Full wwPDB EM Validation Report (i)

Feb 22, 2024 – 10:36 PM EST

PDB ID	:	4V65
EMDB ID	:	EMD-1055
Title	:	Structure of the E. coli ribosome in the Pre-accommodation state
Authors	:	Devkota, B.; Caulfield, T.R.; Tan, R.-Z.; Harvey, S.C.
Deposited on	:	2008-08-03
Resolution	:	9.00 Å(reported)
Based on initial models	:	1EHZ, 2I2P

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 (i)) were used in the production of this report:

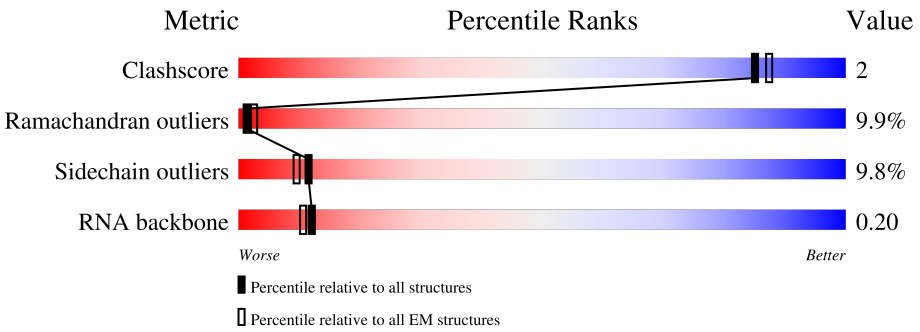
EMDB validation analysis	:	0.0.1.dev70
MolProbity	:	4.02b-467
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 9.00 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	AA	76	57%; 11%, 51%, 37%, •
1	AE	76	58%; 30%, 49%, 21%
1	AP	76	50%; 18%, 46%, 34%, •
2	AM	20	25%; 15%, 50%, 35%
3	A1	1530	65%; 17%, 45%, 39%
4	AB	241	71%; 69%, 17%, •, 10%
5	AC	129	47%; 66%, 22%, • •, 9%

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Mol	Chain	Length	Quality of chain
6	AD	124	76% 59% 30% 9%
7	AF	118	55% 68% 23% 6%
8	AG	101	88% 67% 22% 5% 5%
9	AH	89	84% 69% 25%
10	AI	82	100% 65% 27% 7%
11	AJ	84	73% 68% 21% 6% 5%
12	AK	75	29% 53% 19% 27%
13	AL	92	82% 54% 23% 9% 14%
14	AN	87	56% 77% 17%
15	AO	233	31% 65% 20% 12%
16	AQ	71	39% 45% 18% 7% 28%
17	AR	206	62% 69% 25%
18	AS	159	38% 68% 21% 6%
19	AT	135	55% 54% 16% 26%
20	AU	179	35% 59% 20% 5% 16%
21	AV	130	48% 84% 13%
22	AW	130	81% 75% 18% 5%
23	AX	103	73% 58% 32% 5% 5%
24	BA	117	71% 25% 49% 26%
25	BB	2903	52% 17% 44% 39%
26	BC	94	72% 76% 21%
27	BD	123	48% 65% 26% 7%
28	BE	144	67% 60% 30% 8%
29	BF	136	57% 65% 25% 7%
30	BG	127	35% 64% 30% 5%

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Mol	Chain	Length	Quality of chain
31	BH	117	57% 73% 21% 6%
32	BI	115	48% 58% 33% 8%
33	BJ	118	84% 69% 19% 9%
34	BK	103	92% 64% 27% 6%
35	BL	110	42% 72% 24% 5%
36	BM	99	69% 69% 23% 7%
37	BN	270	54% 61% 31% 6%
38	BO	103	99% 62% 30% 6%
39	BP	85	27% 59% 34% 5%
40	BQ	63	51% 65% 27% 8%
41	BR	59	58% 71% 20% 5%
42	BS	70	67% 71% 24%
43	BT	57	46% 49% 32% 16%
44	BU	54	80% 65% 30% 6%
45	BV	46	46% 67% 22% 9%
46	BW	64	73% 66% 19% 16%
47	BX	38	68% 68% 18% 11%
48	BY	209	33% 61% 29% 9%
49	BZ	213	96% 77% 21%
50	B1	201	71% 65% 25% 8%
51	B2	178	29% 61% 30% 7%
52	B3	177	81% 76% 18% 6%
53	B4	149	92% 76% 23%
54	B5	142	53% 80% 15%
55	B6	140	45% 71% 19% 9%

2 Entry composition (i)

There are 55 unique types of molecules in this entry. The entry contains 149248 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a RNA chain called A/T, P and E-site tRNAs.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
1	AA	75	1600	715	288	523	74	0	0
1	AP	75	1600	715	288	523	74	0	0
1	AE	76	1622	725	293	529	75	0	0

- Molecule 2 is a RNA chain called mRNA model.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
2	AM	20	397	180	40	158	19	0	0

- Molecule 3 is a RNA chain called 16S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
3	A1	1530	32828	14642	6024	10633	1529	0	0

- Molecule 4 is a protein called 30S ribosomal protein S2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	AB	218	1704	1081	305	311	7	0	0

- Molecule 5 is a protein called 30S ribosomal protein S11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	AC	117	876	540	174	159	3	0	0

- Molecule 6 is a protein called 30S ribosomal protein S12.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	AD	123	954	590	196	164	4	0	0

- Molecule 7 is a protein called 30S ribosomal protein S13.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	AF	114	883	546	178	156	3	0	0

- Molecule 8 is a protein called 30S ribosomal protein S14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	AG	96	773	483	160	127	3	0	0

- Molecule 9 is a protein called 30S ribosomal protein S15.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	AH	88	715	440	146	128	1	0	0

- Molecule 10 is a protein called 30S ribosomal protein S16.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	AI	82	648	406	128	113	1	0	0

- Molecule 11 is a protein called 30S ribosomal protein S17.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	AJ	80	648	411	121	113	3	0	0

- Molecule 12 is a protein called 30S ribosomal protein S18.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
12	AK	55	455	288	86	81	0	0

- Molecule 13 is a protein called 30S ribosomal protein S19.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	AL	79	637	408	120	107	2	0	0

- Molecule 14 is a protein called 30S ribosomal protein S20.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	AN	85	664	411	137	113	3	0	0

- Molecule 15 is a protein called 30S ribosomal protein S3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	AO	206	1624	1028	305	288	3	0	0

- Molecule 16 is a protein called 30S ribosomal protein S21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	AQ	51	425	265	86	73	1	0	0

- Molecule 17 is a protein called 30S ribosomal protein S4.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	AR	205	1642	1026	315	297	4	0	0

- Molecule 18 is a protein called 30S ribosomal protein S5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	AS	150	1105	687	211	201	6	0	0

- Molecule 19 is a protein called 30S ribosomal protein S6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	AT	100	817	515	148	148	6	0	0

- Molecule 20 is a protein called 30S ribosomal protein S7.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	AU	150	1174	730	226	214	4	0	0

- Molecule 21 is a protein called 30S ribosomal protein S8.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	AV	129	978	616	173	183	6	0	0

- Molecule 22 is a protein called 30S ribosomal protein S9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	AW	127	1021	634	206	178	3	0	0

- Molecule 23 is a protein called 30S ribosomal protein S10.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
23	AX	98	786	493	150	142	1	0	0

- Molecule 24 is a RNA chain called 5S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
24	BA	117	2504	1116	459	813	116	0	0

- Molecule 25 is a RNA chain called 23S rRNA.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	P		
25	BB	2903	62317	27801	11467	20147	2902	0	0

- Molecule 26 is a protein called 50S ribosomal protein L25.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
26	BC	94	752	479	137	133	3	0	0

- Molecule 27 is a protein called 50S ribosomal protein L14.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
27	BD	121	930	582	179	164	5	0	0

- Molecule 28 is a protein called 50S ribosomal protein L15.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
28	BE	144	1052	654	207	189	2	0	0

- Molecule 29 is a protein called 50S ribosomal protein L16.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
29	BF	136	1073	686	205	176	6	0	0

- Molecule 30 is a protein called 50S ribosomal protein L17.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
30	BG	127	1007	621	204	177	5	0	0

- Molecule 31 is a protein called 50S ribosomal protein L18.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
31	BH	117	899	557	179	162	1	0	0

- Molecule 32 is a protein called 50S ribosomal protein L19.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
32	BI	114	916	574	179	162	1	0	0

- Molecule 33 is a protein called 50S ribosomal protein L20.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
33	BJ	117	946	604	192	150	0	0

- Molecule 34 is a protein called 50S ribosomal protein L21.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
34	BK	103	815	516	153	144	2	0	0

- Molecule 35 is a protein called 50S ribosomal protein L22.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
35	BL	110	856	532	166	155	3	0	0

- Molecule 36 is a protein called 50S ribosomal protein L23.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
36	BM	99	777	491	145	139	2	0	0

- Molecule 37 is a protein called 50S ribosomal protein L2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
37	BN	267	2053	1271	416	359	7	0	0

- Molecule 38 is a protein called 50S ribosomal protein L24.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
38	BO	102	779	492	146	141	0	0

- Molecule 39 is a protein called 50S ribosomal protein L27.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
39	BP	84	633	391	129	112	1	0	0

- Molecule 40 is a protein called 50S ribosomal protein L29.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
40	BQ	63	508	313	99	94	2	0	0

- Molecule 41 is a protein called 50S ribosomal protein L30.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
41	BR	58	448	281	87	78	2	0	0

- Molecule 42 is a protein called 50S ribosomal protein L31.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
42	BS	70	548	339	104	99	6	0	0

- Molecule 43 is a protein called 50S ribosomal protein L32.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
43	BT	56	443	269	94	79	1	0	0

- Molecule 44 is a protein called 50S ribosomal protein L33.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
44	BU	54	440	284	81	75	0	0

- Molecule 45 is a protein called 50S ribosomal protein L34.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
45	BV	46	376	228	90	56	2	0	0

- Molecule 46 is a protein called 50S ribosomal protein L35.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
46	BW	64	503	323	105	73	2	0	0

- Molecule 47 is a protein called 50S ribosomal protein L36.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
47	BX	38	301	185	65	47	4	0	0

- Molecule 48 is a protein called 50S ribosomal protein L3.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
48	BY	209	1564	979	288	293	4	0	0

- Molecule 49 is a protein called 50S ribosomal protein L1P.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
49	BZ	213	1687	1078	300	308	1	0	0

There are 7 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
BZ	1	MET	-	insertion	UNP P35024
BZ	?	-	MET	deletion	UNP P35024
BZ	70	SER	PHE	conflict	UNP P35024
BZ	82	LYS	ASN	conflict	UNP P35024
BZ	?	-	MET	deletion	UNP P35024
BZ	?	-	MET	deletion	UNP P35024
BZ	?	-	MET	deletion	UNP P35024

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
50	B1	201	1551	974	283	289	5	0	0

- Molecule 51 is a protein called 50S ribosomal protein L5.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
51	B2	178	1419	905	251	257	6	0	0

- Molecule 52 is a protein called 50S ribosomal protein L6.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
52	B3	176	1322	832	243	245	2	0	0

- Molecule 53 is a protein called 50S ribosomal protein L9.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
53	B4	149	1110	699	197	213	1	0	0

- Molecule 54 is a protein called 50S ribosomal protein L11.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
54	B5	141	1031	651	179	195	6	0	0

- Molecule 55 is a protein called 50S ribosomal protein L13.

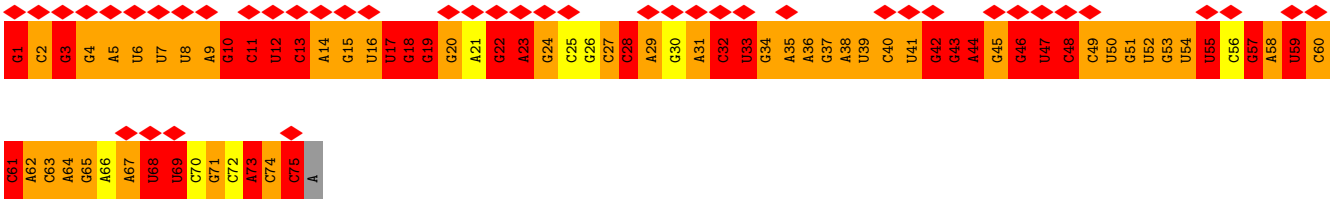
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
55	B6	140	1112	704	210	194	4	0	0

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.

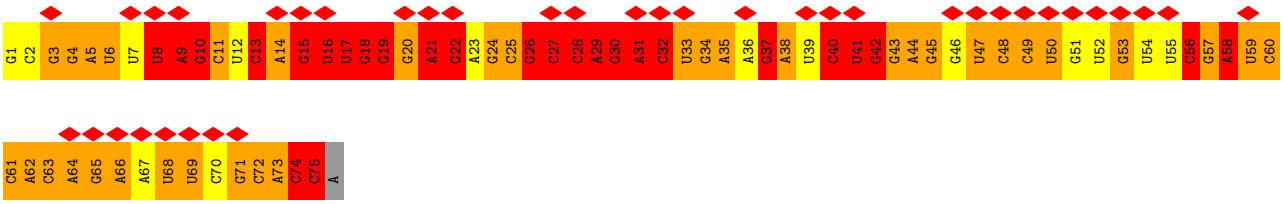
- Molecule 1: A/T, P and E-site tRNAs

Chain AA:



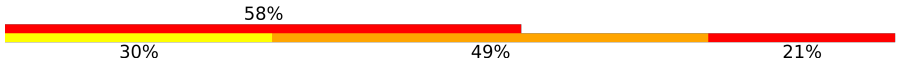
- Molecule 1: A/T, P and E-site tRNAs

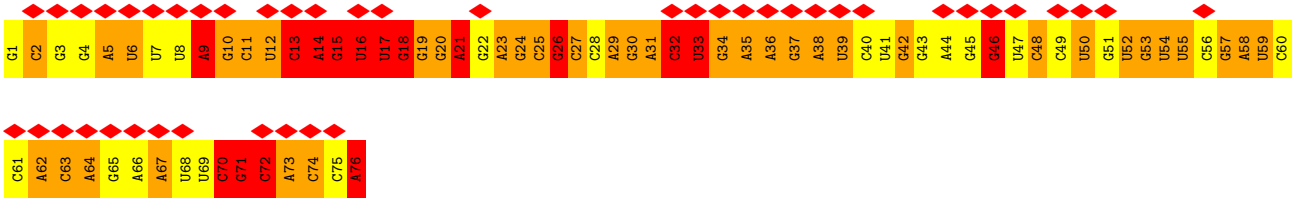
Chain AP:



- Molecule 1: A/T, P and E-site tRNAs

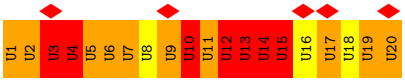
Chain AE:





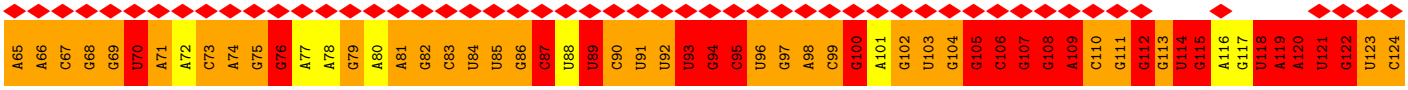
- Molecule 2: mRNA model

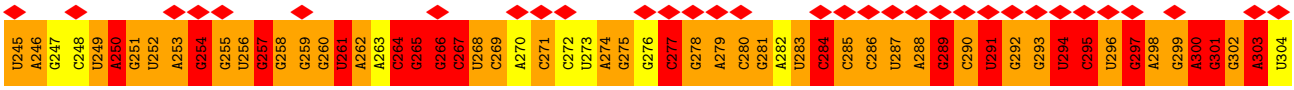
Chain AM:

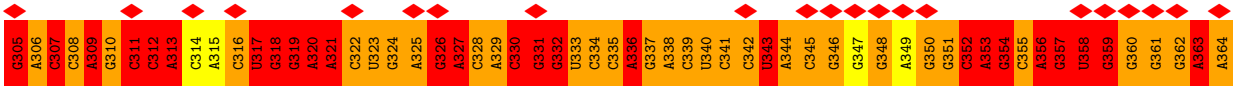


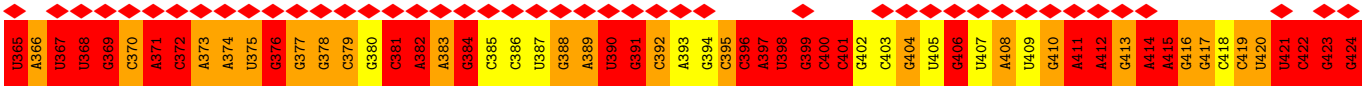
- Molecule 3: 16S rRNA

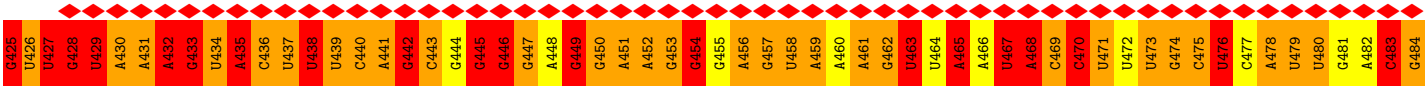
Chain A1:

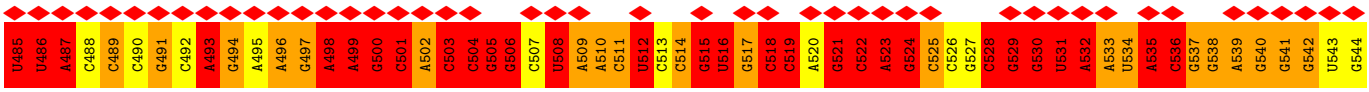


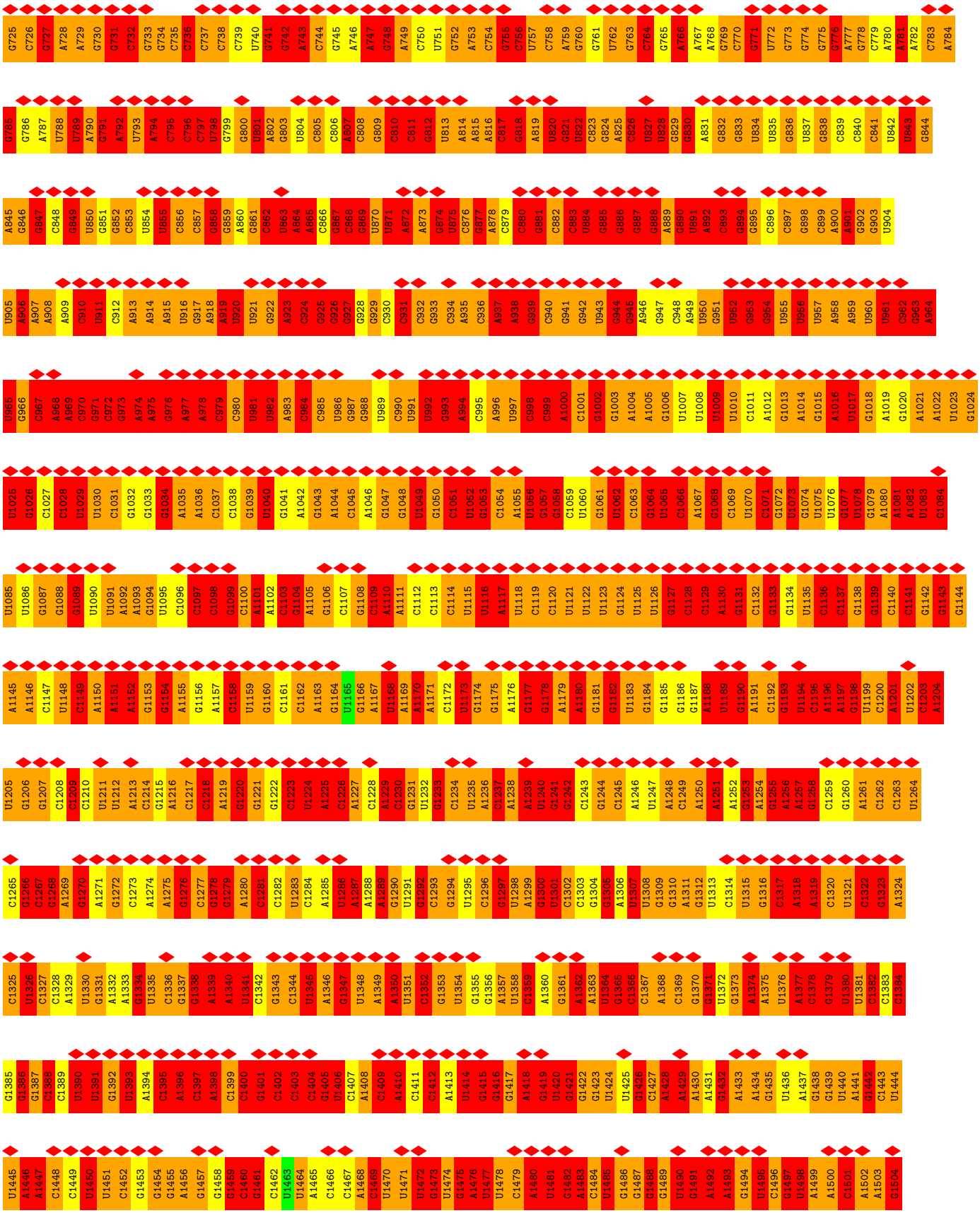








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- Molecule 4: 30S ribosomal protein S2

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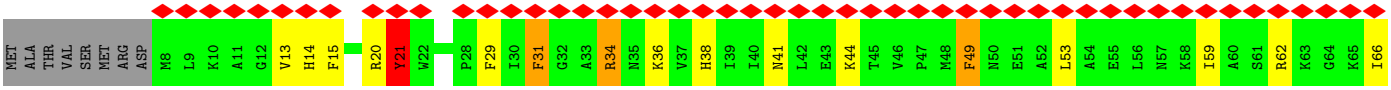

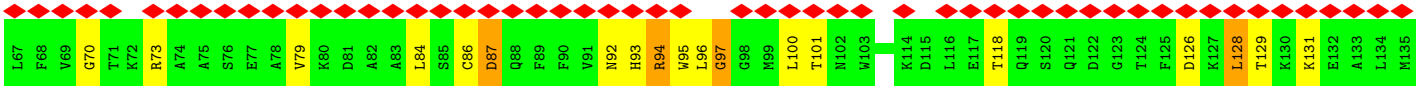

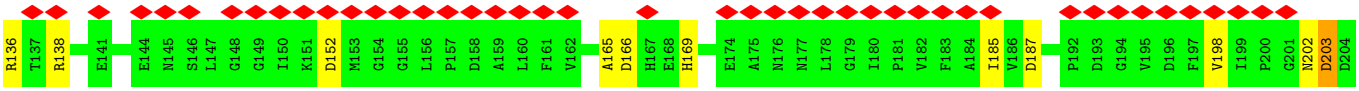

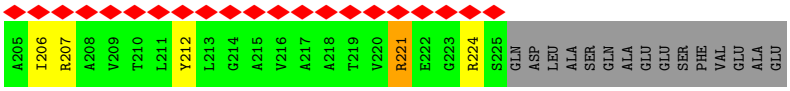

- Molecule 5: 30S ribosomal protein S11

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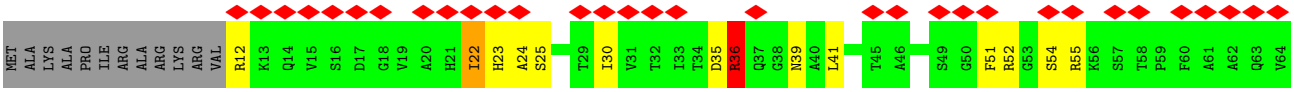
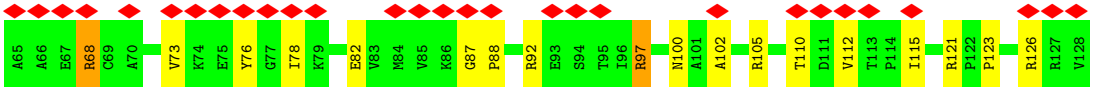
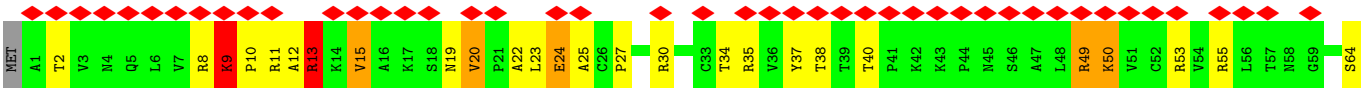
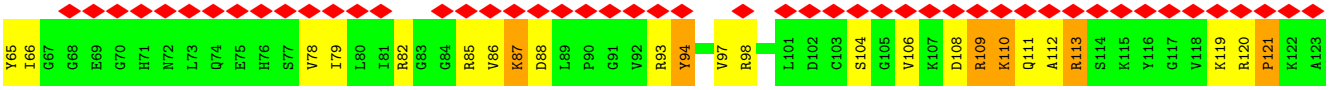




- Molecule 6: 30S ribosomal protein S12

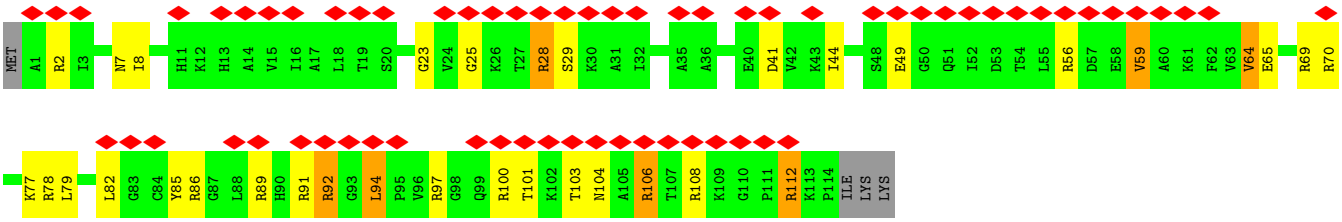
Chain AD:





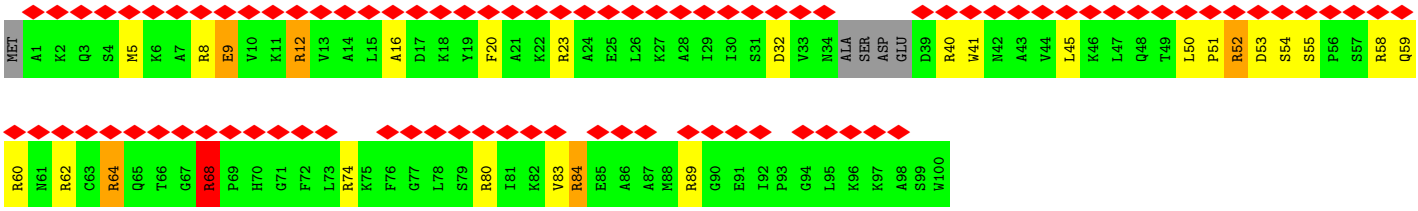
- Molecule 7: 30S ribosomal protein S13

Chain AF:



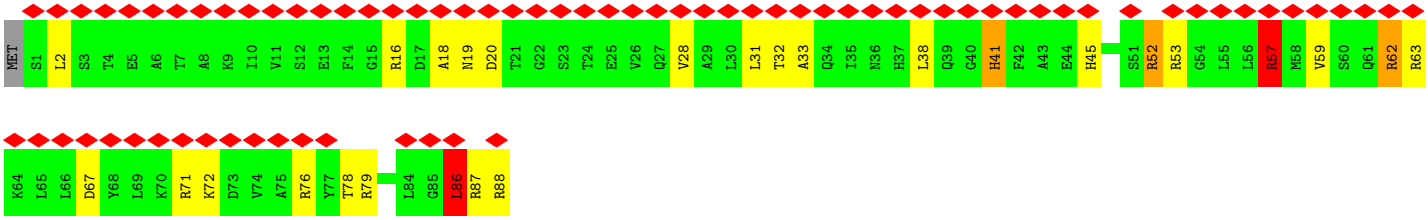
- Molecule 8: 30S ribosomal protein S14

Chain AG:



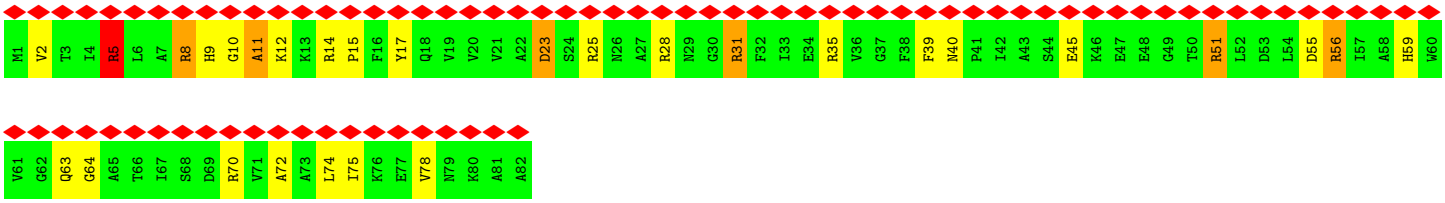
- Molecule 9: 30S ribosomal protein S15

Chain AH:



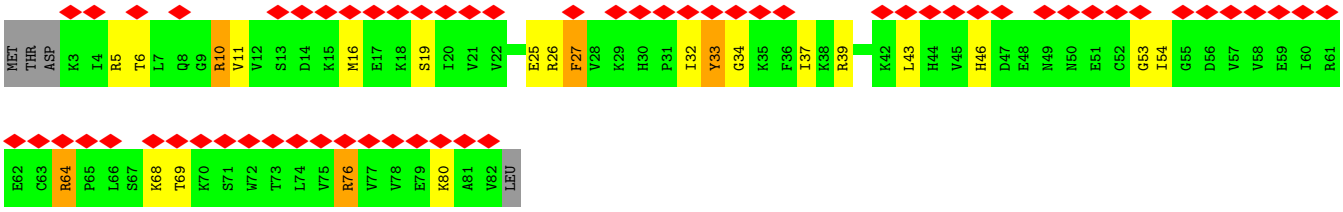
- Molecule 10: 30S ribosomal protein S16

Chain AI:



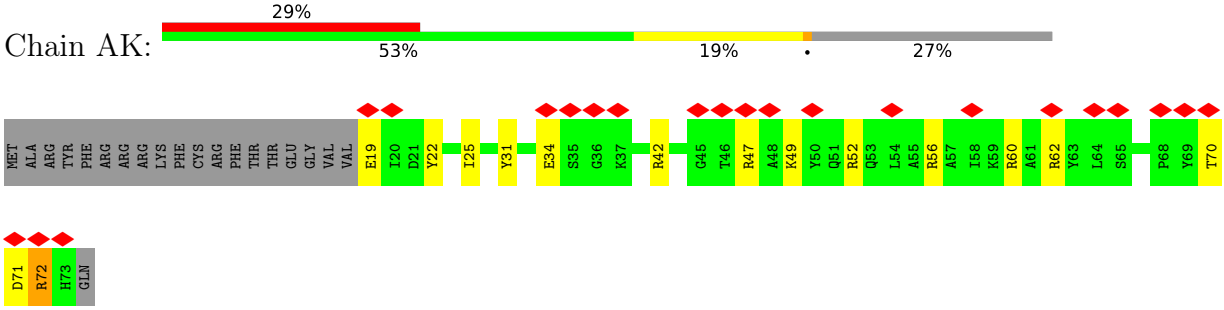
- Molecule 11: 30S ribosomal protein S17

Chain AJ:



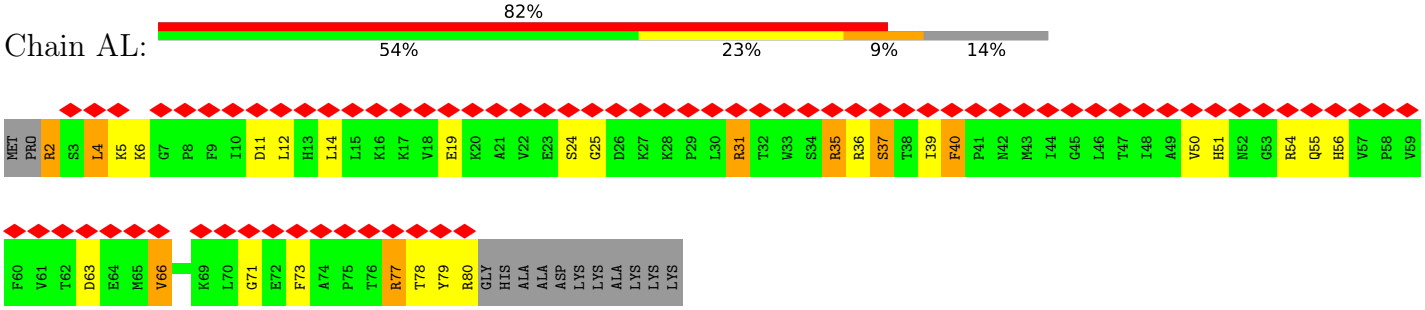
• Molecule 12: 30S ribosomal protein S18

Chain AK:



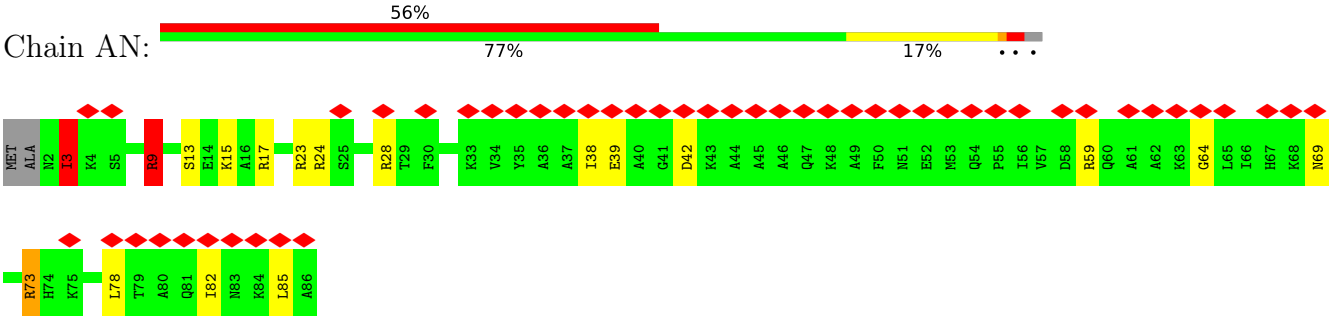
• Molecule 13: 30S ribosomal protein S19

Chain AL:



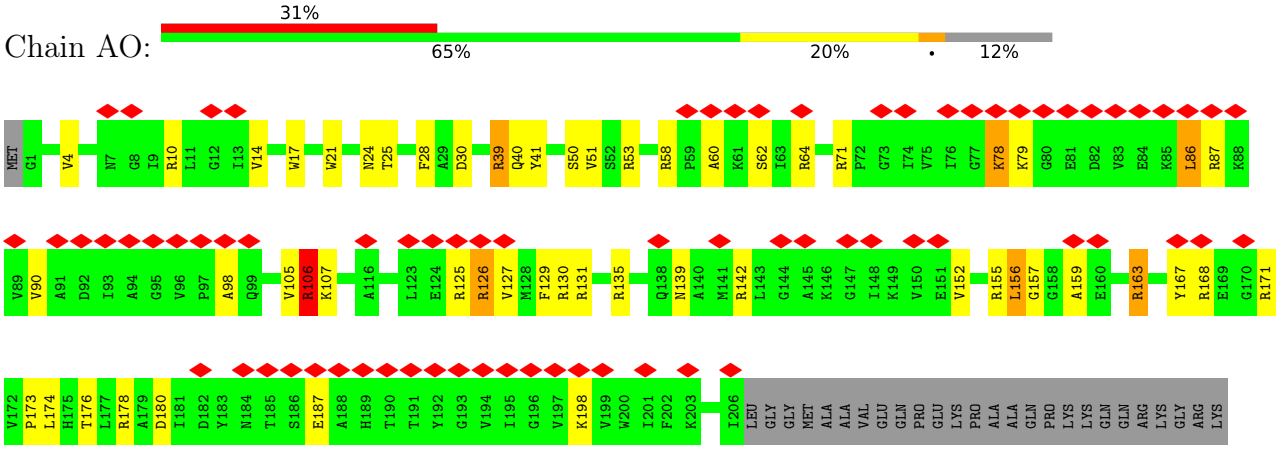
• Molecule 14: 30S ribosomal protein S20

Chain AN:



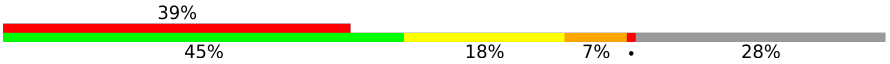
• Molecule 15: 30S ribosomal protein S3

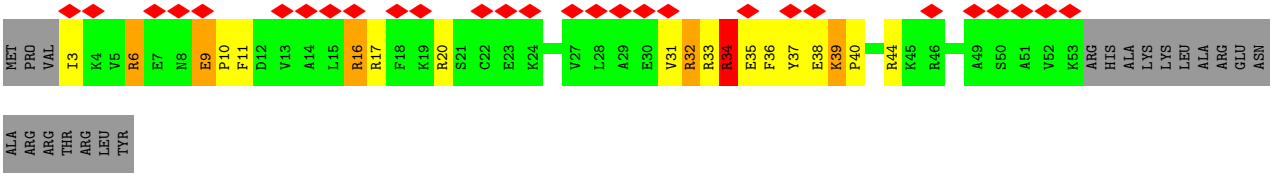
Chain AO:



• Molecule 16: 30S ribosomal protein S21

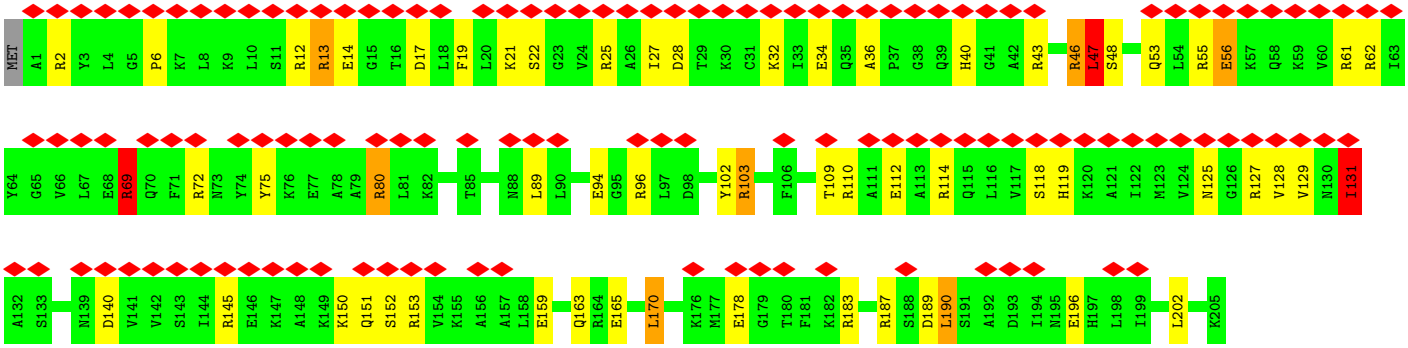
Chain AQ:





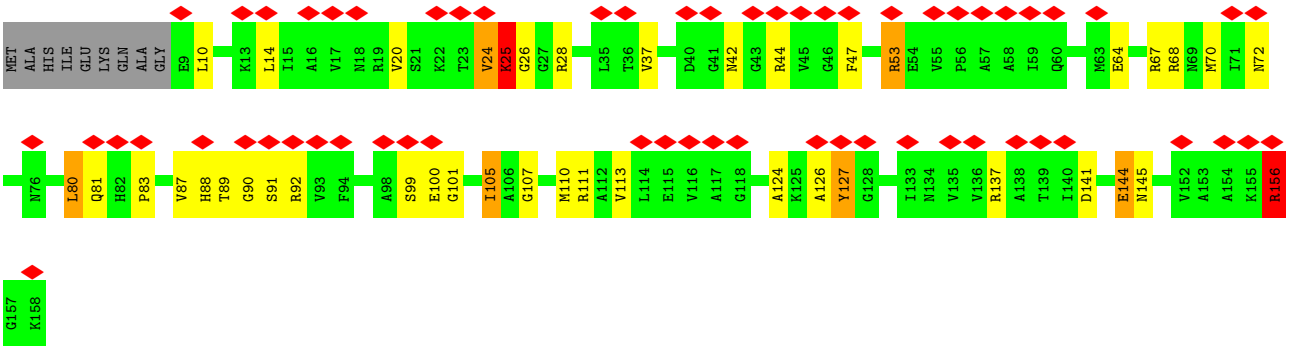
- Molecule 17: 30S ribosomal protein S4

Chain AR:



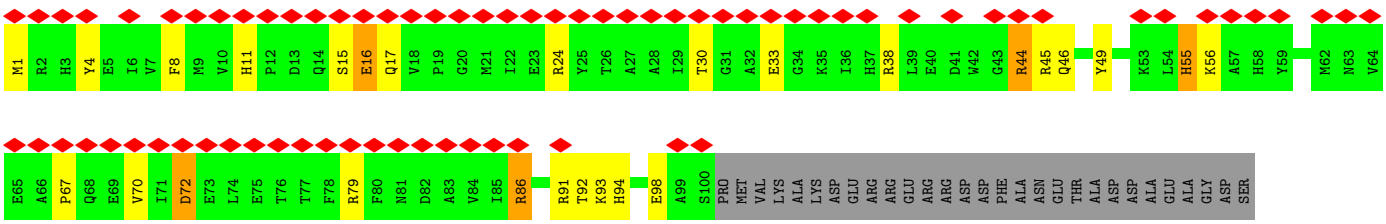
- Molecule 18: 30S ribosomal protein S5

Chain AS:



- Molecule 19: 30S ribosomal protein S6

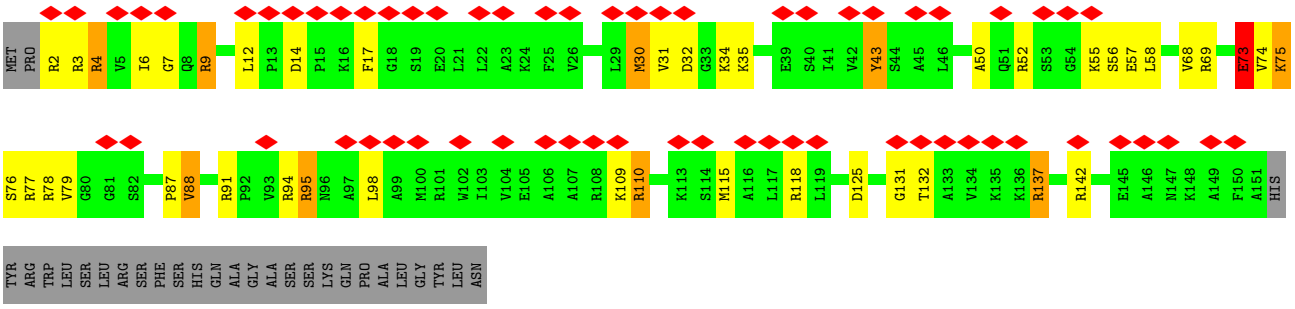
Chain AT:



GLU GLU GLU GLU GLU GLU

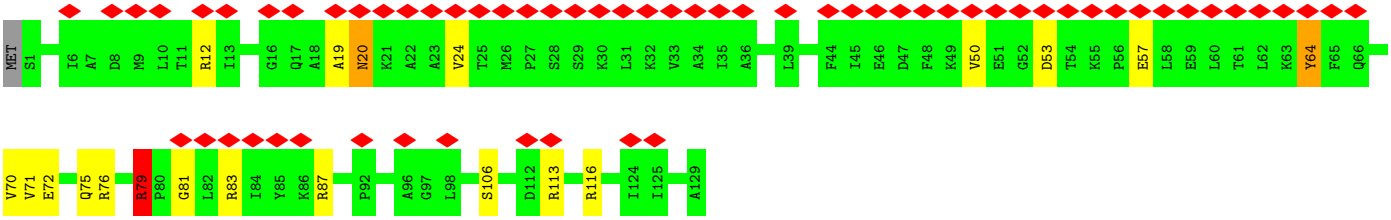
- Molecule 20: 30S ribosomal protein S7

Chain AU:



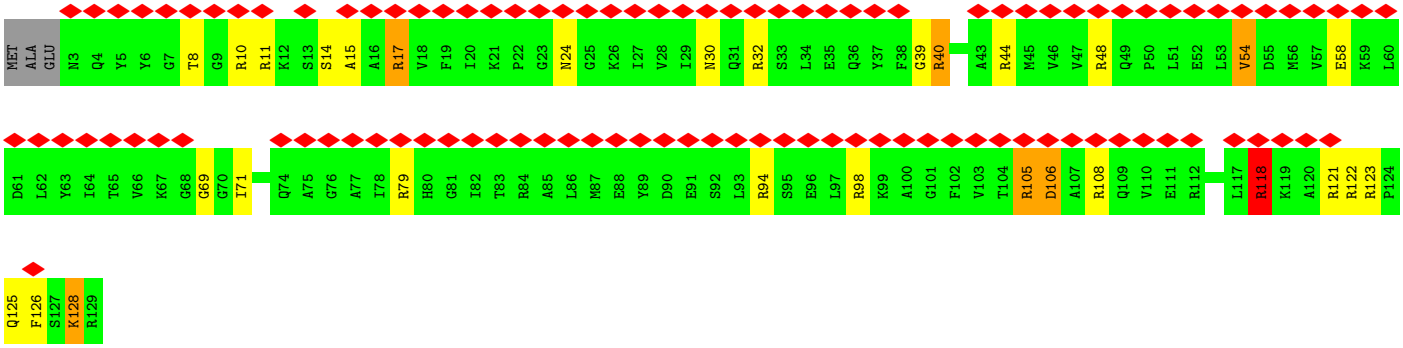
- Molecule 21: 30S ribosomal protein S8

Chain AV:



