N9-C8	6.34	1.42	1.37
21	AA	969	A	C5'-C4'	-6.34	1.43	1.51
57	BB	1252	G	N7-C5	-6.34	1.35	1.39
57	BB	1908	C	C4-N4	6.34	1.39	1.33
57	BB	1937	A	C6-N6	6.34	1.39	1.33
57	BB	2289	G	P-O5'	-6.34	1.53	1.59
57	BB	2596	U	C3'-C2'	-6.34	1.45	1.52
57	BB	2824	C	C4-N4	6.34	1.39	1.33
58	BA	37	C	N3-C4	6.34	1.38	1.33
21	AA	648	A	N1-C2	6.34	1.40	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1198	U	C4'-C3'	6.34	1.60	1.53
21	AA	503	C	C4'-C3'	-6.34	1.46	1.53
21	AA	596	A	C6-N6	6.34	1.39	1.33
21	AA	766	A	C6-N6	6.34	1.39	1.33
21	AA	1432	G	C4'-C3'	6.34	1.60	1.53
57	BB	753	A	C5-C4	6.34	1.43	1.38
57	BB	790	U	C4-O4	6.34	1.28	1.23
57	BB	1316	U	C4'-O4'	6.34	1.53	1.45
57	BB	2240	U	C4-C5	6.34	1.49	1.43
57	BB	2461	A	C6-N6	6.34	1.39	1.33
21	AA	1035	A	C5-C4	6.33	1.43	1.38
57	BB	1423	G	N9-C4	-6.33	1.32	1.38
21	AA	199	A	N1-C2	6.33	1.40	1.34
21	AA	509	A	C6-N1	6.33	1.40	1.35
22	AY	20	G	C5-C4	6.33	1.42	1.38
57	BB	73	A	C2'-C1'	-6.33	1.46	1.53
57	BB	701	G	C5-C6	-6.33	1.36	1.42
57	BB	1906	G	C2-N2	6.33	1.40	1.34
57	BB	1913	A	C5-C4	6.33	1.43	1.38
57	BB	2046	G	C8-N7	-6.33	1.27	1.30
57	BB	2629	U	N1-C6	-6.33	1.32	1.38
57	BB	2846	G	N9-C8	-6.33	1.33	1.37
58	BA	54	G	C2-N2	6.33	1.40	1.34
23	AW	16	U	C5'-C4'	6.33	1.58	1.51
23	AW	27	G	C6-N1	6.33	1.44	1.39
26	AV	70	G	N7-C5	6.33	1.43	1.39
57	BB	50	U	C1'-N1	6.33	1.58	1.48
57	BB	1003	G	N7-C5	-6.33	1.35	1.39
57	BB	1651	G	C4'-C3'	6.33	1.60	1.53
57	BB	2079	U	O4'-C1'	-6.33	1.33	1.41
21	AA	990	C	C4-N4	6.33	1.39	1.33
57	BB	1078	U	C2-N3	6.33	1.42	1.37
57	BB	2471	A	C4'-C3'	6.33	1.60	1.53
21	AA	122	G	P-O5'	-6.33	1.53	1.59
21	AA	1182	G	P-O5'	-6.33	1.53	1.59
23	AW	9	A	C5'-C4'	6.33	1.58	1.51
54	BF	114	ARG	CD-NE	6.33	1.57	1.46
57	BB	86	G	P-O5'	-6.33	1.53	1.59
57	BB	395	U	C4'-C3'	6.33	1.60	1.53
57	BB	1031	G	C2'-C1'	-6.33	1.46	1.53
57	BB	1200	C	C2'-C1'	-6.33	1.46	1.53
57	BB	1223	G	O4'-C1'	-6.33	1.33	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1237	A	C6-N6	6.33	1.39	1.33
57	BB	1950	G	C5-C4	6.33	1.42	1.38
25	AZ	223	ARG	CZ-NH2	6.33	1.41	1.33
57	BB	2722	G	C5'-C4'	6.33	1.58	1.51
21	AA	164	G	N3-C4	-6.33	1.31	1.35
21	AA	408	A	N9-C4	-6.33	1.34	1.37
21	AA	689	C	C2'-C1'	-6.33	1.46	1.53
21	AA	1206	G	C2-N3	6.33	1.37	1.32
23	AW	9	A	N3-C4	-6.33	1.31	1.34
57	BB	813	U	C4'-C3'	6.33	1.60	1.53
57	BB	1840	G	C5-C4	6.33	1.42	1.38
57	BB	2784	U	C2'-C1'	-6.33	1.46	1.53
20	AI	44	ARG	CZ-NH2	6.32	1.41	1.33
21	AA	971	G	C2-N2	6.32	1.40	1.34
57	BB	226	A	C4'-C3'	-6.32	1.46	1.53
57	BB	425	G	C8-N7	-6.32	1.27	1.30
57	BB	488	G	C4'-C3'	-6.32	1.46	1.53
57	BB	1637	A	C6-N1	6.32	1.40	1.35
57	BB	2253	G	C8-N7	6.32	1.34	1.30
57	BB	2682	A	O3'-P	-6.32	1.53	1.61
57	BB	2846	G	P-O5'	6.32	1.66	1.59
21	AA	1246	A	N7-C5	-6.32	1.35	1.39
23	AW	52	G	N3-C4	-6.32	1.31	1.35
57	BB	710	U	C2'-C1'	-6.32	1.46	1.53
21	AA	408	A	N1-C2	-6.32	1.28	1.34
21	AA	426	U	P-O5'	-6.32	1.53	1.59
21	AA	1474	U	C3'-C2'	-6.32	1.45	1.52
26	AV	76	A	C5'-C4'	6.32	1.58	1.51
45	BC	261	ARG	CD-NE	6.32	1.57	1.46
57	BB	1528	A	C2'-C1'	-6.32	1.46	1.53
57	BB	1550	C	N3-C4	-6.32	1.29	1.33
57	BB	2367	G	C2-N2	6.32	1.40	1.34
57	BB	2395	C	C4-N4	6.32	1.39	1.33
57	BB	2503	A	C6-N6	6.32	1.39	1.33
57	BB	2864	G	N1-C2	6.32	1.42	1.37
21	AA	347	G	N1-C2	6.32	1.42	1.37
21	AA	1041	G	O3'-P	-6.32	1.53	1.61
21	AA	1403	C	N1-C6	6.32	1.41	1.37
21	AA	1518	A	N7-C5	-6.32	1.35	1.39
57	BB	35	G	C2'-C1'	6.32	1.60	1.53
57	BB	781	A	N9-C8	6.32	1.42	1.37
57	BB	1117	C	C2'-C1'	-6.32	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1188	U	C4'-C3'	6.32	1.60	1.53
57	BB	1353	A	N3-C4	-6.32	1.31	1.34
57	BB	2443	C	P-O5'	-6.32	1.53	1.59
1	AJ	65	TYR	CZ-OH	6.32	1.48	1.37
21	AA	810	C	N1-C6	6.32	1.41	1.37
57	BB	335	C	C4-C5	6.32	1.48	1.43
57	BB	464	U	C4-C5	6.32	1.49	1.43
57	BB	1562	U	C2-N3	6.32	1.42	1.37
57	BB	1931	U	C5'-C4'	6.32	1.58	1.51
57	BB	2480	C	C4-N4	6.32	1.39	1.33
57	BB	2639	A	N9-C4	6.32	1.41	1.37
21	AA	620	C	C4-C5	6.32	1.48	1.43
21	AA	905	U	N3-C4	6.32	1.44	1.38
57	BB	71	A	C6-N1	6.32	1.40	1.35
57	BB	353	C	C2-O2	6.32	1.30	1.24
57	BB	657	U	O4'-C1'	-6.32	1.33	1.41
57	BB	811	U	N1-C6	-6.32	1.32	1.38
57	BB	1055	G	C6-N1	6.32	1.44	1.39
57	BB	2690	U	P-O5'	-6.32	1.53	1.59
10	AS	31	ARG	CZ-NH2	6.31	1.41	1.33
57	BB	2587	A	N1-C2	6.31	1.40	1.34
20	AI	112	ARG	CZ-NH1	6.31	1.41	1.33
21	AA	70	U	C4-O4	-6.31	1.18	1.23
21	AA	309	A	C4'-O4'	6.31	1.53	1.45
21	AA	1417	G	C2'-C1'	-6.31	1.46	1.53
21	AA	1482	G	O3'-P	-6.31	1.53	1.61
57	BB	402	A	O4'-C1'	-6.31	1.33	1.41
57	BB	974	G	C2-N3	6.31	1.37	1.32
57	BB	982	C	C4-N4	6.31	1.39	1.33
57	BB	1464	G	C2'-O2'	-6.31	1.33	1.41
57	BB	1700	A	N7-C5	-6.31	1.35	1.39
57	BB	2161	C	C4-C5	-6.31	1.38	1.43
57	BB	2901	C	C4-C5	6.31	1.48	1.43
21	AA	457	G	C5-C6	6.31	1.48	1.42
21	AA	779	C	C2-N3	6.31	1.40	1.35
21	AA	798	U	C4-O4	-6.31	1.18	1.23
57	BB	700	G	C8-N7	6.31	1.34	1.30
57	BB	1693	U	C5-C6	6.31	1.39	1.34
57	BB	1725	U	C4'-O4'	6.31	1.53	1.45
21	AA	407	U	C2-N3	6.31	1.42	1.37
21	AA	430	A	C4'-C3'	-6.31	1.46	1.53
23	AW	52	G	C5-C4	6.31	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	62	U	C2-N3	6.31	1.42	1.37
57	BB	203	A	C5-C4	-6.31	1.34	1.38
57	BB	1116	G	C8-N7	6.31	1.34	1.30
58	BA	66	A	C5-C4	6.31	1.43	1.38
15	AD	43	ARG	CZ-NH1	6.31	1.41	1.33
17	AF	40	GLU	CD-OE1	6.31	1.32	1.25
22	AY	45	G	C6-N1	-6.31	1.35	1.39
26	AV	37	A	C8-N7	-6.31	1.27	1.31
57	BB	1827	U	N3-C4	6.31	1.44	1.38
57	BB	2214	C	N1-C2	6.31	1.46	1.40
57	BB	2250	G	N3-C4	-6.31	1.31	1.35
21	AA	441	A	N9-C8	6.31	1.42	1.37
57	BB	451	U	N3-C4	-6.31	1.32	1.38
57	BB	1131	G	N7-C5	6.31	1.43	1.39
21	AA	475	C	C2-O2	6.30	1.30	1.24
21	AA	924	C	C2'-C1'	-6.30	1.46	1.53
21	AA	1364	U	N1-C2	6.30	1.44	1.38
57	BB	149	A	C4'-O4'	-6.30	1.37	1.45
57	BB	908	C	N1-C6	6.30	1.41	1.37
57	BB	2253	G	C2'-C1'	6.30	1.60	1.53
57	BB	2322	A	N9-C8	6.30	1.42	1.37
57	BB	2337	G	C5'-C4'	6.30	1.58	1.51
57	BB	2690	U	C5'-C4'	6.30	1.58	1.51
57	BB	1025	G	C4'-C3'	6.30	1.60	1.53
57	BB	1807	G	C2-N3	6.30	1.37	1.32
57	BB	2212	A	N7-C5	-6.30	1.35	1.39
21	AA	892	A	P-O5'	-6.30	1.53	1.59
57	BB	628	G	C8-N7	-6.30	1.27	1.30
57	BB	1442	U	P-O5'	-6.30	1.53	1.59
57	BB	1783	A	C8-N7	-6.30	1.27	1.31
15	AD	127	ARG	CZ-NH1	6.30	1.41	1.33
21	AA	715	A	C8-N7	-6.30	1.27	1.31
21	AA	1047	G	C2-N2	6.30	1.40	1.34
57	BB	742	A	C6-N6	6.30	1.39	1.33
57	BB	904	G	O3'-P	-6.30	1.53	1.61
57	BB	1547	C	O3'-P	-6.30	1.53	1.61
58	BA	98	G	C2-N2	6.30	1.40	1.34
57	BB	277	G	C2'-C1'	6.30	1.60	1.53
57	BB	1747	U	O3'-P	-6.30	1.53	1.61
21	AA	59	A	C6-N1	6.30	1.40	1.35
21	AA	413	G	C1'-N9	-6.30	1.38	1.46
21	AA	773	G	C5'-C4'	6.30	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	944	G	C8-N7	-6.30	1.27	1.30
21	AA	1305	G	C2'-C1'	-6.30	1.46	1.53
57	BB	1042	G	C4'-O4'	6.30	1.53	1.45
57	BB	2883	A	C8-N7	-6.30	1.27	1.31
21	AA	667	G	C4'-C3'	-6.29	1.46	1.53
57	BB	638	G	C3'-C2'	-6.29	1.45	1.52
57	BB	1883	U	C5'-C4'	6.29	1.58	1.51
57	BB	2899	A	C5-C6	-6.29	1.35	1.41
21	AA	310	G	C5-C4	6.29	1.42	1.38
21	AA	556	C	N3-C4	6.29	1.38	1.33
21	AA	865	A	C6-N6	6.29	1.39	1.33
21	AA	1450	U	O3'-P	-6.29	1.53	1.61
24	AX	21	C	C4-N4	6.29	1.39	1.33
57	BB	918	A	P-O5'	-6.29	1.53	1.59
57	BB	1054	A	C2'-C1'	-6.29	1.46	1.53
21	AA	109	A	P-O5'	-6.29	1.53	1.59
57	BB	278	A	C8-N7	-6.29	1.27	1.31
57	BB	1381	G	N1-C2	6.29	1.42	1.37
57	BB	2006	C	C3'-C2'	-6.29	1.45	1.52
58	BA	115	A	C4'-C3'	6.29	1.60	1.53
21	AA	296	U	O4'-C1'	-6.29	1.33	1.41
21	AA	346	G	N1-C2	6.29	1.42	1.37
21	AA	771	G	C4'-O4'	6.29	1.53	1.45
21	AA	1329	A	C4'-C3'	6.29	1.60	1.53
57	BB	618	G	N3-C4	6.29	1.39	1.35
57	BB	2231	U	C2'-C1'	-6.29	1.46	1.53
21	AA	1522	U	C2'-C1'	-6.29	1.46	1.53
23	AW	20	U	C4'-C3'	-6.29	1.46	1.53
57	BB	119	A	C4'-C3'	6.29	1.60	1.53
57	BB	1093	G	C2'-C1'	-6.29	1.46	1.53
57	BB	1220	G	P-O5'	-6.29	1.53	1.59
57	BB	1854	A	P-O5'	-6.29	1.53	1.59
21	AA	1260	G	C2-N3	6.29	1.37	1.32
23	AW	53	G	N9-C4	-6.29	1.32	1.38
57	BB	1776	G	N3-C4	-6.29	1.31	1.35
57	BB	2573	C	C1'-N1	6.29	1.58	1.48
57	BB	2773	C	O3'-P	6.29	1.68	1.61
21	AA	637	C	C4'-C3'	6.29	1.60	1.53
21	AA	973	G	N7-C5	-6.29	1.35	1.39
57	BB	515	A	C6-N6	6.29	1.39	1.33
57	BB	863	A	C6-N6	6.29	1.39	1.33
57	BB	1131	G	C5'-C4'	6.29	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1964	G	C5-C4	-6.29	1.33	1.38
57	BB	2294	G	C5-C6	-6.29	1.36	1.42
57	BB	2475	C	O4'-C1'	6.29	1.49	1.41
21	AA	32	A	N3-C4	-6.28	1.31	1.34
21	AA	123	U	C2-N3	6.28	1.42	1.37
21	AA	978	A	C6-N1	-6.28	1.31	1.35
57	BB	66	C	O4'-C1'	6.28	1.49	1.41
57	BB	418	C	C4-N4	6.28	1.39	1.33
57	BB	1166	G	N7-C5	-6.28	1.35	1.39
57	BB	1889	A	N7-C5	-6.28	1.35	1.39
57	BB	2245	U	N3-C4	6.28	1.44	1.38
57	BB	1182	G	N7-C5	-6.28	1.35	1.39
57	BB	1183	U	C3'-C2'	-6.28	1.45	1.52
57	BB	2529	G	O3'-P	-6.28	1.53	1.61
21	AA	1220	G	C2-N2	6.28	1.40	1.34
57	BB	118	A	N7-C5	-6.28	1.35	1.39
57	BB	918	A	N1-C2	6.28	1.40	1.34
57	BB	1763	G	C2-N2	6.28	1.40	1.34
57	BB	1924	C	C5-C6	6.28	1.39	1.34
57	BB	2437	G	P-O5'	-6.28	1.53	1.59
57	BB	2618	G	C6-N1	6.28	1.44	1.39
21	AA	252	U	N1-C6	6.28	1.43	1.38
57	BB	878	A	N9-C4	6.28	1.41	1.37
57	BB	2438	U	C4-C5	6.28	1.49	1.43
21	AA	88	U	C2'-C1'	-6.28	1.46	1.53
21	AA	367	U	C2'-C1'	-6.28	1.46	1.53
21	AA	386	C	N3-C4	6.28	1.38	1.33
21	AA	428	G	C1'-N9	-6.28	1.38	1.46
21	AA	526	C	N1-C6	6.28	1.41	1.37
21	AA	1500	A	C2'-C1'	-6.28	1.46	1.53
22	AY	42	G	N9-C8	6.28	1.42	1.37
26	AV	17	C	P-O5'	-6.28	1.53	1.59
57	BB	312	G	C2'-C1'	-6.28	1.46	1.53
57	BB	1173	U	C2'-C1'	-6.28	1.46	1.53
57	BB	1480	C	C2-N3	6.28	1.40	1.35
57	BB	1506	U	N3-C4	6.28	1.44	1.38
21	AA	1222	G	C5'-C4'	6.27	1.58	1.51
41	BV	9	ARG	NE-CZ	6.27	1.41	1.33
57	BB	189	G	C8-N7	-6.27	1.27	1.30
57	BB	837	C	C2'-C1'	-6.27	1.46	1.53
57	BB	969	G	N9-C8	6.27	1.42	1.37
57	BB	1216	G	N7-C5	-6.27	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1532	A	C2-N3	6.27	1.39	1.33
21	AA	374	A	C4'-O4'	6.27	1.53	1.45
57	BB	74	A	C6-N6	6.27	1.39	1.33
57	BB	535	G	P-O5'	-6.27	1.53	1.59
57	BB	1465	G	C8-N7	-6.27	1.27	1.30
57	BB	2280	G	N7-C5	-6.27	1.35	1.39
21	AA	335	C	C4'-O4'	-6.27	1.37	1.45
21	AA	934	C	N1-C6	6.27	1.41	1.37
21	AA	1160	G	C2-N2	6.27	1.40	1.34
57	BB	1213	A	P-O5'	-6.27	1.53	1.59
57	BB	1380	G	N1-C2	6.27	1.42	1.37
57	BB	1514	G	C2'-C1'	-6.27	1.46	1.53
21	AA	633	G	P-O5'	-6.27	1.53	1.59
57	BB	708	G	P-O5'	-6.27	1.53	1.59
57	BB	943	A	N9-C4	-6.27	1.34	1.37
57	BB	1433	A	N1-C2	6.27	1.40	1.34
57	BB	1513	U	N1-C2	6.27	1.44	1.38
57	BB	2618	G	C2-N3	6.27	1.37	1.32
57	BB	2620	C	C2-N3	6.27	1.40	1.35
58	BA	30	C	C5'-C4'	6.27	1.58	1.51
58	BA	117	G	C6-O6	6.27	1.29	1.24
21	AA	7	A	C5'-C4'	6.27	1.58	1.51
21	AA	361	G	N1-C2	6.27	1.42	1.37
21	AA	1171	A	C5-C4	6.27	1.43	1.38
21	AA	1286	U	O3'-P	-6.27	1.53	1.61
22	AY	32	C	C4'-C3'	-6.27	1.46	1.53
57	BB	1180	U	C5'-C4'	6.27	1.58	1.51
57	BB	1254	A	C5-C4	6.27	1.43	1.38
57	BB	2675	A	P-O5'	-6.27	1.53	1.59
21	AA	988	G	C4'-C3'	6.27	1.60	1.53
57	BB	223	A	C8-N7	-6.27	1.27	1.31
57	BB	323	C	C2-N3	-6.27	1.30	1.35
57	BB	511	U	C5-C6	6.27	1.39	1.34
57	BB	2218	G	C2'-C1'	-6.27	1.46	1.53
57	BB	2250	G	N9-C4	6.27	1.43	1.38
16	AE	103	GLY	N-CA	-6.26	1.36	1.46
21	AA	1002	G	C2'-C1'	-6.26	1.46	1.53
21	AA	1247	U	C4'-C3'	6.26	1.60	1.53
57	BB	1084	A	O3'-P	-6.26	1.53	1.61
57	BB	1346	G	C2-N3	6.26	1.37	1.32
57	BB	1486	U	C4-O4	6.26	1.28	1.23
57	BB	1920	C	N3-C4	6.26	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2147	A	C2-N3	6.26	1.39	1.33
57	BB	2675	A	N7-C5	-6.26	1.35	1.39
57	BB	2103	C	C2'-C1'	-6.26	1.46	1.53
57	BB	2383	G	N1-C2	6.26	1.42	1.37
21	AA	162	A	C5'-C4'	6.26	1.58	1.51
21	AA	259	G	O4'-C1'	-6.26	1.33	1.41
21	AA	397	A	C5-C4	6.26	1.43	1.38
25	AZ	81	CYS	CB-SG	6.26	1.92	1.82
57	BB	2549	G	N7-C5	-6.26	1.35	1.39
57	BB	2645	G	C8-N7	-6.26	1.27	1.30
21	AA	277	C	P-O5'	-6.26	1.53	1.59
21	AA	849	G	N9-C4	-6.26	1.32	1.38
21	AA	1124	G	C2'-C1'	-6.26	1.46	1.53
57	BB	785	G	C5-C4	6.26	1.42	1.38
57	BB	824	U	C4-C5	-6.26	1.38	1.43
57	BB	1140	C	O3'-P	-6.26	1.53	1.61
57	BB	1264	A	C3'-O3'	6.26	1.50	1.42
21	AA	1507	A	N9-C4	6.26	1.41	1.37
57	BB	22	C	O3'-P	-6.26	1.53	1.61
57	BB	2289	G	N9-C8	6.26	1.42	1.37
57	BB	2889	C	N3-C4	-6.26	1.29	1.33
21	AA	264	C	C4-N4	6.26	1.39	1.33
21	AA	724	G	N3-C4	-6.26	1.31	1.35
21	AA	1188	A	C2-N3	-6.26	1.27	1.33
56	BH	139	PHE	CD2-CE2	-6.26	1.26	1.39
57	BB	242	G	N9-C8	-6.26	1.33	1.37
57	BB	1425	G	N7-C5	-6.26	1.35	1.39
57	BB	1589	U	C4'-C3'	-6.26	1.46	1.53
57	BB	2361	G	C8-N7	-6.26	1.27	1.30
57	BB	2860	A	N7-C5	-6.26	1.35	1.39
58	BA	112	G	N9-C4	6.26	1.43	1.38
21	AA	1178	G	C5-C6	-6.25	1.36	1.42
26	AV	22	G	C2-N2	6.25	1.40	1.34
57	BB	116	C	C2'-C1'	-6.25	1.46	1.53
57	BB	449	A	N7-C5	-6.25	1.35	1.39
57	BB	648	G	C5-C4	-6.25	1.33	1.38
57	BB	1796	U	C4-C5	6.25	1.49	1.43
21	AA	443	C	N3-C4	6.25	1.38	1.33
21	AA	1247	U	C4-O4	6.25	1.28	1.23
57	BB	526	A	P-OP1	-6.25	1.38	1.49
57	BB	610	C	N3-C4	6.25	1.38	1.33
57	BB	636	G	O3'-P	-6.25	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1030	C	N3-C4	6.25	1.38	1.33
57	BB	2281	A	O3'-P	-6.25	1.53	1.61
21	AA	1294	G	N9-C8	-6.25	1.33	1.37
21	AA	1380	U	C4'-C3'	-6.25	1.46	1.53
21	AA	1447	A	C4'-C3'	-6.25	1.46	1.53
42	BW	53	GLY	N-CA	-6.25	1.36	1.46
42	BW	76	ARG	CZ-NH1	6.25	1.41	1.33
57	BB	671	C	N3-C4	6.25	1.38	1.33
57	BB	732	C	C5-C6	-6.25	1.29	1.34
57	BB	1214	A	N1-C2	6.25	1.40	1.34
57	BB	2216	G	P-O5'	6.25	1.66	1.59
57	BB	2235	G	C2'-C1'	-6.25	1.46	1.53
19	AH	14	ARG	CD-NE	6.25	1.57	1.46
21	AA	1246	A	C6-N6	6.25	1.39	1.33
21	AA	1288	A	N7-C5	-6.25	1.35	1.39
21	AA	1532	U	C3'-C2'	6.25	1.59	1.52
57	BB	666	A	C4'-O4'	6.25	1.53	1.45
57	BB	943	A	N7-C5	-6.25	1.35	1.39
57	BB	1039	A	C8-N7	-6.25	1.27	1.31
57	BB	1299	G	C5-C4	6.25	1.42	1.38
57	BB	1509	A	N9-C8	6.25	1.42	1.37
57	BB	2511	U	C5'-C4'	6.25	1.58	1.51
21	AA	187	G	N3-C4	6.25	1.39	1.35
21	AA	1048	G	N9-C8	6.25	1.42	1.37
21	AA	1263	C	N3-C4	6.25	1.38	1.33
57	BB	2401	U	N1-C6	-6.25	1.32	1.38
21	AA	444	G	C4'-C3'	6.25	1.60	1.53
21	AA	461	A	N7-C5	-6.25	1.35	1.39
21	AA	582	C	C4'-C3'	6.25	1.60	1.53
21	AA	1525	G	C2'-C1'	-6.25	1.46	1.53
25	AZ	164	GLY	N-CA	-6.25	1.36	1.46
57	BB	719	C	N1-C6	6.25	1.40	1.37
57	BB	892	A	C3'-C2'	-6.25	1.45	1.52
57	BB	1106	G	C2'-O2'	-6.25	1.33	1.41
57	BB	1868	C	C5'-C4'	6.25	1.58	1.51
57	BB	2314	A	N9-C4	6.25	1.41	1.37
57	BB	2340	A	C2-N3	6.25	1.39	1.33
21	AA	958	A	C6-N1	6.25	1.40	1.35
23	AW	28	G	N1-C2	6.25	1.42	1.37
57	BB	597	G	C2-N3	6.25	1.37	1.32
57	BB	1336	A	C8-N7	-6.25	1.27	1.31
57	BB	1792	G	N9-C4	-6.25	1.32	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1882	U	C3'-C2'	-6.25	1.45	1.52
57	BB	1939	U	C3'-C2'	-6.25	1.45	1.52
57	BB	2233	U	C4-C5	-6.25	1.38	1.43
21	AA	879	C	C3'-C2'	-6.24	1.45	1.52
21	AA	1355	G	C2'-C1'	-6.24	1.46	1.53
22	AY	73	A	P-O5'	6.24	1.66	1.59
26	AV	6	G	N3-C4	-6.24	1.31	1.35
57	BB	44	A	N9-C8	-6.24	1.32	1.37
57	BB	75	G	C8-N7	6.24	1.34	1.30
57	BB	730	A	N1-C2	-6.24	1.28	1.34
57	BB	1521	G	N9-C8	6.24	1.42	1.37
57	BB	1996	C	N3-C4	6.24	1.38	1.33
57	BB	2037	A	N9-C8	-6.24	1.32	1.37
57	BB	2097	A	N9-C8	-6.24	1.32	1.37
21	AA	37	U	C2'-C1'	-6.24	1.46	1.53
21	AA	357	G	N3-C4	6.24	1.39	1.35
21	AA	745	G	C2-N3	6.24	1.37	1.32
21	AA	1130	A	C6-N1	-6.24	1.31	1.35
21	AA	1133	G	C2-N3	6.24	1.37	1.32
21	AA	1473	G	N3-C4	6.24	1.39	1.35
57	BB	13	A	C8-N7	-6.24	1.27	1.31
57	BB	182	A	C8-N7	6.24	1.35	1.31
57	BB	232	G	N1-C2	6.24	1.42	1.37
57	BB	295	G	N9-C8	-6.24	1.33	1.37
57	BB	1552	A	C6-N6	6.24	1.39	1.33
57	BB	2006	C	N3-C4	6.24	1.38	1.33
57	BB	2506	U	C1'-N1	6.24	1.58	1.48
21	AA	1032	G	C6-N1	6.24	1.44	1.39
21	AA	1435	G	N9-C4	6.24	1.43	1.38
23	AW	65	G	N9-C8	6.24	1.42	1.37
57	BB	198	C	C1'-N1	6.24	1.58	1.48
57	BB	257	C	N3-C4	6.24	1.38	1.33
57	BB	821	A	C5-C6	6.24	1.46	1.41
57	BB	1143	A	N9-C4	-6.24	1.34	1.37
57	BB	1508	A	O3'-P	-6.24	1.53	1.61
57	BB	1853	A	N9-C8	6.24	1.42	1.37
57	BB	1886	U	C3'-C2'	-6.24	1.45	1.52
57	BB	2169	A	N7-C5	-6.24	1.35	1.39
57	BB	2712	C	N1-C6	6.24	1.40	1.37
21	AA	908	A	C3'-C2'	-6.24	1.45	1.52
36	BQ	54	ARG	CZ-NH1	6.24	1.41	1.33
57	BB	1861	G	N1-C2	6.24	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2102	G	C5-C6	-6.24	1.36	1.42
20	AI	118	ARG	CD-NE	6.24	1.57	1.46
21	AA	727	G	C2'-C1'	-6.24	1.46	1.53
21	AA	1034	G	C5-C4	-6.24	1.33	1.38
57	BB	409	G	C5'-C4'	6.23	1.58	1.51
57	BB	698	C	N1-C6	6.23	1.40	1.37
57	BB	1889	A	C1'-N9	6.23	1.58	1.48
57	BB	29	U	N3-C4	6.23	1.44	1.38
57	BB	450	G	P-O5'	-6.23	1.53	1.59
57	BB	1158	C	N3-C4	6.23	1.38	1.33
57	BB	1190	G	C5-C6	-6.23	1.36	1.42
57	BB	1471	G	N7-C5	-6.23	1.35	1.39
57	BB	2297	A	N9-C8	6.23	1.42	1.37
57	BB	2622	U	C2-O2	6.23	1.27	1.22
57	BB	2759	G	C5-C4	6.23	1.42	1.38
21	AA	321	A	C5-C4	6.23	1.43	1.38
21	AA	1217	C	C2'-C1'	6.23	1.60	1.53
21	AA	1339	A	C4'-C3'	6.23	1.60	1.53
57	BB	58	G	O3'-P	-6.23	1.53	1.61
57	BB	180	G	C6-N1	-6.23	1.35	1.39
57	BB	407	G	P-O5'	-6.23	1.53	1.59
57	BB	1725	U	C4-C5	6.23	1.49	1.43
57	BB	2239	G	N9-C8	-6.23	1.33	1.37
21	AA	247	G	C6-N1	6.23	1.44	1.39
57	BB	153	U	C4-O4	6.23	1.28	1.23
57	BB	2742	G	N3-C4	6.23	1.39	1.35
21	AA	235	C	P-O5'	-6.23	1.53	1.59
21	AA	790	A	N9-C4	6.23	1.41	1.37
21	AA	1014	A	C6-N1	6.23	1.40	1.35
25	AZ	332	PHE	CG-CD1	6.23	1.48	1.38
57	BB	132	G	C2-N3	6.23	1.37	1.32
57	BB	701	G	N9-C4	-6.23	1.32	1.38
57	BB	1332	G	N7-C5	-6.23	1.35	1.39
57	BB	1435	G	C2-N3	6.23	1.37	1.32
57	BB	2740	A	C1'-N9	-6.23	1.38	1.46
21	AA	816	A	N3-C4	-6.23	1.31	1.34
21	AA	852	G	C2-N2	-6.23	1.28	1.34
57	BB	1800	C	C2'-C1'	-6.23	1.46	1.53
57	BB	1887	C	C4'-C3'	6.23	1.59	1.53
57	BB	2511	U	N3-C4	6.23	1.44	1.38
21	AA	1499	A	C8-N7	-6.22	1.27	1.31
57	BB	205	G	O3'-P	-6.22	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	710	U	C2-O2	6.22	1.27	1.22
57	BB	718	A	C5-C4	-6.22	1.34	1.38
57	BB	1084	A	C6-N6	6.22	1.39	1.33
57	BB	1134	A	C6-N6	6.22	1.39	1.33
57	BB	1252	G	C8-N7	-6.22	1.27	1.30
57	BB	1959	G	N9-C8	6.22	1.42	1.37
57	BB	2018	G	C3'-O3'	6.22	1.50	1.42
57	BB	2624	G	N3-C4	-6.22	1.31	1.35
57	BB	2708	G	N1-C2	6.22	1.42	1.37
21	AA	720	C	C4-N4	6.22	1.39	1.33
21	AA	1276	G	N7-C5	-6.22	1.35	1.39
57	BB	703	U	C2'-C1'	-6.22	1.46	1.53
57	BB	1407	G	C6-N1	6.22	1.44	1.39
57	BB	1902	C	C4-C5	6.22	1.48	1.43
57	BB	1953	A	P-O5'	-6.22	1.53	1.59
21	AA	58	C	P-O5'	-6.22	1.53	1.59
21	AA	813	U	N3-C4	6.22	1.44	1.38
57	BB	1640	A	P-O5'	-6.22	1.53	1.59
12	AU	37	TYR	CG-CD2	6.22	1.47	1.39
21	AA	436	C	P-O5'	-6.22	1.53	1.59
21	AA	584	G	C2'-C1'	-6.22	1.46	1.53
21	AA	825	A	C2-N3	6.22	1.39	1.33
22	AY	5	A	C3'-C2'	-6.22	1.46	1.52
22	AY	76	A	C2-N3	-6.22	1.27	1.33
57	BB	2071	A	C6-N6	6.22	1.39	1.33
57	BB	2355	G	P-O5'	-6.22	1.53	1.59
57	BB	2487	G	C2'-C1'	-6.22	1.46	1.53
57	BB	2765	A	N9-C4	6.22	1.41	1.37
21	AA	1220	G	C5-C4	6.22	1.42	1.38
21	AA	1293	C	C4-N4	6.22	1.39	1.33
22	AY	57	G	C4'-O4'	6.22	1.53	1.45
57	BB	1142	A	C6-N6	6.22	1.39	1.33
57	BB	1745	A	C6-N6	6.22	1.39	1.33
57	BB	1968	G	C8-N7	6.22	1.34	1.30
21	AA	392	C	N3-C4	6.22	1.38	1.33
21	AA	473	U	N1-C2	6.22	1.44	1.38
21	AA	663	A	C6-N1	6.22	1.40	1.35
21	AA	769	G	C8-N7	-6.22	1.27	1.30
21	AA	886	G	N9-C8	6.22	1.42	1.37
22	AY	11	C	C4-C5	-6.22	1.38	1.43
22	AY	67	A	C2'-O2'	-6.22	1.33	1.41
57	BB	187	G	O3'-P	-6.22	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	829	A	N7-C5	-6.22	1.35	1.39
57	BB	1094	U	C2'-C1'	-6.22	1.46	1.53
57	BB	1228	G	C5-C6	-6.22	1.36	1.42
57	BB	1719	G	N3-C4	6.22	1.39	1.35
57	BB	1955	U	C1'-N1	6.22	1.58	1.48
57	BB	2202	U	C4-C5	6.22	1.49	1.43
58	BA	59	A	N9-C4	-6.22	1.34	1.37
21	AA	188	C	P-O5'	6.21	1.66	1.59
21	AA	223	A	C2'-C1'	-6.21	1.46	1.53
21	AA	336	A	C6-N6	6.21	1.39	1.33
21	AA	500	G	O3'-P	-6.21	1.53	1.61
21	AA	935	A	C4'-C3'	6.21	1.59	1.53
57	BB	1289	C	C4'-O4'	-6.21	1.37	1.45
57	BB	1508	A	C4'-O4'	-6.21	1.37	1.45
57	BB	1782	U	C2-N3	6.21	1.42	1.37
57	BB	2494	G	C2'-C1'	-6.21	1.46	1.53
57	BB	2631	G	N7-C5	-6.21	1.35	1.39
21	AA	139	A	N9-C4	6.21	1.41	1.37
57	BB	1549	A	C5-C4	-6.21	1.34	1.38
57	BB	2062	A	C5-C6	6.21	1.46	1.41
21	AA	61	G	C1'-N9	-6.21	1.38	1.46
21	AA	109	A	C8-N7	-6.21	1.27	1.31
21	AA	411	A	C5-C6	6.21	1.46	1.41
21	AA	752	G	C6-N1	6.21	1.43	1.39
21	AA	856	C	C4-N4	6.21	1.39	1.33
21	AA	882	C	N3-C4	6.21	1.38	1.33
21	AA	904	U	N3-C4	6.21	1.44	1.38
21	AA	1140	C	C3'-C2'	6.21	1.59	1.52
21	AA	1154	G	N7-C5	-6.21	1.35	1.39
26	AV	74	C	N3-C4	6.21	1.38	1.33
33	BN	4	ARG	CZ-NH1	6.21	1.41	1.33
57	BB	1122	G	C8-N7	-6.21	1.27	1.30
57	BB	1784	A	C6-N6	-6.21	1.28	1.33
57	BB	2753	A	N7-C5	-6.21	1.35	1.39
21	AA	501	C	C4'-O4'	6.21	1.53	1.45
21	AA	777	A	C6-N6	6.21	1.39	1.33
21	AA	1517	G	N9-C4	-6.21	1.32	1.38
57	BB	1628	G	N3-C4	-6.21	1.31	1.35
21	AA	18	C	C4-C5	6.21	1.48	1.43
21	AA	743	A	O3'-P	-6.21	1.53	1.61
21	AA	1286	U	C2-N3	6.21	1.42	1.37
21	AA	1292	G	C5-C4	6.21	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1448	C	C5-C6	-6.21	1.29	1.34
57	BB	704	G	C4'-C3'	-6.21	1.46	1.53
57	BB	1665	A	N7-C5	6.21	1.43	1.39
57	BB	2409	G	C8-N7	-6.21	1.27	1.30
57	BB	2676	C	P-O5'	-6.21	1.53	1.59
21	AA	215	C	C2-N3	6.21	1.40	1.35
21	AA	986	U	C2'-C1'	-6.21	1.46	1.53
21	AA	1212	U	N1-C6	6.21	1.43	1.38
45	BC	270	ARG	CZ-NH1	6.21	1.41	1.33
57	BB	916	G	C5-C4	-6.21	1.34	1.38
57	BB	1019	U	N1-C2	-6.21	1.32	1.38
57	BB	2306	C	N1-C6	6.21	1.40	1.37
21	AA	1457	G	N9-C8	-6.21	1.33	1.37
57	BB	2078	C	C5'-C4'	6.21	1.58	1.51
22	AY	76	A	C2'-C1'	-6.20	1.46	1.53
57	BB	494	G	P-O5'	-6.20	1.53	1.59
57	BB	1060	U	C4'-C3'	-6.20	1.46	1.53
57	BB	1237	A	C5-C6	-6.20	1.35	1.41
57	BB	1511	G	N7-C5	6.20	1.43	1.39
57	BB	1850	G	C4'-C3'	-6.20	1.46	1.53
57	BB	2227	A	N7-C5	6.20	1.43	1.39
57	BB	2510	C	N1-C2	6.20	1.46	1.40
57	BB	2588	G	N3-C4	6.20	1.39	1.35
57	BB	2856	A	C5'-C4'	6.20	1.58	1.51
58	BA	88	C	O4'-C1'	6.20	1.49	1.41
26	AV	67	C	C4'-C3'	-6.20	1.46	1.53
57	BB	43	G	N3-C4	-6.20	1.31	1.35
57	BB	152	A	C6-N1	6.20	1.39	1.35
57	BB	610	C	N1-C6	6.20	1.40	1.37
57	BB	1534	U	C4-C5	6.20	1.49	1.43
57	BB	2902	C	C2-N3	-6.20	1.30	1.35
21	AA	408	A	C6-N1	6.20	1.39	1.35
57	BB	1012	U	N1-C2	6.20	1.44	1.38
57	BB	1130	U	O3'-P	-6.20	1.53	1.61
57	BB	1590	A	N9-C8	-6.20	1.32	1.37
57	BB	1990	C	C4-N4	6.20	1.39	1.33
57	BB	2566	A	N3-C4	-6.20	1.31	1.34
21	AA	36	C	O3'-P	-6.20	1.53	1.61
21	AA	118	U	P-O5'	-6.20	1.53	1.59
21	AA	204	G	N7-C5	-6.20	1.35	1.39
21	AA	255	G	P-O5'	-6.20	1.53	1.59
21	AA	331	G	N1-C2	6.20	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	730	G	N3-C4	6.20	1.39	1.35
21	AA	849	G	O3'-P	-6.20	1.53	1.61
21	AA	973	G	C2'-O2'	-6.20	1.33	1.41
21	AA	996	A	N7-C5	6.20	1.43	1.39
21	AA	1091	U	C4'-C3'	6.20	1.59	1.53
26	AV	63	G	C2-N3	6.20	1.37	1.32
57	BB	895	U	C4'-C3'	6.20	1.59	1.53
57	BB	1355	G	C8-N7	6.20	1.34	1.30
57	BB	1697	G	C2-N3	6.20	1.37	1.32
57	BB	2640	G	O3'-P	-6.20	1.53	1.61
57	BB	2695	U	C5'-C4'	6.20	1.58	1.51
57	BB	2839	G	C2-N2	6.20	1.40	1.34
21	AA	650	G	N3-C4	-6.20	1.31	1.35
21	AA	821	G	C2'-C1'	-6.20	1.46	1.53
57	BB	741	U	C5-C6	6.20	1.39	1.34
57	BB	1501	G	P-O5'	-6.20	1.53	1.59
57	BB	2711	A	C5'-C4'	6.20	1.58	1.51
21	AA	432	A	N3-C4	-6.20	1.31	1.34
21	AA	897	C	C4-C5	6.20	1.48	1.43
21	AA	1359	C	N3-C4	6.20	1.38	1.33
23	AW	11	C	C3'-O3'	6.20	1.50	1.42
45	BC	214	GLY	N-CA	-6.20	1.36	1.46
57	BB	84	A	P-O5'	-6.20	1.53	1.59
57	BB	1396	U	C3'-C2'	-6.20	1.46	1.52
58	BA	32	U	N1-C6	-6.20	1.32	1.38
21	AA	1448	C	C2'-C1'	-6.19	1.46	1.53
21	AA	1453	G	O4'-C1'	6.19	1.49	1.41
57	BB	992	C	C2'-C1'	-6.19	1.46	1.53
57	BB	1308	A	C6-N6	6.19	1.39	1.33
15	AD	19	PHE	CG-CD2	6.19	1.48	1.38
22	AY	73	A	N9-C4	6.19	1.41	1.37
26	AV	38	A	C6-N1	6.19	1.39	1.35
57	BB	1118	C	C4-N4	6.19	1.39	1.33
57	BB	1355	G	C2-N3	6.19	1.37	1.32
57	BB	1761	C	O3'-P	-6.19	1.53	1.61
57	BB	2234	G	N7-C5	-6.19	1.35	1.39
57	BB	2369	A	C3'-O3'	6.19	1.50	1.42
57	BB	2399	G	C2-N2	6.19	1.40	1.34
21	AA	471	U	C5-C6	6.19	1.39	1.34
21	AA	491	G	C4'-C3'	-6.19	1.46	1.53
21	AA	669	G	N1-C2	-6.19	1.32	1.37
21	AA	722	G	N1-C2	6.19	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	941	G	N9-C4	-6.19	1.32	1.38
23	AW	35	A	C3'-C2'	-6.19	1.46	1.52
57	BB	314	C	N1-C6	6.19	1.40	1.37
57	BB	1640	A	C5-C6	6.19	1.46	1.41
57	BB	2231	U	C3'-O3'	6.19	1.50	1.42
11	AT	9	ARG	CZ-NH2	6.19	1.41	1.33
14	AC	155	ARG	CZ-NH1	6.19	1.41	1.33
37	BR	102	SER	CA-CB	6.19	1.62	1.52
57	BB	899	A	C3'-C2'	-6.19	1.46	1.52
57	BB	1290	C	C4-N4	6.19	1.39	1.33
57	BB	1369	G	N1-C2	6.19	1.42	1.37
57	BB	2189	U	O4'-C1'	-6.19	1.33	1.41
57	BB	2450	A	N9-C8	6.19	1.42	1.37
58	BA	27	C	C5'-C4'	6.19	1.58	1.51
58	BA	117	G	C5-C4	6.19	1.42	1.38
21	AA	71	A	C6-N1	6.19	1.39	1.35
21	AA	1378	C	C2-N3	6.19	1.40	1.35
57	BB	342	A	C4'-C3'	-6.19	1.46	1.53
57	BB	476	G	C2-N3	6.19	1.37	1.32
57	BB	2015	A	C5-C4	-6.19	1.34	1.38
22	AY	11	C	C1'-N1	6.19	1.58	1.48
23	AW	19	G	N9-C8	-6.19	1.33	1.37
21	AA	899	C	C2'-C1'	-6.18	1.46	1.53
21	AA	901	A	C8-N7	-6.18	1.27	1.31
57	BB	147	C	N1-C6	-6.18	1.33	1.37
57	BB	580	U	N1-C2	6.18	1.44	1.38
57	BB	701	G	C6-N1	6.18	1.43	1.39
58	BA	81	G	N3-C4	6.18	1.39	1.35
21	AA	37	U	C2-N3	6.18	1.42	1.37
21	AA	179	A	C2-N3	6.18	1.39	1.33
21	AA	276	G	N9-C8	6.18	1.42	1.37
21	AA	947	G	C3'-C2'	-6.18	1.46	1.52
21	AA	950	U	C2'-C1'	-6.18	1.46	1.53
21	AA	1066	C	C4-N4	6.18	1.39	1.33
23	AW	51	U	C5'-C4'	6.18	1.58	1.51
26	AV	67	C	C4'-O4'	-6.18	1.37	1.45
57	BB	68	G	C6-N1	6.18	1.43	1.39
57	BB	667	U	C5'-C4'	6.18	1.58	1.51
57	BB	1011	G	N3-C4	-6.18	1.31	1.35
57	BB	2031	A	C8-N7	6.18	1.35	1.31
57	BB	2224	G	N9-C4	-6.18	1.33	1.38
57	BB	2751	G	C6-N1	6.18	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	BD	59	ARG	CZ-NH2	6.18	1.41	1.33
57	BB	1301	A	N1-C2	6.18	1.40	1.34
57	BB	2521	C	C1'-N1	6.18	1.58	1.48
21	AA	47	C	C4-N4	6.18	1.39	1.33
21	AA	81	A	C3'-C2'	-6.18	1.46	1.52
21	AA	617	G	N7-C5	-6.18	1.35	1.39
21	AA	783	C	C2-N3	-6.18	1.30	1.35
21	AA	1493	A	N3-C4	6.18	1.38	1.34
23	AW	50	U	C5'-C4'	6.18	1.58	1.51
26	AV	26	G	C2'-C1'	-6.18	1.46	1.53
26	AV	64	G	C2-N3	6.18	1.37	1.32
33	BN	27	SER	CB-OG	6.18	1.50	1.42
55	BG	65	GLY	CA-C	-6.18	1.42	1.51
57	BB	910	A	C5-C4	6.18	1.43	1.38
57	BB	1641	A	N7-C5	-6.18	1.35	1.39
57	BB	2546	U	N1-C6	6.18	1.43	1.38
57	BB	2731	G	C2'-C1'	-6.18	1.46	1.53
21	AA	206	C	C5-C6	6.18	1.39	1.34
21	AA	1022	A	C4'-C3'	-6.18	1.46	1.53
57	BB	296	U	C2-O2	6.18	1.27	1.22
57	BB	1347	A	O3'-P	-6.18	1.53	1.61
57	BB	2661	G	N9-C4	-6.18	1.33	1.38
21	AA	1048	G	C3'-C2'	-6.18	1.46	1.52
21	AA	1109	C	C4-N4	6.18	1.39	1.33
22	AY	56	C	C2-N3	-6.18	1.30	1.35
57	BB	1221	C	C5-C6	6.18	1.39	1.34
57	BB	1728	C	C2'-C1'	-6.18	1.46	1.53
57	BB	1901	A	C5-C4	-6.18	1.34	1.38
57	BB	2136	G	C5-C4	6.18	1.42	1.38
57	BB	2524	G	C2'-O2'	-6.18	1.33	1.41
57	BB	2572	A	O4'-C1'	-6.18	1.33	1.41
21	AA	259	G	C2-N2	6.17	1.40	1.34
21	AA	1483	A	O3'-P	-6.17	1.53	1.61
57	BB	1041	G	N7-C5	-6.17	1.35	1.39
57	BB	1573	G	N9-C4	-6.17	1.33	1.38
57	BB	2035	G	N9-C8	-6.17	1.33	1.37
57	BB	2453	A	N9-C8	6.17	1.42	1.37
57	BB	2694	G	C2-N3	6.17	1.37	1.32
38	BS	92	ARG	CD-NE	6.17	1.56	1.46
57	BB	44	A	C8-N7	6.17	1.35	1.31
57	BB	177	G	N9-C8	6.17	1.42	1.37
57	BB	2325	G	N7-C5	-6.17	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2505	G	C6-N1	6.17	1.43	1.39
21	AA	87	C	C4-N4	6.17	1.39	1.33
21	AA	117	G	C2'-C1'	-6.17	1.46	1.53
21	AA	612	C	N1-C2	6.17	1.46	1.40
21	AA	727	G	C8-N7	-6.17	1.27	1.30
21	AA	1515	G	C2'-C1'	-6.17	1.46	1.53
23	AW	19	G	C8-N7	6.17	1.34	1.30
57	BB	418	C	N3-C4	6.17	1.38	1.33
57	BB	620	G	P-O5'	-6.17	1.53	1.59
57	BB	855	G	C2-N3	6.17	1.37	1.32
21	AA	383	A	O3'-P	6.17	1.68	1.61
21	AA	876	C	C2'-C1'	-6.17	1.46	1.53
30	BK	74	SER	CA-CB	6.17	1.62	1.52
57	BB	328	U	C4-C5	6.17	1.49	1.43
57	BB	401	A	N7-C5	-6.17	1.35	1.39
57	BB	1855	U	N1-C2	6.17	1.44	1.38
21	AA	622	A	C8-N7	-6.17	1.27	1.31
21	AA	886	G	N1-C2	6.17	1.42	1.37
21	AA	1000	A	N3-C4	-6.17	1.31	1.34
21	AA	1143	G	C8-N7	-6.17	1.27	1.30
21	AA	1526	G	C2-N3	6.17	1.37	1.32
22	AY	75	C	O3'-P	-6.17	1.53	1.61
57	BB	255	A	C2'-C1'	-6.17	1.46	1.53
57	BB	301	G	P-O5'	6.17	1.66	1.59
57	BB	1283	G	C5'-C4'	6.17	1.58	1.51
57	BB	1941	C	C2'-C1'	-6.17	1.46	1.53
57	BB	2233	U	C5'-C4'	6.17	1.58	1.51
21	AA	413	G	C2-N3	6.17	1.37	1.32
21	AA	598	U	C5'-C4'	6.17	1.58	1.51
21	AA	710	G	N9-C4	-6.17	1.33	1.38
21	AA	1153	G	N3-C4	-6.17	1.31	1.35
23	AW	33	U	C5'-C4'	6.17	1.58	1.51
57	BB	103	A	C8-N7	-6.17	1.27	1.31
57	BB	1771	C	C4-C5	6.17	1.47	1.43
57	BB	1798	U	C2'-C1'	-6.17	1.46	1.53
57	BB	1954	G	C5-C4	-6.17	1.34	1.38
57	BB	2508	G	C2-N3	6.17	1.37	1.32
57	BB	2510	C	C5-C6	-6.17	1.29	1.34
57	BB	2709	G	C5-C6	-6.17	1.36	1.42
57	BB	2803	G	C6-N1	6.17	1.43	1.39
57	BB	2808	G	P-O5'	-6.17	1.53	1.59
21	AA	207	C	N3-C4	6.17	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	618	G	P-O5'	-6.17	1.53	1.59
57	BB	1570	A	C8-N7	-6.17	1.27	1.31
58	BA	68	C	C5'-C4'	6.17	1.58	1.51
16	AE	144	GLU	CG-CD	6.16	1.61	1.51
21	AA	673	A	C3'-C2'	-6.16	1.46	1.52
21	AA	805	C	C2'-C1'	-6.16	1.46	1.53
21	AA	1287	A	O3'-P	-6.16	1.53	1.61
21	AA	1393	U	C2'-C1'	-6.16	1.46	1.53
22	AY	65	G	C8-N7	-6.16	1.27	1.30
57	BB	401	A	C6-N6	6.16	1.38	1.33
57	BB	567	U	N1-C2	6.16	1.44	1.38
57	BB	615	U	N1-C6	6.16	1.43	1.38
57	BB	707	G	N1-C2	6.16	1.42	1.37
57	BB	1018	U	N3-C4	6.16	1.44	1.38
57	BB	1322	A	C3'-O3'	6.16	1.50	1.42
57	BB	1421	G	C2-N2	6.16	1.40	1.34
57	BB	1232	G	N7-C5	-6.16	1.35	1.39
57	BB	1427	A	C2'-C1'	-6.16	1.46	1.53
57	BB	1540	G	C5-C4	6.16	1.42	1.38
57	BB	1938	A	C6-N6	6.16	1.38	1.33
57	BB	2357	G	N7-C5	-6.16	1.35	1.39
21	AA	247	G	N9-C4	6.16	1.42	1.38
21	AA	314	C	C5'-C4'	6.16	1.58	1.51
21	AA	1266	G	C5-C6	-6.16	1.36	1.42
57	BB	626	A	C3'-C2'	-6.16	1.46	1.52
57	BB	730	A	N7-C5	-6.16	1.35	1.39
57	BB	1219	U	N1-C2	6.16	1.44	1.38
58	BA	63	C	C2'-C1'	-6.16	1.46	1.53
21	AA	468	A	C2'-C1'	-6.16	1.46	1.53
21	AA	1236	A	N7-C5	6.16	1.43	1.39
21	AA	1494	G	C2'-C1'	-6.16	1.46	1.53
57	BB	911	A	C3'-C2'	-6.16	1.46	1.52
57	BB	2214	C	C2-O2	-6.16	1.19	1.24
14	AC	126	ARG	CZ-NH2	6.16	1.41	1.33
21	AA	970	C	P-O5'	-6.16	1.53	1.59
21	AA	1362	A	N1-C2	6.16	1.39	1.34
57	BB	387	U	C4'-O4'	-6.16	1.37	1.45
57	BB	1004	U	N1-C6	6.16	1.43	1.38
57	BB	1816	C	N1-C6	6.16	1.40	1.37
21	AA	378	G	N3-C4	-6.16	1.31	1.35
21	AA	597	G	N1-C2	6.16	1.42	1.37
21	AA	784	A	C6-N6	6.16	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1292	G	N3-C4	-6.16	1.31	1.35
22	AY	34	G	O3'-P	-6.16	1.53	1.61
57	BB	43	G	C2-N3	6.16	1.37	1.32
57	BB	454	A	C5'-C4'	6.16	1.58	1.51
57	BB	547	A	O3'-P	-6.16	1.53	1.61
57	BB	635	C	C4-C5	-6.16	1.38	1.43
57	BB	1387	A	C6-N6	6.16	1.38	1.33
57	BB	1706	C	C3'-C2'	-6.16	1.46	1.52
57	BB	1954	G	C2-N2	6.16	1.40	1.34
57	BB	2025	C	C4-C5	6.16	1.47	1.43
58	BA	55	U	P-O5'	-6.16	1.53	1.59
8	AQ	5	ARG	CD-NE	6.15	1.56	1.46
57	BB	277	G	N7-C5	-6.15	1.35	1.39
57	BB	960	A	C8-N7	6.15	1.35	1.31
57	BB	1542	U	C3'-C2'	-6.15	1.46	1.52
57	BB	2514	U	N1-C2	-6.15	1.33	1.38
21	AA	909	A	P-O5'	-6.15	1.53	1.59
21	AA	1025	U	C2'-C1'	-6.15	1.46	1.53
22	AY	21	A	C2-N3	-6.15	1.28	1.33
57	BB	1199	U	C4-C5	6.15	1.49	1.43
57	BB	2675	A	C4'-C3'	-6.15	1.46	1.53
21	AA	29	U	C2'-C1'	-6.15	1.46	1.53
21	AA	1082	A	C6-N1	6.15	1.39	1.35
21	AA	1154	G	C5-C6	-6.15	1.36	1.42
21	AA	1311	A	C8-N7	6.15	1.35	1.31
21	AA	1361	G	N9-C8	-6.15	1.33	1.37
22	AY	22	G	C1'-N9	-6.15	1.38	1.46
23	AW	65	G	C6-N1	6.15	1.43	1.39
57	BB	36	G	N9-C8	6.15	1.42	1.37
57	BB	398	C	C3'-C2'	-6.15	1.46	1.52
57	BB	402	A	O3'-P	-6.15	1.53	1.61
57	BB	695	G	N3-C4	-6.15	1.31	1.35
57	BB	794	A	C8-N7	-6.15	1.27	1.31
57	BB	1523	U	P-O5'	-6.15	1.53	1.59
57	BB	2106	U	N3-C4	6.15	1.44	1.38
57	BB	2724	U	O4'-C1'	-6.15	1.33	1.41
46	BZ	44	ARG	CZ-NH2	6.15	1.41	1.33
57	BB	2490	G	O3'-P	-6.15	1.53	1.61
57	BB	2596	U	C2-N3	6.15	1.42	1.37
21	AA	878	A	N9-C4	6.15	1.41	1.37
21	AA	1019	A	O3'-P	-6.15	1.53	1.61
23	AW	15	G	C4'-C3'	-6.15	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	45	G	C1'-N9	6.15	1.57	1.48
57	BB	316	C	C4'-C3'	6.15	1.59	1.53
57	BB	708	G	O3'-P	-6.15	1.53	1.61
57	BB	1106	G	C1'-N9	6.15	1.57	1.48
57	BB	1123	C	N1-C2	6.15	1.46	1.40
57	BB	1194	A	N3-C4	6.15	1.38	1.34
57	BB	1496	A	N3-C4	6.15	1.38	1.34
57	BB	1560	G	C3'-O3'	6.15	1.50	1.42
57	BB	2084	C	C4'-O4'	6.15	1.53	1.45
57	BB	2482	A	C6-N6	6.15	1.38	1.33
58	BA	10	G	O3'-P	-6.15	1.53	1.61
21	AA	129	A	P-O5'	-6.15	1.53	1.59
21	AA	526	C	N3-C4	6.15	1.38	1.33
21	AA	824	G	C2-N2	6.15	1.40	1.34
28	BI	7	TYR	CG-CD2	6.15	1.47	1.39
57	BB	1219	U	C4-O4	6.15	1.28	1.23
58	BA	19	C	C5-C6	-6.15	1.29	1.34
21	AA	63	C	C5-C6	6.14	1.39	1.34
21	AA	455	G	C5'-C4'	6.14	1.58	1.51
21	AA	853	C	N3-C4	6.14	1.38	1.33
21	AA	921	U	C2'-C1'	-6.14	1.46	1.53
21	AA	999	C	O4'-C1'	6.14	1.49	1.41
21	AA	1263	C	C2-N3	6.14	1.40	1.35
57	BB	397	U	C2'-C1'	-6.14	1.46	1.53
57	BB	1256	G	C2-N3	6.14	1.37	1.32
57	BB	1434	A	C2'-C1'	-6.14	1.46	1.53
57	BB	1586	A	C5-C4	6.14	1.43	1.38
21	AA	57	G	C5-C4	6.14	1.42	1.38
57	BB	124	G	O4'-C1'	-6.14	1.33	1.41
57	BB	1081	U	C2'-C1'	-6.14	1.46	1.53
57	BB	1893	C	C2'-C1'	-6.14	1.46	1.53
57	BB	2553	G	C5-C4	6.14	1.42	1.38
21	AA	231	U	C5-C6	-6.14	1.28	1.34
19	AH	87	ARG	CD-NE	6.14	1.56	1.46
21	AA	347	G	C4'-O4'	6.14	1.53	1.45
21	AA	488	C	N1-C2	6.14	1.46	1.40
21	AA	1288	A	N9-C4	-6.14	1.34	1.37
38	BS	59	GLU	CD-OE1	6.14	1.32	1.25
57	BB	248	G	N7-C5	-6.14	1.35	1.39
57	BB	400	G	C8-N7	-6.14	1.27	1.30
57	BB	726	G	C5'-C4'	6.14	1.58	1.51
57	BB	817	C	C3'-C2'	6.14	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1448	G	N7-C5	-6.14	1.35	1.39
57	BB	2413	G	P-O5'	-6.14	1.53	1.59
57	BB	2899	A	C8-N7	-6.14	1.27	1.31
57	BB	899	A	N9-C4	-6.14	1.34	1.37
57	BB	1497	U	N3-C4	6.14	1.44	1.38
21	AA	52	C	N1-C6	6.14	1.40	1.37
21	AA	82	G	C5'-C4'	6.14	1.58	1.51
21	AA	102	G	C6-N1	6.14	1.43	1.39
21	AA	138	G	N3-C4	-6.14	1.31	1.35
21	AA	532	A	C5-C4	6.14	1.43	1.38
21	AA	679	C	C4-N4	-6.14	1.28	1.33
21	AA	1047	G	N9-C4	6.14	1.42	1.38
23	AW	37	A	C2-N3	6.14	1.39	1.33
57	BB	150	U	C3'-O3'	6.14	1.50	1.42
57	BB	204	A	C5-C6	-6.14	1.35	1.41
57	BB	729	G	C6-O6	6.14	1.29	1.24
57	BB	789	A	N7-C5	-6.14	1.35	1.39
57	BB	801	G	C5-C4	6.14	1.42	1.38
57	BB	1926	U	N3-C4	6.14	1.44	1.38
57	BB	2190	G	C4'-C3'	6.14	1.59	1.53
57	BB	2470	G	N9-C4	-6.14	1.33	1.38
57	BB	2789	C	C4-C5	6.14	1.47	1.43
58	BA	38	C	C4-N4	6.14	1.39	1.33
21	AA	1186	G	C8-N7	6.13	1.34	1.30
21	AA	1338	G	O3'-P	-6.13	1.53	1.61
22	AY	16	U	N3-C4	-6.13	1.32	1.38
57	BB	40	U	N1-C6	6.13	1.43	1.38
57	BB	1278	C	C5-C6	6.13	1.39	1.34
57	BB	1370	C	N1-C6	6.13	1.40	1.37
57	BB	1895	C	C2'-C1'	-6.13	1.46	1.53
57	BB	1921	G	N7-C5	6.13	1.43	1.39
57	BB	2344	U	C1'-N1	6.13	1.57	1.48
57	BB	2389	G	C8-N7	-6.13	1.27	1.30
57	BB	2795	C	P-O5'	-6.13	1.53	1.59
57	BB	2823	A	C2'-C1'	-6.13	1.46	1.53
58	BA	63	C	C4-C5	6.13	1.47	1.43
21	AA	977	A	N1-C2	6.13	1.39	1.34
57	BB	646	U	C5'-C4'	6.13	1.58	1.51
57	BB	1110	G	C6-N1	6.13	1.43	1.39
21	AA	80	A	C6-N1	6.13	1.39	1.35
21	AA	582	C	C4-C5	6.13	1.47	1.43
21	AA	838	G	C5-C4	-6.13	1.34	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	967	C	C2'-C1'	-6.13	1.46	1.53
21	AA	1002	G	N1-C2	6.13	1.42	1.37
21	AA	1013	G	N9-C8	6.13	1.42	1.37
57	BB	98	G	C5-C6	-6.13	1.36	1.42
57	BB	116	C	O3'-P	-6.13	1.53	1.61
57	BB	119	A	N9-C8	-6.13	1.32	1.37
57	BB	158	U	N3-C4	6.13	1.44	1.38
57	BB	853	C	N3-C4	6.13	1.38	1.33
57	BB	1205	A	O4'-C1'	-6.13	1.33	1.41
57	BB	1458	U	C4'-O4'	-6.13	1.37	1.45
57	BB	1480	C	N3-C4	6.13	1.38	1.33
57	BB	1810	A	C5-C4	6.13	1.43	1.38
57	BB	1921	G	C5-C6	-6.13	1.36	1.42
57	BB	2044	C	C3'-O3'	6.13	1.50	1.42
57	BB	2109	U	N1-C2	6.13	1.44	1.38
57	BB	2715	C	C5'-C4'	6.13	1.58	1.51
57	BB	2747	G	N9-C8	6.13	1.42	1.37
57	BB	2866	U	C2'-C1'	-6.13	1.46	1.53
21	AA	298	A	C2-N3	-6.13	1.28	1.33
21	AA	1356	G	C8-N7	-6.13	1.27	1.30
21	AA	1500	A	N7-C5	-6.13	1.35	1.39
57	BB	930	G	C2-N2	6.13	1.40	1.34
57	BB	2168	G	C5'-C4'	6.13	1.58	1.51
57	BB	2616	C	N1-C6	6.13	1.40	1.37
21	AA	318	G	N7-C5	-6.13	1.35	1.39
57	BB	501	A	C6-N6	6.13	1.38	1.33
57	BB	1494	A	N7-C5	-6.13	1.35	1.39
57	BB	2045	C	C2'-C1'	-6.13	1.46	1.53
58	BA	16	G	C4'-O4'	6.13	1.53	1.45
21	AA	619	U	C5-C6	6.13	1.39	1.34
21	AA	669	G	C2-N3	6.13	1.37	1.32
21	AA	903	G	N1-C2	6.13	1.42	1.37
21	AA	1276	G	O3'-P	-6.13	1.53	1.61
26	AV	6	G	C2'-C1'	-6.13	1.46	1.53
57	BB	380	G	N9-C8	-6.13	1.33	1.37
57	BB	469	G	C2'-C1'	-6.13	1.46	1.53
57	BB	981	A	N9-C8	6.13	1.42	1.37
57	BB	2825	G	C5-C6	-6.13	1.36	1.42
21	AA	1023	U	N1-C6	-6.12	1.32	1.38
57	BB	654	A	C6-N1	6.12	1.39	1.35
57	BB	2449	U	O3'-P	-6.12	1.53	1.61
21	AA	265	G	C2-N3	6.12	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	865	A	C5'-C4'	6.12	1.58	1.51
21	AA	1142	G	O3'-P	-6.12	1.53	1.61
22	AY	43	G	N9-C8	6.12	1.42	1.37
55	BG	62	ALA	CA-CB	6.12	1.65	1.52
57	BB	450	G	O3'-P	-6.12	1.53	1.61
57	BB	541	A	C5'-C4'	6.12	1.58	1.51
57	BB	752	A	C8-N7	6.12	1.35	1.31
57	BB	1020	A	C6-N1	6.12	1.39	1.35
57	BB	2046	G	N9-C8	6.12	1.42	1.37
21	AA	237	G	N7-C5	6.12	1.43	1.39
21	AA	624	C	P-O5'	-6.12	1.53	1.59
21	AA	777	A	P-O5'	-6.12	1.53	1.59
21	AA	1019	A	C5-C4	-6.12	1.34	1.38
21	AA	1116	U	C3'-C2'	-6.12	1.46	1.52
52	BD	194	PRO	N-CD	-6.12	1.39	1.47
57	BB	38	A	C4'-C3'	6.12	1.59	1.53
57	BB	1138	G	C2'-C1'	-6.12	1.46	1.53
57	BB	1669	A	N9-C8	6.12	1.42	1.37
57	BB	2669	G	N1-C2	6.12	1.42	1.37
21	AA	1357	A	N9-C4	-6.12	1.34	1.37
57	BB	35	G	C1'-N9	6.12	1.57	1.48
57	BB	795	C	C4-N4	6.12	1.39	1.33
57	BB	924	G	C3'-O3'	6.12	1.50	1.42
57	BB	1831	G	C4'-C3'	-6.12	1.46	1.53
58	BA	41	G	N7-C5	-6.12	1.35	1.39
58	BA	83	G	C4'-C3'	-6.12	1.46	1.53
5	AN	12	ARG	CZ-NH2	6.12	1.41	1.33
21	AA	610	U	C5'-C4'	6.12	1.58	1.51
23	AW	34	G	N1-C2	6.12	1.42	1.37
23	AW	59	U	C4-C5	6.12	1.49	1.43
57	BB	488	G	C5'-C4'	6.12	1.58	1.51
57	BB	858	G	P-O5'	-6.12	1.53	1.59
57	BB	930	G	N9-C8	6.12	1.42	1.37
57	BB	946	C	C5-C6	6.12	1.39	1.34
57	BB	2551	C	N3-C4	6.12	1.38	1.33
57	BB	2676	C	C4-C5	6.12	1.47	1.43
57	BB	2733	A	C2'-C1'	-6.12	1.46	1.53
57	BB	745	G	N1-C2	6.12	1.42	1.37
57	BB	2546	U	C4-C5	6.12	1.49	1.43
57	BB	2704	C	N1-C6	-6.12	1.33	1.37
21	AA	110	C	C3'-C2'	-6.12	1.46	1.52
21	AA	391	G	N9-C4	-6.12	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	7	G	C3'-C2'	6.12	1.59	1.52
57	BB	151	C	O3'-P	-6.12	1.53	1.61
57	BB	1303	G	C2-N2	6.12	1.40	1.34
58	BA	76	G	C2'-C1'	-6.12	1.46	1.53
21	AA	271	C	C5-C6	-6.11	1.29	1.34
21	AA	1359	C	C2'-C1'	-6.11	1.46	1.53
22	AY	64	A	C4'-O4'	-6.11	1.37	1.45
57	BB	1343	G	N3-C4	6.11	1.39	1.35
57	BB	1408	G	N7-C5	6.11	1.43	1.39
57	BB	1847	A	C6-N6	6.11	1.38	1.33
57	BB	2547	A	N7-C5	-6.11	1.35	1.39
21	AA	204	G	C6-N1	6.11	1.43	1.39
57	BB	502	A	C4'-C3'	-6.11	1.46	1.53
57	BB	633	A	C8-N7	-6.11	1.27	1.31
57	BB	931	U	C4-C5	6.11	1.49	1.43
57	BB	2601	C	C2-N3	6.11	1.40	1.35
20	AI	41	GLU	N-CA	-6.11	1.34	1.46
21	AA	196	A	C6-N1	-6.11	1.31	1.35
21	AA	953	G	N9-C8	6.11	1.42	1.37
23	AW	9	A	C2'-C1'	-6.11	1.46	1.53
57	BB	191	A	C2'-C1'	-6.11	1.46	1.53
57	BB	202	U	C2-N3	6.11	1.42	1.37
57	BB	724	U	C2-N3	6.11	1.42	1.37
57	BB	1622	G	C5-C6	-6.11	1.36	1.42
57	BB	1968	G	N1-C2	6.11	1.42	1.37
57	BB	2155	U	C5'-C4'	6.11	1.58	1.51
57	BB	2568	U	C4'-C3'	-6.11	1.46	1.53
21	AA	259	G	N1-C2	6.11	1.42	1.37
57	BB	174	U	N1-C2	6.11	1.44	1.38
57	BB	491	G	P-O5'	-6.11	1.53	1.59
57	BB	1141	U	C2-N3	6.11	1.42	1.37
57	BB	1343	G	C2-N3	6.11	1.37	1.32
57	BB	1623	G	C8-N7	6.11	1.34	1.30
57	BB	1822	C	C2'-O2'	-6.11	1.33	1.41
57	BB	2310	C	O3'-P	-6.11	1.53	1.61
21	AA	384	G	C3'-O3'	6.11	1.50	1.42
26	AV	49	G	O4'-C1'	-6.11	1.33	1.41
57	BB	309	A	N9-C8	6.11	1.42	1.37
57	BB	505	A	C2'-C1'	-6.11	1.46	1.53
57	BB	569	U	P-O5'	-6.11	1.53	1.59
57	BB	587	C	N3-C4	6.11	1.38	1.33
57	BB	988	A	C4'-O4'	6.11	1.53	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1202	G	C8-N7	-6.11	1.27	1.30
57	BB	1453	A	N7-C5	-6.11	1.35	1.39
57	BB	1496	A	N7-C5	-6.11	1.35	1.39
57	BB	1678	A	C8-N7	-6.11	1.27	1.31
57	BB	2093	G	C5'-C4'	-6.11	1.44	1.51
13	AB	166	ASP	CA-CB	6.11	1.67	1.53
21	AA	1141	C	C2'-C1'	-6.11	1.46	1.53
21	AA	1147	C	C4-C5	6.11	1.47	1.43
21	AA	1176	A	P-O5'	-6.11	1.53	1.59
21	AA	1400	C	C3'-O3'	6.11	1.50	1.42
23	AW	34	G	C6-N1	6.11	1.43	1.39
57	BB	346	A	N7-C5	6.11	1.43	1.39
57	BB	366	C	N1-C6	6.11	1.40	1.37
57	BB	599	A	N9-C4	-6.11	1.34	1.37
57	BB	1269	A	N3-C4	-6.11	1.31	1.34
57	BB	2254	C	P-O5'	-6.11	1.53	1.59
57	BB	2315	G	N1-C2	6.11	1.42	1.37
57	BB	2481	G	C4'-C3'	-6.11	1.46	1.53
21	AA	59	A	C5-C4	-6.10	1.34	1.38
57	BB	2141	G	C2'-C1'	-6.10	1.46	1.53
57	BB	2265	U	O3'-P	-6.10	1.53	1.61
21	AA	204	G	C2'-C1'	-6.10	1.46	1.53
21	AA	432	A	C2-N3	6.10	1.39	1.33
21	AA	867	G	C2-N3	6.10	1.37	1.32
57	BB	707	G	C5-C4	6.10	1.42	1.38
57	BB	1533	C	P-O5'	-6.10	1.53	1.59
57	BB	2082	A	C5'-C4'	6.10	1.58	1.51
21	AA	1375	A	C2'-C1'	-6.10	1.46	1.53
57	BB	1081	U	N3-C4	6.10	1.44	1.38
57	BB	1224	U	P-O5'	-6.10	1.53	1.59
57	BB	1304	A	C8-N7	-6.10	1.27	1.31
57	BB	1729	U	C4-C5	-6.10	1.38	1.43
57	BB	2184	A	C5'-C4'	6.10	1.58	1.51
57	BB	2399	G	N9-C8	6.10	1.42	1.37
58	BA	66	A	C6-N6	6.10	1.38	1.33
21	AA	266	G	C2-N3	6.10	1.37	1.32
21	AA	1004	A	N9-C4	6.10	1.41	1.37
21	AA	1279	G	C3'-C2'	-6.10	1.46	1.52
21	AA	1345	U	C2'-C1'	-6.10	1.46	1.53
55	BG	151	ARG	NE-CZ	6.10	1.41	1.33
57	BB	905	A	N9-C4	6.10	1.41	1.37
57	BB	1185	G	C2'-C1'	-6.10	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2819	G	N7-C5	-6.10	1.35	1.39
57	BB	2824	C	N3-C4	6.10	1.38	1.33
21	AA	783	C	C5-C6	-6.10	1.29	1.34
21	AA	1002	G	N9-C4	-6.10	1.33	1.38
21	AA	1254	A	C5-C6	-6.10	1.35	1.41
57	BB	22	C	C2'-C1'	-6.10	1.46	1.53
57	BB	504	A	N3-C4	-6.10	1.31	1.34
57	BB	1120	G	N7-C5	-6.10	1.35	1.39
57	BB	1220	G	C3'-C2'	-6.10	1.46	1.52
57	BB	1392	A	N9-C8	-6.10	1.32	1.37
57	BB	1675	C	N1-C2	6.10	1.46	1.40
58	BA	16	G	C4'-C3'	-6.10	1.46	1.53
5	AN	93	PRO	N-CA	-6.10	1.36	1.47
21	AA	177	G	P-O5'	-6.10	1.53	1.59
21	AA	763	G	N9-C4	6.10	1.42	1.38
21	AA	1277	C	C2-N3	-6.10	1.30	1.35
57	BB	2144	G	C2-N3	6.10	1.37	1.32
21	AA	100	G	C6-N1	6.09	1.43	1.39
21	AA	303	A	C8-N7	-6.09	1.27	1.31
21	AA	712	A	C2'-C1'	-6.09	1.46	1.53
21	AA	819	A	N1-C2	6.09	1.39	1.34
21	AA	822	U	C4-C5	6.09	1.49	1.43
21	AA	1177	G	N1-C2	6.09	1.42	1.37
21	AA	1304	G	C6-N1	6.09	1.43	1.39
57	BB	351	C	P-O5'	-6.09	1.53	1.59
57	BB	1273	U	C4'-O4'	-6.09	1.37	1.45
57	BB	1345	C	C5-C6	-6.09	1.29	1.34
57	BB	2169	A	C5'-C4'	6.09	1.58	1.51
57	BB	2641	G	N9-C8	-6.09	1.33	1.37
57	BB	2744	G	N1-C2	6.09	1.42	1.37
57	BB	2752	C	P-O5'	-6.09	1.53	1.59
21	AA	110	C	C2'-C1'	-6.09	1.46	1.53
57	BB	1427	A	C6-N1	-6.09	1.31	1.35
57	BB	355	U	C5-C6	-6.09	1.28	1.34
57	BB	670	A	N7-C5	-6.09	1.35	1.39
57	BB	2209	G	O3'-P	-6.09	1.53	1.61
21	AA	96	U	N1-C2	6.09	1.44	1.38
21	AA	182	A	C5-C4	6.09	1.43	1.38
21	AA	455	G	N7-C5	-6.09	1.35	1.39
21	AA	530	G	C6-N1	6.09	1.43	1.39
21	AA	604	G	C5-C4	6.09	1.42	1.38
21	AA	728	A	C5-C6	-6.09	1.35	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1065	U	C5'-C4'	6.09	1.58	1.51
57	BB	425	G	C5-C4	-6.09	1.34	1.38
57	BB	1062	G	C3'-O3'	-6.09	1.33	1.42
57	BB	2681	C	C4'-C3'	6.09	1.59	1.53
57	BB	2831	G	O4'-C1'	-6.09	1.33	1.41
21	AA	190	A	N3-C4	-6.09	1.31	1.34
21	AA	254	G	N9-C4	-6.09	1.33	1.38
21	AA	953	G	C3'-O3'	6.09	1.50	1.42
21	AA	1419	G	C8-N7	6.09	1.34	1.30
57	BB	162	U	C2-N3	6.09	1.42	1.37
57	BB	2171	A	P-O5'	-6.09	1.53	1.59
57	BB	2292	U	C2-O2	6.09	1.27	1.22
21	AA	298	A	C6-N6	6.09	1.38	1.33
21	AA	1196	A	C6-N6	6.09	1.38	1.33
57	BB	369	U	N3-C4	6.09	1.44	1.38
57	BB	1113	U	O5'-C5'	6.09	1.54	1.44
57	BB	1433	A	N7-C5	-6.09	1.35	1.39
57	BB	2123	G	C8-N7	6.09	1.34	1.30
21	AA	101	A	C3'-O3'	6.08	1.50	1.42
21	AA	666	G	N9-C4	6.08	1.42	1.38
57	BB	967	U	C4'-O4'	6.08	1.53	1.45
57	BB	1089	A	N1-C2	-6.08	1.28	1.34
21	AA	1290	G	N9-C8	-6.08	1.33	1.37
22	AY	33	U	N1-C6	-6.08	1.32	1.38
22	AY	75	C	C5'-C4'	6.08	1.58	1.51
57	BB	700	G	C6-N1	6.08	1.43	1.39
57	BB	1007	C	C2-N3	6.08	1.40	1.35
57	BB	1322	A	P-O5'	6.08	1.65	1.59
57	BB	1422	G	C3'-C2'	-6.08	1.46	1.52
57	BB	2782	G	C5-C4	-6.08	1.34	1.38
21	AA	120	A	C8-N7	6.08	1.35	1.31
21	AA	131	A	C2'-C1'	-6.08	1.46	1.53
21	AA	605	U	O4'-C1'	-6.08	1.33	1.41
21	AA	768	A	O3'-P	6.08	1.68	1.61
57	BB	83	A	N9-C8	-6.08	1.32	1.37
57	BB	997	G	C2-N2	6.08	1.40	1.34
57	BB	1213	A	C8-N7	-6.08	1.27	1.31
57	BB	1685	C	N1-C6	6.08	1.40	1.37
57	BB	1863	G	C4'-O4'	6.08	1.53	1.45
57	BB	1872	A	C5-C4	-6.08	1.34	1.38
57	BB	2599	G	N9-C8	6.08	1.42	1.37
13	AB	85	SER	CA-CB	6.08	1.62	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	177	G	C6-O6	6.08	1.29	1.24
21	AA	568	G	C2'-C1'	-6.08	1.46	1.53
57	BB	219	A	C3'-C2'	-6.08	1.46	1.52
57	BB	2053	G	C3'-C2'	-6.08	1.46	1.52
21	AA	98	A	O4'-C1'	-6.08	1.33	1.41
21	AA	871	U	O4'-C1'	6.08	1.49	1.41
21	AA	1343	G	N9-C8	-6.08	1.33	1.37
57	BB	969	G	C2'-C1'	-6.08	1.46	1.53
57	BB	2053	G	C2-N3	6.08	1.37	1.32
57	BB	2179	C	C1'-N1	6.08	1.57	1.48
57	BB	2870	C	C4'-C3'	6.08	1.59	1.53
58	BA	65	U	C2-N3	6.08	1.42	1.37
21	AA	131	A	C8-N7	-6.08	1.27	1.31
21	AA	406	G	C8-N7	-6.08	1.27	1.30
21	AA	465	A	C8-N7	-6.08	1.27	1.31
21	AA	1151	A	C4'-O4'	-6.08	1.37	1.45
21	AA	92	U	C4'-O4'	6.08	1.53	1.45
21	AA	286	C	C2-N3	6.08	1.40	1.35
21	AA	508	U	N1-C2	6.08	1.44	1.38
21	AA	904	U	C2'-C1'	-6.08	1.46	1.53
21	AA	921	U	O3'-P	-6.08	1.53	1.61
57	BB	74	A	P-O5'	-6.08	1.53	1.59
57	BB	388	G	N7-C5	-6.08	1.35	1.39
57	BB	1540	G	N9-C4	-6.08	1.33	1.38
57	BB	2400	G	N9-C8	6.08	1.42	1.37
57	BB	2639	A	N1-C2	-6.08	1.28	1.34
21	AA	668	G	C5'-C4'	6.07	1.58	1.51
21	AA	1273	C	P-O5'	-6.07	1.53	1.59
23	AW	25	C	C2-N3	6.07	1.40	1.35
42	BW	54	ARG	CZ-NH2	6.07	1.41	1.33
50	B3	44	ARG	CZ-NH1	6.07	1.41	1.33
57	BB	458	G	C5-C4	6.07	1.42	1.38
57	BB	736	C	C3'-C2'	6.07	1.59	1.52
57	BB	1929	G	N3-C4	-6.07	1.31	1.35
57	BB	2225	A	N7-C5	-6.07	1.35	1.39
57	BB	2543	G	C2-N2	6.07	1.40	1.34
21	AA	549	C	C4-N4	6.07	1.39	1.33
21	AA	973	G	C8-N7	-6.07	1.27	1.30
57	BB	500	G	C6-N1	6.07	1.43	1.39
57	BB	1334	G	C2-N2	6.07	1.40	1.34
21	AA	97	G	C5'-C4'	6.07	1.58	1.51
21	AA	468	A	P-O5'	-6.07	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1086	U	C3'-O3'	6.07	1.50	1.42
21	AA	1223	C	C4-N4	6.07	1.39	1.33
21	AA	1272	G	N3-C4	6.07	1.39	1.35
22	AY	74	C	C4-C5	-6.07	1.38	1.43
26	AV	13	C	C4-C5	6.07	1.47	1.43
57	BB	849	A	C6-N6	6.07	1.38	1.33
57	BB	1083	U	C5-C6	6.07	1.39	1.34
57	BB	1389	G	C5-C6	-6.07	1.36	1.42
57	BB	1492	G	C6-N1	6.07	1.43	1.39
57	BB	1944	U	N1-C2	6.07	1.44	1.38
57	BB	2402	U	C3'-C2'	6.07	1.59	1.52
21	AA	534	U	P-O5'	-6.07	1.53	1.59
57	BB	280	U	O3'-P	-6.07	1.53	1.61
57	BB	368	A	C5-C6	-6.07	1.35	1.41
57	BB	959	A	C8-N7	-6.07	1.27	1.31
57	BB	2194	U	N1-C6	6.07	1.43	1.38
58	BA	10	G	C2'-C1'	-6.07	1.46	1.53
58	BA	25	U	C2-O2	6.07	1.27	1.22
58	BA	107	G	C2-N3	6.07	1.37	1.32
21	AA	506	G	P-O5'	-6.07	1.53	1.59
57	BB	125	A	N9-C4	6.07	1.41	1.37
57	BB	317	G	N1-C2	6.07	1.42	1.37
57	BB	468	G	C5-C6	6.07	1.48	1.42
57	BB	547	A	C6-N6	6.07	1.38	1.33
57	BB	1445	G	C2'-C1'	-6.07	1.46	1.53
57	BB	2047	C	C2'-C1'	-6.07	1.46	1.53
57	BB	2053	G	C8-N7	6.07	1.34	1.30
57	BB	2860	A	C5-C6	-6.07	1.35	1.41
21	AA	547	A	C4'-C3'	6.07	1.59	1.53
42	BW	15	SER	CA-CB	6.07	1.62	1.52
57	BB	168	G	N7-C5	-6.07	1.35	1.39
57	BB	355	U	C2-O2	6.07	1.27	1.22
57	BB	877	A	C2-N3	6.07	1.39	1.33
57	BB	1194	A	C3'-C2'	-6.07	1.46	1.52
57	BB	1224	U	C2'-C1'	-6.07	1.46	1.53
57	BB	1771	C	C4'-O4'	6.07	1.53	1.45
57	BB	1813	G	C6-O6	-6.07	1.18	1.24
57	BB	1823	G	C5-C4	-6.07	1.34	1.38
57	BB	2172	U	C4-O4	6.07	1.28	1.23
57	BB	2371	G	N1-C2	6.07	1.42	1.37
57	BB	2545	G	C8-N7	-6.07	1.27	1.30
57	BB	2678	C	C5'-C4'	6.07	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
58	BA	43	C	C4-N4	6.07	1.39	1.33
21	AA	275	G	N1-C2	6.06	1.42	1.37
21	AA	693	G	C5-C4	6.06	1.42	1.38
21	AA	715	A	N7-C5	-6.06	1.35	1.39
21	AA	1230	C	N1-C6	6.06	1.40	1.37
21	AA	1265	C	C4-N4	6.06	1.39	1.33
21	AA	1504	G	C6-N1	6.06	1.43	1.39
57	BB	3	U	C4'-C3'	6.06	1.59	1.53
57	BB	364	C	C3'-C2'	-6.06	1.46	1.52
57	BB	1176	U	N3-C4	6.06	1.44	1.38
58	BA	55	U	C3'-C2'	-6.06	1.46	1.52
21	AA	7	A	N3-C4	-6.06	1.31	1.34
21	AA	442	G	C4'-O4'	6.06	1.53	1.45
21	AA	848	C	N1-C6	6.06	1.40	1.37
21	AA	933	G	N1-C2	6.06	1.42	1.37
23	AW	48	C	N3-C4	6.06	1.38	1.33
26	AV	76	A	C6-N6	6.06	1.38	1.33
57	BB	206	U	C4-C5	6.06	1.49	1.43
57	BB	1645	G	C2-N3	6.06	1.37	1.32
57	BB	1658	C	C4-C5	-6.06	1.38	1.43
57	BB	1988	G	C4'-C3'	6.06	1.59	1.53
57	BB	2149	U	C4'-O4'	-6.06	1.37	1.45
57	BB	2332	C	C5-C6	6.06	1.39	1.34
57	BB	2849	U	C5'-C4'	6.06	1.58	1.51
58	BA	16	G	N7-C5	-6.06	1.35	1.39
21	AA	463	U	C4'-O4'	-6.06	1.37	1.45
45	BC	211	ARG	NE-CZ	6.06	1.41	1.33
57	BB	1146	C	C4-N4	6.06	1.39	1.33
57	BB	1971	U	P-O5'	6.06	1.65	1.59
57	BB	2836	U	C4'-O4'	6.06	1.53	1.45
21	AA	1278	G	N7-C5	-6.06	1.35	1.39
21	AA	1517	G	N7-C5	-6.06	1.35	1.39
57	BB	1802	A	C5'-C4'	6.06	1.58	1.51
57	BB	2462	C	C4-N4	6.06	1.39	1.33
57	BB	2632	A	C8-N7	6.06	1.35	1.31
21	AA	566	G	N3-C4	-6.06	1.31	1.35
21	AA	895	G	C2-N2	6.06	1.40	1.34
21	AA	1099	G	C2'-C1'	6.06	1.60	1.53
23	AW	63	G	C4'-O4'	-6.06	1.37	1.45
57	BB	78	U	C4-C5	6.06	1.49	1.43
57	BB	1583	A	C5-C6	6.06	1.46	1.41
57	BB	1707	G	C2-N3	6.06	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	176	C	N1-C6	-6.06	1.33	1.37
21	AA	458	U	N3-C4	-6.06	1.32	1.38
57	BB	386	G	O3'-P	-6.06	1.53	1.61
57	BB	1915	U	C4-C5	6.06	1.49	1.43
9	AR	69	TYR	CE2-CZ	6.05	1.46	1.38
21	AA	214	C	C4-N4	6.05	1.39	1.33
21	AA	386	C	C4-N4	6.05	1.39	1.33
21	AA	595	A	N9-C8	6.05	1.42	1.37
21	AA	756	C	N1-C2	6.05	1.46	1.40
25	AZ	52	ALA	N-CA	-6.05	1.34	1.46
57	BB	6	A	N3-C4	-6.05	1.31	1.34
57	BB	100	U	C4'-O4'	6.05	1.53	1.45
57	BB	264	C	N1-C6	6.05	1.40	1.37
57	BB	977	G	N9-C4	6.05	1.42	1.38
57	BB	1159	U	C4-O4	6.05	1.28	1.23
57	BB	1282	U	N1-C2	-6.05	1.33	1.38
57	BB	1446	C	P-O5'	-6.05	1.53	1.59
57	BB	2406	A	C3'-O3'	6.05	1.50	1.42
57	BB	2645	G	C6-N1	6.05	1.43	1.39
57	BB	921	C	P-O5'	-6.05	1.53	1.59
21	AA	491	G	N1-C2	6.05	1.42	1.37
21	AA	825	A	C8-N7	-6.05	1.27	1.31
21	AA	1033	G	C4'-C3'	6.05	1.59	1.53
57	BB	859	G	C8-N7	6.05	1.34	1.30
57	BB	924	G	C6-N1	6.05	1.43	1.39
57	BB	1909	C	C4'-O4'	6.05	1.53	1.45
4	AM	100	ARG	CZ-NH2	6.05	1.41	1.33
14	AC	12	GLY	CA-C	-6.05	1.42	1.51
21	AA	476	U	C4-C5	6.05	1.49	1.43
21	AA	1073	U	N1-C2	-6.05	1.33	1.38
21	AA	1278	G	N3-C4	-6.05	1.31	1.35
22	AY	22	G	N9-C4	6.05	1.42	1.38
23	AW	25	C	O4'-C1'	-6.05	1.33	1.41
57	BB	265	A	C2'-C1'	-6.05	1.46	1.53
57	BB	1263	U	C4-O4	-6.05	1.18	1.23
57	BB	1437	C	P-O5'	-6.05	1.53	1.59
57	BB	1960	A	N9-C8	6.05	1.42	1.37
57	BB	2044	C	C4-N4	6.05	1.39	1.33
21	AA	952	U	O4'-C1'	6.05	1.49	1.41
57	BB	493	G	C4'-C3'	6.05	1.59	1.53
57	BB	904	G	C8-N7	6.05	1.34	1.30
57	BB	1100	C	C3'-O3'	6.05	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1106	G	C5-C6	-6.05	1.36	1.42
57	BB	1212	G	N3-C4	6.05	1.39	1.35
57	BB	1722	A	C8-N7	-6.05	1.27	1.31
57	BB	2217	G	C5-C6	-6.05	1.36	1.42
57	BB	2903	U	N3-C4	6.05	1.43	1.38
21	AA	945	G	N1-C2	6.05	1.42	1.37
57	BB	92	U	N3-C4	6.05	1.43	1.38
57	BB	733	G	N7-C5	-6.05	1.35	1.39
57	BB	1039	A	C4'-C3'	-6.05	1.46	1.53
57	BB	1535	A	C5'-C4'	6.05	1.58	1.51
57	BB	1681	G	C6-N1	6.05	1.43	1.39
57	BB	1726	C	C4'-C3'	-6.05	1.46	1.53
57	BB	2048	G	O3'-P	-6.05	1.53	1.61
57	BB	2903	U	C2-O2	6.05	1.27	1.22
21	AA	93	U	N1-C6	6.04	1.43	1.38
21	AA	1088	G	N9-C8	-6.04	1.33	1.37
57	BB	149	A	N3-C4	-6.04	1.31	1.34
57	BB	1055	G	O3'-P	-6.04	1.53	1.61
57	BB	1597	A	C4'-O4'	-6.04	1.37	1.45
21	AA	527	G	C6-N1	6.04	1.43	1.39
57	BB	141	G	N9-C8	6.04	1.42	1.37
57	BB	744	U	P-O5'	-6.04	1.53	1.59
57	BB	1537	G	P-O5'	-6.04	1.53	1.59
57	BB	1611	C	C4-C5	-6.04	1.38	1.43
57	BB	1625	C	C2-N3	-6.04	1.30	1.35
57	BB	1698	A	C5'-C4'	6.04	1.58	1.51
57	BB	2179	C	O3'-P	-6.04	1.53	1.61
21	AA	1472	U	N3-C4	6.04	1.43	1.38
57	BB	221	A	C8-N7	-6.04	1.27	1.31
57	BB	1707	G	C2-N2	6.04	1.40	1.34
57	BB	1891	G	N1-C2	6.04	1.42	1.37
58	BA	10	G	C8-N7	6.04	1.34	1.30
57	BB	2316	G	N9-C8	-6.04	1.33	1.37
57	BB	2411	A	C4'-O4'	6.04	1.53	1.45
21	AA	124	C	O4'-C1'	6.04	1.49	1.41
21	AA	589	U	N1-C6	-6.04	1.32	1.38
21	AA	619	U	N1-C2	6.04	1.44	1.38
21	AA	1500	A	C6-N1	6.04	1.39	1.35
57	BB	1205	A	N9-C8	-6.04	1.32	1.37
57	BB	2008	C	O4'-C1'	6.04	1.49	1.41
57	BB	2686	G	N1-C2	6.04	1.42	1.37
21	AA	255	G	C3'-C2'	-6.04	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1359	C	P-O5'	-6.04	1.53	1.59
29	BJ	96	ARG	CZ-NH2	6.04	1.40	1.33
57	BB	1465	G	N9-C4	6.04	1.42	1.38
57	BB	2238	G	O3'-P	-6.04	1.53	1.61
57	BB	2498	C	C4'-C3'	-6.04	1.46	1.53
58	BA	71	C	C4-N4	6.04	1.39	1.33
18	AG	101	ARG	NE-CZ	6.04	1.40	1.33
21	AA	15	G	C8-N7	6.04	1.34	1.30
21	AA	82	G	C3'-C2'	6.04	1.59	1.52
21	AA	302	G	C2-N3	6.04	1.37	1.32
21	AA	1119	C	C3'-C2'	6.04	1.59	1.52
21	AA	1328	C	C4-N4	6.04	1.39	1.33
57	BB	799	G	N9-C8	6.04	1.42	1.37
57	BB	1035	U	C4-C5	6.04	1.49	1.43
57	BB	1144	A	P-O5'	-6.04	1.53	1.59
57	BB	1590	A	C3'-O3'	6.04	1.50	1.42
57	BB	1809	A	C2'-C1'	-6.04	1.46	1.53
57	BB	2534	A	C8-N7	6.04	1.35	1.31
21	AA	685	G	C4'-O4'	-6.03	1.37	1.45
21	AA	840	C	C2'-C1'	-6.03	1.46	1.53
21	AA	1256	A	C3'-C2'	-6.03	1.46	1.52
21	AA	1279	G	P-O5'	-6.03	1.53	1.59
21	AA	1512	U	P-O5'	-6.03	1.53	1.59
22	AY	28	C	C4'-O4'	6.03	1.53	1.45
57	BB	426	C	N3-C4	6.03	1.38	1.33
57	BB	865	C	C4'-O4'	6.03	1.53	1.45
57	BB	972	A	N3-C4	-6.03	1.31	1.34
57	BB	1016	G	C3'-C2'	-6.03	1.46	1.52
57	BB	1544	A	C2-N3	6.03	1.39	1.33
57	BB	1704	C	C2-N3	6.03	1.40	1.35
57	BB	1735	A	C2'-C1'	-6.03	1.46	1.53
57	BB	2272	U	P-O5'	-6.03	1.53	1.59
21	AA	791	G	C5-C4	-6.03	1.34	1.38
57	BB	1503	A	O3'-P	-6.03	1.53	1.61
21	AA	372	C	C5-C6	6.03	1.39	1.34
21	AA	640	A	C5-C4	-6.03	1.34	1.38
21	AA	865	A	C4'-O4'	-6.03	1.37	1.45
23	AW	61	C	C4-N4	6.03	1.39	1.33
53	BE	167	VAL	CB-CG1	6.03	1.65	1.52
57	BB	173	A	N1-C2	6.03	1.39	1.34
57	BB	531	C	C4-C5	6.03	1.47	1.43
57	BB	1031	G	C8-N7	6.03	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1473	G	C1'-N9	-6.03	1.38	1.46
57	BB	2757	A	N3-C4	-6.03	1.31	1.34
57	BB	494	G	N9-C8	6.03	1.42	1.37
57	BB	679	C	P-O5'	-6.03	1.53	1.59
57	BB	1728	C	C4-N4	6.03	1.39	1.33
57	BB	70	G	N7-C5	-6.03	1.35	1.39
57	BB	1020	A	C8-N7	-6.03	1.27	1.31
57	BB	1627	G	C2'-C1'	-6.03	1.46	1.53
57	BB	2626	C	N3-C4	6.03	1.38	1.33
21	AA	140	U	C2'-C1'	-6.03	1.46	1.53
21	AA	610	U	O3'-P	-6.03	1.53	1.61
21	AA	1236	A	O3'-P	-6.03	1.53	1.61
21	AA	1388	C	C2-N3	6.03	1.40	1.35
21	AA	1441	A	N9-C4	6.03	1.41	1.37
57	BB	241	A	C3'-C2'	6.03	1.59	1.52
57	BB	628	G	C2'-C1'	-6.03	1.46	1.53
57	BB	1641	A	P-O5'	-6.03	1.53	1.59
57	BB	2075	U	C4'-O4'	-6.03	1.37	1.45
57	BB	2325	G	C5-C4	6.03	1.42	1.38
21	AA	210	C	N3-C4	6.02	1.38	1.33
57	BB	1714	U	C4'-C3'	-6.02	1.46	1.53
57	BB	2897	U	N1-C6	6.02	1.43	1.38
21	AA	164	G	C5-C6	-6.02	1.36	1.42
26	AV	19	G	P-O5'	-6.02	1.53	1.59
57	BB	361	G	N9-C8	-6.02	1.33	1.37
57	BB	1917	U	O3'-P	-6.02	1.53	1.61
57	BB	1943	U	N3-C4	6.02	1.43	1.38
57	BB	1980	G	O3'-P	-6.02	1.53	1.61
57	BB	2443	C	C2-O2	6.02	1.29	1.24
57	BB	2543	G	C6-N1	6.02	1.43	1.39
57	BB	2740	A	N1-C2	-6.02	1.28	1.34
21	AA	65	A	C4'-C3'	6.02	1.59	1.53
21	AA	1189	U	N1-C6	6.02	1.43	1.38
57	BB	88	G	P-O5'	6.02	1.65	1.59
57	BB	1910	G	C4'-C3'	6.02	1.59	1.53
57	BB	2305	U	C2-N3	6.02	1.42	1.37
21	AA	1047	G	C8-N7	6.02	1.34	1.30
21	AA	1118	U	C3'-C2'	-6.02	1.46	1.52
21	AA	1323	G	C4'-C3'	6.02	1.59	1.53
57	BB	542	C	P-O5'	-6.02	1.53	1.59
57	BB	1334	G	N7-C5	-6.02	1.35	1.39
57	BB	1775	U	C5-C6	-6.02	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2403	C	N3-C4	6.02	1.38	1.33
57	BB	2761	A	N9-C4	-6.02	1.34	1.37
57	BB	2768	U	O4'-C1'	6.02	1.49	1.41
21	AA	566	G	C5-C6	6.02	1.48	1.42
21	AA	813	U	C2-N3	6.02	1.42	1.37
21	AA	861	G	C4'-C3'	-6.02	1.46	1.53
21	AA	1198	G	N9-C4	-6.02	1.33	1.38
25	AZ	373	ARG	CZ-NH2	6.02	1.40	1.33
26	AV	41	C	O3'-P	-6.02	1.53	1.61
57	BB	57	C	P-O5'	-6.02	1.53	1.59
57	BB	1266	G	C2'-C1'	-6.02	1.46	1.53
57	BB	2374	C	C4-N4	6.02	1.39	1.33
58	BA	20	G	N3-C4	-6.02	1.31	1.35
21	AA	55	A	C2'-C1'	-6.02	1.46	1.53
21	AA	609	A	C8-N7	-6.02	1.27	1.31
21	AA	733	G	C6-N1	6.02	1.43	1.39
57	BB	2	G	P-O5'	-6.02	1.53	1.59
57	BB	532	A	C6-N1	6.02	1.39	1.35
57	BB	1071	G	N9-C8	-6.02	1.33	1.37
57	BB	1366	A	C2'-C1'	-6.02	1.46	1.53
57	BB	1404	C	C4-C5	6.02	1.47	1.43
57	BB	1738	G	C2-N3	6.02	1.37	1.32
57	BB	2810	A	C6-N1	6.02	1.39	1.35
10	AS	77	ARG	CZ-NH2	6.01	1.40	1.33
21	AA	495	A	P-O5'	6.01	1.65	1.59
21	AA	572	A	C8-N7	-6.01	1.27	1.31
21	AA	674	G	C2-N3	6.01	1.37	1.32
21	AA	798	U	P-O5'	-6.01	1.53	1.59
21	AA	1035	A	C2'-C1'	-6.01	1.46	1.53
21	AA	1133	G	N1-C2	6.01	1.42	1.37
23	AW	17	C	N3-C4	6.01	1.38	1.33
57	BB	746	U	N1-C2	6.01	1.44	1.38
57	BB	1116	G	N7-C5	6.01	1.42	1.39
57	BB	1615	C	C4'-O4'	-6.01	1.37	1.45
57	BB	76	C	C2-N3	6.01	1.40	1.35
57	BB	949	G	C2-N3	6.01	1.37	1.32
16	AE	100	GLU	CD-OE2	6.01	1.32	1.25
21	AA	953	G	P-O5'	-6.01	1.53	1.59
54	BF	86	CYS	CB-SG	6.01	1.92	1.82
57	BB	12	U	C5-C6	6.01	1.39	1.34
57	BB	235	U	N1-C2	6.01	1.44	1.38
57	BB	351	C	C2'-C1'	-6.01	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	594	U	P-O5'	-6.01	1.53	1.59
57	BB	746	U	N1-C6	6.01	1.43	1.38
57	BB	1226	A	N9-C4	6.01	1.41	1.37
57	BB	1289	C	C4-C5	-6.01	1.38	1.43
57	BB	1699	G	C5-C6	-6.01	1.36	1.42
57	BB	2383	G	C2-N3	6.01	1.37	1.32
8	AQ	26	ARG	CZ-NH2	6.01	1.40	1.33
21	AA	280	C	N3-C4	6.01	1.38	1.33
21	AA	759	A	O5'-C5'	-6.01	1.33	1.42
21	AA	890	G	P-O5'	-6.01	1.53	1.59
21	AA	1500	A	C8-N7	-6.01	1.27	1.31
57	BB	359	G	N9-C8	6.01	1.42	1.37
57	BB	576	U	N1-C6	-6.01	1.32	1.38
57	BB	785	G	N1-C2	6.01	1.42	1.37
57	BB	1610	A	C5-C6	6.01	1.46	1.41
57	BB	2160	C	C4-C5	-6.01	1.38	1.43
57	BB	2729	G	C1'-N9	-6.01	1.38	1.46
21	AA	690	G	C5'-C4'	6.01	1.58	1.51
57	BB	1692	U	O3'-P	-6.01	1.53	1.61
57	BB	2510	C	C2'-C1'	-6.01	1.46	1.53
57	BB	2675	A	C2'-C1'	-6.01	1.46	1.53
21	AA	438	U	C4-C5	6.01	1.49	1.43
21	AA	1434	A	C8-N7	-6.01	1.27	1.31
57	BB	512	G	C2'-C1'	6.01	1.59	1.53
57	BB	551	G	N7-C5	-6.01	1.35	1.39
57	BB	575	A	C5'-C4'	6.01	1.58	1.51
57	BB	721	A	N1-C2	6.01	1.39	1.34
57	BB	1074	G	C5-C4	6.01	1.42	1.38
57	BB	1362	C	N1-C2	6.01	1.46	1.40
57	BB	1493	C	N1-C2	6.01	1.46	1.40
57	BB	1567	G	C6-N1	6.01	1.43	1.39
57	BB	1985	C	C5-C6	-6.01	1.29	1.34
21	AA	351	G	N3-C4	6.00	1.39	1.35
25	AZ	7	ARG	CZ-NH2	6.00	1.40	1.33
26	AV	50	U	C5-C6	-6.00	1.28	1.34
27	B5	208	TYR	CG-CD2	6.00	1.47	1.39
57	BB	2536	G	O3'-P	-6.00	1.53	1.61
21	AA	254	G	N1-C2	6.00	1.42	1.37
21	AA	1016	A	N9-C4	6.00	1.41	1.37
22	AY	33	U	C4-C5	6.00	1.49	1.43
57	BB	600	G	N3-C4	-6.00	1.31	1.35
57	BB	726	G	N7-C5	-6.00	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1567	G	N1-C2	6.00	1.42	1.37
57	BB	1616	A	C1'-N9	6.00	1.57	1.48
57	BB	1743	G	N1-C2	6.00	1.42	1.37
57	BB	2539	C	N3-C4	6.00	1.38	1.33
58	BA	70	C	C5'-C4'	6.00	1.58	1.51
58	BA	80	U	N1-C2	6.00	1.44	1.38
21	AA	566	G	C5-C4	6.00	1.42	1.38
21	AA	884	U	C3'-C2'	-6.00	1.46	1.52
21	AA	1504	G	C2-N3	6.00	1.37	1.32
24	AX	18	G	N1-C2	6.00	1.42	1.37
27	B5	12	ARG	CZ-NH2	6.00	1.40	1.33
57	BB	36	G	C2'-C1'	-6.00	1.46	1.53
57	BB	552	U	C3'-C2'	-6.00	1.46	1.52
57	BB	756	A	N3-C4	-6.00	1.31	1.34
57	BB	794	A	N7-C5	-6.00	1.35	1.39
57	BB	1165	A	C8-N7	-6.00	1.27	1.31
57	BB	1243	C	N1-C6	6.00	1.40	1.37
57	BB	1511	G	O3'-P	-6.00	1.53	1.61
57	BB	2762	C	P-O5'	-6.00	1.53	1.59
57	BB	983	A	N1-C2	-6.00	1.28	1.34
57	BB	2340	A	N3-C4	-6.00	1.31	1.34
21	AA	693	G	O4'-C1'	6.00	1.49	1.41
21	AA	1155	A	N3-C4	-6.00	1.31	1.34
21	AA	1187	G	C5'-C4'	6.00	1.58	1.51
21	AA	1268	G	C5-C4	6.00	1.42	1.38
21	AA	1484	C	C4-C5	6.00	1.47	1.43
57	BB	212	G	C6-O6	-6.00	1.18	1.24
57	BB	1295	C	C4-N4	6.00	1.39	1.33
57	BB	1606	C	C2'-C1'	-6.00	1.46	1.53
57	BB	1847	A	N9-C8	-6.00	1.32	1.37
57	BB	2121	G	N1-C2	6.00	1.42	1.37
57	BB	2186	G	N1-C2	6.00	1.42	1.37
57	BB	2810	A	C8-N7	-6.00	1.27	1.31
57	BB	2860	A	C5'-C4'	6.00	1.58	1.51
21	AA	347	G	C6-N1	6.00	1.43	1.39
21	AA	723	U	C2-N3	-6.00	1.33	1.37
21	AA	739	C	C2'-C1'	-6.00	1.46	1.53
21	AA	1061	G	C2-N3	6.00	1.37	1.32
21	AA	1092	A	N1-C2	6.00	1.39	1.34
21	AA	1305	G	C5'-C4'	6.00	1.58	1.51
23	AW	40	C	C4-C5	6.00	1.47	1.43
57	BB	60	G	N7-C5	6.00	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	942	G	C4'-O4'	-6.00	1.37	1.45
57	BB	960	A	C5-C4	-6.00	1.34	1.38
57	BB	1882	U	O3'-P	-6.00	1.53	1.61
57	BB	2156	G	N7-C5	6.00	1.42	1.39
57	BB	2527	C	C1'-N1	6.00	1.57	1.48
57	BB	2753	A	N9-C8	-6.00	1.32	1.37
21	AA	1461	G	C5'-C4'	6.00	1.58	1.51
32	BM	64	TRP	CD2-CE3	-6.00	1.31	1.40
57	BB	119	A	P-O5'	-6.00	1.53	1.59
57	BB	142	A	C2'-C1'	-6.00	1.46	1.53
57	BB	757	G	C5'-C4'	6.00	1.58	1.51
57	BB	1126	A	N9-C8	6.00	1.42	1.37
57	BB	1254	A	C2-N3	6.00	1.39	1.33
21	AA	324	G	C8-N7	5.99	1.34	1.30
21	AA	389	A	N9-C4	5.99	1.41	1.37
21	AA	1508	A	C4'-C3'	-5.99	1.46	1.52
57	BB	183	C	C4-C5	5.99	1.47	1.43
57	BB	1369	G	N3-C4	-5.99	1.31	1.35
57	BB	1529	G	C4'-O4'	5.99	1.53	1.45
6	AO	45	HIS	CB-CG	5.99	1.60	1.50
21	AA	319	G	C6-N1	5.99	1.43	1.39
26	AV	72	A	C5-C4	-5.99	1.34	1.38
57	BB	2371	G	N9-C8	-5.99	1.33	1.37
21	AA	84	U	N3-C4	5.99	1.43	1.38
21	AA	158	G	C8-N7	5.99	1.34	1.30
21	AA	359	G	C4'-O4'	-5.99	1.37	1.45
21	AA	520	A	O4'-C1'	5.99	1.49	1.41
21	AA	850	U	C4'-C3'	5.99	1.59	1.53
21	AA	1008	U	P-O5'	-5.99	1.53	1.59
21	AA	1332	A	O3'-P	-5.99	1.53	1.61
57	BB	157	C	C2-N3	5.99	1.40	1.35
57	BB	296	U	N1-C2	5.99	1.44	1.38
57	BB	636	G	N3-C4	-5.99	1.31	1.35
57	BB	801	G	C2-N2	5.99	1.40	1.34
57	BB	2229	U	P-O5'	-5.99	1.53	1.59
57	BB	2594	C	P-O5'	-5.99	1.53	1.59
21	AA	458	U	C1'-N1	5.99	1.57	1.48
21	AA	1143	G	C5'-C4'	5.99	1.58	1.51
21	AA	1285	A	C2'-C1'	-5.99	1.46	1.53
26	AV	62	C	N3-C4	5.99	1.38	1.33
57	BB	52	A	N9-C4	5.99	1.41	1.37
57	BB	605	G	C2'-C1'	-5.99	1.46	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	697	G	N1-C2	5.99	1.42	1.37
57	BB	997	G	C3'-O3'	5.99	1.50	1.42
57	BB	2071	A	O3'-P	-5.99	1.53	1.61
58	BA	63	C	C5'-C4'	5.99	1.58	1.51
58	BA	83	G	C6-N1	5.99	1.43	1.39
21	AA	296	U	C2-N3	5.99	1.42	1.37
21	AA	996	A	N3-C4	-5.99	1.31	1.34
57	BB	233	A	C5'-C4'	5.99	1.58	1.51
57	BB	395	U	C2-N3	5.99	1.42	1.37
57	BB	1434	A	C6-N6	-5.99	1.29	1.33
57	BB	2053	G	C5-C4	-5.99	1.34	1.38
57	BB	2577	A	C2-N3	-5.99	1.28	1.33
21	AA	45	G	C5'-C4'	5.99	1.58	1.51
21	AA	156	C	C2-O2	5.99	1.29	1.24
21	AA	220	G	C8-N7	-5.99	1.27	1.30
21	AA	524	G	N7-C5	-5.99	1.35	1.39
21	AA	781	A	C2'-C1'	-5.99	1.46	1.53
21	AA	876	C	N1-C6	-5.99	1.33	1.37
21	AA	902	G	C4'-O4'	5.99	1.53	1.45
21	AA	1523	G	N7-C5	-5.99	1.35	1.39
57	BB	30	G	N7-C5	-5.99	1.35	1.39
57	BB	223	A	P-O5'	-5.99	1.53	1.59
57	BB	824	U	P-O5'	-5.99	1.53	1.59
57	BB	1043	C	C4-N4	5.99	1.39	1.33
57	BB	2092	U	C4-O4	-5.99	1.18	1.23
57	BB	2307	G	N1-C2	5.99	1.42	1.37
57	BB	2483	C	C2'-C1'	-5.99	1.46	1.53
21	AA	836	G	C5'-C4'	-5.98	1.44	1.51
21	AA	1435	G	N9-C8	-5.98	1.33	1.37
57	BB	1131	G	N3-C4	5.98	1.39	1.35
57	BB	1503	A	C5-C6	-5.98	1.35	1.41
46	BZ	29	ARG	NE-CZ	5.98	1.40	1.33
57	BB	805	G	C8-N7	5.98	1.34	1.30
57	BB	862	G	C5-C6	-5.98	1.36	1.42
57	BB	1114	C	C2'-C1'	-5.98	1.46	1.53
57	BB	1366	A	C6-N6	5.98	1.38	1.33
57	BB	2893	A	O3'-P	-5.98	1.53	1.61
58	BA	75	G	N1-C2	5.98	1.42	1.37
58	BA	86	G	C2'-C1'	-5.98	1.46	1.53
21	AA	343	U	C2'-C1'	-5.98	1.46	1.53
21	AA	410	G	C6-N1	5.98	1.43	1.39
21	AA	1180	A	N9-C8	5.98	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	41	C	C2'-C1'	-5.98	1.46	1.53
57	BB	654	A	N9-C4	5.98	1.41	1.37
57	BB	960	A	N7-C5	-5.98	1.35	1.39
57	BB	1564	C	C5-C6	5.98	1.39	1.34
57	BB	2453	A	C4'-C3'	5.98	1.59	1.53
57	BB	2654	A	C2'-C1'	-5.98	1.46	1.53
21	AA	552	U	C2-N3	5.98	1.42	1.37
21	AA	942	G	P-O5'	-5.98	1.53	1.59
57	BB	673	C	C4-N4	5.98	1.39	1.33
57	BB	861	A	C6-N1	5.98	1.39	1.35
57	BB	1829	A	P-O5'	-5.98	1.53	1.59
57	BB	2310	C	N1-C6	5.98	1.40	1.37
21	AA	417	G	N7-C5	-5.98	1.35	1.39
21	AA	729	A	C6-N1	5.98	1.39	1.35
21	AA	1041	G	N7-C5	5.98	1.42	1.39
21	AA	1250	A	C6-N6	5.98	1.38	1.33
21	AA	1350	A	C2'-C1'	-5.98	1.46	1.53
21	AA	1352	C	O3'-P	5.98	1.68	1.61
35	BP	20	ARG	CZ-NH1	5.98	1.40	1.33
39	BT	77	ARG	CD-NE	5.98	1.56	1.46
57	BB	262	A	C6-N6	5.98	1.38	1.33
57	BB	1765	U	P-O5'	-5.98	1.53	1.59
57	BB	2829	A	C5-C6	5.98	1.46	1.41
57	BB	2902	C	N3-C4	5.98	1.38	1.33
58	BA	66	A	O3'-P	-5.98	1.53	1.61
57	BB	1521	G	N3-C4	-5.98	1.31	1.35
57	BB	2183	A	N7-C5	-5.98	1.35	1.39
21	AA	802	A	O3'-P	-5.97	1.53	1.61
21	AA	829	G	C5-C4	5.97	1.42	1.38
23	AW	66	U	C2'-C1'	-5.97	1.46	1.53
57	BB	300	A	C5-C4	-5.97	1.34	1.38
57	BB	761	A	C5-C4	5.97	1.43	1.38
57	BB	1696	G	C6-N1	5.97	1.43	1.39
57	BB	2307	G	N7-C5	-5.97	1.35	1.39
57	BB	2646	C	N1-C6	5.97	1.40	1.37
57	BB	2679	A	C5'-C4'	5.97	1.58	1.51
57	BB	2761	A	C2'-C1'	5.97	1.59	1.53
18	AG	137	ARG	CD-NE	5.97	1.56	1.46
21	AA	129	A	C2'-C1'	-5.97	1.46	1.53
21	AA	725	G	C3'-C2'	5.97	1.59	1.52
21	AA	888	G	N3-C4	5.97	1.39	1.35
21	AA	1027	C	O3'-P	-5.97	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	353	C	N3-C4	5.97	1.38	1.33
57	BB	1230	A	P-O5'	-5.97	1.53	1.59
57	BB	1648	U	N1-C6	5.97	1.43	1.38
57	BB	1701	A	C5-C6	-5.97	1.35	1.41
57	BB	2680	U	N1-C6	5.97	1.43	1.38
21	AA	126	G	N9-C8	-5.97	1.33	1.37
21	AA	477	C	C5'-C4'	5.97	1.58	1.51
21	AA	590	U	N1-C2	5.97	1.44	1.38
21	AA	700	G	N9-C8	-5.97	1.33	1.37
24	AX	17	U	C4-C5	5.97	1.49	1.43
57	BB	762	U	C5'-C4'	5.97	1.58	1.51
57	BB	2693	G	N7-C5	-5.97	1.35	1.39
21	AA	72	A	N9-C4	5.97	1.41	1.37
21	AA	106	C	P-O5'	-5.97	1.53	1.59
21	AA	843	U	P-O5'	-5.97	1.53	1.59
21	AA	926	G	N9-C8	5.97	1.42	1.37
21	AA	1370	G	C5-C6	-5.97	1.36	1.42
21	AA	1435	G	O3'-P	-5.97	1.53	1.61
21	AA	1435	G	C5'-C4'	5.97	1.58	1.51
26	AV	21	A	O3'-P	-5.97	1.53	1.61
55	BG	26	LYS	C-N	5.97	1.43	1.33
57	BB	234	U	C4-C5	-5.97	1.38	1.43
57	BB	379	G	C5-C6	-5.97	1.36	1.42
57	BB	462	C	C5'-C4'	5.97	1.58	1.51
57	BB	808	G	P-O5'	-5.97	1.53	1.59
57	BB	986	C	O3'-P	-5.97	1.53	1.61
57	BB	1830	C	N3-C4	5.97	1.38	1.33
57	BB	2180	U	C5'-C4'	5.97	1.58	1.51
57	BB	2208	C	C4'-O4'	5.97	1.53	1.45
57	BB	2740	A	C2'-C1'	-5.97	1.46	1.53
57	BB	1640	A	C5'-C4'	-5.97	1.44	1.51
57	BB	1780	A	C6-N6	5.97	1.38	1.33
57	BB	2674	G	N7-C5	-5.97	1.35	1.39
21	AA	494	G	C4'-C3'	5.97	1.59	1.53
21	AA	1323	G	C4'-O4'	-5.97	1.37	1.45
57	BB	1618	A	C8-N7	-5.97	1.27	1.31
57	BB	1918	A	C2'-C1'	-5.97	1.46	1.53
57	BB	2543	G	O3'-P	-5.97	1.53	1.61
21	AA	89	U	N1-C2	5.96	1.44	1.38
21	AA	401	C	C4-N4	5.96	1.39	1.33
21	AA	766	A	N1-C2	-5.96	1.28	1.34
21	AA	1421	G	C6-N1	-5.96	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	109	C	C5-C6	5.96	1.39	1.34
58	BA	45	A	C1'-N9	5.96	1.57	1.48
21	AA	1416	G	O3'-P	-5.96	1.53	1.61
15	AD	80	ARG	CZ-NH2	5.96	1.40	1.33
21	AA	337	G	O3'-P	-5.96	1.53	1.61
21	AA	1077	G	C3'-C2'	5.96	1.59	1.52
26	AV	31	G	N1-C2	5.96	1.42	1.37
57	BB	1	G	N7-C5	-5.96	1.35	1.39
57	BB	649	G	C2'-C1'	-5.96	1.46	1.53
57	BB	1884	G	C2-N3	5.96	1.37	1.32
57	BB	2825	G	C8-N7	-5.96	1.27	1.30
21	AA	336	A	C2'-C1'	-5.96	1.46	1.53
21	AA	494	G	C8-N7	5.96	1.34	1.30
21	AA	1493	A	O3'-P	-5.96	1.53	1.61
36	BQ	75	TYR	CZ-OH	5.96	1.48	1.37
57	BB	285	G	N1-C2	5.96	1.42	1.37
57	BB	2366	A	C2'-C1'	-5.96	1.46	1.53
21	AA	1328	C	C2'-C1'	-5.96	1.46	1.53
23	AW	53	G	C2'-C1'	-5.96	1.46	1.53
28	BI	133	ARG	CZ-NH2	5.96	1.40	1.33
57	BB	750	A	C5-C4	5.96	1.43	1.38
57	BB	1069	A	O3'-P	-5.96	1.53	1.61
57	BB	1188	U	C2-N3	5.96	1.42	1.37
57	BB	1902	C	N3-C4	5.96	1.38	1.33
57	BB	1966	A	C5'-C4'	5.96	1.58	1.51
57	BB	2786	U	C4-C5	5.96	1.49	1.43
58	BA	67	G	N1-C2	5.96	1.42	1.37
21	AA	215	C	N3-C4	5.96	1.38	1.33
21	AA	847	G	N9-C8	-5.96	1.33	1.37
21	AA	889	A	C6-N1	5.96	1.39	1.35
21	AA	996	A	C6-N1	5.96	1.39	1.35
21	AA	1340	A	C6-N1	5.96	1.39	1.35
22	AY	45	G	O3'-P	-5.96	1.54	1.61
26	AV	9	G	C4'-C3'	5.96	1.59	1.53
57	BB	891	G	C2-N2	5.96	1.40	1.34
57	BB	993	G	C2-N2	5.96	1.40	1.34
57	BB	1958	C	C2-N3	5.96	1.40	1.35
57	BB	2377	A	C5-C4	5.96	1.43	1.38
21	AA	1487	G	N9-C4	5.96	1.42	1.38
21	AA	154	U	C2-N3	5.95	1.42	1.37
21	AA	604	G	C8-N7	-5.95	1.27	1.30
21	AA	1153	G	C3'-O3'	5.95	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1459	G	N9-C4	5.95	1.42	1.38
57	BB	2137	U	P-O5'	-5.95	1.53	1.59
57	BB	2479	U	C2'-C1'	-5.95	1.46	1.53
57	BB	2864	G	C6-N1	5.95	1.43	1.39
21	AA	1095	U	N3-C4	5.95	1.43	1.38
57	BB	183	C	C4-N4	5.95	1.39	1.33
57	BB	692	C	C4-C5	5.95	1.47	1.43
57	BB	1529	G	C2'-C1'	5.95	1.59	1.53
57	BB	2097	A	C6-N1	5.95	1.39	1.35
57	BB	2592	G	C8-N7	-5.95	1.27	1.30
8	AQ	71	SER	CA-CB	5.95	1.61	1.52
21	AA	674	G	N7-C5	-5.95	1.35	1.39
21	AA	1026	G	C5-C6	5.95	1.48	1.42
29	BJ	44	TYR	CZ-OH	5.95	1.48	1.37
57	BB	542	C	N3-C4	5.95	1.38	1.33
57	BB	1614	A	N9-C4	-5.95	1.34	1.37
57	BB	2330	G	N1-C2	5.95	1.42	1.37
21	AA	184	G	C2-N2	5.95	1.40	1.34
57	BB	347	A	C4'-C3'	5.95	1.59	1.53
57	BB	468	G	C5'-C4'	5.95	1.58	1.51
57	BB	596	U	O4'-C1'	5.95	1.49	1.41
57	BB	784	G	N1-C2	5.95	1.42	1.37
57	BB	798	G	C2'-C1'	-5.95	1.46	1.53
57	BB	861	A	O3'-P	5.95	1.68	1.61
57	BB	1607	C	C4-C5	5.95	1.47	1.43
57	BB	1761	C	N3-C4	5.95	1.38	1.33
21	AA	596	A	C4'-C3'	5.95	1.59	1.53
26	AV	18	G	C3'-C2'	5.95	1.59	1.52
57	BB	260	G	C2'-C1'	-5.95	1.46	1.53
57	BB	702	U	O3'-P	-5.95	1.54	1.61
58	BA	84	G	C2'-C1'	-5.95	1.46	1.53
21	AA	16	A	C2'-C1'	-5.95	1.46	1.53
21	AA	484	G	C4'-C3'	5.95	1.59	1.53
21	AA	933	G	N3-C4	5.95	1.39	1.35
21	AA	1160	G	C5-C4	-5.95	1.34	1.38
22	AY	64	A	N7-C5	-5.95	1.35	1.39
57	BB	761	A	C4'-C3'	-5.95	1.46	1.52
57	BB	1368	G	P-O5'	-5.95	1.53	1.59
57	BB	1598	A	P-O5'	-5.95	1.53	1.59
57	BB	1735	A	C5-C4	5.95	1.43	1.38
57	BB	1953	A	C6-N1	5.95	1.39	1.35
21	AA	67	C	N3-C4	5.94	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	860	A	N7-C5	-5.94	1.35	1.39
21	AA	987	G	C8-N7	5.94	1.34	1.30
21	AA	1013	G	O3'-P	-5.94	1.54	1.61
57	BB	1034	G	C5-C4	-5.94	1.34	1.38
57	BB	1102	C	C2'-C1'	-5.94	1.46	1.53
57	BB	1512	C	N1-C6	5.94	1.40	1.37
57	BB	1628	G	P-O5'	-5.94	1.53	1.59
57	BB	2346	A	C1'-N9	-5.94	1.38	1.46
21	AA	742	G	N1-C2	5.94	1.42	1.37
21	AA	1196	A	N9-C4	5.94	1.41	1.37
41	BV	93	ARG	NE-CZ	5.94	1.40	1.33
57	BB	436	C	C4'-C3'	-5.94	1.46	1.52
57	BB	491	G	N3-C4	-5.94	1.31	1.35
57	BB	1237	A	N1-C2	5.94	1.39	1.34
57	BB	1252	G	N1-C2	5.94	1.42	1.37
57	BB	1589	U	C2-N3	5.94	1.42	1.37
57	BB	1984	G	P-O5'	-5.94	1.53	1.59
57	BB	2522	U	C2-N3	5.94	1.42	1.37
21	AA	305	G	C8-N7	-5.94	1.27	1.30
21	AA	694	A	C8-N7	5.94	1.35	1.31
21	AA	1499	A	C5-C4	-5.94	1.34	1.38
57	BB	23	G	N9-C8	-5.94	1.33	1.37
57	BB	166	U	P-O5'	-5.94	1.53	1.59
57	BB	1168	G	C2-N3	5.94	1.37	1.32
57	BB	1910	G	N9-C4	-5.94	1.33	1.38
57	BB	2778	A	C6-N6	5.94	1.38	1.33
21	AA	504	C	O3'-P	-5.94	1.54	1.61
21	AA	668	G	N9-C8	-5.94	1.33	1.37
21	AA	1414	U	C5'-C4'	5.94	1.58	1.51
57	BB	1570	A	C6-N6	5.94	1.38	1.33
57	BB	1586	A	N7-C5	-5.94	1.35	1.39
57	BB	1587	G	N9-C4	5.94	1.42	1.38
57	BB	1749	A	P-O5'	-5.94	1.53	1.59
57	BB	1868	C	N3-C4	5.94	1.38	1.33
57	BB	2001	C	C4'-C3'	5.94	1.59	1.53
21	AA	724	G	C5-C4	5.94	1.42	1.38
21	AA	881	G	C6-N1	5.94	1.43	1.39
21	AA	1532	U	C4'-O4'	5.94	1.53	1.45
26	AV	7	G	N9-C4	5.94	1.42	1.38
27	B5	162	ARG	CZ-NH2	5.94	1.40	1.33
57	BB	96	C	N3-C4	5.94	1.38	1.33
57	BB	2572	A	C6-N6	5.94	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2595	G	N1-C2	5.94	1.42	1.37
57	BB	2870	C	C2-O2	5.94	1.29	1.24
58	BA	91	C	C3'-O3'	5.94	1.50	1.42
21	AA	433	G	C5-C4	5.94	1.42	1.38
21	AA	1005	A	C5-C4	-5.94	1.34	1.38
57	BB	1	G	C5-C4	-5.94	1.34	1.38
57	BB	685	A	O3'-P	-5.94	1.54	1.61
57	BB	2209	G	N7-C5	-5.94	1.35	1.39
21	AA	135	C	C4-N4	5.93	1.39	1.33
22	AY	37	G	P-O5'	-5.93	1.53	1.59
23	AW	1	G	N1-C2	5.93	1.42	1.37
23	AW	10	G	N9-C4	-5.93	1.33	1.38
57	BB	74	A	N1-C2	-5.93	1.29	1.34
57	BB	346	A	C5-C4	5.93	1.43	1.38
57	BB	1294	U	P-O5'	-5.93	1.53	1.59
57	BB	1771	C	N3-C4	5.93	1.38	1.33
57	BB	2389	G	C2'-C1'	-5.93	1.46	1.53
57	BB	2428	G	N7-C5	-5.93	1.35	1.39
21	AA	785	G	C2'-C1'	5.93	1.59	1.53
21	AA	854	U	C2-O2	5.93	1.27	1.22
21	AA	1344	C	C4-N4	5.93	1.39	1.33
57	BB	201	C	C3'-O3'	5.93	1.50	1.42
57	BB	361	G	C4'-C3'	5.93	1.59	1.53
57	BB	1041	G	C5'-C4'	5.93	1.58	1.51
57	BB	1551	A	C6-N1	5.93	1.39	1.35
57	BB	1999	C	N3-C4	5.93	1.38	1.33
57	BB	2246	G	C2-N2	5.93	1.40	1.34
21	AA	971	G	C5'-C4'	5.93	1.58	1.51
57	BB	303	G	C5'-C4'	-5.93	1.44	1.51
57	BB	536	G	N7-C5	-5.93	1.35	1.39
57	BB	1310	G	N9-C8	5.93	1.42	1.37
21	AA	486	U	C4-C5	5.93	1.48	1.43
21	AA	1230	C	C5'-C4'	5.93	1.58	1.51
57	BB	638	G	P-O5'	-5.93	1.53	1.59
57	BB	1582	C	O3'-P	-5.93	1.54	1.61
57	BB	2729	G	C4'-C3'	5.93	1.59	1.53
57	BB	2749	A	C3'-C2'	-5.93	1.46	1.52
57	BB	2842	G	C5-C4	5.93	1.42	1.38
58	BA	117	G	N9-C8	5.93	1.42	1.37
21	AA	15	G	C2'-C1'	-5.93	1.46	1.53
21	AA	430	A	P-O5'	-5.93	1.53	1.59
21	AA	987	G	O3'-P	5.93	1.68	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
40	BU	81	ARG	CZ-NH1	5.93	1.40	1.33
57	BB	2215	C	C2-N3	5.93	1.40	1.35
57	BB	2280	G	C2-N3	5.93	1.37	1.32
57	BB	2352	A	N3-C4	-5.93	1.31	1.34
11	AT	44	ALA	N-CA	-5.93	1.34	1.46
21	AA	203	G	N7-C5	-5.93	1.35	1.39
21	AA	391	G	C8-N7	5.93	1.34	1.30
21	AA	676	A	C8-N7	-5.93	1.27	1.31
21	AA	1076	U	O4'-C1'	5.93	1.49	1.41
21	AA	1084	G	N9-C4	5.93	1.42	1.38
26	AV	2	G	C4'-C3'	5.93	1.59	1.53
57	BB	1116	G	C6-N1	5.93	1.43	1.39
57	BB	2822	G	C5-C6	-5.93	1.36	1.42
21	AA	125	U	C2-N3	5.92	1.41	1.37
21	AA	351	G	C5'-C4'	5.92	1.58	1.51
21	AA	1073	U	C3'-C2'	5.92	1.59	1.52
21	AA	1302	C	C1'-N1	5.92	1.57	1.48
57	BB	215	G	C5-C6	-5.92	1.36	1.42
57	BB	654	A	C6-N6	5.92	1.38	1.33
57	BB	1747	U	N1-C6	-5.92	1.32	1.38
57	BB	2047	C	C1'-N1	5.92	1.57	1.48
57	BB	2138	G	N3-C4	5.92	1.39	1.35
57	BB	2151	U	P-O5'	-5.92	1.53	1.59
57	BB	2277	G	C5'-C4'	5.92	1.58	1.51
21	AA	766	A	C5-C4	5.92	1.42	1.38
23	AW	64	A	C6-N6	5.92	1.38	1.33
25	AZ	288	ARG	CZ-NH1	5.92	1.40	1.33
57	BB	900	A	C6-N1	5.92	1.39	1.35
57	BB	1112	G	N9-C4	5.92	1.42	1.38
57	BB	1339	G	N7-C5	5.92	1.42	1.39
57	BB	2369	A	C8-N7	-5.92	1.27	1.31
20	AI	38	PHE	CG-CD1	5.92	1.47	1.38
21	AA	574	A	C5'-C4'	5.92	1.58	1.51
21	AA	1239	A	C6-N1	5.92	1.39	1.35
57	BB	228	C	C4'-C3'	5.92	1.59	1.53
57	BB	604	G	N9-C4	-5.92	1.33	1.38
57	BB	924	G	C2-N2	5.92	1.40	1.34
57	BB	940	G	N9-C8	-5.92	1.33	1.37
57	BB	1016	G	O4'-C1'	5.92	1.49	1.41
57	BB	1381	G	C3'-C2'	-5.92	1.46	1.52
57	BB	1511	G	C2-N2	5.92	1.40	1.34
57	BB	1649	G	C2-N3	5.92	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	743	A	C6-N1	5.92	1.39	1.35
21	AA	195	A	N7-C5	5.92	1.42	1.39
21	AA	563	A	N1-C2	-5.92	1.29	1.34
57	BB	20	C	C4'-O4'	5.92	1.53	1.45
57	BB	852	U	C2'-C1'	-5.92	1.46	1.53
57	BB	1157	G	C1'-N9	5.92	1.57	1.48
57	BB	1239	G	P-O5'	-5.92	1.53	1.59
57	BB	1692	U	C2-N3	5.92	1.41	1.37
57	BB	2353	G	N9-C8	5.92	1.42	1.37
21	AA	488	C	N1-C6	5.92	1.40	1.37
21	AA	555	U	C3'-C2'	5.92	1.59	1.52
21	AA	770	C	N3-C4	5.92	1.38	1.33
21	AA	785	G	C6-N1	-5.92	1.35	1.39
21	AA	1442	G	N9-C4	5.92	1.42	1.38
23	AW	58	A	C6-N1	5.92	1.39	1.35
31	BL	69	ARG	NE-CZ	5.92	1.40	1.33
45	BC	166	ARG	CD-NE	5.92	1.56	1.46
57	BB	506	G	N3-C4	5.92	1.39	1.35
57	BB	614	A	C2'-C1'	-5.92	1.46	1.53
57	BB	972	A	C4'-C3'	5.92	1.59	1.53
57	BB	1736	U	C2-N3	5.92	1.41	1.37
57	BB	2135	A	N9-C4	-5.92	1.34	1.37
57	BB	2536	G	N3-C4	-5.92	1.31	1.35
58	BA	57	A	C8-N7	-5.92	1.27	1.31
21	AA	1060	U	N3-C4	5.92	1.43	1.38
23	AW	35	A	O4'-C1'	5.92	1.49	1.41
57	BB	64	A	P-O5'	-5.92	1.53	1.59
57	BB	482	A	C5'-C4'	5.92	1.58	1.51
57	BB	2860	A	O5'-C5'	-5.92	1.33	1.42
57	BB	2861	U	N3-C4	5.92	1.43	1.38
21	AA	111	G	N1-C2	5.91	1.42	1.37
21	AA	765	G	C2'-C1'	-5.91	1.46	1.53
21	AA	1462	C	C5'-C4'	5.91	1.58	1.51
57	BB	131	A	C8-N7	-5.91	1.27	1.31
57	BB	735	A	C2'-C1'	-5.91	1.46	1.53
57	BB	853	C	C5-C6	5.91	1.39	1.34
57	BB	1152	C	C4'-C3'	5.91	1.59	1.53
57	BB	1744	A	O4'-C1'	5.91	1.49	1.41
57	BB	1773	A	N7-C5	-5.91	1.35	1.39
57	BB	2253	G	N9-C8	-5.91	1.33	1.37
57	BB	2796	U	P-O5'	-5.91	1.53	1.59
21	AA	441	A	C6-N1	5.91	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	960	U	C4-O4	5.91	1.28	1.23
22	AY	70	C	N1-C2	-5.91	1.34	1.40
57	BB	2335	A	N7-C5	-5.91	1.35	1.39
57	BB	2349	G	C2'-C1'	-5.91	1.46	1.53
58	BA	77	U	O3'-P	-5.91	1.54	1.61
21	AA	677	U	O3'-P	-5.91	1.54	1.61
21	AA	869	G	N9-C4	-5.91	1.33	1.38
21	AA	1320	C	C2'-C1'	-5.91	1.46	1.53
21	AA	1382	C	C4'-C3'	5.91	1.59	1.53
57	BB	512	G	C6-N1	5.91	1.43	1.39
57	BB	877	A	C6-N6	5.91	1.38	1.33
57	BB	902	C	C2-N3	5.91	1.40	1.35
57	BB	1946	U	C4-C5	5.91	1.48	1.43
57	BB	2108	A	C5-C4	-5.91	1.34	1.38
13	AB	107	ARG	NE-CZ	5.91	1.40	1.33
21	AA	666	G	C5-C6	-5.91	1.36	1.42
21	AA	1004	A	C5-C4	5.91	1.42	1.38
21	AA	1099	G	C5-C4	-5.91	1.34	1.38
21	AA	1128	C	C2-O2	5.91	1.29	1.24
37	BR	84	ARG	CD-NE	5.91	1.56	1.46
57	BB	450	G	N3-C4	5.91	1.39	1.35
57	BB	698	C	P-O5'	-5.91	1.53	1.59
57	BB	1367	A	C6-N1	5.91	1.39	1.35
57	BB	2101	A	N3-C4	5.91	1.38	1.34
57	BB	2303	G	N7-C5	-5.91	1.35	1.39
2	AK	52	ARG	CZ-NH2	5.91	1.40	1.33
21	AA	931	C	C5'-C4'	-5.91	1.44	1.51
21	AA	1277	C	O3'-P	-5.91	1.54	1.61
58	BA	28	C	C5'-C4'	5.91	1.58	1.51
21	AA	154	U	C4-O4	-5.91	1.19	1.23
21	AA	370	C	C5'-C4'	5.91	1.58	1.51
21	AA	877	G	C8-N7	5.91	1.34	1.30
57	BB	1226	A	C8-N7	-5.91	1.27	1.31
57	BB	1560	G	C5'-C4'	5.91	1.58	1.51
57	BB	1930	G	C2'-C1'	-5.91	1.46	1.53
57	BB	1993	U	C4-O4	5.91	1.28	1.23
57	BB	2380	C	C5-C6	-5.91	1.29	1.34
57	BB	2446	G	N3-C4	5.91	1.39	1.35
21	AA	559	A	C6-N1	5.90	1.39	1.35
21	AA	851	G	O3'-P	-5.90	1.54	1.61
21	AA	911	U	N1-C6	5.90	1.43	1.38
21	AA	1188	A	N7-C5	5.90	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1426	G	C3'-C2'	-5.90	1.46	1.52
57	BB	461	C	C2-O2	5.90	1.29	1.24
21	AA	885	G	O3'-P	-5.90	1.54	1.61
21	AA	929	G	C2'-C1'	-5.90	1.46	1.53
21	AA	1182	G	C2-N2	5.90	1.40	1.34
21	AA	1281	C	C2'-C1'	-5.90	1.46	1.53
22	AY	19	G	P-O5'	5.90	1.65	1.59
23	AW	53	G	C4'-C3'	5.90	1.59	1.53
57	BB	1673	G	N1-C2	5.90	1.42	1.37
57	BB	1711	A	C2'-C1'	-5.90	1.46	1.53
57	BB	2883	A	P-O5'	-5.90	1.53	1.59
21	AA	791	G	C6-N1	5.90	1.43	1.39
21	AA	971	G	O4'-C1'	-5.90	1.33	1.41
21	AA	1337	G	C2'-C1'	-5.90	1.46	1.53
21	AA	1461	G	O3'-P	-5.90	1.54	1.61
57	BB	34	U	C2-N3	5.90	1.41	1.37
57	BB	784	G	C2-N2	5.90	1.40	1.34
57	BB	1128	G	N9-C8	5.90	1.42	1.37
57	BB	1186	G	C8-N7	-5.90	1.27	1.30
57	BB	1604	C	C3'-O3'	5.90	1.50	1.42
57	BB	1808	A	C8-N7	5.90	1.35	1.31
21	AA	66	A	C5'-C4'	5.90	1.58	1.51
21	AA	800	G	N9-C4	5.90	1.42	1.38
26	AV	27	U	C4'-O4'	5.90	1.53	1.45
57	BB	1194	A	C5-C4	5.90	1.42	1.38
57	BB	2544	G	C6-N1	5.90	1.43	1.39
4	AM	89	ARG	CD-NE	5.90	1.56	1.46
21	AA	1494	G	O4'-C1'	5.90	1.49	1.41
57	BB	372	G	C2'-C1'	-5.90	1.46	1.53
57	BB	1651	G	N9-C4	-5.90	1.33	1.38
57	BB	1660	G	C6-O6	-5.90	1.18	1.24
57	BB	2365	G	O4'-C1'	-5.90	1.33	1.41
57	BB	2741	A	C6-N6	5.90	1.38	1.33
58	BA	28	C	C4'-O4'	5.90	1.53	1.45
21	AA	1042	A	C2'-C1'	-5.90	1.46	1.53
57	BB	1574	C	C4-C5	-5.90	1.38	1.43
57	BB	2688	G	N1-C2	5.90	1.42	1.37
21	AA	723	U	C4'-C3'	5.89	1.59	1.53
21	AA	993	G	N1-C2	5.89	1.42	1.37
21	AA	1241	G	C6-N1	-5.89	1.35	1.39
26	AV	43	A	N1-C2	-5.89	1.29	1.34
32	BM	91	TYR	CG-CD2	5.89	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2	G	C5'-C4'	5.89	1.58	1.51
57	BB	1554	U	N3-C4	5.89	1.43	1.38
57	BB	1925	C	C2'-C1'	-5.89	1.46	1.53
57	BB	1945	G	N9-C8	5.89	1.42	1.37
57	BB	2025	C	P-O5'	-5.89	1.53	1.59
57	BB	2563	U	C2'-C1'	-5.89	1.46	1.53
21	AA	777	A	C8-N7	5.89	1.35	1.31
26	AV	45	G	N7-C5	-5.89	1.35	1.39
57	BB	27	G	N7-C5	5.89	1.42	1.39
57	BB	707	G	N7-C5	-5.89	1.35	1.39
57	BB	776	G	C2-N3	5.89	1.37	1.32
57	BB	1106	G	C2-N3	5.89	1.37	1.32
57	BB	1249	U	C2'-C1'	-5.89	1.46	1.53
57	BB	1826	G	C4'-C3'	5.89	1.59	1.53
57	BB	1856	U	C2'-C1'	-5.89	1.46	1.53
57	BB	2164	C	C5-C6	5.89	1.39	1.34
57	BB	2380	C	C2-N3	5.89	1.40	1.35
21	AA	422	C	C4-C5	5.89	1.47	1.43
23	AW	18	G	N7-C5	-5.89	1.35	1.39
57	BB	124	G	C6-N1	5.89	1.43	1.39
57	BB	745	G	C8-N7	-5.89	1.27	1.30
21	AA	261	U	O3'-P	-5.89	1.54	1.61
21	AA	1486	G	N1-C2	5.89	1.42	1.37
57	BB	345	A	N3-C4	-5.89	1.31	1.34
57	BB	715	A	N9-C4	-5.89	1.34	1.37
57	BB	1024	G	N9-C4	5.89	1.42	1.38
57	BB	2005	A	N7-C5	-5.89	1.35	1.39
57	BB	2234	G	P-O5'	-5.89	1.53	1.59
57	BB	2811	G	N3-C4	-5.89	1.31	1.35
21	AA	35	G	C8-N7	-5.89	1.27	1.30
21	AA	1205	U	C5-C6	5.89	1.39	1.34
23	AW	18	G	N1-C2	5.89	1.42	1.37
57	BB	384	A	N9-C8	-5.89	1.33	1.37
57	BB	2308	G	C2'-C1'	-5.89	1.46	1.53
21	AA	569	C	N1-C6	5.89	1.40	1.37
26	AV	37	A	C6-N1	5.89	1.39	1.35
42	BW	27	GLY	CA-C	-5.89	1.42	1.51
57	BB	47	C	C4-C5	5.89	1.47	1.43
57	BB	95	A	C2'-C1'	-5.89	1.46	1.53
57	BB	1021	A	C8-N7	-5.89	1.27	1.31
57	BB	1739	A	C5-C4	5.89	1.42	1.38
57	BB	2496	C	C2-N3	5.89	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2520	C	C3'-C2'	5.89	1.59	1.52
21	AA	200	G	C5-C6	-5.88	1.36	1.42
21	AA	254	G	C5-C4	5.88	1.42	1.38
21	AA	503	C	N1-C2	-5.88	1.34	1.40
21	AA	535	A	C5'-C4'	5.88	1.58	1.51
21	AA	1386	G	N9-C8	5.88	1.42	1.37
57	BB	579	G	C2'-C1'	-5.88	1.46	1.53
57	BB	599	A	N9-C8	-5.88	1.33	1.37
57	BB	630	G	C5-C4	-5.88	1.34	1.38
57	BB	1179	G	C6-N1	5.88	1.43	1.39
57	BB	1278	C	C4-C5	-5.88	1.38	1.43
57	BB	1939	U	C4'-C3'	-5.88	1.46	1.52
57	BB	2376	A	C8-N7	5.88	1.35	1.31
57	BB	2602	A	N7-C5	-5.88	1.35	1.39
21	AA	909	A	C6-N1	5.88	1.39	1.35
57	BB	1218	G	C2'-C1'	-5.88	1.46	1.53
57	BB	1504	A	C5-C4	5.88	1.42	1.38
57	BB	1814	G	C2'-C1'	-5.88	1.46	1.53
57	BB	2220	U	C5'-C4'	5.88	1.58	1.51
7	AP	70	ARG	NE-CZ	5.88	1.40	1.33
21	AA	710	G	C2-N3	5.88	1.37	1.32
21	AA	743	A	N7-C5	-5.88	1.35	1.39
21	AA	1524	C	C2'-C1'	-5.88	1.46	1.53
23	AW	52	G	C6-N1	5.88	1.43	1.39
24	AX	22	A	N9-C4	-5.88	1.34	1.37
57	BB	564	C	C3'-O3'	5.88	1.50	1.42
57	BB	1045	C	P-O5'	-5.88	1.53	1.59
57	BB	1148	U	N1-C6	5.88	1.43	1.38
57	BB	1226	A	N3-C4	-5.88	1.31	1.34
57	BB	1438	U	C2-N3	5.88	1.41	1.37
57	BB	2501	C	C3'-C2'	5.88	1.59	1.52
33	BN	12	ARG	NE-CZ	5.88	1.40	1.33
57	BB	85	G	O3'-P	-5.88	1.54	1.61
57	BB	819	A	N9-C4	5.88	1.41	1.37
57	BB	2001	C	N1-C2	5.88	1.46	1.40
21	AA	831	A	C5-C6	5.88	1.46	1.41
21	AA	1230	C	C5-C6	5.88	1.39	1.34
21	AA	1371	G	N9-C8	5.88	1.42	1.37
32	BM	15	GLY	N-CA	-5.88	1.37	1.46
33	BN	59	SER	CA-CB	5.88	1.61	1.52
57	BB	1	G	P-O5'	-5.88	1.53	1.59
57	BB	1047	G	P-O5'	-5.88	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1130	U	C5'-C4'	5.88	1.58	1.51
57	BB	1277	G	C5'-C4'	5.88	1.58	1.51
57	BB	1734	G	N3-C4	-5.88	1.31	1.35
57	BB	1767	G	C2'-C1'	-5.88	1.46	1.53
57	BB	2152	G	C6-N1	5.88	1.43	1.39
57	BB	2212	A	C3'-C2'	5.88	1.59	1.52
57	BB	2649	C	C2'-C1'	-5.88	1.46	1.53
57	BB	2674	G	C6-N1	5.88	1.43	1.39
21	AA	896	C	N1-C6	5.88	1.40	1.37
23	AW	9	A	C8-N7	5.88	1.35	1.31
26	AV	4	G	N9-C8	-5.88	1.33	1.37
57	BB	51	G	C6-N1	5.88	1.43	1.39
21	AA	902	G	N1-C2	5.88	1.42	1.37
21	AA	1211	U	C3'-C2'	5.88	1.59	1.52
21	AA	1366	C	C2'-C1'	-5.88	1.46	1.53
57	BB	707	G	C8-N7	-5.88	1.27	1.30
57	BB	1227	G	C2-N2	5.88	1.40	1.34
57	BB	2138	G	C5-C4	5.88	1.42	1.38
57	BB	2651	C	N3-C4	5.88	1.38	1.33
21	AA	45	G	C8-N7	5.87	1.34	1.30
21	AA	375	U	C2'-C1'	5.87	1.59	1.53
21	AA	575	G	C8-N7	5.87	1.34	1.30
21	AA	839	C	C3'-C2'	-5.87	1.46	1.52
21	AA	1321	U	O3'-P	-5.87	1.54	1.61
57	BB	2509	G	O3'-P	-5.87	1.54	1.61
57	BB	2562	U	C4'-C3'	-5.87	1.46	1.52
57	BB	2587	A	C1'-N9	5.87	1.57	1.48
57	BB	2641	G	C2'-C1'	-5.87	1.46	1.53
58	BA	99	A	C6-N1	-5.87	1.31	1.35
21	AA	94	G	N9-C4	5.87	1.42	1.38
21	AA	216	U	N3-C4	5.87	1.43	1.38
21	AA	326	G	O5'-C5'	5.87	1.53	1.44
21	AA	544	G	C6-N1	5.87	1.43	1.39
21	AA	1236	A	C6-N1	5.87	1.39	1.35
23	AW	38	A	N3-C4	5.87	1.38	1.34
57	BB	1163	G	C5-C4	5.87	1.42	1.38
57	BB	1319	C	C4-C5	5.87	1.47	1.43
57	BB	1522	A	N9-C8	-5.87	1.33	1.37
21	AA	1269	A	N7-C5	-5.87	1.35	1.39
25	AZ	69	TYR	CZ-OH	5.87	1.47	1.37
57	BB	1693	U	C2-N3	-5.87	1.33	1.37
21	AA	307	C	C4'-C3'	5.87	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	852	G	C5'-C4'	5.87	1.58	1.51
21	AA	1282	C	C5-C6	5.87	1.39	1.34
22	AY	55	U	C2'-C1'	-5.87	1.46	1.53
22	AY	65	G	N9-C4	5.87	1.42	1.38
26	AV	42	G	C5-C4	-5.87	1.34	1.38
53	BE	117	ARG	NE-CZ	5.87	1.40	1.33
57	BB	4	U	N3-C4	5.87	1.43	1.38
57	BB	896	A	O4'-C1'	5.87	1.49	1.41
57	BB	1042	G	N3-C4	-5.87	1.31	1.35
57	BB	1758	U	O3'-P	-5.87	1.54	1.61
57	BB	1789	A	N3-C4	-5.87	1.31	1.34
57	BB	2146	C	O3'-P	5.87	1.68	1.61
57	BB	2549	G	C6-N1	5.87	1.43	1.39
57	BB	2600	A	C6-N1	5.87	1.39	1.35
57	BB	361	G	N9-C4	-5.87	1.33	1.38
57	BB	1290	C	C5-C6	5.87	1.39	1.34
57	BB	2677	G	C4'-C3'	5.87	1.59	1.53
57	BB	2741	A	N1-C2	-5.87	1.29	1.34
21	AA	127	G	N1-C2	-5.87	1.33	1.37
21	AA	538	G	C2'-C1'	-5.87	1.46	1.53
21	AA	837	U	N1-C6	-5.87	1.32	1.38
21	AA	1126	U	C4-C5	5.87	1.48	1.43
57	BB	388	G	C8-N7	-5.87	1.27	1.30
57	BB	628	G	O3'-P	-5.87	1.54	1.61
57	BB	750	A	N7-C5	-5.87	1.35	1.39
57	BB	974	G	P-O5'	-5.87	1.53	1.59
57	BB	1215	G	O3'-P	-5.87	1.54	1.61
57	BB	1598	A	N9-C4	5.87	1.41	1.37
57	BB	2023	C	N1-C6	5.87	1.40	1.37
21	AA	153	C	O4'-C1'	5.86	1.49	1.41
23	AW	7	A	C5'-C4'	5.86	1.58	1.51
57	BB	60	G	P-O5'	-5.86	1.53	1.59
57	BB	270	A	C5-C6	-5.86	1.35	1.41
57	BB	282	A	C6-N6	5.86	1.38	1.33
57	BB	287	G	C8-N7	-5.86	1.27	1.30
57	BB	459	U	P-O5'	-5.86	1.53	1.59
57	BB	746	U	C4-O4	5.86	1.28	1.23
57	BB	1444	G	C3'-O3'	5.86	1.50	1.42
58	BA	95	U	N3-C4	5.86	1.43	1.38
21	AA	64	G	N3-C4	-5.86	1.31	1.35
21	AA	1288	A	P-O5'	-5.86	1.53	1.59
57	BB	1514	G	N9-C8	5.86	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1755	A	C2'-C1'	-5.86	1.47	1.53
57	BB	1989	G	N1-C2	5.86	1.42	1.37
58	BA	18	G	C6-N1	5.86	1.43	1.39
21	AA	153	C	O3'-P	-5.86	1.54	1.61
21	AA	350	G	C6-O6	-5.86	1.18	1.24
21	AA	573	A	P-O5'	-5.86	1.53	1.59
21	AA	1403	C	P-O5'	-5.86	1.53	1.59
23	AW	42	C	O4'-C1'	5.86	1.49	1.41
26	AV	14	A	C5'-C4'	5.86	1.58	1.51
57	BB	627	A	C4'-C3'	5.86	1.59	1.53
57	BB	1107	G	C6-N1	5.86	1.43	1.39
57	BB	2587	A	C2-N3	5.86	1.38	1.33
57	BB	2783	U	C5-C6	5.86	1.39	1.34
57	BB	2861	U	O4'-C1'	5.86	1.49	1.41
21	AA	712	A	P-O5'	-5.86	1.53	1.59
23	AW	28	G	C5'-C4'	5.86	1.58	1.51
21	AA	561	U	N1-C2	5.86	1.43	1.38
21	AA	643	C	C4-N4	5.86	1.39	1.33
21	AA	905	U	C5-C6	5.86	1.39	1.34
21	AA	1107	C	N1-C2	5.86	1.46	1.40
22	AY	66	A	C4'-O4'	-5.86	1.38	1.45
57	BB	393	C	C4'-C3'	-5.86	1.46	1.52
57	BB	708	G	C2'-C1'	-5.86	1.47	1.53
57	BB	2163	A	C6-N1	5.86	1.39	1.35
4	AM	70	ARG	CD-NE	5.86	1.56	1.46
21	AA	162	A	P-O5'	-5.86	1.53	1.59
22	AY	52	U	O3'-P	-5.86	1.54	1.61
23	AW	49	C	C4'-O4'	5.86	1.53	1.45
57	BB	28	A	C2'-C1'	-5.86	1.47	1.53
57	BB	252	G	O4'-C1'	-5.86	1.34	1.41
57	BB	883	G	N9-C4	5.86	1.42	1.38
57	BB	1753	G	C2-N3	5.86	1.37	1.32
57	BB	2083	G	P-O5'	-5.86	1.53	1.59
57	BB	2143	C	N3-C4	5.86	1.38	1.33
57	BB	2263	C	C5-C6	-5.86	1.29	1.34
21	AA	410	G	C2-N3	5.85	1.37	1.32
21	AA	1284	C	N1-C6	5.85	1.40	1.37
21	AA	1304	G	O3'-P	-5.85	1.54	1.61
57	BB	310	A	C2'-C1'	-5.85	1.47	1.53
57	BB	876	C	N1-C2	5.85	1.46	1.40
3	AL	120	ARG	CZ-NH2	5.85	1.40	1.33
21	AA	91	U	C4'-C3'	-5.85	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1164	G	C2'-C1'	-5.85	1.47	1.53
21	AA	1173	U	C4-C5	5.85	1.48	1.43
21	AA	1399	C	C3'-C2'	5.85	1.59	1.52
21	AA	1428	A	O4'-C1'	5.85	1.49	1.41
57	BB	891	G	C4'-C3'	-5.85	1.46	1.52
57	BB	1344	U	P-O5'	-5.85	1.53	1.59
57	BB	2226	C	N1-C6	5.85	1.40	1.37
57	BB	2483	C	C4'-C3'	5.85	1.59	1.53
58	BA	34	A	N9-C4	-5.85	1.34	1.37
21	AA	1242	G	N3-C4	-5.85	1.31	1.35
57	BB	62	U	C4'-C3'	-5.85	1.46	1.52
57	BB	2404	U	P-O5'	5.85	1.65	1.59
57	BB	2583	G	P-O5'	-5.85	1.53	1.59
58	BA	39	A	C2'-C1'	5.85	1.59	1.53
21	AA	214	C	O4'-C1'	5.85	1.49	1.41
21	AA	1139	G	C3'-C2'	-5.85	1.46	1.52
21	AA	1275	A	C1'-N9	-5.85	1.38	1.46
26	AV	67	C	N1-C2	5.85	1.46	1.40
57	BB	1770	G	C6-N1	5.85	1.43	1.39
57	BB	2756	U	C2'-C1'	-5.85	1.47	1.53
21	AA	528	C	C4'-C3'	5.85	1.59	1.53
21	AA	573	A	C8-N7	5.85	1.35	1.31
21	AA	636	U	C5'-C4'	5.85	1.58	1.51
21	AA	647	C	P-O5'	-5.85	1.53	1.59
21	AA	1279	G	O3'-P	-5.85	1.54	1.61
21	AA	1372	U	O3'-P	-5.85	1.54	1.61
57	BB	217	A	O4'-C1'	5.85	1.49	1.41
57	BB	350	G	N1-C2	5.85	1.42	1.37
57	BB	484	C	N3-C4	5.85	1.38	1.33
57	BB	614	A	C3'-O3'	-5.85	1.33	1.42
57	BB	696	G	N7-C5	5.85	1.42	1.39
21	AA	1306	A	N9-C4	5.85	1.41	1.37
57	BB	1048	A	C3'-C2'	-5.85	1.46	1.52
21	AA	26	A	C3'-C2'	-5.84	1.46	1.52
21	AA	1292	G	C8-N7	5.84	1.34	1.30
57	BB	1210	G	O4'-C1'	-5.84	1.34	1.41
57	BB	1795	C	N3-C4	5.84	1.38	1.33
57	BB	2096	C	O3'-P	-5.84	1.54	1.61
57	BB	2316	G	C6-N1	5.84	1.43	1.39
57	BB	2869	G	C6-N1	5.84	1.43	1.39
21	AA	716	A	C5-C6	-5.84	1.35	1.41
21	AA	1315	U	C5-C6	5.84	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	7	U	C5'-C4'	5.84	1.58	1.51
23	AW	21	A	C6-N6	5.84	1.38	1.33
57	BB	1292	G	O3'-P	-5.84	1.54	1.61
57	BB	1623	G	N3-C4	5.84	1.39	1.35
57	BB	2323	G	C8-N7	-5.84	1.27	1.30
21	AA	59	A	C5'-C4'	5.84	1.58	1.51
21	AA	127	G	C3'-C2'	-5.84	1.46	1.52
21	AA	824	G	P-O5'	-5.84	1.53	1.59
24	AX	18	G	C8-N7	-5.84	1.27	1.30
26	AV	74	C	C5-C6	5.84	1.39	1.34
57	BB	71	A	C4'-O4'	-5.84	1.38	1.45
57	BB	98	G	N3-C4	-5.84	1.31	1.35
57	BB	291	G	C5'-C4'	5.84	1.58	1.51
57	BB	374	A	N9-C4	5.84	1.41	1.37
57	BB	609	A	C2-N3	5.84	1.38	1.33
57	BB	789	A	C5-C4	5.84	1.42	1.38
57	BB	1674	G	C8-N7	5.84	1.34	1.30
57	BB	1785	A	C3'-C2'	5.84	1.59	1.52
57	BB	2747	G	C5-C4	5.84	1.42	1.38
21	AA	1030	U	N1-C2	5.84	1.43	1.38
21	AA	1458	G	C6-N1	5.84	1.43	1.39
57	BB	140	C	O5'-C5'	-5.84	1.33	1.42
57	BB	630	G	C6-N1	5.84	1.43	1.39
57	BB	883	G	C5'-C4'	-5.84	1.44	1.51
57	BB	980	A	P-O5'	-5.84	1.53	1.59
21	AA	497	G	N9-C8	5.84	1.42	1.37
21	AA	732	C	P-O5'	-5.84	1.53	1.59
23	AW	64	A	C5-C4	5.84	1.42	1.38
57	BB	158	U	N1-C6	5.84	1.43	1.38
57	BB	465	G	O3'-P	-5.84	1.54	1.61
57	BB	1721	G	N7-C5	5.84	1.42	1.39
21	AA	189	A	C2'-O2'	-5.84	1.34	1.41
21	AA	799	G	C2-N3	5.84	1.37	1.32
21	AA	885	G	P-O5'	-5.84	1.53	1.59
57	BB	99	U	N3-C4	-5.84	1.33	1.38
57	BB	656	G	C3'-C2'	-5.84	1.46	1.52
57	BB	1815	A	O3'-P	-5.84	1.54	1.61
57	BB	1821	A	C5-C4	-5.84	1.34	1.38
57	BB	2397	G	C6-O6	5.84	1.29	1.24
21	AA	1246	A	O3'-P	-5.83	1.54	1.61
23	AW	38	A	O4'-C1'	5.83	1.49	1.41
57	BB	1127	A	C2'-C1'	-5.83	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1569	A	C2'-C1'	5.83	1.59	1.53
57	BB	1791	A	C6-N6	5.83	1.38	1.33
58	BA	43	C	C1'-N1	5.83	1.57	1.48
21	AA	277	C	C2-N3	-5.83	1.31	1.35
21	AA	373	A	C4'-O4'	5.83	1.53	1.45
21	AA	413	G	O4'-C1'	-5.83	1.34	1.41
21	AA	677	U	C3'-O3'	5.83	1.50	1.42
57	BB	551	G	N9-C8	-5.83	1.33	1.37
57	BB	1352	U	C4'-O4'	-5.83	1.38	1.45
57	BB	1400	U	O4'-C1'	5.83	1.49	1.41
57	BB	2126	A	C2'-C1'	-5.83	1.47	1.53
58	BA	28	C	N1-C6	5.83	1.40	1.37
16	AE	129	SER	CA-CB	5.83	1.61	1.52
21	AA	313	A	N7-C5	-5.83	1.35	1.39
21	AA	478	A	C2'-C1'	-5.83	1.47	1.53
21	AA	777	A	C5'-C4'	5.83	1.58	1.51
21	AA	1023	U	C4-C5	-5.83	1.38	1.43
21	AA	1465	A	C6-N1	5.83	1.39	1.35
57	BB	44	A	O3'-P	-5.83	1.54	1.61
57	BB	372	G	N1-C2	5.83	1.42	1.37
57	BB	808	G	C4'-C3'	-5.83	1.46	1.52
57	BB	818	G	C3'-C2'	-5.83	1.46	1.52
57	BB	897	C	O3'-P	5.83	1.68	1.61
57	BB	1378	A	C5'-C4'	5.83	1.58	1.51
57	BB	1412	U	P-O5'	5.83	1.65	1.59
57	BB	1484	U	N1-C6	5.83	1.43	1.38
57	BB	2172	U	C1'-N1	5.83	1.57	1.48
57	BB	2286	G	C6-N1	-5.83	1.35	1.39
57	BB	2773	C	C4-C5	5.83	1.47	1.43
57	BB	2839	G	N1-C2	5.83	1.42	1.37
21	AA	98	A	C2'-C1'	-5.83	1.47	1.53
21	AA	608	A	C8-N7	-5.83	1.27	1.31
21	AA	926	G	O5'-C5'	-5.83	1.33	1.42
21	AA	1058	G	N7-C5	-5.83	1.35	1.39
21	AA	1469	C	N1-C6	5.83	1.40	1.37
21	AA	382	A	C8-N7	5.83	1.35	1.31
21	AA	909	A	C6-N6	5.83	1.38	1.33
21	AA	1276	G	C8-N7	-5.83	1.27	1.30
57	BB	248	G	O3'-P	-5.83	1.54	1.61
57	BB	559	G	C4'-O4'	5.83	1.53	1.45
57	BB	1232	G	N3-C4	5.83	1.39	1.35
57	BB	1438	U	C4'-C3'	5.83	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2543	G	N9-C8	-5.83	1.33	1.37
21	AA	673	A	N3-C4	5.83	1.38	1.34
21	AA	1529	G	N3-C4	-5.83	1.31	1.35
57	BB	5	A	C5-C6	-5.83	1.35	1.41
57	BB	426	C	P-O5'	-5.83	1.53	1.59
57	BB	663	G	N9-C4	-5.83	1.33	1.38
57	BB	2392	A	C4'-C3'	-5.83	1.46	1.52
21	AA	275	G	C4'-C3'	-5.83	1.46	1.52
21	AA	1307	U	P-O5'	5.83	1.65	1.59
26	AV	71	C	C4-N4	5.83	1.39	1.33
57	BB	332	A	N9-C4	-5.83	1.34	1.37
57	BB	1459	G	O3'-P	-5.83	1.54	1.61
57	BB	2088	A	C4'-C3'	-5.83	1.46	1.52
57	BB	2700	A	C8-N7	-5.83	1.27	1.31
21	AA	21	G	N9-C4	-5.82	1.33	1.38
21	AA	229	U	C4-C5	-5.82	1.38	1.43
21	AA	306	A	P-O5'	-5.82	1.53	1.59
21	AA	382	A	C4'-C3'	-5.82	1.46	1.52
21	AA	958	A	C3'-C2'	5.82	1.59	1.52
21	AA	1511	G	C2'-C1'	-5.82	1.47	1.53
22	AY	42	G	C3'-C2'	5.82	1.59	1.52
57	BB	1866	A	N9-C4	5.82	1.41	1.37
57	BB	2106	U	C5-C6	5.82	1.39	1.34
57	BB	2449	U	C2'-C1'	-5.82	1.47	1.53
22	AY	44	A	C5-C6	5.82	1.46	1.41
45	BC	100	ARG	NE-CZ	5.82	1.40	1.33
57	BB	990	A	N7-C5	-5.82	1.35	1.39
57	BB	1017	G	N9-C8	-5.82	1.33	1.37
57	BB	2647	U	C2-N3	5.82	1.41	1.37
57	BB	2736	A	N9-C4	5.82	1.41	1.37
3	AL	94	TYR	CE2-CZ	5.82	1.46	1.38
12	AU	17	ARG	CZ-NH1	5.82	1.40	1.33
57	BB	315	G	P-O5'	-5.82	1.53	1.59
57	BB	583	G	N1-C2	5.82	1.42	1.37
57	BB	1823	G	C6-N1	5.82	1.43	1.39
57	BB	1829	A	O4'-C1'	-5.82	1.34	1.41
57	BB	1912	A	P-O5'	-5.82	1.53	1.59
57	BB	2052	A	N1-C2	5.82	1.39	1.34
57	BB	2267	A	P-O5'	-5.82	1.53	1.59
57	BB	2280	G	C3'-O3'	5.82	1.50	1.42
57	BB	2641	G	C6-N1	-5.82	1.35	1.39
57	BB	2783	U	C1'-N1	5.82	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	AC	163	ARG	CD-NE	5.82	1.56	1.46
21	AA	197	A	C2'-C1'	-5.82	1.47	1.53
57	BB	748	G	O4'-C1'	-5.82	1.34	1.41
58	BA	84	G	C8-N7	5.82	1.34	1.30
18	AG	9	ARG	CZ-NH2	5.82	1.40	1.33
21	AA	288	A	C6-N6	5.82	1.38	1.33
21	AA	496	A	N3-C4	5.82	1.38	1.34
21	AA	896	C	O3'-P	-5.82	1.54	1.61
21	AA	1518	A	C4'-C3'	5.82	1.59	1.53
57	BB	505	A	C5-C6	5.82	1.46	1.41
57	BB	634	C	C2-O2	5.82	1.29	1.24
57	BB	920	A	C3'-C2'	5.82	1.59	1.52
57	BB	1105	U	C4-O4	5.82	1.28	1.23
57	BB	2143	C	C3'-C2'	-5.82	1.46	1.52
57	BB	2197	U	C4-O4	-5.82	1.19	1.23
57	BB	2228	G	N9-C4	5.82	1.42	1.38
5	AN	8	ARG	CZ-NH1	5.82	1.40	1.33
21	AA	90	C	P-O5'	5.82	1.65	1.59
21	AA	1220	G	O3'-P	-5.82	1.54	1.61
26	AV	33	U	C5'-C4'	5.82	1.58	1.51
53	BE	71	GLY	CA-C	-5.82	1.42	1.51
56	BH	25	TYR	CB-CG	5.82	1.60	1.51
57	BB	688	U	C4-C5	5.82	1.48	1.43
57	BB	1562	U	N3-C4	5.82	1.43	1.38
57	BB	1918	A	N9-C4	-5.82	1.34	1.37
57	BB	2033	A	C8-N7	-5.82	1.27	1.31
57	BB	2552	U	P-O5'	-5.82	1.53	1.59
21	AA	420	U	C4'-C3'	-5.81	1.46	1.52
57	BB	13	A	P-O5'	-5.81	1.53	1.59
57	BB	2199	A	C4'-O4'	-5.81	1.38	1.45
21	AA	180	U	C4'-C3'	5.81	1.59	1.53
21	AA	435	A	C8-N7	-5.81	1.27	1.31
21	AA	908	A	C6-N6	5.81	1.38	1.33
21	AA	1032	G	C2-N2	5.81	1.40	1.34
23	AW	28	G	C1'-N9	-5.81	1.38	1.46
26	AV	28	C	C2-N3	-5.81	1.31	1.35
57	BB	257	C	C4-C5	-5.81	1.38	1.43
57	BB	491	G	C5-C4	-5.81	1.34	1.38
57	BB	1476	U	C2-N3	5.81	1.41	1.37
57	BB	1972	G	N9-C4	-5.81	1.33	1.38
57	BB	380	G	C2'-C1'	-5.81	1.47	1.53
57	BB	937	C	C2'-C1'	-5.81	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1383	A	N1-C2	-5.81	1.29	1.34
21	AA	304	U	C5-C6	5.81	1.39	1.34
22	AY	36	A	N9-C8	5.81	1.42	1.37
42	BW	10	ARG	NE-CZ	5.81	1.40	1.33
57	BB	1251	C	C4-C5	5.81	1.47	1.43
57	BB	1342	A	N1-C2	5.81	1.39	1.34
57	BB	1525	A	O5'-C5'	5.81	1.53	1.44
57	BB	1703	G	C5'-C4'	5.81	1.58	1.51
9	AR	56	ARG	NE-CZ	5.81	1.40	1.33
21	AA	44	A	N1-C2	5.81	1.39	1.34
21	AA	351	G	C5-C6	-5.81	1.36	1.42
21	AA	459	A	O3'-P	-5.81	1.54	1.61
21	AA	504	C	C3'-O3'	5.81	1.50	1.42
21	AA	630	A	N9-C8	-5.81	1.33	1.37
21	AA	753	A	N3-C4	5.81	1.38	1.34
21	AA	903	G	C5-C4	5.81	1.42	1.38
21	AA	1052	U	C2-N3	5.81	1.41	1.37
21	AA	1232	U	C4'-C3'	5.81	1.59	1.53
21	AA	1276	G	C2-N3	5.81	1.37	1.32
21	AA	1452	C	C5'-C4'	5.81	1.58	1.51
57	BB	24	G	N9-C8	-5.81	1.33	1.37
57	BB	609	A	C2'-C1'	-5.81	1.47	1.53
57	BB	1255	U	C2-N3	5.81	1.41	1.37
57	BB	2100	G	O3'-P	-5.81	1.54	1.61
57	BB	2574	G	C8-N7	-5.81	1.27	1.30
21	AA	459	A	C2'-C1'	-5.81	1.47	1.53
23	AW	33	U	C4'-C3'	5.81	1.59	1.53
57	BB	1781	U	C3'-C2'	5.81	1.59	1.52
21	AA	1340	A	C6-N6	5.80	1.38	1.33
21	AA	1445	U	C4'-C3'	-5.80	1.46	1.52
57	BB	63	A	C6-N6	5.80	1.38	1.33
57	BB	312	G	C8-N7	5.80	1.34	1.30
57	BB	735	A	C8-N7	-5.80	1.27	1.31
57	BB	1142	A	N9-C4	-5.80	1.34	1.37
57	BB	1307	A	N9-C4	5.80	1.41	1.37
57	BB	1332	G	C4'-C3'	5.80	1.59	1.53
57	BB	2504	U	C5-C6	5.80	1.39	1.34
21	AA	502	A	N7-C5	-5.80	1.35	1.39
57	BB	258	G	N3-C4	-5.80	1.31	1.35
57	BB	640	C	C5'-C4'	5.80	1.58	1.51
57	BB	894	U	C2'-C1'	-5.80	1.47	1.53
57	BB	1250	G	N9-C8	-5.80	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1405	U	C4'-O4'	5.80	1.53	1.45
21	AA	173	U	C4-C5	5.80	1.48	1.43
21	AA	274	A	N9-C4	-5.80	1.34	1.37
57	BB	2044	C	N1-C6	5.80	1.40	1.37
57	BB	2827	C	N3-C4	5.80	1.38	1.33
21	AA	44	A	C5'-C4'	5.80	1.58	1.51
21	AA	359	G	C4'-C3'	5.80	1.59	1.53
21	AA	441	A	P-O5'	-5.80	1.53	1.59
21	AA	761	G	N1-C2	5.80	1.42	1.37
57	BB	141	G	N1-C2	5.80	1.42	1.37
57	BB	503	A	N9-C4	5.80	1.41	1.37
57	BB	564	C	C2'-C1'	-5.80	1.47	1.53
57	BB	726	G	C2-N3	5.80	1.37	1.32
57	BB	1130	U	C2'-C1'	-5.80	1.47	1.53
57	BB	2104	C	C4'-C3'	5.80	1.59	1.53
57	BB	2170	A	C5-C4	5.80	1.42	1.38
21	AA	138	G	C6-N1	-5.80	1.35	1.39
21	AA	547	A	C8-N7	-5.80	1.27	1.31
57	BB	124	G	P-O5'	5.80	1.65	1.59
57	BB	851	C	C5-C6	-5.80	1.29	1.34
57	BB	2000	C	C2-O2	5.80	1.29	1.24
57	BB	2268	A	C2'-C1'	-5.80	1.47	1.53
57	BB	2467	C	C2'-C1'	-5.80	1.47	1.53
57	BB	2848	G	P-O5'	-5.80	1.53	1.59
22	AY	66	A	C5-C6	-5.80	1.35	1.41
23	AW	29	G	N3-C4	-5.80	1.31	1.35
23	AW	65	G	C5-C6	5.80	1.48	1.42
57	BB	465	G	C5-C6	-5.80	1.36	1.42
57	BB	953	G	N3-C4	5.80	1.39	1.35
57	BB	1077	A	O3'-P	-5.80	1.54	1.61
57	BB	1278	C	C4-N4	5.80	1.39	1.33
57	BB	1500	G	C2'-C1'	-5.80	1.47	1.53
57	BB	2782	G	C8-N7	-5.80	1.27	1.30
2	AK	68	ARG	NE-CZ	5.79	1.40	1.33
13	AB	32	GLY	N-CA	-5.79	1.37	1.46
21	AA	95	C	C1'-N1	5.79	1.57	1.48
21	AA	1339	A	P-O5'	-5.79	1.53	1.59
22	AY	21	A	N3-C4	5.79	1.38	1.34
57	BB	24	G	N7-C5	-5.79	1.35	1.39
57	BB	2362	C	N1-C6	5.79	1.40	1.37
57	BB	2398	U	C2-N3	5.79	1.41	1.37
21	AA	566	G	C1'-N9	5.79	1.57	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	734	G	O3'-P	-5.79	1.54	1.61
21	AA	827	U	C5'-C4'	5.79	1.58	1.51
21	AA	1457	G	C8-N7	-5.79	1.27	1.30
21	AA	1463	U	C2-N3	5.79	1.41	1.37
57	BB	1305	C	C4'-O4'	-5.79	1.38	1.45
57	BB	1947	C	C2-N3	5.79	1.40	1.35
57	BB	2421	G	C8-N7	-5.79	1.27	1.30
57	BB	2507	C	C4-C5	-5.79	1.38	1.43
21	AA	743	A	C3'-O3'	5.79	1.50	1.42
21	AA	1203	C	N3-C4	5.79	1.38	1.33
32	BM	107	GLY	CA-C	-5.79	1.42	1.51
57	BB	465	G	O4'-C1'	-5.79	1.34	1.41
57	BB	493	G	C2-N3	5.79	1.37	1.32
57	BB	560	C	N3-C4	5.79	1.38	1.33
57	BB	809	G	N7-C5	5.79	1.42	1.39
57	BB	905	A	C3'-C2'	5.79	1.59	1.52
57	BB	1586	A	C4'-C3'	-5.79	1.46	1.52
57	BB	1604	C	C5'-C4'	5.79	1.58	1.51
57	BB	2037	A	C5-C4	-5.79	1.34	1.38
57	BB	2661	G	N1-C2	5.79	1.42	1.37
16	AE	9	GLU	N-CA	5.79	1.57	1.46
21	AA	751	U	C5'-C4'	5.79	1.58	1.51
21	AA	1035	A	C4'-C3'	5.79	1.59	1.53
21	AA	1104	G	N9-C8	-5.79	1.33	1.37
26	AV	64	G	P-O5'	-5.79	1.53	1.59
57	BB	805	G	C4'-C3'	5.79	1.59	1.53
57	BB	2059	A	C4'-O4'	5.79	1.53	1.45
57	BB	2676	C	C3'-C2'	-5.79	1.46	1.52
21	AA	179	A	C6-N1	5.79	1.39	1.35
21	AA	749	A	N3-C4	5.79	1.38	1.34
57	BB	1192	G	N1-C2	5.79	1.42	1.37
57	BB	1565	C	N1-C6	5.79	1.40	1.37
57	BB	1756	G	C2'-C1'	-5.79	1.47	1.53
57	BB	2162	G	N9-C8	-5.79	1.33	1.37
57	BB	2868	A	C8-N7	-5.79	1.27	1.31
21	AA	1153	G	N7-C5	-5.79	1.35	1.39
21	AA	1488	G	C4'-O4'	5.79	1.53	1.45
57	BB	1136	G	C4'-C3'	5.79	1.59	1.53
21	AA	328	C	C4'-C3'	5.79	1.59	1.53
21	AA	449	G	N1-C2	5.79	1.42	1.37
21	AA	1041	G	P-O5'	-5.79	1.53	1.59
57	BB	415	A	N1-C2	5.79	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1502	A	C4'-O4'	5.79	1.53	1.45
57	BB	1512	C	N3-C4	5.79	1.38	1.33
57	BB	2287	A	N9-C4	5.79	1.41	1.37
57	BB	2781	A	N9-C8	-5.79	1.33	1.37
57	BB	2868	A	C4'-O4'	5.79	1.53	1.45
58	BA	27	C	C2'-C1'	-5.79	1.47	1.53
58	BA	61	G	N9-C4	5.79	1.42	1.38
21	AA	872	A	C2'-C1'	-5.78	1.47	1.53
21	AA	877	G	C5-C6	-5.78	1.36	1.42
21	AA	1145	A	C5'-C4'	5.78	1.58	1.51
57	BB	1206	G	C5-C4	5.78	1.42	1.38
57	BB	1649	G	N3-C4	5.78	1.39	1.35
57	BB	2780	G	N7-C5	-5.78	1.35	1.39
19	AH	76	ARG	CZ-NH2	5.78	1.40	1.33
21	AA	709	U	N1-C2	5.78	1.43	1.38
57	BB	379	G	N3-C4	-5.78	1.31	1.35
21	AA	209	U	C1'-N1	5.78	1.57	1.48
21	AA	815	A	C6-N6	-5.78	1.29	1.33
21	AA	1172	C	C4-C5	5.78	1.47	1.43
21	AA	1313	U	C2'-C1'	-5.78	1.47	1.53
21	AA	1436	U	N3-C4	5.78	1.43	1.38
21	AA	1447	A	C2'-C1'	-5.78	1.47	1.53
22	AY	56	C	N1-C6	5.78	1.40	1.37
57	BB	40	U	P-O5'	-5.78	1.53	1.59
57	BB	42	A	C6-N1	5.78	1.39	1.35
57	BB	181	A	C5'-C4'	5.78	1.58	1.51
57	BB	555	G	N1-C2	5.78	1.42	1.37
57	BB	1193	G	P-O5'	-5.78	1.53	1.59
57	BB	2012	G	C2'-C1'	-5.78	1.47	1.53
57	BB	2405	G	C2'-C1'	-5.78	1.47	1.53
58	BA	45	A	P-O5'	5.78	1.65	1.59
21	AA	1115	U	C5'-C4'	5.78	1.58	1.51
57	BB	510	C	C2'-C1'	-5.78	1.47	1.53
57	BB	712	G	C2-N2	5.78	1.40	1.34
21	AA	676	A	N1-C2	5.78	1.39	1.34
21	AA	806	C	O3'-P	-5.78	1.54	1.61
21	AA	1127	G	C4'-O4'	5.78	1.53	1.45
21	AA	1496	C	C3'-C2'	-5.78	1.46	1.52
57	BB	548	G	N1-C2	5.78	1.42	1.37
57	BB	1708	C	C4-N4	5.78	1.39	1.33
57	BB	2293	G	N3-C4	-5.78	1.31	1.35
4	AM	69	ARG	NE-CZ	5.78	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	887	G	N7-C5	-5.78	1.35	1.39
21	AA	1054	C	O3'-P	-5.78	1.54	1.61
21	AA	1067	A	O3'-P	-5.78	1.54	1.61
32	BM	66	ARG	CD-NE	5.78	1.56	1.46
57	BB	726	G	N3-C4	-5.78	1.31	1.35
57	BB	1187	G	C3'-C2'	5.78	1.59	1.52
57	BB	1266	G	C4'-C3'	-5.78	1.46	1.52
57	BB	1609	A	C4'-C3'	5.78	1.59	1.53
57	BB	2506	U	C4'-O4'	-5.78	1.38	1.45
58	BA	10	G	C2-N3	5.78	1.37	1.32
21	AA	1168	U	O4'-C1'	5.77	1.49	1.41
57	BB	487	C	N1-C6	-5.77	1.33	1.37
57	BB	966	G	C5-C4	-5.77	1.34	1.38
57	BB	1039	A	O5'-C5'	-5.77	1.33	1.42
57	BB	2775	G	C6-O6	-5.77	1.19	1.24
21	AA	388	G	N1-C2	5.77	1.42	1.37
21	AA	1211	U	C5-C6	-5.77	1.28	1.34
21	AA	1232	U	N3-C4	5.77	1.43	1.38
26	AV	62	C	C3'-C2'	-5.77	1.46	1.52
45	BC	270	ARG	NE-CZ	5.77	1.40	1.33
57	BB	178	G	N9-C4	-5.77	1.33	1.38
57	BB	502	A	C8-N7	-5.77	1.27	1.31
57	BB	765	C	O3'-P	-5.77	1.54	1.61
57	BB	2068	U	C5-C6	5.77	1.39	1.34
57	BB	896	A	C8-N7	-5.77	1.27	1.31
57	BB	1347	A	C5'-C4'	5.77	1.58	1.51
57	BB	1510	G	C5-C6	-5.77	1.36	1.42
57	BB	1779	U	C2-N3	5.77	1.41	1.37
57	BB	2429	G	C2'-C1'	5.77	1.59	1.53
57	BB	2892	G	P-O5'	-5.77	1.53	1.59
21	AA	729	A	C2'-O2'	5.77	1.49	1.41
21	AA	1178	G	C2'-C1'	-5.77	1.47	1.53
21	AA	1246	A	C5-C6	-5.77	1.35	1.41
21	AA	1503	A	N7-C5	-5.77	1.35	1.39
57	BB	63	A	C3'-C2'	-5.77	1.46	1.52
57	BB	328	U	C3'-O3'	5.77	1.50	1.42
57	BB	1055	G	N7-C5	-5.77	1.35	1.39
57	BB	1071	G	C6-N1	5.77	1.43	1.39
57	BB	1369	G	N9-C8	5.77	1.41	1.37
21	AA	404	G	N1-C2	5.77	1.42	1.37
21	AA	617	G	C5-C4	5.77	1.42	1.38
21	AA	629	A	C6-N1	5.77	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1221	G	P-O5'	5.77	1.65	1.59
21	AA	1245	C	C2'-O2'	5.77	1.49	1.41
21	AA	1335	U	O3'-P	-5.77	1.54	1.61
57	BB	86	G	C2-N3	5.77	1.37	1.32
57	BB	111	A	N9-C4	5.77	1.41	1.37
57	BB	132	G	C2-N2	5.77	1.40	1.34
57	BB	871	U	C3'-C2'	-5.77	1.46	1.52
57	BB	1268	A	O4'-C1'	-5.77	1.34	1.41
57	BB	1379	U	O4'-C1'	5.77	1.49	1.41
57	BB	1464	G	N7-C5	5.77	1.42	1.39
57	BB	1744	A	C5'-C4'	5.77	1.58	1.51
57	BB	2212	A	N9-C4	5.77	1.41	1.37
57	BB	2510	C	C2-N3	-5.77	1.31	1.35
17	AF	44	ARG	CZ-NH1	5.77	1.40	1.33
57	BB	6	A	C1'-N9	-5.77	1.38	1.46
57	BB	39	G	N9-C4	5.77	1.42	1.38
57	BB	559	G	N9-C4	-5.77	1.33	1.38
57	BB	865	C	C2'-C1'	-5.77	1.47	1.53
57	BB	1144	A	C4'-C3'	-5.77	1.46	1.52
57	BB	1715	G	N1-C2	5.77	1.42	1.37
58	BA	44	G	C3'-C2'	-5.77	1.46	1.52
21	AA	438	U	C2'-C1'	-5.76	1.47	1.53
21	AA	699	C	N3-C4	5.76	1.38	1.33
21	AA	1356	G	N9-C4	5.76	1.42	1.38
26	AV	58	A	P-O5'	-5.76	1.53	1.59
57	BB	298	G	C6-N1	5.76	1.43	1.39
57	BB	705	A	C3'-C2'	5.76	1.59	1.52
57	BB	1219	U	N3-C4	5.76	1.43	1.38
57	BB	1310	G	N9-C4	-5.76	1.33	1.38
57	BB	1390	U	N3-C4	5.76	1.43	1.38
57	BB	1826	G	C2-N2	5.76	1.40	1.34
57	BB	2077	A	N7-C5	-5.76	1.35	1.39
57	BB	2214	C	N3-C4	5.76	1.38	1.33
21	AA	528	C	O3'-P	-5.76	1.54	1.61
21	AA	802	A	C5-C4	5.76	1.42	1.38
22	AY	18	G	C6-N1	-5.76	1.35	1.39
57	BB	53	A	O3'-P	-5.76	1.54	1.61
57	BB	1300	G	C6-N1	5.76	1.43	1.39
2	AK	92	ARG	NE-CZ	5.76	1.40	1.33
21	AA	455	G	C2'-C1'	-5.76	1.47	1.53
21	AA	613	C	C5-C6	-5.76	1.29	1.34
21	AA	1024	G	C2-N3	5.76	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1131	G	N9-C4	-5.76	1.33	1.38
21	AA	1340	A	C8-N7	-5.76	1.27	1.31
21	AA	1382	C	O4'-C1'	5.76	1.49	1.41
21	AA	1530	G	C2-N3	5.76	1.37	1.32
22	AY	47	U	O3'-P	-5.76	1.54	1.61
57	BB	146	A	C6-N6	5.76	1.38	1.33
57	BB	377	G	N9-C4	-5.76	1.33	1.38
57	BB	448	U	P-O5'	5.76	1.65	1.59
57	BB	935	C	N3-C4	5.76	1.38	1.33
57	BB	1435	G	N3-C4	-5.76	1.31	1.35
57	BB	1500	G	C6-N1	5.76	1.43	1.39
57	BB	1543	G	N9-C8	5.76	1.41	1.37
21	AA	156	C	C3'-C2'	5.76	1.59	1.52
21	AA	337	G	C5-C4	5.76	1.42	1.38
21	AA	1029	U	O3'-P	-5.76	1.54	1.61
21	AA	1076	U	C2-N3	5.76	1.41	1.37
23	AW	40	C	C5'-C4'	5.76	1.58	1.51
26	AV	73	A	C6-N1	5.76	1.39	1.35
41	BV	79	ARG	CZ-NH1	5.76	1.40	1.33
57	BB	304	U	C2-N3	5.76	1.41	1.37
57	BB	572	A	C5-C4	5.76	1.42	1.38
57	BB	1493	C	O3'-P	-5.76	1.54	1.61
57	BB	1929	G	C2-N3	5.76	1.37	1.32
57	BB	2020	A	C4'-C3'	5.76	1.59	1.53
57	BB	2038	G	P-O5'	-5.76	1.53	1.59
57	BB	2270	A	O3'-P	-5.76	1.54	1.61
21	AA	54	C	C5-C6	5.76	1.39	1.34
21	AA	390	U	C2-O2	5.76	1.27	1.22
21	AA	1042	A	C8-N7	-5.76	1.27	1.31
21	AA	1216	A	N3-C4	5.76	1.38	1.34
57	BB	1456	G	O4'-C1'	-5.76	1.34	1.41
57	BB	1631	G	C2'-C1'	-5.76	1.47	1.53
57	BB	2638	G	N9-C8	-5.76	1.33	1.37
21	AA	587	G	C3'-C2'	5.76	1.59	1.52
21	AA	838	G	O3'-P	-5.76	1.54	1.61
21	AA	848	C	O3'-P	-5.76	1.54	1.61
21	AA	1119	C	C5-C6	5.76	1.39	1.34
21	AA	1468	A	C6-N1	5.76	1.39	1.35
57	BB	536	G	C2-N3	5.76	1.37	1.32
57	BB	864	G	C6-N1	5.76	1.43	1.39
57	BB	1309	G	C2-N2	-5.76	1.28	1.34
57	BB	2140	G	C2'-C1'	-5.76	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2434	A	C4'-C3'	5.76	1.59	1.53
21	AA	1150	A	C6-N6	5.75	1.38	1.33
57	BB	599	A	N3-C4	-5.75	1.31	1.34
57	BB	729	G	N1-C2	5.75	1.42	1.37
57	BB	2247	A	C5-C4	-5.75	1.34	1.38
13	AB	29	PHE	CB-CG	5.75	1.61	1.51
21	AA	859	G	C6-N1	5.75	1.43	1.39
21	AA	893	C	P-O5'	-5.75	1.53	1.59
21	AA	1485	U	C4-C5	5.75	1.48	1.43
23	AW	7	A	C4'-C3'	-5.75	1.46	1.52
33	BN	8	ARG	CZ-NH1	5.75	1.40	1.33
38	BS	60	HIS	CB-CG	5.75	1.60	1.50
54	BF	7	TYR	CE2-CZ	5.75	1.46	1.38
57	BB	454	A	C4'-C3'	5.75	1.59	1.53
57	BB	858	G	C3'-O3'	5.75	1.50	1.42
57	BB	1238	G	O5'-C5'	5.75	1.53	1.44
57	BB	2102	G	N9-C4	-5.75	1.33	1.38
57	BB	2848	G	C4'-C3'	5.75	1.59	1.53
21	AA	727	G	P-O5'	-5.75	1.53	1.59
21	AA	916	U	C2-N3	5.75	1.41	1.37
21	AA	949	A	C2-N3	5.75	1.38	1.33
21	AA	1044	A	C2-N3	5.75	1.38	1.33
21	AA	1139	G	N7-C5	-5.75	1.35	1.39
21	AA	1468	A	N9-C8	-5.75	1.33	1.37
21	AA	1474	U	P-O5'	-5.75	1.53	1.59
57	BB	377	G	C3'-C2'	-5.75	1.46	1.52
57	BB	612	G	N9-C8	5.75	1.41	1.37
57	BB	1648	U	C2'-C1'	-5.75	1.47	1.53
57	BB	1996	C	P-O5'	-5.75	1.53	1.59
57	BB	2893	A	N9-C4	-5.75	1.34	1.37
57	BB	2899	A	N3-C4	-5.75	1.31	1.34
21	AA	437	U	O3'-P	-5.75	1.54	1.61
21	AA	975	A	O3'-P	-5.75	1.54	1.61
22	AY	12	U	C2-N3	-5.75	1.33	1.37
26	AV	12	G	C6-N1	5.75	1.43	1.39
57	BB	1651	G	C2-N3	5.75	1.37	1.32
57	BB	1942	C	C2-O2	-5.75	1.19	1.24
4	AM	112	ARG	CZ-NH1	5.75	1.40	1.33
21	AA	655	A	C6-N6	5.75	1.38	1.33
21	AA	1266	G	C4'-C3'	-5.75	1.46	1.52
57	BB	615	U	C2-N3	5.75	1.41	1.37
57	BB	900	A	C3'-C2'	5.75	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1122	G	C6-O6	-5.75	1.19	1.24
57	BB	1870	C	N3-C4	5.75	1.38	1.33
57	BB	2382	G	C2-N3	5.75	1.37	1.32
57	BB	2505	G	C4'-C3'	5.75	1.59	1.53
21	AA	36	C	C4-N4	5.75	1.39	1.33
21	AA	1231	G	C3'-O3'	5.75	1.50	1.42
57	BB	329	G	C5'-C4'	5.75	1.58	1.51
57	BB	336	C	C5'-C4'	-5.75	1.44	1.51
57	BB	617	G	P-O5'	-5.75	1.54	1.59
57	BB	926	G	C5-C6	-5.75	1.36	1.42
57	BB	980	A	C3'-C2'	5.75	1.59	1.52
57	BB	1891	G	N9-C4	-5.75	1.33	1.38
21	AA	125	U	C4'-C3'	5.75	1.59	1.53
21	AA	1515	G	C5'-C4'	5.75	1.58	1.51
26	AV	58	A	C3'-O3'	5.75	1.50	1.42
57	BB	371	A	N7-C5	5.75	1.42	1.39
57	BB	382	A	N9-C8	5.75	1.42	1.37
57	BB	962	G	C2'-C1'	-5.75	1.47	1.53
57	BB	1462	C	C2'-C1'	-5.75	1.47	1.53
57	BB	1741	C	N1-C6	5.75	1.40	1.37
21	AA	215	C	C2-O2	5.74	1.29	1.24
21	AA	600	A	P-O5'	-5.74	1.54	1.59
21	AA	657	U	N1-C6	5.74	1.43	1.38
57	BB	862	G	N1-C2	5.74	1.42	1.37
57	BB	1120	G	C5-C4	5.74	1.42	1.38
57	BB	1146	C	O3'-P	-5.74	1.54	1.61
57	BB	1162	G	N7-C5	-5.74	1.35	1.39
57	BB	1788	C	C4'-C3'	5.74	1.59	1.53
57	BB	2058	A	C3'-O3'	5.74	1.50	1.42
57	BB	2415	G	C6-O6	-5.74	1.19	1.24
57	BB	1011	G	C5-C6	5.74	1.48	1.42
57	BB	1260	A	N9-C8	-5.74	1.33	1.37
57	BB	1384	A	N7-C5	-5.74	1.35	1.39
57	BB	1622	G	O4'-C1'	5.74	1.49	1.41
57	BB	1661	G	C4'-O4'	5.74	1.53	1.45
5	AN	58	ARG	NE-CZ	5.74	1.40	1.33
18	AG	31	VAL	CB-CG2	5.74	1.65	1.52
21	AA	324	G	N3-C4	-5.74	1.31	1.35
21	AA	337	G	O4'-C1'	5.74	1.49	1.41
21	AA	463	U	N1-C6	5.74	1.43	1.38
21	AA	1426	G	C5-C4	-5.74	1.34	1.38
57	BB	103	A	O3'-P	-5.74	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	321	U	C4-C5	5.74	1.48	1.43
57	BB	1771	C	C2'-C1'	-5.74	1.47	1.53
58	BA	112	G	C2-N3	5.74	1.37	1.32
21	AA	471	U	C2-N3	5.74	1.41	1.37
21	AA	851	G	C2-N2	5.74	1.40	1.34
21	AA	901	A	C5-C4	5.74	1.42	1.38
21	AA	1130	A	C5-C6	5.74	1.46	1.41
21	AA	1218	C	C4'-O4'	5.74	1.53	1.45
26	AV	52	G	O3'-P	5.74	1.68	1.61
57	BB	445	C	N1-C2	-5.74	1.34	1.40
57	BB	625	G	N1-C2	5.74	1.42	1.37
57	BB	949	G	P-O5'	-5.74	1.54	1.59
57	BB	1153	C	C4-N4	5.74	1.39	1.33
57	BB	1832	C	P-O5'	-5.74	1.54	1.59
57	BB	2087	G	N9-C8	-5.74	1.33	1.37
57	BB	2235	G	N1-C2	5.74	1.42	1.37
57	BB	2582	G	C8-N7	5.74	1.34	1.30
57	BB	2597	G	N7-C5	-5.74	1.35	1.39
58	BA	18	G	C2-N3	5.74	1.37	1.32
21	AA	645	G	O4'-C1'	5.74	1.49	1.41
40	BU	8	ASP	CB-CG	5.74	1.63	1.51
57	BB	785	G	C2-N3	5.74	1.37	1.32
57	BB	1290	C	C2'-C1'	-5.74	1.47	1.53
21	AA	14	U	C1'-N1	5.74	1.57	1.48
21	AA	316	C	C4'-O4'	5.74	1.53	1.45
21	AA	392	C	N1-C6	-5.74	1.33	1.37
21	AA	734	G	C2'-C1'	-5.74	1.47	1.53
26	AV	47	U	N1-C6	-5.74	1.32	1.38
57	BB	339	U	C5'-C4'	5.74	1.58	1.51
57	BB	1454	C	P-O5'	-5.74	1.54	1.59
57	BB	1680	U	C2'-C1'	-5.74	1.47	1.53
57	BB	1726	C	C2'-C1'	-5.74	1.47	1.53
57	BB	2632	A	C2'-C1'	-5.74	1.47	1.53
21	AA	149	A	C2'-O2'	-5.73	1.34	1.41
21	AA	161	A	C5'-C4'	5.73	1.58	1.51
21	AA	397	A	N7-C5	-5.73	1.35	1.39
21	AA	789	U	C5'-C4'	5.73	1.58	1.51
21	AA	1056	U	C4-O4	5.73	1.28	1.23
21	AA	1190	G	N7-C5	-5.73	1.35	1.39
25	AZ	381	ARG	CZ-NH1	5.73	1.40	1.33
26	AV	24	U	C2-N3	5.73	1.41	1.37
57	BB	177	G	N7-C5	-5.73	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	328	C	C5'-C4'	5.73	1.58	1.51
21	AA	966	G	N9-C4	5.73	1.42	1.38
23	AW	24	G	C5-C4	5.73	1.42	1.38
54	BF	133	GLU	CD-OE1	5.73	1.31	1.25
57	BB	483	A	O3'-P	-5.73	1.54	1.61
57	BB	610	C	C4-N4	5.73	1.39	1.33
57	BB	953	G	C3'-C2'	5.73	1.59	1.52
57	BB	2115	G	N7-C5	-5.73	1.35	1.39
57	BB	2222	C	C4'-C3'	-5.73	1.46	1.52
57	BB	2498	C	N1-C2	5.73	1.45	1.40
58	BA	94	A	C6-N6	5.73	1.38	1.33
21	AA	1205	U	C3'-O3'	5.73	1.50	1.42
21	AA	1471	U	P-O5'	-5.73	1.54	1.59
22	AY	19	G	C2'-C1'	-5.73	1.47	1.53
23	AW	46	G	C3'-C2'	-5.73	1.46	1.52
26	AV	28	C	O4'-C1'	5.73	1.49	1.41
38	BS	11	ARG	CZ-NH2	5.73	1.40	1.33
57	BB	726	G	C8-N7	-5.73	1.27	1.30
57	BB	981	A	N7-C5	-5.73	1.35	1.39
57	BB	2437	G	C8-N7	5.73	1.34	1.30
57	BB	2718	G	C5-C6	-5.73	1.36	1.42
18	AG	69	ARG	NE-CZ	5.73	1.40	1.33
21	AA	1280	A	P-O5'	-5.73	1.54	1.59
57	BB	650	C	N1-C2	5.73	1.45	1.40
57	BB	1810	A	C6-N1	5.73	1.39	1.35
57	BB	2090	A	C2-N3	-5.73	1.28	1.33
21	AA	1307	U	N3-C4	5.73	1.43	1.38
22	AY	55	U	C2-N3	5.73	1.41	1.37
31	BL	33	ARG	CZ-NH2	5.73	1.40	1.33
57	BB	322	A	C5'-C4'	5.73	1.58	1.51
57	BB	438	G	C4'-C3'	5.73	1.59	1.53
57	BB	1741	C	C1'-N1	5.73	1.57	1.48
57	BB	2036	C	C4'-O4'	-5.73	1.38	1.45
57	BB	2578	G	N9-C4	5.73	1.42	1.38
57	BB	2753	A	C6-N6	5.73	1.38	1.33
21	AA	405	U	C4'-C3'	-5.73	1.46	1.52
21	AA	619	U	C2-O2	5.73	1.27	1.22
21	AA	852	G	O4'-C1'	5.73	1.49	1.41
57	BB	211	C	C2-N3	5.73	1.40	1.35
57	BB	1416	G	P-O5'	5.73	1.65	1.59
57	BB	2141	G	C6-N1	5.73	1.43	1.39
15	AD	51	GLY	CA-C	-5.72	1.42	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	193	C	C3'-O3'	5.72	1.50	1.42
26	AV	20	U	P-O5'	-5.72	1.54	1.59
57	BB	1083	U	C4-C5	5.72	1.48	1.43
57	BB	1160	G	C2-N3	5.72	1.37	1.32
57	BB	1473	G	C8-N7	-5.72	1.27	1.30
57	BB	1710	G	C8-N7	-5.72	1.27	1.30
57	BB	2204	G	N1-C2	5.72	1.42	1.37
57	BB	2488	G	C8-N7	5.72	1.34	1.30
21	AA	285	C	C4-C5	5.72	1.47	1.43
43	BX	36	ARG	CZ-NH1	5.72	1.40	1.33
43	BX	77	TYR	CE1-CZ	5.72	1.46	1.38
55	BG	54	ARG	CD-NE	5.72	1.56	1.46
57	BB	2775	G	C4'-C3'	-5.72	1.46	1.52
57	BB	194	G	C6-N1	5.72	1.43	1.39
57	BB	638	G	N7-C5	-5.72	1.35	1.39
57	BB	659	G	N1-C2	5.72	1.42	1.37
21	AA	455	G	C2-N3	5.72	1.37	1.32
21	AA	481	G	C6-N1	5.72	1.43	1.39
21	AA	568	G	N9-C8	5.72	1.41	1.37
21	AA	1203	C	C5-C6	5.72	1.39	1.34
21	AA	1406	U	C2-N3	5.72	1.41	1.37
21	AA	1434	A	P-O5'	-5.72	1.54	1.59
22	AY	20	G	C5'-C4'	5.72	1.58	1.51
22	AY	26	G	C2'-C1'	-5.72	1.47	1.53
22	AY	51	G	C5-C6	-5.72	1.36	1.42
23	AW	57	G	C8-N7	5.72	1.34	1.30
57	BB	352	A	C5-C4	-5.72	1.34	1.38
57	BB	1518	C	C4'-C3'	5.72	1.59	1.53
57	BB	1583	A	C5-C4	5.72	1.42	1.38
57	BB	2370	G	C8-N7	5.72	1.34	1.30
57	BB	2661	G	C5-C4	-5.72	1.34	1.38
21	AA	1089	G	N1-C2	5.72	1.42	1.37
21	AA	1094	G	N9-C8	5.72	1.41	1.37
21	AA	1384	C	P-O5'	-5.72	1.54	1.59
23	AW	6	G	C5'-C4'	5.72	1.58	1.51
57	BB	456	C	C5'-C4'	5.72	1.58	1.51
57	BB	1024	G	C4'-O4'	-5.72	1.38	1.45
57	BB	1633	G	C4'-C3'	5.72	1.59	1.53
57	BB	2397	G	N9-C4	-5.72	1.33	1.38
58	BA	29	A	C4'-O4'	-5.72	1.38	1.45
15	AD	191	SER	CA-CB	5.72	1.61	1.52
21	AA	678	U	P-O5'	-5.72	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1144	G	O3'-P	-5.72	1.54	1.61
21	AA	1234	C	C2'-C1'	-5.72	1.47	1.53
21	AA	1507	A	C5-C4	-5.72	1.34	1.38
57	BB	574	A	C6-N6	5.72	1.38	1.33
57	BB	586	A	C3'-O3'	5.72	1.50	1.42
57	BB	904	G	N9-C4	5.72	1.42	1.38
57	BB	1445	G	N7-C5	-5.72	1.35	1.39
57	BB	1519	G	C6-N1	5.72	1.43	1.39
57	BB	1695	G	C8-N7	-5.72	1.27	1.30
57	BB	1811	G	P-O5'	-5.72	1.54	1.59
57	BB	2869	G	C8-N7	-5.72	1.27	1.30
22	AY	23	A	N7-C5	-5.71	1.35	1.39
48	B1	48	TYR	CG-CD2	5.71	1.46	1.39
57	BB	683	U	C2-N3	5.71	1.41	1.37
57	BB	1174	U	C4-O4	5.71	1.28	1.23
57	BB	1724	G	C2-N2	5.71	1.40	1.34
57	BB	1878	G	C2'-C1'	-5.71	1.47	1.53
57	BB	2311	A	C5-C4	5.71	1.42	1.38
57	BB	2394	C	C5'-C4'	5.71	1.58	1.51
57	BB	2600	A	C5-C4	5.71	1.42	1.38
57	BB	2797	U	C2'-C1'	-5.71	1.47	1.53
57	BB	2813	A	N9-C4	-5.71	1.34	1.37
58	BA	116	G	C2'-C1'	-5.71	1.47	1.53
13	AB	76	SER	CA-CB	5.71	1.61	1.52
21	AA	85	U	O4'-C1'	5.71	1.49	1.41
21	AA	230	G	N1-C2	5.71	1.42	1.37
21	AA	466	A	C4'-O4'	5.71	1.52	1.45
57	BB	84	A	C3'-O3'	-5.71	1.34	1.42
57	BB	587	C	C2'-C1'	-5.71	1.47	1.53
57	BB	748	G	C6-N1	5.71	1.43	1.39
57	BB	1900	A	N3-C4	-5.71	1.31	1.34
57	BB	2049	G	C2'-C1'	-5.71	1.47	1.53
57	BB	2461	A	O3'-P	5.71	1.68	1.61
58	BA	3	C	C4-N4	5.71	1.39	1.33
14	AC	142	ARG	CZ-NH2	5.71	1.40	1.33
21	AA	1048	G	C4'-C3'	5.71	1.59	1.53
23	AW	49	C	P-O5'	-5.71	1.54	1.59
57	BB	316	C	C4'-O4'	5.71	1.52	1.45
57	BB	400	G	C2'-C1'	-5.71	1.47	1.53
57	BB	642	U	N1-C6	5.71	1.43	1.38
57	BB	1138	G	N9-C8	5.71	1.41	1.37
57	BB	1169	A	N1-C2	-5.71	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1336	A	O3'-P	-5.71	1.54	1.61
57	BB	1667	G	P-O5'	-5.71	1.54	1.59
57	BB	1806	C	C2'-C1'	-5.71	1.47	1.53
57	BB	322	A	C2-N3	5.71	1.38	1.33
57	BB	425	G	C6-N1	5.71	1.43	1.39
57	BB	1663	G	N1-C2	5.71	1.42	1.37
57	BB	2442	C	N3-C4	5.71	1.38	1.33
21	AA	587	G	C3'-O3'	5.71	1.50	1.42
21	AA	644	U	C2'-C1'	-5.71	1.47	1.53
21	AA	858	G	C3'-C2'	-5.71	1.46	1.52
21	AA	887	G	N9-C4	-5.71	1.33	1.38
21	AA	1021	A	C2'-C1'	-5.71	1.47	1.53
22	AY	10	G	N7-C5	-5.71	1.35	1.39
57	BB	809	G	C2'-C1'	-5.71	1.47	1.53
57	BB	1715	G	N3-C4	-5.71	1.31	1.35
57	BB	1982	U	C2-N3	5.71	1.41	1.37
57	BB	2094	A	C3'-C2'	-5.71	1.46	1.52
21	AA	820	U	C3'-C2'	5.71	1.59	1.52
21	AA	1527	U	C3'-C2'	-5.71	1.46	1.52
57	BB	104	A	N3-C4	5.71	1.38	1.34
57	BB	130	C	C5'-C4'	5.71	1.58	1.51
57	BB	858	G	C5-C4	5.71	1.42	1.38
57	BB	1078	U	N1-C6	-5.71	1.32	1.38
57	BB	1147	A	P-O5'	-5.71	1.54	1.59
57	BB	1606	C	O4'-C1'	5.71	1.49	1.41
57	BB	1814	G	C3'-C2'	-5.71	1.46	1.52
57	BB	1866	A	P-O5'	-5.71	1.54	1.59
57	BB	2076	U	N3-C4	5.71	1.43	1.38
21	AA	759	A	N1-C2	5.71	1.39	1.34
57	BB	174	U	C3'-O3'	5.71	1.50	1.42
57	BB	654	A	N9-C8	5.71	1.42	1.37
57	BB	1384	A	C4'-C3'	5.71	1.59	1.53
57	BB	1412	U	N1-C2	5.71	1.43	1.38
57	BB	1462	C	C4'-C3'	5.71	1.59	1.53
58	BA	113	C	N3-C4	5.71	1.38	1.33
16	AE	67	ARG	NE-CZ	5.70	1.40	1.33
57	BB	321	U	N3-C4	5.70	1.43	1.38
57	BB	1151	A	C6-N1	5.70	1.39	1.35
57	BB	1484	U	P-O5'	-5.70	1.54	1.59
57	BB	1890	A	P-O5'	-5.70	1.54	1.59
57	BB	2021	C	N3-C4	5.70	1.38	1.33
57	BB	2437	G	C2'-O2'	-5.70	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2781	A	C8-N7	5.70	1.35	1.31
58	BA	83	G	C2-N3	5.70	1.37	1.32
6	AO	87	ARG	CD-NE	5.70	1.56	1.46
21	AA	853	C	C4'-C3'	-5.70	1.46	1.52
21	AA	887	G	C5-C6	5.70	1.48	1.42
57	BB	1060	U	N1-C2	-5.70	1.33	1.38
57	BB	1809	A	C4'-O4'	-5.70	1.38	1.45
57	BB	2172	U	P-O5'	-5.70	1.54	1.59
57	BB	2185	U	P-O5'	5.70	1.65	1.59
13	AB	148	GLY	N-CA	-5.70	1.37	1.46
15	AD	13	ARG	NE-CZ	5.70	1.40	1.33
21	AA	494	G	N9-C4	-5.70	1.33	1.38
22	AY	63	C	N1-C6	5.70	1.40	1.37
22	AY	63	C	P-O5'	-5.70	1.54	1.59
57	BB	578	G	C5'-C4'	5.70	1.58	1.51
57	BB	590	A	C5-C6	5.70	1.46	1.41
57	BB	1770	G	C2-N3	5.70	1.37	1.32
57	BB	2191	A	N9-C8	-5.70	1.33	1.37
57	BB	2391	G	N3-C4	-5.70	1.31	1.35
57	BB	2677	G	N9-C8	-5.70	1.33	1.37
58	BA	113	C	N1-C6	-5.70	1.33	1.37
21	AA	110	C	C4-N4	5.70	1.39	1.33
21	AA	208	U	C3'-C2'	-5.70	1.46	1.52
21	AA	394	G	C2'-C1'	-5.70	1.47	1.53
21	AA	936	C	C2-N3	-5.70	1.31	1.35
57	BB	23	G	C8-N7	-5.70	1.27	1.30
57	BB	69	C	C4'-C3'	5.70	1.59	1.53
57	BB	196	A	P-O5'	-5.70	1.54	1.59
57	BB	719	C	C4-N4	5.70	1.39	1.33
57	BB	993	G	C5-C4	-5.70	1.34	1.38
57	BB	1071	G	C2-N3	5.70	1.37	1.32
57	BB	1510	G	C2-N3	5.70	1.37	1.32
57	BB	2173	A	N1-C2	5.70	1.39	1.34
57	BB	2190	G	O4'-C1'	-5.70	1.34	1.41
58	BA	15	A	N9-C8	5.70	1.42	1.37
21	AA	653	U	N1-C6	-5.70	1.32	1.38
57	BB	2346	A	C5-C4	5.70	1.42	1.38
7	AP	36	VAL	C-N	5.70	1.43	1.33
21	AA	301	G	C2-N2	-5.70	1.28	1.34
21	AA	1050	G	O4'-C1'	5.70	1.49	1.41
21	AA	1303	C	C4-N4	5.70	1.39	1.33
21	AA	1438	G	C2'-C1'	-5.70	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
32	BM	38	ARG	CZ-NH2	5.70	1.40	1.33
32	BM	55	ARG	CZ-NH1	5.70	1.40	1.33
57	BB	574	A	C6-N1	5.70	1.39	1.35
57	BB	910	A	N1-C2	-5.70	1.29	1.34
57	BB	1544	A	N7-C5	-5.70	1.35	1.39
57	BB	1548	A	C2-N3	-5.70	1.28	1.33
57	BB	1954	G	C5'-C4'	5.70	1.58	1.51
57	BB	2173	A	N9-C4	5.70	1.41	1.37
21	AA	390	U	O4'-C1'	-5.69	1.34	1.41
21	AA	503	C	O3'-P	-5.69	1.54	1.61
21	AA	778	G	C5'-C4'	5.69	1.58	1.51
57	BB	1648	U	O3'-P	-5.69	1.54	1.61
57	BB	1756	G	N7-C5	-5.69	1.35	1.39
57	BB	1772	A	N3-C4	5.69	1.38	1.34
57	BB	2556	C	C1'-N1	5.69	1.57	1.48
21	AA	618	C	C2'-C1'	-5.69	1.47	1.53
22	AY	62	A	C5-C4	-5.69	1.34	1.38
57	BB	377	G	N3-C4	-5.69	1.31	1.35
57	BB	460	A	N3-C4	-5.69	1.31	1.34
57	BB	2436	G	N3-C4	-5.69	1.31	1.35
57	BB	2452	C	P-O5'	-5.69	1.54	1.59
57	BB	2567	G	C2-N2	-5.69	1.28	1.34
21	AA	567	G	C3'-C2'	-5.69	1.46	1.52
21	AA	604	G	C4'-C3'	5.69	1.59	1.53
21	AA	1087	G	C2-N2	5.69	1.40	1.34
21	AA	1105	A	N3-C4	5.69	1.38	1.34
21	AA	1190	G	N3-C4	5.69	1.39	1.35
57	BB	531	C	C5-C6	-5.69	1.29	1.34
57	BB	780	G	N1-C2	5.69	1.42	1.37
57	BB	977	G	N1-C2	5.69	1.42	1.37
57	BB	1623	G	P-O5'	-5.69	1.54	1.59
57	BB	1941	C	N3-C4	5.69	1.38	1.33
57	BB	2451	A	C5'-C4'	5.69	1.58	1.51
57	BB	2794	C	C4-N4	5.69	1.39	1.33
57	BB	2879	A	C2'-C1'	-5.69	1.47	1.53
21	AA	212	G	C6-O6	-5.69	1.19	1.24
21	AA	452	A	C6-N6	5.69	1.38	1.33
21	AA	1079	G	N7-C5	-5.69	1.35	1.39
57	BB	91	A	C4'-O4'	-5.69	1.38	1.45
57	BB	1242	U	C2-N3	5.69	1.41	1.37
57	BB	1563	U	P-O5'	-5.69	1.54	1.59
57	BB	2381	A	N9-C8	5.69	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	92	U	N1-C6	-5.69	1.32	1.38
21	AA	470	C	C1'-N1	5.69	1.57	1.48
21	AA	608	A	C4'-C3'	5.69	1.59	1.53
21	AA	669	G	C2'-C1'	-5.69	1.47	1.53
21	AA	1493	A	C6-N1	5.69	1.39	1.35
45	BC	12	ARG	NE-CZ	5.69	1.40	1.33
57	BB	875	G	C5-C6	-5.69	1.36	1.42
57	BB	1059	G	C2-N3	5.69	1.37	1.32
57	BB	1111	A	P-O5'	-5.69	1.54	1.59
57	BB	1774	C	O4'-C1'	-5.69	1.34	1.41
57	BB	1878	G	C5'-C4'	5.69	1.58	1.51
57	BB	2796	U	N3-C4	5.69	1.43	1.38
8	AQ	10	ARG	CZ-NH1	5.69	1.40	1.33
21	AA	626	G	C8-N7	5.69	1.34	1.30
21	AA	1521	C	N3-C4	5.69	1.38	1.33
57	BB	689	A	N9-C8	-5.69	1.33	1.37
57	BB	1387	A	C5-C6	5.69	1.46	1.41
57	BB	1941	C	P-O5'	5.69	1.65	1.59
57	BB	2054	A	C5-C4	5.69	1.42	1.38
21	AA	364	A	C5-C6	5.68	1.46	1.41
21	AA	1425	U	C3'-C2'	-5.68	1.46	1.52
26	AV	68	C	C2-N3	5.68	1.40	1.35
57	BB	28	A	O4'-C1'	5.68	1.49	1.41
57	BB	46	G	N9-C4	5.68	1.42	1.38
57	BB	179	C	C5'-C4'	5.68	1.58	1.51
57	BB	900	A	C6-N6	5.68	1.38	1.33
57	BB	1165	A	C5'-C4'	5.68	1.58	1.51
57	BB	2115	G	O3'-P	-5.68	1.54	1.61
57	BB	2356	U	C3'-C2'	-5.68	1.46	1.52
57	BB	2387	U	C2-N3	5.68	1.41	1.37
57	BB	2618	G	C4'-C3'	5.68	1.59	1.53
57	BB	2778	A	N9-C4	5.68	1.41	1.37
21	AA	64	G	C8-N7	-5.68	1.27	1.30
21	AA	190	A	C2-N3	5.68	1.38	1.33
21	AA	363	A	N7-C5	5.68	1.42	1.39
21	AA	695	A	C2'-C1'	-5.68	1.47	1.53
21	AA	1016	A	C4'-O4'	-5.68	1.38	1.45
21	AA	1195	C	C4-N4	5.68	1.39	1.33
24	AX	12	A	C6-N6	5.68	1.38	1.33
57	BB	923	G	C2'-C1'	-5.68	1.47	1.53
57	BB	1033	U	C1'-N1	5.68	1.57	1.48
57	BB	1186	G	C5-C6	-5.68	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1525	A	O3'-P	-5.68	1.54	1.61
57	BB	1687	G	N9-C8	5.68	1.41	1.37
57	BB	2299	U	C2-N3	5.68	1.41	1.37
57	BB	2745	C	N3-C4	5.68	1.38	1.33
21	AA	690	G	C5-C6	-5.68	1.36	1.42
21	AA	713	G	P-O5'	5.68	1.65	1.59
21	AA	1482	G	C8-N7	-5.68	1.27	1.30
26	AV	28	C	C2'-C1'	-5.68	1.47	1.53
57	BB	413	C	C2-N3	5.68	1.40	1.35
57	BB	482	A	N9-C8	5.68	1.42	1.37
57	BB	1241	A	C5-C4	5.68	1.42	1.38
57	BB	2487	G	C5'-C4'	5.68	1.58	1.51
58	BA	13	G	N9-C8	5.68	1.41	1.37
21	AA	45	G	C6-N1	5.68	1.43	1.39
21	AA	559	A	C5-C4	5.68	1.42	1.38
23	AW	54	U	C5-C6	-5.68	1.29	1.34
55	BG	148	ARG	NE-CZ	5.68	1.40	1.33
57	BB	144	A	C5'-C4'	5.68	1.58	1.51
57	BB	470	A	C6-N6	5.68	1.38	1.33
57	BB	723	C	C4-C5	5.68	1.47	1.43
57	BB	2017	U	C4'-O4'	5.68	1.52	1.45
57	BB	2502	G	C5-C6	-5.68	1.36	1.42
57	BB	2741	A	C5-C6	5.68	1.46	1.41
21	AA	81	A	C8-N7	-5.68	1.27	1.31
21	AA	554	A	C8-N7	5.68	1.35	1.31
22	AY	44	A	N3-C4	-5.68	1.31	1.34
57	BB	36	G	N7-C5	-5.68	1.35	1.39
57	BB	144	A	N7-C5	-5.68	1.35	1.39
57	BB	1558	C	N3-C4	5.68	1.38	1.33
21	AA	487	A	N3-C4	-5.68	1.31	1.34
23	AW	33	U	C4'-O4'	-5.68	1.38	1.45
27	B5	12	ARG	NE-CZ	5.68	1.40	1.33
56	BH	50	ARG	NE-CZ	5.68	1.40	1.33
57	BB	1664	A	C5'-C4'	5.68	1.58	1.51
57	BB	1666	G	C2-N3	5.68	1.37	1.32
57	BB	1916	A	C4'-C3'	5.68	1.59	1.53
22	AY	4	G	C2'-C1'	-5.67	1.47	1.53
23	AW	14	A	C6-N6	5.67	1.38	1.33
24	AX	14	A	C5-C6	5.67	1.46	1.41
57	BB	180	G	N3-C4	5.67	1.39	1.35
57	BB	649	G	C2-N3	5.67	1.37	1.32
57	BB	673	C	C4'-O4'	-5.67	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1053	C	C4-N4	5.67	1.39	1.33
57	BB	1148	U	C3'-C2'	-5.67	1.46	1.52
57	BB	1797	G	C5-C6	-5.67	1.36	1.42
57	BB	2138	G	N1-C2	5.67	1.42	1.37
57	BB	2551	C	P-O5'	-5.67	1.54	1.59
57	BB	2763	G	N9-C4	5.67	1.42	1.38
21	AA	968	A	C6-N6	5.67	1.38	1.33
57	BB	239	C	C5-C6	5.67	1.38	1.34
57	BB	498	G	C5-C4	-5.67	1.34	1.38
57	BB	2120	G	C2-N3	5.67	1.37	1.32
57	BB	2526	G	N1-C2	5.67	1.42	1.37
58	BA	83	G	N3-C4	5.67	1.39	1.35
21	AA	168	G	C8-N7	-5.67	1.27	1.30
21	AA	1190	G	C3'-C2'	-5.67	1.46	1.52
21	AA	1234	C	N1-C6	5.67	1.40	1.37
22	AY	25	C	C4-N4	-5.67	1.28	1.33
23	AW	18	G	P-O5'	5.67	1.65	1.59
54	BF	6	TYR	CB-CG	5.67	1.60	1.51
57	BB	1	G	C2-N3	5.67	1.37	1.32
57	BB	591	U	N1-C6	5.67	1.43	1.38
57	BB	768	G	C2'-C1'	-5.67	1.47	1.53
57	BB	871	U	C2-N3	5.67	1.41	1.37
57	BB	917	A	N7-C5	-5.67	1.35	1.39
57	BB	991	C	C2-N3	5.67	1.40	1.35
57	BB	2019	A	N3-C4	5.67	1.38	1.34
21	AA	1289	A	C4'-C3'	5.67	1.59	1.53
26	AV	58	A	N9-C4	5.67	1.41	1.37
57	BB	679	C	N1-C6	5.67	1.40	1.37
57	BB	880	G	C2-N3	5.67	1.37	1.32
57	BB	1812	U	O3'-P	-5.67	1.54	1.61
21	AA	107	G	N1-C2	5.67	1.42	1.37
21	AA	1517	G	P-O5'	-5.67	1.54	1.59
22	AY	15	G	C2-N3	5.67	1.37	1.32
55	BG	89	VAL	C-N	5.67	1.43	1.33
57	BB	194	G	C5-C6	5.67	1.48	1.42
57	BB	242	G	C5'-C4'	5.67	1.58	1.51
57	BB	273	G	C8-N7	-5.67	1.27	1.30
57	BB	470	A	C8-N7	-5.67	1.27	1.31
57	BB	1218	G	C8-N7	-5.67	1.27	1.30
57	BB	1389	G	N1-C2	5.67	1.42	1.37
57	BB	2530	A	N3-C4	-5.67	1.31	1.34
21	AA	735	C	C5-C6	5.67	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	886	G	P-O5'	-5.67	1.54	1.59
21	AA	955	U	C2-O2	5.67	1.27	1.22
21	AA	1216	A	C5-C6	5.67	1.46	1.41
24	AX	16	A	P-O5'	-5.67	1.54	1.59
29	BJ	35	ARG	NE-CZ	5.67	1.40	1.33
57	BB	144	A	C5-C4	5.67	1.42	1.38
57	BB	1517	G	C2-N3	5.67	1.37	1.32
57	BB	1775	U	C3'-C2'	5.67	1.59	1.52
57	BB	1842	G	C5-C4	5.67	1.42	1.38
57	BB	1916	A	N1-C2	5.67	1.39	1.34
57	BB	2472	G	C5'-C4'	5.67	1.58	1.51
57	BB	2867	G	C2'-C1'	-5.67	1.47	1.53
5	AN	62	ARG	CZ-NH1	5.67	1.40	1.33
21	AA	565	U	O3'-P	-5.67	1.54	1.61
21	AA	1308	U	C2-N3	5.67	1.41	1.37
22	AY	29	A	C5-C6	-5.67	1.35	1.41
57	BB	1808	A	P-O5'	-5.67	1.54	1.59
57	BB	1929	G	N9-C4	-5.67	1.33	1.38
21	AA	1369	C	O3'-P	-5.66	1.54	1.61
34	BO	5	SER	CA-CB	5.66	1.61	1.52
57	BB	394	C	N3-C4	5.66	1.38	1.33
57	BB	475	C	C4-N4	5.66	1.39	1.33
57	BB	1702	G	C2-N2	5.66	1.40	1.34
57	BB	2638	G	C3'-O3'	5.66	1.50	1.42
21	AA	156	C	N3-C4	5.66	1.38	1.33
21	AA	161	A	C8-N7	5.66	1.35	1.31
21	AA	669	G	N9-C4	-5.66	1.33	1.38
21	AA	696	A	N7-C5	-5.66	1.35	1.39
21	AA	915	A	N9-C8	5.66	1.42	1.37
21	AA	1121	U	N3-C4	5.66	1.43	1.38
21	AA	1503	A	C3'-O3'	-5.66	1.34	1.42
22	AY	32	C	N3-C4	5.66	1.38	1.33
57	BB	130	C	N3-C4	5.66	1.38	1.33
57	BB	937	C	N1-C6	5.66	1.40	1.37
57	BB	942	G	C3'-C2'	5.66	1.59	1.52
57	BB	981	A	C8-N7	-5.66	1.27	1.31
57	BB	1502	A	O3'-P	-5.66	1.54	1.61
57	BB	1719	G	C6-N1	5.66	1.43	1.39
57	BB	2586	U	C2-N3	-5.66	1.33	1.37
21	AA	452	A	C8-N7	-5.66	1.27	1.31
21	AA	1292	G	C5-C6	5.66	1.48	1.42
25	AZ	379	GLY	N-CA	-5.66	1.37	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	BL	22	GLY	CA-C	-5.66	1.42	1.51
57	BB	131	A	O4'-C1'	5.66	1.49	1.41
57	BB	1212	G	C6-O6	5.66	1.29	1.24
57	BB	2822	G	C5-C4	-5.66	1.34	1.38
21	AA	872	A	C4'-O4'	-5.66	1.38	1.45
21	AA	1533	C	C5-C6	5.66	1.38	1.34
28	BI	28	GLY	N-CA	-5.66	1.37	1.46
29	BJ	14	ASP	N-CA	-5.66	1.35	1.46
57	BB	223	A	C3'-C2'	-5.66	1.46	1.52
57	BB	1315	C	C4'-C3'	5.66	1.59	1.53
57	BB	1614	A	C4'-O4'	-5.66	1.38	1.45
57	BB	1795	C	N1-C6	5.66	1.40	1.37
57	BB	2471	A	N7-C5	-5.66	1.35	1.39
57	BB	2778	A	C5-C4	5.66	1.42	1.38
21	AA	57	G	P-O5'	-5.66	1.54	1.59
21	AA	243	A	C4'-C3'	5.66	1.59	1.53
57	BB	617	G	C8-N7	5.66	1.34	1.30
57	BB	987	C	C4-N4	5.66	1.39	1.33
57	BB	1135	C	P-O5'	-5.66	1.54	1.59
57	BB	1285	A	N9-C8	5.66	1.42	1.37
57	BB	1568	G	O5'-C5'	5.66	1.53	1.44
57	BB	1882	U	O4'-C1'	5.66	1.49	1.41
57	BB	1915	U	N3-C4	5.66	1.43	1.38
57	BB	2123	G	C1'-N9	5.66	1.57	1.48
21	AA	42	G	N1-C2	5.66	1.42	1.37
21	AA	89	U	N3-C4	5.66	1.43	1.38
21	AA	449	G	C2'-C1'	-5.66	1.47	1.53
21	AA	1322	C	O3'-P	-5.66	1.54	1.61
21	AA	1380	U	P-O5'	5.66	1.65	1.59
21	AA	1501	C	C4-N4	5.66	1.39	1.33
23	AW	57	G	N3-C4	5.66	1.39	1.35
57	BB	504	A	O3'-P	-5.66	1.54	1.61
57	BB	1833	C	C5'-C4'	5.66	1.58	1.51
57	BB	1867	G	N1-C2	5.66	1.42	1.37
57	BB	2162	G	C3'-C2'	-5.66	1.46	1.52
57	BB	2755	C	C4'-C3'	-5.66	1.46	1.52
22	AY	33	U	C5-C6	-5.65	1.29	1.34
22	AY	61	C	O3'-P	-5.65	1.54	1.61
36	BQ	23	TYR	CE2-CZ	5.65	1.45	1.38
57	BB	212	G	N3-C4	-5.65	1.31	1.35
57	BB	532	A	C4'-C3'	5.65	1.59	1.53
57	BB	895	U	C2-N3	5.65	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2026	U	C5'-C4'	5.65	1.58	1.51
57	BB	2881	U	N1-C2	5.65	1.43	1.38
21	AA	184	G	N9-C8	-5.65	1.33	1.37
21	AA	908	A	C8-N7	-5.65	1.27	1.31
21	AA	953	G	N1-C2	5.65	1.42	1.37
57	BB	667	U	O3'-P	-5.65	1.54	1.61
57	BB	1652	A	N9-C8	-5.65	1.33	1.37
57	BB	1709	U	C2'-C1'	-5.65	1.47	1.53
57	BB	1772	A	C4'-C3'	5.65	1.59	1.53
57	BB	2821	A	C5-C4	5.65	1.42	1.38
21	AA	1044	A	N3-C4	-5.65	1.31	1.34
21	AA	1405	G	P-O5'	-5.65	1.54	1.59
21	AA	1503	A	C5'-C4'	5.65	1.58	1.51
26	AV	12	G	P-O5'	-5.65	1.54	1.59
26	AV	19	G	N1-C2	5.65	1.42	1.37
36	BQ	2	ARG	CZ-NH2	5.65	1.40	1.33
57	BB	257	C	C2'-C1'	-5.65	1.47	1.53
57	BB	633	A	C6-N6	5.65	1.38	1.33
57	BB	674	G	C6-N1	5.65	1.43	1.39
57	BB	1403	A	P-O5'	5.65	1.65	1.59
57	BB	1597	A	C2'-C1'	-5.65	1.47	1.53
57	BB	2344	U	C2'-C1'	5.65	1.59	1.53
57	BB	2759	G	C8-N7	-5.65	1.27	1.30
57	BB	2785	C	C4-N4	5.65	1.39	1.33
57	BB	2789	C	C2'-C1'	-5.65	1.47	1.53
21	AA	327	A	C6-N1	5.65	1.39	1.35
21	AA	656	G	C5-C6	-5.65	1.36	1.42
57	BB	188	G	C2-N3	5.65	1.37	1.32
57	BB	368	A	C2'-C1'	-5.65	1.47	1.53
57	BB	1803	A	N3-C4	5.65	1.38	1.34
57	BB	2459	A	C8-N7	-5.65	1.27	1.31
21	AA	90	C	N3-C4	5.65	1.38	1.33
21	AA	200	G	C8-N7	-5.65	1.27	1.30
21	AA	683	G	N7-C5	-5.65	1.35	1.39
21	AA	935	A	C2'-C1'	-5.65	1.47	1.53
21	AA	1185	G	N9-C8	5.65	1.41	1.37
21	AA	1226	C	C2-N3	5.65	1.40	1.35
23	AW	17	C	O3'-P	5.65	1.68	1.61
57	BB	424	G	C2-N3	5.65	1.37	1.32
57	BB	1372	U	C3'-C2'	-5.65	1.46	1.52
57	BB	2840	C	C4-N4	5.65	1.39	1.33
21	AA	408	A	N3-C4	5.65	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	181	A	C5-C4	-5.65	1.34	1.38
57	BB	761	A	N1-C2	5.65	1.39	1.34
57	BB	2007	U	C2'-C1'	5.65	1.59	1.53
57	BB	2419	U	N3-C4	5.65	1.43	1.38
57	BB	2856	A	O3'-P	-5.65	1.54	1.61
57	BB	2863	C	C2-O2	5.65	1.29	1.24
21	AA	188	C	C4-C5	-5.64	1.38	1.43
21	AA	588	G	C5'-C4'	5.64	1.58	1.51
21	AA	849	G	C2'-C1'	-5.64	1.47	1.53
21	AA	1361	G	C2-N3	5.64	1.37	1.32
22	AY	54	U	C5-C6	-5.64	1.29	1.34
57	BB	560	C	C4-N4	5.64	1.39	1.33
57	BB	739	A	C4'-C3'	-5.64	1.47	1.52
57	BB	1165	A	N9-C4	-5.64	1.34	1.37
57	BB	1254	A	P-O5'	5.64	1.65	1.59
57	BB	1280	G	C3'-C2'	-5.64	1.46	1.52
57	BB	1361	G	C8-N7	5.64	1.34	1.30
57	BB	1368	G	C3'-C2'	-5.64	1.46	1.52
57	BB	1743	G	O3'-P	-5.64	1.54	1.61
57	BB	2098	U	C3'-O3'	5.64	1.50	1.42
57	BB	2446	G	C6-N1	-5.64	1.35	1.39
57	BB	2584	U	O3'-P	-5.64	1.54	1.61
57	BB	2838	G	N3-C4	-5.64	1.31	1.35
57	BB	2877	G	C2-N2	5.64	1.40	1.34
58	BA	81	G	N1-C2	5.64	1.42	1.37
21	AA	499	A	C3'-C2'	-5.64	1.46	1.52
21	AA	631	C	N1-C2	-5.64	1.34	1.40
21	AA	795	C	C2'-C1'	-5.64	1.47	1.53
21	AA	1196	A	C6-N1	5.64	1.39	1.35
22	AY	57	G	C6-N1	-5.64	1.35	1.39
23	AW	51	U	C2'-C1'	-5.64	1.47	1.53
57	BB	447	A	C4'-C3'	5.64	1.59	1.53
57	BB	964	C	N3-C4	5.64	1.37	1.33
57	BB	973	A	C2'-C1'	-5.64	1.47	1.53
57	BB	2330	G	C2-N3	5.64	1.37	1.32
57	BB	2398	U	C2'-C1'	-5.64	1.47	1.53
57	BB	2501	C	C2-O2	-5.64	1.19	1.24
4	AM	70	ARG	NE-CZ	5.64	1.40	1.33
21	AA	196	A	C1'-N9	-5.64	1.39	1.46
57	BB	625	G	C2-N2	5.64	1.40	1.34
57	BB	1627	G	C4'-C3'	-5.64	1.47	1.52
57	BB	2206	C	C2'-C1'	-5.64	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2692	G	P-O5'	-5.64	1.54	1.59
21	AA	667	G	C4'-O4'	-5.64	1.38	1.45
21	AA	1082	A	P-O5'	-5.64	1.54	1.59
57	BB	64	A	N7-C5	5.64	1.42	1.39
57	BB	176	A	N9-C4	5.64	1.41	1.37
57	BB	224	U	C5-C6	5.64	1.39	1.34
57	BB	795	C	P-O5'	-5.64	1.54	1.59
57	BB	962	G	O3'-P	-5.64	1.54	1.61
57	BB	1426	G	C2-N3	5.64	1.37	1.32
57	BB	1614	A	C6-N6	5.64	1.38	1.33
57	BB	1801	A	C6-N6	5.64	1.38	1.33
57	BB	2145	C	C4'-C3'	-5.64	1.47	1.52
57	BB	2869	G	C4'-O4'	5.64	1.52	1.45
21	AA	95	C	C5-C6	5.64	1.38	1.34
21	AA	856	C	N1-C6	-5.64	1.33	1.37
21	AA	1427	C	C2-N3	5.64	1.40	1.35
57	BB	968	C	O4'-C1'	-5.64	1.34	1.41
21	AA	161	A	C6-N6	5.64	1.38	1.33
21	AA	1445	U	N1-C2	-5.64	1.33	1.38
57	BB	88	G	C8-N7	5.64	1.34	1.30
57	BB	197	A	C8-N7	5.64	1.35	1.31
57	BB	2121	G	C2-N2	5.64	1.40	1.34
57	BB	2302	U	C3'-O3'	5.64	1.50	1.42
57	BB	2525	G	P-O5'	5.64	1.65	1.59
57	BB	2679	A	N9-C8	5.64	1.42	1.37
21	AA	1150	A	N9-C8	5.63	1.42	1.37
22	AY	6	U	O4'-C1'	-5.63	1.34	1.41
47	B0	33	SER	CA-CB	5.63	1.61	1.52
57	BB	331	C	P-O5'	-5.63	1.54	1.59
57	BB	393	C	C4-N4	5.63	1.39	1.33
57	BB	515	A	N7-C5	-5.63	1.35	1.39
57	BB	1501	G	C8-N7	5.63	1.34	1.30
57	BB	1879	C	N3-C4	5.63	1.37	1.33
57	BB	1909	C	C4-C5	5.63	1.47	1.43
57	BB	2147	A	C6-N6	5.63	1.38	1.33
58	BA	36	C	O3'-P	-5.63	1.54	1.61
21	AA	53	A	O4'-C1'	-5.63	1.34	1.41
21	AA	196	A	O3'-P	-5.63	1.54	1.61
21	AA	693	G	C2-N2	5.63	1.40	1.34
21	AA	961	U	C2'-C1'	-5.63	1.47	1.53
57	BB	775	G	N9-C8	-5.63	1.33	1.37
57	BB	931	U	C5'-C4'	5.63	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1195	G	C8-N7	5.63	1.34	1.30
57	BB	2231	U	C3'-C2'	5.63	1.59	1.52
21	AA	1367	C	C4-C5	-5.63	1.38	1.43
26	AV	16	C	C3'-C2'	5.63	1.59	1.52
57	BB	420	C	C4-C5	-5.63	1.38	1.43
57	BB	736	C	N3-C4	5.63	1.37	1.33
57	BB	1489	C	C4'-C3'	5.63	1.59	1.53
57	BB	1498	C	C4'-O4'	-5.63	1.38	1.45
57	BB	2016	U	C5'-C4'	5.63	1.58	1.51
58	BA	52	A	N7-C5	5.63	1.42	1.39
21	AA	41	G	N9-C4	5.63	1.42	1.38
21	AA	152	A	C2-N3	5.63	1.38	1.33
57	BB	1013	C	C3'-C2'	-5.63	1.46	1.52
57	BB	2282	G	P-O5'	-5.63	1.54	1.59
57	BB	2431	U	C4'-C3'	-5.63	1.47	1.52
21	AA	115	G	C4'-O4'	5.63	1.52	1.45
21	AA	214	C	P-O5'	-5.63	1.54	1.59
21	AA	1077	G	C4'-O4'	-5.63	1.38	1.45
25	AZ	377	ARG	CD-NE	5.63	1.56	1.46
26	AV	8	U	C2-N3	5.63	1.41	1.37
57	BB	135	U	N1-C6	-5.63	1.32	1.38
57	BB	1831	G	C5-C6	-5.63	1.36	1.42
58	BA	104	A	C6-N6	5.63	1.38	1.33
1	AJ	13	PHE	CG-CD2	5.63	1.47	1.38
14	AC	130	ARG	NE-CZ	5.63	1.40	1.33
21	AA	43	C	C4-N4	5.63	1.39	1.33
21	AA	160	A	C5-C6	5.63	1.46	1.41
21	AA	228	A	C2-N3	5.63	1.38	1.33
21	AA	838	G	N3-C4	5.63	1.39	1.35
21	AA	1429	A	C6-N6	5.63	1.38	1.33
26	AV	15	G	P-O5'	-5.63	1.54	1.59
57	BB	348	A	P-O5'	-5.63	1.54	1.59
57	BB	800	A	C8-N7	5.63	1.35	1.31
57	BB	1099	G	N1-C2	5.63	1.42	1.37
57	BB	1433	A	O4'-C1'	-5.63	1.34	1.41
57	BB	2264	C	C4'-O4'	5.63	1.52	1.45
57	BB	2303	G	C5-C6	-5.63	1.36	1.42
57	BB	2365	G	N3-C4	-5.63	1.31	1.35
57	BB	2613	U	P-O5'	-5.63	1.54	1.59
21	AA	104	G	N9-C8	-5.62	1.33	1.37
21	AA	518	C	C5-C6	5.62	1.38	1.34
21	AA	733	G	C2'-C1'	-5.62	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	745	G	C3'-C2'	-5.62	1.46	1.52
21	AA	886	G	C2-N3	5.62	1.37	1.32
26	AV	27	U	P-O5'	-5.62	1.54	1.59
57	BB	2532	G	C2-N3	5.62	1.37	1.32
21	AA	266	G	C6-O6	-5.62	1.19	1.24
21	AA	327	A	C6-N6	5.62	1.38	1.33
21	AA	542	G	N1-C2	5.62	1.42	1.37
21	AA	580	C	C4'-O4'	5.62	1.52	1.45
21	AA	1268	G	C8-N7	-5.62	1.27	1.30
21	AA	1484	C	C3'-C2'	-5.62	1.46	1.52
57	BB	57	C	N1-C6	5.62	1.40	1.37
57	BB	77	G	C8-N7	5.62	1.34	1.30
57	BB	133	U	C4'-C3'	-5.62	1.47	1.52
57	BB	1328	A	C5-C4	-5.62	1.34	1.38
57	BB	1986	C	O3'-P	-5.62	1.54	1.61
57	BB	2311	A	C6-N6	5.62	1.38	1.33
57	BB	2424	C	C4-N4	5.62	1.39	1.33
21	AA	187	G	C4'-O4'	-5.62	1.38	1.45
21	AA	758	C	O3'-P	-5.62	1.54	1.61
21	AA	824	G	N7-C5	-5.62	1.35	1.39
26	AV	76	A	C6-N1	5.62	1.39	1.35
57	BB	864	G	P-O5'	-5.62	1.54	1.59
57	BB	905	A	C5'-C4'	5.62	1.58	1.51
57	BB	1146	C	C2-N3	5.62	1.40	1.35
57	BB	1451	C	N1-C6	5.62	1.40	1.37
57	BB	1470	A	N3-C4	-5.62	1.31	1.34
57	BB	2355	G	C8-N7	5.62	1.34	1.30
57	BB	2530	A	N7-C5	-5.62	1.35	1.39
57	BB	2830	C	N1-C6	5.62	1.40	1.37
58	BA	84	G	N3-C4	-5.62	1.31	1.35
21	AA	356	A	C8-N7	-5.62	1.27	1.31
21	AA	450	G	N3-C4	5.62	1.39	1.35
21	AA	1431	A	N9-C4	5.62	1.41	1.37
57	BB	839	U	N1-C6	5.62	1.43	1.38
57	BB	2185	U	C2-N3	5.62	1.41	1.37
2	AK	47	GLY	CA-C	-5.62	1.42	1.51
21	AA	561	U	C5'-C4'	5.62	1.58	1.51
21	AA	770	C	C4-N4	5.62	1.39	1.33
21	AA	922	G	C5'-C4'	5.62	1.58	1.51
21	AA	956	U	C5-C6	5.62	1.39	1.34
21	AA	962	C	P-O5'	-5.62	1.54	1.59
21	AA	1160	G	C6-N1	5.62	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1371	G	C2-N3	5.62	1.37	1.32
23	AW	73	A	C2'-C1'	-5.62	1.47	1.53
38	BS	95	ARG	CD-NE	5.62	1.55	1.46
43	BX	49	ARG	CZ-NH2	5.62	1.40	1.33
57	BB	233	A	C2-N3	5.62	1.38	1.33
57	BB	1220	G	N9-C8	-5.62	1.33	1.37
19	AH	90	GLU	CG-CD	5.62	1.60	1.51
21	AA	465	A	C4'-C3'	5.62	1.59	1.53
21	AA	865	A	P-O5'	5.62	1.65	1.59
57	BB	146	A	N1-C2	-5.62	1.29	1.34
57	BB	246	C	N3-C4	5.62	1.37	1.33
57	BB	418	C	O4'-C1'	5.62	1.49	1.41
57	BB	1491	G	N9-C4	5.62	1.42	1.38
21	AA	254	G	C4'-C3'	5.62	1.59	1.53
21	AA	345	C	C1'-N1	5.62	1.57	1.48
24	AX	18	G	C2'-C1'	-5.62	1.47	1.53
57	BB	480	A	C5-C4	5.62	1.42	1.38
57	BB	789	A	N3-C4	-5.62	1.31	1.34
57	BB	1658	C	C4-N4	5.62	1.39	1.33
57	BB	1836	C	C2-N3	-5.62	1.31	1.35
57	BB	2050	C	C2-O2	5.62	1.29	1.24
57	BB	2349	G	C3'-C2'	5.62	1.59	1.52
57	BB	2415	G	C8-N7	-5.62	1.27	1.30
57	BB	2539	C	C4-C5	-5.62	1.38	1.43
2	AK	67	GLU	CD-OE2	5.61	1.31	1.25
21	AA	246	A	C6-N1	5.61	1.39	1.35
21	AA	447	G	N1-C2	5.61	1.42	1.37
21	AA	1063	C	C4-C5	5.61	1.47	1.43
21	AA	1315	U	C4'-C3'	-5.61	1.47	1.52
25	AZ	287	GLU	CD-OE2	5.61	1.31	1.25
47	B0	12	ARG	CZ-NH2	5.61	1.40	1.33
55	BG	58	ALA	CA-CB	5.61	1.64	1.52
57	BB	362	A	P-O5'	5.61	1.65	1.59
57	BB	1199	U	C4'-C3'	-5.61	1.47	1.52
57	BB	2833	U	C2'-C1'	5.61	1.59	1.53
57	BB	2880	C	N3-C4	5.61	1.37	1.33
21	AA	817	C	C4-C5	5.61	1.47	1.43
57	BB	808	G	N1-C2	5.61	1.42	1.37
57	BB	2432	A	C8-N7	-5.61	1.27	1.31
21	AA	223	A	C2'-O2'	5.61	1.49	1.41
21	AA	289	G	P-O5'	-5.61	1.54	1.59
21	AA	646	G	N7-C5	-5.61	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	650	G	P-O5'	-5.61	1.54	1.59
57	BB	142	A	N1-C2	-5.61	1.29	1.34
57	BB	1025	G	P-O5'	5.61	1.65	1.59
57	BB	1697	G	C2'-C1'	-5.61	1.47	1.53
57	BB	2053	G	C4'-C3'	5.61	1.59	1.53
57	BB	2352	A	C8-N7	-5.61	1.27	1.31
57	BB	2390	U	C2'-O2'	-5.61	1.34	1.41
57	BB	2550	G	C3'-C2'	-5.61	1.46	1.52
58	BA	50	A	O4'-C1'	5.61	1.49	1.41
21	AA	1080	A	C4'-C3'	-5.61	1.47	1.52
24	AX	21	C	N1-C6	5.61	1.40	1.37
57	BB	590	A	N3-C4	5.61	1.38	1.34
57	BB	1143	A	C4'-C3'	5.61	1.59	1.53
57	BB	1854	A	C4'-C3'	5.61	1.59	1.53
57	BB	2585	U	C4'-O4'	-5.61	1.38	1.45
58	BA	79	G	C2'-O2'	5.61	1.49	1.41
21	AA	195	A	C3'-O3'	5.61	1.50	1.42
21	AA	1435	G	C5-C4	-5.61	1.34	1.38
23	AW	21	A	C4'-C3'	5.61	1.59	1.53
57	BB	654	A	C1'-N9	5.61	1.57	1.48
57	BB	807	U	C5'-C4'	5.61	1.58	1.51
57	BB	1166	G	C5'-C4'	5.61	1.58	1.51
57	BB	1550	C	C3'-O3'	5.61	1.50	1.42
57	BB	2326	C	C2'-C1'	5.61	1.59	1.53
57	BB	2579	C	C3'-C2'	-5.61	1.46	1.52
57	BB	2707	U	N1-C6	5.61	1.43	1.38
57	BB	2742	G	C2'-C1'	-5.61	1.47	1.53
58	BA	2	G	C2-N3	5.61	1.37	1.32
21	AA	1206	G	C5'-C4'	5.61	1.58	1.51
22	AY	20	G	C6-N1	5.61	1.43	1.39
57	BB	926	G	C2'-C1'	-5.61	1.47	1.53
57	BB	971	G	C5'-C4'	5.61	1.58	1.51
57	BB	1274	A	C5'-C4'	5.61	1.58	1.51
57	BB	2088	A	N7-C5	-5.61	1.35	1.39
57	BB	2736	A	N9-C8	5.61	1.42	1.37
20	AI	10	ARG	CZ-NH2	5.60	1.40	1.33
57	BB	806	C	C5'-C4'	5.60	1.58	1.51
57	BB	1136	G	N9-C8	5.60	1.41	1.37
57	BB	1345	C	C4'-O4'	5.60	1.52	1.45
57	BB	2038	G	C2-N2	-5.60	1.28	1.34
21	AA	121	U	P-O5'	5.60	1.65	1.59
21	AA	278	G	C5-C6	-5.60	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1081	A	N9-C4	-5.60	1.34	1.37
22	AY	55	U	N3-C4	5.60	1.43	1.38
57	BB	337	C	N1-C6	-5.60	1.33	1.37
57	BB	995	C	C4-C5	5.60	1.47	1.43
57	BB	1326	U	N1-C6	5.60	1.43	1.38
57	BB	1430	G	C8-N7	5.60	1.34	1.30
57	BB	1535	A	C6-N1	5.60	1.39	1.35
57	BB	1587	G	N9-C8	5.60	1.41	1.37
57	BB	1703	G	C3'-C2'	-5.60	1.46	1.52
57	BB	2150	C	N1-C6	5.60	1.40	1.37
57	BB	2877	G	N3-C4	5.60	1.39	1.35
21	AA	313	A	N3-C4	-5.60	1.31	1.34
22	AY	70	C	C4-C5	5.60	1.47	1.43
50	B3	7	ARG	CZ-NH2	5.60	1.40	1.33
57	BB	2182	U	C5-C6	5.60	1.39	1.34
57	BB	2799	A	C2-N3	5.60	1.38	1.33
21	AA	569	C	C3'-C2'	5.60	1.59	1.52
21	AA	654	G	P-O5'	5.60	1.65	1.59
21	AA	966	G	C6-N1	5.60	1.43	1.39
21	AA	1375	A	C6-N6	5.60	1.38	1.33
21	AA	1402	C	C2'-C1'	-5.60	1.47	1.53
22	AY	28	C	C5-C6	5.60	1.38	1.34
23	AW	34	G	N9-C4	5.60	1.42	1.38
35	BP	87	ARG	CZ-NH2	5.60	1.40	1.33
57	BB	172	A	C6-N6	5.60	1.38	1.33
57	BB	181	A	N3-C4	-5.60	1.31	1.34
57	BB	1202	G	C2-N2	5.60	1.40	1.34
57	BB	1471	G	C5-C4	5.60	1.42	1.38
57	BB	2058	A	C5-C4	-5.60	1.34	1.38
57	BB	2497	A	C5'-C4'	5.60	1.58	1.51
57	BB	2723	C	N3-C4	5.60	1.37	1.33
21	AA	357	G	C8-N7	-5.60	1.27	1.30
21	AA	1033	G	C2'-C1'	-5.60	1.47	1.53
21	AA	1094	G	C2-N3	5.60	1.37	1.32
21	AA	1304	G	C2-N3	5.60	1.37	1.32
25	AZ	233	ARG	NE-CZ	5.60	1.40	1.33
29	BJ	34	ARG	NE-CZ	5.60	1.40	1.33
40	BU	93	ARG	NE-CZ	5.60	1.40	1.33
55	BG	135	ALA	CA-CB	5.60	1.64	1.52
57	BB	133	U	C2'-C1'	-5.60	1.47	1.53
57	BB	308	G	N7-C5	5.60	1.42	1.39
57	BB	1456	G	N9-C8	-5.60	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1509	A	C6-N6	5.60	1.38	1.33
57	BB	1609	A	C5-C4	-5.60	1.34	1.38
57	BB	2069	G	C6-N1	5.60	1.43	1.39
57	BB	2695	U	C5-C6	5.60	1.39	1.34
58	BA	44	G	N9-C4	-5.60	1.33	1.38
21	AA	528	C	C2-O2	5.60	1.29	1.24
21	AA	1473	G	N7-C5	-5.60	1.35	1.39
52	BD	124	ARG	NE-CZ	5.60	1.40	1.33
57	BB	2014	A	P-O5'	-5.60	1.54	1.59
21	AA	676	A	O4'-C1'	-5.59	1.34	1.41
21	AA	1297	G	C2'-C1'	-5.59	1.47	1.53
23	AW	6	G	C3'-C2'	5.59	1.59	1.52
46	BZ	29	ARG	CZ-NH1	5.59	1.40	1.33
57	BB	119	A	C5-C6	-5.59	1.36	1.41
57	BB	355	U	C1'-N1	5.59	1.57	1.48
57	BB	658	U	C4-O4	5.59	1.28	1.23
57	BB	1461	C	P-O5'	5.59	1.65	1.59
57	BB	1468	U	N1-C6	5.59	1.43	1.38
57	BB	1989	G	O4'-C1'	-5.59	1.34	1.41
57	BB	2174	C	C5-C6	5.59	1.38	1.34
57	BB	2392	A	N7-C5	-5.59	1.35	1.39
57	BB	2606	C	C2'-C1'	-5.59	1.47	1.53
57	BB	646	U	C3'-C2'	5.59	1.59	1.52
57	BB	2221	G	N3-C4	-5.59	1.31	1.35
57	BB	2407	A	N9-C8	5.59	1.42	1.37
57	BB	2544	G	N7-C5	-5.59	1.35	1.39
21	AA	46	G	N9-C8	-5.59	1.33	1.37
21	AA	55	A	C8-N7	-5.59	1.27	1.31
21	AA	957	U	C2'-C1'	-5.59	1.47	1.53
21	AA	1219	A	C2'-C1'	-5.59	1.47	1.53
22	AY	9	A	N1-C2	5.59	1.39	1.34
57	BB	27	G	C2-N2	-5.59	1.28	1.34
57	BB	73	A	N7-C5	-5.59	1.35	1.39
57	BB	226	A	N3-C4	-5.59	1.31	1.34
57	BB	435	C	N1-C2	5.59	1.45	1.40
57	BB	846	U	N1-C6	5.59	1.43	1.38
57	BB	1497	U	C2-N3	5.59	1.41	1.37
57	BB	1837	C	N3-C4	5.59	1.37	1.33
57	BB	2092	U	C4-C5	5.59	1.48	1.43
57	BB	2155	U	O5'-C5'	5.59	1.53	1.44
57	BB	2201	G	C2-N3	5.59	1.37	1.32
57	BB	140	C	C4-C5	5.59	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	933	A	C6-N1	5.59	1.39	1.35
57	BB	1149	G	C2'-O2'	-5.59	1.34	1.41
57	BB	2023	C	N1-C2	-5.59	1.34	1.40
57	BB	2407	A	N9-C4	5.59	1.41	1.37
57	BB	2424	C	C5-C6	-5.59	1.29	1.34
57	BB	2615	U	O3'-P	-5.59	1.54	1.61
23	AW	4	C	N3-C4	5.59	1.37	1.33
30	BK	70	ARG	CZ-NH2	5.59	1.40	1.33
57	BB	158	U	C2'-O2'	5.59	1.49	1.41
57	BB	205	G	C2-N3	5.59	1.37	1.32
57	BB	1194	A	P-O5'	5.59	1.65	1.59
57	BB	1636	U	C4-C5	-5.59	1.38	1.43
57	BB	1756	G	C5'-C4'	5.59	1.58	1.51
57	BB	2082	A	C4'-C3'	5.59	1.59	1.53
57	BB	2183	A	C6-N6	5.59	1.38	1.33
57	BB	2767	C	O3'-P	-5.59	1.54	1.61
21	AA	352	C	N1-C6	5.59	1.40	1.37
21	AA	706	A	C4'-C3'	-5.59	1.47	1.52
21	AA	1175	G	C2-N3	5.59	1.37	1.32
21	AA	1243	C	N1-C6	5.59	1.40	1.37
21	AA	1381	U	C5-C6	5.59	1.39	1.34
21	AA	1383	C	N3-C4	5.59	1.37	1.33
57	BB	196	A	C2'-O2'	-5.59	1.34	1.41
57	BB	329	G	N7-C5	-5.59	1.35	1.39
57	BB	489	G	C2-N3	5.59	1.37	1.32
57	BB	2102	G	C4'-O4'	5.59	1.52	1.45
57	BB	2233	U	C2'-C1'	-5.59	1.47	1.53
57	BB	2313	C	C3'-C2'	5.59	1.59	1.52
21	AA	66	A	C5-C6	-5.58	1.36	1.41
21	AA	1290	G	C5-C6	-5.58	1.36	1.42
21	AA	1502	A	N3-C4	-5.58	1.31	1.34
25	AZ	171	ARG	NE-CZ	5.58	1.40	1.33
31	BL	21	ARG	NE-CZ	5.58	1.40	1.33
57	BB	880	G	O3'-P	-5.58	1.54	1.61
57	BB	1876	A	C4'-C3'	5.58	1.59	1.53
58	BA	15	A	C5-C4	5.58	1.42	1.38
21	AA	304	U	N3-C4	5.58	1.43	1.38
21	AA	398	U	N3-C4	5.58	1.43	1.38
57	BB	43	G	C8-N7	-5.58	1.27	1.30
57	BB	85	G	C8-N7	-5.58	1.27	1.30
57	BB	396	G	N3-C4	5.58	1.39	1.35
57	BB	786	C	C4-N4	5.58	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	960	A	O3'-P	-5.58	1.54	1.61
57	BB	1102	C	N1-C2	5.58	1.45	1.40
57	BB	1563	U	C2'-C1'	-5.58	1.47	1.53
57	BB	1585	C	C1'-N1	5.58	1.57	1.48
57	BB	1979	U	N1-C2	5.58	1.43	1.38
57	BB	2096	C	C4-N4	5.58	1.39	1.33
57	BB	2169	A	C4'-O4'	5.58	1.52	1.45
58	BA	51	G	C2-N3	5.58	1.37	1.32
21	AA	347	G	N9-C4	5.58	1.42	1.38
21	AA	473	U	C4-O4	5.58	1.28	1.23
21	AA	679	C	C4'-C3'	5.58	1.59	1.53
21	AA	1195	C	C4-C5	-5.58	1.38	1.43
21	AA	1245	C	C4-N4	5.58	1.39	1.33
21	AA	1265	C	C3'-C2'	-5.58	1.46	1.52
57	BB	566	U	N1-C6	-5.58	1.32	1.38
57	BB	699	A	C5'-C4'	5.58	1.58	1.51
57	BB	902	C	P-O5'	-5.58	1.54	1.59
57	BB	1357	C	C2-O2	5.58	1.29	1.24
57	BB	2064	C	N1-C2	5.58	1.45	1.40
57	BB	2535	G	C5-C6	-5.58	1.36	1.42
2	AK	121	ARG	CD-NE	5.58	1.55	1.46
21	AA	933	G	C2-N3	5.58	1.37	1.32
57	BB	1273	U	C4-O4	5.58	1.28	1.23
58	BA	104	A	C4'-O4'	5.58	1.52	1.45
21	AA	1050	G	C5-C4	5.58	1.42	1.38
21	AA	1502	A	C8-N7	-5.58	1.27	1.31
38	BS	7	HIS	CB-CG	5.58	1.60	1.50
54	BF	33	ILE	CA-C	-5.58	1.38	1.52
57	BB	385	C	C4-N4	5.58	1.39	1.33
57	BB	792	A	C5-C6	5.58	1.46	1.41
57	BB	2183	A	C5-C4	5.58	1.42	1.38
57	BB	2890	G	N3-C4	-5.58	1.31	1.35
58	BA	90	C	C4-C5	5.58	1.47	1.43
21	AA	706	A	O3'-P	-5.58	1.54	1.61
21	AA	1152	A	C2-N3	5.58	1.38	1.33
35	BP	47	ILE	CA-CB	-5.58	1.42	1.54
57	BB	355	U	C5'-C4'	5.58	1.58	1.51
57	BB	1619	G	N1-C2	-5.58	1.33	1.37
57	BB	1855	U	C4'-C3'	-5.58	1.47	1.52
57	BB	1855	U	P-O5'	-5.58	1.54	1.59
18	AG	150	PHE	CE1-CZ	5.58	1.48	1.37
21	AA	704	A	C3'-O3'	5.58	1.50	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1487	G	C2-N2	5.58	1.40	1.34
30	BK	90	SER	CA-CB	5.58	1.61	1.52
57	BB	177	G	P-O5'	-5.58	1.54	1.59
57	BB	578	G	C5-C4	-5.58	1.34	1.38
57	BB	1847	A	C2'-C1'	-5.58	1.47	1.53
57	BB	2190	G	C5'-C4'	5.58	1.58	1.51
57	BB	2249	U	P-O5'	-5.58	1.54	1.59
57	BB	2362	C	P-O5'	-5.58	1.54	1.59
21	AA	244	U	O3'-P	-5.57	1.54	1.61
21	AA	653	U	C4'-C3'	5.57	1.59	1.53
21	AA	954	G	N3-C4	5.57	1.39	1.35
21	AA	1262	C	O3'-P	-5.57	1.54	1.61
21	AA	1423	G	C2-N3	5.57	1.37	1.32
25	AZ	58	ARG	CZ-NH1	5.57	1.40	1.33
57	BB	729	G	C5-C6	-5.57	1.36	1.42
57	BB	1026	G	C6-N1	5.57	1.43	1.39
57	BB	1039	A	N3-C4	5.57	1.38	1.34
57	BB	2888	C	O3'-P	5.57	1.67	1.61
58	BA	62	C	N1-C6	5.57	1.40	1.37
57	BB	1403	A	C5'-C4'	5.57	1.58	1.51
57	BB	2277	G	N7-C5	-5.57	1.35	1.39
21	AA	303	A	C5-C6	-5.57	1.36	1.41
21	AA	1170	A	N1-C2	5.57	1.39	1.34
23	AW	47	U	C5'-C4'	5.57	1.58	1.51
57	BB	648	G	P-O5'	-5.57	1.54	1.59
57	BB	744	U	N1-C2	5.57	1.43	1.38
57	BB	997	G	C4'-C3'	5.57	1.59	1.53
57	BB	1666	G	C2'-C1'	-5.57	1.47	1.53
57	BB	2349	G	N7-C5	-5.57	1.35	1.39
57	BB	2475	C	N3-C4	5.57	1.37	1.33
57	BB	2672	U	P-O5'	-5.57	1.54	1.59
21	AA	328	C	C2-N3	5.57	1.40	1.35
21	AA	585	G	C2-N3	5.57	1.37	1.32
21	AA	950	U	C2-N3	5.57	1.41	1.37
21	AA	983	A	N9-C4	5.57	1.41	1.37
57	BB	1341	G	N3-C4	-5.57	1.31	1.35
57	BB	1395	A	N9-C4	-5.57	1.34	1.37
21	AA	60	A	C5-C6	-5.57	1.36	1.41
21	AA	70	U	P-O5'	-5.57	1.54	1.59
21	AA	124	C	C2'-C1'	-5.57	1.47	1.53
21	AA	368	U	C2-N3	5.57	1.41	1.37
21	AA	779	C	N1-C6	5.57	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1039	G	C4'-O4'	5.57	1.52	1.45
21	AA	1330	U	N3-C4	5.57	1.43	1.38
21	AA	1405	G	C6-N1	5.57	1.43	1.39
21	AA	1441	A	N7-C5	-5.57	1.35	1.39
57	BB	2	G	C2'-C1'	-5.57	1.47	1.53
57	BB	1334	G	P-O5'	-5.57	1.54	1.59
57	BB	1492	G	C4'-O4'	5.57	1.52	1.45
57	BB	2220	U	N1-C2	-5.57	1.33	1.38
21	AA	41	G	N9-C8	5.57	1.41	1.37
21	AA	1001	C	N3-C4	5.57	1.37	1.33
57	BB	6	A	C6-N1	5.57	1.39	1.35
57	BB	952	G	N9-C8	5.57	1.41	1.37
57	BB	1717	A	C8-N7	-5.57	1.27	1.31
21	AA	399	G	C2'-C1'	-5.56	1.47	1.53
57	BB	1351	C	C2'-C1'	-5.56	1.47	1.53
21	AA	509	A	N7-C5	-5.56	1.35	1.39
21	AA	758	C	C2'-C1'	-5.56	1.47	1.53
21	AA	922	G	C5-C4	-5.56	1.34	1.38
21	AA	1078	U	P-O5'	5.56	1.65	1.59
21	AA	1410	A	C8-N7	-5.56	1.27	1.31
21	AA	1479	C	C3'-C2'	-5.56	1.46	1.52
57	BB	950	G	P-O5'	-5.56	1.54	1.59
57	BB	2072	C	P-O5'	-5.56	1.54	1.59
21	AA	875	U	C2-O2	5.56	1.27	1.22
21	AA	1294	G	N1-C2	5.56	1.42	1.37
31	BL	50	PHE	CG-CD1	5.56	1.47	1.38
57	BB	505	A	C4'-O4'	5.56	1.52	1.45
57	BB	1269	A	C5'-C4'	5.56	1.58	1.51
57	BB	1595	C	C5'-C4'	5.56	1.58	1.51
57	BB	1792	G	C2'-C1'	-5.56	1.47	1.53
57	BB	2089	C	P-O5'	-5.56	1.54	1.59
57	BB	2272	U	C4'-C3'	5.56	1.59	1.53
58	BA	52	A	C8-N7	-5.56	1.27	1.31
21	AA	226	G	C2-N3	5.56	1.37	1.32
21	AA	382	A	P-O5'	-5.56	1.54	1.59
21	AA	1197	A	C5-C6	5.56	1.46	1.41
57	BB	219	A	C2'-C1'	-5.56	1.47	1.53
57	BB	843	G	C2'-C1'	-5.56	1.47	1.53
57	BB	1085	A	N1-C2	5.56	1.39	1.34
57	BB	1481	U	C1'-N1	5.56	1.57	1.48
58	BA	94	A	C5-C6	-5.56	1.36	1.41
11	AT	73	ARG	CZ-NH1	5.56	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	385	C	N1-C6	5.56	1.40	1.37
21	AA	427	U	C2-N3	5.56	1.41	1.37
21	AA	1054	C	N3-C4	5.56	1.37	1.33
21	AA	1123	U	C4'-C3'	5.56	1.59	1.53
26	AV	68	C	N1-C6	5.56	1.40	1.37
52	BD	179	ARG	CZ-NH2	5.56	1.40	1.33
57	BB	7	G	C4'-O4'	5.56	1.52	1.45
57	BB	37	C	C2'-C1'	-5.56	1.47	1.53
57	BB	127	A	C5-C4	5.56	1.42	1.38
57	BB	319	G	N1-C2	5.56	1.42	1.37
57	BB	510	C	C2-N3	5.56	1.40	1.35
57	BB	562	U	C4'-C3'	-5.56	1.47	1.52
57	BB	867	C	N3-C4	5.56	1.37	1.33
57	BB	1115	G	C8-N7	-5.56	1.27	1.30
57	BB	1337	G	C8-N7	-5.56	1.27	1.30
57	BB	1947	C	C4-N4	5.56	1.39	1.33
57	BB	2282	G	O4'-C1'	-5.56	1.34	1.41
58	BA	23	G	N1-C2	5.56	1.42	1.37
21	AA	43	C	N1-C2	5.56	1.45	1.40
21	AA	235	C	O3'-P	-5.56	1.54	1.61
21	AA	590	U	N1-C6	5.56	1.43	1.38
57	BB	1823	G	C2'-O2'	-5.56	1.34	1.41
57	BB	2063	C	C4'-O4'	-5.56	1.38	1.45
5	AN	60	ARG	CZ-NH2	5.55	1.40	1.33
21	AA	40	C	C5'-C4'	5.55	1.58	1.51
21	AA	421	U	C4'-C3'	5.55	1.59	1.53
21	AA	486	U	N1-C6	5.55	1.43	1.38
21	AA	741	G	N9-C8	5.55	1.41	1.37
21	AA	1250	A	N9-C4	5.55	1.41	1.37
57	BB	31	C	O3'-P	5.55	1.67	1.61
57	BB	110	G	C4'-C3'	-5.55	1.47	1.52
57	BB	174	U	C5-C6	5.55	1.39	1.34
57	BB	411	G	C5-C4	5.55	1.42	1.38
57	BB	672	C	O4'-C1'	5.55	1.48	1.41
57	BB	908	C	C4-C5	5.55	1.47	1.43
57	BB	1473	G	C2'-C1'	-5.55	1.47	1.53
57	BB	1650	A	C5-C6	5.55	1.46	1.41
57	BB	1851	U	N1-C2	5.55	1.43	1.38
57	BB	1949	G	C5-C6	-5.55	1.36	1.42
57	BB	2213	U	C2-N3	5.55	1.41	1.37
57	BB	2424	C	N1-C2	5.55	1.45	1.40
57	BB	2633	G	C4'-O4'	-5.55	1.38	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2674	G	N3-C4	-5.55	1.31	1.35
21	AA	22	G	C2'-C1'	-5.55	1.47	1.53
21	AA	278	G	C3'-C2'	-5.55	1.46	1.52
21	AA	370	C	N1-C6	5.55	1.40	1.37
21	AA	455	G	P-O5'	-5.55	1.54	1.59
21	AA	523	A	N7-C5	-5.55	1.35	1.39
21	AA	746	A	C4'-C3'	-5.55	1.47	1.52
23	AW	19	G	O3'-P	-5.55	1.54	1.61
57	BB	1061	U	O3'-P	-5.55	1.54	1.61
57	BB	2279	G	N9-C8	-5.55	1.33	1.37
57	BB	2813	A	C3'-C2'	5.55	1.59	1.52
21	AA	579	A	N7-C5	5.55	1.42	1.39
21	AA	711	G	C8-N7	-5.55	1.27	1.30
21	AA	1158	C	C5'-C4'	5.55	1.58	1.51
21	AA	1295	U	C2-N3	5.55	1.41	1.37
22	AY	44	A	C5'-C4'	5.55	1.58	1.51
57	BB	1336	A	C2-N3	5.55	1.38	1.33
57	BB	1448	G	C5'-C4'	5.55	1.58	1.51
57	BB	1789	A	C4'-O4'	5.55	1.52	1.45
21	AA	80	A	C5-C4	5.55	1.42	1.38
21	AA	365	U	P-O5'	-5.55	1.54	1.59
21	AA	410	G	C8-N7	-5.55	1.27	1.30
21	AA	1266	G	C3'-C2'	-5.55	1.46	1.52
21	AA	1275	A	C5-C4	-5.55	1.34	1.38
34	BO	112	GLU	CG-CD	5.55	1.60	1.51
57	BB	2772	C	C4-C5	-5.55	1.38	1.43
57	BB	2868	A	N3-C4	-5.55	1.31	1.34
57	BB	2898	U	C2-N3	5.55	1.41	1.37
13	AB	201	GLY	CA-C	-5.55	1.43	1.51
21	AA	124	C	C2-N3	5.55	1.40	1.35
21	AA	412	A	C4'-C3'	5.55	1.59	1.53
22	AY	20	G	N9-C4	5.55	1.42	1.38
57	BB	1142	A	C2'-C1'	-5.55	1.47	1.53
57	BB	1945	G	P-O5'	5.55	1.65	1.59
2	AK	55	ARG	CZ-NH1	5.55	1.40	1.33
21	AA	381	C	C2'-O2'	-5.55	1.34	1.41
21	AA	921	U	C2-N3	5.55	1.41	1.37
21	AA	1045	C	N3-C4	5.55	1.37	1.33
26	AV	9	G	C6-N1	5.55	1.43	1.39
57	BB	55	G	C6-N1	5.55	1.43	1.39
57	BB	617	G	C5'-C4'	5.55	1.58	1.51
57	BB	1104	C	C4-C5	5.55	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1356	G	C5-C6	5.55	1.47	1.42
57	BB	1644	C	O3'-P	-5.55	1.54	1.61
57	BB	1863	G	C8-N7	-5.55	1.27	1.30
57	BB	2522	U	C5-C6	5.55	1.39	1.34
57	BB	2560	A	C6-N1	5.55	1.39	1.35
57	BB	2826	A	C5'-C4'	5.55	1.58	1.51
21	AA	600	A	C5-C4	-5.54	1.34	1.38
25	AZ	133	PHE	CG-CD2	5.54	1.47	1.38
51	B4	4	ARG	NE-CZ	5.54	1.40	1.33
57	BB	388	G	P-O5'	-5.54	1.54	1.59
57	BB	524	G	N9-C4	-5.54	1.33	1.38
57	BB	880	G	N1-C2	5.54	1.42	1.37
57	BB	2086	U	C2'-C1'	-5.54	1.47	1.53
57	BB	2388	A	C8-N7	5.54	1.35	1.31
57	BB	2577	A	N9-C8	-5.54	1.33	1.37
40	BU	94	PHE	CG-CD1	5.54	1.47	1.38
57	BB	473	G	C8-N7	-5.54	1.27	1.30
57	BB	485	C	C5'-C4'	5.54	1.58	1.51
57	BB	793	A	C5'-C4'	5.54	1.58	1.51
57	BB	1415	U	C4-C5	5.54	1.48	1.43
57	BB	1614	A	N9-C8	5.54	1.42	1.37
57	BB	1814	G	O3'-P	-5.54	1.54	1.61
57	BB	1989	G	N3-C4	-5.54	1.31	1.35
57	BB	2357	G	C8-N7	-5.54	1.27	1.30
21	AA	62	U	C1'-N1	5.54	1.57	1.48
21	AA	1208	C	C1'-N1	5.54	1.57	1.48
22	AY	60	C	C2'-C1'	-5.54	1.47	1.53
30	BK	14	GLY	CA-C	-5.54	1.43	1.51
57	BB	74	A	C2-N3	5.54	1.38	1.33
57	BB	410	G	C2'-C1'	-5.54	1.47	1.53
57	BB	788	A	C6-N1	5.54	1.39	1.35
57	BB	946	C	C2'-C1'	-5.54	1.47	1.53
57	BB	991	C	N3-C4	5.54	1.37	1.33
21	AA	535	A	N3-C4	5.54	1.38	1.34
21	AA	764	C	C4-N4	5.54	1.39	1.33
21	AA	858	G	C5-C6	-5.54	1.36	1.42
57	BB	1574	C	N1-C6	5.54	1.40	1.37
57	BB	1641	A	N9-C4	-5.54	1.34	1.37
57	BB	2692	G	C2'-C1'	-5.54	1.47	1.53
58	BA	84	G	C2-N3	5.54	1.37	1.32
21	AA	152	A	C8-N7	-5.54	1.27	1.31
21	AA	221	C	N3-C4	5.54	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	611	C	C2-N3	5.54	1.40	1.35
21	AA	626	G	N9-C4	-5.54	1.33	1.38
21	AA	833	G	N1-C2	5.54	1.42	1.37
21	AA	969	A	N9-C8	-5.54	1.33	1.37
21	AA	1141	C	C4-N4	5.54	1.39	1.33
57	BB	88	G	C2-N2	5.54	1.40	1.34
57	BB	659	G	C8-N7	-5.54	1.27	1.30
57	BB	792	A	N9-C4	-5.54	1.34	1.37
57	BB	899	A	P-O5'	-5.54	1.54	1.59
57	BB	900	A	C1'-N9	5.54	1.57	1.48
57	BB	1329	U	O3'-P	-5.54	1.54	1.61
57	BB	1367	A	N9-C4	5.54	1.41	1.37
57	BB	1721	G	C6-O6	-5.54	1.19	1.24
57	BB	1874	C	C2'-O2'	5.54	1.48	1.41
57	BB	1997	C	C4-C5	5.54	1.47	1.43
57	BB	2216	G	C6-N1	5.54	1.43	1.39
57	BB	2526	G	C3'-C2'	-5.54	1.46	1.52
57	BB	2563	U	O3'-P	-5.54	1.54	1.61
57	BB	2759	G	C2-N3	5.54	1.37	1.32
21	AA	1365	G	O3'-P	-5.54	1.54	1.61
21	AA	1474	U	N3-C4	5.54	1.43	1.38
57	BB	1167	C	C3'-C2'	-5.54	1.46	1.52
57	BB	1247	A	C6-N1	5.54	1.39	1.35
57	BB	1930	G	N1-C2	5.54	1.42	1.37
57	BB	2286	G	C4'-O4'	-5.54	1.38	1.45
21	AA	51	A	N9-C8	-5.54	1.33	1.37
21	AA	975	A	C4'-C3'	-5.54	1.47	1.52
21	AA	1329	A	N3-C4	5.54	1.38	1.34
21	AA	1396	A	C6-N6	5.54	1.38	1.33
26	AV	30	G	C2-N3	5.54	1.37	1.32
57	BB	199	A	C4'-O4'	5.54	1.52	1.45
57	BB	629	G	C6-N1	5.54	1.43	1.39
57	BB	1649	G	C2'-C1'	-5.54	1.47	1.53
57	BB	1936	A	N9-C8	-5.54	1.33	1.37
57	BB	2044	C	N1-C2	5.54	1.45	1.40
57	BB	2314	A	C2'-C1'	-5.54	1.47	1.53
57	BB	2612	C	C3'-C2'	-5.54	1.46	1.52
57	BB	2677	G	C1'-N9	5.54	1.57	1.48
21	AA	168	G	C5-C6	-5.53	1.36	1.42
21	AA	476	U	C2-N3	5.53	1.41	1.37
21	AA	591	U	C5-C6	5.53	1.39	1.34
21	AA	1479	C	C4-C5	5.53	1.47	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1495	U	C5'-C4'	5.53	1.57	1.51
57	BB	465	G	C2'-O2'	5.53	1.48	1.41
57	BB	1389	G	C2-N2	5.53	1.40	1.34
57	BB	1545	A	N7-C5	-5.53	1.35	1.39
57	BB	2384	U	C4-O4	-5.53	1.19	1.23
57	BB	2881	U	C2'-C1'	-5.53	1.47	1.53
21	AA	515	G	C6-N1	5.53	1.43	1.39
21	AA	683	G	C5-C6	-5.53	1.36	1.42
21	AA	1421	G	C5'-C4'	5.53	1.57	1.51
57	BB	411	G	C3'-C2'	5.53	1.59	1.52
57	BB	831	G	N9-C8	5.53	1.41	1.37
57	BB	1560	G	C8-N7	-5.53	1.27	1.30
15	AD	72	ARG	CZ-NH2	5.53	1.40	1.33
21	AA	424	G	C2-N3	5.53	1.37	1.32
21	AA	673	A	C2'-C1'	-5.53	1.47	1.53
21	AA	1047	G	C2'-C1'	-5.53	1.47	1.53
26	AV	71	C	C2'-C1'	-5.53	1.47	1.53
57	BB	314	C	O3'-P	-5.53	1.54	1.61
57	BB	1290	C	N3-C4	5.53	1.37	1.33
57	BB	1700	A	C6-N1	5.53	1.39	1.35
57	BB	1797	G	C2'-C1'	-5.53	1.47	1.53
57	BB	2064	C	C5-C6	5.53	1.38	1.34
57	BB	2238	G	C3'-O3'	5.53	1.49	1.42
21	AA	121	U	O3'-P	-5.53	1.54	1.61
21	AA	552	U	C3'-O3'	5.53	1.49	1.42
21	AA	867	G	C4'-O4'	-5.53	1.38	1.45
57	BB	1453	A	C5-C6	-5.53	1.36	1.41
58	BA	10	G	P-O5'	-5.53	1.54	1.59
21	AA	533	A	N9-C4	5.53	1.41	1.37
21	AA	1513	A	C5-C4	-5.53	1.34	1.38
23	AW	10	G	C5'-C4'	-5.53	1.44	1.51
57	BB	144	A	C3'-O3'	5.53	1.49	1.42
57	BB	239	C	N3-C4	5.53	1.37	1.33
57	BB	428	A	C6-N1	5.53	1.39	1.35
57	BB	849	A	N7-C5	-5.53	1.35	1.39
57	BB	1207	C	C4-C5	5.53	1.47	1.43
57	BB	1815	A	N7-C5	-5.53	1.35	1.39
57	BB	1849	G	N9-C4	5.53	1.42	1.38
2	AK	76	TYR	CZ-OH	5.53	1.47	1.37
21	AA	560	A	C2-N3	5.53	1.38	1.33
26	AV	7	G	N1-C2	5.53	1.42	1.37
57	BB	85	G	C2-N3	5.53	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	304	U	P-O5'	-5.53	1.54	1.59
57	BB	1381	G	O3'-P	-5.53	1.54	1.61
57	BB	1567	G	C5-C6	-5.53	1.36	1.42
57	BB	2396	G	N3-C4	-5.53	1.31	1.35
57	BB	2891	U	N3-C4	5.53	1.43	1.38
23	AW	12	U	N1-C2	5.52	1.43	1.38
26	AV	28	C	N1-C2	5.52	1.45	1.40
42	BW	19	ARG	CZ-NH2	5.52	1.40	1.33
57	BB	901	C	C4-N4	5.52	1.39	1.33
57	BB	2579	C	C4-N4	5.52	1.39	1.33
57	BB	2592	G	C4'-C3'	5.52	1.59	1.53
12	AU	33	ARG	CZ-NH1	5.52	1.40	1.33
18	AG	77	ARG	NE-CZ	5.52	1.40	1.33
21	AA	782	A	O3'-P	-5.52	1.54	1.61
57	BB	817	C	N3-C4	5.52	1.37	1.33
57	BB	880	G	C4'-C3'	5.52	1.59	1.53
57	BB	984	A	N9-C8	-5.52	1.33	1.37
57	BB	1465	G	O4'-C1'	-5.52	1.34	1.41
57	BB	2507	C	C4'-C3'	5.52	1.59	1.53
57	BB	2792	A	C8-N7	-5.52	1.27	1.31
18	AG	19	SER	CA-CB	5.52	1.61	1.52
57	BB	140	C	C2-N3	5.52	1.40	1.35
57	BB	496	G	C2-N3	5.52	1.37	1.32
57	BB	768	G	N1-C2	5.52	1.42	1.37
57	BB	927	A	C3'-C2'	5.52	1.59	1.52
57	BB	1237	A	O4'-C1'	-5.52	1.34	1.41
21	AA	1076	U	P-O5'	-5.52	1.54	1.59
21	AA	1279	G	C5'-C4'	5.52	1.57	1.51
21	AA	1436	U	C2'-C1'	-5.52	1.47	1.53
21	AA	1439	G	C4'-O4'	-5.52	1.38	1.45
21	AA	1475	G	O3'-P	-5.52	1.54	1.61
21	AA	1481	U	O3'-P	-5.52	1.54	1.61
57	BB	684	G	N1-C2	5.52	1.42	1.37
57	BB	850	U	O4'-C1'	5.52	1.48	1.41
57	BB	1034	G	C5'-C4'	5.52	1.57	1.51
57	BB	1163	G	C1'-N9	-5.52	1.39	1.46
57	BB	2068	U	C3'-C2'	-5.52	1.46	1.52
57	BB	2365	G	N1-C2	5.52	1.42	1.37
21	AA	212	G	N9-C8	5.52	1.41	1.37
21	AA	294	U	P-O5'	5.52	1.65	1.59
21	AA	1254	A	N9-C8	5.52	1.42	1.37
21	AA	1465	A	N9-C8	-5.52	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	16	U	C2'-O2'	5.52	1.48	1.41
57	BB	13	A	C5'-C4'	5.52	1.57	1.51
57	BB	83	A	C5-C4	-5.52	1.34	1.38
57	BB	387	U	O4'-C1'	-5.52	1.34	1.41
57	BB	430	A	C6-N6	5.52	1.38	1.33
57	BB	1128	G	C2-N3	5.52	1.37	1.32
57	BB	1555	G	C3'-C2'	5.52	1.59	1.52
57	BB	1710	G	C2'-C1'	-5.52	1.47	1.53
57	BB	1841	U	C2-N3	5.52	1.41	1.37
57	BB	1989	G	C5-C4	5.52	1.42	1.38
57	BB	2608	G	C5'-C4'	5.52	1.57	1.51
58	BA	55	U	C4-C5	5.52	1.48	1.43
57	BB	1522	A	O3'-P	-5.52	1.54	1.61
57	BB	2177	C	O4'-C1'	5.52	1.48	1.41
57	BB	2380	C	C1'-N1	5.52	1.57	1.48
21	AA	130	A	O3'-P	-5.51	1.54	1.61
21	AA	246	A	N9-C4	5.51	1.41	1.37
21	AA	843	U	C4'-C3'	-5.51	1.47	1.52
50	B3	45	PRO	N-CA	-5.51	1.37	1.47
57	BB	1175	A	N9-C4	5.51	1.41	1.37
57	BB	1328	A	C2-N3	5.51	1.38	1.33
57	BB	1597	A	O4'-C1'	5.51	1.48	1.41
57	BB	1665	A	C6-N6	5.51	1.38	1.33
57	BB	1999	C	P-O5'	-5.51	1.54	1.59
57	BB	2064	C	P-O5'	-5.51	1.54	1.59
57	BB	2550	G	P-O5'	-5.51	1.54	1.59
57	BB	2835	A	N3-C4	5.51	1.38	1.34
21	AA	205	A	O3'-P	-5.51	1.54	1.61
57	BB	1555	G	C2-N3	5.51	1.37	1.32
21	AA	40	C	C2'-C1'	-5.51	1.47	1.53
21	AA	102	G	C2-N3	5.51	1.37	1.32
21	AA	418	C	P-O5'	-5.51	1.54	1.59
21	AA	522	C	P-O5'	-5.51	1.54	1.59
21	AA	551	U	N1-C6	-5.51	1.32	1.38
21	AA	983	A	O3'-P	-5.51	1.54	1.61
21	AA	1167	A	C2-N3	5.51	1.38	1.33
21	AA	1279	G	C3'-O3'	5.51	1.49	1.42
26	AV	67	C	N3-C4	5.51	1.37	1.33
44	BY	29	ARG	CZ-NH1	5.51	1.40	1.33
57	BB	453	A	C5-C6	5.51	1.46	1.41
57	BB	598	U	C2'-C1'	-5.51	1.47	1.53
57	BB	795	C	C4'-C3'	-5.51	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	866	A	O4'-C1'	-5.51	1.34	1.41
57	BB	1645	G	O3'-P	-5.51	1.54	1.61
57	BB	1655	A	C3'-C2'	-5.51	1.46	1.52
57	BB	2010	G	C6-O6	-5.51	1.19	1.24
57	BB	2033	A	C5-C4	-5.51	1.34	1.38
58	BA	44	G	C6-N1	-5.51	1.35	1.39
21	AA	46	G	C2-N3	5.51	1.37	1.32
21	AA	310	G	N1-C2	5.51	1.42	1.37
21	AA	626	G	C6-N1	-5.51	1.35	1.39
21	AA	727	G	C4'-C3'	-5.51	1.47	1.52
21	AA	1019	A	N9-C8	-5.51	1.33	1.37
21	AA	1216	A	N7-C5	-5.51	1.35	1.39
52	BD	83	ARG	CD-NE	5.51	1.55	1.46
57	BB	62	U	C4-C5	5.51	1.48	1.43
57	BB	89	A	C4'-C3'	5.51	1.59	1.53
57	BB	947	A	N9-C8	-5.51	1.33	1.37
57	BB	1282	U	N1-C6	5.51	1.43	1.38
57	BB	1444	G	C5-C6	-5.51	1.36	1.42
57	BB	2045	C	N3-C4	5.51	1.37	1.33
57	BB	2323	G	C5'-C4'	5.51	1.57	1.51
21	AA	403	C	C4-C5	5.51	1.47	1.43
23	AW	45	U	C4'-O4'	-5.51	1.38	1.45
57	BB	689	A	C6-N1	5.51	1.39	1.35
57	BB	789	A	N9-C4	5.51	1.41	1.37
57	BB	1301	A	N9-C4	-5.51	1.34	1.37
57	BB	2680	U	C5'-C4'	5.51	1.57	1.51
58	BA	13	G	C8-N7	5.51	1.34	1.30
14	AC	125	ARG	CZ-NH2	5.51	1.40	1.33
21	AA	60	A	C2'-C1'	-5.51	1.47	1.53
21	AA	983	A	N7-C5	-5.51	1.35	1.39
26	AV	53	G	N9-C8	-5.51	1.33	1.37
57	BB	30	G	N1-C2	5.51	1.42	1.37
57	BB	349	U	C1'-N1	5.51	1.57	1.48
57	BB	1171	G	O3'-P	5.51	1.67	1.61
57	BB	1317	G	N9-C8	5.51	1.41	1.37
57	BB	2365	G	C4'-O4'	5.51	1.52	1.45
57	BB	2575	C	C2-O2	-5.51	1.19	1.24
58	BA	43	C	P-O5'	5.51	1.65	1.59
21	AA	185	U	N3-C4	5.50	1.43	1.38
21	AA	300	A	C4'-C3'	5.50	1.59	1.53
25	AZ	373	ARG	CG-CD	5.50	1.65	1.51
57	BB	497	A	C3'-C2'	-5.50	1.46	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	602	A	C8-N7	-5.50	1.27	1.31
57	BB	2166	U	C5'-C4'	5.50	1.57	1.51
21	AA	507	C	P-O5'	-5.50	1.54	1.59
21	AA	951	G	N3-C4	-5.50	1.31	1.35
31	BL	33	ARG	CD-NE	5.50	1.55	1.46
56	BH	50	ARG	CZ-NH2	5.50	1.40	1.33
57	BB	2330	G	C6-N1	-5.50	1.35	1.39
57	BB	2768	U	P-O5'	-5.50	1.54	1.59
21	AA	426	U	O3'-P	-5.50	1.54	1.61
21	AA	755	G	C6-N1	5.50	1.43	1.39
25	AZ	283	ARG	CZ-NH2	5.50	1.40	1.33
57	BB	44	A	C6-N6	5.50	1.38	1.33
57	BB	954	G	C5-C4	-5.50	1.34	1.38
57	BB	1453	A	C5'-C4'	5.50	1.57	1.51
57	BB	1500	G	C5-C4	-5.50	1.34	1.38
57	BB	1950	G	N3-C4	-5.50	1.31	1.35
57	BB	2175	C	O3'-P	-5.50	1.54	1.61
57	BB	2827	C	C2'-C1'	-5.50	1.47	1.53
21	AA	238	A	C4'-C3'	-5.50	1.47	1.52
21	AA	242	G	C3'-C2'	5.50	1.59	1.52
21	AA	345	C	C2-N3	5.50	1.40	1.35
21	AA	607	A	N3-C4	-5.50	1.31	1.34
21	AA	1003	G	C5-C4	5.50	1.42	1.38
21	AA	1067	A	C5-C6	-5.50	1.36	1.41
21	AA	1534	A	C2'-O2'	5.50	1.48	1.41
57	BB	531	C	N3-C4	5.50	1.37	1.33
57	BB	872	U	C4-C5	-5.50	1.38	1.43
57	BB	1010	A	C5-C4	5.50	1.42	1.38
57	BB	1156	A	C6-N1	5.50	1.39	1.35
57	BB	2714	G	P-O5'	-5.50	1.54	1.59
57	BB	2875	C	P-O5'	-5.50	1.54	1.59
3	AL	93	ARG	CZ-NH1	5.50	1.40	1.33
21	AA	329	A	C1'-N9	5.50	1.56	1.48
21	AA	464	U	C2-O2	5.50	1.27	1.22
21	AA	660	C	O3'-P	5.50	1.67	1.61
21	AA	959	A	C5'-C4'	-5.50	1.44	1.51
21	AA	1222	G	C8-N7	5.50	1.34	1.30
21	AA	1388	C	N3-C4	5.50	1.37	1.33
23	AW	73	A	O3'-P	-5.50	1.54	1.61
26	AV	41	C	C2'-C1'	-5.50	1.47	1.53
57	BB	854	C	C5-C6	-5.50	1.29	1.34
57	BB	902	C	C4'-O4'	5.50	1.52	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	977	G	N9-C8	5.50	1.41	1.37
57	BB	1075	C	C2-N3	5.50	1.40	1.35
57	BB	1577	C	N3-C4	5.50	1.37	1.33
58	BA	71	C	N3-C4	5.50	1.37	1.33
21	AA	130	A	N9-C8	5.50	1.42	1.37
21	AA	220	G	N3-C4	5.50	1.39	1.35
21	AA	592	G	N3-C4	5.50	1.39	1.35
21	AA	1045	C	C3'-C2'	-5.50	1.46	1.52
21	AA	1342	C	N1-C6	5.50	1.40	1.37
22	AY	51	G	C5-C4	-5.50	1.34	1.38
57	BB	592	A	O3'-P	-5.50	1.54	1.61
57	BB	1087	G	O4'-C1'	-5.50	1.34	1.41
57	BB	1860	G	N9-C8	-5.50	1.34	1.37
57	BB	2056	G	C6-N1	5.50	1.43	1.39
57	BB	2267	A	N1-C2	5.50	1.39	1.34
57	BB	2604	U	C4'-C3'	5.50	1.59	1.53
21	AA	734	G	N7-C5	-5.50	1.35	1.39
21	AA	1508	A	C5-C6	5.50	1.46	1.41
57	BB	806	C	C4-N4	5.50	1.38	1.33
57	BB	1158	C	C3'-O3'	5.50	1.49	1.42
57	BB	1517	G	C3'-O3'	5.50	1.49	1.42
57	BB	2639	A	O3'-P	-5.50	1.54	1.61
57	BB	2793	C	O4'-C1'	5.50	1.48	1.41
21	AA	68	G	N7-C5	-5.49	1.35	1.39
21	AA	115	G	N9-C8	5.49	1.41	1.37
21	AA	129	A	C6-N6	5.49	1.38	1.33
21	AA	587	G	C4'-C3'	-5.49	1.47	1.52
21	AA	1127	G	C2'-C1'	-5.49	1.47	1.53
21	AA	1149	C	C1'-N1	5.49	1.56	1.48
37	BR	56	GLY	N-CA	-5.49	1.37	1.46
57	BB	409	G	C2'-C1'	-5.49	1.47	1.53
57	BB	757	G	C2-N3	5.49	1.37	1.32
57	BB	1020	A	C2'-C1'	-5.49	1.47	1.53
57	BB	1034	G	N1-C2	5.49	1.42	1.37
57	BB	1141	U	C4-C5	5.49	1.48	1.43
57	BB	2050	C	O3'-P	-5.49	1.54	1.61
57	BB	2416	C	O4'-C1'	5.49	1.48	1.41
21	AA	542	G	C5-C4	5.49	1.42	1.38
21	AA	633	G	C2-N2	5.49	1.40	1.34
21	AA	1220	G	C2-N3	5.49	1.37	1.32
57	BB	527	C	C2-O2	5.49	1.29	1.24
57	BB	1984	G	N1-C2	-5.49	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2315	G	O3'-P	-5.49	1.54	1.61
57	BB	2737	G	N1-C2	5.49	1.42	1.37
21	AA	149	A	C2-N3	-5.49	1.28	1.33
21	AA	379	C	C4-N4	5.49	1.38	1.33
21	AA	1160	G	C4'-C3'	5.49	1.59	1.53
21	AA	1447	A	C6-N1	5.49	1.39	1.35
45	BC	208	GLY	N-CA	-5.49	1.37	1.46
57	BB	303	G	C4'-O4'	5.49	1.52	1.45
57	BB	513	A	C8-N7	5.49	1.35	1.31
57	BB	636	G	C2-N3	5.49	1.37	1.32
57	BB	893	C	C4-N4	5.49	1.38	1.33
57	BB	1195	G	C4'-O4'	5.49	1.52	1.45
57	BB	1525	A	N7-C5	-5.49	1.35	1.39
57	BB	1702	G	C8-N7	5.49	1.34	1.30
57	BB	2183	A	N3-C4	-5.49	1.31	1.34
57	BB	2391	G	N1-C2	5.49	1.42	1.37
21	AA	482	A	N9-C8	-5.49	1.33	1.37
21	AA	812	G	N9-C8	5.49	1.41	1.37
21	AA	821	G	C2-N3	5.49	1.37	1.32
45	BC	39	SER	C-N	5.49	1.43	1.33
57	BB	288	U	C5-C6	5.49	1.39	1.34
57	BB	319	G	C4'-O4'	-5.49	1.38	1.45
57	BB	1411	U	C2-N3	5.49	1.41	1.37
57	BB	1489	C	C3'-O3'	5.49	1.49	1.42
57	BB	2203	U	C2-O2	5.49	1.27	1.22
58	BA	108	A	C5-C4	-5.49	1.34	1.38
21	AA	513	C	C5'-C4'	5.49	1.57	1.51
21	AA	743	A	N3-C4	-5.49	1.31	1.34
21	AA	1111	A	C6-N6	5.49	1.38	1.33
57	BB	36	G	C1'-N9	5.49	1.56	1.48
57	BB	187	G	N7-C5	-5.49	1.35	1.39
57	BB	292	U	C3'-C2'	5.49	1.58	1.52
21	AA	270	A	C6-N6	5.49	1.38	1.33
21	AA	1332	A	C5'-C4'	5.49	1.57	1.51
57	BB	1080	A	N3-C4	5.49	1.38	1.34
57	BB	1381	G	N7-C5	-5.49	1.35	1.39
57	BB	2366	A	N7-C5	-5.49	1.35	1.39
57	BB	2572	A	C5-C6	5.49	1.46	1.41
58	BA	58	A	N9-C4	-5.49	1.34	1.37
58	BA	86	G	C8-N7	-5.49	1.27	1.30
21	AA	104	G	C5-C4	5.48	1.42	1.38
21	AA	1133	G	P-O5'	5.48	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	12	U	P-O5'	-5.48	1.54	1.59
57	BB	684	G	C6-O6	5.48	1.29	1.24
57	BB	752	A	C6-N1	5.48	1.39	1.35
57	BB	808	G	C5-C6	-5.48	1.36	1.42
57	BB	858	G	C2'-O2'	-5.48	1.34	1.41
57	BB	1003	G	C2'-C1'	-5.48	1.47	1.53
57	BB	2309	A	N1-C2	5.48	1.39	1.34
57	BB	2377	A	C5'-C4'	5.48	1.57	1.51
21	AA	547	A	N9-C8	5.48	1.42	1.37
21	AA	699	C	C4-C5	-5.48	1.38	1.43
21	AA	795	C	O3'-P	-5.48	1.54	1.61
21	AA	805	C	P-O5'	-5.48	1.54	1.59
21	AA	1276	G	C5'-C4'	5.48	1.57	1.51
21	AA	1426	G	N3-C4	-5.48	1.31	1.35
21	AA	1516	G	C6-N1	5.48	1.43	1.39
57	BB	123	G	N1-C2	5.48	1.42	1.37
57	BB	738	G	C5-C6	-5.48	1.36	1.42
57	BB	1558	C	C3'-C2'	5.48	1.58	1.52
57	BB	1964	G	C2-N2	-5.48	1.29	1.34
57	BB	2065	C	O4'-C1'	5.48	1.48	1.41
57	BB	2844	G	C2'-C1'	-5.48	1.47	1.53
6	AO	1	SER	CA-CB	-5.48	1.44	1.52
21	AA	146	G	C2'-C1'	-5.48	1.47	1.53
21	AA	842	U	C2-N3	5.48	1.41	1.37
21	AA	1016	A	P-O5'	-5.48	1.54	1.59
22	AY	67	A	C6-N1	5.48	1.39	1.35
57	BB	189	G	C2-N3	5.48	1.37	1.32
57	BB	220	G	C5-C4	-5.48	1.34	1.38
57	BB	1089	A	N7-C5	-5.48	1.35	1.39
57	BB	1170	C	C4-N4	5.48	1.38	1.33
57	BB	1258	U	O4'-C1'	5.48	1.48	1.41
57	BB	1450	G	C6-N1	5.48	1.43	1.39
57	BB	1490	A	C5-C6	5.48	1.46	1.41
57	BB	1702	G	N1-C2	5.48	1.42	1.37
57	BB	2617	U	C3'-C2'	-5.48	1.46	1.52
57	BB	2691	C	C4-N4	5.48	1.38	1.33
57	BB	2790	U	C4-C5	5.48	1.48	1.43
21	AA	189	A	N7-C5	-5.48	1.35	1.39
21	AA	389	A	N3-C4	5.48	1.38	1.34
57	BB	191	A	N1-C2	5.48	1.39	1.34
57	BB	295	G	C2-N2	5.48	1.40	1.34
57	BB	1392	A	C6-N6	5.48	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1751	U	C4-O4	5.48	1.28	1.23
57	BB	2497	A	C1'-N9	-5.48	1.39	1.46
21	AA	330	C	C3'-C2'	-5.48	1.46	1.52
21	AA	809	G	C2'-C1'	-5.48	1.47	1.53
21	AA	1208	C	C3'-O3'	5.48	1.49	1.42
21	AA	1396	A	C5-C4	5.48	1.42	1.38
57	BB	142	A	C8-N7	-5.48	1.27	1.31
57	BB	629	G	C2'-C1'	-5.48	1.47	1.53
57	BB	1003	G	C2-N3	5.48	1.37	1.32
57	BB	1164	C	C4-N4	5.48	1.38	1.33
57	BB	1336	A	C6-N1	5.48	1.39	1.35
57	BB	1715	G	O3'-P	-5.48	1.54	1.61
57	BB	2025	C	C5-C6	-5.48	1.29	1.34
57	BB	2501	C	N1-C2	5.48	1.45	1.40
58	BA	10	G	N1-C2	5.48	1.42	1.37
58	BA	110	C	O4'-C1'	5.48	1.48	1.41
21	AA	82	G	C6-N1	5.48	1.43	1.39
21	AA	873	A	C3'-C2'	5.48	1.58	1.52
21	AA	1159	U	C4-C5	-5.48	1.38	1.43
21	AA	1433	A	C5'-C4'	5.48	1.57	1.51
57	BB	725	G	C6-N1	5.48	1.43	1.39
57	BB	1796	U	N1-C6	5.48	1.42	1.38
21	AA	996	A	C3'-C2'	-5.47	1.46	1.52
21	AA	1325	C	C4-N4	5.47	1.38	1.33
26	AV	30	G	C2'-C1'	-5.47	1.47	1.53
57	BB	42	A	C8-N7	-5.47	1.27	1.31
57	BB	63	A	C2-N3	5.47	1.38	1.33
57	BB	1498	C	C2-N3	-5.47	1.31	1.35
57	BB	1651	G	C8-N7	-5.47	1.27	1.30
57	BB	2197	U	O3'-P	-5.47	1.54	1.61
57	BB	2197	U	C2-O2	5.47	1.27	1.22
20	AI	75	ALA	C-N	5.47	1.42	1.33
43	BX	41	SER	CA-CB	5.47	1.61	1.52
57	BB	122	G	C5-C4	5.47	1.42	1.38
57	BB	491	G	C2-N3	5.47	1.37	1.32
57	BB	1932	A	N7-C5	-5.47	1.35	1.39
57	BB	2481	G	N7-C5	-5.47	1.35	1.39
21	AA	1434	A	C5-C4	5.47	1.42	1.38
57	BB	409	G	C4'-C3'	-5.47	1.47	1.52
57	BB	1442	U	C3'-C2'	5.47	1.58	1.52
57	BB	1958	C	O4'-C1'	-5.47	1.34	1.41
57	BB	2304	G	C2-N3	5.47	1.37	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2323	G	C2-N2	5.47	1.40	1.34
57	BB	2517	C	P-O5'	-5.47	1.54	1.59
21	AA	907	A	N9-C8	-5.47	1.33	1.37
32	BM	31	PHE	CG-CD1	5.47	1.47	1.38
57	BB	73	A	C8-N7	5.47	1.35	1.31
57	BB	917	A	C2'-C1'	-5.47	1.47	1.53
57	BB	1173	U	N3-C4	5.47	1.43	1.38
57	BB	1207	C	C5-C6	-5.47	1.29	1.34
57	BB	1331	G	O3'-P	-5.47	1.54	1.61
57	BB	1348	C	N3-C4	5.47	1.37	1.33
57	BB	1628	G	C6-O6	-5.47	1.19	1.24
57	BB	1681	G	C2-N2	5.47	1.40	1.34
57	BB	2067	G	C3'-C2'	5.47	1.58	1.52
57	BB	2527	C	C5-C6	5.47	1.38	1.34
57	BB	2581	G	C2-N3	-5.47	1.28	1.32
57	BB	2802	G	C6-N1	5.47	1.43	1.39
21	AA	73	C	N1-C6	5.47	1.40	1.37
21	AA	217	C	C2'-C1'	5.47	1.59	1.53
48	B1	20	TYR	CG-CD1	5.47	1.46	1.39
57	BB	73	A	N9-C4	-5.47	1.34	1.37
57	BB	1525	A	N1-C2	5.47	1.39	1.34
57	BB	1836	C	C4-N4	5.47	1.38	1.33
57	BB	2233	U	N1-C2	-5.47	1.33	1.38
21	AA	180	U	C4-C5	-5.47	1.38	1.43
21	AA	631	C	N1-C6	5.47	1.40	1.37
21	AA	1068	G	C3'-C2'	-5.47	1.46	1.52
21	AA	1149	C	C3'-O3'	5.47	1.49	1.42
23	AW	55	U	O3'-P	-5.47	1.54	1.61
57	BB	486	C	N3-C4	5.47	1.37	1.33
57	BB	745	G	N9-C4	5.47	1.42	1.38
57	BB	836	G	C6-N1	-5.47	1.35	1.39
57	BB	1060	U	N1-C6	-5.47	1.33	1.38
57	BB	1402	U	N3-C4	5.47	1.43	1.38
57	BB	1463	C	C4-C5	-5.47	1.38	1.43
57	BB	1812	U	N1-C6	-5.47	1.33	1.38
57	BB	1835	G	N9-C8	5.47	1.41	1.37
57	BB	2366	A	N1-C2	5.47	1.39	1.34
57	BB	2884	U	C5'-C4'	5.47	1.57	1.51
15	AD	69	ARG	CZ-NH1	5.46	1.40	1.33
21	AA	309	A	C2-N3	5.46	1.38	1.33
21	AA	718	A	C2'-C1'	-5.46	1.47	1.53
21	AA	1227	A	O4'-C1'	5.46	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1503	A	P-O5'	5.46	1.65	1.59
24	AX	20	U	P-O5'	-5.46	1.54	1.59
57	BB	535	G	O3'-P	5.46	1.67	1.61
57	BB	965	C	C4'-O4'	5.46	1.52	1.45
21	AA	18	C	N1-C6	5.46	1.40	1.37
21	AA	117	G	C8-N7	-5.46	1.27	1.30
45	BC	193	GLU	CD-OE1	5.46	1.31	1.25
57	BB	300	A	N7-C5	-5.46	1.35	1.39
57	BB	682	G	C2-N2	5.46	1.40	1.34
57	BB	1321	A	C6-N6	5.46	1.38	1.33
57	BB	1995	U	N3-C4	5.46	1.43	1.38
57	BB	2067	G	C4'-C3'	5.46	1.59	1.53
21	AA	189	A	O3'-P	-5.46	1.54	1.61
21	AA	501	C	P-O5'	-5.46	1.54	1.59
21	AA	662	U	C4-C5	5.46	1.48	1.43
21	AA	691	G	N3-C4	-5.46	1.31	1.35
21	AA	716	A	N7-C5	-5.46	1.35	1.39
21	AA	840	C	C2-N3	-5.46	1.31	1.35
21	AA	1213	A	P-O5'	-5.46	1.54	1.59
34	BO	55	GLU	CD-OE2	-5.46	1.19	1.25
57	BB	279	A	C5'-C4'	5.46	1.57	1.51
57	BB	411	G	C2-N2	5.46	1.40	1.34
57	BB	436	C	C5'-C4'	5.46	1.57	1.51
57	BB	871	U	C2'-C1'	-5.46	1.47	1.53
57	BB	1171	G	P-O5'	-5.46	1.54	1.59
57	BB	2355	G	N1-C2	5.46	1.42	1.37
57	BB	2564	A	O4'-C1'	5.46	1.48	1.41
21	AA	1445	U	C5-C6	-5.46	1.29	1.34
57	BB	619	G	C6-N1	-5.46	1.35	1.39
57	BB	695	G	O3'-P	-5.46	1.54	1.61
57	BB	1238	G	O3'-P	-5.46	1.54	1.61
57	BB	2114	A	P-O5'	-5.46	1.54	1.59
58	BA	53	A	C4'-C3'	5.46	1.59	1.53
58	BA	98	G	C2'-C1'	-5.46	1.47	1.53
16	AE	111	ARG	NE-CZ	5.46	1.40	1.33
21	AA	289	G	C2-N2	5.46	1.40	1.34
21	AA	648	A	C4'-C3'	-5.46	1.47	1.52
21	AA	1208	C	N3-C4	5.46	1.37	1.33
21	AA	1329	A	O3'-P	-5.46	1.54	1.61
21	AA	1439	G	C5-C4	5.46	1.42	1.38
36	BQ	5	ARG	CZ-NH2	5.46	1.40	1.33
43	BX	26	ARG	NE-CZ	5.46	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	138	U	O4'-C1'	5.46	1.48	1.41
57	BB	310	A	C6-N6	5.46	1.38	1.33
57	BB	484	C	O4'-C1'	5.46	1.48	1.41
57	BB	1859	U	C3'-C2'	-5.46	1.46	1.52
57	BB	2439	A	N9-C4	-5.46	1.34	1.37
21	AA	725	G	O4'-C1'	5.46	1.48	1.41
21	AA	1051	C	C4-C5	5.46	1.47	1.43
21	AA	1097	C	N3-C4	5.46	1.37	1.33
22	AY	53	G	C2'-C1'	-5.46	1.47	1.53
57	BB	916	G	C6-N1	5.46	1.43	1.39
57	BB	1337	G	C5'-C4'	5.46	1.57	1.51
57	BB	1734	G	C8-N7	5.46	1.34	1.30
57	BB	2410	G	C2'-C1'	-5.46	1.47	1.53
57	BB	2844	G	N7-C5	5.46	1.42	1.39
21	AA	498	A	P-O5'	-5.46	1.54	1.59
21	AA	712	A	N1-C2	-5.46	1.29	1.34
21	AA	770	C	N1-C6	5.46	1.40	1.37
57	BB	707	G	C2'-C1'	-5.46	1.47	1.53
57	BB	1237	A	N7-C5	-5.46	1.35	1.39
57	BB	1333	G	O3'-P	-5.46	1.54	1.61
57	BB	1927	A	C5-C4	-5.46	1.34	1.38
57	BB	2025	C	C4'-O4'	-5.46	1.38	1.45
21	AA	241	G	C5-C6	-5.45	1.36	1.42
21	AA	695	A	N7-C5	-5.45	1.35	1.39
21	AA	894	G	N7-C5	-5.45	1.35	1.39
21	AA	1335	U	N3-C4	5.45	1.43	1.38
21	AA	1387	G	N1-C2	5.45	1.42	1.37
43	BX	36	ARG	CD-NE	5.45	1.55	1.46
57	BB	1285	A	N9-C4	-5.45	1.34	1.37
57	BB	1956	U	C2-N3	5.45	1.41	1.37
57	BB	2427	C	N1-C6	5.45	1.40	1.37
57	BB	2432	A	C5-C4	5.45	1.42	1.38
57	BB	2870	C	N1-C6	5.45	1.40	1.37
21	AA	578	C	C4-N4	5.45	1.38	1.33
21	AA	1464	U	P-O5'	-5.45	1.54	1.59
57	BB	119	A	O3'-P	-5.45	1.54	1.61
57	BB	583	G	N9-C8	5.45	1.41	1.37
57	BB	1183	U	C5'-C4'	5.45	1.57	1.51
57	BB	2801	G	N9-C4	-5.45	1.33	1.38
21	AA	192	A	N7-C5	5.45	1.42	1.39
21	AA	606	G	O5'-C5'	-5.45	1.34	1.42
21	AA	656	G	N9-C4	-5.45	1.33	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	825	A	N3-C4	-5.45	1.31	1.34
57	BB	212	G	P-O5'	-5.45	1.54	1.59
57	BB	461	C	C4'-C3'	-5.45	1.47	1.52
57	BB	1878	G	C4'-C3'	-5.45	1.47	1.52
57	BB	2235	G	C8-N7	-5.45	1.27	1.30
57	BB	2645	G	O3'-P	-5.45	1.54	1.61
57	BB	2764	A	P-O5'	-5.45	1.54	1.59
21	AA	453	G	C5-C4	-5.45	1.34	1.38
21	AA	576	C	N1-C6	5.45	1.40	1.37
21	AA	629	A	O3'-P	-5.45	1.54	1.61
21	AA	771	G	N3-C4	-5.45	1.31	1.35
21	AA	1385	G	C4'-O4'	5.45	1.52	1.45
21	AA	1483	A	C6-N6	5.45	1.38	1.33
57	BB	209	C	C4'-C3'	-5.45	1.47	1.52
57	BB	261	G	N9-C8	5.45	1.41	1.37
57	BB	681	G	C4'-O4'	-5.45	1.38	1.45
57	BB	1131	G	C6-N1	5.45	1.43	1.39
57	BB	2841	C	P-O5'	-5.45	1.54	1.59
2	AK	68	ARG	CD-NE	5.45	1.55	1.46
21	AA	776	G	P-O5'	-5.45	1.54	1.59
21	AA	1321	U	N3-C4	5.45	1.43	1.38
57	BB	177	G	C4'-O4'	5.45	1.52	1.45
57	BB	1384	A	C4'-O4'	-5.45	1.38	1.45
58	BA	16	G	C2-N3	-5.45	1.28	1.32
21	AA	152	A	N9-C8	5.45	1.42	1.37
21	AA	257	G	N1-C2	5.45	1.42	1.37
21	AA	1227	A	C3'-C2'	-5.45	1.46	1.52
21	AA	1262	C	N1-C2	5.45	1.45	1.40
22	AY	34	G	C5-C6	-5.45	1.36	1.42
25	AZ	1	SER	CA-CB	5.45	1.61	1.52
57	BB	443	A	O5'-C5'	-5.45	1.34	1.42
57	BB	450	G	C2-N3	5.45	1.37	1.32
57	BB	606	U	N1-C6	-5.45	1.33	1.38
57	BB	659	G	C2'-O2'	-5.45	1.34	1.41
57	BB	794	A	C3'-C2'	5.45	1.58	1.52
57	BB	944	C	C4-C5	5.45	1.47	1.43
57	BB	1170	C	C4-C5	5.45	1.47	1.43
57	BB	2079	U	C3'-C2'	-5.45	1.46	1.52
57	BB	2084	C	C4-N4	5.45	1.38	1.33
57	BB	2750	A	N3-C4	-5.45	1.31	1.34
21	AA	383	A	C6-N6	5.44	1.38	1.33
57	BB	155	A	N9-C8	5.44	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	211	C	N3-C4	5.44	1.37	1.33
57	BB	254	G	C4'-C3'	5.44	1.59	1.53
57	BB	517	C	N1-C6	5.44	1.40	1.37
57	BB	953	G	C5-C6	5.44	1.47	1.42
57	BB	2347	C	C4-C5	5.44	1.47	1.43
57	BB	2683	C	C5-C6	-5.44	1.29	1.34
21	AA	321	A	C6-N6	5.44	1.38	1.33
21	AA	577	G	C3'-O3'	5.44	1.49	1.42
21	AA	671	G	C6-N1	5.44	1.43	1.39
21	AA	895	G	C8-N7	5.44	1.34	1.30
21	AA	388	G	N9-C4	-5.44	1.33	1.38
21	AA	590	U	C5'-C4'	5.44	1.57	1.51
21	AA	1432	G	O4'-C1'	-5.44	1.34	1.41
57	BB	87	U	C5'-C4'	5.44	1.57	1.51
57	BB	249	C	N3-C4	5.44	1.37	1.33
57	BB	488	G	N1-C2	5.44	1.42	1.37
57	BB	575	A	N9-C8	5.44	1.42	1.37
57	BB	1150	C	N3-C4	5.44	1.37	1.33
57	BB	1151	A	P-O5'	5.44	1.65	1.59
57	BB	1245	G	C8-N7	-5.44	1.27	1.30
57	BB	1922	G	C6-N1	-5.44	1.35	1.39
57	BB	2264	C	C1'-N1	5.44	1.56	1.48
58	BA	26	C	C5'-C4'	5.44	1.57	1.51
58	BA	69	G	C2-N2	-5.44	1.29	1.34
21	AA	1163	A	C2-N3	5.44	1.38	1.33
21	AA	1206	G	C2'-C1'	-5.44	1.47	1.53
23	AW	42	C	N3-C4	5.44	1.37	1.33
57	BB	1311	G	N7-C5	-5.44	1.35	1.39
57	BB	1835	G	C3'-C2'	5.44	1.58	1.52
57	BB	2281	A	C6-N1	5.44	1.39	1.35
6	AO	77	TYR	CE2-CZ	5.44	1.45	1.38
21	AA	120	A	C6-N6	5.44	1.38	1.33
57	BB	27	G	N1-C2	5.44	1.42	1.37
57	BB	42	A	C2'-C1'	-5.44	1.47	1.53
57	BB	948	C	C5-C6	5.44	1.38	1.34
57	BB	1216	G	C6-N1	5.44	1.43	1.39
57	BB	1377	G	C6-N1	5.44	1.43	1.39
57	BB	1668	A	C2-N3	-5.44	1.28	1.33
57	BB	2787	C	C1'-N1	5.44	1.56	1.48
14	AC	10	ARG	CD-NE	5.44	1.55	1.46
21	AA	62	U	N1-C6	-5.44	1.33	1.38
57	BB	190	A	C2-N3	5.44	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1515	A	C6-N6	5.44	1.38	1.33
57	BB	2415	G	C2'-C1'	-5.44	1.47	1.53
57	BB	2896	C	C4-C5	-5.44	1.38	1.43
21	AA	988	G	C5'-C4'	5.43	1.57	1.51
21	AA	989	U	N3-C4	5.43	1.43	1.38
26	AV	71	C	N1-C6	-5.43	1.33	1.37
28	BI	126	ARG	CZ-NH1	5.43	1.40	1.33
57	BB	43	G	C6-N1	5.43	1.43	1.39
57	BB	116	C	N1-C2	5.43	1.45	1.40
57	BB	121	G	C8-N7	5.43	1.34	1.30
57	BB	329	G	C5-C4	-5.43	1.34	1.38
57	BB	467	G	C8-N7	5.43	1.34	1.30
57	BB	615	U	C3'-C2'	5.43	1.58	1.52
57	BB	1074	G	O3'-P	5.43	1.67	1.61
57	BB	2337	G	C6-N1	-5.43	1.35	1.39
57	BB	2583	G	C8-N7	-5.43	1.27	1.30
57	BB	2748	A	C5-C4	5.43	1.42	1.38
57	BB	2770	G	C4'-C3'	5.43	1.59	1.53
21	AA	887	G	P-O5'	-5.43	1.54	1.59
21	AA	1038	C	C5'-C4'	5.43	1.57	1.51
21	AA	1179	A	N3-C4	5.43	1.38	1.34
21	AA	1185	G	C2'-C1'	-5.43	1.47	1.53
57	BB	87	U	C3'-O3'	5.43	1.49	1.42
57	BB	1360	G	C2'-C1'	-5.43	1.47	1.53
57	BB	1845	G	N7-C5	-5.43	1.35	1.39
57	BB	2282	G	C6-O6	-5.43	1.19	1.24
57	BB	2419	U	C5'-C4'	5.43	1.57	1.51
57	BB	1892	C	P-O5'	-5.43	1.54	1.59
21	AA	23	C	C2-O2	5.43	1.29	1.24
21	AA	127	G	C6-N1	5.43	1.43	1.39
21	AA	1118	U	C4-O4	-5.43	1.19	1.23
21	AA	1471	U	O3'-P	5.43	1.67	1.61
21	AA	1507	A	C3'-C2'	5.43	1.58	1.52
36	BQ	57	ARG	CD-NE	5.43	1.55	1.46
50	B3	39	ARG	CZ-NH2	5.43	1.40	1.33
57	BB	9	G	C2-N3	5.43	1.37	1.32
57	BB	139	U	C4-C5	5.43	1.48	1.43
57	BB	192	C	C5-C6	-5.43	1.30	1.34
57	BB	313	G	C5'-C4'	5.43	1.57	1.51
57	BB	432	A	C4'-C3'	5.43	1.59	1.53
57	BB	563	A	C3'-C2'	-5.43	1.46	1.52
57	BB	758	C	N1-C2	5.43	1.45	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	935	C	C4'-C3'	5.43	1.59	1.53
57	BB	1035	U	C4'-C3'	-5.43	1.47	1.52
57	BB	1208	C	C3'-C2'	-5.43	1.46	1.52
57	BB	1687	G	C8-N7	-5.43	1.27	1.30
21	AA	544	G	O4'-C1'	-5.43	1.34	1.41
21	AA	737	C	N1-C6	5.43	1.40	1.37
21	AA	1106	G	C6-N1	5.43	1.43	1.39
22	AY	6	U	C4'-O4'	5.43	1.52	1.45
22	AY	31	A	C5-C4	-5.43	1.34	1.38
57	BB	377	G	N9-C8	-5.43	1.34	1.37
57	BB	536	G	N1-C2	5.43	1.42	1.37
57	BB	682	G	O3'-P	-5.43	1.54	1.61
57	BB	1543	G	N7-C5	-5.43	1.35	1.39
57	BB	2061	G	C5-C4	-5.43	1.34	1.38
57	BB	2167	U	C4'-C3'	5.43	1.59	1.53
58	BA	82	U	C4'-C3'	5.43	1.59	1.53
21	AA	383	A	C4'-C3'	-5.43	1.47	1.52
21	AA	422	C	C5-C6	-5.43	1.30	1.34
21	AA	1076	U	C3'-O3'	5.43	1.49	1.42
22	AY	10	G	C2-N2	5.43	1.40	1.34
57	BB	1203	U	C4'-O4'	-5.43	1.38	1.45
57	BB	1328	A	N9-C8	5.43	1.42	1.37
57	BB	1362	C	C2-N3	5.43	1.40	1.35
57	BB	1777	U	P-O5'	-5.43	1.54	1.59
57	BB	1615	C	C4-N4	5.42	1.38	1.33
57	BB	2314	A	N7-C5	-5.42	1.35	1.39
57	BB	2374	C	N1-C6	-5.42	1.33	1.37
58	BA	118	C	C2'-O2'	-5.42	1.34	1.41
21	AA	1293	C	N1-C6	-5.42	1.33	1.37
31	BL	31	GLY	CA-C	-5.42	1.43	1.51
57	BB	1123	C	C2'-C1'	-5.42	1.47	1.53
57	BB	1633	G	N3-C4	-5.42	1.31	1.35
57	BB	1746	A	O3'-P	-5.42	1.54	1.61
57	BB	1764	C	N3-C4	5.42	1.37	1.33
57	BB	2635	A	C5-C6	-5.42	1.36	1.41
57	BB	2660	A	C3'-C2'	-5.42	1.46	1.52
57	BB	2662	A	C5-C6	-5.42	1.36	1.41
57	BB	2716	C	N3-C4	5.42	1.37	1.33
21	AA	189	A	C6-N1	5.42	1.39	1.35
21	AA	810	C	C5'-C4'	5.42	1.57	1.51
21	AA	1486	G	C2-N3	5.42	1.37	1.32
57	BB	458	G	O3'-P	-5.42	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	982	C	N1-C6	-5.42	1.33	1.37
57	BB	1176	U	C2-N3	5.42	1.41	1.37
57	BB	1275	A	N1-C2	-5.42	1.29	1.34
21	AA	706	A	C8-N7	-5.42	1.27	1.31
21	AA	1284	C	P-O5'	-5.42	1.54	1.59
57	BB	892	A	N1-C2	-5.42	1.29	1.34
57	BB	1531	C	C5-C6	-5.42	1.30	1.34
57	BB	1940	U	C3'-C2'	-5.42	1.46	1.52
21	AA	39	G	O3'-P	-5.42	1.54	1.61
21	AA	232	G	N1-C2	5.42	1.42	1.37
21	AA	359	G	C2-N2	5.42	1.40	1.34
21	AA	675	A	O3'-P	-5.42	1.54	1.61
22	AY	64	A	N9-C8	-5.42	1.33	1.37
53	BE	42	GLY	N-CA	-5.42	1.38	1.46
57	BB	49	A	C2'-C1'	-5.42	1.47	1.53
57	BB	160	A	C6-N1	5.42	1.39	1.35
57	BB	686	U	C2-N3	5.42	1.41	1.37
57	BB	727	A	C6-N1	-5.42	1.31	1.35
57	BB	1330	C	O3'-P	-5.42	1.54	1.61
57	BB	1750	G	C6-N1	5.42	1.43	1.39
57	BB	1873	G	N9-C4	5.42	1.42	1.38
57	BB	2048	G	N3-C4	5.42	1.39	1.35
21	AA	156	C	C2-N3	-5.42	1.31	1.35
21	AA	746	A	N7-C5	-5.42	1.35	1.39
21	AA	1490	U	C1'-N1	5.42	1.56	1.48
26	AV	64	G	C1'-N9	5.42	1.56	1.48
34	BO	16	ARG	CZ-NH2	5.42	1.40	1.33
57	BB	417	C	N3-C4	5.42	1.37	1.33
57	BB	900	A	C5-C4	5.42	1.42	1.38
57	BB	1719	G	N9-C8	5.42	1.41	1.37
57	BB	2400	G	C8-N7	5.42	1.34	1.30
57	BB	2729	G	O3'-P	-5.42	1.54	1.61
21	AA	97	G	C6-N1	5.42	1.43	1.39
57	BB	1481	U	N3-C4	-5.42	1.33	1.38
57	BB	1833	C	C4'-O4'	-5.42	1.38	1.45
57	BB	2237	G	N3-C4	-5.42	1.31	1.35
33	BN	6	SER	CA-CB	5.41	1.61	1.52
45	BC	86	ARG	NE-CZ	5.41	1.40	1.33
57	BB	1437	C	N1-C6	5.41	1.40	1.37
57	BB	1800	C	C5'-C4'	5.41	1.57	1.51
57	BB	2350	C	N3-C4	5.41	1.37	1.33
58	BA	72	G	C5-C6	-5.41	1.36	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	524	G	C8-N7	-5.41	1.27	1.30
22	AY	17	U	P-O5'	-5.41	1.54	1.59
26	AV	48	C	C4-N4	5.41	1.38	1.33
45	BC	155	ARG	CG-CD	5.41	1.65	1.51
57	BB	512	G	O3'-P	-5.41	1.54	1.61
57	BB	634	C	N3-C4	5.41	1.37	1.33
57	BB	958	U	N1-C2	5.41	1.43	1.38
57	BB	1650	A	N9-C4	-5.41	1.34	1.37
57	BB	1838	C	N1-C6	5.41	1.40	1.37
57	BB	2170	A	P-O5'	-5.41	1.54	1.59
1	AJ	89	ARG	NE-CZ	5.41	1.40	1.33
16	AE	127	TYR	CD1-CE1	5.41	1.47	1.39
21	AA	276	G	N3-C4	-5.41	1.31	1.35
57	BB	332	A	N1-C2	5.41	1.39	1.34
57	BB	559	G	C3'-C2'	5.41	1.58	1.52
57	BB	2121	G	C3'-C2'	-5.41	1.46	1.52
21	AA	440	C	N1-C6	5.41	1.40	1.37
21	AA	793	U	C3'-C2'	5.41	1.58	1.52
53	BE	44	ARG	CD-NE	5.41	1.55	1.46
57	BB	331	C	N1-C6	-5.41	1.33	1.37
57	BB	373	U	C1'-N1	5.41	1.56	1.48
57	BB	527	C	C5'-C4'	5.41	1.57	1.51
57	BB	1144	A	C2-N3	5.41	1.38	1.33
57	BB	1354	A	N3-C4	-5.41	1.31	1.34
57	BB	1614	A	C5'-C4'	5.41	1.57	1.51
57	BB	2540	C	C4'-C3'	5.41	1.59	1.53
57	BB	2577	A	C5-C4	5.41	1.42	1.38
57	BB	2753	A	N3-C4	5.41	1.38	1.34
21	AA	694	A	C4'-O4'	-5.41	1.38	1.45
21	AA	1273	C	C5'-C4'	5.41	1.57	1.51
57	BB	1656	C	C5-C6	5.41	1.38	1.34
57	BB	2051	A	C3'-C2'	-5.41	1.46	1.52
14	AC	165	GLU	CG-CD	5.41	1.60	1.51
21	AA	830	G	C5-C4	-5.41	1.34	1.38
21	AA	902	G	C4'-C3'	-5.41	1.47	1.52
21	AA	1089	G	P-O5'	-5.41	1.54	1.59
21	AA	1532	U	O3'-P	-5.41	1.54	1.61
57	BB	127	A	C2'-C1'	-5.41	1.47	1.53
57	BB	132	G	O3'-P	-5.41	1.54	1.61
57	BB	206	U	C1'-N1	5.41	1.56	1.48
57	BB	356	G	C5-C6	-5.41	1.36	1.42
57	BB	479	A	C5'-C4'	5.41	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1434	A	C5-C4	-5.41	1.34	1.38
57	BB	1467	U	C1'-N1	5.41	1.56	1.48
57	BB	1624	U	N3-C4	5.41	1.43	1.38
57	BB	1779	U	C5-C6	5.41	1.39	1.34
57	BB	1880	U	C4'-O4'	5.41	1.52	1.45
57	BB	2816	G	C2'-O2'	-5.41	1.34	1.41
21	AA	193	C	C5'-C4'	5.40	1.57	1.51
21	AA	487	A	O3'-P	-5.40	1.54	1.61
21	AA	1266	G	C2-N3	-5.40	1.28	1.32
21	AA	1324	A	C6-N1	5.40	1.39	1.35
57	BB	1093	G	C8-N7	5.40	1.34	1.30
57	BB	1317	G	N9-C4	5.40	1.42	1.38
21	AA	75	G	C5-C4	5.40	1.42	1.38
21	AA	567	G	C6-O6	5.40	1.29	1.24
21	AA	606	G	C3'-O3'	5.40	1.49	1.42
21	AA	797	C	C4'-O4'	5.40	1.52	1.45
21	AA	1100	C	N1-C6	5.40	1.40	1.37
21	AA	1459	G	C5-C4	5.40	1.42	1.38
21	AA	1520	C	C3'-C2'	-5.40	1.46	1.52
29	BJ	110	PRO	CA-CB	-5.40	1.42	1.53
34	BO	16	ARG	NE-CZ	5.40	1.40	1.33
35	BP	108	ARG	CZ-NH1	5.40	1.40	1.33
57	BB	44	A	C3'-C2'	-5.40	1.46	1.52
57	BB	191	A	C5-C6	-5.40	1.36	1.41
57	BB	333	G	C4'-C3'	5.40	1.59	1.53
57	BB	2204	G	C5-C6	-5.40	1.36	1.42
21	AA	905	U	N1-C6	5.40	1.42	1.38
21	AA	1510	C	C5-C6	-5.40	1.30	1.34
22	AY	19	G	C5-C6	-5.40	1.36	1.42
57	BB	659	G	O3'-P	-5.40	1.54	1.61
57	BB	1055	G	C3'-C2'	-5.40	1.46	1.52
57	BB	2062	A	N9-C8	5.40	1.42	1.37
57	BB	2344	U	N1-C2	5.40	1.43	1.38
14	AC	90	VAL	CB-CG1	5.40	1.64	1.52
57	BB	159	G	N1-C2	5.40	1.42	1.37
57	BB	1804	C	N1-C2	5.40	1.45	1.40
57	BB	2288	A	C3'-O3'	5.40	1.49	1.42
57	BB	2827	C	C5'-C4'	5.40	1.57	1.51
58	BA	89	U	C4'-C3'	5.40	1.59	1.53
14	AC	135	ARG	CZ-NH2	5.40	1.40	1.33
15	AD	74	TYR	CG-CD1	5.40	1.46	1.39
21	AA	340	U	N3-C4	5.40	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	443	C	O3'-P	-5.40	1.54	1.61
21	AA	741	G	C5'-C4'	5.40	1.57	1.51
21	AA	1111	A	C5-C4	5.40	1.42	1.38
21	AA	1168	U	N1-C6	5.40	1.42	1.38
30	BK	30	ARG	NE-CZ	5.40	1.40	1.33
57	BB	980	A	C5'-C4'	5.40	1.57	1.51
57	BB	1398	C	C5-C6	5.40	1.38	1.34
57	BB	2715	C	C2'-C1'	-5.40	1.47	1.53
13	AB	20	ARG	CZ-NH1	5.40	1.40	1.33
21	AA	488	C	C2-O2	5.40	1.29	1.24
21	AA	1105	A	O4'-C1'	5.40	1.48	1.41
21	AA	1397	C	C4-C5	-5.40	1.38	1.43
57	BB	232	G	N9-C8	5.40	1.41	1.37
57	BB	476	G	N1-C2	5.40	1.42	1.37
57	BB	668	A	C4'-C3'	5.40	1.59	1.53
57	BB	1111	A	C2'-C1'	-5.40	1.47	1.53
57	BB	1152	C	C2'-C1'	-5.40	1.47	1.53
57	BB	1528	A	N3-C4	5.40	1.38	1.34
57	BB	1899	A	C5-C4	-5.40	1.34	1.38
3	AL	104	SER	CB-OG	5.39	1.49	1.42
13	AB	154	GLY	CA-C	-5.39	1.43	1.51
21	AA	101	A	N7-C5	-5.39	1.36	1.39
21	AA	485	U	C2-N3	5.39	1.41	1.37
21	AA	1220	G	N7-C5	-5.39	1.36	1.39
23	AW	72	C	C4'-C3'	-5.39	1.47	1.52
57	BB	94	A	C2'-C1'	-5.39	1.47	1.53
57	BB	439	A	N3-C4	-5.39	1.31	1.34
57	BB	454	A	C6-N6	5.39	1.38	1.33
57	BB	1034	G	C2'-C1'	-5.39	1.47	1.53
57	BB	1108	U	N1-C2	-5.39	1.33	1.38
57	BB	1354	A	C6-N6	5.39	1.38	1.33
57	BB	1498	C	O4'-C1'	-5.39	1.34	1.41
57	BB	1850	G	C3'-O3'	5.39	1.49	1.42
57	BB	1993	U	C2'-C1'	-5.39	1.47	1.53
57	BB	2185	U	N1-C2	5.39	1.43	1.38
57	BB	2479	U	C2-N3	5.39	1.41	1.37
58	BA	33	G	C8-N7	5.39	1.34	1.30
21	AA	241	G	C4'-C3'	5.39	1.59	1.53
21	AA	910	C	N1-C6	-5.39	1.33	1.37
21	AA	1111	A	C5'-C4'	5.39	1.57	1.51
21	AA	1149	C	C2-O2	-5.39	1.19	1.24
21	AA	1291	U	C2-N3	5.39	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	AY	48	C	P-O5'	-5.39	1.54	1.59
56	BH	116	ARG	NE-CZ	5.39	1.40	1.33
57	BB	392	U	C4-O4	5.39	1.27	1.23
57	BB	855	G	O3'-P	-5.39	1.54	1.61
57	BB	954	G	C4'-C3'	-5.39	1.47	1.52
57	BB	1225	G	N1-C2	5.39	1.42	1.37
57	BB	1301	A	C6-N6	5.39	1.38	1.33
57	BB	1957	C	P-O5'	-5.39	1.54	1.59
57	BB	2168	G	C2'-C1'	-5.39	1.47	1.53
57	BB	2299	U	O3'-P	5.39	1.67	1.61
57	BB	2308	G	N1-C2	5.39	1.42	1.37
57	BB	2360	G	C2-N3	5.39	1.37	1.32
13	AB	34	ARG	CZ-NH2	5.39	1.40	1.33
21	AA	558	G	N7-C5	-5.39	1.36	1.39
21	AA	1297	G	C6-N1	5.39	1.43	1.39
57	BB	557	C	C2'-C1'	-5.39	1.47	1.53
57	BB	1970	A	C4'-O4'	-5.39	1.38	1.45
57	BB	2802	G	C8-N7	-5.39	1.27	1.30
21	AA	281	G	C5'-C4'	5.39	1.57	1.51
21	AA	307	C	P-O5'	-5.39	1.54	1.59
21	AA	686	U	C4'-C3'	5.39	1.59	1.53
21	AA	1294	G	C8-N7	5.39	1.34	1.30
21	AA	1480	A	C6-N6	5.39	1.38	1.33
26	AV	69	C	C3'-C2'	-5.39	1.46	1.52
57	BB	58	G	C5-C4	5.39	1.42	1.38
57	BB	129	C	O3'-P	-5.39	1.54	1.61
57	BB	208	C	C4-N4	5.39	1.38	1.33
57	BB	420	C	N1-C2	5.39	1.45	1.40
57	BB	762	U	C4-C5	5.39	1.48	1.43
57	BB	1792	G	C6-O6	-5.39	1.19	1.24
57	BB	1814	G	C6-N1	5.39	1.43	1.39
57	BB	2064	C	N1-C6	5.39	1.40	1.37
57	BB	2476	A	C4'-O4'	5.39	1.52	1.45
57	BB	2526	G	C6-N1	5.39	1.43	1.39
57	BB	2563	U	N1-C6	5.39	1.42	1.38
57	BB	2692	G	N9-C4	5.39	1.42	1.38
57	BB	2762	C	C4'-C3'	-5.39	1.47	1.52
58	BA	27	C	C3'-C2'	-5.39	1.46	1.52
58	BA	49	C	N1-C6	-5.39	1.33	1.37
21	AA	1274	A	C8-N7	5.39	1.35	1.31
21	AA	1491	G	C5'-C4'	5.39	1.57	1.51
57	BB	408	G	P-O5'	-5.39	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2550	G	C6-N1	5.39	1.43	1.39
21	AA	423	G	N9-C8	-5.39	1.34	1.37
21	AA	530	G	O3'-P	-5.39	1.54	1.61
21	AA	564	C	C4-N4	5.39	1.38	1.33
21	AA	894	G	C2'-O2'	5.39	1.48	1.41
21	AA	1256	A	C5-C6	-5.39	1.36	1.41
22	AY	57	G	O5'-C5'	5.39	1.53	1.44
57	BB	124	G	N7-C5	-5.39	1.36	1.39
57	BB	334	C	C2'-C1'	-5.39	1.47	1.53
57	BB	372	G	N3-C4	5.39	1.39	1.35
57	BB	820	A	P-O5'	-5.39	1.54	1.59
57	BB	1162	G	C2-N2	-5.39	1.29	1.34
57	BB	1195	G	C6-N1	5.39	1.43	1.39
57	BB	1526	C	C3'-C2'	5.39	1.58	1.52
57	BB	1567	G	C3'-C2'	5.39	1.58	1.52
57	BB	1983	G	C2-N3	5.39	1.37	1.32
57	BB	2135	A	N7-C5	-5.39	1.36	1.39
57	BB	2292	U	N1-C2	-5.39	1.33	1.38
57	BB	2713	U	C4-O4	5.39	1.27	1.23
57	BB	2784	U	C2-N3	-5.39	1.33	1.37
21	AA	580	C	C4-N4	5.38	1.38	1.33
57	BB	183	C	N3-C4	5.38	1.37	1.33
57	BB	633	A	C5-C4	5.38	1.42	1.38
57	BB	852	U	C5'-C4'	5.38	1.57	1.51
57	BB	1284	A	N9-C4	5.38	1.41	1.37
57	BB	1315	C	C4-N4	5.38	1.38	1.33
57	BB	1455	G	N1-C2	5.38	1.42	1.37
57	BB	2126	A	N9-C4	5.38	1.41	1.37
21	AA	39	G	N9-C4	5.38	1.42	1.38
21	AA	153	C	C4'-C3'	5.38	1.59	1.53
21	AA	1051	C	C4-N4	5.38	1.38	1.33
21	AA	1257	A	C2-N3	5.38	1.38	1.33
23	AW	28	G	N7-C5	5.38	1.42	1.39
57	BB	705	A	C8-N7	-5.38	1.27	1.31
57	BB	2455	G	C5-C6	-5.38	1.36	1.42
57	BB	2704	C	N3-C4	5.38	1.37	1.33
58	BA	110	C	N1-C6	-5.38	1.33	1.37
21	AA	1105	A	P-O5'	5.38	1.65	1.59
24	AX	15	A	C2'-C1'	-5.38	1.47	1.53
57	BB	407	G	C3'-O3'	5.38	1.49	1.42
57	BB	996	A	C5-C4	5.38	1.42	1.38
57	BB	1070	A	O3'-P	-5.38	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1363	C	C2-N3	5.38	1.40	1.35
57	BB	1390	U	C4'-C3'	-5.38	1.47	1.52
57	BB	1874	C	C2-N3	-5.38	1.31	1.35
57	BB	1876	A	C5-C4	5.38	1.42	1.38
57	BB	2170	A	C4'-C3'	5.38	1.59	1.53
21	AA	151	A	O3'-P	-5.38	1.54	1.61
21	AA	783	C	C4'-C3'	-5.38	1.47	1.52
21	AA	1014	A	N3-C4	-5.38	1.31	1.34
23	AW	65	G	C4'-C3'	-5.38	1.47	1.52
57	BB	1031	G	C5'-C4'	5.38	1.57	1.51
57	BB	1796	U	N1-C2	-5.38	1.33	1.38
21	AA	157	U	C5'-C4'	5.38	1.57	1.51
21	AA	572	A	N1-C2	5.38	1.39	1.34
21	AA	1130	A	N9-C8	-5.38	1.33	1.37
22	AY	23	A	O3'-P	-5.38	1.54	1.61
22	AY	41	U	C4'-O4'	5.38	1.52	1.45
23	AW	6	G	C2-N2	5.38	1.40	1.34
23	AW	37	A	C5-C6	-5.38	1.36	1.41
24	AX	18	G	O3'-P	-5.38	1.54	1.61
57	BB	136	G	C3'-O3'	5.38	1.49	1.42
57	BB	770	G	C5-C4	-5.38	1.34	1.38
57	BB	1120	G	C2'-C1'	-5.38	1.47	1.53
57	BB	1468	U	N3-C4	5.38	1.43	1.38
57	BB	1533	C	C3'-O3'	5.38	1.49	1.42
57	BB	1633	G	C8-N7	5.38	1.34	1.30
57	BB	2135	A	C5'-C4'	5.38	1.57	1.51
57	BB	2661	G	P-O5'	5.38	1.65	1.59
57	BB	2730	C	C4-C5	5.38	1.47	1.43
57	BB	2737	G	C5-C4	5.38	1.42	1.38
21	AA	375	U	P-O5'	-5.38	1.54	1.59
21	AA	754	C	N1-C6	5.38	1.40	1.37
23	AW	56	C	C3'-O3'	5.38	1.49	1.42
26	AV	25	C	C4-C5	5.38	1.47	1.43
32	BM	114	ARG	CZ-NH1	5.38	1.40	1.33
57	BB	224	U	C2-N3	5.38	1.41	1.37
57	BB	502	A	O3'-P	5.38	1.67	1.61
57	BB	936	A	C2'-C1'	-5.38	1.47	1.53
57	BB	951	C	C4'-O4'	5.38	1.52	1.45
57	BB	2274	A	C6-N6	-5.38	1.29	1.33
57	BB	2320	U	C1'-N1	5.38	1.56	1.48
57	BB	2621	G	N1-C2	5.38	1.42	1.37
21	AA	198	G	C6-N1	5.38	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	690	G	N7-C5	-5.38	1.36	1.39
44	BY	5	GLU	CD-OE1	5.38	1.31	1.25
56	BH	48	GLU	CB-CG	5.38	1.62	1.52
57	BB	1135	C	N1-C6	-5.38	1.33	1.37
57	BB	1419	A	P-O5'	-5.38	1.54	1.59
21	AA	201	G	N3-C4	-5.37	1.31	1.35
21	AA	482	A	C3'-C2'	5.37	1.58	1.52
21	AA	494	G	O3'-P	-5.37	1.54	1.61
21	AA	515	G	O4'-C1'	5.37	1.48	1.41
21	AA	749	A	N1-C2	-5.37	1.29	1.34
23	AW	46	G	N7-C5	-5.37	1.36	1.39
26	AV	17(A)	U	C4'-O4'	-5.37	1.38	1.45
45	BC	174	ARG	CD-NE	5.37	1.55	1.46
57	BB	82	U	N1-C6	5.37	1.42	1.38
57	BB	322	A	C5-C6	5.37	1.45	1.41
57	BB	802	A	C5-C4	5.37	1.42	1.38
57	BB	819	A	C1'-N9	5.37	1.56	1.48
57	BB	980	A	C6-N1	5.37	1.39	1.35
57	BB	1434	A	C8-N7	5.37	1.35	1.31
57	BB	1700	A	C2-N3	-5.37	1.28	1.33
57	BB	2215	C	C4'-C3'	-5.37	1.47	1.52
57	BB	2893	A	C2-N3	5.37	1.38	1.33
7	AP	14	ARG	CD-NE	5.37	1.55	1.46
21	AA	225	C	C4-N4	5.37	1.38	1.33
21	AA	819	A	N7-C5	-5.37	1.36	1.39
21	AA	861	G	C8-N7	5.37	1.34	1.30
21	AA	884	U	P-O5'	-5.37	1.54	1.59
21	AA	889	A	C5-C4	5.37	1.42	1.38
21	AA	934	C	N3-C4	5.37	1.37	1.33
21	AA	1038	C	C3'-O3'	-5.37	1.34	1.42
21	AA	1234	C	C2-O2	5.37	1.29	1.24
23	AW	6	G	N3-C4	5.37	1.39	1.35
23	AW	43	C	O3'-P	-5.37	1.54	1.61
57	BB	91	A	N9-C4	-5.37	1.34	1.37
57	BB	361	G	C6-N1	5.37	1.43	1.39
57	BB	530	G	C4'-C3'	5.37	1.59	1.53
57	BB	1112	G	C6-N1	5.37	1.43	1.39
57	BB	1128	G	C6-O6	5.37	1.28	1.24
57	BB	1146	C	N3-C4	5.37	1.37	1.33
57	BB	1183	U	O3'-P	-5.37	1.54	1.61
57	BB	1204	A	C5-C6	5.37	1.45	1.41
57	BB	1260	A	N1-C2	-5.37	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1910	G	C6-N1	5.37	1.43	1.39
21	AA	444	G	N3-C4	-5.37	1.31	1.35
21	AA	978	A	N9-C4	-5.37	1.34	1.37
21	AA	1032	G	P-O5'	5.37	1.65	1.59
57	BB	79	C	O4'-C1'	5.37	1.48	1.41
57	BB	183	C	C4'-C3'	-5.37	1.47	1.52
21	AA	193	C	C3'-C2'	-5.37	1.46	1.52
21	AA	1104	G	C5-C4	5.37	1.42	1.38
21	AA	1213	A	N7-C5	-5.37	1.36	1.39
21	AA	1322	C	N1-C2	5.37	1.45	1.40
26	AV	42	G	N1-C2	5.37	1.42	1.37
26	AV	64	G	C4'-C3'	5.37	1.59	1.53
42	BW	24	ARG	NE-CZ	5.37	1.40	1.33
57	BB	227	A	O3'-P	-5.37	1.54	1.61
57	BB	480	A	C1'-N9	5.37	1.56	1.48
57	BB	2547	A	C5-C4	5.37	1.42	1.38
57	BB	2721	A	C8-N7	-5.37	1.27	1.31
21	AA	875	U	O3'-P	-5.37	1.54	1.61
57	BB	676	A	N3-C4	5.37	1.38	1.34
21	AA	278	G	N9-C8	5.37	1.41	1.37
21	AA	967	C	N3-C4	5.37	1.37	1.33
26	AV	10	G	C2-N2	-5.37	1.29	1.34
26	AV	37	A	C2'-C1'	-5.37	1.47	1.53
38	BS	8	ARG	NE-CZ	5.37	1.40	1.33
57	BB	902	C	N1-C2	5.37	1.45	1.40
57	BB	956	G	C8-N7	5.37	1.34	1.30
57	BB	1093	G	N9-C4	5.37	1.42	1.38
57	BB	1124	G	C6-N1	5.37	1.43	1.39
57	BB	2094	A	C5-C4	5.37	1.42	1.38
57	BB	2571	U	P-O5'	-5.37	1.54	1.59
57	BB	2759	G	C3'-C2'	5.37	1.58	1.52
21	AA	110	C	N3-C4	5.36	1.37	1.33
21	AA	730	G	N1-C2	5.36	1.42	1.37
21	AA	991	U	N1-C6	5.36	1.42	1.38
57	BB	826	U	N1-C6	5.36	1.42	1.38
57	BB	1170	C	N3-C4	-5.36	1.30	1.33
57	BB	1374	G	C2-N3	5.36	1.37	1.32
57	BB	1626	A	O4'-C1'	5.36	1.48	1.41
57	BB	1627	G	C5-C6	-5.36	1.36	1.42
57	BB	1809	A	N9-C4	5.36	1.41	1.37
57	BB	2024	G	N9-C4	5.36	1.42	1.38
57	BB	2643	G	O4'-C1'	5.36	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	65	A	O3'-P	-5.36	1.54	1.61
21	AA	96	U	C3'-C2'	-5.36	1.46	1.52
57	BB	61	C	C4'-O4'	5.36	1.52	1.45
57	BB	738	G	C5-C4	5.36	1.42	1.38
57	BB	2169	A	C6-N6	5.36	1.38	1.33
57	BB	2606	C	C2-O2	5.36	1.29	1.24
57	BB	2704	C	C5'-C4'	5.36	1.57	1.51
18	AG	108	ARG	CZ-NH2	5.36	1.40	1.33
21	AA	634	C	N3-C4	5.36	1.37	1.33
21	AA	866	C	C5'-C4'	5.36	1.57	1.51
21	AA	873	A	N3-C4	5.36	1.38	1.34
21	AA	912	C	C3'-C2'	5.36	1.58	1.52
21	AA	1134	G	C2'-C1'	5.36	1.59	1.53
25	AZ	283	ARG	NE-CZ	5.36	1.40	1.33
26	AV	67	C	C5-C6	-5.36	1.30	1.34
57	BB	295	G	N1-C2	5.36	1.42	1.37
57	BB	549	G	C8-N7	5.36	1.34	1.30
57	BB	687	C	O3'-P	-5.36	1.54	1.61
57	BB	925	A	C2'-C1'	-5.36	1.47	1.53
57	BB	965	C	C2'-C1'	-5.36	1.47	1.53
57	BB	1196	C	C2-N3	5.36	1.40	1.35
57	BB	1571	A	C1'-N9	5.36	1.56	1.48
57	BB	1732	C	C2'-C1'	-5.36	1.47	1.53
57	BB	2396	G	C2-N2	5.36	1.40	1.34
57	BB	2418	A	C2'-C1'	-5.36	1.47	1.53
57	BB	2487	G	C8-N7	5.36	1.34	1.30
21	AA	300	A	C2'-C1'	-5.36	1.47	1.53
21	AA	1268	G	N3-C4	5.36	1.39	1.35
57	BB	557	C	P-O5'	-5.36	1.54	1.59
57	BB	604	G	C5-C4	-5.36	1.34	1.38
57	BB	1464	G	C2-N3	5.36	1.37	1.32
21	AA	219	U	C1'-N1	5.36	1.56	1.48
21	AA	449	G	N9-C8	-5.36	1.34	1.37
21	AA	1168	U	P-O5'	-5.36	1.54	1.59
21	AA	1437	A	O3'-P	-5.36	1.54	1.61
23	AW	27	G	C5-C6	-5.36	1.36	1.42
57	BB	98	G	O4'-C1'	5.36	1.48	1.41
57	BB	150	U	C2'-C1'	-5.36	1.47	1.53
57	BB	467	G	C2-N3	5.36	1.37	1.32
57	BB	934	U	C4'-O4'	-5.36	1.38	1.45
57	BB	1838	C	C2-N3	-5.36	1.31	1.35
57	BB	1875	G	P-O5'	-5.36	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2051	A	C4'-O4'	-5.36	1.38	1.45
57	BB	2153	C	P-O5'	-5.36	1.54	1.59
57	BB	2237	G	C1'-N9	5.36	1.56	1.48
58	BA	91	C	C1'-N1	5.36	1.56	1.48
58	BA	107	G	C5-C4	-5.36	1.34	1.38
14	AC	166	TRP	CB-CG	5.36	1.59	1.50
21	AA	167	A	N3-C4	-5.36	1.31	1.34
21	AA	393	A	N3-C4	-5.36	1.31	1.34
21	AA	1027	C	C2'-C1'	5.36	1.59	1.53
21	AA	1113	C	N1-C6	5.36	1.40	1.37
26	AV	56	C	C5'-C4'	-5.36	1.45	1.51
33	BN	116	VAL	CB-CG2	5.36	1.64	1.52
38	BS	88	ARG	CZ-NH2	5.36	1.40	1.33
57	BB	43	G	N1-C2	5.36	1.42	1.37
57	BB	458	G	C2'-O2'	-5.36	1.34	1.41
57	BB	473	G	C6-N1	5.36	1.43	1.39
57	BB	640	C	O3'-P	-5.36	1.54	1.61
57	BB	1088	A	N9-C8	-5.36	1.33	1.37
57	BB	1233	C	N1-C6	-5.36	1.33	1.37
57	BB	1382	G	N7-C5	-5.36	1.36	1.39
57	BB	1689	A	N1-C2	5.36	1.39	1.34
57	BB	2170	A	C6-N6	5.36	1.38	1.33
58	BA	24	G	N7-C5	-5.36	1.36	1.39
58	BA	81	G	C5-C4	-5.36	1.34	1.38
58	BA	86	G	C1'-N9	5.36	1.56	1.48
21	AA	201	G	C6-N1	5.35	1.43	1.39
21	AA	282	A	C6-N1	5.35	1.39	1.35
57	BB	594	U	C4-C5	5.35	1.48	1.43
57	BB	1092	C	N3-C4	5.35	1.37	1.33
57	BB	1419	A	O3'-P	-5.35	1.54	1.61
9	AR	31	TYR	CZ-OH	5.35	1.47	1.37
21	AA	178	C	C2'-C1'	-5.35	1.47	1.53
21	AA	637	C	P-O5'	-5.35	1.54	1.59
21	AA	729	A	C2-N3	5.35	1.38	1.33
21	AA	1311	A	O3'-P	-5.35	1.54	1.61
57	BB	191	A	C4'-O4'	5.35	1.52	1.45
57	BB	737	C	N1-C2	5.35	1.45	1.40
57	BB	995	C	N3-C4	5.35	1.37	1.33
57	BB	1527	G	C6-N1	5.35	1.43	1.39
57	BB	2177	C	O3'-P	-5.35	1.54	1.61
57	BB	2753	A	C5'-C4'	5.35	1.57	1.51
21	AA	200	G	O4'-C1'	5.35	1.48	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1121	U	C2'-C1'	-5.35	1.47	1.53
57	BB	408	G	N3-C4	5.35	1.39	1.35
57	BB	1625	C	N1-C6	5.35	1.40	1.37
57	BB	2209	G	N3-C4	-5.35	1.31	1.35
7	AP	17	TYR	CB-CG	5.35	1.59	1.51
21	AA	353	A	C6-N6	5.35	1.38	1.33
21	AA	587	G	C5-C6	5.35	1.47	1.42
21	AA	695	A	N9-C4	-5.35	1.34	1.37
21	AA	1157	A	N9-C4	5.35	1.41	1.37
21	AA	1197	A	N9-C8	-5.35	1.33	1.37
21	AA	1211	U	C4-C5	5.35	1.48	1.43
21	AA	1374	A	C2'-C1'	-5.35	1.47	1.53
22	AY	30	G	C2'-C1'	-5.35	1.47	1.53
22	AY	38	A	C3'-C2'	5.35	1.58	1.52
26	AV	46	G	C2-N2	5.35	1.40	1.34
26	AV	52	G	C8-N7	-5.35	1.27	1.30
46	BZ	10	ARG	NE-CZ	5.35	1.40	1.33
57	BB	620	G	N7-C5	-5.35	1.36	1.39
57	BB	771	G	C6-N1	5.35	1.43	1.39
57	BB	826	U	O3'-P	-5.35	1.54	1.61
57	BB	1143	A	C5'-C4'	5.35	1.57	1.51
57	BB	1597	A	C2-N3	-5.35	1.28	1.33
57	BB	1960	A	C2'-C1'	-5.35	1.47	1.53
57	BB	1978	A	C6-N6	5.35	1.38	1.33
5	AN	100	TRP	CG-CD1	5.35	1.44	1.36
21	AA	1000	A	C3'-C2'	-5.35	1.46	1.52
21	AA	1477	U	C4-O4	-5.35	1.19	1.23
22	AY	16	U	O3'-P	-5.35	1.54	1.61
26	AV	5	G	N7-C5	-5.35	1.36	1.39
57	BB	122	G	N1-C2	5.35	1.42	1.37
57	BB	140	C	N1-C6	5.35	1.40	1.37
57	BB	164	C	C2-N3	5.35	1.40	1.35
57	BB	450	G	C4'-C3'	5.35	1.59	1.53
57	BB	1076	C	C4'-O4'	-5.35	1.38	1.45
57	BB	1149	G	O3'-P	5.35	1.67	1.61
57	BB	1421	G	C3'-C2'	-5.35	1.46	1.52
57	BB	1789	A	C6-N6	5.35	1.38	1.33
57	BB	2700	A	C2'-C1'	-5.35	1.47	1.53
21	AA	728	A	C3'-C2'	5.35	1.58	1.52
21	AA	730	G	C2-N3	5.35	1.37	1.32
55	BG	152	ARG	NE-CZ	5.35	1.40	1.33
57	BB	1501	G	N3-C4	-5.35	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2028	U	C2'-C1'	-5.35	1.47	1.53
57	BB	2625	G	P-O5'	-5.35	1.54	1.59
21	AA	529	G	C6-O6	5.34	1.28	1.24
21	AA	659	U	C2-O2	5.34	1.27	1.22
21	AA	929	G	P-O5'	-5.34	1.54	1.59
21	AA	998	C	C2'-O2'	-5.34	1.34	1.41
21	AA	1318	A	N7-C5	-5.34	1.36	1.39
21	AA	1531	A	C6-N1	5.34	1.39	1.35
57	BB	413	C	O3'-P	-5.34	1.54	1.61
57	BB	960	A	N9-C8	-5.34	1.33	1.37
57	BB	1561	C	P-O5'	-5.34	1.54	1.59
57	BB	1566	A	N7-C5	-5.34	1.36	1.39
57	BB	2074	U	C2'-C1'	5.34	1.59	1.53
57	BB	2367	G	N1-C2	5.34	1.42	1.37
57	BB	2400	G	C3'-C2'	5.34	1.58	1.52
57	BB	2530	A	C8-N7	5.34	1.35	1.31
21	AA	206	C	P-O5'	-5.34	1.54	1.59
21	AA	446	G	N9-C8	5.34	1.41	1.37
21	AA	483	C	N1-C6	5.34	1.40	1.37
21	AA	587	G	C2'-C1'	-5.34	1.47	1.53
21	AA	713	G	C4'-C3'	5.34	1.59	1.53
21	AA	1172	C	C3'-O3'	5.34	1.49	1.42
21	AA	1194	U	C2-N3	5.34	1.41	1.37
21	AA	1348	U	C5-C6	5.34	1.39	1.34
57	BB	533	G	C2-N2	5.34	1.39	1.34
57	BB	1679	A	C6-N6	5.34	1.38	1.33
57	BB	2204	G	C2'-C1'	-5.34	1.47	1.53
21	AA	441	A	N7-C5	-5.34	1.36	1.39
21	AA	582	C	N1-C6	5.34	1.40	1.37
21	AA	690	G	C2-N2	5.34	1.39	1.34
21	AA	763	G	C4'-C3'	5.34	1.59	1.53
21	AA	1129	C	N1-C6	5.34	1.40	1.37
21	AA	1182	G	C2'-C1'	-5.34	1.47	1.53
21	AA	1217	C	N1-C2	-5.34	1.34	1.40
52	BD	174	SER	CA-CB	5.34	1.60	1.52
57	BB	423	A	C5-C4	-5.34	1.35	1.38
57	BB	1389	G	N9-C4	-5.34	1.33	1.38
57	BB	1847	A	C1'-N9	-5.34	1.39	1.46
57	BB	2413	G	C6-N1	5.34	1.43	1.39
57	BB	2467	C	P-O5'	-5.34	1.54	1.59
21	AA	295	C	N3-C4	5.34	1.37	1.33
21	AA	419	C	C1'-N1	5.34	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	651	C	C4'-O4'	5.34	1.52	1.45
57	BB	1143	A	N9-C8	5.34	1.42	1.37
57	BB	1843	C	C5'-C4'	5.34	1.57	1.51
57	BB	2147	A	C5-C4	5.34	1.42	1.38
57	BB	2255	G	C6-O6	5.34	1.28	1.24
57	BB	2373	G	N1-C2	5.34	1.42	1.37
58	BA	2	G	C8-N7	5.34	1.34	1.30
21	AA	259	G	C3'-C2'	-5.34	1.46	1.52
21	AA	765	G	C5-C6	-5.34	1.37	1.42
57	BB	36	G	N1-C2	5.34	1.42	1.37
57	BB	439	A	C5'-C4'	5.34	1.57	1.51
57	BB	1680	U	N3-C4	5.34	1.43	1.38
57	BB	2763	G	O3'-P	-5.34	1.54	1.61
7	AP	28	ARG	CD-NE	5.34	1.55	1.46
21	AA	167	A	C2'-C1'	-5.34	1.47	1.53
21	AA	175	C	C4-C5	-5.34	1.38	1.43
21	AA	462	G	C2'-O2'	5.34	1.48	1.41
57	BB	355	U	C4'-O4'	5.34	1.52	1.45
57	BB	410	G	N9-C8	5.34	1.41	1.37
57	BB	978	G	C4'-C3'	-5.34	1.47	1.52
57	BB	1472	C	C4-C5	-5.34	1.38	1.43
57	BB	1677	A	C5'-C4'	5.34	1.57	1.51
57	BB	2705	A	C3'-C2'	-5.34	1.46	1.52
57	BB	2896	C	C2-N3	5.34	1.40	1.35
21	AA	610	U	O4'-C1'	5.33	1.48	1.41
26	AV	50	U	N1-C6	-5.33	1.33	1.38
57	BB	276	U	C2-N3	5.33	1.41	1.37
57	BB	1269	A	C5-C4	-5.33	1.35	1.38
57	BB	1398	C	N1-C2	5.33	1.45	1.40
57	BB	2056	G	N9-C4	-5.33	1.33	1.38
57	BB	2175	C	C4-N4	5.33	1.38	1.33
57	BB	2589	A	O3'-P	-5.33	1.54	1.61
58	BA	5	U	C3'-O3'	5.33	1.49	1.42
58	BA	22	U	C3'-O3'	5.33	1.49	1.42
21	AA	1174	G	P-O5'	5.33	1.65	1.59
21	AA	1240	U	O3'-P	-5.33	1.54	1.61
21	AA	1421	G	O3'-P	-5.33	1.54	1.61
24	AX	15	A	C6-N6	5.33	1.38	1.33
57	BB	298	G	N7-C5	-5.33	1.36	1.39
57	BB	434	U	C2-N3	5.33	1.41	1.37
57	BB	925	A	N1-C2	5.33	1.39	1.34
57	BB	1526	C	N1-C6	5.33	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1548	A	C2'-C1'	-5.33	1.47	1.53
57	BB	1551	A	C8-N7	-5.33	1.27	1.31
57	BB	1628	G	C2'-C1'	5.33	1.59	1.53
57	BB	1783	A	C5-C4	5.33	1.42	1.38
57	BB	2658	C	C5-C6	5.33	1.38	1.34
57	BB	2876	G	C2'-C1'	-5.33	1.47	1.53
21	AA	1451	U	O4'-C1'	5.33	1.48	1.41
22	AY	51	G	C4'-O4'	-5.33	1.38	1.45
23	AW	42	C	C4'-C3'	5.33	1.59	1.53
26	AV	19	G	C5-C4	5.33	1.42	1.38
45	BC	265	PHE	CE2-CZ	5.33	1.47	1.37
57	BB	667	U	N3-C4	5.33	1.43	1.38
57	BB	821	A	C6-N1	5.33	1.39	1.35
57	BB	833	A	C2'-C1'	-5.33	1.47	1.53
57	BB	1054	A	C6-N6	5.33	1.38	1.33
57	BB	1345	C	O3'-P	-5.33	1.54	1.61
57	BB	2254	C	N1-C6	5.33	1.40	1.37
57	BB	2309	A	C5-C4	5.33	1.42	1.38
21	AA	145	G	N7-C5	-5.33	1.36	1.39
57	BB	1274	A	P-O5'	-5.33	1.54	1.59
57	BB	1538	G	N3-C4	5.33	1.39	1.35
57	BB	1837	C	C1'-N1	5.33	1.56	1.48
57	BB	1941	C	C4-N4	5.33	1.38	1.33
57	BB	2407	A	O4'-C1'	-5.33	1.34	1.41
57	BB	2490	G	N7-C5	-5.33	1.36	1.39
21	AA	93	U	N1-C2	-5.33	1.33	1.38
21	AA	936	C	C5-C6	5.33	1.38	1.34
21	AA	1258	G	P-O5'	-5.33	1.54	1.59
21	AA	1383	C	C5'-C4'	5.33	1.57	1.51
22	AY	4	G	C4'-O4'	-5.33	1.38	1.45
24	AX	22	A	C5'-C4'	5.33	1.57	1.51
57	BB	594	U	C2-O2	5.33	1.27	1.22
57	BB	841	G	C5-C6	5.33	1.47	1.42
57	BB	865	C	N1-C6	5.33	1.40	1.37
57	BB	972	A	C5-C4	5.33	1.42	1.38
57	BB	1017	G	N7-C5	5.33	1.42	1.39
57	BB	1499	C	N3-C4	5.33	1.37	1.33
57	BB	1764	C	C4'-O4'	-5.33	1.38	1.45
57	BB	2182	U	C2-N3	5.33	1.41	1.37
57	BB	2860	A	C5-C4	5.33	1.42	1.38
57	BB	2886	A	N9-C8	5.33	1.42	1.37
21	AA	108	G	C2'-C1'	5.33	1.59	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	761	G	C5'-C4'	5.33	1.57	1.51
21	AA	1226	C	C4-N4	5.33	1.38	1.33
57	BB	1982	U	C3'-C2'	-5.33	1.46	1.52
57	BB	2450	A	C6-N6	-5.33	1.29	1.33
21	AA	641	U	C3'-C2'	-5.33	1.46	1.52
21	AA	1326	U	C3'-C2'	5.33	1.58	1.52
23	AW	21	A	C4'-O4'	5.33	1.52	1.45
39	BT	12	ARG	NE-CZ	5.33	1.40	1.33
57	BB	297	G	P-O5'	-5.33	1.54	1.59
57	BB	1056	G	C8-N7	-5.33	1.27	1.30
57	BB	1476	U	N1-C6	-5.33	1.33	1.38
57	BB	1974	C	N3-C4	5.33	1.37	1.33
57	BB	2063	C	C3'-O3'	5.33	1.49	1.42
57	BB	2325	G	O3'-P	-5.33	1.54	1.61
57	BB	2527	C	N1-C2	5.33	1.45	1.40
57	BB	2635	A	C2'-C1'	-5.33	1.47	1.53
21	AA	664	G	P-O5'	5.32	1.65	1.59
21	AA	1234	C	C2-N3	5.32	1.40	1.35
22	AY	45	G	C4'-C3'	-5.32	1.47	1.52
42	BW	24	ARG	CD-NE	5.32	1.55	1.46
57	BB	202	U	N3-C4	5.32	1.43	1.38
57	BB	682	G	C6-N1	5.32	1.43	1.39
57	BB	782	A	C3'-C2'	5.32	1.58	1.52
57	BB	883	G	C2-N2	5.32	1.39	1.34
57	BB	1075	C	C1'-N1	5.32	1.56	1.48
57	BB	1574	C	O3'-P	-5.32	1.54	1.61
57	BB	2089	C	C5'-C4'	-5.32	1.45	1.51
57	BB	2342	C	C3'-C2'	-5.32	1.46	1.52
58	BA	102	G	C2'-C1'	-5.32	1.47	1.53
21	AA	264	C	N3-C4	5.32	1.37	1.33
21	AA	703	G	C8-N7	-5.32	1.27	1.30
21	AA	1202	U	C4'-C3'	5.32	1.59	1.53
22	AY	30	G	C1'-N9	5.32	1.56	1.48
57	BB	535	G	N1-C2	5.32	1.42	1.37
57	BB	661	A	C5'-C4'	5.32	1.57	1.51
58	BA	108	A	C4'-C3'	5.32	1.59	1.53
21	AA	50	A	N1-C2	-5.32	1.29	1.34
21	AA	307	C	N1-C6	5.32	1.40	1.37
21	AA	432	A	N7-C5	-5.32	1.36	1.39
21	AA	448	A	C5-C4	-5.32	1.35	1.38
23	AW	17	C	C5-C6	5.32	1.38	1.34
57	BB	695	G	C5'-C4'	5.32	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	704	G	C5-C4	5.32	1.42	1.38
57	BB	804	A	P-O5'	-5.32	1.54	1.59
57	BB	1627	G	C6-N1	5.32	1.43	1.39
57	BB	2378	A	P-O5'	-5.32	1.54	1.59
57	BB	2380	C	C2-O2	-5.32	1.19	1.24
57	BB	2651	C	C4-N4	5.32	1.38	1.33
58	BA	39	A	C5'-C4'	5.32	1.57	1.51
21	AA	779	C	N3-C4	5.32	1.37	1.33
21	AA	1527	U	O3'-P	-5.32	1.54	1.61
33	BN	56	LYS	N-CA	-5.32	1.35	1.46
57	BB	270	A	N7-C5	-5.32	1.36	1.39
57	BB	2085	U	N3-C4	5.32	1.43	1.38
17	AF	86	ARG	NE-CZ	5.32	1.40	1.33
21	AA	331	G	N9-C4	5.32	1.42	1.38
21	AA	457	G	O3'-P	-5.32	1.54	1.61
21	AA	512	U	N1-C2	-5.32	1.33	1.38
21	AA	644	U	C4-C5	5.32	1.48	1.43
21	AA	990	C	N3-C4	5.32	1.37	1.33
21	AA	1135	U	C2'-C1'	5.32	1.59	1.53
21	AA	1342	C	C3'-C2'	5.32	1.58	1.52
26	AV	72	A	N3-C4	-5.32	1.31	1.34
42	BW	76	ARG	CZ-NH2	5.32	1.40	1.33
57	BB	858	G	C6-N1	5.32	1.43	1.39
57	BB	1361	G	C2-N3	5.32	1.37	1.32
57	BB	2062	A	C6-N6	5.32	1.38	1.33
57	BB	2501	C	N3-C4	5.32	1.37	1.33
58	BA	10	G	C4'-C3'	5.32	1.59	1.53
21	AA	1042	A	N7-C5	5.32	1.42	1.39
21	AA	1088	G	N1-C2	5.32	1.42	1.37
21	AA	1098	C	C5-C6	-5.32	1.30	1.34
21	AA	1156	G	C5'-C4'	5.32	1.57	1.51
23	AW	46	G	C5-C4	5.32	1.42	1.38
57	BB	109	C	C1'-N1	5.32	1.56	1.48
57	BB	541	A	C2-N3	5.32	1.38	1.33
57	BB	996	A	C5'-C4'	5.32	1.57	1.51
57	BB	1356	G	C2-N2	5.32	1.39	1.34
57	BB	1760	C	C5-C6	-5.32	1.30	1.34
57	BB	1896	G	C8-N7	5.32	1.34	1.30
57	BB	1926	U	C5'-C4'	5.32	1.57	1.51
57	BB	2199	A	C3'-O3'	5.32	1.49	1.42
57	BB	2304	G	C2'-C1'	-5.32	1.47	1.53
21	AA	493	A	C1'-N9	5.31	1.56	1.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	932	C	C1'-N1	5.31	1.56	1.48
21	AA	953	G	C6-N1	5.31	1.43	1.39
21	AA	1244	G	P-O5'	-5.31	1.54	1.59
23	AW	67	C	C2-N3	-5.31	1.31	1.35
57	BB	2428	G	C2-N3	5.31	1.37	1.32
21	AA	51	A	C6-N1	5.31	1.39	1.35
21	AA	342	C	C5-C6	-5.31	1.30	1.34
21	AA	964	A	C2'-C1'	-5.31	1.47	1.53
21	AA	1100	C	N3-C4	5.31	1.37	1.33
23	AW	10	G	C6-O6	-5.31	1.19	1.24
57	BB	106	C	C2-N3	5.31	1.40	1.35
57	BB	210	C	O3'-P	-5.31	1.54	1.61
57	BB	851	C	O4'-C1'	5.31	1.48	1.41
57	BB	1287	A	C2-N3	5.31	1.38	1.33
57	BB	1839	G	C5'-C4'	5.31	1.57	1.51
57	BB	2432	A	N1-C2	5.31	1.39	1.34
57	BB	2531	A	C5-C4	5.31	1.42	1.38
21	AA	1196	A	C2'-C1'	-5.31	1.47	1.53
21	AA	1323	G	C2-N3	5.31	1.36	1.32
57	BB	1717	A	O3'-P	-5.31	1.54	1.61
11	AT	34	VAL	CB-CG2	5.31	1.64	1.52
21	AA	446	G	C6-O6	-5.31	1.19	1.24
21	AA	572	A	C3'-O3'	5.31	1.49	1.42
21	AA	577	G	P-O5'	-5.31	1.54	1.59
57	BB	126	A	C5'-C4'	5.31	1.57	1.51
57	BB	303	G	C2-N3	5.31	1.36	1.32
57	BB	492	A	N7-C5	5.31	1.42	1.39
57	BB	1033	U	C2'-C1'	-5.31	1.47	1.53
57	BB	1042	G	C2-N3	5.31	1.36	1.32
57	BB	1818	U	C1'-N1	5.31	1.56	1.48
57	BB	1963	U	C3'-C2'	-5.31	1.47	1.52
57	BB	2653	U	C5'-C4'	5.31	1.57	1.51
15	AD	143	SER	CA-CB	5.31	1.60	1.52
21	AA	1191	A	N9-C4	-5.31	1.34	1.37
21	AA	1319	A	N7-C5	-5.31	1.36	1.39
22	AY	20	G	C3'-O3'	5.31	1.49	1.42
57	BB	176	A	C2'-O2'	-5.31	1.34	1.41
57	BB	560	C	C2'-C1'	-5.31	1.47	1.53
57	BB	1047	G	N9-C8	-5.31	1.34	1.37
57	BB	1057	A	C8-N7	-5.31	1.27	1.31
57	BB	1354	A	N9-C8	-5.31	1.33	1.37
57	BB	1608	A	O3'-P	-5.31	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1754	A	N3-C4	5.31	1.38	1.34
57	BB	1875	G	N9-C8	5.31	1.41	1.37
57	BB	1939	U	C2-N3	5.31	1.41	1.37
57	BB	2110	G	C5'-C4'	5.31	1.57	1.51
57	BB	2185	U	C4'-C3'	-5.31	1.47	1.52
57	BB	2708	G	C5-C6	-5.31	1.37	1.42
21	AA	937	A	C4'-C3'	-5.31	1.47	1.52
26	AV	7	G	P-O5'	-5.31	1.54	1.59
31	BL	64	PHE	CA-CB	5.31	1.65	1.53
57	BB	1597	A	N3-C4	-5.31	1.31	1.34
57	BB	1683	U	O3'-P	-5.31	1.54	1.61
58	BA	11	C	C4-N4	5.31	1.38	1.33
21	AA	977	A	C3'-O3'	5.30	1.49	1.42
21	AA	1002	G	C4'-C3'	-5.30	1.47	1.52
21	AA	1126	U	C4'-C3'	5.30	1.58	1.53
21	AA	1252	A	C5'-C4'	5.30	1.57	1.51
22	AY	12	U	C1'-N1	5.30	1.56	1.48
57	BB	254	G	C2-N2	5.30	1.39	1.34
57	BB	441	U	C4-C5	-5.30	1.38	1.43
57	BB	1362	C	C5-C6	-5.30	1.30	1.34
57	BB	1679	A	N9-C8	5.30	1.42	1.37
57	BB	1769	U	C3'-C2'	-5.30	1.47	1.52
57	BB	2229	U	C1'-N1	5.30	1.56	1.48
57	BB	2519	U	C4'-O4'	-5.30	1.38	1.45
58	BA	39	A	N3-C4	5.30	1.38	1.34
21	AA	146	G	N3-C4	5.30	1.39	1.35
21	AA	381	C	N1-C6	-5.30	1.33	1.37
21	AA	1348	U	C5'-C4'	5.30	1.57	1.51
57	BB	1307	A	C8-N7	-5.30	1.27	1.31
57	BB	1358	G	C6-N1	5.30	1.43	1.39
58	BA	91	C	C5'-C4'	5.30	1.57	1.51
21	AA	523	A	N3-C4	-5.30	1.31	1.34
21	AA	1150	A	C5-C4	-5.30	1.35	1.38
26	AV	27	U	C2-N3	5.30	1.41	1.37
49	B2	12	ARG	NE-CZ	5.30	1.40	1.33
57	BB	856	G	C6-N1	5.30	1.43	1.39
57	BB	1050	A	N3-C4	-5.30	1.31	1.34
57	BB	1360	G	C2-N2	5.30	1.39	1.34
57	BB	1827	U	C5'-C4'	5.30	1.57	1.51
57	BB	1991	U	C3'-O3'	5.30	1.49	1.42
57	BB	2340	A	C6-N6	5.30	1.38	1.33
57	BB	2420	C	N3-C4	5.30	1.37	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2679	A	O3'-P	-5.30	1.54	1.61
21	AA	442	G	N3-C4	-5.30	1.31	1.35
21	AA	645	G	N9-C4	-5.30	1.33	1.38
21	AA	647	C	N1-C6	5.30	1.40	1.37
21	AA	746	A	N9-C8	5.30	1.42	1.37
21	AA	1178	G	C4'-O4'	-5.30	1.38	1.45
23	AW	57	G	C2-N3	-5.30	1.28	1.32
57	BB	535	G	C4'-O4'	5.30	1.52	1.45
57	BB	864	G	C8-N7	-5.30	1.27	1.30
57	BB	1220	G	C3'-O3'	5.30	1.49	1.42
57	BB	1510	G	C4'-O4'	5.30	1.52	1.45
57	BB	1751	U	C4-C5	5.30	1.48	1.43
57	BB	2277	G	C2'-O2'	5.30	1.48	1.41
58	BA	94	A	N7-C5	-5.30	1.36	1.39
21	AA	360	G	N9-C8	5.30	1.41	1.37
57	BB	24	G	C3'-C2'	-5.30	1.47	1.52
57	BB	105	C	C4'-O4'	-5.30	1.38	1.45
57	BB	1242	U	P-O5'	-5.30	1.54	1.59
57	BB	1531	C	P-O5'	-5.30	1.54	1.59
21	AA	46	G	C4'-O4'	5.30	1.52	1.45
21	AA	442	G	N7-C5	-5.30	1.36	1.39
21	AA	474	G	C4'-C3'	5.30	1.58	1.53
21	AA	522	C	C4-C5	5.30	1.47	1.43
21	AA	536	C	N1-C2	5.30	1.45	1.40
21	AA	902	G	N9-C8	-5.30	1.34	1.37
21	AA	1349	A	N9-C8	5.30	1.42	1.37
31	BL	2	ARG	CZ-NH2	5.30	1.40	1.33
57	BB	821	A	N9-C4	-5.30	1.34	1.37
57	BB	871	U	C5-C6	5.30	1.39	1.34
57	BB	1083	U	C2-N3	5.30	1.41	1.37
57	BB	1123	C	C4-C5	-5.30	1.38	1.43
57	BB	1479	G	C2'-C1'	5.30	1.59	1.53
57	BB	1756	G	P-O5'	-5.30	1.54	1.59
57	BB	2605	U	C4-C5	5.30	1.48	1.43
21	AA	35	G	N9-C8	5.29	1.41	1.37
57	BB	914	G	C6-O6	-5.29	1.19	1.24
57	BB	1378	A	N9-C4	5.29	1.41	1.37
57	BB	1747	U	C2-N3	-5.29	1.34	1.37
57	BB	1995	U	C4-O4	5.29	1.27	1.23
57	BB	2057	G	C5-C6	-5.29	1.37	1.42
21	AA	314	C	C4'-C3'	5.29	1.58	1.53
21	AA	503	C	C2'-C1'	-5.29	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	690	G	C4'-O4'	5.29	1.52	1.45
21	AA	778	G	C3'-C2'	-5.29	1.47	1.52
21	AA	911	U	O4'-C1'	-5.29	1.34	1.41
21	AA	1219	A	C5'-C4'	5.29	1.57	1.51
21	AA	1311	A	C2-N3	5.29	1.38	1.33
22	AY	18	G	C5-C4	5.29	1.42	1.38
23	AW	13	C	C3'-O3'	5.29	1.49	1.42
57	BB	48	G	N9-C8	5.29	1.41	1.37
57	BB	264	C	C2-O2	5.29	1.29	1.24
57	BB	318	C	N1-C6	5.29	1.40	1.37
57	BB	930	G	C4'-O4'	-5.29	1.38	1.45
57	BB	1441	G	C2-N2	5.29	1.39	1.34
57	BB	1670	C	N3-C4	5.29	1.37	1.33
57	BB	2739	U	C3'-C2'	-5.29	1.47	1.52
57	BB	2778	A	C3'-C2'	-5.29	1.47	1.52
21	AA	157	U	P-O5'	5.29	1.65	1.59
21	AA	1144	G	C6-N1	5.29	1.43	1.39
21	AA	1232	U	C4-C5	5.29	1.48	1.43
21	AA	1380	U	C5-C6	5.29	1.39	1.34
57	BB	71	A	C2'-C1'	-5.29	1.47	1.53
57	BB	144	A	C6-N6	5.29	1.38	1.33
57	BB	246	C	C3'-C2'	5.29	1.58	1.52
57	BB	812	C	C4'-O4'	5.29	1.52	1.45
57	BB	1688	U	C3'-O3'	5.29	1.49	1.42
57	BB	2155	U	N1-C6	5.29	1.42	1.38
57	BB	2168	G	C8-N7	-5.29	1.27	1.30
57	BB	2725	A	C8-N7	-5.29	1.27	1.31
57	BB	2727	A	C8-N7	-5.29	1.27	1.31
58	BA	40	U	O3'-P	-5.29	1.54	1.61
21	AA	623	C	C4-N4	5.29	1.38	1.33
21	AA	628	G	C2-N3	5.29	1.36	1.32
57	BB	630	G	C8-N7	-5.29	1.27	1.30
57	BB	786	C	C4'-C3'	-5.29	1.47	1.52
1	AJ	16	ARG	NE-CZ	5.29	1.40	1.33
21	AA	794	A	N1-C2	5.29	1.39	1.34
21	AA	1071	C	C4'-C3'	5.29	1.58	1.53
21	AA	1127	G	C8-N7	5.29	1.34	1.30
57	BB	367	G	C5-C4	5.29	1.42	1.38
57	BB	493	G	C6-N1	5.29	1.43	1.39
57	BB	604	G	C6-N1	-5.29	1.35	1.39
57	BB	919	U	C4'-C3'	5.29	1.58	1.53
57	BB	1463	C	O5'-C5'	-5.29	1.34	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1569	A	C4'-C3'	-5.29	1.47	1.52
57	BB	1630	A	N9-C8	-5.29	1.33	1.37
58	BA	85	G	C2-N2	5.29	1.39	1.34
21	AA	754	C	P-O5'	5.29	1.65	1.59
21	AA	929	G	N7-C5	-5.29	1.36	1.39
21	AA	1456	A	C5-C4	5.29	1.42	1.38
22	AY	39	U	C2-O2	5.29	1.27	1.22
57	BB	997	G	C6-O6	-5.29	1.19	1.24
57	BB	1245	G	C3'-O3'	-5.29	1.34	1.42
57	BB	2145	C	P-O5'	-5.29	1.54	1.59
57	BB	2303	G	C2-N2	5.29	1.39	1.34
21	AA	221	C	P-O5'	-5.29	1.54	1.59
21	AA	1018	G	N3-C4	-5.29	1.31	1.35
21	AA	1084	G	C4'-O4'	-5.29	1.38	1.45
21	AA	1288	A	C4'-C3'	5.29	1.58	1.53
57	BB	116	C	C1'-N1	5.29	1.56	1.48
57	BB	326	G	N1-C2	5.29	1.42	1.37
57	BB	360	U	C2-N3	5.29	1.41	1.37
57	BB	577	G	C5-C4	5.29	1.42	1.38
57	BB	881	G	N1-C2	5.29	1.42	1.37
57	BB	1613	G	N9-C4	-5.29	1.33	1.38
21	AA	31	G	N1-C2	5.28	1.42	1.37
21	AA	417	G	N1-C2	5.28	1.42	1.37
21	AA	670	G	C2-N3	5.28	1.36	1.32
21	AA	759	A	C3'-O3'	5.28	1.49	1.42
57	BB	220	G	C2-N3	5.28	1.36	1.32
57	BB	268	C	N1-C6	5.28	1.40	1.37
57	BB	910	A	C3'-O3'	5.28	1.49	1.42
57	BB	922	C	C2-O2	-5.28	1.19	1.24
57	BB	1060	U	C1'-N1	5.28	1.56	1.48
57	BB	1763	G	N3-C4	5.28	1.39	1.35
57	BB	1979	U	O4'-C1'	-5.28	1.34	1.41
57	BB	2288	A	O4'-C1'	5.28	1.48	1.41
57	BB	2301	C	N3-C4	5.28	1.37	1.33
57	BB	2317	A	N9-C4	-5.28	1.34	1.37
57	BB	2523	G	C2-N3	5.28	1.36	1.32
57	BB	2674	G	C4'-C3'	5.28	1.58	1.53
21	AA	492	C	P-O5'	-5.28	1.54	1.59
21	AA	627	G	C6-N1	5.28	1.43	1.39
21	AA	1118	U	C2-N3	5.28	1.41	1.37
26	AV	40	C	O3'-P	-5.28	1.54	1.61
57	BB	577	G	C6-N1	5.28	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2609	U	C3'-O3'	5.28	1.49	1.42
8	AQ	9	GLY	N-CA	-5.28	1.38	1.46
21	AA	63	C	C4'-C3'	-5.28	1.47	1.52
21	AA	280	C	C4-N4	5.28	1.38	1.33
21	AA	1164	G	N1-C2	5.28	1.42	1.37
21	AA	1488	G	O3'-P	-5.28	1.54	1.61
22	AY	18	G	C4'-C3'	5.28	1.58	1.53
57	BB	54	G	C5'-C4'	5.28	1.57	1.51
57	BB	93	G	C6-N1	5.28	1.43	1.39
57	BB	1259	G	C2'-C1'	-5.28	1.47	1.53
57	BB	1344	U	N1-C6	5.28	1.42	1.38
57	BB	1946	U	O3'-P	-5.28	1.54	1.61
57	BB	1976	U	C1'-N1	5.28	1.56	1.48
57	BB	2400	G	N1-C2	5.28	1.42	1.37
57	BB	2588	G	N1-C2	5.28	1.42	1.37
57	BB	2693	G	C5-C6	-5.28	1.37	1.42
57	BB	2749	A	O3'-P	-5.28	1.54	1.61
57	BB	2770	G	N9-C8	5.28	1.41	1.37
57	BB	2890	G	C1'-N9	5.28	1.56	1.48
21	AA	612	C	N3-C4	5.28	1.37	1.33
21	AA	693	G	C1'-N9	-5.28	1.39	1.46
21	AA	1075	U	C3'-C2'	-5.28	1.47	1.52
22	AY	14	A	N3-C4	-5.28	1.31	1.34
57	BB	883	G	N1-C2	5.28	1.42	1.37
57	BB	1193	G	N3-C4	-5.28	1.31	1.35
57	BB	1881	C	C2-O2	5.28	1.29	1.24
57	BB	2252	G	P-O5'	5.28	1.65	1.59
21	AA	883	C	C5-C6	-5.28	1.30	1.34
21	AA	916	U	N3-C4	5.28	1.43	1.38
21	AA	1236	A	N9-C4	5.28	1.41	1.37
21	AA	1438	G	N9-C8	5.28	1.41	1.37
22	AY	37	G	N9-C8	-5.28	1.34	1.37
23	AW	58	A	C6-N6	5.28	1.38	1.33
38	BS	75	PHE	CA-CB	5.28	1.65	1.53
52	BD	175	LEU	CA-C	-5.28	1.39	1.52
57	BB	170	U	C2'-C1'	-5.28	1.47	1.53
57	BB	277	G	C6-N1	5.28	1.43	1.39
57	BB	1089	A	C3'-C2'	-5.28	1.47	1.52
57	BB	1584	U	C5'-C4'	5.28	1.57	1.51
57	BB	1608	A	C2-N3	5.28	1.38	1.33
57	BB	1726	C	P-O5'	-5.28	1.54	1.59
57	BB	2283	C	C3'-O3'	5.28	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2606	C	C4-N4	5.28	1.38	1.33
57	BB	2645	G	N7-C5	5.28	1.42	1.39
21	AA	11	G	C6-N1	5.28	1.43	1.39
21	AA	70	U	C5-C6	5.28	1.38	1.34
21	AA	262	A	N3-C4	-5.28	1.31	1.34
21	AA	301	G	N9-C8	5.28	1.41	1.37
21	AA	927	G	O4'-C1'	-5.28	1.34	1.41
21	AA	1048	G	N1-C2	5.28	1.42	1.37
57	BB	332	A	C6-N1	5.28	1.39	1.35
57	BB	765	C	C4'-O4'	5.28	1.52	1.45
57	BB	771	G	C5'-C4'	5.28	1.57	1.51
57	BB	802	A	N1-C2	-5.28	1.29	1.34
57	BB	1044	C	N1-C6	5.28	1.40	1.37
57	BB	1056	G	N9-C4	5.28	1.42	1.38
57	BB	1572	A	N9-C8	5.28	1.42	1.37
57	BB	1816	C	P-O5'	5.28	1.65	1.59
57	BB	2528	U	C2-N3	5.28	1.41	1.37
21	AA	1054	C	C3'-C2'	5.27	1.58	1.52
57	BB	1944	U	C3'-O3'	5.27	1.49	1.42
57	BB	2010	G	C6-N1	5.27	1.43	1.39
58	BA	67	G	C6-N1	5.27	1.43	1.39
21	AA	591	U	C3'-O3'	5.27	1.49	1.42
21	AA	992	U	N1-C6	5.27	1.42	1.38
21	AA	1153	G	C2'-C1'	-5.27	1.47	1.53
21	AA	1315	U	C4-O4	-5.27	1.19	1.23
33	BN	2	ARG	CZ-NH1	5.27	1.40	1.33
57	BB	197	A	N1-C2	5.27	1.39	1.34
57	BB	798	G	N1-C2	5.27	1.42	1.37
57	BB	1331	G	C5'-C4'	5.27	1.57	1.51
57	BB	1394	U	N1-C2	5.27	1.43	1.38
57	BB	1742	U	N3-C4	5.27	1.43	1.38
57	BB	2208	C	C2-N3	5.27	1.40	1.35
57	BB	2298	A	N7-C5	5.27	1.42	1.39
57	BB	2748	A	N7-C5	-5.27	1.36	1.39
57	BB	2754	U	C5-C6	5.27	1.38	1.34
58	BA	70	C	C2'-C1'	-5.27	1.47	1.53
34	BO	64	TYR	CE2-CZ	5.27	1.45	1.38
57	BB	1188	U	O4'-C1'	5.27	1.48	1.41
21	AA	20	U	C4'-O4'	5.27	1.52	1.45
21	AA	154	U	N1-C6	-5.27	1.33	1.38
21	AA	554	A	P-O5'	-5.27	1.54	1.59
21	AA	621	A	P-O5'	-5.27	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	898	G	N9-C4	5.27	1.42	1.38
22	AY	9	A	C8-N7	-5.27	1.27	1.31
23	AW	47	U	C4-C5	-5.27	1.38	1.43
24	AX	21	C	C4-C5	5.27	1.47	1.43
26	AV	34	C	N3-C4	5.27	1.37	1.33
57	BB	268	C	N3-C4	5.27	1.37	1.33
57	BB	473	G	C2-N3	5.27	1.36	1.32
57	BB	619	G	C5-C6	-5.27	1.37	1.42
57	BB	1903	G	C4'-O4'	5.27	1.52	1.45
57	BB	2474	U	P-O5'	5.27	1.65	1.59
57	BB	2625	G	N1-C2	5.27	1.42	1.37
57	BB	2782	G	N1-C2	5.27	1.42	1.37
57	BB	2839	G	C6-N1	5.27	1.43	1.39
5	AN	57	SER	CB-OG	5.27	1.49	1.42
18	AG	59	GLU	CG-CD	5.27	1.59	1.51
21	AA	30	U	C3'-C2'	5.27	1.58	1.52
21	AA	217	C	C2-N3	5.27	1.40	1.35
21	AA	582	C	C2-N3	-5.27	1.31	1.35
21	AA	604	G	C6-N1	5.27	1.43	1.39
21	AA	705	G	C5-C4	5.27	1.42	1.38
21	AA	954	G	P-O5'	-5.27	1.54	1.59
21	AA	1473	G	C8-N7	-5.27	1.27	1.30
52	BD	30	GLU	CG-CD	5.27	1.59	1.51
56	BH	51	ARG	NE-CZ	5.27	1.39	1.33
57	BB	77	G	C2'-C1'	-5.27	1.47	1.53
57	BB	92	U	O3'-P	-5.27	1.54	1.61
57	BB	207	A	N1-C2	-5.27	1.29	1.34
57	BB	582	A	N3-C4	-5.27	1.31	1.34
57	BB	1423	G	C8-N7	-5.27	1.27	1.30
57	BB	1530	G	C5'-C4'	5.27	1.57	1.51
57	BB	1704	C	C4'-C3'	5.27	1.58	1.53
57	BB	2751	G	N9-C8	-5.27	1.34	1.37
57	BB	2864	G	C5-C4	5.27	1.42	1.38
57	BB	2877	G	C3'-C2'	5.27	1.58	1.52
57	BB	2903	U	C2'-C1'	-5.27	1.47	1.53
5	AN	8	ARG	NE-CZ	5.27	1.39	1.33
21	AA	117	G	C5-C6	-5.27	1.37	1.42
21	AA	313	A	C5'-C4'	5.27	1.57	1.51
21	AA	1381	U	N3-C4	5.27	1.43	1.38
22	AY	7	U	C4'-O4'	-5.27	1.38	1.45
57	BB	374	A	C3'-O3'	5.27	1.49	1.42
57	BB	433	C	C4'-C3'	5.27	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2623	G	O3'-P	-5.27	1.54	1.61
21	AA	568	G	C2'-O2'	-5.26	1.34	1.41
21	AA	583	A	C4'-O4'	-5.26	1.38	1.45
21	AA	816	A	P-O5'	-5.26	1.54	1.59
21	AA	894	G	C5-C4	-5.26	1.34	1.38
21	AA	1028	C	N3-C4	5.26	1.37	1.33
21	AA	1050	G	C8-N7	-5.26	1.27	1.30
21	AA	1119	C	N1-C2	5.26	1.45	1.40
21	AA	1187	G	N7-C5	-5.26	1.36	1.39
21	AA	1192	C	C2'-C1'	-5.26	1.47	1.53
22	AY	32	C	C3'-C2'	-5.26	1.47	1.52
57	BB	322	A	O3'-P	-5.26	1.54	1.61
57	BB	408	G	C2-N3	5.26	1.36	1.32
57	BB	1118	C	P-O5'	-5.26	1.54	1.59
57	BB	1549	A	C2-N3	5.26	1.38	1.33
57	BB	1761	C	N1-C6	5.26	1.40	1.37
57	BB	1875	G	C1'-N9	-5.26	1.39	1.46
57	BB	1907	G	C2'-O2'	-5.26	1.34	1.41
57	BB	2695	U	O3'-P	-5.26	1.54	1.61
15	AD	153	ARG	CZ-NH1	5.26	1.39	1.33
21	AA	846	G	C4'-C3'	5.26	1.58	1.53
26	AV	49	G	C5-C6	-5.26	1.37	1.42
57	BB	420	C	C4-N4	5.26	1.38	1.33
57	BB	1482	G	C3'-O3'	5.26	1.49	1.42
21	AA	429	U	C5-C6	5.26	1.38	1.34
21	AA	490	C	N3-C4	5.26	1.37	1.33
21	AA	785	G	N3-C4	5.26	1.39	1.35
21	AA	1401	G	O3'-P	-5.26	1.54	1.61
21	AA	1441	A	C6-N6	5.26	1.38	1.33
21	AA	1469	C	N3-C4	5.26	1.37	1.33
23	AW	72	C	C5'-C4'	5.26	1.57	1.51
25	AZ	344	PRO	N-CD	5.26	1.55	1.47
57	BB	227	A	N9-C4	-5.26	1.34	1.37
57	BB	626	A	C5'-C4'	5.26	1.57	1.51
57	BB	675	A	N7-C5	-5.26	1.36	1.39
57	BB	742	A	C5-C6	-5.26	1.36	1.41
57	BB	1300	G	N3-C4	-5.26	1.31	1.35
57	BB	2586	U	N3-C4	5.26	1.43	1.38
57	BB	2808	G	N7-C5	5.26	1.42	1.39
58	BA	16	G	C5-C4	5.26	1.42	1.38
21	AA	970	C	C5'-C4'	5.26	1.57	1.51
21	AA	1168	U	N3-C4	5.26	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1310	G	C3'-C2'	-5.26	1.47	1.52
21	AA	1389	C	P-O5'	-5.26	1.54	1.59
21	AA	1477	U	C3'-O3'	5.26	1.49	1.42
21	AA	1478	U	N3-C4	5.26	1.43	1.38
57	BB	299	A	O3'-P	5.26	1.67	1.61
57	BB	857	G	N9-C8	5.26	1.41	1.37
57	BB	2750	A	C2'-C1'	-5.26	1.47	1.53
57	BB	2868	A	N9-C4	5.26	1.41	1.37
21	AA	1222	G	O4'-C1'	5.26	1.48	1.41
26	AV	66	C	P-O5'	-5.26	1.54	1.59
57	BB	1141	U	N3-C4	5.26	1.43	1.38
57	BB	1563	U	C4-C5	5.26	1.48	1.43
57	BB	1898	U	N1-C2	-5.26	1.33	1.38
15	AD	164	ARG	CZ-NH2	5.26	1.39	1.33
21	AA	59	A	O3'-P	-5.26	1.54	1.61
21	AA	326	G	C4'-C3'	-5.26	1.47	1.52
21	AA	1370	G	O3'-P	5.26	1.67	1.61
21	AA	1480	A	C4'-C3'	5.26	1.58	1.53
57	BB	646	U	C2'-C1'	5.26	1.59	1.53
57	BB	1029	A	O4'-C1'	-5.26	1.34	1.41
57	BB	1585	C	N1-C2	-5.26	1.34	1.40
57	BB	1607	C	C5'-C4'	5.26	1.57	1.51
57	BB	1865	U	N1-C2	5.26	1.43	1.38
57	BB	2031	A	C5-C4	5.26	1.42	1.38
21	AA	994	A	C8-N7	-5.25	1.27	1.31
21	AA	1104	G	C5'-C4'	5.25	1.57	1.51
57	BB	384	A	C6-N6	5.25	1.38	1.33
21	AA	230	G	C5-C6	-5.25	1.37	1.42
21	AA	469	C	C2'-C1'	-5.25	1.47	1.53
21	AA	540	G	C6-N1	5.25	1.43	1.39
21	AA	718	A	C4'-C3'	5.25	1.58	1.53
21	AA	867	G	C3'-C2'	5.25	1.58	1.52
21	AA	968	A	P-O5'	-5.25	1.54	1.59
26	AV	55	U	O3'-P	-5.25	1.54	1.61
57	BB	35	G	N7-C5	5.25	1.42	1.39
57	BB	296	U	O3'-P	-5.25	1.54	1.61
57	BB	350	G	C8-N7	-5.25	1.27	1.30
57	BB	358	U	N1-C2	-5.25	1.33	1.38
57	BB	666	A	C8-N7	5.25	1.35	1.31
57	BB	830	G	C2'-O2'	-5.25	1.34	1.41
57	BB	962	G	C5'-C4'	5.25	1.57	1.51
57	BB	1344	U	N3-C4	5.25	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1727	C	C4'-C3'	-5.25	1.47	1.52
57	BB	1909	C	C4-N4	5.25	1.38	1.33
57	BB	2247	A	N9-C8	-5.25	1.33	1.37
57	BB	2551	C	C5-C6	5.25	1.38	1.34
21	AA	211	G	O4'-C1'	-5.25	1.34	1.41
21	AA	333	U	O5'-C5'	-5.25	1.34	1.42
21	AA	744	C	N1-C2	5.25	1.45	1.40
21	AA	1524	C	C4'-C3'	-5.25	1.47	1.52
26	AV	27	U	N3-C4	5.25	1.43	1.38
57	BB	249	C	N1-C6	5.25	1.40	1.37
57	BB	446	G	C2-N3	5.25	1.36	1.32
57	BB	451	U	O3'-P	-5.25	1.54	1.61
57	BB	1022	G	C2'-C1'	-5.25	1.47	1.53
57	BB	1047	G	C5-C6	-5.25	1.37	1.42
57	BB	1522	A	N3-C4	-5.25	1.31	1.34
57	BB	2790	U	O4'-C1'	5.25	1.48	1.41
57	BB	2812	G	N9-C4	5.25	1.42	1.38
21	AA	860	A	C6-N6	5.25	1.38	1.33
21	AA	1114	C	O4'-C1'	-5.25	1.34	1.41
21	AA	1252	A	C3'-O3'	5.25	1.49	1.42
21	AA	1398	A	C8-N7	5.25	1.35	1.31
57	BB	1105	U	C4-C5	5.25	1.48	1.43
57	BB	1524	G	C5-C4	-5.25	1.34	1.38
57	BB	2454	G	C8-N7	-5.25	1.27	1.30
21	AA	248	C	N1-C6	5.25	1.40	1.37
21	AA	420	U	O3'-P	-5.25	1.54	1.61
21	AA	468	A	C3'-O3'	5.25	1.49	1.42
21	AA	502	A	C2'-C1'	-5.25	1.47	1.53
21	AA	839	C	C2'-C1'	-5.25	1.47	1.53
52	BD	79	LEU	CA-C	-5.25	1.39	1.52
55	BG	80	GLU	CD-OE2	5.25	1.31	1.25
57	BB	54	G	C5-C6	-5.25	1.37	1.42
57	BB	386	G	C4'-C3'	5.25	1.58	1.53
57	BB	719	C	C2-N3	5.25	1.40	1.35
57	BB	835	C	N1-C6	-5.25	1.34	1.37
57	BB	1028	A	N9-C4	-5.25	1.34	1.37
57	BB	1228	G	C6-N1	5.25	1.43	1.39
57	BB	2137	U	O3'-P	-5.25	1.54	1.61
57	BB	2190	G	C6-O6	-5.25	1.19	1.24
21	AA	331	G	C2'-C1'	-5.25	1.47	1.53
21	AA	442	G	C3'-O3'	5.25	1.49	1.42
21	AA	613	C	O3'-P	5.25	1.67	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1236	A	C8-N7	-5.25	1.27	1.31
21	AA	1423	G	C2'-C1'	-5.25	1.47	1.53
53	BE	92	HIS	CB-CG	5.25	1.59	1.50
57	BB	627	A	C6-N6	5.25	1.38	1.33
57	BB	817	C	C4'-C3'	5.25	1.58	1.53
57	BB	1140	C	N1-C6	5.25	1.40	1.37
57	BB	1277	G	N3-C4	5.25	1.39	1.35
57	BB	1715	G	C2'-C1'	-5.25	1.47	1.53
57	BB	1781	U	C4-O4	-5.25	1.19	1.23
57	BB	1793	C	C2'-C1'	-5.25	1.47	1.53
57	BB	1871	A	C2-N3	5.25	1.38	1.33
57	BB	1900	A	C5-C4	5.25	1.42	1.38
57	BB	2065	C	N1-C2	-5.25	1.34	1.40
57	BB	2287	A	C6-N6	5.25	1.38	1.33
13	AB	62	ARG	NE-CZ	5.25	1.39	1.33
14	AC	157	GLY	N-CA	-5.25	1.38	1.46
21	AA	257	G	C5-C4	-5.25	1.34	1.38
21	AA	626	G	C2-N3	5.25	1.36	1.32
21	AA	1038	C	C2'-C1'	5.25	1.59	1.53
21	AA	1438	G	O3'-P	-5.25	1.54	1.61
57	BB	132	G	C5-C4	5.25	1.42	1.38
6	AO	57	ARG	NE-CZ	5.24	1.39	1.33
19	AH	59	GLU	CG-CD	5.24	1.59	1.51
21	AA	194	C	C2-N3	-5.24	1.31	1.35
21	AA	324	G	C2-N3	5.24	1.36	1.32
21	AA	827	U	N3-C4	5.24	1.43	1.38
22	AY	10	G	C5'-C4'	-5.24	1.45	1.51
36	BQ	27	ARG	CD-NE	5.24	1.55	1.46
57	BB	262	A	P-O5'	-5.24	1.54	1.59
57	BB	419	U	N3-C4	5.24	1.43	1.38
57	BB	439	A	N9-C8	-5.24	1.33	1.37
57	BB	633	A	P-O5'	-5.24	1.54	1.59
57	BB	719	C	P-O5'	-5.24	1.54	1.59
57	BB	782	A	N7-C5	-5.24	1.36	1.39
57	BB	831	G	C5-C4	-5.24	1.34	1.38
57	BB	845	A	C3'-C2'	5.24	1.58	1.52
57	BB	891	G	C6-N1	5.24	1.43	1.39
57	BB	1571	A	C2-N3	-5.24	1.28	1.33
21	AA	5	U	P-O5'	5.24	1.65	1.59
21	AA	545	C	C1'-N1	5.24	1.56	1.48
23	AW	58	A	P-O5'	5.24	1.65	1.59
57	BB	983	A	N9-C8	-5.24	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1192	G	C6-N1	5.24	1.43	1.39
57	BB	1538	G	C2-N2	5.24	1.39	1.34
57	BB	1572	A	C3'-C2'	5.24	1.58	1.52
21	AA	33	A	N3-C4	-5.24	1.31	1.34
21	AA	79	G	C4'-C3'	5.24	1.58	1.53
21	AA	217	C	C5'-C4'	5.24	1.57	1.51
21	AA	348	G	C2-N3	5.24	1.36	1.32
21	AA	614	C	C2-N3	5.24	1.40	1.35
21	AA	753	A	C8-N7	5.24	1.35	1.31
21	AA	1075	U	C4-O4	-5.24	1.19	1.23
21	AA	1124	G	C5-C6	-5.24	1.37	1.42
23	AW	76	A	N9-C4	-5.24	1.34	1.37
36	BQ	57	ARG	CZ-NH1	5.24	1.39	1.33
57	BB	291	G	C5-C4	5.24	1.42	1.38
57	BB	1627	G	C5'-C4'	5.24	1.57	1.51
57	BB	1858	A	C8-N7	-5.24	1.27	1.31
57	BB	2174	C	C5'-C4'	5.24	1.57	1.51
57	BB	2295	C	C1'-N1	5.24	1.56	1.48
57	BB	2891	U	C2'-C1'	-5.24	1.47	1.53
58	BA	96	G	C2'-C1'	-5.24	1.47	1.53
21	AA	193	C	C2'-C1'	-5.24	1.47	1.53
21	AA	1030	U	C5-C6	5.24	1.38	1.34
22	AY	11	C	C4-N4	5.24	1.38	1.33
23	AW	8	U	C5-C6	-5.24	1.29	1.34
57	BB	77	G	C5'-C4'	5.24	1.57	1.51
57	BB	1737	G	O4'-C1'	-5.24	1.34	1.41
57	BB	2124	G	C3'-C2'	-5.24	1.47	1.52
57	BB	2359	C	C4-C5	5.24	1.47	1.43
57	BB	2535	G	C5'-C4'	5.24	1.57	1.51
57	BB	2579	C	C2'-C1'	-5.24	1.47	1.53
21	AA	294	U	C2-N3	5.24	1.41	1.37
21	AA	1316	G	N7-C5	-5.24	1.36	1.39
57	BB	375	G	C2-N3	5.24	1.36	1.32
57	BB	409	G	C8-N7	5.24	1.34	1.30
57	BB	415	A	C5-C4	5.24	1.42	1.38
57	BB	959	A	C6-N1	5.24	1.39	1.35
15	AD	3	TYR	CB-CG	-5.24	1.43	1.51
21	AA	90	C	C4-N4	5.24	1.38	1.33
21	AA	262	A	C3'-C2'	-5.24	1.47	1.52
21	AA	983	A	C2'-C1'	-5.24	1.47	1.53
32	BM	44	ARG	NE-CZ	5.24	1.39	1.33
57	BB	178	G	C2'-C1'	-5.24	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1103	A	N9-C8	5.24	1.42	1.37
57	BB	1725	U	N1-C6	5.24	1.42	1.38
57	BB	1753	G	N7-C5	5.24	1.42	1.39
57	BB	2405	G	O4'-C1'	-5.24	1.34	1.41
57	BB	2482	A	C2'-O2'	5.24	1.48	1.41
21	AA	380	G	C5'-C4'	5.23	1.57	1.51
21	AA	460	A	N9-C8	5.23	1.42	1.37
21	AA	952	U	C2'-C1'	-5.23	1.47	1.53
21	AA	980	C	C4-N4	5.23	1.38	1.33
21	AA	1204	A	C6-N6	-5.23	1.29	1.33
21	AA	1311	A	C2'-C1'	-5.23	1.47	1.53
26	AV	38	A	N9-C8	5.23	1.42	1.37
57	BB	715	A	P-O5'	5.23	1.65	1.59
57	BB	797	G	C8-N7	-5.23	1.27	1.30
57	BB	816	C	N3-C4	5.23	1.37	1.33
57	BB	1929	G	N1-C2	5.23	1.42	1.37
57	BB	2587	A	C4'-C3'	5.23	1.58	1.53
57	BB	2822	G	C2-N3	5.23	1.36	1.32
20	AI	88	GLU	CD-OE2	5.23	1.31	1.25
21	AA	709	U	C5'-C4'	5.23	1.57	1.51
21	AA	1004	A	C6-N6	5.23	1.38	1.33
21	AA	1482	G	N9-C8	-5.23	1.34	1.37
57	BB	256	A	C3'-C2'	-5.23	1.47	1.52
57	BB	484	C	C2'-O2'	5.23	1.48	1.41
57	BB	650	C	C5-C6	-5.23	1.30	1.34
57	BB	999	U	C3'-C2'	5.23	1.58	1.52
57	BB	1419	A	N9-C8	-5.23	1.33	1.37
57	BB	1437	C	O3'-P	-5.23	1.54	1.61
57	BB	1518	C	N3-C4	5.23	1.37	1.33
57	BB	2256	G	C6-N1	5.23	1.43	1.39
57	BB	2348	U	C5-C6	5.23	1.38	1.34
57	BB	2615	U	C4'-O4'	5.23	1.52	1.45
57	BB	2777	G	C3'-C2'	-5.23	1.47	1.52
58	BA	96	G	C2'-O2'	5.23	1.48	1.41
16	AE	156	ARG	CD-NE	5.23	1.55	1.46
21	AA	212	G	C5'-C4'	5.23	1.57	1.51
21	AA	364	A	C1'-N9	5.23	1.56	1.48
21	AA	422	C	O3'-P	-5.23	1.54	1.61
21	AA	1215	G	C2-N3	5.23	1.36	1.32
57	BB	212	G	C5-C4	5.23	1.42	1.38
57	BB	348	A	N9-C4	5.23	1.41	1.37
57	BB	363	G	P-O5'	-5.23	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	503	A	C6-N6	5.23	1.38	1.33
57	BB	519	U	C4'-O4'	5.23	1.52	1.45
57	BB	2362	C	C2-O2	5.23	1.29	1.24
57	BB	2696	U	N3-C4	5.23	1.43	1.38
58	BA	111	U	C2-O2	5.23	1.27	1.22
57	BB	451	U	N1-C2	5.23	1.43	1.38
57	BB	1091	G	C5'-C4'	5.23	1.57	1.51
57	BB	1149	G	C2'-C1'	-5.23	1.47	1.53
57	BB	2063	C	C3'-C2'	-5.23	1.47	1.52
57	BB	2260	C	P-O5'	-5.23	1.54	1.59
57	BB	2302	U	C4'-C3'	5.23	1.58	1.53
57	BB	2460	U	N1-C6	5.23	1.42	1.38
57	BB	2732	G	N9-C4	-5.23	1.33	1.38
13	AB	183	PHE	CG-CD2	5.23	1.46	1.38
21	AA	62	U	O3'-P	-5.23	1.54	1.61
21	AA	155	A	C6-N6	5.23	1.38	1.33
21	AA	953	G	C2'-C1'	-5.23	1.47	1.53
21	AA	1200	C	C2-N3	5.23	1.40	1.35
21	AA	1426	G	C2'-C1'	-5.23	1.47	1.53
22	AY	2	C	C2'-C1'	-5.23	1.47	1.53
57	BB	993	G	C8-N7	5.23	1.34	1.30
57	BB	1134	A	C5-C4	5.23	1.42	1.38
57	BB	1335	C	C2'-C1'	-5.23	1.47	1.53
57	BB	1613	G	C3'-C2'	5.23	1.58	1.52
57	BB	1821	A	C2'-C1'	-5.23	1.47	1.53
57	BB	2056	G	N1-C2	5.23	1.42	1.37
57	BB	2637	U	C2-N3	5.23	1.41	1.37
57	BB	2664	G	P-O5'	-5.23	1.54	1.59
57	BB	2770	G	C3'-O3'	5.23	1.49	1.42
14	AC	130	ARG	CZ-NH2	5.23	1.39	1.33
21	AA	435	A	C6-N1	5.23	1.39	1.35
43	BX	10	ARG	CD-NE	5.23	1.55	1.46
57	BB	21	A	C8-N7	-5.23	1.27	1.31
57	BB	74	A	C3'-O3'	5.23	1.49	1.42
57	BB	116	C	C4'-C3'	5.23	1.58	1.53
57	BB	272	A	C2'-C1'	-5.23	1.47	1.53
57	BB	1570	A	N3-C4	-5.23	1.31	1.34
21	AA	833	G	C5-C6	-5.22	1.37	1.42
21	AA	938	A	O5'-C5'	5.22	1.52	1.44
22	AY	8	U	N1-C2	5.22	1.43	1.38
22	AY	56	C	C5'-C4'	5.22	1.57	1.51
57	BB	274	C	C5-C6	-5.22	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	553	G	N7-C5	-5.22	1.36	1.39
57	BB	1341	G	C2'-C1'	-5.22	1.47	1.53
57	BB	1346	G	C4'-O4'	5.22	1.52	1.45
57	BB	2138	G	C6-N1	5.22	1.43	1.39
57	BB	2716	C	C4-N4	5.22	1.38	1.33
21	AA	32	A	N7-C5	-5.22	1.36	1.39
21	AA	343	U	C5-C6	-5.22	1.29	1.34
21	AA	706	A	P-O5'	-5.22	1.54	1.59
21	AA	1310	G	N9-C8	5.22	1.41	1.37
22	AY	53	G	O5'-C5'	5.22	1.52	1.44
34	BO	10	ARG	CD-NE	5.22	1.55	1.46
42	BW	44	PHE	CG-CD1	5.22	1.46	1.38
57	BB	274	C	C2-O2	5.22	1.29	1.24
57	BB	381	G	O4'-C1'	-5.22	1.34	1.41
57	BB	430	A	C5'-C4'	5.22	1.57	1.51
57	BB	855	G	N7-C5	-5.22	1.36	1.39
57	BB	1188	U	C4'-O4'	5.22	1.52	1.45
57	BB	1335	C	O3'-P	-5.22	1.54	1.61
57	BB	1953	A	N7-C5	-5.22	1.36	1.39
57	BB	2268	A	P-O5'	-5.22	1.54	1.59
21	AA	174	A	C5-C6	5.22	1.45	1.41
21	AA	861	G	C6-O6	5.22	1.28	1.24
21	AA	1215	G	P-O5'	-5.22	1.54	1.59
57	BB	243	U	C4-O4	-5.22	1.19	1.23
57	BB	811	U	C4'-O4'	5.22	1.52	1.45
57	BB	1692	U	C2'-C1'	-5.22	1.47	1.53
57	BB	1854	A	N3-C4	-5.22	1.31	1.34
57	BB	1967	C	C5'-C4'	5.22	1.57	1.51
21	AA	379	C	C2-N3	5.22	1.40	1.35
21	AA	408	A	O3'-P	-5.22	1.54	1.61
21	AA	447	G	C1'-N9	-5.22	1.39	1.46
21	AA	533	A	C5'-C4'	5.22	1.57	1.51
21	AA	603	U	N1-C2	5.22	1.43	1.38
21	AA	799	G	N1-C2	5.22	1.42	1.37
21	AA	819	A	C3'-C2'	5.22	1.58	1.52
21	AA	1187	G	C2'-C1'	5.22	1.59	1.53
21	AA	1401	G	C5-C6	-5.22	1.37	1.42
23	AW	37	A	N1-C2	5.22	1.39	1.34
23	AW	71	G	P-O5'	-5.22	1.54	1.59
57	BB	206	U	O3'-P	-5.22	1.54	1.61
57	BB	582	A	C4'-O4'	5.22	1.52	1.45
57	BB	989	G	N3-C4	-5.22	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1220	G	C6-N1	5.22	1.43	1.39
57	BB	1257	C	C2-O2	-5.22	1.19	1.24
57	BB	1857	G	C4'-C3'	5.22	1.58	1.53
57	BB	2796	U	N1-C6	-5.22	1.33	1.38
36	BQ	24	TYR	CZ-OH	5.22	1.46	1.37
57	BB	1080	A	P-O5'	-5.22	1.54	1.59
57	BB	1082	U	O3'-P	-5.22	1.54	1.61
57	BB	2591	C	C5-C6	-5.22	1.30	1.34
57	BB	2631	G	C2'-C1'	-5.22	1.47	1.53
57	BB	2820	A	C8-N7	-5.22	1.27	1.31
4	AM	82	LEU	N-CA	-5.22	1.35	1.46
18	AG	142	ARG	CD-NE	5.22	1.55	1.46
21	AA	211	G	C4'-C3'	5.22	1.58	1.53
21	AA	618	C	P-O5'	5.22	1.65	1.59
21	AA	935	A	O3'-P	-5.22	1.54	1.61
21	AA	1533	C	O4'-C1'	-5.22	1.34	1.41
39	BT	89	GLU	C-N	5.22	1.42	1.33
57	BB	356	G	C2'-O2'	5.22	1.48	1.41
57	BB	373	U	C4-O4	5.22	1.27	1.23
57	BB	523	C	N1-C6	5.22	1.40	1.37
57	BB	771	G	C1'-N9	-5.22	1.39	1.46
57	BB	831	G	N3-C4	5.22	1.39	1.35
57	BB	913	U	O4'-C1'	5.22	1.48	1.41
57	BB	999	U	P-O5'	-5.22	1.54	1.59
57	BB	1727	C	C3'-C2'	5.22	1.58	1.52
57	BB	1759	A	N3-C4	5.22	1.38	1.34
57	BB	2019	A	C8-N7	-5.22	1.27	1.31
57	BB	2207	C	C4'-O4'	5.22	1.52	1.45
57	BB	2527	C	C3'-O3'	5.22	1.49	1.42
21	AA	785	G	P-O5'	5.21	1.65	1.59
53	BE	170	ARG	CZ-NH2	5.21	1.39	1.33
57	BB	27	G	C2'-C1'	-5.21	1.47	1.53
57	BB	832	U	C5'-C4'	5.21	1.57	1.51
57	BB	1724	G	P-O5'	-5.21	1.54	1.59
57	BB	1981	A	C4'-C3'	5.21	1.58	1.53
57	BB	2363	G	O3'-P	-5.21	1.54	1.61
57	BB	2843	G	C6-N1	-5.21	1.35	1.39
21	AA	1391	U	C4-C5	-5.21	1.38	1.43
21	AA	1423	G	N1-C2	5.21	1.42	1.37
24	AX	16	A	C5'-C4'	5.21	1.57	1.51
57	BB	1203	U	C2-O2	5.21	1.27	1.22
57	BB	1245	G	C6-N1	5.21	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
2	AK	43	TRP	CA-CB	5.21	1.65	1.53
21	AA	25	C	C4'-C3'	5.21	1.58	1.53
21	AA	449	G	N9-C4	-5.21	1.33	1.38
21	AA	535	A	C5-C6	-5.21	1.36	1.41
57	BB	19	A	C5-C4	5.21	1.42	1.38
57	BB	238	C	C2'-C1'	-5.21	1.47	1.53
57	BB	675	A	N9-C4	5.21	1.41	1.37
57	BB	765	C	C1'-N1	5.21	1.56	1.48
57	BB	1356	G	N3-C4	-5.21	1.31	1.35
57	BB	2263	C	O5'-C5'	5.21	1.52	1.44
58	BA	114	C	N1-C6	-5.21	1.34	1.37
21	AA	1012	A	C3'-C2'	5.21	1.58	1.52
21	AA	1464	U	C3'-O3'	5.21	1.49	1.42
57	BB	1823	G	C1'-N9	5.21	1.56	1.48
57	BB	2482	A	C6-N1	5.21	1.39	1.35
6	AO	77	TYR	CG-CD2	5.21	1.46	1.39
21	AA	62	U	C4'-O4'	-5.21	1.38	1.45
21	AA	154	U	C2'-O2'	-5.21	1.34	1.41
21	AA	586	C	C5-C6	5.21	1.38	1.34
21	AA	590	U	P-O5'	-5.21	1.54	1.59
21	AA	802	A	C2'-C1'	-5.21	1.47	1.53
21	AA	1186	G	C2-N3	-5.21	1.28	1.32
23	AW	28	G	N3-C4	-5.21	1.31	1.35
26	AV	18	G	O3'-P	-5.21	1.54	1.61
57	BB	119	A	N3-C4	5.21	1.38	1.34
57	BB	316	C	C2'-C1'	-5.21	1.47	1.53
57	BB	738	G	C6-O6	-5.21	1.19	1.24
57	BB	869	G	N9-C8	-5.21	1.34	1.37
57	BB	1009	A	C6-N6	5.21	1.38	1.33
57	BB	1177	G	C4'-C3'	-5.21	1.47	1.52
57	BB	1408	G	C3'-C2'	-5.21	1.47	1.52
57	BB	2066	C	N1-C6	-5.21	1.34	1.37
57	BB	2770	G	P-O5'	-5.21	1.54	1.59
57	BB	2881	U	N1-C6	-5.21	1.33	1.38
7	AP	31	ARG	NE-CZ	5.21	1.39	1.33
19	AH	113	ARG	CZ-NH1	5.21	1.39	1.33
21	AA	509	A	C5-C6	5.21	1.45	1.41
21	AA	1214	C	C2-N3	-5.21	1.31	1.35
21	AA	1280	A	N1-C2	5.21	1.39	1.34
57	BB	240	C	N1-C6	5.21	1.40	1.37
57	BB	468	G	C4'-C3'	-5.21	1.47	1.52
57	BB	863	A	C5-C6	-5.21	1.36	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	969	G	N3-C4	-5.21	1.31	1.35
57	BB	977	G	C5-C6	-5.21	1.37	1.42
57	BB	1276	A	N1-C2	5.21	1.39	1.34
57	BB	1395	A	C4'-O4'	-5.21	1.38	1.45
57	BB	1603	A	C6-N1	-5.21	1.31	1.35
57	BB	1821	A	N9-C4	-5.21	1.34	1.37
57	BB	2234	G	N9-C8	-5.21	1.34	1.37
57	BB	2252	G	C6-N1	5.21	1.43	1.39
57	BB	2754	U	C4-O4	-5.21	1.19	1.23
21	AA	1009	U	C2-N3	5.21	1.41	1.37
36	BQ	91	ARG	NE-CZ	5.21	1.39	1.33
57	BB	2056	G	N9-C8	5.21	1.41	1.37
57	BB	2091	C	N3-C4	5.21	1.37	1.33
57	BB	2537	U	P-O5'	-5.21	1.54	1.59
21	AA	711	G	C5-C4	-5.20	1.34	1.38
22	AY	67	A	C3'-C2'	5.20	1.58	1.52
23	AW	65	G	C5-C4	-5.20	1.34	1.38
26	AV	9	G	O4'-C1'	-5.20	1.34	1.41
57	BB	1183	U	O4'-C1'	5.20	1.48	1.41
57	BB	1403	A	N9-C4	5.20	1.41	1.37
57	BB	2498	C	C2'-C1'	-5.20	1.47	1.53
57	BB	2869	G	C2'-C1'	-5.20	1.47	1.53
21	AA	191	G	C1'-N9	5.20	1.56	1.48
26	AV	58	A	N3-C4	-5.20	1.31	1.34
36	BQ	32	ARG	CZ-NH1	5.20	1.39	1.33
57	BB	79	C	C2'-O2'	-5.20	1.34	1.41
57	BB	217	A	N1-C2	5.20	1.39	1.34
57	BB	1895	C	C4'-O4'	-5.20	1.38	1.45
21	AA	335	C	P-O5'	-5.20	1.54	1.59
21	AA	463	U	C2-N3	5.20	1.41	1.37
21	AA	570	G	C2-N3	5.20	1.36	1.32
21	AA	830	G	N7-C5	-5.20	1.36	1.39
21	AA	943	U	C4'-C3'	5.20	1.58	1.53
21	AA	1177	G	C5'-C4'	5.20	1.57	1.51
26	AV	59	A	C2'-C1'	-5.20	1.47	1.53
57	BB	796	C	N3-C4	5.20	1.37	1.33
57	BB	1248	G	C5'-C4'	5.20	1.57	1.51
57	BB	1619	G	N9-C8	5.20	1.41	1.37
57	BB	2800	A	C4'-C3'	5.20	1.58	1.53
21	AA	377	G	C5-C4	-5.20	1.34	1.38
21	AA	475	C	N3-C4	5.20	1.37	1.33
21	AA	482	A	C4'-C3'	5.20	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	521	G	C2-N3	5.20	1.36	1.32
21	AA	851	G	C2'-C1'	-5.20	1.47	1.53
21	AA	1491	G	C2-N2	-5.20	1.29	1.34
57	BB	79	C	C1'-N1	5.20	1.56	1.48
57	BB	202	U	C5'-C4'	5.20	1.57	1.51
57	BB	1448	G	C4'-C3'	-5.20	1.47	1.52
57	BB	1836	C	C2'-C1'	-5.20	1.47	1.53
57	BB	2034	U	C2-N3	5.20	1.41	1.37
57	BB	2592	G	C6-N1	5.20	1.43	1.39
57	BB	2603	G	C6-N1	5.20	1.43	1.39
21	AA	1305	G	C1'-N9	-5.20	1.39	1.46
57	BB	46	G	N3-C4	-5.20	1.31	1.35
57	BB	285	G	C4'-O4'	-5.20	1.38	1.45
57	BB	486	C	O3'-P	-5.20	1.54	1.61
57	BB	782	A	N9-C4	5.20	1.41	1.37
57	BB	1300	G	O3'-P	-5.20	1.54	1.61
57	BB	1388	G	N1-C2	5.20	1.42	1.37
57	BB	2239	G	C3'-O3'	5.20	1.49	1.42
57	BB	2702	G	C8-N7	5.20	1.34	1.30
21	AA	64	G	C5-C6	-5.20	1.37	1.42
21	AA	309	A	C5'-C4'	5.20	1.57	1.51
21	AA	560	A	C5-C4	-5.20	1.35	1.38
21	AA	930	C	N1-C2	5.20	1.45	1.40
23	AW	42	C	C3'-C2'	5.20	1.58	1.52
57	BB	255	A	N7-C5	-5.20	1.36	1.39
57	BB	2833	U	N1-C2	5.20	1.43	1.38
21	AA	467	U	N1-C2	5.19	1.43	1.38
21	AA	1005	A	O3'-P	-5.19	1.54	1.61
21	AA	1259	C	N1-C6	5.19	1.40	1.37
26	AV	71	C	C2-N3	5.19	1.40	1.35
57	BB	1246	A	C6-N6	5.19	1.38	1.33
57	BB	1331	G	C6-O6	-5.19	1.19	1.24
21	AA	169	C	N1-C6	5.19	1.40	1.37
21	AA	371	A	N3-C4	-5.19	1.31	1.34
21	AA	915	A	C6-N1	5.19	1.39	1.35
21	AA	996	A	C8-N7	-5.19	1.27	1.31
21	AA	1344	C	P-O5'	-5.19	1.54	1.59
21	AA	1454	G	N9-C4	-5.19	1.33	1.38
57	BB	234	U	C2'-C1'	-5.19	1.47	1.53
57	BB	741	U	C2-N3	5.19	1.41	1.37
57	BB	798	G	C3'-O3'	5.19	1.49	1.42
57	BB	826	U	P-O5'	-5.19	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1006	C	N1-C6	5.19	1.40	1.37
57	BB	1646	C	C3'-O3'	-5.19	1.34	1.42
57	BB	1648	U	N3-C4	5.19	1.43	1.38
57	BB	2069	G	C2'-C1'	-5.19	1.47	1.53
57	BB	2108	A	P-O5'	-5.19	1.54	1.59
57	BB	2308	G	O3'-P	-5.19	1.54	1.61
57	BB	2529	G	C2-N3	5.19	1.36	1.32
57	BB	2863	C	C4'-O4'	-5.19	1.38	1.45
58	BA	74	U	C4'-C3'	5.19	1.58	1.53
5	AN	33	VAL	CA-CB	-5.19	1.43	1.54
21	AA	86	G	C6-N1	5.19	1.43	1.39
21	AA	925	G	C2-N2	5.19	1.39	1.34
21	AA	1093	A	C6-N1	5.19	1.39	1.35
49	B2	33	ARG	NE-CZ	5.19	1.39	1.33
57	BB	468	G	O5'-C5'	-5.19	1.34	1.42
57	BB	859	G	C6-N1	5.19	1.43	1.39
57	BB	1603	A	N7-C5	-5.19	1.36	1.39
57	BB	1640	A	C8-N7	-5.19	1.27	1.31
57	BB	1853	A	C4'-O4'	5.19	1.52	1.45
57	BB	1947	C	C2'-C1'	-5.19	1.47	1.53
57	BB	2187	U	N3-C4	5.19	1.43	1.38
57	BB	2325	G	N9-C4	5.19	1.42	1.38
21	AA	133	U	C2-O2	5.19	1.27	1.22
21	AA	573	A	C3'-C2'	5.19	1.58	1.52
57	BB	141	G	N3-C4	5.19	1.39	1.35
57	BB	271	G	N1-C2	5.19	1.42	1.37
57	BB	555	G	N7-C5	-5.19	1.36	1.39
57	BB	668	A	C4'-O4'	-5.19	1.38	1.45
57	BB	1240	U	N1-C6	-5.19	1.33	1.38
58	BA	104	A	N7-C5	-5.19	1.36	1.39
21	AA	235	C	C5-C6	-5.19	1.30	1.34
21	AA	339	C	N1-C6	5.19	1.40	1.37
21	AA	451	A	O4'-C1'	5.19	1.48	1.41
21	AA	496	A	C6-N6	5.19	1.38	1.33
21	AA	857	C	C5'-C4'	5.19	1.57	1.51
21	AA	1437	A	C5'-C4'	5.19	1.57	1.51
57	BB	97	C	C2-N3	5.19	1.39	1.35
57	BB	170	U	N3-C4	5.19	1.43	1.38
57	BB	532	A	P-O5'	-5.19	1.54	1.59
57	BB	799	G	P-O5'	-5.19	1.54	1.59
57	BB	1108	U	C2'-C1'	-5.19	1.47	1.53
57	BB	2500	U	N1-C2	5.19	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2701	U	P-O5'	-5.19	1.54	1.59
57	BB	2718	G	P-O5'	-5.19	1.54	1.59
23	AW	15	G	O3'-P	-5.19	1.54	1.61
57	BB	816	C	N1-C2	-5.19	1.34	1.40
57	BB	1079	C	C2-N3	-5.19	1.31	1.35
57	BB	1984	G	C2-N3	5.19	1.36	1.32
21	AA	33	A	P-O5'	-5.18	1.54	1.59
21	AA	1068	G	N1-C2	5.18	1.41	1.37
57	BB	590	A	C5-C4	-5.18	1.35	1.38
57	BB	1109	C	C2-O2	5.18	1.29	1.24
57	BB	1218	G	N1-C2	5.18	1.41	1.37
57	BB	1715	G	O4'-C1'	5.18	1.48	1.41
57	BB	2437	G	C3'-O3'	5.18	1.49	1.42
21	AA	39	G	C2'-C1'	-5.18	1.47	1.53
21	AA	448	A	C6-N6	5.18	1.38	1.33
21	AA	491	G	C3'-O3'	5.18	1.49	1.42
21	AA	966	G	N7-C5	-5.18	1.36	1.39
22	AY	8	U	O4'-C1'	5.18	1.48	1.41
22	AY	41	U	C4'-C3'	-5.18	1.47	1.52
53	BE	102	ARG	NE-CZ	5.18	1.39	1.33
57	BB	437	U	C2'-C1'	-5.18	1.47	1.53
57	BB	689	A	C5-C4	5.18	1.42	1.38
57	BB	727	A	N3-C4	5.18	1.38	1.34
57	BB	1781	U	C5-C6	5.18	1.38	1.34
57	BB	2075	U	O3'-P	-5.18	1.54	1.61
57	BB	2786	U	C2'-C1'	-5.18	1.47	1.53
21	AA	187	G	C8-N7	-5.18	1.27	1.30
21	AA	1497	G	C5'-C4'	5.18	1.57	1.51
57	BB	336	C	N1-C2	5.18	1.45	1.40
57	BB	2272	U	C4-O4	5.18	1.27	1.23
2	AK	97	ARG	CZ-NH1	5.18	1.39	1.33
18	AG	9	ARG	CD-NE	5.18	1.55	1.46
26	AV	17(A)	U	O3'-P	-5.18	1.54	1.61
36	BQ	49	ARG	CZ-NH1	5.18	1.39	1.33
57	BB	278	A	C2'-O2'	-5.18	1.34	1.41
57	BB	291	G	N7-C5	-5.18	1.36	1.39
57	BB	472	A	C2'-C1'	-5.18	1.47	1.53
57	BB	496	G	N1-C2	5.18	1.41	1.37
57	BB	1084	A	N3-C4	5.18	1.38	1.34
57	BB	1102	C	C4-C5	-5.18	1.38	1.43
57	BB	1626	A	N3-C4	-5.18	1.31	1.34
57	BB	1969	A	N9-C8	-5.18	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2113	U	C4'-C3'	5.18	1.58	1.53
57	BB	2162	G	C2'-C1'	-5.18	1.47	1.53
57	BB	2895	G	N1-C2	5.18	1.41	1.37
21	AA	127	G	N7-C5	5.18	1.42	1.39
57	BB	295	G	C3'-O3'	-5.18	1.34	1.42
57	BB	600	G	C2'-O2'	-5.18	1.34	1.41
57	BB	1695	G	C6-N1	-5.18	1.35	1.39
57	BB	2447	G	C5-C6	-5.18	1.37	1.42
57	BB	2458	G	C8-N7	-5.18	1.27	1.30
57	BB	2883	A	C3'-C2'	5.18	1.58	1.52
1	AJ	7	ARG	NE-CZ	5.18	1.39	1.33
21	AA	413	G	C2-N2	5.18	1.39	1.34
21	AA	1375	A	N9-C4	5.18	1.41	1.37
21	AA	1496	C	O3'-P	-5.18	1.54	1.61
25	AZ	381	ARG	CZ-NH2	5.18	1.39	1.33
57	BB	79	C	C4'-C3'	5.18	1.58	1.53
57	BB	693	A	C5-C4	5.18	1.42	1.38
57	BB	747	U	P-O5'	-5.18	1.54	1.59
57	BB	1280	G	C2-N2	5.18	1.39	1.34
57	BB	1434	A	C4'-C3'	-5.18	1.47	1.52
57	BB	1618	A	N7-C5	-5.18	1.36	1.39
57	BB	2073	C	C4-N4	5.18	1.38	1.33
57	BB	2606	C	N3-C4	5.18	1.37	1.33
57	BB	2659	G	O3'-P	-5.18	1.54	1.61
57	BB	2737	G	C6-N1	5.18	1.43	1.39
57	BB	2782	G	N9-C8	5.18	1.41	1.37
57	BB	2811	G	C2'-C1'	-5.18	1.47	1.53
21	AA	561	U	P-O5'	5.17	1.65	1.59
22	AY	65	G	C6-N1	5.17	1.43	1.39
23	AW	24	G	C6-N1	5.17	1.43	1.39
57	BB	130	C	C4-C5	-5.17	1.38	1.43
57	BB	312	G	N3-C4	5.17	1.39	1.35
57	BB	849	A	N9-C8	-5.17	1.33	1.37
57	BB	1528	A	C8-N7	-5.17	1.27	1.31
57	BB	1797	G	C1'-N9	5.17	1.56	1.48
57	BB	1815	A	C4'-O4'	5.17	1.52	1.45
57	BB	2010	G	N7-C5	-5.17	1.36	1.39
57	BB	2279	G	C6-N1	5.17	1.43	1.39
57	BB	2302	U	C2-O2	5.17	1.27	1.22
57	BB	2331	G	P-O5'	-5.17	1.54	1.59
21	AA	372	C	C2-N3	5.17	1.39	1.35
57	BB	715	A	N7-C5	-5.17	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	799	G	C2'-C1'	-5.17	1.47	1.53
57	BB	878	A	C3'-O3'	5.17	1.49	1.42
57	BB	1481	U	C2'-C1'	-5.17	1.47	1.53
57	BB	1608	A	C5-C4	5.17	1.42	1.38
57	BB	1966	A	C2'-C1'	-5.17	1.47	1.53
57	BB	1998	A	C3'-C2'	-5.17	1.47	1.52
21	AA	31	G	C5-C4	5.17	1.42	1.38
21	AA	182	A	C4'-C3'	5.17	1.58	1.53
21	AA	326	G	C3'-C2'	-5.17	1.47	1.52
21	AA	665	A	N9-C4	-5.17	1.34	1.37
21	AA	750	C	C4-N4	5.17	1.38	1.33
26	AV	15	G	C2-N3	5.17	1.36	1.32
57	BB	617	G	N1-C2	5.17	1.41	1.37
57	BB	821	A	C5'-C4'	5.17	1.57	1.51
57	BB	1111	A	C4'-C3'	5.17	1.58	1.53
57	BB	1198	U	C4-C5	5.17	1.48	1.43
57	BB	2222	C	C1'-N1	5.17	1.56	1.48
57	BB	2536	G	C8-N7	-5.17	1.27	1.30
21	AA	154	U	P-O5'	-5.17	1.54	1.59
21	AA	179	A	N9-C8	-5.17	1.33	1.37
21	AA	287	U	N3-C4	5.17	1.43	1.38
21	AA	312	C	C4-N4	5.17	1.38	1.33
21	AA	355	C	C5'-C4'	5.17	1.57	1.51
21	AA	664	G	C8-N7	5.17	1.34	1.30
21	AA	725	G	C2'-C1'	-5.17	1.47	1.53
52	BD	128	ARG	CZ-NH2	5.17	1.39	1.33
57	BB	1	G	N1-C2	5.17	1.41	1.37
57	BB	253	C	O4'-C1'	5.17	1.48	1.41
57	BB	999	U	C2'-O2'	5.17	1.48	1.41
57	BB	1369	G	C3'-C2'	-5.17	1.47	1.52
57	BB	1498	C	N1-C6	5.17	1.40	1.37
57	BB	1706	C	C2'-C1'	-5.17	1.47	1.53
57	BB	1733	G	N3-C4	-5.17	1.31	1.35
57	BB	2335	A	C8-N7	-5.17	1.27	1.31
57	BB	2625	G	N7-C5	-5.17	1.36	1.39
57	BB	2877	G	P-OP1	-5.17	1.40	1.49
21	AA	271	C	O3'-P	-5.17	1.54	1.61
21	AA	339	C	C5'-C4'	5.17	1.57	1.51
21	AA	353	A	N3-C4	-5.17	1.31	1.34
21	AA	1224	U	N3-C4	5.17	1.43	1.38
21	AA	1251	A	P-O5'	-5.17	1.54	1.59
26	AV	49	G	C8-N7	-5.17	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	BF	93	GLU	CG-CD	5.17	1.59	1.51
57	BB	157	C	C4-C5	5.17	1.47	1.43
57	BB	245	G	C4'-C3'	5.17	1.58	1.53
57	BB	440	C	C2-N3	5.17	1.39	1.35
57	BB	629	G	N1-C2	5.17	1.41	1.37
57	BB	1050	A	N7-C5	-5.17	1.36	1.39
57	BB	1577	C	C4'-O4'	5.17	1.52	1.45
57	BB	1609	A	O3'-P	-5.17	1.54	1.61
57	BB	1844	C	N3-C4	5.17	1.37	1.33
57	BB	2241	A	C6-N6	5.17	1.38	1.33
57	BB	2418	A	C5-C6	5.17	1.45	1.41
57	BB	2674	G	C3'-C2'	5.17	1.58	1.52
58	BA	64	G	C2'-C1'	-5.17	1.47	1.53
3	AL	35	ARG	NE-CZ	5.17	1.39	1.33
21	AA	470	C	C4-N4	5.17	1.38	1.33
21	AA	503	C	C4-N4	5.17	1.38	1.33
21	AA	592	G	O3'-P	-5.17	1.54	1.61
21	AA	616	G	C4'-C3'	-5.17	1.47	1.52
21	AA	851	G	P-O5'	-5.17	1.54	1.59
26	AV	39	C	N3-C4	5.17	1.37	1.33
57	BB	352	A	C6-N1	5.17	1.39	1.35
57	BB	603	A	C2-N3	5.17	1.38	1.33
57	BB	1019	U	C4'-C3'	-5.17	1.47	1.52
57	BB	1157	G	C6-N1	5.17	1.43	1.39
57	BB	1589	U	P-O5'	-5.17	1.54	1.59
57	BB	1620	G	C4'-O4'	-5.17	1.38	1.45
57	BB	1810	A	C6-N6	5.17	1.38	1.33
57	BB	2406	A	C5-C4	5.17	1.42	1.38
57	BB	2893	A	C2'-C1'	-5.17	1.47	1.53
58	BA	84	G	O3'-P	5.17	1.67	1.61
21	AA	390	U	C3'-O3'	5.17	1.49	1.42
57	BB	264	C	C4'-O4'	-5.17	1.38	1.45
57	BB	348	A	O3'-P	-5.17	1.54	1.61
57	BB	504	A	C4'-C3'	5.17	1.58	1.53
57	BB	721	A	C6-N1	5.17	1.39	1.35
57	BB	920	A	C8-N7	5.17	1.35	1.31
57	BB	1052	C	C5'-C4'	5.17	1.57	1.51
57	BB	1125	G	C5-C4	5.17	1.42	1.38
57	BB	2162	G	C8-N7	5.17	1.34	1.30
21	AA	715	A	P-O5'	-5.16	1.54	1.59
21	AA	742	G	C6-N1	5.16	1.43	1.39
21	AA	777	A	C6-N1	-5.16	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1016	A	C5-C6	-5.16	1.36	1.41
21	AA	1300	G	C3'-O3'	5.16	1.49	1.42
37	BR	70	GLU	CB-CG	5.16	1.61	1.52
55	BG	61	TRP	NE1-CE2	5.16	1.44	1.37
57	BB	41	C	C4'-C3'	5.16	1.58	1.53
57	BB	456	C	C2'-C1'	5.16	1.59	1.53
57	BB	2042	A	N9-C8	5.16	1.41	1.37
57	BB	2051	A	C2'-C1'	5.16	1.59	1.53
57	BB	2284	A	C6-N1	5.16	1.39	1.35
21	AA	114	U	C5-C6	5.16	1.38	1.34
21	AA	924	C	C4'-C3'	5.16	1.58	1.53
57	BB	1691	C	N3-C4	5.16	1.37	1.33
57	BB	1891	G	C6-N1	5.16	1.43	1.39
57	BB	2544	G	N9-C4	-5.16	1.33	1.38
57	BB	2770	G	O3'-P	-5.16	1.54	1.61
5	AN	76	PHE	CG-CD2	5.16	1.46	1.38
21	AA	124	C	N3-C4	5.16	1.37	1.33
21	AA	320	A	C5-C4	5.16	1.42	1.38
21	AA	421	U	N3-C4	5.16	1.43	1.38
21	AA	549	C	C5-C6	5.16	1.38	1.34
21	AA	1058	G	C8-N7	-5.16	1.27	1.30
21	AA	1072	G	N3-C4	5.16	1.39	1.35
21	AA	1332	A	C8-N7	-5.16	1.27	1.31
21	AA	1361	G	C5'-C4'	5.16	1.57	1.51
21	AA	1421	G	C6-O6	5.16	1.28	1.24
22	AY	65	G	N3-C4	-5.16	1.31	1.35
56	BH	60	GLU	CG-CD	5.16	1.59	1.51
57	BB	882	G	O3'-P	-5.16	1.54	1.61
57	BB	1148	U	C5'-C4'	5.16	1.57	1.51
57	BB	1327	A	N3-C4	-5.16	1.31	1.34
57	BB	2681	C	C4-C5	5.16	1.47	1.43
21	AA	427	U	P-O5'	-5.16	1.54	1.59
21	AA	625	U	C5-C6	-5.16	1.29	1.34
21	AA	956	U	O4'-C1'	5.16	1.48	1.41
21	AA	1262	C	C2-N3	5.16	1.39	1.35
23	AW	38	A	N9-C4	-5.16	1.34	1.37
24	AX	13	A	N7-C5	-5.16	1.36	1.39
57	BB	15	G	N9-C8	-5.16	1.34	1.37
57	BB	817	C	C1'-N1	5.16	1.56	1.48
57	BB	1386	C	C4'-O4'	5.16	1.52	1.45
57	BB	1930	G	N3-C4	5.16	1.39	1.35
57	BB	2341	G	C6-N1	5.16	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2740	A	N7-C5	-5.16	1.36	1.39
57	BB	2772	C	C1'-N1	5.16	1.56	1.48
57	BB	2829	A	N3-C4	5.16	1.38	1.34
21	AA	1155	A	C6-N6	5.16	1.38	1.33
57	BB	469	G	C2-N2	5.16	1.39	1.34
57	BB	1036	G	N7-C5	-5.16	1.36	1.39
57	BB	1150	C	C2'-C1'	-5.16	1.47	1.53
57	BB	1386	C	C4'-C3'	5.16	1.58	1.53
57	BB	1743	G	O5'-C5'	-5.16	1.34	1.42
21	AA	300	A	N9-C8	5.16	1.41	1.37
21	AA	433	G	C8-N7	5.16	1.34	1.30
21	AA	764	C	P-O5'	-5.16	1.54	1.59
21	AA	1049	U	C5'-C4'	5.16	1.57	1.51
21	AA	1467	C	P-O5'	-5.16	1.54	1.59
22	AY	46	G	N3-C4	5.16	1.39	1.35
26	AV	22	G	C2'-C1'	-5.16	1.47	1.53
26	AV	44	A	N9-C4	5.16	1.41	1.37
57	BB	762	U	C5-C6	5.16	1.38	1.34
57	BB	783	A	C8-N7	-5.16	1.27	1.31
57	BB	1616	A	N3-C4	-5.16	1.31	1.34
57	BB	1835	G	C8-N7	5.16	1.34	1.30
57	BB	2088	A	P-O5'	-5.16	1.54	1.59
57	BB	2289	G	C1'-N9	-5.16	1.39	1.46
57	BB	2499	C	N3-C4	5.16	1.37	1.33
57	BB	2524	G	N3-C4	-5.16	1.31	1.35
21	AA	447	G	C5-C6	-5.15	1.37	1.42
21	AA	510	A	C5-C6	5.15	1.45	1.41
21	AA	763	G	C3'-C2'	-5.15	1.47	1.52
57	BB	274	C	C4-N4	5.15	1.38	1.33
57	BB	491	G	O3'-P	5.15	1.67	1.61
57	BB	2168	G	C2-N3	5.15	1.36	1.32
57	BB	2237	G	C8-N7	-5.15	1.27	1.30
57	BB	2680	U	N1-C2	5.15	1.43	1.38
4	AM	92	ARG	CZ-NH1	5.15	1.39	1.33
21	AA	199	A	C4'-O4'	-5.15	1.38	1.45
21	AA	326	G	C2-N3	5.15	1.36	1.32
21	AA	1074	G	C1'-N9	5.15	1.56	1.48
21	AA	1480	A	C8-N7	-5.15	1.27	1.31
23	AW	28	G	O4'-C1'	5.15	1.48	1.41
23	AW	35	A	C6-N6	5.15	1.38	1.33
57	BB	133	U	N1-C6	5.15	1.42	1.38
57	BB	764	A	C5'-C4'	5.15	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1093	G	N1-C2	5.15	1.41	1.37
57	BB	2228	G	N3-C4	-5.15	1.31	1.35
57	BB	2664	G	C3'-O3'	5.15	1.49	1.42
57	BB	2795	C	C5-C6	5.15	1.38	1.34
57	BB	2900	A	C8-N7	5.15	1.35	1.31
58	BA	105	G	N1-C2	5.15	1.41	1.37
21	AA	191	G	C5'-C4'	5.15	1.57	1.51
21	AA	284	C	P-O5'	-5.15	1.54	1.59
21	AA	833	G	C5'-C4'	5.15	1.57	1.51
21	AA	1318	A	N1-C2	5.15	1.39	1.34
21	AA	1380	U	N1-C6	5.15	1.42	1.38
26	AV	26	G	N1-C2	5.15	1.41	1.37
57	BB	311	A	C5'-C4'	5.15	1.57	1.51
57	BB	420	C	C3'-C2'	5.15	1.58	1.52
57	BB	1474	U	C3'-O3'	5.15	1.49	1.42
57	BB	1964	G	C6-N1	5.15	1.43	1.39
57	BB	2054	A	N1-C2	5.15	1.39	1.34
57	BB	2243	U	C2-N3	5.15	1.41	1.37
58	BA	76	G	P-O5'	-5.15	1.54	1.59
21	AA	9	G	N7-C5	-5.15	1.36	1.39
55	BG	2	ARG	CD-NE	5.15	1.55	1.46
57	BB	126	A	N7-C5	-5.15	1.36	1.39
57	BB	809	G	C3'-C2'	-5.15	1.47	1.52
57	BB	1022	G	N1-C2	5.15	1.41	1.37
57	BB	1631	G	C6-N1	5.15	1.43	1.39
57	BB	2582	G	C3'-O3'	-5.15	1.34	1.42
12	AU	46	ARG	NE-CZ	5.15	1.39	1.33
21	AA	691	G	O4'-C1'	5.15	1.48	1.41
21	AA	1029	U	C4'-C3'	5.15	1.58	1.53
21	AA	1039	G	N3-C4	5.15	1.39	1.35
21	AA	1043	G	C2-N3	5.15	1.36	1.32
21	AA	1240	U	P-O5'	-5.15	1.54	1.59
22	AY	31	A	C4'-C3'	5.15	1.58	1.53
26	AV	12	G	C5'-C4'	-5.15	1.45	1.51
57	BB	78	U	C1'-N1	5.15	1.56	1.48
57	BB	269	C	C4'-O4'	5.15	1.52	1.45
57	BB	424	G	N9-C8	5.15	1.41	1.37
57	BB	486	C	C4'-O4'	-5.15	1.38	1.45
57	BB	566	U	O4'-C1'	-5.15	1.34	1.41
57	BB	833	A	N9-C8	5.15	1.41	1.37
57	BB	990	A	P-O5'	-5.15	1.54	1.59
57	BB	1235	G	N3-C4	-5.15	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1612	C	C3'-O3'	5.15	1.49	1.42
10	AS	45	GLY	CA-C	-5.15	1.43	1.51
21	AA	1167	A	N3-C4	-5.15	1.31	1.34
21	AA	1344	C	C4-C5	5.15	1.47	1.43
57	BB	738	G	N1-C2	5.15	1.41	1.37
57	BB	1683	U	N3-C4	5.15	1.43	1.38
57	BB	1879	C	C4'-C3'	-5.15	1.47	1.52
57	BB	2016	U	N3-C4	5.15	1.43	1.38
21	AA	533	A	C6-N6	5.14	1.38	1.33
21	AA	1344	C	N1-C6	-5.14	1.34	1.37
37	BR	78	ARG	NE-CZ	5.14	1.39	1.33
57	BB	37	C	P-O5'	-5.14	1.54	1.59
57	BB	327	G	C5-C4	-5.14	1.34	1.38
57	BB	538	A	C6-N6	5.14	1.38	1.33
57	BB	1027	A	N9-C4	5.14	1.41	1.37
57	BB	1315	C	C2'-C1'	-5.14	1.47	1.53
57	BB	2242	G	C2-N2	-5.14	1.29	1.34
57	BB	2326	C	C5'-C4'	5.14	1.57	1.51
57	BB	2759	G	C5'-C4'	5.14	1.57	1.51
21	AA	96	U	N3-C4	5.14	1.43	1.38
21	AA	185	U	C2-N3	5.14	1.41	1.37
21	AA	227	G	O3'-P	-5.14	1.54	1.61
21	AA	590	U	C4'-C3'	5.14	1.58	1.53
21	AA	616	G	C8-N7	-5.14	1.27	1.30
21	AA	1083	U	C4'-C3'	-5.14	1.47	1.52
21	AA	1377	A	C5-C6	5.14	1.45	1.41
44	BY	49	ASP	N-CA	-5.14	1.36	1.46
57	BB	770	G	N1-C2	5.14	1.41	1.37
57	BB	807	U	C4-O4	5.14	1.27	1.23
57	BB	1325	U	N1-C6	5.14	1.42	1.38
57	BB	1472	C	P-O5'	-5.14	1.54	1.59
57	BB	2597	G	C6-N1	-5.14	1.35	1.39
57	BB	2796	U	C1'-N1	5.14	1.56	1.48
58	BA	4	C	C4-C5	5.14	1.47	1.43
21	AA	327	A	N9-C8	-5.14	1.33	1.37
22	AY	23	A	N3-C4	-5.14	1.31	1.34
23	AW	52	G	C3'-C2'	-5.14	1.47	1.52
57	BB	468	G	C8-N7	5.14	1.34	1.30
57	BB	1284	A	N3-C4	-5.14	1.31	1.34
57	BB	2258	C	C2'-C1'	-5.14	1.47	1.53
57	BB	2706	A	C5'-C4'	5.14	1.57	1.51
14	AC	53	ARG	CZ-NH1	5.14	1.39	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	48	C	C2-N3	5.14	1.39	1.35
21	AA	702	A	C5'-C4'	5.14	1.57	1.51
24	AX	18	G	C3'-O3'	5.14	1.49	1.42
57	BB	312	G	C2-N2	5.14	1.39	1.34
57	BB	693	A	P-O5'	-5.14	1.54	1.59
57	BB	700	G	C4'-C3'	-5.14	1.47	1.52
57	BB	1098	A	N1-C2	5.14	1.39	1.34
57	BB	1135	C	C5'-C4'	5.14	1.57	1.51
57	BB	1175	A	N3-C4	5.14	1.38	1.34
57	BB	1612	C	C5-C6	-5.14	1.30	1.34
57	BB	1843	C	C4-N4	5.14	1.38	1.33
57	BB	1851	U	C2-N3	5.14	1.41	1.37
57	BB	2114	A	C5'-C4'	5.14	1.57	1.51
21	AA	675	A	C6-N6	5.14	1.38	1.33
49	B2	15	SER	CB-OG	5.14	1.49	1.42
57	BB	218	A	C5-C4	5.14	1.42	1.38
57	BB	455	C	C5-C6	-5.14	1.30	1.34
57	BB	2380	C	C4'-O4'	5.14	1.52	1.45
21	AA	942	G	O3'-P	-5.14	1.54	1.61
21	AA	1277	C	P-O5'	-5.14	1.54	1.59
36	BQ	63	ARG	NE-CZ	5.14	1.39	1.33
38	BS	52	GLU	CD-OE1	-5.14	1.20	1.25
57	BB	39	G	P-O5'	-5.14	1.54	1.59
57	BB	443	A	C6-N1	5.14	1.39	1.35
57	BB	495	G	C2'-C1'	-5.14	1.47	1.53
57	BB	913	U	N3-C4	5.14	1.43	1.38
57	BB	2421	G	N1-C2	5.14	1.41	1.37
21	AA	734	G	N1-C2	5.13	1.41	1.37
21	AA	1330	U	C4'-C3'	5.13	1.58	1.53
21	AA	1469	C	C2'-C1'	-5.13	1.47	1.53
42	BW	27	GLY	N-CA	-5.13	1.38	1.46
52	BD	145	SER	CA-CB	5.13	1.60	1.52
57	BB	234	U	C2-N3	5.13	1.41	1.37
57	BB	389	G	O4'-C1'	5.13	1.48	1.41
57	BB	709	U	O3'-P	-5.13	1.54	1.61
57	BB	1050	A	C6-N1	5.13	1.39	1.35
57	BB	1314	C	C5-C6	5.13	1.38	1.34
57	BB	1636	U	C2-N3	5.13	1.41	1.37
57	BB	2121	G	C2'-C1'	-5.13	1.47	1.53
57	BB	2653	U	N3-C4	5.13	1.43	1.38
57	BB	2662	A	N9-C4	-5.13	1.34	1.37
57	BB	2710	C	C2'-C1'	-5.13	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2753	A	O3'-P	-5.13	1.54	1.61
21	AA	770	C	C4-C5	-5.13	1.38	1.43
57	BB	64	A	C5-C4	-5.13	1.35	1.38
57	BB	453	A	N7-C5	-5.13	1.36	1.39
57	BB	756	A	C2'-C1'	-5.13	1.47	1.53
57	BB	1937	A	C5'-C4'	5.13	1.57	1.51
57	BB	1945	G	N3-C4	-5.13	1.31	1.35
21	AA	1072	G	N9-C4	-5.13	1.33	1.38
21	AA	1430	A	O3'-P	5.13	1.67	1.61
55	BG	109	SER	CA-CB	-5.13	1.45	1.52
57	BB	426	C	N1-C6	5.13	1.40	1.37
57	BB	454	A	N9-C8	-5.13	1.33	1.37
57	BB	718	A	C6-N6	-5.13	1.29	1.33
57	BB	1023	U	N3-C4	5.13	1.43	1.38
57	BB	2116	G	C8-N7	5.13	1.34	1.30
57	BB	2313	C	O3'-P	5.13	1.67	1.61
21	AA	616	G	N9-C4	-5.13	1.33	1.38
43	BX	28	PHE	CG-CD1	5.13	1.46	1.38
57	BB	1123	C	N3-C4	5.13	1.37	1.33
57	BB	2116	G	C1'-N9	5.13	1.56	1.48
57	BB	2162	G	N7-C5	5.13	1.42	1.39
57	BB	2454	G	N9-C8	-5.13	1.34	1.37
6	AO	53	ARG	CZ-NH1	5.13	1.39	1.33
21	AA	83	C	C5'-C4'	5.13	1.57	1.51
21	AA	411	A	O3'-P	5.13	1.67	1.61
21	AA	1118	U	C1'-N1	5.13	1.56	1.48
26	AV	38	A	C8-N7	5.13	1.35	1.31
38	BS	83	LYS	N-CA	-5.13	1.36	1.46
57	BB	921	C	N3-C4	5.13	1.37	1.33
57	BB	1570	A	C5-C4	-5.13	1.35	1.38
57	BB	1926	U	C5-C6	-5.13	1.29	1.34
57	BB	1933	G	N9-C8	5.13	1.41	1.37
21	AA	281	G	C2-N2	5.13	1.39	1.34
21	AA	531	U	P-O5'	-5.13	1.54	1.59
21	AA	688	G	N7-C5	-5.13	1.36	1.39
21	AA	1088	G	N9-C4	-5.13	1.33	1.38
21	AA	1238	A	N3-C4	5.13	1.38	1.34
21	AA	1241	G	C3'-C2'	-5.13	1.47	1.52
21	AA	1255	G	C2'-C1'	-5.13	1.47	1.53
26	AV	21	A	C3'-O3'	5.13	1.49	1.42
57	BB	538	A	C2'-C1'	-5.13	1.47	1.53
57	BB	1889	A	C6-N6	5.13	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1933	G	C2'-C1'	-5.13	1.47	1.53
57	BB	2599	G	N1-C2	5.13	1.41	1.37
57	BB	2665	A	C1'-N9	-5.13	1.39	1.46
57	BB	2755	C	C2'-C1'	-5.13	1.47	1.53
57	BB	543	G	C2-N2	5.12	1.39	1.34
57	BB	2536	G	N7-C5	5.12	1.42	1.39
57	BB	2819	G	N1-C2	5.12	1.41	1.37
21	AA	12	U	N1-C6	-5.12	1.33	1.38
21	AA	281	G	C5-C6	5.12	1.47	1.42
21	AA	880	C	N3-C4	5.12	1.37	1.33
21	AA	987	G	O4'-C1'	5.12	1.48	1.41
21	AA	1230	C	C2-O2	-5.12	1.19	1.24
24	AX	17	U	P-O5'	5.12	1.64	1.59
57	BB	508	A	N9-C4	5.12	1.41	1.37
57	BB	793	A	N3-C4	5.12	1.38	1.34
57	BB	1041	G	C4'-O4'	5.12	1.52	1.45
57	BB	1469	A	C5'-C4'	5.12	1.57	1.51
57	BB	1484	U	C2'-C1'	-5.12	1.47	1.53
57	BB	1528	A	C3'-O3'	5.12	1.49	1.42
57	BB	1994	C	C4'-C3'	-5.12	1.47	1.52
57	BB	2067	G	O3'-P	-5.12	1.55	1.61
57	BB	2248	C	O4'-C1'	-5.12	1.34	1.41
57	BB	2263	C	C4-N4	5.12	1.38	1.33
57	BB	2305	U	P-O5'	-5.12	1.54	1.59
57	BB	2782	G	O3'-P	-5.12	1.55	1.61
58	BA	28	C	C2'-C1'	-5.12	1.47	1.53
13	AB	112	ARG	NE-CZ	5.12	1.39	1.33
21	AA	325	A	C4'-C3'	-5.12	1.47	1.52
21	AA	747	A	C5'-C4'	5.12	1.57	1.51
21	AA	906	A	N9-C8	-5.12	1.33	1.37
23	AW	26	A	C2'-C1'	-5.12	1.47	1.53
33	BN	8	ARG	NE-CZ	5.12	1.39	1.33
57	BB	16	C	O3'-P	-5.12	1.55	1.61
57	BB	381	G	C5'-C4'	5.12	1.57	1.51
57	BB	388	G	N1-C2	5.12	1.41	1.37
57	BB	1320	C	C3'-C2'	5.12	1.58	1.52
57	BB	1766	G	C5-C4	-5.12	1.34	1.38
57	BB	2528	U	N1-C6	-5.12	1.33	1.38
57	BB	2877	G	N9-C8	-5.12	1.34	1.37
26	AV	73	A	N9-C4	5.12	1.41	1.37
57	BB	4	U	C2-O2	5.12	1.26	1.22
57	BB	179	C	N1-C6	5.12	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	684	G	C8-N7	-5.12	1.27	1.30
57	BB	1549	A	P-O5'	-5.12	1.54	1.59
57	BB	1669	A	O4'-C1'	-5.12	1.34	1.41
57	BB	1889	A	N9-C8	-5.12	1.33	1.37
57	BB	2099	U	N1-C6	5.12	1.42	1.38
57	BB	2403	C	P-O5'	-5.12	1.54	1.59
57	BB	2588	G	N9-C8	5.12	1.41	1.37
57	BB	2614	A	N3-C4	5.12	1.38	1.34
21	AA	88	U	C5-C6	5.12	1.38	1.34
21	AA	785	G	C5-C4	-5.12	1.34	1.38
21	AA	1087	G	C2'-C1'	-5.12	1.47	1.53
57	BB	531	C	C4'-O4'	-5.12	1.38	1.45
57	BB	1304	A	C6-N6	5.12	1.38	1.33
57	BB	1628	G	C8-N7	-5.12	1.27	1.30
57	BB	2166	U	O3'-P	-5.12	1.55	1.61
57	BB	2340	A	C8-N7	-5.12	1.27	1.31
57	BB	2616	C	C2'-C1'	5.12	1.58	1.53
57	BB	2862	G	N9-C8	-5.12	1.34	1.37
21	AA	659	U	C2-N3	5.12	1.41	1.37
21	AA	703	G	C2-N2	5.12	1.39	1.34
21	AA	736	C	P-O5'	-5.12	1.54	1.59
21	AA	1403	C	N1-C2	-5.12	1.35	1.40
22	AY	35	A	N9-C4	5.12	1.41	1.37
37	BR	77	PHE	N-CA	-5.12	1.36	1.46
52	BD	68	PHE	CG-CD2	5.12	1.46	1.38
57	BB	1074	G	C2-N2	-5.12	1.29	1.34
57	BB	2095	A	C8-N7	-5.12	1.27	1.31
57	BB	2450	A	C8-N7	-5.12	1.27	1.31
58	BA	54	G	C2-N3	5.12	1.36	1.32
21	AA	213	G	C5-C6	-5.12	1.37	1.42
21	AA	617	G	O4'-C1'	-5.12	1.34	1.41
21	AA	639	G	P-O5'	-5.12	1.54	1.59
21	AA	916	U	C5'-C4'	-5.12	1.45	1.51
57	BB	276	U	C5'-C4'	5.12	1.57	1.51
57	BB	430	A	N9-C4	5.12	1.41	1.37
57	BB	783	A	P-O5'	-5.12	1.54	1.59
57	BB	1278	C	C2-N3	5.12	1.39	1.35
57	BB	1694	C	C2-N3	5.12	1.39	1.35
57	BB	1840	G	C5'-C4'	5.12	1.57	1.51
57	BB	1949	G	N9-C4	-5.12	1.33	1.38
57	BB	1995	U	C2-O2	5.12	1.26	1.22
58	BA	57	A	O3'-P	-5.12	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	240	G	O3'-P	-5.11	1.55	1.61
21	AA	423	G	C6-O6	5.11	1.28	1.24
21	AA	454	G	N3-C4	-5.11	1.31	1.35
21	AA	519	C	C2-N3	5.11	1.39	1.35
21	AA	794	A	C3'-C2'	-5.11	1.47	1.52
21	AA	1294	G	C5'-C4'	5.11	1.57	1.51
21	AA	1532	U	C2-N3	5.11	1.41	1.37
57	BB	134	G	C2'-O2'	-5.11	1.35	1.41
57	BB	156	A	C6-N6	5.11	1.38	1.33
57	BB	1352	U	C2'-C1'	-5.11	1.47	1.53
57	BB	1637	A	N3-C4	-5.11	1.31	1.34
57	BB	1760	C	O4'-C1'	5.11	1.48	1.41
57	BB	2067	G	C4'-O4'	5.11	1.52	1.45
21	AA	125	U	O3'-P	-5.11	1.55	1.61
21	AA	307	C	O3'-P	-5.11	1.55	1.61
37	BR	58	VAL	N-CA	-5.11	1.36	1.46
57	BB	1552	A	N3-C4	-5.11	1.31	1.34
57	BB	2075	U	C2'-C1'	-5.11	1.47	1.53
21	AA	261	U	P-O5'	-5.11	1.54	1.59
21	AA	531	U	C4'-C3'	5.11	1.58	1.53
21	AA	944	G	N1-C2	5.11	1.41	1.37
21	AA	991	U	C2'-C1'	-5.11	1.47	1.53
22	AY	52	U	C5-C6	-5.11	1.29	1.34
26	AV	43	A	C5'-C4'	5.11	1.57	1.51
29	BJ	13	ARG	NE-CZ	5.11	1.39	1.33
32	BM	94	ALA	CA-CB	5.11	1.63	1.52
57	BB	1208	C	N1-C6	-5.11	1.34	1.37
57	BB	1466	U	C2'-O2'	-5.11	1.35	1.41
57	BB	1648	U	C4-C5	-5.11	1.39	1.43
57	BB	1914	C	C4-N4	5.11	1.38	1.33
57	BB	1938	A	C1'-N9	5.11	1.56	1.48
57	BB	2418	A	C6-N6	5.11	1.38	1.33
57	BB	2572	A	N9-C8	5.11	1.41	1.37
57	BB	2592	G	N3-C4	-5.11	1.31	1.35
57	BB	2622	U	C3'-C2'	-5.11	1.47	1.52
21	AA	412	A	C6-N1	5.11	1.39	1.35
21	AA	536	C	C3'-C2'	-5.11	1.47	1.52
21	AA	599	C	C2-N3	5.11	1.39	1.35
21	AA	1392	G	C5'-C4'	5.11	1.57	1.51
22	AY	37	G	N1-C2	5.11	1.41	1.37
57	BB	73	A	C5-C4	5.11	1.42	1.38
57	BB	433	C	C3'-O3'	5.11	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	907	G	C5-C4	5.11	1.42	1.38
57	BB	918	A	N7-C5	-5.11	1.36	1.39
57	BB	2503	A	C6-N1	-5.11	1.31	1.35
21	AA	79	G	N1-C2	5.11	1.41	1.37
21	AA	807	A	C5'-C4'	5.11	1.57	1.51
21	AA	1147	C	C4'-O4'	-5.11	1.39	1.45
21	AA	1208	C	C5'-C4'	5.11	1.57	1.51
22	AY	2	C	P-O5'	5.11	1.64	1.59
23	AW	59	U	N3-C4	5.11	1.43	1.38
45	BC	96	LYS	CA-CB	5.11	1.65	1.53
57	BB	3	U	N1-C6	-5.11	1.33	1.38
57	BB	274	C	C2-N3	5.11	1.39	1.35
57	BB	326	G	N9-C8	5.11	1.41	1.37
57	BB	600	G	C4'-C3'	-5.11	1.47	1.52
57	BB	999	U	C4-O4	-5.11	1.19	1.23
57	BB	1063	G	C6-N1	5.11	1.43	1.39
57	BB	1412	U	O4'-C1'	5.11	1.48	1.41
57	BB	1805	A	C5-C4	-5.11	1.35	1.38
57	BB	1966	A	C5-C4	5.11	1.42	1.38
57	BB	2078	C	O4'-C1'	5.11	1.48	1.41
57	BB	2164	C	C4-C5	-5.11	1.38	1.43
57	BB	2412	A	N9-C4	-5.11	1.34	1.37
57	BB	2556	C	O3'-P	-5.11	1.55	1.61
57	BB	2558	C	C4-N4	5.11	1.38	1.33
21	AA	607	A	C6-N1	5.11	1.39	1.35
21	AA	1306	A	N7-C5	-5.11	1.36	1.39
22	AY	36	A	P-OP2	5.11	1.57	1.49
23	AW	57	G	C2'-C1'	-5.11	1.47	1.53
35	BP	71	ARG	NE-CZ	5.11	1.39	1.33
57	BB	540	C	N1-C6	5.11	1.40	1.37
57	BB	779	U	C2'-C1'	-5.11	1.47	1.53
57	BB	1160	G	C3'-C2'	5.11	1.58	1.52
57	BB	1300	G	C3'-C2'	5.11	1.58	1.52
57	BB	1511	G	C3'-C2'	-5.11	1.47	1.52
57	BB	1798	U	C5'-C4'	5.11	1.57	1.51
57	BB	2250	G	P-O5'	-5.11	1.54	1.59
57	BB	2645	G	C2'-C1'	-5.11	1.47	1.53
57	BB	2836	U	N1-C2	-5.11	1.33	1.38
21	AA	54	C	N1-C2	5.10	1.45	1.40
21	AA	835	U	N3-C4	5.10	1.43	1.38
21	AA	1042	A	C2-N3	5.10	1.38	1.33
21	AA	1430	A	N1-C2	5.10	1.39	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	75	C	C4'-C3'	-5.10	1.47	1.52
57	BB	778	G	C5-C4	5.10	1.42	1.38
57	BB	2161	C	C5-C6	5.10	1.38	1.34
57	BB	2481	G	C2-N2	5.10	1.39	1.34
57	BB	2688	G	C2-N2	5.10	1.39	1.34
57	BB	2740	A	C6-N1	5.10	1.39	1.35
57	BB	2816	G	C8-N7	-5.10	1.27	1.30
21	AA	116	A	N1-C2	5.10	1.39	1.34
21	AA	538	G	C6-N1	5.10	1.43	1.39
21	AA	825	A	C5-C4	-5.10	1.35	1.38
21	AA	1386	G	P-O5'	-5.10	1.54	1.59
21	AA	1506	U	N3-C4	5.10	1.43	1.38
23	AW	34	G	C3'-C2'	5.10	1.58	1.52
26	AV	13	C	O4'-C1'	5.10	1.48	1.41
57	BB	190	A	N9-C8	-5.10	1.33	1.37
57	BB	1252	G	C2-N3	5.10	1.36	1.32
57	BB	1551	A	C4'-C3'	5.10	1.58	1.53
57	BB	1984	G	N7-C5	5.10	1.42	1.39
57	BB	2315	G	C8-N7	5.10	1.34	1.30
57	BB	2770	G	C2-N2	-5.10	1.29	1.34
58	BA	13	G	C5-C4	5.10	1.42	1.38
58	BA	74	U	N1-C2	5.10	1.43	1.38
17	AF	86	ARG	CD-NE	5.10	1.55	1.46
21	AA	539	A	C4'-C3'	5.10	1.58	1.53
21	AA	769	G	O4'-C1'	5.10	1.48	1.41
57	BB	339	U	C4'-C3'	-5.10	1.47	1.52
57	BB	406	G	C8-N7	-5.10	1.27	1.30
21	AA	20	U	P-O5'	-5.10	1.54	1.59
21	AA	293	G	N9-C8	-5.10	1.34	1.37
21	AA	1431	A	C5'-C4'	5.10	1.57	1.51
26	AV	44	A	P-O5'	-5.10	1.54	1.59
57	BB	963	U	C2-O2	5.10	1.26	1.22
57	BB	1100	C	C2-N3	5.10	1.39	1.35
57	BB	1264	A	N9-C4	5.10	1.41	1.37
57	BB	1563	U	C4'-O4'	5.10	1.52	1.45
57	BB	1975	G	C4'-C3'	5.10	1.58	1.53
57	BB	2321	U	C5'-C4'	5.10	1.57	1.51
57	BB	2521	C	P-O5'	-5.10	1.54	1.59
57	BB	2578	G	N3-C4	-5.10	1.31	1.35
57	BB	2725	A	C6-N6	5.10	1.38	1.33
21	AA	18	C	N3-C4	5.10	1.37	1.33
21	AA	35	G	N3-C4	5.10	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	228	A	C5'-C4'	5.10	1.57	1.51
21	AA	655	A	C2'-C1'	-5.10	1.47	1.53
21	AA	676	A	N9-C8	5.10	1.41	1.37
21	AA	976	G	N7-C5	-5.10	1.36	1.39
31	BL	33	ARG	CZ-NH1	5.10	1.39	1.33
54	BF	73	VAL	CA-C	-5.10	1.39	1.52
57	BB	312	G	N1-C2	5.10	1.41	1.37
57	BB	996	A	C6-N6	5.10	1.38	1.33
57	BB	1026	G	C5'-C4'	5.10	1.57	1.51
57	BB	1223	G	O3'-P	-5.10	1.55	1.61
57	BB	1592	C	P-O5'	-5.10	1.54	1.59
57	BB	1664	A	N9-C4	5.10	1.41	1.37
57	BB	1710	G	N7-C5	5.10	1.42	1.39
57	BB	1865	U	C5'-C4'	5.10	1.57	1.51
57	BB	1902	C	P-O5'	-5.10	1.54	1.59
57	BB	2318	G	C5-C6	-5.10	1.37	1.42
57	BB	2337	G	N9-C8	5.10	1.41	1.37
57	BB	2688	G	C6-N1	-5.10	1.35	1.39
21	AA	462	G	C2-N2	5.10	1.39	1.34
23	AW	59	U	C2-N3	5.10	1.41	1.37
57	BB	203	A	N3-C4	-5.10	1.31	1.34
57	BB	314	C	C5-C6	-5.10	1.30	1.34
57	BB	1623	G	O3'-P	-5.10	1.55	1.61
57	BB	1681	G	C3'-C2'	-5.10	1.47	1.52
57	BB	1842	G	C2-N3	-5.10	1.28	1.32
57	BB	2318	G	C5-C4	5.10	1.42	1.38
11	AT	24	ARG	CZ-NH1	5.09	1.39	1.33
21	AA	197	A	C5'-C4'	5.09	1.57	1.51
21	AA	241	G	P-O5'	-5.09	1.54	1.59
21	AA	924	C	C2'-O2'	-5.09	1.35	1.41
21	AA	1148	U	C1'-N1	5.09	1.56	1.48
21	AA	1171	A	N1-C2	-5.09	1.29	1.34
23	AW	42	C	O3'-P	-5.09	1.55	1.61
57	BB	192	C	C2-O2	5.09	1.29	1.24
57	BB	197	A	C5-C4	5.09	1.42	1.38
57	BB	458	G	C3'-O3'	-5.09	1.35	1.42
57	BB	796	C	N1-C6	5.09	1.40	1.37
57	BB	1226	A	O3'-P	-5.09	1.55	1.61
57	BB	1238	G	N9-C8	5.09	1.41	1.37
57	BB	1361	G	N3-C4	-5.09	1.31	1.35
57	BB	1737	G	C3'-O3'	5.09	1.49	1.42
57	BB	1828	G	C2-N3	5.09	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2008	C	C2'-C1'	-5.09	1.47	1.53
57	BB	2175	C	C3'-C2'	-5.09	1.47	1.52
57	BB	2349	G	N9-C8	-5.09	1.34	1.37
21	AA	395	C	C4'-C3'	5.09	1.58	1.53
22	AY	56	C	C1'-N1	5.09	1.56	1.48
57	BB	215	G	N9-C4	5.09	1.42	1.38
57	BB	1305	C	C2-N3	-5.09	1.31	1.35
57	BB	1505	A	C4'-C3'	5.09	1.58	1.53
57	BB	1740	G	C2-N3	5.09	1.36	1.32
57	BB	1748	C	C3'-C2'	5.09	1.58	1.52
58	BA	30	C	C4'-C3'	-5.09	1.47	1.52
1	AJ	27	GLU	CB-CG	5.09	1.61	1.52
4	AM	40	GLU	CG-CD	-5.09	1.44	1.51
21	AA	263	A	C4'-C3'	5.09	1.58	1.53
21	AA	301	G	C2'-C1'	-5.09	1.47	1.53
21	AA	361	G	N3-C4	5.09	1.39	1.35
21	AA	592	G	C2'-C1'	-5.09	1.47	1.53
21	AA	833	G	C6-N1	5.09	1.43	1.39
21	AA	1267	C	N1-C2	5.09	1.45	1.40
21	AA	1303	C	N1-C2	5.09	1.45	1.40
22	AY	56	C	O3'-P	-5.09	1.55	1.61
57	BB	110	G	N9-C8	5.09	1.41	1.37
57	BB	235	U	N3-C4	5.09	1.43	1.38
57	BB	731	C	C3'-C2'	-5.09	1.47	1.52
57	BB	775	G	C5'-C4'	5.09	1.57	1.51
57	BB	864	G	C2-N2	5.09	1.39	1.34
57	BB	960	A	C3'-C2'	-5.09	1.47	1.52
57	BB	971	G	P-O5'	-5.09	1.54	1.59
57	BB	1025	G	N9-C8	5.09	1.41	1.37
57	BB	1167	C	N1-C6	-5.09	1.34	1.37
57	BB	1485	U	O3'-P	-5.09	1.55	1.61
57	BB	1696	G	O4'-C1'	-5.09	1.35	1.41
57	BB	2608	G	C4'-C3'	5.09	1.58	1.53
57	BB	2812	G	N3-C4	-5.09	1.31	1.35
58	BA	8	C	O5'-C5'	-5.09	1.34	1.42
21	AA	629	A	C8-N7	-5.09	1.27	1.31
21	AA	704	A	N1-C2	5.09	1.39	1.34
21	AA	1198	G	P-O5'	-5.09	1.54	1.59
23	AW	13	C	C5-C6	-5.09	1.30	1.34
57	BB	39	G	C5-C6	-5.09	1.37	1.42
57	BB	609	A	C6-N1	5.09	1.39	1.35
57	BB	858	G	C8-N7	5.09	1.34	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1451	C	C4-N4	5.09	1.38	1.33
57	BB	1457	U	N3-C4	5.09	1.43	1.38
57	BB	1668	A	N7-C5	-5.09	1.36	1.39
57	BB	1751	U	O4'-C1'	5.09	1.48	1.41
57	BB	2213	U	O3'-P	-5.09	1.55	1.61
57	BB	2814	A	N7-C5	5.09	1.42	1.39
21	AA	555	U	C2'-C1'	-5.09	1.47	1.53
21	AA	722	G	C8-N7	5.09	1.34	1.30
26	AV	57	A	N3-C4	5.09	1.38	1.34
57	BB	225	C	C4-C5	5.09	1.47	1.43
57	BB	962	G	C5-C6	5.09	1.47	1.42
57	BB	1125	G	C4'-C3'	5.09	1.58	1.53
57	BB	1810	A	C2-N3	5.09	1.38	1.33
57	BB	2693	G	O3'-P	-5.09	1.55	1.61
58	BA	16	G	C6-N1	5.09	1.43	1.39
21	AA	7	A	C2-N3	-5.09	1.28	1.33
21	AA	215	C	C4-C5	-5.09	1.38	1.43
21	AA	415	A	P-O5'	-5.09	1.54	1.59
21	AA	639	G	C3'-C2'	5.09	1.58	1.52
21	AA	745	G	C5'-C4'	5.09	1.57	1.51
21	AA	782	A	C8-N7	-5.09	1.27	1.31
21	AA	783	C	N1-C6	5.09	1.40	1.37
25	AZ	100	GLY	CA-C	-5.09	1.43	1.51
55	BG	46	ASP	CB-CG	5.09	1.62	1.51
57	BB	163	C	C4-C5	5.09	1.47	1.43
57	BB	300	A	C6-N6	5.09	1.38	1.33
57	BB	710	U	C1'-N1	5.09	1.56	1.48
57	BB	947	A	O3'-P	-5.09	1.55	1.61
57	BB	1443	U	C2-N3	-5.09	1.34	1.37
57	BB	1497	U	N1-C2	-5.09	1.33	1.38
57	BB	1546	G	N1-C2	5.09	1.41	1.37
57	BB	1647	U	N1-C6	5.09	1.42	1.38
57	BB	2140	G	N1-C2	5.09	1.41	1.37
57	BB	2190	G	C8-N7	-5.09	1.27	1.30
57	BB	2583	G	C2-N2	5.09	1.39	1.34
21	AA	711	G	N3-C4	5.08	1.39	1.35
21	AA	1054	C	C5'-C4'	5.08	1.57	1.51
57	BB	493	G	N9-C8	5.08	1.41	1.37
57	BB	833	A	O3'-P	5.08	1.67	1.61
57	BB	1573	G	C3'-C2'	-5.08	1.47	1.52
57	BB	2230	G	C5'-C4'	-5.08	1.45	1.51
57	BB	2242	G	C4'-C3'	-5.08	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	247	G	O4'-C1'	5.08	1.48	1.41
21	AA	622	A	C2-N3	-5.08	1.28	1.33
21	AA	699	C	C4'-C3'	-5.08	1.47	1.52
21	AA	944	G	C5-C4	-5.08	1.34	1.38
21	AA	1001	C	C4-N4	5.08	1.38	1.33
21	AA	1068	G	N9-C4	5.08	1.42	1.38
21	AA	1287	A	C6-N6	5.08	1.38	1.33
21	AA	1426	G	N7-C5	-5.08	1.36	1.39
22	AY	29	A	C2'-C1'	-5.08	1.47	1.53
26	AV	28	C	C3'-O3'	-5.08	1.35	1.42
57	BB	377	G	C2-N2	5.08	1.39	1.34
57	BB	1115	G	N7-C5	-5.08	1.36	1.39
57	BB	1260	A	C2-N3	5.08	1.38	1.33
57	BB	1350	C	O3'-P	5.08	1.67	1.61
57	BB	2058	A	C5-C6	-5.08	1.36	1.41
57	BB	2078	C	P-O5'	-5.08	1.54	1.59
57	BB	2095	A	C6-N6	5.08	1.38	1.33
58	BA	8	C	C5-C6	5.08	1.38	1.34
19	AH	73	SER	CB-OG	5.08	1.48	1.42
21	AA	542	G	C3'-O3'	5.08	1.49	1.42
21	AA	670	G	C2'-C1'	-5.08	1.47	1.53
57	BB	318	C	C2-O2	-5.08	1.19	1.24
57	BB	523	C	O3'-P	5.08	1.67	1.61
57	BB	733	G	C6-N1	5.08	1.43	1.39
57	BB	802	A	C6-N6	5.08	1.38	1.33
57	BB	985	C	N1-C6	-5.08	1.34	1.37
57	BB	1093	G	O4'-C1'	5.08	1.48	1.41
57	BB	1687	G	C2-N3	5.08	1.36	1.32
57	BB	2738	A	N9-C4	5.08	1.40	1.37
21	AA	377	G	N1-C2	5.08	1.41	1.37
21	AA	786	G	C2-N3	5.08	1.36	1.32
26	AV	44	A	C2-N3	5.08	1.38	1.33
57	BB	471	A	N9-C8	-5.08	1.33	1.37
57	BB	687	C	N1-C2	5.08	1.45	1.40
57	BB	1850	G	C2-N3	5.08	1.36	1.32
57	BB	2056	G	C2'-C1'	-5.08	1.47	1.53
21	AA	749	A	C5'-C4'	5.08	1.57	1.51
21	AA	758	C	C5-C6	-5.08	1.30	1.34
57	BB	782	A	C2'-C1'	-5.08	1.47	1.53
57	BB	937	C	C5-C6	5.08	1.38	1.34
57	BB	1080	A	C6-N1	5.08	1.39	1.35
57	BB	1283	G	C2'-C1'	-5.08	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1930	G	O3'-P	-5.08	1.55	1.61
57	BB	1945	G	C2-N3	5.08	1.36	1.32
57	BB	2022	U	P-O5'	-5.08	1.54	1.59
57	BB	2331	G	C2'-C1'	-5.08	1.47	1.53
57	BB	2593	U	C2'-O2'	-5.08	1.35	1.41
21	AA	695	A	C6-N1	5.08	1.39	1.35
21	AA	1425	U	C1'-N1	5.08	1.56	1.48
57	BB	188	G	C2-N2	5.08	1.39	1.34
57	BB	1046	A	C3'-C2'	5.08	1.58	1.52
57	BB	1562	U	N1-C2	-5.08	1.33	1.38
57	BB	2215	C	C2'-C1'	5.08	1.58	1.53
58	BA	41	G	C2'-C1'	5.08	1.58	1.53
58	BA	84	G	C3'-C2'	-5.08	1.47	1.52
15	AD	69	ARG	CZ-NH2	5.08	1.39	1.33
21	AA	734	G	C4'-O4'	-5.08	1.39	1.45
21	AA	1252	A	P-O5'	-5.08	1.54	1.59
23	AW	3	C	N1-C2	5.08	1.45	1.40
57	BB	37	C	C4'-O4'	5.08	1.52	1.45
57	BB	84	A	O4'-C1'	5.08	1.48	1.41
57	BB	127	A	N1-C2	-5.08	1.29	1.34
57	BB	309	A	N9-C4	5.08	1.40	1.37
57	BB	444	C	N1-C6	5.08	1.40	1.37
57	BB	1399	C	C2-O2	5.08	1.29	1.24
57	BB	1815	A	N9-C4	-5.08	1.34	1.37
57	BB	1918	A	C2-N3	5.08	1.38	1.33
57	BB	2115	G	C2-N3	5.08	1.36	1.32
57	BB	2145	C	N3-C4	5.08	1.37	1.33
57	BB	2178	C	C4-N4	-5.08	1.29	1.33
57	BB	2522	U	C4'-C3'	-5.08	1.47	1.52
57	BB	2703	C	C2-N3	5.08	1.39	1.35
57	BB	2761	A	C5-C4	5.08	1.42	1.38
8	AQ	26	ARG	CD-NE	5.07	1.55	1.46
21	AA	323	U	N3-C4	5.07	1.43	1.38
21	AA	466	A	N3-C4	5.07	1.37	1.34
21	AA	700	G	C2'-O2'	5.07	1.48	1.41
21	AA	859	G	N1-C2	5.07	1.41	1.37
21	AA	1305	G	C3'-C2'	-5.07	1.47	1.52
23	AW	51	U	N3-C4	5.07	1.43	1.38
57	BB	57	C	C2'-C1'	-5.07	1.47	1.53
57	BB	166	U	C1'-N1	5.07	1.56	1.48
57	BB	966	G	P-O5'	-5.07	1.54	1.59
57	BB	1119	U	O3'-P	-5.07	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1136	G	C4'-O4'	5.07	1.52	1.45
57	BB	1233	C	C4'-O4'	5.07	1.52	1.45
57	BB	1364	G	C2-N2	5.07	1.39	1.34
57	BB	1457	U	C4'-C3'	5.07	1.58	1.53
57	BB	1677	A	P-O5'	5.07	1.64	1.59
57	BB	1787	A	N3-C4	-5.07	1.31	1.34
57	BB	2291	U	N3-C4	5.07	1.43	1.38
12	AU	20	ARG	CZ-NH1	5.07	1.39	1.33
21	AA	326	G	O4'-C1'	-5.07	1.35	1.41
21	AA	520	A	C5-C4	5.07	1.42	1.38
57	BB	314	C	C4-C5	5.07	1.47	1.43
57	BB	1047	G	C5'-C4'	5.07	1.57	1.51
57	BB	1094	U	C1'-N1	5.07	1.56	1.48
57	BB	2425	A	C4'-O4'	-5.07	1.39	1.45
57	BB	2832	U	N3-C4	5.07	1.43	1.38
21	AA	44	A	C8-N7	5.07	1.35	1.31
21	AA	1015	G	N3-C4	-5.07	1.31	1.35
21	AA	1081	A	O4'-C1'	-5.07	1.35	1.41
21	AA	1143	G	N3-C4	5.07	1.39	1.35
21	AA	1275	A	C8-N7	-5.07	1.28	1.31
57	BB	338	G	N1-C2	5.07	1.41	1.37
57	BB	432	A	C2-N3	-5.07	1.28	1.33
57	BB	809	G	N9-C8	-5.07	1.34	1.37
57	BB	2025	C	C2'-C1'	-5.07	1.47	1.53
57	BB	2517	C	C4-N4	5.07	1.38	1.33
57	BB	2521	C	C3'-C2'	-5.07	1.47	1.52
57	BB	2783	U	N1-C6	5.07	1.42	1.38
21	AA	44	A	C2-N3	5.07	1.38	1.33
21	AA	271	C	N1-C2	5.07	1.45	1.40
21	AA	567	G	C6-N1	5.07	1.43	1.39
22	AY	18	G	O4'-C1'	-5.07	1.35	1.41
57	BB	719	C	O4'-C1'	-5.07	1.35	1.41
57	BB	2079	U	P-O5'	-5.07	1.54	1.59
57	BB	2627	G	C2-N3	-5.07	1.28	1.32
21	AA	27	G	C2-N3	5.07	1.36	1.32
21	AA	619	U	C4'-C3'	5.07	1.58	1.53
21	AA	678	U	N3-C4	5.07	1.43	1.38
21	AA	1348	U	C2-O2	5.07	1.26	1.22
22	AY	48	C	C4-N4	-5.07	1.29	1.33
23	AW	56	C	C4'-C3'	5.07	1.58	1.53
34	BO	102	ARG	CD-NE	5.07	1.55	1.46
57	BB	192	C	C4-N4	-5.07	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	194	G	C5-C4	-5.07	1.34	1.38
57	BB	513	A	C5-C4	5.07	1.42	1.38
57	BB	537	G	C2'-C1'	-5.07	1.47	1.53
57	BB	902	C	C5-C6	5.07	1.38	1.34
57	BB	1147	A	C6-N6	5.07	1.38	1.33
57	BB	1393	A	C6-N6	5.07	1.38	1.33
57	BB	1695	G	C5-C4	5.07	1.41	1.38
57	BB	1927	A	N3-C4	-5.07	1.31	1.34
57	BB	2053	G	N7-C5	5.07	1.42	1.39
57	BB	2278	A	O3'-P	-5.07	1.55	1.61
57	BB	2397	G	C5-C4	5.07	1.41	1.38
58	BA	41	G	N9-C8	-5.07	1.34	1.37
19	AH	59	GLU	N-CA	-5.07	1.36	1.46
21	AA	107	G	N7-C5	-5.07	1.36	1.39
21	AA	557	G	C8-N7	5.07	1.33	1.30
21	AA	1029	U	N1-C6	5.07	1.42	1.38
26	AV	64	G	N9-C4	5.07	1.42	1.38
56	BH	87	GLU	CA-CB	5.07	1.65	1.53
57	BB	787	C	C3'-C2'	5.07	1.58	1.52
57	BB	1004	U	N1-C2	-5.07	1.33	1.38
57	BB	1218	G	P-O5'	-5.07	1.54	1.59
57	BB	1762	A	N3-C4	-5.07	1.31	1.34
57	BB	1915	U	C2-N3	5.07	1.41	1.37
57	BB	2032	G	C2-N3	5.07	1.36	1.32
57	BB	2137	U	C5-C6	-5.07	1.29	1.34
58	BA	86	G	C4'-C3'	5.07	1.58	1.53
5	AN	60	ARG	NE-CZ	5.06	1.39	1.33
21	AA	299	G	N3-C4	-5.06	1.31	1.35
57	BB	507	A	C1'-N9	-5.06	1.39	1.46
57	BB	850	U	C2-N3	5.06	1.41	1.37
57	BB	1411	U	C2-O2	5.06	1.26	1.22
57	BB	1778	U	C4-O4	5.06	1.27	1.23
21	AA	263	A	C2'-C1'	-5.06	1.47	1.53
21	AA	471	U	C4'-O4'	5.06	1.52	1.45
21	AA	653	U	C5'-C4'	-5.06	1.45	1.51
21	AA	682	G	N9-C8	5.06	1.41	1.37
21	AA	973	G	C5-C4	-5.06	1.34	1.38
55	BG	162	ARG	CZ-NH1	5.06	1.39	1.33
57	BB	305	C	C4-C5	5.06	1.47	1.43
57	BB	641	U	N3-C4	5.06	1.43	1.38
57	BB	709	U	C2'-C1'	-5.06	1.47	1.53
57	BB	916	G	C3'-C2'	-5.06	1.47	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1040	A	C2'-C1'	-5.06	1.47	1.53
57	BB	1100	C	C1'-N1	5.06	1.56	1.48
57	BB	1167	C	C4-N4	5.06	1.38	1.33
57	BB	1189	A	O3'-P	-5.06	1.55	1.61
57	BB	1775	U	C4-C5	5.06	1.48	1.43
57	BB	1787	A	C4'-O4'	-5.06	1.39	1.45
57	BB	2126	A	C5-C6	5.06	1.45	1.41
58	BA	73	A	C3'-O3'	5.06	1.49	1.42
58	BA	73	A	N7-C5	-5.06	1.36	1.39
21	AA	116	A	C5-C4	5.06	1.42	1.38
21	AA	679	C	C4-C5	5.06	1.47	1.43
21	AA	1124	G	N9-C8	-5.06	1.34	1.37
22	AY	70	C	O3'-P	-5.06	1.55	1.61
54	BF	111	ARG	CD-NE	5.06	1.55	1.46
56	BH	95	GLY	CA-C	-5.06	1.43	1.51
57	BB	49	A	C2-N3	5.06	1.38	1.33
57	BB	497	A	O3'-P	5.06	1.67	1.61
57	BB	790	U	C2-N3	5.06	1.41	1.37
57	BB	1133	A	C8-N7	-5.06	1.28	1.31
57	BB	1570	A	C6-N1	-5.06	1.32	1.35
57	BB	2351	G	N3-C4	5.06	1.39	1.35
21	AA	31	G	C5'-C4'	5.06	1.57	1.51
21	AA	277	C	N1-C6	-5.06	1.34	1.37
21	AA	306	A	C6-N1	5.06	1.39	1.35
21	AA	346	G	N3-C4	5.06	1.39	1.35
55	BG	69	ALA	N-CA	-5.06	1.36	1.46
57	BB	143	C	C4'-O4'	-5.06	1.39	1.45
57	BB	587	C	P-O5'	-5.06	1.54	1.59
57	BB	860	U	C3'-C2'	5.06	1.58	1.52
57	BB	974	G	C5-C4	5.06	1.41	1.38
57	BB	1214	A	C2'-C1'	-5.06	1.47	1.53
57	BB	1399	C	C1'-N1	5.06	1.56	1.48
57	BB	1987	A	C4'-O4'	5.06	1.52	1.45
57	BB	2047	C	C4'-O4'	-5.06	1.39	1.45
57	BB	2515	C	C2'-C1'	-5.06	1.47	1.53
57	BB	2520	C	C4-N4	5.06	1.38	1.33
21	AA	600	A	N7-C5	-5.06	1.36	1.39
43	BX	71	ARG	CZ-NH1	5.06	1.39	1.33
57	BB	697	G	C2-N3	5.06	1.36	1.32
57	BB	759	G	N1-C2	5.06	1.41	1.37
57	BB	811	U	C3'-O3'	5.06	1.49	1.42
57	BB	1052	C	C3'-O3'	5.06	1.49	1.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1776	G	N7-C5	-5.06	1.36	1.39
57	BB	2044	C	N3-C4	5.06	1.37	1.33
57	BB	2147	A	C4'-O4'	5.06	1.52	1.45
57	BB	2202	U	C5-C6	5.06	1.38	1.34
57	BB	2264	C	C2'-C1'	-5.06	1.47	1.53
57	BB	2794	C	O3'-P	-5.06	1.55	1.61
57	BB	2808	G	C5'-C4'	5.06	1.57	1.51
57	BB	2817	U	C2-N3	5.06	1.41	1.37
57	BB	275	C	N3-C4	5.06	1.37	1.33
57	BB	918	A	C3'-O3'	5.06	1.49	1.42
57	BB	2726	A	C2'-O2'	5.06	1.48	1.41
21	AA	279	A	C3'-O3'	-5.05	1.35	1.42
21	AA	599	C	C2'-C1'	-5.05	1.47	1.53
21	AA	881	G	N9-C8	5.05	1.41	1.37
21	AA	964	A	C8-N7	-5.05	1.28	1.31
21	AA	1270	G	C3'-C2'	-5.05	1.47	1.52
22	AY	14	A	C5-C6	5.05	1.45	1.41
41	BV	71	LYS	CA-C	-5.05	1.39	1.52
49	B2	18	PHE	CG-CD1	5.05	1.46	1.38
57	BB	137	U	N3-C4	5.05	1.43	1.38
57	BB	440	C	P-O5'	-5.05	1.54	1.59
57	BB	586	A	C8-N7	5.05	1.35	1.31
57	BB	881	G	N9-C4	5.05	1.42	1.38
57	BB	1251	C	C2'-C1'	-5.05	1.47	1.53
57	BB	1399	C	O4'-C1'	5.05	1.48	1.41
57	BB	2249	U	C4-C5	5.05	1.48	1.43
57	BB	2298	A	C6-N1	5.05	1.39	1.35
57	BB	2566	A	C5-C6	-5.05	1.36	1.41
57	BB	2750	A	C5'-C4'	5.05	1.57	1.51
57	BB	2850	A	C6-N1	5.05	1.39	1.35
21	AA	607	A	C5'-C4'	5.05	1.57	1.51
21	AA	784	A	N9-C4	5.05	1.40	1.37
57	BB	1872	A	N3-C4	-5.05	1.31	1.34
57	BB	2021	C	P-O5'	-5.05	1.54	1.59
57	BB	2349	G	C6-N1	5.05	1.43	1.39
57	BB	2620	C	C4'-C3'	5.05	1.58	1.53
57	BB	2878	U	C5-C6	-5.05	1.29	1.34
21	AA	156	C	P-O5'	-5.05	1.54	1.59
21	AA	223	A	N9-C8	-5.05	1.33	1.37
21	AA	279	A	P-O5'	-5.05	1.54	1.59
21	AA	710	G	C5-C4	5.05	1.41	1.38
21	AA	739	C	C1'-N1	-5.05	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	882	C	P-O5'	-5.05	1.54	1.59
21	AA	1325	C	C3'-C2'	-5.05	1.47	1.52
22	AY	68	U	N3-C4	5.05	1.43	1.38
33	BN	103	ARG	CZ-NH1	5.05	1.39	1.33
57	BB	215	G	P-O5'	5.05	1.64	1.59
57	BB	416	U	P-O5'	5.05	1.64	1.59
57	BB	582	A	N7-C5	-5.05	1.36	1.39
57	BB	1174	U	N1-C2	5.05	1.43	1.38
57	BB	1264	A	C1'-N9	5.05	1.56	1.48
57	BB	1460	U	N1-C2	-5.05	1.34	1.38
57	BB	1743	G	N9-C4	-5.05	1.33	1.38
57	BB	1910	G	N7-C5	-5.05	1.36	1.39
57	BB	2727	A	C6-N1	5.05	1.39	1.35
57	BB	2884	U	N1-C2	5.05	1.43	1.38
21	AA	278	G	P-O5'	-5.05	1.54	1.59
21	AA	482	A	C5-C4	5.05	1.42	1.38
21	AA	1345	U	N1-C6	5.05	1.42	1.38
22	AY	7	U	P-O5'	-5.05	1.54	1.59
23	AW	47	U	N1-C6	5.05	1.42	1.38
34	BO	101	GLY	CA-C	-5.05	1.43	1.51
57	BB	8	C	N1-C6	-5.05	1.34	1.37
57	BB	401	A	N1-C2	-5.05	1.29	1.34
57	BB	748	G	N1-C2	5.05	1.41	1.37
57	BB	802	A	C2-N3	5.05	1.38	1.33
57	BB	1145	C	C5'-C4'	-5.05	1.45	1.51
57	BB	1235	G	N9-C4	-5.05	1.33	1.38
57	BB	2096	C	C3'-O3'	5.05	1.49	1.42
57	BB	2301	C	C4'-O4'	5.05	1.52	1.45
57	BB	2488	G	N7-C5	-5.05	1.36	1.39
57	BB	2621	G	C2-N2	5.05	1.39	1.34
57	BB	2693	G	C2-N2	5.05	1.39	1.34
7	AP	25	ARG	NE-CZ	5.05	1.39	1.33
8	AQ	25	GLU	CB-CG	5.05	1.61	1.52
20	AI	92	SER	CA-CB	5.05	1.60	1.52
21	AA	998	C	C5'-C4'	5.05	1.57	1.51
21	AA	1370	G	N7-C5	-5.05	1.36	1.39
25	AZ	384	GLY	N-CA	-5.05	1.38	1.46
57	BB	415	A	C2-N3	-5.05	1.29	1.33
57	BB	517	C	O5'-C5'	-5.05	1.34	1.42
57	BB	564	C	N1-C6	5.05	1.40	1.37
57	BB	1028	A	C2'-C1'	-5.05	1.47	1.53
57	BB	2305	U	C5'-C4'	5.05	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	122	G	C2-N2	5.05	1.39	1.34
21	AA	308	C	C4-C5	5.05	1.47	1.43
21	AA	349	A	C3'-C2'	5.05	1.58	1.52
21	AA	360	G	C5'-C4'	5.05	1.57	1.51
21	AA	389	A	N1-C2	5.05	1.38	1.34
21	AA	778	G	N7-C5	-5.05	1.36	1.39
21	AA	1152	A	C6-N1	5.05	1.39	1.35
22	AY	33	U	N1-C2	5.05	1.43	1.38
25	AZ	313	LYS	CA-C	-5.05	1.39	1.52
26	AV	42	G	N7-C5	-5.05	1.36	1.39
57	BB	117	G	N3-C4	-5.05	1.31	1.35
57	BB	177	G	C6-N1	-5.05	1.36	1.39
57	BB	1467	U	C5'-C4'	5.05	1.57	1.51
57	BB	1602	U	C2-N3	5.05	1.41	1.37
57	BB	1661	G	P-O5'	-5.05	1.54	1.59
57	BB	1829	A	C2'-C1'	-5.05	1.47	1.53
57	BB	2140	G	N7-C5	-5.05	1.36	1.39
57	BB	2459	A	N1-C2	5.05	1.38	1.34
57	BB	2518	A	N7-C5	-5.05	1.36	1.39
2	AK	49	SER	CB-OG	-5.04	1.35	1.42
18	AG	56	SER	N-CA	-5.04	1.36	1.46
21	AA	47	C	O4'-C1'	5.04	1.48	1.41
21	AA	467	U	C3'-O3'	5.04	1.49	1.42
21	AA	783	C	C2'-C1'	5.04	1.58	1.53
57	BB	569	U	C4'-C3'	-5.04	1.47	1.52
57	BB	663	G	C3'-C2'	-5.04	1.47	1.52
57	BB	731	C	N3-C4	5.04	1.37	1.33
57	BB	1502	A	N9-C8	5.04	1.41	1.37
57	BB	2435	A	N7-C5	-5.04	1.36	1.39
21	AA	197	A	N7-C5	5.04	1.42	1.39
21	AA	203	G	C5-C4	-5.04	1.34	1.38
21	AA	380	G	C2-N2	5.04	1.39	1.34
22	AY	68	U	C5-C6	5.04	1.38	1.34
25	AZ	50	ASP	CB-CG	5.04	1.62	1.51
57	BB	3	U	P-O5'	5.04	1.64	1.59
57	BB	11	C	C4'-C3'	5.04	1.58	1.53
57	BB	118	A	N1-C2	5.04	1.38	1.34
57	BB	462	C	C4'-O4'	-5.04	1.39	1.45
57	BB	509	C	P-O5'	-5.04	1.54	1.59
57	BB	1424	G	C6-N1	5.04	1.43	1.39
57	BB	1596	A	C5'-C4'	5.04	1.57	1.51
58	BA	50	A	C2'-C1'	-5.04	1.47	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AJ	72	ARG	NE-CZ	5.04	1.39	1.33
21	AA	229	U	N1-C2	-5.04	1.34	1.38
21	AA	547	A	C3'-O3'	5.04	1.49	1.42
21	AA	616	G	C2'-O2'	-5.04	1.35	1.41
21	AA	958	A	O4'-C1'	5.04	1.48	1.41
21	AA	1167	A	N7-C5	-5.04	1.36	1.39
21	AA	1278	G	C6-N1	5.04	1.43	1.39
24	AX	19	U	C2'-C1'	-5.04	1.47	1.53
57	BB	152	A	P-O5'	-5.04	1.54	1.59
57	BB	210	C	N3-C4	5.04	1.37	1.33
57	BB	1009	A	C5'-C4'	5.04	1.57	1.51
57	BB	1034	G	N9-C4	5.04	1.42	1.38
57	BB	1536	C	O3'-P	-5.04	1.55	1.61
57	BB	2561	U	O3'-P	-5.04	1.55	1.61
57	BB	2621	G	P-O5'	-5.04	1.54	1.59
57	BB	2672	U	C2-N3	5.04	1.41	1.37
21	AA	1270	G	C5'-C4'	5.04	1.57	1.51
57	BB	85	G	N3-C4	5.04	1.39	1.35
57	BB	107	G	N9-C4	-5.04	1.33	1.38
57	BB	218	A	N3-C4	-5.04	1.31	1.34
57	BB	436	C	P-O5'	-5.04	1.54	1.59
57	BB	1536	C	C5'-C4'	5.04	1.57	1.51
57	BB	1842	G	N9-C4	-5.04	1.33	1.38
57	BB	1985	C	N3-C4	5.04	1.37	1.33
9	AR	23	LYS	CA-CB	5.04	1.65	1.53
21	AA	284	C	C4-C5	5.04	1.47	1.43
21	AA	620	C	C2-N3	5.04	1.39	1.35
21	AA	639	G	C2'-C1'	-5.04	1.47	1.53
21	AA	1478	U	C4'-C3'	5.04	1.58	1.53
31	BL	2	ARG	CA-C	-5.04	1.39	1.52
41	BV	59	GLU	CD-OE2	5.04	1.31	1.25
57	BB	124	G	C3'-C2'	-5.04	1.47	1.52
57	BB	189	G	C3'-C2'	5.04	1.58	1.52
57	BB	202	U	C4-C5	5.04	1.48	1.43
57	BB	319	G	C8-N7	-5.04	1.27	1.30
57	BB	691	C	N1-C6	5.04	1.40	1.37
57	BB	857	G	C2-N2	5.04	1.39	1.34
57	BB	1023	U	C1'-N1	-5.04	1.39	1.46
57	BB	1388	G	C5-C4	5.04	1.41	1.38
57	BB	1461	C	N1-C6	5.04	1.40	1.37
57	BB	1718	G	O4'-C1'	5.04	1.48	1.41
57	BB	2110	G	C4'-C3'	5.04	1.58	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2872	A	N9-C8	-5.04	1.33	1.37
58	BA	2	G	C6-N1	5.04	1.43	1.39
21	AA	439	U	O4'-C1'	5.04	1.48	1.41
21	AA	860	A	C5-C4	-5.04	1.35	1.38
21	AA	1084	G	C2'-C1'	-5.04	1.47	1.53
23	AW	52	G	P-O5'	-5.04	1.54	1.59
57	BB	1265	A	C4'-O4'	-5.04	1.39	1.45
15	AD	80	ARG	CD-NE	5.04	1.55	1.46
21	AA	140	U	N1-C2	5.04	1.43	1.38
21	AA	997	U	N3-C4	5.04	1.43	1.38
21	AA	1246	A	N9-C8	-5.04	1.33	1.37
21	AA	1401	G	C2'-C1'	-5.04	1.47	1.53
37	BR	21	ARG	NE-CZ	5.04	1.39	1.33
42	BW	25	PHE	C-N	5.04	1.42	1.33
45	BC	99	GLU	CD-OE2	-5.04	1.20	1.25
57	BB	82	U	C4-C5	5.04	1.48	1.43
57	BB	277	G	N9-C8	-5.04	1.34	1.37
57	BB	734	A	C3'-C2'	5.04	1.58	1.52
57	BB	759	G	C5-C4	5.04	1.41	1.38
57	BB	924	G	C3'-C2'	5.04	1.58	1.52
57	BB	1792	G	C8-N7	-5.04	1.27	1.30
57	BB	2070	A	C5'-C4'	-5.04	1.45	1.51
57	BB	2075	U	N3-C4	5.04	1.43	1.38
57	BB	2281	A	N3-C4	-5.04	1.31	1.34
57	BB	2603	G	C5-C4	5.04	1.41	1.38
57	BB	2834	G	N9-C8	-5.04	1.34	1.37
58	BA	69	G	C2-N3	5.04	1.36	1.32
21	AA	273	U	C2-O2	5.03	1.26	1.22
21	AA	600	A	C2-N3	5.03	1.38	1.33
21	AA	803	G	C2'-O2'	5.03	1.48	1.41
21	AA	1233	G	C2'-C1'	-5.03	1.47	1.53
27	B5	21	TYR	CE1-CZ	-5.03	1.32	1.38
32	BM	66	ARG	NE-CZ	5.03	1.39	1.33
57	BB	185	G	P-O5'	5.03	1.64	1.59
57	BB	711	G	P-O5'	-5.03	1.54	1.59
57	BB	952	G	C2'-C1'	-5.03	1.47	1.53
57	BB	1197	G	N9-C8	5.03	1.41	1.37
57	BB	1666	G	O3'-P	-5.03	1.55	1.61
57	BB	2301	C	O3'-P	-5.03	1.55	1.61
57	BB	2581	G	C2'-C1'	-5.03	1.47	1.53
57	BB	2750	A	P-O5'	-5.03	1.54	1.59
58	BA	60	C	N1-C6	5.03	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	AD	38	GLY	CA-C	-5.03	1.43	1.51
21	AA	350	G	C2-N3	5.03	1.36	1.32
21	AA	733	G	N9-C8	5.03	1.41	1.37
26	AV	34	C	N1-C6	5.03	1.40	1.37
57	BB	1046	A	C6-N1	5.03	1.39	1.35
57	BB	1224	U	C3'-O3'	-5.03	1.35	1.42
57	BB	1289	C	O4'-C1'	5.03	1.48	1.41
57	BB	1539	U	N3-C4	5.03	1.43	1.38
57	BB	2020	A	C8-N7	5.03	1.35	1.31
57	BB	2600	A	C1'-N9	5.03	1.56	1.48
57	BB	2802	G	N9-C4	-5.03	1.33	1.38
4	AM	56	ARG	CD-NE	5.03	1.55	1.46
21	AA	126	G	C5'-C4'	5.03	1.57	1.51
21	AA	787	A	C3'-C2'	-5.03	1.47	1.52
21	AA	1138	G	N9-C8	5.03	1.41	1.37
21	AA	1202	U	C2-N3	5.03	1.41	1.37
21	AA	1465	A	O3'-P	-5.03	1.55	1.61
21	AA	1497	G	C2-N3	5.03	1.36	1.32
23	AW	44	G	N7-C5	-5.03	1.36	1.39
57	BB	165	A	C2'-C1'	-5.03	1.47	1.53
57	BB	807	U	O5'-C5'	5.03	1.52	1.44
57	BB	894	U	C4-C5	5.03	1.48	1.43
57	BB	2245	U	N1-C2	5.03	1.43	1.38
57	BB	2311	A	N7-C5	5.03	1.42	1.39
57	BB	2375	G	C4'-O4'	5.03	1.52	1.45
58	BA	89	U	C2'-C1'	-5.03	1.47	1.53
21	AA	453	G	N7-C5	5.03	1.42	1.39
21	AA	1459	G	C6-O6	-5.03	1.19	1.24
57	BB	1544	A	O3'-P	-5.03	1.55	1.61
57	BB	1741	C	C2'-C1'	-5.03	1.47	1.53
1	AJ	31	ARG	CZ-NH2	5.03	1.39	1.33
21	AA	671	G	C4'-C3'	-5.03	1.47	1.52
21	AA	1508	A	C2-N3	-5.03	1.29	1.33
22	AY	2	C	C1'-N1	5.03	1.56	1.48
23	AW	24	G	N7-C5	-5.03	1.36	1.39
26	AV	35	A	N9-C8	-5.03	1.33	1.37
57	BB	329	G	P-O5'	5.03	1.64	1.59
57	BB	655	A	C2'-C1'	-5.03	1.47	1.53
57	BB	985	C	C4-N4	5.03	1.38	1.33
57	BB	1081	U	P-O5'	-5.03	1.54	1.59
57	BB	1684	G	N7-C5	-5.03	1.36	1.39
57	BB	2307	G	C2-N3	5.03	1.36	1.32