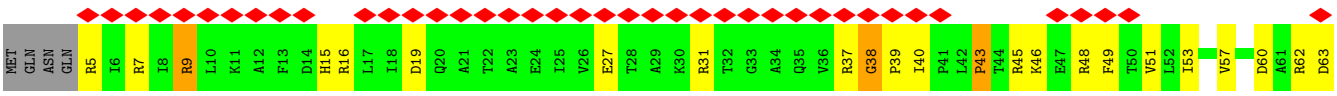
- Molecule 22: 30S ribosomal protein S9

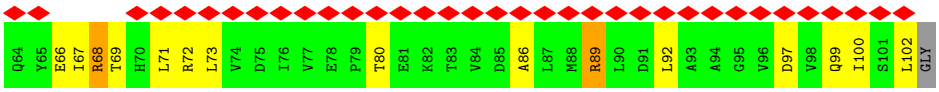
Chain AW:



- Molecule 23: 30S ribosomal protein S10

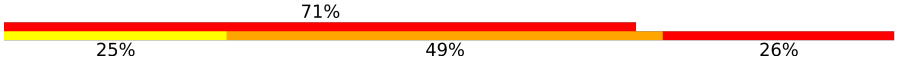
Chain AX:

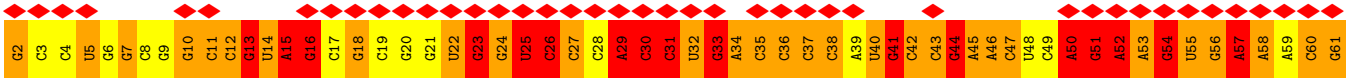




• Molecule 24: 5S rRNA

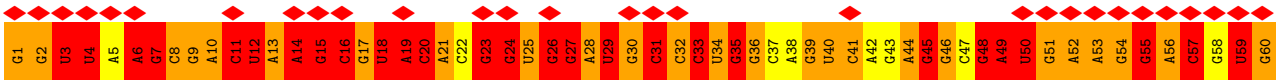
Chain BA:

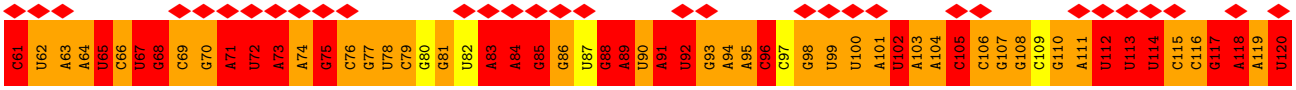


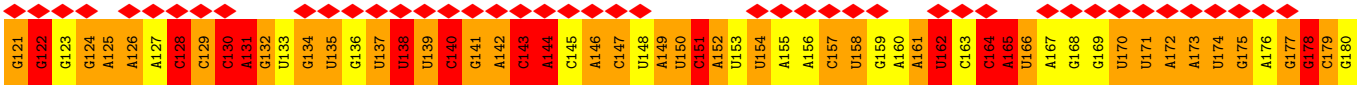


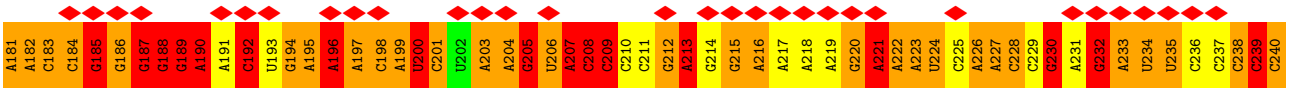
• Molecule 25: 23S rRNA

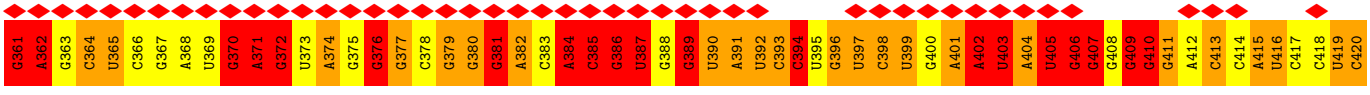
Chain BB:

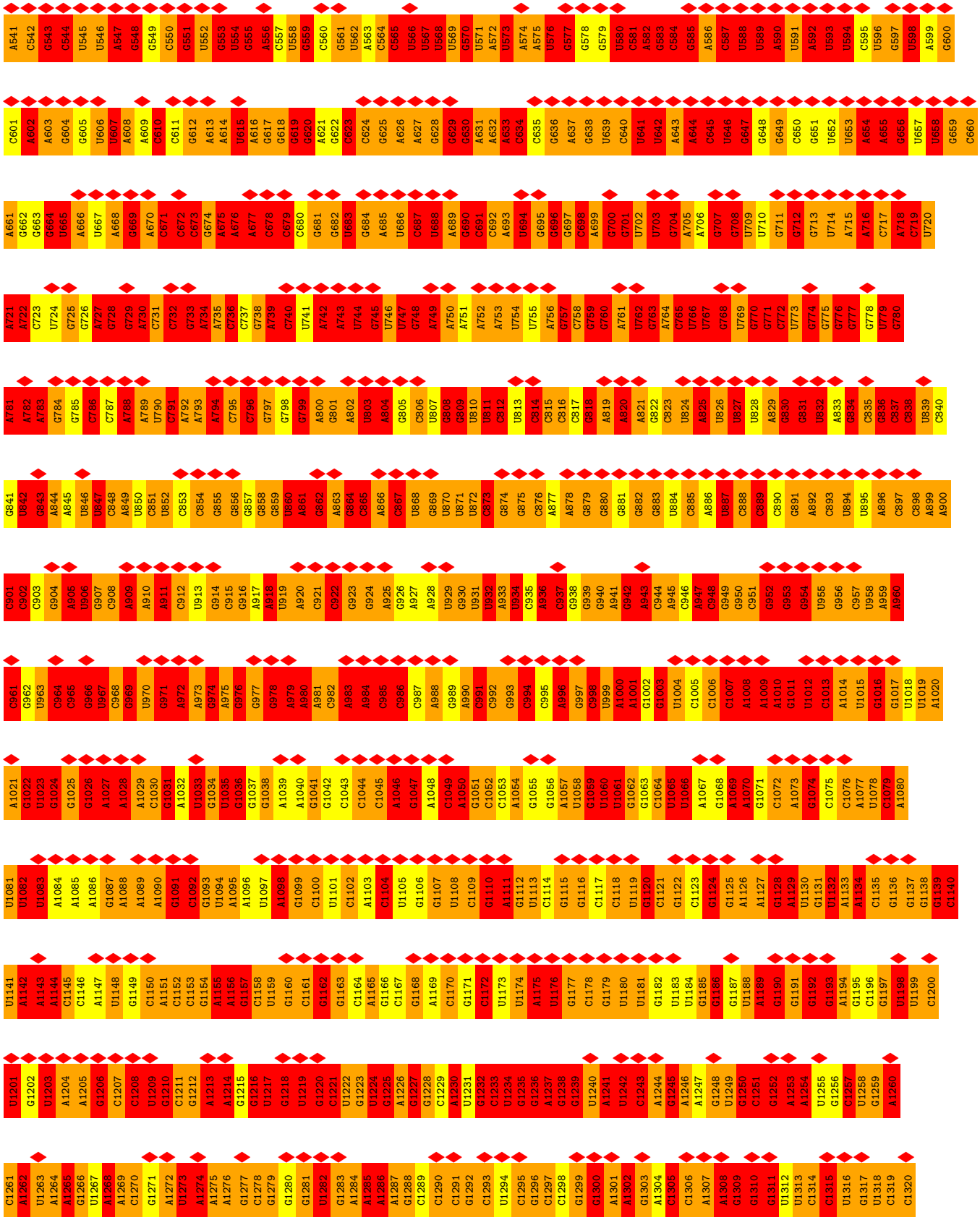








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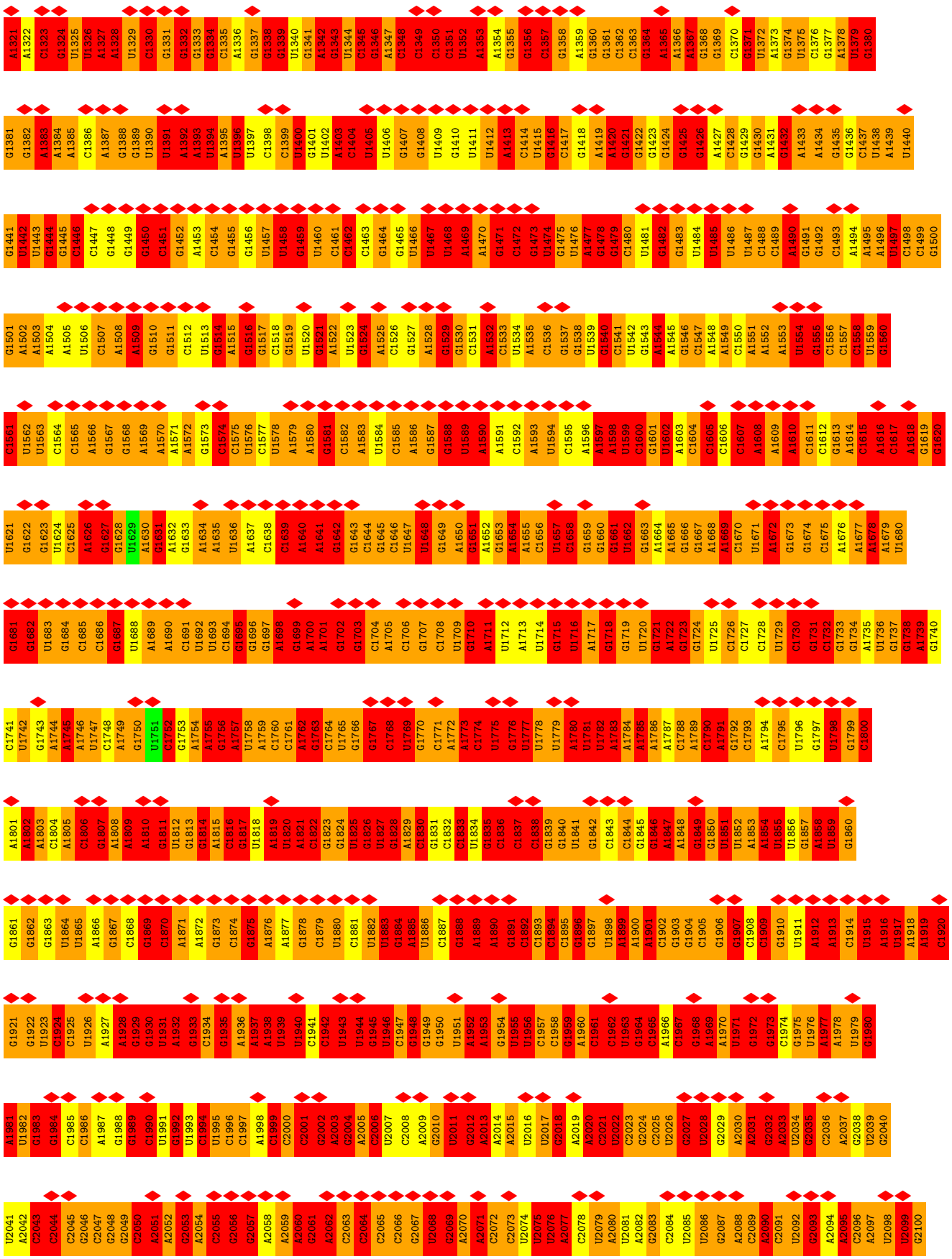
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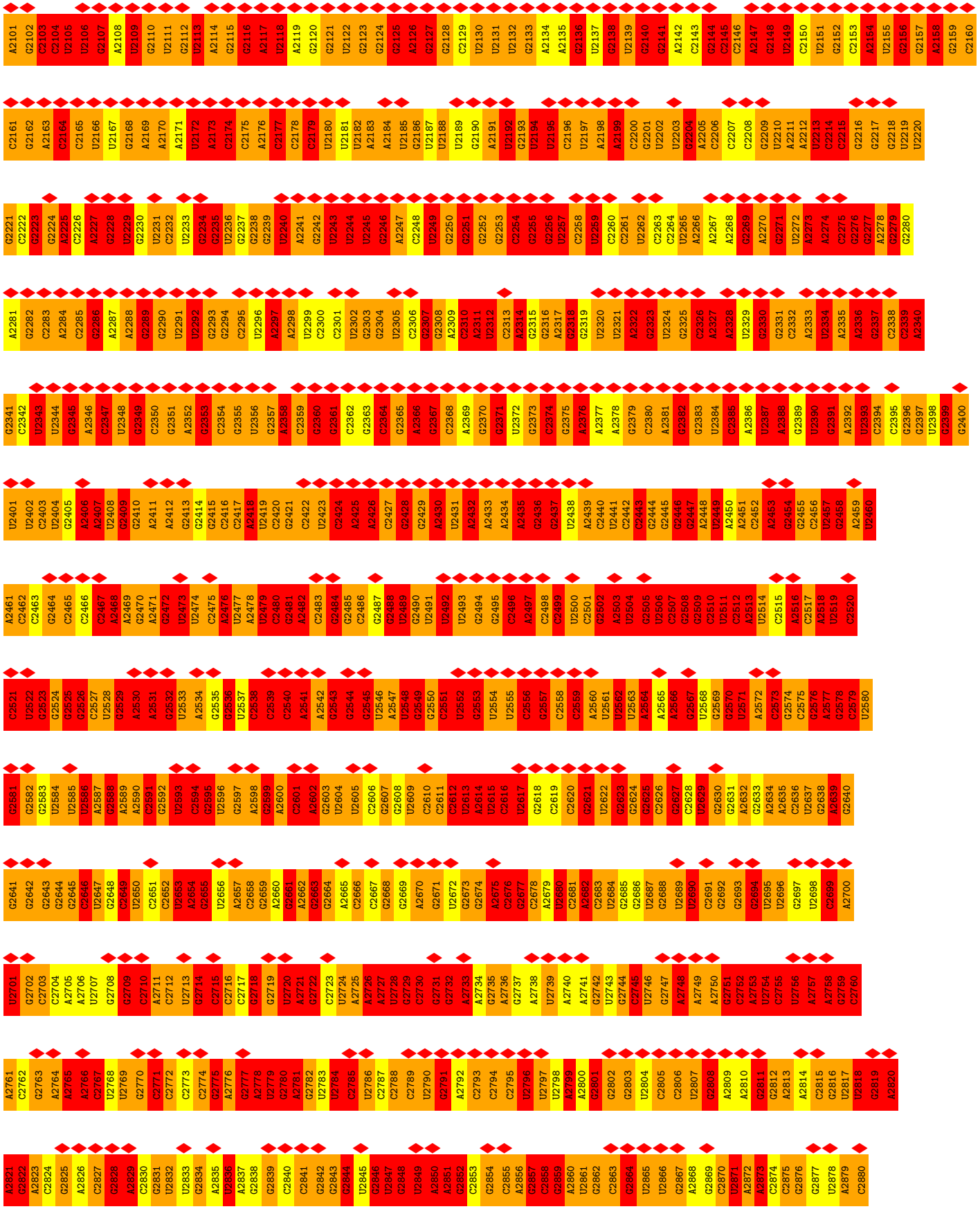
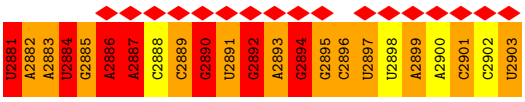
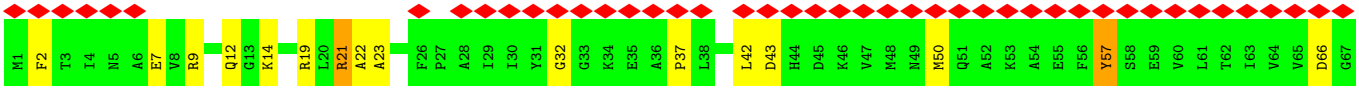
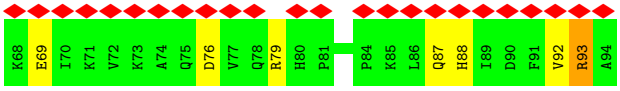




- Molecule 26: 50S ribosomal protein L25

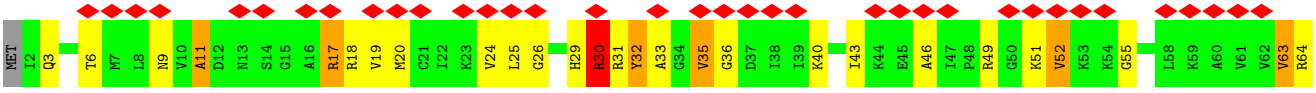
Chain BC:

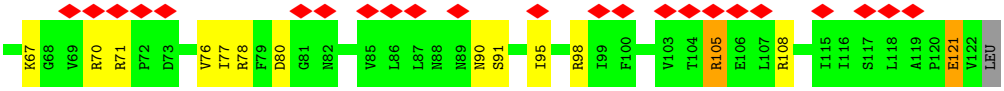




- Molecule 27: 50S ribosomal protein L14

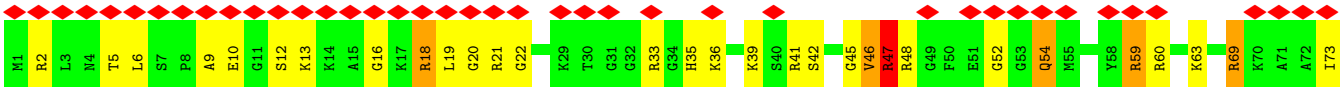
Chain BD:

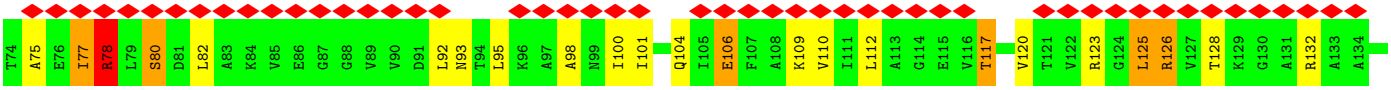


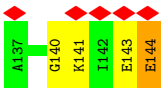


- Molecule 28: 50S ribosomal protein L15

Chain BE:

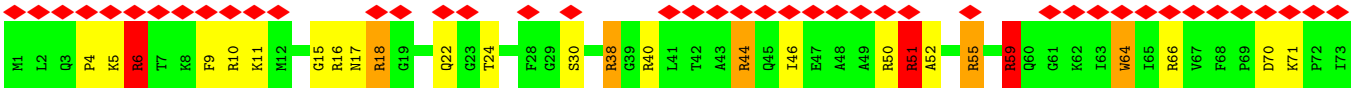


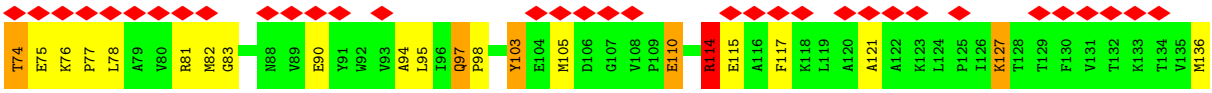




- Molecule 29: 50S ribosomal protein L16

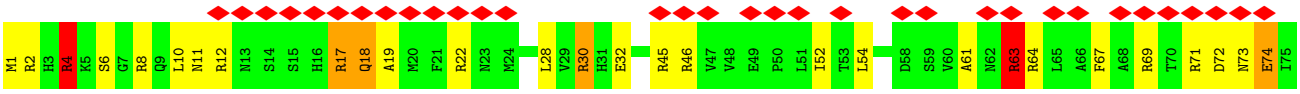
Chain BF:

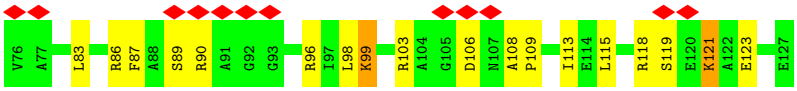




• Molecule 30: 50S ribosomal protein L17

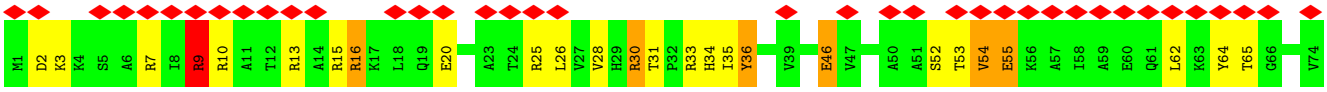
Chain BG:

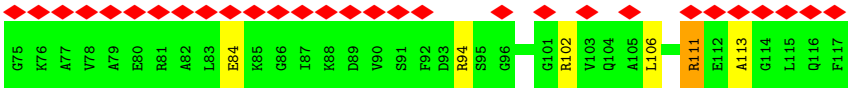




• Molecule 31: 50S ribosomal protein L18

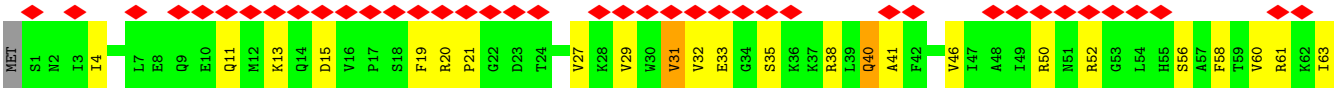
Chain BH:

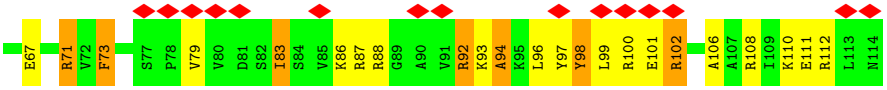




• Molecule 32: 50S ribosomal protein L19

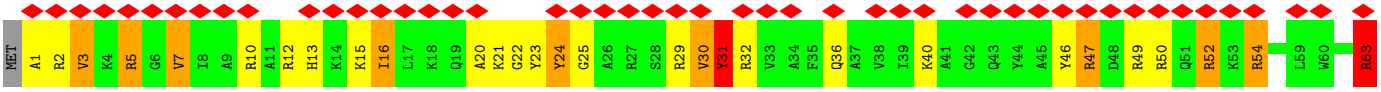
Chain BI:

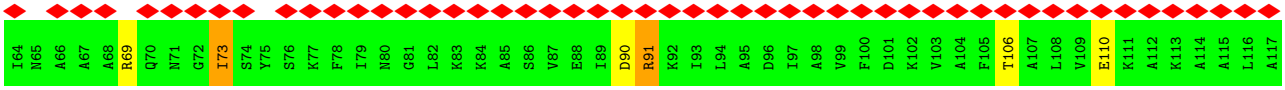




• Molecule 33: 50S ribosomal protein L20

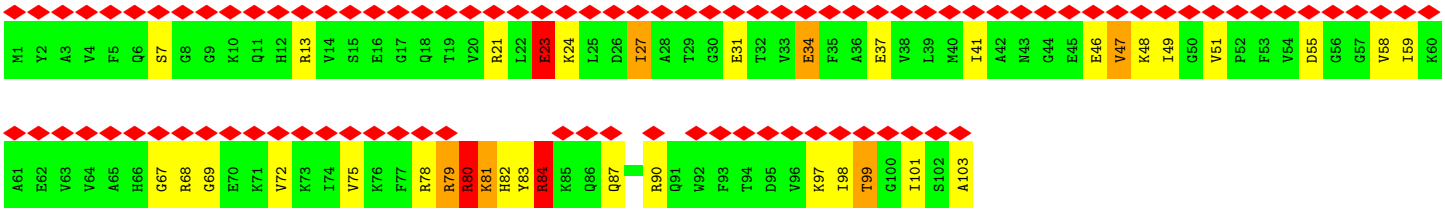
Chain BJ:





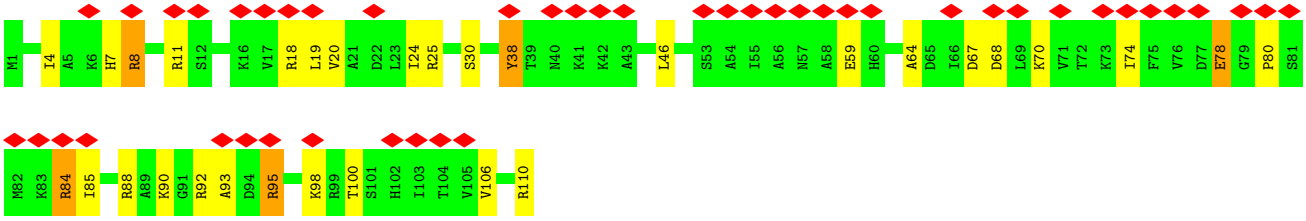
• Molecule 34: 50S ribosomal protein L21

Chain BK: 92% 64% 27% 6%



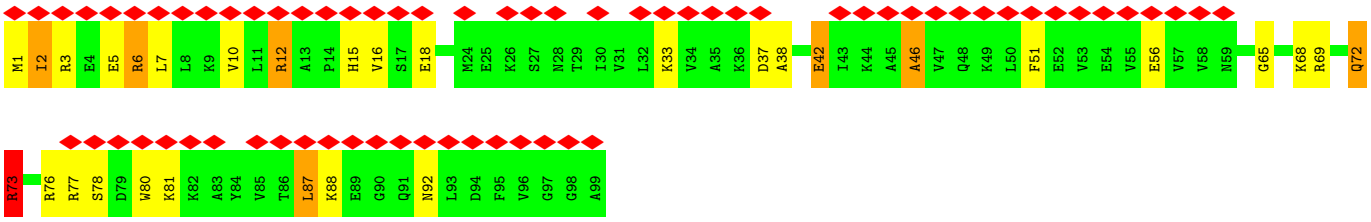
- Molecule 35: 50S ribosomal protein L22

Chain BL: 42% 72% 24% 5%



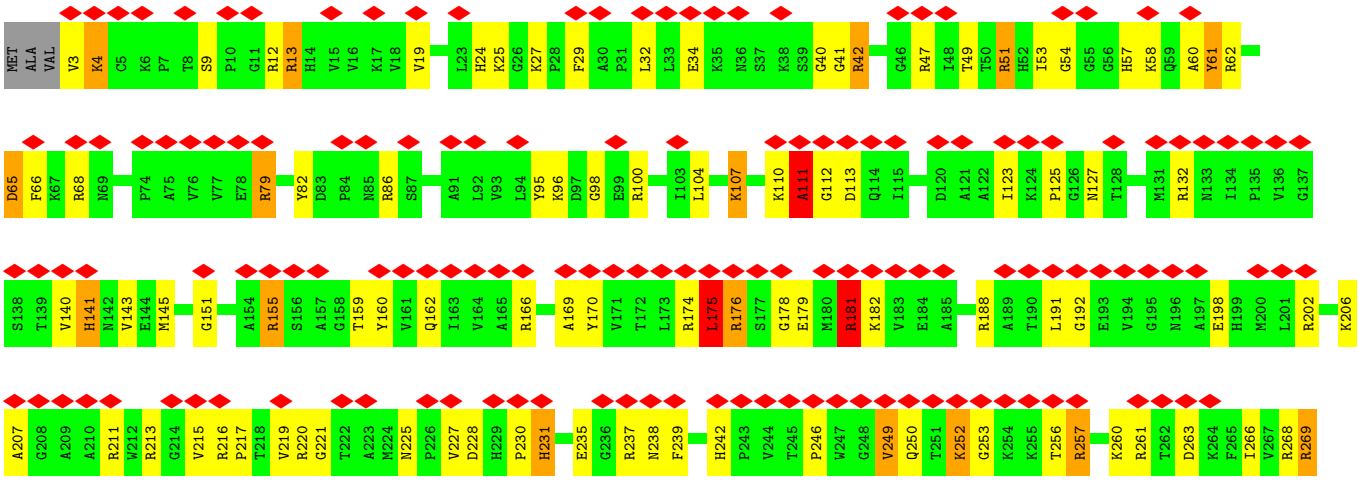
- Molecule 36: 50S ribosomal protein L23

Chain BM: 69% 69% 23% 7%



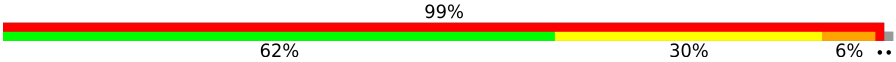
- Molecule 37: 50S ribosomal protein L2

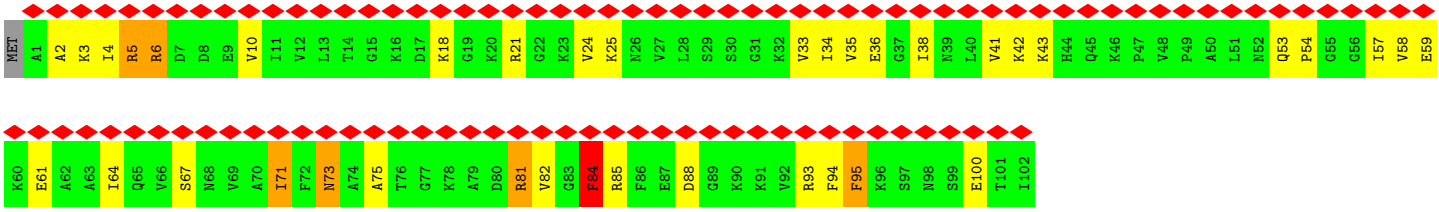
Chain BN: 54% 61% 31% 6%



• Molecule 38: 50S ribosomal protein L24

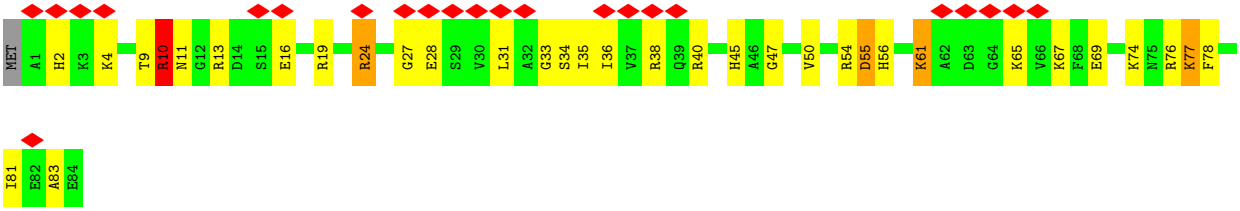
Chain BO:





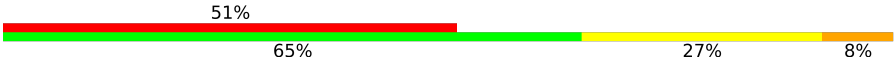
• Molecule 39: 50S ribosomal protein L27

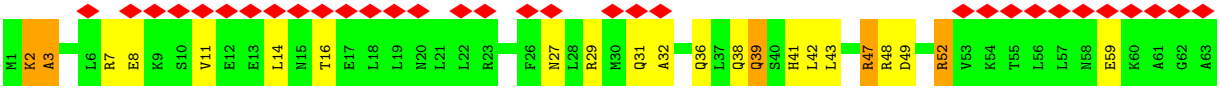
Chain BP:



• Molecule 40: 50S ribosomal protein L29

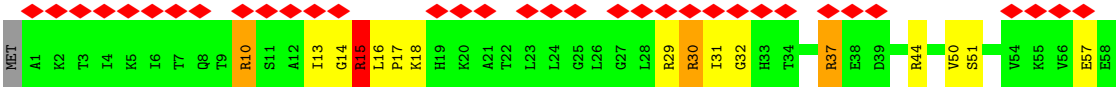
Chain BQ:





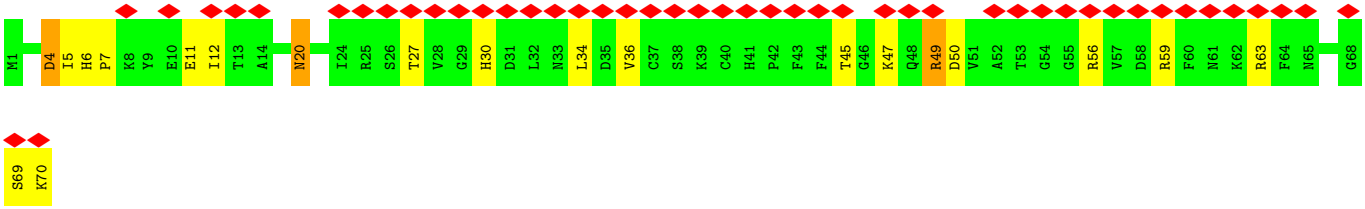
• Molecule 41: 50S ribosomal protein L30

Chain BR:



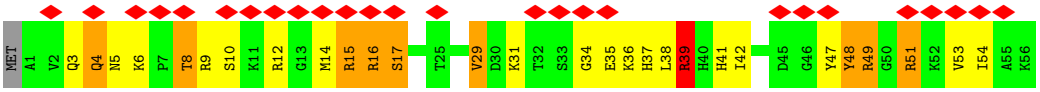
• Molecule 42: 50S ribosomal protein L31

Chain BS:



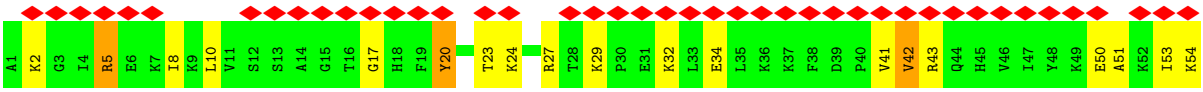
• Molecule 43: 50S ribosomal protein L32

Chain BT: 46% 49% 32% 16%



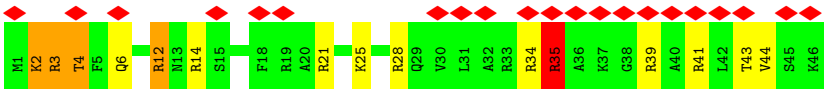
- Molecule 44: 50S ribosomal protein L33

Chain BU: 80% 65% 30% 6%



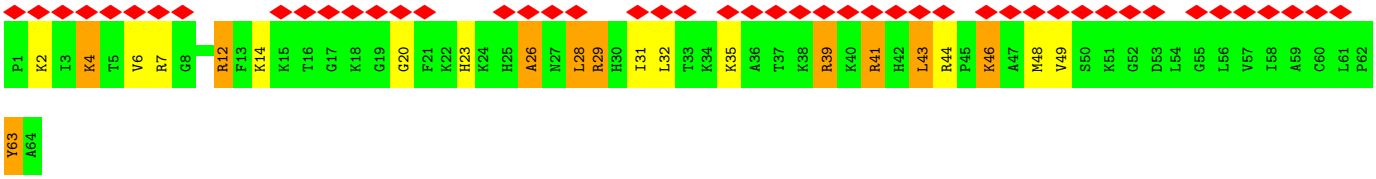
- Molecule 45: 50S ribosomal protein L34

Chain BV: 46% 67% 22% 9%



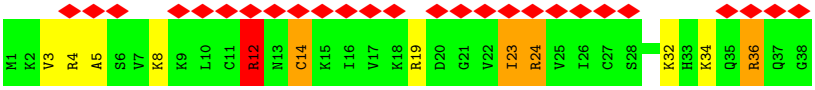
- Molecule 46: 50S ribosomal protein L35

Chain BW: 73% 66% 19% 16%



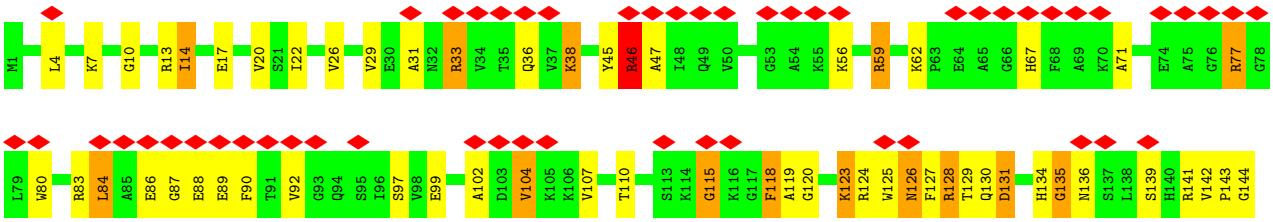
- Molecule 47: 50S ribosomal protein L36

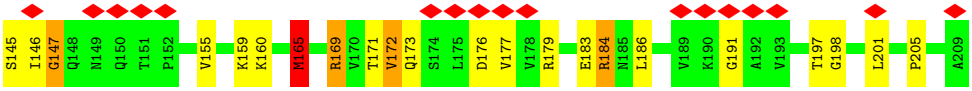
Chain BX: 68% 68% 18% 11%



- Molecule 48: 50S ribosomal protein L3

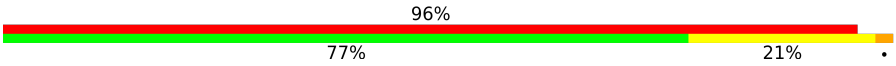
Chain BY: 33% 61% 29% 9%

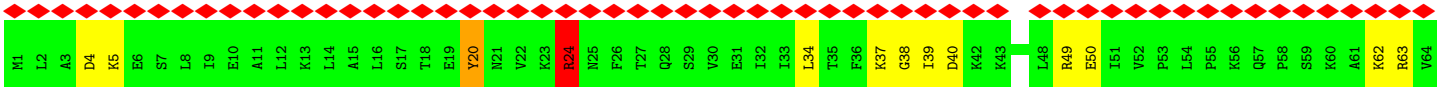


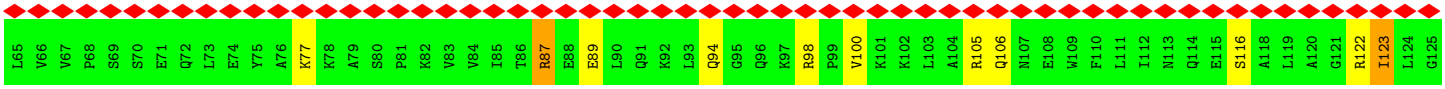


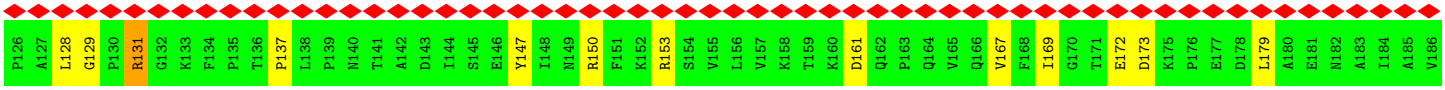
- Molecule 49: 50S ribosomal protein L1P

Chain BZ:



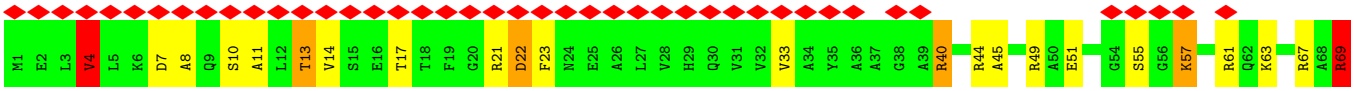


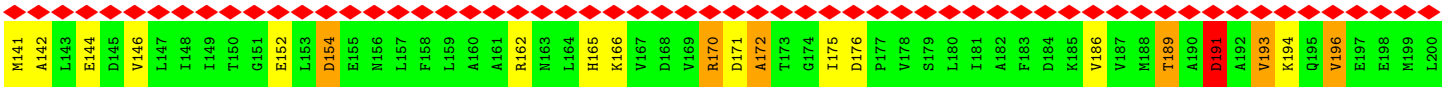




- Molecule 50: 50S ribosomal protein L4

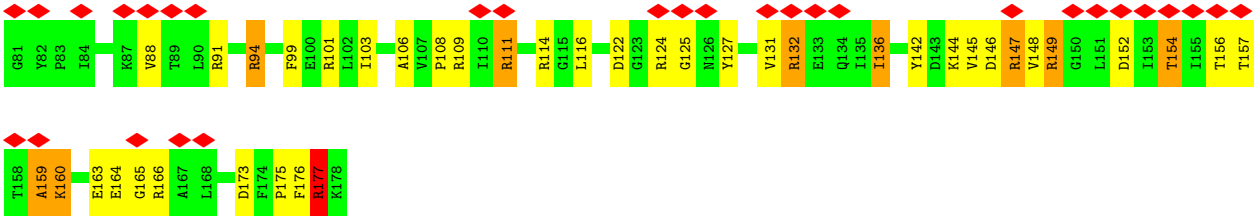
Chain B1:





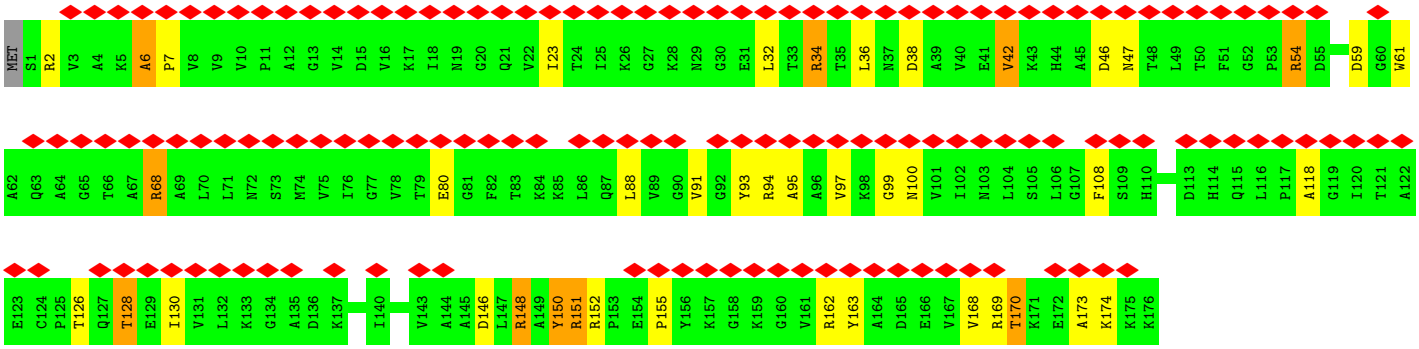
- Molecule 51: 50S ribosomal protein L5

Chain B2:



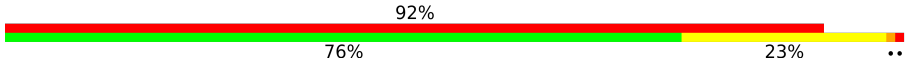
• Molecule 52: 50S ribosomal protein L6

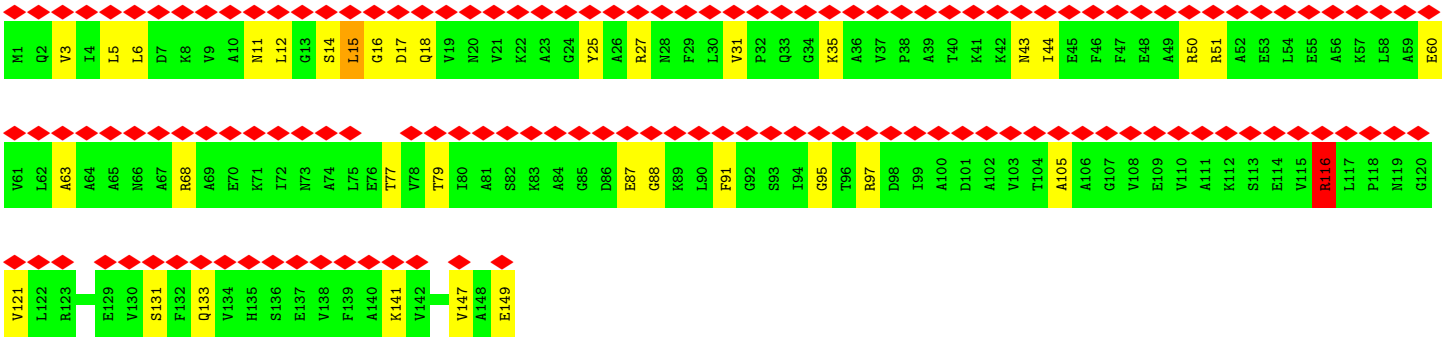
Chain B3:



• Molecule 53: 50S ribosomal protein L9

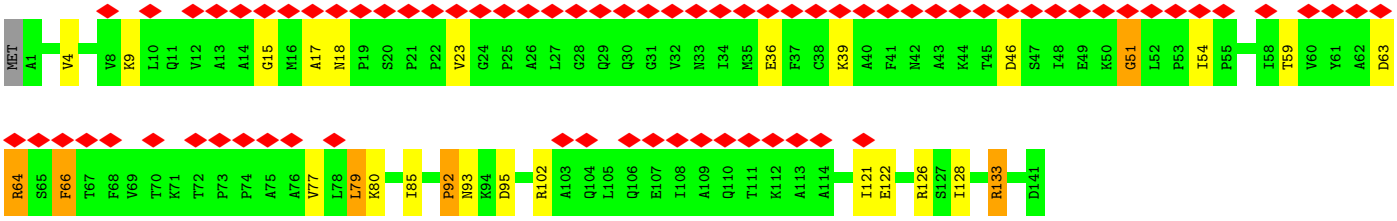
Chain B4:





• Molecule 54: 50S ribosomal protein L11

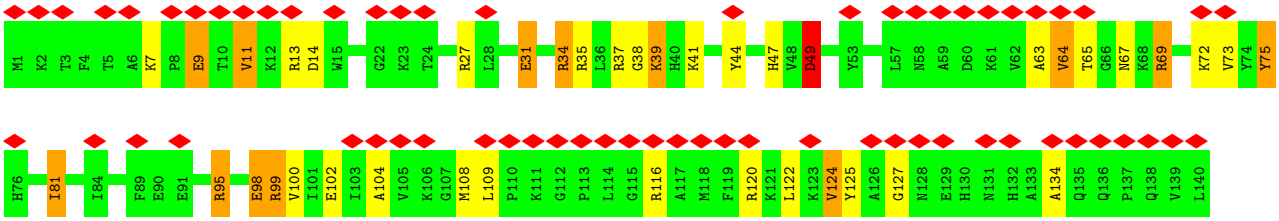
Chain B5:



• Molecule 55: 50S ribosomal protein L13

Chain B6:

45%
71%
19%
9%


M1 K2 T3 F4 T5 A6 K7 P8 E9 T10 V11 K12 R13 D14 W15 G22 K23 T24 R27 L28 E31 R34 R35 L36 R37 G38 K39 H40 K41 Y44 H47 V48 D49 Y53 L57 N58 A59 D60 K61 V62 A63 V64 T65 G66 N67 K68 R69 K72 V73 Y74 Y75
H76 I81 I84 F89 E90 E91 R95 E98 R99 V100 I101 E102 I103 A104 V105 K106 G107 M108 L109 P110 K111 G112 P113 L114 G115 R116 A117 M118 F119 R120 K121 L122 K123 V124 Y125 A126 G127 N128 E129 H130 N131 H132 A133 A134 Q135 Q136 P137 Q138 V139 L140

4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	75996	Depositor
Resolution determination method	Not provided	
CTF correction method	Not provided	
Microscope	FEI TECNAI F20	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	15	Depositor
Minimum defocus (nm)	2000	Depositor
Maximum defocus (nm)	4000	Depositor
Magnification	50000	Depositor
Image detector	KODAK SO-163 FILM	Depositor
Maximum map value	250.984	Depositor
Minimum map value	-85.859	Depositor
Average map value	4.444	Depositor
Map value standard deviation	25.344	Depositor
Recommended contour level	57.2	Depositor
Map size (Å)	366.6, 366.6, 366.6	wwPDB
Map dimensions	130, 130, 130	wwPDB
Map angles (°)	90, 90, 90	wwPDB
Pixel spacing (Å)	2.82, 2.82, 2.82	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

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	AA	2.55	109/1789 (6.1%)	3.85	439/2788 (15.7%)
1	AE	2.27	78/1814 (4.3%)	3.60	403/2827 (14.3%)
1	AP	3.55	99/1789 (5.5%)	3.96	389/2788 (14.0%)
2	AM	2.44	19/436 (4.4%)	3.59	99/672 (14.7%)
3	A1	2.55	1627/36759 (4.4%)	3.68	8418/57346 (14.7%)
4	AB	0.97	2/1735 (0.1%)	1.84	41/2338 (1.8%)
5	AC	1.10	5/892 (0.6%)	1.74	19/1205 (1.6%)
6	AD	1.14	2/968 (0.2%)	2.24	38/1300 (2.9%)
7	AF	1.16	7/892 (0.8%)	2.21	32/1193 (2.7%)
8	AG	1.13	3/785 (0.4%)	2.22	33/1046 (3.2%)
9	AH	1.13	5/723 (0.7%)	2.18	30/966 (3.1%)
10	AI	1.17	4/658 (0.6%)	2.16	20/884 (2.3%)
11	AJ	0.99	2/657 (0.3%)	1.87	11/881 (1.2%)
12	AK	1.19	5/462 (1.1%)	1.98	15/621 (2.4%)
13	AL	1.08	2/652 (0.3%)	1.96	14/877 (1.6%)
14	AN	1.03	4/670 (0.6%)	1.87	14/888 (1.6%)
15	AO	1.08	6/1651 (0.4%)	1.94	43/2225 (1.9%)
16	AQ	1.23	2/430 (0.5%)	2.26	19/570 (3.3%)
17	AR	1.08	2/1664 (0.1%)	1.94	46/2227 (2.1%)
18	AS	1.02	2/1118 (0.2%)	1.70	19/1504 (1.3%)
19	AT	1.03	1/835 (0.1%)	1.81	13/1128 (1.2%)
20	AU	1.12	4/1187 (0.3%)	1.97	33/1591 (2.1%)
21	AV	0.95	1/988 (0.1%)	1.65	14/1326 (1.1%)
22	AW	1.13	1/1033 (0.1%)	1.98	27/1375 (2.0%)
23	AX	1.03	2/796 (0.3%)	2.11	28/1077 (2.6%)
24	BA	2.22	97/2800 (3.5%)	3.50	592/4367 (13.6%)
25	BB	2.24	2712/69795 (3.9%)	3.62	15539/108884 (14.3%)
26	BC	1.01	1/765 (0.1%)	1.78	11/1025 (1.1%)
27	BD	1.11	4/939 (0.4%)	2.36	28/1258 (2.2%)
28	BE	1.13	2/1061 (0.2%)	1.97	25/1413 (1.8%)
29	BF	1.09	3/1092 (0.3%)	2.16	36/1460 (2.5%)
30	BG	1.16	6/1020 (0.6%)	2.13	43/1364 (3.2%)
31	BH	1.11	1/909 (0.1%)	2.12	33/1219 (2.7%)
32	BI	1.15	4/928 (0.4%)	2.04	30/1242 (2.4%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
33	BJ	1.18	4/959 (0.4%)	1.97	27/1278 (2.1%)
34	BK	1.05	1/828 (0.1%)	2.02	23/1107 (2.1%)
35	BL	0.98	0/863	1.86	17/1156 (1.5%)
36	BM	0.99	2/784 (0.3%)	1.93	18/1048 (1.7%)
37	BN	1.10	9/2092 (0.4%)	1.99	65/2813 (2.3%)
38	BO	1.03	1/787 (0.1%)	1.87	18/1051 (1.7%)
39	BP	1.05	1/641 (0.2%)	2.02	17/848 (2.0%)
40	BQ	1.02	0/509	2.09	13/677 (1.9%)
41	BR	0.99	2/452 (0.4%)	2.05	14/605 (2.3%)
42	BS	1.04	0/558	1.99	13/745 (1.7%)
43	BT	1.10	0/449	2.22	16/599 (2.7%)
44	BU	1.08	0/447	1.81	8/594 (1.3%)
45	BV	1.16	0/379	2.33	18/498 (3.6%)
46	BW	0.99	0/512	1.74	9/676 (1.3%)
47	BX	1.07	1/302 (0.3%)	2.23	8/397 (2.0%)
48	BY	0.99	3/1585 (0.2%)	1.98	42/2134 (2.0%)
49	BZ	0.98	3/1711 (0.2%)	1.64	26/2305 (1.1%)
50	B1	1.01	0/1570	1.86	35/2113 (1.7%)
51	B2	1.07	2/1443 (0.1%)	1.88	40/1937 (2.1%)
52	B3	1.01	0/1342	1.81	32/1816 (1.8%)
53	B4	0.97	1/1121 (0.1%)	1.74	16/1515 (1.1%)
54	B5	0.94	0/1045	1.71	11/1410 (0.8%)
55	B6	1.02	1/1135 (0.1%)	1.95	28/1529 (1.8%)
All	All	2.08	4855/162206 (3.0%)	3.29	27108/242726 (11.2%)

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	AA	0	55
1	AE	0	49
1	AP	2	50
2	AM	0	9
3	A1	4	945
4	AB	0	3
5	AC	0	3
6	AD	0	7
7	AF	0	5
8	AG	0	4
9	AH	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
10	AI	0	3
11	AJ	0	4
13	AL	0	8
14	AN	1	1
15	AO	0	3
16	AQ	0	4
17	AR	0	7
18	AS	0	3
19	AT	0	4
20	AU	0	4
21	AV	0	2
22	AW	0	4
23	AX	0	4
24	BA	0	66
25	BB	3	1717
26	BC	0	3
27	BD	0	6
28	BE	0	6
29	BF	0	4
30	BG	0	4
31	BH	0	1
32	BI	0	4
33	BJ	0	4
34	BK	0	5
35	BL	0	5
36	BM	0	1
37	BN	0	12
38	BO	0	4
39	BP	0	3
40	BQ	0	3
41	BR	0	3
42	BS	0	3
43	BT	0	2
44	BU	0	5
45	BV	0	2
46	BW	0	4
47	BX	0	2
48	BY	0	9
49	BZ	0	2
50	B1	0	9
51	B2	0	6
52	B3	0	5

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Mol	Chain	#Chirality outliers	#Planarity outliers
53	B4	0	4
54	B5	0	3
55	B6	0	8
All	All	10	3101

All (4855) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1429	A	P-O5'	178.16	3.38	1.59
3	A1	1340	A	C3'-O3'	99.95	2.82	1.42
1	AP	31	A	C4'-C3'	53.26	2.11	1.53
1	AP	31	A	C2'-C1'	45.01	2.02	1.53
1	AP	31	A	C4'-O4'	44.63	2.03	1.45
1	AP	31	A	O4'-C1'	44.29	1.99	1.41
1	AP	74	C	O3'-P	-43.71	1.08	1.61
1	AP	31	A	C3'-C2'	43.64	2.00	1.52
3	A1	1418	A	N3-C4	41.25	1.59	1.34
25	BB	1687	G	C4'-C3'	39.75	1.96	1.53
25	BB	1687	G	C2'-C1'	36.75	1.93	1.53
25	BB	1687	G	O4'-C1'	35.35	1.87	1.41
3	A1	1418	A	C6-N1	34.90	1.59	1.35
25	BB	1687	G	C3'-C2'	34.75	1.91	1.52
25	BB	1687	G	C4'-O4'	32.35	1.87	1.45
3	A1	1418	A	C5-C6	29.75	1.67	1.41
3	A1	1418	A	C5-C4	26.44	1.57	1.38
3	A1	1418	A	C2-N3	26.23	1.57	1.33
3	A1	1418	A	N1-C2	25.12	1.56	1.34
1	AP	35	A	C6-N6	-12.96	1.23	1.33
1	AP	27	C	N3-C4	-12.28	1.25	1.33
25	BB	2802	G	O3'-P	-11.90	1.46	1.61
25	BB	221	A	N7-C5	11.59	1.46	1.39
1	AP	34	G	C2-N2	-11.44	1.23	1.34
3	A1	1340	A	C3'-C2'	11.37	1.65	1.52
25	BB	903	C	C4-N4	-11.02	1.24	1.33
3	A1	872	A	N7-C5	10.94	1.45	1.39
25	BB	957	C	C4-N4	-10.93	1.24	1.33
25	BB	2799	A	N7-C5	10.76	1.45	1.39
25	BB	1583	A	N7-C5	10.76	1.45	1.39
25	BB	2327	A	N7-C5	10.71	1.45	1.39
1	AA	44	A	P-O5'	-10.64	1.49	1.59
3	A1	1365	G	N1-C2	-10.63	1.29	1.37
25	BB	2165	C	N3-C4	-10.63	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	664	G	N1-C2	-10.61	1.29	1.37
3	A1	1182	G	N1-C2	-10.60	1.29	1.37
1	AA	64	A	N7-C5	10.59	1.45	1.39
25	BB	2557	G	N7-C5	10.57	1.45	1.39
3	A1	1355	G	C2-N2	-10.53	1.24	1.34
3	A1	669	G	P-O5'	-10.47	1.49	1.59
25	BB	2222	C	C4-N4	-10.32	1.24	1.33
25	BB	149	A	N7-C5	10.31	1.45	1.39
25	BB	413	C	C4-N4	-10.29	1.24	1.33
3	A1	1175	G	P-O5'	-10.26	1.49	1.59
25	BB	497	A	P-O5'	-10.17	1.49	1.59
25	BB	1659	G	P-O5'	10.05	1.69	1.59
3	A1	413	G	P-O5'	-9.97	1.49	1.59
25	BB	1883	U	P-O5'	-9.97	1.49	1.59
25	BB	1051	G	N1-C2	-9.85	1.29	1.37
3	A1	1202	U	P-O5'	-9.79	1.50	1.59
25	BB	2376	A	C6-N1	-9.74	1.28	1.35
25	BB	274	C	C4-N4	-9.69	1.25	1.33
3	A1	328	C	C4-N4	-9.68	1.25	1.33
3	A1	200	G	N1-C2	-9.65	1.30	1.37
25	BB	249	C	N3-C4	-9.65	1.27	1.33
25	BB	838	C	C4-N4	-9.64	1.25	1.33
3	A1	646	G	N1-C2	-9.64	1.30	1.37
3	A1	1523	G	P-O5'	9.63	1.69	1.59
24	BA	117	G	N1-C2	-9.63	1.30	1.37
3	A1	539	A	P-O5'	9.63	1.69	1.59
25	BB	1888	G	C2-N2	-9.60	1.25	1.34
25	BB	1836	C	C4-N4	-9.57	1.25	1.33
25	BB	2558	C	C4-N4	-9.54	1.25	1.33
3	A1	51	A	O3'-P	-9.53	1.49	1.61
25	BB	2766	A	N7-C5	9.50	1.45	1.39
3	A1	1268	G	P-O5'	9.50	1.69	1.59
1	AA	56	C	C4-N4	-9.48	1.25	1.33
3	A1	107	G	O3'-P	-9.43	1.49	1.61
3	A1	1219	A	O3'-P	-9.42	1.49	1.61
3	A1	1082	A	O3'-P	-9.40	1.49	1.61
3	A1	1529	G	N1-C2	-9.36	1.30	1.37
3	A1	1340	A	C4'-C3'	9.35	1.63	1.53
24	BA	90	C	O3'-P	-9.29	1.50	1.61
25	BB	1205	A	N3-C4	9.27	1.40	1.34
3	A1	435	A	C6-N1	-9.26	1.29	1.35
25	BB	804	A	N7-C5	9.26	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	255	G	P-O5'	9.26	1.69	1.59
3	A1	795	C	N3-C4	-9.25	1.27	1.33
3	A1	781	A	C6-N1	-9.24	1.29	1.35
25	BB	1560	G	O3'-P	-9.23	1.50	1.61
3	A1	894	G	P-O5'	-9.21	1.50	1.59
25	BB	69	C	N3-C4	-9.19	1.27	1.33
25	BB	1910	G	P-O5'	9.14	1.68	1.59
3	A1	478	A	N7-C5	9.11	1.44	1.39
25	BB	1489	C	P-O5'	9.10	1.68	1.59
1	AP	27	C	C4-N4	-9.05	1.25	1.33
25	BB	342	A	N7-C5	9.05	1.44	1.39
3	A1	1135	U	P-O5'	-9.03	1.50	1.59
25	BB	1027	A	N7-C5	9.03	1.44	1.39
25	BB	1863	G	N1-C2	-9.02	1.30	1.37
1	AA	34	G	C2-N2	-9.01	1.25	1.34
3	A1	1352	C	P-O5'	-8.96	1.50	1.59
25	BB	1738	G	P-O5'	8.95	1.68	1.59
25	BB	2	G	O3'-P	-8.94	1.50	1.61
3	A1	608	A	N7-C5	8.92	1.44	1.39
3	A1	1395	C	C4-N4	-8.88	1.25	1.33
25	BB	2529	G	N7-C5	8.87	1.44	1.39
25	BB	753	A	O3'-P	-8.87	1.50	1.61
3	A1	1316	G	N1-C2	-8.84	1.30	1.37
25	BB	1538	G	C2-N2	-8.83	1.25	1.34
25	BB	1694	C	P-O5'	8.82	1.68	1.59
25	BB	1458	U	P-O5'	8.82	1.68	1.59
25	BB	1334	G	N1-C2	-8.81	1.30	1.37
25	BB	1946	U	P-O5'	8.81	1.68	1.59
25	BB	2532	G	N7-C5	8.80	1.44	1.39
1	AP	34	G	N1-C2	-8.78	1.30	1.37
3	A1	207	C	O3'-P	-8.78	1.50	1.61
3	A1	412	A	N3-C4	8.77	1.40	1.34
25	BB	1975	G	P-O5'	-8.77	1.50	1.59
3	A1	92	U	P-O5'	-8.77	1.50	1.59
1	AE	20	G	N7-C5	8.76	1.44	1.39
25	BB	205	G	N1-C2	-8.76	1.30	1.37
3	A1	342	C	C4-N4	-8.73	1.26	1.33
3	A1	1262	C	C4-N4	-8.72	1.26	1.33
25	BB	2336	A	N7-C5	8.71	1.44	1.39
3	A1	127	G	O3'-P	-8.71	1.50	1.61
1	AP	45	G	O3'-P	-8.71	1.50	1.61
3	A1	193	C	N1-C6	8.70	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	13	G	C2-N2	-8.70	1.25	1.34
3	A1	68	G	P-O5'	8.69	1.68	1.59
3	A1	1106	G	N7-C5	8.68	1.44	1.39
3	A1	721	G	N1-C2	-8.68	1.30	1.37
25	BB	2140	G	P-O5'	8.68	1.68	1.59
3	A1	1368	A	P-O5'	-8.66	1.51	1.59
3	A1	611	C	N3-C4	-8.65	1.27	1.33
25	BB	271	G	C2-N2	-8.65	1.25	1.34
25	BB	838	C	N3-C4	-8.64	1.27	1.33
25	BB	1951	U	O3'-P	-8.63	1.50	1.61
3	A1	531	U	C5'-C4'	8.62	1.61	1.51
25	BB	462	C	N3-C4	-8.62	1.27	1.33
25	BB	334	C	N3-C4	-8.62	1.27	1.33
1	AE	26	G	O3'-P	-8.61	1.50	1.61
3	A1	904	U	P-O5'	-8.61	1.51	1.59
25	BB	1435	G	O3'-P	-8.61	1.50	1.61
3	A1	99	C	P-O5'	-8.61	1.51	1.59
25	BB	1171	G	N7-C5	8.60	1.44	1.39
3	A1	492	C	C4-N4	-8.59	1.26	1.33
3	A1	212	G	N3-C4	8.59	1.41	1.35
25	BB	2371	G	C2-N2	-8.58	1.25	1.34
25	BB	1289	C	C4-N4	-8.58	1.26	1.33
25	BB	2307	G	C2-N2	-8.58	1.25	1.34
25	BB	2341	G	P-O5'	8.58	1.68	1.59
3	A1	1362	A	O3'-P	-8.56	1.50	1.61
25	BB	702	U	O3'-P	-8.56	1.50	1.61
3	A1	1013	G	O3'-P	-8.55	1.50	1.61
3	A1	1257	A	O3'-P	-8.55	1.50	1.61
25	BB	296	U	P-O5'	8.54	1.68	1.59
25	BB	2158	A	N7-C5	8.54	1.44	1.39
1	AA	65	G	O3'-P	-8.54	1.50	1.61
25	BB	2248	C	C4-N4	-8.54	1.26	1.33
25	BB	141	G	N1-C2	-8.53	1.30	1.37
25	BB	1544	A	N7-C5	8.53	1.44	1.39
25	BB	544	C	C4-C5	-8.53	1.36	1.43
25	BB	978	G	O3'-P	-8.53	1.50	1.61
25	BB	2112	G	C2-N2	-8.50	1.26	1.34
3	A1	77	A	N7-C5	8.50	1.44	1.39
25	BB	414	C	P-O5'	8.49	1.68	1.59
25	BB	1925	C	N3-C4	-8.47	1.28	1.33
3	A1	1488	G	C2-N2	-8.47	1.26	1.34
3	A1	1529	G	C2-N2	-8.47	1.26	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AP	49	C	P-O5'	8.46	1.68	1.59
25	BB	2628	C	O3'-P	-8.46	1.51	1.61
25	BB	1893	C	C4-N4	-8.44	1.26	1.33
3	A1	1513	A	C6-N6	-8.44	1.27	1.33
25	BB	33	C	C4-N4	-8.44	1.26	1.33
3	A1	1241	G	C2-N2	-8.43	1.26	1.34
25	BB	236	C	C4-N4	-8.43	1.26	1.33
25	BB	2139	U	P-O5'	8.43	1.68	1.59
2	AM	9	U	C2-N3	8.42	1.43	1.37
3	A1	1531	A	O3'-P	-8.42	1.51	1.61
1	AE	21	A	P-O5'	-8.41	1.51	1.59
3	A1	381	C	C4-N4	-8.41	1.26	1.33
25	BB	2308	G	C2-N2	-8.41	1.26	1.34
25	BB	1	G	C2-N2	-8.40	1.26	1.34
25	BB	1382	G	N7-C5	8.39	1.44	1.39
3	A1	110	C	C4-N4	-8.37	1.26	1.33
25	BB	32	C	C4-N4	-8.36	1.26	1.33
25	BB	2730	C	C4-N4	-8.36	1.26	1.33
1	AP	35	A	N1-C2	8.35	1.41	1.34
3	A1	201	G	N1-C2	-8.35	1.31	1.37
3	A1	1053	G	N3-C4	8.35	1.41	1.35
1	AA	48	C	C4-N4	-8.34	1.26	1.33
1	AP	67	A	P-O5'	-8.34	1.51	1.59
3	A1	1412	C	C4-N4	-8.34	1.26	1.33
3	A1	361	G	P-O5'	-8.34	1.51	1.59
25	BB	2743	U	P-O5'	-8.33	1.51	1.59
3	A1	634	C	C4-N4	-8.33	1.26	1.33
1	AA	71	G	N1-C2	-8.33	1.31	1.37
3	A1	1138	G	N1-C2	-8.32	1.31	1.37
25	BB	526	A	N7-C5	8.32	1.44	1.39
1	AA	72	C	P-O5'	8.31	1.68	1.59
3	A1	65	A	C6-N6	-8.31	1.27	1.33
3	A1	724	G	C6-N1	-8.31	1.33	1.39
25	BB	1989	G	C2-N2	-8.30	1.26	1.34
3	A1	1230	C	C4-N4	-8.30	1.26	1.33
25	BB	547	A	C6-N6	-8.30	1.27	1.33
25	BB	2805	C	C4-N4	-8.30	1.26	1.33
3	A1	362	G	C2-N2	-8.29	1.26	1.34
25	BB	981	A	N7-C5	8.29	1.44	1.39
1	AE	18	G	N1-C2	-8.29	1.31	1.37
25	BB	352	A	P-O5'	-8.29	1.51	1.59
3	A1	1441	A	O3'-P	-8.28	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	736	C	C4-N4	-8.28	1.26	1.33
3	A1	1256	A	N7-C5	8.28	1.44	1.39
25	BB	658	U	O3'-P	-8.26	1.51	1.61
25	BB	602	A	N7-C5	8.26	1.44	1.39
25	BB	851	C	N3-C4	-8.26	1.28	1.33
3	A1	1492	A	O3'-P	-8.25	1.51	1.61
1	AA	1	G	N3-C4	8.25	1.41	1.35
1	AA	60	C	C4-N4	-8.24	1.26	1.33
3	A1	1011	C	C4-N4	-8.24	1.26	1.33
25	BB	1606	C	C4-N4	-8.21	1.26	1.33
3	A1	849	G	N1-C2	-8.21	1.31	1.37
3	A1	1115	U	O3'-P	-8.20	1.51	1.61
25	BB	1929	G	P-O5'	8.20	1.68	1.59
1	AE	72	C	C4-N4	-8.19	1.26	1.33
3	A1	918	A	P-O5'	-8.18	1.51	1.59
3	A1	498	A	P-O5'	-8.17	1.51	1.59
25	BB	1451	C	C4-N4	-8.17	1.26	1.33
3	A1	116	A	N7-C5	8.16	1.44	1.39
25	BB	1315	C	C4-N4	-8.16	1.26	1.33
25	BB	2671	G	P-O5'	-8.16	1.51	1.59
3	A1	969	A	N7-C5	8.16	1.44	1.39
25	BB	1675	C	N3-C4	-8.15	1.28	1.33
25	BB	85	G	N1-C2	-8.14	1.31	1.37
25	BB	539	G	C2-N2	-8.14	1.26	1.34
25	BB	1985	C	C4-N4	-8.14	1.26	1.33
25	BB	1549	A	C6-N1	-8.13	1.29	1.35
25	BB	7	G	C2-N2	-8.13	1.26	1.34
25	BB	1918	A	N7-C5	8.12	1.44	1.39
25	BB	1250	G	N7-C5	8.12	1.44	1.39
3	A1	532	A	C6-N1	-8.12	1.29	1.35
25	BB	537	G	C2-N2	-8.12	1.26	1.34
1	AA	56	C	N3-C4	-8.11	1.28	1.33
3	A1	1167	A	O3'-P	-8.10	1.51	1.61
25	BB	1941	C	N3-C4	-8.10	1.28	1.33
25	BB	2484	G	N1-C2	-8.10	1.31	1.37
25	BB	1873	G	N1-C2	-8.09	1.31	1.37
25	BB	2217	G	N1-C2	-8.09	1.31	1.37
3	A1	55	A	N7-C5	8.09	1.44	1.39
25	BB	2350	C	C4-N4	-8.09	1.26	1.33
25	BB	2110	G	C2-N2	-8.09	1.26	1.34
3	A1	810	C	C4-N4	-8.08	1.26	1.33
25	BB	1522	A	O3'-P	-8.08	1.51	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	475	C	C4-N4	-8.08	1.26	1.33
3	A1	258	G	C2-N2	-8.07	1.26	1.34
3	A1	950	U	P-O5'	-8.07	1.51	1.59
25	BB	294	A	O3'-P	-8.06	1.51	1.61
25	BB	2710	C	N3-C4	-8.06	1.28	1.33
3	A1	1088	G	C2-N2	-8.06	1.26	1.34
25	BB	2411	A	N7-C5	8.05	1.44	1.39
25	BB	336	C	O3'-P	-8.05	1.51	1.61
25	BB	926	G	N7-C5	8.05	1.44	1.39
3	A1	1396	A	N7-C5	8.04	1.44	1.39
3	A1	978	A	N7-C5	8.04	1.44	1.39
25	BB	80	G	N1-C2	-8.03	1.31	1.37
25	BB	987	C	N3-C4	-8.03	1.28	1.33
3	A1	258	G	N1-C2	-8.03	1.31	1.37
25	BB	1408	G	N1-C2	-8.02	1.31	1.37
25	BB	2734	A	N3-C4	8.02	1.39	1.34
3	A1	65	A	N7-C5	8.02	1.44	1.39
25	BB	2549	G	N1-C2	-8.02	1.31	1.37
25	BB	2813	A	N3-C4	8.01	1.39	1.34
25	BB	1398	C	N3-C4	-8.01	1.28	1.33
25	BB	1239	G	N1-C2	-8.01	1.31	1.37
25	BB	1500	G	N1-C2	-8.00	1.31	1.37
3	A1	381	C	P-O5'	-8.00	1.51	1.59
25	BB	1359	A	C6-N1	-8.00	1.29	1.35
3	A1	760	G	N1-C2	-7.99	1.31	1.37
25	BB	1953	A	N7-C5	7.99	1.44	1.39
3	A1	288	A	C6-N6	-7.99	1.27	1.33
3	A1	412	A	C6-N1	-7.99	1.29	1.35
25	BB	307	G	N7-C5	7.99	1.44	1.39
25	BB	603	A	N7-C5	7.99	1.44	1.39
1	AP	36	A	C5'-C4'	7.98	1.60	1.51
25	BB	2308	G	N7-C5	7.98	1.44	1.39
25	BB	1232	G	C2-N2	-7.96	1.26	1.34
25	BB	2891	U	P-O5'	-7.95	1.51	1.59
3	A1	986	U	O3'-P	-7.95	1.51	1.61
3	A1	43	C	C4-N4	-7.94	1.26	1.33
3	A1	348	G	C2-N2	-7.94	1.26	1.34
1	AE	40	C	C4-N4	-7.94	1.26	1.33
25	BB	1681	G	N1-C2	-7.94	1.31	1.37
25	BB	1745	A	C5'-C4'	7.94	1.60	1.51
3	A1	1094	G	N1-C2	-7.93	1.31	1.37
3	A1	1249	C	C4-N4	-7.93	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	144	A	C6-N1	-7.93	1.29	1.35
25	BB	1530	G	N1-C2	-7.93	1.31	1.37
3	A1	321	A	C6-N6	-7.92	1.27	1.33
25	BB	1804	C	C4-N4	-7.92	1.26	1.33
25	BB	1	G	N1-C2	-7.92	1.31	1.37
25	BB	2153	C	P-O5'	-7.92	1.51	1.59
3	A1	631	C	C4-N4	-7.92	1.26	1.33
25	BB	2181	U	P-O5'	-7.92	1.51	1.59
25	BB	456	C	C4-N4	-7.92	1.26	1.33
25	BB	426	C	C4-N4	-7.92	1.26	1.33
25	BB	2541	A	N7-C5	7.92	1.44	1.39
25	BB	1102	C	C4-N4	-7.92	1.26	1.33
25	BB	136	G	C2-N2	-7.91	1.26	1.34
25	BB	2165	C	C4-N4	-7.91	1.26	1.33
25	BB	2462	C	C4-N4	-7.91	1.26	1.33
25	BB	2895	G	O3'-P	-7.91	1.51	1.61
3	A1	1397	C	C4-N4	-7.90	1.26	1.33
25	BB	889	C	C4-N4	-7.90	1.26	1.33
3	A1	360	G	C2-N2	-7.90	1.26	1.34
24	BA	85	G	C2-N2	-7.89	1.26	1.34
3	A1	1369	C	O3'-P	-7.89	1.51	1.61
25	BB	1441	G	N1-C2	-7.89	1.31	1.37
3	A1	1284	C	C4-N4	-7.89	1.26	1.33
3	A1	454	G	N1-C2	-7.89	1.31	1.37
5	AC	97	ARG	CZ-NH1	-7.89	1.22	1.33
25	BB	1694	C	C4-N4	-7.89	1.26	1.33
25	BB	1914	C	P-O5'	-7.89	1.51	1.59
3	A1	879	C	P-O5'	-7.87	1.51	1.59
25	BB	1072	C	N3-C4	-7.87	1.28	1.33
25	BB	446	G	N7-C5	7.87	1.44	1.39
25	BB	112	U	O3'-P	-7.87	1.51	1.61
25	BB	1072	C	O3'-P	-7.87	1.51	1.61
25	BB	1000	A	P-O5'	7.86	1.67	1.59
3	A1	818	G	N7-C5	7.86	1.44	1.39
25	BB	81	G	C2-N2	-7.86	1.26	1.34
3	A1	360	G	O3'-P	-7.85	1.51	1.61
1	AE	60	C	C4-N4	-7.85	1.26	1.33
25	BB	1530	G	N7-C5	7.85	1.44	1.39
25	BB	2465	C	N3-C4	-7.84	1.28	1.33
3	A1	1045	C	C4-N4	-7.84	1.26	1.33
25	BB	2566	A	N3-C4	7.84	1.39	1.34
25	BB	1959	G	N7-C5	7.84	1.44	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	43	G	C2-N2	-7.83	1.26	1.34
25	BB	574	A	N7-C5	7.83	1.44	1.39
1	AA	42	G	N7-C5	7.83	1.44	1.39
3	A1	284	C	N3-C4	-7.83	1.28	1.33
25	BB	20	C	C4-N4	-7.83	1.26	1.33
25	BB	2161	C	N3-C4	-7.82	1.28	1.33
3	A1	460	A	N7-C5	7.81	1.44	1.39
25	BB	304	U	P-O5'	-7.81	1.51	1.59
3	A1	1141	C	C4-N4	-7.81	1.26	1.33
25	BB	2656	U	P-O5'	-7.81	1.51	1.59
3	A1	175	C	N3-C4	-7.81	1.28	1.33
25	BB	602	A	N3-C4	7.81	1.39	1.34
25	BB	1475	G	N1-C2	-7.81	1.31	1.37
25	BB	1399	C	C4-N4	-7.80	1.26	1.33
25	BB	203	A	P-O5'	-7.80	1.51	1.59
1	AA	11	C	C4-N4	-7.80	1.26	1.33
25	BB	2269	G	N7-C5	7.80	1.44	1.39
25	BB	159	G	O3'-P	-7.79	1.51	1.61
3	A1	132	C	N3-C4	-7.79	1.28	1.33
3	A1	459	A	N3-C4	7.79	1.39	1.34
3	A1	453	G	C2-N2	-7.79	1.26	1.34
3	A1	351	G	N7-C5	7.78	1.44	1.39
25	BB	475	C	N3-C4	-7.78	1.28	1.33
3	A1	533	A	N7-C5	7.78	1.44	1.39
3	A1	75	G	C2-N2	-7.78	1.26	1.34
25	BB	2834	G	O3'-P	-7.77	1.51	1.61
3	A1	1534	A	C6-N6	-7.76	1.27	1.33
25	BB	2293	G	P-O5'	7.76	1.67	1.59
1	AA	37	G	N1-C2	-7.75	1.31	1.37
25	BB	80	G	P-O5'	-7.75	1.51	1.59
1	AE	51	G	N7-C5	7.75	1.43	1.39
25	BB	1724	G	P-O5'	-7.75	1.52	1.59
1	AA	71	G	N7-C5	7.74	1.43	1.39
25	BB	2831	G	C2-N2	-7.74	1.26	1.34
3	A1	946	A	N7-C5	7.73	1.43	1.39
25	BB	2066	C	N3-C4	-7.73	1.28	1.33
3	A1	980	C	N3-C4	-7.73	1.28	1.33
3	A1	371	A	N7-C5	7.73	1.43	1.39
25	BB	1966	A	N3-C4	7.73	1.39	1.34
25	BB	2483	C	N3-C4	-7.73	1.28	1.33
25	BB	2787	C	C4-N4	-7.72	1.26	1.33
25	BB	1924	C	C4-N4	-7.72	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2371	G	N1-C2	-7.72	1.31	1.37
3	A1	845	A	C6-N6	-7.71	1.27	1.33
25	BB	1072	C	C4-N4	-7.71	1.27	1.33
25	BB	2253	G	C2-N2	-7.71	1.26	1.34
25	BB	1870	C	P-O5'	7.71	1.67	1.59
1	AA	36	A	P-O5'	7.70	1.67	1.59
25	BB	1047	G	C2-N2	-7.70	1.26	1.34
3	A1	954	G	N7-C5	7.69	1.43	1.39
3	A1	206	C	C4-N4	-7.69	1.27	1.33
3	A1	1405	G	N1-C2	-7.69	1.31	1.37
25	BB	2188	U	P-O5'	7.69	1.67	1.59
3	A1	754	C	O3'-P	-7.69	1.51	1.61
3	A1	993	G	N1-C2	-7.69	1.31	1.37
3	A1	52	C	C4-N4	-7.68	1.27	1.33
3	A1	846	G	N1-C2	-7.68	1.31	1.37
25	BB	2547	A	N7-C5	7.68	1.43	1.39
3	A1	1178	G	C2-N2	-7.68	1.26	1.34
25	BB	312	G	C2-N2	-7.68	1.26	1.34
25	BB	1582	C	C4-N4	-7.68	1.27	1.33
3	A1	1136	C	O3'-P	-7.67	1.51	1.61
25	BB	2208	C	P-O5'	7.67	1.67	1.59
25	BB	1496	A	C6-N1	-7.67	1.30	1.35
25	BB	1916	A	C6-N1	-7.67	1.30	1.35
3	A1	934	C	C4-N4	-7.67	1.27	1.33
25	BB	838	C	P-O5'	-7.67	1.52	1.59
25	BB	2279	G	P-O5'	7.67	1.67	1.59
3	A1	1476	A	O3'-P	-7.67	1.51	1.61
25	BB	1432	G	O3'-P	-7.67	1.51	1.61
3	A1	1419	G	C2-N2	-7.66	1.26	1.34
25	BB	2618	G	C2-N2	-7.66	1.26	1.34
3	A1	528	C	C4-N4	-7.66	1.27	1.33
25	BB	428	A	N7-C5	7.66	1.43	1.39
3	A1	22	G	P-O5'	-7.66	1.52	1.59
3	A1	539	A	C6-N6	-7.66	1.27	1.33
25	BB	1564	C	C4-N4	-7.65	1.27	1.33
25	BB	1728	C	C4-N4	-7.65	1.27	1.33
3	A1	377	G	C2-N2	-7.65	1.26	1.34
3	A1	728	A	C6-N6	-7.65	1.27	1.33
3	A1	1078	U	P-O5'	-7.65	1.52	1.59
3	A1	1405	G	C2-N2	-7.64	1.26	1.34
25	BB	1091	G	C2-N2	-7.64	1.26	1.34
25	BB	2753	A	C6-N1	-7.64	1.30	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	573	A	N3-C4	7.64	1.39	1.34
25	BB	2606	C	C4-N4	-7.64	1.27	1.33
25	BB	1237	A	C6-N6	-7.63	1.27	1.33
3	A1	663	A	C6-N1	-7.63	1.30	1.35
25	BB	655	A	N7-C5	7.63	1.43	1.39
3	A1	63	C	N3-C4	-7.62	1.28	1.33
25	BB	1601	G	P-O5'	7.62	1.67	1.59
3	A1	431	A	O3'-P	-7.62	1.52	1.61
25	BB	2230	G	N1-C2	-7.62	1.31	1.37
3	A1	817	C	P-O5'	7.62	1.67	1.59
3	A1	1452	C	C4-N4	-7.62	1.27	1.33
1	AA	29	A	C6-N1	-7.61	1.30	1.35
3	A1	517	G	C2-N2	-7.61	1.26	1.34
25	BB	1027	A	P-O5'	7.61	1.67	1.59
3	A1	846	G	C2-N2	-7.60	1.26	1.34
25	BB	489	G	N1-C2	-7.60	1.31	1.37
3	A1	181	A	P-O5'	-7.60	1.52	1.59
25	BB	179	C	N3-C4	-7.59	1.28	1.33
25	BB	2846	G	C2-N2	-7.59	1.26	1.34
25	BB	1404	C	C4-N4	-7.59	1.27	1.33
25	BB	134	G	N1-C2	-7.59	1.31	1.37
25	BB	8	C	C4-N4	-7.58	1.27	1.33
3	A1	556	C	C4-N4	-7.58	1.27	1.33
25	BB	2648	G	P-O5'	7.58	1.67	1.59
25	BB	669	G	N1-C2	-7.58	1.31	1.37
3	A1	35	G	C2-N2	-7.57	1.26	1.34
25	BB	229	C	P-O5'	-7.57	1.52	1.59
3	A1	587	G	C2-N2	-7.57	1.26	1.34
25	BB	1003	G	C2-N2	-7.56	1.26	1.34
3	A1	1097	C	C4-N4	-7.56	1.27	1.33
3	A1	722	G	O3'-P	-7.55	1.52	1.61
25	BB	804	A	C6-N1	-7.55	1.30	1.35
25	BB	1053	C	O3'-P	-7.55	1.52	1.61
25	BB	1146	C	C4-N4	-7.55	1.27	1.33
25	BB	1957	C	C4-N4	-7.55	1.27	1.33
25	BB	1863	G	C2-N2	-7.54	1.27	1.34
3	A1	669	G	C2-N2	-7.54	1.27	1.34
1	AA	14	A	C6-N1	-7.54	1.30	1.35
25	BB	1416	G	C2-N2	-7.54	1.27	1.34
25	BB	1507	C	C4-N4	-7.54	1.27	1.33
25	BB	2103	C	N3-C4	-7.54	1.28	1.33
25	BB	2395	C	C4-N4	-7.53	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1764	C	P-O5'	7.53	1.67	1.59
3	A1	75	G	O3'-P	-7.53	1.52	1.61
1	AE	24	G	O3'-P	-7.53	1.52	1.61
25	BB	2805	C	N3-C4	-7.52	1.28	1.33
3	A1	912	C	O3'-P	-7.52	1.52	1.61
25	BB	1585	C	C4-N4	-7.52	1.27	1.33
25	BB	2316	G	C2-N2	-7.52	1.27	1.34
25	BB	1459	G	C5-C6	7.51	1.49	1.42
1	AP	36	A	C4'-C3'	7.51	1.61	1.53
3	A1	442	G	C6-N1	-7.51	1.34	1.39
3	A1	454	G	C2-N2	-7.51	1.27	1.34
3	A1	40	C	C4-N4	-7.51	1.27	1.33
25	BB	350	G	N1-C2	-7.51	1.31	1.37
3	A1	517	G	O3'-P	-7.50	1.52	1.61
25	BB	1942	C	O3'-P	7.50	1.70	1.61
25	BB	180	G	C2-N2	-7.50	1.27	1.34
3	A1	204	G	C2-N2	-7.50	1.27	1.34
3	A1	455	G	N3-C4	7.50	1.40	1.35
3	A1	222	C	C4-N4	-7.50	1.27	1.33
25	BB	2641	G	N1-C2	-7.50	1.31	1.37
1	AP	69	U	C2-N3	-7.49	1.32	1.37
3	A1	999	C	C4-N4	-7.49	1.27	1.33
3	A1	1024	G	O3'-P	-7.49	1.52	1.61
3	A1	942	G	C2-N2	-7.49	1.27	1.34
3	A1	1188	A	N7-C5	7.49	1.43	1.39
3	A1	1282	C	C4-N4	-7.49	1.27	1.33
25	BB	1557	C	C4-N4	-7.49	1.27	1.33
3	A1	357	G	N1-C2	-7.48	1.31	1.37
3	A1	1006	G	P-O5'	-7.48	1.52	1.59
3	A1	193	C	C4-N4	-7.47	1.27	1.33
25	BB	2658	C	O3'-P	-7.47	1.52	1.61
3	A1	1316	G	N7-C5	7.47	1.43	1.39
25	BB	1805	A	N7-C5	7.47	1.43	1.39
1	AA	75	C	C2-N3	7.46	1.41	1.35
3	A1	620	C	N3-C4	-7.46	1.28	1.33
25	BB	818	G	C2-N2	-7.46	1.27	1.34
25	BB	880	G	N7-C5	7.46	1.43	1.39
25	BB	2866	U	P-O5'	7.46	1.67	1.59
3	A1	82	G	C2-N2	-7.45	1.27	1.34
1	AA	3	G	N7-C5	7.45	1.43	1.39
25	BB	1925	C	C4-N4	-7.45	1.27	1.33
25	BB	2704	C	N3-C4	-7.45	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	970	C	C4-N4	-7.45	1.27	1.33
25	BB	605	G	N1-C2	-7.44	1.31	1.37
1	AA	57	G	N1-C2	-7.44	1.31	1.37
3	A1	1399	C	N3-C4	-7.43	1.28	1.33
25	BB	1736	U	P-O5'	7.43	1.67	1.59
3	A1	688	G	C2-N2	-7.43	1.27	1.34
25	BB	2408	U	O3'-P	-7.43	1.52	1.61
3	A1	926	G	O3'-P	-7.43	1.52	1.61
25	BB	308	G	N1-C2	-7.42	1.31	1.37
25	BB	2785	C	C4-N4	-7.42	1.27	1.33
25	BB	1037	G	C2-N2	-7.42	1.27	1.34
3	A1	170	U	O3'-P	7.42	1.70	1.61
3	A1	212	G	N1-C2	-7.42	1.31	1.37
3	A1	601	G	N1-C2	-7.42	1.31	1.37
3	A1	199	A	P-O5'	-7.42	1.52	1.59
25	BB	2900	A	N3-C4	7.41	1.39	1.34
3	A1	362	G	P-O5'	-7.41	1.52	1.59
25	BB	392	U	O3'-P	-7.41	1.52	1.61
25	BB	2824	C	C4-N4	-7.41	1.27	1.33
25	BB	1869	G	O3'-P	-7.41	1.52	1.61
49	BZ	122	ARG	CZ-NH1	-7.41	1.23	1.33
25	BB	873	C	N3-C4	-7.40	1.28	1.33
25	BB	134	G	P-O5'	7.40	1.67	1.59
24	BA	18	G	O3'-P	-7.40	1.52	1.61
25	BB	1981	A	C3'-C2'	7.40	1.61	1.52
25	BB	2044	C	C4-N4	-7.39	1.27	1.33
3	A1	990	C	N3-C4	-7.39	1.28	1.33
25	BB	652	U	O3'-P	7.39	1.70	1.61
25	BB	954	G	N1-C2	-7.39	1.31	1.37
25	BB	2148	G	P-O5'	7.38	1.67	1.59
3	A1	1058	G	C2-N2	-7.38	1.27	1.34
25	BB	1870	C	C4-N4	-7.38	1.27	1.33
3	A1	192	A	N7-C5	7.38	1.43	1.39
3	A1	993	G	C3'-C2'	7.37	1.61	1.52
3	A1	1210	C	C4-N4	-7.37	1.27	1.33
25	BB	1223	G	N7-C5	7.37	1.43	1.39
1	AA	28	C	N3-C4	-7.37	1.28	1.33
3	A1	1379	G	P-O5'	-7.37	1.52	1.59
3	A1	269	C	C4-N4	-7.36	1.27	1.33
25	BB	1150	C	N3-C4	-7.36	1.28	1.33
25	BB	1388	G	N1-C2	-7.36	1.31	1.37
25	BB	1875	G	C2-N2	-7.36	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1916	A	N7-C5	7.36	1.43	1.39
3	A1	958	A	N7-C5	7.36	1.43	1.39
3	A1	64	G	C2-N2	-7.36	1.27	1.34
3	A1	76	G	C2-N2	-7.36	1.27	1.34
25	BB	1893	C	P-O5'	7.36	1.67	1.59
25	BB	2860	A	N3-C4	7.36	1.39	1.34
3	A1	1254	A	N3-C4	7.36	1.39	1.34
25	BB	2006	C	N3-C4	-7.35	1.28	1.33
25	BB	1721	G	C6-N1	-7.35	1.34	1.39
25	BB	110	G	C2-N2	-7.35	1.27	1.34
25	BB	2667	C	C4-N4	-7.35	1.27	1.33
3	A1	528	C	N1-C6	7.34	1.41	1.37
25	BB	2138	G	C2-N2	-7.34	1.27	1.34
25	BB	2379	G	N1-C2	-7.34	1.31	1.37
25	BB	249	C	C4-N4	-7.34	1.27	1.33
25	BB	2529	G	C5-C6	7.34	1.49	1.42
25	BB	1383	A	N7-C5	7.34	1.43	1.39
3	A1	1115	U	P-O5'	-7.34	1.52	1.59
3	A1	1120	C	C4-N4	-7.33	1.27	1.33
3	A1	1041	G	N7-C5	7.33	1.43	1.39
25	BB	2214	C	P-O5'	-7.33	1.52	1.59
3	A1	538	G	N1-C2	-7.33	1.31	1.37
3	A1	791	G	N7-C5	7.33	1.43	1.39
25	BB	1102	C	P-O5'	7.33	1.67	1.59
25	BB	1597	A	C6-N1	-7.32	1.30	1.35
25	BB	1625	C	N3-C4	-7.32	1.28	1.33
3	A1	134	G	C2-N2	-7.32	1.27	1.34
25	BB	393	C	N3-C4	-7.32	1.28	1.33
25	BB	2896	C	C4-N4	-7.32	1.27	1.33
25	BB	1087	G	C2-N2	-7.32	1.27	1.34
3	A1	1108	G	C2-N2	-7.32	1.27	1.34
25	BB	945	A	N7-C5	7.32	1.43	1.39
25	BB	1583	A	N3-C4	7.32	1.39	1.34
25	BB	1726	C	C4-N4	-7.32	1.27	1.33
25	BB	1428	C	N3-C4	-7.31	1.28	1.33
25	BB	1286	A	C6-N6	-7.31	1.28	1.33
25	BB	2666	C	N3-C4	-7.31	1.28	1.33
3	A1	794	A	O3'-P	-7.31	1.52	1.61
25	BB	1721	G	N1-C2	-7.31	1.31	1.37
25	BB	212	G	C2-N2	-7.30	1.27	1.34
25	BB	814	C	C4-N4	-7.30	1.27	1.33
3	A1	301	G	C2-N2	-7.30	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	73	A	N3-C4	7.30	1.39	1.34
3	A1	999	C	P-O5'	-7.29	1.52	1.59
3	A1	62	U	P-O5'	7.29	1.67	1.59
3	A1	674	G	C2-N2	-7.29	1.27	1.34
25	BB	2619	C	C4-N4	-7.29	1.27	1.33
25	BB	1942	C	N3-C4	-7.29	1.28	1.33
7	AF	100	ARG	CZ-NH2	-7.29	1.23	1.33
3	A1	203	G	P-O5'	7.29	1.67	1.59
24	BA	10	G	P-O5'	-7.29	1.52	1.59
3	A1	645	G	C2-N2	-7.29	1.27	1.34
25	BB	260	G	O3'-P	-7.28	1.52	1.61
25	BB	2258	C	C4-N4	-7.28	1.27	1.33
3	A1	679	C	C4-N4	-7.28	1.27	1.33
25	BB	655	A	P-O5'	7.28	1.67	1.59
25	BB	2721	A	P-O5'	-7.28	1.52	1.59
2	AM	6	U	O3'-P	-7.27	1.52	1.61
3	A1	1238	A	N3-C4	7.27	1.39	1.34
1	AA	24	G	C2-N2	-7.27	1.27	1.34
3	A1	237	G	C2-N2	-7.27	1.27	1.34
3	A1	1024	G	C2-N2	-7.27	1.27	1.34
3	A1	549	C	C4-N4	-7.27	1.27	1.33
25	BB	2402	U	C2-N3	-7.26	1.32	1.37
25	BB	93	G	N1-C2	-7.26	1.31	1.37
25	BB	1030	C	C4-N4	-7.26	1.27	1.33
1	AP	23	A	N3-C4	7.26	1.39	1.34
24	BA	38	C	C4-N4	-7.25	1.27	1.33
25	BB	1668	A	N7-C5	7.25	1.43	1.39
3	A1	1438	G	N7-C5	7.25	1.43	1.39
25	BB	2599	G	N7-C5	7.25	1.43	1.39
3	A1	109	A	C6-N1	-7.25	1.30	1.35
25	BB	2193	G	C2-N2	-7.25	1.27	1.34
25	BB	2764	A	O3'-P	-7.25	1.52	1.61
25	BB	1420	A	P-O5'	7.24	1.67	1.59
25	BB	707	G	N1-C2	-7.24	1.31	1.37
3	A1	1520	C	N3-C4	-7.24	1.28	1.33
3	A1	946	A	C6-N1	-7.24	1.30	1.35
25	BB	2307	G	O3'-P	-7.23	1.52	1.61
3	A1	1250	A	C6-N1	-7.23	1.30	1.35
25	BB	1085	A	C6-N1	-7.23	1.30	1.35
3	A1	1369	C	N3-C4	-7.23	1.28	1.33
25	BB	2557	G	C2-N2	-7.23	1.27	1.34
3	A1	1030	U	O3'-P	-7.23	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1280	G	P-O5'	-7.23	1.52	1.59
25	BB	825	A	C6-N6	-7.22	1.28	1.33
25	BB	707	G	C2-N2	-7.22	1.27	1.34
25	BB	2835	A	P-O5'	-7.21	1.52	1.59
25	BB	2599	G	C2-N2	-7.21	1.27	1.34
25	BB	1658	C	C4-N4	-7.21	1.27	1.33
3	A1	187	G	C2-N2	-7.21	1.27	1.34
25	BB	2125	G	N1-C2	-7.21	1.31	1.37
3	A1	145	G	P-O5'	7.20	1.67	1.59
25	BB	544	C	N3-C4	-7.20	1.28	1.33
3	A1	496	A	N3-C4	7.20	1.39	1.34
25	BB	1496	A	C6-N6	-7.20	1.28	1.33
25	BB	1907	G	C2-N2	-7.20	1.27	1.34
3	A1	1134	G	N1-C2	-7.20	1.31	1.37
25	BB	1207	C	C4-N4	-7.20	1.27	1.33
3	A1	688	G	C6-N1	-7.20	1.34	1.39
25	BB	1109	C	N3-C4	-7.20	1.28	1.33
3	A1	803	G	C2-N2	-7.20	1.27	1.34
25	BB	537	G	N7-C5	7.20	1.43	1.39
25	BB	1453	A	N3-C4	7.20	1.39	1.34
1	AA	45	G	N1-C2	-7.19	1.31	1.37
25	BB	2722	G	O3'-P	-7.19	1.52	1.61
3	A1	888	G	N1-C2	-7.19	1.31	1.37
3	A1	1491	G	C6-N1	-7.19	1.34	1.39
3	A1	1112	C	C4-N4	-7.18	1.27	1.33
1	AP	71	G	N7-C5	7.18	1.43	1.39
3	A1	100	G	O3'-P	-7.18	1.52	1.61
3	A1	542	G	C2-N2	-7.18	1.27	1.34
3	A1	349	A	C6-N1	-7.18	1.30	1.35
25	BB	211	C	C4-N4	-7.18	1.27	1.33
25	BB	620	G	C2-N2	-7.18	1.27	1.34
3	A1	1183	U	P-O5'	-7.17	1.52	1.59
25	BB	527	C	C4-N4	-7.17	1.27	1.33
25	BB	2835	A	N3-C4	7.17	1.39	1.34
3	A1	963	G	C2-N2	-7.17	1.27	1.34
3	A1	1160	G	C6-N1	-7.17	1.34	1.39
25	BB	1986	C	N3-C4	-7.17	1.28	1.33
3	A1	363	A	C6-N1	-7.17	1.30	1.35
3	A1	50	A	N3-C4	7.16	1.39	1.34
3	A1	280	C	P-O5'	-7.16	1.52	1.59
25	BB	561	G	C2-N2	-7.16	1.27	1.34
25	BB	1428	C	C4-N4	-7.16	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	877	G	O3'-P	-7.16	1.52	1.61
3	A1	779	C	C4-N4	-7.16	1.27	1.33
1	AP	60	C	C4-N4	-7.15	1.27	1.33
3	A1	1009	U	P-O5'	-7.15	1.52	1.59
24	BA	95	U	O3'-P	-7.15	1.52	1.61
3	A1	954	G	C2-N2	-7.15	1.27	1.34
25	BB	10	A	N7-C5	7.15	1.43	1.39
25	BB	97	C	C4-N4	-7.15	1.27	1.33
25	BB	1103	A	C6-N1	-7.15	1.30	1.35
1	AE	13	C	C4-N4	-7.15	1.27	1.33
1	AE	30	G	C2-N2	-7.14	1.27	1.34
3	A1	677	U	O3'-P	-7.14	1.52	1.61
24	BA	26	C	C4-N4	-7.14	1.27	1.33
25	BB	1632	A	C6-N1	-7.14	1.30	1.35
25	BB	2737	G	N1-C2	-7.14	1.32	1.37
25	BB	1317	G	N1-C2	-7.14	1.32	1.37
3	A1	454	G	C6-N1	-7.14	1.34	1.39
3	A1	746	A	N7-C5	7.14	1.43	1.39
3	A1	844	G	C2-N2	-7.14	1.27	1.34
25	BB	206	U	P-O5'	-7.13	1.52	1.59
25	BB	2464	G	N7-C5	7.13	1.43	1.39
1	AP	8	U	P-O5'	7.13	1.66	1.59
3	A1	529	G	C2-N2	-7.13	1.27	1.34
3	A1	746	A	N3-C4	7.13	1.39	1.34
25	BB	334	C	C4-N4	-7.13	1.27	1.33
1	AA	30	G	C2-N2	-7.13	1.27	1.34
25	BB	2819	G	N1-C2	-7.13	1.32	1.37
25	BB	281	C	C4-N4	-7.12	1.27	1.33
3	A1	1325	C	N3-C4	-7.12	1.28	1.33
3	A1	143	A	C6-N1	-7.12	1.30	1.35
25	BB	2899	A	N7-C5	7.12	1.43	1.39
1	AP	9	A	N7-C5	7.11	1.43	1.39
25	BB	1869	G	N3-C4	7.11	1.40	1.35
25	BB	1031	G	C2-N2	-7.11	1.27	1.34
3	A1	418	C	C4-N4	-7.11	1.27	1.33
3	A1	639	G	C2-N2	-7.11	1.27	1.34
3	A1	1340	A	O3'-P	7.11	1.69	1.61
25	BB	1026	G	N7-C5	7.10	1.43	1.39
25	BB	1305	C	P-O5'	7.10	1.66	1.59
25	BB	550	C	N3-C4	-7.10	1.28	1.33
25	BB	2364	C	C4-N4	-7.10	1.27	1.33
3	A1	964	A	N7-C5	7.10	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	936	C	O3'-P	-7.10	1.52	1.61
25	BB	2186	G	C6-N1	-7.10	1.34	1.39
1	AA	61	C	N3-C4	-7.09	1.28	1.33
3	A1	149	A	N7-C5	7.09	1.43	1.39
25	BB	1837	C	C4-N4	-7.09	1.27	1.33
25	BB	1882	U	O3'-P	-7.09	1.52	1.61
3	A1	234	C	C4-N4	-7.09	1.27	1.33
25	BB	541	A	N3-C4	7.09	1.39	1.34
25	BB	2208	C	N3-C4	-7.09	1.28	1.33
25	BB	1565	C	C4-N4	-7.09	1.27	1.33
25	BB	31	C	N3-C4	-7.09	1.28	1.33
3	A1	481	G	C2-N2	-7.08	1.27	1.34
25	BB	105	C	C4-N4	-7.08	1.27	1.33
25	BB	378	C	C4-N4	-7.08	1.27	1.33
25	BB	1857	G	N7-C5	7.08	1.43	1.39
3	A1	1096	C	C4-N4	-7.08	1.27	1.33
3	A1	1188	A	C6-N1	-7.08	1.30	1.35
25	BB	2591	C	C4-N4	-7.08	1.27	1.33
3	A1	952	U	N1-C2	7.07	1.45	1.38
25	BB	802	A	N7-C5	7.07	1.43	1.39
25	BB	17	G	C2-N2	-7.07	1.27	1.34
25	BB	1593	A	N7-C5	7.07	1.43	1.39
25	BB	1783	A	C6-N1	-7.07	1.30	1.35
3	A1	242	G	C2-N2	-7.06	1.27	1.34
1	AA	29	A	P-O5'	-7.06	1.52	1.59
25	BB	1884	G	P-O5'	7.06	1.66	1.59
25	BB	2065	C	C4-N4	-7.06	1.27	1.33
3	A1	350	G	N1-C2	-7.06	1.32	1.37
3	A1	67	C	C4-N4	-7.05	1.27	1.33
25	BB	440	C	C4-N4	-7.05	1.27	1.33
25	BB	647	G	C2-N2	-7.05	1.27	1.34
25	BB	2595	G	N7-C5	7.05	1.43	1.39
25	BB	2365	G	N1-C2	-7.05	1.32	1.37
3	A1	808	C	O3'-P	-7.05	1.52	1.61
25	BB	742	A	P-O5'	7.05	1.66	1.59
25	BB	1974	C	C4-N4	-7.05	1.27	1.33
25	BB	440	C	N3-C4	-7.04	1.29	1.33
25	BB	2339	C	O3'-P	-7.04	1.52	1.61
3	A1	482	A	O3'-P	-7.04	1.52	1.61
25	BB	66	C	C4-N4	-7.04	1.27	1.33
3	A1	1043	G	C2-N2	-7.03	1.27	1.34
1	AA	3	G	N9-C4	7.03	1.43	1.38