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2735	G	N3-C4	5.03	1.39	1.35
16	AE	67	ARG	CZ-NH2	5.03	1.39	1.33
21	AA	71	A	C5'-C4'	5.03	1.57	1.51
21	AA	289	G	C4'-O4'	-5.03	1.39	1.45
21	AA	796	C	N1-C2	5.03	1.45	1.40
21	AA	949	A	N7-C5	-5.03	1.36	1.39
21	AA	1366	C	P-O5'	-5.03	1.54	1.59
21	AA	1507	A	N7-C5	-5.03	1.36	1.39
21	AA	1526	G	N3-C4	5.03	1.39	1.35
57	BB	337	C	P-O5'	-5.03	1.54	1.59
57	BB	672	C	C3'-C2'	-5.03	1.47	1.52
57	BB	674	G	C5'-C4'	5.03	1.57	1.51
57	BB	1059	G	C6-N1	5.03	1.43	1.39
57	BB	1596	A	N7-C5	5.03	1.42	1.39
57	BB	2204	G	C2-N3	5.03	1.36	1.32
57	BB	2604	U	C4-C5	5.03	1.48	1.43
21	AA	143	A	N3-C4	5.02	1.37	1.34
21	AA	1360	A	N3-C4	-5.02	1.31	1.34
29	BJ	97	PRO	N-CD	-5.02	1.40	1.47
57	BB	98	G	N9-C4	5.02	1.42	1.38
57	BB	543	G	C4'-C3'	5.02	1.58	1.53
57	BB	644	A	N7-C5	-5.02	1.36	1.39
57	BB	1921	G	N9-C4	-5.02	1.33	1.38
57	BB	2103	C	N1-C6	5.02	1.40	1.37
57	BB	2363	G	C3'-C2'	-5.02	1.47	1.52
21	AA	602	A	O4'-C1'	5.02	1.48	1.41
21	AA	654	G	C4'-O4'	5.02	1.52	1.45
21	AA	939	G	C2-N3	5.02	1.36	1.32
21	AA	1024	G	C8-N7	5.02	1.33	1.30
21	AA	1074	G	C3'-O3'	5.02	1.49	1.42
21	AA	1169	A	C2-N3	5.02	1.38	1.33
21	AA	1345	U	P-O5'	-5.02	1.54	1.59
26	AV	30	G	C5-C6	-5.02	1.37	1.42
57	BB	534	U	O3'-P	-5.02	1.55	1.61
57	BB	551	G	N3-C4	5.02	1.39	1.35
57	BB	1036	G	C2'-O2'	-5.02	1.35	1.41
57	BB	1284	A	C5-C6	5.02	1.45	1.41
57	BB	1525	A	C8-N7	-5.02	1.28	1.31
57	BB	2123	G	C6-N1	5.02	1.43	1.39
58	BA	88	C	C5'-C4'	5.02	1.57	1.51
21	AA	827	U	O4'-C1'	5.02	1.48	1.41
21	AA	1010	U	C2-N3	5.02	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1094	G	N9-C4	5.02	1.42	1.38
21	AA	1223	C	N1-C2	-5.02	1.35	1.40
22	AY	36	A	C5-C4	5.02	1.42	1.38
57	BB	361	G	C6-O6	5.02	1.28	1.24
57	BB	513	A	C2'-C1'	-5.02	1.47	1.53
57	BB	665	U	C2'-O2'	-5.02	1.35	1.41
57	BB	1722	A	C5-C4	5.02	1.42	1.38
57	BB	1752	C	C2-N3	5.02	1.39	1.35
57	BB	1803	A	P-O5'	-5.02	1.54	1.59
2	AK	36	ARG	NE-CZ	5.02	1.39	1.33
18	AG	84	TYR	CZ-OH	5.02	1.46	1.37
21	AA	566	G	C6-N1	-5.02	1.36	1.39
21	AA	814	A	N9-C4	-5.02	1.34	1.37
21	AA	841	C	C2-N3	5.02	1.39	1.35
57	BB	63	A	N3-C4	-5.02	1.31	1.34
57	BB	385	C	C2-N3	5.02	1.39	1.35
57	BB	521	U	N1-C2	-5.02	1.34	1.38
57	BB	1574	C	P-O5'	5.02	1.64	1.59
57	BB	2083	G	C2'-C1'	-5.02	1.47	1.53
57	BB	2163	A	N3-C4	-5.02	1.31	1.34
57	BB	2310	C	P-O5'	5.02	1.64	1.59
57	BB	2686	G	O3'-P	-5.02	1.55	1.61
57	BB	2800	A	C8-N7	5.02	1.35	1.31
57	BB	2851	A	C2-N3	5.02	1.38	1.33
57	BB	2866	U	C4-C5	5.02	1.48	1.43
21	AA	548	G	N7-C5	-5.02	1.36	1.39
21	AA	1048	G	C8-N7	5.02	1.33	1.30
21	AA	1238	A	C5-C4	5.02	1.42	1.38
23	AW	25	C	C5-C6	5.02	1.38	1.34
23	AW	50	U	N3-C4	5.02	1.43	1.38
57	BB	186	G	C8-N7	5.02	1.33	1.30
57	BB	468	G	P-O5'	-5.02	1.54	1.59
57	BB	553	G	C4'-C3'	5.02	1.58	1.53
57	BB	843	G	N9-C4	-5.02	1.33	1.38
57	BB	1205	A	O3'-P	-5.02	1.55	1.61
57	BB	1359	A	N3-C4	-5.02	1.31	1.34
57	BB	1482	G	N9-C8	-5.02	1.34	1.37
57	BB	1810	A	N9-C4	-5.02	1.34	1.37
57	BB	2322	A	N3-C4	-5.02	1.31	1.34
57	BB	2794	C	C1'-N1	5.02	1.56	1.48
21	AA	941	G	O4'-C1'	-5.02	1.35	1.41
21	AA	1268	G	N9-C4	5.02	1.42	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
21	AA	1505	G	C4'-C3'	5.02	1.58	1.53
57	BB	1784	A	C4'-C3'	5.02	1.58	1.53
57	BB	2602	A	P-O5'	-5.02	1.54	1.59
13	AB	136	ARG	CA-CB	5.01	1.65	1.53
21	AA	433	G	P-O5'	-5.01	1.54	1.59
21	AA	698	G	C2-N3	5.01	1.36	1.32
57	BB	487	C	C4-C5	5.01	1.47	1.43
57	BB	515	A	P-O5'	-5.01	1.54	1.59
57	BB	591	U	C4-C5	5.01	1.48	1.43
57	BB	823	C	C3'-O3'	-5.01	1.35	1.42
57	BB	1008	A	C2'-O2'	-5.01	1.35	1.41
57	BB	1284	A	C4'-O4'	5.01	1.52	1.45
57	BB	1373	A	C6-N6	5.01	1.38	1.33
57	BB	1734	G	O3'-P	5.01	1.67	1.61
57	BB	2016	U	N1-C2	5.01	1.43	1.38
57	BB	2044	C	C2-N3	5.01	1.39	1.35
57	BB	2103	C	P-O5'	5.01	1.64	1.59
57	BB	2278	A	C6-N6	5.01	1.38	1.33
21	AA	427	U	N3-C4	5.01	1.43	1.38
57	BB	438	G	N1-C2	5.01	1.41	1.37
57	BB	1014	A	P-O5'	-5.01	1.54	1.59
57	BB	1319	C	N1-C2	5.01	1.45	1.40
57	BB	1753	G	N9-C4	5.01	1.42	1.38
57	BB	1941	C	C5-C6	5.01	1.38	1.34
58	BA	67	G	C2-N3	5.01	1.36	1.32
21	AA	7	A	C6-N1	5.01	1.39	1.35
21	AA	288	A	C3'-C2'	-5.01	1.47	1.52
21	AA	579	A	C2'-C1'	-5.01	1.47	1.53
21	AA	794	A	N9-C4	5.01	1.40	1.37
21	AA	1132	C	C5'-C4'	5.01	1.57	1.51
21	AA	1385	G	C5-C4	-5.01	1.34	1.38
22	AY	5	A	O5'-C5'	5.01	1.52	1.44
33	BN	89	SER	CA-CB	5.01	1.60	1.52
57	BB	740	C	C3'-C2'	5.01	1.58	1.52
57	BB	987	C	O3'-P	-5.01	1.55	1.61
57	BB	1217	U	O4'-C1'	5.01	1.48	1.41
57	BB	1404	C	C4-N4	5.01	1.38	1.33
57	BB	1530	G	N3-C4	5.01	1.39	1.35
57	BB	1623	G	N9-C4	-5.01	1.33	1.38
57	BB	1826	G	C3'-O3'	5.01	1.49	1.42
57	BB	1886	U	C4-C5	5.01	1.48	1.43
57	BB	1974	C	C4-N4	5.01	1.38	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	2059	A	N7-C5	5.01	1.42	1.39
57	BB	2073	C	C5'-C4'	5.01	1.57	1.51
57	BB	2254	C	C3'-C2'	5.01	1.58	1.52
57	BB	2427	C	C4'-O4'	-5.01	1.39	1.45
57	BB	2492	U	C2-N3	5.01	1.41	1.37
57	BB	2549	G	C2'-C1'	-5.01	1.47	1.53
57	BB	2843	G	N9-C8	-5.01	1.34	1.37
58	BA	98	G	C1'-N9	-5.01	1.39	1.46
13	AB	90	PHE	CG-CD2	5.01	1.46	1.38
18	AG	118	ARG	CZ-NH2	5.01	1.39	1.33
21	AA	46	G	C2'-C1'	-5.01	1.47	1.53
21	AA	236	A	C5-C6	-5.01	1.36	1.41
21	AA	512	U	P-O5'	-5.01	1.54	1.59
21	AA	1181	G	C3'-C2'	-5.01	1.47	1.52
21	AA	1280	A	C2'-O2'	-5.01	1.35	1.41
22	AY	1	G	C5-C6	-5.01	1.37	1.42
23	AW	60	U	P-O5'	-5.01	1.54	1.59
57	BB	559	G	C6-N1	5.01	1.43	1.39
57	BB	954	G	N9-C8	5.01	1.41	1.37
57	BB	1346	G	N7-C5	5.01	1.42	1.39
57	BB	1512	C	P-O5'	-5.01	1.54	1.59
57	BB	1652	A	C3'-C2'	-5.01	1.47	1.52
57	BB	2257	U	C2'-O2'	5.01	1.48	1.41
57	BB	2500	U	N3-C4	5.01	1.43	1.38
57	BB	2577	A	N3-C4	5.01	1.37	1.34
58	BA	66	A	C3'-C2'	5.01	1.58	1.52
13	AB	220	VAL	CA-C	-5.01	1.40	1.52
21	AA	318	G	C2-N3	5.01	1.36	1.32
21	AA	417	G	C2-N2	5.01	1.39	1.34
21	AA	657	U	C2'-C1'	-5.01	1.47	1.53
22	AY	21	A	C5'-C4'	5.01	1.57	1.51
23	AW	69	G	C4'-C3'	5.01	1.58	1.53
53	BE	40	ARG	NE-CZ	5.01	1.39	1.33
57	BB	114	U	C4'-C3'	-5.01	1.47	1.52
57	BB	311	A	C6-N1	5.01	1.39	1.35
57	BB	553	G	C8-N7	-5.01	1.27	1.30
57	BB	2894	G	N1-C2	5.01	1.41	1.37
21	AA	307	C	C1'-N1	5.01	1.56	1.48
21	AA	784	A	C2'-C1'	-5.01	1.47	1.53
21	AA	818	G	C3'-C2'	5.01	1.58	1.52
21	AA	1255	G	C8-N7	-5.01	1.27	1.30
21	AA	1293	C	C5-C6	-5.01	1.30	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	AW	5	G	C2'-C1'	-5.01	1.47	1.53
26	AV	12	G	C8-N7	-5.01	1.27	1.30
57	BB	150	U	N1-C6	-5.01	1.33	1.38
57	BB	310	A	C5-C4	5.01	1.42	1.38
57	BB	457	A	C6-N6	5.01	1.38	1.33
57	BB	907	G	C6-N1	5.01	1.43	1.39
57	BB	1106	G	C6-N1	-5.01	1.36	1.39
57	BB	1327	A	C6-N1	5.01	1.39	1.35
57	BB	2050	C	C2-N3	5.01	1.39	1.35
21	AA	418	C	C4-N4	5.00	1.38	1.33
21	AA	1027	C	C3'-C2'	-5.00	1.47	1.52
21	AA	1121	U	C4'-O4'	-5.00	1.39	1.45
21	AA	1178	G	N3-C4	5.00	1.39	1.35
57	BB	971	G	N1-C2	5.00	1.41	1.37
57	BB	2293	G	P-O5'	-5.00	1.54	1.59
57	BB	2699	C	C4-N4	5.00	1.38	1.33
8	AQ	61	ARG	NE-CZ	5.00	1.39	1.33
14	AC	198	LYS	CA-C	-5.00	1.40	1.52
21	AA	175	C	N3-C4	5.00	1.37	1.33
21	AA	537	G	C2-N2	5.00	1.39	1.34
42	BW	18	LYS	C-N	5.00	1.45	1.34
57	BB	408	G	C4'-C3'	5.00	1.58	1.53
57	BB	1038	G	N9-C4	-5.00	1.33	1.38
57	BB	1063	G	O4'-C1'	-5.00	1.35	1.41
57	BB	1254	A	N9-C8	5.00	1.41	1.37
57	BB	1368	G	C8-N7	-5.00	1.27	1.30
57	BB	2045	C	N1-C6	5.00	1.40	1.37
58	BA	100	G	N7-C5	-5.00	1.36	1.39
11	AT	81	GLN	N-CA	-5.00	1.36	1.46
21	AA	100	G	N9-C8	5.00	1.41	1.37
21	AA	726	C	P-O5'	-5.00	1.54	1.59
21	AA	790	A	C4'-C3'	-5.00	1.47	1.52
21	AA	1160	G	N9-C8	5.00	1.41	1.37
21	AA	1409	C	N1-C6	-5.00	1.34	1.37
22	AY	47	U	N1-C2	5.00	1.43	1.38
57	BB	37	C	C2-O2	5.00	1.28	1.24
57	BB	680	C	O3'-P	-5.00	1.55	1.61
57	BB	751	A	N3-C4	5.00	1.37	1.34
57	BB	880	G	C6-N1	5.00	1.43	1.39
57	BB	1110	G	C5'-C4'	5.00	1.57	1.51
57	BB	1460	U	C5-C6	5.00	1.38	1.34
57	BB	1589	U	O3'-P	-5.00	1.55	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
57	BB	1774	C	N3-C4	5.00	1.37	1.33
57	BB	2445	G	C2-N3	5.00	1.36	1.32
57	BB	2489	U	N3-C4	5.00	1.43	1.38
57	BB	2506	U	P-O5'	-5.00	1.54	1.59
57	BB	2865	U	N1-C2	-5.00	1.34	1.38