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	613	C	C4-N4	-7.03	1.27	1.33
25	BB	866	A	P-O5'	-7.03	1.52	1.59
25	BB	1337	G	C2-N2	-7.03	1.27	1.34
25	BB	1637	A	C6-N1	-7.03	1.30	1.35
25	BB	2581	G	N1-C2	-7.03	1.32	1.37
1	AA	15	G	C2-N2	-7.03	1.27	1.34
25	BB	1261	C	N3-C4	-7.03	1.29	1.33
3	A1	738	C	C4-N4	-7.03	1.27	1.33
25	BB	888	C	N1-C6	-7.03	1.32	1.37
1	AA	10	G	C6-N1	-7.02	1.34	1.39
25	BB	1218	G	N1-C2	-7.02	1.32	1.37
25	BB	1483	G	C2-N2	-7.02	1.27	1.34
3	A1	1090	U	N3-C4	-7.02	1.32	1.38
25	BB	47	C	C4-N4	-7.02	1.27	1.33
3	A1	337	G	N7-C5	7.02	1.43	1.39
25	BB	1688	U	P-O5'	-7.01	1.52	1.59
3	A1	105	G	C6-N1	-7.01	1.34	1.39
1	AE	45	G	C2-N2	-7.01	1.27	1.34
3	A1	28	A	N3-C4	7.01	1.39	1.34
3	A1	446	G	C2-N2	-7.01	1.27	1.34
25	BB	364	C	P-O5'	7.01	1.66	1.59
25	BB	2856	A	C6-N6	-7.01	1.28	1.33
3	A1	204	G	N1-C2	-7.00	1.32	1.37
3	A1	233	C	C4-N4	-7.00	1.27	1.33
25	BB	223	A	N7-C5	7.00	1.43	1.39
25	BB	2371	G	N7-C5	7.00	1.43	1.39
25	BB	1037	G	O3'-P	-7.00	1.52	1.61
3	A1	468	A	N7-C5	7.00	1.43	1.39
3	A1	998	C	C4-N4	-7.00	1.27	1.33
25	BB	216	A	C6-N1	-7.00	1.30	1.35
25	BB	347	A	N7-C5	7.00	1.43	1.39
25	BB	540	C	C4-N4	-7.00	1.27	1.33
25	BB	1617	C	C4-N4	-7.00	1.27	1.33
25	BB	1330	C	N3-C4	-7.00	1.29	1.33
25	BB	1876	A	N7-C5	6.99	1.43	1.39
25	BB	2537	U	O3'-P	-6.99	1.52	1.61
3	A1	175	C	C4-N4	-6.99	1.27	1.33
3	A1	454	G	P-O5'	-6.99	1.52	1.59
25	BB	378	C	N3-C4	-6.99	1.29	1.33
25	BB	2073	C	O3'-P	-6.99	1.52	1.61
3	A1	812	G	N1-C2	-6.98	1.32	1.37
25	BB	718	A	O3'-P	-6.98	1.52	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	503	C	C4-N4	-6.98	1.27	1.33
3	A1	65	A	O3'-P	-6.97	1.52	1.61
25	BB	2053	G	N1-C2	-6.97	1.32	1.37
3	A1	302	G	P-O5'	-6.97	1.52	1.59
3	A1	504	C	C4-N4	-6.97	1.27	1.33
25	BB	1761	C	N3-C4	-6.97	1.29	1.33
25	BB	1285	A	P-O5'	6.97	1.66	1.59
25	BB	1315	C	O3'-P	-6.97	1.52	1.61
25	BB	2469	A	C6-N1	-6.97	1.30	1.35
3	A1	488	C	C4-N4	-6.96	1.27	1.33
3	A1	606	G	C2-N2	-6.96	1.27	1.34
24	BA	3	C	C4-N4	-6.96	1.27	1.33
25	BB	481	G	C2-N2	-6.96	1.27	1.34
25	BB	2484	G	C2-N2	-6.96	1.27	1.34
3	A1	790	A	P-O5'	6.96	1.66	1.59
25	BB	1706	C	C4-N4	-6.96	1.27	1.33
25	BB	2270	A	N7-C5	6.95	1.43	1.39
3	A1	83	C	N1-C6	6.95	1.41	1.37
3	A1	241	G	N7-C5	6.95	1.43	1.39
3	A1	1196	A	C6-N6	-6.95	1.28	1.33
25	BB	1960	A	N7-C5	6.95	1.43	1.39
3	A1	215	C	C4-N4	-6.94	1.27	1.33
25	BB	2661	G	C2-N2	-6.94	1.27	1.34
25	BB	1359	A	N3-C4	6.94	1.39	1.34
3	A1	341	C	N1-C6	6.94	1.41	1.37
25	BB	550	C	C4-N4	-6.94	1.27	1.33
25	BB	1408	G	C2-N2	-6.94	1.27	1.34
25	BB	1575	C	C4-N4	-6.94	1.27	1.33
1	AE	18	G	C2-N2	-6.93	1.27	1.34
3	A1	856	C	C4-N4	-6.93	1.27	1.33
3	A1	79	G	N1-C2	-6.93	1.32	1.37
3	A1	200	G	C2-N2	-6.93	1.27	1.34
1	AA	51	G	C2-N2	-6.92	1.27	1.34
3	A1	616	G	O3'-P	-6.92	1.52	1.61
3	A1	1371	G	C6-N1	-6.92	1.34	1.39
3	A1	1445	U	N1-C2	6.92	1.44	1.38
25	BB	86	G	O3'-P	-6.92	1.52	1.61
3	A1	1488	G	N1-C2	-6.92	1.32	1.37
25	BB	752	A	O3'-P	-6.92	1.52	1.61
25	BB	944	C	C4-N4	-6.92	1.27	1.33
25	BB	2610	C	C4-N4	-6.92	1.27	1.33
25	BB	2794	C	N3-C4	-6.92	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	381	C	C4-C5	-6.92	1.37	1.43
3	A1	1044	A	C6-N1	-6.92	1.30	1.35
25	BB	2136	G	C2-N2	-6.92	1.27	1.34
25	BB	2351	G	C2-N2	-6.92	1.27	1.34
3	A1	461	A	N3-C4	6.92	1.39	1.34
25	BB	1533	C	C4-N4	-6.92	1.27	1.33
3	A1	1138	G	N7-C5	6.92	1.43	1.39
25	BB	900	A	C6-N6	-6.92	1.28	1.33
3	A1	109	A	N7-C5	6.91	1.43	1.39
3	A1	821	G	N7-C5	6.91	1.43	1.39
25	BB	1357	C	P-O5'	6.91	1.66	1.59
25	BB	2851	A	C6-N1	-6.91	1.30	1.35
3	A1	628	G	N7-C5	6.91	1.43	1.39
25	BB	1651	G	N1-C2	-6.91	1.32	1.37
25	BB	2895	G	C2-N2	-6.91	1.27	1.34
1	AP	42	G	N1-C2	-6.91	1.32	1.37
25	BB	2228	G	C2-N2	-6.91	1.27	1.34
3	A1	1152	A	C6-N6	-6.91	1.28	1.33
25	BB	1558	C	C4-N4	-6.91	1.27	1.33
3	A1	785	G	N7-C5	6.90	1.43	1.39
1	AP	22	G	C2-N2	-6.90	1.27	1.34
25	BB	740	C	N3-C4	-6.90	1.29	1.33
3	A1	749	A	O3'-P	-6.90	1.52	1.61
3	A1	906	A	C6-N1	-6.90	1.30	1.35
3	A1	496	A	N7-C5	6.90	1.43	1.39
25	BB	471	A	N7-C5	6.90	1.43	1.39
3	A1	736	C	N3-C4	-6.89	1.29	1.33
3	A1	460	A	C6-N1	-6.89	1.30	1.35
25	BB	1125	G	N1-C2	-6.89	1.32	1.37
3	A1	90	C	N3-C4	-6.89	1.29	1.33
3	A1	469	C	N3-C4	-6.89	1.29	1.33
25	BB	1292	G	N1-C2	-6.89	1.32	1.37
3	A1	359	G	C2-N2	-6.88	1.27	1.34
3	A1	1305	G	N1-C2	-6.88	1.32	1.37
3	A1	1451	U	N1-C2	6.88	1.44	1.38
25	BB	135	U	O3'-P	-6.88	1.52	1.61
3	A1	1033	G	P-O5'	-6.88	1.52	1.59
25	BB	2632	A	C6-N6	-6.88	1.28	1.33
25	BB	1507	C	P-O5'	6.88	1.66	1.59
3	A1	123	U	O3'-P	-6.87	1.52	1.61
3	A1	547	A	C6-N6	-6.87	1.28	1.33
25	BB	2635	A	N7-C5	6.87	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2567	G	N1-C2	-6.87	1.32	1.37
25	BB	1157	G	N3-C4	6.87	1.40	1.35
25	BB	2120	G	N3-C4	6.87	1.40	1.35
25	BB	2253	G	N1-C2	-6.87	1.32	1.37
3	A1	453	G	N7-C5	6.87	1.43	1.39
25	BB	1889	A	N3-C4	6.87	1.39	1.34
25	BB	2380	C	C4-N4	-6.87	1.27	1.33
3	A1	948	C	N3-C4	-6.87	1.29	1.33
3	A1	1044	A	P-O5'	-6.86	1.52	1.59
25	BB	2657	A	N7-C5	6.86	1.43	1.39
25	BB	5	A	N7-C5	6.86	1.43	1.39
3	A1	857	C	C4-N4	-6.86	1.27	1.33
25	BB	2359	C	N3-C4	-6.86	1.29	1.33
25	BB	2630	G	N7-C5	6.86	1.43	1.39
3	A1	356	A	N7-C5	6.86	1.43	1.39
25	BB	1451	C	N1-C6	6.85	1.41	1.37
3	A1	844	G	N1-C2	-6.85	1.32	1.37
3	A1	611	C	C4-N4	-6.85	1.27	1.33
25	BB	1478	G	O3'-P	-6.85	1.52	1.61
3	A1	1370	G	C2-N2	-6.85	1.27	1.34
24	BA	11	C	N3-C4	-6.85	1.29	1.33
25	BB	898	C	C4-N4	-6.85	1.27	1.33
25	BB	2497	A	C6-N6	-6.85	1.28	1.33
1	AA	48	C	N3-C4	-6.84	1.29	1.33
3	A1	993	G	C2-N2	-6.84	1.27	1.34
25	BB	186	G	N3-C4	6.84	1.40	1.35
25	BB	1360	G	C2-N2	-6.84	1.27	1.34
3	A1	555	U	O3'-P	-6.84	1.52	1.61
24	BA	36	C	C4-N4	-6.84	1.27	1.33
25	BB	1162	G	N1-C2	-6.84	1.32	1.37
25	BB	1512	C	C4-N4	-6.84	1.27	1.33
25	BB	1626	A	N7-C5	6.84	1.43	1.39
25	BB	2732	G	C6-N1	-6.84	1.34	1.39
3	A1	1184	G	N7-C5	6.84	1.43	1.39
25	BB	297	G	C2-N2	-6.84	1.27	1.34
25	BB	1550	C	C4-N4	-6.84	1.27	1.33
25	BB	394	C	N3-C4	-6.84	1.29	1.33
25	BB	935	C	C4-N4	-6.84	1.27	1.33
25	BB	2603	G	P-O5'	-6.83	1.52	1.59
25	BB	1486	U	O3'-P	-6.83	1.52	1.61
25	BB	2715	C	C4-N4	-6.83	1.27	1.33
25	BB	1788	C	N3-C4	-6.83	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	708	C	O3'-P	-6.83	1.52	1.61
3	A1	815	A	C6-N6	-6.83	1.28	1.33
3	A1	972	C	N3-C4	-6.83	1.29	1.33
25	BB	961	C	C4-N4	-6.83	1.27	1.33
25	BB	455	C	C4-N4	-6.82	1.27	1.33
3	A1	833	G	P-O5'	-6.82	1.52	1.59
3	A1	931	C	C4-N4	-6.82	1.27	1.33
3	A1	1316	G	C2-N2	-6.82	1.27	1.34
25	BB	2633	G	N3-C4	6.82	1.40	1.35
25	BB	2157	G	N1-C2	-6.81	1.32	1.37
3	A1	15	G	C2-N2	-6.81	1.27	1.34
3	A1	1448	C	C4-N4	-6.81	1.27	1.33
1	AP	61	C	C4-N4	-6.81	1.27	1.33
25	BB	2832	U	O3'-P	-6.81	1.52	1.61
3	A1	858	G	N7-C5	6.81	1.43	1.39
25	BB	825	A	N3-C4	6.81	1.39	1.34
25	BB	1310	G	N1-C2	-6.81	1.32	1.37
3	A1	357	G	C2-N2	-6.80	1.27	1.34
3	A1	578	C	N3-C4	-6.80	1.29	1.33
25	BB	438	G	C6-N1	-6.80	1.34	1.39
25	BB	1913	A	N7-C5	6.80	1.43	1.39
3	A1	1492	A	C5-C6	6.80	1.47	1.41
25	BB	1600	C	C4-N4	-6.80	1.27	1.33
3	A1	899	C	C4-N4	-6.80	1.27	1.33
25	BB	2748	A	C6-N1	-6.80	1.30	1.35
25	BB	1561	C	C4-N4	-6.80	1.27	1.33
25	BB	1912	A	P-O5'	6.79	1.66	1.59
3	A1	206	C	N3-C4	-6.79	1.29	1.33
25	BB	98	G	C2-N2	-6.79	1.27	1.34
25	BB	751	A	N9-C4	6.79	1.42	1.37
25	BB	347	A	C6-N1	-6.79	1.30	1.35
25	BB	940	G	C2-N2	-6.79	1.27	1.34
25	BB	2874	C	C4-N4	-6.79	1.27	1.33
3	A1	1346	A	N7-C5	6.79	1.43	1.39
3	A1	537	G	N1-C2	-6.79	1.32	1.37
25	BB	1901	A	N7-C5	6.79	1.43	1.39
25	BB	252	G	C2-N2	-6.78	1.27	1.34
3	A1	354	G	P-O5'	-6.78	1.52	1.59
3	A1	1360	A	N7-C5	6.78	1.43	1.39
3	A1	403	C	C4-N4	-6.78	1.27	1.33
3	A1	394	G	O3'-P	-6.78	1.53	1.61
25	BB	2161	C	P-O5'	-6.78	1.52	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	514	C	C4-N4	-6.77	1.27	1.33
25	BB	2652	C	P-O5'	6.77	1.66	1.59
3	A1	579	A	C6-N1	-6.77	1.30	1.35
3	A1	1216	A	C6-N6	-6.77	1.28	1.33
25	BB	2190	G	C2-N2	-6.77	1.27	1.34
3	A1	732	C	C4-N4	-6.77	1.27	1.33
25	BB	1962	C	O3'-P	-6.77	1.53	1.61
3	A1	211	G	P-O5'	-6.77	1.52	1.59
3	A1	1204	A	C6-N1	-6.77	1.30	1.35
3	A1	165	G	C2-N2	-6.77	1.27	1.34
25	BB	520	G	C2-N2	-6.77	1.27	1.34
3	A1	1071	C	C4-N4	-6.76	1.27	1.33
3	A1	1156	G	N3-C4	6.76	1.40	1.35
25	BB	2112	G	N1-C2	-6.76	1.32	1.37
1	AE	45	G	N1-C2	-6.76	1.32	1.37
3	A1	1048	G	P-O5'	6.76	1.66	1.59
25	BB	544	C	C4-N4	-6.76	1.27	1.33
25	BB	881	G	C2-N2	-6.76	1.27	1.34
25	BB	1852	U	P-O5'	-6.76	1.52	1.59
3	A1	728	A	O3'-P	-6.76	1.53	1.61
25	BB	2045	C	C4-N4	-6.76	1.27	1.33
25	BB	2577	A	N7-C5	6.76	1.43	1.39
25	BB	350	G	P-O5'	6.76	1.66	1.59
25	BB	1089	A	C6-N6	-6.76	1.28	1.33
25	BB	2256	G	C2-N2	-6.76	1.27	1.34
25	BB	2558	C	N3-C4	-6.76	1.29	1.33
25	BB	2685	G	N1-C2	-6.76	1.32	1.37
25	BB	368	A	N7-C5	6.75	1.43	1.39
3	A1	790	A	N3-C4	6.75	1.39	1.34
25	BB	883	G	C2-N2	-6.75	1.27	1.34
1	AP	62	A	O3'-P	-6.75	1.53	1.61
3	A1	354	G	N1-C2	-6.75	1.32	1.37
25	BB	1805	A	N3-C4	6.75	1.39	1.34
25	BB	1973	G	N1-C2	-6.75	1.32	1.37
3	A1	1002	G	N1-C2	-6.75	1.32	1.37
25	BB	2100	G	N1-C2	-6.75	1.32	1.37
25	BB	2221	G	N1-C2	-6.75	1.32	1.37
3	A1	227	G	C2-N2	-6.75	1.27	1.34
2	AM	12	U	P-O5'	6.74	1.66	1.59
3	A1	481	G	O3'-P	-6.74	1.53	1.61
3	A1	861	G	C2-N2	-6.74	1.27	1.34
3	A1	1113	C	C4-N4	-6.74	1.27	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1531	A	C6-N6	-6.74	1.28	1.33
25	BB	2440	C	C4-N4	-6.74	1.27	1.33
25	BB	1089	A	C5-C4	-6.74	1.34	1.38
25	BB	1447	C	O3'-P	-6.74	1.53	1.61
3	A1	864	A	C6-N6	-6.74	1.28	1.33
25	BB	2211	A	C6-N6	-6.74	1.28	1.33
25	BB	282	A	P-O5'	6.73	1.66	1.59
1	AE	73	A	C6-N6	-6.73	1.28	1.33
25	BB	1622	G	C2-N2	-6.73	1.27	1.34
3	A1	499	A	P-O5'	6.73	1.66	1.59
25	BB	2644	G	C2-N2	-6.73	1.27	1.34
1	AA	70	C	C4-N4	-6.73	1.27	1.33
3	A1	97	G	N1-C2	-6.73	1.32	1.37
3	A1	143	A	C6-N6	-6.73	1.28	1.33
3	A1	1366	C	C4-N4	-6.73	1.27	1.33
3	A1	609	A	C6-N1	-6.72	1.30	1.35
3	A1	332	G	C2-N2	-6.72	1.27	1.34
25	BB	2517	C	C5'-C4'	6.72	1.59	1.51
25	BB	2545	G	C2-N2	-6.72	1.27	1.34
25	BB	363	G	C6-N1	-6.72	1.34	1.39
5	AC	105	ARG	CZ-NH1	-6.72	1.24	1.33
25	BB	1490	A	N3-C4	6.72	1.38	1.34
25	BB	2330	G	C3'-C2'	6.72	1.60	1.52
1	AP	71	G	C2-N2	-6.71	1.27	1.34
3	A1	1128	C	N3-C4	-6.71	1.29	1.33
25	BB	2291	U	O3'-P	-6.71	1.53	1.61
3	A1	255	G	C2-N2	-6.71	1.27	1.34
25	BB	1206	G	N7-C5	6.71	1.43	1.39
25	BB	2250	G	C2-N2	-6.71	1.27	1.34
1	AE	74	C	C4-N4	-6.71	1.27	1.33
3	A1	478	A	C6-N6	-6.71	1.28	1.33
3	A1	1262	C	P-O5'	6.71	1.66	1.59
25	BB	1748	C	C4-N4	-6.71	1.27	1.33
3	A1	530	G	N1-C2	-6.70	1.32	1.37
3	A1	637	C	N3-C4	-6.70	1.29	1.33
3	A1	1288	A	P-O5'	-6.70	1.53	1.59
25	BB	1281	G	C2-N2	-6.70	1.27	1.34
25	BB	1675	C	P-O5'	-6.70	1.53	1.59
24	BA	60	C	C4-N4	-6.70	1.27	1.33
25	BB	2239	G	C2-N2	-6.70	1.27	1.34
3	A1	719	C	P-O5'	6.70	1.66	1.59
3	A1	809	G	N7-C5	6.70	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	49	A	P-O5'	-6.70	1.53	1.59
25	BB	2111	U	N1-C2	6.70	1.44	1.38
24	BA	23	G	C6-N1	-6.70	1.34	1.39
3	A1	115	G	C2-N2	-6.69	1.27	1.34
3	A1	164	G	O3'-P	-6.69	1.53	1.61
3	A1	156	C	C4-N4	-6.69	1.27	1.33
25	BB	125	A	C6-N1	-6.69	1.30	1.35
25	BB	1076	C	P-O5'	-6.68	1.53	1.59
25	BB	279	A	N7-C5	6.68	1.43	1.39
25	BB	977	G	N1-C2	-6.68	1.32	1.37
25	BB	2795	C	N1-C6	6.68	1.41	1.37
3	A1	690	G	P-O5'	6.68	1.66	1.59
25	BB	260	G	C2-N2	-6.68	1.27	1.34
25	BB	345	A	O3'-P	-6.68	1.53	1.61
25	BB	529	A	N3-C4	6.68	1.38	1.34
3	A1	818	G	C2-N2	-6.68	1.27	1.34
3	A1	1388	C	C4-N4	-6.68	1.27	1.33
24	BA	30	C	C4-N4	-6.67	1.27	1.33
25	BB	118	A	O3'-P	-6.67	1.53	1.61
25	BB	2112	G	N7-C5	6.67	1.43	1.39
25	BB	2474	U	P-O5'	-6.67	1.53	1.59
3	A1	325	A	N3-C4	6.67	1.38	1.34
25	BB	362	A	N7-C5	6.67	1.43	1.39
3	A1	355	C	C4-N4	-6.67	1.27	1.33
24	BA	44	G	N1-C2	-6.67	1.32	1.37
24	BA	62	C	C4-N4	-6.67	1.27	1.33
3	A1	1052	U	P-O5'	6.67	1.66	1.59
25	BB	398	C	P-O5'	-6.67	1.53	1.59
25	BB	2266	A	C6-N6	-6.67	1.28	1.33
3	A1	666	G	C2-N2	-6.67	1.27	1.34
25	BB	2258	C	N3-C4	-6.67	1.29	1.33
25	BB	1806	C	C4-N4	-6.67	1.27	1.33
25	BB	1410	G	C2-N2	-6.66	1.27	1.34
48	BY	169	ARG	CZ-NH1	-6.66	1.24	1.33
3	A1	1051	C	N1-C6	6.66	1.41	1.37
3	A1	695	A	N3-C4	6.66	1.38	1.34
25	BB	711	G	N7-C5	6.66	1.43	1.39
25	BB	1197	G	P-O5'	6.66	1.66	1.59
25	BB	1297	C	O3'-P	-6.66	1.53	1.61
25	BB	2808	G	N7-C5	6.66	1.43	1.39
3	A1	431	A	N7-C5	6.66	1.43	1.39
25	BB	2582	G	N1-C2	-6.66	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2735	G	N1-C2	-6.66	1.32	1.37
25	BB	2462	C	O3'-P	-6.65	1.53	1.61
25	BB	2488	G	N1-C2	-6.65	1.32	1.37
3	A1	6	G	N1-C2	-6.65	1.32	1.37
3	A1	225	C	C4-N4	-6.65	1.27	1.33
3	A1	223	A	O3'-P	-6.65	1.53	1.61
3	A1	366	A	C6-N6	-6.65	1.28	1.33
3	A1	760	G	C2-N2	-6.65	1.27	1.34
25	BB	2382	G	C2-N2	-6.65	1.27	1.34
3	A1	1360	A	N3-C4	6.64	1.38	1.34
14	AN	59	ARG	CZ-NH1	-6.64	1.24	1.33
25	BB	38	A	N7-C5	6.64	1.43	1.39
25	BB	1645	G	N1-C2	-6.64	1.32	1.37
25	BB	1878	G	N3-C4	6.64	1.40	1.35
25	BB	2307	G	N7-C5	6.64	1.43	1.39
3	A1	691	G	C2-N2	-6.64	1.27	1.34
25	BB	1330	C	C4-N4	-6.64	1.27	1.33
3	A1	1331	G	C2-N2	-6.63	1.27	1.34
25	BB	2374	C	P-O5'	-6.63	1.53	1.59
3	A1	744	C	C4-N4	-6.63	1.27	1.33
25	BB	298	G	C2-N2	-6.63	1.27	1.34
3	A1	492	C	N3-C4	-6.63	1.29	1.33
3	A1	1378	C	C4-N4	-6.63	1.27	1.33
25	BB	2396	G	N3-C4	6.63	1.40	1.35
25	BB	122	G	N1-C2	-6.62	1.32	1.37
1	AA	70	C	N3-C4	-6.62	1.29	1.33
3	A1	1518	A	P-O5'	6.62	1.66	1.59
25	BB	2714	G	N1-C2	-6.62	1.32	1.37
25	BB	7	G	N7-C5	6.62	1.43	1.39
25	BB	2657	A	C6-N6	-6.62	1.28	1.33
25	BB	2675	A	O3'-P	-6.62	1.53	1.61
25	BB	1605	C	C4-N4	-6.61	1.27	1.33
3	A1	1442	G	N7-C5	6.61	1.43	1.39
25	BB	2186	G	N1-C2	-6.61	1.32	1.37
3	A1	79	G	C2-N2	-6.61	1.27	1.34
24	BA	67	G	N1-C2	-6.61	1.32	1.37
25	BB	2047	C	C4-N4	-6.61	1.28	1.33
1	AA	36	A	C6-N6	-6.61	1.28	1.33
3	A1	1370	G	N1-C2	-6.61	1.32	1.37
25	BB	199	A	N7-C5	6.61	1.43	1.39
25	BB	1904	G	C2-N2	-6.61	1.27	1.34
24	BA	27	C	C4-N4	-6.61	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	891	G	N7-C5	6.60	1.43	1.39
31	BH	10	ARG	CZ-NH1	-6.60	1.24	1.33
1	AP	4	G	N1-C2	-6.60	1.32	1.37
3	A1	107	G	N1-C2	-6.60	1.32	1.37
25	BB	86	G	C2-N2	-6.60	1.27	1.34
25	BB	1008	A	N3-C4	6.60	1.38	1.34
25	BB	1945	G	N1-C2	-6.60	1.32	1.37
25	BB	2633	G	O3'-P	-6.60	1.53	1.61
25	BB	2058	A	N3-C4	6.60	1.38	1.34
3	A1	1011	C	N3-C4	-6.60	1.29	1.33
25	BB	1789	A	C6-N6	-6.60	1.28	1.33
25	BB	1913	A	N3-C4	6.60	1.38	1.34
3	A1	455	G	C2-N2	-6.60	1.27	1.34
25	BB	578	G	C2-N2	-6.60	1.27	1.34
25	BB	1831	G	C2-N2	-6.60	1.27	1.34
25	BB	1953	A	O3'-P	-6.60	1.53	1.61
25	BB	2238	G	C2-N2	-6.60	1.27	1.34
3	A1	1002	G	C2-N2	-6.59	1.27	1.34
25	BB	309	A	N7-C5	6.59	1.43	1.39
25	BB	1871	A	N7-C5	6.59	1.43	1.39
3	A1	796	C	C4-N4	-6.59	1.28	1.33
3	A1	1193	G	C2-N2	-6.59	1.27	1.34
3	A1	620	C	C4-N4	-6.59	1.28	1.33
3	A1	769	G	C2-N2	-6.59	1.27	1.34
3	A1	1317	C	C4-N4	-6.59	1.28	1.33
25	BB	2477	U	P-O5'	6.59	1.66	1.59
38	BO	93	ARG	CZ-NH1	-6.59	1.24	1.33
3	A1	574	A	N7-C5	6.59	1.43	1.39
25	BB	1227	G	C2-N2	-6.59	1.27	1.34
25	BB	2339	C	C4-N4	-6.59	1.28	1.33
3	A1	1013	G	N1-C2	-6.58	1.32	1.37
25	BB	645	C	C4-N4	-6.58	1.28	1.33
3	A1	334	C	C4-N4	-6.58	1.28	1.33
3	A1	703	G	N1-C2	-6.58	1.32	1.37
25	BB	663	G	P-O5'	6.58	1.66	1.59
2	AM	9	U	C3'-O3'	6.58	1.51	1.42
3	A1	266	G	P-O5'	6.58	1.66	1.59
25	BB	1087	G	N7-C5	6.58	1.43	1.39
25	BB	1530	G	C2-N2	-6.58	1.27	1.34
25	BB	1264	A	O3'-P	-6.58	1.53	1.61
25	BB	2567	G	P-O5'	-6.58	1.53	1.59
3	A1	628	G	C2-N2	-6.58	1.27	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	226	A	N3-C4	6.58	1.38	1.34
25	BB	2356	U	P-O5'	6.58	1.66	1.59
3	A1	1387	G	C2-N2	-6.58	1.27	1.34
25	BB	380	G	C2-N2	-6.58	1.27	1.34
1	AE	53	G	C2-N2	-6.57	1.27	1.34
25	BB	181	A	N3-C4	6.57	1.38	1.34
25	BB	537	G	P-O5'	6.57	1.66	1.59
25	BB	2886	A	C6-N1	-6.57	1.30	1.35
3	A1	645	G	N1-C2	-6.57	1.32	1.37
2	AM	12	U	C4-C5	6.57	1.49	1.43
10	AI	28	ARG	CZ-NH2	-6.57	1.24	1.33
1	AA	42	G	P-O5'	-6.57	1.53	1.59
3	A1	182	A	P-O5'	-6.57	1.53	1.59
25	BB	654	A	C6-N6	-6.57	1.28	1.33
25	BB	1560	G	C2-N2	-6.57	1.27	1.34
3	A1	384	G	C2-N2	-6.57	1.27	1.34
3	A1	391	G	N7-C5	6.57	1.43	1.39
25	BB	1379	U	P-O5'	6.56	1.66	1.59
25	BB	1737	G	C2-N2	-6.56	1.27	1.34
25	BB	2540	C	C4-N4	-6.56	1.28	1.33
25	BB	1296	G	C2-N2	-6.56	1.27	1.34
25	BB	1432	G	C2-N2	-6.56	1.27	1.34
25	BB	2773	C	N3-C4	-6.56	1.29	1.33
25	BB	2858	C	N3-C4	-6.56	1.29	1.33
3	A1	677	U	P-O5'	6.56	1.66	1.59
3	A1	1209	C	C4-N4	-6.56	1.28	1.33
3	A1	1254	A	C6-N6	-6.56	1.28	1.33
25	BB	122	G	C6-N1	-6.56	1.34	1.39
25	BB	78	U	O3'-P	-6.56	1.53	1.61
25	BB	218	A	O3'-P	-6.56	1.53	1.61
3	A1	1390	U	O3'-P	-6.55	1.53	1.61
25	BB	1786	A	N3-C4	6.55	1.38	1.34
25	BB	2676	C	O3'-P	-6.55	1.53	1.61
3	A1	1003	G	P-O5'	-6.55	1.53	1.59
25	BB	2096	C	P-O5'	6.55	1.66	1.59
3	A1	349	A	C5-C4	-6.55	1.34	1.38
25	BB	1292	G	N7-C5	6.55	1.43	1.39
3	A1	991	U	O3'-P	-6.54	1.53	1.61
25	BB	267	C	N1-C6	-6.54	1.33	1.37
25	BB	1491	G	N1-C2	-6.54	1.32	1.37
25	BB	2279	G	O3'-P	-6.54	1.53	1.61
25	BB	2280	G	C2-N2	-6.54	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2377	A	N7-C5	6.54	1.43	1.39
3	A1	258	G	C6-N1	-6.54	1.34	1.39
25	BB	1046	A	C6-N1	-6.54	1.30	1.35
25	BB	1166	G	C2-N2	-6.54	1.28	1.34
25	BB	1907	G	O3'-P	-6.54	1.53	1.61
25	BB	2161	C	C4-N4	-6.54	1.28	1.33
25	BB	1964	G	N7-C5	6.54	1.43	1.39
1	AA	45	G	C2-N2	-6.54	1.28	1.34
1	AP	14	A	O3'-P	-6.54	1.53	1.61
25	BB	954	G	C2-N2	-6.54	1.28	1.34
25	BB	1559	U	O3'-P	-6.54	1.53	1.61
25	BB	2081	U	O3'-P	-6.54	1.53	1.61
3	A1	944	G	N3-C4	6.54	1.40	1.35
25	BB	382	A	N3-C4	6.54	1.38	1.34
25	BB	1899	A	C6-N1	-6.53	1.30	1.35
3	A1	506	G	C2-N2	-6.53	1.28	1.34
25	BB	962	G	O3'-P	-6.53	1.53	1.61
25	BB	1074	G	C2-N2	-6.53	1.28	1.34
3	A1	235	C	C4-N4	-6.53	1.28	1.33
25	BB	1844	C	P-O5'	-6.53	1.53	1.59
25	BB	1719	G	N7-C5	6.53	1.43	1.39
1	AP	11	C	P-O5'	-6.53	1.53	1.59
25	BB	2352	A	N9-C4	6.53	1.41	1.37
25	BB	2529	G	C2-N2	-6.53	1.28	1.34
25	BB	2536	G	P-O5'	6.53	1.66	1.59
25	BB	2703	C	C4-N4	-6.52	1.28	1.33
3	A1	793	U	O3'-P	-6.52	1.53	1.61
3	A1	1207	G	N9-C8	6.52	1.42	1.37
25	BB	1071	G	C2-N2	-6.52	1.28	1.34
25	BB	405	U	O3'-P	-6.52	1.53	1.61
25	BB	1093	G	N3-C4	6.52	1.40	1.35
25	BB	2808	G	C2-N2	-6.52	1.28	1.34
25	BB	2820	A	N3-C4	6.52	1.38	1.34
1	AP	26	G	O3'-P	-6.52	1.53	1.61
25	BB	1152	C	C4-N4	-6.52	1.28	1.33
1	AP	72	C	C4-N4	-6.52	1.28	1.33
25	BB	551	G	O3'-P	-6.52	1.53	1.61
25	BB	624	C	N3-C4	-6.52	1.29	1.33
3	A1	759	A	C6-N1	-6.52	1.30	1.35
25	BB	624	C	C4-N4	-6.51	1.28	1.33
25	BB	928	A	C6-N1	-6.51	1.30	1.35
25	BB	944	C	N3-C4	-6.51	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1883	U	O3'-P	-6.51	1.53	1.61
25	BB	163	C	C4-N4	-6.51	1.28	1.33
25	BB	836	G	N1-C2	-6.51	1.32	1.37
25	BB	1762	A	N7-C5	6.51	1.43	1.39
25	BB	2071	A	N7-C5	6.51	1.43	1.39
3	A1	572	A	C6-N1	-6.51	1.30	1.35
25	BB	327	G	C4'-C3'	6.51	1.60	1.53
3	A1	614	C	N3-C4	-6.51	1.29	1.33
25	BB	2100	G	C2-N2	-6.51	1.28	1.34
25	BB	2892	G	N3-C4	6.51	1.40	1.35
3	A1	889	A	N3-C4	6.51	1.38	1.34
25	BB	1045	C	C4-N4	-6.51	1.28	1.33
25	BB	2218	G	N1-C2	-6.51	1.32	1.37
25	BB	2655	G	N3-C4	6.50	1.40	1.35
3	A1	74	A	N3-C4	6.50	1.38	1.34
3	A1	915	A	O3'-P	-6.50	1.53	1.61
3	A1	1314	C	C4-N4	-6.50	1.28	1.33
3	A1	420	U	P-O5'	6.50	1.66	1.59
25	BB	217	A	N3-C4	6.50	1.38	1.34
3	A1	57	G	C2-N2	-6.50	1.28	1.34
3	A1	153	C	C4-N4	-6.50	1.28	1.33
3	A1	364	A	N7-C5	6.50	1.43	1.39
3	A1	649	A	C6-N1	-6.50	1.31	1.35
3	A1	817	C	O3'-P	-6.50	1.53	1.61
3	A1	897	C	O3'-P	-6.50	1.53	1.61
3	A1	1039	G	N1-C2	-6.50	1.32	1.37
25	BB	1068	G	N9-C8	-6.50	1.33	1.37
3	A1	778	G	C2-N2	-6.49	1.28	1.34
24	BA	83	G	C2-N2	-6.49	1.28	1.34
25	BB	572	A	N3-C4	6.49	1.38	1.34
3	A1	36	C	O3'-P	-6.49	1.53	1.61
3	A1	198	G	N1-C2	-6.49	1.32	1.37
3	A1	730	G	C2-N2	-6.49	1.28	1.34
3	A1	1223	C	C4-N4	-6.49	1.28	1.33
25	BB	1942	C	N1-C6	6.49	1.41	1.37
25	BB	1948	G	N7-C5	6.49	1.43	1.39
25	BB	2699	C	C4-N4	-6.49	1.28	1.33
1	AA	40	C	P-O5'	-6.49	1.53	1.59
3	A1	569	C	C4-N4	-6.49	1.28	1.33
25	BB	1550	C	N3-C4	-6.49	1.29	1.33
25	BB	204	A	N3-C4	6.49	1.38	1.34
25	BB	1985	C	N3-C4	-6.49	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1705	A	N7-C5	6.48	1.43	1.39
5	AC	36	ARG	CZ-NH1	-6.48	1.24	1.33
25	BB	797	G	C2-N2	-6.48	1.28	1.34
25	BB	1516	G	C2-N2	-6.48	1.28	1.34
25	BB	1878	G	C2-N2	-6.48	1.28	1.34
25	BB	2231	U	O3'-P	-6.48	1.53	1.61
25	BB	2616	C	C4-N4	-6.48	1.28	1.33
3	A1	37	U	O3'-P	-6.48	1.53	1.61
25	BB	725	G	N1-C2	-6.48	1.32	1.37
25	BB	1922	G	N1-C2	-6.48	1.32	1.37
3	A1	107	G	C6-N1	-6.48	1.35	1.39
25	BB	81	G	C6-N1	-6.48	1.35	1.39
25	BB	935	C	N3-C4	-6.48	1.29	1.33
25	BB	1115	G	N7-C5	6.48	1.43	1.39
25	BB	1667	G	C2-N2	-6.48	1.28	1.34
3	A1	845	A	N3-C4	6.48	1.38	1.34
25	BB	2854	G	C2-N2	-6.48	1.28	1.34
3	A1	1178	G	C6-N1	-6.47	1.35	1.39
1	AA	58	A	C6-N1	-6.47	1.31	1.35
3	A1	348	G	N7-C5	6.47	1.43	1.39
25	BB	323	C	C4-N4	-6.47	1.28	1.33
25	BB	856	G	N7-C5	6.47	1.43	1.39
25	BB	1250	G	C2-N2	-6.47	1.28	1.34
25	BB	1643	G	N3-C4	6.47	1.40	1.35
25	BB	2221	G	O3'-P	-6.47	1.53	1.61
3	A1	196	A	O3'-P	-6.47	1.53	1.61
3	A1	1428	A	C6-N6	-6.47	1.28	1.33
25	BB	219	A	N7-C5	6.47	1.43	1.39
25	BB	766	U	O3'-P	-6.47	1.53	1.61
25	BB	776	G	N1-C2	-6.47	1.32	1.37
3	A1	85	U	P-O5'	-6.47	1.53	1.59
25	BB	1934	C	C4-N4	-6.47	1.28	1.33
25	BB	2035	G	C2-N2	-6.47	1.28	1.34
25	BB	2578	G	C2-N2	-6.47	1.28	1.34
3	A1	569	C	N3-C4	-6.46	1.29	1.33
25	BB	1503	A	O3'-P	-6.46	1.53	1.61
25	BB	1518	C	N3-C4	-6.46	1.29	1.33
3	A1	164	G	P-O5'	6.46	1.66	1.59
3	A1	1294	G	C2-N2	-6.46	1.28	1.34
25	BB	1954	G	C6-N1	-6.46	1.35	1.39
3	A1	101	A	N7-C5	6.46	1.43	1.39
3	A1	1395	C	N3-C4	-6.46	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	92	C	C4-N4	-6.46	1.28	1.33
3	A1	524	G	C2-N2	-6.46	1.28	1.34
25	BB	601	C	C4-N4	-6.46	1.28	1.33
25	BB	2409	G	C2-N2	-6.46	1.28	1.34
25	BB	2583	G	C2-N2	-6.46	1.28	1.34
25	BB	669	G	C2-N2	-6.45	1.28	1.34
25	BB	1228	G	N3-C4	6.45	1.40	1.35
25	BB	2614	A	C6-N1	-6.45	1.31	1.35
3	A1	356	A	C6-N6	-6.45	1.28	1.33
3	A1	908	A	N3-C4	6.45	1.38	1.34
3	A1	1022	A	N7-C5	6.45	1.43	1.39
25	BB	1973	G	C2-N2	-6.45	1.28	1.34
25	BB	368	A	N3-C4	6.45	1.38	1.34
25	BB	1527	G	C2-N2	-6.45	1.28	1.34
3	A1	1166	G	C2-N2	-6.45	1.28	1.34
25	BB	1152	C	N3-C4	-6.45	1.29	1.33
3	A1	637	C	C4-N4	-6.45	1.28	1.33
25	BB	663	G	C2-N2	-6.45	1.28	1.34
25	BB	2114	A	N7-C5	6.44	1.43	1.39
1	AE	29	A	C6-N6	-6.44	1.28	1.33
3	A1	212	G	C6-N1	-6.44	1.35	1.39
25	BB	1535	A	C6-N1	-6.44	1.31	1.35
3	A1	551	U	O3'-P	6.44	1.68	1.61
25	BB	311	A	C6-N1	-6.44	1.31	1.35
25	BB	411	G	C2-N2	-6.44	1.28	1.34
25	BB	1516	G	N7-C5	6.44	1.43	1.39
25	BB	2853	C	N1-C6	6.44	1.41	1.37
3	A1	787	A	N7-C5	6.44	1.43	1.39
1	AA	2	C	N3-C4	-6.43	1.29	1.33
25	BB	1109	C	C4-N4	-6.43	1.28	1.33
3	A1	82	G	C6-N1	-6.43	1.35	1.39
3	A1	470	C	C4-N4	-6.43	1.28	1.33
3	A1	745	G	C2-N2	-6.43	1.28	1.34
3	A1	1352	C	N3-C4	-6.43	1.29	1.33
3	A1	756	C	C4-N4	-6.43	1.28	1.33
3	A1	727	G	N1-C2	-6.43	1.32	1.37
25	BB	1772	A	N3-C4	6.43	1.38	1.34
25	BB	1636	U	O3'-P	-6.43	1.53	1.61
25	BB	1750	G	C2-N2	-6.43	1.28	1.34
3	A1	1219	A	C6-N6	-6.43	1.28	1.33
25	BB	553	G	N3-C4	6.43	1.40	1.35
1	AE	49	C	C4-N4	-6.42	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1141	C	N3-C4	-6.42	1.29	1.33