All (27780) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	523	A	N1-C6-N6	27.08	134.85	118.60
57	BB	2097	A	N1-C6-N6	26.55	134.53	118.60
57	BB	725	G	N1-C6-O6	26.46	135.78	119.90
57	BB	2274	A	N1-C6-N6	26.21	134.33	118.60
58	BA	9	G	N1-C6-O6	25.88	135.43	119.90
21	AA	1375	A	N1-C6-N6	25.69	134.01	118.60
57	BB	1090	A	N1-C6-N6	25.63	133.98	118.60
21	AA	968	A	N1-C6-N6	25.38	133.83	118.60
57	BB	628	G	N1-C6-O6	25.11	134.97	119.90
21	AA	15	G	N1-C6-O6	24.76	134.76	119.90
21	AA	59	A	N1-C6-N6	24.34	133.21	118.60
57	BB	1698	A	N1-C6-N6	24.27	133.16	118.60
57	BB	1853	A	N1-C6-N6	24.23	133.13	118.60
57	BB	1202	G	N1-C6-O6	23.99	134.29	119.90
21	AA	1188	A	N1-C6-N6	23.96	132.98	118.60
21	AA	1405	G	C5-C6-O6	-23.91	114.26	128.60
57	BB	1122	G	N1-C6-O6	23.73	134.14	119.90
57	BB	2389	G	C5-C6-O6	-23.72	114.37	128.60
22	AY	76	A	N1-C6-N6	23.45	132.67	118.60
57	BB	528	A	N1-C6-N6	23.45	132.67	118.60
57	BB	1276	A	N1-C6-N6	23.42	132.65	118.60
21	AA	574	A	N1-C6-N6	23.36	132.62	118.60
58	BA	56	G	N1-C6-O6	23.31	133.89	119.90
57	BB	330	A	N1-C6-N6	23.26	132.56	118.60
57	BB	2101	A	N1-C6-N6	23.23	132.54	118.60
57	BB	2009	A	N1-C6-N6	23.17	132.50	118.60
21	AA	1405	G	N1-C6-O6	23.12	133.78	119.90
21	AA	608	A	N1-C6-N6	23.05	132.43	118.60
57	BB	1649	G	C5-C6-O6	-22.94	114.84	128.60
57	BB	156	A	N1-C6-N6	22.93	132.36	118.60
57	BB	1848	A	N1-C6-N6	22.92	132.35	118.60
57	BB	864	G	N1-C6-O6	22.89	133.63	119.90
57	BB	322	A	N1-C6-N6	22.82	132.29	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2670	A	N1-C6-N6	22.82	132.29	118.60
22	AY	23	A	N1-C6-N6	22.73	132.24	118.60
21	AA	1453	G	N1-C6-O6	22.67	133.50	119.90
21	AA	15	G	C5-C6-O6	-22.63	115.02	128.60
21	AA	1398	A	N1-C6-N6	22.62	132.17	118.60
57	BB	602	A	N1-C6-N6	22.59	132.15	118.60
21	AA	713	G	N1-C6-O6	22.52	133.41	119.90
57	BB	259	G	N1-C6-O6	22.50	133.40	119.90
57	BB	1133	A	N1-C6-N6	22.31	131.98	118.60
23	AW	36	A	N1-C6-N6	22.30	131.98	118.60
57	BB	2705	A	N1-C6-N6	22.29	131.97	118.60
57	BB	1553	A	N1-C6-N6	22.27	131.96	118.60
26	AV	52	G	N1-C6-O6	22.25	133.25	119.90
57	BB	1193	G	N1-C6-O6	22.16	133.19	119.90
21	AA	10	A	N1-C6-N6	22.12	131.88	118.60
57	BB	362	A	N1-C6-N6	22.09	131.86	118.60
21	AA	1426	G	N1-C6-O6	22.03	133.12	119.90
21	AA	1012	A	N1-C6-N6	22.02	131.81	118.60
21	AA	77	A	N1-C6-N6	21.98	131.79	118.60
21	AA	116	A	N1-C6-N6	21.92	131.75	118.60
21	AA	450	G	N1-C6-O6	21.90	133.04	119.90
57	BB	2287	A	N1-C6-N6	21.79	131.68	118.60
57	BB	1262	A	N1-C6-N6	21.75	131.65	118.60
57	BB	2869	G	N1-C6-O6	21.62	132.87	119.90
26	AV	35	A	N1-C6-N6	21.55	131.53	118.60
26	AV	43	A	N1-C6-N6	21.51	131.51	118.60
21	AA	931	C	N3-C4-C5	-21.51	113.30	121.90
57	BB	1640	A	N1-C6-N6	21.51	131.50	118.60
21	AA	1473	G	N1-C6-O6	21.46	132.78	119.90
57	BB	53	A	N1-C6-N6	21.42	131.45	118.60
21	AA	1164	G	N1-C6-O6	21.40	132.74	119.90
21	AA	1318	A	N1-C6-N6	21.34	131.41	118.60
21	AA	1435	G	N1-C6-O6	21.32	132.69	119.90
23	AW	58	A	N1-C6-N6	21.23	131.34	118.60
57	BB	1842	G	N1-C6-O6	21.21	132.62	119.90
21	AA	353	A	N1-C6-N6	21.19	131.31	118.60
21	AA	568	G	N1-C6-O6	21.17	132.60	119.90
57	BB	2894	G	C5-C6-O6	-21.14	115.92	128.60
57	BB	1696	G	C5-C6-O6	-21.13	115.92	128.60
57	BB	2867	G	N1-C6-O6	21.06	132.53	119.90
57	BB	1817	G	C5-C6-O6	-21.04	115.97	128.60
21	AA	491	G	N1-C6-O6	20.97	132.48	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	978	G	N1-C6-O6	20.91	132.45	119.90
21	AA	924	C	N3-C4-C5	-20.91	113.54	121.90
22	AY	57	G	N1-C6-O6	20.89	132.43	119.90
21	AA	460	A	N1-C6-N6	20.82	131.09	118.60
57	BB	689	A	N1-C6-N6	20.76	131.06	118.60
57	BB	1122	G	C5-C6-O6	-20.72	116.17	128.60
57	BB	1191	G	N1-C6-O6	20.72	132.33	119.90
21	AA	830	G	N1-C6-O6	20.70	132.32	119.90
21	AA	994	A	N1-C6-N6	20.68	131.01	118.60
57	BB	1347	A	N1-C6-N6	20.68	131.01	118.60
21	AA	963	G	N1-C6-O6	20.64	132.28	119.90
57	BB	492	A	N1-C6-N6	20.55	130.93	118.60
57	BB	1588	G	N1-C6-O6	20.53	132.22	119.90
57	BB	488	G	N1-C6-O6	20.48	132.19	119.90
57	BB	897	C	N3-C4-C5	-20.43	113.73	121.90
21	AA	442	G	C5-C6-O6	-20.42	116.35	128.60
21	AA	1413	A	N1-C6-N6	20.39	130.84	118.60
57	BB	855	G	C5-C6-O6	-20.35	116.39	128.60
22	AY	4	G	N1-C6-O6	20.35	132.11	119.90
57	BB	1435	G	C5-C6-O6	-20.34	116.40	128.60
21	AA	546	A	N1-C6-N6	20.33	130.80	118.60
21	AA	450	G	C5-C6-O6	-20.31	116.41	128.60
57	BB	1193	G	C5-C6-O6	-20.27	116.44	128.60
21	AA	1306	A	N1-C6-N6	20.27	130.76	118.60
57	BB	453	A	N1-C6-N6	20.26	130.76	118.60
57	BB	1479	G	N1-C6-O6	20.26	132.05	119.90
57	BB	2059	A	N1-C6-N6	20.22	130.73	118.60
57	BB	1715	G	N1-C6-O6	20.16	132.00	119.90
57	BB	1145	C	C6-N1-C2	-20.04	112.29	120.30
26	AV	38	A	N1-C6-N6	20.03	130.62	118.60
21	AA	77	A	C8-N9-C4	-20.02	97.79	105.80
57	BB	2747	G	C5-C6-O6	-20.01	116.59	128.60
57	BB	880	G	P-O3'-C3'	19.98	143.67	119.70
57	BB	730	A	N1-C6-N6	19.97	130.58	118.60
21	AA	968	A	C5-C6-N6	-19.96	107.73	123.70
57	BB	83	A	N1-C6-N6	19.96	130.58	118.60
57	BB	1968	G	N1-C6-O6	19.96	131.88	119.90
21	AA	1072	G	N1-C6-O6	19.95	131.87	119.90
21	AA	1256	A	P-O3'-C3'	19.94	143.63	119.70
23	AW	65	G	N1-C6-O6	19.93	131.85	119.90
57	BB	2848	G	N1-C6-O6	19.92	131.85	119.90
21	AA	362	G	N1-C6-O6	19.88	131.83	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	847	G	N1-C6-O6	19.87	131.82	119.90
21	AA	382	A	N1-C6-N6	19.87	130.52	118.60
21	AA	663	A	N1-C6-N6	19.86	130.51	118.60
58	BA	109	A	N1-C6-N6	19.85	130.51	118.60
21	AA	31	G	N1-C6-O6	19.81	131.79	119.90
57	BB	628	G	C5-C6-O6	-19.77	116.74	128.60
57	BB	2369	A	N1-C6-N6	19.77	130.46	118.60
57	BB	1653	G	N1-C6-O6	19.77	131.76	119.90
57	BB	299	A	N1-C6-N6	19.72	130.43	118.60
57	BB	1588	G	C5-C6-O6	-19.70	116.78	128.60
21	AA	362	G	C5-C6-O6	-19.69	116.79	128.60
21	AA	1072	G	C5-C6-O6	-19.69	116.79	128.60
21	AA	1435	G	C5-C6-O6	-19.69	116.79	128.60
26	AV	73	A	N1-C6-N6	19.67	130.40	118.60
57	BB	1353	A	N1-C6-N6	19.67	130.40	118.60
21	AA	243	A	N1-C6-N6	19.66	130.40	118.60
57	BB	582	A	N1-C6-N6	19.59	130.36	118.60
57	BB	1528	A	N1-C6-N6	19.58	130.35	118.60
57	BB	7	G	C5-C6-O6	-19.57	116.86	128.60
57	BB	1111	A	N1-C6-N6	19.57	130.34	118.60
57	BB	2013	A	N1-C6-N6	19.56	130.34	118.60
57	BB	2323	G	N1-C6-O6	19.56	131.63	119.90
57	BB	196	A	N1-C6-N6	19.55	130.33	118.60
21	AA	412	A	P-O3'-C3'	19.54	143.15	119.70
21	AA	1438	G	C5-C6-O6	-19.54	116.88	128.60
57	BB	1649	G	N1-C6-O6	19.53	131.62	119.90
57	BB	1272	A	N1-C6-N6	19.52	130.31	118.60
57	BB	1202	G	C5-C6-O6	-19.51	116.89	128.60
57	BB	879	G	N1-C6-O6	19.51	131.61	119.90
57	BB	627	A	N1-C6-N6	19.47	130.28	118.60
58	BA	56	G	C5-C6-O6	-19.44	116.93	128.60
57	BB	347	A	N1-C6-N6	19.43	130.26	118.60
57	BB	1786	A	N1-C6-N6	19.43	130.26	118.60
21	AA	301	G	C5-C6-O6	-19.40	116.96	128.60
21	AA	517	G	N1-C6-O6	19.38	131.53	119.90
57	BB	2729	G	N1-C6-O6	19.38	131.53	119.90
22	AY	44	A	N1-C6-N6	19.37	130.22	118.60
57	BB	319	G	N1-C6-O6	19.35	131.51	119.90
21	AA	1508	A	N1-C6-N6	19.32	130.19	118.60
21	AA	939	G	N1-C6-O6	19.31	131.49	119.90
57	BB	141	G	N1-C6-O6	19.29	131.47	119.90
21	AA	1201	A	N1-C6-N6	19.29	130.17	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	265	A	N1-C6-N6	19.24	130.15	118.60
21	AA	148	G	N1-C6-O6	19.24	131.44	119.90
57	BB	2848	G	C5-C6-O6	-19.24	117.06	128.60
21	AA	80	A	N1-C6-N6	19.23	130.14	118.60
21	AA	685	G	N1-C6-O6	19.23	131.44	119.90
21	AA	895	G	N1-C6-O6	19.22	131.43	119.90
23	AW	27	G	N1-C6-O6	19.20	131.42	119.90
57	BB	1385	A	N1-C6-N6	19.19	130.11	118.60
57	BB	1701	A	N1-C6-N6	19.19	130.11	118.60
21	AA	1255	G	N1-C6-O6	19.17	131.40	119.90
21	AA	388	G	N1-C6-O6	19.16	131.39	119.90
57	BB	1204	A	N1-C6-N6	19.15	130.09	118.60
21	AA	1138	G	N1-C6-O6	19.09	131.35	119.90
57	BB	1968	G	C5-C6-O6	-19.09	117.15	128.60
21	AA	1473	G	C5-C6-O6	-19.07	117.16	128.60
57	BB	165	A	N1-C6-N6	19.07	130.04	118.60
21	AA	1164	G	C5-C6-O6	-19.06	117.16	128.60
57	BB	7	G	N1-C6-O6	19.06	131.34	119.90
57	BB	1021	A	N1-C6-N6	19.02	130.01	118.60
21	AA	1374	A	N1-C6-N6	18.99	129.99	118.60
57	BB	763	G	N1-C6-O6	18.95	131.27	119.90
21	AA	1433	A	N1-C6-N6	18.94	129.97	118.60
21	AA	749	A	N1-C6-N6	18.94	129.96	118.60
57	BB	1579	A	N1-C6-N6	18.91	129.94	118.60
57	BB	1590	A	N1-C6-N6	18.90	129.94	118.60
21	AA	1507	A	N1-C6-N6	18.88	129.93	118.60
21	AA	301	G	N1-C6-O6	18.86	131.21	119.90
21	AA	790	A	N1-C6-N6	18.84	129.90	118.60
21	AA	415	A	N1-C6-N6	18.84	129.90	118.60
57	BB	845	A	N1-C6-N6	18.83	129.90	118.60
21	AA	122	G	N1-C6-O6	18.82	131.19	119.90
57	BB	242	G	N1-C6-O6	18.82	131.19	119.90
21	AA	713	G	C5-C6-O6	-18.80	117.32	128.60
57	BB	938	G	N1-C6-O6	18.80	131.18	119.90
57	BB	655	A	N1-C6-N6	18.78	129.87	118.60
57	BB	1620	G	N1-C6-O6	18.77	131.16	119.90
57	BB	1524	G	N1-C6-O6	18.77	131.16	119.90
21	AA	306	A	N1-C6-N6	18.76	129.85	118.60
21	AA	475	C	N3-C4-C5	-18.74	114.40	121.90
21	AA	572	A	N1-C6-N6	18.72	129.83	118.60
26	AV	23	C	N3-C4-C5	-18.70	114.42	121.90
57	BB	2565	A	N1-C6-N6	18.70	129.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2717	C	C6-N1-C2	-18.69	112.82	120.30
22	AY	3	G	P-O3'-C3'	18.69	142.13	119.70
57	BB	472	A	N1-C6-N6	18.68	129.81	118.60
57	BB	408	G	N1-C6-O6	18.67	131.10	119.90
57	BB	1540	G	N1-C6-O6	18.66	131.10	119.90
57	BB	2750	A	N1-C6-N6	18.66	129.79	118.60
58	BA	9	G	C5-C6-O6	-18.65	117.41	128.60
22	AY	57	G	C5-C6-O6	-18.64	117.42	128.60
21	AA	432	A	N1-C6-N6	18.62	129.78	118.60
57	BB	241	A	N1-C6-N6	18.61	129.77	118.60
57	BB	629	G	C5-C6-O6	-18.60	117.44	128.60
21	AA	59	A	C5-C6-N6	-18.59	108.83	123.70
22	AY	14	A	N1-C6-N6	18.58	129.75	118.60
57	BB	1286	A	N1-C6-N6	18.57	129.74	118.60
57	BB	2879	A	N1-C6-N6	18.56	129.74	118.60
30	BK	70	ARG	NE-CZ-NH2	-18.53	111.03	120.30
22	AY	34	G	P-O3'-C3'	18.52	141.92	119.70
21	AA	425	G	N1-C6-O6	18.47	130.98	119.90
21	AA	710	G	N1-C6-O6	18.44	130.96	119.90
21	AA	964	A	N1-C6-N6	18.42	129.65	118.60
57	BB	2600	A	N1-C6-N6	18.41	129.65	118.60
57	BB	1452	G	N1-C6-O6	18.39	130.93	119.90
57	BB	1696	G	N1-C6-O6	18.38	130.93	119.90
57	BB	1509	A	N1-C6-N6	18.38	129.62	118.60
57	BB	2742	G	N1-C6-O6	18.37	130.92	119.90
57	BB	1928	A	N1-C6-N6	18.36	129.62	118.60
57	BB	1998	A	N1-C6-N6	18.36	129.61	118.60
57	BB	168	G	N1-C6-O6	18.34	130.91	119.90
57	BB	984	A	N1-C6-N6	18.33	129.60	118.60
57	BB	2736	A	N1-C6-N6	18.33	129.60	118.60
57	BB	1727	C	C5-C6-N1	18.30	130.15	121.00
21	AA	1131	G	C5-C6-O6	-18.29	117.62	128.60
21	AA	82	G	N1-C6-O6	18.27	130.86	119.90
21	AA	1271	A	N1-C6-N6	18.27	129.56	118.60
21	AA	1021	A	N1-C6-N6	18.27	129.56	118.60
57	BB	532	A	N1-C6-N6	18.27	129.56	118.60
57	BB	1717	A	N1-C6-N6	18.26	129.56	118.60
57	BB	1617	C	C4-C5-C6	18.25	126.53	117.40
23	AW	14	A	N1-C6-N6	18.25	129.55	118.60
21	AA	1276	G	N1-C6-O6	18.25	130.85	119.90
57	BB	1317	G	N1-C6-O6	18.25	130.85	119.90
21	AA	1287	A	N1-C6-N6	18.24	129.54	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	101	A	N1-C6-N6	18.22	129.53	118.60
57	BB	1204	A	C5-C6-N1	-18.21	108.59	117.70
21	AA	1143	G	C5-C6-O6	-18.21	117.67	128.60
21	AA	691	G	N1-C6-O6	18.21	130.82	119.90
57	BB	2669	G	C5-C6-O6	-18.18	117.69	128.60
57	BB	1031	G	N1-C6-O6	18.13	130.78	119.90
21	AA	1133	G	N1-C6-O6	18.13	130.78	119.90
57	BB	1535	A	N1-C6-N6	18.12	129.47	118.60
21	AA	478	A	N1-C6-N6	18.10	129.46	118.60
21	AA	923	A	N1-C6-N6	18.10	129.46	118.60
23	AW	30	G	N1-C6-O6	18.09	130.75	119.90
21	AA	847	G	C5-C6-O6	-18.09	117.75	128.60
21	AA	549	C	N3-C4-C5	-18.09	114.67	121.90
57	BB	1050	A	N1-C6-N6	18.08	129.45	118.60
21	AA	1106	G	C5-C6-O6	-18.06	117.76	128.60
22	AY	38	A	N1-C6-N6	18.06	129.44	118.60
57	BB	2841	C	N3-C4-N4	18.06	130.64	118.00
26	AV	44	A	N1-C6-N6	18.05	129.43	118.60
57	BB	203	A	N1-C6-N6	18.03	129.42	118.60
57	BB	2867	G	C5-C6-O6	-18.01	117.79	128.60
57	BB	547	A	N1-C6-N6	18.01	129.40	118.60
57	BB	1246	A	N1-C6-N6	17.99	129.40	118.60
21	AA	335	C	N3-C4-C5	-17.96	114.72	121.90
57	BB	2412	A	N1-C6-N6	17.96	129.38	118.60
21	AA	298	A	N1-C6-N6	17.96	129.38	118.60
57	BB	2057	G	C5-C6-O6	-17.96	117.83	128.60
57	BB	908	C	N3-C4-C5	-17.94	114.72	121.90
57	BB	822	G	N1-C6-O6	17.93	130.66	119.90
57	BB	644	A	N1-C6-N6	17.92	129.35	118.60
21	AA	465	A	N1-C6-N6	17.90	129.34	118.60
22	AY	58	A	N1-C6-N6	17.89	129.33	118.60
57	BB	2747	G	N1-C6-O6	17.87	130.62	119.90
57	BB	831	G	N1-C6-O6	17.87	130.62	119.90
57	BB	1361	G	N1-C6-O6	17.87	130.62	119.90
57	BB	2183	A	N1-C6-N6	17.86	129.32	118.60
57	BB	1269	A	N1-C6-N6	17.84	129.30	118.60
57	BB	463	G	N1-C6-O6	17.84	130.60	119.90
57	BB	980	A	C4-C5-C6	17.84	125.92	117.00
23	AW	63	G	N1-C6-O6	17.83	130.60	119.90
57	BB	1761	C	N3-C4-C5	-17.81	114.78	121.90
21	AA	416	G	N1-C6-O6	17.80	130.58	119.90
57	BB	1992	G	N1-C6-O6	17.80	130.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1457	G	N1-C6-O6	17.79	130.57	119.90
57	BB	1787	A	N1-C6-N6	17.79	129.28	118.60
21	AA	292	G	N1-C6-O6	17.76	130.56	119.90
21	AA	548	G	N1-C6-O6	17.76	130.56	119.90
21	AA	349	A	N1-C6-N6	17.75	129.25	118.60
57	BB	2123	G	N1-C6-O6	17.74	130.54	119.90
57	BB	1435	G	N1-C6-O6	17.73	130.54	119.90
21	AA	1487	G	N1-C6-O6	17.73	130.54	119.90
57	BB	168	G	C5-C6-O6	-17.72	117.97	128.60
21	AA	548	G	C5-C6-O6	-17.68	117.99	128.60
57	BB	2297	A	N1-C6-N6	17.68	129.21	118.60
57	BB	2853	C	O4'-C1'-N1	17.68	122.34	108.20
57	BB	2379	G	N1-C6-O6	17.67	130.50	119.90
57	BB	2702	G	N1-C6-O6	17.67	130.50	119.90
57	BB	2409	G	C5-C6-O6	-17.66	118.00	128.60
57	BB	1617	C	N3-C4-C5	-17.65	114.84	121.90
21	AA	927	G	C5-C6-O6	-17.63	118.02	128.60
57	BB	1998	A	C4-C5-C6	17.62	125.81	117.00
57	BB	500	G	N1-C6-O6	17.58	130.45	119.90
58	BA	18	G	C5-C6-O6	-17.57	118.06	128.60
57	BB	831	G	C5-C6-O6	-17.56	118.06	128.60
21	AA	1529	G	N1-C6-O6	17.56	130.44	119.90
21	AA	344	A	N1-C6-N6	17.53	129.12	118.60
57	BB	637	A	N1-C6-N6	17.52	129.11	118.60
57	BB	1256	G	N1-C6-O6	17.51	130.41	119.90
57	BB	1722	A	N1-C6-N6	17.48	129.09	118.60
22	AY	35	A	N1-C6-N6	17.48	129.09	118.60
57	BB	1322	A	N1-C6-N6	17.47	129.08	118.60
58	BA	105	G	O4'-C1'-N9	17.47	122.18	108.20
57	BB	283	G	C5-C6-O6	-17.42	118.15	128.60
21	AA	1188	A	O4'-C1'-N9	17.41	122.13	108.20
57	BB	2723	C	C6-N1-C2	-17.41	113.33	120.30
57	BB	722	A	N1-C6-N6	17.41	129.05	118.60
57	BB	495	G	N1-C6-O6	17.41	130.34	119.90
21	AA	521	G	N1-C6-O6	17.40	130.34	119.90
21	AA	1143	G	N1-C6-O6	17.37	130.32	119.90
57	BB	1365	A	N1-C6-N6	17.36	129.02	118.60
57	BB	1256	G	C5-C6-O6	-17.36	118.19	128.60
57	BB	2688	G	N1-C6-O6	17.34	130.30	119.90
22	AY	65	G	N1-C6-O6	17.34	130.30	119.90
57	BB	676	A	N1-C6-N6	17.32	128.99	118.60
21	AA	162	A	N1-C6-N6	17.32	128.99	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2247	A	N1-C6-N6	17.30	128.98	118.60
21	AA	741	G	N1-C6-O6	17.30	130.28	119.90
57	BB	71	A	N1-C6-N6	17.29	128.98	118.60
21	AA	977	A	N1-C6-N6	17.29	128.97	118.60
21	AA	1184	G	C6-C5-N7	-17.29	120.03	130.40
21	AA	1202	U	O4'-C1'-N1	17.28	122.02	108.20
57	BB	1920	C	N3-C4-C5	-17.26	115.00	121.90
57	BB	1430	G	N1-C6-O6	17.26	130.25	119.90
57	BB	2842	G	N1-C6-O6	17.24	130.24	119.90
21	AA	1182	G	N1-C6-O6	17.24	130.24	119.90
57	BB	2518	A	N1-C6-N6	17.20	128.92	118.60
57	BB	1945	G	N1-C6-O6	17.16	130.20	119.90
57	BB	181	A	N1-C6-N6	17.16	128.90	118.60
58	BA	83	G	C5-C6-O6	-17.16	118.30	128.60
57	BB	660	C	N3-C4-C5	-17.16	115.04	121.90
21	AA	1437	A	N1-C6-N6	17.15	128.89	118.60
21	AA	1138	G	C5-C6-O6	-17.15	118.31	128.60
21	AA	155	A	N1-C6-N6	17.12	128.87	118.60
21	AA	759	A	C4-C5-C6	17.11	125.55	117.00
21	AA	1453	G	C5-C6-O6	-17.11	118.34	128.60
57	BB	1419	A	N1-C6-N6	17.11	128.86	118.60
57	BB	1630	A	N1-C6-N6	17.10	128.86	118.60
22	AY	27	C	C6-N1-C2	-17.10	113.46	120.30
57	BB	1733	G	C5-C6-O6	-17.08	118.35	128.60
57	BB	1343	G	N1-C6-O6	17.08	130.15	119.90
57	BB	1619	G	C5-C6-O6	-17.07	118.36	128.60
57	BB	725	G	C5-C6-O6	-17.05	118.37	128.60
57	BB	1346	G	C5-C6-O6	-17.04	118.38	128.60
58	BA	101	A	N1-C6-N6	17.04	128.82	118.60
21	AA	1531	A	N1-C6-N6	17.04	128.82	118.60
21	AA	1275	A	N1-C6-N6	17.03	128.82	118.60
21	AA	302	G	N1-C6-O6	17.03	130.12	119.90
57	BB	2444	G	C8-N9-C4	-17.01	99.59	106.40
57	BB	834	G	C5-C6-O6	-16.99	118.41	128.60
21	AA	1410	A	N1-C6-N6	16.98	128.79	118.60
57	BB	1698	A	C5-C6-N6	-16.98	110.11	123.70
57	BB	1165	A	N1-C6-N6	16.98	128.79	118.60
57	BB	2660	A	N1-C6-N6	16.97	128.78	118.60
57	BB	2829	A	N1-C6-N6	16.97	128.78	118.60
57	BB	1381	G	O4'-C1'-N9	16.96	121.77	108.20
5	AN	58	ARG	NE-CZ-NH2	-16.95	111.82	120.30
57	BB	1260	A	N1-C6-N6	16.95	128.77	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1645	G	N1-C6-O6	16.95	130.07	119.90
21	AA	1206	G	C5-C6-O6	-16.94	118.43	128.60
24	AX	14	A	N1-C6-N6	16.93	128.76	118.60
21	AA	812	G	N1-C6-O6	16.92	130.05	119.90
21	AA	1438	G	N1-C6-O6	16.92	130.05	119.90
57	BB	866	A	N1-C6-N6	16.92	128.75	118.60
57	BB	1761	C	C2-N3-C4	16.91	128.36	119.90
57	BB	423	A	N1-C6-N6	16.90	128.74	118.60
21	AA	359	G	N1-C6-O6	16.88	130.03	119.90
57	BB	2765	A	C8-N9-C4	-16.88	99.05	105.80
21	AA	223	A	N1-C6-N6	16.86	128.71	118.60
21	AA	182	A	N1-C6-N6	16.85	128.71	118.60
57	BB	986	C	O4'-C1'-N1	16.85	121.68	108.20
57	BB	2093	G	C5-C6-O6	-16.83	118.50	128.60
26	AV	29	G	N1-C6-O6	16.82	129.99	119.90
57	BB	1078	U	C5-C6-N1	16.81	131.10	122.70
57	BB	1002	G	N1-C6-O6	16.80	129.98	119.90
57	BB	2810	A	N1-C6-N6	16.80	128.68	118.60
57	BB	1735	A	N1-C6-N6	16.79	128.67	118.60
21	AA	1206	G	N1-C6-O6	16.78	129.97	119.90
57	BB	377	G	N1-C6-O6	16.78	129.97	119.90
57	BB	1328	A	N1-C6-N6	16.77	128.66	118.60
57	BB	2581	G	N1-C6-O6	16.76	129.96	119.90
57	BB	86	G	N1-C6-O6	16.74	129.94	119.90
57	BB	1549	A	N1-C6-N6	16.74	128.65	118.60
58	BA	6	G	N1-C6-O6	16.74	129.94	119.90
57	BB	2323	G	C5-C6-O6	-16.73	118.56	128.60
57	BB	1002	G	C5-C6-O6	-16.72	118.57	128.60
57	BB	504	A	N1-C6-N6	16.71	128.63	118.60
58	BA	57	A	C4-C5-C6	16.71	125.36	117.00
57	BB	2471	A	N1-C6-N6	16.69	128.61	118.60
57	BB	2598	A	N1-C6-N6	16.68	128.61	118.60
57	BB	2669	G	N1-C6-O6	16.68	129.91	119.90
21	AA	914	A	N1-C6-N6	16.67	128.60	118.60
21	AA	441	A	C4-C5-C6	16.63	125.32	117.00
57	BB	1977	A	N1-C6-N6	16.63	128.58	118.60
57	BB	1098	A	N1-C6-N6	16.63	128.58	118.60
21	AA	75	G	C5-C6-O6	-16.62	118.63	128.60
57	BB	938	G	C5-C6-O6	-16.62	118.63	128.60
22	AY	24	G	N1-C6-O6	16.61	129.86	119.90
57	BB	2043	C	C6-N1-C2	-16.60	113.66	120.30
57	BB	1424	G	C5-C6-O6	-16.59	118.65	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1518	C	C6-N1-C2	-16.59	113.66	120.30
57	BB	1288	G	N1-C6-O6	16.58	129.85	119.90
57	BB	2778	A	N1-C6-N6	16.57	128.54	118.60
21	AA	356	A	N1-C6-N6	16.57	128.54	118.60
21	AA	1258	G	N1-C6-O6	16.55	129.83	119.90
37	BR	68	ARG	NE-CZ-NH2	16.55	128.57	120.30
57	BB	730	A	C5-C6-N6	-16.55	110.46	123.70
57	BB	2551	C	N3-C4-C5	-16.54	115.28	121.90
57	BB	2733	A	N1-C6-N6	16.54	128.52	118.60
57	BB	146	A	N1-C6-N6	16.52	128.51	118.60
21	AA	712	A	N1-C6-N6	16.52	128.51	118.60
57	BB	2883	A	N1-C6-N6	16.52	128.51	118.60
22	AY	21	A	N1-C6-N6	16.51	128.51	118.60
21	AA	718	A	N1-C6-N6	16.51	128.50	118.60
21	AA	1093	A	N1-C6-N6	16.50	128.50	118.60
57	BB	1449	G	N1-C6-O6	16.50	129.80	119.90
21	AA	942	G	N1-C6-O6	16.49	129.80	119.90
57	BB	1194	A	N1-C6-N6	16.49	128.50	118.60
57	BB	799	G	C5-C6-O6	-16.48	118.71	128.60
57	BB	526	A	N1-C6-N6	16.48	128.49	118.60
22	AY	36	A	N1-C6-N6	16.47	128.48	118.60
57	BB	2623	G	N1-C6-O6	16.47	129.78	119.90
57	BB	2675	A	N1-C6-N6	16.47	128.48	118.60
21	AA	958	A	N1-C6-N6	16.46	128.48	118.60
57	BB	2623	G	N3-C2-N2	16.46	131.42	119.90
21	AA	104	G	N1-C6-O6	16.46	129.78	119.90
57	BB	488	G	C5-C6-O6	-16.45	118.73	128.60
57	BB	49	A	N1-C6-N6	16.45	128.47	118.60
36	BQ	32	ARG	NE-CZ-NH2	16.44	128.52	120.30
21	AA	1398	A	C5-C6-N6	-16.43	110.55	123.70
52	BD	128	ARG	NE-CZ-NH1	16.43	128.52	120.30
21	AA	211	G	N1-C6-O6	16.43	129.76	119.90
57	BB	2154	A	O4'-C1'-N9	16.43	121.34	108.20
57	BB	2536	G	C5-C6-O6	-16.43	118.74	128.60
22	AY	62	A	N1-C6-N6	16.42	128.45	118.60
22	AY	25	C	N3-C4-C5	-16.42	115.33	121.90
57	BB	259	G	C5-C6-O6	-16.42	118.75	128.60
57	BB	74	A	C5-C6-N1	-16.41	109.49	117.70
57	BB	2378	A	N1-C6-N6	16.41	128.45	118.60
57	BB	1153	C	C6-N1-C2	-16.41	113.73	120.30
57	BB	940	G	C5-C6-O6	-16.41	118.75	128.60
57	BB	1452	G	C5-C6-O6	-16.41	118.75	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	197	A	N1-C6-N6	16.41	128.44	118.60
21	AA	932	C	C6-N1-C2	-16.40	113.74	120.30
57	BB	449	A	N1-C6-N6	16.39	128.44	118.60
57	BB	2212	A	N1-C6-N6	16.39	128.43	118.60
57	BB	775	G	N1-C6-O6	16.39	129.73	119.90
57	BB	1878	G	C8-N9-C4	-16.38	99.85	106.40
57	BB	2810	A	C5-C6-N1	-16.37	109.51	117.70
57	BB	822	G	C5-C6-O6	-16.37	118.78	128.60
23	AW	27	G	C5-C6-O6	-16.34	118.79	128.60
26	AV	9	G	C5-C6-O6	-16.33	118.80	128.60
57	BB	2635	A	N1-C6-N6	16.33	128.40	118.60
57	BB	1645	G	C5-C6-O6	-16.33	118.80	128.60
57	BB	2816	G	N1-C6-O6	16.32	129.69	119.90
57	BB	1479	G	C5-C6-O6	-16.32	118.81	128.60
21	AA	1050	G	C5-C6-O6	-16.32	118.81	128.60
57	BB	792	A	N1-C6-N6	16.32	128.39	118.60
21	AA	1229	A	N1-C6-N6	16.31	128.39	118.60
57	BB	68	G	N1-C6-O6	16.31	129.69	119.90
21	AA	627	G	N1-C6-O6	16.31	129.69	119.90
57	BB	2020	A	C4-C5-C6	16.31	125.15	117.00
21	AA	1503	A	N1-C6-N6	16.29	128.38	118.60
57	BB	188	G	N1-C6-O6	16.29	129.68	119.90
57	BB	319	G	C5-C6-O6	-16.29	118.83	128.60
57	BB	429	A	N1-C6-N6	16.28	128.37	118.60
58	BA	59	A	N1-C6-N6	16.28	128.37	118.60
57	BB	1715	G	C5-C6-N1	-16.27	103.36	111.50
57	BB	774	G	N1-C6-O6	16.26	129.66	119.90
57	BB	285	G	N1-C6-O6	16.26	129.66	119.90
57	BB	283	G	N1-C6-O6	16.26	129.66	119.90
23	AW	26	A	N1-C6-N6	16.26	128.35	118.60
57	BB	1960	A	N1-C6-N6	16.26	128.35	118.60
57	BB	2753	A	N9-C4-C5	16.25	112.30	105.80
57	BB	1992	G	C5-C6-O6	-16.25	118.85	128.60
57	BB	2314	A	N1-C6-N6	16.25	128.35	118.60
21	AA	171	A	N1-C6-N6	16.24	128.35	118.60
57	BB	2080	A	N1-C6-N6	16.24	128.34	118.60
21	AA	523	A	C5-C6-N6	-16.23	110.72	123.70
22	AY	22	G	C5-C6-O6	-16.22	118.87	128.60
21	AA	1186	G	C5-C6-O6	-16.22	118.87	128.60
21	AA	499	A	N1-C6-N6	16.21	128.33	118.60
57	BB	176	A	N1-C6-N6	16.21	128.32	118.60
57	BB	774	G	C5-C6-O6	-16.21	118.88	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2148	G	N1-C6-O6	16.20	129.62	119.90
57	BB	2042	A	N1-C6-N6	16.19	128.32	118.60
57	BB	2417	C	N3-C4-C5	-16.18	115.43	121.90
57	BB	1107	G	N1-C6-O6	16.18	129.61	119.90
26	AV	73	A	C2-N3-C4	-16.18	102.51	110.60
21	AA	620	C	O4'-C1'-N1	16.16	121.13	108.20
52	BD	184	ARG	NE-CZ-NH1	-16.14	112.23	120.30
57	BB	1635	A	N1-C6-N6	16.14	128.29	118.60
57	BB	1608	A	N1-C6-N6	16.14	128.28	118.60
57	BB	190	A	N1-C6-N6	16.14	128.28	118.60
57	BB	1001	A	N1-C6-N6	16.13	128.28	118.60
57	BB	23	G	N1-C6-O6	16.12	129.57	119.90
57	BB	1677	A	N1-C6-N6	16.12	128.27	118.60
58	BA	108	A	N1-C6-N6	16.12	128.27	118.60
57	BB	1772	A	N1-C6-N6	16.11	128.27	118.60
57	BB	1288	G	C5-C6-N1	-16.11	103.44	111.50
57	BB	564	C	C6-N1-C2	-16.10	113.86	120.30
23	AW	63	G	C5-C6-O6	-16.09	118.94	128.60
21	AA	1236	A	N1-C6-N6	16.09	128.25	118.60
21	AA	277	C	N3-C4-C5	-16.08	115.47	121.90
57	BB	1914	C	C6-N1-C2	-16.08	113.87	120.30
57	BB	2456	C	N3-C4-C5	-16.08	115.47	121.90
57	BB	266	G	C5-C6-O6	-16.08	118.95	128.60
21	AA	532	A	N1-C6-N6	16.08	128.25	118.60
57	BB	1960	A	C8-N9-C4	-16.07	99.37	105.80
21	AA	417	G	C5-C6-O6	-16.06	118.97	128.60
21	AA	890	G	N1-C6-O6	16.05	129.53	119.90
57	BB	1591	A	N1-C6-N6	16.05	128.23	118.60
21	AA	1278	G	C5-C6-O6	-16.05	118.97	128.60
57	BB	855	G	N1-C6-O6	16.05	129.53	119.90
21	AA	792	A	C8-N9-C4	16.04	112.22	105.80
21	AA	303	A	N1-C6-N6	16.03	128.22	118.60
21	AA	1133	G	C5-C6-O6	-16.03	118.98	128.60
58	BA	29	A	N1-C6-N6	16.03	128.22	118.60
57	BB	2076	U	P-O3'-C3'	16.02	138.93	119.70
57	BB	1806	C	N3-C4-N4	16.00	129.20	118.00
21	AA	568	G	C5-C6-O6	-15.99	119.00	128.60
21	AA	1287	A	C4-C5-C6	15.99	125.00	117.00
21	AA	1366	C	C6-N1-C2	-15.99	113.90	120.30
32	BM	91	TYR	CB-CG-CD1	15.99	130.59	121.00
57	BB	2702	G	C5-C6-O6	-15.98	119.01	128.60
57	BB	2054	A	C8-N9-C4	-15.97	99.41	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2162	G	N1-C6-O6	15.97	129.48	119.90
57	BB	2538	C	O4'-C1'-N1	15.96	120.97	108.20
21	AA	786	G	C5-C6-O6	-15.96	119.03	128.60
57	BB	896	A	N1-C2-N3	15.96	137.28	129.30
57	BB	1337	G	N1-C6-O6	15.95	129.47	119.90
57	BB	2468	A	N1-C6-N6	15.95	128.17	118.60
57	BB	825	A	N1-C6-N6	15.94	128.16	118.60
57	BB	2484	G	N1-C6-O6	15.94	129.46	119.90
21	AA	203	G	C5-C6-O6	-15.93	119.05	128.60
57	BB	613	A	N1-C6-N6	15.92	128.15	118.60
57	BB	1156	A	N1-C6-N6	15.92	128.15	118.60
57	BB	733	G	N1-C6-O6	15.91	129.45	119.90
57	BB	1661	G	N1-C6-O6	15.91	129.45	119.90
57	BB	1519	G	N1-C6-O6	15.90	129.44	119.90
57	BB	2014	A	N1-C6-N6	15.90	128.14	118.60
21	AA	360	G	N1-C6-O6	15.89	129.44	119.90
57	BB	221	A	N1-C6-N6	15.89	128.14	118.60
21	AA	128	G	N1-C6-O6	15.89	129.43	119.90
57	BB	2136	G	N1-C6-O6	15.89	129.43	119.90
58	BA	46	A	N1-C6-N6	15.88	128.13	118.60
21	AA	535	A	N1-C6-N6	15.87	128.12	118.60
21	AA	621	A	N1-C6-N6	15.87	128.12	118.60
57	BB	2448	A	N1-C6-N6	15.87	128.12	118.60
21	AA	1278	G	N1-C6-O6	15.87	129.42	119.90
57	BB	1810	A	N1-C6-N6	15.86	128.12	118.60
57	BB	1462	C	C2-N3-C4	15.86	127.83	119.90
57	BB	2753	A	C4-C5-C6	15.86	124.93	117.00
57	BB	1728	C	O4'-C1'-N1	15.85	120.88	108.20
57	BB	1799	G	N1-C6-O6	15.84	129.41	119.90
21	AA	533	A	C4-C5-C6	15.84	124.92	117.00
21	AA	859	G	N1-C6-O6	15.84	129.40	119.90
57	BB	2057	G	N1-C6-O6	15.84	129.40	119.90
57	BB	175	G	C5-C6-O6	-15.83	119.10	128.60
21	AA	691	G	C5-C6-O6	-15.83	119.10	128.60
21	AA	1502	A	N1-C6-N6	15.82	128.09	118.60
21	AA	1468	A	N1-C6-N6	15.82	128.09	118.60
57	BB	2534	A	N1-C6-N6	15.82	128.09	118.60
57	BB	603	A	N1-C6-N6	15.82	128.09	118.60
26	AV	52	G	C5-C6-O6	-15.81	119.11	128.60
58	BA	109	A	C5-C6-N6	-15.81	111.05	123.70
57	BB	361	G	N1-C6-O6	15.81	129.39	119.90
57	BB	2376	A	N1-C6-N6	15.81	128.09	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1650	A	N1-C6-N6	15.81	128.08	118.60
58	BA	6	G	C5-C6-O6	-15.79	119.13	128.60
57	BB	233	A	N1-C6-N6	15.78	128.07	118.60
26	AV	70	G	N1-C6-O6	15.78	129.37	119.90
57	BB	925	A	N1-C6-N6	15.78	128.07	118.60
57	BB	342	A	N1-C6-N6	15.77	128.06	118.60
57	BB	1863	G	N1-C6-O6	15.77	129.36	119.90
21	AA	607	A	N1-C6-N6	15.77	128.06	118.60
57	BB	1424	G	N1-C6-O6	15.77	129.36	119.90
57	BB	264	C	C6-N1-C2	-15.76	114.00	120.30
21	AA	890	G	C5-C6-O6	-15.75	119.15	128.60
57	BB	1701	A	C4-C5-C6	15.75	124.87	117.00
21	AA	669	G	N1-C6-O6	15.74	129.35	119.90
57	BB	413	C	N3-C4-C5	-15.74	115.61	121.90
57	BB	1011	G	N1-C6-O6	15.73	129.34	119.90
21	AA	674	G	N1-C6-O6	15.73	129.34	119.90
57	BB	1789	A	N1-C6-N6	15.73	128.04	118.60
21	AA	752	G	C5-C6-O6	-15.73	119.16	128.60
57	BB	2010	G	N1-C6-O6	15.72	129.34	119.90
57	BB	2162	G	C5-C6-O6	-15.72	119.17	128.60
32	BM	55	ARG	NE-CZ-NH1	-15.72	112.44	120.30
57	BB	677	A	N1-C6-N6	15.71	128.03	118.60
57	BB	2289	G	N3-C2-N2	15.71	130.90	119.90
21	AA	1002	G	C4-C5-N7	-15.71	104.52	110.80
57	BB	1246	A	C5-C6-N1	-15.71	109.85	117.70
57	BB	1930	G	O4'-C1'-N9	15.70	120.76	108.20
57	BB	2547	A	N1-C6-N6	15.70	128.02	118.60
57	BB	188	G	C5-C6-O6	-15.70	119.18	128.60
57	BB	553	G	N1-C6-O6	15.70	129.32	119.90
21	AA	532	A	C5-C6-N1	-15.67	109.87	117.70
21	AA	1058	G	C5-C6-O6	-15.67	119.20	128.60
21	AA	510	A	N1-C6-N6	15.65	127.99	118.60
57	BB	1482	G	N1-C6-O6	15.65	129.29	119.90
58	BA	17	C	N3-C4-C5	-15.65	115.64	121.90
57	BB	1957	C	C6-N1-C2	-15.62	114.05	120.30
54	BF	109	ARG	NE-CZ-NH1	-15.62	112.49	120.30
21	AA	179	A	N1-C6-N6	15.61	127.97	118.60
57	BB	1614	A	N1-C6-N6	15.62	127.97	118.60
57	BB	2717	C	N3-C4-C5	-15.61	115.66	121.90
21	AA	502	A	N1-C6-N6	15.61	127.96	118.60
57	BB	617	G	N1-C6-O6	15.61	129.26	119.90
57	BB	810	U	O4'-C1'-N1	15.60	120.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2020	A	N1-C6-N6	15.60	127.96	118.60
58	BA	43	C	O4'-C1'-N1	15.60	120.68	108.20
21	AA	626	G	C5-C6-O6	-15.59	119.25	128.60
26	AV	75	C	N3-C4-C5	-15.59	115.66	121.90
21	AA	262	A	C4-C5-C6	15.58	124.79	117.00
57	BB	535	G	N1-C6-O6	15.58	129.25	119.90
57	BB	2093	G	N1-C6-O6	15.58	129.25	119.90
57	BB	2494	G	N1-C6-O6	15.57	129.24	119.90
21	AA	1287	A	C5-C6-N1	-15.57	109.91	117.70
57	BB	1803	A	N1-C6-N6	15.57	127.94	118.60
57	BB	2266	A	N1-C6-N6	15.57	127.94	118.60
57	BB	1678	A	N1-C6-N6	15.56	127.94	118.60
22	AY	26	G	N3-C2-N2	15.56	130.79	119.90
57	BB	2126	A	C5-C6-N1	-15.56	109.92	117.70
57	BB	897	C	C2-N3-C4	15.55	127.68	119.90
21	AA	127	G	C5-C6-O6	-15.55	119.27	128.60
57	BB	352	A	N1-C6-N6	15.55	127.93	118.60
57	BB	735	A	N1-C6-N6	15.55	127.93	118.60
21	AA	303	A	C4-C5-C6	15.54	124.77	117.00
57	BB	1810	A	C8-N9-C4	-15.54	99.58	105.80
57	BB	2050	C	C6-N1-C2	-15.53	114.09	120.30
57	BB	199	A	N1-C6-N6	15.53	127.92	118.60
21	AA	915	A	N1-C6-N6	15.52	127.91	118.60
57	BB	2661	G	N1-C6-O6	15.52	129.21	119.90
21	AA	1386	G	N1-C6-O6	15.52	129.21	119.90
21	AA	8	A	N1-C6-N6	15.51	127.91	118.60
57	BB	2516	A	N1-C6-N6	15.51	127.91	118.60
21	AA	203	G	N1-C6-O6	15.51	129.21	119.90
57	BB	675	A	N1-C6-N6	15.51	127.91	118.60
21	AA	481	G	N1-C6-O6	15.49	129.19	119.90
57	BB	1794	A	N1-C6-N6	15.49	127.89	118.60
57	BB	2358	A	N1-C6-N6	15.49	127.89	118.60
23	AW	17	C	N3-C4-C5	-15.49	115.70	121.90
21	AA	814	A	N1-C6-N6	15.48	127.89	118.60
57	BB	2583	G	N1-C6-O6	15.48	129.19	119.90
57	BB	2454	G	C5-C6-O6	-15.47	119.32	128.60
21	AA	327	A	N1-C6-N6	15.47	127.88	118.60
57	BB	1784	A	N1-C6-N6	15.47	127.88	118.60
57	BB	1245	G	N1-C6-O6	15.47	129.18	119.90
57	BB	2379	G	C5-C6-O6	-15.46	119.32	128.60
21	AA	134	G	N1-C6-O6	15.46	129.17	119.90
57	BB	2821	A	N1-C6-N6	15.45	127.87	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	289	G	C5-N7-C8	15.45	112.03	104.30
21	AA	1310	G	N1-C6-O6	15.45	129.17	119.90
21	AA	77	A	N9-C4-C5	15.44	111.98	105.80
57	BB	1205	A	N1-C6-N6	15.44	127.86	118.60
21	AA	360	G	C5-C6-O6	-15.44	119.34	128.60
57	BB	2506	U	O4'-C1'-N1	15.44	120.55	108.20
21	AA	444	G	N1-C6-O6	15.44	129.16	119.90
57	BB	2392	A	N1-C6-N6	15.43	127.86	118.60
21	AA	474	G	N1-C6-O6	15.43	129.16	119.90
21	AA	1433	A	C5-C6-N6	-15.43	111.36	123.70
57	BB	548	G	C5-C6-O6	-15.43	119.34	128.60
57	BB	661	A	N1-C6-N6	15.43	127.86	118.60
57	BB	1079	C	O4'-C1'-N1	15.42	120.53	108.20
57	BB	2456	C	N3-C4-N4	15.42	128.79	118.00
57	BB	2024	G	N1-C6-O6	15.42	129.15	119.90
21	AA	1487	G	C5-C6-O6	-15.41	119.35	128.60
57	BB	707	G	N1-C6-O6	15.40	129.14	119.90
21	AA	579	A	N1-C6-N6	15.39	127.84	118.60
57	BB	408	G	C5-C6-O6	-15.39	119.36	128.60
57	BB	854	C	O4'-C1'-N1	15.39	120.51	108.20
57	BB	185	G	N1-C6-O6	15.39	129.13	119.90
57	BB	1260	A	C5-C6-N6	-15.39	111.39	123.70
57	BB	1384	A	N1-C6-N6	15.38	127.83	118.60
21	AA	71	A	N1-C6-N6	15.38	127.83	118.60
21	AA	627	G	C5-C6-O6	-15.38	119.37	128.60
57	BB	2824	C	N3-C4-C5	-15.38	115.75	121.90
57	BB	1637	A	C5-C6-N1	-15.37	110.02	117.70
57	BB	2594	C	O4'-C1'-N1	15.37	120.50	108.20
57	BB	921	C	N3-C4-C5	-15.36	115.76	121.90
57	BB	1448	G	C8-N9-C4	-15.36	100.25	106.40
21	AA	127	G	N1-C6-O6	15.36	129.12	119.90
25	AZ	204	ARG	NE-CZ-NH1	15.36	127.98	120.30
57	BB	175	G	N1-C6-O6	15.36	129.12	119.90
57	BB	2250	G	N1-C6-O6	15.36	129.12	119.90
21	AA	109	A	N1-C6-N6	15.35	127.81	118.60
21	AA	918	A	N1-C6-N6	15.35	127.81	118.60
57	BB	2177	C	N3-C4-C5	-15.35	115.76	121.90
57	BB	251	A	N1-C6-N6	15.34	127.81	118.60
21	AA	411	A	O4'-C1'-N9	15.34	120.47	108.20
21	AA	1439	G	N1-C6-O6	15.34	129.10	119.90
57	BB	592	A	N1-C6-N6	15.34	127.80	118.60
57	BB	1920	C	N3-C4-N4	15.34	128.74	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2699	C	O4'-C1'-N1	15.33	120.47	108.20
21	AA	325	A	N1-C6-N6	15.33	127.80	118.60
57	BB	983	A	N1-C6-N6	15.33	127.80	118.60
21	AA	695	A	N1-C6-N6	15.33	127.80	118.60
57	BB	491	G	N3-C2-N2	15.33	130.63	119.90
57	BB	851	C	O4'-C1'-N1	15.33	120.46	108.20
26	AV	9	G	N1-C6-O6	15.33	129.10	119.90
22	AY	31	A	O4'-C1'-N9	15.32	120.46	108.20
57	BB	2882	A	N1-C6-N6	15.32	127.80	118.60
21	AA	1525	G	N1-C6-O6	15.32	129.09	119.90
57	BB	753	A	N1-C6-N6	15.32	127.79	118.60
57	BB	409	G	C5-C6-O6	-15.32	119.41	128.60
57	BB	1661	G	N3-C4-C5	15.32	136.26	128.60
21	AA	937	A	C5-N7-C8	15.31	111.56	103.90
21	AA	748	G	N1-C6-O6	15.31	129.09	119.90
57	BB	108	G	N1-C6-O6	15.31	129.09	119.90
22	AY	18	G	N7-C8-N9	15.30	120.75	113.10
57	BB	1861	G	N1-C6-O6	15.31	129.08	119.90
57	BB	2841	C	N3-C4-C5	-15.31	115.78	121.90
26	AV	11	A	N1-C6-N6	15.30	127.78	118.60
57	BB	2719	G	N1-C6-O6	15.30	129.08	119.90
57	BB	1317	G	C5-C6-N1	-15.29	103.85	111.50
57	BB	1945	G	C5-C6-O6	-15.29	119.42	128.60
57	BB	1301	A	N1-C6-N6	15.28	127.77	118.60
21	AA	1426	G	C5-C6-O6	-15.28	119.43	128.60
57	BB	1433	A	N1-C6-N6	15.28	127.77	118.60
57	BB	1545	A	N1-C6-N6	15.27	127.77	118.60
57	BB	191	A	N1-C6-N6	15.27	127.76	118.60
21	AA	1294	G	C5-C6-O6	-15.27	119.44	128.60
57	BB	218	A	N1-C6-N6	15.27	127.76	118.60
22	AY	44	A	C5-C6-N6	-15.27	111.49	123.70
57	BB	2119	A	N1-C6-N6	15.27	127.76	118.60
57	BB	2282	G	N1-C6-O6	15.27	129.06	119.90
57	BB	2409	G	N1-C6-O6	15.26	129.06	119.90
57	BB	2052	A	N1-C6-N6	15.26	127.75	118.60
57	BB	1872	A	C8-N9-C4	-15.26	99.70	105.80
57	BB	2190	G	O4'-C1'-N9	15.26	120.40	108.20
57	BB	2894	G	N1-C6-O6	15.25	129.05	119.90
57	BB	849	A	N1-C6-N6	15.24	127.74	118.60
57	BB	2279	G	N1-C6-O6	15.24	129.04	119.90
57	BB	950	G	N1-C6-O6	15.23	129.04	119.90
57	BB	443	A	N1-C6-N6	15.22	127.73	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2602	A	N1-C6-N6	15.20	127.72	118.60
57	BB	2451	A	N1-C6-N6	15.20	127.72	118.60
57	BB	215	G	N1-C6-O6	15.19	129.02	119.90
57	BB	2142	A	N1-C6-N6	15.19	127.72	118.60
57	BB	2033	A	N1-C6-N6	15.19	127.71	118.60
57	BB	2425	A	P-O3'-C3'	15.19	137.93	119.70
57	BB	1008	A	N1-C6-N6	15.19	127.71	118.60
57	BB	345	A	N1-C6-N6	15.18	127.71	118.60
23	AW	63	G	N3-C4-C5	-15.18	121.01	128.60
57	BB	882	G	N1-C2-N3	-15.18	114.79	123.90
57	BB	2543	G	N1-C6-O6	15.18	129.01	119.90
57	BB	1253	A	N1-C6-N6	15.18	127.71	118.60
57	BB	1422	G	O4'-C1'-N9	15.17	120.34	108.20
57	BB	2363	G	N1-C6-O6	15.17	129.00	119.90
57	BB	1191	G	C5-C6-O6	-15.17	119.50	128.60
16	AE	67	ARG	NE-CZ-NH1	15.16	127.88	120.30
57	BB	193	U	O4'-C1'-N1	15.16	120.33	108.20
57	BB	583	G	C5-C6-O6	-15.15	119.51	128.60
57	BB	980	A	C5-C6-N1	-15.15	110.12	117.70
21	AA	608	A	C5-C6-N6	-15.15	111.58	123.70
57	BB	74	A	C4-C5-C6	15.15	124.57	117.00
57	BB	1381	G	N1-C6-O6	15.14	128.99	119.90
22	AY	36	A	O4'-C1'-N9	15.14	120.31	108.20
57	BB	2337	G	C5-C6-O6	-15.14	119.52	128.60
57	BB	1620	G	C5-C6-O6	-15.13	119.52	128.60
57	BB	2464	G	N1-C6-O6	15.13	128.98	119.90
21	AA	685	G	C5-C6-O6	-15.13	119.52	128.60
57	BB	1346	G	N1-C6-O6	15.13	128.98	119.90
22	AY	2	C	N3-C4-C5	-15.12	115.85	121.90
57	BB	41	C	N3-C4-C5	-15.12	115.85	121.90
57	BB	2453	A	N1-C6-N6	15.12	127.67	118.60
58	BA	30	C	N3-C4-C5	-15.11	115.86	121.90
57	BB	375	G	N1-C6-O6	15.11	128.96	119.90
21	AA	1041	G	N1-C6-O6	15.10	128.96	119.90
57	BB	1268	A	N1-C6-N6	15.10	127.66	118.60
57	BB	1972	G	N1-C6-O6	15.10	128.96	119.90
57	BB	2742	G	C5-C6-O6	-15.10	119.54	128.60
57	BB	422	A	N1-C6-N6	15.09	127.66	118.60
21	AA	868	C	O4'-C1'-N1	15.09	120.27	108.20
57	BB	2308	G	C5-C6-O6	-15.09	119.55	128.60
57	BB	902	C	N3-C4-C5	-15.08	115.87	121.90
57	BB	1088	A	N1-C6-N6	15.08	127.65	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	53	A	C5-C6-N6	-15.08	111.64	123.70
21	AA	1054	C	C5-C6-N1	15.08	128.54	121.00
57	BB	272	A	N1-C6-N6	15.07	127.64	118.60
58	BA	92	C	N3-C4-N4	15.07	128.55	118.00
22	AY	65	G	C5-C6-O6	-15.07	119.56	128.60
21	AA	1024	G	N1-C6-O6	15.06	128.94	119.90
21	AA	428	G	N1-C6-O6	15.06	128.93	119.90
21	AA	750	C	O4'-C1'-N1	15.05	120.24	108.20
57	BB	645	C	N3-C4-N4	15.05	128.53	118.00
58	BA	2	G	N1-C6-O6	15.04	128.93	119.90
57	BB	799	G	N1-C6-O6	15.03	128.92	119.90
57	BB	914	G	N1-C6-O6	15.03	128.92	119.90
57	BB	2568	U	O4'-C1'-N1	15.03	120.23	108.20
21	AA	1513	A	N1-C6-N6	15.03	127.62	118.60
21	AA	262	A	N1-C6-N6	15.02	127.61	118.60
57	BB	1573	G	C5-C6-O6	-15.02	119.59	128.60
57	BB	389	G	C6-C5-N7	-15.02	121.39	130.40
57	BB	2280	G	N1-C6-O6	15.02	128.91	119.90
57	BB	1677	A	C8-N9-C4	-15.02	99.79	105.80
54	BF	149	ARG	NE-CZ-NH2	-15.01	112.79	120.30
57	BB	841	G	C5-C6-O6	-15.01	119.59	128.60
21	AA	428	G	C5-C6-O6	-15.00	119.60	128.60
58	BA	67	G	N1-C6-O6	15.00	128.90	119.90
57	BB	2351	G	C5-C6-O6	-14.99	119.61	128.60
21	AA	1258	G	C5-C6-O6	-14.97	119.61	128.60
57	BB	1213	A	N1-C6-N6	14.97	127.58	118.60
23	AW	65	G	C5-C6-O6	-14.97	119.62	128.60
57	BB	176	A	C4-C5-C6	14.97	124.48	117.00
58	BA	106	G	N1-C6-O6	14.97	128.88	119.90
57	BB	1089	A	N1-C6-N6	14.96	127.58	118.60
57	BB	695	G	N1-C6-O6	14.96	128.88	119.90
21	AA	74	A	N1-C6-N6	14.96	127.57	118.60
21	AA	946	A	C5-C6-N1	-14.96	110.22	117.70
57	BB	831	G	C5-N7-C8	14.95	111.78	104.30
57	BB	503	A	N1-C6-N6	14.95	127.57	118.60
57	BB	1890	A	N1-C6-N6	14.95	127.57	118.60
21	AA	416	G	C5-C6-N1	-14.94	104.03	111.50
57	BB	63	A	N1-C6-N6	14.94	127.56	118.60
57	BB	1670	C	C6-N1-C2	-14.94	114.32	120.30
57	BB	1235	G	N1-C6-O6	14.94	128.86	119.90
21	AA	1046	A	N1-C6-N6	14.93	127.56	118.60
21	AA	1311	A	N1-C6-N6	14.93	127.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	831	G	N7-C8-N9	-14.93	105.64	113.10
57	BB	1380	G	N1-C6-O6	14.92	128.85	119.90
21	AA	446	G	N1-C6-O6	14.91	128.85	119.90
57	BB	583	G	N1-C6-O6	14.91	128.85	119.90
57	BB	1612	C	O4'-C1'-N1	14.91	120.13	108.20
57	BB	176	A	C5-C6-N1	-14.90	110.25	117.70
21	AA	1106	G	N1-C6-O6	14.89	128.84	119.90
57	BB	155	A	N1-C6-N6	14.89	127.54	118.60
57	BB	2353	G	N1-C6-O6	14.89	128.83	119.90
21	AA	300	A	O4'-C1'-N9	14.88	120.11	108.20
57	BB	621	A	N1-C6-N6	14.88	127.53	118.60
21	AA	158	G	N1-C6-O6	14.88	128.82	119.90
21	AA	1063	C	N3-C4-C5	-14.88	115.95	121.90
57	BB	2824	C	C2-N3-C4	14.87	127.33	119.90
57	BB	278	A	N1-C6-N6	14.87	127.52	118.60
57	BB	1734	G	N1-C6-O6	14.86	128.82	119.90
21	AA	726	C	C5-C6-N1	14.86	128.43	121.00
22	AY	28	C	O4'-C1'-N1	14.86	120.09	108.20
57	BB	384	A	N1-C6-N6	14.86	127.51	118.60
21	AA	1089	G	N1-C6-O6	14.86	128.81	119.90
57	BB	389	G	N1-C6-O6	14.85	128.81	119.90
21	AA	191	G	N9-C4-C5	14.85	111.34	105.40
6	AO	76	ARG	NE-CZ-NH2	-14.84	112.88	120.30
22	AY	9	A	N1-C6-N6	14.83	127.50	118.60
21	AA	655	A	N1-C6-N6	14.83	127.50	118.60
57	BB	1289	C	C6-N1-C2	-14.83	114.37	120.30
13	AB	73	ARG	NE-CZ-NH2	-14.83	112.89	120.30
57	BB	270	A	N1-C6-N6	14.82	127.49	118.60
57	BB	687	C	C6-N1-C2	-14.81	114.38	120.30
57	BB	2854	G	N1-C6-O6	14.81	128.78	119.90
21	AA	485	U	O4'-C1'-N1	14.80	120.04	108.20
57	BB	1162	G	N1-C6-O6	14.79	128.78	119.90
21	AA	1014	A	C5-C6-N1	-14.79	110.31	117.70
57	BB	551	G	N1-C6-O6	14.78	128.77	119.90
22	AY	21	A	N1-C2-N3	14.78	136.69	129.30
57	BB	1845	G	N1-C6-O6	14.78	128.77	119.90
21	AA	726	C	C6-N1-C2	-14.78	114.39	120.30
57	BB	2564	A	N1-C6-N6	14.78	127.47	118.60
57	BB	2844	G	C5-C6-O6	-14.78	119.73	128.60
21	AA	936	C	O4'-C1'-N1	14.77	120.02	108.20
23	AW	22	G	N1-C6-O6	14.76	128.76	119.90
57	BB	2729	G	C5-C6-O6	-14.76	119.74	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	298	A	C5-C6-N6	-14.76	111.89	123.70
22	AY	54	U	C5-C6-N1	14.75	130.07	122.70
21	AA	546	A	C5-C6-N1	-14.74	110.33	117.70
21	AA	946	A	N1-C6-N6	14.74	127.45	118.60
57	BB	2020	A	C5-C6-N1	-14.73	110.33	117.70
21	AA	364	A	N1-C6-N6	14.73	127.44	118.60
57	BB	2154	A	N1-C6-N6	14.73	127.44	118.60
57	BB	2045	C	O4'-C1'-N1	14.72	119.98	108.20
57	BB	1259	G	C5-C6-O6	-14.71	119.77	128.60
57	BB	380	G	C8-N9-C4	14.71	112.28	106.40
57	BB	742	A	N1-C6-N6	14.71	127.42	118.60
57	BB	1085	A	O4'-C1'-N9	14.70	119.96	108.20
57	BB	1430	G	C5-C6-O6	-14.70	119.78	128.60
57	BB	134	G	N1-C6-O6	14.70	128.72	119.90
21	AA	1111	A	N1-C6-N6	14.70	127.42	118.60
57	BB	1587	G	C4-C5-N7	14.69	116.68	110.80
21	AA	1334	G	C8-N9-C4	-14.69	100.52	106.40
24	AX	20	U	C5-C4-O4	-14.69	117.09	125.90
57	BB	309	A	N1-C6-N6	14.69	127.41	118.60
57	BB	2325	G	N1-C6-O6	14.69	128.71	119.90
21	AA	780	A	N1-C6-N6	14.69	127.41	118.60
57	BB	226	A	N1-C6-N6	14.69	127.41	118.60
22	AY	24	G	C5-C6-O6	-14.66	119.80	128.60
57	BB	2101	A	C5-C6-N6	-14.66	111.97	123.70
21	AA	361	G	C5-C6-O6	-14.66	119.80	128.60
21	AA	830	G	C5-C6-N1	-14.66	104.17	111.50
27	B5	36	ALA	O-C-N	-14.66	99.25	122.70
21	AA	1467	C	O4'-C1'-N1	14.66	119.93	108.20
57	BB	844	A	N1-C6-N6	14.66	127.39	118.60
21	AA	587	G	N1-C6-O6	14.65	128.69	119.90
21	AA	98	A	N1-C6-N6	14.65	127.39	118.60
57	BB	1876	A	C8-N9-C4	-14.64	99.94	105.80
21	AA	792	A	N1-C6-N6	14.64	127.38	118.60
57	BB	1054	A	N1-C6-N6	14.64	127.38	118.60
57	BB	1084	A	N1-C6-N6	14.64	127.38	118.60
57	BB	2594	C	N3-C4-C5	-14.63	116.05	121.90
21	AA	160	A	N1-C6-N6	14.62	127.37	118.60
21	AA	297	G	N1-C2-N3	-14.62	115.13	123.90
57	BB	912	C	C6-N1-C2	-14.62	114.45	120.30
57	BB	462	C	N3-C4-C5	-14.62	116.05	121.90
21	AA	609	A	N1-C6-N6	14.61	127.37	118.60
57	BB	2130	U	P-O3'-C3'	14.61	137.23	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2250	G	C5-C6-O6	-14.61	119.83	128.60
21	AA	626	G	N1-C6-O6	14.60	128.66	119.90
57	BB	374	A	N1-C6-N6	14.60	127.36	118.60
57	BB	94	A	N1-C6-N6	14.60	127.36	118.60
57	BB	379	G	C5-C6-O6	-14.60	119.84	128.60
21	AA	1014	A	C4-C5-C6	14.59	124.30	117.00
57	BB	185	G	C5-C6-O6	-14.59	119.84	128.60
57	BB	2175	C	N3-C4-C5	-14.59	116.06	121.90
57	BB	332	A	N1-C6-N6	14.58	127.35	118.60
57	BB	682	G	N1-C6-O6	14.58	128.65	119.90
21	AA	189	A	C5-C6-N1	-14.58	110.41	117.70
21	AA	927	G	N1-C6-O6	14.58	128.65	119.90
57	BB	1090	A	C5-C6-N1	-14.58	110.41	117.70
21	AA	254	G	C5-C6-O6	-14.57	119.86	128.60
57	BB	2670	A	C5-C6-N1	-14.57	110.41	117.70
57	BB	2841	C	O4'-C1'-N1	14.56	119.85	108.20
57	BB	2234	G	N1-C6-O6	14.56	128.64	119.90
57	BB	878	A	N1-C6-N6	14.56	127.34	118.60
21	AA	937	A	C4-C5-N7	-14.56	103.42	110.70
21	AA	31	G	C5-C6-O6	-14.55	119.87	128.60
21	AA	487	A	N7-C8-N9	14.55	121.08	113.80
57	BB	1936	A	C4-C5-C6	14.54	124.27	117.00
57	BB	2331	G	N1-C6-O6	14.54	128.63	119.90
57	BB	297	G	C5-C6-O6	-14.54	119.88	128.60
21	AA	264	C	O4'-C1'-N1	14.54	119.83	108.20
21	AA	1297	G	N1-C6-O6	14.54	128.62	119.90
57	BB	707	G	C8-N9-C4	-14.54	100.58	106.40
21	AA	939	G	C5-C6-O6	-14.54	119.88	128.60
57	BB	1535	A	C4-C5-C6	14.54	124.27	117.00
57	BB	655	A	C5-C6-N6	-14.53	112.07	123.70
57	BB	477	A	C5-C6-N1	-14.53	110.43	117.70
22	AY	15	G	C2-N3-C4	-14.53	104.64	111.90
21	AA	452	A	N1-C6-N6	14.53	127.32	118.60
21	AA	1279	G	N1-C6-O6	14.52	128.61	119.90
57	BB	1808	A	N1-C6-N6	14.52	127.31	118.60
57	BB	2889	C	O4'-C1'-N1	14.52	119.82	108.20
21	AA	533	A	N1-C6-N6	14.51	127.31	118.60
57	BB	2652	C	O4'-C1'-N1	14.51	119.81	108.20
57	BB	265	A	C5-C6-N6	-14.51	112.09	123.70
57	BB	2442	C	N3-C4-C5	-14.51	116.10	121.90
58	BA	54	G	N1-C6-O6	14.50	128.60	119.90
21	AA	690	G	C5-C6-O6	-14.50	119.90	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1661	G	C5-C6-O6	-14.50	119.90	128.60
26	AV	49	G	N1-C6-O6	14.48	128.59	119.90
57	BB	2484	G	C2-N3-C4	14.48	119.14	111.90
21	AA	138	G	O4'-C1'-N9	14.47	119.78	108.20
57	BB	2623	G	C5-C6-O6	-14.47	119.92	128.60
10	AS	2	ARG	NE-CZ-NH2	-14.46	113.07	120.30
22	AY	15	G	N1-C6-O6	14.46	128.58	119.90
28	BI	7	TYR	CB-CG-CD2	-14.46	112.32	121.00
57	BB	52	A	C5-N7-C8	14.46	111.13	103.90
21	AA	297	G	N1-C6-O6	14.45	128.57	119.90
57	BB	1746	A	C2-N3-C4	-14.45	103.38	110.60
57	BB	30	G	C5-C6-O6	-14.44	119.94	128.60
57	BB	2454	G	N1-C6-O6	14.43	128.56	119.90
57	BB	1711	A	N1-C6-N6	14.43	127.26	118.60
57	BB	690	G	C5-C6-O6	-14.43	119.94	128.60
57	BB	1137	G	N1-C6-O6	14.42	128.55	119.90
57	BB	1637	A	N1-C6-N6	14.42	127.25	118.60
57	BB	1488	C	O4'-C1'-N1	14.42	119.73	108.20
57	BB	1691	C	O4'-C1'-N1	14.42	119.73	108.20
21	AA	441	A	C5-C6-N1	-14.41	110.49	117.70
21	AA	1277	C	N3-C4-N4	14.41	128.09	118.00
57	BB	2104	C	P-O3'-C3'	14.41	137.00	119.70
57	BB	2171	A	N1-C6-N6	14.41	127.25	118.60
57	BB	1524	G	C5-C6-O6	-14.40	119.96	128.60
21	AA	156	C	O4'-C1'-N1	14.40	119.72	108.20
21	AA	1105	A	N1-C6-N6	14.40	127.24	118.60
57	BB	233	A	C5-C6-N6	-14.40	112.18	123.70
57	BB	2123	G	C5-C6-O6	-14.40	119.96	128.60
57	BB	1048	A	N1-C6-N6	14.39	127.24	118.60
57	BB	981	A	C5-N7-C8	14.39	111.09	103.90
21	AA	1042	A	N1-C6-N6	14.38	127.23	118.60
21	AA	201	G	N1-C6-O6	14.38	128.53	119.90
21	AA	595	A	N1-C6-N6	14.38	127.23	118.60
21	AA	782	A	O4'-C1'-N9	14.38	119.70	108.20
57	BB	1080	A	N1-C6-N6	14.38	127.23	118.60
21	AA	6	G	C5-C6-O6	-14.38	119.97	128.60
21	AA	104	G	C5-C6-O6	-14.37	119.98	128.60
55	BG	169	ARG	NE-CZ-NH2	14.37	127.49	120.30
57	BB	1618	A	N1-C6-N6	14.37	127.22	118.60
57	BB	2725	A	N1-C6-N6	14.37	127.22	118.60
21	AA	277	C	O4'-C1'-N1	14.36	119.69	108.20
57	BB	372	G	C5-C6-O6	-14.36	119.98	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1585	C	O4'-C1'-N1	14.36	119.69	108.20
21	AA	1356	G	C5-C6-O6	-14.35	119.99	128.60
57	BB	325	G	C5-C6-O6	-14.35	119.99	128.60
57	BB	1948	G	C2-N3-C4	14.35	119.07	111.90
21	AA	1257	A	N1-C6-N6	14.34	127.20	118.60
57	BB	231	A	N1-C6-N6	14.34	127.20	118.60
21	AA	1146	A	N1-C6-N6	14.34	127.20	118.60
21	AA	611	C	N3-C4-N4	14.33	128.03	118.00
57	BB	759	G	N1-C6-O6	14.33	128.50	119.90
57	BB	846	U	O4'-C1'-N1	14.33	119.66	108.20
21	AA	609	A	C4-C5-C6	14.32	124.16	117.00
57	BB	1842	G	C5-C6-O6	-14.32	120.01	128.60
57	BB	745	G	C5-C6-O6	-14.32	120.01	128.60
57	BB	896	A	N1-C6-N6	14.32	127.19	118.60
57	BB	716	A	N1-C6-N6	14.31	127.19	118.60
57	BB	2898	U	O4'-C1'-N1	14.31	119.65	108.20
57	BB	1422	G	C5-C6-O6	-14.31	120.02	128.60
57	BB	2844	G	N1-C6-O6	14.31	128.49	119.90
57	BB	1867	G	C5-C6-O6	-14.30	120.02	128.60
57	BB	2396	G	N1-C6-O6	14.30	128.48	119.90
21	AA	254	G	N1-C6-O6	14.30	128.48	119.90
57	BB	2149	U	O4'-C1'-N1	14.30	119.64	108.20
21	AA	212	G	C5-C6-O6	-14.29	120.02	128.60
21	AA	220	G	N1-C6-O6	14.29	128.48	119.90
21	AA	424	G	N1-C6-O6	14.29	128.48	119.90
57	BB	841	G	O4'-C1'-N9	14.29	119.64	108.20
57	BB	713	G	N1-C6-O6	14.29	128.47	119.90
26	AV	34	C	O4'-C1'-N1	14.29	119.63	108.20
57	BB	964	C	N3-C4-C5	-14.28	116.19	121.90
57	BB	1949	G	C5-C6-O6	-14.28	120.03	128.60
21	AA	586	C	O4'-C1'-N1	14.28	119.62	108.20
21	AA	1246	A	N1-C6-N6	14.28	127.17	118.60
27	B5	60	ARG	NE-CZ-NH2	-14.28	113.16	120.30
57	BB	36	G	C5-C6-O6	-14.27	120.04	128.60
57	BB	2495	G	N1-C6-O6	14.27	128.46	119.90
14	AC	87	ARG	NE-CZ-NH2	-14.27	113.17	120.30
26	AV	19	G	N1-C6-O6	14.27	128.46	119.90
14	AC	135	ARG	NE-CZ-NH2	-14.27	113.17	120.30
21	AA	262	A	C5-C6-N1	-14.27	110.57	117.70
57	BB	788	A	N1-C6-N6	14.26	127.16	118.60
58	BA	57	A	C4-C5-N7	-14.26	103.57	110.70
45	BC	216	ARG	NE-CZ-NH2	-14.26	113.17	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	75	G	N1-C6-O6	14.26	128.45	119.90
21	AA	1142	G	N1-C6-O6	14.25	128.45	119.90
57	BB	1666	G	N1-C6-O6	14.25	128.45	119.90
21	AA	655	A	C5-C6-N6	-14.25	112.30	123.70
21	AA	869	G	N1-C6-O6	14.24	128.45	119.90
57	BB	1446	C	N3-C4-C5	-14.24	116.20	121.90
57	BB	2624	G	N1-C6-O6	14.24	128.44	119.90
57	BB	548	G	N1-C6-O6	14.24	128.44	119.90
57	BB	1371	G	C5-C6-O6	-14.24	120.06	128.60
21	AA	321	A	N1-C6-N6	14.23	127.14	118.60
21	AA	1280	A	N1-C6-N6	14.22	127.13	118.60
57	BB	195	A	C4-C5-C6	14.22	124.11	117.00
21	AA	425	G	C5-C6-O6	-14.22	120.07	128.60
57	BB	2226	C	N3-C4-C5	-14.22	116.21	121.90
21	AA	223	A	C8-N9-C4	-14.22	100.11	105.80
57	BB	1845	G	C5-C6-O6	-14.21	120.07	128.60
21	AA	1360	A	N1-C6-N6	14.21	127.12	118.60
26	AV	71	C	O4'-C1'-N1	14.21	119.57	108.20
58	BA	88	C	N3-C4-C5	-14.21	116.22	121.90
21	AA	1215	G	N1-C6-O6	14.20	128.42	119.90
57	BB	2472	G	N1-C6-O6	14.21	128.42	119.90
57	BB	236	C	N3-C4-N4	14.20	127.94	118.00
57	BB	1593	A	N7-C8-N9	-14.20	106.70	113.80
57	BB	2791	G	N1-C6-O6	14.20	128.42	119.90
21	AA	374	A	N1-C6-N6	14.20	127.12	118.60
57	BB	2711	A	N1-C6-N6	14.20	127.12	118.60
57	BB	1322	A	C5-C6-N1	-14.19	110.60	117.70
57	BB	415	A	C5-C6-N1	-14.19	110.61	117.70
21	AA	385	C	O4'-C1'-N1	14.19	119.55	108.20
58	BA	23	G	C5-C6-O6	-14.19	120.09	128.60
21	AA	435	A	N1-C6-N6	14.18	127.11	118.60
57	BB	1503	A	N1-C6-N6	14.18	127.11	118.60
21	AA	635	A	N1-C6-N6	14.17	127.10	118.60
21	AA	268	U	O4'-C1'-N1	14.17	119.54	108.20
21	AA	809	G	C5-C6-O6	-14.17	120.10	128.60
57	BB	2073	C	N3-C4-C5	-14.17	116.23	121.90
57	BB	689	A	C5-C6-N1	-14.17	110.62	117.70
57	BB	745	G	N1-C6-O6	14.17	128.40	119.90
21	AA	669	G	C5-C6-O6	-14.16	120.10	128.60
21	AA	814	A	C4-C5-C6	14.15	124.08	117.00
57	BB	841	G	N1-C6-O6	14.15	128.39	119.90
57	BB	1954	G	N1-C6-O6	14.15	128.39	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1131	G	N1-C6-O6	14.14	128.39	119.90
57	BB	8	C	N3-C4-N4	14.14	127.90	118.00
57	BB	2666	C	N3-C4-N4	14.14	127.90	118.00
21	AA	528	C	C6-N1-C2	-14.14	114.64	120.30
21	AA	1014	A	N1-C6-N6	14.14	127.08	118.60
21	AA	259	G	N1-C6-O6	14.12	128.38	119.90
21	AA	520	A	N1-C6-N6	14.12	127.08	118.60
57	BB	750	A	N1-C6-N6	14.12	127.07	118.60
57	BB	2012	G	N1-C2-N3	-14.12	115.43	123.90
57	BB	2834	G	N1-C2-N3	-14.12	115.43	123.90
13	AB	107	ARG	NE-CZ-NH2	-14.11	113.24	120.30
57	BB	1387	A	N1-C6-N6	14.11	127.07	118.60
21	AA	483	C	N3-C4-N4	14.11	127.88	118.00
21	AA	1004	A	N1-C6-N6	14.11	127.06	118.60
21	AA	1276	G	C5-C6-O6	-14.10	120.14	128.60
21	AA	155	A	C4-C5-C6	14.09	124.05	117.00
21	AA	976	G	N1-C6-O6	14.09	128.35	119.90
21	AA	1018	G	N1-C6-O6	14.09	128.35	119.90
57	BB	219	A	N1-C6-N6	14.09	127.05	118.60
21	AA	1201	A	C8-N9-C4	-14.09	100.17	105.80
57	BB	2126	A	C4-C5-C6	14.08	124.04	117.00
55	BG	169	ARG	NE-CZ-NH1	-14.08	113.26	120.30
57	BB	58	G	C2-N3-C4	14.08	118.94	111.90
57	BB	2283	C	O4'-C1'-N1	14.08	119.46	108.20
21	AA	292	G	C5-C6-N1	-14.07	104.47	111.50
21	AA	869	G	C5-C6-O6	-14.07	120.16	128.60
22	AY	66	A	C4-C5-C6	14.07	124.03	117.00
21	AA	1318	A	C5-C6-N1	-14.06	110.67	117.70
57	BB	255	A	N1-C6-N6	14.06	127.04	118.60
21	AA	69	G	N1-C6-O6	14.06	128.34	119.90
57	BB	62	U	P-O5'-C5'	14.06	143.40	120.90
57	BB	1551	A	N1-C6-N6	14.05	127.03	118.60
57	BB	1803	A	C4-C5-C6	14.06	124.03	117.00
21	AA	6	G	N1-C6-O6	14.05	128.33	119.90
57	BB	812	C	C4-C5-C6	14.05	124.42	117.40
57	BB	1743	G	O4'-C1'-N9	14.05	119.44	108.20
57	BB	1593	A	C4-C5-C6	14.05	124.02	117.00
21	AA	862	C	N3-C4-C5	-14.04	116.28	121.90
57	BB	979	A	N1-C6-N6	14.04	127.03	118.60
57	BB	213	A	N1-C6-N6	14.04	127.03	118.60
21	AA	359	G	C5-C6-O6	-14.04	120.17	128.60
57	BB	2860	A	N1-C6-N6	14.04	127.03	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2263	C	O4'-C1'-N1	14.04	119.43	108.20
21	AA	960	U	P-O3'-C3'	14.04	136.54	119.70
57	BB	1560	G	N1-C6-O6	14.04	128.32	119.90
57	BB	1652	A	N1-C6-N6	14.04	127.02	118.60
57	BB	2620	C	O4'-C1'-N1	14.04	119.43	108.20
21	AA	943	U	O4'-C1'-N1	14.03	119.43	108.20
57	BB	351	C	N3-C4-N4	14.03	127.82	118.00
57	BB	1041	G	C5-C6-O6	-14.03	120.18	128.60
22	AY	27	C	N3-C4-N4	14.03	127.82	118.00
57	BB	2726	A	C5-C6-N1	-14.03	110.69	117.70
57	BB	14	A	N1-C6-N6	14.02	127.01	118.60
57	BB	800	A	N1-C6-N6	14.02	127.01	118.60
57	BB	1125	G	N1-C6-O6	14.02	128.31	119.90
57	BB	1200	C	O4'-C1'-N1	14.02	119.42	108.20
57	BB	1244	A	N1-C6-N6	14.02	127.01	118.60
57	BB	1705	A	N1-C6-N6	14.02	127.01	118.60
21	AA	718	A	C5-C6-N1	-14.01	110.70	117.70
57	BB	1986	C	C4-C5-C6	14.00	124.40	117.40
52	BD	184	ARG	NE-CZ-NH2	14.00	127.30	120.30
57	BB	1164	C	C6-N1-C2	-14.00	114.70	120.30
22	AY	18	G	C8-N9-C4	-13.99	100.80	106.40
21	AA	797	C	O4'-C1'-N1	13.99	119.39	108.20
57	BB	2331	G	C5-C6-O6	-13.99	120.21	128.60
21	AA	878	A	N1-C6-N6	13.99	126.99	118.60
26	AV	70	G	C5-C6-O6	-13.99	120.21	128.60
21	AA	60	A	N1-C6-N6	13.98	126.99	118.60
57	BB	1285	A	N1-C6-N6	13.98	126.99	118.60
57	BB	270	A	C4-C5-C6	13.98	123.99	117.00
21	AA	442	G	N1-C6-O6	13.97	128.28	119.90
57	BB	1030	C	N3-C4-C5	-13.97	116.31	121.90
57	BB	2535	G	N1-C6-O6	13.97	128.28	119.90
21	AA	490	C	O4'-C1'-N1	13.97	119.38	108.20
21	AA	765	G	C4-C5-N7	-13.97	105.21	110.80
21	AA	859	G	C5-C6-O6	-13.96	120.22	128.60
57	BB	515	A	N1-C6-N6	13.96	126.98	118.60
21	AA	190	A	N1-C6-N6	13.96	126.98	118.60
57	BB	2091	C	C6-N1-C2	-13.96	114.72	120.30
21	AA	227	G	C8-N9-C4	-13.95	100.82	106.40
57	BB	1262	A	C5-C6-N1	-13.95	110.72	117.70
57	BB	1613	G	N1-C6-O6	13.95	128.27	119.90
21	AA	746	A	N1-C6-N6	13.94	126.97	118.60
57	BB	344	A	O4'-C1'-N9	13.94	119.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2708	G	N3-C2-N2	13.95	129.66	119.90
21	AA	474	G	C5-C6-O6	-13.94	120.23	128.60
57	BB	2070	A	N1-C6-N6	13.94	126.97	118.60
21	AA	482	A	N1-C6-N6	13.94	126.96	118.60
22	AY	4	G	C5-C6-N1	-13.94	104.53	111.50
57	BB	1413	A	C5-C6-N1	-13.94	110.73	117.70
21	AA	832	G	N1-C6-O6	13.93	128.26	119.90
57	BB	1010	A	N9-C4-C5	-13.93	100.23	105.80
57	BB	1477	A	N1-C6-N6	13.93	126.96	118.60
57	BB	2805	C	N3-C4-C5	-13.93	116.33	121.90
57	BB	261	G	C5-C6-O6	-13.93	120.25	128.60
21	AA	1058	G	N1-C6-O6	13.92	128.25	119.90
21	AA	124	C	N3-C4-N4	13.92	127.75	118.00
21	AA	987	G	C5-C6-O6	-13.92	120.25	128.60
57	BB	2446	G	C5-C6-O6	-13.92	120.25	128.60
57	BB	772	C	N3-C4-C5	-13.91	116.33	121.90
57	BB	1630	A	C5-C6-N6	-13.91	112.57	123.70
21	AA	130	A	N1-C6-N6	13.91	126.95	118.60
21	AA	1355	G	C5-C6-O6	-13.91	120.26	128.60
21	AA	776	G	N3-C2-N2	13.90	129.63	119.90
57	BB	2685	G	N1-C6-O6	13.90	128.24	119.90
21	AA	89	U	O4'-C1'-N1	13.89	119.32	108.20
21	AA	749	A	C5-C6-N6	-13.89	112.58	123.70
21	AA	1401	G	N1-C6-O6	13.89	128.24	119.90
22	AY	70	C	O4'-C1'-N1	13.89	119.31	108.20
57	BB	2097	A	N9-C4-C5	13.89	111.36	105.80
57	BB	1023	U	O4'-C1'-N1	13.89	119.31	108.20
33	BN	90	ARG	NE-CZ-NH2	-13.88	113.36	120.30
57	BB	771	G	C5-C6-O6	-13.88	120.27	128.60
21	AA	1355	G	N1-C6-O6	13.88	128.23	119.90
57	BB	1357	C	O4'-C1'-N1	13.88	119.30	108.20
57	BB	2507	C	O4'-C1'-N1	13.88	119.31	108.20
21	AA	84	U	N3-C4-O4	13.88	129.11	119.40
57	BB	2124	G	N1-C6-O6	13.88	128.22	119.90
57	BB	2239	G	N1-C6-O6	13.87	128.22	119.90
57	BB	1806	C	N3-C4-C5	-13.87	116.35	121.90
57	BB	2391	G	N1-C6-O6	13.87	128.22	119.90
57	BB	2174	C	P-O3'-C3'	13.87	136.34	119.70
57	BB	2721	A	C4-C5-C6	13.87	123.93	117.00
57	BB	1031	G	C5-C6-O6	-13.86	120.28	128.60
57	BB	1276	A	C5-C6-N1	-13.86	110.77	117.70
57	BB	1667	G	C5-C6-N1	-13.86	104.57	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	818	G	N1-C6-O6	13.86	128.21	119.90
57	BB	89	A	N1-C6-N6	13.86	126.91	118.60
57	BB	1528	A	C5-C6-N6	-13.85	112.62	123.70
21	AA	1369	C	N3-C4-N4	13.85	127.69	118.00
57	BB	324	A	N1-C6-N6	13.85	126.91	118.60
57	BB	2751	G	N1-C6-O6	13.85	128.21	119.90
21	AA	1269	A	N1-C6-N6	13.85	126.91	118.60
7	AP	5	ARG	NE-CZ-NH2	-13.84	113.38	120.30
57	BB	1226	A	N1-C6-N6	13.84	126.91	118.60
21	AA	52	C	N3-C4-C5	-13.83	116.37	121.90
57	BB	2169	A	O4'-C1'-N9	13.83	119.26	108.20
58	BA	79	G	C6-C5-N7	-13.83	122.10	130.40
57	BB	1006	C	O4'-C1'-N1	13.82	119.26	108.20
57	BB	1948	G	N3-C4-C5	-13.82	121.69	128.60
57	BB	250	G	N1-C6-O6	13.81	128.19	119.90
23	AW	35	A	N1-C6-N6	13.81	126.89	118.60
57	BB	1985	C	O4'-C1'-N1	13.81	119.25	108.20
58	BA	81	G	N1-C6-O6	13.81	128.18	119.90
23	AW	70	G	C8-N9-C4	-13.80	100.88	106.40
57	BB	253	C	C6-N1-C2	-13.80	114.78	120.30
57	BB	2411	A	C4-C5-C6	13.80	123.90	117.00
57	BB	327	G	N1-C6-O6	13.80	128.18	119.90
57	BB	866	A	C5-C6-N1	-13.80	110.80	117.70
57	BB	2311	A	N1-C6-N6	13.80	126.88	118.60
57	BB	1381	G	C5-C6-O6	-13.79	120.32	128.60
21	AA	1529	G	C5-C6-O6	-13.79	120.33	128.60
26	AV	27	U	O4'-C1'-N1	13.79	119.23	108.20
57	BB	698	C	O4'-C1'-N1	13.78	119.22	108.20
22	AY	23	A	C5-C6-N1	-13.78	110.81	117.70
29	BJ	74	TYR	CB-CG-CD1	-13.78	112.73	121.00
57	BB	1884	G	N1-C6-O6	13.77	128.16	119.90
57	BB	951	C	O4'-C1'-N1	13.77	119.22	108.20
57	BB	2058	A	N9-C4-C5	13.77	111.31	105.80
21	AA	131	A	N1-C6-N6	13.76	126.86	118.60
21	AA	988	G	N1-C6-O6	13.76	128.16	119.90
21	AA	493	A	N1-C6-N6	13.76	126.85	118.60
57	BB	95	A	C6-C5-N7	-13.75	122.67	132.30
21	AA	122	G	C5-C6-N1	-13.75	104.62	111.50
23	AW	64	A	N1-C6-N6	13.73	126.84	118.60
40	BU	93	ARG	NE-CZ-NH1	-13.73	113.43	120.30
57	BB	1919	A	C5-C6-N6	-13.73	112.71	123.70
21	AA	1250	A	N1-C6-N6	13.73	126.84	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1289	A	N1-C6-N6	13.73	126.84	118.60
21	AA	295	C	C5-C6-N1	13.73	127.86	121.00
21	AA	784	A	N1-C6-N6	13.72	126.83	118.60
26	AV	61	C	N3-C4-C5	-13.72	116.41	121.90
21	AA	1244	G	C5-C6-O6	-13.72	120.37	128.60
21	AA	1319	A	N1-C6-N6	13.72	126.83	118.60
57	BB	641	U	N3-C2-O2	13.72	131.81	122.20
57	BB	1296	G	N1-C2-N3	-13.72	115.67	123.90
57	BB	1320	C	N3-C4-C5	-13.72	116.41	121.90
57	BB	2583	G	C5-C6-O6	-13.72	120.37	128.60
57	BB	1413	A	N1-C6-N6	13.71	126.83	118.60
57	BB	2332	C	O4'-C1'-N1	13.71	119.17	108.20
21	AA	563	A	N1-C6-N6	13.71	126.83	118.60
21	AA	690	G	N1-C6-O6	13.71	128.13	119.90
57	BB	1677	A	C4-C5-C6	13.71	123.86	117.00
21	AA	752	G	N1-C6-O6	13.71	128.12	119.90
57	BB	2530	A	N1-C6-N6	13.71	126.83	118.60
57	BB	795	C	C6-N1-C2	-13.70	114.82	120.30
57	BB	2082	A	N1-C6-N6	13.70	126.82	118.60
57	BB	2834	G	N1-C6-O6	13.70	128.12	119.90
57	BB	1334	G	C5-C6-O6	-13.70	120.38	128.60
57	BB	1668	A	N1-C6-N6	13.70	126.82	118.60
57	BB	1247	A	C4-C5-C6	13.70	123.85	117.00
57	BB	528	A	C5-C6-N6	-13.69	112.75	123.70
21	AA	1252	A	N1-C6-N6	13.69	126.81	118.60
58	BA	112	G	C5-C6-O6	-13.69	120.39	128.60
21	AA	900	A	N1-C6-N6	13.69	126.81	118.60
57	BB	91	A	N1-C6-N6	13.69	126.81	118.60
57	BB	2803	G	N1-C6-O6	13.69	128.11	119.90
21	AA	111	G	O4'-C1'-N9	13.68	119.15	108.20
21	AA	456	A	N1-C6-N6	13.68	126.81	118.60
21	AA	755	G	C5-C6-O6	-13.68	120.39	128.60
57	BB	197	A	N1-C6-N6	13.68	126.81	118.60
57	BB	415	A	C4-C5-C6	13.68	123.84	117.00
57	BB	460	A	N1-C6-N6	13.68	126.81	118.60
57	BB	1038	G	N1-C6-O6	13.68	128.11	119.90
57	BB	1427	A	N1-C6-N6	13.68	126.81	118.60
57	BB	2097	A	C4-C5-N7	-13.68	103.86	110.70
34	BO	30	ARG	NE-CZ-NH1	13.67	127.14	120.30
57	BB	141	G	C5-C6-N1	-13.67	104.66	111.50
57	BB	862	G	N1-C6-O6	13.67	128.10	119.90
57	BB	2662	A	N1-C6-N6	13.67	126.80	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	425	G	N1-C6-O6	13.67	128.10	119.90
57	BB	1822	C	N3-C4-C5	-13.67	116.43	121.90
57	BB	1848	A	C5-C6-N6	-13.67	112.77	123.70
57	BB	2377	A	N1-C6-N6	13.67	126.80	118.60
24	AX	13	A	C4-C5-C6	13.66	123.83	117.00
57	BB	2536	G	N1-C6-O6	13.66	128.10	119.90
57	BB	752	A	N1-C6-N6	13.66	126.80	118.60
57	BB	864	G	C5-C6-O6	-13.65	120.41	128.60
57	BB	415	A	N1-C6-N6	13.65	126.79	118.60
57	BB	804	A	N1-C6-N6	13.65	126.79	118.60
58	BA	57	A	N1-C6-N6	13.65	126.79	118.60
21	AA	41	G	N1-C6-O6	13.65	128.09	119.90
21	AA	794	A	N1-C6-N6	13.64	126.79	118.60
22	AY	20	G	C5-C6-O6	-13.64	120.41	128.60
21	AA	1353	G	N1-C6-O6	13.64	128.09	119.90
57	BB	2743	U	O4'-C1'-N1	13.64	119.11	108.20
57	BB	629	G	N1-C6-O6	13.64	128.08	119.90
57	BB	2107	G	N1-C6-O6	13.63	128.08	119.90
27	B5	162	ARG	NE-CZ-NH2	-13.62	113.49	120.30
57	BB	656	G	N1-C6-O6	13.62	128.07	119.90
57	BB	1246	A	C4-C5-C6	13.62	123.81	117.00
21	AA	303	A	C5-C6-N1	-13.62	110.89	117.70
57	BB	281	C	O4'-C1'-N1	13.62	119.09	108.20
57	BB	207	A	N1-C6-N6	13.61	126.77	118.60
57	BB	1021	A	C5-C6-N6	-13.62	112.81	123.70
21	AA	80	A	C5-C6-N6	-13.61	112.81	123.70
57	BB	1641	A	N1-C6-N6	13.61	126.77	118.60
21	AA	959	A	N1-C6-N6	13.61	126.77	118.60
21	AA	533	A	C5-C6-N1	-13.61	110.90	117.70
57	BB	1234	U	O4'-C1'-N1	13.61	119.09	108.20
57	BB	2062	A	C5-C6-N1	-13.60	110.90	117.70
21	AA	797	C	N3-C4-C5	-13.60	116.46	121.90
57	BB	1809	A	N1-C6-N6	13.60	126.76	118.60
22	AY	3	G	C5-C6-O6	-13.59	120.45	128.60
57	BB	27	G	N1-C2-N3	-13.59	115.75	123.90
57	BB	477	A	C4-C5-C6	13.59	123.79	117.00
57	BB	1965	C	C6-N1-C2	-13.58	114.87	120.30
21	AA	823	C	N3-C4-C5	-13.57	116.47	121.90
57	BB	21	A	N1-C6-N6	13.57	126.74	118.60
57	BB	2069	G	N1-C6-O6	13.57	128.04	119.90
21	AA	1179	A	N1-C6-N6	13.57	126.74	118.60
57	BB	299	A	C5-N7-C8	13.57	110.68	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	173	A	C4-C5-C6	13.56	123.78	117.00
57	BB	1052	C	N3-C4-C5	-13.56	116.47	121.90
21	AA	1036	A	N1-C6-N6	13.56	126.74	118.60
57	BB	1342	A	N1-C6-N6	13.56	126.74	118.60
57	BB	2411	A	C8-N9-C4	-13.55	100.38	105.80
21	AA	175	C	C6-N1-C2	-13.55	114.88	120.30
21	AA	706	A	N1-C6-N6	13.54	126.73	118.60
21	AA	879	C	O4'-C1'-N1	13.54	119.03	108.20
57	BB	1958	C	N3-C4-C5	-13.54	116.48	121.90
21	AA	1132	C	O4'-C1'-N1	13.54	119.03	108.20
23	AW	38	A	C4-C5-C6	13.54	123.77	117.00
57	BB	82	U	O4'-C1'-N1	13.54	119.03	108.20
57	BB	584	C	N3-C4-N4	13.54	127.48	118.00
57	BB	1780	A	N1-C6-N6	13.54	126.72	118.60
57	BB	2073	C	O4'-C1'-N1	13.54	119.03	108.20
57	BB	1746	A	N1-C2-N3	13.53	136.06	129.30
57	BB	55	G	C2-N3-C4	13.52	118.66	111.90
57	BB	354	A	O4'-C1'-N9	13.52	119.02	108.20
21	AA	1219	A	N1-C6-N6	13.52	126.71	118.60
57	BB	1802	A	N1-C6-N6	13.52	126.71	118.60
21	AA	963	G	C5-C6-O6	-13.52	120.49	128.60
32	BM	10	ARG	NE-CZ-NH1	-13.51	113.54	120.30
57	BB	918	A	C5-C6-N1	-13.51	110.94	117.70
21	AA	1333	A	N1-C6-N6	13.51	126.71	118.60
57	BB	1601	G	N1-C6-O6	13.51	128.00	119.90
21	AA	330	C	O4'-C1'-N1	13.51	119.01	108.20
23	AW	21	A	N1-C6-N6	13.51	126.70	118.60
57	BB	1494	A	N1-C6-N6	13.51	126.70	118.60
57	BB	1550	C	O4'-C1'-N1	13.50	119.00	108.20
57	BB	2867	G	N7-C8-N9	13.50	119.85	113.10
57	BB	1386	C	N3-C4-C5	-13.50	116.50	121.90
57	BB	1557	C	N3-C4-N4	13.50	127.45	118.00
57	BB	2389	G	N1-C6-O6	13.50	128.00	119.90
21	AA	1408	A	N1-C6-N6	13.50	126.70	118.60
22	AY	57	G	O4'-C1'-N9	13.50	119.00	108.20
21	AA	1186	G	N1-C6-O6	13.49	128.00	119.90
57	BB	379	G	N1-C6-O6	13.49	128.00	119.90
57	BB	1109	C	N3-C4-C5	-13.49	116.50	121.90
57	BB	771	G	N1-C6-O6	13.48	127.99	119.90
23	AW	4	C	N3-C4-C5	-13.48	116.51	121.90
57	BB	2271	G	N1-C6-O6	13.48	127.99	119.90
57	BB	2286	G	C5-C6-O6	-13.48	120.51	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1142	G	C5-C6-O6	-13.47	120.52	128.60
57	BB	1938	A	N1-C6-N6	13.47	126.69	118.60
58	BA	26	C	C6-N1-C2	-13.46	114.91	120.30
21	AA	139	A	C8-N9-C4	-13.46	100.42	105.80
22	AY	48	C	P-O5'-C5'	13.46	142.44	120.90
57	BB	879	G	C5-C6-O6	-13.46	120.52	128.60
57	BB	2335	A	N1-C6-N6	13.46	126.68	118.60
57	BB	2816	G	C5-C6-O6	-13.46	120.52	128.60
21	AA	949	A	N1-C6-N6	13.46	126.68	118.60
57	BB	1541	C	O4'-C1'-N1	13.46	118.97	108.20
57	BB	1677	A	N9-C4-C5	13.45	111.18	105.80
57	BB	670	A	P-O3'-C3'	13.45	135.84	119.70
57	BB	1540	G	C5-C6-O6	-13.45	120.53	128.60
57	BB	173	A	N1-C6-N6	13.44	126.67	118.60
21	AA	1320	C	O4'-C1'-N1	13.44	118.95	108.20
57	BB	1792	G	C5-C6-O6	-13.44	120.54	128.60
57	BB	2201	G	N1-C6-O6	13.44	127.96	119.90
57	BB	83	A	C5-C6-N6	-13.44	112.95	123.70
57	BB	1560	G	C5-C6-O6	-13.44	120.54	128.60
57	BB	2799	A	N1-C6-N6	13.44	126.66	118.60
21	AA	64	G	C5-C6-O6	-13.43	120.54	128.60
21	AA	313	A	N1-C6-N6	13.43	126.66	118.60
57	BB	2428	G	P-O3'-C3'	13.43	135.82	119.70
21	AA	81	A	N1-C6-N6	13.43	126.66	118.60
21	AA	646	G	N1-C6-O6	13.43	127.96	119.90
21	AA	710	G	O4'-C1'-N9	13.43	118.94	108.20
57	BB	1905	C	O4'-C1'-N1	13.43	118.94	108.20
57	BB	1919	A	N1-C6-N6	13.43	126.66	118.60
21	AA	1034	G	N1-C6-O6	13.42	127.95	119.90
57	BB	2199	A	N1-C6-N6	13.42	126.65	118.60
21	AA	865	A	C8-N9-C4	-13.42	100.43	105.80
57	BB	661	A	C5-C6-N1	-13.42	110.99	117.70
57	BB	346	A	C8-N9-C4	13.42	111.17	105.80
57	BB	2285	C	O4'-C1'-N1	13.41	118.93	108.20
57	BB	1228	G	C5-C6-O6	-13.41	120.55	128.60
21	AA	38	G	C8-N9-C4	-13.41	101.04	106.40
57	BB	1171	G	N3-C2-N2	13.41	129.28	119.90
58	BA	23	G	N1-C6-O6	13.40	127.94	119.90
24	AX	14	A	C5-C6-N1	-13.40	111.00	117.70
57	BB	1086	A	N1-C6-N6	13.40	126.64	118.60
58	BA	30	C	O4'-C1'-N1	13.40	118.92	108.20
57	BB	205	G	N1-C6-O6	13.39	127.94	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	539	G	C5-C6-O6	-13.39	120.56	128.60
57	BB	1960	A	N9-C4-C5	13.39	111.16	105.80
22	AY	64	A	N1-C6-N6	13.39	126.64	118.60
57	BB	2874	C	N3-C4-C5	-13.39	116.54	121.90
26	AV	73	A	N1-C2-N3	13.39	135.99	129.30
57	BB	1766	G	N1-C2-N3	-13.39	115.87	123.90
26	AV	38	A	C4-C5-C6	13.38	123.69	117.00
55	BG	51	PHE	CB-CG-CD2	-13.38	111.43	120.80
57	BB	1899	A	N1-C6-N6	13.38	126.63	118.60
58	BA	7	G	C5-C6-O6	-13.38	120.57	128.60
22	AY	76	A	C5-C6-N6	-13.38	113.00	123.70
57	BB	2799	A	C5-C6-N1	-13.37	111.01	117.70
21	AA	555	U	O4'-C1'-N1	13.37	118.90	108.20
21	AA	1117	A	N1-C6-N6	13.37	126.62	118.60
57	BB	513	A	N1-C6-N6	13.37	126.62	118.60
57	BB	762	U	N3-C4-C5	-13.37	106.58	114.60
21	AA	156	C	C4-C5-C6	13.36	124.08	117.40
57	BB	2812	G	C5-C6-O6	-13.36	120.58	128.60
21	AA	587	G	C5-C6-O6	-13.36	120.58	128.60
57	BB	960	A	N9-C4-C5	13.36	111.14	105.80
58	BA	67	G	C5-C6-O6	-13.36	120.58	128.60
57	BB	2281	A	N9-C4-C5	13.36	111.14	105.80
57	BB	2443	C	O4'-C1'-N1	13.36	118.88	108.20
22	AY	4	G	C6-N1-C2	13.35	133.11	125.10
57	BB	2466	C	N3-C4-N4	13.35	127.35	118.00
21	AA	1141	C	O4'-C1'-N1	13.35	118.88	108.20
57	BB	565	C	O4'-C1'-N1	13.35	118.88	108.20
57	BB	1238	G	C5-C6-O6	-13.35	120.59	128.60
57	BB	1626	A	N1-C6-N6	13.35	126.61	118.60
21	AA	489	C	O4'-C1'-N1	13.35	118.88	108.20
21	AA	1457	G	C5-C6-O6	-13.35	120.59	128.60
26	AV	17	C	O4'-C1'-N1	13.35	118.88	108.20
57	BB	974	G	C5-C6-N1	-13.35	104.83	111.50
57	BB	1640	A	N1-C2-N3	13.35	135.97	129.30
21	AA	866	C	O4'-C1'-N1	13.34	118.88	108.20
57	BB	151	C	O4'-C1'-N1	13.34	118.87	108.20
26	AV	48	C	N3-C4-C5	-13.34	116.56	121.90
57	BB	1884	G	C5-C6-O6	-13.34	120.60	128.60
57	BB	547	A	C5-C6-N6	-13.34	113.03	123.70
58	BA	16	G	N1-C6-O6	13.33	127.90	119.90
57	BB	964	C	C2-N3-C4	13.33	126.56	119.90
21	AA	951	G	N7-C8-N9	-13.32	106.44	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	BM	91	TYR	CB-CG-CD2	-13.32	113.01	121.00
36	BQ	32	ARG	NE-CZ-NH1	-13.32	113.64	120.30
57	BB	2145	C	O4'-C1'-N1	13.32	118.86	108.20
57	BB	2803	G	O4'-C1'-N9	13.32	118.86	108.20
57	BB	559	G	N1-C6-O6	13.32	127.89	119.90
21	AA	860	A	N1-C6-N6	13.31	126.59	118.60
57	BB	2019	A	N1-C6-N6	13.31	126.59	118.60
57	BB	1867	G	N1-C6-O6	13.31	127.89	119.90
57	BB	553	G	N7-C8-N9	13.31	119.75	113.10
21	AA	1156	G	N1-C6-O6	13.31	127.88	119.90
23	AW	19	G	O4'-C1'-N9	13.31	118.84	108.20
57	BB	2148	G	C5-N7-C8	13.31	110.95	104.30
57	BB	2560	A	N1-C6-N6	13.31	126.58	118.60
57	BB	2771	C	C6-N1-C2	-13.30	114.98	120.30
57	BB	2551	C	O4'-C1'-N1	13.30	118.84	108.20
21	AA	116	A	C5-C6-N6	-13.30	113.06	123.70
57	BB	1969	A	N1-C2-N3	13.30	135.95	129.30
21	AA	1469	C	O4'-C1'-N1	13.30	118.84	108.20
57	BB	1074	G	N1-C6-O6	13.29	127.88	119.90
21	AA	1041	G	C5-C6-O6	-13.28	120.63	128.60
21	AA	1395	C	N3-C4-C5	-13.28	116.59	121.90
57	BB	140	C	O4'-C1'-N1	13.28	118.83	108.20
21	AA	1290	G	N1-C6-O6	13.28	127.86	119.90
57	BB	1854	A	O4'-C1'-N9	13.28	118.82	108.20
15	AD	114	ARG	NE-CZ-NH2	-13.27	113.66	120.30
54	BF	109	ARG	NE-CZ-NH2	13.27	126.94	120.30
57	BB	2030	A	N1-C6-N6	13.27	126.56	118.60
21	AA	138	G	C5-C6-O6	-13.27	120.64	128.60
57	BB	1504	A	C5-C6-N1	-13.27	111.06	117.70
21	AA	1182	G	C5-C6-O6	-13.27	120.64	128.60
57	BB	294	A	N1-C6-N6	13.27	126.56	118.60
21	AA	913	A	N1-C6-N6	13.26	126.56	118.60
21	AA	633	G	N1-C6-O6	13.26	127.86	119.90
57	BB	380	G	N9-C4-C5	-13.26	100.10	105.40
57	BB	2116	G	N1-C6-O6	13.26	127.86	119.90
57	BB	391	A	N1-C6-N6	13.26	126.55	118.60
57	BB	2630	G	N1-C6-O6	13.26	127.85	119.90
21	AA	253	A	C4-C5-C6	13.25	123.62	117.00
21	AA	483	C	N3-C4-C5	-13.25	116.60	121.90
21	AA	656	G	N1-C6-O6	13.25	127.85	119.90
21	AA	731	G	N1-C6-O6	13.25	127.85	119.90
23	AW	49	C	N3-C4-C5	-13.25	116.60	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1373	G	N1-C6-O6	13.25	127.85	119.90
57	BB	1449	G	C5-C6-O6	-13.24	120.65	128.60
57	BB	73	A	N1-C6-N6	13.24	126.54	118.60
57	BB	152	A	N1-C6-N6	13.24	126.54	118.60
57	BB	758	C	O4'-C1'-N1	13.23	118.78	108.20
57	BB	1137	G	C8-N9-C4	-13.23	101.11	106.40
57	BB	2808	G	N9-C4-C5	-13.23	100.11	105.40
21	AA	1363	A	N1-C6-N6	13.22	126.53	118.60
57	BB	471	A	N1-C6-N6	13.22	126.53	118.60
57	BB	911	A	N1-C6-N6	13.22	126.53	118.60
57	BB	858	G	N1-C6-O6	13.22	127.83	119.90
57	BB	952	G	C5-C6-O6	-13.22	120.67	128.60
57	BB	2900	A	N1-C6-N6	13.22	126.53	118.60
57	BB	104	A	N1-C6-N6	13.21	126.53	118.60
57	BB	902	C	C2-N3-C4	13.21	126.51	119.90
21	AA	1465	A	N1-C6-N6	13.21	126.53	118.60
21	AA	609	A	C5-C6-N1	-13.20	111.10	117.70
57	BB	668	A	N1-C6-N6	13.21	126.52	118.60
21	AA	729	A	N1-C6-N6	13.20	126.52	118.60
57	BB	1324	G	N1-C6-O6	13.19	127.82	119.90
57	BB	1107	G	C5-C6-O6	-13.19	120.69	128.60
57	BB	2196	C	N3-C4-N4	13.19	127.23	118.00
23	AW	31	A	O4'-C1'-N9	13.19	118.75	108.20
21	AA	214	C	N3-C4-N4	13.18	127.23	118.00
21	AA	589	U	C5-C6-N1	13.18	129.29	122.70
57	BB	1306	C	O4'-C1'-N1	13.17	118.74	108.20
21	AA	63	C	N3-C4-N4	13.17	127.22	118.00
21	AA	840	C	N3-C4-N4	13.17	127.22	118.00
21	AA	1423	G	N9-C4-C5	-13.17	100.13	105.40
57	BB	1571	A	N1-C6-N6	13.16	126.50	118.60
57	BB	2379	G	C8-N9-C4	-13.16	101.13	106.40
57	BB	43	G	C5-C6-O6	-13.16	120.70	128.60
57	BB	988	A	N9-C4-C5	13.16	111.06	105.80
57	BB	1247	A	C5-C6-N1	-13.16	111.12	117.70
21	AA	139	A	N1-C6-N6	13.15	126.49	118.60
57	BB	1247	A	N1-C6-N6	13.15	126.49	118.60
57	BB	1515	A	O4'-C1'-N9	13.15	118.72	108.20
21	AA	1434	A	O4'-C1'-N9	13.15	118.72	108.20
31	BL	50	PHE	CB-CG-CD1	-13.15	111.60	120.80
57	BB	66	C	O4'-C1'-N1	13.15	118.72	108.20
21	AA	55	A	N1-C6-N6	13.15	126.49	118.60
21	AA	468	A	N1-C6-N6	13.15	126.49	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1210	C	N3-C4-C5	-13.15	116.64	121.90
57	BB	413	C	C4-C5-C6	13.15	123.97	117.40
57	BB	2410	G	N1-C6-O6	13.15	127.79	119.90
57	BB	53	A	O4'-C1'-N9	13.14	118.72	108.20
27	B5	36	ALA	C-N-CA	13.14	154.55	121.70
57	BB	2353	G	C5-C6-O6	-13.14	120.72	128.60
21	AA	942	G	C5-C6-O6	-13.14	120.72	128.60
57	BB	1337	G	C5-C6-O6	-13.14	120.72	128.60
21	AA	1339	A	C8-N9-C4	-13.13	100.55	105.80
21	AA	64	G	N1-C6-O6	13.13	127.78	119.90
57	BB	261	G	N1-C6-O6	13.13	127.78	119.90
57	BB	1450	G	N1-C6-O6	13.13	127.78	119.90
57	BB	2525	G	C5-C6-O6	-13.13	120.72	128.60
21	AA	433	G	N1-C6-O6	13.12	127.77	119.90
21	AA	1048	G	N1-C6-O6	13.12	127.77	119.90
21	AA	1048	G	O4'-C1'-N9	13.12	118.69	108.20
57	BB	165	A	C8-N9-C4	-13.12	100.55	105.80
21	AA	448	A	N1-C6-N6	13.11	126.47	118.60
23	AW	3	C	C6-N1-C2	-13.11	115.06	120.30
57	BB	214	G	N1-C6-O6	13.11	127.77	119.90
57	BB	2638	G	N1-C6-O6	13.11	127.77	119.90
58	BA	18	G	N1-C6-O6	13.11	127.76	119.90
21	AA	629	A	C5-C6-N1	-13.11	111.15	117.70
57	BB	1752	C	N3-C4-N4	13.11	127.17	118.00
21	AA	1170	A	N1-C6-N6	13.10	126.46	118.60
57	BB	1482	G	C5-C6-O6	-13.10	120.74	128.60
57	BB	30	G	N1-C6-O6	13.09	127.75	119.90
57	BB	1506	U	O4'-C1'-N1	13.09	118.67	108.20
26	AV	37	A	C8-N9-C4	-13.09	100.56	105.80
57	BB	453	A	C5-C6-N1	-13.09	111.16	117.70
57	BB	1274	A	N1-C6-N6	13.09	126.45	118.60
57	BB	918	A	C4-C5-C6	13.09	123.54	117.00
57	BB	1698	A	C5-N7-C8	13.09	110.44	103.90
57	BB	2248	C	C6-N1-C2	-13.09	115.07	120.30
57	BB	311	A	N1-C6-N6	13.08	126.45	118.60
21	AA	52	C	C6-N1-C2	-13.08	115.07	120.30
21	AA	38	G	O4'-C1'-N9	13.07	118.66	108.20
57	BB	1343	G	C5-C6-O6	-13.07	120.76	128.60
57	BB	2090	A	O4'-C1'-N9	13.07	118.66	108.20
21	AA	223	A	C5-C6-N1	-13.07	111.17	117.70
57	BB	548	G	N3-C2-N2	13.07	129.05	119.90
57	BB	626	A	N1-C6-N6	13.07	126.44	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1208	C	O4'-C1'-N1	13.07	118.65	108.20
21	AA	86	G	C4-C5-N7	-13.07	105.57	110.80
21	AA	18	C	O4'-C1'-N1	13.06	118.65	108.20
57	BB	257	C	C6-N1-C2	-13.06	115.08	120.30
57	BB	834	G	N1-C6-O6	13.06	127.73	119.90
57	BB	1752	C	C5-C4-N4	-13.06	111.06	120.20
57	BB	2149	U	C4-C5-C6	13.06	127.53	119.70
57	BB	1434	A	O4'-C1'-N9	13.05	118.64	108.20
57	BB	1994	C	C5-C4-N4	-13.05	111.06	120.20
57	BB	2799	A	C4-C5-C6	13.05	123.53	117.00
57	BB	2268	A	C8-N9-C4	-13.05	100.58	105.80
26	AV	56	C	O4'-C1'-N1	13.05	118.64	108.20
57	BB	867	C	O4'-C1'-N1	13.05	118.64	108.20
54	BF	70	ARG	NE-CZ-NH1	-13.05	113.78	120.30
57	BB	679	C	N3-C4-N4	13.04	127.13	118.00
57	BB	711	G	N1-C6-O6	13.04	127.73	119.90
23	AW	70	G	C5-C6-O6	-13.04	120.78	128.60
57	BB	426	C	O4'-C1'-N1	13.04	118.63	108.20
57	BB	1665	A	N1-C6-N6	13.04	126.42	118.60
28	BI	7	TYR	CB-CG-CD1	13.03	128.82	121.00
57	BB	22	C	O4'-C1'-N1	13.03	118.63	108.20
57	BB	2264	C	N3-C4-N4	13.04	127.12	118.00
21	AA	417	G	N1-C6-O6	13.03	127.72	119.90
57	BB	654	A	C6-N1-C2	-13.03	110.78	118.60
57	BB	1853	A	C5-C6-N1	-13.03	111.19	117.70
57	BB	2418	A	N1-C6-N6	13.03	126.42	118.60
57	BB	1829	A	C4-C5-C6	13.03	123.51	117.00
57	BB	1631	G	N1-C6-O6	13.02	127.71	119.90
21	AA	1466	C	C6-N1-C2	-13.02	115.09	120.30
57	BB	6	A	N1-C6-N6	13.02	126.41	118.60
57	BB	1667	G	C4-C5-N7	-13.02	105.59	110.80
57	BB	692	C	O4'-C1'-N1	13.01	118.61	108.20
57	BB	2388	A	C5-C6-N1	-13.01	111.19	117.70
57	BB	48	G	N1-C6-O6	13.01	127.70	119.90
57	BB	1465	G	N1-C6-O6	13.01	127.70	119.90
57	BB	435	C	N3-C4-N4	13.01	127.10	118.00
21	AA	165	G	N7-C8-N9	-13.00	106.60	113.10
57	BB	2787	C	N3-C4-C5	-13.00	116.70	121.90
21	AA	148	G	C5-C6-O6	-13.00	120.80	128.60
57	BB	1564	C	C2-N3-C4	13.00	126.40	119.90
21	AA	82	G	C5-C6-O6	-12.99	120.80	128.60
21	AA	1046	A	C5-C6-N1	-12.99	111.20	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	BJ	74	TYR	CB-CG-CD2	12.99	128.80	121.00
57	BB	1199	U	O4'-C1'-N1	12.99	118.60	108.20
57	BB	2024	G	C5-C6-O6	-12.99	120.80	128.60
57	BB	2856	A	N1-C6-N6	12.99	126.39	118.60
21	AA	1050	G	N1-C6-O6	12.99	127.69	119.90
57	BB	10	A	C5-C6-N1	-12.99	111.20	117.70
21	AA	1215	G	C4-C5-C6	12.99	126.59	118.80
23	AW	14	A	N1-C2-N3	12.99	135.79	129.30
21	AA	273	U	C5-C4-O4	-12.98	118.11	125.90
57	BB	1291	C	N3-C4-C5	-12.98	116.71	121.90
21	AA	226	G	N1-C6-O6	12.98	127.69	119.90
57	BB	2808	G	C5-C6-O6	-12.98	120.81	128.60
57	BB	2837	A	N1-C6-N6	12.98	126.39	118.60
21	AA	60	A	P-O3'-C3'	12.98	135.27	119.70
21	AA	77	A	C5-C6-N6	-12.98	113.32	123.70
47	B0	12	ARG	NE-CZ-NH2	-12.98	113.81	120.30
57	BB	1117	C	N3-C4-C5	-12.98	116.71	121.90
57	BB	1653	G	C5-C6-N1	-12.98	105.01	111.50
57	BB	1229	C	N3-C4-N4	12.97	127.08	118.00
57	BB	2902	C	O4'-C1'-N1	12.97	118.58	108.20
57	BB	375	G	C5-C6-O6	-12.97	120.82	128.60
21	AA	606	G	C6-N1-C2	12.97	132.88	125.10
57	BB	1872	A	N1-C6-N6	12.97	126.38	118.60
21	AA	674	G	C5-C6-O6	-12.97	120.82	128.60
57	BB	2880	C	O4'-C1'-N1	12.97	118.57	108.20
22	AY	71	G	C5-C6-O6	-12.96	120.82	128.60
57	BB	260	G	C5-C6-O6	-12.96	120.82	128.60
58	BA	114	C	N3-C4-C5	-12.96	116.72	121.90
57	BB	945	A	N1-C6-N6	12.96	126.38	118.60
57	BB	1611	C	C6-N1-C2	-12.96	115.12	120.30
57	BB	2822	G	C6-C5-N7	-12.95	122.63	130.40
57	BB	2201	G	C5-C6-O6	-12.95	120.83	128.60
58	BA	106	G	C5-C6-O6	-12.95	120.83	128.60
57	BB	539	G	N1-C6-O6	12.95	127.67	119.90
57	BB	1365	A	C5-C6-N1	-12.95	111.22	117.70
21	AA	501	C	N3-C4-C5	-12.95	116.72	121.90
21	AA	1203	C	O4'-C1'-N1	12.95	118.56	108.20
21	AA	53	A	N1-C6-N6	12.94	126.36	118.60
57	BB	2662	A	C5-C6-N6	-12.94	113.35	123.70
57	BB	2723	C	C5-C6-N1	12.94	127.47	121.00
21	AA	753	A	N1-C6-N6	12.94	126.36	118.60
23	AW	36	A	C4-C5-C6	12.94	123.47	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	179	C	N3-C4-N4	12.94	127.06	118.00
57	BB	1030	C	N3-C4-N4	12.94	127.06	118.00
21	AA	1155	A	N1-C6-N6	12.93	126.36	118.60
57	BB	604	G	N1-C6-O6	12.93	127.66	119.90
57	BB	358	U	C5-C6-N1	12.93	129.16	122.70
57	BB	952	G	N1-C6-O6	12.93	127.66	119.90
57	BB	1518	C	C5-C4-N4	-12.93	111.15	120.20
21	AA	189	A	N1-C6-N6	12.93	126.36	118.60
21	AA	1119	C	N3-C4-N4	12.93	127.05	118.00
21	AA	1369	C	N3-C4-C5	-12.93	116.73	121.90
57	BB	644	A	C4-C5-C6	12.92	123.46	117.00
31	BL	47	ARG	NE-CZ-NH1	-12.92	113.84	120.30
57	BB	2373	G	O4'-C1'-N9	12.92	118.54	108.20
57	BB	302	C	O4'-C1'-N1	12.92	118.54	108.20
58	BA	27	C	O4'-C1'-N1	12.92	118.54	108.20
26	AV	12	G	C5-C6-O6	-12.91	120.85	128.60
21	AA	1508	A	C5-C6-N1	-12.91	111.24	117.70
57	BB	310	A	N1-C6-N6	12.91	126.35	118.60
57	BB	602	A	C5-C6-N1	-12.91	111.24	117.70
21	AA	1492	A	C5-C6-N6	-12.91	113.37	123.70
21	AA	1439	G	C5-C6-O6	-12.91	120.86	128.60
57	BB	2149	U	C5-C6-N1	-12.91	116.25	122.70
57	BB	370	G	C8-N9-C4	-12.91	101.24	106.40
57	BB	2193	G	N1-C6-O6	12.90	127.64	119.90
57	BB	2435	A	N1-C6-N6	12.90	126.34	118.60
21	AA	985	C	N3-C4-C5	-12.90	116.74	121.90
57	BB	1792	G	N1-C6-O6	12.90	127.64	119.90
57	BB	505	A	C5-C6-N1	-12.90	111.25	117.70
57	BB	2025	C	O4'-C1'-N1	12.90	118.52	108.20
23	AW	58	A	C5-C6-N6	-12.90	113.38	123.70
57	BB	446	G	C5-C6-O6	-12.90	120.86	128.60
57	BB	244	A	N1-C6-N6	12.89	126.34	118.60
57	BB	262	A	N1-C6-N6	12.89	126.34	118.60
57	BB	1557	C	N3-C4-C5	-12.89	116.74	121.90
57	BB	2388	A	C4-C5-C6	12.89	123.45	117.00
57	BB	1713	A	N1-C6-N6	12.89	126.33	118.60
23	AW	43	C	C6-N1-C2	-12.88	115.15	120.30
57	BB	377	G	C5-C6-O6	-12.88	120.87	128.60
57	BB	793	A	N1-C6-N6	12.88	126.33	118.60
57	BB	1465	G	C5-C6-N1	-12.88	105.06	111.50
58	BA	20	G	N9-C4-C5	-12.88	100.25	105.40
58	BA	51	G	N1-C6-O6	12.88	127.63	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1010	A	N1-C6-N6	12.88	126.33	118.60
57	BB	1906	G	N9-C4-C5	12.88	110.55	105.40
57	BB	2734	A	N1-C6-N6	12.88	126.33	118.60
57	BB	492	A	C5-C6-N6	-12.88	113.40	123.70
21	AA	1035	A	C4-C5-C6	12.88	123.44	117.00
57	BB	2363	G	C5-C6-O6	-12.88	120.88	128.60
21	AA	1340	A	N1-C6-N6	12.87	126.32	118.60
57	BB	2559	C	O4'-C1'-N1	12.88	118.50	108.20
57	BB	2810	A	C4-C5-C6	12.88	123.44	117.00
57	BB	633	A	C5-C6-N1	-12.87	111.26	117.70
57	BB	991	C	O4'-C1'-N1	12.87	118.50	108.20
57	BB	2280	G	C5-C6-O6	-12.87	120.88	128.60
57	BB	2874	C	O4'-C1'-N1	12.87	118.50	108.20
57	BB	2337	G	N1-C6-O6	12.87	127.62	119.90
57	BB	2286	G	N1-C6-O6	12.87	127.62	119.90
21	AA	194	C	C2-N3-C4	12.87	126.33	119.90
57	BB	2740	A	N1-C6-N6	12.86	126.32	118.60
58	BA	58	A	N1-C6-N6	12.86	126.32	118.60
21	AA	198	G	C5-C6-O6	-12.86	120.88	128.60
57	BB	1262	A	C4-C5-C6	12.86	123.43	117.00
21	AA	22	G	C8-N9-C4	-12.86	101.26	106.40
57	BB	2438	U	O4'-C1'-N1	12.86	118.49	108.20
57	BB	926	G	C5-C6-O6	-12.86	120.89	128.60
21	AA	996	A	N1-C6-N6	12.85	126.31	118.60
57	BB	1309	G	N1-C6-O6	12.85	127.61	119.90
57	BB	1969	A	C4-C5-C6	12.85	123.43	117.00
21	AA	233	C	O4'-C1'-N1	12.85	118.48	108.20
21	AA	447	G	O4'-C1'-N9	12.85	118.48	108.20
21	AA	877	G	C5-C6-O6	-12.85	120.89	128.60
57	BB	2148	G	C5-C6-O6	-12.85	120.89	128.60
21	AA	637	C	O4'-C1'-N1	12.84	118.47	108.20
21	AA	865	A	C4-C5-C6	12.84	123.42	117.00
21	AA	1400	C	N3-C4-C5	-12.84	116.77	121.90
26	AV	37	A	N1-C6-N6	12.84	126.30	118.60
21	AA	788	U	O4'-C1'-N1	12.83	118.46	108.20
57	BB	1339	G	N1-C6-O6	12.83	127.60	119.90
57	BB	1983	G	N3-C2-N2	12.83	128.88	119.90
57	BB	536	G	O4'-C1'-N9	12.83	118.46	108.20
57	BB	2860	A	C4-C5-C6	12.83	123.41	117.00
21	AA	1217	C	O4'-C1'-N1	12.82	118.46	108.20
21	AA	337	G	C5-C6-O6	-12.82	120.91	128.60
57	BB	108	G	C5-C6-O6	-12.82	120.91	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	780	A	O4'-C1'-N9	12.81	118.45	108.20
21	AA	210	C	N3-C4-C5	-12.81	116.78	121.90
21	AA	1082	A	C5-C6-N1	-12.81	111.30	117.70
58	BA	20	G	C4-C5-N7	12.81	115.92	110.80
57	BB	1651	G	N1-C6-O6	12.81	127.58	119.90
21	AA	361	G	N1-C6-O6	12.80	127.58	119.90
21	AA	1255	G	C5-C6-O6	-12.80	120.92	128.60
21	AA	1148	U	O4'-C1'-N1	12.80	118.44	108.20
22	AY	3	G	N1-C6-O6	12.80	127.58	119.90
57	BB	1505	A	O4'-C1'-N9	12.80	118.44	108.20
57	BB	417	C	O4'-C1'-N1	12.80	118.44	108.20
57	BB	1837	C	N3-C4-N4	12.80	126.96	118.00
21	AA	78	A	N1-C6-N6	12.79	126.28	118.60
21	AA	380	G	C5-C6-O6	-12.80	120.92	128.60
21	AA	1016	A	C8-N9-C4	-12.79	100.68	105.80
57	BB	1142	A	C5-C6-N1	-12.79	111.30	117.70
57	BB	1817	G	N1-C6-O6	12.80	127.58	119.90
57	BB	2881	U	O4'-C1'-N1	12.79	118.44	108.20
21	AA	1032	G	C8-N9-C4	-12.79	101.28	106.40
57	BB	399	U	O4'-C1'-N1	12.79	118.43	108.20
57	BB	1462	C	N3-C4-C5	-12.79	116.79	121.90
57	BB	1003	G	C5-C6-O6	-12.78	120.93	128.60
57	BB	1646	C	C6-N1-C2	-12.78	115.19	120.30
57	BB	2512	C	N3-C4-C5	-12.78	116.79	121.90
57	BB	2503	A	C8-N9-C4	-12.78	100.69	105.80
21	AA	643	C	O4'-C1'-N1	12.78	118.42	108.20
49	B2	19	ARG	NE-CZ-NH2	12.78	126.69	120.30
21	AA	466	A	N1-C6-N6	12.78	126.27	118.60
57	BB	425	G	C5-C6-O6	-12.78	120.93	128.60
57	BB	2170	A	C8-N9-C4	-12.78	100.69	105.80
38	BS	99	ARG	NE-CZ-NH1	12.77	126.69	120.30
57	BB	1145	C	N3-C4-C5	-12.77	116.79	121.90
57	BB	2020	A	C6-C5-N7	-12.77	123.36	132.30
57	BB	2842	G	C5-C6-O6	-12.77	120.94	128.60
21	AA	993	G	C5-C6-O6	-12.77	120.94	128.60
21	AA	1176	A	C5-N7-C8	12.76	110.28	103.90
23	AW	30	G	C5-C6-O6	-12.76	120.94	128.60
57	BB	244	A	N1-C2-N3	12.76	135.68	129.30
57	BB	2791	G	C5-C6-O6	-12.76	120.94	128.60
2	AK	121	ARG	NE-CZ-NH1	12.76	126.68	120.30
57	BB	121	G	C5-C6-O6	-12.76	120.94	128.60
57	BB	2726	A	O4'-C1'-N9	12.76	118.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	988	G	C5-C6-O6	-12.76	120.95	128.60
21	AA	1108	G	N1-C6-O6	12.76	127.55	119.90
15	AD	13	ARG	NE-CZ-NH2	-12.75	113.92	120.30
57	BB	5	A	N1-C2-N3	-12.75	122.93	129.30
21	AA	517	G	C5-C6-O6	-12.74	120.95	128.60
57	BB	2860	A	C5-C6-N1	-12.74	111.33	117.70
57	BB	1533	C	C5-C4-N4	-12.74	111.28	120.20
57	BB	497	A	N1-C6-N6	12.74	126.24	118.60
57	BB	933	A	N1-C6-N6	12.74	126.24	118.60
57	BB	865	C	N3-C4-N4	12.74	126.92	118.00
57	BB	2271	G	C5-C6-O6	-12.74	120.96	128.60
21	AA	1256	A	C8-N9-C4	-12.73	100.71	105.80
57	BB	2755	C	C2-N3-C4	12.73	126.27	119.90
57	BB	2886	A	N1-C6-N6	12.73	126.24	118.60
21	AA	831	A	N1-C6-N6	12.73	126.24	118.60
26	AV	64	G	N1-C6-O6	12.73	127.54	119.90
21	AA	432	A	C8-N9-C4	-12.72	100.71	105.80
57	BB	995	C	C6-N1-C2	12.72	125.39	120.30
57	BB	1664	A	N1-C6-N6	12.72	126.23	118.60
57	BB	1685	C	O4'-C1'-N1	12.72	118.38	108.20
57	BB	2078	C	O4'-C1'-N1	12.72	118.38	108.20
21	AA	1314	C	N3-C4-C5	-12.72	116.81	121.90
26	AV	49	G	C5-C6-O6	-12.72	120.97	128.60
57	BB	777	G	N1-C6-O6	12.72	127.53	119.90
57	BB	1181	U	O4'-C1'-N1	12.72	118.37	108.20
57	BB	2490	G	C5-C6-O6	-12.72	120.97	128.60
57	BB	2544	G	C5-C6-O6	-12.71	120.97	128.60
21	AA	1069	C	C6-N1-C2	12.71	125.39	120.30
57	BB	2752	C	O4'-C1'-N1	12.71	118.37	108.20
57	BB	1551	A	O4'-C1'-N9	12.71	118.37	108.20
57	BB	2006	C	N3-C4-C5	-12.71	116.82	121.90
57	BB	1755	A	N1-C6-N6	12.71	126.22	118.60
57	BB	907	G	N1-C6-O6	12.70	127.52	119.90
23	AW	25	C	N3-C4-C5	-12.70	116.82	121.90
21	AA	852	G	N9-C4-C5	12.69	110.48	105.40
21	AA	503	C	O4'-C1'-N1	12.69	118.35	108.20
57	BB	1555	G	C4-C5-C6	12.69	126.41	118.80
57	BB	52	A	N1-C6-N6	12.69	126.21	118.60
21	AA	1227	A	C8-N9-C4	-12.69	100.72	105.80
57	BB	1414	C	N3-C4-C5	-12.69	116.83	121.90
57	BB	2617	U	N3-C4-C5	-12.69	106.99	114.60
57	BB	1384	A	C5-C6-N1	-12.68	111.36	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2048	G	C5-C6-O6	-12.68	120.99	128.60
57	BB	1733	G	N1-C6-O6	12.68	127.51	119.90
57	BB	2156	G	N1-C6-O6	12.68	127.51	119.90
57	BB	1173	U	C5-C6-N1	12.68	129.04	122.70
57	BB	2599	G	C8-N9-C4	-12.68	101.33	106.40
57	BB	2799	A	C8-N9-C4	-12.67	100.73	105.80
57	BB	23	G	C5-C6-O6	-12.67	121.00	128.60
57	BB	2683	C	O4'-C1'-N1	12.67	118.33	108.20
57	BB	407	G	N1-C6-O6	12.67	127.50	119.90
21	AA	196	A	C8-N9-C4	-12.66	100.74	105.80
57	BB	213	A	O4'-C1'-N9	12.66	118.33	108.20
57	BB	1061	U	P-O3'-C3'	12.65	134.89	119.70
57	BB	2482	A	C4-C5-C6	12.65	123.33	117.00
58	BA	88	C	N3-C4-N4	12.65	126.86	118.00
23	AW	62	C	N3-C4-C5	-12.65	116.84	121.90
57	BB	260	G	N1-C6-O6	12.65	127.49	119.90
35	BP	112	ARG	NE-CZ-NH2	-12.65	113.97	120.30
57	BB	430	A	N1-C6-N6	12.65	126.19	118.60
57	BB	661	A	C4-C5-C6	12.64	123.32	117.00
57	BB	1643	G	C5-C6-O6	-12.64	121.01	128.60
57	BB	2106	U	O4'-C1'-N1	12.64	118.31	108.20
57	BB	179	C	C5-C4-N4	-12.64	111.35	120.20
57	BB	1092	C	O4'-C1'-N1	12.64	118.31	108.20
13	AB	221	ARG	NE-CZ-NH1	12.64	126.62	120.30
21	AA	491	G	C5-C6-O6	-12.64	121.02	128.60
22	AY	38	A	C5-C6-N6	-12.64	113.59	123.70
21	AA	1042	A	C5-C6-N1	-12.63	111.38	117.70
57	BB	1969	A	C2-N3-C4	-12.63	104.28	110.60
21	AA	760	G	N1-C6-O6	12.63	127.48	119.90
57	BB	1229	C	N3-C4-C5	-12.63	116.85	121.90
57	BB	2730	C	O4'-C1'-N1	12.63	118.30	108.20
21	AA	784	A	C5-C6-N6	-12.62	113.61	123.70
57	BB	2138	G	N1-C6-O6	12.62	127.47	119.90
57	BB	2719	G	C5-C6-O6	-12.62	121.03	128.60
21	AA	979	C	O4'-C1'-N1	12.61	118.29	108.20
21	AA	1044	A	N1-C6-N6	12.61	126.17	118.60
57	BB	2823	A	C8-N9-C4	-12.61	100.76	105.80
57	BB	2851	A	C8-N9-C4	-12.61	100.76	105.80
21	AA	833	G	C5-C6-O6	-12.61	121.03	128.60
57	BB	2675	A	C5-C6-N6	-12.61	113.61	123.70
21	AA	973	G	N1-C6-O6	12.61	127.46	119.90
21	AA	651	C	O4'-C1'-N1	12.60	118.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	712	A	C5-C6-N6	-12.60	113.62	123.70
57	BB	2381	A	N1-C6-N6	12.60	126.16	118.60
57	BB	2038	G	C6-C5-N7	-12.60	122.84	130.40
21	AA	286	C	C5-C6-N1	12.60	127.30	121.00
57	BB	282	A	N1-C6-N6	12.60	126.16	118.60
21	AA	1272	G	C5-C6-O6	-12.60	121.04	128.60
57	BB	216	A	N1-C6-N6	12.60	126.16	118.60
57	BB	2097	A	C5-C6-N1	-12.60	111.40	117.70
57	BB	1763	G	N1-C6-O6	12.59	127.46	119.90
21	AA	475	C	N3-C4-N4	12.59	126.81	118.00
57	BB	386	G	N1-C6-O6	12.59	127.45	119.90
26	AV	12	G	N1-C6-O6	12.59	127.45	119.90
21	AA	582	C	N3-C4-N4	12.59	126.81	118.00
57	BB	1470	A	N1-C6-N6	12.59	126.15	118.60
57	BB	2869	G	C5-C6-O6	-12.59	121.05	128.60
57	BB	2722	G	N1-C2-N3	-12.59	116.35	123.90
21	AA	1482	G	N9-C4-C5	-12.59	100.36	105.40
58	BA	81	G	N3-C2-N2	12.59	128.71	119.90
57	BB	265	A	O4'-C1'-N9	12.58	118.27	108.20
57	BB	285	G	C4-C5-C6	12.58	126.35	118.80
57	BB	2266	A	C5-C6-N6	-12.58	113.64	123.70
57	BB	2359	C	O4'-C1'-N1	12.58	118.26	108.20
57	BB	847	U	C5-C6-N1	12.58	128.99	122.70
57	BB	1508	A	N1-C6-N6	12.57	126.14	118.60
57	BB	2618	G	N1-C2-N3	-12.57	116.36	123.90
57	BB	2115	G	O4'-C1'-N9	12.57	118.26	108.20
57	BB	1744	A	N1-C6-N6	12.57	126.14	118.60
58	BA	75	G	N1-C6-O6	12.57	127.44	119.90
21	AA	388	G	C5'-C4'-O4'	12.57	124.18	109.10
21	AA	338	A	C5-C6-N1	-12.57	111.42	117.70
21	AA	1277	C	O4'-C1'-N1	12.57	118.25	108.20
57	BB	2153	C	C4-C5-C6	12.57	123.68	117.40
21	AA	541	G	N1-C6-O6	12.56	127.44	119.90
57	BB	1907	G	N1-C6-O6	12.56	127.44	119.90
57	BB	1445	G	C5-C6-O6	-12.56	121.06	128.60
57	BB	1030	C	O4'-C1'-N1	12.56	118.25	108.20
57	BB	2107	G	C5-C6-O6	-12.56	121.07	128.60
21	AA	1162	C	O4'-C1'-N1	12.56	118.25	108.20
57	BB	1871	A	C4-C5-C6	12.55	123.28	117.00
58	BA	83	G	N1-C6-O6	12.55	127.43	119.90
23	AW	36	A	C5-C6-N6	-12.55	113.66	123.70
57	BB	325	G	N1-C6-O6	12.55	127.43	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	177	G	N3-C4-C5	-12.55	122.33	128.60
57	BB	1182	G	N9-C4-C5	-12.55	100.38	105.40
57	BB	1669	A	C4-C5-C6	12.55	123.28	117.00
57	BB	682	G	C5-C6-O6	-12.55	121.07	128.60
57	BB	689	A	C6-N1-C2	12.54	126.13	118.60
57	BB	949	G	N1-C6-O6	12.54	127.42	119.90
21	AA	680	C	N3-C4-C5	-12.53	116.89	121.90
57	BB	1827	U	C5-C6-N1	12.53	128.96	122.70
21	AA	710	G	C5-C6-O6	-12.52	121.09	128.60
57	BB	2668	G	N1-C6-O6	12.52	127.41	119.90
57	BB	1991	U	O4'-C1'-N1	12.52	118.21	108.20
21	AA	1061	G	N1-C6-O6	12.51	127.41	119.90
57	BB	782	A	N1-C6-N6	12.51	126.11	118.60
57	BB	362	A	O4'-C1'-N9	12.51	118.21	108.20
21	AA	1028	C	N3-C4-C5	-12.51	116.90	121.90
57	BB	1218	G	O4'-C1'-N9	12.51	118.21	108.20
21	AA	831	A	C5-C6-N1	-12.51	111.45	117.70
21	AA	1362	A	N1-C6-N6	12.51	126.10	118.60
57	BB	855	G	N3-C2-N2	12.51	128.65	119.90
57	BB	2010	G	C5-C6-O6	-12.51	121.10	128.60
21	AA	113	G	N1-C6-O6	12.50	127.40	119.90
57	BB	2453	A	C5-C6-N6	-12.50	113.70	123.70
57	BB	1284	A	N1-C6-N6	12.50	126.10	118.60
57	BB	1799	G	O4'-C1'-N9	12.50	118.20	108.20
57	BB	365	U	O4'-C1'-N1	12.50	118.20	108.20
21	AA	162	A	C5-C6-N6	-12.50	113.70	123.70
21	AA	63	C	C5-C4-N4	-12.49	111.45	120.20
57	BB	2375	G	N1-C6-O6	12.49	127.40	119.90
21	AA	449	G	C5-C6-O6	-12.49	121.11	128.60
21	AA	1257	A	O4'-C1'-N9	12.49	118.19	108.20
57	BB	330	A	C5-C6-N1	-12.49	111.46	117.70
57	BB	734	A	C5-C6-N1	-12.49	111.46	117.70
26	AV	64	G	C5-N7-C8	12.48	110.54	104.30
21	AA	80	A	C5-N7-C8	12.48	110.14	103.90
21	AA	536	C	O4'-C1'-N1	12.48	118.19	108.20
57	BB	2772	C	N3-C4-N4	12.48	126.74	118.00
21	AA	470	C	N3-C4-N4	12.48	126.73	118.00
57	BB	2404	U	O4'-C1'-N1	12.48	118.18	108.20
57	BB	2525	G	N1-C6-O6	12.47	127.38	119.90
57	BB	2717	C	O4'-C1'-N1	12.47	118.18	108.20
23	AW	47	U	O4'-C1'-N1	12.47	118.18	108.20
26	AV	57	A	N1-C6-N6	12.47	126.08	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	452	G	N1-C6-O6	12.47	127.38	119.90
57	BB	2341	G	N1-C6-O6	12.47	127.38	119.90
57	BB	502	A	C5-N7-C8	12.47	110.13	103.90
57	BB	1502	A	N1-C6-N6	12.47	126.08	118.60
57	BB	845	A	C5-C6-N1	-12.47	111.47	117.70
21	AA	814	A	C5-C6-N1	-12.46	111.47	117.70
57	BB	1535	A	C5-C6-N1	-12.46	111.47	117.70
21	AA	223	A	C4-C5-C6	12.46	123.23	117.00
21	AA	987	G	N1-C6-O6	12.46	127.38	119.90
21	AA	1033	G	C5-C6-O6	-12.46	121.12	128.60
57	BB	743	A	N1-C6-N6	12.46	126.08	118.60
57	BB	2204	G	N1-C6-O6	12.46	127.38	119.90
57	BB	1958	C	N3-C4-N4	12.46	126.72	118.00
57	BB	389	G	C4-C5-C6	12.46	126.27	118.80
57	BB	2578	G	N1-C6-O6	12.46	127.37	119.90
21	AA	1525	G	N1-C2-N3	-12.45	116.43	123.90
57	BB	1085	A	N1-C6-N6	12.45	126.07	118.60
57	BB	2012	G	N3-C2-N2	12.45	128.61	119.90
57	BB	2444	G	N1-C6-O6	12.45	127.37	119.90
57	BB	2523	G	N1-C6-O6	12.45	127.37	119.90
36	BQ	69	ARG	NE-CZ-NH1	-12.45	114.08	120.30
21	AA	498	A	C4-C5-C6	12.44	123.22	117.00
57	BB	530	G	N1-C2-N3	-12.44	116.44	123.90
57	BB	2287	A	C5-C6-N6	-12.44	113.75	123.70
26	AV	43	A	C8-N9-C4	-12.44	100.82	105.80
21	AA	844	G	N3-C2-N2	12.44	128.60	119.90
23	AW	17	C	O4'-C1'-N1	12.44	118.15	108.20
57	BB	2631	G	C5-C6-O6	-12.44	121.14	128.60
22	AY	14	A	C5-C6-N1	-12.44	111.48	117.70
57	BB	71	A	C5-C6-N1	-12.43	111.48	117.70
21	AA	1347	G	N1-C6-O6	12.43	127.36	119.90
57	BB	1410	G	C4-C5-N7	12.43	115.77	110.80
57	BB	1619	G	N1-C6-O6	12.43	127.36	119.90
57	BB	2744	G	C5-C6-O6	-12.43	121.14	128.60
21	AA	1375	A	C5-C6-N6	-12.43	113.76	123.70
26	AV	21	A	N1-C6-N6	12.43	126.06	118.60
57	BB	275	C	N3-C4-N4	12.43	126.70	118.00
57	BB	1925	C	N3-C4-C5	-12.43	116.93	121.90
57	BB	2831	G	C5-C6-O6	-12.43	121.14	128.60
21	AA	10	A	C5-C6-N6	-12.42	113.76	123.70
21	AA	818	G	C5-C6-O6	-12.42	121.15	128.60
21	AA	1374	A	C5-C6-N6	-12.42	113.76	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	137	U	O4'-C1'-N1	12.42	118.14	108.20
21	AA	946	A	C4-C5-C6	12.42	123.21	117.00
23	AW	35	A	O4'-C1'-N9	12.42	118.13	108.20
57	BB	1117	C	N3-C4-N4	12.42	126.69	118.00
57	BB	2862	G	O4'-C1'-N9	12.42	118.13	108.20
57	BB	753	A	C5-C6-N1	-12.41	111.49	117.70
57	BB	209	C	C6-N1-C2	-12.41	115.34	120.30
21	AA	1379	G	O4'-C1'-N9	12.41	118.13	108.20
23	AW	74	C	C6-N1-C2	-12.41	115.34	120.30
57	BB	1735	A	C5-C6-N6	-12.41	113.78	123.70
57	BB	44	A	C4-C5-C6	12.40	123.20	117.00
57	BB	2670	A	O4'-C1'-N9	12.40	118.12	108.20
57	BB	1233	C	C6-N1-C2	-12.40	115.34	120.30
57	BB	2327	A	N1-C6-N6	12.40	126.04	118.60
58	BA	57	A	N9-C4-C5	12.40	110.76	105.80
57	BB	2833	U	O4'-C1'-N1	12.39	118.12	108.20
21	AA	440	C	O4'-C1'-N1	12.39	118.11	108.20
57	BB	1216	G	N9-C4-C5	12.39	110.36	105.40
57	BB	1685	C	C6-N1-C2	-12.39	115.34	120.30
57	BB	2732	G	N1-C6-O6	12.39	127.33	119.90
57	BB	2887	A	N1-C6-N6	12.39	126.03	118.60
21	AA	777	A	O4'-C1'-N9	12.39	118.11	108.20
21	AA	897	C	N3-C4-N4	12.39	126.67	118.00
57	BB	408	G	O4'-C1'-N9	12.39	118.11	108.20
57	BB	2487	G	N1-C6-O6	12.38	127.33	119.90
57	BB	2827	C	N3-C4-N4	12.38	126.67	118.00
21	AA	765	G	N1-C6-O6	12.37	127.32	119.90
21	AA	1188	A	C5-C6-N6	-12.38	113.80	123.70
22	AY	70	C	C6-N1-C2	12.38	125.25	120.30
22	AY	47	U	C5-C6-N1	12.37	128.88	122.70
57	BB	2540	C	N3-C4-C5	-12.37	116.95	121.90
57	BB	270	A	C5-C6-N1	-12.37	111.52	117.70
57	BB	361	G	C5-C6-O6	-12.37	121.18	128.60
23	AW	2	C	N3-C4-C5	-12.37	116.95	121.90
57	BB	737	C	O4'-C1'-N1	12.37	118.09	108.20
57	BB	1577	C	O4'-C1'-N1	12.37	118.09	108.20
57	BB	2196	C	O4'-C1'-N1	12.37	118.09	108.20
21	AA	1317	C	O4'-C1'-N1	12.36	118.09	108.20
57	BB	340	A	N1-C6-N6	12.36	126.02	118.60
57	BB	679	C	C6-N1-C2	-12.36	115.36	120.30
21	AA	607	A	C4-C5-C6	12.36	123.18	117.00
57	BB	1261	C	O4'-C1'-N1	12.36	118.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1384	A	C4-C5-C6	12.35	123.18	117.00
57	BB	2884	U	N3-C4-O4	12.35	128.04	119.40
57	BB	2175	C	O4'-C1'-N1	12.35	118.08	108.20
57	BB	1637	A	C4-C5-C6	12.34	123.17	117.00
57	BB	1573	G	N1-C6-O6	12.34	127.31	119.90
57	BB	2391	G	C5-C6-O6	-12.34	121.20	128.60
57	BB	602	A	C4-C5-C6	12.33	123.17	117.00
57	BB	1833	C	N3-C4-C5	-12.33	116.97	121.90
57	BB	146	A	C5-C6-N6	-12.33	113.84	123.70
57	BB	885	C	O4'-C1'-N1	12.33	118.06	108.20
57	BB	2614	A	N1-C6-N6	12.33	126.00	118.60
21	AA	144	G	O4'-C1'-N9	12.33	118.06	108.20
21	AA	1310	G	O4'-C1'-N9	12.33	118.06	108.20
57	BB	1137	G	C5-C6-O6	-12.33	121.20	128.60
57	BB	2274	A	C5-C6-N6	-12.33	113.84	123.70
57	BB	1512	C	N3-C4-C5	-12.32	116.97	121.90
21	AA	816	A	C8-N9-C4	-12.32	100.87	105.80
21	AA	1383	C	O4'-C1'-N1	12.32	118.06	108.20
57	BB	2481	G	C2-N3-C4	12.32	118.06	111.90
21	AA	778	G	N1-C6-O6	12.32	127.29	119.90
21	AA	1080	A	N1-C6-N6	12.32	125.99	118.60
57	BB	1593	A	C5-N7-C8	12.32	110.06	103.90
57	BB	2086	U	O4'-C1'-N1	12.32	118.06	108.20
21	AA	1434	A	N1-C6-N6	12.32	125.99	118.60
57	BB	715	A	N7-C8-N9	12.32	119.96	113.80
57	BB	2208	C	O4'-C1'-N1	12.32	118.05	108.20
21	AA	284	C	N3-C4-C5	-12.31	116.97	121.90
21	AA	1230	C	C6-N1-C2	-12.31	115.37	120.30
22	AY	20	G	N1-C6-O6	12.31	127.29	119.90
23	AW	11	C	N3-C4-C5	-12.31	116.97	121.90
57	BB	67	U	N1-C2-N3	-12.31	107.51	114.90
57	BB	1150	C	C5-C6-N1	12.31	127.16	121.00
57	BB	1361	G	C5-C6-O6	-12.31	121.21	128.60
57	BB	1803	A	N1-C2-N3	12.31	135.46	129.30
22	AY	4	G	C5-C6-O6	-12.31	121.21	128.60
57	BB	1448	G	N1-C6-O6	12.31	127.28	119.90
57	BB	2248	C	C5-C6-N1	12.31	127.15	121.00
21	AA	337	G	N1-C6-O6	12.31	127.28	119.90
21	AA	541	G	O4'-C1'-N9	12.31	118.05	108.20
21	AA	606	G	N1-C2-N3	-12.31	116.52	123.90
21	AA	635	A	C2-N3-C4	12.30	116.75	110.60
57	BB	1037	G	C5-C6-O6	-12.30	121.22	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1508	A	C8-N9-C4	-12.30	100.88	105.80
58	BA	84	G	N1-C6-O6	12.30	127.28	119.90
21	AA	1318	A	C2-N3-C4	-12.29	104.45	110.60
54	BF	94	ARG	NE-CZ-NH1	12.29	126.45	120.30
57	BB	1788	C	O4'-C1'-N1	12.29	118.04	108.20
13	AB	29	PHE	CB-CG-CD1	-12.29	112.20	120.80
57	BB	1099	G	C5-C6-O6	-12.29	121.23	128.60
21	AA	312	C	N3-C4-N4	12.29	126.60	118.00
57	BB	2205	A	N1-C6-N6	12.28	125.97	118.60
21	AA	331	G	C5-C6-O6	-12.28	121.23	128.60
45	BC	216	ARG	NE-CZ-NH1	12.28	126.44	120.30
57	BB	1238	G	N1-C6-O6	12.28	127.27	119.90
57	BB	1239	G	C8-N9-C4	-12.28	101.49	106.40
57	BB	1483	G	C5-C6-O6	-12.28	121.23	128.60
21	AA	777	A	N1-C6-N6	12.28	125.97	118.60
57	BB	331	C	C5-C6-N1	12.28	127.14	121.00
57	BB	2541	A	C5-C6-N1	-12.27	111.56	117.70
21	AA	453	G	C5-C6-O6	-12.27	121.24	128.60
57	BB	2823	A	N1-C6-N6	12.27	125.96	118.60
57	BB	1048	A	O4'-C1'-N9	12.27	118.01	108.20
57	BB	257	C	C5-C6-N1	12.26	127.13	121.00
57	BB	1673	G	N1-C6-O6	12.26	127.26	119.90
21	AA	675	A	N1-C6-N6	12.26	125.96	118.60
57	BB	2420	C	N3-C4-N4	12.26	126.58	118.00
21	AA	1339	A	C5-C6-N1	-12.26	111.57	117.70
30	BK	70	ARG	NE-CZ-NH1	12.26	126.43	120.30
57	BB	1772	A	C5-C6-N6	-12.26	113.89	123.70
21	AA	973	G	C5-C6-O6	-12.26	121.25	128.60
57	BB	1296	G	C8-N9-C4	-12.26	101.50	106.40
21	AA	992	U	O4'-C1'-N1	12.26	118.00	108.20
57	BB	670	A	N1-C6-N6	12.26	125.95	118.60
21	AA	1187	G	N1-C6-O6	12.25	127.25	119.90
57	BB	332	A	C4-C5-C6	12.25	123.13	117.00
57	BB	1041	G	N1-C6-O6	12.25	127.25	119.90
21	AA	1120	C	N3-C4-C5	-12.25	117.00	121.90
57	BB	77	G	C5-N7-C8	12.25	110.43	104.30
57	BB	172	A	N1-C6-N6	12.25	125.95	118.60
21	AA	1496	C	N3-C4-N4	12.25	126.57	118.00
57	BB	817	C	O4'-C1'-N1	12.25	118.00	108.20
57	BB	2713	U	O4'-C1'-N1	12.25	118.00	108.20
21	AA	298	A	N1-C2-N3	12.24	135.42	129.30
21	AA	627	G	O4'-C1'-N9	12.24	118.00	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	584	C	N3-C4-C5	-12.24	117.00	121.90
21	AA	238	A	N1-C2-N3	12.23	135.42	129.30
57	BB	382	A	N1-C6-N6	12.23	125.94	118.60
57	BB	2447	G	C5-C6-O6	-12.23	121.26	128.60
21	AA	956	U	O4'-C1'-N1	12.23	117.99	108.20
21	AA	1244	G	N1-C6-O6	12.23	127.24	119.90
57	BB	2378	A	C8-N9-C4	-12.23	100.91	105.80
21	AA	223	A	N7-C8-N9	12.23	119.92	113.80
21	AA	453	G	C4-C5-N7	12.23	115.69	110.80
57	BB	2255	G	N1-C6-O6	12.23	127.24	119.90
57	BB	70	G	N3-C2-N2	12.22	128.46	119.90
57	BB	1164	C	N3-C4-C5	-12.22	117.01	121.90
21	AA	613	C	O4'-C1'-N1	12.22	117.98	108.20
21	AA	1316	G	N3-C2-N2	12.22	128.46	119.90
21	AA	263	A	N1-C6-N6	12.22	125.93	118.60
21	AA	1534	A	N1-C6-N6	12.22	125.93	118.60
57	BB	2150	C	O4'-C1'-N1	12.22	117.97	108.20
21	AA	91	U	O4'-C1'-N1	12.21	117.97	108.20
57	BB	194	G	N1-C6-O6	12.21	127.23	119.90
57	BB	2039	U	O4'-C1'-N1	12.21	117.97	108.20
57	BB	2896	C	N3-C4-N4	12.21	126.55	118.00
21	AA	22	G	C5-C6-O6	-12.21	121.28	128.60
57	BB	950	G	C5-C6-O6	-12.21	121.27	128.60
57	BB	1232	G	N1-C6-O6	12.21	127.22	119.90
58	BA	110	C	O4'-C1'-N1	12.21	117.96	108.20
57	BB	1893	C	O4'-C1'-N1	12.20	117.96	108.20
57	BB	2758	A	N1-C6-N6	12.20	125.92	118.60
57	BB	2397	G	C6-N1-C2	12.20	132.42	125.10
57	BB	2466	C	N3-C4-C5	-12.20	117.02	121.90
57	BB	1406	U	C5-C6-N1	12.20	128.80	122.70
21	AA	1367	C	O4'-C1'-N1	12.19	117.95	108.20
57	BB	2261	C	C6-N1-C2	-12.19	115.42	120.30
57	BB	1504	A	N1-C6-N6	12.19	125.91	118.60
57	BB	2896	C	C6-N1-C2	-12.19	115.42	120.30
21	AA	728	A	C5-C6-N6	-12.19	113.95	123.70
57	BB	172	A	O4'-C1'-N9	12.19	117.95	108.20
57	BB	262	A	C5-C6-N1	-12.19	111.61	117.70
57	BB	1471	G	C6-N1-C2	12.19	132.41	125.10
21	AA	631	C	N3-C4-C5	-12.18	117.03	121.90
23	AW	63	G	N3-C4-N9	12.18	133.31	126.00
57	BB	2351	G	N1-C6-O6	12.18	127.21	119.90
57	BB	555	G	N3-C2-N2	12.18	128.43	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1273	U	N1-C2-N3	-12.18	107.59	114.90
57	BB	2025	C	N3-C4-C5	-12.18	117.03	121.90
21	AA	386	C	O4'-C1'-N1	12.18	117.94	108.20
57	BB	545	U	C5-C4-O4	-12.18	118.59	125.90
57	BB	2097	A	C5-C6-N6	-12.18	113.96	123.70
21	AA	602	A	N1-C6-N6	12.17	125.91	118.60
57	BB	1471	G	C5-C6-N1	-12.17	105.41	111.50
57	BB	1509	A	C8-N9-C4	-12.17	100.93	105.80
21	AA	1394	A	C2-N3-C4	-12.17	104.52	110.60
23	AW	33	U	C5-C4-O4	-12.17	118.60	125.90
57	BB	176	A	C6-C5-N7	-12.17	123.78	132.30
57	BB	784	G	O4'-C1'-N9	12.17	117.93	108.20
57	BB	1738	G	N1-C6-O6	12.17	127.20	119.90
21	AA	444	G	C5-C6-O6	-12.16	121.30	128.60
57	BB	2366	A	C6-N1-C2	-12.16	111.30	118.60
57	BB	549	G	C5-C6-O6	-12.16	121.30	128.60
21	AA	1227	A	N1-C6-N6	12.16	125.89	118.60
57	BB	127	A	N3-C4-N9	12.16	137.13	127.40
57	BB	2463	C	O4'-C1'-N1	12.16	117.93	108.20
57	BB	2411	A	N7-C8-N9	12.15	119.88	113.80
21	AA	1533	C	N3-C4-N4	12.15	126.51	118.00
57	BB	323	C	N3-C4-N4	12.15	126.51	118.00
21	AA	465	A	C5-C6-N1	-12.15	111.62	117.70
21	AA	602	A	C5-C6-N6	-12.15	113.98	123.70
57	BB	1245	G	C5-C6-O6	-12.15	121.31	128.60
52	BD	46	ARG	NE-CZ-NH2	-12.15	114.23	120.30
57	BB	798	G	N1-C6-O6	12.15	127.19	119.90
57	BB	2694	G	N1-C6-O6	12.15	127.19	119.90
57	BB	2762	C	O4'-C1'-N1	12.15	117.92	108.20
57	BB	1362	C	O4'-C1'-N1	12.14	117.92	108.20
57	BB	2701	U	O4'-C1'-N1	12.14	117.92	108.20
57	BB	160	A	N1-C6-N6	12.14	125.89	118.60
57	BB	1613	G	C5-C6-O6	-12.14	121.31	128.60
21	AA	1289	A	C5-C6-N6	-12.14	113.99	123.70
21	AA	1428	A	N1-C6-N6	12.14	125.88	118.60
21	AA	496	A	N1-C6-N6	12.13	125.88	118.60
21	AA	582	C	N3-C4-C5	-12.14	117.05	121.90
21	AA	1513	A	C5-C6-N1	-12.13	111.63	117.70
57	BB	1989	G	N1-C6-O6	12.14	127.18	119.90
57	BB	1037	G	N1-C6-O6	12.13	127.18	119.90
21	AA	1331	G	C5-C6-N1	-12.13	105.44	111.50
32	BM	51	ARG	NE-CZ-NH2	-12.13	114.23	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	994	A	C5-N7-C8	12.13	109.96	103.90
21	AA	1533	C	C2-N3-C4	12.13	125.97	119.90
57	BB	517	C	O4'-C1'-N1	12.13	117.90	108.20
57	BB	1272	A	C5-C6-N6	-12.13	114.00	123.70
57	BB	2228	G	N1-C6-O6	12.12	127.17	119.90
21	AA	1352	C	N3-C4-C5	-12.12	117.05	121.90
57	BB	2271	G	N1-C2-N3	-12.12	116.63	123.90
2	AK	126	ARG	NE-CZ-NH2	-12.12	114.24	120.30
57	BB	344	A	N1-C6-N6	12.12	125.87	118.60
57	BB	923	G	C5-C6-O6	-12.12	121.33	128.60
21	AA	521	G	C5-C6-O6	-12.11	121.33	128.60
57	BB	2309	A	N1-C2-N3	12.11	135.36	129.30
58	BA	37	C	C4-C5-C6	12.11	123.46	117.40
21	AA	43	C	O4'-C1'-N1	12.11	117.89	108.20
21	AA	1231	G	N1-C6-O6	12.11	127.17	119.90
21	AA	193	C	O4'-C1'-N1	12.11	117.89	108.20
21	AA	324	G	C5-C6-O6	-12.11	121.34	128.60
21	AA	631	C	O4'-C1'-N1	12.11	117.89	108.20
57	BB	2207	C	N3-C4-N4	12.11	126.47	118.00
57	BB	58	G	N1-C2-N3	-12.10	116.64	123.90
21	AA	1244	G	N9-C4-C5	12.10	110.24	105.40
21	AA	1258	G	N3-C2-N2	12.10	128.37	119.90
57	BB	2828	G	N1-C2-N3	-12.10	116.64	123.90
21	AA	881	G	N1-C6-O6	12.10	127.16	119.90
57	BB	1855	U	O4'-C1'-N1	12.10	117.88	108.20
21	AA	824	G	C5-C6-O6	-12.09	121.34	128.60
57	BB	436	C	O4'-C1'-N1	12.09	117.87	108.20
57	BB	885	C	N3-C4-C5	-12.09	117.06	121.90
21	AA	109	A	N7-C8-N9	-12.09	107.75	113.80
21	AA	350	G	N3-C2-N2	12.09	128.36	119.90
21	AA	1110	A	O4'-C1'-N9	12.09	117.87	108.20
21	AA	1222	G	O4'-C1'-N9	12.09	117.87	108.20
57	BB	1221	C	O4'-C1'-N1	12.09	117.87	108.20
57	BB	2710	C	N3-C4-C5	-12.09	117.06	121.90
57	BB	2741	A	N1-C6-N6	12.09	125.85	118.60
21	AA	129	A	N1-C6-N6	12.09	125.85	118.60
21	AA	771	G	N1-C6-O6	12.08	127.15	119.90
21	AA	1319	A	C4-C5-C6	12.08	123.04	117.00
21	AA	134	G	C5-C6-O6	-12.08	121.35	128.60
57	BB	347	A	C4-C5-C6	12.08	123.04	117.00
57	BB	2493	U	O4'-C1'-N1	12.08	117.86	108.20
21	AA	179	A	C4-C5-C6	12.08	123.04	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1959	G	N1-C6-O6	12.07	127.14	119.90
21	AA	152	A	O4'-C1'-N9	12.07	117.86	108.20
21	AA	167	A	C5-C6-N6	-12.07	114.04	123.70
21	AA	873	A	N1-C6-N6	12.07	125.84	118.60
57	BB	1448	G	C5-C6-O6	-12.07	121.36	128.60
57	BB	2452	C	O4'-C1'-N1	12.07	117.85	108.20
21	AA	532	A	C8-N9-C4	-12.07	100.97	105.80
57	BB	2821	A	O4'-C1'-N9	12.07	117.85	108.20
21	AA	441	A	C6-C5-N7	-12.06	123.86	132.30
57	BB	1214	A	N1-C2-N3	-12.06	123.27	129.30
21	AA	748	G	C5-C6-O6	-12.06	121.36	128.60
4	AM	86	ARG	NE-CZ-NH2	-12.06	114.27	120.30
21	AA	919	A	C4-C5-C6	12.06	123.03	117.00
57	BB	2899	A	N1-C6-N6	12.05	125.83	118.60
21	AA	1107	C	C4-C5-C6	12.05	123.42	117.40
57	BB	305	C	N3-C4-C5	-12.05	117.08	121.90
57	BB	891	G	C1'-O4'-C4'	-12.04	100.27	109.90
57	BB	1532	A	N1-C6-N6	12.04	125.83	118.60
21	AA	745	G	C5-C6-O6	-12.04	121.38	128.60
36	BQ	27	ARG	NE-CZ-NH1	12.04	126.32	120.30
21	AA	363	A	N1-C6-N6	12.04	125.82	118.60
57	BB	1264	A	C4-C5-C6	12.04	123.02	117.00
22	AY	3	G	O4'-C1'-N9	12.03	117.83	108.20
57	BB	679	C	N3-C4-C5	-12.03	117.09	121.90
57	BB	1452	G	P-O3'-C3'	12.03	134.14	119.70
57	BB	2829	A	C4-C5-C6	12.03	123.02	117.00
57	BB	1342	A	C5-N7-C8	12.03	109.92	103.90
57	BB	212	G	C5-C6-O6	-12.03	121.38	128.60
57	BB	2748	A	C5-C6-N1	-12.03	111.69	117.70
21	AA	68	G	C5-C6-O6	-12.03	121.38	128.60
21	AA	895	G	C5-C6-O6	-12.03	121.38	128.60
26	AV	70	G	N9-C4-C5	12.03	110.21	105.40
57	BB	1371	G	N1-C6-O6	12.02	127.11	119.90
21	AA	191	G	C8-N9-C4	-12.02	101.59	106.40
57	BB	828	U	N3-C4-O4	12.02	127.81	119.40
57	BB	2523	G	C5-C6-O6	-12.02	121.39	128.60
21	AA	113	G	O4'-C1'-N9	12.02	117.81	108.20
57	BB	1450	G	C5-C6-O6	-12.02	121.39	128.60
57	BB	2851	A	N9-C4-C5	12.02	110.61	105.80
57	BB	1608	A	C4-C5-C6	12.01	123.01	117.00
21	AA	595	A	C5-C6-N6	-12.01	114.09	123.70
57	BB	742	A	C4-C5-C6	12.01	123.01	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1615	C	N3-C4-C5	-12.01	117.09	121.90
57	BB	2207	C	C5-C4-N4	-12.01	111.79	120.20
57	BB	2642	G	C5-C6-O6	-12.01	121.39	128.60
21	AA	590	U	O4'-C1'-N1	12.01	117.81	108.20
21	AA	1310	G	C5-C6-O6	-12.01	121.39	128.60
21	AA	1021	A	C4-C5-C6	12.01	123.00	117.00
57	BB	1483	G	N1-C6-O6	12.01	127.10	119.90
57	BB	339	U	O4'-C1'-N1	12.00	117.80	108.20
21	AA	1375	A	C5-N7-C8	12.00	109.90	103.90
57	BB	398	C	O4'-C1'-N1	12.00	117.80	108.20
57	BB	681	G	N1-C6-O6	12.00	127.10	119.90
57	BB	2471	A	O4'-C1'-N9	12.00	117.80	108.20
21	AA	6	G	C2-N3-C4	11.99	117.90	111.90
57	BB	978	G	C5-C6-O6	-11.99	121.40	128.60
21	AA	159	G	N1-C6-O6	11.99	127.09	119.90
58	BA	8	C	C5-C4-N4	-11.99	111.81	120.20
57	BB	335	C	N3-C4-N4	11.99	126.39	118.00
57	BB	1518	C	N3-C4-N4	11.99	126.39	118.00
57	BB	1171	G	N1-C2-N3	-11.99	116.71	123.90
57	BB	1163	G	C8-N9-C4	11.98	111.19	106.40
57	BB	1259	G	N1-C6-O6	11.98	127.09	119.90
57	BB	1949	G	C5-C6-N1	11.98	117.49	111.50
21	AA	978	A	N1-C6-N6	11.98	125.79	118.60
57	BB	1745	A	N1-C6-N6	11.98	125.79	118.60
21	AA	1492	A	N1-C6-N6	11.98	125.79	118.60
57	BB	821	A	N1-C6-N6	11.97	125.78	118.60
21	AA	190	A	C5-C6-N1	-11.97	111.72	117.70
57	BB	634	C	O4'-C1'-N1	11.97	117.77	108.20
21	AA	1516	G	N1-C6-O6	11.97	127.08	119.90
57	BB	2153	C	C6-N1-C2	-11.96	115.51	120.30
57	BB	2212	A	O4'-C1'-N9	11.97	117.77	108.20
57	BB	2318	G	N3-C2-N2	11.96	128.28	119.90
57	BB	2776	A	N1-C6-N6	11.97	125.78	118.60
21	AA	1294	G	N1-C6-O6	11.96	127.08	119.90
57	BB	1514	G	N1-C6-O6	11.96	127.08	119.90
21	AA	353	A	C5-C6-N1	-11.96	111.72	117.70
57	BB	227	A	C4-C5-C6	11.96	122.98	117.00
21	AA	1217	C	N3-C4-N4	11.95	126.37	118.00
57	BB	1759	A	C4-C5-C6	11.96	122.98	117.00
26	AV	23	C	C4-C5-C6	11.95	123.38	117.40
57	BB	1231	U	O4'-C1'-N1	11.95	117.76	108.20
57	BB	1606	C	N3-C4-C5	-11.95	117.12	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	702	A	C4-C5-N7	-11.95	104.72	110.70
22	AY	56	C	C2-N3-C4	11.95	125.87	119.90
21	AA	958	A	C5-N7-C8	11.95	109.87	103.90
57	BB	916	G	N1-C6-O6	11.95	127.07	119.90
57	BB	2532	G	C6-C5-N7	-11.95	123.23	130.40
57	BB	1233	C	C5-C6-N1	11.95	126.97	121.00
21	AA	597	G	O4'-C1'-N9	11.94	117.75	108.20
57	BB	1920	C	O4'-C1'-N1	11.94	117.75	108.20
57	BB	2532	G	C4-C5-C6	11.94	125.97	118.80
21	AA	99	C	O4'-C1'-N1	11.94	117.75	108.20
21	AA	1404	C	C6-N1-C2	-11.94	115.52	120.30
57	BB	465	G	N3-C2-N2	11.94	128.26	119.90
57	BB	1469	A	C5-N7-C8	11.94	109.87	103.90
57	BB	804	A	C5-C6-N1	-11.94	111.73	117.70
57	BB	1703	G	O4'-C1'-N9	11.94	117.75	108.20
57	BB	1726	C	N3-C4-C5	-11.94	117.12	121.90
22	AY	3	G	N3-C4-C5	-11.93	122.63	128.60
57	BB	1870	C	O4'-C1'-N1	11.93	117.75	108.20
57	BB	2664	G	C5-C6-O6	-11.93	121.44	128.60
21	AA	342	C	N3-C4-C5	-11.93	117.13	121.90
57	BB	1453	A	N1-C6-N6	11.93	125.76	118.60
21	AA	1278	G	P-O3'-C3'	11.93	134.01	119.70
21	AA	130	A	C5-C6-N6	-11.93	114.16	123.70
57	BB	452	G	C5-C6-O6	-11.92	121.44	128.60
21	AA	1361	G	O4'-C1'-N9	11.92	117.74	108.20
57	BB	816	C	O4'-C1'-N1	11.92	117.74	108.20
57	BB	2744	G	N1-C6-O6	11.92	127.05	119.90
20	AI	40	ARG	NE-CZ-NH2	-11.92	114.34	120.30
21	AA	1053	G	C5-C6-O6	-11.92	121.45	128.60
57	BB	266	G	N1-C6-O6	11.92	127.05	119.90
57	BB	558	U	O4'-C1'-N1	11.92	117.74	108.20
57	BB	1154	G	C8-N9-C4	-11.92	101.63	106.40
21	AA	1197	A	N1-C6-N6	11.92	125.75	118.60
21	AA	1416	G	C5-C6-O6	-11.92	121.45	128.60
57	BB	157	C	N3-C4-C5	-11.92	117.13	121.90
57	BB	1305	C	O4'-C1'-N1	11.92	117.73	108.20
56	BH	68	ARG	NE-CZ-NH2	11.91	126.26	120.30
57	BB	1414	C	C6-N1-C2	-11.91	115.53	120.30
57	BB	1656	C	O4'-C1'-N1	11.91	117.73	108.20
21	AA	877	G	N1-C6-O6	11.91	127.04	119.90
57	BB	2614	A	C5-C6-N6	-11.91	114.17	123.70
21	AA	854	U	C5-C4-O4	-11.90	118.76	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1364	U	O4'-C1'-N1	11.90	117.72	108.20
19	AH	79	ARG	NE-CZ-NH2	-11.90	114.35	120.30
21	AA	1514	G	N1-C6-O6	11.90	127.04	119.90
21	AA	1042	A	C4-C5-C6	11.90	122.95	117.00
55	BG	68	ARG	NE-CZ-NH2	-11.90	114.35	120.30
57	BB	2015	A	N1-C6-N6	11.90	125.74	118.60
57	BB	2759	G	N1-C6-O6	11.89	127.04	119.90
58	BA	37	C	N3-C4-C5	-11.89	117.14	121.90
57	BB	574	A	C4-C5-C6	11.89	122.95	117.00
21	AA	676	A	N1-C6-N6	11.89	125.73	118.60
57	BB	77	G	N1-C6-O6	11.89	127.03	119.90
57	BB	2648	G	N1-C2-N3	-11.89	116.77	123.90
57	BB	190	A	C5-C6-N6	-11.89	114.19	123.70
57	BB	2499	C	N3-C4-C5	-11.89	117.14	121.90
57	BB	2228	G	C5-C6-O6	-11.89	121.47	128.60
21	AA	1354	U	O4'-C1'-N1	11.88	117.71	108.20
57	BB	1445	G	C4-C5-N7	11.88	115.55	110.80
21	AA	436	C	O4'-C1'-N1	11.88	117.70	108.20
57	BB	1477	A	C5-C6-N6	-11.88	114.19	123.70
57	BB	2397	G	N1-C6-O6	11.88	127.03	119.90
22	AY	8	U	O4'-C1'-N1	11.88	117.70	108.20
21	AA	25	C	O4'-C1'-N1	11.88	117.70	108.20
21	AA	1248	A	N1-C6-N6	11.88	125.73	118.60
57	BB	362	A	C5-C6-N6	-11.88	114.20	123.70
58	BA	44	G	C5-C6-O6	-11.88	121.47	128.60
21	AA	1089	G	C5-C6-O6	-11.88	121.47	128.60
21	AA	889	A	N1-C6-N6	11.87	125.72	118.60
26	AV	26	G	O4'-C1'-N9	11.87	117.70	108.20
57	BB	1800	C	C6-N1-C2	-11.87	115.55	120.30
57	BB	753	A	C4-C5-C6	11.87	122.94	117.00
21	AA	169	C	O4'-C1'-N1	11.87	117.69	108.20
57	BB	2347	C	O4'-C1'-N1	11.87	117.69	108.20
57	BB	2828	G	N3-C2-N2	11.87	128.21	119.90
57	BB	195	A	N1-C6-N6	11.87	125.72	118.60
57	BB	729	G	N1-C6-O6	11.87	127.02	119.90
57	BB	2632	A	N1-C6-N6	11.87	125.72	118.60
21	AA	98	A	C5-C6-N6	-11.86	114.21	123.70
21	AA	937	A	N1-C6-N6	11.86	125.72	118.60
21	AA	1012	A	C5-C6-N6	-11.86	114.21	123.70
57	BB	495	G	C5-C6-O6	-11.86	121.48	128.60
57	BB	1296	G	C4-C5-N7	11.86	115.54	110.80
57	BB	2178	C	O4'-C1'-N1	11.86	117.69	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	75	G	C8-N9-C4	-11.86	101.66	106.40
57	BB	2603	G	N1-C6-O6	11.86	127.01	119.90
21	AA	1255	G	C4-C5-N7	-11.85	106.06	110.80
21	AA	862	C	C5-C4-N4	11.85	128.50	120.20
21	AA	9	G	C5-C6-O6	-11.85	121.49	128.60
57	BB	2097	A	C4-C5-C6	11.85	122.92	117.00
58	BA	2	G	C6-C5-N7	-11.85	123.29	130.40
21	AA	673	A	N1-C6-N6	11.84	125.71	118.60
57	BB	170	U	O4'-C1'-N1	11.84	117.67	108.20
57	BB	532	A	C4-C5-C6	11.84	122.92	117.00
57	BB	997	G	C2-N3-C4	11.84	117.82	111.90
57	BB	2588	G	C4-C5-N7	11.84	115.54	110.80
57	BB	2736	A	C5-C6-N6	-11.84	114.23	123.70
21	AA	417	G	C8-N9-C4	-11.84	101.66	106.40
21	AA	1069	C	C5-C6-N1	-11.84	115.08	121.00
57	BB	1237	A	N1-C6-N6	11.84	125.70	118.60
57	BB	296	U	C5-C4-O4	-11.84	118.80	125.90
58	BA	47	C	O4'-C1'-N1	11.84	117.67	108.20
21	AA	1401	G	C5-C6-O6	-11.84	121.50	128.60
21	AA	527	G	C5-C6-O6	-11.84	121.50	128.60
57	BB	731	C	N3-C4-C5	-11.84	117.17	121.90
57	BB	1595	C	N3-C4-C5	-11.84	117.17	121.90
57	BB	2274	A	C5-C6-N1	-11.83	111.78	117.70
57	BB	2532	G	N1-C6-O6	11.83	127.00	119.90
21	AA	728	A	N1-C6-N6	11.83	125.70	118.60
57	BB	2090	A	N1-C6-N6	11.83	125.70	118.60
57	BB	2706	A	N1-C6-N6	11.83	125.70	118.60
57	BB	156	A	C5-C6-N6	-11.82	114.24	123.70
57	BB	1640	A	C5-C6-N6	-11.82	114.24	123.70
57	BB	861	A	C5-C6-N6	-11.82	114.24	123.70
57	BB	1216	G	C4-C5-C6	11.82	125.89	118.80
21	AA	840	C	C5-C4-N4	-11.82	111.93	120.20
21	AA	1257	A	C5-N7-C8	11.82	109.81	103.90
21	AA	1396	A	N9-C4-C5	-11.82	101.07	105.80
57	BB	372	G	N1-C6-O6	11.82	126.99	119.90
57	BB	2147	A	C5-C6-N1	-11.82	111.79	117.70
23	AW	71	G	N1-C6-O6	11.82	126.99	119.90
57	BB	192	C	O4'-C1'-N1	11.82	117.66	108.20
58	BA	51	G	C5-C6-O6	-11.82	121.51	128.60
57	BB	1277	G	N1-C6-O6	11.81	126.99	119.90
57	BB	1429	G	O4'-C1'-N9	11.81	117.65	108.20
57	BB	1593	A	O4'-C1'-N9	11.81	117.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	AS	31	ARG	NE-CZ-NH1	11.81	126.20	120.30
57	BB	1986	C	N3-C4-C5	-11.81	117.18	121.90
2	AK	121	ARG	NE-CZ-NH2	-11.81	114.40	120.30
21	AA	479	U	O4'-C1'-N1	11.81	117.65	108.20
21	AA	1338	G	C2-N3-C4	11.81	117.80	111.90
21	AA	1045	C	O4'-C1'-N1	11.81	117.64	108.20
57	BB	1209	U	O4'-C1'-N1	11.81	117.64	108.20
57	BB	2284	A	C6-N1-C2	-11.81	111.52	118.60
21	AA	490	C	C6-N1-C2	-11.80	115.58	120.30
21	AA	307	C	N3-C4-C5	-11.80	117.18	121.90
21	AA	923	A	C5-C6-N6	-11.80	114.26	123.70
21	AA	1113	C	O4'-C1'-N1	11.80	117.64	108.20
57	BB	556	A	N1-C6-N6	11.80	125.68	118.60
57	BB	2120	G	N7-C8-N9	11.80	119.00	113.10
21	AA	501	C	N3-C4-N4	11.80	126.26	118.00
57	BB	250	G	C6-C5-N7	-11.80	123.32	130.40
57	BB	1129	A	N1-C6-N6	11.80	125.68	118.60
57	BB	1289	C	N3-C4-N4	11.80	126.26	118.00
57	BB	2047	C	O4'-C1'-N1	11.80	117.64	108.20
57	BB	975	A	N1-C6-N6	11.80	125.68	118.60
57	BB	2073	C	C2-N3-C4	11.80	125.80	119.90
21	AA	128	G	C5-C6-O6	-11.79	121.52	128.60
21	AA	388	G	C5-C6-N1	-11.79	105.60	111.50
57	BB	2434	A	N1-C6-N6	11.79	125.68	118.60
57	BB	36	G	N1-C6-O6	11.79	126.97	119.90
57	BB	866	A	C4-C5-C6	11.79	122.89	117.00
57	BB	327	G	C5-C6-O6	-11.79	121.53	128.60
21	AA	84	U	N3-C4-C5	-11.79	107.53	114.60
57	BB	196	A	O4'-C1'-N9	11.79	117.63	108.20
57	BB	592	A	C5-C6-N1	-11.79	111.81	117.70
57	BB	1780	A	C4-C5-C6	11.78	122.89	117.00
57	BB	1909	C	O4'-C1'-N1	11.79	117.63	108.20
57	BB	2178	C	P-O3'-C3'	11.78	133.84	119.70
57	BB	2737	G	N1-C6-O6	11.79	126.97	119.90
57	BB	278	A	C4-C5-C6	11.78	122.89	117.00
57	BB	1518	C	C5-C6-N1	11.78	126.89	121.00
21	AA	1087	G	N1-C6-O6	11.78	126.97	119.90
21	AA	934	C	N3-C4-C5	-11.78	117.19	121.90
57	BB	2087	G	N1-C6-O6	11.78	126.97	119.90
58	BA	49	C	O4'-C1'-N1	11.78	117.62	108.20
21	AA	63	C	C6-N1-C2	-11.78	115.59	120.30
21	AA	1053	G	N1-C6-O6	11.78	126.97	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1366	C	C5-C6-N1	11.78	126.89	121.00
57	BB	1773	A	N1-C6-N6	11.78	125.67	118.60
21	AA	454	G	N1-C6-O6	11.77	126.96	119.90
57	BB	364	C	C5-C6-N1	11.77	126.89	121.00
57	BB	595	C	N3-C4-N4	11.77	126.24	118.00
57	BB	1711	A	C5-C6-N1	-11.77	111.81	117.70
21	AA	534	U	O4'-C1'-N1	11.77	117.61	108.20
57	BB	544	C	O4'-C1'-N1	11.77	117.62	108.20
57	BB	2035	G	C5-C6-N1	-11.77	105.61	111.50
57	BB	891	G	O4'-C1'-N9	11.77	117.61	108.20
57	BB	1864	U	O4'-C1'-N1	11.77	117.61	108.20
21	AA	451	A	N1-C6-N6	11.76	125.66	118.60
21	AA	1254	A	N1-C6-N6	11.76	125.66	118.60
49	B2	21	ARG	NE-CZ-NH1	-11.76	114.42	120.30
57	BB	1886	U	O4'-C1'-N1	11.76	117.61	108.20
21	AA	649	A	N1-C6-N6	11.76	125.66	118.60
22	AY	19	G	C5-C6-O6	-11.76	121.55	128.60
57	BB	1927	A	C4-C5-C6	11.76	122.88	117.00
11	AT	17	ARG	NE-CZ-NH2	-11.75	114.42	120.30
21	AA	1339	A	N1-C6-N6	11.75	125.65	118.60
57	BB	42	A	N1-C6-N6	11.75	125.65	118.60
57	BB	1386	C	O4'-C1'-N1	11.75	117.60	108.20
21	AA	424	G	N7-C8-N9	11.75	118.98	113.10
21	AA	622	A	N1-C6-N6	11.75	125.65	118.60
57	BB	1339	G	C5-C6-O6	-11.75	121.55	128.60
57	BB	638	G	N7-C8-N9	11.75	118.97	113.10
57	BB	1120	G	C5-C6-O6	-11.75	121.55	128.60
21	AA	453	G	N1-C6-O6	11.75	126.95	119.90
57	BB	216	A	C4-C5-C6	11.75	122.87	117.00
57	BB	989	G	N1-C6-O6	11.75	126.95	119.90
57	BB	681	G	O4'-C1'-N9	11.74	117.59	108.20
57	BB	1016	G	C2-N3-C4	11.74	117.77	111.90
57	BB	1492	G	N3-C2-N2	11.74	128.12	119.90
21	AA	607	A	O4'-C1'-N9	11.74	117.59	108.20
57	BB	1275	A	N1-C6-N6	11.74	125.64	118.60
57	BB	2417	C	N3-C4-N4	11.74	126.22	118.00
57	BB	2755	C	N3-C4-C5	-11.74	117.20	121.90
21	AA	320	A	N1-C6-N6	11.74	125.64	118.60
21	AA	1038	C	O4'-C1'-N1	11.74	117.59	108.20
23	AW	19	G	C5-C6-O6	-11.74	121.56	128.60
57	BB	2850	A	N1-C6-N6	11.74	125.64	118.60
21	AA	616	G	N1-C2-N3	-11.73	116.86	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	720	C	O4'-C1'-N1	11.73	117.59	108.20
22	AY	25	C	N3-C4-N4	11.73	126.21	118.00
57	BB	223	A	N1-C6-N6	11.73	125.64	118.60
57	BB	304	U	O4'-C1'-N1	11.73	117.59	108.20
57	BB	1275	A	O4'-C1'-N9	11.73	117.59	108.20
57	BB	225	C	O4'-C1'-N1	11.73	117.58	108.20
57	BB	1194	A	C5-C6-N6	-11.73	114.31	123.70
57	BB	2869	G	C5-C6-N1	-11.73	105.63	111.50
57	BB	262	A	C4-C5-C6	11.73	122.86	117.00
57	BB	1134	A	N1-C6-N6	11.73	125.64	118.60
57	BB	1297	C	C5-C6-N1	11.73	126.86	121.00
21	AA	1465	A	N1-C2-N3	11.72	135.16	129.30
57	BB	219	A	C4-C5-C6	11.72	122.86	117.00
57	BB	407	G	C5-C6-O6	-11.72	121.56	128.60
57	BB	1813	G	O4'-C1'-N9	11.72	117.58	108.20
22	AY	45	G	N1-C6-O6	11.72	126.93	119.90
58	BA	7	G	N1-C6-O6	11.72	126.93	119.90
58	BA	8	C	N3-C4-N4	11.72	126.20	118.00
57	BB	1158	C	O4'-C1'-N1	11.72	117.57	108.20
21	AA	524	G	C4-C5-C6	11.72	125.83	118.80
21	AA	1156	G	C5-C6-O6	-11.71	121.57	128.60
57	BB	432	A	O4'-C1'-N9	11.72	117.57	108.20
31	BL	60	ARG	NE-CZ-NH2	11.71	126.16	120.30
57	BB	1239	G	N9-C4-C5	11.71	110.09	105.40
57	BB	2778	A	C5-C6-N6	-11.71	114.33	123.70
21	AA	550	G	O4'-C1'-N9	11.71	117.57	108.20
21	AA	920	U	O4'-C1'-N1	11.71	117.57	108.20
57	BB	1200	C	N3-C4-C5	-11.71	117.22	121.90
57	BB	66	C	N3-C4-C5	-11.71	117.22	121.90
57	BB	1287	A	C5-N7-C8	11.71	109.75	103.90
21	AA	1140	C	O4'-C1'-N1	11.71	117.56	108.20
21	AA	1356	G	N1-C6-O6	11.71	126.92	119.90
57	BB	10	A	N1-C6-N6	11.70	125.62	118.60
57	BB	505	A	N1-C6-N6	11.70	125.62	118.60
57	BB	1403	A	C4-C5-C6	11.70	122.85	117.00
57	BB	262	A	O4'-C1'-N9	11.70	117.56	108.20
21	AA	1465	A	C4-C5-C6	11.70	122.85	117.00
57	BB	295	G	N1-C6-O6	11.70	126.92	119.90
21	AA	135	C	N3-C4-C5	-11.70	117.22	121.90
21	AA	196	A	N7-C8-N9	11.70	119.65	113.80
57	BB	1769	U	N3-C4-C5	-11.70	107.58	114.60
21	AA	519	C	O4'-C1'-N1	11.69	117.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1701	A	O4'-C1'-N9	11.70	117.56	108.20
57	BB	2589	A	O4'-C1'-N9	11.69	117.56	108.20
22	AY	41	U	O4'-C1'-N1	11.69	117.55	108.20
22	AY	46	G	C5-C6-O6	-11.69	121.58	128.60
57	BB	337	C	N3-C4-C5	-11.69	117.22	121.90
57	BB	402	A	N1-C2-N3	11.69	135.15	129.30
21	AA	1334	G	N1-C6-O6	11.69	126.91	119.90
23	AW	67	C	O4'-C1'-N1	11.69	117.55	108.20
57	BB	190	A	O4'-C1'-N9	11.69	117.55	108.20
57	BB	957	C	N3-C4-C5	-11.69	117.22	121.90
57	BB	1484	U	O4'-C1'-N1	11.69	117.55	108.20
57	BB	2371	G	N1-C6-O6	11.69	126.91	119.90
21	AA	601	G	N1-C6-O6	11.69	126.91	119.90
21	AA	1314	C	C6-N1-C2	-11.69	115.62	120.30
49	B2	3	ARG	NE-CZ-NH1	11.68	126.14	120.30
57	BB	163	C	C2-N1-C1'	11.68	131.65	118.80
57	BB	240	C	O4'-C1'-N1	11.68	117.55	108.20
57	BB	2468	A	C5-C6-N1	-11.68	111.86	117.70
58	BA	20	G	C5-C6-O6	-11.68	121.59	128.60
21	AA	1000	A	C8-N9-C4	-11.68	101.13	105.80
57	BB	1161	C	N3-C4-C5	-11.68	117.23	121.90
57	BB	1776	G	N3-C2-N2	11.68	128.07	119.90
57	BB	2114	A	C8-N9-C4	-11.67	101.13	105.80
21	AA	833	G	N1-C6-O6	11.67	126.90	119.90
26	AV	62	C	O4'-C1'-N1	11.67	117.54	108.20
57	BB	1151	A	N1-C6-N6	11.67	125.60	118.60
57	BB	2161	C	O4'-C1'-N1	11.67	117.53	108.20
21	AA	535	A	C4-C5-C6	11.67	122.83	117.00
21	AA	132	C	N3-C4-C5	-11.66	117.23	121.90
21	AA	461	A	N1-C6-N6	11.66	125.60	118.60
57	BB	2543	G	C5-C6-O6	-11.66	121.60	128.60
21	AA	226	G	N1-C2-N3	-11.66	116.90	123.90
21	AA	928	G	C5-C6-O6	-11.66	121.60	128.60
21	AA	539	A	N1-C6-N6	11.66	125.60	118.60
22	AY	5	A	C5-C6-N1	-11.66	111.87	117.70
57	BB	631	A	N1-C6-N6	11.66	125.60	118.60
57	BB	1760	C	C5-C6-N1	11.66	126.83	121.00
57	BB	905	A	N1-C6-N6	11.66	125.59	118.60
57	BB	1491	G	N1-C2-N3	-11.65	116.91	123.90
57	BB	2364	C	C5-C6-N1	-11.65	115.17	121.00
57	BB	2679	A	N1-C6-N6	11.65	125.59	118.60
58	BA	59	A	N9-C4-C5	11.65	110.46	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	794	A	N1-C6-N6	11.65	125.59	118.60
57	BB	130	C	O4'-C1'-N1	11.65	117.52	108.20
57	BB	204	A	C4-C5-C6	11.65	122.82	117.00
57	BB	407	G	O4'-C1'-N9	11.65	117.52	108.20
57	BB	855	G	N1-C2-N3	-11.65	116.91	123.90
57	BB	1635	A	C4-C5-C6	11.65	122.82	117.00
57	BB	184	C	N3-C4-C5	-11.64	117.24	121.90
21	AA	388	G	C6-C5-N7	-11.64	123.42	130.40
57	BB	2027	G	C5-C6-O6	-11.64	121.61	128.60
57	BB	2528	U	N3-C4-C5	-11.64	107.62	114.60
21	AA	1234	C	O4'-C1'-N1	11.63	117.51	108.20
57	BB	1874	C	N3-C4-C5	-11.64	117.25	121.90
57	BB	908	C	O4'-C1'-N1	11.63	117.51	108.20
21	AA	853	C	C6-N1-C2	-11.63	115.65	120.30
21	AA	189	A	C4-C5-C6	11.63	122.81	117.00
21	AA	1329	A	O4'-C1'-N9	11.63	117.50	108.20
57	BB	1527	G	C8-N9-C4	-11.63	101.75	106.40
57	BB	2789	C	O4'-C1'-N1	11.63	117.50	108.20
21	AA	984	C	N3-C4-C5	-11.63	117.25	121.90
21	AA	806	C	O4'-C1'-N1	11.63	117.50	108.20
57	BB	2635	A	C5-C6-N1	-11.63	111.89	117.70
57	BB	2853	C	N3-C4-N4	11.63	126.14	118.00
21	AA	338	A	C4-C5-C6	11.62	122.81	117.00
21	AA	388	G	C4-C5-C6	11.62	125.78	118.80
21	AA	1322	C	N3-C4-C5	-11.62	117.25	121.90
57	BB	298	G	N3-C2-N2	11.62	128.03	119.90
57	BB	429	A	C5-C6-N1	-11.62	111.89	117.70
57	BB	926	G	N1-C6-O6	11.62	126.87	119.90
57	BB	2213	U	P-O3'-C3'	11.62	133.64	119.70
57	BB	1849	G	N1-C6-O6	11.62	126.87	119.90
21	AA	202	G	C8-N9-C4	-11.62	101.75	106.40
21	AA	684	U	O4'-C1'-N1	11.62	117.49	108.20
57	BB	1878	G	N9-C4-C5	11.62	110.05	105.40
21	AA	657	U	C2-N3-C4	-11.61	120.03	127.00
57	BB	302	C	N3-C4-N4	11.61	126.13	118.00
57	BB	1895	C	O4'-C1'-N1	11.62	117.49	108.20
57	BB	2810	A	C2-N3-C4	-11.62	104.79	110.60
57	BB	2893	A	N1-C6-N6	11.62	125.57	118.60
21	AA	1181	G	C5-C6-O6	-11.61	121.63	128.60
57	BB	148	U	O4'-C1'-N1	11.61	117.49	108.20
57	BB	410	G	C5-C6-O6	-11.61	121.63	128.60
32	BM	38	ARG	NE-CZ-NH1	11.61	126.11	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	AX	16	A	C4-C5-C6	11.61	122.80	117.00
57	BB	228	C	N3-C4-N4	11.61	126.13	118.00
58	BA	14	U	C4-C5-C6	11.61	126.66	119.70
57	BB	1229	C	O4'-C1'-N1	11.60	117.48	108.20
57	BB	2589	A	N1-C6-N6	11.60	125.56	118.60
58	BA	58	A	C8-N9-C4	-11.60	101.16	105.80
57	BB	1425	G	O4'-C1'-N9	11.60	117.48	108.20
22	AY	4	G	C6-C5-N7	-11.60	123.44	130.40
21	AA	28	A	N1-C6-N6	11.60	125.56	118.60
21	AA	532	A	C4-C5-N7	-11.60	104.90	110.70
57	BB	2763	G	C5-C6-O6	-11.60	121.64	128.60
21	AA	1308	U	O4'-C1'-N1	11.59	117.47	108.20
23	AW	36	A	N9-C4-C5	11.59	110.44	105.80
57	BB	63	A	C5-C6-N6	-11.59	114.43	123.70
23	AW	30	G	C5-N7-C8	11.59	110.09	104.30
21	AA	1482	G	C5-C6-O6	-11.58	121.65	128.60
57	BB	1719	G	C8-N9-C4	-11.58	101.77	106.40
57	BB	1833	C	C2-N3-C4	11.58	125.69	119.90
57	BB	1653	G	C4-C5-N7	-11.58	106.17	110.80
57	BB	1753	G	O4'-C1'-N9	11.58	117.46	108.20
57	BB	2485	G	N1-C6-O6	11.58	126.85	119.90
21	AA	492	C	C2-N3-C4	11.57	125.69	119.90
22	AY	60	C	C6-N1-C2	-11.57	115.67	120.30
57	BB	791	C	C3'-C2'-C1'	-11.57	92.24	101.50
57	BB	1836	C	N3-C4-C5	-11.57	117.27	121.90
22	AY	1	G	C5-C6-O6	-11.57	121.66	128.60
57	BB	879	G	C4-C5-C6	11.57	125.74	118.80
57	BB	1721	G	N3-C2-N2	11.57	128.00	119.90
21	AA	1186	G	C2-N3-C4	11.57	117.68	111.90
4	AM	91	ARG	NE-CZ-NH1	11.56	126.08	120.30
57	BB	2666	C	C5-C4-N4	-11.56	112.11	120.20
21	AA	447	G	C5-C6-O6	-11.56	121.67	128.60
21	AA	1391	U	O4'-C1'-N1	11.56	117.45	108.20
57	BB	936	A	N1-C6-N6	11.56	125.53	118.60
57	BB	2053	G	N1-C6-O6	11.56	126.83	119.90
57	BB	997	G	O4'-C1'-N9	11.55	117.44	108.20
57	BB	1336	A	C5-C6-N1	-11.55	111.93	117.70
57	BB	2041	U	O4'-C1'-N1	11.55	117.44	108.20
21	AA	929	G	N1-C6-O6	11.54	126.83	119.90
21	AA	1055	A	C5-N7-C8	11.54	109.67	103.90
21	AA	1370	G	N3-C2-N2	11.54	127.98	119.90
33	BN	45	ARG	NE-CZ-NH1	-11.54	114.53	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1155	A	C8-N9-C4	-11.54	101.18	105.80
57	BB	1844	C	C2-N3-C4	-11.54	114.13	119.90
21	AA	941	G	C8-N9-C4	-11.54	101.78	106.40
21	AA	996	A	C5-C6-N1	-11.54	111.93	117.70
57	BB	1205	A	C4-C5-C6	11.54	122.77	117.00
21	AA	1474	U	O4'-C1'-N1	11.54	117.43	108.20
57	BB	923	G	N1-C6-O6	11.54	126.83	119.90
21	AA	1035	A	N3-C4-C5	-11.54	118.72	126.80
57	BB	1846	G	C5-C6-O6	-11.54	121.68	128.60
57	BB	177	G	C5-C6-N1	-11.54	105.73	111.50
57	BB	282	A	C4-C5-C6	11.54	122.77	117.00
57	BB	474	G	C5-C6-O6	-11.54	121.68	128.60
58	BA	35	C	N3-C4-C5	-11.54	117.28	121.90
21	AA	412	A	N1-C6-N6	11.54	125.52	118.60
21	AA	607	A	C5-C6-N1	-11.54	111.93	117.70
57	BB	1125	G	C5-C6-O6	-11.54	121.68	128.60
57	BB	2872	A	N1-C6-N6	11.54	125.52	118.60
21	AA	1458	G	N1-C6-O6	11.53	126.82	119.90
57	BB	2490	G	N1-C6-O6	11.53	126.82	119.90
26	AV	65	C	O4'-C1'-N1	11.53	117.43	108.20
21	AA	526	C	N3-C4-N4	11.53	126.07	118.00
57	BB	627	A	C5-C6-N6	-11.53	114.48	123.70
57	BB	777	G	C5-C6-O6	-11.53	121.68	128.60
21	AA	1274	A	N1-C6-N6	11.53	125.52	118.60
57	BB	2731	G	N1-C6-O6	11.53	126.82	119.90
21	AA	331	G	N1-C6-O6	11.52	126.81	119.90
21	AA	8	A	C5-C6-N6	-11.52	114.48	123.70
21	AA	398	U	O4'-C1'-N1	11.52	117.41	108.20
21	AA	1155	A	C5-N7-C8	11.52	109.66	103.90
57	BB	551	G	C2-N3-C4	-11.52	106.14	111.90
57	BB	1188	U	O4'-C1'-N1	11.52	117.42	108.20
36	BQ	100	PHE	CB-CG-CD1	-11.52	112.74	120.80
45	BC	213	ARG	NE-CZ-NH2	-11.52	114.54	120.30
57	BB	730	A	C5-N7-C8	11.52	109.66	103.90
57	BB	2726	A	N1-C6-N6	11.52	125.51	118.60
57	BB	918	A	N1-C6-N6	11.52	125.51	118.60
57	BB	281	C	N1-C2-O2	11.51	125.81	118.90
57	BB	2050	C	C5-C6-N1	11.51	126.76	121.00
21	AA	146	G	C5-C6-O6	-11.51	121.69	128.60
57	BB	1668	A	C5-C6-N6	-11.51	114.49	123.70
21	AA	459	A	C4-C5-C6	11.51	122.75	117.00
21	AA	1497	G	C5-C6-O6	-11.51	121.69	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	227	G	C5-C6-O6	-11.51	121.70	128.60
32	BM	55	ARG	NE-CZ-NH2	11.51	126.05	120.30
57	BB	1846	G	N1-C6-O6	11.51	126.81	119.90
57	BB	2145	C	P-O3'-C3'	11.51	133.51	119.70
21	AA	1211	U	N3-C4-O4	11.51	127.45	119.40
57	BB	57	C	O4'-C1'-N1	11.50	117.40	108.20
21	AA	207	C	C6-N1-C2	-11.50	115.70	120.30
55	BG	150	TYR	CB-CG-CD2	11.50	127.90	121.00
57	BB	249	C	N3-C4-N4	11.50	126.05	118.00
57	BB	735	A	C5-C6-N6	-11.50	114.50	123.70
21	AA	574	A	C5-C6-N6	-11.50	114.50	123.70
16	AE	44	ARG	NE-CZ-NH2	-11.50	114.55	120.30
21	AA	1482	G	N1-C2-N3	-11.50	117.00	123.90
21	AA	289	G	C6-C5-N7	-11.49	123.50	130.40
57	BB	1014	A	N1-C6-N6	11.49	125.50	118.60
57	BB	89	A	C5-C6-N1	-11.49	111.95	117.70
57	BB	2499	C	N3-C4-N4	11.49	126.04	118.00
22	AY	13	C	C5-C4-N4	-11.49	112.16	120.20
57	BB	1525	A	N1-C6-N6	11.49	125.49	118.60
21	AA	953	G	N1-C6-O6	11.48	126.79	119.90
21	AA	706	A	C5-C6-N1	-11.48	111.96	117.70
21	AA	709	U	O4'-C1'-N1	11.48	117.39	108.20
57	BB	101	A	C4-C5-C6	11.48	122.74	117.00
57	BB	504	A	C5-C6-N1	-11.48	111.96	117.70
21	AA	27	G	N1-C6-O6	11.48	126.79	119.90
57	BB	76	C	N3-C4-N4	11.48	126.03	118.00
57	BB	2055	C	O4'-C1'-N1	11.48	117.38	108.20
21	AA	1416	G	N1-C6-O6	11.47	126.78	119.90
57	BB	142	A	N1-C6-N6	11.47	125.48	118.60
57	BB	607	U	O4'-C1'-N1	11.47	117.38	108.20
21	AA	108	G	N1-C6-O6	11.47	126.78	119.90
21	AA	167	A	C6-N1-C2	-11.47	111.72	118.60
57	BB	992	C	O4'-C1'-N1	11.47	117.38	108.20
21	AA	1413	A	C5-C6-N1	-11.47	111.97	117.70
57	BB	219	A	C5-C6-N1	-11.47	111.97	117.70
57	BB	1564	C	O4'-C1'-N1	11.47	117.38	108.20
21	AA	201	G	C5-C6-O6	-11.47	121.72	128.60
21	AA	1175	G	C5-C6-O6	-11.47	121.72	128.60
55	BG	156	TYR	CB-CG-CD1	-11.47	114.12	121.00
21	AA	1032	G	N1-C6-O6	11.47	126.78	119.90
57	BB	718	A	N1-C6-N6	11.46	125.48	118.60
57	BB	1296	G	N3-C2-N2	11.46	127.92	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	351	C	O4'-C1'-N1	11.46	117.37	108.20
21	AA	389	A	N1-C6-N6	11.46	125.47	118.60
15	AD	12	ARG	NE-CZ-NH2	11.45	126.03	120.30
21	AA	300	A	N1-C6-N6	11.45	125.47	118.60
21	AA	423	G	N1-C6-O6	11.45	126.77	119.90
21	AA	1480	A	N1-C6-N6	11.45	125.47	118.60
57	BB	103	A	N1-C6-N6	11.45	125.47	118.60
57	BB	813	U	O4'-C1'-N1	11.45	117.36	108.20
57	BB	1854	A	N1-C6-N6	11.45	125.47	118.60
21	AA	681	A	N1-C6-N6	11.45	125.47	118.60
21	AA	1105	A	C4-C5-C6	11.45	122.72	117.00
21	AA	1248	A	C6-C5-N7	-11.45	124.29	132.30
57	BB	2315	G	N1-C6-O6	11.45	126.77	119.90
21	AA	1134	G	N1-C6-O6	11.45	126.77	119.90
26	AV	46	G	N1-C6-O6	11.44	126.77	119.90
40	BU	6	ARG	NE-CZ-NH1	-11.45	114.58	120.30
57	BB	2402	U	O4'-C1'-N1	11.45	117.36	108.20
21	AA	1423	G	N1-C6-O6	11.44	126.77	119.90
57	BB	297	G	N1-C6-O6	11.44	126.77	119.90
21	AA	718	A	C4-C5-C6	11.44	122.72	117.00
21	AA	866	C	N3-C4-N4	11.44	126.01	118.00
22	AY	60	C	C5-C6-N1	11.44	126.72	121.00
57	BB	2134	A	P-O3'-C3'	11.44	133.43	119.70
57	BB	2250	G	C5-N7-C8	11.44	110.02	104.30
21	AA	1423	G	C5-C6-O6	-11.44	121.74	128.60
21	AA	1441	A	N1-C6-N6	11.44	125.46	118.60
58	BA	2	G	OP1-P-OP2	-11.44	102.44	119.60
21	AA	477	C	O4'-C1'-N1	11.44	117.35	108.20
57	BB	2606	C	N3-C4-N4	11.44	126.00	118.00
57	BB	2751	G	C4-C5-N7	-11.44	106.23	110.80
57	BB	526	A	C5-C6-N6	-11.43	114.55	123.70
57	BB	70	G	C2-N3-C4	11.43	117.62	111.90
21	AA	171	A	C5-C6-N6	-11.43	114.56	123.70
57	BB	2478	A	C4-C5-C6	11.43	122.72	117.00
57	BB	927	A	C4-C5-C6	11.43	122.71	117.00
21	AA	52	C	N1-C2-O2	-11.43	112.04	118.90
57	BB	619	G	C4-C5-N7	-11.43	106.23	110.80
57	BB	125	A	N1-C6-N6	11.42	125.45	118.60
57	BB	1366	A	O4'-C1'-N9	11.42	117.34	108.20
21	AA	1043	G	N1-C6-O6	11.42	126.75	119.90
21	AA	856	C	O4'-C1'-N1	11.42	117.34	108.20
57	BB	776	G	O4'-C1'-N9	11.42	117.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1333	G	C5-C6-O6	-11.42	121.75	128.60
57	BB	1583	A	C5-C6-N1	-11.42	111.99	117.70
21	AA	573	A	C5-C6-N1	-11.42	111.99	117.70
21	AA	715	A	C4-C5-C6	11.42	122.71	117.00
57	BB	2400	G	C4-C5-N7	11.42	115.37	110.80
57	BB	2617	U	N3-C4-O4	11.42	127.39	119.40
57	BB	734	A	N1-C6-N6	11.41	125.45	118.60
57	BB	978	G	C5-C6-N1	-11.41	105.79	111.50
57	BB	1010	A	C8-N9-C4	11.41	110.36	105.80
57	BB	1568	G	O4'-C1'-N9	11.41	117.33	108.20
57	BB	2641	G	N1-C6-O6	11.41	126.75	119.90
21	AA	341	C	N3-C4-N4	11.41	125.99	118.00
21	AA	1463	U	C5-C4-O4	-11.41	119.06	125.90
57	BB	1085	A	C4-C5-C6	11.41	122.70	117.00
21	AA	248	C	C5-C6-N1	-11.40	115.30	121.00
57	BB	1862	G	C5-C6-O6	-11.40	121.76	128.60
57	BB	1676	A	N1-C6-N6	11.40	125.44	118.60
57	BB	1801	A	C6-N1-C2	-11.40	111.76	118.60
57	BB	1816	C	C5-C4-N4	-11.40	112.22	120.20
57	BB	2052	A	C5-N7-C8	11.40	109.60	103.90
23	AW	3	C	C5-C6-N1	11.40	126.70	121.00
23	AW	70	G	N7-C8-N9	11.40	118.80	113.10
57	BB	2046	G	C5-C6-O6	-11.40	121.76	128.60
57	BB	2850	A	O4'-C1'-N9	11.40	117.32	108.20
21	AA	456	A	O4'-C1'-N9	11.39	117.31	108.20
21	AA	1288	A	O4'-C1'-N9	11.39	117.32	108.20
21	AA	1496	C	C5-C4-N4	-11.39	112.22	120.20
57	BB	209	C	N3-C4-C5	-11.39	117.34	121.90
57	BB	2484	G	N1-C2-N3	-11.39	117.06	123.90
57	BB	2757	A	C4-C5-C6	11.39	122.70	117.00
21	AA	961	U	C2-N3-C4	-11.39	120.17	127.00
57	BB	1336	A	N1-C6-N6	11.39	125.43	118.60
57	BB	880	G	C6-C5-N7	-11.39	123.57	130.40
57	BB	1338	G	O4'-C1'-N9	11.39	117.31	108.20
57	BB	2509	G	C4-C5-N7	11.39	115.36	110.80
57	BB	2541	A	C8-N9-C4	-11.39	101.25	105.80
26	AV	69	C	O4'-C1'-N1	11.38	117.31	108.20
57	BB	313	G	N1-C6-O6	11.38	126.73	119.90
57	BB	1220	G	N1-C6-O6	11.38	126.73	119.90
21	AA	1002	G	C5-N7-C8	11.38	109.99	104.30
57	BB	1437	C	O4'-C1'-N1	11.38	117.30	108.20
21	AA	525	C	N3-C4-N4	11.38	125.96	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1929	G	C5-C6-O6	-11.38	121.77	128.60
57	BB	2345	G	N3-C4-C5	-11.38	122.91	128.60
21	AA	51	A	N1-C6-N6	11.37	125.42	118.60
57	BB	241	A	C5-C6-N1	-11.38	112.01	117.70
57	BB	1040	A	N1-C6-N6	11.37	125.42	118.60
57	BB	2038	G	C5-C6-O6	-11.37	121.78	128.60
57	BB	2863	C	N3-C4-N4	11.38	125.96	118.00
21	AA	156	C	N3-C4-C5	-11.37	117.35	121.90
21	AA	1246	A	O4'-C1'-N9	11.37	117.30	108.20
57	BB	2531	A	N1-C6-N6	11.37	125.42	118.60
57	BB	2626	C	O4'-C1'-N1	11.37	117.30	108.20
21	AA	770	C	O4'-C1'-N1	11.37	117.30	108.20
24	AX	12	A	N1-C6-N6	11.37	125.42	118.60
57	BB	770	G	C5-C6-O6	-11.37	121.78	128.60
57	BB	1334	G	N1-C6-O6	11.37	126.72	119.90
21	AA	79	G	N1-C6-O6	11.37	126.72	119.90
21	AA	109	A	C5-C6-N1	-11.37	112.02	117.70
21	AA	514	C	N3-C4-C5	-11.37	117.35	121.90
57	BB	2893	A	C4-C5-N7	-11.37	105.02	110.70
57	BB	2896	C	N3-C4-C5	-11.37	117.35	121.90
21	AA	704	A	C5-N7-C8	11.37	109.58	103.90
26	AV	14	A	C4-C5-C6	11.37	122.68	117.00
58	BA	84	G	C5-C6-O6	-11.37	121.78	128.60
21	AA	106	C	C6-N1-C2	-11.36	115.76	120.30
57	BB	551	G	C8-N9-C4	-11.36	101.86	106.40
22	AY	13	C	N3-C4-N4	11.36	125.95	118.00
57	BB	2753	A	C5-C6-N1	-11.36	112.02	117.70
21	AA	578	C	C5-C6-N1	11.36	126.68	121.00
26	AV	37	A	N1-C2-N3	11.36	134.98	129.30
57	BB	520	G	N7-C8-N9	-11.36	107.42	113.10
57	BB	725	G	C5-C6-N1	-11.35	105.82	111.50
57	BB	930	G	C5-C6-O6	-11.35	121.79	128.60
57	BB	1650	A	N1-C2-N3	11.35	134.98	129.30
57	BB	2411	A	C6-C5-N7	-11.35	124.35	132.30
21	AA	339	C	C6-N1-C2	-11.35	115.76	120.30
21	AA	1172	C	O4'-C1'-N1	11.35	117.28	108.20
57	BB	2772	C	O4'-C1'-N1	11.35	117.28	108.20
26	AV	67	C	O4'-C1'-N1	11.35	117.28	108.20
21	AA	622	A	N1-C2-N3	11.34	134.97	129.30
23	AW	75	C	N3-C4-C5	-11.34	117.36	121.90
57	BB	484	C	C6-N1-C2	11.34	124.83	120.30
57	BB	1220	G	O4'-C1'-N9	11.34	117.27	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	28	A	C5-C6-N1	-11.34	112.03	117.70
21	AA	48	C	C2-N3-C4	11.34	125.57	119.90
21	AA	468	A	C8-N9-C4	-11.34	101.27	105.80
57	BB	2560	A	O4'-C1'-N9	11.33	117.27	108.20
22	AY	17	U	N1-C2-N3	-11.33	108.10	114.90
57	BB	1652	A	C5-C6-N1	-11.33	112.03	117.70
53	BE	67	ARG	NE-CZ-NH2	-11.33	114.63	120.30
57	BB	308	G	C5-C6-O6	-11.33	121.80	128.60
57	BB	322	A	C5-C6-N6	-11.33	114.64	123.70
21	AA	1378	C	N3-C4-N4	11.33	125.93	118.00
57	BB	1027	A	N1-C6-N6	11.33	125.40	118.60
57	BB	2508	G	N1-C6-O6	11.33	126.70	119.90
21	AA	319	G	C5-C6-O6	-11.32	121.81	128.60
21	AA	617	G	N1-C6-O6	11.32	126.69	119.90
57	BB	500	G	C5-C6-O6	-11.32	121.81	128.60
57	BB	1393	A	C4-C5-C6	11.32	122.66	117.00
57	BB	1869	G	N1-C6-O6	11.32	126.69	119.90
22	AY	29	A	C8-N9-C4	-11.32	101.27	105.80
57	BB	644	A	C5-C6-N1	-11.32	112.04	117.70
57	BB	1332	G	N1-C6-O6	11.32	126.69	119.90
58	BA	3	C	C6-N1-C2	-11.32	115.77	120.30
57	BB	2792	A	N1-C6-N6	11.32	125.39	118.60
21	AA	777	A	C4-C5-C6	11.32	122.66	117.00
57	BB	862	G	C5-C6-O6	-11.32	121.81	128.60
57	BB	912	C	N3-C4-C5	-11.32	117.37	121.90
57	BB	2441	U	C5-C6-N1	11.32	128.36	122.70
21	AA	944	G	N1-C2-N3	-11.32	117.11	123.90
57	BB	2491	U	C5-C4-O4	-11.32	119.11	125.90
57	BB	239	C	N3-C4-N4	11.32	125.92	118.00
57	BB	955	U	O4'-C1'-N1	11.32	117.25	108.20
57	BB	1317	G	C5-N7-C8	11.32	109.96	104.30
21	AA	549	C	C2-N3-C4	11.32	125.56	119.90
57	BB	2470	G	N1-C6-O6	11.32	126.69	119.90
57	BB	1422	G	N1-C6-O6	11.31	126.69	119.90
57	BB	2894	G	P-O5'-C5'	11.31	139.00	120.90
21	AA	265	G	C5-C6-O6	-11.31	121.81	128.60
57	BB	1225	G	N1-C6-O6	11.31	126.68	119.90
57	BB	644	A	P-O3'-C3'	11.30	133.26	119.70
57	BB	645	C	O4'-C1'-N1	11.30	117.24	108.20
57	BB	1261	C	C2-N3-C4	11.30	125.55	119.90
57	BB	1678	A	C5-C6-N6	-11.30	114.66	123.70
21	AA	1519	A	N1-C6-N6	11.30	125.38	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2207	C	O4'-C1'-N1	11.30	117.24	108.20
21	AA	68	G	N1-C6-O6	11.30	126.68	119.90
57	BB	1163	G	C5-C6-N1	-11.30	105.85	111.50
57	BB	2309	A	C4-C5-C6	11.30	122.65	117.00
57	BB	453	A	O4'-C1'-N9	11.30	117.24	108.20
57	BB	916	G	C5-C6-O6	-11.30	121.82	128.60
57	BB	865	C	N3-C4-C5	-11.30	117.38	121.90
21	AA	1033	G	N1-C6-O6	11.29	126.68	119.90
57	BB	617	G	C5-C6-O6	-11.29	121.82	128.60
21	AA	158	G	C5-C6-O6	-11.29	121.83	128.60
57	BB	1603	A	N1-C2-N3	11.29	134.95	129.30
57	BB	1961	C	C5-C4-N4	-11.29	112.30	120.20
57	BB	1074	G	C5-C6-O6	-11.29	121.83	128.60
57	BB	1498	C	C2-N3-C4	11.29	125.55	119.90
21	AA	654	G	C5-C6-O6	-11.29	121.83	128.60
21	AA	227	G	N1-C6-O6	11.29	126.67	119.90
16	AE	127	TYR	CB-CG-CD1	-11.28	114.23	121.00
21	AA	877	G	O4'-C1'-N9	11.29	117.23	108.20
57	BB	531	C	O4'-C1'-N1	11.29	117.23	108.20
21	AA	924	C	C4-C5-C6	11.28	123.04	117.40
21	AA	1418	A	N1-C6-N6	11.28	125.37	118.60
57	BB	2472	G	C5-C6-O6	-11.28	121.83	128.60
57	BB	2335	A	C5-C6-N6	-11.28	114.67	123.70
21	AA	1326	U	O4'-C1'-N1	11.28	117.22	108.20
57	BB	777	G	C8-N9-C4	-11.28	101.89	106.40
21	AA	286	C	C4-C5-C6	-11.28	111.76	117.40
21	AA	1318	A	C4-C5-C6	11.28	122.64	117.00
23	AW	9	A	C6-C5-N7	-11.27	124.41	132.30
57	BB	2531	A	C5-N7-C8	11.27	109.54	103.90
57	BB	2124	G	C5-C6-O6	-11.27	121.84	128.60
34	BO	13	ARG	NE-CZ-NH2	11.27	125.93	120.30
57	BB	2060	A	N7-C8-N9	11.27	119.43	113.80
58	BA	73	A	C4-C5-C6	11.27	122.63	117.00
57	BB	1643	G	N1-C6-O6	11.27	126.66	119.90
21	AA	196	A	N1-C6-N6	11.26	125.36	118.60
21	AA	622	A	C5-C6-N1	-11.26	112.07	117.70
57	BB	787	C	O4'-C1'-N1	11.26	117.21	108.20
57	BB	1025	G	N1-C6-O6	11.26	126.66	119.90
57	BB	1343	G	O4'-C1'-N9	11.26	117.21	108.20
57	BB	2822	G	C4-C5-C6	11.26	125.56	118.80
58	BA	45	A	N1-C6-N6	11.26	125.36	118.60
21	AA	767	A	N1-C6-N6	11.26	125.35	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	622	G	N1-C6-O6	11.26	126.65	119.90
57	BB	770	G	N1-C6-O6	11.26	126.65	119.90
57	BB	1548	A	N1-C2-N3	11.26	134.93	129.30
23	AW	54	U	O4'-C1'-N1	11.26	117.20	108.20
57	BB	2389	G	C5-C6-N1	11.26	117.13	111.50
57	BB	2747	G	O4'-C1'-N9	11.25	117.20	108.20
57	BB	1994	C	N3-C4-N4	11.25	125.88	118.00
57	BB	1120	G	O4'-C1'-N9	11.25	117.20	108.20
57	BB	1974	C	N3-C4-N4	11.25	125.88	118.00
57	BB	2600	A	C5-C6-N6	-11.25	114.70	123.70
21	AA	1304	G	N1-C6-O6	11.25	126.65	119.90
57	BB	960	A	C8-N9-C4	-11.25	101.30	105.80
26	AV	6	G	N3-C2-N2	11.24	127.77	119.90
21	AA	279	A	N9-C4-C5	11.24	110.30	105.80
58	BA	27	C	C2-N3-C4	11.24	125.52	119.90
21	AA	279	A	P-O3'-C3'	11.24	133.19	119.70
22	AY	72	C	N3-C4-C5	-11.24	117.40	121.90
57	BB	243	U	O4'-C1'-N1	11.24	117.19	108.20
21	AA	616	G	N1-C6-O6	11.24	126.64	119.90
21	AA	1352	C	N3-C4-N4	11.24	125.87	118.00
57	BB	2231	U	O4'-C1'-N1	11.24	117.19	108.20
57	BB	774	G	N9-C4-C5	-11.23	100.91	105.40
57	BB	1462	C	O4'-C1'-N1	11.23	117.19	108.20
58	BA	39	A	N1-C6-N6	11.23	125.34	118.60
21	AA	199	A	N1-C6-N6	11.23	125.34	118.60
21	AA	109	A	C8-N9-C4	11.23	110.29	105.80
21	AA	494	G	C5-N7-C8	-11.22	98.69	104.30
57	BB	111	A	N1-C6-N6	11.22	125.33	118.60
21	AA	583	A	N1-C2-N3	11.22	134.91	129.30
57	BB	704	G	N1-C6-O6	11.22	126.63	119.90
21	AA	1139	G	C8-N9-C4	-11.22	101.91	106.40
57	BB	2100	G	N1-C6-O6	11.22	126.63	119.90
57	BB	848	C	N3-C4-N4	11.22	125.85	118.00
57	BB	1519	G	C5-C6-O6	-11.22	121.87	128.60
57	BB	2484	G	C5-C6-O6	-11.22	121.87	128.60
21	AA	40	C	N3-C4-C5	-11.22	117.41	121.90
57	BB	1616	A	C4-C5-C6	11.22	122.61	117.00
21	AA	702	A	C8-N9-C4	-11.21	101.31	105.80
57	BB	1677	A	C5-C6-N1	-11.21	112.09	117.70
57	BB	1776	G	C5-C6-O6	-11.21	121.87	128.60
21	AA	481	G	C5-C6-N1	-11.21	105.89	111.50
21	AA	487	A	C8-N9-C4	-11.21	101.32	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1327	A	C5-C6-N1	-11.21	112.09	117.70
21	AA	399	G	N7-C8-N9	-11.21	107.50	113.10
57	BB	1088	A	C5-C6-N1	-11.21	112.10	117.70
57	BB	496	G	N3-C4-C5	11.21	134.20	128.60
57	BB	1819	A	N1-C6-N6	11.20	125.32	118.60
21	AA	200	G	N1-C6-O6	11.20	126.62	119.90
21	AA	220	G	C8-N9-C4	-11.20	101.92	106.40
21	AA	765	G	C5-C6-O6	-11.20	121.88	128.60
57	BB	279	A	C8-N9-C4	-11.20	101.32	105.80
57	BB	44	A	N1-C6-N6	11.20	125.32	118.60
21	AA	37	U	O4'-C1'-N1	11.20	117.16	108.20
21	AA	934	C	N3-C4-N4	11.20	125.84	118.00
57	BB	890	C	P-O3'-C3'	11.20	133.13	119.70
11	AT	35	TYR	CB-CG-CD2	-11.19	114.28	121.00
57	BB	2748	A	N1-C6-N6	11.19	125.32	118.60
21	AA	1526	G	N7-C8-N9	-11.19	107.50	113.10
57	BB	2565	A	C5-C6-N6	-11.19	114.75	123.70
21	AA	247	G	C8-N9-C4	-11.19	101.92	106.40
57	BB	1	G	C2-N3-C4	11.19	117.50	111.90
57	BB	1909	C	N3-C4-N4	11.19	125.83	118.00
57	BB	2859	G	N1-C6-O6	11.19	126.61	119.90
21	AA	52	C	C2-N3-C4	11.19	125.49	119.90
57	BB	1564	C	N3-C4-N4	11.19	125.83	118.00
57	BB	1760	C	C2-N3-C4	11.19	125.49	119.90
57	BB	1966	A	C5-C6-N1	-11.19	112.11	117.70
57	BB	2526	G	N1-C6-O6	11.19	126.61	119.90
57	BB	2388	A	N1-C6-N6	11.19	125.31	118.60
21	AA	924	C	O4'-C1'-N1	11.18	117.15	108.20
21	AA	1065	U	C5-C4-O4	-11.18	119.19	125.90
57	BB	23	G	O4'-C1'-N9	11.18	117.15	108.20
57	BB	2544	G	N1-C6-O6	11.18	126.61	119.90
21	AA	634	C	C5-C4-N4	-11.18	112.37	120.20
21	AA	1146	A	N9-C4-C5	11.18	110.27	105.80
57	BB	2009	A	C5-C6-N1	-11.18	112.11	117.70
55	BG	108	PHE	CB-CG-CD1	-11.18	112.97	120.80
57	BB	657	U	N3-C4-O4	11.18	127.23	119.40
11	AT	28	ARG	NE-CZ-NH2	-11.18	114.71	120.30
21	AA	1105	A	C5-C6-N1	-11.18	112.11	117.70
57	BB	1321	A	C4-C5-C6	11.18	122.59	117.00
57	BB	2884	U	C5-C4-O4	-11.18	119.19	125.90
21	AA	453	G	C5-N7-C8	-11.18	98.71	104.30
26	AV	17(A)	U	N3-C2-O2	11.18	130.02	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2232	C	N3-C4-C5	-11.18	117.43	121.90
57	BB	864	G	C5-C6-N1	-11.18	105.91	111.50
57	BB	2236	U	O4'-C1'-N1	11.18	117.14	108.20
21	AA	532	A	C4-C5-C6	11.17	122.59	117.00
23	AW	26	A	C4-C5-C6	11.17	122.59	117.00
31	BL	126	ARG	NE-CZ-NH1	-11.17	114.71	120.30
57	BB	1026	G	O4'-C1'-N9	11.17	117.14	108.20
57	BB	1623	G	O4'-C1'-N9	11.17	117.14	108.20
58	BA	64	G	N1-C6-O6	11.17	126.60	119.90
57	BB	1867	G	N1-C2-N3	-11.17	117.20	123.90
57	BB	2053	G	C5-C6-O6	-11.17	121.90	128.60
57	BB	2755	C	N3-C4-N4	11.17	125.82	118.00
57	BB	89	A	C2-N3-C4	-11.16	105.02	110.60
57	BB	1404	C	O4'-C1'-N1	11.16	117.13	108.20
57	BB	1586	A	N1-C6-N6	11.16	125.30	118.60
57	BB	1680	U	O4'-C1'-N1	11.16	117.13	108.20
57	BB	2516	A	C5-C6-N6	-11.16	114.77	123.70
21	AA	233	C	N3-C4-C5	-11.16	117.44	121.90
21	AA	539	A	O4'-C1'-N9	11.16	117.13	108.20
21	AA	1069	C	O4'-C1'-N1	11.16	117.13	108.20
21	AA	1096	C	N3-C4-N4	11.16	125.81	118.00
57	BB	797	G	O4'-C1'-N9	11.16	117.13	108.20
57	BB	1109	C	O4'-C1'-N1	11.16	117.13	108.20
57	BB	2309	A	N1-C6-N6	11.16	125.30	118.60
57	BB	2503	A	N9-C4-C5	11.16	110.26	105.80
58	BA	21	G	C8-N9-C4	-11.16	101.94	106.40
5	AN	40	ARG	NE-CZ-NH1	11.16	125.88	120.30
21	AA	23	C	C5-C6-N1	11.16	126.58	121.00
21	AA	1020	G	C4-C5-N7	11.15	115.26	110.80
57	BB	471	A	C5-C6-N6	-11.15	114.78	123.70
57	BB	937	C	N1-C2-O2	-11.15	112.21	118.90
21	AA	1026	G	C5-C6-O6	-11.15	121.91	128.60
21	AA	1102	A	C8-N9-C4	-11.15	101.34	105.80
57	BB	622	G	C6-C5-N7	-11.15	123.71	130.40
57	BB	1553	A	C5-C6-N6	-11.15	114.78	123.70
57	BB	1745	A	C4-C5-C6	11.15	122.58	117.00
21	AA	382	A	C4-C5-C6	11.15	122.57	117.00
21	AA	993	G	N1-C6-O6	11.15	126.59	119.90
21	AA	1098	C	O4'-C1'-N1	11.15	117.12	108.20
22	AY	12	U	O4'-C1'-N1	11.15	117.12	108.20
23	AW	13	C	O4'-C1'-N1	11.15	117.12	108.20
57	BB	2143	C	O4'-C1'-N1	11.15	117.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	92	C	C5-C4-N4	-11.15	112.40	120.20
57	BB	2343	U	O4'-C1'-N1	11.15	117.12	108.20
21	AA	668	G	C4-C5-N7	-11.14	106.34	110.80
21	AA	1269	A	C5-C6-N6	-11.14	114.78	123.70
57	BB	175	G	O4'-C1'-N9	11.14	117.12	108.20
57	BB	643	A	O4'-C1'-N9	11.14	117.11	108.20
57	BB	466	A	N1-C6-N6	11.14	125.28	118.60
57	BB	1983	G	N1-C6-O6	11.14	126.58	119.90
12	AU	18	PHE	CB-CG-CD1	-11.14	113.00	120.80
21	AA	238	A	N1-C6-N6	11.14	125.28	118.60
43	BX	44	ARG	NE-CZ-NH1	11.14	125.87	120.30
21	AA	203	G	N3-C2-N2	11.14	127.69	119.90
57	BB	2119	A	C5-C6-N6	-11.14	114.79	123.70
57	BB	1266	G	C5-C6-O6	-11.13	121.92	128.60
57	BB	2787	C	O4'-C1'-N1	11.13	117.11	108.20
57	BB	1322	A	C4-C5-C6	11.13	122.57	117.00
21	AA	205	A	C5-N7-C8	11.13	109.47	103.90
21	AA	1028	C	N3-C4-N4	11.13	125.79	118.00
57	BB	898	C	N1-C2-O2	-11.13	112.22	118.90
57	BB	2044	C	O4'-C1'-N1	11.13	117.10	108.20
57	BB	2660	A	C5-C6-N6	-11.13	114.80	123.70
22	AY	20	G	N7-C8-N9	11.13	118.67	113.10
26	AV	75	C	N3-C4-N4	11.13	125.79	118.00
57	BB	2512	C	N3-C4-N4	11.13	125.79	118.00
57	BB	2470	G	C2-N3-C4	11.13	117.46	111.90
21	AA	1104	G	N1-C2-N3	-11.12	117.23	123.90
21	AA	1378	C	N3-C4-C5	-11.12	117.45	121.90
21	AA	767	A	N9-C4-C5	11.12	110.25	105.80
21	AA	1446	A	N1-C6-N6	11.12	125.27	118.60
22	AY	74	C	C2-N3-C4	-11.12	114.34	119.90
57	BB	541	A	N1-C6-N6	11.12	125.27	118.60
57	BB	1395	A	C5-C6-N1	-11.12	112.14	117.70
21	AA	341	C	N3-C4-C5	-11.12	117.45	121.90
57	BB	282	A	C5-C6-N1	-11.12	112.14	117.70
57	BB	644	A	N3-C4-C5	-11.12	119.02	126.80
57	BB	1370	C	N3-C4-N4	11.12	125.78	118.00
57	BB	2596	U	C2-N3-C4	-11.12	120.33	127.00
21	AA	18	C	C4-C5-C6	11.11	122.96	117.40
21	AA	76	G	N1-C6-O6	11.11	126.57	119.90
21	AA	1228	C	C5-C6-N1	11.12	126.56	121.00
26	AV	19	G	C4-C5-N7	-11.12	106.35	110.80
57	BB	722	A	C5-C6-N6	-11.12	114.81	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	705	A	O4'-C1'-N9	11.11	117.09	108.20
57	BB	1164	C	C4-C5-C6	11.11	122.95	117.40
57	BB	1509	A	C5-C6-N6	-11.11	114.81	123.70
57	BB	2002	G	N1-C6-O6	11.11	126.57	119.90
21	AA	188	C	O4'-C1'-N1	11.11	117.09	108.20
21	AA	623	C	O4'-C1'-N1	11.11	117.09	108.20
57	BB	1998	A	N3-C4-C5	-11.11	119.02	126.80
21	AA	121	U	O4'-C1'-N1	11.11	117.09	108.20
57	BB	165	A	C5-C6-N6	-11.11	114.82	123.70
57	BB	972	A	O4'-C1'-N9	11.11	117.08	108.20
57	BB	1171	G	N1-C6-O6	11.11	126.56	119.90
23	AW	60	U	N3-C4-O4	11.10	127.17	119.40
32	BM	51	ARG	NE-CZ-NH1	11.10	125.85	120.30
57	BB	1036	G	N1-C2-N3	-11.10	117.24	123.90
21	AA	465	A	P-O3'-C3'	11.10	133.02	119.70
57	BB	1572	A	C8-N9-C4	-11.10	101.36	105.80
57	BB	1882	U	O4'-C1'-N1	11.10	117.08	108.20
58	BA	84	G	N1-C2-N3	-11.10	117.24	123.90
21	AA	163	C	O4'-C1'-N1	11.10	117.08	108.20
25	AZ	204	ARG	NE-CZ-NH2	-11.10	114.75	120.30
57	BB	998	C	O4'-C1'-N1	11.10	117.08	108.20
57	BB	2615	U	O4'-C1'-N1	11.10	117.08	108.20
22	AY	51	G	C5-C6-O6	-11.09	121.94	128.60
37	BR	90	ARG	NE-CZ-NH1	11.09	125.85	120.30
21	AA	678	U	N3-C4-O4	11.09	127.16	119.40
21	AA	1158	C	N3-C4-C5	-11.09	117.46	121.90
57	BB	1091	G	O4'-C1'-N9	11.09	117.07	108.20
57	BB	1145	C	C5-C6-N1	11.09	126.55	121.00
57	BB	1088	A	C5-N7-C8	11.09	109.44	103.90
57	BB	1395	A	N1-C6-N6	11.09	125.25	118.60
57	BB	2661	G	C5-C6-O6	-11.09	121.95	128.60
57	BB	877	A	O4'-C1'-N9	11.09	117.07	108.20
57	BB	1162	G	C5-C6-O6	-11.08	121.95	128.60
21	AA	192	A	N1-C6-N6	11.08	125.25	118.60
21	AA	1361	G	N1-C6-O6	11.08	126.55	119.90
21	AA	566	G	N1-C6-O6	11.08	126.55	119.90
23	AW	36	A	C4-C5-N7	-11.08	105.16	110.70
49	B2	3	ARG	NE-CZ-NH2	-11.08	114.76	120.30
57	BB	1403	A	N1-C6-N6	11.08	125.25	118.60
58	BA	57	A	C5-C6-N1	-11.08	112.16	117.70
57	BB	402	A	C8-N9-C4	-11.08	101.37	105.80
57	BB	1627	G	C8-N9-C4	-11.08	101.97	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1100	C	N3-C4-C5	-11.07	117.47	121.90
57	BB	1448	G	N9-C4-C5	11.07	109.83	105.40
21	AA	101	A	N1-C6-N6	11.07	125.24	118.60
21	AA	144	G	C6-N1-C2	-11.07	118.46	125.10
57	BB	246	C	N3-C4-N4	11.07	125.75	118.00
57	BB	2365	G	O4'-C1'-N9	11.07	117.06	108.20
21	AA	584	G	C5-C6-O6	-11.07	121.96	128.60
57	BB	1032	A	N1-C6-N6	11.07	125.24	118.60
57	BB	1624	U	O4'-C1'-N1	11.07	117.06	108.20
57	BB	2575	C	N3-C4-N4	11.07	125.75	118.00
58	BA	4	C	O4'-C1'-N1	11.07	117.06	108.20
58	BA	59	A	C4-C5-C6	11.07	122.53	117.00
57	BB	690	G	O4'-C1'-N9	11.07	117.05	108.20
21	AA	165	G	C5-N7-C8	11.06	109.83	104.30
57	BB	974	G	C4-C5-C6	11.06	125.44	118.80
57	BB	1496	A	C8-N9-C4	-11.06	101.38	105.80
57	BB	1999	C	C5-C4-N4	-11.06	112.46	120.20
58	BA	29	A	O4'-C1'-N9	11.06	117.05	108.20
57	BB	2025	C	N3-C4-N4	11.06	125.74	118.00
57	BB	1104	C	C5-C4-N4	-11.06	112.46	120.20
57	BB	1887	C	O4'-C1'-N1	11.06	117.05	108.20
21	AA	776	G	O4'-C1'-N9	11.05	117.04	108.20
57	BB	716	A	C8-N9-C4	-11.06	101.38	105.80
43	BX	49	ARG	NE-CZ-NH1	11.05	125.83	120.30
57	BB	1501	G	N1-C6-O6	11.05	126.53	119.90
57	BB	859	G	C2-N3-C4	11.05	117.43	111.90
21	AA	338	A	N1-C2-N3	11.05	134.82	129.30
21	AA	1214	C	N3-C4-N4	11.05	125.73	118.00
21	AA	1507	A	C2-N3-C4	-11.05	105.07	110.60
26	AV	29	G	C5-C6-O6	-11.05	121.97	128.60
57	BB	1745	A	C5-C6-N1	-11.05	112.17	117.70
57	BB	2150	C	C6-N1-C2	-11.05	115.88	120.30
57	BB	1431	A	O4'-C1'-N9	11.05	117.04	108.20
57	BB	1742	U	N3-C4-O4	11.05	127.13	119.40
57	BB	2763	G	N1-C6-O6	11.05	126.53	119.90
21	AA	198	G	N1-C6-O6	11.04	126.53	119.90
21	AA	772	U	O4'-C1'-N1	11.04	117.04	108.20
21	AA	1358	U	C5-C4-O4	-11.05	119.27	125.90
57	BB	515	A	N7-C8-N9	-11.04	108.28	113.80
57	BB	983	A	C5-C6-N6	-11.04	114.86	123.70
57	BB	189	G	C5-C6-O6	-11.04	121.97	128.60
57	BB	1920	C	C4-C5-C6	11.04	122.92	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2053	G	N3-C2-N2	11.04	127.63	119.90
58	BA	41	G	N1-C6-O6	11.04	126.53	119.90
57	BB	609	A	C4-C5-C6	11.04	122.52	117.00
58	BA	35	C	C2-N3-C4	11.04	125.42	119.90
21	AA	597	G	C5-C6-O6	-11.04	121.98	128.60
22	AY	15	G	N9-C4-C5	-11.04	100.98	105.40
57	BB	1764	C	N3-C4-N4	11.04	125.73	118.00
57	BB	2226	C	N3-C4-N4	11.04	125.73	118.00
57	BB	473	G	N1-C6-O6	11.04	126.52	119.90
57	BB	763	G	C5-C6-N1	-11.04	105.98	111.50
57	BB	925	A	C5-C6-N6	-11.04	114.87	123.70
57	BB	1421	G	C2-N3-C4	11.04	117.42	111.90
57	BB	1644	C	N3-C4-C5	-11.04	117.49	121.90
57	BB	2289	G	N1-C6-O6	11.03	126.52	119.90
57	BB	2390	U	O4'-C1'-N1	11.03	117.03	108.20
21	AA	1285	A	C5-C6-N6	-11.03	114.87	123.70
57	BB	2753	A	C8-N9-C4	-11.03	101.39	105.80
33	BN	4	ARG	NE-CZ-NH1	11.03	125.81	120.30
57	BB	272	A	C5-C6-N1	-11.03	112.19	117.70
57	BB	614	A	N1-C2-N3	11.03	134.81	129.30
57	BB	2084	C	C6-N1-C2	-11.03	115.89	120.30
21	AA	865	A	N1-C6-N6	11.02	125.21	118.60
57	BB	1042	G	O4'-C1'-N9	11.02	117.02	108.20
57	BB	2270	A	N1-C6-N6	11.02	125.21	118.60
21	AA	781	A	N1-C6-N6	11.02	125.21	118.60
57	BB	1388	G	C6-C5-N7	-11.02	123.79	130.40
21	AA	1103	C	N3-C4-N4	11.02	125.71	118.00
57	BB	897	C	O4'-C1'-N1	11.02	117.02	108.20
57	BB	2342	C	C6-N1-C2	-11.02	115.89	120.30
57	BB	1264	A	N1-C6-N6	11.02	125.21	118.60
57	BB	1273	U	C5-C6-N1	-11.01	117.19	122.70
57	BB	1464	G	C6-C5-N7	-11.01	123.79	130.40
57	BB	2549	G	C5-C6-O6	-11.01	121.99	128.60
21	AA	265	G	N1-C6-O6	11.01	126.50	119.90
21	AA	329	A	N1-C6-N6	11.01	125.21	118.60
21	AA	369	G	N1-C6-O6	11.01	126.51	119.90
57	BB	2619	C	C2-N3-C4	11.01	125.41	119.90
21	AA	629	A	C4-C5-C6	11.01	122.50	117.00
21	AA	1265	C	O4'-C1'-N1	11.01	117.00	108.20
57	BB	447	A	C8-N9-C4	-11.01	101.40	105.80
57	BB	2433	A	C5-C6-N1	-11.01	112.20	117.70
58	BA	98	G	C5-C6-O6	-11.01	122.00	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	12	C	N3-C4-N4	11.01	125.70	118.00
21	AA	650	G	N1-C6-O6	11.00	126.50	119.90
57	BB	2753	A	C4-C5-N7	-11.00	105.20	110.70
21	AA	432	A	C4-C5-C6	11.00	122.50	117.00
57	BB	236	C	C5-C4-N4	-11.00	112.50	120.20
57	BB	607	U	N1-C2-N3	11.00	121.50	114.90
57	BB	640	C	O4'-C1'-N1	11.00	117.00	108.20
57	BB	1187	G	C6-C5-N7	-11.00	123.80	130.40
21	AA	1530	G	C5-C6-O6	-11.00	122.00	128.60
21	AA	1435	G	N1-C2-N3	-11.00	117.30	123.90
57	BB	568	U	C5-C4-O4	-11.00	119.30	125.90
57	BB	1702	G	N1-C6-O6	11.00	126.50	119.90
21	AA	81	A	C4-C5-C6	10.99	122.50	117.00
21	AA	424	G	C5-C6-O6	-10.99	122.00	128.60
25	AZ	262	ARG	NE-CZ-NH1	10.99	125.80	120.30
57	BB	2641	G	C4-C5-C6	10.99	125.40	118.80
57	BB	354	A	N1-C6-N6	10.99	125.20	118.60
57	BB	1307	A	N9-C4-C5	-10.99	101.40	105.80
57	BB	1614	A	C5-C6-N6	-10.99	114.90	123.70
57	BB	2772	C	N3-C4-C5	-10.99	117.50	121.90
21	AA	1215	G	C8-N9-C4	-10.99	102.00	106.40
57	BB	240	C	N3-C4-N4	10.99	125.69	118.00
57	BB	2691	C	N3-C4-C5	10.99	126.30	121.90
21	AA	1455	G	N1-C6-O6	10.98	126.49	119.90
57	BB	1886	U	N3-C4-O4	10.98	127.09	119.40
58	BA	20	G	N1-C6-O6	10.98	126.49	119.90
23	AW	25	C	N3-C4-N4	10.98	125.69	118.00
57	BB	265	A	N3-C4-C5	10.98	134.49	126.80
57	BB	877	A	C4-C5-C6	10.98	122.49	117.00
57	BB	235	U	O4'-C1'-N1	10.98	116.99	108.20
21	AA	43	C	C6-N1-C2	-10.98	115.91	120.30
21	AA	1093	A	O4'-C1'-N9	10.98	116.98	108.20
21	AA	1166	G	N3-C2-N2	10.98	127.58	119.90
21	AA	1187	G	C5-C6-O6	-10.98	122.01	128.60
57	BB	899	A	N1-C6-N6	10.98	125.19	118.60
21	AA	7	A	N7-C8-N9	10.97	119.29	113.80
21	AA	532	A	C5-N7-C8	10.97	109.39	103.90
22	AY	1	G	N1-C6-O6	10.97	126.48	119.90
57	BB	1655	A	C5-C6-N1	-10.97	112.21	117.70
57	BB	2650	U	C5-C6-N1	10.97	128.19	122.70
57	BB	23	G	N7-C8-N9	10.97	118.58	113.10
57	BB	196	A	C5-C6-N1	-10.97	112.21	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	211	C	O4'-C1'-N1	10.97	116.98	108.20
57	BB	2509	G	C5-C6-O6	-10.97	122.02	128.60
57	BB	347	A	N3-C4-C5	-10.97	119.12	126.80
21	AA	471	U	O4'-C1'-N1	10.97	116.97	108.20
26	AV	32	C	N3-C4-C5	-10.96	117.51	121.90
57	BB	2809	A	N1-C6-N6	10.97	125.18	118.60
57	BB	379	G	O4'-C1'-N9	10.96	116.97	108.20
57	BB	1133	A	C5-C6-N1	-10.96	112.22	117.70
21	AA	1375	A	C5-C6-N1	-10.96	112.22	117.70
22	AY	45	G	C5-C6-O6	-10.96	122.02	128.60
57	BB	1367	A	N1-C2-N3	10.96	134.78	129.30
21	AA	691	G	N3-C2-N2	10.96	127.57	119.90
57	BB	553	G	C5-C6-O6	-10.96	122.03	128.60
21	AA	1051	C	O4'-C1'-N1	10.95	116.96	108.20
57	BB	330	A	C4-C5-C6	10.95	122.48	117.00
57	BB	767	U	N3-C2-O2	10.96	129.87	122.20
57	BB	2853	C	C2-N3-C4	10.96	125.38	119.90
58	BA	13	G	O4'-C1'-N9	10.95	116.96	108.20
21	AA	161	A	N1-C6-N6	10.95	125.17	118.60
57	BB	1706	C	C6-N1-C2	-10.95	115.92	120.30
57	BB	2461	A	N1-C6-N6	10.95	125.17	118.60
57	BB	2477	U	O4'-C1'-N1	10.95	116.96	108.20
21	AA	334	C	C5-C6-N1	10.95	126.47	121.00
26	AV	20	U	N3-C4-O4	10.95	127.06	119.40
57	BB	299	A	C5-C6-N1	-10.95	112.23	117.70
57	BB	2466	C	C4-C5-C6	10.95	122.87	117.40
57	BB	2839	G	N1-C2-N3	-10.95	117.33	123.90
57	BB	1727	C	C4-C5-C6	-10.95	111.93	117.40
21	AA	949	A	C5-N7-C8	10.95	109.37	103.90
21	AA	1417	G	C5-N7-C8	10.95	109.77	104.30
57	BB	1309	G	O4'-C1'-N9	10.95	116.96	108.20
57	BB	2188	U	O4'-C1'-N1	10.95	116.96	108.20
21	AA	286	C	N1-C2-O2	-10.94	112.33	118.90
57	BB	1463	C	O4'-C1'-N1	10.94	116.95	108.20
21	AA	1011	C	O4'-C1'-N1	10.94	116.95	108.20
57	BB	409	G	N1-C6-O6	10.94	126.47	119.90
57	BB	2139	U	C5-C4-O4	-10.94	119.34	125.90
22	AY	66	A	N1-C2-N3	10.94	134.77	129.30
57	BB	1496	A	N1-C6-N6	10.94	125.16	118.60
57	BB	2364	C	C4-C5-C6	10.94	122.87	117.40
21	AA	1531	A	C5-C6-N6	-10.94	114.95	123.70
57	BB	2625	G	N1-C6-O6	10.94	126.46	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	18	G	O4'-C1'-N9	10.93	116.95	108.20
21	AA	834	U	O4'-C1'-N1	10.93	116.94	108.20
57	BB	1413	A	C4-C5-C6	10.93	122.47	117.00
57	BB	1727	C	C6-N1-C2	-10.93	115.93	120.30
57	BB	1746	A	N1-C6-N6	10.93	125.16	118.60
21	AA	384	G	N1-C6-O6	10.93	126.45	119.90
57	BB	1440	U	O4'-C1'-N1	10.93	116.94	108.20
57	BB	1789	A	N9-C4-C5	-10.93	101.43	105.80
57	BB	2333	A	P-O3'-C3'	10.93	132.81	119.70
58	BA	45	A	C2-N3-C4	-10.93	105.14	110.60
21	AA	847	G	N1-C2-N3	-10.92	117.34	123.90
21	AA	1152	A	C5-C6-N1	-10.92	112.24	117.70
57	BB	435	C	C5-C4-N4	-10.92	112.55	120.20
57	BB	2608	G	C4-C5-N7	-10.92	106.43	110.80
21	AA	1001	C	C2-N3-C4	10.92	125.36	119.90
57	BB	32	C	O4'-C1'-N1	10.92	116.94	108.20
21	AA	667	G	O4'-C1'-N9	10.92	116.94	108.20
21	AA	783	C	N3-C4-C5	-10.92	117.53	121.90
57	BB	1369	G	C5-C6-O6	-10.92	122.05	128.60
57	BB	1928	A	C4-C5-C6	10.92	122.46	117.00
21	AA	178	C	C6-N1-C2	10.92	124.67	120.30
57	BB	905	A	C4-C5-C6	10.92	122.46	117.00
57	BB	2450	A	C8-N9-C4	-10.92	101.43	105.80
21	AA	149	A	C4-C5-C6	10.91	122.46	117.00
57	BB	2436	G	N1-C2-N3	-10.91	117.35	123.90
21	AA	578	C	N3-C4-N4	10.91	125.64	118.00
21	AA	1209	C	N3-C4-N4	10.91	125.64	118.00
21	AA	1392	G	C5-C6-O6	-10.91	122.06	128.60
57	BB	132	G	N1-C6-O6	10.91	126.44	119.90
57	BB	597	G	C5-C6-N1	-10.91	106.05	111.50
57	BB	2380	C	O4'-C1'-N1	10.91	116.93	108.20
57	BB	246	C	N3-C4-C5	-10.90	117.54	121.90
57	BB	549	G	N1-C6-O6	10.90	126.44	119.90
57	BB	1087	G	N1-C6-O6	10.90	126.44	119.90
57	BB	2369	A	C4-C5-C6	10.90	122.45	117.00
58	BA	47	C	C6-N1-C2	-10.90	115.94	120.30
22	AY	22	G	N1-C6-O6	10.90	126.44	119.90
57	BB	393	C	O4'-C1'-N1	10.90	116.92	108.20
57	BB	2649	C	O4'-C1'-N1	10.90	116.92	108.20
21	AA	1510	C	O4'-C1'-N1	10.89	116.92	108.20
57	BB	2631	G	N1-C6-O6	10.89	126.44	119.90
57	BB	1128	G	O4'-C1'-N9	10.89	116.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1236	G	N1-C2-N3	-10.89	117.36	123.90
57	BB	881	G	N3-C2-N2	10.89	127.52	119.90
57	BB	1906	G	C8-N9-C4	-10.89	102.04	106.40
57	BB	2021	C	N3-C4-C5	-10.89	117.55	121.90
21	AA	1016	A	C4-C5-C6	10.88	122.44	117.00
57	BB	2466	C	C6-N1-C2	-10.89	115.95	120.30
57	BB	2668	G	C4-C5-C6	10.89	125.33	118.80
57	BB	92	U	O4'-C1'-N1	10.88	116.91	108.20
57	BB	2049	G	O4'-C1'-N9	10.88	116.91	108.20
57	BB	2352	A	N9-C4-C5	-10.88	101.45	105.80
57	BB	1592	C	N3-C4-N4	10.88	125.62	118.00
57	BB	1706	C	C5-C6-N1	10.88	126.44	121.00
57	BB	2412	A	C5-C6-N6	-10.88	114.99	123.70
57	BB	2754	U	O4'-C1'-N1	10.88	116.90	108.20
57	BB	714	U	N3-C4-C5	-10.88	108.07	114.60
57	BB	726	G	C5-C6-O6	-10.88	122.07	128.60
57	BB	1211	C	P-O3'-C3'	10.88	132.75	119.70
57	BB	1783	A	C5-C6-N1	-10.88	112.26	117.70
57	BB	1998	A	C5-C6-N1	-10.88	112.26	117.70
21	AA	615	G	N1-C6-O6	10.88	126.42	119.90
26	AV	42	G	C6-N1-C2	-10.88	118.57	125.10
57	BB	910	A	N1-C6-N6	10.88	125.12	118.60
20	AI	48	ARG	NE-CZ-NH1	10.87	125.74	120.30
21	AA	230	G	O4'-C1'-N9	10.87	116.90	108.20
57	BB	2008	C	N3-C4-C5	-10.87	117.55	121.90
57	BB	2233	U	N3-C4-O4	10.88	127.01	119.40
57	BB	2582	G	C3'-C2'-C1'	-10.88	92.80	101.50
21	AA	1082	A	C4-C5-C6	10.87	122.44	117.00
21	AA	1249	C	N3-C4-C5	10.87	126.25	121.90
57	BB	6	A	O4'-C1'-N9	10.87	116.90	108.20
57	BB	946	C	N3-C4-C5	-10.87	117.55	121.90
21	AA	969	A	N1-C6-N6	10.87	125.12	118.60
26	AV	13	C	O4'-C1'-N1	10.87	116.90	108.20
21	AA	1105	A	O4'-C1'-N9	10.87	116.89	108.20
57	BB	2489	U	O4'-C1'-N1	10.87	116.89	108.20
21	AA	583	A	N1-C6-N6	10.86	125.12	118.60
57	BB	1701	A	C5-C6-N1	-10.86	112.27	117.70
57	BB	2414	G	C5-C6-O6	-10.86	122.08	128.60
57	BB	2759	G	C5-C6-O6	-10.86	122.08	128.60
57	BB	2808	G	C8-N9-C4	10.86	110.75	106.40
21	AA	433	G	C5-C6-O6	-10.86	122.08	128.60
57	BB	1579	A	C5-C6-N6	-10.86	115.01	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	643	C	C6-N1-C2	-10.86	115.96	120.30
21	AA	922	G	N1-C6-O6	10.86	126.41	119.90
21	AA	542	G	C4-C5-N7	-10.85	106.46	110.80
57	BB	1146	C	O4'-C1'-N1	10.85	116.88	108.20
57	BB	2322	A	C4-C5-N7	10.85	116.13	110.70
18	AG	118	ARG	NE-CZ-NH1	10.85	125.72	120.30
57	BB	178	G	C5-C6-O6	-10.85	122.09	128.60
57	BB	1206	G	N1-C6-O6	10.85	126.41	119.90
57	BB	1669	A	C8-N9-C4	-10.85	101.46	105.80
21	AA	678	U	O4'-C1'-N1	10.85	116.88	108.20
57	BB	1453	A	C5-C6-N1	-10.85	112.28	117.70
57	BB	2876	G	C6-C5-N7	-10.85	123.89	130.40
21	AA	319	G	O4'-C1'-N9	10.84	116.88	108.20
57	BB	213	A	C4-C5-N7	-10.84	105.28	110.70
57	BB	1239	G	C4-C5-C6	10.84	125.31	118.80
57	BB	43	G	N1-C6-O6	10.84	126.41	119.90
42	BW	54	ARG	NE-CZ-NH2	-10.84	114.88	120.30
57	BB	615	U	O4'-C1'-N1	10.84	116.87	108.20
57	BB	2540	C	O4'-C1'-N1	10.84	116.87	108.20
57	BB	2700	A	O4'-C1'-N9	10.84	116.87	108.20
21	AA	1186	G	C4-C5-N7	10.83	115.13	110.80
57	BB	616	A	N1-C6-N6	10.83	125.10	118.60
57	BB	2882	A	O4'-C1'-N9	10.83	116.87	108.20
21	AA	159	G	C5-C6-O6	-10.83	122.10	128.60
57	BB	640	C	C5-C4-N4	-10.83	112.62	120.20
57	BB	724	U	O4'-C1'-N1	10.83	116.86	108.20
21	AA	1131	G	N1-C2-N3	-10.83	117.40	123.90
57	BB	1369	G	N1-C6-O6	10.83	126.40	119.90
39	BT	69	ARG	NE-CZ-NH1	10.83	125.71	120.30
57	BB	69	C	O4'-C1'-N1	10.83	116.86	108.20
57	BB	181	A	C8-N9-C4	-10.83	101.47	105.80
57	BB	66	C	C2-N3-C4	10.82	125.31	119.90
57	BB	654	A	N1-C2-N3	10.82	134.71	129.30
57	BB	1776	G	N1-C6-O6	10.82	126.39	119.90
21	AA	197	A	C5-C6-N6	-10.82	115.04	123.70
21	AA	203	G	N1-C2-N3	-10.82	117.41	123.90
57	BB	412	A	N1-C6-N6	10.82	125.09	118.60
21	AA	492	C	N3-C4-C5	-10.82	117.57	121.90
21	AA	751	U	O4'-C1'-N1	10.82	116.86	108.20
21	AA	1151	A	C5-C6-N1	-10.82	112.29	117.70
21	AA	971	G	C5-C6-O6	-10.82	122.11	128.60
22	AY	12	U	C4'-C3'-C2'	-10.82	91.78	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	14	A	C8-N9-C4	-10.82	101.47	105.80
23	AW	10	G	C6-C5-N7	-10.82	123.91	130.40
57	BB	776	G	C5-C6-O6	-10.82	122.11	128.60
21	AA	18	C	N3-C4-C5	-10.82	117.57	121.90
57	BB	2324	U	C5-C6-N1	10.82	128.11	122.70
21	AA	563	A	C5-N7-C8	10.81	109.31	103.90
21	AA	1019	A	C8-N9-C4	-10.81	101.47	105.80
21	AA	1040	U	O4'-C1'-N1	10.81	116.85	108.20
21	AA	1117	A	C4-C5-C6	10.81	122.41	117.00
57	BB	1572	A	N1-C6-N6	10.81	125.09	118.60
21	AA	366	A	P-O3'-C3'	10.81	132.68	119.70
21	AA	1475	G	C5-C6-O6	-10.81	122.11	128.60
57	BB	401	A	N1-C6-N6	10.81	125.09	118.60
57	BB	2733	A	C5-C6-N1	-10.81	112.29	117.70
57	BB	1883	U	N3-C4-O4	10.81	126.97	119.40
21	AA	6	G	N3-C4-C5	-10.81	123.20	128.60
21	AA	308	C	N3-C4-N4	10.81	125.57	118.00
21	AA	815	A	N1-C6-N6	10.81	125.09	118.60
21	AA	1136	C	N3-C4-N4	10.81	125.56	118.00
57	BB	2668	G	C5-C6-N1	-10.81	106.10	111.50
57	BB	1625	C	N3-C4-N4	10.80	125.56	118.00
57	BB	1775	U	N3-C2-O2	10.80	129.76	122.20
57	BB	2009	A	C5-C6-N6	-10.80	115.06	123.70
57	BB	2247	A	C4-C5-C6	10.80	122.40	117.00
57	BB	1209	U	P-O3'-C3'	10.80	132.66	119.70
57	BB	1042	G	N1-C6-O6	10.80	126.38	119.90
21	AA	234	C	N3-C4-N4	10.80	125.56	118.00
21	AA	509	A	N1-C6-N6	10.80	125.08	118.60
22	AY	47	U	O4'-C1'-N1	10.80	116.84	108.20
57	BB	442	G	C5-C6-O6	-10.80	122.12	128.60
57	BB	1662	U	O4'-C1'-N1	10.80	116.84	108.20
58	BA	81	G	C5-C6-O6	-10.80	122.12	128.60
5	AN	60	ARG	NE-CZ-NH1	10.80	125.70	120.30
21	AA	12	U	O4'-C1'-N1	10.79	116.84	108.20
57	BB	91	A	C5-C6-N6	-10.80	115.06	123.70
57	BB	1098	A	C5-C6-N1	-10.80	112.30	117.70
57	BB	2377	A	C5-C6-N1	-10.79	112.30	117.70
58	BA	96	G	N1-C6-O6	10.80	126.38	119.90
57	BB	2638	G	C5-C6-O6	-10.79	122.12	128.60
21	AA	1277	C	C5-C4-N4	-10.79	112.65	120.20
57	BB	77	G	C5-C6-N1	-10.79	106.11	111.50
57	BB	128	C	O4'-C1'-N1	10.79	116.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	281	C	N3-C4-N4	10.79	125.55	118.00
57	BB	729	G	C5-C6-O6	-10.79	122.13	128.60
57	BB	433	C	O4'-C1'-N1	10.78	116.83	108.20
57	BB	2364	C	O4'-C1'-N1	10.78	116.83	108.20
57	BB	1981	A	N1-C6-N6	10.78	125.07	118.60
54	BF	113	PHE	CB-CG-CD2	-10.78	113.25	120.80
57	BB	182	A	N1-C6-N6	10.78	125.07	118.60
57	BB	2308	G	O4'-C1'-N9	10.78	116.83	108.20
21	AA	1279	G	C5-C6-N1	-10.78	106.11	111.50
26	AV	17(A)	U	N1-C2-N3	-10.78	108.43	114.90
21	AA	1082	A	C6-C5-N7	-10.78	124.76	132.30
21	AA	1225	A	N1-C6-N6	10.78	125.07	118.60
57	BB	210	C	N3-C4-C5	-10.78	117.59	121.90
57	BB	794	A	C5-N7-C8	10.78	109.29	103.90
57	BB	857	G	N1-C6-O6	10.78	126.36	119.90
21	AA	507	C	N3-C4-N4	10.77	125.54	118.00
21	AA	1357	A	N1-C6-N6	10.77	125.06	118.60
21	AA	1509	C	O4'-C1'-N1	10.77	116.82	108.20
57	BB	1403	A	O4'-C1'-N9	10.77	116.82	108.20
57	BB	900	A	P-O3'-C3'	-10.77	106.78	119.70
57	BB	1999	C	C6-N1-C2	-10.77	115.99	120.30
57	BB	2092	U	C2-N3-C4	-10.77	120.54	127.00
21	AA	1414	U	C4-C5-C6	-10.77	113.24	119.70
26	AV	48	C	N3-C4-N4	10.77	125.54	118.00
57	BB	1547	C	O4'-C1'-N1	10.77	116.81	108.20
57	BB	2518	A	C5-C6-N6	-10.77	115.09	123.70
57	BB	1897	G	C5-C6-O6	-10.76	122.14	128.60
19	AH	79	ARG	NE-CZ-NH1	10.76	125.68	120.30
21	AA	1217	C	C5-C4-N4	-10.76	112.67	120.20
57	BB	2087	G	C5-C6-O6	-10.76	122.14	128.60
57	BB	2282	G	C5-C6-O6	-10.76	122.14	128.60
4	AM	69	ARG	NE-CZ-NH2	-10.76	114.92	120.30
21	AA	155	A	C6-C5-N7	-10.76	124.77	132.30
21	AA	1171	A	C5-C6-N1	-10.76	112.32	117.70
57	BB	819	A	N1-C6-N6	10.76	125.05	118.60
57	BB	2144	G	C5-C6-O6	-10.76	122.15	128.60
4	AM	78	ARG	NE-CZ-NH2	-10.75	114.92	120.30
23	AW	60	U	O4'-C1'-N1	10.75	116.80	108.20
57	BB	2413	G	N1-C6-O6	10.75	126.35	119.90
25	AZ	57	ALA	CB-CA-C	-10.75	93.97	110.10
57	BB	1333	G	N1-C6-O6	10.75	126.35	119.90
57	BB	2466	C	O4'-C1'-N1	10.75	116.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	792	A	C5-C6-N6	-10.75	115.10	123.70
57	BB	942	G	C4-C5-N7	10.75	115.10	110.80
57	BB	882	G	N3-C2-N2	10.75	127.42	119.90
57	BB	2592	G	C5-C6-O6	-10.75	122.15	128.60
21	AA	22	G	N1-C6-O6	10.75	126.35	119.90
21	AA	68	G	N3-C2-N2	10.75	127.42	119.90
26	AV	76	A	N1-C2-N3	10.75	134.67	129.30
57	BB	1529	G	C5-C6-O6	-10.75	122.15	128.60
57	BB	740	C	O4'-C1'-N1	10.75	116.80	108.20
57	BB	942	G	C5-N7-C8	-10.75	98.93	104.30
57	BB	1004	U	O4'-C1'-N1	10.75	116.80	108.20
57	BB	1591	A	O4'-C1'-N9	10.75	116.80	108.20
57	BB	1651	G	C5-C6-O6	-10.75	122.15	128.60
21	AA	234	C	O4'-C1'-N1	10.74	116.80	108.20
21	AA	977	A	C5-C6-N6	-10.74	115.10	123.70
23	AW	69	G	O4'-C1'-N9	10.74	116.80	108.20
57	BB	275	C	C5-C4-N4	-10.74	112.68	120.20
21	AA	754	C	N3-C4-N4	10.74	125.52	118.00
21	AA	572	A	C5-C6-N6	-10.74	115.11	123.70
21	AA	1299	A	C4-C5-C6	10.74	122.37	117.00
57	BB	312	G	N9-C4-C5	10.74	109.69	105.40
57	BB	1861	G	C5-C6-O6	-10.74	122.16	128.60
21	AA	506	G	N1-C6-O6	10.73	126.34	119.90
21	AA	1169	A	N1-C6-N6	10.73	125.04	118.60
57	BB	203	A	C5-C6-N6	-10.73	115.11	123.70
57	BB	291	G	N1-C6-O6	10.73	126.34	119.90
57	BB	532	A	C8-N9-C4	-10.73	101.51	105.80
57	BB	2508	G	O4'-C1'-N9	10.73	116.79	108.20
21	AA	308	C	C5-C4-N4	-10.73	112.69	120.20
21	AA	563	A	C2-N3-C4	10.73	115.97	110.60
21	AA	1460	C	O4'-C1'-N1	10.73	116.78	108.20
57	BB	2298	A	C2-N3-C4	-10.73	105.23	110.60
21	AA	672	U	O4'-C1'-N1	10.73	116.78	108.20
21	AA	975	A	N1-C6-N6	10.73	125.04	118.60
57	BB	74	A	N1-C6-N6	10.73	125.04	118.60
21	AA	1154	G	C5-C6-O6	-10.73	122.16	128.60
57	BB	1154	G	C5-C6-O6	-10.73	122.17	128.60
57	BB	2841	C	C4-C5-C6	10.73	122.76	117.40
21	AA	147	G	N1-C6-O6	10.72	126.33	119.90
57	BB	1206	G	C5-C6-O6	-10.72	122.17	128.60
8	AQ	26	ARG	NE-CZ-NH1	10.72	125.66	120.30
21	AA	511	C	N3-C4-N4	10.72	125.50	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	702	A	C4-C5-C6	10.72	122.36	117.00
57	BB	537	G	C8-N9-C4	-10.72	102.11	106.40
57	BB	2666	C	O4'-C1'-N1	10.72	116.78	108.20
21	AA	755	G	N1-C6-O6	10.72	126.33	119.90
22	AY	2	C	O4'-C1'-N1	10.72	116.77	108.20
57	BB	575	A	N1-C6-N6	10.72	125.03	118.60
57	BB	2474	U	O4'-C1'-N1	10.72	116.77	108.20
57	BB	2844	G	N7-C8-N9	10.72	118.46	113.10
26	AV	57	A	O4'-C1'-N9	10.71	116.77	108.20
57	BB	1110	G	N1-C2-N3	-10.71	117.47	123.90
57	BB	1699	G	C1'-O4'-C4'	-10.71	101.33	109.90
21	AA	812	G	C6-C5-N7	-10.71	123.97	130.40
21	AA	1483	A	C5-C6-N1	-10.71	112.34	117.70
57	BB	1299	G	N1-C6-O6	10.71	126.33	119.90
26	AV	15	G	C8-N9-C4	-10.71	102.12	106.40
57	BB	680	C	O4'-C1'-N1	10.71	116.77	108.20
57	BB	2148	G	N7-C8-N9	-10.71	107.75	113.10
57	BB	916	G	N3-C2-N2	10.70	127.39	119.90
21	AA	71	A	O4'-C1'-N9	10.70	116.76	108.20
21	AA	395	C	C6-N1-C2	-10.70	116.02	120.30
57	BB	310	A	C5-C6-N6	-10.70	115.14	123.70
57	BB	1527	G	N3-C4-C5	-10.70	123.25	128.60
57	BB	2497	A	N1-C6-N6	10.70	125.02	118.60
57	BB	621	A	C5-C6-N1	-10.70	112.35	117.70
21	AA	682	G	C8-N9-C4	10.70	110.68	106.40
21	AA	1241	G	O4'-C1'-N9	10.70	116.76	108.20
57	BB	690	G	N1-C6-O6	10.70	126.32	119.90
57	BB	1669	A	C5-C6-N1	-10.70	112.35	117.70
21	AA	113	G	C6-C5-N7	-10.70	123.98	130.40
21	AA	736	C	O4'-C1'-N1	10.70	116.76	108.20
57	BB	726	G	N3-C4-C5	10.70	133.95	128.60
57	BB	1557	C	O4'-C1'-N1	10.70	116.76	108.20
21	AA	509	A	C8-N9-C4	-10.69	101.52	105.80
57	BB	404	A	N1-C6-N6	10.69	125.02	118.60
21	AA	507	C	O4'-C1'-N1	10.69	116.75	108.20
21	AA	1342	C	O4'-C1'-N1	10.69	116.75	108.20
57	BB	550	C	C5-C4-N4	-10.69	112.72	120.20
21	AA	895	G	C5-C6-N1	-10.69	106.16	111.50
57	BB	143	C	O4'-C1'-N1	10.69	116.75	108.20
57	BB	1451	C	O4'-C1'-N1	10.69	116.75	108.20
21	AA	190	A	C4-C5-C6	10.69	122.34	117.00
57	BB	1936	A	N1-C6-N6	10.69	125.01	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	548	G	C4-C5-N7	10.68	115.07	110.80
57	BB	498	G	N1-C2-N3	-10.68	117.49	123.90
21	AA	903	G	N1-C6-O6	10.68	126.31	119.90
21	AA	1482	G	N1-C6-O6	10.68	126.31	119.90
57	BB	86	G	C5-C6-O6	-10.68	122.19	128.60
57	BB	2064	C	N3-C2-O2	10.68	129.38	121.90
57	BB	1763	G	C5-C6-O6	-10.68	122.19	128.60
57	BB	2115	G	C5-C6-N1	-10.68	106.16	111.50
57	BB	2828	G	N1-C6-O6	10.68	126.31	119.90
26	AV	11	A	C5-C6-N1	-10.68	112.36	117.70
58	BA	101	A	C5-C6-N6	-10.68	115.16	123.70
21	AA	1043	G	C5-C6-O6	-10.68	122.19	128.60
57	BB	132	G	O4'-C1'-N9	10.68	116.74	108.20
57	BB	2285	C	N1-C2-O2	10.68	125.31	118.90
21	AA	513	C	O4'-C1'-N1	10.67	116.74	108.20
26	AV	75	C	C2-N3-C4	10.67	125.24	119.90
21	AA	403	C	O4'-C1'-N1	10.67	116.74	108.20
57	BB	1285	A	C5-C6-N6	-10.67	115.17	123.70
57	BB	2204	G	C6-C5-N7	-10.67	124.00	130.40
21	AA	1270	G	N1-C6-O6	10.67	126.30	119.90
23	AW	60	U	N3-C4-C5	-10.67	108.20	114.60
23	AW	64	A	N1-C2-N3	10.67	134.63	129.30
26	AV	38	A	N9-C4-C5	10.67	110.07	105.80
57	BB	1670	C	O4'-C1'-N1	10.67	116.73	108.20
57	BB	2028	U	O4'-C1'-N1	10.67	116.73	108.20
21	AA	372	C	O4'-C1'-N1	10.66	116.73	108.20
57	BB	2538	C	N3-C4-C5	-10.66	117.63	121.90
57	BB	149	A	N1-C6-N6	10.66	125.00	118.60
57	BB	2016	U	N3-C4-C5	-10.66	108.20	114.60
57	BB	1300	G	N3-C2-N2	10.66	127.36	119.90
57	BB	1807	G	N1-C6-O6	10.66	126.30	119.90
21	AA	579	A	C5-C6-N6	-10.66	115.17	123.70
21	AA	867	G	N1-C6-O6	10.66	126.30	119.90
26	AV	44	A	C5-C6-N6	-10.66	115.17	123.70
57	BB	1764	C	C5-C4-N4	-10.66	112.74	120.20
58	BA	15	A	C5-C6-N1	-10.66	112.37	117.70
21	AA	1359	C	N3-C4-N4	10.66	125.46	118.00
23	AW	14	A	C2-N3-C4	-10.66	105.27	110.60
57	BB	475	C	N3-C4-C5	-10.66	117.64	121.90
57	BB	753	A	C3'-C2'-C1'	10.66	110.03	101.50
57	BB	1216	G	C8-N9-C4	-10.66	102.14	106.40
57	BB	2200	C	O4'-C1'-N1	10.66	116.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1386	G	C5-C6-O6	-10.65	122.21	128.60
57	BB	177	G	C4-C5-C6	10.65	125.19	118.80
57	BB	580	U	N1-C2-N3	-10.65	108.51	114.90
21	AA	925	G	N1-C6-O6	10.65	126.29	119.90
21	AA	1361	G	C5-C6-N1	-10.65	106.17	111.50
21	AA	1108	G	C5-C6-O6	-10.65	122.21	128.60
21	AA	1285	A	N1-C6-N6	10.65	124.99	118.60
23	AW	15	G	N1-C6-O6	10.65	126.29	119.90
57	BB	2339	C	O4'-C1'-N1	10.65	116.72	108.20
57	BB	2250	G	N9-C4-C5	-10.65	101.14	105.40
21	AA	349	A	C5-C6-N6	-10.64	115.19	123.70
21	AA	809	G	N1-C6-O6	10.64	126.29	119.90
57	BB	577	G	C5-C6-O6	-10.64	122.21	128.60
57	BB	1999	C	C5-C6-N1	10.64	126.32	121.00
57	BB	2247	A	C8-N9-C4	-10.64	101.54	105.80
57	BB	1592	C	C5-C4-N4	-10.64	112.75	120.20
57	BB	2414	G	N1-C6-O6	10.64	126.28	119.90
21	AA	741	G	C5-C6-O6	-10.64	122.22	128.60
21	AA	483	C	C2-N3-C4	10.63	125.22	119.90
21	AA	743	A	C5-C6-N1	-10.63	112.38	117.70
57	BB	1808	A	C4-C5-C6	10.63	122.32	117.00
21	AA	244	U	N3-C4-C5	-10.63	108.22	114.60
57	BB	529	A	C4-C5-C6	10.63	122.31	117.00
21	AA	1362	A	C4-C5-C6	10.63	122.31	117.00
21	AA	574	A	C5-C6-N1	-10.63	112.39	117.70
57	BB	917	A	N1-C6-N6	10.63	124.98	118.60
57	BB	2158	A	N1-C6-N6	10.63	124.98	118.60
58	BA	73	A	N1-C6-N6	10.63	124.98	118.60
21	AA	259	G	P-O3'-C3'	-10.62	106.95	119.70
57	BB	506	G	C8-N9-C4	-10.63	102.15	106.40
57	BB	2016	U	O4'-C1'-N1	10.63	116.70	108.20
21	AA	819	A	C8-N9-C4	-10.62	101.55	105.80
24	AX	15	A	N1-C6-N6	10.62	124.97	118.60
57	BB	2413	G	N7-C8-N9	10.63	118.41	113.10
57	BB	988	A	C8-N9-C4	-10.62	101.55	105.80
57	BB	1442	U	C5-C4-O4	-10.62	119.53	125.90
21	AA	220	G	N7-C8-N9	10.62	118.41	113.10
21	AA	747	A	N1-C6-N6	10.62	124.97	118.60
21	AA	829	G	N7-C8-N9	10.62	118.41	113.10
21	AA	896	C	N3-C4-N4	10.62	125.44	118.00
57	BB	733	G	C4-C5-C6	10.62	125.17	118.80
57	BB	1571	A	O4'-C1'-N9	10.62	116.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2717	C	C5-C6-N1	10.62	126.31	121.00
57	BB	2867	G	C5-N7-C8	-10.62	98.99	104.30
57	BB	2589	A	C5-C6-N1	-10.62	112.39	117.70
21	AA	913	A	C5-C6-N1	-10.62	112.39	117.70
57	BB	2761	A	O4'-C1'-N9	10.62	116.69	108.20
36	BQ	69	ARG	NE-CZ-NH2	10.62	125.61	120.30
57	BB	892	A	C8-N9-C4	-10.62	101.55	105.80
57	BB	975	A	C8-N9-C4	-10.61	101.56	105.80
21	AA	546	A	C4-C5-C6	10.61	122.31	117.00
21	AA	567	G	O4'-C1'-N9	10.61	116.69	108.20
57	BB	633	A	N1-C6-N6	10.61	124.97	118.60
57	BB	2541	A	N1-C6-N6	10.61	124.97	118.60
15	AD	103	ARG	NE-CZ-NH2	-10.61	115.00	120.30
21	AA	312	C	C6-N1-C2	-10.61	116.06	120.30
21	AA	731	G	C5-C6-O6	-10.61	122.24	128.60
57	BB	1359	A	N1-C6-N6	10.61	124.96	118.60
21	AA	770	C	N3-C4-C5	-10.61	117.66	121.90
57	BB	238	C	O4'-C1'-N1	10.61	116.68	108.20
21	AA	864	A	N1-C6-N6	10.60	124.96	118.60
21	AA	933	G	N1-C6-O6	10.60	126.26	119.90
57	BB	1313	U	C2-N1-C1'	10.60	130.42	117.70
57	BB	1615	C	C4-C5-C6	10.60	122.70	117.40
57	BB	2539	C	O4'-C1'-N1	10.60	116.68	108.20
57	BB	68	G	C5-C6-N1	-10.60	106.20	111.50
57	BB	1593	A	N3-C4-C5	-10.60	119.38	126.80
57	BB	2410	G	C5-C6-N1	-10.60	106.20	111.50
21	AA	251	G	N1-C6-O6	10.60	126.26	119.90
21	AA	550	G	N3-C2-N2	10.60	127.32	119.90
57	BB	1511	G	N1-C6-O6	10.60	126.26	119.90
21	AA	835	U	O4'-C1'-N1	10.60	116.68	108.20
21	AA	931	C	O4'-C1'-N1	10.60	116.68	108.20
57	BB	1733	G	O4'-C1'-N9	10.60	116.68	108.20
57	BB	2770	G	N9-C4-C5	10.60	109.64	105.40
21	AA	616	G	C2-N3-C4	10.59	117.20	111.90
21	AA	1249	C	O4'-C1'-N1	10.59	116.67	108.20
21	AA	1279	G	C8-N9-C4	-10.59	102.16	106.40
57	BB	381	G	N3-C2-N2	10.59	127.31	119.90
33	BN	64	ARG	NE-CZ-NH2	10.59	125.60	120.30
57	BB	385	C	O4'-C1'-N1	10.59	116.67	108.20
57	BB	64	A	C8-N9-C4	10.59	110.04	105.80
57	BB	1788	C	C2-N3-C4	10.59	125.19	119.90
57	BB	2483	C	C6-N1-C2	-10.59	116.06	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	795	C	O4'-C1'-N1	10.59	116.67	108.20
21	AA	195	A	C5-C6-N1	-10.59	112.41	117.70
21	AA	266	G	O4'-C1'-N9	10.59	116.67	108.20
21	AA	563	A	C5-C6-N6	-10.59	115.23	123.70
21	AA	1033	G	C8-N9-C4	-10.59	102.17	106.40
57	BB	707	G	C4-C5-C6	10.59	125.15	118.80
57	BB	2302	U	O4'-C1'-N1	10.59	116.67	108.20
58	BA	24	G	P-O3'-C3'	10.59	132.40	119.70
21	AA	759	A	C5-C6-N1	-10.58	112.41	117.70
21	AA	763	G	C8-N9-C4	-10.58	102.17	106.40
21	AA	1143	G	O4'-C1'-N9	10.58	116.67	108.20
21	AA	1503	A	C5-C6-N6	-10.58	115.23	123.70
57	BB	1453	A	C4-C5-C6	10.58	122.29	117.00
57	BB	1300	G	C2-N3-C4	10.58	117.19	111.90
21	AA	1393	U	O4'-C1'-N1	10.58	116.66	108.20
57	BB	640	C	N3-C4-N4	10.58	125.41	118.00
57	BB	1987	A	N1-C2-N3	-10.58	124.01	129.30
22	AY	40	C	C2-N3-C4	10.58	125.19	119.90
21	AA	334	C	O4'-C1'-N1	10.58	116.66	108.20
22	AY	62	A	O4'-C1'-N9	10.58	116.66	108.20
57	BB	1641	A	C5-C6-N1	-10.58	112.41	117.70
57	BB	2153	C	O4'-C1'-N1	10.57	116.66	108.20
21	AA	617	G	C5-C6-O6	-10.57	122.26	128.60
21	AA	865	A	N1-C2-N3	10.57	134.59	129.30
26	AV	41	C	O4'-C1'-N1	10.57	116.66	108.20
57	BB	2839	G	N3-C2-N2	10.57	127.30	119.90
21	AA	454	G	C4-C5-N7	10.57	115.03	110.80
14	AC	87	ARG	NE-CZ-NH1	10.57	125.58	120.30
57	BB	1267	U	C6-N1-C2	10.56	127.34	121.00
21	AA	71	A	C5-C6-N6	-10.56	115.25	123.70
57	BB	1535	A	N3-C4-C5	-10.56	119.41	126.80
21	AA	185	U	O4'-C1'-N1	10.56	116.65	108.20
57	BB	141	G	C4-C5-C6	10.56	125.14	118.80
57	BB	2705	A	C5-C6-N1	-10.56	112.42	117.70
58	BA	68	C	N3-C4-C5	-10.56	117.68	121.90
21	AA	933	G	C5-C6-O6	-10.56	122.27	128.60
21	AA	49	U	N3-C4-O4	10.55	126.79	119.40
21	AA	817	C	C4-C5-C6	10.55	122.68	117.40
21	AA	482	A	C4-C5-C6	10.55	122.28	117.00
21	AA	594	U	C5-C6-N1	10.55	127.98	122.70
57	BB	2478	A	N1-C6-N6	10.55	124.93	118.60
21	AA	1060	U	N3-C4-C5	-10.55	108.27	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2681	C	N3-C4-C5	-10.55	117.68	121.90
21	AA	272	C	N3-C4-N4	10.55	125.38	118.00
57	BB	2745	C	C6-N1-C2	10.55	124.52	120.30
21	AA	1357	A	C5-C6-N1	-10.55	112.43	117.70
23	AW	15	G	P-O3'-C3'	10.55	132.36	119.70
57	BB	754	U	C6-N1-C2	-10.55	114.67	121.00
57	BB	2097	A	N1-C2-N3	10.55	134.57	129.30
57	BB	1673	G	N9-C4-C5	-10.55	101.18	105.40
57	BB	2840	C	N3-C4-C5	-10.55	117.68	121.90
58	BA	30	C	C2-N3-C4	10.55	125.17	119.90
21	AA	804	U	C6-N1-C2	10.55	127.33	121.00
21	AA	1150	A	N1-C6-N6	10.54	124.93	118.60
57	BB	582	A	C5-C6-N6	-10.54	115.27	123.70
57	BB	1974	C	C5-C4-N4	-10.54	112.82	120.20
57	BB	2054	A	N7-C8-N9	10.54	119.07	113.80
57	BB	2785	C	O4'-C1'-N1	10.54	116.64	108.20
22	AY	65	G	O4'-C1'-N9	10.54	116.63	108.20
57	BB	695	G	C5-C6-N1	-10.54	106.23	111.50
21	AA	366	A	C4-C5-C6	10.54	122.27	117.00
57	BB	1185	G	C5-C6-O6	-10.54	122.28	128.60
21	AA	811	C	N3-C4-C5	-10.54	117.69	121.90
21	AA	1215	G	N3-C4-C5	-10.54	123.33	128.60
57	BB	406	G	N1-C6-O6	10.53	126.22	119.90
57	BB	1204	A	C4-C5-C6	10.53	122.27	117.00
58	BA	116	G	C5-C6-O6	-10.53	122.28	128.60
21	AA	347	G	N9-C4-C5	-10.53	101.19	105.40
21	AA	1036	A	C5-C6-N1	-10.53	112.44	117.70
22	AY	71	G	N1-C6-O6	10.53	126.22	119.90
57	BB	425	G	N3-C4-C5	10.53	133.86	128.60
57	BB	2151	U	O4'-C1'-N1	10.53	116.62	108.20
21	AA	382	A	C5-C6-N1	-10.52	112.44	117.70
21	AA	658	C	C6-N1-C2	-10.52	116.09	120.30
23	AW	73	A	C5-C6-N1	-10.52	112.44	117.70
57	BB	77	G	C4-C5-C6	10.52	125.11	118.80
57	BB	912	C	C5-C6-N1	10.52	126.26	121.00
57	BB	1338	G	C5-C6-O6	-10.52	122.28	128.60
57	BB	1774	C	C5-C6-N1	10.52	126.26	121.00
57	BB	1872	A	N1-C2-N3	10.52	134.56	129.30
21	AA	324	G	N1-C6-O6	10.52	126.21	119.90
21	AA	1018	G	C5-C6-O6	-10.52	122.29	128.60
21	AA	1116	U	O4'-C1'-N1	10.52	116.61	108.20
57	BB	751	A	C5-N7-C8	10.52	109.16	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2141	G	C5-C6-O6	-10.52	122.29	128.60
57	BB	2635	A	C4-C5-C6	10.52	122.26	117.00
21	AA	1375	A	C4-C5-N7	-10.52	105.44	110.70
57	BB	1738	G	P-O3'-C3'	10.52	132.32	119.70
57	BB	1063	G	O4'-C1'-N9	10.52	116.61	108.20
57	BB	2357	G	C6-C5-N7	-10.52	124.09	130.40
21	AA	235	C	C6-N1-C2	-10.51	116.09	120.30
21	AA	502	A	C4-C5-C6	10.51	122.26	117.00
57	BB	584	C	C6-N1-C2	-10.51	116.09	120.30
57	BB	1028	A	N1-C6-N6	10.51	124.91	118.60
21	AA	255	G	N1-C6-O6	10.51	126.21	119.90
21	AA	538	G	C8-N9-C4	-10.51	102.20	106.40
21	AA	1388	C	N3-C4-N4	10.51	125.36	118.00
21	AA	181	A	N1-C6-N6	10.51	124.90	118.60
21	AA	571	U	O4'-C1'-N1	10.51	116.61	108.20
21	AA	650	G	C4-C5-N7	-10.51	106.60	110.80
57	BB	480	A	N1-C6-N6	10.51	124.90	118.60
57	BB	681	G	N3-C2-N2	10.51	127.25	119.90
57	BB	1475	G	N1-C6-O6	10.51	126.20	119.90
57	BB	1976	U	O4'-C1'-N1	10.51	116.60	108.20
21	AA	1185	G	N3-C2-N2	10.50	127.25	119.90
57	BB	536	G	N1-C6-O6	10.50	126.20	119.90
57	BB	2048	G	N1-C6-O6	10.50	126.20	119.90
57	BB	259	G	O4'-C1'-N9	10.50	116.60	108.20
57	BB	2090	A	C4-C5-C6	10.50	122.25	117.00
57	BB	2221	G	N1-C6-O6	10.50	126.20	119.90
21	AA	182	A	P-O3'-C3'	10.50	132.30	119.70
21	AA	874	G	N1-C6-O6	10.50	126.20	119.90
21	AA	1160	G	C5-C6-O6	-10.50	122.30	128.60
57	BB	76	C	N3-C4-C5	-10.50	117.70	121.90
21	AA	1249	C	C4-C5-C6	-10.50	112.15	117.40
57	BB	496	G	N3-C4-N9	-10.49	119.70	126.00
57	BB	1046	A	C4-C5-C6	10.49	122.25	117.00
57	BB	2650	U	N3-C4-O4	10.49	126.75	119.40
22	AY	6	U	O4'-C1'-N1	10.49	116.59	108.20
57	BB	759	G	C5-C6-O6	-10.49	122.31	128.60
57	BB	1254	A	N1-C6-N6	10.49	124.90	118.60
21	AA	190	A	C8-N9-C4	-10.49	101.60	105.80
21	AA	401	C	O4'-C1'-N1	10.49	116.59	108.20
57	BB	614	A	C6-N1-C2	-10.49	112.31	118.60
57	BB	1667	G	C5-N7-C8	10.49	109.54	104.30
57	BB	1743	G	N1-C6-O6	10.49	126.19	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1290	G	C4-C5-C6	10.49	125.09	118.80
22	AY	5	A	N9-C4-C5	-10.49	101.61	105.80
26	AV	8	U	C4-C5-C6	10.49	125.99	119.70
57	BB	61	C	O4'-C1'-N1	10.49	116.59	108.20
57	BB	1800	C	C5-C6-N1	10.49	126.24	121.00
57	BB	1952	A	N1-C6-N6	10.49	124.89	118.60
21	AA	164	G	N1-C2-N3	-10.48	117.61	123.90
21	AA	624	C	O4'-C1'-N1	10.48	116.58	108.20
26	AV	43	A	C5-C6-N1	-10.48	112.46	117.70
57	BB	41	C	O4'-C1'-N1	10.48	116.58	108.20
21	AA	702	A	N1-C6-N6	10.48	124.89	118.60
57	BB	232	G	N1-C6-O6	10.48	126.19	119.90
57	BB	442	G	N1-C6-O6	10.48	126.19	119.90
57	BB	2486	C	O4'-C1'-N1	10.48	116.58	108.20
57	BB	2057	G	O4'-C1'-N9	10.48	116.58	108.20
57	BB	199	A	C5-N7-C8	10.47	109.14	103.90
21	AA	455	G	N1-C6-O6	10.47	126.18	119.90
57	BB	739	A	O5'-P-OP1	-10.47	96.27	105.70
57	BB	960	A	N1-C6-N6	10.47	124.88	118.60
21	AA	500	G	N3-C2-N2	10.47	127.23	119.90
21	AA	1311	A	C4-C5-C6	10.47	122.24	117.00
21	AA	1482	G	O4'-C1'-N9	10.47	116.58	108.20
57	BB	157	C	N3-C4-N4	10.47	125.33	118.00
57	BB	87	U	N3-C2-O2	-10.47	114.87	122.20
57	BB	1573	G	C2-N3-C4	10.47	117.14	111.90
21	AA	295	C	C4-C5-C6	-10.47	112.17	117.40
21	AA	606	G	O4'-C1'-N9	10.47	116.57	108.20
23	AW	72	C	N3-C4-C5	-10.47	117.71	121.90
57	BB	1801	A	O4'-C1'-N9	10.47	116.58	108.20
21	AA	1158	C	C4-C5-C6	10.47	122.63	117.40
57	BB	1475	G	C5-C6-O6	-10.47	122.32	128.60
21	AA	1484	C	O4'-C1'-N1	10.46	116.57	108.20
57	BB	689	A	N1-C2-N3	-10.46	124.07	129.30
57	BB	1590	A	C5-C6-N6	-10.47	115.33	123.70
57	BB	2278	A	N1-C6-N6	10.46	124.88	118.60
21	AA	840	C	O4'-C1'-N1	10.46	116.57	108.20
57	BB	982	C	N3-C4-C5	-10.46	117.72	121.90
21	AA	1280	A	N1-C2-N3	10.46	134.53	129.30
57	BB	2185	U	C5-C4-O4	-10.46	119.62	125.90
57	BB	613	A	C5-C6-N6	-10.46	115.33	123.70
21	AA	111	G	C5-C6-O6	-10.46	122.33	128.60
21	AA	743	A	C4-C5-C6	10.46	122.23	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	12	U	C6-N1-C2	-10.46	114.72	121.00
21	AA	1108	G	O4'-C1'-N9	10.46	116.57	108.20
21	AA	273	U	O4'-C1'-N1	10.45	116.56	108.20
21	AA	307	C	N3-C4-N4	10.45	125.32	118.00
25	AZ	44	ARG	NE-CZ-NH2	-10.45	115.07	120.30
57	BB	462	C	C2-N3-C4	10.45	125.13	119.90
57	BB	1854	A	C5-C6-N1	-10.45	112.47	117.70
58	BA	74	U	O4'-C1'-N1	10.45	116.56	108.20
57	BB	559	G	C5-C6-O6	-10.45	122.33	128.60
21	AA	236	A	N1-C6-N6	10.45	124.87	118.60
21	AA	763	G	N1-C2-N3	-10.45	117.63	123.90
57	BB	1565	C	N3-C4-N4	10.45	125.31	118.00
58	BA	91	C	N3-C4-N4	10.45	125.31	118.00
58	BA	2	G	C5-C6-O6	-10.45	122.33	128.60
21	AA	676	A	C5-C6-N6	-10.45	115.34	123.70
21	AA	889	A	C5-C6-N1	-10.45	112.48	117.70
57	BB	501	A	N1-C6-N6	10.45	124.87	118.60
57	BB	541	A	C4-C5-C6	10.45	122.22	117.00
57	BB	2338	C	C6-N1-C2	-10.45	116.12	120.30
57	BB	2354	C	N3-C4-N4	10.45	125.31	118.00
21	AA	493	A	C5-C6-N6	-10.44	115.35	123.70
21	AA	1394	A	N1-C2-N3	10.44	134.52	129.30
57	BB	146	A	O4'-C1'-N9	10.44	116.55	108.20
57	BB	1889	A	N1-C6-N6	10.44	124.86	118.60
21	AA	980	C	O4'-C1'-N1	10.44	116.55	108.20
57	BB	1389	G	C6-C5-N7	-10.44	124.14	130.40
21	AA	1396	A	C5-C6-N6	-10.44	115.35	123.70
21	AA	1160	G	N3-C2-N2	10.44	127.20	119.90
21	AA	1181	G	N1-C6-O6	10.44	126.16	119.90
21	AA	172	A	N1-C6-N6	10.43	124.86	118.60
21	AA	1155	A	O4'-C1'-N9	10.43	116.55	108.20
21	AA	1475	G	N1-C6-O6	10.43	126.16	119.90
21	AA	1493	A	N1-C6-N6	10.43	124.86	118.60
57	BB	1214	A	N1-C6-N6	10.43	124.86	118.60
21	AA	1483	A	N1-C6-N6	10.43	124.86	118.60
21	AA	1503	A	N1-C2-N3	10.43	134.51	129.30
26	AV	6	G	C5-C6-O6	-10.43	122.34	128.60
57	BB	550	C	N3-C4-N4	10.43	125.30	118.00
57	BB	1785	A	N1-C6-N6	10.43	124.86	118.60
57	BB	2603	G	C5-C6-O6	-10.43	122.34	128.60
57	BB	2080	A	C5-C6-N6	-10.43	115.36	123.70
21	AA	728	A	O4'-C1'-N9	10.42	116.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1936	A	C8-N9-C4	-10.42	101.63	105.80
21	AA	306	A	C5-C6-N6	-10.42	115.36	123.70
57	BB	1006	C	N3-C4-C5	-10.42	117.73	121.90
57	BB	87	U	N3-C4-O4	10.42	126.69	119.40
57	BB	163	C	C6-N1-C1'	-10.42	108.30	120.80
57	BB	2022	U	O4'-C1'-N1	10.42	116.53	108.20
57	BB	1160	G	O4'-C1'-N9	10.42	116.53	108.20
57	BB	1793	C	N3-C4-N4	10.42	125.29	118.00
26	AV	45	G	C5-C6-O6	10.42	134.85	128.60
57	BB	2083	G	C2-N3-C4	10.42	117.11	111.90
21	AA	1088	G	C5-C6-O6	-10.41	122.35	128.60
21	AA	613	C	N3-C4-C5	-10.41	117.73	121.90
21	AA	1442	G	O4'-C1'-N9	10.41	116.53	108.20
57	BB	474	G	N1-C6-O6	10.41	126.15	119.90
57	BB	1317	G	C4-C5-C6	10.41	125.05	118.80
57	BB	1389	G	N1-C6-O6	10.41	126.15	119.90
57	BB	2062	A	N1-C6-N6	10.41	124.85	118.60
21	AA	1520	C	O4'-C1'-N1	10.41	116.53	108.20
57	BB	1583	A	N1-C6-N6	10.41	124.85	118.60
57	BB	2282	G	P-O3'-C3'	10.41	132.19	119.70
21	AA	681	A	C4-C5-C6	10.41	122.20	117.00
57	BB	631	A	O4'-C1'-N9	10.41	116.53	108.20
21	AA	175	C	C5-C6-N1	10.41	126.20	121.00
21	AA	1095	U	O4'-C1'-N1	10.41	116.53	108.20
57	BB	299	A	N7-C8-N9	-10.41	108.60	113.80
57	BB	2594	C	C6-N1-C2	-10.41	116.14	120.30
21	AA	243	A	C5-C6-N1	-10.40	112.50	117.70
57	BB	1483	G	C5-N7-C8	10.40	109.50	104.30
57	BB	2012	G	C4-C5-N7	10.40	114.96	110.80
23	AW	31	A	N9-C4-C5	-10.40	101.64	105.80
21	AA	787	A	N1-C6-N6	10.40	124.84	118.60
21	AA	1306	A	C5-C6-N6	-10.40	115.38	123.70
21	AA	178	C	O4'-C1'-N1	10.40	116.52	108.20
21	AA	173	U	N3-C4-O4	10.40	126.68	119.40
21	AA	860	A	C4-C5-C6	10.40	122.20	117.00
21	AA	1131	G	N3-C2-N2	10.40	127.18	119.90
57	BB	109	C	N3-C4-N4	10.40	125.28	118.00
57	BB	2436	G	C5-C6-O6	-10.40	122.36	128.60
21	AA	339	C	C5-C6-N1	10.39	126.20	121.00
21	AA	302	G	C5-C6-O6	-10.39	122.36	128.60
21	AA	1158	C	C6-N1-C2	-10.39	116.14	120.30
21	AA	1410	A	C5-C6-N1	-10.39	112.50	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1790	C	C2-N3-C4	10.39	125.10	119.90
57	BB	1804	C	C5-C4-N4	-10.39	112.92	120.20
21	AA	1443	C	O4'-C1'-N1	10.39	116.51	108.20
57	BB	657	U	O4'-C1'-N1	10.39	116.51	108.20
57	BB	2596	U	O4'-C1'-N1	10.39	116.52	108.20
21	AA	253	A	N1-C2-N3	10.39	134.50	129.30
57	BB	351	C	N3-C4-C5	-10.39	117.74	121.90
57	BB	572	A	N1-C6-N6	10.39	124.83	118.60
57	BB	2174	C	N1-C2-O2	-10.39	112.67	118.90
57	BB	2672	U	O4'-C1'-N1	10.39	116.51	108.20
21	AA	832	G	N3-C2-N2	10.39	127.17	119.90
22	AY	67	A	N1-C6-N6	10.39	124.83	118.60
57	BB	616	A	N9-C4-C5	10.39	109.96	105.80
21	AA	1250	A	O4'-C1'-N9	10.39	116.51	108.20
22	AY	51	G	N1-C6-O6	10.39	126.13	119.90
45	BC	220	ARG	NE-CZ-NH1	-10.39	115.11	120.30
57	BB	1013	C	O4'-C1'-N1	10.39	116.51	108.20
21	AA	397	A	C5-C6-N1	-10.38	112.51	117.70
21	AA	1404	C	N3-C4-C5	-10.39	117.75	121.90
57	BB	2682	A	C6-C5-N7	-10.39	125.03	132.30
57	BB	2901	C	N3-C4-N4	10.38	125.27	118.00
21	AA	968	A	C4-C5-N7	-10.38	105.51	110.70
57	BB	186	G	N1-C2-N3	-10.38	117.67	123.90
57	BB	1641	A	C4-C5-C6	10.38	122.19	117.00
57	BB	1332	G	C5-C6-O6	-10.38	122.37	128.60
57	BB	2665	A	N1-C6-N6	10.38	124.83	118.60
21	AA	511	C	N3-C4-C5	-10.38	117.75	121.90
21	AA	1171	A	C6-N1-C2	10.38	124.83	118.60
57	BB	1291	C	C4-C5-C6	10.38	122.59	117.40
15	AD	74	TYR	CB-CG-CD1	-10.37	114.78	121.00
57	BB	1084	A	C5-C6-N6	-10.38	115.40	123.70
57	BB	2084	C	N3-C4-C5	-10.38	117.75	121.90
57	BB	242	G	C5-C6-O6	-10.37	122.38	128.60
57	BB	870	U	N1-C2-O2	-10.37	115.54	122.80
21	AA	607	A	N9-C4-C5	10.37	109.95	105.80
21	AA	925	G	C2-N3-C4	-10.37	106.72	111.90
21	AA	1339	A	C4-C5-C6	10.37	122.19	117.00
21	AA	1211	U	C5-C4-O4	-10.37	119.68	125.90
21	AA	1248	A	C4-C5-C6	10.37	122.18	117.00
57	BB	375	G	C8-N9-C4	10.37	110.55	106.40
57	BB	715	A	C8-N9-C4	-10.37	101.65	105.80
23	AW	28	G	C5-C6-N1	-10.37	106.32	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2006	C	O4'-C1'-N1	10.37	116.49	108.20
21	AA	211	G	C5-C6-O6	-10.36	122.38	128.60
21	AA	615	G	N3-C2-N2	10.36	127.15	119.90
57	BB	38	A	N1-C6-N6	10.36	124.82	118.60
57	BB	362	A	N1-C2-N3	10.36	134.48	129.30
57	BB	441	U	O4'-C1'-N1	10.36	116.49	108.20
57	BB	2294	G	C4-C5-N7	-10.36	106.66	110.80
57	BB	2688	G	C5-C6-O6	-10.36	122.38	128.60
57	BB	1303	G	N1-C6-O6	10.36	126.12	119.90
57	BB	2567	G	N1-C6-O6	10.36	126.12	119.90
21	AA	77	A	N7-C8-N9	10.36	118.98	113.80
57	BB	870	U	N1-C2-N3	10.36	121.11	114.90
57	BB	1187	G	O4'-C1'-N9	10.36	116.48	108.20
57	BB	2136	G	C5-C6-O6	-10.36	122.39	128.60
57	BB	2492	U	O4'-C1'-N1	10.36	116.48	108.20
21	AA	165	G	C5-C6-O6	-10.35	122.39	128.60
21	AA	297	G	C2-N3-C4	10.35	117.08	111.90
21	AA	812	G	C5-C6-O6	-10.35	122.39	128.60
21	AA	824	G	N1-C6-O6	10.35	126.11	119.90
57	BB	1711	A	C4-C5-C6	10.35	122.18	117.00
57	BB	2460	U	O4'-C1'-N1	10.35	116.48	108.20
57	BB	2519	U	O4'-C1'-N1	10.35	116.48	108.20
57	BB	2834	G	C5-C6-O6	-10.35	122.39	128.60
58	BA	18	G	N1-C2-N3	-10.35	117.69	123.90
21	AA	1293	C	C5-C6-N1	10.35	126.17	121.00
57	BB	1853	A	C5-C6-N6	-10.34	115.42	123.70
16	AE	19	ARG	NE-CZ-NH1	10.34	125.47	120.30
58	BA	111	U	O4'-C1'-N1	10.34	116.47	108.20
21	AA	334	C	C4-C5-C6	-10.34	112.23	117.40
57	BB	381	G	C5-C6-O6	-10.34	122.39	128.60
57	BB	638	G	C8-N9-C4	-10.34	102.26	106.40
57	BB	2289	G	N1-C2-N3	-10.34	117.69	123.90
57	BB	1771	C	N3-C4-C5	-10.34	117.76	121.90
21	AA	32	A	O4'-C1'-N9	10.34	116.47	108.20
21	AA	128	G	C8-N9-C4	10.34	110.53	106.40
21	AA	328	C	P-O3'-C3'	10.34	132.11	119.70
21	AA	1480	A	N1-C2-N3	10.34	134.47	129.30
23	AW	56	C	C6-N1-C1'	-10.34	108.40	120.80
22	AY	63	C	C5-C6-N1	10.34	126.17	121.00
57	BB	1516	G	N1-C2-N3	-10.34	117.70	123.90
57	BB	1570	A	C4-C5-C6	10.34	122.17	117.00
57	BB	2840	C	C4-C5-C6	10.34	122.57	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2865	U	N3-C4-O4	10.34	126.64	119.40
26	AV	51	C	C6-N1-C2	-10.33	116.17	120.30
26	AV	73	A	C5-C6-N6	-10.33	115.43	123.70
57	BB	1410	G	O4'-C1'-N9	10.33	116.47	108.20
57	BB	2159	G	O4'-C1'-N9	10.33	116.47	108.20
21	AA	721	G	N1-C6-O6	10.33	126.10	119.90
57	BB	1359	A	C5-N7-C8	10.33	109.06	103.90
57	BB	1635	A	O4'-C1'-N9	10.33	116.47	108.20
57	BB	2424	C	O4'-C1'-N1	10.33	116.46	108.20
57	BB	2218	G	C5-C6-O6	-10.33	122.40	128.60
57	BB	551	G	O4'-C1'-N9	10.33	116.46	108.20
57	BB	701	G	N9-C1'-C2'	-10.33	100.58	114.00
57	BB	1133	A	C5-C6-N6	-10.32	115.44	123.70
57	BB	2542	A	N1-C6-N6	10.32	124.80	118.60
21	AA	535	A	C5-C6-N1	-10.32	112.54	117.70
57	BB	904	G	N1-C6-O6	10.32	126.09	119.90
57	BB	1859	U	N1-C2-N3	-10.32	108.71	114.90
21	AA	29	U	O4'-C1'-N1	10.32	116.46	108.20
21	AA	1415	G	N3-C4-C5	-10.32	123.44	128.60
57	BB	2632	A	C4-C5-C6	10.32	122.16	117.00
26	AV	53	G	N9-C4-C5	-10.32	101.27	105.40
57	BB	77	G	O4'-C1'-N9	10.32	116.45	108.20
57	BB	751	A	N1-C6-N6	10.32	124.79	118.60
57	BB	2434	A	C4-C5-C6	10.32	122.16	117.00
57	BB	2126	A	N1-C6-N6	10.32	124.79	118.60
9	AR	50	TYR	CB-CG-CD1	10.32	127.19	121.00
21	AA	220	G	P-O3'-C3'	-10.32	107.32	119.70
21	AA	1062	U	N3-C4-O4	10.32	126.62	119.40
57	BB	99	U	O4'-C1'-N1	10.32	116.45	108.20
21	AA	128	G	O4'-C1'-N9	10.32	116.45	108.20
55	BG	51	PHE	CB-CG-CD1	10.32	128.02	120.80
57	BB	1789	A	C5-C6-N6	-10.32	115.45	123.70
57	BB	144	A	N1-C6-N6	10.32	124.79	118.60
57	BB	625	G	C8-N9-C4	-10.32	102.27	106.40
57	BB	1270	C	N3-C4-C5	-10.32	117.77	121.90
57	BB	1511	G	C5-C6-N1	-10.32	106.34	111.50
57	BB	2705	A	C5-C6-N6	-10.32	115.45	123.70
57	BB	1	G	N3-C2-N2	10.31	127.12	119.90
57	BB	645	C	N3-C4-C5	-10.31	117.77	121.90
57	BB	907	G	C5-C6-O6	-10.31	122.41	128.60
57	BB	1304	A	N1-C6-N6	10.31	124.79	118.60
21	AA	140	U	O4'-C1'-N1	10.31	116.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1144	G	N1-C2-N3	-10.31	117.71	123.90
57	BB	1604	C	N3-C4-C5	-10.31	117.78	121.90
57	BB	2147	A	C4-C5-C6	10.31	122.16	117.00
57	BB	2879	A	C8-N9-C4	-10.31	101.67	105.80
58	BA	69	G	C5-C6-N1	-10.31	106.34	111.50
21	AA	215	C	N3-C4-C5	-10.31	117.78	121.90
21	AA	1482	G	N3-C2-N2	10.31	127.12	119.90
57	BB	1300	G	N1-C2-N3	-10.31	117.72	123.90
57	BB	208	C	N3-C4-N4	10.30	125.21	118.00
57	BB	2685	G	C5-C6-O6	-10.30	122.42	128.60
57	BB	544	C	C2-N1-C1'	10.30	130.13	118.80
57	BB	836	G	N9-C4-C5	10.30	109.52	105.40
9	AR	50	TYR	CB-CG-CD2	-10.30	114.82	121.00
21	AA	810	C	O4'-C1'-N1	10.30	116.44	108.20
57	BB	1285	A	P-O3'-C3'	10.30	132.06	119.70
57	BB	914	G	C5-C6-O6	-10.30	122.42	128.60
57	BB	980	A	N1-C6-N6	10.30	124.78	118.60
57	BB	1835	G	N1-C6-O6	10.30	126.08	119.90
57	BB	2857	G	N3-C2-N2	10.30	127.11	119.90
21	AA	546	A	N9-C4-C5	10.30	109.92	105.80
57	BB	2528	U	N3-C4-O4	10.30	126.61	119.40
21	AA	1161	C	C6-N1-C2	-10.29	116.18	120.30
21	AA	1433	A	C5-N7-C8	10.29	109.05	103.90
22	AY	31	A	C5-N7-C8	-10.30	98.75	103.90
34	BO	10	ARG	NE-CZ-NH2	10.29	125.45	120.30
57	BB	4	U	O4'-C1'-N1	10.29	116.44	108.20
57	BB	400	G	C5-C6-O6	-10.29	122.42	128.60
57	BB	717	C	C6-N1-C2	-10.29	116.18	120.30
57	BB	1970	A	N1-C6-N6	10.29	124.78	118.60
58	BA	16	G	C5-C6-O6	-10.29	122.42	128.60
21	AA	653	U	N3-C2-O2	-10.29	115.00	122.20
21	AA	727	G	C5-C6-O6	-10.29	122.42	128.60
57	BB	1950	G	C4-C5-N7	-10.29	106.68	110.80
57	BB	2013	A	C5-C6-N6	-10.29	115.47	123.70
21	AA	424	G	N1-C2-N3	-10.29	117.73	123.90
21	AA	1244	G	C4-C5-N7	-10.29	106.68	110.80
57	BB	1235	G	C4-C5-N7	-10.29	106.68	110.80
57	BB	659	G	N1-C6-O6	10.29	126.07	119.90
57	BB	962	G	N1-C6-O6	10.29	126.07	119.90
57	BB	2426	A	C5-C6-N1	-10.29	112.56	117.70
21	AA	716	A	C4-C5-C6	10.29	122.14	117.00
57	BB	1908	C	C2-N3-C4	10.29	125.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1170	A	C5-C6-N6	-10.28	115.47	123.70
57	BB	856	G	C5-C6-O6	-10.29	122.43	128.60
21	AA	7	A	O4'-C1'-N9	10.28	116.43	108.20
21	AA	525	C	O4'-C1'-N1	10.28	116.42	108.20
22	AY	39	U	C2-N1-C1'	10.28	130.04	117.70
57	BB	2215	C	O4'-C1'-N1	10.28	116.43	108.20
57	BB	2584	U	P-O3'-C3'	10.28	132.04	119.70
58	BA	107	G	C8-N9-C4	-10.28	102.29	106.40
21	AA	206	C	O4'-C1'-N1	10.28	116.42	108.20
26	AV	2	G	N1-C6-O6	10.28	126.07	119.90
57	BB	660	C	O4'-C1'-N1	10.28	116.42	108.20
57	BB	762	U	N3-C4-O4	10.28	126.60	119.40
57	BB	2202	U	O4'-C1'-N1	10.28	116.42	108.20
57	BB	2679	A	O4'-C1'-N9	10.28	116.42	108.20
21	AA	449	G	N1-C6-O6	10.28	126.07	119.90
26	AV	6	G	N1-C6-O6	10.28	126.07	119.90
57	BB	925	A	O4'-C1'-N9	10.28	116.42	108.20
57	BB	835	C	N3-C4-N4	10.28	125.19	118.00
18	AG	77	ARG	NE-CZ-NH2	10.28	125.44	120.30
39	BT	73	ARG	NE-CZ-NH2	10.28	125.44	120.30
57	BB	227	A	N1-C6-N6	10.28	124.77	118.60
57	BB	1627	G	C6-C5-N7	-10.28	124.23	130.40
57	BB	2232	C	O4'-C1'-N1	10.28	116.42	108.20
21	AA	1016	A	N1-C6-N6	10.27	124.76	118.60
57	BB	2681	C	N3-C4-N4	10.27	125.19	118.00
21	AA	1192	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	564	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	739	A	O4'-C1'-N9	10.27	116.42	108.20
21	AA	1121	U	O4'-C1'-N1	10.27	116.42	108.20
58	BA	11	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	1153	C	C5-C6-N1	10.27	126.13	121.00
58	BA	113	C	O4'-C1'-N1	10.27	116.42	108.20
57	BB	492	A	N7-C8-N9	10.27	118.93	113.80
57	BB	539	G	N9-C4-C5	-10.27	101.29	105.40
57	BB	1161	C	N3-C4-N4	10.27	125.19	118.00
21	AA	159	G	N3-C2-N2	10.26	127.08	119.90
57	BB	1815	A	O4'-C1'-N9	10.26	116.41	108.20
57	BB	1832	C	N3-C4-N4	10.26	125.18	118.00
57	BB	2619	C	N3-C4-C5	-10.26	117.80	121.90
57	BB	2895	G	O4'-C1'-N9	10.26	116.41	108.20
22	AY	63	C	N3-C4-C5	-10.26	117.80	121.90
57	BB	1618	A	C4-C5-C6	10.26	122.13	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	602	A	C8-N9-C4	-10.26	101.70	105.80
57	BB	1427	A	C5-C6-N6	-10.26	115.49	123.70
57	BB	2154	A	N1-C2-N3	10.26	134.43	129.30
57	BB	2495	G	O4'-C1'-N9	10.26	116.41	108.20
26	AV	65	C	N3-C4-N4	10.26	125.18	118.00
22	AY	43	G	O4'-C1'-N9	10.25	116.40	108.20
57	BB	850	U	C6-N1-C2	-10.25	114.85	121.00
57	BB	1371	G	O4'-C1'-N9	10.25	116.40	108.20
21	AA	457	G	N1-C6-O6	10.25	126.05	119.90
57	BB	127	A	N3-C4-C5	-10.25	119.62	126.80
57	BB	278	A	C5-C6-N1	-10.25	112.58	117.70
57	BB	1296	G	C5-C6-O6	-10.25	122.45	128.60
57	BB	1397	U	O4'-C1'-N1	10.25	116.40	108.20
57	BB	1091	G	N3-C2-N2	10.25	127.07	119.90
57	BB	1303	G	C5-C6-O6	-10.25	122.45	128.60
57	BB	1649	G	O4'-C1'-N9	10.25	116.40	108.20
57	BB	1948	G	N1-C2-N3	-10.25	117.75	123.90
57	BB	2374	C	N3-C4-C5	-10.25	117.80	121.90
57	BB	232	G	C5-C6-O6	-10.25	122.45	128.60
16	AE	68	ARG	NE-CZ-NH2	-10.24	115.18	120.30
57	BB	463	G	C5-C6-O6	-10.24	122.45	128.60
57	BB	2777	G	C5-C6-O6	-10.24	122.45	128.60
57	BB	1551	A	C5-C6-N6	-10.24	115.51	123.70
57	BB	2250	G	O4'-C1'-N9	10.24	116.39	108.20
57	BB	2535	G	C4-C5-C6	10.24	124.94	118.80
21	AA	305	G	N1-C6-O6	10.24	126.04	119.90
57	BB	134	G	C5-C6-O6	-10.24	122.45	128.60
57	BB	242	G	C5-C6-N1	-10.24	106.38	111.50
57	BB	981	A	N7-C8-N9	-10.24	108.68	113.80
57	BB	2058	A	N1-C6-N6	10.24	124.75	118.60
21	AA	205	A	C5-C6-N6	-10.24	115.51	123.70
57	BB	252	G	O4'-C1'-N9	10.24	116.39	108.20
57	BB	246	C	O4'-C1'-N1	10.24	116.39	108.20
21	AA	909	A	C4-C5-C6	10.23	122.12	117.00
57	BB	1991	U	C2-N3-C4	-10.23	120.86	127.00
58	BA	65	U	O4'-C1'-N1	10.23	116.39	108.20
57	BB	1300	G	C5-C6-N1	10.23	116.62	111.50
57	BB	2143	C	N3-C4-N4	10.23	125.16	118.00
57	BB	2244	U	O4'-C1'-N1	10.23	116.39	108.20
57	BB	2420	C	C5-C4-N4	-10.23	113.04	120.20
57	BB	2757	A	C5-C6-N1	-10.23	112.58	117.70
21	AA	460	A	C5-C6-N1	-10.23	112.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1099	G	N1-C6-O6	10.23	126.04	119.90
57	BB	1844	C	O4'-C1'-N1	10.23	116.39	108.20
57	BB	2831	G	N1-C6-O6	10.23	126.04	119.90
57	BB	593	U	O4'-C1'-N1	10.23	116.38	108.20
3	AL	113	ARG	NE-CZ-NH2	-10.23	115.19	120.30
21	AA	665	A	C2-N3-C4	10.23	115.71	110.60
57	BB	775	G	C5-C6-O6	-10.23	122.46	128.60
57	BB	1223	G	O4'-C1'-N9	10.23	116.38	108.20
21	AA	1507	A	C4-C5-C6	10.23	122.11	117.00
57	BB	2682	A	C5-C6-N1	-10.23	112.59	117.70
21	AA	1246	A	C4-C5-C6	10.22	122.11	117.00
22	AY	42	G	N1-C6-O6	10.22	126.03	119.90
57	BB	812	C	N3-C4-C5	-10.22	117.81	121.90
57	BB	2384	U	C5-C4-O4	-10.22	119.77	125.90
57	BB	1020	A	N1-C6-N6	10.22	124.73	118.60
21	AA	1014	A	C4-C5-N7	-10.22	105.59	110.70
57	BB	1629	U	C2-N3-C4	-10.22	120.87	127.00
57	BB	2432	A	C5-N7-C8	10.22	109.01	103.90
21	AA	1316	G	C5-C6-O6	-10.22	122.47	128.60
22	AY	27	C	C5-C4-N4	-10.22	113.05	120.20
28	BI	102	ARG	NE-CZ-NH2	10.22	125.41	120.30
57	BB	10	A	O4'-C1'-N9	10.22	116.38	108.20
57	BB	1655	A	N1-C6-N6	10.22	124.73	118.60
57	BB	2862	G	N1-C6-O6	10.22	126.03	119.90
21	AA	358	U	O4'-C1'-N1	10.22	116.37	108.20
57	BB	927	A	C6-C5-N7	-10.21	125.15	132.30
57	BB	2171	A	C4-C5-N7	-10.21	105.59	110.70
57	BB	366	C	O4'-C1'-N1	10.21	116.37	108.20
57	BB	493	G	C5-C6-N1	-10.21	106.39	111.50
21	AA	964	A	C5-C6-N6	-10.21	115.53	123.70
57	BB	1124	G	C5-C6-O6	-10.21	122.47	128.60
57	BB	2043	C	C5-C6-N1	10.21	126.11	121.00
57	BB	2771	C	N3-C4-C5	-10.21	117.81	121.90
57	BB	1301	A	C5-C6-N6	-10.21	115.53	123.70
57	BB	959	A	C5-C6-N1	-10.21	112.60	117.70
57	BB	1288	G	C6-C5-N7	-10.21	124.28	130.40
21	AA	286	C	N3-C2-O2	10.21	129.04	121.90
21	AA	953	G	C5-C6-O6	-10.21	122.48	128.60
57	BB	1822	C	O4'-C1'-N1	10.21	116.36	108.20
21	AA	694	A	C4-C5-C6	10.20	122.10	117.00
57	BB	159	G	O4'-C1'-N9	10.20	116.36	108.20
57	BB	713	G	C5-C6-N1	-10.20	106.40	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2362	C	N3-C4-N4	10.20	125.14	118.00
57	BB	677	A	C2-N3-C4	-10.20	105.50	110.60
57	BB	1419	A	C5-C6-N1	-10.20	112.60	117.70
57	BB	984	A	C4-C5-C6	10.20	122.10	117.00
57	BB	1614	A	C4-C5-C6	10.20	122.10	117.00
57	BB	2265	U	O4'-C1'-N1	10.20	116.36	108.20
21	AA	415	A	C5-C6-N6	-10.20	115.54	123.70
21	AA	829	G	C8-N9-C4	-10.20	102.32	106.40
57	BB	331	C	C6-N1-C2	-10.20	116.22	120.30
57	BB	716	A	C4-C5-N7	-10.20	105.60	110.70
57	BB	1064	C	C2-N3-C4	-10.20	114.80	119.90
57	BB	1706	C	O4'-C1'-N1	10.20	116.36	108.20
57	BB	2757	A	N1-C6-N6	10.19	124.72	118.60
21	AA	904	U	O4'-C1'-N1	10.19	116.35	108.20
57	BB	370	G	C5-C6-O6	-10.19	122.48	128.60
57	BB	1241	A	O4'-C1'-N9	10.19	116.35	108.20
57	BB	1655	A	C4-C5-C6	10.19	122.09	117.00
57	BB	2211	A	N1-C6-N6	10.19	124.71	118.60
57	BB	186	G	C2-N3-C4	10.19	116.99	111.90
57	BB	1221	C	N3-C4-C5	-10.19	117.82	121.90
57	BB	1050	A	C5-C6-N6	-10.19	115.55	123.70
21	AA	1265	C	N3-C4-C5	-10.19	117.83	121.90
21	AA	1413	A	C5-C6-N6	-10.19	115.55	123.70
57	BB	86	G	O4'-C1'-N9	10.19	116.35	108.20
57	BB	733	G	C5-C6-N1	-10.19	106.41	111.50
57	BB	1561	C	O4'-C1'-N1	10.19	116.35	108.20
57	BB	2152	G	P-O3'-C3'	10.19	131.92	119.70
21	AA	628	G	N3-C2-N2	10.18	127.03	119.90
57	BB	335	C	C5-C4-N4	-10.18	113.07	120.20
57	BB	2636	C	N3-C4-N4	10.18	125.13	118.00
21	AA	1226	C	P-O3'-C3'	10.18	131.92	119.70
21	AA	1328	C	O4'-C1'-N1	10.18	116.34	108.20
23	AW	12	U	O4'-C1'-N1	10.18	116.34	108.20
57	BB	984	A	C5-C6-N6	-10.18	115.56	123.70
57	BB	590	A	C4-C5-C6	10.18	122.09	117.00
57	BB	1433	A	C4-C5-C6	10.18	122.09	117.00
57	BB	2109	U	O4'-C1'-N1	10.18	116.34	108.20
57	BB	2352	A	N1-C6-N6	10.18	124.71	118.60
57	BB	1368	G	C6-N1-C2	-10.18	118.99	125.10
57	BB	1947	C	N3-C4-N4	10.18	125.12	118.00
21	AA	901	A	C8-N9-C4	-10.17	101.73	105.80
21	AA	1386	G	C2-N3-C4	10.17	116.99	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	839	U	O4'-C1'-N1	10.17	116.34	108.20
57	BB	1216	G	C4-C5-N7	-10.17	106.73	110.80
57	BB	2802	G	N1-C6-O6	10.17	126.00	119.90
57	BB	241	A	C4-C5-C6	10.17	122.09	117.00
57	BB	1906	G	N7-C8-N9	10.17	118.19	113.10
57	BB	2464	G	C5-C6-O6	-10.17	122.50	128.60
58	BA	91	C	C5-C4-N4	-10.17	113.08	120.20
57	BB	106	C	C6-N1-C2	-10.17	116.23	120.30
57	BB	1972	G	C5-C6-N1	-10.17	106.41	111.50
21	AA	28	A	C4-C5-C6	10.17	122.08	117.00
21	AA	151	A	C5-C6-N1	-10.17	112.61	117.70
21	AA	597	G	N1-C6-O6	10.17	126.00	119.90
21	AA	1421	G	N7-C8-N9	10.17	118.19	113.10
57	BB	655	A	C2-N3-C4	10.17	115.69	110.60
21	AA	725	G	N1-C6-O6	10.17	126.00	119.90
21	AA	1297	G	C5-C6-O6	-10.17	122.50	128.60
53	BE	49	ARG	NE-CZ-NH1	-10.17	115.22	120.30
57	BB	301	G	N1-C6-O6	10.17	126.00	119.90
57	BB	1090	A	C5-C6-N6	-10.17	115.57	123.70
57	BB	1874	C	C6-N1-C2	-10.17	116.23	120.30
57	BB	2540	C	N3-C4-N4	10.17	125.12	118.00
21	AA	825	A	O4'-C1'-N9	10.16	116.33	108.20
21	AA	235	C	C5-C6-N1	10.16	126.08	121.00
21	AA	635	A	N3-C4-C5	-10.16	119.69	126.80
57	BB	1543	G	N1-C6-O6	10.16	126.00	119.90
57	BB	1724	G	C6-C5-N7	-10.16	124.30	130.40
5	AN	19	TYR	CB-CG-CD2	10.16	127.10	121.00
21	AA	83	C	N3-C4-N4	10.16	125.11	118.00
21	AA	1134	G	C5-C6-O6	-10.16	122.50	128.60
21	AA	1422	G	N1-C2-N3	-10.16	117.80	123.90
22	AY	27	C	C5-C6-N1	10.16	126.08	121.00
57	BB	8	C	C5-C4-N4	-10.16	113.09	120.20
57	BB	2481	G	N1-C6-O6	10.16	126.00	119.90
57	BB	786	C	N3-C4-N4	10.16	125.11	118.00
57	BB	812	C	N3-C4-N4	10.16	125.11	118.00
57	BB	2007	U	O4'-C1'-N1	10.16	116.33	108.20
57	BB	2336	A	P-O3'-C3'	10.16	131.89	119.70
57	BB	341	C	O4'-C1'-N1	10.16	116.33	108.20
57	BB	872	U	N3-C4-O4	10.16	126.51	119.40
57	BB	1041	G	N3-C2-N2	10.16	127.01	119.90
57	BB	2195	U	O4'-C1'-N1	10.16	116.33	108.20
21	AA	7	A	C5-N7-C8	-10.15	98.82	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	101	A	C5-C6-N1	-10.15	112.62	117.70
57	BB	1286	A	C5-C6-N6	-10.15	115.58	123.70
57	BB	1465	G	C4-C5-C6	10.15	124.89	118.80
57	BB	249	C	C5-C4-N4	-10.15	113.09	120.20
58	BA	60	C	O4'-C1'-N1	10.15	116.32	108.20
58	BA	99	A	C8-N9-C4	10.15	109.86	105.80
3	AL	65	TYR	CB-CG-CD1	-10.15	114.91	121.00
21	AA	914	A	N1-C2-N3	-10.15	124.23	129.30
57	BB	106	C	O4'-C1'-N1	10.15	116.32	108.20
57	BB	307	G	C6-C5-N7	-10.15	124.31	130.40
57	BB	626	A	O4'-C1'-N9	10.15	116.32	108.20
57	BB	89	A	N1-C2-N3	10.14	134.37	129.30
57	BB	503	A	C5-N7-C8	10.14	108.97	103.90
57	BB	161	A	C4-C5-C6	10.14	122.07	117.00
21	AA	1144	G	C5-C6-N1	-10.14	106.43	111.50
57	BB	695	G	C4-C5-N7	10.14	114.86	110.80
21	AA	711	G	N1-C6-O6	10.14	125.98	119.90
21	AA	740	U	N3-C4-C5	-10.14	108.52	114.60
57	BB	2078	C	N3-C4-C5	-10.14	117.84	121.90
21	AA	549	C	O4'-C1'-N1	10.14	116.31	108.20
21	AA	798	U	C5-C6-N1	10.14	127.77	122.70
21	AA	1248	A	C5-C6-N1	-10.14	112.63	117.70
57	BB	507	A	N1-C6-N6	10.14	124.68	118.60
57	BB	1980	G	N1-C6-O6	10.14	125.98	119.90
57	BB	2224	G	C5-C6-N1	-10.14	106.43	111.50
57	BB	2194	U	O4'-C1'-N1	10.14	116.31	108.20
57	BB	2257	U	O4'-C1'-N1	10.14	116.31	108.20
21	AA	77	A	O4'-C1'-N9	10.13	116.31	108.20
57	BB	1783	A	N1-C6-N6	10.13	124.68	118.60
57	BB	2269	G	C8-N9-C4	-10.14	102.34	106.40
57	BB	2465	C	C2-N3-C4	10.14	124.97	119.90
21	AA	687	A	C4-C5-C6	10.13	122.07	117.00
57	BB	1710	G	O4'-C1'-N9	10.13	116.31	108.20
57	BB	1896	G	N1-C6-O6	10.13	125.98	119.90
57	BB	1578	U	C5-C4-O4	10.13	131.98	125.90
57	BB	1658	C	N3-C4-N4	10.13	125.09	118.00
57	BB	2471	A	C5-C6-N1	-10.13	112.63	117.70
57	BB	791	C	N3-C4-N4	10.13	125.09	118.00
57	BB	1837	C	C5-C4-N4	-10.13	113.11	120.20
21	AA	1464	U	O4'-C1'-N1	10.13	116.30	108.20
35	BP	92	ARG	NE-CZ-NH2	-10.13	115.24	120.30
57	BB	1563	U	N3-C4-C5	-10.13	108.52	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1268	A	C5-C6-N6	-10.13	115.60	123.70
21	AA	186	C	O4'-C1'-N1	10.12	116.30	108.20
25	AZ	99	ASP	CB-CG-OD1	10.12	127.41	118.30
57	BB	480	A	N9-C4-C5	-10.13	101.75	105.80
57	BB	1108	U	C5-C6-N1	10.13	127.76	122.70
57	BB	1284	A	C5-C6-N6	-10.13	115.60	123.70
57	BB	315	G	O4'-C1'-N9	10.12	116.30	108.20
57	BB	556	A	C8-N9-C4	-10.12	101.75	105.80
57	BB	2734	A	C2-N3-C4	10.12	115.66	110.60
21	AA	827	U	O4'-C1'-N1	10.12	116.30	108.20
57	BB	2417	C	O4'-C1'-N1	10.12	116.30	108.20
21	AA	299	G	C5-C6-O6	-10.12	122.53	128.60
57	BB	528	A	O4'-C1'-N9	10.12	116.30	108.20
57	BB	1916	A	N1-C6-N6	10.12	124.67	118.60
21	AA	1195	C	P-O3'-C3'	10.12	131.84	119.70
57	BB	2059	A	C5-C6-N6	-10.12	115.61	123.70
57	BB	26	G	C5-C6-N1	-10.12	106.44	111.50
57	BB	1951	U	O4'-C1'-N1	10.12	116.29	108.20
15	AD	61	ARG	NE-CZ-NH1	10.11	125.36	120.30
21	AA	344	A	C4-C5-C6	10.11	122.06	117.00
21	AA	1268	G	C5-C6-O6	-10.12	122.53	128.60
57	BB	576	U	N3-C4-O4	10.12	126.48	119.40
57	BB	613	A	O4'-C1'-N9	10.12	116.29	108.20
57	BB	1218	G	N7-C8-N9	-10.12	108.04	113.10
57	BB	2403	C	O4'-C1'-N1	10.11	116.29	108.20
57	BB	524	G	N1-C6-O6	10.11	125.97	119.90
57	BB	750	A	C5-C6-N1	-10.11	112.64	117.70
57	BB	675	A	C5-C6-N6	-10.11	115.61	123.70
57	BB	1098	A	C5'-C4'-C3'	10.11	132.18	116.00
21	AA	999	C	N3-C4-N4	10.11	125.08	118.00
57	BB	1426	G	N3-C2-N2	10.11	126.98	119.90
57	BB	2205	A	C5-C6-N6	-10.11	115.61	123.70
57	BB	2852	G	N7-C8-N9	-10.11	108.05	113.10
21	AA	368	U	C4-C5-C6	-10.11	113.64	119.70
57	BB	198	C	O4'-C1'-N1	10.11	116.28	108.20
57	BB	1061	U	O4'-C1'-N1	10.11	116.28	108.20
57	BB	1555	G	C6-C5-N7	-10.11	124.34	130.40
57	BB	2485	G	C5-C6-O6	-10.10	122.54	128.60
21	AA	1296	C	C4-C5-C6	10.10	122.45	117.40
23	AW	24	G	O4'-C1'-N9	10.10	116.28	108.20
57	BB	1646	C	C5-C6-N1	10.10	126.05	121.00
21	AA	78	A	N1-C2-N3	10.10	134.35	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	543	U	O4'-C1'-N1	10.10	116.28	108.20
21	AA	1329	A	N1-C6-N6	10.10	124.66	118.60
23	AW	57	G	O4'-C1'-N9	10.10	116.28	108.20
26	AV	35	A	C5-C6-N6	-10.10	115.62	123.70
21	AA	181	A	C2-N3-C4	10.10	115.65	110.60
21	AA	1220	G	C8-N9-C4	10.10	110.44	106.40
21	AA	255	G	N9-C4-C5	-10.10	101.36	105.40
21	AA	702	A	N9-C4-C5	10.10	109.84	105.80
22	AY	49	C	O4'-C1'-N1	10.10	116.28	108.20
57	BB	553	G	C8-N9-C4	-10.10	102.36	106.40
57	BB	1084	A	C5-N7-C8	10.10	108.95	103.90
57	BB	2441	U	O4'-C1'-N1	10.10	116.28	108.20
57	BB	1752	C	O4'-C1'-N1	10.09	116.28	108.20
18	AG	2	ARG	NE-CZ-NH2	-10.09	115.25	120.30
21	AA	447	G	N1-C6-O6	10.09	125.95	119.90
21	AA	1019	A	N1-C6-N6	10.09	124.66	118.60
57	BB	2407	A	N1-C6-N6	10.09	124.66	118.60
27	B5	111	PHE	CB-CG-CD1	10.09	127.86	120.80
30	BK	30	ARG	NE-CZ-NH2	-10.09	115.25	120.30
57	BB	312	G	C8-N9-C4	-10.09	102.36	106.40
57	BB	553	G	C6-C5-N7	-10.09	124.34	130.40
21	AA	1026	G	N1-C6-O6	10.09	125.95	119.90
57	BB	1327	A	N1-C6-N6	10.09	124.65	118.60
57	BB	1388	G	C8-N9-C4	-10.09	102.37	106.40
57	BB	1445	G	N9-C4-C5	-10.09	101.36	105.40
57	BB	1830	C	C5-C6-N1	10.09	126.04	121.00
57	BB	2029	G	C8-N9-C4	10.09	110.44	106.40
57	BB	1418	G	C6-C5-N7	-10.09	124.35	130.40
58	BA	40	U	N3-C4-O4	10.09	126.46	119.40
57	BB	500	G	C5-N7-C8	10.08	109.34	104.30
57	BB	1185	G	C5-N7-C8	10.08	109.34	104.30
57	BB	2030	A	O4'-C1'-N9	10.08	116.27	108.20
21	AA	492	C	O4'-C1'-N1	10.08	116.27	108.20
21	AA	1502	A	C5-C6-N6	-10.08	115.64	123.70
23	AW	38	A	C6-C5-N7	-10.08	125.24	132.30
23	AW	62	C	N3-C4-N4	10.08	125.06	118.00
30	BK	17	ARG	NE-CZ-NH2	-10.08	115.26	120.30
57	BB	174	U	C2-N3-C4	-10.08	120.95	127.00
57	BB	515	A	C5-C6-N6	-10.08	115.64	123.70
57	BB	2002	G	C5-C6-N1	-10.08	106.46	111.50
21	AA	179	A	C4-C5-N7	-10.08	105.66	110.70
57	BB	1464	G	N1-C6-O6	10.08	125.95	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1605	C	O4'-C1'-N1	10.08	116.26	108.20
57	BB	2602	A	N9-C4-C5	10.08	109.83	105.80
57	BB	390	U	O4'-C1'-N1	10.07	116.26	108.20
21	AA	69	G	C5-C6-O6	-10.07	122.56	128.60
17	AF	2	ARG	NE-CZ-NH2	-10.07	115.27	120.30
21	AA	335	C	C2-N3-C4	10.07	124.94	119.90
21	AA	491	G	C4-C5-N7	-10.07	106.77	110.80
21	AA	1525	G	C6-C5-N7	-10.07	124.36	130.40
57	BB	1213	A	C5-C6-N6	-10.07	115.64	123.70
57	BB	1266	G	N1-C6-O6	10.07	125.94	119.90
21	AA	1201	A	C5-C6-N6	-10.07	115.64	123.70
21	AA	1450	U	N1-C2-O2	-10.07	115.75	122.80
57	BB	1523	U	C5-C4-O4	10.07	131.94	125.90
57	BB	335	C	O4'-C1'-N1	10.07	116.25	108.20
57	BB	705	A	C4-C5-C6	10.07	122.03	117.00
57	BB	2702	G	C8-N9-C4	-10.07	102.37	106.40
57	BB	493	G	N1-C6-O6	10.06	125.94	119.90
57	BB	1904	G	C8-N9-C4	-10.06	102.38	106.40
57	BB	1912	A	N1-C6-N6	10.06	124.64	118.60
21	AA	954	G	N3-C4-N9	10.06	132.04	126.00
31	BL	41	ARG	NE-CZ-NH1	-10.06	115.27	120.30
57	BB	6	A	C2-N3-C4	10.06	115.63	110.60
57	BB	1527	G	N1-C6-O6	10.06	125.94	119.90
57	BB	2715	C	O4'-C1'-N1	10.06	116.25	108.20
57	BB	2877	G	O4'-C1'-N9	10.06	116.25	108.20
21	AA	932	C	O4'-C1'-N1	10.06	116.25	108.20
22	AY	40	C	C1'-O4'-C4'	-10.06	101.85	109.90
57	BB	2446	G	N1-C6-O6	10.06	125.94	119.90
21	AA	695	A	C4-C5-C6	10.05	122.03	117.00
21	AA	970	C	N3-C4-C5	-10.05	117.88	121.90
57	BB	1016	G	N9-C4-C5	10.05	109.42	105.40
22	AY	18	G	N1-C2-N3	-10.05	117.87	123.90
22	AY	23	A	O4'-C1'-N9	10.05	116.24	108.20
24	AX	20	U	P-O3'-C3'	-10.05	107.64	119.70
57	BB	1522	A	N1-C6-N6	10.05	124.63	118.60
57	BB	1745	A	N9-C4-C5	10.05	109.82	105.80
21	AA	1172	C	C2-N3-C4	10.05	124.93	119.90
57	BB	645	C	C5-C4-N4	-10.05	113.16	120.20
57	BB	2001	C	C6-N1-C2	-10.05	116.28	120.30
57	BB	86	G	C6-C5-N7	-10.05	124.37	130.40
57	BB	1673	G	C5-C6-O6	-10.05	122.57	128.60
57	BB	2576	G	N9-C4-C5	-10.05	101.38	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2659	G	C5-C6-O6	-10.05	122.57	128.60
21	AA	88	U	O4'-C1'-N1	10.04	116.23	108.20
21	AA	1006	G	N1-C2-N3	-10.04	117.87	123.90
21	AA	1231	G	N9-C4-C5	10.04	109.42	105.40
57	BB	1965	C	O4'-C1'-N1	10.04	116.23	108.20
21	AA	75	G	C8-N9-C4	-10.04	102.38	106.40
21	AA	489	C	N3-C4-N4	10.04	125.03	118.00
21	AA	918	A	C5-C6-N6	-10.04	115.67	123.70
21	AA	1073	U	C4'-C3'-C2'	-10.04	92.56	102.60
21	AA	1525	G	C5-C6-O6	-10.04	122.58	128.60
57	BB	545	U	C2-N1-C1'	10.04	129.75	117.70
58	BA	50	A	C4-C5-C6	10.04	122.02	117.00
15	AD	74	TYR	CB-CG-CD2	10.04	127.02	121.00
57	BB	795	C	O4'-C1'-N1	10.04	116.23	108.20
57	BB	2279	G	C5-C6-O6	-10.04	122.58	128.60
21	AA	426	U	O4'-C1'-N1	10.03	116.23	108.20
55	BG	108	PHE	CB-CG-CD2	10.03	127.82	120.80
57	BB	1785	A	C5-C6-N1	-10.03	112.68	117.70
21	AA	493	A	C8-N9-C4	-10.03	101.79	105.80
57	BB	1549	A	C5-C6-N6	-10.03	115.67	123.70
57	BB	551	G	C5-C6-O6	-10.03	122.58	128.60
22	AY	32	C	O4'-C1'-N1	10.03	116.22	108.20
57	BB	1111	A	C5-C6-N6	-10.03	115.68	123.70
21	AA	1310	G	N3-C4-C5	10.03	133.61	128.60
23	AW	20	U	P-O3'-C3'	10.03	131.73	119.70
57	BB	1505	A	N1-C6-N6	10.03	124.61	118.60
57	BB	2381	A	N7-C8-N9	-10.03	108.79	113.80
57	BB	95	A	C4-C5-C6	10.02	122.01	117.00
21	AA	317	U	O4'-C1'-N1	10.02	116.22	108.20
57	BB	31	C	N3-C4-C5	-10.02	117.89	121.90
57	BB	2171	A	C5-C6-N6	-10.02	115.68	123.70
57	BB	428	A	C2-N3-C4	-10.02	105.59	110.60
57	BB	537	G	O4'-C1'-N9	10.02	116.22	108.20
57	BB	1102	C	C6-N1-C2	-10.02	116.29	120.30
21	AA	766	A	N9-C4-C5	-10.02	101.79	105.80
21	AA	1054	C	C6-N1-C2	-10.02	116.29	120.30
57	BB	2710	C	O4'-C1'-N1	10.02	116.22	108.20
21	AA	458	U	O4'-C1'-N1	10.02	116.21	108.20
22	AY	59	U	N3-C4-O4	10.02	126.41	119.40
22	AY	65	G	N1-C2-N3	-10.02	117.89	123.90
21	AA	483	C	C6-N1-C2	-10.02	116.29	120.30
57	BB	570	G	N7-C8-N9	-10.02	108.09	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	938	A	C8-N9-C4	-10.01	101.79	105.80
21	AA	305	G	C5-C6-N1	-10.01	106.49	111.50
57	BB	228	C	N1-C2-O2	10.01	124.91	118.90
57	BB	1979	U	O4'-C1'-N1	10.01	116.21	108.20
57	BB	2091	C	N3-C4-C5	-10.01	117.89	121.90
57	BB	2291	U	O4'-C1'-N1	10.01	116.21	108.20
21	AA	838	G	N1-C6-O6	10.01	125.91	119.90
57	BB	1601	G	C5-C6-O6	-10.01	122.59	128.60
57	BB	2655	G	N1-C6-O6	10.01	125.91	119.90
22	AY	48	C	C4-C5-C6	10.01	122.40	117.40
23	AW	70	G	O4'-C1'-N9	10.01	116.21	108.20
57	BB	817	C	C5-C6-N1	10.01	126.00	121.00
57	BB	1399	C	N3-C4-C5	-10.01	117.90	121.90
21	AA	435	A	N7-C8-N9	10.01	118.80	113.80
57	BB	1276	A	C4-C5-C6	10.01	122.00	117.00
21	AA	1235	U	C5-C4-O4	-10.01	119.90	125.90
21	AA	1453	G	O4'-C1'-N9	10.01	116.20	108.20
57	BB	77	G	C4-C5-N7	-10.01	106.80	110.80
57	BB	820	A	N1-C6-N6	10.01	124.60	118.60
57	BB	1280	G	O4'-C1'-N9	10.01	116.20	108.20
18	AG	94	ARG	NE-CZ-NH1	10.00	125.30	120.30
21	AA	237	G	N1-C2-N3	-10.00	117.90	123.90
21	AA	1458	G	N1-C2-N3	-10.00	117.90	123.90
23	AW	2	C	N3-C4-N4	10.00	125.00	118.00
57	BB	849	A	C4-C5-C6	10.00	122.00	117.00
57	BB	2566	A	N1-C6-N6	10.00	124.60	118.60
21	AA	9	G	N1-C6-O6	10.00	125.90	119.90
21	AA	297	G	C6-N1-C2	10.00	131.10	125.10
21	AA	1242	G	O4'-C1'-N9	10.00	116.20	108.20
21	AA	1392	G	N1-C6-O6	10.00	125.90	119.90
57	BB	236	C	O4'-C1'-N1	10.00	116.20	108.20
57	BB	1168	G	C8-N9-C4	10.00	110.40	106.40
57	BB	2507	C	N3-C4-N4	10.00	125.00	118.00
21	AA	491	G	C5-C6-N1	-10.00	106.50	111.50
21	AA	732	C	O4'-C1'-N1	10.00	116.20	108.20
57	BB	673	C	O4'-C1'-N1	10.00	116.20	108.20
57	BB	2289	G	O4'-C1'-N9	10.00	116.20	108.20
57	BB	117	G	N1-C6-O6	10.00	125.90	119.90
57	BB	494	G	C4-C5-N7	10.00	114.80	110.80
57	BB	1328	A	N7-C8-N9	-10.00	108.80	113.80
57	BB	1937	A	C4-C5-C6	10.00	122.00	117.00
57	BB	2809	A	C8-N9-C4	-10.00	101.80	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	183	C	P-O3'-C3'	9.99	131.69	119.70
57	BB	523	C	O4'-C1'-N1	9.99	116.20	108.20
21	AA	1067	A	C2-N3-C4	-9.99	105.60	110.60
23	AW	69	G	C5-C6-N1	-9.99	106.50	111.50
57	BB	1655	A	O4'-C1'-N9	9.99	116.19	108.20
21	AA	17	U	O4'-C1'-N1	9.99	116.19	108.20
21	AA	1305	G	N1-C6-O6	9.99	125.89	119.90
26	AV	18	G	C5-C6-O6	-9.99	122.61	128.60
57	BB	1011	G	C5-C6-N1	-9.99	106.50	111.50
57	BB	2381	A	C4-C5-C6	9.99	121.99	117.00
57	BB	2763	G	N1-C2-N3	-9.99	117.91	123.90
21	AA	449	G	O4'-C1'-N9	9.99	116.19	108.20
21	AA	1456	A	N7-C8-N9	9.99	118.79	113.80
57	BB	875	G	N1-C2-N3	-9.99	117.91	123.90
57	BB	1372	U	O4'-C1'-N1	9.99	116.19	108.20
57	BB	1818	U	O4'-C1'-N1	9.99	116.19	108.20
57	BB	530	G	C5-C6-O6	-9.98	122.61	128.60
57	BB	805	G	C8-N9-C4	-9.98	102.41	106.40
21	AA	466	A	C5-C6-N6	-9.98	115.71	123.70
22	AY	63	C	C6-N1-C2	-9.98	116.31	120.30
57	BB	2882	A	C5-C6-N1	-9.98	112.71	117.70
57	BB	827	U	O4'-C1'-N1	9.98	116.19	108.20
57	BB	2602	A	O4'-C1'-N9	9.98	116.19	108.20
57	BB	1348	C	N3-C4-C5	-9.98	117.91	121.90
14	AC	53	ARG	NE-CZ-NH1	9.98	125.29	120.30
21	AA	968	A	C6-N1-C2	-9.98	112.61	118.60
21	AA	1252	A	C5-C6-N6	-9.98	115.72	123.70
57	BB	167	A	N1-C6-N6	9.98	124.59	118.60
57	BB	1269	A	C5-C6-N6	-9.98	115.72	123.70
21	AA	124	C	C5-C4-N4	-9.98	113.22	120.20
57	BB	1421	G	N1-C2-N3	-9.98	117.91	123.90
57	BB	1861	G	C4-C5-N7	9.98	114.79	110.80
21	AA	499	A	C5-C6-N6	-9.97	115.72	123.70
21	AA	1373	G	C5-C6-O6	-9.97	122.62	128.60
28	BI	133	ARG	NE-CZ-NH1	9.97	125.29	120.30
57	BB	1927	A	N1-C6-N6	9.97	124.58	118.60
57	BB	1124	G	N3-C2-N2	9.97	126.88	119.90
57	BB	2588	G	O4'-C1'-N9	9.97	116.18	108.20
58	BA	66	A	P-O3'-C3'	9.97	131.67	119.70
21	AA	970	C	O4'-C1'-N1	9.97	116.18	108.20
57	BB	768	G	O4'-C1'-N9	9.97	116.18	108.20
57	BB	1445	G	N3-C2-N2	9.97	126.88	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1915	U	O4'-C1'-N1	9.97	116.18	108.20
57	BB	2534	A	C5-C6-N6	-9.97	115.72	123.70
21	AA	121	U	C2-N3-C4	-9.97	121.02	127.00
21	AA	489	C	N3-C4-C5	-9.97	117.91	121.90
21	AA	1408	A	N9-C4-C5	9.97	109.79	105.80
57	BB	250	G	C4-C5-C6	9.97	124.78	118.80
57	BB	894	U	O4'-C1'-N1	9.97	116.17	108.20
57	BB	897	C	N3-C4-N4	9.97	124.98	118.00
57	BB	1348	C	C2-N3-C4	9.97	124.88	119.90
57	BB	1494	A	C6-C5-N7	-9.97	125.32	132.30
57	BB	1526	C	C6-N1-C2	9.97	124.29	120.30
57	BB	2294	G	N9-C4-C5	9.97	109.39	105.40
57	BB	302	C	N3-C4-C5	-9.97	117.91	121.90
21	AA	635	A	C4-C5-C6	9.96	121.98	117.00
21	AA	654	G	N7-C8-N9	9.96	118.08	113.10
57	BB	41	C	C2-N3-C4	9.96	124.88	119.90
57	BB	676	A	C5-C6-N6	-9.96	115.73	123.70
57	BB	1462	C	N3-C4-N4	9.96	124.97	118.00
57	BB	2189	U	C5-C6-N1	9.96	127.68	122.70
21	AA	530	G	C8-N9-C4	-9.96	102.42	106.40
57	BB	167	A	C5-C6-N1	-9.96	112.72	117.70
57	BB	485	C	N3-C4-C5	-9.96	117.92	121.90
57	BB	1668	A	N9-C4-C5	-9.96	101.81	105.80
57	BB	1919	A	O4'-C1'-N9	9.96	116.17	108.20
21	AA	267	C	C5-C4-N4	-9.96	113.23	120.20
57	BB	1281	G	N1-C6-O6	9.96	125.88	119.90
57	BB	1321	A	C5-C6-N1	-9.96	112.72	117.70
21	AA	696	A	N1-C6-N6	9.96	124.57	118.60
21	AA	951	G	N1-C6-O6	9.96	125.88	119.90
57	BB	388	G	C6-C5-N7	-9.96	124.42	130.40
57	BB	2902	C	C5-C6-N1	-9.96	116.02	121.00
21	AA	328	C	O4'-C1'-N1	9.96	116.16	108.20
57	BB	2072	C	C5-C4-N4	-9.96	113.23	120.20
21	AA	1333	A	C8-N9-C4	-9.95	101.82	105.80
57	BB	2864	G	N1-C6-O6	9.95	125.87	119.90
57	BB	2880	C	N3-C4-C5	-9.95	117.92	121.90
21	AA	703	G	C5-C6-O6	-9.95	122.63	128.60
57	BB	464	U	O4'-C1'-N1	9.95	116.16	108.20
57	BB	1408	G	N1-C6-O6	9.95	125.87	119.90
21	AA	1193	G	C2-N3-C4	9.95	116.88	111.90
57	BB	1277	G	C8-N9-C4	-9.95	102.42	106.40
57	BB	2081	U	O4'-C1'-N1	9.95	116.16	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2809	A	C5-C6-N6	-9.95	115.74	123.70
21	AA	1358	U	N3-C4-O4	9.95	126.36	119.40
21	AA	1372	U	O4'-C1'-N1	9.95	116.16	108.20
57	BB	1733	G	C2-N3-C4	9.95	116.87	111.90
21	AA	1055	A	N7-C8-N9	-9.95	108.83	113.80
57	BB	590	A	C5-C6-N1	-9.95	112.73	117.70
57	BB	696	G	O4'-C1'-N9	9.95	116.16	108.20
57	BB	1439	A	N1-C6-N6	9.95	124.57	118.60
57	BB	1806	C	O4'-C1'-N1	9.95	116.16	108.20
57	BB	1976	U	N1-C2-N3	9.95	120.87	114.90
57	BB	2893	A	N9-C4-C5	9.95	109.78	105.80
3	AL	85	ARG	NE-CZ-NH1	9.94	125.27	120.30
22	AY	58	A	C4-C5-C6	9.94	121.97	117.00
25	AZ	76	TYR	CB-CG-CD2	-9.94	115.03	121.00
26	AV	35	A	C5-C6-N1	-9.95	112.73	117.70
57	BB	222	A	N3-C4-C5	-9.94	119.84	126.80
58	BA	46	A	C5-C6-N1	-9.95	112.73	117.70
21	AA	1311	A	C5-C6-N6	-9.94	115.75	123.70
57	BB	881	G	N1-C2-N2	-9.94	107.25	116.20
57	BB	1986	C	O4'-C1'-N1	9.94	116.15	108.20
57	BB	233	A	N7-C8-N9	-9.94	108.83	113.80
57	BB	1737	G	P-O3'-C3'	9.94	131.63	119.70
21	AA	1485	U	O4'-C1'-N1	9.94	116.15	108.20
57	BB	1631	G	C5-C6-O6	-9.94	122.64	128.60
57	BB	2529	G	N1-C6-O6	9.94	125.86	119.90
57	BB	2737	G	C5-C6-O6	-9.94	122.64	128.60
58	BA	28	C	N3-C4-N4	9.94	124.96	118.00
21	AA	227	G	N9-C4-C5	9.94	109.37	105.40
57	BB	440	C	O4'-C1'-N1	9.94	116.15	108.20
57	BB	2834	G	C6-N1-C2	9.94	131.06	125.10
21	AA	695	A	C5-C6-N1	-9.93	112.73	117.70
57	BB	1862	G	N1-C6-O6	9.93	125.86	119.90
21	AA	446	G	N1-C2-N3	-9.93	117.94	123.90
21	AA	939	G	N1-C2-N3	-9.93	117.94	123.90
57	BB	1628	G	N7-C8-N9	-9.93	108.13	113.10
57	BB	2787	C	N3-C4-N4	9.93	124.95	118.00
18	AG	43	TYR	CB-CG-CD1	9.93	126.96	121.00
57	BB	26	G	N1-C6-O6	9.93	125.86	119.90
57	BB	1828	G	O4'-C1'-N9	9.93	116.14	108.20
57	BB	99	U	N3-C4-O4	9.93	126.35	119.40
57	BB	1414	C	O4'-C1'-N1	9.93	116.14	108.20
57	BB	2189	U	N3-C4-O4	9.93	126.35	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1025	G	C5-C6-O6	-9.93	122.64	128.60
21	AA	702	A	C5-N7-C8	9.92	108.86	103.90
21	AA	1279	G	C4-C5-C6	9.92	124.75	118.80
57	BB	2095	A	N9-C4-C5	-9.92	101.83	105.80
57	BB	2290	G	N1-C6-O6	9.92	125.85	119.90
58	BA	58	A	N9-C4-C5	9.92	109.77	105.80
21	AA	1344	C	O4'-C1'-N1	9.92	116.14	108.20
21	AA	279	A	C4-C5-C6	9.92	121.96	117.00
21	AA	351	G	N1-C6-O6	9.92	125.85	119.90
26	AV	72	A	N1-C6-N6	9.92	124.55	118.60
57	BB	109	C	C5-C4-N4	-9.92	113.25	120.20
57	BB	155	A	O4'-C1'-N9	9.92	116.14	108.20
57	BB	2401	U	N1-C2-N3	9.92	120.85	114.90
21	AA	1120	C	O4'-C1'-N1	9.92	116.13	108.20
57	BB	974	G	C3'-C2'-C1'	-9.92	93.57	101.50
57	BB	1906	G	C5-N7-C8	-9.92	99.34	104.30
57	BB	2677	G	O4'-C1'-N9	9.92	116.13	108.20
57	BB	2712	C	O4'-C1'-N1	9.92	116.13	108.20
21	AA	953	G	O4'-C1'-N9	9.91	116.13	108.20
57	BB	347	A	C5-C6-N6	-9.91	115.77	123.70
57	BB	1100	C	C4-C5-C6	9.91	122.36	117.40
57	BB	1868	C	O4'-C1'-N1	9.91	116.13	108.20
21	AA	973	G	O4'-C1'-N9	9.91	116.13	108.20
21	AA	1022	A	C4-C5-C6	9.91	121.95	117.00
57	BB	2443	C	C2-N3-C4	9.91	124.86	119.90
57	BB	2676	C	N3-C4-C5	-9.91	117.94	121.90
21	AA	1468	A	O4'-C1'-N9	9.91	116.13	108.20
57	BB	2857	G	N1-C6-O6	9.91	125.84	119.90
25	AZ	261	PHE	CB-CG-CD1	9.91	127.74	120.80
21	AA	270	A	N9-C4-C5	-9.91	101.84	105.80
22	AY	49	C	N3-C4-C5	-9.91	117.94	121.90
57	BB	253	C	C5-C6-N1	9.91	125.95	121.00
27	B5	37	LYS	N-CA-CB	9.90	128.43	110.60
57	BB	6	A	C5-C6-N6	-9.90	115.78	123.70
57	BB	344	A	C5-C6-N1	-9.90	112.75	117.70
57	BB	430	A	C5-C6-N1	-9.90	112.75	117.70
57	BB	1243	C	O4'-C1'-N1	9.90	116.12	108.20
57	BB	1157	G	C6-C5-N7	-9.90	124.46	130.40
10	AS	60	PHE	CB-CG-CD1	-9.90	113.87	120.80
57	BB	576	U	O4'-C1'-N1	9.90	116.12	108.20
57	BB	1160	G	N1-C6-O6	9.90	125.84	119.90
58	BA	75	G	C5-C6-N1	-9.90	106.55	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	408	A	O4'-C1'-N9	9.89	116.12	108.20
57	BB	1977	A	C5-C6-N6	-9.89	115.78	123.70
21	AA	790	A	C8-N9-C4	-9.89	101.84	105.80
57	BB	2396	G	C5-C6-O6	-9.89	122.66	128.60
57	BB	2630	G	O4'-C1'-N9	9.89	116.11	108.20
57	BB	2854	G	C6-N1-C2	9.89	131.04	125.10
58	BA	69	G	N1-C6-O6	9.89	125.84	119.90
21	AA	341	C	C2-N3-C4	9.89	124.85	119.90
21	AA	498	A	C6-C5-N7	-9.89	125.38	132.30
21	AA	635	A	N3-C4-N9	9.89	135.31	127.40
57	BB	147	C	O4'-C1'-N1	9.89	116.11	108.20
21	AA	659	U	O4'-C1'-N1	9.89	116.11	108.20
21	AA	1195	C	O4'-C1'-N1	9.89	116.11	108.20
21	AA	1395	C	N3-C4-N4	9.89	124.92	118.00
21	AA	905	U	O4'-C1'-N1	9.89	116.11	108.20
21	AA	1494	G	C5-C6-O6	-9.89	122.67	128.60
23	AW	38	A	O4'-C1'-N9	9.89	116.11	108.20
57	BB	1360	G	C4-C5-C6	9.89	124.73	118.80
21	AA	599	C	O4'-C1'-N1	9.88	116.11	108.20
21	AA	792	A	C5-C6-N6	-9.89	115.79	123.70
57	BB	1453	A	O4'-C1'-N9	9.89	116.11	108.20
57	BB	696	G	N3-C2-N2	9.88	126.82	119.90
57	BB	1820	U	N3-C2-O2	9.88	129.12	122.20
57	BB	2092	U	C2-N1-C1'	9.88	129.56	117.70
57	BB	2186	G	C5-C6-N1	-9.88	106.56	111.50
21	AA	227	G	C2-N3-C4	9.88	116.84	111.90
21	AA	241	G	N1-C6-O6	9.88	125.83	119.90
21	AA	398	U	N3-C4-C5	-9.88	108.67	114.60
21	AA	1069	C	C4-C5-C6	9.88	122.34	117.40
21	AA	1238	A	N1-C6-N6	9.88	124.53	118.60
22	AY	17	U	C6-N1-C2	9.88	126.93	121.00
57	BB	2579	C	O4'-C1'-N1	9.88	116.11	108.20
58	BA	83	G	C4-C5-N7	9.88	114.75	110.80
21	AA	1422	G	O4'-C1'-N9	9.88	116.10	108.20
57	BB	815	C	O4'-C1'-N1	9.88	116.10	108.20
57	BB	1950	G	N1-C6-O6	9.88	125.83	119.90
1	AJ	65	TYR	CB-CG-CD1	-9.88	115.07	121.00
21	AA	941	G	N9-C4-C5	9.88	109.35	105.40
21	AA	1214	C	C5-C4-N4	-9.88	113.29	120.20
21	AA	1513	A	C4-C5-C6	9.88	121.94	117.00
26	AV	76	A	C4-C5-C6	9.87	121.94	117.00
57	BB	1816	C	O4'-C1'-N1	9.88	116.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2121	G	N1-C6-O6	9.88	125.83	119.90
57	BB	2570	G	N9-C4-C5	-9.88	101.45	105.40
21	AA	370	C	O4'-C1'-N1	9.87	116.10	108.20
57	BB	279	A	P-O5'-C5'	9.87	136.69	120.90
57	BB	2298	A	N1-C6-N6	9.87	124.52	118.60
21	AA	309	A	N1-C6-N6	9.87	124.52	118.60
57	BB	683	U	O4'-C1'-N1	9.87	116.10	108.20
57	BB	2137	U	O4'-C1'-N1	9.87	116.10	108.20
3	AL	109	ARG	NE-CZ-NH1	9.87	125.23	120.30
21	AA	886	G	C5-C6-O6	-9.87	122.68	128.60
21	AA	1024	G	C5-C6-O6	-9.87	122.68	128.60
57	BB	951	C	C6-N1-C2	9.87	124.25	120.30
21	AA	1171	A	N1-C6-N6	9.87	124.52	118.60
57	BB	1490	A	C5-N7-C8	9.87	108.83	103.90
21	AA	232	G	C5-C6-O6	-9.87	122.68	128.60
21	AA	1508	A	C4-C5-N7	-9.87	105.77	110.70
26	AV	68	C	C4-C5-C6	9.87	122.33	117.40
57	BB	2215	C	C6-N1-C2	-9.86	116.36	120.30
57	BB	2369	A	C5-C6-N6	-9.87	115.81	123.70
57	BB	2590	A	C5-N7-C8	9.87	108.83	103.90
14	AC	64	ARG	NE-CZ-NH1	9.86	125.23	120.30
57	BB	1469	A	C4-C5-N7	-9.86	105.77	110.70
57	BB	2413	G	C6-N1-C2	9.86	131.02	125.10
44	BY	47	ARG	NE-CZ-NH2	-9.86	115.37	120.30
21	AA	167	A	N1-C6-N6	9.86	124.52	118.60
21	AA	976	G	C5-C6-O6	-9.86	122.68	128.60
57	BB	1382	G	O4'-C1'-N9	9.86	116.09	108.20
57	BB	1891	G	C5-C6-O6	-9.86	122.68	128.60
57	BB	483	A	N1-C6-N6	9.86	124.51	118.60
57	BB	789	A	N3-C4-N9	9.86	135.28	127.40
57	BB	1268	A	C8-N9-C4	-9.86	101.86	105.80
21	AA	394	G	C5-C6-O6	-9.85	122.69	128.60
21	AA	789	U	O4'-C1'-N1	9.85	116.08	108.20
21	AA	821	G	C6-C5-N7	-9.85	124.49	130.40
22	AY	73	A	N1-C6-N6	9.85	124.51	118.60
36	BQ	27	ARG	NE-CZ-NH2	-9.85	115.37	120.30
36	BQ	49	ARG	NE-CZ-NH1	9.85	125.23	120.30
57	BB	2091	C	C5-C6-N1	9.85	125.93	121.00
21	AA	467	U	O4'-C1'-N1	9.85	116.08	108.20
21	AA	484	G	N1-C2-N3	-9.85	117.99	123.90
21	AA	826	C	N3-C2-O2	-9.85	115.00	121.90
26	AV	8	U	C5-C6-N1	-9.85	117.77	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2187	U	O4'-C1'-N1	9.85	116.08	108.20
57	BB	2261	C	N3-C4-N4	9.85	124.90	118.00
21	AA	72	A	O4'-C1'-N9	9.85	116.08	108.20
21	AA	180	U	O4'-C1'-N1	9.85	116.08	108.20
57	BB	1090	A	N7-C8-N9	9.85	118.72	113.80
57	BB	2058	A	C4-C5-C6	9.85	121.92	117.00
57	BB	2517	C	N3-C4-C5	-9.85	117.96	121.90
57	BB	296	U	O4'-C1'-N1	9.85	116.08	108.20
57	BB	1220	G	C5-C6-O6	-9.85	122.69	128.60
57	BB	1289	C	C5-C6-N1	9.85	125.92	121.00
57	BB	2777	G	C8-N9-C4	-9.85	102.46	106.40
21	AA	1000	A	O4'-C1'-N9	9.84	116.07	108.20
21	AA	1176	A	N1-C6-N6	9.84	124.51	118.60
26	AV	64	G	N7-C8-N9	-9.84	108.18	113.10
57	BB	936	A	C4-C5-C6	9.84	121.92	117.00
57	BB	221	A	C5-C6-N6	-9.84	115.83	123.70
57	BB	561	G	N1-C2-N3	-9.84	117.99	123.90
57	BB	361	G	O4'-C1'-N9	9.84	116.07	108.20
57	BB	2488	G	O4'-C1'-N9	9.84	116.07	108.20
4	AM	97	ARG	NE-CZ-NH2	-9.84	115.38	120.30
21	AA	109	A	C5-N7-C8	9.84	108.82	103.90
21	AA	109	A	O4'-C1'-N9	9.84	116.07	108.20
21	AA	1104	G	N3-C2-N2	9.84	126.79	119.90
27	B5	36	ALA	CA-C-N	9.84	138.85	117.20
57	BB	162	U	O4'-C1'-N1	9.84	116.07	108.20
57	BB	501	A	C8-N9-C4	-9.84	101.86	105.80
21	AA	262	A	C6-C5-N7	-9.84	125.41	132.30
26	AV	38	A	O4'-C1'-N9	9.84	116.07	108.20
57	BB	16	C	O4'-C1'-N1	9.84	116.07	108.20
57	BB	195	A	C5-C6-N1	-9.84	112.78	117.70
57	BB	1763	G	C2-N3-C4	-9.84	106.98	111.90
21	AA	164	G	N9-C4-C5	-9.84	101.47	105.40
21	AA	1482	G	C2-N3-C4	9.84	116.82	111.90
22	AY	23	A	N1-C2-N3	-9.84	124.38	129.30
57	BB	195	A	C6-C5-N7	-9.84	125.42	132.30
57	BB	2864	G	O4'-C1'-N9	9.84	116.07	108.20
57	BB	1133	A	C4-C5-C6	9.83	121.92	117.00
21	AA	1365	G	N1-C6-O6	9.83	125.80	119.90
57	BB	949	G	C5-C6-O6	-9.83	122.70	128.60
57	BB	1700	A	N1-C6-N6	9.83	124.50	118.60
57	BB	2639	A	N1-C6-N6	9.83	124.50	118.60
21	AA	57	G	N1-C6-O6	9.83	125.80	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	564	C	N3-C4-C5	-9.83	117.97	121.90
21	AA	1319	A	C5-C6-N1	-9.83	112.79	117.70
22	AY	56	C	N3-C4-N4	9.83	124.88	118.00
57	BB	1569	A	N1-C2-N3	9.83	134.21	129.30
57	BB	2399	G	C5-N7-C8	9.83	109.22	104.30
57	BB	2764	A	C4-C5-C6	9.83	121.92	117.00
58	BA	53	A	O4'-C1'-N9	9.83	116.06	108.20
57	BB	834	G	O4'-C1'-N9	9.83	116.06	108.20
58	BA	46	A	C4-C5-C6	9.83	121.91	117.00
57	BB	1279	G	O4'-C1'-N9	9.83	116.06	108.20
21	AA	1143	G	C8-N9-C4	-9.82	102.47	106.40
21	AA	1484	C	N3-C4-N4	9.82	124.88	118.00
57	BB	2283	C	P-O5'-C5'	9.82	136.62	120.90
57	BB	2598	A	N9-C4-C5	-9.82	101.87	105.80
21	AA	832	G	C5-C6-O6	-9.82	122.71	128.60
26	AV	30	G	C5-C6-O6	-9.82	122.71	128.60
57	BB	2168	G	N1-C2-N3	-9.82	118.01	123.90
57	BB	2332	C	C6-N1-C2	-9.82	116.37	120.30
57	BB	2748	A	C6-N1-C2	9.82	124.49	118.60
21	AA	419	C	C6-N1-C2	-9.82	116.37	120.30
21	AA	882	C	C6-N1-C2	-9.82	116.37	120.30
23	AW	56	C	C2-N1-C1'	9.82	129.60	118.80
25	AZ	262	ARG	NE-CZ-NH2	-9.82	115.39	120.30
57	BB	1507	C	N3-C4-C5	-9.82	117.97	121.90
57	BB	2158	A	C2-N3-C4	9.82	115.51	110.60
57	BB	2183	A	N9-C4-C5	-9.82	101.87	105.80
57	BB	2350	C	C6-N1-C2	-9.82	116.37	120.30
57	BB	2738	A	C8-N9-C4	-9.82	101.87	105.80
21	AA	1229	A	C5-N7-C8	9.81	108.81	103.90
57	BB	1216	G	N1-C6-O6	9.81	125.79	119.90
57	BB	1326	U	N3-C4-O4	9.81	126.27	119.40
58	BA	50	A	N1-C6-N6	9.81	124.49	118.60
21	AA	1365	G	C5-C6-O6	-9.81	122.71	128.60
57	BB	815	C	N3-C4-N4	9.81	124.87	118.00
57	BB	768	G	N1-C6-O6	9.81	125.79	119.90
57	BB	935	C	N3-C4-C5	-9.81	117.98	121.90
57	BB	1701	A	N3-C4-C5	-9.81	119.93	126.80
21	AA	145	G	N1-C2-N3	-9.81	118.02	123.90
21	AA	759	A	C6-C5-N7	-9.81	125.43	132.30
57	BB	800	A	C5-C6-N6	-9.81	115.85	123.70
57	BB	996	A	N1-C6-N6	9.81	124.49	118.60
57	BB	1218	G	N1-C6-O6	9.81	125.78	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2606	C	N3-C4-C5	-9.81	117.98	121.90
21	AA	814	A	N9-C4-C5	9.81	109.72	105.80
57	BB	1287	A	N1-C6-N6	9.80	124.48	118.60
57	BB	1315	C	N3-C4-C5	-9.80	117.98	121.90
57	BB	2018	G	N1-C6-O6	9.80	125.78	119.90
57	BB	2051	A	N1-C6-N6	9.80	124.48	118.60
57	BB	2868	A	O4'-C1'-N9	9.80	116.04	108.20
57	BB	50	U	N3-C4-C5	-9.80	108.72	114.60
57	BB	169	G	C6-C5-N7	-9.80	124.52	130.40
57	BB	477	A	C6-N1-C2	9.80	124.48	118.60
57	BB	763	G	C5-C6-O6	-9.80	122.72	128.60
57	BB	837	C	O4'-C1'-N1	9.80	116.04	108.20
57	BB	1314	C	O4'-C1'-N1	9.80	116.04	108.20
57	BB	2008	C	N1-C2-O2	-9.80	113.02	118.90
57	BB	2901	C	O4'-C1'-N1	9.80	116.04	108.20
57	BB	523	C	N3-C4-C5	-9.80	117.98	121.90
21	AA	48	C	C4-C5-C6	9.80	122.30	117.40
57	BB	324	A	O4'-C1'-N9	9.80	116.04	108.20
57	BB	711	G	O4'-C1'-N9	9.80	116.04	108.20
57	BB	1326	U	N3-C4-C5	-9.80	108.72	114.60
57	BB	1501	G	C5-C6-O6	-9.80	122.72	128.60
57	BB	2315	G	N9-C4-C5	9.80	109.32	105.40
58	BA	29	A	C5-C6-N6	-9.80	115.86	123.70
21	AA	922	G	C5-C6-O6	-9.80	122.72	128.60
21	AA	1175	G	N1-C2-N3	-9.80	118.02	123.90
57	BB	193	U	N3-C4-O4	9.80	126.26	119.40
57	BB	1152	C	C2-N3-C4	9.79	124.80	119.90
57	BB	2303	G	O4'-C1'-N9	9.79	116.03	108.20
21	AA	860	A	C5-C6-N1	-9.79	112.80	117.70
21	AA	901	A	N7-C8-N9	9.79	118.70	113.80
26	AV	64	G	C5-C6-O6	-9.79	122.72	128.60
57	BB	1058	U	O4'-C1'-N1	9.79	116.03	108.20
57	BB	2176	A	N1-C6-N6	9.79	124.47	118.60
57	BB	1049	C	C6-N1-C2	-9.79	116.38	120.30
57	BB	2333	A	C5-N7-C8	9.79	108.80	103.90
57	BB	2595	G	N9-C4-C5	-9.79	101.48	105.40
58	BA	63	C	O4'-C1'-N1	9.79	116.03	108.20
21	AA	207	C	N3-C2-O2	-9.79	115.05	121.90
23	AW	69	G	C4-C5-C6	9.79	124.67	118.80
57	BB	780	G	O4'-C1'-N9	9.79	116.03	108.20
57	BB	1069	A	P-O3'-C3'	9.79	131.44	119.70
58	BA	117	G	C8-N9-C4	-9.79	102.48	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	484	G	P-O3'-C3'	9.79	131.44	119.70
21	AA	805	C	C4-C5-C6	-9.78	112.51	117.40
21	AA	1054	C	O4'-C1'-N1	9.78	116.03	108.20
21	AA	1144	G	C2-N3-C4	9.79	116.79	111.90
21	AA	1482	G	N3-C4-N9	9.79	131.87	126.00
57	BB	954	G	O4'-C1'-N9	9.79	116.03	108.20
57	BB	959	A	C4-C5-C6	9.78	121.89	117.00
57	BB	2635	A	C6-N1-C2	9.79	124.47	118.60
57	BB	2802	G	C5-C6-O6	-9.78	122.73	128.60
57	BB	1046	A	O4'-C1'-N9	9.78	116.03	108.20
57	BB	984	A	N7-C8-N9	9.78	118.69	113.80
57	BB	2594	C	N3-C4-N4	9.78	124.85	118.00
21	AA	476	U	O4'-C1'-N1	9.78	116.02	108.20
57	BB	529	A	C5-C6-N1	-9.78	112.81	117.70
57	BB	1059	G	C2-N3-C4	-9.78	107.01	111.90
57	BB	1767	G	O4'-C1'-N9	9.78	116.02	108.20
21	AA	1170	A	N9-C4-C5	-9.78	101.89	105.80
57	BB	1090	A	C2-N3-C4	-9.78	105.71	110.60
21	AA	962	C	O4'-C1'-N1	9.78	116.02	108.20
23	AW	63	G	N1-C2-N3	9.78	129.76	123.90
57	BB	1766	G	C2-N3-C4	9.78	116.79	111.90
21	AA	429	U	C4-C5-C6	-9.77	113.84	119.70
57	BB	2156	G	C5-C6-O6	-9.77	122.74	128.60
21	AA	1400	C	C6-N1-C2	-9.77	116.39	120.30
57	BB	1154	G	O4'-C1'-N9	9.77	116.02	108.20
22	AY	46	G	N1-C6-O6	9.77	125.76	119.90
57	BB	526	A	N7-C8-N9	-9.77	108.91	113.80
57	BB	2614	A	N9-C4-C5	9.77	109.71	105.80
21	AA	616	G	N3-C4-C5	-9.77	123.72	128.60
21	AA	734	G	C5-C6-O6	-9.77	122.74	128.60
57	BB	951	C	N3-C4-N4	9.77	124.84	118.00
57	BB	1696	G	N1-C2-N3	-9.77	118.04	123.90
57	BB	2090	A	N3-C4-C5	-9.77	119.96	126.80
57	BB	2297	A	C5-C6-N1	-9.77	112.81	117.70
57	BB	2685	G	N3-C2-N2	9.77	126.74	119.90
21	AA	953	G	C8-N9-C4	-9.77	102.49	106.40
57	BB	597	G	N1-C6-O6	9.77	125.76	119.90
57	BB	863	A	C4-C5-C6	9.77	121.88	117.00
46	BZ	29	ARG	NE-CZ-NH2	9.77	125.18	120.30
57	BB	45	G	P-O3'-C3'	9.77	131.42	119.70
57	BB	1187	G	N1-C6-O6	9.77	125.76	119.90
57	BB	2588	G	C5-C6-O6	-9.77	122.74	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1087	G	C5-C6-O6	-9.77	122.74	128.60
58	BA	11	C	N3-C4-C5	-9.77	117.99	121.90
21	AA	743	A	C4-C5-N7	-9.76	105.82	110.70
57	BB	2852	G	C5-N7-C8	9.76	109.18	104.30
21	AA	592	G	O4'-C1'-N9	9.76	116.01	108.20
21	AA	1069	C	N3-C4-N4	9.76	124.83	118.00
21	AA	1350	A	C8-N9-C4	-9.76	101.90	105.80
21	AA	194	C	O4'-C1'-N1	9.76	116.01	108.20
21	AA	944	G	C8-N9-C4	-9.76	102.50	106.40
57	BB	48	G	C5-C6-O6	-9.76	122.74	128.60
57	BB	358	U	O4'-C1'-N1	9.76	116.01	108.20
57	BB	2074	U	N3-C4-O4	9.76	126.23	119.40
57	BB	2237	G	N9-C4-C5	-9.76	101.50	105.40
57	BB	2702	G	O4'-C1'-N9	9.76	116.01	108.20
21	AA	716	A	N1-C6-N6	9.76	124.45	118.60
21	AA	719	C	O4'-C1'-N1	9.76	116.01	108.20
57	BB	972	A	N1-C6-N6	9.76	124.45	118.60
57	BB	2667	C	N3-C4-N4	9.76	124.83	118.00
57	BB	336	C	N3-C4-N4	9.76	124.83	118.00
57	BB	1433	A	C5-C6-N6	-9.76	115.89	123.70
57	BB	1847	A	N1-C6-N6	9.76	124.45	118.60
57	BB	2274	A	O4'-C1'-N9	9.76	116.01	108.20
21	AA	406	G	C8-N9-C4	-9.75	102.50	106.40
57	BB	468	G	C5-C6-O6	-9.75	122.75	128.60
57	BB	2412	A	C8-N9-C4	-9.75	101.90	105.80
58	BA	61	G	N1-C2-N3	-9.75	118.05	123.90
57	BB	2298	A	C5-C6-N1	-9.75	112.82	117.70
21	AA	473	U	O4'-C1'-N1	9.75	116.00	108.20
57	BB	21	A	C4-C5-C6	9.75	121.88	117.00
57	BB	659	G	C5-C6-O6	-9.75	122.75	128.60
21	AA	739	C	C5-C6-N1	9.75	125.87	121.00
57	BB	1872	A	N7-C8-N9	9.75	118.67	113.80
21	AA	400	C	O4'-C1'-N1	9.75	116.00	108.20
57	BB	697	G	C5-C6-O6	-9.75	122.75	128.60
57	BB	1593	A	N1-C6-N6	9.75	124.45	118.60
57	BB	1765	U	O4'-C1'-N1	9.75	116.00	108.20
58	BA	30	C	N3-C4-N4	9.75	124.82	118.00
22	AY	26	G	N9-C4-C5	-9.74	101.50	105.40
49	B2	33	ARG	NE-CZ-NH1	-9.74	115.43	120.30
57	BB	2046	G	N1-C6-O6	9.74	125.75	119.90
21	AA	332	G	C5-C6-O6	-9.74	122.75	128.60
57	BB	1810	A	N9-C4-C5	9.74	109.70	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	87	U	C5-C6-N1	-9.74	117.83	122.70
21	AA	214	C	N3-C4-C5	-9.74	118.00	121.90
21	AA	1276	G	C8-N9-C4	-9.74	102.50	106.40
26	AV	43	A	C5-C6-N6	-9.74	115.91	123.70
57	BB	2773	C	O4'-C1'-N1	9.74	115.99	108.20
58	BA	61	G	N3-C2-N2	9.74	126.72	119.90
57	BB	110	G	C5-C6-O6	-9.74	122.76	128.60
57	BB	2648	G	N1-C6-O6	9.74	125.74	119.90
57	BB	1235	G	C5-C6-O6	-9.74	122.76	128.60
57	BB	1866	A	N1-C6-N6	9.74	124.44	118.60
57	BB	1875	G	C5-C6-N1	-9.74	106.63	111.50
21	AA	124	C	N3-C4-C5	-9.73	118.01	121.90
21	AA	927	G	N3-C2-N2	9.73	126.71	119.90
38	BS	92	ARG	NE-CZ-NH2	9.73	125.17	120.30
57	BB	1257	C	O4'-C1'-N1	9.73	115.99	108.20
57	BB	2218	G	C4-C5-N7	9.73	114.69	110.80
57	BB	2367	G	C5-C6-O6	-9.73	122.76	128.60
57	BB	2688	G	C5-C6-N1	-9.73	106.63	111.50
21	AA	601	G	C6-C5-N7	-9.73	124.56	130.40
21	AA	1335	U	N3-C4-O4	9.73	126.21	119.40
57	BB	1606	C	C6-N1-C2	-9.73	116.41	120.30
21	AA	837	U	O4'-C1'-N1	9.73	115.98	108.20
57	BB	1153	C	N3-C4-C5	-9.73	118.01	121.90
57	BB	1261	C	N3-C4-C5	-9.73	118.01	121.90
58	BA	7	G	C2-N3-C4	9.73	116.77	111.90
21	AA	1532	U	O4'-C1'-N1	9.73	115.98	108.20
57	BB	345	A	C5-C6-N1	-9.73	112.83	117.70
57	BB	1771	C	O4'-C1'-N1	9.73	115.98	108.20
57	BB	1161	C	C5-C6-N1	9.73	125.86	121.00
57	BB	2828	G	C5-C6-O6	-9.73	122.76	128.60
21	AA	1423	G	C8-N9-C4	9.72	110.29	106.40
57	BB	343	C	O4'-C1'-N1	9.72	115.98	108.20
57	BB	910	A	C5-N7-C8	9.72	108.76	103.90
57	BB	912	C	C2-N3-C4	9.72	124.76	119.90
57	BB	1294	U	O4'-C1'-N1	9.72	115.98	108.20
57	BB	1672	A	N1-C6-N6	9.72	124.43	118.60
23	AW	55	U	C2-N1-C1'	9.72	129.37	117.70
57	BB	912	C	N3-C4-N4	9.72	124.81	118.00
57	BB	2230	G	C5-C6-O6	-9.72	122.77	128.60
21	AA	306	A	C4-C5-N7	-9.72	105.84	110.70
21	AA	1460	C	C2-N3-C4	9.72	124.76	119.90
21	AA	1038	C	C2-N3-C4	9.72	124.76	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	228	C	N3-C4-C5	-9.72	118.01	121.90
57	BB	2183	A	C5-C6-N6	-9.72	115.93	123.70
57	BB	2367	G	C5-N7-C8	9.72	109.16	104.30
57	BB	963	U	N3-C4-O4	9.72	126.20	119.40
57	BB	554	U	C5-C6-N1	9.71	127.56	122.70
57	BB	686	U	C5-C4-O4	-9.71	120.07	125.90
57	BB	826	U	P-O3'-C3'	9.71	131.36	119.70
57	BB	1954	G	C5-C6-O6	-9.71	122.77	128.60
1	AJ	65	TYR	CG-CD2-CE2	-9.71	113.53	121.30
21	AA	272	C	C5-C4-N4	-9.71	113.40	120.20
23	AW	69	G	N1-C2-N3	-9.71	118.07	123.90
57	BB	1695	G	C5-N7-C8	9.71	109.16	104.30
57	BB	353	C	C5-C4-N4	-9.71	113.40	120.20
57	BB	459	U	O4'-C1'-N1	9.71	115.97	108.20
57	BB	1017	G	N1-C6-O6	9.71	125.73	119.90
57	BB	1764	C	O4'-C1'-N1	9.71	115.97	108.20
57	BB	2637	U	O4'-C1'-N1	9.71	115.97	108.20
21	AA	286	C	O4'-C1'-N1	9.71	115.97	108.20
21	AA	994	A	C5-C6-N6	-9.71	115.93	123.70
57	BB	789	A	N1-C6-N6	9.71	124.42	118.60
57	BB	916	G	N1-C2-N3	-9.71	118.08	123.90
57	BB	1817	G	C5-C6-N1	9.71	116.35	111.50
57	BB	1871	A	O4'-C1'-N9	9.71	115.97	108.20
57	BB	1906	G	N1-C2-N3	-9.71	118.08	123.90
57	BB	2358	A	C5-C6-N6	-9.71	115.93	123.70
57	BB	2656	U	O4'-C1'-N1	9.71	115.97	108.20
21	AA	67	C	N3-C4-C5	-9.71	118.02	121.90
21	AA	346	G	C5-C6-O6	-9.71	122.78	128.60
21	AA	861	G	C5-C6-O6	-9.71	122.78	128.60
57	BB	861	A	N1-C6-N6	9.71	124.42	118.60
57	BB	1114	C	N3-C4-N4	9.71	124.80	118.00
57	BB	1481	U	O4'-C1'-N1	9.71	115.97	108.20
57	BB	1347	A	C5-C6-N6	-9.70	115.94	123.70
21	AA	117	G	C5-C6-O6	-9.70	122.78	128.60
53	BE	79	ARG	NE-CZ-NH2	-9.70	115.45	120.30
57	BB	1441	G	N1-C6-O6	9.70	125.72	119.90
57	BB	2300	C	O4'-C1'-N1	9.70	115.96	108.20
21	AA	1388	C	C5-C4-N4	-9.70	113.41	120.20
55	BG	162	ARG	NE-CZ-NH1	-9.70	115.45	120.30
57	BB	422	A	C5-C6-N1	-9.70	112.85	117.70
57	BB	1795	C	N3-C4-N4	9.70	124.79	118.00
57	BB	2894	G	C4-C5-N7	9.70	114.68	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	646	U	N3-C4-O4	9.70	126.19	119.40
57	BB	660	C	N3-C4-N4	9.70	124.79	118.00
57	BB	1136	G	N1-C6-O6	9.70	125.72	119.90
57	BB	1767	G	C2-N3-C4	9.70	116.75	111.90
21	AA	944	G	O4'-C1'-N9	9.70	115.96	108.20
21	AA	1006	G	N3-C2-N2	9.70	126.69	119.90
57	BB	423	A	C5-C6-N1	-9.70	112.85	117.70
57	BB	1946	U	C5-C4-O4	-9.70	120.08	125.90
57	BB	2398	U	C5-C6-N1	9.70	127.55	122.70
57	BB	1446	C	C6-N1-C2	-9.70	116.42	120.30
21	AA	712	A	O4'-C1'-N9	9.70	115.96	108.20
21	AA	1022	A	C5-C6-N1	-9.70	112.85	117.70
21	AA	1323	G	O4'-C1'-N9	9.70	115.96	108.20
57	BB	693	A	N1-C6-N6	9.70	124.42	118.60
57	BB	1052	C	C6-N1-C2	-9.70	116.42	120.30
21	AA	319	G	N1-C6-O6	9.69	125.72	119.90
21	AA	646	G	N3-C2-N2	9.69	126.69	119.90
57	BB	1740	G	N1-C6-O6	9.69	125.72	119.90
57	BB	1901	A	C4-C5-C6	9.70	121.85	117.00
57	BB	1947	C	O4'-C1'-N1	9.70	115.96	108.20
57	BB	2053	G	N1-C2-N3	-9.69	118.08	123.90
21	AA	241	G	C5-C6-N1	-9.69	106.65	111.50
21	AA	442	G	C8-N9-C4	-9.69	102.52	106.40
21	AA	997	U	O4'-C1'-N1	9.69	115.95	108.20
21	AA	1325	C	N3-C4-N4	9.69	124.78	118.00
57	BB	277	G	N1-C6-O6	9.69	125.72	119.90
57	BB	386	G	C5-C6-N1	-9.69	106.65	111.50
57	BB	669	G	N9-C4-C5	9.69	109.28	105.40
57	BB	814	C	O4'-C1'-N1	9.69	115.95	108.20
57	BB	2049	G	C6-C5-N7	-9.69	124.58	130.40
57	BB	1984	G	C5-C6-O6	-9.69	122.79	128.60
57	BB	2842	G	P-O3'-C3'	-9.69	108.07	119.70
21	AA	611	C	C5-C4-N4	-9.69	113.42	120.20
57	BB	322	A	C5-C6-N1	-9.69	112.86	117.70
57	BB	1398	C	O4'-C1'-N1	9.69	115.95	108.20
14	AC	92	ASP	CB-CG-OD1	-9.69	109.58	118.30
21	AA	160	A	C8-N9-C4	-9.69	101.92	105.80
21	AA	616	G	C5-C6-O6	-9.69	122.79	128.60
21	AA	857	C	O4'-C1'-N1	9.69	115.95	108.20
57	BB	1590	A	C4-C5-C6	9.69	121.84	117.00
21	AA	874	G	C5-C6-O6	-9.69	122.79	128.60
57	BB	1705	A	C5-C6-N6	-9.69	115.95	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2577	A	O4'-C1'-N9	9.69	115.95	108.20
57	BB	1888	G	N1-C6-O6	9.69	125.71	119.90
57	BB	2378	A	C5-C6-N6	-9.69	115.95	123.70
21	AA	764	C	O4'-C1'-N1	9.68	115.95	108.20
57	BB	1020	A	C8-N9-C4	-9.68	101.93	105.80
57	BB	1642	G	O4'-C1'-N9	9.68	115.95	108.20
21	AA	484	G	N1-C6-O6	9.68	125.71	119.90
57	BB	340	A	C5-C6-N6	-9.68	115.95	123.70
57	BB	928	A	N1-C6-N6	9.68	124.41	118.60
57	BB	2196	C	C5-C4-N4	-9.68	113.42	120.20
58	BA	41	G	N7-C8-N9	9.68	117.94	113.10
21	AA	925	G	N7-C8-N9	-9.68	108.26	113.10
57	BB	382	A	C5-N7-C8	9.68	108.74	103.90
57	BB	1788	C	N3-C4-C5	-9.68	118.03	121.90
21	AA	581	G	O4'-C1'-N9	9.68	115.94	108.20
21	AA	535	A	C6-C5-N7	-9.68	125.53	132.30
23	AW	40	C	N3-C4-C5	-9.68	118.03	121.90
23	AW	49	C	N3-C4-N4	9.68	124.77	118.00
57	BB	1524	G	O4'-C1'-N9	9.68	115.94	108.20
57	BB	1650	A	C4-C5-C6	9.68	121.84	117.00
21	AA	199	A	O4'-C1'-N9	9.67	115.94	108.20
21	AA	359	G	N9-C4-C5	-9.67	101.53	105.40
57	BB	1215	G	C8-N9-C4	-9.67	102.53	106.40
22	AY	20	G	C3'-C2'-C1'	-9.67	93.76	101.50
57	BB	2296	U	C5-C6-N1	9.67	127.54	122.70
57	BB	541	A	C5-C6-N1	-9.67	112.86	117.70
21	AA	1035	A	C2-N3-C4	9.67	115.43	110.60
57	BB	56	A	C5-N7-C8	9.67	108.73	103.90
57	BB	520	G	C5-N7-C8	9.67	109.13	104.30
57	BB	320	A	N1-C2-N3	9.67	134.13	129.30
57	BB	1227	G	C5-C6-O6	-9.67	122.80	128.60
57	BB	1987	A	N1-C6-N6	9.67	124.40	118.60
57	BB	2508	G	C5-C6-O6	-9.67	122.80	128.60
57	BB	2606	C	O4'-C1'-N1	9.67	115.94	108.20
57	BB	2640	G	O4'-C1'-N9	9.67	115.93	108.20
21	AA	1290	G	C6-C5-N7	-9.66	124.60	130.40
26	AV	68	C	O4'-C1'-N1	9.66	115.93	108.20
57	BB	70	G	N1-C2-N3	-9.66	118.10	123.90
22	AY	76	A	O4'-C1'-N9	9.66	115.93	108.20
57	BB	460	A	C5-C6-N6	-9.66	115.97	123.70
57	BB	1273	U	C6-N1-C2	9.66	126.80	121.00
57	BB	2862	G	C5-C6-O6	-9.66	122.80	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	61	C	C5-C6-N1	9.66	125.83	121.00
57	BB	266	G	N7-C8-N9	-9.66	108.27	113.10
57	BB	902	C	N3-C4-N4	9.66	124.76	118.00
57	BB	312	G	C4-C5-C6	9.66	124.60	118.80
57	BB	392	U	N3-C4-O4	9.66	126.16	119.40
57	BB	2077	A	O4'-C1'-N9	9.66	115.93	108.20
15	AD	69	ARG	NE-CZ-NH2	9.66	125.13	120.30
18	AG	137	ARG	NE-CZ-NH2	-9.66	115.47	120.30
21	AA	364	A	C5-C6-N6	-9.66	115.97	123.70
21	AA	457	G	C2-N3-C4	9.66	116.73	111.90
21	AA	1099	G	O4'-C1'-N9	9.66	115.93	108.20
57	BB	161	A	C5-C6-N1	-9.66	112.87	117.70
57	BB	472	A	C5-C6-N6	-9.66	115.97	123.70
57	BB	996	A	N1-C2-N3	-9.66	124.47	129.30
57	BB	1157	G	N1-C6-O6	9.66	125.69	119.90
57	BB	1227	G	C8-N9-C4	9.66	110.26	106.40
57	BB	1949	G	C5-N7-C8	-9.66	99.47	104.30
57	BB	2361	G	C5-C6-N1	-9.66	106.67	111.50
57	BB	2383	G	C5-C6-O6	-9.66	122.81	128.60
57	BB	2815	C	C5-C6-N1	9.66	125.83	121.00
21	AA	155	A	C2-N3-C4	9.65	115.43	110.60
21	AA	632	U	O4'-C1'-N1	9.65	115.92	108.20
21	AA	814	A	C4-C5-N7	-9.65	105.87	110.70
22	AY	20	G	C4'-C3'-C2'	9.65	112.25	102.60
57	BB	330	A	C5-C6-N6	-9.65	115.98	123.70
57	BB	718	A	N1-C2-N3	9.65	134.13	129.30
57	BB	2263	C	C6-N1-C2	-9.65	116.44	120.30
57	BB	2281	A	C8-N9-C4	-9.65	101.94	105.80
57	BB	2865	U	N3-C4-C5	-9.65	108.81	114.60
57	BB	2893	A	C5-N7-C8	9.65	108.73	103.90
22	AY	18	G	P-O3'-C3'	9.65	131.28	119.70
57	BB	577	G	N1-C6-O6	9.65	125.69	119.90
57	BB	872	U	C2-N3-C4	9.65	132.79	127.00
57	BB	1575	C	N3-C4-N4	9.65	124.75	118.00
57	BB	2483	C	C4-C5-C6	9.65	122.22	117.40
57	BB	2826	A	N1-C6-N6	9.65	124.39	118.60
21	AA	1499	A	O4'-C1'-N9	9.65	115.92	108.20
57	BB	313	G	N3-C2-N2	9.65	126.65	119.90
57	BB	402	A	C2-N3-C4	-9.65	105.78	110.60
57	BB	891	G	N1-C2-N3	-9.65	118.11	123.90
57	BB	1892	C	N3-C4-N4	9.65	124.75	118.00
57	BB	2633	G	O4'-C1'-N9	9.64	115.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	72	G	O4'-C1'-N9	9.64	115.91	108.20
57	BB	1399	C	O4'-C1'-N1	9.64	115.91	108.20
21	AA	240	G	C5-C6-O6	-9.64	122.82	128.60
57	BB	456	C	O4'-C1'-N1	9.64	115.91	108.20
57	BB	539	G	C8-N9-C4	9.64	110.25	106.40
57	BB	557	C	O4'-C1'-N1	9.64	115.91	108.20
57	BB	2186	G	C4-C5-C6	9.64	124.58	118.80
5	AN	68	ARG	NE-CZ-NH1	-9.64	115.48	120.30
21	AA	135	C	C2-N3-C4	9.64	124.72	119.90
57	BB	181	A	C5-C6-N6	-9.64	115.99	123.70
57	BB	1909	C	C1'-O4'-C4'	-9.64	102.19	109.90
57	BB	2864	G	N3-C2-N2	9.64	126.64	119.90
57	BB	648	G	N9-C4-C5	9.63	109.25	105.40
57	BB	2058	A	O4'-C1'-N9	9.63	115.91	108.20
57	BB	2240	U	O4'-C1'-N1	9.63	115.91	108.20
21	AA	520	A	C4-C5-N7	-9.63	105.88	110.70
21	AA	944	G	C6-C5-N7	-9.63	124.62	130.40
21	AA	1005	A	N1-C6-N6	9.63	124.38	118.60
21	AA	1392	G	C5-N7-C8	9.63	109.11	104.30
21	AA	1483	A	C4-C5-C6	9.63	121.81	117.00
26	AV	67	C	N1-C2-O2	9.63	124.68	118.90
57	BB	91	A	N9-C4-C5	-9.63	101.95	105.80
57	BB	154	U	N1-C2-O2	9.63	129.54	122.80
57	BB	1717	A	C5-C6-N6	-9.63	116.00	123.70
57	BB	1896	G	C5-C6-N1	-9.63	106.68	111.50
57	BB	2813	A	O4'-C1'-N9	9.63	115.91	108.20
57	BB	654	A	C5-C6-N6	-9.63	116.00	123.70
21	AA	1418	A	C5-C6-N1	-9.63	112.89	117.70
22	AY	23	A	C8-N9-C4	-9.63	101.95	105.80
22	AY	42	G	C5-C6-N1	-9.63	106.69	111.50
57	BB	2113	U	O4'-C1'-N1	9.63	115.90	108.20
57	BB	2233	U	C5-C4-O4	-9.63	120.12	125.90
57	BB	2587	A	C5-C6-N6	-9.63	116.00	123.70
21	AA	1519	A	C5-C6-N6	-9.62	116.00	123.70
23	AW	7	A	N7-C8-N9	-9.62	108.99	113.80
57	BB	440	C	C6-N1-C2	-9.63	116.45	120.30
57	BB	1038	G	C5-C6-O6	-9.62	122.83	128.60
57	BB	1281	G	C5-C6-N1	-9.62	106.69	111.50
57	BB	2021	C	O4'-C1'-N1	9.63	115.90	108.20
57	BB	2895	G	N1-C6-O6	9.62	125.67	119.90
22	AY	15	G	C4-C5-N7	9.62	114.65	110.80
21	AA	1392	G	C4-C5-N7	-9.62	106.95	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	984	A	C4-C5-N7	-9.62	105.89	110.70
22	AY	15	G	N3-C4-C5	9.62	133.41	128.60
57	BB	2103	C	P-O3'-C3'	9.62	131.24	119.70
21	AA	445	G	O4'-C1'-N9	9.62	115.89	108.20
21	AA	1272	G	N1-C6-O6	9.62	125.67	119.90
26	AV	26	G	N1-C6-O6	9.62	125.67	119.90
7	AP	28	ARG	NE-CZ-NH1	9.62	125.11	120.30
22	AY	15	G	C5-C6-N1	-9.62	106.69	111.50
23	AW	46	G	P-O3'-C3'	9.62	131.24	119.70
57	BB	20	C	N3-C4-N4	9.62	124.73	118.00
57	BB	1304	A	O4'-C1'-N9	9.62	115.89	108.20
57	BB	2712	C	C4-C5-C6	9.62	122.21	117.40
57	BB	300	A	C4-C5-C6	9.61	121.81	117.00
21	AA	651	C	N3-C4-C5	-9.61	118.06	121.90
21	AA	1112	C	N3-C4-C5	-9.61	118.06	121.90
21	AA	1305	G	C5-C6-O6	-9.61	122.83	128.60
57	BB	209	C	N3-C4-N4	9.61	124.73	118.00
57	BB	1420	A	C5-C6-N1	-9.61	112.89	117.70
57	BB	1158	C	N3-C4-C5	-9.61	118.06	121.90
57	BB	1696	G	N3-C2-N2	9.61	126.63	119.90
57	BB	285	G	C4-C5-N7	-9.61	106.96	110.80
57	BB	1238	G	N3-C2-N2	9.61	126.63	119.90
57	BB	2808	G	N1-C6-O6	9.61	125.67	119.90
21	AA	511	C	P-O3'-C3'	9.61	131.23	119.70
21	AA	121	U	C5-C4-O4	-9.61	120.14	125.90
21	AA	1139	G	N1-C6-O6	9.61	125.66	119.90
45	BC	181	ARG	NE-CZ-NH2	9.61	125.10	120.30
58	BA	5	U	O4'-C1'-N1	9.61	115.88	108.20
21	AA	914	A	O4'-C1'-N9	9.60	115.88	108.20
21	AA	1212	U	P-O3'-C3'	9.60	131.22	119.70
57	BB	1998	A	C4-C5-N7	-9.60	105.90	110.70
57	BB	2857	G	C5-N7-C8	-9.60	99.50	104.30
21	AA	1494	G	O4'-C1'-N9	9.60	115.88	108.20
57	BB	497	A	N1-C2-N3	9.60	134.10	129.30
57	BB	592	A	O4'-C1'-N9	9.60	115.88	108.20
57	BB	921	C	C6-N1-C2	-9.60	116.46	120.30
21	AA	939	G	N1-C2-N2	9.60	124.84	116.20
21	AA	1295	U	O4'-C1'-N1	9.60	115.88	108.20
21	AA	1375	A	C4-C5-C6	9.60	121.80	117.00
23	AW	49	C	P-O5'-C5'	9.60	136.26	120.90
57	BB	212	G	O4'-C1'-N9	9.60	115.88	108.20
57	BB	1804	C	C5-C6-N1	9.60	125.80	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2583	G	N3-C2-N2	9.60	126.62	119.90
22	AY	44	A	C6-N1-C2	-9.60	112.84	118.60
57	BB	1251	C	P-O3'-C3'	9.60	131.22	119.70
23	AW	5	G	N1-C6-O6	9.60	125.66	119.90
57	BB	1311	G	O4'-C1'-N9	9.60	115.88	108.20
21	AA	27	G	C5-C6-O6	-9.59	122.84	128.60
21	AA	342	C	N3-C4-N4	9.59	124.72	118.00
21	AA	951	G	C5-C6-O6	-9.59	122.84	128.60
21	AA	1340	A	C5-C6-N1	-9.59	112.90	117.70
57	BB	182	A	C2-N3-C4	-9.59	105.80	110.60
57	BB	2313	C	O4'-C1'-N1	9.59	115.88	108.20
57	BB	959	A	N1-C6-N6	9.59	124.36	118.60
57	BB	1169	A	N1-C6-N6	9.59	124.36	118.60
57	BB	2360	G	N1-C6-O6	9.59	125.66	119.90
57	BB	2411	A	C5-C6-N1	-9.59	112.90	117.70
21	AA	250	A	C8-N9-C4	-9.59	101.96	105.80
21	AA	320	A	C5-C6-N1	-9.59	112.90	117.70
21	AA	949	A	C5-C6-N1	-9.59	112.90	117.70
57	BB	603	A	C4-C5-C6	9.59	121.79	117.00
57	BB	853	C	O4'-C1'-N1	9.59	115.87	108.20
57	BB	1936	A	N9-C4-C5	9.59	109.64	105.80
57	BB	1439	A	C5-C6-N6	-9.59	116.03	123.70
21	AA	6	G	C8-N9-C4	-9.59	102.57	106.40
21	AA	1445	U	O4'-C1'-N1	9.59	115.87	108.20
24	AX	16	A	N1-C6-N6	9.59	124.35	118.60
57	BB	1682	G	C5-N7-C8	9.59	109.09	104.30
21	AA	738	C	N3-C4-N4	9.58	124.71	118.00
21	AA	908	A	N1-C6-N6	9.58	124.35	118.60
21	AA	1210	C	C4-C5-C6	9.58	122.19	117.40
57	BB	1444	G	C5-C6-O6	-9.58	122.85	128.60
57	BB	2418	A	C5-C6-N6	-9.58	116.03	123.70
57	BB	1628	G	C5-N7-C8	9.58	109.09	104.30
57	BB	2354	C	C4-C5-C6	9.58	122.19	117.40
57	BB	2520	C	N3-C4-C5	-9.58	118.07	121.90
57	BB	2883	A	C5-C6-N6	-9.58	116.03	123.70
21	AA	1032	G	N3-C2-N2	9.58	126.61	119.90
21	AA	1172	C	N3-C4-N4	9.58	124.71	118.00
57	BB	46	G	O4'-C1'-N9	9.58	115.86	108.20
57	BB	733	G	C8-N9-C4	-9.58	102.57	106.40
57	BB	2315	G	N1-C2-N3	-9.58	118.15	123.90
57	BB	2549	G	N1-C6-O6	9.58	125.65	119.90
57	BB	2806	C	N3-C4-N4	9.58	124.70	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	946	A	C6-C5-N7	-9.58	125.60	132.30
21	AA	1002	G	N9-C4-C5	9.58	109.23	105.40
21	AA	1057	G	C8-N9-C4	-9.58	102.57	106.40
57	BB	308	G	N1-C6-O6	9.58	125.65	119.90
57	BB	1119	U	O4'-C1'-N1	9.58	115.86	108.20
57	BB	2783	U	O4'-C1'-N1	9.58	115.86	108.20
21	AA	607	A	C8-N9-C4	-9.57	101.97	105.80
57	BB	73	A	N9-C4-C5	9.57	109.63	105.80
57	BB	891	G	C2-N3-C4	9.57	116.69	111.90
57	BB	1042	G	C5-C6-O6	-9.57	122.86	128.60
57	BB	1822	C	N3-C4-N4	9.57	124.70	118.00
57	BB	1017	G	C2-N3-C4	-9.57	107.11	111.90
57	BB	1389	G	C5-N7-C8	-9.57	99.51	104.30
21	AA	825	A	N1-C6-N6	9.57	124.34	118.60
21	AA	958	A	C5-C6-N6	-9.57	116.05	123.70
22	AY	17	U	O4'-C1'-N1	9.57	115.86	108.20
57	BB	1252	G	N9-C4-C5	-9.57	101.57	105.40
57	BB	1527	G	N9-C4-C5	9.57	109.23	105.40
57	BB	2224	G	N1-C6-O6	9.57	125.64	119.90
57	BB	2311	A	C5-C6-N6	-9.57	116.04	123.70
57	BB	2329	U	C5-C4-O4	-9.57	120.16	125.90
21	AA	520	A	C5-N7-C8	9.57	108.68	103.90
21	AA	730	G	N1-C6-O6	9.57	125.64	119.90
21	AA	931	C	N3-C4-N4	9.57	124.70	118.00
21	AA	1462	C	O4'-C1'-N1	9.57	115.85	108.20
21	AA	1509	C	C4'-C3'-C2'	-9.57	93.03	102.60
57	BB	2165	C	O4'-C1'-N1	9.57	115.85	108.20
21	AA	811	C	C4-C5-C6	9.56	122.18	117.40
57	BB	178	G	N1-C6-O6	9.56	125.64	119.90
57	BB	1761	C	C5-C6-N1	9.56	125.78	121.00
57	BB	2433	A	C5-N7-C8	9.56	108.68	103.90
57	BB	58	G	N3-C2-N2	9.56	126.59	119.90
57	BB	877	A	N9-C4-C5	9.56	109.62	105.80
57	BB	1727	C	N3-C4-N4	9.56	124.69	118.00
57	BB	2255	G	C5-C6-O6	-9.56	122.86	128.60
57	BB	2598	A	C5-C6-N1	-9.56	112.92	117.70
58	BA	47	C	C5-C6-N1	9.56	125.78	121.00
21	AA	800	G	C4-C5-N7	9.56	114.62	110.80
57	BB	1366	A	C4-C5-C6	9.56	121.78	117.00
57	BB	1392	A	O4'-C1'-N9	9.56	115.85	108.20
57	BB	2205	A	C8-N9-C4	-9.56	101.98	105.80
21	AA	708	C	O4'-C1'-N1	9.56	115.84	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	407	G	N1-C2-N3	-9.56	118.17	123.90
21	AA	1258	G	O4'-C1'-N9	9.55	115.84	108.20
57	BB	1786	A	C8-N9-C4	-9.55	101.98	105.80
57	BB	215	G	C5-C6-O6	-9.55	122.87	128.60
57	BB	669	G	O4'-C1'-N9	9.55	115.84	108.20
57	BB	870	U	C2-N3-C4	-9.55	121.27	127.00
57	BB	1969	A	C6-C5-N7	-9.55	125.61	132.30
57	BB	908	C	C6-N1-C2	-9.55	116.48	120.30
57	BB	2661	G	N1-C2-N3	-9.55	118.17	123.90
57	BB	2840	C	N3-C4-N4	9.55	124.69	118.00
21	AA	534	U	C6-N1-C2	9.55	126.73	121.00
38	BS	95	ARG	NE-CZ-NH2	-9.55	115.52	120.30
57	BB	1535	A	O4'-C1'-C2'	-9.55	96.25	105.80
57	BB	1149	G	C1'-O4'-C4'	-9.55	102.26	109.90
57	BB	1667	G	N1-C6-O6	9.55	125.63	119.90
57	BB	1964	G	N1-C6-O6	9.55	125.63	119.90
57	BB	2281	A	O4'-C1'-N9	9.55	115.84	108.20
57	BB	2381	A	C5-N7-C8	9.55	108.67	103.90
21	AA	541	G	C5-C6-O6	-9.55	122.87	128.60
21	AA	1410	A	C4-C5-C6	9.55	121.77	117.00
50	B3	63	TYR	CB-CG-CD1	-9.55	115.27	121.00
21	AA	663	A	C5-C6-N1	-9.55	112.93	117.70
57	BB	900	A	C3'-C2'-C1'	-9.55	93.86	101.50
57	BB	1538	G	O4'-C1'-N9	9.55	115.84	108.20
57	BB	2029	G	P-O3'-C3'	9.55	131.16	119.70
57	BB	2030	A	C5-C6-N6	-9.55	116.06	123.70
57	BB	2336	A	C2-N3-C4	-9.55	105.83	110.60
21	AA	262	A	O4'-C1'-N9	9.54	115.83	108.20
21	AA	612	C	N3-C4-N4	9.54	124.68	118.00
21	AA	1332	A	O4'-C1'-N9	9.54	115.84	108.20
57	BB	151	C	C6-N1-C2	-9.54	116.48	120.30
57	BB	1694	C	N3-C4-N4	9.54	124.68	118.00
57	BB	2830	C	N3-C4-N4	9.54	124.68	118.00
21	AA	221	C	O4'-C1'-N1	9.54	115.83	108.20
21	AA	298	A	C6-N1-C2	-9.54	112.88	118.60
21	AA	401	C	C2-N3-C4	9.54	124.67	119.90
21	AA	1337	G	C2-N3-C4	9.54	116.67	111.90
57	BB	56	A	O4'-C1'-N9	9.54	115.83	108.20
57	BB	217	A	N1-C6-N6	9.54	124.32	118.60
57	BB	993	G	C8-N9-C4	-9.54	102.58	106.40
57	BB	1112	G	O4'-C1'-N9	9.54	115.83	108.20
57	BB	2009	A	C4-C5-C6	9.54	121.77	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1155	A	N7-C8-N9	-9.54	109.03	113.80
57	BB	629	G	C4-C5-N7	9.54	114.62	110.80
21	AA	846	G	P-O3'-C3'	-9.54	108.25	119.70
23	AW	7	A	C5-N7-C8	9.54	108.67	103.90
49	B2	41	ARG	NE-CZ-NH2	9.54	125.07	120.30
57	BB	508	A	N1-C6-N6	9.54	124.32	118.60
57	BB	2281	A	C4-C5-C6	9.54	121.77	117.00
57	BB	2761	A	C2-N3-C4	-9.54	105.83	110.60
58	BA	44	G	N1-C6-O6	9.54	125.62	119.90
57	BB	2870	C	N3-C4-N4	9.54	124.68	118.00
21	AA	412	A	O4'-C1'-N9	9.54	115.83	108.20
21	AA	726	C	O4'-C1'-N1	9.54	115.83	108.20
21	AA	921	U	O4'-C1'-N1	9.54	115.83	108.20
21	AA	1020	G	C6-C5-N7	-9.54	124.68	130.40
57	BB	1384	A	N9-C4-C5	9.53	109.61	105.80
21	AA	299	G	O4'-C1'-N9	9.53	115.83	108.20
21	AA	741	G	O4'-C1'-N9	9.53	115.83	108.20
57	BB	1715	G	C6-N1-C2	9.53	130.82	125.10
57	BB	2841	C	C5-C4-N4	-9.53	113.53	120.20
33	BN	112	TYR	CB-CG-CD2	-9.53	115.28	121.00
57	BB	2027	G	N1-C6-O6	9.53	125.62	119.90
57	BB	2114	A	N9-C4-C5	9.53	109.61	105.80
57	BB	2546	U	N3-C4-O4	9.53	126.07	119.40
57	BB	2261	C	C5-C6-N1	9.53	125.76	121.00
21	AA	600	A	C4-C5-C6	9.53	121.76	117.00
22	AY	23	A	C6-N1-C2	9.53	124.31	118.60
57	BB	451	U	O4'-C1'-N1	9.53	115.82	108.20
57	BB	1118	C	N3-C4-C5	-9.53	118.09	121.90
57	BB	1965	C	C5-C6-N1	9.53	125.76	121.00
21	AA	928	G	N1-C6-O6	9.52	125.61	119.90
21	AA	1087	G	C5-C6-O6	-9.52	122.89	128.60
21	AA	497	G	N1-C6-O6	9.52	125.61	119.90
57	BB	1618	A	C5-C6-N6	-9.52	116.08	123.70
57	BB	2813	A	N1-C6-N6	9.52	124.31	118.60
57	BB	295	G	C2-N3-C4	-9.52	107.14	111.90
57	BB	2035	G	C5-C6-O6	9.52	134.31	128.60
21	AA	505	G	O4'-C1'-N9	9.52	115.81	108.20
57	BB	1035	U	N3-C4-C5	-9.52	108.89	114.60
57	BB	2218	G	N1-C6-O6	9.52	125.61	119.90
21	AA	143	A	N1-C6-N6	9.52	124.31	118.60
21	AA	461	A	C8-N9-C4	-9.52	101.99	105.80
21	AA	799	G	N1-C6-O6	9.52	125.61	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2855	C	N3-C4-N4	9.52	124.66	118.00
21	AA	1103	C	C5-C4-N4	-9.52	113.54	120.20
18	AG	108	ARG	NE-CZ-NH1	-9.51	115.54	120.30
21	AA	287	U	O4'-C1'-N1	9.51	115.81	108.20
21	AA	354	G	N9-C4-C5	-9.51	101.59	105.40
21	AA	670	G	C5-C6-O6	-9.51	122.89	128.60
57	BB	872	U	O4'-C1'-N1	9.51	115.81	108.20
57	BB	962	G	N9-C4-C5	-9.51	101.59	105.40
57	BB	1773	A	C5-C6-N6	-9.51	116.09	123.70
21	AA	1165	U	C5-C4-O4	-9.51	120.19	125.90
57	BB	1328	A	C5-C6-N6	-9.51	116.09	123.70
21	AA	761	G	O4'-C1'-N9	9.51	115.81	108.20
42	BW	40	ARG	NE-CZ-NH1	-9.51	115.55	120.30
57	BB	351	C	C2-N3-C4	9.51	124.66	119.90
57	BB	733	G	N3-C2-N2	9.51	126.56	119.90
57	BB	1386	C	C4-C5-C6	9.51	122.16	117.40
57	BB	1584	U	N3-C2-O2	9.51	128.86	122.20
58	BA	91	C	O4'-C1'-N1	9.51	115.81	108.20
57	BB	2815	C	O4'-C1'-N1	9.51	115.81	108.20
7	AP	8	ARG	NE-CZ-NH1	9.51	125.05	120.30
23	AW	36	A	C8-N9-C4	-9.51	102.00	105.80
21	AA	371	A	O4'-C1'-N9	9.51	115.80	108.20
21	AA	1290	G	O4'-C1'-N9	9.51	115.80	108.20
57	BB	105	C	O4'-C1'-N1	9.51	115.80	108.20
57	BB	227	A	N3-C4-C5	-9.51	120.15	126.80
57	BB	316	C	N3-C4-C5	-9.50	118.10	121.90
57	BB	885	C	C2-N3-C4	9.50	124.65	119.90
57	BB	997	G	C4'-C3'-C2'	-9.50	93.10	102.60
57	BB	2266	A	C4-C5-C6	9.50	121.75	117.00
58	BA	116	G	N1-C6-O6	9.50	125.60	119.90
57	BB	585	G	O4'-C1'-N9	9.50	115.80	108.20
21	AA	205	A	N1-C6-N6	9.50	124.30	118.60
21	AA	544	G	C5-C6-O6	-9.50	122.90	128.60
22	AY	64	A	C5-C6-N6	-9.50	116.10	123.70
57	BB	1137	G	C6-C5-N7	-9.50	124.70	130.40
57	BB	2136	G	O4'-C1'-N9	9.50	115.80	108.20
21	AA	1125	U	P-O3'-C3'	9.50	131.10	119.70
23	AW	15	G	C8-N9-C4	-9.50	102.60	106.40
21	AA	436	C	N3-C4-N4	9.50	124.65	118.00
26	AV	38	A	C5-C6-N6	-9.50	116.10	123.70
57	BB	255	A	C4-C5-C6	9.50	121.75	117.00
57	BB	267	C	O4'-C1'-N1	9.50	115.80	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	496	G	C5-C6-O6	-9.50	122.90	128.60
57	BB	1504	A	C4-C5-C6	9.50	121.75	117.00
57	BB	2599	G	N9-C4-C5	9.50	109.20	105.40
57	BB	1937	A	C6-C5-N7	-9.49	125.65	132.30
57	BB	2547	A	C5-C6-N6	-9.49	116.11	123.70
57	BB	2097	A	C5-N7-C8	9.49	108.65	103.90
57	BB	2722	G	C5-C6-O6	-9.49	122.91	128.60
57	BB	2794	C	O4'-C1'-N1	9.49	115.79	108.20
21	AA	941	G	N7-C8-N9	9.49	117.84	113.10
26	AV	46	G	C6-C5-N7	-9.49	124.70	130.40
57	BB	723	C	O4'-C1'-N1	9.49	115.79	108.20
57	BB	1488	C	C5-C4-N4	-9.49	113.56	120.20
21	AA	1231	G	C4-C5-N7	-9.49	107.00	110.80
57	BB	1795	C	N3-C4-C5	-9.49	118.11	121.90
57	BB	2106	U	N3-C4-C5	-9.49	108.91	114.60
57	BB	2388	A	N9-C4-C5	9.49	109.60	105.80
21	AA	129	A	C4-C5-C6	9.49	121.74	117.00
21	AA	278	G	C5-C6-O6	-9.49	122.91	128.60
57	BB	481	G	C6-C5-N7	-9.49	124.71	130.40
57	BB	532	A	N9-C4-C5	9.49	109.59	105.80
57	BB	614	A	N1-C6-N6	9.49	124.29	118.60
57	BB	1627	G	C4-C5-C6	9.49	124.49	118.80
57	BB	64	A	N1-C6-N6	9.48	124.29	118.60
57	BB	286	U	C2-N3-C4	-9.48	121.31	127.00
57	BB	578	G	C6-C5-N7	-9.48	124.71	130.40
57	BB	2777	G	N1-C2-N3	-9.48	118.21	123.90
21	AA	1167	A	O4'-C1'-N9	9.48	115.78	108.20
21	AA	1251	A	N1-C6-N6	9.48	124.29	118.60
57	BB	2494	G	C4-C5-C6	9.48	124.49	118.80
21	AA	1397	C	N1-C2-O2	9.48	124.59	118.90
57	BB	2900	A	C5-C6-N6	-9.48	116.11	123.70
57	BB	1271	G	O4'-C1'-N9	9.48	115.78	108.20
21	AA	136	C	O4'-C1'-N1	9.48	115.78	108.20
57	BB	2234	G	C5-C6-O6	-9.48	122.91	128.60
21	AA	275	G	O4'-C1'-N9	9.48	115.78	108.20
57	BB	768	G	C5-C6-O6	-9.48	122.91	128.60
57	BB	908	C	C2-N3-C4	9.48	124.64	119.90
57	BB	2290	G	C5-C6-O6	-9.48	122.92	128.60
21	AA	129	A	O4'-C1'-N9	9.47	115.78	108.20
57	BB	1818	U	N1-C2-N3	-9.47	109.22	114.90
57	BB	1897	G	O4'-C1'-N9	9.47	115.78	108.20
57	BB	2038	G	N1-C6-O6	9.47	125.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	753	A	C4-C5-C6	9.47	121.74	117.00
57	BB	548	G	O4'-C1'-N9	9.47	115.78	108.20
57	BB	595	C	N1-C2-O2	9.47	124.58	118.90
21	AA	1507	A	C5-C6-N1	-9.47	112.97	117.70
26	AV	59	A	C5-C6-N1	-9.47	112.97	117.70
21	AA	718	A	C5-N7-C8	9.47	108.64	103.90
21	AA	1323	G	N1-C6-O6	9.47	125.58	119.90
57	BB	274	C	C5-C6-N1	9.47	125.73	121.00
57	BB	1354	A	O4'-C1'-N9	9.47	115.77	108.20
57	BB	2021	C	N3-C4-N4	9.47	124.63	118.00
57	BB	2653	U	N1-C2-N3	-9.47	109.22	114.90
21	AA	916	U	O4'-C1'-N1	9.47	115.77	108.20
57	BB	1105	U	O4'-C1'-N1	9.47	115.77	108.20
21	AA	284	C	O4'-C1'-N1	9.46	115.77	108.20
21	AA	1135	U	O4'-C1'-N1	9.46	115.77	108.20
21	AA	1322	C	N3-C4-N4	9.46	124.62	118.00
57	BB	825	A	C5-C6-N6	-9.46	116.13	123.70
57	BB	1360	G	C6-C5-N7	-9.46	124.72	130.40
21	AA	388	G	C5-C6-O6	-9.46	122.92	128.60
57	BB	803	U	C2-N3-C4	-9.46	121.32	127.00
21	AA	377	G	C2-N3-C4	9.46	116.63	111.90
57	BB	34	U	N1-C2-O2	9.46	129.42	122.80
57	BB	479	A	N1-C6-N6	9.46	124.28	118.60
57	BB	1508	A	C5-C6-N6	-9.46	116.13	123.70
57	BB	1734	G	C5-C6-O6	-9.46	122.92	128.60
57	BB	2893	A	C4-C5-C6	9.46	121.73	117.00
21	AA	356	A	C5-C6-N6	-9.46	116.13	123.70
57	BB	1437	C	N3-C4-N4	9.46	124.62	118.00
57	BB	2318	G	C6-N1-C2	9.46	130.77	125.10
21	AA	745	G	O4'-C1'-N9	9.46	115.76	108.20
57	BB	42	A	O4'-C1'-N9	9.45	115.76	108.20
57	BB	824	U	N1-C2-N3	-9.46	109.23	114.90
57	BB	1289	C	N3-C4-C5	-9.46	118.12	121.90
57	BB	1595	C	O4'-C1'-N1	9.46	115.76	108.20
21	AA	134	G	C1'-O4'-C4'	-9.45	102.34	109.90
57	BB	1684	G	N1-C6-O6	9.45	125.57	119.90
57	BB	2165	C	C5-C4-N4	-9.45	113.58	120.20
57	BB	2577	A	N1-C6-N6	9.45	124.27	118.60
57	BB	2764	A	C5-N7-C8	9.45	108.63	103.90
21	AA	187	G	N1-C6-O6	9.45	125.57	119.90
21	AA	1229	A	C2-N3-C4	-9.45	105.88	110.60
57	BB	312	G	N1-C6-O6	9.45	125.57	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	677	A	N7-C8-N9	-9.45	109.08	113.80
57	BB	1091	G	N1-C6-O6	9.45	125.57	119.90
57	BB	1298	C	C6-N1-C2	-9.45	116.52	120.30
57	BB	2787	C	C4-C5-C6	9.45	122.12	117.40
21	AA	12	U	N1-C2-O2	-9.44	116.19	122.80
21	AA	167	A	C4'-C3'-C2'	-9.45	93.16	102.60
21	AA	242	G	N1-C6-O6	9.45	125.57	119.90
21	AA	353	A	C6-N1-C2	9.45	124.27	118.60
21	AA	612	C	C5-C6-N1	9.45	125.72	121.00
21	AA	1027	C	O4'-C1'-N1	9.45	115.76	108.20
57	BB	1969	A	O4'-C1'-N9	9.45	115.76	108.20
21	AA	826	C	N1-C2-O2	9.44	124.57	118.90
57	BB	2367	G	N1-C6-O6	9.44	125.57	119.90
21	AA	1358	U	O4'-C1'-N1	9.44	115.75	108.20
57	BB	721	A	C5-C6-N6	-9.44	116.15	123.70
57	BB	1366	A	C6-C5-N7	-9.44	125.69	132.30
57	BB	1490	A	N1-C6-N6	9.44	124.27	118.60
57	BB	1643	G	O4'-C1'-N9	9.44	115.75	108.20
21	AA	432	A	C5-C6-N6	-9.44	116.15	123.70
26	AV	58	A	N1-C2-N3	9.44	134.02	129.30
57	BB	738	G	O4'-C1'-N9	9.44	115.75	108.20
57	BB	1541	C	C2-N3-C4	9.44	124.62	119.90
57	BB	2155	U	O4'-C1'-N1	9.44	115.75	108.20
57	BB	2335	A	C5-N7-C8	9.44	108.62	103.90
57	BB	1676	A	C4-C5-C6	9.44	121.72	117.00
21	AA	454	G	C6-C5-N7	-9.44	124.74	130.40
21	AA	893	C	O4'-C1'-N1	9.44	115.75	108.20
21	AA	1353	G	C5-C6-N1	-9.44	106.78	111.50
57	BB	307	G	N1-C6-O6	9.44	125.56	119.90
21	AA	711	G	C5-C6-O6	-9.43	122.94	128.60
21	AA	1516	G	O4'-C1'-N9	9.43	115.75	108.20
57	BB	1142	A	C6-C5-N7	-9.43	125.70	132.30
57	BB	1598	A	C4-C5-C6	9.43	121.72	117.00
57	BB	1661	G	C4-C5-N7	9.43	114.57	110.80
57	BB	1918	A	O4'-C1'-N9	9.43	115.75	108.20
57	BB	1734	G	O4'-C1'-N9	9.43	115.75	108.20
21	AA	212	G	C5-C6-N1	9.43	116.22	111.50
21	AA	253	A	C4-C5-N7	-9.43	105.98	110.70
21	AA	446	G	C5-C6-N1	-9.43	106.78	111.50
57	BB	31	C	N3-C4-N4	9.43	124.60	118.00
57	BB	436	C	C5-C6-N1	9.43	125.72	121.00
57	BB	2264	C	N3-C4-C5	-9.43	118.13	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	40	C	N3-C4-N4	9.43	124.60	118.00
57	BB	192	C	C5-C4-N4	-9.43	113.60	120.20
57	BB	1592	C	C4-C5-C6	-9.43	112.69	117.40
21	AA	399	G	N1-C6-O6	9.43	125.56	119.90
26	AV	23	C	C2-N3-C4	9.43	124.61	119.90
57	BB	287	G	N1-C2-N3	-9.43	118.24	123.90
21	AA	526	C	C5-C4-N4	-9.43	113.60	120.20
21	AA	1469	C	N1-C2-O2	-9.43	113.24	118.90
57	BB	686	U	N3-C4-O4	9.43	126.00	119.40
57	BB	731	C	C6-N1-C2	-9.43	116.53	120.30
57	BB	882	G	C5-C6-O6	-9.43	122.94	128.60
57	BB	1090	A	C5-N7-C8	-9.43	99.19	103.90
57	BB	2725	A	C8-N9-C4	-9.43	102.03	105.80
21	AA	592	G	C6-C5-N7	-9.42	124.75	130.40
21	AA	1296	C	C5-C6-N1	-9.42	116.29	121.00
57	BB	187	G	O4'-C1'-N9	9.42	115.74	108.20
57	BB	502	A	N7-C8-N9	-9.42	109.09	113.80
57	BB	535	G	C5-C6-O6	-9.42	122.95	128.60
57	BB	1502	A	O4'-C1'-N9	9.42	115.74	108.20
21	AA	1404	C	N3-C4-N4	9.42	124.59	118.00
57	BB	1040	A	O4'-C1'-N9	9.42	115.74	108.20
57	BB	2487	G	N3-C2-N2	9.42	126.49	119.90
21	AA	1361	G	C6-N1-C2	9.42	130.75	125.10
57	BB	931	U	N1-C2-N3	-9.42	109.25	114.90
57	BB	2508	G	N3-C2-N2	9.42	126.49	119.90
21	AA	652	U	O4'-C1'-N1	9.42	115.73	108.20
57	BB	527	C	C2-N1-C1'	9.42	129.16	118.80
57	BB	1423	G	C4-C5-C6	9.42	124.45	118.80
57	BB	428	A	N1-C2-N3	9.42	134.01	129.30
57	BB	1548	A	O4'-C1'-N9	9.42	115.73	108.20
57	BB	2017	U	C5-C6-N1	9.42	127.41	122.70
21	AA	915	A	C5-C6-N1	-9.41	112.99	117.70
21	AA	945	G	N3-C2-N2	9.41	126.49	119.90
21	AA	1338	G	N1-C2-N3	-9.41	118.25	123.90
23	AW	68	C	O4'-C1'-N1	9.41	115.73	108.20
57	BB	878	A	C8-N9-C4	-9.41	102.03	105.80
57	BB	1881	C	N3-C4-N4	9.41	124.59	118.00
57	BB	2879	A	C5-C6-N6	-9.41	116.17	123.70
21	AA	1251	A	C4-C5-C6	9.41	121.71	117.00
57	BB	618	G	C6-C5-N7	-9.41	124.75	130.40
21	AA	78	A	O4'-C1'-N9	9.41	115.73	108.20
57	BB	812	C	O4'-C1'-N1	9.41	115.73	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2256	G	C5-C6-O6	-9.41	122.95	128.60
21	AA	232	G	C6-N1-C2	-9.41	119.45	125.10
57	BB	2542	A	C8-N9-C4	-9.41	102.04	105.80
21	AA	63	C	C5-C6-N1	9.41	125.70	121.00
26	AV	23	C	C5-C6-N1	-9.41	116.30	121.00
57	BB	1	G	OP1-P-OP2	-9.41	105.49	119.60
57	BB	2100	G	C6-N1-C2	9.41	130.74	125.10
57	BB	2450	A	C5-C6-N1	-9.41	113.00	117.70
21	AA	38	G	C2-N3-C4	9.40	116.60	111.90
57	BB	158	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	1182	G	C5-C6-O6	-9.40	122.96	128.60
58	BA	79	G	C4-C5-C6	9.40	124.44	118.80
57	BB	1267	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	1365	A	C4-C5-C6	9.40	121.70	117.00
57	BB	1418	G	N3-C2-N2	9.40	126.48	119.90
57	BB	2827	C	C5-C4-N4	-9.40	113.62	120.20
25	AZ	210	PHE	CB-CG-CD2	9.40	127.38	120.80
58	BA	31	C	C2-N3-C4	9.40	124.60	119.90
21	AA	1387	G	O4'-C1'-N9	9.40	115.72	108.20
21	AA	1396	A	N1-C6-N6	9.40	124.24	118.60
23	AW	72	C	C4-C5-C6	9.40	122.10	117.40
40	BU	85	ARG	NE-CZ-NH2	9.40	125.00	120.30
57	BB	789	A	C2-N3-C4	9.40	115.30	110.60
57	BB	1859	U	C6-N1-C2	9.40	126.64	121.00
21	AA	496	A	O4'-C1'-N9	9.40	115.72	108.20
21	AA	7	A	N1-C6-N6	9.40	124.24	118.60
21	AA	125	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	224	U	O4'-C1'-N1	9.40	115.72	108.20
57	BB	1929	G	N1-C6-O6	9.40	125.54	119.90
21	AA	220	G	C5-C6-O6	-9.40	122.96	128.60
57	BB	564	C	N3-C4-N4	9.40	124.58	118.00
57	BB	1471	G	O4'-C1'-N9	9.40	115.72	108.20
57	BB	1948	G	C4-C5-N7	-9.40	107.04	110.80
21	AA	48	C	N3-C4-C5	-9.39	118.14	121.90
21	AA	182	A	C5-C6-N6	-9.39	116.18	123.70
21	AA	401	C	N1-C2-O2	9.39	124.54	118.90
21	AA	1313	U	O4'-C1'-N1	9.39	115.72	108.20
57	BB	2806	C	O4'-C1'-N1	9.39	115.72	108.20
22	AY	76	A	C8-N9-C4	-9.39	102.04	105.80
33	BN	8	ARG	NE-CZ-NH1	-9.39	115.60	120.30
57	BB	85	G	N1-C6-O6	9.39	125.53	119.90
57	BB	214	G	C6-C5-N7	-9.39	124.77	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1419	A	C4-C5-C6	9.39	121.69	117.00
21	AA	878	A	C5-C6-N6	-9.39	116.19	123.70
25	AZ	288	ARG	NE-CZ-NH2	9.39	124.99	120.30
57	BB	20	C	N3-C4-C5	-9.39	118.14	121.90
57	BB	1223	G	N9-C4-C5	9.39	109.16	105.40
58	BA	38	C	O4'-C1'-N1	9.39	115.71	108.20
42	BW	63	ASP	CB-CG-OD1	-9.39	109.85	118.30
21	AA	42	G	N1-C6-O6	9.39	125.53	119.90
21	AA	925	G	P-O3'-C3'	9.38	130.96	119.70
21	AA	1049	U	P-O3'-C3'	9.38	130.96	119.70
57	BB	1957	C	C5-C6-N1	9.39	125.69	121.00
57	BB	1155	A	N9-C4-C5	9.38	109.55	105.80
57	BB	1389	G	N1-C2-N3	-9.38	118.27	123.90
57	BB	2220	U	O4'-C1'-N1	9.38	115.71	108.20
21	AA	897	C	C5-C4-N4	-9.38	113.63	120.20
57	BB	1166	G	C6-C5-N7	-9.38	124.77	130.40
57	BB	1615	C	N3-C4-N4	9.38	124.57	118.00
57	BB	1715	G	C4-C5-C6	9.38	124.43	118.80
57	BB	2538	C	C4-C5-C6	9.38	122.09	117.40
21	AA	139	A	C5-C6-N6	-9.38	116.20	123.70
57	BB	639	U	O4'-C1'-N1	9.38	115.70	108.20
57	BB	1225	G	C5-C6-O6	-9.38	122.97	128.60
57	BB	1499	C	N3-C4-N4	9.38	124.56	118.00
57	BB	1998	A	N7-C8-N9	-9.38	109.11	113.80
57	BB	2883	A	C4-C5-C6	9.38	121.69	117.00
13	AB	193	ASP	CB-CG-OD2	-9.37	109.86	118.30
21	AA	23	C	C5-C4-N4	-9.37	113.64	120.20
21	AA	1063	C	N3-C4-N4	9.37	124.56	118.00
57	BB	1335	C	C5-C4-N4	-9.37	113.64	120.20
57	BB	2221	G	C5-C6-N1	-9.37	106.81	111.50
15	AD	61	ARG	NE-CZ-NH2	-9.37	115.61	120.30
21	AA	138	G	N1-C6-O6	9.37	125.52	119.90
21	AA	818	G	N7-C8-N9	-9.37	108.41	113.10
21	AA	1334	G	C5-C6-O6	-9.37	122.98	128.60
57	BB	1353	A	C5-C6-N1	-9.37	113.02	117.70
57	BB	1388	G	N7-C8-N9	9.37	117.79	113.10
57	BB	1990	C	O4'-C1'-N1	9.37	115.70	108.20
57	BB	2165	C	N3-C4-N4	9.37	124.56	118.00
57	BB	2706	A	C5-C6-N6	-9.37	116.20	123.70
57	BB	2741	A	C5-C6-N1	-9.37	113.01	117.70
57	BB	2419	U	O4'-C1'-N1	9.37	115.70	108.20
21	AA	255	G	C5-C6-O6	-9.37	122.98	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	BO	57	ALA	N-CA-CB	9.37	123.22	110.10
57	BB	332	A	N9-C4-C5	9.37	109.55	105.80
57	BB	1007	C	O4'-C1'-N1	9.37	115.69	108.20
57	BB	1473	G	O4'-C1'-N9	9.37	115.69	108.20
57	BB	1521	G	N3-C2-N2	9.37	126.46	119.90
57	BB	2495	G	C4-C5-C6	9.37	124.42	118.80
21	AA	545	C	O4'-C1'-N1	9.37	115.69	108.20
21	AA	846	G	C5-C6-O6	-9.37	122.98	128.60
57	BB	20	C	O4'-C1'-N1	9.37	115.69	108.20
57	BB	684	G	C5-C6-O6	-9.37	122.98	128.60
57	BB	1013	C	N3-C4-C5	-9.37	118.15	121.90
57	BB	2425	A	C4-C5-C6	9.37	121.68	117.00
57	BB	1831	G	C5-C6-O6	-9.36	122.98	128.60
57	BB	2229	U	O4'-C1'-N1	9.36	115.69	108.20
57	BB	2557	G	N1-C6-O6	9.36	125.52	119.90
21	AA	157	U	C1'-O4'-C4'	-9.36	102.41	109.90
21	AA	257	G	C6-N1-C2	-9.36	119.48	125.10
21	AA	654	G	C4-C5-N7	9.36	114.54	110.80
21	AA	966	G	O4'-C1'-N9	9.36	115.69	108.20
21	AA	1437	A	C5-C6-N1	-9.36	113.02	117.70
57	BB	379	G	C5-N7-C8	9.36	108.98	104.30
57	BB	682	G	C6-C5-N7	-9.36	124.78	130.40
57	BB	2115	G	N1-C6-O6	9.36	125.52	119.90
21	AA	23	C	C6-N1-C2	-9.36	116.56	120.30
21	AA	312	C	C5-C4-N4	-9.36	113.65	120.20
57	BB	896	A	C5-C6-N6	-9.36	116.21	123.70
57	BB	2805	C	P-O3'-C3'	-9.36	108.47	119.70
17	AF	79	ARG	NE-CZ-NH1	9.36	124.98	120.30
21	AA	363	A	C5-C6-N6	-9.36	116.22	123.70
21	AA	642	A	N1-C6-N6	9.36	124.21	118.60
23	AW	56	C	P-O3'-C3'	9.36	130.93	119.70
57	BB	1787	A	C5-C6-N6	-9.36	116.22	123.70
15	AD	62	ARG	NE-CZ-NH1	9.35	124.98	120.30
21	AA	240	G	N1-C6-O6	9.35	125.51	119.90
23	AW	24	G	C5-C6-O6	-9.35	122.99	128.60
57	BB	9	G	C5-C6-O6	-9.35	122.99	128.60
21	AA	237	G	N3-C2-N2	9.35	126.45	119.90
23	AW	58	A	N1-C2-N3	9.35	133.98	129.30
26	AV	18	G	P-O3'-C3'	9.35	130.92	119.70
57	BB	1931	U	O4'-C1'-N1	9.35	115.68	108.20
57	BB	728	G	N1-C6-O6	9.35	125.51	119.90
57	BB	1339	G	O4'-C1'-N9	9.35	115.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	794	A	C8-N9-C4	-9.35	102.06	105.80
21	AA	1299	A	C5-C6-N1	-9.35	113.03	117.70
21	AA	1039	G	N1-C6-O6	9.35	125.51	119.90
23	AW	63	G	C4-N9-C1'	9.35	138.65	126.50
57	BB	117	G	C6-C5-N7	-9.35	124.79	130.40
57	BB	463	G	C5-C6-N1	-9.35	106.83	111.50
21	AA	283	U	N3-C4-C5	-9.35	108.99	114.60
21	AA	693	G	N1-C6-O6	9.35	125.51	119.90
57	BB	1367	A	N1-C6-N6	9.35	124.21	118.60
57	BB	2478	A	C5-C6-N1	-9.35	113.03	117.70
57	BB	2685	G	C2-N3-C4	9.35	116.57	111.90
21	AA	580	C	O4'-C1'-N1	9.35	115.68	108.20
21	AA	821	G	N1-C6-O6	9.35	125.51	119.90
21	AA	1220	G	N9-C4-C5	-9.35	101.66	105.40
57	BB	1743	G	C6-C5-N7	-9.35	124.79	130.40
57	BB	2222	C	N3-C4-N4	9.35	124.54	118.00
57	BB	189	G	N1-C6-O6	9.34	125.51	119.90
57	BB	1635	A	C5-C6-N6	-9.34	116.22	123.70
21	AA	119	A	N1-C6-N6	9.34	124.20	118.60
21	AA	975	A	N9-C4-C5	9.34	109.54	105.80
57	BB	2469	A	C4-C5-C6	9.34	121.67	117.00
57	BB	785	G	N1-C6-O6	9.34	125.50	119.90
21	AA	1228	C	O4'-C1'-N1	9.34	115.67	108.20
21	AA	1280	A	C2-N3-C4	-9.34	105.93	110.60
57	BB	706	A	O4'-C1'-N9	9.34	115.67	108.20
57	BB	1631	G	O4'-C1'-N9	9.34	115.67	108.20
58	BA	10	G	C5-C6-O6	-9.34	123.00	128.60
21	AA	45	G	N1-C6-O6	9.34	125.50	119.90
21	AA	89	U	C5-C6-N1	9.34	127.37	122.70
21	AA	220	G	N3-C2-N2	9.34	126.44	119.90
57	BB	227	A	C5-C6-N1	-9.34	113.03	117.70
57	BB	289	G	N7-C8-N9	-9.34	108.43	113.10
21	AA	285	C	C5-C6-N1	9.34	125.67	121.00
21	AA	524	G	C5-C6-N1	-9.34	106.83	111.50
21	AA	1312	G	N1-C6-O6	9.34	125.50	119.90
21	AA	1530	G	N1-C6-O6	9.34	125.50	119.90
57	BB	136	G	O4'-C1'-N9	9.34	115.67	108.20
57	BB	1891	G	N1-C6-O6	9.34	125.50	119.90
57	BB	2611	C	N3-C4-C5	-9.34	118.17	121.90
57	BB	2817	U	O4'-C1'-N1	9.34	115.67	108.20
57	BB	1922	G	N1-C2-N3	-9.34	118.30	123.90
57	BB	2469	A	C5-N7-C8	9.34	108.57	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2898	U	N1-C2-N3	-9.34	109.30	114.90
21	AA	309	A	C5-C6-N6	-9.33	116.23	123.70
23	AW	56	C	C4-C5-C6	9.33	122.07	117.40
57	BB	413	C	O4'-C1'-N1	9.33	115.67	108.20
57	BB	1347	A	C5-C6-N1	-9.33	113.03	117.70
57	BB	1473	G	C5-N7-C8	9.33	108.97	104.30
57	BB	2887	A	C5-C6-N6	-9.33	116.23	123.70
13	AB	152	ASP	CB-CG-OD2	9.32	126.69	118.30
21	AA	1500	A	N1-C6-N6	9.32	124.19	118.60
57	BB	1517	G	O4'-C1'-N9	9.32	115.66	108.20
57	BB	1616	A	C5-C6-N1	-9.32	113.04	117.70
57	BB	2353	G	O4'-C1'-N9	9.32	115.66	108.20
57	BB	2454	G	C8-N9-C4	9.32	110.13	106.40
57	BB	309	A	N1-C2-N3	9.32	133.96	129.30
58	BA	19	C	C5-C4-N4	-9.32	113.67	120.20
21	AA	994	A	C5-C6-N1	-9.32	113.04	117.70
21	AA	1034	G	C4-C5-N7	9.32	114.53	110.80
21	AA	1245	C	O4'-C1'-N1	9.32	115.66	108.20
21	AA	33	A	C4-C5-C6	9.32	121.66	117.00
21	AA	1228	C	C4-C5-C6	-9.32	112.74	117.40
57	BB	2581	G	C5-C6-N1	-9.32	106.84	111.50
21	AA	346	G	O4'-C1'-N9	9.32	115.65	108.20
21	AA	778	G	O4'-C1'-N9	9.32	115.65	108.20
21	AA	498	A	C5-C6-N1	-9.32	113.04	117.70
57	BB	103	A	C5-C6-N6	-9.32	116.25	123.70
57	BB	504	A	C4-C5-C6	9.32	121.66	117.00
57	BB	694	U	O4'-C1'-N1	9.32	115.65	108.20
57	BB	896	A	P-O3'-C3'	-9.32	108.52	119.70
21	AA	1111	A	P-O3'-C3'	9.31	130.88	119.70
57	BB	47	C	O4'-C1'-N1	9.31	115.65	108.20
21	AA	546	A	C8-N9-C4	-9.31	102.08	105.80
21	AA	639	G	N1-C6-O6	9.31	125.49	119.90
23	AW	62	C	O4'-C1'-N1	9.31	115.65	108.20
57	BB	1843	C	N3-C4-C5	-9.31	118.17	121.90
57	BB	2727	A	N1-C6-N6	9.31	124.19	118.60
57	BB	621	A	O4'-C1'-N9	9.31	115.65	108.20
57	BB	460	A	N9-C4-C5	-9.31	102.08	105.80
57	BB	1791	A	C8-N9-C4	-9.31	102.08	105.80
57	BB	2548	U	O4'-C1'-N1	9.31	115.65	108.20
21	AA	819	A	C4-C5-C6	9.30	121.65	117.00
22	AY	18	G	C3'-C2'-C1'	-9.30	94.06	101.50
57	BB	165	A	N7-C8-N9	9.30	118.45	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	950	U	C5-C4-O4	-9.30	120.32	125.90
57	BB	1763	G	N3-C4-C5	9.30	133.25	128.60
57	BB	2045	C	N3-C4-C5	-9.30	118.18	121.90
57	BB	2614	A	C4-C5-N7	-9.30	106.05	110.70
21	AA	470	C	C5-C4-N4	-9.30	113.69	120.20
21	AA	701	U	N1-C2-O2	-9.30	116.29	122.80
21	AA	858	G	C5-C6-O6	-9.30	123.02	128.60
57	BB	669	G	C4-N9-C1'	9.30	138.59	126.50
21	AA	60	A	C5-C6-N6	-9.30	116.26	123.70
21	AA	424	G	C5-N7-C8	-9.30	99.65	104.30
57	BB	466	A	C5-C6-N1	-9.30	113.05	117.70
57	BB	1032	A	C4-C5-C6	9.30	121.65	117.00
57	BB	1261	C	N3-C4-N4	9.30	124.51	118.00
57	BB	1852	U	O4'-C1'-N1	9.30	115.64	108.20
57	BB	2691	C	O4'-C1'-N1	9.30	115.64	108.20
21	AA	825	A	C8-N9-C4	-9.30	102.08	105.80
57	BB	2073	C	C4'-C3'-C2'	-9.30	93.30	102.60
57	BB	2482	A	C6-C5-N7	-9.30	125.79	132.30
21	AA	1327	C	C5-C4-N4	-9.29	113.69	120.20
52	BD	181	ASP	CB-CG-OD1	9.29	126.67	118.30
57	BB	466	A	C8-N9-C4	-9.29	102.08	105.80
58	BA	114	C	C6-N1-C2	-9.29	116.58	120.30
21	AA	582	C	C6-N1-C2	-9.29	116.58	120.30
21	AA	1507	A	O4'-C1'-N9	9.29	115.63	108.20
26	AV	10	G	N1-C2-N3	-9.29	118.32	123.90
57	BB	988	A	O4'-C1'-N9	9.29	115.63	108.20
57	BB	1809	A	C5-C6-N6	-9.29	116.27	123.70
58	BA	18	G	C2-N3-C4	9.29	116.55	111.90
57	BB	709	U	C5-C4-O4	-9.29	120.33	125.90
21	AA	308	C	O4'-C1'-N1	9.29	115.63	108.20
21	AA	802	A	N1-C6-N6	9.29	124.17	118.60
57	BB	439	A	N1-C6-N6	9.29	124.17	118.60
58	BA	64	G	O4'-C1'-N9	9.29	115.63	108.20
21	AA	780	A	N1-C2-N3	9.29	133.94	129.30
21	AA	1140	C	N3-C4-N4	9.29	124.50	118.00
57	BB	1080	A	C5-C6-N6	-9.29	116.27	123.70
57	BB	1626	A	C8-N9-C4	-9.29	102.08	105.80
21	AA	378	G	C8-N9-C4	-9.29	102.69	106.40
21	AA	478	A	C5-C6-N6	-9.29	116.27	123.70
21	AA	1506	U	N3-C2-O2	9.29	128.70	122.20
57	BB	130	C	N3-C4-C5	9.29	125.61	121.90
57	BB	1367	A	C2-N3-C4	-9.29	105.96	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	661	G	N1-C2-N3	-9.28	118.33	123.90
21	AA	719	C	N3-C4-N4	9.29	124.50	118.00
57	BB	1553	A	C5-C6-N1	-9.29	113.06	117.70
21	AA	195	A	N9-C4-C5	-9.28	102.09	105.80
21	AA	964	A	C4-C5-C6	9.28	121.64	117.00
57	BB	930	G	N1-C6-O6	9.28	125.47	119.90
57	BB	1237	A	C4-C5-C6	9.28	121.64	117.00
57	BB	1811	G	C4-C5-N7	-9.28	107.09	110.80
57	BB	1770	G	N1-C6-O6	9.28	125.47	119.90
57	BB	2177	C	C2-N3-C4	9.28	124.54	119.90
57	BB	2294	G	N1-C6-O6	9.28	125.47	119.90
21	AA	73	C	C2-N3-C4	9.28	124.54	119.90
21	AA	348	G	N3-C2-N2	9.28	126.39	119.90
21	AA	921	U	C2-N3-C4	9.28	132.57	127.00
57	BB	91	A	C8-N9-C4	9.28	109.51	105.80
57	BB	1269	A	C4-C5-N7	-9.28	106.06	110.70
57	BB	1481	U	C4'-C3'-C2'	-9.28	93.32	102.60
57	BB	1604	C	N3-C4-N4	9.28	124.50	118.00
21	AA	155	A	N3-C4-C5	-9.28	120.31	126.80
21	AA	803	G	N1-C6-O6	9.28	125.47	119.90
21	AA	858	G	N1-C6-O6	9.28	125.47	119.90
21	AA	1466	C	C5-C6-N1	9.28	125.64	121.00
57	BB	18	U	N3-C4-O4	9.28	125.89	119.40
57	BB	256	A	O4'-C1'-N9	9.28	115.62	108.20
57	BB	700	G	O4'-C1'-N9	9.28	115.62	108.20
57	BB	2170	A	N1-C2-N3	9.28	133.94	129.30
57	BB	1661	G	O4'-C1'-N9	9.27	115.62	108.20
57	BB	2383	G	N1-C6-O6	9.27	125.46	119.90
21	AA	495	A	C8-N9-C4	-9.27	102.09	105.80
57	BB	2052	A	C4-C5-C6	9.27	121.64	117.00
57	BB	2455	G	C5-C6-O6	-9.27	123.04	128.60
57	BB	2465	C	O4'-C1'-N1	9.27	115.62	108.20
21	AA	781	A	C4-C5-C6	9.27	121.64	117.00
21	AA	1414	U	C5-C4-O4	-9.27	120.34	125.90
22	AY	8	U	N3-C4-O4	9.27	125.89	119.40
57	BB	740	C	N3-C4-N4	9.27	124.49	118.00
57	BB	1354	A	N9-C4-C5	-9.27	102.09	105.80
57	BB	1874	C	N3-C4-N4	9.27	124.49	118.00
21	AA	912	C	N3-C4-C5	-9.27	118.19	121.90
57	BB	1085	A	N9-C4-C5	9.27	109.51	105.80
21	AA	912	C	N3-C4-N4	9.27	124.48	118.00
21	AA	930	C	N3-C4-N4	9.27	124.49	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	46	G	C5'-C4'-O4'	9.27	120.22	109.10
57	BB	444	C	N1-C2-O2	-9.27	113.34	118.90
57	BB	1286	A	C8-N9-C4	-9.27	102.09	105.80
23	AW	35	A	C5-C6-N1	-9.26	113.07	117.70
21	AA	1188	A	C5-C6-N1	-9.26	113.07	117.70
26	AV	53	G	O4'-C1'-N9	9.26	115.61	108.20
57	BB	1626	A	C4-C5-C6	9.26	121.63	117.00
22	AY	72	C	C4-C5-C6	9.26	122.03	117.40
57	BB	896	A	C8-N9-C4	-9.26	102.10	105.80
57	BB	2006	C	C2-N3-C4	9.26	124.53	119.90
21	AA	26	A	N1-C6-N6	9.26	124.16	118.60
21	AA	615	G	O4'-C1'-N9	9.26	115.60	108.20
21	AA	830	G	C5-C6-O6	-9.26	123.05	128.60
57	BB	1394	U	O4'-C1'-N1	9.26	115.60	108.20
57	BB	1621	U	O4'-C1'-N1	9.26	115.61	108.20
57	BB	2342	C	N3-C4-N4	9.26	124.48	118.00
21	AA	1418	A	C4-C5-C6	9.25	121.63	117.00
57	BB	531	C	N3-C4-N4	9.25	124.48	118.00
57	BB	603	A	C5-C6-N6	-9.25	116.30	123.70
57	BB	1543	G	N3-C4-N9	-9.25	120.45	126.00
57	BB	2708	G	N1-C6-O6	9.25	125.45	119.90
58	BA	3	C	O4'-C1'-N1	9.25	115.60	108.20
21	AA	283	U	O4'-C1'-N1	9.25	115.60	108.20
21	AA	656	G	C5-C6-N1	-9.25	106.87	111.50
57	BB	973	A	N1-C6-N6	9.25	124.15	118.60
57	BB	2694	G	C1'-O4'-C4'	9.25	117.30	109.90
57	BB	1057	A	N1-C6-N6	9.25	124.15	118.60
57	BB	1829	A	N1-C6-N6	9.25	124.15	118.60
57	BB	1928	A	C5-C6-N6	-9.25	116.30	123.70
57	BB	2432	A	N1-C6-N6	9.25	124.15	118.60
58	BA	60	C	N3-C4-C5	-9.25	118.20	121.90
21	AA	435	A	C5-C6-N1	-9.25	113.08	117.70
21	AA	475	C	O4'-C1'-N1	9.25	115.60	108.20
57	BB	1488	C	N3-C4-N4	9.25	124.47	118.00
57	BB	1678	A	C8-N9-C4	-9.25	102.10	105.80
57	BB	2069	G	C5-C6-O6	-9.25	123.05	128.60
21	AA	1456	A	C5-C6-N1	-9.24	113.08	117.70
22	AY	55	U	N3-C4-O4	9.24	125.87	119.40
21	AA	1048	G	N3-C2-N2	9.24	126.37	119.90
57	BB	76	C	C2-N3-C4	9.24	124.52	119.90
57	BB	1546	G	N1-C6-O6	9.24	125.45	119.90
57	BB	2226	C	C2-N3-C4	9.24	124.52	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2598	A	C5-N7-C8	9.24	108.52	103.90
21	AA	585	G	C5-C6-O6	-9.24	123.06	128.60
57	BB	239	C	C5-C4-N4	-9.24	113.73	120.20
21	AA	683	G	N1-C6-O6	9.24	125.44	119.90
53	BE	88	ARG	NE-CZ-NH2	9.24	124.92	120.30
57	BB	906	U	O4'-C1'-N1	9.24	115.59	108.20
57	BB	1256	G	O4'-C1'-N9	9.24	115.59	108.20
57	BB	2204	G	C4-C5-C6	9.24	124.34	118.80
21	AA	429	U	C5-C4-O4	-9.24	120.36	125.90
21	AA	1034	G	C5-C6-O6	-9.24	123.06	128.60
57	BB	399	U	N1-C2-N3	-9.24	109.36	114.90
57	BB	604	G	C6-C5-N7	-9.24	124.86	130.40
57	BB	526	A	C5-N7-C8	9.24	108.52	103.90
57	BB	2369	A	C5-C6-N1	-9.24	113.08	117.70
21	AA	205	A	N7-C8-N9	-9.23	109.18	113.80
21	AA	1426	G	C5-C6-N1	-9.23	106.88	111.50
57	BB	173	A	C5-C6-N1	-9.23	113.08	117.70
57	BB	192	C	N3-C4-N4	9.23	124.46	118.00
21	AA	760	G	O4'-C1'-N9	9.23	115.58	108.20
21	AA	430	A	C4-C5-C6	9.23	121.61	117.00
21	AA	604	G	N7-C8-N9	9.23	117.72	113.10
23	AW	14	A	C4-C5-C6	9.23	121.61	117.00
57	BB	951	C	C5-C4-N4	-9.23	113.74	120.20
57	BB	1533	C	N3-C4-N4	9.23	124.46	118.00
57	BB	2437	G	C6-N1-C2	-9.23	119.56	125.10
57	BB	8	C	O4'-C1'-N1	9.23	115.58	108.20
57	BB	2209	G	N1-C6-O6	9.23	125.44	119.90
21	AA	460	A	C5-C6-N6	-9.23	116.32	123.70
21	AA	784	A	N1-C2-N3	9.23	133.91	129.30
57	BB	155	A	C4-C5-C6	9.23	121.61	117.00
57	BB	550	C	O4'-C1'-N1	9.23	115.58	108.20
57	BB	726	G	N9-C4-C5	-9.23	101.71	105.40
57	BB	1104	C	N3-C4-N4	9.23	124.46	118.00
21	AA	292	G	C2-N3-C4	-9.22	107.29	111.90
21	AA	598	U	N3-C4-O4	9.22	125.86	119.40
21	AA	792	A	N9-C4-C5	-9.22	102.11	105.80
21	AA	1530	G	O4'-C1'-N9	9.22	115.58	108.20
57	BB	695	G	C6-C5-N7	-9.22	124.87	130.40
57	BB	1344	U	O4'-C1'-N1	9.22	115.58	108.20
57	BB	2801	G	C5-C6-O6	-9.22	123.06	128.60
57	BB	981	A	C4-C5-C6	9.22	121.61	117.00
57	BB	1044	C	N3-C4-C5	-9.22	118.21	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1148	U	C5-C4-O4	-9.22	120.37	125.90
57	BB	2591	C	O4'-C1'-N1	9.22	115.58	108.20
57	BB	1849	G	C5-C6-O6	-9.22	123.07	128.60
21	AA	729	A	C5-C6-N6	-9.22	116.32	123.70
26	AV	48	C	O4'-C1'-N1	9.22	115.58	108.20
57	BB	2435	A	O4'-C1'-N9	9.22	115.58	108.20
57	BB	1730	C	C6-N1-C2	-9.22	116.61	120.30
58	BA	70	C	O4'-C1'-N1	9.22	115.58	108.20
57	BB	1527	G	C4-C5-C6	9.22	124.33	118.80
57	BB	1598	A	C5-C6-N1	-9.22	113.09	117.70
57	BB	2571	U	O4'-C1'-N1	9.22	115.58	108.20
57	BB	636	G	C5-C6-N1	-9.22	106.89	111.50
57	BB	1203	U	O4'-C1'-N1	9.22	115.57	108.20
57	BB	2303	G	C5-C6-O6	-9.22	123.07	128.60
57	BB	2704	C	N3-C4-N4	9.22	124.45	118.00
57	BB	2886	A	C4-C5-C6	9.22	121.61	117.00
21	AA	110	C	O4'-C1'-N1	9.22	115.57	108.20
21	AA	257	G	O4'-C1'-N9	9.22	115.57	108.20
57	BB	651	G	P-O3'-C3'	9.22	130.76	119.70
57	BB	2495	G	C2-N3-C4	9.22	116.51	111.90
57	BB	1999	C	N3-C4-N4	9.21	124.45	118.00
57	BB	2078	C	C4-C5-C6	9.21	122.01	117.40
21	AA	235	C	N3-C4-N4	9.21	124.45	118.00
21	AA	585	G	O4'-C1'-N9	9.21	115.57	108.20
21	AA	1201	A	C4-C5-C6	9.21	121.61	117.00
57	BB	528	A	C4-C5-N7	-9.21	106.09	110.70
22	AY	19	G	N9-C4-C5	-9.21	101.72	105.40
57	BB	1890	A	N9-C4-C5	9.21	109.48	105.80
57	BB	2756	U	P-O3'-C3'	9.21	130.75	119.70
21	AA	1287	A	C6-C5-N7	-9.21	125.85	132.30
57	BB	789	A	C5-C6-N6	-9.21	116.33	123.70
21	AA	997	U	N3-C4-O4	9.21	125.84	119.40
45	BC	270	ARG	NE-CZ-NH1	9.21	124.90	120.30
57	BB	1099	G	N3-C2-N2	9.21	126.34	119.90
21	AA	1166	G	N1-C2-N3	-9.20	118.38	123.90
21	AA	1332	A	C5'-C4'-C3'	9.20	130.72	116.00
57	BB	367	G	O4'-C1'-N9	9.20	115.56	108.20
21	AA	243	A	C2'-C3'-O3'	9.20	129.74	109.50
21	AA	769	G	N1-C2-N3	-9.20	118.38	123.90
57	BB	788	A	N1-C2-N3	9.20	133.90	129.30
57	BB	811	U	N1-C2-O2	-9.20	116.36	122.80
57	BB	1863	G	C5-C6-O6	-9.20	123.08	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2307	G	C8-N9-C1'	-9.20	115.04	127.00
57	BB	2470	G	C6-C5-N7	-9.20	124.88	130.40
57	BB	1094	U	C2-N3-C4	-9.20	121.48	127.00
21	AA	114	U	P-O3'-C3'	-9.20	108.66	119.70
22	AY	36	A	C4-C5-C6	9.20	121.60	117.00
57	BB	209	C	C2-N3-C4	9.20	124.50	119.90
57	BB	545	U	N3-C4-O4	9.20	125.84	119.40
57	BB	1046	A	O4'-C1'-C2'	-9.20	96.60	105.80
57	BB	2238	G	C6-C5-N7	-9.20	124.88	130.40
57	BB	805	G	N1-C6-O6	9.20	125.42	119.90
57	BB	1005	C	O4'-C1'-N1	9.20	115.56	108.20
21	AA	179	A	C5-C6-N1	-9.20	113.10	117.70
21	AA	1081	A	N3-C4-C5	-9.20	120.36	126.80
56	BH	25	TYR	CB-CG-CD2	-9.20	115.48	121.00
57	BB	656	G	C5-C6-O6	-9.20	123.08	128.60
21	AA	1480	A	C2-N3-C4	-9.19	106.00	110.60
21	AA	1518	A	O4'-C1'-N9	9.19	115.55	108.20
57	BB	285	G	C5-C6-O6	-9.19	123.08	128.60
57	BB	2416	C	C5-C4-N4	-9.19	113.77	120.20
57	BB	1085	A	C5-C6-N1	-9.19	113.10	117.70
57	BB	1619	G	C8-N9-C4	-9.19	102.72	106.40
57	BB	2389	G	N3-C2-N2	9.19	126.33	119.90
23	AW	30	G	N7-C8-N9	-9.19	108.50	113.10
57	BB	110	G	O4'-C1'-N9	9.19	115.55	108.20
57	BB	516	C	O4'-C1'-N1	9.19	115.55	108.20
57	BB	1281	G	N3-C2-N2	9.19	126.33	119.90
21	AA	1511	G	C5-C6-O6	-9.19	123.09	128.60
57	BB	1317	G	N7-C8-N9	-9.19	108.51	113.10
21	AA	61	G	O4'-C1'-N9	9.18	115.55	108.20
21	AA	885	G	O4'-C1'-N9	9.18	115.55	108.20
21	AA	1521	C	O4'-C1'-N1	9.18	115.55	108.20
57	BB	940	G	N1-C6-O6	9.18	125.41	119.90
57	BB	1575	C	N3-C4-C5	-9.18	118.23	121.90
57	BB	1829	A	C5-C6-N1	-9.18	113.11	117.70
57	BB	2010	G	C2-N3-C4	9.18	116.49	111.90
34	BO	15	ARG	NE-CZ-NH1	-9.18	115.71	120.30
57	BB	95	A	C4-C5-N7	9.18	115.29	110.70
57	BB	1774	C	C4-C5-C6	-9.18	112.81	117.40
57	BB	2283	C	N3-C4-N4	9.18	124.42	118.00
21	AA	474	G	C6-C5-N7	-9.18	124.89	130.40
21	AA	1107	C	N3-C4-C5	-9.18	118.23	121.90
21	AA	1175	G	N1-C6-O6	9.18	125.41	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	971	G	C3'-C2'-C1'	-9.18	94.16	101.50
21	AA	1273	C	N3-C4-C5	9.18	125.57	121.90
21	AA	1372	U	P-O3'-C3'	9.18	130.71	119.70
26	AV	18	G	N1-C6-O6	9.18	125.41	119.90
45	BC	166	ARG	NE-CZ-NH1	-9.18	115.71	120.30
57	BB	255	A	C5-N7-C8	9.18	108.49	103.90
57	BB	1311	G	N1-C6-O6	9.18	125.41	119.90
57	BB	2475	C	C6-N1-C2	-9.18	116.63	120.30
21	AA	1505	G	C5-C6-O6	-9.17	123.09	128.60
57	BB	176	A	O4'-C1'-N9	9.17	115.54	108.20
57	BB	777	G	N9-C4-C5	9.17	109.07	105.40
21	AA	1448	C	N3-C4-N4	9.17	124.42	118.00
57	BB	660	C	C2-N3-C4	9.17	124.49	119.90
57	BB	980	A	C6-C5-N7	-9.17	125.88	132.30
57	BB	1653	G	C5-C6-O6	-9.17	123.10	128.60
21	AA	267	C	N3-C4-N4	9.17	124.42	118.00
21	AA	309	A	C4'-C3'-C2'	-9.17	93.43	102.60
57	BB	769	U	O4'-C1'-N1	9.17	115.54	108.20
57	BB	859	G	N3-C4-C5	-9.17	124.02	128.60
58	BA	114	C	O4'-C1'-N1	9.17	115.54	108.20
21	AA	670	G	O4'-C1'-N9	9.17	115.53	108.20
21	AA	1100	C	C4-C5-C6	9.17	121.98	117.40
21	AA	1300	G	N1-C6-O6	9.17	125.40	119.90
57	BB	88	G	C6-C5-N7	-9.17	124.90	130.40
21	AA	817	C	N3-C4-C5	-9.16	118.23	121.90
57	BB	1402	U	O4'-C1'-N1	9.16	115.53	108.20
21	AA	91	U	N3-C4-O4	9.16	125.81	119.40
21	AA	1184	G	N1-C6-O6	9.16	125.40	119.90
57	BB	1971	U	O4'-C1'-N1	9.16	115.53	108.20
14	AC	39	ARG	NE-CZ-NH2	-9.16	115.72	120.30
21	AA	983	A	C6-C5-N7	-9.16	125.89	132.30
57	BB	555	G	C4-C5-C6	9.16	124.30	118.80
57	BB	1630	A	O4'-C1'-N9	9.16	115.53	108.20
57	BB	1802	A	O4'-C1'-N9	9.16	115.53	108.20
57	BB	1957	C	N3-C4-C5	-9.16	118.24	121.90
21	AA	655	A	O4'-C1'-N9	9.16	115.53	108.20
22	AY	11	C	C5-C6-N1	9.16	125.58	121.00
57	BB	793	A	C5-C6-N1	-9.16	113.12	117.70
57	BB	2602	A	C5-C6-N6	-9.16	116.37	123.70
57	BB	49	A	C4-C5-C6	9.16	121.58	117.00
57	BB	2685	G	N1-C2-N3	-9.16	118.41	123.90
57	BB	2725	A	C5-C6-N1	-9.16	113.12	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1429	A	N1-C6-N6	9.15	124.09	118.60
57	BB	73	A	C4-C5-C6	9.15	121.58	117.00
57	BB	924	G	N3-C2-N2	9.15	126.31	119.90
57	BB	1027	A	O4'-C1'-N9	9.15	115.52	108.20
57	BB	1098	A	C4-C5-C6	9.15	121.58	117.00
57	BB	2642	G	N1-C6-O6	9.15	125.39	119.90
21	AA	1458	G	N3-C2-N2	9.15	126.31	119.90
57	BB	104	A	O4'-C1'-N9	9.15	115.52	108.20
57	BB	891	G	C5-C6-O6	-9.15	123.11	128.60
57	BB	2567	G	C5-C6-O6	-9.15	123.11	128.60
21	AA	746	A	C5-N7-C8	9.15	108.47	103.90
21	AA	924	C	C6-N1-C2	-9.15	116.64	120.30
22	AY	30	G	C5-N7-C8	9.15	108.87	104.30
57	BB	248	G	P-O3'-C3'	9.15	130.68	119.70
57	BB	703	U	P-O3'-C3'	9.15	130.68	119.70
21	AA	617	G	N3-C4-N9	9.15	131.49	126.00
57	BB	895	U	C2-N3-C4	-9.15	121.51	127.00
57	BB	1385	A	C5-C6-N1	-9.15	113.13	117.70
57	BB	1873	G	N1-C6-O6	9.15	125.39	119.90
57	BB	2214	C	N3-C4-C5	9.15	125.56	121.90
21	AA	1209	C	C5-C4-N4	-9.14	113.80	120.20
26	AV	47	U	C5-C6-N1	9.14	127.27	122.70
21	AA	879	C	C1'-O4'-C4'	-9.14	102.58	109.90
57	BB	347	A	C5-C6-N1	-9.14	113.13	117.70
57	BB	822	G	O4'-C1'-N9	9.14	115.52	108.20
57	BB	2322	A	N9-C4-C5	-9.14	102.14	105.80
21	AA	151	A	C4-C5-C6	9.14	121.57	117.00
21	AA	1241	G	N1-C6-O6	9.14	125.39	119.90
21	AA	1413	A	C4-C5-C6	9.14	121.57	117.00
21	AA	656	G	C4-C5-C6	9.14	124.28	118.80
57	BB	201	C	O4'-C1'-N1	9.14	115.51	108.20
57	BB	2574	G	N1-C6-O6	9.14	125.39	119.90
57	BB	2623	G	C4-C5-C6	9.14	124.28	118.80
21	AA	224	U	N3-C4-O4	9.14	125.80	119.40
57	BB	2251	G	C6-C5-N7	-9.14	124.92	130.40
57	BB	2602	A	C5-N7-C8	9.14	108.47	103.90
21	AA	1094	G	N9-C4-C5	-9.14	101.75	105.40
57	BB	482	A	C6-C5-N7	-9.14	125.90	132.30
57	BB	1360	G	C5-C6-N1	-9.14	106.93	111.50
57	BB	2037	A	C4-C5-C6	9.14	121.57	117.00
57	BB	2071	A	N1-C6-N6	9.14	124.08	118.60
57	BB	2585	U	O4'-C1'-N1	9.14	115.51	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1722	A	C5-C6-N1	-9.14	113.13	117.70
57	BB	1786	A	C5-C6-N6	-9.14	116.39	123.70
21	AA	1265	C	N3-C4-N4	9.13	124.39	118.00
57	BB	180	G	C5-C6-O6	-9.13	123.12	128.60
58	BA	115	A	N1-C6-N6	9.13	124.08	118.60
21	AA	1530	G	C2-N3-C4	9.13	116.47	111.90
57	BB	492	A	C4-C5-C6	9.13	121.57	117.00
57	BB	509	C	C6-N1-C2	-9.13	116.65	120.30
57	BB	1109	C	N3-C4-N4	9.13	124.39	118.00
57	BB	2108	A	C4-C5-C6	9.13	121.57	117.00
21	AA	605	U	N3-C2-O2	9.13	128.59	122.20
21	AA	1254	A	C4-C5-C6	9.13	121.56	117.00
57	BB	2376	A	C5-C6-N6	-9.13	116.39	123.70
57	BB	2534	A	O4'-C1'-N9	9.13	115.50	108.20
23	AW	43	C	N3-C4-C5	-9.13	118.25	121.90
57	BB	218	A	N1-C2-N3	9.13	133.87	129.30
57	BB	1782	U	N3-C4-O4	9.13	125.79	119.40
58	BA	62	C	O4'-C1'-N1	9.13	115.50	108.20
57	BB	956	G	N1-C6-O6	9.13	125.38	119.90
57	BB	620	G	C4-C5-N7	9.13	114.45	110.80
57	BB	1541	C	N3-C2-O2	9.13	128.29	121.90
57	BB	2721	A	N1-C6-N6	9.13	124.08	118.60
21	AA	893	C	C5-C6-N1	9.13	125.56	121.00
21	AA	1389	C	N3-C4-C5	-9.12	118.25	121.90
57	BB	1265	A	C6-C5-N7	-9.12	125.91	132.30
21	AA	187	G	N3-C2-N2	9.12	126.28	119.90
21	AA	782	A	N1-C6-N6	9.12	124.07	118.60
21	AA	858	G	O4'-C1'-N9	9.12	115.50	108.20
21	AA	954	G	C5-C6-O6	-9.12	123.13	128.60
22	AY	57	G	C6-N1-C2	9.12	130.57	125.10
22	AY	47	U	N3-C2-O2	-9.12	115.81	122.20
57	BB	272	A	C4-C5-C6	9.12	121.56	117.00
57	BB	597	G	C6-C5-N7	-9.12	124.93	130.40
57	BB	1461	C	C6-N1-C2	-9.12	116.65	120.30
57	BB	1523	U	C6-N1-C2	9.12	126.47	121.00
57	BB	2171	A	N9-C4-C5	9.12	109.45	105.80
21	AA	1168	U	O4'-C1'-N1	9.12	115.50	108.20
21	AA	1417	G	N1-C6-O6	9.12	125.37	119.90
57	BB	202	U	O4'-C1'-N1	9.12	115.50	108.20
57	BB	259	G	N1-C2-N3	-9.12	118.43	123.90
57	BB	1244	A	C5-C6-N6	-9.12	116.40	123.70
21	AA	773	G	C2-N3-C4	9.12	116.46	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1312	G	C4-C5-N7	-9.12	107.15	110.80
57	BB	669	G	C8-N9-C4	-9.12	102.75	106.40
57	BB	708	G	O4'-C1'-N9	9.12	115.50	108.20
57	BB	1878	G	N7-C8-N9	9.12	117.66	113.10
57	BB	1322	A	C4-C5-N7	-9.12	106.14	110.70
21	AA	598	U	O4'-C1'-N1	9.12	115.49	108.20
21	AA	841	C	N3-C4-N4	9.12	124.38	118.00
21	AA	1034	G	C6-C5-N7	-9.12	124.93	130.40
21	AA	1137	C	O4'-C1'-N1	9.12	115.49	108.20
21	AA	1495	U	O4'-C1'-N1	9.12	115.49	108.20
57	BB	802	A	N1-C6-N6	9.12	124.07	118.60
57	BB	94	A	O4'-C1'-N9	9.11	115.49	108.20
21	AA	1027	C	N1-C2-O2	9.11	124.37	118.90
21	AA	1272	G	O4'-C1'-N9	9.11	115.49	108.20
21	AA	1443	C	C6-N1-C2	9.11	123.94	120.30
57	BB	879	G	C6-C5-N7	-9.11	124.93	130.40
57	BB	1667	G	C6-N1-C2	9.11	130.57	125.10
57	BB	1816	C	N3-C4-C5	9.11	125.55	121.90
21	AA	1458	G	O4'-C1'-N9	9.11	115.49	108.20
57	BB	482	A	C4-C5-C6	9.11	121.55	117.00
57	BB	1174	U	O4'-C1'-N1	9.11	115.49	108.20
57	BB	1436	G	N1-C6-O6	9.11	125.36	119.90
57	BB	1801	A	N1-C2-N3	9.11	133.85	129.30
21	AA	49	U	C5-C4-O4	-9.11	120.44	125.90
21	AA	52	C	N3-C2-O2	9.11	128.27	121.90
57	BB	253	C	O4'-C1'-N1	9.11	115.48	108.20
57	BB	495	G	C5-C6-N1	-9.11	106.95	111.50
57	BB	1245	G	O4'-C1'-N9	9.11	115.48	108.20
57	BB	809	G	N9-C4-C5	-9.11	101.76	105.40
57	BB	1879	C	C5-C6-N1	9.11	125.55	121.00
21	AA	122	G	O4'-C1'-N9	9.10	115.48	108.20
21	AA	318	G	N1-C6-O6	9.10	125.36	119.90
43	BX	77	TYR	CB-CG-CD1	-9.10	115.54	121.00
57	BB	145	C	N3-C4-C5	-9.10	118.26	121.90
57	BB	1363	C	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1948	G	N9-C4-C5	9.10	109.04	105.40
21	AA	1111	A	O4'-C1'-N9	9.10	115.48	108.20
21	AA	1498	U	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1835	G	N1-C2-N3	-9.10	118.44	123.90
57	BB	2611	C	O4'-C1'-N1	9.10	115.48	108.20
21	AA	74	A	N1-C2-N3	9.10	133.85	129.30
57	BB	292	U	N3-C2-O2	9.10	128.57	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	662	G	O4'-C1'-N9	9.10	115.48	108.20
57	BB	653	U	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1269	A	C4-C5-C6	9.10	121.55	117.00
57	BB	1273	U	C2-N3-C4	9.10	132.46	127.00
57	BB	1307	A	C8-N9-C4	9.10	109.44	105.80
57	BB	1902	C	P-O3'-C3'	-9.10	108.78	119.70
57	BB	2067	G	C5-N7-C8	9.10	108.85	104.30
57	BB	2531	A	C5-C6-N6	-9.10	116.42	123.70
57	BB	2641	G	C4-C5-N7	-9.10	107.16	110.80
21	AA	484	G	C5-C6-O6	-9.10	123.14	128.60
57	BB	1380	G	C5-C6-N1	-9.10	106.95	111.50
57	BB	1785	A	C4-C5-C6	9.10	121.55	117.00
57	BB	374	A	N1-C2-N3	-9.10	124.75	129.30
57	BB	866	A	C6-C5-N7	-9.10	125.93	132.30
57	BB	2079	U	O4'-C1'-N1	9.10	115.48	108.20
57	BB	1077	A	N1-C2-N3	9.09	133.85	129.30
57	BB	1580	A	N1-C6-N6	9.09	124.06	118.60
26	AV	45	G	O4'-C1'-N9	9.09	115.47	108.20
57	BB	324	A	C2-N3-C4	-9.09	106.05	110.60
57	BB	1603	A	C2-N3-C4	-9.09	106.05	110.60
57	BB	2175	C	C4-C5-C6	9.09	121.95	117.40
57	BB	2326	C	C3'-C2'-C1'	-9.09	94.23	101.50
21	AA	401	C	N3-C4-C5	-9.09	118.26	121.90
57	BB	496	G	C8-N9-C4	-9.09	102.76	106.40
57	BB	2600	A	O4'-C1'-N9	9.09	115.47	108.20
21	AA	771	G	N7-C8-N9	-9.09	108.56	113.10
57	BB	712	G	N1-C6-O6	9.09	125.35	119.90
57	BB	2005	A	N1-C6-N6	9.09	124.05	118.60
57	BB	2455	G	N1-C6-O6	9.09	125.35	119.90
21	AA	560	A	N1-C6-N6	9.09	124.05	118.60
21	AA	1327	C	C4-C5-C6	-9.09	112.86	117.40
21	AA	1458	G	C5-C6-O6	-9.09	123.15	128.60
21	AA	1503	A	C8-N9-C4	-9.09	102.17	105.80
57	BB	1429	G	N1-C6-O6	9.09	125.35	119.90
21	AA	128	G	N3-C2-N2	9.09	126.26	119.90
57	BB	97	C	N3-C4-C5	-9.09	118.27	121.90
57	BB	602	A	N1-C2-N3	9.09	133.84	129.30
57	BB	928	A	O4'-C1'-N9	9.09	115.47	108.20
57	BB	1959	G	C5-C6-O6	-9.09	123.15	128.60
21	AA	1098	C	C6-N1-C2	9.08	123.93	120.30
21	AA	1300	G	C2-N3-C4	-9.08	107.36	111.90
57	BB	1	G	N1-C2-N3	-9.08	118.45	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	443	A	C5-C6-N6	-9.08	116.43	123.70
57	BB	1170	C	O4'-C1'-N1	9.08	115.47	108.20
57	BB	2750	A	C5-C6-N6	-9.08	116.43	123.70
42	BW	68	PHE	CB-CG-CD1	-9.08	114.44	120.80
57	BB	589	U	C5-C6-N1	9.08	127.24	122.70
57	BB	2181	U	C5-C6-N1	9.08	127.24	122.70
57	BB	2237	G	C5-C6-O6	-9.08	123.15	128.60
57	BB	231	A	O4'-C1'-N9	9.08	115.46	108.20
57	BB	1587	G	N9-C4-C5	-9.08	101.77	105.40
21	AA	583	A	C5-C6-N6	-9.08	116.44	123.70
21	AA	635	A	C6-C5-N7	-9.08	125.94	132.30
22	AY	9	A	C2-N3-C4	-9.08	106.06	110.60
57	BB	521	U	O4'-C1'-N1	9.08	115.46	108.20
57	BB	2825	G	C5-N7-C8	9.08	108.84	104.30
21	AA	45	G	O4'-C1'-N9	9.08	115.46	108.20
57	BB	576	U	N3-C2-O2	9.08	128.56	122.20
57	BB	1408	G	C5-C6-O6	-9.08	123.15	128.60
57	BB	2509	G	N1-C6-O6	9.08	125.35	119.90
57	BB	2901	C	N3-C4-C5	-9.08	118.27	121.90
57	BB	1127	A	O4'-C1'-N9	9.07	115.46	108.20
21	AA	927	G	C4-C5-N7	9.07	114.43	110.80
57	BB	1545	A	C5-C6-N6	-9.07	116.44	123.70
57	BB	2810	A	C6-C5-N7	-9.07	125.95	132.30
21	AA	262	A	N3-C4-C5	-9.07	120.45	126.80
21	AA	1468	A	C5-C6-N6	-9.07	116.44	123.70
57	BB	376	G	O4'-C1'-N9	9.07	115.46	108.20
57	BB	1720	U	C5-C6-N1	9.07	127.24	122.70
57	BB	1774	C	O4'-C1'-N1	9.07	115.46	108.20
21	AA	254	G	N9-C4-C5	9.07	109.03	105.40
21	AA	1119	C	C5-C4-N4	-9.07	113.85	120.20
26	AV	45	G	C5-C6-N1	-9.07	106.97	111.50
57	BB	2474	U	C2-N1-C1'	9.07	128.58	117.70
21	AA	561	U	C5-C4-O4	-9.07	120.46	125.90
21	AA	394	G	N1-C6-O6	9.07	125.34	119.90
21	AA	1114	C	O4'-C1'-N1	9.07	115.45	108.20
21	AA	1323	G	C5-C6-O6	-9.07	123.16	128.60
55	BG	162	ARG	NE-CZ-NH2	9.07	124.83	120.30
57	BB	1769	U	C4-C5-C6	9.07	125.14	119.70
57	BB	1836	C	N3-C4-N4	9.07	124.35	118.00
57	BB	1875	G	C6-C5-N7	-9.07	124.96	130.40
57	BB	1504	A	C6-N1-C2	9.07	124.04	118.60
57	BB	2198	A	N3-C4-C5	-9.07	120.45	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	832	G	C6-N1-C2	9.06	130.54	125.10
23	AW	38	A	P-O3'-C3'	9.06	130.58	119.70
57	BB	556	A	C5-C6-N6	-9.06	116.45	123.70
57	BB	1650	A	C5-C6-N1	-9.06	113.17	117.70
21	AA	250	A	N9-C4-C5	9.06	109.42	105.80
21	AA	1280	A	N7-C8-N9	-9.06	109.27	113.80
21	AA	1463	U	O4'-C1'-N1	9.06	115.45	108.20
57	BB	604	G	N7-C8-N9	-9.06	108.57	113.10
57	BB	1521	G	N3-C4-C5	-9.06	124.07	128.60
57	BB	1946	U	C6-N1-C2	9.06	126.44	121.00
57	BB	2373	G	N7-C8-N9	-9.06	108.57	113.10
57	BB	1113	U	O4'-C1'-N1	9.06	115.45	108.20
57	BB	1343	G	N1-C2-N3	-9.06	118.46	123.90
21	AA	38	G	N1-C2-N3	-9.06	118.47	123.90
26	AV	39	C	N3-C4-N4	9.06	124.34	118.00
21	AA	65	A	N1-C6-N6	9.06	124.03	118.60
21	AA	653	U	O4'-C1'-N1	9.06	115.45	108.20
21	AA	994	A	C4-C5-C6	9.06	121.53	117.00
21	AA	1011	C	N3-C4-C5	-9.06	118.28	121.90
57	BB	123	G	C6-C5-N7	-9.06	124.97	130.40
57	BB	244	A	C5-C6-N6	-9.06	116.45	123.70
57	BB	664	G	N1-C6-O6	9.06	125.33	119.90
57	BB	979	A	O4'-C1'-N9	9.06	115.45	108.20
57	BB	1493	C	C2-N1-C1'	9.06	128.76	118.80
57	BB	2111	U	P-O3'-C3'	-9.06	108.83	119.70
21	AA	40	C	N3-C4-N4	9.05	124.34	118.00
57	BB	214	G	C5-C6-N1	-9.05	106.97	111.50
57	BB	688	U	O4'-C1'-N1	9.06	115.44	108.20
57	BB	2397	G	C5-C6-N1	-9.06	106.97	111.50
21	AA	1408	A	C5-C6-N6	-9.05	116.46	123.70
57	BB	503	A	C5-C6-N6	-9.05	116.46	123.70
57	BB	1140	C	N3-C4-C5	-9.05	118.28	121.90
21	AA	589	U	C6-N1-C2	-9.05	115.57	121.00
21	AA	930	C	O4'-C1'-N1	9.05	115.44	108.20
21	AA	994	A	O4'-C1'-N9	9.05	115.44	108.20
21	AA	1456	A	N1-C6-N6	9.05	124.03	118.60
57	BB	489	G	C5-C6-O6	-9.05	123.17	128.60
57	BB	527	C	C6-N1-C1'	-9.05	109.94	120.80
57	BB	2538	C	N3-C4-N4	9.05	124.33	118.00
57	BB	2859	G	C5-C6-N1	-9.05	106.97	111.50
58	BA	114	C	N1-C2-O2	-9.05	113.47	118.90
57	BB	43	G	C2-N3-C4	9.05	116.42	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	74	A	C6-N1-C2	9.05	124.03	118.60
57	BB	944	C	O4'-C1'-N1	9.05	115.44	108.20
57	BB	2388	A	C8-N9-C4	-9.05	102.18	105.80
21	AA	41	G	C5-C6-O6	-9.04	123.17	128.60
21	AA	808	C	O4'-C1'-N1	9.04	115.44	108.20
57	BB	391	A	C4-C5-C6	9.05	121.52	117.00
57	BB	744	U	N3-C4-O4	9.04	125.73	119.40
57	BB	765	C	C6-N1-C2	-9.05	116.68	120.30
57	BB	1303	G	N7-C8-N9	-9.05	108.58	113.10
57	BB	1704	C	N3-C4-N4	9.04	124.33	118.00
57	BB	1925	C	O4'-C1'-N1	9.04	115.43	108.20
57	BB	1239	G	C6-C5-N7	-9.04	124.97	130.40
57	BB	2457	U	C5-C4-O4	9.04	131.32	125.90
57	BB	383	C	C2-N3-C4	9.04	124.42	119.90
57	BB	703	U	N1-C2-N3	-9.04	109.48	114.90
57	BB	2376	A	N1-C2-N3	9.04	133.82	129.30
21	AA	634	C	N3-C4-N4	9.04	124.33	118.00
21	AA	1347	G	C5-C6-N1	-9.04	106.98	111.50
57	BB	212	G	C5-N7-C8	9.04	108.82	104.30
57	BB	285	G	C5-C6-N1	-9.04	106.98	111.50
57	BB	721	A	N1-C6-N6	9.04	124.02	118.60
57	BB	1271	G	C5-C6-O6	-9.04	123.18	128.60
57	BB	2550	G	C5-C6-O6	-9.04	123.18	128.60
57	BB	356	G	N3-C2-N2	9.04	126.22	119.90
57	BB	2630	G	C5-C6-O6	-9.04	123.18	128.60
21	AA	654	G	N1-C6-O6	9.03	125.32	119.90
21	AA	776	G	N1-C2-N3	-9.03	118.48	123.90
21	AA	862	C	O4'-C1'-N1	9.03	115.43	108.20
21	AA	968	A	C8-N9-C4	-9.04	102.19	105.80
21	AA	1023	U	O4'-C1'-N1	9.04	115.43	108.20
21	AA	1083	U	N3-C4-C5	-9.04	109.18	114.60
23	AW	39	U	P-O3'-C3'	9.03	130.54	119.70
57	BB	1943	U	O4'-C1'-N1	9.04	115.43	108.20
21	AA	1036	A	C8-N9-C4	-9.03	102.19	105.80
57	BB	374	A	N7-C8-N9	9.03	118.32	113.80
57	BB	1194	A	O4'-C1'-N9	9.03	115.43	108.20
57	BB	2108	A	N1-C6-N6	9.03	124.02	118.60
57	BB	605	G	N1-C6-O6	9.03	125.32	119.90
57	BB	624	C	O4'-C1'-N1	9.03	115.43	108.20
57	BB	2090	A	C5-C6-N1	-9.03	113.18	117.70
58	BA	9	G	C5-C6-N1	-9.03	106.98	111.50
21	AA	90	C	O4'-C1'-N1	9.03	115.42	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1153	G	C5-C6-N1	-9.03	106.98	111.50
57	BB	1212	G	C4-C5-C6	9.03	124.22	118.80
57	BB	2189	U	C6-N1-C2	-9.03	115.58	121.00
57	BB	2843	G	N1-C2-N3	-9.03	118.48	123.90
21	AA	312	C	C2-N3-C4	9.03	124.41	119.90
22	AY	53	G	N7-C8-N9	-9.03	108.59	113.10
21	AA	714	G	C5-C6-O6	-9.03	123.19	128.60
21	AA	753	A	C5-N7-C8	9.03	108.41	103.90
57	BB	35	G	N1-C6-O6	9.03	125.31	119.90
57	BB	134	G	C8-N9-C4	-9.03	102.79	106.40
57	BB	2012	G	C2-N3-C4	9.03	116.41	111.90
58	BA	86	G	N1-C6-O6	9.03	125.31	119.90
21	AA	541	G	N1-C2-N3	-9.02	118.49	123.90
21	AA	1466	C	O4'-C1'-N1	9.02	115.42	108.20
57	BB	343	C	N3-C4-N4	9.02	124.32	118.00
21	AA	1280	A	C5-C6-N6	-9.02	116.48	123.70
22	AY	21	A	C4-C5-C6	9.02	121.51	117.00
57	BB	850	U	N1-C2-N3	9.02	120.31	114.90
57	BB	1064	C	P-O3'-C3'	9.02	130.53	119.70
57	BB	1273	U	N3-C4-C5	-9.02	109.19	114.60
57	BB	1369	G	O4'-C1'-N9	9.02	115.42	108.20
57	BB	2154	A	C5-N7-C8	9.02	108.41	103.90
57	BB	1387	A	C4-C5-C6	9.02	121.51	117.00
57	BB	1604	C	O4'-C1'-N1	9.02	115.42	108.20
57	BB	2121	G	N9-C4-C5	-9.02	101.79	105.40
21	AA	452	A	O4'-C1'-N9	9.02	115.42	108.20
57	BB	1177	G	N1-C6-O6	9.02	125.31	119.90
57	BB	2247	A	C5-C6-N1	-9.02	113.19	117.70
21	AA	935	A	N1-C6-N6	9.02	124.01	118.60
21	AA	1191	A	N1-C6-N6	9.02	124.01	118.60
26	AV	22	G	C3'-C2'-C1'	-9.02	94.29	101.50
57	BB	561	G	N3-C2-N2	9.02	126.21	119.90
57	BB	1331	G	C8-N9-C4	-9.02	102.79	106.40
57	BB	2102	G	N1-C2-N3	-9.02	118.49	123.90
57	BB	2377	A	C4-C5-C6	9.02	121.51	117.00
8	AQ	26	ARG	NE-CZ-NH2	-9.02	115.79	120.30
21	AA	601	G	C5-C6-O6	-9.02	123.19	128.60
41	BV	93	ARG	NE-CZ-NH1	9.02	124.81	120.30
57	BB	1446	C	N3-C4-N4	9.02	124.31	118.00
57	BB	1592	C	C5-C6-N1	9.02	125.51	121.00
57	BB	1604	C	C4-C5-C6	9.02	121.91	117.40
57	BB	2354	C	N1-C2-O2	9.02	124.31	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	150	U	O4'-C1'-N1	9.01	115.41	108.20
21	AA	855	U	C5-C4-O4	-9.01	120.49	125.90
57	BB	55	G	N3-C4-C5	-9.01	124.09	128.60
21	AA	409	U	C6-N1-C2	9.01	126.41	121.00
21	AA	527	G	N1-C6-O6	9.01	125.31	119.90
57	BB	485	C	O4'-C1'-N1	9.01	115.41	108.20
57	BB	308	G	N3-C2-N2	9.01	126.21	119.90
57	BB	655	A	N1-C2-N3	-9.01	124.79	129.30
57	BB	780	G	C5-C6-O6	-9.01	123.19	128.60
57	BB	860	U	C5-C6-N1	9.01	127.21	122.70
57	BB	866	A	N1-C2-N3	9.01	133.81	129.30
57	BB	2146	C	N3-C4-N4	9.01	124.31	118.00
57	BB	2683	C	N3-C4-C5	-9.01	118.30	121.90
21	AA	389	A	C5-C6-N1	-9.01	113.19	117.70
21	AA	658	C	O4'-C1'-N1	9.01	115.41	108.20
57	BB	2581	G	C5-C6-O6	-9.01	123.19	128.60
21	AA	295	C	C2-N3-C4	9.01	124.41	119.90
21	AA	1363	A	C8-N9-C4	-9.01	102.20	105.80
57	BB	1208	C	N3-C4-C5	-9.01	118.30	121.90
57	BB	2541	A	C4-C5-C6	9.01	121.50	117.00
21	AA	399	G	C5-C6-O6	-9.01	123.19	128.60
21	AA	647	C	O4'-C1'-N1	9.01	115.41	108.20
57	BB	543	G	C5-C6-O6	-9.01	123.19	128.60
57	BB	700	G	N1-C6-O6	9.01	125.30	119.90
57	BB	2076	U	N3-C4-O4	9.01	125.70	119.40
21	AA	238	A	O4'-C1'-N9	9.01	115.40	108.20
21	AA	491	G	P-O3'-C3'	-9.01	108.89	119.70
21	AA	653	U	N3-C4-O4	9.01	125.70	119.40
57	BB	2012	G	O4'-C1'-N9	9.01	115.41	108.20
26	AV	18	G	N9-C4-C5	-9.01	101.80	105.40
57	BB	1867	G	N3-C2-N2	9.01	126.20	119.90
57	BB	2361	G	N1-C6-O6	9.01	125.30	119.90
58	BA	102	G	C4-C5-C6	9.01	124.20	118.80
22	AY	47	U	C4-C5-C6	-9.00	114.30	119.70
54	BF	172	PHE	CB-CG-CD2	-9.00	114.50	120.80
21	AA	685	G	C6-C5-N7	-9.00	125.00	130.40
23	AW	23	A	C5-N7-C8	9.00	108.40	103.90
57	BB	1521	G	N1-C6-O6	9.00	125.30	119.90
57	BB	2835	A	O4'-C1'-N9	9.00	115.40	108.20
21	AA	97	G	C5-C6-N1	-9.00	107.00	111.50
21	AA	1229	A	O4'-C1'-N9	9.00	115.40	108.20
57	BB	857	G	C6-N1-C2	9.00	130.50	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	117	G	N1-C6-O6	9.00	125.30	119.90
21	AA	848	C	O4'-C1'-N1	9.00	115.40	108.20
57	BB	1001	A	C8-N9-C4	-9.00	102.20	105.80
57	BB	1541	C	N3-C4-C5	-9.00	118.30	121.90
57	BB	2224	G	C5-N7-C8	-9.00	99.80	104.30
21	AA	752	G	C5-N7-C8	9.00	108.80	104.30
21	AA	966	G	N3-C2-N2	9.00	126.20	119.90
57	BB	1265	A	C4-C5-C6	9.00	121.50	117.00
57	BB	1418	G	C4-C5-N7	9.00	114.40	110.80
22	AY	61	C	N3-C4-C5	-9.00	118.30	121.90
57	BB	2381	A	C5-C6-N1	-9.00	113.20	117.70
57	BB	2607	G	O4'-C1'-N9	9.00	115.40	108.20
57	BB	2693	G	C5-C6-O6	-9.00	123.20	128.60
57	BB	2806	C	N3-C4-C5	-9.00	118.30	121.90
58	BA	20	G	C3'-C2'-C1'	-9.00	94.30	101.50
21	AA	28	A	N9-C4-C5	8.99	109.40	105.80
21	AA	142	G	N1-C6-O6	8.99	125.30	119.90
40	BU	94	PHE	CB-CG-CD1	-8.99	114.50	120.80
57	BB	1237	A	C5-C6-N6	-8.99	116.50	123.70
21	AA	346	G	C6-C5-N7	-8.99	125.00	130.40
21	AA	941	G	C2-N3-C4	8.99	116.40	111.90
57	BB	1140	C	O4'-C1'-N1	8.99	115.40	108.20
57	BB	1226	A	C5-C6-N6	-8.99	116.50	123.70
57	BB	1900	A	C4-C5-C6	8.99	121.50	117.00
57	BB	2593	U	O4'-C1'-N1	8.99	115.40	108.20
57	BB	1338	G	C6-C5-N7	-8.99	125.00	130.40
57	BB	2510	C	C6-N1-C2	-8.99	116.70	120.30
57	BB	2769	U	N1-C2-N3	-8.99	109.50	114.90
57	BB	388	G	N3-C2-N2	8.99	126.19	119.90
21	AA	626	G	N3-C2-N2	8.99	126.19	119.90
57	BB	314	C	N3-C4-C5	-8.99	118.30	121.90
57	BB	493	G	C6-C5-N7	-8.99	125.01	130.40
57	BB	774	G	N3-C4-C5	8.99	133.09	128.60
57	BB	1155	A	O4'-C1'-N9	8.99	115.39	108.20
57	BB	1548	A	C5-C6-N1	-8.99	113.21	117.70
57	BB	1587	G	C5-N7-C8	-8.99	99.81	104.30
57	BB	1873	G	C5-C6-O6	-8.99	123.21	128.60
57	BB	2182	U	P-O3'-C3'	8.99	130.49	119.70
57	BB	2533	U	N3-C4-O4	8.99	125.69	119.40
21	AA	246	A	N1-C6-N6	8.99	123.99	118.60
57	BB	2618	G	N3-C2-N2	8.99	126.19	119.90
21	AA	1268	G	N1-C6-O6	8.99	125.29	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	110	G	N1-C6-O6	8.99	125.29	119.90
57	BB	507	A	O4'-C1'-N9	8.99	115.39	108.20
57	BB	923	G	C8-N9-C4	8.99	110.00	106.40
57	BB	2481	G	N1-C2-N3	-8.98	118.51	123.90
23	AW	63	G	C5-N7-C8	8.98	108.79	104.30
57	BB	372	G	P-O3'-C3'	8.98	130.48	119.70
57	BB	1508	A	N7-C8-N9	8.98	118.29	113.80
57	BB	1799	G	C5-C6-O6	-8.98	123.21	128.60
26	AV	32	C	O4'-C1'-N1	8.98	115.39	108.20
57	BB	1783	A	C6-N1-C2	8.98	123.99	118.60
21	AA	113	G	C5-C6-O6	-8.98	123.21	128.60
22	AY	63	C	O4'-C1'-N1	8.98	115.38	108.20
44	BY	30	MET	CG-SD-CE	-8.98	85.83	100.20
57	BB	2186	G	C6-C5-N7	-8.98	125.01	130.40
21	AA	767	A	C8-N9-C4	-8.98	102.21	105.80
57	BB	104	A	C5-C6-N6	-8.98	116.52	123.70
57	BB	150	U	O4'-C1'-N1	8.98	115.38	108.20
57	BB	609	A	N1-C6-N6	8.98	123.99	118.60
57	BB	2024	G	N9-C4-C5	-8.98	101.81	105.40
57	BB	2566	A	C5-N7-C8	8.98	108.39	103.90
21	AA	1020	G	N1-C2-N3	-8.98	118.52	123.90
57	BB	102	U	C5-C4-O4	-8.98	120.52	125.90
57	BB	1464	G	C4-C5-C6	8.98	124.19	118.80
57	BB	1661	G	O4'-C4'-C3'	-8.98	95.02	104.00
57	BB	1791	A	N1-C2-N3	8.98	133.79	129.30
57	BB	2083	G	C5-N7-C8	-8.98	99.81	104.30
57	BB	2299	U	O4'-C1'-N1	8.98	115.38	108.20
57	BB	425	G	C4-C5-N7	8.97	114.39	110.80
57	BB	244	A	N9-C4-C5	8.97	109.39	105.80
57	BB	1090	A	C4-C5-C6	8.97	121.49	117.00
57	BB	1315	C	N3-C4-N4	8.97	124.28	118.00
21	AA	771	G	C6-C5-N7	-8.97	125.02	130.40
21	AA	828	U	O4'-C1'-N1	8.97	115.38	108.20
21	AA	956	U	C2-N3-C4	8.97	132.38	127.00
21	AA	1097	C	N3-C4-C5	-8.97	118.31	121.90
21	AA	1262	C	N1-C2-N3	-8.97	112.92	119.20
26	AV	61	C	C2-N3-C4	8.97	124.39	119.90
57	BB	137	U	O4'-C1'-N1	8.97	115.38	108.20
57	BB	524	G	C5-C6-O6	-8.97	123.22	128.60
57	BB	761	A	C4-C5-C6	8.97	121.48	117.00
57	BB	1556	C	N3-C4-C5	-8.97	118.31	121.90
57	BB	935	C	C2-N3-C4	8.97	124.39	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1071	G	N1-C6-O6	8.97	125.28	119.90
57	BB	1570	A	O4'-C1'-N9	8.97	115.38	108.20
23	AW	72	C	O4'-C1'-N1	8.97	115.38	108.20
57	BB	420	C	C4-C5-C6	8.97	121.88	117.40
21	AA	187	G	O4'-C1'-N9	8.97	115.37	108.20
21	AA	242	G	C5-C6-O6	-8.97	123.22	128.60
21	AA	392	C	N3-C4-N4	8.97	124.28	118.00
57	BB	721	A	C2-N3-C4	8.97	115.08	110.60
57	BB	1591	A	C5-C6-N6	-8.97	116.53	123.70
57	BB	2733	A	C5-N7-C8	8.97	108.39	103.90
57	BB	2771	C	C4-C5-C6	8.97	121.88	117.40
25	AZ	323	PHE	CB-CG-CD1	-8.96	114.52	120.80
57	BB	700	G	N7-C8-N9	-8.96	108.62	113.10
57	BB	1386	C	N3-C4-N4	8.96	124.28	118.00
20	AI	40	ARG	NE-CZ-NH1	8.96	124.78	120.30
20	AI	98	ARG	NE-CZ-NH1	8.96	124.78	120.30
21	AA	633	G	C5-C6-O6	-8.96	123.22	128.60
21	AA	1489	G	N7-C8-N9	-8.96	108.62	113.10
57	BB	1072	C	C6-N1-C2	8.96	123.89	120.30
57	BB	2401	U	N1-C2-O2	-8.96	116.53	122.80
57	BB	2558	C	O4'-C1'-N1	8.96	115.37	108.20
21	AA	1190	G	O4'-C1'-N9	8.96	115.37	108.20
57	BB	337	C	C2-N3-C4	8.96	124.38	119.90
21	AA	592	G	C8-N9-C4	-8.96	102.82	106.40
57	BB	387	U	P-O3'-C3'	8.96	130.45	119.70
57	BB	427	U	N1-C2-O2	8.96	129.07	122.80
57	BB	502	A	C4-C5-C6	8.96	121.48	117.00
57	BB	866	A	C8-N9-C4	-8.96	102.22	105.80
57	BB	1464	G	N3-C4-C5	-8.96	124.12	128.60
57	BB	731	C	O4'-C1'-N1	8.96	115.37	108.20
57	BB	1084	A	O4'-C1'-N9	8.96	115.37	108.20
57	BB	1425	G	N7-C8-N9	-8.96	108.62	113.10
57	BB	2751	G	C5-C6-O6	-8.96	123.23	128.60
57	BB	2762	C	N3-C4-N4	8.96	124.27	118.00
57	BB	2900	A	O4'-C1'-N9	8.96	115.37	108.20
21	AA	318	G	C5-C6-O6	-8.96	123.23	128.60
21	AA	510	A	C5-C6-N6	-8.96	116.53	123.70
21	AA	1397	C	O4'-C1'-N1	8.96	115.36	108.20
21	AA	1404	C	C5-C6-N1	8.96	125.48	121.00
57	BB	1663	G	N1-C6-O6	8.96	125.27	119.90
31	BL	132	ARG	NE-CZ-NH1	-8.95	115.82	120.30
57	BB	749	A	N1-C6-N6	8.95	123.97	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1103	A	P-O3'-C3'	8.95	130.44	119.70
57	BB	1276	A	C5-C6-N6	-8.96	116.54	123.70
57	BB	1389	G	N1-C2-N2	8.95	124.26	116.20
21	AA	109	A	N9-C4-C5	-8.95	102.22	105.80
21	AA	1273	C	O4'-C1'-N1	8.95	115.36	108.20
21	AA	1337	G	N1-C2-N3	-8.95	118.53	123.90
57	BB	1370	C	C6-N1-C2	-8.95	116.72	120.30
57	BB	517	C	N3-C4-C5	-8.95	118.32	121.90
57	BB	557	C	N3-C4-C5	-8.95	118.32	121.90
57	BB	572	A	C5-N7-C8	8.95	108.38	103.90
57	BB	2682	A	N1-C6-N6	8.95	123.97	118.60
21	AA	289	G	N1-C6-O6	8.95	125.27	119.90
21	AA	683	G	C5-N7-C8	8.95	108.78	104.30
21	AA	1079	G	C6-C5-N7	-8.95	125.03	130.40
26	AV	53	G	C4-C5-N7	8.95	114.38	110.80
57	BB	564	C	N3-C4-C5	-8.95	118.32	121.90
57	BB	1787	A	C4-C5-N7	-8.95	106.23	110.70
21	AA	546	A	O4'-C1'-N9	8.95	115.36	108.20
21	AA	1378	C	O4'-C1'-N1	8.95	115.36	108.20
57	BB	220	G	C5-C6-O6	-8.95	123.23	128.60
57	BB	359	G	C4-C5-N7	8.95	114.38	110.80
57	BB	1597	A	C8-N9-C4	-8.95	102.22	105.80
57	BB	2607	G	C5-N7-C8	-8.95	99.83	104.30
21	AA	1260	G	N1-C2-N3	-8.94	118.53	123.90
57	BB	747	U	O4'-C1'-N1	8.94	115.36	108.20
57	BB	1409	U	N3-C4-O4	8.95	125.66	119.40
57	BB	1702	G	C5-C6-O6	-8.95	123.23	128.60
21	AA	16	A	C5-C6-N1	-8.94	113.23	117.70
21	AA	225	C	N3-C4-N4	8.94	124.26	118.00
21	AA	597	G	N7-C8-N9	8.94	117.57	113.10
21	AA	1280	A	C5-N7-C8	8.94	108.37	103.90
57	BB	244	A	C8-N9-C4	-8.94	102.22	105.80
57	BB	234	U	O4'-C1'-N1	8.94	115.35	108.20
57	BB	838	C	C2-N3-C4	8.94	124.37	119.90
57	BB	1004	U	N3-C4-O4	8.94	125.66	119.40
57	BB	1250	G	O4'-C1'-N9	8.94	115.35	108.20
57	BB	2407	A	C5-N7-C8	8.94	108.37	103.90
58	BA	82	U	O4'-C1'-N1	8.94	115.35	108.20
21	AA	693	G	N1-C2-N3	-8.94	118.54	123.90
57	BB	741	U	C4-C5-C6	-8.94	114.34	119.70
21	AA	632	U	N3-C2-O2	8.94	128.46	122.20
21	AA	831	A	O4'-C1'-N9	8.94	115.35	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1517	G	C8-N9-C4	-8.94	102.82	106.40
57	BB	186	G	O4'-C1'-N9	8.94	115.35	108.20
21	AA	1084	G	N1-C6-O6	8.94	125.26	119.90
22	AY	40	C	C2-N1-C1'	-8.94	108.97	118.80
57	BB	901	C	P-O5'-C5'	8.94	135.20	120.90
57	BB	1127	A	N1-C6-N6	8.94	123.96	118.60
21	AA	103	U	O4'-C1'-N1	8.94	115.35	108.20
21	AA	108	G	O4'-C1'-N9	8.94	115.35	108.20
21	AA	401	C	N3-C4-N4	8.94	124.25	118.00
21	AA	663	A	C5-C6-N6	-8.94	116.55	123.70
57	BB	21	A	C5-C6-N1	-8.94	113.23	117.70
57	BB	801	G	C5-N7-C8	8.94	108.77	104.30
57	BB	1537	G	O4'-C1'-N9	8.94	115.35	108.20
57	BB	2234	G	C6-C5-N7	-8.94	125.04	130.40
10	AS	9	PHE	CB-CG-CD2	-8.93	114.55	120.80
57	BB	1786	A	C5-C6-N1	-8.93	113.23	117.70
21	AA	687	A	N9-C4-C5	8.93	109.37	105.80
57	BB	1505	A	N1-C2-N3	8.93	133.77	129.30
57	BB	2266	A	C4-C5-N7	-8.93	106.23	110.70
57	BB	2755	C	N1-C2-O2	-8.93	113.54	118.90
15	AD	134	TYR	CG-CD1-CE1	-8.93	114.16	121.30
57	BB	670	A	C4-C5-N7	-8.93	106.23	110.70
57	BB	701	G	N1-C6-O6	8.93	125.26	119.90
57	BB	2324	U	O4'-C1'-N1	8.93	115.34	108.20
57	BB	2690	U	O4'-C1'-N1	8.93	115.34	108.20
57	BB	401	A	O4'-C1'-N9	8.93	115.34	108.20
57	BB	2251	G	N1-C6-O6	8.93	125.26	119.90
57	BB	2341	G	N3-C4-C5	8.93	133.06	128.60
21	AA	19	A	N1-C6-N6	8.93	123.96	118.60
21	AA	994	A	C4-C5-N7	-8.93	106.24	110.70
21	AA	662	U	C3'-C2'-C1'	-8.93	94.36	101.50
21	AA	1004	A	C8-N9-C4	-8.93	102.23	105.80
57	BB	746	U	O4'-C1'-N1	8.93	115.34	108.20
57	BB	882	G	C6-N1-C2	8.93	130.46	125.10
21	AA	132	C	C2-N3-C4	8.92	124.36	119.90
21	AA	244	U	N3-C4-O4	8.92	125.65	119.40
21	AA	790	A	C5-C6-N1	-8.92	113.24	117.70
22	AY	73	A	N1-C2-N3	8.92	133.76	129.30
57	BB	832	U	O4'-C1'-N1	8.92	115.34	108.20
57	BB	1319	C	O4'-C1'-N1	8.92	115.34	108.20
57	BB	415	A	O4'-C1'-N9	8.92	115.34	108.20
57	BB	1003	G	N1-C6-O6	8.92	125.25	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1255	U	O4'-C1'-N1	8.92	115.34	108.20
57	BB	2724	U	C5-C4-O4	-8.92	120.55	125.90
57	BB	2840	C	O4'-C1'-N1	8.92	115.34	108.20
51	B4	4	ARG	NE-CZ-NH2	-8.92	115.84	120.30
57	BB	1032	A	O4'-C1'-N9	8.92	115.33	108.20
21	AA	431	A	C6-N1-C2	-8.92	113.25	118.60
21	AA	668	G	N1-C6-O6	8.92	125.25	119.90
21	AA	1275	A	C5-C6-N6	-8.92	116.57	123.70
21	AA	1290	G	C5-C6-N1	-8.92	107.04	111.50
21	AA	1355	G	C8-N9-C4	-8.92	102.83	106.40
57	BB	987	C	N3-C4-N4	8.92	124.24	118.00
57	BB	2271	G	N3-C2-N2	8.92	126.14	119.90
57	BB	2537	U	N3-C2-O2	8.92	128.44	122.20
21	AA	794	A	O4'-C1'-N9	8.91	115.33	108.20
21	AA	1279	G	N7-C8-N9	8.91	117.56	113.10
57	BB	462	C	N3-C4-N4	8.91	124.24	118.00
57	BB	2509	G	N9-C4-C5	-8.91	101.83	105.40
57	BB	2892	G	C5-C6-O6	-8.91	123.25	128.60
21	AA	1036	A	C4-C5-C6	8.91	121.46	117.00
22	AY	46	G	C4-C5-N7	8.91	114.37	110.80
57	BB	2607	G	N7-C8-N9	8.91	117.56	113.10
57	BB	1139	G	C2-N3-C4	-8.91	107.44	111.90
57	BB	1152	C	O4'-C1'-N1	8.91	115.33	108.20
57	BB	1431	A	N1-C6-N6	8.91	123.95	118.60
57	BB	1854	A	C4-C5-C6	8.91	121.45	117.00
21	AA	606	G	C5-C6-N1	-8.91	107.05	111.50
57	BB	2142	A	C5-C6-N6	-8.91	116.57	123.70
58	BA	20	G	O4'-C1'-N9	8.91	115.33	108.20
21	AA	243	A	C5-C6-N6	-8.91	116.57	123.70
57	BB	1727	C	C5-C4-N4	-8.91	113.96	120.20
21	AA	253	A	N7-C8-N9	-8.91	109.35	113.80
21	AA	389	A	P-O3'-C3'	8.91	130.39	119.70
21	AA	397	A	N1-C6-N6	8.91	123.94	118.60
21	AA	727	G	N1-C6-O6	8.91	125.24	119.90
26	AV	4	G	O4'-C1'-N9	8.91	115.33	108.20
57	BB	1093	G	N1-C6-O6	8.91	125.24	119.90
57	BB	2310	C	O4'-C1'-N1	8.91	115.33	108.20
57	BB	608	A	N1-C2-N3	8.90	133.75	129.30
57	BB	2454	G	N9-C4-C5	-8.90	101.84	105.40
57	BB	972	A	C5-C6-N1	-8.90	113.25	117.70
57	BB	1443	U	O4'-C1'-N1	8.90	115.32	108.20
21	AA	183	C	O4'-C1'-N1	8.90	115.32	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1513	A	C6-C5-N7	-8.90	126.07	132.30
57	BB	2383	G	C4-C5-N7	-8.90	107.24	110.80
57	BB	152	A	C5-C6-N1	-8.90	113.25	117.70
57	BB	197	A	C5-C6-N6	-8.90	116.58	123.70
57	BB	1404	C	N3-C4-N4	8.90	124.23	118.00
57	BB	347	A	C4-C5-N7	-8.90	106.25	110.70
57	BB	1904	G	N1-C2-N3	-8.90	118.56	123.90
21	AA	152	A	N1-C6-N6	8.90	123.94	118.60
21	AA	34	C	C2-N3-C4	-8.90	115.45	119.90
21	AA	975	A	C4-C5-C6	8.90	121.45	117.00
33	BN	29	VAL	CG1-CB-CG2	8.90	125.14	110.90
57	BB	337	C	O4'-C1'-N1	8.90	115.32	108.20
57	BB	1232	G	O4'-C1'-N9	8.90	115.32	108.20
57	BB	1702	G	C4-C5-N7	-8.90	107.24	110.80
57	BB	55	G	O4'-C1'-N9	8.90	115.32	108.20
57	BB	608	A	C2-N3-C4	-8.90	106.15	110.60
57	BB	975	A	N9-C4-C5	8.90	109.36	105.80
57	BB	1235	G	N9-C4-C5	8.90	108.96	105.40
21	AA	259	G	C5-C6-O6	-8.89	123.26	128.60
21	AA	1439	G	O4'-C1'-N9	8.89	115.32	108.20
57	BB	273	G	C5-C6-O6	-8.89	123.26	128.60
57	BB	2313	C	C5-C6-N1	8.89	125.45	121.00
57	BB	177	G	C6-N1-C2	8.89	130.44	125.10
57	BB	386	G	C6-C5-N7	-8.89	125.06	130.40
57	BB	1353	A	C5-C6-N6	-8.89	116.58	123.70
57	BB	1645	G	P-O3'-C3'	8.89	130.37	119.70
57	BB	1652	A	O4'-C1'-N9	8.89	115.31	108.20
58	BA	54	G	C5-C6-N1	-8.89	107.05	111.50
21	AA	963	G	O4'-C1'-N9	8.89	115.31	108.20
26	AV	18	G	C1'-O4'-C4'	8.89	117.01	109.90
57	BB	639	U	N3-C4-O4	8.89	125.62	119.40
21	AA	1236	A	C5-C6-N6	-8.89	116.59	123.70
23	AW	63	G	C6-N1-C2	8.89	130.43	125.10
57	BB	498	G	C5-C6-O6	-8.89	123.27	128.60
21	AA	793	U	N3-C2-O2	-8.89	115.98	122.20
57	BB	249	C	O4'-C1'-N1	8.89	115.31	108.20
57	BB	353	C	C5-C6-N1	8.89	125.44	121.00
57	BB	970	U	C5-C6-N1	8.89	127.14	122.70
57	BB	1572	A	C5-C6-N6	-8.89	116.59	123.70
10	AS	79	TYR	CG-CD1-CE1	-8.89	114.19	121.30
21	AA	327	A	C4-C5-C6	8.89	121.44	117.00
21	AA	946	A	C6-N1-C2	8.89	123.93	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	21	G	P-O3'-C3'	-8.88	109.04	119.70
21	AA	348	G	C5-C6-O6	-8.88	123.27	128.60
21	AA	1516	G	C5-C6-O6	-8.89	123.27	128.60
57	BB	1318	U	C5'-C4'-C3'	-8.89	101.78	116.00
57	BB	2242	G	N1-C6-O6	8.88	125.23	119.90
57	BB	2357	G	C2-N3-C4	-8.88	107.46	111.90
21	AA	471	U	O4'-C4'-C3'	-8.88	95.12	104.00
21	AA	520	A	N9-C4-C5	8.88	109.35	105.80
57	BB	946	C	O4'-C1'-N1	8.88	115.31	108.20
57	BB	1558	C	N3-C4-C5	-8.88	118.35	121.90
57	BB	2195	U	N1-C2-N3	-8.88	109.57	114.90
57	BB	2362	C	C2-N3-C4	8.88	124.34	119.90
57	BB	2757	A	C6-C5-N7	-8.88	126.08	132.30
57	BB	2790	U	O4'-C1'-N1	8.88	115.31	108.20
58	BA	34	A	O4'-C1'-N9	8.88	115.31	108.20
21	AA	600	A	N1-C6-N6	8.88	123.93	118.60
37	BR	2	TYR	CB-CG-CD1	8.88	126.33	121.00
57	BB	1223	G	C8-N9-C4	-8.88	102.85	106.40
21	AA	41	G	N3-C4-C5	8.88	133.04	128.60
21	AA	549	C	C4-C5-C6	8.88	121.84	117.40
21	AA	622	A	C4-C5-C6	8.88	121.44	117.00
57	BB	79	C	N3-C4-C5	-8.88	118.35	121.90
57	BB	182	A	C5-C6-N1	-8.88	113.26	117.70
57	BB	2057	G	C8-N9-C4	-8.88	102.85	106.40
57	BB	1967	C	O4'-C1'-N1	8.88	115.30	108.20
57	BB	1029	A	P-O5'-C5'	8.88	135.10	120.90
21	AA	533	A	C5-N7-C8	8.87	108.34	103.90
57	BB	602	A	C5-C6-N6	-8.88	116.60	123.70
57	BB	849	A	C5-C6-N1	-8.88	113.26	117.70
57	BB	1336	A	C2-N3-C4	-8.87	106.16	110.60
57	BB	1869	G	C4-C5-N7	-8.87	107.25	110.80
57	BB	1896	G	O4'-C1'-N9	8.88	115.30	108.20
57	BB	2490	G	N1-C2-N3	-8.88	118.58	123.90
21	AA	672	U	C5-C6-N1	8.87	127.14	122.70
21	AA	1422	G	N3-C2-N2	8.87	126.11	119.90
57	BB	883	G	C4-C5-N7	-8.87	107.25	110.80
57	BB	1536	C	N3-C4-C5	-8.87	118.35	121.90
57	BB	2797	U	N3-C4-O4	8.87	125.61	119.40
58	BA	103	U	O4'-C1'-N1	8.87	115.30	108.20
21	AA	344	A	C5-C6-N1	-8.87	113.27	117.70
21	AA	705	G	N1-C2-N3	-8.87	118.58	123.90
57	BB	1900	A	C5-N7-C8	8.87	108.33	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1227	A	N9-C4-C5	8.87	109.35	105.80
57	BB	476	G	C5-C6-O6	-8.87	123.28	128.60
57	BB	1535	A	N9-C4-C5	8.87	109.35	105.80
57	BB	820	A	C8-N9-C4	-8.87	102.25	105.80
57	BB	1076	C	O4'-C1'-N1	8.87	115.30	108.20
57	BB	1250	G	C5-C6-N1	-8.87	107.07	111.50
21	AA	9	G	O4'-C1'-N9	8.87	115.29	108.20
21	AA	836	G	C8-N9-C4	-8.87	102.85	106.40
21	AA	1357	A	C4-C5-C6	8.87	121.43	117.00
57	BB	1280	G	C5-C6-O6	-8.86	123.28	128.60
57	BB	2592	G	N1-C2-N3	-8.86	118.58	123.90
21	AA	346	G	N1-C6-O6	8.86	125.22	119.90
21	AA	761	G	C6-C5-N7	-8.86	125.08	130.40
21	AA	1302	C	O4'-C1'-N1	8.86	115.29	108.20
23	AW	4	C	C6-N1-C2	-8.86	116.75	120.30
26	AV	74	C	O4'-C1'-N1	8.86	115.29	108.20
57	BB	935	C	N3-C4-N4	8.86	124.20	118.00
57	BB	1482	G	C4-C5-N7	-8.86	107.25	110.80
57	BB	2314	A	C5-C6-N6	-8.86	116.61	123.70
57	BB	1279	G	N1-C6-O6	8.86	125.22	119.90
21	AA	48	C	O4'-C1'-N1	8.86	115.29	108.20
21	AA	111	G	N1-C6-O6	8.86	125.22	119.90
21	AA	128	G	N1-C2-N3	-8.86	118.58	123.90
21	AA	607	A	C6-C5-N7	-8.86	126.10	132.30
24	AX	16	A	C6-C5-N7	-8.86	126.10	132.30
57	BB	1730	C	N3-C4-C5	-8.86	118.36	121.90
57	BB	2860	A	C6-C5-N7	-8.86	126.10	132.30
21	AA	870	U	C5-C4-O4	-8.86	120.59	125.90
57	BB	409	G	O4'-C1'-N9	8.86	115.28	108.20
57	BB	1107	G	N3-C4-C5	-8.86	124.17	128.60
57	BB	1892	C	O4'-C1'-N1	8.86	115.28	108.20
21	AA	646	G	C6-N1-C2	8.86	130.41	125.10
44	BY	23	ARG	NE-CZ-NH1	8.86	124.73	120.30
57	BB	413	C	C2-N3-C4	8.86	124.33	119.90
57	BB	1498	C	N3-C4-N4	8.86	124.20	118.00
57	BB	2184	A	N1-C6-N6	8.86	123.91	118.60
57	BB	2211	A	C4-C5-C6	8.86	121.43	117.00
58	BA	112	G	N1-C2-N3	-8.86	118.59	123.90
57	BB	520	G	N1-C6-O6	8.85	125.21	119.90
57	BB	2013	A	C5-C6-N1	-8.85	113.27	117.70
21	AA	640	A	C6-N1-C2	-8.85	113.29	118.60
21	AA	867	G	C5-C6-N1	-8.85	107.07	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	19	G	N1-C6-O6	8.85	125.21	119.90
57	BB	164	C	C5-C6-N1	8.85	125.43	121.00
57	BB	685	A	C4-C5-C6	8.85	121.43	117.00
57	BB	940	G	C6-N1-C2	-8.85	119.79	125.10
57	BB	957	C	C2-N3-C4	8.85	124.33	119.90
21	AA	1395	C	C2-N3-C4	8.85	124.33	119.90
57	BB	1190	G	O4'-C1'-N9	8.85	115.28	108.20
57	BB	1509	A	N9-C4-C5	8.85	109.34	105.80
57	BB	2076	U	O4'-C1'-N1	8.85	115.28	108.20
57	BB	2799	A	C6-N1-C2	8.85	123.91	118.60
21	AA	1100	C	O4'-C1'-N1	8.85	115.28	108.20
21	AA	1124	G	C6-N1-C2	-8.85	119.79	125.10
57	BB	574	A	N1-C2-N3	8.85	133.72	129.30
57	BB	2642	G	N1-C2-N3	-8.85	118.59	123.90
21	AA	90	C	C5-C4-N4	-8.85	114.01	120.20
21	AA	603	U	C2-N3-C4	-8.85	121.69	127.00
21	AA	1160	G	O4'-C1'-N9	8.85	115.28	108.20
26	AV	38	A	C5-C6-N1	-8.85	113.28	117.70
57	BB	1024	G	C6-C5-N7	-8.85	125.09	130.40
21	AA	468	A	C5-C6-N1	-8.84	113.28	117.70
21	AA	763	G	N3-C4-C5	8.84	133.02	128.60
57	BB	1552	A	P-O3'-C3'	-8.84	109.09	119.70
21	AA	1033	G	N7-C8-N9	8.84	117.52	113.10
22	AY	35	A	C5-C6-N1	-8.84	113.28	117.70
57	BB	1293	C	N3-C4-N4	8.84	124.19	118.00
52	BD	129	THR	CA-CB-CG2	-8.84	100.02	112.40
57	BB	1225	G	O4'-C1'-N9	8.84	115.27	108.20
21	AA	6	G	O4'-C1'-N9	8.84	115.27	108.20
21	AA	85	U	C5-C6-N1	8.84	127.12	122.70
21	AA	806	C	C6-N1-C2	-8.84	116.76	120.30
21	AA	906	A	C8-N9-C4	8.84	109.34	105.80
57	BB	1933	G	C5-C6-O6	-8.84	123.30	128.60
57	BB	2607	G	C8-N9-C4	-8.84	102.86	106.40
26	AV	76	A	N1-C6-N6	8.84	123.90	118.60
57	BB	1456	G	N9-C4-C5	-8.84	101.86	105.40
57	BB	2659	G	N9-C4-C5	-8.84	101.86	105.40
57	BB	112	U	O4'-C1'-N1	8.84	115.27	108.20
57	BB	1804	C	N3-C4-N4	8.84	124.19	118.00
57	BB	1821	A	N9-C4-C5	8.84	109.33	105.80
21	AA	1416	G	N9-C4-C5	8.84	108.93	105.40
57	BB	2406	A	N9-C4-C5	-8.84	102.27	105.80
57	BB	2487	G	N7-C8-N9	8.84	117.52	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2632	A	O4'-C1'-N9	8.84	115.27	108.20
57	BB	330	A	C5-N7-C8	8.84	108.32	103.90
57	BB	638	G	N3-C4-C5	-8.84	124.18	128.60
57	BB	1139	G	N1-C6-O6	8.84	125.20	119.90
21	AA	612	C	C5-C4-N4	-8.83	114.02	120.20
21	AA	753	A	C5-C6-N6	-8.83	116.63	123.70
21	AA	1289	A	N9-C4-C5	8.83	109.33	105.80
21	AA	1351	U	O4'-C1'-N1	8.83	115.27	108.20
57	BB	370	G	N1-C6-O6	8.83	125.20	119.90
57	BB	1516	G	N1-C6-O6	8.83	125.20	119.90
57	BB	2340	A	N9-C4-C5	-8.83	102.27	105.80
21	AA	24	U	O4'-C1'-N1	8.83	115.26	108.20
21	AA	223	A	N9-C4-C5	8.83	109.33	105.80
24	AX	16	A	P-O3'-C3'	8.83	130.30	119.70
57	BB	75	G	N3-C2-N2	8.83	126.08	119.90
57	BB	1658	C	O4'-C1'-N1	8.83	115.27	108.20
57	BB	708	G	N1-C6-O6	8.83	125.20	119.90
57	BB	1370	C	N3-C4-C5	-8.83	118.37	121.90
57	BB	1811	G	C5-C6-O6	-8.83	123.30	128.60
57	BB	2076	U	C5-C4-O4	-8.83	120.60	125.90
57	BB	2617	U	C2-N3-C4	8.83	132.30	127.00
21	AA	1369	C	O4'-C1'-N1	8.83	115.26	108.20
22	AY	29	A	N1-C6-N6	8.83	123.90	118.60
21	AA	1083	U	N3-C4-O4	8.83	125.58	119.40
42	BW	24	ARG	NE-CZ-NH2	-8.83	115.89	120.30
57	BB	1139	G	C6-C5-N7	-8.83	125.10	130.40
57	BB	1283	G	C5-C6-O6	-8.83	123.30	128.60
57	BB	2199	A	C4-C5-C6	8.83	121.41	117.00
21	AA	819	A	O4'-C1'-N9	8.82	115.26	108.20
21	AA	899	C	O4'-C1'-N1	8.82	115.26	108.20
22	AY	21	A	C2-N3-C4	-8.82	106.19	110.60
57	BB	2068	U	N3-C4-C5	-8.82	109.31	114.60
57	BB	233	A	O4'-C1'-N9	8.82	115.26	108.20
57	BB	702	U	O4'-C1'-N1	8.82	115.26	108.20
57	BB	1601	G	N3-C4-C5	8.82	133.01	128.60
57	BB	2328	A	C4'-C3'-C2'	-8.82	93.78	102.60
21	AA	306	A	C4-C5-C6	8.82	121.41	117.00
21	AA	1339	A	C4-C5-N7	-8.82	106.29	110.70
22	AY	58	A	C5-C6-N1	-8.82	113.29	117.70
57	BB	627	A	C5-N7-C8	8.82	108.31	103.90
57	BB	727	A	N1-C6-N6	8.82	123.89	118.60
57	BB	992	C	C5-C4-N4	8.82	126.37	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1823	G	N1-C6-O6	8.82	125.19	119.90
57	BB	1998	A	C5-N7-C8	8.82	108.31	103.90
21	AA	39	G	C5-C6-O6	-8.82	123.31	128.60
21	AA	92	U	O4'-C1'-N1	8.82	115.25	108.20
21	AA	1212	U	C4-C5-C6	8.82	124.99	119.70
21	AA	1271	A	C5-C6-N6	-8.82	116.65	123.70
21	AA	1394	A	N1-C6-N6	8.82	123.89	118.60
21	AA	1408	A	C5-N7-C8	8.82	108.31	103.90
57	BB	164	C	N3-C4-N4	8.82	124.17	118.00
57	BB	170	U	N3-C4-O4	8.82	125.57	119.40
57	BB	718	A	C2-N3-C4	-8.82	106.19	110.60
57	BB	1157	G	C4-C5-N7	8.82	114.33	110.80
57	BB	2271	G	C8-N9-C4	-8.82	102.87	106.40
21	AA	22	G	N7-C8-N9	8.81	117.51	113.10
57	BB	2252	G	N3-C2-N2	8.81	126.07	119.90
22	AY	62	A	C5-C6-N6	-8.81	116.65	123.70
57	BB	594	U	N3-C4-C5	-8.81	109.31	114.60
57	BB	1163	G	C6-N1-C2	8.81	130.39	125.10
57	BB	2110	G	P-O3'-C3'	8.81	130.28	119.70
57	BB	2676	C	O4'-C1'-N1	8.81	115.25	108.20
17	AF	25	TYR	CB-CG-CD1	-8.81	115.71	121.00
21	AA	996	A	O4'-C1'-N9	8.81	115.25	108.20
21	AA	1237	C	O4'-C1'-N1	8.81	115.25	108.20
57	BB	384	A	C5-C6-N6	-8.81	116.65	123.70
57	BB	747	U	C5-C4-O4	-8.81	120.61	125.90
57	BB	1558	C	N3-C4-N4	8.81	124.17	118.00
57	BB	2048	G	C8-N9-C4	-8.81	102.88	106.40
57	BB	2628	C	C2-N3-C4	8.81	124.31	119.90
57	BB	1090	A	C6-N1-C2	8.81	123.89	118.60
21	AA	611	C	N3-C4-C5	-8.81	118.38	121.90
21	AA	1405	G	N1-C2-N3	-8.81	118.62	123.90
21	AA	1514	G	C5-C6-N1	-8.81	107.10	111.50
42	BW	54	ARG	NE-CZ-NH1	8.81	124.70	120.30
57	BB	544	C	C4'-C3'-C2'	-8.81	93.79	102.60
57	BB	752	A	O4'-C1'-N9	8.81	115.25	108.20
57	BB	2352	A	C5-C6-N6	-8.81	116.66	123.70
21	AA	1019	A	O4'-C1'-N9	8.80	115.24	108.20
57	BB	31	C	C4-C5-C6	8.80	121.80	117.40
57	BB	877	A	N3-C4-C5	-8.80	120.64	126.80
21	AA	254	G	O4'-C1'-N9	8.80	115.24	108.20
57	BB	131	A	C4-C5-C6	8.80	121.40	117.00
57	BB	455	C	N3-C4-C5	-8.80	118.38	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1255	G	O4'-C1'-N9	8.80	115.24	108.20
57	BB	298	G	N1-C6-O6	8.80	125.18	119.90
57	BB	969	G	C5-C6-O6	-8.80	123.32	128.60
57	BB	1036	G	N3-C2-N2	8.80	126.06	119.90
57	BB	1173	U	C6-N1-C2	-8.80	115.72	121.00
57	BB	1385	A	C5-C6-N6	-8.80	116.66	123.70
57	BB	1395	A	C4-C5-C6	8.80	121.40	117.00
57	BB	2879	A	C4-C5-C6	8.80	121.40	117.00
22	AY	21	A	C5-C6-N1	-8.80	113.30	117.70
57	BB	270	A	N9-C4-C5	8.80	109.32	105.80
57	BB	323	C	N3-C4-C5	-8.80	118.38	121.90
57	BB	619	G	N1-C6-O6	8.80	125.18	119.90
57	BB	623	C	O4'-C1'-N1	8.80	115.24	108.20
57	BB	1124	G	N1-C6-O6	8.80	125.18	119.90
21	AA	517	G	C5-C6-N1	-8.80	107.10	111.50
21	AA	611	C	C6-N1-C2	-8.80	116.78	120.30
21	AA	743	A	C5-N7-C8	8.79	108.30	103.90
57	BB	348	A	N9-C4-C5	-8.79	102.28	105.80
57	BB	574	A	N1-C6-N6	8.79	123.88	118.60
57	BB	2643	G	N3-C2-N2	8.79	126.06	119.90
57	BB	2691	C	P-O3'-C3'	-8.79	109.15	119.70
21	AA	945	G	C6-C5-N7	-8.79	125.12	130.40
57	BB	402	A	N1-C6-N6	8.79	123.88	118.60
57	BB	2102	G	N3-C4-C5	-8.79	124.20	128.60
57	BB	489	G	N3-C2-N2	8.79	126.05	119.90
57	BB	1404	C	N3-C4-C5	-8.79	118.38	121.90
21	AA	79	G	C5-C6-O6	-8.79	123.33	128.60
21	AA	911	U	O4'-C1'-N1	8.79	115.23	108.20
26	AV	70	G	C4-C5-N7	-8.79	107.28	110.80
57	BB	425	G	O4'-C1'-N9	8.79	115.23	108.20
57	BB	555	G	N1-C6-O6	8.79	125.17	119.90
57	BB	949	G	C5-N7-C8	8.79	108.69	104.30
57	BB	1175	A	C4-C5-C6	8.79	121.39	117.00
57	BB	2527	C	N3-C4-N4	8.79	124.15	118.00
21	AA	86	G	C4-C5-C6	8.79	124.07	118.80
21	AA	1021	A	C5-C6-N6	-8.79	116.67	123.70
57	BB	68	G	C6-C5-N7	-8.79	125.13	130.40
57	BB	383	C	N1-C1'-C2'	-8.79	102.33	112.00
57	BB	1496	A	C4-C5-C6	8.79	121.39	117.00
57	BB	2554	U	O4'-C1'-N1	8.79	115.23	108.20
58	BA	22	U	C5-C4-O4	-8.79	120.63	125.90
57	BB	778	G	C4-C5-C6	8.79	124.07	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	562	U	O4'-C1'-N1	8.78	115.23	108.20
21	AA	836	G	N1-C6-O6	8.79	125.17	119.90
21	AA	861	G	O4'-C1'-N9	8.78	115.23	108.20
57	BB	383	C	N3-C4-N4	8.79	124.15	118.00
57	BB	1617	C	C5-C6-N1	-8.78	116.61	121.00
57	BB	1769	U	O4'-C1'-N1	8.79	115.23	108.20
57	BB	1961	C	N3-C4-N4	8.79	124.15	118.00
57	BB	2687	U	O4'-C1'-N1	8.78	115.23	108.20
16	AE	67	ARG	NE-CZ-NH2	-8.78	115.91	120.30
22	AY	50	U	O4'-C1'-N1	8.78	115.23	108.20
23	AW	35	A	C3'-C2'-C1'	-8.78	94.47	101.50
58	BA	90	C	N3-C4-C5	-8.78	118.39	121.90
21	AA	423	G	N3-C2-N2	8.78	126.05	119.90
21	AA	1019	A	N7-C8-N9	8.78	118.19	113.80
23	AW	75	C	N3-C4-N4	8.78	124.15	118.00
57	BB	529	A	C8-N9-C4	8.78	109.31	105.80
57	BB	579	G	C4-C5-N7	8.78	114.31	110.80
57	BB	761	A	C5-C6-N1	-8.78	113.31	117.70
57	BB	1588	G	N7-C8-N9	8.78	117.49	113.10
21	AA	105	G	C5-C6-O6	-8.78	123.33	128.60
21	AA	812	G	C5-C6-N1	-8.78	107.11	111.50
21	AA	841	C	P-O3'-C3'	8.78	130.23	119.70
21	AA	1325	C	C5-C4-N4	-8.78	114.05	120.20
21	AA	1461	G	O4'-C1'-N9	8.78	115.22	108.20
57	BB	2004	G	N1-C6-O6	8.78	125.17	119.90
57	BB	2064	C	N1-C2-O2	-8.78	113.63	118.90
21	AA	427	U	N3-C2-O2	8.78	128.34	122.20
21	AA	954	G	N1-C6-O6	8.78	125.17	119.90
57	BB	643	A	N1-C6-N6	8.78	123.87	118.60
57	BB	2120	G	C8-N9-C4	-8.78	102.89	106.40
21	AA	1128	C	C6-N1-C2	-8.78	116.79	120.30
21	AA	1256	A	O4'-C1'-N9	8.78	115.22	108.20
21	AA	1301	U	O4'-C1'-N1	8.78	115.22	108.20
57	BB	633	A	C2-N3-C4	-8.78	106.21	110.60
57	BB	998	C	C6-N1-C2	-8.78	116.79	120.30
57	BB	2794	C	N3-C4-N4	8.78	124.14	118.00
57	BB	1465	G	O4'-C1'-N9	8.77	115.22	108.20
57	BB	2082	A	C5-C6-N1	-8.77	113.31	117.70
21	AA	139	A	N7-C8-N9	8.77	118.19	113.80
21	AA	753	A	O4'-C1'-N9	8.77	115.22	108.20
21	AA	913	A	C4-C5-C6	8.77	121.39	117.00
57	BB	918	A	C6-C5-N7	-8.77	126.16	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1004	U	C5-C4-O4	-8.77	120.64	125.90
21	AA	240	G	C8-N9-C4	8.77	109.91	106.40
21	AA	560	A	C4-C5-C6	8.77	121.39	117.00
57	BB	527	C	N3-C4-C5	-8.77	118.39	121.90
57	BB	1124	G	N1-C2-N3	-8.77	118.64	123.90
57	BB	2627	G	C5-C6-N1	-8.77	107.11	111.50
57	BB	1513	U	N3-C2-O2	8.77	128.34	122.20
57	BB	2636	C	C5-C4-N4	-8.77	114.06	120.20
57	BB	2733	A	C6-N1-C2	8.77	123.86	118.60
57	BB	2728	U	O4'-C1'-N1	8.77	115.22	108.20
21	AA	954	G	C6-C5-N7	-8.77	125.14	130.40
57	BB	797	G	N7-C8-N9	8.77	117.48	113.10
57	BB	2206	C	N3-C2-O2	8.77	128.04	121.90
21	AA	23	C	N3-C4-N4	8.77	124.14	118.00
21	AA	480	U	O4'-C1'-N1	8.77	115.21	108.20
21	AA	925	G	C8-N9-C4	8.77	109.91	106.40
57	BB	704	G	C6-N1-C2	8.77	130.36	125.10
57	BB	1106	G	N1-C2-N3	-8.77	118.64	123.90
57	BB	1116	G	C2-N3-C4	8.77	116.28	111.90
57	BB	1266	G	C1'-O4'-C4'	-8.77	102.89	109.90
57	BB	1479	G	C6-N1-C2	8.77	130.36	125.10
57	BB	2238	G	O4'-C1'-N9	8.77	115.21	108.20
57	BB	2777	G	N1-C6-O6	8.77	125.16	119.90
21	AA	884	U	O4'-C1'-N1	8.76	115.21	108.20
21	AA	468	A	O4'-C1'-N9	8.76	115.21	108.20
21	AA	486	U	O4'-C1'-N1	8.76	115.21	108.20
21	AA	1080	A	C4-C5-C6	8.76	121.38	117.00
23	AW	26	A	C5-C6-N6	-8.76	116.69	123.70
26	AV	51	C	N3-C4-N4	8.76	124.13	118.00
26	AV	72	A	C5-C6-N6	-8.76	116.69	123.70
57	BB	730	A	O4'-C1'-N9	8.76	115.21	108.20
21	AA	255	G	N3-C2-N2	8.76	126.03	119.90
37	BR	2	TYR	CB-CG-CD2	-8.76	115.74	121.00
57	BB	91	A	O4'-C1'-N9	8.76	115.21	108.20
21	AA	380	G	C5-C6-N1	8.76	115.88	111.50
21	AA	394	G	N1-C2-N3	-8.76	118.64	123.90
21	AA	744	C	C2-N3-C4	8.76	124.28	119.90
25	AZ	80	ASP	CB-CG-OD2	-8.76	110.42	118.30
57	BB	1682	G	N7-C8-N9	-8.76	108.72	113.10
57	BB	502	A	N1-C6-N6	8.76	123.85	118.60
57	BB	828	U	C5-C4-O4	-8.76	120.65	125.90
57	BB	1052	C	N3-C4-N4	8.76	124.13	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1890	A	C5-C6-N6	-8.76	116.69	123.70
57	BB	1873	G	O4'-C1'-N9	8.76	115.20	108.20
21	AA	155	A	N3-C4-N9	8.75	134.40	127.40
21	AA	997	U	C5-C4-O4	-8.75	120.65	125.90
21	AA	1430	A	C4-C5-C6	8.75	121.38	117.00
58	BA	68	C	C2-N3-C4	8.75	124.28	119.90
52	BD	167	ASN	N-CA-CB	8.75	126.35	110.60
57	BB	218	A	N9-C4-C5	-8.75	102.30	105.80
57	BB	1596	A	C8-N9-C4	8.75	109.30	105.80
57	BB	1636	U	O4'-C1'-N1	8.75	115.20	108.20
57	BB	2481	G	O4'-C1'-N9	8.75	115.20	108.20
57	BB	2753	A	N3-C4-C5	-8.75	120.67	126.80
57	BB	2776	A	C5-C6-N1	-8.75	113.32	117.70
57	BB	1910	G	N1-C2-N3	-8.75	118.65	123.90
21	AA	207	C	O4'-C1'-N1	8.75	115.20	108.20
21	AA	452	A	C5-C6-N1	-8.75	113.33	117.70
57	BB	607	U	C2-N3-C4	-8.75	121.75	127.00
57	BB	1068	G	O4'-C1'-N9	8.75	115.20	108.20
21	AA	119	A	C8-N9-C4	-8.75	102.30	105.80
21	AA	455	G	O4'-C1'-N9	8.75	115.20	108.20
21	AA	654	G	C8-N9-C4	-8.75	102.90	106.40
21	AA	1287	A	O4'-C1'-N9	8.75	115.20	108.20
21	AA	1310	G	C2-N3-C4	-8.75	107.53	111.90
26	AV	37	A	C5-C6-N6	-8.75	116.70	123.70
57	BB	916	G	C2-N3-C4	8.75	116.27	111.90
57	BB	1126	A	N1-C6-N6	8.75	123.85	118.60
57	BB	1265	A	N1-C6-N6	8.75	123.85	118.60
57	BB	2716	C	O4'-C1'-N1	8.75	115.20	108.20
57	BB	2757	A	N1-C2-N3	-8.75	124.93	129.30
21	AA	1380	U	O4'-C1'-N1	8.74	115.20	108.20
21	AA	1507	A	C6-C5-N7	-8.74	126.18	132.30
57	BB	74	A	C5-N7-C8	8.74	108.27	103.90
57	BB	155	A	C5-C6-N6	-8.74	116.70	123.70
57	BB	663	G	C4-C5-N7	8.74	114.30	110.80
57	BB	731	C	C2-N3-C4	8.74	124.27	119.90
57	BB	904	G	C4-C5-N7	8.74	114.30	110.80
57	BB	1054	A	C5-C6-N1	-8.74	113.33	117.70
57	BB	1521	G	C6-C5-N7	-8.74	125.15	130.40
21	AA	611	C	O4'-C1'-N1	8.74	115.19	108.20
57	BB	1082	U	C2-N3-C4	-8.74	121.76	127.00
57	BB	2266	A	C5-N7-C8	8.74	108.27	103.90
21	AA	933	G	O4'-C1'-N9	8.74	115.19	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	940	C	O4'-C1'-N1	8.74	115.19	108.20
21	AA	1416	G	C8-N9-C4	-8.74	102.91	106.40
57	BB	492	A	C4-C5-N7	-8.74	106.33	110.70
57	BB	1983	G	C5-C6-O6	-8.74	123.36	128.60
57	BB	524	G	P-O3'-C3'	-8.74	109.22	119.70
57	BB	662	G	N7-C8-N9	-8.74	108.73	113.10
57	BB	884	U	O4'-C1'-N1	8.74	115.19	108.20
57	BB	1347	A	O4'-C1'-N9	8.74	115.19	108.20
57	BB	1720	U	O4'-C1'-N1	8.74	115.19	108.20
57	BB	1797	G	O4'-C1'-N9	8.74	115.19	108.20
57	BB	1995	U	O4'-C1'-N1	8.74	115.19	108.20
57	BB	2105	U	C3'-C2'-C1'	8.74	108.49	101.50
57	BB	2750	A	C5-C6-N1	-8.74	113.33	117.70
57	BB	223	A	C8-N9-C4	-8.73	102.31	105.80
21	AA	178	C	N3-C4-C5	-8.73	118.41	121.90
21	AA	901	A	N1-C6-N6	8.73	123.84	118.60
21	AA	1032	G	C5-C6-O6	-8.73	123.36	128.60
57	BB	636	G	P-O3'-C3'	8.73	130.18	119.70
57	BB	2318	G	C5-C6-N1	-8.73	107.13	111.50
57	BB	37	C	O4'-C1'-N1	8.73	115.19	108.20
57	BB	1671	U	O4'-C1'-N1	8.73	115.19	108.20
21	AA	453	G	N9-C4-C5	-8.73	101.91	105.40
21	AA	971	G	N1-C6-O6	8.73	125.14	119.90
22	AY	17	U	C2-N3-C4	8.73	132.24	127.00
57	BB	471	A	O4'-C1'-N9	8.73	115.19	108.20
57	BB	797	G	N1-C2-N3	-8.73	118.66	123.90
57	BB	1953	A	N1-C6-N6	8.73	123.84	118.60
57	BB	2368	C	C4-C5-C6	-8.73	113.03	117.40
21	AA	104	G	N7-C8-N9	8.73	117.47	113.10
57	BB	30	G	N1-C2-N3	-8.73	118.66	123.90
21	AA	115	G	N1-C2-N3	-8.73	118.67	123.90
21	AA	278	G	O4'-C1'-N9	8.73	115.18	108.20
21	AA	608	A	O4'-C1'-N9	8.73	115.18	108.20
21	AA	645	G	O4'-C1'-N9	8.73	115.18	108.20
26	AV	58	A	C6-N1-C2	-8.73	113.36	118.60
57	BB	219	A	O4'-C1'-N9	8.73	115.18	108.20
57	BB	1309	G	C5-C6-O6	-8.73	123.36	128.60
57	BB	1908	C	N3-C4-C5	-8.73	118.41	121.90
57	BB	2774	C	N3-C4-C5	-8.73	118.41	121.90
57	BB	2789	C	C5-C4-N4	-8.73	114.09	120.20
57	BB	2801	G	N1-C6-O6	8.73	125.14	119.90
57	BB	637	A	C2-N3-C4	8.72	114.96	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	144	G	C5-C6-O6	-8.72	123.37	128.60
21	AA	1177	G	C4-C5-C6	8.72	124.03	118.80
22	AY	26	G	O4'-C1'-N9	8.72	115.18	108.20
55	BG	54	ARG	NE-CZ-NH2	-8.72	115.94	120.30
57	BB	2056	G	N1-C6-O6	8.72	125.14	119.90
57	BB	2308	G	N1-C6-O6	8.72	125.13	119.90
21	AA	39	G	C8-N9-C4	-8.72	102.91	106.40
21	AA	1215	G	N9-C4-C5	8.72	108.89	105.40
21	AA	45	G	N1-C2-N3	-8.72	118.67	123.90
21	AA	372	C	C5-C4-N4	-8.72	114.10	120.20
21	AA	952	U	O4'-C1'-N1	8.72	115.18	108.20
26	AV	17(A)	U	C2-N3-C4	8.72	132.23	127.00
57	BB	637	A	C5-C6-N6	-8.72	116.72	123.70
57	BB	1303	G	C5-N7-C8	8.72	108.66	104.30
57	BB	1904	G	C5-C6-O6	-8.72	123.37	128.60
57	BB	14	A	C4-C5-C6	8.72	121.36	117.00
57	BB	130	C	C2-N3-C4	-8.72	115.54	119.90
57	BB	1387	A	C5-C6-N6	-8.72	116.72	123.70
57	BB	1420	A	N1-C2-N3	8.72	133.66	129.30
57	BB	2366	A	N1-C2-N3	8.72	133.66	129.30
57	BB	2578	G	N7-C8-N9	-8.72	108.74	113.10
21	AA	394	G	N3-C2-N2	8.72	126.00	119.90
21	AA	695	A	O4'-C1'-N9	8.72	115.17	108.20
57	BB	1202	G	C6-C5-N7	-8.72	125.17	130.40
26	AV	1	C	O4'-C1'-N1	8.72	115.17	108.20
57	BB	776	G	N1-C6-O6	8.72	125.13	119.90
57	BB	704	G	C5-C6-O6	-8.71	123.37	128.60
57	BB	960	A	P-O3'-C3'	8.71	130.16	119.70
57	BB	1357	C	C6-N1-C2	-8.71	116.81	120.30
57	BB	601	C	C6-N1-C2	-8.71	116.81	120.30
57	BB	624	C	C6-N1-C2	-8.71	116.81	120.30
57	BB	2723	C	C5-C4-N4	-8.71	114.10	120.20
26	AV	25	C	O4'-C1'-N1	8.71	115.17	108.20
57	BB	1492	G	O4'-C1'-N9	8.71	115.17	108.20
21	AA	1470	U	O4'-C1'-N1	8.71	115.17	108.20
57	BB	2558	C	C6-N1-C2	-8.71	116.82	120.30
57	BB	264	C	N3-C4-N4	8.71	124.09	118.00
57	BB	1158	C	C4-C5-C6	8.71	121.75	117.40
57	BB	131	A	O4'-C1'-N9	8.71	115.17	108.20
57	BB	2792	A	C4-C5-N7	-8.71	106.35	110.70
21	AA	560	A	C2-N3-C4	-8.70	106.25	110.60
21	AA	860	A	C2-N3-C4	-8.70	106.25	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	895	G	N3-C2-N2	8.70	125.99	119.90
57	BB	2090	A	P-O3'-C3'	-8.71	109.25	119.70
21	AA	631	C	C5-C6-N1	8.70	125.35	121.00
57	BB	1201	U	O4'-C1'-N1	8.70	115.16	108.20
57	BB	1395	A	P-O3'-C3'	8.70	130.14	119.70
57	BB	2146	C	O4'-C1'-N1	8.70	115.16	108.20
21	AA	1460	C	C5-C6-N1	8.70	125.35	121.00
21	AA	1514	G	N1-C2-N3	-8.70	118.68	123.90
57	BB	1416	G	N3-C2-N2	8.70	125.99	119.90
21	AA	204	G	C8-N9-C4	-8.70	102.92	106.40
21	AA	1235	U	C2-N3-C4	-8.70	121.78	127.00
57	BB	2494	G	C5-C6-O6	-8.70	123.38	128.60
21	AA	416	G	O4'-C1'-N9	8.70	115.16	108.20
57	BB	1859	U	C5-C4-O4	-8.70	120.68	125.90
21	AA	459	A	N1-C6-N6	8.70	123.82	118.60
57	BB	2812	G	O4'-C1'-N9	8.70	115.16	108.20
12	AU	6	ARG	NE-CZ-NH1	8.69	124.65	120.30
21	AA	532	A	N9-C4-C5	8.70	109.28	105.80
57	BB	200	U	C2-N3-C4	8.70	132.22	127.00
57	BB	726	G	N1-C6-O6	8.69	125.12	119.90
21	AA	376	G	C5-C6-O6	-8.69	123.39	128.60
21	AA	1339	A	C5-N7-C8	8.69	108.25	103.90
57	BB	1034	G	N1-C2-N3	-8.69	118.68	123.90
57	BB	580	U	N1-C2-O2	8.69	128.88	122.80
57	BB	1403	A	N3-C4-C5	-8.69	120.72	126.80
21	AA	963	G	C5-C6-N1	-8.69	107.16	111.50
21	AA	1379	G	N3-C4-N9	-8.69	120.79	126.00
21	AA	1397	C	N3-C4-N4	8.69	124.08	118.00
57	BB	2288	A	O4'-C1'-N9	8.69	115.15	108.20
21	AA	1154	G	C5-N7-C8	8.69	108.64	104.30
57	BB	422	A	O4'-C1'-N9	8.69	115.15	108.20
57	BB	677	A	C5-N7-C8	8.69	108.25	103.90
57	BB	2198	A	C5-C6-N6	-8.69	116.75	123.70
57	BB	2239	G	C5-C6-O6	-8.69	123.39	128.60
57	BB	2881	U	N3-C4-C5	-8.69	109.39	114.60
21	AA	795	C	N3-C4-C5	-8.69	118.42	121.90
21	AA	1430	A	C3'-C2'-C1'	-8.69	94.55	101.50
50	B3	31	ILE	CB-CA-C	8.69	128.97	111.60
57	BB	713	G	N3-C2-N2	8.69	125.98	119.90
57	BB	833	A	N9-C4-C5	8.69	109.27	105.80
57	BB	1106	G	N1-C6-O6	8.69	125.11	119.90
21	AA	1029	U	O4'-C1'-N1	8.68	115.15	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1611	C	C5-C6-N1	8.68	125.34	121.00
57	BB	2269	G	N1-C6-O6	8.68	125.11	119.90
21	AA	803	G	O4'-C1'-N9	8.68	115.15	108.20
23	AW	6	G	C5-C6-O6	-8.68	123.39	128.60
57	BB	2179	C	O4'-C1'-N1	8.68	115.15	108.20
57	BB	2812	G	N1-C6-O6	8.68	125.11	119.90
58	BA	63	C	N3-C4-C5	-8.68	118.43	121.90
21	AA	16	A	N1-C6-N6	8.68	123.81	118.60
21	AA	662	U	O4'-C1'-N1	8.68	115.14	108.20
57	BB	953	G	N7-C8-N9	-8.68	108.76	113.10
57	BB	1835	G	C5-C6-O6	-8.68	123.39	128.60
57	BB	1296	G	N3-C4-C5	8.68	132.94	128.60
57	BB	2627	G	C2-N3-C4	8.68	116.24	111.90
21	AA	253	A	N9-C4-C5	8.68	109.27	105.80
21	AA	1158	C	O4'-C1'-N1	8.68	115.14	108.20
21	AA	1318	A	P-O3'-C3'	8.68	130.11	119.70
57	BB	1543	G	N3-C4-C5	8.68	132.94	128.60
57	BB	1074	G	C5-N7-C8	8.68	108.64	104.30
57	BB	1669	A	C6-C5-N7	-8.68	126.23	132.30
21	AA	1212	U	C5-C6-N1	-8.67	118.36	122.70
57	BB	2354	C	N3-C4-C5	-8.67	118.43	121.90
21	AA	482	A	C5-C6-N1	-8.67	113.36	117.70
57	BB	1039	A	C4-C5-C6	8.67	121.34	117.00
57	BB	1278	C	O4'-C1'-N1	8.67	115.14	108.20
57	BB	1438	U	N3-C4-C5	-8.67	109.40	114.60
21	AA	609	A	C4-C5-N7	-8.67	106.36	110.70
23	AW	64	A	C5-C6-N6	-8.67	116.76	123.70
58	BA	99	A	C4-C5-C6	8.67	121.33	117.00
21	AA	1252	A	O4'-C1'-N9	8.67	115.14	108.20
57	BB	963	U	N3-C2-O2	8.67	128.27	122.20
21	AA	187	G	N9-C1'-C2'	-8.67	102.47	112.00
21	AA	876	C	C5-C6-N1	8.67	125.33	121.00
21	AA	1257	A	N7-C8-N9	-8.67	109.47	113.80
57	BB	1179	G	O4'-C1'-N9	8.67	115.13	108.20
21	AA	1473	G	C5-N7-C8	8.67	108.63	104.30
23	AW	73	A	N1-C6-N6	8.67	123.80	118.60
57	BB	73	A	C4-C5-N7	-8.67	106.37	110.70
57	BB	987	C	N3-C4-C5	-8.67	118.43	121.90
21	AA	243	A	C4-C5-C6	8.66	121.33	117.00
21	AA	423	G	N1-C2-N3	-8.66	118.70	123.90
21	AA	869	G	C8-N9-C4	8.66	109.87	106.40
21	AA	1220	G	N1-C6-O6	8.66	125.10	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BR	79	ARG	NE-CZ-NH1	-8.66	115.97	120.30
57	BB	181	A	C4-C5-C6	8.66	121.33	117.00
57	BB	205	G	C5-C6-O6	-8.66	123.40	128.60
57	BB	248	G	C6-C5-N7	-8.66	125.20	130.40
57	BB	882	G	N1-C6-O6	8.66	125.10	119.90
58	BA	75	G	N3-C2-N2	8.66	125.97	119.90
57	BB	291	G	C5-C6-O6	-8.66	123.40	128.60
57	BB	333	G	C6-C5-N7	-8.66	125.20	130.40
57	BB	1139	G	N9-C4-C5	-8.66	101.94	105.40
58	BA	19	C	C5-C6-N1	8.66	125.33	121.00
21	AA	5	U	O4'-C1'-N1	8.66	115.13	108.20
57	BB	256	A	C8-N9-C4	-8.66	102.34	105.80
57	BB	711	G	C4-C5-C6	8.66	124.00	118.80
21	AA	838	G	C5-C6-O6	-8.66	123.41	128.60
21	AA	1437	A	C4-C5-C6	8.66	121.33	117.00
57	BB	2772	C	C4-C5-C6	8.66	121.73	117.40
21	AA	1454	G	C6-C5-N7	-8.66	125.21	130.40
57	BB	216	A	C6-C5-N7	-8.66	126.24	132.30
57	BB	559	G	O4'-C1'-N9	8.66	115.12	108.20
57	BB	1497	U	O4'-C1'-N1	8.66	115.12	108.20
57	BB	2667	C	C5-C4-N4	-8.66	114.14	120.20
57	BB	616	A	C8-N9-C4	-8.65	102.34	105.80
57	BB	1027	A	N1-C2-N3	8.65	133.63	129.30
57	BB	1491	G	C6-C5-N7	-8.65	125.21	130.40
57	BB	1677	A	N3-C4-C5	-8.65	120.74	126.80
57	BB	1795	C	C2-N3-C4	8.65	124.23	119.90
57	BB	2761	A	N1-C6-N6	8.65	123.79	118.60
57	BB	1865	U	O4'-C1'-N1	8.65	115.12	108.20
21	AA	307	C	O4'-C1'-N1	8.65	115.12	108.20
57	BB	207	A	C8-N9-C4	-8.65	102.34	105.80
57	BB	290	U	C5-C6-N1	8.65	127.03	122.70
57	BB	789	A	N3-C4-C5	-8.65	120.74	126.80
21	AA	392	C	C5-C4-N4	-8.65	114.14	120.20
21	AA	739	C	C6-N1-C2	-8.65	116.84	120.30
57	BB	1573	G	C6-N1-C2	-8.65	119.91	125.10
21	AA	52	C	C5-C6-N1	8.65	125.32	121.00
21	AA	925	G	C5-N7-C8	8.65	108.62	104.30
21	AA	1224	U	P-O3'-C3'	8.65	130.08	119.70
21	AA	1300	G	C5-C6-O6	-8.65	123.41	128.60
57	BB	2501	C	N3-C4-C5	-8.65	118.44	121.90
57	BB	1849	G	C8-N9-C4	-8.65	102.94	106.40
57	BB	2775	G	O4'-C1'-N9	8.65	115.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	113	G	C4-C5-C6	8.64	123.99	118.80
57	BB	1328	A	C4-C5-C6	8.64	121.32	117.00
57	BB	1581	G	C8-N9-C4	-8.64	102.94	106.40
57	BB	1321	A	C8-N9-C4	-8.64	102.34	105.80
57	BB	1563	U	N3-C4-O4	8.64	125.45	119.40
57	BB	2014	A	O4'-C1'-N9	8.64	115.11	108.20
57	BB	2179	C	N1-C2-O2	-8.64	113.71	118.90
57	BB	2104	C	O4'-C1'-N1	8.64	115.11	108.20
57	BB	2483	C	N3-C4-C5	-8.64	118.44	121.90
21	AA	968	A	N9-C4-C5	8.64	109.26	105.80
57	BB	38	A	C5-C6-N6	-8.64	116.79	123.70
57	BB	788	A	C5'-C4'-O4'	8.64	119.47	109.10
57	BB	1386	C	C6-N1-C2	8.64	123.76	120.30
57	BB	2042	A	C5-C6-N6	-8.64	116.79	123.70
21	AA	321	A	C4-C5-C6	8.64	121.32	117.00
21	AA	746	A	C4-C5-C6	8.64	121.32	117.00
21	AA	1000	A	N1-C6-N6	8.64	123.78	118.60
57	BB	85	G	N7-C8-N9	-8.64	108.78	113.10
57	BB	1479	G	N1-C2-N3	-8.64	118.72	123.90
21	AA	774	G	N1-C6-O6	8.64	125.08	119.90
57	BB	566	U	C1'-O4'-C4'	8.64	116.81	109.90
57	BB	1328	A	N9-C4-C5	8.64	109.25	105.80
57	BB	1598	A	N1-C6-N6	8.64	123.78	118.60
57	BB	585	G	C5-C6-O6	-8.64	123.42	128.60
57	BB	1287	A	C4-C5-N7	-8.64	106.38	110.70
21	AA	1363	A	N9-C4-C5	8.63	109.25	105.80
57	BB	716	A	C5-C6-N1	-8.63	113.38	117.70
57	BB	804	A	C3'-C2'-C1'	8.64	108.41	101.50
58	BA	71	C	N3-C4-C5	8.63	125.35	121.90
21	AA	395	C	O4'-C1'-N1	8.63	115.11	108.20
57	BB	518	G	O4'-C1'-N9	8.63	115.11	108.20
21	AA	693	G	C5-C6-O6	-8.63	123.42	128.60
57	BB	975	A	C4-C5-N7	-8.63	106.39	110.70
57	BB	2242	G	N3-C4-C5	8.63	132.92	128.60
57	BB	2344	U	O4'-C1'-N1	8.63	115.10	108.20
57	BB	2766	A	N1-C6-N6	8.63	123.78	118.60
22	AY	40	C	O4'-C4'-C3'	8.63	113.00	106.10
21	AA	1444	U	O4'-C1'-N1	8.63	115.10	108.20
57	BB	2520	C	O4'-C1'-N1	8.63	115.10	108.20
57	BB	2562	U	C5-C6-N1	8.63	127.01	122.70
21	AA	530	G	C5-C6-O6	-8.62	123.43	128.60
22	AY	5	A	O4'-C1'-N9	8.62	115.10	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	40	U	C5-C6-N1	8.62	127.01	122.70
57	BB	193	U	N3-C4-C5	-8.62	109.43	114.60
57	BB	2448	A	C5-C6-N6	-8.62	116.80	123.70
21	AA	1333	A	C5-C6-N6	-8.62	116.80	123.70
22	AY	4	G	C8-N9-C4	-8.62	102.95	106.40
57	BB	458	G	N1-C6-O6	8.62	125.07	119.90
57	BB	582	A	O4'-C1'-N9	8.62	115.10	108.20
21	AA	1219	A	C5-C6-N6	-8.62	116.80	123.70
21	AA	1489	G	N3-C2-N2	-8.62	113.86	119.90
23	AW	14	A	C5-C6-N6	-8.62	116.80	123.70
57	BB	733	G	O4'-C1'-N9	8.62	115.10	108.20
21	AA	468	A	C4-C5-C6	8.62	121.31	117.00
57	BB	346	A	N7-C8-N9	-8.62	109.49	113.80
57	BB	627	A	N7-C8-N9	-8.62	109.49	113.80
57	BB	1724	G	C4-C5-N7	8.62	114.25	110.80
57	BB	1918	A	C2-N3-C4	-8.62	106.29	110.60
57	BB	2217	G	C5-C6-O6	-8.62	123.43	128.60
57	BB	1165	A	C5-C6-N1	-8.62	113.39	117.70
57	BB	1658	C	N3-C4-C5	-8.62	118.45	121.90
21	AA	186	C	C6-N1-C2	-8.62	116.85	120.30
21	AA	233	C	C6-N1-C2	-8.62	116.85	120.30
57	BB	1430	G	N9-C4-C5	8.62	108.85	105.40
23	AW	9	A	C8-N9-C4	-8.61	102.36	105.80
57	BB	156	A	C5-C6-N1	-8.62	113.39	117.70
57	BB	1456	G	C6-C5-N7	-8.62	125.23	130.40
57	BB	1913	A	N9-C4-C5	8.61	109.25	105.80
21	AA	937	A	C4-C5-C6	8.61	121.31	117.00
52	BD	46	ARG	NE-CZ-NH1	8.61	124.61	120.30
57	BB	389	G	C5-C6-N1	-8.61	107.19	111.50
57	BB	572	A	C4-C5-C6	8.61	121.31	117.00
57	BB	1432	G	C5-C6-O6	-8.61	123.43	128.60
57	BB	1587	G	C6-C5-N7	-8.61	125.23	130.40
57	BB	1599	U	C5-C4-O4	8.61	131.07	125.90
57	BB	1991	U	N3-C4-C5	8.61	119.77	114.60
57	BB	2144	G	N1-C2-N3	-8.61	118.73	123.90
21	AA	142	G	C5-C6-O6	-8.61	123.44	128.60
21	AA	262	A	C8-N9-C4	-8.61	102.36	105.80
21	AA	1098	C	N1-C2-N3	-8.61	113.17	119.20
21	AA	1185	G	N7-C8-N9	-8.61	108.80	113.10
21	AA	1261	A	C8-N9-C4	-8.61	102.36	105.80
57	BB	1246	A	C6-N1-C2	8.61	123.77	118.60
57	BB	2228	G	O4'-C1'-N9	8.61	115.09	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2869	G	N3-C2-N2	8.61	125.93	119.90
20	AI	5	TYR	CB-CG-CD2	-8.61	115.84	121.00
23	AW	31	A	N1-C6-N6	8.61	123.76	118.60
57	BB	1349	C	N3-C4-N4	8.61	124.03	118.00
57	BB	604	G	C5-C6-O6	-8.61	123.44	128.60
57	BB	757	G	C2-N3-C4	8.61	116.20	111.90
57	BB	1300	G	N9-C4-C5	8.61	108.84	105.40
57	BB	1300	G	O4'-C1'-N9	8.61	115.08	108.20
57	BB	2187	U	C3'-C2'-C1'	-8.61	94.62	101.50
57	BB	2402	U	C1'-O4'-C4'	-8.61	103.02	109.90
57	BB	2806	C	C4-C5-C6	8.61	121.70	117.40
21	AA	449	G	N3-C4-N9	-8.60	120.84	126.00
21	AA	763	G	N3-C4-N9	-8.60	120.84	126.00
21	AA	453	G	C5'-C4'-O4'	8.60	119.42	109.10
21	AA	777	A	C6-C5-N7	-8.60	126.28	132.30
24	AX	14	A	C8-N9-C4	-8.60	102.36	105.80
57	BB	466	A	C2-N3-C4	8.60	114.90	110.60
57	BB	707	G	N7-C8-N9	8.60	117.40	113.10
57	BB	756	A	C6-C5-N7	-8.60	126.28	132.30
57	BB	1315	C	O4'-C1'-N1	8.60	115.08	108.20
57	BB	1078	U	C6-N1-C2	-8.60	115.84	121.00
57	BB	1740	G	N1-C2-N3	-8.60	118.74	123.90
57	BB	1760	C	N1-C2-N3	-8.60	113.18	119.20
57	BB	2447	G	N1-C6-O6	8.60	125.06	119.90
21	AA	790	A	C5-C6-N6	-8.60	116.82	123.70
57	BB	2101	A	N3-C4-N9	8.60	134.28	127.40
21	AA	240	G	N9-C4-C5	-8.60	101.96	105.40
21	AA	1185	G	C8-N9-C4	8.60	109.84	106.40
57	BB	298	G	O4'-C1'-N9	8.60	115.08	108.20
57	BB	829	A	C5-C6-N1	-8.60	113.40	117.70
57	BB	916	G	N7-C8-N9	8.60	117.40	113.10
57	BB	1544	A	C5-C6-N6	-8.60	116.82	123.70
57	BB	2410	G	C5-C6-O6	-8.60	123.44	128.60
57	BB	2792	A	C5-C6-N6	-8.60	116.82	123.70
58	BA	59	A	O4'-C1'-N9	8.60	115.08	108.20
21	AA	393	A	N1-C6-N6	8.60	123.76	118.60
21	AA	416	G	C6-N1-C2	8.60	130.26	125.10
21	AA	637	C	N3-C2-O2	8.60	127.92	121.90
57	BB	211	C	N3-C4-N4	8.60	124.02	118.00
57	BB	279	A	C4-C5-C6	8.60	121.30	117.00
57	BB	172	A	N1-C2-N3	8.60	133.60	129.30
57	BB	404	A	N7-C8-N9	-8.60	109.50	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1086	A	C5-C6-N6	-8.60	116.82	123.70
57	BB	1277	G	C5-C6-O6	-8.60	123.44	128.60
57	BB	1395	A	O4'-C1'-N9	8.60	115.08	108.20
57	BB	1861	G	N9-C4-C5	-8.60	101.96	105.40
57	BB	1533	C	C2-N3-C4	-8.59	115.60	119.90
57	BB	2684	U	O4'-C1'-N1	8.59	115.08	108.20
57	BB	1112	G	O4'-C4'-C3'	-8.59	95.41	104.00
57	BB	1478	G	C5-C6-N1	-8.59	107.20	111.50
15	AD	71	PHE	CB-CG-CD2	8.59	126.81	120.80
23	AW	3	C	O4'-C1'-N1	8.59	115.07	108.20
57	BB	128	C	C2-N3-C4	8.59	124.19	119.90
57	BB	332	A	C5-C6-N6	-8.59	116.83	123.70
57	BB	729	G	C4-C5-N7	-8.59	107.36	110.80
57	BB	124	G	N1-C6-O6	8.59	125.05	119.90
57	BB	368	A	C8-N9-C4	-8.59	102.36	105.80
57	BB	1100	C	C2-N1-C1'	8.59	128.25	118.80
57	BB	2686	G	N1-C6-O6	8.59	125.05	119.90
57	BB	1165	A	C6-C5-N7	-8.59	126.29	132.30
57	BB	1338	G	N1-C6-O6	8.59	125.05	119.90
25	AZ	123	ARG	NE-CZ-NH1	-8.59	116.01	120.30
57	BB	667	U	P-O3'-C3'	8.59	130.01	119.70
57	BB	1140	C	C6-N1-C2	-8.59	116.86	120.30
21	AA	15	G	O4'-C1'-N9	8.59	115.07	108.20
21	AA	325	A	C5-C6-N6	-8.59	116.83	123.70
57	BB	380	G	N1-C6-O6	8.59	125.05	119.90
57	BB	458	G	P-O3'-C3'	8.59	130.01	119.70
21	AA	933	G	C8-N9-C4	-8.59	102.97	106.40
21	AA	1038	C	N3-C4-C5	-8.59	118.47	121.90
26	AV	46	G	C4-C5-C6	8.59	123.95	118.80
57	BB	2247	A	C6-C5-N7	-8.59	126.29	132.30
57	BB	2309	A	C5-C6-N1	-8.59	113.41	117.70
21	AA	462	G	C5'-C4'-O4'	8.58	119.40	109.10
21	AA	1415	G	O4'-C1'-N9	8.58	115.07	108.20
57	BB	1723	G	C5-C6-O6	-8.58	123.45	128.60
57	BB	2121	G	C5-C6-N1	-8.58	107.21	111.50
57	BB	2356	U	C5-C4-O4	-8.58	120.75	125.90
57	BB	2705	A	C8-N9-C4	-8.58	102.37	105.80
57	BB	2776	A	C4-C5-C6	8.58	121.29	117.00
57	BB	2830	C	O4'-C1'-N1	8.58	115.07	108.20
57	BB	184	C	C5-C6-N1	8.58	125.29	121.00
57	BB	1676	A	C6-C5-N7	-8.58	126.29	132.30
57	BB	24	G	N7-C8-N9	8.58	117.39	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	723	C	C4-C5-C6	-8.58	113.11	117.40
57	BB	750	A	C4-C5-C6	8.58	121.29	117.00
57	BB	1187	G	C4-C5-C6	8.58	123.95	118.80
57	BB	1273	U	O4'-C1'-N1	8.58	115.06	108.20
57	BB	1498	C	O4'-C1'-N1	8.58	115.06	108.20
21	AA	276	G	C5-C6-N1	-8.58	107.21	111.50
21	AA	493	A	N9-C4-C5	8.58	109.23	105.80
21	AA	1339	A	C2-N3-C4	-8.58	106.31	110.60
57	BB	43	G	N1-C2-N3	-8.58	118.75	123.90
57	BB	109	C	C6-N1-C2	-8.58	116.87	120.30
57	BB	247	G	N3-C2-N2	8.58	125.91	119.90
57	BB	526	A	C6-N1-C2	-8.58	113.45	118.60
57	BB	621	A	C4-C5-C6	8.58	121.29	117.00
57	BB	2624	G	C5-C6-N1	-8.58	107.21	111.50
57	BB	2424	C	N3-C4-C5	-8.58	118.47	121.90
57	BB	2619	C	N3-C4-N4	8.58	124.00	118.00
57	BB	2732	G	C8-N9-C1'	-8.58	115.85	127.00
57	BB	2879	A	N1-C2-N3	8.58	133.59	129.30
58	BA	104	A	C2-N3-C4	-8.58	106.31	110.60
21	AA	374	A	C4-C5-N7	-8.57	106.41	110.70
21	AA	1421	G	C8-N9-C4	-8.57	102.97	106.40
26	AV	59	A	C8-N9-C4	-8.57	102.37	105.80
57	BB	67	U	O4'-C1'-N1	8.57	115.06	108.20
57	BB	237	C	C6-N1-C2	-8.57	116.87	120.30
57	BB	450	G	N3-C2-N2	8.57	125.90	119.90
57	BB	1419	A	C5-N7-C8	8.57	108.19	103.90
21	AA	629	A	C8-N9-C4	-8.57	102.37	105.80
21	AA	1318	A	N1-C2-N3	8.57	133.59	129.30
23	AW	22	G	C5-C6-O6	-8.57	123.46	128.60
57	BB	701	G	C5-C6-O6	-8.57	123.46	128.60
57	BB	959	A	C8-N9-C4	-8.57	102.37	105.80
21	AA	257	G	C8-N9-C4	-8.57	102.97	106.40
21	AA	1189	U	O4'-C1'-N1	8.57	115.06	108.20
57	BB	428	A	C5-N7-C8	8.57	108.19	103.90
57	BB	994	C	N3-C4-N4	8.57	124.00	118.00
57	BB	1094	U	P-O3'-C3'	8.57	129.99	119.70
21	AA	366	A	C5-C6-N1	-8.57	113.42	117.70
21	AA	1220	G	N3-C2-N2	8.57	125.90	119.90
21	AA	1417	G	N1-C2-N2	-8.57	108.49	116.20
57	BB	1548	A	N1-C6-N6	8.57	123.74	118.60
57	BB	2166	U	N3-C4-C5	-8.57	109.46	114.60
57	BB	2721	A	C5-C6-N1	-8.57	113.42	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	39	U	O4'-C1'-N1	8.57	115.05	108.20
39	BT	6	ARG	NE-CZ-NH1	8.57	124.58	120.30
57	BB	1293	C	C5-C4-N4	-8.57	114.20	120.20
57	BB	1352	U	N1-C2-N3	-8.57	109.76	114.90
57	BB	2679	A	N9-C4-C5	-8.57	102.37	105.80
57	BB	2900	A	N7-C8-N9	-8.57	109.52	113.80
27	B5	71	ARG	CD-NE-CZ	8.56	135.59	123.60
57	BB	2648	G	C2-N3-C4	8.56	116.18	111.90
21	AA	250	A	O4'-C1'-N9	8.56	115.05	108.20
57	BB	685	A	C8-N9-C4	-8.56	102.38	105.80
57	BB	1420	A	N1-C6-N6	8.56	123.74	118.60
57	BB	2855	C	O4'-C1'-N1	8.56	115.05	108.20
26	AV	3	C	C6-N1-C2	-8.56	116.88	120.30
57	BB	2314	A	N1-C2-N3	8.56	133.58	129.30
57	BB	2427	C	C1'-O4'-C4'	8.56	116.75	109.90
21	AA	962	C	N3-C4-N4	8.56	123.99	118.00
57	BB	1464	G	C5-C6-O6	-8.56	123.46	128.60
57	BB	1942	C	N3-C4-C5	-8.56	118.48	121.90
57	BB	369	U	P-O5'-C5'	8.56	134.59	120.90
57	BB	780	G	N1-C6-O6	8.56	125.04	119.90
57	BB	1786	A	N9-C4-C5	8.56	109.22	105.80
21	AA	253	A	C5-N7-C8	8.56	108.18	103.90
21	AA	291	U	O4'-C1'-N1	8.56	115.05	108.20
21	AA	612	C	O4'-C1'-N1	8.56	115.05	108.20
21	AA	1024	G	O4'-C1'-N9	8.56	115.05	108.20
57	BB	2733	A	O4'-C1'-N9	8.56	115.05	108.20
21	AA	382	A	C5-C6-N6	-8.55	116.86	123.70
21	AA	1350	A	N1-C6-N6	8.55	123.73	118.60
57	BB	408	G	C5-N7-C8	-8.55	100.02	104.30
57	BB	490	C	P-O3'-C3'	8.55	129.96	119.70
57	BB	589	U	O4'-C1'-N1	8.55	115.04	108.20
57	BB	909	A	N1-C6-N6	8.55	123.73	118.60
57	BB	1295	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	1406	U	C6-N1-C2	-8.55	115.87	121.00
57	BB	1690	A	C5-N7-C8	-8.55	99.62	103.90
57	BB	1384	A	C8-N9-C4	-8.55	102.38	105.80
57	BB	1666	G	C5-C6-O6	-8.55	123.47	128.60
57	BB	1807	G	N7-C8-N9	-8.55	108.82	113.10
21	AA	1229	A	C5-C6-N1	-8.55	113.42	117.70
23	AW	70	G	N1-C6-O6	8.55	125.03	119.90
57	BB	203	A	O4'-C1'-N9	8.55	115.04	108.20
57	BB	1793	C	C5-C4-N4	-8.55	114.21	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	232	G	C8-N9-C4	8.55	109.82	106.40
57	BB	724	U	N3-C2-O2	8.55	128.19	122.20
57	BB	870	U	C4'-C3'-C2'	-8.55	94.05	102.60
57	BB	1217	U	C5-C6-N1	8.55	126.97	122.70
57	BB	1237	A	O4'-C1'-N9	8.55	115.04	108.20
57	BB	1557	C	C2-N1-C1'	8.55	128.21	118.80
57	BB	1293	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	2722	G	N1-C6-O6	8.55	125.03	119.90
58	BA	103	U	C5-C6-N1	8.55	126.97	122.70
21	AA	1408	A	C4-C5-N7	-8.55	106.42	110.70
57	BB	73	A	O4'-C1'-N9	8.55	115.04	108.20
57	BB	252	G	N1-C2-N3	-8.55	118.77	123.90
57	BB	893	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	1565	C	N3-C4-C5	-8.55	118.48	121.90
21	AA	448	A	C5-C6-N6	-8.55	116.86	123.70
57	BB	33	C	O4'-C1'-N1	8.55	115.04	108.20
57	BB	817	C	N3-C4-C5	-8.55	118.48	121.90
21	AA	597	G	N9-C4-C5	-8.54	101.98	105.40
21	AA	1013	G	N3-C2-N2	8.54	125.88	119.90
57	BB	1193	G	N3-C4-C5	8.54	132.87	128.60
57	BB	2282	G	N7-C8-N9	8.55	117.37	113.10
57	BB	1403	A	C4-C5-N7	-8.54	106.43	110.70
21	AA	288	A	O4'-C1'-N9	8.54	115.03	108.20
21	AA	47	C	C6-N1-C2	8.54	123.72	120.30
21	AA	102	G	N1-C6-O6	8.54	125.03	119.90
25	AZ	279	ARG	NE-CZ-NH2	8.54	124.57	120.30
57	BB	1700	A	O4'-C1'-N9	8.54	115.03	108.20
23	AW	40	C	P-O5'-C5'	-8.54	107.24	120.90
57	BB	122	G	C5-C6-N1	8.54	115.77	111.50
57	BB	307	G	N7-C8-N9	-8.54	108.83	113.10
57	BB	432	A	C5-N7-C8	8.54	108.17	103.90
57	BB	532	A	C5-C6-N6	-8.54	116.87	123.70
57	BB	669	G	N3-C4-C5	-8.54	124.33	128.60
57	BB	1613	G	N1-C2-N3	-8.54	118.78	123.90
21	AA	614	C	O4'-C1'-N1	8.54	115.03	108.20
23	AW	55	U	O4'-C1'-N1	8.54	115.03	108.20
57	BB	117	G	N3-C4-N9	8.54	131.12	126.00
57	BB	1260	A	O4'-C1'-N9	8.54	115.03	108.20
57	BB	1656	C	C2-N3-C4	8.54	124.17	119.90
57	BB	2526	G	N1-C2-N3	-8.54	118.78	123.90
57	BB	2821	A	C5-C6-N1	-8.54	113.43	117.70
21	AA	687	A	C8-N9-C4	-8.54	102.39	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	995	C	O4'-C1'-N1	8.54	115.03	108.20
57	BB	2830	C	C2-N3-C4	8.54	124.17	119.90
21	AA	907	A	N1-C6-N6	8.53	123.72	118.60
21	AA	1533	C	N3-C4-C5	-8.54	118.49	121.90
57	BB	124	G	C2-N3-C4	8.54	116.17	111.90
57	BB	600	G	N1-C6-O6	8.54	125.02	119.90
57	BB	276	U	C4-C5-C6	8.53	124.82	119.70
57	BB	813	U	C5-C4-O4	-8.53	120.78	125.90
57	BB	2902	C	N3-C4-N4	8.53	123.97	118.00
21	AA	242	G	N1-C2-N3	-8.53	118.78	123.90
57	BB	294	A	C5-C6-N6	-8.53	116.87	123.70
21	AA	173	U	N3-C4-C5	-8.53	109.48	114.60
21	AA	656	G	O4'-C1'-N9	8.53	115.03	108.20
21	AA	1065	U	P-O3'-C3'	8.53	129.94	119.70
57	BB	2889	C	C6-N1-C2	-8.53	116.89	120.30
58	BA	51	G	O4'-C1'-N9	8.53	115.03	108.20
21	AA	430	A	C8-N9-C4	-8.53	102.39	105.80
57	BB	1509	A	P-O3'-C3'	8.53	129.94	119.70
57	BB	2843	G	N3-C2-N2	8.53	125.87	119.90
21	AA	784	A	C2-N3-C4	-8.53	106.34	110.60
21	AA	957	U	N3-C4-C5	-8.53	109.48	114.60
21	AA	1022	A	C6-C5-N7	-8.53	126.33	132.30
21	AA	1088	G	O4'-C1'-N9	8.53	115.02	108.20
57	BB	127	A	C2-N3-C4	8.53	114.86	110.60
57	BB	2045	C	N3-C4-N4	8.53	123.97	118.00
57	BB	1605	C	N3-C4-C5	-8.53	118.49	121.90
57	BB	2819	G	N1-C6-O6	8.53	125.02	119.90
57	BB	1211	C	O4'-C1'-N1	8.53	115.02	108.20
21	AA	200	G	C5-C6-O6	-8.53	123.48	128.60
21	AA	540	G	C5-C6-O6	-8.53	123.48	128.60
57	BB	1150	C	O4'-C1'-N1	8.53	115.02	108.20
57	BB	1336	A	C5-N7-C8	8.53	108.16	103.90
57	BB	2503	A	C4-C5-C6	8.53	121.26	117.00
21	AA	157	U	O4'-C1'-N1	8.52	115.02	108.20
21	AA	234	C	N3-C4-C5	-8.52	118.49	121.90
57	BB	211	C	C5-C6-N1	8.52	125.26	121.00
57	BB	388	G	C4-C5-C6	8.52	123.91	118.80
57	BB	525	U	N1-C2-O2	-8.52	116.83	122.80
21	AA	988	G	C5-N7-C8	8.52	108.56	104.30
57	BB	940	G	C5-C6-N1	8.52	115.76	111.50
57	BB	2736	A	N1-C2-N3	8.52	133.56	129.30
57	BB	2811	G	N7-C8-N9	8.52	117.36	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1110	G	C2-N3-C4	8.52	116.16	111.90
57	BB	2012	G	C8-N9-C4	-8.52	102.99	106.40
57	BB	2411	A	N1-C6-N6	8.52	123.71	118.60
57	BB	2721	A	O4'-C1'-N9	8.52	115.02	108.20
57	BB	2760	C	O4'-C1'-N1	8.52	115.02	108.20
21	AA	18	C	N3-C4-N4	8.52	123.96	118.00
21	AA	116	A	C8-N9-C4	-8.52	102.39	105.80
57	BB	663	G	C5-C6-O6	-8.52	123.49	128.60
57	BB	1674	G	C3'-C2'-C1'	8.52	108.32	101.50
57	BB	2498	C	C4-C5-C6	8.52	121.66	117.40
22	AY	18	G	N3-C2-N2	8.52	125.86	119.90
57	BB	2578	G	C5-C6-N1	-8.52	107.24	111.50
21	AA	151	A	C4-C5-N7	-8.52	106.44	110.70
21	AA	716	A	C5-N7-C8	8.52	108.16	103.90
21	AA	802	A	O4'-C1'-N9	8.52	115.01	108.20
21	AA	1384	C	C6-N1-C2	-8.52	116.89	120.30
57	BB	731	C	C5-C6-N1	8.52	125.26	121.00
57	BB	2100	G	C5-C6-N1	-8.52	107.24	111.50
57	BB	2200	C	C6-N1-C2	-8.52	116.89	120.30
21	AA	662	U	N3-C4-O4	8.51	125.36	119.40
57	BB	707	G	C5-C6-N1	-8.51	107.24	111.50
21	AA	552	U	N1-C2-O2	8.51	128.76	122.80
21	AA	1179	A	C8-N9-C4	-8.51	102.39	105.80
21	AA	1224	U	O5'-P-OP1	-8.51	98.04	105.70
21	AA	1356	G	C8-N9-C4	-8.51	103.00	106.40
57	BB	98	G	O4'-C1'-N9	8.51	115.01	108.20
57	BB	241	A	O4'-C1'-C2'	-8.51	97.29	105.80
57	BB	436	C	C4-C5-C6	-8.51	113.14	117.40
57	BB	1585	C	N3-C4-N4	8.51	123.96	118.00
57	BB	1300	G	C8-N9-C4	-8.51	103.00	106.40
57	BB	2185	U	O4'-C1'-N1	8.51	115.01	108.20
57	BB	2397	G	N1-C2-N3	-8.51	118.79	123.90
21	AA	416	G	C4-C5-C6	8.51	123.91	118.80
22	AY	66	A	O4'-C1'-N9	8.51	115.01	108.20
23	AW	17	C	C2-N3-C4	8.51	124.15	119.90
32	BM	18	ARG	NE-CZ-NH1	-8.51	116.05	120.30
57	BB	122	G	N1-C6-O6	-8.51	114.79	119.90
57	BB	468	G	O4'-C1'-N9	8.51	115.01	108.20
57	BB	2399	G	N7-C8-N9	-8.51	108.84	113.10
21	AA	210	C	C2-N1-C1'	8.51	128.16	118.80
17	AF	45	ARG	NE-CZ-NH2	-8.51	116.05	120.30
21	AA	147	G	C6-C5-N7	-8.51	125.30	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	156	C	C5-C6-N1	-8.51	116.75	121.00
21	AA	488	C	O4'-C1'-N1	8.51	115.01	108.20
21	AA	1128	C	O4'-C1'-N1	8.51	115.01	108.20
22	AY	35	A	N1-C2-N3	8.51	133.55	129.30
26	AV	28	C	O4'-C1'-N1	8.51	115.00	108.20
57	BB	2495	G	C6-C5-N7	-8.51	125.30	130.40
57	BB	2498	C	C5-C6-N1	-8.51	116.75	121.00
57	BB	2839	G	C5-C6-O6	-8.51	123.50	128.60
57	BB	809	G	N3-C4-N9	8.51	131.10	126.00
57	BB	2307	G	N1-C6-O6	8.51	125.00	119.90
21	AA	569	C	O4'-C1'-N1	8.50	115.00	108.20
21	AA	1423	G	N3-C4-C5	8.50	132.85	128.60
57	BB	383	C	N3-C4-C5	-8.50	118.50	121.90
57	BB	1381	G	P-O3'-C3'	-8.50	109.50	119.70
57	BB	2244	U	C5-C4-O4	8.50	131.00	125.90
57	BB	2882	A	C2-N3-C4	-8.50	106.35	110.60
21	AA	738	C	C5-C4-N4	-8.50	114.25	120.20
21	AA	814	A	O4'-C1'-N9	8.50	115.00	108.20
21	AA	1423	G	C5-N7-C8	-8.50	100.05	104.30
57	BB	1476	U	C2-N3-C4	-8.50	121.90	127.00
57	BB	1653	G	O4'-C1'-N9	8.50	115.00	108.20
58	BA	79	G	N1-C6-O6	8.50	125.00	119.90
21	AA	122	G	C4-C5-C6	8.50	123.90	118.80
21	AA	221	C	N3-C4-N4	8.50	123.95	118.00
21	AA	279	A	N1-C6-N6	8.50	123.70	118.60
21	AA	463	U	O4'-C1'-N1	8.50	115.00	108.20
21	AA	792	A	N7-C8-N9	-8.50	109.55	113.80
57	BB	540	C	N3-C4-N4	8.50	123.95	118.00
57	BB	786	C	C5-C6-N1	8.50	125.25	121.00
57	BB	1565	C	C2-N3-C4	8.50	124.15	119.90
57	BB	1637	A	C8-N9-C4	-8.50	102.40	105.80
57	BB	1831	G	C6-C5-N7	-8.50	125.30	130.40
57	BB	2765	A	N9-C4-C5	8.50	109.20	105.80
21	AA	629	A	N1-C6-N6	8.49	123.70	118.60
21	AA	1104	G	C5-C6-N1	-8.49	107.25	111.50
21	AA	1212	U	C5-C4-O4	8.49	131.00	125.90
22	AY	73	A	C1'-O4'-C4'	-8.49	103.11	109.90
54	BF	60	SER	N-CA-CB	8.49	123.24	110.50
57	BB	2045	C	C4-C5-C6	8.49	121.65	117.40
57	BB	2416	C	O4'-C1'-N1	8.49	115.00	108.20
58	BA	59	A	C5-C6-N6	-8.49	116.91	123.70
57	BB	108	G	P-O3'-C3'	-8.49	109.51	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1899	A	C5-C6-N6	-8.49	116.91	123.70
57	BB	1987	A	O4'-C1'-N9	8.49	114.99	108.20
57	BB	2628	C	N3-C4-C5	-8.49	118.50	121.90
21	AA	1012	A	C5-C6-N1	-8.49	113.45	117.70
57	BB	369	U	O4'-C1'-N1	8.49	114.99	108.20
57	BB	1360	G	N3-C2-N2	8.49	125.84	119.90
57	BB	1683	U	N3-C4-O4	8.49	125.34	119.40
58	BA	43	C	C5-C6-N1	-8.49	116.75	121.00
57	BB	1799	G	C5-C6-N1	-8.49	107.26	111.50
21	AA	628	G	N1-C6-O6	8.49	124.99	119.90
21	AA	852	G	N3-C4-N9	-8.49	120.91	126.00
22	AY	20	G	O4'-C1'-N9	8.49	114.99	108.20
21	AA	1219	A	O4'-C1'-N9	8.49	114.99	108.20
57	BB	121	G	N1-C6-O6	8.49	124.99	119.90
57	BB	1643	G	N3-C2-N2	8.49	125.84	119.90
57	BB	2579	C	N1-C2-O2	-8.49	113.81	118.90
21	AA	149	A	N1-C6-N6	8.48	123.69	118.60
21	AA	247	G	O4'-C1'-N9	8.48	114.99	108.20
21	AA	708	C	C5-C6-N1	8.48	125.24	121.00
21	AA	1500	A	N7-C8-N9	8.48	118.04	113.80
57	BB	1761	C	O4'-C1'-N1	8.48	114.99	108.20
21	AA	985	C	N3-C4-N4	8.48	123.94	118.00
57	BB	1886	U	C2-N3-C4	8.48	132.09	127.00
57	BB	1926	U	O4'-C1'-N1	8.48	114.99	108.20
21	AA	1157	A	N1-C6-N6	8.48	123.69	118.60
21	AA	1194	U	O4'-C1'-N1	8.48	114.98	108.20
21	AA	1307	U	O4'-C1'-N1	8.48	114.98	108.20
57	BB	982	C	C4-C5-C6	8.48	121.64	117.40
57	BB	1012	U	P-O3'-C3'	8.48	129.88	119.70
57	BB	2126	A	C6-N1-C2	8.48	123.69	118.60
57	BB	2468	A	O4'-C1'-N9	8.48	114.98	108.20
57	BB	2563	U	O4'-C1'-N1	8.48	114.99	108.20
57	BB	2607	G	C4-C5-N7	8.48	114.19	110.80
22	AY	23	A	C5-C6-N6	-8.48	116.92	123.70
57	BB	754	U	C2-N3-C4	-8.48	121.91	127.00
21	AA	414	A	N1-C6-N6	8.48	123.69	118.60
23	AW	55	U	C5-C4-O4	-8.48	120.81	125.90
57	BB	188	G	N3-C2-N2	8.48	125.83	119.90
57	BB	1163	G	N3-C2-N2	8.48	125.83	119.90
57	BB	2679	A	C5-C6-N6	-8.48	116.92	123.70
21	AA	238	A	C4-C5-C6	8.47	121.24	117.00
6	AO	79	ARG	NE-CZ-NH2	8.47	124.54	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	146	G	N1-C6-O6	8.47	124.98	119.90
21	AA	803	G	C5-C6-O6	-8.47	123.52	128.60
21	AA	1436	U	N3-C2-O2	8.47	128.13	122.20
23	AW	71	G	C5-C6-O6	-8.47	123.52	128.60
57	BB	241	A	C3'-C2'-C1'	-8.47	94.72	101.50
57	BB	1754	A	N1-C6-N6	8.47	123.69	118.60
57	BB	2115	G	C4-C5-C6	8.47	123.89	118.80
11	AT	35	TYR	CB-CG-CD1	8.47	126.08	121.00
21	AA	85	U	N3-C4-O4	8.47	125.33	119.40
21	AA	613	C	P-O5'-C5'	8.47	134.45	120.90
21	AA	1070	U	O4'-C1'-N1	8.47	114.98	108.20
25	AZ	30	ALA	N-CA-CB	8.47	121.96	110.10
57	BB	314	C	O4'-C1'-N1	8.47	114.98	108.20
57	BB	540	C	C5-C4-N4	-8.47	114.27	120.20
57	BB	946	C	C2-N3-C4	8.47	124.14	119.90
57	BB	1742	U	O4'-C1'-N1	8.47	114.98	108.20
57	BB	2144	G	N1-C6-O6	8.47	124.98	119.90
57	BB	2406	A	N1-C2-N3	-8.47	125.06	129.30
21	AA	22	G	O4'-C1'-N9	8.47	114.97	108.20
21	AA	612	C	C6-N1-C2	-8.47	116.91	120.30
57	BB	1168	G	C2-N3-C4	-8.47	107.67	111.90
57	BB	1455	G	O4'-C1'-N9	8.47	114.97	108.20
58	BA	108	A	C5-C6-N6	-8.47	116.93	123.70
21	AA	250	A	C2-N3-C4	8.46	114.83	110.60
21	AA	282	A	C5-C6-N6	8.46	130.47	123.70
26	AV	10	G	N1-C6-O6	8.47	124.98	119.90
26	AV	34	C	N3-C4-N4	8.47	123.93	118.00
57	BB	738	G	N1-C6-O6	8.47	124.98	119.90
57	BB	1111	A	C5-C6-N1	-8.47	113.47	117.70
57	BB	2145	C	C6-N1-C1'	-8.46	110.64	120.80
57	BB	2690	U	C5-C4-O4	-8.47	120.82	125.90
21	AA	611	C	C5-C6-N1	8.46	125.23	121.00
21	AA	1499	A	N7-C8-N9	-8.46	109.57	113.80
42	BW	40	ARG	NE-CZ-NH2	8.46	124.53	120.30
57	BB	67	U	N1-C2-O2	8.46	128.72	122.80
57	BB	1115	G	N9-C4-C5	-8.46	102.02	105.40
57	BB	1791	A	C6-C5-N7	-8.46	126.38	132.30
57	BB	1878	G	N3-C4-N9	-8.46	120.92	126.00
57	BB	2354	C	C2-N3-C4	8.46	124.13	119.90
57	BB	2514	U	O4'-C1'-N1	8.46	114.97	108.20
57	BB	2107	G	N9-C4-C5	8.46	108.78	105.40
57	BB	2297	A	C5-C6-N6	-8.46	116.93	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	106	C	C5-C6-N1	8.46	125.23	121.00
21	AA	186	C	C5-C6-N1	8.46	125.23	121.00
21	AA	845	A	C4-C5-C6	8.46	121.23	117.00
21	AA	1171	A	O4'-C1'-N9	8.46	114.97	108.20
57	BB	90	U	N3-C4-O4	8.46	125.32	119.40
57	BB	485	C	C4-C5-C6	8.46	121.63	117.40
57	BB	513	A	C5-C6-N6	-8.46	116.93	123.70
57	BB	1169	A	C8-N9-C4	-8.46	102.42	105.80
57	BB	1819	A	C4-C5-C6	8.46	121.23	117.00
57	BB	1879	C	C6-N1-C2	-8.46	116.92	120.30
57	BB	2149	U	N3-C4-C5	-8.46	109.53	114.60
57	BB	2208	C	N3-C4-C5	-8.46	118.52	121.90
57	BB	2270	A	C4-C5-C6	8.46	121.23	117.00
57	BB	2333	A	N7-C8-N9	-8.46	109.57	113.80
21	AA	537	G	C6-N1-C2	-8.45	120.03	125.10
21	AA	1338	G	O4'-C1'-N9	8.45	114.96	108.20
57	BB	152	A	C4-C5-C6	8.45	121.23	117.00
57	BB	677	A	C5-C6-N1	-8.45	113.47	117.70
57	BB	1352	U	N1-C2-O2	8.46	128.72	122.80
57	BB	2392	A	C5-C6-N6	-8.46	116.94	123.70
57	BB	2430	A	N1-C6-N6	8.45	123.67	118.60
57	BB	2597	G	N7-C8-N9	8.45	117.33	113.10
21	AA	752	G	C4-C5-N7	-8.45	107.42	110.80
21	AA	1255	G	C5-C6-N1	-8.45	107.27	111.50
57	BB	554	U	O4'-C1'-N1	8.45	114.96	108.20
21	AA	1129	C	C6-N1-C2	-8.45	116.92	120.30
57	BB	1287	A	C5-C6-N6	-8.45	116.94	123.70
57	BB	1332	G	O4'-C1'-N9	8.45	114.96	108.20
57	BB	2085	U	N3-C4-C5	-8.45	109.53	114.60
1	AJ	5	ARG	NE-CZ-NH2	-8.45	116.08	120.30
21	AA	195	A	C6-C5-N7	-8.45	126.39	132.30
21	AA	1507	A	C5-C6-N6	-8.45	116.94	123.70
23	AW	74	C	C2-N1-C1'	8.45	128.09	118.80
57	BB	364	C	N3-C4-N4	8.45	123.92	118.00
21	AA	275	G	N1-C6-O6	8.45	124.97	119.90
21	AA	292	G	C5-N7-C8	8.45	108.52	104.30
25	AZ	39	TYR	CB-CG-CD2	8.45	126.07	121.00
57	BB	531	C	C6-N1-C2	8.45	123.68	120.30
57	BB	644	A	N9-C4-C5	8.45	109.18	105.80
57	BB	908	C	N1-C2-O2	-8.45	113.83	118.90
21	AA	164	G	C5-C6-N1	8.44	115.72	111.50
21	AA	767	A	C4-C5-C6	8.44	121.22	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	BI	61	TYR	CB-CG-CD1	8.45	126.07	121.00
57	BB	1197	G	C5-C6-O6	-8.45	123.53	128.60
57	BB	1907	G	C5-C6-N1	-8.45	107.28	111.50
57	BB	1957	C	N3-C2-O2	-8.44	115.99	121.90
57	BB	2051	A	C4-C5-N7	-8.44	106.48	110.70
57	BB	2144	G	N9-C4-C5	-8.44	102.02	105.40
57	BB	2853	C	C5-C4-N4	-8.44	114.29	120.20
57	BB	562	U	O4'-C1'-N1	8.44	114.95	108.20
57	BB	663	G	C5-N7-C8	-8.44	100.08	104.30
57	BB	752	A	C4-C5-C6	8.44	121.22	117.00
57	BB	2404	U	N3-C2-O2	8.44	128.11	122.20
57	BB	2830	C	N1-C2-N3	-8.44	113.29	119.20
58	BA	35	C	O4'-C1'-N1	8.44	114.95	108.20
21	AA	244	U	C5-C6-N1	8.44	126.92	122.70
21	AA	359	G	C2-N3-C4	-8.44	107.68	111.90
21	AA	369	G	C5-C6-O6	-8.44	123.54	128.60
21	AA	378	G	O4'-C1'-N9	8.44	114.95	108.20
21	AA	1463	U	N3-C4-O4	8.44	125.31	119.40
57	BB	2444	G	N9-C4-C5	8.44	108.78	105.40
57	BB	484	C	O4'-C1'-N1	8.44	114.95	108.20
57	BB	695	G	N9-C4-C5	-8.44	102.02	105.40
57	BB	2800	A	O4'-C1'-N9	8.44	114.95	108.20
57	BB	1351	C	O4'-C1'-N1	8.44	114.95	108.20
57	BB	2582	G	C4-C5-N7	-8.44	107.42	110.80
58	BA	99	A	N7-C8-N9	-8.44	109.58	113.80
21	AA	108	G	C8-N9-C4	-8.44	103.03	106.40
57	BB	1586	A	C5-C6-N1	-8.44	113.48	117.70
57	BB	1938	A	C4-C5-C6	8.44	121.22	117.00
21	AA	663	A	O4'-C1'-N9	8.44	114.95	108.20
57	BB	220	G	N3-C4-N9	-8.44	120.94	126.00
57	BB	1409	U	O4'-C1'-N1	8.44	114.95	108.20
57	BB	2889	C	P-O3'-C3'	8.44	129.82	119.70
24	AX	21	C	O4'-C1'-N1	8.43	114.95	108.20
57	BB	1503	A	C4-C5-C6	8.43	121.22	117.00
57	BB	1122	G	O4'-C1'-N9	8.43	114.95	108.20
57	BB	1529	G	N1-C6-O6	8.43	124.96	119.90
57	BB	1571	A	C5-C6-N1	-8.43	113.48	117.70
57	BB	1803	A	C2-N3-C4	-8.43	106.38	110.60
21	AA	131	A	C5-C6-N6	-8.43	116.96	123.70
21	AA	210	C	O4'-C1'-N1	8.43	114.94	108.20
57	BB	1806	C	C5-C4-N4	-8.43	114.30	120.20
21	AA	251	G	C8-N9-C4	-8.43	103.03	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	355	C	N3-C4-N4	8.43	123.90	118.00
57	BB	595	C	C6-N1-C2	-8.43	116.93	120.30
57	BB	1028	A	C4-C5-N7	-8.43	106.48	110.70
21	AA	1297	G	N3-C2-N2	8.43	125.80	119.90
57	BB	1401	G	N3-C4-C5	-8.43	124.39	128.60
57	BB	1409	U	C4-C5-C6	8.43	124.76	119.70
57	BB	1855	U	C2-N3-C4	8.43	132.06	127.00
57	BB	1449	G	O4'-C1'-N9	8.43	114.94	108.20
57	BB	1904	G	C6-C5-N7	-8.43	125.34	130.40
57	BB	2146	C	N3-C4-C5	-8.43	118.53	121.90
13	AB	31	PHE	CB-CG-CD2	8.43	126.70	120.80
21	AA	353	A	C5-C6-N6	-8.43	116.96	123.70
21	AA	564	C	O4'-C1'-N1	8.43	114.94	108.20
21	AA	583	A	O4'-C1'-N9	8.43	114.94	108.20
21	AA	1012	A	O4'-C1'-N9	8.43	114.94	108.20
21	AA	1100	C	C1'-O4'-C4'	-8.43	103.16	109.90
21	AA	1452	C	C5'-C4'-O4'	8.43	119.21	109.10
21	AA	1490	U	C5-C4-O4	-8.43	120.84	125.90
22	AY	19	G	N3-C4-C5	8.43	132.81	128.60
54	BF	172	PHE	CB-CG-CD1	8.43	126.70	120.80
56	BH	123	ARG	NE-CZ-NH2	-8.43	116.09	120.30
57	BB	489	G	N1-C6-O6	8.43	124.96	119.90
57	BB	510	C	O4'-C1'-N1	8.43	114.94	108.20
57	BB	555	G	N9-C4-C5	8.43	108.77	105.40
57	BB	1341	G	O4'-C1'-N9	8.43	114.94	108.20
57	BB	1191	G	C4-N9-C1'	-8.43	115.55	126.50
57	BB	1340	U	N3-C4-O4	8.43	125.30	119.40
57	BB	1603	A	N1-C6-N6	8.43	123.66	118.60
57	BB	2703	C	O4'-C1'-N1	8.43	114.94	108.20
10	AS	37	SER	N-CA-CB	8.42	123.14	110.50
21	AA	165	G	N1-C6-O6	8.42	124.95	119.90
21	AA	1316	G	O4'-C1'-N9	8.42	114.94	108.20
57	BB	592	A	C4-C5-C6	8.42	121.21	117.00
57	BB	919	U	O4'-C1'-N1	8.42	114.94	108.20
21	AA	558	G	C6-C5-N7	-8.42	125.35	130.40
21	AA	1514	G	C2-N3-C4	8.42	116.11	111.90
57	BB	105	C	N3-C4-C5	-8.42	118.53	121.90
57	BB	272	A	C8-N9-C4	-8.42	102.43	105.80
57	BB	1398	C	C4-C5-C6	8.42	121.61	117.40
57	BB	766	U	N1-C2-O2	-8.42	116.91	122.80
57	BB	2854	G	C5-C6-N1	-8.42	107.29	111.50
21	AA	356	A	C8-N9-C4	-8.42	102.43	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	422	C	O4'-C1'-N1	8.42	114.93	108.20
21	AA	499	A	O4'-C1'-N9	8.42	114.93	108.20
21	AA	665	A	N1-C2-N3	-8.42	125.09	129.30
21	AA	852	G	N1-C6-O6	8.42	124.95	119.90
21	AA	890	G	C8-N9-C4	-8.42	103.03	106.40
21	AA	890	G	N9-C4-C5	8.42	108.77	105.40
22	AY	48	C	N3-C4-C5	-8.42	118.53	121.90
57	BB	1138	G	C6-C5-N7	-8.42	125.35	130.40
57	BB	1165	A	O4'-C1'-N9	8.42	114.93	108.20
57	BB	2446	G	N9-C4-C5	-8.42	102.03	105.40
21	AA	1018	G	O4'-C1'-N9	8.41	114.93	108.20
57	BB	976	G	N3-C2-N2	8.41	125.79	119.90
57	BB	2318	G	N1-C2-N3	-8.41	118.85	123.90
23	AW	8	U	O4'-C1'-N1	8.41	114.93	108.20
57	BB	1307	A	N7-C8-N9	-8.41	109.59	113.80
57	BB	31	C	O4'-C1'-N1	8.41	114.93	108.20
57	BB	431	U	N3-C2-O2	8.41	128.09	122.20
57	BB	2578	G	C5-N7-C8	8.41	108.50	104.30
57	BB	2803	G	C5-C6-N1	-8.41	107.29	111.50
21	AA	86	G	C5-N7-C8	8.41	108.50	104.30
21	AA	558	G	N1-C6-O6	8.41	124.94	119.90
57	BB	193	U	C4-C5-C6	8.41	124.75	119.70
57	BB	1000	A	O4'-C1'-N9	8.41	114.93	108.20
57	BB	1009	A	O4'-C1'-N9	8.41	114.93	108.20
57	BB	1048	A	C5-C6-N1	-8.41	113.50	117.70
57	BB	1305	C	N3-C4-C5	-8.41	118.54	121.90
57	BB	1879	C	O4'-C1'-N1	8.41	114.93	108.20
58	BA	77	U	N1-C2-O2	-8.41	116.91	122.80
57	BB	534	U	N3-C4-C5	-8.41	109.56	114.60
21	AA	275	G	N3-C2-N2	8.41	125.78	119.90
21	AA	421	U	N3-C4-C5	-8.41	109.56	114.60
57	BB	791	C	C5-C4-N4	-8.41	114.32	120.20
57	BB	1496	A	N3-C4-C5	-8.41	120.92	126.80
57	BB	2211	A	C5-C6-N1	-8.41	113.50	117.70
17	AF	86	ARG	NE-CZ-NH2	-8.40	116.10	120.30
57	BB	212	G	N1-C6-O6	8.40	124.94	119.90
57	BB	605	G	C5-C6-O6	-8.40	123.56	128.60
21	AA	989	U	O4'-C1'-N1	8.40	114.92	108.20
57	BB	620	G	C6-C5-N7	-8.40	125.36	130.40
57	BB	786	C	C5-C4-N4	-8.40	114.32	120.20
57	BB	1106	G	C5-N7-C8	8.40	108.50	104.30
57	BB	2124	G	N1-C2-N3	-8.40	118.86	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	AL	109	ARG	NE-CZ-NH2	-8.40	116.10	120.30
57	BB	2081	U	C5'-C4'-C3'	8.40	129.44	116.00
21	AA	478	A	N7-C8-N9	-8.40	109.60	113.80
21	AA	653	U	P-O5'-C5'	8.40	134.34	120.90
21	AA	609	A	N3-C4-C5	-8.40	120.92	126.80
21	AA	1493	A	P-O3'-C3'	8.40	129.78	119.70
21	AA	354	G	N7-C8-N9	8.40	117.30	113.10
57	BB	142	A	C5-N7-C8	8.40	108.10	103.90
57	BB	1046	A	C6-C5-N7	-8.40	126.42	132.30
57	BB	1162	G	O4'-C1'-N9	8.40	114.92	108.20
57	BB	788	A	C5-C6-N6	-8.40	116.98	123.70
57	BB	2568	U	C5-C6-N1	8.40	126.90	122.70
21	AA	39	G	N1-C6-O6	8.39	124.94	119.90
21	AA	1431	A	O4'-C1'-N9	8.39	114.92	108.20
57	BB	2627	G	C5-C6-O6	8.39	133.64	128.60
21	AA	1395	C	O4'-C1'-N1	8.39	114.92	108.20
57	BB	937	C	N3-C4-N4	8.39	123.88	118.00
57	BB	1011	G	N1-C2-N3	-8.39	118.86	123.90
57	BB	2018	G	C8-N9-C4	-8.39	103.04	106.40
57	BB	2056	G	C5-C6-O6	-8.39	123.56	128.60
57	BB	2587	A	N1-C6-N6	8.39	123.64	118.60
57	BB	2710	C	N3-C4-N4	8.39	123.88	118.00
58	BA	104	A	C8-N9-C4	-8.39	102.44	105.80
21	AA	353	A	O4'-C1'-N9	8.39	114.91	108.20
21	AA	450	G	C4-C5-N7	-8.39	107.44	110.80
57	BB	177	G	N3-C4-N9	8.39	131.03	126.00
57	BB	2227	A	N1-C6-N6	8.39	123.64	118.60
21	AA	1079	G	C4-C5-N7	8.39	114.16	110.80
57	BB	49	A	C5-C6-N6	-8.39	116.99	123.70
58	BA	98	G	N1-C6-O6	8.39	124.93	119.90
21	AA	214	C	C5-C6-N1	8.39	125.19	121.00
21	AA	497	G	C2-N3-C4	-8.39	107.71	111.90
21	AA	655	A	N1-C2-N3	8.39	133.49	129.30
57	BB	902	C	C4-C5-C6	8.39	121.59	117.40
21	AA	1336	C	C5-C4-N4	-8.39	114.33	120.20
24	AX	18	G	N1-C2-N3	-8.39	118.87	123.90
57	BB	297	G	O4'-C1'-N9	8.39	114.91	108.20
57	BB	885	C	N3-C4-N4	8.39	123.87	118.00
57	BB	1206	G	O5'-P-OP2	-8.39	98.15	105.70
57	BB	2646	C	O4'-C1'-N1	8.39	114.91	108.20
57	BB	2864	G	N1-C2-N2	-8.39	108.65	116.20
21	AA	504	C	O4'-C1'-N1	8.39	114.91	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1205	U	N1-C2-N3	8.39	119.93	114.90
21	AA	237	G	C2-N3-C4	8.38	116.09	111.90
21	AA	405	U	O4'-C1'-N1	8.38	114.91	108.20
57	BB	26	G	C8-N9-C4	-8.39	103.05	106.40
57	BB	752	A	C5-C6-N1	-8.39	113.51	117.70
57	BB	2018	G	C3'-C2'-C1'	-8.38	94.79	101.50
57	BB	2147	A	N1-C6-N6	8.38	123.63	118.60
57	BB	2451	A	C5-C6-N6	-8.39	116.99	123.70
57	BB	2667	C	O4'-C1'-N1	8.38	114.91	108.20
57	BB	2837	A	C8-N9-C4	-8.38	102.45	105.80
26	AV	63	G	C6-C5-N7	-8.38	125.37	130.40
57	BB	2038	G	C4-C5-N7	8.38	114.15	110.80
21	AA	500	G	N1-C6-O6	8.38	124.93	119.90
57	BB	1802	A	C1'-O4'-C4'	8.38	116.61	109.90
58	BA	28	C	O4'-C1'-N1	8.38	114.91	108.20
21	AA	658	C	C5-C6-N1	8.38	125.19	121.00
22	AY	52	U	P-O3'-C3'	8.38	129.76	119.70
57	BB	1839	G	C4-C5-N7	-8.38	107.45	110.80
57	BB	2007	U	N1-C2-N3	-8.38	109.87	114.90
57	BB	299	A	C5-C6-N6	-8.38	117.00	123.70
57	BB	881	G	C2-N3-C4	-8.38	107.71	111.90
57	BB	1936	A	N3-C4-C5	-8.38	120.93	126.80
57	BB	2349	G	O4'-C1'-N9	8.38	114.90	108.20
57	BB	2820	A	C2-N3-C4	-8.38	106.41	110.60
57	BB	2825	G	N1-C6-O6	8.38	124.93	119.90
57	BB	2852	G	O4'-C1'-N9	8.38	114.90	108.20
21	AA	254	G	C4-C5-C6	8.38	123.83	118.80
21	AA	461	A	P-O3'-C3'	-8.38	109.64	119.70
21	AA	428	G	P-O3'-C3'	8.38	129.75	119.70
21	AA	811	C	N3-C4-N4	8.38	123.86	118.00
21	AA	919	A	C6-C5-N7	-8.38	126.44	132.30
21	AA	1147	C	C6-N1-C2	-8.38	116.95	120.30
57	BB	382	A	N7-C8-N9	-8.38	109.61	113.80
57	BB	654	A	N1-C6-N6	8.38	123.63	118.60
57	BB	991	C	N3-C4-C5	-8.38	118.55	121.90
57	BB	1456	G	N1-C6-O6	8.38	124.93	119.90
21	AA	258	G	N3-C2-N2	8.38	125.76	119.90
21	AA	550	G	N1-C2-N3	-8.38	118.87	123.90
21	AA	914	A	C5-C6-N6	-8.38	117.00	123.70
21	AA	1147	C	N3-C4-C5	-8.38	118.55	121.90
57	BB	52	A	O4'-C1'-N9	8.38	114.90	108.20
57	BB	922	C	O4'-C1'-N1	8.38	114.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1878	G	O4'-C1'-N9	8.38	114.90	108.20
57	BB	2860	A	C8-N9-C4	-8.38	102.45	105.80
21	AA	1214	C	C6-N1-C1'	-8.37	110.75	120.80
26	AV	67	C	N3-C4-N4	8.37	123.86	118.00
57	BB	1422	G	C8-N9-C4	8.38	109.75	106.40
21	AA	683	G	O4'-C1'-N9	8.37	114.90	108.20
57	BB	1969	A	C5-C6-N1	-8.37	113.51	117.70
57	BB	2721	A	C6-C5-N7	-8.37	126.44	132.30
57	BB	2803	G	C3'-C2'-C1'	-8.37	94.80	101.50
58	BA	77	U	O4'-C1'-N1	8.37	114.90	108.20
21	AA	861	G	N1-C6-O6	8.37	124.92	119.90
57	BB	904	G	C5-C6-O6	-8.37	123.58	128.60
21	AA	93	U	O4'-C1'-N1	8.37	114.89	108.20
21	AA	124	C	O4'-C1'-N1	8.37	114.89	108.20
21	AA	451	A	C5-C6-N1	-8.37	113.52	117.70
21	AA	981	U	C5-C6-N1	8.37	126.88	122.70
23	AW	26	A	O4'-C1'-N9	8.37	114.89	108.20
57	BB	974	G	C6-N1-C2	8.37	130.12	125.10
57	BB	1242	U	N1-C2-N3	-8.37	109.88	114.90
57	BB	362	A	C4-C5-C6	8.37	121.18	117.00
57	BB	1538	G	N1-C6-O6	8.37	124.92	119.90
21	AA	704	A	N1-C6-N6	8.37	123.62	118.60
21	AA	1063	C	C4-C5-C6	8.37	121.58	117.40
21	AA	1270	G	C4-C5-C6	8.37	123.82	118.80
57	BB	77	G	N3-C4-C5	-8.37	124.42	128.60
57	BB	457	A	P-O3'-C3'	8.37	129.74	119.70
57	BB	728	G	N3-C2-N2	8.36	125.75	119.90
57	BB	1219	U	C5-C6-N1	8.37	126.88	122.70
57	BB	2043	C	O4'-C1'-N1	8.37	114.89	108.20
57	BB	2032	G	N3-C2-N2	8.36	125.75	119.90
21	AA	518	C	C3'-C2'-C1'	-8.36	94.81	101.50
21	AA	937	A	C5-C6-N1	-8.36	113.52	117.70
57	BB	859	G	C8-N9-C4	8.36	109.75	106.40
57	BB	1875	G	N1-C6-O6	8.36	124.92	119.90
21	AA	986	U	C5-C4-O4	-8.36	120.88	125.90
25	AZ	123	ARG	NE-CZ-NH2	8.36	124.48	120.30
57	BB	803	U	N1-C2-N3	8.36	119.92	114.90
57	BB	1564	C	N3-C4-C5	-8.36	118.56	121.90
21	AA	881	G	C8-N9-C4	-8.36	103.06	106.40
57	BB	2751	G	C5-N7-C8	8.36	108.48	104.30
21	AA	174	A	N1-C6-N6	8.36	123.61	118.60
22	AY	28	C	O4'-C4'-C3'	-8.36	95.64	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	BM	117	PHE	CB-CG-CD1	8.36	126.65	120.80
57	BB	585	G	N1-C6-O6	8.36	124.92	119.90
57	BB	2083	G	N1-C6-O6	8.36	124.92	119.90
57	BB	2399	G	N1-C6-O6	8.36	124.92	119.90
57	BB	2415	G	N1-C6-O6	8.36	124.92	119.90
21	AA	50	A	O4'-C1'-N9	8.36	114.89	108.20
57	BB	2127	G	O4'-C1'-N9	8.36	114.89	108.20
21	AA	1484	C	C5-C4-N4	-8.36	114.35	120.20
57	BB	2755	C	C6-N1-C2	-8.36	116.96	120.30
21	AA	1048	G	C5-C6-O6	-8.35	123.59	128.60
57	BB	237	C	C1'-O4'-C4'	8.35	116.58	109.90
57	BB	985	C	N3-C4-N4	8.35	123.85	118.00
21	AA	126	G	C4-N9-C1'	-8.35	115.64	126.50
21	AA	397	A	C4-C5-C6	8.35	121.18	117.00
21	AA	734	G	N3-C2-N2	8.35	125.75	119.90
21	AA	1246	A	C5-C6-N6	-8.35	117.02	123.70
26	AV	40	C	C4'-C3'-C2'	-8.35	94.25	102.60
57	BB	756	A	N1-C6-N6	8.35	123.61	118.60
57	BB	850	U	O4'-C1'-N1	8.35	114.88	108.20
57	BB	1561	C	C5-C6-N1	8.35	125.18	121.00
57	BB	2120	G	C4-C5-N7	8.35	114.14	110.80
57	BB	2360	G	C5-C6-O6	-8.35	123.59	128.60
21	AA	350	G	N7-C8-N9	8.35	117.28	113.10
22	AY	37	G	N1-C2-N3	-8.35	118.89	123.90
57	BB	58	G	N1-C6-O6	8.35	124.91	119.90
30	BK	17	ARG	NE-CZ-NH1	8.35	124.47	120.30
57	BB	254	G	C2-N3-C4	8.35	116.07	111.90
57	BB	430	A	O4'-C1'-N9	8.35	114.88	108.20
57	BB	537	G	N9-C4-C5	8.35	108.74	105.40
57	BB	2074	U	C2-N3-C4	8.35	132.01	127.00
57	BB	2146	C	C4-C5-C6	8.35	121.58	117.40
57	BB	698	C	O5'-P-OP2	-8.35	98.19	105.70
57	BB	1167	C	C6-N1-C2	8.35	123.64	120.30
57	BB	1228	G	N1-C6-O6	8.35	124.91	119.90
57	BB	1338	G	N7-C8-N9	8.35	117.27	113.10
57	BB	2463	C	C6-N1-C2	8.35	123.64	120.30
58	BA	24	G	C8-N9-C4	-8.35	103.06	106.40
21	AA	681	A	C5-C6-N1	-8.35	113.53	117.70
21	AA	1016	A	C5-C6-N1	-8.35	113.53	117.70
21	AA	1434	A	C5-C6-N6	-8.35	117.02	123.70
57	BB	7	G	O4'-C1'-N9	8.35	114.88	108.20
57	BB	1572	A	O4'-C1'-N9	8.35	114.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1447	A	P-O3'-C3'	8.35	129.71	119.70
21	AA	1476	A	C4-C5-N7	8.35	114.87	110.70
23	AW	38	A	C5-C6-N1	-8.35	113.53	117.70
57	BB	141	G	N3-C2-N2	8.35	125.74	119.90
57	BB	265	A	C4-C5-C6	-8.35	112.83	117.00
57	BB	578	G	O5'-P-OP2	-8.35	98.19	105.70
57	BB	1471	G	N1-C6-O6	8.35	124.91	119.90
57	BB	1556	C	O4'-C1'-N1	8.35	114.88	108.20
57	BB	2264	C	O4'-C1'-N1	8.35	114.88	108.20
57	BB	2700	A	C6-N1-C2	-8.35	113.59	118.60
57	BB	963	U	N1-C2-O2	-8.34	116.96	122.80
57	BB	2177	C	O4'-C1'-N1	8.34	114.88	108.20
21	AA	585	G	C4-C5-N7	-8.34	107.46	110.80
21	AA	734	G	N1-C2-N3	-8.34	118.89	123.90
57	BB	707	G	C5-C6-O6	-8.34	123.59	128.60
57	BB	1038	G	C6-C5-N7	-8.34	125.39	130.40
57	BB	1842	G	C5-C6-N1	-8.34	107.33	111.50
57	BB	2138	G	C5-C6-O6	-8.34	123.59	128.60
58	BA	57	A	N3-C4-C5	-8.34	120.96	126.80
57	BB	651	G	O4'-C1'-N9	8.34	114.87	108.20
57	BB	1185	G	N1-C2-N3	-8.34	118.89	123.90
57	BB	1227	G	N3-C2-N2	8.34	125.74	119.90
57	BB	1511	G	C8-N9-C4	-8.34	103.06	106.40
57	BB	1803	A	C4-C5-N7	-8.34	106.53	110.70
57	BB	1346	G	N1-C2-N3	-8.34	118.90	123.90
57	BB	1790	C	O4'-C1'-N1	8.34	114.87	108.20
57	BB	1794	A	C5-C6-N6	-8.34	117.03	123.70
57	BB	2634	A	O4'-C1'-N9	8.34	114.87	108.20
57	BB	1992	G	C6-C5-N7	-8.34	125.40	130.40
57	BB	2643	G	C5-C6-O6	-8.34	123.60	128.60
57	BB	2753	A	O4'-C1'-N9	8.34	114.87	108.20
58	BA	37	C	C2-N3-C4	8.34	124.07	119.90
21	AA	568	G	C6-C5-N7	-8.34	125.40	130.40
21	AA	648	A	N1-C6-N6	8.34	123.60	118.60
23	AW	40	C	C6-N1-C2	-8.34	116.97	120.30
57	BB	476	G	N3-C2-N2	-8.34	114.06	119.90
57	BB	1578	U	N3-C4-C5	-8.34	109.60	114.60
21	AA	51	A	C5-C6-N1	-8.34	113.53	117.70
21	AA	281	G	N1-C6-O6	8.34	124.90	119.90
21	AA	756	C	O4'-C1'-N1	8.34	114.87	108.20
21	AA	1003	G	N1-C6-O6	8.34	124.90	119.90
57	BB	357	C	N3-C4-N4	8.34	123.83	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1103	A	C2-N3-C4	8.34	114.77	110.60
57	BB	1383	A	N7-C8-N9	8.34	117.97	113.80
57	BB	1710	G	N1-C6-O6	8.34	124.90	119.90
57	BB	2762	C	C2-N3-C4	8.34	124.07	119.90
58	BA	72	G	N1-C6-O6	8.34	124.90	119.90
21	AA	941	G	C4-C5-C6	8.33	123.80	118.80
57	BB	472	A	C5-C6-N1	-8.33	113.53	117.70
57	BB	523	C	N3-C4-N4	8.33	123.83	118.00
57	BB	690	G	N1-C2-N3	-8.33	118.90	123.90
57	BB	2121	G	C8-N9-C4	8.33	109.73	106.40
57	BB	2829	A	C5-C6-N6	-8.33	117.03	123.70
57	BB	412	A	C5-C6-N6	-8.33	117.03	123.70
57	BB	570	G	O4'-C1'-N9	8.33	114.87	108.20
57	BB	1079	C	C5-C4-N4	-8.33	114.37	120.20
57	BB	1089	A	C5-C6-N1	-8.33	113.53	117.70
57	BB	2125	G	C8-N9-C4	-8.33	103.07	106.40
57	BB	2810	A	N1-C2-N3	8.33	133.47	129.30
57	BB	2465	C	N3-C4-N4	8.33	123.83	118.00
57	BB	2592	G	N3-C2-N2	8.33	125.73	119.90
58	BA	28	C	N3-C4-C5	-8.33	118.57	121.90
21	AA	25	C	C5-C4-N4	-8.33	114.37	120.20
21	AA	805	C	C5-C6-N1	8.33	125.17	121.00
21	AA	745	G	N1-C6-O6	8.33	124.90	119.90
21	AA	1055	A	O4'-C1'-N9	8.33	114.86	108.20
47	B0	15	ARG	NE-CZ-NH2	8.33	124.47	120.30
57	BB	1391	U	N3-C4-C5	-8.33	109.60	114.60
57	BB	1937	A	N1-C6-N6	8.33	123.60	118.60
57	BB	1897	G	N1-C6-O6	8.33	124.90	119.90
57	BB	2101	A	N9-C4-C5	-8.33	102.47	105.80
21	AA	615	G	P-O3'-C3'	-8.33	109.71	119.70
22	AY	27	C	O3'-P-O5'	-8.33	88.18	104.00
26	AV	17	C	C4'-C3'-C2'	-8.33	94.27	102.60
26	AV	31	G	C5-C6-O6	-8.33	123.60	128.60
57	BB	1644	C	N3-C4-N4	8.33	123.83	118.00
57	BB	2623	G	N1-C2-N2	-8.33	108.70	116.20
57	BB	2661	G	C2-N3-C4	8.33	116.06	111.90
57	BB	2665	A	C5-C6-N6	-8.33	117.04	123.70
57	BB	2804	U	C2-N3-C4	-8.33	122.00	127.00
21	AA	254	G	C4-C5-N7	-8.32	107.47	110.80
21	AA	1324	A	N1-C6-N6	8.32	123.59	118.60
57	BB	753	A	N3-C4-C5	-8.32	120.97	126.80
21	AA	1231	G	C5-C6-O6	-8.32	123.61	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1248	A	O4'-C1'-N9	8.32	114.86	108.20
21	AA	1448	C	O4'-C1'-N1	8.32	114.86	108.20
57	BB	295	G	C5-C6-N1	-8.32	107.34	111.50
57	BB	1107	G	C4-C5-N7	-8.32	107.47	110.80
57	BB	2071	A	C5-N7-C8	-8.32	99.74	103.90
57	BB	1899	A	N9-C4-C5	8.32	109.13	105.80
57	BB	2232	C	N3-C4-N4	8.32	123.83	118.00
2	AK	68	ARG	NE-CZ-NH1	8.32	124.46	120.30
21	AA	634	C	C5-C6-N1	8.32	125.16	121.00
21	AA	784	A	N9-C4-C5	8.32	109.13	105.80
26	AV	40	C	O4'-C1'-N1	8.32	114.86	108.20
21	AA	112	G	N9-C4-C5	-8.32	102.07	105.40
57	BB	584	C	C4-C5-C6	8.32	121.56	117.40
57	BB	1142	A	C4-C5-C6	8.32	121.16	117.00
57	BB	1638	C	O4'-C1'-N1	8.32	114.85	108.20
57	BB	1787	A	C4-C5-C6	8.32	121.16	117.00
57	BB	1927	A	O4'-C1'-N9	8.32	114.85	108.20
57	BB	2726	A	C4-C5-C6	8.32	121.16	117.00
21	AA	191	G	C2-N3-C4	8.32	116.06	111.90
21	AA	445	G	N1-C2-N3	-8.32	118.91	123.90
21	AA	654	G	C5-N7-C8	-8.32	100.14	104.30
57	BB	1232	G	C2-N3-C4	8.32	116.06	111.90
58	BA	90	C	P-O3'-C3'	-8.32	109.72	119.70
19	AH	61	THR	CA-CB-CG2	-8.31	100.76	112.40
21	AA	716	A	N7-C8-N9	-8.31	109.64	113.80
21	AA	184	G	N1-C2-N3	-8.31	118.91	123.90
21	AA	354	G	C5-C6-N1	-8.31	107.34	111.50
21	AA	1501	C	O4'-C1'-N1	8.31	114.85	108.20
57	BB	290	U	C6-N1-C2	-8.31	116.01	121.00
57	BB	1320	C	C4-C5-C6	8.31	121.56	117.40
57	BB	1503	A	C5-C6-N6	-8.31	117.05	123.70
17	AF	24	ARG	NE-CZ-NH1	8.31	124.46	120.30
21	AA	689	C	P-O5'-C5'	8.31	134.20	120.90
21	AA	1264	U	C5-C6-N1	8.31	126.86	122.70
23	AW	55	U	N3-C4-O4	8.31	125.22	119.40
23	AW	56	C	N3-C4-C5	-8.31	118.58	121.90
57	BB	292	U	O4'-C1'-N1	8.31	114.85	108.20
57	BB	528	A	C4-C5-C6	8.31	121.16	117.00
57	BB	1970	A	C5-C6-N1	-8.31	113.55	117.70
57	BB	2071	A	C6-C5-N7	-8.31	126.48	132.30
21	AA	200	G	N1-C2-N3	-8.31	118.92	123.90
21	AA	823	C	C4-C5-C6	8.31	121.56	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1462	C	N3-C4-N4	8.31	123.81	118.00
57	BB	338	G	N7-C8-N9	-8.31	108.95	113.10
57	BB	1143	A	C2-N3-C4	8.31	114.75	110.60
57	BB	1477	A	O4'-C1'-N9	8.31	114.85	108.20
57	BB	1504	A	C6-C5-N7	-8.31	126.48	132.30
21	AA	81	A	C8-N9-C4	-8.31	102.48	105.80
21	AA	186	C	N3-C4-C5	-8.31	118.58	121.90
21	AA	314	C	O4'-C1'-N1	8.30	114.84	108.20
57	BB	52	A	N7-C8-N9	-8.31	109.65	113.80
57	BB	641	U	N1-C2-N3	-8.30	109.92	114.90
57	BB	1719	G	N1-C6-O6	8.31	124.88	119.90
57	BB	2093	G	C4-N9-C1'	-8.30	115.70	126.50
57	BB	2332	C	N3-C4-C5	-8.31	118.58	121.90
57	BB	2719	G	C5'-C4'-O4'	8.31	119.07	109.10
25	AZ	381	ARG	NE-CZ-NH2	8.30	124.45	120.30
57	BB	868	U	N3-C4-O4	8.30	125.21	119.40
57	BB	1182	G	C4-C5-N7	8.30	114.12	110.80
57	BB	1313	U	C6-N1-C1'	-8.30	109.57	121.20
57	BB	2755	C	P-O3'-C3'	8.30	129.67	119.70
58	BA	117	G	N3-C2-N2	8.30	125.71	119.90
21	AA	1047	G	C6-C5-N7	-8.30	125.42	130.40
57	BB	866	A	N9-C4-C5	8.30	109.12	105.80
57	BB	2722	G	N3-C2-N2	8.30	125.71	119.90
57	BB	963	U	C5-C4-O4	-8.30	120.92	125.90
57	BB	2425	A	N1-C6-N6	8.30	123.58	118.60
21	AA	800	G	O4'-C1'-N9	8.30	114.84	108.20
21	AA	949	A	C4-C5-C6	8.30	121.15	117.00
57	BB	872	U	N1-C2-N3	-8.30	109.92	114.90
57	BB	1581	G	N9-C4-C5	8.30	108.72	105.40
57	BB	1918	A	C8-N9-C4	-8.30	102.48	105.80
57	BB	2206	C	O4'-C1'-N1	8.30	114.84	108.20
24	AX	12	A	C2-N3-C4	-8.30	106.45	110.60
21	AA	289	G	N1-C2-N3	-8.29	118.92	123.90
57	BB	251	A	C5-C6-N6	-8.29	117.06	123.70
57	BB	668	A	C5-C6-N6	-8.29	117.06	123.70
57	BB	1891	G	N7-C8-N9	-8.29	108.95	113.10
58	BA	45	A	N9-C4-C5	-8.29	102.48	105.80
21	AA	585	G	C5'-C4'-O4'	8.29	119.05	109.10
21	AA	1218	C	N3-C4-C5	-8.29	118.58	121.90
57	BB	355	U	O4'-C1'-N1	8.29	114.83	108.20
57	BB	45	G	O4'-C1'-N9	8.29	114.83	108.20
57	BB	766	U	O4'-C1'-N1	8.29	114.83	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	810	U	C4-C5-C6	8.29	124.67	119.70
57	BB	1085	A	C4-C5-N7	-8.29	106.56	110.70
57	BB	1989	G	C5-C6-O6	-8.29	123.62	128.60
21	AA	122	G	C5-C6-O6	-8.29	123.63	128.60
21	AA	501	C	C4-C5-C6	8.29	121.55	117.40
21	AA	1267	C	O4'-C1'-N1	8.29	114.83	108.20
23	AW	20	U	P-O5'-C5'	8.29	134.16	120.90
57	BB	80	G	C5-C6-O6	-8.29	123.63	128.60
57	BB	121	G	C4-C5-N7	8.29	114.11	110.80
57	BB	920	A	C4-C5-C6	8.29	121.14	117.00
57	BB	1352	U	C2-N3-C4	8.29	131.97	127.00
57	BB	2052	A	C4-C5-N7	-8.29	106.56	110.70
57	BB	1303	G	N3-C2-N2	8.29	125.70	119.90
57	BB	1666	G	N3-C2-N2	8.29	125.70	119.90
57	BB	1819	A	C5-C6-N1	-8.29	113.56	117.70
57	BB	1954	G	N1-C2-N3	-8.29	118.93	123.90
57	BB	2167	U	P-O5'-C5'	8.29	134.16	120.90
57	BB	2527	C	C5-C4-N4	-8.29	114.40	120.20
57	BB	2535	G	C5-C6-N1	-8.29	107.36	111.50
57	BB	2373	G	C5-N7-C8	8.29	108.44	104.30
21	AA	63	C	O4'-C1'-N1	8.28	114.83	108.20
21	AA	213	G	N1-C2-N3	-8.28	118.93	123.90
21	AA	1093	A	C5-C6-N1	-8.28	113.56	117.70
57	BB	254	G	N3-C2-N2	8.28	125.70	119.90
57	BB	669	G	N1-C6-O6	8.28	124.87	119.90
21	AA	1489	G	O4'-C1'-N9	8.28	114.83	108.20
57	BB	364	C	C6-N1-C2	-8.28	116.99	120.30
57	BB	1829	A	N1-C2-N3	8.28	133.44	129.30
57	BB	1898	U	O4'-C1'-N1	8.28	114.83	108.20
57	BB	2116	G	C5-C6-O6	-8.28	123.63	128.60
57	BB	2578	G	O4'-C1'-N9	8.28	114.83	108.20
57	BB	2863	C	C5-C4-N4	-8.28	114.40	120.20
57	BB	2874	C	N3-C4-N4	8.28	123.80	118.00
21	AA	292	G	N7-C8-N9	-8.28	108.96	113.10
21	AA	785	G	C5-C6-O6	-8.28	123.63	128.60
21	AA	1015	G	O4'-C1'-N9	8.28	114.82	108.20
21	AA	1412	C	C5-C4-N4	-8.28	114.40	120.20
57	BB	1233	C	O4'-C1'-N1	8.28	114.82	108.20
57	BB	1494	A	N1-C2-N3	8.28	133.44	129.30
57	BB	1666	G	C5-C6-N1	-8.28	107.36	111.50
57	BB	1017	G	C5-C6-N1	-8.28	107.36	111.50
57	BB	1280	G	N1-C6-O6	8.28	124.87	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1689	A	C4-C5-C6	8.28	121.14	117.00
57	BB	2472	G	O4'-C1'-N9	8.28	114.82	108.20
7	AP	51	ARG	NE-CZ-NH1	8.28	124.44	120.30
57	BB	254	G	N1-C2-N3	-8.28	118.94	123.90
57	BB	635	C	C6-N1-C2	-8.28	116.99	120.30
57	BB	1806	C	C2-N3-C4	8.28	124.04	119.90
57	BB	2797	U	C4-C5-C6	8.28	124.67	119.70
57	BB	663	G	C3'-C2'-C1'	-8.28	94.88	101.50
57	BB	1773	A	N9-C1'-C2'	-8.28	102.90	112.00
21	AA	525	C	C2-N3-C4	8.27	124.04	119.90
57	BB	839	U	C5-C6-N1	8.27	126.84	122.70
21	AA	324	G	N3-C2-N2	8.27	125.69	119.90
57	BB	945	A	N1-C2-N3	8.27	133.44	129.30
57	BB	1161	C	O4'-C1'-N1	8.27	114.82	108.20
57	BB	1557	C	C2-N3-C4	8.27	124.04	119.90
57	BB	1959	G	C8-N9-C4	-8.27	103.09	106.40
57	BB	417	C	N3-C4-N4	8.27	123.79	118.00
57	BB	1605	C	N3-C4-N4	8.27	123.79	118.00
57	BB	1821	A	C8-N9-C4	-8.27	102.49	105.80
57	BB	2325	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	2740	A	O4'-C1'-N9	8.27	114.82	108.20
21	AA	410	G	O4'-C1'-N9	8.27	114.81	108.20
21	AA	663	A	C6-C5-N7	-8.27	126.51	132.30
57	BB	50	U	N3-C4-O4	8.27	125.19	119.40
57	BB	324	A	C5-C6-N6	-8.27	117.08	123.70
57	BB	427	U	C5-C6-N1	8.27	126.83	122.70
57	BB	1106	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	1125	G	O4'-C1'-N9	8.27	114.82	108.20
57	BB	449	A	C5-C6-N1	-8.27	113.57	117.70
57	BB	1527	G	O4'-C1'-N9	8.27	114.81	108.20
57	BB	1807	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	2543	G	C4-C5-N7	-8.27	107.49	110.80
21	AA	71	A	C4-C5-C6	8.27	121.13	117.00
21	AA	1389	C	O4'-C1'-N1	8.27	114.81	108.20
21	AA	1412	C	O4'-C1'-N1	8.27	114.81	108.20
57	BB	771	G	N1-C2-N2	8.27	123.64	116.20
21	AA	452	A	N9-C1'-C2'	-8.27	102.91	112.00
22	AY	14	A	C2-N3-C4	-8.27	106.47	110.60
57	BB	988	A	C5-N7-C8	8.27	108.03	103.90
57	BB	1112	G	C5-C6-O6	-8.27	123.64	128.60
57	BB	353	C	N3-C4-N4	8.27	123.79	118.00
57	BB	1558	C	C6-N1-C2	-8.27	116.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1829	A	O4'-C1'-N9	8.27	114.81	108.20
57	BB	2269	G	C5-N7-C8	8.27	108.43	104.30
57	BB	2854	G	N1-C2-N3	-8.27	118.94	123.90
23	AW	15	G	C4-C5-C6	8.26	123.76	118.80
21	AA	254	G	N3-C4-C5	-8.26	124.47	128.60
21	AA	352	C	O4'-C1'-N1	8.26	114.81	108.20
21	AA	410	G	N3-C2-N2	8.26	125.68	119.90
21	AA	606	G	C4-C5-N7	-8.26	107.50	110.80
23	AW	15	G	C5-C6-N1	-8.26	107.37	111.50
57	BB	869	G	C6-N1-C2	-8.26	120.14	125.10
57	BB	525	U	O4'-C1'-N1	8.26	114.81	108.20
57	BB	541	A	C6-C5-N7	-8.26	126.52	132.30
57	BB	1958	C	C2-N3-C4	8.26	124.03	119.90
57	BB	2568	U	N3-C4-O4	8.26	125.18	119.40
58	BA	57	A	C8-N9-C4	-8.26	102.50	105.80
21	AA	178	C	N3-C4-N4	8.26	123.78	118.00
21	AA	281	G	C5-C6-N1	-8.26	107.37	111.50
21	AA	484	G	C8-N9-C4	-8.26	103.10	106.40
57	BB	1330	C	C5-C6-N1	8.26	125.13	121.00
57	BB	532	A	C5-C6-N1	-8.26	113.57	117.70
57	BB	1505	A	C5-C6-N6	-8.26	117.09	123.70
21	AA	1157	A	C5-C6-N6	-8.26	117.09	123.70
57	BB	1043	C	C6-N1-C2	-8.26	117.00	120.30
22	AY	43	G	N3-C4-C5	-8.26	124.47	128.60
57	BB	404	A	C5-C6-N1	-8.26	113.57	117.70
57	BB	551	G	N7-C8-N9	8.26	117.23	113.10
57	BB	1566	A	N1-C6-N6	8.26	123.55	118.60
57	BB	2569	G	C4'-C3'-C2'	-8.26	94.34	102.60
21	AA	222	C	O4'-C1'-N1	8.25	114.80	108.20
21	AA	846	G	N1-C6-O6	8.25	124.85	119.90
25	AZ	76	TYR	CG-CD2-CE2	-8.25	114.70	121.30
57	BB	265	A	N9-C4-C5	-8.25	102.50	105.80
57	BB	1821	A	N1-C6-N6	8.25	123.55	118.60
57	BB	1821	A	O4'-C1'-N9	8.25	114.80	108.20
21	AA	794	A	C5-C6-N6	-8.25	117.10	123.70
57	BB	1401	G	O4'-C1'-N9	8.25	114.80	108.20
57	BB	7	G	N1-C2-N3	-8.25	118.95	123.90
57	BB	59	U	C5-C6-N1	8.25	126.83	122.70
21	AA	300	A	N7-C8-N9	-8.25	109.68	113.80
21	AA	432	A	C1'-O4'-C4'	-8.25	103.30	109.90
21	AA	646	G	C6-C5-N7	-8.25	125.45	130.40
21	AA	1275	A	C5-C6-N1	-8.25	113.58	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	20	U	C5-C4-O4	-8.25	120.95	125.90
57	BB	2267	A	N1-C6-N6	8.25	123.55	118.60
57	BB	2494	G	C5-C6-N1	-8.25	107.38	111.50
58	BA	112	G	N1-C6-O6	8.25	124.85	119.90
57	BB	1046	A	N1-C6-N6	8.25	123.55	118.60
57	BB	1491	G	C4-C5-N7	8.25	114.10	110.80
57	BB	2071	A	C4-C5-N7	8.25	114.82	110.70
57	BB	520	G	N1-C2-N3	-8.24	118.95	123.90
21	AA	418	C	O4'-C1'-N1	8.24	114.80	108.20
57	BB	2214	C	C4-C5-C6	-8.24	113.28	117.40
21	AA	505	G	P-O3'-C3'	8.24	129.59	119.70
21	AA	1055	A	C5'-C4'-O4'	8.24	118.99	109.10
21	AA	1483	A	O4'-C1'-N9	8.24	114.79	108.20
57	BB	580	U	C6-N1-C2	8.24	125.94	121.00
21	AA	202	G	N9-C4-C5	8.24	108.70	105.40
21	AA	272	C	O4'-C1'-N1	8.24	114.79	108.20
21	AA	487	A	N1-C6-N6	8.24	123.54	118.60
21	AA	841	C	C5-C4-N4	-8.24	114.43	120.20
57	BB	43	G	N3-C2-N2	8.24	125.67	119.90
57	BB	1906	G	O4'-C1'-N9	8.24	114.79	108.20
57	BB	142	A	O4'-C1'-N9	8.24	114.79	108.20
57	BB	351	C	C5-C4-N4	-8.24	114.43	120.20
57	BB	2574	G	C4-C5-C6	8.24	123.74	118.80
58	BA	26	C	N3-C4-C5	-8.24	118.60	121.90
21	AA	782	A	N9-C4-C5	-8.24	102.51	105.80
22	AY	37	G	N3-C2-N2	8.24	125.67	119.90
57	BB	910	A	C5-C6-N1	-8.24	113.58	117.70
57	BB	968	C	O4'-C1'-N1	8.24	114.79	108.20
57	BB	1532	A	N9-C4-C5	-8.24	102.50	105.80
57	BB	1551	A	C3'-C2'-C1'	-8.24	94.91	101.50
57	BB	1554	U	O4'-C1'-N1	8.24	114.79	108.20
57	BB	1938	A	C5-C6-N1	-8.24	113.58	117.70
57	BB	2357	G	C4-C5-N7	8.24	114.09	110.80
57	BB	2603	G	N1-C2-N3	-8.24	118.96	123.90
21	AA	338	A	C6-C5-N7	-8.23	126.54	132.30
57	BB	2670	A	C5-C6-N6	-8.23	117.11	123.70
21	AA	226	G	C5-C6-O6	-8.23	123.66	128.60
21	AA	408	A	N1-C6-N6	8.23	123.54	118.60
21	AA	531	U	O4'-C1'-N1	8.23	114.79	108.20
57	BB	320	A	C6-N1-C2	-8.23	113.66	118.60
57	BB	400	G	N1-C6-O6	8.23	124.84	119.90
57	BB	2224	G	N3-C2-N2	8.23	125.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1414	U	C5-C6-N1	8.23	126.82	122.70
24	AX	20	U	O4'-C1'-N1	8.23	114.79	108.20
57	BB	637	A	N1-C2-N3	-8.23	125.18	129.30
21	AA	413	G	C5-C6-N1	-8.23	107.38	111.50
21	AA	928	G	N1-C2-N3	-8.23	118.96	123.90
21	AA	1284	C	P-O3'-C3'	8.23	129.58	119.70
57	BB	540	C	O4'-C1'-N1	8.23	114.78	108.20
57	BB	677	A	C8-N9-C4	8.23	109.09	105.80
57	BB	964	C	N1-C2-N3	-8.23	113.44	119.20
13	AB	21	TYR	CB-CG-CD2	8.23	125.94	121.00
21	AA	767	A	C4-C5-N7	-8.23	106.58	110.70
57	BB	905	A	N3-C4-C5	-8.23	121.04	126.80
21	AA	127	G	O4'-C1'-N9	8.23	114.78	108.20
21	AA	238	A	C5-C6-N1	-8.23	113.59	117.70
21	AA	241	G	C4-C5-N7	-8.23	107.51	110.80
57	BB	1326	U	C2-N3-C4	8.23	131.94	127.00
57	BB	1364	G	C6-C5-N7	-8.23	125.46	130.40
57	BB	1781	U	C1'-O4'-C4'	8.23	116.48	109.90
57	BB	2699	C	C5-C4-N4	-8.23	114.44	120.20
57	BB	2714	G	C6-C5-N7	-8.23	125.46	130.40
58	BA	14	U	C5-C6-N1	-8.23	118.59	122.70
21	AA	1453	G	C8-N9-C4	-8.23	103.11	106.40
57	BB	1531	C	O4'-C1'-N1	8.23	114.78	108.20
57	BB	1933	G	N1-C6-O6	8.23	124.83	119.90
21	AA	66	A	C4-C5-C6	8.22	121.11	117.00
21	AA	1468	A	C3'-C2'-C1'	-8.22	94.92	101.50
57	BB	184	C	O4'-C1'-N1	8.22	114.78	108.20
21	AA	616	G	O4'-C1'-N9	8.22	114.78	108.20
57	BB	447	A	N1-C6-N6	8.22	123.53	118.60
57	BB	1011	G	C6-C5-N7	-8.22	125.47	130.40
57	BB	2512	C	C2-N3-C4	8.22	124.01	119.90
57	BB	1080	A	N1-C2-N3	-8.22	125.19	129.30
57	BB	2142	A	N1-C2-N3	8.22	133.41	129.30
57	BB	2704	C	C6-N1-C2	8.22	123.59	120.30
57	BB	2742	G	C2-N3-C4	-8.22	107.79	111.90
21	AA	155	A	C5-C6-N6	-8.22	117.12	123.70
21	AA	442	G	N7-C8-N9	8.22	117.21	113.10
22	AY	19	G	C8-N9-C4	8.22	109.69	106.40
21	AA	510	A	C5-N7-C8	8.22	108.01	103.90
21	AA	1175	G	O4'-C1'-N9	8.22	114.78	108.20
26	AV	65	C	N3-C4-C5	-8.22	118.61	121.90
26	AV	31	G	C8-N9-C4	-8.22	103.11	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	406	G	O4'-C1'-N9	8.22	114.78	108.20
57	BB	1862	G	N1-C2-N3	-8.22	118.97	123.90
57	BB	2236	U	C6-N1-C2	-8.22	116.07	121.00
57	BB	2397	G	N3-C2-N2	8.22	125.65	119.90
58	BA	60	C	C2-N3-C4	8.22	124.01	119.90
21	AA	687	A	C5-N7-C8	8.22	108.01	103.90
21	AA	80	A	O4'-C1'-N9	8.22	114.77	108.20
21	AA	441	A	N3-C4-C5	-8.22	121.05	126.80
21	AA	1329	A	C4-C5-C6	8.22	121.11	117.00
22	AY	2	C	C2-N3-C4	8.22	124.01	119.90
57	BB	1264	A	C8-N9-C4	-8.22	102.51	105.80
57	BB	1334	G	N9-C4-C5	-8.22	102.11	105.40
57	BB	1801	A	N1-C6-N6	8.22	123.53	118.60
57	BB	2475	C	O4'-C1'-N1	8.22	114.78	108.20
57	BB	1927	A	C6-C5-N7	-8.22	126.55	132.30
57	BB	2013	A	C8-N9-C4	-8.22	102.51	105.80
21	AA	77	A	C4-C5-N7	-8.22	106.59	110.70
21	AA	734	G	N1-C6-O6	8.22	124.83	119.90
57	BB	2213	U	O4'-C1'-N1	8.22	114.77	108.20
21	AA	129	A	N7-C8-N9	8.21	117.91	113.80
23	AW	8	U	C2-N3-C4	-8.21	122.07	127.00
57	BB	1722	A	C5-C6-N6	-8.22	117.13	123.70
57	BB	1978	A	N1-C2-N3	8.21	133.41	129.30
57	BB	2758	A	O4'-C1'-N9	8.21	114.77	108.20
21	AA	836	G	N3-C2-N2	8.21	125.65	119.90
21	AA	1205	U	C5-C6-N1	8.21	126.81	122.70
26	AV	15	G	C6-N1-C2	-8.21	120.17	125.10
57	BB	1577	C	C6-N1-C2	-8.21	117.02	120.30
21	AA	1443	C	N1-C2-N3	-8.21	113.45	119.20
57	BB	1437	C	C5-C4-N4	-8.21	114.45	120.20
57	BB	1573	G	O4'-C1'-N9	8.21	114.77	108.20
57	BB	1665	A	C5-C6-N6	-8.21	117.13	123.70
57	BB	2597	G	N3-C4-C5	-8.21	124.49	128.60
57	BB	2803	G	C5-C6-O6	-8.21	123.67	128.60
57	BB	2626	C	N3-C4-N4	8.21	123.75	118.00
57	BB	2713	U	C6-N1-C2	-8.21	116.07	121.00
21	AA	177	G	O4'-C1'-N9	8.21	114.77	108.20
21	AA	765	G	C4-N9-C1'	8.21	137.17	126.50
21	AA	889	A	C4-C5-C6	8.21	121.10	117.00
57	BB	264	C	N1-C2-O2	8.21	123.83	118.90
57	BB	1634	A	N1-C6-N6	8.21	123.52	118.60
57	BB	1705	A	C4-C5-N7	8.21	114.80	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2511	U	N3-C2-O2	8.21	127.94	122.20
57	BB	2511	U	O4'-C1'-N1	8.21	114.77	108.20
57	BB	2774	C	C2-N3-C4	8.21	124.00	119.90
21	AA	1262	C	C5-C4-N4	-8.21	114.46	120.20
23	AW	33	U	O4'-C1'-N1	8.21	114.76	108.20
57	BB	1093	G	C5-C6-O6	-8.21	123.68	128.60
57	BB	328	U	C5-C4-O4	-8.20	120.98	125.90
21	AA	16	A	O4'-C1'-N9	8.20	114.76	108.20
21	AA	141	G	C4-C5-N7	-8.20	107.52	110.80
21	AA	640	A	N1-C6-N6	8.20	123.52	118.60
57	BB	1163	G	N9-C4-C5	-8.20	102.12	105.40
21	AA	646	G	C5-C6-O6	-8.20	123.68	128.60
21	AA	1160	G	N1-C6-O6	8.20	124.82	119.90
22	AY	31	A	N7-C8-N9	8.20	117.90	113.80
57	BB	1700	A	C5-C6-N1	-8.20	113.60	117.70
57	BB	2030	A	C4-C5-C6	8.20	121.10	117.00
57	BB	2734	A	N1-C2-N3	-8.20	125.20	129.30
57	BB	2763	G	O4'-C1'-N9	8.20	114.76	108.20
21	AA	1251	A	C5-N7-C8	8.20	108.00	103.90
23	AW	28	G	N9-C4-C5	-8.20	102.12	105.40
38	BS	95	ARG	NE-CZ-NH1	-8.20	116.20	120.30
57	BB	655	A	O4'-C1'-N9	8.20	114.76	108.20
57	BB	683	U	C5-C6-N1	8.20	126.80	122.70
21	AA	362	G	N9-C4-C5	-8.20	102.12	105.40
57	BB	192	C	C6-N1-C2	-8.20	117.02	120.30
57	BB	350	G	N1-C6-O6	8.20	124.82	119.90
57	BB	1978	A	O4'-C1'-N9	8.20	114.76	108.20
57	BB	2414	G	O4'-C1'-N9	8.20	114.76	108.20
58	BA	68	C	C5-C6-N1	8.20	125.10	121.00
21	AA	206	C	N3-C4-C5	-8.20	118.62	121.90
21	AA	441	A	N1-C2-N3	8.20	133.40	129.30
21	AA	758	C	O4'-C1'-N1	8.20	114.76	108.20
57	BB	1354	A	N1-C6-N6	8.20	123.52	118.60
57	BB	1403	A	C5-C6-N1	-8.20	113.60	117.70
57	BB	1702	G	N9-C4-C5	8.20	108.68	105.40
57	BB	2100	G	N3-C2-N2	8.20	125.64	119.90
21	AA	929	G	C5-C6-O6	-8.19	123.68	128.60
21	AA	1028	C	O4'-C1'-N1	8.20	114.76	108.20
57	BB	1205	A	N1-C2-N3	8.20	133.40	129.30
57	BB	2154	A	C5-C6-N1	-8.20	113.60	117.70
57	BB	2328	A	N1-C6-N6	8.20	123.52	118.60
57	BB	2444	G	C5-C6-O6	-8.20	123.68	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1167	A	N1-C6-N6	8.19	123.52	118.60
57	BB	2282	G	C8-N9-C4	-8.19	103.12	106.40
21	AA	227	G	O4'-C1'-N9	8.19	114.75	108.20
21	AA	350	G	N1-C2-N2	-8.19	108.83	116.20
57	BB	840	C	C6-N1-C2	-8.19	117.02	120.30
57	BB	1382	G	C5-C6-O6	-8.19	123.68	128.60
21	AA	681	A	C5-N7-C8	8.19	108.00	103.90
21	AA	906	A	C4-C5-C6	8.19	121.10	117.00
21	AA	1407	C	C5-C4-N4	-8.19	114.47	120.20
57	BB	163	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	1330	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	1953	A	C2-N3-C4	8.19	114.70	110.60
57	BB	2106	U	N3-C4-O4	8.19	125.13	119.40
21	AA	191	G	N1-C2-N3	-8.19	118.99	123.90
21	AA	472	U	C3'-C2'-C1'	-8.19	94.95	101.50
21	AA	247	G	C5-C6-O6	-8.19	123.69	128.60
21	AA	1136	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	126	A	N7-C8-N9	-8.19	109.70	113.80
57	BB	804	A	C6-N1-C2	8.19	123.51	118.60
57	BB	1514	G	C5-C6-O6	-8.19	123.69	128.60
57	BB	1909	C	N3-C4-C5	-8.19	118.62	121.90
57	BB	2135	A	P-O5'-C5'	8.19	134.00	120.90
58	BA	66	A	N1-C6-N6	8.19	123.51	118.60
21	AA	470	C	O4'-C1'-N1	8.19	114.75	108.20
21	AA	1263	C	O4'-C1'-N1	8.19	114.75	108.20
23	AW	37	A	C4-C5-C6	8.19	121.09	117.00
57	BB	67	U	C5-C4-O4	-8.19	120.99	125.90
57	BB	447	A	N7-C8-N9	8.19	117.89	113.80
57	BB	1300	G	N3-C4-N9	-8.19	121.09	126.00
57	BB	1725	U	N1-C2-O2	-8.19	117.07	122.80
57	BB	2020	A	P-O3'-C3'	8.19	129.52	119.70
57	BB	2092	U	C5'-C4'-C3'	-8.19	102.90	116.00
57	BB	2375	G	C5-C6-O6	-8.19	123.69	128.60
57	BB	2539	C	N3-C4-N4	8.19	123.73	118.00
57	BB	2700	A	N1-C2-N3	8.19	133.39	129.30
57	BB	2720	U	C6-N1-C2	-8.19	116.09	121.00
7	AP	32	PHE	CB-CG-CD1	-8.18	115.07	120.80
22	AY	40	C	N3-C4-N4	8.18	123.73	118.00
57	BB	124	G	O4'-C1'-N9	8.18	114.75	108.20
57	BB	1967	C	C5-C4-N4	-8.18	114.47	120.20
57	BB	2324	U	C6-N1-C2	-8.18	116.09	121.00
21	AA	941	G	N1-C2-N3	-8.18	118.99	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1074	G	C5-C6-O6	-8.18	123.69	128.60
21	AA	1220	G	N1-C2-N3	-8.18	118.99	123.90
57	BB	1010	A	O4'-C1'-N9	8.18	114.75	108.20
57	BB	1099	G	C8-N9-C4	-8.18	103.13	106.40
57	BB	1154	G	N1-C6-O6	8.18	124.81	119.90
57	BB	1504	A	C8-N9-C4	-8.18	102.53	105.80
57	BB	1952	A	C4-C5-C6	8.18	121.09	117.00
57	BB	2333	A	C4-C5-C6	8.18	121.09	117.00
57	BB	2804	U	O4'-C1'-N1	8.18	114.75	108.20
21	AA	322	C	N3-C4-C5	-8.18	118.63	121.90
21	AA	635	A	C4'-C3'-C2'	-8.18	94.42	102.60
21	AA	1035	A	C4-C5-N7	-8.18	106.61	110.70
57	BB	38	A	C8-N9-C4	-8.18	102.53	105.80
57	BB	155	A	C6-C5-N7	-8.18	126.57	132.30
57	BB	245	G	N1-C6-O6	8.18	124.81	119.90
57	BB	910	A	N7-C8-N9	-8.18	109.71	113.80
57	BB	953	G	C5-N7-C8	8.18	108.39	104.30
57	BB	1049	C	C5-C6-N1	8.18	125.09	121.00
57	BB	1198	U	C5-C4-O4	-8.18	120.99	125.90
57	BB	1405	U	O4'-C1'-N1	8.18	114.74	108.20
57	BB	2018	G	O4'-C1'-N9	8.18	114.75	108.20
57	BB	2895	G	C8-N9-C4	-8.18	103.13	106.40
21	AA	689	C	C4-C5-C6	8.18	121.49	117.40
23	AW	48	C	C2-N3-C4	-8.18	115.81	119.90
57	BB	128	C	N3-C4-C5	-8.18	118.63	121.90
57	BB	2214	C	O4'-C1'-N1	8.18	114.74	108.20
57	BB	2581	G	C8-N9-C4	8.18	109.67	106.40
21	AA	538	G	N7-C8-N9	8.18	117.19	113.10
21	AA	760	G	C6-N1-C2	8.18	130.01	125.10
57	BB	917	A	N7-C8-N9	8.18	117.89	113.80
57	BB	1098	A	P-O3'-C3'	8.18	129.51	119.70
57	BB	1872	A	C4-C5-C6	8.18	121.09	117.00
57	BB	757	G	C5-C6-O6	-8.18	123.69	128.60
57	BB	1182	G	O4'-C1'-N9	8.18	114.74	108.20
57	BB	1337	G	N1-C2-N3	-8.18	119.00	123.90
57	BB	1942	C	C2-N3-C4	8.18	123.99	119.90
57	BB	2065	C	C5-C6-N1	-8.18	116.91	121.00
57	BB	2745	C	N3-C4-C5	-8.18	118.63	121.90
21	AA	316	C	O4'-C1'-N1	8.17	114.74	108.20
21	AA	365	U	P-O3'-C3'	-8.17	109.89	119.70
21	AA	768	A	O4'-C1'-N9	8.17	114.74	108.20
21	AA	1304	G	O4'-C1'-N9	8.17	114.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	28	A	N1-C6-N6	8.17	123.50	118.60
57	BB	704	G	N1-C2-N3	-8.17	119.00	123.90
57	BB	1063	G	C4-C5-C6	8.17	123.70	118.80
57	BB	1246	A	O4'-C1'-N9	8.17	114.74	108.20
57	BB	1360	G	N1-C2-N3	-8.17	119.00	123.90
57	BB	2027	G	O4'-C1'-N9	8.17	114.74	108.20
57	BB	2753	A	N1-C6-N6	8.17	123.50	118.60
58	BA	22	U	C5-C6-N1	8.17	126.79	122.70
57	BB	2820	A	N1-C6-N6	8.17	123.50	118.60
21	AA	59	A	O4'-C1'-N9	8.17	114.74	108.20
21	AA	408	A	C5-C6-N6	-8.17	117.16	123.70
21	AA	517	G	C6-C5-N7	-8.17	125.50	130.40
21	AA	975	A	N7-C8-N9	-8.17	109.71	113.80
23	AW	64	A	O4'-C1'-N9	8.17	114.74	108.20
57	BB	943	A	C4-C5-C6	8.17	121.08	117.00
57	BB	997	G	N1-C2-N3	-8.17	119.00	123.90
57	BB	1275	A	N1-C2-N3	8.17	133.39	129.30
57	BB	1490	A	N3-C4-C5	-8.17	121.08	126.80
57	BB	2435	A	C5-C6-N6	-8.17	117.16	123.70
23	AW	14	A	C5-C6-N1	-8.17	113.62	117.70
57	BB	228	C	C4-C5-C6	8.17	121.48	117.40
57	BB	2075	U	N1-C2-N3	-8.17	110.00	114.90
57	BB	2434	A	C5-C6-N1	-8.17	113.61	117.70
57	BB	2456	C	N1-C2-O2	-8.17	114.00	118.90
58	BA	2	G	C4-C5-C6	8.17	123.70	118.80
21	AA	310	G	O4'-C1'-N9	8.17	114.73	108.20
21	AA	698	G	N1-C2-N3	-8.17	119.00	123.90
21	AA	894	G	N3-C2-N2	8.17	125.62	119.90
57	BB	1872	A	C6-C5-N7	-8.17	126.58	132.30
21	AA	303	A	N9-C4-C5	8.16	109.07	105.80
57	BB	1372	U	N3-C4-O4	8.16	125.12	119.40
21	AA	768	A	N1-C6-N6	8.16	123.50	118.60
21	AA	1343	G	N7-C8-N9	8.16	117.18	113.10
22	AY	20	G	C8-N9-C4	-8.16	103.13	106.40
57	BB	1	G	N1-C6-O6	8.16	124.80	119.90
31	BL	50	PHE	CB-CG-CD2	8.16	126.51	120.80
32	BM	130	PHE	CB-CG-CD2	-8.16	115.09	120.80
57	BB	515	A	C8-N9-C4	8.16	109.07	105.80
57	BB	2126	A	N1-C2-N3	-8.16	125.22	129.30
57	BB	410	G	C8-N9-C4	-8.16	103.14	106.40
57	BB	1717	A	C4-C5-C6	8.16	121.08	117.00
21	AA	303	A	C4-C5-N7	-8.16	106.62	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1452	G	C6-C5-N7	-8.16	125.50	130.40
21	AA	64	G	N3-C2-N2	8.16	125.61	119.90
21	AA	562	U	C5'-C4'-O4'	8.16	118.89	109.10
21	AA	1069	C	C5-C4-N4	-8.16	114.49	120.20
26	AV	34	C	N3-C4-C5	-8.16	118.64	121.90
57	BB	775	G	C4-C5-N7	-8.16	107.54	110.80
57	BB	843	G	N1-C6-O6	8.16	124.80	119.90
57	BB	1112	G	N1-C6-O6	8.16	124.80	119.90
58	BA	10	G	N7-C8-N9	-8.16	109.02	113.10
21	AA	172	A	C5-C6-N1	-8.16	113.62	117.70
21	AA	1466	C	N3-C4-C5	-8.16	118.64	121.90
23	AW	18	G	N7-C8-N9	8.16	117.18	113.10
57	BB	152	A	C2-N3-C4	8.16	114.68	110.60
57	BB	1232	G	N1-C2-N3	-8.16	119.00	123.90
57	BB	2126	A	C2-N3-C4	8.16	114.68	110.60
57	BB	2729	G	O4'-C1'-N9	8.16	114.73	108.20
57	BB	553	G	O4'-C1'-N9	8.16	114.72	108.20
57	BB	763	G	C8-N9-C4	8.16	109.66	106.40
57	BB	2348	U	O4'-C1'-N1	8.16	114.73	108.20
58	BA	7	G	N3-C4-C5	-8.16	124.52	128.60
15	AD	46	ARG	NE-CZ-NH2	-8.15	116.22	120.30
21	AA	833	G	N7-C8-N9	-8.15	109.02	113.10
21	AA	925	G	C4'-C3'-C2'	8.15	110.75	102.60
23	AW	17	C	C2-N1-C1'	8.15	127.77	118.80
57	BB	191	A	C5-C6-N6	-8.15	117.18	123.70
57	BB	753	A	N3-C4-N9	8.15	133.92	127.40
26	AV	57	A	C5-C6-N6	-8.15	117.18	123.70
57	BB	937	C	N3-C2-O2	8.15	127.61	121.90
57	BB	1137	G	C8-N9-C1'	8.15	137.60	127.00
57	BB	1950	G	N3-C4-N9	-8.15	121.11	126.00
57	BB	2120	G	C6-C5-N7	-8.15	125.51	130.40
57	BB	2742	G	C4-C5-N7	-8.15	107.54	110.80
57	BB	2829	A	N3-C4-C5	-8.15	121.09	126.80
21	AA	182	A	N1-C2-N3	8.15	133.38	129.30
21	AA	1055	A	N1-C6-N6	8.15	123.49	118.60
25	AZ	354	ASP	CB-CG-OD1	8.15	125.64	118.30
57	BB	277	G	C4-C5-N7	-8.15	107.54	110.80
57	BB	453	A	C4-C5-C6	8.15	121.08	117.00
57	BB	1600	C	O4'-C1'-N1	8.15	114.72	108.20
57	BB	1773	A	C2-N3-C4	8.15	114.68	110.60
57	BB	2326	C	O4'-C1'-N1	8.15	114.72	108.20
57	BB	2541	A	C6-N1-C2	8.15	123.49	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2781	A	C3'-C2'-C1'	-8.15	94.98	101.50
21	AA	989	U	C5-C6-N1	8.15	126.77	122.70
21	AA	1005	A	N7-C8-N9	-8.15	109.72	113.80
22	AY	39	U	C5-C6-N1	8.15	126.78	122.70
21	AA	1102	A	C5-N7-C8	8.15	107.97	103.90
55	BG	156	TYR	CB-CG-CD2	8.15	125.89	121.00
57	BB	1790	C	N3-C4-C5	-8.15	118.64	121.90
57	BB	2093	G	C8-N9-C1'	8.15	137.59	127.00
57	BB	2526	G	C5-C6-N1	-8.15	107.43	111.50
21	AA	778	G	C5-C6-O6	-8.14	123.71	128.60
21	AA	887	G	N7-C8-N9	-8.14	109.03	113.10
21	AA	484	G	N3-C2-N2	8.14	125.60	119.90
23	AW	65	G	O4'-C1'-N9	8.14	114.71	108.20
57	BB	445	C	O4'-C1'-N1	8.14	114.72	108.20
57	BB	1084	A	C2-N3-C4	8.14	114.67	110.60
57	BB	1105	U	N3-C4-O4	8.14	125.10	119.40
57	BB	1713	A	C5-C6-N1	-8.14	113.63	117.70
57	BB	2665	A	C8-N9-C4	-8.14	102.54	105.80
58	BA	101	A	C5'-C4'-O4'	8.14	118.87	109.10
21	AA	57	G	C5-C6-O6	-8.14	123.72	128.60
21	AA	346	G	C4-C5-C6	8.14	123.69	118.80
21	AA	482	A	C8-N9-C4	-8.14	102.54	105.80
21	AA	798	U	O4'-C1'-N1	8.14	114.71	108.20
21	AA	875	U	O4'-C1'-N1	8.14	114.71	108.20
57	BB	321	U	N3-C2-O2	8.14	127.90	122.20
57	BB	1138	G	C5-C6-N1	-8.14	107.43	111.50
57	BB	1390	U	O4'-C1'-N1	8.14	114.71	108.20
57	BB	1934	C	O4'-C1'-N1	8.14	114.71	108.20
21	AA	375	U	O4'-C1'-N1	8.14	114.71	108.20
21	AA	388	G	N7-C8-N9	-8.14	109.03	113.10
21	AA	1061	G	C6-N1-C2	8.14	129.98	125.10
21	AA	1417	G	C5-C6-O6	-8.14	123.72	128.60
23	AW	26	A	C5-C6-N1	-8.14	113.63	117.70
57	BB	811	U	N3-C2-O2	8.14	127.90	122.20
57	BB	940	G	N7-C8-N9	-8.14	109.03	113.10
57	BB	1308	A	C2-N3-C4	8.14	114.67	110.60
57	BB	2001	C	O4'-C1'-N1	8.14	114.71	108.20
57	BB	2635	A	N1-C2-N3	-8.14	125.23	129.30
57	BB	1378	A	P-O5'-C5'	-8.14	107.88	120.90
57	BB	2202	U	C2-N3-C4	8.14	131.88	127.00
57	BB	2327	A	C5-C6-N6	-8.14	117.19	123.70
57	BB	2433	A	P-O5'-C5'	-8.14	107.88	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2830	C	N3-C4-C5	-8.14	118.64	121.90
58	BA	79	G	C5-C6-N1	-8.14	107.43	111.50
19	AH	76	ARG	NE-CZ-NH2	-8.13	116.23	120.30
21	AA	382	A	N1-C2-N3	-8.14	125.23	129.30
22	AY	35	A	C4-C5-C6	8.14	121.07	117.00
57	BB	2574	G	C5-C6-O6	-8.14	123.72	128.60
22	AY	56	C	N3-C4-C5	-8.13	118.65	121.90
26	AV	47	U	C2-N1-C1'	8.13	127.46	117.70
57	BB	208	C	C5-C4-N4	-8.13	114.51	120.20
57	BB	1516	G	C5-N7-C8	8.13	108.37	104.30
57	BB	1797	G	C5-C6-O6	-8.13	123.72	128.60
57	BB	2330	G	N1-C2-N3	-8.13	119.02	123.90
21	AA	10	A	C4-C5-C6	8.13	121.07	117.00
21	AA	155	A	N1-C2-N3	-8.13	125.23	129.30
21	AA	780	A	C8-N9-C4	-8.13	102.55	105.80
21	AA	1215	G	C5-C6-N1	-8.13	107.43	111.50
45	BC	62	ARG	NE-CZ-NH1	-8.13	116.23	120.30
57	BB	8	C	N3-C4-C5	-8.13	118.65	121.90
57	BB	163	C	N3-C4-N4	8.13	123.69	118.00
57	BB	511	U	N1-C2-O2	-8.13	117.11	122.80
57	BB	816	C	N3-C2-O2	-8.13	116.21	121.90
57	BB	1168	G	O4'-C1'-N9	8.13	114.71	108.20
57	BB	1928	A	C6-C5-N7	-8.13	126.61	132.30
21	AA	53	A	C5-C6-N1	-8.13	113.64	117.70
21	AA	188	C	N3-C4-N4	8.13	123.69	118.00
21	AA	203	G	C8-N9-C4	-8.13	103.15	106.40
57	BB	1124	G	C3'-C2'-C1'	-8.13	95.00	101.50
57	BB	2623	G	O4'-C1'-N9	8.13	114.70	108.20
21	AA	289	G	N9-C4-C5	-8.13	102.15	105.40
21	AA	646	G	N3-C4-N9	8.13	130.88	126.00
57	BB	1717	A	C8-N9-C4	-8.13	102.55	105.80
21	AA	299	G	C5-N7-C8	-8.13	100.24	104.30
57	BB	576	U	C5-C4-O4	-8.13	121.02	125.90
57	BB	1801	A	C5-N7-C8	8.13	107.96	103.90
57	BB	2814	A	C4-C5-C6	8.13	121.06	117.00
21	AA	1117	A	C8-N9-C4	-8.13	102.55	105.80
57	BB	1768	C	O4'-C1'-N1	8.13	114.70	108.20
57	BB	2342	C	N1-C2-O2	-8.13	114.02	118.90
57	BB	2565	A	N1-C2-N3	8.13	133.36	129.30
57	BB	2750	A	C4-C5-N7	-8.13	106.64	110.70
21	AA	297	G	C5-C6-O6	-8.12	123.72	128.60
21	AA	413	G	C6-C5-N7	-8.12	125.53	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2415	G	C8-N9-C4	8.12	109.65	106.40
58	BA	59	A	C4-C5-N7	-8.12	106.64	110.70
16	AE	92	ARG	NE-CZ-NH2	-8.12	116.24	120.30
21	AA	714	G	O4'-C1'-N9	8.12	114.70	108.20
21	AA	739	C	N3-C4-C5	-8.12	118.65	121.90
57	BB	529	A	N7-C8-N9	-8.12	109.74	113.80
57	BB	764	A	C5-C6-N1	-8.12	113.64	117.70
57	BB	2564	A	C4-C5-N7	-8.12	106.64	110.70
57	BB	2627	G	N1-C2-N3	-8.12	119.03	123.90
21	AA	1244	G	O4'-C1'-N9	8.12	114.70	108.20
57	BB	1	G	C5-C6-O6	-8.12	123.73	128.60
57	BB	374	A	C5-C6-N6	-8.12	117.20	123.70
57	BB	626	A	C5-C6-N6	-8.12	117.20	123.70
57	BB	971	G	O4'-C1'-N9	8.12	114.70	108.20
57	BB	1824	G	C5-C6-O6	-8.12	123.73	128.60
57	BB	2072	C	N3-C4-N4	8.12	123.69	118.00
57	BB	2765	A	N1-C6-N6	8.12	123.47	118.60
57	BB	2833	U	N1-C2-N3	-8.12	110.03	114.90
21	AA	36	C	O4'-C1'-N1	8.12	114.70	108.20
21	AA	266	G	N1-C2-N3	-8.12	119.03	123.90
57	BB	2850	A	P-O3'-C3'	8.12	129.44	119.70
57	BB	85	G	C5-N7-C8	8.12	108.36	104.30
57	BB	289	G	C5-C6-N1	-8.12	107.44	111.50
57	BB	1789	A	N1-C2-N3	-8.12	125.24	129.30
58	BA	78	A	C5'-C4'-O4'	8.12	118.84	109.10
21	AA	578	C	C5-C4-N4	-8.12	114.52	120.20
21	AA	1412	C	N3-C4-N4	8.12	123.68	118.00
21	AA	917	G	C6-N1-C2	8.11	129.97	125.10
21	AA	1487	G	C4-N9-C1'	-8.12	115.95	126.50
21	AA	1520	C	C5-C6-N1	-8.12	116.94	121.00
22	AY	17	U	C5'-C4'-O4'	8.12	118.84	109.10
57	BB	239	C	C2-N3-C4	8.12	123.96	119.90
57	BB	348	A	C2-N3-C4	-8.12	106.54	110.60
57	BB	2151	U	N1-C2-N3	8.12	119.77	114.90
22	AY	58	A	C5-C6-N6	-8.11	117.21	123.70
57	BB	474	G	C4-C5-N7	8.12	114.05	110.80
57	BB	911	A	O4'-C1'-N9	8.12	114.69	108.20
57	BB	1008	A	C5-C6-N6	-8.11	117.21	123.70
57	BB	1186	G	O4'-C1'-N9	8.11	114.69	108.20
57	BB	1784	A	C5-C6-N1	-8.11	113.64	117.70
57	BB	2242	G	O4'-C1'-N9	8.11	114.69	108.20
57	BB	2432	A	C4-C5-C6	8.11	121.06	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2732	G	C5-C6-O6	-8.12	123.73	128.60
21	AA	964	A	C5-C6-N1	-8.11	113.64	117.70
57	BB	1057	A	C4-C5-C6	8.11	121.06	117.00
21	AA	40	C	O4'-C1'-N1	8.11	114.69	108.20
21	AA	1162	C	C5-C6-N1	8.11	125.06	121.00
23	AW	30	G	C4-C5-N7	-8.11	107.56	110.80
57	BB	489	G	N1-C2-N3	-8.11	119.03	123.90
57	BB	1107	G	C8-N9-C4	-8.11	103.16	106.40
21	AA	1456	A	O4'-C1'-N9	8.11	114.69	108.20
57	BB	402	A	C4-C5-C6	8.11	121.06	117.00
57	BB	473	G	N3-C4-C5	8.11	132.66	128.60
57	BB	578	G	C4-C5-N7	8.11	114.05	110.80
57	BB	1156	A	C5-C6-N6	-8.11	117.21	123.70
57	BB	1571	A	C5-N7-C8	8.11	107.96	103.90
57	BB	2334	U	N3-C4-C5	-8.11	109.73	114.60
57	BB	1789	A	C8-N9-C4	8.11	109.04	105.80
57	BB	1876	A	N9-C4-C5	8.11	109.05	105.80
57	BB	2014	A	C5-C6-N6	-8.11	117.21	123.70
21	AA	176	C	O4'-C1'-N1	8.11	114.69	108.20
21	AA	220	G	N1-C2-N3	-8.11	119.03	123.90
21	AA	413	G	C4-C5-C6	8.11	123.67	118.80
57	BB	315	G	N7-C8-N9	8.11	117.16	113.10
57	BB	1350	C	O4'-C1'-N1	8.11	114.69	108.20
57	BB	2587	A	C5-N7-C8	8.11	107.95	103.90
21	AA	462	G	O4'-C1'-N9	8.11	114.68	108.20
21	AA	1071	C	O4'-C1'-N1	8.11	114.68	108.20
52	BD	83	ARG	NE-CZ-NH2	8.11	124.35	120.30
57	BB	342	A	C5-C6-N6	-8.11	117.22	123.70
57	BB	1590	A	C5-C6-N1	-8.11	113.65	117.70
57	BB	1843	C	N3-C4-N4	8.11	123.67	118.00
57	BB	2588	G	C6-C5-N7	-8.11	125.54	130.40
21	AA	942	G	C6-C5-N7	-8.10	125.54	130.40
57	BB	675	A	C5-N7-C8	8.10	107.95	103.90
57	BB	891	G	P-O5'-C5'	8.10	133.87	120.90
57	BB	1257	C	N3-C4-N4	8.10	123.67	118.00
57	BB	1661	G	C2-N3-C4	-8.10	107.85	111.90
57	BB	1760	C	O4'-C1'-N1	8.10	114.68	108.20
21	AA	681	A	N7-C8-N9	-8.10	109.75	113.80
21	AA	1022	A	N3-C4-N9	8.10	133.88	127.40
21	AA	1142	G	N9-C4-C5	8.10	108.64	105.40
21	AA	1152	A	C6-C5-N7	-8.10	126.63	132.30
26	AV	24	U	N3-C2-O2	-8.10	116.53	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	811	U	N3-C4-C5	-8.10	109.74	114.60
57	BB	938	G	O4'-C1'-N9	8.10	114.68	108.20
57	BB	1700	A	C6-C5-N7	-8.10	126.63	132.30
26	AV	68	C	N3-C4-C5	-8.10	118.66	121.90
57	BB	1266	G	C3'-C2'-C1'	-8.10	95.02	101.50
57	BB	2375	G	O4'-C1'-N9	8.10	114.68	108.20
57	BB	1016	G	O4'-C1'-N9	8.10	114.68	108.20
57	BB	1975	G	N9-C4-C5	-8.10	102.16	105.40
57	BB	1729	U	N1-C2-N3	-8.09	110.04	114.90
21	AA	116	A	C4-C5-C6	8.09	121.05	117.00
21	AA	710	G	C2-N3-C4	-8.09	107.85	111.90
21	AA	753	A	N7-C8-N9	-8.09	109.75	113.80
52	BD	141	ARG	NE-CZ-NH1	-8.09	116.25	120.30
57	BB	1599	U	O4'-C1'-N1	8.09	114.67	108.20
57	BB	1900	A	N3-C4-C5	-8.09	121.14	126.80
57	BB	2427	C	O4'-C1'-N1	8.09	114.67	108.20
57	BB	2438	U	N3-C4-C5	-8.09	109.75	114.60
21	AA	646	G	N3-C4-C5	-8.09	124.56	128.60
21	AA	780	A	C5-C6-N6	-8.09	117.23	123.70
21	AA	1021	A	C5-C6-N1	-8.09	113.66	117.70
57	BB	2	G	N3-C4-C5	8.09	132.65	128.60
57	BB	1242	U	C5-C6-N1	8.09	126.75	122.70
57	BB	2468	A	C4-C5-C6	8.09	121.05	117.00
21	AA	1076	U	O4'-C1'-N1	8.09	114.67	108.20
21	AA	1192	C	C2-N3-C4	-8.09	115.86	119.90
22	AY	10	G	C8-N9-C4	-8.09	103.16	106.40
57	BB	1141	U	C6-N1-C2	8.09	125.85	121.00
57	BB	1799	G	N7-C8-N9	-8.09	109.06	113.10
57	BB	2856	A	C5-C6-N6	-8.09	117.23	123.70
21	AA	800	G	C6-C5-N7	-8.09	125.55	130.40
21	AA	917	G	N1-C6-O6	8.09	124.75	119.90
21	AA	1032	G	N1-C2-N3	-8.09	119.05	123.90
21	AA	1439	G	C8-N9-C4	-8.09	103.17	106.40
39	BT	51	PHE	N-CA-CB	8.09	125.16	110.60
57	BB	244	A	C2-N3-C4	-8.09	106.56	110.60
58	BA	57	A	C5-N7-C8	8.09	107.94	103.90
21	AA	899	C	C6-N1-C2	-8.09	117.07	120.30
22	AY	31	A	C6-C5-N7	-8.09	126.64	132.30
57	BB	1102	C	O4'-C1'-N1	8.09	114.67	108.20
57	BB	1830	C	C6-N1-C2	-8.09	117.07	120.30
57	BB	2083	G	N3-C2-N2	8.09	125.56	119.90
13	AB	31	PHE	CB-CG-CD1	-8.08	115.14	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	895	G	C6-C5-N7	-8.08	125.55	130.40
21	AA	930	C	N3-C4-C5	-8.08	118.67	121.90
21	AA	510	A	N9-C4-C5	8.08	109.03	105.80
21	AA	696	A	C5-C6-N1	-8.08	113.66	117.70
57	BB	26	G	N1-C2-N3	-8.08	119.05	123.90
57	BB	293	U	C5-C6-N1	-8.08	118.66	122.70
57	BB	425	G	C4-C5-C6	-8.08	113.95	118.80
57	BB	1091	G	C5-C6-O6	-8.08	123.75	128.60
57	BB	1110	G	N1-C6-O6	8.08	124.75	119.90
57	BB	1364	G	C4-C5-C6	8.08	123.65	118.80
57	BB	1933	G	C8-N9-C1'	8.08	137.51	127.00
57	BB	2092	U	C6-N1-C1'	-8.08	109.89	121.20
57	BB	2663	G	N9-C4-C5	8.08	108.63	105.40
57	BB	213	A	C5-N7-C8	8.08	107.94	103.90
57	BB	2015	A	C2-N3-C4	8.08	114.64	110.60
57	BB	2175	C	N3-C4-N4	8.08	123.66	118.00
57	BB	2251	G	C5-C6-O6	-8.08	123.75	128.60
57	BB	2417	C	C2-N3-C4	8.08	123.94	119.90
57	BB	2589	A	C4-C5-C6	8.08	121.04	117.00
21	AA	480	U	N3-C4-O4	8.08	125.06	119.40
21	AA	1373	G	C2-N3-C4	-8.08	107.86	111.90
57	BB	730	A	C4-C5-N7	-8.08	106.66	110.70
21	AA	1296	C	N3-C4-N4	8.08	123.65	118.00
57	BB	308	G	O4'-C1'-N9	8.08	114.66	108.20
57	BB	835	C	N3-C4-C5	-8.08	118.67	121.90
57	BB	1888	G	C5-C6-O6	-8.08	123.75	128.60
57	BB	2089	C	O4'-C1'-N1	8.08	114.66	108.20
58	BA	106	G	C5-N7-C8	8.08	108.34	104.30
57	BB	88	G	C4-C5-C6	8.07	123.64	118.80
57	BB	1358	G	N3-C2-N2	8.07	125.55	119.90
21	AA	64	G	C2-N3-C4	8.07	115.94	111.90
21	AA	299	G	C8-N9-C4	-8.07	103.17	106.40
21	AA	447	G	N3-C2-N2	8.07	125.55	119.90
21	AA	1082	A	C5-N7-C8	8.07	107.94	103.90
21	AA	1318	A	C6-C5-N7	-8.07	126.65	132.30
57	BB	12	U	N3-C4-O4	8.07	125.05	119.40
57	BB	1949	G	C2-N3-C4	8.07	115.94	111.90
57	BB	2059	A	C5-C6-N1	-8.07	113.66	117.70
57	BB	2241	A	O4'-C1'-N9	8.07	114.66	108.20
58	BA	105	G	N1-C6-O6	8.07	124.74	119.90
21	AA	82	G	C8-N9-C4	-8.07	103.17	106.40
21	AA	181	A	N9-C4-C5	8.07	109.03	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	457	G	N1-C2-N3	-8.07	119.06	123.90
21	AA	584	G	N1-C6-O6	8.07	124.74	119.90
21	AA	823	C	C2-N3-C4	8.07	123.94	119.90
32	BM	59	ARG	NE-CZ-NH1	-8.07	116.26	120.30
57	BB	807	U	P-O5'-C5'	-8.07	107.98	120.90
21	AA	737	C	C5-C6-N1	8.07	125.03	121.00
23	AW	76	A	O4'-C1'-N9	8.07	114.66	108.20
57	BB	905	A	N1-C2-N3	8.07	133.34	129.30
57	BB	643	A	C5-C6-N1	-8.07	113.67	117.70
21	AA	1275	A	C4-C5-C6	8.07	121.03	117.00
57	BB	2482	A	N1-C6-N6	8.07	123.44	118.60
21	AA	1493	A	C2-N3-C4	-8.07	106.57	110.60
26	AV	56	C	C2-N3-C4	-8.07	115.87	119.90
48	B1	20	TYR	CB-CG-CD2	8.07	125.84	121.00
57	BB	670	A	C5-C6-N6	-8.07	117.25	123.70
57	BB	2793	C	N3-C4-N4	8.07	123.65	118.00
57	BB	471	A	N3-C4-N9	8.07	133.85	127.40
57	BB	669	G	C5-C6-O6	-8.07	123.76	128.60
21	AA	691	G	C4-C5-N7	8.06	114.03	110.80
21	AA	730	G	C6-C5-N7	-8.06	125.56	130.40
21	AA	115	G	C6-N1-C2	8.06	129.94	125.10
21	AA	851	G	C5'-C4'-C3'	-8.06	103.10	116.00
26	AV	13	C	N3-C4-C5	-8.06	118.67	121.90
57	BB	329	G	N1-C2-N3	-8.06	119.06	123.90
57	BB	1446	C	C5-C6-N1	8.06	125.03	121.00
21	AA	1382	C	C5-C6-N1	8.06	125.03	121.00
57	BB	196	A	C6-C5-N7	-8.06	126.66	132.30
57	BB	316	C	N3-C4-N4	8.06	123.64	118.00
57	BB	855	G	C2-N3-C4	8.06	115.93	111.90
57	BB	1811	G	N1-C6-O6	8.06	124.74	119.90
57	BB	2495	G	C5-C6-O6	-8.06	123.76	128.60
21	AA	181	A	N1-C2-N3	-8.06	125.27	129.30
21	AA	1099	G	N1-C2-N3	-8.06	119.06	123.90
26	AV	19	G	C5-C6-O6	-8.06	123.76	128.60
57	BB	1726	C	C2-N3-C4	8.06	123.93	119.90
21	AA	889	A	C8-N9-C4	-8.06	102.58	105.80
57	BB	829	A	O4'-C1'-N9	8.06	114.65	108.20
57	BB	1937	A	C5-C6-N1	-8.06	113.67	117.70
57	BB	2081	U	N3-C2-O2	8.06	127.84	122.20
57	BB	2092	U	N1-C2-N3	8.06	119.74	114.90
57	BB	2789	C	C5-C6-N1	8.06	125.03	121.00
21	AA	782	A	C8-N9-C4	8.06	109.02	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	358	U	C4-C5-C6	-8.06	114.86	119.70
57	BB	913	U	C2-N3-C4	-8.06	122.17	127.00
57	BB	1657	U	O4'-C1'-N1	8.06	114.65	108.20
57	BB	2036	C	C5-C4-N4	-8.06	114.56	120.20
21	AA	549	C	N3-C4-N4	8.06	123.64	118.00
21	AA	1215	G	C4-C5-N7	-8.05	107.58	110.80
21	AA	1223	C	C6-N1-C2	-8.06	117.08	120.30
26	AV	5	G	N3-C4-C5	-8.05	124.57	128.60
31	BL	18	ARG	NE-CZ-NH1	8.05	124.33	120.30
57	BB	1157	G	C5-C6-O6	-8.05	123.77	128.60
57	BB	1173	U	N1-C2-O2	-8.05	117.16	122.80
57	BB	1283	G	N1-C6-O6	8.05	124.73	119.90
57	BB	2201	G	N1-C2-N3	-8.06	119.07	123.90
57	BB	2645	G	N3-C2-N2	8.05	125.54	119.90
57	BB	2663	G	N3-C4-C5	-8.06	124.57	128.60
57	BB	2823	A	C5-C6-N1	-8.06	113.67	117.70
22	AY	28	C	N3-C4-N4	8.05	123.64	118.00
57	BB	1717	A	C2-N3-C4	8.05	114.63	110.60
57	BB	2214	C	C5-C4-N4	-8.05	114.56	120.20
57	BB	2611	C	N3-C4-N4	8.05	123.64	118.00
21	AA	525	C	N3-C4-C5	-8.05	118.68	121.90
21	AA	1360	A	C3'-C2'-C1'	8.05	107.94	101.50
26	AV	67	C	C2-N3-C4	8.05	123.93	119.90
57	BB	810	U	P-O5'-C5'	8.05	133.78	120.90
57	BB	966	G	N3-C2-N2	8.05	125.54	119.90
21	AA	50	A	N1-C6-N6	8.05	123.43	118.60
21	AA	251	G	C5-N7-C8	8.05	108.33	104.30
21	AA	404	G	C5-N7-C8	8.05	108.33	104.30
21	AA	473	U	C5-C4-O4	-8.05	121.07	125.90
21	AA	903	G	N3-C2-N2	8.05	125.54	119.90
21	AA	1088	G	N1-C2-N3	-8.05	119.07	123.90
21	AA	1383	C	N3-C2-O2	8.05	127.54	121.90
22	AY	66	A	C6-C5-N7	-8.05	126.66	132.30
21	AA	1435	G	C8-N9-C4	-8.05	103.18	106.40
57	BB	134	G	O4'-C1'-N9	8.05	114.64	108.20
57	BB	1117	C	O4'-C4'-C3'	-8.05	95.95	104.00
57	BB	1759	A	N3-C4-C5	-8.05	121.16	126.80
57	BB	1976	U	C2-N3-C4	-8.05	122.17	127.00
57	BB	2034	U	O4'-C1'-N1	8.05	114.64	108.20
57	BB	2256	G	N1-C6-O6	8.05	124.73	119.90
21	AA	290	C	N3-C4-N4	8.05	123.63	118.00
21	AA	302	G	C5-C6-N1	-8.05	107.48	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	312	C	C5-C6-N1	8.05	125.02	121.00
21	AA	552	U	N3-C2-O2	-8.05	116.57	122.20
57	BB	919	U	N3-C4-O4	8.05	125.03	119.40
57	BB	1175	A	N1-C6-N6	8.05	123.43	118.60
57	BB	2714	G	N3-C2-N2	8.05	125.53	119.90
21	AA	563	A	N1-C2-N3	-8.05	125.28	129.30
21	AA	1455	G	C5-C6-O6	-8.05	123.77	128.60
57	BB	300	A	N9-C4-C5	8.05	109.02	105.80
57	BB	470	A	N1-C6-N6	8.05	123.43	118.60
57	BB	2023	C	O4'-C1'-N1	8.05	114.64	108.20
57	BB	2054	A	C4-C5-C6	8.05	121.02	117.00
57	BB	2151	U	C6-N1-C2	-8.05	116.17	121.00
57	BB	2420	C	O4'-C1'-N1	8.05	114.64	108.20
57	BB	2635	A	C4-C5-N7	-8.05	106.68	110.70
13	AB	87	ASP	CB-CG-OD2	8.04	125.54	118.30
21	AA	26	A	O4'-C1'-N9	8.05	114.64	108.20
21	AA	84	U	C2-N3-C4	8.05	131.83	127.00
21	AA	299	G	N1-C6-O6	8.05	124.73	119.90
21	AA	744	C	O4'-C1'-N1	8.04	114.64	108.20
57	BB	782	A	C5-C6-N1	-8.05	113.68	117.70
57	BB	959	A	P-O3'-C3'	-8.04	110.05	119.70
57	BB	2183	A	O4'-C1'-N9	8.05	114.64	108.20
57	BB	2052	A	C5-C6-N1	-8.04	113.68	117.70
57	BB	2322	A	N1-C6-N6	8.04	123.43	118.60
21	AA	1225	A	O4'-C1'-N9	8.04	114.63	108.20
24	AX	16	A	N1-C2-N3	8.04	133.32	129.30
57	BB	177	G	C6-C5-N7	-8.04	125.58	130.40
57	BB	862	G	C8-N9-C4	-8.04	103.18	106.40
57	BB	2230	G	N1-C6-O6	8.04	124.73	119.90
57	BB	2033	A	C2-N3-C4	-8.04	106.58	110.60
21	AA	653	U	C5-C4-O4	-8.04	121.08	125.90
57	BB	932	U	C4-C5-C6	-8.04	114.88	119.70
57	BB	2902	C	C4-C5-C6	8.04	121.42	117.40
57	BB	155	A	C8-N9-C4	-8.04	102.58	105.80
57	BB	227	A	C5-N7-C8	8.04	107.92	103.90
57	BB	371	A	N1-C2-N3	-8.04	125.28	129.30
57	BB	430	A	C6-N1-C2	8.04	123.42	118.60
57	BB	705	A	C5-C6-N1	-8.04	113.68	117.70
57	BB	810	U	C5-C6-N1	-8.04	118.68	122.70
57	BB	973	A	C5-C6-N1	-8.04	113.68	117.70
57	BB	1250	G	C6-C5-N7	-8.04	125.58	130.40
57	BB	2846	G	N1-C6-O6	8.04	124.72	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1961	C	O4'-C1'-N1	8.04	114.63	108.20
21	AA	71	A	N9-C4-C5	8.04	109.01	105.80
21	AA	85	U	N3-C4-C5	-8.04	109.78	114.60
21	AA	289	G	C4-C5-N7	8.04	114.01	110.80
21	AA	398	U	N3-C4-O4	8.04	125.03	119.40
21	AA	741	G	C5-C6-N1	-8.04	107.48	111.50
57	BB	956	G	N3-C2-N2	8.04	125.53	119.90
57	BB	1048	A	C8-N9-C4	-8.04	102.59	105.80
21	AA	687	A	C4-C5-N7	-8.03	106.68	110.70
21	AA	1039	G	C5-C6-O6	-8.03	123.78	128.60
57	BB	1810	A	C5-C6-N6	-8.04	117.27	123.70
57	BB	2340	A	N1-C2-N3	-8.04	125.28	129.30
21	AA	190	A	C6-C5-N7	-8.03	126.68	132.30
21	AA	493	A	C4-C5-N7	-8.03	106.68	110.70
57	BB	2031	A	O4'-C1'-N9	8.03	114.63	108.20
21	AA	865	A	O4'-C1'-N9	8.03	114.62	108.20
57	BB	1148	U	O4'-C1'-N1	8.03	114.62	108.20
57	BB	1892	C	C6-N1-C2	-8.03	117.09	120.30
57	BB	2656	U	C2-N3-C4	8.03	131.82	127.00
57	BB	1906	G	N3-C2-N2	8.03	125.52	119.90
57	BB	2725	A	C4-C5-C6	8.03	121.02	117.00
11	AT	26	MET	CG-SD-CE	-8.03	87.35	100.20
57	BB	1479	G	N3-C2-N2	8.03	125.52	119.90
57	BB	2092	U	C5-C4-O4	-8.03	121.08	125.90
21	AA	52	C	N3-C4-N4	8.03	123.62	118.00
21	AA	922	G	N7-C8-N9	-8.03	109.08	113.10
57	BB	326	G	C6-C5-N7	-8.03	125.58	130.40
57	BB	2505	G	C3'-C2'-C1'	8.03	107.92	101.50
21	AA	447	G	C6-C5-N7	-8.03	125.58	130.40
21	AA	630	A	N1-C6-N6	8.03	123.42	118.60
21	AA	1338	G	C5-C6-O6	-8.03	123.78	128.60
57	BB	311	A	C5-N7-C8	-8.03	99.89	103.90
21	AA	141	G	N3-C2-N2	-8.03	114.28	119.90
22	AY	26	G	N1-C2-N3	-8.03	119.08	123.90
57	BB	483	A	O4'-C1'-N9	8.03	114.62	108.20
57	BB	1949	G	O4'-C1'-N9	8.03	114.62	108.20
57	BB	2549	G	N3-C2-N2	8.03	125.52	119.90
58	BA	6	G	N1-C2-N3	-8.03	119.08	123.90
21	AA	689	C	N3-C4-C5	-8.02	118.69	121.90
21	AA	900	A	C5-C6-N6	-8.02	117.28	123.70
24	AX	20	U	C2-N3-C4	-8.02	122.19	127.00
57	BB	1236	G	N7-C8-N9	-8.02	109.09	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2238	G	C4-C5-N7	8.02	114.01	110.80
22	AY	4	G	O4'-C4'-C3'	8.02	112.52	106.10
57	BB	207	A	C5-C6-N1	-8.02	113.69	117.70
57	BB	689	A	N7-C8-N9	8.02	117.81	113.80
57	BB	856	G	P-O3'-C3'	8.02	129.33	119.70
57	BB	2087	G	C2-N3-C4	8.02	115.91	111.90
57	BB	2877	G	C4'-C3'-C2'	-8.02	94.58	102.60
58	BA	102	G	N1-C6-O6	8.02	124.71	119.90
21	AA	998	C	N1-C2-O2	8.02	123.71	118.90
21	AA	1518	A	N1-C6-N6	8.02	123.41	118.60
24	AX	13	A	C5-C6-N1	-8.02	113.69	117.70
57	BB	71	A	C4-C5-N7	-8.02	106.69	110.70
57	BB	84	A	C5-C6-N1	-8.02	113.69	117.70
57	BB	734	A	C2-N3-C4	-8.02	106.59	110.60
57	BB	430	A	C4-C5-C6	8.02	121.01	117.00
57	BB	581	C	O4'-C1'-N1	8.02	114.61	108.20
57	BB	2119	A	O4'-C1'-N9	8.02	114.61	108.20
57	BB	2744	G	N1-C2-N3	-8.02	119.09	123.90
18	AG	3	ARG	NE-CZ-NH2	-8.02	116.29	120.30
57	BB	106	C	N3-C4-C5	-8.02	118.69	121.90
57	BB	690	G	C4-C5-N7	-8.02	107.59	110.80
57	BB	808	G	O4'-C1'-N9	8.02	114.61	108.20
57	BB	2240	U	C5-C4-O4	-8.02	121.09	125.90
57	BB	1353	A	C6-C5-N7	-8.02	126.69	132.30
57	BB	1674	G	O4'-C1'-N9	8.02	114.61	108.20
57	BB	1697	G	C6-C5-N7	-8.02	125.59	130.40
57	BB	2481	G	C5-C6-N1	-8.02	107.49	111.50
21	AA	1300	G	P-O5'-C5'	8.01	133.72	120.90
22	AY	19	G	C5-C6-N1	8.01	115.51	111.50
57	BB	1358	G	C2-N3-C4	8.01	115.91	111.90
24	AX	20	U	C5-C6-N1	8.01	126.71	122.70
57	BB	88	G	N1-C6-O6	8.01	124.71	119.90
57	BB	803	U	O4'-C1'-N1	8.01	114.61	108.20
57	BB	1001	A	C5-C6-N1	-8.01	113.69	117.70
57	BB	2539	C	N3-C4-C5	-8.01	118.69	121.90
57	BB	463	G	N1-C2-N3	-8.01	119.09	123.90
57	BB	1387	A	N1-C2-N3	8.01	133.31	129.30
21	AA	226	G	C8-N9-C4	-8.01	103.20	106.40
57	BB	163	C	O4'-C1'-N1	8.01	114.61	108.20
57	BB	2144	G	C8-N9-C4	8.01	109.60	106.40
21	AA	866	C	C5-C4-N4	-8.01	114.60	120.20
57	BB	240	C	C5-C4-N4	-8.01	114.59	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1701	A	C5-C6-N6	-8.01	117.29	123.70
57	BB	2305	U	O4'-C1'-N1	8.01	114.61	108.20
21	AA	1084	G	C4-C5-C6	8.01	123.60	118.80
21	AA	1261	A	N1-C6-N6	8.01	123.40	118.60
26	AV	59	A	N1-C6-N6	8.01	123.40	118.60
57	BB	328	U	N3-C4-O4	8.01	125.00	119.40
57	BB	538	A	C1'-O4'-C4'	-8.01	103.50	109.90
57	BB	721	A	O4'-C1'-N9	8.01	114.60	108.20
57	BB	857	G	C6-C5-N7	-8.01	125.60	130.40
57	BB	1577	C	C5-C6-N1	8.01	125.00	121.00
21	AA	697	U	N1-C2-O2	-8.00	117.20	122.80
57	BB	132	G	C4-C5-N7	-8.00	107.60	110.80
21	AA	1264	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	1321	U	O4'-C1'-N1	8.00	114.60	108.20
57	BB	984	A	O4'-C1'-N9	8.00	114.60	108.20
57	BB	1541	C	C6-N1-C2	8.00	123.50	120.30
57	BB	1651	G	C4-C5-C6	8.00	123.60	118.80
21	AA	561	U	N3-C4-O4	8.00	125.00	119.40
57	BB	525	U	N3-C4-C5	-8.00	109.80	114.60
57	BB	856	G	N1-C6-O6	8.00	124.70	119.90
57	BB	904	G	C2-N3-C4	8.00	115.90	111.90
57	BB	1823	G	N7-C8-N9	-8.00	109.10	113.10
57	BB	2556	C	N3-C4-C5	-8.00	118.70	121.90
57	BB	2786	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	1415	G	C4-C5-C6	8.00	123.60	118.80
21	AA	1486	G	N1-C6-O6	8.00	124.70	119.90
26	AV	13	C	C5-C6-N1	8.00	125.00	121.00
57	BB	2528	U	C2-N3-C4	8.00	131.80	127.00
57	BB	2884	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	218	U	O4'-C1'-N1	8.00	114.60	108.20
21	AA	343	U	C5-C6-N1	8.00	126.70	122.70
21	AA	1178	G	C5-C6-O6	-8.00	123.80	128.60
26	AV	29	G	C5-C6-N1	-8.00	107.50	111.50
57	BB	309	A	C5-C6-N6	-8.00	117.30	123.70
57	BB	1243	C	P-O3'-C3'	-8.00	110.10	119.70
57	BB	1532	A	N1-C2-N3	8.00	133.30	129.30
57	BB	783	A	N1-C6-N6	8.00	123.40	118.60
57	BB	1946	U	N3-C4-O4	8.00	125.00	119.40
26	AV	2	G	C5-C6-O6	-7.99	123.80	128.60
57	BB	902	C	O4'-C1'-N1	7.99	114.59	108.20
57	BB	1407	G	N1-C2-N3	-7.99	119.10	123.90
57	BB	2764	A	C4-C5-N7	-7.99	106.70	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	7	G	C3'-C2'-C1'	-7.99	95.11	101.50
57	BB	2002	G	C6-C5-N7	-7.99	125.61	130.40
21	AA	1218	C	N3-C4-N4	7.99	123.59	118.00
57	BB	160	A	C5-N7-C8	7.99	107.89	103.90
57	BB	318	C	O4'-C1'-N1	7.99	114.59	108.20
57	BB	1007	C	N3-C4-N4	7.99	123.59	118.00
21	AA	336	A	C5-C6-N1	-7.99	113.71	117.70
21	AA	619	U	C5-C6-N1	7.99	126.69	122.70
21	AA	1187	G	C5-N7-C8	7.99	108.29	104.30
22	AY	40	C	O4'-C1'-N1	7.99	114.59	108.20
57	BB	2648	G	C6-C5-N7	-7.99	125.61	130.40
57	BB	2706	A	O4'-C1'-N9	7.99	114.59	108.20
58	BA	108	A	C6-C5-N7	-7.99	126.71	132.30
57	BB	456	C	C5'-C4'-O4'	7.99	118.68	109.10
21	AA	635	A	C5-C6-N6	-7.99	117.31	123.70
21	AA	1293	C	C5-C4-N4	-7.99	114.61	120.20
23	AW	17	C	N3-C4-N4	7.99	123.59	118.00
57	BB	55	G	N3-C2-N2	7.99	125.49	119.90
57	BB	1879	C	N3-C4-C5	-7.99	118.71	121.90
49	B2	34	ARG	NE-CZ-NH2	-7.98	116.31	120.30
57	BB	896	A	C6-N1-C2	-7.98	113.81	118.60
21	AA	11	G	C5-C6-O6	-7.98	123.81	128.60
21	AA	126	G	C5-C6-O6	7.98	133.39	128.60
21	AA	513	C	N1-C2-N3	-7.98	113.61	119.20
21	AA	1143	G	N9-C4-C5	7.98	108.59	105.40
57	BB	498	G	C4-C5-N7	7.98	113.99	110.80
57	BB	1443	U	C1'-O4'-C4'	7.98	116.29	109.90
57	BB	2235	G	O4'-C1'-N9	7.98	114.59	108.20
57	BB	2641	G	N9-C4-C5	7.98	108.59	105.40
57	BB	2694	G	C5-C6-O6	-7.98	123.81	128.60
58	BA	92	C	O4'-C1'-N1	7.98	114.58	108.20
17	AF	41	ASP	CB-CG-OD2	7.98	125.48	118.30
21	AA	844	G	C6-C5-N7	-7.98	125.61	130.40
25	AZ	309	TYR	CB-CG-CD2	7.98	125.79	121.00
57	BB	465	G	N1-C2-N3	-7.98	119.11	123.90
57	BB	1273	U	C4-C5-C6	7.98	124.49	119.70
57	BB	1897	G	N3-C2-N2	7.98	125.49	119.90
57	BB	2379	G	C6-C5-N7	-7.98	125.61	130.40
41	BV	21	ARG	NE-CZ-NH2	-7.98	116.31	120.30
57	BB	2467	C	N3-C4-C5	-7.98	118.71	121.90
57	BB	2484	G	N3-C4-C5	-7.98	124.61	128.60
21	AA	473	U	N3-C4-O4	7.98	124.98	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	633	G	N9-C4-C5	-7.98	102.21	105.40
57	BB	544	C	C6-N1-C2	-7.98	117.11	120.30
57	BB	667	U	N3-C4-O4	7.98	124.98	119.40
57	BB	776	G	C8-N9-C4	-7.98	103.21	106.40
58	BA	56	G	O4'-C1'-N9	7.98	114.58	108.20
21	AA	985	C	O4'-C1'-N1	7.98	114.58	108.20
21	AA	1104	G	N1-C6-O6	7.98	124.69	119.90
21	AA	1376	U	O4'-C1'-N1	7.98	114.58	108.20
57	BB	1913	A	C4-C5-N7	-7.98	106.71	110.70
57	BB	2244	U	C3'-C2'-C1'	7.98	107.88	101.50
23	AW	39	U	C6-N1-C1'	-7.97	110.04	121.20
45	BC	102	TYR	CG-CD2-CE2	7.97	127.68	121.30
57	BB	134	G	C4-C5-C6	7.97	123.58	118.80
57	BB	515	A	C5-N7-C8	7.97	107.89	103.90
57	BB	727	A	C2-N3-C4	-7.97	106.61	110.60
57	BB	764	A	C8-N9-C4	-7.97	102.61	105.80
57	BB	783	A	C4-C5-C6	7.97	120.99	117.00
57	BB	1276	A	C6-N1-C2	7.97	123.39	118.60
21	AA	1414	U	N3-C4-C5	7.97	119.38	114.60
26	AV	1	C	OP1-P-OP2	-7.97	107.64	119.60
57	BB	141	G	C5-C6-O6	-7.97	123.82	128.60
57	BB	995	C	N1-C2-O2	7.97	123.68	118.90
57	BB	1159	U	O4'-C1'-N1	7.97	114.58	108.20
57	BB	2507	C	N3-C4-C5	-7.97	118.71	121.90
57	BB	2770	G	N1-C6-O6	7.97	124.68	119.90
58	BA	108	A	C4-C5-C6	7.97	120.99	117.00
21	AA	17	U	N3-C4-C5	-7.97	109.82	114.60
21	AA	225	C	N3-C4-C5	-7.97	118.71	121.90
26	AV	70	G	O4'-C1'-N9	7.97	114.58	108.20
57	BB	2003	A	O4'-C1'-N9	7.97	114.58	108.20
57	BB	2469	A	N7-C8-N9	-7.97	109.81	113.80
21	AA	297	G	O4'-C1'-N9	7.97	114.58	108.20
21	AA	733	G	C5-N7-C8	7.97	108.28	104.30
21	AA	1147	C	O4'-C1'-N1	7.97	114.58	108.20
22	AY	3	G	C2-N3-C4	7.97	115.89	111.90
23	AW	55	U	C6-N1-C1'	-7.97	110.04	121.20
57	BB	1305	C	N3-C4-N4	7.97	123.58	118.00
57	BB	1310	G	N9-C4-C5	7.97	108.59	105.40
57	BB	1612	C	N3-C4-C5	7.97	125.09	121.90
21	AA	1328	C	C2-N3-C4	7.97	123.88	119.90
25	AZ	326	TYR	CB-CG-CD1	-7.97	116.22	121.00
57	BB	1215	G	O4'-C1'-N9	7.97	114.57	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	557	G	N1-C6-O6	7.97	124.68	119.90
21	AA	923	A	O4'-C1'-N9	7.97	114.57	108.20
21	AA	1330	U	N3-C4-O4	7.97	124.98	119.40
21	AA	1403	C	N3-C4-C5	-7.97	118.71	121.90
54	BF	106	ALA	CB-CA-C	-7.97	98.15	110.10
57	BB	250	G	C5-C6-O6	-7.97	123.82	128.60
57	BB	848	C	N3-C4-C5	-7.97	118.71	121.90
57	BB	1698	A	N7-C8-N9	-7.97	109.82	113.80
57	BB	2071	A	N9-C4-C5	-7.97	102.61	105.80
57	BB	2525	G	P-O5'-C5'	-7.97	108.15	120.90
21	AA	435	A	C3'-C2'-C1'	7.96	107.87	101.50
21	AA	454	G	O4'-C1'-N9	7.96	114.57	108.20
21	AA	1060	U	O4'-C1'-N1	7.96	114.57	108.20
22	AY	71	G	N3-C4-N9	7.96	130.78	126.00
23	AW	6	G	N9-C4-C5	7.96	108.59	105.40
23	AW	72	C	C5'-C4'-C3'	7.96	128.74	116.00
57	BB	900	A	O4'-C1'-N9	7.96	114.57	108.20
57	BB	2272	U	C4-C5-C6	-7.96	114.92	119.70
20	AI	37	TYR	CB-CG-CD1	7.96	125.78	121.00
20	AI	89	TYR	CB-CG-CD2	-7.96	116.22	121.00
21	AA	26	A	C5-C6-N1	-7.96	113.72	117.70
21	AA	31	G	O4'-C1'-N9	7.96	114.57	108.20
21	AA	76	G	C4-C5-C6	7.96	123.58	118.80
21	AA	155	A	C5-C6-N1	-7.96	113.72	117.70
21	AA	932	C	C5-C6-N1	7.96	124.98	121.00
21	AA	1294	G	O4'-C1'-N9	7.96	114.57	108.20
21	AA	1362	A	C6-C5-N7	-7.96	126.73	132.30
30	BK	63	ARG	NE-CZ-NH2	7.96	124.28	120.30
57	BB	729	G	O4'-C1'-N9	7.96	114.57	108.20
57	BB	932	U	N3-C4-C5	7.96	119.38	114.60
57	BB	1505	A	C6-N1-C2	-7.96	113.82	118.60
57	BB	2038	G	C6-N1-C2	-7.96	120.32	125.10
57	BB	2070	A	N9-C4-C5	7.96	108.98	105.80
57	BB	2180	U	C5-C6-N1	7.96	126.68	122.70
57	BB	2266	A	N9-C4-C5	7.96	108.98	105.80
58	BA	17	C	C2-N3-C4	7.96	123.88	119.90
57	BB	683	U	C6-N1-C2	-7.96	116.22	121.00
57	BB	1490	A	C4-C5-C6	7.96	120.98	117.00
57	BB	2036	C	C4-C5-C6	-7.96	113.42	117.40
21	AA	694	A	N1-C6-N6	7.96	123.38	118.60
56	BH	139	PHE	CB-CG-CD1	-7.96	115.23	120.80
57	BB	180	G	N1-C6-O6	7.96	124.68	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	797	G	C6-N1-C2	7.96	129.88	125.10
57	BB	1279	G	C5-C6-O6	-7.96	123.82	128.60
57	BB	1757	A	C4-C5-N7	-7.96	106.72	110.70
21	AA	398	U	N1-C2-O2	7.96	128.37	122.80
21	AA	791	G	N9-C4-C5	7.96	108.58	105.40
21	AA	1489	G	C5-N7-C8	7.96	108.28	104.30
57	BB	278	A	C6-C5-N7	-7.96	126.73	132.30
57	BB	1746	A	C5-C6-N6	-7.96	117.34	123.70
57	BB	1884	G	N1-C2-N3	-7.96	119.13	123.90
21	AA	214	C	C5-C4-N4	-7.96	114.63	120.20
57	BB	106	C	C5-C6-N1	7.96	124.98	121.00
57	BB	620	G	N9-C4-C5	-7.96	102.22	105.40
21	AA	299	G	N7-C8-N9	7.95	117.08	113.10
21	AA	1130	A	C5-N7-C8	7.95	107.88	103.90
57	BB	865	C	C2-N3-C4	7.95	123.88	119.90
57	BB	1149	G	N9-C4-C5	-7.95	102.22	105.40
17	AF	41	ASP	CB-CG-OD1	-7.95	111.14	118.30
57	BB	793	A	C5-N7-C8	7.95	107.88	103.90
57	BB	2512	C	O4'-C1'-N1	7.95	114.56	108.20
15	AD	12	ARG	NE-CZ-NH1	-7.95	116.32	120.30
21	AA	740	U	O4'-C1'-N1	7.95	114.56	108.20
21	AA	1403	C	N3-C4-N4	7.95	123.57	118.00
22	AY	21	A	O4'-C1'-N9	7.95	114.56	108.20
53	BE	91	ASP	CB-CG-OD2	-7.95	111.14	118.30
57	BB	572	A	N3-C4-C5	-7.95	121.23	126.80
57	BB	1021	A	N1-C2-N3	7.95	133.28	129.30
57	BB	2101	A	O4'-C1'-N9	7.95	114.56	108.20
57	BB	2311	A	C6-N1-C2	-7.95	113.83	118.60
21	AA	496	A	C5-C6-N6	-7.95	117.34	123.70
21	AA	1172	C	N3-C4-C5	-7.95	118.72	121.90
57	BB	674	G	N9-C4-C5	7.95	108.58	105.40
57	BB	2746	U	O4'-C1'-N1	7.95	114.56	108.20
57	BB	2852	G	P-O3'-C3'	-7.95	110.16	119.70
58	BA	38	C	C5-C6-N1	7.95	124.97	121.00
21	AA	654	G	O4'-C1'-N9	7.95	114.56	108.20
21	AA	697	U	N3-C4-O4	7.95	124.96	119.40
21	AA	1196	A	C6-N1-C2	-7.95	113.83	118.60
21	AA	1326	U	N3-C4-O4	7.95	124.96	119.40
57	BB	175	G	N1-C2-N3	-7.95	119.13	123.90
57	BB	1122	G	C6-C5-N7	-7.95	125.63	130.40
57	BB	1274	A	C5-C6-N6	-7.95	117.34	123.70
57	BB	2818	U	O4'-C1'-N1	7.95	114.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2899	A	C5-C6-N6	-7.95	117.34	123.70
58	BA	38	C	C4-C5-C6	-7.95	113.43	117.40
58	BA	42	C	P-O3'-C3'	7.95	129.23	119.70
18	AG	52	ARG	NE-CZ-NH1	7.94	124.27	120.30
21	AA	581	G	N9-C4-C5	-7.94	102.22	105.40
21	AA	880	C	O4'-C1'-N1	7.94	114.56	108.20
57	BB	1317	G	C6-C5-N7	-7.94	125.63	130.40
21	AA	674	G	O4'-C1'-N9	7.94	114.56	108.20
21	AA	961	U	N1-C2-N3	7.94	119.67	114.90
21	AA	1180	A	N9-C4-C5	7.94	108.98	105.80
21	AA	1400	C	C5-C6-N1	7.94	124.97	121.00
21	AA	1500	A	N1-C2-N3	-7.94	125.33	129.30
23	AW	15	G	N7-C8-N9	7.94	117.07	113.10
29	BJ	53	TYR	CB-CG-CD1	-7.94	116.23	121.00
57	BB	800	A	C8-N9-C4	7.94	108.98	105.80
57	BB	1041	G	O4'-C1'-N9	7.94	114.55	108.20
57	BB	2102	G	C4-C5-C6	7.94	123.57	118.80
57	BB	2798	U	O4'-C1'-N1	7.94	114.56	108.20
21	AA	86	G	N9-C4-C5	7.94	108.58	105.40
21	AA	147	G	C4-C5-C6	7.94	123.56	118.80
21	AA	158	G	C4-C5-N7	-7.94	107.62	110.80
57	BB	173	A	C6-C5-N7	-7.94	126.74	132.30
57	BB	637	A	C4-C5-C6	7.94	120.97	117.00
57	BB	1802	A	C5-C6-N6	-7.94	117.35	123.70
57	BB	2295	C	O4'-C1'-N1	7.94	114.55	108.20
19	AH	44	PHE	CB-CG-CD1	-7.94	115.24	120.80
21	AA	599	C	N3-C4-C5	-7.94	118.72	121.90
57	BB	1533	C	P-O3'-C3'	-7.94	110.17	119.70
21	AA	289	G	O4'-C1'-N9	7.94	114.55	108.20
21	AA	1152	A	N9-C4-C5	-7.94	102.62	105.80
57	BB	89	A	O4'-C4'-C3'	-7.94	96.06	104.00
57	BB	991	C	C5-C6-N1	7.94	124.97	121.00
21	AA	165	G	C2-N3-C4	7.94	115.87	111.90
21	AA	441	A	N1-C6-N6	7.94	123.36	118.60
21	AA	1080	A	C5-C6-N1	-7.94	113.73	117.70
57	BB	2171	A	C4-C5-C6	7.94	120.97	117.00
57	BB	2617	U	P-O5'-C5'	-7.94	108.20	120.90
57	BB	2789	C	C4-C5-C6	-7.94	113.43	117.40
15	AD	71	PHE	CB-CG-CD1	-7.93	115.25	120.80
21	AA	889	A	N1-C2-N3	7.93	133.27	129.30
21	AA	1225	A	C4-C5-C6	7.93	120.97	117.00
57	BB	153	U	O4'-C1'-N1	7.93	114.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	191	A	C4-C5-C6	7.93	120.97	117.00
21	AA	694	A	OP1-P-OP2	-7.93	107.70	119.60
21	AA	873	A	C8-N9-C4	-7.93	102.63	105.80
21	AA	986	U	N3-C4-O4	7.93	124.95	119.40
29	BJ	69	ARG	NE-CZ-NH1	7.93	124.27	120.30
57	BB	212	G	N3-C2-N2	7.93	125.45	119.90
57	BB	2212	A	C5-C6-N1	-7.93	113.73	117.70
57	BB	2707	U	C5-C4-O4	-7.93	121.14	125.90
21	AA	430	A	N1-C6-N6	7.93	123.36	118.60
22	AY	65	G	C5-N7-C8	7.93	108.27	104.30
57	BB	1339	G	N7-C8-N9	-7.93	109.14	113.10
57	BB	1803	A	C5-C6-N6	-7.93	117.36	123.70
57	BB	13	A	C6-N1-C2	-7.93	113.84	118.60
57	BB	1791	A	N1-C6-N6	7.93	123.36	118.60
21	AA	38	G	C6-C5-N7	-7.93	125.64	130.40
21	AA	83	C	N3-C4-C5	-7.93	118.73	121.90
21	AA	338	A	N1-C6-N6	7.93	123.36	118.60
21	AA	1444	U	C5-C4-O4	-7.93	121.14	125.90
57	BB	259	G	N7-C8-N9	-7.93	109.14	113.10
57	BB	492	A	N1-C2-N3	7.93	133.26	129.30
57	BB	1128	G	C8-N9-C4	-7.93	103.23	106.40
57	BB	1341	G	N9-C4-C5	-7.93	102.23	105.40
5	AN	62	ARG	NE-CZ-NH1	7.92	124.26	120.30
6	AO	58	MET	CG-SD-CE	-7.92	87.52	100.20
21	AA	628	G	C8-N9-C4	-7.92	103.23	106.40
26	AV	44	A	N1-C2-N3	-7.92	125.34	129.30
57	BB	835	C	O4'-C1'-N1	7.92	114.54	108.20
57	BB	1003	G	C6-C5-N7	-7.92	125.64	130.40
57	BB	1027	A	C4-C5-C6	7.92	120.96	117.00
57	BB	1291	C	O4'-C1'-N1	7.92	114.54	108.20
57	BB	2731	G	O4'-C1'-N9	7.92	114.54	108.20
57	BB	2794	C	C2-N3-C4	7.92	123.86	119.90
21	AA	454	G	C5-C6-O6	-7.92	123.85	128.60
57	BB	619	G	C5-C6-O6	-7.92	123.85	128.60
57	BB	1429	G	N1-C2-N3	-7.92	119.15	123.90
21	AA	227	G	N1-C2-N3	-7.92	119.15	123.90
21	AA	255	G	C1'-O4'-C4'	-7.92	103.56	109.90
21	AA	518	C	N3-C4-N4	7.92	123.54	118.00
21	AA	1239	A	C2-N3-C4	-7.92	106.64	110.60
57	BB	209	C	C1'-O4'-C4'	-7.92	103.56	109.90
57	BB	2147	A	C6-C5-N7	-7.92	126.75	132.30
21	AA	204	G	O4'-C1'-N9	7.92	114.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	610	U	C2-N1-C1'	7.92	127.20	117.70
57	BB	1072	C	N3-C4-N4	7.92	123.54	118.00
57	BB	1968	G	N3-C2-N2	7.92	125.44	119.90
58	BA	72	G	N1-C2-N3	-7.92	119.15	123.90
21	AA	618	C	C4-C5-C6	7.92	121.36	117.40
56	BH	25	TYR	CB-CG-CD1	7.92	125.75	121.00
57	BB	382	A	N9-C4-C5	7.92	108.97	105.80
57	BB	1441	G	C8-N9-C4	7.92	109.57	106.40
57	BB	1609	A	O4'-C1'-N9	7.92	114.53	108.20
57	BB	1651	G	P-O3'-C3'	7.92	129.20	119.70
57	BB	1661	G	C6-C5-N7	-7.92	125.65	130.40
57	BB	2124	G	N3-C2-N2	7.92	125.44	119.90
57	BB	2517	C	C6-N1-C2	7.92	123.47	120.30
21	AA	76	G	C5-C6-O6	-7.92	123.85	128.60
21	AA	465	A	C4-C5-C6	7.92	120.96	117.00
23	AW	26	A	N3-C4-C5	-7.92	121.26	126.80
23	AW	69	G	N3-C2-N2	7.92	125.44	119.90
57	BB	423	A	O4'-C1'-N9	7.92	114.53	108.20
57	BB	1012	U	N3-C2-O2	7.92	127.74	122.20
57	BB	1046	A	C5-C6-N1	-7.92	113.74	117.70
57	BB	1385	A	N9-C4-C5	7.92	108.97	105.80
57	BB	1993	U	C5-C6-N1	7.92	126.66	122.70
57	BB	2086	U	N3-C2-O2	7.92	127.74	122.20
57	BB	2488	G	C8-N9-C4	-7.92	103.23	106.40
21	AA	1134	G	O4'-C1'-N9	7.92	114.53	108.20
57	BB	2396	G	O4'-C1'-N9	7.92	114.53	108.20
21	AA	771	G	N3-C2-N2	7.91	125.44	119.90
21	AA	990	C	C2-N3-C4	-7.91	115.94	119.90
21	AA	1499	A	C5-N7-C8	7.91	107.86	103.90
57	BB	181	A	N9-C4-C5	7.91	108.97	105.80
57	BB	292	U	C5-C6-N1	7.91	126.66	122.70
57	BB	595	C	N3-C4-C5	-7.91	118.73	121.90
57	BB	701	G	O4'-C1'-N9	7.91	114.53	108.20
57	BB	857	G	C5-C6-N1	-7.91	107.54	111.50
57	BB	1494	A	C5-N7-C8	-7.91	99.94	103.90
57	BB	1916	A	C6-C5-N7	-7.91	126.76	132.30
57	BB	2008	C	N3-C2-O2	7.91	127.44	121.90
57	BB	2119	A	N3-C4-C5	-7.91	121.26	126.80
57	BB	2782	G	C8-N9-C4	-7.91	103.23	106.40
57	BB	2876	G	N7-C8-N9	7.91	117.06	113.10
21	AA	722	G	C5-C6-O6	7.91	133.35	128.60
57	BB	373	U	N3-C2-O2	7.91	127.74	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	662	G	C8-N9-C4	7.91	109.56	106.40
57	BB	1733	G	C8-N9-C4	-7.91	103.23	106.40
57	BB	2162	G	N3-C2-N2	7.91	125.44	119.90
21	AA	99	C	N3-C4-C5	-7.91	118.74	121.90
57	BB	446	G	O4'-C1'-N9	7.91	114.53	108.20
57	BB	501	A	C4'-C3'-C2'	-7.91	94.69	102.60
57	BB	547	A	O4'-C1'-N9	7.91	114.53	108.20
57	BB	644	A	C4-C5-N7	-7.91	106.75	110.70
57	BB	662	G	N1-C6-O6	7.91	124.65	119.90
57	BB	756	A	C8-N9-C4	-7.91	102.64	105.80
57	BB	1052	C	O4'-C1'-N1	7.91	114.53	108.20
57	BB	1367	A	C4-C5-C6	7.91	120.95	117.00
57	BB	1652	A	C4-C5-C6	7.91	120.96	117.00
57	BB	1993	U	C4-C5-C6	-7.91	114.95	119.70
57	BB	2072	C	O4'-C1'-N1	7.91	114.53	108.20
21	AA	358	U	C5-C6-N1	7.91	126.65	122.70
21	AA	588	G	C2-N3-C4	7.91	115.85	111.90
21	AA	661	G	N1-C6-O6	7.91	124.64	119.90
21	AA	1271	A	O4'-C1'-N9	7.91	114.53	108.20
57	BB	1878	G	N3-C2-N2	7.91	125.44	119.90
57	BB	2170	A	N3-C4-C5	-7.91	121.27	126.80
58	BA	9	G	C5'-C4'-O4'	7.91	118.59	109.10
22	AY	61	C	C2-N3-C4	7.91	123.85	119.90
23	AW	12	U	C4'-C3'-C2'	7.91	110.51	102.60
23	AW	31	A	P-O3'-C3'	-7.91	110.21	119.70
57	BB	1196	C	N3-C4-C5	-7.91	118.74	121.90
57	BB	1348	C	N1-C2-N3	-7.91	113.67	119.20
21	AA	1034	G	N3-C4-C5	7.91	132.55	128.60
21	AA	1175	G	N9-C4-C5	-7.91	102.24	105.40
57	BB	401	A	C5-C6-N6	-7.91	117.38	123.70
57	BB	1229	C	C2-N3-C4	7.91	123.85	119.90
57	BB	1780	A	C5-C6-N1	-7.91	113.75	117.70
57	BB	2107	G	N3-C4-C5	-7.91	124.65	128.60
57	BB	2370	G	O4'-C1'-N9	7.91	114.53	108.20
57	BB	2758	A	C4-C5-C6	7.91	120.95	117.00
57	BB	2881	U	C4-C5-C6	7.91	124.44	119.70
21	AA	144	G	N1-C6-O6	7.90	124.64	119.90
21	AA	532	A	C6-N1-C2	7.90	123.34	118.60
57	BB	1459	G	N1-C6-O6	7.90	124.64	119.90
58	BA	52	A	C4-C5-C6	7.90	120.95	117.00
13	AB	221	ARG	NE-CZ-NH2	-7.90	116.35	120.30
21	AA	142	G	N7-C8-N9	-7.90	109.15	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	501	C	O4'-C1'-N1	7.90	114.52	108.20
22	AY	31	A	C2-N3-C4	-7.90	106.65	110.60
57	BB	1422	G	N7-C8-N9	-7.90	109.15	113.10
57	BB	1463	C	C6-N1-C2	-7.90	117.14	120.30
57	BB	1694	C	C5-C4-N4	-7.90	114.67	120.20
57	BB	1735	A	O4'-C1'-N9	7.90	114.52	108.20
57	BB	1827	U	C4-C5-C6	-7.90	114.96	119.70
57	BB	2090	A	N3-C4-N9	7.90	133.72	127.40
21	AA	726	C	N3-C4-C5	-7.90	118.74	121.90
21	AA	808	C	N1-C2-O2	-7.90	114.16	118.90
21	AA	1017	U	C5'-C4'-C3'	-7.90	103.36	116.00
21	AA	1028	C	C4-C5-C6	7.90	121.35	117.40
21	AA	1241	G	P-O5'-C5'	7.90	133.54	120.90
57	BB	170	U	C5-C6-N1	7.90	126.65	122.70
57	BB	1492	G	C2-N3-C4	7.90	115.85	111.90
57	BB	2385	C	N3-C4-N4	7.90	123.53	118.00
57	BB	2509	G	C6-C5-N7	-7.90	125.66	130.40
57	BB	2767	C	N3-C4-N4	7.90	123.53	118.00
10	AS	80	ARG	NE-CZ-NH1	7.90	124.25	120.30
21	AA	998	C	N3-C4-C5	-7.90	118.74	121.90
21	AA	1396	A	C5-N7-C8	-7.90	99.95	103.90
57	BB	1035	U	O4'-C1'-N1	7.90	114.52	108.20
57	BB	1182	G	C8-N9-C4	7.90	109.56	106.40
57	BB	1232	G	C5-C6-O6	-7.90	123.86	128.60
22	AY	14	A	N1-C2-N3	7.90	133.25	129.30
22	AY	66	A	C5-C6-N6	7.90	130.02	123.70
57	BB	1056	G	O4'-C1'-N9	7.90	114.52	108.20
57	BB	1570	A	N9-C4-C5	7.90	108.96	105.80
21	AA	909	A	O4'-C1'-N9	7.89	114.52	108.20
21	AA	1301	U	N1-C2-O2	-7.89	117.27	122.80
57	BB	172	A	C5-C6-N1	-7.89	113.75	117.70
57	BB	1598	A	O4'-C1'-N9	7.89	114.52	108.20
57	BB	2316	G	O4'-C1'-N9	7.89	114.52	108.20
57	BB	2597	G	C8-N9-C4	-7.89	103.24	106.40
58	BA	22	U	C4-C5-C6	-7.89	114.96	119.70
21	AA	511	C	O4'-C1'-N1	7.89	114.51	108.20
21	AA	697	U	N1-C2-N3	7.89	119.64	114.90
26	AV	7	G	P-O3'-C3'	7.89	129.17	119.70
57	BB	111	A	C5-C6-N6	-7.89	117.39	123.70
57	BB	502	A	O4'-C1'-N9	7.89	114.51	108.20
57	BB	510	C	P-O5'-C5'	7.89	133.53	120.90
57	BB	1470	A	C5-C6-N6	-7.89	117.39	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2362	C	N3-C4-C5	-7.89	118.74	121.90
21	AA	413	G	N1-C6-O6	7.89	124.63	119.90
21	AA	852	G	C4-C5-N7	-7.89	107.64	110.80
57	BB	331	C	O4'-C1'-N1	7.89	114.51	108.20
57	BB	2315	G	C2-N3-C4	7.89	115.84	111.90
57	BB	491	G	C6-C5-N7	-7.89	125.67	130.40
57	BB	772	C	C4-C5-C6	7.89	121.34	117.40
21	AA	538	G	N1-C2-N3	-7.89	119.17	123.90
57	BB	2614	A	C8-N9-C4	-7.89	102.64	105.80
57	BB	2723	C	N3-C4-N4	7.89	123.52	118.00
23	AW	58	A	C4-C5-N7	-7.88	106.76	110.70
57	BB	2264	C	C5-C4-N4	-7.88	114.68	120.20
21	AA	707	U	O4'-C1'-N1	7.88	114.51	108.20
21	AA	1534	A	O4'-C1'-N9	7.88	114.51	108.20
57	BB	497	A	C4-C5-C6	7.88	120.94	117.00
57	BB	1204	A	C6-C5-N7	-7.88	126.78	132.30
57	BB	1863	G	C5-C6-N1	-7.88	107.56	111.50
58	BA	69	G	N1-C2-N3	-7.88	119.17	123.90
21	AA	15	G	C2-N3-C4	7.88	115.84	111.90
21	AA	52	C	C4'-C3'-C2'	-7.88	94.72	102.60
21	AA	548	G	N3-C2-N2	7.88	125.42	119.90
21	AA	1089	G	O4'-C1'-N9	7.88	114.51	108.20
21	AA	1146	A	C4-C5-C6	7.88	120.94	117.00
31	BL	41	ARG	NE-CZ-NH2	7.88	124.24	120.30
57	BB	788	A	C4-C5-C6	7.88	120.94	117.00
57	BB	1612	C	C5-C4-N4	-7.88	114.68	120.20
57	BB	2114	A	N1-C6-N6	7.88	123.33	118.60
21	AA	1020	G	N3-C2-N2	7.88	125.42	119.90
57	BB	715	A	C5-C6-N1	-7.88	113.76	117.70
57	BB	1865	U	N3-C4-C5	7.88	119.33	114.60
21	AA	91	U	N3-C4-C5	-7.88	109.87	114.60
21	AA	898	G	N1-C6-O6	7.88	124.63	119.90
21	AA	1205	U	C6-N1-C2	-7.88	116.27	121.00
22	AY	24	G	C4-C5-N7	-7.88	107.65	110.80
57	BB	1416	G	N1-C2-N3	-7.88	119.17	123.90
57	BB	2854	G	C5-C6-O6	-7.88	123.87	128.60
22	AY	40	C	N1-C2-N3	-7.88	113.69	119.20
49	B2	18	PHE	CB-CG-CD1	-7.88	115.29	120.80
57	BB	483	A	C8-N9-C4	-7.88	102.65	105.80
57	BB	715	A	C5-N7-C8	-7.88	99.96	103.90
57	BB	1124	G	C2-N3-C4	7.88	115.84	111.90
57	BB	2391	G	C2-N3-C4	7.88	115.84	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2770	G	C4-C5-C6	7.88	123.53	118.80
12	AU	33	ARG	NE-CZ-NH1	-7.88	116.36	120.30
21	AA	1428	A	C5-C6-N1	-7.88	113.76	117.70
29	BJ	75	TYR	CB-CG-CD2	-7.88	116.28	121.00
57	BB	9	G	O4'-C1'-N9	7.88	114.50	108.20
57	BB	198	C	N3-C4-N4	7.88	123.51	118.00
21	AA	435	A	C4-C5-C6	7.87	120.94	117.00
21	AA	1306	A	C5-C6-N1	-7.87	113.76	117.70
57	BB	2654	A	N1-C2-N3	7.87	133.24	129.30
21	AA	115	G	N1-C6-O6	7.87	124.62	119.90
21	AA	191	G	C4-C5-N7	-7.87	107.65	110.80
57	BB	394	C	N3-C4-N4	7.87	123.51	118.00
57	BB	844	A	O4'-C1'-N9	7.87	114.50	108.20
57	BB	1129	A	C5-C6-N1	-7.87	113.76	117.70
21	AA	64	G	N1-C2-N3	-7.87	119.18	123.90
57	BB	259	G	C5-C6-N1	-7.87	107.56	111.50
57	BB	427	U	N1-C2-N3	-7.87	110.18	114.90
57	BB	1137	G	N7-C8-N9	7.87	117.03	113.10
21	AA	31	G	P-O5'-C5'	7.87	133.49	120.90
21	AA	55	A	O4'-C1'-N9	7.87	114.49	108.20
57	BB	802	A	C4-C5-C6	7.87	120.93	117.00
57	BB	2400	G	C6-C5-N7	-7.87	125.68	130.40
21	AA	268	U	N3-C2-O2	7.87	127.71	122.20
57	BB	1761	C	C6-N1-C2	-7.87	117.15	120.30
57	BB	1819	A	C5-N7-C8	7.87	107.83	103.90
57	BB	1962	C	N3-C4-C5	-7.87	118.75	121.90
21	AA	593	U	O4'-C1'-N1	7.87	114.49	108.20
21	AA	1048	G	N1-C2-N3	-7.87	119.18	123.90
21	AA	1437	A	C6-C5-N7	-7.87	126.79	132.30
57	BB	234	U	C4'-C3'-C2'	-7.87	94.73	102.60
57	BB	276	U	O4'-C1'-N1	7.87	114.49	108.20
57	BB	879	G	C5-C6-N1	-7.87	107.57	111.50
57	BB	1250	G	N1-C6-O6	7.87	124.62	119.90
57	BB	1450	G	O4'-C1'-N9	7.87	114.49	108.20
57	BB	1484	U	P-O5'-C5'	7.87	133.49	120.90
57	BB	1831	G	C8-N9-C4	-7.87	103.25	106.40
21	AA	1046	A	O4'-C1'-N9	7.86	114.49	108.20
21	AA	1243	C	N3-C4-N4	7.86	123.50	118.00
57	BB	538	A	O4'-C1'-N9	7.86	114.49	108.20
57	BB	947	A	N1-C6-N6	7.86	123.32	118.60
57	BB	1398	C	N3-C4-N4	7.86	123.50	118.00
57	BB	1635	A	N1-C2-N3	7.86	133.23	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2451	A	O4'-C1'-N9	7.86	114.49	108.20
57	BB	1744	A	C4-C5-C6	7.86	120.93	117.00
57	BB	2481	G	N3-C2-N2	7.86	125.40	119.90
21	AA	188	C	N3-C4-C5	-7.86	118.76	121.90
21	AA	1379	G	C6-N1-C2	-7.86	120.38	125.10
25	AZ	80	ASP	CB-CG-OD1	7.86	125.37	118.30
57	BB	165	A	C4-C5-C6	7.86	120.93	117.00
57	BB	408	G	C4-C5-N7	7.86	113.94	110.80
57	BB	911	A	C5-C6-N6	-7.86	117.41	123.70
57	BB	1200	C	N3-C4-N4	7.86	123.50	118.00
57	BB	1338	G	C5-N7-C8	-7.86	100.37	104.30
57	BB	2251	G	N9-C4-C5	-7.86	102.25	105.40
57	BB	2324	U	C5-C4-O4	7.86	130.62	125.90
21	AA	1223	C	O4'-C1'-N1	7.86	114.49	108.20
40	BU	94	PHE	CB-CG-CD2	7.86	126.30	120.80
57	BB	238	C	C2-N3-C4	7.86	123.83	119.90
57	BB	407	G	C8-N9-C4	-7.86	103.26	106.40
57	BB	523	C	C2-N3-C4	7.86	123.83	119.90
21	AA	704	A	C2-N3-C4	-7.86	106.67	110.60
21	AA	833	G	N9-C4-C5	7.86	108.54	105.40
21	AA	1057	G	N1-C2-N3	-7.86	119.19	123.90
21	AA	1338	G	N3-C2-N2	7.86	125.40	119.90
21	AA	1375	A	C4'-C3'-C2'	-7.86	94.74	102.60
57	BB	662	G	C5-C6-O6	-7.86	123.89	128.60
57	BB	688	U	N1-C2-O2	-7.86	117.30	122.80
57	BB	700	G	C5-C6-O6	-7.86	123.89	128.60
57	BB	718	A	C5-C6-N1	-7.86	113.77	117.70
57	BB	2035	G	C6-C5-N7	-7.86	125.69	130.40
57	BB	2628	C	O4'-C1'-N1	7.86	114.49	108.20
21	AA	465	A	O4'-C1'-N9	7.86	114.48	108.20
21	AA	655	A	C6-N1-C2	-7.86	113.89	118.60
21	AA	765	G	N7-C8-N9	7.86	117.03	113.10
23	AW	65	G	C5-C6-N1	-7.86	107.57	111.50
57	BB	725	G	C6-C5-N7	-7.86	125.69	130.40
57	BB	880	G	C4-C5-C6	7.86	123.51	118.80
57	BB	1531	C	C5-C6-N1	7.86	124.93	121.00
57	BB	994	C	C4-C5-C6	7.85	121.33	117.40
57	BB	1053	C	O4'-C1'-N1	7.85	114.48	108.20
57	BB	1278	C	N3-C4-N4	7.85	123.50	118.00
57	BB	1707	G	C5-C6-O6	-7.85	123.89	128.60
57	BB	2435	A	C4-C5-C6	7.85	120.93	117.00
21	AA	105	G	C5-N7-C8	-7.85	100.37	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1484	C	C6-N1-C2	7.85	123.44	120.30
23	AW	73	A	C2-N3-C4	7.85	114.53	110.60
57	BB	2246	G	N1-C6-O6	7.85	124.61	119.90
57	BB	2399	G	N3-C2-N2	7.85	125.40	119.90
57	BB	2828	G	N9-C4-C5	-7.85	102.26	105.40
57	BB	2331	G	O4'-C1'-N9	7.85	114.48	108.20
57	BB	2474	U	C6-N1-C1'	-7.85	110.21	121.20
36	BQ	23	TYR	CB-CG-CD1	-7.85	116.29	121.00
57	BB	191	A	C6-C5-N7	-7.85	126.81	132.30
57	BB	337	C	C3'-C2'-C1'	-7.85	95.22	101.50
57	BB	1760	C	N3-C4-C5	-7.85	118.76	121.90
21	AA	452	A	C5-C6-N6	-7.85	117.42	123.70
21	AA	491	G	C4-C5-C6	7.85	123.51	118.80
21	AA	671	G	C8-N9-C4	-7.85	103.26	106.40
21	AA	1061	G	C2-N3-C4	-7.85	107.98	111.90
23	AW	61	C	P-O3'-C3'	7.85	129.12	119.70
57	BB	196	A	C5-C6-N6	-7.85	117.42	123.70
57	BB	468	G	N1-C6-O6	7.85	124.61	119.90
57	BB	926	G	C8-N9-C4	-7.85	103.26	106.40
57	BB	1342	A	N7-C8-N9	-7.85	109.88	113.80
57	BB	1648	U	N3-C2-O2	7.85	127.69	122.20
57	BB	2061	G	C8-N9-C4	-7.85	103.26	106.40
21	AA	1534	A	C4-C5-C6	7.85	120.92	117.00
57	BB	98	G	C6-C5-N7	-7.85	125.69	130.40
57	BB	1956	U	O4'-C1'-N1	7.85	114.48	108.20
57	BB	2475	C	C2-N3-C4	7.85	123.82	119.90
58	BA	57	A	O4'-C1'-N9	7.85	114.48	108.20
21	AA	1094	G	N7-C8-N9	-7.84	109.18	113.10
57	BB	411	G	C4-C5-N7	-7.84	107.66	110.80
57	BB	1791	A	C4-C5-N7	7.84	114.62	110.70
57	BB	2035	G	C4-C5-C6	7.84	123.51	118.80
57	BB	2260	C	O4'-C1'-N1	7.84	114.47	108.20
57	BB	2262	U	C2-N3-C4	-7.84	122.29	127.00
21	AA	1271	A	C5-C6-N1	-7.84	113.78	117.70
57	BB	555	G	P-O3'-C3'	-7.84	110.29	119.70
58	BA	77	U	N3-C4-O4	7.84	124.89	119.40
21	AA	471	U	P-O5'-C5'	7.84	133.45	120.90
21	AA	1503	A	C4-C5-C6	7.84	120.92	117.00
57	BB	568	U	N3-C4-O4	7.84	124.89	119.40
5	AN	12	ARG	NE-CZ-NH1	7.84	124.22	120.30
21	AA	325	A	N7-C8-N9	-7.84	109.88	113.80
21	AA	1196	A	N1-C6-N6	7.84	123.30	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1496	C	C5-C6-N1	7.84	124.92	121.00
57	BB	480	A	C5-C6-N6	-7.84	117.43	123.70
57	BB	1805	A	C4-C5-C6	7.84	120.92	117.00
57	BB	2000	C	O4'-C1'-N1	7.84	114.47	108.20
14	AC	131	ARG	NE-CZ-NH2	-7.84	116.38	120.30
21	AA	160	A	N9-C4-C5	7.84	108.94	105.80
21	AA	1306	A	C4-C5-C6	7.84	120.92	117.00
21	AA	1411	C	O4'-C1'-N1	7.84	114.47	108.20
23	AW	50	U	N3-C4-O4	7.84	124.89	119.40
57	BB	1463	C	C2-N3-C4	-7.84	115.98	119.90
57	BB	1614	A	N9-C4-C5	7.84	108.94	105.80
21	AA	1397	C	C5-C4-N4	-7.84	114.72	120.20
57	BB	172	A	C4-C5-C6	7.84	120.92	117.00
57	BB	449	A	C5-C6-N6	-7.84	117.43	123.70
57	BB	878	A	N9-C4-C5	7.84	108.94	105.80
57	BB	1439	A	N1-C2-N3	7.84	133.22	129.30
36	BQ	52	ARG	NE-CZ-NH1	7.83	124.22	120.30
21	AA	33	A	N1-C6-N6	7.83	123.30	118.60
21	AA	510	A	C4-C5-N7	-7.83	106.78	110.70
21	AA	1030	U	C5-C4-O4	-7.83	121.20	125.90
21	AA	1248	A	C8-N9-C4	7.83	108.93	105.80
57	BB	465	G	N3-C4-C5	-7.83	124.68	128.60
57	BB	522	A	C5-C6-N6	-7.83	117.43	123.70
57	BB	1129	A	C4-C5-C6	7.83	120.92	117.00
58	BA	102	G	C6-C5-N7	-7.83	125.70	130.40
21	AA	617	G	N9-C4-C5	-7.83	102.27	105.40
21	AA	983	A	C5-C6-N1	-7.83	113.78	117.70
21	AA	1180	A	C8-N9-C4	-7.83	102.67	105.80
57	BB	437	U	O4'-C1'-N1	7.83	114.47	108.20
57	BB	917	A	C5-C6-N6	-7.83	117.44	123.70
57	BB	977	G	C6-C5-N7	-7.83	125.70	130.40
57	BB	1392	A	P-O3'-C3'	-7.83	110.30	119.70
57	BB	1725	U	N3-C2-O2	7.83	127.68	122.20
57	BB	1750	G	N1-C2-N3	-7.83	119.20	123.90
57	BB	2293	G	O4'-C1'-N9	7.83	114.47	108.20
57	BB	2399	G	O4'-C1'-N9	7.83	114.47	108.20
57	BB	2404	U	C4'-C3'-C2'	7.83	110.43	102.60
21	AA	191	G	N1-C6-O6	7.83	124.60	119.90
21	AA	300	A	C5-C6-N1	-7.83	113.78	117.70
21	AA	674	G	N7-C8-N9	-7.83	109.19	113.10
57	BB	330	A	N7-C8-N9	-7.83	109.89	113.80
57	BB	1163	G	O4'-C1'-N9	7.83	114.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1245	G	N1-C2-N3	-7.83	119.20	123.90
57	BB	2751	G	C4-C5-C6	7.83	123.50	118.80
21	AA	537	G	C3'-C2'-C1'	-7.83	95.24	101.50
21	AA	1042	A	N1-C2-N3	7.83	133.21	129.30
21	AA	1180	A	N1-C6-N6	7.83	123.30	118.60
21	AA	1493	A	C4-C5-N7	7.83	114.61	110.70
57	BB	566	U	N3-C4-O4	7.83	124.88	119.40
57	BB	588	U	O4'-C1'-N1	7.83	114.46	108.20
57	BB	1001	A	O4'-C1'-N9	7.83	114.46	108.20
57	BB	2322	A	C6-C5-N7	-7.83	126.82	132.30
21	AA	705	G	C5-C6-O6	-7.83	123.90	128.60
21	AA	1021	A	C6-C5-N7	-7.83	126.82	132.30
24	AX	12	A	N1-C2-N3	7.83	133.21	129.30
57	BB	585	G	C4-C5-N7	-7.83	107.67	110.80
57	BB	765	C	N3-C4-N4	7.83	123.48	118.00
57	BB	1383	A	N3-C4-C5	-7.83	121.32	126.80
21	AA	128	G	N9-C4-C5	-7.83	102.27	105.40
21	AA	668	G	C3'-C2'-C1'	-7.83	95.24	101.50
21	AA	740	U	C2-N3-C4	7.83	131.69	127.00
22	AY	47	U	N1-C2-O2	7.83	128.28	122.80
57	BB	419	U	O4'-C1'-N1	7.83	114.46	108.20
57	BB	927	A	C5-C6-N1	-7.83	113.79	117.70
57	BB	930	G	N3-C2-N2	7.83	125.38	119.90
57	BB	1185	G	N1-C6-O6	7.83	124.59	119.90
57	BB	1429	G	C5-C6-O6	-7.83	123.90	128.60
57	BB	2058	A	C8-N9-C4	-7.83	102.67	105.80
57	BB	2220	U	C5-C4-O4	-7.83	121.20	125.90
57	BB	2413	G	C5-N7-C8	-7.83	100.39	104.30
21	AA	515	G	N7-C8-N9	-7.82	109.19	113.10
21	AA	812	G	C4-C5-C6	7.82	123.49	118.80
21	AA	1306	A	O4'-C1'-N9	7.82	114.46	108.20
57	BB	580	U	C5-C4-O4	-7.82	121.21	125.90
57	BB	981	A	C4-C5-N7	-7.82	106.79	110.70
57	BB	1198	U	C5-C6-N1	7.82	126.61	122.70
57	BB	1290	C	N3-C4-C5	-7.82	118.77	121.90
57	BB	2773	C	N3-C4-N4	7.82	123.48	118.00
57	BB	2855	C	N3-C4-C5	-7.82	118.77	121.90
21	AA	476	U	C5-C6-N1	7.82	126.61	122.70
23	AW	53	G	C4'-C3'-C2'	-7.82	94.78	102.60
57	BB	858	G	C5-C6-O6	-7.82	123.91	128.60
57	BB	1978	A	P-O5'-C5'	7.82	133.42	120.90
57	BB	2356	U	O4'-C1'-N1	7.82	114.46	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	33	A	C5-C6-N1	-7.82	113.79	117.70
21	AA	306	A	N9-C4-C5	7.82	108.93	105.80
21	AA	615	G	C4-C5-C6	7.82	123.49	118.80
21	AA	759	A	N1-C6-N6	7.82	123.29	118.60
23	AW	31	A	N9-C1'-C2'	-7.82	103.40	112.00
52	BD	181	ASP	CB-CG-OD2	-7.82	111.26	118.30
56	BH	132	PHE	CB-CG-CD2	-7.82	115.33	120.80
57	BB	1450	G	P-O3'-C3'	7.82	129.08	119.70
57	BB	1863	G	C6-N1-C2	7.82	129.79	125.10
57	BB	1989	G	C6-C5-N7	-7.82	125.71	130.40
57	BB	2261	C	C3'-C2'-C1'	-7.82	95.24	101.50
57	BB	2595	G	C5-N7-C8	7.82	108.21	104.30
57	BB	2608	G	N1-C2-N2	-7.82	109.16	116.20
57	BB	2870	C	C5-C4-N4	-7.82	114.73	120.20
21	AA	689	C	N3-C4-N4	7.82	123.47	118.00
21	AA	1061	G	C5-C6-O6	-7.82	123.91	128.60
23	AW	61	C	N3-C4-N4	7.82	123.47	118.00
57	BB	510	C	N3-C4-C5	-7.82	118.77	121.90
57	BB	2796	U	C5-C4-O4	7.82	130.59	125.90
21	AA	424	G	O4'-C1'-N9	7.82	114.45	108.20
21	AA	808	C	P-O3'-C3'	-7.82	110.32	119.70
23	AW	34	G	N3-C4-C5	-7.82	124.69	128.60
57	BB	1326	U	O4'-C1'-N1	7.82	114.45	108.20
57	BB	2386	A	N1-C6-N6	7.82	123.29	118.60
21	AA	116	A	O4'-C1'-N9	7.82	114.45	108.20
57	BB	244	A	O4'-C1'-N9	7.82	114.45	108.20
57	BB	311	A	C5-C6-N1	-7.82	113.79	117.70
57	BB	1135	C	C6-N1-C2	-7.82	117.17	120.30
57	BB	2167	U	P-O3'-C3'	7.82	129.08	119.70
57	BB	2258	C	O4'-C1'-N1	7.82	114.45	108.20
21	AA	409	U	C5-C6-N1	-7.81	118.79	122.70
21	AA	1009	U	C5'-C4'-C3'	-7.81	103.50	116.00
57	BB	870	U	C6-N1-C2	-7.81	116.31	121.00
57	BB	1626	A	N9-C4-C5	7.81	108.92	105.80
57	BB	2008	C	C6-N1-C2	-7.81	117.17	120.30
21	AA	429	U	O4'-C1'-N1	7.81	114.45	108.20
21	AA	567	G	N7-C8-N9	7.81	117.01	113.10
21	AA	629	A	O4'-C1'-N9	7.81	114.45	108.20
21	AA	702	A	N3-C4-C5	-7.81	121.33	126.80
57	BB	88	G	N3-C4-C5	-7.81	124.69	128.60
57	BB	614	A	C5-C6-N6	-7.81	117.45	123.70
57	BB	750	A	C2-N3-C4	7.81	114.51	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2386	A	O4'-C1'-N9	7.81	114.45	108.20
57	BB	171	U	P-O3'-C3'	-7.81	110.33	119.70
57	BB	1982	U	O4'-C1'-N1	7.81	114.45	108.20
21	AA	883	C	N3-C4-N4	7.81	123.47	118.00
26	AV	43	A	N7-C8-N9	7.81	117.70	113.80
57	BB	218	A	C5-N7-C8	7.81	107.81	103.90
57	BB	325	G	O4'-C1'-N9	7.81	114.45	108.20
57	BB	475	C	C4-C5-C6	7.81	121.30	117.40
21	AA	764	C	C5-C6-N1	7.81	124.90	121.00
21	AA	1229	A	C6-N1-C2	7.81	123.28	118.60
57	BB	796	C	C5-C6-N1	7.81	124.90	121.00
57	BB	838	C	N1-C2-O2	7.81	123.58	118.90
57	BB	1467	U	O4'-C1'-N1	7.81	114.45	108.20
57	BB	2428	G	N1-C2-N3	-7.81	119.22	123.90
57	BB	2615	U	C5-C4-O4	-7.81	121.22	125.90
57	BB	2829	A	C5-C6-N1	-7.81	113.80	117.70
57	BB	389	G	C5-C6-O6	-7.81	123.92	128.60
57	BB	636	G	C6-C5-N7	-7.81	125.72	130.40
57	BB	2750	A	N9-C4-C5	7.81	108.92	105.80
18	AG	25	PHE	CB-CG-CD2	7.80	126.26	120.80
21	AA	1522	U	C5-C4-O4	-7.80	121.22	125.90
57	BB	160	A	C4-C5-C6	7.80	120.90	117.00
57	BB	778	G	C6-C5-N7	-7.80	125.72	130.40
57	BB	1117	C	O4'-C1'-N1	7.80	114.44	108.20
57	BB	1490	A	C4-C5-N7	-7.80	106.80	110.70
57	BB	2503	A	C4-C5-N7	-7.80	106.80	110.70
21	AA	689	C	O4'-C1'-N1	7.80	114.44	108.20
21	AA	1526	G	O4'-C1'-N9	7.80	114.44	108.20
57	BB	481	G	C5-N7-C8	-7.80	100.40	104.30
21	AA	313	A	C5-N7-C8	7.80	107.80	103.90
57	BB	379	G	C4-C5-N7	-7.80	107.68	110.80
57	BB	1360	G	C4'-C3'-C2'	-7.80	94.80	102.60
57	BB	1608	A	C5-C6-N6	-7.80	117.46	123.70
57	BB	1623	G	C6-N1-C2	7.80	129.78	125.10
21	AA	81	A	N1-C2-N3	7.80	133.20	129.30
21	AA	209	U	O4'-C1'-N1	7.80	114.44	108.20
57	BB	164	C	N3-C4-C5	-7.80	118.78	121.90
57	BB	733	G	N9-C4-C5	7.80	108.52	105.40
57	BB	822	G	N3-C4-N9	-7.80	121.32	126.00
57	BB	878	A	C5-C6-N6	-7.80	117.46	123.70
57	BB	1511	G	N7-C8-N9	7.80	117.00	113.10
57	BB	2309	A	C2-N3-C4	-7.80	106.70	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	359	G	O4'-C1'-N9	7.80	114.44	108.20
57	BB	2769	U	C2-N3-C4	7.80	131.68	127.00
57	BB	1025	G	O4'-C1'-N9	7.80	114.44	108.20
57	BB	1177	G	N1-C2-N3	-7.80	119.22	123.90
57	BB	1358	G	N1-C6-O6	7.80	124.58	119.90
57	BB	2717	C	N3-C4-N4	7.80	123.46	118.00
21	AA	399	G	C8-N9-C4	7.79	109.52	106.40
21	AA	852	G	N1-C2-N3	-7.79	119.22	123.90
21	AA	1199	U	C5-C6-N1	7.79	126.60	122.70
57	BB	917	A	C8-N9-C4	-7.79	102.68	105.80
21	AA	691	G	N7-C8-N9	-7.79	109.20	113.10
21	AA	1044	A	C5-N7-C8	7.79	107.80	103.90
21	AA	1099	G	C5-C6-N1	-7.79	107.60	111.50
21	AA	1205	U	N3-C2-O2	-7.79	116.75	122.20
26	AV	52	G	C5-C6-N1	-7.79	107.60	111.50
57	BB	462	C	C4-C5-C6	7.79	121.30	117.40
57	BB	622	G	C4-C5-N7	7.79	113.92	110.80
57	BB	1661	G	N3-C4-N9	-7.79	121.32	126.00
57	BB	2402	U	N3-C4-O4	7.79	124.86	119.40
21	AA	1048	G	C6-C5-N7	-7.79	125.72	130.40
21	AA	1145	A	C4-C5-C6	7.79	120.90	117.00
29	BJ	34	ARG	NE-CZ-NH1	7.79	124.20	120.30
21	AA	812	G	O4'-C1'-N9	7.79	114.43	108.20
23	AW	47	U	N3-C4-O4	7.79	124.85	119.40
39	BT	73	ARG	NE-CZ-NH1	-7.79	116.41	120.30
57	BB	985	C	O4'-C1'-N1	7.79	114.43	108.20
57	BB	1028	A	C5-C6-N6	-7.79	117.47	123.70
57	BB	1762	A	C6-C5-N7	-7.79	126.85	132.30
58	BA	23	G	O4'-C1'-N9	7.79	114.43	108.20
21	AA	135	C	N3-C2-O2	7.79	127.35	121.90
21	AA	1185	G	N1-C2-N2	-7.79	109.19	116.20
55	BG	150	TYR	CB-CG-CD1	-7.79	116.33	121.00
57	BB	511	U	N1-C2-N3	7.79	119.57	114.90
57	BB	904	G	C6-C5-N7	-7.79	125.73	130.40
57	BB	1275	A	C8-N9-C4	-7.79	102.69	105.80
57	BB	2778	A	N1-C2-N3	7.79	133.19	129.30
21	AA	161	A	N7-C8-N9	-7.79	109.91	113.80
21	AA	467	U	N3-C4-O4	7.79	124.85	119.40
21	AA	726	C	N3-C4-N4	7.79	123.45	118.00
57	BB	2261	C	N3-C4-C5	-7.79	118.78	121.90
57	BB	2625	G	C6-C5-N7	-7.79	125.73	130.40
21	AA	1044	A	C5-C6-N6	-7.79	117.47	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	9	G	C4-C5-N7	7.79	113.91	110.80
57	BB	533	G	C2-N3-C4	7.79	115.79	111.90
57	BB	1058	U	N3-C2-O2	7.79	127.65	122.20
57	BB	2133	G	O4'-C1'-N9	7.79	114.43	108.20
21	AA	12	U	C1'-O4'-C4'	-7.78	103.67	109.90
21	AA	103	U	C5-C4-O4	-7.78	121.23	125.90
21	AA	189	A	N1-C2-N3	7.78	133.19	129.30
21	AA	328	C	C2-N3-C4	7.78	123.79	119.90
45	BC	269	ARG	NE-CZ-NH2	-7.78	116.41	120.30
57	BB	524	G	O4'-C1'-N9	7.78	114.43	108.20
57	BB	982	C	P-O3'-C3'	7.78	129.04	119.70
57	BB	1433	A	C5-N7-C8	7.78	107.79	103.90
57	BB	1574	C	C4'-C3'-C2'	-7.78	94.82	102.60
21	AA	1016	A	N9-C4-C5	7.78	108.91	105.80
57	BB	435	C	O4'-C1'-N1	7.78	114.42	108.20
57	BB	1869	G	N1-C2-N2	-7.78	109.20	116.20
21	AA	1024	G	N3-C2-N2	7.78	125.35	119.90
21	AA	1153	G	C8-N9-C4	-7.78	103.29	106.40
21	AA	1370	G	N1-C2-N2	-7.78	109.20	116.20
21	AA	1430	A	C5-C6-N1	-7.78	113.81	117.70
57	BB	842	U	O4'-C1'-N1	7.78	114.42	108.20
57	BB	936	A	C6-C5-N7	-7.78	126.85	132.30
57	BB	1477	A	C5-N7-C8	7.78	107.79	103.90
57	BB	1805	A	C6-C5-N7	-7.78	126.85	132.30
57	BB	1903	G	C4-C5-N7	-7.78	107.69	110.80
57	BB	2267	A	C4-C5-C6	7.78	120.89	117.00
58	BA	96	G	C4-C5-C6	7.78	123.47	118.80
21	AA	53	A	C4'-C3'-C2'	-7.78	94.82	102.60
21	AA	1419	G	N3-C4-N9	-7.78	121.33	126.00
57	BB	49	A	N1-C2-N3	-7.78	125.41	129.30
57	BB	189	G	N3-C2-N2	7.78	125.34	119.90
13	AB	112	ARG	NE-CZ-NH2	-7.78	116.41	120.30
21	AA	281	G	O4'-C1'-N9	7.78	114.42	108.20
23	AW	14	A	C6-C5-N7	-7.78	126.86	132.30
57	BB	326	G	N1-C6-O6	7.78	124.57	119.90
57	BB	695	G	C6-N1-C2	7.78	129.77	125.10
57	BB	2455	G	C2-N3-C4	-7.78	108.01	111.90
57	BB	2471	A	C5-N7-C8	7.78	107.79	103.90
57	BB	2695	U	O4'-C1'-N1	7.78	114.42	108.20
21	AA	17	U	N3-C4-O4	7.78	124.84	119.40
21	AA	144	G	C5-N7-C8	7.78	108.19	104.30
21	AA	421	U	N3-C4-O4	7.78	124.84	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	71	G	N9-C4-C5	-7.78	102.29	105.40
26	AV	25	C	N3-C4-N4	7.78	123.44	118.00
57	BB	1241	A	C8-N9-C4	-7.78	102.69	105.80
57	BB	1477	A	C4-C5-C6	7.78	120.89	117.00
21	AA	131	A	C2-N3-C4	-7.77	106.71	110.60
21	AA	1096	C	C5-C4-N4	-7.77	114.76	120.20
21	AA	302	G	N1-C2-N3	-7.77	119.24	123.90
21	AA	327	A	C5-C6-N6	-7.77	117.48	123.70
21	AA	329	A	C5-C6-N6	-7.77	117.48	123.70
21	AA	1242	G	N3-C2-N2	7.77	125.34	119.90
21	AA	1405	G	O4'-C1'-N9	7.77	114.42	108.20
57	BB	506	G	N1-C2-N3	-7.77	119.24	123.90
57	BB	1000	A	C8-N9-C4	-7.77	102.69	105.80
57	BB	1160	G	C5-C6-N1	-7.77	107.61	111.50
57	BB	1608	A	C6-C5-N7	-7.77	126.86	132.30
57	BB	1806	C	C4-C5-C6	7.77	121.29	117.40
57	BB	2057	G	N1-C2-N3	-7.77	119.24	123.90
21	AA	724	G	C8-N9-C4	-7.77	103.29	106.40
21	AA	1156	G	O4'-C1'-N9	7.77	114.42	108.20
57	BB	1837	C	O4'-C1'-N1	7.77	114.42	108.20
57	BB	2885	G	C5-C6-N1	-7.77	107.61	111.50
58	BA	81	G	O4'-C1'-N9	7.77	114.42	108.20
21	AA	683	G	N7-C8-N9	-7.77	109.22	113.10
21	AA	1312	G	N9-C4-C5	7.77	108.51	105.40
23	AW	23	A	C5'-C4'-C3'	-7.77	103.57	116.00
57	BB	834	G	C8-N9-C4	-7.77	103.29	106.40
57	BB	1351	C	C5-C6-N1	-7.77	117.12	121.00
57	BB	1960	A	C5-C6-N1	-7.77	113.82	117.70
57	BB	2467	C	C1'-O4'-C4'	-7.77	103.69	109.90
21	AA	69	G	C6-C5-N7	-7.77	125.74	130.40
21	AA	524	G	N3-C4-C5	-7.77	124.72	128.60
57	BB	994	C	N3-C4-C5	-7.77	118.79	121.90
7	AP	35	ARG	NE-CZ-NH2	7.76	124.18	120.30
21	AA	295	C	C6-N1-C2	-7.76	117.19	120.30
21	AA	318	G	N1-C2-N3	-7.76	119.24	123.90
21	AA	761	G	C4-C5-C6	7.76	123.46	118.80
21	AA	822	U	O4'-C1'-N1	7.76	114.41	108.20
26	AV	40	C	N3-C4-C5	-7.76	118.79	121.90
57	BB	1181	U	N3-C4-C5	-7.76	109.94	114.60
57	BB	1258	U	N3-C2-O2	7.76	127.63	122.20
57	BB	1321	A	N1-C6-N6	7.76	123.26	118.60
57	BB	1776	G	O4'-C1'-N9	7.76	114.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1886	U	N3-C4-C5	-7.76	109.94	114.60
57	BB	2339	C	C6-N1-C2	-7.76	117.19	120.30
57	BB	2418	A	N7-C8-N9	-7.76	109.92	113.80
57	BB	2544	G	O4'-C1'-N9	7.76	114.41	108.20
21	AA	785	G	N7-C8-N9	-7.76	109.22	113.10
23	AW	10	G	C4-C5-N7	7.76	113.91	110.80
57	BB	473	G	O4'-C1'-N9	7.76	114.41	108.20
57	BB	1138	G	C4-C5-C6	7.76	123.46	118.80
57	BB	1285	A	C5-N7-C8	7.76	107.78	103.90
57	BB	2089	C	P-O5'-C5'	7.76	133.32	120.90
21	AA	404	G	C5-C6-O6	-7.76	123.94	128.60
26	AV	12	G	O4'-C1'-N9	7.76	114.41	108.20
57	BB	708	G	C5-C6-O6	-7.76	123.94	128.60
57	BB	650	C	C5-C4-N4	-7.76	114.77	120.20
57	BB	1221	C	N3-C4-N4	7.76	123.43	118.00
57	BB	2199	A	C5-C6-N1	-7.76	113.82	117.70
21	AA	16	A	N1-C2-N3	-7.76	125.42	129.30
26	AV	59	A	C4-C5-C6	7.76	120.88	117.00
57	BB	545	U	O4'-C1'-N1	7.76	114.41	108.20
57	BB	687	C	C2-N1-C1'	7.76	127.33	118.80
57	BB	779	U	O4'-C1'-N1	7.76	114.41	108.20
57	BB	2102	G	N3-C2-N2	7.76	125.33	119.90
21	AA	528	C	N3-C4-C5	-7.75	118.80	121.90
57	BB	491	G	O4'-C1'-N9	7.75	114.40	108.20
57	BB	1151	A	C8-N9-C4	-7.75	102.70	105.80
57	BB	2808	G	O4'-C1'-N9	7.75	114.40	108.20
57	BB	904	G	N1-C2-N3	-7.75	119.25	123.90
57	BB	2704	C	O4'-C1'-N1	7.75	114.40	108.20
21	AA	254	G	C4'-C3'-C2'	-7.75	94.85	102.60
21	AA	471	U	C2-N3-C4	7.75	131.65	127.00
21	AA	1146	A	C2-N3-C4	7.75	114.48	110.60
21	AA	1147	C	C5-C6-N1	7.75	124.88	121.00
21	AA	1163	A	C5-N7-C8	7.75	107.78	103.90
57	BB	1742	U	C5-C4-O4	-7.75	121.25	125.90
58	BA	92	C	N3-C4-C5	-7.75	118.80	121.90
21	AA	550	G	N9-C4-C5	-7.75	102.30	105.40
21	AA	977	A	C8-N9-C4	-7.75	102.70	105.80
57	BB	307	G	C4-C5-C6	7.75	123.45	118.80
57	BB	1343	G	N9-C4-C5	-7.75	102.30	105.40
57	BB	2734	A	C4-C5-C6	7.75	120.88	117.00
21	AA	226	G	C6-C5-N7	-7.75	125.75	130.40
21	AA	1443	C	C2-N3-C4	7.75	123.77	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	59	U	C5-C4-O4	-7.75	121.25	125.90
57	BB	587	C	N3-C4-C5	-7.75	118.80	121.90
57	BB	967	U	O4'-C1'-N1	7.75	114.40	108.20
57	BB	2083	G	N1-C2-N3	-7.75	119.25	123.90
57	BB	2496	C	O4'-C1'-N1	7.75	114.40	108.20
58	BA	22	U	C2-N3-C4	-7.75	122.35	127.00
21	AA	1040	U	C5-C4-O4	-7.75	121.25	125.90
57	BB	534	U	N3-C2-O2	7.75	127.62	122.20
57	BB	1608	A	C4'-C3'-C2'	7.75	110.35	102.60
57	BB	470	A	C5-C6-N6	-7.75	117.50	123.70
57	BB	1994	C	O4'-C1'-N1	7.75	114.40	108.20
57	BB	2325	G	C5-C6-N1	-7.75	107.63	111.50
21	AA	42	G	N3-C2-N2	7.74	125.32	119.90
21	AA	675	A	C5-C6-N6	-7.74	117.51	123.70
57	BB	978	G	N3-C2-N2	7.74	125.32	119.90
57	BB	1389	G	C4-C5-N7	7.74	113.90	110.80
57	BB	1567	G	N1-C6-O6	7.74	124.55	119.90
57	BB	2198	A	N1-C6-N6	7.74	123.25	118.60
57	BB	2784	U	C6-N1-C2	-7.74	116.35	121.00
9	AR	22	TYR	CB-CG-CD1	7.74	125.64	121.00
21	AA	500	G	C5-C6-O6	-7.74	123.95	128.60
57	BB	429	A	C6-N1-C2	7.74	123.25	118.60
58	BA	93	C	O4'-C1'-N1	7.74	114.39	108.20
21	AA	864	A	C5-C6-N1	-7.74	113.83	117.70
22	AY	36	A	C5-C6-N1	-7.74	113.83	117.70
57	BB	38	A	C1'-O4'-C4'	7.74	116.09	109.90
57	BB	802	A	C5-C6-N1	-7.74	113.83	117.70
57	BB	1998	A	C5-C6-N6	-7.74	117.51	123.70
57	BB	2773	C	C5-C6-N1	7.74	124.87	121.00
21	AA	1190	G	N1-C6-O6	7.74	124.54	119.90
21	AA	1210	C	N3-C4-N4	7.74	123.42	118.00
57	BB	313	G	C5-C6-N1	-7.74	107.63	111.50
57	BB	575	A	C5-C6-N6	-7.74	117.51	123.70
21	AA	281	G	C4-C5-N7	-7.74	107.71	110.80
21	AA	622	A	C8-N9-C4	-7.74	102.71	105.80
57	BB	446	G	N1-C6-O6	7.74	124.54	119.90
57	BB	1321	A	O4'-C1'-N9	7.74	114.39	108.20
57	BB	1535	A	C4'-C3'-C2'	-7.74	94.86	102.60
57	BB	2749	A	N1-C6-N6	7.74	123.24	118.60
58	BA	45	A	N1-C2-N3	7.74	133.17	129.30
57	BB	2276	G	N1-C6-O6	7.73	124.54	119.90
57	BB	2433	A	C4-C5-C6	7.73	120.87	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	975	A	C5-C6-N1	-7.73	113.83	117.70
21	AA	1019	A	N1-C2-N3	7.73	133.17	129.30
21	AA	1144	G	C6-C5-N7	-7.73	125.76	130.40
57	BB	1334	G	C4-C5-N7	7.73	113.89	110.80
57	BB	1386	C	C5-C6-N1	-7.73	117.13	121.00
57	BB	1904	G	C4-C5-N7	7.73	113.89	110.80
21	AA	106	C	N3-C4-C5	-7.73	118.81	121.90
21	AA	438	U	O4'-C1'-N1	7.73	114.39	108.20
57	BB	51	G	N1-C6-O6	7.73	124.54	119.90
57	BB	220	G	N3-C4-C5	7.73	132.47	128.60
57	BB	954	G	N1-C6-O6	7.73	124.54	119.90
57	BB	1198	U	N3-C4-O4	7.73	124.81	119.40
21	AA	76	G	C8-N9-C4	-7.73	103.31	106.40
57	BB	253	C	C1'-O4'-C4'	-7.73	103.72	109.90
21	AA	48	C	N1-C2-N3	-7.73	113.79	119.20
21	AA	502	A	C5-N7-C8	7.73	107.76	103.90
21	AA	1304	G	C5-C6-O6	-7.73	123.96	128.60
21	AA	1428	A	C6-N1-C2	7.73	123.24	118.60
57	BB	1383	A	C4-C5-C6	7.73	120.86	117.00
57	BB	1860	G	P-O3'-C3'	-7.73	110.43	119.70
57	BB	2033	A	C5-C6-N6	-7.73	117.52	123.70
57	BB	2618	G	O4'-C1'-N9	7.73	114.38	108.20
57	BB	943	A	C2-N3-C4	-7.73	106.74	110.60
57	BB	1443	U	C5-C4-O4	-7.73	121.26	125.90
57	BB	1861	G	C6-C5-N7	-7.73	125.77	130.40
21	AA	144	G	C4-C5-C6	7.72	123.44	118.80
57	BB	1854	A	C8-N9-C4	-7.72	102.71	105.80
21	AA	784	A	C8-N9-C4	-7.72	102.71	105.80
21	AA	923	A	C4-C5-C6	7.72	120.86	117.00
57	BB	326	G	C5-C6-O6	-7.72	123.97	128.60
57	BB	342	A	O4'-C1'-N9	7.72	114.38	108.20
57	BB	1744	A	C5-N7-C8	7.72	107.76	103.90
57	BB	1979	U	N1-C2-N3	-7.72	110.27	114.90
57	BB	2193	G	C5-C6-O6	-7.72	123.97	128.60
21	AA	1470	U	N3-C4-C5	-7.72	109.97	114.60
21	AA	1475	G	N3-C2-N2	7.72	125.31	119.90
57	BB	19	A	C4-C5-C6	7.72	120.86	117.00
57	BB	40	U	C4-C5-C6	-7.72	115.07	119.70
57	BB	820	A	N1-C2-N3	-7.72	125.44	129.30
57	BB	1048	A	P-O3'-C3'	-7.72	110.44	119.70
21	AA	569	C	N3-C2-O2	7.72	127.30	121.90
21	AA	588	G	N3-C4-C5	-7.72	124.74	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	794	A	C4-C5-C6	7.72	120.86	117.00
21	AA	1118	U	C2-N1-C1'	7.72	126.96	117.70
57	BB	199	A	C5-C6-N6	-7.72	117.53	123.70
57	BB	2168	G	C6-N1-C2	7.72	129.73	125.10
21	AA	529	G	N1-C2-N3	-7.72	119.27	123.90
57	BB	733	G	C5-C6-O6	-7.72	123.97	128.60
21	AA	143	A	C5-C6-N6	-7.72	117.53	123.70
57	BB	167	A	C4-C5-C6	7.72	120.86	117.00
19	AH	113	ARG	NE-CZ-NH2	-7.71	116.44	120.30
21	AA	326	G	O4'-C1'-N9	7.71	114.37	108.20
21	AA	1334	G	N7-C8-N9	7.71	116.96	113.10
21	AA	1360	A	N7-C8-N9	-7.71	109.94	113.80
21	AA	1396	A	C4-C5-N7	7.71	114.56	110.70
57	BB	387	U	N3-C4-O4	7.71	124.80	119.40
57	BB	494	G	O4'-C1'-N9	7.71	114.37	108.20
57	BB	1521	G	C5-C6-O6	-7.71	123.97	128.60
57	BB	1940	U	O4'-C1'-N1	7.71	114.37	108.20
57	BB	2134	A	O4'-C1'-N9	7.71	114.37	108.20
57	BB	2252	G	C4-C5-N7	-7.71	107.71	110.80
57	BB	2838	G	C5'-C4'-O4'	7.71	118.36	109.10
58	BA	15	A	P-O3'-C3'	7.71	128.96	119.70
21	AA	906	A	C5-N7-C8	7.71	107.76	103.90
57	BB	926	G	C6-C5-N7	-7.71	125.77	130.40
57	BB	1836	C	O4'-C1'-N1	7.71	114.37	108.20
21	AA	93	U	N3-C4-C5	-7.71	109.97	114.60
21	AA	665	A	C8-N9-C4	-7.71	102.72	105.80
21	AA	1523	G	N3-C2-N2	7.71	125.30	119.90
22	AY	66	A	P-O5'-C5'	7.71	133.24	120.90
21	AA	144	G	N1-C2-N3	7.71	128.53	123.90
57	BB	1981	A	C5-C6-N6	-7.71	117.53	123.70
58	BA	34	A	N1-C6-N6	7.71	123.23	118.60
22	AY	34	G	O4'-C1'-N9	7.71	114.37	108.20
57	BB	761	A	O4'-C1'-N9	7.71	114.37	108.20
57	BB	1798	U	O4'-C1'-N1	7.71	114.37	108.20
57	BB	2098	U	O4'-C1'-N1	7.71	114.37	108.20
21	AA	1077	G	C4-C5-N7	7.71	113.88	110.80
21	AA	1316	G	N1-C6-O6	7.71	124.52	119.90
57	BB	718	A	C5-N7-C8	7.71	107.75	103.90
57	BB	925	A	N9-C4-C5	-7.71	102.72	105.80
57	BB	1770	G	C5-C6-O6	-7.71	123.98	128.60
57	BB	2426	A	O4'-C1'-N9	7.71	114.36	108.20
21	AA	262	A	N9-C4-C5	7.71	108.88	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	924	C	N1-C2-O2	-7.71	114.28	118.90
23	AW	6	G	P-O5'-C5'	7.71	133.23	120.90
57	BB	1569	A	C2-N3-C4	-7.71	106.75	110.60
57	BB	2218	G	C5-N7-C8	-7.71	100.45	104.30
21	AA	552	U	C5-C4-O4	-7.70	121.28	125.90
21	AA	1277	C	C2-N3-C4	7.70	123.75	119.90
30	BK	112	MET	CG-SD-CE	-7.70	87.88	100.20
57	BB	517	C	C2-N3-C4	7.70	123.75	119.90
57	BB	984	A	C8-N9-C4	-7.70	102.72	105.80
57	BB	988	A	C4-C5-N7	-7.70	106.85	110.70
57	BB	1031	G	N3-C2-N2	7.70	125.29	119.90
57	BB	1543	G	C2-N3-C4	-7.70	108.05	111.90
21	AA	592	G	C2-N3-C4	-7.70	108.05	111.90
21	AA	1215	G	C6-C5-N7	-7.70	125.78	130.40
57	BB	141	G	C6-C5-N7	-7.70	125.78	130.40
21	AA	64	G	O4'-C1'-N9	7.70	114.36	108.20
21	AA	320	A	N1-C2-N3	7.70	133.15	129.30
21	AA	1377	A	O4'-C1'-N9	7.70	114.36	108.20
57	BB	733	G	C4-C5-N7	-7.70	107.72	110.80
57	BB	1559	U	O4'-C1'-N1	7.70	114.36	108.20
57	BB	1720	U	C6-N1-C2	-7.70	116.38	121.00
57	BB	2231	U	C6-N1-C2	-7.70	116.38	121.00
57	BB	2802	G	C2-N3-C4	-7.70	108.05	111.90
21	AA	9	G	C8-N9-C4	-7.70	103.32	106.40
21	AA	50	A	N3-C4-C5	-7.70	121.41	126.80
21	AA	451	A	N1-C2-N3	-7.70	125.45	129.30
21	AA	574	A	C6-N1-C2	7.70	123.22	118.60
21	AA	836	G	C5-C6-O6	-7.70	123.98	128.60
57	BB	711	G	C8-N9-C4	-7.70	103.32	106.40
57	BB	1004	U	N1-C2-N3	7.70	119.52	114.90
21	AA	783	C	P-O3'-C3'	-7.70	110.46	119.70
57	BB	2205	A	O4'-C1'-N9	7.70	114.36	108.20
57	BB	2329	U	N3-C4-O4	7.70	124.79	119.40
57	BB	2766	A	C2-N3-C4	-7.70	106.75	110.60
33	BN	111	ALA	CB-CA-C	-7.70	98.56	110.10
57	BB	1352	U	O4'-C1'-N1	7.70	114.36	108.20
57	BB	2014	A	C8-N9-C4	-7.70	102.72	105.80
21	AA	193	C	N3-C4-N4	7.69	123.39	118.00
21	AA	524	G	N1-C6-O6	7.69	124.52	119.90
21	AA	564	C	N3-C4-N4	7.69	123.39	118.00
21	AA	703	G	C2-N3-C4	7.69	115.75	111.90
23	AW	34	G	C6-C5-N7	-7.69	125.78	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1794	A	N1-C2-N3	7.69	133.15	129.30
21	AA	881	G	C5-C6-N1	-7.69	107.65	111.50
23	AW	31	A	C6-N1-C2	-7.69	113.98	118.60
57	BB	310	A	C5-N7-C8	7.69	107.75	103.90
57	BB	2528	U	O4'-C1'-N1	7.69	114.35	108.20
21	AA	1139	G	N3-C4-N9	-7.69	121.39	126.00
57	BB	1376	C	O4'-C1'-N1	7.69	114.35	108.20
57	BB	2091	C	N3-C4-N4	7.69	123.38	118.00
57	BB	2458	G	N1-C6-O6	7.69	124.51	119.90
21	AA	1301	U	C6-N1-C2	-7.69	116.39	121.00
57	BB	24	G	N1-C6-O6	7.69	124.51	119.90
57	BB	681	G	C5-C6-O6	-7.69	123.99	128.60
57	BB	845	A	O4'-C1'-N9	7.69	114.35	108.20
57	BB	1107	G	C4-C5-C6	7.69	123.41	118.80
57	BB	2854	G	N3-C2-N2	7.69	125.28	119.90
21	AA	126	G	C5-C6-N1	-7.69	107.66	111.50
21	AA	351	G	C5-C6-O6	-7.69	123.99	128.60
21	AA	419	C	C5-C6-N1	7.69	124.84	121.00
57	BB	404	A	C2-N3-C4	-7.69	106.76	110.60
57	BB	421	C	C5-C6-N1	7.69	124.84	121.00
57	BB	1155	A	N1-C6-N6	7.69	123.21	118.60
57	BB	1324	G	C5-C6-O6	-7.69	123.99	128.60
57	BB	1429	G	N7-C8-N9	7.69	116.94	113.10
57	BB	2252	G	N1-C2-N3	-7.69	119.29	123.90
57	BB	2823	A	C4-C5-C6	7.69	120.84	117.00
21	AA	296	U	C6-N1-C2	-7.69	116.39	121.00
21	AA	1481	U	N3-C4-O4	7.69	124.78	119.40
22	AY	44	A	C1'-O4'-C4'	-7.69	103.75	109.90
21	AA	148	G	C5-C6-N1	-7.68	107.66	111.50
21	AA	1130	A	C4-C5-C6	7.68	120.84	117.00
57	BB	402	A	C6-N1-C2	-7.68	113.99	118.60
57	BB	790	U	N3-C2-O2	7.68	127.58	122.20
57	BB	2651	C	C2-N1-C1'	-7.68	110.35	118.80
57	BB	2668	G	C4-C5-N7	-7.68	107.73	110.80
21	AA	297	G	C5-C6-N1	-7.68	107.66	111.50
21	AA	1363	A	C4-C5-C6	7.68	120.84	117.00
57	BB	24	G	C8-N9-C4	-7.68	103.33	106.40
57	BB	209	C	O4'-C1'-N1	7.68	114.35	108.20
57	BB	1337	G	C6-N1-C2	7.68	129.71	125.10
21	AA	344	A	C5-C6-N6	-7.68	117.56	123.70
21	AA	733	G	N1-C6-O6	7.68	124.51	119.90
23	AW	29	G	C8-N9-C4	7.68	109.47	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	BI	124	MET	CG-SD-CE	-7.68	87.91	100.20
57	BB	1430	G	N1-C2-N3	-7.68	119.29	123.90
21	AA	962	C	N3-C4-C5	-7.68	118.83	121.90
21	AA	1515	G	N1-C2-N3	-7.68	119.29	123.90
23	AW	34	G	C5-C6-N1	-7.68	107.66	111.50
57	BB	194	G	C5-C6-N1	-7.68	107.66	111.50
57	BB	370	G	N1-C2-N3	-7.68	119.29	123.90
57	BB	751	A	C5-C6-N1	-7.68	113.86	117.70
57	BB	1353	A	C4-C5-C6	7.68	120.84	117.00
57	BB	1632	A	O4'-C1'-N9	7.68	114.34	108.20
57	BB	1803	A	C5-N7-C8	7.68	107.74	103.90
57	BB	1987	A	P-O5'-C5'	-7.68	108.61	120.90
57	BB	168	G	P-O5'-C5'	7.68	133.19	120.90
26	AV	26	G	C5-C6-O6	-7.68	123.99	128.60
32	BM	66	ARG	NE-CZ-NH2	-7.68	116.46	120.30
57	BB	714	U	P-O3'-C3'	7.68	128.91	119.70
57	BB	901	C	N3-C4-N4	7.68	123.37	118.00
21	AA	847	G	O4'-C1'-N9	7.67	114.34	108.20
21	AA	929	G	O4'-C1'-N9	7.67	114.34	108.20
21	AA	950	U	C5-C6-N1	-7.67	118.86	122.70
21	AA	1204	A	C2-N3-C4	-7.67	106.76	110.60
57	BB	61	C	C6-N1-C2	-7.67	117.23	120.30
57	BB	279	A	O4'-C1'-N9	7.67	114.34	108.20
57	BB	670	A	C5-N7-C8	7.67	107.74	103.90
57	BB	1743	G	C5-C6-O6	-7.67	124.00	128.60
57	BB	1960	A	C4-C5-C6	7.67	120.84	117.00
57	BB	2116	G	C5-C6-N1	-7.67	107.66	111.50
58	BA	10	G	C5-N7-C8	7.67	108.14	104.30
58	BA	13	G	N1-C6-O6	7.67	124.50	119.90
21	AA	1081	A	C4-C5-C6	7.67	120.84	117.00
57	BB	501	A	C5-C6-N1	-7.67	113.86	117.70
57	BB	2040	G	N1-C2-N3	-7.67	119.30	123.90
21	AA	1523	G	C8-N9-C4	-7.67	103.33	106.40
22	AY	3	G	C8-N9-C4	-7.67	103.33	106.40
22	AY	71	G	C5-N7-C8	7.67	108.14	104.30
26	AV	4	G	C5-C6-N1	-7.67	107.66	111.50
57	BB	308	G	N1-C2-N3	-7.67	119.30	123.90
57	BB	382	A	C4-C5-C6	7.67	120.83	117.00
57	BB	1016	G	N3-C2-N2	7.67	125.27	119.90
57	BB	2751	G	N1-C2-N3	-7.67	119.30	123.90
57	BB	2883	A	C5-N7-C8	7.67	107.73	103.90
21	AA	534	U	N1-C2-N3	-7.67	110.30	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	828	U	C2-N3-C4	-7.67	122.40	127.00
21	AA	1096	C	O4'-C1'-N1	7.67	114.33	108.20
21	AA	1150	A	C5-C6-N6	-7.67	117.57	123.70
21	AA	1304	G	N1-C2-N3	-7.67	119.30	123.90
22	AY	76	A	N1-C2-N3	7.67	133.13	129.30
57	BB	1157	G	N9-C4-C5	-7.67	102.33	105.40
57	BB	1535	A	P-O5'-C5'	7.67	133.17	120.90
57	BB	1637	A	N9-C4-C5	7.67	108.87	105.80
57	BB	1780	A	N7-C8-N9	-7.67	109.97	113.80
57	BB	2209	G	C5-C6-N1	-7.67	107.67	111.50
21	AA	440	C	N1-C1'-C2'	-7.67	103.57	112.00
21	AA	897	C	N3-C4-C5	-7.67	118.83	121.90
21	AA	1111	A	C4-C5-C6	7.67	120.83	117.00
21	AA	1136	C	C2-N3-C4	7.67	123.73	119.90
57	BB	2570	G	C4-C5-N7	7.67	113.87	110.80
57	BB	2767	C	C2-N3-C4	7.67	123.73	119.90
57	BB	2893	A	N7-C8-N9	-7.67	109.97	113.80
57	BB	1767	G	N3-C4-C5	-7.67	124.77	128.60
57	BB	2570	G	C8-N9-C4	7.67	109.47	106.40
57	BB	2586	U	O4'-C1'-N1	7.67	114.33	108.20
21	AA	344	A	N1-C2-N3	7.66	133.13	129.30
21	AA	1446	A	O4'-C1'-N9	7.66	114.33	108.20
23	AW	18	G	C8-N9-C4	-7.66	103.33	106.40
57	BB	712	G	C8-N9-C4	-7.66	103.33	106.40
57	BB	1059	G	C4-C5-C6	7.66	123.40	118.80
57	BB	1348	C	N3-C4-N4	7.66	123.36	118.00
57	BB	1728	C	C5-C4-N4	-7.66	114.84	120.20
57	BB	2277	G	N3-C2-N2	7.66	125.26	119.90
57	BB	2843	G	C5-C6-O6	-7.66	124.00	128.60
21	AA	1262	C	N3-C4-N4	7.66	123.36	118.00
57	BB	828	U	N3-C2-O2	-7.66	116.84	122.20
57	BB	1543	G	C5-C6-O6	-7.66	124.00	128.60
58	BA	76	G	C6-C5-N7	-7.66	125.80	130.40
19	AH	23	ALA	N-CA-CB	7.66	120.83	110.10
21	AA	1139	G	C6-C5-N7	-7.66	125.80	130.40
22	AY	40	C	C4'-C3'-C2'	-7.66	94.94	102.60
57	BB	13	A	C1'-O4'-C4'	7.66	116.03	109.90
57	BB	266	G	N9-C4-C5	-7.66	102.34	105.40
57	BB	1300	G	C4-C5-C6	-7.66	114.20	118.80
57	BB	2536	G	N1-C2-N3	-7.66	119.30	123.90
21	AA	691	G	O4'-C1'-N9	7.66	114.33	108.20
21	AA	1201	A	C5-C6-N1	-7.66	113.87	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	87	U	O4'-C1'-N1	7.66	114.33	108.20
57	BB	884	U	C6-N1-C2	-7.66	116.41	121.00
57	BB	1635	A	C6-C5-N7	-7.66	126.94	132.30
57	BB	2121	G	C4'-C3'-C2'	-7.66	94.94	102.60
57	BB	2623	G	N7-C8-N9	7.66	116.93	113.10
21	AA	134	G	N9-C4-C5	7.66	108.46	105.40
21	AA	446	G	C6-N1-C2	7.66	129.69	125.10
57	BB	411	G	N1-C6-O6	7.66	124.49	119.90
57	BB	548	G	N1-C2-N2	-7.66	109.31	116.20
57	BB	590	A	C6-C5-N7	-7.66	126.94	132.30
57	BB	709	U	N1-C2-N3	7.66	119.49	114.90
57	BB	714	U	OP1-P-OP2	-7.66	108.12	119.60
57	BB	1964	G	N1-C2-N3	-7.66	119.31	123.90
58	BA	15	A	O4'-C1'-N9	7.66	114.33	108.20
21	AA	781	A	C5-C6-N1	-7.65	113.87	117.70
57	BB	86	G	C5-C6-N1	-7.65	107.67	111.50
57	BB	1006	C	P-O3'-C3'	-7.65	110.52	119.70
21	AA	548	G	N9-C4-C5	-7.65	102.34	105.40
21	AA	700	G	N1-C6-O6	7.65	124.49	119.90
38	BS	95	ARG	NH1-CZ-NH2	7.65	127.82	119.40
57	BB	595	C	C5-C4-N4	-7.65	114.84	120.20
57	BB	1167	C	C4-C5-C6	7.65	121.23	117.40
57	BB	2331	G	C8-N9-C4	-7.65	103.34	106.40
57	BB	2462	C	O4'-C1'-N1	7.65	114.32	108.20
57	BB	2713	U	C5-C4-O4	-7.65	121.31	125.90
21	AA	487	A	C4-C5-C6	7.65	120.83	117.00
57	BB	960	A	C4-C5-N7	-7.65	106.88	110.70
57	BB	1699	G	N7-C8-N9	7.65	116.93	113.10
57	BB	1722	A	O4'-C1'-N9	7.65	114.32	108.20
21	AA	491	G	N3-C4-N9	-7.65	121.41	126.00
21	AA	966	G	C6-C5-N7	-7.65	125.81	130.40
21	AA	1348	U	O4'-C1'-N1	7.65	114.32	108.20
57	BB	903	C	N3-C4-C5	-7.65	118.84	121.90
58	BA	96	G	C6-C5-N7	-7.65	125.81	130.40
23	AW	56	C	C5-C6-N1	-7.65	117.18	121.00
24	AX	19	U	O4'-C1'-N1	7.65	114.32	108.20
26	AV	31	G	N1-C2-N3	-7.65	119.31	123.90
57	BB	187	G	C4-C5-C6	7.65	123.39	118.80
57	BB	619	G	O4'-C1'-N9	7.65	114.32	108.20
57	BB	1072	C	O4'-C1'-N1	7.65	114.32	108.20
57	BB	1163	G	N3-C4-N9	7.65	130.59	126.00
57	BB	1385	A	C4-C5-C6	7.65	120.82	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2564	A	O4'-C1'-N9	7.65	114.32	108.20
57	BB	1731	G	C4-C5-N7	7.65	113.86	110.80
26	AV	14	A	N3-C4-C5	-7.64	121.45	126.80
57	BB	427	U	O4'-C1'-N1	7.64	114.32	108.20
57	BB	1269	A	N9-C4-C5	7.64	108.86	105.80
57	BB	1946	U	C5-C6-N1	-7.64	118.88	122.70
57	BB	2283	C	C5-C4-N4	-7.64	114.85	120.20
21	AA	136	C	N3-C4-N4	7.64	123.35	118.00
21	AA	292	G	N9-C4-C5	-7.64	102.34	105.40
21	AA	1518	A	C8-N9-C4	-7.64	102.74	105.80
57	BB	623	C	C2-N3-C4	-7.64	116.08	119.90
57	BB	995	C	O4'-C1'-N1	7.64	114.31	108.20
57	BB	2469	A	N9-C4-C5	7.64	108.86	105.80
21	AA	842	U	C5-C4-O4	-7.64	121.31	125.90
57	BB	59	U	C4-C5-C6	-7.64	115.12	119.70
57	BB	1238	G	O4'-C1'-N9	7.64	114.31	108.20
57	BB	1205	A	C5-C6-N6	-7.64	117.59	123.70
57	BB	1631	G	P-O3'-C3'	-7.64	110.53	119.70
57	BB	1676	A	O4'-C1'-N9	7.64	114.31	108.20
57	BB	1777	U	O4'-C1'-N1	7.64	114.31	108.20
57	BB	2224	G	N7-C8-N9	7.64	116.92	113.10
57	BB	2643	G	C4-C5-N7	7.64	113.86	110.80
57	BB	862	G	C4-C5-C6	7.64	123.38	118.80
57	BB	2373	G	N1-C2-N3	-7.64	119.32	123.90
21	AA	338	A	C2-N3-C4	-7.64	106.78	110.60
57	BB	473	G	C5-C6-O6	-7.64	124.02	128.60
57	BB	711	G	C6-C5-N7	-7.64	125.82	130.40
57	BB	1847	A	P-O3'-C3'	7.64	128.86	119.70
57	BB	2373	G	C4-C5-N7	-7.64	107.75	110.80
21	AA	779	C	O4'-C1'-N1	7.63	114.31	108.20
26	AV	37	A	C6-N1-C2	-7.63	114.02	118.60
26	AV	71	C	C5-C4-N4	-7.63	114.86	120.20
57	BB	522	A	N1-C6-N6	7.63	123.18	118.60
57	BB	558	U	C2-N3-C4	7.63	131.58	127.00
57	BB	1812	U	C6-N1-C2	7.63	125.58	121.00
57	BB	2579	C	N3-C4-C5	-7.63	118.85	121.90
57	BB	2820	A	C5-C6-N1	-7.63	113.88	117.70
21	AA	781	A	C6-C5-N7	-7.63	126.96	132.30
57	BB	765	C	C5-C4-N4	-7.63	114.86	120.20
57	BB	993	G	O4'-C1'-N9	7.63	114.31	108.20
57	BB	1289	C	C2-N1-C1'	7.63	127.20	118.80
21	AA	124	C	N1-C2-O2	7.63	123.48	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	998	C	C5-C6-N1	7.63	124.81	121.00
21	AA	1246	A	C4'-C3'-C2'	-7.63	94.97	102.60
30	BK	63	ARG	NE-CZ-NH1	-7.63	116.48	120.30
57	BB	393	C	N3-C4-C5	-7.63	118.85	121.90
57	BB	631	A	C5-C6-N6	-7.63	117.60	123.70
57	BB	1342	A	C5-C6-N6	-7.63	117.60	123.70
21	AA	437	U	O4'-C1'-N1	7.63	114.30	108.20
21	AA	722	G	O4'-C1'-N9	7.63	114.30	108.20
21	AA	1221	G	O4'-C4'-C3'	-7.63	96.37	104.00
57	BB	1114	C	C6-N1-C2	-7.63	117.25	120.30
57	BB	1653	G	C4-C5-C6	7.63	123.38	118.80
57	BB	1879	C	N3-C4-N4	7.63	123.34	118.00
57	BB	1957	C	O4'-C1'-N1	7.63	114.30	108.20
57	BB	2258	C	C5-C4-N4	-7.63	114.86	120.20
57	BB	2317	A	C6-N1-C2	-7.63	114.02	118.60
21	AA	152	A	C4-C5-C6	7.63	120.81	117.00
21	AA	597	G	C2-N3-C4	-7.63	108.09	111.90
21	AA	944	G	C6-N1-C2	7.63	129.68	125.10
21	AA	1102	A	O4'-C1'-N9	7.63	114.30	108.20
21	AA	1443	C	N3-C4-N4	7.63	123.34	118.00
57	BB	131	A	C5-C6-N1	-7.63	113.89	117.70
57	BB	1527	G	C6-C5-N7	-7.63	125.82	130.40
57	BB	2583	G	C2-N3-C4	-7.63	108.09	111.90
57	BB	2796	U	O4'-C1'-N1	7.63	114.30	108.20
21	AA	57	G	N7-C8-N9	7.62	116.91	113.10
21	AA	1501	C	N3-C4-N4	7.62	123.34	118.00
57	BB	352	A	C5-C6-N1	-7.62	113.89	117.70
57	BB	1262	A	C5-C6-N6	-7.62	117.60	123.70
57	BB	255	A	C4-C5-N7	-7.62	106.89	110.70
57	BB	2217	G	C8-N9-C1'	7.62	136.91	127.00
57	BB	2272	U	C5-C6-N1	7.62	126.51	122.70
21	AA	126	G	C8-N9-C4	7.62	109.45	106.40
21	AA	989	U	C6-N1-C2	-7.62	116.43	121.00
21	AA	1167	A	C2-N3-C4	-7.62	106.79	110.60
23	AW	52	G	O4'-C1'-N9	7.62	114.30	108.20
57	BB	470	A	N9-C4-C5	-7.62	102.75	105.80
57	BB	614	A	C4-C5-C6	7.62	120.81	117.00
57	BB	1865	U	C5-C4-O4	-7.62	121.33	125.90
57	BB	2411	A	N3-C4-C5	-7.62	121.47	126.80
57	BB	2898	U	C5'-C4'-C3'	-7.62	103.81	116.00
21	AA	1327	C	C6-N1-C2	-7.62	117.25	120.30
21	AA	1450	U	O4'-C1'-N1	7.62	114.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	663	G	N7-C8-N9	7.62	116.91	113.10
57	BB	1833	C	C5-C6-N1	7.62	124.81	121.00
57	BB	1938	A	C2-N3-C4	7.62	114.41	110.60
57	BB	2513	A	C6-C5-N7	-7.62	126.97	132.30
57	BB	2564	A	C5-C6-N1	-7.62	113.89	117.70
57	BB	2763	G	N3-C2-N2	7.62	125.23	119.90
21	AA	340	U	O4'-C1'-N1	7.62	114.29	108.20
57	BB	1230	A	N1-C6-N6	7.62	123.17	118.60
57	BB	2190	G	P-O3'-C3'	-7.62	110.56	119.70
57	BB	2345	G	C2-N3-C4	7.62	115.71	111.90
57	BB	2396	G	N1-C2-N3	-7.62	119.33	123.90
57	BB	2735	G	N1-C6-O6	7.62	124.47	119.90
58	BA	100	G	C5-C6-O6	-7.62	124.03	128.60
57	BB	1154	G	N3-C2-N2	7.62	125.23	119.90
21	AA	588	G	C8-N9-C4	-7.62	103.35	106.40
21	AA	675	A	O4'-C1'-N9	7.62	114.29	108.20
21	AA	1327	C	C5-C6-N1	7.62	124.81	121.00
57	BB	267	C	N3-C4-C5	-7.62	118.85	121.90
57	BB	553	G	C8-N9-C1'	7.62	136.90	127.00
57	BB	1645	G	N3-C2-N2	7.62	125.23	119.90
57	BB	2275	C	N1-C2-O2	-7.62	114.33	118.90
21	AA	1250	A	P-O5'-C5'	-7.61	108.72	120.90
21	AA	1324	A	C5-C6-N6	-7.61	117.61	123.70
26	AV	22	G	C8-N9-C4	-7.61	103.35	106.40
57	BB	481	G	C4-C5-N7	7.61	113.84	110.80
57	BB	962	G	C5-C6-O6	-7.61	124.03	128.60
57	BB	1429	G	N3-C2-N2	7.61	125.23	119.90
57	BB	362	A	C5-C6-N1	-7.61	113.89	117.70
57	BB	368	A	O4'-C1'-N9	7.61	114.29	108.20
57	BB	968	C	N3-C4-C5	-7.61	118.86	121.90
57	BB	2711	A	C5-C6-N6	-7.61	117.61	123.70
21	AA	572	A	C5-N7-C8	7.61	107.70	103.90
21	AA	1449	C	O4'-C1'-N1	7.61	114.29	108.20
57	BB	252	G	N9-C4-C5	7.61	108.44	105.40
57	BB	374	A	C2-N3-C4	7.61	114.41	110.60
57	BB	2036	C	C5-C6-N1	7.61	124.81	121.00
57	BB	2602	A	N7-C8-N9	-7.61	109.99	113.80
57	BB	2900	A	N9-C4-C5	-7.61	102.76	105.80
18	AG	114	SER	C-N-CA	7.61	140.72	121.70
21	AA	11	G	N3-C4-N9	-7.61	121.44	126.00
21	AA	1203	C	N3-C4-N4	7.61	123.33	118.00
21	AA	1428	A	N9-C4-C5	-7.61	102.76	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1012	U	N3-C4-C5	7.61	119.17	114.60
58	BA	107	G	C5-C6-O6	-7.61	124.03	128.60
21	AA	5	U	OP1-P-OP2	-7.61	108.19	119.60
27	B5	7	ARG	NE-CZ-NH2	-7.61	116.50	120.30
57	BB	1044	C	N3-C4-N4	7.61	123.33	118.00
57	BB	1120	G	C8-N9-C4	-7.61	103.36	106.40
57	BB	1656	C	N3-C4-N4	7.61	123.33	118.00
57	BB	1679	A	C5-N7-C8	7.61	107.70	103.90
57	BB	2151	U	C5-C4-O4	-7.61	121.34	125.90
57	BB	2623	G	N3-C4-C5	-7.61	124.80	128.60
21	AA	725	G	N9-C4-C5	7.61	108.44	105.40
21	AA	1439	G	N7-C8-N9	7.61	116.90	113.10
57	BB	659	G	N1-C2-N3	-7.61	119.34	123.90
57	BB	705	A	N1-C6-N6	7.61	123.16	118.60
57	BB	921	C	C5-C6-N1	7.61	124.80	121.00
57	BB	1296	G	O4'-C1'-N9	7.61	114.28	108.20
57	BB	1840	G	N3-C2-N2	7.61	125.22	119.90
21	AA	285	C	N3-C4-C5	-7.60	118.86	121.90
21	AA	980	C	C4'-C3'-C2'	-7.60	95.00	102.60
21	AA	311	C	O4'-C1'-N1	7.60	114.28	108.20
21	AA	1231	G	C8-N9-C4	-7.60	103.36	106.40
21	AA	1256	A	C5-C6-N1	-7.60	113.90	117.70
21	AA	1261	A	C5-C6-N6	-7.60	117.62	123.70
57	BB	97	C	N3-C4-N4	7.60	123.32	118.00
57	BB	1232	G	N3-C4-C5	-7.60	124.80	128.60
57	BB	1673	G	C4-C5-N7	7.60	113.84	110.80
57	BB	2003	A	C5-N7-C8	7.60	107.70	103.90
57	BB	2029	G	N3-C2-N2	7.60	125.22	119.90
21	AA	328	C	N1-C2-N3	-7.60	113.88	119.20
21	AA	776	G	N1-C6-O6	7.60	124.46	119.90
21	AA	1324	A	O4'-C1'-N9	7.60	114.28	108.20
57	BB	181	A	C5-N7-C8	7.60	107.70	103.90
57	BB	218	A	C5-C6-N6	-7.60	117.62	123.70
57	BB	1674	G	N1-C6-O6	7.60	124.46	119.90
57	BB	2016	U	N3-C4-O4	7.60	124.72	119.40
21	AA	377	G	C8-N9-C4	-7.60	103.36	106.40
21	AA	925	G	N9-C4-C5	-7.60	102.36	105.40
21	AA	1328	C	N3-C4-C5	-7.60	118.86	121.90
57	BB	807	U	O4'-C1'-N1	7.60	114.28	108.20
57	BB	1567	G	C5-C6-O6	-7.60	124.04	128.60
57	BB	1955	U	O4'-C1'-N1	7.60	114.28	108.20
57	BB	2541	A	C6-C5-N7	-7.60	126.98	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2682	A	C4-C5-C6	7.60	120.80	117.00
57	BB	141	G	O4'-C1'-N9	7.60	114.28	108.20
57	BB	229	C	O4'-C1'-N1	7.60	114.28	108.20
57	BB	2641	G	C5-C6-N1	-7.60	107.70	111.50
21	AA	380	G	O4'-C1'-N9	7.59	114.28	108.20
21	AA	1318	A	C5-C6-N6	-7.59	117.62	123.70
36	BQ	103	VAL	CG1-CB-CG2	7.59	123.05	110.90
57	BB	496	G	O4'-C1'-N9	7.59	114.28	108.20
57	BB	1917	U	O4'-C1'-N1	7.59	114.28	108.20
57	BB	2713	U	P-O3'-C3'	7.59	128.81	119.70
57	BB	2833	U	P-O3'-C3'	7.59	128.81	119.70
21	AA	203	G	O4'-C1'-N9	7.59	114.27	108.20
21	AA	566	G	C5-C6-O6	-7.59	124.05	128.60
21	AA	1105	A	C5-N7-C8	7.59	107.70	103.90
24	AX	22	A	C5-C6-N1	-7.59	113.91	117.70
57	BB	669	G	P-O3'-C3'	7.59	128.81	119.70
57	BB	704	G	O4'-C1'-N9	7.59	114.27	108.20
57	BB	867	C	N3-C4-C5	-7.59	118.86	121.90
57	BB	1924	C	O4'-C1'-N1	7.59	114.27	108.20
21	AA	1066	C	N3-C4-C5	-7.59	118.86	121.90
21	AA	1120	C	C2-N3-C4	7.59	123.69	119.90
21	AA	1327	C	O4'-C1'-N1	7.59	114.27	108.20
21	AA	1533	C	O4'-C1'-N1	7.59	114.27	108.20
57	BB	2	G	C6-C5-N7	-7.59	125.85	130.40
57	BB	518	G	N1-C2-N3	-7.59	119.35	123.90
57	BB	94	A	C5-C6-N6	-7.59	117.63	123.70
57	BB	101	A	C5-C6-N6	-7.59	117.63	123.70
57	BB	750	A	N3-C4-C5	-7.59	121.49	126.80
21	AA	941	G	C5-C6-N1	-7.59	107.71	111.50
21	AA	1511	G	P-O3'-C3'	-7.59	110.60	119.70
26	AV	19	G	C5-C6-N1	-7.59	107.71	111.50
57	BB	274	C	O4'-C1'-N1	7.59	114.27	108.20
57	BB	643	A	N1-C2-N3	-7.59	125.51	129.30
57	BB	1484	U	N1-C2-O2	-7.59	117.49	122.80
57	BB	1913	A	C8-N9-C4	-7.59	102.77	105.80
57	BB	2148	G	C4'-C3'-C2'	-7.59	95.01	102.60
57	BB	2867	G	N3-C2-N2	7.59	125.21	119.90
21	AA	846	G	O4'-C1'-N9	7.58	114.27	108.20
22	AY	35	A	C5-C6-N6	-7.58	117.63	123.70
57	BB	216	A	N3-C4-C5	-7.58	121.49	126.80
57	BB	1445	G	N3-C4-C5	7.58	132.39	128.60
57	BB	1460	U	O5'-P-OP2	-7.58	98.87	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	366	A	C8-N9-C4	-7.58	102.77	105.80
21	AA	774	G	N3-C2-N2	7.58	125.21	119.90
21	AA	922	G	C5-N7-C8	7.58	108.09	104.30
21	AA	1092	A	C4-C5-C6	7.58	120.79	117.00
22	AY	75	C	N3-C4-N4	7.58	123.31	118.00
57	BB	82	U	C3'-C2'-C1'	-7.58	95.43	101.50
21	AA	108	G	C5-C6-O6	-7.58	124.05	128.60
21	AA	225	C	O4'-C1'-N1	7.58	114.27	108.20
21	AA	1270	G	C5-C6-N1	-7.58	107.71	111.50
21	AA	1487	G	C8-N9-C1'	7.58	136.86	127.00
28	BI	133	ARG	NE-CZ-NH2	-7.58	116.51	120.30
57	BB	387	U	C5-C4-O4	-7.58	121.35	125.90
57	BB	825	A	C4-C5-C6	7.58	120.79	117.00
57	BB	1261	C	C5-C6-N1	7.58	124.79	121.00
57	BB	1911	U	C6-N1-C2	-7.58	116.45	121.00
57	BB	2207	C	C4-C5-C6	7.58	121.19	117.40
57	BB	2566	A	C4-C5-C6	7.58	120.79	117.00
15	AD	102	TYR	CB-CG-CD1	7.58	125.55	121.00
21	AA	1132	C	N3-C4-C5	-7.58	118.87	121.90
57	BB	373	U	N1-C2-O2	-7.58	117.50	122.80
57	BB	664	G	C6-C5-N7	-7.58	125.85	130.40
57	BB	684	G	N1-C2-N3	-7.58	119.35	123.90
57	BB	985	C	N3-C4-C5	-7.58	118.87	121.90
57	BB	2823	A	N7-C8-N9	7.58	117.59	113.80
21	AA	353	A	P-O3'-C3'	7.58	128.79	119.70
57	BB	1181	U	C5-C6-N1	-7.58	118.91	122.70
57	BB	2413	G	C5-C6-N1	-7.58	107.71	111.50
57	BB	2616	C	N3-C4-C5	-7.58	118.87	121.90
21	AA	123	U	O4'-C1'-N1	7.58	114.26	108.20
21	AA	455	G	N9-C4-C5	-7.58	102.37	105.40
21	AA	1155	A	C4-C5-N7	-7.58	106.91	110.70
21	AA	1213	A	N9-C4-C5	-7.58	102.77	105.80
27	B5	92	ALA	N-CA-CB	7.58	120.70	110.10
57	BB	1129	A	C5'-C4'-O4'	7.58	118.19	109.10
57	BB	1758	U	O4'-C1'-N1	7.58	114.26	108.20
57	BB	1826	G	N1-C2-N3	-7.58	119.35	123.90
21	AA	35	G	N1-C6-O6	7.57	124.44	119.90
21	AA	831	A	C4-C5-C6	7.57	120.79	117.00
21	AA	1284	C	C6-N1-C2	-7.57	117.27	120.30
21	AA	1406	U	O4'-C1'-N1	7.57	114.26	108.20
57	BB	218	A	O4'-C1'-N9	7.57	114.26	108.20
57	BB	630	G	O4'-C1'-N9	7.57	114.26	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	71	A	C5-N7-C8	7.57	107.69	103.90
57	BB	2498	C	C5-C4-N4	-7.57	114.90	120.20
21	AA	1526	G	C5-N7-C8	7.57	108.09	104.30
23	AW	70	G	N3-C2-N2	7.57	125.20	119.90
57	BB	450	G	C6-C5-N7	-7.57	125.86	130.40
57	BB	1047	G	N3-C4-C5	-7.57	124.81	128.60
57	BB	1285	A	N7-C8-N9	-7.57	110.02	113.80
57	BB	1391	U	C2-N3-C4	7.57	131.54	127.00
57	BB	1947	C	C5-C6-N1	7.57	124.78	121.00
57	BB	2534	A	N9-C4-C5	7.57	108.83	105.80
57	BB	2566	A	N7-C8-N9	-7.57	110.02	113.80
57	BB	2829	A	N9-C4-C5	7.57	108.83	105.80
21	AA	332	G	N1-C6-O6	7.57	124.44	119.90
57	BB	465	G	C4-C5-C6	7.57	123.34	118.80
57	BB	648	G	N1-C2-N3	-7.57	119.36	123.90
57	BB	1016	G	C8-N9-C4	-7.57	103.37	106.40
57	BB	1755	A	C5-C6-N6	-7.57	117.64	123.70
57	BB	1843	C	O4'-C1'-N1	7.57	114.26	108.20
57	BB	2532	G	N3-C4-C5	-7.57	124.81	128.60
57	BB	2669	G	C4-C5-C6	7.57	123.34	118.80
57	BB	2792	A	C2-N3-C4	-7.57	106.81	110.60
21	AA	126	G	N7-C8-N9	-7.57	109.32	113.10
21	AA	592	G	N1-C6-O6	7.57	124.44	119.90
21	AA	1208	C	N3-C4-C5	-7.57	118.87	121.90
52	BD	197	THR	N-CA-CB	7.57	124.68	110.30
57	BB	275	C	C6-N1-C2	-7.57	117.27	120.30
57	BB	428	A	C5-C6-N1	-7.57	113.92	117.70
57	BB	473	G	C5-N7-C8	7.57	108.08	104.30
57	BB	959	A	O4'-C1'-N9	7.57	114.25	108.20
57	BB	1748	C	N3-C4-C5	-7.57	118.87	121.90
57	BB	1770	G	N7-C8-N9	7.57	116.88	113.10
57	BB	2115	G	C4-C5-N7	-7.57	107.77	110.80
21	AA	107	G	C4-C5-N7	-7.57	107.77	110.80
21	AA	1322	C	C2-N3-C4	7.57	123.68	119.90
21	AA	1493	A	N9-C4-C5	-7.57	102.77	105.80
57	BB	1418	G	N9-C4-C5	-7.57	102.37	105.40
57	BB	1661	G	N9-C4-C5	-7.57	102.37	105.40
57	BB	1745	A	C4-C5-N7	-7.57	106.92	110.70
57	BB	1762	A	N1-C6-N6	7.57	123.14	118.60
57	BB	1981	A	N9-C4-C5	-7.57	102.77	105.80
57	BB	2795	C	O4'-C1'-N1	7.57	114.25	108.20
21	AA	23	C	C3'-C2'-C1'	-7.56	95.45	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	58	A	N1-C6-N6	7.56	123.14	118.60
57	BB	114	U	N3-C4-O4	7.56	124.69	119.40
57	BB	1416	G	N3-C4-N9	-7.56	121.46	126.00
57	BB	1730	C	N3-C4-N4	7.56	123.30	118.00
57	BB	2108	A	O4'-C1'-N9	7.56	114.25	108.20
21	AA	25	C	N1-C1'-C2'	-7.56	103.68	112.00
21	AA	52	C	O4'-C1'-N1	7.56	114.25	108.20
21	AA	152	A	C5-N7-C8	7.56	107.68	103.90
21	AA	934	C	O4'-C1'-N1	7.56	114.25	108.20
21	AA	1074	G	N3-C2-N2	7.56	125.19	119.90
57	BB	898	C	O4'-C1'-N1	7.56	114.25	108.20
57	BB	1504	A	O4'-C1'-N9	7.56	114.25	108.20
58	BA	76	G	C4-C5-C6	7.56	123.34	118.80
21	AA	167	A	N1-C2-N3	7.56	133.08	129.30
28	BI	61	TYR	CB-CG-CD2	-7.56	116.46	121.00
57	BB	127	A	C6-C5-N7	-7.56	127.01	132.30
21	AA	389	A	C4-C5-C6	7.56	120.78	117.00
21	AA	502	A	C5-C6-N6	-7.56	117.65	123.70
21	AA	912	C	O4'-C1'-N1	7.56	114.25	108.20
21	AA	1164	G	C6-C5-N7	-7.56	125.86	130.40
57	BB	18	U	N3-C4-C5	-7.56	110.06	114.60
57	BB	185	G	O4'-C1'-N9	7.56	114.25	108.20
57	BB	414	C	C5'-C4'-C3'	7.56	128.10	116.00
57	BB	817	C	C6-N1-C2	-7.56	117.28	120.30
57	BB	2198	A	N3-C4-N9	7.56	133.45	127.40
57	BB	2389	G	N1-C2-N3	-7.56	119.36	123.90
21	AA	179	A	N9-C4-C5	7.56	108.82	105.80
21	AA	199	A	N9-C4-C5	-7.56	102.78	105.80
21	AA	338	A	C8-N9-C4	-7.56	102.78	105.80
26	AV	40	C	C2-N3-C4	7.56	123.68	119.90
57	BB	649	G	N3-C4-C5	-7.56	124.82	128.60
57	BB	1512	C	C6-N1-C2	-7.56	117.28	120.30
57	BB	2043	C	N3-C4-N4	7.56	123.29	118.00
57	BB	2640	G	N1-C6-O6	7.56	124.44	119.90
21	AA	590	U	N3-C2-O2	7.56	127.49	122.20
21	AA	1094	G	C5-N7-C8	7.56	108.08	104.30
21	AA	1465	A	C2-N3-C4	-7.56	106.82	110.60
57	BB	244	A	C4-C5-C6	7.56	120.78	117.00
57	BB	2345	G	C4-C5-C6	7.56	123.33	118.80
21	AA	507	C	N3-C4-C5	-7.55	118.88	121.90
21	AA	1513	A	O4'-C1'-N9	7.55	114.24	108.20
22	AY	27	C	N1-C2-O2	-7.55	114.37	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	350	G	C5-C6-O6	-7.55	124.07	128.60
57	BB	512	G	P-O3'-C3'	7.55	128.77	119.70
57	BB	2169	A	C4-C5-C6	7.55	120.78	117.00
57	BB	2315	G	C5-C6-O6	-7.55	124.07	128.60
57	BB	2648	G	C6-N1-C2	7.55	129.63	125.10
21	AA	767	A	O4'-C1'-N9	7.55	114.24	108.20
22	AY	62	A	C8-N9-C4	-7.55	102.78	105.80
57	BB	216	A	N1-C2-N3	7.55	133.08	129.30
57	BB	327	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	389	G	P-O5'-C5'	-7.55	108.82	120.90
57	BB	472	A	N7-C8-N9	-7.55	110.02	113.80
57	BB	795	C	C5-C6-N1	7.55	124.78	121.00
57	BB	1717	A	N3-C4-C5	-7.55	121.51	126.80
57	BB	2664	G	N1-C6-O6	7.55	124.43	119.90
21	AA	55	A	N1-C2-N3	7.55	133.08	129.30
21	AA	1040	U	N1-C2-O2	-7.55	117.51	122.80
21	AA	1508	A	C5-C6-N6	-7.55	117.66	123.70
57	BB	307	G	P-O5'-C5'	7.55	132.98	120.90
57	BB	1394	U	P-O3'-C3'	-7.55	110.64	119.70
57	BB	2458	G	C5-C6-O6	-7.55	124.07	128.60
21	AA	560	A	C6-C5-N7	-7.55	127.02	132.30
21	AA	681	A	C6-C5-N7	-7.55	127.02	132.30
21	AA	1457	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	227	A	C2-N3-C4	7.55	114.37	110.60
57	BB	1060	U	C5-C4-O4	7.55	130.43	125.90
57	BB	1738	G	C6-C5-N7	-7.55	125.87	130.40
57	BB	2760	C	N3-C4-N4	7.55	123.28	118.00
21	AA	1369	C	C2-N3-C4	7.55	123.67	119.90
21	AA	1533	C	C5-C4-N4	-7.55	114.92	120.20
57	BB	142	A	C5-C6-N6	-7.55	117.66	123.70
57	BB	1171	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	1784	A	C3'-C2'-C1'	7.55	107.54	101.50
57	BB	2220	U	N3-C4-O4	7.55	124.68	119.40
57	BB	2412	A	C4-N9-C1'	7.55	139.89	126.30
21	AA	1034	G	N3-C2-N2	7.55	125.18	119.90
21	AA	1389	C	C2-N3-C4	7.55	123.67	119.90
23	AW	29	G	C4'-C3'-C2'	-7.55	95.05	102.60
26	AV	49	G	C3'-C2'-C1'	7.55	107.54	101.50
57	BB	301	G	C5-C6-O6	-7.55	124.07	128.60
57	BB	449	A	C2-N3-C4	-7.55	106.83	110.60
57	BB	668	A	C4-C5-C6	7.55	120.77	117.00
57	BB	820	A	C5-N7-C8	7.55	107.67	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1102	C	C4'-C3'-C2'	-7.55	95.05	102.60
57	BB	1299	G	O4'-C1'-N9	7.55	114.24	108.20
57	BB	1626	A	O4'-C1'-N9	7.55	114.24	108.20
57	BB	1726	C	C5-C6-N1	7.55	124.77	121.00
57	BB	2145	C	N3-C2-O2	7.55	127.18	121.90
57	BB	2625	G	N1-C2-N3	-7.55	119.37	123.90
21	AA	83	C	O4'-C1'-N1	7.54	114.24	108.20
57	BB	41	C	N3-C4-N4	7.54	123.28	118.00
57	BB	683	U	N1-C2-O2	-7.54	117.52	122.80
57	BB	1156	A	C4-C5-C6	7.54	120.77	117.00
21	AA	382	A	P-O3'-C3'	7.54	128.75	119.70
21	AA	1154	G	N1-C6-O6	7.54	124.43	119.90
21	AA	1359	C	C2-N3-C4	7.54	123.67	119.90
57	BB	1357	C	N1-C2-O2	-7.54	114.37	118.90
57	BB	1585	C	N3-C4-C5	-7.54	118.88	121.90
57	BB	1586	A	C6-N1-C2	7.54	123.13	118.60
57	BB	1906	G	N3-C4-N9	-7.54	121.47	126.00
57	BB	2478	A	N9-C4-C5	7.54	108.82	105.80
57	BB	2712	C	N3-C4-C5	-7.54	118.88	121.90
57	BB	2892	G	O4'-C1'-N9	7.54	114.23	108.20
21	AA	506	G	C5-C6-O6	-7.54	124.08	128.60
21	AA	1097	C	N3-C4-N4	7.54	123.28	118.00
57	BB	1502	A	C5-C6-N1	-7.54	113.93	117.70
58	BA	13	G	C5-C6-O6	-7.54	124.08	128.60
57	BB	282	A	N1-C2-N3	7.54	133.07	129.30
5	AN	23	ARG	NE-CZ-NH1	7.54	124.07	120.30
21	AA	102	G	C8-N9-C4	-7.54	103.38	106.40
21	AA	666	G	N1-C2-N3	-7.54	119.38	123.90
26	AV	57	A	C8-N9-C4	-7.54	102.78	105.80
57	BB	633	A	N7-C8-N9	7.54	117.57	113.80
57	BB	1393	A	N1-C6-N6	7.54	123.12	118.60
41	BV	21	ARG	NE-CZ-NH1	7.54	124.07	120.30
57	BB	78	U	C1'-O4'-C4'	-7.54	103.87	109.90
21	AA	87	C	C5'-C4'-C3'	7.54	128.06	116.00
21	AA	999	C	C5-C4-N4	-7.54	114.92	120.20
21	AA	1120	C	N3-C4-N4	7.54	123.28	118.00
22	AY	42	G	C2-N3-C4	-7.54	108.13	111.90
57	BB	321	U	P-O3'-C3'	7.54	128.74	119.70
57	BB	336	C	C2-N3-C4	7.54	123.67	119.90
57	BB	1144	A	N1-C6-N6	7.54	123.12	118.60
21	AA	458	U	P-O3'-C3'	7.53	128.74	119.70
21	AA	674	G	N1-C2-N3	-7.53	119.38	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1362	A	C5-C6-N6	-7.53	117.67	123.70
22	AY	8	U	C6-N1-C2	-7.53	116.48	121.00
57	BB	188	G	N1-C2-N3	-7.53	119.38	123.90
57	BB	491	G	N1-C2-N2	-7.53	109.42	116.20
57	BB	908	C	P-O3'-C3'	7.53	128.74	119.70
57	BB	1552	A	N3-C4-N9	7.53	133.43	127.40
57	BB	1648	U	N1-C2-N3	-7.53	110.38	114.90
57	BB	2049	G	C4-C5-N7	7.53	113.81	110.80
57	BB	2109	U	N3-C4-O4	7.53	124.67	119.40
57	BB	2608	G	C4-C5-C6	7.53	123.32	118.80
21	AA	79	G	C6-C5-N7	-7.53	125.88	130.40
21	AA	313	A	C5-C6-N1	-7.53	113.93	117.70
21	AA	472	U	C5-C4-O4	-7.53	121.38	125.90
22	AY	36	A	C5-C6-N6	-7.53	117.67	123.70
57	BB	255	A	C5-C6-N1	-7.53	113.93	117.70
57	BB	512	G	N1-C2-N3	-7.53	119.38	123.90
57	BB	1510	G	N3-C2-N2	7.53	125.17	119.90
21	AA	305	G	O4'-C1'-N9	7.53	114.22	108.20
21	AA	529	G	N7-C8-N9	-7.53	109.33	113.10
21	AA	698	G	N1-C6-O6	7.53	124.42	119.90
21	AA	874	G	N3-C2-N2	7.53	125.17	119.90
21	AA	1360	A	C5-N7-C8	7.53	107.67	103.90
57	BB	98	G	N1-C6-O6	7.53	124.42	119.90
57	BB	1358	G	O4'-C1'-N9	7.53	114.22	108.20
57	BB	1911	U	C2-N3-C4	-7.53	122.48	127.00
57	BB	2845	U	O4'-C1'-N1	7.53	114.22	108.20
21	AA	545	C	C5-C4-N4	-7.53	114.93	120.20
21	AA	842	U	P-O3'-C3'	7.53	128.73	119.70
57	BB	560	C	C5-C4-N4	-7.53	114.93	120.20
57	BB	995	C	N1-C2-N3	-7.53	113.93	119.20
57	BB	1300	G	P-O3'-C3'	7.53	128.73	119.70
57	BB	1687	G	N1-C6-O6	7.53	124.42	119.90
57	BB	2056	G	N7-C8-N9	-7.53	109.34	113.10
57	BB	2410	G	C4-C5-C6	7.53	123.32	118.80
21	AA	1514	G	C6-N1-C2	7.53	129.62	125.10
36	BQ	35	PHE	CB-CG-CD1	7.53	126.07	120.80
57	BB	196	A	C4-C5-C6	7.53	120.76	117.00
57	BB	691	C	N1-C2-O2	7.53	123.42	118.90
57	BB	742	A	C5-C6-N6	-7.53	117.68	123.70
21	AA	773	G	O4'-C1'-N9	7.52	114.22	108.20
57	BB	1107	G	O4'-C1'-N9	7.52	114.22	108.20
57	BB	2211	A	C8-N9-C4	-7.52	102.79	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	115	G	C8-N9-C4	-7.52	103.39	106.40
21	AA	446	G	C5-C6-O6	-7.52	124.09	128.60
21	AA	649	A	C4-C5-C6	7.52	120.76	117.00
21	AA	716	A	C5-C6-N1	-7.52	113.94	117.70
21	AA	942	G	C4-C5-N7	7.52	113.81	110.80
57	BB	1162	G	C4-C5-C6	7.52	123.31	118.80
57	BB	2689	U	N3-C4-O4	-7.52	114.13	119.40
57	BB	2863	C	O4'-C1'-N1	7.52	114.22	108.20
22	AY	4	G	C1'-O4'-C4'	-7.52	103.88	109.90
57	BB	447	A	C4-C5-C6	7.52	120.76	117.00
57	BB	500	G	C5-C6-N1	-7.52	107.74	111.50
21	AA	1034	G	N3-C4-N9	-7.52	121.49	126.00
57	BB	534	U	N3-C4-O4	7.52	124.66	119.40
57	BB	1613	G	N3-C2-N2	7.52	125.16	119.90
57	BB	1970	A	C8-N9-C4	-7.52	102.79	105.80
58	BA	41	G	C5-C6-N1	-7.52	107.74	111.50
13	AB	126	ASP	CB-CG-OD2	-7.52	111.53	118.30
21	AA	7	A	C5-C6-N1	-7.52	113.94	117.70
21	AA	105	G	N7-C8-N9	7.52	116.86	113.10
45	BC	120	ASP	CB-CG-OD1	-7.52	111.53	118.30
57	BB	1430	G	N3-C2-N2	7.52	125.16	119.90
22	AY	18	G	C5-N7-C8	-7.52	100.54	104.30
57	BB	874	G	C6-C5-N7	-7.52	125.89	130.40
57	BB	1766	G	N7-C8-N9	-7.52	109.34	113.10
57	BB	2036	C	N3-C4-N4	7.52	123.26	118.00
57	BB	2807	U	O5'-P-OP1	-7.52	98.94	105.70
21	AA	442	G	P-O3'-C3'	-7.51	110.68	119.70
21	AA	586	C	N3-C4-C5	-7.51	118.89	121.90
21	AA	996	A	C5-N7-C8	7.51	107.66	103.90
57	BB	546	U	C6-N1-C2	-7.51	116.49	121.00
57	BB	568	U	O4'-C1'-N1	7.51	114.21	108.20
57	BB	575	A	N1-C2-N3	7.51	133.06	129.30
57	BB	896	A	O4'-C1'-N9	7.51	114.21	108.20
57	BB	1023	U	C5-C4-O4	7.51	130.41	125.90
57	BB	1335	C	N3-C4-N4	7.51	123.26	118.00
57	BB	1935	G	N1-C2-N3	-7.51	119.39	123.90
57	BB	2183	A	C4-C5-N7	7.51	114.46	110.70
57	BB	204	A	P-O3'-C3'	7.51	128.72	119.70
57	BB	561	G	C2-N3-C4	7.51	115.66	111.90
21	AA	1002	G	N7-C8-N9	-7.51	109.34	113.10
21	AA	1281	C	C6-N1-C2	7.51	123.31	120.30
21	AA	1501	C	N3-C4-C5	-7.51	118.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	125	A	C5-N7-C8	7.51	107.66	103.90
57	BB	604	G	C4-C5-C6	7.51	123.31	118.80
57	BB	1011	G	C5-C6-O6	-7.51	124.09	128.60
57	BB	1523	U	O4'-C1'-N1	7.51	114.21	108.20
57	BB	1736	U	C2-N3-C4	-7.51	122.49	127.00
57	BB	2023	C	N3-C4-N4	7.51	123.26	118.00
57	BB	2677	G	N1-C6-O6	7.51	124.41	119.90
58	BA	32	U	N3-C4-O4	7.51	124.66	119.40
21	AA	1514	G	N7-C8-N9	7.51	116.86	113.10
57	BB	194	G	O4'-C1'-N9	7.51	114.21	108.20
57	BB	2051	A	C8-N9-C4	7.51	108.80	105.80
57	BB	2470	G	C5-C6-N1	-7.51	107.75	111.50
58	BA	58	A	C4-C5-C6	7.51	120.75	117.00
11	AT	17	ARG	NE-CZ-NH1	7.51	124.05	120.30
21	AA	915	A	C3'-C2'-C1'	-7.51	95.49	101.50
57	BB	506	G	N1-C6-O6	7.51	124.41	119.90
57	BB	734	A	C4-C5-C6	7.51	120.75	117.00
16	AE	106	ALA	N-CA-CB	7.51	120.61	110.10
21	AA	113	G	N1-C2-N3	-7.51	119.40	123.90
21	AA	693	G	N3-C2-N2	7.51	125.15	119.90
21	AA	920	U	P-O5'-C5'	7.51	132.91	120.90
21	AA	1022	A	N1-C6-N6	7.51	123.10	118.60
23	AW	18	G	N1-C6-O6	7.51	124.40	119.90
26	AV	73	A	O4'-C1'-N9	7.51	114.21	108.20
40	BU	17	ASP	CB-CG-OD2	7.51	125.06	118.30
57	BB	559	G	C8-N9-C4	7.51	109.40	106.40
57	BB	654	A	C8-N9-C4	-7.51	102.80	105.80
57	BB	671	C	N3-C4-N4	7.51	123.25	118.00
57	BB	877	A	C8-N9-C4	-7.51	102.80	105.80
57	BB	879	G	C5'-C4'-O4'	7.51	118.11	109.10
57	BB	2237	G	C8-N9-C4	7.51	109.40	106.40
57	BB	2292	U	O4'-C1'-N1	7.51	114.20	108.20
57	BB	2560	A	C5-C6-N6	-7.51	117.69	123.70
21	AA	1148	U	C4'-C3'-C2'	-7.50	95.09	102.60
57	BB	1721	G	N7-C8-N9	7.50	116.85	113.10
57	BB	1840	G	C2-N3-C4	-7.50	108.15	111.90
57	BB	2592	G	C2-N3-C4	7.50	115.65	111.90
21	AA	74	A	C5-C6-N1	-7.50	113.95	117.70
57	BB	124	G	C5-C6-O6	-7.50	124.10	128.60
57	BB	625	G	N1-C6-O6	7.50	124.40	119.90
57	BB	772	C	O4'-C1'-N1	7.50	114.20	108.20
57	BB	1042	G	C1'-O4'-C4'	-7.50	103.90	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2075	U	O4'-C1'-N1	7.50	114.20	108.20
57	BB	2158	A	P-O3'-C3'	7.50	128.70	119.70
57	BB	2513	A	C5-C6-N1	-7.50	113.95	117.70
21	AA	1174	G	N1-C6-O6	7.50	124.40	119.90
23	AW	22	G	C5-C6-N1	-7.50	107.75	111.50
26	AV	22	G	C4-C5-C6	7.50	123.30	118.80
29	BJ	16	TYR	CB-CG-CD1	-7.50	116.50	121.00
57	BB	348	A	N1-C6-N6	7.50	123.10	118.60
57	BB	609	A	C6-C5-N7	-7.50	127.05	132.30
57	BB	772	C	N1-C2-O2	7.50	123.40	118.90
57	BB	809	G	N3-C2-N2	7.50	125.15	119.90
57	BB	1162	G	C5-N7-C8	7.50	108.05	104.30
57	BB	1433	A	O4'-C1'-N9	7.50	114.20	108.20
57	BB	1484	U	N3-C2-O2	7.50	127.45	122.20
57	BB	1526	C	N1-C2-N3	-7.50	113.95	119.20
57	BB	1545	A	O4'-C1'-N9	7.50	114.20	108.20
57	BB	2320	U	O4'-C1'-N1	7.50	114.20	108.20
57	BB	2642	G	C8-N9-C4	7.50	109.40	106.40
57	BB	51	G	C4'-C3'-C2'	7.50	110.10	102.60
57	BB	535	G	C5-C6-N1	-7.50	107.75	111.50
57	BB	1187	G	C5-C6-N1	-7.50	107.75	111.50
57	BB	2095	A	C5-N7-C8	7.50	107.65	103.90
21	AA	207	C	N3-C4-C5	-7.50	118.90	121.90
57	BB	285	G	N3-C4-C5	-7.50	124.85	128.60
57	BB	765	C	O4'-C1'-N1	7.50	114.20	108.20
57	BB	990	A	N1-C6-N6	7.50	123.10	118.60
57	BB	1911	U	N1-C2-N3	7.50	119.40	114.90
57	BB	1959	G	N3-C4-N9	-7.50	121.50	126.00
58	BA	71	C	C2-N3-C4	-7.50	116.15	119.90
10	AS	80	ARG	NE-CZ-NH2	-7.50	116.55	120.30
21	AA	1042	A	C4-C5-N7	-7.50	106.95	110.70
21	AA	1300	G	N1-C2-N3	7.50	128.40	123.90
28	BI	63	ASP	CB-CG-OD1	-7.50	111.55	118.30
57	BB	49	A	C5-C6-N1	-7.50	113.95	117.70
57	BB	693	A	C5'-C4'-C3'	7.50	128.00	116.00
57	BB	2513	A	C4-C5-C6	7.50	120.75	117.00
57	BB	2575	C	C5-C4-N4	-7.50	114.95	120.20
57	BB	2900	A	C8-N9-C4	7.50	108.80	105.80
58	BA	43	C	P-O5'-C5'	-7.50	108.91	120.90
58	BA	75	G	C4-C5-C6	7.50	123.30	118.80
4	AM	108	ARG	NE-CZ-NH2	7.50	124.05	120.30
21	AA	688	G	C5-C6-N1	-7.50	107.75	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	724	G	N1-C2-N3	-7.50	119.40	123.90
21	AA	1215	G	C5-C6-O6	-7.50	124.10	128.60
21	AA	1285	A	C6-N1-C2	-7.50	114.10	118.60
21	AA	1511	G	N1-C6-O6	7.50	124.40	119.90
57	BB	177	G	C4-N9-C1'	7.50	136.24	126.50
57	BB	978	G	C4-C5-C6	7.50	123.30	118.80
57	BB	2212	A	C8-N9-C4	-7.50	102.80	105.80
57	BB	2857	G	C5-C6-O6	-7.50	124.10	128.60
21	AA	195	A	C4-C5-C6	7.49	120.75	117.00
57	BB	856	G	N7-C8-N9	-7.49	109.35	113.10
57	BB	876	C	P-O5'-C5'	7.49	132.89	120.90
57	BB	1475	G	O4'-C1'-N9	7.49	114.19	108.20
57	BB	1912	A	C5-C6-N1	-7.49	113.95	117.70
58	BA	64	G	C6-C5-N7	-7.49	125.90	130.40
26	AV	55	U	O4'-C1'-N1	7.49	114.19	108.20
21	AA	710	G	C5-C6-N1	-7.49	107.75	111.50
21	AA	894	G	O4'-C1'-N9	7.49	114.19	108.20
21	AA	1117	A	C6-C5-N7	-7.49	127.06	132.30
21	AA	1174	G	O4'-C1'-N9	7.49	114.19	108.20
22	AY	22	G	C6-C5-N7	-7.49	125.91	130.40
57	BB	43	G	C3'-C2'-C1'	-7.49	95.51	101.50
57	BB	189	G	O4'-C1'-N9	7.49	114.19	108.20
57	BB	572	A	C4-C5-N7	-7.49	106.95	110.70
57	BB	599	A	N3-C4-N9	7.49	133.39	127.40
57	BB	811	U	N3-C4-O4	7.49	124.64	119.40
57	BB	1197	G	C6-N1-C2	-7.49	120.61	125.10
57	BB	1232	G	C6-N1-C2	7.49	129.59	125.10
17	AF	59	TYR	CB-CG-CD2	-7.49	116.51	121.00
21	AA	34	C	O4'-C1'-N1	7.49	114.19	108.20
21	AA	1383	C	N1-C2-O2	-7.49	114.41	118.90
22	AY	64	A	C2-N3-C4	-7.49	106.86	110.60
57	BB	129	C	C4-C5-C6	7.49	121.14	117.40
57	BB	133	U	O4'-C1'-N1	7.49	114.19	108.20
57	BB	336	C	N1-C2-N3	-7.49	113.96	119.20
57	BB	1185	G	C4-C5-N7	-7.49	107.81	110.80
57	BB	1465	G	N3-C2-N2	7.49	125.14	119.90
57	BB	1869	G	N3-C2-N2	7.49	125.14	119.90
57	BB	2328	A	C4-C5-C6	7.49	120.74	117.00
21	AA	435	A	N9-C4-C5	7.49	108.80	105.80
21	AA	885	G	C5-C6-N1	-7.49	107.76	111.50
20	AI	11	ARG	NE-CZ-NH2	7.49	124.04	120.30
21	AA	321	A	C8-N9-C4	-7.49	102.81	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	615	G	N3-C4-N9	-7.49	121.51	126.00
21	AA	1078	U	N3-C4-C5	-7.49	110.11	114.60
35	BP	32	VAL	CA-CB-CG2	-7.49	99.67	110.90
57	BB	942	G	C5-C6-O6	-7.49	124.11	128.60
57	BB	1493	C	C6-N1-C1'	-7.49	111.82	120.80
57	BB	1960	A	C5-C6-N6	-7.49	117.71	123.70
57	BB	2367	G	C4-C5-N7	-7.49	107.81	110.80
57	BB	2400	G	N1-C2-N3	-7.49	119.41	123.90
58	BA	69	G	C6-N1-C2	7.49	129.59	125.10
57	BB	2770	G	C8-N9-C4	-7.48	103.41	106.40
21	AA	320	A	O4'-C1'-N9	7.48	114.19	108.20
21	AA	895	G	C4-C5-C6	7.48	123.29	118.80
21	AA	1410	A	O4'-C1'-N9	7.48	114.19	108.20
26	AV	41	C	C6-N1-C2	-7.48	117.31	120.30
26	AV	58	A	O4'-C1'-N9	7.48	114.19	108.20
57	BB	353	C	O4'-C1'-N1	7.48	114.19	108.20
57	BB	1049	C	N1-C2-O2	-7.48	114.41	118.90
57	BB	2218	G	P-O3'-C3'	-7.48	110.72	119.70
21	AA	843	U	O4'-C1'-N1	7.48	114.18	108.20
21	AA	1139	G	C4-C5-C6	7.48	123.29	118.80
57	BB	68	G	C5-C6-O6	-7.48	124.11	128.60
57	BB	548	G	N3-C4-N9	7.48	130.49	126.00
57	BB	607	U	N3-C2-O2	-7.48	116.96	122.20
57	BB	1640	A	C4-C5-C6	7.48	120.74	117.00
57	BB	2215	C	C5-C6-N1	7.48	124.74	121.00
21	AA	1434	A	C2-N3-C4	-7.48	106.86	110.60
21	AA	425	G	O4'-C1'-N9	7.48	114.18	108.20
21	AA	661	G	C6-C5-N7	-7.48	125.91	130.40
21	AA	1063	C	O4'-C1'-N1	7.48	114.18	108.20
57	BB	260	G	O4'-C1'-N9	7.48	114.18	108.20
57	BB	439	A	O4'-C1'-N9	7.48	114.18	108.20
57	BB	2689	U	C4-C5-C6	-7.48	115.21	119.70
21	AA	951	G	C8-N9-C4	7.48	109.39	106.40
57	BB	817	C	N3-C4-N4	7.48	123.23	118.00
57	BB	1419	A	C1'-O4'-C4'	7.48	115.88	109.90
57	BB	737	C	N3-C2-O2	7.47	127.13	121.90
57	BB	1286	A	N7-C8-N9	7.47	117.54	113.80
57	BB	1355	G	C4-N9-C1'	-7.47	116.78	126.50
57	BB	1544	A	N1-C6-N6	7.47	123.08	118.60
58	BA	25	U	N3-C4-C5	-7.47	110.11	114.60
21	AA	167	A	C5-C6-N1	7.47	121.44	117.70
21	AA	677	U	C5-C6-N1	7.47	126.44	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1419	G	C8-N9-C4	-7.47	103.41	106.40
57	BB	68	G	O4'-C1'-N9	7.47	114.18	108.20
57	BB	363	G	C5'-C4'-C3'	-7.47	104.04	116.00
57	BB	2247	A	C5-C6-N6	-7.47	117.72	123.70
7	AP	31	ARG	NE-CZ-NH1	-7.47	116.56	120.30
21	AA	120	A	N1-C6-N6	7.47	123.08	118.60
21	AA	137	U	C3'-C2'-C1'	7.47	107.48	101.50
21	AA	230	G	O4'-C4'-C3'	-7.47	96.53	104.00
21	AA	1454	G	C4-C5-C6	7.47	123.28	118.80
57	BB	710	U	O4'-C1'-N1	7.47	114.18	108.20
21	AA	1310	G	C6-C5-N7	-7.47	125.92	130.40
52	BD	102	ALA	CB-CA-C	-7.47	98.90	110.10
57	BB	52	A	C5-C6-N6	-7.47	117.72	123.70
57	BB	376	G	N1-C2-N3	-7.47	119.42	123.90
57	BB	1089	A	C8-N9-C4	-7.47	102.81	105.80
57	BB	2136	G	C5-C6-N1	-7.47	107.77	111.50
57	BB	2299	U	C5-C4-O4	7.47	130.38	125.90
58	BA	67	G	C6-C5-N7	-7.47	125.92	130.40
57	BB	50	U	O4'-C1'-N1	7.47	114.17	108.20
57	BB	969	G	N1-C6-O6	7.47	124.38	119.90
57	BB	1218	G	C6-C5-N7	-7.47	125.92	130.40
57	BB	1221	C	C2-N3-C4	7.47	123.63	119.90
57	BB	2083	G	N7-C8-N9	7.47	116.83	113.10
21	AA	164	G	N3-C2-N2	7.47	125.13	119.90
21	AA	350	G	C8-N9-C4	-7.47	103.41	106.40
21	AA	731	G	C1'-O4'-C4'	7.47	115.87	109.90
21	AA	998	C	C6-N1-C2	-7.47	117.31	120.30
21	AA	1316	G	N1-C2-N2	-7.47	109.48	116.20
57	BB	199	A	C2-N3-C4	-7.47	106.87	110.60
57	BB	414	C	O4'-C1'-N1	7.47	114.17	108.20
57	BB	879	G	N3-C2-N2	7.47	125.13	119.90
57	BB	1359	A	C5-C6-N1	-7.47	113.97	117.70
21	AA	260	G	N9-C4-C5	-7.46	102.41	105.40
21	AA	953	G	N7-C8-N9	7.46	116.83	113.10
26	AV	76	A	O4'-C1'-N9	7.46	114.17	108.20
49	B2	28	ARG	NE-CZ-NH2	7.46	124.03	120.30
57	BB	345	A	C4-C5-N7	-7.46	106.97	110.70
57	BB	417	C	N3-C4-C5	-7.46	118.91	121.90
57	BB	525	U	N3-C2-O2	7.46	127.42	122.20
57	BB	775	G	C5-C6-N1	-7.46	107.77	111.50
57	BB	2356	U	N3-C4-O4	7.46	124.63	119.40
57	BB	2546	U	N3-C4-C5	-7.46	110.12	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	444	G	N1-C2-N3	-7.46	119.42	123.90
21	AA	754	C	C5-C4-N4	-7.46	114.98	120.20
21	AA	898	G	O4'-C1'-N9	7.46	114.17	108.20
21	AA	1205	U	C4-C5-C6	-7.46	115.22	119.70
57	BB	584	C	O4'-C1'-N1	7.46	114.17	108.20
57	BB	1139	G	C4-C5-N7	7.46	113.78	110.80
57	BB	1422	G	N3-C2-N2	7.46	125.12	119.90
21	AA	690	G	N3-C2-N2	7.46	125.12	119.90
21	AA	754	C	P-O3'-C3'	-7.46	110.75	119.70
57	BB	769	U	C2-N3-C4	-7.46	122.52	127.00
57	BB	1153	C	P-O5'-C5'	7.46	132.84	120.90
57	BB	1505	A	C3'-C2'-C1'	-7.46	95.53	101.50
57	BB	2057	G	N3-C2-N2	7.46	125.12	119.90
57	BB	2346	A	C2-N3-C4	7.46	114.33	110.60
57	BB	2572	A	O4'-C1'-N9	7.46	114.17	108.20
57	BB	580	U	O4'-C1'-N1	7.46	114.17	108.20
57	BB	1865	U	C4-C5-C6	-7.46	115.22	119.70
57	BB	2852	G	N1-C6-O6	7.46	124.38	119.90
26	AV	36	U	N1-C2-O2	-7.46	117.58	122.80
57	BB	545	U	C6-N1-C1'	-7.46	110.76	121.20
57	BB	1625	C	N3-C4-C5	-7.46	118.92	121.90
58	BA	99	A	N3-C4-N9	7.46	133.37	127.40
21	AA	795	C	N3-C4-N4	7.46	123.22	118.00
26	AV	51	C	O4'-C1'-N1	7.46	114.17	108.20
57	BB	495	G	C8-N9-C4	-7.46	103.42	106.40
57	BB	1518	C	C2-N1-C1'	7.46	127.00	118.80
21	AA	978	A	C1'-O4'-C4'	7.46	115.86	109.90
57	BB	1105	U	C5-C4-O4	-7.46	121.43	125.90
57	BB	66	C	N3-C4-N4	7.45	123.22	118.00
57	BB	1191	G	C8-N9-C1'	7.45	136.69	127.00
57	BB	1637	A	C6-C5-N7	-7.45	127.08	132.30
57	BB	2228	G	C8-N9-C4	-7.45	103.42	106.40
57	BB	2495	G	C5-C6-N1	-7.45	107.77	111.50
57	BB	2148	G	C4-C5-N7	-7.45	107.82	110.80
21	AA	787	A	OP1-P-OP2	-7.45	108.42	119.60
26	AV	38	A	P-O3'-C3'	-7.45	110.76	119.70
57	BB	1406	U	O4'-C1'-N1	7.45	114.16	108.20
57	BB	1447	C	N3-C4-C5	-7.45	118.92	121.90
57	BB	1775	U	N1-C2-O2	-7.45	117.58	122.80
57	BB	2019	A	C8-N9-C4	-7.45	102.82	105.80
57	BB	2686	G	C5-C6-N1	-7.45	107.78	111.50
57	BB	2813	A	C5-C6-N1	-7.45	113.97	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	148	G	N1-C2-N3	-7.45	119.43	123.90
57	BB	365	U	N3-C4-O4	7.45	124.61	119.40
57	BB	415	A	C6-C5-N7	-7.45	127.09	132.30
57	BB	417	C	P-O3'-C3'	-7.45	110.76	119.70
57	BB	600	G	N1-C2-N3	-7.45	119.43	123.90
57	BB	754	U	C5-C6-N1	7.45	126.42	122.70
21	AA	325	A	O4'-C1'-N9	7.45	114.16	108.20
21	AA	475	C	C4-C5-C6	7.45	121.12	117.40
21	AA	685	G	O4'-C1'-N9	7.45	114.16	108.20
57	BB	659	G	C8-N9-C4	-7.45	103.42	106.40
6	AO	52	ARG	NE-CZ-NH2	-7.45	116.58	120.30
21	AA	1151	A	C4-C5-C6	7.45	120.72	117.00
21	AA	1220	G	C5-C6-O6	-7.45	124.13	128.60
23	AW	73	A	N1-C2-N3	-7.45	125.58	129.30
57	BB	10	A	N7-C8-N9	-7.45	110.08	113.80
57	BB	102	U	C4-C5-C6	-7.45	115.23	119.70
57	BB	982	C	O4'-C1'-N1	7.45	114.16	108.20
57	BB	1054	A	C5-N7-C8	7.45	107.62	103.90
57	BB	1382	G	N1-C6-O6	7.45	124.37	119.90
57	BB	1627	G	N3-C2-N2	7.45	125.11	119.90
57	BB	1702	G	O4'-C1'-N9	7.45	114.16	108.20
57	BB	1973	G	N3-C2-N2	7.45	125.11	119.90
57	BB	2043	C	N3-C4-C5	-7.45	118.92	121.90
57	BB	2686	G	C6-C5-N7	-7.45	125.93	130.40
21	AA	1017	U	N3-C4-C5	-7.44	110.13	114.60
57	BB	211	C	C5-C4-N4	-7.44	114.99	120.20
57	BB	261	G	N7-C8-N9	-7.44	109.38	113.10
57	BB	410	G	N1-C2-N3	-7.44	119.43	123.90
57	BB	1622	G	N1-C2-N3	-7.44	119.43	123.90
21	AA	362	G	C8-N9-C4	7.44	109.38	106.40
21	AA	471	U	N3-C4-C5	-7.44	110.13	114.60
21	AA	1274	A	C5-C6-N6	-7.44	117.75	123.70
21	AA	1291	U	N3-C4-C5	-7.44	110.13	114.60
21	AA	1357	A	C6-C5-N7	-7.44	127.09	132.30
57	BB	1992	G	C4-C5-C6	7.44	123.27	118.80
58	BA	12	C	C5-C4-N4	-7.44	114.99	120.20
21	AA	457	G	C5-N7-C8	7.44	108.02	104.30
21	AA	553	A	C8-N9-C4	-7.44	102.82	105.80
21	AA	800	G	C1'-O4'-C4'	7.44	115.85	109.90
21	AA	1432	G	N3-C2-N2	7.44	125.11	119.90
22	AY	73	A	N9-C4-C5	-7.44	102.82	105.80
26	AV	53	G	N1-C2-N3	-7.44	119.44	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	334	C	O4'-C1'-N1	7.44	114.15	108.20
57	BB	1633	G	N1-C6-O6	7.44	124.36	119.90
21	AA	85	U	C2-N1-C1'	7.44	126.62	117.70
21	AA	261	U	C5-C4-O4	-7.44	121.44	125.90
21	AA	516	U	O4'-C1'-N1	7.44	114.15	108.20
21	AA	617	G	C2-N3-C4	7.44	115.62	111.90
21	AA	832	G	O4'-C1'-N9	7.44	114.15	108.20
21	AA	915	A	O4'-C1'-N9	7.44	114.15	108.20
21	AA	979	C	N3-C4-N4	7.44	123.21	118.00
21	AA	1325	C	O4'-C1'-N1	7.44	114.15	108.20
57	BB	264	C	C5-C6-N1	7.44	124.72	121.00
57	BB	1360	G	N9-C4-C5	7.44	108.38	105.40
57	BB	1494	A	C4-C5-C6	7.44	120.72	117.00
57	BB	1496	A	N9-C4-C5	7.44	108.78	105.80
57	BB	1847	A	C1'-O4'-C4'	-7.44	103.95	109.90
57	BB	2851	A	O4'-C1'-N9	7.44	114.15	108.20
57	BB	2894	G	C3'-C2'-C1'	7.44	107.45	101.50
51	B4	20	ASP	CB-CG-OD1	-7.44	111.61	118.30
57	BB	527	C	C2-N3-C4	7.44	123.62	119.90
57	BB	1407	G	C8-N9-C4	-7.44	103.42	106.40
12	AU	40	PRO	N-CA-CB	7.43	112.22	103.30
21	AA	419	C	N3-C4-N4	7.43	123.20	118.00
57	BB	136	G	C5-C6-O6	-7.43	124.14	128.60
57	BB	147	C	N3-C4-N4	7.43	123.20	118.00
58	BA	10	G	C8-N9-C4	7.43	109.37	106.40
21	AA	816	A	N1-C6-N6	7.43	123.06	118.60
21	AA	854	U	C4-C5-C6	-7.43	115.24	119.70
57	BB	1219	U	O4'-C1'-N1	7.43	114.15	108.20
57	BB	1234	U	N3-C4-O4	7.43	124.60	119.40
57	BB	1911	U	O4'-C1'-N1	7.43	114.15	108.20
57	BB	2037	A	C5-C6-N1	-7.43	113.98	117.70
21	AA	78	A	C5-C6-N1	-7.43	113.98	117.70
57	BB	455	C	N3-C4-N4	7.43	123.20	118.00
57	BB	1998	A	N3-C4-N9	7.43	133.34	127.40
57	BB	2515	C	C5-C6-N1	7.43	124.72	121.00
21	AA	544	G	N7-C8-N9	-7.43	109.39	113.10
21	AA	894	G	C5-C6-O6	-7.43	124.14	128.60
21	AA	1035	A	O4'-C1'-N9	7.43	114.14	108.20
57	BB	521	U	N3-C2-O2	7.43	127.40	122.20
57	BB	1302	A	C4-C5-C6	7.43	120.72	117.00
57	BB	1594	U	C5-C4-O4	-7.43	121.44	125.90
57	BB	2071	A	C5'-C4'-C3'	-7.43	104.11	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2330	G	O4'-C1'-N9	7.43	114.14	108.20
57	BB	2473	U	P-O5'-C5'	7.43	132.79	120.90
57	BB	2658	C	N3-C4-N4	7.43	123.20	118.00
21	AA	74	A	C4-C5-C6	7.43	120.71	117.00
22	AY	35	A	P-O3'-C3'	-7.43	110.79	119.70
23	AW	68	C	C4-C5-C6	-7.43	113.69	117.40
57	BB	681	G	N1-C2-N3	-7.43	119.44	123.90
57	BB	2226	C	C6-N1-C2	-7.43	117.33	120.30
57	BB	2857	G	N1-C2-N3	-7.43	119.44	123.90
21	AA	885	G	C6-C5-N7	-7.43	125.94	130.40
21	AA	1007	U	N1-C2-N3	-7.43	110.44	114.90
57	BB	2169	A	N3-C4-N9	7.43	133.34	127.40
57	BB	2325	G	C8-N9-C4	-7.43	103.43	106.40
17	AF	25	TYR	CB-CG-CD2	7.42	125.45	121.00
21	AA	139	A	N9-C4-C5	7.42	108.77	105.80
21	AA	865	A	N7-C8-N9	7.42	117.51	113.80
21	AA	1435	G	N7-C8-N9	7.42	116.81	113.10
57	BB	44	A	C5'-C4'-O4'	7.42	118.01	109.10
57	BB	300	A	N1-C2-N3	7.42	133.01	129.30
57	BB	396	G	N9-C4-C5	-7.42	102.43	105.40
57	BB	857	G	O4'-C1'-N9	7.42	114.14	108.20
57	BB	1463	C	C5-C6-N1	7.42	124.71	121.00
57	BB	1522	A	N7-C8-N9	7.42	117.51	113.80
57	BB	1666	G	C4-N9-C1'	-7.42	116.85	126.50
57	BB	2748	A	C2-N3-C4	-7.42	106.89	110.60
21	AA	482	A	O4'-C1'-N9	7.42	114.14	108.20
21	AA	1309	G	C5-N7-C8	7.42	108.01	104.30
57	BB	1269	A	O4'-C1'-N9	7.42	114.14	108.20
21	AA	232	G	C5-N7-C8	-7.42	100.59	104.30
21	AA	807	A	C1'-O4'-C4'	-7.42	103.96	109.90
26	AV	15	G	C5-N7-C8	7.42	108.01	104.30
57	BB	933	A	C5-C6-N6	-7.42	117.76	123.70
57	BB	2006	C	N3-C4-N4	7.42	123.19	118.00
57	BB	2177	C	N3-C4-N4	7.42	123.19	118.00
57	BB	2434	A	C5-N7-C8	7.42	107.61	103.90
21	AA	897	C	O4'-C1'-N1	7.42	114.14	108.20
21	AA	1041	G	O4'-C1'-N9	7.42	114.14	108.20
57	BB	586	A	C8-N9-C4	-7.42	102.83	105.80
57	BB	614	A	P-O3'-C3'	7.42	128.60	119.70
57	BB	718	A	C4-C5-C6	7.42	120.71	117.00
57	BB	1639	C	N3-C4-N4	7.42	123.19	118.00
57	BB	1955	U	C6-N1-C2	7.42	125.45	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2747	G	N3-C2-N2	7.42	125.09	119.90
21	AA	138	G	N9-C4-C5	-7.42	102.43	105.40
21	AA	309	A	C5-N7-C8	7.42	107.61	103.90
21	AA	938	A	N1-C6-N6	7.42	123.05	118.60
57	BB	421	C	C5-C4-N4	-7.42	115.01	120.20
57	BB	1608	A	O4'-C1'-N9	7.42	114.14	108.20
57	BB	1639	C	C5-C4-N4	-7.42	115.01	120.20
57	BB	1655	A	C6-C5-N7	-7.42	127.11	132.30
57	BB	1807	G	P-O5'-C5'	-7.42	109.03	120.90
57	BB	2062	A	C8-N9-C4	-7.42	102.83	105.80
57	BB	2232	C	C4-C5-C6	7.42	121.11	117.40
57	BB	320	A	O4'-C1'-N9	7.42	114.13	108.20
57	BB	1401	G	N1-C6-O6	7.42	124.35	119.90
57	BB	1933	G	C5-N7-C8	7.42	108.01	104.30
57	BB	2070	A	C4-C5-N7	-7.42	106.99	110.70
57	BB	2148	G	C5'-C4'-O4'	7.42	118.00	109.10
57	BB	2475	C	C5-C6-N1	7.42	124.71	121.00
57	BB	2674	G	C2-N3-C4	7.42	115.61	111.90
57	BB	2792	A	C5-N7-C8	7.42	107.61	103.90
57	BB	2901	C	C5-C6-N1	7.42	124.71	121.00
58	BA	97	C	P-O3'-C3'	-7.42	110.80	119.70
57	BB	288	U	O4'-C1'-N1	7.42	114.13	108.20
57	BB	2275	C	P-O5'-C5'	7.42	132.76	120.90
21	AA	226	G	C6-N1-C2	7.41	129.55	125.10
21	AA	495	A	C6-C5-N7	-7.41	127.11	132.30
41	BV	57	TYR	CB-CG-CD2	-7.41	116.55	121.00
57	BB	940	G	C4-N9-C1'	-7.41	116.86	126.50
57	BB	1380	G	C5-C6-O6	-7.41	124.15	128.60
57	BB	1936	A	C5-C6-N1	-7.41	113.99	117.70
57	BB	2222	C	C5-C4-N4	-7.41	115.01	120.20
57	BB	2493	U	N1-C2-N3	-7.41	110.45	114.90
57	BB	2774	C	N3-C4-N4	7.41	123.19	118.00
58	BA	20	G	C6-C5-N7	-7.41	125.95	130.40
21	AA	520	A	C5-C6-N6	-7.41	117.77	123.70
57	BB	114	U	C5-C6-N1	7.41	126.41	122.70
57	BB	521	U	N1-C2-O2	-7.41	117.61	122.80
57	BB	1296	G	C4-C5-C6	-7.41	114.35	118.80
57	BB	2347	C	N3-C4-N4	7.41	123.19	118.00
21	AA	1406	U	N3-C2-O2	7.41	127.39	122.20
57	BB	159	G	C8-N9-C4	-7.41	103.44	106.40
57	BB	229	C	C4-C5-C6	7.41	121.11	117.40
57	BB	828	U	N1-C2-O2	7.41	127.99	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	858	G	N3-C2-N2	7.41	125.09	119.90
57	BB	974	G	C6-C5-N7	-7.41	125.95	130.40
57	BB	2311	A	C4-C5-C6	7.41	120.70	117.00
21	AA	464	U	N3-C4-O4	-7.41	114.21	119.40
22	AY	28	C	C3'-C2'-C1'	7.41	107.43	101.50
57	BB	205	G	C1'-O4'-C4'	-7.41	103.97	109.90
57	BB	398	C	N3-C4-C5	-7.41	118.94	121.90
57	BB	494	G	N3-C4-C5	7.41	132.30	128.60
57	BB	1135	C	C5-C6-N1	7.41	124.70	121.00
57	BB	2193	G	C4'-C3'-C2'	-7.41	95.19	102.60
57	BB	2895	G	C5-C6-O6	-7.41	124.16	128.60
21	AA	585	G	C1'-O4'-C4'	7.41	115.83	109.90
21	AA	1180	A	C4-C5-C6	7.41	120.70	117.00
21	AA	1394	A	O4'-C1'-N9	7.41	114.12	108.20
57	BB	309	A	C5-C6-N1	-7.41	114.00	117.70
57	BB	2141	G	C1'-O4'-C4'	-7.41	103.97	109.90
21	AA	601	G	C4-C5-C6	7.41	123.24	118.80
57	BB	323	C	C5-C4-N4	-7.41	115.02	120.20
57	BB	757	G	C8-N9-C4	7.41	109.36	106.40
57	BB	1120	G	N1-C6-O6	7.41	124.34	119.90
57	BB	2385	C	N1-C2-O2	-7.41	114.46	118.90
57	BB	2481	G	C4-C5-N7	-7.41	107.84	110.80
57	BB	2808	G	C4-C5-N7	7.41	113.76	110.80
21	AA	520	A	O4'-C1'-N9	7.40	114.12	108.20
57	BB	56	A	C4-C5-C6	7.40	120.70	117.00
57	BB	713	G	C6-N1-C2	7.40	129.54	125.10
57	BB	1227	G	N1-C6-O6	7.40	124.34	119.90
57	BB	1526	C	C2-N3-C4	7.40	123.60	119.90
57	BB	1720	U	N1-C2-O2	-7.40	117.62	122.80
21	AA	399	G	C5-N7-C8	7.40	108.00	104.30
21	AA	621	A	C5-C6-N1	-7.40	114.00	117.70
57	BB	745	G	O4'-C1'-N9	7.40	114.12	108.20
57	BB	1045	C	C2-N3-C4	7.40	123.60	119.90
57	BB	1593	A	C2-N3-C4	7.40	114.30	110.60
57	BB	1657	U	C5-C6-N1	7.40	126.40	122.70
57	BB	2466	C	C5-C4-N4	-7.40	115.02	120.20
21	AA	421	U	C6-N1-C1'	-7.40	110.84	121.20
21	AA	725	G	C4-C5-C6	7.40	123.24	118.80
21	AA	909	A	N9-C4-C5	7.40	108.76	105.80
21	AA	1463	U	N1-C2-O2	-7.40	117.62	122.80
58	BA	28	C	C4-C5-C6	7.40	121.10	117.40
57	BB	823	C	C5-C4-N4	-7.40	115.02	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	920	A	C5'-C4'-C3'	7.40	127.84	116.00
57	BB	1549	A	C6-C5-N7	-7.40	127.12	132.30
21	AA	296	U	O4'-C1'-N1	7.40	114.12	108.20
57	BB	154	U	C2-N3-C4	7.40	131.44	127.00
57	BB	2120	G	C5-N7-C8	-7.40	100.60	104.30
57	BB	2641	G	O4'-C1'-N9	7.40	114.12	108.20
21	AA	797	C	C6-N1-C2	7.40	123.26	120.30
18	AG	142	ARG	NE-CZ-NH2	-7.39	116.60	120.30
21	AA	697	U	N3-C4-C5	-7.39	110.16	114.60
21	AA	1482	G	P-O3'-C3'	7.39	128.57	119.70
23	AW	31	A	C6-C5-N7	-7.39	127.12	132.30
57	BB	666	A	N1-C6-N6	7.39	123.04	118.60
57	BB	1187	G	N1-C2-N2	-7.39	109.54	116.20
57	BB	1519	G	N3-C2-N2	-7.39	114.72	119.90
20	AI	17	ARG	NE-CZ-NH2	7.39	124.00	120.30
21	AA	807	A	N1-C6-N6	7.39	123.03	118.60
21	AA	1268	G	N9-C4-C5	-7.39	102.44	105.40
57	BB	154	U	N1-C2-N3	-7.39	110.46	114.90
57	BB	178	G	N7-C8-N9	7.39	116.80	113.10
57	BB	693	A	C5-C6-N6	-7.39	117.79	123.70
57	BB	1181	U	N1-C2-O2	-7.39	117.62	122.80
57	BB	1232	G	N3-C2-N2	7.39	125.08	119.90
57	BB	2047	C	N3-C4-N4	7.39	123.17	118.00
57	BB	2168	G	N1-C6-O6	7.39	124.34	119.90
57	BB	2832	U	C2-N3-C4	7.39	131.44	127.00
21	AA	432	A	C5-C6-N1	-7.39	114.00	117.70
22	AY	3	G	P-O5'-C5'	-7.39	109.07	120.90
23	AW	23	A	O4'-C1'-N9	7.39	114.11	108.20
57	BB	476	G	N1-C6-O6	7.39	124.33	119.90
57	BB	2565	A	C2-N3-C4	-7.39	106.90	110.60
57	BB	2886	A	C5-C6-N1	-7.39	114.00	117.70
57	BB	122	G	N7-C8-N9	-7.39	109.41	113.10
57	BB	418	C	O4'-C1'-N1	7.39	114.11	108.20
57	BB	491	G	C4-C5-C6	7.39	123.23	118.80
57	BB	536	G	C5-C6-O6	-7.39	124.17	128.60
21	AA	711	G	C4-C5-N7	-7.39	107.84	110.80
21	AA	229	U	C5-C6-N1	7.39	126.39	122.70
57	BB	377	G	N1-C2-N3	-7.39	119.47	123.90
57	BB	552	U	N1-C2-O2	-7.39	117.63	122.80
57	BB	1781	U	O4'-C1'-N1	7.39	114.11	108.20
57	BB	2114	A	O4'-C4'-C3'	-7.39	96.61	104.00
14	AC	39	ARG	NE-CZ-NH1	7.38	123.99	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	171	A	O4'-C1'-N9	7.38	114.11	108.20
21	AA	1130	A	N1-C2-N3	7.38	132.99	129.30
21	AA	1151	A	N1-C6-N6	7.38	123.03	118.60
57	BB	1537	G	C5-C6-O6	-7.38	124.17	128.60
57	BB	1936	A	C5-N7-C8	7.38	107.59	103.90
57	BB	2795	C	N3-C4-C5	-7.38	118.95	121.90
21	AA	26	A	C4-C5-C6	7.38	120.69	117.00
21	AA	882	C	N3-C4-C5	-7.38	118.95	121.90
21	AA	744	C	N3-C4-N4	7.38	123.17	118.00
21	AA	1077	G	C6-C5-N7	-7.38	125.97	130.40
23	AW	9	A	C4-C5-N7	7.38	114.39	110.70
27	B5	111	PHE	CB-CG-CD2	-7.38	115.63	120.80
57	BB	354	A	C5-C6-N1	-7.38	114.01	117.70
57	BB	711	G	C5-C6-N1	-7.38	107.81	111.50
57	BB	844	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	932	U	C5-C6-N1	7.38	126.39	122.70
57	BB	1288	G	C4-C5-C6	7.38	123.23	118.80
57	BB	2426	A	C6-N1-C2	7.38	123.03	118.60
57	BB	2653	U	N3-C2-O2	7.38	127.37	122.20
58	BA	94	A	C5-C6-N6	-7.38	117.80	123.70
21	AA	1047	G	O4'-C1'-N9	7.38	114.10	108.20
26	AV	21	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	187	G	C6-C5-N7	-7.38	125.97	130.40
57	BB	2199	A	N3-C4-N9	7.38	133.30	127.40
57	BB	2471	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	2858	C	N3-C4-C5	-7.38	118.95	121.90
21	AA	913	A	C5'-C4'-O4'	7.38	117.95	109.10
57	BB	750	A	N3-C4-N9	7.38	133.30	127.40
57	BB	1053	C	C5-C6-N1	-7.38	117.31	121.00
57	BB	1831	G	C4-C5-N7	7.38	113.75	110.80
57	BB	1935	G	O4'-C1'-N9	7.38	114.10	108.20
57	BB	2184	A	C5-N7-C8	7.38	107.59	103.90
21	AA	841	C	C2-N1-C1'	7.38	126.91	118.80
21	AA	954	G	C4-N9-C1'	-7.38	116.91	126.50
57	BB	25	U	C5-C4-O4	-7.38	121.47	125.90
57	BB	262	A	C6-C5-N7	-7.38	127.14	132.30
57	BB	1407	G	N7-C8-N9	7.38	116.79	113.10
57	BB	1800	C	N3-C4-N4	7.38	123.16	118.00
21	AA	583	A	C2-N3-C4	-7.38	106.91	110.60
26	AV	10	G	C2-N3-C4	7.38	115.59	111.90
57	BB	352	A	C5-C6-N6	-7.38	117.80	123.70
57	BB	756	A	C4-C5-C6	7.38	120.69	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1151	A	N9-C4-C5	7.38	108.75	105.80
21	AA	679	C	O4'-C1'-N1	7.37	114.10	108.20
21	AA	721	G	C4-C5-C6	7.37	123.22	118.80
21	AA	1222	G	C1'-O4'-C4'	-7.37	104.00	109.90
57	BB	210	C	O4'-C1'-N1	7.37	114.10	108.20
57	BB	485	C	C6-N1-C2	-7.37	117.35	120.30
57	BB	815	C	C5-C4-N4	-7.37	115.04	120.20
57	BB	1115	G	C6-C5-N7	-7.37	125.98	130.40
21	AA	178	C	N1-C2-N3	-7.37	114.04	119.20
21	AA	363	A	N7-C8-N9	7.37	117.49	113.80
21	AA	765	G	C3'-C2'-C1'	-7.37	95.60	101.50
21	AA	1015	G	C5-C6-O6	7.37	133.02	128.60
21	AA	1017	U	O4'-C1'-N1	7.37	114.10	108.20
22	AY	21	A	C6-C5-N7	-7.37	127.14	132.30
57	BB	295	G	C4-C5-C6	7.37	123.22	118.80
57	BB	1289	C	O4'-C1'-N1	7.37	114.10	108.20
57	BB	1562	U	O4'-C1'-N1	7.37	114.10	108.20
57	BB	1650	A	O4'-C1'-N9	7.37	114.10	108.20
57	BB	2383	G	N3-C2-N2	7.37	125.06	119.90
57	BB	179	C	O4'-C1'-N1	7.37	114.10	108.20
57	BB	313	G	N9-C4-C5	-7.37	102.45	105.40
57	BB	809	G	C2-N3-C4	7.37	115.58	111.90
57	BB	1322	A	N9-C4-C5	7.37	108.75	105.80
57	BB	2179	C	N3-C2-O2	7.37	127.06	121.90
57	BB	19	A	N3-C4-C5	-7.37	121.64	126.80
57	BB	294	A	C5-N7-C8	7.37	107.58	103.90
57	BB	574	A	C5-C6-N1	-7.37	114.02	117.70
57	BB	1016	G	C5-C6-O6	-7.37	124.18	128.60
57	BB	1088	A	C2-N3-C4	-7.37	106.92	110.60
57	BB	1272	A	O4'-C1'-N9	7.37	114.09	108.20
57	BB	2342	C	N3-C4-C5	-7.37	118.95	121.90
57	BB	2459	A	C6-C5-N7	-7.37	127.14	132.30
58	BA	10	G	C6-N1-C2	-7.37	120.68	125.10
58	BA	23	G	C5-N7-C8	-7.37	100.62	104.30
58	BA	115	A	C4-C5-C6	7.37	120.68	117.00
57	BB	404	A	N1-C2-N3	7.37	132.98	129.30
57	BB	444	C	N3-C2-O2	7.37	127.06	121.90
57	BB	2312	U	O4'-C1'-N1	7.37	114.09	108.20
57	BB	2755	C	N3-C2-O2	7.37	127.06	121.90
21	AA	897	C	C1'-O4'-C4'	-7.37	104.01	109.90
57	BB	11	C	N3-C4-C5	-7.37	118.95	121.90
57	BB	680	C	C5-C4-N4	7.37	125.36	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2062	A	C4-C5-C6	7.37	120.68	117.00
57	BB	2813	A	P-O3'-C3'	7.37	128.54	119.70
21	AA	288	A	N1-C6-N6	7.36	123.02	118.60
21	AA	670	G	C6-N1-C2	-7.36	120.68	125.10
21	AA	760	G	C5-C6-O6	-7.36	124.18	128.60
21	AA	912	C	C5-C4-N4	-7.36	115.05	120.20
21	AA	990	C	O4'-C1'-N1	7.36	114.09	108.20
21	AA	1340	A	C6-N1-C2	7.36	123.02	118.60
57	BB	524	G	N7-C8-N9	-7.36	109.42	113.10
57	BB	1598	A	C6-C5-N7	-7.36	127.14	132.30
57	BB	1881	C	C5-C4-N4	-7.36	115.05	120.20
57	BB	2621	G	N1-C2-N2	7.36	122.83	116.20
22	AY	46	G	N9-C4-C5	-7.36	102.45	105.40
57	BB	137	U	C5-C4-O4	7.36	130.32	125.90
57	BB	1165	A	C5-C6-N6	-7.36	117.81	123.70
57	BB	1973	G	N9-C4-C5	-7.36	102.45	105.40
57	BB	2385	C	C5-C4-N4	-7.36	115.05	120.20
21	AA	1418	A	C6-C5-N7	-7.36	127.15	132.30
21	AA	1470	U	C5-C4-O4	7.36	130.32	125.90
57	BB	123	G	C4-C5-N7	7.36	113.74	110.80
57	BB	624	C	C5-C4-N4	-7.36	115.05	120.20
57	BB	1182	G	N3-C2-N2	7.36	125.05	119.90
57	BB	1397	U	P-O3'-C3'	-7.36	110.87	119.70
57	BB	1786	A	C1'-O4'-C4'	-7.36	104.01	109.90
57	BB	1933	G	C4-N9-C1'	-7.36	116.93	126.50
57	BB	2122	U	N3-C4-C5	-7.36	110.18	114.60
57	BB	2479	U	O4'-C1'-N1	7.36	114.09	108.20
57	BB	2550	G	C6-N1-C2	-7.36	120.68	125.10
23	AW	39	U	O4'-C1'-N1	7.36	114.09	108.20
57	BB	2877	G	N1-C6-O6	7.36	124.31	119.90
21	AA	146	G	N3-C2-N2	7.36	125.05	119.90
21	AA	161	A	C5-C6-N6	-7.36	117.81	123.70
21	AA	266	G	C8-N9-C4	7.36	109.34	106.40
21	AA	1260	G	N1-C6-O6	7.36	124.31	119.90
21	AA	1326	U	N3-C2-O2	-7.36	117.05	122.20
21	AA	1369	C	C5-C4-N4	-7.36	115.05	120.20
21	AA	1452	C	N3-C4-C5	7.36	124.84	121.90
24	AX	22	A	O4'-C1'-N9	7.36	114.09	108.20
57	BB	277	G	C5-N7-C8	7.36	107.98	104.30
57	BB	277	G	O4'-C1'-N9	7.36	114.09	108.20
57	BB	458	G	N1-C2-N3	-7.36	119.49	123.90
57	BB	2393	U	C6-N1-C2	-7.36	116.58	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	73	A	C5-C6-N1	-7.36	114.02	117.70
58	BA	94	A	N1-C6-N6	7.36	123.01	118.60
58	BA	98	G	O4'-C1'-N9	7.36	114.08	108.20
21	AA	398	U	C6-N1-C2	7.36	125.41	121.00
21	AA	1107	C	O4'-C1'-N1	7.36	114.08	108.20
57	BB	647	G	N1-C6-O6	7.36	124.31	119.90
57	BB	800	A	P-O3'-C3'	7.36	128.53	119.70
57	BB	859	G	C4'-C3'-C2'	-7.36	95.24	102.60
57	BB	859	G	O4'-C1'-N9	7.36	114.08	108.20
57	BB	1498	C	N1-C2-O2	7.36	123.31	118.90
57	BB	1625	C	C5-C4-N4	-7.36	115.05	120.20
57	BB	1748	C	C5'-C4'-O4'	7.36	117.92	109.10
57	BB	2524	G	N1-C6-O6	7.36	124.31	119.90
57	BB	2648	G	O4'-C1'-N9	7.36	114.08	108.20
21	AA	1266	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	74	A	C6-C5-N7	-7.35	127.15	132.30
57	BB	532	A	C4-C5-N7	-7.35	107.02	110.70
57	BB	580	U	N3-C4-O4	7.35	124.55	119.40
57	BB	741	U	N1-C2-N3	-7.35	110.49	114.90
57	BB	2402	U	C5-C4-O4	-7.35	121.49	125.90
57	BB	2623	G	C6-C5-N7	-7.35	125.99	130.40
21	AA	346	G	N3-C4-C5	-7.35	124.92	128.60
21	AA	410	G	C4-C5-N7	7.35	113.74	110.80
21	AA	487	A	C5-C6-N1	-7.35	114.02	117.70
23	AW	15	G	C4-C5-N7	-7.35	107.86	110.80
23	AW	20	U	C5'-C4'-O4'	7.35	117.92	109.10
57	BB	141	G	N1-C2-N2	-7.35	109.58	116.20
57	BB	425	G	N3-C4-N9	-7.35	121.59	126.00
57	BB	1950	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	2212	A	C5-C6-N6	-7.35	117.82	123.70
58	BA	40	U	C5-C4-O4	-7.35	121.49	125.90
57	BB	257	C	P-O3'-C3'	-7.35	110.88	119.70
57	BB	1829	A	N9-C4-C5	7.35	108.74	105.80
21	AA	152	A	C1'-O4'-C4'	7.35	115.78	109.90
21	AA	629	A	C5-N7-C8	7.35	107.58	103.90
21	AA	1072	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	100	U	C5-C6-N1	7.35	126.38	122.70
57	BB	467	G	O4'-C1'-N9	7.35	114.08	108.20
57	BB	1481	U	C3'-C2'-C1'	7.35	107.38	101.50
57	BB	2743	U	C5-C6-N1	7.35	126.38	122.70
58	BA	5	U	C2-N3-C4	7.35	131.41	127.00
58	BA	12	C	C4-C5-C6	7.35	121.08	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	89	U	N3-C4-C5	-7.35	110.19	114.60
21	AA	273	U	N3-C4-O4	7.35	124.54	119.40
21	AA	1209	C	C5-C6-N1	7.35	124.67	121.00
21	AA	1255	G	C2-N3-C4	7.35	115.57	111.90
57	BB	55	G	N1-C2-N3	-7.35	119.49	123.90
57	BB	1877	A	N1-C6-N6	7.35	123.01	118.60
57	BB	2405	G	C6-C5-N7	-7.35	125.99	130.40
21	AA	449	G	C4-C5-N7	-7.35	107.86	110.80
32	BM	9	PHE	CB-CG-CD2	-7.35	115.66	120.80
57	BB	614	A	C1'-O4'-C4'	7.35	115.78	109.90
57	BB	2844	G	C5-N7-C8	-7.35	100.63	104.30
21	AA	1167	A	P-O3'-C3'	7.34	128.51	119.70
57	BB	697	G	OP1-P-O3'	7.34	121.36	105.20
57	BB	924	G	N1-C2-N3	-7.34	119.49	123.90
57	BB	2630	G	N1-C2-N2	7.34	122.81	116.20
21	AA	459	A	C5-C6-N1	-7.34	114.03	117.70
21	AA	763	G	C5-C6-O6	-7.34	124.19	128.60
37	BR	92	TRP	CE2-CD2-CG	-7.34	101.43	107.30
57	BB	134	G	C4-C5-N7	-7.34	107.86	110.80
57	BB	929	U	O4'-C1'-N1	7.34	114.07	108.20
57	BB	2049	G	N1-C6-O6	7.34	124.31	119.90
57	BB	2566	A	P-O3'-C3'	7.34	128.51	119.70
22	AY	59	U	N3-C2-O2	7.34	127.34	122.20
57	BB	127	A	C4-C5-C6	7.34	120.67	117.00
57	BB	151	C	N3-C4-N4	7.34	123.14	118.00
57	BB	594	U	C4-C5-C6	7.34	124.10	119.70
57	BB	644	A	C5-C6-N6	-7.34	117.83	123.70
57	BB	823	C	C5-C6-N1	7.34	124.67	121.00
57	BB	1216	G	N3-C4-C5	-7.34	124.93	128.60
57	BB	1378	A	C6-N1-C2	-7.34	114.20	118.60
21	AA	621	A	C5-C6-N6	-7.34	117.83	123.70
57	BB	282	A	C6-C5-N7	-7.34	127.16	132.30
57	BB	344	A	C4-C5-C6	7.34	120.67	117.00
57	BB	1521	G	C4-C5-C6	7.34	123.20	118.80
57	BB	1532	A	O4'-C1'-N9	7.34	114.07	108.20
57	BB	2064	C	N3-C4-N4	7.34	123.14	118.00
57	BB	2065	C	N3-C4-C5	-7.34	118.97	121.90
57	BB	2278	A	C4-C5-N7	-7.34	107.03	110.70
57	BB	2325	G	C6-N1-C2	7.34	129.50	125.10
57	BB	2487	G	C6-C5-N7	-7.34	126.00	130.40
21	AA	813	U	O4'-C1'-N1	7.34	114.07	108.20
57	BB	1044	C	O4'-C1'-N1	7.34	114.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1407	G	O4'-C4'-C3'	-7.34	96.66	104.00
57	BB	248	G	N1-C2-N3	-7.33	119.50	123.90
57	BB	2238	G	C5-N7-C8	-7.33	100.63	104.30
57	BB	2689	U	N1-C2-N3	-7.33	110.50	114.90
21	AA	249	U	N3-C2-O2	7.33	127.33	122.20
21	AA	763	G	O4'-C1'-N9	7.33	114.07	108.20
21	AA	885	G	C2-N3-C4	-7.33	108.23	111.90
21	AA	1139	G	C5-C6-N1	-7.33	107.83	111.50
21	AA	1145	A	N3-C4-C5	-7.33	121.67	126.80
57	BB	1519	G	N7-C8-N9	7.33	116.77	113.10
57	BB	1838	C	O4'-C1'-N1	7.33	114.07	108.20
57	BB	2066	C	C5-C6-N1	-7.33	117.33	121.00
57	BB	2590	A	C4-C5-C6	7.33	120.67	117.00
21	AA	1239	A	N1-C6-N6	7.33	123.00	118.60
23	AW	54	U	N3-C4-O4	7.33	124.53	119.40
26	AV	73	A	C5-C6-N1	-7.33	114.03	117.70
57	BB	543	G	P-O3'-C3'	7.33	128.50	119.70
57	BB	709	U	O4'-C1'-N1	7.33	114.06	108.20
57	BB	2416	C	N3-C4-N4	7.33	123.13	118.00
57	BB	2493	U	N3-C2-O2	7.33	127.33	122.20
58	BA	116	G	O4'-C1'-N9	7.33	114.07	108.20
26	AV	45	G	C4-N9-C1'	-7.33	116.97	126.50
57	BB	31	C	P-O3'-C3'	-7.33	110.90	119.70
57	BB	530	G	O4'-C1'-N9	7.33	114.06	108.20
21	AA	719	C	C5-C4-N4	-7.33	115.07	120.20
21	AA	1322	C	C6-N1-C1'	-7.33	112.00	120.80
22	AY	63	C	C2-N3-C4	7.33	123.56	119.90
23	AW	69	G	C4-C5-N7	-7.33	107.87	110.80
57	BB	161	A	N9-C4-C5	7.33	108.73	105.80
57	BB	423	A	N1-C2-N3	-7.33	125.64	129.30
57	BB	1629	U	C5-C6-N1	-7.33	119.03	122.70
57	BB	2480	C	O4'-C1'-N1	7.33	114.06	108.20
57	BB	2732	G	C4-N9-C1'	7.33	136.03	126.50
21	AA	227	G	N7-C8-N9	7.33	116.76	113.10
21	AA	363	A	N1-C2-N3	7.33	132.96	129.30
21	AA	915	A	C4-C5-C6	7.33	120.66	117.00
21	AA	1032	G	O4'-C1'-N9	7.33	114.06	108.20
57	BB	1143	A	N3-C4-C5	-7.33	121.67	126.80
57	BB	1253	A	C5-C6-N1	-7.33	114.04	117.70
21	AA	715	A	C6-C5-N7	-7.33	127.17	132.30
21	AA	982	U	N3-C4-C5	-7.33	110.20	114.60
57	BB	124	G	N1-C2-N3	-7.33	119.50	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	507	A	C4-C5-C6	7.33	120.66	117.00
57	BB	1409	U	N3-C4-C5	-7.33	110.20	114.60
57	BB	1523	U	N3-C4-O4	-7.33	114.27	119.40
57	BB	1646	C	O4'-C1'-N1	7.33	114.06	108.20
57	BB	1768	C	N3-C4-N4	7.33	123.13	118.00
57	BB	2595	G	C8-N9-C4	7.33	109.33	106.40
19	AH	65	PHE	CB-CG-CD2	-7.32	115.67	120.80
21	AA	280	C	N3-C4-N4	7.32	123.13	118.00
21	AA	1417	G	O4'-C1'-N9	7.32	114.06	108.20
57	BB	1875	G	P-O5'-C5'	7.32	132.62	120.90
21	AA	763	G	N7-C8-N9	7.32	116.76	113.10
21	AA	1032	G	C2-N3-C4	7.32	115.56	111.90
21	AA	158	G	N9-C4-C5	7.32	108.33	105.40
21	AA	357	G	O4'-C1'-C2'	-7.32	98.48	105.80
21	AA	494	G	N7-C8-N9	7.32	116.76	113.10
21	AA	738	C	O4'-C1'-N1	7.32	114.06	108.20
21	AA	895	G	C6-N1-C2	7.32	129.49	125.10
34	BO	9	ARG	NE-CZ-NH2	-7.32	116.64	120.30
57	BB	250	G	C5-C6-N1	-7.32	107.84	111.50
57	BB	444	C	P-O3'-C3'	-7.32	110.92	119.70
57	BB	632	A	O4'-C1'-N9	7.32	114.06	108.20
57	BB	957	C	N3-C4-N4	7.32	123.12	118.00
57	BB	1042	G	C3'-C2'-C1'	-7.32	95.64	101.50
57	BB	1910	G	C2-N3-C4	7.32	115.56	111.90
57	BB	2108	A	C5-C6-N1	-7.32	114.04	117.70
21	AA	1037	C	O4'-C1'-N1	7.32	114.06	108.20
21	AA	1254	A	C5-C6-N6	-7.32	117.84	123.70
57	BB	471	A	N9-C4-C5	-7.32	102.87	105.80
21	AA	247	G	C2-N3-C4	7.32	115.56	111.90
21	AA	1160	G	N7-C8-N9	-7.32	109.44	113.10
21	AA	1437	A	C5-C6-N6	-7.32	117.85	123.70
23	AW	28	G	O4'-C1'-N9	7.32	114.05	108.20
57	BB	39	G	N1-C2-N3	-7.32	119.51	123.90
57	BB	1690	A	O4'-C1'-N9	7.32	114.05	108.20
58	BA	68	C	O4'-C1'-N1	7.32	114.05	108.20
21	AA	31	G	C5-C6-N1	-7.32	107.84	111.50
21	AA	646	G	N1-C2-N3	-7.32	119.51	123.90
21	AA	849	G	C8-N9-C4	-7.32	103.47	106.40
22	AY	30	G	O4'-C1'-N9	7.32	114.05	108.20
23	AW	28	G	C8-N9-C4	7.32	109.33	106.40
56	BH	98	ASP	CB-CG-OD1	7.32	124.88	118.30
57	BB	11	C	N3-C4-N4	7.32	123.12	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	98	G	C4-C5-C6	7.32	123.19	118.80
57	BB	155	A	N9-C4-C5	7.32	108.73	105.80
57	BB	797	G	N3-C2-N2	7.32	125.02	119.90
57	BB	1017	G	O4'-C1'-N9	7.32	114.05	108.20
57	BB	1349	C	C6-N1-C2	-7.32	117.37	120.30
57	BB	1534	U	O4'-C1'-N1	7.32	114.05	108.20
57	BB	1786	A	C5-N7-C8	7.32	107.56	103.90
57	BB	2400	G	N9-C4-C5	-7.32	102.47	105.40
57	BB	2627	G	C6-N1-C2	7.32	129.49	125.10
21	AA	807	A	O4'-C1'-N9	7.31	114.05	108.20
57	BB	1777	U	N3-C2-O2	7.31	127.32	122.20
21	AA	133	U	O4'-C1'-N1	7.31	114.05	108.20
21	AA	189	A	C6-C5-N7	-7.31	127.18	132.30
57	BB	750	A	C8-N9-C4	-7.31	102.88	105.80
57	BB	1660	G	C6-N1-C2	7.31	129.49	125.10
57	BB	1753	G	C4-C5-N7	-7.31	107.88	110.80
57	BB	1885	A	C4-C5-C6	7.31	120.66	117.00
58	BA	7	G	O4'-C1'-N9	7.31	114.05	108.20
58	BA	72	G	C2-N3-C4	7.31	115.56	111.90
57	BB	1642	G	N3-C4-C5	7.31	132.25	128.60
57	BB	1885	A	C8-N9-C4	-7.31	102.88	105.80
57	BB	2326	C	N3-C4-N4	7.31	123.12	118.00
21	AA	851	G	C5-C6-N1	7.31	115.15	111.50
21	AA	1120	C	C5-C6-N1	7.31	124.66	121.00
57	BB	177	G	O4'-C1'-N9	7.31	114.05	108.20
57	BB	836	G	C5-C6-O6	-7.31	124.21	128.60
57	BB	872	U	N3-C4-C5	-7.31	110.21	114.60
21	AA	570	G	N1-C6-O6	7.31	124.28	119.90
21	AA	1422	G	N1-C6-O6	7.31	124.28	119.90
26	AV	11	A	C6-C5-N7	-7.31	127.18	132.30
57	BB	293	U	N1-C2-N3	-7.31	110.52	114.90
57	BB	353	C	C5'-C4'-O4'	7.31	117.87	109.10
57	BB	847	U	O4'-C1'-N1	7.31	114.05	108.20
57	BB	1148	U	P-O3'-C3'	-7.31	110.93	119.70
57	BB	1565	C	C5-C4-N4	-7.31	115.08	120.20
57	BB	1626	A	C5-C6-N6	-7.31	117.85	123.70
57	BB	2271	G	N7-C8-N9	7.31	116.75	113.10
57	BB	2705	A	O4'-C1'-N9	7.31	114.05	108.20
57	BB	1616	A	C6-C5-N7	-7.31	127.19	132.30
57	BB	1637	A	C5-N7-C8	7.31	107.55	103.90
57	BB	2566	A	O4'-C1'-N9	7.31	114.04	108.20
21	AA	247	G	N1-C2-N3	-7.30	119.52	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	674	G	C5-N7-C8	7.30	107.95	104.30
21	AA	763	G	C4-C5-N7	7.30	113.72	110.80
21	AA	941	G	C5-N7-C8	-7.30	100.65	104.30
21	AA	1008	U	C2-N3-C4	-7.30	122.62	127.00
21	AA	1012	A	N7-C8-N9	-7.30	110.15	113.80
57	BB	248	G	C5-C6-N1	-7.30	107.85	111.50
57	BB	2005	A	C5-C6-N6	-7.30	117.86	123.70
57	BB	2406	A	C5'-C4'-O4'	7.30	117.87	109.10
57	BB	2663	G	C6-C5-N7	-7.30	126.02	130.40
57	BB	2701	U	C4-C5-C6	7.30	124.08	119.70
21	AA	1082	A	N7-C8-N9	-7.30	110.15	113.80
57	BB	836	G	C8-N9-C4	-7.30	103.48	106.40
21	AA	533	A	C3'-C2'-C1'	-7.30	95.66	101.50
21	AA	1002	G	C4-C5-C6	7.30	123.18	118.80
21	AA	1107	C	N3-C4-N4	7.30	123.11	118.00
21	AA	1231	G	P-O3'-C3'	-7.30	110.94	119.70
57	BB	627	A	C2-N3-C4	7.30	114.25	110.60
57	BB	1264	A	C5-C6-N1	-7.30	114.05	117.70
57	BB	1543	G	N3-C2-N2	7.30	125.01	119.90
21	AA	108	G	C6-C5-N7	-7.30	126.02	130.40
57	BB	309	A	C2-N3-C4	-7.30	106.95	110.60
57	BB	382	A	C4-C5-N7	-7.30	107.05	110.70
57	BB	506	G	N3-C2-N2	7.30	125.01	119.90
57	BB	1139	G	O4'-C1'-N9	7.30	114.04	108.20
57	BB	1221	C	C5-C6-N1	7.30	124.65	121.00
57	BB	1625	C	N1-C2-O2	-7.30	114.52	118.90
57	BB	2003	A	N1-C6-N6	7.30	122.98	118.60
57	BB	2482	A	C8-N9-C4	-7.30	102.88	105.80
21	AA	511	C	C4-C5-C6	7.30	121.05	117.40
21	AA	1468	A	C4-C5-C6	7.30	120.65	117.00
57	BB	444	C	O4'-C1'-N1	7.30	114.04	108.20
57	BB	744	U	O4'-C1'-N1	7.30	114.04	108.20
57	BB	749	A	C4-C5-C6	7.30	120.65	117.00
57	BB	859	G	N1-C2-N3	-7.30	119.52	123.90
57	BB	2386	A	C8-N9-C4	-7.30	102.88	105.80
21	AA	537	G	N9-C4-C5	-7.30	102.48	105.40
21	AA	816	A	C5-C6-N6	-7.30	117.86	123.70
21	AA	865	A	C5-C6-N6	-7.30	117.86	123.70
21	AA	1099	G	N3-C2-N2	7.30	125.01	119.90
22	AY	10	G	C5-C6-O6	7.30	132.98	128.60
57	BB	39	G	N3-C2-N2	7.30	125.01	119.90
57	BB	272	A	O4'-C1'-N9	7.30	114.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	374	A	C6-C5-N7	-7.30	127.19	132.30
57	BB	969	G	N1-C2-N3	-7.30	119.52	123.90
57	BB	1202	G	N3-C2-N2	7.30	125.01	119.90
58	BA	78	A	C3'-C2'-C1'	-7.30	95.66	101.50
58	BA	88	C	O4'-C1'-N1	7.30	114.04	108.20
21	AA	607	A	N1-C2-N3	-7.29	125.65	129.30
21	AA	1342	C	N3-C4-N4	7.29	123.11	118.00
21	AA	1489	G	N1-C2-N3	7.29	128.28	123.90
57	BB	102	U	N1-C2-N3	-7.29	110.52	114.90
57	BB	1835	G	C8-N9-C4	-7.29	103.48	106.40
21	AA	136	C	C4'-C3'-C2'	-7.29	95.31	102.60
21	AA	276	G	N3-C4-C5	-7.29	124.95	128.60
21	AA	558	G	N1-C2-N2	-7.29	109.64	116.20
21	AA	1393	U	N3-C4-C5	-7.29	110.22	114.60
57	BB	169	G	O4'-C1'-N9	7.29	114.04	108.20
57	BB	371	A	C5-C6-N1	-7.29	114.05	117.70
57	BB	825	A	N9-C4-C5	7.29	108.72	105.80
57	BB	959	A	C5'-C4'-C3'	-7.29	104.33	116.00
57	BB	1113	U	N1-C2-O2	7.29	127.91	122.80
57	BB	1507	C	N3-C4-N4	7.29	123.11	118.00
57	BB	1967	C	N3-C4-N4	7.29	123.11	118.00
57	BB	2237	G	N1-C6-O6	7.29	124.28	119.90
21	AA	1120	C	C6-N1-C2	-7.29	117.38	120.30
57	BB	723	C	C5-C6-N1	7.29	124.65	121.00
57	BB	734	A	O4'-C1'-N9	7.29	114.03	108.20
57	BB	2340	A	O4'-C1'-N9	7.29	114.03	108.20
21	AA	282	A	C5-C6-N1	-7.29	114.06	117.70
21	AA	573	A	N1-C6-N6	7.29	122.97	118.60
23	AW	29	G	C6-C5-N7	-7.29	126.03	130.40
57	BB	1051	G	N1-C6-O6	7.29	124.27	119.90
57	BB	1535	A	C2-N3-C4	7.29	114.25	110.60
57	BB	2245	U	O4'-C1'-N1	7.29	114.03	108.20
57	BB	2875	C	O4'-C1'-N1	7.29	114.03	108.20
21	AA	100	G	N7-C8-N9	-7.29	109.46	113.10
21	AA	833	G	C8-N9-C1'	7.29	136.47	127.00
21	AA	856	C	N1-C1'-C2'	-7.29	103.98	112.00
21	AA	857	C	N3-C4-C5	-7.29	118.98	121.90
21	AA	882	C	C5-C4-N4	7.29	125.30	120.20
57	BB	1346	G	C2-N3-C4	7.29	115.55	111.90
57	BB	1549	A	C4-C5-C6	7.29	120.64	117.00
57	BB	1812	U	C2-N3-C4	-7.29	122.63	127.00
57	BB	1928	A	C5-C6-N1	-7.29	114.06	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	BC	95	TYR	CG-CD1-CE1	-7.29	115.47	121.30
57	BB	426	C	C4-C5-C6	7.29	121.04	117.40
57	BB	1552	A	C5-N7-C8	7.29	107.54	103.90
57	BB	1758	U	C5-C6-N1	7.29	126.34	122.70
21	AA	400	C	C5-C4-N4	-7.29	115.10	120.20
21	AA	1022	A	N3-C4-C5	-7.29	121.70	126.80
22	AY	28	C	C5-C4-N4	-7.29	115.10	120.20
54	BF	94	ARG	NE-CZ-NH2	-7.29	116.66	120.30
57	BB	59	U	O4'-C1'-N1	7.29	114.03	108.20
57	BB	492	A	C8-N9-C4	-7.29	102.89	105.80
21	AA	211	G	C5-C6-N1	-7.28	107.86	111.50
21	AA	711	G	O4'-C1'-N9	7.28	114.03	108.20
21	AA	948	C	O4'-C1'-N1	7.28	114.03	108.20
21	AA	1258	G	P-O5'-C5'	7.28	132.55	120.90
57	BB	777	G	C4-C5-C6	7.28	123.17	118.80
57	BB	1561	C	C6-N1-C2	-7.28	117.39	120.30
57	BB	1582	C	O4'-C1'-N1	7.28	114.03	108.20
57	BB	1835	G	C2-N3-C4	7.28	115.54	111.90
21	AA	970	C	N3-C4-N4	7.28	123.10	118.00
57	BB	2002	G	N1-C2-N3	-7.28	119.53	123.90
21	AA	245	U	O4'-C1'-N1	7.28	114.02	108.20
21	AA	385	C	C5-C4-N4	-7.28	115.10	120.20
21	AA	794	A	C2-N3-C4	-7.28	106.96	110.60
21	AA	1081	A	N3-C4-N9	7.28	133.22	127.40
21	AA	1201	A	P-O3'-C3'	7.28	128.44	119.70
23	AW	34	G	C4-C5-C6	7.28	123.17	118.80
57	BB	1164	C	O4'-C1'-N1	7.28	114.03	108.20
57	BB	1495	A	O4'-C1'-N9	7.28	114.02	108.20
57	BB	1839	G	N3-C4-N9	-7.28	121.63	126.00
26	AV	75	C	O4'-C1'-N1	7.28	114.02	108.20
57	BB	2481	G	C5-N7-C8	7.28	107.94	104.30
21	AA	456	A	C5-C6-N1	-7.28	114.06	117.70
22	AY	20	G	N3-C2-N2	7.28	124.99	119.90
57	BB	1415	U	C6-N1-C2	7.28	125.37	121.00
57	BB	2656	U	N3-C4-C5	-7.28	110.23	114.60
57	BB	2790	U	N3-C4-C5	-7.28	110.23	114.60
21	AA	792	A	O4'-C1'-C2'	-7.28	98.53	105.80
57	BB	1168	G	N3-C4-C5	7.28	132.24	128.60
57	BB	1646	C	N1-C2-O2	-7.28	114.53	118.90
57	BB	1949	G	C6-N1-C2	-7.28	120.73	125.10
57	BB	2352	A	O4'-C1'-N9	7.28	114.02	108.20
57	BB	2648	G	N1-C2-N2	7.28	122.75	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	424	G	N3-C2-N2	7.27	124.99	119.90
21	AA	792	A	P-O5'-C5'	-7.27	109.26	120.90
21	AA	854	U	N3-C4-O4	7.27	124.49	119.40
57	BB	2204	G	C5-C6-O6	-7.27	124.24	128.60
21	AA	177	G	C2-N3-C4	7.27	115.54	111.90
21	AA	941	G	C6-C5-N7	-7.27	126.04	130.40
21	AA	1256	A	N1-C6-N6	7.27	122.96	118.60
21	AA	1455	G	C2-N3-C4	7.27	115.54	111.90
21	AA	1466	C	N1-C2-O2	-7.27	114.54	118.90
57	BB	221	A	P-O3'-C3'	7.27	128.43	119.70
57	BB	1314	C	N1-C2-O2	-7.27	114.54	118.90
57	BB	1643	G	C8-N9-C4	-7.27	103.49	106.40
57	BB	421	C	N3-C4-N4	7.27	123.09	118.00
57	BB	1234	U	C5-C4-O4	-7.27	121.54	125.90
57	BB	1873	G	C6-C5-N7	-7.27	126.04	130.40
57	BB	2613	U	C5-C6-N1	7.27	126.33	122.70
21	AA	96	U	O4'-C1'-N1	7.27	114.02	108.20
26	AV	74	C	C2-N3-C4	-7.27	116.27	119.90
57	BB	264	C	C5-C4-N4	-7.27	115.11	120.20
57	BB	1024	G	C3'-C2'-C1'	-7.27	95.69	101.50
57	BB	2151	U	N3-C4-O4	7.27	124.49	119.40
57	BB	2321	U	C2-N1-C1'	7.27	126.42	117.70
57	BB	2771	C	O4'-C1'-N1	7.27	114.02	108.20
21	AA	277	C	N3-C2-O2	-7.27	116.81	121.90
21	AA	588	G	N7-C8-N9	7.27	116.73	113.10
57	BB	141	G	P-O5'-C5'	7.27	132.53	120.90
57	BB	154	U	C4'-C3'-C2'	-7.27	95.33	102.60
57	BB	360	U	N3-C4-C5	-7.27	110.24	114.60
57	BB	798	G	C5-C6-O6	-7.27	124.24	128.60
57	BB	1001	A	C5-C6-N6	-7.27	117.89	123.70
57	BB	1801	A	C5-C6-N6	-7.27	117.89	123.70
57	BB	1853	A	N7-C8-N9	-7.27	110.17	113.80
21	AA	441	A	N9-C4-C5	7.27	108.71	105.80
57	BB	6	A	N1-C2-N3	-7.27	125.67	129.30
57	BB	311	A	C4-C5-N7	7.27	114.33	110.70
57	BB	912	C	P-O3'-C3'	-7.27	110.98	119.70
57	BB	1426	G	N7-C8-N9	-7.27	109.47	113.10
21	AA	842	U	O4'-C1'-N1	7.26	114.01	108.20
35	BP	81	ASP	CB-CG-OD1	-7.26	111.76	118.30
57	BB	383	C	O4'-C1'-N1	7.26	114.01	108.20
57	BB	653	U	C2-N1-C1'	7.26	126.42	117.70
57	BB	1419	A	C4'-C3'-C2'	7.26	109.86	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2329	U	N1-C2-N3	-7.26	110.54	114.90
57	BB	2609	U	C2-N3-C4	-7.26	122.64	127.00
18	AG	69	ARG	NE-CZ-NH2	-7.26	116.67	120.30
57	BB	1470	A	N1-C2-N3	7.26	132.93	129.30
57	BB	2069	G	C6-C5-N7	-7.26	126.04	130.40
57	BB	2602	A	C4-C5-N7	-7.26	107.07	110.70
57	BB	2837	A	C5-C6-N6	-7.26	117.89	123.70
21	AA	1440	U	O4'-C1'-N1	7.26	114.01	108.20
43	BX	37	PHE	CB-CG-CD1	7.26	125.88	120.80
57	BB	93	G	C5-C6-O6	-7.26	124.24	128.60
57	BB	345	A	C5-N7-C8	7.26	107.53	103.90
57	BB	818	G	N1-C2-N3	-7.26	119.54	123.90
57	BB	2268	A	N1-C2-N3	7.26	132.93	129.30
21	AA	854	U	O4'-C1'-N1	7.26	114.01	108.20
57	BB	63	A	C1'-O4'-C4'	-7.26	104.09	109.90
57	BB	76	C	N3-C2-O2	7.26	126.98	121.90
57	BB	87	U	C5-C4-O4	-7.26	121.54	125.90
57	BB	187	G	C5-C6-N1	-7.26	107.87	111.50
57	BB	403	U	N1-C2-N3	7.26	119.26	114.90
57	BB	2010	G	C4-C5-N7	-7.26	107.90	110.80
57	BB	2307	G	C5-C6-O6	-7.26	124.25	128.60
57	BB	2498	C	O4'-C1'-N1	7.26	114.01	108.20
26	AV	75	C	C3'-C2'-C1'	7.26	107.31	101.50
57	BB	237	C	O4'-C1'-N1	7.26	114.01	108.20
57	BB	2874	C	C2-N3-C4	7.26	123.53	119.90
21	AA	1141	C	N3-C4-C5	-7.26	119.00	121.90
23	AW	4	C	N3-C4-N4	7.26	123.08	118.00
36	BQ	24	TYR	CG-CD2-CE2	-7.26	115.49	121.30
57	BB	381	G	N1-C6-O6	7.26	124.25	119.90
57	BB	504	A	O4'-C1'-N9	7.26	114.00	108.20
57	BB	687	C	C5-C6-N1	7.26	124.63	121.00
57	BB	1364	G	O4'-C1'-N9	7.26	114.00	108.20
57	BB	1701	A	C6-C5-N7	-7.26	127.22	132.30
57	BB	2298	A	C4-C5-C6	7.26	120.63	117.00
57	BB	2613	U	N1-C2-O2	7.26	127.88	122.80
57	BB	2800	A	C6-N1-C2	-7.26	114.25	118.60
21	AA	521	G	C5-C6-N1	-7.25	107.87	111.50
57	BB	794	A	C5-C6-N6	-7.25	117.90	123.70
9	AR	62	ARG	NE-CZ-NH2	-7.25	116.67	120.30
21	AA	537	G	C4-C5-N7	7.25	113.70	110.80
23	AW	22	G	C4-C5-C6	7.25	123.15	118.80
23	AW	63	G	C8-N9-C1'	-7.25	117.57	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	398	C	P-O3'-C3'	7.25	128.41	119.70
57	BB	1351	C	C4-C5-C6	7.25	121.03	117.40
57	BB	1563	U	C2-N3-C4	7.25	131.35	127.00
57	BB	2479	U	C5-C6-N1	-7.25	119.07	122.70
57	BB	2522	U	C4-C5-C6	7.25	124.05	119.70
57	BB	2731	G	C5-C6-O6	-7.25	124.25	128.60
57	BB	2822	G	N1-C6-O6	7.25	124.25	119.90
21	AA	69	G	C4-C5-C6	7.25	123.15	118.80
21	AA	544	G	N1-C6-O6	7.25	124.25	119.90
21	AA	715	A	C5-C6-N1	-7.25	114.07	117.70
21	AA	853	C	O4'-C1'-N1	7.25	114.00	108.20
21	AA	1289	A	C4-C5-N7	-7.25	107.07	110.70
21	AA	1363	A	C5-C6-N6	-7.25	117.90	123.70
57	BB	1548	A	C4-C5-C6	7.25	120.62	117.00
57	BB	1674	G	N3-C2-N2	7.25	124.97	119.90
57	BB	2033	A	C6-C5-N7	-7.25	127.22	132.30
57	BB	2588	G	N9-C4-C5	-7.25	102.50	105.40
22	AY	67	A	C5-C6-N6	-7.25	117.90	123.70
57	BB	1750	G	N1-C6-O6	7.25	124.25	119.90
21	AA	267	C	C2-N3-C4	7.25	123.52	119.90
21	AA	374	A	P-O5'-C5'	7.25	132.50	120.90
21	AA	459	A	N1-C2-N3	7.25	132.93	129.30
21	AA	540	G	O4'-C1'-N9	7.25	114.00	108.20
21	AA	956	U	N3-C2-O2	7.25	127.28	122.20
21	AA	1088	G	N1-C2-N2	7.25	122.72	116.20
23	AW	66	U	O4'-C1'-N1	7.25	114.00	108.20
57	BB	649	G	N1-C2-N3	-7.25	119.55	123.90
57	BB	1287	A	C2-N3-C4	-7.25	106.98	110.60
57	BB	1537	G	N1-C6-O6	7.25	124.25	119.90
57	BB	1726	C	C6-N1-C2	-7.25	117.40	120.30
57	BB	2730	C	P-O3'-C3'	-7.25	111.00	119.70
21	AA	282	A	C4-C5-C6	7.25	120.62	117.00
21	AA	461	A	O4'-C1'-N9	7.25	114.00	108.20
21	AA	549	C	C6-N1-C2	-7.25	117.40	120.30
21	AA	557	G	O4'-C1'-N9	7.25	114.00	108.20
57	BB	486	C	C5-C6-N1	7.25	124.62	121.00
57	BB	1116	G	N3-C2-N2	7.25	124.97	119.90
57	BB	1387	A	C2-N3-C4	-7.25	106.98	110.60
57	BB	2185	U	P-O3'-C3'	-7.25	111.00	119.70
21	AA	300	A	C4-C5-C6	7.25	120.62	117.00
23	AW	75	C	P-O3'-C3'	-7.25	111.01	119.70
57	BB	2518	A	C4-C5-C6	7.25	120.62	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1027	C	N3-C4-C5	-7.24	119.00	121.90
21	AA	1227	A	C4-C5-C6	7.24	120.62	117.00
22	AY	29	A	C5'-C4'-C3'	-7.24	104.41	116.00
23	AW	70	G	N3-C4-N9	-7.24	121.65	126.00
57	BB	190	A	N7-C8-N9	-7.24	110.18	113.80
57	BB	410	G	N1-C6-O6	7.24	124.25	119.90
57	BB	1136	G	C5-C6-N1	-7.24	107.88	111.50
57	BB	1168	G	N1-C6-O6	7.24	124.25	119.90
57	BB	2074	U	O4'-C1'-N1	7.24	114.00	108.20
58	BA	40	U	P-O3'-C3'	7.24	128.39	119.70
57	BB	1583	A	C6-N1-C2	7.24	122.94	118.60
21	AA	1010	U	O4'-C1'-N1	7.24	113.99	108.20
21	AA	1143	G	C3'-C2'-C1'	-7.24	95.71	101.50
57	BB	1866	A	O4'-C1'-N9	7.24	113.99	108.20
57	BB	1872	A	C5-C6-N6	-7.24	117.91	123.70
57	BB	1894	C	O4'-C1'-N1	7.24	113.99	108.20
58	BA	98	G	N3-C2-N2	7.24	124.97	119.90
58	BA	107	G	N1-C6-O6	7.24	124.24	119.90
21	AA	118	U	O3'-P-O5'	-7.24	90.25	104.00
21	AA	631	C	C6-N1-C2	-7.24	117.41	120.30
21	AA	1303	C	C5-C6-N1	7.24	124.62	121.00
21	AA	1482	G	C8-N9-C4	7.24	109.30	106.40
57	BB	281	C	C5-C4-N4	-7.24	115.13	120.20
57	BB	436	C	C5-C4-N4	-7.24	115.13	120.20
57	BB	987	C	C4-C5-C6	7.24	121.02	117.40
57	BB	2200	C	N1-C2-O2	-7.24	114.56	118.90
57	BB	2410	G	C6-C5-N7	-7.24	126.06	130.40
57	BB	2606	C	C2-N3-C4	7.24	123.52	119.90
57	BB	2658	C	P-O3'-C3'	-7.24	111.01	119.70
57	BB	2723	C	N1-C2-N3	7.24	124.27	119.20
58	BA	54	G	C5-C6-O6	-7.24	124.26	128.60
21	AA	128	G	C6-C5-N7	-7.24	126.06	130.40
57	BB	678	C	C6-N1-C2	-7.24	117.41	120.30
57	BB	1901	A	N1-C2-N3	-7.24	125.68	129.30
57	BB	2855	C	C6-N1-C2	-7.24	117.41	120.30
21	AA	86	G	N1-C2-N3	-7.24	119.56	123.90
21	AA	199	A	C8-N9-C4	7.24	108.69	105.80
21	AA	357	G	C8-N9-C4	-7.24	103.51	106.40
21	AA	364	A	N1-C2-N3	7.24	132.92	129.30
21	AA	1191	A	C5-C6-N1	-7.24	114.08	117.70
21	AA	1230	C	C3'-C2'-C1'	-7.24	95.71	101.50
21	AA	1258	G	C2-N3-C4	7.24	115.52	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1341	U	O4'-C1'-N1	7.24	113.99	108.20
21	AA	1370	G	C6-C5-N7	-7.24	126.06	130.40
57	BB	312	G	C4-C5-N7	-7.24	107.91	110.80
57	BB	343	C	N3-C4-C5	-7.24	119.01	121.90
57	BB	1728	C	C5-C6-N1	7.24	124.62	121.00
58	BA	9	G	C2-N3-C4	-7.24	108.28	111.90
58	BA	12	C	P-O5'-C5'	7.24	132.48	120.90
57	BB	70	G	N3-C4-C5	-7.23	124.98	128.60
57	BB	2597	G	C4-C5-C6	7.23	123.14	118.80
21	AA	678	U	C5-C6-N1	7.23	126.32	122.70
57	BB	745	G	C2-N3-C4	-7.23	108.28	111.90
57	BB	1243	C	N3-C4-N4	7.23	123.06	118.00
21	AA	167	A	C1'-O4'-C4'	-7.23	104.12	109.90
21	AA	1094	G	N3-C2-N2	7.23	124.96	119.90
21	AA	1169	A	C5-C6-N1	-7.23	114.08	117.70
21	AA	1493	A	C6-C5-N7	-7.23	127.24	132.30
23	AW	26	A	N1-C2-N3	7.23	132.91	129.30
57	BB	649	G	C6-C5-N7	-7.23	126.06	130.40
57	BB	1340	U	C2-N1-C1'	7.23	126.38	117.70
57	BB	1659	G	C4-C5-N7	-7.23	107.91	110.80
57	BB	1984	G	N3-C4-C5	7.23	132.22	128.60
57	BB	2295	C	N3-C4-C5	-7.23	119.01	121.90
21	AA	404	G	C5-C6-N1	7.23	115.11	111.50
57	BB	178	G	N1-C2-N3	-7.23	119.56	123.90
57	BB	948	C	N3-C4-N4	7.23	123.06	118.00
57	BB	1660	G	C5-C6-N1	-7.23	107.89	111.50
57	BB	2250	G	N3-C2-N2	7.23	124.96	119.90
21	AA	25	C	N3-C4-N4	7.23	123.06	118.00
21	AA	55	A	C4-C5-C6	7.23	120.61	117.00
21	AA	305	G	C8-N9-C4	-7.23	103.51	106.40
21	AA	589	U	N1-C2-O2	-7.23	117.74	122.80
57	BB	14	A	C5-C6-N6	-7.23	117.92	123.70
57	BB	831	G	C4-C5-N7	-7.23	107.91	110.80
57	BB	2341	G	C5-C6-O6	-7.23	124.26	128.60
21	AA	1289	A	N7-C8-N9	-7.23	110.19	113.80
57	BB	1308	A	N1-C2-N3	-7.23	125.69	129.30
57	BB	1383	A	N3-C4-N9	7.23	133.18	127.40
21	AA	67	C	N3-C4-N4	7.22	123.06	118.00
21	AA	1524	C	N3-C4-C5	-7.22	119.01	121.90
23	AW	5	G	O4'-C1'-N9	7.22	113.98	108.20
29	BJ	27	ARG	NE-CZ-NH1	7.22	123.91	120.30
57	BB	107	G	C4'-C3'-C2'	-7.22	95.38	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	496	G	C5-N7-C8	7.22	107.91	104.30
57	BB	636	G	C4-C5-N7	7.22	113.69	110.80
57	BB	842	U	C6-N1-C2	-7.22	116.67	121.00
57	BB	1010	A	C6-N1-C2	7.22	122.94	118.60
57	BB	1642	G	C5-C6-O6	-7.22	124.27	128.60
57	BB	1774	C	N3-C4-C5	7.22	124.79	121.90
57	BB	2190	G	C4'-C3'-C2'	-7.22	95.38	102.60
57	BB	2539	C	C6-N1-C2	7.22	123.19	120.30
57	BB	2556	C	N3-C4-N4	7.22	123.06	118.00
57	BB	2613	U	C2-N3-C4	7.22	131.34	127.00
21	AA	1410	A	N3-C4-C5	-7.22	121.74	126.80
57	BB	188	G	C4-C5-N7	-7.22	107.91	110.80
57	BB	1275	A	N3-C4-C5	-7.22	121.74	126.80
57	BB	2566	A	C5-C6-N1	-7.22	114.09	117.70
58	BA	93	C	N3-C4-C5	-7.22	119.01	121.90
57	BB	383	C	P-O3'-C3'	-7.22	111.03	119.70
57	BB	879	G	N3-C4-C5	-7.22	124.99	128.60
57	BB	974	G	N1-C2-N3	-7.22	119.57	123.90
57	BB	1072	C	C2-N3-C4	7.22	123.51	119.90
21	AA	103	U	C4-C5-C6	-7.22	115.37	119.70
21	AA	954	G	N9-C4-C5	-7.22	102.51	105.40
21	AA	1425	U	O4'-C1'-N1	7.22	113.97	108.20
21	AA	1433	A	N7-C8-N9	-7.22	110.19	113.80
22	AY	67	A	C4-C5-C6	7.22	120.61	117.00
57	BB	204	A	N1-C6-N6	7.22	122.93	118.60
57	BB	1167	C	O4'-C1'-N1	7.22	113.97	108.20
57	BB	1216	G	C5-C6-N1	-7.22	107.89	111.50
57	BB	1663	G	O4'-C1'-N9	7.22	113.97	108.20
57	BB	1690	A	C6-C5-N7	-7.22	127.25	132.30
57	BB	2432	A	C4-C5-N7	-7.22	107.09	110.70
57	BB	2500	U	N1-C2-N3	-7.22	110.57	114.90
21	AA	1215	G	C5-N7-C8	7.22	107.91	104.30
21	AA	1260	G	C4-C5-N7	-7.22	107.91	110.80
57	BB	1478	G	C6-C5-N7	-7.22	126.07	130.40
57	BB	2237	G	C5'-C4'-O4'	7.22	117.76	109.10
57	BB	2636	C	C3'-C2'-C1'	7.22	107.28	101.50
21	AA	1349	A	N1-C6-N6	7.22	122.93	118.60
57	BB	1038	G	O4'-C1'-N9	7.22	113.97	108.20
57	BB	2202	U	N3-C4-C5	-7.22	110.27	114.60
57	BB	2476	A	N1-C6-N6	7.22	122.93	118.60
21	AA	1155	A	C5-C6-N1	-7.21	114.09	117.70
21	AA	1391	U	C1'-O4'-C4'	7.21	115.67	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	25	C	C4-C5-C6	7.21	121.01	117.40
57	BB	1871	A	C6-C5-N7	-7.21	127.25	132.30
57	BB	2295	C	C6-N1-C2	7.21	123.19	120.30
57	BB	2598	A	P-O5'-C5'	-7.21	109.36	120.90
58	BA	3	C	N3-C4-N4	7.21	123.05	118.00
58	BA	30	C	C6-N1-C2	-7.21	117.41	120.30
21	AA	478	A	C5-C6-N1	-7.21	114.09	117.70
21	AA	1006	G	C4-C5-C6	7.21	123.13	118.80
23	AW	13	C	P-O3'-C3'	7.21	128.36	119.70
57	BB	2057	G	N3-C4-C5	-7.21	124.99	128.60
58	BA	37	C	O4'-C1'-N1	7.21	113.97	108.20
57	BB	12	U	C4-C5-C6	7.21	124.03	119.70
57	BB	23	G	C4-C5-N7	-7.21	107.92	110.80
57	BB	1019	U	O4'-C1'-N1	7.21	113.97	108.20
57	BB	2325	G	N1-C2-N3	-7.21	119.57	123.90
57	BB	2379	G	C4-C5-N7	7.21	113.68	110.80
57	BB	2648	G	C5-N7-C8	-7.21	100.69	104.30
57	BB	2879	A	C5-C6-N1	-7.21	114.09	117.70
21	AA	661	G	O4'-C1'-N9	7.21	113.97	108.20
57	BB	1078	U	C5-C4-O4	7.21	130.23	125.90
57	BB	1601	G	N7-C8-N9	-7.21	109.50	113.10
21	AA	51	A	C4-C5-C6	7.21	120.60	117.00
21	AA	261	U	O4'-C1'-N1	7.21	113.97	108.20
21	AA	887	G	O4'-C1'-N9	7.21	113.97	108.20
21	AA	1330	U	C5-C4-O4	-7.21	121.58	125.90
22	AY	25	C	N1-C2-O2	-7.21	114.58	118.90
57	BB	196	A	C6-N1-C2	7.21	122.92	118.60
57	BB	322	A	C4-C5-C6	7.21	120.60	117.00
57	BB	1715	G	C5-C6-O6	-7.21	124.28	128.60
57	BB	1841	U	O4'-C1'-N1	7.21	113.97	108.20
57	BB	2631	G	C4-C5-N7	7.21	113.68	110.80
21	AA	253	A	C5-C6-N1	-7.21	114.10	117.70
21	AA	1293	C	C5'-C4'-C3'	-7.21	104.47	116.00
21	AA	1442	G	N1-C6-O6	7.21	124.22	119.90
57	BB	378	C	P-O3'-C3'	-7.21	111.05	119.70
57	BB	465	G	N3-C4-N9	7.21	130.32	126.00
57	BB	848	C	C4-C5-C6	7.21	121.00	117.40
57	BB	2502	G	C5-C6-O6	-7.21	124.28	128.60
57	BB	2717	C	C2-N1-C1'	7.21	126.73	118.80
21	AA	109	A	C4-C5-C6	7.21	120.60	117.00
44	BY	61	ALA	N-CA-CB	7.21	120.19	110.10
57	BB	423	A	C5-C6-N6	-7.21	117.94	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2883	A	C4-C5-N7	-7.21	107.10	110.70
21	AA	581	G	C5-C6-O6	-7.20	124.28	128.60
21	AA	817	C	C5-C6-N1	-7.20	117.40	121.00
21	AA	1093	A	C5-C6-N6	-7.20	117.94	123.70
57	BB	557	C	C2-N3-C4	7.20	123.50	119.90
57	BB	2150	C	N1-C1'-C2'	-7.20	104.08	112.00
57	BB	2592	G	N1-C6-O6	7.20	124.22	119.90
21	AA	374	A	C5-C6-N1	-7.20	114.10	117.70
21	AA	965	U	N1-C2-O2	7.20	127.84	122.80
21	AA	1347	G	C6-N1-C2	7.20	129.42	125.10
21	AA	1419	G	N9-C4-C5	7.20	108.28	105.40
57	BB	237	C	N3-C4-N4	7.20	123.04	118.00
57	BB	2243	U	O4'-C1'-N1	7.20	113.96	108.20
57	BB	2278	A	C5-C6-N6	-7.20	117.94	123.70
58	BA	109	A	C8-N9-C4	7.20	108.68	105.80
21	AA	801	U	O4'-C1'-N1	7.20	113.96	108.20
21	AA	1098	C	C2-N3-C4	7.20	123.50	119.90
21	AA	1514	G	O4'-C1'-N9	7.20	113.96	108.20
57	BB	572	A	P-O3'-C3'	7.20	128.34	119.70
57	BB	995	C	N3-C4-N4	7.20	123.04	118.00
57	BB	1763	G	N3-C2-N2	7.20	124.94	119.90
57	BB	1947	C	N3-C4-C5	-7.20	119.02	121.90
57	BB	2824	C	N3-C2-O2	7.20	126.94	121.90
57	BB	794	A	C4-C5-N7	-7.20	107.10	110.70
57	BB	2369	A	C4-C5-N7	-7.20	107.10	110.70
57	BB	2475	C	N3-C4-C5	-7.20	119.02	121.90
57	BB	2509	G	C8-N9-C4	7.20	109.28	106.40
57	BB	2802	G	C4-N9-C1'	-7.20	117.14	126.50
21	AA	253	A	N1-C6-N6	7.20	122.92	118.60
57	BB	711	G	C5-C6-O6	-7.20	124.28	128.60
57	BB	1729	U	O4'-C1'-N1	7.20	113.96	108.20
21	AA	302	G	C6-N1-C2	7.20	129.42	125.10
21	AA	896	C	C5-C4-N4	-7.20	115.16	120.20
21	AA	1364	U	C4-C5-C6	7.20	124.02	119.70
45	BC	142	ASN	N-CA-CB	7.20	123.55	110.60
57	BB	35	G	C4-C5-C6	7.20	123.12	118.80
57	BB	228	C	C5-C6-N1	-7.20	117.40	121.00
57	BB	289	G	N9-C4-C5	-7.20	102.52	105.40
57	BB	356	G	C6-C5-N7	-7.20	126.08	130.40
57	BB	482	A	N1-C6-N6	7.20	122.92	118.60
57	BB	680	C	N3-C4-C5	-7.20	119.02	121.90
57	BB	1555	G	N3-C4-C5	-7.20	125.00	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2333	A	C5-C6-N1	-7.20	114.10	117.70
57	BB	2424	C	C4-C5-C6	7.20	121.00	117.40
57	BB	2688	G	N3-C2-N2	7.20	124.94	119.90
57	BB	2891	U	N3-C4-C5	-7.20	110.28	114.60
21	AA	329	A	C5-N7-C8	-7.19	100.30	103.90
21	AA	1016	A	C5-N7-C8	7.19	107.50	103.90
57	BB	403	U	P-O3'-C3'	7.19	128.33	119.70
57	BB	1182	G	N1-C6-O6	7.19	124.22	119.90
57	BB	2572	A	N9-C4-C5	-7.19	102.92	105.80
21	AA	414	A	P-O3'-C3'	7.19	128.33	119.70
57	BB	386	G	C4-C5-C6	7.19	123.11	118.80
57	BB	1038	G	C4-C5-C6	7.19	123.12	118.80
57	BB	1281	G	N1-C2-N3	-7.19	119.58	123.90
57	BB	2226	C	P-O5'-C5'	7.19	132.41	120.90
21	AA	236	A	C8-N9-C4	-7.19	102.92	105.80
21	AA	857	C	C6-N1-C2	7.19	123.18	120.30
57	BB	574	A	O4'-C1'-N9	7.19	113.95	108.20
57	BB	633	A	C4-C5-C6	7.19	120.59	117.00
57	BB	905	A	C5-C6-N1	-7.19	114.11	117.70
57	BB	1355	G	C5-C6-O6	-7.19	124.29	128.60
57	BB	2109	U	C4-C5-C6	7.19	124.01	119.70
57	BB	2171	A	O4'-C1'-N9	7.19	113.95	108.20
57	BB	2487	G	C8-N9-C4	-7.19	103.52	106.40
21	AA	1082	A	O4'-C1'-N9	7.19	113.95	108.20
21	AA	1508	A	N9-C4-C5	7.19	108.68	105.80
57	BB	1388	G	C4-C5-C6	7.19	123.11	118.80
57	BB	2362	C	O4'-C1'-N1	7.19	113.95	108.20
21	AA	846	G	N3-C2-N2	7.19	124.93	119.90
21	AA	1213	A	O4'-C1'-N9	7.19	113.95	108.20
21	AA	1363	A	C5'-C4'-O4'	7.19	117.73	109.10
21	AA	1454	G	P-O5'-C5'	7.19	132.40	120.90
57	BB	1077	A	O4'-C1'-N9	7.19	113.95	108.20
57	BB	1579	A	C1'-O4'-C4'	-7.19	104.15	109.90
57	BB	1863	G	O4'-C1'-N9	7.19	113.95	108.20
57	BB	2116	G	C6-C5-N7	-7.19	126.09	130.40
57	BB	2645	G	N1-C2-N3	-7.19	119.59	123.90
57	BB	2823	A	O4'-C1'-N9	7.19	113.95	108.20
21	AA	524	G	C4-C5-N7	-7.19	107.93	110.80
21	AA	1026	G	O4'-C1'-N9	7.19	113.95	108.20
57	BB	131	A	C8-N9-C4	-7.19	102.93	105.80
21	AA	200	G	C2-N3-C4	7.18	115.49	111.90
21	AA	911	U	C5-C4-O4	-7.18	121.59	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	165	A	N9-C4-C5	7.18	108.67	105.80
57	BB	200	U	N3-C4-C5	-7.18	110.29	114.60
57	BB	643	A	C6-N1-C2	7.18	122.91	118.60
57	BB	708	G	C5-N7-C8	7.18	107.89	104.30
57	BB	1177	G	O4'-C1'-N9	7.18	113.95	108.20
57	BB	1807	G	O4'-C1'-N9	7.18	113.95	108.20
57	BB	303	G	C5-C6-N1	-7.18	107.91	111.50
57	BB	408	G	C6-N1-C2	7.18	129.41	125.10
57	BB	1547	C	N3-C4-C5	-7.18	119.03	121.90
57	BB	2327	A	N7-C8-N9	7.18	117.39	113.80
57	BB	2388	A	C6-C5-N7	-7.18	127.27	132.30
57	BB	2553	G	O4'-C1'-N9	7.18	113.94	108.20
57	BB	962	G	C8-N9-C4	7.18	109.27	106.40
57	BB	1319	C	C2-N3-C4	7.18	123.49	119.90
57	BB	1457	U	O4'-C1'-N1	7.18	113.94	108.20
57	BB	2751	G	N9-C4-C5	7.18	108.27	105.40
21	AA	241	G	C4-C5-C6	7.18	123.11	118.80
23	AW	9	A	C4-C5-C6	7.18	120.59	117.00
23	AW	31	A	N3-C4-N9	7.18	133.14	127.40
57	BB	1621	U	P-O3'-C3'	7.18	128.32	119.70
57	BB	1668	A	C8-N9-C4	7.18	108.67	105.80
57	BB	2635	A	O4'-C1'-N9	7.18	113.94	108.20
21	AA	55	A	C5-C6-N1	-7.18	114.11	117.70
57	BB	2696	U	O4'-C1'-N1	7.18	113.94	108.20
8	AQ	40	THR	CA-CB-CG2	-7.18	102.35	112.40
21	AA	533	A	C6-C5-N7	-7.18	127.28	132.30
57	BB	764	A	O4'-C1'-N9	7.18	113.94	108.20
57	BB	1907	G	C5'-C4'-C3'	-7.18	104.52	116.00
57	BB	1934	C	C5-C4-N4	-7.18	115.18	120.20
57	BB	2624	G	C5-C6-O6	-7.18	124.29	128.60
57	BB	2784	U	O4'-C1'-N1	7.18	113.94	108.20
21	AA	108	G	N3-C4-C5	-7.17	125.01	128.60
21	AA	789	U	O4'-C4'-C3'	-7.17	96.83	104.00
57	BB	205	G	C6-N1-C2	7.17	129.41	125.10
57	BB	281	C	P-O3'-C3'	7.17	128.31	119.70
57	BB	591	U	O4'-C1'-N1	7.17	113.94	108.20
57	BB	1171	G	C6-N1-C2	7.17	129.41	125.10
57	BB	1292	G	C4-C5-N7	7.17	113.67	110.80
21	AA	628	G	C5-C6-O6	-7.17	124.30	128.60
21	AA	1241	G	C5-C6-O6	-7.17	124.30	128.60
21	AA	1258	G	C8-N9-C4	-7.17	103.53	106.40
57	BB	266	G	C8-N9-C4	7.17	109.27	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1281	G	C4-C5-C6	7.17	123.10	118.80
57	BB	1324	G	C5-C6-N1	-7.17	107.91	111.50
13	AB	21	TYR	CB-CG-CD1	-7.17	116.70	121.00
21	AA	423	G	C5-C6-N1	-7.17	107.91	111.50
21	AA	684	U	N3-C4-O4	7.17	124.42	119.40
21	AA	844	G	C4-C5-C6	7.17	123.10	118.80
23	AW	12	U	N3-C4-C5	-7.17	110.30	114.60
57	BB	35	G	C4-C5-N7	-7.17	107.93	110.80
57	BB	976	G	C5-C6-O6	-7.17	124.30	128.60
57	BB	1230	A	C5-C6-N6	-7.17	117.96	123.70
57	BB	2115	G	C4-N9-C1'	7.17	135.82	126.50
57	BB	2558	C	N3-C4-N4	7.17	123.02	118.00
21	AA	160	A	C5-C6-N6	-7.17	117.96	123.70
26	AV	11	A	C4-C5-C6	7.17	120.58	117.00
57	BB	405	U	N3-C4-C5	7.17	118.90	114.60
21	AA	218	U	C5-C6-N1	7.17	126.28	122.70
21	AA	507	C	C5-C4-N4	-7.17	115.18	120.20
21	AA	656	G	N9-C4-C5	7.17	108.27	105.40
21	AA	971	G	N1-C2-N3	-7.17	119.60	123.90
21	AA	1007	U	C6-N1-C2	7.17	125.30	121.00
21	AA	1285	A	C2-N3-C4	-7.17	107.02	110.60
25	AZ	91	MET	CG-SD-CE	-7.17	88.73	100.20
26	AV	72	A	C2-N3-C4	7.17	114.18	110.60
57	BB	282	A	O4'-C4'-C3'	-7.17	96.83	104.00
57	BB	979	A	C4-C5-C6	7.17	120.58	117.00
57	BB	1344	U	C5-C6-N1	-7.17	119.12	122.70
57	BB	1692	U	O4'-C1'-N1	7.17	113.93	108.20
57	BB	2025	C	C2-N3-C4	7.17	123.48	119.90
57	BB	2073	C	C1'-O4'-C4'	7.17	115.64	109.90
58	BA	98	G	C2-N3-C4	7.17	115.48	111.90
21	AA	216	U	O4'-C1'-N1	7.17	113.93	108.20
21	AA	1350	A	C5-C6-N6	-7.17	117.97	123.70
21	AA	1478	U	C2-N3-C4	-7.17	122.70	127.00
22	AY	27	C	N3-C4-C5	-7.17	119.03	121.90
57	BB	241	A	C5-C6-N6	-7.17	117.97	123.70
57	BB	997	G	N3-C4-C5	-7.17	125.02	128.60
57	BB	1300	G	C1'-O4'-C4'	-7.17	104.17	109.90
57	BB	2410	G	O4'-C1'-N9	7.17	113.93	108.20
58	BA	55	U	N3-C4-O4	7.17	124.42	119.40
23	AW	17	C	C6-N1-C1'	-7.17	112.20	120.80
26	AV	50	U	C2-N3-C4	-7.17	122.70	127.00
19	AH	64	TYR	CG-CD1-CE1	7.16	127.03	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	819	A	C5-N7-C8	7.16	107.48	103.90
21	AA	1285	A	N7-C8-N9	7.16	117.38	113.80
21	AA	1335	U	N3-C4-C5	-7.16	110.30	114.60
57	BB	1883	U	N1-C2-N3	-7.16	110.60	114.90
57	BB	1974	C	O4'-C1'-N1	7.16	113.93	108.20
57	BB	2209	G	C8-N9-C4	-7.16	103.53	106.40
57	BB	2222	C	O4'-C1'-N1	7.16	113.93	108.20
21	AA	1093	A	C4-C5-C6	7.16	120.58	117.00
21	AA	1446	A	P-O5'-C5'	-7.16	109.44	120.90
57	BB	1537	G	C2-N3-C4	7.16	115.48	111.90
21	AA	145	G	N3-C2-N2	7.16	124.91	119.90
21	AA	1019	A	C2-N3-C4	-7.16	107.02	110.60
21	AA	1299	A	N1-C6-N6	7.16	122.90	118.60
21	AA	1480	A	C8-N9-C4	-7.16	102.94	105.80
32	BM	44	ARG	NE-CZ-NH2	7.16	123.88	120.30
57	BB	426	C	N3-C4-C5	-7.16	119.04	121.90
57	BB	742	A	C8-N9-C4	-7.16	102.94	105.80
57	BB	773	U	C6-N1-C2	-7.16	116.70	121.00
57	BB	1465	G	C6-C5-N7	-7.16	126.10	130.40
57	BB	2071	A	O4'-C1'-N9	7.16	113.93	108.20
57	BB	2902	C	N3-C4-C5	-7.16	119.04	121.90
21	AA	370	C	N3-C4-C5	-7.16	119.04	121.90
21	AA	962	C	C6-N1-C2	-7.16	117.44	120.30
36	BQ	29	ARG	NE-CZ-NH1	-7.16	116.72	120.30
57	BB	226	A	C5-C6-N1	-7.16	114.12	117.70
57	BB	838	C	N1-C2-N3	-7.16	114.19	119.20
57	BB	1006	C	O4'-C4'-C3'	-7.16	96.84	104.00
57	BB	1361	G	C6-C5-N7	-7.16	126.11	130.40
57	BB	1667	G	C4-C5-C6	7.16	123.09	118.80
57	BB	2530	A	C5-C6-N1	-7.16	114.12	117.70
57	BB	2727	A	C4-C5-C6	7.16	120.58	117.00
21	AA	1049	U	N1-C2-N3	-7.16	110.61	114.90
55	BG	68	ARG	NE-CZ-NH1	7.16	123.88	120.30
57	BB	662	G	N9-C4-C5	-7.16	102.54	105.40
57	BB	1434	A	C4-C5-C6	7.16	120.58	117.00
57	BB	1727	C	O4'-C1'-N1	7.16	113.93	108.20
57	BB	2255	G	C4-C5-C6	7.16	123.09	118.80
21	AA	786	G	N1-C6-O6	7.16	124.19	119.90
22	AY	49	C	N1-C2-O2	-7.16	114.61	118.90
49	B2	19	ARG	NH1-CZ-NH2	-7.16	111.53	119.40
56	BH	102	ALA	N-CA-CB	7.16	120.12	110.10
57	BB	531	C	N3-C4-C5	-7.16	119.04	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	533	G	N3-C2-N2	7.16	124.91	119.90
57	BB	1116	G	N1-C2-N3	-7.16	119.61	123.90
57	BB	1217	U	O4'-C1'-N1	7.16	113.92	108.20
57	BB	1387	A	O4'-C1'-N9	7.16	113.92	108.20
57	BB	2145	C	C2-N1-C1'	7.16	126.67	118.80
57	BB	2206	C	N1-C2-N3	-7.16	114.19	119.20
57	BB	2228	G	N7-C8-N9	7.16	116.68	113.10
21	AA	737	C	C5-C4-N4	-7.15	115.19	120.20
21	AA	1346	A	O4'-C1'-N9	7.15	113.92	108.20
26	AV	65	C	C4-C5-C6	7.15	120.98	117.40
57	BB	385	C	N3-C4-N4	7.15	123.01	118.00
57	BB	1749	A	O4'-C1'-N9	7.15	113.92	108.20
57	BB	1780	A	C6-C5-N7	-7.15	127.29	132.30
57	BB	2831	G	O4'-C1'-N9	7.15	113.92	108.20
9	AR	72	ARG	NE-CZ-NH1	7.15	123.88	120.30
21	AA	6	G	N1-C2-N3	-7.15	119.61	123.90
21	AA	239	U	N1-C2-N3	-7.15	110.61	114.90
21	AA	873	A	N1-C2-N3	7.15	132.88	129.30
26	AV	31	G	N1-C6-O6	7.15	124.19	119.90
57	BB	993	G	N9-C4-C5	7.15	108.26	105.40
57	BB	1344	U	N3-C4-O4	7.15	124.41	119.40
57	BB	1392	A	C5-N7-C8	7.15	107.48	103.90
57	BB	1984	G	P-O3'-C3'	-7.15	111.12	119.70
57	BB	2861	U	N3-C4-O4	7.15	124.41	119.40
21	AA	1031	C	N3-C4-C5	-7.15	119.04	121.90
21	AA	1361	G	C4-C5-N7	-7.15	107.94	110.80
23	AW	21	A	C6-N1-C2	7.15	122.89	118.60
57	BB	981	A	C2-N3-C4	7.15	114.17	110.60
57	BB	1104	C	O4'-C1'-N1	7.15	113.92	108.20
57	BB	1971	U	N3-C2-O2	7.15	127.21	122.20
58	BA	66	A	N9-C4-C5	-7.15	102.94	105.80
57	BB	2126	A	N9-C4-C5	7.15	108.66	105.80
14	AC	22	PHE	CB-CG-CD2	7.15	125.80	120.80
21	AA	649	A	N3-C4-C5	-7.15	121.80	126.80
21	AA	976	G	C8-N9-C4	-7.15	103.54	106.40
21	AA	1191	A	C4-C5-C6	7.15	120.57	117.00
21	AA	1401	G	N3-C4-C5	7.15	132.17	128.60
21	AA	1442	G	N3-C2-N2	7.15	124.90	119.90
57	BB	18	U	O4'-C1'-N1	7.15	113.92	108.20
57	BB	532	A	C2-N3-C4	7.15	114.17	110.60
57	BB	720	U	N3-C4-O4	7.15	124.40	119.40
57	BB	2102	G	O4'-C4'-C3'	-7.15	96.85	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2686	G	O4'-C1'-N9	7.15	113.92	108.20
21	AA	37	U	N3-C4-C5	-7.15	110.31	114.60
26	AV	63	G	C4-C5-C6	7.15	123.09	118.80
57	BB	1332	G	C6-C5-N7	-7.15	126.11	130.40
21	AA	207	C	P-O5'-C5'	-7.14	109.47	120.90
21	AA	542	G	N3-C4-C5	-7.14	125.03	128.60
21	AA	968	A	C3'-C2'-C1'	7.14	107.22	101.50
22	AY	31	A	C4-C5-N7	7.14	114.27	110.70
43	BX	17	ARG	NE-CZ-NH1	-7.14	116.73	120.30
57	BB	970	U	N1-C2-N3	-7.14	110.61	114.90
57	BB	2346	A	N1-C6-N6	7.14	122.89	118.60
57	BB	2775	G	N1-C6-O6	7.14	124.19	119.90
21	AA	453	G	C8-N9-C4	7.14	109.26	106.40
21	AA	524	G	C6-C5-N7	-7.14	126.11	130.40
21	AA	1006	G	C5-C6-N1	-7.14	107.93	111.50
21	AA	1392	G	N3-C4-C5	-7.14	125.03	128.60
57	BB	1161	C	C6-N1-C2	-7.14	117.44	120.30
57	BB	1268	A	N9-C4-C5	7.14	108.66	105.80
57	BB	1734	G	N9-C4-C5	7.14	108.26	105.40
57	BB	1853	A	O4'-C1'-N9	7.14	113.91	108.20
57	BB	2234	G	C5-C6-N1	-7.14	107.93	111.50
57	BB	2307	G	C4-N9-C1'	7.14	135.78	126.50
58	BA	19	C	O4'-C1'-N1	7.14	113.91	108.20
21	AA	552	U	O4'-C1'-N1	7.14	113.91	108.20
23	AW	21	A	P-O3'-C3'	7.14	128.27	119.70
57	BB	636	G	N9-C4-C5	-7.14	102.54	105.40
57	BB	1733	G	C6-C5-N7	-7.14	126.11	130.40
58	BA	17	C	O4'-C1'-N1	7.14	113.91	108.20
13	AB	62	ARG	NE-CZ-NH2	-7.14	116.73	120.30
21	AA	768	A	C5-N7-C8	7.14	107.47	103.90
21	AA	952	U	N3-C4-C5	-7.14	110.32	114.60
57	BB	199	A	N1-C2-N3	7.14	132.87	129.30
57	BB	682	G	C3'-C2'-C1'	-7.14	95.79	101.50
57	BB	1517	G	N7-C8-N9	7.14	116.67	113.10
57	BB	1583	A	N7-C8-N9	7.14	117.37	113.80
57	BB	2265	U	C4-C5-C6	-7.14	115.42	119.70
57	BB	2594	C	C2-N3-C4	7.14	123.47	119.90
58	BA	30	C	O4'-C1'-C2'	-7.14	98.66	105.80
21	AA	82	G	C5-N7-C8	-7.14	100.73	104.30
21	AA	1368	A	N1-C6-N6	7.14	122.88	118.60
21	AA	1488	G	C5-C6-N1	-7.14	107.93	111.50
57	BB	1296	G	N3-C4-N9	-7.14	121.72	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1632	A	C2-N3-C4	7.14	114.17	110.60
57	BB	1815	A	C1'-O4'-C4'	7.14	115.61	109.90
57	BB	2076	U	O4'-C4'-C3'	-7.14	96.86	104.00
21	AA	1131	G	N9-C4-C5	7.14	108.25	105.40
26	AV	10	G	N3-C2-N2	7.14	124.90	119.90
57	BB	1950	G	C5-C6-N1	-7.14	107.93	111.50
57	BB	2659	G	C4-C5-N7	7.14	113.66	110.80
58	BA	109	A	N9-C4-C5	-7.14	102.95	105.80
21	AA	276	G	C6-C5-N7	-7.13	126.12	130.40
21	AA	1019	A	C5-N7-C8	-7.13	100.33	103.90
21	AA	1084	G	C6-C5-N7	-7.13	126.12	130.40
57	BB	139	U	O4'-C1'-N1	7.13	113.91	108.20
57	BB	1145	C	C2-N3-C4	7.13	123.47	119.90
57	BB	1652	A	C1'-O4'-C4'	-7.13	104.19	109.90
14	AC	131	ARG	NE-CZ-NH1	7.13	123.87	120.30
21	AA	219	U	N3-C4-O4	7.13	124.39	119.40
21	AA	1173	U	N1-C2-O2	7.13	127.79	122.80
57	BB	1845	G	O4'-C1'-N9	7.13	113.91	108.20
58	BA	82	U	C2-N3-C4	7.13	131.28	127.00
21	AA	227	G	N3-C2-N2	7.13	124.89	119.90
21	AA	1392	G	O4'-C1'-N9	7.13	113.91	108.20
57	BB	35	G	C5-C6-N1	-7.13	107.93	111.50
57	BB	336	C	C5-C4-N4	-7.13	115.21	120.20
57	BB	875	G	C6-C5-N7	-7.13	126.12	130.40
57	BB	939	G	O4'-C1'-N9	7.13	113.91	108.20
57	BB	1010	A	O4'-C4'-C3'	-7.13	96.87	104.00
57	BB	2332	C	C5-C6-N1	7.13	124.56	121.00
57	BB	2642	G	O4'-C1'-N9	7.13	113.91	108.20
21	AA	347	G	N1-C6-O6	7.13	124.18	119.90
24	AX	20	U	N3-C4-O4	7.13	124.39	119.40
57	BB	75	G	N9-C4-C5	7.13	108.25	105.40
57	BB	92	U	P-O5'-C5'	7.13	132.31	120.90
57	BB	502	A	C5-C6-N1	-7.13	114.14	117.70
57	BB	939	G	C6-C5-N7	-7.13	126.12	130.40
57	BB	2899	A	C5-N7-C8	7.13	107.47	103.90
21	AA	276	G	C4-C5-C6	7.13	123.08	118.80
21	AA	553	A	C5-C6-N6	-7.13	118.00	123.70
21	AA	825	A	C5-C6-N6	-7.13	118.00	123.70
21	AA	948	C	C5-C4-N4	-7.13	115.21	120.20
57	BB	51	G	N1-C2-N3	-7.13	119.62	123.90
57	BB	58	G	C6-N1-C2	7.13	129.38	125.10
57	BB	1888	G	C6-N1-C2	7.13	129.38	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1972	G	C5-C6-O6	-7.13	124.32	128.60
57	BB	2166	U	C2-N3-C4	7.13	131.28	127.00
57	BB	980	A	C5-N7-C8	7.13	107.46	103.90
57	BB	2026	U	O4'-C1'-N1	7.13	113.90	108.20
57	BB	2605	U	O4'-C1'-N1	7.13	113.90	108.20
21	AA	48	C	N1-C2-O2	7.12	123.17	118.90
21	AA	229	U	C5-C4-O4	-7.12	121.62	125.90
22	AY	23	A	C4-C5-N7	-7.12	107.14	110.70
57	BB	265	A	O5'-P-OP1	7.12	119.25	110.70
57	BB	411	G	C5-C6-N1	-7.12	107.94	111.50
57	BB	2162	G	N3-C4-C5	-7.12	125.04	128.60
57	BB	2352	A	N3-C4-N9	7.12	133.10	127.40
23	AW	47	U	N1-C2-N3	-7.12	110.63	114.90
57	BB	1479	G	C3'-C2'-C1'	-7.12	95.80	101.50
57	BB	2578	G	C4-C5-C6	7.12	123.07	118.80
21	AA	951	G	C5-N7-C8	7.12	107.86	104.30
53	BE	79	ARG	NE-CZ-NH1	7.12	123.86	120.30
57	BB	161	A	N1-C6-N6	7.12	122.87	118.60
57	BB	2412	A	N3-C4-C5	-7.12	121.82	126.80
21	AA	802	A	N1-C2-N3	7.12	132.86	129.30
21	AA	1497	G	C5-N7-C8	7.12	107.86	104.30
57	BB	960	A	C4-C5-C6	7.12	120.56	117.00
57	BB	1100	C	C2-N3-C4	-7.12	116.34	119.90
57	BB	1151	A	C5-C6-N6	-7.12	118.00	123.70
21	AA	32	A	C6-N1-C2	-7.12	114.33	118.60
21	AA	1410	A	OP1-P-OP2	-7.12	108.92	119.60
57	BB	453	A	C5-C6-N6	-7.12	118.00	123.70
57	BB	777	G	O4'-C1'-N9	7.12	113.89	108.20
57	BB	1088	A	C4-C5-C6	7.12	120.56	117.00
57	BB	1349	C	C5-C6-N1	7.12	124.56	121.00
57	BB	2412	A	C4-C5-C6	7.12	120.56	117.00
57	BB	2710	C	C5'-C4'-O4'	7.12	117.64	109.10
58	BA	61	G	C5-N7-C8	7.12	107.86	104.30
21	AA	941	G	N3-C2-N2	7.12	124.88	119.90
41	BV	44	HIS	CA-CB-CG	7.12	125.70	113.60
57	BB	1609	A	N1-C2-N3	7.12	132.86	129.30
57	BB	1861	G	N7-C8-N9	7.12	116.66	113.10
15	AD	103	ARG	NE-CZ-NH1	7.12	123.86	120.30
21	AA	190	A	N9-C4-C5	7.12	108.65	105.80
21	AA	645	G	N1-C6-O6	7.12	124.17	119.90
21	AA	746	A	C5-C6-N6	-7.12	118.01	123.70
21	AA	769	G	C5-N7-C8	7.12	107.86	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	847	G	C4'-C3'-C2'	-7.12	95.48	102.60
21	AA	1360	A	C5-C6-N1	-7.12	114.14	117.70
23	AW	22	G	C6-N1-C2	7.12	129.37	125.10
23	AW	66	U	C5-C6-N1	7.12	126.26	122.70
57	BB	327	G	C4'-C3'-C2'	-7.12	95.48	102.60
57	BB	484	C	N1-C2-N3	-7.12	114.22	119.20
57	BB	1029	A	C4-C5-C6	7.12	120.56	117.00
57	BB	1552	A	C4'-C3'-C2'	-7.12	95.48	102.60
57	BB	1843	C	C4-C5-C6	7.12	120.96	117.40
57	BB	2019	A	O4'-C1'-N9	7.12	113.89	108.20
58	BA	54	G	C6-N1-C2	7.12	129.37	125.10
21	AA	217	C	O4'-C1'-N1	7.11	113.89	108.20
21	AA	453	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	731	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	1293	C	N3-C4-N4	7.11	122.98	118.00
21	AA	1461	G	C5-C6-O6	-7.11	124.33	128.60
22	AY	8	U	N3-C4-C5	-7.11	110.33	114.60
22	AY	24	G	O4'-C1'-N9	7.11	113.89	108.20
34	BO	10	ARG	NE-CZ-NH1	-7.11	116.74	120.30
57	BB	305	C	O4'-C1'-N1	7.11	113.89	108.20
57	BB	403	U	O4'-C1'-N1	7.11	113.89	108.20
57	BB	791	C	O4'-C1'-C2'	7.11	114.00	107.60
57	BB	1377	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	1546	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	2137	U	C2-N1-C1'	7.11	126.24	117.70
21	AA	1115	U	O4'-C1'-N1	7.11	113.89	108.20
57	BB	1847	A	C4-C5-N7	-7.11	107.14	110.70
57	BB	1857	G	N1-C6-O6	7.11	124.17	119.90
21	AA	402	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	699	C	N1-C2-O2	-7.11	114.63	118.90
21	AA	921	U	N3-C4-C5	-7.11	110.33	114.60
21	AA	1289	A	C5-N7-C8	7.11	107.45	103.90
42	BW	11	ASN	CB-CA-C	-7.11	96.18	110.40
57	BB	58	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	515	A	O4'-C1'-N9	7.11	113.89	108.20
57	BB	1236	G	C5-N7-C8	7.11	107.86	104.30
57	BB	1711	A	O4'-C1'-N9	7.11	113.89	108.20
57	BB	2288	A	N1-C6-N6	7.11	122.87	118.60
21	AA	129	A	C4-C5-N7	-7.11	107.14	110.70
21	AA	442	G	C5-C6-N1	7.11	115.06	111.50
21	AA	1237	C	N3-C4-N4	7.11	122.98	118.00
21	AA	1447	A	N3-C4-C5	-7.11	121.82	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1596	A	O4'-C1'-N9	7.11	113.89	108.20
57	BB	1667	G	O4'-C1'-N9	7.11	113.89	108.20
21	AA	925	G	C5-C6-O6	-7.11	124.33	128.60
21	AA	975	A	C5-N7-C8	7.11	107.45	103.90
21	AA	1437	A	O4'-C1'-N9	7.11	113.89	108.20
22	AY	70	C	N3-C4-C5	-7.11	119.06	121.90
23	AW	34	G	P-O3'-C3'	-7.11	111.17	119.70
57	BB	1896	G	C5'-C4'-C3'	-7.11	104.63	116.00
57	BB	1980	G	C5-C6-O6	-7.11	124.33	128.60
57	BB	2416	C	C5-C6-N1	7.11	124.55	121.00
57	BB	2535	G	C5-C6-O6	-7.11	124.34	128.60
57	BB	2804	U	N1-C2-N3	7.11	119.16	114.90
57	BB	2822	G	N3-C4-C5	-7.11	125.05	128.60
21	AA	64	G	N7-C8-N9	-7.11	109.55	113.10
21	AA	141	G	O4'-C1'-N9	7.11	113.88	108.20
57	BB	531	C	C4-C5-C6	7.11	120.95	117.40
57	BB	806	C	N3-C4-C5	-7.11	119.06	121.90
57	BB	984	A	N3-C4-C5	-7.11	121.83	126.80
57	BB	1413	A	C5-N7-C8	7.11	107.45	103.90
57	BB	1676	A	C5-C6-N1	-7.11	114.15	117.70
57	BB	2274	A	C4-C5-C6	7.11	120.55	117.00
57	BB	2635	A	N9-C4-C5	7.11	108.64	105.80
57	BB	194	G	N3-C4-N9	-7.10	121.74	126.00
57	BB	254	G	N1-C6-O6	7.10	124.16	119.90
57	BB	702	U	C5-C4-O4	-7.10	121.64	125.90
57	BB	753	A	C2-N3-C4	7.10	114.15	110.60
57	BB	1435	G	N3-C4-N9	7.10	130.26	126.00
57	BB	2250	G	N7-C8-N9	-7.10	109.55	113.10
57	BB	2888	C	N3-C2-O2	7.10	126.87	121.90
21	AA	457	G	O4'-C1'-N9	7.10	113.88	108.20
21	AA	896	C	O4'-C1'-N1	7.10	113.88	108.20
21	AA	1003	G	C4-C5-C6	7.10	123.06	118.80
57	BB	36	G	N1-C2-N3	-7.10	119.64	123.90
57	BB	82	U	C5-C4-O4	-7.10	121.64	125.90
57	BB	175	G	C8-N9-C4	-7.10	103.56	106.40
57	BB	506	G	C5-C6-O6	-7.10	124.34	128.60
57	BB	1393	A	C5-C6-N1	-7.10	114.15	117.70
57	BB	2033	A	C4-C5-C6	7.10	120.55	117.00
57	BB	2459	A	C4-C5-N7	7.10	114.25	110.70
57	BB	2849	U	C3'-C2'-C1'	7.10	107.18	101.50
57	BB	5	A	N1-C6-N6	7.10	122.86	118.60
57	BB	286	U	O4'-C1'-N1	7.10	113.88	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2246	G	C4-C5-N7	7.10	113.64	110.80
21	AA	1262	C	C2-N3-C4	7.10	123.45	119.90
57	BB	68	G	N9-C4-C5	-7.10	102.56	105.40
57	BB	396	G	C4-C5-N7	7.10	113.64	110.80
57	BB	1214	A	C6-N1-C2	7.10	122.86	118.60
57	BB	1369	G	N1-C2-N3	-7.10	119.64	123.90
57	BB	1880	U	O4'-C1'-N1	7.10	113.88	108.20
57	BB	2075	U	C2-N3-C4	7.10	131.26	127.00
57	BB	2385	C	O4'-C1'-N1	7.10	113.88	108.20
58	BA	72	G	C5-C6-N1	-7.10	107.95	111.50
57	BB	97	C	N1-C2-O2	-7.10	114.64	118.90
57	BB	439	A	C4-C5-C6	7.10	120.55	117.00
57	BB	762	U	C2-N3-C4	7.10	131.26	127.00
57	BB	1452	G	C4-C5-C6	7.10	123.06	118.80
57	BB	1980	G	O4'-C1'-N9	7.10	113.88	108.20
57	BB	2663	G	C2-N3-C4	7.10	115.45	111.90
57	BB	2790	U	C2-N3-C4	7.10	131.26	127.00
21	AA	203	G	P-O3'-C3'	-7.10	111.19	119.70
23	AW	76	A	N1-C6-N6	7.10	122.86	118.60
36	BQ	91	ARG	NE-CZ-NH2	-7.10	116.75	120.30
57	BB	167	A	C6-C5-N7	-7.10	127.33	132.30
57	BB	864	G	O4'-C1'-N9	7.10	113.88	108.20
57	BB	2217	G	N1-C6-O6	7.10	124.16	119.90
57	BB	2319	G	C5-C6-O6	-7.10	124.34	128.60
21	AA	149	A	N3-C4-C5	-7.09	121.83	126.80
21	AA	388	G	C5-N7-C8	7.09	107.85	104.30
21	AA	937	A	N9-C4-C5	7.09	108.64	105.80
21	AA	1197	A	O4'-C1'-N9	7.09	113.88	108.20
21	AA	1296	C	N3-C4-C5	-7.09	119.06	121.90
23	AW	61	C	C5-C4-N4	-7.09	115.23	120.20
57	BB	1900	A	O4'-C1'-N9	7.09	113.88	108.20
57	BB	1081	U	C5-C4-O4	-7.09	121.64	125.90
57	BB	1165	A	C4-C5-C6	7.09	120.55	117.00
21	AA	660	C	N3-C4-N4	7.09	122.97	118.00
21	AA	1332	A	O4'-C4'-C3'	-7.09	96.91	104.00
57	BB	181	A	O4'-C1'-N9	7.09	113.87	108.20
57	BB	468	G	N3-C2-N2	-7.09	114.94	119.90
57	BB	1218	G	C5-C6-O6	-7.09	124.34	128.60
57	BB	1492	G	N1-C2-N2	-7.09	109.82	116.20
57	BB	2330	G	C6-N1-C2	7.09	129.35	125.10
58	BA	78	A	N9-C4-C5	-7.09	102.96	105.80
21	AA	126	G	N9-C4-C5	-7.09	102.56	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	376	G	N1-C6-O6	7.09	124.15	119.90
21	AA	1183	U	O4'-C1'-N1	7.09	113.87	108.20
21	AA	1393	U	C4-C5-C6	7.09	123.95	119.70
21	AA	1501	C	C6-N1-C2	7.09	123.14	120.30
57	BB	716	A	C4-C5-C6	7.09	120.54	117.00
57	BB	1445	G	C5-C6-N1	7.09	115.05	111.50
57	BB	1934	C	N1-C2-O2	7.09	123.15	118.90
57	BB	1988	G	N1-C2-N3	-7.09	119.65	123.90
57	BB	2595	G	C5-C6-O6	-7.09	124.35	128.60
58	BA	32	U	O4'-C1'-N1	7.09	113.87	108.20
21	AA	665	A	N9-C4-C5	7.09	108.64	105.80
21	AA	711	G	N1-C2-N3	-7.09	119.65	123.90
57	BB	11	C	O4'-C1'-N1	7.09	113.87	108.20
57	BB	1177	G	C6-C5-N7	-7.09	126.15	130.40
57	BB	1353	A	C8-N9-C4	-7.09	102.97	105.80
21	AA	507	C	C6-N1-C2	-7.09	117.47	120.30
21	AA	725	G	C5-C6-O6	-7.09	124.35	128.60
35	BP	88	ARG	NE-CZ-NH1	-7.09	116.76	120.30
57	BB	362	A	C8-N9-C4	-7.09	102.97	105.80
57	BB	574	A	C2-N3-C4	-7.09	107.06	110.60
57	BB	674	G	N3-C4-C5	-7.09	125.06	128.60
57	BB	1007	C	C5-C4-N4	-7.09	115.24	120.20
57	BB	2276	G	O4'-C1'-N9	7.09	113.87	108.20
57	BB	2278	A	C5-N7-C8	7.09	107.44	103.90
57	BB	2389	G	O4'-C1'-N9	7.09	113.87	108.20
57	BB	2657	A	N9-C4-C5	-7.09	102.97	105.80
21	AA	113	G	C2-N3-C4	7.08	115.44	111.90
21	AA	534	U	C5'-C4'-O4'	7.08	117.60	109.10
47	B0	32	THR	CA-CB-CG2	-7.08	102.48	112.40
57	BB	1056	G	P-O5'-C5'	7.08	132.24	120.90
57	BB	1835	G	O4'-C1'-N9	7.08	113.87	108.20
57	BB	2681	C	O4'-C1'-N1	7.08	113.87	108.20
3	AL	116	TYR	CZ-CE2-CD2	7.08	126.17	119.80
16	AE	137	ARG	NE-CZ-NH2	7.08	123.84	120.30
21	AA	13	U	O4'-C1'-N1	7.08	113.87	108.20
21	AA	76	G	N9-C4-C5	7.08	108.23	105.40
21	AA	956	U	N1-C2-N3	-7.08	110.65	114.90
21	AA	1066	C	C2-N3-C4	7.08	123.44	119.90
21	AA	1533	C	C5'-C4'-O4'	7.08	117.60	109.10
23	AW	1	G	C8-N9-C4	-7.08	103.57	106.40
57	BB	403	U	C4-C5-C6	7.08	123.95	119.70
57	BB	647	G	C5-C6-O6	-7.08	124.35	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	796	C	C6-N1-C2	-7.08	117.47	120.30
57	BB	1307	A	O4'-C1'-N9	7.08	113.87	108.20
57	BB	1755	A	C8-N9-C4	-7.08	102.97	105.80
57	BB	1834	U	C5-C4-O4	-7.08	121.65	125.90
57	BB	2733	A	C4-C5-N7	-7.08	107.16	110.70
21	AA	305	G	N7-C8-N9	7.08	116.64	113.10
21	AA	480	U	O5'-P-OP2	-7.08	99.33	105.70
21	AA	1088	G	C5-N7-C8	-7.08	100.76	104.30
25	AZ	233	ARG	NE-CZ-NH1	-7.08	116.76	120.30
57	BB	293	U	N1-C2-O2	7.08	127.76	122.80
57	BB	1350	C	N3-C4-N4	7.08	122.96	118.00
57	BB	1703	G	N1-C6-O6	7.08	124.15	119.90
57	BB	2126	A	N3-C4-C5	-7.08	121.84	126.80
57	BB	2583	G	N3-C4-N9	-7.08	121.75	126.00
57	BB	2795	C	C6-N1-C2	-7.08	117.47	120.30
21	AA	135	C	O4'-C1'-N1	7.08	113.86	108.20
23	AW	12	U	C5-C4-O4	7.08	130.15	125.90
57	BB	243	U	C4'-C3'-C2'	-7.08	95.52	102.60
57	BB	357	C	C5-C4-N4	-7.08	115.24	120.20
57	BB	637	A	C5-C6-N1	-7.08	114.16	117.70
57	BB	955	U	P-O3'-C3'	-7.08	111.20	119.70
57	BB	2141	G	C4-C5-N7	7.08	113.63	110.80
57	BB	2270	A	C5-C6-N6	-7.08	118.04	123.70
57	BB	2767	C	N1-C2-N3	-7.08	114.24	119.20
21	AA	137	U	N3-C2-O2	7.08	127.15	122.20
21	AA	178	C	C2-N3-C4	7.08	123.44	119.90
21	AA	682	G	N1-C6-O6	7.08	124.15	119.90
57	BB	75	G	N1-C2-N2	-7.08	109.83	116.20
57	BB	194	G	N3-C4-C5	7.08	132.14	128.60
57	BB	1003	G	C4'-C3'-C2'	-7.08	95.52	102.60
57	BB	1799	G	N3-C2-N2	7.08	124.86	119.90
57	BB	1834	U	N3-C4-O4	7.08	124.36	119.40
58	BA	28	C	C4'-C3'-C2'	-7.08	95.52	102.60
21	AA	431	A	C4-C5-C6	7.08	120.54	117.00
50	B3	48	MET	CG-SD-CE	-7.08	88.88	100.20
57	BB	790	U	O4'-C1'-N1	7.08	113.86	108.20
57	BB	1360	G	N3-C4-C5	-7.08	125.06	128.60
57	BB	2666	C	C2-N1-C1'	7.08	126.58	118.80
16	AE	19	ARG	NE-CZ-NH2	-7.08	116.76	120.30
21	AA	305	G	N3-C2-N2	7.08	124.85	119.90
26	AV	14	A	C5-N7-C8	7.08	107.44	103.90
56	BH	146	VAL	CA-CB-CG1	-7.08	100.29	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	877	A	C4-C5-N7	-7.08	107.16	110.70
57	BB	1118	C	N3-C4-N4	7.08	122.95	118.00
57	BB	2073	C	N1-C2-N3	-7.08	114.25	119.20
57	BB	2271	G	C6-N1-C2	7.08	129.34	125.10
21	AA	671	G	O4'-C1'-N9	7.07	113.86	108.20
21	AA	788	U	N1-C2-N3	-7.07	110.66	114.90
23	AW	36	A	C5-N7-C8	7.07	107.44	103.90
57	BB	2382	G	C5-N7-C8	7.07	107.84	104.30
57	BB	2461	A	C4-C5-C6	7.07	120.54	117.00
21	AA	383	A	C8-N9-C4	-7.07	102.97	105.80
24	AX	18	G	N1-C6-O6	7.07	124.14	119.90
57	BB	511	U	O4'-C1'-N1	7.07	113.86	108.20
57	BB	1509	A	C5-N7-C8	7.07	107.44	103.90
57	BB	1761	C	N1-C2-N3	-7.07	114.25	119.20
57	BB	1789	A	C5-N7-C8	7.07	107.44	103.90
21	AA	263	A	C5-C6-N1	-7.07	114.16	117.70
21	AA	950	U	C5'-C4'-C3'	7.07	127.31	116.00
22	AY	19	G	O4'-C1'-N9	7.07	113.86	108.20
57	BB	5	A	C5-C6-N6	-7.07	118.04	123.70
57	BB	1847	A	O4'-C1'-N9	7.07	113.86	108.20
57	BB	2425	A	C5-N7-C8	7.07	107.44	103.90
57	BB	2681	C	C4-C5-C6	7.07	120.94	117.40
57	BB	362	A	P-O5'-C5'	7.07	132.21	120.90
57	BB	624	C	C4'-C3'-C2'	-7.07	95.53	102.60
57	BB	2396	G	C6-C5-N7	-7.07	126.16	130.40
21	AA	186	C	N3-C4-N4	7.07	122.95	118.00
21	AA	493	A	N3-C4-C5	-7.07	121.85	126.80
23	AW	47	U	C4'-C3'-C2'	-7.07	95.53	102.60
57	BB	767	U	N1-C2-O2	-7.07	117.85	122.80
57	BB	780	G	N1-C2-N2	7.07	122.56	116.20
57	BB	901	C	N3-C4-C5	-7.07	119.07	121.90
57	BB	1180	U	N3-C4-O4	7.07	124.35	119.40
57	BB	1296	G	N1-C6-O6	7.07	124.14	119.90
57	BB	1383	A	N1-C6-N6	7.07	122.84	118.60
57	BB	2814	A	C3'-C2'-C1'	7.07	107.15	101.50
21	AA	444	G	O4'-C1'-N9	7.07	113.85	108.20
21	AA	621	A	N9-C4-C5	7.07	108.63	105.80
21	AA	1152	A	C6-N1-C2	7.07	122.84	118.60
57	BB	456	C	C6-N1-C2	7.07	123.13	120.30
57	BB	2479	U	C4-C5-C6	7.07	123.94	119.70
21	AA	255	G	C4-C5-N7	7.06	113.62	110.80
57	BB	2492	U	P-O3'-C3'	-7.06	111.22	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	821	G	C5-C6-O6	-7.06	124.36	128.60
22	AY	2	C	N3-C4-N4	7.06	122.94	118.00
57	BB	84	A	C4-C5-C6	7.06	120.53	117.00
57	BB	553	G	C5-N7-C8	-7.06	100.77	104.30
57	BB	595	C	N3-C2-O2	-7.06	116.96	121.90
57	BB	912	C	O4'-C1'-N1	7.06	113.85	108.20
57	BB	1610	A	N7-C8-N9	7.06	117.33	113.80
57	BB	2112	G	C5-C6-O6	-7.06	124.36	128.60
57	BB	2345	G	N9-C4-C5	7.06	108.22	105.40
57	BB	2534	A	C4-C5-C6	7.06	120.53	117.00
57	BB	2551	C	C2-N1-C1'	7.06	126.57	118.80
57	BB	2632	A	C6-C5-N7	-7.06	127.36	132.30
21	AA	321	A	O4'-C1'-N9	7.06	113.85	108.20
21	AA	1019	A	C6-C5-N7	-7.06	127.36	132.30
57	BB	904	G	O4'-C1'-N9	7.06	113.85	108.20
21	AA	51	A	C2-N3-C4	-7.06	107.07	110.60
21	AA	816	A	C6-N1-C2	-7.06	114.36	118.60
21	AA	1031	C	N1-C2-O2	7.06	123.14	118.90
21	AA	1256	A	N9-C4-C5	7.06	108.62	105.80
21	AA	1279	G	N3-C4-C5	-7.06	125.07	128.60
21	AA	1446	A	N9-C4-C5	-7.06	102.98	105.80
57	BB	287	G	N9-C4-C5	-7.06	102.58	105.40
57	BB	359	G	OP1-P-OP2	-7.06	109.01	119.60
57	BB	1853	A	C6-N1-C2	7.06	122.84	118.60
57	BB	1993	U	C3'-C2'-C1'	7.06	107.15	101.50
57	BB	2561	U	C4'-C3'-C2'	-7.06	95.54	102.60
57	BB	2661	G	C6-C5-N7	-7.06	126.17	130.40
57	BB	2856	A	O4'-C1'-N9	7.06	113.85	108.20
21	AA	416	G	C6-C5-N7	-7.06	126.17	130.40
21	AA	1097	C	O4'-C1'-N1	7.06	113.85	108.20
44	BY	23	ARG	NE-CZ-NH2	-7.06	116.77	120.30
57	BB	624	C	C5-C6-N1	7.06	124.53	121.00
57	BB	624	C	N3-C2-O2	-7.06	116.96	121.90
57	BB	1366	A	N1-C6-N6	7.06	122.83	118.60
57	BB	2246	G	C6-C5-N7	-7.06	126.17	130.40
57	BB	2262	U	O4'-C1'-N1	7.06	113.85	108.20
21	AA	280	C	C4-C5-C6	7.06	120.93	117.40
21	AA	944	G	C4-C5-C6	7.06	123.03	118.80
57	BB	1965	C	C2-N1-C1'	7.06	126.56	118.80
58	BA	40	U	N3-C2-O2	7.06	127.14	122.20
21	AA	472	U	O4'-C1'-N1	7.05	113.84	108.20
22	AY	39	U	C2-N3-C4	-7.05	122.77	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	638	G	C4-C5-N7	-7.05	107.98	110.80
57	BB	751	A	N1-C2-N3	7.05	132.83	129.30
57	BB	1115	G	C8-N9-C4	7.05	109.22	106.40
57	BB	1953	A	C5-C6-N1	-7.05	114.17	117.70
57	BB	2025	C	C1'-O4'-C4'	7.05	115.54	109.90
57	BB	2234	G	C4-C5-C6	7.05	123.03	118.80
21	AA	495	A	N7-C8-N9	-7.05	110.27	113.80
21	AA	703	G	N1-C6-O6	7.05	124.13	119.90
21	AA	1153	G	N1-C6-O6	7.05	124.13	119.90
57	BB	351	C	N3-C2-O2	7.05	126.84	121.90
57	BB	731	C	N3-C4-N4	7.05	122.94	118.00
57	BB	1181	U	N3-C2-O2	7.05	127.14	122.20
57	BB	1638	C	N3-C4-N4	7.05	122.94	118.00
58	BA	94	A	N3-C4-N9	7.05	133.04	127.40
21	AA	1214	C	C2-N1-C1'	7.05	126.56	118.80
23	AW	63	G	N1-C2-N2	-7.05	109.85	116.20
57	BB	433	C	N3-C4-N4	7.05	122.94	118.00
57	BB	790	U	C2-N1-C1'	7.05	126.16	117.70
57	BB	1683	U	N3-C4-C5	-7.05	110.37	114.60
57	BB	1791	A	P-O5'-C5'	7.05	132.18	120.90
57	BB	2342	C	O4'-C1'-N1	7.05	113.84	108.20
57	BB	2877	G	N1-C2-N3	-7.05	119.67	123.90
21	AA	100	G	C8-N9-C4	7.05	109.22	106.40
21	AA	174	A	O4'-C1'-N9	7.05	113.84	108.20
21	AA	1131	G	C4'-C3'-C2'	-7.05	95.55	102.60
21	AA	1227	A	O4'-C1'-N9	7.05	113.84	108.20
23	AW	36	A	C5-C6-N1	-7.05	114.18	117.70
57	BB	293	U	C5-C4-O4	-7.05	121.67	125.90
57	BB	527	C	N3-C4-N4	7.05	122.93	118.00
57	BB	712	G	N1-C2-N3	-7.05	119.67	123.90
57	BB	1398	C	C5-C6-N1	-7.05	117.47	121.00
57	BB	2721	A	N3-C4-C5	-7.05	121.86	126.80
57	BB	2037	A	O4'-C1'-N9	7.05	113.84	108.20
57	BB	2882	A	C4'-C3'-C2'	-7.05	95.55	102.60
16	AE	98	ALA	N-CA-CB	7.05	119.97	110.10
21	AA	700	G	N9-C4-C5	-7.05	102.58	105.40
21	AA	722	G	N1-C6-O6	-7.05	115.67	119.90
21	AA	1204	A	C5-N7-C8	7.05	107.42	103.90
21	AA	1235	U	N3-C4-C5	7.05	118.83	114.60
24	AX	18	G	C6-C5-N7	-7.05	126.17	130.40
57	BB	498	G	N9-C4-C5	-7.05	102.58	105.40
57	BB	790	U	N1-C2-N3	-7.05	110.67	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1876	A	C5-C6-N1	-7.05	114.18	117.70
57	BB	2063	C	P-O3'-C3'	-7.05	111.24	119.70
57	BB	2516	A	P-O5'-C5'	-7.05	109.62	120.90
21	AA	108	G	N1-C2-N3	-7.04	119.67	123.90
21	AA	1048	G	P-O3'-C3'	-7.04	111.25	119.70
22	AY	15	G	N1-C2-N2	-7.04	109.86	116.20
57	BB	1639	C	O4'-C1'-N1	7.04	113.84	108.20
58	BA	52	A	OP1-P-OP2	-7.04	109.03	119.60
21	AA	235	C	C5-C4-N4	-7.04	115.27	120.20
21	AA	1004	A	C5-C6-N6	-7.04	118.07	123.70
21	AA	1223	C	P-O3'-C3'	7.04	128.15	119.70
21	AA	1227	A	C5-C6-N6	-7.04	118.06	123.70
22	AY	39	U	N1-C2-N3	7.04	119.13	114.90
26	AV	14	A	C5-C6-N1	-7.04	114.18	117.70
57	BB	891	G	C5'-C4'-O4'	7.04	117.55	109.10
57	BB	1652	A	P-O3'-C3'	7.04	128.15	119.70
57	BB	2053	G	N9-C4-C5	7.04	108.22	105.40
18	AG	61	PHE	CB-CG-CD1	7.04	125.73	120.80
21	AA	710	G	C4-C5-N7	-7.04	107.98	110.80
21	AA	909	A	C1'-O4'-C4'	-7.04	104.27	109.90
21	AA	1179	A	C5-C6-N1	-7.04	114.18	117.70
23	AW	24	G	N1-C6-O6	7.04	124.12	119.90
57	BB	180	G	N9-C4-C5	-7.04	102.58	105.40
57	BB	257	C	O4'-C1'-N1	7.04	113.83	108.20
57	BB	513	A	C2-N3-C4	-7.04	107.08	110.60
57	BB	538	A	N7-C8-N9	-7.04	110.28	113.80
57	BB	850	U	C2-N3-C4	-7.04	122.78	127.00
57	BB	1248	G	C4'-C3'-C2'	7.04	109.64	102.60
57	BB	1489	C	O4'-C1'-N1	7.04	113.83	108.20
57	BB	1600	C	C4-C5-C6	-7.04	113.88	117.40
57	BB	1743	G	C4-C5-C6	7.04	123.03	118.80
57	BB	1793	C	O5'-P-OP2	-7.04	99.36	105.70
57	BB	1848	A	C8-N9-C4	-7.04	102.98	105.80
57	BB	2046	G	N9-C4-C5	7.04	108.22	105.40
57	BB	2068	U	C2-N3-C4	7.04	131.22	127.00
57	BB	2387	U	O4'-C1'-N1	7.04	113.83	108.20
57	BB	2525	G	C2-N3-C4	7.04	115.42	111.90
21	AA	567	G	N3-C4-C5	-7.04	125.08	128.60
57	BB	56	A	C4'-C3'-C2'	-7.04	95.56	102.60
57	BB	628	G	C5-C6-N1	-7.04	107.98	111.50
57	BB	1100	C	C6-N1-C1'	-7.04	112.35	120.80
57	BB	1421	G	N1-C6-O6	7.04	124.12	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	72	A	N7-C8-N9	-7.04	110.28	113.80
21	AA	106	C	O4'-C1'-N1	7.04	113.83	108.20
21	AA	1257	A	C5-C6-N1	-7.04	114.18	117.70
23	AW	76	A	C5-C6-N1	-7.04	114.18	117.70
41	BV	9	ARG	NE-CZ-NH2	-7.04	116.78	120.30
57	BB	5	A	C2-N3-C4	7.04	114.12	110.60
57	BB	1084	A	C8-N9-C4	-7.04	102.98	105.80
57	BB	1546	G	N9-C4-C5	-7.04	102.58	105.40
57	BB	2436	G	N3-C4-C5	7.04	132.12	128.60
57	BB	408	G	N3-C4-C5	7.04	132.12	128.60
57	BB	560	C	N3-C4-N4	7.04	122.93	118.00
57	BB	2065	C	C4-C5-C6	7.04	120.92	117.40
57	BB	2178	C	C6-N1-C2	7.04	123.11	120.30
21	AA	344	A	C5'-C4'-O4'	7.04	117.54	109.10
57	BB	34	U	N3-C4-O4	7.04	124.32	119.40
57	BB	1649	G	N1-C2-N3	-7.04	119.68	123.90
21	AA	308	C	P-O5'-C5'	7.03	132.15	120.90
21	AA	333	U	N1-C2-O2	7.03	127.72	122.80
21	AA	1124	G	C5-C6-O6	-7.03	124.38	128.60
21	AA	1193	G	O4'-C1'-N9	7.03	113.83	108.20
26	AV	59	A	N1-C2-N3	-7.03	125.78	129.30
57	BB	303	G	O4'-C1'-N9	7.03	113.83	108.20
57	BB	663	G	N1-C2-N3	-7.03	119.68	123.90
57	BB	1869	G	C5-C6-O6	-7.03	124.38	128.60
57	BB	2203	U	N3-C4-O4	7.03	124.32	119.40
21	AA	1261	A	O4'-C1'-N9	7.03	113.83	108.20
21	AA	184	G	N1-C6-O6	7.03	124.12	119.90
21	AA	765	G	N1-C2-N3	-7.03	119.68	123.90
21	AA	1111	A	C5-C6-N6	-7.03	118.08	123.70
21	AA	1418	A	O4'-C1'-N9	7.03	113.83	108.20
26	AV	38	A	C6-C5-N7	-7.03	127.38	132.30
27	B5	144	THR	CA-CB-CG2	7.03	122.24	112.40
57	BB	1684	G	C5-C6-O6	-7.03	124.38	128.60
57	BB	2368	C	N3-C4-C5	7.03	124.71	121.90
58	BA	59	A	C5-C6-N1	-7.03	114.19	117.70
21	AA	481	G	N3-C2-N2	7.03	124.82	119.90
21	AA	1297	G	C5'-C4'-O4'	7.03	117.53	109.10
21	AA	1424	U	C2-N3-C4	-7.03	122.78	127.00
57	BB	1755	A	C6-C5-N7	-7.03	127.38	132.30
57	BB	2491	U	N3-C2-O2	-7.03	117.28	122.20
57	BB	2560	A	C8-N9-C4	-7.03	102.99	105.80
21	AA	784	A	C4-C5-N7	-7.03	107.19	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	39	U	O3'-P-O5'	7.03	117.35	104.00
54	BF	37	MET	N-CA-CB	7.03	123.25	110.60
57	BB	570	G	C8-N9-C4	7.03	109.21	106.40
57	BB	793	A	P-O3'-C3'	7.03	128.13	119.70
57	BB	1764	C	C6-N1-C2	7.03	123.11	120.30
57	BB	2662	A	O4'-C1'-N9	7.03	113.82	108.20
57	BB	2861	U	O4'-C1'-N1	7.03	113.82	108.20
5	AN	21	ALA	N-CA-CB	7.03	119.94	110.10
21	AA	1301	U	O4'-C1'-C2'	-7.03	98.78	105.80
21	AA	1425	U	C5-C4-O4	-7.03	121.69	125.90
21	AA	1426	G	N9-C4-C5	7.03	108.21	105.40
57	BB	50	U	P-O3'-C3'	7.03	128.13	119.70
57	BB	136	G	N1-C6-O6	7.03	124.12	119.90
57	BB	625	G	C5-C6-O6	-7.03	124.38	128.60
57	BB	1057	A	C6-C5-N7	-7.03	127.38	132.30
57	BB	1832	C	C5-C4-N4	-7.03	115.28	120.20
57	BB	2210	U	N3-C2-O2	7.03	127.12	122.20
57	BB	2799	A	N9-C4-C5	7.03	108.61	105.80
57	BB	14	A	O4'-C1'-N9	7.02	113.82	108.20
57	BB	1244	A	N1-C2-N3	7.02	132.81	129.30
57	BB	1389	G	C5-C6-O6	-7.02	124.39	128.60
57	BB	1535	A	C5'-C4'-O4'	7.02	117.53	109.10
57	BB	2196	C	N3-C4-C5	-7.02	119.09	121.90
21	AA	1217	C	N1-C2-O2	7.02	123.11	118.90
21	AA	1410	A	N3-C4-N9	7.02	133.02	127.40
52	BD	77	ARG	NE-CZ-NH2	7.02	123.81	120.30
57	BB	212	G	C2-N3-C4	7.02	115.41	111.90
57	BB	762	U	O4'-C1'-N1	7.02	113.82	108.20
57	BB	1554	U	N1-C2-N3	-7.02	110.69	114.90
57	BB	2524	G	N9-C4-C5	-7.02	102.59	105.40
21	AA	1446	A	C4-C5-C6	7.02	120.51	117.00
57	BB	790	U	C6-N1-C1'	-7.02	111.37	121.20
21	AA	1146	A	O4'-C1'-N9	7.02	113.82	108.20
21	AA	1178	G	P-O3'-C3'	7.02	128.12	119.70
57	BB	2460	U	N3-C4-O4	7.02	124.31	119.40
57	BB	2462	C	N3-C4-C5	-7.02	119.09	121.90
21	AA	226	G	N3-C2-N2	7.02	124.81	119.90
21	AA	523	A	N1-C2-N3	7.02	132.81	129.30
21	AA	1460	C	N1-C2-O2	7.02	123.11	118.90
57	BB	226	A	O4'-C1'-N9	7.02	113.81	108.20
57	BB	258	G	N7-C8-N9	-7.02	109.59	113.10
57	BB	486	C	C6-N1-C2	-7.02	117.49	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1247	A	P-O3'-C3'	7.02	128.12	119.70
57	BB	1463	C	N3-C4-C5	7.02	124.71	121.90
57	BB	1741	C	N3-C4-C5	-7.02	119.09	121.90
57	BB	2071	A	N7-C8-N9	7.02	117.31	113.80
57	BB	2754	U	C6-N1-C2	-7.02	116.79	121.00
21	AA	267	C	N3-C2-O2	7.02	126.81	121.90
21	AA	269	C	O4'-C1'-N1	7.02	113.81	108.20
57	BB	1064	C	O4'-C1'-N1	7.02	113.81	108.20
21	AA	80	A	C4-C5-N7	-7.01	107.19	110.70
21	AA	272	C	C3'-C2'-C1'	-7.01	95.89	101.50
21	AA	501	C	N3-C2-O2	7.01	126.81	121.90
22	AY	23	A	C3'-C2'-C1'	-7.01	95.89	101.50
22	AY	33	U	C2-N1-C1'	-7.01	109.28	117.70
26	AV	67	C	N3-C4-C5	-7.01	119.09	121.90
57	BB	1732	C	C3'-C2'-C1'	-7.01	95.89	101.50
57	BB	26	G	C6-N1-C2	7.01	129.31	125.10
57	BB	190	A	C4-C5-C6	7.01	120.51	117.00
57	BB	329	G	N1-C6-O6	7.01	124.11	119.90
57	BB	1966	A	C6-N1-C2	7.01	122.81	118.60
57	BB	2495	G	N1-C2-N3	-7.01	119.69	123.90
5	AN	44	VAL	CA-CB-CG1	-7.01	100.38	110.90
21	AA	1144	G	N1-C6-O6	7.01	124.11	119.90
57	BB	1118	C	P-O3'-C3'	-7.01	111.29	119.70
57	BB	1803	A	C8-N9-C4	-7.01	103.00	105.80
57	BB	2718	G	C4-C5-N7	7.01	113.61	110.80
58	BA	64	G	C4-C5-C6	7.01	123.01	118.80
20	AI	28	VAL	CA-CB-CG1	-7.01	100.39	110.90
21	AA	1067	A	N1-C6-N6	7.01	122.81	118.60
21	AA	1094	G	C4-C5-N7	7.01	113.60	110.80
21	AA	1176	A	N7-C8-N9	-7.01	110.30	113.80
21	AA	1419	G	N1-C6-O6	7.01	124.11	119.90
21	AA	1491	G	N3-C2-N2	7.01	124.81	119.90
22	AY	60	C	P-O3'-C3'	-7.01	111.29	119.70
24	AX	14	A	C4-C5-C6	7.01	120.50	117.00
26	AV	48	C	C4-C5-C6	7.01	120.91	117.40
57	BB	114	U	O4'-C1'-N1	7.01	113.81	108.20
57	BB	750	A	C6-C5-N7	-7.01	127.39	132.30
57	BB	969	G	N3-C2-N2	7.01	124.81	119.90
57	BB	1783	A	N1-C2-N3	-7.01	125.80	129.30
57	BB	2503	A	N3-C4-C5	-7.01	121.89	126.80
57	BB	2546	U	C2-N3-C4	7.01	131.21	127.00
57	BB	2625	G	C5-C6-O6	-7.01	124.39	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1088	G	N1-C6-O6	7.01	124.11	119.90
57	BB	2058	A	N3-C4-C5	-7.01	121.89	126.80
21	AA	1170	A	C4'-C3'-C2'	-7.01	95.59	102.60
21	AA	1373	G	C6-C5-N7	-7.01	126.20	130.40
57	BB	560	C	C2-N3-C4	7.01	123.40	119.90
57	BB	795	C	C2-N3-C4	7.01	123.40	119.90
57	BB	1476	U	N1-C2-N3	7.01	119.10	114.90
57	BB	1979	U	C2-N3-C4	7.01	131.20	127.00
57	BB	2144	G	N3-C4-N9	7.01	130.20	126.00
57	BB	2368	C	O4'-C1'-N1	7.01	113.81	108.20
57	BB	2649	C	N3-C4-C5	-7.01	119.10	121.90
58	BA	41	G	C8-N9-C4	-7.01	103.60	106.40
21	AA	444	G	C6-C5-N7	-7.00	126.20	130.40
21	AA	993	G	C4-C5-N7	-7.00	108.00	110.80
57	BB	1264	A	N9-C4-C5	7.00	108.60	105.80
57	BB	1359	A	N7-C8-N9	-7.00	110.30	113.80
21	AA	16	A	C6-N1-C2	7.00	122.80	118.60
21	AA	102	G	N1-C2-N3	-7.00	119.70	123.90
21	AA	1504	G	C6-C5-N7	-7.00	126.20	130.40
57	BB	982	C	C6-N1-C1'	-7.00	112.40	120.80
57	BB	1153	C	O4'-C1'-N1	7.00	113.80	108.20
57	BB	1583	A	C4-C5-N7	-7.00	107.20	110.70
57	BB	2438	U	N3-C4-O4	7.00	124.30	119.40
21	AA	48	C	C5'-C4'-C3'	-7.00	104.80	116.00
21	AA	98	A	C6-N1-C2	-7.00	114.40	118.60
21	AA	1119	C	N3-C4-C5	-7.00	119.10	121.90
27	B5	97	MET	CG-SD-CE	-7.00	89.00	100.20
57	BB	243	U	N3-C4-C5	-7.00	110.40	114.60
57	BB	252	G	C5-C6-O6	-7.00	124.40	128.60
57	BB	509	C	C2-N1-C1'	7.00	126.50	118.80
57	BB	1130	U	P-O3'-C3'	7.00	128.10	119.70
57	BB	1666	G	C8-N9-C1'	7.00	136.10	127.00
57	BB	1740	G	C6-N1-C2	7.00	129.30	125.10
57	BB	2003	A	C5-C6-N6	-7.00	118.10	123.70
57	BB	2325	G	C5-N7-C8	7.00	107.80	104.30
57	BB	2381	A	C1'-O4'-C4'	-7.00	104.30	109.90
58	BA	64	G	C5-C6-O6	-7.00	124.40	128.60
21	AA	1004	A	C4-C5-C6	7.00	120.50	117.00
26	AV	44	A	C4-C5-C6	7.00	120.50	117.00
57	BB	657	U	N3-C4-C5	-7.00	110.40	114.60
22	AY	53	G	C5-N7-C8	7.00	107.80	104.30
57	BB	532	A	P-O3'-C3'	7.00	128.10	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	571	U	C2-N3-C4	-7.00	122.80	127.00
57	BB	766	U	C5-C4-O4	-7.00	121.70	125.90
57	BB	1353	A	N1-C2-N3	-7.00	125.80	129.30
57	BB	1587	G	N3-C2-N2	7.00	124.80	119.90
57	BB	2052	A	C5-C6-N6	-7.00	118.10	123.70
21	AA	439	U	N3-C4-C5	-7.00	110.40	114.60
23	AW	50	U	C6-N1-C2	-7.00	116.80	121.00
57	BB	486	C	O4'-C1'-N1	7.00	113.80	108.20
57	BB	735	A	O5'-P-OP1	-7.00	99.40	105.70
57	BB	1338	G	N3-C4-N9	7.00	130.20	126.00
57	BB	2090	A	C6-C5-N7	-7.00	127.40	132.30
58	BA	84	G	N3-C2-N2	7.00	124.80	119.90
18	AG	35	LYS	O-C-N	-7.00	111.51	122.70
21	AA	327	A	C5-C6-N1	-7.00	114.20	117.70
21	AA	1071	C	C2-N3-C4	7.00	123.40	119.90
57	BB	134	G	N9-C4-C5	7.00	108.20	105.40
57	BB	1413	A	C6-C5-N7	-7.00	127.40	132.30
57	BB	1731	G	N9-C4-C5	-7.00	102.60	105.40
57	BB	1916	A	C4-C5-N7	7.00	114.20	110.70
57	BB	1984	G	N1-C6-O6	7.00	124.10	119.90
21	AA	91	U	C4-C5-C6	6.99	123.90	119.70
21	AA	111	G	C6-C5-N7	-6.99	126.20	130.40
21	AA	1207	G	N1-C2-N2	-6.99	109.91	116.20
21	AA	1250	A	C5-C6-N1	-6.99	114.20	117.70
21	AA	1453	G	C5-C6-N1	-6.99	108.00	111.50
57	BB	215	G	C6-C5-N7	-6.99	126.20	130.40
57	BB	1047	G	N3-C2-N2	6.99	124.80	119.90
57	BB	1416	G	C5-N7-C8	6.99	107.80	104.30
57	BB	1575	C	C4-C5-C6	6.99	120.90	117.40
57	BB	2294	G	N3-C4-C5	-6.99	125.10	128.60
57	BB	2573	C	O4'-C1'-N1	6.99	113.80	108.20
57	BB	2699	C	C2-N3-C4	-6.99	116.40	119.90
57	BB	2807	U	O4'-C1'-N1	6.99	113.80	108.20
58	BA	4	C	N1-C2-O2	-6.99	114.70	118.90
21	AA	724	G	C5-C6-O6	-6.99	124.41	128.60
21	AA	770	C	C6-N1-C2	-6.99	117.50	120.30
21	AA	1260	G	C4-C5-C6	6.99	123.00	118.80
57	BB	1871	A	C5-C6-N1	-6.99	114.20	117.70
57	BB	2308	G	C5-C6-N1	6.99	115.00	111.50
57	BB	2411	A	C5-N7-C8	-6.99	100.40	103.90
21	AA	8	A	C8-N9-C4	-6.99	103.00	105.80
21	AA	74	A	O4'-C1'-N9	6.99	113.79	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	600	A	O4'-C1'-N9	6.99	113.79	108.20
21	AA	1264	U	C6-N1-C2	-6.99	116.81	121.00
21	AA	1343	G	C8-N9-C4	-6.99	103.60	106.40
21	AA	1519	A	C5-N7-C8	6.99	107.40	103.90
22	AY	12	U	O5'-C5'-C4'	6.99	124.98	111.70
57	BB	880	G	N1-C6-O6	6.99	124.09	119.90
57	BB	1267	U	C5-C6-N1	-6.99	119.20	122.70
21	AA	851	G	O4'-C1'-N9	6.99	113.79	108.20
21	AA	1333	A	N7-C8-N9	6.99	117.29	113.80
23	AW	1	G	O4'-C1'-N9	6.99	113.79	108.20
57	BB	188	G	C5-N7-C8	6.99	107.79	104.30
57	BB	413	C	N3-C4-N4	6.99	122.89	118.00
57	BB	841	G	C1'-O4'-C4'	-6.99	104.31	109.90
57	BB	1140	C	N1-C2-O2	-6.99	114.71	118.90
57	BB	1503	A	N1-C2-N3	6.99	132.79	129.30
57	BB	1914	C	C5-C6-N1	6.99	124.50	121.00
57	BB	2425	A	C5-C6-N1	-6.99	114.21	117.70
21	AA	341	C	O4'-C1'-N1	6.99	113.79	108.20
21	AA	775	G	C8-N9-C1'	6.99	136.08	127.00
57	BB	679	C	O4'-C1'-N1	6.99	113.79	108.20
57	BB	1058	U	C5-C4-O4	-6.99	121.71	125.90
57	BB	1803	A	C6-C5-N7	-6.99	127.41	132.30
57	BB	2900	A	N3-C4-N9	6.99	132.99	127.40
14	AC	135	ARG	NE-CZ-NH1	6.99	123.79	120.30
21	AA	1127	G	C4-C5-N7	6.99	113.59	110.80
23	AW	7	A	C8-N9-C4	6.99	108.59	105.80
48	B1	20	TYR	CB-CG-CD1	-6.99	116.81	121.00
57	BB	332	A	P-O3'-C3'	6.99	128.08	119.70
57	BB	346	A	N9-C4-C5	-6.99	103.00	105.80
57	BB	1676	A	N7-C8-N9	-6.99	110.31	113.80
57	BB	1714	U	C2-N3-C4	6.99	131.19	127.00
21	AA	216	U	C1'-O4'-C4'	-6.98	104.31	109.90
21	AA	1242	G	N9-C4-C5	-6.98	102.61	105.40
21	AA	1438	G	O4'-C1'-N9	6.98	113.79	108.20
57	BB	878	A	C5'-C4'-C3'	6.98	127.17	116.00
57	BB	1184	U	O4'-C1'-N1	6.98	113.79	108.20
24	AX	14	A	P-O3'-C3'	6.98	128.08	119.70
57	BB	682	G	C4-C5-C6	6.98	122.99	118.80
57	BB	1291	C	N3-C4-N4	6.98	122.89	118.00
57	BB	2204	G	O4'-C1'-N9	6.98	113.79	108.20
57	BB	2791	G	O4'-C1'-N9	6.98	113.79	108.20
21	AA	263	A	C5-C6-N6	-6.98	118.12	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1510	C	N3-C4-N4	6.98	122.89	118.00
57	BB	81	G	C6-C5-N7	-6.98	126.21	130.40
57	BB	199	A	O4'-C1'-N9	6.98	113.78	108.20
57	BB	453	A	C6-C5-N7	-6.98	127.41	132.30
57	BB	1202	G	N9-C4-C5	-6.98	102.61	105.40
57	BB	1949	G	N3-C2-N2	6.98	124.79	119.90
57	BB	2064	C	C2-N3-C4	6.98	123.39	119.90
57	BB	2574	G	C4-C5-N7	-6.98	108.01	110.80
57	BB	2651	C	N1-C2-O2	6.98	123.09	118.90
57	BB	2885	G	C6-C5-N7	-6.98	126.21	130.40
57	BB	2886	A	O4'-C1'-N9	6.98	113.78	108.20
21	AA	120	A	C5-N7-C8	-6.98	100.41	103.90
21	AA	924	C	N3-C4-N4	6.98	122.89	118.00
24	AX	16	A	C3'-C2'-C1'	-6.98	95.92	101.50
57	BB	1196	C	O4'-C1'-N1	6.98	113.78	108.20
57	BB	1653	G	N3-C2-N2	6.98	124.78	119.90
57	BB	2672	U	N1-C2-N3	-6.98	110.71	114.90
57	BB	810	U	C3'-C2'-C1'	-6.98	95.92	101.50
57	BB	832	U	C4-C5-C6	6.98	123.89	119.70
57	BB	2450	A	C4-C5-C6	6.98	120.49	117.00
21	AA	1487	G	C2-N3-C4	-6.98	108.41	111.90
28	BI	89	SER	N-CA-CB	6.98	120.96	110.50
34	BO	33	ARG	NE-CZ-NH1	6.98	123.79	120.30
57	BB	1053	C	C4-C5-C6	6.98	120.89	117.40
57	BB	1320	C	N3-C4-N4	6.98	122.88	118.00
57	BB	1856	U	C4'-C3'-C2'	-6.98	95.62	102.60
57	BB	2208	C	C6-N1-C2	6.98	123.09	120.30
57	BB	2589	A	C4-C5-N7	-6.98	107.21	110.70
21	AA	1334	G	N3-C2-N2	6.97	124.78	119.90
26	AV	23	C	N3-C4-N4	6.97	122.88	118.00
57	BB	863	A	C6-C5-N7	-6.97	127.42	132.30
57	BB	1113	U	N3-C2-O2	-6.97	117.32	122.20
57	BB	1152	C	N1-C2-N3	-6.97	114.32	119.20
57	BB	2259	U	P-O3'-C3'	-6.97	111.33	119.70
21	AA	467	U	C1'-O4'-C4'	-6.97	104.32	109.90
21	AA	1464	U	C3'-C2'-C1'	-6.97	95.92	101.50
57	BB	125	A	C4-C5-C6	6.97	120.49	117.00
57	BB	896	A	C5'-C4'-C3'	6.97	127.16	116.00
57	BB	1361	G	C4-C5-C6	6.97	122.98	118.80
57	BB	1383	A	O4'-C1'-N9	6.97	113.78	108.20
57	BB	1444	G	C3'-C2'-C1'	-6.97	95.92	101.50
57	BB	1967	C	C6-N1-C2	-6.97	117.51	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2231	U	N3-C4-C5	-6.97	110.42	114.60
21	AA	730	G	C5-C6-N1	-6.97	108.01	111.50
22	AY	5	A	N7-C8-N9	-6.97	110.31	113.80
57	BB	827	U	N3-C2-O2	6.97	127.08	122.20
57	BB	2579	C	N3-C4-N4	6.97	122.88	118.00
57	BB	2623	G	N1-C2-N3	-6.97	119.72	123.90
57	BB	2780	G	N1-C6-O6	6.97	124.08	119.90
57	BB	2799	A	O4'-C1'-N9	6.97	113.78	108.20
21	AA	935	A	C5-C6-N6	-6.97	118.12	123.70
23	AW	53	G	N3-C2-N2	6.97	124.78	119.90
24	AX	22	A	N1-C6-N6	6.97	122.78	118.60
57	BB	374	A	N3-C4-N9	6.97	132.97	127.40
57	BB	579	G	C5-N7-C8	-6.97	100.81	104.30
57	BB	635	C	N3-C4-C5	-6.97	119.11	121.90
57	BB	1160	G	C6-C5-N7	-6.97	126.22	130.40
57	BB	2060	A	C8-N9-C4	-6.97	103.01	105.80
58	BA	89	U	P-O5'-C5'	6.97	132.05	120.90
57	BB	465	G	C4-C5-N7	-6.97	108.01	110.80
57	BB	475	C	O5'-P-OP2	6.97	119.06	110.70
57	BB	752	A	P-O3'-C3'	6.97	128.06	119.70
57	BB	1375	U	P-O5'-C5'	-6.97	109.75	120.90
57	BB	1677	A	C2-N3-C4	6.97	114.08	110.60
57	BB	1721	G	O4'-C1'-N9	6.97	113.77	108.20
57	BB	2469	A	N3-C4-C5	-6.97	121.92	126.80
21	AA	148	G	C4-C5-C6	6.97	122.98	118.80
21	AA	1144	G	N3-C4-C5	-6.97	125.12	128.60
57	BB	10	A	C8-N9-C4	6.97	108.59	105.80
57	BB	98	G	N7-C8-N9	6.97	116.58	113.10
57	BB	365	U	N1-C2-N3	-6.97	110.72	114.90
57	BB	989	G	N3-C2-N2	6.97	124.78	119.90
57	BB	1145	C	N3-C4-N4	6.97	122.88	118.00
57	BB	2010	G	C3'-C2'-C1'	-6.97	95.93	101.50
57	BB	2107	G	C6-N1-C2	6.97	129.28	125.10
57	BB	2403	C	N1-C2-O2	-6.97	114.72	118.90
57	BB	2485	G	N7-C8-N9	6.97	116.58	113.10
2	AK	84	MET	CG-SD-CE	-6.96	89.06	100.20
18	AG	2	ARG	NE-CZ-NH1	6.96	123.78	120.30
21	AA	1305	G	N3-C2-N2	6.96	124.78	119.90
57	BB	299	A	C4-C5-C6	6.96	120.48	117.00
57	BB	1651	G	N1-C2-N3	-6.96	119.72	123.90
21	AA	1283	U	O4'-C1'-N1	6.96	113.77	108.20
26	AV	45	G	C5-N7-C8	6.96	107.78	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2145	C	C4'-C3'-C2'	6.96	109.56	102.60
57	BB	2272	U	O4'-C1'-N1	6.96	113.77	108.20
57	BB	2475	C	C2-N1-C1'	6.96	126.46	118.80
21	AA	883	C	O4'-C1'-N1	6.96	113.77	108.20
21	AA	1040	U	C2-N3-C4	-6.96	122.82	127.00
21	AA	1137	C	C6-N1-C2	-6.96	117.52	120.30
21	AA	1461	G	P-O3'-C3'	6.96	128.05	119.70
26	AV	57	A	N9-C4-C5	6.96	108.58	105.80
57	BB	60	G	N1-C6-O6	6.96	124.08	119.90
57	BB	128	C	N3-C4-N4	6.96	122.87	118.00
57	BB	360	U	N3-C4-O4	6.96	124.27	119.40
57	BB	1432	G	O4'-C1'-N9	6.96	113.77	108.20
57	BB	2269	G	C5-C6-O6	-6.96	124.42	128.60
57	BB	2731	G	C4-C5-N7	-6.96	108.02	110.80
57	BB	2825	G	C4-C5-C6	6.96	122.98	118.80
57	BB	2851	A	C4-C5-N7	-6.96	107.22	110.70
57	BB	1842	G	C6-N1-C2	6.96	129.28	125.10
21	AA	149	A	N1-C2-N3	6.96	132.78	129.30
21	AA	238	A	C5-N7-C8	6.96	107.38	103.90
21	AA	1123	U	O4'-C1'-N1	6.96	113.77	108.20
21	AA	1523	G	N9-C1'-C2'	-6.96	104.35	112.00
26	AV	28	C	C6-N1-C2	-6.96	117.52	120.30
57	BB	376	G	N1-C6-O6	6.96	124.08	119.90
57	BB	1528	A	P-O3'-C3'	-6.96	111.35	119.70
57	BB	2301	C	O4'-C1'-N1	6.96	113.77	108.20
21	AA	1109	C	C4-C5-C6	6.96	120.88	117.40
57	BB	312	G	P-O5'-C5'	6.96	132.03	120.90
57	BB	757	G	C1'-O4'-C4'	-6.96	104.33	109.90
57	BB	894	U	C4'-C3'-C2'	-6.96	95.64	102.60
57	BB	909	A	O4'-C1'-N9	6.96	113.77	108.20
57	BB	1029	A	N3-C4-C5	-6.96	121.93	126.80
57	BB	1748	C	C4-C5-C6	6.96	120.88	117.40
21	AA	1465	A	O4'-C1'-N9	6.96	113.76	108.20
57	BB	1834	U	O4'-C1'-N1	6.96	113.76	108.20
57	BB	2654	A	C2-N3-C4	-6.96	107.12	110.60
21	AA	497	G	C4-C5-C6	6.95	122.97	118.80
21	AA	1090	U	O4'-C1'-N1	6.95	113.76	108.20
21	AA	1282	C	O4'-C1'-N1	6.95	113.76	108.20
57	BB	51	G	C8-N9-C4	-6.95	103.62	106.40
57	BB	117	G	N9-C4-C5	-6.95	102.62	105.40
57	BB	853	C	C6-N1-C2	6.95	123.08	120.30
57	BB	1335	C	O4'-C1'-N1	6.95	113.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1458	U	P-O5'-C5'	-6.95	109.78	120.90
57	BB	1950	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	221	C	C5-C4-N4	-6.95	115.33	120.20
21	AA	1026	G	P-O3'-C3'	-6.95	111.36	119.70
21	AA	1359	C	C5-C4-N4	-6.95	115.33	120.20
57	BB	563	A	O4'-C1'-N9	6.95	113.76	108.20
57	BB	781	A	C5-C6-N1	-6.95	114.22	117.70
57	BB	1414	C	N3-C4-N4	6.95	122.87	118.00
57	BB	1420	A	C2-N3-C4	-6.95	107.12	110.60
57	BB	1885	A	O4'-C1'-N9	6.95	113.76	108.20
57	BB	2487	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	860	A	O4'-C1'-N9	6.95	113.76	108.20
21	AA	865	A	C6-N1-C2	-6.95	114.43	118.60
27	B5	112	ASP	CB-CG-OD2	-6.95	112.05	118.30
57	BB	190	A	C5-N7-C8	6.95	107.38	103.90
57	BB	1017	G	N3-C4-N9	-6.95	121.83	126.00
57	BB	1749	A	N1-C6-N6	6.95	122.77	118.60
57	BB	1950	G	N9-C4-C5	6.95	108.18	105.40
57	BB	2205	A	C4-C5-C6	6.95	120.47	117.00
58	BA	86	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	508	U	O4'-C1'-N1	6.95	113.76	108.20
21	AA	870	U	N1-C2-O2	6.95	127.66	122.80
21	AA	1179	A	C5-C6-N6	-6.95	118.14	123.70
57	BB	118	A	C2-N3-C4	-6.95	107.13	110.60
57	BB	446	G	C4-C5-N7	6.95	113.58	110.80
57	BB	464	U	C4-C5-C6	-6.95	115.53	119.70
57	BB	1875	G	N9-C4-C5	-6.95	102.62	105.40
57	BB	1941	C	N3-C4-C5	-6.95	119.12	121.90
57	BB	2537	U	O4'-C1'-N1	6.95	113.76	108.20
57	BB	2822	G	C5-C6-O6	-6.95	124.43	128.60
21	AA	1508	A	C1'-O4'-C4'	6.95	115.46	109.90
57	BB	446	G	C6-C5-N7	-6.95	126.23	130.40
57	BB	599	A	C1'-O4'-C4'	-6.95	104.34	109.90
57	BB	701	G	C6-C5-N7	-6.95	126.23	130.40
57	BB	1568	G	C5-C6-O6	-6.95	124.43	128.60
57	BB	1614	A	C2-N3-C4	6.95	114.07	110.60
21	AA	393	A	N7-C8-N9	6.95	117.27	113.80
21	AA	456	A	N9-C4-C5	6.95	108.58	105.80
21	AA	1225	A	N9-C4-C5	6.95	108.58	105.80
21	AA	1351	U	C6-N1-C2	-6.95	116.83	121.00
22	AY	7	U	C3'-C2'-C1'	-6.95	95.94	101.50
57	BB	1721	G	C5-C6-N1	-6.95	108.03	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1840	G	C4-C5-C6	6.95	122.97	118.80
57	BB	1986	C	N3-C4-N4	6.95	122.86	118.00
57	BB	2040	G	C5-N7-C8	-6.95	100.83	104.30
57	BB	2740	A	N1-C2-N3	6.95	132.77	129.30
21	AA	42	G	C5-C6-O6	-6.94	124.43	128.60
57	BB	64	A	N9-C4-C5	-6.94	103.02	105.80
57	BB	511	U	C1'-O4'-C4'	6.94	115.45	109.90
57	BB	1926	U	C2-N3-C4	6.94	131.17	127.00
21	AA	724	G	O4'-C1'-N9	6.94	113.75	108.20
21	AA	1100	C	C5'-C4'-O4'	-6.94	100.77	109.10
57	BB	547	A	N1-C2-N3	-6.94	125.83	129.30
57	BB	1171	G	C5-C6-N1	-6.94	108.03	111.50
57	BB	1557	C	C6-N1-C2	-6.94	117.52	120.30
57	BB	2385	C	C2-N3-C4	-6.94	116.43	119.90
58	BA	105	G	C8-N9-C4	-6.94	103.62	106.40
58	BA	114	C	C5-C6-N1	6.94	124.47	121.00
21	AA	58	C	O4'-C1'-N1	6.94	113.75	108.20
21	AA	366	A	O4'-C1'-C2'	6.94	113.85	107.60
21	AA	676	A	C4-C5-C6	6.94	120.47	117.00
21	AA	737	C	N3-C4-N4	6.94	122.86	118.00
21	AA	839	C	N3-C4-C5	-6.94	119.12	121.90
26	AV	7	G	C6-C5-N7	-6.94	126.24	130.40
57	BB	77	G	N7-C8-N9	-6.94	109.63	113.10
57	BB	936	A	C5-C6-N1	-6.94	114.23	117.70
57	BB	1319	C	N3-C4-N4	6.94	122.86	118.00
57	BB	1401	G	C4-C5-N7	-6.94	108.02	110.80
57	BB	1734	G	C5-C6-N1	-6.94	108.03	111.50
57	BB	2282	G	C2'-C3'-O3'	6.94	124.80	113.70
57	BB	2484	G	N3-C2-N2	6.94	124.76	119.90
57	BB	2602	A	C2-N3-C4	6.94	114.07	110.60
57	BB	646	U	O4'-C1'-N1	6.94	113.75	108.20
57	BB	811	U	C5-C6-N1	6.94	126.17	122.70
57	BB	1407	G	C4-C5-N7	6.94	113.58	110.80
57	BB	2764	A	O4'-C1'-N9	6.94	113.75	108.20
21	AA	301	G	N7-C8-N9	6.94	116.57	113.10
21	AA	424	G	C6-C5-N7	-6.94	126.24	130.40
21	AA	776	G	C5-C6-O6	-6.94	124.44	128.60
57	BB	171	U	C1'-O4'-C4'	-6.94	104.35	109.90
57	BB	736	C	O4'-C1'-N1	6.94	113.75	108.20
57	BB	748	G	O4'-C1'-N9	6.94	113.75	108.20
57	BB	1206	G	O4'-C1'-N9	6.94	113.75	108.20
57	BB	1807	G	N1-C2-N3	-6.94	119.74	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2083	G	C6-C5-N7	-6.94	126.24	130.40
57	BB	2331	G	N7-C8-N9	6.94	116.57	113.10
21	AA	123	U	C5-C4-O4	6.94	130.06	125.90
39	BT	20	ALA	N-CA-CB	6.94	119.81	110.10
57	BB	256	A	N7-C8-N9	6.94	117.27	113.80
57	BB	1526	C	N1-C2-O2	6.94	123.06	118.90
57	BB	2532	G	C5-C6-O6	-6.94	124.44	128.60
21	AA	279	A	O4'-C1'-N9	6.93	113.75	108.20
21	AA	839	C	C4-C5-C6	6.93	120.87	117.40
21	AA	1235	U	C6-N1-C2	6.93	125.16	121.00
22	AY	25	C	C4-C5-C6	6.93	120.87	117.40
23	AW	44	G	P-O3'-C3'	6.93	128.02	119.70
35	BP	108	ARG	NE-CZ-NH2	6.93	123.77	120.30
57	BB	891	G	N1-C6-O6	6.93	124.06	119.90
57	BB	1259	G	P-O3'-C3'	-6.93	111.38	119.70
57	BB	1494	A	C2-N3-C4	-6.93	107.13	110.60
57	BB	1714	U	O4'-C1'-N1	6.93	113.75	108.20
21	AA	1179	A	N7-C8-N9	6.93	117.27	113.80
21	AA	1364	U	C5'-C4'-C3'	-6.93	104.91	116.00
22	AY	30	G	N1-C6-O6	6.93	124.06	119.90
22	AY	37	G	C2-N3-C4	6.93	115.37	111.90
57	BB	189	G	N3-C4-C5	-6.93	125.13	128.60
57	BB	1733	G	N3-C4-C5	-6.93	125.13	128.60
57	BB	1770	G	O4'-C1'-N9	6.93	113.75	108.20
58	BA	81	G	N1-C2-N3	-6.93	119.74	123.90
58	BA	109	A	C6-C5-N7	-6.93	127.45	132.30
57	BB	1248	G	C6-C5-N7	-6.93	126.24	130.40
57	BB	1865	U	P-O3'-C3'	6.93	128.02	119.70
57	BB	2254	C	C5-C6-N1	6.93	124.47	121.00
57	BB	2411	A	N9-C4-C5	6.93	108.57	105.80
57	BB	2421	G	N1-C6-O6	-6.93	115.74	119.90
57	BB	2535	G	C6-C5-N7	-6.93	126.24	130.40
6	AO	14	PHE	CB-CG-CD1	-6.93	115.95	120.80
21	AA	299	G	N1-C2-N3	-6.93	119.74	123.90
21	AA	759	A	N3-C4-C5	-6.93	121.95	126.80
21	AA	958	A	C4-C5-N7	-6.93	107.23	110.70
21	AA	1015	G	C8-N9-C4	-6.93	103.63	106.40
21	AA	1042	A	C2-N3-C4	-6.93	107.14	110.60
21	AA	1146	A	C5-C6-N6	-6.93	118.16	123.70
22	AY	9	A	C5-C6-N1	-6.93	114.24	117.70
57	BB	184	C	N3-C4-N4	6.93	122.85	118.00
57	BB	272	A	C2-N3-C4	6.93	114.06	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	391	A	C5-C6-N1	-6.93	114.23	117.70
57	BB	1010	A	P-O5'-C5'	6.93	131.99	120.90
57	BB	1175	A	C8-N9-C4	-6.93	103.03	105.80
57	BB	1318	U	C3'-C2'-C1'	-6.93	95.96	101.50
57	BB	1356	G	O4'-C1'-N9	6.93	113.74	108.20
57	BB	2263	C	C5-C6-N1	6.93	124.47	121.00
21	AA	455	G	C8-N9-C4	6.93	109.17	106.40
21	AA	1279	G	C5-C6-O6	-6.93	124.44	128.60
57	BB	7	G	C5-N7-C8	6.93	107.76	104.30
57	BB	15	G	O4'-C1'-N9	6.93	113.74	108.20
57	BB	347	A	C6-N1-C2	6.93	122.76	118.60
57	BB	1773	A	N9-C4-C5	6.93	108.57	105.80
57	BB	1782	U	C6-N1-C2	-6.93	116.84	121.00
57	BB	2665	A	N1-C2-N3	6.93	132.76	129.30
21	AA	1234	C	N3-C2-O2	6.93	126.75	121.90
22	AY	20	G	N3-C4-C5	-6.93	125.14	128.60
57	BB	128	C	C6-N1-C2	-6.93	117.53	120.30
57	BB	1218	G	C8-N9-C4	6.93	109.17	106.40
57	BB	1813	G	O5'-C5'-C4'	-6.93	98.54	111.70
57	BB	1899	A	C8-N9-C4	-6.93	103.03	105.80
57	BB	2428	G	C2-N3-C4	6.93	115.36	111.90
57	BB	2521	C	N1-C2-O2	6.93	123.06	118.90
57	BB	2803	G	C6-C5-N7	-6.93	126.24	130.40
21	AA	112	G	C5-C6-N1	-6.92	108.04	111.50
21	AA	525	C	C5-C4-N4	-6.92	115.35	120.20
21	AA	663	A	N1-C2-N3	6.92	132.76	129.30
21	AA	1025	U	N3-C4-C5	-6.92	110.44	114.60
21	AA	1093	A	C6-C5-N7	-6.92	127.45	132.30
21	AA	1145	A	C2-N3-C4	6.92	114.06	110.60
21	AA	1301	U	N1-C2-N3	6.92	119.06	114.90
30	BK	55	ASP	CB-CG-OD1	6.92	124.53	118.30
57	BB	29	U	O4'-C1'-N1	6.92	113.74	108.20
57	BB	1519	G	C5-N7-C8	-6.92	100.84	104.30
57	BB	1627	G	P-O3'-C3'	-6.92	111.39	119.70
57	BB	2619	C	C5'-C4'-C3'	-6.92	104.92	116.00
57	BB	2737	G	C2-N3-C4	6.92	115.36	111.90
58	BA	16	G	P-O5'-C5'	6.92	131.98	120.90
22	AY	5	A	C6-N1-C2	6.92	122.75	118.60
24	AX	15	A	C5-C6-N1	-6.92	114.24	117.70
57	BB	992	C	N3-C4-N4	-6.92	113.15	118.00
57	BB	1373	A	N7-C8-N9	6.92	117.26	113.80
58	BA	82	U	O4'-C4'-C3'	-6.92	97.08	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	5	U	N1-C2-N3	6.92	119.05	114.90
21	AA	255	G	N1-C2-N3	-6.92	119.75	123.90
21	AA	258	G	N1-C2-N3	-6.92	119.75	123.90
21	AA	432	A	O4'-C1'-N9	6.92	113.74	108.20
21	AA	568	G	C5-C6-N1	-6.92	108.04	111.50
21	AA	930	C	C4-C5-C6	6.92	120.86	117.40
22	AY	19	G	C6-N1-C2	-6.92	120.95	125.10
23	AW	42	C	O4'-C1'-N1	6.92	113.74	108.20
57	BB	381	G	C4-C5-N7	6.92	113.57	110.80
57	BB	713	G	C6-C5-N7	-6.92	126.25	130.40
57	BB	1871	A	C2-N3-C4	-6.92	107.14	110.60
57	BB	2032	G	O4'-C1'-N9	6.92	113.74	108.20
57	BB	2060	A	C2-N3-C4	-6.92	107.14	110.60
58	BA	52	A	C4-C5-N7	-6.92	107.24	110.70
7	AP	14	ARG	NE-CZ-NH2	-6.92	116.84	120.30
57	BB	242	G	C3'-C2'-C1'	-6.92	95.96	101.50
57	BB	860	U	O4'-C1'-N1	6.92	113.74	108.20
57	BB	1213	A	N1-C2-N3	6.92	132.76	129.30
21	AA	168	G	O4'-C1'-N9	6.92	113.73	108.20
21	AA	1163	A	O4'-C1'-N9	6.92	113.73	108.20
22	AY	29	A	C3'-C2'-C1'	-6.92	95.97	101.50
57	BB	273	G	C5-N7-C8	6.92	107.76	104.30
57	BB	374	A	N9-C4-C5	-6.92	103.03	105.80
57	BB	809	G	C8-N9-C4	6.92	109.17	106.40
57	BB	1207	C	C5-C6-N1	6.92	124.46	121.00
57	BB	2830	C	P-O3'-C3'	-6.92	111.40	119.70
21	AA	1178	G	C2-N3-C4	-6.92	108.44	111.90
57	BB	214	G	C4-C5-N7	6.92	113.57	110.80
57	BB	1176	U	C5-C6-N1	6.92	126.16	122.70
57	BB	1702	G	N3-C2-N2	6.92	124.74	119.90
57	BB	1844	C	P-O3'-C3'	-6.92	111.40	119.70
57	BB	1873	G	N9-C1'-C2'	-6.92	104.39	112.00
57	BB	1998	A	C8-N9-C4	6.92	108.57	105.80
58	BA	114	C	N3-C4-N4	6.92	122.84	118.00
21	AA	768	A	P-O5'-C5'	6.92	131.96	120.90
21	AA	1462	C	C6-N1-C1'	-6.92	112.50	120.80
57	BB	297	G	C8-N9-C4	6.92	109.17	106.40
57	BB	359	G	N1-C2-N3	-6.92	119.75	123.90
57	BB	2428	G	O4'-C1'-N9	6.92	113.73	108.20
13	AB	22	TRP	CB-CG-CD1	6.91	135.99	127.00
21	AA	1244	G	C4'-C3'-C2'	-6.91	95.69	102.60
21	AA	1415	G	C6-N1-C2	-6.91	120.95	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	18	G	C4-C5-N7	6.91	113.57	110.80
57	BB	183	C	O4'-C1'-N1	6.91	113.73	108.20
57	BB	795	C	N3-C4-C5	-6.91	119.14	121.90
57	BB	1072	C	C1'-O4'-C4'	-6.91	104.37	109.90
57	BB	1075	C	N3-C4-N4	6.91	122.84	118.00
57	BB	2087	G	N1-C2-N3	-6.91	119.75	123.90
57	BB	2156	G	N1-C2-N3	-6.91	119.75	123.90
57	BB	2307	G	C8-N9-C4	6.91	109.17	106.40
57	BB	2370	G	C5-N7-C8	-6.91	100.84	104.30
57	BB	2421	G	N1-C2-N3	-6.91	119.75	123.90
21	AA	761	G	N1-C6-O6	6.91	124.05	119.90
21	AA	1074	G	C6-N1-C2	-6.91	120.95	125.10
21	AA	1392	G	N9-C4-C5	6.91	108.17	105.40
21	AA	1432	G	O4'-C1'-N9	6.91	113.73	108.20
21	AA	530	G	N1-C6-O6	6.91	124.05	119.90
21	AA	907	A	C8-N9-C4	-6.91	103.04	105.80
21	AA	1161	C	C5-C4-N4	-6.91	115.36	120.20
21	AA	1213	A	C5'-C4'-O4'	6.91	117.39	109.10
22	AY	76	A	C5-C6-N1	-6.91	114.25	117.70
23	AW	24	G	N3-C2-N2	6.91	124.74	119.90
57	BB	809	G	O4'-C1'-N9	6.91	113.73	108.20
57	BB	1327	A	C4-C5-C6	6.91	120.46	117.00
57	BB	1606	C	C2-N3-C4	6.91	123.36	119.90
57	BB	2491	U	N3-C4-O4	6.91	124.24	119.40
57	BB	2788	C	O4'-C1'-N1	6.91	113.73	108.20
21	AA	242	G	C4-C5-N7	-6.91	108.04	110.80
21	AA	432	A	N9-C4-C5	6.91	108.56	105.80
21	AA	1523	G	N3-C4-N9	-6.91	121.86	126.00
57	BB	75	G	C6-C5-N7	-6.91	126.25	130.40
57	BB	229	C	C5-C6-N1	-6.91	117.55	121.00
57	BB	663	G	C5-C6-N1	6.91	114.95	111.50
57	BB	1285	A	N3-C4-C5	-6.91	121.96	126.80
57	BB	1608	A	C5-C6-N1	-6.91	114.25	117.70
57	BB	2722	G	C6-C5-N7	-6.91	126.25	130.40
58	BA	82	U	N3-C4-C5	-6.91	110.45	114.60
21	AA	201	G	N3-C2-N2	6.91	124.73	119.90
21	AA	410	G	N9-C4-C5	-6.91	102.64	105.40
21	AA	1050	G	C8-N9-C4	-6.91	103.64	106.40
57	BB	582	A	C5-C6-N1	-6.91	114.25	117.70
57	BB	727	A	C5-C6-N6	-6.91	118.17	123.70
21	AA	109	A	C2-N3-C4	-6.91	107.15	110.60
21	AA	219	U	C5-C4-O4	-6.91	121.76	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	964	A	C2-N3-C4	-6.91	107.15	110.60
57	BB	101	A	C6-C5-N7	-6.91	127.47	132.30
57	BB	579	G	C5-C6-O6	-6.91	124.46	128.60
57	BB	1852	U	P-O3'-C3'	-6.91	111.41	119.70
57	BB	2292	U	N3-C4-O4	6.91	124.23	119.40
57	BB	2810	A	C6-N1-C2	6.91	122.74	118.60
58	BA	72	G	C4-C5-C6	6.91	122.94	118.80
21	AA	251	G	C4-C5-C6	6.90	122.94	118.80
21	AA	742	G	N9-C4-C5	-6.90	102.64	105.40
22	AY	1	G	O4'-C1'-N9	6.90	113.72	108.20
26	AV	32	C	C5-C6-N1	6.90	124.45	121.00
57	BB	73	A	N1-C2-N3	6.90	132.75	129.30
57	BB	2190	G	C5-C6-N1	-6.90	108.05	111.50
21	AA	860	A	C8-N9-C4	-6.90	103.04	105.80
21	AA	1223	C	C5-C6-N1	6.90	124.45	121.00
21	AA	1386	G	O4'-C1'-N9	6.90	113.72	108.20
57	BB	169	G	N1-C2-N3	-6.90	119.76	123.90
57	BB	1217	U	C4-C5-C6	-6.90	115.56	119.70
57	BB	2181	U	C6-N1-C2	-6.90	116.86	121.00
57	BB	2311	A	C5'-C4'-O4'	6.90	117.38	109.10
57	BB	2338	C	N3-C4-N4	6.90	122.83	118.00
4	AM	106	ARG	NE-CZ-NH1	6.90	123.75	120.30
21	AA	382	A	C6-N1-C2	6.90	122.74	118.60
21	AA	1139	G	N9-C4-C5	6.90	108.16	105.40
21	AA	1217	C	N3-C2-O2	-6.90	117.07	121.90
21	AA	1408	A	C8-N9-C4	-6.90	103.04	105.80
26	AV	1	C	O5'-P-OP2	-6.90	99.49	105.70
57	BB	13	A	C4-C5-C6	6.90	120.45	117.00
57	BB	689	A	C8-N9-C4	-6.90	103.04	105.80
57	BB	899	A	C6-N1-C2	6.90	122.74	118.60
57	BB	1092	C	C4'-C3'-C2'	-6.90	95.70	102.60
57	BB	1163	G	N1-C6-O6	6.90	124.04	119.90
57	BB	1297	C	C6-N1-C2	-6.90	117.54	120.30
57	BB	1734	G	C4-C5-C6	6.90	122.94	118.80
57	BB	2172	U	O4'-C1'-N1	6.90	113.72	108.20
57	BB	2482	A	N3-C4-C5	-6.90	121.97	126.80
58	BA	83	G	C6-C5-N7	-6.90	126.26	130.40
21	AA	855	U	N1-C2-O2	6.90	127.63	122.80
21	AA	863	U	O4'-C1'-N1	6.90	113.72	108.20
57	BB	1558	C	C2-N1-C1'	6.90	126.39	118.80
57	BB	1610	A	C8-N9-C4	-6.90	103.04	105.80
57	BB	1682	G	C5-C6-N1	-6.90	108.05	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2815	C	C4-C5-C6	-6.90	113.95	117.40
57	BB	2883	A	C5-C6-N1	-6.90	114.25	117.70
21	AA	319	G	C6-C5-N7	-6.90	126.26	130.40
21	AA	959	A	N1-C2-N3	-6.90	125.85	129.30
21	AA	1359	C	N1-C2-O2	6.90	123.04	118.90
57	BB	599	A	O4'-C1'-N9	6.90	113.72	108.20
57	BB	648	G	C8-N9-C4	-6.90	103.64	106.40
57	BB	673	C	N3-C4-N4	6.90	122.83	118.00
57	BB	1160	G	N3-C2-N2	6.90	124.73	119.90
57	BB	1298	C	N3-C2-O2	-6.90	117.07	121.90
57	BB	1611	C	C5-C4-N4	-6.90	115.37	120.20
57	BB	1640	A	C5-C6-N1	-6.90	114.25	117.70
57	BB	2551	C	N1-C2-O2	-6.90	114.76	118.90
57	BB	2708	G	O4'-C1'-N9	6.90	113.72	108.20
58	BA	66	A	C2-N3-C4	-6.90	107.15	110.60
21	AA	1175	G	N3-C4-C5	6.90	132.05	128.60
57	BB	1955	U	N1-C2-N3	-6.90	110.76	114.90
57	BB	2369	A	N9-C4-C5	6.90	108.56	105.80
4	AM	78	ARG	NH1-CZ-NH2	6.89	126.98	119.40
21	AA	1229	A	C5-C6-N6	-6.89	118.18	123.70
57	BB	563	A	C8-N9-C4	6.89	108.56	105.80
57	BB	755	U	C2-N3-C4	6.89	131.14	127.00
57	BB	899	A	N7-C8-N9	6.89	117.25	113.80
57	BB	1922	G	O4'-C1'-N9	6.89	113.72	108.20
57	BB	2053	G	P-O3'-C3'	-6.89	111.43	119.70
21	AA	211	G	C6-C5-N7	-6.89	126.27	130.40
21	AA	380	G	P-O3'-C3'	-6.89	111.43	119.70
21	AA	400	C	N1-C2-O2	6.89	123.04	118.90
21	AA	929	G	C1'-O4'-C4'	6.89	115.41	109.90
57	BB	44	A	C5-N7-C8	6.89	107.35	103.90
57	BB	860	U	C6-N1-C2	-6.89	116.86	121.00
57	BB	2769	U	N3-C2-O2	6.89	127.03	122.20
18	AG	52	ARG	NE-CZ-NH2	-6.89	116.86	120.30
21	AA	74	A	C2-N3-C4	-6.89	107.16	110.60
21	AA	345	C	N1-C2-O2	6.89	123.03	118.90
57	BB	97	C	C6-N1-C2	-6.89	117.54	120.30
57	BB	750	A	N7-C8-N9	6.89	117.25	113.80
57	BB	1883	U	N3-C4-C5	-6.89	110.47	114.60
21	AA	1204	A	N9-C1'-C2'	-6.89	104.42	112.00
21	AA	1349	A	N1-C2-N3	6.89	132.75	129.30
21	AA	1390	U	N3-C4-C5	-6.89	110.47	114.60
22	AY	21	A	C5-C6-N6	-6.89	118.19	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1098	A	C6-C5-N7	-6.89	127.48	132.30
57	BB	1193	G	N3-C2-N2	6.89	124.72	119.90
57	BB	1542	U	N1-C2-O2	-6.89	117.98	122.80
57	BB	1773	A	C8-N9-C4	-6.89	103.04	105.80
21	AA	651	C	C2-N3-C4	6.89	123.34	119.90
21	AA	775	G	C8-N9-C4	-6.89	103.64	106.40
21	AA	1332	A	N1-C6-N6	6.89	122.73	118.60
22	AY	5	A	C5-N7-C8	6.89	107.34	103.90
57	BB	1599	U	C5-C6-N1	6.89	126.14	122.70
57	BB	2479	U	N3-C4-C5	-6.89	110.47	114.60
21	AA	52	C	C3'-C2'-C1'	6.89	107.01	101.50
21	AA	1347	G	C6-C5-N7	-6.89	126.27	130.40
57	BB	19	A	C4'-C3'-C2'	-6.89	95.71	102.60
57	BB	466	A	N7-C8-N9	6.89	117.24	113.80
57	BB	809	G	N1-C6-O6	6.89	124.03	119.90
57	BB	1196	C	C4-C5-C6	6.89	120.84	117.40
57	BB	1477	A	N9-C4-C5	6.89	108.56	105.80
57	BB	1685	C	N3-C4-C5	-6.89	119.14	121.90
57	BB	2502	G	N1-C6-O6	6.89	124.03	119.90
57	BB	2585	U	N1-C2-N3	-6.89	110.77	114.90
57	BB	2610	C	P-O3'-C3'	6.89	127.96	119.70
57	BB	2821	A	C5-N7-C8	6.89	107.34	103.90
57	BB	2842	G	C6-C5-N7	-6.89	126.27	130.40
21	AA	398	U	C3'-C2'-C1'	6.88	107.01	101.50
21	AA	1122	U	N3-C4-O4	-6.88	114.58	119.40
23	AW	76	A	C4-C5-C6	6.88	120.44	117.00
57	BB	549	G	C2-N3-C4	6.88	115.34	111.90
57	BB	564	C	C5-C6-N1	6.88	124.44	121.00
57	BB	1875	G	C6-N1-C2	6.88	129.23	125.10
57	BB	2046	G	C8-N9-C4	-6.88	103.65	106.40
21	AA	557	G	N7-C8-N9	-6.88	109.66	113.10
21	AA	606	G	N9-C4-C5	6.88	108.15	105.40
21	AA	1278	G	N3-C4-N9	-6.88	121.87	126.00
23	AW	27	G	C6-C5-N7	-6.88	126.27	130.40
57	BB	930	G	O4'-C1'-N9	6.88	113.71	108.20
21	AA	167	A	O4'-C1'-N9	6.88	113.70	108.20
21	AA	518	C	N3-C4-C5	-6.88	119.15	121.90
21	AA	831	A	N1-C2-N3	6.88	132.74	129.30
21	AA	864	A	N9-C4-C5	-6.88	103.05	105.80
21	AA	1160	G	C2-N3-C4	6.88	115.34	111.90
57	BB	27	G	C6-N1-C2	6.88	129.23	125.10
57	BB	115	C	O4'-C1'-N1	6.88	113.70	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1521	G	C2-N3-C4	6.88	115.34	111.90
57	BB	1762	A	C5-C6-N1	-6.88	114.26	117.70
57	BB	2734	A	C5-C6-N6	-6.88	118.19	123.70
57	BB	345	A	C5-C6-N6	-6.88	118.20	123.70
57	BB	1130	U	P-O5'-C5'	-6.88	109.89	120.90
57	BB	2321	U	C6-N1-C1'	-6.88	111.57	121.20
21	AA	949	A	C4-C5-N7	-6.88	107.26	110.70
21	AA	1453	G	C5-N7-C8	6.88	107.74	104.30
22	AY	26	G	N1-C2-N2	-6.88	110.01	116.20
57	BB	1837	C	C2-N3-C4	6.88	123.34	119.90
57	BB	2090	A	N1-C2-N3	6.88	132.74	129.30
57	BB	2289	G	C5-C6-O6	-6.88	124.47	128.60
57	BB	2497	A	C4-C5-C6	6.88	120.44	117.00
57	BB	2893	A	C5-C6-N1	-6.88	114.26	117.70
21	AA	499	A	N7-C8-N9	-6.88	110.36	113.80
21	AA	681	A	C5'-C4'-O4'	6.88	117.35	109.10
21	AA	984	C	N3-C4-N4	6.88	122.81	118.00
21	AA	1433	A	C4-C5-N7	-6.88	107.26	110.70
21	AA	1497	G	N1-C6-O6	6.88	124.03	119.90
22	AY	9	A	C5-C6-N6	-6.88	118.20	123.70
22	AY	22	G	N3-C2-N2	6.88	124.71	119.90
53	BE	44	ARG	NE-CZ-NH1	-6.88	116.86	120.30
57	BB	268	C	N3-C4-N4	6.88	122.81	118.00
57	BB	660	C	P-O5'-C5'	-6.88	109.90	120.90
57	BB	1821	A	C5-C6-N6	-6.88	118.20	123.70
57	BB	2019	A	C5-C6-N6	-6.88	118.20	123.70
57	BB	2311	A	N3-C4-N9	6.88	132.90	127.40
57	BB	2436	G	N9-C4-C5	-6.88	102.65	105.40
57	BB	2517	C	C6-N1-C1'	-6.88	112.55	120.80
14	AC	171	ARG	NE-CZ-NH2	-6.88	116.86	120.30
21	AA	166	U	O4'-C1'-N1	6.88	113.70	108.20
21	AA	944	G	N1-C6-O6	6.87	124.02	119.90
21	AA	1225	A	C8-N9-C4	-6.87	103.05	105.80
21	AA	1448	C	C5-C4-N4	-6.87	115.39	120.20
21	AA	1454	G	O4'-C1'-N9	6.87	113.70	108.20
21	AA	1462	C	C6-N1-C2	6.87	123.05	120.30
27	B5	208	TYR	CA-CB-CG	-6.87	100.34	113.40
57	BB	819	A	C8-N9-C4	-6.87	103.05	105.80
57	BB	894	U	C5'-C4'-O4'	6.87	117.35	109.10
57	BB	1145	C	C6-N1-C1'	6.87	129.05	120.80
57	BB	2068	U	N3-C2-O2	6.87	127.01	122.20
57	BB	2598	A	C5-C6-N6	-6.87	118.20	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	54	G	O4'-C1'-N9	6.87	113.70	108.20
21	AA	121	U	N1-C2-O2	-6.87	117.99	122.80
21	AA	906	A	P-O5'-C5'	6.87	131.90	120.90
21	AA	1019	A	C4-C5-C6	6.87	120.44	117.00
21	AA	1388	C	O4'-C1'-N1	6.87	113.70	108.20
21	AA	1517	G	N1-C2-N3	-6.87	119.78	123.90
57	BB	99	U	N3-C4-C5	-6.87	110.48	114.60
57	BB	370	G	N9-C4-C5	6.87	108.15	105.40
57	BB	677	A	C4-C5-C6	6.87	120.44	117.00
57	BB	875	G	N3-C2-N2	6.87	124.71	119.90
57	BB	977	G	C4-C5-N7	6.87	113.55	110.80
57	BB	1564	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	1699	G	O4'-C1'-N9	6.87	113.70	108.20
21	AA	630	A	C5-C6-N6	-6.87	118.20	123.70
57	BB	1312	U	N3-C4-O4	6.87	124.21	119.40
57	BB	1803	A	N9-C4-C5	6.87	108.55	105.80
57	BB	1892	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	2673	G	C5-C6-O6	-6.87	124.48	128.60
21	AA	515	G	N1-C6-O6	6.87	124.02	119.90
21	AA	551	U	P-O3'-C3'	-6.87	111.46	119.70
21	AA	575	G	C5-C6-N1	-6.87	108.07	111.50
21	AA	854	U	C5-C6-N1	6.87	126.14	122.70
21	AA	1338	G	N1-C6-O6	6.87	124.02	119.90
27	B5	78	PHE	CB-CG-CD2	6.87	125.61	120.80
57	BB	794	A	C1'-O4'-C4'	6.87	115.39	109.90
57	BB	1399	C	N3-C4-N4	6.87	122.81	118.00
57	BB	1715	G	C4-C5-N7	-6.87	108.05	110.80
57	BB	1849	G	N3-C4-N9	-6.87	121.88	126.00
57	BB	2655	G	C5-C6-O6	-6.87	124.48	128.60
21	AA	335	C	N3-C4-N4	6.87	122.81	118.00
21	AA	453	G	C6-C5-N7	-6.87	126.28	130.40
22	AY	41	U	C6-N1-C2	6.87	125.12	121.00
26	AV	25	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	1257	C	C5-C4-N4	-6.87	115.39	120.20
57	BB	1529	G	O4'-C1'-N9	6.87	113.69	108.20
57	BB	2868	A	N9-C4-C5	-6.87	103.05	105.80
21	AA	373	A	N9-C4-C5	6.87	108.55	105.80
21	AA	466	A	C2-N3-C4	-6.87	107.17	110.60
21	AA	615	G	C6-C5-N7	-6.87	126.28	130.40
21	AA	766	A	C8-N9-C4	6.87	108.55	105.80
21	AA	1199	U	O4'-C1'-N1	6.87	113.69	108.20
57	BB	313	G	C6-N1-C2	6.87	129.22	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	382	A	C5-C6-N1	-6.87	114.27	117.70
57	BB	424	G	N9-C1'-C2'	-6.87	104.45	112.00
57	BB	1003	G	C4-C5-N7	6.87	113.55	110.80
57	BB	1169	A	N7-C8-N9	6.87	117.23	113.80
57	BB	2489	U	N3-C4-O4	6.87	124.21	119.40
2	AK	55	ARG	NE-CZ-NH1	6.86	123.73	120.30
21	AA	774	G	C5-C6-N1	-6.86	108.07	111.50
57	BB	1889	A	C2-N3-C4	6.86	114.03	110.60
57	BB	2052	A	C8-N9-C4	-6.86	103.06	105.80
57	BB	2281	A	C6-C5-N7	-6.86	127.50	132.30
57	BB	2560	A	N9-C4-C5	6.86	108.55	105.80
57	BB	2763	G	C2-N3-C4	6.86	115.33	111.90
21	AA	961	U	O5'-P-OP1	-6.86	99.52	105.70
57	BB	11	C	C2-N3-C4	6.86	123.33	119.90
57	BB	86	G	C4-C5-C6	6.86	122.92	118.80
57	BB	925	A	C2-N3-C4	-6.86	107.17	110.60
57	BB	2848	G	C3'-C2'-C1'	-6.86	96.01	101.50
21	AA	413	G	C2-N3-C4	-6.86	108.47	111.90
21	AA	853	C	N3-C4-C5	-6.86	119.16	121.90
21	AA	1039	G	C4-C5-N7	6.86	113.54	110.80
21	AA	1291	U	C4-C5-C6	6.86	123.82	119.70
21	AA	1460	C	C4'-C3'-C2'	-6.86	95.74	102.60
57	BB	197	A	C3'-C2'-C1'	6.86	106.99	101.50
57	BB	439	A	P-O3'-C3'	-6.86	111.47	119.70
57	BB	601	C	N3-C2-O2	-6.86	117.10	121.90
57	BB	1984	G	C2-N3-C4	-6.86	108.47	111.90
57	BB	2199	A	C5-N7-C8	6.86	107.33	103.90
57	BB	2315	G	C5-C6-N1	-6.86	108.07	111.50
57	BB	2339	C	N3-C4-C5	-6.86	119.16	121.90
57	BB	2592	G	O4'-C1'-N9	6.86	113.69	108.20
8	AQ	64	ARG	NE-CZ-NH1	6.86	123.73	120.30
57	BB	222	A	C2-N3-C4	6.86	114.03	110.60
57	BB	879	G	N1-C2-N3	-6.86	119.78	123.90
57	BB	1420	A	C5-N7-C8	6.86	107.33	103.90
21	AA	46	G	N7-C8-N9	6.86	116.53	113.10
21	AA	164	G	C5-N7-C8	6.86	107.73	104.30
21	AA	640	A	C5-C6-N6	-6.86	118.21	123.70
21	AA	664	G	C6-N1-C2	6.86	129.21	125.10
21	AA	729	A	C4'-C3'-C2'	-6.86	95.74	102.60
21	AA	775	G	N1-C6-O6	6.86	124.02	119.90
21	AA	884	U	C6-N1-C2	6.86	125.11	121.00
21	AA	1292	G	C5-C6-N1	-6.86	108.07	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	216	A	N3-C4-N9	6.86	132.88	127.40
57	BB	948	C	C2-N3-C4	6.86	123.33	119.90
57	BB	1275	A	P-O3'-C3'	6.86	127.93	119.70
57	BB	1463	C	C5-C4-N4	-6.86	115.40	120.20
57	BB	2260	C	N3-C4-N4	6.86	122.80	118.00
57	BB	2663	G	C4-C5-C6	6.86	122.92	118.80
21	AA	895	G	N9-C4-C5	6.86	108.14	105.40
21	AA	990	C	N3-C2-O2	-6.86	117.10	121.90
21	AA	1111	A	OP1-P-OP2	-6.86	109.32	119.60
21	AA	1285	A	C8-N9-C4	-6.86	103.06	105.80
22	AY	58	A	C3'-C2'-C1'	6.86	106.98	101.50
57	BB	75	G	O4'-C1'-N9	6.86	113.69	108.20
57	BB	179	C	O4'-C4'-C3'	-6.86	97.14	104.00
57	BB	334	C	N3-C4-C5	-6.86	119.16	121.90
57	BB	440	C	N3-C4-C5	-6.86	119.16	121.90
57	BB	1392	A	N1-C6-N6	6.86	122.71	118.60
57	BB	2382	G	C5-C6-O6	-6.86	124.49	128.60
57	BB	2617	U	C4-C5-C6	6.86	123.81	119.70
21	AA	619	U	N3-C4-O4	6.85	124.20	119.40
57	BB	80	G	O4'-C1'-N9	6.85	113.68	108.20
57	BB	316	C	O4'-C1'-N1	6.85	113.68	108.20
57	BB	703	U	C6-N1-C2	6.85	125.11	121.00
19	AH	42	GLU	CB-CA-C	-6.85	96.70	110.40
21	AA	793	U	N1-C2-O2	6.85	127.60	122.80
21	AA	843	U	N3-C2-O2	-6.85	117.40	122.20
57	BB	39	G	O4'-C1'-N9	6.85	113.68	108.20
57	BB	833	A	N1-C2-N3	6.85	132.73	129.30
57	BB	1285	A	C4-C5-N7	-6.85	107.27	110.70
57	BB	1908	C	O4'-C1'-N1	6.85	113.68	108.20
58	BA	26	C	P-O3'-C3'	6.85	127.92	119.70
21	AA	81	A	N3-C4-C5	-6.85	122.00	126.80
30	BK	6	MET	CG-SD-CE	-6.85	89.24	100.20
21	AA	191	G	C5-C6-O6	-6.85	124.49	128.60
21	AA	1426	G	C4-C5-C6	6.85	122.91	118.80
21	AA	1530	G	N1-C2-N3	-6.85	119.79	123.90
23	AW	57	G	C5-C6-O6	6.85	132.71	128.60
57	BB	561	G	C8-N9-C4	-6.85	103.66	106.40
57	BB	1001	A	C6-C5-N7	-6.85	127.50	132.30
57	BB	1142	A	C2-N3-C4	-6.85	107.17	110.60
57	BB	1822	C	C4-C5-C6	6.85	120.82	117.40
57	BB	2794	C	C5-C4-N4	-6.85	115.41	120.20
57	BB	2834	G	O4'-C1'-N9	6.85	113.68	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2881	U	N1-C2-O2	-6.85	118.01	122.80
58	BA	50	A	O4'-C1'-N9	6.85	113.68	108.20
21	AA	161	A	O4'-C1'-N9	6.85	113.68	108.20
21	AA	484	G	N7-C8-N9	6.85	116.52	113.10
21	AA	818	G	N9-C4-C5	6.85	108.14	105.40
21	AA	1024	G	N1-C2-N3	-6.85	119.79	123.90
21	AA	1032	G	C4-N9-C1'	6.85	135.40	126.50
21	AA	1187	G	C8-N9-C4	-6.85	103.66	106.40
57	BB	980	A	C8-N9-C4	-6.85	103.06	105.80
57	BB	1144	A	C4-C5-C6	6.85	120.42	117.00
57	BB	1410	G	C4-C5-C6	-6.85	114.69	118.80
57	BB	2415	G	N9-C4-C5	-6.85	102.66	105.40
57	BB	2436	G	C4-C5-N7	6.85	113.54	110.80
57	BB	2463	C	P-O3'-C3'	-6.85	111.48	119.70
58	BA	58	A	C5-C6-N6	-6.85	118.22	123.70
21	AA	762	U	C5-C6-N1	6.85	126.12	122.70
21	AA	1076	U	N3-C4-O4	6.85	124.19	119.40
57	BB	1316	U	N3-C2-O2	-6.85	117.41	122.20
57	BB	1988	G	C2-N3-C4	6.85	115.32	111.90
57	BB	2334	U	P-O3'-C3'	6.85	127.92	119.70
21	AA	1299	A	C1'-O4'-C4'	6.84	115.38	109.90
21	AA	1423	G	N1-C2-N3	-6.84	119.79	123.90
57	BB	848	C	C5-C4-N4	-6.84	115.41	120.20
57	BB	1496	A	C5-C6-N6	-6.84	118.22	123.70
2	AK	24	ALA	N-CA-CB	6.84	119.68	110.10
21	AA	1178	G	C5'-C4'-C3'	-6.84	105.05	116.00
57	BB	613	A	C8-N9-C1'	-6.84	115.38	127.70
57	BB	1652	A	C6-C5-N7	-6.84	127.51	132.30
57	BB	2458	G	P-O5'-C5'	-6.84	109.95	120.90
57	BB	303	G	N3-C2-N2	6.84	124.69	119.90
57	BB	892	A	C5-C6-N1	-6.84	114.28	117.70
57	BB	1212	G	C6-C5-N7	-6.84	126.30	130.40
57	BB	2126	A	C8-N9-C4	-6.84	103.06	105.80
57	BB	2280	G	C4-C5-C6	6.84	122.91	118.80
57	BB	2720	U	N1-C2-O2	-6.84	118.01	122.80
57	BB	2765	A	N7-C8-N9	6.84	117.22	113.80
57	BB	2898	U	C5-C6-N1	6.84	126.12	122.70
21	AA	187	G	C6-N1-C2	6.84	129.20	125.10
21	AA	1068	G	N3-C2-N2	6.84	124.69	119.90
21	AA	1454	G	N1-C6-O6	6.84	124.00	119.90
22	AY	4	G	N1-C2-N3	-6.84	119.80	123.90
57	BB	158	U	C5-C6-N1	-6.84	119.28	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1282	U	O4'-C1'-N1	6.84	113.67	108.20
57	BB	1607	C	N3-C4-C5	-6.84	119.16	121.90
57	BB	2037	A	C4'-C3'-C2'	-6.84	95.76	102.60
57	BB	2100	G	O4'-C1'-N9	6.84	113.67	108.20
23	AW	50	U	C5-C4-O4	-6.84	121.80	125.90
57	BB	218	A	C2-N3-C4	-6.84	107.18	110.60
57	BB	1015	U	C5-C6-N1	-6.84	119.28	122.70
21	AA	1196	A	C5-C6-N6	-6.84	118.23	123.70
21	AA	1483	A	C6-C5-N7	-6.84	127.51	132.30
24	AX	12	A	C5-C6-N6	-6.84	118.23	123.70
57	BB	1277	G	N9-C4-C5	6.84	108.14	105.40
57	BB	1300	G	C6-C5-N7	6.84	134.50	130.40
57	BB	1361	G	C5-C6-N1	-6.84	108.08	111.50
57	BB	1492	G	C5-N7-C8	-6.84	100.88	104.30
57	BB	2349	G	C5-C6-O6	6.84	132.70	128.60
57	BB	2351	G	N1-C2-N3	-6.84	119.80	123.90
23	AW	9	A	C5-N7-C8	-6.83	100.48	103.90
57	BB	562	U	P-O5'-C5'	-6.83	109.96	120.90
57	BB	949	G	C8-N9-C4	-6.83	103.67	106.40
57	BB	1337	G	C4-C5-N7	6.83	113.53	110.80
57	BB	2396	G	C5'-C4'-O4'	6.83	117.30	109.10
21	AA	896	C	N3-C4-C5	-6.83	119.17	121.90
21	AA	1465	A	C6-C5-N7	-6.83	127.52	132.30
26	AV	40	C	N3-C4-N4	6.83	122.78	118.00
57	BB	728	G	C5-C6-O6	-6.83	124.50	128.60
57	BB	1171	G	C6-C5-N7	-6.83	126.30	130.40
57	BB	1540	G	N7-C8-N9	6.83	116.52	113.10
57	BB	1584	U	O4'-C1'-N1	6.83	113.67	108.20
57	BB	2812	G	C6-N1-C2	-6.83	121.00	125.10
57	BB	2819	G	N1-C2-N3	-6.83	119.80	123.90
21	AA	657	U	O4'-C1'-N1	6.83	113.67	108.20
21	AA	670	G	C5-C6-N1	6.83	114.92	111.50
21	AA	815	A	C5-C6-N6	-6.83	118.23	123.70
23	AW	57	G	N3-C2-N2	6.83	124.68	119.90
57	BB	2535	G	N3-C2-N2	6.83	124.68	119.90
57	BB	649	G	C2-N3-C4	6.83	115.31	111.90
57	BB	661	A	O4'-C1'-N9	6.83	113.66	108.20
57	BB	688	U	N3-C2-O2	6.83	126.98	122.20
57	BB	2523	G	N3-C4-N9	6.83	130.10	126.00
21	AA	19	A	O4'-C1'-N9	6.83	113.66	108.20
21	AA	923	A	P-O3'-C3'	-6.83	111.50	119.70
21	AA	1137	C	C4-C5-C6	6.83	120.81	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	B5	16	ASP	CB-CG-OD2	-6.83	112.16	118.30
57	BB	279	A	C5-C6-N1	-6.83	114.29	117.70
57	BB	518	G	N3-C4-N9	-6.83	121.90	126.00
57	BB	1160	G	C4-C5-C6	6.83	122.90	118.80
57	BB	1586	A	C4-C5-C6	6.83	120.42	117.00
57	BB	2792	A	N1-C2-N3	6.83	132.72	129.30
44	BY	11	VAL	O-C-N	-6.83	111.78	122.70
57	BB	30	G	O4'-C1'-N9	6.83	113.66	108.20
57	BB	237	C	C5-C4-N4	-6.83	115.42	120.20
57	BB	646	U	C5-C4-O4	-6.83	121.80	125.90
21	AA	256	U	C5-C4-O4	-6.83	121.80	125.90
21	AA	935	A	P-O5'-C5'	6.83	131.82	120.90
21	AA	1040	U	C1'-O4'-C4'	6.83	115.36	109.90
21	AA	1207	G	C4-C5-C6	6.83	122.89	118.80
57	BB	49	A	O4'-C1'-N9	6.83	113.66	108.20
57	BB	286	U	C5-C6-N1	6.83	126.11	122.70
57	BB	477	A	N3-C4-C5	-6.83	122.02	126.80
57	BB	1594	U	N1-C2-O2	-6.83	118.02	122.80
57	BB	2341	G	N3-C4-N9	-6.83	121.91	126.00
57	BB	2423	U	C5-C4-O4	6.83	130.00	125.90
57	BB	2557	G	C5-N7-C8	6.83	107.71	104.30
57	BB	2714	G	C5-C6-N1	-6.83	108.09	111.50
21	AA	129	A	P-O3'-C3'	6.82	127.89	119.70
21	AA	618	C	O4'-C1'-N1	6.82	113.66	108.20
21	AA	949	A	C6-N1-C2	6.82	122.69	118.60
21	AA	1056	U	C2-N3-C4	6.82	131.09	127.00
21	AA	1251	A	C4-C5-N7	-6.82	107.29	110.70
21	AA	1347	G	O4'-C1'-N9	6.82	113.66	108.20
57	BB	664	G	C5-C6-O6	-6.82	124.51	128.60
57	BB	672	C	O4'-C1'-N1	6.82	113.66	108.20
57	BB	2663	G	N7-C8-N9	-6.82	109.69	113.10
21	AA	1491	G	C6-C5-N7	-6.82	126.31	130.40
21	AA	1496	C	C4-C5-C6	-6.82	113.99	117.40
57	BB	286	U	N1-C2-N3	6.82	118.99	114.90
57	BB	623	C	N1-C2-O2	-6.82	114.81	118.90
21	AA	991	U	C2-N3-C4	-6.82	122.91	127.00
21	AA	1136	C	C5-C4-N4	-6.82	115.43	120.20
21	AA	1520	C	C4-C5-C6	6.82	120.81	117.40
22	AY	73	A	C5-C6-N6	-6.82	118.24	123.70
28	BI	64	ARG	NE-CZ-NH1	6.82	123.71	120.30
57	BB	843	G	C8-N9-C4	-6.82	103.67	106.40
57	BB	1220	G	N9-C4-C5	6.82	108.13	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1712	U	O4'-C1'-N1	6.82	113.66	108.20
57	BB	1870	C	C3'-C2'-C1'	6.82	106.96	101.50
57	BB	2740	A	C4'-C3'-C2'	-6.82	95.78	102.60
57	BB	2846	G	C6-C5-N7	-6.82	126.31	130.40
58	BA	102	G	O4'-C1'-N9	6.82	113.66	108.20
21	AA	182	A	O4'-C1'-N9	6.82	113.66	108.20
21	AA	972	C	C1'-O4'-C4'	-6.82	104.44	109.90
26	AV	39	C	C4-C5-C6	6.82	120.81	117.40
57	BB	626	A	N1-C2-N3	-6.82	125.89	129.30
57	BB	898	C	C2-N3-C4	-6.82	116.49	119.90
57	BB	1253	A	C5-C6-N6	-6.82	118.25	123.70
57	BB	1403	A	C5-N7-C8	6.82	107.31	103.90
57	BB	2473	U	O4'-C1'-N1	6.82	113.66	108.20
21	AA	78	A	C4-C5-C6	6.82	120.41	117.00
21	AA	239	U	N1-C1'-C2'	-6.82	104.50	112.00
21	AA	615	G	C5-C6-O6	-6.82	124.51	128.60
21	AA	873	A	C2-N3-C4	-6.82	107.19	110.60
21	AA	1137	C	N3-C4-N4	6.82	122.77	118.00
21	AA	1260	G	O4'-C1'-N9	6.82	113.65	108.20
21	AA	1382	C	N3-C4-C5	-6.82	119.17	121.90
23	AW	29	G	N1-C6-O6	6.82	123.99	119.90
57	BB	1682	G	C8-N9-C4	6.82	109.13	106.40
21	AA	234	C	C5-C4-N4	-6.82	115.43	120.20
21	AA	412	A	C1'-O4'-C4'	-6.82	104.45	109.90
21	AA	465	A	C8-N9-C4	-6.82	103.07	105.80
21	AA	865	A	N9-C4-C5	6.82	108.53	105.80
56	BH	59	ALA	N-CA-CB	6.82	119.64	110.10
57	BB	114	U	N1-C2-O2	6.82	127.57	122.80
57	BB	200	U	O4'-C1'-N1	6.82	113.65	108.20
57	BB	347	A	P-O5'-C5'	-6.82	110.00	120.90
58	BA	112	G	C8-N9-C4	-6.82	103.67	106.40
21	AA	295	C	O4'-C1'-N1	6.81	113.65	108.20
21	AA	701	U	O4'-C4'-C3'	6.81	111.55	106.10
21	AA	1257	A	C5-C6-N6	-6.81	118.25	123.70
22	AY	6	U	C2'-C3'-O3'	6.81	124.60	113.70
57	BB	753	A	C6-C5-N7	-6.81	127.53	132.30
57	BB	920	A	N3-C4-C5	-6.81	122.03	126.80
57	BB	937	C	O4'-C1'-N1	6.81	113.65	108.20
57	BB	1055	G	C5-C6-O6	-6.81	124.51	128.60
57	BB	2705	A	C4-C5-C6	6.81	120.41	117.00
21	AA	799	G	C5-C6-N1	-6.81	108.09	111.50
21	AA	1124	G	N1-C2-N3	6.81	127.99	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	914	G	N1-C2-N3	-6.81	119.81	123.90
57	BB	1095	A	O4'-C1'-N9	6.81	113.65	108.20
57	BB	2066	C	C4-C5-C6	6.81	120.81	117.40
57	BB	2281	A	N1-C6-N6	6.81	122.69	118.60
57	BB	2404	U	N1-C2-O2	-6.81	118.03	122.80
57	BB	2725	A	C5-N7-C8	6.81	107.31	103.90
58	BA	94	A	P-O3'-C3'	-6.81	111.52	119.70
19	AH	14	ARG	NE-CZ-NH1	6.81	123.70	120.30
57	BB	792	A	C5'-C4'-O4'	6.81	117.27	109.10
57	BB	1181	U	C4-C5-C6	6.81	123.79	119.70
57	BB	1897	G	C8-N9-C4	-6.81	103.68	106.40
21	AA	824	G	C8-N9-C4	-6.81	103.68	106.40
21	AA	1133	G	N1-C2-N3	-6.81	119.81	123.90
21	AA	1471	U	C5-C4-O4	6.81	129.99	125.90
57	BB	530	G	N1-C2-N2	6.81	122.33	116.20
57	BB	580	U	C4-C5-C6	6.81	123.79	119.70
57	BB	938	G	N1-C2-N3	-6.81	119.81	123.90
57	BB	962	G	C3'-C2'-C1'	6.81	106.95	101.50
57	BB	1309	G	C6-C5-N7	-6.81	126.31	130.40
57	BB	1341	G	C6-C5-N7	-6.81	126.31	130.40
57	BB	2731	G	C4-C5-C6	6.81	122.89	118.80
21	AA	486	U	C1'-O4'-C4'	6.81	115.35	109.90
21	AA	1410	A	C3'-C2'-C1'	6.81	106.95	101.50
21	AA	1418	A	C2-N3-C4	-6.81	107.20	110.60
57	BB	804	A	C5-N7-C8	6.81	107.30	103.90
57	BB	1525	A	C4-C5-C6	6.81	120.40	117.00
57	BB	1668	A	N3-C4-N9	6.81	132.85	127.40
21	AA	148	G	O4'-C1'-N9	6.81	113.64	108.20
21	AA	287	U	C3'-C2'-C1'	-6.81	96.06	101.50
21	AA	668	G	C6-N1-C2	6.81	129.18	125.10
21	AA	1112	C	N3-C4-N4	6.81	122.76	118.00
57	BB	1968	G	O4'-C1'-N9	6.81	113.64	108.20
57	BB	2409	G	N1-C2-N2	-6.81	110.08	116.20
57	BB	2709	G	N7-C8-N9	-6.81	109.70	113.10
21	AA	220	G	C6-N1-C2	6.80	129.18	125.10
21	AA	381	C	C6-N1-C2	6.80	123.02	120.30
21	AA	1013	G	N1-C6-O6	6.80	123.98	119.90
23	AW	18	G	O4'-C1'-N9	6.80	113.64	108.20
57	BB	272	A	C4'-C3'-C2'	-6.80	95.80	102.60
57	BB	573	U	O4'-C1'-N1	6.80	113.64	108.20
57	BB	1909	C	C5-C4-N4	-6.80	115.44	120.20
57	BB	2273	A	C5-C6-N1	-6.80	114.30	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2328	A	N1-C2-N3	6.80	132.70	129.30
57	BB	2740	A	C5-C6-N6	-6.80	118.26	123.70
58	BA	51	G	C6-C5-N7	-6.80	126.32	130.40
21	AA	430	A	C5-C6-N1	-6.80	114.30	117.70
57	BB	1754	A	C4-C5-C6	6.80	120.40	117.00
58	BA	6	G	O4'-C1'-N9	6.80	113.64	108.20
57	BB	555	G	C8-N9-C4	-6.80	103.68	106.40
57	BB	1317	G	N3-C4-N9	6.80	130.08	126.00
57	BB	2236	U	C5-C6-N1	6.80	126.10	122.70
57	BB	2814	A	N9-C4-C5	6.80	108.52	105.80
21	AA	28	A	C2-N3-C4	6.80	114.00	110.60
21	AA	978	A	C5-C6-N6	-6.80	118.26	123.70
21	AA	1182	G	C4-C5-C6	6.80	122.88	118.80
21	AA	1184	G	C5-C6-N1	-6.80	108.10	111.50
21	AA	1197	A	C5-C6-N1	-6.80	114.30	117.70
57	BB	34	U	N1-C2-N3	-6.80	110.82	114.90
57	BB	621	A	C6-C5-N7	-6.80	127.54	132.30
57	BB	1167	C	C5-C6-N1	-6.80	117.60	121.00
57	BB	1176	U	C3'-C2'-C1'	6.80	106.94	101.50
57	BB	1719	G	C5-C6-O6	-6.80	124.52	128.60
57	BB	1787	A	N1-C2-N3	6.80	132.70	129.30
57	BB	1823	G	C8-N9-C4	6.80	109.12	106.40
57	BB	2389	G	C2-N3-C4	6.80	115.30	111.90
57	BB	2886	A	N7-C8-N9	-6.80	110.40	113.80
21	AA	538	G	C5-N7-C8	-6.80	100.90	104.30
21	AA	682	G	N7-C8-N9	-6.80	109.70	113.10
21	AA	809	G	C2-N3-C4	6.80	115.30	111.90
57	BB	483	A	C2-N3-C4	6.80	114.00	110.60
57	BB	728	G	C8-N9-C4	6.80	109.12	106.40
57	BB	1587	G	C5-C6-O6	-6.80	124.52	128.60
57	BB	1787	A	C5-C6-N1	-6.80	114.30	117.70
21	AA	741	G	C6-N1-C2	6.80	129.18	125.10
21	AA	1022	A	N9-C4-C5	-6.80	103.08	105.80
23	AW	68	C	N1-C2-O2	6.80	122.98	118.90
56	BH	123	ARG	NE-CZ-NH1	6.80	123.70	120.30
57	BB	173	A	O4'-C1'-N9	6.80	113.64	108.20
57	BB	1006	C	C2-N3-C4	6.80	123.30	119.90
57	BB	1133	A	C4'-C3'-C2'	6.80	109.40	102.60
57	BB	1150	C	N3-C4-C5	-6.80	119.18	121.90
57	BB	1305	C	C2-N3-C4	6.80	123.30	119.90
57	BB	1438	U	O4'-C1'-N1	6.80	113.64	108.20
57	BB	1613	G	C5'-C4'-C3'	6.80	126.87	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1853	A	C1'-O4'-C4'	-6.80	104.46	109.90
57	BB	2247	A	N7-C8-N9	6.80	117.20	113.80
57	BB	2566	A	C4'-C3'-C2'	6.80	109.40	102.60
57	BB	2625	G	C5'-C4'-C3'	-6.80	105.12	116.00
57	BB	2789	C	N3-C4-N4	6.80	122.76	118.00
21	AA	158	G	C6-N1-C2	6.79	129.18	125.10
57	BB	350	G	C5'-C4'-O4'	6.79	117.25	109.10
57	BB	2770	G	P-O5'-C5'	6.79	131.77	120.90
58	BA	108	A	C8-N9-C4	-6.79	103.08	105.80
21	AA	224	U	C5-C4-O4	-6.79	121.82	125.90
21	AA	226	G	C2-N3-C4	6.79	115.30	111.90
21	AA	791	G	C5-N7-C8	6.79	107.70	104.30
21	AA	1281	C	N1-C2-N3	-6.79	114.44	119.20
21	AA	1286	U	C5-C4-O4	6.79	129.98	125.90
21	AA	1316	G	C5-N7-C8	6.79	107.70	104.30
57	BB	1553	A	C5-N7-C8	6.79	107.30	103.90
57	BB	2561	U	N3-C4-C5	-6.79	110.52	114.60
21	AA	99	C	C4-C5-C6	6.79	120.80	117.40
21	AA	695	A	C5-C6-N6	-6.79	118.27	123.70
21	AA	791	G	N3-C4-N9	-6.79	121.92	126.00
21	AA	1101	A	C4-C5-N7	6.79	114.10	110.70
57	BB	577	G	C2-N3-C4	-6.79	108.50	111.90
57	BB	2326	C	C6-N1-C2	-6.79	117.58	120.30
21	AA	171	A	C4-C5-C6	6.79	120.39	117.00
22	AY	34	G	C4'-C3'-C2'	-6.79	95.81	102.60
57	BB	2580	U	O4'-C1'-N1	6.79	113.63	108.20
2	AK	32	THR	N-CA-CB	6.79	123.20	110.30
21	AA	809	G	N7-C8-N9	-6.79	109.71	113.10
21	AA	1343	G	O4'-C1'-N9	6.79	113.63	108.20
57	BB	661	A	C4-C5-N7	-6.79	107.31	110.70
57	BB	1736	U	O4'-C1'-N1	6.79	113.63	108.20
57	BB	1744	A	N7-C8-N9	-6.79	110.41	113.80
57	BB	2285	C	C6-N1-C2	6.79	123.02	120.30
57	BB	2799	A	C4-C5-N7	-6.79	107.31	110.70
21	AA	293	G	N1-C6-O6	6.79	123.97	119.90
21	AA	896	C	N1-C2-O2	6.79	122.97	118.90
21	AA	1494	G	C6-N1-C2	-6.79	121.03	125.10
26	AV	71	C	N3-C4-N4	6.79	122.75	118.00
57	BB	629	G	C1'-O4'-C4'	-6.79	104.47	109.90
57	BB	1526	C	N3-C4-C5	-6.79	119.19	121.90
57	BB	1876	A	N1-C6-N6	6.79	122.67	118.60
57	BB	2042	A	C8-N9-C4	-6.79	103.08	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2633	G	C8-N9-C4	-6.79	103.69	106.40
21	AA	8	A	O4'-C1'-C2'	-6.79	99.02	105.80
21	AA	21	G	N3-C2-N2	6.79	124.65	119.90
21	AA	494	G	C5-C6-O6	-6.79	124.53	128.60
21	AA	561	U	O4'-C1'-N1	6.79	113.63	108.20
21	AA	872	A	C2-N3-C4	-6.79	107.21	110.60
21	AA	1144	G	C6-N1-C2	6.79	129.17	125.10
57	BB	620	G	N1-C6-O6	6.79	123.97	119.90
57	BB	738	G	C5-N7-C8	6.79	107.69	104.30
57	BB	1167	C	N3-C4-N4	6.79	122.75	118.00
57	BB	1743	G	N3-C2-N2	6.79	124.65	119.90
57	BB	2564	A	C5-N7-C8	6.79	107.29	103.90
57	BB	2693	G	N7-C8-N9	-6.79	109.71	113.10
57	BB	2730	C	C5-C4-N4	-6.79	115.45	120.20
4	AM	56	ARG	NE-CZ-NH2	6.78	123.69	120.30
21	AA	144	G	C3'-C2'-C1'	-6.78	96.07	101.50
21	AA	1086	U	N3-C2-O2	6.78	126.95	122.20
26	AV	7	G	O4'-C1'-N9	6.78	113.63	108.20
57	BB	196	A	N1-C2-N3	-6.78	125.91	129.30
57	BB	295	G	O4'-C1'-N9	6.78	113.63	108.20
57	BB	772	C	C2-N3-C4	6.78	123.29	119.90
57	BB	945	A	C6-N1-C2	-6.78	114.53	118.60
57	BB	1060	U	C5-C6-N1	6.78	126.09	122.70
57	BB	1166	G	C4-C5-N7	6.78	113.51	110.80
57	BB	1301	A	N9-C4-C5	-6.78	103.09	105.80
57	BB	2041	U	N1-C2-O2	-6.78	118.05	122.80
57	BB	2660	A	N1-C2-N3	6.78	132.69	129.30
57	BB	2751	G	C5-C6-N1	-6.78	108.11	111.50
21	AA	1174	G	C5-C6-O6	-6.78	124.53	128.60
21	AA	1421	G	C5-C6-N1	6.78	114.89	111.50
57	BB	683	U	N3-C2-O2	6.78	126.95	122.20
57	BB	1311	G	N9-C4-C5	-6.78	102.69	105.40
57	BB	1808	A	C5-C6-N6	-6.78	118.28	123.70
21	AA	1144	G	N3-C4-N9	6.78	130.07	126.00
22	AY	15	G	N1-C2-N3	6.78	127.97	123.90
22	AY	61	C	C4-C5-C6	-6.78	114.01	117.40
34	BO	99	TYR	CB-CG-CD2	-6.78	116.93	121.00
57	BB	518	G	C8-N9-C4	-6.78	103.69	106.40
57	BB	530	G	C4-C5-N7	6.78	113.51	110.80
57	BB	584	C	C5-C4-N4	-6.78	115.45	120.20
57	BB	862	G	N7-C8-N9	6.78	116.49	113.10
57	BB	1238	G	N7-C8-N9	-6.78	109.71	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1583	A	C8-N9-C4	-6.78	103.09	105.80
57	BB	1874	C	O4'-C1'-N1	6.78	113.62	108.20
57	BB	2551	C	C4-C5-C6	6.78	120.79	117.40
57	BB	2604	U	N3-C4-O4	6.78	124.15	119.40
21	AA	1241	G	N1-C2-N3	-6.78	119.83	123.90
21	AA	1382	C	C6-N1-C2	-6.78	117.59	120.30
56	BH	97	ARG	NE-CZ-NH1	6.78	123.69	120.30
57	BB	1407	G	C3'-C2'-C1'	-6.78	96.08	101.50
57	BB	2685	G	O4'-C1'-N9	6.78	113.62	108.20
58	BA	35	C	O3'-P-O5'	-6.78	91.12	104.00
21	AA	315	A	C4-C5-C6	6.78	120.39	117.00
21	AA	1304	G	C6-C5-N7	-6.78	126.33	130.40
23	AW	23	A	N1-C2-N3	6.78	132.69	129.30
47	B0	9	ARG	NE-CZ-NH1	-6.78	116.91	120.30
57	BB	297	G	N7-C8-N9	-6.78	109.71	113.10
57	BB	596	U	N3-C2-O2	-6.78	117.46	122.20
57	BB	690	G	N3-C2-N2	6.78	124.64	119.90
57	BB	1444	G	O4'-C1'-N9	6.78	113.62	108.20
57	BB	2405	G	O4'-C1'-N9	6.78	113.62	108.20
57	BB	2431	U	C5-C4-O4	-6.78	121.83	125.90
21	AA	251	G	C5-C6-O6	-6.78	124.53	128.60
21	AA	448	A	N7-C8-N9	-6.78	110.41	113.80
21	AA	497	G	O4'-C1'-N9	6.78	113.62	108.20
21	AA	663	A	C4-C5-C6	6.78	120.39	117.00
22	AY	17	U	N1-C2-O2	6.78	127.54	122.80
57	BB	1332	G	N9-C4-C5	-6.78	102.69	105.40
57	BB	1641	A	C4'-C3'-C2'	-6.78	95.83	102.60
57	BB	1821	A	P-O3'-C3'	-6.78	111.57	119.70
57	BB	2606	C	O4'-C4'-C3'	-6.78	97.22	104.00
21	AA	1080	A	O4'-C1'-N9	6.77	113.62	108.20
23	AW	6	G	N7-C8-N9	6.77	116.49	113.10
25	AZ	74	ARG	NE-CZ-NH1	6.77	123.69	120.30
57	BB	47	C	N3-C4-C5	-6.77	119.19	121.90
57	BB	453	A	C6-N1-C2	6.77	122.66	118.60
57	BB	774	G	C2-N3-C4	-6.77	108.51	111.90
57	BB	1828	G	N1-C2-N3	-6.77	119.84	123.90
57	BB	2683	C	C2-N3-C4	6.77	123.29	119.90
57	BB	2782	G	N1-C2-N3	-6.77	119.83	123.90
21	AA	190	A	C2-N3-C4	-6.77	107.21	110.60
21	AA	276	G	N1-C6-O6	6.77	123.96	119.90
57	BB	2329	U	O4'-C1'-N1	6.77	113.62	108.20
58	BA	48	U	O4'-C1'-N1	6.77	113.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	229	U	C6-N1-C2	-6.77	116.94	121.00
21	AA	1032	G	N9-C4-C5	6.77	108.11	105.40
21	AA	1507	A	P-O5'-C5'	-6.77	110.07	120.90
57	BB	1233	C	N3-C4-C5	-6.77	119.19	121.90
57	BB	1296	G	C6-N1-C2	6.77	129.16	125.10
57	BB	2280	G	C6-C5-N7	-6.77	126.34	130.40
57	BB	2814	A	C4-C5-N7	-6.77	107.31	110.70
6	AO	66	LEU	CB-CA-C	-6.77	97.34	110.20
21	AA	74	A	C5-C6-N6	-6.77	118.28	123.70
57	BB	61	C	P-O3'-C3'	6.77	127.82	119.70
57	BB	215	G	C5-C6-N1	-6.77	108.12	111.50
57	BB	656	G	O4'-C1'-N9	6.77	113.62	108.20
57	BB	1524	G	N1-C2-N3	-6.77	119.84	123.90
57	BB	1694	C	C4-C5-C6	6.77	120.78	117.40
57	BB	2700	A	C5-N7-C8	6.77	107.28	103.90
11	AT	29	THR	CA-CB-CG2	-6.77	102.92	112.40
57	BB	512	G	O4'-C1'-N9	6.77	113.61	108.20
57	BB	1300	G	C5-C6-O6	-6.77	124.54	128.60
57	BB	1796	U	P-O3'-C3'	-6.77	111.58	119.70
57	BB	1831	G	N7-C8-N9	6.77	116.48	113.10
57	BB	2073	C	N3-C4-N4	6.77	122.74	118.00
57	BB	2249	U	C5-C4-O4	-6.77	121.84	125.90
57	BB	2738	A	O4'-C1'-N9	6.77	113.61	108.20
21	AA	128	G	N7-C8-N9	-6.77	109.72	113.10
21	AA	568	G	N9-C4-C5	-6.77	102.69	105.40
21	AA	608	A	C2-N3-C4	-6.77	107.22	110.60
21	AA	1201	A	C5-N7-C8	6.77	107.28	103.90
57	BB	1515	A	C5-N7-C8	6.77	107.28	103.90
57	BB	2616	C	N3-C4-N4	6.77	122.74	118.00
57	BB	2732	G	C6-C5-N7	-6.77	126.34	130.40
58	BA	83	G	N1-C2-N3	-6.77	119.84	123.90
21	AA	15	G	N1-C2-N3	-6.76	119.84	123.90
21	AA	1169	A	C4-C5-C6	6.76	120.38	117.00
21	AA	1304	G	C5-N7-C8	-6.76	100.92	104.30
22	AY	39	U	P-O5'-C5'	6.76	131.72	120.90
57	BB	524	G	C4-C5-N7	-6.76	108.09	110.80
57	BB	886	A	O4'-C1'-N9	6.76	113.61	108.20
57	BB	1812	U	O4'-C1'-N1	6.76	113.61	108.20
57	BB	2202	U	C6-N1-C2	6.76	125.06	121.00
57	BB	2334	U	O4'-C1'-N1	6.76	113.61	108.20
57	BB	2659	G	C4'-C3'-C2'	-6.76	95.83	102.60
21	AA	325	A	C5-N7-C8	6.76	107.28	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	892	A	C6-C5-N7	-6.76	127.57	132.30
26	AV	38	A	N3-C4-C5	-6.76	122.07	126.80
57	BB	231	A	C5-C6-N6	-6.76	118.29	123.70
57	BB	654	A	C4-C5-N7	6.76	114.08	110.70
57	BB	1969	A	N9-C4-C5	-6.76	103.09	105.80
57	BB	2510	C	C2-N3-C4	-6.76	116.52	119.90
58	BA	27	C	N3-C4-C5	-6.76	119.19	121.90
5	AN	58	ARG	NE-CZ-NH1	6.76	123.68	120.30
9	AR	46	THR	CA-CB-CG2	-6.76	102.94	112.40
21	AA	656	G	N7-C8-N9	-6.76	109.72	113.10
21	AA	1289	A	C4-C5-C6	6.76	120.38	117.00
21	AA	1350	A	C2-N3-C4	-6.76	107.22	110.60
53	BE	124	PHE	N-CA-CB	6.76	122.77	110.60
57	BB	628	G	C4-C5-N7	-6.76	108.09	110.80
57	BB	809	G	C5-C6-O6	-6.76	124.54	128.60
57	BB	1840	G	C6-C5-N7	-6.76	126.34	130.40
57	BB	2456	C	N1-C2-N3	6.76	123.93	119.20
57	BB	2500	U	N3-C2-O2	6.76	126.93	122.20
21	AA	481	G	N7-C8-N9	-6.76	109.72	113.10
21	AA	589	U	N3-C4-C5	-6.76	110.55	114.60
21	AA	654	G	N3-C4-C5	6.76	131.98	128.60
57	BB	850	U	C5-C6-N1	6.76	126.08	122.70
57	BB	1676	A	N1-C2-N3	6.76	132.68	129.30
57	BB	1738	G	C5-C6-O6	-6.76	124.54	128.60
57	BB	2046	G	O4'-C1'-N9	6.76	113.61	108.20
21	AA	87	C	C6-N1-C2	-6.76	117.60	120.30
21	AA	463	U	N3-C4-O4	6.76	124.13	119.40
56	BH	7	ASP	CB-CG-OD2	-6.76	112.22	118.30
57	BB	898	C	C6-N1-C2	-6.76	117.60	120.30
57	BB	978	G	C4-C5-N7	-6.76	108.10	110.80
57	BB	2608	G	N9-C4-C5	6.76	108.10	105.40
57	BB	2643	G	N1-C6-O6	6.76	123.95	119.90
21	AA	624	C	N3-C4-C5	-6.76	119.20	121.90
21	AA	1015	G	N1-C2-N3	-6.76	119.85	123.90
21	AA	1279	G	C4-N9-C1'	6.76	135.28	126.50
57	BB	861	A	C5-C6-N1	6.76	121.08	117.70
57	BB	1030	C	C4-C5-C6	6.76	120.78	117.40
57	BB	1080	A	C4-C5-C6	6.76	120.38	117.00
57	BB	1877	A	O4'-C1'-N9	6.76	113.61	108.20
57	BB	2047	C	C6-N1-C2	6.76	123.00	120.30
57	BB	2107	G	C4-C5-N7	-6.76	108.10	110.80
58	BA	21	G	C8-N9-C1'	6.76	135.78	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	31	G	C6-C5-N7	-6.75	126.35	130.40
54	BF	1	ALA	CB-CA-C	6.75	120.23	110.10
57	BB	1224	U	C5-C6-N1	-6.75	119.32	122.70
57	BB	2082	A	C5-N7-C8	6.75	107.28	103.90
21	AA	179	A	C2-N3-C4	6.75	113.98	110.60
21	AA	609	A	P-O5'-C5'	6.75	131.71	120.90
21	AA	718	A	C6-C5-N7	-6.75	127.57	132.30
21	AA	906	A	N7-C8-N9	-6.75	110.42	113.80
21	AA	941	G	N3-C4-C5	-6.75	125.22	128.60
21	AA	1203	C	C5-C4-N4	-6.75	115.47	120.20
21	AA	1457	G	C2-N3-C4	6.75	115.28	111.90
57	BB	737	C	C4'-C3'-C2'	-6.75	95.85	102.60
57	BB	797	G	C8-N9-C4	-6.75	103.70	106.40
57	BB	857	G	C2-N3-C4	-6.75	108.52	111.90
57	BB	1219	U	P-O3'-C3'	-6.75	111.60	119.70
57	BB	1916	A	O4'-C1'-N9	6.75	113.60	108.20
57	BB	2356	U	N1-C2-O2	-6.75	118.07	122.80
57	BB	2643	G	C5-N7-C8	-6.75	100.92	104.30
21	AA	290	C	C2-N3-C4	6.75	123.28	119.90
21	AA	409	U	O4'-C1'-N1	6.75	113.60	108.20
21	AA	915	A	C2-N3-C4	-6.75	107.22	110.60
21	AA	983	A	C4-C5-N7	6.75	114.08	110.70
23	AW	1	G	N1-C2-N3	-6.75	119.85	123.90
24	AX	19	U	C2-N3-C4	-6.75	122.95	127.00
57	BB	329	G	C5-C6-O6	-6.75	124.55	128.60
57	BB	580	U	C5-C6-N1	-6.75	119.33	122.70
57	BB	1392	A	C4-C5-C6	6.75	120.38	117.00
57	BB	1394	U	C6-N1-C2	-6.75	116.95	121.00
57	BB	1552	A	O4'-C1'-N9	6.75	113.60	108.20
21	AA	10	A	C5-C6-N1	-6.75	114.33	117.70
21	AA	338	A	O4'-C1'-N9	6.75	113.60	108.20
26	AV	46	G	C5-C6-N1	-6.75	108.12	111.50
57	BB	1795	C	N1-C2-O2	6.75	122.95	118.90
21	AA	103	U	P-O3'-C3'	-6.75	111.60	119.70
21	AA	374	A	C5-C6-N6	-6.75	118.30	123.70
21	AA	1013	G	O4'-C1'-N9	6.75	113.60	108.20
57	BB	1156	A	C5-C6-N1	-6.75	114.33	117.70
57	BB	1208	C	C4-C5-C6	6.75	120.77	117.40
57	BB	1380	G	C4-C5-C6	6.75	122.85	118.80
57	BB	2469	A	P-O3'-C3'	-6.75	111.60	119.70
57	BB	2801	G	N3-C4-C5	-6.75	125.22	128.60
14	AC	162	ALA	N-CA-CB	6.75	119.55	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	359	G	C5-N7-C8	6.75	107.67	104.30
21	AA	715	A	N1-C6-N6	6.75	122.65	118.60
21	AA	885	G	C3'-C2'-C1'	-6.75	96.10	101.50
22	AY	17	U	P-O5'-C5'	6.75	131.69	120.90
24	AX	17	U	N1-C1'-C2'	-6.75	104.58	112.00
57	BB	439	A	C5-C6-N1	-6.75	114.33	117.70
57	BB	1086	A	C5'-C4'-O4'	6.75	117.20	109.10
57	BB	2033	A	C5-C6-N1	-6.75	114.33	117.70
57	BB	2152	G	C6-C5-N7	-6.75	126.35	130.40
57	BB	2199	A	N9-C4-C5	-6.75	103.10	105.80
57	BB	2324	U	P-O5'-C5'	6.75	131.70	120.90
57	BB	2694	G	O4'-C4'-C3'	-6.75	97.25	104.00
57	BB	1535	A	C4-C5-N7	-6.75	107.33	110.70
57	BB	1750	G	C4'-C3'-C2'	-6.75	95.86	102.60
20	AI	126	PHE	CB-CG-CD1	-6.74	116.08	120.80
21	AA	956	U	N3-C4-O4	6.74	124.12	119.40
21	AA	1525	G	C6-N1-C2	6.74	129.15	125.10
24	AX	18	G	N7-C8-N9	6.74	116.47	113.10
25	AZ	194	PHE	CB-CG-CD2	6.74	125.52	120.80
57	BB	500	G	C5'-C4'-O4'	6.74	117.19	109.10
57	BB	544	C	C6-N1-C1'	-6.74	112.71	120.80
57	BB	767	U	C5-C6-N1	6.74	126.07	122.70
58	BA	52	A	P-O3'-C3'	6.74	127.79	119.70
37	BR	68	ARG	NH1-CZ-NH2	-6.74	111.98	119.40
57	BB	1191	G	C5-C6-N1	-6.74	108.13	111.50
57	BB	1459	G	C5-C6-N1	-6.74	108.13	111.50
58	BA	62	C	C2-N3-C4	6.74	123.27	119.90
21	AA	192	A	C5-C6-N6	-6.74	118.31	123.70
21	AA	292	G	C4-C5-C6	6.74	122.84	118.80
21	AA	321	A	C5-C6-N6	-6.74	118.31	123.70
21	AA	496	A	C5-N7-C8	6.74	107.27	103.90
21	AA	1100	C	C5-C6-N1	-6.74	117.63	121.00
21	AA	1111	A	N1-C2-N3	6.74	132.67	129.30
21	AA	1379	G	N9-C4-C5	6.74	108.10	105.40
21	AA	1427	C	N3-C2-O2	-6.74	117.18	121.90
22	AY	40	C	C5-C4-N4	-6.74	115.48	120.20
22	AY	52	U	C5'-C4'-O4'	6.74	117.19	109.10
31	BL	99	ASN	N-CA-CB	6.74	122.73	110.60
57	BB	94	A	N9-C4-C5	6.74	108.50	105.80
57	BB	138	U	C5'-C4'-C3'	-6.74	105.21	116.00
57	BB	540	C	C6-N1-C2	-6.74	117.60	120.30
57	BB	776	G	C4-N9-C1'	6.74	135.26	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1926	U	N3-C4-C5	-6.74	110.56	114.60
57	BB	1975	G	C8-N9-C4	6.74	109.10	106.40
57	BB	2635	A	C5-N7-C8	6.74	107.27	103.90
57	BB	2761	A	N1-C2-N3	6.74	132.67	129.30
57	BB	2766	A	N1-C2-N3	6.74	132.67	129.30
57	BB	2862	G	C6-N1-C2	6.74	129.14	125.10
21	AA	1401	G	N1-C2-N3	-6.74	119.86	123.90
21	AA	1521	C	C5-C4-N4	-6.74	115.48	120.20
22	AY	39	U	C6-N1-C2	-6.74	116.96	121.00
41	BV	79	ARG	NE-CZ-NH2	6.74	123.67	120.30
57	BB	1144	A	C5-C6-N1	-6.74	114.33	117.70
57	BB	1627	G	C4-N9-C1'	6.74	135.26	126.50
57	BB	1922	G	C8-N9-C4	-6.74	103.70	106.40
57	BB	2552	U	O4'-C1'-N1	6.74	113.59	108.20
57	BB	2639	A	C5-C6-N1	-6.74	114.33	117.70
57	BB	2731	G	N7-C8-N9	-6.74	109.73	113.10
58	BA	88	C	C5-C4-N4	-6.74	115.48	120.20
57	BB	2219	U	C5-C6-N1	6.74	126.07	122.70
57	BB	2618	G	C2-N3-C4	6.74	115.27	111.90
21	AA	566	G	N3-C2-N2	6.74	124.61	119.90
21	AA	1046	A	C4-C5-C6	6.74	120.37	117.00
21	AA	1060	U	N3-C4-O4	6.74	124.11	119.40
21	AA	1359	C	N3-C4-C5	-6.74	119.21	121.90
22	AY	15	G	C6-C5-N7	-6.74	126.36	130.40
42	BW	48	ALA	N-CA-CB	6.74	119.53	110.10
57	BB	3	U	O4'-C1'-N1	6.74	113.59	108.20
57	BB	253	C	N3-C4-N4	6.74	122.72	118.00
57	BB	345	A	C4-C5-C6	6.74	120.37	117.00
57	BB	370	G	C2-N3-C4	6.74	115.27	111.90
57	BB	601	C	O4'-C1'-N1	6.74	113.59	108.20
57	BB	1122	G	N3-C2-N2	6.74	124.61	119.90
57	BB	1258	U	O4'-C1'-N1	6.74	113.59	108.20
57	BB	2353	G	N3-C2-N2	6.74	124.61	119.90
57	BB	2371	G	N3-C4-N9	-6.74	121.96	126.00
21	AA	5	U	N3-C2-O2	-6.73	117.49	122.20
21	AA	1254	A	N3-C4-C5	-6.73	122.09	126.80
21	AA	1527	U	O4'-C1'-N1	6.73	113.59	108.20
43	BX	44	ARG	CD-NE-CZ	-6.73	114.17	123.60
57	BB	2	G	N9-C4-C5	-6.73	102.71	105.40
57	BB	708	G	C4-C5-N7	-6.73	108.11	110.80
57	BB	1561	C	C2-N3-C4	6.73	123.27	119.90
18	AG	43	TYR	CG-CD2-CE2	6.73	126.69	121.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	189	A	O4'-C1'-N9	6.73	113.59	108.20
21	AA	1371	G	C4'-C3'-C2'	-6.73	95.87	102.60
57	BB	40	U	O4'-C1'-N1	6.73	113.59	108.20
57	BB	485	C	C4'-C3'-C2'	-6.73	95.87	102.60
57	BB	684	G	N1-C6-O6	6.73	123.94	119.90
57	BB	2689	U	N3-C4-C5	6.73	118.64	114.60
21	AA	141	G	N1-C6-O6	6.73	123.94	119.90
21	AA	333	U	N3-C2-O2	-6.73	117.49	122.20
21	AA	524	G	N9-C4-C5	6.73	108.09	105.40
21	AA	1070	U	C5-C6-N1	6.73	126.06	122.70
57	BB	707	G	C6-C5-N7	-6.73	126.36	130.40
57	BB	1018	U	C5-C6-N1	6.73	126.06	122.70
57	BB	1120	G	C4'-C3'-C2'	-6.73	95.87	102.60
57	BB	1187	G	N3-C2-N2	6.73	124.61	119.90
57	BB	1330	C	C2-N3-C4	6.73	123.27	119.90
21	AA	149	A	C5-C6-N1	-6.73	114.33	117.70
21	AA	397	A	C6-C5-N7	-6.73	127.59	132.30
21	AA	904	U	C1'-O4'-C4'	-6.73	104.52	109.90
21	AA	1115	U	N1-C2-N3	-6.73	110.86	114.90
57	BB	579	G	N9-C4-C5	-6.73	102.71	105.40
57	BB	1664	A	C5-C6-N6	-6.73	118.32	123.70
57	BB	1920	C	C2-N3-C4	6.73	123.27	119.90
58	BA	21	G	N1-C2-N3	-6.73	119.86	123.90
57	BB	231	A	C5-C6-N1	-6.73	114.34	117.70
57	BB	274	C	C6-N1-C2	-6.73	117.61	120.30
57	BB	510	C	C2-N3-C4	6.73	123.26	119.90
57	BB	859	G	N1-C6-O6	6.73	123.94	119.90
57	BB	899	A	O4'-C1'-N9	6.73	113.58	108.20
57	BB	1494	A	O4'-C1'-N9	6.73	113.58	108.20
57	BB	1587	G	N3-C4-N9	6.73	130.04	126.00
57	BB	1668	A	O3'-P-O5'	-6.73	91.22	104.00
57	BB	1674	G	N9-C4-C5	-6.73	102.71	105.40
57	BB	2804	U	C5-C4-O4	-6.73	121.86	125.90
22	AY	72	C	N3-C4-N4	6.73	122.71	118.00
57	BB	2076	U	C5-C6-N1	6.73	126.06	122.70
57	BB	2707	U	C5'-C4'-O4'	6.73	117.17	109.10
57	BB	2796	U	C6-N1-C2	6.73	125.03	121.00
21	AA	111	G	P-O5'-C5'	6.72	131.66	120.90
21	AA	276	G	N3-C4-N9	6.72	130.03	126.00
21	AA	707	U	C1'-O4'-C4'	6.72	115.28	109.90
57	BB	475	C	O4'-C1'-N1	6.72	113.58	108.20
57	BB	579	G	O4'-C1'-N9	6.72	113.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1557	C	C5-C6-N1	6.72	124.36	121.00
57	BB	1669	A	C4-N9-C1'	6.72	138.41	126.30
57	BB	1685	C	C5-C6-N1	6.72	124.36	121.00
57	BB	1858	A	N1-C6-N6	6.72	122.64	118.60
57	BB	2604	U	C4-C5-C6	6.72	123.73	119.70
21	AA	165	G	C6-N1-C2	-6.72	121.07	125.10
21	AA	202	G	C6-C5-N7	-6.72	126.37	130.40
21	AA	288	A	C5'-C4'-O4'	6.72	117.17	109.10
21	AA	776	G	C2-N3-C4	6.72	115.26	111.90
21	AA	855	U	N3-C4-C5	6.72	118.63	114.60
21	AA	1382	C	P-O3'-C3'	-6.72	111.63	119.70
57	BB	689	A	C5-C6-N6	-6.72	118.32	123.70
57	BB	853	C	N3-C4-N4	6.72	122.71	118.00
57	BB	1338	G	N3-C4-C5	-6.72	125.24	128.60
57	BB	1407	G	N3-C4-C5	6.72	131.96	128.60
57	BB	1424	G	O4'-C1'-N9	6.72	113.58	108.20
57	BB	1426	G	N1-C2-N2	-6.72	110.15	116.20
57	BB	1825	U	C6-N1-C2	6.72	125.03	121.00
57	BB	2838	G	C5-C6-O6	-6.72	124.57	128.60
21	AA	379	C	N3-C4-C5	-6.72	119.21	121.90
21	AA	906	A	O4'-C1'-N9	6.72	113.58	108.20
57	BB	775	G	N7-C8-N9	6.72	116.46	113.10
21	AA	197	A	N9-C4-C5	-6.72	103.11	105.80
21	AA	495	A	C5-N7-C8	6.72	107.26	103.90
21	AA	1001	C	N3-C4-C5	-6.72	119.21	121.90
21	AA	1203	C	C4-C5-C6	-6.72	114.04	117.40
21	AA	1218	C	C1'-O4'-C4'	-6.72	104.53	109.90
21	AA	1444	U	O5'-P-OP2	-6.72	99.65	105.70
57	BB	586	A	OP1-P-OP2	-6.72	109.52	119.60
57	BB	664	G	N9-C1'-C2'	-6.72	104.61	112.00
57	BB	690	G	C2-N3-C4	6.72	115.26	111.90
57	BB	842	U	N3-C2-O2	-6.72	117.50	122.20
57	BB	879	G	C8-N9-C4	-6.72	103.71	106.40
57	BB	1478	G	C4-C5-C6	6.72	122.83	118.80
57	BB	1520	U	C5-C4-O4	6.72	129.93	125.90
57	BB	1663	G	C5-C6-O6	-6.72	124.57	128.60
57	BB	2276	G	C4-C5-C6	6.72	122.83	118.80
57	BB	2647	U	N3-C4-O4	6.72	124.10	119.40
28	BI	96	LYS	N-CA-CB	6.72	122.69	110.60
57	BB	867	C	C3'-C2'-C1'	6.72	106.87	101.50
57	BB	2532	G	N3-C4-N9	6.72	130.03	126.00
57	BB	2899	A	O4'-C1'-N9	6.72	113.58	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	34	C	N3-C4-N4	6.72	122.70	118.00
21	AA	347	G	C5-C6-O6	-6.72	124.57	128.60
21	AA	581	G	N1-C6-O6	6.72	123.93	119.90
25	AZ	74	ARG	NE-CZ-NH2	-6.72	116.94	120.30
57	BB	952	G	N7-C8-N9	-6.72	109.74	113.10
57	BB	1222	U	O4'-C1'-N1	6.72	113.57	108.20
57	BB	1901	A	N1-C6-N6	6.72	122.63	118.60
57	BB	1959	G	O4'-C1'-N9	6.72	113.57	108.20
57	BB	2218	G	C6-C5-N7	-6.72	126.37	130.40
57	BB	2315	G	C4-C5-N7	-6.72	108.11	110.80
57	BB	2673	G	N1-C2-N2	6.72	122.25	116.20
15	AD	110	ARG	NE-CZ-NH2	-6.71	116.94	120.30
21	AA	143	A	N3-C4-C5	-6.71	122.10	126.80
21	AA	279	A	N1-C2-N3	-6.71	125.94	129.30
21	AA	371	A	N9-C4-C5	-6.71	103.11	105.80
57	BB	849	A	C6-C5-N7	-6.71	127.60	132.30
57	BB	1623	G	N1-C2-N3	-6.71	119.87	123.90
57	BB	2625	G	O4'-C1'-N9	6.71	113.57	108.20
21	AA	357	G	C4-C5-N7	6.71	113.48	110.80
21	AA	1236	A	O4'-C1'-N9	6.71	113.57	108.20
57	BB	80	G	N1-C6-O6	6.71	123.93	119.90
57	BB	592	A	C2-N3-C4	-6.71	107.24	110.60
57	BB	1173	U	O4'-C1'-N1	6.71	113.57	108.20
57	BB	1829	A	C4-C5-N7	-6.71	107.34	110.70
57	BB	1888	G	C4-C5-N7	-6.71	108.11	110.80
57	BB	2092	U	O5'-P-OP2	-6.71	99.66	105.70
57	BB	2463	C	C3'-C2'-C1'	6.71	106.87	101.50
21	AA	1046	A	N1-C2-N3	6.71	132.66	129.30
28	BI	26	ALA	N-CA-CB	6.71	119.50	110.10
57	BB	125	A	O4'-C1'-N9	6.71	113.57	108.20
57	BB	833	A	C5-C6-N6	-6.71	118.33	123.70
57	BB	1689	A	C5-C6-N1	-6.71	114.34	117.70
57	BB	1696	G	N9-C4-C5	6.71	108.08	105.40
57	BB	2820	A	O4'-C1'-N9	6.71	113.57	108.20
57	BB	1303	G	C8-N9-C4	6.71	109.08	106.40
57	BB	2616	C	O4'-C1'-N1	6.71	113.57	108.20
21	AA	184	G	C5-C6-O6	-6.71	124.58	128.60
21	AA	558	G	N3-C2-N2	6.71	124.60	119.90
21	AA	1314	C	N3-C4-N4	6.71	122.70	118.00
22	AY	49	C	C6-N1-C2	6.71	122.98	120.30
44	BY	3	ALA	N-CA-CB	6.71	119.49	110.10
57	BB	726	G	C4-N9-C1'	-6.71	117.78	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1278	C	C5-C4-N4	-6.71	115.50	120.20
57	BB	1651	G	N3-C2-N2	6.71	124.59	119.90
57	BB	2141	G	N9-C4-C5	-6.71	102.72	105.40
57	BB	2143	C	C5-C4-N4	-6.71	115.50	120.20
21	AA	421	U	C2-N1-C1'	6.71	125.75	117.70
21	AA	725	G	N3-C4-N9	-6.71	121.98	126.00
21	AA	832	G	N1-C2-N3	-6.71	119.88	123.90
21	AA	1229	A	C4-C5-N7	-6.71	107.35	110.70
21	AA	1293	C	C4'-C3'-C2'	-6.71	95.89	102.60
57	BB	296	U	N3-C4-O4	6.71	124.09	119.40
57	BB	327	G	C6-C5-N7	-6.71	126.38	130.40
57	BB	902	C	N1-C2-N3	-6.71	114.50	119.20
57	BB	932	U	N3-C4-O4	-6.71	114.71	119.40
57	BB	981	A	O4'-C1'-N9	6.71	113.56	108.20
57	BB	1733	G	N7-C8-N9	-6.71	109.75	113.10
57	BB	1761	C	N3-C4-N4	6.71	122.69	118.00
57	BB	2354	C	N1-C2-N3	-6.71	114.50	119.20
57	BB	2476	A	C8-N9-C4	-6.71	103.12	105.80
57	BB	2601	C	N3-C4-N4	6.71	122.69	118.00
21	AA	303	A	C4'-C3'-C2'	-6.71	95.89	102.60
26	AV	53	G	N3-C2-N2	6.71	124.59	119.90
57	BB	649	G	N3-C4-N9	6.71	130.02	126.00
57	BB	1220	G	C4-C5-N7	-6.71	108.12	110.80
57	BB	1408	G	O4'-C1'-N9	6.71	113.56	108.20
57	BB	2016	U	C4-C5-C6	6.71	123.72	119.70
21	AA	836	G	N3-C4-C5	-6.70	125.25	128.60
21	AA	1035	A	N3-C4-N9	6.70	132.76	127.40
21	AA	1157	A	C6-N1-C2	-6.70	114.58	118.60
57	BB	223	A	C5-C6-N1	-6.70	114.35	117.70
57	BB	996	A	P-O5'-C5'	6.70	131.62	120.90
57	BB	1241	A	C4-C5-N7	-6.70	107.35	110.70
57	BB	1567	G	C4'-C3'-C2'	-6.70	95.90	102.60
57	BB	1660	G	N1-C6-O6	6.70	123.92	119.90
57	BB	1984	G	C6-C5-N7	6.70	134.42	130.40
57	BB	2235	G	N9-C4-C5	-6.70	102.72	105.40
57	BB	2656	U	N3-C4-O4	6.70	124.09	119.40
21	AA	721	G	C5-C6-O6	-6.70	124.58	128.60
57	BB	45	G	C6-N1-C2	-6.70	121.08	125.10
57	BB	854	C	C4'-C3'-C2'	-6.70	95.90	102.60
21	AA	1108	G	N1-C2-N3	-6.70	119.88	123.90
22	AY	42	G	C5-N7-C8	6.70	107.65	104.30
28	BI	123	ALA	CB-CA-C	-6.70	100.05	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
29	BJ	35	ARG	CB-CA-C	-6.70	97.00	110.40
57	BB	14	A	C6-C5-N7	-6.70	127.61	132.30
57	BB	769	U	N1-C2-N3	6.70	118.92	114.90
57	BB	1214	A	O4'-C1'-N9	6.70	113.56	108.20
57	BB	1543	G	O4'-C1'-N9	6.70	113.56	108.20
57	BB	1827	U	N3-C2-O2	6.70	126.89	122.20
57	BB	2487	G	C5-C6-N1	-6.70	108.15	111.50
21	AA	833	G	C5-N7-C8	6.70	107.65	104.30
36	BQ	57	ARG	NE-CZ-NH2	6.70	123.65	120.30
57	BB	182	A	N1-C2-N3	6.70	132.65	129.30
57	BB	315	G	C6-C5-N7	-6.70	126.38	130.40
57	BB	619	G	C5-N7-C8	6.70	107.65	104.30
57	BB	1181	U	N3-C4-O4	6.70	124.09	119.40
57	BB	1288	G	O4'-C1'-N9	6.70	113.56	108.20
21	AA	109	A	N3-C4-C5	6.70	131.49	126.80
21	AA	496	A	C4-C5-N7	-6.70	107.35	110.70
21	AA	874	G	N9-C4-C5	-6.70	102.72	105.40
25	AZ	132	VAL	CA-CB-CG1	6.70	120.94	110.90
53	BE	125	SER	N-CA-CB	6.70	120.55	110.50
57	BB	324	A	N3-C4-C5	6.70	131.49	126.80
57	BB	501	A	C3'-C2'-C1'	6.70	106.86	101.50
57	BB	1237	A	C3'-C2'-C1'	6.70	106.86	101.50
21	AA	272	C	C5-C6-N1	6.70	124.35	121.00
21	AA	1074	G	O4'-C1'-N9	6.70	113.56	108.20
21	AA	1174	G	C8-N9-C4	-6.70	103.72	106.40
23	AW	50	U	O4'-C1'-N1	6.70	113.56	108.20
26	AV	17	C	O4'-C4'-C3'	-6.70	97.31	104.00
57	BB	16	C	C5-C4-N4	-6.70	115.51	120.20
57	BB	798	G	C8-N9-C4	6.70	109.08	106.40
57	BB	1757	A	N1-C6-N6	6.70	122.62	118.60
58	BA	23	G	C6-C5-N7	-6.70	126.38	130.40
21	AA	1346	A	C2-N3-C4	-6.69	107.25	110.60
23	AW	62	C	C4-C5-C6	6.69	120.75	117.40
57	BB	1802	A	P-O3'-C3'	-6.69	111.67	119.70
21	AA	156	C	N3-C4-N4	6.69	122.69	118.00
21	AA	548	G	C4-C5-C6	-6.69	114.78	118.80
21	AA	751	U	N1-C2-O2	6.69	127.48	122.80
22	AY	49	C	C1'-O4'-C4'	6.69	115.25	109.90
26	AV	55	U	N3-C4-C5	-6.69	110.58	114.60
57	BB	219	A	C4-C5-N7	-6.69	107.35	110.70
57	BB	265	A	C4-C5-N7	6.69	114.05	110.70
57	BB	533	G	O4'-C1'-N9	6.69	113.55	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	666	A	C5-C6-N6	-6.69	118.35	123.70
57	BB	1063	G	N3-C4-C5	-6.69	125.25	128.60
57	BB	1194	A	N1-C2-N3	-6.69	125.95	129.30
57	BB	1922	G	N1-C6-O6	6.69	123.92	119.90
57	BB	2155	U	N3-C2-O2	6.69	126.89	122.20
57	BB	2354	C	C5-C6-N1	-6.69	117.65	121.00
21	AA	230	G	N1-C6-O6	6.69	123.91	119.90
21	AA	613	C	P-O3'-C3'	-6.69	111.67	119.70
57	BB	56	A	C4-C5-N7	-6.69	107.36	110.70
57	BB	201	C	C4'-C3'-C2'	-6.69	95.91	102.60
57	BB	507	A	C6-C5-N7	-6.69	127.62	132.30
57	BB	1177	G	OP1-P-OP2	-6.69	109.57	119.60
57	BB	1228	G	C4-C5-N7	6.69	113.48	110.80
57	BB	1239	G	N1-C6-O6	6.69	123.91	119.90
57	BB	1947	C	C5-C4-N4	-6.69	115.52	120.20
57	BB	2738	A	N1-C6-N6	6.69	122.61	118.60
57	BB	12	U	N3-C4-C5	-6.69	110.59	114.60
57	BB	146	A	C4-C5-N7	-6.69	107.36	110.70
57	BB	642	U	N3-C4-C5	6.69	118.61	114.60
57	BB	766	U	N3-C2-O2	6.69	126.88	122.20
57	BB	923	G	N7-C8-N9	-6.69	109.75	113.10
57	BB	1695	G	C4-C5-C6	6.69	122.81	118.80
57	BB	1791	A	N9-C4-C5	-6.69	103.12	105.80
57	BB	2678	C	O4'-C1'-N1	6.69	113.55	108.20
57	BB	2888	C	N1-C2-N3	-6.69	114.52	119.20
21	AA	429	U	N1-C2-N3	-6.69	110.89	114.90
21	AA	1366	C	O4'-C1'-N1	6.69	113.55	108.20
57	BB	363	G	C4-C5-C6	6.69	122.81	118.80
57	BB	1145	C	P-O3'-C3'	-6.69	111.68	119.70
57	BB	1210	G	N1-C2-N3	-6.69	119.89	123.90
57	BB	1900	A	N1-C6-N6	6.69	122.61	118.60
57	BB	1977	A	C6-C5-N7	-6.69	127.62	132.30
57	BB	2341	G	N1-C2-N3	-6.69	119.89	123.90
57	BB	2537	U	N1-C2-O2	-6.69	118.12	122.80
57	BB	2792	A	C8-N9-C4	-6.69	103.12	105.80
15	AD	75	TYR	CG-CD1-CE1	-6.69	115.95	121.30
21	AA	939	G	P-O5'-C5'	-6.69	110.20	120.90
57	BB	1223	G	C4-C5-C6	6.69	122.81	118.80
57	BB	2787	C	N1-C2-O2	-6.69	114.89	118.90
21	AA	673	A	C5-N7-C8	6.68	107.24	103.90
21	AA	694	A	C5-C6-N1	-6.68	114.36	117.70
21	AA	745	G	C4-N9-C1'	-6.68	117.81	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	30	G	C5-C6-O6	-6.68	124.59	128.60
57	BB	84	A	C5-N7-C8	6.68	107.24	103.90
57	BB	118	A	C6-C5-N7	-6.68	127.62	132.30
57	BB	408	G	C8-N9-C4	6.68	109.07	106.40
57	BB	1010	A	C5-C6-N1	-6.68	114.36	117.70
57	BB	1537	G	N1-C2-N3	-6.68	119.89	123.90
57	BB	2206	C	P-O3'-C3'	-6.68	111.68	119.70
57	BB	2829	A	C4-C5-N7	-6.68	107.36	110.70
21	AA	996	A	C4-C5-N7	-6.68	107.36	110.70
21	AA	1255	G	C4-C5-C6	6.68	122.81	118.80
21	AA	1510	C	N3-C2-O2	6.68	126.58	121.90
57	BB	966	G	C6-C5-N7	-6.68	126.39	130.40
57	BB	1242	U	O4'-C1'-N1	6.68	113.55	108.20
57	BB	1434	A	N1-C6-N6	6.68	122.61	118.60
57	BB	1729	U	C5-C4-O4	-6.68	121.89	125.90
57	BB	1944	U	O4'-C1'-N1	6.68	113.55	108.20
57	BB	2268	A	P-O3'-C3'	-6.68	111.68	119.70
22	AY	61	C	O4'-C1'-N1	6.68	113.55	108.20
57	BB	344	A	P-O3'-C3'	-6.68	111.68	119.70
57	BB	464	U	C3'-C2'-C1'	6.68	106.84	101.50
57	BB	549	G	N3-C2-N2	6.68	124.58	119.90
57	BB	1802	A	C8-N9-C4	-6.68	103.13	105.80
57	BB	2325	G	O4'-C4'-C3'	-6.68	97.32	104.00
57	BB	2608	G	C5-C6-N1	-6.68	108.16	111.50
21	AA	436	C	C5-C4-N4	-6.68	115.53	120.20
21	AA	502	A	C5-C6-N1	-6.68	114.36	117.70
21	AA	1221	G	C1'-O4'-C4'	6.68	115.24	109.90
57	BB	40	U	C6-N1-C2	-6.68	116.99	121.00
57	BB	356	G	N1-C2-N3	-6.68	119.89	123.90
57	BB	423	A	C6-N1-C2	6.68	122.61	118.60
57	BB	678	C	C2-N3-C4	-6.68	116.56	119.90
57	BB	2058	A	C4-C5-N7	-6.68	107.36	110.70
57	BB	2494	G	C6-C5-N7	-6.68	126.39	130.40
57	BB	2780	G	O4'-C1'-N9	6.68	113.54	108.20
21	AA	172	A	O4'-C1'-N9	6.68	113.54	108.20
21	AA	483	C	C5-C4-N4	-6.68	115.53	120.20
21	AA	501	C	P-O3'-C3'	-6.68	111.69	119.70
57	BB	370	G	N3-C2-N2	6.68	124.57	119.90
57	BB	732	C	C5-C4-N4	-6.68	115.53	120.20
57	BB	1111	A	P-O5'-C5'	6.68	131.59	120.90
57	BB	1887	C	C6-N1-C2	-6.68	117.63	120.30
57	BB	2412	A	C5-C6-N1	-6.68	114.36	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	126	G	C5-N7-C8	6.68	107.64	104.30
21	AA	552	U	N3-C4-O4	6.68	124.07	119.40
21	AA	629	A	C3'-C2'-C1'	-6.68	96.16	101.50
21	AA	798	U	C4-C5-C6	-6.68	115.69	119.70
21	AA	865	A	N3-C4-C5	-6.68	122.13	126.80
57	BB	1731	G	N3-C4-C5	6.68	131.94	128.60
57	BB	2150	C	C5'-C4'-O4'	6.68	117.11	109.10
57	BB	2261	C	N1-C2-O2	-6.68	114.89	118.90
21	AA	972	C	O4'-C1'-N1	6.67	113.54	108.20
21	AA	1034	G	C8-N9-C4	-6.67	103.73	106.40
21	AA	1035	A	N1-C6-N6	6.67	122.60	118.60
21	AA	1346	A	P-O5'-C5'	-6.67	110.22	120.90
23	AW	32	U	N3-C4-O4	6.67	124.07	119.40
45	BC	100	ARG	NE-CZ-NH1	6.67	123.64	120.30
57	BB	520	G	C5-C6-O6	-6.67	124.59	128.60
57	BB	977	G	N1-C6-O6	6.67	123.91	119.90
57	BB	2258	C	N3-C4-N4	6.67	122.67	118.00
57	BB	2628	C	C6-N1-C2	-6.67	117.63	120.30
21	AA	62	U	N3-C2-O2	6.67	126.87	122.20
21	AA	1299	A	C4'-C3'-C2'	6.67	109.27	102.60
23	AW	34	G	C3'-C2'-C1'	6.67	106.84	101.50
57	BB	368	A	N9-C4-C5	6.67	108.47	105.80
57	BB	1302	A	N1-C2-N3	6.67	132.64	129.30
21	AA	460	A	P-O5'-C5'	6.67	131.57	120.90
21	AA	586	C	N3-C4-N4	6.67	122.67	118.00
21	AA	750	C	N3-C2-O2	-6.67	117.23	121.90
21	AA	1012	A	P-O5'-C5'	-6.67	110.23	120.90
21	AA	1397	C	C5-C6-N1	6.67	124.33	121.00
57	BB	728	G	C6-C5-N7	-6.67	126.40	130.40
57	BB	820	A	C5-C6-N1	-6.67	114.36	117.70
57	BB	908	C	C4-C5-C6	6.67	120.74	117.40
57	BB	1264	A	C4-C5-N7	-6.67	107.36	110.70
57	BB	1714	U	N3-C4-C5	-6.67	110.60	114.60
57	BB	1764	C	C2-N3-C4	6.67	123.24	119.90
57	BB	1997	C	O4'-C1'-N1	6.67	113.54	108.20
57	BB	2382	G	O4'-C1'-N9	6.67	113.54	108.20
57	BB	2405	G	C5'-C4'-O4'	6.67	117.11	109.10
57	BB	2595	G	O4'-C1'-N9	6.67	113.54	108.20
21	AA	568	G	C4-C5-C6	6.67	122.80	118.80
23	AW	74	C	N3-C4-C5	-6.67	119.23	121.90
57	BB	1275	A	N3-C4-N9	6.67	132.74	127.40
21	AA	618	C	N3-C4-C5	-6.67	119.23	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	840	C	N3-C4-C5	-6.67	119.23	121.90
21	AA	1534	A	C5-C6-N6	-6.67	118.36	123.70
22	AY	20	G	N1-C2-N2	-6.67	110.20	116.20
23	AW	37	A	C5-C6-N1	-6.67	114.37	117.70
41	BV	61	LEU	CB-CG-CD2	6.67	122.33	111.00
57	BB	112	U	N3-C4-O4	-6.67	114.73	119.40
57	BB	119	A	N7-C8-N9	6.67	117.13	113.80
57	BB	491	G	N1-C2-N3	-6.67	119.90	123.90
57	BB	633	A	C8-N9-C4	-6.67	103.13	105.80
57	BB	1166	G	O4'-C4'-C3'	-6.67	97.33	104.00
57	BB	1491	G	N3-C2-N2	6.67	124.57	119.90
57	BB	2122	U	C6-N1-C2	-6.67	117.00	121.00
57	BB	2520	C	C6-N1-C2	-6.67	117.63	120.30
57	BB	2685	G	C4-C5-N7	-6.67	108.13	110.80
21	AA	181	A	O4'-C1'-N9	6.67	113.53	108.20
21	AA	388	G	O5'-P-OP2	-6.67	99.70	105.70
21	AA	978	A	C5-N7-C8	6.67	107.23	103.90
22	AY	49	C	C5'-C4'-C3'	-6.67	105.33	116.00
23	AW	23	A	P-O3'-C3'	6.67	127.70	119.70
53	BE	170	ARG	NE-CZ-NH1	-6.67	116.97	120.30
57	BB	519	U	P-O3'-C3'	-6.67	111.70	119.70
57	BB	578	G	N9-C4-C5	-6.67	102.73	105.40
57	BB	742	A	C4-C5-N7	-6.67	107.37	110.70
57	BB	1106	G	C4-C5-C6	6.67	122.80	118.80
57	BB	1867	G	C2-N3-C4	6.67	115.23	111.90
57	BB	2401	U	C2-N3-C4	-6.67	123.00	127.00
21	AA	642	A	C5-N7-C8	-6.67	100.57	103.90
57	BB	1541	C	N1-C2-N3	-6.67	114.53	119.20
21	AA	797	C	C4-C5-C6	6.66	120.73	117.40
21	AA	1355	G	N9-C4-C5	6.66	108.06	105.40
23	AW	27	G	C4-C5-C6	6.66	122.80	118.80
49	B2	17	GLY	O-C-N	-6.66	112.04	122.70
57	BB	716	A	C5-N7-C8	6.66	107.23	103.90
57	BB	1244	A	O4'-C1'-N9	6.66	113.53	108.20
57	BB	1393	A	P-O3'-C3'	6.66	127.70	119.70
57	BB	1401	G	N1-C2-N3	-6.66	119.90	123.90
57	BB	1840	G	C8-N9-C4	-6.66	103.73	106.40
57	BB	2180	U	N1-C2-N3	-6.66	110.90	114.90
57	BB	2213	U	C6-N1-C1'	-6.66	111.87	121.20
21	AA	379	C	O4'-C1'-N1	6.66	113.53	108.20
57	BB	805	G	N9-C4-C5	6.66	108.06	105.40
57	BB	1593	A	C5-C6-N1	-6.66	114.37	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1750	G	C6-C5-N7	-6.66	126.40	130.40
57	BB	2425	A	C6-C5-N7	-6.66	127.64	132.30
21	AA	71	A	C2-N3-C4	6.66	113.93	110.60
21	AA	1105	A	N1-C2-N3	6.66	132.63	129.30
21	AA	1290	G	N1-C2-N3	-6.66	119.90	123.90
57	BB	367	G	N3-C2-N2	6.66	124.56	119.90
57	BB	1205	A	C4-C5-N7	-6.66	107.37	110.70
57	BB	2444	G	N1-C2-N3	-6.66	119.90	123.90
57	BB	2843	G	N9-C4-C5	-6.66	102.74	105.40
58	BA	33	G	N1-C6-O6	6.66	123.90	119.90
13	AB	197	PHE	CB-CG-CD2	-6.66	116.14	120.80
20	AI	10	ARG	NE-CZ-NH2	6.66	123.63	120.30
21	AA	1062	U	C5'-C4'-O4'	6.66	117.09	109.10
21	AA	1207	G	N3-C2-N2	6.66	124.56	119.90
21	AA	1508	A	C6-N1-C2	6.66	122.59	118.60
22	AY	23	A	N7-C8-N9	6.66	117.13	113.80
26	AV	6	G	N1-C2-N3	-6.66	119.91	123.90
57	BB	513	A	C3'-C2'-C1'	6.66	106.83	101.50
57	BB	814	C	C6-N1-C2	6.66	122.96	120.30
57	BB	1576	U	O4'-C1'-N1	6.66	113.53	108.20
58	BA	86	G	N9-C4-C5	-6.66	102.74	105.40
21	AA	53	A	N1-C2-N3	6.66	132.63	129.30
21	AA	166	U	N1-C2-N3	-6.66	110.91	114.90
21	AA	643	C	C5-C6-N1	6.66	124.33	121.00
21	AA	1236	A	N9-C4-C5	-6.66	103.14	105.80
26	AV	73	A	C5'-C4'-O4'	6.66	117.09	109.10
45	BC	86	ARG	NE-CZ-NH2	-6.66	116.97	120.30
21	AA	162	A	O4'-C1'-N9	6.66	113.52	108.20
21	AA	196	A	C5-C6-N1	-6.66	114.37	117.70
21	AA	624	C	C6-N1-C2	-6.66	117.64	120.30
21	AA	1119	C	O4'-C1'-N1	6.66	113.53	108.20
57	BB	813	U	N3-C2-O2	6.66	126.86	122.20
57	BB	2838	G	N1-C6-O6	6.66	123.89	119.90
57	BB	2878	U	P-O5'-C5'	6.66	131.55	120.90
57	BB	2882	A	N9-C4-C5	-6.66	103.14	105.80
21	AA	341	C	N3-C2-O2	6.65	126.56	121.90
21	AA	683	G	C5-C6-O6	-6.65	124.61	128.60
21	AA	1355	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	2625	G	C3'-C2'-C1'	6.65	106.82	101.50
21	AA	57	G	P-O5'-C5'	6.65	131.54	120.90
21	AA	82	G	C6-C5-N7	-6.65	126.41	130.40
21	AA	688	G	N1-C6-O6	6.65	123.89	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	917	G	C5-C6-O6	-6.65	124.61	128.60
21	AA	1082	A	N1-C6-N6	6.65	122.59	118.60
57	BB	263	G	C4-C5-N7	-6.65	108.14	110.80
57	BB	998	C	C2-N3-C4	-6.65	116.57	119.90
57	BB	1275	A	C5-C6-N1	-6.65	114.37	117.70
57	BB	1673	G	N3-C2-N2	6.65	124.56	119.90
57	BB	1715	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	2018	G	C5-C6-O6	-6.65	124.61	128.60
57	BB	2120	G	N1-C6-O6	6.65	123.89	119.90
57	BB	2627	G	N7-C8-N9	6.65	116.43	113.10
57	BB	2647	U	O4'-C1'-N1	6.65	113.52	108.20
57	BB	2708	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	2843	G	N1-C6-O6	6.65	123.89	119.90
21	AA	393	A	O4'-C1'-N9	6.65	113.52	108.20
21	AA	511	C	N3-C2-O2	-6.65	117.25	121.90
21	AA	900	A	N1-C2-N3	6.65	132.63	129.30
57	BB	1059	G	N1-C2-N3	6.65	127.89	123.90
57	BB	1494	A	C5-C6-N6	-6.65	118.38	123.70
57	BB	2246	G	N7-C8-N9	-6.65	109.77	113.10
57	BB	2788	C	C6-N1-C2	6.65	122.96	120.30
58	BA	21	G	C5-C6-O6	-6.65	124.61	128.60
21	AA	275	G	N1-C2-N3	-6.65	119.91	123.90
21	AA	1129	C	O4'-C1'-N1	6.65	113.52	108.20
21	AA	1480	A	C4'-C3'-C2'	-6.65	95.95	102.60
57	BB	102	U	N3-C2-O2	6.65	126.85	122.20
57	BB	361	G	N1-C2-N3	-6.65	119.91	123.90
57	BB	381	G	C6-C5-N7	-6.65	126.41	130.40
57	BB	1568	G	P-O3'-C3'	-6.65	111.72	119.70
57	BB	1587	G	N7-C8-N9	6.65	116.42	113.10
57	BB	1773	A	N7-C8-N9	6.65	117.12	113.80
21	AA	140	U	C5-C4-O4	6.65	129.89	125.90
21	AA	1003	G	C4-C5-N7	-6.65	108.14	110.80
21	AA	1038	C	N3-C4-N4	6.65	122.65	118.00
21	AA	1250	A	C1'-O4'-C4'	-6.65	104.58	109.90
21	AA	1468	A	C8-N9-C4	-6.65	103.14	105.80
57	BB	1808	A	C5-C6-N1	-6.65	114.38	117.70
57	BB	1943	U	N3-C4-O4	6.65	124.05	119.40
57	BB	2224	G	O4'-C1'-N9	6.65	113.52	108.20
18	AG	78	ARG	NE-CZ-NH1	-6.65	116.98	120.30
21	AA	469	C	N3-C4-C5	-6.65	119.24	121.90
57	BB	222	A	O4'-C1'-N9	6.65	113.52	108.20
57	BB	2366	A	C4-C5-C6	6.65	120.32	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	160	A	C4-C5-C6	6.64	120.32	117.00
21	AA	706	A	C4-C5-C6	6.64	120.32	117.00
21	AA	1049	U	O4'-C1'-N1	6.64	113.52	108.20
21	AA	1277	C	N3-C4-C5	-6.64	119.24	121.90
57	BB	986	C	C5-C6-N1	6.64	124.32	121.00
57	BB	1938	A	O4'-C1'-N9	6.64	113.52	108.20
21	AA	668	G	N9-C4-C5	6.64	108.06	105.40
21	AA	694	A	P-O3'-C3'	6.64	127.67	119.70
21	AA	1240	U	O4'-C1'-N1	6.64	113.51	108.20
21	AA	1407	C	O4'-C1'-N1	6.64	113.51	108.20
21	AA	1523	G	O5'-P-OP1	-6.64	99.72	105.70
22	AY	6	U	C5-C4-O4	6.64	129.89	125.90
57	BB	1178	C	O4'-C1'-N1	6.64	113.51	108.20
57	BB	2333	A	C8-N9-C4	6.64	108.46	105.80
57	BB	2362	C	C5-C4-N4	-6.64	115.55	120.20
57	BB	2780	G	C5'-C4'-O4'	-6.64	101.13	109.10
21	AA	682	G	N9-C4-C5	-6.64	102.74	105.40
21	AA	1172	C	N1-C2-N3	-6.64	114.55	119.20
21	AA	1508	A	C5-N7-C8	6.64	107.22	103.90
57	BB	150	U	N3-C4-O4	6.64	124.05	119.40
21	AA	1134	G	P-O3'-C3'	6.64	127.67	119.70
22	AY	29	A	C1'-O4'-C4'	-6.64	104.59	109.90
22	AY	30	G	C5'-C4'-O4'	6.64	117.07	109.10
22	AY	34	G	C2-N3-C4	-6.64	108.58	111.90
57	BB	27	G	C4-N9-C1'	-6.64	117.87	126.50
57	BB	254	G	C5-C6-O6	-6.64	124.62	128.60
57	BB	553	G	C4-C5-N7	6.64	113.46	110.80
57	BB	646	U	N3-C2-O2	-6.64	117.55	122.20
57	BB	1072	C	N1-C2-O2	6.64	122.88	118.90
57	BB	1584	U	N1-C2-O2	-6.64	118.15	122.80
57	BB	1721	G	N1-C2-N2	-6.64	110.22	116.20
57	BB	2437	G	C8-N9-C4	6.64	109.06	106.40
57	BB	2844	G	C6-N1-C2	6.64	129.08	125.10
15	AD	140	ASP	CB-CG-OD1	6.64	124.27	118.30
21	AA	373	A	C5-C6-N1	-6.64	114.38	117.70
43	BX	44	ARG	NE-CZ-NH2	-6.64	116.98	120.30
21	AA	251	G	C6-C5-N7	-6.64	126.42	130.40
21	AA	293	G	C6-C5-N7	-6.64	126.42	130.40
21	AA	912	C	N1-C2-N3	-6.64	114.55	119.20
57	BB	534	U	O4'-C1'-N1	6.64	113.51	108.20
57	BB	830	G	O4'-C1'-N9	6.64	113.51	108.20
57	BB	893	C	N3-C4-N4	6.64	122.64	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	899	A	N1-C2-N3	-6.64	125.98	129.30
57	BB	1429	G	C2-N3-C4	6.64	115.22	111.90
57	BB	1566	A	C3'-C2'-C1'	-6.64	96.19	101.50
57	BB	1952	A	C5-C6-N1	-6.64	114.38	117.70
57	BB	2482	A	C5-C6-N1	-6.64	114.38	117.70
21	AA	764	C	C2-N3-C4	6.63	123.22	119.90
21	AA	1004	A	C5-C6-N1	-6.63	114.38	117.70
26	AV	72	A	C6-N1-C2	-6.63	114.62	118.60
45	BC	74	PRO	N-CD-CG	6.63	113.15	103.20
57	BB	336	C	O4'-C1'-N1	6.63	113.51	108.20
57	BB	585	G	N3-C2-N2	6.63	124.54	119.90
57	BB	1123	C	C2-N3-C4	-6.63	116.58	119.90
57	BB	1447	C	C2-N3-C4	6.63	123.22	119.90
57	BB	1747	U	N3-C4-O4	6.63	124.05	119.40
57	BB	2244	U	N3-C4-O4	-6.63	114.76	119.40
57	BB	2269	G	N3-C2-N2	6.63	124.54	119.90
57	BB	2437	G	N7-C8-N9	-6.63	109.78	113.10
57	BB	2781	A	C5'-C4'-C3'	-6.63	105.38	116.00
57	BB	243	U	N3-C4-O4	6.63	124.04	119.40
57	BB	642	U	C2-N3-C4	-6.63	123.02	127.00
57	BB	2613	U	C4-C5-C6	-6.63	115.72	119.70
15	AD	145	ARG	NE-CZ-NH1	-6.63	116.98	120.30
21	AA	513	C	N1-C2-O2	6.63	122.88	118.90
21	AA	721	G	C8-N9-C4	6.63	109.05	106.40
21	AA	1237	C	C5'-C4'-C3'	6.63	126.61	116.00
21	AA	1487	G	O4'-C1'-N9	6.63	113.50	108.20
57	BB	1144	A	P-O3'-C3'	6.63	127.66	119.70
57	BB	1304	A	C5-C6-N6	-6.63	118.40	123.70
57	BB	2026	U	N1-C2-N3	6.63	118.88	114.90
57	BB	2587	A	O4'-C1'-N9	6.63	113.50	108.20
57	BB	2650	U	C2-N3-C4	6.63	130.98	127.00
21	AA	437	U	N1-C2-N3	-6.63	110.92	114.90
21	AA	913	A	N7-C8-N9	-6.63	110.48	113.80
21	AA	1467	C	C5-C4-N4	-6.63	115.56	120.20
57	BB	95	A	C5-N7-C8	-6.63	100.58	103.90
57	BB	311	A	N9-C4-C5	-6.63	103.15	105.80
57	BB	771	G	N1-C2-N3	-6.63	119.92	123.90
57	BB	2068	U	N1-C2-O2	-6.63	118.16	122.80
21	AA	31	G	C4-C5-C6	6.63	122.78	118.80
21	AA	345	C	P-O5'-C5'	-6.63	110.30	120.90
57	BB	109	C	C5-C6-N1	6.63	124.31	121.00
57	BB	539	G	N3-C4-C5	6.63	131.91	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	600	G	C1'-O4'-C4'	-6.63	104.60	109.90
57	BB	751	A	C2-N3-C4	-6.63	107.29	110.60
57	BB	1272	A	C2-N3-C4	-6.63	107.29	110.60
57	BB	1961	C	C2-N3-C4	-6.63	116.59	119.90
21	AA	66	A	N3-C4-C5	-6.63	122.16	126.80
21	AA	194	C	N3-C4-N4	6.63	122.64	118.00
21	AA	412	A	C4-C5-C6	6.63	120.31	117.00
21	AA	480	U	C5-C4-O4	-6.63	121.92	125.90
21	AA	1258	G	N1-C2-N2	-6.63	110.24	116.20
22	AY	49	C	N3-C4-N4	6.63	122.64	118.00
57	BB	329	G	C8-N9-C4	-6.63	103.75	106.40
57	BB	668	A	C4'-C3'-C2'	-6.63	95.97	102.60
57	BB	858	G	C6-N1-C2	6.63	129.08	125.10
57	BB	1225	G	N1-C2-N3	-6.63	119.92	123.90
57	BB	1400	U	O4'-C1'-N1	6.63	113.50	108.20
57	BB	1941	C	C6-N1-C2	-6.63	117.65	120.30
57	BB	2034	U	N1-C2-N3	-6.63	110.92	114.90
57	BB	2682	A	C4-C5-N7	6.63	114.01	110.70
58	BA	69	G	C4-C5-C6	6.63	122.78	118.80
58	BA	94	A	N3-C4-C5	-6.63	122.16	126.80
57	BB	140	C	C2-N3-C4	-6.62	116.59	119.90
57	BB	446	G	C6-N1-C2	-6.62	121.12	125.10
57	BB	664	G	O4'-C1'-N9	6.62	113.50	108.20
57	BB	677	A	C5-C6-N6	-6.62	118.40	123.70
57	BB	1300	G	C5'-C4'-O4'	6.62	117.05	109.10
57	BB	1713	A	C6-C5-N7	-6.62	127.66	132.30
57	BB	2004	G	C6-C5-N7	-6.62	126.42	130.40
57	BB	2472	G	C6-N1-C2	6.62	129.07	125.10
58	BA	13	G	C5-N7-C8	6.62	107.61	104.30
21	AA	678	U	C5-C4-O4	-6.62	121.93	125.90
21	AA	1104	G	C6-N1-C2	6.62	129.07	125.10
21	AA	1219	A	N7-C8-N9	6.62	117.11	113.80
26	AV	15	G	N9-C4-C5	6.62	108.05	105.40
27	B5	51	ASP	CB-CG-OD1	-6.62	112.34	118.30
57	BB	1744	A	C5-C6-N6	-6.62	118.40	123.70
57	BB	2156	G	P-O5'-C5'	-6.62	110.30	120.90
57	BB	2611	C	C4-C5-C6	6.62	120.71	117.40
57	BB	2724	U	C1'-O4'-C4'	6.62	115.20	109.90
58	BA	52	A	N1-C6-N6	6.62	122.58	118.60
21	AA	12	U	C5-C4-O4	-6.62	121.93	125.90
21	AA	341	C	N1-C2-N3	-6.62	114.56	119.20
21	AA	621	A	O4'-C1'-N9	6.62	113.50	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	726	C	C2-N3-C4	6.62	123.21	119.90
21	AA	976	G	O4'-C4'-C3'	-6.62	97.38	104.00
57	BB	55	G	C5-C6-O6	-6.62	124.63	128.60
57	BB	629	G	N7-C8-N9	6.62	116.41	113.10
57	BB	1210	G	C2-N3-C4	6.62	115.21	111.90
57	BB	1892	C	C4'-C3'-C2'	-6.62	95.98	102.60
57	BB	2803	G	C8-N9-C1'	6.62	135.61	127.00
9	AR	60	ARG	NE-CZ-NH2	6.62	123.61	120.30
21	AA	240	G	O4'-C1'-N9	6.62	113.50	108.20
21	AA	771	G	C5-C6-O6	-6.62	124.63	128.60
57	BB	679	C	N1-C2-O2	-6.62	114.93	118.90
57	BB	1454	C	C6-N1-C2	6.62	122.95	120.30
57	BB	1739	A	N3-C4-C5	-6.62	122.17	126.80
57	BB	2453	A	N3-C4-C5	-6.62	122.17	126.80
57	BB	2745	C	N3-C4-N4	6.62	122.63	118.00
21	AA	199	A	N1-C2-N3	-6.62	125.99	129.30
21	AA	500	G	N3-C4-N9	6.62	129.97	126.00
21	AA	910	C	C2-N3-C4	-6.62	116.59	119.90
21	AA	1166	G	C6-C5-N7	-6.62	126.43	130.40
57	BB	348	A	C6-C5-N7	-6.62	127.67	132.30
57	BB	505	A	O4'-C1'-N9	6.62	113.49	108.20
57	BB	555	G	N3-C4-C5	-6.62	125.29	128.60
57	BB	2004	G	C5-C6-O6	-6.62	124.63	128.60
57	BB	2554	U	C5-C4-O4	-6.62	121.93	125.90
57	BB	2585	U	N3-C4-O4	6.62	124.03	119.40
21	AA	183	C	N3-C4-C5	-6.62	119.25	121.90
21	AA	864	A	C6-C5-N7	-6.62	127.67	132.30
57	BB	353	C	C1'-O4'-C4'	6.62	115.19	109.90
57	BB	942	G	C4-N9-C1'	-6.62	117.90	126.50
57	BB	2529	G	C6-N1-C2	6.62	129.07	125.10
21	AA	208	U	O4'-C1'-N1	6.62	113.49	108.20
21	AA	246	A	C5'-C4'-O4'	6.62	117.04	109.10
21	AA	1437	A	C8-N9-C4	-6.62	103.15	105.80
26	AV	14	A	C4-C5-N7	-6.62	107.39	110.70
57	BB	207	A	N9-C4-C5	6.62	108.45	105.80
57	BB	497	A	C5-C6-N1	-6.62	114.39	117.70
57	BB	948	C	N3-C4-C5	-6.62	119.25	121.90
57	BB	1305	C	C3'-C2'-C1'	-6.62	96.21	101.50
57	BB	1561	C	C4-C5-C6	-6.62	114.09	117.40
6	AO	57	ARG	NE-CZ-NH2	-6.61	116.99	120.30
6	AO	83	ARG	NE-CZ-NH1	6.61	123.61	120.30
21	AA	1112	C	N3-C2-O2	-6.61	117.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	48	C	C6-N1-C2	-6.61	117.66	120.30
57	BB	703	U	O4'-C1'-N1	6.61	113.49	108.20
57	BB	805	G	C6-C5-N7	-6.61	126.43	130.40
57	BB	1063	G	C4-C5-N7	-6.61	108.15	110.80
57	BB	1850	G	N1-C2-N3	-6.61	119.93	123.90
57	BB	1938	A	C6-C5-N7	-6.61	127.67	132.30
57	BB	8	C	C2-N3-C4	6.61	123.21	119.90
57	BB	1906	G	N1-C6-O6	6.61	123.87	119.90
57	BB	2887	A	P-O3'-C3'	-6.61	111.77	119.70
21	AA	71	A	N3-C4-C5	-6.61	122.17	126.80
21	AA	695	A	C5-N7-C8	6.61	107.21	103.90
21	AA	1215	G	C2-N3-C4	6.61	115.20	111.90
21	AA	1271	A	C4-C5-C6	6.61	120.31	117.00
21	AA	1373	G	C4-C5-C6	6.61	122.77	118.80
23	AW	42	C	N3-C4-C5	-6.61	119.26	121.90
57	BB	1241	A	N9-C4-C5	6.61	108.44	105.80
57	BB	1674	G	C5-C6-N1	-6.61	108.19	111.50
57	BB	2629	U	C3'-C2'-C1'	-6.61	96.21	101.50
1	AJ	65	TYR	CD1-CG-CD2	6.61	125.17	117.90
21	AA	741	G	C5'-C4'-C3'	6.61	126.57	116.00
21	AA	812	G	C5-N7-C8	6.61	107.61	104.30
57	BB	1401	G	C2-N3-C4	6.61	115.20	111.90
57	BB	2289	G	C2-N3-C4	6.61	115.20	111.90
57	BB	2400	G	O4'-C1'-N9	6.61	113.49	108.20
57	BB	2762	C	C5-C4-N4	-6.61	115.57	120.20
21	AA	7	A	N9-C4-C5	-6.61	103.16	105.80
21	AA	914	A	C5-C6-N1	-6.61	114.40	117.70
26	AV	41	C	P-O3'-C3'	6.61	127.63	119.70
57	BB	209	C	C5-C6-N1	6.61	124.30	121.00
57	BB	551	G	C6-C5-N7	-6.61	126.44	130.40
57	BB	813	U	P-O3'-C3'	-6.61	111.77	119.70
57	BB	882	G	C2-N3-C4	6.61	115.20	111.90
57	BB	1544	A	C4-C5-N7	-6.61	107.40	110.70
57	BB	1745	A	C5-N7-C8	6.61	107.20	103.90
57	BB	2485	G	O4'-C1'-N9	6.61	113.49	108.20
20	AI	79	ARG	NE-CZ-NH2	-6.61	117.00	120.30
21	AA	116	A	N9-C4-C5	6.61	108.44	105.80
21	AA	372	C	C2-N3-C4	-6.61	116.60	119.90
21	AA	1491	G	N9-C1'-C2'	-6.61	104.73	112.00
35	BP	38	ARG	NE-CZ-NH1	-6.61	117.00	120.30
57	BB	539	G	C4-C5-N7	6.61	113.44	110.80
57	BB	667	U	N3-C4-C5	-6.61	110.64	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	927	A	N1-C6-N6	6.61	122.56	118.60
57	BB	1277	G	O4'-C1'-N9	6.61	113.48	108.20
57	BB	1296	G	N7-C8-N9	6.61	116.40	113.10
57	BB	1545	A	N7-C8-N9	6.61	117.10	113.80
57	BB	2158	A	C5-C6-N6	-6.61	118.42	123.70
57	BB	2495	G	N3-C2-N2	6.61	124.52	119.90
57	BB	2615	U	C3'-C2'-C1'	6.61	106.78	101.50
21	AA	455	G	O3'-P-O5'	-6.60	91.45	104.00
21	AA	1306	A	C2-N3-C4	-6.60	107.30	110.60
57	BB	714	U	C2-N3-C4	6.60	130.96	127.00
57	BB	2258	C	C6-N1-C2	-6.60	117.66	120.30
58	BA	96	G	C5-C6-O6	-6.60	124.64	128.60
21	AA	522	C	O4'-C1'-N1	6.60	113.48	108.20
21	AA	691	G	C6-C5-N7	-6.60	126.44	130.40
21	AA	1139	G	O4'-C1'-N9	6.60	113.48	108.20
21	AA	1312	G	C5-C6-O6	-6.60	124.64	128.60
22	AY	64	A	C3'-C2'-C1'	-6.60	96.22	101.50
33	BN	91	ALA	N-CA-CB	6.60	119.34	110.10
57	BB	376	G	C2-N3-C4	6.60	115.20	111.90
57	BB	438	G	C5-C6-O6	-6.60	124.64	128.60
57	BB	563	A	C4-C5-C6	6.60	120.30	117.00
57	BB	625	G	N1-C2-N3	-6.60	119.94	123.90
57	BB	1053	C	C3'-C2'-C1'	-6.60	96.22	101.50
57	BB	2068	U	N3-C4-O4	6.60	124.02	119.40
57	BB	2624	G	C6-C5-N7	-6.60	126.44	130.40
1	AJ	9	ARG	NE-CZ-NH1	6.60	123.60	120.30
21	AA	398	U	C2-N3-C4	6.60	130.96	127.00
21	AA	495	A	P-O3'-C3'	6.60	127.62	119.70
57	BB	463	G	N7-C8-N9	-6.60	109.80	113.10
57	BB	470	A	C4'-C3'-C2'	-6.60	96.00	102.60
57	BB	1482	G	N3-C4-C5	-6.60	125.30	128.60
57	BB	2070	A	C5-C6-N6	-6.60	118.42	123.70
57	BB	2294	G	C5-N7-C8	6.60	107.60	104.30
21	AA	16	A	N7-C8-N9	6.60	117.10	113.80
21	AA	267	C	N1-C2-N3	-6.60	114.58	119.20
21	AA	578	C	O4'-C1'-N1	6.60	113.48	108.20
57	BB	187	G	N1-C2-N3	-6.60	119.94	123.90
57	BB	397	U	O4'-C1'-N1	6.60	113.48	108.20
57	BB	604	G	C8-N9-C4	6.60	109.04	106.40
57	BB	849	A	C3'-C2'-C1'	-6.60	96.22	101.50
57	BB	852	U	N1-C2-N3	-6.60	110.94	114.90
57	BB	910	A	C6-N1-C2	6.60	122.56	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1910	G	C6-C5-N7	-6.60	126.44	130.40
57	BB	2142	A	C6-C5-N7	-6.60	127.68	132.30
57	BB	2278	A	N9-C4-C5	6.60	108.44	105.80
21	AA	478	A	C6-N1-C2	6.60	122.56	118.60
21	AA	512	U	N3-C4-O4	6.60	124.02	119.40
22	AY	30	G	C4-C5-N7	-6.60	108.16	110.80
57	BB	170	U	C5-C4-O4	-6.60	121.94	125.90
57	BB	343	C	C3'-C2'-C1'	-6.60	96.22	101.50
57	BB	903	C	N3-C4-N4	6.60	122.62	118.00
57	BB	979	A	C5-C6-N6	-6.60	118.42	123.70
57	BB	1430	G	O4'-C1'-N9	6.60	113.48	108.20
57	BB	1678	A	C6-N1-C2	-6.60	114.64	118.60
21	AA	21	G	C8-N9-C4	-6.59	103.76	106.40
23	AW	22	G	C3'-C2'-C1'	-6.59	96.22	101.50
57	BB	424	G	N1-C2-N3	-6.59	119.94	123.90
57	BB	1149	G	C5-C6-O6	-6.59	124.64	128.60
57	BB	1372	U	N3-C4-C5	-6.59	110.64	114.60
57	BB	1980	G	C4-C5-N7	-6.59	108.16	110.80
57	BB	2568	U	C5-C4-O4	-6.59	121.94	125.90
58	BA	20	G	P-O3'-C3'	-6.59	111.79	119.70
58	BA	41	G	C4-C5-C6	6.59	122.76	118.80
21	AA	977	A	O4'-C1'-N9	6.59	113.47	108.20
27	B5	51	ASP	CB-CG-OD2	6.59	124.23	118.30
57	BB	114	U	C2-N1-C1'	6.59	125.61	117.70
57	BB	1017	G	C8-N9-C4	6.59	109.04	106.40
57	BB	1552	A	N9-C4-C5	-6.59	103.16	105.80
57	BB	1690	A	C4-C5-N7	6.59	114.00	110.70
21	AA	108	G	C3'-C2'-C1'	-6.59	96.23	101.50
21	AA	631	C	N3-C4-N4	6.59	122.61	118.00
21	AA	807	A	C2-N3-C4	-6.59	107.30	110.60
45	BC	134	ILE	N-CA-C	-6.59	93.20	111.00
57	BB	1991	U	C5-C4-O4	-6.59	121.94	125.90
57	BB	2230	G	O4'-C1'-N9	6.59	113.47	108.20
57	BB	2488	G	N1-C2-N3	-6.59	119.94	123.90
57	BB	2749	A	P-O3'-C3'	6.59	127.61	119.70
58	BA	73	A	C6-C5-N7	-6.59	127.69	132.30
20	AI	90	ASP	CB-CG-OD2	-6.59	112.37	118.30
21	AA	1280	A	O4'-C1'-N9	6.59	113.47	108.20
21	AA	1501	C	C4-C5-C6	6.59	120.69	117.40
26	AV	63	G	C5-C6-N1	-6.59	108.20	111.50
33	BN	94	TYR	CB-CG-CD2	-6.59	117.05	121.00
57	BB	177	G	C5-N7-C8	6.59	107.59	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	519	U	O4'-C1'-N1	6.59	113.47	108.20
57	BB	847	U	C5'-C4'-O4'	6.59	117.01	109.10
57	BB	1651	G	C6-C5-N7	-6.59	126.45	130.40
57	BB	1721	G	C4-C5-N7	-6.59	108.16	110.80
57	BB	1955	U	N3-C4-C5	-6.59	110.65	114.60
57	BB	2392	A	C5-N7-C8	6.59	107.19	103.90
57	BB	2741	A	O4'-C1'-N9	6.59	113.47	108.20
21	AA	642	A	N7-C8-N9	6.59	117.09	113.80
21	AA	1204	A	N1-C6-N6	6.59	122.55	118.60
21	AA	1390	U	O4'-C1'-N1	6.59	113.47	108.20
29	BJ	52	ASP	N-CA-CB	6.59	122.46	110.60
57	BB	983	A	C5-N7-C8	6.59	107.19	103.90
3	AL	8	ARG	NE-CZ-NH1	6.59	123.59	120.30
4	AM	22	TYR	CG-CD2-CE2	-6.59	116.03	121.30
21	AA	385	C	C4-C5-C6	-6.59	114.11	117.40
21	AA	920	U	C2-N3-C4	6.59	130.95	127.00
26	AV	75	C	N1-C2-N3	-6.59	114.59	119.20
29	BJ	132	HIS	N-CA-CB	-6.59	98.75	110.60
57	BB	132	G	C5-C6-O6	-6.59	124.65	128.60
57	BB	497	A	C6-C5-N7	-6.59	127.69	132.30
57	BB	651	G	C4-C5-N7	-6.59	108.17	110.80
57	BB	672	C	C1'-O4'-C4'	-6.59	104.63	109.90
57	BB	675	A	C4-C5-C6	6.59	120.29	117.00
57	BB	1540	G	C4-C5-N7	-6.59	108.17	110.80
57	BB	2265	U	C5-C4-O4	-6.59	121.95	125.90
57	BB	2323	G	C5-N7-C8	6.59	107.59	104.30
57	BB	485	C	N3-C4-N4	6.58	122.61	118.00
57	BB	759	G	N3-C2-N2	6.58	124.51	119.90
57	BB	2318	G	C3'-C2'-C1'	6.58	106.77	101.50
57	BB	2839	G	N3-C4-C5	6.58	131.89	128.60
58	BA	33	G	N7-C8-N9	-6.58	109.81	113.10
21	AA	154	U	C5-C6-N1	6.58	125.99	122.70
21	AA	760	G	C5-N7-C8	6.58	107.59	104.30
57	BB	307	G	N3-C4-C5	-6.58	125.31	128.60
57	BB	1372	U	C2-N3-C4	6.58	130.95	127.00
21	AA	27	G	C6-C5-N7	-6.58	126.45	130.40
21	AA	701	U	N3-C2-O2	6.58	126.81	122.20
21	AA	992	U	P-O3'-C3'	6.58	127.60	119.70
22	AY	57	G	C4'-C3'-C2'	6.58	109.18	102.60
57	BB	350	G	C6-C5-N7	-6.58	126.45	130.40
57	BB	1102	C	N3-C4-C5	-6.58	119.27	121.90
57	BB	2478	A	C4-C5-N7	-6.58	107.41	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2857	G	C6-N1-C2	6.58	129.05	125.10
58	BA	106	G	C3'-C2'-C1'	-6.58	96.23	101.50
21	AA	494	G	C8-N9-C4	-6.58	103.77	106.40
21	AA	1184	G	C5-C6-O6	-6.58	124.65	128.60
57	BB	889	C	O4'-C1'-N1	6.58	113.46	108.20
57	BB	1080	A	C2-N3-C4	6.58	113.89	110.60
57	BB	2444	G	C6-C5-N7	-6.58	126.45	130.40
57	BB	2530	A	C5-C6-N6	-6.58	118.44	123.70
21	AA	787	A	C4-C5-C6	6.58	120.29	117.00
56	BH	96	THR	CA-CB-CG2	-6.58	103.19	112.40
57	BB	119	A	N1-C6-N6	6.58	122.55	118.60
57	BB	456	C	C5'-C4'-C3'	-6.58	105.48	116.00
57	BB	1188	U	C5-C4-O4	-6.58	121.95	125.90
57	BB	1276	A	C6-C5-N7	-6.58	127.70	132.30
57	BB	1695	G	C6-N1-C2	6.58	129.05	125.10
57	BB	1888	G	O4'-C1'-N9	6.58	113.46	108.20
57	BB	2084	C	C4-C5-C6	6.58	120.69	117.40
57	BB	2100	G	C6-C5-N7	-6.58	126.45	130.40
57	BB	2801	G	O4'-C1'-N9	6.58	113.46	108.20
57	BB	459	U	C5-C6-N1	6.58	125.99	122.70
57	BB	2126	A	C4-C5-N7	-6.58	107.41	110.70
58	BA	43	C	C2-N3-C4	-6.58	116.61	119.90
21	AA	39	G	N3-C2-N2	6.58	124.50	119.90
21	AA	183	C	C6-N1-C1'	-6.58	112.91	120.80
21	AA	354	G	C6-C5-N7	-6.58	126.45	130.40
21	AA	523	A	C5-C6-N1	-6.58	114.41	117.70
21	AA	666	G	C5-C6-N1	6.58	114.79	111.50
21	AA	1078	U	P-O5'-C5'	-6.58	110.38	120.90
57	BB	481	G	N3-C2-N2	6.58	124.50	119.90
57	BB	684	G	P-O3'-C3'	-6.58	111.81	119.70
21	AA	458	U	C5-C4-O4	-6.57	121.96	125.90
23	AW	72	C	N3-C4-N4	6.57	122.60	118.00
26	AV	61	C	C2-N1-C1'	-6.57	111.57	118.80
55	BG	82	PHE	C-N-CA	6.57	138.13	121.70
57	BB	78	U	N1-C2-O2	-6.57	118.20	122.80
57	BB	455	C	C2-N3-C4	6.57	123.19	119.90
57	BB	856	G	C6-C5-N7	-6.57	126.46	130.40
57	BB	868	U	N3-C4-C5	-6.57	110.66	114.60
57	BB	1897	G	C2-N3-C4	6.57	115.19	111.90
57	BB	2178	C	N3-C4-C5	-6.57	119.27	121.90
57	BB	2488	G	P-O5'-C5'	6.57	131.42	120.90
58	BA	27	C	O4'-C4'-C3'	-6.57	97.43	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	153	C	C1'-O4'-C4'	-6.57	104.64	109.90
23	AW	67	C	C3'-C2'-C1'	-6.57	96.24	101.50
21	AA	289	G	C5-C6-N1	-6.57	108.22	111.50
21	AA	298	A	C8-N9-C4	6.57	108.43	105.80
21	AA	641	U	C2-N3-C4	-6.57	123.06	127.00
57	BB	72	U	O4'-C1'-N1	6.57	113.46	108.20
57	BB	136	G	P-O3'-C3'	-6.57	111.82	119.70
57	BB	362	A	N9-C4-C5	6.57	108.43	105.80
57	BB	396	G	N3-C2-N2	6.57	124.50	119.90
57	BB	476	G	C2-N3-C4	-6.57	108.61	111.90
57	BB	747	U	P-O5'-C5'	6.57	131.41	120.90
57	BB	1289	C	C5-C4-N4	-6.57	115.60	120.20
57	BB	1370	C	C5-C4-N4	-6.57	115.60	120.20
57	BB	1508	A	C1'-O4'-C4'	-6.57	104.64	109.90
57	BB	2388	A	O4'-C1'-N9	6.57	113.46	108.20
57	BB	2496	C	N3-C4-N4	6.57	122.60	118.00
21	AA	147	G	O4'-C1'-N9	6.57	113.45	108.20
21	AA	645	G	C4-C5-N7	-6.57	108.17	110.80
22	AY	2	C	C4-C5-C6	6.57	120.69	117.40
34	BO	7	ARG	NE-CZ-NH2	-6.57	117.02	120.30
57	BB	1068	G	C5'-C4'-O4'	6.57	116.98	109.10
57	BB	1689	A	N1-C6-N6	6.57	122.54	118.60
2	AK	126	ARG	NH1-CZ-NH2	6.57	126.62	119.40
21	AA	48	C	C5-C6-N1	-6.57	117.72	121.00
21	AA	183	C	C2-N3-C4	6.57	123.18	119.90
21	AA	909	A	C8-N9-C4	-6.57	103.17	105.80
21	AA	1422	G	C5-C6-O6	-6.57	124.66	128.60
21	AA	1518	A	C5-N7-C8	6.57	107.18	103.90
21	AA	1521	C	N3-C4-N4	6.57	122.60	118.00
22	AY	10	G	C4-C5-C6	6.57	122.74	118.80
26	AV	75	C	C5-C6-N1	6.57	124.28	121.00
57	BB	1009	A	C4-C5-C6	6.57	120.28	117.00
57	BB	1744	A	N1-C2-N3	6.57	132.58	129.30
57	BB	2006	C	N1-C2-N3	-6.57	114.60	119.20
57	BB	2101	A	C5-N7-C8	6.57	107.18	103.90
57	BB	2135	A	O4'-C1'-N9	6.57	113.45	108.20
57	BB	2310	C	C5-C6-N1	-6.57	117.72	121.00
57	BB	2805	C	C4-C5-C6	6.57	120.68	117.40
21	AA	47	C	N3-C4-N4	6.57	122.60	118.00
21	AA	86	G	C5'-C4'-O4'	6.57	116.98	109.10
21	AA	186	C	C2-N3-C4	6.57	123.18	119.90
21	AA	210	C	N1-C2-N3	6.57	123.80	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1022	A	C8-N9-C4	6.57	108.43	105.80
21	AA	1075	U	C2-N1-C1'	-6.57	109.82	117.70
26	AV	45	G	C1'-O4'-C4'	6.57	115.15	109.90
57	BB	1812	U	C5-C4-O4	-6.57	121.96	125.90
57	BB	1925	C	C4-C5-C6	6.57	120.68	117.40
57	BB	2650	U	C5-C4-O4	-6.57	121.96	125.90
21	AA	841	C	C4'-C3'-C2'	-6.56	96.04	102.60
21	AA	1446	A	C6-C5-N7	-6.56	127.70	132.30
57	BB	1682	G	C4-C5-N7	-6.56	108.17	110.80
57	BB	1900	A	N3-C4-N9	6.56	132.65	127.40
57	BB	2154	A	C5-C6-N6	-6.56	118.45	123.70
21	AA	115	G	C5-C6-O6	-6.56	124.66	128.60
21	AA	121	U	C2-N1-C1'	6.56	125.57	117.70
21	AA	571	U	N1-C2-N3	-6.56	110.96	114.90
21	AA	771	G	C5-C6-N1	-6.56	108.22	111.50
21	AA	833	G	C4-N9-C1'	-6.56	117.97	126.50
21	AA	1379	G	C4-C5-N7	-6.56	108.17	110.80
22	AY	66	A	N1-C6-N6	-6.56	114.66	118.60
23	AW	63	G	C8-N9-C4	-6.56	103.78	106.40
57	BB	7	G	N1-C2-N2	6.56	122.11	116.20
57	BB	73	A	C5-C6-N6	-6.56	118.45	123.70
57	BB	147	C	N3-C4-C5	-6.56	119.28	121.90
57	BB	1204	A	N9-C4-C5	-6.56	103.17	105.80
57	BB	1419	A	C5-C6-N6	-6.56	118.45	123.70
57	BB	1531	C	C6-N1-C2	-6.56	117.67	120.30
57	BB	1572	A	N7-C8-N9	6.56	117.08	113.80
57	BB	1700	A	N9-C4-C5	-6.56	103.17	105.80
57	BB	1717	A	C5-C6-N1	-6.56	114.42	117.70
57	BB	2193	G	C5-C6-N1	-6.56	108.22	111.50
57	BB	2221	G	C6-C5-N7	-6.56	126.46	130.40
57	BB	2524	G	C6-N1-C2	6.56	129.04	125.10
21	AA	703	G	N1-C2-N2	6.56	122.11	116.20
21	AA	1161	C	C5-C6-N1	6.56	124.28	121.00
21	AA	1394	A	C5-N7-C8	6.56	107.18	103.90
57	BB	265	A	C2-N3-C4	-6.56	107.32	110.60
57	BB	1083	U	C2-N3-C4	-6.56	123.06	127.00
57	BB	1597	A	N1-C2-N3	6.56	132.58	129.30
57	BB	2670	A	C4-C5-C6	6.56	120.28	117.00
57	BB	2814	A	N1-C6-N6	6.56	122.54	118.60
57	BB	2822	G	N1-C2-N3	-6.56	119.96	123.90
21	AA	511	C	P-O5'-C5'	-6.56	110.41	120.90
21	AA	786	G	O4'-C1'-N9	6.56	113.45	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1086	U	N1-C2-N3	-6.56	110.96	114.90
21	AA	1165	U	C1'-O4'-C4'	6.56	115.15	109.90
21	AA	1179	A	C4-C5-C6	6.56	120.28	117.00
57	BB	495	G	C6-C5-N7	-6.56	126.46	130.40
57	BB	520	G	C2-N3-C4	6.56	115.18	111.90
57	BB	735	A	C3'-C2'-C1'	6.56	106.75	101.50
57	BB	943	A	N1-C2-N3	6.56	132.58	129.30
57	BB	2124	G	N3-C4-C5	6.56	131.88	128.60
1	AJ	9	ARG	NE-CZ-NH2	-6.56	117.02	120.30
21	AA	427	U	O4'-C1'-N1	6.56	113.45	108.20
21	AA	604	G	C4'-C3'-C2'	-6.56	96.04	102.60
21	AA	1259	C	C2-N3-C4	6.56	123.18	119.90
21	AA	1450	U	N3-C4-O4	6.56	123.99	119.40
22	AY	70	C	N1-C2-O2	6.56	122.83	118.90
24	AX	13	A	C4-C5-N7	-6.56	107.42	110.70
57	BB	618	G	N1-C6-O6	6.56	123.83	119.90
57	BB	789	A	C6-C5-N7	-6.56	127.71	132.30
57	BB	964	C	O4'-C1'-N1	6.56	113.45	108.20
57	BB	1052	C	C2-N3-C4	6.56	123.18	119.90
57	BB	1988	G	N1-C6-O6	6.56	123.83	119.90
57	BB	2383	G	C5-N7-C8	6.56	107.58	104.30
57	BB	2708	G	C5-N7-C8	6.56	107.58	104.30
21	AA	1279	G	N3-C2-N2	6.56	124.49	119.90
54	BF	90	LEU	N-CA-CB	6.56	123.51	110.40
57	BB	629	G	N3-C4-C5	6.56	131.88	128.60
57	BB	655	A	C5-N7-C8	-6.56	100.62	103.90
57	BB	778	G	N7-C8-N9	-6.56	109.82	113.10
57	BB	1581	G	C5-C6-O6	-6.56	124.67	128.60
21	AA	739	C	C1'-O4'-C4'	-6.55	104.66	109.90
21	AA	1220	G	C5'-C4'-C3'	-6.55	105.51	116.00
21	AA	1449	C	C6-N1-C2	-6.55	117.68	120.30
34	BO	102	ARG	CB-CA-C	-6.55	97.29	110.40
57	BB	2105	U	C4'-C3'-C2'	-6.55	96.05	102.60
57	BB	2570	G	N3-C4-C5	6.55	131.88	128.60
21	AA	188	C	C2-N3-C4	6.55	123.18	119.90
21	AA	502	A	O4'-C1'-N9	6.55	113.44	108.20
21	AA	650	G	C5-C6-O6	-6.55	124.67	128.60
21	AA	802	A	C5-C6-N6	-6.55	118.46	123.70
21	AA	1311	A	C5-C6-N1	-6.55	114.42	117.70
57	BB	99	U	C6-N1-C2	-6.55	117.07	121.00
57	BB	1932	A	C2-N3-C4	-6.55	107.32	110.60
57	BB	2330	G	N3-C4-C5	-6.55	125.32	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1166	G	N3-C4-C5	-6.55	125.32	128.60
57	BB	248	G	C4-C5-N7	6.55	113.42	110.80
57	BB	354	A	C4-C5-C6	6.55	120.28	117.00
57	BB	381	G	N1-C2-N2	-6.55	110.30	116.20
57	BB	1114	C	C5-C4-N4	-6.55	115.61	120.20
57	BB	1310	G	O4'-C1'-N9	6.55	113.44	108.20
57	BB	2356	U	N1-C2-N3	6.55	118.83	114.90
57	BB	2575	C	N3-C4-C5	-6.55	119.28	121.90
21	AA	84	U	C5-C6-N1	6.55	125.97	122.70
21	AA	91	U	N3-C2-O2	6.55	126.78	122.20
21	AA	344	A	O4'-C1'-N9	-6.55	102.96	108.20
21	AA	1225	A	N3-C4-C5	-6.55	122.22	126.80
21	AA	1467	C	N3-C4-N4	6.55	122.58	118.00
22	AY	55	U	C5-C4-O4	-6.55	121.97	125.90
57	BB	35	G	N1-C2-N3	-6.55	119.97	123.90
57	BB	205	G	C5-C6-N1	-6.55	108.22	111.50
57	BB	858	G	C5-C6-N1	-6.55	108.22	111.50
57	BB	1171	G	C8-N9-C4	-6.55	103.78	106.40
57	BB	1334	G	N3-C4-C5	6.55	131.88	128.60
21	AA	27	G	N7-C8-N9	6.55	116.37	113.10
21	AA	840	C	C3'-C2'-C1'	6.55	106.74	101.50
57	BB	383	C	C4-C5-C6	6.55	120.67	117.40
57	BB	1262	A	C6-N1-C2	6.55	122.53	118.60
57	BB	1287	A	N1-C2-N3	6.55	132.57	129.30
57	BB	1909	C	C5-C6-N1	-6.55	117.73	121.00
3	AL	13	ARG	NE-CZ-NH1	-6.55	117.03	120.30
21	AA	1067	A	N9-C4-C5	-6.55	103.18	105.80
21	AA	1505	G	N1-C6-O6	6.55	123.83	119.90
57	BB	226	A	C5-C6-N6	-6.55	118.46	123.70
57	BB	1711	A	N7-C8-N9	-6.55	110.53	113.80
57	BB	2162	G	C6-C5-N7	-6.55	126.47	130.40
57	BB	2272	U	C5-C4-O4	-6.55	121.97	125.90
21	AA	402	G	N7-C8-N9	-6.54	109.83	113.10
21	AA	540	G	N9-C1'-C2'	-6.54	104.80	112.00
21	AA	832	G	C4'-C3'-C2'	-6.54	96.06	102.60
57	BB	274	C	N3-C4-N4	6.54	122.58	118.00
57	BB	679	C	C5-C4-N4	-6.54	115.62	120.20
57	BB	1232	G	C8-N9-C4	-6.54	103.78	106.40
57	BB	1704	C	O4'-C1'-N1	6.54	113.44	108.20
21	AA	936	C	N1-C2-N3	6.54	123.78	119.20
57	BB	362	A	N9-C1'-C2'	-6.54	104.80	112.00
57	BB	536	G	N3-C4-C5	6.54	131.87	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1673	G	C6-C5-N7	-6.54	126.47	130.40
57	BB	1759	A	C8-N9-C4	-6.54	103.18	105.80
57	BB	2775	G	C5-C6-O6	-6.54	124.67	128.60
57	BB	2820	A	N3-C4-C5	6.54	131.38	126.80
21	AA	40	C	C5'-C4'-C3'	-6.54	105.53	116.00
21	AA	112	G	C6-C5-N7	-6.54	126.47	130.40
21	AA	347	G	N9-C1'-C2'	-6.54	104.80	112.00
21	AA	538	G	N9-C4-C5	6.54	108.02	105.40
21	AA	1314	C	O4'-C1'-N1	6.54	113.43	108.20
57	BB	95	A	N1-C6-N6	6.54	122.52	118.60
57	BB	168	G	N3-C2-N2	6.54	124.48	119.90
57	BB	189	G	C4-C5-N7	-6.54	108.18	110.80
57	BB	316	C	O4'-C4'-C3'	-6.54	97.46	104.00
57	BB	458	G	C3'-C2'-C1'	-6.54	96.27	101.50
57	BB	742	A	C1'-O4'-C4'	-6.54	104.67	109.90
57	BB	1107	G	C8-N9-C1'	6.54	135.50	127.00
57	BB	1278	C	C5-C6-N1	6.54	124.27	121.00
57	BB	1415	U	C1'-O4'-C4'	6.54	115.13	109.90
57	BB	1576	U	C5-C4-O4	-6.54	121.97	125.90
57	BB	2135	A	N9-C4-C5	6.54	108.42	105.80
57	BB	2161	C	C5-C4-N4	-6.54	115.62	120.20
57	BB	2364	C	N3-C4-N4	6.54	122.58	118.00
57	BB	2499	C	C2-N3-C4	6.54	123.17	119.90
57	BB	2613	U	N1-C2-N3	-6.54	110.98	114.90
21	AA	495	A	C4-C5-C6	6.54	120.27	117.00
21	AA	901	A	C4'-C3'-C2'	6.54	109.14	102.60
57	BB	286	U	N1-C2-O2	-6.54	118.22	122.80
57	BB	531	C	N1-C2-N3	-6.54	114.62	119.20
57	BB	964	C	C5-C6-N1	6.54	124.27	121.00
57	BB	1532	A	C5-C6-N1	-6.54	114.43	117.70
57	BB	1619	G	O4'-C1'-N9	6.54	113.43	108.20
57	BB	2115	G	C6-N1-C2	6.54	129.02	125.10
57	BB	2143	C	N3-C4-C5	-6.54	119.28	121.90
57	BB	2303	G	N1-C6-O6	6.54	123.82	119.90
4	AM	28	ARG	NE-CZ-NH2	-6.54	117.03	120.30
15	AD	193	ASP	CB-CG-OD1	6.54	124.19	118.30
21	AA	714	G	C5-C6-N1	6.54	114.77	111.50
21	AA	1001	C	C4-C5-C6	-6.54	114.13	117.40
21	AA	1405	G	C4-C5-N7	6.54	113.42	110.80
57	BB	347	A	N3-C4-N9	6.54	132.63	127.40
57	BB	495	G	C4-C5-C6	6.54	122.72	118.80
57	BB	1132	U	P-O3'-C3'	6.54	127.55	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1490	A	C5-C6-N6	-6.54	118.47	123.70
57	BB	2315	G	N3-C4-N9	-6.54	122.08	126.00
57	BB	990	A	C5-N7-C8	6.54	107.17	103.90
26	AV	34	C	C2-N3-C4	6.54	123.17	119.90
26	AV	51	C	C5-C4-N4	-6.54	115.63	120.20
52	BD	141	ARG	NE-CZ-NH2	6.54	123.57	120.30
57	BB	563	A	C6-C5-N7	-6.54	127.72	132.30
57	BB	594	U	C5-C6-N1	-6.54	119.43	122.70
57	BB	926	G	C8-N9-C1'	6.54	135.50	127.00
57	BB	2804	U	N3-C4-C5	6.54	118.52	114.60
57	BB	2894	G	C8-N9-C4	-6.54	103.78	106.40
21	AA	221	C	P-O3'-C3'	6.53	127.54	119.70
21	AA	596	A	C4-C5-C6	6.53	120.27	117.00
21	AA	782	A	C5-C6-N1	-6.53	114.43	117.70
21	AA	916	U	C5'-C4'-O4'	6.53	116.94	109.10
21	AA	1365	G	C8-N9-C4	-6.53	103.79	106.40
23	AW	26	A	C6-C5-N7	-6.53	127.73	132.30
34	BO	49	VAL	CG1-CB-CG2	-6.53	100.45	110.90
57	BB	213	A	N9-C4-C5	6.53	108.41	105.80
57	BB	365	U	C2-N3-C4	6.53	130.92	127.00
57	BB	979	A	C5-C6-N1	-6.53	114.43	117.70
57	BB	1003	G	O4'-C1'-N9	6.53	113.43	108.20
57	BB	1237	A	C6-C5-N7	-6.53	127.73	132.30
57	BB	1745	A	O4'-C1'-N9	6.53	113.43	108.20
57	BB	2035	G	N3-C2-N2	6.53	124.47	119.90
57	BB	2754	U	N1-C2-O2	-6.53	118.23	122.80
21	AA	44	A	O4'-C1'-N9	6.53	113.43	108.20
21	AA	405	U	P-O3'-C3'	6.53	127.54	119.70
57	BB	1784	A	C5-C6-N6	-6.53	118.47	123.70
57	BB	1942	C	N3-C4-N4	6.53	122.57	118.00
57	BB	2287	A	C5-C6-N1	-6.53	114.43	117.70
57	BB	2658	C	O4'-C1'-N1	6.53	113.43	108.20
16	AE	88	HIS	N-CA-CB	6.53	122.36	110.60
21	AA	9	G	N3-C4-N9	-6.53	122.08	126.00
21	AA	707	U	C3'-C2'-C1'	6.53	106.72	101.50
21	AA	1027	C	C6-N1-C2	-6.53	117.69	120.30
21	AA	1302	C	N1-C2-O2	6.53	122.82	118.90
57	BB	134	G	N3-C4-C5	-6.53	125.33	128.60
57	BB	213	A	C4-C5-C6	6.53	120.27	117.00
57	BB	1189	A	N1-C6-N6	-6.53	114.68	118.60
57	BB	1382	G	N3-C4-C5	-6.53	125.33	128.60
57	BB	1808	A	C6-C5-N7	-6.53	127.73	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2165	C	C2-N1-C1'	6.53	125.98	118.80
57	BB	2179	C	C5-C6-N1	6.53	124.27	121.00
57	BB	2401	U	O4'-C1'-N1	6.53	113.42	108.20
57	BB	2655	G	C8-N9-C4	-6.53	103.79	106.40
58	BA	28	C	C5-C4-N4	-6.53	115.63	120.20
21	AA	81	A	C5-C6-N6	-6.53	118.48	123.70
21	AA	246	A	C8-N9-C4	-6.53	103.19	105.80
57	BB	574	A	C6-C5-N7	-6.53	127.73	132.30
57	BB	1972	G	C4-C5-C6	6.53	122.72	118.80
21	AA	94	G	N1-C2-N3	-6.53	119.98	123.90
21	AA	500	G	C4-C5-C6	6.53	122.72	118.80
21	AA	787	A	C5-C6-N1	-6.53	114.44	117.70
21	AA	860	A	C6-C5-N7	-6.53	127.73	132.30
23	AW	28	G	C6-N1-C2	6.53	129.02	125.10
57	BB	514	A	N1-C6-N6	6.53	122.52	118.60
57	BB	1027	A	C5-C6-N1	-6.53	114.44	117.70
57	BB	1393	A	C6-C5-N7	-6.53	127.73	132.30
57	BB	1559	U	N1-C2-N3	-6.53	110.98	114.90
57	BB	1729	U	C2-N3-C4	6.53	130.92	127.00
57	BB	1768	C	N3-C4-C5	-6.53	119.29	121.90
12	AU	16	ARG	NE-CZ-NH2	-6.53	117.04	120.30
21	AA	462	G	C2-N3-C4	6.53	115.16	111.90
21	AA	469	C	O4'-C1'-N1	6.53	113.42	108.20
21	AA	1435	G	C6-C5-N7	-6.53	126.48	130.40
57	BB	74	A	N3-C4-C5	-6.53	122.23	126.80
57	BB	75	G	C5-N7-C8	-6.53	101.04	104.30
57	BB	77	G	N9-C4-C5	6.53	108.01	105.40
57	BB	281	C	N3-C4-C5	-6.53	119.29	121.90
57	BB	2110	G	O4'-C1'-N9	6.53	113.42	108.20
57	BB	2315	G	O4'-C1'-N9	6.53	113.42	108.20
57	BB	2413	G	N9-C4-C5	-6.53	102.79	105.40
57	BB	346	A	C3'-C2'-C1'	-6.52	96.28	101.50
57	BB	749	A	N1-C2-N3	6.52	132.56	129.30
57	BB	1781	U	C5-C4-O4	-6.52	121.98	125.90
21	AA	122	G	C6-N1-C2	6.52	129.01	125.10
21	AA	160	A	OP1-P-OP2	-6.52	109.81	119.60
21	AA	260	G	N7-C8-N9	6.52	116.36	113.10
21	AA	447	G	N3-C4-N9	6.52	129.91	126.00
21	AA	1094	G	O4'-C1'-N9	6.52	113.42	108.20
46	BZ	15	ARG	NE-CZ-NH1	6.52	123.56	120.30
57	BB	526	A	N9-C4-C5	6.52	108.41	105.80
57	BB	940	G	C8-N9-C4	6.52	109.01	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2048	G	N9-C4-C5	6.52	108.01	105.40
21	AA	120	A	C5-C6-N6	-6.52	118.48	123.70
21	AA	351	G	C4-C5-C6	6.52	122.71	118.80
21	AA	415	A	C5-C6-N1	-6.52	114.44	117.70
21	AA	776	G	P-O3'-C3'	6.52	127.53	119.70
21	AA	1117	A	C5-C6-N6	-6.52	118.48	123.70
57	BB	2793	C	N3-C4-C5	-6.52	119.29	121.90
21	AA	328	C	C2'-C3'-O3'	6.52	124.13	113.70
57	BB	445	C	N1-C2-O2	-6.52	114.99	118.90
57	BB	717	C	C5'-C4'-O4'	6.52	116.92	109.10
57	BB	803	U	C5-C6-N1	6.52	125.96	122.70
57	BB	1551	A	C5-N7-C8	6.52	107.16	103.90
57	BB	1557	C	C5-C4-N4	-6.52	115.64	120.20
57	BB	1793	C	O4'-C1'-N1	6.52	113.42	108.20
57	BB	1906	G	C4'-C3'-C2'	-6.52	96.08	102.60
57	BB	2780	G	N1-C2-N3	-6.52	119.99	123.90
57	BB	2803	G	C4-N9-C1'	-6.52	118.03	126.50
58	BA	11	C	C6-N1-C2	-6.52	117.69	120.30
21	AA	177	G	N7-C8-N9	6.52	116.36	113.10
21	AA	335	C	O4'-C1'-N1	6.52	113.41	108.20
21	AA	649	A	O4'-C1'-N9	6.52	113.41	108.20
57	BB	727	A	N9-C4-C5	-6.52	103.19	105.80
57	BB	1244	A	C4'-C3'-C2'	-6.52	96.08	102.60
57	BB	2197	U	P-O3'-C3'	6.52	127.52	119.70
57	BB	2266	A	C5'-C4'-O4'	6.52	116.92	109.10
57	BB	2365	G	N1-C6-O6	6.52	123.81	119.90
57	BB	2371	G	C5-C6-O6	-6.52	124.69	128.60
57	BB	2435	A	N9-C4-C5	6.52	108.41	105.80
21	AA	113	G	N3-C2-N2	6.52	124.46	119.90
21	AA	1169	A	O4'-C1'-N9	6.52	113.41	108.20
57	BB	1090	A	N9-C1'-C2'	-6.52	104.83	112.00
57	BB	2865	U	C2-N3-C4	6.52	130.91	127.00
21	AA	97	G	C6-N1-C2	6.51	129.01	125.10
21	AA	376	G	O4'-C1'-N9	6.51	113.41	108.20
50	B3	63	TYR	CB-CG-CD2	6.51	124.91	121.00
55	BG	93	TYR	CB-CG-CD2	-6.51	117.09	121.00
57	BB	199	A	C5-C6-N1	-6.51	114.44	117.70
57	BB	755	U	N3-C4-O4	6.51	123.96	119.40
57	BB	1055	G	N1-C6-O6	6.51	123.81	119.90
57	BB	1274	A	C4-C5-C6	6.51	120.26	117.00
57	BB	1553	A	N9-C4-C5	-6.51	103.19	105.80
57	BB	1885	A	C5-C6-N1	-6.51	114.44	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2136	G	C6-C5-N7	-6.51	126.49	130.40
57	BB	2456	C	C4-C5-C6	6.51	120.66	117.40
57	BB	2693	G	N1-C6-O6	6.51	123.81	119.90
57	BB	2751	G	C5'-C4'-C3'	-6.51	105.58	116.00
21	AA	880	C	C6-N1-C2	6.51	122.91	120.30
57	BB	26	G	N3-C2-N2	6.51	124.46	119.90
57	BB	213	A	C5-C6-N6	-6.51	118.49	123.70
57	BB	418	C	C4'-C3'-C2'	-6.51	96.09	102.60
57	BB	2174	C	N3-C2-O2	6.51	126.46	121.90
57	BB	2176	A	C5-C6-N6	-6.51	118.49	123.70
14	AC	53	ARG	NE-CZ-NH2	-6.51	117.04	120.30
21	AA	1055	A	C4-C5-N7	-6.51	107.44	110.70
21	AA	1465	A	C5-C6-N6	-6.51	118.49	123.70
57	BB	160	A	C5-C6-N1	-6.51	114.44	117.70
57	BB	374	A	C5-N7-C8	-6.51	100.64	103.90
57	BB	394	C	C5-C6-N1	6.51	124.25	121.00
57	BB	436	C	N1-C2-O2	6.51	122.81	118.90
57	BB	1257	C	C6-N1-C2	-6.51	117.70	120.30
57	BB	2273	A	N7-C8-N9	6.51	117.06	113.80
58	BA	36	C	N3-C2-O2	-6.51	117.34	121.90
21	AA	367	U	C5-C6-N1	6.51	125.95	122.70
21	AA	578	C	N3-C4-C5	-6.51	119.30	121.90
21	AA	766	A	N3-C4-N9	6.51	132.61	127.40
21	AA	890	G	O4'-C1'-C2'	-6.51	99.29	105.80
21	AA	1131	G	OP1-P-OP2	-6.51	109.83	119.60
23	AW	30	G	C4-C5-C6	6.51	122.71	118.80
57	BB	641	U	N1-C2-O2	-6.51	118.24	122.80
57	BB	899	A	C4-C5-C6	6.51	120.25	117.00
57	BB	2066	C	C6-N1-C2	6.51	122.90	120.30
21	AA	134	G	O4'-C1'-N9	6.51	113.41	108.20
21	AA	1450	U	C6-N1-C2	-6.51	117.09	121.00
57	BB	16	C	N3-C4-N4	6.51	122.56	118.00
57	BB	397	U	P-O5'-C5'	6.51	131.31	120.90
57	BB	1171	G	C2-N3-C4	6.51	115.15	111.90
57	BB	1713	A	C4-C5-C6	6.51	120.25	117.00
57	BB	1859	U	C5-C6-N1	-6.51	119.45	122.70
58	BA	30	C	C4-C5-C6	6.51	120.65	117.40
58	BA	104	A	O4'-C1'-N9	6.51	113.41	108.20
21	AA	502	A	C2-N3-C4	-6.51	107.35	110.60
21	AA	1277	C	C1'-O4'-C4'	-6.51	104.69	109.90
21	AA	1287	A	C6-N1-C2	6.51	122.50	118.60
21	AA	1363	A	C5-N7-C8	6.51	107.15	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1132	U	C4-C5-C6	6.51	123.60	119.70
57	BB	1622	G	C5-N7-C8	6.51	107.55	104.30
57	BB	1954	G	C5-C6-N1	-6.51	108.25	111.50
57	BB	2656	U	C6-N1-C2	-6.51	117.10	121.00
57	BB	2675	A	P-O3'-C3'	-6.51	111.89	119.70
57	BB	2737	G	C5'-C4'-C3'	-6.51	105.59	116.00
57	BB	2902	C	C6-N1-C2	6.51	122.90	120.30
6	AO	4	THR	CA-CB-CG2	6.50	121.50	112.40
21	AA	71	A	C4-C5-N7	-6.50	107.45	110.70
21	AA	302	G	C5-N7-C8	6.50	107.55	104.30
21	AA	890	G	C4'-C3'-C2'	-6.50	96.10	102.60
21	AA	1202	U	C5-C6-N1	6.50	125.95	122.70
57	BB	44	A	C5-C6-N1	-6.50	114.45	117.70
57	BB	629	G	C8-N9-C4	-6.50	103.80	106.40
57	BB	855	G	O4'-C1'-N9	6.50	113.40	108.20
57	BB	923	G	O5'-P-OP1	6.50	118.50	110.70
57	BB	1108	U	O4'-C1'-N1	6.50	113.40	108.20
57	BB	1544	A	O4'-C1'-N9	6.50	113.40	108.20
57	BB	1743	G	N3-C4-C5	-6.50	125.35	128.60
57	BB	1910	G	C5-C6-O6	-6.50	124.70	128.60
21	AA	431	A	O4'-C1'-N9	6.50	113.40	108.20
21	AA	1066	C	N3-C4-N4	6.50	122.55	118.00
21	AA	1079	G	N3-C4-N9	6.50	129.90	126.00
57	BB	195	A	C8-N9-C4	-6.50	103.20	105.80
57	BB	1967	C	C2-N3-C4	-6.50	116.65	119.90
57	BB	1972	G	C8-N9-C4	-6.50	103.80	106.40
57	BB	2506	U	C5-C6-N1	6.50	125.95	122.70
4	AM	2	ARG	NE-CZ-NH1	-6.50	117.05	120.30
57	BB	333	G	N1-C6-O6	6.50	123.80	119.90
57	BB	616	A	C5-C6-N6	-6.50	118.50	123.70
57	BB	685	A	N3-C4-C5	-6.50	122.25	126.80
57	BB	883	G	O4'-C1'-N9	6.50	113.40	108.20
57	BB	1330	C	P-O5'-C5'	-6.50	110.50	120.90
57	BB	1724	G	N3-C4-C5	-6.50	125.35	128.60
57	BB	1744	A	C6-C5-N7	-6.50	127.75	132.30
57	BB	2070	A	C5-C6-N1	-6.50	114.45	117.70
57	BB	2485	G	C5-N7-C8	-6.50	101.05	104.30
57	BB	2690	U	C6-N1-C1'	-6.50	112.10	121.20
21	AA	1187	G	C4-C5-N7	-6.50	108.20	110.80
21	AA	1279	G	C4-C5-N7	-6.50	108.20	110.80
22	AY	24	G	N9-C4-C5	6.50	108.00	105.40
57	BB	170	U	N1-C1'-C2'	-6.50	104.85	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	262	A	C5'-C4'-C3'	-6.50	105.60	116.00
57	BB	1110	G	N1-C2-N2	6.50	122.05	116.20
57	BB	1777	U	N1-C2-O2	-6.50	118.25	122.80
57	BB	2826	A	C4'-C3'-C2'	-6.50	96.10	102.60
21	AA	565	U	O4'-C1'-N1	6.50	113.40	108.20
21	AA	568	G	P-O5'-C5'	-6.50	110.50	120.90
21	AA	649	A	C5-C6-N6	-6.50	118.50	123.70
21	AA	777	A	C5-C6-N6	-6.50	118.50	123.70
57	BB	724	U	C6-N1-C2	6.50	124.90	121.00
57	BB	1068	G	C1'-O4'-C4'	-6.50	104.70	109.90
57	BB	1307	A	C6-C5-N7	-6.50	127.75	132.30
21	AA	653	U	N1-C2-N3	6.50	118.80	114.90
57	BB	846	U	O4'-C1'-C2'	-6.50	99.31	105.80
21	AA	92	U	N3-C4-O4	6.49	123.94	119.40
21	AA	709	U	C5-C4-O4	-6.49	122.00	125.90
21	AA	1471	U	P-O3'-C3'	-6.49	111.91	119.70
38	BS	13	SER	N-CA-CB	6.49	120.24	110.50
57	BB	477	A	C6-C5-N7	-6.49	127.75	132.30
57	BB	1142	A	N1-C6-N6	6.49	122.50	118.60
57	BB	1799	G	C6-C5-N7	-6.49	126.50	130.40
57	BB	2722	G	C2-N3-C4	6.49	115.15	111.90
57	BB	2890	G	P-O5'-C5'	6.49	131.29	120.90
57	BB	2892	G	N1-C6-O6	6.49	123.80	119.90
21	AA	579	A	C4-C5-C6	6.49	120.25	117.00
23	AW	30	G	C5-C6-N1	-6.49	108.25	111.50
26	AV	36	U	O4'-C1'-N1	6.49	113.39	108.20
57	BB	64	A	C6-C5-N7	-6.49	127.76	132.30
57	BB	634	C	N3-C4-N4	6.49	122.54	118.00
57	BB	784	G	N1-C2-N3	-6.49	120.00	123.90
57	BB	1954	G	N1-C2-N2	6.49	122.04	116.20
57	BB	2023	C	C6-N1-C2	6.49	122.90	120.30
57	BB	2189	U	C5-C4-O4	-6.49	122.00	125.90
57	BB	2231	U	C4'-C3'-C2'	-6.49	96.11	102.60
58	BA	39	A	C5-C6-N6	-6.49	118.51	123.70
5	AN	80	ARG	NE-CZ-NH1	6.49	123.55	120.30
21	AA	556	C	P-O3'-C3'	-6.49	111.91	119.70
21	AA	882	C	O4'-C1'-N1	6.49	113.39	108.20
21	AA	1315	U	C6-N1-C2	-6.49	117.11	121.00
21	AA	1442	G	C5-C6-O6	-6.49	124.71	128.60
21	AA	1498	U	N3-C4-C5	-6.49	110.71	114.60
22	AY	55	U	C2-N3-C4	-6.49	123.11	127.00
57	BB	374	A	C4-C5-C6	6.49	120.25	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1738	G	C5-C6-N1	-6.49	108.25	111.50
57	BB	1766	G	C1'-O4'-C4'	6.49	115.09	109.90
57	BB	2046	G	C3'-C2'-C1'	6.49	106.69	101.50
57	BB	2218	G	C8-N9-C4	-6.49	103.80	106.40
57	BB	2430	A	C4-C5-C6	6.49	120.25	117.00
21	AA	944	G	N3-C2-N2	6.49	124.44	119.90
21	AA	1045	C	C6-N1-C2	6.49	122.90	120.30
21	AA	1529	G	O4'-C1'-N9	6.49	113.39	108.20
57	BB	977	G	C4'-C3'-C2'	-6.49	96.11	102.60
57	BB	983	A	N9-C4-C5	-6.49	103.20	105.80
57	BB	1526	C	O5'-P-OP2	-6.49	99.86	105.70
57	BB	1774	C	C1'-O4'-C4'	6.49	115.09	109.90
57	BB	1863	G	C8-N9-C4	-6.49	103.81	106.40
57	BB	2135	A	C5-C6-N1	-6.49	114.46	117.70
57	BB	2235	G	N1-C2-N3	-6.49	120.01	123.90
57	BB	2802	G	C8-N9-C1'	6.49	135.44	127.00
58	BA	12	C	N3-C4-C5	-6.49	119.31	121.90
58	BA	68	C	N3-C4-N4	6.49	122.54	118.00
21	AA	640	A	C8-N9-C4	-6.49	103.20	105.80
21	AA	1512	U	N3-C2-O2	6.49	126.74	122.20
57	BB	707	G	C8-N9-C1'	6.49	135.43	127.00
57	BB	1183	U	O4'-C1'-N1	6.49	113.39	108.20
57	BB	1417	C	P-O3'-C3'	-6.49	111.92	119.70
57	BB	1983	G	N1-C2-N2	-6.49	110.36	116.20
21	AA	155	A	O4'-C1'-N9	6.49	113.39	108.20
21	AA	272	C	C4-C5-C6	-6.49	114.16	117.40
21	AA	345	C	O4'-C1'-N1	6.49	113.39	108.20
21	AA	821	G	C8-N9-C4	-6.49	103.81	106.40
21	AA	917	G	N1-C2-N3	-6.49	120.01	123.90
21	AA	1002	G	N3-C4-C5	-6.49	125.36	128.60
57	BB	2	G	C5'-C4'-C3'	-6.49	105.62	116.00
57	BB	185	G	P-O3'-C3'	-6.49	111.92	119.70
57	BB	1162	G	C8-N9-C4	-6.49	103.81	106.40
57	BB	1205	A	C2-N3-C4	-6.49	107.36	110.60
57	BB	1416	G	C6-N1-C2	6.49	128.99	125.10
57	BB	1562	U	C2-N3-C4	-6.49	123.11	127.00
57	BB	1608	A	N3-C4-C5	-6.49	122.26	126.80
57	BB	1704	C	C5-C4-N4	-6.49	115.66	120.20
57	BB	1991	U	C4'-C3'-C2'	-6.49	96.11	102.60
57	BB	2456	C	O4'-C1'-N1	6.49	113.39	108.20
57	BB	2705	A	C6-C5-N7	-6.49	127.76	132.30
57	BB	2859	G	C6-C5-N7	-6.49	126.51	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	368	U	O4'-C1'-N1	6.48	113.39	108.20
21	AA	451	A	C4-C5-C6	6.48	120.24	117.00
57	BB	740	C	C5-C4-N4	-6.48	115.66	120.20
57	BB	1135	C	C4-C5-C6	-6.48	114.16	117.40
21	AA	773	G	C4-N9-C1'	-6.48	118.07	126.50
21	AA	774	G	C6-C5-N7	-6.48	126.51	130.40
21	AA	809	G	O4'-C1'-N9	6.48	113.39	108.20
21	AA	850	U	C6-N1-C2	-6.48	117.11	121.00
57	BB	285	G	C6-C5-N7	-6.48	126.51	130.40
57	BB	543	G	N1-C6-O6	6.48	123.79	119.90
57	BB	548	G	C6-C5-N7	-6.48	126.51	130.40
57	BB	1593	A	C4-C5-N7	-6.48	107.46	110.70
57	BB	1988	G	N3-C2-N2	6.48	124.44	119.90
57	BB	2590	A	N1-C6-N6	6.48	122.49	118.60
58	BA	79	G	N1-C2-N3	-6.48	120.01	123.90
7	AP	31	ARG	NE-CZ-NH2	6.48	123.54	120.30
21	AA	412	A	C5-C6-N1	-6.48	114.46	117.70
21	AA	437	U	N3-C2-O2	6.48	126.74	122.20
21	AA	555	U	C5-C6-N1	6.48	125.94	122.70
21	AA	584	G	O4'-C1'-N9	6.48	113.38	108.20
21	AA	1021	A	N3-C4-N9	6.48	132.59	127.40
21	AA	1316	G	N3-C4-N9	6.48	129.89	126.00
21	AA	1378	C	C2-N3-C4	6.48	123.14	119.90
21	AA	1532	U	C5'-C4'-C3'	-6.48	105.63	116.00
21	AA	1534	A	C2-N3-C4	6.48	113.84	110.60
23	AW	44	G	C2-N3-C4	-6.48	108.66	111.90
25	AZ	320	THR	N-CA-CB	6.48	122.61	110.30
53	BE	162	ARG	NE-CZ-NH1	-6.48	117.06	120.30
57	BB	277	G	C5-C6-N1	-6.48	108.26	111.50
57	BB	484	C	OP1-P-OP2	-6.48	109.88	119.60
57	BB	1048	A	N3-C4-C5	-6.48	122.26	126.80
57	BB	1850	G	N1-C6-O6	6.48	123.79	119.90
57	BB	1897	G	N1-C2-N3	-6.48	120.01	123.90
57	BB	2541	A	O4'-C1'-N9	6.48	113.38	108.20
57	BB	2721	A	C8-N9-C4	-6.48	103.21	105.80
57	BB	2765	A	C5-C6-N1	-6.48	114.46	117.70
21	AA	36	C	N3-C4-C5	-6.48	119.31	121.90
21	AA	1140	C	N1-C2-O2	6.48	122.79	118.90
47	B0	16	ARG	NE-CZ-NH1	6.48	123.54	120.30
57	BB	1395	A	C2-N3-C4	-6.48	107.36	110.60
21	AA	356	A	O4'-C1'-N9	6.48	113.38	108.20
37	BR	83	TYR	CZ-CE2-CD2	-6.48	113.97	119.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	287	G	C5-C6-O6	-6.48	124.71	128.60
57	BB	934	U	O4'-C1'-N1	6.48	113.38	108.20
57	BB	1578	U	P-O3'-C3'	-6.48	111.93	119.70
57	BB	1659	G	C8-N9-C1'	6.48	135.42	127.00
57	BB	2246	G	C5-C6-O6	-6.48	124.71	128.60
21	AA	514	C	C6-N1-C2	-6.48	117.71	120.30
21	AA	893	C	N3-C4-C5	-6.48	119.31	121.90
21	AA	914	A	C2-N3-C4	6.48	113.84	110.60
25	AZ	47	ASP	CB-CG-OD2	-6.48	112.47	118.30
57	BB	159	G	N9-C4-C5	6.48	107.99	105.40
21	AA	429	U	N3-C2-O2	6.47	126.73	122.20
21	AA	463	U	C6-N1-C2	-6.47	117.12	121.00
21	AA	600	A	C6-C5-N7	-6.47	127.77	132.30
21	AA	878	A	O4'-C1'-N9	6.47	113.38	108.20
57	BB	1004	U	N3-C2-O2	-6.47	117.67	122.20
57	BB	2078	C	N3-C4-N4	6.47	122.53	118.00
57	BB	2084	C	N1-C2-O2	-6.47	115.02	118.90
57	BB	2474	U	C3'-C2'-C1'	-6.47	96.32	101.50
57	BB	2876	G	C4-C5-C6	6.47	122.69	118.80
21	AA	554	A	O4'-C1'-N9	6.47	113.38	108.20
21	AA	954	G	N3-C4-C5	-6.47	125.36	128.60
23	AW	21	A	C5-C6-N6	-6.47	118.52	123.70
23	AW	76	A	C5-N7-C8	6.47	107.14	103.90
45	BC	132	ARG	NE-CZ-NH2	-6.47	117.06	120.30
57	BB	1061	U	N1-C2-O2	-6.47	118.27	122.80
57	BB	2436	G	N1-C6-O6	6.47	123.78	119.90
21	AA	1016	A	C1'-O4'-C4'	6.47	115.08	109.90
57	BB	1983	G	N1-C2-N3	-6.47	120.02	123.90
21	AA	137	U	N1-C1'-C2'	-6.47	104.88	112.00
21	AA	596	A	N1-C6-N6	6.47	122.48	118.60
21	AA	713	G	C2-N3-C4	-6.47	108.67	111.90
21	AA	793	U	C6-N1-C2	-6.47	117.12	121.00
21	AA	872	A	N1-C6-N6	6.47	122.48	118.60
21	AA	990	C	N1-C2-N3	6.47	123.73	119.20
21	AA	1340	A	C8-N9-C4	-6.47	103.21	105.80
21	AA	1441	A	C8-N9-C4	-6.47	103.21	105.80
21	AA	1486	G	C5-C6-O6	-6.47	124.72	128.60
23	AW	17	C	C4-C5-C6	6.47	120.64	117.40
23	AW	64	A	C5-N7-C8	6.47	107.14	103.90
57	BB	615	U	N3-C2-O2	6.47	126.73	122.20
57	BB	639	U	N3-C4-C5	-6.47	110.72	114.60
57	BB	989	G	C5-C6-N1	-6.47	108.27	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1246	A	C6-C5-N7	-6.47	127.77	132.30
57	BB	1724	G	N7-C8-N9	-6.47	109.86	113.10
57	BB	2042	A	N1-C2-N3	6.47	132.53	129.30
57	BB	2306	C	C6-N1-C2	-6.47	117.71	120.30
57	BB	2399	G	C5-C6-O6	-6.47	124.72	128.60
57	BB	2851	A	C4-C5-C6	6.47	120.23	117.00
21	AA	362	G	O4'-C1'-N9	6.47	113.38	108.20
21	AA	468	A	N9-C4-C5	6.47	108.39	105.80
21	AA	649	A	N9-C4-C5	6.47	108.39	105.80
57	BB	180	G	C2-N3-C4	-6.47	108.67	111.90
57	BB	2333	A	N9-C1'-C2'	-6.47	104.89	112.00
21	AA	492	C	P-O3'-C3'	6.47	127.46	119.70
21	AA	847	G	C2-N3-C4	6.47	115.13	111.90
21	AA	890	G	N3-C4-N9	-6.47	122.12	126.00
21	AA	943	U	C5-C4-O4	-6.47	122.02	125.90
25	AZ	109	ASP	CB-CG-OD1	-6.47	112.48	118.30
57	BB	5	A	C1'-O4'-C4'	-6.47	104.73	109.90
57	BB	194	G	C2-N3-C4	-6.47	108.67	111.90
57	BB	450	G	C4-C5-C6	6.47	122.68	118.80
57	BB	483	A	N1-C2-N3	-6.47	126.07	129.30
57	BB	2623	G	C8-N9-C4	-6.47	103.81	106.40
58	BA	34	A	C5-C6-N6	-6.47	118.53	123.70
21	AA	816	A	C2-N3-C4	6.46	113.83	110.60
21	AA	1186	G	C8-N9-C4	-6.46	103.81	106.40
21	AA	1523	G	O4'-C1'-N9	6.46	113.37	108.20
22	AY	5	A	C2-N3-C4	-6.46	107.37	110.60
57	BB	154	U	O4'-C1'-N1	6.46	113.37	108.20
57	BB	233	A	C5-N7-C8	6.46	107.13	103.90
57	BB	312	G	C5-C6-N1	-6.46	108.27	111.50
57	BB	1031	G	O4'-C1'-N9	6.46	113.37	108.20
57	BB	1695	G	P-O5'-C5'	-6.46	110.56	120.90
57	BB	2024	G	N9-C1'-C2'	-6.46	104.89	112.00
57	BB	2591	C	C6-N1-C2	-6.46	117.71	120.30
58	BA	103	U	C4'-C3'-C2'	-6.46	96.14	102.60
18	AG	112	ASP	CB-CG-OD2	-6.46	112.48	118.30
21	AA	1251	A	C5-C6-N1	-6.46	114.47	117.70
57	BB	425	G	C8-N9-C4	-6.46	103.81	106.40
57	BB	622	G	N1-C2-N3	-6.46	120.02	123.90
21	AA	939	G	C5-C6-N1	-6.46	108.27	111.50
21	AA	963	G	C6-C5-N7	-6.46	126.52	130.40
21	AA	1075	U	C5-C4-O4	-6.46	122.02	125.90
21	AA	1296	C	C6-N1-C2	6.46	122.88	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	15	G	C5-C6-O6	-6.46	124.72	128.60
26	AV	61	C	N3-C4-N4	6.46	122.52	118.00
57	BB	169	G	C2-N3-C4	6.46	115.13	111.90
57	BB	1133	A	C4-C5-N7	-6.46	107.47	110.70
57	BB	1286	A	C6-C5-N7	-6.46	127.78	132.30
57	BB	1350	C	C5-C6-N1	6.46	124.23	121.00
57	BB	1483	G	O4'-C1'-N9	6.46	113.37	108.20
57	BB	1801	A	N7-C8-N9	-6.46	110.57	113.80
57	BB	2518	A	C4'-C3'-C2'	-6.46	96.14	102.60
57	BB	734	A	N1-C2-N3	6.46	132.53	129.30
57	BB	916	G	O4'-C1'-N9	6.46	113.37	108.20
57	BB	2636	C	C5'-C4'-O4'	-6.46	101.35	109.10
21	AA	230	G	N1-C2-N3	-6.46	120.03	123.90
21	AA	360	G	C4'-C3'-C2'	-6.46	96.14	102.60
21	AA	679	C	O4'-C4'-C3'	-6.46	97.54	104.00
21	AA	721	G	N7-C8-N9	-6.46	109.87	113.10
21	AA	952	U	N3-C4-O4	6.46	123.92	119.40
21	AA	1395	C	C5'-C4'-C3'	-6.46	105.67	116.00
26	AV	16	C	O5'-P-OP1	6.46	118.45	110.70
57	BB	570	G	N9-C4-C5	-6.46	102.82	105.40
57	BB	970	U	N3-C4-O4	6.46	123.92	119.40
57	BB	1360	G	N1-C6-O6	6.46	123.78	119.90
57	BB	1772	A	C4-C5-N7	-6.46	107.47	110.70
57	BB	2198	A	C6-N1-C2	-6.46	114.72	118.60
57	BB	2622	U	O4'-C1'-N1	6.46	113.37	108.20
58	BA	26	C	O4'-C1'-N1	6.46	113.37	108.20
13	AB	205	ALA	N-CA-CB	6.46	119.14	110.10
21	AA	50	A	C4-C5-C6	6.46	120.23	117.00
21	AA	98	A	C4'-C3'-C2'	-6.46	96.14	102.60
21	AA	676	A	C8-N9-C4	-6.46	103.22	105.80
21	AA	888	G	C2-N3-C4	-6.46	108.67	111.90
57	BB	945	A	C5-C6-N6	-6.46	118.53	123.70
57	BB	953	G	O4'-C1'-N9	6.46	113.36	108.20
57	BB	972	A	C3'-C2'-C1'	-6.46	96.33	101.50
57	BB	1277	G	N3-C4-N9	-6.46	122.13	126.00
57	BB	1645	G	N9-C4-C5	6.46	107.98	105.40
57	BB	1872	A	C6-N1-C2	-6.46	114.73	118.60
57	BB	1901	A	C6-C5-N7	-6.46	127.78	132.30
57	BB	2005	A	N7-C8-N9	6.46	117.03	113.80
57	BB	2187	U	N1-C2-O2	-6.46	118.28	122.80
58	BA	8	C	O4'-C1'-N1	6.46	113.37	108.20
21	AA	1409	C	C4'-C3'-C2'	-6.46	96.14	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	159	G	N1-C6-O6	6.46	123.77	119.90
57	BB	727	A	N7-C8-N9	-6.46	110.57	113.80
57	BB	781	A	N1-C6-N6	6.46	122.47	118.60
57	BB	819	A	C4-C5-C6	6.46	120.23	117.00
57	BB	986	C	C4'-C3'-C2'	-6.46	96.14	102.60
57	BB	1361	G	N7-C8-N9	-6.46	109.87	113.10
57	BB	1932	A	C4-C5-C6	6.46	120.23	117.00
58	BA	76	G	N1-C6-O6	6.46	123.77	119.90
12	AU	32	ARG	NE-CZ-NH1	-6.45	117.07	120.30
21	AA	321	A	C5-C6-N1	-6.45	114.47	117.70
21	AA	455	G	C4'-C3'-C2'	-6.45	96.15	102.60
21	AA	582	C	C6-N1-C1'	6.45	128.54	120.80
21	AA	1486	G	N1-C2-N3	-6.45	120.03	123.90
30	BK	102	VAL	CA-CB-CG1	-6.45	101.22	110.90
33	BN	103	ARG	NE-CZ-NH2	6.45	123.53	120.30
57	BB	380	G	O4'-C1'-N9	6.45	113.36	108.20
57	BB	469	G	C8-N9-C4	-6.45	103.82	106.40
57	BB	509	C	N3-C4-C5	-6.45	119.32	121.90
57	BB	805	G	OP1-P-OP2	-6.45	109.92	119.60
57	BB	1498	C	N3-C4-C5	-6.45	119.32	121.90
57	BB	1784	A	C4-C5-C6	6.45	120.23	117.00
57	BB	1862	G	C1'-O4'-C4'	-6.45	104.74	109.90
57	BB	2630	G	N3-C2-N2	-6.45	115.38	119.90
21	AA	153	C	C6-N1-C2	-6.45	117.72	120.30
21	AA	1415	G	C4-C5-N7	-6.45	108.22	110.80
57	BB	1137	G	O4'-C1'-N9	6.45	113.36	108.20
57	BB	1563	U	O4'-C1'-N1	6.45	113.36	108.20
57	BB	2564	A	C5-C6-N6	-6.45	118.54	123.70
57	BB	2852	G	C5-C6-O6	-6.45	124.73	128.60
10	AS	30	LEU	CB-CG-CD2	6.45	121.97	111.00
21	AA	559	A	N1-C6-N6	6.45	122.47	118.60
57	BB	778	G	N3-C4-N9	6.45	129.87	126.00
57	BB	1288	G	N9-C4-C5	-6.45	102.82	105.40
57	BB	2217	G	C5-N7-C8	6.45	107.53	104.30
57	BB	2273	A	C2-N3-C4	-6.45	107.38	110.60
2	AK	97	ARG	NE-CZ-NH2	6.45	123.52	120.30
21	AA	825	A	N9-C1'-C2'	-6.45	104.91	112.00
21	AA	918	A	N9-C4-C5	6.45	108.38	105.80
21	AA	1064	G	N1-C2-N3	-6.45	120.03	123.90
22	AY	13	C	C5-C6-N1	6.45	124.22	121.00
57	BB	85	G	C4-C5-C6	6.45	122.67	118.80
57	BB	186	G	N1-C6-O6	6.45	123.77	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	226	A	N3-C4-C5	-6.45	122.29	126.80
57	BB	552	U	C5-C4-O4	6.45	129.77	125.90
57	BB	989	G	C4-C5-N7	-6.45	108.22	110.80
57	BB	1274	A	C6-N1-C2	-6.45	114.73	118.60
57	BB	1518	C	C4-C5-C6	-6.45	114.17	117.40
57	BB	1793	C	C5-C6-N1	6.45	124.22	121.00
57	BB	2224	G	P-O5'-C5'	6.45	131.22	120.90
57	BB	2255	G	N9-C4-C5	6.45	107.98	105.40
57	BB	2625	G	N3-C2-N2	6.45	124.41	119.90
58	BA	3	C	C5-C6-N1	6.45	124.22	121.00
58	BA	99	A	C5-N7-C8	6.45	107.12	103.90
13	AB	197	PHE	CB-CG-CD1	6.45	125.31	120.80
21	AA	450	G	O4'-C1'-N9	6.45	113.36	108.20
21	AA	1340	A	N1-C2-N3	-6.45	126.08	129.30
22	AY	52	U	OP2-P-O3'	6.45	119.38	105.20
57	BB	2436	G	C2-N3-C4	6.45	115.12	111.90
57	BB	2708	G	N1-C2-N2	-6.45	110.40	116.20
21	AA	46	G	C4'-C3'-C2'	-6.45	96.15	102.60
21	AA	170	U	C2-N3-C4	6.45	130.87	127.00
21	AA	527	G	O4'-C1'-N9	6.45	113.36	108.20
21	AA	541	G	C6-N1-C2	6.45	128.97	125.10
21	AA	690	G	O4'-C1'-N9	6.45	113.36	108.20
21	AA	950	U	O4'-C1'-N1	6.45	113.36	108.20
21	AA	959	A	C5-C6-N6	-6.45	118.54	123.70
21	AA	1246	A	N3-C4-C5	-6.45	122.29	126.80
22	AY	28	C	C1'-O4'-C4'	6.45	115.06	109.90
57	BB	226	A	C4-C5-C6	6.45	120.22	117.00
57	BB	343	C	C4-C5-C6	6.45	120.62	117.40
57	BB	743	A	C5-C6-N6	-6.45	118.54	123.70
57	BB	920	A	C6-C5-N7	-6.45	127.79	132.30
57	BB	1297	C	N3-C4-C5	-6.45	119.32	121.90
57	BB	1618	A	C8-N9-C4	-6.45	103.22	105.80
57	BB	1862	G	N9-C4-C5	-6.45	102.82	105.40
57	BB	2220	U	N3-C2-O2	6.45	126.71	122.20
57	BB	2852	G	C2-N3-C4	6.45	115.12	111.90
21	AA	1306	A	C5-N7-C8	6.44	107.12	103.90
25	AZ	16	THR	CA-CB-CG2	-6.44	103.38	112.40
57	BB	903	C	C4'-C3'-C2'	-6.44	96.16	102.60
57	BB	1220	G	C4-N9-C1'	-6.44	118.12	126.50
57	BB	1826	G	N3-C2-N2	6.44	124.41	119.90
58	BA	76	G	N9-C1'-C2'	-6.44	104.91	112.00
21	AA	331	G	N3-C2-N2	6.44	124.41	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	749	A	C5-N7-C8	6.44	107.12	103.90
21	AA	1119	C	P-O5'-C5'	6.44	131.21	120.90
57	BB	34	U	C6-N1-C1'	-6.44	112.18	121.20
57	BB	213	A	C5-C6-N1	-6.44	114.48	117.70
57	BB	1653	G	C5-N7-C8	6.44	107.52	104.30
57	BB	1813	G	P-O3'-C3'	-6.44	111.97	119.70
57	BB	2101	A	C4-C5-C6	6.44	120.22	117.00
58	BA	67	G	O4'-C1'-N9	6.44	113.35	108.20
14	AC	117	ASP	CB-CG-OD2	6.44	124.10	118.30
21	AA	90	C	N3-C4-C5	6.44	124.48	121.90
21	AA	159	G	C8-N9-C4	-6.44	103.82	106.40
21	AA	602	A	C6-N1-C2	-6.44	114.74	118.60
21	AA	1238	A	C5-C6-N6	-6.44	118.55	123.70
57	BB	1350	C	P-O3'-C3'	-6.44	111.97	119.70
57	BB	1442	U	C4'-C3'-C2'	-6.44	96.16	102.60
57	BB	1536	C	N3-C4-N4	6.44	122.51	118.00
57	BB	1769	U	C2-N3-C4	6.44	130.87	127.00
57	BB	1860	G	C5-C6-O6	-6.44	124.73	128.60
57	BB	2008	C	N3-C4-N4	6.44	122.51	118.00
21	AA	349	A	C4'-C3'-C2'	-6.44	96.16	102.60
57	BB	44	A	C4-C5-N7	-6.44	107.48	110.70
57	BB	2705	A	C4'-C3'-C2'	6.44	109.04	102.60
21	AA	509	A	N1-C2-N3	6.44	132.52	129.30
21	AA	790	A	N7-C8-N9	6.44	117.02	113.80
21	AA	889	A	C3'-C2'-C1'	-6.44	96.35	101.50
21	AA	993	G	C5-N7-C8	6.44	107.52	104.30
21	AA	1144	G	O4'-C1'-N9	6.44	113.35	108.20
21	AA	1214	C	O4'-C1'-N1	6.44	113.35	108.20
26	AV	15	G	O4'-C1'-N9	6.44	113.35	108.20
37	BR	84	ARG	NE-CZ-NH1	-6.44	117.08	120.30
57	BB	149	A	C4-C5-C6	6.44	120.22	117.00
57	BB	315	G	N1-C2-N3	-6.44	120.04	123.90
57	BB	426	C	N3-C2-O2	-6.44	117.39	121.90
57	BB	532	A	N3-C4-C5	-6.44	122.29	126.80
57	BB	1003	G	N9-C4-C5	-6.44	102.83	105.40
57	BB	1017	G	N3-C4-C5	6.44	131.82	128.60
57	BB	1728	C	N1-C1'-C2'	-6.44	104.92	112.00
57	BB	1783	A	C4-C5-C6	6.44	120.22	117.00
57	BB	1842	G	N3-C4-N9	6.44	129.86	126.00
57	BB	2621	G	N1-C2-N3	-6.44	120.04	123.90
57	BB	2832	U	N1-C2-N3	-6.44	111.04	114.90
21	AA	489	C	C2-N3-C4	6.44	123.12	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	891	G	N7-C8-N9	6.44	116.32	113.10
57	BB	939	G	C5-N7-C8	-6.44	101.08	104.30
57	BB	1207	C	N3-C4-N4	6.44	122.50	118.00
57	BB	1321	A	C6-C5-N7	-6.44	127.80	132.30
57	BB	1682	G	C4-C5-C6	6.44	122.66	118.80
2	AK	36	ARG	NE-CZ-NH2	-6.43	117.08	120.30
21	AA	1083	U	C4-C5-C6	6.43	123.56	119.70
21	AA	1427	C	N1-C2-O2	6.43	122.76	118.90
23	AW	74	C	N3-C2-O2	-6.43	117.40	121.90
57	BB	1011	G	C6-N1-C2	6.43	128.96	125.10
57	BB	1364	G	C6-N1-C2	-6.43	121.24	125.10
57	BB	1489	C	N3-C4-C5	-6.43	119.33	121.90
57	BB	1888	G	C8-N9-C4	-6.43	103.83	106.40
58	BA	109	A	N7-C8-N9	-6.43	110.58	113.80
21	AA	94	G	C4-C5-N7	6.43	113.37	110.80
21	AA	493	A	O4'-C1'-N9	6.43	113.35	108.20
21	AA	751	U	C4'-C3'-C2'	-6.43	96.17	102.60
21	AA	1347	G	C4-C5-C6	6.43	122.66	118.80
57	BB	176	A	N3-C4-N9	6.43	132.55	127.40
57	BB	344	A	C5-N7-C8	6.43	107.12	103.90
57	BB	670	A	O4'-C1'-N9	6.43	113.35	108.20
57	BB	2010	G	C4-C5-C6	6.43	122.66	118.80
57	BB	2138	G	C5'-C4'-C3'	-6.43	105.71	116.00
57	BB	2456	C	C5-C4-N4	-6.43	115.70	120.20
58	BA	107	G	N1-C2-N3	-6.43	120.04	123.90
21	AA	1305	G	C6-C5-N7	-6.43	126.54	130.40
22	AY	62	A	C5-N7-C8	-6.43	100.68	103.90
31	BL	110	VAL	CA-CB-CG1	-6.43	101.25	110.90
58	BA	61	G	C8-N9-C4	-6.43	103.83	106.40
3	AL	35	ARG	NE-CZ-NH2	-6.43	117.09	120.30
21	AA	10	A	C5-N7-C8	6.43	107.11	103.90
21	AA	69	G	O4'-C1'-N9	6.43	113.34	108.20
21	AA	238	A	P-O3'-C3'	6.43	127.42	119.70
21	AA	372	C	N3-C4-N4	6.43	122.50	118.00
21	AA	1168	U	C5-C4-O4	-6.43	122.04	125.90
21	AA	1431	A	N9-C4-C5	-6.43	103.23	105.80
57	BB	842	U	P-O5'-C5'	6.43	131.19	120.90
57	BB	1245	G	N7-C8-N9	-6.43	109.89	113.10
57	BB	1456	G	C5-C6-N1	-6.43	108.29	111.50
57	BB	2294	G	C4-C5-C6	6.43	122.66	118.80
57	BB	2772	C	C5-C4-N4	-6.43	115.70	120.20
57	BB	2248	C	N3-C4-C5	-6.43	119.33	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	121	U	P-O5'-C5'	-6.43	110.62	120.90
21	AA	554	A	N9-C4-C5	6.43	108.37	105.80
21	AA	602	A	O4'-C1'-N9	6.43	113.34	108.20
21	AA	1351	U	C5-C6-N1	6.43	125.91	122.70
21	AA	1457	G	N3-C2-N2	6.43	124.40	119.90
22	AY	5	A	C4-C5-C6	6.43	120.21	117.00
22	AY	14	A	C3'-C2'-C1'	-6.43	96.36	101.50
26	AV	74	C	C5-C4-N4	-6.43	115.70	120.20
57	BB	522	A	O4'-C4'-C3'	-6.43	97.57	104.00
57	BB	549	G	N1-C2-N3	-6.43	120.04	123.90
57	BB	764	A	N1-C6-N6	6.43	122.46	118.60
57	BB	865	C	C5-C4-N4	-6.43	115.70	120.20
57	BB	1407	G	O4'-C1'-N9	6.43	113.34	108.20
57	BB	2075	U	N3-C4-O4	6.43	123.90	119.40
57	BB	2491	U	N1-C2-N3	6.43	118.76	114.90
12	AU	7	GLU	N-CA-CB	6.42	122.17	110.60
21	AA	391	G	O4'-C1'-N9	6.42	113.34	108.20
21	AA	459	A	N9-C4-C5	6.42	108.37	105.80
21	AA	758	C	C2-N1-C1'	6.42	125.87	118.80
21	AA	1189	U	C6-N1-C2	-6.42	117.14	121.00
57	BB	455	C	P-O3'-C3'	-6.42	111.99	119.70
57	BB	971	G	C5-N7-C8	-6.42	101.09	104.30
57	BB	1024	G	C4-C5-C6	6.42	122.66	118.80
57	BB	1041	G	N9-C4-C5	6.42	107.97	105.40
57	BB	1590	A	O4'-C1'-N9	6.42	113.34	108.20
57	BB	2045	C	OP2-P-O3'	6.42	119.33	105.20
57	BB	2394	C	O4'-C1'-N1	6.42	113.34	108.20
57	BB	2847	U	C5-C4-O4	6.42	129.75	125.90
21	AA	85	U	C6-N1-C2	-6.42	117.15	121.00
21	AA	1094	G	N3-C4-C5	6.42	131.81	128.60
22	AY	14	A	C5-N7-C8	6.42	107.11	103.90
57	BB	2020	A	N3-C4-C5	-6.42	122.30	126.80
57	BB	2367	G	C6-N1-C2	-6.42	121.25	125.10
21	AA	639	G	C8-N9-C4	-6.42	103.83	106.40
21	AA	1097	C	C2-N3-C4	6.42	123.11	119.90
21	AA	1430	A	N7-C8-N9	-6.42	110.59	113.80
26	AV	64	G	C4-C5-N7	-6.42	108.23	110.80
57	BB	29	U	C5-C6-N1	6.42	125.91	122.70
57	BB	1504	A	C5'-C4'-C3'	-6.42	105.72	116.00
57	BB	2529	G	C5-C6-N1	-6.42	108.29	111.50
57	BB	2623	G	N9-C4-C5	6.42	107.97	105.40
16	AE	68	ARG	NE-CZ-NH1	6.42	123.51	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	34	C	P-O3'-C3'	-6.42	112.00	119.70
21	AA	696	A	O4'-C1'-N9	6.42	113.34	108.20
21	AA	927	G	N1-C2-N3	-6.42	120.05	123.90
49	B2	14	ARG	NE-CZ-NH2	6.42	123.51	120.30
57	BB	490	C	C3'-C2'-C1'	6.42	106.64	101.50
57	BB	838	C	C5-C6-N1	6.42	124.21	121.00
57	BB	1195	G	O4'-C1'-N9	6.42	113.34	108.20
57	BB	1315	C	C4-C5-C6	6.42	120.61	117.40
57	BB	2548	U	C5-C4-O4	6.42	129.75	125.90
57	BB	2858	C	C6-N1-C2	6.42	122.87	120.30
21	AA	86	G	P-O3'-C3'	6.42	127.40	119.70
21	AA	249	U	O4'-C1'-N1	6.42	113.34	108.20
21	AA	735	C	O4'-C1'-N1	6.42	113.33	108.20
21	AA	762	U	C4'-C3'-C2'	-6.42	96.18	102.60
21	AA	1309	G	N3-C4-N9	6.42	129.85	126.00
21	AA	1529	G	N3-C4-C5	6.42	131.81	128.60
22	AY	49	C	N3-C2-O2	6.42	126.39	121.90
25	AZ	86	ASP	CB-CG-OD2	-6.42	112.52	118.30
57	BB	279	A	N1-C6-N6	6.42	122.45	118.60
57	BB	460	A	C6-C5-N7	-6.42	127.81	132.30
57	BB	869	G	O4'-C1'-N9	6.42	113.33	108.20
57	BB	1131	G	O4'-C1'-N9	6.42	113.33	108.20
57	BB	1296	G	C5-N7-C8	-6.42	101.09	104.30
57	BB	1365	A	C6-N1-C2	6.42	122.45	118.60
57	BB	1681	G	N9-C4-C5	-6.42	102.83	105.40
57	BB	1909	C	N1-C2-O2	6.42	122.75	118.90
57	BB	1978	A	C6-N1-C2	-6.42	114.75	118.60
57	BB	2459	A	N1-C2-N3	-6.42	126.09	129.30
21	AA	173	U	C4-C5-C6	6.42	123.55	119.70
21	AA	1359	C	P-O3'-C3'	6.42	127.40	119.70
21	AA	1417	G	C4-C5-N7	-6.42	108.23	110.80
23	AW	16	U	P-O3'-C3'	6.42	127.40	119.70
57	BB	64	A	C3'-C2'-C1'	-6.42	96.37	101.50
57	BB	331	C	C4-C5-C6	-6.42	114.19	117.40
57	BB	391	A	C6-C5-N7	-6.42	127.81	132.30
57	BB	669	G	C8-N9-C1'	-6.42	118.66	127.00
57	BB	719	C	C6-N1-C2	-6.42	117.73	120.30
57	BB	763	G	C4-C5-C6	6.42	122.65	118.80
57	BB	1273	U	N1-C2-O2	6.42	127.29	122.80
57	BB	1280	G	C5'-C4'-C3'	-6.42	105.73	116.00
57	BB	1464	G	O4'-C1'-N9	6.42	113.33	108.20
57	BB	1494	A	C4-C5-N7	6.42	113.91	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1513	U	O4'-C1'-N1	6.42	113.33	108.20
57	BB	2176	A	C8-N9-C4	-6.42	103.23	105.80
57	BB	977	G	C8-N9-C4	-6.42	103.83	106.40
57	BB	2710	C	C4-C5-C6	6.42	120.61	117.40
21	AA	919	A	C4'-C3'-C2'	-6.41	96.19	102.60
21	AA	1006	G	C5-N7-C8	6.41	107.51	104.30
21	AA	1329	A	N3-C4-C5	-6.41	122.31	126.80
26	AV	74	C	N3-C4-N4	6.41	122.49	118.00
57	BB	60	G	N7-C8-N9	-6.41	109.89	113.10
57	BB	186	G	C3'-C2'-C1'	-6.41	96.37	101.50
57	BB	349	U	O4'-C1'-N1	6.41	113.33	108.20
57	BB	838	C	N3-C4-C5	-6.41	119.33	121.90
57	BB	1174	U	C1'-O4'-C4'	-6.41	104.77	109.90
57	BB	1819	A	C4-C5-N7	-6.41	107.49	110.70
57	BB	2268	A	C4-C5-C6	6.41	120.21	117.00
57	BB	2654	A	C4-C5-C6	6.41	120.21	117.00
21	AA	639	G	O4'-C1'-N9	6.41	113.33	108.20
21	AA	923	A	N1-C2-N3	-6.41	126.09	129.30
57	BB	2423	U	C2-N3-C4	6.41	130.85	127.00
21	AA	38	G	C4-C5-N7	6.41	113.36	110.80
21	AA	103	U	C4'-C3'-C2'	-6.41	96.19	102.60
26	AV	3	C	C2-N1-C1'	6.41	125.85	118.80
57	BB	460	A	O4'-C1'-N9	6.41	113.33	108.20
57	BB	947	A	O4'-C1'-N9	6.41	113.33	108.20
57	BB	1417	C	O4'-C1'-N1	6.41	113.33	108.20
57	BB	1635	A	N3-C4-C5	-6.41	122.31	126.80
57	BB	1669	A	N9-C4-C5	6.41	108.36	105.80
57	BB	2891	U	C5-C6-N1	6.41	125.91	122.70
21	AA	275	G	C8-N9-C4	-6.41	103.84	106.40
21	AA	651	C	N3-C4-N4	6.41	122.49	118.00
21	AA	1160	G	N1-C2-N3	-6.41	120.06	123.90
21	AA	1454	G	O5'-C5'-C4'	6.41	123.88	111.70
57	BB	214	G	C8-N9-C4	-6.41	103.84	106.40
57	BB	494	G	C8-N9-C1'	6.41	135.33	127.00
57	BB	800	A	N9-C4-C5	-6.41	103.24	105.80
57	BB	1728	C	N3-C4-N4	6.41	122.49	118.00
57	BB	2037	A	N1-C6-N6	6.41	122.45	118.60
57	BB	2365	G	C6-N1-C2	-6.41	121.25	125.10
57	BB	2678	C	P-O3'-C3'	6.41	127.39	119.70
57	BB	1054	A	C8-N9-C4	-6.41	103.24	105.80
57	BB	2685	G	C6-N1-C2	6.41	128.94	125.10
13	AB	94	ARG	NE-CZ-NH2	-6.41	117.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	AB	152	ASP	CB-CG-OD1	-6.41	112.53	118.30
21	AA	301	G	C5-N7-C8	-6.41	101.10	104.30
21	AA	736	C	C6-N1-C2	6.41	122.86	120.30
21	AA	1201	A	C6-C5-N7	-6.41	127.82	132.30
21	AA	1500	A	O4'-C1'-N9	6.41	113.32	108.20
22	AY	43	G	C6-C5-N7	-6.41	126.56	130.40
28	BI	141	ASP	CB-CG-OD2	6.41	124.06	118.30
57	BB	289	G	N1-C6-O6	6.41	123.74	119.90
57	BB	386	G	C3'-C2'-C1'	-6.41	96.38	101.50
57	BB	824	U	C2-N3-C4	6.41	130.84	127.00
57	BB	1509	A	C5'-C4'-C3'	-6.41	105.75	116.00
57	BB	1820	U	N1-C2-O2	-6.41	118.31	122.80
57	BB	1957	C	N1-C2-O2	6.41	122.74	118.90
57	BB	1998	A	C6-C5-N7	-6.41	127.82	132.30
57	BB	2014	A	C5-C6-N1	-6.41	114.50	117.70
57	BB	2543	G	C4-C5-C6	6.41	122.64	118.80
57	BB	2770	G	C4-C5-N7	-6.41	108.24	110.80
21	AA	1096	C	N3-C4-C5	-6.40	119.34	121.90
25	AZ	160	TYR	CB-CG-CD1	6.40	124.84	121.00
57	BB	1373	A	C5-C6-N6	-6.40	118.58	123.70
21	AA	56	U	C4-C5-C6	6.40	123.54	119.70
21	AA	159	G	N7-C8-N9	6.40	116.30	113.10
21	AA	280	C	C5-C4-N4	-6.40	115.72	120.20
21	AA	287	U	N3-C4-C5	6.40	118.44	114.60
21	AA	292	G	C8-N9-C4	6.40	108.96	106.40
21	AA	399	G	O4'-C1'-N9	6.40	113.32	108.20
57	BB	999	U	O4'-C1'-N1	6.40	113.32	108.20
57	BB	1881	C	O4'-C1'-N1	6.40	113.32	108.20
57	BB	1925	C	C6-N1-C2	6.40	122.86	120.30
57	BB	2382	G	C5-C6-N1	6.40	114.70	111.50
57	BB	2515	C	N3-C2-O2	-6.40	117.42	121.90
57	BB	2730	C	N3-C4-N4	6.40	122.48	118.00
57	BB	2792	A	C6-N1-C2	-6.40	114.76	118.60
58	BA	45	A	C5-C6-N6	-6.40	118.58	123.70
21	AA	866	C	C6-N1-C2	-6.40	117.74	120.30
21	AA	1416	G	P-O3'-C3'	-6.40	112.02	119.70
21	AA	1460	C	C6-N1-C2	-6.40	117.74	120.30
22	AY	46	G	N1-C2-N3	-6.40	120.06	123.90
57	BB	555	G	N1-C2-N3	-6.40	120.06	123.90
57	BB	1233	C	N3-C4-N4	6.40	122.48	118.00
57	BB	1788	C	N3-C4-N4	6.40	122.48	118.00
57	BB	2762	C	C5-C6-N1	6.40	124.20	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	250	A	C6-N1-C2	-6.40	114.76	118.60
21	AA	942	G	C3'-C2'-C1'	-6.40	96.38	101.50
21	AA	1238	A	O4'-C1'-N9	6.40	113.32	108.20
57	BB	554	U	C6-N1-C2	-6.40	117.16	121.00
57	BB	1056	G	N1-C2-N3	-6.40	120.06	123.90
57	BB	1210	G	O4'-C1'-N9	6.40	113.32	108.20
57	BB	1410	G	C5-N7-C8	-6.40	101.10	104.30
57	BB	2461	A	C5-C6-N6	-6.40	118.58	123.70
21	AA	250	A	C4-C5-N7	-6.40	107.50	110.70
21	AA	375	U	N3-C4-O4	6.40	123.88	119.40
21	AA	1455	G	N1-C2-N3	-6.40	120.06	123.90
21	AA	1522	U	N3-C4-O4	6.40	123.88	119.40
36	BQ	35	PHE	CB-CG-CD2	-6.40	116.32	120.80
57	BB	120	U	N1-C2-O2	-6.40	118.32	122.80
57	BB	179	C	P-O3'-C3'	-6.40	112.02	119.70
57	BB	1139	G	N1-C2-N3	6.40	127.74	123.90
57	BB	2154	A	C2-N3-C4	-6.40	107.40	110.60
57	BB	2196	C	P-O5'-C5'	-6.40	110.66	120.90
58	BA	29	A	P-O3'-C3'	6.40	127.38	119.70
21	AA	306	A	N3-C4-C5	-6.40	122.32	126.80
21	AA	688	G	C4-C5-C6	6.40	122.64	118.80
21	AA	959	A	C4-C5-C6	6.40	120.20	117.00
21	AA	1523	G	N1-C6-O6	6.40	123.74	119.90
22	AY	32	C	P-O3'-C3'	6.40	127.38	119.70
37	BR	77	PHE	CB-CG-CD2	-6.40	116.32	120.80
57	BB	102	U	N3-C4-O4	6.40	123.88	119.40
57	BB	190	A	N9-C4-C5	-6.40	103.24	105.80
57	BB	447	A	N1-C2-N3	6.40	132.50	129.30
23	AW	32	U	C5-C4-O4	-6.39	122.06	125.90
57	BB	117	G	N3-C2-N2	6.39	124.38	119.90
57	BB	169	G	C4-C5-N7	6.39	113.36	110.80
57	BB	1434	A	N9-C4-C5	6.39	108.36	105.80
57	BB	1475	G	N7-C8-N9	6.39	116.30	113.10
57	BB	1876	A	N7-C8-N9	6.39	117.00	113.80
57	BB	2051	A	C5-C6-N1	-6.39	114.50	117.70
57	BB	2285	C	P-O5'-C5'	-6.39	110.67	120.90
57	BB	2445	G	N3-C4-C5	6.39	131.80	128.60
57	BB	2532	G	N3-C2-N2	6.39	124.38	119.90
58	BA	43	C	C6-N1-C2	6.39	122.86	120.30
21	AA	784	A	C1'-O4'-C4'	-6.39	104.79	109.90
21	AA	950	U	N3-C4-O4	6.39	123.88	119.40
21	AA	1089	G	N1-C2-N3	-6.39	120.06	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1516	G	C6-C5-N7	-6.39	126.56	130.40
26	AV	18	G	N3-C4-C5	6.39	131.80	128.60
49	B2	12	ARG	NE-CZ-NH2	-6.39	117.10	120.30
57	BB	364	C	N3-C4-C5	-6.39	119.34	121.90
57	BB	966	G	C4-C5-N7	6.39	113.36	110.80
57	BB	1482	G	C4-C5-C6	6.39	122.64	118.80
57	BB	2277	G	C6-C5-N7	-6.39	126.56	130.40
57	BB	2459	A	N7-C8-N9	6.39	117.00	113.80
21	AA	481	G	C8-N9-C4	6.39	108.96	106.40
57	BB	815	C	C3'-C2'-C1'	-6.39	96.39	101.50
57	BB	1525	A	C4'-C3'-C2'	-6.39	96.21	102.60
21	AA	435	A	C5-N7-C8	-6.39	100.70	103.90
21	AA	1147	C	N1-C2-O2	-6.39	115.07	118.90
57	BB	284	U	C6-N1-C2	-6.39	117.17	121.00
57	BB	333	G	N1-C2-N3	-6.39	120.07	123.90
57	BB	381	G	O4'-C1'-N9	6.39	113.31	108.20
57	BB	1365	A	N7-C8-N9	6.39	117.00	113.80
57	BB	1596	A	C4-C5-C6	6.39	120.19	117.00
57	BB	1851	U	N1-C2-N3	-6.39	111.07	114.90
21	AA	560	A	O4'-C1'-N9	6.39	113.31	108.20
22	AY	33	U	P-O5'-C5'	6.39	131.12	120.90
44	BY	47	ARG	NH1-CZ-NH2	6.39	126.43	119.40
57	BB	594	U	C5-C4-O4	6.39	129.73	125.90
57	BB	1088	A	N1-C2-N3	6.39	132.49	129.30
57	BB	1871	A	C5-N7-C8	6.39	107.09	103.90
13	AB	191	ASP	CB-CG-OD2	-6.39	112.55	118.30
21	AA	1037	C	N3-C4-C5	-6.39	119.34	121.90
21	AA	1111	A	C5-C6-N1	-6.39	114.51	117.70
22	AY	7	U	C5-C4-O4	-6.39	122.07	125.90
57	BB	109	C	O4'-C1'-N1	6.39	113.31	108.20
57	BB	450	G	N1-C2-N3	-6.39	120.07	123.90
57	BB	2279	G	C5-C6-N1	-6.39	108.31	111.50
57	BB	2780	G	C5-N7-C8	6.39	107.49	104.30
21	AA	621	A	C6-N1-C2	6.38	122.43	118.60
21	AA	1337	G	C5-C6-N1	-6.38	108.31	111.50
21	AA	1371	G	C5-C6-O6	-6.38	124.77	128.60
36	BQ	74	SER	CB-CA-C	6.38	122.23	110.10
57	BB	394	C	C5-C4-N4	-6.38	115.73	120.20
57	BB	2715	C	P-O3'-C3'	-6.38	112.04	119.70
20	AI	48	ARG	NE-CZ-NH2	-6.38	117.11	120.30
21	AA	1403	C	P-O5'-C5'	6.38	131.11	120.90
22	AY	8	U	C4-C5-C6	6.38	123.53	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	12	U	C5'-C4'-O4'	6.38	116.76	109.10
57	BB	2663	G	O4'-C1'-N9	6.38	113.31	108.20
21	AA	51	A	P-O3'-C3'	6.38	127.36	119.70
21	AA	935	A	P-O3'-C3'	-6.38	112.04	119.70
26	AV	66	C	C6-N1-C2	-6.38	117.75	120.30
45	BC	206	LYS	CB-CA-C	6.38	123.16	110.40
57	BB	127	A	N9-C4-C5	-6.38	103.25	105.80
57	BB	227	A	N7-C8-N9	-6.38	110.61	113.80
57	BB	1793	C	N3-C2-O2	6.38	126.37	121.90
57	BB	2572	A	C4-C5-N7	6.38	113.89	110.70
58	BA	104	A	P-O5'-C5'	-6.38	110.69	120.90
58	BA	106	G	O4'-C1'-N9	6.38	113.30	108.20
21	AA	722	G	C8-N9-C4	-6.38	103.85	106.40
21	AA	892	A	C4-C5-C6	6.38	120.19	117.00
21	AA	1255	G	N3-C4-C5	-6.38	125.41	128.60
21	AA	1447	A	C3'-C2'-C1'	6.38	106.60	101.50
41	BV	74	ALA	N-CA-CB	6.38	119.03	110.10
57	BB	1263	U	C1'-O4'-C4'	-6.38	104.80	109.90
57	BB	2861	U	N3-C2-O2	6.38	126.67	122.20
21	AA	73	C	O4'-C1'-N1	6.38	113.30	108.20
21	AA	148	G	C6-N1-C2	6.38	128.93	125.10
21	AA	454	G	N3-C2-N2	6.38	124.36	119.90
21	AA	1117	A	C5-C6-N1	-6.38	114.51	117.70
21	AA	1225	A	C5-C6-N6	-6.38	118.60	123.70
57	BB	312	G	C6-C5-N7	-6.38	126.57	130.40
57	BB	1040	A	N9-C4-C5	6.38	108.35	105.80
57	BB	1307	A	C3'-C2'-C1'	6.38	106.60	101.50
57	BB	1314	C	C6-N1-C2	-6.38	117.75	120.30
57	BB	1920	C	C5-C4-N4	-6.38	115.73	120.20
57	BB	2805	C	O4'-C1'-N1	6.38	113.30	108.20
21	AA	260	G	O4'-C1'-N9	6.38	113.30	108.20
21	AA	1186	G	N3-C4-N9	6.38	129.83	126.00
57	BB	319	G	O4'-C1'-N9	6.38	113.30	108.20
57	BB	847	U	C4-C5-C6	-6.38	115.87	119.70
57	BB	1168	G	N3-C2-N2	6.38	124.36	119.90
57	BB	1272	A	N9-C4-C5	6.38	108.35	105.80
57	BB	1720	U	N1-C2-N3	6.38	118.73	114.90
57	BB	1934	C	N3-C4-N4	6.38	122.46	118.00
57	BB	1969	A	C8-N9-C4	6.38	108.35	105.80
57	BB	2234	G	O4'-C1'-N9	6.38	113.30	108.20
57	BB	2431	U	O4'-C1'-N1	6.38	113.30	108.20
57	BB	2674	G	N3-C2-N2	6.38	124.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2844	G	P-O3'-C3'	6.38	127.35	119.70
21	AA	519	C	N3-C4-N4	6.38	122.46	118.00
21	AA	1375	A	N3-C4-C5	-6.38	122.34	126.80
57	BB	2065	C	P-O5'-C5'	6.38	131.10	120.90
21	AA	409	U	C5-C4-O4	-6.37	122.08	125.90
21	AA	866	C	C1'-O4'-C4'	6.37	115.00	109.90
21	AA	1219	A	C4-C5-N7	-6.37	107.51	110.70
25	AZ	288	ARG	NE-CZ-NH1	-6.37	117.11	120.30
57	BB	149	A	C6-C5-N7	-6.37	127.84	132.30
57	BB	266	G	N1-C2-N3	-6.37	120.08	123.90
57	BB	284	U	N1-C2-N3	6.37	118.72	114.90
57	BB	468	G	N9-C4-C5	-6.37	102.85	105.40
57	BB	1011	G	C2-N3-C4	6.37	115.09	111.90
57	BB	1040	A	C5'-C4'-O4'	6.37	116.75	109.10
57	BB	1093	G	C4-C5-N7	-6.37	108.25	110.80
57	BB	1194	A	C6-N1-C2	6.37	122.42	118.60
57	BB	1411	U	C5-C4-O4	6.37	129.72	125.90
57	BB	2048	G	C4-C5-N7	-6.37	108.25	110.80
57	BB	2287	A	C5-N7-C8	6.37	107.09	103.90
57	BB	2567	G	N1-C2-N3	-6.37	120.08	123.90
21	AA	337	G	C6-N1-C2	6.37	128.92	125.10
21	AA	1410	A	C5-C6-N6	-6.37	118.60	123.70
23	AW	62	C	C2-N3-C4	6.37	123.09	119.90
35	BP	75	THR	CA-CB-CG2	-6.37	103.48	112.40
57	BB	428	A	O4'-C1'-N9	6.37	113.30	108.20
57	BB	947	A	C1'-O4'-C4'	-6.37	104.80	109.90
57	BB	1634	A	C5-N7-C8	6.37	107.09	103.90
57	BB	1814	G	C5-C6-O6	-6.37	124.78	128.60
57	BB	2152	G	N9-C4-C5	-6.37	102.85	105.40
57	BB	2690	U	N3-C4-C5	6.37	118.42	114.60
21	AA	201	G	C4-C5-C6	6.37	122.62	118.80
22	AY	74	C	C5-C6-N1	-6.37	117.81	121.00
57	BB	1997	C	N3-C4-C5	-6.37	119.35	121.90
57	BB	2584	U	O4'-C1'-N1	6.37	113.30	108.20
7	AP	16	PHE	CB-CG-CD1	-6.37	116.34	120.80
21	AA	90	C	P-O5'-C5'	-6.37	110.71	120.90
21	AA	119	A	C4-C5-N7	-6.37	107.52	110.70
21	AA	130	A	C5-N7-C8	6.37	107.08	103.90
21	AA	237	G	O4'-C1'-N9	6.37	113.29	108.20
21	AA	383	A	N1-C6-N6	6.37	122.42	118.60
21	AA	1394	A	N9-C1'-C2'	-6.37	105.00	112.00
21	AA	1495	U	N1-C2-N3	6.37	118.72	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1498	U	N3-C4-O4	6.37	123.86	119.40
23	AW	11	C	O4'-C1'-N1	6.37	113.30	108.20
57	BB	13	A	C5-N7-C8	6.37	107.08	103.90
57	BB	1679	A	C5-C6-N1	-6.37	114.52	117.70
57	BB	2268	A	O4'-C1'-N9	6.37	113.30	108.20
21	AA	461	A	N7-C8-N9	6.37	116.98	113.80
4	AM	69	ARG	NE-CZ-NH1	6.37	123.48	120.30
21	AA	978	A	O4'-C4'-C3'	-6.37	97.63	104.00
26	AV	45	G	N7-C8-N9	-6.37	109.92	113.10
57	BB	833	A	O4'-C1'-N9	6.37	113.29	108.20
57	BB	1250	G	N9-C4-C5	-6.37	102.85	105.40
57	BB	1875	G	N3-C4-N9	6.37	129.82	126.00
57	BB	2219	U	O4'-C1'-N1	6.37	113.29	108.20
57	BB	2326	C	C5'-C4'-O4'	-6.37	101.46	109.10
57	BB	2758	A	C5-C6-N6	-6.37	118.61	123.70
58	BA	47	C	N1-C2-O2	-6.37	115.08	118.90
58	BA	67	G	C8-N9-C4	-6.37	103.85	106.40
21	AA	960	U	N1-C2-N3	-6.36	111.08	114.90
21	AA	1030	U	C2'-C3'-O3'	6.36	123.88	113.70
21	AA	1429	A	N1-C2-N3	-6.36	126.12	129.30
33	BN	12	ARG	NE-CZ-NH1	-6.36	117.12	120.30
47	B0	24	VAL	CG1-CB-CG2	-6.36	100.72	110.90
57	BB	164	C	O4'-C1'-N1	6.36	113.29	108.20
57	BB	610	C	N1-C2-O2	-6.36	115.08	118.90
57	BB	653	U	C6-N1-C1'	-6.36	112.29	121.20
57	BB	836	G	N1-C6-O6	6.36	123.72	119.90
57	BB	982	C	C5-C6-N1	-6.36	117.82	121.00
57	BB	1641	A	C5-C6-N6	-6.36	118.61	123.70
57	BB	2361	G	O4'-C1'-N9	6.36	113.29	108.20
57	BB	2529	G	C8-N9-C4	6.36	108.94	106.40
57	BB	2631	G	N7-C8-N9	-6.36	109.92	113.10
57	BB	2657	A	C4-C5-N7	6.36	113.88	110.70
21	AA	646	G	C5-C6-N1	-6.36	108.32	111.50
21	AA	1152	A	N1-C6-N6	6.36	122.42	118.60
21	AA	1403	C	C6-N1-C2	-6.36	117.75	120.30
21	AA	1496	C	C6-N1-C2	-6.36	117.75	120.30
57	BB	1340	U	C5'-C4'-O4'	6.36	116.73	109.10
57	BB	1377	G	O4'-C1'-N9	6.36	113.29	108.20
57	BB	2146	C	N1-C2-N3	-6.36	114.75	119.20
57	BB	2297	A	C6-N1-C2	6.36	122.42	118.60
21	AA	770	C	P-O5'-C5'	6.36	131.08	120.90
21	AA	1162	C	C2-N3-C4	6.36	123.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1518	A	C4-C5-C6	6.36	120.18	117.00
57	BB	218	A	C5-C6-N1	-6.36	114.52	117.70
57	BB	989	G	C5-C6-O6	-6.36	124.78	128.60
57	BB	1152	C	N3-C4-C5	-6.36	119.36	121.90
57	BB	1515	A	C4'-C3'-C2'	-6.36	96.24	102.60
57	BB	1581	G	N1-C6-O6	6.36	123.72	119.90
57	BB	1989	G	O4'-C4'-C3'	-6.36	97.64	104.00
21	AA	90	C	C2-N3-C4	-6.36	116.72	119.90
21	AA	226	G	C5-C6-N1	-6.36	108.32	111.50
21	AA	369	G	N1-C2-N3	-6.36	120.08	123.90
21	AA	381	C	N3-C4-N4	6.36	122.45	118.00
21	AA	415	A	C2-N3-C4	6.36	113.78	110.60
21	AA	714	G	C8-N9-C4	-6.36	103.86	106.40
21	AA	732	C	N3-C4-C5	-6.36	119.36	121.90
21	AA	969	A	C5-C6-N1	-6.36	114.52	117.70
21	AA	970	C	C2-N3-C4	6.36	123.08	119.90
21	AA	1061	G	N1-C2-N3	-6.36	120.09	123.90
57	BB	326	G	O4'-C1'-N9	6.36	113.29	108.20
57	BB	894	U	C5'-C4'-C3'	-6.36	105.83	116.00
57	BB	979	A	C6-C5-N7	-6.36	127.85	132.30
57	BB	1225	G	C6-C5-N7	-6.36	126.59	130.40
57	BB	1317	G	N9-C4-C5	-6.36	102.86	105.40
57	BB	1592	C	C6-N1-C2	-6.36	117.76	120.30
21	AA	384	G	C5-C6-N1	-6.36	108.32	111.50
21	AA	1525	G	C5-C6-N1	-6.36	108.32	111.50
57	BB	367	G	C5-C6-O6	-6.36	124.79	128.60
57	BB	375	G	N9-C4-C5	-6.36	102.86	105.40
57	BB	701	G	P-O3'-C3'	-6.36	112.07	119.70
57	BB	1245	G	C5-N7-C8	6.36	107.48	104.30
57	BB	2002	G	N3-C2-N2	6.36	124.35	119.90
57	BB	2166	U	N3-C2-O2	6.36	126.65	122.20
58	BA	34	A	C4-C5-N7	-6.36	107.52	110.70
29	BJ	16	TYR	CZ-CE2-CD2	-6.35	114.08	119.80
57	BB	907	G	C8-N9-C1'	6.35	135.26	127.00
57	BB	2362	C	C4'-C3'-C2'	-6.35	96.25	102.60
21	AA	209	U	P-O5'-C5'	6.35	131.06	120.90
21	AA	573	A	O4'-C1'-N9	6.35	113.28	108.20
21	AA	749	A	O4'-C1'-N9	6.35	113.28	108.20
21	AA	976	G	C4-C5-C6	6.35	122.61	118.80
57	BB	721	A	N1-C2-N3	-6.35	126.12	129.30
57	BB	874	G	OP2-P-O3'	6.35	119.17	105.20
57	BB	1034	G	C6-C5-N7	-6.35	126.59	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1943	U	N3-C4-C5	-6.35	110.79	114.60
57	BB	2011	U	C6-N1-C2	-6.35	117.19	121.00
57	BB	2209	G	C4-C5-C6	6.35	122.61	118.80
57	BB	2433	A	N1-C6-N6	6.35	122.41	118.60
57	BB	2819	G	C5-C6-O6	-6.35	124.79	128.60
58	BA	104	A	N1-C6-N6	6.35	122.41	118.60
58	BA	112	G	C5-C6-N1	6.35	114.68	111.50
1	AJ	49	PHE	CB-CG-CD2	-6.35	116.35	120.80
21	AA	222	C	C6-N1-C2	-6.35	117.76	120.30
21	AA	1176	A	C4-C5-C6	6.35	120.17	117.00
21	AA	1400	C	C2-N3-C4	6.35	123.08	119.90
57	BB	479	A	C6-C5-N7	-6.35	127.85	132.30
57	BB	1960	A	N7-C8-N9	6.35	116.97	113.80
57	BB	2278	A	N9-C1'-C2'	-6.35	105.01	112.00
21	AA	389	A	C8-N9-C4	-6.35	103.26	105.80
21	AA	906	A	N1-C6-N6	6.35	122.41	118.60
23	AW	9	A	N1-C6-N6	6.35	122.41	118.60
34	BO	89	ASP	CB-CG-OD2	6.35	124.02	118.30
57	BB	85	G	C4-N9-C1'	-6.35	118.25	126.50
57	BB	453	A	C4'-C3'-C2'	-6.35	96.25	102.60
57	BB	459	U	P-O5'-C5'	6.35	131.06	120.90
57	BB	616	A	C4-C5-C6	6.35	120.17	117.00
57	BB	1790	C	N3-C4-N4	6.35	122.44	118.00
57	BB	1794	A	C8-N9-C4	6.35	108.34	105.80
57	BB	2015	A	N1-C2-N3	-6.35	126.13	129.30
57	BB	2582	G	C5-C6-O6	-6.35	124.79	128.60
5	AN	100	TRP	CH2-CZ2-CE2	6.35	123.75	117.40
21	AA	82	G	C5-C6-N1	-6.35	108.33	111.50
21	AA	416	G	C5-C6-O6	-6.35	124.79	128.60
21	AA	739	C	O4'-C1'-N1	6.35	113.28	108.20
21	AA	866	C	N3-C4-C5	-6.35	119.36	121.90
21	AA	1208	C	O4'-C1'-N1	6.35	113.28	108.20
21	AA	1237	C	P-O3'-C3'	6.35	127.32	119.70
21	AA	1279	G	O4'-C1'-N9	6.35	113.28	108.20
57	BB	632	A	C5-C6-N6	-6.35	118.62	123.70
57	BB	928	A	N1-C2-N3	6.35	132.47	129.30
57	BB	1079	C	N3-C4-N4	6.35	122.44	118.00
57	BB	1778	U	C2-N1-C1'	-6.35	110.08	117.70
57	BB	1941	C	O4'-C1'-N1	6.35	113.28	108.20
57	BB	2631	G	C6-C5-N7	-6.35	126.59	130.40
57	BB	2869	G	C6-N1-C2	6.35	128.91	125.10
21	AA	210	C	C6-N1-C1'	-6.35	113.19	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	862	C	C2-N3-C4	6.35	123.07	119.90
57	BB	989	G	C2-N3-C4	6.35	115.07	111.90
57	BB	1040	A	C5-C6-N1	-6.35	114.53	117.70
21	AA	304	U	C5-C4-O4	-6.34	122.09	125.90
21	AA	467	U	P-O3'-C3'	-6.34	112.09	119.70
21	AA	553	A	C6-N1-C2	-6.34	114.79	118.60
21	AA	780	A	C2-N3-C4	-6.34	107.43	110.60
21	AA	908	A	C5-C6-N6	-6.34	118.62	123.70
21	AA	1101	A	N7-C8-N9	-6.34	110.63	113.80
57	BB	413	C	N1-C2-O2	6.34	122.71	118.90
57	BB	635	C	C4-C5-C6	6.34	120.57	117.40
57	BB	663	G	O4'-C1'-N9	6.34	113.28	108.20
57	BB	731	C	C2-N1-C1'	6.34	125.78	118.80
57	BB	808	G	C6-C5-N7	-6.34	126.59	130.40
57	BB	2081	U	C5-C6-N1	6.34	125.87	122.70
57	BB	2264	C	O4'-C4'-C3'	-6.34	97.66	104.00
21	AA	1293	C	C1'-O4'-C4'	-6.34	104.83	109.90
22	AY	9	A	C5-N7-C8	6.34	107.07	103.90
57	BB	618	G	C4-C5-C6	6.34	122.61	118.80
57	BB	1571	A	N7-C8-N9	-6.34	110.63	113.80
57	BB	1642	G	N1-C6-O6	6.34	123.71	119.90
57	BB	2023	C	C2-N3-C4	6.34	123.07	119.90
57	BB	2896	C	C5-C6-N1	6.34	124.17	121.00
21	AA	727	G	N9-C4-C5	-6.34	102.86	105.40
21	AA	1079	G	N1-C6-O6	6.34	123.70	119.90
21	AA	1155	A	C5-C6-N6	-6.34	118.63	123.70
23	AW	27	G	N3-C2-N2	6.34	124.34	119.90
57	BB	2708	G	C4-C5-C6	6.34	122.61	118.80
57	BB	2854	G	C6-C5-N7	-6.34	126.60	130.40
21	AA	206	C	C6-N1-C2	-6.34	117.76	120.30
21	AA	879	C	N3-C4-N4	6.34	122.44	118.00
21	AA	903	G	C5-C6-O6	-6.34	124.80	128.60
21	AA	1102	A	N9-C4-C5	6.34	108.34	105.80
57	BB	1564	C	C3'-C2'-C1'	6.34	106.57	101.50
57	BB	1668	A	C6-C5-N7	-6.34	127.86	132.30
57	BB	2581	G	N9-C4-C5	-6.34	102.86	105.40
57	BB	348	A	P-O3'-C3'	6.34	127.31	119.70
57	BB	699	A	C4-C5-C6	6.34	120.17	117.00
57	BB	730	A	P-O3'-C3'	-6.34	112.09	119.70
57	BB	820	A	C2-N3-C4	6.34	113.77	110.60
57	BB	953	G	C5-C6-O6	-6.34	124.80	128.60
57	BB	1509	A	O3'-P-O5'	6.34	116.04	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1651	G	C2-N3-C4	6.34	115.07	111.90
57	BB	1679	A	N7-C8-N9	-6.34	110.63	113.80
57	BB	1800	C	C2-N3-C4	6.34	123.07	119.90
57	BB	2418	A	C8-N9-C4	6.34	108.33	105.80
58	BA	29	A	C4-C5-C6	6.34	120.17	117.00
21	AA	274	A	N1-C6-N6	6.34	122.40	118.60
21	AA	601	G	O4'-C1'-N9	6.34	113.27	108.20
21	AA	792	A	C4'-C3'-C2'	-6.34	96.26	102.60
21	AA	906	A	C4'-C3'-C2'	-6.34	96.26	102.60
21	AA	1008	U	O4'-C1'-N1	6.34	113.27	108.20
21	AA	1275	A	O4'-C1'-N9	6.34	113.27	108.20
21	AA	1444	U	P-O5'-C5'	6.34	131.04	120.90
26	AV	28	C	P-O3'-C3'	6.34	127.30	119.70
57	BB	49	A	C5-N7-C8	6.34	107.07	103.90
57	BB	466	A	C4-C5-N7	-6.34	107.53	110.70
57	BB	974	G	C5-N7-C8	6.34	107.47	104.30
57	BB	1250	G	C1'-O4'-C4'	6.34	114.97	109.90
57	BB	1673	G	O4'-C1'-N9	6.34	113.27	108.20
57	BB	1684	G	C4-C5-N7	-6.34	108.27	110.80
57	BB	2479	U	P-O5'-C5'	6.34	131.04	120.90
20	AI	5	TYR	CB-CG-CD1	6.33	124.80	121.00
21	AA	629	A	C4-C5-N7	-6.33	107.53	110.70
57	BB	528	A	C5-C6-N1	-6.33	114.53	117.70
57	BB	1138	G	N1-C6-O6	6.33	123.70	119.90
57	BB	1401	G	N3-C2-N2	6.33	124.33	119.90
57	BB	1521	G	N1-C2-N3	-6.33	120.10	123.90
57	BB	1654	A	N1-C6-N6	-6.33	114.80	118.60
58	BA	36	C	C1'-O4'-C4'	6.33	114.97	109.90
21	AA	284	C	P-O5'-C5'	6.33	131.03	120.90
21	AA	676	A	N9-C4-C5	6.33	108.33	105.80
21	AA	981	U	N1-C2-N3	-6.33	111.10	114.90
21	AA	991	U	O4'-C1'-N1	6.33	113.27	108.20
57	BB	10	A	C4-C5-C6	6.33	120.17	117.00
57	BB	71	A	C5-C6-N6	-6.33	118.63	123.70
57	BB	611	C	O4'-C1'-N1	6.33	113.27	108.20
57	BB	648	G	C4-C5-N7	-6.33	108.27	110.80
57	BB	808	G	C8-N9-C4	-6.33	103.87	106.40
57	BB	845	A	C5-C6-N6	-6.33	118.63	123.70
57	BB	900	A	O4'-C4'-C3'	-6.33	97.67	104.00
57	BB	1136	G	O4'-C1'-N9	6.33	113.27	108.20
57	BB	1728	C	P-O3'-C3'	-6.33	112.10	119.70
57	BB	1774	C	N1-C2-O2	-6.33	115.10	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2121	G	C5-N7-C8	6.33	107.47	104.30
21	AA	158	G	N3-C4-N9	-6.33	122.20	126.00
21	AA	367	U	C2-N1-C1'	6.33	125.30	117.70
21	AA	825	A	N1-C2-N3	-6.33	126.13	129.30
21	AA	991	U	C6-N1-C2	-6.33	117.20	121.00
21	AA	1099	G	C4-C5-N7	6.33	113.33	110.80
22	AY	46	G	C6-C5-N7	-6.33	126.60	130.40
24	AX	20	U	N3-C4-C5	6.33	118.40	114.60
57	BB	166	U	C6-N1-C2	-6.33	117.20	121.00
57	BB	212	G	N7-C8-N9	-6.33	109.94	113.10
57	BB	1120	G	N7-C8-N9	6.33	116.27	113.10
57	BB	1648	U	O4'-C1'-N1	6.33	113.27	108.20
57	BB	2450	A	C6-C5-N7	-6.33	127.87	132.30
57	BB	2588	G	N1-C6-O6	6.33	123.70	119.90
21	AA	473	U	P-O5'-C5'	-6.33	110.77	120.90
21	AA	902	G	O4'-C1'-N9	6.33	113.26	108.20
57	BB	664	G	N1-C2-N3	-6.33	120.10	123.90
57	BB	1306	C	P-O5'-C5'	-6.33	110.77	120.90
57	BB	2109	U	N3-C4-C5	-6.33	110.80	114.60
57	BB	2269	G	N1-C2-N3	-6.33	120.10	123.90
21	AA	259	G	C5-C6-N1	-6.33	108.33	111.50
21	AA	514	C	N3-C4-N4	6.33	122.43	118.00
21	AA	855	U	C4'-C3'-C2'	6.33	108.93	102.60
51	B4	33	HIS	CB-CA-C	-6.33	97.75	110.40
57	BB	203	A	P-O3'-C3'	6.33	127.29	119.70
57	BB	468	G	C4-C5-N7	6.33	113.33	110.80
57	BB	1134	A	C4-C5-C6	6.33	120.16	117.00
57	BB	1434	A	N7-C8-N9	-6.33	110.64	113.80
57	BB	1474	U	O4'-C1'-N1	6.33	113.26	108.20
57	BB	1678	A	O4'-C1'-N9	6.33	113.26	108.20
57	BB	2216	G	C5-C6-O6	-6.33	124.80	128.60
21	AA	159	G	N1-C2-N3	-6.33	120.10	123.90
57	BB	308	G	C2-N3-C4	6.33	115.06	111.90
57	BB	1364	G	C5-N7-C8	-6.33	101.14	104.30
57	BB	1439	A	C6-N1-C2	-6.33	114.80	118.60
57	BB	1677	A	C6-C5-N7	-6.33	127.87	132.30
57	BB	1914	C	C2-N3-C4	-6.33	116.74	119.90
57	BB	2872	A	C8-N9-C4	-6.33	103.27	105.80
21	AA	102	G	N3-C4-N9	-6.33	122.20	126.00
21	AA	126	G	N3-C2-N2	6.33	124.33	119.90
21	AA	237	G	C4-N9-C1'	-6.33	118.28	126.50
21	AA	511	C	C6-N1-C2	-6.33	117.77	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	760	G	C5-C6-N1	-6.33	108.34	111.50
21	AA	803	G	N1-C2-N3	-6.33	120.11	123.90
21	AA	891	U	N3-C4-C5	-6.33	110.81	114.60
21	AA	959	A	C5-C6-N1	-6.33	114.54	117.70
21	AA	975	A	O4'-C1'-N9	6.33	113.26	108.20
21	AA	1351	U	N3-C4-O4	6.33	123.83	119.40
38	BS	1	MET	CG-SD-CE	-6.33	90.08	100.20
45	BC	102	TYR	CD1-CG-CD2	-6.33	110.94	117.90
57	BB	376	G	C5-C6-O6	-6.33	124.80	128.60
57	BB	380	G	C4'-C3'-C2'	-6.33	96.28	102.60
57	BB	456	C	N1-C2-N3	-6.33	114.77	119.20
57	BB	516	C	C5-C6-N1	6.33	124.16	121.00
57	BB	1388	G	N3-C4-C5	-6.33	125.44	128.60
57	BB	1840	G	C5-C6-N1	-6.33	108.34	111.50
57	BB	2235	G	C4-C5-C6	6.33	122.60	118.80
58	BA	95	U	N1-C2-O2	6.33	127.23	122.80
58	BA	108	A	C5-C6-N1	-6.33	114.54	117.70
21	AA	251	G	C4-N9-C1'	6.32	134.72	126.50
21	AA	459	A	C5-N7-C8	6.32	107.06	103.90
21	AA	547	A	C4-C5-C6	6.32	120.16	117.00
21	AA	1278	G	N7-C8-N9	-6.32	109.94	113.10
21	AA	1436	U	N1-C2-O2	-6.32	118.37	122.80
57	BB	1168	G	N9-C4-C5	-6.32	102.87	105.40
57	BB	1311	G	C5-C6-O6	-6.32	124.81	128.60
57	BB	1481	U	C5-C6-N1	6.32	125.86	122.70
57	BB	2828	G	C6-N1-C2	6.32	128.89	125.10
57	BB	2834	G	N3-C2-N2	6.32	124.33	119.90
58	BA	51	G	C4-C5-N7	6.32	113.33	110.80
57	BB	76	C	C5-C4-N4	-6.32	115.77	120.20
57	BB	665	U	N3-C4-O4	6.32	123.83	119.40
21	AA	436	C	P-O3'-C3'	-6.32	112.12	119.70
21	AA	585	G	N1-C6-O6	6.32	123.69	119.90
26	AV	66	C	C5-C4-N4	-6.32	115.78	120.20
57	BB	102	U	C5-C6-N1	6.32	125.86	122.70
57	BB	249	C	C2-N1-C1'	6.32	125.75	118.80
57	BB	292	U	C4-C5-C6	-6.32	115.91	119.70
57	BB	379	G	N1-C2-N3	-6.32	120.11	123.90
57	BB	504	A	C5-N7-C8	6.32	107.06	103.90
57	BB	961	C	O5'-C5'-C4'	-6.32	99.69	111.70
57	BB	963	U	O4'-C1'-N1	6.32	113.26	108.20
21	AA	377	G	N1-C6-O6	-6.32	116.11	119.90
21	AA	394	G	C2-N3-C4	6.32	115.06	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1061	G	O4'-C1'-N9	6.32	113.25	108.20
21	AA	1342	C	C5-C4-N4	-6.32	115.78	120.20
21	AA	1452	C	O4'-C1'-N1	6.32	113.25	108.20
57	BB	1928	A	N3-C4-C5	-6.32	122.38	126.80
57	BB	2317	A	C6-C5-N7	-6.32	127.88	132.30
21	AA	128	G	C5-C6-N1	-6.32	108.34	111.50
21	AA	676	A	O4'-C1'-N9	6.32	113.25	108.20
21	AA	724	G	C2-N3-C4	6.32	115.06	111.90
21	AA	981	U	O4'-C1'-N1	6.32	113.25	108.20
21	AA	1233	G	N1-C6-O6	6.32	123.69	119.90
21	AA	1514	G	C4-C5-N7	-6.32	108.27	110.80
26	AV	29	G	N3-C4-N9	-6.32	122.21	126.00
26	AV	65	C	C5-C4-N4	-6.32	115.78	120.20
57	BB	931	U	N3-C2-O2	6.32	126.62	122.20
57	BB	1214	A	C2-N3-C4	6.32	113.76	110.60
57	BB	1367	A	C6-C5-N7	-6.32	127.88	132.30
57	BB	2397	G	C5-C6-O6	-6.32	124.81	128.60
57	BB	2484	G	C4-C5-C6	6.32	122.59	118.80
57	BB	2569	G	C8-N9-C4	6.32	108.93	106.40
57	BB	2776	A	N1-C2-N3	6.32	132.46	129.30
57	BB	2823	A	C4'-C3'-C2'	-6.32	96.28	102.60
57	BB	2824	C	N1-C2-N3	-6.32	114.78	119.20
21	AA	999	C	O4'-C1'-N1	6.32	113.25	108.20
21	AA	1119	C	C3'-C2'-C1'	-6.32	96.45	101.50
57	BB	558	U	N3-C4-C5	-6.32	110.81	114.60
57	BB	881	G	N9-C1'-C2'	-6.32	105.05	112.00
57	BB	1029	A	C6-C5-N7	-6.32	127.88	132.30
57	BB	1220	G	C8-N9-C1'	6.32	135.21	127.00
57	BB	1594	U	C5-C6-N1	6.32	125.86	122.70
57	BB	2168	G	C5-C6-O6	-6.32	124.81	128.60
57	BB	2217	G	C4-N9-C1'	-6.32	118.29	126.50
57	BB	2297	A	C4-C5-C6	6.32	120.16	117.00
57	BB	2415	G	N1-C2-N3	-6.32	120.11	123.90
58	BA	9	G	O4'-C1'-N9	6.32	113.25	108.20
58	BA	81	G	C6-C5-N7	-6.32	126.61	130.40
21	AA	58	C	C6-N1-C2	-6.31	117.77	120.30
26	AV	10	G	C4-C5-N7	-6.31	108.28	110.80
57	BB	858	G	N1-C2-N3	-6.31	120.11	123.90
21	AA	605	U	N1-C2-O2	-6.31	118.38	122.80
21	AA	1190	G	C8-N9-C1'	-6.31	118.79	127.00
21	AA	1394	A	O4'-C1'-C2'	-6.31	99.49	105.80
26	AV	58	A	C5-C6-N6	-6.31	118.65	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	820	A	O4'-C1'-N9	6.31	113.25	108.20
57	BB	1299	G	N1-C2-N3	-6.31	120.11	123.90
57	BB	1646	C	P-O5'-C5'	6.31	131.00	120.90
57	BB	1982	U	C5-C4-O4	-6.31	122.11	125.90
57	BB	2459	A	C5-N7-C8	-6.31	100.74	103.90
21	AA	471	U	N3-C2-O2	6.31	126.62	122.20
21	AA	831	A	P-O3'-C3'	-6.31	112.13	119.70
21	AA	974	A	O4'-C1'-N9	6.31	113.25	108.20
23	AW	69	G	C6-C5-N7	-6.31	126.61	130.40
26	AV	21	A	O3'-P-O5'	-6.31	92.01	104.00
45	BC	102	TYR	CB-CG-CD2	6.31	124.79	121.00
57	BB	134	G	N7-C8-N9	6.31	116.25	113.10
57	BB	259	G	C6-N1-C2	6.31	128.89	125.10
57	BB	286	U	N3-C4-C5	6.31	118.39	114.60
57	BB	1423	G	C6-C5-N7	-6.31	126.61	130.40
57	BB	1475	G	C5-N7-C8	-6.31	101.14	104.30
57	BB	1555	G	C5-N7-C8	6.31	107.46	104.30
57	BB	2335	A	P-O3'-C3'	6.31	127.27	119.70
57	BB	2368	C	C4'-C3'-C2'	-6.31	96.29	102.60
57	BB	2859	G	C5'-C4'-O4'	6.31	116.67	109.10
21	AA	101	A	C5-C6-N6	-6.31	118.65	123.70
21	AA	545	C	C2-N3-C4	-6.31	116.75	119.90
21	AA	1385	G	N1-C2-N3	-6.31	120.11	123.90
25	AZ	195	LEU	CB-CG-CD2	6.31	121.72	111.00
26	AV	12	G	C4'-C3'-C2'	-6.31	96.29	102.60
57	BB	28	A	C4-C5-C6	6.31	120.16	117.00
57	BB	939	G	N3-C2-N2	6.31	124.32	119.90
57	BB	1205	A	C5-C6-N1	-6.31	114.55	117.70
57	BB	1936	A	C4-C5-N7	-6.31	107.55	110.70
57	BB	2608	G	C5-N7-C8	6.31	107.45	104.30
57	BB	2813	A	C4'-C3'-C2'	-6.31	96.29	102.60
58	BA	24	G	C6-N1-C2	-6.31	121.31	125.10
58	BA	39	A	O4'-C1'-N9	6.31	113.25	108.20
58	BA	99	A	N9-C4-C5	-6.31	103.28	105.80
10	AS	77	ARG	NE-CZ-NH1	6.31	123.45	120.30
21	AA	582	C	C5-C4-N4	-6.31	115.78	120.20
21	AA	893	C	P-O3'-C3'	-6.31	112.13	119.70
57	BB	71	A	C4-C5-C6	6.31	120.15	117.00
57	BB	600	G	C5-C6-O6	-6.31	124.82	128.60
57	BB	692	C	N3-C4-N4	6.31	122.42	118.00
57	BB	809	G	N1-C2-N3	-6.31	120.12	123.90
21	AA	1450	U	C5-C4-O4	-6.31	122.12	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	20	G	N3-C4-N9	6.31	129.78	126.00
57	BB	1499	C	C5-C4-N4	-6.31	115.79	120.20
57	BB	1628	G	O4'-C1'-N9	6.31	113.25	108.20
57	BB	1644	C	O4'-C1'-N1	6.31	113.25	108.20
57	BB	1701	A	C6-N1-C2	6.31	122.38	118.60
57	BB	1765	U	C4-C5-C6	6.31	123.48	119.70
57	BB	2155	U	N1-C2-O2	-6.31	118.39	122.80
57	BB	2656	U	C5-C6-N1	6.31	125.85	122.70
57	BB	2842	G	C5-C6-N1	-6.31	108.35	111.50
58	BA	33	G	C8-N9-C4	6.31	108.92	106.40
21	AA	82	G	N7-C8-N9	6.30	116.25	113.10
21	AA	765	G	C8-N9-C4	-6.30	103.88	106.40
21	AA	771	G	C2-N3-C4	6.30	115.05	111.90
21	AA	886	G	N1-C6-O6	6.30	123.68	119.90
56	BH	37	VAL	CA-CB-CG2	-6.30	101.44	110.90
57	BB	10	A	C6-C5-N7	-6.30	127.89	132.30
57	BB	115	C	C5-C6-N1	6.30	124.15	121.00
57	BB	1127	A	C5-N7-C8	6.30	107.05	103.90
57	BB	1740	G	N3-C2-N2	6.30	124.31	119.90
57	BB	2594	C	C3'-C2'-C1'	-6.30	96.46	101.50
57	BB	155	A	N3-C4-C5	-6.30	122.39	126.80
57	BB	2067	G	P-O3'-C3'	6.30	127.26	119.70
21	AA	759	A	C8-N9-C4	-6.30	103.28	105.80
21	AA	1496	C	C1'-O4'-C4'	-6.30	104.86	109.90
21	AA	1526	G	C8-N9-C4	6.30	108.92	106.40
53	BE	80	SER	N-CA-CB	6.30	119.95	110.50
57	BB	207	A	C5-N7-C8	6.30	107.05	103.90
57	BB	427	U	C4-C5-C6	-6.30	115.92	119.70
57	BB	926	G	N3-C2-N2	6.30	124.31	119.90
57	BB	1000	A	C5-C6-N1	-6.30	114.55	117.70
57	BB	2015	A	N9-C4-C5	6.30	108.32	105.80
57	BB	2109	U	C5'-C4'-O4'	6.30	116.66	109.10
57	BB	2665	A	C4'-C3'-C2'	-6.30	96.30	102.60
21	AA	743	A	N1-C6-N6	6.30	122.38	118.60
21	AA	757	U	O4'-C1'-N1	6.30	113.24	108.20
21	AA	1303	C	C6-N1-C2	-6.30	117.78	120.30
21	AA	1333	A	N9-C4-C5	6.30	108.32	105.80
57	BB	808	G	C4-C5-C6	6.30	122.58	118.80
57	BB	864	G	C8-N9-C4	-6.30	103.88	106.40
57	BB	1235	G	C5-C6-N1	-6.30	108.35	111.50
57	BB	1430	G	C6-N1-C2	6.30	128.88	125.10
57	BB	1918	A	N7-C8-N9	6.30	116.95	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2666	C	C6-N1-C1'	-6.30	113.24	120.80
57	BB	2794	C	C5-C6-N1	6.30	124.15	121.00
15	AD	164	ARG	NE-CZ-NH1	6.30	123.45	120.30
21	AA	1364	U	N3-C4-C5	-6.30	110.82	114.60
57	BB	1428	C	N1-C2-O2	-6.30	115.12	118.90
57	BB	1785	A	C8-N9-C4	-6.30	103.28	105.80
57	BB	2709	G	N1-C2-N3	-6.30	120.12	123.90
57	BB	2822	G	C2-N3-C4	6.30	115.05	111.90
21	AA	436	C	N3-C4-C5	-6.30	119.38	121.90
21	AA	558	G	C4-C5-C6	6.30	122.58	118.80
21	AA	919	A	N3-C4-C5	-6.30	122.39	126.80
21	AA	1527	U	N3-C4-C5	-6.30	110.82	114.60
57	BB	152	A	C8-N9-C4	-6.30	103.28	105.80
57	BB	535	G	N9-C4-C5	-6.30	102.88	105.40
57	BB	2061	G	N1-C2-N2	-6.30	110.53	116.20
21	AA	49	U	C4'-C3'-C2'	-6.29	96.31	102.60
21	AA	400	C	N3-C4-N4	6.29	122.41	118.00
21	AA	1190	G	C3'-C2'-C1'	-6.29	96.46	101.50
23	AW	37	A	O4'-C1'-N9	6.29	113.24	108.20
57	BB	452	G	C5-N7-C8	6.29	107.45	104.30
57	BB	1151	A	C4-C5-N7	-6.29	107.55	110.70
57	BB	2034	U	N3-C4-C5	-6.29	110.82	114.60
57	BB	2341	G	C5-C6-N1	-6.29	108.35	111.50
57	BB	2377	A	C8-N9-C4	-6.29	103.28	105.80
21	AA	310	G	N7-C8-N9	6.29	116.25	113.10
56	BH	115	VAL	C-N-CA	6.29	137.43	121.70
57	BB	235	U	N3-C2-O2	-6.29	117.80	122.20
57	BB	551	G	C4-C5-C6	6.29	122.58	118.80
57	BB	978	G	C5'-C4'-C3'	6.29	126.07	116.00
57	BB	1150	C	N3-C4-N4	6.29	122.41	118.00
57	BB	1430	G	C8-N9-C4	-6.29	103.88	106.40
57	BB	2092	U	N3-C4-O4	6.29	123.81	119.40
57	BB	2615	U	C5-C6-N1	6.29	125.85	122.70
21	AA	74	A	N9-C4-C5	-6.29	103.28	105.80
21	AA	342	C	O4'-C1'-N1	6.29	113.23	108.20
21	AA	959	A	C6-C5-N7	-6.29	127.90	132.30
21	AA	1290	G	C5-C6-O6	-6.29	124.83	128.60
49	B2	14	ARG	NE-CZ-NH1	-6.29	117.16	120.30
57	BB	754	U	C4'-C3'-C2'	-6.29	96.31	102.60
57	BB	1001	A	C4-C5-C6	6.29	120.15	117.00
57	BB	1392	A	C2-N3-C4	-6.29	107.45	110.60
57	BB	1964	G	C6-C5-N7	-6.29	126.62	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2369	A	C4'-C3'-C2'	-6.29	96.31	102.60
57	BB	2612	C	O4'-C1'-N1	6.29	113.23	108.20
57	BB	2199	A	C6-C5-N7	-6.29	127.90	132.30
57	BB	2293	G	C8-N9-C4	-6.29	103.88	106.40
21	AA	423	G	N3-C4-N9	-6.29	122.23	126.00
21	AA	435	A	C8-N9-C4	-6.29	103.28	105.80
21	AA	872	A	C4-C5-N7	-6.29	107.56	110.70
21	AA	873	A	C5-C6-N1	-6.29	114.56	117.70
21	AA	1273	C	C4-C5-C6	-6.29	114.25	117.40
57	BB	111	A	C2-N3-C4	-6.29	107.46	110.60
57	BB	537	G	N3-C4-N9	-6.29	122.23	126.00
57	BB	674	G	C4-C5-N7	-6.29	108.28	110.80
57	BB	1009	A	N1-C2-N3	6.29	132.44	129.30
57	BB	1261	C	N1-C2-N3	-6.29	114.80	119.20
57	BB	1314	C	N3-C2-O2	6.29	126.30	121.90
57	BB	1541	C	C4-C5-C6	6.29	120.54	117.40
57	BB	1776	G	N1-C2-N2	-6.29	110.54	116.20
57	BB	2817	U	N3-C4-O4	6.29	123.80	119.40
57	BB	2876	G	C5-N7-C8	-6.29	101.16	104.30
21	AA	1186	G	N1-C2-N3	-6.29	120.13	123.90
57	BB	479	A	C4-C5-C6	6.29	120.14	117.00
57	BB	606	U	N3-C4-C5	-6.29	110.83	114.60
57	BB	1281	G	C6-C5-N7	-6.29	126.63	130.40
57	BB	1537	G	N3-C2-N2	6.29	124.30	119.90
57	BB	1926	U	C5-C6-N1	6.29	125.84	122.70
57	BB	2704	C	N3-C4-C5	-6.29	119.39	121.90
23	AW	73	A	C4-C5-C6	6.29	120.14	117.00
24	AX	16	A	C5-C6-N1	-6.29	114.56	117.70
51	B4	20	ASP	CB-CG-OD2	6.29	123.96	118.30
57	BB	247	G	C6-C5-N7	-6.29	126.63	130.40
57	BB	729	G	C5-N7-C8	6.29	107.44	104.30
57	BB	1855	U	N1-C2-N3	-6.29	111.13	114.90
57	BB	2204	G	C5-C6-N1	-6.29	108.36	111.50
57	BB	2292	U	N1-C2-O2	-6.29	118.40	122.80
57	BB	2820	A	P-O3'-C3'	6.29	127.24	119.70
57	BB	2821	A	C5-C6-N6	-6.29	118.67	123.70
58	BA	19	C	N3-C4-N4	6.29	122.40	118.00
21	AA	393	A	C8-N9-C4	-6.28	103.29	105.80
21	AA	823	C	N3-C4-N4	6.28	122.40	118.00
21	AA	974	A	C5'-C4'-C3'	-6.28	105.94	116.00
21	AA	1441	A	O4'-C1'-N9	6.28	113.23	108.20
21	AA	1461	G	C8-N9-C4	-6.28	103.89	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1507	A	C8-N9-C4	-6.28	103.29	105.80
57	BB	403	U	N3-C2-O2	-6.28	117.80	122.20
57	BB	420	C	C4'-C3'-C2'	-6.28	96.32	102.60
57	BB	759	G	P-O3'-C3'	6.28	127.24	119.70
57	BB	818	G	C3'-C2'-C1'	-6.28	96.47	101.50
57	BB	1251	C	N3-C4-N4	6.28	122.40	118.00
57	BB	1828	G	N3-C4-N9	-6.28	122.23	126.00
57	BB	1890	A	N3-C4-N9	-6.28	122.37	127.40
57	BB	2047	C	C6-N1-C1'	-6.28	113.26	120.80
57	BB	2391	G	N9-C4-C5	6.28	107.91	105.40
57	BB	2643	G	O4'-C1'-N9	6.28	113.23	108.20
58	BA	85	G	C8-N9-C4	-6.28	103.89	106.40
21	AA	604	G	N3-C2-N2	-6.28	115.50	119.90
57	BB	1074	G	N3-C2-N2	6.28	124.30	119.90
57	BB	1270	C	N3-C4-N4	6.28	122.40	118.00
57	BB	1671	U	C4-C5-C6	6.28	123.47	119.70
57	BB	2126	A	C5-N7-C8	6.28	107.04	103.90
21	AA	110	C	N3-C4-C5	-6.28	119.39	121.90
21	AA	1177	G	C6-C5-N7	-6.28	126.63	130.40
21	AA	1284	C	O4'-C1'-N1	6.28	113.22	108.20
21	AA	1288	A	C4-C5-C6	6.28	120.14	117.00
57	BB	223	A	O4'-C1'-N9	6.28	113.22	108.20
57	BB	487	C	O4'-C1'-N1	6.28	113.22	108.20
57	BB	622	G	C5-C6-O6	-6.28	124.83	128.60
57	BB	1023	U	N3-C4-C5	-6.28	110.83	114.60
57	BB	1037	G	C8-N9-C4	-6.28	103.89	106.40
57	BB	1414	C	N1-C2-O2	-6.28	115.13	118.90
57	BB	1432	G	N7-C8-N9	6.28	116.24	113.10
57	BB	1497	U	N1-C2-O2	-6.28	118.40	122.80
57	BB	1531	C	C4-C5-C6	-6.28	114.26	117.40
57	BB	2115	G	N3-C2-N2	6.28	124.30	119.90
57	BB	2139	U	C2-N3-C4	-6.28	123.23	127.00
57	BB	2276	G	C5-N7-C8	6.28	107.44	104.30
57	BB	2643	G	N1-C2-N3	-6.28	120.13	123.90
57	BB	2871	U	O4'-C4'-C3'	-6.28	97.72	104.00
58	BA	52	A	O4'-C1'-N9	6.28	113.22	108.20
21	AA	1144	G	P-O3'-C3'	6.28	127.23	119.70
21	AA	1206	G	N3-C2-N2	6.28	124.30	119.90
57	BB	820	A	C6-N1-C2	6.28	122.37	118.60
57	BB	1445	G	C6-C5-N7	-6.28	126.63	130.40
57	BB	1791	A	C4'-C3'-C2'	-6.28	96.32	102.60
57	BB	2048	G	N3-C4-N9	-6.28	122.23	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	821	G	C4-C5-N7	6.28	113.31	110.80
21	AA	1245	C	N3-C4-N4	6.28	122.39	118.00
23	AW	11	C	C4-C5-C6	6.28	120.54	117.40
57	BB	94	A	C4-C5-C6	6.28	120.14	117.00
57	BB	392	U	N3-C4-C5	-6.28	110.83	114.60
57	BB	625	G	N9-C1'-C2'	-6.28	105.10	112.00
57	BB	1012	U	C4-C5-C6	-6.28	115.93	119.70
57	BB	1530	G	N9-C4-C5	-6.28	102.89	105.40
57	BB	1603	A	C5-C6-N6	-6.28	118.68	123.70
57	BB	1795	C	O4'-C1'-N1	6.28	113.22	108.20
57	BB	1849	G	N7-C8-N9	6.28	116.24	113.10
57	BB	1883	U	C6-N1-C2	6.28	124.77	121.00
21	AA	582	C	C2-N3-C4	6.28	123.04	119.90
21	AA	616	G	C4-C5-C6	6.28	122.57	118.80
21	AA	1363	A	N9-C1'-C2'	6.28	122.16	114.00
22	AY	58	A	N3-C4-N9	6.28	132.42	127.40
22	AY	65	G	P-O5'-C5'	-6.28	110.86	120.90
26	AV	64	G	C8-N9-C4	6.28	108.91	106.40
57	BB	198	C	C5-C4-N4	-6.28	115.81	120.20
57	BB	413	C	C5-C6-N1	-6.28	117.86	121.00
57	BB	956	G	N1-C2-N3	-6.28	120.13	123.90
57	BB	2727	A	C5-N7-C8	6.28	107.04	103.90
57	BB	2769	U	N3-C4-O4	6.28	123.79	119.40
57	BB	2810	A	P-O5'-C5'	6.28	130.94	120.90
21	AA	779	C	N3-C4-N4	6.27	122.39	118.00
21	AA	982	U	O4'-C1'-N1	6.27	113.22	108.20
21	AA	985	C	C2-N3-C4	6.27	123.04	119.90
21	AA	1360	A	C4'-C3'-C2'	-6.27	96.33	102.60
21	AA	1457	G	N1-C2-N3	-6.27	120.14	123.90
26	AV	72	A	C4-C5-C6	6.27	120.14	117.00
57	BB	249	C	C6-N1-C1'	-6.27	113.27	120.80
57	BB	559	G	N3-C2-N2	6.27	124.29	119.90
57	BB	1536	C	C4-C5-C6	6.27	120.54	117.40
21	AA	122	G	C6-C5-N7	-6.27	126.64	130.40
21	AA	262	A	C6-N1-C2	6.27	122.36	118.60
21	AA	558	G	O4'-C1'-N9	6.27	113.22	108.20
57	BB	569	U	O4'-C1'-N1	6.27	113.22	108.20
57	BB	1594	U	C2-N3-C4	-6.27	123.24	127.00
57	BB	1679	A	C4-C5-N7	-6.27	107.56	110.70
57	BB	2900	A	C6-C5-N7	-6.27	127.91	132.30
57	BB	350	G	N9-C4-C5	-6.27	102.89	105.40
57	BB	944	C	N3-C4-N4	6.27	122.39	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2082	A	C4-C5-C6	6.27	120.14	117.00
57	BB	2144	G	C8-N9-C1'	-6.27	118.85	127.00
57	BB	2317	A	C4-C5-C6	6.27	120.14	117.00
13	AB	17	HIS	N-CA-CB	6.27	121.89	110.60
21	AA	253	A	O4'-C1'-N9	6.27	113.22	108.20
57	BB	549	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	818	G	N7-C8-N9	6.27	116.23	113.10
57	BB	1050	A	C5-C6-N1	-6.27	114.56	117.70
57	BB	1233	C	C4'-C3'-C2'	-6.27	96.33	102.60
57	BB	1260	A	C8-N9-C4	-6.27	103.29	105.80
57	BB	1299	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	1651	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	1727	C	C2-N3-C4	6.27	123.03	119.90
57	BB	1755	A	N7-C8-N9	6.27	116.94	113.80
57	BB	2033	A	N1-C2-N3	6.27	132.43	129.30
57	BB	2107	G	N3-C2-N2	6.27	124.29	119.90
57	BB	2722	G	O4'-C1'-N9	6.27	113.22	108.20
21	AA	609	A	C8-N9-C4	-6.27	103.29	105.80
21	AA	657	U	C5-C4-O4	-6.27	122.14	125.90
21	AA	951	G	C6-N1-C2	-6.27	121.34	125.10
21	AA	1385	G	C6-C5-N7	-6.27	126.64	130.40
49	B2	39	ARG	NE-CZ-NH1	-6.27	117.17	120.30
57	BB	406	G	C5-C6-N1	-6.27	108.37	111.50
57	BB	778	G	N3-C4-C5	-6.27	125.47	128.60
57	BB	980	A	C4-C5-N7	-6.27	107.57	110.70
57	BB	1459	G	O4'-C1'-N9	6.27	113.21	108.20
57	BB	1935	G	P-O3'-C3'	-6.27	112.18	119.70
57	BB	2059	A	C4-C5-C6	6.27	120.13	117.00
57	BB	2477	U	N3-C4-O4	6.27	123.79	119.40
57	BB	2642	G	C4'-C3'-C2'	-6.27	96.33	102.60
57	BB	2852	G	N3-C2-N2	6.27	124.29	119.90
12	AU	10	PRO	N-CA-CB	6.27	110.82	103.30
21	AA	93	U	C5-C6-N1	6.27	125.83	122.70
21	AA	874	G	N1-C2-N2	-6.27	110.56	116.20
21	AA	1146	A	C8-N9-C4	-6.27	103.29	105.80
57	BB	463	G	C6-N1-C2	6.27	128.86	125.10
57	BB	2040	G	C4-C5-N7	6.27	113.31	110.80
57	BB	2671	G	N1-C6-O6	6.27	123.66	119.90
58	BA	111	U	C5-C4-O4	-6.27	122.14	125.90
21	AA	6	G	N7-C8-N9	6.26	116.23	113.10
21	AA	214	C	C6-N1-C2	-6.26	117.79	120.30
21	AA	456	A	O5'-P-OP2	6.26	118.22	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	763	G	C5-N7-C8	-6.26	101.17	104.30
22	AY	7	U	P-O3'-C3'	6.26	127.22	119.70
22	AY	30	G	C2-N3-C4	6.26	115.03	111.90
33	BN	75	ILE	CA-CB-CG2	-6.26	98.37	110.90
57	BB	313	G	C4-C5-N7	6.26	113.31	110.80
57	BB	2286	G	N7-C8-N9	6.26	116.23	113.10
57	BB	2449	U	O4'-C1'-N1	6.26	113.21	108.20
57	BB	2480	C	C3'-C2'-C1'	-6.26	96.49	101.50
57	BB	2521	C	C4-C5-C6	6.26	120.53	117.40
21	AA	1128	C	N1-C2-N3	6.26	123.58	119.20
21	AA	1386	G	N1-C2-N3	-6.26	120.14	123.90
55	BG	152	ARG	NE-CZ-NH1	-6.26	117.17	120.30
57	BB	628	G	C5-N7-C8	6.26	107.43	104.30
57	BB	638	G	C4-C5-C6	6.26	122.56	118.80
57	BB	1965	C	C5-C4-N4	-6.26	115.82	120.20
57	BB	2161	C	C6-N1-C2	-6.26	117.80	120.30
57	BB	2435	A	C8-N9-C4	-6.26	103.30	105.80
57	BB	2599	G	N3-C2-N2	6.26	124.28	119.90
21	AA	285	C	O4'-C1'-N1	6.26	113.21	108.20
21	AA	384	G	N3-C2-N2	6.26	124.28	119.90
21	AA	434	U	O4'-C1'-N1	6.26	113.21	108.20
21	AA	548	G	N1-C2-N3	-6.26	120.14	123.90
21	AA	821	G	C8-N9-C1'	6.26	135.14	127.00
21	AA	858	G	P-O3'-C3'	6.26	127.21	119.70
21	AA	1301	U	C2-N1-C1'	6.26	125.21	117.70
57	BB	402	A	C6-C5-N7	-6.26	127.92	132.30
57	BB	1366	A	C5-C6-N1	-6.26	114.57	117.70
57	BB	1713	A	C1'-O4'-C4'	-6.26	104.89	109.90
57	BB	2330	G	C4-C5-C6	6.26	122.56	118.80
58	BA	53	A	C4-C5-C6	6.26	120.13	117.00
18	AG	71	THR	CA-CB-CG2	-6.26	103.64	112.40
21	AA	715	A	C2-N3-C4	6.26	113.73	110.60
21	AA	1257	A	N9-C4-C5	-6.26	103.30	105.80
57	BB	226	A	N3-C4-N9	6.26	132.41	127.40
57	BB	228	C	C5-C4-N4	-6.26	115.82	120.20
57	BB	422	A	C4'-C3'-C2'	-6.26	96.34	102.60
57	BB	1157	G	N3-C4-N9	6.26	129.76	126.00
57	BB	1540	G	C5-C6-N1	-6.26	108.37	111.50
57	BB	1629	U	C2-N1-C1'	-6.26	110.19	117.70
57	BB	2284	A	N1-C2-N3	6.26	132.43	129.30
57	BB	2533	U	O4'-C1'-N1	6.26	113.21	108.20
57	BB	2578	G	C4-C5-N7	-6.26	108.30	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2702	G	N3-C2-N2	6.26	124.28	119.90
21	AA	400	C	N3-C2-O2	-6.26	117.52	121.90
57	BB	715	A	C4-C5-C6	6.26	120.13	117.00
57	BB	1373	A	N9-C4-C5	6.26	108.30	105.80
57	BB	1996	C	C6-N1-C2	-6.26	117.80	120.30
57	BB	2676	C	C5-C6-N1	6.26	124.13	121.00
21	AA	282	A	N1-C6-N6	-6.26	114.85	118.60
21	AA	588	G	C6-C5-N7	-6.26	126.65	130.40
21	AA	1066	C	N1-C2-O2	6.26	122.65	118.90
21	AA	1328	C	N3-C2-O2	6.26	126.28	121.90
57	BB	220	G	N1-C6-O6	6.26	123.65	119.90
57	BB	713	G	N9-C4-C5	-6.26	102.90	105.40
57	BB	966	G	N1-C2-N3	-6.26	120.15	123.90
57	BB	1077	A	C2-N3-C4	-6.26	107.47	110.60
57	BB	2825	G	P-O3'-C3'	-6.26	112.19	119.70
58	BA	77	U	OP1-P-OP2	-6.26	110.22	119.60
15	AD	35	GLN	N-CA-CB	6.25	121.86	110.60
26	AV	28	C	N3-C4-C5	-6.25	119.40	121.90
31	BL	108	ALA	CB-CA-C	-6.25	100.72	110.10
53	BE	172	ALA	O-C-N	6.25	132.71	122.70
57	BB	1014	A	C5-C6-N6	-6.25	118.70	123.70
57	BB	1106	G	C6-C5-N7	-6.25	126.65	130.40
57	BB	2704	C	N1-C2-O2	6.25	122.65	118.90
58	BA	88	C	C4-C5-C6	6.25	120.53	117.40
21	AA	137	U	C5-C6-N1	6.25	125.83	122.70
21	AA	221	C	C6-N1-C2	-6.25	117.80	120.30
21	AA	243	A	OP1-P-OP2	-6.25	110.22	119.60
21	AA	518	C	O4'-C1'-N1	6.25	113.20	108.20
21	AA	721	G	C1'-O4'-C4'	-6.25	104.90	109.90
21	AA	1463	U	C1'-O4'-C4'	-6.25	104.90	109.90
23	AW	12	U	C4-C5-C6	6.25	123.45	119.70
25	AZ	354	ASP	CB-CG-OD2	-6.25	112.67	118.30
28	BI	46	ASP	CB-CG-OD1	-6.25	112.67	118.30
33	BN	64	ARG	NE-CZ-NH1	-6.25	117.17	120.30
57	BB	513	A	N9-C4-C5	-6.25	103.30	105.80
57	BB	798	G	N3-C4-C5	6.25	131.73	128.60
57	BB	1128	G	N9-C4-C5	6.25	107.90	105.40
57	BB	1183	U	C5-C6-N1	6.25	125.83	122.70
57	BB	1593	A	C6-C5-N7	-6.25	127.92	132.30
57	BB	1684	G	C5-N7-C8	6.25	107.43	104.30
57	BB	1726	C	O4'-C1'-N1	6.25	113.20	108.20
57	BB	1747	U	N3-C4-C5	-6.25	110.85	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2112	G	N1-C6-O6	6.25	123.65	119.90
57	BB	2263	C	O4'-C4'-C3'	-6.25	97.75	104.00
58	BA	31	C	N1-C2-O2	6.25	122.65	118.90
21	AA	72	A	C5-N7-C8	6.25	107.03	103.90
21	AA	212	G	N1-C6-O6	6.25	123.65	119.90
21	AA	286	C	C5-C4-N4	-6.25	115.82	120.20
21	AA	953	G	N3-C2-N2	6.25	124.28	119.90
21	AA	1060	U	C3'-C2'-C1'	-6.25	96.50	101.50
26	AV	28	C	C2-N3-C4	6.25	123.03	119.90
26	AV	30	G	N1-C6-O6	6.25	123.65	119.90
57	BB	178	G	C5-N7-C8	-6.25	101.17	104.30
57	BB	576	U	N1-C2-O2	-6.25	118.42	122.80
57	BB	1192	G	C5-C6-N1	6.25	114.62	111.50
57	BB	1501	G	C4-C5-N7	6.25	113.30	110.80
57	BB	2247	A	O4'-C1'-N9	6.25	113.20	108.20
57	BB	2368	C	C2-N1-C1'	-6.25	111.92	118.80
58	BA	46	A	O4'-C1'-N9	6.25	113.20	108.20
21	AA	257	G	O4'-C4'-C3'	-6.25	97.75	104.00
21	AA	737	C	O4'-C1'-N1	6.25	113.20	108.20
57	BB	976	G	N1-C2-N3	-6.25	120.15	123.90
57	BB	1028	A	O4'-C1'-N9	6.25	113.20	108.20
57	BB	1453	A	C6-N1-C2	6.25	122.35	118.60
57	BB	1902	C	C6-N1-C1'	-6.25	113.30	120.80
57	BB	2685	G	N9-C4-C5	6.25	107.90	105.40
14	AC	126	ARG	NE-CZ-NH2	-6.25	117.18	120.30
21	AA	145	G	O4'-C1'-N9	6.25	113.20	108.20
21	AA	244	U	N3-C2-O2	6.25	126.57	122.20
21	AA	369	G	O4'-C1'-N9	6.25	113.20	108.20
21	AA	553	A	N1-C6-N6	6.25	122.35	118.60
21	AA	566	G	C4-N9-C1'	-6.25	118.38	126.50
21	AA	783	C	C4-C5-C6	6.25	120.52	117.40
21	AA	969	A	C4-C5-N7	-6.25	107.58	110.70
21	AA	1014	A	N9-C4-C5	6.25	108.30	105.80
21	AA	1359	C	O4'-C1'-N1	6.25	113.20	108.20
21	AA	1488	G	C8-N9-C4	-6.25	103.90	106.40
26	AV	16	C	C5-C6-N1	-6.25	117.88	121.00
33	BN	17	ARG	NE-CZ-NH1	6.25	123.42	120.30
37	BR	13	ARG	NE-CZ-NH2	6.25	123.42	120.30
57	BB	47	C	P-O3'-C3'	-6.25	112.20	119.70
57	BB	303	G	C6-C5-N7	-6.25	126.65	130.40
57	BB	572	A	N3-C4-N9	6.25	132.40	127.40
57	BB	833	A	C6-N1-C2	-6.25	114.85	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1345	C	O4'-C1'-N1	6.25	113.20	108.20
57	BB	1525	A	C5-C6-N6	-6.25	118.70	123.70
57	BB	1549	A	C8-N9-C4	-6.25	103.30	105.80
57	BB	1769	U	P-O5'-C5'	6.25	130.90	120.90
57	BB	1807	G	P-O3'-C3'	-6.25	112.20	119.70
21	AA	522	C	P-O3'-C3'	6.25	127.20	119.70
21	AA	563	A	N3-C4-C5	-6.25	122.43	126.80
21	AA	1353	G	C5-C6-O6	-6.25	124.85	128.60
57	BB	99	U	C2-N3-C4	6.25	130.75	127.00
57	BB	101	A	C1'-O4'-C4'	-6.25	104.90	109.90
57	BB	776	G	C5'-C4'-O4'	-6.25	101.60	109.10
57	BB	1281	G	O4'-C1'-N9	6.25	113.20	108.20
57	BB	2192	U	C5-C6-N1	6.25	125.82	122.70
57	BB	2433	A	C4-C5-N7	-6.25	107.58	110.70
58	BA	54	G	C4-C5-C6	6.25	122.55	118.80
21	AA	389	A	C6-C5-N7	-6.25	127.93	132.30
57	BB	854	C	O4'-C1'-C2'	-6.25	99.56	105.80
57	BB	2597	G	N3-C4-N9	6.25	129.75	126.00
57	BB	2699	C	N1-C1'-C2'	-6.25	105.13	112.00
21	AA	64	G	O4'-C1'-C2'	6.24	113.22	107.60
21	AA	174	A	C5-C6-N6	-6.24	118.70	123.70
21	AA	215	C	C4-C5-C6	6.24	120.52	117.40
21	AA	455	G	N3-C2-N2	6.24	124.27	119.90
21	AA	694	A	N9-C4-C5	6.24	108.30	105.80
21	AA	821	G	O4'-C4'-C3'	-6.24	97.76	104.00
21	AA	1192	C	C2-N1-C1'	6.24	125.67	118.80
57	BB	637	A	C4'-C3'-C2'	6.24	108.84	102.60
57	BB	785	G	C4-C5-C6	6.24	122.55	118.80
57	BB	1038	G	C8-N9-C4	6.24	108.90	106.40
57	BB	1090	A	C6-C5-N7	-6.24	127.93	132.30
57	BB	1759	A	C6-C5-N7	-6.24	127.93	132.30
57	BB	1863	G	C6-C5-N7	-6.24	126.65	130.40
57	BB	2011	U	C4'-C3'-C2'	-6.24	96.36	102.60
57	BB	2433	A	O4'-C1'-N9	6.24	113.19	108.20
57	BB	343	C	P-O3'-C3'	-6.24	112.21	119.70
57	BB	2539	C	C2-N3-C4	6.24	123.02	119.90
21	AA	380	G	C4-C5-C6	-6.24	115.06	118.80
21	AA	392	C	O4'-C1'-N1	6.24	113.19	108.20
21	AA	616	G	C4-C5-N7	-6.24	108.30	110.80
21	AA	636	U	O4'-C1'-N1	6.24	113.19	108.20
21	AA	759	A	N9-C4-C5	6.24	108.30	105.80
57	BB	118	A	C4-C5-N7	6.24	113.82	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	518	G	N3-C2-N2	6.24	124.27	119.90
57	BB	970	U	C5-C4-O4	-6.24	122.16	125.90
57	BB	996	A	C5-C6-N6	-6.24	118.71	123.70
57	BB	1327	A	C3'-C2'-C1'	-6.24	96.51	101.50
57	BB	1965	C	N3-C4-N4	6.24	122.37	118.00
57	BB	2349	G	O5'-P-OP2	6.24	118.19	110.70
57	BB	2661	G	C4-C5-C6	6.24	122.55	118.80
21	AA	248	C	C6-N1-C2	6.24	122.80	120.30
21	AA	356	A	C2-N3-C4	-6.24	107.48	110.60
21	AA	533	A	N7-C8-N9	-6.24	110.68	113.80
21	AA	1152	A	C4-C5-C6	6.24	120.12	117.00
21	AA	1494	G	C5-C6-N1	6.24	114.62	111.50
57	BB	381	G	C5-N7-C8	-6.24	101.18	104.30
57	BB	1579	A	C3'-C2'-C1'	-6.24	96.51	101.50
57	BB	1853	A	C4-C5-C6	6.24	120.12	117.00
57	BB	1918	A	C4-C5-C6	6.24	120.12	117.00
57	BB	2879	A	C6-C5-N7	-6.24	127.93	132.30
21	AA	147	G	C5-C6-N1	-6.24	108.38	111.50
53	BE	7	ASP	CB-CG-OD2	6.24	123.91	118.30
57	BB	463	G	C6-C5-N7	-6.24	126.66	130.40
57	BB	1098	A	C5-C6-N6	-6.24	118.71	123.70
57	BB	2050	C	C3'-C2'-C1'	-6.24	96.51	101.50
57	BB	2135	A	C8-N9-C4	-6.24	103.31	105.80
21	AA	138	G	N3-C4-C5	6.24	131.72	128.60
21	AA	443	C	O4'-C1'-N1	6.24	113.19	108.20
21	AA	521	G	C8-N9-C1'	6.24	135.11	127.00
21	AA	1135	U	C6-N1-C2	-6.24	117.26	121.00
22	AY	37	G	C5'-C4'-C3'	-6.24	106.02	116.00
57	BB	506	G	O4'-C1'-N9	6.24	113.19	108.20
57	BB	1048	A	N1-C2-N3	6.24	132.42	129.30
57	BB	2064	C	O4'-C1'-N1	6.24	113.19	108.20
57	BB	2493	U	C5-C4-O4	6.24	129.64	125.90
57	BB	2591	C	C5-C6-N1	6.24	124.12	121.00
21	AA	582	C	N3-C2-O2	-6.23	117.54	121.90
21	AA	633	G	P-O5'-C5'	6.23	130.87	120.90
24	AX	13	A	N9-C4-C5	6.23	108.29	105.80
24	AX	16	A	O4'-C1'-C2'	6.23	113.21	107.60
26	AV	60	U	C6-N1-C2	-6.23	117.26	121.00
57	BB	1077	A	N1-C6-N6	6.23	122.34	118.60
57	BB	1171	G	C4-C5-C6	6.23	122.54	118.80
21	AA	1215	G	N3-C2-N2	6.23	124.26	119.90
21	AA	1440	U	C5-C6-N1	6.23	125.82	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	10	G	C4-N9-C1'	6.23	134.60	126.50
26	AV	59	A	C6-N1-C2	6.23	122.34	118.60
57	BB	685	A	C6-C5-N7	-6.23	127.94	132.30
57	BB	1142	A	C5'-C4'-O4'	6.23	116.58	109.10
57	BB	1799	G	C4-C5-C6	6.23	122.54	118.80
57	BB	2169	A	N9-C4-C5	-6.23	103.31	105.80
57	BB	2266	A	C8-N9-C4	-6.23	103.31	105.80
57	BB	2625	G	C4-C5-N7	6.23	113.29	110.80
57	BB	2718	G	C5-N7-C8	-6.23	101.18	104.30
58	BA	40	U	N1-C2-O2	-6.23	118.44	122.80
12	AU	46	ARG	NE-CZ-NH1	6.23	123.42	120.30
21	AA	664	G	O4'-C1'-N9	6.23	113.19	108.20
21	AA	671	G	C5-C6-O6	-6.23	124.86	128.60
21	AA	1024	G	C5-C6-N1	-6.23	108.38	111.50
21	AA	1391	U	C5-C4-O4	-6.23	122.16	125.90
57	BB	548	G	N7-C8-N9	6.23	116.22	113.10
57	BB	1041	G	N3-C4-C5	-6.23	125.48	128.60
57	BB	1903	G	P-O3'-C3'	-6.23	112.22	119.70
57	BB	2028	U	N3-C4-O4	6.23	123.76	119.40
57	BB	2371	G	C5-C6-N1	-6.23	108.39	111.50
57	BB	2823	A	N9-C4-C5	6.23	108.29	105.80
52	BD	110	THR	CA-CB-CG2	-6.23	103.68	112.40
57	BB	763	G	N1-C2-N3	-6.23	120.16	123.90
20	AI	129	ARG	NE-CZ-NH2	6.23	123.41	120.30
21	AA	238	A	C6-N1-C2	-6.23	114.86	118.60
21	AA	441	A	C1'-O4'-C4'	-6.23	104.92	109.90
21	AA	592	G	C4-C5-C6	6.23	122.54	118.80
21	AA	1100	C	P-O3'-C3'	6.23	127.17	119.70
21	AA	1204	A	C4-C5-C6	6.23	120.11	117.00
21	AA	1456	A	C4-C5-C6	6.23	120.11	117.00
21	AA	1525	G	C2-N3-C4	6.23	115.01	111.90
22	AY	32	C	N1-C2-O2	-6.23	115.16	118.90
23	AW	53	G	N7-C8-N9	-6.23	109.99	113.10
23	AW	68	C	C5-C6-N1	6.23	124.11	121.00
26	AV	56	C	N1-C2-N3	6.23	123.56	119.20
57	BB	1905	C	N3-C4-C5	-6.23	119.41	121.90
57	BB	1913	A	C5'-C4'-O4'	6.23	116.57	109.10
57	BB	2239	G	C5-C6-N1	-6.23	108.39	111.50
57	BB	2529	G	C4'-C3'-C2'	6.23	108.83	102.60
57	BB	2532	G	OP1-P-OP2	-6.23	110.26	119.60
57	BB	2777	G	C6-C5-N7	-6.23	126.66	130.40
21	AA	382	A	P-O5'-C5'	6.23	130.86	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2023	C	N3-C4-C5	-6.23	119.41	121.90
57	BB	2171	A	N3-C4-C5	-6.23	122.44	126.80
21	AA	1265	C	N1-C1'-C2'	-6.22	105.15	112.00
23	AW	24	G	N9-C4-C5	-6.22	102.91	105.40
26	AV	47	U	C5'-C4'-O4'	6.22	116.57	109.10
57	BB	28	A	C5-C6-N6	-6.22	118.72	123.70
57	BB	726	G	O4'-C1'-N9	6.22	113.18	108.20
57	BB	741	U	C5-C6-N1	6.22	125.81	122.70
57	BB	2531	A	N1-C2-N3	-6.22	126.19	129.30
57	BB	2760	C	C5'-C4'-O4'	6.22	116.57	109.10
21	AA	335	C	C4-C5-C6	6.22	120.51	117.40
21	AA	737	C	C6-N1-C2	-6.22	117.81	120.30
23	AW	5	G	C6-C5-N7	-6.22	126.67	130.40
26	AV	33	U	O4'-C1'-N1	6.22	113.18	108.20
56	BH	132	PHE	CB-CG-CD1	6.22	125.16	120.80
57	BB	164	C	C2-N3-C4	6.22	123.01	119.90
57	BB	700	G	C4-C5-C6	6.22	122.53	118.80
57	BB	959	A	N3-C4-C5	-6.22	122.44	126.80
57	BB	1140	C	C2-N3-C4	6.22	123.01	119.90
57	BB	1288	G	C2-N3-C4	-6.22	108.79	111.90
57	BB	2482	A	O4'-C1'-N9	6.22	113.18	108.20
57	BB	2692	G	N3-C2-N2	6.22	124.26	119.90
21	AA	152	A	C8-N9-C4	-6.22	103.31	105.80
21	AA	537	G	O4'-C1'-N9	6.22	113.18	108.20
21	AA	954	G	O4'-C1'-N9	6.22	113.18	108.20
22	AY	59	U	P-O5'-C5'	6.22	130.85	120.90
57	BB	188	G	N7-C8-N9	-6.22	109.99	113.10
57	BB	249	C	O4'-C4'-C3'	6.22	111.08	106.10
57	BB	363	G	C4-C5-N7	-6.22	108.31	110.80
57	BB	385	C	C5-C4-N4	-6.22	115.84	120.20
57	BB	627	A	O4'-C1'-C2'	-6.22	99.58	105.80
57	BB	1079	C	C5-C6-N1	-6.22	117.89	121.00
14	AC	105	VAL	CA-CB-CG2	-6.22	101.57	110.90
21	AA	133	U	C5-C6-N1	6.22	125.81	122.70
21	AA	200	G	C1'-O4'-C4'	-6.22	104.92	109.90
21	AA	587	G	N1-C2-N3	-6.22	120.17	123.90
21	AA	945	G	N1-C2-N3	-6.22	120.17	123.90
21	AA	960	U	N3-C2-O2	6.22	126.55	122.20
21	AA	1030	U	P-O3'-C3'	6.22	127.16	119.70
21	AA	1109	C	O4'-C1'-N1	6.22	113.18	108.20
22	AY	31	A	N3-C4-C5	6.22	131.15	126.80
25	AZ	349	MET	CG-SD-CE	-6.22	90.25	100.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
27	B5	149	VAL	CA-CB-CG1	-6.22	101.57	110.90
57	BB	125	A	N1-C2-N3	6.22	132.41	129.30
57	BB	247	G	N1-C6-O6	6.22	123.63	119.90
57	BB	526	A	C4-C5-C6	6.22	120.11	117.00
57	BB	833	A	C4-C5-N7	-6.22	107.59	110.70
57	BB	1715	G	C5'-C4'-C3'	6.22	125.95	116.00
57	BB	2325	G	C2-N3-C4	6.22	115.01	111.90
57	BB	2360	G	N3-C4-C5	-6.22	125.49	128.60
57	BB	2376	A	C2-N3-C4	-6.22	107.49	110.60
58	BA	9	G	N9-C4-C5	-6.22	102.91	105.40
21	AA	656	G	C6-C5-N7	-6.22	126.67	130.40
21	AA	1155	A	C4-C5-C6	6.22	120.11	117.00
21	AA	1245	C	N3-C4-C5	-6.22	119.41	121.90
23	AW	17	C	P-O3'-C3'	6.22	127.16	119.70
56	BH	98	ASP	CB-CG-OD2	-6.22	112.70	118.30
57	BB	261	G	C2-N3-C4	6.22	115.01	111.90
57	BB	1492	G	C5-C6-N1	-6.22	108.39	111.50
57	BB	1507	C	C4-C5-C6	6.22	120.51	117.40
57	BB	2129	C	O4'-C1'-N1	6.22	113.17	108.20
57	BB	2419	U	C6-N1-C2	6.22	124.73	121.00
58	BA	118	C	O4'-C1'-N1	6.22	113.17	108.20
21	AA	160	A	C4'-C3'-C2'	-6.22	96.38	102.60
21	AA	442	G	C8-N9-C1'	6.22	135.08	127.00
21	AA	855	U	O4'-C4'-C3'	-6.22	97.78	104.00
21	AA	863	U	N3-C4-O4	6.22	123.75	119.40
21	AA	907	A	C6-N1-C2	6.22	122.33	118.60
21	AA	1084	G	O4'-C1'-N9	6.22	113.17	108.20
57	BB	1615	C	N1-C2-N3	6.22	123.55	119.20
57	BB	1900	A	C2-N3-C4	6.22	113.71	110.60
57	BB	1993	U	N3-C4-C5	6.22	118.33	114.60
57	BB	2141	G	N1-C6-O6	6.22	123.63	119.90
57	BB	2333	A	P-O5'-C5'	6.22	130.85	120.90
57	BB	2361	G	C6-N1-C2	6.22	128.83	125.10
57	BB	2694	G	C6-N1-C2	6.22	128.83	125.10
57	BB	2803	G	N1-C2-N3	-6.22	120.17	123.90
21	AA	61	G	C5-C6-O6	-6.21	124.87	128.60
21	AA	119	A	C5-N7-C8	6.21	107.01	103.90
21	AA	617	G	N3-C4-C5	-6.21	125.49	128.60
21	AA	765	G	C8-N9-C1'	-6.21	118.92	127.00
21	AA	1392	G	C4-C5-C6	6.21	122.53	118.80
26	AV	26	G	C8-N9-C4	6.21	108.89	106.40
57	BB	281	C	C4'-C3'-C2'	6.21	108.81	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	328	U	O4'-C1'-N1	6.21	113.17	108.20
57	BB	394	C	C6-N1-C2	-6.21	117.81	120.30
57	BB	526	A	N1-C2-N3	6.21	132.41	129.30
57	BB	874	G	C4-C5-N7	6.21	113.29	110.80
57	BB	1282	U	N3-C4-C5	-6.21	110.87	114.60
57	BB	1833	C	N1-C2-N3	-6.21	114.85	119.20
57	BB	1960	A	C4-C5-N7	-6.21	107.59	110.70
57	BB	2405	G	C5'-C4'-C3'	-6.21	106.06	116.00
21	AA	51	A	O4'-C1'-N9	6.21	113.17	108.20
21	AA	297	G	N3-C2-N2	6.21	124.25	119.90
21	AA	374	A	N9-C4-C5	6.21	108.28	105.80
21	AA	438	U	N3-C4-C5	-6.21	110.87	114.60
28	BI	58	ILE	CA-CB-CG1	6.21	122.81	111.00
57	BB	658	U	O4'-C1'-N1	6.21	113.17	108.20
57	BB	1210	G	C4'-C3'-C2'	-6.21	96.39	102.60
57	BB	1507	C	N3-C2-O2	6.21	126.25	121.90
57	BB	2037	A	C2-N3-C4	-6.21	107.49	110.60
57	BB	2706	A	C5'-C4'-C3'	6.21	125.94	116.00
57	BB	2887	A	N1-C2-N3	6.21	132.41	129.30
14	AC	21	TRP	CA-CB-CG	6.21	125.50	113.70
21	AA	91	U	C2-N3-C4	6.21	130.73	127.00
21	AA	275	G	C5-C6-O6	-6.21	124.87	128.60
21	AA	276	G	N3-C2-N2	6.21	124.25	119.90
21	AA	343	U	P-O3'-C3'	6.21	127.15	119.70
21	AA	633	G	O4'-C1'-N9	6.21	113.17	108.20
21	AA	813	U	OP1-P-OP2	-6.21	110.28	119.60
21	AA	1285	A	N1-C2-N3	6.21	132.41	129.30
21	AA	1455	G	C8-N9-C4	6.21	108.88	106.40
22	AY	3	G	N9-C4-C5	6.21	107.89	105.40
22	AY	32	C	C2-N1-C1'	6.21	125.63	118.80
22	AY	42	G	C6-N1-C2	6.21	128.83	125.10
26	AV	38	A	N1-C2-N3	6.21	132.41	129.30
57	BB	166	U	C5-C6-N1	6.21	125.81	122.70
57	BB	1565	C	N3-C2-O2	6.21	126.25	121.90
57	BB	1776	G	C4'-C3'-C2'	-6.21	96.39	102.60
57	BB	1991	U	C5-C6-N1	-6.21	119.59	122.70
18	AG	25	PHE	CB-CG-CD1	-6.21	116.45	120.80
21	AA	95	C	N3-C4-N4	6.21	122.35	118.00
21	AA	465	A	N7-C8-N9	6.21	116.91	113.80
21	AA	1457	G	N3-C4-N9	6.21	129.73	126.00
29	BJ	4	PHE	CB-CG-CD2	-6.21	116.45	120.80
32	BM	134	THR	N-CA-CB	6.21	122.10	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	524	G	C5-N7-C8	6.21	107.41	104.30
57	BB	849	A	C5-C6-N6	-6.21	118.73	123.70
57	BB	1207	C	O4'-C1'-N1	6.21	113.17	108.20
57	BB	1299	G	C5-C6-O6	-6.21	124.87	128.60
57	BB	1732	C	C4'-C3'-C2'	6.21	108.81	102.60
21	AA	326	G	C5-C6-O6	-6.21	124.88	128.60
21	AA	445	G	C2-N3-C4	6.21	115.00	111.90
21	AA	694	A	N7-C8-N9	-6.21	110.70	113.80
21	AA	813	U	P-O3'-C3'	6.21	127.15	119.70
21	AA	1360	A	C5-C6-N6	-6.21	118.73	123.70
22	AY	73	A	C2-N3-C4	-6.21	107.50	110.60
22	AY	75	C	O4'-C1'-N1	6.21	113.17	108.20
57	BB	284	U	C5'-C4'-C3'	-6.21	106.06	116.00
57	BB	819	A	C5-C6-N6	-6.21	118.73	123.70
57	BB	975	A	N7-C8-N9	6.21	116.90	113.80
57	BB	1900	A	C5-C6-N1	-6.21	114.59	117.70
57	BB	2283	C	P-O3'-C3'	-6.21	112.25	119.70
57	BB	2632	A	C5-C6-N6	-6.21	118.73	123.70
57	BB	2651	C	O4'-C1'-N1	6.21	113.17	108.20
57	BB	2824	C	C5-C4-N4	6.21	124.55	120.20
57	BB	2851	A	N1-C2-N3	6.21	132.40	129.30
21	AA	28	A	C4-C5-N7	-6.21	107.60	110.70
21	AA	227	G	N3-C4-N9	-6.21	122.28	126.00
21	AA	324	G	C4-C5-N7	-6.21	108.32	110.80
21	AA	747	A	C5-C6-N6	-6.21	118.73	123.70
21	AA	843	U	OP2-P-O3'	6.21	118.85	105.20
22	AY	74	C	C3'-C2'-C1'	-6.21	96.53	101.50
24	AX	12	A	C4-N9-C1'	6.21	137.47	126.30
33	BN	72	ASP	CB-CG-OD1	6.21	123.89	118.30
57	BB	26	G	C2-N3-C4	6.21	115.00	111.90
57	BB	712	G	C6-C5-N7	-6.21	126.68	130.40
57	BB	1043	C	P-O3'-C3'	-6.21	112.25	119.70
57	BB	1701	A	C5'-C4'-C3'	-6.21	106.07	116.00
57	BB	1822	C	C3'-C2'-C1'	-6.21	96.53	101.50
57	BB	2470	G	N1-C2-N3	-6.21	120.18	123.90
58	BA	109	A	C3'-C2'-C1'	6.21	106.46	101.50
21	AA	505	G	N3-C2-N2	6.21	124.24	119.90
22	AY	5	A	C6-C5-N7	-6.21	127.96	132.30
25	AZ	210	PHE	CB-CG-CD1	-6.21	116.46	120.80
35	BP	87	ARG	NE-CZ-NH2	-6.21	117.20	120.30
57	BB	1427	A	O4'-C1'-N9	6.21	113.16	108.20
3	AL	13	ARG	NE-CZ-NH2	6.20	123.40	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	AL	49	ARG	CB-CG-CD	6.20	127.73	111.60
21	AA	262	A	C2-N3-C4	6.20	113.70	110.60
21	AA	424	G	C1'-O4'-C4'	6.20	114.86	109.90
21	AA	767	A	N7-C8-N9	6.20	116.90	113.80
21	AA	906	A	C6-N1-C2	-6.20	114.88	118.60
21	AA	957	U	C5-C4-O4	6.20	129.62	125.90
22	AY	30	G	N1-C2-N3	-6.20	120.18	123.90
25	AZ	343	LEU	CB-CG-CD1	6.20	121.55	111.00
29	BJ	16	TYR	CB-CG-CD2	6.20	124.72	121.00
57	BB	44	A	N3-C4-C5	-6.20	122.46	126.80
57	BB	1310	G	C2-N3-C4	6.20	115.00	111.90
57	BB	1317	G	C5-C6-O6	-6.20	124.88	128.60
57	BB	1697	G	C4-C5-N7	6.20	113.28	110.80
57	BB	1883	U	O4'-C1'-N1	6.20	113.16	108.20
57	BB	2472	G	C5'-C4'-C3'	6.20	125.93	116.00
57	BB	932	U	C3'-C2'-C1'	-6.20	96.54	101.50
57	BB	1722	A	C4-C5-C6	6.20	120.10	117.00
57	BB	2459	A	N9-C4-C5	-6.20	103.32	105.80
57	BB	2699	C	N3-C4-N4	6.20	122.34	118.00
58	BA	110	C	N1-C2-O2	-6.20	115.18	118.90
21	AA	255	G	C4'-C3'-C2'	-6.20	96.40	102.60
21	AA	622	A	O4'-C1'-N9	6.20	113.16	108.20
21	AA	711	G	C4'-C3'-C2'	-6.20	96.40	102.60
21	AA	942	G	N1-C2-N3	-6.20	120.18	123.90
21	AA	1140	C	C5-C4-N4	-6.20	115.86	120.20
21	AA	1243	C	C5-C4-N4	-6.20	115.86	120.20
23	AW	53	G	O4'-C1'-N9	6.20	113.16	108.20
57	BB	580	U	C4'-C3'-C2'	-6.20	96.40	102.60
57	BB	742	A	C5-C6-N1	-6.20	114.60	117.70
57	BB	1028	A	C5-N7-C8	6.20	107.00	103.90
57	BB	1371	G	C5-N7-C8	6.20	107.40	104.30
57	BB	1503	A	N9-C4-C5	6.20	108.28	105.80
57	BB	2808	G	N3-C4-N9	6.20	129.72	126.00
57	BB	2829	A	N1-C2-N3	6.20	132.40	129.30
21	AA	483	C	C4'-C3'-C2'	6.20	108.80	102.60
21	AA	693	G	C6-N1-C2	6.20	128.82	125.10
23	AW	65	G	C2-N3-C4	6.20	115.00	111.90
57	BB	127	A	O4'-C1'-N9	6.20	113.16	108.20
57	BB	565	C	C4-C5-C6	6.20	120.50	117.40
57	BB	754	U	N1-C2-N3	6.20	118.62	114.90
57	BB	1186	G	C5-C6-N1	6.20	114.60	111.50
57	BB	1186	G	C6-N1-C2	-6.20	121.38	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1395	A	C4-C5-N7	-6.20	107.60	110.70
57	BB	1759	A	N1-C6-N6	6.20	122.32	118.60
57	BB	1770	G	C5-N7-C8	-6.20	101.20	104.30
57	BB	1901	A	C5-N7-C8	6.20	107.00	103.90
57	BB	2129	C	C2-N1-C1'	6.20	125.62	118.80
57	BB	2453	A	C2-N3-C4	6.20	113.70	110.60
21	AA	578	C	C6-N1-C2	-6.20	117.82	120.30
21	AA	609	A	C5-N7-C8	6.20	107.00	103.90
57	BB	34	U	C5-C4-O4	-6.20	122.18	125.90
57	BB	1435	G	O4'-C1'-N9	6.20	113.16	108.20
57	BB	1570	A	C5-C6-N1	-6.20	114.60	117.70
57	BB	1757	A	C4-C5-C6	6.20	120.10	117.00
57	BB	2370	G	N1-C6-O6	6.20	123.62	119.90
21	AA	15	G	C1'-O4'-C4'	6.20	114.86	109.90
21	AA	1308	U	C6-N1-C2	-6.20	117.28	121.00
22	AY	36	A	C5-N7-C8	6.20	107.00	103.90
57	BB	751	A	P-O3'-C3'	-6.20	112.27	119.70
57	BB	938	G	N3-C2-N2	6.20	124.24	119.90
57	BB	1418	G	N1-C2-N2	-6.20	110.62	116.20
57	BB	1835	G	N3-C2-N2	6.20	124.24	119.90
57	BB	1839	G	C8-N9-C1'	6.20	135.06	127.00
57	BB	1949	G	C4'-C3'-C2'	-6.20	96.41	102.60
57	BB	1987	A	C5-C6-N1	-6.20	114.60	117.70
57	BB	2590	A	C4-C5-N7	-6.20	107.60	110.70
58	BA	50	A	N9-C4-C5	6.20	108.28	105.80
21	AA	351	G	N3-C2-N2	6.19	124.24	119.90
21	AA	408	A	N1-C2-N3	6.19	132.40	129.30
57	BB	1060	U	O4'-C1'-N1	6.19	113.16	108.20
21	AA	112	G	N3-C4-N9	6.19	129.72	126.00
21	AA	303	A	C6-C5-N7	-6.19	127.97	132.30
21	AA	669	G	O4'-C1'-N9	6.19	113.15	108.20
21	AA	1042	A	O4'-C1'-N9	6.19	113.15	108.20
21	AA	1250	A	C5-C6-N6	-6.19	118.75	123.70
57	BB	514	A	C8-N9-C4	6.19	108.28	105.80
57	BB	1091	G	N1-C2-N3	-6.19	120.19	123.90
57	BB	1650	A	C5-C6-N6	-6.19	118.75	123.70
57	BB	1963	U	C6-N1-C1'	-6.19	112.53	121.20
21	AA	164	G	C4-C5-C6	-6.19	115.09	118.80
21	AA	244	U	C2-N3-C4	6.19	130.72	127.00
23	AW	10	G	C5-N7-C8	-6.19	101.20	104.30
32	BM	38	ARG	NE-CZ-NH2	-6.19	117.20	120.30
57	BB	94	A	N3-C4-C5	-6.19	122.47	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1491	G	C4'-C3'-C2'	-6.19	96.41	102.60
57	BB	2143	C	C5-C6-N1	6.19	124.09	121.00
57	BB	2330	G	OP1-P-OP2	-6.19	110.31	119.60
57	BB	2731	G	C5-C6-N1	-6.19	108.41	111.50
57	BB	2857	G	N7-C8-N9	6.19	116.19	113.10
58	BA	9	G	C6-N1-C2	6.19	128.81	125.10
21	AA	873	A	O4'-C1'-N9	6.19	113.15	108.20
21	AA	1096	C	C6-N1-C2	-6.19	117.82	120.30
33	BN	117	ASP	N-CA-CB	6.19	121.74	110.60
57	BB	1032	A	N9-C4-C5	6.19	108.28	105.80
57	BB	1163	G	N1-C2-N3	-6.19	120.19	123.90
57	BB	1839	G	N9-C4-C5	6.19	107.88	105.40
57	BB	2176	A	P-O3'-C3'	-6.19	112.27	119.70
58	BA	67	G	C4-C5-N7	6.19	113.28	110.80
19	AH	65	PHE	CB-CG-CD1	6.19	125.13	120.80
21	AA	455	G	C5-C6-O6	-6.19	124.89	128.60
21	AA	576	C	O4'-C1'-N1	6.19	113.15	108.20
21	AA	733	G	N7-C8-N9	-6.19	110.01	113.10
57	BB	115	C	P-O3'-C3'	-6.19	112.28	119.70
57	BB	745	G	C5-N7-C8	6.19	107.39	104.30
57	BB	790	U	C5-C4-O4	-6.19	122.19	125.90
57	BB	931	U	N3-C4-C5	-6.19	110.89	114.60
57	BB	1059	G	O4'-C1'-N9	6.19	113.15	108.20
57	BB	1256	G	N3-C2-N2	6.19	124.23	119.90
57	BB	1711	A	N9-C4-C5	6.19	108.28	105.80
57	BB	1781	U	C2-N3-C4	-6.19	123.29	127.00
57	BB	2305	U	N3-C2-O2	6.19	126.53	122.20
21	AA	1135	U	C5-C6-N1	6.19	125.79	122.70
21	AA	1441	A	C5-C6-N6	-6.19	118.75	123.70
57	BB	117	G	C1'-O4'-C4'	-6.19	104.95	109.90
57	BB	503	A	N7-C8-N9	-6.19	110.71	113.80
57	BB	2859	G	C4-C5-C6	6.19	122.51	118.80
58	BA	14	U	C2-N3-C4	-6.19	123.29	127.00
21	AA	784	A	C5-N7-C8	6.18	106.99	103.90
21	AA	998	C	C2-N3-C4	6.18	122.99	119.90
52	BD	175	LEU	N-CA-CB	6.18	122.77	110.40
53	BE	62	GLN	CA-CB-CG	6.18	127.01	113.40
57	BB	315	G	N9-C4-C5	-6.18	102.93	105.40
57	BB	473	G	N3-C4-N9	-6.18	122.29	126.00
57	BB	907	G	P-O3'-C3'	-6.18	112.28	119.70
57	BB	1249	U	C5-C6-N1	6.18	125.79	122.70
57	BB	1307	A	C4-C5-N7	6.18	113.79	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1856	U	C4-C5-C6	-6.18	115.99	119.70
57	BB	2198	A	C4-C5-N7	-6.18	107.61	110.70
57	BB	2608	G	P-O3'-C3'	-6.18	112.28	119.70
21	AA	102	G	N3-C4-C5	6.18	131.69	128.60
21	AA	512	U	C5'-C4'-C3'	-6.18	106.11	116.00
21	AA	648	A	C5-C6-N1	-6.18	114.61	117.70
21	AA	683	G	N1-C2-N3	-6.18	120.19	123.90
21	AA	840	C	C6-N1-C2	-6.18	117.83	120.30
21	AA	867	G	N1-C2-N3	-6.18	120.19	123.90
21	AA	938	A	N7-C8-N9	6.18	116.89	113.80
57	BB	44	A	C5-C6-N6	-6.18	118.75	123.70
57	BB	242	G	N9-C4-C5	-6.18	102.93	105.40
57	BB	340	A	P-O3'-C3'	-6.18	112.28	119.70
57	BB	1316	U	P-O3'-C3'	-6.18	112.28	119.70
57	BB	1344	U	C5-C4-O4	-6.18	122.19	125.90
57	BB	1601	G	C5-C6-N1	-6.18	108.41	111.50
57	BB	1644	C	C4-C5-C6	6.18	120.49	117.40
57	BB	1885	A	N9-C4-C5	6.18	108.27	105.80
57	BB	2811	G	N1-C6-O6	6.18	123.61	119.90
21	AA	1456	A	C6-C5-N7	-6.18	127.97	132.30
57	BB	81	G	C4-C5-N7	6.18	113.27	110.80
57	BB	227	A	P-O3'-C3'	6.18	127.12	119.70
57	BB	1695	G	N7-C8-N9	-6.18	110.01	113.10
57	BB	2346	A	N1-C2-N3	-6.18	126.21	129.30
21	AA	260	G	C4-N9-C1'	-6.18	118.47	126.50
21	AA	715	A	N3-C4-C5	-6.18	122.47	126.80
21	AA	1472	U	O4'-C1'-N1	6.18	113.14	108.20
26	AV	45	G	P-O5'-C5'	-6.18	111.01	120.90
35	BP	20	ARG	NE-CZ-NH1	6.18	123.39	120.30
57	BB	266	G	C4-C5-N7	6.18	113.27	110.80
57	BB	775	G	C8-N9-C1'	6.18	135.03	127.00
57	BB	1091	G	C1'-O4'-C4'	6.18	114.84	109.90
57	BB	1399	C	C3'-C2'-C1'	6.18	106.44	101.50
57	BB	2582	G	C5-N7-C8	6.18	107.39	104.30
57	BB	2664	G	P-O5'-C5'	6.18	130.79	120.90
21	AA	382	A	N9-C4-C5	6.18	108.27	105.80
21	AA	616	G	N3-C2-N2	6.18	124.22	119.90
21	AA	1104	G	O4'-C1'-N9	6.18	113.14	108.20
57	BB	1705	A	O4'-C1'-N9	6.18	113.14	108.20
57	BB	2035	G	C5'-C4'-C3'	6.18	125.89	116.00
57	BB	2440	C	C6-N1-C2	-6.18	117.83	120.30
2	AK	51	PHE	CB-CG-CD2	-6.18	116.48	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	271	C	P-O3'-C3'	6.18	127.11	119.70
21	AA	319	G	N3-C2-N2	-6.18	115.58	119.90
21	AA	1118	U	C3'-C2'-C1'	-6.18	96.56	101.50
21	AA	1165	U	N3-C4-O4	6.18	123.72	119.40
21	AA	1177	G	N3-C4-C5	-6.18	125.51	128.60
21	AA	1310	G	N3-C4-N9	-6.18	122.29	126.00
21	AA	1414	U	O4'-C1'-N1	6.18	113.14	108.20
21	AA	1417	G	N3-C2-N2	6.18	124.22	119.90
48	B1	20	TYR	CG-CD2-CE2	6.18	126.24	121.30
57	BB	391	A	C5-C6-N6	-6.18	118.76	123.70
57	BB	695	G	C5-C6-O6	-6.18	124.89	128.60
57	BB	1810	A	C5-C6-N1	-6.18	114.61	117.70
57	BB	1968	G	P-O5'-C5'	-6.18	111.02	120.90
57	BB	1999	C	O4'-C1'-N1	6.18	113.14	108.20
57	BB	2521	C	N3-C4-C5	-6.18	119.43	121.90
57	BB	2644	G	O4'-C1'-N9	6.18	113.14	108.20
57	BB	2850	A	C5-C6-N1	-6.18	114.61	117.70
5	AN	52	ARG	NE-CZ-NH2	6.17	123.39	120.30
21	AA	722	G	C4-N9-C1'	6.17	134.53	126.50
21	AA	1012	A	C8-N9-C4	6.17	108.27	105.80
23	AW	31	A	C4-C5-N7	6.17	113.79	110.70
45	BC	181	ARG	NE-CZ-NH1	-6.17	117.21	120.30
57	BB	375	G	O4'-C1'-N9	6.17	113.14	108.20
57	BB	907	G	O4'-C1'-N9	6.17	113.14	108.20
57	BB	1285	A	C8-N9-C4	6.17	108.27	105.80
57	BB	1582	C	N3-C4-C5	-6.17	119.43	121.90
57	BB	2186	G	N3-C4-C5	-6.17	125.51	128.60
58	BA	74	U	N3-C4-O4	6.17	123.72	119.40
21	AA	778	G	P-O5'-C5'	6.17	130.78	120.90
21	AA	1136	C	N3-C2-O2	6.17	126.22	121.90
57	BB	1219	U	C2-N3-C4	-6.17	123.30	127.00
57	BB	1924	C	N3-C4-N4	6.17	122.32	118.00
57	BB	2273	A	O4'-C1'-N9	6.17	113.14	108.20
57	BB	2699	C	P-O3'-C3'	-6.17	112.29	119.70
57	BB	2725	A	O4'-C1'-N9	6.17	113.14	108.20
21	AA	154	U	C1'-O4'-C4'	-6.17	104.96	109.90
21	AA	457	G	C5-C6-N1	-6.17	108.41	111.50
21	AA	1036	A	N9-C4-C5	6.17	108.27	105.80
21	AA	1468	A	P-O3'-C3'	-6.17	112.29	119.70
22	AY	25	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	210	C	N3-C2-O2	6.17	126.22	121.90
57	BB	235	U	C6-N1-C2	-6.17	117.30	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	327	G	C8-N9-C4	-6.17	103.93	106.40
57	BB	839	U	C4-C5-C6	-6.17	116.00	119.70
57	BB	1002	G	O4'-C1'-N9	6.17	113.14	108.20
57	BB	1516	G	C6-N1-C2	6.17	128.80	125.10
57	BB	1797	G	N3-C4-C5	6.17	131.69	128.60
57	BB	2170	A	P-O3'-C3'	-6.17	112.30	119.70
57	BB	2498	C	C4'-C3'-C2'	-6.17	96.43	102.60
58	BA	67	G	N1-C2-N3	-6.17	120.20	123.90
21	AA	232	G	N7-C8-N9	6.17	116.19	113.10
21	AA	729	A	C8-N9-C4	6.17	108.27	105.80
21	AA	1189	U	C2-N1-C1'	6.17	125.11	117.70
57	BB	1151	A	N1-C2-N3	6.17	132.38	129.30
57	BB	1767	G	C3'-C2'-C1'	-6.17	96.56	101.50
57	BB	1917	U	C4'-C3'-C2'	-6.17	96.43	102.60
57	BB	2723	C	P-O3'-C3'	-6.17	112.30	119.70
57	BB	2748	A	C8-N9-C4	-6.17	103.33	105.80
21	AA	568	G	N3-C4-N9	6.17	129.70	126.00
21	AA	1336	C	C4'-C3'-C2'	6.17	108.77	102.60
26	AV	46	G	C8-N9-C4	-6.17	103.93	106.40
56	BH	36	ALA	CB-CA-C	6.17	119.35	110.10
57	BB	31	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	542	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	758	C	P-O3'-C3'	-6.17	112.30	119.70
57	BB	1206	G	N9-C1'-C2'	-6.17	105.21	112.00
57	BB	1412	U	C2-N3-C4	-6.17	123.30	127.00
57	BB	1749	A	C3'-C2'-C1'	-6.17	96.56	101.50
57	BB	1779	U	C3'-C2'-C1'	6.17	106.43	101.50
57	BB	1912	A	O4'-C1'-N9	6.17	113.14	108.20
57	BB	2008	C	O4'-C1'-N1	6.17	113.14	108.20
57	BB	2770	G	O4'-C1'-N9	6.17	113.14	108.20
21	AA	301	G	N9-C4-C5	-6.17	102.93	105.40
21	AA	384	G	P-O5'-C5'	6.17	130.77	120.90
21	AA	844	G	O4'-C4'-C3'	6.17	111.03	106.10
43	BX	27	ARG	NE-CZ-NH2	-6.17	117.22	120.30
57	BB	593	U	C6-N1-C2	-6.17	117.30	121.00
57	BB	669	G	N1-C2-N3	-6.17	120.20	123.90
57	BB	1265	A	C8-N9-C4	-6.17	103.33	105.80
57	BB	1276	A	N1-C2-N3	-6.17	126.22	129.30
57	BB	1603	A	C5-N7-C8	6.17	106.98	103.90
57	BB	2121	G	N7-C8-N9	-6.17	110.02	113.10
57	BB	2202	U	N1-C2-N3	-6.17	111.20	114.90
21	AA	605	U	C3'-C2'-C1'	-6.17	96.57	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1289	A	N3-C4-C5	-6.17	122.48	126.80
21	AA	1330	U	P-O3'-C3'	6.17	127.10	119.70
21	AA	1518	A	N9-C4-C5	6.17	108.27	105.80
22	AY	22	G	C4-C5-C6	6.17	122.50	118.80
23	AW	60	U	C4-C5-C6	6.17	123.40	119.70
57	BB	11	C	C6-N1-C2	-6.17	117.83	120.30
57	BB	299	A	C4-C5-N7	-6.17	107.62	110.70
57	BB	404	A	P-O5'-C5'	6.17	130.76	120.90
57	BB	1552	A	C6-N1-C2	-6.17	114.90	118.60
57	BB	1970	A	N1-C2-N3	-6.17	126.22	129.30
21	AA	50	A	C5-C6-N6	-6.16	118.77	123.70
21	AA	969	A	N3-C4-C5	-6.16	122.49	126.80
21	AA	1029	U	C4'-C3'-C2'	-6.16	96.44	102.60
21	AA	1092	A	C5-C6-N1	-6.16	114.62	117.70
21	AA	1251	A	O4'-C1'-N9	6.16	113.13	108.20
21	AA	1395	C	N1-C2-O2	6.16	122.60	118.90
22	AY	14	A	C5-C6-N6	-6.16	118.77	123.70
57	BB	341	C	C4-C5-C6	6.16	120.48	117.40
57	BB	1223	G	C5'-C4'-O4'	6.16	116.50	109.10
57	BB	1338	G	C4-C5-N7	6.16	113.27	110.80
57	BB	1618	A	C4-C5-N7	-6.16	107.62	110.70
57	BB	1632	A	O4'-C4'-C3'	-6.16	97.84	104.00
57	BB	1670	C	C2-N1-C1'	6.16	125.58	118.80
57	BB	1815	A	C5-N7-C8	-6.16	100.82	103.90
57	BB	2042	A	C5-C6-N1	-6.16	114.62	117.70
57	BB	2165	C	P-O3'-C3'	6.16	127.10	119.70
21	AA	1097	C	P-O3'-C3'	-6.16	112.31	119.70
57	BB	88	G	N7-C8-N9	-6.16	110.02	113.10
57	BB	443	A	C5-C6-N1	-6.16	114.62	117.70
57	BB	916	G	C5-N7-C8	-6.16	101.22	104.30
57	BB	1000	A	N7-C8-N9	6.16	116.88	113.80
57	BB	1195	G	C4-C5-C6	6.16	122.50	118.80
57	BB	1827	U	O4'-C1'-N1	6.16	113.13	108.20
57	BB	1979	U	O4'-C4'-C3'	-6.16	97.84	104.00
57	BB	2256	G	N1-C2-N2	6.16	121.75	116.20
21	AA	663	A	C2-N3-C4	-6.16	107.52	110.60
26	AV	9	G	O4'-C1'-N9	6.16	113.13	108.20
30	BK	107	ARG	NE-CZ-NH1	6.16	123.38	120.30
57	BB	937	C	N3-C4-C5	-6.16	119.44	121.90
57	BB	1374	G	C6-C5-N7	-6.16	126.70	130.40
57	BB	1774	C	N3-C2-O2	6.16	126.21	121.90
57	BB	2357	G	N1-C2-N2	-6.16	110.66	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2491	U	C1'-O4'-C4'	6.16	114.83	109.90
58	BA	84	G	C2-N3-C4	6.16	114.98	111.90
21	AA	319	G	N1-C2-N2	6.16	121.74	116.20
21	AA	365	U	N3-C4-C5	-6.16	110.91	114.60
21	AA	1309	G	C5-C6-O6	-6.16	124.91	128.60
22	AY	57	G	C4-C5-N7	-6.16	108.34	110.80
23	AW	46	G	C3'-C2'-C1'	6.16	106.43	101.50
31	BL	78	ARG	NE-CZ-NH2	-6.16	117.22	120.30
57	BB	316	C	C4-C5-C6	6.16	120.48	117.40
57	BB	960	A	C5-C6-N6	-6.16	118.77	123.70
57	BB	1139	G	C5-C6-N1	-6.16	108.42	111.50
57	BB	2164	C	O4'-C1'-N1	6.16	113.13	108.20
57	BB	2166	U	C4'-C3'-C2'	-6.16	96.44	102.60
57	BB	2224	G	C3'-C2'-C1'	-6.16	96.57	101.50
57	BB	2498	C	N3-C4-N4	6.16	122.31	118.00
57	BB	2606	C	C5-C4-N4	-6.16	115.89	120.20
57	BB	2625	G	O4'-C4'-C3'	6.16	111.03	106.10
58	BA	3	C	C5-C4-N4	-6.16	115.89	120.20
21	AA	11	G	N1-C6-O6	6.16	123.59	119.90
21	AA	277	C	N1-C2-O2	6.16	122.59	118.90
21	AA	386	C	C4-C5-C6	6.16	120.48	117.40
21	AA	465	A	C5-C6-N6	-6.16	118.77	123.70
21	AA	1101	A	C4'-C3'-C2'	-6.16	96.44	102.60
57	BB	603	A	N3-C4-C5	-6.16	122.49	126.80
57	BB	1527	G	C5-C6-O6	-6.16	124.91	128.60
57	BB	1989	G	C4-C5-C6	6.16	122.49	118.80
57	BB	2100	G	N1-C2-N3	-6.16	120.21	123.90
21	AA	632	U	P-O5'-C5'	6.16	130.75	120.90
21	AA	1229	A	C8-N9-C4	-6.16	103.34	105.80
21	AA	1419	G	C5-C6-O6	-6.16	124.91	128.60
57	BB	933	A	C6-N1-C2	-6.16	114.91	118.60
57	BB	1432	G	C5'-C4'-C3'	-6.16	106.15	116.00
57	BB	1772	A	C2-N3-C4	6.16	113.68	110.60
57	BB	1810	A	N7-C8-N9	6.16	116.88	113.80
57	BB	1921	G	C4-C5-N7	-6.16	108.34	110.80
57	BB	2068	U	O4'-C1'-N1	6.16	113.12	108.20
58	BA	70	C	N3-C4-C5	-6.16	119.44	121.90
21	AA	1051	C	P-O3'-C3'	-6.15	112.32	119.70
57	BB	307	G	C5-C6-N1	-6.15	108.42	111.50
57	BB	587	C	C4-C5-C6	6.15	120.48	117.40
57	BB	1160	G	C4'-C3'-C2'	-6.15	96.45	102.60
57	BB	1196	C	N3-C4-N4	6.15	122.31	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2771	C	N3-C2-O2	-6.15	117.59	121.90
4	AM	78	ARG	N-CA-CB	6.15	121.68	110.60
17	AF	4	TYR	CB-CG-CD2	6.15	124.69	121.00
21	AA	60	A	O4'-C1'-N9	6.15	113.12	108.20
21	AA	290	C	N3-C4-C5	-6.15	119.44	121.90
21	AA	522	C	N3-C4-C5	-6.15	119.44	121.90
21	AA	1014	A	N7-C8-N9	6.15	116.88	113.80
21	AA	1119	C	O4'-C4'-C3'	-6.15	97.85	104.00
57	BB	710	U	C3'-C2'-C1'	6.15	106.42	101.50
57	BB	2895	G	N3-C2-N2	6.15	124.21	119.90
21	AA	804	U	N1-C2-N3	-6.15	111.21	114.90
21	AA	1361	G	C4'-C3'-C2'	-6.15	96.45	102.60
21	AA	1465	A	C6-N1-C2	-6.15	114.91	118.60
23	AW	3	C	C3'-C2'-C1'	-6.15	96.58	101.50
57	BB	2690	U	C4-C5-C6	-6.15	116.01	119.70
21	AA	678	U	N3-C4-C5	-6.15	110.91	114.60
21	AA	921	U	N3-C4-O4	6.15	123.70	119.40
25	AZ	84	HIS	O-C-N	6.15	132.54	122.70
50	B3	16	THR	CA-CB-CG2	-6.15	103.79	112.40
57	BB	81	G	N9-C4-C5	-6.15	102.94	105.40
57	BB	256	A	N1-C6-N6	6.15	122.29	118.60
57	BB	2032	G	N1-C2-N2	-6.15	110.67	116.20
57	BB	2073	C	N1-C1'-C2'	-6.15	105.24	112.00
57	BB	2671	G	C5-C6-O6	-6.15	124.91	128.60
58	BA	62	C	N3-C2-O2	6.15	126.20	121.90
21	AA	255	G	N3-C4-N9	6.15	129.69	126.00
21	AA	442	G	C6-N1-C2	-6.15	121.41	125.10
21	AA	1333	A	C4-C5-N7	-6.15	107.63	110.70
57	BB	450	G	C6-N1-C2	6.15	128.79	125.10
57	BB	1189	A	O4'-C1'-N9	6.15	113.12	108.20
57	BB	2820	A	O4'-C1'-C2'	-6.15	99.65	105.80
21	AA	926	G	C6-C5-N7	-6.15	126.71	130.40
57	BB	777	G	N1-C2-N3	-6.15	120.21	123.90
57	BB	1166	G	N1-C6-O6	6.15	123.59	119.90
57	BB	1926	U	N1-C2-N3	-6.15	111.21	114.90
57	BB	2044	C	C5-C6-N1	6.15	124.07	121.00
57	BB	2051	A	O4'-C1'-N9	6.15	113.12	108.20
57	BB	2895	G	C4-N9-C1'	6.15	134.49	126.50
21	AA	231	U	O4'-C1'-N1	6.14	113.12	108.20
21	AA	481	G	C5-C6-O6	-6.14	124.91	128.60
21	AA	976	G	N1-C2-N3	-6.14	120.21	123.90
21	AA	1161	C	O4'-C1'-N1	6.14	113.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1406	U	N1-C2-N3	-6.14	111.21	114.90
57	BB	781	A	N9-C4-C5	6.14	108.26	105.80
57	BB	817	C	C3'-C2'-C1'	-6.14	96.58	101.50
57	BB	1011	G	O4'-C1'-N9	6.14	113.11	108.20
57	BB	1794	A	C5-C6-N1	-6.14	114.63	117.70
57	BB	2491	U	O4'-C1'-N1	6.14	113.11	108.20
57	BB	2837	A	C5-N7-C8	6.14	106.97	103.90
21	AA	176	C	C2-N3-C4	-6.14	116.83	119.90
21	AA	505	G	C8-N9-C4	6.14	108.86	106.40
21	AA	923	A	C1'-O4'-C4'	6.14	114.81	109.90
21	AA	1077	G	C5-C6-O6	-6.14	124.92	128.60
21	AA	1149	C	N3-C4-N4	6.14	122.30	118.00
57	BB	295	G	C8-N9-C4	6.14	108.86	106.40
57	BB	1054	A	C4-C5-C6	6.14	120.07	117.00
57	BB	1398	C	C5-C4-N4	-6.14	115.90	120.20
57	BB	1840	G	P-O5'-C5'	6.14	130.73	120.90
21	AA	342	C	N1-C2-O2	6.14	122.58	118.90
21	AA	450	G	N9-C4-C5	6.14	107.86	105.40
21	AA	1473	G	C6-N1-C2	6.14	128.78	125.10
57	BB	310	A	P-O3'-C3'	6.14	127.07	119.70
57	BB	416	U	C5-C6-N1	6.14	125.77	122.70
57	BB	1583	A	C2-N3-C4	-6.14	107.53	110.60
57	BB	1691	C	C4'-C3'-C2'	-6.14	96.46	102.60
57	BB	1831	G	N1-C6-O6	6.14	123.58	119.90
57	BB	2577	A	P-O3'-C3'	6.14	127.07	119.70
21	AA	49	U	C3'-C2'-C1'	6.14	106.41	101.50
21	AA	65	A	C5-C6-N6	-6.14	118.79	123.70
21	AA	465	A	N9-C4-C5	6.14	108.26	105.80
21	AA	872	A	C5-N7-C8	6.14	106.97	103.90
21	AA	1062	U	C5-C4-O4	-6.14	122.22	125.90
21	AA	1249	C	C5-C4-N4	-6.14	115.90	120.20
26	AV	2	G	O4'-C1'-N9	6.14	113.11	108.20
33	BN	112	TYR	CB-CG-CD1	6.14	124.68	121.00
57	BB	493	G	C6-N1-C2	6.14	128.78	125.10
57	BB	723	C	C5-C4-N4	-6.14	115.90	120.20
57	BB	1454	C	C5-C6-N1	-6.14	117.93	121.00
57	BB	2186	G	N3-C2-N2	6.14	124.20	119.90
57	BB	2879	A	C6-N1-C2	-6.14	114.92	118.60
21	AA	1271	A	C4-C5-N7	-6.14	107.63	110.70
21	AA	1285	A	C5'-C4'-O4'	6.14	116.47	109.10
57	BB	508	A	N1-C2-N3	6.14	132.37	129.30
57	BB	2531	A	O4'-C1'-N9	6.14	113.11	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2779	U	N1-C2-O2	6.14	127.10	122.80
21	AA	149	A	C3'-C2'-C1'	6.14	106.41	101.50
21	AA	387	U	P-O5'-C5'	-6.14	111.08	120.90
21	AA	914	A	C4-C5-C6	6.14	120.07	117.00
21	AA	1212	U	O4'-C1'-N1	6.14	113.11	108.20
21	AA	1415	G	N3-C4-N9	6.14	129.68	126.00
26	AV	56	C	N1-C2-O2	-6.14	115.22	118.90
57	BB	175	G	N7-C8-N9	6.14	116.17	113.10
57	BB	177	G	C8-N9-C1'	-6.14	119.02	127.00
57	BB	875	G	C4-C5-C6	6.14	122.48	118.80
57	BB	1489	C	C2-N1-C1'	6.14	125.55	118.80
57	BB	2212	A	C4-C5-C6	6.14	120.07	117.00
57	BB	2303	G	N1-C2-N3	-6.14	120.22	123.90
57	BB	2428	G	C6-C5-N7	-6.14	126.72	130.40
57	BB	2759	G	C5-N7-C8	6.14	107.37	104.30
57	BB	2879	A	C2-N3-C4	-6.14	107.53	110.60
21	AA	166	U	N1-C2-O2	6.13	127.09	122.80
21	AA	536	C	C6-N1-C2	6.13	122.75	120.30
21	AA	1300	G	N3-C2-N2	-6.13	115.61	119.90
23	AW	5	G	C5-C6-O6	-6.13	124.92	128.60
57	BB	263	G	C5-C6-O6	-6.13	124.92	128.60
57	BB	1200	C	C2-N3-C4	6.13	122.97	119.90
57	BB	1380	G	C6-N1-C2	6.13	128.78	125.10
57	BB	2274	A	P-O5'-C5'	6.13	130.71	120.90
57	BB	2694	G	C5-N7-C8	6.13	107.37	104.30
57	BB	2774	C	C5-C6-N1	6.13	124.07	121.00
58	BA	96	G	C8-N9-C4	-6.13	103.95	106.40
21	AA	1205	U	O4'-C1'-N1	6.13	113.11	108.20
26	AV	41	C	C2-N3-C4	6.13	122.97	119.90
57	BB	1363	C	C5-C4-N4	-6.13	115.91	120.20
21	AA	106	C	N3-C4-N4	6.13	122.29	118.00
21	AA	645	G	C4-C5-C6	6.13	122.48	118.80
21	AA	851	G	C6-C5-N7	-6.13	126.72	130.40
21	AA	1414	U	N1-C2-N3	-6.13	111.22	114.90
30	BK	119	PRO	N-CA-C	-6.13	96.16	112.10
34	BO	7	ARG	NE-CZ-NH1	6.13	123.37	120.30
57	BB	477	A	N9-C4-C5	6.13	108.25	105.80
57	BB	698	C	N3-C4-C5	-6.13	119.45	121.90
57	BB	1914	C	N1-C2-N3	6.13	123.49	119.20
57	BB	2015	A	O4'-C1'-N9	6.13	113.11	108.20
57	BB	2361	G	C8-N9-C4	-6.13	103.95	106.40
57	BB	2465	C	C5-C6-N1	6.13	124.06	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2880	C	N3-C4-N4	6.13	122.29	118.00
21	AA	45	G	C6-C5-N7	-6.13	126.72	130.40
21	AA	538	G	C6-C5-N7	-6.13	126.72	130.40
21	AA	833	G	C6-N1-C2	-6.13	121.42	125.10
21	AA	919	A	N1-C6-N6	6.13	122.28	118.60
21	AA	1061	G	N7-C8-N9	6.13	116.17	113.10
57	BB	283	G	N1-C2-N3	-6.13	120.22	123.90
57	BB	388	G	C5-C6-N1	-6.13	108.44	111.50
57	BB	1660	G	P-O5'-C5'	-6.13	111.09	120.90
6	AO	84	LEU	CB-CA-C	-6.13	98.56	110.20
21	AA	179	A	C5-C6-N6	-6.13	118.80	123.70
21	AA	491	G	N9-C4-C5	6.13	107.85	105.40
21	AA	567	G	C8-N9-C4	-6.13	103.95	106.40
21	AA	623	C	C5-C6-N1	6.13	124.06	121.00
21	AA	1373	G	C4'-C3'-C2'	-6.13	96.47	102.60
57	BB	184	C	OP1-P-OP2	-6.13	110.41	119.60
57	BB	1218	G	C4-C5-C6	6.13	122.48	118.80
57	BB	1581	G	C4-C5-C6	6.13	122.48	118.80
57	BB	2029	G	C5-C6-N1	-6.13	108.44	111.50
57	BB	2046	G	OP1-P-OP2	-6.13	110.41	119.60
57	BB	2731	G	C5-N7-C8	6.13	107.36	104.30
21	AA	782	A	C5-N7-C8	6.13	106.96	103.90
21	AA	1002	G	O4'-C1'-N9	6.13	113.10	108.20
21	AA	1322	C	C2-N1-C1'	6.13	125.54	118.80
21	AA	1362	A	C5'-C4'-C3'	6.13	125.80	116.00
26	AV	45	G	C8-N9-C1'	6.13	134.97	127.00
57	BB	1009	A	C8-N9-C4	-6.13	103.35	105.80
57	BB	1150	C	P-O3'-C3'	-6.13	112.35	119.70
57	BB	1239	G	N3-C4-N9	-6.13	122.32	126.00
57	BB	1773	A	N3-C4-C5	-6.13	122.51	126.80
57	BB	1819	A	N9-C4-C5	6.13	108.25	105.80
57	BB	1859	U	N3-C4-O4	6.13	123.69	119.40
57	BB	1980	G	C5-N7-C8	6.13	107.36	104.30
57	BB	2480	C	C1'-O4'-C4'	-6.13	105.00	109.90
57	BB	2568	U	C2-N1-C1'	6.13	125.05	117.70
57	BB	2724	U	N3-C2-O2	-6.13	117.91	122.20
57	BB	2894	G	C5-C6-N1	6.13	114.56	111.50
21	AA	780	A	N9-C4-C5	6.12	108.25	105.80
21	AA	784	A	O4'-C1'-N9	6.12	113.10	108.20
21	AA	968	A	N7-C8-N9	6.12	116.86	113.80
21	AA	1026	G	C6-C5-N7	6.12	134.07	130.40
57	BB	336	C	C5-C6-N1	6.12	124.06	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	939	G	C4-C5-N7	6.12	113.25	110.80
21	AA	865	A	C4-C5-N7	-6.12	107.64	110.70
21	AA	1146	A	C5-C6-N1	-6.12	114.64	117.70
22	AY	8	U	OP1-P-OP2	-6.12	110.42	119.60
25	AZ	226	VAL	CA-CB-CG1	6.12	120.08	110.90
57	BB	1337	G	C2-N3-C4	6.12	114.96	111.90
57	BB	1496	A	N1-C2-N3	6.12	132.36	129.30
21	AA	388	G	C1'-O4'-C4'	6.12	114.80	109.90
21	AA	444	G	N3-C4-C5	6.12	131.66	128.60
21	AA	604	G	N1-C2-N2	6.12	121.71	116.20
21	AA	609	A	O4'-C1'-N9	6.12	113.10	108.20
21	AA	886	G	C6-N1-C2	-6.12	121.43	125.10
21	AA	945	G	N1-C6-O6	6.12	123.57	119.90
21	AA	1122	U	C6-N1-C2	6.12	124.67	121.00
21	AA	1410	A	C6-C5-N7	-6.12	128.01	132.30
57	BB	25	U	N3-C4-O4	6.12	123.68	119.40
57	BB	75	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	82	U	C1'-O4'-C4'	-6.12	105.00	109.90
57	BB	1530	G	P-O3'-C3'	6.12	127.05	119.70
57	BB	1798	U	C5-C4-O4	-6.12	122.23	125.90
57	BB	2080	A	C2-N3-C4	6.12	113.66	110.60
57	BB	9	G	C5'-C4'-O4'	6.12	116.44	109.10
57	BB	551	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	757	G	N1-C2-N3	-6.12	120.23	123.90
57	BB	769	U	N1-C2-O2	-6.12	118.52	122.80
57	BB	1184	U	N1-C1'-C2'	-6.12	105.27	112.00
57	BB	1647	U	C5'-C4'-C3'	6.12	125.79	116.00
57	BB	2576	G	N1-C6-O6	6.12	123.57	119.90
21	AA	282	A	C3'-C2'-C1'	-6.12	96.61	101.50
21	AA	1474	U	C5-C4-O4	-6.12	122.23	125.90
21	AA	1532	U	N1-C2-N3	-6.12	111.23	114.90
57	BB	221	A	C5-N7-C8	6.12	106.96	103.90
57	BB	902	C	C5'-C4'-C3'	6.12	125.79	116.00
57	BB	1627	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	2532	G	C5-C6-N1	-6.12	108.44	111.50
57	BB	2891	U	O4'-C1'-N1	6.12	113.09	108.20
21	AA	910	C	O4'-C1'-N1	6.12	113.09	108.20
56	BH	101	ASP	CB-CA-C	-6.12	98.17	110.40
57	BB	54	G	O4'-C1'-N9	6.12	113.09	108.20
57	BB	368	A	C4-C5-C6	6.12	120.06	117.00
57	BB	795	C	C2-N1-C1'	6.12	125.53	118.80
57	BB	1560	G	C4-C5-N7	-6.12	108.35	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2233	U	O4'-C1'-N1	6.12	113.09	108.20
57	BB	2276	G	N3-C2-N2	6.12	124.18	119.90
57	BB	2400	G	C2-N3-C4	6.12	114.96	111.90
57	BB	2797	U	O4'-C1'-N1	6.12	113.09	108.20
21	AA	192	A	O4'-C1'-N9	6.12	113.09	108.20
21	AA	1065	U	C2-N3-C4	-6.12	123.33	127.00
22	AY	28	C	C6-N1-C2	6.12	122.75	120.30
26	AV	76	A	C5-N7-C8	6.12	106.96	103.90
57	BB	176	A	C8-N9-C1'	6.12	138.71	127.70
57	BB	954	G	C8-N9-C4	-6.12	103.95	106.40
57	BB	1103	A	N3-C4-C5	-6.12	122.52	126.80
57	BB	1423	G	N9-C4-C5	6.12	107.85	105.40
57	BB	1926	U	C3'-C2'-C1'	-6.12	96.61	101.50
57	BB	2465	C	C6-N1-C2	-6.12	117.85	120.30
57	BB	2586	U	C4'-C3'-C2'	-6.12	96.48	102.60
57	BB	2802	G	C5-N7-C8	6.12	107.36	104.30
57	BB	2867	G	C4-C5-N7	6.12	113.25	110.80
58	BA	73	A	OP1-P-OP2	-6.12	110.42	119.60
21	AA	1054	C	N3-C4-C5	-6.11	119.45	121.90
22	AY	33	U	C6-N1-C2	6.11	124.67	121.00
57	BB	355	U	C5-C6-N1	6.11	125.76	122.70
57	BB	399	U	N1-C2-O2	6.11	127.08	122.80
57	BB	465	G	C5-N7-C8	6.11	107.36	104.30
57	BB	937	C	C6-N1-C1'	-6.11	113.46	120.80
57	BB	1191	G	C4-C5-C6	6.11	122.47	118.80
57	BB	1701	A	C8-N9-C4	-6.11	103.35	105.80
57	BB	2142	A	P-O5'-C5'	-6.11	111.12	120.90
57	BB	2365	G	C5-C6-O6	-6.11	124.93	128.60
57	BB	2369	A	C5-N7-C8	6.11	106.96	103.90
58	BA	50	A	P-O3'-C3'	-6.11	112.36	119.70
58	BA	101	A	C3'-C2'-C1'	6.11	106.39	101.50
21	AA	41	G	C8-N9-C4	-6.11	103.95	106.40
21	AA	43	C	C4-C5-C6	6.11	120.46	117.40
21	AA	199	A	N7-C8-N9	-6.11	110.74	113.80
26	AV	48	C	C5-C6-N1	-6.11	117.94	121.00
36	BQ	90	ASP	CB-CG-OD1	6.11	123.80	118.30
57	BB	294	A	O4'-C4'-C3'	6.11	110.99	106.10
57	BB	408	G	N9-C4-C5	-6.11	102.95	105.40
57	BB	962	G	O4'-C1'-N9	6.11	113.09	108.20
57	BB	1356	G	N1-C2-N3	-6.11	120.23	123.90
57	BB	1421	G	O4'-C1'-N9	6.11	113.09	108.20
57	BB	1435	G	O5'-C5'-C4'	-6.11	100.09	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1592	C	C2-N3-C4	6.11	122.96	119.90
57	BB	2444	G	P-O3'-C3'	-6.11	112.37	119.70
21	AA	668	G	C5-C6-N1	-6.11	108.44	111.50
22	AY	42	G	O4'-C1'-N9	6.11	113.09	108.20
23	AW	39	U	C2-N1-C1'	6.11	125.03	117.70
55	BG	57	TYR	CB-CG-CD1	-6.11	117.33	121.00
57	BB	304	U	C2-N3-C4	-6.11	123.33	127.00
57	BB	1123	C	C4-C5-C6	6.11	120.45	117.40
57	BB	1670	C	N3-C4-C5	-6.11	119.46	121.90
57	BB	1773	A	C5'-C4'-C3'	6.11	125.78	116.00
57	BB	2172	U	OP1-P-OP2	-6.11	110.43	119.60
7	AP	51	ARG	NE-CZ-NH2	-6.11	117.25	120.30
21	AA	1333	A	C4-C5-C6	6.11	120.05	117.00
57	BB	461	C	O4'-C1'-N1	6.11	113.09	108.20
57	BB	974	G	C4-C5-N7	-6.11	108.36	110.80
57	BB	1830	C	N3-C4-N4	6.11	122.28	118.00
57	BB	1833	C	N1-C2-O2	6.11	122.56	118.90
21	AA	886	G	N3-C2-N2	6.11	124.18	119.90
21	AA	1184	G	C4-C5-N7	6.11	113.24	110.80
21	AA	1305	G	C8-N9-C1'	6.11	134.94	127.00
22	AY	15	G	C2'-C3'-O3'	6.11	123.47	113.70
23	AW	9	A	C5-C6-N1	-6.11	114.65	117.70
57	BB	293	U	N3-C4-O4	6.11	123.67	119.40
57	BB	483	A	N9-C4-C5	6.11	108.24	105.80
57	BB	500	G	N7-C8-N9	-6.11	110.05	113.10
57	BB	582	A	C4-C5-C6	6.11	120.05	117.00
57	BB	2504	U	N3-C4-C5	-6.11	110.94	114.60
21	AA	1000	A	C4-C5-C6	6.11	120.05	117.00
22	AY	39	U	C4'-C3'-C2'	-6.11	96.50	102.60
45	BC	155	ARG	NE-CZ-NH1	6.11	123.35	120.30
56	BH	67	ALA	C-N-CA	6.11	136.97	121.70
57	BB	833	A	C8-N9-C4	-6.11	103.36	105.80
57	BB	897	C	C4-C5-C6	6.11	120.45	117.40
57	BB	1870	C	N3-C4-N4	6.11	122.27	118.00
57	BB	2526	G	C6-N1-C2	6.11	128.76	125.10
57	BB	2850	A	C4-C5-N7	-6.11	107.65	110.70
58	BA	85	G	N9-C4-C5	6.11	107.84	105.40
21	AA	327	A	C4-C5-N7	-6.10	107.65	110.70
21	AA	367	U	N1-C2-O2	-6.10	118.53	122.80
21	AA	754	C	C2-N1-C1'	6.10	125.51	118.80
21	AA	922	G	N1-C2-N2	-6.10	110.71	116.20
21	AA	1021	A	C1'-O4'-C4'	-6.10	105.02	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	252	G	C8-N9-C4	-6.10	103.96	106.40
57	BB	1142	A	C4-N9-C1'	-6.10	115.31	126.30
57	BB	1957	C	N3-C4-N4	6.10	122.27	118.00
57	BB	1992	G	C2-N3-C4	-6.10	108.85	111.90
57	BB	2869	G	C8-N9-C4	-6.10	103.96	106.40
21	AA	51	A	N9-C4-C5	-6.10	103.36	105.80
21	AA	462	G	N7-C8-N9	-6.10	110.05	113.10
21	AA	1083	U	C2-N1-C1'	-6.10	110.38	117.70
23	AW	60	U	C2-N3-C4	6.10	130.66	127.00
57	BB	467	G	N1-C2-N3	-6.10	120.24	123.90
57	BB	721	A	N3-C4-C5	-6.10	122.53	126.80
57	BB	1496	A	O4'-C1'-N9	6.10	113.08	108.20
57	BB	1554	U	C4-C5-C6	-6.10	116.04	119.70
57	BB	1610	A	OP1-P-O3'	6.10	118.63	105.20
57	BB	2628	C	C5-C6-N1	6.10	124.05	121.00
57	BB	2676	C	N3-C4-N4	6.10	122.27	118.00
57	BB	2898	U	C4'-C3'-C2'	-6.10	96.50	102.60
21	AA	23	C	O4'-C1'-N1	6.10	113.08	108.20
21	AA	509	A	C5-N7-C8	6.10	106.95	103.90
57	BB	838	C	C4'-C3'-C2'	-6.10	96.50	102.60
57	BB	952	G	C5-N7-C8	6.10	107.35	104.30
57	BB	2550	G	N9-C4-C5	-6.10	102.96	105.40
21	AA	124	C	C4-C5-C6	6.10	120.45	117.40
21	AA	591	U	O4'-C1'-N1	6.10	113.08	108.20
21	AA	713	G	O4'-C1'-N9	6.10	113.08	108.20
26	AV	51	C	C5-C6-N1	6.10	124.05	121.00
56	BH	101	ASP	CB-CG-OD2	-6.10	112.81	118.30
57	BB	852	U	C3'-C2'-C1'	-6.10	96.62	101.50
57	BB	1056	G	C8-N9-C4	-6.10	103.96	106.40
57	BB	1499	C	N3-C4-C5	-6.10	119.46	121.90
57	BB	2092	U	C5'-C4'-O4'	6.10	116.42	109.10
57	BB	2513	A	C3'-C2'-C1'	6.10	106.38	101.50
57	BB	2759	G	OP1-P-O3'	6.10	118.62	105.20
21	AA	172	A	C5-C6-N6	-6.10	118.82	123.70
21	AA	256	U	N3-C4-O4	6.10	123.67	119.40
21	AA	391	G	C5-N7-C8	-6.10	101.25	104.30
21	AA	478	A	C5-N7-C8	6.10	106.95	103.90
21	AA	830	G	C6-N1-C2	6.10	128.76	125.10
21	AA	836	G	C5-N7-C8	6.10	107.35	104.30
21	AA	1279	G	C5'-C4'-C3'	-6.10	106.24	116.00
21	AA	1293	C	O4'-C1'-N1	6.10	113.08	108.20
21	AA	1356	G	C5-N7-C8	6.10	107.35	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
54	BF	147	ARG	NE-CZ-NH2	-6.10	117.25	120.30
57	BB	98	G	C8-N9-C4	-6.10	103.96	106.40
57	BB	152	A	N1-C2-N3	-6.10	126.25	129.30
57	BB	295	G	N1-C2-N3	6.10	127.56	123.90
57	BB	485	C	C5'-C4'-O4'	6.10	116.42	109.10
57	BB	601	C	N1-C2-O2	6.10	122.56	118.90
57	BB	1140	C	N3-C4-N4	6.10	122.27	118.00
57	BB	1497	U	C2-N3-C4	-6.10	123.34	127.00
57	BB	1515	A	N1-C6-N6	6.10	122.26	118.60
57	BB	1628	G	C6-N1-C2	-6.10	121.44	125.10
57	BB	1966	A	N1-C6-N6	6.10	122.26	118.60
57	BB	2673	G	N9-C4-C5	6.10	107.84	105.40
57	BB	2700	A	N1-C6-N6	6.10	122.26	118.60
21	AA	607	A	P-O3'-C3'	-6.10	112.39	119.70
21	AA	626	G	C6-C5-N7	-6.10	126.74	130.40
57	BB	1163	G	C4-C5-C6	6.10	122.46	118.80
57	BB	1939	U	O4'-C4'-C3'	-6.10	97.90	104.00
21	AA	164	G	N7-C8-N9	-6.09	110.05	113.10
21	AA	232	G	C5-C6-N1	6.09	114.55	111.50
21	AA	520	A	C5-C6-N1	-6.09	114.65	117.70
21	AA	835	U	C6-N1-C2	-6.09	117.34	121.00
22	AY	40	C	C6-N1-C1'	6.09	128.11	120.80
31	BL	126	ARG	NE-CZ-NH2	6.09	123.35	120.30
57	BB	362	A	N7-C8-N9	6.09	116.85	113.80
57	BB	961	C	C5-C4-N4	-6.09	115.93	120.20
57	BB	1075	C	P-O3'-C3'	-6.09	112.39	119.70
57	BB	1248	G	N1-C6-O6	6.09	123.56	119.90
57	BB	1286	A	C5-C6-N1	-6.09	114.65	117.70
57	BB	1358	G	N3-C4-C5	-6.09	125.55	128.60
57	BB	1759	A	N9-C4-C5	6.09	108.24	105.80
57	BB	1975	G	N1-C6-O6	6.09	123.56	119.90
57	BB	2458	G	C3'-C2'-C1'	-6.09	96.62	101.50
57	BB	2698	U	O4'-C1'-N1	6.09	113.08	108.20
57	BB	2775	G	N1-C2-N3	-6.09	120.24	123.90
21	AA	419	C	C5-C4-N4	-6.09	115.94	120.20
21	AA	639	G	C5-C6-N1	-6.09	108.45	111.50
21	AA	743	A	C3'-C2'-C1'	-6.09	96.62	101.50
22	AY	39	U	N1-C2-O2	-6.09	118.53	122.80
57	BB	523	C	C3'-C2'-C1'	-6.09	96.62	101.50
57	BB	570	G	N3-C2-N2	6.09	124.17	119.90
57	BB	708	G	C8-N9-C4	6.09	108.84	106.40
57	BB	836	G	C4-C5-C6	6.09	122.46	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1136	G	P-O5'-C5'	-6.09	111.15	120.90
57	BB	2468	A	C2-N3-C4	-6.09	107.55	110.60
21	AA	342	C	N3-C2-O2	-6.09	117.64	121.90
21	AA	387	U	C5-C6-N1	6.09	125.75	122.70
21	AA	812	G	C2-N3-C4	6.09	114.95	111.90
21	AA	1493	A	C4'-C3'-C2'	6.09	108.69	102.60
22	AY	52	U	N1-C2-O2	6.09	127.06	122.80
26	AV	39	C	N3-C4-C5	-6.09	119.46	121.90
26	AV	47	U	C6-N1-C1'	-6.09	112.67	121.20
57	BB	85	G	C2-N3-C4	-6.09	108.85	111.90
57	BB	265	A	C1'-O4'-C4'	-6.09	105.03	109.90
57	BB	302	C	C5-C4-N4	-6.09	115.94	120.20
57	BB	380	G	C4-C5-N7	6.09	113.24	110.80
57	BB	560	C	N1-C2-N3	-6.09	114.94	119.20
57	BB	1253	A	C6-C5-N7	-6.09	128.04	132.30
57	BB	1748	C	O4'-C1'-N1	6.09	113.07	108.20
57	BB	2407	A	N7-C8-N9	-6.09	110.75	113.80
57	BB	2772	C	C6-N1-C2	6.09	122.74	120.30
21	AA	382	A	C4-C5-N7	-6.09	107.66	110.70
21	AA	687	A	C5-C6-N1	-6.09	114.66	117.70
21	AA	828	U	C1'-O4'-C4'	6.09	114.77	109.90
23	AW	43	C	C2-N3-C4	6.09	122.94	119.90
26	AV	64	G	P-O3'-C3'	-6.09	112.39	119.70
47	B0	30	ASP	CB-CG-OD2	-6.09	112.82	118.30
57	BB	244	A	C4-C5-N7	-6.09	107.66	110.70
57	BB	365	U	N3-C2-O2	6.09	126.46	122.20
57	BB	462	C	C6-N1-C2	6.09	122.74	120.30
57	BB	1045	C	N3-C4-N4	6.09	122.26	118.00
57	BB	1093	G	P-O5'-C5'	6.09	130.64	120.90
57	BB	1124	G	O4'-C1'-N9	6.09	113.07	108.20
57	BB	1247	A	C6-C5-N7	-6.09	128.04	132.30
57	BB	1638	C	C4'-C3'-C2'	-6.09	96.51	102.60
57	BB	1790	C	N3-C2-O2	6.09	126.16	121.90
57	BB	2193	G	O4'-C1'-N9	6.09	113.07	108.20
57	BB	2491	U	C5'-C4'-O4'	6.09	116.41	109.10
57	BB	2624	G	O4'-C1'-N9	6.09	113.07	108.20
57	BB	2758	A	N7-C8-N9	-6.09	110.75	113.80
58	BA	41	G	N1-C2-N3	-6.09	120.25	123.90
21	AA	277	C	C4-C5-C6	6.09	120.44	117.40
21	AA	713	G	N3-C4-C5	6.09	131.64	128.60
21	AA	948	C	N3-C4-C5	6.09	124.33	121.90
21	AA	1377	A	C5-N7-C8	-6.09	100.86	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2619	C	C4-C5-C6	6.09	120.44	117.40
57	BB	2777	G	C1'-O4'-C4'	6.09	114.77	109.90
58	BA	11	C	C2-N1-C1'	6.09	125.50	118.80
21	AA	129	A	C5-C6-N1	-6.09	114.66	117.70
21	AA	322	C	O4'-C1'-N1	6.09	113.07	108.20
21	AA	550	G	C4-C5-C6	-6.09	115.15	118.80
21	AA	567	G	C6-N1-C2	-6.09	121.45	125.10
22	AY	43	G	N3-C4-N9	6.09	129.65	126.00
28	BI	53	PRO	O-C-N	6.09	132.44	122.70
36	BQ	105	PHE	CB-CG-CD2	6.09	125.06	120.80
48	B1	12	SER	N-CA-CB	6.09	119.63	110.50
57	BB	232	G	N7-C8-N9	-6.09	110.06	113.10
57	BB	450	G	C4'-C3'-C2'	-6.09	96.51	102.60
57	BB	859	G	N7-C8-N9	-6.09	110.06	113.10
57	BB	1244	A	C5-N7-C8	6.09	106.94	103.90
57	BB	1420	A	C3'-C2'-C1'	-6.09	96.63	101.50
57	BB	2000	C	C3'-C2'-C1'	-6.09	96.63	101.50
57	BB	2678	C	N1-C2-O2	-6.09	115.25	118.90
57	BB	2742	G	O4'-C1'-N9	6.09	113.07	108.20
21	AA	87	C	N3-C4-N4	6.08	122.26	118.00
21	AA	1122	U	O4'-C1'-N1	6.08	113.07	108.20
23	AW	36	A	N3-C4-C5	-6.08	122.54	126.80
57	BB	683	U	C2-N1-C1'	6.08	125.00	117.70
57	BB	2891	U	N3-C4-O4	6.08	123.66	119.40
21	AA	355	C	O4'-C4'-C3'	-6.08	97.92	104.00
21	AA	462	G	C5-C6-O6	-6.08	124.95	128.60
21	AA	743	A	N9-C4-C5	6.08	108.23	105.80
21	AA	908	A	C6-N1-C2	-6.08	114.95	118.60
54	BF	148	VAL	C-N-CA	6.08	136.91	121.70
57	BB	390	U	N1-C2-N3	-6.08	111.25	114.90
57	BB	905	A	C8-N9-C4	-6.08	103.37	105.80
57	BB	945	A	N9-C4-C5	6.08	108.23	105.80
57	BB	1087	G	O4'-C1'-N9	6.08	113.07	108.20
57	BB	1382	G	P-O5'-C5'	-6.08	111.17	120.90
57	BB	1578	U	O4'-C1'-N1	6.08	113.07	108.20
57	BB	2034	U	N3-C4-O4	6.08	123.66	119.40
57	BB	2182	U	C5-C4-O4	-6.08	122.25	125.90
57	BB	2601	C	O4'-C1'-N1	6.08	113.07	108.20
58	BA	2	G	C5-C6-N1	-6.08	108.46	111.50
58	BA	2	G	C8-N9-C4	-6.08	103.97	106.40
21	AA	374	A	C5-N7-C8	6.08	106.94	103.90
21	AA	781	A	O4'-C1'-N9	6.08	113.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1446	A	C5-C6-N6	-6.08	118.83	123.70
22	AY	64	A	C4-C5-N7	-6.08	107.66	110.70
57	BB	1415	U	O4'-C1'-N1	6.08	113.06	108.20
57	BB	1861	G	O4'-C1'-N9	6.08	113.06	108.20
57	BB	2379	G	C2-N3-C4	6.08	114.94	111.90
57	BB	2478	A	C5-N7-C8	6.08	106.94	103.90
57	BB	2882	A	N3-C4-C5	6.08	131.06	126.80
58	BA	77	U	C6-N1-C2	-6.08	117.35	121.00
21	AA	160	A	C5-C6-N1	-6.08	114.66	117.70
21	AA	851	G	C4-C5-N7	6.08	113.23	110.80
21	AA	1070	U	C5-C4-O4	-6.08	122.25	125.90
26	AV	63	G	C8-N9-C4	-6.08	103.97	106.40
57	BB	1207	C	N3-C4-C5	-6.08	119.47	121.90
57	BB	1278	C	C6-N1-C2	-6.08	117.87	120.30
57	BB	1323	C	N3-C4-N4	6.08	122.26	118.00
57	BB	1359	A	C4-C5-C6	6.08	120.04	117.00
57	BB	2714	G	O4'-C1'-N9	6.08	113.06	108.20
14	AC	16	PRO	O-C-N	6.08	132.43	122.70
21	AA	28	A	C5-N7-C8	6.08	106.94	103.90
21	AA	33	A	C6-C5-N7	-6.08	128.04	132.30
21	AA	288	A	C5-C6-N6	-6.08	118.84	123.70
21	AA	1457	G	N9-C4-C5	-6.08	102.97	105.40
57	BB	109	C	C2-N3-C4	6.08	122.94	119.90
57	BB	176	A	C4-N9-C1'	-6.08	115.36	126.30
57	BB	901	C	C1'-O4'-C4'	-6.08	105.04	109.90
57	BB	1988	G	C1'-O4'-C4'	6.08	114.76	109.90
57	BB	2489	U	N3-C4-C5	-6.08	110.95	114.60
57	BB	2632	A	P-O5'-C5'	-6.08	111.17	120.90
57	BB	2804	U	C6-N1-C2	-6.08	117.35	121.00
57	BB	2832	U	N1-C2-O2	6.08	127.05	122.80
57	BB	2850	A	C4-C5-C6	6.08	120.04	117.00
57	BB	533	G	N1-C6-O6	6.08	123.55	119.90
57	BB	1026	G	N7-C8-N9	6.08	116.14	113.10
57	BB	1520	U	N3-C4-C5	-6.08	110.95	114.60
57	BB	2557	G	N3-C4-C5	6.08	131.64	128.60
58	BA	102	G	C5-C6-O6	-6.08	124.95	128.60
21	AA	409	U	N3-C4-O4	6.08	123.65	119.40
21	AA	804	U	N3-C4-O4	-6.08	115.15	119.40
21	AA	915	A	C6-C5-N7	-6.08	128.05	132.30
21	AA	1045	C	C6-N1-C1'	-6.08	113.51	120.80
21	AA	1265	C	C5-C6-N1	6.08	124.04	121.00
21	AA	1499	A	N1-C6-N6	6.08	122.25	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	66	A	C2-N3-C4	-6.08	107.56	110.60
36	BQ	86	SER	N-CA-CB	6.08	119.61	110.50
57	BB	836	G	N3-C4-C5	-6.08	125.56	128.60
57	BB	1125	G	P-O3'-C3'	6.08	126.99	119.70
58	BA	79	G	C4-C5-N7	6.08	113.23	110.80
58	BA	85	G	P-O3'-C3'	-6.08	112.41	119.70
21	AA	385	C	N3-C4-N4	6.07	122.25	118.00
21	AA	457	G	N7-C8-N9	-6.07	110.06	113.10
21	AA	580	C	O5'-P-OP1	-6.07	100.23	105.70
21	AA	1132	C	C2-N3-C4	6.07	122.94	119.90
21	AA	1498	U	C2-N3-C4	6.07	130.64	127.00
23	AW	6	G	C8-N9-C4	-6.07	103.97	106.40
57	BB	301	G	O4'-C1'-N9	6.07	113.06	108.20
57	BB	558	U	C5-C6-N1	6.07	125.74	122.70
57	BB	668	A	P-O3'-C3'	6.07	126.99	119.70
57	BB	813	U	C3'-C2'-C1'	6.07	106.36	101.50
57	BB	878	A	O4'-C1'-N9	6.07	113.06	108.20
57	BB	1237	A	P-O3'-C3'	6.07	126.99	119.70
57	BB	1348	C	N1-C2-O2	6.07	122.54	118.90
57	BB	1378	A	C6-C5-N7	-6.07	128.05	132.30
57	BB	1709	U	N1-C2-O2	6.07	127.05	122.80
57	BB	1814	G	N1-C2-N3	-6.07	120.26	123.90
57	BB	2174	C	C4'-C3'-C2'	-6.07	96.53	102.60
21	AA	199	A	C5-N7-C8	6.07	106.94	103.90
21	AA	736	C	C3'-C2'-C1'	-6.07	96.64	101.50
21	AA	853	C	C5-C6-N1	6.07	124.04	121.00
23	AW	53	G	C8-N9-C4	6.07	108.83	106.40
24	AX	13	A	P-O3'-C3'	-6.07	112.41	119.70
57	BB	315	G	C5-N7-C8	-6.07	101.26	104.30
57	BB	1944	U	O4'-C1'-C2'	-6.07	99.73	105.80
21	AA	546	A	C5-C6-N6	-6.07	118.84	123.70
21	AA	731	G	N9-C4-C5	-6.07	102.97	105.40
21	AA	766	A	O4'-C1'-N9	6.07	113.06	108.20
21	AA	1177	G	C8-N9-C4	-6.07	103.97	106.40
21	AA	1407	C	N3-C4-N4	6.07	122.25	118.00
21	AA	1476	A	C1'-O4'-C4'	-6.07	105.04	109.90
25	AZ	366	ILE	N-CA-C	-6.07	94.61	111.00
28	BI	17	ALA	CB-CA-C	-6.07	101.00	110.10
32	BM	95	LEU	N-CA-CB	6.07	122.54	110.40
57	BB	104	A	C8-N9-C4	-6.07	103.37	105.80
57	BB	311	A	C6-C5-N7	-6.07	128.05	132.30
57	BB	563	A	C3'-C2'-C1'	-6.07	96.64	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	833	A	N1-C6-N6	6.07	122.24	118.60
57	BB	881	G	O4'-C1'-N9	6.07	113.06	108.20
57	BB	1480	C	N3-C4-N4	6.07	122.25	118.00
57	BB	1740	G	C5-C6-N1	-6.07	108.47	111.50
57	BB	2084	C	P-O3'-C3'	-6.07	112.42	119.70
57	BB	2347	C	N3-C4-C5	-6.07	119.47	121.90
23	AW	6	G	N3-C4-N9	-6.07	122.36	126.00
25	AZ	381	ARG	NH1-CZ-NH2	-6.07	112.72	119.40
57	BB	990	A	C4-C5-C6	6.07	120.03	117.00
57	BB	1124	G	P-O5'-C5'	-6.07	111.19	120.90
57	BB	1876	A	C2-N3-C4	-6.07	107.56	110.60
57	BB	2217	G	N1-C2-N3	-6.07	120.26	123.90
57	BB	2315	G	C5-N7-C8	-6.07	101.27	104.30
21	AA	233	C	C5-C6-N1	6.07	124.03	121.00
21	AA	253	A	C6-N1-C2	-6.07	114.96	118.60
21	AA	615	G	N9-C4-C5	6.07	107.83	105.40
21	AA	1062	U	O4'-C1'-N1	6.07	113.05	108.20
21	AA	1197	A	C2-N3-C4	-6.07	107.57	110.60
21	AA	1526	G	C6-C5-N7	-6.07	126.76	130.40
23	AW	15	G	O5'-P-OP1	6.07	117.98	110.70
57	BB	32	C	C6-N1-C2	6.07	122.73	120.30
57	BB	309	A	O4'-C1'-N9	6.07	113.06	108.20
57	BB	512	G	C5-C6-N1	-6.07	108.47	111.50
57	BB	1288	G	C5-C6-O6	-6.07	124.96	128.60
57	BB	1546	G	N3-C2-N2	6.07	124.15	119.90
57	BB	1729	U	P-O3'-C3'	6.07	126.98	119.70
57	BB	2491	U	C2-N3-C4	-6.07	123.36	127.00
21	AA	170	U	O4'-C4'-C3'	-6.07	97.94	104.00
21	AA	456	A	C5-C6-N6	-6.07	118.85	123.70
57	BB	149	A	C5-C6-N1	-6.07	114.67	117.70
57	BB	446	G	C5-C6-N1	6.07	114.53	111.50
57	BB	638	G	N1-C6-O6	6.07	123.54	119.90
57	BB	899	A	C5-C6-N1	-6.07	114.67	117.70
57	BB	920	A	C3'-C2'-C1'	-6.07	96.65	101.50
57	BB	968	C	C2-N3-C4	6.07	122.93	119.90
57	BB	1175	A	C5-C6-N1	-6.07	114.67	117.70
57	BB	2257	U	C5-C6-N1	6.07	125.73	122.70
57	BB	2345	G	C6-C5-N7	-6.07	126.76	130.40
21	AA	1354	U	C4'-C3'-C2'	-6.06	96.54	102.60
21	AA	12	U	N3-C4-O4	6.06	123.64	119.40
21	AA	470	C	N3-C4-C5	-6.06	119.47	121.90
21	AA	509	A	C5-C6-N1	-6.06	114.67	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	533	A	C8-N9-C4	6.06	108.22	105.80
21	AA	705	G	N3-C2-N2	6.06	124.14	119.90
21	AA	753	A	OP2-P-O3'	6.06	118.54	105.20
21	AA	1255	G	C4-N9-C1'	-6.06	118.62	126.50
39	BT	69	ARG	NE-CZ-NH2	-6.06	117.27	120.30
57	BB	600	G	C6-C5-N7	-6.06	126.76	130.40
57	BB	674	G	N1-C2-N3	-6.06	120.26	123.90
57	BB	759	G	N1-C2-N3	-6.06	120.26	123.90
57	BB	1739	A	C4-C5-C6	6.06	120.03	117.00
57	BB	2047	C	P-O5'-C5'	-6.06	111.20	120.90
21	AA	505	G	N1-C2-N3	-6.06	120.26	123.90
21	AA	513	C	C4-C5-C6	-6.06	114.37	117.40
21	AA	695	A	N7-C8-N9	-6.06	110.77	113.80
21	AA	1430	A	O4'-C1'-N9	6.06	113.05	108.20
57	BB	1724	G	O4'-C1'-N9	6.06	113.05	108.20
57	BB	1802	A	O4'-C1'-C2'	-6.06	99.74	105.80
57	BB	2286	G	C8-N9-C4	-6.06	103.97	106.40
57	BB	2538	C	C6-N1-C2	-6.06	117.88	120.30
21	AA	859	G	C6-C5-N7	-6.06	126.76	130.40
21	AA	1378	C	C6-N1-C2	6.06	122.72	120.30
24	AX	13	A	N1-C2-N3	6.06	132.33	129.30
57	BB	204	A	C6-C5-N7	-6.06	128.06	132.30
57	BB	246	C	C6-N1-C2	-6.06	117.88	120.30
57	BB	835	C	C5-C6-N1	6.06	124.03	121.00
57	BB	1839	G	C6-C5-N7	6.06	134.03	130.40
57	BB	1840	G	C6-N1-C2	6.06	128.74	125.10
57	BB	1910	G	C4-C5-N7	6.06	113.22	110.80
57	BB	1911	U	C5-C4-O4	-6.06	122.26	125.90
57	BB	2523	G	C5-N7-C8	6.06	107.33	104.30
57	BB	2622	U	O5'-C5'-C4'	-6.06	100.19	111.70
58	BA	10	G	N3-C2-N2	-6.06	115.66	119.90
58	BA	30	C	C4'-C3'-C2'	-6.06	96.54	102.60
21	AA	107	G	C2-N3-C4	-6.06	108.87	111.90
21	AA	292	G	C5-C6-O6	-6.06	124.97	128.60
21	AA	459	A	N3-C4-C5	-6.06	122.56	126.80
21	AA	1046	A	C4'-C3'-C2'	-6.06	96.54	102.60
22	AY	76	A	P-O5'-C5'	-6.06	111.21	120.90
26	AV	53	G	C5-N7-C8	-6.06	101.27	104.30
57	BB	211	C	C6-N1-C2	-6.06	117.88	120.30
57	BB	1174	U	C5-C6-N1	6.06	125.73	122.70
57	BB	1652	A	C6-N1-C2	6.06	122.23	118.60
57	BB	2183	A	C5-C6-N1	-6.06	114.67	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2522	U	N3-C4-C5	-6.06	110.97	114.60
57	BB	2700	A	P-O3'-C3'	6.06	126.97	119.70
5	AN	12	ARG	NE-CZ-NH2	-6.06	117.27	120.30
21	AA	115	G	N3-C4-C5	-6.06	125.57	128.60
21	AA	137	U	C5-C4-O4	6.06	129.53	125.90
21	AA	411	A	N9-C4-C5	6.06	108.22	105.80
21	AA	872	A	P-O5'-C5'	6.06	130.59	120.90
21	AA	915	A	C5-C6-N6	-6.06	118.86	123.70
57	BB	412	A	O4'-C1'-N9	6.06	113.05	108.20
57	BB	1153	C	C4'-C3'-C2'	-6.06	96.54	102.60
21	AA	319	G	C4-C5-C6	6.05	122.43	118.80
21	AA	351	G	O4'-C1'-N9	6.05	113.04	108.20
21	AA	1255	G	N1-C2-N3	-6.05	120.27	123.90
21	AA	1320	C	N1-C2-N3	6.05	123.44	119.20
22	AY	36	A	C4'-C3'-C2'	-6.05	96.55	102.60
57	BB	586	A	N1-C6-N6	6.05	122.23	118.60
57	BB	743	A	O4'-C1'-N9	6.05	113.04	108.20
57	BB	787	C	N3-C4-C5	-6.05	119.48	121.90
57	BB	864	G	C4-C5-C6	6.05	122.43	118.80
57	BB	1593	A	N3-C4-N9	6.05	132.24	127.40
57	BB	1755	A	C4-C5-C6	6.05	120.03	117.00
57	BB	2062	A	N9-C4-C5	6.05	108.22	105.80
57	BB	2362	C	N3-C2-O2	6.05	126.14	121.90
57	BB	2413	G	N3-C2-N2	6.05	124.14	119.90
57	BB	2422	C	N3-C4-N4	6.05	122.24	118.00
57	BB	2446	G	O4'-C1'-N9	6.05	113.04	108.20
57	BB	2447	G	O5'-C5'-C4'	-6.05	100.20	111.70
57	BB	2452	C	P-O3'-C3'	-6.05	112.43	119.70
49	B2	33	ARG	CG-CD-NE	-6.05	99.09	111.80
57	BB	68	G	C6-N1-C2	6.05	128.73	125.10
57	BB	228	C	N3-C2-O2	-6.05	117.66	121.90
57	BB	416	U	N3-C4-O4	6.05	123.64	119.40
57	BB	457	A	C2-N3-C4	-6.05	107.57	110.60
57	BB	854	C	P-O3'-C3'	-6.05	112.44	119.70
57	BB	871	U	C5-C4-O4	6.05	129.53	125.90
57	BB	1089	A	C5-C6-N6	-6.05	118.86	123.70
57	BB	1414	C	C4-C5-C6	6.05	120.43	117.40
57	BB	1622	G	N1-C6-O6	6.05	123.53	119.90
57	BB	1964	G	C4-C5-C6	6.05	122.43	118.80
57	BB	2085	U	C4-C5-C6	6.05	123.33	119.70
57	BB	2305	U	C5'-C4'-O4'	6.05	116.36	109.10
57	BB	2329	U	C1'-O4'-C4'	-6.05	105.06	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2445	G	C8-N9-C4	6.05	108.82	106.40
21	AA	517	G	C4-C5-C6	6.05	122.43	118.80
21	AA	1046	A	C6-C5-N7	-6.05	128.06	132.30
21	AA	1099	G	N1-C6-O6	6.05	123.53	119.90
31	BL	69	ARG	NE-CZ-NH1	6.05	123.33	120.30
34	BO	51	ALA	N-CA-CB	6.05	118.57	110.10
54	BF	56	LEU	CB-CA-C	-6.05	98.70	110.20
57	BB	602	A	C8-N9-C4	-6.05	103.38	105.80
57	BB	622	G	C5-N7-C8	-6.05	101.27	104.30
57	BB	1831	G	C2-N3-C4	-6.05	108.87	111.90
57	BB	1869	G	C5-N7-C8	6.05	107.33	104.30
57	BB	2378	A	C4-C5-C6	6.05	120.03	117.00
57	BB	2386	A	N1-C2-N3	-6.05	126.27	129.30
15	AD	110	ARG	NE-CZ-NH1	6.05	123.33	120.30
21	AA	1167	A	N9-C4-C5	-6.05	103.38	105.80
21	AA	1219	A	C6-N1-C2	-6.05	114.97	118.60
53	BE	46	GLN	N-CA-CB	6.05	121.49	110.60
54	BF	9	ASP	CB-CG-OD1	-6.05	112.86	118.30
57	BB	467	G	N9-C4-C5	-6.05	102.98	105.40
57	BB	815	C	C6-N1-C2	-6.05	117.88	120.30
57	BB	1486	U	C5-C6-N1	6.05	125.72	122.70
57	BB	1625	C	N3-C2-O2	6.05	126.14	121.90
57	BB	1781	U	C3'-C2'-C1'	-6.05	96.66	101.50
57	BB	1962	C	C2-N3-C4	6.05	122.92	119.90
21	AA	385	C	C6-N1-C2	-6.05	117.88	120.30
21	AA	1439	G	N9-C4-C5	6.05	107.82	105.40
57	BB	4	U	C2-N1-C1'	-6.05	110.44	117.70
57	BB	1031	G	N3-C4-C5	6.05	131.62	128.60
57	BB	2570	G	O4'-C4'-C3'	-6.05	97.95	104.00
21	AA	87	C	O4'-C1'-N1	6.05	113.04	108.20
21	AA	447	G	O5'-P-OP2	-6.05	100.26	105.70
21	AA	500	G	N1-C2-N3	-6.05	120.27	123.90
21	AA	836	G	N1-C2-N3	-6.05	120.27	123.90
21	AA	1413	A	N9-C1'-C2'	-6.05	105.35	112.00
26	AV	37	A	N7-C8-N9	6.05	116.82	113.80
33	BN	22	ARG	NE-CZ-NH2	6.05	123.32	120.30
57	BB	70	G	O4'-C1'-N9	6.05	113.04	108.20
57	BB	480	A	O4'-C1'-N9	6.05	113.04	108.20
57	BB	859	G	OP1-P-OP2	-6.05	110.53	119.60
57	BB	980	A	N3-C4-C5	-6.05	122.57	126.80
57	BB	1476	U	O4'-C1'-N1	6.05	113.04	108.20
57	BB	1655	A	C6-N1-C2	6.05	122.23	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2028	U	C5-C4-O4	-6.05	122.27	125.90
57	BB	2139	U	C5'-C4'-O4'	6.05	116.36	109.10
57	BB	2482	A	N9-C4-C5	6.05	108.22	105.80
57	BB	2488	G	N3-C2-N2	6.05	124.13	119.90
57	BB	2704	C	C5-C4-N4	-6.05	115.97	120.20
58	BA	74	U	C6-N1-C2	-6.05	117.37	121.00
21	AA	1230	C	C5-C6-N1	6.04	124.02	121.00
22	AY	55	U	O4'-C1'-N1	6.04	113.04	108.20
57	BB	303	G	N9-C1'-C2'	-6.04	105.35	112.00
57	BB	1568	G	P-O5'-C5'	-6.04	111.23	120.90
57	BB	1771	C	C4-C5-C6	6.04	120.42	117.40
57	BB	2396	G	C5'-C4'-C3'	-6.04	106.33	116.00
57	BB	2396	G	N3-C2-N2	6.04	124.13	119.90
57	BB	2767	C	O4'-C1'-N1	6.04	113.04	108.20
21	AA	211	G	C1'-O4'-C4'	6.04	114.73	109.90
21	AA	766	A	N1-C6-N6	6.04	122.23	118.60
21	AA	1270	G	C6-C5-N7	-6.04	126.77	130.40
22	AY	25	C	P-O3'-C3'	-6.04	112.45	119.70
23	AW	30	G	P-O3'-C3'	-6.04	112.45	119.70
23	AW	50	U	P-O3'-C3'	6.04	126.95	119.70
45	BC	89	ASN	CA-CB-CG	-6.04	100.10	113.40
56	BH	19	VAL	CG1-CB-CG2	6.04	120.57	110.90
57	BB	835	C	C5-C4-N4	-6.04	115.97	120.20
57	BB	2872	A	N7-C8-N9	6.04	116.82	113.80
2	AK	12	ARG	NE-CZ-NH1	6.04	123.32	120.30
21	AA	77	A	N9-C1'-C2'	-6.04	105.35	112.00
21	AA	281	G	C5-N7-C8	6.04	107.32	104.30
21	AA	506	G	N9-C4-C5	6.04	107.82	105.40
21	AA	538	G	C2-N3-C4	6.04	114.92	111.90
21	AA	779	C	C6-N1-C2	6.04	122.72	120.30
21	AA	1200	C	O4'-C1'-N1	6.04	113.03	108.20
21	AA	1469	C	N3-C2-O2	6.04	126.13	121.90
21	AA	1507	A	N1-C2-N3	6.04	132.32	129.30
26	AV	72	A	N3-C4-C5	-6.04	122.57	126.80
57	BB	583	G	N3-C2-N2	6.04	124.13	119.90
57	BB	978	G	C6-N1-C2	6.04	128.72	125.10
57	BB	1473	G	N7-C8-N9	-6.04	110.08	113.10
57	BB	2464	G	C5-C6-N1	-6.04	108.48	111.50
57	BB	2558	C	N3-C4-C5	-6.04	119.48	121.90
57	BB	2776	A	C5-N7-C8	6.04	106.92	103.90
21	AA	754	C	N3-C4-C5	-6.04	119.48	121.90
21	AA	1504	G	C4-C5-C6	6.04	122.42	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	724	U	C4-C5-C6	-6.04	116.08	119.70
57	BB	2004	G	C4-C5-N7	6.04	113.22	110.80
57	BB	2155	U	P-O5'-C5'	-6.04	111.24	120.90
12	AU	25	ALA	N-CA-CB	6.04	118.55	110.10
21	AA	350	G	N1-C6-O6	6.04	123.52	119.90
21	AA	446	G	N3-C2-N2	6.04	124.13	119.90
21	AA	1020	G	N9-C4-C5	-6.04	102.98	105.40
21	AA	1266	G	N3-C2-N2	-6.04	115.67	119.90
21	AA	1379	G	C5-C6-O6	-6.04	124.98	128.60
22	AY	61	C	C5'-C4'-O4'	-6.04	101.86	109.10
26	AV	40	C	C5-C6-N1	6.04	124.02	121.00
26	AV	40	C	C6-N1-C2	-6.04	117.88	120.30
54	BF	142	TYR	CB-CG-CD2	-6.04	117.38	121.00
57	BB	270	A	C4-C5-N7	-6.04	107.68	110.70
57	BB	1373	A	C5-N7-C8	-6.04	100.88	103.90
57	BB	1391	U	N1-C2-N3	-6.04	111.28	114.90
57	BB	1532	A	C6-C5-N7	-6.04	128.07	132.30
57	BB	1807	G	C6-C5-N7	-6.04	126.78	130.40
57	BB	1848	A	C6-C5-N7	-6.04	128.07	132.30
57	BB	2100	G	P-O5'-C5'	-6.04	111.24	120.90
57	BB	2144	G	C2-N3-C4	6.04	114.92	111.90
57	BB	2339	C	C5-C6-N1	6.04	124.02	121.00
57	BB	2640	G	C5-N7-C8	6.04	107.32	104.30
21	AA	423	G	C5-C6-O6	-6.04	124.98	128.60
21	AA	1166	G	O4'-C1'-N9	6.04	113.03	108.20
57	BB	778	G	C5-N7-C8	6.04	107.32	104.30
57	BB	785	G	C5-C6-O6	-6.04	124.98	128.60
57	BB	821	A	C5-C6-N1	-6.04	114.68	117.70
57	BB	1570	A	C8-N9-C4	-6.04	103.39	105.80
13	AB	139	GLU	O-C-N	-6.04	113.04	122.70
21	AA	119	A	N9-C4-C5	6.04	108.21	105.80
21	AA	350	G	N3-C4-C5	6.04	131.62	128.60
21	AA	1276	G	O4'-C4'-C3'	-6.04	97.96	104.00
22	AY	22	G	P-O3'-C3'	-6.04	112.46	119.70
30	BK	15	ALA	N-CA-CB	6.04	118.55	110.10
55	BG	165	ASP	N-CA-CB	6.04	121.47	110.60
57	BB	227	A	N3-C4-N9	6.04	132.23	127.40
57	BB	252	G	C4-C5-N7	-6.04	108.39	110.80
57	BB	346	A	O4'-C1'-N9	6.04	113.03	108.20
57	BB	500	G	N3-C4-N9	6.04	129.62	126.00
57	BB	578	G	C5-N7-C8	-6.04	101.28	104.30
57	BB	590	A	N1-C6-N6	6.04	122.22	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2058	A	C5-C6-N1	-6.04	114.68	117.70
57	BB	2884	U	C2-N3-C4	6.04	130.62	127.00
58	BA	15	A	C6-N1-C2	6.04	122.22	118.60
21	AA	725	G	C6-C5-N7	-6.03	126.78	130.40
21	AA	1079	G	C5-C6-O6	-6.03	124.98	128.60
21	AA	1186	G	N3-C2-N2	6.03	124.12	119.90
57	BB	845	A	C4-C5-C6	6.03	120.02	117.00
57	BB	942	G	C8-N9-C1'	6.03	134.84	127.00
57	BB	1317	G	C8-N9-C4	6.03	108.81	106.40
57	BB	1569	A	C4-C5-C6	6.03	120.02	117.00
57	BB	2777	G	C5'-C4'-O4'	6.03	116.34	109.10
58	BA	117	G	P-O3'-C3'	-6.03	112.46	119.70
18	AG	85	GLN	CA-CB-CG	6.03	126.67	113.40
21	AA	725	G	C8-N9-C4	-6.03	103.99	106.40
22	AY	44	A	O4'-C1'-C2'	6.03	113.03	107.60
28	BI	4	VAL	CA-CB-CG1	6.03	119.95	110.90
57	BB	159	G	C5-C6-O6	-6.03	124.98	128.60
57	BB	1124	G	P-O3'-C3'	6.03	126.94	119.70
57	BB	2058	A	O4'-C1'-C2'	6.03	113.03	107.60
57	BB	2384	U	C5'-C4'-C3'	-6.03	106.35	116.00
21	AA	49	U	N1-C2-O2	-6.03	118.58	122.80
21	AA	627	G	C5-N7-C8	6.03	107.31	104.30
21	AA	673	A	C5-C6-N6	-6.03	118.88	123.70
21	AA	921	U	N1-C2-N3	-6.03	111.28	114.90
21	AA	1360	A	O4'-C1'-N9	6.03	113.02	108.20
21	AA	1374	A	C4-C5-C6	6.03	120.02	117.00
21	AA	1497	G	P-O3'-C3'	6.03	126.94	119.70
57	BB	478	A	C5-C6-N1	6.03	120.72	117.70
57	BB	713	G	C4-C5-N7	6.03	113.21	110.80
57	BB	1587	G	N1-C2-N2	-6.03	110.77	116.20
57	BB	2314	A	C4-C5-C6	6.03	120.02	117.00
57	BB	2593	U	C1'-O4'-C4'	-6.03	105.08	109.90
58	BA	52	A	C5-N7-C8	6.03	106.92	103.90
21	AA	133	U	OP1-P-O3'	6.03	118.46	105.20
21	AA	286	C	C6-N1-C2	-6.03	117.89	120.30
21	AA	456	A	C4-C5-C6	6.03	120.01	117.00
21	AA	767	A	C5-C6-N6	-6.03	118.88	123.70
21	AA	843	U	C2-N3-C4	-6.03	123.38	127.00
21	AA	1088	G	C4-C5-N7	6.03	113.21	110.80
57	BB	197	A	O4'-C1'-N9	6.03	113.02	108.20
57	BB	775	G	C8-N9-C4	-6.03	103.99	106.40
57	BB	1813	G	C6-N1-C2	6.03	128.72	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	207	C	N1-C2-N3	6.03	123.42	119.20
21	AA	402	G	N3-C2-N2	6.03	124.12	119.90
21	AA	615	G	N1-C2-N2	-6.03	110.78	116.20
21	AA	892	A	N1-C6-N6	6.03	122.22	118.60
21	AA	902	G	N3-C4-C5	6.03	131.61	128.60
21	AA	1054	C	P-O3'-C3'	6.03	126.93	119.70
21	AA	1250	A	C4'-C3'-C2'	-6.03	96.57	102.60
25	AZ	154	ARG	NE-CZ-NH1	6.03	123.31	120.30
57	BB	132	G	N9-C4-C5	6.03	107.81	105.40
57	BB	428	A	N1-C6-N6	6.03	122.22	118.60
57	BB	946	C	C5'-C4'-O4'	-6.03	101.87	109.10
57	BB	1259	G	C1'-O4'-C4'	6.03	114.72	109.90
57	BB	1325	U	N3-C4-O4	6.03	123.62	119.40
57	BB	1703	G	C8-N9-C4	-6.03	103.99	106.40
57	BB	1772	A	N3-C4-C5	-6.03	122.58	126.80
57	BB	1896	G	C4-C5-C6	6.03	122.42	118.80
57	BB	1908	C	N3-C2-O2	6.03	126.12	121.90
57	BB	2430	A	C6-C5-N7	-6.03	128.08	132.30
21	AA	98	A	C8-N9-C4	-6.03	103.39	105.80
21	AA	188	C	C2-N1-C1'	6.03	125.43	118.80
21	AA	258	G	C5'-C4'-O4'	-6.03	101.87	109.10
21	AA	481	G	C4-C5-C6	6.03	122.42	118.80
21	AA	1162	C	C6-N1-C2	-6.03	117.89	120.30
21	AA	1429	A	C5-C6-N1	-6.03	114.69	117.70
21	AA	1492	A	P-O3'-C3'	-6.03	112.47	119.70
57	BB	738	G	C5-C6-O6	-6.03	124.98	128.60
57	BB	792	A	N9-C4-C5	-6.03	103.39	105.80
57	BB	1245	G	C1'-O4'-C4'	-6.03	105.08	109.90
57	BB	1490	A	N7-C8-N9	-6.03	110.79	113.80
57	BB	1568	G	C4-C5-N7	6.03	113.21	110.80
21	AA	553	A	N9-C4-C5	6.02	108.21	105.80
21	AA	1014	A	C8-N9-C4	-6.02	103.39	105.80
57	BB	1279	G	N3-C2-N2	6.02	124.12	119.90
57	BB	2121	G	N3-C2-N2	6.02	124.12	119.90
3	AL	30	ARG	NE-CZ-NH2	-6.02	117.29	120.30
12	AU	52	VAL	CG1-CB-CG2	6.02	120.54	110.90
21	AA	1063	C	C6-N1-C1'	-6.02	113.57	120.80
21	AA	1425	U	N3-C2-O2	6.02	126.42	122.20
34	BO	36	TYR	CG-CD2-CE2	-6.02	116.48	121.30
57	BB	491	G	C5'-C4'-C3'	6.02	125.64	116.00
57	BB	818	G	C2-N3-C4	6.02	114.91	111.90
57	BB	1175	A	C6-C5-N7	-6.02	128.09	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1718	G	C5-C6-O6	-6.02	124.99	128.60
57	BB	1803	A	C5-C6-N1	-6.02	114.69	117.70
57	BB	2314	A	C2-N3-C4	-6.02	107.59	110.60
58	BA	27	C	N1-C1'-C2'	-6.02	105.37	112.00
21	AA	597	G	N3-C4-C5	6.02	131.61	128.60
21	AA	703	G	N1-C2-N3	-6.02	120.29	123.90
21	AA	872	A	N1-C2-N3	6.02	132.31	129.30
41	BV	26	PHE	CB-CG-CD1	6.02	125.02	120.80
57	BB	738	G	C5-C6-N1	-6.02	108.49	111.50
57	BB	1567	G	O4'-C1'-N9	6.02	113.02	108.20
10	AS	56	HIS	N-CA-C	-6.02	94.75	111.00
21	AA	448	A	O4'-C1'-N9	6.02	113.02	108.20
21	AA	767	A	N3-C4-C5	-6.02	122.59	126.80
21	AA	1063	C	C2-N1-C1'	6.02	125.42	118.80
36	BQ	3	VAL	CA-CB-CG1	-6.02	101.87	110.90
57	BB	93	G	N1-C2-N3	-6.02	120.29	123.90
57	BB	252	G	N1-C6-O6	6.02	123.51	119.90
57	BB	403	U	C6-N1-C2	-6.02	117.39	121.00
57	BB	822	G	C5-N7-C8	-6.02	101.29	104.30
57	BB	905	A	N3-C4-N9	6.02	132.22	127.40
57	BB	1110	G	C5-N7-C8	6.02	107.31	104.30
57	BB	1413	A	C6-N1-C2	6.02	122.21	118.60
57	BB	1781	U	O4'-C4'-C3'	-6.02	97.98	104.00
57	BB	2029	G	O4'-C1'-N9	6.02	113.02	108.20
57	BB	2484	G	N3-C4-N9	6.02	129.61	126.00
57	BB	2740	A	C4-C5-C6	6.02	120.01	117.00
21	AA	644	U	C3'-C2'-C1'	-6.02	96.69	101.50
21	AA	712	A	C8-N9-C4	-6.02	103.39	105.80
21	AA	740	U	C5-C4-O4	6.02	129.51	125.90
21	AA	1283	U	C5-C6-N1	6.02	125.71	122.70
45	BC	189	ALA	N-CA-CB	6.02	118.53	110.10
52	BD	128	ARG	NE-CZ-NH2	-6.02	117.29	120.30
57	BB	101	A	C5'-C4'-C3'	-6.02	106.37	116.00
57	BB	1348	C	C5'-C4'-O4'	6.02	116.32	109.10
57	BB	1426	G	N1-C6-O6	6.02	123.51	119.90
57	BB	1917	U	C5-C6-N1	6.02	125.71	122.70
57	BB	2080	A	N1-C2-N3	-6.02	126.29	129.30
57	BB	2351	G	N3-C2-N2	6.02	124.11	119.90
37	BR	92	TRP	CB-CG-CD2	-6.02	118.78	126.60
43	BX	77	TYR	CG-CD1-CE1	-6.02	116.49	121.30
47	B0	12	ARG	NE-CZ-NH1	6.02	123.31	120.30
57	BB	346	A	C8-N9-C1'	-6.02	116.87	127.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	505	A	C6-C5-N7	-6.02	128.09	132.30
57	BB	778	G	P-O3'-C3'	-6.02	112.48	119.70
57	BB	1731	G	N1-C2-N3	-6.02	120.29	123.90
21	AA	70	U	O4'-C1'-N1	6.01	113.01	108.20
21	AA	327	A	O4'-C1'-N9	6.01	113.01	108.20
21	AA	467	U	C5-C6-N1	6.01	125.71	122.70
21	AA	723	U	O4'-C1'-N1	6.01	113.01	108.20
21	AA	951	G	N9-C4-C5	-6.01	102.99	105.40
57	BB	246	C	P-O5'-C5'	6.01	130.52	120.90
57	BB	322	A	P-O5'-C5'	-6.01	111.28	120.90
57	BB	677	A	P-O5'-C5'	-6.01	111.28	120.90
57	BB	1894	C	C4-C5-C6	6.01	120.41	117.40
57	BB	2245	U	N1-C2-N3	-6.01	111.29	114.90
57	BB	2262	U	O4'-C4'-C3'	-6.01	97.99	104.00
57	BB	2618	G	C8-N9-C4	-6.01	103.99	106.40
4	AM	46	GLU	CB-CA-C	-6.01	98.37	110.40
21	AA	152	A	C5-C6-N6	-6.01	118.89	123.70
21	AA	840	C	C1'-O4'-C4'	6.01	114.71	109.90
21	AA	901	A	O4'-C1'-N9	6.01	113.01	108.20
57	BB	726	G	OP1-P-O3'	6.01	118.43	105.20
57	BB	1108	U	C6-N1-C2	-6.01	117.39	121.00
57	BB	2564	A	C6-N1-C2	6.01	122.21	118.60
21	AA	315	A	C5-C6-N1	-6.01	114.69	117.70
21	AA	473	U	C5-C6-N1	6.01	125.71	122.70
21	AA	474	G	O4'-C1'-N9	6.01	113.01	108.20
21	AA	580	C	O4'-C4'-C3'	-6.01	97.99	104.00
21	AA	1006	G	C4-C5-N7	-6.01	108.39	110.80
21	AA	1276	G	N3-C2-N2	6.01	124.11	119.90
21	AA	1525	G	C4-C5-N7	6.01	113.20	110.80
57	BB	42	A	C5-C6-N6	-6.01	118.89	123.70
57	BB	190	A	C8-N9-C4	6.01	108.20	105.80
57	BB	548	G	C1'-O4'-C4'	-6.01	105.09	109.90
57	BB	787	C	N3-C4-N4	6.01	122.21	118.00
57	BB	1259	G	N3-C2-N2	6.01	124.11	119.90
57	BB	1302	A	C6-C5-N7	-6.01	128.09	132.30
57	BB	1423	G	C2-N3-C4	-6.01	108.89	111.90
57	BB	1902	C	N1-C2-O2	-6.01	115.29	118.90
57	BB	2481	G	N3-C4-C5	-6.01	125.59	128.60
21	AA	784	A	P-O5'-C5'	-6.01	111.28	120.90
21	AA	895	G	C8-N9-C4	-6.01	104.00	106.40
21	AA	919	A	C5-C6-N1	-6.01	114.70	117.70
21	AA	923	A	C5-N7-C8	6.01	106.91	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	B0	49	ARG	NE-CZ-NH1	6.01	123.30	120.30
57	BB	555	G	C6-C5-N7	-6.01	126.79	130.40
57	BB	1322	A	C6-N1-C2	6.01	122.21	118.60
57	BB	1731	G	N7-C8-N9	6.01	116.10	113.10
57	BB	2207	C	C5-C6-N1	-6.01	118.00	121.00
57	BB	2520	C	N3-C4-N4	6.01	122.21	118.00
57	BB	2763	G	C8-N9-C4	-6.01	104.00	106.40
57	BB	2829	A	C8-N9-C4	-6.01	103.40	105.80
21	AA	880	C	N3-C4-C5	-6.01	119.50	121.90
27	B5	60	ARG	NH1-CZ-NH2	6.01	126.01	119.40
57	BB	74	A	N1-C2-N3	-6.01	126.30	129.30
57	BB	734	A	C5-N7-C8	6.01	106.90	103.90
57	BB	1299	G	C5-C6-N1	-6.01	108.50	111.50
57	BB	1378	A	C5-C6-N6	-6.01	118.89	123.70
57	BB	2759	G	C3'-C2'-C1'	-6.01	96.69	101.50
3	AL	85	ARG	NE-CZ-NH2	-6.01	117.30	120.30
16	AE	114	LEU	CB-CG-CD2	6.01	121.21	111.00
21	AA	103	U	C3'-C2'-C1'	-6.01	96.69	101.50
21	AA	132	C	N3-C4-N4	6.01	122.20	118.00
21	AA	948	C	C2-N3-C4	-6.01	116.90	119.90
44	BY	35	GLY	N-CA-C	-6.01	98.09	113.10
57	BB	191	A	N3-C4-N9	6.01	132.21	127.40
57	BB	363	G	C8-N9-C1'	6.01	134.81	127.00
57	BB	1501	G	O4'-C1'-N9	6.01	113.01	108.20
57	BB	1569	A	O4'-C1'-N9	6.01	113.00	108.20
57	BB	1608	A	N3-C4-N9	6.01	132.21	127.40
57	BB	1682	G	N1-C2-N3	-6.01	120.30	123.90
57	BB	1829	A	C2-N3-C4	-6.01	107.60	110.60
14	AC	24	ASN	CA-CB-CG	-6.00	100.19	113.40
20	AI	122	ARG	NE-CZ-NH2	-6.00	117.30	120.30
21	AA	62	U	O4'-C1'-N1	6.00	113.00	108.20
21	AA	195	A	N1-C6-N6	6.00	122.20	118.60
21	AA	1244	G	C4-C5-C6	6.00	122.40	118.80
57	BB	509	C	O4'-C1'-N1	6.00	113.00	108.20
57	BB	1009	A	C2-N3-C4	-6.00	107.60	110.60
21	AA	326	G	N3-C4-N9	-6.00	122.40	126.00
21	AA	488	C	N3-C4-C5	-6.00	119.50	121.90
21	AA	529	G	C5-N7-C8	6.00	107.30	104.30
21	AA	825	A	P-O3'-C3'	-6.00	112.50	119.70
21	AA	1427	C	C6-N1-C2	-6.00	117.90	120.30
57	BB	455	C	C2-N1-C1'	6.00	125.41	118.80
57	BB	523	C	C6-N1-C2	-6.00	117.90	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	883	G	C5-N7-C8	6.00	107.30	104.30
57	BB	1685	C	C3'-C2'-C1'	-6.00	96.70	101.50
57	BB	2198	A	O4'-C1'-C2'	-6.00	99.80	105.80
58	BA	37	C	C1'-O4'-C4'	6.00	114.70	109.90
21	AA	1020	G	C3'-C2'-C1'	-6.00	96.70	101.50
21	AA	1224	U	C5-C4-O4	-6.00	122.30	125.90
21	AA	1315	U	OP1-P-OP2	-6.00	110.60	119.60
21	AA	1379	G	C5-C6-N1	6.00	114.50	111.50
21	AA	1402	C	C3'-C2'-C1'	6.00	106.30	101.50
21	AA	1428	A	N1-C2-N3	-6.00	126.30	129.30
21	AA	1430	A	N9-C4-C5	6.00	108.20	105.80
38	BS	64	ALA	C-N-CA	6.00	136.70	121.70
57	BB	777	G	N3-C4-C5	-6.00	125.60	128.60
57	BB	1084	A	N1-C2-N3	-6.00	126.30	129.30
57	BB	1611	C	C4-C5-C6	-6.00	114.40	117.40
57	BB	1706	C	N3-C4-C5	-6.00	119.50	121.90
57	BB	2205	A	N9-C4-C5	6.00	108.20	105.80
57	BB	2775	G	N3-C2-N2	6.00	124.10	119.90
21	AA	181	A	C5-C6-N6	-6.00	118.90	123.70
21	AA	189	A	C8-N9-C4	-6.00	103.40	105.80
21	AA	632	U	N1-C2-N3	-6.00	111.30	114.90
21	AA	820	U	OP1-P-OP2	-6.00	110.60	119.60
21	AA	1251	A	N9-C4-C5	6.00	108.20	105.80
57	BB	1687	G	C5-C6-O6	-6.00	125.00	128.60
57	BB	1802	A	C4-C5-C6	6.00	120.00	117.00
57	BB	2465	C	N3-C4-C5	-6.00	119.50	121.90
57	BB	2685	G	N3-C4-C5	-6.00	125.60	128.60
21	AA	139	A	N3-C4-C5	-6.00	122.60	126.80
21	AA	605	U	O4'-C1'-N1	6.00	113.00	108.20
57	BB	1044	C	C6-N1-C2	-6.00	117.90	120.30
57	BB	1312	U	C3'-C2'-C1'	-6.00	96.70	101.50
57	BB	1366	A	N9-C4-C5	-6.00	103.40	105.80
57	BB	2461	A	O4'-C1'-N9	6.00	113.00	108.20
57	BB	2536	G	N3-C4-C5	6.00	131.60	128.60
57	BB	2759	G	P-O3'-C3'	6.00	126.90	119.70
21	AA	350	G	O4'-C1'-N9	6.00	113.00	108.20
21	AA	465	A	N1-C2-N3	6.00	132.30	129.30
21	AA	588	G	N1-C6-O6	6.00	123.50	119.90
21	AA	774	G	N9-C4-C5	-6.00	103.00	105.40
21	AA	1090	U	C2-N3-C4	-6.00	123.40	127.00
21	AA	1206	G	C8-N9-C4	6.00	108.80	106.40
32	BM	36	VAL	CA-CB-CG2	-6.00	101.91	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
41	BV	12	GLN	N-CA-CB	6.00	121.39	110.60
57	BB	432	A	C4-C5-N7	-6.00	107.70	110.70
57	BB	479	A	C2-N3-C4	-6.00	107.60	110.60
57	BB	1667	G	N3-C2-N2	6.00	124.10	119.90
57	BB	1979	U	C5-C6-N1	6.00	125.70	122.70
57	BB	2500	U	O4'-C1'-N1	6.00	113.00	108.20
57	BB	2831	G	N1-C2-N3	-6.00	120.30	123.90
21	AA	238	A	C3'-C2'-C1'	-6.00	96.70	101.50
21	AA	720	C	N3-C4-C5	-6.00	119.50	121.90
21	AA	1532	U	C5-C4-O4	-6.00	122.30	125.90
57	BB	559	G	N7-C8-N9	-6.00	110.10	113.10
57	BB	606	U	O4'-C1'-N1	6.00	113.00	108.20
57	BB	630	G	N7-C8-N9	-6.00	110.10	113.10
57	BB	1268	A	C5'-C4'-C3'	-6.00	106.41	116.00
57	BB	2102	G	C2-N3-C4	6.00	114.90	111.90
58	BA	12	C	C6-N1-C2	-6.00	117.90	120.30
2	AK	107	THR	CA-CB-CG2	-5.99	104.01	112.40
5	AN	29	ILE	C-N-CA	5.99	136.68	121.70
21	AA	320	A	C6-C5-N7	-5.99	128.10	132.30
21	AA	532	A	C4'-C3'-C2'	5.99	108.59	102.60
21	AA	873	A	C6-C5-N7	-5.99	128.10	132.30
21	AA	976	G	C5-C6-N1	-5.99	108.50	111.50
21	AA	1475	G	N3-C4-N9	5.99	129.60	126.00
22	AY	52	U	N1-C2-N3	-5.99	111.30	114.90
23	AW	40	C	O4'-C1'-N1	5.99	113.00	108.20
57	BB	87	U	N1-C2-N3	5.99	118.50	114.90
57	BB	333	G	O4'-C4'-C3'	-5.99	98.01	104.00
57	BB	781	A	O4'-C1'-N9	5.99	112.99	108.20
57	BB	1134	A	C8-N9-C4	-5.99	103.40	105.80
57	BB	1607	C	C5-C6-N1	5.99	124.00	121.00
57	BB	2057	G	C6-C5-N7	-5.99	126.80	130.40
57	BB	2600	A	C5-C6-N1	-5.99	114.70	117.70
57	BB	2754	U	N1-C2-N3	5.99	118.50	114.90
45	BC	6	LYS	N-CA-CB	5.99	121.39	110.60
57	BB	409	G	N3-C2-N2	5.99	124.09	119.90
57	BB	798	G	C5-C6-N1	-5.99	108.50	111.50
57	BB	2228	G	C1'-O4'-C4'	-5.99	105.11	109.90
57	BB	2725	A	N9-C4-C5	5.99	108.20	105.80
21	AA	1221	G	N3-C2-N2	5.99	124.09	119.90
21	AA	1404	C	O4'-C1'-N1	5.99	112.99	108.20
24	AX	13	A	N1-C6-N6	5.99	122.19	118.60
57	BB	935	C	O4'-C1'-N1	5.99	112.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1577	C	C5-C4-N4	-5.99	116.01	120.20
57	BB	1763	G	P-O3'-C3'	5.99	126.89	119.70
57	BB	2031	A	N1-C6-N6	5.99	122.19	118.60
57	BB	2113	U	C5'-C4'-O4'	5.99	116.29	109.10
57	BB	2183	A	P-O3'-C3'	5.99	126.89	119.70
57	BB	2429	G	C4'-C3'-C2'	5.99	108.59	102.60
57	BB	2526	G	C1'-O4'-C4'	-5.99	105.11	109.90
57	BB	2693	G	C5-N7-C8	5.99	107.30	104.30
57	BB	2745	C	C1'-O4'-C4'	5.99	114.69	109.90
58	BA	15	A	N1-C6-N6	5.99	122.19	118.60
58	BA	67	G	N7-C8-N9	5.99	116.09	113.10
3	AL	116	TYR	CG-CD2-CE2	-5.99	116.51	121.30
17	AF	34	GLY	N-CA-C	-5.99	98.13	113.10
21	AA	340	U	OP1-P-OP2	-5.99	110.62	119.60
21	AA	941	G	O4'-C4'-C3'	-5.99	98.01	104.00
21	AA	1036	A	C4'-C3'-C2'	-5.99	96.61	102.60
21	AA	1375	A	O4'-C1'-N9	5.99	112.99	108.20
57	BB	284	U	C5-C6-N1	5.99	125.69	122.70
57	BB	505	A	C6-N1-C2	5.99	122.19	118.60
57	BB	656	G	N3-C2-N2	5.99	124.09	119.90
57	BB	1310	G	C4-C5-N7	-5.99	108.40	110.80
57	BB	1406	U	C4-C5-C6	-5.99	116.11	119.70
57	BB	1538	G	C6-C5-N7	-5.99	126.81	130.40
57	BB	1567	G	O4'-C1'-C2'	-5.99	99.81	105.80
57	BB	1778	U	N1-C2-N3	-5.99	111.31	114.90
57	BB	2029	G	N7-C8-N9	-5.99	110.11	113.10
57	BB	2218	G	N7-C8-N9	5.99	116.09	113.10
57	BB	2270	A	C6-C5-N7	-5.99	128.11	132.30
57	BB	2857	G	C8-N9-C4	-5.99	104.00	106.40
21	AA	824	G	N1-C2-N3	-5.99	120.31	123.90
21	AA	1228	C	C5-C4-N4	-5.99	116.01	120.20
21	AA	1459	G	N9-C4-C5	-5.99	103.00	105.40
46	BZ	46	MET	CG-SD-CE	-5.99	90.62	100.20
57	BB	589	U	C5'-C4'-C3'	5.99	125.58	116.00
57	BB	596	U	C1'-O4'-C4'	-5.99	105.11	109.90
57	BB	1816	C	N3-C4-N4	5.99	122.19	118.00
57	BB	2310	C	N3-C2-O2	-5.99	117.71	121.90
57	BB	2547	A	N7-C8-N9	5.99	116.79	113.80
57	BB	2641	G	C5-C6-O6	-5.99	125.01	128.60
58	BA	118	C	O4'-C4'-C3'	-5.99	98.01	104.00
21	AA	770	C	P-O3'-C3'	-5.99	112.52	119.70
21	AA	1210	C	O4'-C1'-N1	5.99	112.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	4	G	O4'-C1'-N9	5.99	112.99	108.20
23	AW	30	G	N1-C2-N3	-5.99	120.31	123.90
38	BS	75	PHE	CB-CG-CD2	-5.99	116.61	120.80
57	BB	461	C	C5-C4-N4	-5.99	116.01	120.20
57	BB	1074	G	O4'-C1'-N9	5.99	112.99	108.20
57	BB	1552	A	C2-N3-C4	5.99	113.59	110.60
57	BB	2248	C	C6-N1-C1'	5.99	127.98	120.80
57	BB	2577	A	N1-C2-N3	5.99	132.29	129.30
57	BB	2732	G	C5'-C4'-C3'	-5.99	106.42	116.00
57	BB	2876	G	C4-C5-N7	5.99	113.19	110.80
57	BB	2877	G	OP1-P-OP2	-5.99	110.62	119.60
58	BA	39	A	C6-C5-N7	-5.99	128.11	132.30
21	AA	177	G	C5-C6-O6	-5.98	125.01	128.60
21	AA	245	U	C5-C6-N1	-5.98	119.71	122.70
21	AA	626	G	C4-C5-N7	5.98	113.19	110.80
57	BB	943	A	N1-C6-N6	5.98	122.19	118.60
57	BB	1371	G	N7-C8-N9	-5.98	110.11	113.10
21	AA	61	G	N1-C6-O6	5.98	123.49	119.90
21	AA	537	G	C1'-O4'-C4'	-5.98	105.11	109.90
21	AA	630	A	C6-C5-N7	-5.98	128.11	132.30
21	AA	1182	G	P-O3'-C3'	5.98	126.88	119.70
21	AA	1326	U	N1-C2-O2	5.98	126.99	122.80
22	AY	31	A	C4'-C3'-C2'	-5.98	96.62	102.60
57	BB	174	U	N3-C4-C5	5.98	118.19	114.60
57	BB	187	G	N3-C2-N2	5.98	124.09	119.90
57	BB	277	G	N7-C8-N9	-5.98	110.11	113.10
57	BB	303	G	N1-C6-O6	5.98	123.49	119.90
57	BB	890	C	O4'-C1'-N1	5.98	112.99	108.20
57	BB	1008	A	C3'-C2'-C1'	-5.98	96.71	101.50
57	BB	1516	G	C5-C6-N1	-5.98	108.51	111.50
57	BB	1961	C	N3-C2-O2	-5.98	117.71	121.90
57	BB	2475	C	C5-C4-N4	5.98	124.39	120.20
57	BB	2686	G	N9-C4-C5	-5.98	103.01	105.40
57	BB	2811	G	C8-N9-C1'	5.98	134.78	127.00
21	AA	404	G	O4'-C1'-N9	5.98	112.98	108.20
21	AA	1241	G	P-O3'-C3'	-5.98	112.52	119.70
21	AA	1436	U	O4'-C1'-N1	5.98	112.98	108.20
21	AA	1455	G	N9-C4-C5	-5.98	103.01	105.40
26	AV	15	G	C6-C5-N7	-5.98	126.81	130.40
39	BT	77	ARG	CD-NE-CZ	-5.98	115.23	123.60
57	BB	360	U	P-O3'-C3'	5.98	126.88	119.70
57	BB	496	G	C4-C5-C6	-5.98	115.21	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	722	A	N1-C2-N3	5.98	132.29	129.30
57	BB	818	G	N9-C4-C5	-5.98	103.01	105.40
57	BB	888	C	O4'-C1'-N1	5.98	112.98	108.20
57	BB	1051	G	C8-N9-C4	-5.98	104.01	106.40
57	BB	1543	G	C6-N1-C2	5.98	128.69	125.10
57	BB	2267	A	C6-C5-N7	-5.98	128.11	132.30
57	BB	2274	A	N7-C8-N9	5.98	116.79	113.80
57	BB	2739	U	C5-C4-O4	5.98	129.49	125.90
57	BB	2743	U	N1-C2-N3	-5.98	111.31	114.90
15	AD	12	ARG	CB-CA-C	-5.98	98.44	110.40
21	AA	377	G	N1-C2-N3	-5.98	120.31	123.90
21	AA	907	A	P-O3'-C3'	-5.98	112.53	119.70
21	AA	1520	C	C5-C4-N4	-5.98	116.02	120.20
57	BB	1076	C	C4'-C3'-C2'	-5.98	96.62	102.60
57	BB	1954	G	C2-N3-C4	5.98	114.89	111.90
57	BB	2470	G	C4-C5-C6	5.98	122.39	118.80
58	BA	116	G	C6-C5-N7	-5.98	126.81	130.40
21	AA	1041	G	C5'-C4'-C3'	-5.98	106.44	116.00
21	AA	1224	U	N3-C4-O4	5.98	123.58	119.40
21	AA	1363	A	C3'-C2'-C1'	5.98	106.28	101.50
23	AW	5	G	C4-C5-C6	5.98	122.39	118.80
49	B2	39	ARG	NE-CZ-NH2	5.98	123.29	120.30
57	BB	535	G	C4-N9-C1'	-5.98	118.73	126.50
57	BB	931	U	C2-N3-C4	5.98	130.59	127.00
57	BB	1403	A	C3'-C2'-C1'	-5.98	96.72	101.50
57	BB	1422	G	C6-N1-C2	-5.98	121.51	125.10
57	BB	2868	A	N3-C4-N9	5.98	132.18	127.40
58	BA	31	C	N1-C2-N3	-5.98	115.02	119.20
21	AA	108	G	C5-C6-N1	-5.98	108.51	111.50
21	AA	257	G	C4-C5-C6	5.98	122.39	118.80
21	AA	637	C	N1-C2-O2	-5.98	115.31	118.90
21	AA	647	C	N3-C4-N4	5.98	122.18	118.00
21	AA	1048	G	C4-C5-C6	5.98	122.39	118.80
26	AV	29	G	N7-C8-N9	-5.98	110.11	113.10
57	BB	366	C	N1-C2-O2	5.98	122.48	118.90
57	BB	622	G	C5-C6-N1	-5.98	108.51	111.50
57	BB	2013	A	C4-C5-C6	5.98	119.99	117.00
57	BB	2601	C	C5-C4-N4	-5.98	116.02	120.20
57	BB	2780	G	C4-C5-N7	-5.98	108.41	110.80
21	AA	73	C	N1-C2-N3	-5.97	115.02	119.20
21	AA	291	U	N1-C2-N3	-5.97	111.31	114.90
57	BB	47	C	C6-N1-C2	5.97	122.69	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	51	G	C4-C5-C6	5.97	122.39	118.80
57	BB	264	C	O4'-C1'-N1	5.97	112.98	108.20
57	BB	673	C	C5-C4-N4	-5.97	116.02	120.20
57	BB	737	C	C2-N3-C4	5.97	122.89	119.90
57	BB	782	A	C5'-C4'-O4'	5.97	116.27	109.10
57	BB	861	A	P-O3'-C3'	-5.97	112.53	119.70
57	BB	936	A	C4'-C3'-C2'	-5.97	96.63	102.60
57	BB	1041	G	C4-C5-N7	-5.97	108.41	110.80
57	BB	1711	A	C5-N7-C8	5.97	106.89	103.90
57	BB	1989	G	N1-C2-N3	-5.97	120.31	123.90
57	BB	2668	G	C6-C5-N7	-5.97	126.81	130.40
57	BB	2687	U	N1-C2-O2	-5.97	118.62	122.80
21	AA	41	G	C5-C6-N1	-5.97	108.51	111.50
21	AA	751	U	N1-C2-N3	-5.97	111.32	114.90
57	BB	382	A	O4'-C1'-N9	5.97	112.98	108.20
57	BB	720	U	N3-C4-C5	-5.97	111.02	114.60
57	BB	760	G	C4'-C3'-C2'	-5.97	96.63	102.60
57	BB	856	G	C6-N1-C2	-5.97	121.52	125.10
57	BB	1510	G	N1-C2-N3	-5.97	120.32	123.90
57	BB	1647	U	C2-N1-C1'	5.97	124.87	117.70
57	BB	1855	U	C1'-O4'-C4'	-5.97	105.12	109.90
15	AD	140	ASP	CB-CG-OD2	-5.97	112.93	118.30
21	AA	57	G	C8-N9-C4	-5.97	104.01	106.40
21	AA	1031	C	C2-N1-C1'	-5.97	112.23	118.80
21	AA	1493	A	C5-C6-N6	-5.97	118.92	123.70
57	BB	257	C	C4'-C3'-C2'	-5.97	96.63	102.60
57	BB	832	U	N3-C4-C5	-5.97	111.02	114.60
57	BB	1854	A	P-O5'-C5'	5.97	130.45	120.90
57	BB	1888	G	N1-C2-N3	-5.97	120.32	123.90
57	BB	2044	C	C6-N1-C2	-5.97	117.91	120.30
57	BB	2409	G	N3-C2-N2	5.97	124.08	119.90
57	BB	2864	G	C5-C6-N1	-5.97	108.51	111.50
21	AA	175	C	N1-C2-O2	-5.97	115.32	118.90
21	AA	758	C	C6-N1-C1'	-5.97	113.64	120.80
21	AA	1374	A	C4'-C3'-C2'	-5.97	96.63	102.60
23	AW	65	G	C8-N9-C4	-5.97	104.01	106.40
57	BB	767	U	C2-N3-C4	5.97	130.58	127.00
57	BB	908	C	C5-C4-N4	5.97	124.38	120.20
57	BB	1425	G	C5'-C4'-O4'	5.97	116.26	109.10
57	BB	1471	G	N1-C2-N3	-5.97	120.32	123.90
57	BB	1857	G	C6-C5-N7	-5.97	126.82	130.40
57	BB	2294	G	N7-C8-N9	-5.97	110.11	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2578	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	2884	U	C6-N1-C1'	-5.97	112.84	121.20
21	AA	570	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	27	G	C2-N3-C4	5.97	114.88	111.90
57	BB	2518	A	N1-C2-N3	5.97	132.28	129.30
1	AJ	5	ARG	CD-NE-CZ	5.97	131.95	123.60
21	AA	229	U	O4'-C1'-N1	5.97	112.97	108.20
21	AA	254	G	C8-N9-C4	-5.97	104.01	106.40
21	AA	848	C	P-O3'-C3'	5.97	126.86	119.70
45	BC	113	ASP	CB-CA-C	-5.97	98.47	110.40
52	BD	43	ASP	CB-CA-C	5.97	122.33	110.40
57	BB	342	A	C5-C6-N1	-5.97	114.72	117.70
57	BB	555	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	871	U	O4'-C1'-N1	5.97	112.97	108.20
57	BB	1182	G	N1-C2-N2	-5.97	110.83	116.20
57	BB	1314	C	C2-N3-C4	5.97	122.88	119.90
57	BB	1336	A	C4-C5-C6	5.97	119.98	117.00
57	BB	1433	A	C4-C5-N7	-5.97	107.72	110.70
57	BB	1850	G	C5-C6-O6	-5.97	125.02	128.60
57	BB	1911	U	C1'-O4'-C4'	5.97	114.67	109.90
57	BB	2109	U	P-O3'-C3'	-5.97	112.54	119.70
57	BB	2452	C	C6-N1-C2	-5.97	117.91	120.30
21	AA	710	G	C5-N7-C8	5.96	107.28	104.30
21	AA	1146	A	C4-C5-N7	-5.96	107.72	110.70
21	AA	1339	A	C4'-C3'-C2'	-5.96	96.64	102.60
22	AY	6	U	C4'-C3'-C2'	-5.96	96.64	102.60
36	BQ	16	ILE	CB-CA-C	-5.96	99.67	111.60
57	BB	268	C	C5-C4-N4	-5.96	116.03	120.20
57	BB	1340	U	C6-N1-C1'	-5.96	112.85	121.20
57	BB	1521	G	N3-C4-N9	5.96	129.58	126.00
57	BB	2070	A	O4'-C4'-C3'	-5.96	98.03	104.00
57	BB	2082	A	N9-C4-C5	-5.96	103.41	105.80
57	BB	2245	U	N3-C2-O2	5.96	126.38	122.20
21	AA	773	G	N1-C2-N3	-5.96	120.32	123.90
21	AA	775	G	C5-C6-N1	-5.96	108.52	111.50
21	AA	978	A	C4-C5-N7	-5.96	107.72	110.70
21	AA	1426	G	C5-N7-C8	5.96	107.28	104.30
42	BW	76	ARG	NE-CZ-NH1	5.96	123.28	120.30
57	BB	361	G	N9-C4-C5	5.96	107.78	105.40
57	BB	536	G	N3-C4-N9	-5.96	122.42	126.00
57	BB	1426	G	C8-N9-C4	5.96	108.78	106.40
57	BB	1918	A	C6-C5-N7	-5.96	128.13	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2185	U	N3-C4-O4	5.96	123.57	119.40
57	BB	2448	A	C4-C5-C6	5.96	119.98	117.00
21	AA	87	C	O4'-C4'-C3'	-5.96	98.04	104.00
21	AA	482	A	C5-N7-C8	5.96	106.88	103.90
21	AA	796	C	O4'-C1'-N1	5.96	112.97	108.20
21	AA	861	G	N1-C2-N3	-5.96	120.32	123.90
21	AA	873	A	N9-C4-C5	5.96	108.18	105.80
21	AA	1136	C	O4'-C1'-N1	5.96	112.97	108.20
22	AY	10	G	N3-C4-C5	-5.96	125.62	128.60
47	B0	29	VAL	CA-CB-CG1	5.96	119.84	110.90
57	BB	125	A	C1'-O4'-C4'	-5.96	105.13	109.90
57	BB	555	G	C4-C5-N7	-5.96	108.42	110.80
57	BB	599	A	N1-C6-N6	5.96	122.18	118.60
57	BB	737	C	N3-C4-C5	-5.96	119.52	121.90
57	BB	1086	A	C4-C5-C6	5.96	119.98	117.00
57	BB	1319	C	N3-C4-C5	-5.96	119.52	121.90
57	BB	1416	G	O4'-C1'-N9	5.96	112.97	108.20
57	BB	1534	U	C4-C5-C6	-5.96	116.12	119.70
57	BB	1746	A	N3-C4-C5	5.96	130.97	126.80
57	BB	1939	U	N3-C4-O4	5.96	123.57	119.40
57	BB	2326	C	C5-C4-N4	-5.96	116.03	120.20
57	BB	2379	G	N7-C8-N9	5.96	116.08	113.10
57	BB	2844	G	N1-C2-N3	-5.96	120.32	123.90
21	AA	730	G	C4-C5-C6	5.96	122.38	118.80
57	BB	969	G	O4'-C1'-N9	5.96	112.97	108.20
57	BB	1072	C	C5-C6-N1	-5.96	118.02	121.00
21	AA	57	G	C4-C5-C6	5.96	122.38	118.80
21	AA	115	G	N3-C2-N2	5.96	124.07	119.90
21	AA	258	G	N1-C6-O6	5.96	123.47	119.90
21	AA	384	G	C5'-C4'-C3'	-5.96	106.47	116.00
21	AA	421	U	O4'-C1'-N1	5.96	112.97	108.20
21	AA	619	U	C6-N1-C2	-5.96	117.42	121.00
21	AA	707	U	C4-C5-C6	-5.96	116.12	119.70
21	AA	1493	A	N1-C2-N3	5.96	132.28	129.30
25	AZ	278	LEU	CB-CA-C	-5.96	98.88	110.20
37	BR	92	TRP	CE2-CD2-CE3	5.96	125.85	118.70
53	BE	196	VAL	CG1-CB-CG2	5.96	120.44	110.90
57	BB	117	G	C5-C6-N1	-5.96	108.52	111.50
57	BB	262	A	P-O3'-C3'	5.96	126.85	119.70
57	BB	501	A	N7-C8-N9	5.96	116.78	113.80
57	BB	1122	G	C4-C5-C6	5.96	122.38	118.80
57	BB	1229	C	C5-C4-N4	-5.96	116.03	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1602	U	N3-C4-O4	-5.96	115.23	119.40
57	BB	1954	G	C4-C5-C6	5.96	122.38	118.80
57	BB	2670	A	C6-N1-C2	5.96	122.18	118.60
57	BB	2708	G	C6-C5-N7	-5.96	126.82	130.40
58	BA	75	G	N1-C2-N3	-5.96	120.33	123.90
21	AA	712	A	N9-C4-C5	5.96	108.18	105.80
21	AA	724	G	N1-C6-O6	5.96	123.47	119.90
21	AA	942	G	N3-C2-N2	5.96	124.07	119.90
21	AA	1426	G	O4'-C1'-N9	5.96	112.97	108.20
55	BG	113	ASP	N-CA-CB	5.96	121.32	110.60
57	BB	579	G	N7-C8-N9	5.96	116.08	113.10
57	BB	602	A	C4-C5-N7	-5.96	107.72	110.70
57	BB	902	C	N3-C2-O2	5.96	126.07	121.90
57	BB	1907	G	N3-C2-N2	5.96	124.07	119.90
57	BB	2102	G	C6-C5-N7	-5.96	126.83	130.40
57	BB	2668	G	N3-C4-C5	-5.96	125.62	128.60
21	AA	270	A	P-O5'-C5'	-5.96	111.37	120.90
21	AA	737	C	C4-C5-C6	-5.96	114.42	117.40
21	AA	1085	U	C5-C6-N1	5.96	125.68	122.70
57	BB	1668	A	P-O5'-C5'	-5.96	111.37	120.90
57	BB	1780	A	C5-N7-C8	5.96	106.88	103.90
57	BB	2175	C	C6-N1-C2	-5.96	117.92	120.30
57	BB	2811	G	O4'-C1'-N9	5.96	112.96	108.20
21	AA	717	U	C6-N1-C2	-5.95	117.43	121.00
21	AA	844	G	C2-N3-C4	5.95	114.88	111.90
21	AA	1210	C	C6-N1-C2	-5.95	117.92	120.30
21	AA	1290	G	C8-N9-C4	-5.95	104.02	106.40
21	AA	1351	U	N1-C2-N3	5.95	118.47	114.90
57	BB	422	A	C6-C5-N7	-5.95	128.13	132.30
57	BB	838	C	P-O5'-C5'	5.95	130.42	120.90
57	BB	1853	A	C5-N7-C8	5.95	106.88	103.90
57	BB	2309	A	P-O3'-C3'	5.95	126.84	119.70
57	BB	2476	A	C6-C5-N7	-5.95	128.13	132.30
57	BB	2563	U	C3'-C2'-C1'	-5.95	96.74	101.50
57	BB	2837	A	C6-N1-C2	5.95	122.17	118.60
57	BB	2873	A	C6-N1-C2	-5.95	115.03	118.60
58	BA	15	A	C1'-O4'-C4'	-5.95	105.14	109.90
58	BA	75	G	C2-N3-C4	5.95	114.88	111.90
58	BA	112	G	N7-C8-N9	5.95	116.08	113.10
21	AA	543	U	C1'-O4'-C4'	5.95	114.66	109.90
21	AA	1372	U	C5-C4-O4	5.95	129.47	125.90
57	BB	1114	C	N3-C4-C5	-5.95	119.52	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2551	C	C6-N1-C1'	-5.95	113.66	120.80
57	BB	2886	A	C5-N7-C8	5.95	106.88	103.90
21	AA	136	C	C4-C5-C6	5.95	120.38	117.40
21	AA	303	A	C8-N9-C4	-5.95	103.42	105.80
21	AA	424	G	P-O5'-C5'	5.95	130.42	120.90
21	AA	459	A	N7-C8-N9	-5.95	110.83	113.80
21	AA	602	A	C2-N3-C4	5.95	113.58	110.60
21	AA	1198	G	C5-C6-O6	-5.95	125.03	128.60
21	AA	1361	G	N1-C2-N3	-5.95	120.33	123.90
21	AA	1368	A	P-O5'-C5'	-5.95	111.38	120.90
57	BB	475	C	N3-C4-N4	5.95	122.17	118.00
57	BB	671	C	N3-C4-C5	-5.95	119.52	121.90
57	BB	778	G	C3'-C2'-C1'	5.95	106.26	101.50
57	BB	1039	A	N1-C6-N6	5.95	122.17	118.60
57	BB	1107	G	P-O5'-C5'	5.95	130.42	120.90
57	BB	1191	G	N1-C2-N3	-5.95	120.33	123.90
57	BB	1206	G	N9-C4-C5	-5.95	103.02	105.40
57	BB	2065	C	O4'-C1'-N1	5.95	112.96	108.20
57	BB	2566	A	C3'-C2'-C1'	-5.95	96.74	101.50
57	BB	2650	U	N3-C4-C5	-5.95	111.03	114.60
21	AA	28	A	N7-C8-N9	-5.95	110.83	113.80
21	AA	941	G	N1-C6-O6	5.95	123.47	119.90
57	BB	377	G	C4-C5-C6	5.95	122.37	118.80
57	BB	666	A	O4'-C1'-N9	5.95	112.96	108.20
57	BB	716	A	C5-C6-N6	-5.95	118.94	123.70
57	BB	1254	A	C5-C6-N6	-5.95	118.94	123.70
57	BB	1262	A	C5-N7-C8	5.95	106.87	103.90
57	BB	1493	C	N3-C4-N4	5.95	122.16	118.00
57	BB	1821	A	C4-C5-C6	5.95	119.97	117.00
57	BB	1860	G	N1-C6-O6	5.95	123.47	119.90
57	BB	2094	A	N1-C6-N6	5.95	122.17	118.60
57	BB	2235	G	C4'-C3'-C2'	-5.95	96.65	102.60
57	BB	2252	G	C5-N7-C8	5.95	107.27	104.30
57	BB	2391	G	C6-C5-N7	-5.95	126.83	130.40
57	BB	2711	A	O4'-C1'-N9	5.95	112.96	108.20
9	AR	70	THR	CA-CB-CG2	-5.95	104.07	112.40
21	AA	269	C	C4-C5-C6	5.95	120.37	117.40
21	AA	1190	G	C6-N1-C2	5.95	128.67	125.10
53	BE	23	PHE	CB-CG-CD1	5.95	124.96	120.80
57	BB	492	A	O4'-C1'-N9	5.95	112.96	108.20
57	BB	857	G	N9-C4-C5	-5.95	103.02	105.40
57	BB	1199	U	C3'-C2'-C1'	-5.95	96.74	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1253	A	C4-C5-C6	5.95	119.97	117.00
57	BB	1453	A	N9-C4-C5	5.95	108.18	105.80
57	BB	1839	G	N3-C2-N2	5.95	124.06	119.90
57	BB	1875	G	C4-C5-N7	5.95	113.18	110.80
57	BB	2530	A	C6-C5-N7	-5.95	128.14	132.30
57	BB	2724	U	C2-N3-C4	-5.95	123.43	127.00
21	AA	487	A	C5'-C4'-C3'	-5.95	106.49	116.00
22	AY	23	A	C5-N7-C8	5.95	106.87	103.90
26	AV	42	G	C3'-C2'-C1'	-5.95	96.74	101.50
57	BB	298	G	N1-C2-N2	-5.95	110.85	116.20
57	BB	586	A	C5-C6-N6	-5.95	118.94	123.70
57	BB	618	G	N9-C4-C5	-5.95	103.02	105.40
57	BB	1019	U	P-O3'-C3'	5.95	126.83	119.70
57	BB	1099	G	N1-C2-N3	-5.95	120.33	123.90
57	BB	1474	U	P-O3'-C3'	-5.95	112.57	119.70
57	BB	1540	G	C4-C5-C6	5.95	122.37	118.80
57	BB	2480	C	N1-C1'-C2'	-5.95	105.46	112.00
21	AA	1348	U	N3-C2-O2	-5.94	118.04	122.20
22	AY	42	G	C1'-O4'-C4'	5.94	114.66	109.90
57	BB	1445	G	O4'-C1'-N9	5.94	112.95	108.20
57	BB	1851	U	C2-N3-C4	5.94	130.57	127.00
57	BB	2842	G	C2-N3-C4	-5.94	108.93	111.90
1	AJ	88	MET	CG-SD-CE	-5.94	90.69	100.20
21	AA	587	G	C2-N3-C4	5.94	114.87	111.90
21	AA	741	G	N1-C2-N3	-5.94	120.33	123.90
21	AA	1102	A	C4-C5-N7	-5.94	107.73	110.70
21	AA	1174	G	C3'-C2'-C1'	-5.94	96.75	101.50
21	AA	1476	A	O4'-C1'-N9	5.94	112.95	108.20
57	BB	306	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	476	G	C6-N1-C2	-5.94	121.53	125.10
57	BB	641	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	1377	G	N9-C4-C5	-5.94	103.02	105.40
57	BB	1848	A	C5-C6-N1	-5.94	114.73	117.70
57	BB	2459	A	C1'-O4'-C4'	5.94	114.66	109.90
57	BB	2796	U	O4'-C4'-C3'	-5.94	98.06	104.00
6	AO	87	ARG	NE-CZ-NH2	5.94	123.27	120.30
21	AA	201	G	N1-C2-N3	-5.94	120.34	123.90
21	AA	264	C	N3-C4-C5	-5.94	119.52	121.90
21	AA	397	A	O4'-C1'-N9	5.94	112.95	108.20
21	AA	432	A	C6-C5-N7	-5.94	128.14	132.30
21	AA	598	U	N3-C4-C5	-5.94	111.03	114.60
21	AA	650	G	C5-N7-C8	5.94	107.27	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	852	G	C8-N9-C4	-5.94	104.02	106.40
21	AA	957	U	C2-N3-C4	5.94	130.56	127.00
21	AA	1098	C	N3-C4-C5	-5.94	119.52	121.90
21	AA	1209	C	O4'-C1'-N1	5.94	112.95	108.20
22	AY	46	G	C5-N7-C8	-5.94	101.33	104.30
57	BB	7	G	N7-C8-N9	-5.94	110.13	113.10
57	BB	538	A	C5'-C4'-O4'	5.94	116.23	109.10
57	BB	1116	G	O4'-C1'-N9	5.94	112.95	108.20
57	BB	1658	C	C6-N1-C2	-5.94	117.92	120.30
57	BB	1716	U	N1-C2-O2	-5.94	118.64	122.80
57	BB	1936	A	C6-C5-N7	-5.94	128.14	132.30
57	BB	1988	G	C6-C5-N7	-5.94	126.84	130.40
57	BB	2552	U	N1-C2-N3	5.94	118.47	114.90
57	BB	2768	U	N3-C2-O2	-5.94	118.04	122.20
57	BB	2801	G	C4-C5-C6	5.94	122.36	118.80
26	AV	70	G	C4-C5-C6	5.94	122.36	118.80
57	BB	546	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	900	A	C4'-C3'-C2'	-5.94	96.66	102.60
57	BB	2321	U	O4'-C1'-N1	5.94	112.95	108.20
21	AA	486	U	O4'-C4'-C3'	-5.94	98.06	104.00
21	AA	1152	A	O4'-C1'-N9	5.94	112.95	108.20
57	BB	100	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	594	U	O4'-C1'-N1	5.94	112.95	108.20
57	BB	807	U	O5'-P-OP2	-5.94	100.36	105.70
57	BB	878	A	O4'-C4'-C3'	-5.94	98.06	104.00
57	BB	1519	G	C8-N9-C4	-5.94	104.03	106.40
57	BB	2221	G	N3-C2-N2	5.94	124.06	119.90
57	BB	2616	C	N1-C2-O2	-5.94	115.34	118.90
57	BB	2640	G	C4-C5-N7	-5.94	108.42	110.80
16	AE	69	ASN	N-CA-CB	5.94	121.28	110.60
21	AA	361	G	N3-C2-N2	5.94	124.06	119.90
21	AA	733	G	C5-C6-O6	-5.94	125.04	128.60
21	AA	1372	U	C5-C6-N1	5.94	125.67	122.70
21	AA	1413	A	C4'-C3'-C2'	-5.94	96.66	102.60
24	AX	19	U	C5'-C4'-C3'	-5.94	106.50	116.00
57	BB	20	C	C4'-C3'-C2'	-5.94	96.66	102.60
57	BB	896	A	N7-C8-N9	5.94	116.77	113.80
57	BB	1381	G	C8-N9-C4	-5.94	104.03	106.40
57	BB	1671	U	N3-C4-C5	-5.94	111.04	114.60
57	BB	2152	G	N3-C4-N9	5.94	129.56	126.00
57	BB	2654	A	C6-N1-C2	-5.94	115.04	118.60
18	AG	134	VAL	CA-CB-CG1	-5.93	102.00	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	681	A	C2-N3-C4	-5.93	107.63	110.60
21	AA	775	G	O4'-C1'-N9	5.93	112.95	108.20
21	AA	844	G	N1-C2-N3	-5.93	120.34	123.90
21	AA	1140	C	N3-C4-C5	-5.93	119.53	121.90
21	AA	1171	A	C4-C5-C6	5.93	119.97	117.00
27	B5	71	ARG	NE-CZ-NH1	5.93	123.27	120.30
29	BJ	95	ARG	NE-CZ-NH1	5.93	123.27	120.30
57	BB	248	G	O4'-C4'-C3'	-5.93	98.06	104.00
57	BB	493	G	C8-N9-C1'	5.93	134.72	127.00
57	BB	553	G	C5-C6-N1	-5.93	108.53	111.50
57	BB	604	G	C5-C6-N1	-5.93	108.53	111.50
57	BB	869	G	N1-C2-N3	5.93	127.46	123.90
57	BB	1086	A	O4'-C1'-N9	5.93	112.95	108.20
57	BB	1391	U	P-O5'-C5'	-5.93	111.40	120.90
57	BB	1705	A	N3-C4-C5	5.93	130.96	126.80
57	BB	2047	C	C5-C4-N4	-5.93	116.05	120.20
57	BB	2062	A	C3'-C2'-C1'	-5.93	96.75	101.50
57	BB	2548	U	N1-C2-N3	-5.93	111.34	114.90
57	BB	2729	G	C8-N9-C4	-5.93	104.03	106.40
15	AD	43	ARG	CB-CA-C	5.93	122.27	110.40
15	AD	79	ALA	CB-CA-C	-5.93	101.20	110.10
21	AA	137	U	N1-C2-O2	-5.93	118.65	122.80
21	AA	600	A	C5-C6-N1	-5.93	114.73	117.70
21	AA	1003	G	O4'-C1'-N9	5.93	112.95	108.20
21	AA	1016	A	O4'-C1'-N9	5.93	112.94	108.20
21	AA	1083	U	N1-C2-N3	-5.93	111.34	114.90
21	AA	1247	U	O4'-C1'-N1	5.93	112.95	108.20
23	AW	48	C	C4-C5-C6	5.93	120.37	117.40
24	AX	13	A	N3-C4-C5	-5.93	122.65	126.80
26	AV	3	C	C4-C5-C6	5.93	120.37	117.40
57	BB	39	G	C4-C5-N7	5.93	113.17	110.80
57	BB	236	C	N3-C4-C5	-5.93	119.53	121.90
57	BB	1312	U	N3-C4-C5	-5.93	111.04	114.60
57	BB	1328	A	C5-N7-C8	5.93	106.87	103.90
58	BA	7	G	N1-C2-N3	-5.93	120.34	123.90
21	AA	159	G	N3-C4-C5	-5.93	125.64	128.60
21	AA	765	G	N9-C4-C5	5.93	107.77	105.40
21	AA	1316	G	N7-C8-N9	-5.93	110.14	113.10
21	AA	1365	G	O4'-C1'-N9	5.93	112.94	108.20
57	BB	168	G	N9-C4-C5	5.93	107.77	105.40
57	BB	506	G	C2-N3-C4	5.93	114.87	111.90
57	BB	2669	G	C5-N7-C8	5.93	107.27	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	542	G	P-O3'-C3'	-5.93	112.58	119.70
21	AA	551	U	O4'-C1'-N1	5.93	112.94	108.20
21	AA	595	A	OP1-P-OP2	-5.93	110.71	119.60
21	AA	742	G	N3-C4-N9	5.93	129.56	126.00
21	AA	1279	G	C6-C5-N7	-5.93	126.84	130.40
23	AW	21	A	C5-C6-N1	-5.93	114.73	117.70
24	AX	14	A	O4'-C1'-N9	5.93	112.94	108.20
28	BI	71	LYS	N-CA-C	-5.93	94.99	111.00
57	BB	157	C	C4-C5-C6	5.93	120.36	117.40
57	BB	756	A	C2-N3-C4	5.93	113.56	110.60
57	BB	1137	G	C4-C5-C6	5.93	122.36	118.80
57	BB	2669	G	N3-C4-C5	-5.93	125.64	128.60
21	AA	100	G	C2-N3-C4	5.93	114.86	111.90
21	AA	914	A	C6-C5-N7	-5.93	128.15	132.30
57	BB	293	U	O4'-C1'-N1	5.93	112.94	108.20
57	BB	1695	G	C4-C5-N7	-5.93	108.43	110.80
57	BB	2733	A	OP1-P-OP2	-5.93	110.71	119.60
21	AA	241	G	C5-C6-O6	-5.93	125.05	128.60
21	AA	306	A	C5-N7-C8	5.93	106.86	103.90
21	AA	396	C	C4-C5-C6	-5.93	114.44	117.40
21	AA	909	A	C5-C6-N1	-5.93	114.74	117.70
21	AA	954	G	C8-N9-C1'	5.93	134.70	127.00
33	BN	8	ARG	NE-CZ-NH2	5.93	123.26	120.30
57	BB	138	U	C1'-O4'-C4'	-5.93	105.16	109.90
57	BB	397	U	N1-C2-N3	-5.93	111.34	114.90
57	BB	510	C	N3-C4-N4	5.93	122.15	118.00
57	BB	632	A	C6-N1-C2	-5.93	115.04	118.60
57	BB	1355	G	O4'-C1'-N9	5.93	112.94	108.20
57	BB	2355	G	N9-C4-C5	5.93	107.77	105.40
58	BA	112	G	C4'-C3'-C2'	-5.93	96.67	102.60
5	AN	2	LYS	N-CA-CB	5.92	121.26	110.60
21	AA	25	C	C6-N1-C1'	-5.92	113.69	120.80
21	AA	164	G	C2-N3-C4	5.92	114.86	111.90
21	AA	458	U	C3'-C2'-C1'	5.92	106.24	101.50
21	AA	731	G	O4'-C4'-C3'	-5.92	98.08	104.00
57	BB	975	A	C5-C6-N6	-5.92	118.96	123.70
57	BB	1195	G	N7-C8-N9	-5.92	110.14	113.10
57	BB	1706	C	C3'-C2'-C1'	5.92	106.24	101.50
57	BB	1839	G	O4'-C1'-N9	5.92	112.94	108.20
57	BB	1913	A	N7-C8-N9	5.92	116.76	113.80
57	BB	1942	C	C5-C6-N1	5.92	123.96	121.00
57	BB	2853	C	N1-C2-N3	-5.92	115.05	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	79	G	N3-C2-N2	5.92	124.05	119.90
21	AA	93	U	C5'-C4'-C3'	-5.92	106.52	116.00
21	AA	329	A	N1-C2-N3	-5.92	126.34	129.30
21	AA	1270	G	N3-C4-C5	-5.92	125.64	128.60
57	BB	67	U	C4-C5-C6	-5.92	116.15	119.70
57	BB	255	A	C5-C6-N6	-5.92	118.96	123.70
57	BB	397	U	C2-N1-C1'	-5.92	110.59	117.70
57	BB	830	G	N7-C8-N9	5.92	116.06	113.10
57	BB	1733	G	C6-N1-C2	-5.92	121.55	125.10
57	BB	2145	C	O4'-C4'-C3'	-5.92	98.08	104.00
57	BB	2353	G	N1-C2-N3	-5.92	120.35	123.90
57	BB	2629	U	N3-C4-C5	-5.92	111.05	114.60
21	AA	220	G	C5-C6-N1	-5.92	108.54	111.50
21	AA	508	U	C6-N1-C2	-5.92	117.45	121.00
21	AA	773	G	C4-C5-N7	-5.92	108.43	110.80
21	AA	844	G	P-O3'-C3'	-5.92	112.59	119.70
23	AW	42	C	N1-C2-N3	5.92	123.34	119.20
44	BY	46	VAL	N-CA-CB	5.92	124.53	111.50
57	BB	545	U	N1-C2-O2	-5.92	118.66	122.80
57	BB	843	G	O4'-C1'-N9	5.92	112.94	108.20
57	BB	914	G	N7-C8-N9	5.92	116.06	113.10
57	BB	1016	G	N1-C2-N3	-5.92	120.35	123.90
57	BB	1167	C	N3-C4-C5	-5.92	119.53	121.90
57	BB	1266	G	O4'-C1'-N9	5.92	112.94	108.20
57	BB	1659	G	C4-N9-C1'	-5.92	118.80	126.50
57	BB	2856	A	C8-N9-C4	-5.92	103.43	105.80
21	AA	1118	U	O4'-C1'-N1	5.92	112.94	108.20
57	BB	764	A	C4-C5-C6	5.92	119.96	117.00
57	BB	811	U	O4'-C1'-C2'	-5.92	99.88	105.80
57	BB	1643	G	N3-C4-N9	-5.92	122.45	126.00
57	BB	1695	G	C5-C6-N1	-5.92	108.54	111.50
57	BB	1894	C	C2-N3-C4	-5.92	116.94	119.90
57	BB	2294	G	C5-C6-O6	-5.92	125.05	128.60
57	BB	2606	C	C5-C6-N1	5.92	123.96	121.00
21	AA	344	A	C6-C5-N7	-5.92	128.16	132.30
21	AA	353	A	N1-C2-N3	-5.92	126.34	129.30
21	AA	530	G	N7-C8-N9	5.92	116.06	113.10
21	AA	871	U	C2-N3-C4	-5.92	123.45	127.00
21	AA	1035	A	C5-C6-N1	-5.92	114.74	117.70
21	AA	1236	A	C5-C6-N1	-5.92	114.74	117.70
23	AW	26	A	N3-C4-N9	5.92	132.13	127.40
35	BP	67	GLU	OE1-CD-OE2	5.92	130.40	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
47	B0	51	ARG	NE-CZ-NH2	5.92	123.26	120.30
57	BB	463	G	P-O3'-C3'	-5.92	112.60	119.70
57	BB	1321	A	N3-C4-C5	-5.92	122.66	126.80
57	BB	2032	G	C5-C6-O6	-5.92	125.05	128.60
57	BB	2704	C	C4'-C3'-C2'	-5.92	96.68	102.60
21	AA	284	C	C4-C5-C6	5.92	120.36	117.40
21	AA	295	C	O5'-C5'-C4'	-5.92	100.46	111.70
21	AA	307	C	C2-N3-C4	5.92	122.86	119.90
21	AA	1311	A	C6-C5-N7	-5.92	128.16	132.30
23	AW	22	G	C8-N9-C4	-5.92	104.03	106.40
23	AW	28	G	N3-C4-C5	5.92	131.56	128.60
23	AW	33	U	N3-C4-O4	5.92	123.54	119.40
23	AW	52	G	C2'-C3'-O3'	5.92	123.17	113.70
57	BB	224	U	N3-C4-C5	-5.92	111.05	114.60
57	BB	237	C	C4-C5-C6	5.92	120.36	117.40
57	BB	777	G	C2-N3-C4	5.92	114.86	111.90
57	BB	1374	G	C8-N9-C4	-5.92	104.03	106.40
57	BB	1706	C	C5'-C4'-C3'	-5.92	106.53	116.00
57	BB	1782	U	C5-C4-O4	-5.92	122.35	125.90
57	BB	1812	U	P-O3'-C3'	5.92	126.80	119.70
57	BB	1832	C	N3-C4-C5	-5.92	119.53	121.90
57	BB	2599	G	N1-C6-O6	5.92	123.45	119.90
21	AA	107	G	O4'-C1'-N9	5.92	112.93	108.20
21	AA	550	G	C4-C5-N7	5.92	113.17	110.80
21	AA	1074	G	N1-C2-N2	-5.92	110.88	116.20
57	BB	126	A	C4'-C3'-C2'	-5.92	96.69	102.60
57	BB	543	G	N3-C4-N9	5.92	129.55	126.00
57	BB	1015	U	N3-C4-O4	5.92	123.54	119.40
57	BB	2476	A	O4'-C1'-N9	5.92	112.93	108.20
58	BA	5	U	N3-C4-C5	-5.92	111.05	114.60
21	AA	194	C	N1-C2-N3	-5.91	115.06	119.20
21	AA	499	A	O5'-P-OP1	5.91	117.80	110.70
21	AA	1047	G	N1-C6-O6	5.91	123.45	119.90
21	AA	1207	G	N3-C4-C5	-5.91	125.64	128.60
38	BS	11	ARG	NE-CZ-NH1	5.91	123.26	120.30
42	BW	50	VAL	CA-CB-CG1	-5.91	102.03	110.90
57	BB	324	A	C3'-C2'-C1'	-5.91	96.77	101.50
57	BB	747	U	N3-C4-C5	5.91	118.15	114.60
57	BB	1368	G	C4-N9-C1'	-5.91	118.81	126.50
57	BB	1379	U	N3-C2-O2	5.91	126.34	122.20
57	BB	1466	U	O4'-C1'-N1	5.91	112.93	108.20
57	BB	2197	U	O4'-C1'-N1	5.91	112.93	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	390	U	N3-C4-O4	5.91	123.54	119.40
21	AA	626	G	C5-N7-C8	-5.91	101.34	104.30
21	AA	1219	A	C4-C5-C6	5.91	119.96	117.00
57	BB	1535	A	C6-C5-N7	-5.91	128.16	132.30
57	BB	1740	G	C5'-C4'-O4'	5.91	116.19	109.10
57	BB	1925	C	C2-N3-C4	5.91	122.86	119.90
57	BB	2258	C	P-O3'-C3'	5.91	126.79	119.70
57	BB	2315	G	N1-C2-N2	5.91	121.52	116.20
21	AA	233	C	C4-C5-C6	5.91	120.36	117.40
21	AA	861	G	N3-C2-N2	5.91	124.04	119.90
21	AA	915	A	N1-C2-N3	5.91	132.25	129.30
21	AA	1358	U	C1'-O4'-C4'	-5.91	105.17	109.90
37	BR	21	ARG	NE-CZ-NH2	-5.91	117.34	120.30
49	B2	40	ALA	CB-CA-C	-5.91	101.23	110.10
57	BB	91	A	N1-C2-N3	-5.91	126.34	129.30
57	BB	215	G	C4-C5-C6	5.91	122.35	118.80
57	BB	1409	U	P-O3'-C3'	-5.91	112.61	119.70
57	BB	1824	G	N1-C2-N2	5.91	121.52	116.20
57	BB	1972	G	C6-C5-N7	-5.91	126.85	130.40
57	BB	2262	U	N3-C4-C5	5.91	118.15	114.60
57	BB	2390	U	N1-C2-O2	5.91	126.94	122.80
57	BB	2603	G	P-O3'-C3'	-5.91	112.61	119.70
21	AA	215	C	N3-C4-N4	5.91	122.14	118.00
21	AA	447	G	N1-C2-N2	-5.91	110.88	116.20
21	AA	619	U	O4'-C4'-C3'	-5.91	98.09	104.00
21	AA	847	G	C6-N1-C2	5.91	128.65	125.10
21	AA	864	A	C3'-C2'-C1'	-5.91	96.77	101.50
26	AV	14	A	O4'-C1'-N9	5.91	112.93	108.20
49	B2	35	ARG	NE-CZ-NH2	5.91	123.25	120.30
57	BB	314	C	C4'-C3'-C2'	-5.91	96.69	102.60
57	BB	441	U	C4-C5-C6	5.91	123.25	119.70
57	BB	1241	A	C1'-O4'-C4'	-5.91	105.17	109.90
57	BB	1516	G	C2-N3-C4	5.91	114.86	111.90
57	BB	1900	A	C8-N9-C4	-5.91	103.44	105.80
57	BB	2289	G	C6-C5-N7	-5.91	126.86	130.40
57	BB	2799	A	C5-N7-C8	5.91	106.85	103.90
21	AA	298	A	O4'-C1'-C2'	5.91	112.92	107.60
21	AA	851	G	C5'-C4'-O4'	5.91	116.19	109.10
21	AA	1395	C	C4'-C3'-C2'	-5.91	96.69	102.60
41	BV	19	ARG	NE-CZ-NH2	-5.91	117.35	120.30
57	BB	582	A	C8-N9-C4	-5.91	103.44	105.80
57	BB	772	C	N3-C4-N4	5.91	122.14	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1433	A	N9-C4-C5	5.91	108.16	105.80
57	BB	2701	U	N3-C2-O2	5.91	126.33	122.20
57	BB	2748	A	O4'-C1'-N9	5.91	112.93	108.20
21	AA	550	G	C5-C6-O6	-5.91	125.06	128.60
21	AA	931	C	C4-C5-C6	5.91	120.35	117.40
21	AA	1059	C	P-O3'-C3'	-5.91	112.61	119.70
21	AA	1518	A	C5-C6-N1	-5.91	114.75	117.70
22	AY	53	G	N3-C4-C5	-5.91	125.65	128.60
23	AW	47	U	C5-C4-O4	-5.91	122.36	125.90
26	AV	67	C	N1-C1'-C2'	-5.91	105.50	112.00
45	BC	257	ARG	CB-CG-CD	5.91	126.95	111.60
57	BB	370	G	N7-C8-N9	5.91	116.05	113.10
57	BB	1343	G	N3-C2-N2	5.91	124.03	119.90
57	BB	1352	U	C6-N1-C2	5.91	124.54	121.00
57	BB	1405	U	C1'-O4'-C4'	-5.91	105.18	109.90
57	BB	1811	G	N1-C2-N3	-5.91	120.36	123.90
57	BB	2018	G	C6-C5-N7	-5.91	126.86	130.40
57	BB	2243	U	N3-C4-O4	5.91	123.53	119.40
21	AA	263	A	P-O3'-C3'	-5.90	112.61	119.70
21	AA	533	A	C4-C5-N7	-5.90	107.75	110.70
21	AA	913	A	C6-C5-N7	-5.90	128.17	132.30
21	AA	1462	C	C5-C4-N4	-5.90	116.07	120.20
57	BB	317	G	P-O3'-C3'	-5.90	112.61	119.70
57	BB	395	U	C1'-O4'-C4'	-5.90	105.18	109.90
57	BB	1414	C	N1-C1'-C2'	-5.90	105.51	112.00
57	BB	1968	G	N9-C4-C5	5.90	107.76	105.40
57	BB	2297	A	O4'-C1'-N9	5.90	112.92	108.20
21	AA	513	C	C5-C4-N4	-5.90	116.07	120.20
21	AA	853	C	N3-C4-N4	5.90	122.13	118.00
21	AA	1048	G	N7-C8-N9	-5.90	110.15	113.10
21	AA	1315	U	N1-C2-N3	5.90	118.44	114.90
21	AA	1502	A	P-O3'-C3'	5.90	126.78	119.70
26	AV	15	G	C4-C5-C6	5.90	122.34	118.80
57	BB	157	C	P-O5'-C5'	5.90	130.34	120.90
57	BB	199	A	C3'-C2'-C1'	5.90	106.22	101.50
57	BB	825	A	O4'-C1'-N9	5.90	112.92	108.20
57	BB	1349	C	C5-C4-N4	-5.90	116.07	120.20
57	BB	1579	A	C2-N3-C4	-5.90	107.65	110.60
57	BB	1738	G	C4-C5-C6	5.90	122.34	118.80
57	BB	2557	G	N3-C4-N9	-5.90	122.46	126.00
21	AA	60	A	C4-C5-N7	-5.90	107.75	110.70
21	AA	347	G	N1-C2-N3	-5.90	120.36	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1102	A	C4-C5-C6	5.90	119.95	117.00
21	AA	1506	U	N1-C2-O2	-5.90	118.67	122.80
26	AV	46	G	C2-N3-C4	5.90	114.85	111.90
37	BR	2	TYR	CZ-CE2-CD2	5.90	125.11	119.80
57	BB	664	G	C8-N9-C4	-5.90	104.04	106.40
57	BB	1627	G	N1-C2-N3	-5.90	120.36	123.90
57	BB	2182	U	N3-C4-O4	5.90	123.53	119.40
57	BB	2688	G	C4-C5-C6	5.90	122.34	118.80
21	AA	108	G	C4-C5-C6	5.90	122.34	118.80
21	AA	390	U	C5-C4-O4	-5.90	122.36	125.90
21	AA	1228	C	N3-C4-C5	5.90	124.26	121.90
22	AY	13	C	O4'-C1'-N1	5.90	112.92	108.20
57	BB	75	G	N7-C8-N9	5.90	116.05	113.10
57	BB	613	A	C4-N9-C1'	5.90	136.92	126.30
57	BB	657	U	C5-C4-O4	-5.90	122.36	125.90
57	BB	700	G	N3-C4-C5	-5.90	125.65	128.60
57	BB	1344	U	C5'-C4'-O4'	5.90	116.18	109.10
57	BB	2530	A	C4-C5-C6	5.90	119.95	117.00
57	BB	2773	C	N3-C4-C5	-5.90	119.54	121.90
21	AA	270	A	N1-C6-N6	5.90	122.14	118.60
21	AA	1386	G	C5-C6-N1	-5.90	108.55	111.50
21	AA	1392	G	N3-C2-N2	5.90	124.03	119.90
57	BB	531	C	C5'-C4'-O4'	5.90	116.18	109.10
57	BB	1253	A	C8-N9-C4	-5.90	103.44	105.80
57	BB	1562	U	N3-C2-O2	-5.90	118.07	122.20
57	BB	1672	A	N9-C4-C5	-5.90	103.44	105.80
57	BB	1935	G	N3-C2-N2	5.90	124.03	119.90
57	BB	2836	U	N3-C4-O4	5.90	123.53	119.40
58	BA	56	G	N3-C2-N2	5.90	124.03	119.90
21	AA	381	C	C5-C6-N1	-5.90	118.05	121.00
21	AA	431	A	N1-C2-N3	5.90	132.25	129.30
21	AA	447	G	C4-C5-C6	5.90	122.34	118.80
21	AA	589	U	N3-C2-O2	5.90	126.33	122.20
21	AA	930	C	C5-C4-N4	-5.90	116.07	120.20
21	AA	1525	G	C4-C5-C6	5.90	122.34	118.80
57	BB	462	C	O4'-C1'-N1	5.90	112.92	108.20
57	BB	1480	C	N3-C4-C5	-5.90	119.54	121.90
57	BB	1581	G	N3-C4-N9	-5.90	122.46	126.00
21	AA	42	G	N1-C2-N3	-5.89	120.36	123.90
21	AA	121	U	C5-C6-N1	5.89	125.65	122.70
21	AA	143	A	N9-C4-C5	5.89	108.16	105.80
21	AA	364	A	C8-N9-C4	-5.89	103.44	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	384	G	C6-N1-C2	5.89	128.64	125.10
21	AA	455	G	C2-N3-C4	-5.89	108.95	111.90
21	AA	776	G	C8-N9-C4	-5.89	104.04	106.40
21	AA	834	U	N3-C4-O4	5.89	123.53	119.40
21	AA	852	G	C1'-O4'-C4'	-5.89	105.18	109.90
26	AV	65	C	P-O3'-C3'	-5.89	112.63	119.70
57	BB	278	A	O4'-C1'-N9	5.89	112.92	108.20
57	BB	404	A	O4'-C1'-N9	5.89	112.92	108.20
57	BB	736	C	N3-C4-C5	-5.89	119.54	121.90
57	BB	1387	A	C5-C6-N1	-5.89	114.75	117.70
57	BB	2749	A	C5-C6-N1	-5.89	114.75	117.70
58	BA	27	C	C6-N1-C2	-5.89	117.94	120.30
21	AA	28	A	C4'-C3'-C2'	-5.89	96.71	102.60
21	AA	65	A	N9-C4-C5	5.89	108.16	105.80
21	AA	506	G	C5-N7-C8	5.89	107.25	104.30
21	AA	1413	A	O4'-C1'-N9	5.89	112.91	108.20
21	AA	1446	A	C3'-C2'-C1'	-5.89	96.78	101.50
22	AY	19	G	C4-C5-N7	5.89	113.16	110.80
57	BB	507	A	N9-C4-C5	-5.89	103.44	105.80
57	BB	602	A	N9-C4-C5	5.89	108.16	105.80
57	BB	653	U	P-O3'-C3'	5.89	126.77	119.70
57	BB	742	A	O4'-C1'-N9	5.89	112.91	108.20
57	BB	768	G	C3'-C2'-C1'	5.89	106.21	101.50
57	BB	1527	G	C2-N3-C4	5.89	114.85	111.90
57	BB	1696	G	C2-N3-C4	5.89	114.85	111.90
57	BB	1737	G	C1'-O4'-C4'	5.89	114.61	109.90
57	BB	2080	A	C8-N9-C4	-5.89	103.44	105.80
57	BB	2113	U	C4-C5-C6	5.89	123.23	119.70
57	BB	2668	G	N9-C4-C5	5.89	107.76	105.40
21	AA	142	G	C4-C5-N7	5.89	113.16	110.80
21	AA	438	U	C4-C5-C6	5.89	123.23	119.70
21	AA	755	G	O4'-C1'-N9	5.89	112.91	108.20
21	AA	844	G	N1-C2-N2	-5.89	110.90	116.20
21	AA	1101	A	N1-C2-N3	-5.89	126.35	129.30
22	AY	54	U	C2-N3-C4	-5.89	123.47	127.00
31	BL	90	VAL	CG1-CB-CG2	-5.89	101.47	110.90
57	BB	178	G	N3-C2-N2	5.89	124.02	119.90
57	BB	497	A	C6-N1-C2	-5.89	115.07	118.60
57	BB	1440	U	C6-N1-C2	-5.89	117.47	121.00
21	AA	559	A	N7-C8-N9	5.89	116.75	113.80
26	AV	29	G	N9-C4-C5	5.89	107.76	105.40
33	BN	69	ARG	NE-CZ-NH2	-5.89	117.36	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	572	A	C5-C6-N6	-5.89	118.99	123.70
57	BB	970	U	C3'-C2'-C1'	5.89	106.21	101.50
57	BB	2054	A	N1-C6-N6	5.89	122.13	118.60
57	BB	2262	U	C5-C6-N1	5.89	125.64	122.70
57	BB	2273	A	N9-C4-C5	-5.89	103.44	105.80
57	BB	2453	A	C8-N9-C4	-5.89	103.44	105.80
57	BB	2620	C	C2-N3-C4	5.89	122.84	119.90
57	BB	2842	G	C3'-C2'-C1'	-5.89	96.79	101.50
57	BB	1497	U	N1-C2-N3	5.89	118.43	114.90
21	AA	151	A	C3'-C2'-C1'	-5.89	96.79	101.50
21	AA	831	A	N9-C4-C5	-5.89	103.44	105.80
21	AA	1277	C	C5'-C4'-O4'	5.89	116.17	109.10
26	AV	42	G	N9-C4-C5	-5.89	103.05	105.40
57	BB	364	C	O4'-C1'-N1	5.89	112.91	108.20
57	BB	964	C	C4'-C3'-C2'	-5.89	96.71	102.60
57	BB	1129	A	O4'-C1'-N9	5.89	112.91	108.20
57	BB	1251	C	C5-C4-N4	-5.89	116.08	120.20
57	BB	1322	A	O4'-C1'-N9	5.89	112.91	108.20
57	BB	1537	G	N3-C4-C5	-5.89	125.66	128.60
57	BB	1645	G	O4'-C1'-N9	5.89	112.91	108.20
57	BB	1856	U	C5-C6-N1	5.89	125.64	122.70
57	BB	1949	G	N1-C2-N3	-5.89	120.37	123.90
57	BB	2295	C	N3-C4-N4	5.89	122.12	118.00
58	BA	61	G	C4'-C3'-C2'	-5.89	96.71	102.60
21	AA	6	G	C4-N9-C1'	5.88	134.15	126.50
21	AA	63	C	C4-C5-C6	-5.88	114.46	117.40
21	AA	435	A	C5-C6-N6	-5.88	118.99	123.70
21	AA	899	C	N3-C4-C5	-5.88	119.55	121.90
21	AA	1147	C	C4'-C3'-C2'	-5.88	96.72	102.60
21	AA	1429	A	C6-N1-C2	5.88	122.13	118.60
23	AW	4	C	P-O5'-C5'	-5.88	111.48	120.90
57	BB	113	U	C5'-C4'-O4'	5.88	116.16	109.10
57	BB	128	C	C1'-O4'-C4'	5.88	114.61	109.90
57	BB	1725	U	O4'-C1'-N1	5.88	112.91	108.20
57	BB	2543	G	C5'-C4'-C3'	-5.88	106.58	116.00
57	BB	2758	A	C5-C6-N1	-5.88	114.76	117.70
58	BA	11	C	N3-C4-N4	5.88	122.12	118.00
58	BA	75	G	P-O3'-C3'	-5.88	112.64	119.70
21	AA	640	A	C4-C5-C6	5.88	119.94	117.00
21	AA	685	G	C5-C6-N1	-5.88	108.56	111.50
21	AA	800	G	N9-C4-C5	-5.88	103.05	105.40
21	AA	1106	G	N3-C2-N2	5.88	124.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	1	G	C5-N7-C8	-5.88	101.36	104.30
57	BB	632	A	C5'-C4'-O4'	5.88	116.16	109.10
21	AA	293	G	N3-C2-N2	5.88	124.02	119.90
21	AA	306	A	C5-C6-N1	-5.88	114.76	117.70
21	AA	683	G	N3-C2-N2	5.88	124.02	119.90
21	AA	688	G	C1'-O4'-C4'	5.88	114.61	109.90
21	AA	1336	C	O4'-C1'-N1	5.88	112.91	108.20
26	AV	46	G	C5-C6-O6	-5.88	125.07	128.60
57	BB	122	G	C6-N1-C2	-5.88	121.57	125.10
57	BB	587	C	OP1-P-OP2	-5.88	110.78	119.60
57	BB	1427	A	P-O5'-C5'	-5.88	111.49	120.90
57	BB	1652	A	C8-N9-C4	-5.88	103.45	105.80
57	BB	1893	C	N3-C4-C5	-5.88	119.55	121.90
57	BB	2818	U	N1-C2-N3	-5.88	111.37	114.90
4	AM	81	ASP	CB-CG-OD1	5.88	123.59	118.30
21	AA	894	G	C8-N9-C4	-5.88	104.05	106.40
21	AA	1384	C	C5-C4-N4	-5.88	116.08	120.20
57	BB	784	G	C4-C5-N7	-5.88	108.45	110.80
57	BB	1097	U	P-O3'-C3'	5.88	126.75	119.70
57	BB	1269	A	C5-C6-N1	-5.88	114.76	117.70
57	BB	2366	A	C5-C6-N6	-5.88	119.00	123.70
57	BB	2780	G	C8-N9-C4	5.88	108.75	106.40
58	BA	69	G	C2-N3-C4	5.88	114.84	111.90
5	AN	89	ARG	CD-NE-CZ	-5.88	115.37	123.60
21	AA	340	U	C5-C6-N1	-5.88	119.76	122.70
21	AA	476	U	C4-C5-C6	-5.88	116.17	119.70
21	AA	1256	A	C4-N9-C1'	5.88	136.88	126.30
23	AW	10	G	O4'-C4'-C3'	5.88	110.80	106.10
57	BB	712	G	O4'-C1'-N9	5.88	112.90	108.20
57	BB	1156	A	C5'-C4'-O4'	5.88	116.15	109.10
57	BB	1216	G	C6-C5-N7	-5.88	126.87	130.40
57	BB	1734	G	C8-N9-C4	-5.88	104.05	106.40
57	BB	1905	C	C4-C5-C6	5.88	120.34	117.40
57	BB	2057	G	C2-N3-C4	5.88	114.84	111.90
57	BB	2121	G	O4'-C1'-N9	5.88	112.90	108.20
57	BB	2225	A	N1-C6-N6	5.88	122.13	118.60
57	BB	2552	U	N3-C4-O4	-5.88	115.28	119.40
57	BB	2775	G	N7-C8-N9	-5.88	110.16	113.10
57	BB	2801	G	O4'-C4'-C3'	-5.88	98.12	104.00
57	BB	2828	G	C2-N3-C4	5.88	114.84	111.90
21	AA	69	G	N3-C4-C5	-5.88	125.66	128.60
21	AA	525	C	C1'-O4'-C4'	5.88	114.60	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1279	G	C4'-C3'-C2'	5.88	108.48	102.60
21	AA	1405	G	N3-C4-C5	5.88	131.54	128.60
22	AY	32	C	C6-N1-C1'	-5.88	113.75	120.80
29	BJ	24	THR	CA-CB-CG2	-5.88	104.17	112.40
57	BB	9	G	N1-C6-O6	5.88	123.42	119.90
57	BB	852	U	O4'-C1'-N1	5.88	112.90	108.20
57	BB	1011	G	N1-C2-N2	5.88	121.49	116.20
57	BB	1059	G	C5-N7-C8	5.88	107.24	104.30
57	BB	1733	G	C5-N7-C8	5.88	107.24	104.30
57	BB	2377	A	C1'-O4'-C4'	5.88	114.60	109.90
21	AA	326	G	N3-C2-N2	5.88	124.01	119.90
21	AA	487	A	C6-C5-N7	-5.88	128.19	132.30
22	AY	70	C	C5-C6-N1	-5.88	118.06	121.00
57	BB	725	G	C4-C5-C6	5.88	122.33	118.80
57	BB	1089	A	C5-N7-C8	5.88	106.84	103.90
57	BB	2506	U	N3-C2-O2	5.88	126.31	122.20
57	BB	2544	G	C6-N1-C2	-5.88	121.58	125.10
57	BB	2609	U	C5-C4-O4	-5.88	122.38	125.90
57	BB	2641	G	N3-C4-C5	-5.88	125.66	128.60
57	BB	2847	U	O4'-C1'-N1	5.88	112.90	108.20
21	AA	1022	A	OP1-P-OP2	-5.87	110.79	119.60
21	AA	1304	G	C6-N1-C2	5.87	128.62	125.10
23	AW	28	G	N1-C6-O6	5.87	123.42	119.90
57	BB	213	A	C4'-C3'-C2'	-5.87	96.73	102.60
57	BB	882	G	C1'-O4'-C4'	-5.87	105.20	109.90
57	BB	924	G	N1-C6-O6	5.87	123.42	119.90
57	BB	1051	G	N9-C4-C5	5.87	107.75	105.40
57	BB	1075	C	O4'-C1'-N1	5.87	112.90	108.20
57	BB	1407	G	C5-N7-C8	-5.87	101.36	104.30
57	BB	1704	C	C6-N1-C2	-5.87	117.95	120.30
57	BB	1900	A	C1'-O4'-C4'	5.87	114.60	109.90
57	BB	2115	G	N9-C4-C5	5.87	107.75	105.40
57	BB	2495	G	N3-C4-C5	-5.87	125.66	128.60
57	BB	2641	G	C8-N9-C4	-5.87	104.05	106.40
57	BB	2860	A	C2-N3-C4	-5.87	107.66	110.60
57	BB	2898	U	C2-N3-C4	5.87	130.52	127.00
58	BA	12	C	O4'-C1'-N1	5.87	112.90	108.20
21	AA	86	G	N3-C4-C5	-5.87	125.66	128.60
21	AA	358	U	C5-C4-O4	-5.87	122.38	125.90
21	AA	927	G	O4'-C1'-N9	5.87	112.90	108.20
57	BB	1780	A	O4'-C1'-N9	5.87	112.90	108.20
57	BB	2832	U	O4'-C1'-N1	5.87	112.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2837	A	N1-C2-N3	-5.87	126.36	129.30
57	BB	2843	G	P-O3'-C3'	5.87	126.75	119.70
21	AA	657	U	N1-C2-N3	5.87	118.42	114.90
21	AA	720	C	C2-N1-C1'	5.87	125.26	118.80
26	AV	63	G	O5'-P-OP1	5.87	117.74	110.70
57	BB	1872	A	C2-N3-C4	-5.87	107.67	110.60
21	AA	988	G	N7-C8-N9	-5.87	110.17	113.10
21	AA	1146	A	N3-C4-C5	-5.87	122.69	126.80
57	BB	725	G	C6-N1-C2	5.87	128.62	125.10
57	BB	916	G	C6-C5-N7	-5.87	126.88	130.40
57	BB	1357	C	N3-C2-O2	5.87	126.01	121.90
57	BB	1394	U	N3-C2-O2	-5.87	118.09	122.20
57	BB	2038	G	C4-C5-C6	5.87	122.32	118.80
57	BB	2563	U	C2-N3-C4	-5.87	123.48	127.00
57	BB	2624	G	C4-C5-C6	5.87	122.32	118.80
57	BB	2890	G	P-O3'-C3'	5.87	126.74	119.70
21	AA	81	A	C5-C6-N1	-5.87	114.77	117.70
21	AA	250	A	N3-C4-C5	-5.87	122.69	126.80
21	AA	447	G	N7-C8-N9	5.87	116.03	113.10
21	AA	1301	U	C2-N3-C4	-5.87	123.48	127.00
23	AW	2	C	C2-N3-C4	5.87	122.83	119.90
23	AW	29	G	N9-C4-C5	-5.87	103.05	105.40
23	AW	73	A	O4'-C4'-C3'	-5.87	98.13	104.00
57	BB	388	G	N3-C4-C5	-5.87	125.67	128.60
57	BB	788	A	N9-C4-C5	5.87	108.15	105.80
57	BB	885	C	N3-C2-O2	5.87	126.01	121.90
57	BB	1177	G	C2-N3-C4	5.87	114.83	111.90
57	BB	1759	A	C6-N1-C2	-5.87	115.08	118.60
21	AA	404	G	C4-C5-N7	-5.87	108.45	110.80
57	BB	15	G	N1-C2-N2	-5.87	110.92	116.20
57	BB	195	A	C5'-C4'-O4'	5.87	116.14	109.10
57	BB	434	U	N3-C4-O4	-5.87	115.29	119.40
57	BB	808	G	O4'-C4'-C3'	5.87	110.79	106.10
57	BB	836	G	C4-C5-N7	-5.87	108.45	110.80
57	BB	1132	U	N1-C2-O2	-5.87	118.69	122.80
21	AA	256	U	O4'-C1'-N1	5.86	112.89	108.20
57	BB	196	A	C5'-C4'-C3'	-5.86	106.62	116.00
57	BB	535	G	C6-C5-N7	-5.86	126.88	130.40
57	BB	621	A	C8-N9-C4	-5.86	103.45	105.80
57	BB	905	A	C4'-C3'-C2'	-5.86	96.74	102.60
57	BB	1665	A	O5'-C5'-C4'	-5.86	100.56	111.70
57	BB	1891	G	N1-C2-N3	-5.86	120.38	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2648	G	C5-C6-O6	-5.86	125.08	128.60
57	BB	2679	A	C8-N9-C4	5.86	108.14	105.80
21	AA	450	G	N1-C2-N3	-5.86	120.38	123.90
21	AA	1056	U	P-O3'-C3'	-5.86	112.67	119.70
21	AA	1241	G	C6-N1-C2	5.86	128.62	125.10
57	BB	555	G	C4-N9-C1'	5.86	134.12	126.50
57	BB	1769	U	P-O3'-C3'	-5.86	112.67	119.70
57	BB	2125	G	C5'-C4'-O4'	5.86	116.14	109.10
57	BB	2433	A	C6-N1-C2	5.86	122.12	118.60
21	AA	279	A	C5-C6-N1	-5.86	114.77	117.70
21	AA	345	C	N3-C4-N4	5.86	122.10	118.00
21	AA	681	A	O4'-C4'-C3'	-5.86	98.14	104.00
21	AA	1094	G	C6-C5-N7	-5.86	126.88	130.40
21	AA	1107	C	C5-C6-N1	-5.86	118.07	121.00
57	BB	12	U	O4'-C1'-N1	5.86	112.89	108.20
57	BB	1739	A	N9-C4-C5	5.86	108.14	105.80
57	BB	1823	G	O4'-C4'-C3'	-5.86	98.14	104.00
57	BB	2000	C	N3-C4-C5	-5.86	119.56	121.90
57	BB	2050	C	C6-N1-C1'	5.86	127.83	120.80
57	BB	2206	C	C5-C4-N4	-5.86	116.10	120.20
57	BB	2242	G	C2-N3-C4	-5.86	108.97	111.90
9	AR	60	ARG	NE-CZ-NH1	5.86	123.23	120.30
19	AH	92	PRO	C-N-CA	5.86	136.35	121.70
21	AA	105	G	C6-C5-N7	-5.86	126.88	130.40
21	AA	1313	U	C5'-C4'-O4'	5.86	116.13	109.10
57	BB	747	U	C4-C5-C6	-5.86	116.19	119.70
57	BB	848	C	O4'-C1'-N1	5.86	112.89	108.20
57	BB	2183	A	C4'-C3'-C2'	-5.86	96.74	102.60
21	AA	317	U	C4'-C3'-C2'	-5.86	96.74	102.60
21	AA	1314	C	C4-C5-C6	5.86	120.33	117.40
21	AA	1355	G	O4'-C1'-N9	5.86	112.89	108.20
22	AY	54	U	N3-C4-C5	5.86	118.11	114.60
57	BB	24	G	C3'-C2'-C1'	5.86	106.19	101.50
57	BB	578	G	P-O3'-C3'	5.86	126.73	119.70
57	BB	667	U	C4-C5-C6	5.86	123.22	119.70
57	BB	763	G	N7-C8-N9	-5.86	110.17	113.10
57	BB	919	U	P-O3'-C3'	-5.86	112.67	119.70
57	BB	992	C	C4'-C3'-C2'	-5.86	96.74	102.60
57	BB	1225	G	C4-C5-C6	5.86	122.31	118.80
57	BB	1443	U	C6-N1-C2	5.86	124.51	121.00
57	BB	1764	C	N1-C2-N3	-5.86	115.10	119.20
57	BB	2396	G	C5-C6-N1	-5.86	108.57	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2896	C	C5-C4-N4	-5.86	116.10	120.20
21	AA	135	C	C5-C4-N4	5.86	124.30	120.20
21	AA	220	G	N9-C4-C5	5.86	107.74	105.40
21	AA	977	A	N9-C4-C5	5.86	108.14	105.80
22	AY	39	U	C6-N1-C1'	-5.86	113.00	121.20
25	AZ	116	ARG	NE-CZ-NH2	5.86	123.23	120.30
26	AV	46	G	C5'-C4'-C3'	5.86	125.37	116.00
57	BB	456	C	C6-N1-C1'	-5.86	113.77	120.80
57	BB	514	A	O4'-C1'-N9	5.86	112.88	108.20
57	BB	857	G	N1-C2-N3	-5.86	120.39	123.90
57	BB	956	G	C5-C6-O6	-5.86	125.09	128.60
57	BB	1855	U	C2-N1-C1'	5.86	124.73	117.70
57	BB	1930	G	C8-N9-C4	5.86	108.74	106.40
57	BB	2307	G	N7-C8-N9	-5.86	110.17	113.10
57	BB	2309	A	C6-C5-N7	-5.86	128.20	132.30
58	BA	112	G	O4'-C1'-N9	5.86	112.88	108.20
21	AA	1216	A	O4'-C1'-N9	5.85	112.88	108.20
57	BB	2187	U	N3-C4-O4	5.85	123.50	119.40
57	BB	2871	U	O4'-C1'-N1	5.85	112.88	108.20
15	AD	2	ARG	NE-CZ-NH2	-5.85	117.37	120.30
21	AA	984	C	C4-C5-C6	5.85	120.33	117.40
21	AA	1104	G	C4-C5-C6	5.85	122.31	118.80
57	BB	67	U	C6-N1-C2	5.85	124.51	121.00
57	BB	173	A	C1'-O4'-C4'	-5.85	105.22	109.90
57	BB	359	G	C6-C5-N7	-5.85	126.89	130.40
57	BB	512	G	C6-C5-N7	-5.85	126.89	130.40
57	BB	778	G	N1-C6-O6	5.85	123.41	119.90
57	BB	858	G	C5'-C4'-O4'	5.85	116.12	109.10
57	BB	982	C	C2-N1-C1'	5.85	125.24	118.80
57	BB	1242	U	N3-C2-O2	5.85	126.30	122.20
57	BB	2106	U	C4'-C3'-C2'	-5.85	96.75	102.60
21	AA	244	U	O4'-C1'-N1	5.85	112.88	108.20
21	AA	466	A	C5-N7-C8	5.85	106.83	103.90
22	AY	26	G	O4'-C4'-C3'	-5.85	98.15	104.00
30	BK	57	LEU	N-CA-CB	5.85	122.10	110.40
57	BB	10	A	C5'-C4'-O4'	5.85	116.12	109.10
57	BB	263	G	C8-N9-C4	-5.85	104.06	106.40
57	BB	896	A	C4-C5-C6	5.85	119.93	117.00
57	BB	1165	A	N9-C4-C5	-5.85	103.46	105.80
57	BB	1325	U	C5'-C4'-C3'	-5.85	106.64	116.00
57	BB	2290	G	N1-C2-N3	-5.85	120.39	123.90
57	BB	2758	A	C5-N7-C8	5.85	106.83	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	101	A	C1'-O4'-C4'	5.85	114.58	109.90
21	AA	394	G	O4'-C1'-N9	5.85	112.88	108.20
21	AA	533	A	P-O5'-C5'	5.85	130.26	120.90
21	AA	1285	A	C5-N7-C8	-5.85	100.97	103.90
21	AA	1395	C	C4-C5-C6	5.85	120.32	117.40
57	BB	21	A	C2-N3-C4	-5.85	107.67	110.60
57	BB	214	G	C5-C6-O6	-5.85	125.09	128.60
57	BB	281	C	C2-N3-C4	5.85	122.82	119.90
57	BB	446	G	C8-N9-C4	5.85	108.74	106.40
57	BB	597	G	C4-C5-N7	5.85	113.14	110.80
57	BB	616	A	C5'-C4'-C3'	-5.85	106.64	116.00
57	BB	1465	G	C5-N7-C8	5.85	107.22	104.30
57	BB	1543	G	N7-C8-N9	-5.85	110.17	113.10
57	BB	1700	A	C5-C6-N6	-5.85	119.02	123.70
57	BB	2189	U	O4'-C1'-N1	5.85	112.88	108.20
21	AA	437	U	N3-C4-C5	-5.85	111.09	114.60
21	AA	880	C	C3'-C2'-C1'	5.85	106.18	101.50
21	AA	1246	A	C6-C5-N7	-5.85	128.21	132.30
23	AW	37	A	C2-N3-C4	-5.85	107.68	110.60
25	AZ	171	ARG	NE-CZ-NH1	-5.85	117.38	120.30
57	BB	216	A	C5-C6-N6	-5.85	119.02	123.70
57	BB	1274	A	O4'-C1'-N9	5.85	112.88	108.20
57	BB	1412	U	O4'-C1'-N1	5.85	112.88	108.20
57	BB	1433	A	C6-N1-C2	-5.85	115.09	118.60
57	BB	1984	G	C4-C5-C6	-5.85	115.29	118.80
57	BB	2361	G	C4-C5-N7	-5.85	108.46	110.80
57	BB	2690	U	N1-C2-O2	5.85	126.89	122.80
58	BA	47	C	C2-N1-C1'	5.85	125.23	118.80
58	BA	104	A	C5-N7-C8	5.85	106.82	103.90
15	AD	193	ASP	CB-CG-OD2	-5.85	113.04	118.30
21	AA	144	G	C4-C5-N7	-5.85	108.46	110.80
21	AA	199	A	C5-C6-N6	-5.85	119.02	123.70
21	AA	1308	U	N3-C4-O4	5.85	123.49	119.40
57	BB	2569	G	C5-C6-O6	-5.85	125.09	128.60
58	BA	39	A	C8-N9-C4	-5.85	103.46	105.80
21	AA	688	G	C6-N1-C2	5.84	128.61	125.10
21	AA	979	C	C2-N3-C4	5.84	122.82	119.90
21	AA	1006	G	N1-C6-O6	5.84	123.41	119.90
21	AA	1181	G	N1-C2-N3	-5.84	120.39	123.90
22	AY	64	A	N9-C4-C5	5.84	108.14	105.80
57	BB	199	A	C4-C5-N7	-5.84	107.78	110.70
57	BB	504	A	C5-C6-N6	-5.84	119.02	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1315	C	N1-C2-O2	-5.84	115.39	118.90
57	BB	1881	C	C4-C5-C6	5.84	120.32	117.40
57	BB	1908	C	C4'-C3'-C2'	-5.84	96.75	102.60
57	BB	2849	U	O4'-C1'-N1	5.84	112.88	108.20
21	AA	512	U	N3-C4-C5	-5.84	111.09	114.60
26	AV	16	C	C4-C5-C6	5.84	120.32	117.40
52	BD	169	ARG	NE-CZ-NH1	5.84	123.22	120.30
57	BB	977	G	C8-N9-C1'	5.84	134.60	127.00
57	BB	1658	C	C2-N3-C4	5.84	122.82	119.90
57	BB	2687	U	P-O3'-C3'	5.84	126.71	119.70
21	AA	14	U	C5-C4-O4	-5.84	122.39	125.90
21	AA	315	A	C6-C5-N7	-5.84	128.21	132.30
21	AA	588	G	C4-C5-C6	5.84	122.31	118.80
21	AA	1329	A	C5-C6-N6	-5.84	119.03	123.70
22	AY	75	C	C5-C4-N4	-5.84	116.11	120.20
39	BT	53	VAL	CA-CB-CG1	-5.84	102.14	110.90
57	BB	883	G	C5'-C4'-O4'	5.84	116.11	109.10
57	BB	1079	C	C6-N1-C2	5.84	122.64	120.30
57	BB	1225	G	N3-C2-N2	5.84	123.99	119.90
57	BB	1388	G	N3-C4-N9	5.84	129.50	126.00
57	BB	1477	A	N3-C4-C5	-5.84	122.71	126.80
57	BB	1805	A	N9-C4-C5	5.84	108.14	105.80
57	BB	1918	A	C5-C6-N1	-5.84	114.78	117.70
57	BB	2151	U	C5'-C4'-O4'	5.84	116.11	109.10
57	BB	2231	U	N1-C2-N3	5.84	118.41	114.90
57	BB	2282	G	N1-C2-N2	-5.84	110.94	116.20
57	BB	2439	A	O4'-C1'-N9	5.84	112.87	108.20
57	BB	2671	G	O4'-C1'-N9	5.84	112.87	108.20
14	AC	23	ALA	N-CA-CB	5.84	118.28	110.10
21	AA	298	A	N7-C8-N9	-5.84	110.88	113.80
21	AA	666	G	C5-C6-O6	-5.84	125.10	128.60
21	AA	974	A	N1-C2-N3	5.84	132.22	129.30
21	AA	1487	G	N9-C4-C5	-5.84	103.06	105.40
21	AA	1524	C	N1-C1'-C2'	-5.84	105.58	112.00
45	BC	170	TYR	CB-CG-CD1	5.84	124.50	121.00
57	BB	21	A	C3'-C2'-C1'	-5.84	96.83	101.50
57	BB	285	G	N9-C4-C5	5.84	107.74	105.40
57	BB	686	U	N1-C2-N3	-5.84	111.40	114.90
57	BB	710	U	C4-C5-C6	-5.84	116.20	119.70
57	BB	712	G	C1'-O4'-C4'	5.84	114.57	109.90
57	BB	744	U	N3-C4-C5	-5.84	111.10	114.60
57	BB	1110	G	C6-N1-C2	5.84	128.60	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1763	G	N3-C4-N9	-5.84	122.50	126.00
57	BB	2300	C	P-O3'-C3'	-5.84	112.69	119.70
57	BB	2493	U	C2-N3-C4	5.84	130.50	127.00
57	BB	2697	G	N7-C8-N9	5.84	116.02	113.10
57	BB	2797	U	C5'-C4'-O4'	5.84	116.11	109.10
57	BB	2846	G	C5-C6-O6	-5.84	125.10	128.60
58	BA	46	A	C6-C5-N7	-5.84	128.21	132.30
58	BA	73	A	N3-C4-C5	-5.84	122.71	126.80
58	BA	105	G	C5-C6-N1	-5.84	108.58	111.50
21	AA	380	G	C4-C5-N7	5.84	113.14	110.80
23	AW	65	G	N3-C4-C5	-5.84	125.68	128.60
57	BB	222	A	N3-C4-N9	5.84	132.07	127.40
57	BB	743	A	O5'-P-OP1	-5.84	100.45	105.70
57	BB	943	A	C4'-C3'-C2'	-5.84	96.76	102.60
57	BB	1132	U	N3-C4-C5	-5.84	111.10	114.60
57	BB	1173	U	N3-C2-O2	5.84	126.29	122.20
57	BB	1303	G	C4-C5-N7	-5.84	108.47	110.80
57	BB	2355	G	C6-C5-N7	-5.84	126.90	130.40
57	BB	2440	C	O4'-C1'-N1	5.84	112.87	108.20
3	AL	88	ASP	CB-CG-OD2	5.84	123.55	118.30
21	AA	571	U	N3-C4-C5	-5.84	111.10	114.60
21	AA	584	G	P-O3'-C3'	5.84	126.70	119.70
21	AA	699	C	C6-N1-C2	-5.84	117.97	120.30
21	AA	1267	C	C2-N1-C1'	5.84	125.22	118.80
21	AA	1395	C	C6-N1-C2	-5.84	117.97	120.30
21	AA	1515	G	C2-N3-C4	5.84	114.82	111.90
26	AV	67	C	N1-C2-N3	-5.84	115.11	119.20
57	BB	447	A	C6-C5-N7	-5.84	128.22	132.30
57	BB	776	G	N7-C8-N9	5.84	116.02	113.10
57	BB	1364	G	N3-C2-N2	-5.84	115.81	119.90
57	BB	2266	A	N1-C2-N3	5.84	132.22	129.30
57	BB	2646	C	N3-C4-N4	5.84	122.08	118.00
57	BB	2821	A	C4-C5-N7	-5.84	107.78	110.70
57	BB	2860	A	N1-C2-N3	5.84	132.22	129.30
21	AA	839	C	N1-C2-O2	-5.83	115.40	118.90
21	AA	933	G	N9-C4-C5	5.83	107.73	105.40
22	AY	53	G	C3'-C2'-C1'	-5.83	96.83	101.50
52	BD	193	VAL	N-CA-CB	5.83	124.34	111.50
58	BA	10	G	O4'-C1'-N9	5.83	112.87	108.20
21	AA	60	A	N1-C2-N3	-5.83	126.38	129.30
23	AW	59	U	C6-N1-C2	5.83	124.50	121.00
35	BP	24	THR	N-CA-C	-5.83	95.25	111.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	219	A	C8-N9-C4	-5.83	103.47	105.80
57	BB	612	G	C5-N7-C8	5.83	107.22	104.30
57	BB	614	A	C4-C5-N7	-5.83	107.78	110.70
57	BB	909	A	C4-C5-C6	5.83	119.92	117.00
57	BB	1017	G	C5-N7-C8	-5.83	101.38	104.30
57	BB	1274	A	N1-C2-N3	5.83	132.22	129.30
57	BB	1613	G	C5-C6-N1	-5.83	108.58	111.50
57	BB	2061	G	C4-C5-C6	5.83	122.30	118.80
57	BB	2400	G	C4-N9-C1'	-5.83	118.92	126.50
57	BB	2472	G	C5-N7-C8	5.83	107.22	104.30
21	AA	97	G	N1-C6-O6	5.83	123.40	119.90
21	AA	141	G	C4-C5-C6	5.83	122.30	118.80
21	AA	650	G	C8-N9-C4	5.83	108.73	106.40
21	AA	968	A	O4'-C1'-N9	5.83	112.87	108.20
45	BC	131	MET	CG-SD-CE	5.83	109.53	100.20
57	BB	161	A	C6-C5-N7	-5.83	128.22	132.30
57	BB	326	G	C6-N1-C2	-5.83	121.60	125.10
57	BB	989	G	P-O3'-C3'	-5.83	112.70	119.70
57	BB	990	A	C5-C6-N6	-5.83	119.03	123.70
57	BB	1459	G	N1-C2-N3	-5.83	120.40	123.90
57	BB	2119	A	C8-N9-C4	-5.83	103.47	105.80
57	BB	2585	U	N3-C2-O2	5.83	126.28	122.20
21	AA	781	A	N3-C4-C5	-5.83	122.72	126.80
26	AV	5	G	O4'-C1'-N9	5.83	112.86	108.20
26	AV	58	A	C5-N7-C8	5.83	106.81	103.90
56	BH	116	ARG	NE-CZ-NH2	5.83	123.22	120.30
57	BB	471	A	C2-N3-C4	5.83	113.52	110.60
57	BB	1569	A	C5-C6-N1	-5.83	114.78	117.70
57	BB	1898	U	N1-C2-N3	5.83	118.40	114.90
57	BB	2614	A	C5-N7-C8	5.83	106.81	103.90
57	BB	2678	C	N3-C4-N4	5.83	122.08	118.00
21	AA	13	U	N3-C4-O4	-5.83	115.32	119.40
21	AA	69	G	P-O3'-C3'	5.83	126.69	119.70
21	AA	1046	A	P-O5'-C5'	-5.83	111.57	120.90
21	AA	1288	A	C6-C5-N7	-5.83	128.22	132.30
57	BB	118	A	N9-C4-C5	-5.83	103.47	105.80
57	BB	129	C	C5-C6-N1	-5.83	118.08	121.00
57	BB	281	C	C6-N1-C2	5.83	122.63	120.30
57	BB	882	G	O4'-C1'-N9	5.83	112.86	108.20
57	BB	1010	A	P-O3'-C3'	-5.83	112.71	119.70
57	BB	1842	G	N9-C4-C5	-5.83	103.07	105.40
57	BB	1900	A	C4-C5-N7	-5.83	107.79	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2520	C	P-O3'-C3'	-5.83	112.71	119.70
57	BB	2679	A	C6-C5-N7	-5.83	128.22	132.30
21	AA	693	G	P-O3'-C3'	-5.83	112.71	119.70
23	AW	46	G	N7-C8-N9	-5.83	110.19	113.10
52	BD	58	ASN	CB-CA-C	-5.83	98.75	110.40
57	BB	313	G	C6-C5-N7	-5.83	126.90	130.40
57	BB	393	C	C6-N1-C2	-5.83	117.97	120.30
57	BB	970	U	O4'-C1'-N1	5.83	112.86	108.20
57	BB	1533	C	N3-C4-C5	5.83	124.23	121.90
57	BB	2143	C	OP1-P-OP2	-5.83	110.86	119.60
57	BB	2167	U	C5'-C4'-C3'	5.83	125.32	116.00
57	BB	2718	G	C2-N3-C4	-5.83	108.99	111.90
57	BB	2867	G	C4-N9-C1'	5.83	134.07	126.50
21	AA	6	G	C4-C5-C6	5.83	122.30	118.80
21	AA	188	C	C6-N1-C1'	-5.83	113.81	120.80
21	AA	379	C	C6-N1-C2	-5.83	117.97	120.30
21	AA	939	G	N7-C8-N9	5.83	116.01	113.10
21	AA	1488	G	C6-C5-N7	-5.83	126.91	130.40
21	AA	1503	A	C6-N1-C2	-5.83	115.10	118.60
22	AY	33	U	N1-C2-O2	5.83	126.88	122.80
53	BE	145	ASP	CB-CG-OD1	5.83	123.54	118.30
57	BB	4	U	N1-C2-O2	5.83	126.88	122.80
57	BB	37	C	C1'-O4'-C4'	-5.83	105.24	109.90
57	BB	73	A	C5-C6-N1	-5.83	114.79	117.70
57	BB	652	U	C5-C6-N1	5.83	125.61	122.70
57	BB	713	G	C5-C6-O6	-5.83	125.10	128.60
57	BB	741	U	N3-C4-C5	5.83	118.09	114.60
57	BB	1039	A	N3-C4-C5	-5.83	122.72	126.80
57	BB	1295	C	C3'-C2'-C1'	-5.83	96.84	101.50
57	BB	1445	G	N1-C6-O6	5.83	123.40	119.90
57	BB	1487	U	C2-N3-C4	-5.83	123.50	127.00
57	BB	1578	U	C6-N1-C2	-5.83	117.50	121.00
57	BB	2169	A	C8-N9-C4	5.83	108.13	105.80
57	BB	2358	A	C4-C5-C6	5.83	119.91	117.00
58	BA	41	G	C6-C5-N7	-5.83	126.91	130.40
58	BA	115	A	C4'-C3'-C2'	-5.83	96.78	102.60
21	AA	34	C	C5-C4-N4	-5.82	116.12	120.20
21	AA	179	A	P-O5'-C5'	5.82	130.22	120.90
21	AA	325	A	P-O5'-C5'	-5.82	111.58	120.90
21	AA	452	A	C6-N1-C2	5.82	122.09	118.60
21	AA	650	G	N1-C2-N3	-5.82	120.41	123.90
21	AA	754	C	C2-N3-C4	5.82	122.81	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1137	C	N3-C4-C5	-5.82	119.57	121.90
23	AW	3	C	C2-N1-C1'	5.82	125.21	118.80
56	BH	56	ALA	CB-CA-C	5.82	118.83	110.10
57	BB	667	U	C5'-C4'-C3'	-5.82	106.68	116.00
57	BB	844	A	C5-C6-N1	-5.82	114.79	117.70
57	BB	1218	G	C5-N7-C8	5.82	107.21	104.30
57	BB	1252	G	N1-C6-O6	5.82	123.39	119.90
57	BB	1532	A	N7-C8-N9	5.82	116.71	113.80
57	BB	2610	C	OP1-P-OP2	-5.82	110.86	119.60
21	AA	135	C	N1-C2-N3	-5.82	115.12	119.20
21	AA	445	G	N3-C2-N2	5.82	123.98	119.90
21	AA	815	A	N1-C2-N3	5.82	132.21	129.30
21	AA	934	C	C2-N3-C4	5.82	122.81	119.90
22	AY	59	U	N3-C4-C5	-5.82	111.11	114.60
57	BB	707	G	C4-C5-N7	-5.82	108.47	110.80
57	BB	915	C	N3-C4-N4	5.82	122.08	118.00
57	BB	2538	C	C2-N1-C1'	5.82	125.20	118.80
58	BA	107	G	C4'-C3'-C2'	-5.82	96.78	102.60
21	AA	1056	U	N1-C2-N3	-5.82	111.41	114.90
21	AA	1198	G	N1-C6-O6	5.82	123.39	119.90
21	AA	1384	C	O4'-C1'-N1	5.82	112.86	108.20
25	AZ	47	ASP	CB-CA-C	-5.82	98.76	110.40
45	BC	42	ARG	CG-CD-NE	-5.82	99.58	111.80
54	BF	116	LEU	CB-CG-CD1	5.82	120.89	111.00
57	BB	429	A	C1'-O4'-C4'	5.82	114.56	109.90
57	BB	432	A	C5-C6-N1	-5.82	114.79	117.70
57	BB	570	G	C5-N7-C8	5.82	107.21	104.30
57	BB	883	G	N1-C6-O6	5.82	123.39	119.90
57	BB	931	U	P-O3'-C3'	5.82	126.68	119.70
57	BB	1436	G	P-O3'-C3'	-5.82	112.72	119.70
57	BB	1697	G	P-O3'-C3'	-5.82	112.71	119.70
57	BB	2853	C	N3-C4-C5	-5.82	119.57	121.90
58	BA	78	A	N1-C6-N6	5.82	122.09	118.60
16	AE	127	TYR	CB-CG-CD2	5.82	124.49	121.00
21	AA	149	A	C4'-C3'-C2'	-5.82	96.78	102.60
21	AA	506	G	C4-C5-N7	-5.82	108.47	110.80
57	BB	407	G	N3-C4-C5	5.82	131.51	128.60
57	BB	612	G	C4'-C3'-C2'	5.82	108.42	102.60
57	BB	793	A	C4-C5-N7	-5.82	107.79	110.70
57	BB	942	G	N9-C4-C5	-5.82	103.07	105.40
57	BB	1617	C	N3-C4-N4	5.82	122.07	118.00
57	BB	2037	A	C5-N7-C8	5.82	106.81	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2373	G	N9-C4-C5	5.82	107.73	105.40
58	BA	105	G	N1-C2-N3	-5.82	120.41	123.90
18	AG	61	PHE	CB-CG-CD2	-5.82	116.73	120.80
21	AA	95	C	C5-C4-N4	-5.82	116.13	120.20
21	AA	126	G	N1-C2-N3	-5.82	120.41	123.90
27	B5	152	ALA	N-CA-CB	5.82	118.24	110.10
29	BJ	47	HIS	CA-CB-CG	5.82	123.49	113.60
41	BV	9	ARG	NE-CZ-NH1	-5.82	117.39	120.30
57	BB	194	G	C5-C6-O6	-5.82	125.11	128.60
57	BB	326	G	C4-C5-N7	5.82	113.13	110.80
57	BB	1849	G	O4'-C1'-N9	5.82	112.85	108.20
57	BB	1889	A	C5-N7-C8	5.82	106.81	103.90
57	BB	1943	U	C1'-O4'-C4'	5.82	114.55	109.90
57	BB	2445	G	N9-C4-C5	-5.82	103.07	105.40
58	BA	117	G	C1'-O4'-C4'	-5.82	105.25	109.90
5	AN	23	ARG	N-CA-C	-5.82	95.30	111.00
7	AP	60	TRP	N-CA-CB	5.82	121.07	110.60
21	AA	42	G	O4'-C1'-N9	5.82	112.85	108.20
21	AA	126	G	O4'-C1'-N9	5.82	112.85	108.20
21	AA	603	U	P-O5'-C5'	5.82	130.20	120.90
21	AA	836	G	C6-N1-C2	5.82	128.59	125.10
21	AA	1020	G	C2-N3-C4	5.82	114.81	111.90
21	AA	1190	G	C4-N9-C1'	5.82	134.06	126.50
21	AA	1303	C	C2-N3-C4	5.82	122.81	119.90
21	AA	1319	A	C6-C5-N7	-5.82	128.23	132.30
21	AA	1500	A	C5-C6-N6	-5.82	119.05	123.70
21	AA	1511	G	C8-N9-C4	-5.82	104.07	106.40
22	AY	47	U	C6-N1-C2	-5.82	117.51	121.00
26	AV	58	A	N9-C4-C5	-5.82	103.47	105.80
57	BB	2	G	C4-N9-C1'	-5.82	118.94	126.50
57	BB	460	A	C4-C5-N7	5.82	113.61	110.70
57	BB	688	U	C5-C4-O4	-5.82	122.41	125.90
57	BB	789	A	O4'-C1'-N9	5.82	112.85	108.20
57	BB	1170	C	P-O3'-C3'	-5.82	112.72	119.70
57	BB	1407	G	N3-C2-N2	5.82	123.97	119.90
57	BB	2015	A	C5-C6-N1	-5.82	114.79	117.70
57	BB	2256	G	C4'-C3'-C2'	-5.82	96.78	102.60
57	BB	2276	G	N7-C8-N9	-5.82	110.19	113.10
57	BB	2279	G	C6-N1-C2	5.82	128.59	125.10
57	BB	2444	G	C4-C5-C6	5.82	122.29	118.80
57	BB	2752	C	C5'-C4'-C3'	-5.82	106.70	116.00
14	AC	82	ASP	CB-CG-OD1	-5.81	113.07	118.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	202	G	C4-C5-C6	5.81	122.29	118.80
57	BB	312	G	N3-C2-N2	5.81	123.97	119.90
57	BB	356	G	C8-N9-C4	-5.81	104.08	106.40
57	BB	871	U	C5-C6-N1	5.81	125.61	122.70
57	BB	1430	G	N3-C4-N9	-5.81	122.51	126.00
57	BB	2576	G	N3-C2-N2	5.81	123.97	119.90
13	AB	77	GLU	CG-CD-OE1	-5.81	106.67	118.30
21	AA	836	G	O4'-C1'-N9	5.81	112.85	108.20
21	AA	1248	A	N7-C8-N9	-5.81	110.89	113.80
26	AV	5	G	N3-C4-N9	5.81	129.49	126.00
57	BB	27	G	C4'-C3'-C2'	-5.81	96.79	102.60
57	BB	284	U	N1-C2-O2	-5.81	118.73	122.80
57	BB	543	G	N9-C4-C5	-5.81	103.08	105.40
57	BB	548	G	N3-C4-C5	-5.81	125.69	128.60
57	BB	715	A	N1-C6-N6	5.81	122.09	118.60
57	BB	752	A	N1-C2-N3	5.81	132.21	129.30
57	BB	1162	G	N1-C2-N3	-5.81	120.41	123.90
57	BB	1489	C	P-O3'-C3'	5.81	126.67	119.70
57	BB	1819	A	N3-C4-C5	-5.81	122.73	126.80
18	AG	37	THR	CA-CB-CG2	-5.81	104.27	112.40
21	AA	105	G	C4-C5-N7	5.81	113.12	110.80
22	AY	60	C	N3-C4-C5	-5.81	119.58	121.90
57	BB	701	G	C8-N9-C4	5.81	108.72	106.40
57	BB	1870	C	N3-C2-O2	-5.81	117.83	121.90
57	BB	2823	A	C3'-C2'-C1'	5.81	106.15	101.50
57	BB	2894	G	N3-C4-C5	5.81	131.51	128.60
21	AA	287	U	C4-C5-C6	-5.81	116.21	119.70
21	AA	640	A	O4'-C1'-N9	5.81	112.85	108.20
21	AA	1111	A	C8-N9-C4	-5.81	103.48	105.80
29	BJ	59	ALA	CB-CA-C	-5.81	101.39	110.10
57	BB	119	A	C3'-C2'-C1'	-5.81	96.85	101.50
57	BB	187	G	C3'-C2'-C1'	-5.81	96.85	101.50
57	BB	216	A	C5-C6-N1	-5.81	114.80	117.70
57	BB	331	C	P-O3'-C3'	5.81	126.67	119.70
57	BB	386	G	C5-C6-O6	-5.81	125.11	128.60
57	BB	1322	A	C5-N7-C8	5.81	106.81	103.90
57	BB	2374	C	N3-C4-N4	5.81	122.07	118.00
57	BB	2478	A	C6-C5-N7	-5.81	128.23	132.30
57	BB	2612	C	C5-C6-N1	5.81	123.91	121.00
57	BB	2755	C	C5-C4-N4	-5.81	116.13	120.20
15	AD	66	VAL	CA-CB-CG1	5.81	119.61	110.90
21	AA	1092	A	N1-C2-N3	-5.81	126.40	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	15	G	C5-C6-O6	-5.81	125.12	128.60
57	BB	288	U	C5-C6-N1	5.81	125.60	122.70
57	BB	1216	G	N1-C2-N3	-5.81	120.42	123.90
57	BB	1453	A	C5'-C4'-O4'	5.81	116.07	109.10
57	BB	1498	C	C5-C4-N4	-5.81	116.14	120.20
57	BB	2223	G	C5'-C4'-C3'	5.81	125.29	116.00
57	BB	2837	A	O4'-C1'-N9	5.81	112.84	108.20
21	AA	193	C	C6-N1-C2	5.81	122.62	120.30
57	BB	266	G	N3-C4-N9	5.81	129.48	126.00
57	BB	1313	U	C5-C6-N1	5.81	125.60	122.70
57	BB	1535	A	C5-C6-N6	-5.81	119.06	123.70
15	AD	111	ALA	N-CA-CB	5.80	118.22	110.10
21	AA	941	G	O4'-C1'-N9	5.80	112.84	108.20
21	AA	1175	G	C4-C5-N7	5.80	113.12	110.80
23	AW	71	G	O4'-C1'-N9	5.80	112.84	108.20
26	AV	39	C	C6-N1-C2	-5.80	117.98	120.30
57	BB	1017	G	C6-C5-N7	-5.80	126.92	130.40
57	BB	1031	G	P-O5'-C5'	-5.80	111.61	120.90
57	BB	1282	U	C5-C4-O4	5.80	129.38	125.90
57	BB	1292	G	OP1-P-OP2	-5.80	110.89	119.60
57	BB	2052	A	C2-N3-C4	5.80	113.50	110.60
57	BB	2103	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	2589	A	C8-N9-C4	5.80	108.12	105.80
57	BB	2839	G	C2-N3-C4	5.80	114.80	111.90
21	AA	281	G	N3-C2-N2	5.80	123.96	119.90
21	AA	375	U	C5-C6-N1	5.80	125.60	122.70
21	AA	482	A	C5-C6-N6	-5.80	119.06	123.70
21	AA	523	A	P-O3'-C3'	5.80	126.66	119.70
21	AA	835	U	N1-C2-O2	-5.80	118.74	122.80
21	AA	979	C	C4'-C3'-C2'	-5.80	96.80	102.60
26	AV	47	U	N3-C2-O2	5.80	126.26	122.20
57	BB	867	C	C4'-C3'-C2'	-5.80	96.80	102.60
57	BB	1566	A	C5-N7-C8	5.80	106.80	103.90
57	BB	1811	G	N9-C4-C5	5.80	107.72	105.40
57	BB	2527	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	2598	A	N7-C8-N9	-5.80	110.90	113.80
57	BB	2648	G	N3-C4-N9	5.80	129.48	126.00
57	BB	2758	A	C1'-O4'-C4'	-5.80	105.26	109.90
57	BB	2793	C	C2-N3-C4	5.80	122.80	119.90
19	AH	59	GLU	N-CA-CB	5.80	121.04	110.60
21	AA	260	G	C8-N9-C1'	5.80	134.54	127.00
23	AW	57	G	C4'-C3'-C2'	-5.80	96.80	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	AZ	96	ALA	N-CA-CB	5.80	118.22	110.10
57	BB	101	A	N9-C4-C5	5.80	108.12	105.80
57	BB	592	A	C5-C6-N6	-5.80	119.06	123.70
57	BB	716	A	N9-C4-C5	5.80	108.12	105.80
57	BB	1185	G	N7-C8-N9	-5.80	110.20	113.10
57	BB	1491	G	O4'-C1'-N9	5.80	112.84	108.20
57	BB	1523	U	C5-C6-N1	-5.80	119.80	122.70
57	BB	1602	U	C2-N3-C4	-5.80	123.52	127.00
57	BB	1724	G	N1-C6-O6	5.80	123.38	119.90
57	BB	2073	C	O4'-C1'-C2'	-5.80	100.00	105.80
57	BB	2241	A	N1-C6-N6	5.80	122.08	118.60
57	BB	2499	C	C4'-C3'-C2'	5.80	108.40	102.60
57	BB	2650	U	C6-N1-C2	-5.80	117.52	121.00
57	BB	2673	G	N3-C4-N9	-5.80	122.52	126.00
11	AT	22	SER	CB-CA-C	-5.80	99.08	110.10
17	AF	76	THR	CA-CB-CG2	-5.80	104.28	112.40
21	AA	219	U	O4'-C1'-N1	5.80	112.84	108.20
21	AA	1059	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	28	A	C5-C6-N1	-5.80	114.80	117.70
57	BB	728	G	P-O3'-C3'	5.80	126.66	119.70
57	BB	1487	U	C5-C6-N1	5.80	125.60	122.70
57	BB	1591	A	N7-C8-N9	-5.80	110.90	113.80
57	BB	1902	C	C4-C5-C6	-5.80	114.50	117.40
57	BB	2019	A	C5-C6-N1	-5.80	114.80	117.70
57	BB	2266	A	C6-N1-C2	-5.80	115.12	118.60
57	BB	2289	G	C8-N9-C4	-5.80	104.08	106.40
21	AA	281	G	C4-C5-C6	5.80	122.28	118.80
21	AA	497	G	N1-C2-N2	-5.80	110.98	116.20
21	AA	640	A	C6-C5-N7	-5.80	128.24	132.30
21	AA	901	A	N1-C2-N3	5.80	132.20	129.30
21	AA	939	G	C6-N1-C2	5.80	128.58	125.10
21	AA	1370	G	C4'-C3'-C2'	-5.80	96.80	102.60
26	AV	30	G	C8-N9-C1'	5.80	134.54	127.00
56	BH	101	ASP	CA-CB-CG	-5.80	100.64	113.40
57	BB	309	A	C5-N7-C8	5.80	106.80	103.90
57	BB	970	U	N3-C2-O2	5.80	126.26	122.20
58	BA	42	C	C4'-C3'-C2'	-5.80	96.80	102.60
21	AA	77	A	C5-C6-N1	-5.80	114.80	117.70
21	AA	139	A	C4-C5-C6	5.80	119.90	117.00
21	AA	878	A	C6-C5-N7	-5.80	128.24	132.30
21	AA	1130	A	C5-C6-N1	-5.80	114.80	117.70
36	BQ	63	ARG	NE-CZ-NH2	5.80	123.20	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	344	A	C5'-C4'-C3'	-5.80	106.72	116.00
57	BB	555	G	O4'-C1'-N9	5.80	112.84	108.20
57	BB	648	G	N3-C4-N9	-5.80	122.52	126.00
57	BB	1072	C	N3-C4-C5	-5.80	119.58	121.90
57	BB	1114	C	O4'-C1'-N1	5.80	112.84	108.20
57	BB	1171	G	C5-C6-O6	-5.80	125.12	128.60
57	BB	1206	G	O5'-P-OP1	5.80	117.66	110.70
57	BB	1823	G	C6-C5-N7	-5.80	126.92	130.40
57	BB	2086	U	C5'-C4'-O4'	5.80	116.06	109.10
57	BB	2452	C	O4'-C1'-C2'	5.80	112.82	107.60
57	BB	2490	G	C6-N1-C2	5.80	128.58	125.10
58	BA	20	G	O4'-C4'-C3'	-5.80	98.20	104.00
21	AA	461	A	C5'-C4'-C3'	5.79	125.27	116.00
21	AA	539	A	C5-C6-N6	-5.79	119.06	123.70
21	AA	561	U	N3-C2-O2	5.79	126.26	122.20
21	AA	587	G	N7-C8-N9	-5.79	110.20	113.10
21	AA	1353	G	N1-C2-N3	-5.79	120.42	123.90
21	AA	1517	G	N9-C4-C5	5.79	107.72	105.40
57	BB	215	G	P-O3'-C3'	5.79	126.65	119.70
57	BB	516	C	N1-C2-N3	-5.79	115.14	119.20
57	BB	692	C	C6-N1-C2	-5.79	117.98	120.30
57	BB	1568	G	C6-N1-C2	-5.79	121.62	125.10
58	BA	62	C	P-O3'-C3'	-5.79	112.75	119.70
58	BA	88	C	C2-N3-C4	5.79	122.80	119.90
20	AI	16	ALA	N-CA-CB	5.79	118.21	110.10
20	AI	117	LEU	CB-CG-CD2	5.79	120.85	111.00
21	AA	205	A	O4'-C1'-N9	5.79	112.83	108.20
21	AA	1110	A	O4'-C4'-C3'	-5.79	98.21	104.00
23	AW	4	C	C4-C5-C6	5.79	120.30	117.40
47	B0	35	GLU	CA-CB-CG	-5.79	100.66	113.40
57	BB	1	G	C6-C5-N7	-5.79	126.92	130.40
57	BB	300	A	C5-C6-N1	-5.79	114.80	117.70
57	BB	315	G	C4-C5-N7	5.79	113.12	110.80
57	BB	1510	G	C1'-O4'-C4'	-5.79	105.27	109.90
57	BB	1816	C	C4-C5-C6	-5.79	114.50	117.40
57	BB	1861	G	C5-N7-C8	-5.79	101.40	104.30
57	BB	2086	U	N1-C2-N3	-5.79	111.42	114.90
57	BB	2446	G	C4-C5-N7	5.79	113.12	110.80
57	BB	2838	G	O4'-C1'-N9	5.79	112.83	108.20
21	AA	1013	G	C5-C6-O6	-5.79	125.12	128.60
21	AA	1177	G	C5-C6-N1	-5.79	108.60	111.50
21	AA	1184	G	C5-N7-C8	-5.79	101.40	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1188	A	C6-C5-N7	-5.79	128.25	132.30
21	AA	1258	G	N9-C1'-C2'	-5.79	105.63	112.00
52	BD	79	LEU	N-CA-CB	5.79	121.98	110.40
54	BF	91	ARG	NE-CZ-NH2	5.79	123.19	120.30
57	BB	260	G	C8-N9-C4	-5.79	104.08	106.40
57	BB	650	C	C6-N1-C1'	5.79	127.75	120.80
57	BB	855	G	C4-C5-N7	5.79	113.12	110.80
57	BB	944	C	C1'-O4'-C4'	5.79	114.53	109.90
57	BB	991	C	P-O5'-C5'	-5.79	111.64	120.90
57	BB	1270	C	C4-C5-C6	5.79	120.30	117.40
57	BB	1335	C	O4'-C4'-C3'	-5.79	98.21	104.00
57	BB	1891	G	N3-C2-N2	5.79	123.95	119.90
57	BB	1899	A	N3-C4-N9	-5.79	122.77	127.40
57	BB	2429	G	N3-C4-N9	-5.79	122.53	126.00
57	BB	2551	C	N3-C4-N4	5.79	122.06	118.00
58	BA	66	A	C8-N9-C4	5.79	108.12	105.80
58	BA	85	G	C2-N3-C4	5.79	114.80	111.90
8	AQ	61	ARG	NE-CZ-NH2	5.79	123.19	120.30
21	AA	1037	C	N3-C2-O2	5.79	125.95	121.90
52	BD	13	ARG	NE-CZ-NH2	-5.79	117.41	120.30
57	BB	774	G	C5'-C4'-O4'	5.79	116.05	109.10
57	BB	1193	G	N1-C2-N3	-5.79	120.43	123.90
57	BB	1789	A	N7-C8-N9	-5.79	110.91	113.80
57	BB	2669	G	C6-C5-N7	-5.79	126.93	130.40
58	BA	36	C	C3'-C2'-C1'	5.79	106.13	101.50
4	AM	112	ARG	NE-CZ-NH2	5.79	123.19	120.30
21	AA	145	G	C8-N9-C4	-5.79	104.08	106.40
21	AA	786	G	OP1-P-OP2	-5.79	110.92	119.60
21	AA	872	A	C3'-C2'-C1'	-5.79	96.87	101.50
21	AA	983	A	C4-C5-C6	5.79	119.89	117.00
57	BB	212	G	C4-C5-N7	-5.79	108.48	110.80
57	BB	244	A	C6-N1-C2	-5.79	115.13	118.60
57	BB	418	C	N3-C4-C5	-5.79	119.58	121.90
57	BB	705	A	C6-C5-N7	-5.79	128.25	132.30
57	BB	711	G	C4'-C3'-C2'	-5.79	96.81	102.60
57	BB	981	A	C5-C6-N1	-5.79	114.81	117.70
57	BB	1258	U	N1-C2-O2	-5.79	118.75	122.80
57	BB	1799	G	C8-N9-C4	5.79	108.72	106.40
57	BB	1861	G	P-O3'-C3'	-5.79	112.75	119.70
57	BB	1878	G	C4-C5-N7	-5.79	108.48	110.80
57	BB	2010	G	N1-C2-N2	5.79	121.41	116.20
57	BB	2162	G	N3-C4-N9	5.79	129.47	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2259	U	O4'-C1'-N1	5.79	112.83	108.20
57	BB	2508	G	N1-C2-N2	-5.79	110.99	116.20
57	BB	2713	U	N3-C4-O4	5.79	123.45	119.40
57	BB	2783	U	C5-C4-O4	-5.79	122.43	125.90
57	BB	2849	U	OP1-P-OP2	-5.79	110.92	119.60
58	BA	23	G	C4-C5-C6	5.79	122.27	118.80
21	AA	255	G	O4'-C1'-N9	5.79	112.83	108.20
21	AA	721	G	C6-C5-N7	-5.79	126.93	130.40
21	AA	1028	C	C2-N3-C4	5.79	122.79	119.90
21	AA	1109	C	P-O5'-C5'	-5.79	111.64	120.90
57	BB	914	G	C5-C6-N1	-5.79	108.61	111.50
57	BB	1188	U	N3-C4-O4	5.79	123.45	119.40
19	AH	115	ALA	N-CA-CB	5.79	118.20	110.10
21	AA	27	G	C8-N9-C4	-5.79	104.08	106.40
21	AA	252	U	C4'-C3'-C2'	-5.79	96.81	102.60
21	AA	281	G	C2-N3-C4	5.79	114.79	111.90
21	AA	515	G	C5-N7-C8	5.79	107.19	104.30
21	AA	1207	G	C4-C5-N7	-5.79	108.49	110.80
57	BB	896	A	C3'-C2'-C1'	-5.79	96.87	101.50
57	BB	1006	C	C3'-C2'-C1'	-5.79	96.87	101.50
57	BB	1025	G	C5'-C4'-C3'	-5.79	106.74	116.00
57	BB	1149	G	O4'-C1'-C2'	5.79	112.81	107.60
57	BB	1640	A	N3-C4-C5	-5.79	122.75	126.80
57	BB	2261	C	O4'-C1'-N1	5.79	112.83	108.20
57	BB	2680	U	C6-N1-C2	-5.79	117.53	121.00
57	BB	2788	C	P-O3'-C3'	-5.79	112.76	119.70
21	AA	303	A	N3-C4-C5	-5.78	122.75	126.80
21	AA	881	G	C5-C6-O6	-5.78	125.13	128.60
21	AA	937	A	C8-N9-C4	-5.78	103.49	105.80
26	AV	23	C	O4'-C1'-N1	5.78	112.83	108.20
26	AV	39	C	C5-C4-N4	-5.78	116.15	120.20
57	BB	280	U	O4'-C1'-N1	5.78	112.83	108.20
57	BB	984	A	C5-C6-N1	-5.78	114.81	117.70
57	BB	1176	U	N3-C4-O4	5.78	123.45	119.40
57	BB	1512	C	O4'-C1'-N1	5.78	112.83	108.20
57	BB	1732	C	N3-C4-N4	5.78	122.05	118.00
57	BB	1891	G	C5-N7-C8	5.78	107.19	104.30
57	BB	1933	G	O4'-C1'-N9	5.78	112.83	108.20
57	BB	1937	A	O4'-C1'-N9	5.78	112.83	108.20
57	BB	2475	C	C5'-C4'-C3'	-5.78	106.75	116.00
57	BB	2583	G	N3-C4-C5	5.78	131.49	128.60
57	BB	2782	G	N3-C2-N2	5.78	123.95	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	116	G	C4-C5-C6	5.78	122.27	118.80
21	AA	855	U	O4'-C1'-N1	5.78	112.83	108.20
25	AZ	39	TYR	CB-CG-CD1	-5.78	117.53	121.00
57	BB	565	C	P-O5'-C5'	-5.78	111.65	120.90
57	BB	967	U	C4'-C3'-C2'	-5.78	96.82	102.60
57	BB	1611	C	N3-C4-N4	5.78	122.05	118.00
21	AA	773	G	C8-N9-C1'	5.78	134.51	127.00
21	AA	1206	G	N1-C2-N3	-5.78	120.43	123.90
21	AA	1293	C	C4-C5-C6	-5.78	114.51	117.40
21	AA	1396	A	C2-N3-C4	-5.78	107.71	110.60
56	BH	30	LEU	N-CA-C	-5.78	95.39	111.00
57	BB	270	A	C6-C5-N7	-5.78	128.25	132.30
57	BB	316	C	C4'-C3'-C2'	-5.78	96.82	102.60
57	BB	788	A	C8-N9-C4	-5.78	103.49	105.80
57	BB	1638	C	N3-C4-C5	-5.78	119.59	121.90
57	BB	1804	C	C4-C5-C6	-5.78	114.51	117.40
57	BB	2191	A	C4-C5-C6	5.78	119.89	117.00
57	BB	2410	G	N9-C1'-C2'	-5.78	105.64	112.00
58	BA	77	U	N3-C4-C5	-5.78	111.13	114.60
21	AA	179	A	N1-C2-N3	-5.78	126.41	129.30
21	AA	1084	G	C5-C6-N1	-5.78	108.61	111.50
21	AA	1297	G	C5-C6-N1	-5.78	108.61	111.50
57	BB	290	U	P-O5'-C5'	5.78	130.15	120.90
57	BB	649	G	N1-C6-O6	5.78	123.37	119.90
57	BB	763	G	C3'-C2'-C1'	5.78	106.12	101.50
57	BB	921	C	P-O5'-C5'	5.78	130.15	120.90
57	BB	1294	U	N3-C4-O4	5.78	123.44	119.40
57	BB	1575	C	O4'-C1'-C2'	5.78	112.80	107.60
57	BB	1609	A	C3'-C2'-C1'	-5.78	96.88	101.50
57	BB	2096	C	C4'-C3'-C2'	-5.78	96.82	102.60
21	AA	138	G	N1-C2-N3	-5.78	120.43	123.90
21	AA	1088	G	N7-C8-N9	5.78	115.99	113.10
22	AY	46	G	C8-N9-C4	5.78	108.71	106.40
57	BB	76	C	N1-C2-N3	-5.78	115.16	119.20
57	BB	789	A	C4-C5-C6	5.78	119.89	117.00
57	BB	933	A	C6-C5-N7	-5.78	128.26	132.30
57	BB	1131	G	N9-C4-C5	-5.78	103.09	105.40
57	BB	1177	G	C4-C5-C6	5.78	122.27	118.80
57	BB	1419	A	O3'-P-O5'	-5.78	93.02	104.00
57	BB	1780	A	C5-C6-N6	-5.78	119.08	123.70
57	BB	1890	A	O4'-C1'-N9	5.78	112.82	108.20
57	BB	1975	G	N7-C8-N9	-5.78	110.21	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2557	G	C5-C6-O6	-5.78	125.13	128.60
57	BB	2718	G	C6-C5-N7	-5.78	126.93	130.40
21	AA	817	C	O4'-C1'-N1	5.78	112.82	108.20
21	AA	1315	U	O4'-C1'-N1	5.78	112.82	108.20
21	AA	1336	C	N3-C4-C5	5.78	124.21	121.90
21	AA	1385	G	O4'-C1'-N9	5.78	112.82	108.20
22	AY	41	U	N1-C2-O2	5.78	126.84	122.80
54	BF	164	GLU	OE1-CD-OE2	-5.78	116.37	123.30
57	BB	174	U	C5-C4-O4	-5.78	122.44	125.90
57	BB	332	A	C3'-C2'-C1'	-5.78	96.88	101.50
57	BB	767	U	N1-C1'-C2'	-5.78	105.65	112.00
57	BB	989	G	C5-N7-C8	5.78	107.19	104.30
57	BB	1117	C	C4-C5-C6	5.78	120.29	117.40
57	BB	1250	G	N3-C2-N2	5.78	123.94	119.90
57	BB	1510	G	N1-C6-O6	5.78	123.37	119.90
57	BB	1601	G	C5-N7-C8	5.78	107.19	104.30
57	BB	1722	A	O5'-P-OP2	-5.78	100.50	105.70
57	BB	1965	C	C5'-C4'-O4'	5.78	116.03	109.10
57	BB	2190	G	C6-N1-C2	5.78	128.56	125.10
21	AA	902	G	N1-C2-N3	-5.77	120.44	123.90
21	AA	988	G	C6-N1-C2	-5.77	121.64	125.10
57	BB	34	U	C3'-C2'-C1'	-5.77	96.88	101.50
57	BB	280	U	C4'-C3'-C2'	-5.77	96.83	102.60
57	BB	452	G	O4'-C1'-N9	5.77	112.82	108.20
57	BB	618	G	C8-N9-C4	5.77	108.71	106.40
57	BB	1128	G	N3-C4-N9	-5.77	122.54	126.00
57	BB	1129	A	C8-N9-C4	-5.77	103.49	105.80
57	BB	1566	A	C4-C5-C6	5.77	119.89	117.00
57	BB	1607	C	C2-N3-C4	5.77	122.79	119.90
57	BB	1755	A	C3'-C2'-C1'	5.77	106.12	101.50
57	BB	2069	G	C8-N9-C4	-5.77	104.09	106.40
57	BB	2125	G	N3-C4-C5	-5.77	125.71	128.60
57	BB	2375	G	C5-C6-N1	-5.77	108.61	111.50
57	BB	2659	G	OP1-P-O3'	5.77	117.90	105.20
57	BB	2815	C	C3'-C2'-C1'	5.77	106.12	101.50
14	AC	111	ASP	N-CA-CB	5.77	120.99	110.60
21	AA	83	C	C5-C4-N4	-5.77	116.16	120.20
21	AA	278	G	C5-C6-N1	5.77	114.39	111.50
21	AA	384	G	C8-N9-C1'	5.77	134.50	127.00
21	AA	435	A	P-O3'-C3'	-5.77	112.77	119.70
21	AA	550	G	C5-C6-N1	5.77	114.39	111.50
21	AA	724	G	N7-C8-N9	5.77	115.99	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	963	G	C5'-C4'-O4'	-5.77	102.17	109.10
22	AY	59	U	C5-C4-O4	-5.77	122.44	125.90
23	AW	59	U	O4'-C1'-N1	5.77	112.82	108.20
57	BB	40	U	N3-C4-O4	-5.77	115.36	119.40
57	BB	599	A	C6-C5-N7	-5.77	128.26	132.30
57	BB	1308	A	N9-C4-C5	5.77	108.11	105.80
57	BB	1477	A	C4-N9-C1'	5.77	136.69	126.30
57	BB	1691	C	N1-C2-O2	5.77	122.36	118.90
57	BB	1762	A	C4-C5-C6	5.77	119.89	117.00
57	BB	2017	U	N3-C2-O2	5.77	126.24	122.20
57	BB	2330	G	C6-C5-N7	-5.77	126.94	130.40
58	BA	38	C	P-O3'-C3'	-5.77	112.77	119.70
58	BA	46	A	C5-C6-N6	-5.77	119.08	123.70
21	AA	316	C	N3-C4-N4	5.77	122.04	118.00
25	AZ	38	THR	CA-CB-CG2	-5.77	104.32	112.40
57	BB	529	A	N3-C4-C5	-5.77	122.76	126.80
57	BB	956	G	P-O5'-C5'	-5.77	111.67	120.90
57	BB	1340	U	P-O3'-C3'	5.77	126.63	119.70
57	BB	1363	C	N3-C4-N4	5.77	122.04	118.00
57	BB	1914	C	N1-C2-O2	-5.77	115.44	118.90
21	AA	277	C	N3-C4-N4	5.77	122.04	118.00
21	AA	380	G	C4'-C3'-C2'	-5.77	96.83	102.60
21	AA	1043	G	C8-N9-C4	5.77	108.71	106.40
21	AA	1356	G	N1-C2-N3	-5.77	120.44	123.90
21	AA	1440	U	C6-N1-C2	-5.77	117.54	121.00
26	AV	65	C	C6-N1-C2	-5.77	117.99	120.30
35	BP	50	ARG	NE-CZ-NH2	-5.77	117.42	120.30
53	BE	114	ARG	NE-CZ-NH2	-5.77	117.42	120.30
57	BB	93	G	N9-C4-C5	-5.77	103.09	105.40
57	BB	241	A	O4'-C1'-N9	5.77	112.81	108.20
57	BB	501	A	P-O5'-C5'	5.77	130.13	120.90
57	BB	514	A	C5'-C4'-C3'	5.77	125.23	116.00
57	BB	640	C	C1'-O4'-C4'	5.77	114.52	109.90
57	BB	831	G	C4-C5-C6	5.77	122.26	118.80
57	BB	875	G	O4'-C1'-N9	5.77	112.82	108.20
57	BB	1317	G	C6-N1-C2	5.77	128.56	125.10
57	BB	1326	U	C4-C5-C6	5.77	123.16	119.70
57	BB	1524	G	C3'-C2'-C1'	-5.77	96.89	101.50
57	BB	1591	A	C5'-C4'-C3'	-5.77	106.77	116.00
57	BB	1689	A	C5-N7-C8	5.77	106.78	103.90
57	BB	2083	G	O4'-C1'-N9	5.77	112.81	108.20
57	BB	2400	G	C5'-C4'-C3'	-5.77	106.77	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	AR	69	TYR	CB-CG-CD2	-5.77	117.54	121.00
21	AA	131	A	N1-C2-N3	5.77	132.18	129.30
21	AA	187	G	C5-C6-N1	-5.77	108.62	111.50
21	AA	300	A	C2-N3-C4	5.77	113.48	110.60
21	AA	604	G	C8-N9-C4	-5.77	104.09	106.40
21	AA	1196	A	N1-C2-N3	5.77	132.18	129.30
57	BB	244	A	P-O3'-C3'	-5.77	112.78	119.70
57	BB	277	G	C4-N9-C1'	-5.77	119.00	126.50
57	BB	1700	A	C4-C5-C6	5.77	119.88	117.00
57	BB	1791	A	C5-C6-N1	-5.77	114.82	117.70
57	BB	1948	G	C4-C5-C6	5.77	122.26	118.80
57	BB	2052	A	N1-C2-N3	-5.77	126.42	129.30
57	BB	2166	U	O4'-C1'-N1	5.77	112.81	108.20
57	BB	2496	C	C5-C4-N4	-5.77	116.16	120.20
57	BB	2615	U	C2-N1-C1'	5.77	124.62	117.70
57	BB	2858	C	N3-C4-N4	5.77	122.04	118.00
21	AA	632	U	P-O3'-C3'	5.77	126.62	119.70
21	AA	908	A	C5-N7-C8	5.77	106.78	103.90
21	AA	1233	G	C4-C5-N7	5.77	113.11	110.80
57	BB	563	A	N9-C4-C5	-5.77	103.49	105.80
57	BB	1226	A	C5-N7-C8	5.77	106.78	103.90
57	BB	1434	A	C5-N7-C8	5.77	106.78	103.90
57	BB	1906	G	C2-N3-C4	5.77	114.78	111.90
57	BB	1963	U	O4'-C1'-N1	5.77	112.81	108.20
57	BB	2792	A	N9-C4-C5	5.77	108.11	105.80
57	BB	2826	A	C5-C6-N1	-5.77	114.82	117.70
21	AA	120	A	C6-C5-N7	-5.76	128.26	132.30
21	AA	253	A	N3-C4-C5	-5.76	122.76	126.80
21	AA	727	G	C1'-O4'-C4'	-5.76	105.29	109.90
21	AA	1255	G	C8-N9-C4	5.76	108.71	106.40
57	BB	287	G	C2-N3-C4	5.76	114.78	111.90
57	BB	958	U	O4'-C1'-N1	5.76	112.81	108.20
57	BB	1010	A	N7-C8-N9	-5.76	110.92	113.80
57	BB	1418	G	N3-C4-N9	5.76	129.46	126.00
57	BB	1615	C	C5-C6-N1	-5.76	118.12	121.00
57	BB	1839	G	C8-N9-C4	-5.76	104.09	106.40
57	BB	1889	A	C5-C6-N6	-5.76	119.09	123.70
57	BB	2119	A	O5'-P-OP2	-5.76	100.51	105.70
57	BB	2202	U	N3-C2-O2	5.76	126.24	122.20
57	BB	2319	G	N1-C6-O6	5.76	123.36	119.90
57	BB	2429	G	N3-C4-C5	5.76	131.48	128.60
57	BB	2693	G	N3-C2-N2	5.76	123.94	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	AR	60	ARG	NH1-CZ-NH2	-5.76	113.06	119.40
21	AA	1355	G	C1'-O4'-C4'	5.76	114.51	109.90
57	BB	38	A	O4'-C1'-N9	5.76	112.81	108.20
57	BB	371	A	C6-N1-C2	5.76	122.06	118.60
57	BB	1601	G	C6-C5-N7	-5.76	126.94	130.40
57	BB	1737	G	C4-C5-N7	-5.76	108.50	110.80
57	BB	2096	C	O4'-C1'-N1	5.76	112.81	108.20
21	AA	73	C	N3-C2-O2	5.76	125.93	121.90
21	AA	239	U	C6-N1-C2	5.76	124.46	121.00
21	AA	746	A	C4-C5-N7	-5.76	107.82	110.70
21	AA	1243	C	C5-C6-N1	5.76	123.88	121.00
57	BB	363	G	C6-N1-C2	-5.76	121.64	125.10
57	BB	822	G	P-O5'-C5'	-5.76	111.68	120.90
57	BB	877	A	N1-C6-N6	5.76	122.06	118.60
57	BB	935	C	O4'-C4'-C3'	-5.76	98.24	104.00
57	BB	1115	G	C6-N1-C2	-5.76	121.64	125.10
57	BB	1180	U	C5-C6-N1	5.76	125.58	122.70
57	BB	1538	G	C4-C5-C6	5.76	122.26	118.80
57	BB	1922	G	C4-C5-C6	5.76	122.26	118.80
57	BB	1925	C	N3-C4-N4	5.76	122.03	118.00
57	BB	2590	A	N7-C8-N9	-5.76	110.92	113.80
57	BB	2706	A	N9-C4-C5	-5.76	103.50	105.80
58	BA	105	G	N3-C2-N2	5.76	123.93	119.90
21	AA	347	G	O4'-C1'-N9	5.76	112.81	108.20
21	AA	384	G	C4-N9-C1'	-5.76	119.01	126.50
21	AA	1066	C	O4'-C1'-N1	5.76	112.81	108.20
21	AA	1155	A	N9-C4-C5	5.76	108.10	105.80
21	AA	1512	U	N3-C4-O4	5.76	123.43	119.40
22	AY	64	A	N1-C2-N3	5.76	132.18	129.30
26	AV	43	A	N9-C4-C5	5.76	108.10	105.80
57	BB	577	G	O4'-C4'-C3'	-5.76	98.24	104.00
57	BB	597	G	P-O3'-C3'	-5.76	112.79	119.70
57	BB	1038	G	C3'-C2'-C1'	-5.76	96.89	101.50
57	BB	2082	A	C6-N1-C2	5.76	122.06	118.60
57	BB	2123	G	P-O5'-C5'	5.76	130.12	120.90
57	BB	2337	G	C4-C5-N7	5.76	113.10	110.80
57	BB	2455	G	C6-C5-N7	-5.76	126.94	130.40
21	AA	506	G	N3-C4-N9	-5.76	122.55	126.00
21	AA	1255	G	N3-C4-N9	5.76	129.46	126.00
21	AA	1268	G	C8-N9-C1'	5.76	134.49	127.00
57	BB	1374	G	O4'-C1'-N9	5.76	112.81	108.20
4	AM	2	ARG	NE-CZ-NH2	-5.76	117.42	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	453	G	C3'-C2'-C1'	-5.76	96.90	101.50
21	AA	799	G	C4-C5-C6	5.76	122.25	118.80
21	AA	925	G	N3-C2-N2	-5.76	115.87	119.90
21	AA	1253	G	C2-N3-C4	5.76	114.78	111.90
57	BB	125	A	C5-C6-N1	-5.76	114.82	117.70
57	BB	846	U	C1'-O4'-C4'	-5.76	105.29	109.90
57	BB	938	G	C3'-C2'-C1'	5.76	106.10	101.50
57	BB	1208	C	P-O5'-C5'	-5.76	111.69	120.90
57	BB	1691	C	N1-C2-N3	-5.76	115.17	119.20
57	BB	2021	C	C2-N1-C1'	5.76	125.13	118.80
57	BB	2090	A	C5'-C4'-C3'	-5.76	106.79	116.00
57	BB	2499	C	P-O3'-C3'	-5.76	112.79	119.70
57	BB	2705	A	C6-N1-C2	5.76	122.05	118.60
26	AV	47	U	C2-N3-C4	-5.75	123.55	127.00
33	BN	48	VAL	CA-CB-CG2	-5.75	102.27	110.90
57	BB	648	G	C5-C6-O6	-5.75	125.15	128.60
57	BB	1495	A	N1-C6-N6	5.75	122.05	118.60
57	BB	2749	A	P-O5'-C5'	5.75	130.11	120.90
58	BA	58	A	C1'-O4'-C4'	-5.75	105.30	109.90
21	AA	119	A	C4'-C3'-C2'	-5.75	96.85	102.60
21	AA	685	G	C3'-C2'-C1'	-5.75	96.90	101.50
41	BV	9	ARG	NH1-CZ-NH2	5.75	125.73	119.40
57	BB	175	G	C2-N3-C4	5.75	114.78	111.90
57	BB	1010	A	C4-C5-N7	5.75	113.58	110.70
57	BB	1420	A	C8-N9-C4	-5.75	103.50	105.80
57	BB	1516	G	N7-C8-N9	-5.75	110.22	113.10
57	BB	2064	C	C5-C4-N4	-5.75	116.17	120.20
57	BB	2076	U	C2-N1-C1'	5.75	124.61	117.70
57	BB	2081	U	N1-C2-O2	-5.75	118.77	122.80
21	AA	306	A	P-O3'-C3'	5.75	126.60	119.70
21	AA	475	C	C2-N3-C4	5.75	122.78	119.90
21	AA	786	G	C5-C6-N1	5.75	114.38	111.50
21	AA	1062	U	N3-C4-C5	-5.75	111.15	114.60
21	AA	1157	A	C1'-O4'-C4'	5.75	114.50	109.90
23	AW	53	G	N1-C6-O6	5.75	123.35	119.90
53	BE	121	VAL	CA-CB-CG2	5.75	119.53	110.90
57	BB	307	G	N3-C4-N9	5.75	129.45	126.00
57	BB	404	A	C5-N7-C8	5.75	106.78	103.90
57	BB	433	C	C5-C6-N1	5.75	123.88	121.00
57	BB	1011	G	C4-C5-N7	5.75	113.10	110.80
57	BB	1028	A	OP1-P-OP2	-5.75	110.97	119.60
57	BB	1298	C	N1-C2-N3	5.75	123.23	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1629	U	C5-C4-O4	-5.75	122.45	125.90
57	BB	1975	G	C5-C6-O6	-5.75	125.15	128.60
57	BB	2172	U	C5'-C4'-O4'	5.75	116.00	109.10
21	AA	563	A	P-O3'-C3'	5.75	126.60	119.70
23	AW	17	C	N1-C2-O2	5.75	122.35	118.90
23	AW	54	U	C4'-C3'-C2'	-5.75	96.85	102.60
26	AV	5	G	C5-N7-C8	5.75	107.17	104.30
31	BL	95	LEU	CB-CA-C	-5.75	99.28	110.20
57	BB	610	C	C1'-O4'-C4'	5.75	114.50	109.90
57	BB	1000	A	N1-C2-N3	5.75	132.18	129.30
57	BB	2272	U	P-O5'-C5'	5.75	130.10	120.90
21	AA	67	C	P-O3'-C3'	5.75	126.60	119.70
21	AA	519	C	C5-C4-N4	-5.75	116.18	120.20
21	AA	945	G	C5-N7-C8	-5.75	101.43	104.30
21	AA	1463	U	C5-C6-N1	5.75	125.57	122.70
22	AY	47	U	C3'-C2'-C1'	5.75	106.10	101.50
23	AW	69	G	C8-N9-C4	5.75	108.70	106.40
57	BB	230	G	O4'-C1'-N9	5.75	112.80	108.20
57	BB	617	G	O4'-C1'-N9	5.75	112.80	108.20
57	BB	674	G	C4-C5-C6	5.75	122.25	118.80
57	BB	953	G	N1-C6-O6	5.75	123.35	119.90
57	BB	1244	A	C2-N3-C4	-5.75	107.73	110.60
57	BB	1481	U	C4-C5-C6	-5.75	116.25	119.70
57	BB	1487	U	N1-C2-O2	-5.75	118.78	122.80
57	BB	1716	U	N3-C4-O4	5.75	123.42	119.40
57	BB	2325	G	C4-C5-N7	-5.75	108.50	110.80
57	BB	2357	G	N1-C6-O6	5.75	123.35	119.90
13	AB	18	GLN	CG-CD-OE1	-5.75	110.11	121.60
21	AA	61	G	N1-C2-N3	-5.75	120.45	123.90
21	AA	177	G	C4-C5-C6	-5.75	115.35	118.80
21	AA	459	A	O4'-C1'-N9	5.75	112.80	108.20
21	AA	728	A	N1-C2-N3	-5.75	126.43	129.30
21	AA	746	A	C5-C6-N1	-5.75	114.83	117.70
21	AA	1048	G	C5-C6-N1	-5.75	108.63	111.50
21	AA	1452	C	C4-C5-C6	-5.75	114.53	117.40
23	AW	70	G	N9-C4-C5	5.75	107.70	105.40
57	BB	240	C	C1'-O4'-C4'	5.75	114.50	109.90
57	BB	333	G	C5-C6-O6	-5.75	125.15	128.60
57	BB	746	U	P-O5'-C5'	5.75	130.09	120.90
57	BB	942	G	O4'-C1'-N9	5.75	112.80	108.20
57	BB	1246	A	N3-C4-C5	-5.75	122.78	126.80
57	BB	1539	U	C1'-O4'-C4'	5.75	114.50	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2903	U	C4'-C3'-C2'	-5.75	96.85	102.60
21	AA	304	U	C2-N3-C4	-5.75	123.55	127.00
21	AA	1047	G	C5-C6-O6	-5.75	125.15	128.60
24	AX	15	A	O4'-C1'-N9	5.75	112.80	108.20
54	BF	1	ALA	C-N-CA	5.75	136.06	121.70
57	BB	936	A	O4'-C1'-N9	5.75	112.80	108.20
57	BB	2208	C	N1-C2-N3	-5.75	115.18	119.20
57	BB	2296	U	N3-C2-O2	5.75	126.22	122.20
57	BB	2754	U	N3-C4-C5	-5.75	111.15	114.60
13	AB	189	ASN	N-CA-CB	5.74	120.94	110.60
21	AA	183	C	N3-C4-N4	5.74	122.02	118.00
21	AA	292	G	C6-C5-N7	-5.74	126.95	130.40
21	AA	546	A	C6-C5-N7	-5.74	128.28	132.30
21	AA	573	A	C2-N3-C4	-5.74	107.73	110.60
21	AA	658	C	N1-C2-O2	-5.74	115.45	118.90
21	AA	832	G	P-O3'-C3'	-5.74	112.81	119.70
21	AA	1392	G	N7-C8-N9	-5.74	110.23	113.10
21	AA	1423	G	O4'-C1'-N9	5.74	112.80	108.20
21	AA	1482	G	C5-N7-C8	5.74	107.17	104.30
26	AV	62	C	P-O3'-C3'	-5.74	112.81	119.70
37	BR	26	ASP	CB-CG-OD1	-5.74	113.13	118.30
45	BC	61	TYR	CB-CG-CD2	5.74	124.45	121.00
57	BB	104	A	C2-N3-C4	-5.74	107.73	110.60
57	BB	2152	G	C2'-C3'-O3'	5.74	122.89	113.70
57	BB	2742	G	OP2-P-O3'	5.74	117.83	105.20
19	AH	127	TYR	CZ-CE2-CD2	5.74	124.97	119.80
57	BB	145	C	C2-N1-C1'	-5.74	112.48	118.80
57	BB	200	U	C3'-C2'-C1'	-5.74	96.91	101.50
57	BB	1672	A	C5-C6-N1	-5.74	114.83	117.70
57	BB	2541	A	N7-C8-N9	5.74	116.67	113.80
57	BB	2743	U	C4-C5-C6	-5.74	116.25	119.70
7	AP	60	TRP	CB-CG-CD1	5.74	134.46	127.00
21	AA	134	G	C4-C5-C6	5.74	122.25	118.80
21	AA	142	G	C5-N7-C8	5.74	107.17	104.30
21	AA	386	C	C6-N1-C2	-5.74	118.00	120.30
21	AA	521	G	N3-C4-N9	-5.74	122.56	126.00
21	AA	573	A	C6-N1-C2	5.74	122.04	118.60
21	AA	596	A	O4'-C1'-N9	5.74	112.79	108.20
21	AA	1044	A	C4-C5-N7	-5.74	107.83	110.70
21	AA	1196	A	N9-C4-C5	5.74	108.10	105.80
21	AA	1228	C	C5'-C4'-C3'	-5.74	106.82	116.00
21	AA	1513	A	C8-N9-C4	5.74	108.10	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	46	G	C5'-C4'-O4'	5.74	115.99	109.10
57	BB	80	G	C2-N3-C4	-5.74	109.03	111.90
57	BB	942	G	N3-C4-C5	5.74	131.47	128.60
57	BB	1430	G	C4-C5-N7	-5.74	108.50	110.80
57	BB	2065	C	C1'-O4'-C4'	-5.74	105.31	109.90
57	BB	2637	U	N3-C4-C5	5.74	118.05	114.60
4	AM	46	GLU	N-CA-CB	5.74	120.93	110.60
21	AA	967	C	N3-C4-N4	5.74	122.02	118.00
21	AA	1161	C	N3-C2-O2	-5.74	117.88	121.90
21	AA	1516	G	N7-C8-N9	-5.74	110.23	113.10
23	AW	51	U	C6-N1-C2	5.74	124.44	121.00
52	BD	142	VAL	CA-CB-CG1	5.74	119.51	110.90
57	BB	770	G	P-O5'-C5'	-5.74	111.72	120.90
57	BB	819	A	P-O3'-C3'	-5.74	112.81	119.70
58	BA	66	A	N7-C8-N9	-5.74	110.93	113.80
21	AA	656	G	C5-C6-O6	-5.74	125.16	128.60
21	AA	967	C	C2-N3-C4	5.74	122.77	119.90
21	AA	1105	A	C4-C5-N7	-5.74	107.83	110.70
21	AA	1414	U	C5'-C4'-C3'	5.74	125.18	116.00
21	AA	1470	U	C4-C5-C6	5.74	123.14	119.70
57	BB	1644	C	C1'-O4'-C4'	-5.74	105.31	109.90
58	BA	13	G	O4'-C4'-C3'	-5.74	98.26	104.00
13	AB	188	THR	CA-CB-CG2	-5.74	104.37	112.40
21	AA	103	U	C5-C6-N1	5.74	125.57	122.70
21	AA	403	C	N3-C4-C5	-5.74	119.61	121.90
21	AA	417	G	C4-C5-N7	5.74	113.09	110.80
21	AA	755	G	C6-N1-C2	-5.74	121.66	125.10
21	AA	790	A	C4-C5-C6	5.74	119.87	117.00
21	AA	1071	C	N3-C4-C5	-5.74	119.61	121.90
21	AA	1325	C	C6-N1-C2	-5.74	118.01	120.30
21	AA	1408	A	C1'-O4'-C4'	-5.74	105.31	109.90
21	AA	1497	G	N7-C8-N9	-5.74	110.23	113.10
41	BV	26	PHE	CB-CG-CD2	-5.74	116.78	120.80
57	BB	32	C	C6-N1-C1'	-5.74	113.92	120.80
57	BB	140	C	N1-C2-O2	-5.74	115.46	118.90
57	BB	309	A	N7-C8-N9	-5.74	110.93	113.80
57	BB	310	A	C6-N1-C2	-5.74	115.16	118.60
57	BB	590	A	N3-C4-C5	-5.74	122.78	126.80
57	BB	697	G	C6-N1-C2	-5.74	121.66	125.10
57	BB	952	G	O4'-C1'-N9	5.74	112.79	108.20
57	BB	1273	U	C3'-C2'-C1'	5.74	106.09	101.50
57	BB	1504	A	N3-C4-C5	-5.74	122.78	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2511	U	N3-C4-C5	-5.74	111.16	114.60
57	BB	2731	G	N9-C4-C5	5.74	107.69	105.40
57	BB	2736	A	C3'-C2'-C1'	-5.74	96.91	101.50
21	AA	403	C	N3-C4-N4	5.73	122.01	118.00
21	AA	621	A	N1-C2-N3	-5.73	126.43	129.30
21	AA	1362	A	O4'-C1'-N9	5.73	112.79	108.20
21	AA	1482	G	C6-N1-C2	5.73	128.54	125.10
57	BB	596	U	P-O3'-C3'	-5.73	112.82	119.70
57	BB	713	G	N3-C4-C5	5.73	131.47	128.60
57	BB	733	G	C6-C5-N7	-5.73	126.96	130.40
17	AF	49	TYR	CB-CG-CD1	-5.73	117.56	121.00
21	AA	102	G	C6-N1-C2	5.73	128.54	125.10
21	AA	126	G	C6-N1-C2	5.73	128.54	125.10
21	AA	595	A	C4'-C3'-C2'	5.73	108.33	102.60
21	AA	1058	G	N1-C2-N3	-5.73	120.46	123.90
21	AA	1119	C	C2-N3-C4	5.73	122.77	119.90
21	AA	1131	G	P-O3'-C3'	-5.73	112.82	119.70
21	AA	1262	C	C4-C5-C6	-5.73	114.53	117.40
23	AW	14	A	C4-N9-C1'	5.73	136.62	126.30
25	AZ	100	GLY	N-CA-C	-5.73	98.77	113.10
57	BB	560	C	O4'-C1'-N1	5.73	112.79	108.20
57	BB	991	C	N3-C4-N4	5.73	122.01	118.00
57	BB	995	C	C2-N3-C4	5.73	122.77	119.90
57	BB	1500	G	N1-C2-N3	-5.73	120.46	123.90
57	BB	2012	G	C5-C6-O6	-5.73	125.16	128.60
57	BB	2859	G	N1-C2-N3	-5.73	120.46	123.90
21	AA	573	A	N1-C2-N3	5.73	132.16	129.30
21	AA	575	G	C2-N3-C4	-5.73	109.03	111.90
21	AA	910	C	C6-N1-C2	5.73	122.59	120.30
21	AA	1189	U	P-O3'-C3'	5.73	126.58	119.70
25	AZ	216	ASP	N-CA-CB	5.73	120.92	110.60
35	BP	29	VAL	CA-CB-CG1	-5.73	102.31	110.90
57	BB	670	A	C4-C5-C6	5.73	119.86	117.00
57	BB	1049	C	P-O3'-C3'	-5.73	112.82	119.70
57	BB	1421	G	N3-C2-N2	5.73	123.91	119.90
57	BB	1689	A	C4'-C3'-C2'	-5.73	96.87	102.60
57	BB	1810	A	N3-C4-N9	-5.73	122.82	127.40
57	BB	1826	G	C5-C6-O6	-5.73	125.16	128.60
57	BB	2415	G	C5-C6-O6	-5.73	125.16	128.60
57	BB	2620	C	N3-C4-N4	5.73	122.01	118.00
21	AA	729	A	O4'-C1'-N9	5.73	112.78	108.20
57	BB	1305	C	P-O3'-C3'	-5.73	112.83	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1781	U	P-O3'-C3'	5.73	126.57	119.70
57	BB	2484	G	O5'-C5'-C4'	-5.73	100.81	111.70
21	AA	500	G	N3-C4-C5	-5.73	125.74	128.60
21	AA	674	G	C4-C5-N7	-5.73	108.51	110.80
21	AA	805	C	OP1-P-O3'	5.73	117.80	105.20
21	AA	1015	G	N3-C4-N9	-5.73	122.56	126.00
22	AY	44	A	P-O5'-C5'	-5.73	111.74	120.90
24	AX	12	A	C8-N9-C1'	-5.73	117.39	127.70
57	BB	396	G	C6-C5-N7	-5.73	126.96	130.40
57	BB	1106	G	C8-N9-C4	-5.73	104.11	106.40
57	BB	1444	G	C8-N9-C4	-5.73	104.11	106.40
57	BB	1545	A	C8-N9-C4	-5.73	103.51	105.80
57	BB	1945	G	C8-N9-C4	-5.73	104.11	106.40
57	BB	1992	G	O4'-C1'-N9	5.73	112.78	108.20
57	BB	2075	U	C6-N1-C2	5.73	124.44	121.00
57	BB	2260	C	C5-C6-N1	5.73	123.86	121.00
57	BB	2271	G	C3'-C2'-C1'	-5.73	96.92	101.50
57	BB	2897	U	N3-C4-O4	5.73	123.41	119.40
21	AA	111	G	C1'-O4'-C4'	-5.73	105.32	109.90
21	AA	149	A	C5-N7-C8	5.73	106.76	103.90
21	AA	838	G	N3-C2-N2	5.73	123.91	119.90
21	AA	1114	C	N3-C4-N4	5.73	122.01	118.00
52	BD	15	PHE	CB-CG-CD1	-5.73	116.79	120.80
57	BB	457	A	C5-N7-C8	5.73	106.76	103.90
57	BB	879	G	C5-N7-C8	5.73	107.16	104.30
57	BB	2865	U	O4'-C1'-N1	5.73	112.78	108.20
21	AA	136	C	N3-C4-C5	-5.72	119.61	121.90
21	AA	324	G	N9-C4-C5	5.72	107.69	105.40
21	AA	391	G	N9-C4-C5	5.72	107.69	105.40
21	AA	571	U	C5-C6-N1	5.72	125.56	122.70
21	AA	1169	A	C5-N7-C8	5.72	106.76	103.90
30	BK	59	ALA	N-CA-CB	5.72	118.11	110.10
43	BX	3	VAL	CA-CB-CG1	-5.72	102.31	110.90
57	BB	407	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	1524	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	1920	C	C6-N1-C2	-5.72	118.01	120.30
57	BB	2186	G	C4-N9-C1'	-5.72	119.06	126.50
57	BB	2741	A	C4-C5-C6	5.72	119.86	117.00
58	BA	79	G	O4'-C1'-N9	5.72	112.78	108.20
21	AA	119	A	C5-C6-N1	-5.72	114.84	117.70
21	AA	619	U	C5-C4-O4	-5.72	122.47	125.90
23	AW	29	G	O4'-C1'-N9	5.72	112.78	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	222	A	N9-C4-C5	5.72	108.09	105.80
57	BB	499	U	O4'-C1'-N1	5.72	112.78	108.20
57	BB	530	G	C5-C6-N1	5.72	114.36	111.50
57	BB	625	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	995	C	OP1-P-OP2	-5.72	111.02	119.60
57	BB	1279	G	C3'-C2'-C1'	-5.72	96.92	101.50
57	BB	1410	G	N9-C4-C5	-5.72	103.11	105.40
57	BB	1691	C	N3-C4-N4	5.72	122.01	118.00
57	BB	1828	G	C5-C6-O6	-5.72	125.17	128.60
57	BB	2074	U	N3-C4-C5	-5.72	111.17	114.60
21	AA	1119	C	C4-C5-C6	5.72	120.26	117.40
57	BB	40	U	N3-C4-C5	5.72	118.03	114.60
57	BB	749	A	C6-C5-N7	-5.72	128.29	132.30
57	BB	1503	A	C2-N3-C4	-5.72	107.74	110.60
57	BB	1665	A	C6-N1-C2	-5.72	115.17	118.60
57	BB	2608	G	N3-C2-N2	5.72	123.91	119.90
57	BB	2771	C	O4'-C4'-C3'	-5.72	98.28	104.00
21	AA	347	G	N3-C4-N9	5.72	129.43	126.00
21	AA	348	G	N1-C2-N2	-5.72	111.05	116.20
21	AA	404	G	N1-C2-N3	-5.72	120.47	123.90
21	AA	607	A	C6-N1-C2	5.72	122.03	118.60
21	AA	822	U	C6-N1-C2	-5.72	117.57	121.00
21	AA	919	A	C8-N9-C4	-5.72	103.51	105.80
21	AA	1326	U	N3-C4-C5	-5.72	111.17	114.60
21	AA	1518	A	C4'-C3'-C2'	-5.72	96.88	102.60
26	AV	13	C	C2-N3-C4	5.72	122.76	119.90
26	AV	60	U	C5'-C4'-C3'	-5.72	106.85	116.00
57	BB	152	A	C5-C6-N6	-5.72	119.12	123.70
57	BB	1931	U	C6-N1-C2	-5.72	117.57	121.00
57	BB	2576	G	C6-C5-N7	-5.72	126.97	130.40
21	AA	911	U	C5-C6-N1	5.72	125.56	122.70
21	AA	1100	C	C2-N3-C4	5.72	122.76	119.90
21	AA	1529	G	N9-C4-C5	-5.72	103.11	105.40
57	BB	492	A	C5-C6-N1	-5.72	114.84	117.70
57	BB	1997	C	C5'-C4'-O4'	5.72	115.96	109.10
21	AA	764	C	N3-C2-O2	5.72	125.90	121.90
21	AA	944	G	C5-C6-N1	-5.72	108.64	111.50
21	AA	1073	U	C4-C5-C6	-5.72	116.27	119.70
21	AA	1362	A	C5'-C4'-O4'	-5.72	102.24	109.10
23	AW	45	U	C2-N3-C4	-5.72	123.57	127.00
25	AZ	391	VAL	CG1-CB-CG2	-5.72	101.75	110.90
57	BB	131	A	N9-C4-C5	5.72	108.09	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	188	G	C4-N9-C1'	-5.72	119.07	126.50
57	BB	494	G	P-O3'-C3'	-5.72	112.84	119.70
57	BB	1775	U	N3-C4-C5	-5.72	111.17	114.60
57	BB	1884	G	C6-C5-N7	-5.72	126.97	130.40
57	BB	1974	C	P-O5'-C5'	5.72	130.05	120.90
57	BB	2046	G	N3-C2-N2	5.72	123.90	119.90
57	BB	2237	G	OP1-P-OP2	-5.72	111.03	119.60
57	BB	2528	U	OP1-P-OP2	-5.72	111.03	119.60
58	BA	68	C	C6-N1-C2	-5.72	118.01	120.30
14	AC	170	GLY	N-CA-C	-5.71	98.81	113.10
21	AA	253	A	C4'-C3'-C2'	-5.71	96.89	102.60
21	AA	386	C	C2-N3-C4	-5.71	117.04	119.90
21	AA	1170	A	O4'-C1'-N9	5.71	112.77	108.20
22	AY	16	U	N1-C1'-C2'	5.71	121.43	114.00
57	BB	9	G	C3'-C2'-C1'	-5.71	96.93	101.50
57	BB	619	G	P-O3'-C3'	-5.71	112.84	119.70
57	BB	742	A	N9-C4-C5	5.71	108.09	105.80
57	BB	1988	G	C5-C6-O6	-5.71	125.17	128.60
57	BB	2341	G	O4'-C1'-N9	5.71	112.77	108.20
21	AA	173	U	O5'-C5'-C4'	-5.71	100.84	111.70
21	AA	936	C	C6-N1-C2	-5.71	118.02	120.30
21	AA	1389	C	N3-C4-N4	5.71	122.00	118.00
35	BP	23	ASP	CB-CG-OD2	-5.71	113.16	118.30
57	BB	770	G	C4'-C3'-C2'	-5.71	96.89	102.60
57	BB	914	G	C6-C5-N7	-5.71	126.97	130.40
57	BB	2035	G	C6-N1-C2	5.71	128.53	125.10
57	BB	2561	U	C4-C5-C6	5.71	123.13	119.70
14	AC	36	PHE	CB-CG-CD2	-5.71	116.80	120.80
17	AF	61	LEU	CB-CG-CD1	5.71	120.71	111.00
21	AA	321	A	N1-C2-N3	5.71	132.16	129.30
21	AA	524	G	C8-N9-C4	-5.71	104.11	106.40
21	AA	542	G	C4-C5-C6	5.71	122.23	118.80
21	AA	1026	G	N3-C4-N9	-5.71	122.57	126.00
21	AA	1114	C	OP1-P-OP2	-5.71	111.03	119.60
21	AA	1192	C	C6-N1-C1'	-5.71	113.95	120.80
21	AA	1353	G	C4-C5-C6	5.71	122.23	118.80
21	AA	1397	C	C6-N1-C2	-5.71	118.02	120.30
21	AA	1471	U	C5-C6-N1	5.71	125.56	122.70
24	AX	18	G	C8-N9-C4	-5.71	104.12	106.40
45	BC	160	TYR	CB-CG-CD1	-5.71	117.57	121.00
57	BB	817	C	C2-N3-C4	5.71	122.76	119.90
57	BB	1126	A	C5-C6-N1	-5.71	114.84	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1228	G	C5-C6-N1	5.71	114.36	111.50
57	BB	1440	U	P-O5'-C5'	5.71	130.04	120.90
57	BB	1466	U	C5-C6-N1	5.71	125.56	122.70
57	BB	1626	A	C4-C5-N7	-5.71	107.84	110.70
57	BB	2103	C	O4'-C4'-C3'	-5.71	98.29	104.00
57	BB	2113	U	C5-C6-N1	-5.71	119.84	122.70
57	BB	2253	G	C1'-O4'-C4'	5.71	114.47	109.90
57	BB	2501	C	C5'-C4'-O4'	-5.71	102.25	109.10
58	BA	72	G	N9-C4-C5	5.71	107.69	105.40
3	AL	49	ARG	NE-CZ-NH2	-5.71	117.44	120.30
17	AF	91	ARG	NE-CZ-NH2	5.71	123.16	120.30
21	AA	1259	C	C4'-C3'-C2'	-5.71	96.89	102.60
21	AA	1521	C	P-O5'-C5'	5.71	130.03	120.90
28	BI	66	PHE	N-CA-CB	5.71	120.88	110.60
54	BF	99	PHE	O-C-N	-5.71	113.56	122.70
57	BB	431	U	N1-C2-O2	-5.71	118.80	122.80
57	BB	1660	G	C4-C5-C6	5.71	122.23	118.80
57	BB	2093	G	C4'-C3'-C2'	-5.71	96.89	102.60
57	BB	2694	G	C5-C6-N1	-5.71	108.64	111.50
2	AK	81	LEU	CB-CA-C	-5.71	99.35	110.20
21	AA	748	G	N9-C4-C5	-5.71	103.12	105.40
21	AA	1011	C	P-O3'-C3'	-5.71	112.85	119.70
21	AA	1400	C	O4'-C1'-N1	5.71	112.77	108.20
22	AY	51	G	N1-C2-N3	-5.71	120.47	123.90
29	BJ	141	ASP	CB-CG-OD1	5.71	123.44	118.30
57	BB	1410	G	C5-C6-O6	-5.71	125.17	128.60
57	BB	1858	A	C1'-O4'-C4'	-5.71	105.33	109.90
57	BB	1959	G	C6-N1-C2	5.71	128.53	125.10
57	BB	2158	A	O4'-C1'-N9	5.71	112.77	108.20
13	AB	136	ARG	NE-CZ-NH1	-5.71	117.45	120.30
21	AA	704	A	N1-C2-N3	5.71	132.15	129.30
21	AA	768	A	N7-C8-N9	-5.71	110.95	113.80
21	AA	846	G	C2-N3-C4	5.71	114.75	111.90
57	BB	361	G	P-O5'-C5'	5.71	130.03	120.90
57	BB	469	G	O4'-C1'-N9	5.71	112.77	108.20
57	BB	511	U	C6-N1-C2	-5.71	117.58	121.00
57	BB	569	U	N1-C2-N3	5.71	118.32	114.90
57	BB	1063	G	C5-N7-C8	5.71	107.15	104.30
57	BB	1083	U	N1-C2-N3	5.71	118.32	114.90
57	BB	1350	C	C5-C4-N4	-5.71	116.21	120.20
57	BB	1510	G	O4'-C1'-N9	5.71	112.77	108.20
21	AA	232	G	C6-C5-N7	-5.71	126.98	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	263	A	C8-N9-C4	-5.71	103.52	105.80
57	BB	227	A	C4-C5-N7	-5.71	107.85	110.70
57	BB	822	G	N3-C4-C5	5.71	131.45	128.60
57	BB	849	A	C2-N3-C4	5.71	113.45	110.60
57	BB	891	G	C5-N7-C8	-5.71	101.45	104.30
57	BB	1145	C	O4'-C1'-N1	5.71	112.76	108.20
57	BB	1670	C	C4-C5-C6	5.71	120.25	117.40
57	BB	1999	C	C4'-C3'-C2'	-5.71	96.89	102.60
21	AA	37	U	C1'-O4'-C4'	-5.70	105.34	109.90
21	AA	242	G	N9-C4-C5	5.70	107.68	105.40
21	AA	452	A	C4-C5-C6	5.70	119.85	117.00
21	AA	481	G	C5-N7-C8	5.70	107.15	104.30
21	AA	730	G	C8-N9-C4	-5.70	104.12	106.40
21	AA	868	C	N3-C4-C5	-5.70	119.62	121.90
21	AA	879	C	N3-C4-C5	-5.70	119.62	121.90
21	AA	898	G	C5-C6-O6	-5.70	125.18	128.60
21	AA	1398	A	O4'-C1'-N9	5.70	112.76	108.20
57	BB	185	G	N9-C4-C5	5.70	107.68	105.40
57	BB	313	G	O4'-C1'-N9	5.70	112.76	108.20
57	BB	434	U	C5-C4-O4	5.70	129.32	125.90
57	BB	771	G	N3-C2-N2	-5.70	115.91	119.90
57	BB	892	A	C5'-C4'-C3'	-5.70	106.87	116.00
57	BB	1441	G	C5-C6-N1	-5.70	108.65	111.50
57	BB	1855	U	N3-C4-C5	-5.70	111.18	114.60
57	BB	1938	A	C1'-O4'-C4'	-5.70	105.34	109.90
57	BB	2182	U	N1-C2-N3	-5.70	111.48	114.90
57	BB	2898	U	N3-C2-O2	5.70	126.19	122.20
4	AM	89	ARG	N-CA-CB	-5.70	100.34	110.60
21	AA	1385	G	N7-C8-N9	-5.70	110.25	113.10
57	BB	45	G	N3-C4-C5	5.70	131.45	128.60
57	BB	1223	G	C5-C6-N1	-5.70	108.65	111.50
57	BB	1295	C	P-O5'-C5'	5.70	130.02	120.90
57	BB	2353	G	C2-N3-C4	5.70	114.75	111.90
58	BA	77	U	N1-C2-N3	5.70	118.32	114.90
21	AA	78	A	C2-N3-C4	-5.70	107.75	110.60
21	AA	1096	C	N1-C2-O2	-5.70	115.48	118.90
21	AA	1218	C	C2-N3-C4	5.70	122.75	119.90
57	BB	231	A	N9-C4-C5	-5.70	103.52	105.80
57	BB	357	C	C4'-C3'-C2'	-5.70	96.90	102.60
57	BB	520	G	O4'-C1'-N9	5.70	112.76	108.20
57	BB	892	A	C1'-O4'-C4'	-5.70	105.34	109.90
57	BB	1368	G	N1-C2-N3	5.70	127.32	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1478	G	N3-C4-C5	-5.70	125.75	128.60
57	BB	1760	C	N3-C2-O2	5.70	125.89	121.90
57	BB	2084	C	O4'-C1'-N1	5.70	112.76	108.20
57	BB	2274	A	C6-N1-C2	5.70	122.02	118.60
57	BB	2335	A	C4-C5-N7	-5.70	107.85	110.70
57	BB	2474	U	N3-C4-O4	5.70	123.39	119.40
58	BA	21	G	O4'-C1'-N9	5.70	112.76	108.20
21	AA	747	A	N1-C2-N3	-5.70	126.45	129.30
21	AA	761	G	O4'-C4'-C3'	-5.70	98.30	104.00
21	AA	1166	G	C8-N9-C4	-5.70	104.12	106.40
21	AA	1173	U	C2-N1-C1'	-5.70	110.86	117.70
21	AA	1285	A	C4-C5-N7	5.70	113.55	110.70
23	AW	74	C	C3'-C2'-C1'	-5.70	96.94	101.50
57	BB	130	C	C5-C4-N4	-5.70	116.21	120.20
57	BB	268	C	C5-C6-N1	5.70	123.85	121.00
57	BB	332	A	C2-N3-C4	-5.70	107.75	110.60
57	BB	780	G	N3-C4-N9	-5.70	122.58	126.00
57	BB	1436	G	C5-C6-N1	-5.70	108.65	111.50
57	BB	2346	A	C5'-C4'-C3'	-5.70	106.88	116.00
57	BB	2484	G	C5-C6-N1	-5.70	108.65	111.50
21	AA	979	C	N3-C4-C5	-5.70	119.62	121.90
26	AV	28	C	N3-C4-N4	5.70	121.99	118.00
57	BB	264	C	N3-C2-O2	-5.70	117.91	121.90
57	BB	679	C	C2-N3-C4	5.70	122.75	119.90
57	BB	1047	G	N3-C4-N9	5.70	129.42	126.00
57	BB	2048	G	O4'-C1'-N9	5.70	112.76	108.20
57	BB	2319	G	N7-C8-N9	-5.70	110.25	113.10
57	BB	2587	A	C8-N9-C4	-5.70	103.52	105.80
21	AA	57	G	N3-C2-N2	5.70	123.89	119.90
21	AA	68	G	N1-C2-N2	-5.70	111.07	116.20
21	AA	746	A	N3-C4-C5	-5.70	122.81	126.80
22	AY	22	G	C5'-C4'-C3'	-5.70	106.89	116.00
53	BE	148	ILE	N-CA-C	-5.70	95.62	111.00
57	BB	60	G	C8-N9-C4	5.70	108.68	106.40
57	BB	361	G	C6-N1-C2	5.70	128.52	125.10
57	BB	841	G	O4'-C1'-C2'	5.70	112.73	107.60
57	BB	1025	G	C6-C5-N7	-5.70	126.98	130.40
57	BB	1062	G	N9-C1'-C2'	-5.70	105.73	112.00
57	BB	1870	C	C5'-C4'-C3'	-5.70	106.89	116.00
57	BB	1883	U	C5-C4-O4	-5.70	122.48	125.90
57	BB	1913	A	C4-C5-C6	5.70	119.85	117.00
58	BA	51	G	C5'-C4'-C3'	5.70	125.11	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	38	A	O4'-C4'-C3'	-5.69	98.31	104.00
57	BB	57	C	C5-C6-N1	5.69	123.85	121.00
57	BB	346	A	C5-N7-C8	5.69	106.75	103.90
57	BB	1377	G	P-O3'-C3'	5.69	126.53	119.70
57	BB	1922	G	C5-C6-O6	-5.69	125.18	128.60
21	AA	60	A	C5-N7-C8	5.69	106.75	103.90
21	AA	833	G	N3-C2-N2	5.69	123.88	119.90
21	AA	851	G	C6-N1-C2	-5.69	121.69	125.10
21	AA	1244	G	N3-C4-N9	-5.69	122.58	126.00
21	AA	1523	G	N9-C4-C5	5.69	107.68	105.40
22	AY	36	A	N1-C2-N3	5.69	132.15	129.30
57	BB	1228	G	C8-N9-C1'	5.69	134.40	127.00
57	BB	1914	C	N3-C4-C5	5.69	124.18	121.90
57	BB	2108	A	C6-C5-N7	-5.69	128.32	132.30
57	BB	2235	G	N3-C2-N2	5.69	123.89	119.90
57	BB	2547	A	N3-C4-N9	5.69	131.95	127.40
57	BB	2603	G	O4'-C1'-N9	5.69	112.75	108.20
58	BA	46	A	N3-C4-N9	5.69	131.95	127.40
9	AR	22	TYR	CZ-CE2-CD2	-5.69	114.68	119.80
21	AA	845	A	C2-N3-C4	5.69	113.44	110.60
21	AA	1078	U	O4'-C1'-N1	5.69	112.75	108.20
21	AA	1149	C	O4'-C1'-N1	5.69	112.75	108.20
21	AA	1525	G	N3-C2-N2	5.69	123.88	119.90
22	AY	16	U	P-O3'-C3'	5.69	126.53	119.70
25	AZ	22	HIS	N-CA-CB	5.69	120.84	110.60
26	AV	65	C	C5'-C4'-O4'	5.69	115.93	109.10
57	BB	464	U	C1'-O4'-C4'	5.69	114.45	109.90
57	BB	629	G	C5-C6-N1	5.69	114.34	111.50
57	BB	947	A	C5-C6-N6	-5.69	119.15	123.70
57	BB	1204	A	C5-N7-C8	5.69	106.75	103.90
57	BB	1206	G	C5-N7-C8	5.69	107.14	104.30
57	BB	1258	U	C3'-C2'-C1'	-5.69	96.95	101.50
57	BB	1382	G	C6-C5-N7	-5.69	126.99	130.40
57	BB	1401	G	N9-C1'-C2'	-5.69	105.74	112.00
57	BB	1580	A	C2-N3-C4	-5.69	107.75	110.60
57	BB	2080	A	C4-C5-C6	5.69	119.84	117.00
57	BB	2363	G	O4'-C1'-N9	5.69	112.75	108.20
57	BB	2827	C	N3-C4-C5	-5.69	119.62	121.90
58	BA	64	G	N1-C2-N3	-5.69	120.48	123.90
21	AA	671	G	N3-C4-N9	-5.69	122.59	126.00
21	AA	856	C	C4-C5-C6	-5.69	114.56	117.40
21	AA	1132	C	C3'-C2'-C1'	5.69	106.05	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	60	U	O4'-C1'-N1	5.69	112.75	108.20
57	BB	98	G	C4'-C3'-C2'	-5.69	96.91	102.60
57	BB	735	A	N1-C2-N3	-5.69	126.46	129.30
57	BB	1299	G	C2-N3-C4	5.69	114.75	111.90
57	BB	2074	U	C5-C4-O4	-5.69	122.49	125.90
57	BB	2723	C	N3-C2-O2	-5.69	117.92	121.90
57	BB	2862	G	N9-C4-C5	-5.69	103.12	105.40
21	AA	17	U	O4'-C4'-C3'	-5.69	98.31	104.00
21	AA	542	G	N9-C4-C5	5.69	107.67	105.40
21	AA	844	G	OP1-P-OP2	-5.69	111.07	119.60
21	AA	1122	U	C2-N3-C4	-5.69	123.59	127.00
25	AZ	231	VAL	CA-CB-CG1	-5.69	102.37	110.90
57	BB	238	C	N3-C4-N4	5.69	121.98	118.00
57	BB	341	C	N3-C4-N4	5.69	121.98	118.00
57	BB	615	U	C1'-O4'-C4'	5.69	114.45	109.90
57	BB	833	A	C5-N7-C8	5.69	106.74	103.90
57	BB	1394	U	P-O5'-C5'	5.69	130.00	120.90
57	BB	1554	U	C6-N1-C2	5.69	124.41	121.00
57	BB	1932	A	C4'-C3'-C2'	-5.69	96.91	102.60
57	BB	2075	U	P-O3'-C3'	5.69	126.52	119.70
57	BB	2099	U	C5-C6-N1	-5.69	119.86	122.70
57	BB	2293	G	P-O3'-C3'	-5.69	112.87	119.70
57	BB	2357	G	N3-C2-N2	5.69	123.88	119.90
57	BB	2671	G	N1-C2-N3	-5.69	120.49	123.90
21	AA	1203	C	O4'-C4'-C3'	-5.69	98.31	104.00
57	BB	387	U	O4'-C1'-N1	5.69	112.75	108.20
57	BB	399	U	C1'-O4'-C4'	5.69	114.45	109.90
57	BB	625	G	N3-C4-N9	-5.69	122.59	126.00
57	BB	783	A	C5-N7-C8	5.69	106.74	103.90
57	BB	1428	C	C1'-O4'-C4'	-5.69	105.35	109.90
57	BB	2318	G	O4'-C1'-N9	5.69	112.75	108.20
57	BB	2508	G	C3'-C2'-C1'	-5.69	96.95	101.50
21	AA	146	G	C5'-C4'-O4'	5.68	115.92	109.10
21	AA	202	G	N3-C2-N2	5.68	123.88	119.90
21	AA	741	G	C8-N9-C4	-5.68	104.13	106.40
21	AA	875	U	C2-N3-C4	-5.68	123.59	127.00
21	AA	1374	A	N1-C2-N3	5.68	132.14	129.30
57	BB	596	U	C5-C6-N1	-5.68	119.86	122.70
57	BB	914	G	C6-N1-C2	5.68	128.51	125.10
57	BB	1308	A	O4'-C1'-N9	5.68	112.75	108.20
57	BB	1383	A	C8-N9-C4	-5.68	103.53	105.80
57	BB	1919	A	C6-N1-C2	-5.68	115.19	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2221	G	N1-C2-N3	-5.68	120.49	123.90
57	BB	2701	U	C5-C4-O4	5.68	129.31	125.90
57	BB	2793	C	C2'-C3'-O3'	5.68	122.80	113.70
58	BA	77	U	O4'-C4'-C3'	-5.68	98.31	104.00
58	BA	110	C	C5-C6-N1	5.68	123.84	121.00
21	AA	357	G	N1-C2-N3	-5.68	120.49	123.90
21	AA	463	U	OP2-P-O3'	5.68	117.70	105.20
21	AA	628	G	N7-C8-N9	5.68	115.94	113.10
21	AA	1126	U	C6-N1-C2	5.68	124.41	121.00
53	BE	79	ARG	N-CA-CB	5.68	120.83	110.60
57	BB	348	A	C5-C6-N1	-5.68	114.86	117.70
57	BB	351	C	P-O5'-C5'	5.68	129.99	120.90
57	BB	389	G	N3-C4-C5	-5.68	125.76	128.60
57	BB	1707	G	N1-C6-O6	5.68	123.31	119.90
57	BB	2171	A	OP2-P-O3'	5.68	117.70	105.20
57	BB	2578	G	C6-C5-N7	-5.68	126.99	130.40
57	BB	2825	G	N3-C4-N9	5.68	129.41	126.00
58	BA	36	C	N1-C2-O2	5.68	122.31	118.90
58	BA	76	G	C2-N3-C4	-5.68	109.06	111.90
21	AA	1471	U	O4'-C1'-N1	5.68	112.75	108.20
57	BB	21	A	C8-N9-C1'	5.68	137.93	127.70
57	BB	1120	G	N3-C2-N2	-5.68	115.92	119.90
57	BB	1220	G	C5'-C4'-C3'	-5.68	106.91	116.00
57	BB	2354	C	C5-C4-N4	-5.68	116.22	120.20
57	BB	2587	A	C6-N1-C2	-5.68	115.19	118.60
21	AA	51	A	C4'-C3'-C2'	5.68	108.28	102.60
21	AA	840	C	C2-N1-C1'	5.68	125.05	118.80
21	AA	883	C	C5-C4-N4	-5.68	116.22	120.20
21	AA	891	U	C5-C4-O4	5.68	129.31	125.90
21	AA	988	G	O4'-C1'-N9	5.68	112.74	108.20
21	AA	1330	U	N1-C2-O2	-5.68	118.83	122.80
21	AA	1431	A	C4-C5-N7	5.68	113.54	110.70
26	AV	52	G	C6-C5-N7	-5.68	126.99	130.40
57	BB	171	U	C6-N1-C2	-5.68	117.59	121.00
57	BB	252	G	C2-N3-C4	5.68	114.74	111.90
57	BB	476	G	C6-C5-N7	-5.68	126.99	130.40
57	BB	1103	A	C5'-C4'-O4'	5.68	115.92	109.10
57	BB	1158	C	P-O3'-C3'	-5.68	112.89	119.70
57	BB	2297	A	O5'-P-OP2	5.68	117.52	110.70
57	BB	2314	A	OP1-P-OP2	-5.68	111.08	119.60
57	BB	2467	C	C5'-C4'-O4'	5.68	115.91	109.10
57	BB	2515	C	N1-C2-O2	5.68	122.31	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2733	A	C5-C6-N6	-5.68	119.16	123.70
57	BB	2864	G	N9-C1'-C2'	-5.68	105.75	112.00
21	AA	1081	A	P-O3'-C3'	-5.68	112.89	119.70
23	AW	34	G	C2-N3-C4	5.68	114.74	111.90
30	BK	92	GLN	N-CA-CB	5.68	120.82	110.60
57	BB	395	U	O4'-C1'-N1	5.68	112.74	108.20
57	BB	1301	A	C2-N3-C4	5.68	113.44	110.60
57	BB	1924	C	C6-N1-C2	-5.68	118.03	120.30
57	BB	1973	G	C5-C6-N1	-5.68	108.66	111.50
57	BB	2122	U	C5-C4-O4	5.68	129.31	125.90
57	BB	2142	A	C4-C5-C6	5.68	119.84	117.00
57	BB	2674	G	N1-C2-N3	-5.68	120.49	123.90
21	AA	40	C	N1-C2-O2	-5.68	115.49	118.90
21	AA	366	A	N1-C6-N6	5.68	122.01	118.60
21	AA	934	C	C6-N1-C2	-5.68	118.03	120.30
21	AA	1450	U	N1-C2-N3	5.68	118.31	114.90
21	AA	1527	U	C5-C4-O4	5.68	129.31	125.90
22	AY	33	U	P-O3'-C3'	5.68	126.51	119.70
31	BL	80	SER	N-CA-CB	5.68	119.01	110.50
54	BF	29	ARG	NE-CZ-NH1	5.68	123.14	120.30
57	BB	359	G	C8-N9-C4	-5.68	104.13	106.40
57	BB	392	U	C5-C4-O4	-5.68	122.49	125.90
57	BB	913	U	N1-C2-O2	-5.68	118.83	122.80
57	BB	1602	U	N3-C4-C5	5.68	118.01	114.60
57	BB	1776	G	C5'-C4'-O4'	5.68	115.91	109.10
57	BB	1848	A	C4-C5-C6	5.68	119.84	117.00
57	BB	2273	A	C8-N9-C4	-5.68	103.53	105.80
57	BB	2863	C	N3-C4-C5	-5.68	119.63	121.90
21	AA	449	G	N9-C4-C5	5.67	107.67	105.40
21	AA	623	C	N3-C4-N4	5.67	121.97	118.00
51	B4	5	ALA	N-CA-CB	5.67	118.04	110.10
57	BB	146	A	P-O3'-C3'	-5.67	112.89	119.70
57	BB	252	G	C4-C5-C6	5.67	122.20	118.80
57	BB	503	A	O4'-C1'-N9	5.67	112.74	108.20
57	BB	929	U	C5-C6-N1	5.67	125.54	122.70
57	BB	1198	U	C1'-O4'-C4'	5.67	114.44	109.90
57	BB	1314	C	C5-C6-N1	5.67	123.84	121.00
57	BB	1701	A	N9-C4-C5	5.67	108.07	105.80
57	BB	1903	G	C6-C5-N7	5.67	133.81	130.40
57	BB	2366	A	C1'-O4'-C4'	-5.67	105.36	109.90
57	BB	2502	G	C6-C5-N7	-5.67	127.00	130.40
57	BB	2552	U	C2-N3-C4	-5.67	123.59	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	258	G	C5-N7-C8	5.67	107.14	104.30
21	AA	326	G	C4-N9-C1'	5.67	133.88	126.50
21	AA	1408	A	C4-C5-C6	5.67	119.84	117.00
57	BB	416	U	C5-C4-O4	-5.67	122.50	125.90
57	BB	1445	G	N1-C2-N2	-5.67	111.09	116.20
57	BB	2507	C	C4'-C3'-C2'	-5.67	96.93	102.60
57	BB	2580	U	C3'-C2'-C1'	5.67	106.04	101.50
21	AA	148	G	C6-C5-N7	-5.67	127.00	130.40
21	AA	183	C	N1-C2-O2	5.67	122.30	118.90
21	AA	417	G	N3-C4-N9	-5.67	122.60	126.00
21	AA	1534	A	C5-N7-C8	5.67	106.74	103.90
57	BB	154	U	N3-C4-C5	-5.67	111.20	114.60
57	BB	572	A	OP2-P-O3'	5.67	117.68	105.20
57	BB	787	C	C1'-O4'-C4'	5.67	114.44	109.90
57	BB	1382	G	N3-C2-N2	5.67	123.87	119.90
57	BB	1435	G	N9-C4-C5	-5.67	103.13	105.40
57	BB	1478	G	OP1-P-OP2	-5.67	111.09	119.60
57	BB	1706	C	N3-C4-N4	5.67	121.97	118.00
57	BB	1831	G	OP1-P-OP2	-5.67	111.09	119.60
57	BB	1976	U	C2-N1-C1'	5.67	124.50	117.70
57	BB	2052	A	N9-C4-C5	5.67	108.07	105.80
57	BB	2363	G	N9-C4-C5	5.67	107.67	105.40
57	BB	2793	C	P-O5'-C5'	-5.67	111.83	120.90
21	AA	497	G	C5-C6-O6	-5.67	125.20	128.60
21	AA	769	G	C6-N1-C2	5.67	128.50	125.10
21	AA	1274	A	P-O3'-C3'	-5.67	112.90	119.70
25	AZ	322	PHE	CB-CG-CD2	5.67	124.77	120.80
45	BC	2	VAL	CA-CB-CG1	5.67	119.41	110.90
57	BB	37	C	P-O5'-C5'	5.67	129.97	120.90
57	BB	236	C	O4'-C4'-C3'	-5.67	98.33	104.00
57	BB	1519	G	C5-C6-N1	-5.67	108.67	111.50
19	AH	3	GLN	N-CA-C	-5.67	95.69	111.00
21	AA	97	G	C4-C5-C6	5.67	122.20	118.80
21	AA	306	A	C8-N9-C4	-5.67	103.53	105.80
21	AA	768	A	C2-N3-C4	-5.67	107.77	110.60
21	AA	1023	U	C5-C6-N1	5.67	125.53	122.70
21	AA	1409	C	O4'-C1'-N1	5.67	112.73	108.20
21	AA	1493	A	N7-C8-N9	-5.67	110.97	113.80
45	BC	166	ARG	N-CA-CB	5.67	120.80	110.60
57	BB	199	A	C4-C5-C6	5.67	119.83	117.00
57	BB	259	G	C5-N7-C8	5.67	107.13	104.30
57	BB	455	C	C6-N1-C1'	-5.67	114.00	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	634	C	C4'-C3'-C2'	-5.67	96.93	102.60
57	BB	661	A	N3-C4-C5	-5.67	122.83	126.80
57	BB	877	A	C3'-C2'-C1'	-5.67	96.97	101.50
57	BB	1248	G	C3'-C2'-C1'	-5.67	96.97	101.50
57	BB	1297	C	N3-C2-O2	5.67	125.87	121.90
57	BB	1459	G	C2-N3-C4	5.67	114.73	111.90
57	BB	1729	U	O4'-C4'-C3'	-5.67	98.33	104.00
57	BB	1739	A	N1-C2-N3	5.67	132.13	129.30
57	BB	1998	A	C2-N3-C4	5.67	113.43	110.60
21	AA	110	C	C5-C6-N1	5.67	123.83	121.00
21	AA	642	A	C5-C6-N6	-5.67	119.17	123.70
21	AA	1123	U	C2-N3-C4	-5.67	123.60	127.00
21	AA	1141	C	N3-C4-N4	5.67	121.97	118.00
22	AY	19	G	C5'-C4'-O4'	5.67	115.90	109.10
23	AW	28	G	N1-C2-N3	-5.67	120.50	123.90
23	AW	67	C	C6-N1-C2	5.67	122.57	120.30
57	BB	305	C	C6-N1-C2	-5.67	118.03	120.30
57	BB	443	A	P-O5'-C5'	5.67	129.97	120.90
57	BB	609	A	C8-N9-C4	-5.67	103.53	105.80
57	BB	751	A	C4-C5-C6	5.67	119.83	117.00
57	BB	804	A	C4-C5-C6	5.67	119.83	117.00
57	BB	843	G	N9-C4-C5	5.67	107.67	105.40
57	BB	914	G	N3-C2-N2	5.67	123.87	119.90
57	BB	1294	U	C2-N3-C4	5.67	130.40	127.00
57	BB	2401	U	O3'-P-O5'	-5.67	93.23	104.00
1	AJ	94	ALA	CB-CA-C	-5.67	101.60	110.10
21	AA	1510	C	C5-C4-N4	-5.67	116.23	120.20
23	AW	60	U	O4'-C1'-C2'	-5.67	100.14	105.80
35	BP	105	LYS	CD-CE-NZ	5.67	124.73	111.70
57	BB	377	G	P-O3'-C3'	-5.67	112.90	119.70
57	BB	715	A	P-O3'-C3'	-5.67	112.90	119.70
58	BA	80	U	C4'-C3'-C2'	5.67	108.27	102.60
21	AA	603	U	P-O3'-C3'	5.66	126.50	119.70
21	AA	640	A	C3'-C2'-C1'	-5.66	96.97	101.50
21	AA	640	A	N9-C4-C5	5.66	108.07	105.80
21	AA	680	C	C4-C5-C6	5.66	120.23	117.40
21	AA	756	C	C5-C4-N4	-5.66	116.24	120.20
21	AA	969	A	P-O5'-C5'	5.66	129.96	120.90
21	AA	1078	U	N3-C4-O4	5.66	123.36	119.40
26	AV	76	A	C2-N3-C4	-5.66	107.77	110.60
57	BB	298	G	C4-N9-C1'	5.66	133.86	126.50
57	BB	305	C	N1-C2-N3	5.66	123.16	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	477	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	821	A	C5-C6-N6	-5.66	119.17	123.70
57	BB	2075	U	N3-C4-C5	-5.66	111.20	114.60
57	BB	2285	C	N1-C2-N3	-5.66	115.24	119.20
57	BB	2384	U	N3-C4-C5	5.66	118.00	114.60
57	BB	2669	G	O4'-C1'-N9	5.66	112.73	108.20
57	BB	2690	U	P-O3'-C3'	5.66	126.50	119.70
21	AA	32	A	P-O3'-C3'	5.66	126.50	119.70
21	AA	191	G	N3-C4-C5	-5.66	125.77	128.60
25	AZ	332	PHE	N-CA-CB	5.66	120.79	110.60
57	BB	1054	A	C5-C6-N6	-5.66	119.17	123.70
57	BB	1448	G	N7-C8-N9	5.66	115.93	113.10
21	AA	231	U	N1-C1'-C2'	-5.66	105.77	112.00
21	AA	1162	C	C5'-C4'-C3'	-5.66	106.94	116.00
24	AX	17	U	O4'-C1'-N1	5.66	112.73	108.20
57	BB	624	C	N3-C4-N4	5.66	121.96	118.00
57	BB	637	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	813	U	N1-C2-O2	-5.66	118.84	122.80
57	BB	838	C	O4'-C1'-N1	5.66	112.73	108.20
57	BB	1088	A	O4'-C1'-N9	5.66	112.73	108.20
57	BB	1415	U	N1-C2-N3	-5.66	111.50	114.90
57	BB	1431	A	C5-C6-N1	-5.66	114.87	117.70
57	BB	1496	A	C4'-C3'-C2'	-5.66	96.94	102.60
57	BB	1929	G	P-O3'-C3'	5.66	126.49	119.70
21	AA	785	G	N1-C6-O6	5.66	123.30	119.90
21	AA	963	G	O4'-C4'-C3'	-5.66	98.34	104.00
21	AA	1347	G	C5-C6-O6	-5.66	125.20	128.60
21	AA	1488	G	O4'-C4'-C3'	-5.66	98.34	104.00
21	AA	1532	U	N3-C4-O4	5.66	123.36	119.40
57	BB	605	G	C4'-C3'-C2'	-5.66	96.94	102.60
57	BB	1021	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	1360	G	C8-N9-C4	-5.66	104.14	106.40
57	BB	1605	C	C2-N3-C4	5.66	122.73	119.90
57	BB	1788	C	N1-C1'-C2'	-5.66	105.78	112.00
57	BB	2491	U	C2-N1-C1'	5.66	124.49	117.70
57	BB	2494	G	O4'-C1'-N9	5.66	112.73	108.20
57	BB	2560	A	C4-C5-C6	5.66	119.83	117.00
57	BB	2784	U	N1-C2-N3	5.66	118.30	114.90
57	BB	2889	C	C1'-O4'-C4'	-5.66	105.37	109.90
21	AA	119	A	C4-C5-C6	5.66	119.83	117.00
21	AA	122	G	P-O3'-C3'	-5.66	112.91	119.70
21	AA	909	A	C4-C5-N7	-5.66	107.87	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	379	G	N7-C8-N9	-5.66	110.27	113.10
57	BB	599	A	N3-C4-C5	-5.66	122.84	126.80
21	AA	170	U	C4-C5-C6	-5.66	116.31	119.70
21	AA	355	C	N3-C4-C5	-5.66	119.64	121.90
21	AA	610	U	N3-C2-O2	-5.66	118.24	122.20
21	AA	1393	U	N3-C4-O4	5.66	123.36	119.40
21	AA	1517	G	C1'-O4'-C4'	5.66	114.42	109.90
25	AZ	88	VAL	CG1-CB-CG2	5.66	119.95	110.90
26	AV	57	A	C4-C5-C6	5.66	119.83	117.00
36	BQ	52	ARG	NH1-CZ-NH2	-5.66	113.18	119.40
57	BB	7	G	C3'-C2'-C1'	5.66	106.03	101.50
57	BB	13	A	C3'-C2'-C1'	-5.66	96.98	101.50
57	BB	1360	G	P-O3'-C3'	-5.66	112.91	119.70
57	BB	1436	G	C5-C6-O6	-5.66	125.21	128.60
57	BB	1681	G	C6-C5-N7	-5.66	127.01	130.40
57	BB	2154	A	C4-C5-N7	-5.66	107.87	110.70
57	BB	2314	A	C5-C6-N1	-5.66	114.87	117.70
57	BB	2487	G	C5-N7-C8	-5.66	101.47	104.30
57	BB	2583	G	N1-C2-N2	-5.66	111.11	116.20
20	AI	28	VAL	CG1-CB-CG2	5.65	119.95	110.90
21	AA	1403	C	C4'-C3'-C2'	5.65	108.25	102.60
26	AV	37	A	C4-C5-C6	5.65	119.83	117.00
57	BB	247	G	P-O5'-C5'	-5.65	111.85	120.90
57	BB	291	G	C8-N9-C4	-5.65	104.14	106.40
57	BB	328	U	C6-N1-C2	5.65	124.39	121.00
57	BB	355	U	O4'-C4'-C3'	-5.65	98.35	104.00
57	BB	778	G	C1'-O4'-C4'	5.65	114.42	109.90
57	BB	1492	G	C4-C5-N7	5.65	113.06	110.80
57	BB	1813	G	N1-C2-N3	-5.65	120.51	123.90
57	BB	1928	A	C8-N9-C4	-5.65	103.54	105.80
57	BB	2182	U	C2-N3-C4	5.65	130.39	127.00
58	BA	87	U	C4-C5-C6	5.65	123.09	119.70
9	AR	62	ARG	NE-CZ-NH1	5.65	123.13	120.30
21	AA	169	C	C6-N1-C2	5.65	122.56	120.30
21	AA	1522	U	O4'-C1'-N1	5.65	112.72	108.20
26	AV	9	G	P-O3'-C3'	-5.65	112.92	119.70
50	B3	9	ALA	N-CA-CB	5.65	118.01	110.10
55	BG	93	TYR	CG-CD2-CE2	-5.65	116.78	121.30
57	BB	60	G	C6-N1-C2	-5.65	121.71	125.10
57	BB	69	C	P-O3'-C3'	-5.65	112.92	119.70
57	BB	591	U	C5-C4-O4	-5.65	122.51	125.90
57	BB	635	C	N3-C4-N4	5.65	121.96	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	845	A	C5-N7-C8	5.65	106.73	103.90
57	BB	1110	G	C5-C6-O6	-5.65	125.21	128.60
57	BB	1491	G	C2-N3-C4	5.65	114.73	111.90
57	BB	1949	G	N7-C8-N9	5.65	115.93	113.10
57	BB	2003	A	N3-C4-N9	5.65	131.92	127.40
57	BB	2041	U	C6-N1-C2	-5.65	117.61	121.00
57	BB	2313	C	C4'-C3'-C2'	-5.65	96.95	102.60
57	BB	2458	G	C6-C5-N7	-5.65	127.01	130.40
57	BB	2751	G	C6-N1-C2	5.65	128.49	125.10
57	BB	2758	A	C4-C5-N7	-5.65	107.87	110.70
15	AD	62	ARG	NH1-CZ-NH2	-5.65	113.18	119.40
21	AA	56	U	O4'-C1'-N1	5.65	112.72	108.20
21	AA	225	C	C4-C5-C6	5.65	120.22	117.40
21	AA	1057	G	N1-C6-O6	5.65	123.29	119.90
21	AA	1502	A	N7-C8-N9	-5.65	110.97	113.80
57	BB	239	C	O4'-C1'-N1	5.65	112.72	108.20
57	BB	249	C	C1'-O4'-C4'	-5.65	105.38	109.90
57	BB	461	C	N3-C4-N4	5.65	121.96	118.00
57	BB	990	A	O4'-C1'-N9	5.65	112.72	108.20
57	BB	1048	A	C5-C6-N6	-5.65	119.18	123.70
57	BB	1512	C	C4-C5-C6	5.65	120.22	117.40
57	BB	1941	C	N3-C2-O2	-5.65	117.94	121.90
57	BB	1980	G	C5-C6-N1	-5.65	108.67	111.50
57	BB	2152	G	C8-N9-C4	5.65	108.66	106.40
57	BB	2246	G	P-O3'-C3'	-5.65	112.92	119.70
21	AA	160	A	N3-C4-C5	-5.65	122.85	126.80
21	AA	180	U	P-O3'-C3'	-5.65	112.92	119.70
21	AA	602	A	N3-C4-C5	-5.65	122.85	126.80
21	AA	1393	U	C5-C6-N1	-5.65	119.88	122.70
22	AY	62	A	C5-C6-N1	-5.65	114.88	117.70
57	BB	2750	A	O4'-C1'-N9	5.65	112.72	108.20
21	AA	193	C	C5-C4-N4	-5.65	116.25	120.20
21	AA	248	C	C4-C5-C6	5.65	120.22	117.40
21	AA	389	A	C1'-O4'-C4'	5.65	114.42	109.90
21	AA	493	A	C2-N3-C4	5.65	113.42	110.60
21	AA	691	G	N1-C2-N2	-5.65	111.12	116.20
21	AA	969	A	C1'-O4'-C4'	-5.65	105.38	109.90
21	AA	1133	G	C5'-C4'-O4'	5.65	115.88	109.10
21	AA	1466	C	N3-C4-N4	5.65	121.95	118.00
57	BB	75	G	C5'-C4'-C3'	-5.65	106.96	116.00
57	BB	461	C	C2-N3-C4	5.65	122.72	119.90
57	BB	553	G	C4-C5-C6	5.65	122.19	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1878	G	C5-C6-N1	-5.65	108.68	111.50
57	BB	2227	A	C5-C6-N6	-5.65	119.18	123.70
57	BB	2276	G	C5-C6-O6	-5.65	125.21	128.60
57	BB	2800	A	O4'-C4'-C3'	-5.65	98.35	104.00
57	BB	2853	C	N1-C2-O2	5.65	122.29	118.90
58	BA	114	C	N3-C2-O2	5.65	125.85	121.90
21	AA	1067	A	P-O5'-C5'	5.65	129.93	120.90
21	AA	1315	U	C1'-O4'-C4'	-5.65	105.38	109.90
21	AA	1489	G	N1-C6-O6	5.65	123.29	119.90
57	BB	1012	U	N1-C2-O2	-5.65	118.85	122.80
57	BB	1902	C	C2-N1-C1'	5.65	125.01	118.80
57	BB	1922	G	N9-C4-C5	5.65	107.66	105.40
57	BB	2007	U	P-O3'-C3'	-5.65	112.92	119.70
57	BB	2121	G	N1-C2-N3	-5.65	120.51	123.90
18	AG	94	ARG	NH1-CZ-NH2	-5.64	113.19	119.40
21	AA	492	C	O5'-P-OP2	-5.64	100.62	105.70
21	AA	912	C	C5-C6-N1	5.64	123.82	121.00
25	AZ	198	TYR	CB-CG-CD2	5.64	124.39	121.00
26	AV	5	G	P-O5'-C5'	-5.64	111.87	120.90
57	BB	687	C	N1-C2-O2	-5.64	115.51	118.90
57	BB	771	G	C1'-O4'-C4'	5.64	114.42	109.90
57	BB	1123	C	C5-C4-N4	-5.64	116.25	120.20
57	BB	1474	U	N3-C2-O2	5.64	126.15	122.20
57	BB	1738	G	C4-N9-C1'	-5.64	119.16	126.50
57	BB	1825	U	C2-N3-C4	-5.64	123.61	127.00
57	BB	2224	G	C6-C5-N7	-5.64	127.01	130.40
57	BB	2415	G	C6-N1-C2	5.64	128.49	125.10
57	BB	2684	U	C3'-C2'-C1'	5.64	106.02	101.50
13	AB	29	PHE	CB-CG-CD2	5.64	124.75	120.80
18	AG	110	ARG	NE-CZ-NH1	5.64	123.12	120.30
21	AA	274	A	C8-N9-C4	5.64	108.06	105.80
21	AA	462	G	N9-C4-C5	-5.64	103.14	105.40
21	AA	470	C	C2-N3-C4	5.64	122.72	119.90
21	AA	661	G	C4-C5-C6	5.64	122.19	118.80
21	AA	929	G	O4'-C4'-C3'	-5.64	98.36	104.00
54	BF	126	ASN	CB-CG-OD1	-5.64	110.31	121.60
57	BB	39	G	N9-C4-C5	-5.64	103.14	105.40
57	BB	1514	G	C6-C5-N7	-5.64	127.02	130.40
57	BB	1521	G	P-O3'-C3'	5.64	126.47	119.70
57	BB	1563	U	N3-C2-O2	5.64	126.15	122.20
57	BB	2003	A	C3'-C2'-C1'	-5.64	96.99	101.50
57	BB	2090	A	C4'-C3'-C2'	-5.64	96.96	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2336	A	C4-C5-C6	5.64	119.82	117.00
57	BB	2899	A	C4-C5-C6	5.64	119.82	117.00
21	AA	256	U	C2-N3-C4	-5.64	123.61	127.00
24	AX	14	A	N7-C8-N9	5.64	116.62	113.80
52	BD	11	MET	CG-SD-CE	-5.64	91.17	100.20
57	BB	1140	C	C6-N1-C1'	5.64	127.57	120.80
57	BB	1479	G	O4'-C1'-N9	5.64	112.71	108.20
57	BB	1733	G	N1-C2-N3	-5.64	120.52	123.90
57	BB	2887	A	C8-N9-C4	-5.64	103.54	105.80
21	AA	313	A	C4-C5-N7	-5.64	107.88	110.70
21	AA	382	A	C5-N7-C8	5.64	106.72	103.90
21	AA	430	A	C5-N7-C8	5.64	106.72	103.90
21	AA	990	C	C1'-O4'-C4'	-5.64	105.39	109.90
21	AA	1016	A	C4-C5-N7	-5.64	107.88	110.70
21	AA	1029	U	C4-C5-C6	5.64	123.08	119.70
21	AA	1079	G	N3-C4-C5	-5.64	125.78	128.60
21	AA	1380	U	N3-C4-O4	5.64	123.35	119.40
21	AA	1482	G	N7-C8-N9	-5.64	110.28	113.10
21	AA	1515	G	C1'-O4'-C4'	-5.64	105.39	109.90
23	AW	65	G	C8-N9-C1'	5.64	134.33	127.00
57	BB	113	U	C4'-C3'-C2'	5.64	108.24	102.60
57	BB	310	A	N1-C2-N3	5.64	132.12	129.30
57	BB	372	G	O4'-C1'-N9	5.64	112.71	108.20
57	BB	892	A	N7-C8-N9	5.64	116.62	113.80
57	BB	2220	U	C6-N1-C2	5.64	124.38	121.00
57	BB	2327	A	O4'-C1'-N9	5.64	112.71	108.20
21	AA	384	G	C5-C6-O6	-5.64	125.22	128.60
21	AA	502	A	N9-C4-C5	5.64	108.06	105.80
21	AA	540	G	C5'-C4'-C3'	5.64	125.02	116.00
21	AA	1480	A	C5-C6-N1	-5.64	114.88	117.70
57	BB	121	G	N1-C2-N3	-5.64	120.52	123.90
57	BB	580	U	C2-N1-C1'	-5.64	110.93	117.70
57	BB	604	G	C4-N9-C1'	-5.64	119.17	126.50
57	BB	810	U	N3-C2-O2	5.64	126.15	122.20
57	BB	961	C	N3-C4-N4	5.64	121.95	118.00
57	BB	1562	U	P-O5'-C5'	5.64	129.92	120.90
57	BB	1783	A	C2-N3-C4	5.64	113.42	110.60
57	BB	2824	C	OP1-P-OP2	-5.64	111.14	119.60
5	AN	85	GLU	N-CA-CB	5.64	120.74	110.60
21	AA	341	C	C5-C4-N4	-5.64	116.25	120.20
21	AA	769	G	O4'-C1'-N9	5.64	112.71	108.20
21	AA	838	G	C5'-C4'-O4'	5.64	115.86	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1339	A	N7-C8-N9	5.64	116.62	113.80
21	AA	1413	A	C8-N9-C4	-5.64	103.55	105.80
21	AA	1434	A	C5-N7-C8	5.64	106.72	103.90
22	AY	39	U	C5'-C4'-C3'	-5.64	106.98	116.00
24	AX	18	G	N3-C2-N2	5.64	123.85	119.90
26	AV	6	G	O4'-C4'-C3'	-5.64	98.36	104.00
26	AV	46	G	O4'-C1'-N9	5.64	112.71	108.20
57	BB	269	C	C1'-O4'-C4'	-5.64	105.39	109.90
57	BB	605	G	N3-C4-C5	-5.64	125.78	128.60
57	BB	1032	A	P-O5'-C5'	-5.64	111.88	120.90
57	BB	1384	A	O5'-P-OP2	5.64	117.46	110.70
57	BB	1564	C	C6-N1-C2	-5.64	118.05	120.30
57	BB	1766	G	P-O3'-C3'	-5.64	112.94	119.70
57	BB	2053	G	N9-C1'-C2'	-5.64	105.80	112.00
57	BB	2115	G	C8-N9-C1'	-5.64	119.67	127.00
57	BB	2371	G	C4-C5-N7	-5.64	108.55	110.80
57	BB	2472	G	C2-N3-C4	-5.64	109.08	111.90
57	BB	2844	G	O4'-C1'-N9	5.64	112.71	108.20
21	AA	12	U	C2-N3-C4	-5.63	123.62	127.00
35	BP	89	GLY	N-CA-C	-5.63	99.02	113.10
57	BB	206	U	N1-C2-O2	5.63	126.74	122.80
57	BB	281	C	N3-C2-O2	-5.63	117.96	121.90
57	BB	442	G	C6-N1-C2	5.63	128.48	125.10
57	BB	532	A	P-O5'-C5'	5.63	129.91	120.90
57	BB	629	G	N9-C4-C5	-5.63	103.15	105.40
57	BB	1456	G	N3-C4-N9	5.63	129.38	126.00
57	BB	1597	A	N7-C8-N9	5.63	116.62	113.80
57	BB	1785	A	C5-N7-C8	5.63	106.72	103.90
57	BB	2547	A	P-O5'-C5'	-5.63	111.88	120.90
57	BB	2574	G	C1'-O4'-C4'	-5.63	105.39	109.90
57	BB	2741	A	C6-C5-N7	-5.63	128.36	132.30
57	BB	2747	G	C8-N9-C1'	-5.63	119.68	127.00
57	BB	2749	A	O4'-C1'-N9	5.63	112.71	108.20
21	AA	9	G	O4'-C4'-C3'	-5.63	98.37	104.00
21	AA	451	A	C5-N7-C8	5.63	106.72	103.90
21	AA	903	G	C5-C6-N1	-5.63	108.68	111.50
21	AA	1006	G	O4'-C1'-N9	5.63	112.71	108.20
21	AA	1061	G	C6-C5-N7	-5.63	127.02	130.40
21	AA	1142	G	C4-C5-N7	-5.63	108.55	110.80
21	AA	1204	A	C5-C6-N1	-5.63	114.88	117.70
23	AW	6	G	N1-C6-O6	5.63	123.28	119.90
57	BB	456	C	C2-N3-C4	5.63	122.72	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	824	U	C6-N1-C1'	5.63	129.09	121.20
57	BB	2374	C	C4-C5-C6	5.63	120.22	117.40
57	BB	2661	G	P-O5'-C5'	-5.63	111.89	120.90
8	AQ	39	ARG	NE-CZ-NH2	-5.63	117.48	120.30
21	AA	139	A	C2-N3-C4	5.63	113.42	110.60
21	AA	535	A	C3'-C2'-C1'	-5.63	96.99	101.50
21	AA	1061	G	C5-C6-N1	-5.63	108.68	111.50
21	AA	1093	A	C5'-C4'-C3'	5.63	125.01	116.00
21	AA	1450	U	P-O3'-C3'	5.63	126.46	119.70
22	AY	60	C	P-O5'-C5'	5.63	129.91	120.90
49	B2	28	ARG	NH1-CZ-NH2	-5.63	113.20	119.40
57	BB	850	U	C5-C4-O4	-5.63	122.52	125.90
57	BB	1370	C	C4'-C3'-C2'	-5.63	96.97	102.60
57	BB	1445	G	C2-N3-C4	-5.63	109.08	111.90
57	BB	2075	U	C1'-O4'-C4'	5.63	114.41	109.90
57	BB	2597	G	C6-C5-N7	-5.63	127.02	130.40
57	BB	2849	U	O4'-C1'-C2'	-5.63	100.17	105.80
58	BA	26	C	C5-C6-N1	5.63	123.82	121.00
21	AA	362	G	N3-C4-N9	5.63	129.38	126.00
25	AZ	314	ASP	CB-CG-OD1	5.63	123.37	118.30
53	BE	69	ARG	NE-CZ-NH2	-5.63	117.48	120.30
57	BB	2379	G	C5-C6-N1	-5.63	108.69	111.50
21	AA	637	C	P-O5'-C5'	5.63	129.91	120.90
21	AA	805	C	C6-N1-C2	-5.63	118.05	120.30
21	AA	1166	G	C2-N3-C4	5.63	114.71	111.90
21	AA	1392	G	O4'-C4'-C3'	-5.63	98.37	104.00
21	AA	1422	G	O4'-C4'-C3'	-5.63	98.37	104.00
21	AA	1479	C	C5-C4-N4	-5.63	116.26	120.20
24	AX	18	G	C5'-C4'-C3'	-5.63	106.99	116.00
57	BB	83	A	C3'-C2'-C1'	5.63	106.00	101.50
57	BB	371	A	N1-C6-N6	5.63	121.98	118.60
57	BB	394	C	OP1-P-OP2	-5.63	111.16	119.60
57	BB	488	G	N3-C4-N9	-5.63	122.62	126.00
57	BB	537	G	N1-C6-O6	5.63	123.28	119.90
57	BB	646	U	C3'-C2'-C1'	5.63	106.00	101.50
57	BB	1432	G	N1-C6-O6	5.63	123.28	119.90
57	BB	2685	G	O5'-P-OP1	-5.63	100.64	105.70
57	BB	2876	G	C2-N3-C4	-5.63	109.09	111.90
57	BB	2889	C	C5-C6-N1	5.63	123.81	121.00
58	BA	60	C	N3-C2-O2	5.63	125.84	121.90
9	AR	72	ARG	NH1-CZ-NH2	-5.63	113.21	119.40
21	AA	222	C	C3'-C2'-C1'	-5.63	97.00	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	298	A	N9-C1'-C2'	-5.63	105.81	112.00
21	AA	299	G	P-O3'-C3'	5.63	126.45	119.70
21	AA	1388	C	C6-N1-C2	-5.63	118.05	120.30
26	AV	37	A	N9-C4-C5	5.63	108.05	105.80
55	BG	151	ARG	NE-CZ-NH1	5.63	123.11	120.30
57	BB	663	G	N3-C2-N2	5.63	123.84	119.90
57	BB	1208	C	C2-N1-C1'	-5.63	112.61	118.80
57	BB	1441	G	N9-C4-C5	-5.63	103.15	105.40
57	BB	2496	C	C5-C6-N1	5.63	123.81	121.00
57	BB	2663	G	C4'-C3'-C2'	-5.63	96.97	102.60
5	AN	19	TYR	CG-CD2-CE2	5.62	125.80	121.30
53	BE	87	ALA	CB-CA-C	-5.62	101.66	110.10
57	BB	114	U	C5-C4-O4	-5.62	122.53	125.90
57	BB	293	U	C4-C5-C6	5.62	123.08	119.70
57	BB	595	C	C2-N3-C4	5.62	122.71	119.90
57	BB	1063	G	C8-N9-C4	-5.62	104.15	106.40
57	BB	1218	G	N3-C2-N2	5.62	123.84	119.90
57	BB	1262	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	1681	G	N1-C6-O6	5.62	123.28	119.90
57	BB	2218	G	O5'-C5'-C4'	-5.62	101.01	111.70
57	BB	2771	C	C2-N1-C1'	5.62	124.99	118.80
57	BB	2811	G	C5-N7-C8	-5.62	101.49	104.30
21	AA	171	A	N3-C4-C5	-5.62	122.86	126.80
21	AA	307	C	C6-N1-C2	-5.62	118.05	120.30
21	AA	674	G	P-O3'-C3'	-5.62	112.95	119.70
21	AA	1077	G	C4'-C3'-C2'	-5.62	96.98	102.60
21	AA	1157	A	C8-N9-C4	-5.62	103.55	105.80
22	AY	29	A	C4-C5-C6	5.62	119.81	117.00
23	AW	28	G	N3-C2-N2	5.62	123.84	119.90
43	BX	48	LEU	N-CA-C	-5.62	95.81	111.00
52	BD	61	THR	CA-CB-CG2	-5.62	104.53	112.40
57	BB	54	G	N3-C4-C5	5.62	131.41	128.60
57	BB	98	G	C5-C6-N1	-5.62	108.69	111.50
57	BB	332	A	C6-C5-N7	-5.62	128.36	132.30
57	BB	482	A	C8-N9-C4	-5.62	103.55	105.80
57	BB	882	G	N9-C4-C5	-5.62	103.15	105.40
57	BB	1268	A	C4-C5-C6	5.62	119.81	117.00
57	BB	1537	G	C8-N9-C4	-5.62	104.15	106.40
57	BB	2139	U	N3-C4-C5	5.62	117.97	114.60
57	BB	2174	C	P-O5'-C5'	-5.62	111.90	120.90
57	BB	2694	G	N7-C8-N9	-5.62	110.29	113.10
57	BB	2712	C	P-O3'-C3'	5.62	126.45	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2743	U	C5'-C4'-O4'	5.62	115.85	109.10
21	AA	353	A	C5'-C4'-C3'	5.62	124.99	116.00
21	AA	458	U	C2-N3-C4	-5.62	123.63	127.00
21	AA	1131	G	C2-N3-C4	5.62	114.71	111.90
21	AA	1353	G	C6-N1-C2	5.62	128.47	125.10
21	AA	1453	G	C6-N1-C2	5.62	128.47	125.10
21	AA	1468	A	C4-N9-C1'	5.62	136.42	126.30
22	AY	33	U	N1-C2-N3	-5.62	111.53	114.90
56	BH	108	VAL	CA-CB-CG1	-5.62	102.47	110.90
57	BB	55	G	C4'-C3'-C2'	-5.62	96.98	102.60
57	BB	257	C	N3-C4-C5	-5.62	119.65	121.90
57	BB	329	G	C3'-C2'-C1'	-5.62	97.00	101.50
57	BB	393	C	N1-C2-O2	-5.62	115.53	118.90
57	BB	718	A	O4'-C1'-N9	5.62	112.70	108.20
57	BB	739	A	N1-C6-N6	5.62	121.97	118.60
57	BB	747	U	C3'-C2'-C1'	5.62	106.00	101.50
57	BB	1364	G	N1-C6-O6	5.62	123.27	119.90
57	BB	1447	C	N3-C4-N4	5.62	121.94	118.00
57	BB	1509	A	P-O5'-C5'	-5.62	111.91	120.90
57	BB	2864	G	C5-N7-C8	5.62	107.11	104.30
57	BB	2901	C	C5-C4-N4	-5.62	116.27	120.20
21	AA	1040	U	N3-C4-O4	5.62	123.33	119.40
21	AA	1226	C	C2-N3-C4	-5.62	117.09	119.90
33	BN	110	MET	CG-SD-CE	-5.62	91.21	100.20
57	BB	629	G	C4-C5-C6	-5.62	115.43	118.80
57	BB	1453	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	2238	G	C3'-C2'-C1'	5.62	106.00	101.50
57	BB	2298	A	C6-C5-N7	-5.62	128.37	132.30
57	BB	2737	G	N1-C2-N3	-5.62	120.53	123.90
15	AD	168	THR	CA-CB-CG2	-5.62	104.53	112.40
21	AA	741	G	N3-C4-N9	-5.62	122.63	126.00
57	BB	109	C	P-O3'-C3'	-5.62	112.96	119.70
57	BB	605	G	C1'-O4'-C4'	-5.62	105.40	109.90
57	BB	1359	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	1451	C	N1-C1'-C2'	-5.62	105.82	112.00
57	BB	1481	U	N1-C2-N3	-5.62	111.53	114.90
57	BB	1718	G	N1-C6-O6	5.62	123.27	119.90
57	BB	2268	A	C5'-C4'-C3'	-5.62	107.01	116.00
57	BB	2488	G	N1-C6-O6	5.62	123.27	119.90
21	AA	233	C	N1-C2-O2	-5.62	115.53	118.90
21	AA	243	A	C4'-C3'-C2'	5.62	108.22	102.60
57	BB	689	A	C4-C5-N7	-5.62	107.89	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1483	G	O5'-C5'-C4'	-5.62	101.03	111.70
57	BB	1508	A	N3-C4-C5	-5.62	122.87	126.80
57	BB	1850	G	P-O5'-C5'	5.62	129.89	120.90
4	AM	65	GLU	C-N-CA	5.62	134.09	122.30
5	AN	41	TRP	N-CA-CB	5.62	120.71	110.60
21	AA	1022	A	O4'-C1'-N9	5.62	112.69	108.20
21	AA	1099	G	N3-C4-C5	5.62	131.41	128.60
56	BH	139	PHE	CB-CG-CD2	5.62	124.73	120.80
57	BB	541	A	P-O3'-C3'	-5.62	112.96	119.70
57	BB	788	A	C4-C5-N7	-5.62	107.89	110.70
57	BB	878	A	N1-C2-N3	5.62	132.11	129.30
57	BB	1031	G	C5-C6-N1	-5.62	108.69	111.50
57	BB	1488	C	C3'-C2'-C1'	-5.62	97.01	101.50
57	BB	1494	A	C5-C6-N1	-5.62	114.89	117.70
57	BB	1500	G	C6-C5-N7	-5.62	127.03	130.40
57	BB	1931	U	O4'-C4'-C3'	-5.62	98.39	104.00
57	BB	2027	G	P-O3'-C3'	-5.62	112.96	119.70
57	BB	2145	C	OP1-P-OP2	-5.62	111.18	119.60
57	BB	2851	A	C3'-C2'-C1'	5.62	105.99	101.50
23	AW	27	G	P-O5'-C5'	-5.61	111.92	120.90
39	BT	46	ALA	N-CA-CB	5.61	117.96	110.10
57	BB	363	G	C4-N9-C1'	-5.61	119.20	126.50
57	BB	536	G	N7-C8-N9	-5.61	110.29	113.10
57	BB	811	U	O4'-C1'-N1	5.61	112.69	108.20
57	BB	814	C	C5-C6-N1	-5.61	118.19	121.00
57	BB	1489	C	C5-C6-N1	5.61	123.81	121.00
57	BB	1800	C	C6-N1-C1'	5.61	127.54	120.80
57	BB	2512	C	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	2576	G	P-O3'-C3'	-5.61	112.96	119.70
57	BB	2654	A	O4'-C1'-N9	5.61	112.69	108.20
1	AJ	14	ASP	CB-CG-OD2	5.61	123.35	118.30
21	AA	331	G	C6-C5-N7	-5.61	127.03	130.40
21	AA	367	U	C2-N3-C4	-5.61	123.63	127.00
21	AA	456	A	C5'-C4'-C3'	-5.61	107.02	116.00
26	AV	76	A	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	399	U	O4'-C1'-C2'	-5.61	100.19	105.80
57	BB	1043	C	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	1381	G	N9-C1'-C2'	-5.61	105.83	112.00
57	BB	2426	A	C8-N9-C4	-5.61	103.56	105.80
57	BB	2546	U	O4'-C1'-N1	5.61	112.69	108.20
21	AA	460	A	N7-C8-N9	-5.61	111.00	113.80
21	AA	1057	G	C2-N3-C4	5.61	114.71	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1385	G	O4'-C4'-C3'	-5.61	98.39	104.00
22	AY	66	A	C6-N1-C2	-5.61	115.23	118.60
26	AV	53	G	C8-N9-C4	5.61	108.64	106.40
57	BB	8	C	N1-C2-N3	-5.61	115.27	119.20
57	BB	668	A	C6-C5-N7	-5.61	128.37	132.30
57	BB	1653	G	C6-N1-C2	5.61	128.47	125.10
57	BB	2065	C	N1-C2-O2	5.61	122.27	118.90
57	BB	2387	U	N1-C2-O2	-5.61	118.87	122.80
57	BB	2757	A	C6-N1-C2	5.61	121.97	118.60
58	BA	61	G	C2-N3-C4	5.61	114.70	111.90
18	AG	53	SER	N-CA-CB	5.61	118.91	110.50
21	AA	464	U	C4-C5-C6	-5.61	116.33	119.70
57	BB	1750	G	O4'-C1'-N9	5.61	112.69	108.20
57	BB	1796	U	N1-C2-O2	-5.61	118.87	122.80
57	BB	2095	A	C2-N3-C4	-5.61	107.80	110.60
57	BB	2509	G	N3-C4-N9	5.61	129.37	126.00
21	AA	387	U	N1-C2-N3	5.61	118.26	114.90
21	AA	501	C	C4'-C3'-C2'	-5.61	96.99	102.60
21	AA	709	U	C2-N3-C4	-5.61	123.64	127.00
21	AA	1212	U	C1'-O4'-C4'	-5.61	105.41	109.90
57	BB	96	C	O4'-C1'-C2'	-5.61	100.19	105.80
57	BB	380	G	C5-C6-O6	-5.61	125.23	128.60
57	BB	446	G	C3'-C2'-C1'	5.61	105.99	101.50
57	BB	573	U	C1'-O4'-C4'	5.61	114.39	109.90
57	BB	733	G	C6-N1-C2	5.61	128.47	125.10
57	BB	1252	G	C6-C5-N7	-5.61	127.03	130.40
57	BB	2120	G	C5-C6-O6	-5.61	125.23	128.60
57	BB	2507	C	C5-C4-N4	-5.61	116.27	120.20
57	BB	2565	A	C4-C5-N7	-5.61	107.90	110.70
57	BB	2879	A	N7-C8-N9	5.61	116.60	113.80
58	BA	94	A	C4-C5-C6	5.61	119.80	117.00
21	AA	761	G	N1-C2-N3	-5.61	120.54	123.90
21	AA	796	C	N3-C2-O2	5.61	125.82	121.90
21	AA	1018	G	P-O5'-C5'	5.61	129.87	120.90
21	AA	1143	G	N3-C2-N2	5.61	123.82	119.90
21	AA	1158	C	O4'-C4'-C3'	-5.61	98.39	104.00
22	AY	17	U	N3-C4-C5	-5.61	111.24	114.60
26	AV	61	C	C6-N1-C1'	5.61	127.53	120.80
57	BB	119	A	C1'-O4'-C4'	-5.61	105.42	109.90
57	BB	251	A	C4-C5-N7	-5.61	107.90	110.70
57	BB	301	G	C5'-C4'-O4'	5.61	115.83	109.10
57	BB	447	A	C5-C6-N1	-5.61	114.90	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	644	A	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	708	G	N7-C8-N9	-5.61	110.30	113.10
57	BB	735	A	C1'-O4'-C4'	5.61	114.39	109.90
57	BB	1278	C	C4'-C3'-C2'	-5.61	96.99	102.60
57	BB	1444	G	C5-C6-N1	5.61	114.30	111.50
57	BB	1986	C	N3-C2-O2	-5.61	117.98	121.90
57	BB	2099	U	C4-C5-C6	5.61	123.06	119.70
57	BB	2116	G	C4-C5-C6	5.61	122.16	118.80
57	BB	2183	A	C6-C5-N7	-5.61	128.38	132.30
58	BA	38	C	C5-C4-N4	-5.61	116.28	120.20
21	AA	169	C	N1-C2-O2	5.60	122.26	118.90
21	AA	392	C	P-O5'-C5'	5.60	129.87	120.90
21	AA	1003	G	C4-N9-C1'	-5.60	119.21	126.50
21	AA	1027	C	N3-C2-O2	-5.60	117.98	121.90
21	AA	1148	U	P-O3'-C3'	-5.60	112.98	119.70
21	AA	1227	A	N7-C8-N9	5.60	116.60	113.80
21	AA	1238	A	C8-N9-C4	-5.60	103.56	105.80
24	AX	16	A	N3-C4-C5	-5.60	122.88	126.80
27	B5	19	LYS	CB-CA-C	-5.60	99.19	110.40
41	BV	37	PRO	N-CA-CB	5.60	110.02	103.30
57	BB	554	U	N3-C4-C5	-5.60	111.24	114.60
57	BB	891	G	N9-C1'-C2'	-5.60	105.84	112.00
57	BB	998	C	C5-C4-N4	-5.60	116.28	120.20
57	BB	1634	A	C5-C6-N6	-5.60	119.22	123.70
57	BB	2161	C	N3-C4-N4	5.60	121.92	118.00
57	BB	2244	U	N1-C2-N3	-5.60	111.54	114.90
58	BA	97	C	C3'-C2'-C1'	-5.60	97.02	101.50
21	AA	39	G	O4'-C1'-N9	5.60	112.68	108.20
21	AA	452	A	C4-C5-N7	-5.60	107.90	110.70
21	AA	875	U	C5-C4-O4	-5.60	122.54	125.90
21	AA	952	U	N3-C2-O2	-5.60	118.28	122.20
21	AA	1274	A	O4'-C1'-N9	5.60	112.68	108.20
23	AW	34	G	N1-C2-N3	-5.60	120.54	123.90
35	BP	79	VAL	CA-CB-CG1	-5.60	102.50	110.90
55	BG	54	ARG	N-CA-C	-5.60	95.87	111.00
57	BB	745	G	C4'-C3'-C2'	-5.60	97.00	102.60
57	BB	1198	U	O4'-C4'-C3'	-5.60	98.40	104.00
57	BB	1446	C	C2-N3-C4	5.60	122.70	119.90
57	BB	1630	A	C4-C5-C6	-5.60	114.20	117.00
57	BB	1797	G	N3-C2-N2	-5.60	115.98	119.90
57	BB	1870	C	C5-C4-N4	-5.60	116.28	120.20
57	BB	2451	A	C4-C5-N7	-5.60	107.90	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	74	A	N3-C4-N9	5.60	131.88	127.40
21	AA	164	G	N3-C4-N9	5.60	129.36	126.00
21	AA	231	U	C1'-O4'-C4'	-5.60	105.42	109.90
21	AA	616	G	N3-C4-N9	5.60	129.36	126.00
25	AZ	190	GLU	CB-CA-C	-5.60	99.20	110.40
57	BB	4	U	N1-C2-N3	-5.60	111.54	114.90
57	BB	488	G	N3-C4-C5	5.60	131.40	128.60
57	BB	1145	C	C4'-C3'-C2'	-5.60	97.00	102.60
57	BB	1359	A	C6-N1-C2	5.60	121.96	118.60
57	BB	1401	G	C4'-C3'-C2'	-5.60	97.00	102.60
57	BB	1403	A	N3-C4-N9	5.60	131.88	127.40
57	BB	1940	U	C5-C4-O4	-5.60	122.54	125.90
57	BB	2221	G	C6-N1-C2	5.60	128.46	125.10
57	BB	2488	G	C4-C5-N7	5.60	113.04	110.80
21	AA	35	G	C6-C5-N7	-5.60	127.04	130.40
21	AA	46	G	C1'-O4'-C4'	-5.60	105.42	109.90
21	AA	200	G	C8-N9-C4	5.60	108.64	106.40
21	AA	779	C	C5-C4-N4	-5.60	116.28	120.20
21	AA	1125	U	C2-N3-C4	-5.60	123.64	127.00
21	AA	1401	G	N3-C2-N2	5.60	123.82	119.90
57	BB	89	A	N7-C8-N9	-5.60	111.00	113.80
57	BB	123	G	N9-C4-C5	-5.60	103.16	105.40
57	BB	607	U	P-O3'-C3'	-5.60	112.98	119.70
57	BB	728	G	O4'-C4'-C3'	5.60	110.58	106.10
57	BB	1478	G	O4'-C1'-N9	5.60	112.68	108.20
57	BB	2162	G	C4-C5-C6	5.60	122.16	118.80
57	BB	2238	G	C5-C6-O6	-5.60	125.24	128.60
57	BB	2255	G	C6-C5-N7	-5.60	127.04	130.40
57	BB	2394	C	C1'-O4'-C4'	5.60	114.38	109.90
57	BB	2483	C	N1-C2-O2	-5.60	115.54	118.90
57	BB	2553	G	N1-C6-O6	5.60	123.26	119.90
57	BB	2809	A	O4'-C4'-C3'	-5.60	98.40	104.00
57	BB	2845	U	P-O3'-C3'	-5.60	112.98	119.70
58	BA	15	A	C2-N3-C4	-5.60	107.80	110.60
21	AA	487	A	N1-C2-N3	-5.60	126.50	129.30
21	AA	531	U	P-O3'-C3'	5.60	126.42	119.70
21	AA	554	A	C4'-C3'-C2'	-5.60	97.00	102.60
21	AA	650	G	C5-C6-N1	-5.60	108.70	111.50
27	B5	16	ASP	N-CA-CB	5.60	120.67	110.60
57	BB	411	G	P-O5'-C5'	5.60	129.85	120.90
57	BB	906	U	C2-N3-C4	-5.60	123.64	127.00
57	BB	1429	G	C5-N7-C8	-5.60	101.50	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1524	G	C8-N9-C4	-5.60	104.16	106.40
57	BB	1932	A	O4'-C1'-N9	5.60	112.68	108.20
57	BB	2156	G	O4'-C1'-N9	5.60	112.68	108.20
21	AA	51	A	N1-C2-N3	5.60	132.10	129.30
21	AA	245	U	C6-N1-C2	5.60	124.36	121.00
21	AA	545	C	O5'-C5'-C4'	-5.60	101.07	111.70
41	BV	41	GLU	N-CA-CB	5.60	120.67	110.60
57	BB	774	G	C8-N9-C4	5.60	108.64	106.40
57	BB	1182	G	N7-C8-N9	-5.60	110.30	113.10
57	BB	2311	A	C6-C5-N7	-5.60	128.38	132.30
21	AA	200	G	C6-C5-N7	-5.59	127.04	130.40
21	AA	293	G	C5-N7-C8	5.59	107.10	104.30
21	AA	344	A	N9-C4-C5	5.59	108.04	105.80
21	AA	649	A	N1-C2-N3	5.59	132.10	129.30
21	AA	1005	A	C5-C6-N6	-5.59	119.22	123.70
26	AV	35	A	C1'-O4'-C4'	-5.59	105.42	109.90
57	BB	94	A	C8-N9-C4	-5.59	103.56	105.80
57	BB	353	C	C4-C5-C6	-5.59	114.60	117.40
57	BB	636	G	O4'-C1'-N9	5.59	112.68	108.20
57	BB	837	C	N3-C4-N4	5.59	121.92	118.00
57	BB	982	C	C2-N3-C4	5.59	122.70	119.90
57	BB	984	A	N9-C4-C5	5.59	108.04	105.80
57	BB	1005	C	N3-C4-N4	5.59	121.92	118.00
57	BB	1601	G	N3-C4-N9	-5.59	122.64	126.00
57	BB	2359	C	N3-C4-C5	-5.59	119.66	121.90
57	BB	2422	C	P-O5'-C5'	-5.59	111.95	120.90
58	BA	81	G	C4-C5-C6	5.59	122.16	118.80
21	AA	1037	C	P-O5'-C5'	-5.59	111.95	120.90
45	BC	235	GLU	CB-CA-C	-5.59	99.21	110.40
57	BB	1835	G	C6-C5-N7	-5.59	127.04	130.40
57	BB	2819	G	C5-N7-C8	-5.59	101.50	104.30
21	AA	26	A	C3'-C2'-C1'	-5.59	97.03	101.50
21	AA	1139	G	N3-C2-N2	5.59	123.81	119.90
22	AY	56	C	C6-N1-C2	-5.59	118.06	120.30
22	AY	74	C	P-O5'-C5'	5.59	129.85	120.90
57	BB	494	G	C5-N7-C8	-5.59	101.50	104.30
57	BB	507	A	C5-C6-N1	-5.59	114.91	117.70
57	BB	530	G	C6-C5-N7	-5.59	127.05	130.40
57	BB	570	G	N1-C2-N2	-5.59	111.17	116.20
57	BB	662	G	C4-C5-N7	5.59	113.04	110.80
57	BB	1106	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	1279	G	C4-C5-N7	-5.59	108.56	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2481	G	C5-C6-O6	-5.59	125.25	128.60
57	BB	2582	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	2717	C	C2-N3-C4	5.59	122.69	119.90
21	AA	44	A	C5-C6-N6	-5.59	119.23	123.70
21	AA	92	U	N1-C1'-C2'	-5.59	105.85	112.00
21	AA	127	G	N1-C2-N3	-5.59	120.55	123.90
21	AA	438	U	C3'-C2'-C1'	5.59	105.97	101.50
21	AA	827	U	O5'-P-OP2	5.59	117.41	110.70
21	AA	872	A	C4-C5-C6	5.59	119.80	117.00
21	AA	936	C	N1-C2-O2	-5.59	115.55	118.90
21	AA	1046	A	C8-N9-C4	5.59	108.04	105.80
21	AA	1137	C	C2-N1-C1'	5.59	124.95	118.80
21	AA	1177	G	O4'-C1'-N9	5.59	112.67	108.20
21	AA	1417	G	P-O5'-C5'	5.59	129.84	120.90
33	BN	118	ARG	NE-CZ-NH1	-5.59	117.50	120.30
46	BZ	52	PHE	CB-CG-CD2	-5.59	116.89	120.80
57	BB	418	C	N3-C4-N4	5.59	121.91	118.00
57	BB	654	A	C6-C5-N7	-5.59	128.39	132.30
57	BB	1036	G	C2-N3-C4	5.59	114.69	111.90
57	BB	1161	C	C4'-C3'-C2'	-5.59	97.01	102.60
57	BB	1307	A	N3-C4-N9	5.59	131.87	127.40
57	BB	1351	C	N3-C4-N4	5.59	121.91	118.00
57	BB	1682	G	N1-C6-O6	5.59	123.25	119.90
57	BB	1701	A	C4-C5-N7	-5.59	107.91	110.70
57	BB	1826	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	1958	C	C1'-O4'-C4'	5.59	114.37	109.90
57	BB	2391	G	C8-N9-C4	-5.59	104.16	106.40
57	BB	2803	G	N3-C2-N2	5.59	123.81	119.90
57	BB	2856	A	C6-C5-N7	-5.59	128.39	132.30
57	BB	2870	C	O4'-C1'-N1	5.59	112.67	108.20
21	AA	383	A	C2-N3-C4	5.59	113.39	110.60
21	AA	808	C	C5-C4-N4	5.59	124.11	120.20
21	AA	849	G	C1'-O4'-C4'	-5.59	105.43	109.90
21	AA	1408	A	N3-C4-N9	-5.59	122.93	127.40
22	AY	3	G	N3-C4-N9	5.59	129.35	126.00
57	BB	1	G	C8-N9-C4	-5.59	104.17	106.40
57	BB	1116	G	C8-N9-C4	5.59	108.64	106.40
57	BB	1139	G	C5-C6-O6	-5.59	125.25	128.60
57	BB	2281	A	N1-C2-N3	-5.59	126.51	129.30
57	BB	2285	C	N3-C4-C5	-5.59	119.67	121.90
57	BB	2633	G	C8-N9-C1'	5.59	134.26	127.00
57	BB	2742	G	C5-N7-C8	5.59	107.09	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	107	G	N7-C8-N9	5.59	115.89	113.10
21	AA	17	U	C2-N1-C1'	-5.59	111.00	117.70
21	AA	741	G	N3-C4-C5	5.59	131.39	128.60
21	AA	903	G	N3-C4-C5	5.59	131.39	128.60
21	AA	925	G	O4'-C1'-N9	5.59	112.67	108.20
21	AA	1456	A	C8-N9-C4	-5.59	103.56	105.80
26	AV	4	G	C4-C5-C6	5.59	122.15	118.80
28	BI	18	ASN	CB-CG-OD1	-5.59	110.43	121.60
57	BB	94	A	C5-C6-N1	-5.59	114.91	117.70
57	BB	99	U	C5'-C4'-O4'	5.59	115.80	109.10
57	BB	151	C	C5-C4-N4	-5.59	116.29	120.20
57	BB	561	G	O4'-C1'-N9	5.59	112.67	108.20
57	BB	2345	G	C5-C6-O6	5.59	131.95	128.60
57	BB	2677	G	N9-C4-C5	5.59	107.64	105.40
57	BB	2854	G	O4'-C1'-N9	5.59	112.67	108.20
58	BA	64	G	C3'-C2'-C1'	5.59	105.97	101.50
21	AA	821	G	C4-C5-C6	5.58	122.15	118.80
21	AA	1373	G	P-O3'-C3'	-5.58	113.00	119.70
22	AY	29	A	N7-C8-N9	5.58	116.59	113.80
57	BB	420	C	O4'-C1'-N1	5.58	112.67	108.20
57	BB	1280	G	C6-N1-C2	-5.58	121.75	125.10
57	BB	1705	A	C4-C5-C6	-5.58	114.21	117.00
58	BA	23	G	N1-C2-N3	-5.58	120.55	123.90
21	AA	471	U	N1-C2-N3	-5.58	111.55	114.90
21	AA	572	A	C4-C5-C6	5.58	119.79	117.00
21	AA	707	U	O4'-C4'-C3'	-5.58	98.42	104.00
21	AA	823	C	OP1-P-OP2	-5.58	111.22	119.60
21	AA	1018	G	C4-C5-C6	5.58	122.15	118.80
22	AY	54	U	C6-N1-C2	-5.58	117.65	121.00
57	BB	150	U	C5-C4-O4	-5.58	122.55	125.90
57	BB	492	A	O4'-C4'-C3'	-5.58	98.42	104.00
57	BB	618	G	C5-C6-O6	-5.58	125.25	128.60
57	BB	1098	A	C1'-O4'-C4'	5.58	114.37	109.90
57	BB	1662	U	N3-C2-O2	5.58	126.11	122.20
57	BB	1880	U	N1-C2-O2	-5.58	118.89	122.80
57	BB	2379	G	N1-C2-N3	-5.58	120.55	123.90
11	AT	74	HIS	N-CA-CB	5.58	120.65	110.60
21	AA	24	U	C5-C6-N1	-5.58	119.91	122.70
21	AA	149	A	C6-N1-C2	-5.58	115.25	118.60
21	AA	182	A	C4-C5-C6	5.58	119.79	117.00
21	AA	411	A	N1-C6-N6	-5.58	115.25	118.60
21	AA	476	U	C2-N1-C1'	-5.58	111.00	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	580	C	C5-C6-N1	5.58	123.79	121.00
21	AA	886	G	C4-C5-N7	5.58	113.03	110.80
21	AA	980	C	C2'-C3'-O3'	5.58	122.63	113.70
21	AA	1098	C	C5'-C4'-O4'	5.58	115.80	109.10
21	AA	1182	G	C6-C5-N7	-5.58	127.05	130.40
21	AA	1382	C	C2-N3-C4	5.58	122.69	119.90
55	BG	88	LEU	CB-CA-C	5.58	120.81	110.20
57	BB	223	A	C5-N7-C8	5.58	106.69	103.90
57	BB	541	A	C6-N1-C2	5.58	121.95	118.60
57	BB	616	A	P-O3'-C3'	-5.58	113.00	119.70
57	BB	1320	C	O4'-C1'-N1	5.58	112.67	108.20
57	BB	1512	C	C2-N3-C4	5.58	122.69	119.90
57	BB	1520	U	C5-C6-N1	5.58	125.49	122.70
57	BB	1907	G	C5-C6-O6	-5.58	125.25	128.60
57	BB	2368	C	C5-C4-N4	-5.58	116.29	120.20
21	AA	662	U	N3-C4-C5	-5.58	111.25	114.60
21	AA	936	C	N3-C4-C5	-5.58	119.67	121.90
21	AA	1056	U	N3-C4-C5	-5.58	111.25	114.60
22	AY	62	A	N9-C4-C5	5.58	108.03	105.80
27	B5	78	PHE	CB-CG-CD1	-5.58	116.89	120.80
57	BB	603	A	C6-C5-N7	-5.58	128.39	132.30
57	BB	1024	G	O4'-C1'-N9	5.58	112.66	108.20
57	BB	2777	G	N9-C4-C5	5.58	107.63	105.40
23	AW	14	A	C5-N7-C8	5.58	106.69	103.90
57	BB	177	G	C5-C6-O6	5.58	131.95	128.60
57	BB	361	G	C4-C5-N7	-5.58	108.57	110.80
57	BB	1046	A	N7-C8-N9	5.58	116.59	113.80
57	BB	1742	U	N3-C4-C5	-5.58	111.25	114.60
57	BB	2084	C	O4'-C4'-C3'	-5.58	98.42	104.00
57	BB	2169	A	C5-N7-C8	5.58	106.69	103.90
57	BB	2690	U	N1-C2-N3	-5.58	111.55	114.90
57	BB	2729	G	C5-C6-N1	-5.58	108.71	111.50
21	AA	654	G	N3-C4-N9	-5.58	122.65	126.00
21	AA	1457	G	C5-C6-N1	-5.58	108.71	111.50
40	BU	17	ASP	CB-CG-OD1	-5.58	113.28	118.30
57	BB	846	U	C5-C6-N1	5.58	125.49	122.70
57	BB	937	C	C2-N1-C1'	5.58	124.94	118.80
57	BB	2626	C	C5-C4-N4	-5.58	116.30	120.20
17	AF	59	TYR	CB-CG-CD1	5.58	124.34	121.00
21	AA	81	A	N7-C8-N9	5.58	116.59	113.80
21	AA	166	U	C2-N3-C4	5.58	130.35	127.00
21	AA	1054	C	C2-N1-C1'	5.58	124.93	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1065	U	N3-C4-O4	5.58	123.30	119.40
21	AA	1239	A	C5-C6-N1	-5.58	114.91	117.70
21	AA	1445	U	C5-C6-N1	5.58	125.49	122.70
23	AW	2	C	O4'-C1'-N1	5.58	112.66	108.20
23	AW	6	G	C5-N7-C8	-5.58	101.51	104.30
57	BB	43	G	N7-C8-N9	5.58	115.89	113.10
57	BB	135	U	O4'-C1'-N1	5.58	112.66	108.20
57	BB	493	G	C4-C5-C6	5.58	122.15	118.80
57	BB	1514	G	N3-C4-N9	-5.58	122.66	126.00
57	BB	1603	A	N7-C8-N9	-5.58	111.01	113.80
57	BB	1646	C	N1-C2-N3	5.58	123.10	119.20
57	BB	2011	U	C2-N3-C4	-5.58	123.66	127.00
57	BB	2164	C	O4'-C4'-C3'	-5.58	98.42	104.00
57	BB	2744	G	C6-C5-N7	-5.58	127.05	130.40
57	BB	2787	C	N3-C2-O2	5.58	125.80	121.90
21	AA	562	U	C3'-C2'-C1'	-5.57	97.04	101.50
21	AA	1133	G	O4'-C1'-N9	5.57	112.66	108.20
21	AA	1390	U	N3-C2-O2	5.57	126.10	122.20
23	AW	10	G	O4'-C1'-N9	5.57	112.66	108.20
35	BP	85	VAL	CG1-CB-CG2	5.57	119.82	110.90
57	BB	89	A	P-O3'-C3'	-5.57	113.01	119.70
57	BB	322	A	P-O3'-C3'	5.57	126.39	119.70
57	BB	788	A	C2-N3-C4	-5.57	107.81	110.60
57	BB	1332	G	P-O3'-C3'	-5.57	113.01	119.70
57	BB	1661	G	P-O5'-C5'	5.57	129.82	120.90
57	BB	2625	G	C8-N9-C4	-5.57	104.17	106.40
57	BB	2711	A	C4-C5-C6	5.57	119.79	117.00
58	BA	75	G	OP1-P-OP2	-5.57	111.24	119.60
58	BA	96	G	C2-N3-C4	-5.57	109.11	111.90
21	AA	85	U	N3-C2-O2	-5.57	118.30	122.20
21	AA	804	U	C5-C4-O4	5.57	129.24	125.90
57	BB	436	C	N3-C4-C5	5.57	124.13	121.90
57	BB	584	C	P-O5'-C5'	-5.57	111.98	120.90
57	BB	1026	G	N9-C4-C5	-5.57	103.17	105.40
57	BB	2465	C	C5-C4-N4	-5.57	116.30	120.20
21	AA	337	G	N3-C2-N2	5.57	123.80	119.90
21	AA	572	A	C5-C6-N1	-5.57	114.92	117.70
21	AA	675	A	N9-C4-C5	-5.57	103.57	105.80
21	AA	692	U	O4'-C1'-N1	5.57	112.66	108.20
21	AA	762	U	C6-N1-C2	-5.57	117.66	121.00
21	AA	1189	U	C4-C5-C6	5.57	123.04	119.70
57	BB	130	C	C5'-C4'-O4'	5.57	115.78	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	191	A	O4'-C1'-N9	5.57	112.66	108.20
57	BB	323	C	O4'-C1'-N1	5.57	112.66	108.20
57	BB	841	G	C4-C5-N7	5.57	113.03	110.80
57	BB	869	G	C2-N3-C4	-5.57	109.11	111.90
57	BB	1197	G	C4'-C3'-C2'	-5.57	97.03	102.60
57	BB	2029	G	C1'-O4'-C4'	5.57	114.36	109.90
57	BB	2151	U	C2-N3-C4	-5.57	123.66	127.00
57	BB	2203	U	P-O3'-C3'	-5.57	113.02	119.70
57	BB	2212	A	C6-C5-N7	-5.57	128.40	132.30
57	BB	2324	U	C4'-C3'-C2'	5.57	108.17	102.60
57	BB	2821	A	C4-C5-C6	5.57	119.78	117.00
58	BA	58	A	C8-N9-C1'	5.57	137.73	127.70
21	AA	1163	A	C8-N9-C4	-5.57	103.57	105.80
57	BB	1492	G	C6-C5-N7	-5.57	127.06	130.40
58	BA	115	A	C4-C5-N7	-5.57	107.92	110.70
6	AO	77	TYR	CZ-CE2-CD2	5.57	124.81	119.80
21	AA	660	C	O4'-C1'-N1	5.57	112.65	108.20
57	BB	344	A	C3'-C2'-C1'	5.57	105.95	101.50
57	BB	454	A	C5-N7-C8	5.57	106.68	103.90
57	BB	538	A	C5-N7-C8	5.57	106.68	103.90
57	BB	571	U	N3-C4-O4	5.57	123.30	119.40
57	BB	678	C	N1-C2-N3	5.57	123.10	119.20
57	BB	752	A	C5-C6-N6	-5.57	119.25	123.70
57	BB	795	C	C4'-C3'-C2'	-5.57	97.03	102.60
57	BB	1045	C	N3-C4-C5	-5.57	119.67	121.90
57	BB	1383	A	OP1-P-OP2	-5.57	111.25	119.60
57	BB	1497	U	O4'-C1'-C2'	-5.57	100.23	105.80
57	BB	2184	A	C4-C5-C6	5.57	119.78	117.00
57	BB	2281	A	C2-N3-C4	5.57	113.38	110.60
57	BB	2311	A	N3-C4-C5	-5.57	122.90	126.80
58	BA	14	U	P-O3'-C3'	5.57	126.38	119.70
21	AA	236	A	C4-C5-C6	5.57	119.78	117.00
21	AA	300	A	C6-C5-N7	-5.57	128.41	132.30
21	AA	734	G	C4'-C3'-C2'	-5.57	97.03	102.60
21	AA	782	A	C4'-C3'-C2'	-5.57	97.03	102.60
21	AA	816	A	O4'-C1'-N9	5.57	112.65	108.20
21	AA	1016	A	C6-N1-C2	5.57	121.94	118.60
21	AA	1384	C	N1-C1'-C2'	-5.57	105.88	112.00
21	AA	1430	A	C2-N3-C4	5.57	113.38	110.60
21	AA	1520	C	N3-C4-N4	5.57	121.90	118.00
30	BK	104	ARG	NE-CZ-NH1	-5.57	117.52	120.30
52	BD	204	LYS	CB-CA-C	-5.57	99.27	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	249	C	N1-C1'-C2'	-5.57	105.88	112.00
57	BB	1355	G	N1-C6-O6	5.57	123.24	119.90
57	BB	1623	G	N3-C2-N2	5.57	123.80	119.90
57	BB	2479	U	C5-C4-O4	5.57	129.24	125.90
57	BB	2835	A	N1-C6-N6	5.57	121.94	118.60
57	BB	2836	U	O4'-C1'-N1	5.57	112.65	108.20
58	BA	89	U	N1-C2-O2	-5.57	118.91	122.80
21	AA	190	A	C5'-C4'-C3'	-5.56	107.10	116.00
21	AA	609	A	C2-N3-C4	5.56	113.38	110.60
21	AA	1447	A	C8-N9-C4	-5.56	103.57	105.80
57	BB	1024	G	C5-N7-C8	5.56	107.08	104.30
57	BB	1228	G	C4-N9-C1'	-5.56	119.27	126.50
57	BB	1542	U	O4'-C1'-N1	5.56	112.65	108.20
57	BB	1974	C	C1'-O4'-C4'	5.56	114.35	109.90
21	AA	163	C	N3-C4-C5	-5.56	119.67	121.90
21	AA	237	G	C8-N9-C1'	5.56	134.23	127.00
21	AA	427	U	N3-C4-O4	5.56	123.29	119.40
21	AA	804	U	C2-N1-C1'	-5.56	111.03	117.70
21	AA	1426	G	N7-C8-N9	-5.56	110.32	113.10
21	AA	1510	C	C2-N3-C4	5.56	122.68	119.90
22	AY	6	U	C4-C5-C6	5.56	123.04	119.70
22	AY	13	C	C3'-C2'-C1'	-5.56	97.05	101.50
23	AW	71	G	C3'-C2'-C1'	5.56	105.95	101.50
25	AZ	368	MET	CG-SD-CE	-5.56	91.30	100.20
26	AV	30	G	C4-N9-C1'	-5.56	119.27	126.50
57	BB	208	C	C2-N3-C4	5.56	122.68	119.90
57	BB	671	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	883	G	C5-C6-O6	-5.56	125.26	128.60
57	BB	997	G	N3-C2-N2	5.56	123.79	119.90
57	BB	1000	A	N1-C6-N6	5.56	121.94	118.60
57	BB	1010	A	C5-C6-N6	-5.56	119.25	123.70
57	BB	1062	G	P-O3'-C3'	5.56	126.38	119.70
57	BB	1781	U	N1-C2-N3	5.56	118.24	114.90
57	BB	2009	A	C6-N1-C2	5.56	121.94	118.60
57	BB	2534	A	C2-N3-C4	5.56	113.38	110.60
57	BB	2536	G	C8-N9-C1'	5.56	134.23	127.00
57	BB	2576	G	C5-C6-N1	-5.56	108.72	111.50
57	BB	2658	C	C6-N1-C2	-5.56	118.08	120.30
58	BA	24	G	N9-C4-C5	5.56	107.62	105.40
2	AK	68	ARG	NE-CZ-NH2	-5.56	117.52	120.30
8	AQ	10	ARG	NE-CZ-NH1	5.56	123.08	120.30
21	AA	668	G	O4'-C1'-N9	5.56	112.65	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	919	A	C5'-C4'-O4'	-5.56	102.43	109.10
57	BB	311	A	P-O3'-C3'	-5.56	113.03	119.70
57	BB	963	U	C5-C6-N1	-5.56	119.92	122.70
57	BB	1362	C	C4-C5-C6	5.56	120.18	117.40
57	BB	2391	G	O4'-C1'-N9	5.56	112.65	108.20
57	BB	2429	G	C5-C6-N1	-5.56	108.72	111.50
57	BB	2775	G	N9-C4-C5	5.56	107.62	105.40
21	AA	653	U	C2-N3-C4	-5.56	123.66	127.00
21	AA	809	G	N1-C2-N3	-5.56	120.56	123.90
21	AA	1319	A	N9-C4-C5	5.56	108.02	105.80
35	BP	94	ALA	N-CA-CB	5.56	117.88	110.10
57	BB	88	G	N3-C4-N9	5.56	129.34	126.00
57	BB	662	G	C6-C5-N7	-5.56	127.06	130.40
57	BB	908	C	C3'-C2'-C1'	-5.56	97.05	101.50
57	BB	1052	C	C5-C6-N1	5.56	123.78	121.00
57	BB	1618	A	C5-N7-C8	5.56	106.68	103.90
57	BB	1757	A	P-O3'-C3'	5.56	126.37	119.70
57	BB	1896	G	C2-N3-C4	5.56	114.68	111.90
57	BB	1942	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	2091	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	2443	C	N3-C4-C5	-5.56	119.68	121.90
57	BB	2557	G	C5'-C4'-O4'	5.56	115.77	109.10
57	BB	2577	A	C5-C6-N6	-5.56	119.25	123.70
57	BB	2615	U	N3-C4-O4	5.56	123.29	119.40
21	AA	241	G	C1'-O4'-C4'	-5.56	105.45	109.90
21	AA	501	C	C2-N3-C4	5.56	122.68	119.90
21	AA	681	A	C1'-O4'-C4'	5.56	114.35	109.90
21	AA	1358	U	O4'-C1'-C2'	5.56	112.60	107.60
23	AW	20	U	N1-C2-O2	-5.56	118.91	122.80
56	BH	77	THR	CA-CB-OG1	5.56	120.67	109.00
57	BB	407	G	C4-C5-N7	5.56	113.02	110.80
57	BB	444	C	C4'-C3'-C2'	-5.56	97.04	102.60
57	BB	704	G	N9-C4-C5	5.56	107.62	105.40
57	BB	806	C	O4'-C1'-N1	5.56	112.65	108.20
57	BB	1082	U	N1-C2-N3	5.56	118.23	114.90
57	BB	1250	G	C4-C5-C6	5.56	122.14	118.80
57	BB	1382	G	P-O3'-C3'	-5.56	113.03	119.70
57	BB	1477	A	C4-C5-N7	-5.56	107.92	110.70
57	BB	1904	G	N3-C4-N9	-5.56	122.67	126.00
57	BB	2060	A	O4'-C1'-N9	5.56	112.64	108.20
21	AA	78	A	C5-C6-N6	-5.56	119.25	123.70
21	AA	143	A	C4-C5-N7	-5.56	107.92	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	371	A	C6-N1-C2	-5.56	115.27	118.60
21	AA	1331	G	C6-C5-N7	-5.56	127.07	130.40
39	BT	84	TYR	CZ-CE2-CD2	-5.56	114.80	119.80
57	BB	217	A	N9-C4-C5	5.56	108.02	105.80
57	BB	984	A	C2-N3-C4	5.56	113.38	110.60
57	BB	1225	G	P-O5'-C5'	-5.56	112.01	120.90
57	BB	2524	G	C4-N9-C1'	-5.56	119.28	126.50
57	BB	2679	A	C4-C5-N7	5.56	113.48	110.70
16	AE	92	ARG	CB-CA-C	-5.55	99.29	110.40
21	AA	234	C	C2-N3-C4	5.55	122.68	119.90
21	AA	488	C	C6-N1-C2	-5.55	118.08	120.30
21	AA	721	G	P-O5'-C5'	5.55	129.79	120.90
21	AA	1261	A	C6-N1-C2	-5.55	115.27	118.60
21	AA	1295	U	N1-C2-N3	5.55	118.23	114.90
21	AA	1531	A	C2-N3-C4	-5.55	107.82	110.60
57	BB	281	C	N1-C2-N3	-5.55	115.31	119.20
57	BB	348	A	C4-C5-C6	5.55	119.78	117.00
57	BB	574	A	C8-N9-C4	-5.55	103.58	105.80
57	BB	619	G	C6-N1-C2	5.55	128.43	125.10
57	BB	939	G	C5-C6-O6	-5.55	125.27	128.60
57	BB	1134	A	C5-C6-N1	-5.55	114.92	117.70
57	BB	1280	G	C2-N3-C4	-5.55	109.12	111.90
57	BB	1929	G	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	1970	A	C2-N3-C4	5.55	113.38	110.60
57	BB	2261	C	C5-C4-N4	-5.55	116.31	120.20
57	BB	2292	U	C5-C4-O4	-5.55	122.57	125.90
57	BB	2345	G	O4'-C1'-N9	5.55	112.64	108.20
57	BB	2361	G	C2-N3-C4	-5.55	109.12	111.90
21	AA	85	U	C5'-C4'-O4'	5.55	115.76	109.10
21	AA	1237	C	N3-C4-C5	-5.55	119.68	121.90
21	AA	1350	A	P-O3'-C3'	5.55	126.36	119.70
21	AA	1356	G	N3-C2-N2	5.55	123.79	119.90
22	AY	34	G	N1-C6-O6	5.55	123.23	119.90
24	AX	13	A	C6-C5-N7	-5.55	128.41	132.30
56	BH	91	PHE	CB-CG-CD2	5.55	124.69	120.80
57	BB	23	G	C8-N9-C4	-5.55	104.18	106.40
57	BB	1336	A	C4'-C3'-C2'	-5.55	97.05	102.60
57	BB	2813	A	C4-C5-C6	5.55	119.78	117.00
21	AA	191	G	N3-C4-N9	-5.55	122.67	126.00
21	AA	879	C	C6-N1-C1'	-5.55	114.14	120.80
21	AA	1383	C	C6-N1-C1'	-5.55	114.14	120.80
21	AA	1498	U	P-O3'-C3'	-5.55	113.04	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	53	G	P-O3'-C3'	-5.55	113.04	119.70
35	BP	82	SER	N-CA-CB	-5.55	102.17	110.50
37	BR	61	ALA	CB-CA-C	-5.55	101.77	110.10
57	BB	240	C	N3-C4-C5	-5.55	119.68	121.90
57	BB	535	G	C4'-C3'-C2'	-5.55	97.05	102.60
57	BB	603	A	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	716	A	N7-C8-N9	5.55	116.58	113.80
57	BB	1025	G	N1-C2-N3	-5.55	120.57	123.90
57	BB	1602	U	P-O3'-C3'	5.55	126.36	119.70
57	BB	1800	C	OP1-P-OP2	-5.55	111.27	119.60
57	BB	2201	G	C8-N9-C1'	5.55	134.22	127.00
57	BB	2624	G	C8-N9-C4	-5.55	104.18	106.40
57	BB	2671	G	C2-N3-C4	5.55	114.67	111.90
21	AA	461	A	C5-C6-N1	-5.55	114.93	117.70
21	AA	702	A	C4'-C3'-C2'	5.55	108.15	102.60
21	AA	966	G	N1-C2-N3	-5.55	120.57	123.90
21	AA	1057	G	O4'-C4'-C3'	5.55	110.54	106.10
52	BD	80	TRP	CB-CG-CD1	5.55	134.22	127.00
57	BB	62	U	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	103	A	N3-C4-N9	5.55	131.84	127.40
57	BB	613	A	C6-N1-C2	-5.55	115.27	118.60
57	BB	650	C	C6-N1-C2	-5.55	118.08	120.30
57	BB	1172	C	C5'-C4'-O4'	5.55	115.76	109.10
57	BB	1416	G	N7-C8-N9	-5.55	110.33	113.10
57	BB	1541	C	C5-C6-N1	-5.55	118.22	121.00
57	BB	2088	A	C5-C6-N6	-5.55	119.26	123.70
57	BB	2193	G	C5'-C4'-C3'	-5.55	107.12	116.00
57	BB	2386	A	C6-C5-N7	-5.55	128.42	132.30
57	BB	2514	U	N3-C4-C5	-5.55	111.27	114.60
57	BB	2608	G	O4'-C1'-N9	5.55	112.64	108.20
58	BA	99	A	O5'-P-OP1	-5.55	100.70	105.70
21	AA	329	A	P-O3'-C3'	5.55	126.36	119.70
21	AA	610	U	C6-N1-C1'	-5.55	113.43	121.20
57	BB	39	G	C5-C6-N1	5.55	114.27	111.50
57	BB	126	A	C8-N9-C4	5.55	108.02	105.80
57	BB	311	A	N1-C2-N3	5.55	132.07	129.30
57	BB	400	G	N7-C8-N9	5.55	115.87	113.10
57	BB	1356	G	C2-N3-C4	5.55	114.67	111.90
57	BB	1600	C	C5'-C4'-O4'	5.55	115.76	109.10
21	AA	147	G	C5-C6-O6	-5.55	125.27	128.60
21	AA	522	C	N1-C2-O2	5.55	122.23	118.90
21	AA	1176	A	O4'-C1'-N9	5.55	112.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1275	A	C6-C5-N7	-5.55	128.42	132.30
25	AZ	258	VAL	N-CA-C	-5.55	96.02	111.00
36	BQ	31	TYR	CD1-CE1-CZ	-5.55	114.81	119.80
36	BQ	100	PHE	CB-CG-CD2	5.55	124.68	120.80
55	BG	54	ARG	NE-CZ-NH1	5.55	123.07	120.30
57	BB	117	G	C4-C5-C6	5.55	122.13	118.80
57	BB	2362	C	P-O3'-C3'	-5.55	113.05	119.70
57	BB	2765	A	C4-C5-C6	5.55	119.77	117.00
57	BB	2825	G	C6-C5-N7	-5.55	127.07	130.40
21	AA	252	U	C6-N1-C2	-5.54	117.67	121.00
21	AA	421	U	C4'-C3'-C2'	-5.54	97.06	102.60
53	BE	145	ASP	CB-CG-OD2	-5.54	113.31	118.30
57	BB	90	U	O4'-C1'-N1	5.54	112.64	108.20
57	BB	131	A	N1-C6-N6	5.54	121.93	118.60
57	BB	2296	U	O4'-C1'-N1	5.54	112.64	108.20
57	BB	2511	U	N1-C2-N3	-5.54	111.57	114.90
57	BB	2549	G	C6-C5-N7	-5.54	127.07	130.40
57	BB	2873	A	C5-N7-C8	5.54	106.67	103.90
58	BA	112	G	C8-N9-C1'	5.54	134.21	127.00
4	AM	11	HIS	N-CA-CB	5.54	120.58	110.60
21	AA	115	G	C4'-C3'-C2'	5.54	108.14	102.60
21	AA	537	G	C5-C6-N1	5.54	114.27	111.50
21	AA	700	G	C5-C6-O6	-5.54	125.27	128.60
21	AA	807	A	N3-C4-N9	-5.54	122.97	127.40
26	AV	66	C	N3-C4-C5	5.54	124.12	121.90
57	BB	283	G	O4'-C1'-N9	5.54	112.63	108.20
57	BB	528	A	N9-C4-C5	5.54	108.02	105.80
57	BB	792	A	C8-N9-C4	5.54	108.02	105.80
57	BB	997	G	C5-N7-C8	5.54	107.07	104.30
57	BB	1041	G	N7-C8-N9	-5.54	110.33	113.10
57	BB	1156	A	C3'-C2'-C1'	-5.54	97.06	101.50
57	BB	1544	A	O4'-C4'-C3'	-5.54	98.46	104.00
57	BB	1787	A	N3-C4-C5	-5.54	122.92	126.80
57	BB	1802	A	N9-C4-C5	5.54	108.02	105.80
57	BB	1866	A	C5-C6-N6	-5.54	119.27	123.70
57	BB	2885	G	C4-C5-C6	5.54	122.13	118.80
7	AP	56	ARG	NE-CZ-NH2	-5.54	117.53	120.30
21	AA	100	G	N3-C2-N2	5.54	123.78	119.90
21	AA	197	A	P-O5'-C5'	-5.54	112.03	120.90
21	AA	652	U	N3-C4-C5	-5.54	111.28	114.60
21	AA	765	G	P-O3'-C3'	-5.54	113.05	119.70
21	AA	1073	U	C5-C6-N1	5.54	125.47	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1412	C	P-O3'-C3'	-5.54	113.05	119.70
22	AY	5	A	C8-N9-C4	5.54	108.02	105.80
57	BB	279	A	N7-C8-N9	5.54	116.57	113.80
57	BB	337	C	C5-C6-N1	5.54	123.77	121.00
57	BB	364	C	C5'-C4'-C3'	-5.54	107.13	116.00
57	BB	482	A	C2-N3-C4	-5.54	107.83	110.60
57	BB	1576	U	C2-N3-C4	-5.54	123.67	127.00
57	BB	1989	G	C5'-C4'-O4'	5.54	115.75	109.10
57	BB	2046	G	N1-C2-N3	-5.54	120.58	123.90
57	BB	2067	G	N1-C2-N3	-5.54	120.58	123.90
57	BB	2103	C	C5-C4-N4	-5.54	116.32	120.20
57	BB	2253	G	O4'-C1'-C2'	-5.54	100.26	105.80
57	BB	2733	A	N9-C4-C5	5.54	108.02	105.80
21	AA	241	G	N1-C2-N3	-5.54	120.58	123.90
21	AA	345	C	C5-C6-N1	5.54	123.77	121.00
21	AA	1118	U	C6-N1-C1'	-5.54	113.44	121.20
21	AA	1184	G	N1-C2-N3	-5.54	120.58	123.90
21	AA	1207	G	C4'-C3'-C2'	-5.54	97.06	102.60
21	AA	1396	A	C8-N9-C4	5.54	108.02	105.80
35	BP	112	ARG	NE-CZ-NH1	5.54	123.07	120.30
57	BB	500	G	C6-N1-C2	5.54	128.42	125.10
57	BB	1223	G	C4-C5-N7	-5.54	108.58	110.80
57	BB	1626	A	N3-C4-C5	-5.54	122.92	126.80
57	BB	2896	C	C4-C5-C6	5.54	120.17	117.40
21	AA	1485	U	N3-C2-O2	5.54	126.08	122.20
21	AA	1512	U	N1-C2-N3	-5.54	111.58	114.90
27	B5	42	VAL	CA-CB-CG1	-5.54	102.59	110.90
40	BU	80	ASP	CB-CG-OD2	-5.54	113.31	118.30
55	BG	114	HIS	CA-CB-CG	5.54	123.02	113.60
57	BB	74	A	C4-C5-N7	-5.54	107.93	110.70
57	BB	217	A	C5-C6-N1	-5.54	114.93	117.70
57	BB	362	A	P-O3'-C3'	5.54	126.35	119.70
57	BB	488	G	O4'-C1'-N9	5.54	112.63	108.20
57	BB	907	G	C4-N9-C1'	-5.54	119.30	126.50
57	BB	1091	G	C6-N1-C2	5.54	128.42	125.10
57	BB	1223	G	C6-C5-N7	-5.54	127.08	130.40
57	BB	1308	A	P-O5'-C5'	5.54	129.76	120.90
57	BB	1433	A	N1-C2-N3	5.54	132.07	129.30
57	BB	1483	G	C4-C5-N7	-5.54	108.58	110.80
57	BB	1663	G	C6-C5-N7	-5.54	127.08	130.40
57	BB	1849	G	N9-C4-C5	5.54	107.61	105.40
57	BB	1902	C	O4'-C1'-N1	5.54	112.63	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1966	A	C4-C5-C6	5.54	119.77	117.00
57	BB	2276	G	C6-C5-N7	-5.54	127.08	130.40
57	BB	2378	A	OP1-P-OP2	-5.54	111.29	119.60
57	BB	2809	A	N9-C4-C5	5.54	108.02	105.80
21	AA	861	G	O5'-P-OP2	-5.54	100.72	105.70
22	AY	68	U	C5'-C4'-O4'	5.54	115.74	109.10
57	BB	857	G	N3-C2-N2	5.54	123.78	119.90
57	BB	1580	A	C8-N9-C4	-5.54	103.58	105.80
14	AC	41	TYR	CG-CD1-CE1	-5.54	116.87	121.30
21	AA	956	U	C5-C4-O4	-5.54	122.58	125.90
21	AA	1005	A	C8-N9-C4	-5.54	103.59	105.80
21	AA	1110	A	N1-C2-N3	-5.54	126.53	129.30
21	AA	1181	G	O4'-C1'-N9	-5.54	103.77	108.20
21	AA	1468	A	O4'-C4'-C3'	-5.54	98.46	104.00
21	AA	1492	A	O4'-C1'-N9	5.54	112.63	108.20
22	AY	28	C	P-O5'-C5'	5.54	129.76	120.90
23	AW	2	C	C4-C5-C6	5.54	120.17	117.40
25	AZ	87	TYR	CG-CD2-CE2	-5.54	116.87	121.30
25	AZ	377	ARG	NE-CZ-NH1	-5.54	117.53	120.30
57	BB	623	C	C6-N1-C1'	-5.54	114.16	120.80
57	BB	887	U	O4'-C1'-N1	5.54	112.63	108.20
57	BB	1193	G	N3-C4-N9	-5.54	122.68	126.00
57	BB	1614	A	C6-C5-N7	-5.54	128.43	132.30
57	BB	2569	G	C3'-C2'-C1'	5.54	105.93	101.50
57	BB	2884	U	C2-N1-C1'	5.54	124.34	117.70
21	AA	1005	A	O4'-C1'-N9	5.53	112.63	108.20
21	AA	1069	C	C2-N3-C4	-5.53	117.13	119.90
21	AA	1191	A	N1-C2-N3	5.53	132.07	129.30
21	AA	1262	C	C5-C6-N1	5.53	123.77	121.00
21	AA	1466	C	N1-C2-N3	5.53	123.07	119.20
21	AA	1473	G	N7-C8-N9	-5.53	110.33	113.10
26	AV	63	G	N3-C2-N2	5.53	123.77	119.90
42	BW	24	ARG	CB-CA-C	5.53	121.47	110.40
57	BB	1410	G	C4'-C3'-C2'	-5.53	97.07	102.60
57	BB	1642	G	P-O3'-C3'	-5.53	113.06	119.70
57	BB	1873	G	C8-N9-C4	-5.53	104.19	106.40
57	BB	2169	A	P-O5'-C5'	5.53	129.75	120.90
57	BB	2462	C	C2-N3-C4	5.53	122.67	119.90
21	AA	1316	G	N3-C4-C5	-5.53	125.83	128.60
21	AA	1381	U	O4'-C1'-N1	5.53	112.63	108.20
30	BK	60	VAL	CA-CB-CG1	-5.53	102.60	110.90
46	BZ	32	GLY	N-CA-C	-5.53	99.27	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	770	G	O4'-C1'-N9	5.53	112.62	108.20
57	BB	1729	U	O4'-C1'-C2'	-5.53	100.27	105.80
57	BB	1769	U	C5-C4-O4	5.53	129.22	125.90
57	BB	1959	G	N9-C4-C5	5.53	107.61	105.40
57	BB	2694	G	N3-C2-N2	5.53	123.77	119.90
21	AA	150	U	C2-N3-C4	5.53	130.32	127.00
21	AA	707	U	N3-C4-C5	5.53	117.92	114.60
21	AA	882	C	P-O3'-C3'	-5.53	113.06	119.70
21	AA	1026	G	N3-C2-N2	5.53	123.77	119.90
21	AA	1085	U	O4'-C1'-N1	5.53	112.62	108.20
57	BB	302	C	C4-C5-C6	5.53	120.17	117.40
57	BB	361	G	C1'-O4'-C4'	5.53	114.33	109.90
57	BB	656	G	C5-C6-N1	-5.53	108.73	111.50
57	BB	918	A	C6-N1-C2	5.53	121.92	118.60
57	BB	1004	U	C1'-O4'-C4'	5.53	114.33	109.90
57	BB	1139	G	N3-C2-N2	-5.53	116.03	119.90
57	BB	2223	G	N1-C2-N3	-5.53	120.58	123.90
57	BB	2370	G	N1-C2-N3	-5.53	120.58	123.90
57	BB	2873	A	C2'-C3'-O3'	5.53	122.55	113.70
58	BA	86	G	N7-C8-N9	5.53	115.86	113.10
58	BA	117	G	C6-C5-N7	-5.53	127.08	130.40
21	AA	333	U	C5-C4-O4	-5.53	122.58	125.90
21	AA	485	U	C6-N1-C2	5.53	124.32	121.00
21	AA	608	A	C8-N9-C4	-5.53	103.59	105.80
21	AA	668	G	N3-C2-N2	5.53	123.77	119.90
21	AA	1361	G	C4-C5-C6	5.53	122.12	118.80
38	BS	64	ALA	N-CA-CB	5.53	117.84	110.10
57	BB	116	C	C4-C5-C6	5.53	120.17	117.40
57	BB	468	G	C5-N7-C8	-5.53	101.53	104.30
57	BB	1170	C	C1'-O4'-C4'	5.53	114.32	109.90
57	BB	1593	A	C8-N9-C4	5.53	108.01	105.80
2	AK	60	PHE	CB-CG-CD1	-5.53	116.93	120.80
21	AA	14	U	N3-C4-O4	5.53	123.27	119.40
21	AA	70	U	O3'-P-O5'	-5.53	93.50	104.00
22	AY	51	G	C4-C5-N7	-5.53	108.59	110.80
29	BJ	128	ASN	N-CA-CB	5.53	120.55	110.60
35	BP	58	PHE	N-CA-C	-5.53	96.07	111.00
42	BW	75	ASN	N-CA-CB	5.53	120.55	110.60
57	BB	53	A	C5-N7-C8	5.53	106.66	103.90
57	BB	508	A	C5-C6-N1	-5.53	114.94	117.70
57	BB	740	C	C2-N3-C4	5.53	122.66	119.90
57	BB	1665	A	N9-C4-C5	5.53	108.01	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2053	G	O4'-C1'-N9	5.53	112.62	108.20
21	AA	361	G	N7-C8-N9	5.53	115.86	113.10
21	AA	629	A	N1-C2-N3	5.53	132.06	129.30
21	AA	748	G	C6-N1-C2	5.53	128.41	125.10
21	AA	856	C	C6-N1-C2	5.53	122.51	120.30
21	AA	905	U	N1-C2-O2	-5.53	118.93	122.80
21	AA	960	U	C2'-C3'-O3'	5.53	122.54	113.70
21	AA	1241	G	N9-C4-C5	-5.53	103.19	105.40
21	AA	1427	C	C5-C6-N1	5.53	123.76	121.00
22	AY	23	A	O4'-C4'-C3'	-5.53	98.47	104.00
34	BO	52	SER	N-CA-CB	5.53	118.79	110.50
57	BB	386	G	N3-C2-N2	5.53	123.77	119.90
57	BB	852	U	N3-C2-O2	5.53	126.07	122.20
57	BB	1659	G	C5-N7-C8	5.53	107.06	104.30
57	BB	1867	G	O4'-C1'-N9	5.53	112.62	108.20
57	BB	1920	C	C2-N1-C1'	5.53	124.88	118.80
57	BB	2075	U	N3-C2-O2	5.53	126.07	122.20
57	BB	2183	A	N3-C4-N9	5.53	131.82	127.40
57	BB	2431	U	N1-C2-N3	-5.53	111.58	114.90
57	BB	2623	G	C5-N7-C8	-5.53	101.54	104.30
58	BA	80	U	C6-N1-C2	-5.53	117.68	121.00
25	AZ	46	PHE	C-N-CA	5.52	135.51	121.70
57	BB	219	A	N9-C4-C5	5.52	108.01	105.80
57	BB	388	G	C1'-O4'-C4'	-5.52	105.48	109.90
57	BB	927	A	N3-C4-N9	5.52	131.82	127.40
57	BB	1468	U	O4'-C1'-N1	5.52	112.62	108.20
57	BB	2267	A	P-O3'-C3'	-5.52	113.07	119.70
20	AI	16	ALA	CB-CA-C	-5.52	101.81	110.10
21	AA	366	A	C6-C5-N7	-5.52	128.44	132.30
21	AA	467	U	C5-C4-O4	-5.52	122.59	125.90
21	AA	627	G	P-O3'-C3'	-5.52	113.07	119.70
21	AA	752	G	P-O3'-C3'	5.52	126.33	119.70
21	AA	863	U	C5-C4-O4	-5.52	122.59	125.90
21	AA	926	G	N7-C8-N9	-5.52	110.34	113.10
21	AA	1342	C	C6-N1-C2	-5.52	118.09	120.30
22	AY	68	U	P-O5'-C5'	-5.52	112.06	120.90
25	AZ	66	HIS	CA-CB-CG	-5.52	104.21	113.60
26	AV	24	U	O4'-C1'-N1	5.52	112.62	108.20
37	BR	21	ARG	NE-CZ-NH1	-5.52	117.54	120.30
54	BF	67	THR	CA-CB-CG2	-5.52	104.67	112.40
57	BB	17	G	N1-C6-O6	5.52	123.21	119.90
57	BB	64	A	C4-C5-N7	5.52	113.46	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	273	G	N1-C6-O6	5.52	123.21	119.90
57	BB	303	G	C4-C5-C6	5.52	122.11	118.80
57	BB	880	G	C5'-C4'-O4'	5.52	115.73	109.10
57	BB	1127	A	C1'-O4'-C4'	5.52	114.32	109.90
57	BB	1275	A	N7-C8-N9	5.52	116.56	113.80
57	BB	1432	G	C2-N3-C4	5.52	114.66	111.90
57	BB	1493	C	C2-N3-C4	5.52	122.66	119.90
57	BB	1995	U	OP1-P-OP2	-5.52	111.31	119.60
57	BB	2334	U	C4-C5-C6	5.52	123.01	119.70
57	BB	2455	G	N9-C4-C5	-5.52	103.19	105.40
57	BB	2804	U	C5-C6-N1	5.52	125.46	122.70
58	BA	58	A	C4-C5-N7	-5.52	107.94	110.70
21	AA	37	U	C4-C5-C6	5.52	123.01	119.70
21	AA	1364	U	N1-C2-N3	-5.52	111.59	114.90
57	BB	1024	G	N9-C4-C5	-5.52	103.19	105.40
57	BB	2169	A	P-O3'-C3'	5.52	126.33	119.70
57	BB	2548	U	N1-C2-O2	5.52	126.67	122.80
57	BB	2707	U	C2-N3-C4	-5.52	123.69	127.00
57	BB	2819	G	O4'-C1'-N9	5.52	112.62	108.20
21	AA	830	G	N3-C4-N9	-5.52	122.69	126.00
23	AW	35	A	C2-N3-C4	-5.52	107.84	110.60
26	AV	64	G	C4-C5-C6	5.52	122.11	118.80
57	BB	482	A	C5-C6-N1	-5.52	114.94	117.70
57	BB	483	A	P-O3'-C3'	-5.52	113.08	119.70
57	BB	608	A	O4'-C4'-C3'	-5.52	98.48	104.00
57	BB	712	G	C5-C6-O6	-5.52	125.29	128.60
57	BB	741	U	C2-N1-C1'	-5.52	111.08	117.70
57	BB	1189	A	C5-C6-N6	5.52	128.12	123.70
57	BB	1204	A	C6-N1-C2	5.52	121.91	118.60
57	BB	2671	G	C6-C5-N7	-5.52	127.09	130.40
58	BA	102	G	N3-C4-C5	-5.52	125.84	128.60
58	BA	104	A	OP1-P-OP2	-5.52	111.32	119.60
15	AD	80	ARG	NE-CZ-NH2	5.52	123.06	120.30
18	AG	52	ARG	O-C-N	-5.52	113.87	122.70
21	AA	137	U	O4'-C1'-C2'	-5.52	100.28	105.80
21	AA	313	A	C5-C6-N6	-5.52	119.28	123.70
21	AA	535	A	C5-C6-N6	-5.52	119.29	123.70
21	AA	1366	C	N3-C4-C5	-5.52	119.69	121.90
45	BC	160	TYR	CB-CA-C	-5.52	99.36	110.40
57	BB	508	A	O4'-C1'-N9	5.52	112.61	108.20
57	BB	629	G	C5-N7-C8	-5.52	101.54	104.30
57	BB	1123	C	O4'-C1'-N1	5.52	112.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1328	A	C2-N3-C4	-5.52	107.84	110.60
57	BB	1347	A	C5-N7-C8	5.52	106.66	103.90
57	BB	1382	G	N1-C2-N2	-5.52	111.23	116.20
57	BB	1820	U	O4'-C1'-N1	5.52	112.61	108.20
57	BB	2101	A	C6-C5-N7	-5.52	128.44	132.30
57	BB	2408	U	C3'-C2'-C1'	5.52	105.91	101.50
21	AA	798	U	C2-N3-C4	5.52	130.31	127.00
21	AA	880	C	P-O5'-C5'	-5.52	112.07	120.90
21	AA	885	G	O4'-C4'-C3'	-5.52	98.48	104.00
57	BB	126	A	N1-C2-N3	-5.52	126.54	129.30
57	BB	901	C	C2-N3-C4	5.52	122.66	119.90
57	BB	942	G	C4-C5-C6	-5.52	115.49	118.80
57	BB	1338	G	C6-N1-C2	-5.52	121.79	125.10
21	AA	193	C	C3'-C2'-C1'	5.51	105.91	101.50
21	AA	407	U	C5-C6-N1	5.51	125.46	122.70
21	AA	563	A	C3'-C2'-C1'	5.51	105.91	101.50
21	AA	574	A	C4'-C3'-C2'	5.51	108.11	102.60
21	AA	892	A	C1'-O4'-C4'	-5.51	105.49	109.90
21	AA	928	G	C5-N7-C8	5.51	107.06	104.30
21	AA	1423	G	N7-C8-N9	5.51	115.86	113.10
25	AZ	67	VAL	CG1-CB-CG2	5.51	119.72	110.90
57	BB	139	U	C5-C4-O4	-5.51	122.59	125.90
57	BB	500	G	C4-C5-C6	5.51	122.11	118.80
57	BB	1579	A	C5-C6-N1	-5.51	114.94	117.70
57	BB	1822	C	C2-N3-C4	5.51	122.66	119.90
57	BB	2270	A	N1-C2-N3	5.51	132.06	129.30
57	BB	2305	U	C4'-C3'-C2'	-5.51	97.08	102.60
57	BB	2805	C	C5-C4-N4	5.51	124.06	120.20
57	BB	2893	A	C3'-C2'-C1'	5.51	105.91	101.50
21	AA	1001	C	N1-C2-N3	-5.51	115.34	119.20
25	AZ	361	THR	N-CA-C	-5.51	96.11	111.00
26	AV	76	A	C5'-C4'-O4'	5.51	115.72	109.10
53	BE	7	ASP	CB-CG-OD1	-5.51	113.34	118.30
57	BB	280	U	N3-C4-C5	5.51	117.91	114.60
57	BB	702	U	P-O3'-C3'	5.51	126.32	119.70
57	BB	1824	G	N1-C6-O6	5.51	123.21	119.90
57	BB	2277	G	C8-N9-C4	5.51	108.61	106.40
58	BA	58	A	N7-C8-N9	5.51	116.56	113.80
19	AH	84	ILE	CA-CB-CG1	5.51	121.47	111.00
21	AA	49	U	O4'-C1'-N1	5.51	112.61	108.20
21	AA	50	A	N9-C4-C5	5.51	108.00	105.80
21	AA	266	G	C2-N3-C4	5.51	114.66	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
21	AA	355	C	C5-C4-N4	-5.51	116.34	120.20
21	AA	650	G	N3-C2-N2	5.51	123.76	119.90
21	AA	1273	C	C1'-O4'-C4'	-5.51	105.49	109.90
22	AY	19	G	C3'-C2'-C1'	5.51	105.91	101.50
23	AW	52	G	N1-C2-N3	-5.51	120.59	123.90
51	B4	14	CYS	N-CA-C	-5.51	96.12	111.00
57	BB	338	G	C5-C6-O6	5.51	131.91	128.60
57	BB	709	U	C2-N3-C4	-5.51	123.69	127.00
57	BB	972	A	C8-N9-C4	-5.51	103.60	105.80
57	BB	1016	G	N3-C4-C5	-5.51	125.84	128.60
57	BB	1827	U	OP1-P-OP2	-5.51	111.33	119.60
57	BB	2215	C	OP2-P-O3'	5.51	117.33	105.20
57	BB	2581	G	P-O5'-C5'	-5.51	112.08	120.90
57	BB	2877	G	C5-C6-O6	-5.51	125.29	128.60
15	AD	11	SER	N-CA-CB	5.51	118.76	110.50
21	AA	65	A	C8-N9-C4	-5.51	103.60	105.80
21	AA	115	G	C2-N3-C4	5.51	114.66	111.90
21	AA	177	G	N1-C2-N3	-5.51	120.59	123.90
21	AA	215	C	C6-N1-C2	-5.51	118.10	120.30
21	AA	312	C	N3-C4-C5	-5.51	119.70	121.90
21	AA	369	G	C4-C5-C6	5.51	122.11	118.80
21	AA	745	G	C8-N9-C1'	5.51	134.16	127.00
21	AA	825	A	C4-N9-C1'	5.51	136.22	126.30
21	AA	974	A	C5'-C4'-O4'	5.51	115.71	109.10
25	AZ	76	TYR	N-CA-CB	5.51	120.52	110.60
26	AV	5	G	N7-C8-N9	-5.51	110.35	113.10
57	BB	564	C	C2-N1-C1'	5.51	124.86	118.80
57	BB	797	G	C6-C5-N7	-5.51	127.09	130.40
57	BB	1009	A	C3'-C2'-C1'	-5.51	97.09	101.50
57	BB	2038	G	N9-C4-C5	-5.51	103.20	105.40
57	BB	2328	A	P-O3'-C3'	-5.51	113.09	119.70
57	BB	2525	G	N1-C2-N3	-5.51	120.59	123.90
58	BA	56	G	C5-C6-N1	-5.51	108.75	111.50
21	AA	142	G	O4'-C1'-N9	5.51	112.61	108.20
21	AA	300	A	C1'-O4'-C4'	5.51	114.31	109.90
21	AA	1297	G	C6-C5-N7	-5.51	127.09	130.40
23	AW	33	U	O5'-P-OP1	5.51	117.31	110.70
27	B5	28	ALA	O-C-N	5.51	131.51	122.70
57	BB	738	G	N1-C2-N3	-5.51	120.59	123.90
57	BB	2115	G	N9-C1'-C2'	-5.51	105.94	112.00
11	AT	45	ALA	N-CA-CB	5.51	117.81	110.10
21	AA	540	G	N7-C8-N9	5.51	115.85	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	656	G	N3-C4-C5	-5.51	125.85	128.60
21	AA	818	G	C4-N9-C1'	5.51	133.66	126.50
21	AA	1005	A	C5-N7-C8	5.51	106.65	103.90
21	AA	1343	G	C6-C5-N7	-5.51	127.10	130.40
22	AY	9	A	O4'-C1'-N9	5.51	112.61	108.20
36	BQ	26	ALA	CB-CA-C	-5.51	101.84	110.10
45	BC	247	TRP	CH2-CZ2-CE2	5.51	122.91	117.40
57	BB	161	A	C3'-C2'-C1'	-5.51	97.09	101.50
57	BB	1568	G	C8-N9-C4	5.51	108.60	106.40
57	BB	1726	C	C2-N1-C1'	5.51	124.86	118.80
57	BB	1903	G	C5-N7-C8	5.51	107.05	104.30
57	BB	1913	A	N1-C6-N6	5.51	121.90	118.60
57	BB	1935	G	C4-C5-N7	5.51	113.00	110.80
57	BB	2555	U	C2-N1-C1'	-5.51	111.09	117.70
57	BB	2750	A	C5'-C4'-C3'	-5.51	107.19	116.00
57	BB	2765	A	O4'-C4'-C3'	-5.51	98.49	104.00
9	AR	42	ARG	NE-CZ-NH1	5.50	123.05	120.30
21	AA	96	U	C5'-C4'-O4'	5.50	115.71	109.10
21	AA	332	G	N1-C2-N3	-5.50	120.60	123.90
21	AA	526	C	C1'-O4'-C4'	5.50	114.30	109.90
57	BB	1984	G	C4'-C3'-C2'	-5.50	97.09	102.60
21	AA	102	G	C5-C6-O6	-5.50	125.30	128.60
21	AA	791	G	C8-N9-C4	-5.50	104.20	106.40
21	AA	1016	A	OP1-P-OP2	-5.50	111.34	119.60
21	AA	1305	G	C4-N9-C1'	-5.50	119.34	126.50
22	AY	55	U	N3-C4-C5	-5.50	111.30	114.60
23	AW	35	A	C6-C5-N7	-5.50	128.45	132.30
28	BI	92	PRO	N-CD-CG	5.50	111.46	103.20
38	BS	87	PRO	N-CA-CB	-5.50	96.55	102.60
41	BV	79	ARG	NE-CZ-NH1	-5.50	117.55	120.30
57	BB	205	G	C4'-C3'-C2'	-5.50	97.10	102.60
57	BB	241	A	C5-N7-C8	5.50	106.65	103.90
57	BB	364	C	C2-N3-C4	5.50	122.65	119.90
57	BB	661	A	C6-N1-C2	5.50	121.90	118.60
57	BB	1828	G	N9-C4-C5	5.50	107.60	105.40
57	BB	1855	U	C5'-C4'-C3'	-5.50	107.19	116.00
57	BB	2007	U	C2-N3-C4	5.50	130.30	127.00
57	BB	2070	A	N1-C2-N3	5.50	132.05	129.30
57	BB	2367	G	N7-C8-N9	-5.50	110.35	113.10
57	BB	2619	C	N1-C2-N3	-5.50	115.35	119.20
21	AA	377	G	C5-C6-N1	5.50	114.25	111.50
23	AW	56	C	N3-C4-N4	5.50	121.85	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BR	92	TRP	CD1-CG-CD2	5.50	110.70	106.30
57	BB	1174	U	C6-N1-C2	-5.50	117.70	121.00
57	BB	1624	U	C5-C6-N1	-5.50	119.95	122.70
57	BB	2377	A	C6-N1-C2	5.50	121.90	118.60
21	AA	520	A	C4-C5-C6	5.50	119.75	117.00
21	AA	1035	A	C5-N7-C8	5.50	106.65	103.90
57	BB	265	A	N3-C4-N9	-5.50	123.00	127.40
57	BB	435	C	C2-N1-C1'	5.50	124.85	118.80
57	BB	849	A	C8-N9-C4	-5.50	103.60	105.80
57	BB	1143	A	N9-C4-C5	5.50	108.00	105.80
57	BB	1845	G	OP1-P-OP2	-5.50	111.35	119.60
57	BB	1861	G	C5-C6-N1	-5.50	108.75	111.50
57	BB	2335	A	O5'-P-OP1	-5.50	100.75	105.70
57	BB	2872	A	C5-C6-N1	-5.50	114.95	117.70
21	AA	254	G	N7-C8-N9	5.50	115.85	113.10
21	AA	257	G	C2-N3-C4	5.50	114.65	111.90
21	AA	600	A	C8-N9-C4	-5.50	103.60	105.80
21	AA	605	U	C5-C6-N1	5.50	125.45	122.70
21	AA	955	U	P-O5'-C5'	5.50	129.70	120.90
21	AA	969	A	C4-C5-C6	5.50	119.75	117.00
22	AY	11	C	O4'-C1'-N1	5.50	112.60	108.20
45	BC	270	ARG	NH1-CZ-NH2	-5.50	113.35	119.40
57	BB	71	A	N3-C4-C5	-5.50	122.95	126.80
57	BB	334	C	P-O3'-C3'	-5.50	113.10	119.70
57	BB	473	G	O4'-C4'-C3'	-5.50	98.50	104.00
57	BB	1021	A	O4'-C1'-N9	5.50	112.60	108.20
57	BB	1341	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	1418	G	P-O3'-C3'	-5.50	113.10	119.70
57	BB	1482	G	C5-N7-C8	5.50	107.05	104.30
57	BB	1790	C	C4-C5-C6	5.50	120.15	117.40
57	BB	2012	G	C4-N9-C1'	5.50	133.65	126.50
57	BB	2034	U	P-O3'-C3'	5.50	126.30	119.70
57	BB	2166	U	C5'-C4'-C3'	-5.50	107.20	116.00
57	BB	2511	U	C5-C6-N1	5.50	125.45	122.70
57	BB	2525	G	O4'-C1'-N9	5.50	112.60	108.20
57	BB	2883	A	OP1-P-OP2	-5.50	111.35	119.60
21	AA	124	C	N3-C2-O2	-5.50	118.05	121.90
21	AA	246	A	C5-C6-N6	-5.50	119.30	123.70
21	AA	1258	G	N7-C8-N9	5.50	115.85	113.10
57	BB	24	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	221	A	N9-C4-C5	-5.50	103.60	105.80
57	BB	389	G	N3-C2-N2	5.50	123.75	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	448	U	C5-C6-N1	5.50	125.45	122.70
57	BB	1278	C	C1'-O4'-C4'	-5.50	105.50	109.90
57	BB	1456	G	O4'-C1'-N9	5.50	112.60	108.20
57	BB	1622	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	1635	A	C6-N1-C2	-5.50	115.30	118.60
57	BB	1983	G	O4'-C1'-N9	5.50	112.60	108.20
57	BB	2326	C	C5-C6-N1	5.50	123.75	121.00
57	BB	2404	U	C5-C6-N1	5.50	125.45	122.70
57	BB	2748	A	C5'-C4'-O4'	5.50	115.70	109.10
57	BB	2862	G	N1-C2-N3	-5.50	120.60	123.90
21	AA	310	G	C8-N9-C4	-5.50	104.20	106.40
21	AA	1045	C	N3-C4-C5	-5.50	119.70	121.90
41	BV	74	ALA	CB-CA-C	-5.50	101.86	110.10
54	BF	7	TYR	CB-CG-CD1	-5.50	117.70	121.00
57	BB	1091	G	C5-N7-C8	-5.50	101.55	104.30
57	BB	1696	G	C8-N9-C4	-5.50	104.20	106.40
57	BB	1823	G	C5-C6-O6	-5.50	125.30	128.60
57	BB	2114	A	C4-C5-C6	5.50	119.75	117.00
57	BB	2152	G	C5-C6-O6	5.50	131.90	128.60
57	BB	2215	C	C1'-O4'-C4'	5.50	114.30	109.90
57	BB	2508	G	N7-C8-N9	-5.50	110.35	113.10
57	BB	2734	A	P-O3'-C3'	-5.50	113.11	119.70
58	BA	10	G	N1-C6-O6	5.50	123.20	119.90
21	AA	618	C	C6-N1-C2	-5.49	118.10	120.30
21	AA	1061	G	O4'-C4'-C3'	-5.49	98.51	104.00
53	BE	101	TYR	CB-CG-CD2	-5.49	117.70	121.00
57	BB	848	C	N3-C2-O2	-5.49	118.05	121.90
57	BB	1129	A	C6-C5-N7	-5.49	128.46	132.30
57	BB	1456	G	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	1895	C	C5-C4-N4	-5.49	116.35	120.20
57	BB	2174	C	C6-N1-C2	-5.49	118.10	120.30
57	BB	2630	G	C5-C6-N1	-5.49	108.75	111.50
57	BB	2780	G	N3-C2-N2	5.49	123.75	119.90
21	AA	232	G	C5'-C4'-O4'	5.49	115.69	109.10
32	BM	11	LYS	N-CA-CB	5.49	120.48	110.60
57	BB	404	A	C5'-C4'-C3'	-5.49	107.21	116.00
57	BB	944	C	C5-C4-N4	-5.49	116.36	120.20
57	BB	1500	G	O4'-C1'-N9	5.49	112.59	108.20
57	BB	1510	G	C5'-C4'-O4'	5.49	115.69	109.10
57	BB	2378	A	C5'-C4'-C3'	-5.49	107.21	116.00
1	AJ	45	ARG	NE-CZ-NH2	-5.49	117.56	120.30
21	AA	66	A	C4-C5-N7	-5.49	107.95	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	396	C	OP1-P-OP2	-5.49	111.37	119.60
21	AA	408	A	P-O3'-C3'	5.49	126.29	119.70
21	AA	540	G	C5-N7-C8	-5.49	101.56	104.30
21	AA	1105	A	N3-C4-C5	-5.49	122.96	126.80
21	AA	1385	G	C2-N3-C4	5.49	114.65	111.90
24	AX	20	U	C4-C5-C6	-5.49	116.41	119.70
57	BB	110	G	C3'-C2'-C1'	-5.49	97.11	101.50
57	BB	700	G	C5-N7-C8	5.49	107.05	104.30
57	BB	1197	G	C3'-C2'-C1'	-5.49	97.11	101.50
57	BB	1622	G	O4'-C1'-N9	5.49	112.59	108.20
57	BB	1664	A	N9-C4-C5	-5.49	103.60	105.80
57	BB	2585	U	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	2720	U	N3-C4-C5	-5.49	111.31	114.60
57	BB	2734	A	C6-C5-N7	-5.49	128.46	132.30
21	AA	557	G	C5-C6-O6	-5.49	125.31	128.60
21	AA	597	G	P-O3'-C3'	-5.49	113.11	119.70
21	AA	746	A	C3'-C2'-C1'	-5.49	97.11	101.50
21	AA	801	U	O4'-C4'-C3'	-5.49	98.51	104.00
21	AA	919	A	C5'-C4'-C3'	5.49	124.78	116.00
21	AA	1172	C	C5-C4-N4	-5.49	116.36	120.20
27	B5	93	GLU	CA-CB-CG	5.49	125.47	113.40
31	BL	66	PHE	CB-CG-CD2	-5.49	116.96	120.80
50	B3	7	ARG	NE-CZ-NH2	-5.49	117.56	120.30
57	BB	126	A	OP1-P-OP2	-5.49	111.37	119.60
57	BB	486	C	C4-C5-C6	-5.49	114.66	117.40
57	BB	1407	G	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	1490	A	N1-C2-N3	5.49	132.04	129.30
57	BB	1610	A	C5-C6-N1	-5.49	114.95	117.70
57	BB	1641	A	C6-C5-N7	-5.49	128.46	132.30
57	BB	2671	G	C8-N9-C4	-5.49	104.20	106.40
57	BB	2676	C	C2-N3-C4	5.49	122.64	119.90
57	BB	2884	U	OP2-P-O3'	5.49	117.28	105.20
58	BA	44	G	N3-C2-N2	5.49	123.74	119.90
21	AA	1080	A	C5-C6-N6	-5.49	119.31	123.70
57	BB	966	G	O4'-C1'-N9	5.49	112.59	108.20
57	BB	1458	U	C2-N3-C4	-5.49	123.71	127.00
21	AA	158	G	O4'-C1'-N9	5.49	112.59	108.20
21	AA	469	C	N3-C4-N4	5.49	121.84	118.00
21	AA	517	G	O4'-C1'-N9	5.49	112.59	108.20
21	AA	855	U	C4-C5-C6	-5.49	116.41	119.70
21	AA	1003	G	C3'-C2'-C1'	-5.49	97.11	101.50
21	AA	1377	A	C4-C5-N7	5.49	113.44	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1409	C	N3-C2-O2	-5.49	118.06	121.90
26	AV	11	A	C4'-C3'-C2'	-5.49	97.11	102.60
57	BB	259	G	N3-C2-N2	5.49	123.74	119.90
57	BB	518	G	C3'-C2'-C1'	5.49	105.89	101.50
57	BB	826	U	N3-C4-C5	-5.49	111.31	114.60
57	BB	1343	G	C6-N1-C2	5.49	128.39	125.10
57	BB	2024	G	N3-C2-N2	5.49	123.74	119.90
57	BB	2396	G	C2-N3-C4	5.49	114.64	111.90
57	BB	2435	A	N3-C4-C5	-5.49	122.96	126.80
21	AA	649	A	C2-N3-C4	5.48	113.34	110.60
57	BB	28	A	C5-N7-C8	5.48	106.64	103.90
57	BB	1029	A	N3-C4-N9	5.48	131.79	127.40
57	BB	1200	C	N3-C2-O2	5.48	125.74	121.90
57	BB	1295	C	N3-C2-O2	-5.48	118.06	121.90
57	BB	1572	A	C2-N3-C4	-5.48	107.86	110.60
57	BB	1601	G	C2-N3-C4	-5.48	109.16	111.90
57	BB	1645	G	C4-C5-C6	5.48	122.09	118.80
57	BB	2819	G	N3-C2-N2	5.48	123.74	119.90
21	AA	350	G	C5-N7-C8	-5.48	101.56	104.30
21	AA	418	C	N1-C2-O2	-5.48	115.61	118.90
21	AA	656	G	N3-C2-N2	5.48	123.74	119.90
22	AY	45	G	OP1-P-OP2	-5.48	111.38	119.60
26	AV	39	C	O5'-C5'-C4'	-5.48	101.28	111.70
45	BC	61	TYR	CB-CG-CD1	-5.48	117.71	121.00
45	BC	79	ARG	CD-NE-CZ	-5.48	115.93	123.60
57	BB	297	G	C2-N3-C4	5.48	114.64	111.90
57	BB	499	U	C6-N1-C2	5.48	124.29	121.00
21	AA	40	C	N3-C2-O2	5.48	125.74	121.90
21	AA	53	A	N9-C4-C5	-5.48	103.61	105.80
21	AA	622	A	C2-N3-C4	-5.48	107.86	110.60
21	AA	1308	U	N3-C2-O2	-5.48	118.36	122.20
57	BB	239	C	N3-C4-C5	-5.48	119.71	121.90
57	BB	554	U	C2-N1-C1'	5.48	124.28	117.70
57	BB	1120	G	N1-C2-N3	5.48	127.19	123.90
57	BB	1717	A	C6-C5-N7	-5.48	128.46	132.30
57	BB	1849	G	C2-N3-C4	-5.48	109.16	111.90
57	BB	2203	U	N1-C1'-C2'	5.48	121.12	114.00
57	BB	2264	C	C4-C5-C6	5.48	120.14	117.40
57	BB	2443	C	N1-C2-N3	-5.48	115.36	119.20
57	BB	2508	G	O4'-C4'-C3'	-5.48	98.52	104.00
58	BA	31	C	C4-C5-C6	-5.48	114.66	117.40
58	BA	37	C	C5-C6-N1	-5.48	118.26	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	118	C	C6-N1-C2	-5.48	118.11	120.30
2	AK	92	ARG	NE-CZ-NH2	5.48	123.04	120.30
7	AP	58	ALA	N-CA-CB	5.48	117.77	110.10
8	AQ	74	LEU	CB-CG-CD1	5.48	120.31	111.00
21	AA	426	U	C4'-C3'-C2'	-5.48	97.12	102.60
21	AA	428	G	C5-N7-C8	5.48	107.04	104.30
23	AW	69	G	C5-N7-C8	5.48	107.04	104.30
57	BB	515	A	N3-C4-N9	5.48	131.78	127.40
57	BB	692	C	C5-C6-N1	5.48	123.74	121.00
57	BB	701	G	C4'-C3'-C2'	-5.48	97.12	102.60
57	BB	2364	C	N1-C2-O2	-5.48	115.61	118.90
58	BA	41	G	C6-N1-C2	5.48	128.39	125.10
21	AA	12	U	N3-C2-O2	5.48	126.03	122.20
21	AA	106	C	C1'-O4'-C4'	5.48	114.28	109.90
21	AA	293	G	C4-C5-C6	5.48	122.09	118.80
21	AA	884	U	C5-C6-N1	-5.48	119.96	122.70
21	AA	1461	G	C8-N9-C1'	5.48	134.12	127.00
34	BO	31	THR	N-CA-C	-5.48	96.21	111.00
36	BQ	48	ASP	CB-CG-OD1	-5.48	113.37	118.30
44	BY	33	ALA	CB-CA-C	-5.48	101.88	110.10
57	BB	906	U	N3-C4-O4	-5.48	115.57	119.40
57	BB	1237	A	O5'-C5'-C4'	-5.48	101.29	111.70
58	BA	43	C	C5-C4-N4	-5.48	116.36	120.20
18	AG	150	PHE	CB-CG-CD1	-5.48	116.97	120.80
21	AA	509	A	C5-C6-N6	-5.48	119.32	123.70
21	AA	950	U	C4-C5-C6	5.48	122.99	119.70
57	BB	38	A	C6-N1-C2	-5.48	115.31	118.60
57	BB	756	A	C5-C6-N1	-5.48	114.96	117.70
57	BB	1247	A	C4-C5-N7	-5.48	107.96	110.70
57	BB	1589	U	C5'-C4'-O4'	-5.48	102.53	109.10
57	BB	2120	G	N9-C4-C5	-5.48	103.21	105.40
57	BB	2894	G	C6-C5-N7	-5.48	127.11	130.40
21	AA	366	A	N7-C8-N9	5.47	116.54	113.80
21	AA	534	U	OP2-P-O3'	5.47	117.24	105.20
21	AA	922	G	C4-C5-N7	-5.47	108.61	110.80
21	AA	1128	C	C4-C5-C6	-5.47	114.66	117.40
24	AX	16	A	C6-N1-C2	-5.47	115.31	118.60
57	BB	84	A	N1-C6-N6	5.47	121.89	118.60
57	BB	944	C	P-O5'-C5'	-5.47	112.14	120.90
57	BB	1011	G	C8-N9-C4	-5.47	104.21	106.40
57	BB	1126	A	C1'-O4'-C4'	5.47	114.28	109.90
57	BB	1402	U	N1-C2-O2	-5.47	118.97	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1432	G	N9-C4-C5	5.47	107.59	105.40
57	BB	2783	U	C1'-O4'-C4'	5.47	114.28	109.90
57	BB	2797	U	C5-C4-O4	-5.47	122.61	125.90
21	AA	287	U	C2-N1-C1'	-5.47	111.13	117.70
21	AA	328	C	N3-C4-N4	5.47	121.83	118.00
21	AA	593	U	C5-C6-N1	5.47	125.44	122.70
21	AA	688	G	O4'-C1'-C2'	-5.47	100.33	105.80
21	AA	758	C	N3-C4-C5	-5.47	119.71	121.90
21	AA	942	G	C5'-C4'-O4'	5.47	115.67	109.10
21	AA	1096	C	P-O3'-C3'	-5.47	113.13	119.70
21	AA	1294	G	C4'-C3'-C2'	-5.47	97.13	102.60
21	AA	1370	G	C6-N1-C2	-5.47	121.82	125.10
33	BN	67	PHE	CB-CG-CD2	-5.47	116.97	120.80
57	BB	203	A	C8-N9-C4	-5.47	103.61	105.80
57	BB	671	C	C5'-C4'-C3'	-5.47	107.24	116.00
57	BB	702	U	N3-C4-O4	5.47	123.23	119.40
57	BB	861	A	O4'-C1'-N9	5.47	112.58	108.20
57	BB	1142	A	C8-N9-C1'	5.47	137.55	127.70
57	BB	1310	G	C5-C6-O6	-5.47	125.32	128.60
57	BB	1402	U	P-O3'-C3'	-5.47	113.13	119.70
57	BB	1964	G	C5-C6-O6	-5.47	125.32	128.60
57	BB	2062	A	C6-N1-C2	5.47	121.88	118.60
57	BB	2555	U	O4'-C1'-N1	5.47	112.58	108.20
57	BB	2571	U	C2'-C3'-O3'	5.47	122.45	113.70
4	AM	83	GLY	C-N-CA	5.47	135.38	121.70
21	AA	111	G	C4-C5-C6	5.47	122.08	118.80
21	AA	140	U	P-O3'-C3'	-5.47	113.14	119.70
21	AA	339	C	C5'-C4'-O4'	5.47	115.67	109.10
23	AW	15	G	C2-N3-C4	-5.47	109.16	111.90
26	AV	26	G	N3-C4-C5	5.47	131.34	128.60
57	BB	181	A	C5-C6-N1	-5.47	114.96	117.70
57	BB	1958	C	N1-C2-O2	5.47	122.18	118.90
57	BB	2284	A	O4'-C1'-N9	5.47	112.58	108.20
58	BA	84	G	C4-N9-C1'	-5.47	119.39	126.50
21	AA	1141	C	C4-C5-C6	5.47	120.14	117.40
54	BF	69	ALA	O-C-N	5.47	131.45	122.70
57	BB	65	U	C4-C5-C6	-5.47	116.42	119.70
57	BB	368	A	N1-C6-N6	5.47	121.88	118.60
57	BB	491	G	N7-C8-N9	-5.47	110.36	113.10
57	BB	496	G	C5'-C4'-C3'	-5.47	107.25	116.00
57	BB	1271	G	C5-C6-N1	5.47	114.23	111.50
57	BB	1350	C	C2-N1-C1'	5.47	124.82	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1360	G	C2-N3-C4	5.47	114.64	111.90
57	BB	1421	G	C6-C5-N7	-5.47	127.12	130.40
57	BB	1672	A	C5-C6-N6	-5.47	119.33	123.70
57	BB	1938	A	C3'-C2'-C1'	5.47	105.88	101.50
57	BB	2347	C	C6-N1-C2	5.47	122.49	120.30
57	BB	2382	G	N3-C4-C5	5.47	131.34	128.60
57	BB	2408	U	P-O3'-C3'	-5.47	113.14	119.70
57	BB	2428	G	O5'-P-OP1	5.47	117.26	110.70
57	BB	2494	G	P-O3'-C3'	-5.47	113.14	119.70
57	BB	2674	G	N1-C6-O6	5.47	123.18	119.90
57	BB	2854	G	C8-N9-C4	-5.47	104.21	106.40
21	AA	425	G	N9-C4-C5	-5.47	103.21	105.40
23	AW	10	G	N1-C6-O6	5.47	123.18	119.90
25	AZ	106	ALA	N-CA-CB	5.47	117.75	110.10
57	BB	799	G	C6-N1-C2	-5.47	121.82	125.10
57	BB	1072	C	C5-C4-N4	-5.47	116.37	120.20
57	BB	1146	C	N3-C4-C5	-5.47	119.71	121.90
57	BB	1393	A	C3'-C2'-C1'	5.47	105.88	101.50
57	BB	1514	G	C5'-C4'-O4'	5.47	115.66	109.10
57	BB	2759	G	O4'-C1'-N9	5.47	112.58	108.20
58	BA	55	U	O4'-C1'-N1	5.47	112.57	108.20
58	BA	72	G	C4-C5-N7	-5.47	108.61	110.80
21	AA	28	A	N3-C4-C5	-5.47	122.97	126.80
21	AA	247	G	N1-C6-O6	5.47	123.18	119.90
21	AA	373	A	C4-C5-C6	5.47	119.73	117.00
21	AA	1089	G	C2-N3-C4	5.47	114.63	111.90
21	AA	1307	U	N3-C4-O4	5.47	123.23	119.40
23	AW	47	U	C2-N3-C4	5.47	130.28	127.00
30	BK	62	VAL	CB-CA-C	-5.47	101.01	111.40
57	BB	34	U	C1'-O4'-C4'	5.47	114.27	109.90
57	BB	134	G	C5-C6-N1	-5.47	108.77	111.50
57	BB	702	U	C5'-C4'-O4'	5.47	115.66	109.10
57	BB	1175	A	O4'-C1'-N9	5.47	112.57	108.20
57	BB	1512	C	C5-C6-N1	5.47	123.73	121.00
57	BB	1660	G	OP1-P-OP2	-5.47	111.40	119.60
57	BB	2113	U	O5'-C5'-C4'	-5.47	101.31	111.70
57	BB	2707	U	N1-C2-O2	5.47	126.63	122.80
57	BB	2708	G	N7-C8-N9	-5.47	110.37	113.10
57	BB	2710	C	N1-C2-O2	-5.47	115.62	118.90
57	BB	2808	G	N7-C8-N9	-5.47	110.37	113.10
57	BB	2822	G	O4'-C1'-N9	5.47	112.57	108.20
13	AB	22	TRP	CB-CG-CD2	-5.46	119.50	126.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	109	A	C5'-C4'-O4'	5.46	115.66	109.10
21	AA	797	C	N3-C4-N4	5.46	121.82	118.00
21	AA	933	G	C6-N1-C2	-5.46	121.82	125.10
21	AA	1112	C	P-O3'-C3'	-5.46	113.14	119.70
21	AA	1193	G	O5'-C5'-C4'	-5.46	101.32	111.70
26	AV	76	A	C5-C6-N6	-5.46	119.33	123.70
57	BB	1227	G	N1-C2-N2	-5.46	111.28	116.20
57	BB	1292	G	C4'-C3'-C2'	-5.46	97.14	102.60
57	BB	1401	G	C5-C6-O6	-5.46	125.32	128.60
57	BB	1614	A	N3-C4-C5	-5.46	122.97	126.80
57	BB	1915	U	C3'-C2'-C1'	5.46	105.87	101.50
57	BB	2043	C	P-O3'-C3'	-5.46	113.14	119.70
57	BB	2125	G	C4-C5-C6	5.46	122.08	118.80
57	BB	2409	G	O4'-C1'-N9	5.46	112.57	108.20
57	BB	2603	G	P-O5'-C5'	-5.46	112.16	120.90
57	BB	2607	G	N3-C2-N2	5.46	123.72	119.90
19	AH	57	GLU	N-CA-CB	5.46	120.43	110.60
21	AA	719	C	N3-C4-C5	-5.46	119.72	121.90
29	BJ	37	ARG	NE-CZ-NH2	5.46	123.03	120.30
43	BX	49	ARG	NH1-CZ-NH2	-5.46	113.39	119.40
57	BB	1322	A	C3'-C2'-C1'	-5.46	97.13	101.50
57	BB	1387	A	C8-N9-C4	-5.46	103.61	105.80
57	BB	1777	U	C5-C4-O4	-5.46	122.62	125.90
57	BB	1830	C	O4'-C1'-N1	5.46	112.57	108.20
57	BB	2032	G	N1-C6-O6	5.46	123.18	119.90
57	BB	2180	U	P-O3'-C3'	5.46	126.25	119.70
57	BB	2627	G	O4'-C1'-N9	5.46	112.57	108.20
57	BB	2670	A	C5-N7-C8	5.46	106.63	103.90
21	AA	49	U	C4-C5-C6	5.46	122.98	119.70
21	AA	336	A	C4-C5-C6	5.46	119.73	117.00
21	AA	566	G	C6-N1-C2	5.46	128.38	125.10
21	AA	697	U	C6-N1-C2	-5.46	117.72	121.00
21	AA	741	G	N7-C8-N9	5.46	115.83	113.10
21	AA	1346	A	N1-C6-N6	5.46	121.88	118.60
48	B1	46	VAL	CG1-CB-CG2	5.46	119.64	110.90
57	BB	121	G	C5-N7-C8	-5.46	101.57	104.30
57	BB	433	C	C5-C4-N4	-5.46	116.38	120.20
57	BB	761	A	N1-C6-N6	5.46	121.88	118.60
57	BB	963	U	C4-C5-C6	5.46	122.98	119.70
57	BB	973	A	O5'-C5'-C4'	5.46	122.08	111.70
57	BB	1289	C	C4-C5-C6	5.46	120.13	117.40
57	BB	1296	G	C2-N3-C4	5.46	114.63	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2203	U	C5-C4-O4	-5.46	122.62	125.90
57	BB	2563	U	N1-C2-O2	-5.46	118.98	122.80
57	BB	2773	C	C4-C5-C6	-5.46	114.67	117.40
57	BB	2882	A	C6-N1-C2	5.46	121.88	118.60
21	AA	1122	U	C5-C4-O4	5.46	129.18	125.90
57	BB	1168	G	C6-N1-C2	5.46	128.38	125.10
57	BB	1830	C	C2-N1-C1'	5.46	124.81	118.80
57	BB	1896	G	N1-C2-N2	5.46	121.11	116.20
57	BB	2563	U	C5-C6-N1	5.46	125.43	122.70
21	AA	59	A	C6-N1-C2	-5.46	115.33	118.60
21	AA	665	A	O4'-C1'-N9	5.46	112.57	108.20
21	AA	798	U	N3-C4-O4	5.46	123.22	119.40
21	AA	848	C	C4-C5-C6	-5.46	114.67	117.40
22	AY	44	A	N1-C2-N3	5.46	132.03	129.30
23	AW	30	G	C2-N3-C4	5.46	114.63	111.90
57	BB	331	C	C5'-C4'-O4'	5.46	115.65	109.10
57	BB	540	C	OP2-P-O3'	5.46	117.21	105.20
57	BB	728	G	N3-C4-N9	5.46	129.28	126.00
57	BB	1298	C	C5-C6-N1	5.46	123.73	121.00
57	BB	1847	A	C4-C5-C6	5.46	119.73	117.00
57	BB	1909	C	N3-C2-O2	-5.46	118.08	121.90
57	BB	2075	U	C3'-C2'-C1'	-5.46	97.13	101.50
57	BB	2760	C	C5-C4-N4	-5.46	116.38	120.20
57	BB	2786	U	C1'-O4'-C4'	5.46	114.27	109.90
57	BB	2869	G	C8-N9-C1'	5.46	134.09	127.00
58	BA	41	G	N3-C2-N2	5.46	123.72	119.90
21	AA	83	C	C4'-C3'-C2'	5.46	108.06	102.60
21	AA	581	G	C8-N9-C4	5.46	108.58	106.40
21	AA	1203	C	C1'-O4'-C4'	5.46	114.27	109.90
23	AW	39	U	N1-C2-O2	5.46	126.62	122.80
57	BB	459	U	C4-C5-C6	-5.46	116.43	119.70
57	BB	784	G	N1-C6-O6	5.46	123.17	119.90
57	BB	1094	U	C6-N1-C2	-5.46	117.73	121.00
57	BB	1368	G	P-O3'-C3'	5.46	126.25	119.70
57	BB	1502	A	C4'-C3'-C2'	-5.46	97.14	102.60
57	BB	1911	U	C5-C6-N1	5.46	125.43	122.70
57	BB	2633	G	OP1-P-OP2	-5.46	111.42	119.60
21	AA	987	G	O4'-C1'-N9	5.46	112.56	108.20
21	AA	1015	G	C5-C6-N1	-5.46	108.77	111.50
57	BB	1173	U	C5'-C4'-O4'	5.46	115.65	109.10
57	BB	2513	A	N7-C8-N9	-5.46	111.07	113.80
21	AA	171	A	P-O5'-C5'	-5.45	112.17	120.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1057	G	N7-C8-N9	5.45	115.83	113.10
21	AA	1323	G	N1-C2-N3	-5.45	120.63	123.90
28	BI	62	ALA	C-N-CA	5.45	135.33	121.70
57	BB	613	A	C6-C5-N7	-5.45	128.48	132.30
57	BB	653	U	N3-C4-O4	5.45	123.22	119.40
57	BB	805	G	P-O3'-C3'	5.45	126.24	119.70
57	BB	1212	G	C5-N7-C8	5.45	107.03	104.30
57	BB	1339	G	C8-N9-C4	5.45	108.58	106.40
57	BB	2251	G	N1-C2-N3	-5.45	120.63	123.90
57	BB	2299	U	N3-C4-C5	-5.45	111.33	114.60
57	BB	2516	A	O4'-C1'-N9	5.45	112.56	108.20
58	BA	22	U	N3-C2-O2	-5.45	118.38	122.20
57	BB	189	G	N1-C2-N2	-5.45	111.29	116.20
57	BB	692	C	C5-C4-N4	-5.45	116.38	120.20
57	BB	1138	G	O4'-C1'-N9	5.45	112.56	108.20
57	BB	1280	G	N1-C2-N2	-5.45	111.29	116.20
57	BB	2289	G	C5-C6-N1	-5.45	108.77	111.50
7	AP	21	VAL	N-CA-C	-5.45	96.28	111.00
21	AA	1130	A	C2-N3-C4	-5.45	107.87	110.60
21	AA	1465	A	C5-C6-N1	-5.45	114.97	117.70
42	BW	14	ASP	CB-CG-OD1	-5.45	113.39	118.30
57	BB	121	G	C6-C5-N7	-5.45	127.13	130.40
57	BB	305	C	N3-C4-N4	5.45	121.81	118.00
57	BB	497	A	C5-C6-N6	-5.45	119.34	123.70
57	BB	529	A	C4-C5-N7	-5.45	107.97	110.70
57	BB	668	A	O4'-C4'-C3'	5.45	110.46	106.10
57	BB	678	C	P-O3'-C3'	-5.45	113.16	119.70
57	BB	925	A	N9-C1'-C2'	-5.45	106.00	112.00
57	BB	1356	G	C3'-C2'-C1'	5.45	105.86	101.50
57	BB	1417	C	C4-C5-C6	5.45	120.12	117.40
57	BB	2282	G	C5-C6-N1	-5.45	108.78	111.50
57	BB	2386	A	C1'-O4'-C4'	-5.45	105.54	109.90
57	BB	2471	A	C4-C5-C6	5.45	119.72	117.00
57	BB	2776	A	P-O3'-C3'	5.45	126.24	119.70
57	BB	2820	A	C6-C5-N7	-5.45	128.49	132.30
21	AA	461	A	C5-C6-N6	-5.45	119.34	123.70
21	AA	645	G	O4'-C1'-C2'	-5.45	100.35	105.80
21	AA	785	G	C5-N7-C8	5.45	107.02	104.30
21	AA	1456	A	C5-N7-C8	-5.45	101.18	103.90
39	BT	41	ALA	CB-CA-C	-5.45	101.93	110.10
57	BB	491	G	C2-N3-C4	5.45	114.62	111.90
57	BB	494	G	C4-N9-C1'	-5.45	119.42	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	602	A	C2-N3-C4	-5.45	107.88	110.60
57	BB	946	C	N1-C2-N3	-5.45	115.39	119.20
57	BB	1384	A	C4-C5-N7	-5.45	107.98	110.70
57	BB	1721	G	N1-C2-N3	-5.45	120.63	123.90
57	BB	2015	A	C4-C5-C6	5.45	119.72	117.00
57	BB	2135	A	C4-C5-C6	5.45	119.72	117.00
57	BB	2655	G	C3'-C2'-C1'	-5.45	97.14	101.50
57	BB	2793	C	C5-C4-N4	-5.45	116.39	120.20
57	BB	2902	C	C5-C4-N4	-5.45	116.39	120.20
58	BA	20	G	C5-N7-C8	-5.45	101.58	104.30
21	AA	438	U	N3-C4-O4	5.45	123.21	119.40
21	AA	441	A	C4'-C3'-C2'	-5.45	97.15	102.60
22	AY	74	C	C4-C5-C6	5.45	120.12	117.40
28	BI	63	ASP	CB-CG-OD2	5.45	123.20	118.30
41	BV	34	LYS	N-CA-CB	5.45	120.41	110.60
57	BB	236	C	N1-C2-O2	5.45	122.17	118.90
57	BB	271	G	N3-C2-N2	5.45	123.71	119.90
57	BB	498	G	N1-C6-O6	5.45	123.17	119.90
57	BB	730	A	C8-N9-C4	-5.45	103.62	105.80
57	BB	1557	C	C6-N1-C1'	-5.45	114.26	120.80
57	BB	1949	G	C4-C5-N7	5.45	112.98	110.80
57	BB	2171	A	C5-N7-C8	5.45	106.62	103.90
57	BB	2448	A	C5-C6-N1	-5.45	114.98	117.70
21	AA	320	A	C2-N3-C4	-5.45	107.88	110.60
21	AA	506	G	O4'-C1'-N9	5.45	112.56	108.20
21	AA	547	A	N9-C4-C5	5.45	107.98	105.80
21	AA	583	A	C5-N7-C8	5.45	106.62	103.90
21	AA	723	U	C5-C4-O4	-5.45	122.63	125.90
21	AA	753	A	C4-C5-N7	-5.45	107.98	110.70
21	AA	1462	C	N3-C2-O2	-5.45	118.09	121.90
31	BL	89	VAL	N-CA-C	-5.45	96.30	111.00
54	BF	82	TYR	N-CA-CB	5.45	120.40	110.60
57	BB	298	G	O5'-P-OP2	-5.45	100.80	105.70
57	BB	1470	A	OP1-P-OP2	-5.45	111.43	119.60
57	BB	1544	A	C5'-C4'-O4'	5.45	115.64	109.10
57	BB	2311	A	O5'-C5'-C4'	-5.45	101.35	111.70
57	BB	2757	A	P-O5'-C5'	-5.45	112.19	120.90
21	AA	240	G	C6-C5-N7	-5.44	127.13	130.40
21	AA	918	A	C4-C5-N7	-5.44	107.98	110.70
21	AA	1190	G	C5-C6-N1	-5.44	108.78	111.50
57	BB	68	G	C2-N3-C4	-5.44	109.18	111.90
57	BB	204	A	C5-C6-N1	-5.44	114.98	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	262	A	C6-N1-C2	5.44	121.87	118.60
57	BB	896	A	O4'-C4'-C3'	-5.44	98.56	104.00
57	BB	1036	G	N7-C8-N9	-5.44	110.38	113.10
57	BB	2250	G	N1-C2-N3	-5.44	120.63	123.90
11	AT	76	ALA	CB-CA-C	-5.44	101.94	110.10
21	AA	311	C	N3-C4-C5	-5.44	119.72	121.90
21	AA	326	G	C8-N9-C1'	-5.44	119.92	127.00
21	AA	493	A	C4-C5-C6	5.44	119.72	117.00
21	AA	1269	A	C6-N1-C2	-5.44	115.33	118.60
23	AW	23	A	C6-N1-C2	-5.44	115.33	118.60
43	BX	45	PHE	N-CA-CB	5.44	120.40	110.60
57	BB	88	G	O4'-C1'-N9	5.44	112.55	108.20
57	BB	145	C	C6-N1-C1'	5.44	127.33	120.80
57	BB	285	G	O4'-C1'-N9	5.44	112.55	108.20
57	BB	333	G	N1-C2-N2	5.44	121.10	116.20
57	BB	714	U	C4-C5-C6	5.44	122.97	119.70
57	BB	735	A	C8-N9-C4	-5.44	103.62	105.80
57	BB	919	U	N3-C4-C5	-5.44	111.33	114.60
57	BB	944	C	C3'-C2'-C1'	5.44	105.85	101.50
57	BB	1539	U	C5-C4-O4	-5.44	122.63	125.90
57	BB	1670	C	N3-C4-N4	5.44	121.81	118.00
57	BB	2225	A	C5-C6-N1	-5.44	114.98	117.70
57	BB	2570	G	C6-C5-N7	-5.44	127.13	130.40
21	AA	662	U	N1-C2-O2	-5.44	118.99	122.80
21	AA	1140	C	C3'-C2'-C1'	-5.44	97.15	101.50
26	AV	41	C	C1'-O4'-C4'	-5.44	105.55	109.90
32	BM	16	ARG	N-CA-C	-5.44	96.31	111.00
36	BQ	63	ARG	NE-CZ-NH1	-5.44	117.58	120.30
45	BC	247	TRP	CG-CD2-CE3	-5.44	129.00	133.90
57	BB	200	U	N3-C4-O4	5.44	123.21	119.40
57	BB	205	G	C4-N9-C1'	-5.44	119.43	126.50
57	BB	504	A	C6-C5-N7	-5.44	128.49	132.30
57	BB	950	G	C8-N9-C4	-5.44	104.22	106.40
57	BB	1008	A	C5-C6-N1	-5.44	114.98	117.70
57	BB	1048	A	N7-C8-N9	5.44	116.52	113.80
57	BB	1417	C	N3-C4-C5	-5.44	119.72	121.90
57	BB	1824	G	N3-C2-N2	-5.44	116.09	119.90
57	BB	1887	C	C5-C6-N1	5.44	123.72	121.00
57	BB	1990	C	C5-C6-N1	5.44	123.72	121.00
57	BB	2290	G	N7-C8-N9	-5.44	110.38	113.10
57	BB	2491	U	C4'-C3'-C2'	5.44	108.04	102.60
57	BB	2592	G	C3'-C2'-C1'	-5.44	97.15	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2831	G	N3-C2-N2	5.44	123.71	119.90
21	AA	1280	A	C8-N9-C1'	-5.44	117.91	127.70
57	BB	306	U	N3-C4-C5	-5.44	111.34	114.60
57	BB	1081	U	C4-C5-C6	-5.44	116.44	119.70
57	BB	1558	C	C5'-C4'-O4'	5.44	115.63	109.10
57	BB	2879	A	C4-N9-C1'	5.44	136.09	126.30
21	AA	454	G	C5-C6-N1	-5.44	108.78	111.50
21	AA	475	C	C5'-C4'-C3'	5.44	124.70	116.00
21	AA	509	A	C4-C5-N7	-5.44	107.98	110.70
21	AA	1299	A	C6-C5-N7	-5.44	128.49	132.30
21	AA	1340	A	C5'-C4'-C3'	-5.44	107.30	116.00
22	AY	66	A	N3-C4-C5	-5.44	122.99	126.80
23	AW	2	C	C6-N1-C1'	-5.44	114.27	120.80
26	AV	12	G	N7-C8-N9	5.44	115.82	113.10
42	BW	11	ASN	N-CA-CB	5.44	120.39	110.60
57	BB	651	G	C4-C5-C6	5.44	122.06	118.80
57	BB	784	G	C6-N1-C2	5.44	128.36	125.10
57	BB	786	C	C6-N1-C2	-5.44	118.12	120.30
57	BB	787	C	C6-N1-C1'	-5.44	114.28	120.80
57	BB	790	U	O4'-C4'-C3'	-5.44	98.56	104.00
57	BB	810	U	N1-C2-N3	-5.44	111.64	114.90
57	BB	1006	C	N1-C2-O2	5.44	122.16	118.90
57	BB	1069	A	N1-C6-N6	5.44	121.86	118.60
57	BB	1176	U	O4'-C1'-N1	5.44	112.55	108.20
57	BB	1177	G	C5-C6-N1	-5.44	108.78	111.50
57	BB	1197	G	N7-C8-N9	5.44	115.82	113.10
57	BB	1385	A	C1'-O4'-C4'	-5.44	105.55	109.90
57	BB	2176	A	C4-C5-C6	5.44	119.72	117.00
57	BB	2211	A	O4'-C1'-N9	5.44	112.55	108.20
57	BB	2238	G	C5-C6-N1	5.44	114.22	111.50
57	BB	2354	C	O4'-C1'-N1	5.44	112.55	108.20
57	BB	2892	G	C5'-C4'-C3'	5.44	124.70	116.00
16	AE	53	ARG	NE-CZ-NH1	-5.44	117.58	120.30
21	AA	903	G	C6-N1-C2	5.44	128.36	125.10
21	AA	1031	C	N3-C4-N4	5.44	121.81	118.00
21	AA	1134	G	C2-N3-C4	-5.44	109.18	111.90
40	BU	97	SER	N-CA-CB	5.44	118.65	110.50
46	BZ	49	ALA	CB-CA-C	-5.44	101.94	110.10
49	B2	41	ARG	NE-CZ-NH1	-5.44	117.58	120.30
53	BE	101	TYR	CG-CD2-CE2	-5.44	116.95	121.30
57	BB	555	G	N1-C2-N2	-5.44	111.31	116.20
57	BB	1008	A	N9-C1'-C2'	-5.44	106.02	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1426	G	C5-C6-N1	-5.44	108.78	111.50
57	BB	1904	G	N3-C2-N2	5.44	123.70	119.90
21	AA	691	G	C1'-O4'-C4'	-5.43	105.55	109.90
21	AA	1370	G	O4'-C1'-N9	5.43	112.55	108.20
21	AA	1381	U	N1-C2-O2	-5.43	119.00	122.80
21	AA	1391	U	O4'-C4'-C3'	-5.43	98.56	104.00
57	BB	83	A	P-O5'-C5'	5.43	129.59	120.90
57	BB	924	G	C5-C6-O6	-5.43	125.34	128.60
57	BB	1281	G	C6-N1-C2	5.43	128.36	125.10
57	BB	1485	U	O4'-C1'-C2'	-5.43	100.36	105.80
57	BB	1611	C	O4'-C1'-N1	5.43	112.55	108.20
57	BB	1981	A	C3'-C2'-C1'	5.43	105.85	101.50
57	BB	2497	A	C6-C5-N7	-5.43	128.50	132.30
57	BB	2536	G	C4-N9-C1'	-5.43	119.44	126.50
58	BA	85	G	C5-C6-O6	-5.43	125.34	128.60
21	AA	46	G	C8-N9-C1'	5.43	134.06	127.00
21	AA	55	A	C5-C6-N6	-5.43	119.35	123.70
21	AA	415	A	C4-C5-N7	-5.43	107.98	110.70
21	AA	745	G	C6-N1-C2	-5.43	121.84	125.10
21	AA	901	A	C5-C6-N6	-5.43	119.36	123.70
21	AA	1113	C	N3-C4-C5	-5.43	119.73	121.90
21	AA	1494	G	C2-N3-C4	5.43	114.62	111.90
57	BB	262	A	OP1-P-OP2	-5.43	111.45	119.60
57	BB	370	G	C1'-O4'-C4'	5.43	114.25	109.90
57	BB	466	A	N1-C2-N3	-5.43	126.58	129.30
57	BB	650	C	C2-N1-C1'	-5.43	112.82	118.80
57	BB	2145	C	N3-C4-N4	5.43	121.80	118.00
58	BA	96	G	O4'-C4'-C3'	-5.43	98.57	104.00
21	AA	212	G	N7-C8-N9	-5.43	110.39	113.10
21	AA	906	A	C4-C5-N7	-5.43	107.98	110.70
22	AY	30	G	N3-C4-N9	5.43	129.26	126.00
23	AW	31	A	C5-C6-N6	-5.43	119.36	123.70
57	BB	219	A	C6-N1-C2	5.43	121.86	118.60
57	BB	377	G	C6-C5-N7	-5.43	127.14	130.40
57	BB	1057	A	N9-C4-C5	-5.43	103.63	105.80
57	BB	1352	U	OP2-P-O3'	5.43	117.15	105.20
57	BB	2391	G	N3-C4-C5	-5.43	125.88	128.60
57	BB	2848	G	C6-C5-N7	-5.43	127.14	130.40
21	AA	655	A	C3'-C2'-C1'	-5.43	97.16	101.50
21	AA	912	C	C6-N1-C2	5.43	122.47	120.30
21	AA	1531	A	N1-C2-N3	5.43	132.01	129.30
26	AV	68	C	C5-C6-N1	-5.43	118.28	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
52	BD	31	ALA	N-CA-CB	5.43	117.70	110.10
57	BB	361	G	N3-C2-N2	5.43	123.70	119.90
57	BB	487	C	N1-C2-O2	-5.43	115.64	118.90
57	BB	1745	A	N1-C2-N3	5.43	132.01	129.30
57	BB	1835	G	C4-C5-N7	5.43	112.97	110.80
57	BB	2084	C	N1-C2-N3	5.43	123.00	119.20
57	BB	2559	C	P-O3'-C3'	-5.43	113.19	119.70
57	BB	2726	A	C5-N7-C8	5.43	106.61	103.90
57	BB	2775	G	C6-C5-N7	-5.43	127.14	130.40
57	BB	2794	C	N1-C2-N3	-5.43	115.40	119.20
58	BA	28	C	C2-N3-C4	5.43	122.61	119.90
21	AA	230	G	C4-C5-C6	5.43	122.06	118.80
21	AA	638	U	P-O5'-C5'	-5.43	112.22	120.90
21	AA	928	G	C2-N3-C4	5.43	114.61	111.90
31	BL	7	SER	CB-CA-C	5.43	120.41	110.10
57	BB	207	A	N1-C2-N3	5.43	132.01	129.30
57	BB	402	A	C4'-C3'-C2'	-5.43	97.17	102.60
57	BB	710	U	C2-N3-C4	5.43	130.26	127.00
57	BB	1196	C	O4'-C4'-C3'	-5.43	98.57	104.00
57	BB	1272	A	N3-C4-N9	-5.43	123.06	127.40
57	BB	1359	A	C4'-C3'-C2'	-5.43	97.17	102.60
57	BB	1663	G	N9-C4-C5	-5.43	103.23	105.40
57	BB	2410	G	C6-N1-C2	5.43	128.36	125.10
21	AA	235	C	O4'-C1'-N1	5.43	112.54	108.20
21	AA	547	A	N1-C6-N6	5.43	121.86	118.60
21	AA	1040	U	O4'-C4'-C3'	-5.43	98.57	104.00
21	AA	1098	C	N1-C2-O2	5.43	122.16	118.90
21	AA	1232	U	C5-C6-N1	5.43	125.41	122.70
23	AW	7	A	C4-C5-N7	-5.43	107.99	110.70
24	AX	21	C	P-O3'-C3'	-5.43	113.19	119.70
39	BT	73	ARG	N-CA-C	-5.43	96.35	111.00
54	BF	155	ILE	CA-CB-CG2	-5.43	100.05	110.90
57	BB	62	U	C2-N3-C4	5.43	130.26	127.00
57	BB	840	C	O4'-C1'-N1	5.43	112.54	108.20
57	BB	973	A	P-O5'-C5'	5.43	129.58	120.90
57	BB	1155	A	C4-C5-C6	5.43	119.71	117.00
57	BB	1179	G	C4'-C3'-C2'	-5.43	97.17	102.60
57	BB	1797	G	C6-N1-C2	-5.43	121.84	125.10
57	BB	1835	G	C6-N1-C2	5.43	128.36	125.10
57	BB	1869	G	C5-C6-N1	-5.43	108.79	111.50
58	BA	47	C	C4-C5-C6	-5.43	114.69	117.40
8	AQ	5	ARG	NE-CZ-NH2	-5.42	117.59	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	535	A	P-O3'-C3'	-5.42	113.19	119.70
21	AA	938	A	O4'-C1'-N9	5.42	112.54	108.20
21	AA	1073	U	C3'-C2'-C1'	5.42	105.84	101.50
21	AA	1250	A	C5'-C4'-O4'	5.42	115.61	109.10
31	BL	58	TYR	CG-CD2-CE2	5.42	125.64	121.30
47	B0	53	VAL	CG1-CB-CG2	5.42	119.58	110.90
57	BB	10	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	75	G	C4-C5-N7	5.42	112.97	110.80
57	BB	239	C	N3-C2-O2	5.42	125.70	121.90
57	BB	247	G	C5-C6-O6	-5.42	125.34	128.60
57	BB	247	G	N9-C4-C5	5.42	107.57	105.40
57	BB	488	G	N3-C2-N2	5.42	123.70	119.90
57	BB	505	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	871	U	C5'-C4'-O4'	-5.42	102.59	109.10
57	BB	1019	U	N1-C2-N3	-5.42	111.64	114.90
57	BB	1299	G	N3-C2-N2	5.42	123.70	119.90
57	BB	1896	G	N3-C2-N2	-5.42	116.10	119.90
57	BB	2500	U	C2-N3-C4	5.42	130.25	127.00
57	BB	2886	A	C6-C5-N7	-5.42	128.50	132.30
58	BA	77	U	C5-C6-N1	5.42	125.41	122.70
21	AA	151	A	C5-N7-C8	5.42	106.61	103.90
42	BW	13	ARG	NE-CZ-NH2	-5.42	117.59	120.30
57	BB	307	G	N3-C2-N2	5.42	123.70	119.90
57	BB	531	C	C5-C4-N4	-5.42	116.40	120.20
57	BB	538	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	663	G	C8-N9-C4	-5.42	104.23	106.40
57	BB	1309	G	C6-N1-C2	5.42	128.35	125.10
57	BB	1436	G	C4'-C3'-C2'	-5.42	97.18	102.60
57	BB	1659	G	C4-C5-C6	5.42	122.05	118.80
57	BB	1833	C	C5-C4-N4	5.42	124.00	120.20
57	BB	1842	G	N3-C2-N2	5.42	123.70	119.90
57	BB	2294	G	C5-C6-N1	-5.42	108.79	111.50
57	BB	2657	A	C8-N9-C4	5.42	107.97	105.80
21	AA	183	C	C2-N1-C1'	5.42	124.76	118.80
27	B5	1	MET	CG-SD-CE	-5.42	91.52	100.20
39	BT	32	LEU	N-CA-CB	5.42	121.24	110.40
57	BB	22	C	P-O3'-C3'	5.42	126.20	119.70
57	BB	251	A	C8-N9-C4	-5.42	103.63	105.80
57	BB	347	A	N9-C4-C5	5.42	107.97	105.80
57	BB	442	G	N1-C2-N3	-5.42	120.65	123.90
57	BB	659	G	N9-C4-C5	5.42	107.57	105.40
57	BB	872	U	C4-C5-C6	5.42	122.95	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1715	G	C6-C5-N7	-5.42	127.15	130.40
57	BB	1801	A	OP1-P-O3'	5.42	117.13	105.20
57	BB	2581	G	C6-C5-N7	-5.42	127.15	130.40
21	AA	627	G	N9-C4-C5	-5.42	103.23	105.40
21	AA	932	C	P-O3'-C3'	5.42	126.20	119.70
21	AA	1253	G	N1-C6-O6	5.42	123.15	119.90
41	BV	45	ASP	CB-CG-OD2	5.42	123.18	118.30
57	BB	34	U	O4'-C4'-C3'	-5.42	98.58	104.00
57	BB	103	A	N9-C4-C5	-5.42	103.63	105.80
57	BB	309	A	C6-C5-N7	-5.42	128.51	132.30
57	BB	1011	G	O5'-C5'-C4'	-5.42	101.40	111.70
57	BB	2726	A	C6-C5-N7	-5.42	128.51	132.30
21	AA	293	G	N3-C4-N9	5.42	129.25	126.00
21	AA	337	G	N1-C2-N3	-5.42	120.65	123.90
21	AA	443	C	O4'-C1'-C2'	5.42	112.48	107.60
21	AA	763	G	C8-N9-C1'	5.42	134.04	127.00
21	AA	1344	C	N3-C4-N4	5.42	121.79	118.00
57	BB	12	U	P-O3'-C3'	5.42	126.20	119.70
57	BB	470	A	P-O3'-C3'	-5.42	113.20	119.70
57	BB	516	C	P-O3'-C3'	-5.42	113.20	119.70
57	BB	750	A	C3'-C2'-C1'	5.42	105.83	101.50
57	BB	798	G	C4'-C3'-C2'	-5.42	97.18	102.60
57	BB	843	G	C5-C6-O6	-5.42	125.35	128.60
57	BB	989	G	N1-C2-N3	-5.42	120.65	123.90
57	BB	1613	G	OP1-P-OP2	-5.42	111.47	119.60
57	BB	2060	A	OP1-P-OP2	-5.42	111.47	119.60
58	BA	92	C	C2-N3-C4	5.42	122.61	119.90
21	AA	305	G	N1-C2-N3	-5.42	120.65	123.90
21	AA	365	U	C4'-C3'-C2'	5.42	108.02	102.60
21	AA	643	C	C6-N1-C1'	5.42	127.30	120.80
21	AA	746	A	O4'-C1'-N9	5.42	112.53	108.20
21	AA	1176	A	C4-C5-N7	-5.42	107.99	110.70
21	AA	1281	C	N3-C4-C5	5.42	124.07	121.90
21	AA	1410	A	C4'-C3'-C2'	-5.42	97.18	102.60
21	AA	1447	A	C5-C6-N6	-5.42	119.37	123.70
22	AY	8	U	N1-C1'-C2'	-5.42	106.04	112.00
22	AY	24	G	C5-C6-N1	-5.42	108.79	111.50
23	AW	50	U	N1-C2-N3	5.42	118.15	114.90
25	AZ	21	ASP	N-CA-CB	5.42	120.35	110.60
47	B0	26	SER	N-CA-CB	5.42	118.62	110.50
55	BG	105	SER	N-CA-CB	5.42	118.62	110.50
57	BB	159	G	N7-C8-N9	5.42	115.81	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	337	C	C5'-C4'-O4'	-5.42	102.60	109.10
57	BB	411	G	C3'-C2'-C1'	-5.42	97.17	101.50
57	BB	570	G	C5-C6-N1	-5.42	108.79	111.50
57	BB	928	A	C2-N3-C4	-5.42	107.89	110.60
57	BB	1147	A	N1-C2-N3	5.42	132.01	129.30
57	BB	1157	G	P-O3'-C3'	-5.42	113.20	119.70
57	BB	1962	C	N3-C4-N4	5.42	121.79	118.00
57	BB	2451	A	C5-N7-C8	5.42	106.61	103.90
21	AA	142	G	C6-C5-N7	-5.42	127.15	130.40
21	AA	676	A	C1'-O4'-C4'	5.42	114.23	109.90
21	AA	1098	C	O4'-C4'-C3'	-5.42	98.58	104.00
21	AA	1402	C	O4'-C1'-N1	5.42	112.53	108.20
37	BR	26	ASP	CB-CG-OD2	5.42	123.17	118.30
57	BB	112	U	N3-C4-C5	5.42	117.85	114.60
57	BB	743	A	N1-C2-N3	5.42	132.01	129.30
57	BB	1202	G	C8-N9-C4	5.42	108.57	106.40
57	BB	2427	C	N3-C4-N4	5.42	121.79	118.00
21	AA	349	A	O4'-C1'-N9	5.41	112.53	108.20
21	AA	704	A	C4-C5-N7	-5.41	107.99	110.70
21	AA	876	C	O4'-C1'-N1	5.41	112.53	108.20
21	AA	1190	G	N1-C2-N3	-5.41	120.65	123.90
21	AA	1419	G	C1'-O4'-C4'	-5.41	105.57	109.90
22	AY	20	G	C5-N7-C8	-5.41	101.59	104.30
29	BJ	118	MET	CA-CB-CG	-5.41	104.10	113.30
57	BB	145	C	C4-C5-C6	5.41	120.11	117.40
57	BB	569	U	C2-N3-C4	-5.41	123.75	127.00
57	BB	841	G	C8-N9-C4	-5.41	104.23	106.40
57	BB	1010	A	C2-N3-C4	-5.41	107.89	110.60
57	BB	1252	G	C5'-C4'-O4'	5.41	115.60	109.10
57	BB	1526	C	O4'-C1'-N1	5.41	112.53	108.20
57	BB	2342	C	C5-C4-N4	-5.41	116.41	120.20
21	AA	90	C	N1-C2-O2	5.41	122.15	118.90
21	AA	1197	A	N1-C2-N3	5.41	132.01	129.30
22	AY	58	A	P-O3'-C3'	5.41	126.19	119.70
23	AW	48	C	N1-C2-N3	5.41	122.99	119.20
44	BY	29	ARG	NE-CZ-NH2	5.41	123.01	120.30
53	BE	167	VAL	CA-CB-CG1	5.41	119.02	110.90
57	BB	446	G	N7-C8-N9	-5.41	110.39	113.10
57	BB	1019	U	N3-C4-O4	5.41	123.19	119.40
57	BB	1407	G	C6-C5-N7	-5.41	127.15	130.40
57	BB	1684	G	C1'-O4'-C4'	-5.41	105.57	109.90
57	BB	2541	A	N9-C4-C5	5.41	107.97	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2687	U	C5-C6-N1	5.41	125.41	122.70
10	AS	35	ARG	N-CA-CB	5.41	120.34	110.60
21	AA	117	G	N3-C2-N2	5.41	123.69	119.90
21	AA	725	G	C5-C6-N1	-5.41	108.80	111.50
21	AA	998	C	P-O5'-C5'	-5.41	112.24	120.90
28	BI	44	LYS	CB-CA-C	-5.41	99.58	110.40
57	BB	27	G	C8-N9-C4	5.41	108.56	106.40
57	BB	312	G	N1-C2-N3	-5.41	120.65	123.90
57	BB	585	G	C3'-C2'-C1'	5.41	105.83	101.50
57	BB	691	C	O5'-P-OP1	-5.41	100.83	105.70
57	BB	2171	A	C1'-O4'-C4'	-5.41	105.57	109.90
57	BB	2225	A	N7-C8-N9	-5.41	111.09	113.80
57	BB	2870	C	C5-C6-N1	5.41	123.71	121.00
13	AB	196	ASP	CB-CG-OD1	-5.41	113.43	118.30
19	AH	15	ASN	N-CA-CB	5.41	120.33	110.60
21	AA	92	U	O5'-C5'-C4'	-5.41	101.42	111.70
21	AA	296	U	N1-C2-O2	-5.41	119.02	122.80
21	AA	676	A	N3-C4-C5	-5.41	123.01	126.80
21	AA	689	C	N1-C2-O2	-5.41	115.66	118.90
21	AA	864	A	C4-C5-C6	5.41	119.70	117.00
21	AA	1368	A	C5-C6-N6	-5.41	119.37	123.70
27	B5	58	ASN	N-CA-CB	5.41	120.33	110.60
56	BH	129	GLU	C-N-CA	5.41	135.22	121.70
57	BB	2	G	C4-C5-N7	5.41	112.96	110.80
57	BB	85	G	C5-C6-O6	-5.41	125.35	128.60
57	BB	287	G	C8-N9-C4	5.41	108.56	106.40
57	BB	410	G	N9-C4-C5	5.41	107.56	105.40
57	BB	545	U	P-O5'-C5'	-5.41	112.25	120.90
57	BB	597	G	N9-C4-C5	-5.41	103.24	105.40
57	BB	1425	G	C6-C5-N7	-5.41	127.16	130.40
57	BB	1700	A	C4-C5-N7	5.41	113.40	110.70
57	BB	1731	G	C5-N7-C8	-5.41	101.60	104.30
57	BB	2223	G	N3-C4-N9	-5.41	122.75	126.00
57	BB	2301	C	C5-C6-N1	-5.41	118.30	121.00
57	BB	2451	A	C5-C6-N1	-5.41	115.00	117.70
57	BB	2599	G	C5-N7-C8	5.41	107.00	104.30
57	BB	2713	U	C5-C6-N1	5.41	125.41	122.70
58	BA	49	C	C2-N1-C1'	5.41	124.75	118.80
21	AA	1032	G	C6-N1-C2	5.41	128.34	125.10
57	BB	127	A	C5-C6-N1	-5.41	115.00	117.70
57	BB	1327	A	C8-N9-C4	-5.41	103.64	105.80
57	BB	1884	G	C4'-C3'-C2'	-5.41	97.19	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2548	U	N3-C4-C5	-5.41	111.36	114.60
57	BB	2575	C	O4'-C1'-N1	5.41	112.53	108.20
21	AA	657	U	N3-C4-C5	5.41	117.84	114.60
21	AA	916	U	C5-C6-N1	5.41	125.40	122.70
21	AA	977	A	C2-N3-C4	-5.41	107.90	110.60
23	AW	10	G	C4'-C3'-C2'	-5.41	97.19	102.60
57	BB	34	U	O4'-C1'-N1	5.41	112.53	108.20
57	BB	182	A	C4-C5-C6	5.41	119.70	117.00
57	BB	703	U	C4'-C3'-C2'	-5.41	97.19	102.60
57	BB	1316	U	N1-C2-O2	5.41	126.58	122.80
57	BB	1433	A	N9-C1'-C2'	-5.41	106.05	112.00
57	BB	1824	G	C8-N9-C1'	5.41	134.03	127.00
57	BB	2083	G	C8-N9-C4	-5.41	104.24	106.40
21	AA	357	G	C6-C5-N7	-5.40	127.16	130.40
21	AA	780	A	C3'-C2'-C1'	5.40	105.82	101.50
21	AA	840	C	N1-C2-N3	5.40	122.98	119.20
21	AA	928	G	O4'-C4'-C3'	-5.40	98.60	104.00
31	BL	12	SER	N-CA-CB	5.40	118.61	110.50
57	BB	74	A	N7-C8-N9	-5.40	111.10	113.80
57	BB	322	A	C6-C5-N7	-5.40	128.52	132.30
57	BB	954	G	C2-N3-C4	-5.40	109.20	111.90
57	BB	1378	A	N1-C2-N3	5.40	132.00	129.30
57	BB	1673	G	C8-N9-C4	5.40	108.56	106.40
57	BB	2069	G	C4-C5-C6	5.40	122.04	118.80
57	BB	2269	G	C2-N3-C4	5.40	114.60	111.90
57	BB	2519	U	C1'-O4'-C4'	5.40	114.22	109.90
57	BB	2585	U	N3-C4-C5	-5.40	111.36	114.60
57	BB	2707	U	P-O3'-C3'	-5.40	113.22	119.70
57	BB	2799	A	P-O3'-C3'	5.40	126.18	119.70
21	AA	174	A	C6-N1-C2	-5.40	115.36	118.60
21	AA	302	G	C1'-O4'-C4'	5.40	114.22	109.90
21	AA	550	G	C2-N3-C4	5.40	114.60	111.90
21	AA	690	G	C4-C5-N7	-5.40	108.64	110.80
21	AA	750	C	C5'-C4'-C3'	5.40	124.64	116.00
21	AA	756	C	C2-N3-C4	-5.40	117.20	119.90
21	AA	1052	U	C5'-C4'-O4'	5.40	115.58	109.10
21	AA	1363	A	C5-C6-N1	-5.40	115.00	117.70
21	AA	1399	C	C5'-C4'-C3'	-5.40	107.36	116.00
21	AA	1408	A	O4'-C1'-C2'	5.40	112.46	107.60
21	AA	1430	A	N1-C6-N6	5.40	121.84	118.60
36	BQ	31	TYR	CG-CD1-CE1	5.40	125.62	121.30
57	BB	87	U	N1-C2-O2	5.40	126.58	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	241	A	C2-N3-C4	-5.40	107.90	110.60
57	BB	407	G	N3-C4-N9	-5.40	122.76	126.00
57	BB	1106	G	N3-C2-N2	5.40	123.68	119.90
57	BB	1365	A	O4'-C1'-N9	5.40	112.52	108.20
57	BB	1498	C	C4'-C3'-C2'	-5.40	97.20	102.60
57	BB	1642	G	C2-N3-C4	-5.40	109.20	111.90
57	BB	1684	G	O4'-C1'-N9	5.40	112.52	108.20
57	BB	2416	C	C2-N1-C1'	5.40	124.74	118.80
21	AA	290	C	C4'-C3'-C2'	-5.40	97.20	102.60
21	AA	351	G	OP1-P-OP2	-5.40	111.50	119.60
21	AA	585	G	N3-C4-C5	-5.40	125.90	128.60
21	AA	1319	A	C5'-C4'-O4'	5.40	115.58	109.10
21	AA	1487	G	N3-C4-C5	5.40	131.30	128.60
21	AA	1505	G	C4-C5-N7	-5.40	108.64	110.80
21	AA	1517	G	C6-C5-N7	-5.40	127.16	130.40
26	AV	10	G	C4-C5-C6	5.40	122.04	118.80
57	BB	2686	G	N7-C8-N9	-5.40	110.40	113.10
57	BB	2877	G	N3-C2-N2	5.40	123.68	119.90
21	AA	426	U	N3-C2-O2	5.40	125.98	122.20
23	AW	29	G	C5-N7-C8	-5.40	101.60	104.30
29	BJ	28	LEU	CB-CG-CD2	-5.40	101.82	111.00
30	BK	98	ILE	N-CA-C	-5.40	96.42	111.00
43	BX	28	PHE	CB-CG-CD1	5.40	124.58	120.80
57	BB	458	G	C4'-C3'-C2'	-5.40	97.20	102.60
57	BB	1590	A	C6-C5-N7	-5.40	128.52	132.30
57	BB	1634	A	P-O5'-C5'	-5.40	112.26	120.90
57	BB	1789	A	O5'-P-OP2	-5.40	100.84	105.70
57	BB	2447	G	P-O3'-C3'	5.40	126.18	119.70
57	BB	2782	G	C6-C5-N7	-5.40	127.16	130.40
21	AA	274	A	C5'-C4'-C3'	-5.40	107.36	116.00
21	AA	841	C	N1-C2-O2	-5.40	115.66	118.90
21	AA	1362	A	N1-C2-N3	5.40	132.00	129.30
21	AA	1465	A	P-O3'-C3'	5.40	126.18	119.70
22	AY	46	G	C5'-C4'-C3'	-5.40	107.36	116.00
25	AZ	350	VAL	O-C-N	5.40	131.34	122.70
26	AV	69	C	O5'-C5'-C4'	-5.40	101.45	111.70
45	BC	161	VAL	CG1-CB-CG2	-5.40	102.26	110.90
57	BB	258	G	N3-C2-N2	5.40	123.68	119.90
57	BB	479	A	C5-C6-N6	-5.40	119.38	123.70
57	BB	699	A	P-O3'-C3'	-5.40	113.22	119.70
57	BB	1169	A	O4'-C4'-C3'	-5.40	98.60	104.00
57	BB	1217	U	P-O3'-C3'	5.40	126.18	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1248	G	O4'-C1'-N9	5.40	112.52	108.20
57	BB	1509	A	C4-C5-N7	-5.40	108.00	110.70
57	BB	1556	C	N3-C4-N4	5.40	121.78	118.00
57	BB	1701	A	P-O3'-C3'	-5.40	113.22	119.70
57	BB	1802	A	C3'-C2'-C1'	5.40	105.82	101.50
57	BB	2176	A	N3-C4-C5	-5.40	123.02	126.80
57	BB	2211	A	N9-C4-C5	5.40	107.96	105.80
57	BB	2424	C	N3-C4-N4	5.40	121.78	118.00
57	BB	2795	C	N3-C4-N4	5.40	121.78	118.00
21	AA	1060	U	C4-C5-C6	5.40	122.94	119.70
21	AA	1083	U	O4'-C1'-N1	5.40	112.52	108.20
21	AA	1159	U	C5-C4-O4	-5.40	122.66	125.90
21	AA	1290	G	C6-N1-C2	5.40	128.34	125.10
22	AY	7	U	C5'-C4'-O4'	5.40	115.58	109.10
57	BB	20	C	P-O3'-C3'	-5.40	113.22	119.70
21	AA	119	A	P-O5'-C5'	-5.39	112.27	120.90
21	AA	237	G	N3-C4-N9	5.39	129.24	126.00
21	AA	660	C	C5-C4-N4	-5.39	116.42	120.20
21	AA	1463	U	N3-C2-O2	5.39	125.98	122.20
21	AA	1477	U	C3'-C2'-C1'	5.39	105.81	101.50
23	AW	62	C	C5-C4-N4	-5.39	116.42	120.20
38	BS	8	ARG	N-CA-CB	5.39	120.31	110.60
52	BD	98	VAL	CA-CB-CG2	5.39	118.99	110.90
57	BB	125	A	N7-C8-N9	-5.39	111.10	113.80
57	BB	175	G	C4'-C3'-C2'	-5.39	97.20	102.60
57	BB	381	G	C8-N9-C4	-5.39	104.24	106.40
57	BB	759	G	C5-C6-N1	-5.39	108.80	111.50
57	BB	1103	A	C5-C6-N1	-5.39	115.00	117.70
57	BB	1277	G	C4'-C3'-C2'	-5.39	97.20	102.60
57	BB	1501	G	C8-N9-C4	-5.39	104.24	106.40
57	BB	1855	U	C5'-C4'-O4'	5.39	115.57	109.10
57	BB	1996	C	N1-C2-N3	5.39	122.98	119.20
57	BB	2371	G	C8-N9-C4	-5.39	104.24	106.40
2	AK	54	SER	N-CA-CB	5.39	118.59	110.50
16	AE	110	MET	CG-SD-CE	-5.39	91.57	100.20
17	AF	99	ALA	N-CA-CB	5.39	117.65	110.10
21	AA	88	U	N3-C4-O4	5.39	123.17	119.40
21	AA	807	A	OP1-P-OP2	-5.39	111.51	119.60
21	AA	851	G	N7-C8-N9	5.39	115.80	113.10
21	AA	876	C	N3-C4-C5	-5.39	119.74	121.90
21	AA	988	G	C2-N3-C4	-5.39	109.20	111.90
21	AA	1390	U	C2-N3-C4	5.39	130.24	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	4	C	O4'-C1'-C2'	-5.39	100.41	105.80
57	BB	921	C	C6-N1-C1'	5.39	127.27	120.80
57	BB	1472	C	O4'-C1'-N1	5.39	112.51	108.20
57	BB	1555	G	N3-C2-N2	5.39	123.67	119.90
57	BB	1713	A	C8-N9-C4	-5.39	103.64	105.80
57	BB	1732	C	C5'-C4'-C3'	-5.39	107.37	116.00
57	BB	1869	G	C4'-C3'-C2'	-5.39	97.21	102.60
57	BB	2421	G	O4'-C1'-N9	5.39	112.52	108.20
21	AA	108	G	C2-N3-C4	5.39	114.59	111.90
21	AA	1201	A	C5'-C4'-C3'	-5.39	107.37	116.00
21	AA	1239	A	C5-N7-C8	5.39	106.60	103.90
57	BB	274	C	C5-C4-N4	-5.39	116.43	120.20
57	BB	940	G	C4-C5-N7	5.39	112.96	110.80
57	BB	1757	A	N9-C4-C5	5.39	107.96	105.80
57	BB	1977	A	C4-C5-N7	5.39	113.40	110.70
57	BB	2610	C	C4-C5-C6	5.39	120.10	117.40
21	AA	418	C	P-O5'-C5'	-5.39	112.28	120.90
23	AW	73	A	C6-C5-N7	-5.39	128.53	132.30
26	AV	17(A)	U	C6-N1-C2	5.39	124.23	121.00
27	B5	112	ASP	CB-CG-OD1	5.39	123.15	118.30
57	BB	148	U	C4-C5-C6	-5.39	116.47	119.70
57	BB	232	G	N1-C2-N3	-5.39	120.67	123.90
57	BB	261	G	N3-C2-N2	5.39	123.67	119.90
57	BB	289	G	C4-C5-N7	-5.39	108.64	110.80
57	BB	312	G	O4'-C1'-N9	5.39	112.51	108.20
57	BB	884	U	C5-C6-N1	5.39	125.39	122.70
57	BB	1030	C	N1-C2-O2	-5.39	115.67	118.90
57	BB	2061	G	N3-C2-N2	5.39	123.67	119.90
57	BB	2579	C	N1-C2-N3	5.39	122.97	119.20
57	BB	2651	C	C4-C5-C6	-5.39	114.71	117.40
21	AA	682	G	N9-C1'-C2'	-5.39	106.07	112.00
41	BV	60	VAL	CG1-CB-CG2	5.39	119.52	110.90
57	BB	304	U	C5'-C4'-C3'	-5.39	107.38	116.00
57	BB	981	A	N3-C4-C5	-5.39	123.03	126.80
57	BB	1063	G	P-O5'-C5'	-5.39	112.28	120.90
57	BB	1236	G	C6-N1-C2	5.39	128.33	125.10
57	BB	1374	G	P-O5'-C5'	5.39	129.52	120.90
57	BB	1513	U	N1-C2-N3	-5.39	111.67	114.90
57	BB	1658	C	C5-C4-N4	-5.39	116.43	120.20
21	AA	45	G	C5-C6-N1	-5.39	108.81	111.50
21	AA	232	G	N3-C2-N2	5.39	123.67	119.90
21	AA	539	A	C2-N3-C4	-5.39	107.91	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	753	A	C5'-C4'-O4'	5.39	115.56	109.10
22	AY	36	A	P-O5'-C5'	-5.39	112.28	120.90
22	AY	53	G	O4'-C4'-C3'	-5.39	98.61	104.00
25	AZ	70	ASP	O-C-N	5.39	131.32	122.70
57	BB	365	U	C5-C4-O4	-5.39	122.67	125.90
57	BB	442	G	N3-C2-N2	5.39	123.67	119.90
57	BB	572	A	C1'-O4'-C4'	5.39	114.21	109.90
57	BB	1165	A	N1-C2-N3	-5.39	126.61	129.30
57	BB	1532	A	P-O5'-C5'	5.39	129.52	120.90
57	BB	1668	A	N7-C8-N9	-5.39	111.11	113.80
57	BB	1807	G	N3-C2-N2	5.39	123.67	119.90
57	BB	2631	G	N1-C2-N2	-5.39	111.35	116.20
57	BB	2723	C	O4'-C1'-N1	5.39	112.51	108.20
57	BB	2814	A	C5-C6-N6	-5.39	119.39	123.70
58	BA	90	C	O4'-C1'-N1	5.39	112.51	108.20
21	AA	536	C	C6-N1-C1'	-5.38	114.34	120.80
57	BB	351	C	N1-C2-O2	-5.38	115.67	118.90
57	BB	698	C	C4-C5-C6	5.38	120.09	117.40
57	BB	951	C	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	1312	U	C1'-O4'-C4'	-5.38	105.59	109.90
57	BB	1348	C	C1'-O4'-C4'	-5.38	105.59	109.90
57	BB	1491	G	C5-N7-C8	-5.38	101.61	104.30
57	BB	1555	G	N1-C6-O6	5.38	123.13	119.90
57	BB	1609	A	C8-N9-C4	-5.38	103.65	105.80
57	BB	1661	G	N3-C2-N2	5.38	123.67	119.90
57	BB	1795	C	N1-C1'-C2'	-5.38	106.08	112.00
57	BB	1878	G	N1-C2-N2	-5.38	111.35	116.20
57	BB	2017	U	OP1-P-OP2	-5.38	111.53	119.60
57	BB	2094	A	OP1-P-OP2	-5.38	111.52	119.60
57	BB	2140	G	N1-C6-O6	5.38	123.13	119.90
21	AA	577	G	C3'-C2'-C1'	-5.38	97.19	101.50
57	BB	35	G	C5-N7-C8	5.38	106.99	104.30
57	BB	517	C	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	2125	G	C6-C5-N7	-5.38	127.17	130.40
57	BB	2497	A	C5-C6-N6	-5.38	119.39	123.70
7	AP	25	ARG	NE-CZ-NH2	-5.38	117.61	120.30
21	AA	205	A	C4-C5-C6	5.38	119.69	117.00
21	AA	304	U	O4'-C1'-N1	5.38	112.50	108.20
21	AA	455	G	C5-C6-N1	-5.38	108.81	111.50
21	AA	470	C	C1'-O4'-C4'	5.38	114.21	109.90
21	AA	499	A	C5'-C4'-O4'	5.38	115.56	109.10
21	AA	880	C	C4'-C3'-C2'	-5.38	97.22	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1185	G	O4'-C1'-N9	5.38	112.50	108.20
21	AA	1447	A	N1-C2-N3	5.38	131.99	129.30
57	BB	321	U	O4'-C1'-N1	5.38	112.50	108.20
57	BB	778	G	O4'-C1'-N9	5.38	112.50	108.20
57	BB	1134	A	C5-C6-N6	-5.38	119.39	123.70
57	BB	1574	C	C6-N1-C2	-5.38	118.15	120.30
57	BB	1948	G	N3-C4-N9	5.38	129.23	126.00
57	BB	1983	G	C6-C5-N7	-5.38	127.17	130.40
57	BB	2070	A	C4-C5-C6	5.38	119.69	117.00
57	BB	2095	A	N1-C2-N3	5.38	131.99	129.30
57	BB	2511	U	N3-C4-O4	5.38	123.17	119.40
57	BB	2724	U	OP1-P-OP2	-5.38	111.53	119.60
57	BB	2897	U	O4'-C1'-N1	5.38	112.51	108.20
57	BB	2900	A	C2-N3-C4	5.38	113.29	110.60
21	AA	51	A	C6-C5-N7	-5.38	128.53	132.30
21	AA	261	U	C1'-O4'-C4'	5.38	114.20	109.90
21	AA	694	A	N3-C4-C5	-5.38	123.03	126.80
26	AV	30	G	C4-C5-N7	5.38	112.95	110.80
31	BL	131	ALA	CB-CA-C	-5.38	102.03	110.10
57	BB	1882	U	C2-N3-C4	5.38	130.23	127.00
21	AA	66	A	O4'-C4'-C3'	-5.38	98.62	104.00
21	AA	436	C	C3'-C2'-C1'	-5.38	97.20	101.50
21	AA	604	G	O5'-C5'-C4'	-5.38	101.48	111.70
21	AA	723	U	N3-C4-O4	5.38	123.17	119.40
21	AA	845	A	C4'-C3'-C2'	-5.38	97.22	102.60
21	AA	1525	G	C3'-C2'-C1'	-5.38	97.20	101.50
26	AV	24	U	C6-N1-C2	-5.38	117.77	121.00
26	AV	39	C	N1-C2-O2	-5.38	115.67	118.90
39	BT	84	TYR	CG-CD1-CE1	-5.38	117.00	121.30
46	BZ	48	ASN	C-N-CA	5.38	135.15	121.70
57	BB	227	A	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	292	U	N1-C2-O2	-5.38	119.03	122.80
57	BB	541	A	O4'-C1'-N9	5.38	112.50	108.20
57	BB	558	U	N3-C4-O4	5.38	123.17	119.40
57	BB	805	G	C5-C6-N1	-5.38	108.81	111.50
57	BB	1020	A	N7-C8-N9	5.38	116.49	113.80
57	BB	1714	U	P-O5'-C5'	5.38	129.50	120.90
57	BB	1762	A	C5'-C4'-O4'	-5.38	102.64	109.10
57	BB	2141	G	C3'-C2'-C1'	-5.38	97.20	101.50
57	BB	2145	C	C6-N1-C2	5.38	122.45	120.30
57	BB	2332	C	N1-C2-O2	-5.38	115.67	118.90
57	BB	2427	C	N3-C4-C5	-5.38	119.75	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2627	G	C3'-C2'-C1'	-5.38	97.20	101.50
57	BB	2826	A	O4'-C1'-N9	5.38	112.50	108.20
21	AA	35	G	C5-C6-O6	-5.38	125.37	128.60
21	AA	71	A	C3'-C2'-C1'	-5.38	97.20	101.50
21	AA	72	A	C5-C6-N1	-5.38	115.01	117.70
21	AA	555	U	N1-C2-O2	-5.38	119.04	122.80
21	AA	637	C	O4'-C4'-C3'	-5.38	98.62	104.00
21	AA	655	A	N7-C8-N9	5.38	116.49	113.80
21	AA	818	G	C6-C5-N7	-5.38	127.17	130.40
21	AA	1058	G	N9-C4-C5	-5.38	103.25	105.40
25	AZ	283	ARG	NE-CZ-NH2	-5.38	117.61	120.30
26	AV	22	G	N3-C4-C5	-5.38	125.91	128.60
57	BB	514	A	C3'-C2'-C1'	-5.38	97.20	101.50
57	BB	706	A	C5-C6-N1	-5.38	115.01	117.70
57	BB	1202	G	C5-C6-N1	-5.38	108.81	111.50
57	BB	1573	G	N9-C1'-C2'	-5.38	106.08	112.00
57	BB	2066	C	O4'-C1'-N1	5.38	112.50	108.20
57	BB	2147	A	C2-N3-C4	-5.38	107.91	110.60
57	BB	2219	U	C4'-C3'-C2'	-5.38	97.22	102.60
57	BB	2224	G	N1-C2-N3	-5.38	120.67	123.90
57	BB	2342	C	C4-C5-C6	5.38	120.09	117.40
21	AA	972	C	C4-C5-C6	5.38	120.09	117.40
23	AW	33	U	N3-C4-C5	5.38	117.83	114.60
55	BG	23	ILE	CA-CB-CG1	5.38	121.21	111.00
57	BB	172	A	C2-N3-C4	-5.38	107.91	110.60
57	BB	968	C	P-O3'-C3'	-5.38	113.25	119.70
57	BB	977	G	N9-C1'-C2'	-5.38	106.09	112.00
57	BB	2700	A	C5-C6-N6	-5.38	119.40	123.70
57	BB	2786	U	N3-C4-C5	-5.38	111.38	114.60
21	AA	734	G	C6-N1-C2	5.37	128.32	125.10
21	AA	1172	C	N1-C2-O2	5.37	122.12	118.90
21	AA	1283	U	N3-C4-C5	-5.37	111.38	114.60
23	AW	34	G	C5-N7-C8	5.37	106.99	104.30
26	AV	34	C	C3'-C2'-C1'	-5.37	97.20	101.50
26	AV	53	G	C3'-C2'-C1'	-5.37	97.20	101.50
57	BB	92	U	O4'-C4'-C3'	-5.37	98.63	104.00
57	BB	197	A	OP1-P-OP2	-5.37	111.54	119.60
57	BB	625	G	O4'-C1'-N9	5.37	112.50	108.20
57	BB	732	C	N3-C2-O2	5.37	125.66	121.90
57	BB	1231	U	C6-N1-C1'	5.37	128.72	121.20
57	BB	1796	U	N1-C2-N3	5.37	118.12	114.90
57	BB	2218	G	C2-N3-C4	5.37	114.59	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2390	U	N3-C4-C5	-5.37	111.38	114.60
21	AA	265	G	N1-C2-N2	-5.37	111.37	116.20
21	AA	331	G	C2-N3-C4	5.37	114.59	111.90
21	AA	528	C	C6-N1-C1'	5.37	127.25	120.80
21	AA	533	A	N1-C2-N3	5.37	131.99	129.30
21	AA	963	G	C4-C5-C6	5.37	122.02	118.80
21	AA	1132	C	C6-N1-C2	-5.37	118.15	120.30
21	AA	1304	G	C5-C6-N1	-5.37	108.81	111.50
57	BB	48	G	C5-C6-N1	-5.37	108.81	111.50
57	BB	298	G	C5-C6-O6	-5.37	125.38	128.60
57	BB	685	A	N9-C4-C5	5.37	107.95	105.80
57	BB	706	A	C4-C5-C6	5.37	119.69	117.00
57	BB	1123	C	N3-C4-C5	5.37	124.05	121.90
57	BB	1151	A	P-O3'-C3'	-5.37	113.25	119.70
57	BB	1344	U	C4-C5-C6	5.37	122.92	119.70
57	BB	1701	A	N3-C4-N9	5.37	131.70	127.40
57	BB	2213	U	N1-C2-N3	-5.37	111.68	114.90
57	BB	2289	G	N1-C2-N2	-5.37	111.37	116.20
57	BB	2398	U	O5'-P-OP1	-5.37	100.86	105.70
57	BB	2725	A	P-O5'-C5'	-5.37	112.30	120.90
58	BA	104	A	C4-C5-C6	5.37	119.69	117.00
19	AH	53	ASP	CB-CG-OD1	-5.37	113.47	118.30
21	AA	494	G	C6-C5-N7	-5.37	127.18	130.40
21	AA	1339	A	N9-C4-C5	5.37	107.95	105.80
21	AA	1376	U	N3-C2-O2	5.37	125.96	122.20
21	AA	1394	A	N9-C4-C5	-5.37	103.65	105.80
25	AZ	332	PHE	CB-CA-C	-5.37	99.66	110.40
26	AV	3	C	N3-C4-C5	-5.37	119.75	121.90
26	AV	36	U	C5'-C4'-C3'	-5.37	107.41	116.00
57	BB	144	A	C5-C6-N6	-5.37	119.40	123.70
57	BB	223	A	C4-C5-N7	-5.37	108.02	110.70
57	BB	825	A	C2-N3-C4	5.37	113.28	110.60
57	BB	1352	U	C4'-C3'-C2'	-5.37	97.23	102.60
57	BB	1840	G	N1-C6-O6	5.37	123.12	119.90
57	BB	1982	U	C2-N1-C1'	-5.37	111.26	117.70
57	BB	2211	A	C6-C5-N7	-5.37	128.54	132.30
57	BB	2270	A	C5'-C4'-O4'	5.37	115.54	109.10
57	BB	2823	A	OP1-P-O3'	5.37	117.01	105.20
21	AA	243	A	N9-C4-C5	5.37	107.95	105.80
21	AA	632	U	C3'-C2'-C1'	5.37	105.80	101.50
21	AA	1253	G	P-O3'-C3'	-5.37	113.26	119.70
21	AA	1274	A	N1-C2-N3	5.37	131.98	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	BK	2	GLN	N-CA-CB	5.37	120.26	110.60
57	BB	166	U	OP1-P-OP2	-5.37	111.55	119.60
57	BB	497	A	O4'-C1'-N9	5.37	112.49	108.20
57	BB	774	G	O4'-C1'-N9	5.37	112.50	108.20
57	BB	862	G	C6-C5-N7	-5.37	127.18	130.40
57	BB	1269	A	N3-C4-C5	-5.37	123.04	126.80
57	BB	1538	G	C5-C6-O6	-5.37	125.38	128.60
21	AA	243	A	C5'-C4'-O4'	5.37	115.54	109.10
21	AA	271	C	C4-C5-C6	5.37	120.08	117.40
21	AA	1344	C	C5-C4-N4	-5.37	116.44	120.20
57	BB	512	G	N3-C2-N2	5.37	123.66	119.90
57	BB	698	C	N3-C4-N4	5.37	121.76	118.00
57	BB	732	C	N3-C4-N4	5.37	121.76	118.00
57	BB	993	G	N3-C4-N9	-5.37	122.78	126.00
4	AM	22	TYR	CB-CG-CD2	-5.37	117.78	121.00
6	AO	14	PHE	CB-CG-CD2	5.37	124.56	120.80
21	AA	139	A	C6-N1-C2	-5.37	115.38	118.60
21	AA	404	G	N7-C8-N9	-5.37	110.42	113.10
21	AA	907	A	O4'-C1'-N9	5.37	112.49	108.20
21	AA	928	G	P-O3'-C3'	-5.37	113.26	119.70
26	AV	48	C	C2-N3-C4	5.37	122.58	119.90
57	BB	233	A	C4-C5-C6	5.37	119.68	117.00
57	BB	1174	U	N3-C4-O4	5.37	123.16	119.40
57	BB	1614	A	C5'-C4'-O4'	5.37	115.54	109.10
57	BB	2058	A	C5-N7-C8	5.37	106.58	103.90
57	BB	2470	G	C5-C6-O6	-5.37	125.38	128.60
57	BB	2529	G	C5-N7-C8	5.37	106.98	104.30
14	AC	116	ALA	O-C-N	-5.36	114.12	122.70
21	AA	488	C	C5-C4-N4	5.36	123.95	120.20
21	AA	492	C	N1-C2-N3	-5.36	115.44	119.20
21	AA	575	G	N3-C4-C5	5.36	131.28	128.60
21	AA	1117	A	N3-C4-C5	-5.36	123.05	126.80
21	AA	1176	A	C5-C6-N6	-5.36	119.41	123.70
21	AA	1200	C	C6-N1-C2	-5.36	118.15	120.30
21	AA	1494	G	C8-N9-C4	-5.36	104.25	106.40
27	B5	37	LYS	CB-CA-C	5.36	121.13	110.40
57	BB	103	A	C5'-C4'-C3'	-5.36	107.42	116.00
57	BB	477	A	O4'-C1'-N9	5.36	112.49	108.20
57	BB	899	A	C8-N9-C4	-5.36	103.65	105.80
57	BB	1252	G	C2-N3-C4	-5.36	109.22	111.90
57	BB	1273	U	C5-C4-O4	5.36	129.12	125.90
57	BB	1608	A	N1-C2-N3	-5.36	126.62	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2094	A	C4-C5-C6	5.36	119.68	117.00
57	BB	2126	A	C6-C5-N7	-5.36	128.54	132.30
57	BB	2444	G	N3-C4-N9	-5.36	122.78	126.00
57	BB	2495	G	C4'-C3'-C2'	-5.36	97.24	102.60
21	AA	320	A	N9-C4-C5	-5.36	103.66	105.80
21	AA	413	G	N1-C2-N2	-5.36	111.37	116.20
21	AA	889	A	N9-C4-C5	5.36	107.94	105.80
21	AA	1332	A	N3-C4-N9	5.36	131.69	127.40
21	AA	1447	A	C4'-C3'-C2'	-5.36	97.24	102.60
21	AA	1527	U	C4-C5-C6	5.36	122.92	119.70
31	BL	28	GLY	CA-C-O	5.36	130.25	120.60
57	BB	2830	C	C5-C4-N4	-5.36	116.45	120.20
21	AA	39	G	C4-C5-N7	-5.36	108.66	110.80
21	AA	692	U	OP1-P-OP2	-5.36	111.56	119.60
21	AA	811	C	OP1-P-OP2	-5.36	111.56	119.60
21	AA	1052	U	C6-N1-C2	5.36	124.22	121.00
21	AA	1154	G	O4'-C4'-C3'	-5.36	98.64	104.00
21	AA	1254	A	N3-C4-N9	5.36	131.69	127.40
21	AA	1484	C	N1-C2-O2	5.36	122.12	118.90
42	BW	24	ARG	NH1-CZ-NH2	5.36	125.30	119.40
57	BB	471	A	C6-C5-N7	-5.36	128.55	132.30
57	BB	1308	A	C5-N7-C8	5.36	106.58	103.90
57	BB	1517	G	C5-C6-O6	-5.36	125.38	128.60
57	BB	1597	A	N1-C6-N6	5.36	121.82	118.60
22	AY	7	U	P-O5'-C5'	-5.36	112.33	120.90
57	BB	720	U	C4'-C3'-C2'	-5.36	97.24	102.60
57	BB	1460	U	C5-C4-O4	-5.36	122.69	125.90
8	AQ	33	TYR	CD1-CE1-CZ	-5.36	114.98	119.80
21	AA	473	U	C4-C5-C6	-5.36	116.49	119.70
21	AA	719	C	C5-C6-N1	5.36	123.68	121.00
21	AA	805	C	N1-C2-O2	5.36	122.11	118.90
21	AA	972	C	N3-C4-C5	-5.36	119.76	121.90
21	AA	1244	G	P-O3'-C3'	-5.36	113.27	119.70
21	AA	1455	G	N3-C2-N2	5.36	123.65	119.90
23	AW	34	G	C8-N9-C4	-5.36	104.26	106.40
26	AV	64	G	C4-N9-C1'	-5.36	119.53	126.50
57	BB	694	U	C5-C4-O4	-5.36	122.69	125.90
57	BB	901	C	N1-C2-O2	5.36	122.11	118.90
57	BB	1040	A	C8-N9-C4	-5.36	103.66	105.80
57	BB	1469	A	C4-C5-C6	5.36	119.68	117.00
57	BB	1681	G	C4-C5-N7	5.36	112.94	110.80
57	BB	2381	A	C6-C5-N7	-5.36	128.55	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2512	C	N1-C1'-C2'	-5.36	106.11	112.00
57	BB	2719	G	P-O3'-C3'	-5.36	113.27	119.70
57	BB	2745	C	C5'-C4'-O4'	5.36	115.53	109.10
57	BB	2859	G	C6-N1-C2	5.36	128.31	125.10
15	AD	6	PRO	O-C-N	5.36	131.27	122.70
21	AA	458	U	N3-C4-C5	5.36	117.81	114.60
21	AA	668	G	N1-C2-N3	-5.36	120.69	123.90
21	AA	685	G	C4-C5-C6	5.36	122.01	118.80
21	AA	718	A	N7-C8-N9	-5.36	111.12	113.80
21	AA	804	U	P-O3'-C3'	-5.36	113.27	119.70
21	AA	862	C	C6-N1-C2	-5.36	118.16	120.30
21	AA	920	U	C5-C6-N1	5.36	125.38	122.70
28	BI	75	ALA	N-CA-C	-5.36	96.54	111.00
52	BD	124	ARG	NE-CZ-NH1	5.36	122.98	120.30
57	BB	195	A	C3'-C2'-C1'	-5.36	97.22	101.50
57	BB	298	G	C5-C6-N1	-5.36	108.82	111.50
57	BB	329	G	C2-N3-C4	5.36	114.58	111.90
57	BB	555	G	O4'-C4'-C3'	-5.36	98.64	104.00
57	BB	656	G	C2-N3-C4	5.36	114.58	111.90
57	BB	1041	G	N1-C2-N3	-5.36	120.69	123.90
57	BB	1075	C	C5-C4-N4	-5.36	116.45	120.20
57	BB	1162	G	C4-C5-N7	-5.36	108.66	110.80
57	BB	1180	U	N3-C4-C5	-5.36	111.39	114.60
57	BB	1243	C	C6-N1-C2	-5.36	118.16	120.30
57	BB	1918	A	P-O3'-C3'	5.36	126.13	119.70
57	BB	2461	A	C5'-C4'-C3'	-5.36	107.43	116.00
21	AA	874	G	O4'-C1'-N9	5.35	112.48	108.20
21	AA	923	A	C4-C5-N7	-5.35	108.02	110.70
21	AA	1396	A	C5-C6-N1	5.35	120.38	117.70
57	BB	449	A	C6-N1-C2	5.35	121.81	118.60
57	BB	1295	C	P-O3'-C3'	-5.35	113.28	119.70
57	BB	2238	G	N7-C8-N9	5.35	115.78	113.10
57	BB	2330	G	N3-C4-N9	5.35	129.21	126.00
57	BB	2692	G	C2-N3-C4	-5.35	109.22	111.90
57	BB	2732	G	N3-C2-N2	5.35	123.65	119.90
5	AN	74	ARG	NE-CZ-NH2	5.35	122.98	120.30
21	AA	222	C	N3-C4-C5	-5.35	119.76	121.90
21	AA	461	A	C4-N9-C1'	5.35	135.94	126.30
21	AA	630	A	C4-C5-N7	5.35	113.38	110.70
21	AA	752	G	O4'-C1'-N9	5.35	112.48	108.20
21	AA	1030	U	C4'-C3'-C2'	-5.35	97.25	102.60
21	AA	1068	G	N1-C2-N2	-5.35	111.38	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1331	G	C6-N1-C2	5.35	128.31	125.10
29	BJ	37	ARG	NE-CZ-NH1	-5.35	117.62	120.30
57	BB	56	A	P-O5'-C5'	5.35	129.46	120.90
57	BB	96	C	O5'-C5'-C4'	-5.35	101.53	111.70
57	BB	250	G	OP1-P-OP2	-5.35	111.57	119.60
57	BB	307	G	C2-N3-C4	5.35	114.58	111.90
57	BB	674	G	C2-N3-C4	5.35	114.58	111.90
57	BB	945	A	C4-C5-C6	5.35	119.68	117.00
57	BB	1366	A	P-O5'-C5'	-5.35	112.34	120.90
57	BB	1821	A	C5'-C4'-O4'	5.35	115.52	109.10
57	BB	1860	G	N1-C2-N3	-5.35	120.69	123.90
57	BB	1885	A	N1-C6-N6	5.35	121.81	118.60
57	BB	1895	C	C2-N3-C4	-5.35	117.22	119.90
57	BB	2060	A	N1-C2-N3	5.35	131.98	129.30
57	BB	2090	A	C8-N9-C4	5.35	107.94	105.80
57	BB	2107	G	N1-C2-N3	-5.35	120.69	123.90
57	BB	2222	C	N3-C4-C5	-5.35	119.76	121.90
57	BB	2308	G	N1-C2-N3	-5.35	120.69	123.90
57	BB	2360	G	C2-N3-C4	5.35	114.58	111.90
57	BB	2764	A	N9-C4-C5	5.35	107.94	105.80
21	AA	705	G	C5-C6-N1	5.35	114.17	111.50
57	BB	45	G	C5-C6-N1	5.35	114.17	111.50
57	BB	191	A	C5-C6-N1	-5.35	115.03	117.70
57	BB	211	C	N3-C4-C5	-5.35	119.76	121.90
57	BB	876	C	N3-C4-C5	-5.35	119.76	121.90
57	BB	993	G	P-O3'-C3'	-5.35	113.28	119.70
57	BB	1573	G	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1789	A	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	2405	G	C4-C5-C6	5.35	122.01	118.80
57	BB	2461	A	C1'-O4'-C4'	5.35	114.18	109.90
21	AA	845	A	C5-C6-N1	-5.35	115.03	117.70
54	BF	149	ARG	NH1-CZ-NH2	5.35	125.28	119.40
57	BB	293	U	C6-N1-C2	5.35	124.21	121.00
57	BB	763	G	C6-C5-N7	-5.35	127.19	130.40
57	BB	1230	A	N9-C4-C5	-5.35	103.66	105.80
57	BB	1308	A	C8-N9-C4	-5.35	103.66	105.80
57	BB	1476	U	N1-C2-O2	-5.35	119.06	122.80
57	BB	1575	C	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1637	A	N3-C4-C5	-5.35	123.06	126.80
57	BB	1712	U	C4-C5-C6	-5.35	116.49	119.70
57	BB	1800	C	C3'-C2'-C1'	5.35	105.78	101.50
57	BB	2176	A	C4'-C3'-C2'	5.35	107.95	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2409	G	P-O5'-C5'	-5.35	112.34	120.90
57	BB	2607	G	OP1-P-OP2	-5.35	111.58	119.60
57	BB	2798	U	O3'-P-O5'	-5.35	93.84	104.00
57	BB	2846	G	C3'-C2'-C1'	5.35	105.78	101.50
58	BA	116	G	C3'-C2'-C1'	5.35	105.78	101.50
21	AA	43	C	C1'-O4'-C4'	-5.35	105.62	109.90
21	AA	129	A	C5-C6-N6	-5.35	119.42	123.70
21	AA	423	G	C4'-C3'-C2'	-5.35	97.25	102.60
21	AA	716	A	C6-C5-N7	-5.35	128.56	132.30
21	AA	983	A	OP1-P-OP2	-5.35	111.58	119.60
21	AA	1238	A	O5'-P-OP1	5.35	117.12	110.70
21	AA	1329	A	C8-N9-C4	-5.35	103.66	105.80
21	AA	1475	G	C4-C5-C6	5.35	122.01	118.80
57	BB	386	G	P-O3'-C3'	5.35	126.12	119.70
57	BB	535	G	N3-C2-N2	5.35	123.64	119.90
57	BB	626	A	C4-C5-N7	-5.35	108.03	110.70
57	BB	654	A	C5-C6-N1	5.35	120.37	117.70
57	BB	706	A	N3-C4-N9	5.35	131.68	127.40
57	BB	970	U	C2-N3-C4	5.35	130.21	127.00
57	BB	994	C	O4'-C1'-N1	5.35	112.48	108.20
57	BB	1021	A	N3-C4-C5	-5.35	123.06	126.80
57	BB	1120	G	C4-C5-N7	-5.35	108.66	110.80
57	BB	2002	G	C6-N1-C2	5.35	128.31	125.10
58	BA	19	C	C6-N1-C2	-5.35	118.16	120.30
58	BA	63	C	N3-C4-N4	5.35	121.74	118.00
21	AA	1415	G	C2-N3-C4	5.35	114.57	111.90
23	AW	31	A	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1284	A	C1'-O4'-C4'	-5.35	105.62	109.90
57	BB	1728	C	P-O5'-C5'	5.35	129.45	120.90
57	BB	1857	G	N3-C2-N2	5.35	123.64	119.90
57	BB	2324	U	N3-C4-C5	-5.35	111.39	114.60
57	BB	2425	A	O4'-C1'-N9	5.35	112.48	108.20
14	AC	129	PHE	CB-CG-CD1	5.34	124.54	120.80
21	AA	646	G	C2-N3-C4	5.34	114.57	111.90
21	AA	1074	G	N9-C4-C5	5.34	107.54	105.40
21	AA	1149	C	C5-C4-N4	-5.34	116.46	120.20
21	AA	1229	A	C4-C5-C6	5.34	119.67	117.00
22	AY	12	U	C5'-C4'-C3'	-5.34	107.45	116.00
23	AW	23	A	N1-C6-N6	5.34	121.81	118.60
57	BB	31	C	C3'-C2'-C1'	5.34	105.78	101.50
57	BB	42	A	C4-C5-C6	5.34	119.67	117.00
57	BB	76	C	C4'-C3'-C2'	-5.34	97.25	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	478	A	C4'-C3'-C2'	5.34	107.94	102.60
57	BB	512	G	C4-C5-C6	5.34	122.01	118.80
57	BB	546	U	P-O3'-C3'	5.34	126.11	119.70
57	BB	937	C	P-O5'-C5'	5.34	129.45	120.90
57	BB	996	A	C8-N9-C4	5.34	107.94	105.80
57	BB	1331	G	O4'-C1'-N9	5.34	112.47	108.20
57	BB	1482	G	N1-C2-N3	-5.34	120.69	123.90
57	BB	2205	A	N7-C8-N9	5.34	116.47	113.80
57	BB	2224	G	C4-C5-C6	5.34	122.01	118.80
57	BB	2259	U	C5-C6-N1	5.34	125.37	122.70
57	BB	2274	A	C4-C5-N7	-5.34	108.03	110.70
57	BB	2617	U	C3'-C2'-C1'	5.34	105.78	101.50
58	BA	39	A	C1'-O4'-C4'	5.34	114.18	109.90
21	AA	640	A	C5-N7-C8	-5.34	101.23	103.90
21	AA	1034	G	C4-N9-C1'	5.34	133.44	126.50
21	AA	1343	G	C5'-C4'-C3'	5.34	124.55	116.00
21	AA	1430	A	C5-N7-C8	5.34	106.57	103.90
21	AA	1480	A	C8-N9-C1'	5.34	137.32	127.70
57	BB	259	G	P-O5'-C5'	-5.34	112.35	120.90
57	BB	457	A	C5'-C4'-O4'	5.34	115.51	109.10
57	BB	2322	A	C5-C6-N1	-5.34	115.03	117.70
58	BA	99	A	N3-C4-C5	-5.34	123.06	126.80
21	AA	197	A	C5'-C4'-C3'	5.34	124.55	116.00
21	AA	407	U	N3-C4-C5	-5.34	111.39	114.60
21	AA	561	U	N1-C2-O2	-5.34	119.06	122.80
21	AA	787	A	O4'-C1'-N9	5.34	112.47	108.20
21	AA	1298	U	P-O3'-C3'	5.34	126.11	119.70
21	AA	1436	U	C5-C6-N1	5.34	125.37	122.70
23	AW	24	G	O4'-C1'-C2'	-5.34	100.46	105.80
48	B1	11	VAL	CA-C-N	-5.34	105.45	117.20
57	BB	80	G	C1'-O4'-C4'	5.34	114.17	109.90
57	BB	125	A	C4'-C3'-C2'	-5.34	97.26	102.60
57	BB	370	G	O4'-C4'-C3'	-5.34	98.66	104.00
57	BB	527	C	P-O3'-C3'	-5.34	113.29	119.70
57	BB	630	G	C5'-C4'-C3'	5.34	124.55	116.00
57	BB	738	G	C8-N9-C4	-5.34	104.26	106.40
57	BB	871	U	N3-C4-O4	-5.34	115.66	119.40
57	BB	1204	A	P-O3'-C3'	5.34	126.11	119.70
57	BB	1473	G	C4-N9-C1'	-5.34	119.56	126.50
57	BB	1570	A	C4-C5-N7	-5.34	108.03	110.70
57	BB	1747	U	O4'-C1'-N1	5.34	112.47	108.20
57	BB	1803	A	C6-N1-C2	-5.34	115.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2160	C	C5-C4-N4	-5.34	116.46	120.20
57	BB	2160	C	C6-N1-C1'	-5.34	114.39	120.80
57	BB	2330	G	N1-C2-N2	5.34	121.01	116.20
57	BB	2400	G	C5-C6-O6	-5.34	125.39	128.60
57	BB	2499	C	C5'-C4'-C3'	-5.34	107.45	116.00
57	BB	2800	A	N1-C2-N3	5.34	131.97	129.30
19	AH	12	ARG	CG-CD-NE	-5.34	100.59	111.80
21	AA	11	G	C6-N1-C2	-5.34	121.90	125.10
21	AA	36	C	N3-C4-N4	5.34	121.74	118.00
21	AA	823	C	C5-C6-N1	-5.34	118.33	121.00
21	AA	993	G	N1-C2-N3	-5.34	120.70	123.90
23	AW	6	G	N3-C2-N2	5.34	123.64	119.90
25	AZ	373	ARG	NE-CZ-NH2	5.34	122.97	120.30
32	BM	117	PHE	CG-CD2-CE2	5.34	126.67	120.80
57	BB	60	G	C5-C6-O6	-5.34	125.40	128.60
57	BB	1478	G	N9-C4-C5	5.34	107.54	105.40
57	BB	1516	G	C5'-C4'-O4'	5.34	115.51	109.10
57	BB	1613	G	C4-C5-N7	5.34	112.94	110.80
57	BB	1819	A	N1-C2-N3	5.34	131.97	129.30
57	BB	1857	G	C2-N3-C4	-5.34	109.23	111.90
57	BB	2113	U	N3-C4-C5	-5.34	111.40	114.60
57	BB	2286	G	C8-N9-C1'	5.34	133.94	127.00
57	BB	2441	U	N1-C2-N3	-5.34	111.70	114.90
57	BB	2452	C	C2-N3-C4	5.34	122.57	119.90
57	BB	2494	G	O5'-C5'-C4'	-5.34	101.56	111.70
57	BB	2632	A	OP1-P-OP2	-5.34	111.59	119.60
57	BB	2708	G	C5-C6-O6	-5.34	125.40	128.60
15	AD	25	ARG	CD-NE-CZ	-5.34	116.13	123.60
21	AA	95	C	O4'-C1'-N1	5.34	112.47	108.20
21	AA	467	U	C5'-C4'-O4'	5.34	115.50	109.10
21	AA	1488	G	N3-C2-N2	5.34	123.64	119.90
21	AA	1508	A	O4'-C1'-C2'	-5.34	100.46	105.80
57	BB	100	U	C6-N1-C2	-5.34	117.80	121.00
57	BB	571	U	C5-C4-O4	-5.34	122.70	125.90
57	BB	1024	G	N3-C4-N9	5.34	129.20	126.00
57	BB	1379	U	N1-C2-O2	-5.34	119.06	122.80
57	BB	1452	G	N3-C4-C5	-5.34	125.93	128.60
57	BB	1602	U	C4'-C3'-C2'	5.34	107.94	102.60
57	BB	1704	C	C5-C6-N1	5.34	123.67	121.00
57	BB	1813	G	C3'-C2'-C1'	-5.34	97.23	101.50
57	BB	2160	C	C1'-O4'-C4'	-5.34	105.63	109.90
57	BB	2900	A	N3-C4-C5	-5.34	123.06	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	33	A	N1-C2-N3	5.34	131.97	129.30
21	AA	371	A	C4'-C3'-C2'	-5.34	97.26	102.60
21	AA	457	G	C5-C6-O6	-5.34	125.40	128.60
21	AA	574	A	P-O3'-C3'	5.34	126.10	119.70
21	AA	784	A	C6-N1-C2	-5.34	115.40	118.60
21	AA	940	C	C2-N3-C4	5.34	122.57	119.90
21	AA	1302	C	C5-C6-N1	5.34	123.67	121.00
23	AW	11	C	C6-N1-C2	-5.34	118.17	120.30
45	BC	95	TYR	CB-CG-CD2	-5.34	117.80	121.00
55	BG	150	TYR	CG-CD1-CE1	5.34	125.57	121.30
57	BB	87	U	C6-N1-C2	-5.34	117.80	121.00
57	BB	127	A	N1-C6-N6	5.34	121.80	118.60
57	BB	1900	A	O4'-C1'-C2'	-5.34	100.46	105.80
57	BB	1952	A	C2-N3-C4	5.34	113.27	110.60
57	BB	2018	G	N3-C4-N9	-5.34	122.80	126.00
57	BB	2148	G	N9-C4-C5	5.34	107.53	105.40
57	BB	2533	U	N3-C4-C5	-5.34	111.40	114.60
57	BB	2661	G	C5-C6-N1	-5.34	108.83	111.50
21	AA	785	G	C2-N3-C4	-5.33	109.23	111.90
21	AA	1515	G	N3-C2-N2	5.33	123.63	119.90
22	AY	56	C	O4'-C4'-C3'	-5.33	98.67	104.00
23	AW	59	U	P-O3'-C3'	5.33	126.10	119.70
35	BP	92	ARG	NE-CZ-NH1	5.33	122.97	120.30
57	BB	1016	G	N1-C6-O6	5.33	123.10	119.90
57	BB	1215	G	N7-C8-N9	5.33	115.77	113.10
57	BB	2412	A	N9-C4-C5	5.33	107.93	105.80
57	BB	2666	C	O5'-P-OP2	-5.33	100.90	105.70
21	AA	1007	U	C2-N1-C1'	-5.33	111.30	117.70
21	AA	1100	C	N3-C4-N4	5.33	121.73	118.00
21	AA	1180	A	C5-C6-N1	-5.33	115.03	117.70
21	AA	1481	U	O4'-C1'-N1	5.33	112.47	108.20
22	AY	65	G	C6-C5-N7	-5.33	127.20	130.40
23	AW	14	A	C8-N9-C1'	-5.33	118.10	127.70
26	AV	55	U	C5-C4-O4	5.33	129.10	125.90
35	BP	70	GLU	CB-CA-C	-5.33	99.73	110.40
57	BB	322	A	N1-C2-N3	-5.33	126.63	129.30
57	BB	564	C	C2-N3-C4	5.33	122.57	119.90
57	BB	789	A	N9-C4-C5	-5.33	103.67	105.80
57	BB	835	C	O4'-C4'-C3'	-5.33	98.67	104.00
57	BB	1271	G	N3-C4-C5	-5.33	125.93	128.60
57	BB	2459	A	P-O5'-C5'	5.33	129.43	120.90
57	BB	2741	A	C5'-C4'-O4'	5.33	115.50	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
58	BA	10	G	C4-C5-N7	-5.33	108.67	110.80
21	AA	194	C	N3-C4-C5	-5.33	119.77	121.90
21	AA	542	G	N9-C1'-C2'	-5.33	106.13	112.00
21	AA	784	A	C4-C5-C6	5.33	119.67	117.00
21	AA	796	C	N1-C2-O2	-5.33	115.70	118.90
21	AA	800	G	C2-N3-C4	-5.33	109.23	111.90
22	AY	65	G	C4'-C3'-C2'	-5.33	97.27	102.60
23	AW	40	C	C5-C6-N1	5.33	123.67	121.00
57	BB	336	C	N3-C4-C5	-5.33	119.77	121.90
57	BB	406	G	C5-C6-O6	-5.33	125.40	128.60
57	BB	947	A	P-O5'-C5'	5.33	129.43	120.90
57	BB	1358	G	N3-C4-N9	5.33	129.20	126.00
57	BB	2049	G	C2-N3-C4	-5.33	109.23	111.90
57	BB	2201	G	C4-N9-C1'	-5.33	119.57	126.50
57	BB	2386	A	O4'-C1'-C2'	5.33	112.40	107.60
21	AA	1230	C	C2-N3-C4	5.33	122.56	119.90
21	AA	1433	A	N1-C2-N3	5.33	131.97	129.30
22	AY	22	G	O5'-P-OP2	-5.33	100.90	105.70
57	BB	90	U	N3-C2-O2	5.33	125.93	122.20
57	BB	1982	U	C6-N1-C1'	5.33	128.66	121.20
4	AM	2	ARG	NH1-CZ-NH2	5.33	125.26	119.40
21	AA	175	C	C5'-C4'-C3'	-5.33	107.47	116.00
21	AA	278	G	OP1-P-OP2	-5.33	111.61	119.60
21	AA	729	A	OP2-P-O3'	5.33	116.92	105.20
21	AA	1106	G	N7-C8-N9	-5.33	110.44	113.10
21	AA	1162	C	N3-C2-O2	5.33	125.63	121.90
21	AA	1501	C	C5-C6-N1	-5.33	118.34	121.00
22	AY	56	C	C5-C4-N4	-5.33	116.47	120.20
57	BB	85	G	C8-N9-C1'	5.33	133.93	127.00
57	BB	774	G	P-O5'-C5'	5.33	129.42	120.90
57	BB	1151	A	P-O5'-C5'	-5.33	112.37	120.90
57	BB	1202	G	N1-C2-N2	-5.33	111.40	116.20
57	BB	1412	U	P-O3'-C3'	5.33	126.09	119.70
57	BB	1581	G	N1-C2-N3	-5.33	120.70	123.90
57	BB	2442	C	C4'-C3'-C2'	-5.33	97.27	102.60
57	BB	2468	A	N9-C4-C5	5.33	107.93	105.80
57	BB	2640	G	N1-C2-N3	-5.33	120.70	123.90
57	BB	2689	U	N3-C2-O2	5.33	125.93	122.20
57	BB	2759	G	O3'-P-O5'	-5.33	93.88	104.00
57	BB	2798	U	P-O3'-C3'	-5.33	113.31	119.70
4	AM	41	ASP	CB-CG-OD2	5.33	123.09	118.30
21	AA	9	G	C5'-C4'-C3'	5.33	124.52	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	501	C	N1-C2-N3	-5.33	115.47	119.20
21	AA	628	G	P-O3'-C3'	-5.33	113.31	119.70
21	AA	721	G	N3-C2-N2	5.33	123.63	119.90
21	AA	1497	G	C5'-C4'-C3'	-5.33	107.48	116.00
57	BB	1786	A	C4-C5-C6	5.33	119.66	117.00
23	AW	52	G	C5-C6-O6	-5.33	125.41	128.60
41	BV	26	PHE	N-CA-CB	5.33	120.19	110.60
57	BB	309	A	N9-C4-C5	-5.33	103.67	105.80
57	BB	437	U	C3'-C2'-C1'	-5.33	97.24	101.50
57	BB	768	G	C2-N3-C4	-5.33	109.24	111.90
57	BB	1197	G	N1-C2-N3	5.33	127.09	123.90
57	BB	1367	A	O4'-C1'-N9	5.33	112.46	108.20
57	BB	1459	G	C4-N9-C1'	5.33	133.42	126.50
57	BB	1637	A	O4'-C1'-N9	5.33	112.46	108.20
57	BB	1984	G	N3-C4-N9	-5.33	122.81	126.00
57	BB	2370	G	N9-C1'-C2'	-5.33	106.14	112.00
57	BB	2599	G	N3-C4-N9	-5.33	122.81	126.00
3	AL	3	VAL	CA-CB-CG2	-5.32	102.92	110.90
21	AA	149	A	N3-C4-N9	5.32	131.66	127.40
21	AA	188	C	C5-C4-N4	-5.32	116.47	120.20
21	AA	528	C	C5-C6-N1	5.32	123.66	121.00
21	AA	1128	C	N1-C2-O2	-5.32	115.70	118.90
21	AA	1222	G	C5-C6-N1	5.32	114.16	111.50
43	BX	31	ASN	CB-CA-C	-5.32	99.75	110.40
46	BZ	12	ALA	N-CA-CB	5.32	117.55	110.10
57	BB	1	G	O4'-C1'-N9	5.32	112.46	108.20
57	BB	93	G	N3-C2-N2	5.32	123.63	119.90
57	BB	119	A	C5-C6-N6	-5.32	119.44	123.70
57	BB	258	G	C4-N9-C1'	-5.32	119.58	126.50
57	BB	1032	A	C4-C5-N7	-5.32	108.04	110.70
57	BB	1104	C	C4'-C3'-C2'	-5.32	97.28	102.60
57	BB	1182	G	C6-C5-N7	-5.32	127.21	130.40
57	BB	1271	G	C6-N1-C2	-5.32	121.91	125.10
57	BB	1330	C	O4'-C1'-N1	5.32	112.46	108.20
57	BB	2083	G	C5-C6-O6	-5.32	125.41	128.60
57	BB	2610	C	N3-C4-C5	-5.32	119.77	121.90
2	AK	43	TRP	CH2-CZ2-CE2	5.32	122.72	117.40
21	AA	96	U	C5'-C4'-C3'	-5.32	107.48	116.00
21	AA	430	A	C3'-C2'-C1'	-5.32	97.24	101.50
22	AY	75	C	C4-C5-C6	5.32	120.06	117.40
57	BB	9	G	N9-C1'-C2'	-5.32	106.14	112.00
57	BB	283	G	C3'-C2'-C1'	5.32	105.76	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	704	G	N7-C8-N9	5.32	115.76	113.10
57	BB	859	G	C4-C5-N7	-5.32	108.67	110.80
57	BB	1163	G	C6-C5-N7	-5.32	127.21	130.40
57	BB	1656	C	OP1-P-OP2	-5.32	111.62	119.60
57	BB	2242	G	C5-C6-N1	-5.32	108.84	111.50
57	BB	2276	G	N3-C4-N9	5.32	129.19	126.00
21	AA	111	G	N9-C1'-C2'	-5.32	106.15	112.00
21	AA	369	G	C4-C5-N7	-5.32	108.67	110.80
21	AA	852	G	C4-C5-C6	5.32	121.99	118.80
54	BF	62	GLN	N-CA-CB	5.32	120.18	110.60
56	BH	28	ASN	CB-CA-C	-5.32	99.76	110.40
57	BB	27	G	N1-C2-N2	5.32	120.99	116.20
57	BB	1311	G	C3'-C2'-C1'	5.32	105.76	101.50
57	BB	1338	G	N3-C2-N2	5.32	123.62	119.90
57	BB	1340	U	C5-C4-O4	-5.32	122.71	125.90
57	BB	1761	C	N3-C2-O2	5.32	125.62	121.90
57	BB	1801	A	C5'-C4'-C3'	-5.32	107.49	116.00
57	BB	2206	C	C4-C5-C6	-5.32	114.74	117.40
57	BB	2268	A	N3-C4-C5	-5.32	123.08	126.80
57	BB	2309	A	C4'-C3'-C2'	-5.32	97.28	102.60
57	BB	2645	G	C2-N3-C4	5.32	114.56	111.90
57	BB	2874	C	P-O5'-C5'	-5.32	112.39	120.90
58	BA	85	G	N1-C2-N3	-5.32	120.71	123.90
21	AA	196	A	C2-N3-C4	-5.32	107.94	110.60
57	BB	1930	G	C6-C5-N7	-5.32	127.21	130.40
57	BB	2660	A	C2-N3-C4	-5.32	107.94	110.60
13	AB	125	PHE	CB-CG-CD2	-5.32	117.08	120.80
21	AA	43	C	C2-N1-C1'	5.32	124.65	118.80
21	AA	412	A	C5'-C4'-O4'	-5.32	102.72	109.10
21	AA	509	A	C4-C5-C6	5.32	119.66	117.00
21	AA	681	A	O4'-C1'-N9	5.32	112.45	108.20
21	AA	1037	C	C4-C5-C6	5.32	120.06	117.40
21	AA	1194	U	C5-C6-N1	5.32	125.36	122.70
21	AA	1270	G	O4'-C1'-N9	5.32	112.45	108.20
39	BT	22	THR	N-CA-CB	5.32	120.40	110.30
57	BB	315	G	P-O5'-C5'	-5.32	112.39	120.90
57	BB	508	A	C4-C5-C6	5.32	119.66	117.00
57	BB	555	G	C5-N7-C8	5.32	106.96	104.30
57	BB	1207	C	C6-N1-C2	-5.32	118.17	120.30
57	BB	1403	A	N1-C2-N3	5.32	131.96	129.30
57	BB	1798	U	N3-C4-C5	5.32	117.79	114.60
57	BB	2054	A	N3-C4-C5	-5.32	123.08	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2172	U	C6-N1-C2	5.32	124.19	121.00
57	BB	2401	U	C6-N1-C2	-5.32	117.81	121.00
57	BB	2469	A	C4-C5-N7	-5.32	108.04	110.70
57	BB	2658	C	C5-C4-N4	-5.32	116.48	120.20
57	BB	2701	U	N3-C4-C5	-5.32	111.41	114.60
1	AJ	26	VAL	O-C-N	-5.32	114.19	122.70
1	AJ	45	ARG	NE-CZ-NH1	5.32	122.96	120.30
21	AA	36	C	O4'-C4'-C3'	-5.32	98.68	104.00
21	AA	45	G	N1-C2-N2	5.32	120.98	116.20
21	AA	591	U	N1-C2-N3	5.32	118.09	114.90
21	AA	762	U	C5-C4-O4	-5.32	122.71	125.90
21	AA	907	A	N7-C8-N9	5.32	116.46	113.80
21	AA	951	G	OP1-P-OP2	-5.32	111.63	119.60
21	AA	1232	U	O4'-C1'-N1	5.32	112.45	108.20
25	AZ	259	GLU	OE1-CD-OE2	5.32	129.68	123.30
29	BJ	8	PRO	N-CA-CB	5.32	109.68	103.30
57	BB	9	G	N9-C4-C5	-5.32	103.27	105.40
57	BB	650	C	C2-N3-C4	-5.32	117.24	119.90
57	BB	799	G	C5-N7-C8	5.32	106.96	104.30
57	BB	1419	A	C6-C5-N7	-5.32	128.58	132.30
57	BB	1660	G	N1-C2-N3	-5.32	120.71	123.90
57	BB	1997	C	N3-C4-N4	5.32	121.72	118.00
57	BB	2198	A	N1-C2-N3	5.32	131.96	129.30
57	BB	2851	A	O5'-P-OP1	5.32	117.08	110.70
58	BA	61	G	C4-C5-N7	-5.32	108.67	110.80
21	AA	373	A	C2-N3-C4	5.31	113.26	110.60
21	AA	455	G	C4-N9-C1'	-5.31	119.59	126.50
21	AA	1108	G	C6-C5-N7	-5.31	127.21	130.40
57	BB	1649	G	N1-C2-N2	5.31	120.98	116.20
57	BB	1912	A	C4-C5-C6	5.31	119.66	117.00
57	BB	2156	G	N3-C2-N2	5.31	123.62	119.90
57	BB	2516	A	C4-C5-C6	5.31	119.66	117.00
20	AI	87	MET	CG-SD-CE	-5.31	91.70	100.20
21	AA	9	G	N9-C4-C5	5.31	107.53	105.40
21	AA	615	G	C4'-C3'-C2'	-5.31	97.29	102.60
21	AA	976	G	C6-N1-C2	5.31	128.29	125.10
21	AA	1073	U	C5-C4-O4	-5.31	122.71	125.90
22	AY	70	C	C6-N1-C1'	-5.31	114.42	120.80
23	AW	1	G	C5-C6-O6	-5.31	125.41	128.60
25	AZ	260	MET	N-CA-CB	5.31	120.16	110.60
57	BB	528	A	C4'-C3'-C2'	-5.31	97.29	102.60
57	BB	646	U	N1-C2-O2	5.31	126.52	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	805	G	C5-C6-O6	-5.31	125.41	128.60
57	BB	1530	G	C6-C5-N7	-5.31	127.21	130.40
57	BB	1878	G	C8-N9-C1'	5.31	133.91	127.00
57	BB	2104	C	N3-C4-N4	5.31	121.72	118.00
21	AA	497	G	C5-C6-N1	-5.31	108.84	111.50
34	BO	62	LEU	CB-CG-CD1	5.31	120.03	111.00
57	BB	1564	C	P-O5'-C5'	5.31	129.40	120.90
57	BB	2579	C	C5'-C4'-C3'	-5.31	107.50	116.00
6	AO	21	THR	CA-CB-CG2	-5.31	104.97	112.40
21	AA	40	C	C2-N3-C4	5.31	122.56	119.90
21	AA	161	A	C4-C5-C6	5.31	119.66	117.00
21	AA	771	G	O4'-C1'-N9	5.31	112.45	108.20
21	AA	1131	G	N9-C1'-C2'	-5.31	106.16	112.00
21	AA	1278	G	C4'-C3'-C2'	-5.31	97.29	102.60
22	AY	76	A	C2-N3-C4	-5.31	107.94	110.60
38	BS	7	HIS	O-C-N	5.31	131.19	122.70
57	BB	250	G	N1-C2-N2	-5.31	111.42	116.20
57	BB	259	G	C4-C5-C6	5.31	121.99	118.80
57	BB	570	G	C2-N3-C4	-5.31	109.25	111.90
57	BB	762	U	C5-C6-N1	5.31	125.36	122.70
57	BB	877	A	P-O5'-C5'	5.31	129.40	120.90
57	BB	935	C	C6-N1-C2	-5.31	118.18	120.30
57	BB	1420	A	C1'-O4'-C4'	-5.31	105.65	109.90
57	BB	1423	G	O4'-C1'-N9	5.31	112.45	108.20
57	BB	2286	G	C2-N3-C4	-5.31	109.25	111.90
57	BB	2495	G	C8-N9-C4	-5.31	104.28	106.40
57	BB	2880	C	C4-C5-C6	5.31	120.05	117.40
21	AA	196	A	C6-C5-N7	-5.31	128.58	132.30
21	AA	251	G	N3-C2-N2	-5.31	116.19	119.90
21	AA	703	G	O4'-C1'-N9	5.31	112.45	108.20
21	AA	898	G	C2-N3-C4	-5.31	109.25	111.90
42	BW	68	PHE	CB-CG-CD2	5.31	124.52	120.80
45	BC	102	TYR	CB-CG-CD1	5.31	124.18	121.00
57	BB	37	C	C2-N3-C4	5.31	122.55	119.90
57	BB	152	A	N3-C4-C5	-5.31	123.08	126.80
57	BB	367	G	C6-N1-C2	-5.31	121.92	125.10
57	BB	450	G	C5-C6-N1	-5.31	108.85	111.50
57	BB	940	G	C8-N9-C1'	5.31	133.90	127.00
57	BB	1061	U	N3-C2-O2	5.31	125.92	122.20
57	BB	1446	C	O4'-C1'-N1	5.31	112.45	108.20
57	BB	2069	G	N3-C2-N2	5.31	123.61	119.90
57	BB	2129	C	C6-N1-C1'	-5.31	114.43	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2138	G	O4'-C1'-N9	5.31	112.44	108.20
58	BA	34	A	P-O3'-C3'	5.31	126.07	119.70
21	AA	432	A	N7-C8-N9	5.31	116.45	113.80
21	AA	1250	A	C4-C5-C6	5.31	119.65	117.00
21	AA	1258	G	N3-C4-C5	-5.31	125.95	128.60
21	AA	1321	U	O5'-C5'-C4'	-5.31	101.62	111.70
46	BZ	3	THR	CA-CB-CG2	-5.31	104.97	112.40
57	BB	1577	C	N3-C4-N4	5.31	121.71	118.00
57	BB	1818	U	N1-C2-O2	5.31	126.51	122.80
57	BB	2875	C	N3-C4-N4	5.31	121.71	118.00
1	AJ	50	THR	CA-CB-CG2	-5.30	104.97	112.40
2	AK	104	PHE	CB-CG-CD1	5.30	124.51	120.80
14	AC	186	SER	O-C-N	-5.30	114.21	122.70
21	AA	37	U	C2-N1-C1'	5.30	124.07	117.70
21	AA	227	G	C4'-C3'-C2'	-5.30	97.30	102.60
21	AA	279	A	C4-C5-N7	-5.30	108.05	110.70
21	AA	468	A	C5-C6-N6	-5.30	119.46	123.70
21	AA	490	C	N3-C4-C5	-5.30	119.78	121.90
21	AA	1251	A	OP1-P-OP2	-5.30	111.64	119.60
21	AA	1345	U	N3-C4-C5	-5.30	111.42	114.60
25	AZ	213	PRO	N-CD-CG	5.30	111.16	103.20
57	BB	105	C	N3-C4-N4	5.30	121.71	118.00
57	BB	212	G	C6-N1-C2	-5.30	121.92	125.10
57	BB	1137	G	C4-C5-N7	5.30	112.92	110.80
57	BB	1173	U	P-O5'-C5'	5.30	129.39	120.90
57	BB	1938	A	N3-C4-C5	-5.30	123.09	126.80
57	BB	1960	A	N3-C4-N9	-5.30	123.16	127.40
57	BB	2370	G	P-O5'-C5'	-5.30	112.41	120.90
57	BB	2688	G	C6-N1-C2	5.30	128.28	125.10
57	BB	2689	U	C6-N1-C2	5.30	124.18	121.00
57	BB	2692	G	N9-C4-C5	-5.30	103.28	105.40
57	BB	2852	G	C8-N9-C4	5.30	108.52	106.40
57	BB	2886	A	C5-C6-N6	-5.30	119.46	123.70
21	AA	195	A	OP1-P-OP2	-5.30	111.65	119.60
21	AA	393	A	C4'-C3'-C2'	-5.30	97.30	102.60
21	AA	869	G	N7-C8-N9	-5.30	110.45	113.10
21	AA	1316	G	C8-N9-C4	5.30	108.52	106.40
57	BB	480	A	N3-C4-N9	5.30	131.64	127.40
57	BB	548	G	C5'-C4'-C3'	5.30	124.48	116.00
57	BB	556	A	N7-C8-N9	5.30	116.45	113.80
57	BB	1088	A	C5-C6-N6	-5.30	119.46	123.70
57	BB	2323	G	C4-C5-C6	5.30	121.98	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2655	G	C1'-O4'-C4'	-5.30	105.66	109.90
3	AL	98	ARG	CD-NE-CZ	5.30	131.02	123.60
21	AA	38	G	N7-C8-N9	5.30	115.75	113.10
21	AA	88	U	C5-C4-O4	-5.30	122.72	125.90
21	AA	479	U	C4'-C3'-C2'	-5.30	97.30	102.60
21	AA	563	A	N7-C8-N9	-5.30	111.15	113.80
21	AA	671	G	N1-C6-O6	5.30	123.08	119.90
21	AA	1453	G	N3-C2-N2	5.30	123.61	119.90
22	AY	50	U	C6-N1-C2	-5.30	117.82	121.00
25	AZ	147	GLU	CA-CB-CG	5.30	125.06	113.40
57	BB	182	A	N3-C4-N9	-5.30	123.16	127.40
57	BB	338	G	C4-C5-C6	5.30	121.98	118.80
57	BB	1071	G	C5-C6-O6	-5.30	125.42	128.60
57	BB	1107	G	N7-C8-N9	5.30	115.75	113.10
57	BB	1129	A	N1-C2-N3	5.30	131.95	129.30
57	BB	1243	C	N1-C2-O2	-5.30	115.72	118.90
57	BB	1277	G	C4-C5-N7	-5.30	108.68	110.80
57	BB	1753	G	N3-C2-N2	5.30	123.61	119.90
57	BB	2026	U	C2-N3-C4	-5.30	123.82	127.00
57	BB	2085	U	O4'-C4'-C3'	-5.30	98.70	104.00
57	BB	2104	C	C6-N1-C2	-5.30	118.18	120.30
57	BB	2216	G	C2-N3-C4	-5.30	109.25	111.90
57	BB	2806	C	N1-C1'-C2'	-5.30	106.17	112.00
21	AA	892	A	P-O3'-C3'	-5.30	113.34	119.70
21	AA	938	A	C6-C5-N7	-5.30	128.59	132.30
21	AA	944	G	N9-C1'-C2'	-5.30	106.17	112.00
21	AA	1040	U	C4-C5-C6	5.30	122.88	119.70
22	AY	39	U	OP1-P-OP2	-5.30	111.65	119.60
22	AY	54	U	P-O5'-C5'	-5.30	112.42	120.90
22	AY	62	A	C4-C5-N7	5.30	113.35	110.70
23	AW	57	G	C2-N3-C4	5.30	114.55	111.90
57	BB	230	G	N1-C6-O6	5.30	123.08	119.90
57	BB	649	G	N1-C2-N2	5.30	120.97	116.20
57	BB	813	U	N3-C4-O4	5.30	123.11	119.40
57	BB	919	U	C4-C5-C6	5.30	122.88	119.70
57	BB	1235	G	N3-C4-N9	-5.30	122.82	126.00
57	BB	1708	C	N3-C4-N4	5.30	121.71	118.00
57	BB	2015	A	C5-C6-N6	-5.30	119.46	123.70
57	BB	2079	U	P-O3'-C3'	5.30	126.06	119.70
57	BB	2376	A	N7-C8-N9	-5.30	111.15	113.80
57	BB	2672	U	N3-C2-O2	5.30	125.91	122.20
57	BB	2732	G	C5-C6-N1	-5.30	108.85	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2767	C	C5-C4-N4	-5.30	116.49	120.20
58	BA	81	G	N1-C2-N2	-5.30	111.43	116.20
21	AA	45	G	C2-N3-C4	5.30	114.55	111.90
21	AA	166	U	N3-C4-O4	5.30	123.11	119.40
21	AA	245	U	C5'-C4'-O4'	-5.30	102.74	109.10
21	AA	852	G	N3-C2-N2	5.30	123.61	119.90
57	BB	37	C	N3-C4-N4	5.30	121.71	118.00
57	BB	1281	G	C8-N9-C4	-5.30	104.28	106.40
21	AA	262	A	C4-N9-C1'	5.30	135.84	126.30
21	AA	270	A	C6-N1-C2	-5.30	115.42	118.60
21	AA	763	G	C3'-C2'-C1'	-5.30	97.26	101.50
21	AA	1136	C	N1-C2-N3	-5.30	115.49	119.20
21	AA	1163	A	N1-C6-N6	5.30	121.78	118.60
22	AY	39	U	O4'-C4'-C3'	-5.30	98.70	104.00
54	BF	153	ILE	N-CA-C	-5.30	96.70	111.00
57	BB	489	G	C2-N3-C4	5.30	114.55	111.90
57	BB	534	U	N1-C2-O2	-5.30	119.09	122.80
57	BB	789	A	N7-C8-N9	5.30	116.45	113.80
57	BB	1125	G	N3-C2-N2	5.30	123.61	119.90
57	BB	1843	C	C6-N1-C2	-5.30	118.18	120.30
57	BB	1910	G	N1-C6-O6	5.30	123.08	119.90
57	BB	1985	C	P-O3'-C3'	-5.30	113.34	119.70
57	BB	2136	G	C4-C5-C6	5.30	121.98	118.80
57	BB	2651	C	N3-C2-O2	-5.30	118.19	121.90
58	BA	24	G	C5-C6-N1	5.30	114.15	111.50
21	AA	390	U	O4'-C1'-N1	5.29	112.44	108.20
21	AA	425	G	C5-C6-N1	-5.29	108.85	111.50
21	AA	873	A	C4-C5-C6	5.29	119.65	117.00
23	AW	49	C	C1'-O4'-C4'	-5.29	105.66	109.90
25	AZ	331	TYR	CA-CB-CG	-5.29	103.34	113.40
57	BB	390	U	C4-C5-C6	-5.29	116.52	119.70
57	BB	1153	C	C3'-C2'-C1'	5.29	105.74	101.50
57	BB	1346	G	N1-C2-N2	5.29	120.97	116.20
57	BB	1387	A	C5-N7-C8	5.29	106.55	103.90
57	BB	2779	U	N3-C4-C5	-5.29	111.42	114.60
1	AJ	68	ARG	NE-CZ-NH1	-5.29	117.65	120.30
21	AA	358	U	C2-N3-C4	-5.29	123.82	127.00
21	AA	602	A	N9-C4-C5	5.29	107.92	105.80
21	AA	904	U	N3-C4-C5	-5.29	111.42	114.60
21	AA	961	U	N1-C2-O2	-5.29	119.09	122.80
21	AA	999	C	C2-N3-C4	5.29	122.55	119.90
21	AA	1061	G	N3-C4-C5	5.29	131.25	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1072	G	N1-C2-N3	-5.29	120.72	123.90
21	AA	1088	G	C6-C5-N7	-5.29	127.22	130.40
21	AA	1153	G	N9-C4-C5	5.29	107.52	105.40
57	BB	194	G	N3-C2-N2	5.29	123.61	119.90
57	BB	399	U	C5-C6-N1	5.29	125.35	122.70
57	BB	534	U	C4-C5-C6	5.29	122.88	119.70
57	BB	559	G	N1-C2-N2	-5.29	111.44	116.20
57	BB	996	A	C4-C5-N7	-5.29	108.05	110.70
57	BB	1100	C	C4'-C3'-C2'	-5.29	97.31	102.60
57	BB	1302	A	C5-C6-N1	-5.29	115.05	117.70
57	BB	1411	U	C5-C6-N1	5.29	125.35	122.70
57	BB	1552	A	N3-C4-C5	-5.29	123.09	126.80
57	BB	2007	U	C6-N1-C2	5.29	124.18	121.00
57	BB	2065	C	C2-N3-C4	5.29	122.55	119.90
57	BB	2257	U	C5'-C4'-C3'	5.29	124.47	116.00
57	BB	2343	U	C5'-C4'-C3'	-5.29	107.53	116.00
57	BB	2644	G	N7-C8-N9	-5.29	110.45	113.10
21	AA	68	G	N9-C4-C5	-5.29	103.28	105.40
21	AA	557	G	C4-C5-C6	5.29	121.97	118.80
21	AA	641	U	O4'-C1'-N1	5.29	112.43	108.20
21	AA	783	C	N3-C4-N4	5.29	121.70	118.00
21	AA	1277	C	C4'-C3'-C2'	-5.29	97.31	102.60
21	AA	1331	G	C4-C5-C6	5.29	121.97	118.80
22	AY	10	G	N7-C8-N9	5.29	115.75	113.10
26	AV	7	G	C4-C5-C6	5.29	121.97	118.80
34	BO	57	ALA	CB-CA-C	-5.29	102.16	110.10
57	BB	83	A	O4'-C1'-N9	5.29	112.43	108.20
57	BB	277	G	C8-N9-C1'	5.29	133.88	127.00
57	BB	645	C	C2-N3-C4	5.29	122.55	119.90
57	BB	1558	C	N1-C2-O2	-5.29	115.72	118.90
57	BB	2145	C	N3-C4-C5	-5.29	119.78	121.90
18	AG	48	THR	CA-CB-CG2	-5.29	105.00	112.40
21	AA	711	G	C4-C5-C6	5.29	121.97	118.80
21	AA	954	G	C4-C5-N7	5.29	112.92	110.80
21	AA	977	A	P-O5'-C5'	5.29	129.36	120.90
21	AA	1052	U	O4'-C1'-N1	5.29	112.43	108.20
21	AA	1151	A	C3'-C2'-C1'	-5.29	97.27	101.50
21	AA	1242	G	C5-C6-N1	-5.29	108.86	111.50
22	AY	31	A	C5-C6-N1	-5.29	115.06	117.70
57	BB	176	A	N3-C4-C5	-5.29	123.10	126.80
57	BB	311	A	C8-N9-C4	5.29	107.92	105.80
57	BB	2796	U	N3-C4-O4	-5.29	115.70	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2864	G	C5-C6-O6	-5.29	125.43	128.60
22	AY	29	A	C5-N7-C8	5.29	106.54	103.90
27	B5	38	PHE	N-CA-CB	5.29	120.12	110.60
57	BB	458	G	C1'-O4'-C4'	-5.29	105.67	109.90
57	BB	787	C	OP2-P-O3'	5.29	116.83	105.20
57	BB	1114	C	C5'-C4'-C3'	-5.29	107.54	116.00
57	BB	1325	U	N3-C2-O2	5.29	125.90	122.20
57	BB	1556	C	C4-C5-C6	5.29	120.05	117.40
57	BB	2053	G	C8-N9-C4	-5.29	104.28	106.40
57	BB	2265	U	N3-C4-O4	5.29	123.10	119.40
57	BB	2735	G	C5-C6-N1	-5.29	108.86	111.50
21	AA	20	U	P-O3'-C3'	5.29	126.05	119.70
21	AA	41	G	C2-N3-C4	-5.29	109.26	111.90
21	AA	365	U	N3-C4-O4	5.29	123.10	119.40
21	AA	873	A	C5-C6-N6	-5.29	119.47	123.70
21	AA	931	C	O4'-C4'-C3'	-5.29	98.71	104.00
57	BB	1057	A	C5-C6-N1	-5.29	115.06	117.70
57	BB	1270	C	C2-N1-C1'	-5.29	112.98	118.80
57	BB	2341	G	N3-C2-N2	5.29	123.60	119.90
57	BB	2747	G	C8-N9-C4	5.29	108.52	106.40
15	AD	134	TYR	CB-CG-CD2	-5.29	117.83	121.00
21	AA	490	C	C5-C6-N1	5.29	123.64	121.00
21	AA	645	G	P-O3'-C3'	-5.29	113.36	119.70
21	AA	965	U	O4'-C1'-N1	5.29	112.43	108.20
21	AA	1090	U	C3'-C2'-C1'	-5.29	97.27	101.50
21	AA	1331	G	C4'-C3'-C2'	-5.29	97.31	102.60
37	BR	54	VAL	N-CA-C	-5.29	96.73	111.00
57	BB	71	A	P-O3'-C3'	-5.29	113.36	119.70
57	BB	599	A	N9-C4-C5	-5.29	103.69	105.80
57	BB	1059	G	C6-N1-C2	-5.29	121.93	125.10
57	BB	1471	G	N1-C2-N2	5.29	120.96	116.20
57	BB	1553	A	P-O5'-C5'	-5.29	112.44	120.90
57	BB	1895	C	C4-C5-C6	5.29	120.04	117.40
57	BB	2235	G	C6-C5-N7	-5.29	127.23	130.40
57	BB	2392	A	C2-N3-C4	-5.29	107.96	110.60
57	BB	2762	C	C3'-C2'-C1'	-5.29	97.27	101.50
21	AA	299	G	C4-C5-N7	5.28	112.91	110.80
21	AA	422	C	C6-N1-C1'	-5.28	114.46	120.80
21	AA	601	G	C3'-C2'-C1'	-5.28	97.27	101.50
21	AA	621	A	C8-N9-C4	-5.28	103.69	105.80
21	AA	977	A	C4-N9-C1'	5.28	135.81	126.30
21	AA	1161	C	N1-C2-O2	5.28	122.07	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	31	C	C2-N1-C1'	5.28	124.61	118.80
57	BB	82	U	N1-C1'-C2'	-5.28	106.19	112.00
57	BB	530	G	C2-N3-C4	5.28	114.54	111.90
57	BB	546	U	N1-C2-O2	-5.28	119.10	122.80
57	BB	959	A	N7-C8-N9	5.28	116.44	113.80
57	BB	1060	U	C2-N1-C1'	5.28	124.04	117.70
57	BB	1549	A	C5-C6-N1	-5.28	115.06	117.70
57	BB	2433	A	C4'-C3'-C2'	5.28	107.88	102.60
58	BA	62	C	N1-C2-N3	-5.28	115.50	119.20
21	AA	954	G	C2-N3-C4	5.28	114.54	111.90
45	BC	101	ARG	N-CA-C	-5.28	96.74	111.00
57	BB	75	G	N3-C4-N9	-5.28	122.83	126.00
57	BB	275	C	C6-N1-C1'	-5.28	114.46	120.80
57	BB	2692	G	O4'-C1'-N9	5.28	112.43	108.20
57	BB	2820	A	C4'-C3'-C2'	-5.28	97.32	102.60
58	BA	71	C	C4-C5-C6	-5.28	114.76	117.40
21	AA	34	C	OP1-P-OP2	-5.28	111.68	119.60
21	AA	135	C	OP1-P-OP2	-5.28	111.68	119.60
21	AA	509	A	O4'-C1'-C2'	5.28	112.35	107.60
21	AA	940	C	N3-C4-N4	5.28	121.70	118.00
26	AV	36	U	P-O3'-C3'	-5.28	113.36	119.70
42	BW	63	ASP	CB-CG-OD2	5.28	123.05	118.30
57	BB	57	C	O4'-C4'-C3'	-5.28	98.72	104.00
57	BB	248	G	C2-N3-C4	5.28	114.54	111.90
57	BB	496	G	C5-C6-N1	5.28	114.14	111.50
57	BB	983	A	N7-C8-N9	-5.28	111.16	113.80
57	BB	1325	U	C2-N3-C4	5.28	130.17	127.00
57	BB	1417	C	C5-C6-N1	-5.28	118.36	121.00
57	BB	1733	G	C5-C6-N1	5.28	114.14	111.50
57	BB	1800	C	C5-C4-N4	-5.28	116.50	120.20
57	BB	1910	G	C4'-C3'-C2'	-5.28	97.32	102.60
57	BB	2069	G	C5-C6-N1	-5.28	108.86	111.50
57	BB	2338	C	C5-C4-N4	-5.28	116.50	120.20
57	BB	2758	A	C8-N9-C4	5.28	107.91	105.80
57	BB	2829	A	C5-N7-C8	5.28	106.54	103.90
21	AA	103	U	N3-C4-O4	5.28	123.09	119.40
21	AA	1248	A	C3'-C2'-C1'	-5.28	97.28	101.50
21	AA	1308	U	O5'-P-OP1	-5.28	100.95	105.70
21	AA	1526	G	N9-C4-C5	-5.28	103.29	105.40
22	AY	32	C	C4'-C3'-C2'	5.28	107.88	102.60
40	BU	59	GLU	OE1-CD-OE2	-5.28	116.97	123.30
57	BB	858	G	N3-C4-C5	5.28	131.24	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1740	G	C8-N9-C4	-5.28	104.29	106.40
58	BA	42	C	C3'-C2'-C1'	5.28	105.72	101.50
21	AA	495	A	P-O5'-C5'	-5.28	112.46	120.90
21	AA	606	G	C8-N9-C4	-5.28	104.29	106.40
21	AA	694	A	C4'-C3'-C2'	-5.28	97.32	102.60
21	AA	1145	A	C5'-C4'-O4'	5.28	115.43	109.10
21	AA	1403	C	C1'-O4'-C4'	5.28	114.12	109.90
30	BK	23	VAL	CA-CB-CG2	5.28	118.81	110.90
53	BE	52	VAL	CG1-CB-CG2	5.28	119.34	110.90
54	BF	29	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
55	BG	38	ASP	CA-CB-CG	-5.28	101.79	113.40
57	BB	681	G	C5-C6-N1	-5.28	108.86	111.50
57	BB	744	U	N1-C2-O2	5.28	126.49	122.80
57	BB	764	A	C5-N7-C8	5.28	106.54	103.90
57	BB	780	G	N1-C2-N3	-5.28	120.73	123.90
57	BB	1384	A	C5'-C4'-C3'	-5.28	107.56	116.00
57	BB	1645	G	C4-C5-N7	-5.28	108.69	110.80
57	BB	1714	U	O4'-C1'-C2'	-5.28	100.52	105.80
21	AA	1432	G	P-O5'-C5'	5.28	129.34	120.90
21	AA	1501	C	C5-C4-N4	-5.28	116.51	120.20
21	AA	1502	A	C5-N7-C8	5.28	106.54	103.90
22	AY	15	G	OP2-P-O3'	5.28	116.81	105.20
22	AY	34	G	OP1-P-OP2	-5.28	111.69	119.60
57	BB	207	A	C5-C6-N6	-5.28	119.48	123.70
57	BB	272	A	N3-C4-C5	-5.28	123.11	126.80
57	BB	347	A	C5-N7-C8	5.28	106.54	103.90
57	BB	418	C	C6-N1-C2	-5.28	118.19	120.30
57	BB	560	C	C1'-O4'-C4'	5.28	114.12	109.90
57	BB	950	G	N3-C4-N9	-5.28	122.83	126.00
57	BB	1182	G	C6-N1-C2	-5.28	121.94	125.10
57	BB	1310	G	N1-C2-N3	-5.28	120.73	123.90
57	BB	1422	G	N1-C2-N3	-5.28	120.73	123.90
57	BB	1555	G	C8-N9-C4	-5.28	104.29	106.40
57	BB	2025	C	C5-C4-N4	-5.28	116.51	120.20
57	BB	2198	A	C4-C5-C6	5.28	119.64	117.00
57	BB	2247	A	P-O3'-C3'	-5.28	113.37	119.70
57	BB	2412	A	C8-N9-C1'	-5.28	118.20	127.70
58	BA	37	C	N3-C4-N4	5.28	121.69	118.00
58	BA	45	A	P-O5'-C5'	-5.28	112.46	120.90
21	AA	336	A	P-O3'-C3'	-5.27	113.37	119.70
21	AA	917	G	OP1-P-OP2	-5.27	111.69	119.60
57	BB	159	G	P-O3'-C3'	5.27	126.03	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	295	G	C5-N7-C8	5.27	106.94	104.30
57	BB	726	G	C8-N9-C1'	5.27	133.86	127.00
57	BB	1394	U	N3-C4-O4	5.27	123.09	119.40
57	BB	1779	U	C5-C6-N1	-5.27	120.06	122.70
57	BB	2216	G	O4'-C1'-N9	5.27	112.42	108.20
21	AA	469	C	C2-N3-C4	5.27	122.54	119.90
21	AA	835	U	N1-C2-N3	5.27	118.06	114.90
21	AA	885	G	N9-C4-C5	-5.27	103.29	105.40
21	AA	1352	C	C5-C4-N4	-5.27	116.51	120.20
38	BS	77	ASP	CB-CG-OD2	-5.27	113.56	118.30
57	BB	21	A	C4-N9-C1'	-5.27	116.81	126.30
57	BB	95	A	C4'-C3'-C2'	-5.27	97.33	102.60
57	BB	377	G	C5-C6-N1	-5.27	108.86	111.50
57	BB	480	A	C2-N3-C4	-5.27	107.96	110.60
57	BB	541	A	C4'-C3'-C2'	-5.27	97.33	102.60
57	BB	571	U	C4-C5-C6	5.27	122.86	119.70
57	BB	625	G	P-O5'-C5'	-5.27	112.46	120.90
57	BB	934	U	C4-C5-C6	5.27	122.86	119.70
57	BB	1683	U	N3-C2-O2	5.27	125.89	122.20
57	BB	1961	C	C5-C6-N1	5.27	123.64	121.00
57	BB	2029	G	N3-C4-N9	5.27	129.16	126.00
57	BB	2240	U	N3-C4-O4	5.27	123.09	119.40
21	AA	86	G	C5-C6-O6	5.27	131.76	128.60
21	AA	137	U	C1'-O4'-C4'	5.27	114.12	109.90
21	AA	832	G	C5-C6-N1	-5.27	108.86	111.50
57	BB	409	G	O5'-P-OP1	-5.27	100.96	105.70
57	BB	1032	A	C5-C6-N6	-5.27	119.48	123.70
57	BB	1334	G	C8-N9-C4	5.27	108.51	106.40
57	BB	1579	A	O4'-C1'-C2'	5.27	112.34	107.60
21	AA	77	A	N1-C2-N3	-5.27	126.67	129.30
21	AA	683	G	C6-N1-C2	5.27	128.26	125.10
21	AA	727	G	N1-C2-N2	-5.27	111.46	116.20
21	AA	770	C	N1-C2-O2	-5.27	115.74	118.90
21	AA	1196	A	P-O5'-C5'	5.27	129.33	120.90
22	AY	25	C	N1-C2-N3	5.27	122.89	119.20
57	BB	496	G	C3'-C2'-C1'	-5.27	97.28	101.50
57	BB	611	C	C4-C5-C6	5.27	120.03	117.40
57	BB	727	A	P-O5'-C5'	5.27	129.33	120.90
57	BB	785	G	O4'-C1'-N9	5.27	112.42	108.20
57	BB	851	C	C5-C6-N1	5.27	123.64	121.00
57	BB	1240	U	O4'-C1'-N1	5.27	112.42	108.20
57	BB	1432	G	C8-N9-C4	-5.27	104.29	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1536	C	N3-C2-O2	-5.27	118.21	121.90
57	BB	1815	A	C3'-C2'-C1'	5.27	105.72	101.50
57	BB	1835	G	N7-C8-N9	5.27	115.73	113.10
57	BB	2579	C	C2-N3-C4	-5.27	117.27	119.90
57	BB	2639	A	N9-C4-C5	-5.27	103.69	105.80
57	BB	2665	A	P-O3'-C3'	-5.27	113.38	119.70
57	BB	2757	A	C8-N9-C4	-5.27	103.69	105.80
57	BB	2779	U	O4'-C1'-N1	5.27	112.42	108.20
57	BB	2867	G	N9-C4-C5	-5.27	103.29	105.40
57	BB	2882	A	C5-C6-N6	-5.27	119.48	123.70
21	AA	246	A	O4'-C1'-N9	5.27	112.41	108.20
21	AA	342	C	C2-N3-C4	5.27	122.53	119.90
21	AA	437	U	C2-N3-C4	5.27	130.16	127.00
21	AA	497	G	C5-N7-C8	5.27	106.93	104.30
21	AA	616	G	C6-N1-C2	5.27	128.26	125.10
21	AA	637	C	C1'-O4'-C4'	5.27	114.11	109.90
21	AA	790	A	C2-N3-C4	-5.27	107.97	110.60
21	AA	1062	U	C1'-O4'-C4'	5.27	114.11	109.90
21	AA	1072	G	N3-C2-N2	5.27	123.59	119.90
22	AY	27	C	P-O5'-C5'	5.27	129.33	120.90
26	AV	15	G	C4'-C3'-C2'	5.27	107.87	102.60
39	BT	32	LEU	C-N-CA	5.27	134.87	121.70
57	BB	1221	C	N1-C1'-C2'	-5.27	106.21	112.00
57	BB	1505	A	N9-C4-C5	5.27	107.91	105.80
57	BB	1591	A	C4-C5-C6	5.27	119.63	117.00
57	BB	1723	G	N3-C2-N2	5.27	123.59	119.90
57	BB	1932	A	C8-N9-C4	-5.27	103.69	105.80
57	BB	2237	G	C6-N1-C2	-5.27	121.94	125.10
57	BB	2385	C	C6-N1-C2	-5.27	118.19	120.30
58	BA	9	G	N3-C2-N2	5.27	123.59	119.90
21	AA	10	A	N1-C2-N3	5.27	131.93	129.30
21	AA	596	A	C5-N7-C8	5.27	106.53	103.90
21	AA	1429	A	N3-C4-C5	-5.27	123.11	126.80
25	AZ	97	GLN	N-CA-CB	5.27	120.08	110.60
57	BB	1330	C	N3-C4-N4	5.27	121.69	118.00
57	BB	1835	G	C5-N7-C8	-5.27	101.67	104.30
57	BB	2281	A	N3-C4-N9	-5.27	123.19	127.40
57	BB	2632	A	N3-C4-C5	-5.27	123.11	126.80
21	AA	74	A	P-O3'-C3'	5.26	126.02	119.70
21	AA	275	G	C2-N3-C4	5.26	114.53	111.90
21	AA	367	U	C6-N1-C2	-5.26	117.84	121.00
21	AA	698	G	C6-N1-C2	5.26	128.26	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	931	C	C2-N3-C4	5.26	122.53	119.90
21	AA	964	A	C6-C5-N7	-5.26	128.62	132.30
21	AA	970	C	OP2-P-O3'	5.26	116.78	105.20
21	AA	992	U	C4-C5-C6	5.26	122.86	119.70
21	AA	1154	G	C8-N9-C4	-5.26	104.29	106.40
21	AA	1423	G	C4-C5-N7	5.26	112.91	110.80
21	AA	1513	A	P-O3'-C3'	-5.26	113.38	119.70
23	AW	38	A	N3-C4-N9	5.26	131.61	127.40
30	BK	31	TYR	CB-CG-CD1	-5.26	117.84	121.00
57	BB	14	A	C5-C6-N1	-5.26	115.07	117.70
57	BB	141	G	N9-C4-C5	5.26	107.51	105.40
57	BB	422	A	C5-C6-N6	-5.26	119.49	123.70
57	BB	472	A	C4'-C3'-C2'	-5.26	97.33	102.60
57	BB	719	C	C4-C5-C6	5.26	120.03	117.40
57	BB	916	G	C4-C5-N7	5.26	112.91	110.80
57	BB	1441	G	O4'-C1'-N9	5.26	112.41	108.20
57	BB	2122	U	C4-C5-C6	5.26	122.86	119.70
57	BB	2246	G	N9-C4-C5	-5.26	103.29	105.40
57	BB	2359	C	N3-C4-N4	5.26	121.69	118.00
57	BB	2518	A	N3-C4-C5	-5.26	123.11	126.80
57	BB	2871	U	C1'-O4'-C4'	5.26	114.11	109.90
21	AA	32	A	C8-N9-C4	-5.26	103.69	105.80
21	AA	142	G	OP2-P-O3'	5.26	116.78	105.20
21	AA	223	A	C6-C5-N7	-5.26	128.62	132.30
21	AA	1307	U	C1'-O4'-C4'	-5.26	105.69	109.90
21	AA	1358	U	C2-N1-C1'	-5.26	111.38	117.70
22	AY	29	A	O4'-C1'-N9	5.26	112.41	108.20
57	BB	71	A	C6-N1-C2	5.26	121.76	118.60
57	BB	186	G	C5-C6-O6	-5.26	125.44	128.60
57	BB	1788	C	N1-C2-N3	-5.26	115.52	119.20
57	BB	2113	U	C1'-O4'-C4'	5.26	114.11	109.90
21	AA	222	C	C4-C5-C6	5.26	120.03	117.40
21	AA	535	A	C6-N1-C2	5.26	121.76	118.60
21	AA	1073	U	O4'-C1'-N1	5.26	112.41	108.20
21	AA	1209	C	N1-C2-O2	5.26	122.06	118.90
21	AA	1507	A	C5'-C4'-C3'	-5.26	107.58	116.00
57	BB	300	A	C4-C5-N7	-5.26	108.07	110.70
57	BB	689	A	O4'-C1'-N9	5.26	112.41	108.20
57	BB	2417	C	C3'-C2'-C1'	-5.26	97.29	101.50
57	BB	2425	A	OP1-P-OP2	-5.26	111.71	119.60
21	AA	465	A	C8-N9-C1'	5.26	137.17	127.70
21	AA	611	C	C2-N3-C4	5.26	122.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	667	G	C6-C5-N7	-5.26	127.25	130.40
21	AA	716	A	O4'-C1'-N9	5.26	112.41	108.20
21	AA	743	A	O4'-C1'-N9	5.26	112.41	108.20
21	AA	818	G	C8-N9-C1'	-5.26	120.16	127.00
21	AA	1005	A	C4-C5-C6	5.26	119.63	117.00
21	AA	1480	A	O4'-C1'-N9	5.26	112.41	108.20
22	AY	3	G	C4-C5-C6	5.26	121.95	118.80
57	BB	171	U	N1-C2-O2	-5.26	119.12	122.80
57	BB	250	G	N3-C2-N2	5.26	123.58	119.90
57	BB	463	G	C4-C5-C6	5.26	121.96	118.80
57	BB	833	A	N3-C4-C5	-5.26	123.12	126.80
57	BB	1734	G	N9-C1'-C2'	-5.26	106.21	112.00
57	BB	2072	C	C4-C5-C6	-5.26	114.77	117.40
57	BB	2348	U	N3-C2-O2	-5.26	118.52	122.20
57	BB	2488	G	C6-C5-N7	-5.26	127.25	130.40
57	BB	2658	C	N1-C2-O2	-5.26	115.74	118.90
57	BB	2839	G	N1-C6-O6	5.26	123.06	119.90
21	AA	82	G	N9-C4-C5	5.26	107.50	105.40
21	AA	462	G	N1-C2-N3	-5.26	120.75	123.90
57	BB	16	C	C2-N3-C4	-5.26	117.27	119.90
57	BB	493	G	O4'-C1'-N9	5.26	112.41	108.20
57	BB	1069	A	N9-C4-C5	-5.26	103.70	105.80
57	BB	1643	G	C1'-O4'-C4'	5.26	114.11	109.90
21	AA	370	C	N3-C4-N4	5.26	121.68	118.00
22	AY	31	A	OP2-P-O3'	5.26	116.77	105.20
25	AZ	137	CYS	O-C-N	5.26	131.11	122.70
57	BB	246	C	C5-C4-N4	-5.26	116.52	120.20
57	BB	319	G	N9-C4-C5	-5.26	103.30	105.40
57	BB	826	U	C3'-C2'-C1'	5.26	105.70	101.50
57	BB	866	A	C2-N3-C4	-5.26	107.97	110.60
57	BB	879	G	O4'-C1'-N9	5.26	112.41	108.20
57	BB	920	A	N3-C4-N9	5.26	131.60	127.40
57	BB	993	G	C6-C5-N7	-5.26	127.25	130.40
57	BB	1884	G	C4-C5-N7	5.26	112.90	110.80
57	BB	2114	A	C3'-C2'-C1'	-5.26	97.29	101.50
57	BB	2138	G	N3-C4-C5	-5.26	125.97	128.60
57	BB	2408	U	O4'-C1'-N1	5.26	112.41	108.20
57	BB	2659	G	C5-C6-N1	5.26	114.13	111.50
21	AA	1258	G	C6-C5-N7	-5.25	127.25	130.40
57	BB	95	A	N1-C2-N3	5.25	131.93	129.30
57	BB	200	U	N1-C2-N3	-5.25	111.75	114.90
57	BB	411	G	C6-N1-C2	5.25	128.25	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	904	G	N3-C4-N9	5.25	129.15	126.00
57	BB	2448	A	C6-C5-N7	-5.25	128.62	132.30
21	AA	246	A	C5-N7-C8	5.25	106.53	103.90
21	AA	386	C	N1-C2-N3	5.25	122.88	119.20
21	AA	742	G	C6-C5-N7	-5.25	127.25	130.40
21	AA	1266	G	C1'-O4'-C4'	-5.25	105.70	109.90
21	AA	1491	G	C4-C5-C6	5.25	121.95	118.80
23	AW	59	U	C2-N1-C1'	-5.25	111.39	117.70
25	AZ	99	ASP	CB-CG-OD2	-5.25	113.57	118.30
33	BN	80	PHE	CB-CG-CD2	-5.25	117.12	120.80
34	BO	117	PHE	CB-CG-CD1	-5.25	117.12	120.80
57	BB	428	A	N7-C8-N9	-5.25	111.17	113.80
57	BB	922	C	P-O3'-C3'	-5.25	113.40	119.70
57	BB	1136	G	C4-C5-C6	5.25	121.95	118.80
57	BB	1280	G	N1-C2-N3	5.25	127.05	123.90
57	BB	1408	G	C6-N1-C2	5.25	128.25	125.10
57	BB	1460	U	P-O5'-C5'	5.25	129.30	120.90
57	BB	1569	A	C5-N7-C8	5.25	106.53	103.90
57	BB	1858	A	O4'-C4'-C3'	5.25	110.30	106.10
57	BB	2295	C	C5-C6-N1	-5.25	118.37	121.00
57	BB	2664	G	C5-C6-N1	5.25	114.13	111.50
57	BB	2735	G	C8-N9-C4	-5.25	104.30	106.40
58	BA	73	A	C5-C6-N6	-5.25	119.50	123.70
3	AL	95	HIS	O-C-N	-5.25	114.30	122.70
21	AA	147	G	C8-N9-C4	-5.25	104.30	106.40
21	AA	527	G	P-O5'-C5'	5.25	129.30	120.90
21	AA	719	C	C5'-C4'-O4'	-5.25	102.80	109.10
21	AA	1322	C	P-O5'-C5'	-5.25	112.50	120.90
26	AV	65	C	C5'-C4'-C3'	-5.25	107.60	116.00
31	BL	84	LYS	N-CA-CB	5.25	120.05	110.60
34	BO	99	TYR	O-C-N	-5.25	114.30	122.70
57	BB	828	U	C2-N1-C1'	5.25	124.00	117.70
57	BB	1006	C	C4-C5-C6	5.25	120.03	117.40
57	BB	1085	A	OP1-P-OP2	-5.25	111.72	119.60
57	BB	1147	A	O4'-C1'-N9	5.25	112.40	108.20
57	BB	1164	C	N3-C4-N4	5.25	121.68	118.00
57	BB	1465	G	C6-N1-C2	5.25	128.25	125.10
57	BB	2346	A	C5-C6-N6	-5.25	119.50	123.70
57	BB	2423	U	O4'-C1'-C2'	-5.25	100.55	105.80
21	AA	481	G	C6-N1-C2	5.25	128.25	125.10
21	AA	1045	C	N1-C2-N3	-5.25	115.53	119.20
57	BB	296	U	N1-C2-O2	-5.25	119.12	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	765	C	N1-C2-O2	-5.25	115.75	118.90
57	BB	1133	A	O4'-C1'-N9	5.25	112.40	108.20
57	BB	1151	A	C4-C5-C6	5.25	119.62	117.00
57	BB	1288	G	C6-N1-C2	5.25	128.25	125.10
57	BB	1678	A	C5-N7-C8	5.25	106.53	103.90
57	BB	1778	U	O4'-C1'-N1	5.25	112.40	108.20
57	BB	1781	U	C5'-C4'-O4'	5.25	115.40	109.10
57	BB	2064	C	C5-C6-N1	5.25	123.62	121.00
58	BA	21	G	N3-C4-N9	-5.25	122.85	126.00
58	BA	82	U	N1-C2-O2	5.25	126.47	122.80
21	AA	47	C	O4'-C1'-N1	5.25	112.40	108.20
21	AA	348	G	N1-C6-O6	5.25	123.05	119.90
21	AA	587	G	O4'-C1'-N9	5.25	112.40	108.20
21	AA	844	G	C4-N9-C1'	5.25	133.32	126.50
21	AA	908	A	N9-C4-C5	-5.25	103.70	105.80
23	AW	61	C	O4'-C1'-N1	5.25	112.40	108.20
29	BJ	20	ALA	N-CA-CB	5.25	117.45	110.10
57	BB	652	U	C5-C4-O4	-5.25	122.75	125.90
57	BB	785	G	C2-N3-C4	-5.25	109.28	111.90
57	BB	823	C	O4'-C1'-N1	5.25	112.40	108.20
57	BB	1377	G	C4'-C3'-C2'	5.25	107.85	102.60
57	BB	1679	A	P-O5'-C5'	-5.25	112.50	120.90
57	BB	1830	C	C4-C5-C6	-5.25	114.78	117.40
57	BB	1914	C	P-O3'-C3'	-5.25	113.40	119.70
57	BB	1996	C	C2-N3-C4	-5.25	117.28	119.90
57	BB	2277	G	N3-C4-C5	5.25	131.22	128.60
57	BB	2467	C	N3-C4-N4	5.25	121.67	118.00
57	BB	2523	G	N3-C4-C5	-5.25	125.98	128.60
57	BB	2591	C	N3-C2-O2	-5.25	118.23	121.90
58	BA	83	G	C5-C6-N1	5.25	114.12	111.50
21	AA	676	A	C2-N3-C4	5.25	113.22	110.60
21	AA	871	U	C1'-O4'-C4'	-5.25	105.70	109.90
21	AA	962	C	C4-C5-C6	5.25	120.02	117.40
21	AA	1022	A	N9-C1'-C2'	-5.25	106.23	112.00
21	AA	1102	A	N1-C6-N6	5.25	121.75	118.60
21	AA	1209	C	C6-N1-C2	-5.25	118.20	120.30
21	AA	1524	C	O4'-C1'-N1	5.25	112.40	108.20
23	AW	4	C	C1'-O4'-C4'	5.25	114.10	109.90
43	BX	15	ASN	CB-CG-OD1	5.25	132.09	121.60
57	BB	721	A	C4-C5-C6	5.25	119.62	117.00
57	BB	734	A	C4-C5-N7	-5.25	108.08	110.70
57	BB	1235	G	C5'-C4'-C3'	-5.25	107.61	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1241	A	N3-C4-C5	-5.25	123.13	126.80
57	BB	1559	U	C2-N3-C4	5.25	130.15	127.00
57	BB	1630	A	C2-N3-C4	5.25	113.22	110.60
57	BB	1832	C	P-O3'-C3'	5.25	126.00	119.70
57	BB	1910	G	N3-C4-N9	5.25	129.15	126.00
57	BB	2097	A	C2-N3-C4	-5.25	107.98	110.60
57	BB	2472	G	O4'-C4'-C3'	-5.25	98.75	104.00
57	BB	2645	G	O4'-C1'-N9	5.25	112.40	108.20
58	BA	36	C	O4'-C1'-C2'	-5.25	100.55	105.80
58	BA	64	G	C5-C6-N1	-5.25	108.88	111.50
21	AA	644	U	C1'-O4'-C4'	-5.25	105.70	109.90
21	AA	867	G	C6-N1-C2	5.25	128.25	125.10
21	AA	1495	U	C2-N3-C4	-5.25	123.85	127.00
23	AW	69	G	P-O3'-C3'	5.25	126.00	119.70
57	BB	52	A	C4-C5-N7	-5.25	108.08	110.70
57	BB	274	C	P-O3'-C3'	-5.25	113.41	119.70
57	BB	2294	G	C4'-C3'-C2'	-5.25	97.36	102.60
21	AA	179	A	O4'-C4'-C3'	-5.24	98.76	104.00
21	AA	244	U	N1-C2-N3	-5.24	111.75	114.90
21	AA	405	U	N1-C2-O2	-5.24	119.13	122.80
21	AA	410	G	OP1-P-OP2	-5.24	111.73	119.60
21	AA	459	A	C4'-C3'-C2'	-5.24	97.36	102.60
27	B5	202	THR	CA-CB-CG2	-5.24	105.06	112.40
41	BV	62	THR	N-CA-C	-5.24	96.84	111.00
57	BB	44	A	N9-C1'-C2'	-5.24	106.23	112.00
57	BB	996	A	C2-N3-C4	5.24	113.22	110.60
57	BB	1036	G	N1-C6-O6	5.24	123.05	119.90
57	BB	1173	U	C6-N1-C1'	5.24	128.54	121.20
57	BB	1952	A	C6-C5-N7	-5.24	128.63	132.30
57	BB	2423	U	N3-C4-C5	-5.24	111.45	114.60
57	BB	2740	A	C5-C6-N1	-5.24	115.08	117.70
21	AA	191	G	C3'-C2'-C1'	-5.24	97.31	101.50
21	AA	340	U	N3-C4-C5	-5.24	111.45	114.60
21	AA	1102	A	C5-C6-N6	-5.24	119.51	123.70
21	AA	1490	U	N3-C4-O4	5.24	123.07	119.40
57	BB	132	G	C5-C6-N1	-5.24	108.88	111.50
57	BB	1329	U	O4'-C1'-N1	5.24	112.39	108.20
57	BB	1519	G	C6-C5-N7	-5.24	127.25	130.40
57	BB	1620	G	N1-C2-N3	-5.24	120.75	123.90
57	BB	2169	A	N3-C4-C5	-5.24	123.13	126.80
57	BB	2189	U	N1-C2-O2	-5.24	119.13	122.80
57	BB	2741	A	C5'-C4'-C3'	-5.24	107.61	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2803	G	C6-N1-C2	5.24	128.25	125.10
13	AB	34	ARG	NE-CZ-NH2	-5.24	117.68	120.30
21	AA	312	C	O4'-C1'-N1	5.24	112.39	108.20
21	AA	775	G	C5'-C4'-O4'	5.24	115.39	109.10
21	AA	804	U	C5-C6-N1	-5.24	120.08	122.70
21	AA	844	G	C8-N9-C1'	-5.24	120.19	127.00
21	AA	954	G	C4-C5-C6	5.24	121.94	118.80
21	AA	1019	A	C5-C6-N1	-5.24	115.08	117.70
21	AA	1356	G	O4'-C1'-N9	5.24	112.39	108.20
24	AX	14	A	C6-C5-N7	-5.24	128.63	132.30
44	BY	10	SER	N-CA-CB	5.24	118.36	110.50
57	BB	251	A	C5-C6-N1	-5.24	115.08	117.70
57	BB	607	U	C6-N1-C2	-5.24	117.86	121.00
57	BB	1367	A	C8-N9-C4	-5.24	103.70	105.80
57	BB	1477	A	C8-N9-C4	-5.24	103.70	105.80
57	BB	1773	A	C4-C5-N7	-5.24	108.08	110.70
57	BB	2297	A	C3'-C2'-C1'	-5.24	97.31	101.50
13	AB	20	ARG	NE-CZ-NH2	5.24	122.92	120.30
21	AA	546	A	C3'-C2'-C1'	5.24	105.69	101.50
21	AA	862	C	C5-C6-N1	5.24	123.62	121.00
21	AA	1259	C	O4'-C1'-N1	5.24	112.39	108.20
21	AA	1306	A	C4'-C3'-C2'	-5.24	97.36	102.60
26	AV	59	A	C5'-C4'-O4'	5.24	115.39	109.10
34	BO	78	VAL	CG1-CB-CG2	5.24	119.28	110.90
41	BV	57	TYR	CD1-CG-CD2	5.24	123.66	117.90
56	BH	146	VAL	N-CA-CB	5.24	123.03	111.50
57	BB	34	U	C4-C5-C6	5.24	122.84	119.70
57	BB	384	A	N3-C4-C5	5.24	130.47	126.80
57	BB	455	C	O4'-C1'-N1	5.24	112.39	108.20
57	BB	940	G	C2-N3-C4	5.24	114.52	111.90
57	BB	1071	G	O4'-C1'-N9	5.24	112.39	108.20
57	BB	1120	G	C6-N1-C2	-5.24	121.96	125.10
57	BB	1828	G	C8-N9-C4	-5.24	104.31	106.40
57	BB	2255	G	C8-N9-C4	-5.24	104.31	106.40
57	BB	2801	G	C1'-O4'-C4'	5.24	114.09	109.90
21	AA	717	U	O4'-C1'-N1	5.24	112.39	108.20
21	AA	1332	A	N7-C8-N9	5.24	116.42	113.80
22	AY	41	U	P-O3'-C3'	5.24	125.98	119.70
57	BB	298	G	O4'-C4'-C3'	-5.24	98.76	104.00
57	BB	1666	G	N1-C2-N3	-5.24	120.76	123.90
21	AA	5	U	C2-N1-C1'	5.24	123.98	117.70
21	AA	564	C	C5'-C4'-C3'	-5.24	107.62	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	566	G	C5-N7-C8	5.24	106.92	104.30
21	AA	761	G	C5-C6-N1	-5.24	108.88	111.50
21	AA	1012	A	C4'-C3'-C2'	-5.24	97.36	102.60
21	AA	1177	G	N1-C2-N3	-5.24	120.76	123.90
21	AA	1257	A	P-O3'-C3'	5.24	125.98	119.70
21	AA	1298	U	C5-C6-N1	5.24	125.32	122.70
21	AA	1486	G	N3-C2-N2	5.24	123.56	119.90
50	B3	56	LEU	CB-CA-C	-5.24	100.25	110.20
54	BF	135	ILE	CB-CA-C	5.24	122.07	111.60
57	BB	258	G	C5-N7-C8	5.24	106.92	104.30
57	BB	481	G	C5-C6-N1	-5.24	108.88	111.50
57	BB	676	A	C5-C6-N1	-5.24	115.08	117.70
57	BB	916	G	C4-N9-C1'	5.24	133.31	126.50
57	BB	939	G	N1-C6-O6	5.24	123.04	119.90
57	BB	2538	C	N1-C2-N3	5.24	122.86	119.20
58	BA	80	U	O4'-C1'-N1	5.24	112.39	108.20
21	AA	230	G	C5-C6-N1	-5.23	108.88	111.50
21	AA	283	U	C2-N3-C4	5.23	130.14	127.00
57	BB	188	G	C8-N9-C1'	5.23	133.80	127.00
57	BB	1524	G	C5-C6-N1	-5.23	108.88	111.50
57	BB	1534	U	N1-C2-N3	-5.23	111.76	114.90
57	BB	2067	G	C4-C5-N7	-5.23	108.71	110.80
21	AA	280	C	C5'-C4'-C3'	5.23	124.37	116.00
21	AA	328	C	C5-C6-N1	5.23	123.62	121.00
21	AA	471	U	C1'-O4'-C4'	5.23	114.09	109.90
21	AA	1333	A	C5'-C4'-O4'	5.23	115.38	109.10
21	AA	1352	C	O4'-C1'-N1	5.23	112.39	108.20
26	AV	24	U	N3-C4-C5	-5.23	111.46	114.60
31	BL	43	GLY	N-CA-C	-5.23	100.02	113.10
57	BB	401	A	C1'-O4'-C4'	-5.23	105.71	109.90
57	BB	900	A	C4-C5-C6	5.23	119.62	117.00
57	BB	1017	G	C4-C5-C6	5.23	121.94	118.80
57	BB	1131	G	C2-N3-C4	-5.23	109.28	111.90
57	BB	1409	U	N1-C2-O2	5.23	126.46	122.80
57	BB	1503	A	C4-C5-N7	-5.23	108.08	110.70
57	BB	1625	C	C6-N1-C2	-5.23	118.21	120.30
57	BB	1945	G	C6-C5-N7	-5.23	127.26	130.40
57	BB	2527	C	C6-N1-C2	-5.23	118.21	120.30
57	BB	2848	G	C5'-C4'-O4'	5.23	115.38	109.10
57	BB	2848	G	N1-C2-N3	-5.23	120.76	123.90
58	BA	24	G	C4-C5-N7	-5.23	108.71	110.80
21	AA	408	A	C5'-C4'-C3'	-5.23	107.63	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	523	A	C6-N1-C2	-5.23	115.46	118.60
21	AA	541	G	C5-N7-C8	-5.23	101.69	104.30
21	AA	776	G	N9-C4-C5	5.23	107.49	105.40
21	AA	1405	G	O5'-C5'-C4'	-5.23	101.76	111.70
22	AY	36	A	N9-C1'-C2'	-5.23	106.25	112.00
22	AY	53	G	N3-C4-N9	5.23	129.14	126.00
43	BX	57	VAL	CG1-CB-CG2	5.23	119.27	110.90
57	BB	678	C	O4'-C1'-N1	5.23	112.38	108.20
57	BB	808	G	N7-C8-N9	5.23	115.72	113.10
57	BB	1226	A	O4'-C1'-C2'	5.23	112.31	107.60
57	BB	1482	G	O4'-C1'-N9	5.23	112.38	108.20
57	BB	1635	A	N3-C4-N9	5.23	131.58	127.40
57	BB	1647	U	C6-N1-C2	-5.23	117.86	121.00
57	BB	1785	A	C6-C5-N7	-5.23	128.64	132.30
57	BB	2012	G	C6-C5-N7	-5.23	127.26	130.40
57	BB	2206	C	C6-N1-C2	5.23	122.39	120.30
57	BB	2570	G	N1-C6-O6	5.23	123.04	119.90
21	AA	36	C	C1'-O4'-C4'	5.23	114.08	109.90
21	AA	129	A	N9-C4-C5	5.23	107.89	105.80
21	AA	1224	U	N3-C2-O2	5.23	125.86	122.20
27	B5	204	ALA	CB-CA-C	5.23	117.94	110.10
41	BV	54	ALA	CB-CA-C	-5.23	102.26	110.10
57	BB	162	U	N1-C2-O2	5.23	126.46	122.80
57	BB	675	A	C6-N1-C2	-5.23	115.46	118.60
57	BB	1184	U	N3-C2-O2	-5.23	118.54	122.20
57	BB	2367	G	O4'-C1'-N9	5.23	112.38	108.20
57	BB	2616	C	C1'-O4'-C4'	5.23	114.08	109.90
21	AA	130	A	N7-C8-N9	-5.23	111.19	113.80
21	AA	335	C	C6-N1-C2	-5.23	118.21	120.30
21	AA	1147	C	C2-N3-C4	5.23	122.51	119.90
23	AW	43	C	N3-C4-N4	5.23	121.66	118.00
25	AZ	79	VAL	CG1-CB-CG2	-5.23	102.54	110.90
52	BD	42	ASN	C-N-CA	5.23	134.77	121.70
55	BG	94	ARG	NE-CZ-NH1	-5.23	117.69	120.30
57	BB	142	A	OP2-P-O3'	5.23	116.70	105.20
57	BB	479	A	P-O3'-C3'	5.23	125.97	119.70
57	BB	554	U	C4'-C3'-C2'	-5.23	97.37	102.60
57	BB	617	G	C5-C6-N1	-5.23	108.89	111.50
57	BB	1611	C	N1-C2-O2	5.23	122.04	118.90
57	BB	1612	C	C4-C5-C6	-5.23	114.79	117.40
57	BB	2125	G	C1'-O4'-C4'	-5.23	105.72	109.90
57	BB	2616	C	C6-N1-C2	-5.23	118.21	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2724	U	N1-C2-N3	5.23	118.04	114.90
21	AA	406	G	C5-C6-O6	-5.23	125.46	128.60
21	AA	830	G	O4'-C1'-N9	5.23	112.38	108.20
21	AA	945	G	C5-C6-O6	-5.23	125.46	128.60
23	AW	7	A	OP1-P-OP2	-5.23	111.76	119.60
23	AW	18	G	N9-C1'-C2'	5.23	120.79	114.00
57	BB	494	G	N1-C6-O6	5.23	123.03	119.90
57	BB	610	C	O4'-C1'-N1	5.23	112.38	108.20
57	BB	894	U	O4'-C1'-C2'	-5.23	100.57	105.80
57	BB	2454	G	C3'-C2'-C1'	5.23	105.68	101.50
57	BB	2547	A	N3-C4-C5	-5.23	123.14	126.80
21	AA	366	A	N1-C2-N3	5.22	131.91	129.30
21	AA	477	C	C6-N1-C2	-5.22	118.21	120.30
21	AA	634	C	O4'-C1'-N1	5.22	112.38	108.20
21	AA	973	G	P-O3'-C3'	5.22	125.97	119.70
21	AA	1225	A	P-O5'-C5'	5.22	129.26	120.90
21	AA	1298	U	C6-N1-C2	-5.22	117.86	121.00
48	B1	23	THR	CA-CB-OG1	5.22	119.97	109.00
57	BB	246	C	C5-C6-N1	5.22	123.61	121.00
57	BB	1290	C	N3-C4-N4	5.22	121.66	118.00
57	BB	1634	A	N3-C4-N9	5.22	131.58	127.40
57	BB	1690	A	N1-C6-N6	5.22	121.73	118.60
57	BB	1869	G	C5'-C4'-C3'	-5.22	107.64	116.00
57	BB	2338	C	N3-C2-O2	-5.22	118.24	121.90
57	BB	2872	A	C5-C6-N6	-5.22	119.52	123.70
2	AK	79	LYS	CB-CA-C	-5.22	99.96	110.40
4	AM	40	GLU	CB-CA-C	-5.22	99.95	110.40
6	AO	71	ARG	NE-CZ-NH1	5.22	122.91	120.30
18	AG	139	ASP	CB-CG-OD2	5.22	123.00	118.30
21	AA	831	A	C2-N3-C4	-5.22	107.99	110.60
21	AA	991	U	C5-C6-N1	5.22	125.31	122.70
21	AA	1019	A	C6-N1-C2	-5.22	115.47	118.60
21	AA	1021	A	N9-C4-C5	-5.22	103.71	105.80
21	AA	1342	C	N1-C2-O2	5.22	122.03	118.90
23	AW	29	G	C4-C5-N7	5.22	112.89	110.80
51	B4	11	CYS	N-CA-CB	5.22	120.00	110.60
57	BB	75	G	N1-C6-O6	5.22	123.03	119.90
57	BB	195	A	C5-N7-C8	5.22	106.51	103.90
57	BB	310	A	C4-C5-C6	5.22	119.61	117.00
57	BB	414	C	C3'-C2'-C1'	-5.22	97.32	101.50
57	BB	1089	A	O4'-C1'-N9	5.22	112.38	108.20
57	BB	1392	A	N9-C4-C5	-5.22	103.71	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1443	U	N3-C4-O4	5.22	123.06	119.40
57	BB	1492	G	P-O5'-C5'	-5.22	112.55	120.90
57	BB	1813	G	N1-C6-O6	5.22	123.03	119.90
57	BB	1890	A	C8-N9-C4	-5.22	103.71	105.80
57	BB	2097	A	N3-C4-N9	-5.22	123.22	127.40
57	BB	2336	A	N1-C6-N6	5.22	121.73	118.60
57	BB	2635	A	C5-C6-N6	-5.22	119.52	123.70
57	BB	2848	G	O4'-C1'-N9	5.22	112.38	108.20
57	BB	2857	G	C4-C5-N7	5.22	112.89	110.80
57	BB	2898	U	N3-C4-O4	5.22	123.06	119.40
21	AA	31	G	N3-C2-N2	5.22	123.55	119.90
21	AA	493	A	C5-N7-C8	5.22	106.51	103.90
21	AA	583	A	C6-N1-C2	-5.22	115.47	118.60
21	AA	1533	C	N1-C2-O2	5.22	122.03	118.90
57	BB	653	U	C5-C6-N1	5.22	125.31	122.70
57	BB	881	G	C1'-O4'-C4'	-5.22	105.72	109.90
57	BB	1243	C	C5-C4-N4	-5.22	116.55	120.20
57	BB	1711	A	C6-C5-N7	-5.22	128.65	132.30
57	BB	2199	A	C5-C6-N6	-5.22	119.52	123.70
57	BB	2407	A	C5-C6-N1	-5.22	115.09	117.70
57	BB	2873	A	C5-C6-N6	-5.22	119.52	123.70
21	AA	320	A	C4-C5-C6	5.22	119.61	117.00
21	AA	567	G	C2-N3-C4	5.22	114.51	111.90
21	AA	752	G	OP1-P-OP2	-5.22	111.77	119.60
21	AA	940	C	C5-C6-N1	5.22	123.61	121.00
21	AA	1314	C	N1-C2-O2	-5.22	115.77	118.90
21	AA	1397	C	N3-C2-O2	-5.22	118.25	121.90
23	AW	31	A	C4'-C3'-C2'	-5.22	97.38	102.60
53	BE	138	LEU	N-CA-CB	5.22	120.84	110.40
57	BB	132	G	C4-C5-C6	5.22	121.93	118.80
57	BB	558	U	P-O3'-C3'	-5.22	113.44	119.70
57	BB	603	A	C5-N7-C8	5.22	106.51	103.90
57	BB	945	A	C5-C6-N1	-5.22	115.09	117.70
57	BB	1414	C	C2-N3-C4	5.22	122.51	119.90
57	BB	1415	U	N3-C4-C5	-5.22	111.47	114.60
57	BB	2006	C	C4-C5-C6	5.22	120.01	117.40
57	BB	2058	A	C5-C6-N6	-5.22	119.52	123.70
57	BB	2463	C	C6-N1-C1'	-5.22	114.54	120.80
58	BA	33	G	O4'-C1'-N9	5.22	112.38	108.20
21	AA	329	A	C1'-O4'-C4'	5.22	114.07	109.90
21	AA	772	U	C1'-O4'-C4'	-5.22	105.73	109.90
21	AA	1267	C	C5-C4-N4	-5.22	116.55	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	2	G	N3-C4-N9	-5.22	122.87	126.00
57	BB	1112	G	N1-C2-N3	-5.22	120.77	123.90
57	BB	1199	U	C5'-C4'-C3'	-5.22	107.65	116.00
57	BB	1236	G	O4'-C1'-N9	5.22	112.37	108.20
57	BB	1618	A	N9-C4-C5	5.22	107.89	105.80
57	BB	2167	U	O4'-C4'-C3'	-5.22	98.78	104.00
58	BA	39	A	C4-C5-C6	5.22	119.61	117.00
21	AA	76	G	O4'-C1'-N9	5.22	112.37	108.20
21	AA	120	A	C8-N9-C4	-5.22	103.71	105.80
21	AA	136	C	C3'-C2'-C1'	5.22	105.67	101.50
21	AA	236	A	C5-C6-N1	-5.22	115.09	117.70
21	AA	288	A	O4'-C1'-C2'	-5.22	100.58	105.80
21	AA	1186	G	C8-N9-C1'	5.22	133.78	127.00
21	AA	1227	A	C8-N9-C1'	5.22	137.09	127.70
34	BO	45	SER	C-N-CA	5.22	134.74	121.70
56	BH	91	PHE	CB-CG-CD1	-5.22	117.15	120.80
57	BB	166	U	N1-C2-N3	5.22	118.03	114.90
57	BB	233	A	C6-N1-C2	-5.22	115.47	118.60
57	BB	1156	A	P-O3'-C3'	-5.22	113.44	119.70
57	BB	1580	A	C4-C5-C6	5.22	119.61	117.00
57	BB	1830	C	C5-C4-N4	-5.22	116.55	120.20
57	BB	1848	A	C4'-C3'-C2'	-5.22	97.38	102.60
57	BB	1907	G	N3-C4-N9	-5.22	122.87	126.00
57	BB	1926	U	N3-C2-O2	5.22	125.85	122.20
57	BB	2373	G	N1-C6-O6	5.22	123.03	119.90
57	BB	2450	A	P-O3'-C3'	-5.22	113.44	119.70
57	BB	2453	A	C5-N7-C8	5.22	106.51	103.90
57	BB	2587	A	C5-C6-N1	5.22	120.31	117.70
57	BB	2768	U	N3-C4-O4	5.22	123.05	119.40
57	BB	2777	G	C2-N3-C4	5.22	114.51	111.90
21	AA	639	G	C4-C5-C6	5.21	121.93	118.80
21	AA	699	C	N3-C4-N4	5.21	121.65	118.00
21	AA	791	G	N7-C8-N9	-5.21	110.49	113.10
21	AA	854	U	N3-C2-O2	5.21	125.85	122.20
21	AA	1345	U	C5-C6-N1	-5.21	120.09	122.70
57	BB	373	U	N3-C4-C5	-5.21	111.47	114.60
57	BB	410	G	C5-C6-N1	5.21	114.11	111.50
57	BB	605	G	C4-C5-N7	-5.21	108.71	110.80
57	BB	1292	G	N1-C2-N3	-5.21	120.77	123.90
57	BB	1411	U	C2-N3-C4	5.21	130.13	127.00
57	BB	1486	U	N1-C1'-C2'	-5.21	106.26	112.00
58	BA	40	U	C3'-C2'-C1'	5.21	105.67	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	244	U	C5'-C4'-O4'	5.21	115.36	109.10
21	AA	328	C	C6-N1-C2	5.21	122.39	120.30
21	AA	639	G	C4-C5-N7	-5.21	108.72	110.80
21	AA	1147	C	P-O5'-C5'	5.21	129.24	120.90
22	AY	58	A	O4'-C1'-C2'	-5.21	100.59	105.80
42	BW	56	HIS	N-CA-CB	5.21	119.98	110.60
57	BB	301	G	C4-N9-C1'	-5.21	119.72	126.50
57	BB	1069	A	C5-C6-N6	-5.21	119.53	123.70
57	BB	1979	U	N1-C2-O2	5.21	126.45	122.80
57	BB	2517	C	N3-C4-N4	5.21	121.65	118.00
57	BB	2767	C	N3-C4-C5	-5.21	119.81	121.90
12	AU	17	ARG	NE-CZ-NH1	5.21	122.91	120.30
21	AA	6	G	N3-C4-N9	5.21	129.13	126.00
21	AA	114	U	N1-C2-N3	5.21	118.03	114.90
21	AA	133	U	C6-N1-C2	-5.21	117.87	121.00
21	AA	170	U	N1-C2-N3	-5.21	111.77	114.90
21	AA	213	G	C6-N1-C2	5.21	128.23	125.10
21	AA	397	A	C6-N1-C2	5.21	121.73	118.60
21	AA	679	C	N3-C4-C5	-5.21	119.81	121.90
21	AA	692	U	C2-N1-C1'	5.21	123.95	117.70
21	AA	870	U	N3-C4-O4	5.21	123.05	119.40
21	AA	1307	U	C5-C6-N1	5.21	125.31	122.70
21	AA	1525	G	C4-N9-C1'	-5.21	119.72	126.50
26	AV	10	G	C5-C6-O6	-5.21	125.47	128.60
30	BK	63	ARG	CB-CA-C	-5.21	99.98	110.40
53	BE	108	ILE	C-N-CA	5.21	134.73	121.70
57	BB	66	C	C6-N1-C1'	-5.21	114.55	120.80
57	BB	89	A	C5-N7-C8	5.21	106.51	103.90
57	BB	135	U	N3-C4-O4	5.21	123.05	119.40
57	BB	222	A	N9-C1'-C2'	-5.21	106.27	112.00
57	BB	254	G	OP1-P-OP2	-5.21	111.78	119.60
57	BB	1037	G	C6-C5-N7	-5.21	127.27	130.40
57	BB	1207	C	P-O3'-C3'	-5.21	113.45	119.70
57	BB	2316	G	N9-C4-C5	-5.21	103.32	105.40
57	BB	2576	G	C4-N9-C1'	5.21	133.28	126.50
57	BB	2883	A	P-O3'-C3'	-5.21	113.45	119.70
21	AA	906	A	C3'-C2'-C1'	5.21	105.67	101.50
22	AY	21	A	C5'-C4'-O4'	5.21	115.35	109.10
36	BQ	31	TYR	CB-CG-CD1	-5.21	117.87	121.00
55	BG	148	ARG	NE-CZ-NH2	5.21	122.91	120.30
57	BB	34	U	C2-N1-C1'	5.21	123.95	117.70
57	BB	650	C	C1'-O4'-C4'	5.21	114.07	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	925	A	P-O5'-C5'	5.21	129.24	120.90
57	BB	1321	A	C2-N3-C4	5.21	113.20	110.60
57	BB	1365	A	C4-C5-N7	-5.21	108.09	110.70
57	BB	1373	A	C2-N3-C4	5.21	113.20	110.60
57	BB	2095	A	C1'-O4'-C4'	-5.21	105.73	109.90
57	BB	2434	A	P-O3'-C3'	-5.21	113.45	119.70
57	BB	2588	G	N1-C2-N3	-5.21	120.77	123.90
57	BB	2894	G	O4'-C1'-N9	5.21	112.37	108.20
14	AC	160	GLU	OE1-CD-OE2	-5.21	117.05	123.30
21	AA	53	A	C8-N9-C4	5.21	107.88	105.80
21	AA	86	G	O4'-C4'-C3'	-5.21	98.79	104.00
21	AA	862	C	C4-C5-C6	5.21	120.00	117.40
21	AA	1013	G	N1-C2-N2	-5.21	111.51	116.20
21	AA	1143	G	C6-C5-N7	-5.21	127.28	130.40
21	AA	1188	A	C8-N9-C4	5.21	107.88	105.80
21	AA	1211	U	C1'-O4'-C4'	5.21	114.07	109.90
23	AW	65	G	C5-N7-C8	5.21	106.90	104.30
24	AX	18	G	O4'-C1'-N9	5.21	112.37	108.20
38	BS	88	ARG	C-N-CA	5.21	134.72	121.70
57	BB	250	G	P-O5'-C5'	-5.21	112.57	120.90
57	BB	261	G	C5-N7-C8	5.21	106.90	104.30
57	BB	669	G	C5'-C4'-O4'	5.21	115.35	109.10
57	BB	1543	G	OP1-P-OP2	-5.21	111.79	119.60
57	BB	1656	C	N3-C2-O2	5.21	125.55	121.90
57	BB	1999	C	P-O3'-C3'	-5.21	113.45	119.70
57	BB	2317	A	C1'-O4'-C4'	-5.21	105.73	109.90
57	BB	2550	G	N1-C6-O6	5.21	123.03	119.90
57	BB	2569	G	N1-C6-O6	5.21	123.03	119.90
57	BB	2580	U	C5'-C4'-C3'	-5.21	107.67	116.00
57	BB	2705	A	O4'-C4'-C3'	-5.21	98.79	104.00
57	BB	2842	G	C8-N9-C4	-5.21	104.32	106.40
19	AH	115	ALA	CB-CA-C	-5.21	102.29	110.10
21	AA	126	G	C8-N9-C1'	5.21	133.77	127.00
21	AA	238	A	C8-N9-C4	-5.21	103.72	105.80
21	AA	474	G	C6-N1-C2	-5.21	121.98	125.10
21	AA	512	U	C6-N1-C2	-5.21	117.88	121.00
21	AA	872	A	N9-C4-C5	5.21	107.88	105.80
21	AA	983	A	C8-N9-C4	-5.21	103.72	105.80
21	AA	1003	G	N3-C4-C5	-5.21	126.00	128.60
21	AA	1207	G	C5-N7-C8	5.21	106.90	104.30
21	AA	1271	A	C5-N7-C8	5.21	106.50	103.90
23	AW	65	G	N1-C2-N3	-5.21	120.78	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	83	A	C2-N3-C4	5.21	113.20	110.60
57	BB	728	G	N7-C8-N9	-5.21	110.50	113.10
57	BB	1244	A	O4'-C4'-C3'	-5.21	98.79	104.00
57	BB	1838	C	N1-C2-O2	-5.21	115.78	118.90
57	BB	1891	G	P-O5'-C5'	5.21	129.23	120.90
57	BB	1954	G	C6-C5-N7	-5.21	127.28	130.40
57	BB	2476	A	C4-C5-C6	5.21	119.60	117.00
57	BB	2574	G	C6-N1-C2	-5.21	121.98	125.10
21	AA	150	U	N3-C4-C5	-5.21	111.48	114.60
21	AA	505	G	C6-C5-N7	-5.21	127.28	130.40
21	AA	1152	A	C2-N3-C4	-5.21	108.00	110.60
22	AY	46	G	C6-N1-C2	5.21	128.22	125.10
57	BB	675	A	C8-N9-C4	-5.21	103.72	105.80
57	BB	1111	A	N7-C8-N9	-5.21	111.20	113.80
57	BB	1666	G	C6-C5-N7	-5.21	127.28	130.40
57	BB	2054	A	N9-C4-C5	5.21	107.88	105.80
57	BB	2076	U	C5'-C4'-C3'	5.21	124.33	116.00
57	BB	2173	A	C5-N7-C8	5.21	106.50	103.90
58	BA	75	G	C4-C5-N7	-5.21	108.72	110.80
10	AS	66	VAL	CA-CB-CG1	-5.20	103.10	110.90
21	AA	517	G	C8-N9-C4	-5.20	104.32	106.40
21	AA	938	A	C5-C6-N1	-5.20	115.10	117.70
21	AA	1451	U	C5-C6-N1	5.20	125.30	122.70
21	AA	1520	C	C5'-C4'-O4'	5.20	115.34	109.10
22	AY	34	G	C4-N9-C1'	5.20	133.27	126.50
57	BB	244	A	N9-C1'-C2'	-5.20	106.28	112.00
57	BB	278	A	C5-N7-C8	5.20	106.50	103.90
57	BB	311	A	C5-C6-N6	-5.20	119.54	123.70
57	BB	316	C	C6-N1-C2	-5.20	118.22	120.30
57	BB	398	C	P-O5'-C5'	-5.20	112.57	120.90
57	BB	518	G	C1'-O4'-C4'	5.20	114.06	109.90
57	BB	697	G	C5-C6-N1	5.20	114.10	111.50
57	BB	1051	G	C5'-C4'-C3'	-5.20	107.67	116.00
57	BB	1385	A	C3'-C2'-C1'	-5.20	97.34	101.50
57	BB	1442	U	O4'-C1'-N1	5.20	112.36	108.20
57	BB	1465	G	C4-C5-N7	-5.20	108.72	110.80
57	BB	1595	C	C4-C5-C6	5.20	120.00	117.40
57	BB	1595	C	N3-C4-N4	5.20	121.64	118.00
57	BB	1613	G	C4'-C3'-C2'	-5.20	97.40	102.60
57	BB	1790	C	OP1-P-O3'	5.20	116.65	105.20
57	BB	2033	A	O4'-C1'-N9	5.20	112.36	108.20
57	BB	2093	G	C2-N3-C4	5.20	114.50	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2120	G	N1-C2-N3	-5.20	120.78	123.90
57	BB	2540	C	N1-C2-O2	5.20	122.02	118.90
57	BB	2785	C	P-O3'-C3'	-5.20	113.46	119.70
3	AL	53	ARG	NE-CZ-NH2	-5.20	117.70	120.30
57	BB	146	A	N3-C4-C5	-5.20	123.16	126.80
57	BB	916	G	N3-C4-N9	5.20	129.12	126.00
57	BB	2097	A	O4'-C4'-C3'	-5.20	98.80	104.00
57	BB	2184	A	C4-C5-N7	-5.20	108.10	110.70
57	BB	2188	U	P-O5'-C5'	5.20	129.22	120.90
21	AA	846	G	N1-C2-N3	-5.20	120.78	123.90
21	AA	933	G	C4-C5-C6	5.20	121.92	118.80
23	AW	46	G	C8-N9-C4	5.20	108.48	106.40
57	BB	267	C	N3-C4-N4	5.20	121.64	118.00
57	BB	317	G	C3'-C2'-C1'	5.20	105.66	101.50
57	BB	784	G	OP1-P-OP2	-5.20	111.80	119.60
57	BB	873	C	N3-C4-C5	-5.20	119.82	121.90
57	BB	921	C	N3-C4-N4	5.20	121.64	118.00
57	BB	1020	A	N1-C2-N3	5.20	131.90	129.30
57	BB	1117	C	C5-C4-N4	-5.20	116.56	120.20
57	BB	1194	A	C4'-C3'-C2'	5.20	107.80	102.60
57	BB	1325	U	C2-N1-C1'	5.20	123.94	117.70
57	BB	1575	C	C2-N3-C4	5.20	122.50	119.90
57	BB	1577	C	P-O3'-C3'	5.20	125.94	119.70
57	BB	1660	G	N3-C2-N2	5.20	123.54	119.90
57	BB	1811	G	C4-C5-C6	5.20	121.92	118.80
57	BB	1847	A	O4'-C1'-C2'	5.20	112.28	107.60
57	BB	2104	C	N1-C2-O2	5.20	122.02	118.90
57	BB	2694	G	N1-C2-N3	-5.20	120.78	123.90
58	BA	21	G	C4-C5-N7	5.20	112.88	110.80
7	AP	37	GLY	CA-C-N	-5.20	105.76	117.20
21	AA	726	C	N1-C1'-C2'	-5.20	106.28	112.00
21	AA	903	G	N1-C2-N3	-5.20	120.78	123.90
21	AA	1142	G	C4-C5-C6	5.20	121.92	118.80
21	AA	1506	U	C5-C6-N1	5.20	125.30	122.70
26	AV	10	G	N9-C4-C5	5.20	107.48	105.40
37	BR	64	VAL	CB-CA-C	-5.20	101.52	111.40
57	BB	172	A	C6-C5-N7	-5.20	128.66	132.30
57	BB	429	A	N9-C4-C5	-5.20	103.72	105.80
57	BB	906	U	N1-C1'-C2'	-5.20	106.28	112.00
57	BB	1013	C	O4'-C4'-C3'	-5.20	98.80	104.00
57	BB	1157	G	C2-N3-C4	5.20	114.50	111.90
57	BB	1428	C	C3'-C2'-C1'	-5.20	97.34	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1790	C	N1-C2-N3	-5.20	115.56	119.20
57	BB	2038	G	O4'-C1'-N9	5.20	112.36	108.20
57	BB	2471	A	C5'-C4'-O4'	-5.20	102.86	109.10
57	BB	2748	A	N7-C8-N9	5.20	116.40	113.80
21	AA	85	U	P-O3'-C3'	5.20	125.94	119.70
21	AA	332	G	N9-C4-C5	-5.20	103.32	105.40
21	AA	988	G	P-O3'-C3'	-5.20	113.46	119.70
21	AA	1281	C	C5-C4-N4	-5.20	116.56	120.20
23	AW	40	C	C2-N3-C4	5.20	122.50	119.90
57	BB	676	A	C8-N9-C4	5.20	107.88	105.80
57	BB	961	C	C1'-O4'-C4'	5.20	114.06	109.90
57	BB	1025	G	C5'-C4'-O4'	5.20	115.34	109.10
57	BB	1646	C	C2-N3-C4	-5.20	117.30	119.90
57	BB	2616	C	C4-C5-C6	5.20	120.00	117.40
58	BA	94	A	C8-N9-C4	5.20	107.88	105.80
21	AA	80	A	N7-C8-N9	-5.20	111.20	113.80
21	AA	427	U	N1-C2-O2	-5.20	119.16	122.80
21	AA	504	C	C5-C6-N1	5.20	123.60	121.00
21	AA	676	A	N7-C8-N9	5.20	116.40	113.80
21	AA	794	A	C6-C5-N7	-5.20	128.66	132.30
21	AA	968	A	C4-C5-C6	5.20	119.60	117.00
21	AA	1077	G	C5-N7-C8	-5.20	101.70	104.30
21	AA	1128	C	C5-C6-N1	5.20	123.60	121.00
22	AY	36	A	C6-C5-N7	-5.20	128.66	132.30
37	BR	21	ARG	NH1-CZ-NH2	5.20	125.11	119.40
57	BB	923	G	N3-C4-N9	5.20	129.12	126.00
57	BB	1493	C	C5-C6-N1	-5.20	118.40	121.00
57	BB	2589	A	C2-N3-C4	-5.20	108.00	110.60
57	BB	2699	C	P-O5'-C5'	5.20	129.21	120.90
21	AA	812	G	N1-C2-N3	-5.19	120.78	123.90
21	AA	1425	U	P-O5'-C5'	5.19	129.21	120.90
21	AA	1531	A	C5-N7-C8	5.19	106.50	103.90
57	BB	1916	A	C4'-C3'-C2'	-5.19	97.41	102.60
57	BB	2080	A	N9-C4-C5	5.19	107.88	105.80
57	BB	2216	G	N1-C2-N3	5.19	127.02	123.90
57	BB	2871	U	C5'-C4'-O4'	5.19	115.33	109.10
58	BA	80	U	O5'-C5'-C4'	-5.19	101.83	111.70
16	AE	88	HIS	N-CA-C	-5.19	96.98	111.00
16	AE	92	ARG	CD-NE-CZ	-5.19	116.33	123.60
21	AA	116	A	C1'-O4'-C4'	-5.19	105.75	109.90
21	AA	182	A	C5-C6-N1	-5.19	115.10	117.70
21	AA	539	A	C5-C6-N1	-5.19	115.10	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	890	G	C2-N3-C4	-5.19	109.30	111.90
21	AA	971	G	N3-C2-N2	5.19	123.53	119.90
21	AA	1239	A	P-O3'-C3'	5.19	125.93	119.70
21	AA	1268	G	C3'-C2'-C1'	-5.19	97.35	101.50
21	AA	1360	A	C4-C5-C6	5.19	119.60	117.00
22	AY	73	A	O4'-C1'-N9	5.19	112.36	108.20
57	BB	221	A	C5'-C4'-C3'	-5.19	107.69	116.00
57	BB	781	A	C8-N9-C4	-5.19	103.72	105.80
57	BB	860	U	C1'-O4'-C4'	5.19	114.05	109.90
57	BB	1568	G	N9-C4-C5	-5.19	103.32	105.40
57	BB	1581	G	N3-C2-N2	5.19	123.53	119.90
57	BB	1718	G	C1'-O4'-C4'	-5.19	105.75	109.90
57	BB	1874	C	N1-C2-N3	5.19	122.83	119.20
57	BB	2040	G	N3-C4-C5	5.19	131.20	128.60
57	BB	2433	A	C1'-O4'-C4'	5.19	114.05	109.90
57	BB	2522	U	N3-C4-O4	5.19	123.03	119.40
57	BB	2626	C	N3-C4-C5	-5.19	119.82	121.90
57	BB	2855	C	C5-C4-N4	-5.19	116.56	120.20
20	AI	71	ILE	CG1-CB-CG2	5.19	122.82	111.40
21	AA	98	A	O4'-C1'-N9	5.19	112.35	108.20
21	AA	811	C	C5-C6-N1	-5.19	118.41	121.00
21	AA	1181	G	C5'-C4'-C3'	-5.19	107.69	116.00
21	AA	1352	C	N1-C2-O2	5.19	122.01	118.90
23	AW	14	A	C3'-C2'-C1'	5.19	105.65	101.50
26	AV	47	U	O4'-C1'-N1	5.19	112.35	108.20
27	B5	87	ALA	N-CA-CB	5.19	117.37	110.10
32	BM	47	GLU	OE1-CD-OE2	-5.19	117.07	123.30
57	BB	7	G	N9-C4-C5	-5.19	103.32	105.40
57	BB	55	G	N1-C6-O6	5.19	123.01	119.90
57	BB	177	G	C4-C5-N7	-5.19	108.72	110.80
57	BB	277	G	C6-N1-C2	5.19	128.21	125.10
57	BB	340	A	O4'-C1'-N9	5.19	112.35	108.20
57	BB	715	A	O4'-C1'-N9	5.19	112.35	108.20
57	BB	1120	G	P-O3'-C3'	-5.19	113.47	119.70
57	BB	1292	G	C5-C6-O6	-5.19	125.49	128.60
57	BB	1336	A	C5'-C4'-C3'	-5.19	107.69	116.00
57	BB	1389	G	O5'-C5'-C4'	-5.19	101.84	111.70
57	BB	1535	A	C5'-C4'-C3'	-5.19	107.69	116.00
57	BB	1814	G	O4'-C4'-C3'	-5.19	98.81	104.00
57	BB	1909	C	C2-N3-C4	5.19	122.50	119.90
57	BB	1935	G	C5'-C4'-O4'	5.19	115.33	109.10
57	BB	2053	G	C6-C5-N7	-5.19	127.29	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2195	U	N3-C2-O2	5.19	125.83	122.20
57	BB	2260	C	N3-C2-O2	5.19	125.53	121.90
57	BB	2306	C	P-O5'-C5'	-5.19	112.59	120.90
57	BB	2590	A	C5-C6-N1	-5.19	115.10	117.70
57	BB	2618	G	C6-N1-C2	5.19	128.22	125.10
57	BB	2700	A	C8-N9-C4	-5.19	103.72	105.80
57	BB	2746	U	C4-C5-C6	5.19	122.81	119.70
57	BB	2843	G	C4-N9-C1'	-5.19	119.75	126.50
57	BB	2857	G	O4'-C4'-C3'	-5.19	98.81	104.00
58	BA	53	A	C3'-C2'-C1'	-5.19	97.35	101.50
4	AM	97	ARG	NE-CZ-NH1	5.19	122.89	120.30
21	AA	220	G	C4'-C3'-C2'	-5.19	97.41	102.60
21	AA	426	U	C2-N3-C4	5.19	130.11	127.00
21	AA	1047	G	N3-C2-N2	5.19	123.53	119.90
21	AA	1378	C	C5-C4-N4	-5.19	116.57	120.20
21	AA	1425	U	N1-C2-O2	-5.19	119.17	122.80
22	AY	71	G	N7-C8-N9	-5.19	110.50	113.10
57	BB	269	C	N1-C2-O2	5.19	122.01	118.90
57	BB	386	G	N1-C2-N3	-5.19	120.79	123.90
57	BB	696	G	N9-C4-C5	5.19	107.48	105.40
57	BB	1109	C	C2-N3-C4	5.19	122.49	119.90
57	BB	1992	G	N1-C2-N2	-5.19	111.53	116.20
57	BB	2008	C	C4'-C3'-C2'	-5.19	97.41	102.60
57	BB	2702	G	N9-C4-C5	5.19	107.48	105.40
5	AN	60	ARG	NE-CZ-NH2	-5.19	117.71	120.30
21	AA	412	A	OP1-P-OP2	-5.19	111.82	119.60
21	AA	777	A	N3-C4-C5	-5.19	123.17	126.80
21	AA	799	G	N3-C2-N2	5.19	123.53	119.90
21	AA	1423	G	N1-C2-N2	5.19	120.87	116.20
21	AA	1454	G	N9-C1'-C2'	-5.19	106.29	112.00
26	AV	60	U	P-O5'-C5'	-5.19	112.60	120.90
26	AV	69	C	N3-C4-C5	-5.19	119.83	121.90
36	BQ	101	ASP	CB-CG-OD2	-5.19	113.63	118.30
38	BS	60	HIS	N-CA-C	-5.19	97.00	111.00
57	BB	1048	A	C4-C5-C6	5.19	119.59	117.00
57	BB	1182	G	N3-C4-N9	5.19	129.11	126.00
57	BB	2148	G	P-O3'-C3'	5.19	125.92	119.70
57	BB	2730	C	C2-N3-C4	-5.19	117.31	119.90
57	BB	2764	A	N3-C4-C5	-5.19	123.17	126.80
57	BB	2876	G	C5-C6-N1	-5.19	108.91	111.50
5	AN	100	TRP	CE3-CZ3-CH2	-5.19	115.50	121.20
21	AA	666	G	N3-C2-N2	5.19	123.53	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1072	G	C6-N1-C2	5.19	128.21	125.10
21	AA	1251	A	C3'-C2'-C1'	-5.19	97.35	101.50
21	AA	1357	A	P-O3'-C3'	5.19	125.92	119.70
57	BB	568	U	N1-C2-O2	5.19	126.43	122.80
57	BB	597	G	C4-C5-C6	5.19	121.91	118.80
57	BB	1033	U	O3'-P-O5'	-5.19	94.15	104.00
57	BB	1035	U	C2-N3-C4	5.19	130.11	127.00
57	BB	1118	C	O4'-C1'-N1	5.19	112.35	108.20
57	BB	1232	G	C5-C6-N1	-5.19	108.91	111.50
57	BB	1441	G	C5-N7-C8	5.19	106.89	104.30
57	BB	1822	C	N1-C1'-C2'	-5.19	106.30	112.00
57	BB	2525	G	N3-C2-N2	5.19	123.53	119.90
58	BA	27	C	C5'-C4'-C3'	-5.19	107.70	116.00
21	AA	1143	G	C2-N3-C4	-5.18	109.31	111.90
23	AW	68	C	C3'-C2'-C1'	-5.18	97.35	101.50
32	BM	103	TYR	CB-CG-CD1	5.18	124.11	121.00
33	BN	75	ILE	CG1-CB-CG2	5.18	122.81	111.40
40	BU	8	ASP	CB-CG-OD1	-5.18	113.63	118.30
57	BB	549	G	C4'-C3'-C2'	-5.18	97.42	102.60
57	BB	835	C	OP2-P-O3'	5.18	116.61	105.20
57	BB	915	C	C5-C4-N4	-5.18	116.57	120.20
57	BB	1238	G	C1'-O4'-C4'	5.18	114.05	109.90
57	BB	1394	U	O4'-C4'-C3'	-5.18	98.81	104.00
57	BB	1507	C	O4'-C1'-N1	5.18	112.35	108.20
57	BB	2233	U	C6-N1-C2	-5.18	117.89	121.00
57	BB	2269	G	C4'-C3'-C2'	-5.18	97.42	102.60
57	BB	2419	U	C2-N1-C1'	-5.18	111.48	117.70
57	BB	2451	A	N7-C8-N9	-5.18	111.21	113.80
57	BB	2648	G	C4-C5-C6	5.18	121.91	118.80
58	BA	40	U	N3-C4-C5	-5.18	111.49	114.60
21	AA	472	U	O5'-P-OP2	-5.18	101.03	105.70
21	AA	900	A	C2-N3-C4	-5.18	108.01	110.60
21	AA	909	A	N3-C4-C5	-5.18	123.17	126.80
21	AA	943	U	N1-C2-O2	5.18	126.43	122.80
21	AA	1145	A	C8-N9-C4	-5.18	103.73	105.80
21	AA	1461	G	N1-C6-O6	5.18	123.01	119.90
21	AA	1474	U	C6-N1-C2	5.18	124.11	121.00
23	AW	30	G	C3'-C2'-C1'	-5.18	97.35	101.50
26	AV	3	C	C3'-C2'-C1'	5.18	105.65	101.50
30	BK	78	PHE	N-CA-CB	5.18	119.93	110.60
57	BB	165	A	C5-C6-N1	-5.18	115.11	117.70
57	BB	269	C	C6-N1-C2	5.18	122.37	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	328	U	C4'-C3'-C2'	-5.18	97.42	102.60
57	BB	688	U	N3-C4-O4	5.18	123.03	119.40
57	BB	757	G	N3-C4-C5	-5.18	126.01	128.60
57	BB	932	U	OP1-P-OP2	-5.18	111.83	119.60
57	BB	1454	C	C5'-C4'-C3'	5.18	124.29	116.00
57	BB	1499	C	N1-C2-O2	-5.18	115.79	118.90
57	BB	1698	A	C4-C5-N7	-5.18	108.11	110.70
57	BB	1722	A	C8-N9-C4	-5.18	103.73	105.80
57	BB	2061	G	C5-C6-N1	-5.18	108.91	111.50
57	BB	2385	C	C4-C5-C6	5.18	119.99	117.40
57	BB	2444	G	C5-C6-N1	-5.18	108.91	111.50
21	AA	514	C	C4-C5-C6	5.18	119.99	117.40
21	AA	886	G	N9-C1'-C2'	-5.18	106.30	112.00
21	AA	1490	U	N1-C2-O2	-5.18	119.17	122.80
22	AY	15	G	C6-N1-C2	5.18	128.21	125.10
22	AY	42	G	N3-C4-N9	-5.18	122.89	126.00
57	BB	974	G	N1-C6-O6	5.18	123.01	119.90
57	BB	1113	U	C3'-C2'-C1'	-5.18	97.36	101.50
57	BB	1575	C	O4'-C1'-N1	5.18	112.34	108.20
14	AC	28	PHE	CB-CG-CD1	5.18	124.42	120.80
21	AA	281	G	N7-C8-N9	-5.18	110.51	113.10
21	AA	364	A	P-O3'-C3'	5.18	125.92	119.70
21	AA	633	G	C5-C6-N1	-5.18	108.91	111.50
21	AA	956	U	P-O3'-C3'	-5.18	113.48	119.70
21	AA	1061	G	C5-N7-C8	-5.18	101.71	104.30
21	AA	1374	A	C6-N1-C2	-5.18	115.49	118.60
23	AW	27	G	C5-C6-N1	-5.18	108.91	111.50
39	BT	51	PHE	CB-CG-CD2	-5.18	117.17	120.80
57	BB	301	G	C6-N1-C2	5.18	128.21	125.10
57	BB	543	G	N1-C2-N3	-5.18	120.79	123.90
57	BB	622	G	C4-C5-C6	5.18	121.91	118.80
57	BB	808	G	C2-N3-C4	-5.18	109.31	111.90
57	BB	1143	A	C3'-C2'-C1'	-5.18	97.36	101.50
57	BB	1333	G	N9-C4-C5	-5.18	103.33	105.40
57	BB	1826	G	N1-C6-O6	5.18	123.01	119.90
57	BB	1860	G	C8-N9-C1'	5.18	133.73	127.00
57	BB	2537	U	C5-C6-N1	5.18	125.29	122.70
57	BB	2648	G	N3-C4-C5	-5.18	126.01	128.60
21	AA	376	G	O4'-C4'-C3'	-5.18	98.82	104.00
21	AA	682	G	C5-C6-O6	-5.18	125.49	128.60
21	AA	696	A	C6-N1-C2	5.18	121.71	118.60
21	AA	1103	C	O4'-C1'-N1	5.18	112.34	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1182	G	C5-C6-N1	-5.18	108.91	111.50
21	AA	1280	A	C6-N1-C2	-5.18	115.49	118.60
21	AA	1481	U	C5-C4-O4	-5.18	122.79	125.90
26	AV	22	G	N7-C8-N9	5.18	115.69	113.10
57	BB	304	U	C1'-O4'-C4'	-5.18	105.76	109.90
57	BB	696	G	N1-C2-N2	-5.18	111.54	116.20
57	BB	1356	G	N3-C2-N2	5.18	123.53	119.90
16	AE	92	ARG	NE-CZ-NH1	5.18	122.89	120.30
21	AA	104	G	C8-N9-C4	-5.18	104.33	106.40
21	AA	497	G	N9-C4-C5	5.18	107.47	105.40
21	AA	1277	C	P-O3'-C3'	-5.18	113.49	119.70
22	AY	49	C	O4'-C1'-C2'	-5.18	100.62	105.80
26	AV	29	G	O4'-C1'-N9	5.18	112.34	108.20
39	BT	4	GLU	CA-C-O	5.18	130.97	120.10
57	BB	69	C	O5'-P-OP1	-5.18	101.04	105.70
57	BB	164	C	C3'-C2'-C1'	-5.18	97.36	101.50
57	BB	174	U	N1-C2-N3	5.18	118.01	114.90
57	BB	513	A	C4-C5-N7	5.18	113.29	110.70
57	BB	941	A	N1-C2-N3	-5.18	126.71	129.30
57	BB	951	C	N1-C2-N3	-5.18	115.58	119.20
57	BB	1654	A	C5-N7-C8	5.18	106.49	103.90
57	BB	2533	U	P-O3'-C3'	5.18	125.91	119.70
57	BB	2631	G	O4'-C1'-N9	5.18	112.34	108.20
58	BA	9	G	C8-N9-C4	5.18	108.47	106.40
3	AL	73	LEU	CB-CG-CD2	5.17	119.80	111.00
21	AA	78	A	C8-N9-C4	-5.17	103.73	105.80
21	AA	111	G	N3-C2-N2	5.17	123.52	119.90
21	AA	764	C	C6-N1-C2	-5.17	118.23	120.30
21	AA	1004	A	N9-C1'-C2'	5.17	120.73	114.00
21	AA	1085	U	C4-C5-C6	-5.17	116.60	119.70
57	BB	700	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	1034	G	N3-C2-N2	5.17	123.52	119.90
57	BB	1072	C	C4'-C3'-C2'	-5.17	97.43	102.60
57	BB	1320	C	C2-N3-C4	5.17	122.49	119.90
57	BB	1368	G	C8-N9-C1'	5.17	133.73	127.00
57	BB	2770	G	C5-N7-C8	5.17	106.89	104.30
21	AA	130	A	C6-N1-C2	-5.17	115.50	118.60
21	AA	502	A	C8-N9-C4	-5.17	103.73	105.80
21	AA	958	A	C5-C6-N1	-5.17	115.11	117.70
23	AW	58	A	C4-C5-C6	5.17	119.59	117.00
57	BB	695	G	C5-N7-C8	-5.17	101.71	104.30
57	BB	1667	G	N9-C4-C5	5.17	107.47	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1906	G	C6-N1-C2	5.17	128.20	125.10
58	BA	88	C	C2-N1-C1'	5.17	124.49	118.80
3	AL	28	GLN	CG-CD-OE1	-5.17	111.25	121.60
21	AA	211	G	C4-N9-C1'	5.17	133.22	126.50
21	AA	562	U	C5-C6-N1	-5.17	120.11	122.70
21	AA	782	A	N7-C8-N9	-5.17	111.21	113.80
21	AA	1226	C	O4'-C1'-N1	5.17	112.34	108.20
21	AA	1463	U	C6-N1-C2	-5.17	117.90	121.00
21	AA	1490	U	C5'-C4'-C3'	-5.17	107.73	116.00
22	AY	23	A	C2-N3-C4	5.17	113.19	110.60
26	AV	37	A	N3-C4-C5	-5.17	123.18	126.80
32	BM	88	ASN	O-C-N	5.17	130.97	122.70
33	BN	94	TYR	CB-CG-CD1	5.17	124.10	121.00
50	B3	45	PRO	N-CA-CB	5.17	109.51	103.30
57	BB	423	A	C4'-C3'-C2'	-5.17	97.43	102.60
57	BB	776	G	N3-C2-N2	5.17	123.52	119.90
57	BB	876	C	C2-N3-C4	5.17	122.48	119.90
57	BB	1421	G	C5-C6-O6	-5.17	125.50	128.60
57	BB	1623	G	C5-C6-N1	-5.17	108.92	111.50
57	BB	1898	U	N3-C4-C5	-5.17	111.50	114.60
57	BB	2125	G	O4'-C1'-N9	5.17	112.34	108.20
57	BB	2222	C	C6-N1-C2	5.17	122.37	120.30
57	BB	2360	G	O4'-C1'-N9	5.17	112.34	108.20
57	BB	2598	A	C6-N1-C2	5.17	121.70	118.60
57	BB	2659	G	N1-C6-O6	5.17	123.00	119.90
57	BB	2880	C	C6-N1-C2	5.17	122.37	120.30
58	BA	75	G	O4'-C1'-N9	5.17	112.34	108.20
21	AA	661	G	C5-C6-N1	-5.17	108.92	111.50
21	AA	764	C	N1-C2-N3	-5.17	115.58	119.20
21	AA	1398	A	P-O3'-C3'	-5.17	113.50	119.70
21	AA	1470	U	C4'-C3'-C2'	5.17	107.77	102.60
22	AY	9	A	C5'-C4'-C3'	-5.17	107.73	116.00
26	AV	64	G	O4'-C1'-N9	5.17	112.34	108.20
38	BS	99	ARG	NH1-CZ-NH2	-5.17	113.71	119.40
57	BB	373	U	O4'-C4'-C3'	-5.17	98.83	104.00
57	BB	495	G	N7-C8-N9	5.17	115.69	113.10
57	BB	724	U	N1-C2-N3	-5.17	111.80	114.90
57	BB	1047	G	C4-C5-C6	5.17	121.90	118.80
57	BB	1262	A	C6-C5-N7	-5.17	128.68	132.30
57	BB	1687	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	2005	A	C2-N3-C4	-5.17	108.02	110.60
57	BB	2302	U	C3'-C2'-C1'	-5.17	97.36	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2815	C	C4'-C3'-C2'	-5.17	97.43	102.60
21	AA	48	C	O5'-C5'-C4'	-5.17	101.88	111.70
21	AA	116	A	C5-C6-N1	-5.17	115.12	117.70
21	AA	167	A	OP1-P-OP2	-5.17	111.85	119.60
21	AA	649	A	O4'-C4'-C3'	-5.17	98.83	104.00
21	AA	658	C	N3-C2-O2	5.17	125.52	121.90
21	AA	741	G	O4'-C4'-C3'	-5.17	98.83	104.00
21	AA	765	G	C2-N3-C4	5.17	114.48	111.90
21	AA	1446	A	N3-C4-N9	5.17	131.53	127.40
57	BB	17	G	N1-C2-N3	-5.17	120.80	123.90
57	BB	60	G	C2-N3-C4	5.17	114.48	111.90
57	BB	89	A	C4-C5-C6	5.17	119.58	117.00
57	BB	130	C	O5'-C5'-C4'	-5.17	101.88	111.70
57	BB	141	G	C1'-O4'-C4'	5.17	114.03	109.90
57	BB	1759	A	O4'-C1'-N9	5.17	112.33	108.20
57	BB	1761	C	P-O3'-C3'	5.17	125.90	119.70
57	BB	2858	C	O4'-C1'-N1	5.17	112.33	108.20
58	BA	33	G	P-O5'-C5'	-5.17	112.63	120.90
58	BA	41	G	P-O3'-C3'	-5.17	113.50	119.70
58	BA	80	U	C1'-O4'-C4'	5.17	114.03	109.90
21	AA	607	A	C2-N3-C4	5.17	113.18	110.60
21	AA	1070	U	C6-N1-C2	-5.17	117.90	121.00
21	AA	1166	G	C6-N1-C2	5.17	128.20	125.10
21	AA	1519	A	OP1-P-OP2	-5.17	111.85	119.60
22	AY	22	G	C5'-C4'-O4'	5.17	115.30	109.10
24	AX	13	A	C8-N9-C4	-5.17	103.73	105.80
26	AV	64	G	C6-N1-C2	5.17	128.20	125.10
27	B5	7	ARG	NE-CZ-NH1	5.17	122.88	120.30
36	BQ	30	VAL	CG1-CB-CG2	5.17	119.17	110.90
57	BB	23	G	C2-N3-C4	5.17	114.48	111.90
57	BB	135	U	C5-C4-O4	-5.17	122.80	125.90
57	BB	151	C	P-O5'-C5'	5.17	129.17	120.90
57	BB	268	C	C5'-C4'-O4'	5.17	115.30	109.10
57	BB	340	A	N7-C8-N9	-5.17	111.22	113.80
57	BB	466	A	P-O5'-C5'	-5.17	112.63	120.90
57	BB	1061	U	C3'-C2'-C1'	-5.17	97.37	101.50
57	BB	1063	G	N1-C2-N2	5.17	120.85	116.20
57	BB	1195	G	C5-N7-C8	5.17	106.88	104.30
57	BB	1358	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	1809	A	C4-C5-C6	5.17	119.58	117.00
57	BB	1889	A	N7-C8-N9	-5.17	111.22	113.80
57	BB	2040	G	O4'-C4'-C3'	-5.17	98.83	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2152	G	C5-C6-N1	-5.17	108.92	111.50
57	BB	2225	A	C5-N7-C8	5.17	106.48	103.90
57	BB	2323	G	P-O5'-C5'	-5.17	112.63	120.90
57	BB	2581	G	C4-C5-C6	5.17	121.90	118.80
57	BB	2753	A	N7-C8-N9	5.17	116.38	113.80
57	BB	2846	G	C5-N7-C8	5.17	106.88	104.30
21	AA	365	U	C4-C5-C6	5.17	122.80	119.70
21	AA	933	G	C6-C5-N7	-5.17	127.30	130.40
57	BB	56	A	C6-N1-C2	-5.17	115.50	118.60
57	BB	268	C	C6-N1-C2	-5.17	118.23	120.30
57	BB	476	G	N3-C4-N9	-5.17	122.90	126.00
57	BB	529	A	N1-C6-N6	5.17	121.70	118.60
57	BB	2220	U	N1-C2-O2	-5.17	119.18	122.80
57	BB	2398	U	OP1-P-OP2	-5.17	111.85	119.60
13	AB	203	ASP	CB-CG-OD1	-5.16	113.65	118.30
21	AA	317	U	O3'-P-O5'	-5.16	94.19	104.00
21	AA	1172	C	OP1-P-OP2	-5.16	111.86	119.60
21	AA	1235	U	C5-C6-N1	-5.16	120.12	122.70
21	AA	1263	C	C2-N3-C4	-5.16	117.32	119.90
25	AZ	369	ASP	CB-CG-OD1	-5.16	113.65	118.30
57	BB	1035	U	P-O3'-C3'	-5.16	113.50	119.70
57	BB	1346	G	C4-C5-C6	-5.16	115.70	118.80
57	BB	1405	U	C5-C4-O4	5.16	129.00	125.90
57	BB	1854	A	C1'-O4'-C4'	5.16	114.03	109.90
57	BB	2014	A	C6-C5-N7	-5.16	128.69	132.30
57	BB	2104	C	O5'-P-OP1	5.16	116.90	110.70
57	BB	2396	G	C4-C5-C6	5.16	121.90	118.80
57	BB	2463	C	C4-C5-C6	-5.16	114.82	117.40
57	BB	2615	U	N1-C2-N3	-5.16	111.80	114.90
13	AB	125	PHE	CB-CG-CD1	5.16	124.41	120.80
21	AA	360	G	N3-C4-C5	-5.16	126.02	128.60
21	AA	702	A	N1-C2-N3	5.16	131.88	129.30
21	AA	746	A	N7-C8-N9	-5.16	111.22	113.80
21	AA	1180	A	C5-N7-C8	5.16	106.48	103.90
33	BN	34	ILE	O-C-N	5.16	130.96	122.70
36	BQ	19	GLN	CB-CA-C	-5.16	100.08	110.40
57	BB	424	G	P-O3'-C3'	-5.16	113.50	119.70
57	BB	893	C	C5-C4-N4	-5.16	116.59	120.20
57	BB	1004	U	C6-N1-C2	-5.16	117.90	121.00
57	BB	1163	G	C4-N9-C1'	-5.16	119.79	126.50
57	BB	2383	G	P-O3'-C3'	-5.16	113.50	119.70
21	AA	141	G	N9-C1'-C2'	-5.16	106.32	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	426	U	N3-C4-C5	-5.16	111.50	114.60
21	AA	776	G	OP2-P-O3'	5.16	116.55	105.20
21	AA	817	C	P-O3'-C3'	-5.16	113.51	119.70
21	AA	994	A	C8-N9-C4	-5.16	103.74	105.80
21	AA	1203	C	OP1-P-OP2	-5.16	111.86	119.60
53	BE	6	LYS	N-CA-CB	5.16	119.89	110.60
57	BB	409	G	C5-C6-N1	5.16	114.08	111.50
57	BB	610	C	C5-C4-N4	-5.16	116.59	120.20
57	BB	645	C	O5'-P-OP1	-5.16	101.06	105.70
57	BB	1176	U	C4'-C3'-C2'	-5.16	97.44	102.60
57	BB	1377	G	N1-C6-O6	5.16	123.00	119.90
57	BB	1420	A	C4-C5-C6	5.16	119.58	117.00
57	BB	1437	C	N1-C2-O2	5.16	122.00	118.90
57	BB	2071	A	C5-C6-N1	-5.16	115.12	117.70
57	BB	2108	A	N7-C8-N9	-5.16	111.22	113.80
57	BB	2284	A	C4'-C3'-C2'	-5.16	97.44	102.60
57	BB	2773	C	N3-C2-O2	-5.16	118.29	121.90
58	BA	6	G	C8-N9-C4	-5.16	104.34	106.40
13	AB	191	ASP	N-CA-C	-5.16	97.07	111.00
16	AE	84	VAL	O-C-N	5.16	130.96	122.70
21	AA	24	U	C5-C4-O4	5.16	129.00	125.90
21	AA	41	G	C6-C5-N7	-5.16	127.31	130.40
21	AA	1010	U	OP1-P-OP2	-5.16	111.86	119.60
21	AA	1190	G	N9-C1'-C2'	-5.16	106.33	112.00
21	AA	1224	U	C5-C6-N1	5.16	125.28	122.70
21	AA	1231	G	N3-C4-N9	-5.16	122.91	126.00
25	AZ	68	GLU	N-CA-C	-5.16	97.07	111.00
57	BB	507	A	N3-C4-N9	5.16	131.53	127.40
57	BB	512	G	C5-C6-O6	5.16	131.69	128.60
57	BB	723	C	N3-C4-N4	5.16	121.61	118.00
57	BB	757	G	C4-C5-N7	-5.16	108.74	110.80
57	BB	957	C	N1-C2-N3	-5.16	115.59	119.20
57	BB	2654	A	C6-C5-N7	-5.16	128.69	132.30
57	BB	2719	G	O4'-C1'-N9	5.16	112.33	108.20
58	BA	32	U	N3-C4-C5	-5.16	111.50	114.60
58	BA	87	U	P-O3'-C3'	5.16	125.89	119.70
19	AH	9	MET	C-N-CA	5.16	134.59	121.70
32	BM	136	MET	CG-SD-CE	-5.16	91.95	100.20
53	BE	161	ALA	CB-CA-C	5.16	117.84	110.10
57	BB	740	C	N3-C4-C5	-5.16	119.84	121.90
21	AA	555	U	N3-C2-O2	5.16	125.81	122.20
21	AA	606	G	C4-C5-C6	5.16	121.89	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	712	A	P-O5'-C5'	5.16	129.15	120.90
21	AA	774	G	C4-C5-N7	5.16	112.86	110.80
21	AA	1105	A	N3-C4-N9	5.16	131.52	127.40
21	AA	1310	G	C5-C6-N1	-5.16	108.92	111.50
21	AA	1420	U	C5'-C4'-O4'	5.16	115.29	109.10
22	AY	29	A	P-O5'-C5'	-5.16	112.65	120.90
34	BO	65	THR	CA-CB-CG2	-5.16	105.18	112.40
39	BT	86	THR	CA-C-O	5.16	130.93	120.10
43	BX	28	PHE	CB-CG-CD2	-5.16	117.19	120.80
46	BZ	47	ILE	CB-CA-C	-5.16	101.29	111.60
57	BB	64	A	C2-N3-C4	5.16	113.18	110.60
57	BB	191	A	N3-C4-C5	-5.16	123.19	126.80
57	BB	659	G	C4-C5-N7	-5.16	108.74	110.80
57	BB	1158	C	C5-C6-N1	-5.16	118.42	121.00
57	BB	1526	C	N3-C4-N4	5.16	121.61	118.00
57	BB	1565	C	N1-C2-N3	-5.16	115.59	119.20
57	BB	1596	A	C2-N3-C4	5.16	113.18	110.60
57	BB	2036	C	C2-N3-C4	5.16	122.48	119.90
57	BB	2657	A	C6-C5-N7	-5.16	128.69	132.30
20	AI	10	ARG	N-CA-CB	5.15	119.88	110.60
21	AA	166	U	P-O3'-C3'	-5.15	113.52	119.70
22	AY	24	G	N3-C4-N9	-5.15	122.91	126.00
57	BB	1475	G	C6-C5-N7	-5.15	127.31	130.40
57	BB	1860	G	C3'-C2'-C1'	-5.15	97.38	101.50
57	BB	1895	C	N3-C4-N4	5.15	121.61	118.00
57	BB	1927	A	C5-C6-N6	-5.15	119.58	123.70
57	BB	2317	A	N1-C6-N6	5.15	121.69	118.60
21	AA	778	G	C5-C6-N1	-5.15	108.92	111.50
21	AA	1145	A	O3'-P-O5'	-5.15	94.21	104.00
21	AA	1270	G	P-O5'-C5'	5.15	129.14	120.90
21	AA	1393	U	O3'-P-O5'	-5.15	94.21	104.00
21	AA	1443	C	C5-C4-N4	-5.15	116.59	120.20
57	BB	71	A	OP1-P-O3'	5.15	116.53	105.20
57	BB	186	G	C6-N1-C2	5.15	128.19	125.10
57	BB	498	G	P-O3'-C3'	-5.15	113.52	119.70
57	BB	701	G	N7-C8-N9	-5.15	110.52	113.10
57	BB	865	C	O3'-P-O5'	-5.15	94.21	104.00
57	BB	1030	C	N3-C2-O2	5.15	125.51	121.90
57	BB	1169	A	C3'-C2'-C1'	-5.15	97.38	101.50
57	BB	1380	G	C6-C5-N7	-5.15	127.31	130.40
57	BB	1890	A	C6-N1-C2	5.15	121.69	118.60
57	BB	2078	C	C5-C6-N1	-5.15	118.42	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2547	A	C6-N1-C2	5.15	121.69	118.60
57	BB	2707	U	C4'-C3'-C2'	5.15	107.75	102.60
57	BB	2770	G	C5-C6-N1	-5.15	108.92	111.50
21	AA	9	G	P-O5'-C5'	5.15	129.14	120.90
21	AA	69	G	N3-C2-N2	-5.15	116.29	119.90
21	AA	169	C	P-O5'-C5'	-5.15	112.66	120.90
21	AA	430	A	O5'-P-OP2	5.15	116.88	110.70
21	AA	1255	G	N3-C2-N2	5.15	123.51	119.90
21	AA	1393	U	N1-C1'-C2'	-5.15	106.33	112.00
23	AW	59	U	N3-C4-C5	-5.15	111.51	114.60
57	BB	32	C	C4'-C3'-C2'	5.15	107.75	102.60
57	BB	214	G	C2-N3-C4	-5.15	109.33	111.90
57	BB	435	C	P-O3'-C3'	-5.15	113.52	119.70
57	BB	454	A	O4'-C1'-N9	5.15	112.32	108.20
57	BB	587	C	C5-C4-N4	5.15	123.81	120.20
57	BB	931	U	C6-N1-C2	5.15	124.09	121.00
57	BB	1148	U	N3-C4-O4	5.15	123.01	119.40
57	BB	1734	G	C4'-C3'-C2'	-5.15	97.45	102.60
57	BB	1735	A	C5-N7-C8	-5.15	101.33	103.90
57	BB	1763	G	O4'-C4'-C3'	-5.15	98.85	104.00
57	BB	2324	U	C5'-C4'-C3'	-5.15	107.76	116.00
21	AA	89	U	C5-C4-O4	5.15	128.99	125.90
21	AA	181	A	C4-C5-N7	-5.15	108.12	110.70
21	AA	214	C	C2-N3-C4	5.15	122.47	119.90
21	AA	223	A	C4-C5-N7	-5.15	108.13	110.70
21	AA	976	G	N3-C4-C5	-5.15	126.03	128.60
21	AA	1470	U	P-O3'-C3'	-5.15	113.52	119.70
23	AW	7	A	C4-C5-C6	5.15	119.58	117.00
30	BK	111	PHE	CB-CG-CD2	5.15	124.40	120.80
57	BB	977	G	C5-C6-O6	-5.15	125.51	128.60
57	BB	1024	G	O4'-C1'-C2'	5.15	112.23	107.60
57	BB	1085	A	N3-C4-C5	-5.15	123.20	126.80
57	BB	1391	U	N3-C4-O4	5.15	123.00	119.40
57	BB	1892	C	N3-C4-C5	-5.15	119.84	121.90
57	BB	2418	A	P-O3'-C3'	-5.15	113.52	119.70
57	BB	2523	G	C4'-C3'-C2'	-5.15	97.45	102.60
21	AA	105	G	N1-C6-O6	5.15	122.99	119.90
21	AA	310	G	C6-C5-N7	-5.15	127.31	130.40
21	AA	434	U	C5-C4-O4	-5.15	122.81	125.90
21	AA	953	G	N1-C2-N2	-5.15	111.57	116.20
21	AA	1481	U	N3-C2-O2	5.15	125.80	122.20
22	AY	54	U	C4-C5-C6	-5.15	116.61	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
22	AY	64	A	C8-N9-C4	-5.15	103.74	105.80
53	BE	158	PHE	CB-CG-CD2	-5.15	117.20	120.80
54	BF	70	ARG	NE-CZ-NH2	5.15	122.87	120.30
55	BG	121	THR	N-CA-CB	5.15	120.08	110.30
57	BB	117	G	C5-C6-O6	-5.15	125.51	128.60
57	BB	151	C	C5-C6-N1	5.15	123.57	121.00
57	BB	171	U	C4'-C3'-C2'	-5.15	97.45	102.60
57	BB	250	G	O5'-C5'-C4'	-5.15	101.92	111.70
57	BB	277	G	N1-C2-N3	-5.15	120.81	123.90
57	BB	1278	C	O4'-C4'-C3'	5.15	110.22	106.10
57	BB	1284	A	C6-C5-N7	-5.15	128.70	132.30
57	BB	1334	G	N7-C8-N9	-5.15	110.53	113.10
57	BB	1445	G	C8-N9-C4	5.15	108.46	106.40
57	BB	1674	G	C6-C5-N7	-5.15	127.31	130.40
57	BB	2251	G	N3-C4-N9	5.15	129.09	126.00
57	BB	2505	G	N3-C2-N2	5.15	123.50	119.90
57	BB	2557	G	P-O3'-C3'	-5.15	113.52	119.70
7	AP	16	PHE	CB-CG-CD2	5.15	124.40	120.80
21	AA	768	A	C5-C6-N1	-5.15	115.13	117.70
21	AA	851	G	C5-C6-O6	-5.15	125.51	128.60
21	AA	1079	G	P-O3'-C3'	5.15	125.88	119.70
21	AA	1260	G	C8-N9-C4	5.15	108.46	106.40
23	AW	2	C	C2-N1-C1'	5.15	124.46	118.80
34	BO	31	THR	CA-CB-OG1	5.15	119.81	109.00
50	B3	57	VAL	CG1-CB-CG2	-5.15	102.67	110.90
57	BB	1009	A	C6-N1-C2	-5.15	115.51	118.60
57	BB	1120	G	C2-N3-C4	-5.15	109.33	111.90
57	BB	1342	A	OP2-P-O3'	5.15	116.52	105.20
57	BB	2535	G	C2-N3-C4	-5.15	109.33	111.90
57	BB	2748	A	C6-C5-N7	-5.15	128.70	132.30
21	AA	43	C	N1-C2-O2	-5.14	115.81	118.90
21	AA	236	A	O4'-C1'-N9	5.14	112.32	108.20
21	AA	261	U	C4-C5-C6	-5.14	116.61	119.70
21	AA	495	A	N1-C6-N6	5.14	121.69	118.60
21	AA	534	U	N3-C2-O2	5.14	125.80	122.20
21	AA	771	G	C4-C5-N7	5.14	112.86	110.80
21	AA	831	A	C6-C5-N7	-5.14	128.70	132.30
21	AA	970	C	C4-C5-C6	5.14	119.97	117.40
25	AZ	210	PHE	CZ-CE2-CD2	-5.14	113.93	120.10
26	AV	9	G	C1'-O4'-C4'	-5.14	105.78	109.90
33	BN	15	SER	N-CA-CB	5.14	118.22	110.50
49	B2	12	ARG	NE-CZ-NH1	5.14	122.87	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
55	BG	167	VAL	N-CA-CB	5.14	122.82	111.50
57	BB	245	G	C5-C6-O6	-5.14	125.51	128.60
57	BB	460	A	O5'-C5'-C4'	-5.14	101.93	111.70
57	BB	560	C	C5'-C4'-O4'	5.14	115.27	109.10
57	BB	1152	C	N3-C4-N4	5.14	121.60	118.00
57	BB	1656	C	C5-C4-N4	-5.14	116.60	120.20
57	BB	2250	G	N3-C4-N9	5.14	129.09	126.00
57	BB	2407	A	P-O5'-C5'	5.14	129.13	120.90
57	BB	2573	C	C6-N1-C2	-5.14	118.24	120.30
57	BB	2648	G	C5-C6-N1	-5.14	108.93	111.50
57	BB	2743	U	C2-N3-C4	5.14	130.09	127.00
57	BB	2825	G	C5-C6-N1	-5.14	108.93	111.50
57	BB	2890	G	N1-C2-N3	-5.14	120.81	123.90
57	BB	2892	G	C6-C5-N7	-5.14	127.31	130.40
16	AE	144	GLU	O-C-N	-5.14	114.47	122.70
21	AA	235	C	N3-C4-C5	-5.14	119.84	121.90
21	AA	392	C	C5'-C4'-C3'	-5.14	107.77	116.00
21	AA	693	G	C4'-C3'-C2'	5.14	107.74	102.60
21	AA	829	G	N3-C2-N2	5.14	123.50	119.90
21	AA	1181	G	N9-C4-C5	-5.14	103.34	105.40
21	AA	1375	A	C6-N1-C2	5.14	121.69	118.60
21	AA	1406	U	P-O5'-C5'	-5.14	112.67	120.90
21	AA	1442	G	C1'-O4'-C4'	5.14	114.02	109.90
23	AW	30	G	O4'-C1'-N9	5.14	112.31	108.20
31	BL	91	ASP	CB-CG-OD2	-5.14	113.67	118.30
42	BW	46	ALA	N-CA-CB	5.14	117.30	110.10
57	BB	417	C	C3'-C2'-C1'	5.14	105.61	101.50
57	BB	895	U	N3-C4-C5	5.14	117.69	114.60
57	BB	1175	A	P-O3'-C3'	5.14	125.87	119.70
57	BB	1377	G	C4-C5-N7	5.14	112.86	110.80
57	BB	2138	G	C5-C6-N1	-5.14	108.93	111.50
57	BB	2323	G	O4'-C1'-N9	5.14	112.31	108.20
21	AA	676	A	C6-C5-N7	-5.14	128.70	132.30
21	AA	965	U	N1-C2-N3	-5.14	111.82	114.90
21	AA	1489	G	C2-N3-C4	-5.14	109.33	111.90
22	AY	45	G	O4'-C1'-C2'	5.14	112.23	107.60
57	BB	188	G	N3-C4-C5	-5.14	126.03	128.60
57	BB	815	C	N3-C4-C5	-5.14	119.84	121.90
57	BB	1051	G	N3-C4-N9	-5.14	122.92	126.00
57	BB	1710	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	1980	G	N1-C2-N3	-5.14	120.81	123.90
16	AE	145	ASN	CB-CG-OD1	-5.14	111.32	121.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	39	G	C4-C5-C6	5.14	121.88	118.80
21	AA	419	C	O4'-C1'-N1	5.14	112.31	108.20
21	AA	577	G	O4'-C1'-N9	5.14	112.31	108.20
21	AA	647	C	C6-N1-C2	-5.14	118.24	120.30
21	AA	815	A	O4'-C1'-N9	5.14	112.31	108.20
21	AA	858	G	C4-C5-C6	5.14	121.88	118.80
21	AA	1064	G	C2-N3-C4	5.14	114.47	111.90
21	AA	1319	A	C5-N7-C8	5.14	106.47	103.90
21	AA	1357	A	O4'-C1'-N9	5.14	112.31	108.20
22	AY	23	A	OP1-P-OP2	-5.14	111.89	119.60
23	AW	40	C	N1-C2-O2	-5.14	115.82	118.90
26	AV	35	A	C5'-C4'-C3'	-5.14	107.78	116.00
54	BF	169	LEU	CB-CG-CD1	5.14	119.74	111.00
57	BB	317	G	O4'-C1'-N9	5.14	112.31	108.20
57	BB	399	U	C4-C5-C6	-5.14	116.62	119.70
57	BB	927	A	C2-N3-C4	5.14	113.17	110.60
57	BB	1528	A	C4'-C3'-C2'	-5.14	97.46	102.60
57	BB	1542	U	N3-C2-O2	5.14	125.80	122.20
57	BB	2187	U	O5'-C5'-C4'	5.14	121.47	111.70
57	BB	2316	G	N3-C4-N9	5.14	129.08	126.00
57	BB	2432	A	N3-C4-C5	-5.14	123.20	126.80
15	AD	96	ARG	NE-CZ-NH2	-5.14	117.73	120.30
21	AA	248	C	N1-C2-O2	5.14	121.98	118.90
21	AA	300	A	C5-C6-N6	-5.14	119.59	123.70
21	AA	701	U	C1'-O4'-C4'	-5.14	105.79	109.90
21	AA	863	U	N3-C4-C5	-5.14	111.52	114.60
21	AA	1125	U	O5'-P-OP2	-5.14	101.08	105.70
25	AZ	344	PRO	C-N-CA	5.14	134.55	121.70
31	BL	121	THR	CA-CB-OG1	5.14	119.79	109.00
57	BB	1583	A	C4-C5-C6	5.14	119.57	117.00
57	BB	1652	A	N1-C2-N3	-5.14	126.73	129.30
57	BB	2783	U	N3-C4-C5	5.14	117.68	114.60
58	BA	112	G	N3-C2-N2	5.14	123.50	119.90
21	AA	372	C	C4'-C3'-C2'	5.14	107.74	102.60
21	AA	480	U	N3-C2-O2	5.14	125.80	122.20
21	AA	994	A	N9-C4-C5	5.14	107.86	105.80
21	AA	1043	G	C1'-O4'-C4'	5.14	114.01	109.90
21	AA	1451	U	P-O5'-C5'	-5.14	112.68	120.90
23	AW	69	G	C6-N1-C2	5.14	128.18	125.10
57	BB	220	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	294	A	C2-N3-C4	5.14	113.17	110.60
57	BB	481	G	N1-C6-O6	5.14	122.98	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	538	A	C8-N9-C4	5.14	107.86	105.80
57	BB	794	A	O4'-C4'-C3'	-5.14	98.86	104.00
57	BB	799	G	C3'-C2'-C1'	5.14	105.61	101.50
57	BB	1301	A	C6-C5-N7	-5.14	128.70	132.30
57	BB	1549	A	O4'-C4'-C3'	-5.14	98.86	104.00
57	BB	1556	C	O4'-C4'-C3'	-5.14	98.86	104.00
57	BB	1661	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	1749	A	C2-N3-C4	-5.14	108.03	110.60
57	BB	1849	G	O5'-P-OP2	-5.14	101.08	105.70
57	BB	2087	G	C4-C5-C6	5.14	121.88	118.80
57	BB	2115	G	N1-C2-N3	-5.14	120.82	123.90
57	BB	2431	U	C4-C5-C6	-5.14	116.62	119.70
57	BB	2838	G	N9-C1'-C2'	-5.14	106.35	112.00
58	BA	69	G	C8-N9-C4	-5.14	104.34	106.40
21	AA	1534	A	N3-C4-C5	-5.13	123.21	126.80
22	AY	5	A	P-O3'-C3'	-5.13	113.54	119.70
57	BB	295	G	C4-C5-N7	-5.13	108.75	110.80
57	BB	402	A	C5-C6-N6	-5.13	119.59	123.70
57	BB	414	C	N3-C4-N4	-5.13	114.41	118.00
57	BB	505	A	C5'-C4'-O4'	5.13	115.26	109.10
57	BB	785	G	C5-C6-N1	-5.13	108.93	111.50
57	BB	978	G	O4'-C1'-N9	5.13	112.31	108.20
57	BB	1208	C	N3-C4-N4	5.13	121.59	118.00
57	BB	1246	A	P-O3'-C3'	-5.13	113.54	119.70
57	BB	1412	U	C6-N1-C2	-5.13	117.92	121.00
57	BB	1508	A	C5-N7-C8	-5.13	101.33	103.90
57	BB	1609	A	C6-N1-C2	-5.13	115.52	118.60
57	BB	1654	A	N9-C4-C5	-5.13	103.75	105.80
57	BB	1851	U	C4'-C3'-C2'	-5.13	97.47	102.60
57	BB	2294	G	N9-C1'-C2'	-5.13	106.35	112.00
57	BB	2440	C	N1-C2-O2	5.13	121.98	118.90
13	AB	37	VAL	CA-CB-CG1	5.13	118.60	110.90
24	AX	15	A	N1-C2-N3	-5.13	126.73	129.30
26	AV	11	A	C5-C6-N6	-5.13	119.59	123.70
57	BB	487	C	N3-C4-N4	5.13	121.59	118.00
57	BB	1559	U	C6-N1-C2	5.13	124.08	121.00
57	BB	1890	A	C3'-C2'-C1'	-5.13	97.39	101.50
57	BB	2169	A	N1-C6-N6	5.13	121.68	118.60
21	AA	447	G	C6-N1-C2	-5.13	122.02	125.10
21	AA	705	G	C1'-O4'-C4'	5.13	114.00	109.90
21	AA	728	A	C8-N9-C4	5.13	107.85	105.80
21	AA	857	C	C2-N3-C4	5.13	122.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	906	A	N1-C2-N3	5.13	131.87	129.30
21	AA	1349	A	C8-N9-C4	-5.13	103.75	105.80
57	BB	78	U	O4'-C1'-N1	5.13	112.31	108.20
57	BB	272	A	C6-C5-N7	-5.13	128.71	132.30
57	BB	673	C	C2-N3-C4	5.13	122.47	119.90
57	BB	1309	G	C5-C6-N1	-5.13	108.93	111.50
57	BB	1384	A	O4'-C1'-N9	5.13	112.31	108.20
57	BB	1572	A	P-O5'-C5'	5.13	129.11	120.90
57	BB	2034	U	C5-C6-N1	5.13	125.27	122.70
57	BB	2047	C	P-O3'-C3'	-5.13	113.54	119.70
57	BB	2386	A	C5-N7-C8	5.13	106.47	103.90
57	BB	2524	G	N1-C2-N3	-5.13	120.82	123.90
57	BB	2702	G	C4-N9-C1'	5.13	133.17	126.50
57	BB	2887	A	C1'-O4'-C4'	5.13	114.01	109.90
58	BA	90	C	N1-C2-N3	5.13	122.79	119.20
4	AM	39	ALA	N-CA-CB	5.13	117.28	110.10
21	AA	1201	A	N7-C8-N9	5.13	116.36	113.80
22	AY	53	G	OP1-P-OP2	-5.13	111.91	119.60
26	AV	42	G	C5-C6-N1	5.13	114.06	111.50
57	BB	446	G	C5'-C4'-O4'	5.13	115.26	109.10
57	BB	492	A	C3'-C2'-C1'	-5.13	97.40	101.50
57	BB	1081	U	C2-N3-C4	-5.13	123.92	127.00
57	BB	2257	U	C6-N1-C2	-5.13	117.92	121.00
57	BB	2442	C	C2-N3-C4	5.13	122.47	119.90
21	AA	55	A	C2-N3-C4	-5.13	108.03	110.60
21	AA	293	G	C8-N9-C4	5.13	108.45	106.40
21	AA	641	U	N1-C2-N3	5.13	117.98	114.90
21	AA	978	A	OP2-P-O3'	5.13	116.48	105.20
21	AA	1069	C	O4'-C1'-C2'	5.13	112.22	107.60
21	AA	1239	A	OP1-P-OP2	-5.13	111.91	119.60
21	AA	1460	C	C4-C5-C6	-5.13	114.84	117.40
57	BB	709	U	OP1-P-OP2	-5.13	111.91	119.60
57	BB	828	U	N3-C4-C5	-5.13	111.52	114.60
57	BB	1130	U	N3-C4-C5	-5.13	111.52	114.60
57	BB	1319	C	C3'-C2'-C1'	-5.13	97.40	101.50
57	BB	1931	U	P-O5'-C5'	-5.13	112.69	120.90
57	BB	2101	A	N3-C4-C5	-5.13	123.21	126.80
57	BB	2620	C	C1'-O4'-C4'	5.13	114.00	109.90
57	BB	2629	U	C5-C4-O4	5.13	128.98	125.90
57	BB	2688	G	C6-C5-N7	-5.13	127.32	130.40
57	BB	2852	G	C4-C5-C6	5.13	121.88	118.80
58	BA	74	U	C5-C6-N1	5.13	125.26	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	187	G	N3-C4-C5	5.13	131.16	128.60
21	AA	324	G	N1-C2-N3	-5.13	120.83	123.90
21	AA	326	G	N7-C8-N9	-5.13	110.54	113.10
21	AA	514	C	OP1-P-OP2	-5.13	111.91	119.60
21	AA	915	A	O4'-C4'-C3'	-5.13	98.87	104.00
21	AA	936	C	C5-C6-N1	-5.13	118.44	121.00
21	AA	1164	G	C4-C5-N7	5.13	112.85	110.80
21	AA	1450	U	C3'-C2'-C1'	5.13	105.60	101.50
30	BK	30	ARG	NH1-CZ-NH2	5.13	125.04	119.40
37	BR	52	PRO	N-CA-C	5.13	125.43	112.10
39	BT	51	PHE	CB-CG-CD1	5.13	124.39	120.80
57	BB	153	U	N1-C2-O2	5.13	126.39	122.80
57	BB	248	G	C5'-C4'-C3'	5.13	124.20	116.00
57	BB	700	G	N9-C1'-C2'	-5.13	106.36	112.00
57	BB	802	A	C6-N1-C2	5.13	121.67	118.60
57	BB	1567	G	C2-N3-C4	-5.13	109.34	111.90
57	BB	1571	A	C5'-C4'-O4'	-5.13	102.95	109.10
57	BB	1611	C	N3-C2-O2	-5.13	118.31	121.90
57	BB	2649	C	N3-C4-N4	5.13	121.59	118.00
58	BA	20	G	N3-C4-N9	5.13	129.07	126.00
2	AK	51	PHE	CB-CG-CD1	5.12	124.39	120.80
21	AA	404	G	C6-N1-C2	-5.12	122.03	125.10
21	AA	521	G	C8-N9-C4	-5.12	104.35	106.40
22	AY	45	G	N3-C4-C5	-5.12	126.04	128.60
26	AV	64	G	C2-N3-C4	-5.12	109.34	111.90
57	BB	441	U	C5-C4-O4	-5.12	122.83	125.90
57	BB	1055	G	N3-C4-C5	-5.12	126.04	128.60
57	BB	1204	A	C5'-C4'-O4'	5.12	115.25	109.10
57	BB	1216	G	C5-N7-C8	5.12	106.86	104.30
57	BB	2364	C	N3-C4-C5	-5.12	119.85	121.90
21	AA	48	C	C6-N1-C2	5.12	122.35	120.30
21	AA	710	G	P-O3'-C3'	-5.12	113.55	119.70
21	AA	1049	U	C1'-O4'-C4'	-5.12	105.80	109.90
21	AA	1436	U	C6-N1-C2	-5.12	117.93	121.00
30	BK	59	ALA	CB-CA-C	-5.12	102.42	110.10
33	BN	29	VAL	CA-CB-CG1	-5.12	103.22	110.90
35	BP	97	TYR	CB-CG-CD2	-5.12	117.93	121.00
57	BB	384	A	C5-N7-C8	-5.12	101.34	103.90
57	BB	805	G	N3-C4-N9	-5.12	122.93	126.00
57	BB	1343	G	C8-N9-C4	5.12	108.45	106.40
57	BB	1416	G	C5-C6-N1	-5.12	108.94	111.50
57	BB	1531	C	C4'-C3'-C2'	5.12	107.72	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1666	G	O4'-C1'-N9	5.12	112.30	108.20
57	BB	1739	A	N1-C6-N6	5.12	121.67	118.60
57	BB	1905	C	OP2-P-O3'	5.12	116.47	105.20
57	BB	2448	A	C5'-C4'-C3'	-5.12	107.80	116.00
57	BB	2618	G	P-O3'-C3'	5.12	125.85	119.70
57	BB	2837	A	C4-C5-C6	5.12	119.56	117.00
58	BA	16	G	O4'-C1'-N9	5.12	112.30	108.20
7	AP	7	ALA	N-CA-CB	5.12	117.27	110.10
21	AA	587	G	C8-N9-C4	5.12	108.45	106.40
21	AA	1147	C	C5-C4-N4	5.12	123.78	120.20
22	AY	62	A	C6-C5-N7	-5.12	128.72	132.30
26	AV	6	G	C8-N9-C1'	5.12	133.66	127.00
57	BB	97	C	N3-C2-O2	5.12	125.48	121.90
57	BB	156	A	O4'-C1'-N9	5.12	112.30	108.20
57	BB	599	A	C4-C5-C6	5.12	119.56	117.00
57	BB	652	U	N1-C2-N3	-5.12	111.83	114.90
57	BB	916	G	C8-N9-C4	-5.12	104.35	106.40
57	BB	1909	C	C4-C5-C6	5.12	119.96	117.40
57	BB	2123	G	C3'-C2'-C1'	-5.12	97.40	101.50
57	BB	2255	G	O4'-C1'-N9	5.12	112.30	108.20
57	BB	2705	A	N7-C8-N9	5.12	116.36	113.80
57	BB	2854	G	P-O3'-C3'	-5.12	113.56	119.70
58	BA	62	C	C5-C6-N1	5.12	123.56	121.00
21	AA	357	G	P-O5'-C5'	-5.12	112.71	120.90
21	AA	1055	A	C2-N3-C4	-5.12	108.04	110.60
23	AW	18	G	C5'-C4'-O4'	5.12	115.25	109.10
26	AV	76	A	C4-C5-N7	-5.12	108.14	110.70
57	BB	19	A	N9-C4-C5	5.12	107.85	105.80
57	BB	378	C	C5-C6-N1	-5.12	118.44	121.00
57	BB	1164	C	O4'-C4'-C3'	-5.12	98.88	104.00
57	BB	1206	G	N1-C2-N2	-5.12	111.59	116.20
57	BB	2095	A	N3-C4-N9	5.12	131.50	127.40
57	BB	2235	G	O5'-P-OP2	-5.12	101.09	105.70
58	BA	54	G	N1-C2-N3	-5.12	120.83	123.90
21	AA	889	A	C1'-O4'-C4'	-5.12	105.81	109.90
21	AA	945	G	N9-C1'-C2'	5.12	120.65	114.00
21	AA	1074	G	C5-C6-N1	5.12	114.06	111.50
21	AA	1183	U	O5'-C5'-C4'	5.12	121.42	111.70
26	AV	3	C	P-O5'-C5'	-5.12	112.71	120.90
30	BK	79	ASP	CB-CA-C	-5.12	100.16	110.40
57	BB	66	C	P-O3'-C3'	-5.12	113.56	119.70
57	BB	91	A	N3-C4-N9	5.12	131.50	127.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	343	C	C5-C4-N4	-5.12	116.62	120.20
57	BB	636	G	C6-N1-C2	5.12	128.17	125.10
57	BB	638	G	P-O5'-C5'	5.12	129.09	120.90
57	BB	654	A	C5-N7-C8	-5.12	101.34	103.90
57	BB	693	A	N7-C8-N9	5.12	116.36	113.80
57	BB	924	G	C2-N3-C4	5.12	114.46	111.90
57	BB	1291	C	C6-N1-C2	-5.12	118.25	120.30
57	BB	1306	C	C5-C6-N1	5.12	123.56	121.00
57	BB	1382	G	N9-C4-C5	5.12	107.45	105.40
57	BB	1385	A	P-O5'-C5'	-5.12	112.71	120.90
57	BB	1482	G	C2-N3-C4	5.12	114.46	111.90
57	BB	1516	G	O4'-C1'-N9	5.12	112.30	108.20
57	BB	1809	A	N1-C2-N3	-5.12	126.74	129.30
57	BB	2389	G	C8-N9-C4	-5.12	104.35	106.40
57	BB	2453	A	O4'-C1'-N9	5.12	112.30	108.20
57	BB	2482	A	C4'-C3'-C2'	-5.12	97.48	102.60
21	AA	955	U	N3-C2-O2	-5.12	118.62	122.20
21	AA	1507	A	C3'-C2'-C1'	-5.12	97.41	101.50
26	AV	73	A	C3'-C2'-C1'	5.12	105.59	101.50
57	BB	1089	A	C6-N1-C2	5.12	121.67	118.60
57	BB	1254	A	C5-N7-C8	5.12	106.46	103.90
57	BB	1355	G	C8-N9-C1'	5.12	133.65	127.00
57	BB	1628	G	C5'-C4'-C3'	-5.12	107.81	116.00
57	BB	1754	A	C6-C5-N7	-5.12	128.72	132.30
57	BB	2103	C	C6-N1-C2	5.12	122.35	120.30
57	BB	2183	A	C5'-C4'-O4'	5.12	115.24	109.10
57	BB	2278	A	N7-C8-N9	-5.12	111.24	113.80
57	BB	2337	G	O4'-C1'-N9	5.12	112.29	108.20
57	BB	2523	G	C6-C5-N7	-5.12	127.33	130.40
1	AJ	14	ASP	CB-CG-OD1	-5.12	113.70	118.30
21	AA	234	C	C2-N1-C1'	5.12	124.43	118.80
21	AA	318	G	N3-C4-N9	-5.12	122.93	126.00
21	AA	830	G	N1-C2-N3	-5.12	120.83	123.90
21	AA	856	C	N3-C2-O2	5.12	125.48	121.90
21	AA	945	G	C4-C5-N7	5.12	112.85	110.80
23	AW	21	A	C5'-C4'-O4'	-5.12	102.96	109.10
23	AW	74	C	C6-N1-C1'	-5.12	114.66	120.80
57	BB	656	G	N1-C2-N3	-5.12	120.83	123.90
57	BB	769	U	C5-C6-N1	5.12	125.26	122.70
57	BB	1297	C	N1-C2-O2	-5.12	115.83	118.90
57	BB	1692	U	P-O5'-C5'	-5.12	112.71	120.90
57	BB	1880	U	C2'-C3'-O3'	5.12	121.89	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1958	C	C5-C4-N4	-5.12	116.62	120.20
57	BB	2481	G	C4-C5-C6	5.12	121.87	118.80
57	BB	2484	G	O4'-C1'-N9	5.12	112.29	108.20
57	BB	2726	A	N1-C2-N3	5.12	131.86	129.30
20	AI	108	ARG	NE-CZ-NH2	-5.11	117.74	120.30
21	AA	157	U	C4'-C3'-C2'	-5.11	97.49	102.60
21	AA	295	C	P-O5'-C5'	-5.11	112.72	120.90
21	AA	399	G	C1'-O4'-C4'	5.11	113.99	109.90
21	AA	728	A	C5-C6-N1	5.11	120.26	117.70
21	AA	1024	G	C6-N1-C2	5.11	128.17	125.10
21	AA	1399	C	O4'-C1'-N1	5.11	112.29	108.20
57	BB	256	A	C4-C5-C6	5.11	119.56	117.00
57	BB	342	A	C4-C5-C6	5.11	119.56	117.00
57	BB	781	A	C6-N1-C2	5.11	121.67	118.60
57	BB	948	C	OP1-P-OP2	-5.11	111.93	119.60
57	BB	1102	C	C5'-C4'-O4'	5.11	115.24	109.10
57	BB	2009	A	C5'-C4'-O4'	-5.11	102.96	109.10
57	BB	2461	A	N1-C2-N3	5.11	131.86	129.30
57	BB	2825	G	C4'-C3'-C2'	-5.11	97.49	102.60
58	BA	42	C	C2-N3-C4	5.11	122.46	119.90
16	AE	37	VAL	CB-CA-C	-5.11	101.69	111.40
21	AA	355	C	C6-N1-C2	5.11	122.34	120.30
21	AA	473	U	N1-C2-O2	-5.11	119.22	122.80
21	AA	1145	A	C5-N7-C8	5.11	106.46	103.90
21	AA	1480	A	C5-C6-N6	-5.11	119.61	123.70
21	AA	1512	U	C2-N1-C1'	-5.11	111.57	117.70
57	BB	96	C	O4'-C1'-N1	5.11	112.29	108.20
57	BB	1723	G	O4'-C1'-N9	5.11	112.29	108.20
57	BB	2331	G	N3-C2-N2	5.11	123.48	119.90
57	BB	2345	G	O4'-C4'-C3'	5.11	110.19	106.10
58	BA	103	U	P-O3'-C3'	-5.11	113.56	119.70
3	AL	49	ARG	NE-CZ-NH1	5.11	122.86	120.30
9	AR	57	ALA	O-C-N	5.11	130.88	122.70
21	AA	387	U	OP1-P-OP2	-5.11	111.94	119.60
21	AA	459	A	C4-C5-N7	-5.11	108.14	110.70
21	AA	861	G	C3'-C2'-C1'	5.11	105.59	101.50
21	AA	1144	G	C4-C5-C6	5.11	121.87	118.80
21	AA	1390	U	C1'-O4'-C4'	5.11	113.99	109.90
21	AA	1396	A	C6-C5-N7	-5.11	128.72	132.30
21	AA	1417	G	N1-C2-N3	5.11	126.97	123.90
23	AW	22	G	O5'-C5'-C4'	-5.11	101.99	111.70
57	BB	148	U	C5-C6-N1	5.11	125.25	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	247	G	C8-N9-C4	-5.11	104.36	106.40
57	BB	247	G	N1-C2-N3	-5.11	120.83	123.90
57	BB	570	G	N3-C4-C5	5.11	131.16	128.60
57	BB	779	U	N3-C4-O4	5.11	122.98	119.40
57	BB	1415	U	C2-N3-C4	5.11	130.07	127.00
57	BB	1873	G	O4'-C4'-C3'	-5.11	98.89	104.00
57	BB	1932	A	C6-C5-N7	-5.11	128.72	132.30
57	BB	1983	G	C4-C5-C6	5.11	121.87	118.80
57	BB	2751	G	O4'-C1'-N9	5.11	112.29	108.20
58	BA	89	U	N3-C2-O2	5.11	125.78	122.20
21	AA	720	C	C6-N1-C1'	-5.11	114.67	120.80
21	AA	722	G	C5'-C4'-C3'	-5.11	107.83	116.00
22	AY	18	G	C5-C6-N1	5.11	114.05	111.50
57	BB	428	A	C4-C5-C6	5.11	119.56	117.00
57	BB	1349	C	N3-C4-C5	-5.11	119.86	121.90
57	BB	1750	G	C8-N9-C1'	5.11	133.64	127.00
57	BB	1878	G	N1-C6-O6	5.11	122.97	119.90
57	BB	2852	G	N9-C4-C5	-5.11	103.36	105.40
4	AM	62	PHE	CB-CA-C	-5.11	100.18	110.40
21	AA	254	G	C5-C6-N1	-5.11	108.95	111.50
21	AA	259	G	N3-C2-N2	5.11	123.47	119.90
21	AA	571	U	O5'-C5'-C4'	-5.11	102.00	111.70
21	AA	856	C	C4'-C3'-C2'	-5.11	97.49	102.60
21	AA	1522	U	C6-N1-C2	5.11	124.06	121.00
24	AX	15	A	C4-C5-C6	5.11	119.55	117.00
31	BL	128	THR	CA-CB-OG1	5.11	119.72	109.00
39	BT	39	THR	CA-CB-OG1	5.11	119.72	109.00
41	BV	18	ARG	NE-CZ-NH1	5.11	122.85	120.30
57	BB	665	U	N3-C4-C5	-5.11	111.53	114.60
57	BB	717	C	C3'-C2'-C1'	5.11	105.58	101.50
57	BB	954	G	C5-C6-O6	-5.11	125.53	128.60
57	BB	1524	G	C4-C5-C6	5.11	121.86	118.80
57	BB	1953	A	N1-C2-N3	-5.11	126.75	129.30
57	BB	2634	A	N7-C8-N9	5.11	116.35	113.80
57	BB	2711	A	C5-C6-N1	-5.11	115.15	117.70
58	BA	88	C	C6-N1-C1'	-5.11	114.67	120.80
4	AM	109	LYS	C-N-CA	5.11	133.02	122.30
21	AA	46	G	C4-N9-C1'	-5.11	119.86	126.50
21	AA	176	C	N3-C4-C5	5.11	123.94	121.90
21	AA	337	G	N9-C4-C5	-5.11	103.36	105.40
21	AA	436	C	C4'-C3'-C2'	-5.11	97.50	102.60
21	AA	590	U	N1-C2-N3	-5.11	111.84	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	861	G	C4'-C3'-C2'	-5.11	97.49	102.60
21	AA	863	U	C6-N1-C2	5.11	124.06	121.00
21	AA	1480	A	C4-C5-C6	5.11	119.55	117.00
27	B5	110	ASN	N-CA-CB	5.11	119.79	110.60
45	BC	206	LYS	N-CA-C	-5.11	97.22	111.00
53	BE	146	VAL	CA-CB-CG1	-5.11	103.24	110.90
57	BB	396	G	C8-N9-C4	5.11	108.44	106.40
57	BB	402	A	N9-C4-C5	5.11	107.84	105.80
57	BB	471	A	N3-C4-C5	-5.11	123.23	126.80
57	BB	686	U	C6-N1-C1'	-5.11	114.05	121.20
57	BB	1275	A	C5-C6-N6	-5.11	119.62	123.70
57	BB	1928	A	O4'-C1'-N9	5.11	112.28	108.20
57	BB	2280	G	P-O3'-C3'	-5.11	113.57	119.70
57	BB	2429	G	N7-C8-N9	5.11	115.65	113.10
4	AM	70	ARG	C-N-CA	5.10	134.46	121.70
21	AA	411	A	C5-C6-N6	5.10	127.78	123.70
21	AA	575	G	C6-C5-N7	-5.10	127.34	130.40
57	BB	351	C	C5-C6-N1	5.10	123.55	121.00
57	BB	759	G	C6-N1-C2	5.10	128.16	125.10
57	BB	2010	G	O4'-C1'-N9	5.10	112.28	108.20
57	BB	2441	U	N1-C1'-C2'	-5.10	106.39	112.00
57	BB	2640	G	C5-C6-O6	-5.10	125.54	128.60
15	AD	93	LEU	CB-CA-C	-5.10	100.50	110.20
20	AI	4	GLN	N-CA-CB	5.10	119.79	110.60
21	AA	389	A	O4'-C1'-N9	5.10	112.28	108.20
21	AA	744	C	N3-C4-C5	-5.10	119.86	121.90
21	AA	754	C	C6-N1-C1'	-5.10	114.68	120.80
21	AA	1337	G	N1-C6-O6	5.10	122.96	119.90
23	AW	61	C	C2-N3-C4	5.10	122.45	119.90
27	B5	35	THR	N-CA-CB	5.10	120.00	110.30
57	BB	72	U	P-O5'-C5'	5.10	129.06	120.90
57	BB	108	G	N3-C2-N2	5.10	123.47	119.90
57	BB	518	G	N3-C4-C5	5.10	131.15	128.60
57	BB	836	G	N1-C2-N3	-5.10	120.84	123.90
57	BB	954	G	C4-N9-C1'	5.10	133.13	126.50
57	BB	1080	A	N3-C4-C5	-5.10	123.23	126.80
57	BB	1190	G	C6-N1-C2	-5.10	122.04	125.10
57	BB	1253	A	C3'-C2'-C1'	5.10	105.58	101.50
57	BB	1400	U	C2-N1-C1'	-5.10	111.58	117.70
57	BB	1457	U	C5'-C4'-O4'	5.10	115.22	109.10
57	BB	1631	G	N1-C2-N3	-5.10	120.84	123.90
57	BB	1731	G	C5-C6-O6	-5.10	125.54	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1915	U	P-O3'-C3'	5.10	125.82	119.70
57	BB	2099	U	N3-C4-C5	-5.10	111.54	114.60
57	BB	2153	C	C6-N1-C1'	5.10	126.92	120.80
57	BB	2458	G	N9-C4-C5	-5.10	103.36	105.40
57	BB	2549	G	N3-C4-N9	5.10	129.06	126.00
57	BB	2729	G	C6-N1-C2	5.10	128.16	125.10
57	BB	2811	G	N3-C2-N2	5.10	123.47	119.90
4	AM	112	ARG	NE-CZ-NH1	-5.10	117.75	120.30
21	AA	150	U	N3-C2-O2	5.10	125.77	122.20
21	AA	606	G	N3-C4-N9	-5.10	122.94	126.00
21	AA	740	U	OP1-P-OP2	-5.10	111.95	119.60
21	AA	895	G	N3-C4-C5	-5.10	126.05	128.60
57	BB	127	A	P-O5'-C5'	5.10	129.06	120.90
57	BB	168	G	N9-C1'-C2'	-5.10	106.39	112.00
57	BB	695	G	N3-C4-C5	5.10	131.15	128.60
57	BB	1797	G	N1-C2-N2	5.10	120.79	116.20
57	BB	2834	G	C5-C6-N1	-5.10	108.95	111.50
21	AA	243	A	C4-C5-N7	-5.10	108.15	110.70
21	AA	451	A	O4'-C1'-N9	5.10	112.28	108.20
21	AA	1040	U	C5'-C4'-O4'	5.10	115.22	109.10
21	AA	1254	A	C6-C5-N7	-5.10	128.73	132.30
21	AA	1263	C	N3-C4-N4	5.10	121.57	118.00
52	BD	51	THR	N-CA-CB	5.10	119.99	110.30
57	BB	333	G	C4-C5-C6	5.10	121.86	118.80
57	BB	458	G	C5-C6-N1	-5.10	108.95	111.50
57	BB	1031	G	N1-C2-N3	-5.10	120.84	123.90
57	BB	1121	C	OP1-P-OP2	-5.10	111.95	119.60
57	BB	1629	U	N1-C2-N3	5.10	117.96	114.90
57	BB	2029	G	C5-N7-C8	5.10	106.85	104.30
57	BB	2419	U	C5-C4-O4	-5.10	122.84	125.90
57	BB	2554	U	C5-C6-N1	5.10	125.25	122.70
58	BA	74	U	P-O3'-C3'	-5.10	113.58	119.70
15	AD	198	LEU	CB-CG-CD2	5.10	119.67	111.00
21	AA	511	C	C5-C4-N4	-5.10	116.63	120.20
21	AA	1457	G	P-O3'-C3'	-5.10	113.58	119.70
25	AZ	71	THR	N-CA-C	-5.10	97.24	111.00
52	BD	131	ASP	CB-CG-OD1	5.10	122.89	118.30
57	BB	313	G	C5-C6-O6	-5.10	125.54	128.60
57	BB	681	G	C1'-O4'-C4'	5.10	113.98	109.90
57	BB	1051	G	C4'-C3'-C2'	-5.10	97.50	102.60
57	BB	1236	G	N3-C2-N2	5.10	123.47	119.90
57	BB	1489	C	C6-N1-C1'	-5.10	114.68	120.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1531	C	C5'-C4'-O4'	5.10	115.22	109.10
57	BB	1677	A	C5-C6-N6	-5.10	119.62	123.70
57	BB	1912	A	C6-C5-N7	-5.10	128.73	132.30
57	BB	2041	U	OP2-P-O3'	5.10	116.41	105.20
57	BB	2172	U	P-O5'-C5'	5.10	129.06	120.90
57	BB	2763	G	OP2-P-O3'	5.10	116.41	105.20
21	AA	1051	C	C6-N1-C1'	-5.10	114.69	120.80
21	AA	1258	G	C4-N9-C1'	5.10	133.12	126.50
23	AW	30	G	N3-C4-C5	-5.10	126.05	128.60
57	BB	776	G	C5-N7-C8	-5.10	101.75	104.30
57	BB	982	C	N1-C2-O2	5.10	121.96	118.90
57	BB	1125	G	O5'-P-OP2	-5.10	101.11	105.70
57	BB	1150	C	C6-N1-C2	-5.10	118.26	120.30
57	BB	1239	G	C8-N9-C1'	5.10	133.62	127.00
57	BB	2641	G	C5'-C4'-C3'	5.10	124.15	116.00
58	BA	27	C	C5'-C4'-O4'	5.10	115.22	109.10
21	AA	81	A	C4-C5-N7	-5.09	108.15	110.70
21	AA	650	G	C6-N1-C2	5.09	128.16	125.10
21	AA	1350	A	C1'-O4'-C4'	-5.09	105.83	109.90
57	BB	113	U	C2-N1-C1'	-5.09	111.59	117.70
57	BB	339	U	N3-C2-O2	5.09	125.77	122.20
57	BB	496	G	N1-C6-O6	5.09	122.96	119.90
57	BB	605	G	N7-C8-N9	-5.09	110.55	113.10
57	BB	710	U	C5'-C4'-O4'	5.09	115.21	109.10
57	BB	878	A	C5-C6-N1	-5.09	115.15	117.70
57	BB	1030	C	C5-C4-N4	-5.09	116.63	120.20
57	BB	1082	U	C5'-C4'-O4'	-5.09	102.99	109.10
57	BB	1208	C	C6-N1-C1'	5.09	126.91	120.80
57	BB	1453	A	C8-N9-C4	-5.09	103.76	105.80
57	BB	1510	G	C5-C6-O6	-5.09	125.54	128.60
57	BB	1571	A	C6-N1-C2	5.09	121.66	118.60
57	BB	1599	U	N3-C4-C5	-5.09	111.54	114.60
57	BB	1728	C	C4-C5-C6	-5.09	114.85	117.40
57	BB	1750	G	C4-N9-C1'	-5.09	119.88	126.50
57	BB	1807	G	C5-N7-C8	5.09	106.85	104.30
57	BB	2135	A	C5'-C4'-O4'	5.09	115.21	109.10
57	BB	2153	C	C2-N3-C4	-5.09	117.35	119.90
57	BB	2518	A	C6-N1-C2	-5.09	115.54	118.60
57	BB	2692	G	N1-C2-N2	-5.09	111.61	116.20
57	BB	2696	U	C5-C4-O4	-5.09	122.84	125.90
57	BB	2725	A	P-O3'-C3'	5.09	125.81	119.70
58	BA	61	G	N9-C4-C5	5.09	107.44	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	265	G	C2-N3-C4	-5.09	109.35	111.90
21	AA	454	G	N9-C4-C5	-5.09	103.36	105.40
21	AA	992	U	C5-C4-O4	5.09	128.96	125.90
21	AA	1317	C	C5-C6-N1	5.09	123.55	121.00
21	AA	1435	G	C8-N9-C1'	5.09	133.62	127.00
57	BB	121	G	C5-C6-N1	5.09	114.05	111.50
57	BB	677	A	C6-N1-C2	5.09	121.66	118.60
57	BB	1299	G	C8-N9-C1'	5.09	133.62	127.00
57	BB	1328	A	C5-C6-N1	-5.09	115.15	117.70
57	BB	2567	G	C4-C5-N7	-5.09	108.76	110.80
57	BB	2782	G	C4-N9-C1'	5.09	133.12	126.50
57	BB	2795	C	C2-N3-C4	5.09	122.45	119.90
21	AA	39	G	N1-C2-N2	-5.09	111.62	116.20
21	AA	122	G	N1-C2-N3	-5.09	120.84	123.90
21	AA	160	A	C8-N9-C1'	5.09	136.86	127.70
21	AA	210	C	C6-N1-C2	-5.09	118.26	120.30
21	AA	611	C	P-O3'-C3'	5.09	125.81	119.70
21	AA	895	G	N1-C2-N3	-5.09	120.85	123.90
21	AA	1212	U	C6-N1-C1'	-5.09	114.07	121.20
21	AA	1384	C	N3-C4-N4	5.09	121.56	118.00
21	AA	1438	G	C4'-C3'-C2'	-5.09	97.51	102.60
45	BC	183	VAL	CA-CB-CG1	-5.09	103.26	110.90
57	BB	160	A	C5-C6-N6	-5.09	119.63	123.70
57	BB	364	C	C5-C4-N4	-5.09	116.64	120.20
57	BB	715	A	C6-C5-N7	-5.09	128.74	132.30
57	BB	822	G	N3-C2-N2	5.09	123.46	119.90
57	BB	1042	G	O5'-C5'-C4'	-5.09	102.02	111.70
57	BB	1246	A	N9-C4-C5	5.09	107.84	105.80
57	BB	1487	U	C5-C4-O4	5.09	128.96	125.90
57	BB	1692	U	N3-C2-O2	-5.09	118.64	122.20
57	BB	2123	G	C6-C5-N7	-5.09	127.34	130.40
57	BB	2260	C	N3-C4-C5	-5.09	119.86	121.90
57	BB	2363	G	C8-N9-C4	-5.09	104.36	106.40
57	BB	2532	G	C4'-C3'-C2'	-5.09	97.51	102.60
58	BA	39	A	C2'-C3'-O3'	5.09	121.84	113.70
7	AP	22	ALA	N-CA-CB	5.09	117.22	110.10
21	AA	270	A	C8-N9-C4	5.09	107.84	105.80
21	AA	1306	A	C6-C5-N7	-5.09	128.74	132.30
22	AY	25	C	C4'-C3'-C2'	-5.09	97.51	102.60
22	AY	26	G	O3'-P-O5'	-5.09	94.33	104.00
26	AV	62	C	C6-N1-C2	-5.09	118.26	120.30
37	BR	29	THR	N-CA-CB	-5.09	100.63	110.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
42	BW	14	ASP	N-CA-CB	5.09	119.76	110.60
53	BE	69	ARG	NE-CZ-NH1	5.09	122.84	120.30
57	BB	191	A	C5-N7-C8	-5.09	101.36	103.90
57	BB	769	U	C6-N1-C2	-5.09	117.95	121.00
57	BB	843	G	N1-C2-N3	-5.09	120.85	123.90
57	BB	1035	U	N3-C4-O4	5.09	122.96	119.40
57	BB	1154	G	C5-N7-C8	5.09	106.84	104.30
57	BB	1214	A	C4-C5-C6	5.09	119.54	117.00
57	BB	1958	C	C4-C5-C6	5.09	119.94	117.40
57	BB	2154	A	C8-N9-C4	-5.09	103.76	105.80
57	BB	2253	G	C5-N7-C8	-5.09	101.75	104.30
57	BB	2406	A	P-O3'-C3'	-5.09	113.59	119.70
57	BB	2548	U	C2-N3-C4	5.09	130.05	127.00
57	BB	2621	G	P-O3'-C3'	-5.09	113.59	119.70
57	BB	2795	C	O5'-C5'-C4'	-5.09	102.03	111.70
57	BB	2890	G	C4-C5-C6	5.09	121.85	118.80
21	AA	199	A	C5-C6-N1	-5.09	115.16	117.70
21	AA	997	U	C2-N3-C4	-5.09	123.95	127.00
23	AW	41	C	P-O3'-C3'	5.09	125.81	119.70
57	BB	1334	G	C6-C5-N7	-5.09	127.35	130.40
57	BB	1409	U	O4'-C1'-C2'	-5.09	100.71	105.80
57	BB	2504	U	N3-C4-O4	5.09	122.96	119.40
5	AN	31	SER	O-C-N	-5.09	114.56	122.70
21	AA	324	G	C6-C5-N7	5.09	133.45	130.40
21	AA	476	U	C2'-C3'-O3'	5.09	121.84	113.70
21	AA	1030	U	C2-N1-C1'	5.09	123.80	117.70
21	AA	1338	G	C8-N9-C4	-5.09	104.37	106.40
23	AW	58	A	C6-N1-C2	-5.09	115.55	118.60
57	BB	49	A	C6-C5-N7	-5.09	128.74	132.30
57	BB	397	U	N3-C2-O2	5.09	125.76	122.20
57	BB	456	C	N1-C2-O2	5.09	121.95	118.90
57	BB	757	G	P-O3'-C3'	-5.09	113.59	119.70
57	BB	915	C	C5'-C4'-O4'	-5.09	103.00	109.10
57	BB	929	U	P-O5'-C5'	-5.09	112.76	120.90
57	BB	933	A	N1-C2-N3	5.09	131.84	129.30
57	BB	1246	A	C8-N9-C4	-5.09	103.77	105.80
57	BB	1387	A	C6-C5-N7	-5.09	128.74	132.30
57	BB	1401	G	C4-C5-C6	5.09	121.85	118.80
57	BB	1511	G	O4'-C1'-N9	5.09	112.27	108.20
57	BB	1713	A	C5-C6-N6	-5.09	119.63	123.70
57	BB	1934	C	C4-C5-C6	5.09	119.94	117.40
57	BB	2152	G	C4-C5-C6	5.09	121.85	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2670	A	C8-N9-C4	-5.09	103.77	105.80
58	BA	17	C	C4-C5-C6	5.09	119.94	117.40
58	BA	69	G	C4-C5-N7	-5.09	108.77	110.80
11	AT	58	ASP	CB-CG-OD2	-5.08	113.72	118.30
22	AY	37	G	C8-N9-C1'	5.08	133.61	127.00
22	AY	56	C	C1'-O4'-C4'	5.08	113.97	109.90
57	BB	273	G	P-O3'-C3'	-5.08	113.60	119.70
57	BB	854	C	O4'-C4'-C3'	-5.08	98.92	104.00
57	BB	2361	G	N7-C8-N9	5.08	115.64	113.10
57	BB	2748	A	C4-C5-C6	5.08	119.54	117.00
57	BB	2885	G	OP1-P-OP2	-5.08	111.97	119.60
21	AA	25	C	C1'-O4'-C4'	-5.08	105.83	109.90
21	AA	391	G	C1'-O4'-C4'	5.08	113.97	109.90
21	AA	396	C	C5-C6-N1	5.08	123.54	121.00
21	AA	421	U	O4'-C4'-C3'	-5.08	98.92	104.00
21	AA	574	A	C4-C5-C6	5.08	119.54	117.00
21	AA	1075	U	C1'-O4'-C4'	-5.08	105.83	109.90
21	AA	1249	C	N1-C2-N3	-5.08	115.64	119.20
21	AA	1355	G	N3-C4-N9	-5.08	122.95	126.00
21	AA	1449	C	C2-N3-C4	-5.08	117.36	119.90
21	AA	1522	U	P-O3'-C3'	-5.08	113.60	119.70
23	AW	1	G	C2-N3-C4	5.08	114.44	111.90
23	AW	16	U	C3'-C2'-C1'	5.08	105.57	101.50
54	BF	140	ILE	CA-CB-CG1	5.08	120.66	111.00
57	BB	1037	G	P-O3'-C3'	-5.08	113.60	119.70
57	BB	1204	A	P-O5'-C5'	5.08	129.03	120.90
57	BB	1215	G	P-O3'-C3'	-5.08	113.60	119.70
57	BB	1395	A	O4'-C4'-C3'	5.08	110.17	106.10
57	BB	1426	G	C5'-C4'-C3'	-5.08	107.86	116.00
57	BB	1514	G	C1'-O4'-C4'	-5.08	105.83	109.90
57	BB	1902	C	C2-N3-C4	-5.08	117.36	119.90
57	BB	1907	G	C5-N7-C8	5.08	106.84	104.30
57	BB	2021	C	P-O3'-C3'	5.08	125.80	119.70
57	BB	2073	C	C5-C6-N1	5.08	123.54	121.00
57	BB	2253	G	N1-C6-O6	5.08	122.95	119.90
17	AF	24	ARG	CD-NE-CZ	-5.08	116.48	123.60
21	AA	126	G	P-O5'-C5'	5.08	129.03	120.90
21	AA	552	U	P-O3'-C3'	-5.08	113.60	119.70
21	AA	606	G	N1-C6-O6	5.08	122.95	119.90
21	AA	879	C	C4'-C3'-C2'	-5.08	97.52	102.60
21	AA	1031	C	C4'-C3'-C2'	-5.08	97.52	102.60
21	AA	1081	A	C6-N1-C2	5.08	121.65	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1295	U	C2-N3-C4	-5.08	123.95	127.00
21	AA	1499	A	P-O5'-C5'	5.08	129.03	120.90
57	BB	420	C	N3-C4-N4	5.08	121.56	118.00
57	BB	492	A	N9-C4-C5	5.08	107.83	105.80
57	BB	545	U	P-O3'-C3'	-5.08	113.60	119.70
57	BB	977	G	N1-C2-N3	-5.08	120.85	123.90
57	BB	1666	G	C4-C5-C6	5.08	121.85	118.80
57	BB	1744	A	C5-C6-N1	-5.08	115.16	117.70
57	BB	1766	G	C5'-C4'-O4'	5.08	115.20	109.10
57	BB	1964	G	C5-C6-N1	-5.08	108.96	111.50
57	BB	2282	G	N3-C2-N2	5.08	123.46	119.90
57	BB	2282	G	O5'-C5'-C4'	-5.08	102.05	111.70
57	BB	2454	G	P-O5'-C5'	-5.08	112.77	120.90
57	BB	2673	G	N3-C2-N2	-5.08	116.34	119.90
57	BB	2893	A	C4'-C3'-C2'	-5.08	97.52	102.60
21	AA	90	C	N3-C2-O2	-5.08	118.34	121.90
22	AY	67	A	N7-C8-N9	-5.08	111.26	113.80
36	BQ	54	ARG	NE-CZ-NH2	5.08	122.84	120.30
57	BB	719	C	O4'-C4'-C3'	-5.08	98.92	104.00
57	BB	1373	A	P-O5'-C5'	5.08	129.03	120.90
57	BB	1553	A	N7-C8-N9	-5.08	111.26	113.80
57	BB	2237	G	N3-C4-N9	5.08	129.05	126.00
57	BB	2625	G	P-O5'-C5'	-5.08	112.77	120.90
57	BB	2767	C	C2-N1-C1'	-5.08	113.21	118.80
13	AB	87	ASP	CB-CG-OD1	-5.08	113.73	118.30
21	AA	258	G	C6-N1-C2	5.08	128.15	125.10
21	AA	733	G	C4-C5-N7	-5.08	108.77	110.80
22	AY	19	G	N1-C6-O6	5.08	122.95	119.90
26	AV	24	U	OP1-P-OP2	-5.08	111.98	119.60
26	AV	44	A	C8-N9-C4	5.08	107.83	105.80
45	BC	257	ARG	NE-CZ-NH1	5.08	122.84	120.30
53	BE	50	ALA	N-CA-CB	-5.08	102.99	110.10
57	BB	185	G	C5'-C4'-C3'	-5.08	107.87	116.00
57	BB	767	U	C6-N1-C2	-5.08	117.95	121.00
57	BB	1173	U	C4-C5-C6	-5.08	116.65	119.70
57	BB	1228	G	N9-C4-C5	-5.08	103.37	105.40
57	BB	1278	C	P-O3'-C3'	-5.08	113.61	119.70
57	BB	1460	U	O4'-C1'-N1	5.08	112.26	108.20
57	BB	1771	C	C2-N3-C4	5.08	122.44	119.90
57	BB	2015	A	N7-C8-N9	-5.08	111.26	113.80
57	BB	2442	C	N1-C2-O2	-5.08	115.85	118.90
21	AA	1409	C	C2-N3-C4	-5.08	117.36	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1313	U	N3-C2-O2	-5.08	118.65	122.20
57	BB	1507	C	C2-N3-C4	5.08	122.44	119.90
57	BB	2730	C	OP2-P-O3'	5.08	116.37	105.20
57	BB	2833	U	N1-C1'-C2'	-5.08	106.42	112.00
1	AJ	23	ALA	CB-CA-C	-5.08	102.49	110.10
13	AB	98	GLY	O-C-N	5.08	130.82	122.70
21	AA	577	G	N3-C4-C5	5.08	131.14	128.60
21	AA	692	U	N1-C2-O2	-5.08	119.25	122.80
21	AA	791	G	OP2-P-O3'	5.08	116.37	105.20
21	AA	895	G	O4'-C1'-N9	5.08	112.26	108.20
21	AA	1135	U	N3-C4-C5	-5.08	111.56	114.60
21	AA	1279	G	C1'-O4'-C4'	-5.08	105.84	109.90
21	AA	1473	G	O4'-C1'-N9	5.08	112.26	108.20
26	AV	14	A	N3-C4-N9	5.08	131.46	127.40
32	BM	13	HIS	C-N-CA	5.08	134.39	121.70
36	BQ	23	TYR	CA-CB-CG	5.08	123.04	113.40
57	BB	500	G	N3-C4-C5	-5.08	126.06	128.60
57	BB	995	C	N3-C4-C5	-5.08	119.87	121.90
57	BB	1342	A	C5'-C4'-O4'	5.08	115.19	109.10
57	BB	1365	A	N3-C4-C5	-5.08	123.25	126.80
57	BB	1367	A	C5-C6-N6	-5.08	119.64	123.70
57	BB	2113	U	C3'-C2'-C1'	5.08	105.56	101.50
57	BB	2205	A	P-O5'-C5'	-5.08	112.78	120.90
57	BB	2437	G	O4'-C1'-N9	5.08	112.26	108.20
57	BB	2440	C	C4'-C3'-C2'	-5.08	97.52	102.60
57	BB	2533	U	OP1-P-OP2	-5.08	111.99	119.60
57	BB	2570	G	O4'-C1'-N9	5.08	112.26	108.20
57	BB	2680	U	C4'-C3'-C2'	-5.08	97.52	102.60
58	BA	99	A	C6-C5-N7	-5.08	128.75	132.30
58	BA	106	G	C4-C5-N7	-5.08	108.77	110.80
15	AD	72	ARG	CG-CD-NE	-5.07	101.15	111.80
21	AA	182	A	C2-N3-C4	-5.07	108.06	110.60
21	AA	227	G	C4-N9-C1'	5.07	133.10	126.50
21	AA	389	A	C2-N3-C4	-5.07	108.06	110.60
21	AA	938	A	C4-C5-C6	5.07	119.54	117.00
21	AA	1025	U	C4'-C3'-C2'	-5.07	97.53	102.60
21	AA	1090	U	N1-C2-O2	-5.07	119.25	122.80
21	AA	1156	G	C6-C5-N7	-5.07	127.36	130.40
21	AA	1206	G	P-O5'-C5'	5.07	129.02	120.90
21	AA	1496	C	N1-C2-O2	-5.07	115.86	118.90
57	BB	164	C	C5'-C4'-O4'	5.07	115.19	109.10
57	BB	525	U	C5-C6-N1	5.07	125.24	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	567	U	O4'-C1'-N1	5.07	112.26	108.20
57	BB	1267	U	C2-N1-C1'	-5.07	111.61	117.70
57	BB	1931	U	C3'-C2'-C1'	-5.07	97.44	101.50
57	BB	1975	G	C5-N7-C8	5.07	106.84	104.30
57	BB	2004	G	N9-C4-C5	-5.07	103.37	105.40
57	BB	2209	G	C6-C5-N7	-5.07	127.36	130.40
57	BB	2316	G	C4-N9-C1'	-5.07	119.90	126.50
57	BB	2367	G	P-O5'-C5'	5.07	129.02	120.90
57	BB	2607	G	C5-C6-N1	5.07	114.04	111.50
20	AI	123	ARG	NE-CZ-NH1	-5.07	117.76	120.30
57	BB	1786	A	C6-N1-C2	5.07	121.64	118.60
57	BB	1802	A	O4'-C4'-C3'	-5.07	98.93	104.00
4	AM	81	ASP	CB-CG-OD2	-5.07	113.74	118.30
21	AA	190	A	C4'-C3'-C2'	-5.07	97.53	102.60
21	AA	207	C	C5-C6-N1	5.07	123.53	121.00
21	AA	343	U	C5'-C4'-O4'	-5.07	103.02	109.10
21	AA	787	A	C8-N9-C4	-5.07	103.77	105.80
21	AA	815	A	P-O3'-C3'	-5.07	113.62	119.70
21	AA	1394	A	N3-C4-C5	5.07	130.35	126.80
23	AW	22	G	N3-C4-C5	-5.07	126.06	128.60
23	AW	34	G	C1'-O4'-C4'	-5.07	105.84	109.90
26	AV	60	U	C2-N1-C1'	5.07	123.79	117.70
57	BB	218	A	O3'-P-O5'	-5.07	94.37	104.00
57	BB	345	A	P-O3'-C3'	5.07	125.78	119.70
57	BB	520	G	P-O3'-C3'	-5.07	113.61	119.70
57	BB	1008	A	C5-N7-C8	5.07	106.44	103.90
57	BB	1671	U	OP1-P-O3'	5.07	116.36	105.20
57	BB	1797	G	N3-C4-N9	-5.07	122.96	126.00
57	BB	2002	G	C4-C5-N7	5.07	112.83	110.80
57	BB	2310	C	C3'-C2'-C1'	5.07	105.56	101.50
57	BB	2474	U	N1-C2-O2	-5.07	119.25	122.80
57	BB	2596	U	C5-C4-O4	5.07	128.94	125.90
57	BB	2625	G	C5-C6-N1	-5.07	108.96	111.50
15	AD	30	LYS	CB-CA-C	-5.07	100.26	110.40
21	AA	226	G	C5-N7-C8	5.07	106.83	104.30
21	AA	664	G	C5-N7-C8	5.07	106.83	104.30
21	AA	911	U	C1'-O4'-C4'	5.07	113.95	109.90
25	AZ	77	ALA	N-CA-C	-5.07	97.31	111.00
57	BB	391	A	OP1-P-OP2	-5.07	112.00	119.60
57	BB	1248	G	N7-C8-N9	5.07	115.64	113.10
57	BB	1423	G	C5-C6-N1	-5.07	108.97	111.50
57	BB	2736	A	C5'-C4'-C3'	-5.07	107.89	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	275	G	C5'-C4'-C3'	-5.07	107.89	116.00
21	AA	300	A	N3-C4-C5	-5.07	123.25	126.80
21	AA	363	A	N9-C4-C5	-5.07	103.77	105.80
21	AA	727	G	C6-C5-N7	-5.07	127.36	130.40
21	AA	1165	U	O4'-C4'-C3'	-5.07	98.93	104.00
40	BU	93	ARG	NE-CZ-NH2	5.07	122.83	120.30
57	BB	95	A	N3-C4-N9	5.07	131.45	127.40
57	BB	287	G	N3-C2-N2	5.07	123.45	119.90
57	BB	614	A	C4'-C3'-C2'	5.07	107.67	102.60
57	BB	810	U	C6-N1-C2	5.07	124.04	121.00
57	BB	1031	G	C6-C5-N7	-5.07	127.36	130.40
57	BB	1498	C	C5'-C4'-C3'	5.07	124.11	116.00
57	BB	1659	G	N3-C4-C5	-5.07	126.07	128.60
57	BB	1664	A	C4-C5-N7	5.07	113.23	110.70
57	BB	1844	C	O4'-C4'-C3'	-5.07	98.93	104.00
57	BB	1904	G	P-O5'-C5'	5.07	129.01	120.90
57	BB	2256	G	N3-C2-N2	-5.07	116.35	119.90
57	BB	2281	A	C4'-C3'-C2'	-5.07	97.53	102.60
57	BB	2441	U	C4-C5-C6	-5.07	116.66	119.70
57	BB	2576	G	N3-C4-N9	5.07	129.04	126.00
57	BB	2702	G	N3-C4-C5	-5.07	126.07	128.60
57	BB	2812	G	C5-C6-N1	5.07	114.03	111.50
58	BA	96	G	C5-C6-N1	-5.07	108.97	111.50
58	BA	111	U	N3-C4-O4	5.07	122.95	119.40
14	AC	161	ILE	N-CA-CB	5.07	122.45	110.80
15	AD	203	TYR	CG-CD1-CE1	-5.07	117.25	121.30
16	AE	49	TYR	CB-CG-CD1	5.07	124.04	121.00
21	AA	97	G	C6-C5-N7	-5.07	127.36	130.40
21	AA	708	C	C5-C4-N4	-5.07	116.65	120.20
21	AA	926	G	P-O3'-C3'	5.07	125.78	119.70
21	AA	1085	U	C1'-O4'-C4'	5.07	113.95	109.90
21	AA	1183	U	P-O3'-C3'	5.07	125.78	119.70
33	BN	63	ARG	NE-CZ-NH1	-5.07	117.77	120.30
57	BB	362	A	C6-C5-N7	-5.07	128.75	132.30
57	BB	458	G	C5-C6-O6	-5.07	125.56	128.60
57	BB	1144	A	N9-C4-C5	5.07	107.83	105.80
57	BB	1523	U	N1-C2-N3	-5.07	111.86	114.90
57	BB	2294	G	O5'-P-OP2	-5.07	101.14	105.70
57	BB	2426	A	N1-C6-N6	5.07	121.64	118.60
57	BB	2474	U	P-O5'-C5'	-5.07	112.79	120.90
57	BB	2496	C	C1'-O4'-C4'	5.07	113.95	109.90
57	BB	2709	G	C4-N9-C1'	-5.07	119.92	126.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2761	A	P-O5'-C5'	5.07	129.01	120.90
57	BB	2814	A	O4'-C1'-C2'	-5.07	100.73	105.80
57	BB	2833	U	C6-N1-C1'	-5.07	114.11	121.20
21	AA	531	U	C5'-C4'-C3'	5.06	124.10	116.00
46	BZ	27	GLY	C-N-CA	5.06	134.36	121.70
57	BB	437	U	C1'-O4'-C4'	-5.06	105.85	109.90
57	BB	957	C	N1-C2-O2	5.06	121.94	118.90
57	BB	1149	G	C5-C6-N1	5.06	114.03	111.50
57	BB	2463	C	N3-C4-N4	5.06	121.55	118.00
57	BB	2850	A	OP1-P-OP2	-5.06	112.00	119.60
1	AJ	62	ARG	NE-CZ-NH1	-5.06	117.77	120.30
21	AA	293	G	C5-C6-O6	-5.06	125.56	128.60
21	AA	708	C	C4-C5-C6	-5.06	114.87	117.40
21	AA	914	A	C6-N1-C2	5.06	121.64	118.60
21	AA	1136	C	OP1-P-OP2	-5.06	112.00	119.60
21	AA	1235	U	O4'-C1'-N1	5.06	112.25	108.20
21	AA	1403	C	C5-C4-N4	-5.06	116.66	120.20
22	AY	68	U	C6-N1-C2	5.06	124.04	121.00
33	BN	69	ARG	N-CA-C	-5.06	97.33	111.00
57	BB	619	G	N3-C4-C5	-5.06	126.07	128.60
57	BB	760	G	C4-C5-N7	5.06	112.83	110.80
57	BB	901	C	C5'-C4'-O4'	5.06	115.18	109.10
57	BB	977	G	N3-C2-N2	5.06	123.44	119.90
57	BB	1811	G	O4'-C1'-N9	5.06	112.25	108.20
57	BB	2090	A	N7-C8-N9	-5.06	111.27	113.80
57	BB	2206	C	N3-C4-N4	5.06	121.54	118.00
57	BB	2238	G	N3-C4-N9	5.06	129.04	126.00
57	BB	2725	A	C5-C6-N6	-5.06	119.65	123.70
57	BB	2777	G	C4-C5-N7	5.06	112.83	110.80
57	BB	2867	G	C6-N1-C2	5.06	128.14	125.10
58	BA	89	U	C4'-C3'-C2'	-5.06	97.54	102.60
21	AA	537	G	N7-C8-N9	-5.06	110.57	113.10
21	AA	628	G	C5'-C4'-O4'	5.06	115.17	109.10
21	AA	1113	C	N3-C2-O2	5.06	125.44	121.90
21	AA	1186	G	C6-C5-N7	-5.06	127.36	130.40
28	BI	119	ALA	CB-CA-C	-5.06	102.51	110.10
57	BB	822	G	N7-C8-N9	5.06	115.63	113.10
57	BB	1157	G	N7-C8-N9	-5.06	110.57	113.10
57	BB	1772	A	P-O5'-C5'	-5.06	112.80	120.90
21	AA	399	G	O4'-C4'-C3'	-5.06	98.94	104.00
21	AA	887	G	C6-N1-C2	5.06	128.13	125.10
21	AA	1058	G	N3-C4-C5	5.06	131.13	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1068	G	N9-C4-C5	-5.06	103.38	105.40
21	AA	1525	G	C8-N9-C1'	5.06	133.58	127.00
57	BB	79	C	C2-N3-C4	5.06	122.43	119.90
57	BB	606	U	C4-C5-C6	5.06	122.74	119.70
57	BB	1377	G	OP1-P-OP2	-5.06	112.01	119.60
57	BB	1456	G	C4-C5-C6	5.06	121.84	118.80
57	BB	1588	G	C1'-O4'-C4'	-5.06	105.85	109.90
57	BB	2040	G	N3-C2-N2	5.06	123.44	119.90
57	BB	2080	A	C3'-C2'-C1'	5.06	105.55	101.50
57	BB	2278	A	C6-C5-N7	5.06	135.84	132.30
57	BB	2515	C	O4'-C1'-N1	5.06	112.25	108.20
57	BB	2887	A	C5-N7-C8	5.06	106.43	103.90
13	AB	62	ARG	NE-CZ-NH1	-5.06	117.77	120.30
21	AA	258	G	C3'-C2'-C1'	-5.06	97.45	101.50
21	AA	1524	C	C4-C5-C6	5.06	119.93	117.40
52	BD	15	PHE	CG-CD2-CE2	-5.06	115.24	120.80
57	BB	513	A	C5'-C4'-O4'	5.06	115.17	109.10
57	BB	781	A	N1-C2-N3	-5.06	126.77	129.30
57	BB	791	C	P-O5'-C5'	-5.06	112.81	120.90
57	BB	1111	A	C8-N9-C4	5.06	107.82	105.80
57	BB	1189	A	N9-C4-C5	-5.06	103.78	105.80
57	BB	1730	C	N3-C2-O2	-5.06	118.36	121.90
57	BB	1805	A	C6-N1-C2	-5.06	115.56	118.60
57	BB	1945	G	C4-C5-N7	5.06	112.82	110.80
57	BB	2058	A	N1-C2-N3	-5.06	126.77	129.30
57	BB	2069	G	N1-C2-N2	-5.06	111.65	116.20
57	BB	2225	A	P-O3'-C3'	5.06	125.77	119.70
57	BB	2354	C	C1'-O4'-C4'	5.06	113.95	109.90
57	BB	2392	A	C5-C6-N1	-5.06	115.17	117.70
57	BB	2636	C	C4-C5-C6	5.06	119.93	117.40
21	AA	196	A	C4-C5-C6	5.06	119.53	117.00
21	AA	989	U	N1-C2-O2	-5.06	119.26	122.80
21	AA	1075	U	C6-N1-C1'	5.06	128.28	121.20
57	BB	1203	U	C5-C6-N1	5.06	125.23	122.70
57	BB	2855	C	C5'-C4'-C3'	-5.06	107.91	116.00
21	AA	37	U	C5-C4-O4	5.05	128.93	125.90
21	AA	170	U	C5-C6-N1	5.05	125.23	122.70
21	AA	328	C	C3'-C2'-C1'	5.05	105.54	101.50
21	AA	387	U	C6-N1-C2	-5.05	117.97	121.00
21	AA	1165	U	C6-N1-C2	-5.05	117.97	121.00
21	AA	1225	A	O4'-C4'-C3'	-5.05	98.95	104.00
21	AA	1315	U	C5-C6-N1	5.05	125.23	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	B4	22	VAL	N-CA-C	-5.05	97.35	111.00
57	BB	438	G	O4'-C1'-N9	5.05	112.24	108.20
57	BB	562	U	N3-C4-O4	5.05	122.94	119.40
57	BB	741	U	C5-C4-O4	-5.05	122.87	125.90
57	BB	998	C	C4'-C3'-C2'	-5.05	97.55	102.60
57	BB	1155	A	C5-N7-C8	5.05	106.43	103.90
57	BB	1398	C	C6-N1-C2	5.05	122.32	120.30
57	BB	1446	C	N3-C2-O2	-5.05	118.36	121.90
57	BB	1680	U	N3-C4-C5	-5.05	111.57	114.60
57	BB	1770	G	P-O3'-C3'	-5.05	113.64	119.70
57	BB	1840	G	N7-C8-N9	5.05	115.63	113.10
57	BB	2056	G	C6-C5-N7	-5.05	127.37	130.40
57	BB	2077	A	C4-C5-C6	5.05	119.53	117.00
57	BB	2296	U	N1-C2-O2	-5.05	119.26	122.80
21	AA	462	G	C5-N7-C8	5.05	106.83	104.30
21	AA	990	C	C3'-C2'-C1'	-5.05	97.46	101.50
26	AV	67	C	C4'-C3'-C2'	-5.05	97.55	102.60
57	BB	670	A	C2'-C3'-O3'	5.05	121.78	113.70
57	BB	1285	A	C5'-C4'-O4'	5.05	115.16	109.10
57	BB	2428	G	N3-C4-N9	5.05	129.03	126.00
21	AA	663	A	N7-C8-N9	-5.05	111.27	113.80
21	AA	708	C	P-O5'-C5'	-5.05	112.82	120.90
21	AA	976	G	P-O3'-C3'	-5.05	113.64	119.70
57	BB	243	U	C2-N3-C4	5.05	130.03	127.00
57	BB	668	A	C5'-C4'-C3'	-5.05	107.92	116.00
57	BB	830	G	N3-C2-N2	-5.05	116.36	119.90
57	BB	2316	G	C8-N9-C4	5.05	108.42	106.40
57	BB	2666	C	N1-C2-O2	5.05	121.93	118.90
3	AL	88	ASP	CB-CG-OD1	-5.05	113.76	118.30
21	AA	641	U	C5-C6-N1	5.05	125.22	122.70
21	AA	676	A	C5-N7-C8	-5.05	101.38	103.90
21	AA	841	C	C6-N1-C2	-5.05	118.28	120.30
21	AA	1216	A	C5-C6-N1	-5.05	115.17	117.70
21	AA	1230	C	C6-N1-C1'	5.05	126.86	120.80
57	BB	982	C	C6-N1-C2	5.05	122.32	120.30
57	BB	998	C	N1-C2-N3	5.05	122.73	119.20
57	BB	1039	A	O5'-C5'-C4'	-5.05	102.11	111.70
57	BB	1192	G	C2-N3-C4	5.05	114.42	111.90
57	BB	1238	G	N1-C2-N3	-5.05	120.87	123.90
57	BB	1466	U	C6-N1-C2	-5.05	117.97	121.00
57	BB	1546	G	N3-C4-C5	5.05	131.12	128.60
57	BB	1797	G	C5-C6-N1	5.05	114.03	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2126	A	O4'-C1'-C2'	-5.05	100.75	105.80
57	BB	2720	U	C4'-C3'-C2'	-5.05	97.55	102.60
57	BB	2723	C	C4-C5-C6	-5.05	114.88	117.40
58	BA	42	C	C6-N1-C2	-5.05	118.28	120.30
20	AI	106	ASP	CB-CG-OD2	-5.05	113.76	118.30
21	AA	1054	C	N1-C1'-C2'	5.05	120.56	114.00
26	AV	44	A	O4'-C1'-N9	5.05	112.24	108.20
57	BB	305	C	N1-C2-O2	-5.05	115.87	118.90
57	BB	338	G	C6-N1-C2	-5.05	122.07	125.10
57	BB	868	U	C4-C5-C6	5.05	122.73	119.70
57	BB	1448	G	N3-C4-N9	-5.05	122.97	126.00
57	BB	1522	A	C5-C6-N6	-5.05	119.66	123.70
57	BB	2116	G	P-O3'-C3'	5.05	125.76	119.70
57	BB	2170	A	O5'-P-OP2	-5.05	101.16	105.70
57	BB	2326	C	P-O5'-C5'	-5.05	112.82	120.90
21	AA	680	C	P-O3'-C3'	-5.05	113.64	119.70
26	AV	70	G	N3-C4-C5	-5.05	126.08	128.60
27	B5	37	LYS	CA-CB-CG	5.05	124.50	113.40
40	BU	23	LYS	N-CA-CB	5.05	119.68	110.60
57	BB	210	C	C5-C6-N1	5.05	123.52	121.00
57	BB	627	A	C5-C6-N1	-5.05	115.18	117.70
57	BB	628	G	C2-N3-C4	5.05	114.42	111.90
57	BB	1041	G	C4-C5-C6	5.05	121.83	118.80
57	BB	1294	U	C5-C4-O4	-5.05	122.87	125.90
57	BB	1531	C	C1'-O4'-C4'	5.05	113.94	109.90
57	BB	2044	C	P-O5'-C5'	-5.05	112.83	120.90
21	AA	839	C	P-O3'-C3'	-5.04	113.64	119.70
57	BB	466	A	N9-C4-C5	5.04	107.82	105.80
57	BB	1024	G	C5-C6-O6	5.04	131.63	128.60
57	BB	1232	G	C4-N9-C1'	5.04	133.06	126.50
57	BB	2666	C	N3-C4-C5	-5.04	119.88	121.90
21	AA	28	A	C5'-C4'-C3'	-5.04	107.93	116.00
21	AA	69	G	C5-C6-N1	-5.04	108.98	111.50
21	AA	328	C	O4'-C1'-C2'	-5.04	100.76	105.80
21	AA	450	G	C4-C5-C6	5.04	121.83	118.80
21	AA	647	C	N3-C4-C5	-5.04	119.88	121.90
21	AA	839	C	O4'-C1'-N1	5.04	112.23	108.20
21	AA	1018	G	C4'-C3'-C2'	-5.04	97.56	102.60
21	AA	1109	C	N3-C4-C5	-5.04	119.88	121.90
21	AA	1206	G	O5'-P-OP2	-5.04	101.16	105.70
21	AA	1225	A	C2-N3-C4	5.04	113.12	110.60
21	AA	1443	C	N3-C4-C5	-5.04	119.88	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AW	43	C	C4-C5-C6	5.04	119.92	117.40
23	AW	75	C	C4-C5-C6	5.04	119.92	117.40
26	AV	35	A	C6-N1-C2	5.04	121.63	118.60
26	AV	63	G	N1-C2-N3	-5.04	120.87	123.90
32	BM	117	PHE	CD1-CG-CD2	-5.04	111.74	118.30
57	BB	405	U	C5'-C4'-O4'	5.04	115.15	109.10
57	BB	831	G	N9-C4-C5	5.04	107.42	105.40
57	BB	832	U	N3-C2-O2	5.04	125.73	122.20
57	BB	1278	C	O3'-P-O5'	-5.04	94.42	104.00
57	BB	1929	G	C5-N7-C8	-5.04	101.78	104.30
57	BB	2778	A	C6-N1-C2	-5.04	115.57	118.60
12	AU	44	ARG	NE-CZ-NH1	5.04	122.82	120.30
21	AA	252	U	O4'-C1'-N1	5.04	112.23	108.20
21	AA	505	G	N1-C6-O6	5.04	122.92	119.90
21	AA	1112	C	N1-C2-O2	5.04	121.92	118.90
21	AA	1152	A	C4-C5-N7	5.04	113.22	110.70
21	AA	1164	G	P-O3'-C3'	-5.04	113.65	119.70
21	AA	1328	C	N1-C2-O2	-5.04	115.88	118.90
26	AV	61	C	O4'-C1'-N1	5.04	112.23	108.20
26	AV	72	A	C6-C5-N7	-5.04	128.77	132.30
29	BJ	27	ARG	NE-CZ-NH2	-5.04	117.78	120.30
38	BS	8	ARG	CB-CA-C	-5.04	100.32	110.40
57	BB	35	G	C6-N1-C2	5.04	128.12	125.10
57	BB	60	G	P-O3'-C3'	5.04	125.75	119.70
57	BB	135	U	OP1-P-OP2	-5.04	112.04	119.60
57	BB	291	G	O4'-C4'-C3'	-5.04	98.96	104.00
57	BB	552	U	OP1-P-O3'	5.04	116.29	105.20
57	BB	716	A	C4'-C3'-C2'	-5.04	97.56	102.60
57	BB	987	C	O4'-C1'-N1	5.04	112.23	108.20
57	BB	1177	G	P-O5'-C5'	5.04	128.97	120.90
57	BB	1408	G	C5-C6-N1	-5.04	108.98	111.50
57	BB	1440	U	N1-C2-O2	-5.04	119.27	122.80
57	BB	1443	U	O4'-C4'-C3'	-5.04	98.96	104.00
57	BB	1523	U	N3-C2-O2	5.04	125.73	122.20
57	BB	1857	G	N1-C2-N2	-5.04	111.66	116.20
57	BB	1967	C	C4'-C3'-C2'	-5.04	97.56	102.60
57	BB	2231	U	OP1-P-O3'	5.04	116.29	105.20
57	BB	2641	G	C6-C5-N7	-5.04	127.38	130.40
57	BB	2673	G	O4'-C1'-N9	5.04	112.23	108.20
57	BB	2745	C	C5'-C4'-C3'	-5.04	107.94	116.00
21	AA	493	A	C1'-O4'-C4'	-5.04	105.87	109.90
21	AA	574	A	C6-C5-N7	-5.04	128.77	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	1136	C	C5-C6-N1	5.04	123.52	121.00
21	AA	1203	C	O4'-C1'-C2'	-5.04	100.76	105.80
55	BG	43	LYS	N-CA-CB	5.04	119.67	110.60
57	BB	26	G	C5-N7-C8	5.04	106.82	104.30
57	BB	424	G	N3-C2-N2	5.04	123.43	119.90
57	BB	599	A	C5-C6-N1	-5.04	115.18	117.70
57	BB	859	G	C6-C5-N7	-5.04	127.38	130.40
57	BB	1011	G	C1'-O4'-C4'	5.04	113.93	109.90
57	BB	1156	A	OP1-P-OP2	-5.04	112.04	119.60
57	BB	1367	A	C6-N1-C2	-5.04	115.58	118.60
57	BB	1456	G	N1-C2-N3	-5.04	120.88	123.90
57	BB	1490	A	N3-C4-N9	5.04	131.43	127.40
57	BB	1804	C	N1-C2-O2	5.04	121.92	118.90
57	BB	1875	G	C4-C5-C6	5.04	121.82	118.80
57	BB	2542	A	C5-C6-N1	-5.04	115.18	117.70
57	BB	2841	C	C2-N3-C4	5.04	122.42	119.90
21	AA	356	A	C5-N7-C8	5.04	106.42	103.90
21	AA	1048	G	C6-N1-C2	5.04	128.12	125.10
22	AY	43	G	C5-N7-C8	-5.04	101.78	104.30
53	BE	19	PHE	CA-C-O	5.04	130.68	120.10
57	BB	186	G	N3-C4-C5	-5.04	126.08	128.60
57	BB	293	U	C2-N1-C1'	-5.04	111.65	117.70
57	BB	484	C	N3-C4-C5	-5.04	119.89	121.90
57	BB	913	U	O4'-C1'-N1	5.04	112.23	108.20
57	BB	942	G	N7-C8-N9	5.04	115.62	113.10
57	BB	1357	C	N3-C4-N4	5.04	121.53	118.00
57	BB	1696	G	N3-C4-N9	-5.04	122.98	126.00
57	BB	2036	C	C6-N1-C2	-5.04	118.28	120.30
57	BB	2377	A	C4-C5-N7	-5.04	108.18	110.70
57	BB	2529	G	N9-C4-C5	-5.04	103.39	105.40
57	BB	2613	U	O4'-C1'-N1	5.04	112.23	108.20
57	BB	2644	G	C1'-O4'-C4'	5.04	113.93	109.90
57	BB	2749	A	N7-C8-N9	-5.04	111.28	113.80
57	BB	2749	A	OP1-P-OP2	-5.04	112.04	119.60
21	AA	7	A	C4-C5-N7	5.04	113.22	110.70
21	AA	53	A	C5-C6-N6	-5.04	119.67	123.70
21	AA	82	G	N1-C2-N2	5.04	120.73	116.20
21	AA	431	A	C3'-C2'-C1'	-5.04	97.47	101.50
21	AA	1271	A	N9-C1'-C2'	-5.04	106.46	112.00
21	AA	1485	U	C3'-C2'-C1'	-5.04	97.47	101.50
22	AY	63	C	C5-C4-N4	5.04	123.73	120.20
33	BN	108	ALA	N-CA-CB	5.04	117.15	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	162	U	C6-N1-C2	5.04	124.02	121.00
57	BB	354	A	N9-C4-C5	5.04	107.81	105.80
57	BB	1641	A	C5-N7-C8	5.04	106.42	103.90
57	BB	2693	G	C4-N9-C1'	-5.04	119.95	126.50
5	AN	32	ASP	CB-CG-OD2	-5.04	113.77	118.30
21	AA	76	G	C6-C5-N7	-5.04	127.38	130.40
21	AA	243	A	C1'-O4'-C4'	5.04	113.93	109.90
21	AA	297	G	N9-C4-C5	5.04	107.41	105.40
21	AA	799	G	C5-N7-C8	5.04	106.82	104.30
21	AA	1517	G	C5-C6-O6	-5.04	125.58	128.60
26	AV	2	G	C6-C5-N7	-5.04	127.38	130.40
57	BB	26	G	N3-C4-C5	-5.04	126.08	128.60
57	BB	548	G	C5-N7-C8	-5.04	101.78	104.30
57	BB	892	A	C5'-C4'-O4'	5.04	115.14	109.10
57	BB	1020	A	C5-C6-N1	-5.04	115.18	117.70
57	BB	1039	A	C6-C5-N7	-5.04	128.78	132.30
57	BB	1166	G	N7-C8-N9	-5.04	110.58	113.10
57	BB	1493	C	OP1-P-OP2	-5.04	112.05	119.60
57	BB	1551	A	P-O3'-C3'	5.04	125.74	119.70
57	BB	2086	U	C6-N1-C1'	-5.04	114.15	121.20
57	BB	2436	G	C8-N9-C4	-5.04	104.39	106.40
57	BB	2711	A	C5-N7-C8	5.04	106.42	103.90
57	BB	2740	A	C5'-C4'-O4'	5.04	115.14	109.10
57	BB	2807	U	C5'-C4'-O4'	5.04	115.14	109.10
58	BA	48	U	N1-C1'-C2'	-5.04	106.46	112.00
4	AM	103	THR	N-CA-CB	5.03	119.86	110.30
6	AO	16	ARG	NE-CZ-NH2	-5.03	117.78	120.30
8	AQ	10	ARG	CB-CA-C	-5.03	100.33	110.40
21	AA	469	C	C5-C6-N1	5.03	123.52	121.00
21	AA	691	G	N1-C2-N3	-5.03	120.88	123.90
21	AA	701	U	C2-N3-C4	-5.03	123.98	127.00
21	AA	807	A	C4-C5-C6	5.03	119.52	117.00
21	AA	866	C	O4'-C4'-C3'	-5.03	98.97	104.00
21	AA	867	G	C5-C6-O6	-5.03	125.58	128.60
21	AA	1517	G	O4'-C1'-N9	5.03	112.23	108.20
26	AV	51	C	C2-N1-C1'	5.03	124.34	118.80
57	BB	649	G	C6-N1-C2	5.03	128.12	125.10
57	BB	1189	A	C4'-C3'-C2'	-5.03	97.57	102.60
57	BB	1271	G	C4-C5-C6	5.03	121.82	118.80
57	BB	1381	G	C2-N3-C4	5.03	114.42	111.90
57	BB	1597	A	O4'-C1'-N9	5.03	112.23	108.20
57	BB	1656	C	N3-C4-C5	-5.03	119.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1681	G	P-O3'-C3'	-5.03	113.66	119.70
57	BB	2056	G	C8-N9-C4	5.03	108.41	106.40
57	BB	2509	G	N7-C8-N9	-5.03	110.58	113.10
57	BB	2800	A	P-O3'-C3'	-5.03	113.66	119.70
58	BA	40	U	O4'-C4'-C3'	5.03	110.13	106.10
21	AA	717	U	C5-C6-N1	5.03	125.22	122.70
21	AA	1134	G	N3-C4-N9	-5.03	122.98	126.00
21	AA	1231	G	C4-C5-C6	5.03	121.82	118.80
21	AA	1313	U	O4'-C4'-C3'	-5.03	98.97	104.00
21	AA	1362	A	O4'-C1'-C2'	-5.03	100.77	105.80
57	BB	43	G	O4'-C1'-N9	5.03	112.23	108.20
57	BB	200	U	C5-C6-N1	5.03	125.22	122.70
57	BB	535	G	O4'-C1'-N9	5.03	112.23	108.20
57	BB	1108	U	C4-C5-C6	-5.03	116.68	119.70
57	BB	1677	A	C4-C5-N7	-5.03	108.18	110.70
57	BB	1767	G	O4'-C4'-C3'	-5.03	98.97	104.00
57	BB	2447	G	C3'-C2'-C1'	-5.03	97.47	101.50
21	AA	44	A	N1-C6-N6	5.03	121.62	118.60
21	AA	534	U	C5-C4-O4	-5.03	122.88	125.90
21	AA	731	G	N1-C2-N3	-5.03	120.88	123.90
21	AA	887	G	N1-C2-N3	-5.03	120.88	123.90
35	BP	38	ARG	NH1-CZ-NH2	5.03	124.93	119.40
57	BB	3	U	O4'-C1'-C2'	5.03	112.13	107.60
57	BB	17	G	N3-C2-N2	5.03	123.42	119.90
57	BB	102	U	C2-N3-C4	5.03	130.02	127.00
57	BB	145	C	N3-C4-N4	5.03	121.52	118.00
57	BB	310	A	C4-C5-N7	-5.03	108.19	110.70
57	BB	2070	A	C3'-C2'-C1'	-5.03	97.48	101.50
57	BB	2793	C	C5-C6-N1	5.03	123.52	121.00
57	BB	2881	U	C5-C4-O4	5.03	128.92	125.90
21	AA	647	C	C2-N3-C4	5.03	122.41	119.90
21	AA	721	G	C5-N7-C8	5.03	106.81	104.30
22	AY	73	A	O5'-P-OP1	5.03	116.73	110.70
36	BQ	83	LYS	CA-CB-CG	5.03	124.46	113.40
53	BE	41	GLN	N-CA-CB	5.03	119.65	110.60
57	BB	1050	A	C6-C5-N7	-5.03	128.78	132.30
57	BB	1107	G	N9-C4-C5	5.03	107.41	105.40
57	BB	2733	A	C5'-C4'-O4'	5.03	115.13	109.10
10	AS	60	PHE	CB-CG-CD2	5.03	124.32	120.80
21	AA	232	G	C5'-C4'-C3'	-5.03	107.96	116.00
21	AA	246	A	N1-C2-N3	5.03	131.81	129.30
21	AA	271	C	N3-C4-C5	-5.03	119.89	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	730	G	O4'-C1'-N9	5.03	112.22	108.20
21	AA	1034	G	C5-C6-N1	-5.03	108.99	111.50
21	AA	1317	C	N3-C4-C5	-5.03	119.89	121.90
23	AW	73	A	C6-N1-C2	5.03	121.62	118.60
54	BF	29	ARG	NE-CZ-NH2	5.03	122.81	120.30
57	BB	967	U	N1-C1'-C2'	-5.03	106.47	112.00
57	BB	1137	G	C5-N7-C8	-5.03	101.79	104.30
57	BB	1416	G	N3-C4-C5	5.03	131.11	128.60
57	BB	1623	G	C2-N3-C4	5.03	114.41	111.90
57	BB	2677	G	C2-N3-C4	-5.03	109.39	111.90
21	AA	502	A	N1-C2-N3	5.03	131.81	129.30
21	AA	770	C	N3-C4-N4	5.03	121.52	118.00
21	AA	841	C	C6-N1-C1'	-5.03	114.77	120.80
21	AA	1033	G	P-O5'-C5'	5.03	128.94	120.90
21	AA	1181	G	N3-C4-N9	5.03	129.01	126.00
52	BD	15	PHE	CB-CG-CD2	5.03	124.32	120.80
57	BB	57	C	C2-N3-C4	5.03	122.41	119.90
57	BB	80	G	N3-C4-C5	5.03	131.11	128.60
57	BB	87	U	C2-N3-C4	-5.03	123.98	127.00
57	BB	118	A	O4'-C1'-N9	5.03	112.22	108.20
57	BB	143	C	P-O5'-C5'	5.03	128.94	120.90
57	BB	421	C	O3'-P-O5'	-5.03	94.45	104.00
57	BB	749	A	P-O3'-C3'	5.03	125.73	119.70
57	BB	924	G	C3'-C2'-C1'	-5.03	97.48	101.50
57	BB	1136	G	C6-C5-N7	-5.03	127.39	130.40
57	BB	1317	G	C5'-C4'-C3'	5.03	124.04	116.00
57	BB	1365	A	C5-C6-N6	-5.03	119.68	123.70
57	BB	1756	G	C4-C5-N7	-5.03	108.79	110.80
57	BB	1902	C	OP1-P-OP2	-5.03	112.06	119.60
57	BB	1914	C	C6-N1-C1'	5.03	126.83	120.80
57	BB	1918	A	N1-C6-N6	5.03	121.62	118.60
57	BB	2061	G	C6-C5-N7	-5.03	127.39	130.40
57	BB	2200	C	C4-C5-C6	5.03	119.91	117.40
57	BB	2246	G	O4'-C1'-N9	5.03	112.22	108.20
57	BB	2343	U	C6-N1-C2	5.03	124.02	121.00
57	BB	2487	G	N3-C4-C5	-5.03	126.09	128.60
57	BB	2625	G	C6-N1-C2	5.03	128.12	125.10
57	BB	2780	G	C5-C6-O6	-5.03	125.58	128.60
58	BA	111	U	OP1-P-OP2	-5.03	112.06	119.60
10	AS	59	VAL	CA-CB-CG2	-5.02	103.36	110.90
21	AA	594	U	O4'-C1'-N1	5.02	112.22	108.20
21	AA	1328	C	C5-C6-N1	-5.02	118.49	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	BY	29	ARG	CG-CD-NE	-5.02	101.25	111.80
57	BB	82	U	N3-C4-O4	5.02	122.92	119.40
57	BB	937	C	C5-C4-N4	-5.02	116.68	120.20
57	BB	2126	A	C5'-C4'-O4'	5.02	115.13	109.10
57	BB	2312	U	O5'-C5'-C4'	-5.02	102.16	111.70
57	BB	2366	A	N1-C6-N6	5.02	121.61	118.60
21	AA	228	A	C5-N7-C8	5.02	106.41	103.90
21	AA	462	G	C8-N9-C4	5.02	108.41	106.40
21	AA	784	A	C4'-C3'-C2'	-5.02	97.58	102.60
21	AA	842	U	OP1-P-OP2	-5.02	112.07	119.60
21	AA	1054	C	C2-N3-C4	5.02	122.41	119.90
21	AA	1292	G	N1-C6-O6	5.02	122.91	119.90
21	AA	1311	A	O4'-C1'-N9	5.02	112.22	108.20
21	AA	1458	G	C6-N1-C2	5.02	128.11	125.10
22	AY	24	G	C4'-C3'-C2'	-5.02	97.58	102.60
23	AW	3	C	P-O3'-C3'	-5.02	113.67	119.70
23	AW	9	A	N7-C8-N9	5.02	116.31	113.80
57	BB	2	G	C8-N9-C1'	5.02	133.53	127.00
57	BB	278	A	OP2-P-O3'	5.02	116.25	105.20
57	BB	517	C	N1-C2-N3	-5.02	115.68	119.20
57	BB	658	U	O4'-C4'-C3'	-5.02	98.98	104.00
57	BB	1347	A	C4-C5-C6	5.02	119.51	117.00
57	BB	1492	G	N1-C6-O6	5.02	122.91	119.90
57	BB	1650	A	N9-C4-C5	5.02	107.81	105.80
57	BB	1863	G	C4-C5-C6	5.02	121.81	118.80
57	BB	1950	G	N1-C2-N3	-5.02	120.89	123.90
57	BB	2410	G	N3-C4-N9	5.02	129.01	126.00
57	BB	2516	A	C4'-C3'-C2'	-5.02	97.58	102.60
58	BA	24	G	C5-C6-O6	-5.02	125.59	128.60
21	AA	807	A	N3-C4-C5	5.02	130.31	126.80
21	AA	1248	A	O4'-C1'-C2'	5.02	112.12	107.60
25	AZ	344	PRO	N-CA-CB	5.02	109.33	103.30
57	BB	113	U	C3'-C2'-C1'	-5.02	97.48	101.50
57	BB	609	A	O4'-C1'-N9	5.02	112.22	108.20
57	BB	843	G	C6-N1-C2	5.02	128.11	125.10
57	BB	1182	G	OP1-P-OP2	-5.02	112.07	119.60
57	BB	1198	U	C4-C5-C6	-5.02	116.69	119.70
57	BB	2328	A	C5-C6-N1	-5.02	115.19	117.70
57	BB	2639	A	N1-C2-N3	-5.02	126.79	129.30
57	BB	2861	U	C5-C4-O4	-5.02	122.89	125.90
2	AK	101	ALA	N-CA-CB	5.02	117.13	110.10
16	AE	55	VAL	CA-C-O	-5.02	109.56	120.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	518	C	P-O3'-C3'	5.02	125.72	119.70
21	AA	730	G	N3-C2-N2	5.02	123.41	119.90
21	AA	813	U	C6-N1-C2	5.02	124.01	121.00
21	AA	961	U	C5-C4-O4	-5.02	122.89	125.90
21	AA	1007	U	C4-C5-C6	-5.02	116.69	119.70
26	AV	50	U	N3-C2-O2	5.02	125.71	122.20
33	BN	37	THR	CA-CB-CG2	-5.02	105.37	112.40
40	BU	30	SER	N-CA-CB	5.02	118.03	110.50
57	BB	65	U	C4'-C3'-C2'	-5.02	97.58	102.60
57	BB	190	A	C6-N1-C2	-5.02	115.59	118.60
57	BB	905	A	C3'-C2'-C1'	-5.02	97.48	101.50
57	BB	1088	A	C4-C5-N7	-5.02	108.19	110.70
57	BB	1292	G	N1-C6-O6	5.02	122.91	119.90
57	BB	1294	U	N1-C2-N3	-5.02	111.89	114.90
57	BB	1532	A	C5-C6-N6	-5.02	119.69	123.70
57	BB	1662	U	C5-C6-N1	5.02	125.21	122.70
57	BB	2843	G	C4-C5-N7	5.02	112.81	110.80
21	AA	749	A	N7-C8-N9	-5.02	111.29	113.80
21	AA	828	U	P-O3'-C3'	5.02	125.72	119.70
21	AA	967	C	N3-C4-C5	-5.02	119.89	121.90
21	AA	1247	U	N1-C1'-C2'	-5.02	106.48	112.00
21	AA	1449	C	O4'-C1'-C2'	5.02	112.12	107.60
21	AA	1510	C	N1-C2-N3	-5.02	115.69	119.20
57	BB	179	C	P-O5'-C5'	-5.02	112.87	120.90
57	BB	263	G	C8-N9-C1'	5.02	133.52	127.00
57	BB	438	G	N1-C6-O6	5.02	122.91	119.90
57	BB	927	A	C5-N7-C8	5.02	106.41	103.90
57	BB	1332	G	N7-C8-N9	-5.02	110.59	113.10
57	BB	1343	G	C5-C6-N1	-5.02	108.99	111.50
57	BB	1637	A	P-O5'-C5'	-5.02	112.87	120.90
57	BB	1954	G	C1'-O4'-C4'	-5.02	105.89	109.90
57	BB	2391	G	C4-C5-C6	5.02	121.81	118.80
57	BB	2634	A	N9-C1'-C2'	-5.02	106.48	112.00
57	BB	2738	A	C5-C6-N1	-5.02	115.19	117.70
58	BA	107	G	C6-C5-N7	-5.02	127.39	130.40
21	AA	432	A	N3-C4-C5	-5.02	123.29	126.80
21	AA	1462	C	N1-C2-O2	5.02	121.91	118.90
26	AV	38	A	P-O5'-C5'	5.02	128.93	120.90
39	BT	39	THR	CA-CB-CG2	-5.02	105.38	112.40
57	BB	978	G	C4-N9-C1'	-5.02	119.98	126.50
57	BB	1575	C	P-O3'-C3'	-5.02	113.68	119.70
57	BB	1615	C	N1-C2-O2	-5.02	115.89	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2797	U	N3-C4-C5	-5.02	111.59	114.60
57	BB	2874	C	C4-C5-C6	5.02	119.91	117.40
58	BA	30	C	C2-N1-C1'	5.02	124.32	118.80
58	BA	98	G	C4-C5-N7	-5.02	108.79	110.80
21	AA	11	G	O4'-C1'-N9	5.01	112.21	108.20
21	AA	95	C	C1'-O4'-C4'	5.01	113.91	109.90
21	AA	364	A	C8-N9-C1'	5.01	136.72	127.70
21	AA	415	A	C5-N7-C8	5.01	106.41	103.90
21	AA	541	G	C4-C5-N7	5.01	112.81	110.80
21	AA	574	A	O4'-C1'-N9	5.01	112.21	108.20
21	AA	676	A	N1-C2-N3	-5.01	126.79	129.30
21	AA	1273	C	P-O5'-C5'	5.01	128.93	120.90
21	AA	1448	C	N3-C4-C5	-5.01	119.89	121.90
22	AY	50	U	O5'-P-OP2	5.01	116.72	110.70
23	AW	52	G	C2-N3-C4	5.01	114.41	111.90
57	BB	507	A	O4'-C1'-C2'	5.01	112.11	107.60
57	BB	656	G	N3-C4-C5	-5.01	126.09	128.60
57	BB	710	U	O4'-C1'-C2'	-5.01	100.79	105.80
57	BB	988	A	C5-C6-N1	-5.01	115.19	117.70
57	BB	1374	G	C4-C5-C6	5.01	121.81	118.80
57	BB	1904	G	N1-C6-O6	5.01	122.91	119.90
57	BB	2450	A	N1-C6-N6	5.01	121.61	118.60
57	BB	2535	G	C4-C5-N7	-5.01	108.79	110.80
57	BB	2733	A	N1-C2-N3	-5.01	126.79	129.30
21	AA	1240	U	O4'-C1'-C2'	-5.01	100.79	105.80
57	BB	805	G	C4-C5-N7	5.01	112.81	110.80
57	BB	1600	C	C3'-C2'-C1'	-5.01	97.49	101.50
57	BB	2739	U	O4'-C1'-N1	5.01	112.21	108.20
57	BB	2828	G	C8-N9-C4	5.01	108.41	106.40
58	BA	13	G	P-O3'-C3'	-5.01	113.68	119.70
21	AA	195	A	C2-N3-C4	-5.01	108.09	110.60
21	AA	769	G	C5-C6-N1	-5.01	109.00	111.50
21	AA	773	G	N3-C4-C5	-5.01	126.09	128.60
21	AA	877	G	N7-C8-N9	5.01	115.61	113.10
21	AA	1458	G	C1'-O4'-C4'	5.01	113.91	109.90
26	AV	42	G	C5-C6-O6	-5.01	125.59	128.60
28	BI	37	PHE	CB-CG-CD1	-5.01	117.29	120.80
53	BE	143	LEU	N-CA-CB	5.01	120.42	110.40
56	BH	80	ILE	CA-CB-CG2	-5.01	100.88	110.90
57	BB	203	A	C5-C6-N1	-5.01	115.19	117.70
57	BB	243	U	C6-N1-C2	-5.01	117.99	121.00
57	BB	1100	C	O4'-C1'-N1	5.01	112.21	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	1238	G	P-O3'-C3'	-5.01	113.69	119.70
21	AA	125	U	C5-C4-O4	5.01	128.91	125.90
21	AA	172	A	C3'-C2'-C1'	5.01	105.51	101.50
21	AA	401	C	O4'-C4'-C3'	-5.01	98.99	104.00
21	AA	406	G	N3-C2-N2	5.01	123.41	119.90
21	AA	597	G	O5'-C5'-C4'	-5.01	102.18	111.70
21	AA	668	G	C8-N9-C4	-5.01	104.40	106.40
21	AA	751	U	P-O3'-C3'	5.01	125.71	119.70
21	AA	1091	U	C1'-O4'-C4'	5.01	113.91	109.90
21	AA	1263	C	C3'-C2'-C1'	5.01	105.51	101.50
21	AA	1305	G	C4-C5-N7	5.01	112.80	110.80
52	BD	126	ASN	N-CA-CB	5.01	119.61	110.60
57	BB	86	G	P-O3'-C3'	-5.01	113.69	119.70
57	BB	507	A	OP1-P-O3'	5.01	116.22	105.20
57	BB	564	C	N1-C2-N3	5.01	122.71	119.20
57	BB	629	G	C8-N9-C1'	5.01	133.51	127.00
57	BB	765	C	C5-C6-N1	5.01	123.50	121.00
57	BB	1125	G	C5-N7-C8	5.01	106.81	104.30
57	BB	1212	G	C5-C6-N1	-5.01	109.00	111.50
57	BB	1566	A	O4'-C1'-C2'	5.01	112.11	107.60
57	BB	1580	A	N1-C2-N3	5.01	131.81	129.30
57	BB	1737	G	OP1-P-OP2	-5.01	112.09	119.60
57	BB	2010	G	N3-C4-C5	-5.01	126.09	128.60
57	BB	2276	G	N1-C2-N3	-5.01	120.89	123.90
57	BB	2686	G	C4-C5-N7	5.01	112.80	110.80
57	BB	2876	G	C8-N9-C1'	5.01	133.51	127.00
21	AA	196	A	C5-C6-N6	-5.01	119.69	123.70
21	AA	1527	U	N1-C2-O2	-5.01	119.29	122.80
32	BM	28	PHE	CB-CG-CD1	5.01	124.31	120.80
57	BB	111	A	C5-N7-C8	5.01	106.40	103.90
57	BB	350	G	C4-C5-C6	5.01	121.81	118.80
57	BB	423	A	C4-C5-C6	5.01	119.50	117.00
57	BB	616	A	N1-C2-N3	5.01	131.80	129.30
57	BB	1104	C	C6-N1-C2	-5.01	118.30	120.30
57	BB	1265	A	N1-C2-N3	5.01	131.80	129.30
57	BB	1527	G	C5-C6-N1	-5.01	109.00	111.50
57	BB	1598	A	N3-C4-C5	-5.01	123.29	126.80
57	BB	1905	C	C1'-O4'-C4'	5.01	113.91	109.90
57	BB	2013	A	P-O3'-C3'	-5.01	113.69	119.70
57	BB	2277	G	N9-C4-C5	-5.01	103.40	105.40
21	AA	29	U	OP2-P-O3'	5.01	116.22	105.20
21	AA	325	A	N9-C4-C5	5.01	107.80	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
21	AA	577	G	N1-C6-O6	5.01	122.90	119.90
21	AA	1230	C	O4'-C4'-C3'	-5.01	98.99	104.00
21	AA	1381	U	C6-N1-C2	-5.01	118.00	121.00
21	AA	1446	A	O4'-C1'-C2'	5.01	112.11	107.60
23	AW	22	G	C4-N9-C1'	5.01	133.01	126.50
23	AW	49	C	OP1-P-OP2	-5.01	112.09	119.60
45	BC	51	ARG	NE-CZ-NH2	-5.01	117.80	120.30
56	BH	104	THR	CB-CA-C	-5.01	98.08	111.60
57	BB	1078	U	OP1-P-O3'	5.01	116.22	105.20
57	BB	1151	A	C4'-C3'-C2'	-5.01	97.59	102.60
57	BB	1271	G	C5-N7-C8	-5.01	101.80	104.30
57	BB	1618	A	N3-C4-C5	-5.01	123.30	126.80
57	BB	2008	C	C2-N3-C4	5.01	122.40	119.90
57	BB	2327	A	OP2-P-O3'	5.01	116.21	105.20
57	BB	2592	G	N3-C4-C5	5.01	131.10	128.60
57	BB	2825	G	C4-N9-C1'	5.01	133.01	126.50
14	AC	166	TRP	CG-CD2-CE3	-5.00	129.40	133.90
21	AA	504	C	C3'-C2'-C1'	5.00	105.50	101.50
21	AA	686	U	C2-N1-C1'	-5.00	111.69	117.70
57	BB	115	C	C4-C5-C6	-5.00	114.90	117.40
57	BB	187	G	C8-N9-C4	-5.00	104.40	106.40
57	BB	408	G	N1-C2-N3	-5.00	120.90	123.90
57	BB	964	C	N1-C2-O2	5.00	121.90	118.90
57	BB	1055	G	C6-N1-C2	-5.00	122.10	125.10
57	BB	1441	G	C5-C6-O6	-5.00	125.60	128.60
57	BB	1619	G	C5-C6-N1	5.00	114.00	111.50
7	AP	50	THR	N-CA-CB	5.00	119.81	110.30
21	AA	293	G	N7-C8-N9	-5.00	110.60	113.10
21	AA	494	G	C4'-C3'-C2'	-5.00	97.60	102.60
21	AA	907	A	C2-N3-C4	-5.00	108.10	110.60
21	AA	1034	G	N1-C2-N3	-5.00	120.90	123.90
21	AA	1049	U	C6-N1-C2	5.00	124.00	121.00
21	AA	1180	A	O4'-C1'-N9	5.00	112.20	108.20
21	AA	1462	C	N3-C4-C5	-5.00	119.90	121.90
48	B1	25	ASN	N-CA-CB	-5.00	101.59	110.60
57	BB	278	A	C5-C6-N6	-5.00	119.70	123.70
57	BB	325	G	OP1-P-OP2	-5.00	112.09	119.60
57	BB	653	U	C2-N3-C4	5.00	130.00	127.00
57	BB	1127	A	C4-C5-C6	5.00	119.50	117.00
57	BB	1908	C	C5-C6-N1	5.00	123.50	121.00
57	BB	2040	G	C5-C6-O6	-5.00	125.60	128.60
57	BB	2215	C	C2-N1-C1'	5.00	124.30	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
57	BB	2647	U	N1-C2-O2	-5.00	119.30	122.80
57	BB	2668	G	C5-N7-C8	5.00	106.80	104.30
57	BB	2768	U	C6-N1-C1'	5.00	128.21	121.20
18	AG	82	SER	N-CA-C	-5.00	97.49	111.00
21	AA	77	A	C2-N3-C4	5.00	113.10	110.60
21	AA	172	A	P-O5'-C5'	5.00	128.90	120.90
21	AA	263	A	O4'-C1'-N9	5.00	112.20	108.20
21	AA	705	G	O4'-C4'-C3'	-5.00	99.00	104.00
21	AA	983	A	C6-N1-C2	5.00	121.60	118.60
21	AA	1184	G	P-O3'-C3'	-5.00	113.70	119.70
21	AA	1296	C	C2-N1-C1'	-5.00	113.30	118.80
22	AY	29	A	O5'-P-OP1	5.00	116.70	110.70
22	AY	51	G	C5-N7-C8	5.00	106.80	104.30
26	AV	6	G	C8-N9-C4	-5.00	104.40	106.40
27	B5	133	PRO	O-C-N	5.00	130.70	122.70
55	BG	82	PHE	CA-CB-CG	-5.00	101.90	113.90
57	BB	338	G	N9-C4-C5	5.00	107.40	105.40
57	BB	598	U	C6-N1-C1'	5.00	128.20	121.20
57	BB	817	C	C4-C5-C6	-5.00	114.90	117.40
57	BB	836	G	N1-C2-N2	5.00	120.70	116.20
57	BB	1083	U	N1-C2-O2	-5.00	119.30	122.80
57	BB	1596	A	N1-C2-N3	-5.00	126.80	129.30
57	BB	1609	A	C5'-C4'-O4'	5.00	115.10	109.10
57	BB	1724	G	N3-C4-N9	5.00	129.00	126.00
57	BB	2349	G	N1-C6-O6	-5.00	116.90	119.90
57	BB	2425	A	P-O5'-C5'	-5.00	112.90	120.90
57	BB	2716	C	N3-C4-C5	-5.00	119.90	121.90