25	BB	97	C	N3-C4	-6.42	1.29	1.33
25	BB	1031	G	C5'-C4'	6.42	1.59	1.51
25	BB	2834	G	C2-N2	-6.42	1.28	1.34
25	BB	1099	G	N1-C2	-6.42	1.32	1.37
25	BB	1538	G	P-O5'	6.42	1.66	1.59
25	BB	1585	C	N3-C4	-6.42	1.29	1.33
1	AA	35	A	C6-N6	-6.42	1.28	1.33
1	AP	35	A	C8-N7	6.42	1.36	1.31
3	A1	357	G	N7-C5	6.42	1.43	1.39
3	A1	392	C	C4-N4	-6.42	1.28	1.33
25	BB	1046	A	P-O5'	6.42	1.66	1.59
25	BB	1706	C	N3-C4	-6.42	1.29	1.33
25	BB	2553	G	C2-N2	-6.42	1.28	1.34
3	A1	337	G	N3-C4	6.42	1.40	1.35
3	A1	1013	G	P-O5'	-6.42	1.53	1.59
25	BB	2117	A	C5'-C4'	6.42	1.59	1.51
25	BB	2292	U	P-O5'	-6.42	1.53	1.59
25	BB	2350	C	O3'-P	-6.42	1.53	1.61
3	A1	520	A	C6-N6	-6.42	1.28	1.33
25	BB	381	G	C2-N2	-6.42	1.28	1.34
25	BB	692	C	C4-N4	-6.42	1.28	1.33
25	BB	883	G	C6-N1	-6.42	1.35	1.39
25	BB	2184	A	N7-C5	6.42	1.43	1.39
25	BB	2334	U	O3'-P	-6.42	1.53	1.61
25	BB	2635	A	P-O5'	6.41	1.66	1.59
24	BA	98	G	C2-N2	-6.41	1.28	1.34
25	BB	1687	G	N1-C2	-6.41	1.32	1.37
3	A1	695	A	N9-C4	6.41	1.41	1.37
25	BB	1524	G	C2-N2	-6.41	1.28	1.34
3	A1	1486	G	C2-N2	-6.41	1.28	1.34
25	BB	1627	G	N1-C2	-6.41	1.32	1.37
3	A1	1465	A	C6-N6	-6.41	1.28	1.33
25	BB	1873	G	C2-N2	-6.41	1.28	1.34
25	BB	2600	A	N7-C5	6.41	1.43	1.39
25	BB	635	C	C4-N4	-6.41	1.28	1.33
25	BB	2869	G	N1-C2	-6.41	1.32	1.37
3	A1	985	C	N3-C4	-6.40	1.29	1.33
25	BB	756	A	N7-C5	6.40	1.43	1.39
25	BB	1192	G	C6-N1	-6.40	1.35	1.39
3	A1	371	A	N3-C4	6.40	1.38	1.34
3	A1	1427	C	C5'-C4'	6.40	1.59	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	23	C	C4-N4	-6.40	1.28	1.33
3	A1	54	C	P-O5'	-6.40	1.53	1.59
3	A1	1468	A	N7-C5	6.40	1.43	1.39
25	BB	864	G	C2-N2	-6.40	1.28	1.34
3	A1	799	G	N1-C2	-6.40	1.32	1.37
3	A1	601	G	C2-N2	-6.40	1.28	1.34
3	A1	947	G	N7-C5	6.39	1.43	1.39
25	BB	1845	G	N3-C4	6.39	1.40	1.35
25	BB	324	A	N7-C5	6.39	1.43	1.39
25	BB	1879	C	N3-C4	-6.39	1.29	1.33
3	A1	1457	G	N1-C2	-6.39	1.32	1.37
1	AA	66	A	N9-C4	6.39	1.41	1.37
25	BB	1092	C	C4-N4	-6.39	1.28	1.33
25	BB	1826	G	C2-N2	-6.39	1.28	1.34
27	BD	30	ARG	CZ-NH1	-6.38	1.24	1.33
25	BB	267	C	C4-N4	-6.38	1.28	1.33
3	A1	1204	A	C6-N6	-6.38	1.28	1.33
3	A1	890	G	N1-C2	-6.38	1.32	1.37
25	BB	2064	C	C4-N4	-6.38	1.28	1.33
1	AP	64	A	P-O5'	6.38	1.66	1.59
3	A1	797	C	C4-N4	-6.38	1.28	1.33
3	A1	975	A	C6-N1	-6.38	1.31	1.35
25	BB	1857	G	C2-N2	-6.38	1.28	1.34
25	BB	2850	A	C6-N1	-6.38	1.31	1.35
25	BB	1374	G	N1-C2	-6.38	1.32	1.37
25	BB	1450	G	C6-N1	-6.38	1.35	1.39
25	BB	1528	A	N3-C4	6.38	1.38	1.34
25	BB	1774	C	N3-C4	-6.38	1.29	1.33
3	A1	914	A	C6-N1	-6.37	1.31	1.35
25	BB	1514	G	C2-N2	-6.37	1.28	1.34
25	BB	1627	G	C2-N2	-6.37	1.28	1.34
3	A1	342	C	P-O5'	-6.37	1.53	1.59
25	BB	1878	G	P-O5'	6.37	1.66	1.59
25	BB	2353	G	N1-C2	-6.37	1.32	1.37
3	A1	9	G	C2-N2	-6.37	1.28	1.34
25	BB	1063	G	C2-N2	-6.37	1.28	1.34
25	BB	1983	G	C2-N2	-6.37	1.28	1.34
3	A1	342	C	N3-C4	-6.37	1.29	1.33
3	A1	940	C	C4-N4	-6.37	1.28	1.33
3	A1	995	C	C4-N4	-6.37	1.28	1.33
25	BB	1161	C	C4-N4	-6.37	1.28	1.33
25	BB	1350	C	C4-N4	-6.36	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2148	G	C6-N1	-6.36	1.35	1.39
3	A1	54	C	C5'-C4'	6.36	1.58	1.51
25	BB	2276	G	N1-C2	-6.36	1.32	1.37
25	BB	2486	C	C4-N4	-6.36	1.28	1.33
27	BD	108	ARG	CZ-NH1	-6.36	1.24	1.33
3	A1	698	G	C2-N2	-6.36	1.28	1.34
25	BB	1619	G	C2-N2	-6.36	1.28	1.34
25	BB	2102	G	N1-C2	-6.36	1.32	1.37
25	BB	2304	G	C2-N2	-6.36	1.28	1.34
3	A1	515	G	N3-C4	6.35	1.39	1.35
3	A1	1305	G	C2-N2	-6.35	1.28	1.34
3	A1	1487	G	C2-N2	-6.35	1.28	1.34
25	BB	2320	U	C2-N3	6.35	1.42	1.37
25	BB	891	G	N3-C4	6.35	1.39	1.35
25	BB	1803	A	N7-C5	6.35	1.43	1.39
3	A1	6	G	C2-N2	-6.35	1.28	1.34
17	AR	183	ARG	CZ-NH1	-6.35	1.24	1.33
25	BB	509	C	C4-N4	-6.35	1.28	1.33
25	BB	1435	G	N1-C2	-6.35	1.32	1.37
25	BB	1365	A	N7-C5	6.35	1.43	1.39
1	AE	75	C	C4-N4	-6.35	1.28	1.33
25	BB	337	C	N3-C4	-6.35	1.29	1.33
25	BB	603	A	C6-N6	-6.35	1.28	1.33
3	A1	102	G	C2-N2	-6.34	1.28	1.34
25	BB	1943	U	P-O5'	6.34	1.66	1.59
25	BB	2277	G	N1-C2	-6.34	1.32	1.37
25	BB	2525	G	N1-C2	-6.34	1.32	1.37
25	BB	20	C	N3-C4	-6.34	1.29	1.33
25	BB	1877	A	C6-N6	-6.34	1.28	1.33
25	BB	2889	C	P-O5'	6.34	1.66	1.59
25	BB	356	G	N7-C5	6.34	1.43	1.39
25	BB	1638	C	N3-C4	-6.34	1.29	1.33
25	BB	2128	G	N7-C5	6.34	1.43	1.39
25	BB	1034	G	C6-N1	-6.34	1.35	1.39
1	AA	4	G	C5-C4	6.34	1.42	1.38
3	A1	588	G	C2-N2	-6.34	1.28	1.34
3	A1	1510	C	N3-C4	-6.34	1.29	1.33
25	BB	1731	G	N1-C2	-6.34	1.32	1.37
3	A1	1373	G	C2-N2	-6.33	1.28	1.34
25	BB	168	G	N1-C2	-6.33	1.32	1.37
1	AA	20	G	P-O5'	6.33	1.66	1.59
3	A1	765	G	N7-C5	6.33	1.43	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1131	G	N1-C2	-6.33	1.32	1.37
25	BB	622	G	N7-C5	6.33	1.43	1.39
25	BB	1216	G	N3-C4	6.33	1.39	1.35
25	BB	1843	C	C4-N4	-6.33	1.28	1.33
25	BB	2791	G	N1-C2	-6.33	1.32	1.37
3	A1	580	C	C4-N4	-6.33	1.28	1.33
3	A1	976	G	C2-N2	-6.33	1.28	1.34
3	A1	1334	G	N3-C4	6.33	1.39	1.35
24	BA	102	G	P-O5'	-6.33	1.53	1.59
25	BB	1266	G	P-O5'	6.33	1.66	1.59
3	A1	127	G	N7-C5	6.33	1.43	1.39
3	A1	529	G	C5-C6	6.33	1.48	1.42
25	BB	604	G	C2-N2	-6.33	1.28	1.34
25	BB	1954	G	C2-N2	-6.33	1.28	1.34
25	BB	2429	G	N1-C2	-6.33	1.32	1.37
25	BB	2484	G	C6-N1	-6.33	1.35	1.39
3	A1	874	G	C2-N2	-6.33	1.28	1.34
25	BB	1548	A	N9-C4	6.33	1.41	1.37
25	BB	2870	C	O3'-P	-6.33	1.53	1.61
1	AP	71	G	N1-C2	-6.32	1.32	1.37
25	BB	818	G	N1-C2	-6.32	1.32	1.37
25	BB	1535	A	P-O5'	-6.32	1.53	1.59
25	BB	1608	A	P-O5'	6.32	1.66	1.59
25	BB	2803	G	N3-C4	6.32	1.39	1.35
1	AP	3	G	C2-N2	-6.32	1.28	1.34
3	A1	139	A	N9-C4	-6.32	1.34	1.37
3	A1	199	A	N7-C5	6.32	1.43	1.39
3	A1	470	C	N3-C4	-6.32	1.29	1.33
3	A1	545	C	P-O5'	-6.32	1.53	1.59
3	A1	1207	G	N7-C5	6.32	1.43	1.39
3	A1	220	G	C2-N2	-6.32	1.28	1.34
25	BB	711	G	C2-N2	-6.32	1.28	1.34
25	BB	2150	C	N3-C4	-6.32	1.29	1.33
25	BB	2171	A	C6-N6	-6.32	1.28	1.33
3	A1	888	G	C2-N2	-6.31	1.28	1.34
3	A1	494	G	O3'-P	-6.31	1.53	1.61
25	BB	761	A	C6-N6	-6.31	1.28	1.33
25	BB	1284	A	N3-C4	6.31	1.38	1.34
25	BB	2763	G	P-O5'	-6.31	1.53	1.59
3	A1	754	C	C4-N4	-6.31	1.28	1.33
24	BA	9	G	C2-N2	-6.31	1.28	1.34
25	BB	718	A	C6-N1	-6.31	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2036	C	C4-N4	-6.31	1.28	1.33
1	AE	9	A	N3-C4	6.31	1.38	1.34
2	AM	17	U	C2-N3	-6.31	1.33	1.37
3	A1	1012	A	C6-N6	-6.31	1.28	1.33
3	A1	1036	A	C6-N1	-6.31	1.31	1.35
25	BB	1392	A	C6-N6	-6.31	1.28	1.33
3	A1	1197	A	C6-N6	-6.31	1.28	1.33
3	A1	1058	G	N1-C2	-6.30	1.32	1.37
25	BB	305	C	N3-C4	-6.30	1.29	1.33
25	BB	461	C	P-O5'	6.30	1.66	1.59
25	BB	1490	A	O3'-P	-6.30	1.53	1.61
25	BB	1927	A	P-O5'	6.30	1.66	1.59
25	BB	2591	C	N3-C4	-6.30	1.29	1.33
3	A1	399	G	N1-C2	-6.30	1.32	1.37
3	A1	713	G	N3-C4	6.30	1.39	1.35
3	A1	1138	G	C5'-C4'	6.30	1.58	1.51
3	A1	1474	U	P-O5'	6.30	1.66	1.59
3	A1	1129	C	C4-N4	-6.30	1.28	1.33
25	BB	1289	C	N3-C4	-6.30	1.29	1.33
25	BB	1480	C	C4-N4	-6.30	1.28	1.33
25	BB	1850	G	N3-C4	6.30	1.39	1.35
1	AP	53	G	C2-N2	-6.30	1.28	1.34
25	BB	716	A	C6-N1	-6.30	1.31	1.35
25	BB	930	G	C2-N2	-6.30	1.28	1.34
25	BB	997	G	N7-C5	6.30	1.43	1.39
25	BB	1526	C	C4-N4	-6.30	1.28	1.33
3	A1	945	G	C2-N2	-6.29	1.28	1.34
25	BB	1107	G	N1-C2	-6.29	1.32	1.37
25	BB	1838	C	O3'-P	-6.29	1.53	1.61
25	BB	2127	G	N1-C2	-6.29	1.32	1.37
3	A1	57	G	N1-C2	-6.29	1.32	1.37
25	BB	681	G	N3-C4	6.29	1.39	1.35
25	BB	1169	A	C6-N6	-6.29	1.28	1.33
3	A1	902	G	N1-C2	-6.29	1.32	1.37
3	A1	979	C	N3-C4	-6.29	1.29	1.33
25	BB	651	G	C6-N1	-6.29	1.35	1.39
25	BB	2606	C	O3'-P	-6.29	1.53	1.61
1	AA	29	A	N9-C4	6.29	1.41	1.37
25	BB	692	C	N3-C4	-6.29	1.29	1.33
25	BB	1182	G	C2-N2	-6.29	1.28	1.34
25	BB	1443	U	P-O5'	-6.29	1.53	1.59
1	AA	14	A	N9-C4	6.29	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1109	C	C4-N4	-6.29	1.28	1.33
25	BB	1511	G	N1-C2	-6.29	1.32	1.37
25	BB	1522	A	N3-C4	6.29	1.38	1.34
25	BB	1762	A	C6-N6	-6.29	1.28	1.33
3	A1	833	G	N1-C2	-6.29	1.32	1.37
25	BB	1382	G	C2-N2	-6.29	1.28	1.34
1	AE	16	U	P-O5'	-6.28	1.53	1.59
3	A1	1365	G	C6-N1	-6.28	1.35	1.39
25	BB	327	G	C5'-C4'	6.28	1.58	1.51
3	A1	747	A	P-O5'	-6.28	1.53	1.59
24	BA	5	U	P-O5'	6.28	1.66	1.59
25	BB	143	C	C4-N4	-6.28	1.28	1.33
25	BB	857	G	C2-N2	-6.28	1.28	1.34
2	AM	7	U	N1-C6	6.28	1.43	1.38
25	BB	86	G	N1-C2	-6.28	1.32	1.37
3	A1	737	C	N3-C4	-6.28	1.29	1.33
3	A1	932	C	C4-N4	-6.28	1.28	1.33
25	BB	116	C	C4-N4	-6.28	1.28	1.33
25	BB	628	G	C2-N2	-6.28	1.28	1.34
25	BB	1382	G	C5-C6	6.28	1.48	1.42
25	BB	2328	A	N7-C5	6.28	1.43	1.39
25	BB	2582	G	C2-N2	-6.28	1.28	1.34
25	BB	631	A	N7-C5	6.28	1.43	1.39
25	BB	1724	G	N1-C2	-6.28	1.32	1.37
25	BB	1915	U	C2-N3	6.28	1.42	1.37
25	BB	1929	G	C2-N2	-6.27	1.28	1.34
3	A1	347	G	C2-N2	-6.27	1.28	1.34
3	A1	225	C	P-O5'	6.27	1.66	1.59
25	BB	1107	G	C2-N2	-6.27	1.28	1.34
3	A1	715	A	N7-C5	6.27	1.43	1.39
3	A1	1426	G	C2-N2	-6.27	1.28	1.34
25	BB	1721	G	C2-N2	-6.27	1.28	1.34
39	BP	19	ARG	CZ-NH2	-6.27	1.24	1.33
3	A1	1402	C	N3-C4	-6.27	1.29	1.33
3	A1	1403	C	N3-C4	-6.27	1.29	1.33
25	BB	1964	G	C2-N2	-6.27	1.28	1.34
25	BB	2387	U	C2-N3	-6.27	1.33	1.37
3	A1	68	G	C6-N1	-6.26	1.35	1.39
3	A1	395	C	C4-N4	-6.26	1.28	1.33
25	BB	1114	C	C4-N4	-6.26	1.28	1.33
1	AE	14	A	O3'-P	-6.26	1.53	1.61
25	BB	910	A	N3-C4	6.26	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	462	G	C6-N1	-6.26	1.35	1.39
3	A1	1383	C	C4-N4	-6.26	1.28	1.33
3	A1	1449	C	C4-N4	-6.26	1.28	1.33
24	BA	64	G	C2-N2	-6.26	1.28	1.34
25	BB	1917	U	P-O5'	6.26	1.66	1.59
25	BB	2581	G	C6-N1	-6.26	1.35	1.39
3	A1	750	C	O3'-P	-6.26	1.53	1.61
3	A1	807	A	N3-C4	6.26	1.38	1.34
3	A1	978	A	C6-N1	-6.26	1.31	1.35
24	BA	56	G	P-O5'	6.26	1.66	1.59
25	BB	2556	C	N3-C4	-6.26	1.29	1.33
25	BB	2641	G	C2-N2	-6.26	1.28	1.34
3	A1	613	C	N3-C4	-6.26	1.29	1.33
3	A1	661	G	C2-N2	-6.25	1.28	1.34
3	A1	1322	C	C4-N4	-6.25	1.28	1.33
25	BB	1125	G	C2-N2	-6.25	1.28	1.34
3	A1	423	G	C6-N1	-6.25	1.35	1.39
25	BB	2232	C	C4-N4	-6.25	1.28	1.33
25	BB	2424	C	O3'-P	-6.25	1.53	1.61
25	BB	2623	G	C2-N2	-6.25	1.28	1.34
3	A1	838	G	C2-N2	-6.25	1.28	1.34
3	A1	980	C	C4-N4	-6.25	1.28	1.33
25	BB	2237	G	C2-N2	-6.25	1.28	1.34
25	BB	2294	G	N7-C5	6.25	1.43	1.39
3	A1	809	G	O3'-P	-6.25	1.53	1.61
25	BB	325	G	N1-C2	-6.25	1.32	1.37
25	BB	2839	G	C2-N2	-6.25	1.28	1.34
25	BB	843	G	C2-N2	-6.24	1.28	1.34
25	BB	1296	G	C6-N1	-6.24	1.35	1.39
25	BB	580	U	P-O5'	6.24	1.66	1.59
25	BB	1525	A	C6-N1	-6.24	1.31	1.35
25	BB	1567	G	C2-N2	-6.24	1.28	1.34
24	BA	67	G	C2-N2	-6.24	1.28	1.34
25	BB	2539	C	N1-C6	6.24	1.40	1.37
25	BB	1233	C	C4-N4	-6.24	1.28	1.33
3	A1	126	G	C2-N2	-6.24	1.28	1.34
3	A1	1366	C	N3-C4	-6.24	1.29	1.33
25	BB	1036	G	N1-C2	-6.24	1.32	1.37
25	BB	1339	G	N1-C2	-6.23	1.32	1.37
25	BB	1429	G	C2-N2	-6.23	1.28	1.34
25	BB	2879	A	N7-C5	6.23	1.43	1.39
3	A1	713	G	N1-C2	-6.23	1.32	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1199	U	P-O5'	6.23	1.66	1.59
25	BB	1797	G	N7-C5	6.23	1.43	1.39
3	A1	749	A	P-O5'	6.23	1.66	1.59
24	BA	81	G	N7-C5	6.23	1.43	1.39
25	BB	361	G	C2-N2	-6.23	1.28	1.34
25	BB	1840	G	N7-C5	6.23	1.43	1.39
3	A1	345	C	C4-C5	-6.23	1.38	1.43
3	A1	1081	A	C6-N6	-6.23	1.28	1.33
3	A1	422	C	N1-C6	6.23	1.40	1.37
3	A1	987	G	N1-C2	-6.23	1.32	1.37
25	BB	1235	G	C2-N2	-6.23	1.28	1.34
25	BB	1426	G	C2-N2	-6.23	1.28	1.34
25	BB	2287	A	N7-C5	6.23	1.43	1.39
3	A1	202	G	P-O5'	-6.22	1.53	1.59
25	BB	192	C	N3-C4	-6.22	1.29	1.33
1	AP	61	C	N3-C4	-6.22	1.29	1.33
25	BB	1164	C	C4-N4	-6.22	1.28	1.33
25	BB	2256	G	N1-C2	-6.22	1.32	1.37
1	AA	49	C	P-O5'	-6.22	1.53	1.59
25	BB	1730	C	O3'-P	-6.22	1.53	1.61
1	AA	70	C	O3'-P	-6.22	1.53	1.61
25	BB	988	A	N7-C5	6.22	1.43	1.39
25	BB	1006	C	C4-N4	-6.22	1.28	1.33
25	BB	1120	G	C2-N2	-6.22	1.28	1.34
3	A1	458	U	O3'-P	-6.22	1.53	1.61
3	A1	557	G	N1-C2	-6.22	1.32	1.37
25	BB	489	G	C2-N2	-6.22	1.28	1.34
25	BB	2318	G	C2-N2	-6.22	1.28	1.34
3	A1	614	C	C4-N4	-6.21	1.28	1.33
25	BB	1153	C	C4-N4	-6.21	1.28	1.33
25	BB	1461	C	C4-N4	-6.21	1.28	1.33
1	AE	24	G	N7-C5	6.21	1.43	1.39
3	A1	159	G	C2-N2	-6.21	1.28	1.34
3	A1	517	G	P-O5'	-6.21	1.53	1.59
25	BB	2454	G	C2-N2	-6.21	1.28	1.34
1	AP	18	G	C2-N2	-6.21	1.28	1.34
3	A1	990	C	P-O5'	-6.21	1.53	1.59
3	A1	350	G	C2-N2	-6.21	1.28	1.34
1	AP	65	G	N1-C2	-6.21	1.32	1.37
20	AU	142	ARG	CZ-NH1	-6.21	1.25	1.33
25	BB	509	C	O3'-P	-6.21	1.53	1.61
25	BB	1319	C	C5'-C4'	6.21	1.58	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1670	C	O3'-P	-6.21	1.53	1.61
25	BB	2618	G	N7-C5	6.21	1.43	1.39
25	BB	2738	A	P-O5'	-6.21	1.53	1.59
1	AA	44	A	C6-N6	-6.20	1.28	1.33
25	BB	710	U	P-O5'	6.20	1.66	1.59
25	BB	1208	C	C4-N4	-6.20	1.28	1.33
25	BB	1595	C	C4-N4	-6.20	1.28	1.33
3	A1	490	C	N3-C4	-6.20	1.29	1.33
1	AA	75	C	C4'-C3'	6.20	1.59	1.53
25	BB	2710	C	C4-N4	-6.20	1.28	1.33
1	AP	56	C	C4-N4	-6.20	1.28	1.33
3	A1	184	G	N7-C5	6.20	1.43	1.39
3	A1	967	C	N3-C4	-6.20	1.29	1.33
25	BB	113	U	P-O5'	-6.20	1.53	1.59
3	A1	99	C	N3-C4	-6.20	1.29	1.33
25	BB	442	G	C2-N2	-6.20	1.28	1.34
3	A1	1162	C	N3-C4	-6.20	1.29	1.33
25	BB	1861	G	C2-N2	-6.20	1.28	1.34
25	BB	1937	A	N7-C5	6.20	1.43	1.39
25	BB	2559	C	O3'-P	-6.20	1.53	1.61
3	A1	432	A	N7-C5	6.19	1.43	1.39
7	AF	91	ARG	CZ-NH2	-6.19	1.25	1.33
25	BB	476	G	N7-C5	6.19	1.43	1.39
25	BB	1007	C	C4-N4	-6.19	1.28	1.33
25	BB	1136	G	O3'-P	-6.19	1.53	1.61
25	BB	1631	G	C2-N2	-6.19	1.28	1.34
25	BB	1914	C	C5-C6	6.19	1.39	1.34
3	A1	401	C	C4-N4	-6.19	1.28	1.33
24	BA	18	G	C2-N2	-6.19	1.28	1.34
25	BB	145	C	P-O5'	-6.19	1.53	1.59
1	AE	26	G	C2-N2	-6.19	1.28	1.34
3	A1	285	C	C4-N4	-6.19	1.28	1.33
3	A1	951	G	P-O5'	6.19	1.66	1.59
25	BB	2705	A	O3'-P	-6.19	1.53	1.61
3	A1	1310	G	C2-N2	-6.19	1.28	1.34
3	A1	1359	C	O3'-P	-6.19	1.53	1.61
25	BB	2476	A	O3'-P	-6.19	1.53	1.61
3	A1	411	A	C6-N1	-6.18	1.31	1.35
3	A1	848	C	C4-N4	-6.18	1.28	1.33
25	BB	2421	G	C2-N2	-6.18	1.28	1.34
25	BB	1118	C	C4-N4	-6.18	1.28	1.33
25	BB	1828	G	C2-N2	-6.18	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	351	G	N3-C4	6.18	1.39	1.35
3	A1	663	A	P-O5'	-6.18	1.53	1.59
3	A1	1032	G	C2-N2	-6.18	1.28	1.34
25	BB	1473	G	P-O5'	6.18	1.66	1.59
25	BB	1298	C	C5'-C4'	6.18	1.58	1.51
3	A1	734	G	C2-N2	-6.18	1.28	1.34
3	A1	279	A	N7-C5	6.18	1.43	1.39
3	A1	830	G	C2-N2	-6.18	1.28	1.34
3	A1	1033	G	C6-N1	-6.18	1.35	1.39
3	A1	1164	G	C2-N2	-6.18	1.28	1.34
25	BB	600	G	O3'-P	-6.18	1.53	1.61
25	BB	1069	A	N3-C4	6.18	1.38	1.34
25	BB	1650	A	N7-C5	6.18	1.43	1.39
25	BB	2061	G	P-O5'	-6.18	1.53	1.59
1	AE	25	C	P-O5'	6.17	1.66	1.59
3	A1	429	U	P-O5'	6.17	1.66	1.59
3	A1	1501	C	N3-C4	-6.17	1.29	1.33
25	BB	1137	G	O3'-P	-6.17	1.53	1.61
25	BB	2240	U	O3'-P	-6.17	1.53	1.61
25	BB	1836	C	N3-C4	-6.17	1.29	1.33
3	A1	1172	C	C4-N4	-6.17	1.28	1.33
3	A1	1383	C	P-O5'	6.17	1.66	1.59
24	BA	61	G	O3'-P	-6.17	1.53	1.61
25	BB	1453	A	P-O5'	-6.17	1.53	1.59
25	BB	2103	C	C4-N4	-6.17	1.28	1.33
25	BB	2226	C	C4-N4	-6.17	1.28	1.33
25	BB	2710	C	C5'-C4'	6.17	1.58	1.51
3	A1	26	A	N7-C5	6.17	1.43	1.39
25	BB	1640	A	O3'-P	-6.17	1.53	1.61
25	BB	139	U	O3'-P	6.17	1.68	1.61
25	BB	1954	G	P-O5'	6.17	1.66	1.59
25	BB	2628	C	N3-C4	-6.17	1.29	1.33
3	A1	980	C	P-O5'	6.17	1.66	1.59
3	A1	139	A	C6-N6	-6.17	1.29	1.33
3	A1	451	A	C6-N1	-6.16	1.31	1.35
3	A1	661	G	C6-N1	-6.16	1.35	1.39
3	A1	872	A	N9-C4	6.16	1.41	1.37
25	BB	1494	A	N7-C5	6.16	1.43	1.39
25	BB	1560	G	C5'-C4'	6.16	1.58	1.51
25	BB	1696	G	C2-N2	-6.16	1.28	1.34
25	BB	2418	A	N7-C5	6.16	1.43	1.39
25	BB	2631	G	P-O5'	6.16	1.66	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	113	C	P-O5'	-6.16	1.53	1.59
25	BB	262	A	N3-C4	6.16	1.38	1.34
3	A1	685	G	P-O5'	6.16	1.66	1.59
3	A1	1180	A	N3-C4	6.16	1.38	1.34
25	BB	1908	C	C5'-C4'	6.16	1.58	1.51
25	BB	2716	C	C4-N4	-6.16	1.28	1.33
3	A1	970	C	N3-C4	-6.16	1.29	1.33
3	A1	1296	C	O3'-P	-6.16	1.53	1.61
25	BB	1670	C	P-O5'	-6.16	1.53	1.59
25	BB	2341	G	N1-C2	-6.16	1.32	1.37
3	A1	1483	A	N3-C4	6.16	1.38	1.34
3	A1	1050	G	C5'-C4'	6.16	1.58	1.51
3	A1	1356	G	N9-C4	6.16	1.42	1.38
25	BB	1547	C	N3-C4	-6.16	1.29	1.33
25	BB	2090	A	N9-C4	6.16	1.41	1.37
3	A1	783	C	C4-N4	-6.15	1.28	1.33
3	A1	880	C	C4-N4	-6.15	1.28	1.33
25	BB	1432	G	N1-C2	-6.15	1.32	1.37
37	BN	176	ARG	CZ-NH2	-6.15	1.25	1.33
3	A1	838	G	N7-C5	6.15	1.43	1.39
25	BB	63	A	N7-C5	6.15	1.43	1.39
3	A1	44	A	C6-N6	-6.15	1.29	1.33
3	A1	1505	G	C6-N1	-6.15	1.35	1.39
25	BB	2524	G	C2-N2	-6.15	1.28	1.34
1	AA	14	A	N7-C5	6.15	1.43	1.39
3	A1	719	C	N3-C4	-6.15	1.29	1.33
25	BB	14	A	N3-C4	6.15	1.38	1.34
3	A1	724	G	O3'-P	-6.14	1.53	1.61
3	A1	1379	G	C2-N2	-6.14	1.28	1.34
25	BB	1202	G	C2-N2	-6.14	1.28	1.34
1	AE	28	C	C4-N4	-6.14	1.28	1.33
25	BB	930	G	O3'-P	-6.14	1.53	1.61
25	BB	1571	A	N7-C5	6.14	1.43	1.39
25	BB	2260	C	N3-C4	-6.14	1.29	1.33
25	BB	2331	G	C2-N2	-6.14	1.28	1.34
25	BB	1135	C	C4-N4	-6.14	1.28	1.33
3	A1	1458	G	O3'-P	-6.14	1.53	1.61
25	BB	1339	G	N3-C4	6.14	1.39	1.35
25	BB	2760	C	C4-N4	-6.14	1.28	1.33
25	BB	1427	A	P-O5'	6.14	1.65	1.59
3	A1	152	A	P-O5'	6.14	1.65	1.59
25	BB	2532	G	P-O5'	-6.14	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1136	C	N3-C4	-6.13	1.29	1.33
3	A1	1198	G	C2-N2	-6.13	1.28	1.34
25	BB	315	G	C2-N2	-6.13	1.28	1.34
25	BB	728	G	N7-C5	6.13	1.43	1.39
3	A1	402	G	C2-N2	-6.13	1.28	1.34
3	A1	959	A	C6-N6	-6.13	1.29	1.33
7	AF	106	ARG	CZ-NH2	-6.13	1.25	1.33
25	BB	136	G	N1-C2	-6.13	1.32	1.37
25	BB	865	C	C4-N4	-6.13	1.28	1.33
25	BB	1247	A	N7-C5	6.13	1.43	1.39
25	BB	2539	C	C4-N4	-6.13	1.28	1.33
3	A1	336	A	N7-C5	6.13	1.43	1.39
3	A1	592	G	C2-N2	-6.13	1.28	1.34
15	AO	135	ARG	CZ-NH2	-6.13	1.25	1.33
25	BB	2510	C	N3-C4	-6.13	1.29	1.33
3	A1	369	G	C2-N2	-6.13	1.28	1.34
25	BB	108	G	C2-N2	-6.13	1.28	1.34
25	BB	1421	G	N1-C2	-6.13	1.32	1.37
1	AE	56	C	C4-N4	-6.12	1.28	1.33
25	BB	163	C	N3-C4	-6.12	1.29	1.33
25	BB	494	G	C2-N2	-6.12	1.28	1.34
25	BB	1287	A	C6-N1	-6.12	1.31	1.35
25	BB	1934	C	C3'-C2'	6.12	1.59	1.52
24	BA	104	A	N3-C4	6.12	1.38	1.34
25	BB	993	G	C2-N2	-6.12	1.28	1.34
25	BB	1631	G	N7-C5	6.12	1.43	1.39
3	A1	521	G	N1-C2	-6.12	1.32	1.37
25	BB	324	A	C6-N6	-6.12	1.29	1.33
25	BB	2174	C	C4-N4	-6.12	1.28	1.33
3	A1	511	C	O3'-P	-6.12	1.53	1.61
25	BB	261	G	O3'-P	-6.12	1.53	1.61
25	BB	313	G	N7-C5	6.12	1.43	1.39
25	BB	1115	G	C2-N2	-6.12	1.28	1.34
25	BB	1520	U	P-O5'	-6.12	1.53	1.59
3	A1	683	G	C5'-C4'	6.12	1.58	1.51
1	AA	65	G	N1-C2	-6.12	1.32	1.37
25	BB	613	A	C6-N6	-6.12	1.29	1.33
25	BB	737	C	C4-N4	-6.12	1.28	1.33
25	BB	2286	G	C2-N2	-6.12	1.28	1.34
25	BB	1109	C	O3'-P	-6.11	1.53	1.61
25	BB	1508	A	C6-N1	-6.11	1.31	1.35
25	BB	2050	C	P-O5'	6.11	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1634	A	N3-C4	6.11	1.38	1.34
1	AP	66	A	O3'-P	-6.11	1.53	1.61
3	A1	187	G	C6-N1	-6.11	1.35	1.39
3	A1	968	A	N9-C4	6.11	1.41	1.37
3	A1	758	C	C4-N4	-6.11	1.28	1.33
25	BB	2458	G	N1-C2	-6.11	1.32	1.37
1	AA	34	G	N1-C2	-6.11	1.32	1.37
3	A1	962	C	C4-N4	-6.11	1.28	1.33
3	A1	1100	C	C5'-C4'	6.11	1.58	1.51
8	AG	68	ARG	CZ-NH1	-6.11	1.25	1.33
25	BB	1919	A	O3'-P	-6.11	1.53	1.61
25	BB	192	C	C4-N4	-6.11	1.28	1.33
25	BB	481	G	N1-C2	-6.11	1.32	1.37
25	BB	553	G	C2-N2	-6.11	1.28	1.34
25	BB	553	G	N1-C2	-6.11	1.32	1.37
25	BB	188	G	C2-N2	-6.10	1.28	1.34
25	BB	915	C	N3-C4	-6.10	1.29	1.33
25	BB	1472	C	C4-N4	-6.10	1.28	1.33
25	BB	1897	G	O3'-P	6.10	1.68	1.61
25	BB	2157	G	C2-N2	-6.10	1.28	1.34
25	BB	285	G	P-O5'	-6.10	1.53	1.59
25	BB	2472	G	P-O5'	6.10	1.65	1.59
25	BB	791	C	N3-C4	-6.10	1.29	1.33
25	BB	1821	A	N7-C5	6.10	1.43	1.39
3	A1	845	A	P-O5'	6.10	1.65	1.59
25	BB	130	C	C4-N4	-6.10	1.28	1.33
25	BB	1707	G	O3'-P	-6.10	1.53	1.61
3	A1	1110	A	N7-C5	6.10	1.43	1.39
25	BB	880	G	O3'-P	-6.10	1.53	1.61
25	BB	1703	G	N7-C5	6.10	1.43	1.39
25	BB	1230	A	P-O5'	6.10	1.65	1.59
1	AP	51	G	O3'-P	-6.09	1.53	1.61
24	BA	113	C	C4-N4	-6.09	1.28	1.33
25	BB	1146	C	N3-C4	-6.09	1.29	1.33
25	BB	2260	C	C4-N4	-6.09	1.28	1.33
25	BB	1967	C	C4-N4	-6.09	1.28	1.33
25	BB	2288	A	N3-C4	6.09	1.38	1.34
25	BB	394	C	C4-N4	-6.09	1.28	1.33
25	BB	511	U	N1-C2	6.09	1.44	1.38
25	BB	708	G	N1-C2	-6.09	1.32	1.37
25	BB	2409	G	N1-C2	-6.09	1.32	1.37
25	BB	2475	C	N1-C6	6.09	1.40	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1675	C	C4-N4	-6.09	1.28	1.33
9	AH	32	THR	C-O	6.09	1.34	1.23
24	BA	7	G	P-O5'	-6.09	1.53	1.59
25	BB	599	A	C6-N6	-6.09	1.29	1.33
25	BB	855	G	C2-N2	-6.09	1.28	1.34
25	BB	2676	C	N1-C6	6.09	1.40	1.37
1	AE	44	A	C6-N1	-6.09	1.31	1.35
24	BA	97	C	C4-N4	-6.09	1.28	1.33
25	BB	426	C	C4'-O4'	-6.09	1.37	1.45
25	BB	1342	A	N7-C5	6.09	1.43	1.39
25	BB	2456	C	C4-N4	-6.09	1.28	1.33
25	BB	611	C	C4'-O4'	-6.08	1.37	1.45
25	BB	1274	A	N7-C5	6.08	1.43	1.39
3	A1	278	G	N1-C2	-6.08	1.32	1.37
25	BB	1179	G	C2-N2	-6.08	1.28	1.34
25	BB	1095	A	N7-C5	6.08	1.42	1.39
3	A1	1046	A	C6-N6	-6.08	1.29	1.33
3	A1	771	G	P-O5'	6.08	1.65	1.59
3	A1	1365	G	O3'-P	-6.08	1.53	1.61
25	BB	300	A	N9-C4	6.08	1.41	1.37
25	BB	1334	G	C2-N2	-6.08	1.28	1.34
3	A1	887	G	C2-N2	-6.08	1.28	1.34
24	BA	9	G	N3-C4	6.08	1.39	1.35
25	BB	1320	C	C4-N4	-6.08	1.28	1.33
3	A1	1363	A	N7-C5	6.08	1.42	1.39
24	BA	70	C	O3'-P	-6.08	1.53	1.61
25	BB	1189	A	N7-C5	6.08	1.42	1.39
25	BB	1838	C	C4-N4	-6.08	1.28	1.33
3	A1	1104	G	C2-N2	-6.07	1.28	1.34
25	BB	239	C	N3-C4	-6.07	1.29	1.33
25	BB	650	C	C4-N4	-6.07	1.28	1.33
1	AE	27	C	C4-N4	-6.07	1.28	1.33
3	A1	794	A	N7-C5	6.07	1.42	1.39
25	BB	182	A	N7-C5	6.07	1.42	1.39
25	BB	1788	C	C4-N4	-6.07	1.28	1.33
3	A1	461	A	P-O5'	-6.07	1.53	1.59
25	BB	735	A	C6-N6	-6.07	1.29	1.33
25	BB	1560	G	N1-C2	-6.07	1.32	1.37
25	BB	2087	G	N1-C2	-6.07	1.32	1.37
25	BB	2518	A	P-O5'	6.07	1.65	1.59
3	A1	1243	C	N3-C4	-6.07	1.29	1.33
25	BB	2294	G	P-O5'	-6.07	1.53	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2394	C	C5'-C4'	6.07	1.58	1.51
3	A1	1139	G	O3'-P	-6.07	1.53	1.61
25	BB	484	C	N3-C4	-6.07	1.29	1.33
25	BB	1037	G	N1-C2	-6.07	1.32	1.37
25	BB	1043	C	C4-N4	-6.07	1.28	1.33
25	BB	1733	G	C2-N2	-6.07	1.28	1.34
25	BB	1910	G	C2-N2	-6.07	1.28	1.34
25	BB	2064	C	N3-C4	-6.07	1.29	1.33
3	A1	391	G	C2-N2	-6.07	1.28	1.34
24	BA	20	G	P-O5'	6.07	1.65	1.59
25	BB	365	U	P-O5'	-6.07	1.53	1.59
25	BB	367	G	C5-C6	6.07	1.48	1.42
25	BB	858	G	C2-N2	-6.07	1.28	1.34
25	BB	2307	G	P-O5'	6.07	1.65	1.59
3	A1	38	G	N1-C2	-6.06	1.32	1.37
25	BB	1697	G	C2-N2	-6.06	1.28	1.34
3	A1	654	G	P-O5'	6.06	1.65	1.59
25	BB	849	A	C6-N1	-6.06	1.31	1.35
25	BB	1215	G	C2-N2	-6.06	1.28	1.34
25	BB	2138	G	N1-C2	-6.06	1.32	1.37
3	A1	42	G	C2-N2	-6.06	1.28	1.34
3	A1	1431	A	C6-N1	-6.06	1.31	1.35
25	BB	2428	G	N1-C2	-6.06	1.32	1.37
3	A1	1455	G	N1-C2	-6.06	1.32	1.37
3	A1	1523	G	C2-N2	-6.06	1.28	1.34
25	BB	471	A	C6-N6	-6.06	1.29	1.33
25	BB	859	G	C2-N2	-6.06	1.28	1.34
25	BB	1161	C	N3-C4	-6.06	1.29	1.33
25	BB	2688	G	C2-N2	-6.06	1.28	1.34
3	A1	155	A	C6-N6	-6.06	1.29	1.33
3	A1	100	G	N1-C2	-6.06	1.32	1.37
3	A1	1091	U	P-O5'	6.06	1.65	1.59
3	A1	1338	G	N1-C2	-6.06	1.32	1.37
24	BA	84	G	N3-C4	6.06	1.39	1.35
25	BB	1149	G	C2-N2	-6.06	1.28	1.34
25	BB	1528	A	N7-C5	6.06	1.42	1.39
25	BB	2862	G	O3'-P	-6.06	1.53	1.61
25	BB	491	G	C2-N2	-6.05	1.28	1.34
25	BB	2102	G	C2-N2	-6.05	1.28	1.34
24	BA	112	G	C2-N2	-6.05	1.28	1.34
1	AE	31	A	N7-C5	6.05	1.42	1.39
4	AB	73	ARG	CZ-NH1	-6.05	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
14	AN	73	ARG	CZ-NH2	-6.05	1.25	1.33