All (4) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	AW	17	C	C1'
23	AW	47	U	C1'
23	AW	70	G	C3'
27	B5	37	LYS	CA

All (2445) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
21	AA	100	G	Sidechain
21	AA	1002	G	Sidechain
21	AA	1004	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	1005	A	Sidechain
21	AA	1007	U	Sidechain
21	AA	101	A	Sidechain
21	AA	1010	U	Sidechain
21	AA	1013	G	Sidechain
21	AA	1014	A	Sidechain
21	AA	1017	U	Sidechain
21	AA	1022	A	Sidechain
21	AA	1024	G	Sidechain
21	AA	1026	G	Sidechain
21	AA	1027	C	Sidechain
21	AA	1028	C	Sidechain
21	AA	103	U	Sidechain
21	AA	1031	C	Sidechain
21	AA	1032	G	Sidechain
21	AA	1033	G	Sidechain
21	AA	1034	G	Sidechain
21	AA	1035	A	Sidechain
21	AA	1040	U	Sidechain
21	AA	1043	G	Sidechain
21	AA	1046	A	Sidechain
21	AA	1047	G	Sidechain
21	AA	1048	G	Sidechain
21	AA	105	G	Sidechain
21	AA	1050	G	Sidechain
21	AA	1051	C	Sidechain
21	AA	1054	C	Sidechain
21	AA	1056	U	Sidechain
21	AA	1057	G	Sidechain
21	AA	1058	G	Sidechain
21	AA	1059	C	Sidechain
21	AA	1060	U	Sidechain
21	AA	1064	G	Sidechain
21	AA	1068	G	Sidechain
21	AA	107	G	Sidechain
21	AA	1071	C	Sidechain
21	AA	1072	G	Sidechain
21	AA	1074	G	Sidechain
21	AA	1076	U	Sidechain
21	AA	1077	G	Sidechain
21	AA	1078	U	Sidechain
21	AA	1079	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	108	G	Sidechain
21	AA	1081	A	Sidechain
21	AA	1082	A	Sidechain
21	AA	1083	U	Sidechain
21	AA	1086	U	Sidechain
21	AA	1088	G	Sidechain
21	AA	1089	G	Sidechain
21	AA	109	A	Sidechain
21	AA	1090	U	Sidechain
21	AA	1091	U	Sidechain
21	AA	1093	A	Sidechain
21	AA	1094	G	Sidechain
21	AA	1097	C	Sidechain
21	AA	1098	C	Sidechain
21	AA	1099	G	Sidechain
21	AA	110	C	Sidechain
21	AA	1101	A	Sidechain
21	AA	1103	C	Sidechain
21	AA	1104	G	Sidechain
21	AA	1105	A	Sidechain
21	AA	1106	G	Sidechain
21	AA	111	G	Sidechain
21	AA	1110	A	Sidechain
21	AA	1116	U	Sidechain
21	AA	1118	U	Sidechain
21	AA	1123	U	Sidechain
21	AA	1126	U	Sidechain
21	AA	1127	G	Sidechain
21	AA	113	G	Sidechain
21	AA	1133	G	Sidechain
21	AA	1134	G	Sidechain
21	AA	1139	G	Sidechain
21	AA	1140	C	Sidechain
21	AA	1142	G	Sidechain
21	AA	1143	G	Sidechain
21	AA	1144	G	Sidechain
21	AA	1146	A	Sidechain
21	AA	1148	U	Sidechain
21	AA	1150	A	Sidechain
21	AA	1151	A	Sidechain
21	AA	1154	G	Sidechain
21	AA	1155	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	1156	G	Sidechain
21	AA	1162	C	Sidechain
21	AA	1166	G	Sidechain
21	AA	1168	U	Sidechain
21	AA	1169	A	Sidechain
21	AA	117	G	Sidechain
21	AA	1170	A	Sidechain
21	AA	1173	U	Sidechain
21	AA	1174	G	Sidechain
21	AA	1178	G	Sidechain
21	AA	1179	A	Sidechain
21	AA	118	U	Sidechain
21	AA	1184	G	Sidechain
21	AA	1185	G	Sidechain
21	AA	1186	G	Sidechain
21	AA	1189	U	Sidechain
21	AA	1190	G	Sidechain
21	AA	1192	C	Sidechain
21	AA	1195	C	Sidechain
21	AA	1199	U	Sidechain
21	AA	12	U	Sidechain
21	AA	120	A	Sidechain
21	AA	1201	A	Sidechain
21	AA	1204	A	Sidechain
21	AA	1205	U	Sidechain
21	AA	1206	G	Sidechain
21	AA	1207	G	Sidechain
21	AA	121	U	Sidechain
21	AA	1210	C	Sidechain
21	AA	1211	U	Sidechain
21	AA	1213	A	Sidechain
21	AA	1214	C	Sidechain
21	AA	1215	G	Sidechain
21	AA	1217	C	Sidechain
21	AA	122	G	Sidechain
21	AA	1220	G	Sidechain
21	AA	1221	G	Sidechain
21	AA	1223	C	Sidechain
21	AA	1224	U	Sidechain
21	AA	1225	A	Sidechain
21	AA	1226	C	Sidechain
21	AA	1227	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	1228	C	Sidechain
21	AA	123	U	Sidechain
21	AA	124	C	Sidechain
21	AA	1241	G	Sidechain
21	AA	1242	G	Sidechain
21	AA	1246	A	Sidechain
21	AA	1247	U	Sidechain
21	AA	125	U	Sidechain
21	AA	1250	A	Sidechain
21	AA	1251	A	Sidechain
21	AA	1253	G	Sidechain
21	AA	1254	A	Sidechain
21	AA	1259	C	Sidechain
21	AA	1260	G	Sidechain
21	AA	1262	C	Sidechain
21	AA	1263	C	Sidechain
21	AA	1264	U	Sidechain
21	AA	1266	G	Sidechain
21	AA	1268	G	Sidechain
21	AA	1272	G	Sidechain
21	AA	1279	G	Sidechain
21	AA	128	G	Sidechain
21	AA	1280	A	Sidechain
21	AA	1282	C	Sidechain
21	AA	1284	C	Sidechain
21	AA	1285	A	Sidechain
21	AA	1286	U	Sidechain
21	AA	1287	A	Sidechain
21	AA	1288	A	Sidechain
21	AA	1290	G	Sidechain
21	AA	1291	U	Sidechain
21	AA	1292	G	Sidechain
21	AA	1297	G	Sidechain
21	AA	1298	U	Sidechain
21	AA	1299	A	Sidechain
21	AA	130	A	Sidechain
21	AA	1302	C	Sidechain
21	AA	1304	G	Sidechain
21	AA	1305	G	Sidechain
21	AA	1306	A	Sidechain
21	AA	1308	U	Sidechain
21	AA	1309	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	131	A	Sidechain
21	AA	1311	A	Sidechain
21	AA	1313	U	Sidechain
21	AA	1316	G	Sidechain
21	AA	1317	C	Sidechain
21	AA	1318	A	Sidechain
21	AA	132	C	Sidechain
21	AA	1323	G	Sidechain
21	AA	1326	U	Sidechain
21	AA	1329	A	Sidechain
21	AA	1331	G	Sidechain
21	AA	1332	A	Sidechain
21	AA	1338	G	Sidechain
21	AA	1339	A	Sidechain
21	AA	1340	A	Sidechain
21	AA	1341	U	Sidechain
21	AA	1342	C	Sidechain
21	AA	1343	G	Sidechain
21	AA	1345	U	Sidechain
21	AA	1346	A	Sidechain
21	AA	1347	G	Sidechain
21	AA	1349	A	Sidechain
21	AA	1351	U	Sidechain
21	AA	1354	U	Sidechain
21	AA	1355	G	Sidechain
21	AA	1356	G	Sidechain
21	AA	1357	A	Sidechain
21	AA	1359	C	Sidechain
21	AA	136	C	Sidechain
21	AA	1361	G	Sidechain
21	AA	1363	A	Sidechain
21	AA	1364	U	Sidechain
21	AA	1365	G	Sidechain
21	AA	1366	C	Sidechain
21	AA	1368	A	Sidechain
21	AA	1371	G	Sidechain
21	AA	1374	A	Sidechain
21	AA	1376	U	Sidechain
21	AA	1377	A	Sidechain
21	AA	138	G	Sidechain
21	AA	1380	U	Sidechain
21	AA	1381	U	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	1382	C	Sidechain
21	AA	1383	C	Sidechain
21	AA	1384	C	Sidechain
21	AA	1385	G	Sidechain
21	AA	1388	C	Sidechain
21	AA	1391	U	Sidechain
21	AA	1392	G	Sidechain
21	AA	1393	U	Sidechain
21	AA	1395	C	Sidechain
21	AA	1397	C	Sidechain
21	AA	1399	C	Sidechain
21	AA	140	U	Sidechain
21	AA	1400	C	Sidechain
21	AA	1401	G	Sidechain
21	AA	1402	C	Sidechain
21	AA	1403	C	Sidechain
21	AA	1404	C	Sidechain
21	AA	1405	G	Sidechain
21	AA	1407	C	Sidechain
21	AA	1409	C	Sidechain
21	AA	1410	A	Sidechain
21	AA	1411	C	Sidechain
21	AA	1412	C	Sidechain
21	AA	1413	A	Sidechain
21	AA	1414	U	Sidechain
21	AA	1415	G	Sidechain
21	AA	1416	G	Sidechain
21	AA	1417	G	Sidechain
21	AA	1418	A	Sidechain
21	AA	142	G	Sidechain
21	AA	1421	G	Sidechain
21	AA	1422	G	Sidechain
21	AA	1426	G	Sidechain
21	AA	1427	C	Sidechain
21	AA	1428	A	Sidechain
21	AA	1429	A	Sidechain
21	AA	1431	A	Sidechain
21	AA	1433	A	Sidechain
21	AA	1434	A	Sidechain
21	AA	1435	G	Sidechain
21	AA	1437	A	Sidechain
21	AA	1438	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	1440	U	Sidechain
21	AA	1442	G	Sidechain
21	AA	1446	A	Sidechain
21	AA	1447	A	Sidechain
21	AA	1449	C	Sidechain
21	AA	1453	G	Sidechain
21	AA	1456	A	Sidechain
21	AA	1457	G	Sidechain
21	AA	1459	G	Sidechain
21	AA	1461	G	Sidechain
21	AA	1463	U	Sidechain
21	AA	1469	C	Sidechain
21	AA	147	G	Sidechain
21	AA	1472	U	Sidechain
21	AA	1482	G	Sidechain
21	AA	1483	A	Sidechain
21	AA	1486	G	Sidechain
21	AA	1489	G	Sidechain
21	AA	1490	U	Sidechain
21	AA	1492	A	Sidechain
21	AA	1497	G	Sidechain
21	AA	1502	A	Sidechain
21	AA	1507	A	Sidechain
21	AA	1508	A	Sidechain
21	AA	1509	C	Sidechain
21	AA	151	A	Sidechain
21	AA	1511	G	Sidechain
21	AA	1516	G	Sidechain
21	AA	1517	G	Sidechain
21	AA	1518	A	Sidechain
21	AA	152	A	Sidechain
21	AA	1521	C	Sidechain
21	AA	1522	U	Sidechain
21	AA	1525	G	Sidechain
21	AA	1526	G	Sidechain
21	AA	1527	U	Sidechain
21	AA	1529	G	Sidechain
21	AA	1530	G	Sidechain
21	AA	1532	U	Sidechain
21	AA	1533	C	Sidechain
21	AA	154	U	Sidechain
21	AA	158	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	159	G	Sidechain
21	AA	16	A	Sidechain
21	AA	161	A	Sidechain
21	AA	164	G	Sidechain
21	AA	17	U	Sidechain
21	AA	170	U	Sidechain
21	AA	172	A	Sidechain
21	AA	173	U	Sidechain
21	AA	176	C	Sidechain
21	AA	181	A	Sidechain
21	AA	183	C	Sidechain
21	AA	190	A	Sidechain
21	AA	191	G	Sidechain
21	AA	193	C	Sidechain
21	AA	195	A	Sidechain
21	AA	20	U	Sidechain
21	AA	200	G	Sidechain
21	AA	201	G	Sidechain
21	AA	202	G	Sidechain
21	AA	203	G	Sidechain
21	AA	204	G	Sidechain
21	AA	205	A	Sidechain
21	AA	206	C	Sidechain
21	AA	208	U	Sidechain
21	AA	209	U	Sidechain
21	AA	21	G	Sidechain
21	AA	213	G	Sidechain
21	AA	214	C	Sidechain
21	AA	218	U	Sidechain
21	AA	219	U	Sidechain
21	AA	22	G	Sidechain
21	AA	221	C	Sidechain
21	AA	222	C	Sidechain
21	AA	225	C	Sidechain
21	AA	226	G	Sidechain
21	AA	23	C	Sidechain
21	AA	230	G	Sidechain
21	AA	231	U	Sidechain
21	AA	232	G	Sidechain
21	AA	233	C	Sidechain
21	AA	234	C	Sidechain
21	AA	236	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	237	G	Sidechain
21	AA	239	U	Sidechain
21	AA	24	U	Sidechain
21	AA	241	G	Sidechain
21	AA	244	U	Sidechain
21	AA	246	A	Sidechain
21	AA	248	C	Sidechain
21	AA	249	U	Sidechain
21	AA	25	C	Sidechain
21	AA	251	G	Sidechain
21	AA	253	A	Sidechain
21	AA	254	G	Sidechain
21	AA	257	G	Sidechain
21	AA	258	G	Sidechain
21	AA	259	G	Sidechain
21	AA	260	G	Sidechain
21	AA	261	U	Sidechain
21	AA	262	A	Sidechain
21	AA	263	A	Sidechain
21	AA	264	C	Sidechain
21	AA	265	G	Sidechain
21	AA	267	C	Sidechain
21	AA	269	C	Sidechain
21	AA	270	A	Sidechain
21	AA	274	A	Sidechain
21	AA	276	G	Sidechain
21	AA	280	C	Sidechain
21	AA	281	G	Sidechain
21	AA	282	A	Sidechain
21	AA	283	U	Sidechain
21	AA	287	U	Sidechain
21	AA	288	A	Sidechain
21	AA	29	U	Sidechain
21	AA	292	G	Sidechain
21	AA	293	G	Sidechain
21	AA	294	U	Sidechain
21	AA	296	U	Sidechain
21	AA	301	G	Sidechain
21	AA	302	G	Sidechain
21	AA	304	U	Sidechain
21	AA	306	A	Sidechain
21	AA	315	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	316	C	Sidechain
21	AA	317	U	Sidechain
21	AA	320	A	Sidechain
21	AA	322	C	Sidechain
21	AA	323	U	Sidechain
21	AA	324	G	Sidechain
21	AA	325	A	Sidechain
21	AA	327	A	Sidechain
21	AA	329	A	Sidechain
21	AA	334	C	Sidechain
21	AA	336	A	Sidechain
21	AA	338	A	Sidechain
21	AA	34	C	Sidechain
21	AA	340	U	Sidechain
21	AA	342	C	Sidechain
21	AA	343	U	Sidechain
21	AA	345	C	Sidechain
21	AA	346	G	Sidechain
21	AA	347	G	Sidechain
21	AA	348	G	Sidechain
21	AA	35	G	Sidechain
21	AA	350	G	Sidechain
21	AA	351	G	Sidechain
21	AA	353	A	Sidechain
21	AA	354	G	Sidechain
21	AA	355	C	Sidechain
21	AA	359	G	Sidechain
21	AA	362	G	Sidechain
21	AA	363	A	Sidechain
21	AA	366	A	Sidechain
21	AA	367	U	Sidechain
21	AA	368	U	Sidechain
21	AA	369	G	Sidechain
21	AA	372	C	Sidechain
21	AA	374	A	Sidechain
21	AA	376	G	Sidechain
21	AA	378	G	Sidechain
21	AA	380	G	Sidechain
21	AA	383	A	Sidechain
21	AA	384	G	Sidechain
21	AA	389	A	Sidechain
21	AA	390	U	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	391	G	Sidechain
21	AA	396	C	Sidechain
21	AA	404	G	Sidechain
21	AA	405	U	Sidechain
21	AA	412	A	Sidechain
21	AA	42	G	Sidechain
21	AA	421	U	Sidechain
21	AA	422	C	Sidechain
21	AA	423	G	Sidechain
21	AA	424	G	Sidechain
21	AA	427	U	Sidechain
21	AA	429	U	Sidechain
21	AA	43	C	Sidechain
21	AA	431	A	Sidechain
21	AA	432	A	Sidechain
21	AA	433	G	Sidechain
21	AA	435	A	Sidechain
21	AA	438	U	Sidechain
21	AA	439	U	Sidechain
21	AA	442	G	Sidechain
21	AA	444	G	Sidechain
21	AA	445	G	Sidechain
21	AA	447	G	Sidechain
21	AA	448	A	Sidechain
21	AA	449	G	Sidechain
21	AA	452	A	Sidechain
21	AA	453	G	Sidechain
21	AA	455	G	Sidechain
21	AA	46	G	Sidechain
21	AA	463	U	Sidechain
21	AA	464	U	Sidechain
21	AA	466	A	Sidechain
21	AA	467	U	Sidechain
21	AA	468	A	Sidechain
21	AA	472	U	Sidechain
21	AA	473	U	Sidechain
21	AA	474	G	Sidechain
21	AA	480	U	Sidechain
21	AA	483	C	Sidechain
21	AA	484	G	Sidechain
21	AA	486	U	Sidechain
21	AA	487	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	49	U	Sidechain
21	AA	491	G	Sidechain
21	AA	493	A	Sidechain
21	AA	494	G	Sidechain
21	AA	496	A	Sidechain
21	AA	5	U	Sidechain
21	AA	500	G	Sidechain
21	AA	501	C	Sidechain
21	AA	503	C	Sidechain
21	AA	504	C	Sidechain
21	AA	506	G	Sidechain
21	AA	509	A	Sidechain
21	AA	51	A	Sidechain
21	AA	512	U	Sidechain
21	AA	513	C	Sidechain
21	AA	521	G	Sidechain
21	AA	524	G	Sidechain
21	AA	526	C	Sidechain
21	AA	528	C	Sidechain
21	AA	530	G	Sidechain
21	AA	531	U	Sidechain
21	AA	532	A	Sidechain
21	AA	533	A	Sidechain
21	AA	538	G	Sidechain
21	AA	544	G	Sidechain
21	AA	548	G	Sidechain
21	AA	55	A	Sidechain
21	AA	550	G	Sidechain
21	AA	553	A	Sidechain
21	AA	554	A	Sidechain
21	AA	555	U	Sidechain
21	AA	556	C	Sidechain
21	AA	557	G	Sidechain
21	AA	56	U	Sidechain
21	AA	560	A	Sidechain
21	AA	561	U	Sidechain
21	AA	563	A	Sidechain
21	AA	565	U	Sidechain
21	AA	566	G	Sidechain
21	AA	567	G	Sidechain
21	AA	57	G	Sidechain
21	AA	572	A	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	573	A	Sidechain
21	AA	574	A	Sidechain
21	AA	575	G	Sidechain
21	AA	577	G	Sidechain
21	AA	58	C	Sidechain
21	AA	580	C	Sidechain
21	AA	581	G	Sidechain
21	AA	584	G	Sidechain
21	AA	585	G	Sidechain
21	AA	588	G	Sidechain
21	AA	589	U	Sidechain
21	AA	598	U	Sidechain
21	AA	6	G	Sidechain
21	AA	60	A	Sidechain
21	AA	600	A	Sidechain
21	AA	602	A	Sidechain
21	AA	603	U	Sidechain
21	AA	605	U	Sidechain
21	AA	608	A	Sidechain
21	AA	61	G	Sidechain
21	AA	611	C	Sidechain
21	AA	612	C	Sidechain
21	AA	613	C	Sidechain
21	AA	622	A	Sidechain
21	AA	624	C	Sidechain
21	AA	626	G	Sidechain
21	AA	627	G	Sidechain
21	AA	631	C	Sidechain
21	AA	632	U	Sidechain
21	AA	633	G	Sidechain
21	AA	637	C	Sidechain
21	AA	638	U	Sidechain
21	AA	640	A	Sidechain
21	AA	646	G	Sidechain
21	AA	648	A	Sidechain
21	AA	652	U	Sidechain
21	AA	655	A	Sidechain
21	AA	656	G	Sidechain
21	AA	657	U	Sidechain
21	AA	662	U	Sidechain
21	AA	663	A	Sidechain
21	AA	664	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	666	G	Sidechain
21	AA	667	G	Sidechain
21	AA	668	G	Sidechain
21	AA	669	G	Sidechain
21	AA	67	C	Sidechain
21	AA	671	G	Sidechain
21	AA	673	A	Sidechain
21	AA	674	G	Sidechain
21	AA	677	U	Sidechain
21	AA	682	G	Sidechain
21	AA	683	G	Sidechain
21	AA	685	G	Sidechain
21	AA	688	G	Sidechain
21	AA	69	G	Sidechain
21	AA	690	G	Sidechain
21	AA	691	G	Sidechain
21	AA	695	A	Sidechain
21	AA	700	G	Sidechain
21	AA	701	U	Sidechain
21	AA	703	G	Sidechain
21	AA	704	A	Sidechain
21	AA	705	G	Sidechain
21	AA	707	U	Sidechain
21	AA	709	U	Sidechain
21	AA	716	A	Sidechain
21	AA	717	U	Sidechain
21	AA	719	C	Sidechain
21	AA	722	G	Sidechain
21	AA	723	U	Sidechain
21	AA	726	C	Sidechain
21	AA	727	G	Sidechain
21	AA	728	A	Sidechain
21	AA	729	A	Sidechain
21	AA	730	G	Sidechain
21	AA	731	G	Sidechain
21	AA	738	C	Sidechain
21	AA	739	C	Sidechain
21	AA	74	A	Sidechain
21	AA	740	U	Sidechain
21	AA	742	G	Sidechain
21	AA	751	U	Sidechain
21	AA	752	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	754	C	Sidechain
21	AA	761	G	Sidechain
21	AA	763	G	Sidechain
21	AA	765	G	Sidechain
21	AA	768	A	Sidechain
21	AA	773	G	Sidechain
21	AA	776	G	Sidechain
21	AA	779	C	Sidechain
21	AA	780	A	Sidechain
21	AA	781	A	Sidechain
21	AA	782	A	Sidechain
21	AA	785	G	Sidechain
21	AA	786	G	Sidechain
21	AA	789	U	Sidechain
21	AA	79	G	Sidechain
21	AA	791	G	Sidechain
21	AA	792	A	Sidechain
21	AA	793	U	Sidechain
21	AA	795	C	Sidechain
21	AA	796	C	Sidechain
21	AA	799	G	Sidechain
21	AA	802	A	Sidechain
21	AA	805	C	Sidechain
21	AA	81	A	Sidechain
21	AA	810	C	Sidechain
21	AA	811	C	Sidechain
21	AA	814	A	Sidechain
21	AA	815	A	Sidechain
21	AA	817	C	Sidechain
21	AA	818	G	Sidechain
21	AA	821	G	Sidechain
21	AA	828	U	Sidechain
21	AA	83	C	Sidechain
21	AA	831	A	Sidechain
21	AA	833	G	Sidechain
21	AA	834	U	Sidechain
21	AA	838	G	Sidechain
21	AA	842	U	Sidechain
21	AA	843	U	Sidechain
21	AA	844	G	Sidechain
21	AA	846	G	Sidechain
21	AA	847	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	851	G	Sidechain
21	AA	854	U	Sidechain
21	AA	859	G	Sidechain
21	AA	86	G	Sidechain
21	AA	864	A	Sidechain
21	AA	865	A	Sidechain
21	AA	869	G	Sidechain
21	AA	87	C	Sidechain
21	AA	870	U	Sidechain
21	AA	871	U	Sidechain
21	AA	873	A	Sidechain
21	AA	874	G	Sidechain
21	AA	877	G	Sidechain
21	AA	878	A	Sidechain
21	AA	879	C	Sidechain
21	AA	881	G	Sidechain
21	AA	883	C	Sidechain
21	AA	886	G	Sidechain
21	AA	887	G	Sidechain
21	AA	889	A	Sidechain
21	AA	890	G	Sidechain
21	AA	895	G	Sidechain
21	AA	898	G	Sidechain
21	AA	899	C	Sidechain
21	AA	9	G	Sidechain
21	AA	90	C	Sidechain
21	AA	900	A	Sidechain
21	AA	901	A	Sidechain
21	AA	902	G	Sidechain
21	AA	903	G	Sidechain
21	AA	909	A	Sidechain
21	AA	91	U	Sidechain
21	AA	911	U	Sidechain
21	AA	914	A	Sidechain
21	AA	916	U	Sidechain
21	AA	919	A	Sidechain
21	AA	920	U	Sidechain
21	AA	921	U	Sidechain
21	AA	922	G	Sidechain
21	AA	923	A	Sidechain
21	AA	924	C	Sidechain
21	AA	925	G	Sidechain

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Mol	Chain	Res	Type	Group
21	AA	926	G	Sidechain
21	AA	927	G	Sidechain
21	AA	932	C	Sidechain
21	AA	933	G	Sidechain
21	AA	936	C	Sidechain
21	AA	937	A	Sidechain
21	AA	938	A	Sidechain
21	AA	939	G	Sidechain
21	AA	942	G	Sidechain
21	AA	944	G	Sidechain
21	AA	946	A	Sidechain
21	AA	948	C	Sidechain
21	AA	951	G	Sidechain
21	AA	953	G	Sidechain
21	AA	954	G	Sidechain
21	AA	957	U	Sidechain
21	AA	958	A	Sidechain
21	AA	959	A	Sidechain
21	AA	961	U	Sidechain
21	AA	962	C	Sidechain
21	AA	964	A	Sidechain
21	AA	966	G	Sidechain
21	AA	968	A	Sidechain
21	AA	971	G	Sidechain
21	AA	972	C	Sidechain
21	AA	973	G	Sidechain
21	AA	974	A	Sidechain
21	AA	975	A	Sidechain
21	AA	977	A	Sidechain
21	AA	978	A	Sidechain
21	AA	979	C	Sidechain
21	AA	981	U	Sidechain
21	AA	991	U	Sidechain
21	AA	992	U	Sidechain
21	AA	994	A	Sidechain
21	AA	995	C	Sidechain
21	AA	996	A	Sidechain
21	AA	999	C	Sidechain
13	AB	107	ARG	Sidechain
13	AB	29	PHE	Sidechain
13	AB	68	PHE	Peptide
13	AB	89	PHE	Sidechain