25	BB	225	C	C4-N4	-6.05	1.28	1.33
3	A1	1079	G	C2-N2	-6.05	1.28	1.34
25	BB	1090	A	O3'-P	-6.05	1.53	1.61
3	A1	851	G	N1-C2	-6.05	1.32	1.37
3	A1	1276	G	O3'-P	-6.05	1.53	1.61
25	BB	1186	G	C6-N1	-6.05	1.35	1.39
3	A1	724	G	C2-N2	-6.05	1.28	1.34
25	BB	147	C	N1-C6	6.05	1.40	1.37
25	BB	971	G	N1-C2	-6.05	1.32	1.37
3	A1	631	C	N3-C4	-6.04	1.29	1.33
1	AP	43	G	P-O5'	6.04	1.65	1.59
25	BB	1332	G	N1-C2	-6.04	1.32	1.37
25	BB	1980	G	C6-N1	-6.04	1.35	1.39
25	BB	2501	C	C4-N4	-6.04	1.28	1.33
25	BB	2858	C	C5-C6	6.04	1.39	1.34
1	AE	2	C	C4-N4	-6.04	1.28	1.33
3	A1	604	G	C2-N2	-6.04	1.28	1.34
3	A1	978	A	C6-N6	-6.04	1.29	1.33
3	A1	1312	G	N1-C2	-6.04	1.32	1.37
7	AF	108	ARG	CZ-NH1	-6.04	1.25	1.33
8	AG	64	ARG	CZ-NH1	-6.04	1.25	1.33
25	BB	95	A	C6-N1	-6.04	1.31	1.35
3	A1	782	A	N3-C4	6.04	1.38	1.34
3	A1	1371	G	C2-N2	-6.04	1.28	1.34
25	BB	2467	C	N3-C4	-6.04	1.29	1.33
25	BB	208	C	C4-N4	-6.04	1.28	1.33
1	AA	26	G	O3'-P	-6.04	1.53	1.61
25	BB	978	G	C2-N2	-6.04	1.28	1.34
25	BB	1091	G	P-O5'	-6.04	1.53	1.59
25	BB	1330	C	N1-C6	6.04	1.40	1.37
25	BB	2042	A	C6-N1	-6.04	1.31	1.35
25	BB	1713	A	N7-C5	6.03	1.42	1.39
3	A1	1174	G	C2-N2	-6.03	1.28	1.34
25	BB	2108	A	P-O5'	-6.03	1.53	1.59
3	A1	243	A	N3-C4	6.03	1.38	1.34
3	A1	821	G	C2-N2	-6.03	1.28	1.34
25	BB	1930	G	C2-N2	-6.03	1.28	1.34
25	BB	2110	G	O3'-P	-6.03	1.53	1.61
3	A1	1051	C	C4-N4	-6.03	1.28	1.33
25	BB	281	C	P-O5'	-6.03	1.53	1.59
25	BB	912	C	C4-N4	-6.03	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2311	A	C6-N6	-6.03	1.29	1.33
25	BB	2579	C	C4-N4	-6.03	1.28	1.33
25	BB	2631	G	C2-N2	-6.03	1.28	1.34
1	AE	36	A	C6-N6	-6.03	1.29	1.33
3	A1	650	G	O3'-P	-6.03	1.53	1.61
3	A1	1415	G	N7-C5	6.03	1.42	1.39
25	BB	1522	A	N9-C4	6.03	1.41	1.37
25	BB	1987	A	O3'-P	-6.03	1.53	1.61
3	A1	957	U	C2-N3	6.02	1.42	1.37
1	AP	18	G	O3'-P	-6.02	1.53	1.61
3	A1	1427	C	C4-N4	-6.02	1.28	1.33
25	BB	925	A	C5'-C4'	6.02	1.58	1.51
25	BB	1292	G	C2-N2	-6.02	1.28	1.34
32	BI	71	ARG	CZ-NH2	-6.02	1.25	1.33
3	A1	1234	C	C4-N4	-6.02	1.28	1.33
25	BB	2759	G	C2-N2	-6.02	1.28	1.34
3	A1	792	A	C6-N1	-6.02	1.31	1.35
25	BB	1868	C	C4-N4	-6.02	1.28	1.33
3	A1	1134	G	N3-C4	6.02	1.39	1.35
25	BB	2358	A	O3'-P	-6.02	1.53	1.61
25	BB	1871	A	C6-N1	-6.02	1.31	1.35
25	BB	2104	C	N3-C4	-6.02	1.29	1.33
25	BB	2206	C	N1-C6	6.02	1.40	1.37
24	BA	102	G	N7-C5	6.01	1.42	1.39
25	BB	2043	C	N3-C4	-6.01	1.29	1.33
25	BB	1594	U	C4-C5	6.01	1.49	1.43
3	A1	413	G	O3'-P	-6.01	1.53	1.61
25	BB	663	G	N1-C2	-6.01	1.32	1.37
25	BB	1166	G	O3'-P	6.01	1.68	1.61
3	A1	416	G	N7-C5	6.01	1.42	1.39
3	A1	628	G	N1-C2	-6.01	1.32	1.37
25	BB	1049	C	N1-C6	6.01	1.40	1.37
25	BB	1172	C	P-O5'	6.01	1.65	1.59
25	BB	2217	G	C2-N2	-6.01	1.28	1.34
25	BB	2675	A	C6-N1	-6.01	1.31	1.35
25	BB	2688	G	N7-C5	6.01	1.42	1.39
25	BB	1752	C	N3-C4	-6.01	1.29	1.33
3	A1	1277	C	C4-N4	-6.01	1.28	1.33
3	A1	1454	G	O3'-P	-6.01	1.53	1.61
3	A1	1501	C	C4-N4	-6.01	1.28	1.33
25	BB	2421	G	C6-N1	-6.01	1.35	1.39
3	A1	632	U	O3'-P	-6.00	1.53	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	27	C	N3-C4	-6.00	1.29	1.33
25	BB	1139	G	N7-C5	6.00	1.42	1.39
1	AP	35	A	C5'-C4'	6.00	1.58	1.51
1	AE	53	G	P-O5'	6.00	1.65	1.59
3	A1	65	A	N9-C4	-6.00	1.34	1.37
25	BB	697	G	N1-C2	-6.00	1.32	1.37
1	AA	72	C	C4-N4	-6.00	1.28	1.33
3	A1	82	G	N1-C2	-6.00	1.32	1.37
3	A1	1169	A	C6-N6	-6.00	1.29	1.33
25	BB	825	A	N7-C5	6.00	1.42	1.39
25	BB	1002	G	C6-N1	-6.00	1.35	1.39
25	BB	2137	U	O3'-P	-6.00	1.53	1.61
3	A1	1062	U	P-O5'	6.00	1.65	1.59
25	BB	2018	G	N7-C5	6.00	1.42	1.39
25	BB	1321	A	C6-N1	-6.00	1.31	1.35
25	BB	2900	A	N7-C5	6.00	1.42	1.39
3	A1	435	A	C5-C4	-6.00	1.34	1.38
3	A1	1480	A	N7-C5	6.00	1.42	1.39
25	BB	203	A	N7-C5	6.00	1.42	1.39
25	BB	1902	C	C4-N4	-6.00	1.28	1.33
25	BB	2050	C	C4-N4	-6.00	1.28	1.33
25	BB	2429	G	N3-C4	6.00	1.39	1.35
25	BB	2869	G	C2-N2	-6.00	1.28	1.34
25	BB	49	A	C4'-O4'	-6.00	1.37	1.45
25	BB	238	C	O3'-P	-6.00	1.53	1.61
25	BB	211	C	N3-C4	-5.99	1.29	1.33
25	BB	1221	C	C4-N4	-5.99	1.28	1.33
3	A1	378	G	N1-C2	-5.99	1.32	1.37
25	BB	109	C	N3-C4	-5.99	1.29	1.33
3	A1	1017	U	P-O5'	-5.99	1.53	1.59
3	A1	1510	C	C4-N4	-5.99	1.28	1.33
25	BB	1047	G	N1-C2	-5.99	1.32	1.37
25	BB	1992	G	C2-N2	-5.99	1.28	1.34
25	BB	2646	C	C4-N4	-5.99	1.28	1.33
25	BB	2735	G	C2-N2	-5.99	1.28	1.34
25	BB	541	A	C6-N6	-5.99	1.29	1.33
25	BB	1727	C	C4-N4	-5.99	1.28	1.33
3	A1	714	G	O3'-P	-5.98	1.53	1.61
25	BB	671	C	C4-N4	-5.98	1.28	1.33
25	BB	1147	A	P-O5'	-5.98	1.53	1.59
1	AE	21	A	N7-C5	5.98	1.42	1.39
25	BB	475	C	C4-N4	-5.98	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	612	G	C6-N1	-5.98	1.35	1.39
25	BB	1531	C	P-O5'	5.98	1.65	1.59
3	A1	10	A	N3-C4	5.98	1.38	1.34
3	A1	233	C	N3-C4	-5.98	1.29	1.33
3	A1	1108	G	P-O5'	5.98	1.65	1.59
25	BB	2223	G	C5'-C4'	5.98	1.58	1.51
3	A1	1422	G	C2-N2	-5.98	1.28	1.34
3	A1	616	G	N3-C4	5.98	1.39	1.35
25	BB	1719	G	N1-C2	-5.98	1.32	1.37
25	BB	1872	A	N3-C4	5.98	1.38	1.34
1	AP	64	A	N3-C4	5.98	1.38	1.34
25	BB	1431	A	N7-C5	5.98	1.42	1.39
3	A1	773	G	C2-N2	-5.97	1.28	1.34
25	BB	1177	G	N7-C5	5.97	1.42	1.39
25	BB	469	G	N1-C2	-5.97	1.32	1.37
25	BB	2775	G	N7-C5	5.97	1.42	1.39
3	A1	127	G	C2-N2	-5.97	1.28	1.34
24	BA	110	C	N3-C4	-5.97	1.29	1.33
25	BB	1410	G	C6-N1	-5.97	1.35	1.39
25	BB	2383	G	C2-N2	-5.97	1.28	1.34
25	BB	1336	A	C6-N1	-5.97	1.31	1.35
25	BB	2090	A	N3-C4	5.97	1.38	1.34
25	BB	2551	C	N1-C6	5.97	1.40	1.37
25	BB	2852	G	P-O5'	5.97	1.65	1.59
25	BB	1574	C	C4-N4	-5.96	1.28	1.33
25	BB	1861	G	N1-C2	-5.96	1.32	1.37
25	BB	2066	C	C4-N4	-5.96	1.28	1.33
3	A1	161	A	C6-N6	-5.96	1.29	1.33
3	A1	874	G	C5-C6	5.96	1.48	1.42
25	BB	732	C	C4-N4	-5.96	1.28	1.33
3	A1	958	A	P-O5'	5.96	1.65	1.59
25	BB	220	G	N7-C5	5.96	1.42	1.39
25	BB	844	A	N3-C4	5.96	1.38	1.34
25	BB	905	A	C6-N6	-5.96	1.29	1.33
25	BB	520	G	O3'-P	-5.96	1.53	1.61
25	BB	2385	C	N3-C4	-5.96	1.29	1.33
3	A1	1185	G	N3-C4	5.96	1.39	1.35
25	BB	1237	A	C5-C4	-5.96	1.34	1.38
25	BB	1393	A	C6-N6	-5.96	1.29	1.33
1	AA	57	G	C2-N2	-5.96	1.28	1.34
25	BB	2042	A	N7-C5	5.96	1.42	1.39
25	BB	2	G	P-O5'	5.95	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1167	C	C4-N4	-5.95	1.28	1.33
3	A1	465	A	N9-C4	5.95	1.41	1.37
3	A1	572	A	C6-N6	-5.95	1.29	1.33
25	BB	1259	G	C2-N2	-5.95	1.28	1.34
25	BB	1691	C	C4-N4	-5.95	1.28	1.33
3	A1	948	C	C4-N4	-5.95	1.28	1.33
25	BB	353	C	C4-N4	-5.95	1.28	1.33
25	BB	1066	U	O3'-P	-5.95	1.54	1.61
25	BB	1737	G	C5-C6	5.95	1.48	1.42
3	A1	425	G	C2-N2	-5.95	1.28	1.34
25	BB	600	G	C2-N2	-5.95	1.28	1.34
25	BB	899	A	N7-C5	5.95	1.42	1.39
25	BB	1040	A	N3-C4	5.95	1.38	1.34
25	BB	2271	G	O3'-P	-5.95	1.54	1.61
1	AA	10	G	N3-C4	5.95	1.39	1.35
25	BB	1205	A	N7-C5	5.95	1.42	1.39
25	BB	2439	A	C6-N1	-5.95	1.31	1.35
3	A1	1278	G	N1-C2	-5.95	1.32	1.37
25	BB	2048	G	C2-N2	-5.95	1.28	1.34
25	BB	2508	G	C2-N2	-5.95	1.28	1.34
25	BB	2592	G	N1-C2	-5.95	1.32	1.37
3	A1	308	C	N3-C4	-5.94	1.29	1.33
25	BB	185	G	O3'-P	5.94	1.68	1.61
25	BB	1024	G	C2-N2	-5.94	1.28	1.34
25	BB	1029	A	O3'-P	-5.94	1.54	1.61
1	AA	57	G	O3'-P	-5.94	1.54	1.61
25	BB	205	G	C2-N2	-5.94	1.28	1.34
25	BB	1041	G	N1-C2	-5.94	1.32	1.37
25	BB	1227	G	N7-C5	5.94	1.42	1.39
25	BB	1262	A	N7-C5	5.94	1.42	1.39
3	A1	927	G	N1-C2	-5.94	1.32	1.37
25	BB	1794	A	C6-N1	-5.94	1.31	1.35
25	BB	2559	C	C4-N4	-5.94	1.28	1.33
3	A1	433	G	C5-C6	5.94	1.48	1.42
3	A1	1515	G	C2-N2	-5.94	1.28	1.34
25	BB	239	C	C4-N4	-5.94	1.28	1.33
25	BB	252	G	N7-C5	5.94	1.42	1.39
25	BB	75	G	C2-N2	-5.94	1.28	1.34
25	BB	2032	G	N1-C2	-5.94	1.33	1.37
3	A1	985	C	C4-N4	-5.94	1.28	1.33
25	BB	1158	C	C4-N4	-5.94	1.28	1.33
25	BB	1489	C	C4-N4	-5.94	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	45	A	C6-N1	-5.93	1.31	1.35
25	BB	487	C	N3-C4	-5.93	1.29	1.33
25	BB	1433	A	C6-N1	-5.93	1.31	1.35
25	BB	1697	G	O3'-P	-5.93	1.54	1.61
3	A1	222	C	C5'-C4'	5.93	1.58	1.51
3	A1	959	A	O3'-P	-5.93	1.54	1.61
3	A1	1311	A	C6-N6	-5.93	1.29	1.33
25	BB	240	C	N3-C4	-5.93	1.29	1.33
25	BB	2352	A	N7-C5	5.93	1.42	1.39
25	BB	2197	U	P-O5'	-5.93	1.53	1.59
3	A1	1169	A	C6-N1	-5.93	1.31	1.35
3	A1	1206	G	C2-N2	-5.93	1.28	1.34
3	A1	636	U	O3'-P	-5.93	1.54	1.61
3	A1	733	G	N1-C2	-5.93	1.33	1.37
3	A1	1028	C	C4-N4	-5.93	1.28	1.33
25	BB	1414	C	N1-C6	5.93	1.40	1.37
1	AA	37	G	C2-N2	-5.92	1.28	1.34
25	BB	774	G	N1-C2	-5.92	1.33	1.37
25	BB	1036	G	C2-N2	-5.92	1.28	1.34
25	BB	1277	G	C2-N2	-5.92	1.28	1.34
25	BB	1892	C	C4-N4	-5.92	1.28	1.33
3	A1	754	C	P-O5'	-5.92	1.53	1.59
3	A1	413	G	C2-N2	-5.92	1.28	1.34
3	A1	885	G	C2-N2	-5.92	1.28	1.34
25	BB	882	G	C2-N3	5.92	1.37	1.32
25	BB	1996	C	O3'-P	-5.92	1.54	1.61
25	BB	853	C	C4-N4	-5.92	1.28	1.33
1	AP	73	A	C6-N6	-5.92	1.29	1.33
3	A1	894	G	N7-C5	5.92	1.42	1.39
3	A1	600	A	N3-C4	5.92	1.38	1.34
3	A1	1387	G	O3'-P	-5.92	1.54	1.61
25	BB	1639	C	C4-N4	-5.92	1.28	1.33
25	BB	2793	C	C4-N4	-5.92	1.28	1.33
25	BB	1182	G	N1-C2	-5.92	1.33	1.37
1	AP	42	G	C2-N2	-5.91	1.28	1.34
3	A1	586	C	C4-N4	-5.91	1.28	1.33
3	A1	1149	C	C4-N4	-5.91	1.28	1.33
25	BB	310	A	C6-N1	-5.91	1.31	1.35
3	A1	423	G	C2-N2	-5.91	1.28	1.34
25	BB	2206	C	C4-N4	-5.91	1.28	1.33
3	A1	524	G	C1'-N9	5.91	1.57	1.48
25	BB	2105	U	C4'-O4'	-5.91	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	48	C	C5'-C4'	5.91	1.58	1.51
3	A1	481	G	N7-C5	5.91	1.42	1.39
25	BB	339	U	C5'-C4'	5.91	1.58	1.51
25	BB	780	G	N7-C5	5.91	1.42	1.39
25	BB	2314	A	N3-C4	5.91	1.38	1.34
3	A1	326	G	O3'-P	-5.91	1.54	1.61
3	A1	925	G	C2-N2	-5.91	1.28	1.34
24	BA	50	A	N7-C5	5.91	1.42	1.39
25	BB	329	G	C2-N2	-5.91	1.28	1.34
25	BB	1918	A	N3-C4	5.91	1.38	1.34
25	BB	2029	G	N7-C5	5.91	1.42	1.39
3	A1	320	A	N7-C5	5.90	1.42	1.39
25	BB	81	G	N1-C2	-5.90	1.33	1.37
25	BB	2445	G	C2-N2	-5.90	1.28	1.34
3	A1	949	A	N3-C4	5.90	1.38	1.34
25	BB	267	C	N3-C4	-5.90	1.29	1.33
25	BB	1088	A	N7-C5	5.90	1.42	1.39
25	BB	2636	C	C4-N4	-5.90	1.28	1.33
25	BB	2770	G	C5-C6	5.90	1.48	1.42
25	BB	2775	G	P-O5'	5.90	1.65	1.59
1	AA	9	A	N9-C4	5.90	1.41	1.37
3	A1	487	A	N7-C5	5.90	1.42	1.39
25	BB	325	G	C2-N2	-5.90	1.28	1.34
25	BB	1535	A	C6-N6	-5.90	1.29	1.33
25	BB	2759	G	N1-C2	-5.90	1.33	1.37
3	A1	771	G	N1-C2	-5.90	1.33	1.37
3	A1	874	G	N7-C5	5.90	1.42	1.39
3	A1	1345	U	N3-C4	-5.90	1.33	1.38
25	BB	79	C	N3-C4	-5.90	1.29	1.33
25	BB	1339	G	C2-N2	-5.90	1.28	1.34
3	A1	1054	C	C4-N4	-5.89	1.28	1.33
25	BB	2253	G	N7-C5	5.89	1.42	1.39
3	A1	517	G	N3-C4	5.89	1.39	1.35
24	BA	76	G	N1-C2	-5.89	1.33	1.37
25	BB	164	C	C4-N4	-5.89	1.28	1.33
25	BB	1228	G	N7-C5	5.89	1.42	1.39
25	BB	1731	G	C5-C6	5.89	1.48	1.42
25	BB	2454	G	N1-C2	-5.89	1.33	1.37
25	BB	2525	G	C2-N2	-5.89	1.28	1.34
3	A1	186	C	O3'-P	-5.89	1.54	1.61
3	A1	983	A	O3'-P	-5.89	1.54	1.61
25	BB	2606	C	N3-C4	-5.89	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AA	49	C	N3-C4	-5.89	1.29	1.33
3	A1	286	C	C4-N4	-5.89	1.28	1.33
3	A1	1064	G	N7-C5	5.89	1.42	1.39
3	A1	1079	G	N1-C2	-5.89	1.33	1.37
3	A1	1203	C	P-O5'	5.89	1.65	1.59
25	BB	77	G	C2-N2	-5.89	1.28	1.34
25	BB	263	G	O3'-P	-5.89	1.54	1.61
25	BB	445	C	N3-C4	-5.89	1.29	1.33
25	BB	2308	G	C5-C6	5.89	1.48	1.42
25	BB	2524	G	C6-N1	-5.89	1.35	1.39
25	BB	2716	C	N3-C4	-5.89	1.29	1.33
25	BB	696	G	N3-C4	5.89	1.39	1.35
25	BB	933	A	N7-C5	5.89	1.42	1.39
3	A1	889	A	C6-N1	-5.89	1.31	1.35
3	A1	1344	C	C4-N4	-5.89	1.28	1.33
25	BB	332	A	N7-C5	5.89	1.42	1.39
25	BB	438	G	N1-C2	-5.89	1.33	1.37
25	BB	452	G	C6-N1	-5.88	1.35	1.39
25	BB	1383	A	O3'-P	-5.88	1.54	1.61
3	A1	1195	C	N1-C6	5.88	1.40	1.37
25	BB	519	U	O3'-P	-5.88	1.54	1.61
25	BB	2651	C	C4-N4	-5.88	1.28	1.33
14	AN	39	GLU	CG-CD	5.88	1.60	1.51
3	A1	1203	C	C4-N4	-5.88	1.28	1.33
3	A1	500	G	C2-N2	-5.88	1.28	1.34
3	A1	623	C	C4-N4	-5.88	1.28	1.33
25	BB	1298	C	C4-N4	-5.88	1.28	1.33
25	BB	1368	G	C2-N2	-5.88	1.28	1.34
25	BB	1667	G	N1-C2	-5.88	1.33	1.37
25	BB	1816	C	N3-C4	-5.88	1.29	1.33
3	A1	176	C	N3-C4	-5.88	1.29	1.33
1	AP	37	G	C2-N2	-5.87	1.28	1.34
3	A1	1360	A	C6-N6	-5.87	1.29	1.33
3	A1	1516	G	C6-N1	-5.87	1.35	1.39
25	BB	777	G	N1-C2	-5.87	1.33	1.37
25	BB	2163	A	N3-C4	5.87	1.38	1.34
1	AE	53	G	O3'-P	-5.87	1.54	1.61
25	BB	341	C	P-O5'	5.87	1.65	1.59
25	BB	1439	A	N7-C5	5.87	1.42	1.39
25	BB	1609	A	N3-C4	5.87	1.38	1.34
25	BB	2215	C	C4-N4	-5.87	1.28	1.33
25	BB	2630	G	P-O5'	5.87	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AE	59	U	P-O5'	-5.87	1.53	1.59
3	A1	755	G	C2-N2	-5.87	1.28	1.34
25	BB	2661	G	N1-C2	-5.87	1.33	1.37
25	BB	2831	G	N1-C2	-5.87	1.33	1.37
3	A1	656	G	C2-N2	-5.87	1.28	1.34
25	BB	413	C	N3-C4	-5.87	1.29	1.33
25	BB	2643	G	N7-C5	5.87	1.42	1.39
3	A1	541	G	N7-C5	5.87	1.42	1.39
25	BB	776	G	C6-N1	-5.87	1.35	1.39
1	AE	56	C	N3-C4	-5.86	1.29	1.33
3	A1	564	C	C5-C6	5.86	1.39	1.34
3	A1	776	G	N3-C4	5.86	1.39	1.35
3	A1	913	A	N7-C5	5.86	1.42	1.39
3	A1	1297	G	C2-N2	-5.86	1.28	1.34
25	BB	1768	C	P-O5'	5.86	1.65	1.59
3	A1	49	U	O3'-P	-5.86	1.54	1.61
25	BB	854	C	N3-C4	-5.86	1.29	1.33
25	BB	398	C	C4-N4	-5.86	1.28	1.33
25	BB	1817	G	C2-N2	-5.86	1.28	1.34
25	BB	1974	C	N3-C4	-5.86	1.29	1.33
25	BB	2252	G	C2-N2	-5.86	1.28	1.34
25	BB	2608	G	C2-N2	-5.86	1.28	1.34
1	AA	46	G	N3-C4	5.86	1.39	1.35
1	AA	71	G	C2-N2	-5.86	1.28	1.34
25	BB	247	G	C2-N2	-5.86	1.28	1.34
1	AP	9	A	C6-N1	-5.86	1.31	1.35
1	AP	20	G	O3'-P	-5.86	1.54	1.61
3	A1	1369	C	C4-C5	-5.86	1.38	1.43
25	BB	408	G	C2-N2	-5.86	1.28	1.34
25	BB	1403	A	C5'-C4'	5.86	1.58	1.51
25	BB	1802	A	N7-C5	5.86	1.42	1.39
25	BB	2330	G	C2-N2	-5.86	1.28	1.34
25	BB	2723	C	P-O5'	-5.86	1.53	1.59
3	A1	1159	U	P-O5'	-5.86	1.53	1.59
3	A1	1409	C	C4-N4	-5.86	1.28	1.33
25	BB	925	A	N7-C5	5.86	1.42	1.39
25	BB	2391	G	N7-C5	5.86	1.42	1.39
25	BB	2862	G	C2-N2	-5.86	1.28	1.34
25	BB	1957	C	N3-C4	-5.85	1.29	1.33
25	BB	2101	A	N7-C5	5.85	1.42	1.39
25	BB	2531	A	C6-N6	-5.85	1.29	1.33
25	BB	645	C	N3-C4	-5.85	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	921	C	C4-N4	-5.85	1.28	1.33
3	A1	465	A	N3-C4	5.85	1.38	1.34
25	BB	435	C	C4-N4	-5.85	1.28	1.33
25	BB	725	G	N3-C4	5.85	1.39	1.35
25	BB	1080	A	N7-C5	5.85	1.42	1.39
25	BB	1659	G	N7-C5	5.85	1.42	1.39
25	BB	1771	C	C4-N4	-5.85	1.28	1.33
25	BB	2463	C	O3'-P	-5.85	1.54	1.61
1	AP	46	G	C2-N2	-5.85	1.28	1.34
25	BB	528	A	C5'-C4'	5.85	1.58	1.51
25	BB	889	C	N3-C4	-5.85	1.29	1.33
25	BB	1947	C	C4-N4	-5.85	1.28	1.33
25	BB	2543	G	C2-N2	-5.85	1.28	1.34
25	BB	2677	G	N7-C5	5.85	1.42	1.39
1	AE	3	G	N1-C2	-5.85	1.33	1.37
25	BB	1284	A	N7-C5	5.85	1.42	1.39
3	A1	812	G	C2-N2	-5.84	1.28	1.34
25	BB	203	A	O3'-P	-5.84	1.54	1.61
25	BB	1009	A	C6-N1	-5.84	1.31	1.35
25	BB	2025	C	C4-N4	-5.84	1.28	1.33
49	BZ	150	ARG	CZ-NH2	-5.84	1.25	1.33
25	BB	639	U	P-O5'	-5.84	1.53	1.59
3	A1	908	A	N7-C5	5.84	1.42	1.39
24	BA	2	G	C2'-O2'	5.84	1.49	1.41
1	AE	48	C	C4-N4	-5.84	1.28	1.33
3	A1	321	A	C6-N1	-5.84	1.31	1.35
25	BB	1846	G	C2-N2	-5.84	1.28	1.34
25	BB	2407	A	N7-C5	5.84	1.42	1.39
25	BB	2534	A	N7-C5	5.84	1.42	1.39
1	AE	76	A	C6-N6	-5.84	1.29	1.33
25	BB	185	G	C2-N2	-5.84	1.28	1.34
25	BB	545	U	O3'-P	-5.84	1.54	1.61
25	BB	1928	A	C6-N6	-5.84	1.29	1.33
3	A1	171	A	N7-C5	5.84	1.42	1.39
25	BB	2841	C	C4-N4	-5.84	1.28	1.33
25	BB	2842	G	N1-C2	-5.84	1.33	1.37
3	A1	1054	C	C3'-C2'	5.83	1.59	1.52
3	A1	182	A	N3-C4	5.83	1.38	1.34
3	A1	300	A	C6-N6	-5.83	1.29	1.33
25	BB	258	G	N7-C5	5.83	1.42	1.39
25	BB	1849	G	C6-N1	-5.83	1.35	1.39
1	AE	19	G	N1-C2	-5.83	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	262	A	C6-N1	-5.83	1.31	1.35
3	A1	468	A	C6-N1	-5.83	1.31	1.35
3	A1	974	A	C6-N1	-5.83	1.31	1.35
25	BB	1313	U	P-O5'	-5.83	1.53	1.59
25	BB	1290	C	N3-C4	-5.83	1.29	1.33
1	AE	34	G	P-O5'	-5.83	1.53	1.59
3	A1	926	G	C5-C6	5.83	1.48	1.42
3	A1	1254	A	N7-C5	5.83	1.42	1.39
25	BB	2090	A	N7-C5	5.83	1.42	1.39
3	A1	1251	A	N7-C5	5.83	1.42	1.39
25	BB	481	G	C6-N1	-5.83	1.35	1.39
25	BB	796	C	N3-C4	-5.83	1.29	1.33
1	AE	51	G	C2-N2	-5.83	1.28	1.34
3	A1	370	C	N3-C4	-5.83	1.29	1.33
3	A1	964	A	P-O5'	5.83	1.65	1.59
25	BB	1711	A	C6-N1	-5.83	1.31	1.35
25	BB	2502	G	C2-N2	-5.83	1.28	1.34
3	A1	207	C	C4-N4	-5.82	1.28	1.33
3	A1	1068	G	C2-N2	-5.82	1.28	1.34
3	A1	1164	G	O3'-P	-5.82	1.54	1.61
25	BB	1443	U	C5'-C4'	5.82	1.58	1.51
25	BB	2048	G	N1-C2	-5.82	1.33	1.37
25	BB	2201	G	O3'-P	-5.82	1.54	1.61
1	AA	71	G	C5'-C4'	5.82	1.58	1.51
3	A1	1051	C	O3'-P	-5.82	1.54	1.61
3	A1	1138	G	C2-N2	-5.82	1.28	1.34
3	A1	901	A	C5'-C4'	5.82	1.58	1.51
3	A1	381	C	N3-C4	-5.82	1.29	1.33
25	BB	359	G	N7-C5	5.82	1.42	1.39
25	BB	342	A	N3-C4	5.82	1.38	1.34
25	BB	1878	G	C6-N1	-5.82	1.35	1.39
25	BB	1930	G	P-O5'	-5.82	1.53	1.59
3	A1	721	G	O3'-P	-5.81	1.54	1.61
3	A1	785	G	O3'-P	-5.81	1.54	1.61
25	BB	1459	G	C2-N2	-5.81	1.28	1.34
25	BB	2333	A	C6-N6	-5.81	1.29	1.33
3	A1	239	U	P-O5'	5.81	1.65	1.59
25	BB	2178	C	O3'-P	-5.81	1.54	1.61
25	BB	117	G	N1-C2	-5.81	1.33	1.37
25	BB	2456	C	O3'-P	-5.81	1.54	1.61
23	AX	68	ARG	CZ-NH2	-5.81	1.25	1.33
24	BA	116	G	N1-C2	-5.81	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	345	A	N7-C5	5.81	1.42	1.39
25	BB	613	A	N7-C5	5.81	1.42	1.39
25	BB	2183	A	N7-C5	5.81	1.42	1.39
25	BB	1807	G	C6-N1	-5.80	1.35	1.39
25	BB	2190	G	C6-N1	-5.80	1.35	1.39
25	BB	336	C	C4-N4	-5.80	1.28	1.33
3	A1	480	U	C4'-O4'	-5.80	1.38	1.45
25	BB	965	C	C4-N4	-5.80	1.28	1.33
25	BB	977	G	C2-N2	-5.80	1.28	1.34
25	BB	987	C	C4-N4	-5.80	1.28	1.33
25	BB	1102	C	N3-C4	-5.80	1.29	1.33
3	A1	767	A	C6-N6	-5.80	1.29	1.33
3	A1	998	C	O3'-P	-5.80	1.54	1.61
25	BB	1996	C	C4-N4	-5.80	1.28	1.33
25	BB	2814	A	C6-N1	-5.80	1.31	1.35
3	A1	1369	C	C4-N4	-5.80	1.28	1.33
24	BA	107	G	N7-C5	5.80	1.42	1.39
25	BB	1645	G	N7-C5	5.80	1.42	1.39
25	BB	2652	C	C4-N4	-5.80	1.28	1.33
3	A1	583	A	N7-C5	5.80	1.42	1.39
3	A1	760	G	N3-C4	5.80	1.39	1.35
3	A1	789	U	P-O5'	5.80	1.65	1.59
3	A1	1305	G	O3'-P	-5.80	1.54	1.61
25	BB	661	A	C6-N1	-5.80	1.31	1.35
25	BB	2285	C	N3-C4	-5.80	1.29	1.33
25	BB	2325	G	N1-C2	-5.80	1.33	1.37
3	A1	896	C	C4-N4	-5.79	1.28	1.33
3	A1	1353	G	O3'-P	-5.79	1.54	1.61
1	AE	28	C	O3'-P	5.79	1.68	1.61
3	A1	213	G	C2-N2	-5.79	1.28	1.34
3	A1	490	C	C4-N4	-5.79	1.28	1.33
25	BB	93	G	C5-C6	5.79	1.48	1.42
25	BB	2135	A	N7-C5	5.79	1.42	1.39
25	BB	2282	G	O3'-P	-5.79	1.54	1.61
25	BB	2479	U	N3-C4	-5.79	1.33	1.38
3	A1	1442	G	C2-N2	-5.79	1.28	1.34
25	BB	1435	G	C2-N2	-5.79	1.28	1.34
25	BB	16	C	C4-N4	-5.79	1.28	1.33
25	BB	516	C	C4-N4	-5.79	1.28	1.33
25	BB	1661	G	C2-N2	-5.79	1.28	1.34
3	A1	385	C	P-O5'	5.79	1.65	1.59
3	A1	617	G	N7-C5	5.79	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1053	G	N7-C5	5.79	1.42	1.39
24	BA	10	G	C2-N2	-5.79	1.28	1.34
25	BB	528	A	N3-C4	5.79	1.38	1.34
25	BB	1323	C	P-O5'	5.79	1.65	1.59
25	BB	1641	A	N3-C4	5.79	1.38	1.34
25	BB	1813	G	C2-N2	-5.79	1.28	1.34
1	AA	51	G	P-O5'	5.79	1.65	1.59
1	AA	56	C	C5-C6	5.79	1.39	1.34
1	AP	40	C	C4-N4	-5.79	1.28	1.33
3	A1	425	G	P-O5'	5.79	1.65	1.59
25	BB	1498	C	C4-N4	-5.79	1.28	1.33
3	A1	139	A	C6-N1	-5.79	1.31	1.35
3	A1	264	C	C4-N4	-5.79	1.28	1.33
3	A1	511	C	C4-N4	-5.79	1.28	1.33
3	A1	646	G	C6-N1	-5.79	1.35	1.39
25	BB	1558	C	N3-C4	-5.79	1.29	1.33
25	BB	1947	C	N3-C4	-5.79	1.29	1.33
1	AA	14	A	O3'-P	5.78	1.68	1.61
3	A1	1144	G	C2-N2	-5.78	1.28	1.34
9	AH	88	ARG	CZ-NH2	-5.78	1.25	1.33
25	BB	406	G	N1-C2	-5.78	1.33	1.37
3	A1	1290	G	C2-N2	-5.78	1.28	1.34
25	BB	1270	C	C4-N4	-5.78	1.28	1.33
37	BN	174	ARG	CZ-NH2	-5.78	1.25	1.33
3	A1	525	C	C4-N4	-5.78	1.28	1.33
3	A1	1294	G	P-O5'	5.78	1.65	1.59
25	BB	1884	G	O3'-P	-5.78	1.54	1.61
1	AA	22	G	C2-N2	-5.78	1.28	1.34
3	A1	226	G	P-O5'	5.78	1.65	1.59
3	A1	345	C	N3-C4	-5.78	1.29	1.33
20	AU	69	ARG	CZ-NH2	-5.78	1.25	1.33
25	BB	1395	A	C6-N1	-5.78	1.31	1.35
25	BB	1454	C	C4-N4	-5.78	1.28	1.33
25	BB	2209	G	C2-N2	-5.78	1.28	1.34
25	BB	2770	G	N3-C4	5.78	1.39	1.35
3	A1	807	A	N7-C5	5.78	1.42	1.39
3	A1	1373	G	N1-C2	-5.78	1.33	1.37
25	BB	242	G	C2-N2	-5.78	1.28	1.34
25	BB	2083	G	C2-N2	-5.77	1.28	1.34
1	AA	74	C	N3-C4	-5.77	1.29	1.33
3	A1	329	A	P-O5'	5.77	1.65	1.59
3	A1	941	G	O3'-P	-5.77	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1061	G	N3-C4	5.77	1.39	1.35
25	BB	201	C	C4-N4	-5.77	1.28	1.33
25	BB	775	G	C2-N2	-5.77	1.28	1.34
25	BB	1150	C	C4-C5	-5.77	1.38	1.43
25	BB	1241	A	C6-N1	-5.77	1.31	1.35
25	BB	107	G	N1-C2	-5.77	1.33	1.37
25	BB	1290	C	C4-N4	-5.77	1.28	1.33
25	BB	338	G	N7-C5	5.77	1.42	1.39
25	BB	390	U	P-O5'	5.77	1.65	1.59
25	BB	502	A	C6-N6	-5.77	1.29	1.33
25	BB	2032	G	C2-N2	-5.77	1.28	1.34
25	BB	2318	G	N7-C5	5.77	1.42	1.39
25	BB	2463	C	N3-C4	-5.77	1.29	1.33
1	AE	45	G	P-O5'	-5.77	1.53	1.59
3	A1	663	A	N3-C4	5.77	1.38	1.34
3	A1	853	C	C4-N4	-5.77	1.28	1.33
3	A1	1077	G	C2-N2	-5.77	1.28	1.34
3	A1	1306	A	C6-N1	-5.77	1.31	1.35
25	BB	1539	U	P-O5'	-5.77	1.53	1.59
25	BB	2448	A	N7-C5	5.77	1.42	1.39
1	AA	2	C	C5-C6	5.77	1.39	1.34
25	BB	1473	G	N7-C5	5.77	1.42	1.39
25	BB	2370	G	N3-C4	5.77	1.39	1.35
3	A1	986	U	C2-N3	-5.76	1.33	1.37
3	A1	1063	C	N3-C4	-5.76	1.29	1.33
25	BB	1049	C	C4-N4	-5.76	1.28	1.33
25	BB	1334	G	N3-C4	5.76	1.39	1.35
25	BB	2273	A	N3-C4	5.76	1.38	1.34
25	BB	2481	G	C2-N2	-5.76	1.28	1.34
3	A1	64	G	N1-C2	-5.76	1.33	1.37
3	A1	716	A	N7-C5	5.76	1.42	1.39
1	AA	5	A	C8-N7	-5.76	1.27	1.31
3	A1	1258	G	C2-N2	-5.76	1.28	1.34
25	BB	1576	U	P-O5'	5.76	1.65	1.59
25	BB	2112	G	C5'-C4'	5.76	1.58	1.51
25	BB	2558	C	P-O5'	-5.76	1.53	1.59
25	BB	2731	G	N1-C2	-5.76	1.33	1.37
3	A1	769	G	N7-C5	5.76	1.42	1.39
3	A1	1211	U	C5'-C4'	5.76	1.58	1.51
3	A1	457	G	C2-N2	-5.76	1.28	1.34
3	A1	1268	G	C2-N2	-5.76	1.28	1.34
24	BA	79	G	N7-C5	5.76	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	615	U	C5'-C4'	5.76	1.58	1.51
3	A1	110	C	N3-C4	-5.76	1.29	1.33
3	A1	292	G	N1-C2	-5.75	1.33	1.37
25	BB	543	G	N3-C4	5.75	1.39	1.35
25	BB	2385	C	C4-N4	-5.75	1.28	1.33
3	A1	650	G	C2-N2	-5.75	1.28	1.34
3	A1	718	A	C6-N1	-5.75	1.31	1.35
3	A1	749	A	N7-C5	5.75	1.42	1.39
25	BB	902	C	C4-N4	-5.75	1.28	1.33
25	BB	952	G	P-O5'	5.75	1.65	1.59
25	BB	1034	G	N3-C4	5.75	1.39	1.35
25	BB	1581	G	C2-N2	-5.75	1.28	1.34
25	BB	2658	C	P-O5'	-5.75	1.53	1.59
3	A1	1266	G	C5'-C4'	5.75	1.58	1.51
3	A1	1314	C	N3-C4	-5.75	1.29	1.33
3	A1	1411	C	N3-C4	-5.75	1.29	1.33
25	BB	1108	U	O3'-P	-5.75	1.54	1.61
25	BB	1830	C	C4-N4	-5.75	1.28	1.33
3	A1	236	A	N7-C5	5.75	1.42	1.39
3	A1	1107	C	C4-N4	-5.75	1.28	1.33
1	AE	63	C	C4-N4	-5.75	1.28	1.33
3	A1	949	A	P-O5'	5.75	1.65	1.59
3	A1	1371	G	N1-C2	-5.75	1.33	1.37
25	BB	386	G	N7-C5	5.75	1.42	1.39
25	BB	436	C	C4-N4	-5.75	1.28	1.33
25	BB	708	G	N3-C4	5.75	1.39	1.35
25	BB	1933	G	N7-C5	5.75	1.42	1.39
1	AE	58	A	N7-C5	5.75	1.42	1.39
25	BB	433	C	P-O5'	5.75	1.65	1.59
25	BB	649	G	C2-N2	-5.75	1.28	1.34
25	BB	1548	A	N7-C5	5.75	1.42	1.39
25	BB	2201	G	C2-N2	-5.75	1.28	1.34
30	BG	46	ARG	CZ-NH2	-5.75	1.25	1.33
3	A1	522	C	O3'-P	-5.75	1.54	1.61
1	AE	57	G	N1-C2	-5.74	1.33	1.37
25	BB	806	C	C4-N4	-5.74	1.28	1.33
3	A1	171	A	N3-C4	5.74	1.38	1.34
25	BB	2770	G	C2-N2	-5.74	1.28	1.34
1	AE	14	A	N7-C5	5.74	1.42	1.39
3	A1	628	G	P-O5'	5.74	1.65	1.59
25	BB	1762	A	O3'-P	-5.74	1.54	1.61
3	A1	956	U	P-O5'	5.74	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1263	C	N3-C4	-5.74	1.29	1.33
15	AO	53	ARG	CZ-NH2	-5.74	1.25	1.33
25	BB	605	G	C2-N2	-5.74	1.28	1.34
25	BB	1761	C	C4-N4	-5.74	1.28	1.33
25	BB	2268	A	N7-C5	5.74	1.42	1.39
25	BB	2361	G	C2-N2	-5.74	1.28	1.34
3	A1	726	C	N3-C4	-5.74	1.29	1.33
6	AD	13	ARG	CZ-NH1	-5.74	1.25	1.33
3	A1	1151	A	N3-C4	5.74	1.38	1.34
3	A1	1263	C	C4-N4	-5.74	1.28	1.33
3	A1	1362	A	N3-C4	5.74	1.38	1.34
3	A1	1503	A	N7-C5	5.74	1.42	1.39
25	BB	972	A	N3-C4	5.74	1.38	1.34
25	BB	1545	A	N7-C5	5.74	1.42	1.39
3	A1	840	C	C4-N4	-5.73	1.28	1.33
24	BA	86	G	C2-N2	-5.73	1.28	1.34
3	A1	623	C	N3-C4	-5.73	1.29	1.33
25	BB	2290	G	N1-C2	-5.73	1.33	1.37
1	AA	51	G	N1-C2	-5.73	1.33	1.37
1	AP	48	C	C4-N4	-5.73	1.28	1.33
25	BB	1915	U	P-O5'	-5.73	1.54	1.59
3	A1	247	G	C2-N2	-5.73	1.28	1.34
3	A1	1388	C	C5-C6	5.73	1.39	1.34
25	BB	508	A	N3-C4	5.73	1.38	1.34
25	BB	1343	G	N7-C5	5.73	1.42	1.39
25	BB	2611	C	N3-C4	-5.73	1.29	1.33
25	BB	2733	A	P-O5'	5.73	1.65	1.59
25	BB	49	A	O3'-P	-5.73	1.54	1.61
25	BB	908	C	C4-N4	-5.73	1.28	1.33
25	BB	2222	C	N3-C4	-5.73	1.29	1.33
25	BB	2772	C	C4-N4	-5.73	1.28	1.33
1	AA	53	G	N1-C2	-5.73	1.33	1.37
2	AM	4	U	C5'-C4'	5.73	1.58	1.51
3	A1	170	U	P-O5'	5.73	1.65	1.59
1	AA	2	C	C4-N4	-5.72	1.28	1.33
25	BB	179	C	C4-N4	-5.72	1.28	1.33
25	BB	1030	C	N3-C4	-5.72	1.29	1.33
25	BB	1309	G	N1-C2	-5.72	1.33	1.37
25	BB	2467	C	C4-N4	-5.72	1.28	1.33
3	A1	832	G	C5-C6	5.72	1.48	1.42
3	A1	858	G	C2-N2	-5.72	1.28	1.34
25	BB	890	C	C4-N4	-5.72	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1458	U	O3'-P	-5.72	1.54	1.61
25	BB	1701	A	C6-N6	-5.72	1.29	1.33
25	BB	1278	C	C4-N4	-5.72	1.28	1.33
3	A1	1458	G	N3-C4	5.72	1.39	1.35
25	BB	1985	C	P-O5'	-5.72	1.54	1.59
2	AM	19	U	O3'-P	-5.72	1.54	1.61
3	A1	769	G	P-O5'	-5.72	1.54	1.59
3	A1	846	G	P-O5'	5.72	1.65	1.59
3	A1	1163	A	C6-N6	-5.72	1.29	1.33
3	A1	1279	G	N3-C4	5.72	1.39	1.35
25	BB	2100	G	O3'-P	-5.72	1.54	1.61
25	BB	2564	A	N7-C5	5.72	1.42	1.39
3	A1	575	G	C2-N2	-5.72	1.28	1.34
3	A1	887	G	N1-C2	-5.72	1.33	1.37
25	BB	1441	G	N3-C4	5.72	1.39	1.35
25	BB	2576	G	N1-C2	-5.72	1.33	1.37
3	A1	711	G	C2-N2	-5.71	1.28	1.34
3	A1	941	G	N1-C2	-5.71	1.33	1.37
3	A1	1084	G	N1-C2	-5.71	1.33	1.37
25	BB	731	C	C4-N4	-5.71	1.28	1.33
25	BB	819	A	P-O5'	5.71	1.65	1.59
25	BB	2234	G	O3'-P	-5.71	1.54	1.61
25	BB	2742	G	N7-C5	5.71	1.42	1.39
3	A1	863	U	O3'-P	-5.71	1.54	1.61
25	BB	1631	G	N1-C2	-5.71	1.33	1.37
25	BB	2217	G	N7-C5	5.71	1.42	1.39
25	BB	68	G	C2-N2	-5.71	1.28	1.34
25	BB	1665	A	O3'-P	-5.71	1.54	1.61
3	A1	61	G	C2-N2	-5.71	1.28	1.34
3	A1	791	G	C2-N2	-5.71	1.28	1.34
3	A1	1492	A	N7-C5	5.71	1.42	1.39
25	BB	400	G	N1-C2	-5.71	1.33	1.37
25	BB	1959	G	C5-C6	5.71	1.48	1.42
25	BB	1961	C	O3'-P	5.71	1.68	1.61
3	A1	80	A	C6-N6	-5.71	1.29	1.33
3	A1	90	C	O3'-P	-5.71	1.54	1.61
3	A1	730	G	N7-C5	5.71	1.42	1.39
25	BB	45	G	C2-N2	-5.71	1.28	1.34
25	BB	227	A	C6-N1	-5.71	1.31	1.35
25	BB	836	G	C6-N1	-5.71	1.35	1.39
25	BB	1336	A	N7-C5	5.71	1.42	1.39
25	BB	1770	G	C2-N2	-5.71	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2271	G	C2-N2	-5.71	1.28	1.34
25	BB	2323	G	O3'-P	-5.71	1.54	1.61
25	BB	2370	G	N7-C5	5.71	1.42	1.39
25	BB	2597	G	C2-N2	-5.71	1.28	1.34
3	A1	1303	C	N3-C4	-5.71	1.29	1.33
25	BB	1016	G	N1-C2	-5.71	1.33	1.37
3	A1	56	U	C5-C6	5.70	1.39	1.34
3	A1	293	G	C2-N2	-5.70	1.28	1.34
3	A1	559	A	P-O5'	-5.70	1.54	1.59
25	BB	548	G	C2-N2	-5.70	1.28	1.34
25	BB	768	G	N1-C2	-5.70	1.33	1.37
3	A1	23	C	N1-C6	5.70	1.40	1.37
3	A1	626	G	N7-C5	5.70	1.42	1.39
3	A1	640	A	N7-C5	5.70	1.42	1.39
25	BB	465	G	N3-C4	5.70	1.39	1.35
25	BB	500	G	C2-N2	-5.70	1.28	1.34
25	BB	1612	C	C4-N4	-5.70	1.28	1.33
3	A1	471	U	C5'-C4'	5.70	1.58	1.51
3	A1	918	A	C5'-C4'	5.70	1.58	1.51
25	BB	450	G	N1-C2	-5.70	1.33	1.37
25	BB	1735	A	C6-N1	-5.70	1.31	1.35
25	BB	1760	C	N3-C4	-5.70	1.29	1.33
25	BB	2114	A	N3-C4	5.70	1.38	1.34
25	BB	2225	A	N7-C5	5.70	1.42	1.39
3	A1	885	G	N7-C5	5.70	1.42	1.39
25	BB	446	G	C5-C6	5.70	1.48	1.42
25	BB	2660	A	N7-C5	5.70	1.42	1.39
25	BB	1456	G	N1-C2	-5.70	1.33	1.37
25	BB	2800	A	N7-C5	5.70	1.42	1.39
8	AG	58	ARG	CZ-NH2	-5.69	1.25	1.33
25	BB	1133	A	O3'-P	-5.69	1.54	1.61
3	A1	81	A	P-O5'	-5.69	1.54	1.59
3	A1	1253	G	N3-C4	5.69	1.39	1.35
25	BB	539	G	P-O5'	-5.69	1.54	1.59
25	BB	992	C	C4-N4	-5.69	1.28	1.33
25	BB	1316	U	O3'-P	-5.69	1.54	1.61
25	BB	1324	G	C2-N2	-5.69	1.28	1.34
25	BB	1630	A	O3'-P	-5.69	1.54	1.61
25	BB	57	C	N3-C4	-5.69	1.29	1.33
25	BB	623	C	C4-N4	-5.69	1.28	1.33
25	BB	1465	G	N3-C4	5.69	1.39	1.35
25	BB	1914	C	C4-N4	-5.69	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	BA	8	C	C4-N4	-5.69	1.28	1.33
25	BB	326	G	O3'-P	-5.69	1.54	1.61
25	BB	1492	G	P-O5'	5.69	1.65	1.59
3	A1	33	A	N7-C5	5.69	1.42	1.39
3	A1	279	A	C6-N6	-5.69	1.29	1.33
25	BB	2487	G	N7-C5	5.69	1.42	1.39
3	A1	949	A	C6-N1	-5.68	1.31	1.35
3	A1	975	A	N3-C4	5.68	1.38	1.34
24	BA	19	C	N3-C4	-5.68	1.29	1.33
3	A1	1270	G	N1-C2	-5.68	1.33	1.37
25	BB	445	C	C4-N4	-5.68	1.28	1.33
25	BB	1065	U	O3'-P	-5.68	1.54	1.61
25	BB	1869	G	C2-N3	5.68	1.37	1.32
3	A1	168	G	C2-N2	-5.68	1.28	1.34
3	A1	1484	C	C5'-C4'	5.68	1.58	1.51
25	BB	985	C	N3-C4	-5.68	1.29	1.33
25	BB	991	C	C4-N4	-5.68	1.28	1.33
25	BB	2207	C	C4-N4	-5.68	1.28	1.33
25	BB	2264	C	O3'-P	-5.68	1.54	1.61
25	BB	2417	C	C4-N4	-5.68	1.28	1.33
3	A1	817	C	N3-C4	-5.68	1.29	1.33
25	BB	1150	C	O3'-P	-5.68	1.54	1.61
25	BB	1446	C	N3-C4	-5.68	1.29	1.33
3	A1	504	C	C5'-C4'	5.68	1.58	1.51
3	A1	1048	G	N1-C2	-5.68	1.33	1.37
3	A1	1507	A	O3'-P	-5.68	1.54	1.61
25	BB	1615	C	C4-N4	-5.68	1.28	1.33
25	BB	1958	C	N3-C4	-5.68	1.29	1.33
25	BB	2289	G	N3-C4	5.68	1.39	1.35
1	AE	29	A	O3'-P	-5.67	1.54	1.61
3	A1	1238	A	N7-C5	5.67	1.42	1.39
3	A1	1485	U	O3'-P	-5.67	1.54	1.61
25	BB	226	A	N7-C5	5.67	1.42	1.39
25	BB	1116	G	N7-C5	5.67	1.42	1.39
25	BB	1169	A	C5'-C4'	5.67	1.58	1.51
3	A1	536	C	N3-C4	-5.67	1.29	1.33
3	A1	1385	G	C2-N2	-5.67	1.28	1.34
25	BB	281	C	N3-C4	-5.67	1.29	1.33
25	BB	764	A	N7-C5	5.67	1.42	1.39
25	BB	938	G	C2-N2	-5.67	1.28	1.34
25	BB	2878	U	O3'-P	-5.67	1.54	1.61
3	A1	444	G	N3-C4	5.67	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1901	A	C6-N1	-5.67	1.31	1.35
1	AA	74	C	C4-N4	-5.67	1.28	1.33
1	AE	46	G	C2-N2	-5.67	1.28	1.34
3	A1	965	U	C2-N3	-5.67	1.33	1.37
25	BB	407	G	C2-N2	-5.67	1.28	1.34
25	BB	535	G	C2-N2	-5.67	1.28	1.34
25	BB	662	G	C2-N2	-5.67	1.28	1.34
25	BB	1077	A	O3'-P	-5.67	1.54	1.61
1	AP	42	G	P-O5'	5.67	1.65	1.59
3	A1	1255	G	C5'-C4'	5.67	1.58	1.51
3	A1	1399	C	C4-N4	-5.67	1.28	1.33
3	A1	1430	A	N7-C5	5.67	1.42	1.39
25	BB	2282	G	C2-N2	-5.67	1.28	1.34
3	A1	83	C	C4-N4	-5.67	1.28	1.33
3	A1	347	G	N1-C2	-5.67	1.33	1.37
3	A1	1468	A	C6-N1	-5.67	1.31	1.35
25	BB	1839	G	N3-C4	5.67	1.39	1.35
3	A1	130	A	P-O5'	-5.66	1.54	1.59
3	A1	653	U	P-O5'	5.66	1.65	1.59
3	A1	324	G	C2-N2	-5.66	1.28	1.34
3	A1	1317	C	N1-C6	5.66	1.40	1.37
3	A1	344	A	C6-N1	-5.66	1.31	1.35
3	A1	1004	A	C6-N6	-5.66	1.29	1.33
25	BB	1071	G	P-O5'	5.66	1.65	1.59
25	BB	1656	C	C4-N4	-5.66	1.28	1.33
25	BB	2702	G	N7-C5	5.66	1.42	1.39
3	A1	976	G	C6-N1	-5.66	1.35	1.39
25	BB	1533	C	N3-C4	-5.66	1.29	1.33
25	BB	866	A	N7-C5	5.66	1.42	1.39
25	BB	1088	A	N9-C4	5.66	1.41	1.37
3	A1	1261	A	N7-C5	5.66	1.42	1.39
25	BB	1137	G	N1-C2	-5.66	1.33	1.37
25	BB	1515	A	N3-C4	5.66	1.38	1.34
24	BA	99	A	N3-C4	5.65	1.38	1.34
24	BA	105	G	N7-C5	5.65	1.42	1.39
25	BB	214	G	N1-C2	-5.65	1.33	1.37
25	BB	1349	C	N3-C4	-5.65	1.29	1.33
3	A1	319	G	C2-N2	-5.65	1.28	1.34
3	A1	491	G	C6-N1	-5.65	1.35	1.39
1	AE	40	C	P-O5'	-5.65	1.54	1.59
25	BB	1989	G	C6-N1	-5.65	1.35	1.39
25	BB	2384	U	P-O5'	5.65	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1242	G	N1-C2	-5.65	1.33	1.37
25	BB	1134	A	N3-C4	5.65	1.38	1.34
25	BB	2752	C	N3-C4	-5.65	1.29	1.33
3	A1	369	G	N1-C2	-5.65	1.33	1.37
3	A1	624	C	C4-N4	-5.65	1.28	1.33
25	BB	482	A	P-O5'	-5.65	1.54	1.59
3	A1	608	A	N3-C4	5.65	1.38	1.34
3	A1	896	C	N3-C4	-5.65	1.29	1.33
25	BB	1322	A	N7-C5	5.65	1.42	1.39
25	BB	1685	C	C4-N4	-5.65	1.28	1.33
1	AE	71	G	N7-C5	5.64	1.42	1.39
3	A1	622	A	N7-C5	5.64	1.42	1.39
25	BB	879	G	N7-C5	5.64	1.42	1.39
28	BE	18	ARG	CZ-NH2	-5.64	1.25	1.33
1	AA	1	G	N1-C2	-5.64	1.33	1.37
3	A1	265	G	C8-N7	5.64	1.34	1.30
25	BB	717	C	C4-N4	-5.64	1.28	1.33
25	BB	756	A	N3-C4	5.64	1.38	1.34
25	BB	2263	C	C4-N4	-5.64	1.28	1.33
25	BB	2694	G	C2-N2	-5.64	1.28	1.34
37	BN	132	ARG	NE-CZ	-5.64	1.25	1.33
3	A1	95	C	C4-N4	-5.64	1.28	1.33
3	A1	404	G	C2-N2	-5.64	1.28	1.34
3	A1	1046	A	P-O5'	-5.64	1.54	1.59
3	A1	611	C	O3'-P	-5.64	1.54	1.61
3	A1	1404	C	C4-N4	-5.64	1.28	1.33
14	AN	24	ARG	CZ-NH2	-5.64	1.25	1.33
25	BB	785	G	C2-N2	-5.64	1.28	1.34
25	BB	983	A	N3-C4	5.64	1.38	1.34
25	BB	1707	G	N1-C2	-5.64	1.33	1.37
1	AA	36	A	N3-C4	5.64	1.38	1.34
3	A1	538	G	C2-N2	-5.64	1.28	1.34
25	BB	231	A	N3-C4	5.64	1.38	1.34
25	BB	488	G	C2-N2	-5.64	1.28	1.34
25	BB	855	G	N1-C2	-5.64	1.33	1.37
25	BB	1916	A	O3'-P	-5.64	1.54	1.61
1	AP	18	G	N1-C2	-5.64	1.33	1.37
3	A1	967	C	C4-N4	-5.64	1.28	1.33
3	A1	1067	A	N7-C5	5.64	1.42	1.39
25	BB	421	C	C4-N4	-5.64	1.28	1.33
25	BB	617	G	C2-N2	-5.64	1.28	1.34
3	A1	683	G	N7-C5	5.63	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1430	G	C2-N2	-5.63	1.28	1.34
25	BB	1478	G	C2-N2	-5.63	1.28	1.34
25	BB	2185	U	O3'-P	-5.63	1.54	1.61
25	BB	2317	A	C6-N1	-5.63	1.31	1.35
25	BB	2728	U	C5'-C4'	5.63	1.58	1.51
3	A1	941	G	N3-C4	5.63	1.39	1.35
3	A1	1054	C	C5'-C4'	5.63	1.58	1.51
25	BB	1536	C	C4-N4	-5.63	1.28	1.33
25	BB	1695	G	C2-N2	-5.63	1.28	1.34
3	A1	841	C	C4-N4	-5.63	1.28	1.33
25	BB	220	G	C2-N2	-5.63	1.28	1.34
25	BB	691	C	N3-C4	-5.63	1.30	1.33
25	BB	1932	A	O3'-P	-5.63	1.54	1.61
25	BB	2795	C	C5-C6	5.63	1.38	1.34
3	A1	345	C	C4-N4	-5.63	1.28	1.33
3	A1	650	G	N3-C4	5.63	1.39	1.35
25	BB	1711	A	N7-C5	5.63	1.42	1.39
25	BB	2379	G	C6-N1	-5.63	1.35	1.39
24	BA	13	G	C5-C6	5.63	1.48	1.42
25	BB	284	U	P-O5'	-5.63	1.54	1.59
25	BB	2152	G	N1-C2	-5.63	1.33	1.37
3	A1	102	G	N3-C4	5.63	1.39	1.35
3	A1	1179	A	N7-C5	5.63	1.42	1.39
25	BB	1403	A	C5-C4	-5.63	1.34	1.38
25	BB	2125	G	C6-N1	-5.63	1.35	1.39
25	BB	2675	A	N3-C4	5.63	1.38	1.34
1	AP	24	G	C2-N2	-5.62	1.28	1.34
3	A1	809	G	C2-N2	-5.62	1.28	1.34
25	BB	424	G	C5'-C4'	5.62	1.58	1.51
25	BB	575	A	O3'-P	-5.62	1.54	1.61
29	BF	114	ARG	CZ-NH2	-5.62	1.25	1.33
3	A1	105	G	C2-N2	-5.62	1.28	1.34
1	AE	1	G	N3-C4	5.62	1.39	1.35
3	A1	469	C	C4-N4	-5.62	1.28	1.33
3	A1	1170	A	O3'-P	-5.62	1.54	1.61
3	A1	1278	G	O3'-P	-5.62	1.54	1.61
25	BB	2893	A	N7-C5	5.62	1.42	1.39
25	BB	2503	A	O3'-P	-5.62	1.54	1.61
3	A1	1469	C	C4-N4	-5.62	1.28	1.33
25	BB	121	G	C2-N2	-5.62	1.28	1.34
1	AP	3	G	N1-C2	-5.62	1.33	1.37
3	A1	1127	G	C2-N2	-5.62	1.28	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1226	C	N3-C4	-5.62	1.30	1.33
25	BB	1592	C	N3-C4	-5.62	1.30	1.33
3	A1	851	G	C5'-C4'	5.62	1.58	1.51
3	A1	866	C	P-O5'	-5.62	1.54	1.59
3	A1	1139	G	C2-N2	-5.62	1.28	1.34
25	BB	219	A	C6-N1	-5.62	1.31	1.35
25	BB	2087	G	C2-N2	-5.62	1.28	1.34
25	BB	2200	C	C4-N4	-5.62	1.28	1.33
3	A1	87	C	C3'-C2'	5.61	1.59	1.52
3	A1	1290	G	O3'-P	-5.61	1.54	1.61
25	BB	866	A	N3-C4	5.61	1.38	1.34
25	BB	1449	G	P-O5'	5.61	1.65	1.59
25	BB	2169	A	N7-C5	5.61	1.42	1.39
25	BB	2890	G	N1-C2	-5.61	1.33	1.37
3	A1	1190	G	N1-C2	-5.61	1.33	1.37
25	BB	1548	A	N3-C4	5.61	1.38	1.34
25	BB	2854	G	N3-C4	5.61	1.39	1.35
3	A1	889	A	N7-C5	5.61	1.42	1.39
25	BB	2380	C	N3-C4	-5.61	1.30	1.33
25	BB	2642	G	C2-N2	-5.61	1.28	1.34
1	AP	11	C	C4-N4	-5.61	1.28	1.33
25	BB	2437	G	C2-N2	-5.61	1.28	1.34
25	BB	417	C	C4'-O4'	-5.61	1.38	1.45
25	BB	661	A	O3'-P	-5.61	1.54	1.61
25	BB	1326	U	C2-N3	5.61	1.41	1.37
25	BB	1467	U	O3'-P	-5.61	1.54	1.61
25	BB	2855	C	C4-N4	-5.61	1.28	1.33
3	A1	803	G	N1-C2	-5.61	1.33	1.37
3	A1	202	G	N1-C2	-5.60	1.33	1.37
25	BB	2697	G	C2-N2	-5.60	1.28	1.34
3	A1	263	A	N3-C4	5.60	1.38	1.34
3	A1	923	A	C6-N6	-5.60	1.29	1.33
24	BA	49	C	N3-C4	-5.60	1.30	1.33
25	BB	107	G	P-O5'	5.60	1.65	1.59
25	BB	2843	G	O3'-P	5.60	1.67	1.61
30	BG	30	ARG	CZ-NH2	-5.60	1.25	1.33
3	A1	1419	G	N7-C5	5.60	1.42	1.39
25	BB	486	C	C4-N4	-5.60	1.28	1.33
25	BB	2661	G	N3-C4	5.60	1.39	1.35
1	AP	75	C	C4-N4	-5.60	1.28	1.33
3	A1	1237	C	N3-C4	-5.60	1.30	1.33
25	BB	1449	G	N7-C5	5.60	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2040	G	C2-N2	-5.60	1.28	1.34
3	A1	357	G	C6-N1	-5.60	1.35	1.39
3	A1	847	G	C2-N2	-5.60	1.28	1.34
25	BB	489	G	C6-N1	-5.60	1.35	1.39
25	BB	1548	A	P-O5'	-5.60	1.54	1.59
3	A1	230	G	P-O5'	-5.60	1.54	1.59
3	A1	725	G	C2-N2	-5.60	1.28	1.34
27	BD	105	ARG	CZ-NH2	-5.60	1.25	1.33
3	A1	682	G	N1-C2	-5.59	1.33	1.37
3	A1	713	G	C6-N1	-5.59	1.35	1.39
24	BA	90	C	P-O5'	-5.59	1.54	1.59
25	BB	1310	G	C2-N2	-5.59	1.28	1.34
25	BB	1455	G	N1-C2	-5.59	1.33	1.37
25	BB	2374	C	C4-C5	-5.59	1.38	1.43
3	A1	532	A	N9-C4	5.59	1.41	1.37
22	AW	32	ARG	CZ-NH1	-5.59	1.25	1.33
3	A1	257	G	C2-N2	-5.59	1.28	1.34
3	A1	1032	G	N1-C2	-5.59	1.33	1.37
3	A1	1482	G	C4'-C3'	5.59	1.59	1.53
3	A1	1508	A	N7-C5	5.59	1.42	1.39
3	A1	40	C	O3'-P	-5.59	1.54	1.61
3	A1	1401	G	C2-N2	-5.59	1.28	1.34
25	BB	266	G	C2-N2	-5.59	1.28	1.34
3	A1	706	A	N7-C5	5.59	1.42	1.39
25	BB	2458	G	C2-N2	-5.59	1.28	1.34
25	BB	2499	C	C4-N4	-5.59	1.28	1.33
1	AA	29	A	O3'-P	-5.59	1.54	1.61
3	A1	71	A	N7-C5	5.59	1.42	1.39
3	A1	392	C	N3-C4	-5.59	1.30	1.33
3	A1	587	G	N1-C2	-5.59	1.33	1.37
30	BG	64	ARG	CZ-NH1	-5.59	1.25	1.33
25	BB	731	C	N3-C4	-5.58	1.30	1.33
25	BB	2802	G	C2-N2	-5.58	1.28	1.34
3	A1	190	A	O3'-P	-5.58	1.54	1.61
3	A1	1253	G	C6-N1	-5.58	1.35	1.39
3	A1	1497	G	N7-C5	5.58	1.42	1.39
25	BB	1740	G	N3-C4	5.58	1.39	1.35
25	BB	2303	G	C2-N2	-5.58	1.28	1.34
25	BB	2735	G	C6-N1	-5.58	1.35	1.39
25	BB	2811	G	C2-N2	-5.58	1.28	1.34
3	A1	611	C	C4-C5	-5.58	1.38	1.43
25	BB	1718	G	C6-N1	-5.58	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1944	U	P-O5'	5.58	1.65	1.59
25	BB	2140	G	C2-N2	-5.58	1.28	1.34
2	AM	11	U	P-O5'	5.58	1.65	1.59
3	A1	361	G	N1-C2	-5.58	1.33	1.37
3	A1	443	C	N3-C4	-5.58	1.30	1.33
3	A1	1267	C	C4'-O4'	-5.58	1.38	1.45
3	A1	1106	G	C2-N2	-5.58	1.28	1.34
25	BB	1288	G	C2-N2	-5.58	1.28	1.34
3	A1	1424	U	N3-C4	-5.58	1.33	1.38
33	BJ	54	ARG	CZ-NH2	-5.58	1.25	1.33
1	AA	38	A	C4'-C3'	5.58	1.59	1.53
1	AP	65	G	C2-N2	-5.58	1.28	1.34
3	A1	788	U	C5'-C4'	5.58	1.58	1.51
3	A1	1143	G	C2-N2	-5.58	1.28	1.34
3	A1	1275	A	O3'-P	-5.58	1.54	1.61
3	A1	1257	A	N7-C5	5.57	1.42	1.39
24	BA	64	G	N7-C5	5.57	1.42	1.39
25	BB	260	G	N1-C2	-5.57	1.33	1.37
25	BB	907	G	P-O5'	-5.57	1.54	1.59
25	BB	1697	G	N1-C2	-5.57	1.33	1.37
25	BB	1936	A	N3-C4	5.57	1.38	1.34
3	A1	326	G	C2-N2	-5.57	1.28	1.34
3	A1	41	G	C2-N2	-5.57	1.28	1.34
3	A1	934	C	C5'-C4'	5.57	1.58	1.51
3	A1	1181	G	C2-N2	-5.57	1.28	1.34
25	BB	145	C	O3'-P	-5.57	1.54	1.61
25	BB	1457	U	P-O5'	5.57	1.65	1.59
25	BB	1975	G	C2-N2	-5.57	1.28	1.34
25	BB	2077	A	N7-C5	5.57	1.42	1.39
25	BB	2427	C	C4-N4	-5.57	1.28	1.33
25	BB	2558	C	C5-C6	5.57	1.38	1.34
1	AP	3	G	P-O5'	5.57	1.65	1.59
25	BB	370	G	C2-N2	-5.57	1.28	1.34
25	BB	2311	A	N3-C4	5.57	1.38	1.34
3	A1	341	C	C4-N4	-5.57	1.28	1.33
3	A1	737	C	C4-N4	-5.57	1.28	1.33
25	BB	31	C	C4-N4	-5.57	1.28	1.33
25	BB	796	C	C4-N4	-5.57	1.28	1.33
25	BB	1483	G	N1-C2	-5.57	1.33	1.37
25	BB	2196	C	C4-N4	-5.57	1.28	1.33
33	BJ	5	ARG	CZ-NH1	-5.57	1.25	1.33
3	A1	388	G	N1-C2	-5.56	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1932	A	C6-N6	-5.56	1.29	1.33
3	A1	39	G	N3-C4	5.56	1.39	1.35
3	A1	184	G	C2-N2	-5.56	1.28	1.34
20	AU	91	ARG	CZ-NH2	-5.56	1.25	1.33
25	BB	851	C	C4-N4	-5.56	1.28	1.33
25	BB	1169	A	P-O5'	5.56	1.65	1.59
25	BB	1589	U	N1-C2	5.56	1.43	1.38
25	BB	2512	C	C4-N4	-5.56	1.28	1.33
3	A1	10	A	C6-N6	-5.56	1.29	1.33
3	A1	441	A	C6-N6	-5.56	1.29	1.33
25	BB	1211	C	C4-N4	-5.56	1.28	1.33
25	BB	1527	G	N1-C2	-5.56	1.33	1.37
36	BM	12	ARG	CZ-NH2	-5.56	1.25	1.33
3	A1	1292	G	C2-N2	-5.56	1.28	1.34
3	A1	1431	A	O3'-P	-5.56	1.54	1.61
3	A1	1499	A	C6-N6	-5.56	1.29	1.33
25	BB	277	G	P-O5'	-5.56	1.54	1.59
25	BB	1145	C	C4-N4	-5.56	1.28	1.33
3	A1	338	A	P-O5'	-5.56	1.54	1.59
25	BB	98	G	N7-C5	5.56	1.42	1.39
25	BB	998	C	P-O5'	-5.56	1.54	1.59
25	BB	1331	G	N1-C2	-5.56	1.33	1.37
3	A1	286	C	N3-C4	-5.55	1.30	1.33
3	A1	347	G	P-O5'	5.55	1.65	1.59
3	A1	1514	G	C2-N2	-5.55	1.28	1.34
3	A1	1525	G	C2-N2	-5.55	1.28	1.34
25	BB	53	A	P-O5'	-5.55	1.54	1.59
25	BB	904	G	N1-C2	-5.55	1.33	1.37
25	BB	1381	G	C2-N2	-5.55	1.28	1.34
25	BB	1456	G	N3-C4	5.55	1.39	1.35
25	BB	1554	U	O3'-P	-5.55	1.54	1.61
25	BB	2136	G	O3'-P	-5.55	1.54	1.61
25	BB	2814	A	C6-N6	-5.55	1.29	1.33
3	A1	371	A	P-O5'	-5.55	1.54	1.59
3	A1	447	G	C6-N1	-5.55	1.35	1.39
25	BB	396	G	N7-C5	5.55	1.42	1.39
25	BB	1753	G	C2-N2	-5.55	1.28	1.34
3	A1	983	A	N7-C5	5.55	1.42	1.39
3	A1	1459	G	O3'-P	-5.55	1.54	1.61
25	BB	484	C	C4-N4	-5.55	1.28	1.33
25	BB	2173	A	C6-N1	-5.55	1.31	1.35
25	BB	2386	A	P-O5'	-5.55	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2648	G	C2-N2	-5.55	1.28	1.34
3	A1	50	A	O3'-P	-5.55	1.54	1.61
3	A1	297	G	N3-C4	5.55	1.39	1.35
3	A1	832	G	N7-C5	5.55	1.42	1.39
25	BB	2658	C	C2-N3	-5.55	1.31	1.35
25	BB	424	G	N1-C2	-5.55	1.33	1.37
25	BB	603	A	N3-C4	5.55	1.38	1.34
25	BB	1095	A	N3-C4	5.55	1.38	1.34
25	BB	1979	U	O3'-P	-5.55	1.54	1.61
25	BB	2330	G	C2'-O2'	5.55	1.48	1.41
25	BB	2483	C	C4-N4	-5.55	1.28	1.33
25	BB	2877	G	N1-C2	-5.55	1.33	1.37
3	A1	946	A	P-O5'	-5.55	1.54	1.59
3	A1	1425	U	O3'-P	-5.55	1.54	1.61
25	BB	927	A	O3'-P	-5.55	1.54	1.61
25	BB	1127	A	C4'-O4'	-5.55	1.38	1.45
25	BB	1653	G	O3'-P	-5.55	1.54	1.61
25	BB	1722	A	P-O5'	5.55	1.65	1.59
3	A1	536	C	N1-C6	5.54	1.40	1.37
25	BB	2628	C	C4-N4	-5.54	1.28	1.33
25	BB	2849	U	C4'-O4'	-5.54	1.38	1.45
25	BB	342	A	C2'-O2'	5.54	1.48	1.41
25	BB	491	G	C6-N1	-5.54	1.35	1.39
25	BB	2254	C	C5-C6	5.54	1.38	1.34
3	A1	558	G	C6-N1	-5.54	1.35	1.39
3	A1	1273	C	C4-N4	-5.54	1.28	1.33
1	AP	70	C	N3-C4	-5.54	1.30	1.33
3	A1	40	C	N3-C4	-5.54	1.30	1.33
3	A1	68	G	C2-N2	-5.54	1.29	1.34
3	A1	346	G	N1-C2	-5.54	1.33	1.37
3	A1	401	C	N3-C4	-5.54	1.30	1.33
25	BB	542	C	C4-N4	-5.54	1.28	1.33
25	BB	816	C	C4-N4	-5.54	1.28	1.33
25	BB	1320	C	N3-C4	-5.54	1.30	1.33
25	BB	1387	A	N7-C5	5.54	1.42	1.39
25	BB	1833	C	C4-N4	-5.54	1.28	1.33
3	A1	297	G	P-O5'	-5.54	1.54	1.59
25	BB	1884	G	N7-C5	5.54	1.42	1.39
25	BB	707	G	P-O5'	5.54	1.65	1.59
25	BB	1646	C	C4-N4	-5.54	1.28	1.33
25	BB	2029	G	C2-N2	-5.54	1.29	1.34
25	BB	1179	G	N7-C5	5.53	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	339	C	C5-C6	5.53	1.38	1.34
24	BA	23	G	N3-C4	5.53	1.39	1.35
25	BB	1421	G	C2-N2	-5.53	1.29	1.34
25	BB	1793	C	C4-N4	-5.53	1.28	1.33
25	BB	2093	G	P-O5'	5.53	1.65	1.59
25	BB	2602	A	N7-C5	5.53	1.42	1.39
24	BA	92	C	N3-C4	-5.53	1.30	1.33
25	BB	1514	G	N1-C2	-5.53	1.33	1.37
25	BB	1623	G	N1-C2	-5.53	1.33	1.37
25	BB	2275	C	C4-N4	-5.53	1.28	1.33
3	A1	90	C	C4-N4	-5.53	1.28	1.33
3	A1	596	A	O3'-P	-5.53	1.54	1.61
25	BB	780	G	C2-N2	-5.53	1.29	1.34
25	BB	1565	C	N3-C4	-5.53	1.30	1.33
25	BB	2418	A	N3-C4	5.53	1.38	1.34
25	BB	2848	G	P-O5'	5.53	1.65	1.59
3	A1	59	A	O3'-P	-5.53	1.54	1.61
3	A1	466	A	N3-C4	5.53	1.38	1.34
3	A1	1045	C	O3'-P	-5.53	1.54	1.61
25	BB	346	A	N7-C5	5.53	1.42	1.39
25	BB	1190	G	C2-N2	-5.53	1.29	1.34
25	BB	1663	G	N7-C5	5.53	1.42	1.39
25	BB	1682	G	N3-C4	5.53	1.39	1.35
25	BB	2549	G	C2-N2	-5.53	1.29	1.34
4	AB	138	ARG	CZ-NH1	-5.52	1.25	1.33
25	BB	1423	G	C2-N2	-5.52	1.29	1.34
3	A1	1056	U	O3'-P	-5.52	1.54	1.61
3	A1	1287	A	N3-C4	5.52	1.38	1.34
3	A1	1426	G	N1-C2	-5.52	1.33	1.37
15	AO	171	ARG	CZ-NH1	-5.52	1.25	1.33
25	BB	294	A	N7-C5	5.52	1.42	1.39
25	BB	1364	G	C2-N2	-5.52	1.29	1.34
25	BB	2405	G	C2-N2	-5.52	1.29	1.34
25	BB	2446	G	C2-N2	-5.52	1.29	1.34
25	BB	283	G	N7-C5	5.52	1.42	1.39
25	BB	1372	U	O3'-P	-5.52	1.54	1.61
25	BB	2063	C	C4-N4	-5.52	1.28	1.33
3	A1	519	C	C4-N4	-5.52	1.28	1.33
25	BB	529	A	N7-C5	5.52	1.42	1.39
25	BB	2389	G	N1-C2	-5.52	1.33	1.37
3	A1	199	A	C6-N6	-5.52	1.29	1.33
3	A1	528	C	N3-C4	-5.52	1.30	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1288	A	C5'-C4'	5.52	1.57	1.51
12	AK	72	ARG	CZ-NH2	-5.52	1.25	1.33
24	BA	9	G	N1-C2	-5.52	1.33	1.37
25	BB	260	G	P-O5'	-5.52	1.54	1.59
25	BB	1140	C	O3'-P	-5.52	1.54	1.61
25	BB	2242	G	C2-N2	-5.52	1.29	1.34
25	BB	2556	C	N1-C6	5.52	1.40	1.37
1	AA	4	G	N3-C4	5.52	1.39	1.35
3	A1	966	G	N9-C8	5.52	1.41	1.37
25	BB	1338	G	N7-C5	5.52	1.42	1.39
25	BB	1505	A	N7-C5	5.52	1.42	1.39
1	AE	20	G	N3-C4	5.51	1.39	1.35
25	BB	1238	G	P-O5'	5.51	1.65	1.59
25	BB	2251	G	C2-N2	-5.51	1.29	1.34
3	A1	972	C	C4-N4	-5.51	1.28	1.33
3	A1	1270	G	N3-C4	5.51	1.39	1.35
25	BB	2770	G	O3'-P	-5.51	1.54	1.61
3	A1	1363	A	C6-N1	-5.51	1.31	1.35
25	BB	1495	A	N3-C4	5.51	1.38	1.34
25	BB	1774	C	C4-N4	-5.51	1.28	1.33
25	BB	2854	G	N1-C2	-5.51	1.33	1.37
3	A1	5	U	O3'-P	-5.51	1.54	1.61
3	A1	19	A	C6-N6	-5.51	1.29	1.33
3	A1	46	G	N7-C5	5.51	1.42	1.39
3	A1	230	G	O3'-P	-5.51	1.54	1.61
25	BB	240	C	C4-N4	-5.51	1.28	1.33
25	BB	2405	G	N3-C4	5.51	1.39	1.35
25	BB	2668	G	C2-N2	-5.51	1.29	1.34
25	BB	2766	A	C6-N6	-5.51	1.29	1.33
25	BB	2895	G	N1-C2	-5.51	1.33	1.37
37	BN	166	ARG	CZ-NH2	-5.51	1.25	1.33
3	A1	40	C	P-O5'	-5.51	1.54	1.59
3	A1	106	C	N3-C4	-5.51	1.30	1.33
25	BB	1644	C	N3-C4	-5.51	1.30	1.33
25	BB	1957	C	P-O5'	5.51	1.65	1.59
25	BB	2237	G	N1-C2	-5.51	1.33	1.37
3	A1	1362	A	C6-N1	-5.51	1.31	1.35
12	AK	52	ARG	CZ-NH2	-5.51	1.25	1.33
25	BB	236	C	N3-C4	-5.51	1.30	1.33
25	BB	1909	C	C4-N4	-5.51	1.28	1.33
25	BB	2087	G	C6-N1	-5.51	1.35	1.39
25	BB	2104	C	C4-N4	-5.51	1.28	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
9	AH	32	THR	C-N	5.50	1.46	1.34
25	BB	1259	G	N1-C2	-5.50	1.33	1.37
25	BB	2327	A	C6-N6	-5.50	1.29	1.33
25	BB	2580	U	P-O5'	-5.50	1.54	1.59
3	A1	21	G	C6-N1	-5.50	1.35	1.39
3	A1	1068	G	P-O5'	-5.50	1.54	1.59
3	A1	1526	G	C5'-C4'	5.50	1.57	1.51
25	BB	597	G	C5'-C4'	5.50	1.57	1.51
25	BB	1541	C	C4-N4	-5.50	1.28	1.33
25	BB	1552	A	N7-C5	5.50	1.42	1.39
25	BB	2363	G	C2-N2	-5.50	1.29	1.34
1	AA	60	C	P-O5'	5.50	1.65	1.59
3	A1	501	C	C4-N4	-5.50	1.28	1.33
3	A1	1111	A	N3-C4	5.50	1.38	1.34
3	A1	1484	C	C4-N4	-5.50	1.28	1.33
25	BB	1977	A	N3-C4	5.50	1.38	1.34
25	BB	2743	U	O3'-P	-5.50	1.54	1.61
25	BB	1331	G	C2-N2	-5.50	1.29	1.34
1	AP	26	G	C2-N2	-5.50	1.29	1.34
1	AP	60	C	O3'-P	-5.50	1.54	1.61
25	BB	1645	G	C2-N2	-5.50	1.29	1.34
25	BB	1705	A	C5'-C4'	5.50	1.57	1.51
25	BB	2745	C	N3-C4	-5.50	1.30	1.33
1	AP	21	A	C6-N6	-5.50	1.29	1.33
3	A1	997	U	C2'-C1'	5.50	1.59	1.53
25	BB	614	A	N7-C5	5.50	1.42	1.39
25	BB	1005	C	C4-N4	-5.50	1.29	1.33
41	BR	37	ARG	CZ-NH2	-5.50	1.25	1.33
12	AK	47	ARG	CZ-NH2	-5.50	1.25	1.33
25	BB	555	G	N1-C2	-5.50	1.33	1.37
25	BB	1093	G	C6-N1	-5.50	1.35	1.39
25	BB	2757	A	C6-N1	-5.50	1.31	1.35
3	A1	771	G	C2-N2	-5.49	1.29	1.34
3	A1	1053	G	C5-C6	5.49	1.47	1.42
25	BB	751	A	N3-C4	5.49	1.38	1.34
3	A1	1435	G	N1-C2	-5.49	1.33	1.37
25	BB	1014	A	N3-C4	5.49	1.38	1.34
25	BB	1450	G	C2-N2	-5.49	1.29	1.34
24	BA	23	G	C2-N2	-5.49	1.29	1.34
25	BB	1305	C	C4-N4	-5.49	1.29	1.33
25	BB	1471	G	C2-N2	-5.49	1.29	1.34
51	B2	101	ARG	CZ-NH2	-5.49	1.25	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	AS	111	ARG	CZ-NH1	-5.49	1.25	1.33
25	BB	366	C	N3-C4	-5.49	1.30	1.33
25	BB	1069	A	N7-C5	5.49	1.42	1.39
25	BB	1968	G	N3-C4	5.49	1.39	1.35