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Mol	Chain	Res	Type	Group
14	AC	155	ARG	Sidechain
14	AC	163	ARG	Sidechain
14	AC	167	TYR	Peptide
14	AC	53	ARG	Sidechain
14	AC	71	ARG	Sidechain
15	AD	103	ARG	Sidechain
15	AD	127	ARG	Sidechain
15	AD	134	TYR	Sidechain
15	AD	145	ARG	Sidechain
15	AD	19	PHE	Sidechain
15	AD	203	TYR	Sidechain
15	AD	50	TYR	Sidechain
15	AD	64	TYR	Sidechain
15	AD	75	TYR	Sidechain
16	AE	94	PHE	Sidechain
17	AF	8	PHE	Sidechain
17	AF	86	ARG	Sidechain
18	AG	110	ARG	Sidechain
18	AG	14	ASP	Peptide
18	AG	78	ARG	Sidechain
18	AG	95	ARG	Sidechain
19	AH	113	ARG	Sidechain
19	AH	125	ILE	Peptide
19	AH	64	TYR	Sidechain
19	AH	85	TYR	Sidechain
20	AI	11	ARG	Sidechain
20	AI	121	ARG	Sidechain
20	AI	126	PHE	Sidechain
20	AI	37	TYR	Sidechain
20	AI	48	ARG	Sidechain
20	AI	6	TYR	Sidechain
1	AJ	16	ARG	Sidechain
1	AJ	68	ARG	Sidechain
1	AJ	9	ARG	Sidechain
2	AK	26	PHE	Sidechain
2	AK	55	ARG	Sidechain
2	AK	89	GLY	Peptide
2	AK	97	ARG	Sidechain
3	AL	13	ARG	Sidechain
3	AL	20	VAL	Peptide
3	AL	30	ARG	Sidechain
3	AL	49	ARG	Sidechain

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Mol	Chain	Res	Type	Group
3	AL	53	ARG	Sidechain
3	AL	65	TYR	Sidechain
3	AL	93	ARG	Sidechain
4	AM	100	ARG	Sidechain
4	AM	104	ASN	Peptide
4	AM	108	ARG	Mainchain
4	AM	2	ARG	Sidechain
4	AM	22	TYR	Sidechain
5	AN	12	ARG	Sidechain
5	AN	52	ARG	Sidechain
5	AN	62	ARG	Sidechain
5	AN	68	ARG	Sidechain
5	AN	84	ARG	Sidechain
6	AO	16	ARG	Sidechain
6	AO	20	ASP	Peptide
6	AO	57	ARG	Sidechain
6	AO	62	ARG	Sidechain
6	AO	79	ARG	Sidechain
7	AP	17	TYR	Sidechain
7	AP	25	ARG	Sidechain
7	AP	9	HIS	Sidechain
8	AQ	30	HIS	Sidechain
9	AR	22	TYR	Sidechain
9	AR	31	TYR	Sidechain
9	AR	47	ARG	Sidechain
9	AR	69	TYR	Sidechain
10	AS	79	TYR	Sidechain
11	AT	17	ARG	Sidechain
11	AT	24	ARG	Sidechain
11	AT	9	ARG	Sidechain
12	AU	20	ARG	Sidechain
12	AU	37	TYR	Sidechain
12	AU	44	ARG	Sidechain
12	AU	46	ARG	Sidechain
12	AU	6	ARG	Sidechain
26	AV	1	C	Sidechain
26	AV	11	A	Sidechain
26	AV	17	C	Sidechain
26	AV	18	G	Sidechain
26	AV	19	G	Sidechain
26	AV	20	U	Sidechain
26	AV	21	A	Sidechain

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Mol	Chain	Res	Type	Group
26	AV	22	G	Sidechain
26	AV	23	C	Sidechain
26	AV	24	U	Sidechain
26	AV	27	U	Sidechain
26	AV	28	C	Sidechain
26	AV	29	G	Sidechain
26	AV	32	C	Sidechain
26	AV	35	A	Sidechain
26	AV	38	A	Sidechain
26	AV	39	C	Sidechain
26	AV	4	G	Sidechain
26	AV	40	C	Sidechain
26	AV	41	C	Sidechain
26	AV	42	G	Sidechain
26	AV	47	U	Sidechain
26	AV	48	C	Sidechain
26	AV	5	G	Sidechain
26	AV	51	C	Sidechain
26	AV	52	G	Sidechain
26	AV	53	G	Sidechain
26	AV	57	A	Sidechain
26	AV	59	A	Sidechain
26	AV	60	U	Sidechain
26	AV	61	C	Sidechain
26	AV	62	C	Sidechain
26	AV	64	G	Sidechain
26	AV	7	G	Sidechain
26	AV	70	G	Sidechain
26	AV	73	A	Sidechain
26	AV	9	G	Sidechain
23	AW	10	G	Sidechain
23	AW	11	C	Sidechain
23	AW	12	U	Sidechain
23	AW	13	C	Sidechain
23	AW	16	U	Sidechain
23	AW	17	C	Sidechain
23	AW	18	G	Sidechain
23	AW	19	G	Sidechain
23	AW	21	A	Sidechain
23	AW	22	G	Sidechain
23	AW	24	G	Sidechain
23	AW	25	C	Sidechain

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Mol	Chain	Res	Type	Group
23	AW	28	G	Sidechain
23	AW	30	G	Sidechain
23	AW	31	A	Sidechain
23	AW	32	U	Sidechain
23	AW	34	G	Sidechain
23	AW	35	A	Sidechain
23	AW	38	A	Sidechain
23	AW	4	C	Sidechain
23	AW	40	C	Sidechain
23	AW	44	G	Sidechain
23	AW	45	U	Sidechain
23	AW	47	U	Sidechain
23	AW	5	G	Sidechain
23	AW	50	U	Sidechain
23	AW	51	U	Sidechain
23	AW	53	G	Sidechain
23	AW	57	G	Sidechain
23	AW	58	A	Sidechain
23	AW	59	U	Sidechain
23	AW	6	G	Sidechain
23	AW	60	U	Sidechain
23	AW	64	A	Sidechain
23	AW	65	G	Sidechain
23	AW	69	G	Sidechain
23	AW	7	A	Sidechain
23	AW	73	A	Sidechain
23	AW	74	C	Sidechain
24	AX	13	A	Sidechain
24	AX	14	A	Sidechain
24	AX	18	G	Sidechain
22	AY	1	G	Sidechain
22	AY	10	G	Sidechain
22	AY	13	C	Sidechain
22	AY	18	G	Sidechain
22	AY	2	C	Sidechain
22	AY	20	G	Sidechain
22	AY	23	A	Sidechain
22	AY	24	G	Sidechain
22	AY	26	G	Sidechain
22	AY	27	C	Sidechain
22	AY	28	C	Sidechain
22	AY	30	G	Sidechain

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Mol	Chain	Res	Type	Group
22	AY	32	C	Sidechain
22	AY	33	U	Sidechain
22	AY	36	A	Sidechain
22	AY	37	G	Sidechain
22	AY	39	U	Sidechain
22	AY	4	G	Sidechain
22	AY	40	C	Sidechain
22	AY	42	G	Sidechain
22	AY	43	G	Sidechain
22	AY	44	A	Sidechain
22	AY	45	G	Sidechain
22	AY	46	G	Sidechain
22	AY	47	U	Sidechain
22	AY	50	U	Sidechain
22	AY	51	G	Sidechain
22	AY	53	G	Sidechain
22	AY	55	U	Sidechain
22	AY	59	U	Sidechain
22	AY	60	C	Sidechain
22	AY	61	C	Sidechain
22	AY	65	G	Sidechain
22	AY	66	A	Sidechain
22	AY	7	U	Sidechain
22	AY	71	G	Sidechain
22	AY	73	A	Sidechain
22	AY	74	C	Sidechain
22	AY	8	U	Sidechain
22	AY	9	A	Sidechain
25	AZ	123	ARG	Sidechain
25	AZ	133	PHE	Sidechain
25	AZ	160	TYR	Peptide
25	AZ	208	LYS	Peptide
25	AZ	354	ASP	Peptide
25	AZ	46	PHE	Sidechain
25	AZ	51	ASN	Peptide
25	AZ	76	TYR	Sidechain
47	B0	15	ARG	Sidechain
47	B0	37	HIS	Sidechain
47	B0	49	ARG	Sidechain
47	B0	9	ARG	Sidechain
48	B1	20	TYR	Sidechain
48	B1	38	PHE	Sidechain

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Mol	Chain	Res	Type	Group
49	B2	5	PHE	Sidechain
50	B3	41	ARG	Sidechain
50	B3	44	ARG	Sidechain
51	B4	36	ARG	Sidechain
27	B5	12	ARG	Sidechain
27	B5	124	VAL	Peptide
27	B5	18	THR	Peptide
27	B5	35	THR	Peptide
27	B5	53	ARG	Sidechain
27	B5	60	ARG	Sidechain
27	B5	78	PHE	Sidechain
58	BA	100	G	Sidechain
58	BA	101	A	Sidechain
58	BA	102	G	Sidechain
58	BA	105	G	Sidechain
58	BA	107	G	Sidechain
58	BA	108	A	Sidechain
58	BA	109	A	Sidechain
58	BA	112	G	Sidechain
58	BA	113	C	Sidechain
58	BA	115	A	Sidechain
58	BA	117	G	Sidechain
58	BA	118	C	Sidechain
58	BA	12	C	Sidechain
58	BA	13	G	Sidechain
58	BA	14	U	Sidechain
58	BA	16	G	Sidechain
58	BA	2	G	Sidechain
58	BA	22	U	Sidechain
58	BA	24	G	Sidechain
58	BA	25	U	Sidechain
58	BA	26	C	Sidechain
58	BA	27	C	Sidechain
58	BA	3	C	Sidechain
58	BA	31	C	Sidechain
58	BA	32	U	Sidechain
58	BA	33	G	Sidechain
58	BA	34	A	Sidechain
58	BA	36	C	Sidechain
58	BA	43	C	Sidechain
58	BA	44	G	Sidechain
58	BA	45	A	Sidechain

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Mol	Chain	Res	Type	Group
58	BA	48	U	Sidechain
58	BA	49	C	Sidechain
58	BA	5	U	Sidechain
58	BA	54	G	Sidechain
58	BA	55	U	Sidechain
58	BA	58	A	Sidechain
58	BA	60	C	Sidechain
58	BA	65	U	Sidechain
58	BA	66	A	Sidechain
58	BA	67	G	Sidechain
58	BA	68	C	Sidechain
58	BA	7	G	Sidechain
58	BA	73	A	Sidechain
58	BA	74	U	Sidechain
58	BA	78	A	Sidechain
58	BA	79	G	Sidechain
58	BA	8	C	Sidechain
58	BA	81	G	Sidechain
58	BA	82	U	Sidechain
58	BA	86	G	Sidechain
58	BA	87	U	Sidechain
58	BA	88	C	Sidechain
58	BA	93	C	Sidechain
58	BA	94	A	Sidechain
58	BA	98	G	Sidechain
57	BB	1	G	Sidechain
57	BB	100	U	Sidechain
57	BB	1000	A	Sidechain
57	BB	1002	G	Sidechain
57	BB	1003	G	Sidechain
57	BB	1005	C	Sidechain
57	BB	1007	C	Sidechain
57	BB	1008	A	Sidechain
57	BB	1009	A	Sidechain
57	BB	101	A	Sidechain
57	BB	1010	A	Sidechain
57	BB	1015	U	Sidechain
57	BB	1016	G	Sidechain
57	BB	1017	G	Sidechain
57	BB	1019	U	Sidechain
57	BB	102	U	Sidechain
57	BB	1024	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1025	G	Sidechain
57	BB	1027	A	Sidechain
57	BB	1028	A	Sidechain
57	BB	103	A	Sidechain
57	BB	1030	C	Sidechain
57	BB	1031	G	Sidechain
57	BB	1033	U	Sidechain
57	BB	1035	U	Sidechain
57	BB	1036	G	Sidechain
57	BB	1037	G	Sidechain
57	BB	104	A	Sidechain
57	BB	1050	A	Sidechain
57	BB	1054	A	Sidechain
57	BB	1055	G	Sidechain
57	BB	106	C	Sidechain
57	BB	1062	G	Sidechain
57	BB	1063	G	Sidechain
57	BB	1068	G	Sidechain
57	BB	107	G	Sidechain
57	BB	1070	A	Sidechain
57	BB	1074	G	Sidechain
57	BB	1078	U	Sidechain
57	BB	1079	C	Sidechain
57	BB	108	G	Sidechain
57	BB	1081	U	Sidechain
57	BB	1083	U	Sidechain
57	BB	1084	A	Sidechain
57	BB	1088	A	Sidechain
57	BB	1089	A	Sidechain
57	BB	109	C	Sidechain
57	BB	1091	G	Sidechain
57	BB	1092	C	Sidechain
57	BB	1094	U	Sidechain
57	BB	1095	A	Sidechain
57	BB	1098	A	Sidechain
57	BB	1099	G	Sidechain
57	BB	11	C	Sidechain
57	BB	110	G	Sidechain
57	BB	1102	C	Sidechain
57	BB	1103	A	Sidechain
57	BB	1104	C	Sidechain
57	BB	1106	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1108	U	Sidechain
57	BB	111	A	Sidechain
57	BB	1110	G	Sidechain
57	BB	1111	A	Sidechain
57	BB	1113	U	Sidechain
57	BB	1115	G	Sidechain
57	BB	1117	C	Sidechain
57	BB	1121	C	Sidechain
57	BB	1122	G	Sidechain
57	BB	1125	G	Sidechain
57	BB	1129	A	Sidechain
57	BB	1131	G	Sidechain
57	BB	1133	A	Sidechain
57	BB	1134	A	Sidechain
57	BB	1138	G	Sidechain
57	BB	1141	U	Sidechain
57	BB	1142	A	Sidechain
57	BB	1143	A	Sidechain
57	BB	1145	C	Sidechain
57	BB	1147	A	Sidechain
57	BB	1149	G	Sidechain
57	BB	1150	C	Sidechain
57	BB	1153	C	Sidechain
57	BB	1154	G	Sidechain
57	BB	1155	A	Sidechain
57	BB	1156	A	Sidechain
57	BB	1160	G	Sidechain
57	BB	1162	G	Sidechain
57	BB	1168	G	Sidechain
57	BB	1169	A	Sidechain
57	BB	117	G	Sidechain
57	BB	1174	U	Sidechain
57	BB	1175	A	Sidechain
57	BB	1176	U	Sidechain
57	BB	1178	C	Sidechain
57	BB	1179	G	Sidechain
57	BB	118	A	Sidechain
57	BB	1181	U	Sidechain
57	BB	1182	G	Sidechain
57	BB	1184	U	Sidechain
57	BB	1185	G	Sidechain
57	BB	1187	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1188	U	Sidechain
57	BB	1189	A	Sidechain
57	BB	119	A	Sidechain
57	BB	1190	G	Sidechain
57	BB	1192	G	Sidechain
57	BB	1195	G	Sidechain
57	BB	1199	U	Sidechain
57	BB	12	U	Sidechain
57	BB	120	U	Sidechain
57	BB	1200	C	Sidechain
57	BB	1202	G	Sidechain
57	BB	1203	U	Sidechain
57	BB	1204	A	Sidechain
57	BB	1206	G	Sidechain
57	BB	1208	C	Sidechain
57	BB	1209	U	Sidechain
57	BB	121	G	Sidechain
57	BB	1210	G	Sidechain
57	BB	1216	G	Sidechain
57	BB	1217	U	Sidechain
57	BB	1218	G	Sidechain
57	BB	122	G	Sidechain
57	BB	1223	G	Sidechain
57	BB	1224	U	Sidechain
57	BB	1226	A	Sidechain
57	BB	1228	G	Sidechain
57	BB	1231	U	Sidechain
57	BB	1234	U	Sidechain
57	BB	1238	G	Sidechain
57	BB	1241	A	Sidechain
57	BB	1248	G	Sidechain
57	BB	1250	G	Sidechain
57	BB	1252	G	Sidechain
57	BB	1253	A	Sidechain
57	BB	1255	U	Sidechain
57	BB	1258	U	Sidechain
57	BB	1266	G	Sidechain
57	BB	1267	U	Sidechain
57	BB	1268	A	Sidechain
57	BB	1269	A	Sidechain
57	BB	127	A	Sidechain
57	BB	1271	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1272	A	Sidechain
57	BB	1273	U	Sidechain
57	BB	1275	A	Sidechain
57	BB	1277	G	Sidechain
57	BB	128	C	Sidechain
57	BB	1280	G	Sidechain
57	BB	1281	G	Sidechain
57	BB	1282	U	Sidechain
57	BB	1283	G	Sidechain
57	BB	1288	G	Sidechain
57	BB	1294	U	Sidechain
57	BB	1299	G	Sidechain
57	BB	1300	G	Sidechain
57	BB	1311	G	Sidechain
57	BB	1313	U	Sidechain
57	BB	1315	C	Sidechain
57	BB	1317	G	Sidechain
57	BB	1322	A	Sidechain
57	BB	1323	C	Sidechain
57	BB	1326	U	Sidechain
57	BB	1327	A	Sidechain
57	BB	1331	G	Sidechain
57	BB	1332	G	Sidechain
57	BB	1333	G	Sidechain
57	BB	1334	G	Sidechain
57	BB	1335	C	Sidechain
57	BB	1336	A	Sidechain
57	BB	1337	G	Sidechain
57	BB	1338	G	Sidechain
57	BB	1339	G	Sidechain
57	BB	1340	U	Sidechain
57	BB	1342	A	Sidechain
57	BB	1343	G	Sidechain
57	BB	1346	G	Sidechain
57	BB	1348	C	Sidechain
57	BB	1349	C	Sidechain
57	BB	135	U	Sidechain
57	BB	1351	C	Sidechain
57	BB	1356	G	Sidechain
57	BB	1359	A	Sidechain
57	BB	136	G	Sidechain
57	BB	1362	C	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1364	G	Sidechain
57	BB	1366	A	Sidechain
57	BB	1367	A	Sidechain
57	BB	1369	G	Sidechain
57	BB	1370	C	Sidechain
57	BB	1375	U	Sidechain
57	BB	1376	C	Sidechain
57	BB	1378	A	Sidechain
57	BB	1379	U	Sidechain
57	BB	1381	G	Sidechain
57	BB	1382	G	Sidechain
57	BB	1383	A	Sidechain
57	BB	1386	C	Sidechain
57	BB	1389	G	Sidechain
57	BB	1393	A	Sidechain
57	BB	1394	U	Sidechain
57	BB	1397	U	Sidechain
57	BB	140	C	Sidechain
57	BB	1401	G	Sidechain
57	BB	1403	A	Sidechain
57	BB	1406	U	Sidechain
57	BB	141	G	Sidechain
57	BB	1410	G	Sidechain
57	BB	1412	U	Sidechain
57	BB	1417	C	Sidechain
57	BB	1420	A	Sidechain
57	BB	1421	G	Sidechain
57	BB	1424	G	Sidechain
57	BB	1426	G	Sidechain
57	BB	1427	A	Sidechain
57	BB	1429	G	Sidechain
57	BB	1431	A	Sidechain
57	BB	1432	G	Sidechain
57	BB	1434	A	Sidechain
57	BB	1435	G	Sidechain
57	BB	1436	G	Sidechain
57	BB	1437	C	Sidechain
57	BB	1439	A	Sidechain
57	BB	1441	G	Sidechain
57	BB	1442	U	Sidechain
57	BB	1444	G	Sidechain
57	BB	1446	C	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	145	C	Sidechain
57	BB	1451	C	Sidechain
57	BB	1452	G	Sidechain
57	BB	1453	A	Sidechain
57	BB	1454	C	Sidechain
57	BB	1455	G	Sidechain
57	BB	1456	G	Sidechain
57	BB	1458	U	Sidechain
57	BB	146	A	Sidechain
57	BB	1460	U	Sidechain
57	BB	1461	C	Sidechain
57	BB	1465	G	Sidechain
57	BB	1469	A	Sidechain
57	BB	1470	A	Sidechain
57	BB	1471	G	Sidechain
57	BB	1473	G	Sidechain
57	BB	1474	U	Sidechain
57	BB	1475	G	Sidechain
57	BB	148	U	Sidechain
57	BB	1481	U	Sidechain
57	BB	1482	G	Sidechain
57	BB	1485	U	Sidechain
57	BB	1487	U	Sidechain
57	BB	1490	A	Sidechain
57	BB	1493	C	Sidechain
57	BB	1494	A	Sidechain
57	BB	1495	A	Sidechain
57	BB	1496	A	Sidechain
57	BB	15	G	Sidechain
57	BB	150	U	Sidechain
57	BB	1505	A	Sidechain
57	BB	1506	U	Sidechain
57	BB	1508	A	Sidechain
57	BB	151	C	Sidechain
57	BB	1510	G	Sidechain
57	BB	1512	C	Sidechain
57	BB	1514	G	Sidechain
57	BB	1517	G	Sidechain
57	BB	1520	U	Sidechain
57	BB	1521	G	Sidechain
57	BB	1522	A	Sidechain
57	BB	1524	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1527	G	Sidechain
57	BB	1535	A	Sidechain
57	BB	1536	C	Sidechain
57	BB	1539	U	Sidechain
57	BB	154	U	Sidechain
57	BB	1542	U	Sidechain
57	BB	1545	A	Sidechain
57	BB	1546	G	Sidechain
57	BB	1549	A	Sidechain
57	BB	1551	A	Sidechain
57	BB	1552	A	Sidechain
57	BB	1557	C	Sidechain
57	BB	1560	G	Sidechain
57	BB	1563	U	Sidechain
57	BB	1567	G	Sidechain
57	BB	1568	G	Sidechain
57	BB	157	C	Sidechain
57	BB	1571	A	Sidechain
57	BB	1573	G	Sidechain
57	BB	1574	C	Sidechain
57	BB	1576	U	Sidechain
57	BB	1578	U	Sidechain
57	BB	1582	C	Sidechain
57	BB	1583	A	Sidechain
57	BB	1584	U	Sidechain
57	BB	1586	A	Sidechain
57	BB	1587	G	Sidechain
57	BB	1588	G	Sidechain
57	BB	1589	U	Sidechain
57	BB	159	G	Sidechain
57	BB	1593	A	Sidechain
57	BB	1598	A	Sidechain
57	BB	1599	U	Sidechain
57	BB	160	A	Sidechain
57	BB	1601	G	Sidechain
57	BB	1606	C	Sidechain
57	BB	1609	A	Sidechain
57	BB	161	A	Sidechain
57	BB	1611	C	Sidechain
57	BB	1613	G	Sidechain
57	BB	1619	G	Sidechain
57	BB	162	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1622	G	Sidechain
57	BB	1623	G	Sidechain
57	BB	1625	C	Sidechain
57	BB	1627	G	Sidechain
57	BB	1628	G	Sidechain
57	BB	1629	U	Sidechain
57	BB	163	C	Sidechain
57	BB	1630	A	Sidechain
57	BB	1631	G	Sidechain
57	BB	1632	A	Sidechain
57	BB	1637	A	Sidechain
57	BB	1641	A	Sidechain
57	BB	1642	G	Sidechain
57	BB	1643	G	Sidechain
57	BB	1645	G	Sidechain
57	BB	165	A	Sidechain
57	BB	1652	A	Sidechain
57	BB	1653	G	Sidechain
57	BB	1654	A	Sidechain
57	BB	1656	C	Sidechain
57	BB	1657	U	Sidechain
57	BB	1658	C	Sidechain
57	BB	1660	G	Sidechain
57	BB	1665	A	Sidechain
57	BB	1666	G	Sidechain
57	BB	1668	A	Sidechain
57	BB	1670	C	Sidechain
57	BB	1672	A	Sidechain
57	BB	1678	A	Sidechain
57	BB	1679	A	Sidechain
57	BB	1680	U	Sidechain
57	BB	1681	G	Sidechain
57	BB	1683	U	Sidechain
57	BB	1684	G	Sidechain
57	BB	1689	A	Sidechain
57	BB	169	G	Sidechain
57	BB	1692	U	Sidechain
57	BB	1693	U	Sidechain
57	BB	1694	C	Sidechain
57	BB	1697	G	Sidechain
57	BB	1698	A	Sidechain
57	BB	170	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1700	A	Sidechain
57	BB	1705	A	Sidechain
57	BB	1706	C	Sidechain
57	BB	1707	G	Sidechain
57	BB	1709	U	Sidechain
57	BB	1710	G	Sidechain
57	BB	1713	A	Sidechain
57	BB	1714	U	Sidechain
57	BB	1717	A	Sidechain
57	BB	172	A	Sidechain
57	BB	1720	U	Sidechain
57	BB	1721	G	Sidechain
57	BB	1722	A	Sidechain
57	BB	1733	G	Sidechain
57	BB	1737	G	Sidechain
57	BB	1738	G	Sidechain
57	BB	1739	A	Sidechain
57	BB	1740	G	Sidechain
57	BB	1743	G	Sidechain
57	BB	1744	A	Sidechain
57	BB	1747	U	Sidechain
57	BB	1750	G	Sidechain
57	BB	1754	A	Sidechain
57	BB	1756	G	Sidechain
57	BB	1759	A	Sidechain
57	BB	176	A	Sidechain
57	BB	1762	A	Sidechain
57	BB	1763	G	Sidechain
57	BB	1769	U	Sidechain
57	BB	177	G	Sidechain
57	BB	1772	A	Sidechain
57	BB	1773	A	Sidechain
57	BB	1775	U	Sidechain
57	BB	1776	G	Sidechain
57	BB	1777	U	Sidechain
57	BB	1778	U	Sidechain
57	BB	1779	U	Sidechain
57	BB	178	G	Sidechain
57	BB	1784	A	Sidechain
57	BB	1785	A	Sidechain
57	BB	1786	A	Sidechain
57	BB	179	C	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1791	A	Sidechain
57	BB	1792	G	Sidechain
57	BB	1793	C	Sidechain
57	BB	1795	C	Sidechain
57	BB	1797	G	Sidechain
57	BB	1799	G	Sidechain
57	BB	18	U	Sidechain
57	BB	1800	C	Sidechain
57	BB	1803	A	Sidechain
57	BB	1804	C	Sidechain
57	BB	1805	A	Sidechain
57	BB	1807	G	Sidechain
57	BB	1809	A	Sidechain
57	BB	1810	A	Sidechain
57	BB	1811	G	Sidechain
57	BB	1814	G	Sidechain
57	BB	1817	G	Sidechain
57	BB	1818	U	Sidechain
57	BB	1820	U	Sidechain
57	BB	1822	C	Sidechain
57	BB	1823	G	Sidechain
57	BB	1831	G	Sidechain
57	BB	1832	C	Sidechain
57	BB	1834	U	Sidechain
57	BB	1836	C	Sidechain
57	BB	1839	G	Sidechain
57	BB	1840	G	Sidechain
57	BB	1841	U	Sidechain
57	BB	1844	C	Sidechain
57	BB	1846	G	Sidechain
57	BB	1848	A	Sidechain
57	BB	1849	G	Sidechain
57	BB	185	G	Sidechain
57	BB	1850	G	Sidechain
57	BB	1852	U	Sidechain
57	BB	1853	A	Sidechain
57	BB	1854	A	Sidechain
57	BB	1857	G	Sidechain
57	BB	1858	A	Sidechain
57	BB	1859	U	Sidechain
57	BB	1861	G	Sidechain
57	BB	1863	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1866	A	Sidechain
57	BB	1873	G	Sidechain
57	BB	1877	A	Sidechain
57	BB	1878	G	Sidechain
57	BB	1879	C	Sidechain
57	BB	188	G	Sidechain
57	BB	1880	U	Sidechain
57	BB	1883	U	Sidechain
57	BB	1884	G	Sidechain
57	BB	1885	A	Sidechain
57	BB	1888	G	Sidechain
57	BB	189	G	Sidechain
57	BB	1890	A	Sidechain
57	BB	1891	G	Sidechain
57	BB	1894	C	Sidechain
57	BB	1898	U	Sidechain
57	BB	190	A	Sidechain
57	BB	1904	G	Sidechain
57	BB	1907	G	Sidechain
57	BB	1908	C	Sidechain
57	BB	191	A	Sidechain
57	BB	1910	G	Sidechain
57	BB	1911	U	Sidechain
57	BB	1912	A	Sidechain
57	BB	1914	C	Sidechain
57	BB	1918	A	Sidechain
57	BB	1919	A	Sidechain
57	BB	192	C	Sidechain
57	BB	1920	C	Sidechain
57	BB	1922	G	Sidechain
57	BB	1923	U	Sidechain
57	BB	1925	C	Sidechain
57	BB	1926	U	Sidechain
57	BB	1927	A	Sidechain
57	BB	1929	G	Sidechain
57	BB	193	U	Sidechain
57	BB	1930	G	Sidechain
57	BB	1933	G	Sidechain
57	BB	1938	A	Sidechain
57	BB	194	G	Sidechain
57	BB	1943	U	Sidechain
57	BB	1944	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	1945	G	Sidechain
57	BB	1946	U	Sidechain
57	BB	1949	G	Sidechain
57	BB	195	A	Sidechain
57	BB	1950	G	Sidechain
57	BB	1952	A	Sidechain
57	BB	1953	A	Sidechain
57	BB	1954	G	Sidechain
57	BB	1955	U	Sidechain
57	BB	1956	U	Sidechain
57	BB	1957	C	Sidechain
57	BB	196	A	Sidechain
57	BB	1960	A	Sidechain
57	BB	1966	A	Sidechain
57	BB	1969	A	Sidechain
57	BB	1970	A	Sidechain
57	BB	1971	U	Sidechain
57	BB	1972	G	Sidechain
57	BB	1974	C	Sidechain
57	BB	1976	U	Sidechain
57	BB	1978	A	Sidechain
57	BB	198	C	Sidechain
57	BB	1980	G	Sidechain
57	BB	1983	G	Sidechain
57	BB	1984	G	Sidechain
57	BB	1987	A	Sidechain
57	BB	1988	G	Sidechain
57	BB	1989	G	Sidechain
57	BB	1991	U	Sidechain
57	BB	1992	G	Sidechain
57	BB	1993	U	Sidechain
57	BB	1995	U	Sidechain
57	BB	1998	A	Sidechain
57	BB	2	G	Sidechain
57	BB	200	U	Sidechain
57	BB	2000	C	Sidechain
57	BB	2002	G	Sidechain
57	BB	2004	G	Sidechain
57	BB	2006	C	Sidechain
57	BB	2007	U	Sidechain
57	BB	2010	G	Sidechain
57	BB	2013	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2018	G	Sidechain
57	BB	202	U	Sidechain
57	BB	2020	A	Sidechain
57	BB	2024	G	Sidechain
57	BB	2026	U	Sidechain
57	BB	2028	U	Sidechain
57	BB	2029	G	Sidechain
57	BB	203	A	Sidechain
57	BB	2030	A	Sidechain
57	BB	2032	G	Sidechain
57	BB	2033	A	Sidechain
57	BB	2034	U	Sidechain
57	BB	2035	G	Sidechain
57	BB	2038	G	Sidechain
57	BB	2039	U	Sidechain
57	BB	2042	A	Sidechain
57	BB	2043	C	Sidechain
57	BB	2048	G	Sidechain
57	BB	205	G	Sidechain
57	BB	2053	G	Sidechain
57	BB	2057	G	Sidechain
57	BB	2058	A	Sidechain
57	BB	206	U	Sidechain
57	BB	2061	G	Sidechain
57	BB	2068	U	Sidechain
57	BB	2069	G	Sidechain
57	BB	207	A	Sidechain
57	BB	2070	A	Sidechain
57	BB	2072	C	Sidechain
57	BB	2073	C	Sidechain
57	BB	2074	U	Sidechain
57	BB	2075	U	Sidechain
57	BB	2076	U	Sidechain
57	BB	2077	A	Sidechain
57	BB	2079	U	Sidechain
57	BB	208	C	Sidechain
57	BB	2080	A	Sidechain
57	BB	2090	A	Sidechain
57	BB	2092	U	Sidechain
57	BB	2094	A	Sidechain
57	BB	2097	A	Sidechain
57	BB	21	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2101	A	Sidechain
57	BB	2102	G	Sidechain
57	BB	2103	C	Sidechain
57	BB	2105	U	Sidechain
57	BB	2106	U	Sidechain
57	BB	2107	G	Sidechain
57	BB	211	C	Sidechain
57	BB	2112	G	Sidechain
57	BB	2113	U	Sidechain
57	BB	2115	G	Sidechain
57	BB	2116	G	Sidechain
57	BB	2119	A	Sidechain
57	BB	2127	G	Sidechain
57	BB	2130	U	Sidechain
57	BB	2132	U	Sidechain
57	BB	2134	A	Sidechain
57	BB	2138	G	Sidechain
57	BB	214	G	Sidechain
57	BB	2141	G	Sidechain
57	BB	2145	C	Sidechain
57	BB	2146	C	Sidechain
57	BB	2148	G	Sidechain
57	BB	2149	U	Sidechain
57	BB	215	G	Sidechain
57	BB	2152	G	Sidechain
57	BB	2154	A	Sidechain
57	BB	2158	A	Sidechain
57	BB	2159	G	Sidechain
57	BB	2161	C	Sidechain
57	BB	2162	G	Sidechain
57	BB	2163	A	Sidechain
57	BB	2164	C	Sidechain
57	BB	2166	U	Sidechain
57	BB	2167	U	Sidechain
57	BB	2168	G	Sidechain
57	BB	2170	A	Sidechain
57	BB	2171	A	Sidechain
57	BB	2173	A	Sidechain
57	BB	2177	C	Sidechain
57	BB	2178	C	Sidechain
57	BB	2179	C	Sidechain
57	BB	2180	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2184	A	Sidechain
57	BB	2186	G	Sidechain
57	BB	2187	U	Sidechain
57	BB	2188	U	Sidechain
57	BB	2189	U	Sidechain
57	BB	219	A	Sidechain
57	BB	2190	G	Sidechain
57	BB	2191	A	Sidechain
57	BB	2195	U	Sidechain
57	BB	2196	C	Sidechain
57	BB	2197	U	Sidechain
57	BB	2198	A	Sidechain
57	BB	2199	A	Sidechain
57	BB	22	C	Sidechain
57	BB	2200	C	Sidechain
57	BB	2202	U	Sidechain
57	BB	2207	C	Sidechain
57	BB	2209	G	Sidechain
57	BB	2210	U	Sidechain
57	BB	2211	A	Sidechain
57	BB	2212	A	Sidechain
57	BB	2213	U	Sidechain
57	BB	2215	C	Sidechain
57	BB	2216	G	Sidechain
57	BB	2217	G	Sidechain
57	BB	2220	U	Sidechain
57	BB	2221	G	Sidechain
57	BB	2222	C	Sidechain
57	BB	2224	G	Sidechain
57	BB	2225	A	Sidechain
57	BB	2226	C	Sidechain
57	BB	2228	G	Sidechain
57	BB	2229	U	Sidechain
57	BB	2230	G	Sidechain
57	BB	2231	U	Sidechain
57	BB	2233	U	Sidechain
57	BB	2234	G	Sidechain
57	BB	2238	G	Sidechain
57	BB	224	U	Sidechain
57	BB	2240	U	Sidechain
57	BB	2242	G	Sidechain
57	BB	2244	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2245	U	Sidechain
57	BB	2246	G	Sidechain
57	BB	2248	C	Sidechain
57	BB	225	C	Sidechain
57	BB	2250	G	Sidechain
57	BB	2251	G	Sidechain
57	BB	2252	G	Sidechain
57	BB	2253	G	Sidechain
57	BB	2254	C	Sidechain
57	BB	2256	G	Sidechain
57	BB	2257	U	Sidechain
57	BB	2258	C	Sidechain
57	BB	2261	C	Sidechain
57	BB	2266	A	Sidechain
57	BB	2267	A	Sidechain
57	BB	2269	G	Sidechain
57	BB	227	A	Sidechain
57	BB	2270	A	Sidechain
57	BB	2272	U	Sidechain
57	BB	2274	A	Sidechain
57	BB	2275	C	Sidechain
57	BB	2277	G	Sidechain
57	BB	2278	A	Sidechain
57	BB	228	C	Sidechain
57	BB	2280	G	Sidechain
57	BB	2283	C	Sidechain
57	BB	2285	C	Sidechain
57	BB	2286	G	Sidechain
57	BB	2287	A	Sidechain
57	BB	2289	G	Sidechain
57	BB	2291	U	Sidechain
57	BB	2292	U	Sidechain
57	BB	2295	C	Sidechain
57	BB	2296	U	Sidechain
57	BB	2297	A	Sidechain
57	BB	2298	A	Sidechain
57	BB	2299	U	Sidechain
57	BB	23	G	Sidechain
57	BB	2300	C	Sidechain
57	BB	2303	G	Sidechain
57	BB	2304	G	Sidechain
57	BB	2308	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	231	A	Sidechain
57	BB	2310	C	Sidechain
57	BB	2311	A	Sidechain
57	BB	2312	U	Sidechain
57	BB	2315	G	Sidechain
57	BB	2317	A	Sidechain
57	BB	2319	G	Sidechain
57	BB	2320	U	Sidechain
57	BB	2321	U	Sidechain
57	BB	2324	U	Sidechain
57	BB	2327	A	Sidechain
57	BB	233	A	Sidechain
57	BB	2333	A	Sidechain
57	BB	2337	G	Sidechain
57	BB	2339	C	Sidechain
57	BB	234	U	Sidechain
57	BB	2345	G	Sidechain
57	BB	2348	U	Sidechain
57	BB	235	U	Sidechain
57	BB	2352	A	Sidechain
57	BB	2353	G	Sidechain
57	BB	2356	U	Sidechain
57	BB	2357	G	Sidechain
57	BB	2359	C	Sidechain
57	BB	2361	G	Sidechain
57	BB	2365	G	Sidechain
57	BB	2366	A	Sidechain
57	BB	2367	G	Sidechain
57	BB	2372	U	Sidechain
57	BB	2375	G	Sidechain
57	BB	2380	C	Sidechain
57	BB	2381	A	Sidechain
57	BB	2382	G	Sidechain
57	BB	2383	G	Sidechain
57	BB	2387	U	Sidechain
57	BB	2394	C	Sidechain
57	BB	2395	C	Sidechain
57	BB	24	G	Sidechain
57	BB	2400	G	Sidechain
57	BB	2401	U	Sidechain
57	BB	2406	A	Sidechain
57	BB	2407	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2409	G	Sidechain
57	BB	2410	G	Sidechain
57	BB	2411	A	Sidechain
57	BB	2412	A	Sidechain
57	BB	2413	G	Sidechain
57	BB	2414	G	Sidechain
57	BB	2417	C	Sidechain
57	BB	242	G	Sidechain
57	BB	2422	C	Sidechain
57	BB	2423	U	Sidechain
57	BB	2428	G	Sidechain
57	BB	2429	G	Sidechain
57	BB	2431	U	Sidechain
57	BB	2434	A	Sidechain
57	BB	2435	A	Sidechain
57	BB	2437	G	Sidechain
57	BB	2440	C	Sidechain
57	BB	2442	C	Sidechain
57	BB	2444	G	Sidechain
57	BB	245	G	Sidechain
57	BB	2451	A	Sidechain
57	BB	2452	C	Sidechain
57	BB	2454	G	Sidechain
57	BB	2458	G	Sidechain
57	BB	246	C	Sidechain
57	BB	2461	A	Sidechain
57	BB	2464	G	Sidechain
57	BB	2466	C	Sidechain
57	BB	2467	C	Sidechain
57	BB	2468	A	Sidechain
57	BB	247	G	Sidechain
57	BB	2470	G	Sidechain
57	BB	2471	A	Sidechain
57	BB	2472	G	Sidechain
57	BB	2473	U	Sidechain
57	BB	2478	A	Sidechain
57	BB	248	G	Sidechain
57	BB	2481	G	Sidechain
57	BB	2482	A	Sidechain
57	BB	2483	C	Sidechain
57	BB	2484	G	Sidechain
57	BB	2486	C	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2487	G	Sidechain
57	BB	2488	G	Sidechain
57	BB	2489	U	Sidechain
57	BB	249	C	Sidechain
57	BB	2490	G	Sidechain
57	BB	2491	U	Sidechain
57	BB	2498	C	Sidechain
57	BB	25	U	Sidechain
57	BB	250	G	Sidechain
57	BB	2500	U	Sidechain
57	BB	2501	C	Sidechain
57	BB	2502	G	Sidechain
57	BB	2504	U	Sidechain
57	BB	2505	G	Sidechain
57	BB	2506	U	Sidechain
57	BB	251	A	Sidechain
57	BB	2513	A	Sidechain
57	BB	2514	U	Sidechain
57	BB	2516	A	Sidechain
57	BB	2519	U	Sidechain
57	BB	2520	C	Sidechain
57	BB	2521	C	Sidechain
57	BB	2522	U	Sidechain
57	BB	2523	G	Sidechain
57	BB	2524	G	Sidechain
57	BB	2526	G	Sidechain
57	BB	2527	C	Sidechain
57	BB	2528	U	Sidechain
57	BB	2529	G	Sidechain
57	BB	2530	A	Sidechain
57	BB	2531	A	Sidechain
57	BB	2532	G	Sidechain
57	BB	2534	A	Sidechain
57	BB	2535	G	Sidechain
57	BB	2540	C	Sidechain
57	BB	2541	A	Sidechain
57	BB	2543	G	Sidechain
57	BB	2549	G	Sidechain
57	BB	2550	G	Sidechain
57	BB	2555	U	Sidechain
57	BB	2556	C	Sidechain
57	BB	2557	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2558	C	Sidechain
57	BB	2559	C	Sidechain
57	BB	2560	A	Sidechain
57	BB	2564	A	Sidechain
57	BB	2565	A	Sidechain
57	BB	2567	G	Sidechain
57	BB	2569	G	Sidechain
57	BB	2575	C	Sidechain
57	BB	2576	G	Sidechain
57	BB	2577	A	Sidechain
57	BB	2583	G	Sidechain
57	BB	2584	U	Sidechain
57	BB	2585	U	Sidechain
57	BB	2587	A	Sidechain
57	BB	2593	U	Sidechain
57	BB	2596	U	Sidechain
57	BB	2597	G	Sidechain
57	BB	2598	A	Sidechain
57	BB	2599	G	Sidechain
57	BB	26	G	Sidechain
57	BB	2602	A	Sidechain
57	BB	2605	U	Sidechain
57	BB	2610	C	Sidechain
57	BB	2611	C	Sidechain
57	BB	2612	C	Sidechain
57	BB	2618	G	Sidechain
57	BB	262	A	Sidechain
57	BB	2621	G	Sidechain
57	BB	2623	G	Sidechain
57	BB	2626	C	Sidechain
57	BB	2627	G	Sidechain
57	BB	2629	U	Sidechain
57	BB	2632	A	Sidechain
57	BB	2635	A	Sidechain
57	BB	2637	U	Sidechain
57	BB	2638	G	Sidechain
57	BB	264	C	Sidechain
57	BB	2640	G	Sidechain
57	BB	2641	G	Sidechain
57	BB	2644	G	Sidechain
57	BB	265	A	Sidechain
57	BB	2650	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2651	C	Sidechain
57	BB	2652	C	Sidechain
57	BB	2653	U	Sidechain
57	BB	2655	G	Sidechain
57	BB	2660	A	Sidechain
57	BB	2661	G	Sidechain
57	BB	2667	C	Sidechain
57	BB	2669	G	Sidechain
57	BB	2671	G	Sidechain
57	BB	2672	U	Sidechain
57	BB	2673	G	Sidechain
57	BB	2674	G	Sidechain
57	BB	268	C	Sidechain
57	BB	2684	U	Sidechain
57	BB	2685	G	Sidechain
57	BB	2687	U	Sidechain
57	BB	2688	G	Sidechain
57	BB	2689	U	Sidechain
57	BB	269	C	Sidechain
57	BB	2690	U	Sidechain
57	BB	2692	G	Sidechain
57	BB	2695	U	Sidechain
57	BB	27	G	Sidechain
57	BB	270	A	Sidechain
57	BB	2701	U	Sidechain
57	BB	2702	G	Sidechain
57	BB	2704	C	Sidechain
57	BB	2707	U	Sidechain
57	BB	2709	G	Sidechain
57	BB	2713	U	Sidechain
57	BB	2714	G	Sidechain
57	BB	2715	C	Sidechain
57	BB	2717	C	Sidechain
57	BB	2718	G	Sidechain
57	BB	2719	G	Sidechain
57	BB	272	A	Sidechain
57	BB	2721	A	Sidechain
57	BB	2726	A	Sidechain
57	BB	2729	G	Sidechain
57	BB	2730	C	Sidechain
57	BB	2732	G	Sidechain
57	BB	2734	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2735	G	Sidechain
57	BB	2736	A	Sidechain
57	BB	2739	U	Sidechain
57	BB	2741	A	Sidechain
57	BB	2747	G	Sidechain
57	BB	2748	A	Sidechain
57	BB	275	C	Sidechain
57	BB	2752	C	Sidechain
57	BB	2753	A	Sidechain
57	BB	2754	U	Sidechain
57	BB	2756	U	Sidechain
57	BB	2757	A	Sidechain
57	BB	2758	A	Sidechain
57	BB	2759	G	Sidechain
57	BB	2766	A	Sidechain
57	BB	2767	C	Sidechain
57	BB	2768	U	Sidechain
57	BB	2770	G	Sidechain
57	BB	2771	C	Sidechain
57	BB	2778	A	Sidechain
57	BB	2780	G	Sidechain
57	BB	2781	A	Sidechain
57	BB	2782	G	Sidechain
57	BB	2788	C	Sidechain
57	BB	279	A	Sidechain
57	BB	2790	U	Sidechain
57	BB	2795	C	Sidechain
57	BB	2797	U	Sidechain
57	BB	2798	U	Sidechain
57	BB	28	A	Sidechain
57	BB	2800	A	Sidechain
57	BB	2811	G	Sidechain
57	BB	2812	G	Sidechain
57	BB	2813	A	Sidechain
57	BB	2816	G	Sidechain
57	BB	2818	U	Sidechain
57	BB	2819	G	Sidechain
57	BB	2820	A	Sidechain
57	BB	2821	A	Sidechain
57	BB	2829	A	Sidechain
57	BB	283	G	Sidechain
57	BB	2830	C	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	2831	G	Sidechain
57	BB	2834	G	Sidechain
57	BB	2835	A	Sidechain
57	BB	2836	U	Sidechain
57	BB	2839	G	Sidechain
57	BB	2840	C	Sidechain
57	BB	2842	G	Sidechain
57	BB	2843	G	Sidechain
57	BB	2845	U	Sidechain
57	BB	2848	G	Sidechain
57	BB	2849	U	Sidechain
57	BB	2851	A	Sidechain
57	BB	2852	G	Sidechain
57	BB	2857	G	Sidechain
57	BB	2858	C	Sidechain
57	BB	2859	G	Sidechain
57	BB	2860	A	Sidechain
57	BB	2864	G	Sidechain
57	BB	2866	U	Sidechain
57	BB	287	G	Sidechain
57	BB	2873	A	Sidechain
57	BB	2876	G	Sidechain
57	BB	2877	G	Sidechain
57	BB	2878	U	Sidechain
57	BB	288	U	Sidechain
57	BB	2884	U	Sidechain
57	BB	2885	G	Sidechain
57	BB	2886	A	Sidechain
57	BB	2888	C	Sidechain
57	BB	2889	C	Sidechain
57	BB	289	G	Sidechain
57	BB	2890	G	Sidechain
57	BB	2891	U	Sidechain
57	BB	2893	A	Sidechain
57	BB	2894	G	Sidechain
57	BB	2900	A	Sidechain
57	BB	2901	C	Sidechain
57	BB	2903	U	Sidechain
57	BB	291	G	Sidechain
57	BB	292	U	Sidechain
57	BB	298	G	Sidechain
57	BB	30	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	307	G	Sidechain
57	BB	308	G	Sidechain
57	BB	316	C	Sidechain
57	BB	320	A	Sidechain
57	BB	321	U	Sidechain
57	BB	322	A	Sidechain
57	BB	324	A	Sidechain
57	BB	325	G	Sidechain
57	BB	328	U	Sidechain
57	BB	329	G	Sidechain
57	BB	330	A	Sidechain
57	BB	331	C	Sidechain
57	BB	333	G	Sidechain
57	BB	334	C	Sidechain
57	BB	335	C	Sidechain
57	BB	336	C	Sidechain
57	BB	337	C	Sidechain
57	BB	339	U	Sidechain
57	BB	342	A	Sidechain
57	BB	343	C	Sidechain
57	BB	345	A	Sidechain
57	BB	347	A	Sidechain
57	BB	350	G	Sidechain
57	BB	352	A	Sidechain
57	BB	353	C	Sidechain
57	BB	356	G	Sidechain
57	BB	359	G	Sidechain
57	BB	360	U	Sidechain
57	BB	361	G	Sidechain
57	BB	362	A	Sidechain
57	BB	363	G	Sidechain
57	BB	365	U	Sidechain
57	BB	366	C	Sidechain
57	BB	367	G	Sidechain
57	BB	369	U	Sidechain
57	BB	370	G	Sidechain
57	BB	372	G	Sidechain
57	BB	375	G	Sidechain
57	BB	376	G	Sidechain
57	BB	377	G	Sidechain
57	BB	380	G	Sidechain
57	BB	381	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	384	A	Sidechain
57	BB	385	C	Sidechain
57	BB	386	G	Sidechain
57	BB	388	G	Sidechain
57	BB	39	G	Sidechain
57	BB	390	U	Sidechain
57	BB	394	C	Sidechain
57	BB	395	U	Sidechain
57	BB	397	U	Sidechain
57	BB	400	G	Sidechain
57	BB	402	A	Sidechain
57	BB	405	U	Sidechain
57	BB	406	G	Sidechain
57	BB	407	G	Sidechain
57	BB	419	U	Sidechain
57	BB	421	C	Sidechain
57	BB	422	A	Sidechain
57	BB	423	A	Sidechain
57	BB	424	G	Sidechain
57	BB	428	A	Sidechain
57	BB	429	A	Sidechain
57	BB	43	G	Sidechain
57	BB	431	U	Sidechain
57	BB	435	C	Sidechain
57	BB	436	C	Sidechain
57	BB	437	U	Sidechain
57	BB	438	G	Sidechain
57	BB	443	A	Sidechain
57	BB	446	G	Sidechain
57	BB	449	A	Sidechain
57	BB	453	A	Sidechain
57	BB	454	A	Sidechain
57	BB	457	A	Sidechain
57	BB	458	G	Sidechain
57	BB	460	A	Sidechain
57	BB	464	U	Sidechain
57	BB	465	G	Sidechain
57	BB	466	A	Sidechain
57	BB	467	G	Sidechain
57	BB	469	G	Sidechain
57	BB	47	C	Sidechain
57	BB	470	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	472	A	Sidechain
57	BB	475	C	Sidechain
57	BB	476	G	Sidechain
57	BB	477	A	Sidechain
57	BB	478	A	Sidechain
57	BB	479	A	Sidechain
57	BB	480	A	Sidechain
57	BB	481	G	Sidechain
57	BB	489	G	Sidechain
57	BB	490	C	Sidechain
57	BB	491	G	Sidechain
57	BB	492	A	Sidechain
57	BB	493	G	Sidechain
57	BB	494	G	Sidechain
57	BB	496	G	Sidechain
57	BB	498	G	Sidechain
57	BB	499	U	Sidechain
57	BB	50	U	Sidechain
57	BB	503	A	Sidechain
57	BB	504	A	Sidechain
57	BB	506	G	Sidechain
57	BB	51	G	Sidechain
57	BB	512	G	Sidechain
57	BB	514	A	Sidechain
57	BB	52	A	Sidechain
57	BB	526	A	Sidechain
57	BB	527	C	Sidechain
57	BB	529	A	Sidechain
57	BB	53	A	Sidechain
57	BB	530	G	Sidechain
57	BB	532	A	Sidechain
57	BB	537	G	Sidechain
57	BB	538	A	Sidechain
57	BB	54	G	Sidechain
57	BB	542	C	Sidechain
57	BB	543	G	Sidechain
57	BB	545	U	Sidechain
57	BB	547	A	Sidechain
57	BB	548	G	Sidechain
57	BB	549	G	Sidechain
57	BB	55	G	Sidechain
57	BB	552	U	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	555	G	Sidechain
57	BB	556	A	Sidechain
57	BB	56	A	Sidechain
57	BB	561	G	Sidechain
57	BB	563	A	Sidechain
57	BB	566	U	Sidechain
57	BB	570	G	Sidechain
57	BB	571	U	Sidechain
57	BB	574	A	Sidechain
57	BB	575	A	Sidechain
57	BB	577	G	Sidechain
57	BB	578	G	Sidechain
57	BB	579	G	Sidechain
57	BB	581	C	Sidechain
57	BB	585	G	Sidechain
57	BB	588	U	Sidechain
57	BB	59	U	Sidechain
57	BB	593	U	Sidechain
57	BB	595	C	Sidechain
57	BB	597	G	Sidechain
57	BB	598	U	Sidechain
57	BB	604	G	Sidechain
57	BB	606	U	Sidechain
57	BB	608	A	Sidechain
57	BB	612	G	Sidechain
57	BB	613	A	Sidechain
57	BB	615	U	Sidechain
57	BB	617	G	Sidechain
57	BB	618	G	Sidechain
57	BB	619	G	Sidechain
57	BB	628	G	Sidechain
57	BB	629	G	Sidechain
57	BB	630	G	Sidechain
57	BB	631	A	Sidechain
57	BB	632	A	Sidechain
57	BB	633	A	Sidechain
57	BB	636	G	Sidechain
57	BB	637	A	Sidechain
57	BB	638	G	Sidechain
57	BB	64	A	Sidechain
57	BB	641	U	Sidechain
57	BB	644	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	645	C	Sidechain
57	BB	647	G	Sidechain
57	BB	648	G	Sidechain
57	BB	656	G	Sidechain
57	BB	659	G	Sidechain
57	BB	660	C	Sidechain
57	BB	663	G	Sidechain
57	BB	666	A	Sidechain
57	BB	667	U	Sidechain
57	BB	669	G	Sidechain
57	BB	671	C	Sidechain
57	BB	673	C	Sidechain
57	BB	674	G	Sidechain
57	BB	675	A	Sidechain
57	BB	676	A	Sidechain
57	BB	677	A	Sidechain
57	BB	679	C	Sidechain
57	BB	68	G	Sidechain
57	BB	680	C	Sidechain
57	BB	681	G	Sidechain
57	BB	682	G	Sidechain
57	BB	683	U	Sidechain
57	BB	684	G	Sidechain
57	BB	685	A	Sidechain
57	BB	686	U	Sidechain
57	BB	687	C	Sidechain
57	BB	688	U	Sidechain
57	BB	690	G	Sidechain
57	BB	693	A	Sidechain
57	BB	695	G	Sidechain
57	BB	696	G	Sidechain
57	BB	697	G	Sidechain
57	BB	7	G	Sidechain
57	BB	70	G	Sidechain
57	BB	700	G	Sidechain
57	BB	703	U	Sidechain
57	BB	704	G	Sidechain
57	BB	705	A	Sidechain
57	BB	706	A	Sidechain
57	BB	708	G	Sidechain
57	BB	711	G	Sidechain
57	BB	712	G	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	715	A	Sidechain
57	BB	716	A	Sidechain
57	BB	72	U	Sidechain
57	BB	723	C	Sidechain
57	BB	725	G	Sidechain
57	BB	726	G	Sidechain
57	BB	727	A	Sidechain
57	BB	728	G	Sidechain
57	BB	730	A	Sidechain
57	BB	731	C	Sidechain
57	BB	733	G	Sidechain
57	BB	734	A	Sidechain
57	BB	735	A	Sidechain
57	BB	737	C	Sidechain
57	BB	738	G	Sidechain
57	BB	739	A	Sidechain
57	BB	740	C	Sidechain
57	BB	741	U	Sidechain
57	BB	742	A	Sidechain
57	BB	744	U	Sidechain
57	BB	746	U	Sidechain
57	BB	75	G	Sidechain
57	BB	750	A	Sidechain
57	BB	752	A	Sidechain
57	BB	754	U	Sidechain
57	BB	756	A	Sidechain
57	BB	759	G	Sidechain
57	BB	76	C	Sidechain
57	BB	760	G	Sidechain
57	BB	761	A	Sidechain
57	BB	762	U	Sidechain
57	BB	763	G	Sidechain
57	BB	764	A	Sidechain
57	BB	766	U	Sidechain
57	BB	767	U	Sidechain
57	BB	768	G	Sidechain
57	BB	773	U	Sidechain
57	BB	776	G	Sidechain
57	BB	777	G	Sidechain
57	BB	778	G	Sidechain
57	BB	780	G	Sidechain
57	BB	782	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	784	G	Sidechain
57	BB	79	C	Sidechain
57	BB	792	A	Sidechain
57	BB	793	A	Sidechain
57	BB	794	A	Sidechain
57	BB	799	G	Sidechain
57	BB	8	C	Sidechain
57	BB	80	G	Sidechain
57	BB	802	A	Sidechain
57	BB	803	U	Sidechain
57	BB	804	A	Sidechain
57	BB	807	U	Sidechain
57	BB	809	G	Sidechain
57	BB	81	G	Sidechain
57	BB	810	U	Sidechain
57	BB	813	U	Sidechain
57	BB	814	C	Sidechain
57	BB	817	C	Sidechain
57	BB	821	A	Sidechain
57	BB	822	G	Sidechain
57	BB	826	U	Sidechain
57	BB	827	U	Sidechain
57	BB	829	A	Sidechain
57	BB	830	G	Sidechain
57	BB	833	A	Sidechain
57	BB	835	C	Sidechain
57	BB	836	G	Sidechain
57	BB	838	C	Sidechain
57	BB	841	G	Sidechain
57	BB	842	U	Sidechain
57	BB	844	A	Sidechain
57	BB	845	A	Sidechain
57	BB	847	U	Sidechain
57	BB	849	A	Sidechain
57	BB	85	G	Sidechain
57	BB	853	C	Sidechain
57	BB	854	C	Sidechain
57	BB	857	G	Sidechain
57	BB	858	G	Sidechain
57	BB	859	G	Sidechain
57	BB	860	U	Sidechain
57	BB	866	A	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	87	U	Sidechain
57	BB	870	U	Sidechain
57	BB	877	A	Sidechain
57	BB	88	G	Sidechain
57	BB	880	G	Sidechain
57	BB	881	G	Sidechain
57	BB	882	G	Sidechain
57	BB	883	G	Sidechain
57	BB	884	U	Sidechain
57	BB	885	C	Sidechain
57	BB	886	A	Sidechain
57	BB	89	A	Sidechain
57	BB	891	G	Sidechain
57	BB	892	A	Sidechain
57	BB	895	U	Sidechain
57	BB	896	A	Sidechain
57	BB	898	C	Sidechain
57	BB	90	U	Sidechain
57	BB	900	A	Sidechain
57	BB	91	A	Sidechain
57	BB	910	A	Sidechain
57	BB	911	A	Sidechain
57	BB	912	C	Sidechain
57	BB	913	U	Sidechain
57	BB	916	G	Sidechain
57	BB	917	A	Sidechain
57	BB	919	U	Sidechain
57	BB	924	G	Sidechain
57	BB	925	A	Sidechain
57	BB	926	G	Sidechain
57	BB	928	A	Sidechain
57	BB	929	U	Sidechain
57	BB	932	U	Sidechain
57	BB	933	A	Sidechain
57	BB	934	U	Sidechain
57	BB	935	C	Sidechain
57	BB	936	A	Sidechain
57	BB	938	G	Sidechain
57	BB	939	G	Sidechain
57	BB	940	G	Sidechain
57	BB	942	G	Sidechain
57	BB	944	C	Sidechain

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Mol	Chain	Res	Type	Group
57	BB	945	A	Sidechain
57	BB	946	C	Sidechain
57	BB	948	C	Sidechain
57	BB	949	G	Sidechain
57	BB	95	A	Sidechain
57	BB	953	G	Sidechain
57	BB	954	G	Sidechain
57	BB	955	U	Sidechain
57	BB	956	G	Sidechain
57	BB	958	U	Sidechain
57	BB	959	A	Sidechain
57	BB	96	C	Sidechain
57	BB	961	C	Sidechain
57	BB	962	G	Sidechain
57	BB	963	U	Sidechain
57	BB	965	C	Sidechain
57	BB	967	U	Sidechain
57	BB	972	A	Sidechain
57	BB	974	G	Sidechain
57	BB	977	G	Sidechain
57	BB	981	A	Sidechain
57	BB	984	A	Sidechain
57	BB	986	C	Sidechain
57	BB	988	A	Sidechain
57	BB	989	G	Sidechain
57	BB	995	C	Sidechain
57	BB	996	A	Sidechain
57	BB	997	G	Sidechain
57	BB	998	C	Sidechain
57	BB	999	U	Sidechain
45	BC	102	TYR	Sidechain
45	BC	12	ARG	Sidechain
45	BC	176	ARG	Sidechain
45	BC	213	ARG	Sidechain
45	BC	231	HIS	Sidechain
45	BC	27	LYS	Peptide
45	BC	57	HIS	Sidechain
45	BC	82	TYR	Sidechain
45	BC	95	TYR	Sidechain
52	BD	141	ARG	Sidechain
52	BD	153	GLY	Peptide
52	BD	179	ARG	Sidechain

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Mol	Chain	Res	Type	Group
52	BD	33	ARG	Sidechain
52	BD	68	PHE	Sidechain
53	BE	114	ARG	Sidechain
53	BE	136	GLN	Peptide
53	BE	162	ARG	Sidechain
53	BE	19	PHE	Sidechain
53	BE	21	ARG	Sidechain
53	BE	35	TYR	Sidechain
53	BE	5	LEU	Peptide
54	BF	130	GLY	Peptide
54	BF	132	ARG	Sidechain
54	BF	142	TYR	Sidechain
54	BF	147	ARG	Sidechain
54	BF	176	PHE	Sidechain
54	BF	21	TYR	Sidechain
54	BF	6	TYR	Sidechain
54	BF	7	TYR	Sidechain
54	BF	91	ARG	Sidechain
55	BG	110	HIS	Peptide
55	BG	114	HIS	Sidechain
55	BG	151	ARG	Peptide
55	BG	34	ARG	Sidechain
55	BG	57	TYR	Sidechain
56	BH	139	PHE	Sidechain
56	BH	25	TYR	Sidechain
56	BH	97	ARG	Sidechain
28	BI	10	LEU	Peptide
28	BI	3	LYS	Peptide
28	BI	7	TYR	Sidechain
29	BJ	116	ARG	Sidechain
29	BJ	125	TYR	Sidechain
29	BJ	16	TYR	Sidechain
29	BJ	37	ARG	Sidechain
29	BJ	44	TYR	Sidechain
29	BJ	53	TYR	Sidechain
29	BJ	74	TYR	Sidechain
29	BJ	77	HIS	Sidechain
29	BJ	99	ARG	Sidechain
30	BK	77	ARG	Sidechain
31	BL	123	ARG	Sidechain
31	BL	33	ARG	Sidechain
31	BL	41	ARG	Sidechain

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Mol	Chain	Res	Type	Group
31	BL	59	ARG	Sidechain
31	BL	60	ARG	Sidechain
31	BL	64	PHE	Sidechain
31	BL	66	PHE	Sidechain
31	BL	7	SER	Peptide
32	BM	38	ARG	Sidechain
32	BM	44	ARG	Sidechain
32	BM	66	ARG	Sidechain
32	BM	91	TYR	Sidechain
33	BN	4	ARG	Sidechain
33	BN	69	ARG	Sidechain
33	BN	71	ARG	Sidechain
34	BO	33	ARG	Sidechain
34	BO	36	TYR	Sidechain
34	BO	55	GLU	Peptide
34	BO	64	TYR	Sidechain
35	BP	108	ARG	Sidechain
35	BP	19	PHE	Peptide
36	BQ	10	ARG	Sidechain
36	BQ	27	ARG	Sidechain
36	BQ	46	TYR	Sidechain
36	BQ	47	ARG	Sidechain
37	BR	54	VAL	Peptide
37	BR	77	PHE	Sidechain
37	BR	78	ARG	Sidechain
37	BR	82	HIS	Sidechain
37	BR	83	TYR	Sidechain
37	BR	93	PHE	Sidechain
38	BS	6	LYS	Peptide
39	BT	3	ARG	Peptide
39	BT	77	ARG	Sidechain
40	BU	21	ARG	Sidechain
40	BU	81	ARG	Sidechain
41	BV	19	ARG	Sidechain
41	BV	31	TYR	Sidechain
41	BV	72	VAL	Peptide
41	BV	82	TYR	Sidechain
42	BW	10	ARG	Sidechain
42	BW	19	ARG	Sidechain
42	BW	44	PHE	Sidechain
43	BX	36	ARG	Sidechain
43	BX	44	ARG	Sidechain

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Mol	Chain	Res	Type	Group
43	BX	77	TYR	Sidechain
44	BY	47	ARG	Sidechain
44	BY	7	ARG	Sidechain
46	BZ	10	ARG	Sidechain
46	BZ	44	ARG	Sidechain
46	BZ	52	PHE	Sidechain

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	AJ	787	0	828	4	0
2	AK	877	0	887	1	0
3	AL	955	0	1019	9	0
4	AM	877	0	937	8	0
5	AN	774	0	828	9	0
6	AO	716	0	742	8	0
7	AP	639	0	656	2	0
8	AQ	649	0	691	3	0
9	AR	456	0	478	4	0
10	AS	638	0	665	7	0
11	AT	665	0	714	1	0
12	AU	426	0	449	0	0
13	AB	1705	0	1732	9	0
14	AC	1625	0	1699	7	0
15	AD	1643	0	1710	17	0
16	AE	1106	0	1148	6	0
17	AF	818	0	808	6	0
18	AG	1175	0	1230	10	0
19	AH	979	0	1034	4	0
20	AI	1022	0	1070	4	0
21	AA	32832	0	16503	179	0
22	AY	1622	0	812	11	0
23	AW	1619	0	822	22	0
24	AX	232	0	120	2	0
25	AZ	3035	0	3049	17	0
26	AV	1645	0	834	6	0
27	B5	1733	0	1823	10	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
28	BI	1032	0	1088	4	0
29	BJ	1129	0	1162	8	0
30	BK	931	0	1003	5	0
31	BL	1045	0	1117	6	0
32	BM	1074	0	1157	1	0
33	BN	961	0	1000	5	0
34	BO	892	0	923	2	0
35	BP	917	0	965	5	0
36	BQ	947	0	1022	4	0
37	BR	816	0	839	3	0
38	BS	857	0	922	3	0
39	BT	739	0	807	4	0
40	BU	780	0	834	5	0
41	BV	753	0	780	3	0
42	BW	596	0	610	5	0
43	BX	625	0	655	3	0
44	BY	509	0	543	1	0
45	BC	2083	0	2157	16	0
46	BZ	449	0	491	0	0
47	B0	444	0	461	6	0
48	B1	410	0	440	4	0
49	B2	377	0	418	3	0
50	B3	504	0	574	3	0
51	B4	302	0	343	0	0
52	BD	1565	0	1616	16	0
53	BE	1552	0	1619	7	0
54	BF	1420	0	1460	10	0
55	BG	1323	0	1374	7	0
56	BH	1111	0	1148	4	0
57	BB	62321	0	31298	323	0
58	BA	2508	0	1268	8	0
59	AZ	28	0	12	0	0
All	All	152250	0	103394	772	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 3.

All (772) close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:63:G:C5	23:AW:63:G:C4	1.87	1.59

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
23:AW:63:G:C8	23:AW:63:G:N7	1.67	1.56
23:AW:63:G:C5	23:AW:63:G:N7	1.86	1.43
23:AW:63:G:C4	23:AW:63:G:N9	1.90	1.40
23:AW:63:G:C8	23:AW:63:G:N9	1.97	1.31
21:AA:842:U:H3'	21:AA:843:U:H4'	1.63	0.80
57:BB:877:A:C2	57:BB:901:C:C2	2.70	0.79
21:AA:664:G:H22	21:AA:741:G:H1	1.31	0.77
21:AA:199:A:H61	21:AA:218:U:H3	1.34	0.75
45:BC:261:ARG:HH22	57:BB:2223:G:H21	1.36	0.74
21:AA:1131:G:H1	21:AA:1143:G:H21	1.38	0.71
16:AE:38:VAL:HG22	16:AE:44:ARG:HB2	1.73	0.71
21:AA:55:A:C4	25:AZ:222:GLY:HA3	2.26	0.70
41:BV:79:ARG:HE	41:BV:84:PRO:HA	1.56	0.69
23:AW:62:C:H2'	23:AW:63:G:C8	2.29	0.68
57:BB:2792:A:H3'	57:BB:2793:C:H5"	1.76	0.67
21:AA:781:A:H2'	21:AA:782:A:H5'	1.76	0.67
35:BP:7:LEU:HD11	52:BD:179:ARG:HH12	1.58	0.67
21:AA:1239:A:H62	21:AA:1299:A:H62	1.43	0.66
15:AD:99:ASN:HD22	15:AD:103:ARG:HH21	1.43	0.65
45:BC:190:THR:HG22	45:BC:191:LEU:H	1.61	0.65
21:AA:1305:G:H22	21:AA:1331:G:H2'	1.61	0.65
26:AV:6:G:H1	26:AV:67:C:H42	1.44	0.64
5:AN:29:ILE:HG13	5:AN:30:ILE:H	1.62	0.63
15:AD:12:ARG:HA	15:AD:34:GLU:H	1.63	0.63
57:BB:1283:G:H22	57:BB:1286:A:H5'	1.64	0.62
6:AO:24:THR:HA	6:AO:27:GLN:HE21	1.65	0.62
29:BJ:77:HIS:CD2	29:BJ:79:GLY:H	2.18	0.62
23:AW:63:G:C5	23:AW:63:G:C8	2.87	0.62
47:B0:49:ARG:H	47:B0:49:ARG:HD3	1.64	0.62
1:AJ:32:THR:HG21	1:AJ:86:ALA:HB3	1.82	0.61
57:BB:962:G:H21	57:BB:2250:G:H1	1.49	0.61
29:BJ:20:ALA:H	29:BJ:58:ASN:HD21	1.47	0.61
48:B1:16:THR:HG23	48:B1:18:HIS:H	1.65	0.61
48:B1:8:ILE:HD12	48:B1:51:ALA:HB1	1.83	0.60
7:AP:52:LEU:HD11	7:AP:78:VAL:HG21	1.84	0.60
21:AA:1305:G:H21	21:AA:1332:A:H8	1.50	0.60
45:BC:179:GLU:HA	45:BC:268:ARG:HE	1.67	0.60
1:AJ:31:ARG:H	1:AJ:31:ARG:HE	1.50	0.59
21:AA:1409:C:H4'	57:BB:1914:C:H42	1.68	0.59
21:AA:1005:A:C5	21:AA:1006:G:H1'	2.38	0.58
40:BU:86:PHE:HB2	40:BU:92:VAL:HG12	1.83	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:AD:66:VAL:HG22	15:AD:70:GLN:HB2	1.85	0.58
57:BB:548:G:H4'	57:BB:549:G:C4	2.39	0.58
57:BB:2547:A:H2'	57:BB:2548:U:C6	2.38	0.58
52:BD:55:LYS:HG2	52:BD:56:LYS:H	1.68	0.58
21:AA:496:A:H2'	21:AA:497:G:C8	2.39	0.57
13:AB:217:ALA:HA	13:AB:221:ARG:HH22	1.69	0.57
57:BB:1079:C:C4	57:BB:1088:A:C2	2.92	0.57
57:BB:2233:U:H2'	57:BB:2234:G:C8	2.38	0.57
21:AA:243:A:H4'	21:AA:244:U:H5'	1.87	0.57
21:AA:507:C:H3'	21:AA:508:U:H5"	1.87	0.56
21:AA:858:G:H1	21:AA:869:G:H3'	1.70	0.56
15:AD:146:GLU:CD	15:AD:146:GLU:H	2.09	0.56
6:AO:52:ARG:HA	6:AO:55:LEU:HD12	1.88	0.56
21:AA:1127:G:H22	21:AA:1145:A:H2	1.53	0.56
39:BT:69:ARG:HH22	57:BB:91:A:H61	1.54	0.56
57:BB:632:A:C6	57:BB:633:A:C2	2.94	0.56
13:AB:125:PHE:CE2	13:AB:136:ARG:HB3	2.41	0.55
53:BE:146:VAL:HG23	53:BE:167:VAL:HG23	1.87	0.55
4:AM:26:LYS:H	4:AM:26:LYS:HD3	1.71	0.55
54:BF:142:TYR:HA	54:BF:149:ARG:HH12	1.71	0.55
19:AH:11:THR:HA	19:AH:14:ARG:HH21	1.71	0.55
57:BB:1533:C:C4	57:BB:1534:U:C4	2.95	0.55
18:AG:52:ARG:HH11	18:AG:124:SER:HB3	1.70	0.55
42:BW:49:ASN:HD22	42:BW:60:ALA:HA	1.71	0.55
57:BB:2091:C:H3'	57:BB:2092:U:H5"	1.87	0.55
21:AA:1395:C:H5'	21:AA:1401:G:H21	1.72	0.55
57:BB:1024:G:H3'	57:BB:1025:G:H5"	1.88	0.55
57:BB:1533:C:C5	57:BB:1534:U:C5	2.95	0.54
21:AA:1300:G:C5	21:AA:1334:G:C6	2.95	0.54
21:AA:1062:U:H2'	21:AA:1063:C:C6	2.43	0.54
21:AA:697:U:C5	21:AA:698:G:C8	2.95	0.54
30:BK:50:LYS:H	30:BK:50:LYS:HD3	1.72	0.54
55:BG:101:VAL:HG22	55:BG:115:GLN:HE22	1.72	0.54
57:BB:1791:A:C8	57:BB:1792:G:C8	2.96	0.54
21:AA:1333:A:H3'	21:AA:1334:G:H8	1.72	0.54
45:BC:152:GLN:HG3	45:BC:153:LEU:HD12	1.90	0.54
55:BG:86:LEU:CD2	55:BG:147:LEU:HD13	2.38	0.54
9:AR:38:ILE:HD11	21:AA:720:C:H4'	1.89	0.54
57:BB:63:A:H2'	57:BB:64:A:C8	2.43	0.54
52:BD:13:ARG:HE	57:BB:2683:C:H4'	1.73	0.53
54:BF:107:VAL:H	54:BF:108:PRO:CD	2.21	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AA:687:A:C2	21:AA:704:A:C5	2.96	0.53
21:AA:499:A:H61	21:AA:547:A:H5"	1.72	0.53
21:AA:842:U:C3'	21:AA:843:U:H4'	2.36	0.53
57:BB:480:A:H3'	57:BB:481:G:H5"	1.90	0.53
23:AW:39:U:H2'	23:AW:40:C:H5"	1.89	0.53
7:AP:60:TRP:HA	7:AP:60:TRP:CE3	2.44	0.53
52:BD:6:GLY:HA2	52:BD:29:VAL:HG22	1.91	0.53
57:BB:172:A:C2	57:BB:173:A:C4	2.96	0.53
3:AL:89:LEU:HB2	3:AL:92:VAL:HG21	1.90	0.53
20:AI:44:ARG:HB2	20:AI:48:ARG:HH21	1.74	0.53
21:AA:181:A:H1'	21:AA:182:A:C2	2.44	0.53
21:AA:973:G:H3'	21:AA:974:A:H5"	1.90	0.53
29:BJ:20:ALA:H	29:BJ:58:ASN:ND2	2.07	0.53
57:BB:308:G:C2	57:BB:309:A:C2	2.97	0.53
10:AS:70:LEU:HD12	10:AS:70:LEU:H	1.73	0.53
27:B5:198:LYS:HA	27:B5:198:LYS:HE2	1.91	0.53
19:AH:2:MET:HG3	21:AA:588:G:H4'	1.89	0.53
23:AW:18:G:H1	23:AW:55:U:H1'	1.74	0.53
57:BB:2357:G:H22	57:BB:2359:C:H3'	1.74	0.53
21:AA:860:A:H3'	21:AA:861:G:H8	1.73	0.53
19:AH:106:SER:HA	21:AA:642:A:C4	2.43	0.52
38:BS:15:GLN:HA	38:BS:18:ARG:HE	1.74	0.52
45:BC:154:ALA:HB2	45:BC:161:VAL:HG23	1.89	0.52
53:BE:52:VAL:HG21	53:BE:82:GLY:H	1.74	0.52
21:AA:979:C:C5	21:AA:980:C:C4	2.97	0.52
57:BB:1684:G:C5	57:BB:1685:C:C5	2.97	0.52
57:BB:2453:A:H61	57:BB:2499:C:H42	1.55	0.52
55:BG:145:ALA:HA	55:BG:148:ARG:HE	1.74	0.52
21:AA:408:A:C2	21:AA:435:A:C2	2.98	0.52
21:AA:464:U:H2'	21:AA:465:A:H3'	1.92	0.52
57:BB:1082:U:C4	57:BB:1086:A:C2	2.98	0.52
3:AL:32:VAL:HG12	3:AL:33:CYS:H	1.74	0.52
3:AL:49:ARG:HH22	21:AA:521:G:H5"	1.75	0.52
21:AA:1305:G:N2	21:AA:1332:A:H8	2.08	0.52
32:BM:69:PRO:HB3	32:BM:94:ALA:HB2	1.91	0.52
57:BB:1120:G:C5	57:BB:1121:C:C5	2.98	0.52
57:BB:1949:G:C6	57:BB:1950:G:C6	2.97	0.52
9:AR:42:ARG:HH21	21:AA:720:C:H5"	1.75	0.52
21:AA:71:A:H61	21:AA:99:C:H1'	1.75	0.52
35:BP:96:LEU:HA	35:BP:99:LEU:HD12	1.91	0.52
57:BB:962:G:N2	57:BB:2250:G:H1	2.07	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1450:G:C5	57:BB:1451:C:C5	2.97	0.52
22:AY:16:U:C5	22:AY:17:U:C4	2.98	0.51
57:BB:419:U:H2'	57:BB:420:C:C6	2.44	0.51
57:BB:2555:U:H5	57:BB:2556:C:C2	2.27	0.51
21:AA:699:C:H2'	21:AA:700:G:H5"	1.92	0.51
22:AY:18:G:H1'	22:AY:57:G:H22	1.76	0.51
57:BB:945:A:C4	57:BB:2448:A:C2	2.98	0.51
21:AA:1236:A:H2'	21:AA:1237:C:C6	2.46	0.51
43:BX:3:VAL:HG22	43:BX:10:ARG:HE	1.75	0.51
55:BG:86:LEU:HD22	55:BG:147:LEU:HD13	1.93	0.51
57:BB:447:A:C2	57:BB:454:A:C8	2.99	0.51
57:BB:2064:C:H1'	57:BB:2450:A:C6	2.45	0.51
16:AE:75:LEU:HD13	16:AE:78:GLY:H	1.75	0.51
26:AV:67:C:C5	26:AV:68:C:C5	2.99	0.51
52:BD:124:ARG:HH11	52:BD:124:ARG:HB2	1.76	0.51
25:AZ:19:HIS:HD2	25:AZ:114:GLN:H	1.57	0.51
57:BB:619:G:H3'	57:BB:620:G:H21	1.76	0.51
45:BC:140:VAL:HG12	45:BC:142:ASN:H	1.76	0.51
57:BB:711:G:C6	57:BB:712:G:C5	2.99	0.51
6:AO:54:GLY:HA2	6:AO:57:ARG:HH21	1.76	0.51
21:AA:1484:C:C4	21:AA:1485:U:C4	2.99	0.51
33:BN:34:ILE:HG23	33:BN:113:ILE:HG23	1.92	0.51
54:BF:177:ARG:HE	54:BF:178:LYS:H	1.56	0.51
57:BB:1933:G:C5	57:BB:1934:C:C5	2.99	0.51
4:AM:11:HIS:H	4:AM:44:ILE:HB	1.76	0.51
52:BD:121:THR:HG22	52:BD:122:VAL:HG23	1.93	0.51
57:BB:1176:U:C5	57:BB:1177:G:C4	3.00	0.51
5:AN:16:ALA:HB2	5:AN:59:GLN:HE22	1.75	0.50
21:AA:483:C:H2'	21:AA:484:G:C8	2.46	0.50
21:AA:1417:G:C6	21:AA:1482:G:C6	2.99	0.50
36:BQ:60:TRP:CZ2	36:BQ:93:ILE:HD12	2.46	0.50
5:AN:74:ARG:HH21	21:AA:1359:C:H3'	1.76	0.50
21:AA:801:U:H2'	21:AA:802:A:C8	2.46	0.50
21:AA:1239:A:H62	21:AA:1299:A:N6	2.06	0.50
25:AZ:69:TYR:CE1	25:AZ:76:TYR:HB2	2.46	0.50
29:BJ:35:ARG:HA	29:BJ:40:HIS:CE1	2.46	0.50
15:AD:169:TRP:CD2	15:AD:185:PRO:HA	2.46	0.50
48:B1:45:HIS:CE1	57:BB:2371:G:H21	2.29	0.50
53:BE:138:LEU:HD13	53:BE:167:VAL:HG21	1.92	0.50
57:BB:900:A:H2'	57:BB:901:C:H5'	1.93	0.50
57:BB:1093:G:H21	57:BB:1098:A:H62	1.59	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
21:AA:780:A:C8	21:AA:800:G:C6	3.00	0.50
57:BB:890:C:H3'	57:BB:891:G:H4'	1.93	0.50
13:AB:176:ASN:HD21	13:AB:182:VAL:HG21	1.77	0.50
21:AA:1044:A:C5	21:AA:1045:C:H1'	2.46	0.50
57:BB:1803:A:C8	57:BB:1804:C:C6	3.00	0.50
57:BB:2314:A:H2'	57:BB:2315:G:C8	2.47	0.50
8:AQ:18:LYS:HB3	8:AQ:46:HIS:CE1	2.46	0.50
21:AA:55:A:C2	21:AA:56:U:H1'	2.46	0.50
21:AA:332:G:C5	21:AA:333:U:C5	2.99	0.50
57:BB:609:A:C8	57:BB:610:C:C5	3.00	0.50
25:AZ:134:LEU:HD22	25:AZ:171:ARG:HE	1.77	0.49
29:BJ:20:ALA:N	29:BJ:58:ASN:HD21	2.10	0.49
10:AS:67:GLY:H	10:AS:68:HIS:CD2	2.30	0.49
13:AB:52:ALA:HB2	13:AB:197:PHE:CE1	2.47	0.49
21:AA:201:G:H21	21:AA:469:C:H1'	1.76	0.49
21:AA:692:U:H5'	21:AA:797:C:H4'	1.94	0.49
57:BB:263:G:C6	57:BB:264:C:C5	3.01	0.49
57:BB:877:A:N1	57:BB:901:C:C2	2.80	0.49
57:BB:1181:U:H2'	57:BB:1182:G:H8	1.77	0.49
57:BB:1862:G:C2	57:BB:1881:C:C2	2.99	0.49
58:BA:42:C:C5	58:BA:43:C:C5	3.00	0.49
21:AA:1333:A:H3'	21:AA:1334:G:C8	2.47	0.49
57:BB:581:C:H2'	57:BB:582:A:C8	2.47	0.49
57:BB:1837:C:H2'	57:BB:1838:C:H5'	1.94	0.49
15:AD:2:ARG:HD2	15:AD:114:ARG:HH22	1.78	0.49
52:BD:122:VAL:HG12	52:BD:122:VAL:O	2.13	0.49
57:BB:510:C:H2'	57:BB:511:U:C6	2.47	0.49
57:BB:2425:A:H4'	57:BB:2426:A:H5"	1.94	0.49
15:AD:66:VAL:CG2	15:AD:70:GLN:HB2	2.41	0.49
17:AF:86:ARG:HH22	21:AA:673:A:H4'	1.77	0.49
54:BF:65:LEU:HD23	54:BF:87:LYS:HB2	1.93	0.49
57:BB:374:A:C2	57:BB:401:A:C4	3.01	0.49
57:BB:1061:U:H3	57:BB:1097:U:H4'	1.77	0.49
21:AA:1144:G:N2	21:AA:1146:A:H62	2.11	0.49
57:BB:35:G:H2'	57:BB:36:G:O4'	2.13	0.49
21:AA:1068:G:C6	21:AA:1069:C:C5	3.01	0.49
23:AW:1:G:C5	23:AW:2:C:C5	3.01	0.49
26:AV:67:C:C4	26:AV:68:C:C5	3.01	0.49
35:BP:32:VAL:HG12	35:BP:34:GLY:H	1.77	0.49
57:BB:977:G:C2	57:BB:987:C:C2	3.00	0.49
26:AV:12:G:H21	57:BB:1924:C:H5'	1.78	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
42:BW:45:HIS:CE1	42:BW:49:ASN:ND2	2.81	0.49
57:BB:422:A:C2	57:BB:423:A:C4	3.00	0.49
18:AG:108:ARG:H	18:AG:118:ARG:HD3	1.77	0.48
21:AA:901:A:C5	21:AA:902:G:H1'	2.48	0.48
23:AW:62:C:H2'	23:AW:63:G:H8	1.78	0.48
57:BB:645:C:H5'	57:BB:645:C:H6	1.78	0.48
16:AE:38:VAL:HG22	16:AE:44:ARG:CB	2.42	0.48
57:BB:871:U:H3	57:BB:906:U:H3	1.59	0.48
57:BB:1821:A:C6	57:BB:1822:C:C4	3.01	0.48
25:AZ:11:HIS:CE1	25:AZ:272:GLU:OE1	2.67	0.48
33:BN:44:LEU:O	33:BN:48:VAL:HG23	2.13	0.48
3:AL:110:LYS:H	3:AL:110:LYS:HD3	1.78	0.48
21:AA:1071:C:H2'	21:AA:1072:G:C8	2.49	0.48
47:B0:40:HIS:CG	57:BB:2816:G:H4'	2.47	0.48
49:B2:16:HIS:CE1	57:BB:686:U:H3	2.31	0.48
21:AA:1347:G:C4	21:AA:1373:G:C6	3.01	0.48
57:BB:627:A:C4	57:BB:637:A:C2	3.01	0.48
21:AA:860:A:H3'	21:AA:861:G:C8	2.49	0.48
52:BD:33:ARG:HA	52:BD:95:SER:H	1.78	0.48
55:BG:10:VAL:HG22	55:BG:47:ASN:O	2.14	0.48
57:BB:880:G:H2'	57:BB:881:G:C8	2.49	0.48
57:BB:1358:G:C2	57:BB:1372:U:C5	3.01	0.48
57:BB:2686:G:H2'	57:BB:2687:U:C6	2.48	0.48
5:AN:29:ILE:HG13	5:AN:30:ILE:N	2.26	0.48
21:AA:1167:A:H2'	21:AA:1169:A:C8	2.49	0.48
57:BB:221:A:C2	57:BB:266:G:OP2	2.67	0.48
57:BB:1203:U:H3'	57:BB:1204:A:H5"	1.95	0.48
17:AF:29:ILE:HG23	17:AF:70:VAL:HG11	1.96	0.48
20:AI:41:GLU:HB2	20:AI:44:ARG:HG2	1.95	0.48
57:BB:1225:G:C2	57:BB:1226:A:C2	3.02	0.48
57:BB:1853:A:C6	57:BB:1854:A:C2	3.02	0.48
21:AA:1142:G:C2	21:AA:1143:G:H1'	2.48	0.47
23:AW:20:U:H2'	23:AW:21:A:H4'	1.95	0.47
16:AE:147:ASN:HD22	19:AH:96:ALA:HB2	1.79	0.47
26:AV:72:A:H3'	26:AV:73:A:H5"	1.95	0.47
57:BB:1829:A:C8	57:BB:1830:C:C5	3.02	0.47
57:BB:2243:U:H2'	57:BB:2244:U:C6	2.50	0.47
20:AI:62:LEU:HD12	20:AI:64:ILE:HD11	1.96	0.47
25:AZ:15:GLY:HA2	25:AZ:78:HIS:CD2	2.49	0.47
31:BL:116:VAL:HG22	31:BL:118:THR:H	1.80	0.47
48:B1:39:ASP:HB3	48:B1:42:VAL:HG22	1.96	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1770:G:C6	57:BB:1771:C:C4	3.02	0.47
57:BB:1770:G:C5	57:BB:1771:C:C5	3.02	0.47
57:BB:2071:A:H2'	57:BB:2072:C:C6	2.49	0.47
57:BB:2140:G:C5	57:BB:2152:G:C6	3.02	0.47
17:AF:3:HIS:CD2	17:AF:4:TYR:H	2.32	0.47
18:AG:136:LYS:O	18:AG:140:VAL:HG23	2.14	0.47
57:BB:5:A:H2'	57:BB:6:A:C8	2.49	0.47
21:AA:995:C:H2'	21:AA:996:A:H5"	1.95	0.47
57:BB:562:U:C4	57:BB:572:A:C8	3.02	0.47
27:B5:134:ARG:HG2	57:BB:2125:G:H1	1.80	0.47
57:BB:956:G:H2'	57:BB:957:C:H2'	1.97	0.47
13:AB:10:LYS:HA	13:AB:207:ARG:HH21	1.79	0.47
21:AA:408:A:H3'	21:AA:409:U:H6	1.79	0.47
26:AV:18:G:C5	26:AV:57:A:C6	3.03	0.47
36:BQ:10:ARG:HH21	57:BB:1216:G:H5"	1.79	0.47
52:BD:14:ILE:HG22	52:BD:22:ILE:O	2.15	0.47
57:BB:184:C:H2'	57:BB:185:G:C8	2.50	0.47
57:BB:1165:A:N3	57:BB:1185:G:C2	2.82	0.47
57:BB:1448:G:C6	57:BB:1449:G:C5	3.03	0.47
57:BB:2485:G:C2	57:BB:2486:C:C6	3.03	0.47
21:AA:1118:U:H3'	21:AA:1119:C:C6	2.49	0.47
23:AW:12:U:H3	23:AW:23:A:H61	1.63	0.47
57:BB:1432:G:H2'	57:BB:1433:A:C8	2.50	0.47
21:AA:66:A:H3'	21:AA:67:C:H5"	1.97	0.47
21:AA:79:G:C2	21:AA:80:A:H1'	2.50	0.47
31:BL:78:ARG:HH22	57:BB:627:A:H2'	1.78	0.47
42:BW:19:ARG:HA	42:BW:35:ILE:HG22	1.97	0.47
43:BX:48:LEU:HD23	43:BX:76:LYS:HD3	1.97	0.47
21:AA:109:A:C6	21:AA:326:G:C6	3.03	0.47
21:AA:1057:G:C5	21:AA:1204:A:C2	3.02	0.47
56:BH:135:HIS:CD2	57:BB:2221:G:OP2	2.68	0.47
57:BB:150:U:H2'	57:BB:151:C:C6	2.50	0.47
57:BB:609:A:C8	57:BB:610:C:C6	3.03	0.47
57:BB:1450:G:C6	57:BB:1451:C:C4	3.03	0.47
57:BB:2352:A:H2'	57:BB:2353:G:H5'	1.97	0.47
3:AL:47:ALA:HB2	21:AA:529:G:H22	1.80	0.46
6:AO:87:ARG:HH22	57:BB:715:A:H5"	1.79	0.46
21:AA:444:G:C2	21:AA:491:G:C2	3.03	0.46
21:AA:825:A:C2	21:AA:876:C:C2	3.03	0.46
57:BB:645:C:H5'	57:BB:645:C:C6	2.49	0.46
57:BB:776:G:H1'	57:BB:793:A:C2	2.50	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:880:G:H1	57:BB:897:C:H42	1.64	0.46
57:BB:2345:G:C6	57:BB:2381:A:C6	3.03	0.46
15:AD:44:LYS:HA	15:AD:45:PRO:HD3	1.81	0.46
30:BK:28:HIS:CE1	57:BB:2547:A:H4'	2.50	0.46
49:B2:44:VAL:HG12	49:B2:44:VAL:O	2.14	0.46
57:BB:1573:G:H2'	57:BB:1574:C:H5'	1.97	0.46
58:BA:11:C:H3'	58:BA:12:C:C6	2.51	0.46
21:AA:761:G:C6	21:AA:762:U:C4	3.03	0.46
21:AA:992:U:H1'	21:AA:993:G:C2	2.50	0.46
31:BL:93:ASN:HD22	31:BL:97:ALA:HB2	1.79	0.46
57:BB:1024:G:C6	57:BB:1025:G:C6	3.03	0.46
57:BB:2714:G:C5	57:BB:2715:C:C5	3.04	0.46
15:AD:58:GLN:HA	15:AD:61:ARG:HB3	1.97	0.46
21:AA:81:A:C2	21:AA:89:U:C2	3.02	0.46
21:AA:581:G:C6	21:AA:758:C:C5	3.04	0.46
47:B0:9:ARG:HH22	57:BB:1263:U:H5"	1.81	0.46
52:BD:56:LYS:O	52:BD:57:ALA:HB3	2.15	0.46
14:AC:132:ALA:HA	14:AC:135:ARG:HH21	1.81	0.46
30:BK:5:THR:HG22	30:BK:6:MET:N	2.29	0.46
57:BB:46:G:C5	57:BB:180:G:C6	3.04	0.46
57:BB:943:A:C6	57:BB:944:C:C5	3.03	0.46
57:BB:1082:U:N3	57:BB:1086:A:C2	2.84	0.46
6:AO:80:LEU:HD12	6:AO:83:ARG:HH12	1.81	0.46
29:BJ:37:ARG:HH21	57:BB:1007:C:H5"	1.81	0.46
31:BL:56:PRO:HB2	31:BL:59:ARG:H	1.81	0.46
57:BB:1615:C:H2'	57:BB:1617:C:C6	2.50	0.46
6:AO:80:LEU:HG	6:AO:83:ARG:HH22	1.80	0.46
21:AA:143:A:H4'	21:AA:196:A:C6	2.50	0.46
21:AA:1121:U:C2	21:AA:1153:G:C2	3.04	0.46
23:AW:63:G:C4	23:AW:63:G:C8	3.04	0.46
36:BQ:67:ALA:HA	36:BQ:70:GLN:HE21	1.81	0.46
56:BH:116:ARG:HE	56:BH:122:LEU:HD22	1.81	0.46
57:BB:1128:G:N7	57:BB:2490:G:H5'	2.31	0.46
50:B3:30:HIS:CE1	57:BB:2421:G:OP2	2.69	0.46
57:BB:1576:U:C2	57:BB:1577:C:C5	3.04	0.46
45:BC:106:PRO:HG2	45:BC:109:LEU:H	1.81	0.46
45:BC:219:VAL:HG11	57:BB:782:A:H2'	1.97	0.46
15:AD:197:HIS:HB3	16:AE:104:ILE:HG22	1.97	0.46
21:AA:82:G:H3'	21:AA:83:C:H4'	1.98	0.46
21:AA:1273:C:H2'	21:AA:1274:A:O4'	2.15	0.46
57:BB:1751:U:H5'	57:BB:2860:A:H2	1.81	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:AZ:284:GLU:CD	25:AZ:284:GLU:H	2.20	0.45
29:BJ:101:ILE:H	29:BJ:101:ILE:HD13	1.81	0.45
45:BC:190:THR:HG22	45:BC:192:GLY:H	1.81	0.45
57:BB:475:C:C4	57:BB:476:G:C5	3.04	0.45
57:BB:2471:A:O2'	57:BB:2472:G:C8	2.64	0.45
18:AG:4:ARG:HE	18:AG:5:VAL:H	1.62	0.45
21:AA:697:U:H3	21:AA:798:U:C1'	2.29	0.45
23:AW:39:U:C2'	23:AW:40:C:H5"	2.46	0.45
23:AW:56:C:H42	27:B5:130:VAL:HG23	1.80	0.45
57:BB:1223:G:C6	57:BB:1227:G:C6	3.04	0.45
57:BB:1486:U:C2	57:BB:1504:A:C2	3.04	0.45
14:AC:176:THR:HG22	14:AC:178:ARG:H	1.81	0.45
21:AA:1226:C:H4'	21:AA:1227:A:OP1	2.17	0.45
57:BB:30:G:C5	57:BB:31:C:C4	3.04	0.45
57:BB:874:G:C6	57:BB:875:G:C5	3.04	0.45
57:BB:1003:G:C2	57:BB:1153:C:C2	3.05	0.45
57:BB:2154:A:C5	57:BB:2155:U:C4	3.05	0.45
18:AG:145:GLU:H	18:AG:148:LYS:HB3	1.82	0.45
21:AA:202:G:N2	21:AA:216:U:C2	2.85	0.45
27:B5:76:ALA:HB3	27:B5:100:LEU:HD11	1.99	0.45
41:BV:11:GLU:HB3	41:BV:16:ALA:HB1	1.98	0.45
57:BB:2:G:C6	57:BB:3:U:C4	3.05	0.45
57:BB:641:U:C4	57:BB:642:U:C4	3.05	0.45
57:BB:2167:U:H2'	57:BB:2168:G:O4'	2.16	0.45
21:AA:956:U:H1'	21:AA:1227:A:H61	1.81	0.45
21:AA:1525:G:C6	21:AA:1526:G:C5	3.05	0.45
54:BF:49:LEU:HD12	54:BF:49:LEU:H	1.81	0.45
55:BG:61:TRP:H	55:BG:64:ALA:HB3	1.81	0.45
57:BB:1642:G:C6	57:BB:1643:G:C5	3.04	0.45
57:BB:945:A:C5	57:BB:2448:A:C2	3.04	0.45
57:BB:2030:A:H4'	57:BB:2031:A:C8	2.52	0.45
15:AD:36:ALA:HB3	15:AD:43:ARG:HH21	1.82	0.45
18:AG:129:ASN:HB3	18:AG:131:GLY:H	1.81	0.45
18:AG:55:LYS:H	18:AG:55:LYS:HD3	1.81	0.45
21:AA:1071:C:H2'	21:AA:1072:G:H8	1.82	0.45
45:BC:107:LYS:HE2	45:BC:125:PRO:HG3	1.98	0.45
56:BH:5:LEU:HD13	56:BH:14:SER:H	1.82	0.45
25:AZ:95:ALA:HA	25:AZ:98:MET:HE2	1.99	0.45
39:BT:6:ARG:HH12	57:BB:144:A:H4'	1.81	0.45
57:BB:1099:G:C5	57:BB:1100:C:C4	3.04	0.45
57:BB:2267:A:C8	57:BB:2267:A:H3'	2.52	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:2345:G:C5	57:BB:2347:C:C5	3.04	0.45
4:AM:104:ASN:H	4:AM:106:ARG:HH12	1.65	0.45
5:AN:88:MET:HB3	14:AC:5:HIS:CD2	2.51	0.45
23:AW:38:A:H3'	23:AW:39:U:H5"	1.98	0.45
54:BF:102:LEU:HD22	54:BF:137:PHE:HA	1.99	0.45
57:BB:1021:A:C2	57:BB:1023:U:C2	3.05	0.45
57:BB:1166:G:C5	57:BB:1167:C:C5	3.04	0.45
57:BB:1783:A:C2	57:BB:2587:A:C5	3.05	0.45
57:BB:2330:G:C6	57:BB:2331:G:C5	3.05	0.45
21:AA:1338:G:H2'	21:AA:1339:A:C8	2.52	0.44
53:BE:36:ALA:HB1	57:BB:443:A:H61	1.82	0.44
54:BF:24:VAL:HG22	54:BF:24:VAL:O	2.18	0.44
54:BF:132:ARG:H	54:BF:150:GLY:HA3	1.82	0.44
57:BB:1210:G:H3'	57:BB:1211:C:C5	2.52	0.44
57:BB:1839:G:H2'	57:BB:1840:G:C8	2.52	0.44
10:AS:26:ASP:HB3	10:AS:46:LEU:HD22	1.97	0.44
25:AZ:92:ILE:HD11	25:AZ:377:ARG:CZ	2.47	0.44
27:B5:172:HIS:HB3	57:BB:2123:G:H1'	1.99	0.44
36:BQ:40:LYS:O	36:BQ:44:TYR:CG	2.70	0.44
38:BS:76:VAL:CG2	38:BS:101:SER:HB3	2.47	0.44
57:BB:1224:U:C4	57:BB:1225:G:C6	3.05	0.44
57:BB:2070:A:C2	57:BB:2071:A:C4	3.05	0.44
57:BB:2447:G:C5	57:BB:2501:C:C2	3.05	0.44
35:BP:99:LEU:HD23	35:BP:102:ARG:HH21	1.82	0.44
40:BU:45:GLN:O	57:BB:483:A:H4'	2.16	0.44
57:BB:863:A:H61	57:BB:912:C:H42	1.64	0.44
21:AA:109:A:C8	21:AA:326:G:H2'	2.53	0.44
21:AA:1234:C:H1'	21:AA:1364:U:H6	1.81	0.44
25:AZ:19:HIS:CD2	25:AZ:114:GLN:H	2.33	0.44
40:BU:4:ILE:HD13	40:BU:4:ILE:H	1.81	0.44
47:B0:11:LYS:HE3	57:BB:2021:C:OP2	2.17	0.44
57:BB:2397:G:C6	57:BB:2398:U:C4	3.05	0.44
21:AA:238:A:H3'	21:AA:239:U:H5"	1.98	0.44
21:AA:310:G:C6	21:AA:311:C:C4	3.06	0.44
21:AA:769:G:H4'	21:AA:1513:A:H4'	1.99	0.44
21:AA:830:G:H2'	21:AA:831:A:C8	2.52	0.44
21:AA:1130:A:H3'	21:AA:1131:G:C8	2.53	0.44
21:AA:1130:A:H1'	21:AA:1146:A:C2	2.53	0.44
57:BB:1722:A:C4	57:BB:1739:A:C4	3.05	0.44
57:BB:2243:U:O2	57:BB:2434:A:C2	2.71	0.44
57:BB:2245:U:O2	57:BB:2435:A:C8	2.70	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:AB:14:HIS:HE1	13:AB:202:ASN:H	1.65	0.44
57:BB:308:G:C5	57:BB:309:A:C6	3.06	0.44
57:BB:2216:G:H2'	57:BB:2217:G:C8	2.53	0.44
5:AN:27:LYS:HA	5:AN:48:GLN:HE22	1.82	0.44
21:AA:594:U:C4	21:AA:595:A:C6	3.05	0.44
21:AA:1003:G:N2	21:AA:1005:A:H5'	2.33	0.44
47:B0:47:TYR:CD2	47:B0:51:ARG:O	2.71	0.44
52:BD:148:GLN:HE21	52:BD:152:PRO:HD3	1.83	0.44
57:BB:682:G:C6	57:BB:683:U:C4	3.05	0.44
57:BB:1717:A:C2	57:BB:1744:A:C4	3.06	0.44
21:AA:468:A:H3'	21:AA:469:C:C6	2.53	0.44
52:BD:134:HIS:CD2	57:BB:1675:C:C6	3.06	0.44
18:AG:129:ASN:HB2	18:AG:134:VAL:HG13	2.00	0.44
21:AA:257:G:H2'	21:AA:258:G:H5"	1.99	0.44
45:BC:219:VAL:HG13	57:BB:781:A:H4'	2.00	0.44
53:BE:23:PHE:CD1	53:BE:111:GLU:HG3	2.53	0.44
57:BB:188:G:C6	57:BB:189:G:C4	3.06	0.44
57:BB:563:A:C6	57:BB:564:C:C4	3.06	0.44
57:BB:2123:G:H22	57:BB:2176:A:H1'	1.82	0.44
25:AZ:21:ASP:CG	25:AZ:22:HIS:H	2.22	0.43
25:AZ:306:SER:HA	25:AZ:389:ALA:H	1.82	0.43
44:BY:38:GLN:HA	57:BB:95:A:H4'	2.00	0.43
52:BD:24:VAL:HG23	52:BD:189:VAL:H	1.83	0.43
57:BB:1285:A:H2'	57:BB:1286:A:H5"	1.99	0.43
57:BB:1528:A:C4	57:BB:1544:A:C5	3.06	0.43
57:BB:1916:A:C2	57:BB:1917:U:C2	3.06	0.43
57:BB:2886:A:H3'	57:BB:2887:A:H5'	1.99	0.43
1:AJ:15:HIS:HB3	21:AA:1152:A:H5'	2.00	0.43
21:AA:185:U:H2'	21:AA:186:C:C6	2.53	0.43
21:AA:278:G:N2	21:AA:279:A:H62	2.17	0.43
21:AA:540:G:C6	21:AA:541:G:C5	3.06	0.43
21:AA:635:A:C6	21:AA:636:U:C4	3.06	0.43
21:AA:685:G:C2	21:AA:686:U:C4	3.06	0.43
28:BI:30:GLN:HE22	28:BI:58:ILE:HG22	1.83	0.43
29:BJ:77:HIS:CE1	57:BB:1131:G:C4	3.05	0.43
39:BT:77:ARG:HH21	39:BT:79:ASP:HA	1.82	0.43
57:BB:2297:A:H2'	57:BB:2298:A:H5'	2.00	0.43
57:BB:2799:A:C5	57:BB:2896:C:H5"	2.53	0.43
57:BB:2809:A:H2'	57:BB:2810:A:C8	2.53	0.43
9:AR:25:ILE:HG23	9:AR:26:ALA:N	2.34	0.43
23:AW:63:G:C8	23:AW:63:G:C1'	2.92	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1074:G:C5	57:BB:1075:C:C5	3.06	0.43
57:BB:1360:G:C6	57:BB:1372:U:C2	3.06	0.43
57:BB:2553:G:H3'	57:BB:2554:U:H5"	1.99	0.43
3:AL:56:LEU:HG	3:AL:58:ASN:H	1.83	0.43
15:AD:187:ARG:C	15:AD:189:ASP:H	2.21	0.43
21:AA:359:G:C6	21:AA:360:G:C5	3.07	0.43
21:AA:764:C:C2'	21:AA:765:G:H5'	2.48	0.43
21:AA:764:C:H2'	21:AA:765:G:H5'	2.00	0.43
53:BE:159:LEU:HD23	53:BE:159:LEU:HA	1.82	0.43
57:BB:532:A:H4'	57:BB:533:G:C8	2.53	0.43
57:BB:877:A:C6	57:BB:901:C:C4	3.07	0.43
57:BB:1070:A:H3'	57:BB:1071:G:H5"	2.00	0.43
57:BB:1912:A:C8	57:BB:1918:A:C2	3.07	0.43
57:BB:2104:C:H2'	57:BB:2105:U:C6	2.54	0.43
58:BA:100:G:C6	58:BA:101:A:C5	3.06	0.43
10:AS:36:ARG:HH12	21:AA:1319:A:H4'	1.83	0.43
21:AA:192:A:C6	21:AA:193:C:C4	3.07	0.43
21:AA:515:G:C5	21:AA:516:U:C5	3.07	0.43
21:AA:773:G:N3	21:AA:807:A:C2	2.87	0.43
21:AA:979:C:H3'	21:AA:980:C:H6	1.83	0.43
21:AA:1300:G:C6	21:AA:1334:G:C5	3.07	0.43
47:B0:9:ARG:HH22	57:BB:1263:U:C5'	2.30	0.43
50:B3:30:HIS:CG	50:B3:31:ILE:N	2.86	0.43
52:BD:150:GLN:HE21	57:BB:2572:A:N6	2.17	0.43
57:BB:1838:C:C5	57:BB:1899:A:C5	3.07	0.43
57:BB:2688:G:C2	57:BB:2720:U:C5	3.07	0.43
58:BA:75:G:H2'	58:BA:76:G:C8	2.53	0.43
3:AL:37:TYR:HB2	3:AL:51:VAL:HG23	1.99	0.43
6:AO:49:HIS:CE1	21:AA:764:C:O2'	2.71	0.43
18:AG:26:VAL:HG12	18:AG:42:VAL:HG21	2.01	0.43
21:AA:1434:A:C6	21:AA:1435:G:C6	3.06	0.43
22:AY:38:A:N6	22:AY:39:U:C5	2.87	0.43
25:AZ:140:VAL:HG11	25:AZ:146:LEU:HG	1.99	0.43
57:BB:150:U:H6	57:BB:150:U:O5'	2.01	0.43
57:BB:1063:G:C6	57:BB:1064:C:C4	3.06	0.43
57:BB:1092:C:H2'	57:BB:1093:G:H5'	1.99	0.43
57:BB:2097:A:H2'	57:BB:2098:U:C6	2.54	0.43
57:BB:2392:A:C6	57:BB:2393:U:C4	3.07	0.43
21:AA:697:U:H3	21:AA:798:U:H1'	1.84	0.43
21:AA:858:G:N1	21:AA:869:G:H2'	2.33	0.43
33:BN:12:ARG:HE	33:BN:12:ARG:HA	1.84	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
38:BS:47:VAL:HA	38:BS:50:VAL:HG22	1.99	0.43
57:BB:1203:U:H3'	57:BB:1204:A:C5'	2.48	0.43
57:BB:2046:G:C4	57:BB:2623:G:C2	3.07	0.43
8:AQ:32:ILE:HD12	8:AQ:32:ILE:HA	1.96	0.43
11:AT:60:GLN:HG2	11:AT:65:LEU:HB3	2.01	0.43
21:AA:53:A:C2	21:AA:54:C:H1'	2.53	0.43
21:AA:1244:G:C6	21:AA:1294:G:C6	3.06	0.43
27:B5:60:ARG:HG3	27:B5:165:ASN:HD22	1.84	0.43
30:BK:5:THR:HG22	30:BK:6:MET:H	1.84	0.43
57:BB:1936:A:H2	57:BB:1943:U:C5	2.36	0.43
57:BB:2181:U:H3'	57:BB:2181:U:C6	2.53	0.43
57:BB:2352:A:C2'	57:BB:2353:G:H5'	2.49	0.43
15:AD:122:ILE:HG13	15:AD:123:MET:N	2.32	0.43
17:AF:3:HIS:CG	17:AF:4:TYR:H	2.37	0.43
21:AA:688:G:C6	21:AA:700:G:C6	3.06	0.43
22:AY:37:G:N2	24:AX:19:U:C6	2.87	0.43
28:BI:7:TYR:CD1	28:BI:59:THR:HA	2.54	0.43
37:BR:61:ALA:HA	37:BR:99:THR:H	1.84	0.43
52:BD:59:ARG:NH1	57:BB:2830:C:C5	2.87	0.43
3:AL:6:LEU:HB3	8:AQ:33:TYR:CZ	2.54	0.43
3:AL:98:ARG:HH21	3:AL:104:SER:H	1.65	0.43
21:AA:544:G:C5	21:AA:545:C:C5	3.07	0.43
21:AA:833:G:C6	21:AA:834:U:C4	3.07	0.43
21:AA:966:G:H2'	21:AA:967:C:C6	2.54	0.43
37:BR:49:ILE:HG22	37:BR:51:VAL:HG22	2.01	0.43
57:BB:2150:C:C5	57:BB:2151:U:C5	3.06	0.43
4:AM:84:CYS:HB2	4:AM:87:GLY:H	1.84	0.42
14:AC:112:ALA:H	14:AC:201:ILE:HD13	1.84	0.42
21:AA:1485:U:H2'	21:AA:1486:G:H8	1.84	0.42
57:BB:877:A:C6	57:BB:878:A:C4	3.07	0.42
57:BB:1444:G:C4	57:BB:1445:G:C8	3.07	0.42
57:BB:1487:U:H2'	57:BB:1488:C:H6	1.84	0.42
57:BB:2493:U:C4	57:BB:2494:G:C8	3.07	0.42
57:BB:2637:U:C5	57:BB:2638:G:C6	3.06	0.42
4:AM:21:ILE:HG13	4:AM:24:VAL:HG13	2.00	0.42
4:AM:102:LYS:HA	21:AA:1226:C:C5	2.53	0.42
13:AB:183:PHE:HB3	13:AB:197:PHE:HB3	2.01	0.42
14:AC:109:GLU:OE1	14:AC:143:LEU:HD23	2.19	0.42
15:AD:123:MET:HG3	15:AD:143:SER:O	2.19	0.42
21:AA:967:C:H2'	21:AA:968:A:C2	2.54	0.42
34:BO:90:VAL:HG22	34:BO:115:LEU:HD11	2.00	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
53:BE:6:LYS:HG3	53:BE:8:ALA:H	1.85	0.42
55:BG:169:ARG:HH22	55:BG:173:ALA:HA	1.84	0.42
57:BB:291:G:C6	57:BB:350:G:C6	3.06	0.42
57:BB:410:G:C2	57:BB:2407:A:C5	3.07	0.42
57:BB:581:C:H2'	57:BB:582:A:H8	1.83	0.42
57:BB:919:U:H2'	57:BB:920:A:C8	2.54	0.42
57:BB:932:U:H4'	57:BB:933:A:C4	2.53	0.42
57:BB:1667:G:H1	57:BB:1991:U:H3'	1.84	0.42
5:AN:63:CYS:HB3	5:AN:67:GLY:H	1.85	0.42
13:AB:186:VAL:HG22	13:AB:201:GLY:H	1.84	0.42
21:AA:66:A:H4'	21:AA:199:A:H4'	2.01	0.42
21:AA:688:G:H21	21:AA:704:A:H2	1.67	0.42
21:AA:860:A:H2'	21:AA:861:G:O4'	2.19	0.42
22:AY:67:A:H2'	22:AY:68:U:C6	2.54	0.42
22:AY:71:G:C6	22:AY:72:C:C5	3.08	0.42
57:BB:873:C:C2	57:BB:905:A:C2	3.07	0.42
57:BB:1634:A:H3'	57:BB:1635:A:C5'	2.49	0.42
57:BB:1848:A:H2'	57:BB:1849:G:O4'	2.19	0.42
57:BB:2357:G:N2	57:BB:2359:C:H3'	2.35	0.42
57:BB:2869:G:H2'	57:BB:2870:C:O4'	2.19	0.42
21:AA:246:A:C5	21:AA:279:A:C5	3.07	0.42
21:AA:728:A:H2'	21:AA:729:A:C8	2.55	0.42
21:AA:941:G:C5	21:AA:942:G:C8	3.07	0.42
21:AA:1108:G:C6	21:AA:1109:C:C4	3.07	0.42
22:AY:1:G:C5	22:AY:73:A:C2	3.07	0.42
23:AW:18:G:C2	23:AW:58:A:N7	2.86	0.42
28:BI:3:LYS:O	28:BI:4:VAL:HG23	2.19	0.42
41:BV:89:ILE:HG21	41:BV:91:PHE:CZ	2.55	0.42
57:BB:826:U:C2	57:BB:828:U:H1'	2.55	0.42
57:BB:1365:A:C2	57:BB:1366:A:H1'	2.55	0.42
57:BB:1426:G:C2'	57:BB:1572:A:H61	2.32	0.42
57:BB:1916:A:H2'	57:BB:1917:U:C6	2.54	0.42
57:BB:2075:U:C4	57:BB:2238:G:C6	3.08	0.42
57:BB:2630:G:C4	57:BB:2894:G:C2	3.08	0.42
57:BB:2835:A:H61	57:BB:2878:U:H2'	1.82	0.42
1:AJ:39:PRO:HA	1:AJ:74:VAL:HA	2.00	0.42
9:AR:53:GLN:N	9:AR:56:ARG:HH21	2.17	0.42
21:AA:1315:U:H2'	21:AA:1316:G:O4'	2.19	0.42
21:AA:1380:U:H1'	21:AA:1381:U:C5	2.55	0.42
22:AY:16:U:H5	22:AY:17:U:C4	2.38	0.42
25:AZ:92:ILE:H	25:AZ:92:ILE:HG13	1.76	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
28:BI:29:GLN:NE2	57:BB:1097:U:H3	2.18	0.42
45:BC:175:LEU:HD12	45:BC:179:GLU:HB2	2.00	0.42
57:BB:564:C:C2	57:BB:565:C:C6	3.07	0.42
57:BB:1402:U:H2'	57:BB:1403:A:O5'	2.20	0.42
17:AF:38:ARG:HB3	17:AF:63:ASN:HD22	1.85	0.42
21:AA:858:G:N1	21:AA:869:G:H3'	2.35	0.42
21:AA:1012:A:C2	21:AA:1018:G:C2	3.08	0.42
33:BN:54:LEU:HD13	33:BN:54:LEU:O	2.18	0.42
45:BC:130:PRO:HB3	45:BC:186:ASP:HA	2.01	0.42
57:BB:268:C:O2	57:BB:268:C:H2'	2.20	0.42
57:BB:766:U:H2'	57:BB:767:U:C6	2.54	0.42
57:BB:921:C:H4'	57:BB:2269:G:C5	2.54	0.42
57:BB:2373:G:H2'	57:BB:2374:C:C6	2.55	0.42
2:AK:39:ASN:HD22	21:AA:683:G:H21	1.68	0.42
16:AE:17:VAL:HA	16:AE:34:ALA:HB2	2.02	0.42
21:AA:174:A:C5	21:AA:175:C:C5	3.08	0.42
21:AA:1043:G:H2'	21:AA:1044:A:C8	2.55	0.42
27:B5:212:VAL:HG11	27:B5:227:ALA:HB3	2.02	0.42
42:BW:24:ARG:HH11	57:BB:924:G:H1'	1.84	0.42
57:BB:861:A:H2'	57:BB:862:G:O4'	2.20	0.42
57:BB:2758:A:C2	57:BB:2759:G:H1'	2.55	0.42
14:AC:155:ARG:HD3	21:AA:1056:U:H4'	2.01	0.42
21:AA:981:U:H2'	21:AA:982:U:C6	2.55	0.42
57:BB:5:A:H2'	57:BB:6:A:H8	1.83	0.42
57:BB:727:A:H2'	57:BB:728:G:C8	2.55	0.42
57:BB:1722:A:H1'	57:BB:1739:A:C2	2.54	0.42
57:BB:2102:G:H2'	57:BB:2103:C:O4'	2.20	0.42
57:BB:2865:U:C4	57:BB:2866:U:C4	3.07	0.42
10:AS:18:VAL:O	10:AS:22:VAL:HG22	2.20	0.42
21:AA:1206:G:C6	21:AA:1207:G:C5	3.08	0.42
21:AA:1436:U:H2'	21:AA:1437:A:C8	2.55	0.42
57:BB:547:A:C8	57:BB:548:G:N2	2.88	0.42
4:AM:88:LEU:H	4:AM:88:LEU:HG	1.64	0.42
13:AB:50:ASN:HA	13:AB:53:LEU:HD12	2.01	0.42
21:AA:859:G:H2'	21:AA:860:A:C8	2.55	0.42
21:AA:1118:U:H3'	21:AA:1119:C:H6	1.85	0.42
21:AA:1133:G:C6	21:AA:1134:G:N7	2.88	0.42
57:BB:30:G:H2'	57:BB:31:C:C6	2.55	0.42
57:BB:1783:A:C2	57:BB:2587:A:C4	3.08	0.42
57:BB:2252:G:H3'	57:BB:2253:G:H5'	2.01	0.42
57:BB:2583:G:C6	57:BB:2584:U:C2	3.08	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:AO:80:LEU:HA	6:AO:83:ARG:NH1	2.35	0.41
21:AA:1117:A:C2	21:AA:1180:A:H1'	2.54	0.41
57:BB:515:A:C8	57:BB:516:C:C6	3.08	0.41
57:BB:1024:G:C5	57:BB:1025:G:C5	3.08	0.41
57:BB:2727:A:H2'	57:BB:2728:U:C6	2.55	0.41
21:AA:81:A:C2	21:AA:89:U:O2	2.73	0.41
21:AA:958:A:C6	21:AA:959:A:N1	2.89	0.41
21:AA:1121:U:C2	21:AA:1153:G:N2	2.88	0.41
23:AW:56:C:H41	57:BB:2169:A:H61	1.67	0.41
31:BL:54:GLN:HE22	57:BB:834:G:H1'	1.85	0.41
39:BT:14:PRO:HB2	39:BT:16:VAL:HG22	2.01	0.41
42:BW:22:VAL:HG11	57:BB:856:G:N3	2.35	0.41
57:BB:299:A:C8	57:BB:322:A:C2	3.09	0.41
57:BB:520:G:C6	57:BB:521:U:C4	3.08	0.41
57:BB:775:G:C4	57:BB:794:A:C8	3.08	0.41
57:BB:870:U:H2'	57:BB:871:U:H5"	2.01	0.41
57:BB:1360:G:C8	57:BB:1361:G:C8	3.07	0.41
57:BB:1699:G:O6	57:BB:1763:G:C8	2.73	0.41
57:BB:1770:G:C5	57:BB:1983:G:C6	3.08	0.41
57:BB:2071:A:H2'	57:BB:2072:C:H6	1.84	0.41
21:AA:93:U:H2'	21:AA:94:G:H5'	2.01	0.41
21:AA:844:G:C8	21:AA:846:G:H1'	2.55	0.41
21:AA:1130:A:H3'	21:AA:1131:G:H8	1.85	0.41
21:AA:1361:G:C2'	21:AA:1362:A:H5"	2.50	0.41
21:AA:1379:G:H2'	21:AA:1380:U:C6	2.56	0.41
25:AZ:85:ALA:HA	25:AZ:88:VAL:HG13	2.02	0.41
50:B3:63:TYR:CZ	57:BB:242:G:H5"	2.55	0.41
57:BB:24:G:C2	57:BB:25:U:C2	3.08	0.41
57:BB:111:A:H2'	57:BB:112:U:O4'	2.20	0.41
57:BB:489:G:C5	57:BB:491:G:C5	3.08	0.41
57:BB:649:G:H2'	57:BB:650:C:O4'	2.20	0.41
57:BB:1817:G:C5	57:BB:1818:U:C5	3.08	0.41
57:BB:2126:A:C2	57:BB:2162:G:N1	2.88	0.41
57:BB:2188:U:C4	57:BB:2189:U:C4	3.08	0.41
58:BA:11:C:H3'	58:BA:12:C:H6	1.84	0.41
21:AA:228:A:H2'	21:AA:229:U:O4'	2.20	0.41
21:AA:707:U:H2'	21:AA:708:C:C6	2.55	0.41
22:AY:67:A:H2'	22:AY:68:U:H6	1.85	0.41
30:BK:10:ALA:HB2	30:BK:82:ALA:HB1	2.03	0.41
57:BB:152:A:C4	57:BB:175:G:N2	2.89	0.41
57:BB:607:U:C4	57:BB:608:A:N7	2.88	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:963:U:H2'	57:BB:964:C:C6	2.55	0.41
21:AA:34:C:H2'	21:AA:35:G:C8	2.55	0.41
21:AA:1207:G:C6	21:AA:1208:C:C4	3.08	0.41
21:AA:1225:A:H2'	21:AA:1226:C:C6	2.56	0.41
21:AA:1396:A:H4'	21:AA:1397:C:H5"	2.02	0.41
23:AW:51:U:C2	23:AW:64:A:C2	3.09	0.41
27:B5:26:ALA:HB1	27:B5:214:ILE:HG21	2.02	0.41
57:BB:2112:G:C8	57:BB:2112:G:H3'	2.55	0.41
57:BB:2710:C:H2'	57:BB:2711:A:C8	2.56	0.41
21:AA:1206:G:C6	21:AA:1207:G:C6	3.08	0.41
22:AY:41:U:C2	22:AY:42:G:C8	3.09	0.41
49:B2:24:THR:HG23	49:B2:26:ASN:H	1.85	0.41
57:BB:1428:C:C5	57:BB:1569:A:H5"	2.56	0.41
57:BB:2343:U:H4'	57:BB:2374:C:H5'	2.03	0.41
57:BB:2734:A:H2'	57:BB:2735:G:H5'	2.03	0.41
21:AA:36:C:C4	21:AA:37:U:C4	3.09	0.41
21:AA:46:G:C6	21:AA:366:A:C2	3.09	0.41
21:AA:1300:G:C5	21:AA:1334:G:C5	3.09	0.41
35:BP:77:SER:O	35:BP:80:VAL:HG12	2.21	0.41
57:BB:402:A:N7	57:BB:403:U:C4	2.89	0.41
57:BB:2645:G:H3'	57:BB:2646:C:H5'	2.02	0.41
57:BB:2740:A:C6	57:BB:2741:A:C6	3.09	0.41
15:AD:4:LEU:HD11	21:AA:405:U:C5	2.55	0.41
27:B5:167:LYS:HB2	57:BB:2120:G:H21	1.84	0.41
34:BO:117:PHE:CE1	57:BB:2377:A:N3	2.89	0.41
57:BB:545:U:H3'	57:BB:547:A:OP2	2.20	0.41
57:BB:1135:C:C6	57:BB:1137:G:OP2	2.74	0.41
57:BB:2091:C:H3'	57:BB:2092:U:C5'	2.50	0.41
57:BB:2379:G:H2'	57:BB:2380:C:C6	2.55	0.41
57:BB:2537:U:H2'	57:BB:2538:C:C6	2.56	0.41
57:BB:2596:U:C4	57:BB:2597:G:C6	3.09	0.41
58:BA:85:G:C2	58:BA:92:C:C2	3.09	0.41
5:AN:2:LYS:HD2	21:AA:1049:U:H3'	2.03	0.41
21:AA:59:A:H3'	21:AA:60:A:C5'	2.50	0.41
21:AA:836:G:C5	21:AA:851:G:C6	3.08	0.41
21:AA:1231:G:C6	21:AA:1232:U:C4	3.09	0.41
40:BU:5:ARG:HH11	40:BU:92:VAL:HG22	1.85	0.41
40:BU:44:HIS:HB2	57:BB:482:A:H4'	2.02	0.41
57:BB:245:G:C6	57:BB:246:C:C4	3.09	0.41
57:BB:250:G:C5	57:BB:251:A:C5	3.09	0.41
57:BB:346:A:C2	57:BB:347:A:C5	3.09	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:663:G:C6	57:BB:664:G:C5	3.09	0.41
57:BB:1202:G:C6	57:BB:1244:A:N1	2.89	0.41
57:BB:1669:A:H2'	57:BB:1670:C:H5'	2.03	0.41
57:BB:1878:G:C6	57:BB:1879:C:C4	3.09	0.41
57:BB:1961:C:C2'	57:BB:1962:C:H5'	2.50	0.41
57:BB:2027:G:N3	57:BB:2037:A:C2	2.88	0.41
57:BB:2119:A:C2	57:BB:2170:A:C2	3.09	0.41
57:BB:2468:A:C2	57:BB:2481:G:N3	2.89	0.41
57:BB:2645:G:H3'	57:BB:2646:C:C5'	2.51	0.41
57:BB:2790:U:O4'	57:BB:2893:A:C8	2.74	0.41
58:BA:79:G:C6	58:BA:80:U:C4	3.08	0.41
4:AM:70:ARG:NE	54:BF:114:ARG:HE	2.19	0.41
10:AS:26:ASP:OD2	10:AS:30:LEU:HD21	2.21	0.41
10:AS:35:ARG:HH22	10:AS:76:THR:HG22	1.86	0.41
21:AA:925:G:H1'	21:AA:1502:A:C4	2.56	0.41
25:AZ:107:ALA:HB2	25:AZ:134:LEU:HB3	2.02	0.41
56:BH:77:THR:HB	56:BH:78:VAL:H	1.77	0.41
57:BB:670:A:H4'	57:BB:671:C:H5'	2.02	0.41
57:BB:735:A:H3'	57:BB:736:C:H6	1.86	0.41
57:BB:796:C:H2'	57:BB:797:G:C8	2.56	0.41
21:AA:678:U:H2'	21:AA:679:C:C6	2.57	0.40
33:BN:32:GLU:HB2	33:BN:118:ARG:HH21	1.86	0.40
57:BB:373:U:O2	57:BB:373:U:H2'	2.21	0.40
57:BB:648:G:H5"	57:BB:2352:A:C5'	2.51	0.40
57:BB:738:G:C6	57:BB:759:G:C6	3.09	0.40
57:BB:2014:A:C2	57:BB:2015:A:N1	2.89	0.40
58:BA:81:G:C5	58:BA:82:U:C5	3.09	0.40
5:AN:89:ARG:HA	14:AC:5:HIS:CE1	2.56	0.40
17:AF:39:LEU:HD12	17:AF:61:LEU:O	2.20	0.40
18:AG:98:LEU:HD23	18:AG:98:LEU:HA	1.94	0.40
21:AA:748:G:C6	21:AA:749:A:C5	3.09	0.40
21:AA:1084:G:H2'	21:AA:1085:U:C6	2.56	0.40
23:AW:76:A:C2	57:BB:2421:G:C6	3.09	0.40
25:AZ:27:LEU:HD23	25:AZ:27:LEU:HA	2.02	0.40
52:BD:3:GLY:HA2	52:BD:204:LYS:HA	2.03	0.40
57:BB:548:G:H5'	57:BB:549:G:N3	2.37	0.40
57:BB:754:U:H2'	57:BB:755:U:H6	1.85	0.40
57:BB:776:G:C4	57:BB:793:A:C5	3.10	0.40
57:BB:1296:G:C2	57:BB:1645:G:C4	3.08	0.40
57:BB:1344:U:H4'	57:BB:1384:A:C5	2.56	0.40
57:BB:1423:G:C6	57:BB:1424:G:C5	3.10	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
57:BB:1751:U:H5'	57:BB:2860:A:C2	2.56	0.40
57:BB:2126:A:C2	57:BB:2173:A:C4	3.08	0.40
21:AA:881:G:C5	21:AA:882:C:C5	3.10	0.40
45:BC:57:HIS:HE1	57:BB:1568:G:H1'	1.86	0.40
54:BF:124:ARG:NE	54:BF:124:ARG:HA	2.36	0.40
57:BB:57:C:H2'	57:BB:58:G:O4'	2.21	0.40
57:BB:2043:C:C2	57:BB:2044:C:C5	3.09	0.40
57:BB:2298:A:C8	57:BB:2299:U:C5	3.08	0.40
57:BB:2662:A:H2'	57:BB:2663:G:O4'	2.21	0.40
57:BB:2686:G:C5	57:BB:2687:U:C4	3.10	0.40
15:AD:146:GLU:HB2	15:AD:147:LYS:H	1.68	0.40
27:B5:78:PHE:CD2	27:B5:120:ALA:HB1	2.57	0.40
31:BL:116:VAL:HG13	31:BL:138:ALA:HB2	2.02	0.40
37:BR:59:ILE:HA	37:BR:101:ILE:H	1.87	0.40
45:BC:2:VAL:HG13	45:BC:16:VAL:HG13	2.04	0.40
57:BB:46:G:C6	57:BB:180:G:C5	3.10	0.40
57:BB:644:A:H4'	57:BB:645:C:C5	2.56	0.40
57:BB:895:U:H4'	57:BB:896:A:C4	2.57	0.40
57:BB:1831:G:C5	57:BB:1832:C:C5	3.10	0.40
57:BB:1839:G:H2'	57:BB:1840:G:H8	1.87	0.40
15:AD:141:VAL:HG22	15:AD:180:THR:HG22	2.03	0.40
20:AI:33:SER:H	20:AI:36:GLN:HB2	1.87	0.40
21:AA:1008:U:C5	21:AA:1009:U:C5	3.09	0.40
21:AA:1343:G:H2'	21:AA:1344:C:C6	2.57	0.40
21:AA:1395:C:C4'	21:AA:1401:G:H21	2.34	0.40
22:AY:37:G:N2	24:AX:19:U:C5	2.90	0.40
43:BX:51:SER:HB2	43:BX:54:GLY:H	1.87	0.40
45:BC:75:ALA:HA	45:BC:95:TYR:HA	2.03	0.40
57:BB:112:U:C5	57:BB:113:U:C4	3.10	0.40
57:BB:648:G:H5"	57:BB:2352:A:H5"	2.03	0.40
57:BB:1091:G:C6	57:BB:1092:C:N4	2.90	0.40
57:BB:1831:G:C6	57:BB:1975:G:C6	3.10	0.40
57:BB:2714:G:C6	57:BB:2715:C:C4	3.10	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	AJ	96/98 (98%)	77 (80%)	11 (12%)	8 (8%)	1	12
2	AK	115/117 (98%)	90 (78%)	18 (16%)	7 (6%)	1	17
3	AL	121/123 (98%)	107 (88%)	11 (9%)	3 (2%)	5	32
4	AM	111/113 (98%)	81 (73%)	20 (18%)	10 (9%)	1	11
5	AN	94/96 (98%)	67 (71%)	18 (19%)	9 (10%)	0	10
6	AO	86/88 (98%)	73 (85%)	8 (9%)	5 (6%)	1	18
7	AP	78/80 (98%)	61 (78%)	14 (18%)	3 (4%)	3	24
8	AQ	78/80 (98%)	62 (80%)	13 (17%)	3 (4%)	3	24
9	AR	53/55 (96%)	43 (81%)	10 (19%)	0	100	100
10	AS	77/79 (98%)	55 (71%)	17 (22%)	5 (6%)	1	16
11	AT	83/85 (98%)	73 (88%)	8 (10%)	2 (2%)	6	33
12	AU	49/51 (96%)	35 (71%)	10 (20%)	4 (8%)	1	12
13	AB	216/218 (99%)	166 (77%)	37 (17%)	13 (6%)	1	17
14	AC	204/206 (99%)	168 (82%)	26 (13%)	10 (5%)	2	20
15	AD	203/205 (99%)	161 (79%)	28 (14%)	14 (7%)	1	15
16	AE	148/150 (99%)	118 (80%)	21 (14%)	9 (6%)	1	17
17	AF	98/100 (98%)	79 (81%)	15 (15%)	4 (4%)	3	22
18	AG	148/150 (99%)	122 (82%)	18 (12%)	8 (5%)	2	19
19	AH	127/129 (98%)	96 (76%)	26 (20%)	5 (4%)	3	23
20	AI	125/127 (98%)	102 (82%)	21 (17%)	2 (2%)	9	44
25	AZ	391/393 (100%)	319 (82%)	52 (13%)	20 (5%)	2	19
27	B5	232/234 (99%)	195 (84%)	31 (13%)	6 (3%)	5	31
28	BI	139/141 (99%)	121 (87%)	11 (8%)	7 (5%)	2	20
29	BJ	140/142 (99%)	116 (83%)	11 (8%)	13 (9%)	0	10
30	BK	119/121 (98%)	96 (81%)	18 (15%)	5 (4%)	3	22

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
31	BL	141/143 (99%)	118 (84%)	16 (11%)	7 (5%)	2	20
32	BM	134/136 (98%)	101 (75%)	26 (19%)	7 (5%)	2	19
33	BN	118/120 (98%)	97 (82%)	17 (14%)	4 (3%)	3	26
34	BO	114/116 (98%)	100 (88%)	8 (7%)	6 (5%)	2	19
35	BP	112/114 (98%)	87 (78%)	15 (13%)	10 (9%)	1	11
36	BQ	115/117 (98%)	99 (86%)	14 (12%)	2 (2%)	9	42
37	BR	101/103 (98%)	83 (82%)	13 (13%)	5 (5%)	2	20
38	BS	108/110 (98%)	85 (79%)	15 (14%)	8 (7%)	1	14
39	BT	91/93 (98%)	64 (70%)	19 (21%)	8 (9%)	1	11
40	BU	100/102 (98%)	79 (79%)	13 (13%)	8 (8%)	1	12
41	BV	92/94 (98%)	76 (83%)	14 (15%)	2 (2%)	6	35
42	BW	77/79 (98%)	56 (73%)	10 (13%)	11 (14%)	0	4
43	BX	75/77 (97%)	60 (80%)	10 (13%)	5 (7%)	1	15
44	BY	61/63 (97%)	47 (77%)	11 (18%)	3 (5%)	2	20
45	BC	269/271 (99%)	201 (75%)	43 (16%)	25 (9%)	0	10
46	BZ	56/58 (97%)	49 (88%)	7 (12%)	0	100	100
47	B0	54/56 (96%)	43 (80%)	9 (17%)	2 (4%)	3	24
48	B1	48/50 (96%)	44 (92%)	2 (4%)	2 (4%)	3	22
49	B2	44/46 (96%)	32 (73%)	11 (25%)	1 (2%)	6	34
50	B3	62/64 (97%)	54 (87%)	5 (8%)	3 (5%)	2	21
51	B4	36/38 (95%)	31 (86%)	4 (11%)	1 (3%)	5	30
52	BD	207/209 (99%)	152 (73%)	39 (19%)	16 (8%)	1	13
53	BE	199/201 (99%)	157 (79%)	29 (15%)	13 (6%)	1	16
54	BF	176/178 (99%)	129 (73%)	28 (16%)	19 (11%)	0	8
55	BG	174/176 (99%)	137 (79%)	23 (13%)	14 (8%)	1	12
56	BH	147/149 (99%)	107 (73%)	23 (16%)	17 (12%)	0	6
All	All	6242/6344 (98%)	4971 (80%)	897 (14%)	374 (6%)	3	17

All (374) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	AJ	67	ILE
3	AL	24	GLU

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Mol	Chain	Res	Type
4	AM	3	ILE
4	AM	29	SER
4	AM	99	GLN
5	AN	26	LEU
5	AN	80	ARG
7	AP	65	ALA
8	AQ	71	SER
10	AS	27	LYS
10	AS	37	SER
13	AB	20	ARG
13	AB	205	ALA
14	AC	21	TRP
14	AC	63	ILE
15	AD	3	TYR
15	AD	45	PRO
16	AE	17	VAL
16	AE	106	ALA
17	AF	85	ILE
18	AG	127	ALA
19	AH	66	GLN
25	AZ	22	HIS
25	AZ	24	LYS
27	B5	36	ALA
27	B5	92	ALA
27	B5	134	ARG
28	BI	3	LYS
29	BJ	40	HIS
30	BK	72	ASP
31	BL	111	ILE
32	BM	43	ALA
37	BR	82	HIS
38	BS	76	VAL
38	BS	96	ILE
39	BT	21	SER
40	BU	75	ALA
42	BW	23	LYS
42	BW	35	ILE
42	BW	48	ALA
43	BX	41	SER
45	BC	35	LYS
45	BC	117	SER
45	BC	142	ASN

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Mol	Chain	Res	Type
45	BC	170	TYR
47	B0	44	ALA
50	B3	29	ARG
52	BD	31	ALA
53	BE	46	GLN
54	BF	13	LYS
54	BF	60	SER
54	BF	82	TYR
54	BF	84	ILE
55	BG	2	ARG
55	BG	62	ALA
56	BH	93	SER
56	BH	102	ALA
56	BH	116	ARG
56	BH	122	LEU
56	BH	130	VAL
1	AJ	17	LEU
1	AJ	57	VAL
1	AJ	74	VAL
1	AJ	75	ASP
2	AK	35	ASP
2	AK	101	ALA
2	AK	118	ASN
3	AL	62	VAL
4	AM	87	GLY
5	AN	21	ALA
5	AN	30	ILE
5	AN	43	ALA
8	AQ	12	VAL
10	AS	31	ARG
12	AU	9	GLU
14	AC	162	ALA
15	AD	7	LYS
15	AD	34	GLU
15	AD	42	ALA
15	AD	146	GLU
16	AE	121	ASN
17	AF	94	HIS
18	AG	109	LYS
18	AG	118	ARG
25	AZ	21	ASP
25	AZ	61	THR

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Mol	Chain	Res	Type
25	AZ	82	PRO
25	AZ	125	VAL
25	AZ	143	GLU
25	AZ	220	ILE
25	AZ	239	GLY
27	B5	159	GLY
28	BI	6	ALA
29	BJ	81	ILE
29	BJ	99	ARG
29	BJ	110	PRO
29	BJ	112	GLY
29	BJ	125	TYR
30	BK	34	VAL
31	BL	60	ARG
31	BL	85	VAL
32	BM	72	PRO
32	BM	73	ILE
33	BN	113	ILE
34	BO	95	SER
35	BP	48	ALA
35	BP	54	LEU
35	BP	103	THR
38	BS	11	ARG
38	BS	61	ASN
39	BT	16	VAL
40	BU	97	SER
41	BV	60	VAL
42	BW	30	VAL
42	BW	71	LYS
43	BX	40	GLU
43	BX	42	GLU
44	BY	10	SER
45	BC	22	GLU
45	BC	57	HIS
45	BC	116	GLN
50	B3	5	THR
51	B4	8	LYS
52	BD	102	ALA
52	BD	109	VAL
52	BD	122	VAL
52	BD	127	PHE
52	BD	175	LEU

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Mol	Chain	Res	Type
53	BE	9	GLN
53	BE	48	THR
54	BF	39	VAL
54	BF	88	VAL
54	BF	133	GLU
55	BG	83	THR
55	BG	150	TYR
56	BH	115	VAL
56	BH	142	VAL
1	AJ	85	ASP
2	AK	120	CYS
6	AO	22	GLY
6	AO	45	HIS
12	AU	26	GLY
13	AB	12	GLY
13	AB	77	GLU
13	AB	98	GLY
13	AB	99	MET
14	AC	116	ALA
17	AF	33	GLU
19	AH	106	SER
19	AH	116	ARG
25	AZ	180	GLY
25	AZ	281	ILE
25	AZ	345	GLU
27	B5	218	MET
28	BI	20	SER
29	BJ	26	GLY
29	BJ	60	ASP
29	BJ	67	ASN
30	BK	90	SER
31	BL	70	LYS
31	BL	82	LEU
35	BP	97	TYR
35	BP	98	TYR
36	BQ	88	GLU
37	BR	54	VAL
38	BS	64	ALA
38	BS	65	ASP
39	BT	73	ARG
40	BU	12	VAL
42	BW	17	ALA

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Mol	Chain	Res	Type
43	BX	27	ARG
45	BC	7	PRO
45	BC	29	PHE
45	BC	54	GLY
45	BC	184	GLU
45	BC	189	ALA
45	BC	197	ALA
48	B1	24	LYS
48	B1	50	GLU
52	BD	162	ALA
52	BD	192	ALA
53	BE	23	PHE
53	BE	71	GLY
53	BE	96	VAL
54	BF	2	LYS
54	BF	74	ALA
54	BF	107	VAL
54	BF	119	LYS
55	BG	36	LEU
55	BG	47	ASN
55	BG	154	GLU
56	BH	8	LYS
56	BH	14	SER
56	BH	33	GLN
56	BH	67	ALA
56	BH	113	SER
56	BH	126	GLY
2	AK	52	ARG
4	AM	6	ILE
4	AM	16	ILE
4	AM	65	GLU
5	AN	28	ALA
5	AN	62	ARG
6	AO	19	ASN
7	AP	36	VAL
10	AS	24	SER
12	AU	28	LEU
13	AB	78	ALA
13	AB	167	HIS
14	AC	167	TYR
15	AD	6	PRO
15	AD	26	ALA

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Mol	Chain	Res	Type
16	AE	25	LYS
16	AE	40	ASP
16	AE	110	MET
25	AZ	63	ASN
25	AZ	209	PRO
25	AZ	222	GLY
28	BI	76	ALA
30	BK	5	THR
31	BL	68	SER
32	BM	51	ARG
32	BM	122	ALA
33	BN	70	THR
34	BO	58	ILE
35	BP	81	ASP
35	BP	105	LYS
35	BP	107	ALA
36	BQ	24	TYR
39	BT	18	GLU
39	BT	41	ALA
40	BU	47	PRO
40	BU	62	ALA
40	BU	63	ALA
40	BU	74	ALA
40	BU	98	ASN
42	BW	14	ASP
42	BW	56	HIS
43	BX	34	SER
44	BY	9	LYS
45	BC	28	PRO
45	BC	68	ARG
45	BC	122	ALA
45	BC	229	HIS
45	BC	239	PHE
47	B0	33	SER
50	B3	53	ASP
52	BD	135	GLY
52	BD	144	GLY
53	BE	6	LYS
53	BE	10	SER
53	BE	11	ALA
53	BE	45	ALA
53	BE	61	ARG

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Mol	Chain	Res	Type
54	BF	35	LEU
54	BF	69	ALA
54	BF	132	ARG
54	BF	149	ARG
55	BG	58	ALA
55	BG	135	ALA
56	BH	29	PHE
56	BH	109	GLU
56	BH	123	ARG
3	AL	100	ALA
4	AM	21	ILE
5	AN	45	LEU
5	AN	99	SER
6	AO	18	ALA
6	AO	87	ARG
7	AP	53	ASP
11	AT	67	HIS
12	AU	21	SER
13	AB	18	GLN
13	AB	219	THR
14	AC	42	LEU
14	AC	65	VAL
14	AC	163	ARG
15	AD	40	HIS
15	AD	121	ALA
16	AE	26	GLY
17	AF	56	LYS
18	AG	40	SER
18	AG	129	ASN
20	AI	128	LYS
25	AZ	30	ALA
25	AZ	247	ILE
28	BI	37	PHE
28	BI	69	VAL
29	BJ	65	THR
29	BJ	69	ARG
30	BK	92	GLN
32	BM	69	PRO
33	BN	59	SER
34	BO	51	ALA
34	BO	112	GLU
37	BR	43	ASN

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Mol	Chain	Res	Type
37	BR	98	ILE
38	BS	90	LYS
39	BT	43	ILE
39	BT	55	VAL
39	BT	64	LYS
41	BV	71	LYS
42	BW	24	ARG
42	BW	75	ASN
45	BC	21	PRO
45	BC	52	HIS
45	BC	77	VAL
45	BC	97	ASP
45	BC	205	GLY
45	BC	254	LYS
49	B2	41	ARG
52	BD	149	ASN
53	BE	83	VAL
54	BF	136	ILE
54	BF	176	PHE
55	BG	9	VAL
55	BG	80	GLU
55	BG	157	LYS
2	AK	125	LYS
4	AM	19	THR
13	AB	40	ILE
15	AD	23	GLY
16	AE	29	ILE
18	AG	146	ALA
19	AH	82	LEU
25	AZ	258	VAL
33	BN	98	LEU
34	BO	73	ALA
35	BP	113	LEU
42	BW	40	ARG
45	BC	171	VAL
55	BG	152	ARG
56	BH	31	VAL
1	AJ	41	PRO
4	AM	24	VAL
14	AC	14	VAL
14	AC	108	PRO
15	AD	185	PRO

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Mol	Chain	Res	Type
25	AZ	298	ILE
28	BI	22	PRO
29	BJ	124	VAL
53	BE	167	VAL
54	BF	12	VAL
54	BF	110	ILE
8	AQ	31	PRO
15	AD	24	VAL
16	AE	15	ILE
18	AG	15	PRO
18	AG	79	VAL
27	B5	209	ILE
32	BM	125	PRO
44	BY	46	VAL
52	BD	166	GLY
52	BD	203	VAL
2	AK	96	ILE
37	BR	101	ILE
38	BS	45	VAL
52	BD	24	VAL
52	BD	93	GLY
52	BD	146	ILE
11	AT	56	ILE
13	AB	47	PRO
15	AD	166	LYS
19	AH	5	PRO
25	AZ	83	GLY
35	BP	45	VAL
55	BG	8	VAL
1	AJ	39	PRO
10	AS	29	PRO
13	AB	79	VAL
20	AI	124	PRO
29	BJ	46	PRO
31	BL	24	GLY
34	BO	41	ALA

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	AJ	86/86 (100%)	82 (95%)	4 (5%)	26	51
2	AK	90/90 (100%)	87 (97%)	3 (3%)	38	61
3	AL	103/103 (100%)	98 (95%)	5 (5%)	25	50
4	AM	91/91 (100%)	85 (93%)	6 (7%)	16	41
5	AN	79/79 (100%)	78 (99%)	1 (1%)	69	82
6	AO	76/76 (100%)	74 (97%)	2 (3%)	46	66
7	AP	65/65 (100%)	63 (97%)	2 (3%)	40	62
8	AQ	74/74 (100%)	67 (90%)	7 (10%)	8	27
9	AR	48/48 (100%)	47 (98%)	1 (2%)	53	72
10	AS	70/70 (100%)	67 (96%)	3 (4%)	29	54
11	AT	65/65 (100%)	65 (100%)	0	100	100
12	AU	44/44 (100%)	42 (96%)	2 (4%)	27	52
13	AB	180/180 (100%)	172 (96%)	8 (4%)	28	53
14	AC	170/170 (100%)	158 (93%)	12 (7%)	14	39
15	AD	172/172 (100%)	163 (95%)	9 (5%)	23	48
16	AE	113/113 (100%)	106 (94%)	7 (6%)	18	43
17	AF	87/87 (100%)	81 (93%)	6 (7%)	15	40
18	AG	123/123 (100%)	115 (94%)	8 (6%)	17	42
19	AH	104/104 (100%)	95 (91%)	9 (9%)	10	31
20	AI	105/105 (100%)	97 (92%)	8 (8%)	13	37
25	AZ	325/326 (100%)	303 (93%)	22 (7%)	16	41
27	B5	181/181 (100%)	170 (94%)	11 (6%)	18	44
28	BI	109/109 (100%)	100 (92%)	9 (8%)	11	34
29	BJ	116/116 (100%)	107 (92%)	9 (8%)	12	36
30	BK	102/102 (100%)	94 (92%)	8 (8%)	12	36
31	BL	102/102 (100%)	100 (98%)	2 (2%)	55	74
32	BM	109/109 (100%)	100 (92%)	9 (8%)	11	34
33	BN	100/100 (100%)	97 (97%)	3 (3%)	41	63
34	BO	86/86 (100%)	83 (96%)	3 (4%)	36	59
35	BP	99/99 (100%)	92 (93%)	7 (7%)	14	39

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
36	BQ	89/89 (100%)	86 (97%)	3 (3%)	37	60
37	BR	84/84 (100%)	78 (93%)	6 (7%)	14	39
38	BS	93/93 (100%)	89 (96%)	4 (4%)	29	54
39	BT	80/80 (100%)	72 (90%)	8 (10%)	7	26
40	BU	83/83 (100%)	72 (87%)	11 (13%)	4	18
41	BV	78/78 (100%)	75 (96%)	3 (4%)	33	57
42	BW	59/59 (100%)	53 (90%)	6 (10%)	7	25
43	BX	67/67 (100%)	60 (90%)	7 (10%)	7	24
44	BY	55/55 (100%)	53 (96%)	2 (4%)	35	59
45	BC	216/216 (100%)	205 (95%)	11 (5%)	24	48
46	BZ	48/48 (100%)	44 (92%)	4 (8%)	11	34
47	B0	47/47 (100%)	42 (89%)	5 (11%)	6	24
48	B1	45/45 (100%)	42 (93%)	3 (7%)	16	41
49	B2	38/38 (100%)	37 (97%)	1 (3%)	46	66
50	B3	51/51 (100%)	49 (96%)	2 (4%)	32	56
51	B4	34/34 (100%)	34 (100%)	0	100	100
52	BD	164/164 (100%)	150 (92%)	14 (8%)	10	33
53	BE	165/165 (100%)	157 (95%)	8 (5%)	25	51
54	BF	149/149 (100%)	139 (93%)	10 (7%)	16	41
55	BG	137/137 (100%)	126 (92%)	11 (8%)	12	35
56	BH	114/114 (100%)	107 (94%)	7 (6%)	18	44
All	All	5170/5171 (100%)	4858 (94%)	312 (6%)	23	44

All (312) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	AJ	15	HIS
1	AJ	31	ARG
1	AJ	60	ASP
1	AJ	85	ASP
2	AK	55	ARG
2	AK	75	GLU
2	AK	126	ARG
3	AL	29	LYS
3	AL	43	LYS

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Mol	Chain	Res	Type
3	AL	72	ASN
3	AL	74	GLN
3	AL	110	LYS
4	AM	12	LYS
4	AM	26	LYS
4	AM	30	LYS
4	AM	52	ILE
4	AM	89	ARG
4	AM	102	LYS
5	AN	23	ARG
6	AO	9	LYS
6	AO	88	ARG
7	AP	3	THR
7	AP	52	LEU
8	AQ	5	ARG
8	AQ	10	ARG
8	AQ	16	MET
8	AQ	17	GLU
8	AQ	26	ARG
8	AQ	32	ILE
8	AQ	79	GLU
9	AR	23	LYS
10	AS	27	LYS
10	AS	42	ASN
10	AS	50	VAL
12	AU	34	ARG
12	AU	35	GLU
13	AB	18	GLN
13	AB	62	ARG
13	AB	99	MET
13	AB	110	ILE
13	AB	141	GLU
13	AB	156	LEU
13	AB	199	ILE
13	AB	219	THR
14	AC	27	GLU
14	AC	28	PHE
14	AC	38	VAL
14	AC	106	ARG
14	AC	110	LEU
14	AC	111	ASP
14	AC	115	VAL

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Mol	Chain	Res	Type
14	AC	122	GLN
14	AC	126	ARG
14	AC	129	PHE
14	AC	163	ARG
14	AC	184	ASN
15	AD	2	ARG
15	AD	39	GLN
15	AD	43	ARG
15	AD	69	ARG
15	AD	71	PHE
15	AD	152	SER
15	AD	170	LEU
15	AD	184	LYS
15	AD	201	GLU
16	AE	13	LYS
16	AE	45	VAL
16	AE	64	GLU
16	AE	123	LEU
16	AE	125	LYS
16	AE	146	MET
16	AE	151	MET
17	AF	7	VAL
17	AF	8	PHE
17	AF	16	GLU
17	AF	49	TYR
17	AF	89	VAL
17	AF	91	ARG
18	AG	9	ARG
18	AG	12	LEU
18	AG	26	VAL
18	AG	51	GLN
18	AG	55	LYS
18	AG	73	GLU
18	AG	100	MET
18	AG	143	MET
19	AH	9	MET
19	AH	41	GLU
19	AH	49	LYS
19	AH	51	GLU
19	AH	63	LYS
19	AH	88	LYS
19	AH	105	THR

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Mol	Chain	Res	Type
19	AH	117	GLN
19	AH	127	TYR
20	AI	31	GLN
20	AI	40	ARG
20	AI	56	MET
20	AI	58	GLU
20	AI	67	LYS
20	AI	86	LEU
20	AI	89	TYR
20	AI	98	ARG
25	AZ	6	GLU
25	AZ	7	ARG
25	AZ	37	LYS
25	AZ	51	ASN
25	AZ	79	VAL
25	AZ	84	HIS
25	AZ	91	MET
25	AZ	114	GLN
25	AZ	139	MET
25	AZ	159	GLN
25	AZ	204	ARG
25	AZ	212	LEU
25	AZ	235	ILE
25	AZ	237	LYS
25	AZ	248	LYS
25	AZ	262	ARG
25	AZ	284	GLU
25	AZ	288	ARG
25	AZ	313	LYS
25	AZ	349	MET
25	AZ	373	ARG
25	AZ	381	ARG
27	B5	7	ARG
27	B5	39	VAL
27	B5	54	LYS
27	B5	59	VAL
27	B5	78	PHE
27	B5	98	GLU
27	B5	105	LYS
27	B5	162	ARG
27	B5	173	THR
27	B5	174	THR

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Mol	Chain	Res	Type
27	B5	207	VAL
28	BI	12	VAL
28	BI	22	PRO
28	BI	39	LYS
28	BI	49	GLU
28	BI	66	PHE
28	BI	73	PRO
28	BI	95	ASP
28	BI	100	ILE
28	BI	140	GLU
29	BJ	18	VAL
29	BJ	43	GLU
29	BJ	49	ASP
29	BJ	60	ASP
29	BJ	69	ARG
29	BJ	76	HIS
29	BJ	101	ILE
29	BJ	125	TYR
29	BJ	129	GLU
30	BK	2	GLN
30	BK	19	MET
30	BK	30	ARG
30	BK	50	LYS
30	BK	68	VAL
30	BK	86	LEU
30	BK	110	LYS
30	BK	115	ILE
31	BL	46	VAL
31	BL	84	LYS
32	BM	10	ARG
32	BM	33	LEU
32	BM	45	GLN
32	BM	51	ARG
32	BM	59	ARG
32	BM	71	LYS
32	BM	90	GLU
32	BM	91	TYR
32	BM	111	GLU
33	BN	9	GLN
33	BN	29	VAL
33	BN	112	TYR
34	BO	4	LYS

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Mol	Chain	Res	Type
34	BO	112	GLU
34	BO	117	PHE
35	BP	6	GLN
35	BP	26	GLU
35	BP	42	PHE
35	BP	74	GLN
35	BP	87	ARG
35	BP	92	ARG
35	BP	108	ARG
36	BQ	24	TYR
36	BQ	63	ARG
36	BQ	94	LEU
37	BR	39	LEU
37	BR	40	MET
37	BR	63	VAL
37	BR	64	VAL
37	BR	82	HIS
37	BR	95	ASP
38	BS	4	ILE
38	BS	48	LYS
38	BS	86	MET
38	BS	104	THR
39	BT	1	MET
39	BT	5	GLU
39	BT	12	ARG
39	BT	16	VAL
39	BT	58	VAL
39	BT	61	LEU
39	BT	70	HIS
39	BT	76	ARG
40	BU	4	ILE
40	BU	18	LYS
40	BU	26	ASN
40	BU	27	VAL
40	BU	33	VAL
40	BU	41	VAL
40	BU	71	ILE
40	BU	81	ARG
40	BU	87	GLU
40	BU	92	VAL
40	BU	94	PHE
41	BV	18	ARG

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Mol	Chain	Res	Type
41	BV	29	ILE
41	BV	66	ASP
42	BW	39	GLN
42	BW	40	ARG
42	BW	45	HIS
42	BW	69	GLU
42	BW	74	LYS
42	BW	82	GLU
43	BX	3	VAL
43	BX	11	PRO
43	BX	15	ASN
43	BX	16	ASN
43	BX	26	ARG
43	BX	32	LEU
43	BX	42	GLU
44	BY	7	ARG
44	BY	53	VAL
45	BC	6	LYS
45	BC	34	GLU
45	BC	36	ASN
45	BC	64	VAL
45	BC	167	ASP
45	BC	183	VAL
45	BC	198	GLU
45	BC	200	MET
45	BC	212	TRP
45	BC	224	MET
45	BC	257	ARG
46	BZ	5	LYS
46	BZ	6	ILE
46	BZ	15	ARG
46	BZ	50	VAL
47	B0	8	THR
47	B0	9	ARG
47	B0	30	ASP
47	B0	47	TYR
47	B0	49	ARG
48	B1	32	LYS
48	B1	36	LYS
48	B1	49	LYS
49	B2	28	ARG
50	B3	29	ARG

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Mol	Chain	Res	Type
50	B3	56	LEU
52	BD	2	ILE
52	BD	12	THR
52	BD	18	ASP
52	BD	38	LYS
52	BD	79	LEU
52	BD	84	LEU
52	BD	124	ARG
52	BD	128	ARG
52	BD	131	ASP
52	BD	159	LYS
52	BD	160	LYS
52	BD	161	MET
52	BD	168	GLU
52	BD	205	PRO
53	BE	1	MET
53	BE	62	GLN
53	BE	78	TRP
53	BE	79	ARG
53	BE	124	PHE
53	BE	141	MET
53	BE	155	GLU
53	BE	194	LYS
54	BF	16	MET
54	BF	49	LEU
54	BF	59	ILE
54	BF	77	LYS
54	BF	91	ARG
54	BF	100	GLU
54	BF	124	ARG
54	BF	129	MET
54	BF	140	ILE
54	BF	175	PRO
55	BG	7	PRO
55	BG	36	LEU
55	BG	50	THR
55	BG	85	LYS
55	BG	91	VAL
55	BG	104	LEU
55	BG	113	ASP
55	BG	120	ILE
55	BG	121	THR

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Mol	Chain	Res	Type
55	BG	150	TYR
55	BG	166	GLU
56	BH	1	MET
56	BH	11	ASN
56	BH	25	TYR
56	BH	29	PHE
56	BH	86	ASP
56	BH	89	LYS
56	BH	123	ARG

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (80) such sidechains are listed below:

Mol	Chain	Res	Type
1	AJ	15	HIS
2	AK	39	ASN
2	AK	63	GLN
2	AK	117	HIS
3	AL	71	HIS
3	AL	72	ASN
3	AL	74	GLN
3	AL	76	HIS
3	AL	95	HIS
5	AN	3	GLN
5	AN	48	GLN
5	AN	59	GLN
5	AN	70	HIS
6	AO	27	GLN
6	AO	49	HIS
7	AP	18	GLN
8	AQ	46	HIS
9	AR	53	GLN
10	AS	51	HIS
10	AS	68	HIS
11	AT	60	GLN
13	AB	14	HIS
13	AB	17	HIS
13	AB	145	ASN
13	AB	176	ASN
14	AC	5	HIS
15	AD	58	GLN
15	AD	99	ASN
16	AE	147	ASN

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Mol	Chain	Res	Type
17	AF	14	GLN
17	AF	52	ASN
17	AF	63	ASN
17	AF	81	ASN
18	AG	27	ASN
18	AG	96	ASN
19	AH	20	ASN
25	AZ	11	HIS
25	AZ	19	HIS
25	AZ	51	ASN
25	AZ	75	HIS
25	AZ	78	HIS
25	AZ	114	GLN
25	AZ	118	HIS
25	AZ	159	GLN
25	AZ	329	GLN
28	BI	29	GLN
29	BJ	58	ASN
29	BJ	77	HIS
29	BJ	132	HIS
30	BK	2	GLN
30	BK	28	HIS
31	BL	54	GLN
31	BL	93	ASN
33	BN	16	HIS
34	BO	100	HIS
36	BQ	58	GLN
36	BQ	70	GLN
39	BT	28	ASN
39	BT	91	GLN
41	BV	75	GLN
41	BV	88	HIS
42	BW	45	HIS
42	BW	49	ASN
45	BC	43	ASN
45	BC	44	ASN
45	BC	57	HIS
45	BC	89	ASN
45	BC	116	GLN
45	BC	199	HIS
45	BC	231	HIS
48	B1	18	HIS

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Mol	Chain	Res	Type
48	B1	45	HIS
49	B2	16	HIS
52	BD	148	GLN
53	BE	41	GLN
53	BE	97	ASN
55	BG	44	HIS
55	BG	115	GLN
55	BG	138	GLN
56	BH	135	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
21	AA	1529/1530 (99%)	281 (18%)	42 (2%)
22	AY	75/76 (98%)	20 (26%)	5 (6%)
23	AW	75/76 (98%)	24 (32%)	6 (8%)
24	AX	10/11 (90%)	3 (30%)	0
26	AV	76/77 (98%)	14 (18%)	0
57	BB	2902/2903 (99%)	491 (16%)	63 (2%)
58	BA	116/117 (99%)	19 (16%)	4 (3%)
All	All	4783/4790 (99%)	852 (17%)	120 (2%)

All (852) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
21	AA	6	G
21	AA	7	A
21	AA	8	A
21	AA	9	G
21	AA	14	U
21	AA	15	G
21	AA	31	G
21	AA	32	A
21	AA	39	G
21	AA	47	C
21	AA	48	C
21	AA	50	A
21	AA	51	A
21	AA	52	C
21	AA	55	A
21	AA	61	G

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Mol	Chain	Res	Type
21	AA	67	C
21	AA	70	U
21	AA	71	A
21	AA	75	G
21	AA	79	G
21	AA	80	A
21	AA	81	A
21	AA	83	C
21	AA	84	U
21	AA	85	U
21	AA	86	G
21	AA	88	U
21	AA	91	U
21	AA	101	A
21	AA	118	U
21	AA	119	A
21	AA	131	A
21	AA	144	G
21	AA	149	A
21	AA	155	A
21	AA	182	A
21	AA	197	A
21	AA	204	G
21	AA	205	A
21	AA	209	U
21	AA	210	C
21	AA	211	G
21	AA	239	U
21	AA	240	G
21	AA	243	A
21	AA	244	U
21	AA	245	U
21	AA	247	G
21	AA	251	G
21	AA	252	U
21	AA	257	G
21	AA	258	G
21	AA	266	G
21	AA	267	C
21	AA	280	C
21	AA	281	G
21	AA	288	A

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Mol	Chain	Res	Type
21	AA	289	G
21	AA	306	A
21	AA	308	C
21	AA	316	C
21	AA	328	C
21	AA	329	A
21	AA	330	C
21	AA	332	G
21	AA	352	C
21	AA	354	G
21	AA	367	U
21	AA	373	A
21	AA	374	A
21	AA	382	A
21	AA	388	G
21	AA	397	A
21	AA	398	U
21	AA	406	G
21	AA	408	A
21	AA	409	U
21	AA	411	A
21	AA	412	A
21	AA	413	G
21	AA	414	A
21	AA	416	G
21	AA	421	U
21	AA	422	C
21	AA	424	G
21	AA	429	U
21	AA	430	A
21	AA	435	A
21	AA	451	A
21	AA	456	A
21	AA	459	A
21	AA	461	A
21	AA	462	G
21	AA	463	U
21	AA	465	A
21	AA	466	A
21	AA	467	U
21	AA	468	A
21	AA	484	G

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Mol	Chain	Res	Type
21	AA	485	U
21	AA	486	U
21	AA	493	A
21	AA	499	A
21	AA	508	U
21	AA	511	C
21	AA	512	U
21	AA	518	C
21	AA	524	G
21	AA	527	G
21	AA	530	G
21	AA	531	U
21	AA	532	A
21	AA	533	A
21	AA	547	A
21	AA	560	A
21	AA	562	U
21	AA	563	A
21	AA	572	A
21	AA	573	A
21	AA	576	C
21	AA	577	G
21	AA	596	A
21	AA	631	C
21	AA	633	G
21	AA	653	U
21	AA	665	A
21	AA	666	G
21	AA	700	G
21	AA	720	C
21	AA	724	G
21	AA	731	G
21	AA	747	A
21	AA	748	G
21	AA	752	G
21	AA	755	G
21	AA	781	A
21	AA	782	A
21	AA	793	U
21	AA	794	A
21	AA	812	G
21	AA	815	A

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Mol	Chain	Res	Type
21	AA	817	C
21	AA	818	G
21	AA	819	A
21	AA	821	G
21	AA	828	U
21	AA	841	C
21	AA	842	U
21	AA	843	U
21	AA	844	G
21	AA	846	G
21	AA	847	G
21	AA	849	G
21	AA	873	A
21	AA	914	A
21	AA	926	G
21	AA	927	G
21	AA	934	C
21	AA	935	A
21	AA	945	G
21	AA	960	U
21	AA	961	U
21	AA	966	G
21	AA	968	A
21	AA	969	A
21	AA	971	G
21	AA	974	A
21	AA	975	A
21	AA	976	G
21	AA	977	A
21	AA	978	A
21	AA	981	U
21	AA	993	G
21	AA	994	A
21	AA	996	A
21	AA	1004	A
21	AA	1018	G
21	AA	1020	G
21	AA	1028	C
21	AA	1030	U
21	AA	1031	C
21	AA	1032	G
21	AA	1034	G

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Mol	Chain	Res	Type
21	AA	1036	A
21	AA	1043	G
21	AA	1050	G
21	AA	1053	G
21	AA	1064	G
21	AA	1065	U
21	AA	1066	C
21	AA	1070	U
21	AA	1085	U
21	AA	1086	U
21	AA	1094	G
21	AA	1095	U
21	AA	1101	A
21	AA	1110	A
21	AA	1112	C
21	AA	1118	U
21	AA	1119	C
21	AA	1124	G
21	AA	1125	U
21	AA	1130	A
21	AA	1133	G
21	AA	1134	G
21	AA	1135	U
21	AA	1136	C
21	AA	1139	G
21	AA	1140	C
21	AA	1145	A
21	AA	1146	A
21	AA	1154	G
21	AA	1159	U
21	AA	1160	G
21	AA	1168	U
21	AA	1181	G
21	AA	1183	U
21	AA	1184	G
21	AA	1196	A
21	AA	1197	A
21	AA	1202	U
21	AA	1212	U
21	AA	1213	A
21	AA	1214	C
21	AA	1215	G

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Mol	Chain	Res	Type
21	AA	1225	A
21	AA	1226	C
21	AA	1227	A
21	AA	1238	A
21	AA	1249	C
21	AA	1250	A
21	AA	1256	A
21	AA	1257	A
21	AA	1258	G
21	AA	1261	A
21	AA	1270	G
21	AA	1278	G
21	AA	1279	G
21	AA	1280	A
21	AA	1285	A
21	AA	1286	U
21	AA	1287	A
21	AA	1297	G
21	AA	1300	G
21	AA	1301	U
21	AA	1303	C
21	AA	1305	G
21	AA	1316	G
21	AA	1317	C
21	AA	1319	A
21	AA	1320	C
21	AA	1322	C
21	AA	1323	G
21	AA	1331	G
21	AA	1336	C
21	AA	1346	A
21	AA	1353	G
21	AA	1363	A
21	AA	1364	U
21	AA	1380	U
21	AA	1399	C
21	AA	1419	G
21	AA	1432	G
21	AA	1446	A
21	AA	1448	C
21	AA	1452	C
21	AA	1454	G

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Mol	Chain	Res	Type
21	AA	1493	A
21	AA	1494	G
21	AA	1497	G
21	AA	1499	A
21	AA	1503	A
21	AA	1506	U
21	AA	1517	G
21	AA	1520	C
21	AA	1529	G
21	AA	1530	G
21	AA	1531	A
21	AA	1533	C
21	AA	1534	A
22	AY	4	G
22	AY	8	U
22	AY	9	A
22	AY	12	U
22	AY	17	U
22	AY	18	G
22	AY	19	G
22	AY	20	G
22	AY	21	A
22	AY	31	A
22	AY	33	U
22	AY	35	A
22	AY	37	G
22	AY	43	G
22	AY	46	G
22	AY	48	C
22	AY	69	U
22	AY	72	C
22	AY	74	C
22	AY	75	C
23	AW	15	G
23	AW	16	U
23	AW	17	C
23	AW	18	G
23	AW	19	G
23	AW	20	U
23	AW	21	A
23	AW	33	U
23	AW	34	G

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Mol	Chain	Res	Type
23	AW	37	A
23	AW	39	U
23	AW	40	C
23	AW	43	C
23	AW	47	U
23	AW	52	G
23	AW	56	C
23	AW	57	G
23	AW	59	U
23	AW	60	U
23	AW	61	C
23	AW	70	G
23	AW	71	G
23	AW	75	C
23	AW	76	A
24	AX	13	A
24	AX	17	U
24	AX	18	G
26	AV	5	G
26	AV	8	U
26	AV	17(A)	U
26	AV	18	G
26	AV	19	G
26	AV	21	A
26	AV	47	U
26	AV	48	C
26	AV	49	G
26	AV	53	G
26	AV	67	C
26	AV	71	C
26	AV	73	A
26	AV	75	C
57	BB	34	U
57	BB	35	G
57	BB	46	G
57	BB	50	U
57	BB	51	G
57	BB	71	A
57	BB	74	A
57	BB	75	G
57	BB	84	A
57	BB	91	A

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Mol	Chain	Res	Type
57	BB	95	A
57	BB	99	U
57	BB	100	U
57	BB	101	A
57	BB	102	U
57	BB	103	A
57	BB	118	A
57	BB	119	A
57	BB	120	U
57	BB	125	A
57	BB	136	G
57	BB	137	U
57	BB	139	U
57	BB	140	C
57	BB	141	G
57	BB	143	C
57	BB	144	A
57	BB	160	A
57	BB	180	G
57	BB	181	A
57	BB	196	A
57	BB	199	A
57	BB	216	A
57	BB	221	A
57	BB	222	A
57	BB	233	A
57	BB	241	A
57	BB	248	G
57	BB	249	C
57	BB	255	A
57	BB	265	A
57	BB	266	G
57	BB	268	C
57	BB	271	G
57	BB	273	G
57	BB	276	U
57	BB	277	G
57	BB	281	C
57	BB	283	G
57	BB	286	U
57	BB	294	A
57	BB	299	A

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Mol	Chain	Res	Type
57	BB	311	A
57	BB	312	G
57	BB	321	U
57	BB	323	C
57	BB	329	G
57	BB	330	A
57	BB	333	G
57	BB	346	A
57	BB	352	A
57	BB	353	C
57	BB	362	A
57	BB	363	G
57	BB	364	C
57	BB	369	U
57	BB	371	A
57	BB	372	G
57	BB	386	G
57	BB	387	U
57	BB	404	A
57	BB	405	U
57	BB	406	G
57	BB	411	G
57	BB	412	A
57	BB	424	G
57	BB	457	A
57	BB	479	A
57	BB	481	G
57	BB	490	C
57	BB	491	G
57	BB	504	A
57	BB	505	A
57	BB	508	A
57	BB	509	C
57	BB	512	G
57	BB	527	C
57	BB	528	A
57	BB	531	C
57	BB	532	A
57	BB	533	G
57	BB	544	C
57	BB	546	U
57	BB	547	A

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Mol	Chain	Res	Type
57	BB	548	G
57	BB	549	G
57	BB	550	C
57	BB	555	G
57	BB	563	A
57	BB	568	U
57	BB	573	U
57	BB	575	A
57	BB	586	A
57	BB	588	U
57	BB	603	A
57	BB	613	A
57	BB	614	A
57	BB	615	U
57	BB	627	A
57	BB	637	A
57	BB	638	G
57	BB	646	U
57	BB	647	G
57	BB	652	U
57	BB	656	G
57	BB	668	A
57	BB	670	A
57	BB	671	C
57	BB	686	U
57	BB	730	A
57	BB	747	U
57	BB	757	G
57	BB	764	A
57	BB	775	G
57	BB	776	G
57	BB	782	A
57	BB	784	G
57	BB	785	G
57	BB	788	A
57	BB	789	A
57	BB	793	A
57	BB	805	G
57	BB	812	C
57	BB	819	A
57	BB	827	U
57	BB	846	U

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Mol	Chain	Res	Type
57	BB	847	U
57	BB	858	G
57	BB	859	G
57	BB	871	U
57	BB	875	G
57	BB	881	G
57	BB	886	A
57	BB	889	C
57	BB	891	G
57	BB	896	A
57	BB	897	C
57	BB	900	A
57	BB	901	C
57	BB	910	A
57	BB	912	C
57	BB	919	U
57	BB	931	U
57	BB	932	U
57	BB	933	A
57	BB	941	A
57	BB	945	A
57	BB	946	C
57	BB	961	C
57	BB	973	A
57	BB	974	G
57	BB	980	A
57	BB	983	A
57	BB	985	C
57	BB	991	C
57	BB	996	A
57	BB	1005	C
57	BB	1012	U
57	BB	1013	C
57	BB	1022	G
57	BB	1023	U
57	BB	1025	G
57	BB	1033	U
57	BB	1046	A
57	BB	1054	A
57	BB	1056	G
57	BB	1057	A
57	BB	1067	A

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Mol	Chain	Res	Type
57	BB	1068	G
57	BB	1069	A
57	BB	1070	A
57	BB	1071	G
57	BB	1073	A
57	BB	1085	A
57	BB	1088	A
57	BB	1090	A
57	BB	1095	A
57	BB	1096	A
57	BB	1104	C
57	BB	1112	G
57	BB	1116	G
57	BB	1130	U
57	BB	1132	U
57	BB	1133	A
57	BB	1134	A
57	BB	1135	C
57	BB	1136	G
57	BB	1139	G
57	BB	1142	A
57	BB	1156	A
57	BB	1174	U
57	BB	1176	U
57	BB	1195	G
57	BB	1205	A
57	BB	1211	C
57	BB	1212	G
57	BB	1238	G
57	BB	1241	A
57	BB	1242	U
57	BB	1248	G
57	BB	1250	G
57	BB	1253	A
57	BB	1256	G
57	BB	1266	G
57	BB	1271	G
57	BB	1272	A
57	BB	1273	U
57	BB	1275	A
57	BB	1276	A
57	BB	1300	G

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Mol	Chain	Res	Type
57	BB	1301	A
57	BB	1321	A
57	BB	1325	U
57	BB	1326	U
57	BB	1332	G
57	BB	1337	G
57	BB	1340	U
57	BB	1341	G
57	BB	1352	U
57	BB	1365	A
57	BB	1368	G
57	BB	1374	G
57	BB	1379	U
57	BB	1394	U
57	BB	1396	U
57	BB	1416	G
57	BB	1417	C
57	BB	1419	A
57	BB	1420	A
57	BB	1421	G
57	BB	1427	A
57	BB	1428	C
57	BB	1451	C
57	BB	1453	A
57	BB	1454	C
57	BB	1458	U
57	BB	1459	G
57	BB	1461	C
57	BB	1469	A
57	BB	1475	G
57	BB	1476	U
57	BB	1477	A
57	BB	1478	G
57	BB	1482	G
57	BB	1490	A
57	BB	1493	C
57	BB	1497	U
57	BB	1504	A
57	BB	1505	A
57	BB	1507	C
57	BB	1508	A
57	BB	1509	A

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Mol	Chain	Res	Type
57	BB	1510	G
57	BB	1523	U
57	BB	1524	G
57	BB	1532	A
57	BB	1535	A
57	BB	1538	G
57	BB	1552	A
57	BB	1566	A
57	BB	1569	A
57	BB	1578	U
57	BB	1585	C
57	BB	1608	A
57	BB	1609	A
57	BB	1610	A
57	BB	1634	A
57	BB	1635	A
57	BB	1640	A
57	BB	1647	U
57	BB	1648	U
57	BB	1653	G
57	BB	1654	A
57	BB	1674	G
57	BB	1699	G
57	BB	1700	A
57	BB	1714	U
57	BB	1715	G
57	BB	1729	U
57	BB	1731	G
57	BB	1733	G
57	BB	1738	G
57	BB	1756	G
57	BB	1758	U
57	BB	1759	A
57	BB	1761	C
57	BB	1764	C
57	BB	1773	A
57	BB	1776	G
57	BB	1781	U
57	BB	1784	A
57	BB	1800	C
57	BB	1801	A
57	BB	1808	A

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Mol	Chain	Res	Type
57	BB	1816	C
57	BB	1829	A
57	BB	1839	G
57	BB	1870	C
57	BB	1884	G
57	BB	1896	G
57	BB	1906	G
57	BB	1913	A
57	BB	1915	U
57	BB	1929	G
57	BB	1930	G
57	BB	1937	A
57	BB	1938	A
57	BB	1940	U
57	BB	1944	U
57	BB	1945	G
57	BB	1952	A
57	BB	1954	G
57	BB	1955	U
57	BB	1965	C
57	BB	1967	C
57	BB	1970	A
57	BB	1971	U
57	BB	1972	G
57	BB	1991	U
57	BB	1993	U
57	BB	1997	C
57	BB	2020	A
57	BB	2022	U
57	BB	2023	C
57	BB	2031	A
57	BB	2032	G
57	BB	2033	A
57	BB	2043	C
57	BB	2055	C
57	BB	2056	G
57	BB	2060	A
57	BB	2061	G
57	BB	2062	A
57	BB	2065	C
57	BB	2069	G
57	BB	2076	U

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Mol	Chain	Res	Type
57	BB	2077	A
57	BB	2096	C
57	BB	2102	G
57	BB	2104	C
57	BB	2111	U
57	BB	2112	G
57	BB	2113	U
57	BB	2117	A
57	BB	2119	A
57	BB	2127	G
57	BB	2129	C
57	BB	2130	U
57	BB	2131	U
57	BB	2133	G
57	BB	2134	A
57	BB	2135	A
57	BB	2136	G
57	BB	2137	U
57	BB	2140	G
57	BB	2144	G
57	BB	2145	C
57	BB	2146	C
57	BB	2147	A
57	BB	2148	G
57	BB	2149	U
57	BB	2152	G
57	BB	2153	C
57	BB	2155	U
57	BB	2158	A
57	BB	2159	G
57	BB	2164	C
57	BB	2166	U
57	BB	2167	U
57	BB	2176	A
57	BB	2179	C
57	BB	2181	U
57	BB	2183	A
57	BB	2187	U
57	BB	2192	U
57	BB	2198	A
57	BB	2199	A
57	BB	2203	U

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Mol	Chain	Res	Type
57	BB	2204	G
57	BB	2212	A
57	BB	2213	U
57	BB	2214	C
57	BB	2225	A
57	BB	2238	G
57	BB	2239	G
57	BB	2251	G
57	BB	2252	G
57	BB	2253	G
57	BB	2254	C
57	BB	2266	A
57	BB	2279	G
57	BB	2283	C
57	BB	2286	G
57	BB	2287	A
57	BB	2297	A
57	BB	2305	U
57	BB	2307	G
57	BB	2308	G
57	BB	2309	A
57	BB	2310	C
57	BB	2321	U
57	BB	2322	A
57	BB	2324	U
57	BB	2325	G
57	BB	2333	A
57	BB	2334	U
57	BB	2335	A
57	BB	2336	A
57	BB	2337	G
57	BB	2347	C
57	BB	2383	G
57	BB	2385	C
57	BB	2396	G
57	BB	2402	U
57	BB	2406	A
57	BB	2423	U
57	BB	2425	A
57	BB	2426	A
57	BB	2429	G
57	BB	2430	A

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Mol	Chain	Res	Type
57	BB	2434	A
57	BB	2441	U
57	BB	2448	A
57	BB	2467	C
57	BB	2472	G
57	BB	2476	A
57	BB	2478	A
57	BB	2491	U
57	BB	2498	C
57	BB	2502	G
57	BB	2503	A
57	BB	2505	G
57	BB	2506	U
57	BB	2518	A
57	BB	2529	G
57	BB	2533	U
57	BB	2535	G
57	BB	2554	U
57	BB	2566	A
57	BB	2567	G
57	BB	2572	A
57	BB	2573	C
57	BB	2586	U
57	BB	2609	U
57	BB	2613	U
57	BB	2629	U
57	BB	2646	C
57	BB	2682	A
57	BB	2689	U
57	BB	2690	U
57	BB	2691	C
57	BB	2714	G
57	BB	2744	G
57	BB	2748	A
57	BB	2751	G
57	BB	2757	A
57	BB	2765	A
57	BB	2778	A
57	BB	2780	G
57	BB	2791	G
57	BB	2793	C
57	BB	2797	U

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Mol	Chain	Res	Type
57	BB	2798	U
57	BB	2799	A
57	BB	2800	A
57	BB	2809	A
57	BB	2820	A
57	BB	2821	A
57	BB	2832	U
57	BB	2834	G
57	BB	2836	U
57	BB	2849	U
57	BB	2850	A
57	BB	2867	G
57	BB	2872	A
57	BB	2873	A
57	BB	2883	A
57	BB	2884	U
57	BB	2885	G
57	BB	2886	A
57	BB	2887	A
58	BA	9	G
58	BA	15	A
58	BA	16	G
58	BA	25	U
58	BA	26	C
58	BA	27	C
58	BA	29	A
58	BA	30	C
58	BA	41	G
58	BA	43	C
58	BA	45	A
58	BA	52	A
58	BA	53	A
58	BA	66	A
58	BA	67	G
58	BA	88	C
58	BA	90	C
58	BA	99	A
58	BA	109	A

All (120) RNA pucker outliers are listed below:

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Mol	Chain	Res	Type

Mol	Chain	Res	Type
21	AA	7	A
21	AA	50	A
21	AA	51	A
21	AA	60	A
21	AA	243	A
21	AA	279	A
21	AA	280	C
21	AA	328	C
21	AA	366	A
21	AA	372	C
21	AA	389	A
21	AA	412	A
21	AA	413	G
21	AA	422	C
21	AA	428	G
21	AA	429	U
21	AA	461	A
21	AA	467	U
21	AA	484	G
21	AA	485	U
21	AA	496	A
21	AA	530	G
21	AA	562	U
21	AA	960	U
21	AA	968	A
21	AA	976	G
21	AA	980	C
21	AA	1030	U
21	AA	1049	U
21	AA	1065	U
21	AA	1111	A
21	AA	1159	U
21	AA	1201	A
21	AA	1214	C
21	AA	1226	C
21	AA	1256	A
21	AA	1278	G
21	AA	1279	G
21	AA	1300	G
21	AA	1302	C
21	AA	1319	A

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Mol	Chain	Res	Type
21	AA	1493	A
22	AY	3	G
22	AY	17	U
22	AY	18	G
22	AY	20	G
22	AY	34	G
23	AW	15	G
23	AW	17	C
23	AW	32	U
23	AW	55	U
23	AW	60	U
23	AW	70	G
57	BB	139	U
57	BB	241	A
57	BB	329	G
57	BB	490	C
57	BB	548	G
57	BB	637	A
57	BB	670	A
57	BB	789	A
57	BB	846	U
57	BB	858	G
57	BB	880	G
57	BB	890	C
57	BB	891	G
57	BB	945	A
57	BB	973	A
57	BB	984	A
57	BB	1033	U
57	BB	1046	A
57	BB	1068	G
57	BB	1069	A
57	BB	1070	A
57	BB	1094	U
57	BB	1133	A
57	BB	1210	G
57	BB	1211	C
57	BB	1300	G
57	BB	1332	G
57	BB	1451	C
57	BB	1458	U
57	BB	1459	G

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Mol	Chain	Res	Type
57	BB	1497	U
57	BB	1608	A
57	BB	1609	A
57	BB	1618	A
57	BB	1699	G
57	BB	1870	C
57	BB	1938	A
57	BB	1944	U
57	BB	1954	G
57	BB	1966	A
57	BB	2031	A
57	BB	2076	U
57	BB	2110	G
57	BB	2116	G
57	BB	2125	G
57	BB	2130	U
57	BB	2134	A
57	BB	2147	A
57	BB	2152	G
57	BB	2157	G
57	BB	2158	A
57	BB	2159	G
57	BB	2172	U
57	BB	2282	G
57	BB	2308	G
57	BB	2333	A
57	BB	2336	A
57	BB	2402	U
57	BB	2425	A
57	BB	2430	A
57	BB	2474	U
57	BB	2491	U
57	BB	2756	U
58	BA	14	U
58	BA	15	A
58	BA	66	A
58	BA	87	U

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

1 non-standard protein/DNA/RNA residue is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul

statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
26	5MU	AV	54	26	19,22,23	1.33	4 (21%)	28,32,35	1.19	3 (10%)

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
26	5MU	AV	54	26	-	0/7/25/26	0/2/2/2

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	AV	54	5MU	O2'-C2'	-2.46	1.37	1.43
26	AV	54	5MU	C6-N1	2.43	1.42	1.38
26	AV	54	5MU	O4'-C1'	2.29	1.47	1.42
26	AV	54	5MU	C2-N1	2.22	1.42	1.38

All (3) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
26	AV	54	5MU	C6-N1-C2	-2.96	118.30	121.30
26	AV	54	5MU	O4'-C1'-N1	2.77	114.70	108.36
26	AV	54	5MU	C1'-N1-C6	2.40	125.13	121.12

There are no chirality outliers.

There are no torsion outliers.

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

1 ligand is modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
59	GDP	AZ	401	-	24,30,30	1.81	6 (25%)	30,47,47	1.80	4 (13%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
59	GDP	AZ	401	-	-	2/12/32/32	0/3/3/3

All (6) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
59	AZ	401	GDP	O4'-C1'	5.64	1.48	1.41
59	AZ	401	GDP	C5-C4	-2.72	1.36	1.43
59	AZ	401	GDP	C2'-C1'	-2.19	1.50	1.53
59	AZ	401	GDP	O3'-C3'	-2.15	1.37	1.43
59	AZ	401	GDP	C5-C6	-2.12	1.43	1.47
59	AZ	401	GDP	C8-N7	-2.12	1.31	1.35

All (4) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
59	AZ	401	GDP	PA-O3A-PB	7.32	157.95	132.83
59	AZ	401	GDP	O6-C6-N1	2.68	123.81	120.65
59	AZ	401	GDP	O3'-C3'-C2'	2.25	119.11	111.82
59	AZ	401	GDP	C3'-C2'-C1'	2.16	104.23	100.98

There are no chirality outliers.

All (2) torsion outliers are listed below:

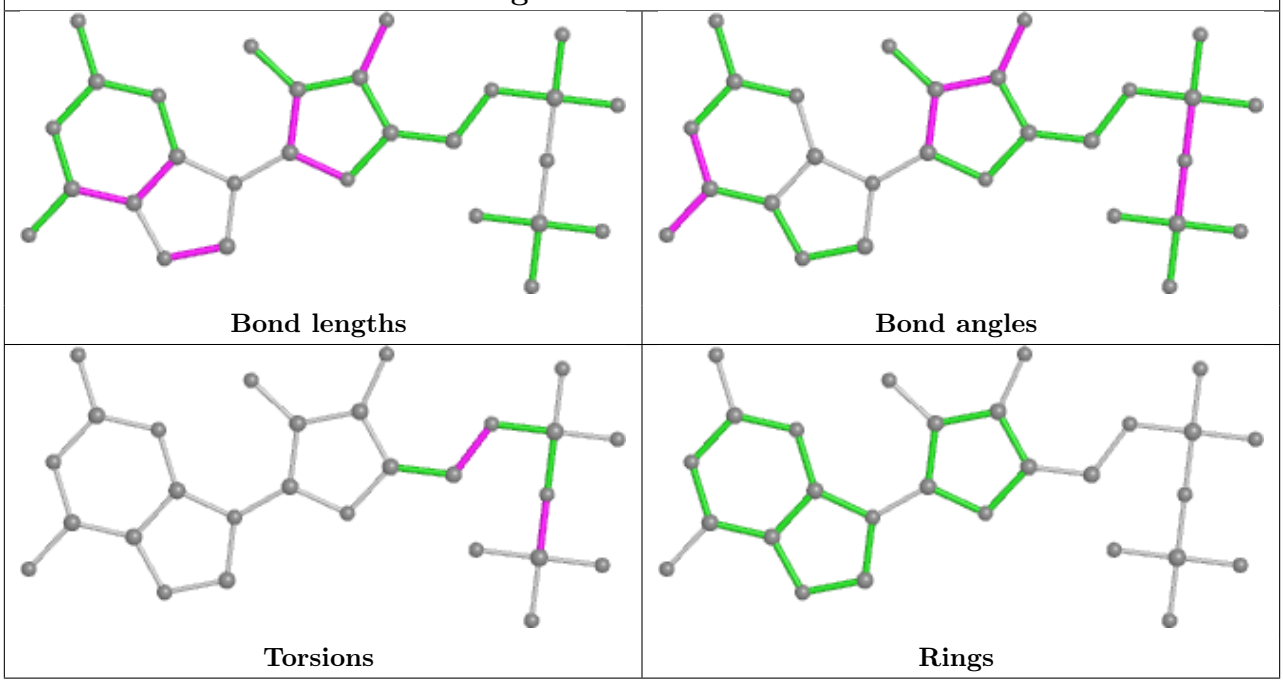
Mol	Chain	Res	Type	Atoms
59	AZ	401	GDP	PA-O3A-PB-O3B
59	AZ	401	GDP	C4'-C5'-O5'-PA

There are no ring outliers.

No monomer is involved in short contacts.

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 then 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.

Ligand GDP AZ 401



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.

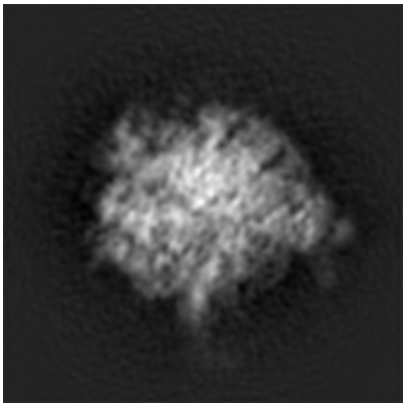
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-5036. These allow visual inspection of the internal detail of the map and identification of artifacts.

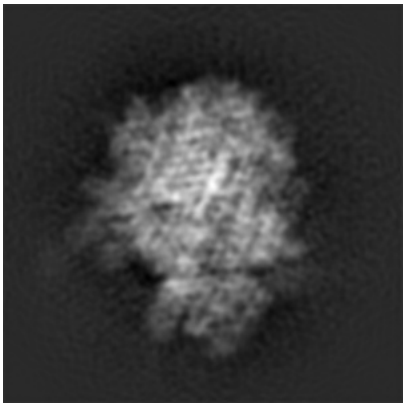
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

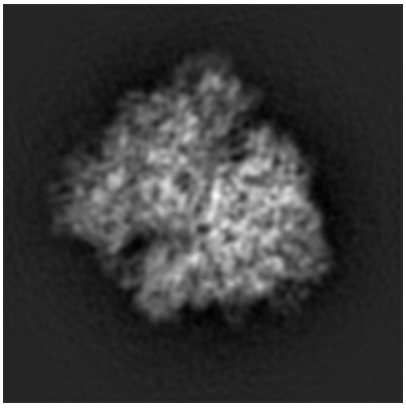
6.1.1 Primary map



X



Y

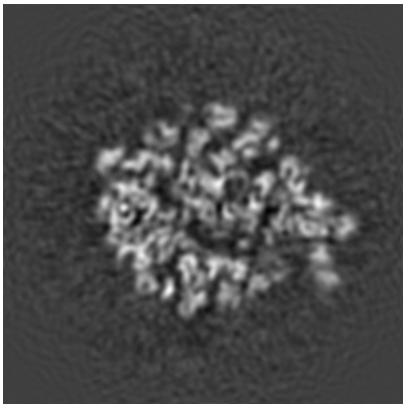


Z

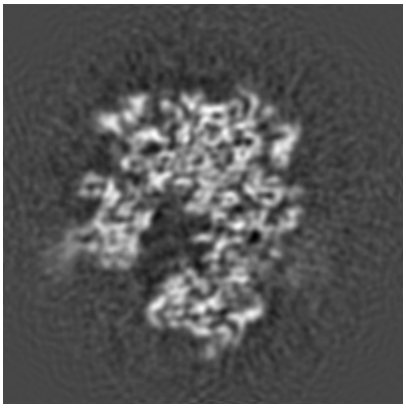
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

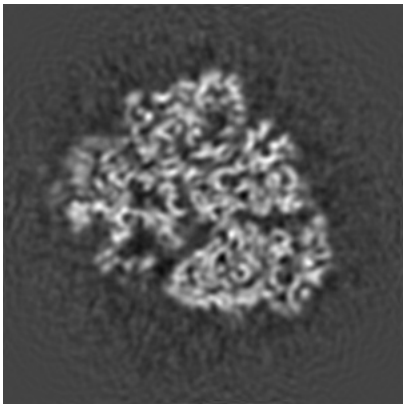
6.2.1 Primary map



X Index: 154



Y Index: 154

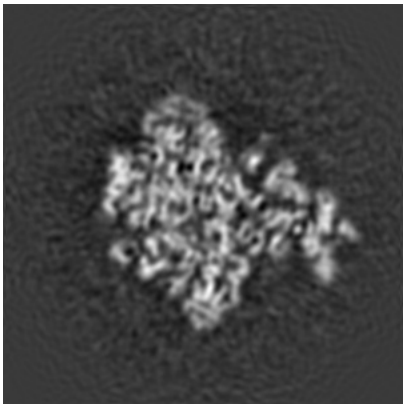


Z Index: 154

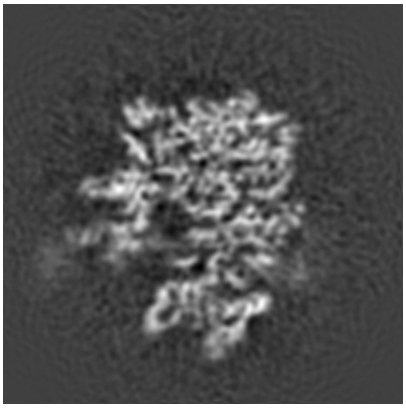
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

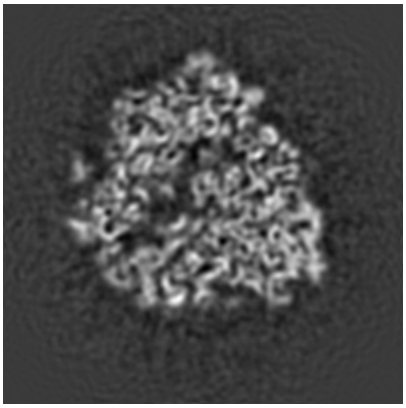
6.3.1 Primary map



X Index: 164



Y Index: 160

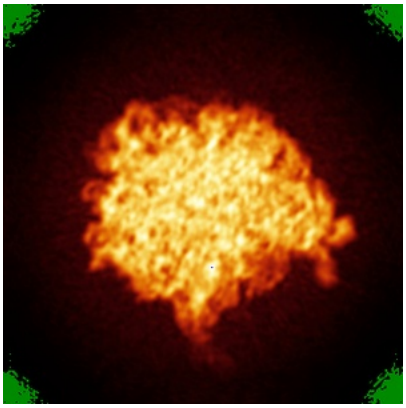


Z Index: 142

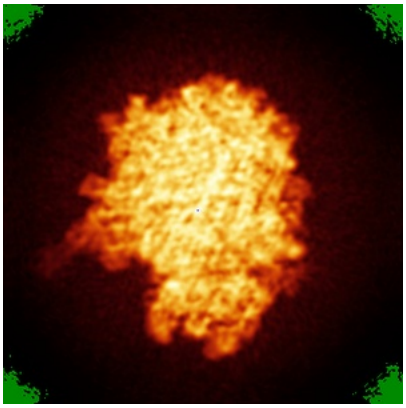
The images above show the largest variance slices of the map in three orthogonal directions.

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

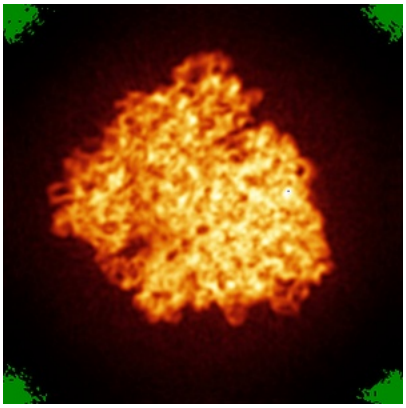
6.4.1 Primary map



X



Y

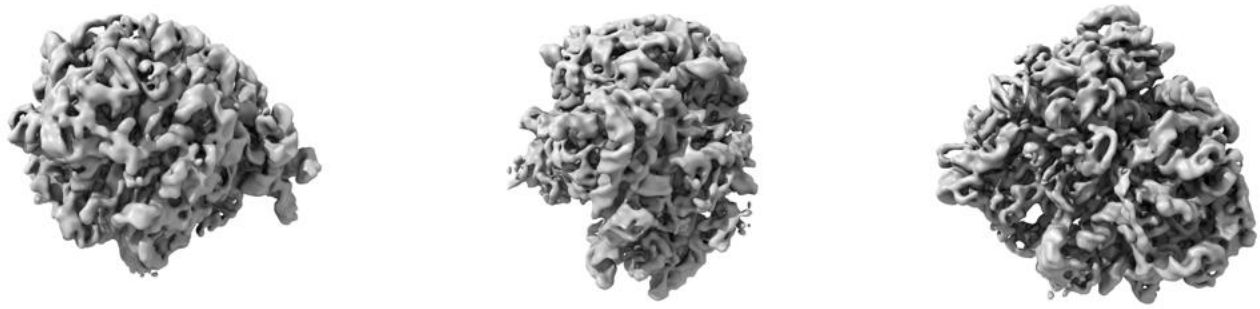


Z

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

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 90.0. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

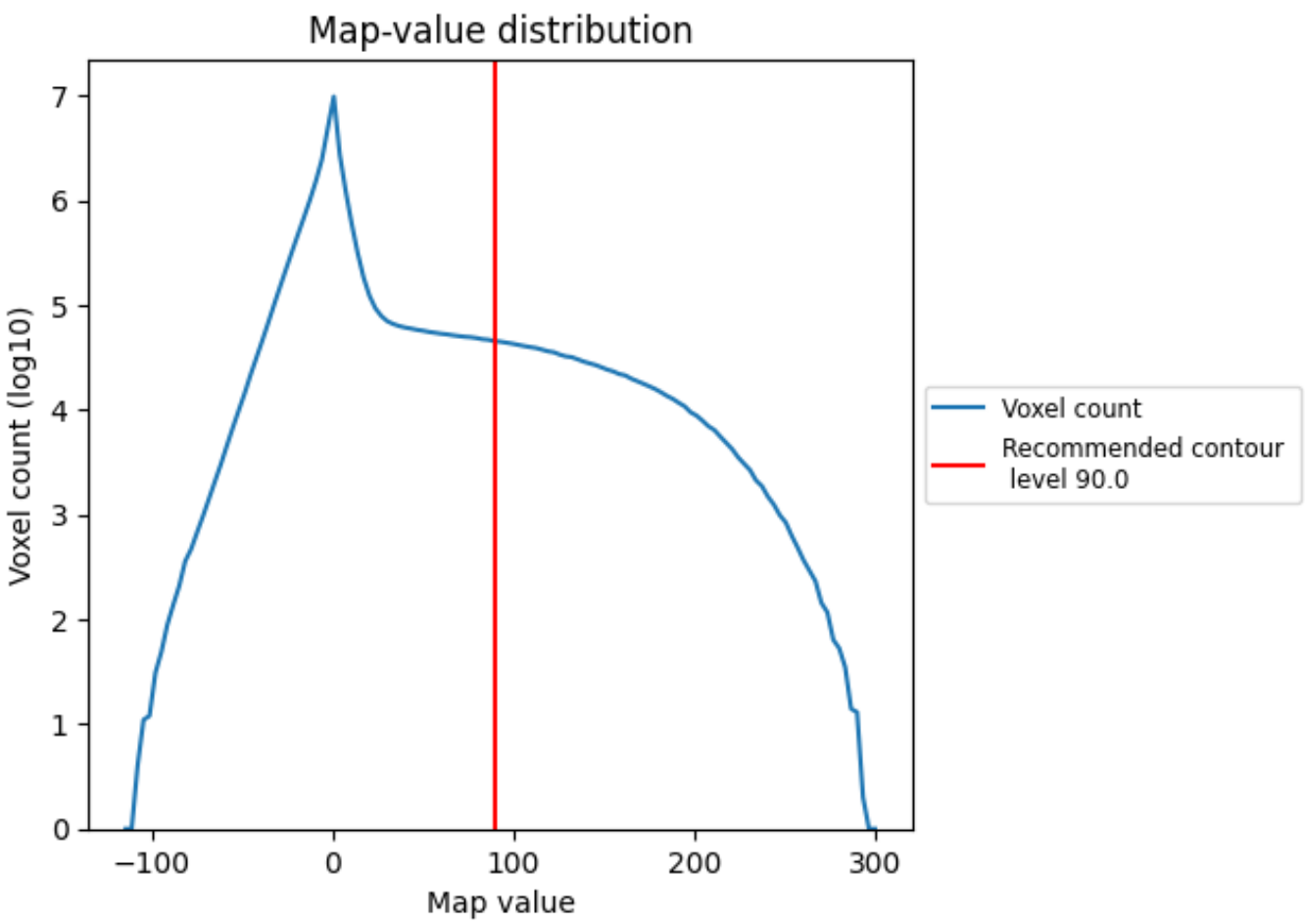
6.6 Mask visualisation (i)

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

7 Map analysis (i)

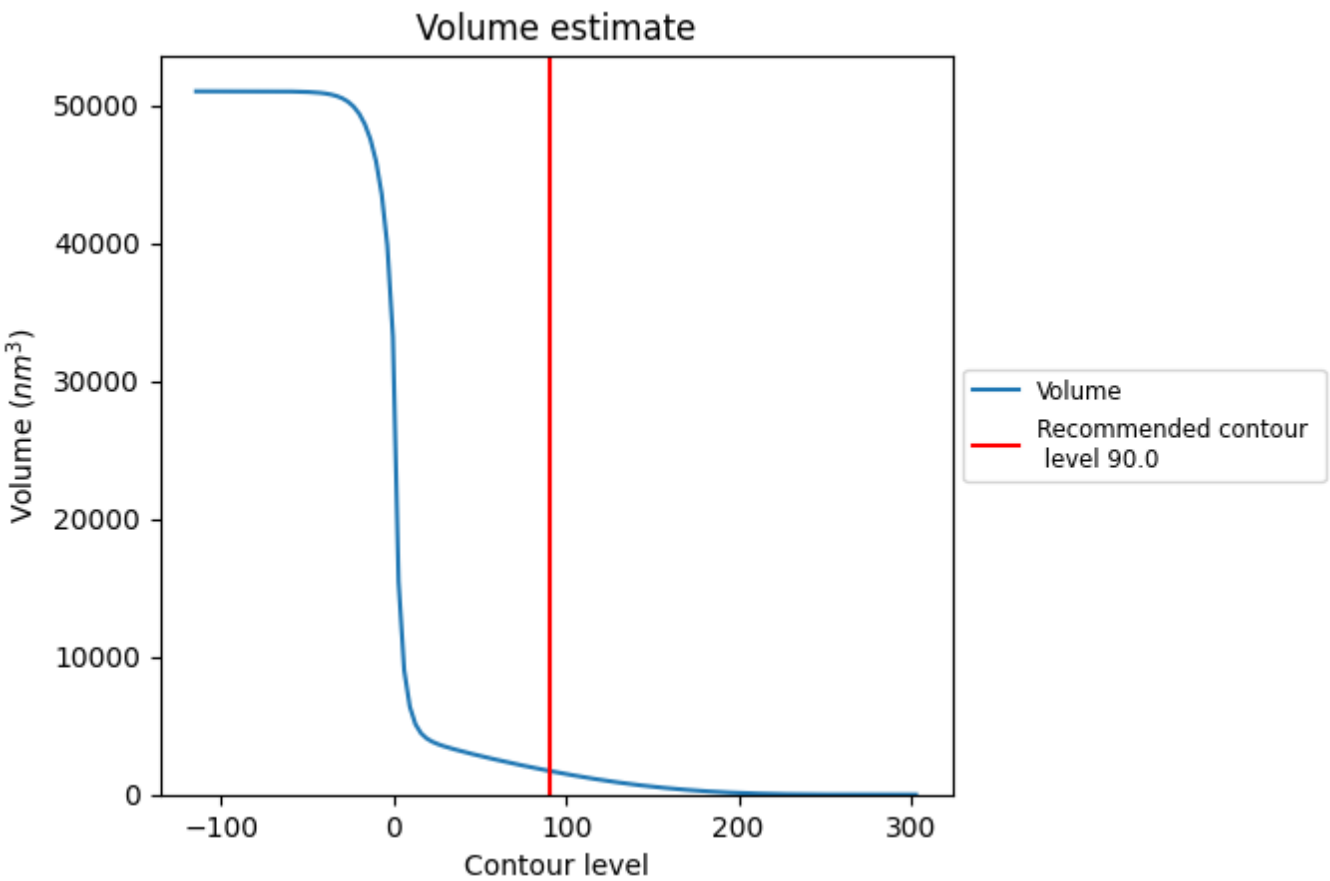
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution (i)



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

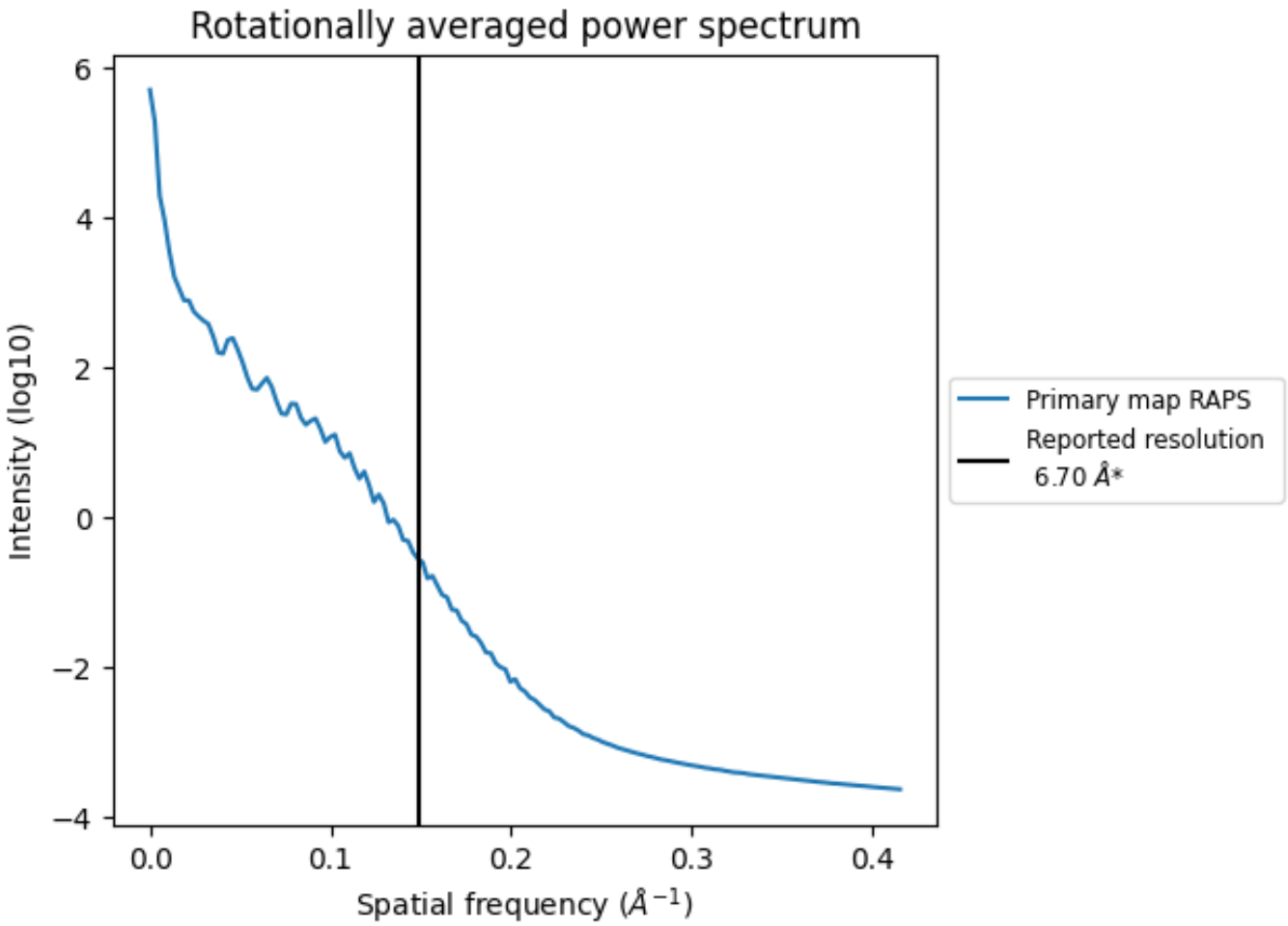
7.2 Volume estimate (i)



The volume at the recommended contour level is 1724 nm^3; this corresponds to an approximate mass of 1557 kDa.

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

7.3 Rotationally averaged power spectrum (i)



*Reported resolution corresponds to spatial frequency of 0.149 Å^{-1}

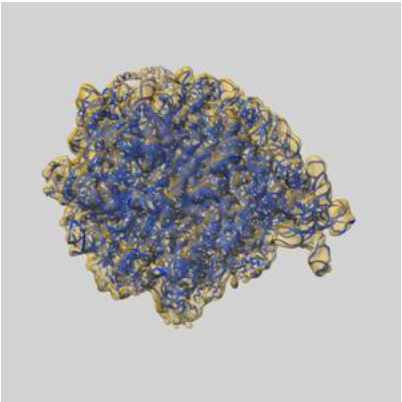
8 Fourier-Shell correlation (i)

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

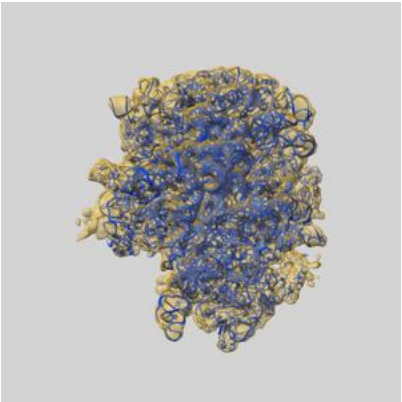
9 Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-5036 and PDB model 4V69. Per-residue inclusion information can be found in section 3 on page 16.

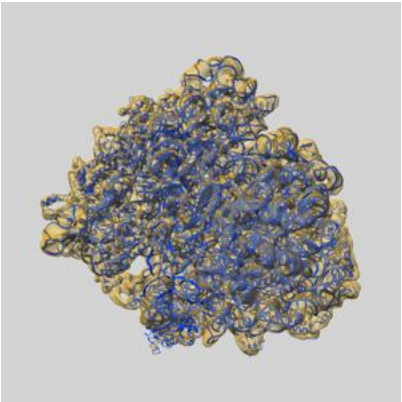
9.1 Map-model overlay (i)



X



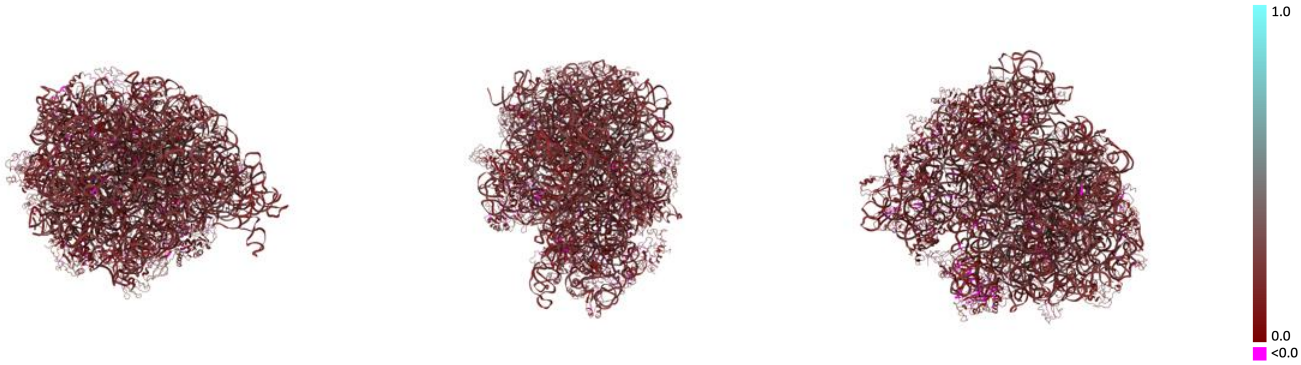
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 90.0 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

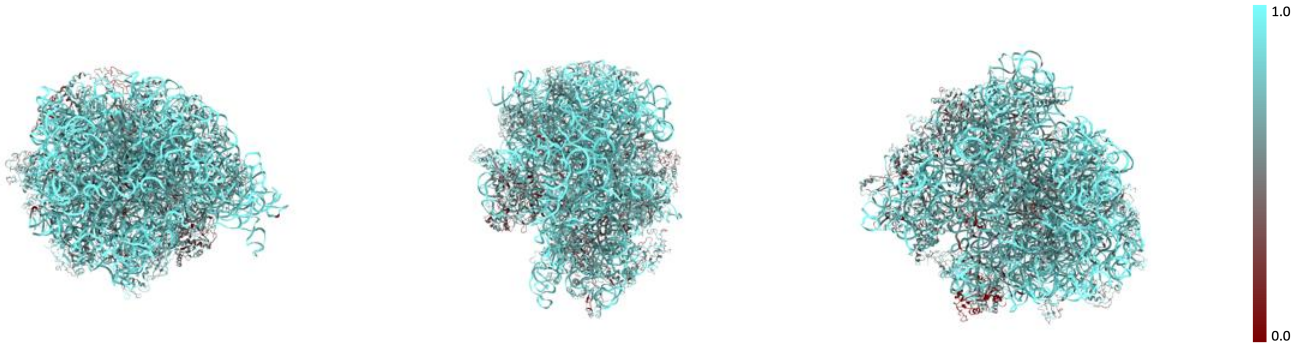
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

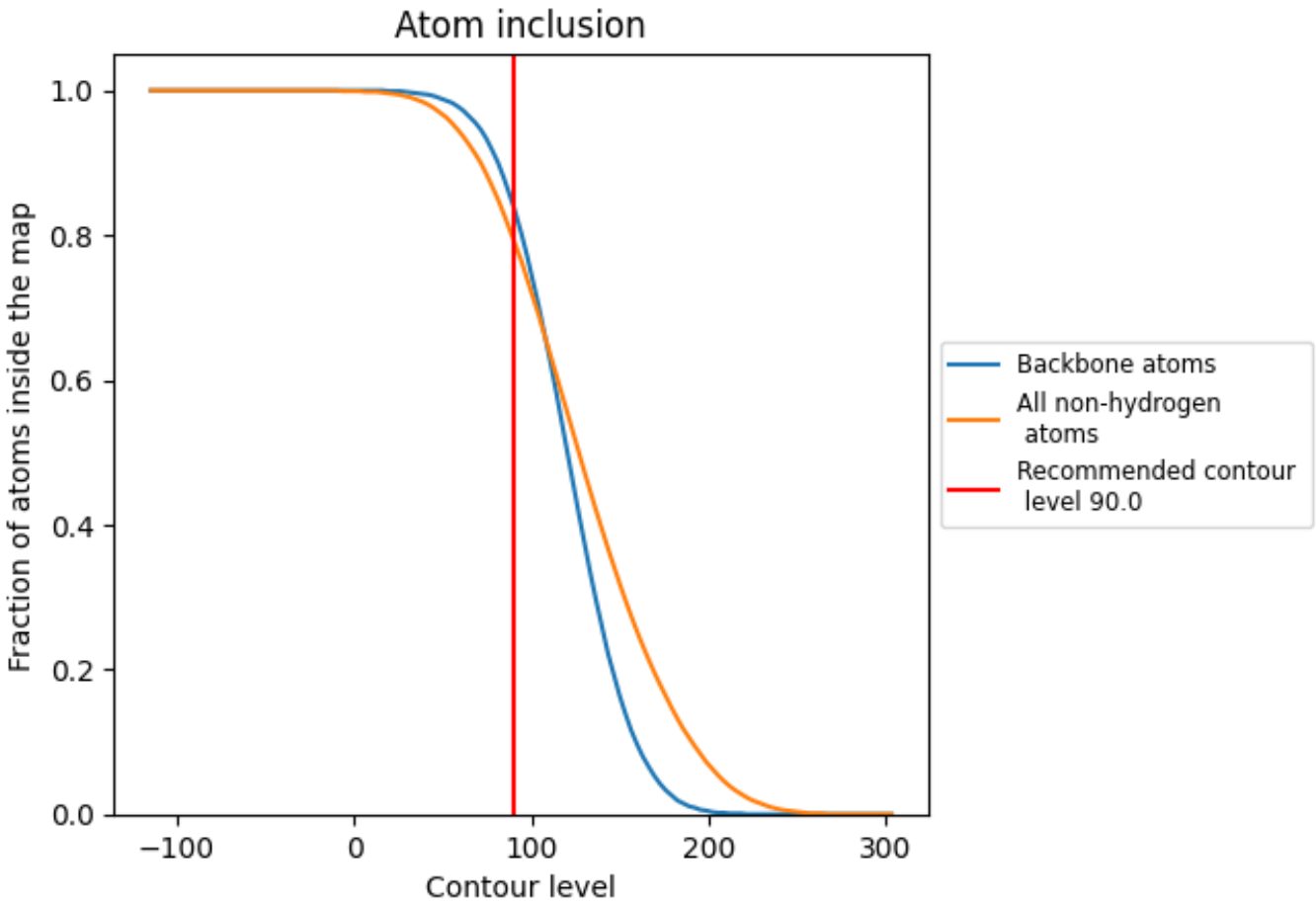
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (90.0).

9.4 Atom inclusion (i)



At the recommended contour level, 84% of all backbone atoms, 79% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary (i)

The table lists the average atom inclusion at the recommended contour level (90.0) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7930	0.1860
AA	0.8950	0.2030
AB	0.5980	0.1550
AC	0.6000	0.1680
AD	0.4980	0.1540
AE	0.5930	0.1600
AF	0.6510	0.1650
AG	0.6070	0.1460
AH	0.5600	0.1590
AI	0.6100	0.1320
AJ	0.4580	0.1330
AK	0.5100	0.1580
AL	0.4790	0.1550
AM	0.6190	0.1590
AN	0.6060	0.1390
AO	0.6230	0.1520
AP	0.6140	0.1330
AQ	0.6820	0.1460
AR	0.5490	0.1480
AS	0.6740	0.1430
AT	0.6030	0.1520
AU	0.7470	0.2000
AV	0.7940	0.1990
AW	0.7090	0.1720
AX	0.7540	0.2270
AY	0.7890	0.1930
AZ	0.4790	0.1640
B0	0.6400	0.1350
B1	0.6170	0.1530
B2	0.5970	0.1010
B3	0.5890	0.1460
B4	0.4970	0.1260
B5	0.3000	0.0990
BA	0.9240	0.2090
BB	0.9050	0.2040

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Chain	Atom inclusion	Q-score
BC	0.5800	0.1420
BD	0.5850	0.1460
BE	0.6170	0.1630
BF	0.7330	0.1620
BG	0.6840	0.1710
BH	0.4090	0.1420
BI	0.4640	0.1380
BJ	0.6030	0.1590
BK	0.4080	0.1560
BL	0.5300	0.1450
BM	0.5420	0.1470
BN	0.6650	0.1340
BO	0.7220	0.1530
BP	0.5630	0.1700
BQ	0.6130	0.1150
BR	0.6270	0.1580
BS	0.5920	0.1460
BT	0.6280	0.1380
BU	0.6730	0.1560
BV	0.7250	0.1700
BW	0.5380	0.0990
BX	0.5810	0.1520
BY	0.7060	0.1360
BZ	0.6590	0.1660