25	BB	2414	G	C2-N2	-5.49	1.29	1.34
25	BB	2590	A	N7-C5	5.49	1.42	1.39
25	BB	2624	G	C2-N2	-5.49	1.29	1.34
3	A1	50	A	N9-C4	5.49	1.41	1.37
3	A1	1276	G	C2-N2	-5.49	1.29	1.34
25	BB	2157	G	C3'-C2'	5.49	1.58	1.52
3	A1	188	C	C4-N4	-5.49	1.29	1.33
25	BB	1806	C	N3-C4	-5.49	1.30	1.33
25	BB	2483	C	P-O5'	-5.49	1.54	1.59
25	BB	1031	G	O3'-P	-5.48	1.54	1.61
25	BB	1123	C	N3-C4	-5.48	1.30	1.33
25	BB	1509	A	C5-C4	-5.48	1.34	1.38
25	BB	1025	G	C2-N2	-5.48	1.29	1.34
25	BB	1157	G	N1-C2	-5.48	1.33	1.37
3	A1	285	C	N1-C6	5.48	1.40	1.37
25	BB	141	G	C2-N2	-5.48	1.29	1.34
25	BB	254	G	C2-N2	-5.48	1.29	1.34
25	BB	1597	A	P-O5'	5.48	1.65	1.59
25	BB	2568	U	O3'-P	-5.48	1.54	1.61
24	BA	37	C	C4-N4	-5.48	1.29	1.33
25	BB	493	G	C2-N2	-5.48	1.29	1.34
25	BB	831	G	N3-C4	5.48	1.39	1.35
25	BB	1513	U	O3'-P	-5.48	1.54	1.61
25	BB	2848	G	C2-N2	-5.48	1.29	1.34
3	A1	1294	G	N1-C2	-5.48	1.33	1.37
25	BB	2349	G	C2-N2	-5.48	1.29	1.34
3	A1	1012	A	C6-N1	-5.47	1.31	1.35
3	A1	1431	A	C6-N6	-5.47	1.29	1.33
25	BB	559	G	N1-C2	-5.47	1.33	1.37
25	BB	960	A	C6-N1	-5.47	1.31	1.35
25	BB	2170	A	C6-N6	-5.47	1.29	1.33
25	BB	2443	C	C4-N4	-5.47	1.29	1.33
25	BB	2638	G	C2-N2	-5.47	1.29	1.34
3	A1	1120	C	N3-C4	-5.47	1.30	1.33
3	A1	1476	A	N3-C4	5.47	1.38	1.34
24	BA	56	G	C2-N2	-5.47	1.29	1.34
25	BB	1291	C	C4-N4	-5.47	1.29	1.33
25	BB	1500	G	N3-C4	5.47	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1423	G	P-O5'	5.47	1.65	1.59
25	BB	1470	A	N7-C5	5.47	1.42	1.39
25	BB	2854	G	C6-N1	-5.47	1.35	1.39
3	A1	942	G	N7-C5	5.47	1.42	1.39
3	A1	1182	G	C2-N2	-5.47	1.29	1.34
25	BB	518	G	C2-N2	-5.47	1.29	1.34
25	BB	2151	U	P-O5'	-5.47	1.54	1.59
3	A1	111	G	C6-N1	-5.47	1.35	1.39
3	A1	927	G	C6-N1	-5.47	1.35	1.39
24	BA	69	G	O3'-P	5.47	1.67	1.61
25	BB	379	G	P-O5'	5.47	1.65	1.59
3	A1	166	U	N3-C4	-5.47	1.33	1.38
3	A1	520	A	C6-N1	-5.47	1.31	1.35
3	A1	1416	G	C5'-C4'	5.47	1.57	1.51
25	BB	685	A	N3-C4	5.47	1.38	1.34
25	BB	1840	G	C2-N2	-5.47	1.29	1.34
25	BB	1994	C	C4-N4	-5.47	1.29	1.33
1	AA	14	A	N3-C4	5.46	1.38	1.34
3	A1	191	G	N1-C2	-5.46	1.33	1.37
25	BB	1643	G	C2-N2	-5.46	1.29	1.34
25	BB	2125	G	C2-N2	-5.46	1.29	1.34
25	BB	1822	C	C4-N4	-5.46	1.29	1.33
3	A1	6	G	O3'-P	-5.46	1.54	1.61
3	A1	361	G	C2-N2	-5.46	1.29	1.34
3	A1	532	A	C3'-C2'	5.46	1.58	1.52
3	A1	1143	G	N1-C2	-5.46	1.33	1.37
3	A1	1197	A	C6-N1	-5.46	1.31	1.35
25	BB	2521	C	C4-N4	-5.46	1.29	1.33
25	BB	2704	C	C4-N4	-5.46	1.29	1.33
25	BB	2659	G	C2-N2	-5.46	1.29	1.34
3	A1	800	G	N7-C5	5.46	1.42	1.39
25	BB	477	A	N7-C5	5.46	1.42	1.39
25	BB	1060	U	N1-C2	5.46	1.43	1.38
25	BB	2544	G	C2-N2	-5.46	1.29	1.34
1	AA	18	G	C5-C6	5.46	1.47	1.42
3	A1	1069	C	N3-C4	-5.46	1.30	1.33
3	A1	1271	A	C6-N1	-5.46	1.31	1.35
25	BB	1016	G	C2-N2	-5.46	1.29	1.34
25	BB	1673	G	C2-N2	-5.46	1.29	1.34
25	BB	2319	G	C2-N2	-5.46	1.29	1.34
55	B6	13	ARG	CZ-NH2	-5.46	1.25	1.33
25	BB	12	U	P-O5'	5.46	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	175	G	N9-C8	-5.46	1.34	1.37
25	BB	1797	G	C6-N1	-5.46	1.35	1.39
25	BB	2413	G	N1-C2	-5.46	1.33	1.37
25	BB	2601	C	N3-C4	-5.46	1.30	1.33
3	A1	572	A	N7-C5	5.45	1.42	1.39
3	A1	944	G	N7-C5	5.45	1.42	1.39
25	BB	1414	C	C4-N4	-5.45	1.29	1.33
25	BB	1766	G	N1-C2	-5.45	1.33	1.37
3	A1	739	C	C5'-C4'	5.45	1.57	1.51
3	A1	1082	A	P-O5'	5.45	1.65	1.59
25	BB	101	A	N3-C4	5.45	1.38	1.34
25	BB	1445	G	N1-C2	-5.45	1.33	1.37
3	A1	70	U	N1-C2	5.45	1.43	1.38
3	A1	308	C	C4-N4	-5.45	1.29	1.33
25	BB	1004	U	O3'-P	-5.45	1.54	1.61
3	A1	718	A	N3-C4	5.45	1.38	1.34
3	A1	859	G	N1-C2	-5.45	1.33	1.37
25	BB	520	G	P-O5'	5.45	1.65	1.59
25	BB	1970	A	N7-C5	5.45	1.42	1.39
3	A1	1370	G	P-O5'	-5.45	1.54	1.59
25	BB	2774	C	C4-N4	-5.45	1.29	1.33
3	A1	491	G	O3'-P	-5.45	1.54	1.61
3	A1	601	G	O3'-P	-5.45	1.54	1.61
3	A1	1158	C	C4-N4	-5.45	1.29	1.33
3	A1	1178	G	N7-C5	5.45	1.42	1.39
3	A1	1200	C	O3'-P	-5.45	1.54	1.61
25	BB	144	A	C6-N6	-5.45	1.29	1.33
25	BB	1370	C	C4-N4	-5.45	1.29	1.33
25	BB	854	C	C4-N4	-5.44	1.29	1.33
3	A1	214	C	N3-C4	-5.44	1.30	1.33
3	A1	404	G	N7-C5	5.44	1.42	1.39
20	AU	95	ARG	CZ-NH2	-5.44	1.25	1.33
25	BB	209	C	C4-N4	-5.44	1.29	1.33
25	BB	258	G	C2-N2	-5.44	1.29	1.34
25	BB	536	G	N1-C2	-5.44	1.33	1.37
25	BB	1268	A	P-O5'	-5.44	1.54	1.59
25	BB	2070	A	N7-C5	5.44	1.42	1.39
25	BB	2703	C	N3-C4	-5.44	1.30	1.33
3	A1	835	U	N3-C4	-5.44	1.33	1.38
3	A1	1453	G	C6-N1	-5.44	1.35	1.39
25	BB	49	A	N3-C4	5.44	1.38	1.34
25	BB	1625	C	C4-N4	-5.44	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2751	G	C2-N2	-5.44	1.29	1.34
3	A1	203	G	C2-N2	-5.44	1.29	1.34
25	BB	792	A	O3'-P	-5.44	1.54	1.61
1	AP	29	A	O3'-P	-5.44	1.54	1.61
3	A1	792	A	N7-C5	5.44	1.42	1.39
25	BB	1614	A	N3-C4	5.44	1.38	1.34
25	BB	2545	G	O3'-P	-5.44	1.54	1.61
1	AP	38	A	C4'-O4'	-5.44	1.38	1.45
25	BB	1158	C	N3-C4	-5.44	1.30	1.33
3	A1	1429	A	C6-N6	-5.43	1.29	1.33
25	BB	2809	A	O3'-P	-5.43	1.54	1.61
25	BB	2894	G	C3'-C2'	5.43	1.58	1.52
3	A1	449	G	P-O5'	-5.43	1.54	1.59
3	A1	1430	A	C6-N1	-5.43	1.31	1.35
25	BB	474	G	C2-N2	-5.43	1.29	1.34
3	A1	128	G	C2-N2	-5.43	1.29	1.34
3	A1	378	G	C2-N2	-5.43	1.29	1.34
3	A1	578	C	C4-N4	-5.43	1.29	1.33
3	A1	587	G	N7-C5	5.43	1.42	1.39
3	A1	682	G	C2-N2	-5.43	1.29	1.34
3	A1	928	G	N1-C2	-5.43	1.33	1.37
25	BB	1579	A	N7-C5	5.43	1.42	1.39
3	A1	242	G	N7-C5	5.43	1.42	1.39
25	BB	21	A	C6-N1	-5.43	1.31	1.35
25	BB	341	C	C4-N4	-5.43	1.29	1.33
25	BB	957	C	N3-C4	-5.43	1.30	1.33
25	BB	1026	G	N1-C2	-5.43	1.33	1.37
25	BB	1364	G	N7-C5	5.43	1.42	1.39
25	BB	2523	G	N1-C2	-5.43	1.33	1.37
3	A1	218	U	O3'-P	-5.43	1.54	1.61
3	A1	1521	C	C4-N4	-5.43	1.29	1.33
25	BB	1548	A	C6-N1	-5.43	1.31	1.35
1	AA	10	G	P-O5'	5.43	1.65	1.59
3	A1	257	G	N7-C5	5.43	1.42	1.39
3	A1	1505	G	C2-N2	-5.43	1.29	1.34
25	BB	343	C	N3-C4	-5.43	1.30	1.33
25	BB	407	G	N3-C4	5.43	1.39	1.35
25	BB	1642	G	P-O5'	-5.43	1.54	1.59
25	BB	1900	A	N7-C5	5.43	1.42	1.39
25	BB	2572	A	N7-C5	5.43	1.42	1.39
25	BB	375	G	C2-N2	-5.42	1.29	1.34
25	BB	807	U	O3'-P	-5.42	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1515	A	C6-N6	-5.42	1.29	1.33
25	BB	2168	G	N1-C2	-5.42	1.33	1.37
25	BB	2565	A	C6-N1	-5.42	1.31	1.35
25	BB	2722	G	N1-C2	-5.42	1.33	1.37
1	AP	5	A	N7-C5	5.42	1.42	1.39
13	AL	31	ARG	CZ-NH2	-5.42	1.26	1.33
25	BB	348	A	O3'-P	-5.42	1.54	1.61
25	BB	1251	C	C4-N4	-5.42	1.29	1.33
25	BB	1481	U	C2-N3	-5.42	1.33	1.37
25	BB	2063	C	N3-C4	-5.42	1.30	1.33
25	BB	2526	G	C2-N2	-5.42	1.29	1.34
3	A1	292	G	O3'-P	-5.42	1.54	1.61
3	A1	380	G	N1-C2	-5.42	1.33	1.37
25	BB	425	G	N7-C5	5.42	1.42	1.39
25	BB	1309	G	N7-C5	5.42	1.42	1.39
25	BB	1640	A	N7-C5	5.42	1.42	1.39
25	BB	2331	G	P-O5'	-5.42	1.54	1.59
1	AE	34	G	C2-N2	-5.42	1.29	1.34
3	A1	667	G	N1-C2	-5.42	1.33	1.37
3	A1	836	G	N1-C2	-5.42	1.33	1.37
3	A1	809	G	N1-C2	-5.42	1.33	1.37
25	BB	190	A	N7-C5	5.42	1.42	1.39
25	BB	960	A	N3-C4	5.42	1.38	1.34
48	BY	88	GLU	CG-CD	5.42	1.60	1.51
3	A1	655	A	C6-N6	-5.41	1.29	1.33
3	A1	1184	G	C2-N2	-5.41	1.29	1.34
25	BB	353	C	N3-C4	-5.41	1.30	1.33
25	BB	358	U	P-O5'	-5.41	1.54	1.59
25	BB	1177	G	C2-N2	-5.41	1.29	1.34
3	A1	280	C	N3-C4	-5.41	1.30	1.33
3	A1	376	G	C2-N2	-5.41	1.29	1.34
3	A1	783	C	N3-C4	-5.41	1.30	1.33
3	A1	1177	G	C2-N2	-5.41	1.29	1.34
3	A1	1194	U	C5'-C4'	5.41	1.57	1.51
25	BB	2355	G	C2-N2	-5.41	1.29	1.34
1	AP	62	A	C6-N1	-5.41	1.31	1.35
3	A1	228	A	N7-C5	5.41	1.42	1.39
3	A1	1051	C	N3-C4	-5.41	1.30	1.33
25	BB	915	C	C4-N4	-5.41	1.29	1.33
25	BB	1499	C	C4-N4	-5.41	1.29	1.33
25	BB	2254	C	C4-N4	-5.41	1.29	1.33
25	BB	2603	G	C2-N2	-5.41	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2750	A	P-O5'	5.41	1.65	1.59
3	A1	115	G	C6-N1	-5.41	1.35	1.39
3	A1	697	U	P-O5'	5.41	1.65	1.59
3	A1	753	A	P-O5'	5.41	1.65	1.59
11	AJ	64	ARG	CZ-NH1	-5.41	1.26	1.33
25	BB	962	G	C2-N2	-5.41	1.29	1.34
25	BB	1261	C	C4-N4	-5.41	1.29	1.33
25	BB	2336	A	C6-N6	-5.41	1.29	1.33
25	BB	2483	C	O3'-P	-5.41	1.54	1.61
25	BB	2556	C	C4-N4	-5.41	1.29	1.33
25	BB	707	G	C6-N1	-5.41	1.35	1.39
25	BB	1695	G	N1-C2	-5.41	1.33	1.37
3	A1	1487	G	N1-C2	-5.41	1.33	1.37
25	BB	1549	A	C6-N6	-5.41	1.29	1.33
25	BB	1733	G	N7-C5	5.41	1.42	1.39
25	BB	1852	U	O3'-P	-5.41	1.54	1.61
25	BB	2271	G	C6-N1	-5.41	1.35	1.39
3	A1	1303	C	C4-N4	-5.40	1.29	1.33
25	BB	322	A	N3-C4	5.40	1.38	1.34
25	BB	1488	C	C4-N4	-5.40	1.29	1.33
3	A1	191	G	N7-C5	5.40	1.42	1.39
3	A1	1269	A	O3'-P	-5.40	1.54	1.61
3	A1	1483	A	O3'-P	-5.40	1.54	1.61
25	BB	307	G	C2-N2	-5.40	1.29	1.34
25	BB	1905	C	N3-C4	-5.40	1.30	1.33
25	BB	1933	G	C2-N2	-5.40	1.29	1.34
25	BB	1987	A	N7-C5	5.40	1.42	1.39
25	BB	2883	A	P-O5'	5.40	1.65	1.59
1	AA	49	C	C4-N4	-5.40	1.29	1.33
3	A1	144	G	C2-N2	-5.40	1.29	1.34
3	A1	289	G	N7-C5	5.40	1.42	1.39
3	A1	505	G	C2-N2	-5.40	1.29	1.34
3	A1	1155	A	N7-C5	5.40	1.42	1.39
25	BB	924	G	C2-N2	-5.40	1.29	1.34
25	BB	1022	G	P-O5'	-5.40	1.54	1.59
25	BB	2815	C	N3-C4	-5.40	1.30	1.33
1	AE	30	G	C6-N1	-5.40	1.35	1.39
24	BA	66	A	N3-C4	5.40	1.38	1.34
25	BB	480	A	O3'-P	-5.40	1.54	1.61
25	BB	1495	A	C6-N1	-5.40	1.31	1.35
25	BB	2251	G	N1-C2	-5.40	1.33	1.37
1	AP	75	C	N3-C4	-5.40	1.30	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	36	C	C4-N4	-5.40	1.29	1.33
3	A1	238	A	O3'-P	-5.40	1.54	1.61
3	A1	337	G	N1-C2	-5.40	1.33	1.37
3	A1	1402	C	C4-N4	-5.40	1.29	1.33
25	BB	1766	G	C2-N2	-5.40	1.29	1.34
25	BB	2370	G	O3'-P	-5.40	1.54	1.61
25	BB	2820	A	N7-C5	5.40	1.42	1.39
3	A1	827	U	C2-N3	-5.40	1.33	1.37
24	BA	83	G	P-O5'	-5.40	1.54	1.59
25	BB	1965	C	N3-C4	-5.40	1.30	1.33
3	A1	184	G	N3-C4	5.39	1.39	1.35
3	A1	700	G	N1-C2	-5.39	1.33	1.37
25	BB	1596	A	N3-C4	5.39	1.38	1.34
25	BB	2564	A	C6-N6	-5.39	1.29	1.33
3	A1	1167	A	C4'-O4'	-5.39	1.38	1.45
3	A1	1229	A	P-O5'	5.39	1.65	1.59
25	BB	439	A	N3-C4	5.39	1.38	1.34
25	BB	2494	G	C2-N2	-5.39	1.29	1.34
25	BB	33	C	O3'-P	5.39	1.67	1.61
25	BB	2745	C	C4-N4	-5.39	1.29	1.33
3	A1	608	A	N9-C4	5.39	1.41	1.37
24	BA	79	G	N1-C2	-5.39	1.33	1.37
25	BB	2459	A	P-O5'	-5.39	1.54	1.59
25	BB	27	G	C2-N2	-5.39	1.29	1.34
25	BB	1220	G	N7-C5	5.39	1.42	1.39
25	BB	2268	A	C5-C6	5.39	1.45	1.41
25	BB	2860	A	N7-C5	5.39	1.42	1.39
3	A1	1027	C	C4-N4	-5.39	1.29	1.33
3	A1	1454	G	C2-N2	-5.39	1.29	1.34
25	BB	186	G	N1-C2	-5.39	1.33	1.37
25	BB	1451	C	N3-C4	-5.39	1.30	1.33
25	BB	1984	G	N1-C2	-5.39	1.33	1.37
25	BB	2867	G	P-O5'	5.39	1.65	1.59
3	A1	766	A	P-O5'	-5.38	1.54	1.59
3	A1	1415	G	C2-N2	-5.38	1.29	1.34
25	BB	57	C	C4-N4	-5.38	1.29	1.33
25	BB	326	G	C2-N2	-5.38	1.29	1.34
25	BB	553	G	N7-C5	5.38	1.42	1.39
25	BB	691	C	O3'-P	-5.38	1.54	1.61
25	BB	1882	U	C5'-C4'	5.38	1.57	1.51
25	BB	1931	U	O3'-P	5.38	1.67	1.61
25	BB	2108	A	C6-N6	-5.38	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2795	C	C4-N4	-5.38	1.29	1.33
3	A1	488	C	C5'-C4'	5.38	1.57	1.51
3	A1	502	A	C6-N6	-5.38	1.29	1.33
3	A1	1153	G	N1-C2	-5.38	1.33	1.37
25	BB	1929	G	C6-N1	-5.38	1.35	1.39
25	BB	2000	C	N3-C4	-5.38	1.30	1.33
25	BB	2142	A	O3'-P	-5.38	1.54	1.61
3	A1	502	A	N3-C4	5.38	1.38	1.34
3	A1	743	A	C6-N1	-5.38	1.31	1.35
3	A1	1180	A	N9-C4	5.38	1.41	1.37
3	A1	1492	A	N9-C4	5.38	1.41	1.37
25	BB	797	G	C5-C6	5.38	1.47	1.42
25	BB	1158	C	C5'-C4'	5.38	1.57	1.51
25	BB	1185	G	O3'-P	-5.38	1.54	1.61
3	A1	966	G	C2-N2	-5.38	1.29	1.34
25	BB	974	G	C2-N2	-5.38	1.29	1.34
25	BB	1125	G	O3'-P	-5.38	1.54	1.61
25	BB	1418	G	C2-N2	-5.38	1.29	1.34
1	AP	44	A	C6-N6	-5.38	1.29	1.33
2	AM	9	U	C3'-C2'	5.38	1.58	1.52
3	A1	344	A	C6-N6	-5.38	1.29	1.33
25	BB	95	A	P-O5'	-5.38	1.54	1.59
25	BB	423	A	N7-C5	5.38	1.42	1.39
25	BB	428	A	N3-C4	5.38	1.38	1.34
25	BB	1540	G	C4'-O4'	-5.38	1.38	1.45
1	AP	21	A	C6-N1	-5.38	1.31	1.35
3	A1	507	C	N3-C4	-5.38	1.30	1.33
3	A1	823	C	O3'-P	-5.38	1.54	1.61
3	A1	1160	G	N1-C2	-5.38	1.33	1.37
7	AF	89	ARG	CZ-NH2	-5.38	1.26	1.33
25	BB	41	C	C2-N3	-5.38	1.31	1.35
25	BB	393	C	C4-N4	-5.38	1.29	1.33
25	BB	491	G	N1-C2	-5.38	1.33	1.37
25	BB	889	C	N1-C6	-5.38	1.33	1.37
25	BB	930	G	C5-C6	5.38	1.47	1.42
25	BB	1538	G	N1-C2	-5.38	1.33	1.37
25	BB	2621	G	C5-C6	5.38	1.47	1.42
3	A1	1210	C	O3'-P	-5.38	1.54	1.61
3	A1	1485	U	C5'-C4'	5.38	1.57	1.51
3	A1	1227	A	C5-C6	5.37	1.45	1.41
25	BB	690	G	N3-C4	5.37	1.39	1.35
25	BB	766	U	P-O5'	-5.37	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1052	C	C4-N4	-5.37	1.29	1.33
25	BB	2141	G	C2-N2	-5.37	1.29	1.34
25	BB	120	U	N1-C2	5.37	1.43	1.38
25	BB	838	C	O3'-P	-5.37	1.54	1.61
25	BB	895	U	C4'-O4'	-5.37	1.38	1.45
25	BB	1413	A	C6-N1	-5.37	1.31	1.35
25	BB	1437	C	C4-N4	-5.37	1.29	1.33
25	BB	2169	A	C6-N1	-5.37	1.31	1.35
25	BB	1945	G	C2-N2	-5.37	1.29	1.34
25	BB	2424	C	N3-C4	-5.37	1.30	1.33
25	BB	437	U	P-O5'	5.37	1.65	1.59
25	BB	1445	G	N3-C4	5.37	1.39	1.35
25	BB	1546	G	C2-N2	-5.37	1.29	1.34
25	BB	2023	C	C4-N4	-5.37	1.29	1.33
3	A1	571	U	P-O5'	-5.37	1.54	1.59
24	BA	7	G	N1-C2	-5.37	1.33	1.37
24	BA	33	G	P-O5'	-5.37	1.54	1.59
25	BB	2107	G	N1-C2	-5.37	1.33	1.37
3	A1	142	G	N1-C2	-5.37	1.33	1.37
3	A1	1148	U	O3'-P	-5.37	1.54	1.61
3	A1	1502	A	C6-N6	-5.37	1.29	1.33
25	BB	1064	C	C4-N4	-5.37	1.29	1.33
25	BB	1080	A	C6-N1	-5.37	1.31	1.35
25	BB	1660	G	C2-N2	-5.37	1.29	1.34
25	BB	2070	A	C6-N1	-5.37	1.31	1.35
25	BB	2399	G	N3-C4	5.37	1.39	1.35
3	A1	68	G	O3'-P	-5.36	1.54	1.61
3	A1	1219	A	C5'-C4'	5.36	1.57	1.51
25	BB	873	C	C4-N4	-5.36	1.29	1.33
25	BB	2645	G	C2-N2	-5.36	1.29	1.34
3	A1	143	A	C5-C4	-5.36	1.34	1.38
3	A1	488	C	O3'-P	-5.36	1.54	1.61
3	A1	916	U	O3'-P	5.36	1.67	1.61
25	BB	16	C	P-O5'	5.36	1.65	1.59
25	BB	2004	G	C2-N2	-5.36	1.29	1.34
25	BB	2315	G	O3'-P	-5.36	1.54	1.61
3	A1	241	G	O3'-P	-5.36	1.54	1.61
3	A1	1207	G	C2-N2	-5.36	1.29	1.34
25	BB	2379	G	C2-N2	-5.36	1.29	1.34
25	BB	2722	G	C2-N2	-5.36	1.29	1.34
25	BB	2764	A	C6-N1	-5.36	1.31	1.35
33	BJ	10	ARG	CZ-NH1	-5.36	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	354	G	N9-C4	-5.36	1.33	1.38
3	A1	712	A	N3-C4	5.36	1.38	1.34
3	A1	775	G	C2-N2	-5.36	1.29	1.34
6	AD	35	ARG	CZ-NH2	-5.36	1.26	1.33
3	A1	267	C	C4-N4	-5.36	1.29	1.33
25	BB	2767	C	C4-N4	-5.36	1.29	1.33
3	A1	349	A	N1-C2	-5.36	1.29	1.34
25	BB	476	G	C5-C6	5.36	1.47	1.42
25	BB	1715	G	C2-N2	-5.36	1.29	1.34
3	A1	763	G	C2-N2	-5.35	1.29	1.34
3	A1	1049	U	N3-C4	-5.35	1.33	1.38
3	A1	1169	A	N3-C4	5.35	1.38	1.34
25	BB	638	G	C2-N2	-5.35	1.29	1.34
1	AA	23	A	C6-N1	-5.35	1.31	1.35
1	AE	73	A	N7-C5	5.35	1.42	1.39
3	A1	143	A	O3'-P	-5.35	1.54	1.61
3	A1	337	G	C5-C6	5.35	1.47	1.42
25	BB	823	C	O3'-P	-5.35	1.54	1.61
25	BB	1044	C	O3'-P	-5.35	1.54	1.61
25	BB	1934	C	N3-C4	-5.35	1.30	1.33
23	AX	16	ARG	CZ-NH2	-5.35	1.26	1.33
25	BB	103	A	N3-C4	5.35	1.38	1.34
25	BB	1839	G	N7-C5	5.35	1.42	1.39
3	A1	564	C	C4-N4	-5.35	1.29	1.33
3	A1	696	A	C6-N1	-5.35	1.31	1.35
25	BB	269	C	C4-N4	-5.35	1.29	1.33
25	BB	1495	A	N7-C5	5.35	1.42	1.39
25	BB	2644	G	P-O5'	5.35	1.65	1.59
3	A1	475	C	N3-C4	-5.35	1.30	1.33
3	A1	720	C	C4-N4	-5.35	1.29	1.33
3	A1	888	G	C5-C6	5.35	1.47	1.42
3	A1	1331	G	N1-C2	-5.35	1.33	1.37
3	A1	1519	A	C6-N6	-5.35	1.29	1.33
25	BB	551	G	C5-C6	5.35	1.47	1.42
25	BB	728	G	C2-N2	-5.35	1.29	1.34
25	BB	2470	G	P-O5'	5.35	1.65	1.59
25	BB	230	G	C5-C6	5.35	1.47	1.42
25	BB	893	C	N3-C4	-5.35	1.30	1.33
3	A1	628	G	C5-C6	5.34	1.47	1.42
3	A1	823	C	C4-N4	-5.34	1.29	1.33
25	BB	63	A	C6-N1	-5.34	1.31	1.35
25	BB	1805	A	P-O5'	5.34	1.65	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2251	G	N3-C4	5.34	1.39	1.35
25	BB	2598	A	C6-N1	-5.34	1.31	1.35
25	BB	2783	U	O3'-P	-5.34	1.54	1.61
3	A1	671	G	C2-N2	-5.34	1.29	1.34
3	A1	954	G	C4'-C3'	-5.34	1.47	1.52
3	A1	1296	C	N3-C4	-5.34	1.30	1.33
3	A1	1494	G	P-O5'	5.34	1.65	1.59
25	BB	477	A	N3-C4	5.34	1.38	1.34
25	BB	972	A	C6-N6	-5.34	1.29	1.33
25	BB	88	G	N3-C4	5.34	1.39	1.35
25	BB	149	A	N3-C4	5.34	1.38	1.34
25	BB	215	G	O3'-P	-5.34	1.54	1.61
25	BB	230	G	N1-C2	-5.34	1.33	1.37
25	BB	1538	G	C6-N1	-5.34	1.35	1.39
3	A1	945	G	N7-C5	5.34	1.42	1.39
19	AT	86	ARG	CZ-NH2	-5.34	1.26	1.33
25	BB	13	A	N3-C4	5.34	1.38	1.34
25	BB	656	G	O3'-P	-5.34	1.54	1.61
25	BB	1038	G	C2-N2	-5.34	1.29	1.34
25	BB	1529	G	N3-C4	5.34	1.39	1.35
25	BB	1609	A	N7-C5	5.34	1.42	1.39
25	BB	2128	G	N1-C2	-5.34	1.33	1.37
25	BB	2306	C	C4-N4	-5.34	1.29	1.33
25	BB	210	C	C4-N4	-5.34	1.29	1.33
25	BB	1647	U	O3'-P	-5.34	1.54	1.61
25	BB	2214	C	N3-C4	-5.34	1.30	1.33
3	A1	260	G	C5'-C4'	5.34	1.57	1.51
3	A1	447	G	C2-N2	-5.34	1.29	1.34
3	A1	833	G	C6-N1	-5.34	1.35	1.39
3	A1	1529	G	O3'-P	-5.34	1.54	1.61
25	BB	759	G	C2-N2	-5.34	1.29	1.34
25	BB	939	G	C2-N2	-5.34	1.29	1.34
25	BB	1195	G	C6-N1	-5.34	1.35	1.39
25	BB	2633	G	N7-C5	5.34	1.42	1.39
25	BB	2809	A	C6-N6	-5.34	1.29	1.33
25	BB	980	A	O3'-P	-5.33	1.54	1.61
25	BB	1036	G	C6-N1	-5.33	1.35	1.39
25	BB	1162	G	C2-N2	-5.33	1.29	1.34
25	BB	1444	G	C2-N2	-5.33	1.29	1.34
25	BB	2608	G	N1-C2	-5.33	1.33	1.37
3	A1	1136	C	C4-N4	-5.33	1.29	1.33
3	A1	1206	G	C8-N7	-5.33	1.27	1.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	562	U	P-O5'	-5.33	1.54	1.59
25	BB	939	G	O3'-P	-5.33	1.54	1.61
25	BB	1112	G	P-O5'	5.33	1.65	1.59
25	BB	1549	A	N3-C4	5.33	1.38	1.34
25	BB	1890	A	C6-N1	-5.33	1.31	1.35
25	BB	2247	A	C6-N6	-5.33	1.29	1.33
3	A1	23	C	N3-C4	-5.33	1.30	1.33
3	A1	410	G	C5'-C4'	5.33	1.57	1.51
3	A1	1285	A	C6-N1	-5.33	1.31	1.35
3	A1	1447	A	N7-C5	5.33	1.42	1.39
25	BB	463	G	C2-N2	-5.33	1.29	1.34
25	BB	834	G	C2-N2	-5.33	1.29	1.34
25	BB	1395	A	N7-C5	5.33	1.42	1.39
25	BB	2747	G	C2-N2	-5.33	1.29	1.34
3	A1	522	C	C4-N4	-5.33	1.29	1.33
3	A1	890	G	C6-N1	-5.33	1.35	1.39
24	BA	91	C	P-O5'	-5.33	1.54	1.59
25	BB	964	C	C4-N4	-5.33	1.29	1.33
25	BB	984	A	N7-C5	5.33	1.42	1.39
3	A1	876	C	N3-C4	-5.33	1.30	1.33
25	BB	257	C	C4-N4	-5.33	1.29	1.33
25	BB	1134	A	C6-N1	-5.33	1.31	1.35
25	BB	1465	G	N1-C2	-5.33	1.33	1.37
25	BB	1569	A	C6-N6	-5.33	1.29	1.33
25	BB	2129	C	C4-N4	-5.33	1.29	1.33
25	BB	2294	G	C2-N2	-5.33	1.29	1.34
25	BB	2764	A	N7-C5	5.33	1.42	1.39
25	BB	1886	U	O3'-P	-5.33	1.54	1.61
25	BB	2841	C	N3-C4	-5.33	1.30	1.33
1	AP	70	C	C4-N4	-5.33	1.29	1.33
1	AP	74	C	N3-C4	-5.33	1.30	1.33
3	A1	240	G	N1-C2	-5.33	1.33	1.37
3	A1	1015	G	N1-C2	-5.33	1.33	1.37
25	BB	578	G	P-O5'	-5.33	1.54	1.59
25	BB	2242	G	N1-C2	-5.33	1.33	1.37
3	A1	740	U	N1-C2	5.32	1.43	1.38
3	A1	1245	C	C4-N4	-5.32	1.29	1.33
3	A1	1476	A	N7-C5	5.32	1.42	1.39
25	BB	800	A	C6-N1	-5.32	1.31	1.35
25	BB	1243	C	C4-N4	-5.32	1.29	1.33
25	BB	2189	U	O3'-P	-5.32	1.54	1.61
1	AA	62	A	N3-C4	5.32	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	80	A	C6-N1	-5.32	1.31	1.35
3	A1	410	G	N1-C2	-5.32	1.33	1.37
3	A1	1356	G	N3-C4	5.32	1.39	1.35
25	BB	1363	C	C4-N4	-5.32	1.29	1.33
25	BB	1598	A	N7-C5	5.32	1.42	1.39
25	BB	1836	C	O3'-P	-5.32	1.54	1.61
25	BB	2875	C	C4-N4	-5.32	1.29	1.33
7	AF	97	ARG	CZ-NH2	-5.32	1.26	1.33
25	BB	2433	A	C6-N6	-5.32	1.29	1.33
25	BB	2436	G	C2-N2	-5.32	1.29	1.34
3	A1	81	A	N7-C5	5.32	1.42	1.39
3	A1	385	C	C4-N4	-5.32	1.29	1.33
3	A1	446	G	N1-C2	-5.32	1.33	1.37
3	A1	630	A	N3-C4	5.32	1.38	1.34
3	A1	1143	G	O3'-P	-5.32	1.54	1.61
3	A1	1452	C	C4-C5	-5.32	1.38	1.43
25	BB	233	A	C6-N1	-5.32	1.31	1.35
25	BB	2762	C	C4-N4	-5.32	1.29	1.33
3	A1	510	A	N7-C5	5.32	1.42	1.39
3	A1	879	C	N3-C4	-5.32	1.30	1.33
3	A1	1069	C	C4-C5	-5.32	1.38	1.43
3	A1	1153	G	C6-N1	-5.32	1.35	1.39
25	BB	2535	G	N3-C4	5.32	1.39	1.35
25	BB	2898	U	C4-O4	-5.32	1.19	1.23
3	A1	241	G	C2-N2	-5.31	1.29	1.34
3	A1	364	A	N3-C4	5.31	1.38	1.34
3	A1	1216	A	N3-C4	5.31	1.38	1.34
3	A1	1517	G	C2-N2	-5.31	1.29	1.34
24	BA	5	U	O3'-P	-5.31	1.54	1.61
1	AA	25	C	C2-O2	-5.31	1.19	1.24
1	AP	36	A	C8-N7	5.31	1.35	1.31
25	BB	1026	G	C2-N2	-5.31	1.29	1.34
25	BB	1068	G	N7-C5	5.31	1.42	1.39
25	BB	1311	G	C5'-C4'	5.31	1.57	1.51
25	BB	1463	C	C4-N4	-5.31	1.29	1.33
25	BB	2569	G	C2-N2	-5.31	1.29	1.34
37	BN	62	ARG	CZ-NH1	-5.31	1.26	1.33
25	BB	519	U	C5'-C4'	5.31	1.57	1.51
25	BB	1930	G	N1-C2	-5.31	1.33	1.37
25	BB	2177	C	P-O5'	-5.31	1.54	1.59
1	AA	56	C	P-O5'	-5.31	1.54	1.59
25	BB	417	C	C5-C6	5.31	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1913	A	N9-C4	5.31	1.41	1.37
25	BB	2484	G	N3-C4	5.31	1.39	1.35
29	BF	50	ARG	CZ-NH1	-5.31	1.26	1.33
3	A1	327	A	C6-N1	-5.31	1.31	1.35
3	A1	886	G	O3'-P	-5.31	1.54	1.61
25	BB	9	G	C2-N2	-5.31	1.29	1.34
25	BB	9	G	N1-C2	-5.31	1.33	1.37
25	BB	643	A	N1-C2	-5.31	1.29	1.34
25	BB	711	G	C6-N1	-5.31	1.35	1.39
25	BB	1336	A	N9-C4	-5.31	1.34	1.37
25	BB	2146	C	C4-N4	-5.31	1.29	1.33
25	BB	2873	A	N3-C4	5.31	1.38	1.34
3	A1	483	C	P-O5'	5.31	1.65	1.59
24	BA	60	C	P-O5'	-5.31	1.54	1.59
1	AE	62	A	N3-C4	5.30	1.38	1.34
3	A1	824	G	O3'-P	-5.30	1.54	1.61
25	BB	129	C	P-O5'	-5.30	1.54	1.59
25	BB	1564	C	N3-C4	-5.30	1.30	1.33
25	BB	2417	C	O3'-P	-5.30	1.54	1.61
3	A1	100	G	C2-N2	-5.30	1.29	1.34
25	BB	2171	A	O3'-P	-5.30	1.54	1.61
1	AE	39	U	O3'-P	-5.30	1.54	1.61
3	A1	304	U	O3'-P	-5.30	1.54	1.61
3	A1	369	G	N3-C4	5.30	1.39	1.35
3	A1	568	G	C2-N2	-5.30	1.29	1.34
25	BB	172	A	P-O5'	-5.30	1.54	1.59
25	BB	681	G	C2-N2	-5.30	1.29	1.34
25	BB	1753	G	O3'-P	-5.30	1.54	1.61
25	BB	2382	G	N1-C2	-5.30	1.33	1.37
1	AA	18	G	C2-N2	-5.30	1.29	1.34
1	AA	24	G	N3-C4	5.30	1.39	1.35
3	A1	866	C	C4-C5	-5.30	1.38	1.43
25	BB	620	G	N7-C5	5.30	1.42	1.39
3	A1	902	G	C2-N2	-5.30	1.29	1.34
25	BB	198	C	N3-C4	-5.30	1.30	1.33
25	BB	1098	A	C6-N1	-5.30	1.31	1.35
1	AP	50	U	O3'-P	-5.30	1.54	1.61
25	BB	388	G	N7-C5	5.30	1.42	1.39
25	BB	901	C	N3-C4	-5.30	1.30	1.33
25	BB	1209	U	O3'-P	-5.30	1.54	1.61
25	BB	1239	G	N3-C4	5.30	1.39	1.35
3	A1	388	G	C2-N2	-5.29	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	785	G	C2-N2	-5.29	1.29	1.34
25	BB	1085	A	N3-C4	5.29	1.38	1.34
25	BB	1275	A	O3'-P	-5.29	1.54	1.61
3	A1	619	U	P-O5'	5.29	1.65	1.59
25	BB	1151	A	C6-N6	-5.29	1.29	1.33
25	BB	2322	A	O3'-P	-5.29	1.54	1.61
25	BB	2567	G	N7-C5	5.29	1.42	1.39
3	A1	539	A	N9-C4	5.29	1.41	1.37
3	A1	800	G	C2-N2	-5.29	1.29	1.34
25	BB	1650	A	P-O5'	-5.29	1.54	1.59
25	BB	1921	G	N7-C5	5.29	1.42	1.39
25	BB	1357	C	C4-N4	-5.29	1.29	1.33
1	AP	47	U	C4-C5	5.29	1.48	1.43
1	AE	33	U	O3'-P	-5.29	1.54	1.61
3	A1	830	G	N7-C5	5.29	1.42	1.39
25	BB	326	G	P-O5'	5.29	1.65	1.59
25	BB	922	C	C4-N4	-5.29	1.29	1.33
25	BB	376	G	C2-N2	-5.29	1.29	1.34
25	BB	557	C	C4-N4	-5.29	1.29	1.33
25	BB	2173	A	O3'-P	-5.29	1.54	1.61
25	BB	2886	A	C6-N6	-5.29	1.29	1.33
3	A1	1083	U	P-O5'	5.29	1.65	1.59
3	A1	1274	A	C6-N6	-5.29	1.29	1.33
25	BB	1159	U	O3'-P	-5.29	1.54	1.61
25	BB	1884	G	N3-C4	5.29	1.39	1.35
25	BB	2382	G	N7-C5	5.29	1.42	1.39
1	AP	23	A	N7-C5	5.28	1.42	1.39
3	A1	162	A	O3'-P	5.28	1.67	1.61
25	BB	80	G	C2-N2	-5.28	1.29	1.34
25	BB	432	A	O3'-P	-5.28	1.54	1.61
25	BB	1119	U	O3'-P	-5.28	1.54	1.61
25	BB	1747	U	O3'-P	-5.28	1.54	1.61
25	BB	2054	A	N7-C5	5.28	1.42	1.39
25	BB	650	C	N3-C4	-5.28	1.30	1.33
25	BB	1596	A	C6-N1	-5.28	1.31	1.35
37	BN	79	ARG	CZ-NH1	-5.28	1.26	1.33
3	A1	263	A	N7-C5	5.28	1.42	1.39
3	A1	1154	G	O3'-P	-5.28	1.54	1.61
25	BB	2193	G	N1-C2	-5.28	1.33	1.37
25	BB	2326	C	C4-N4	-5.28	1.29	1.33
25	BB	2359	C	C5-C6	5.28	1.38	1.34
51	B2	166	ARG	CZ-NH1	-5.28	1.26	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AP	1	G	C6-N1	-5.28	1.35	1.39
25	BB	2603	G	O3'-P	-5.28	1.54	1.61
3	A1	141	G	C2-N2	-5.28	1.29	1.34
3	A1	332	G	N7-C5	5.28	1.42	1.39
3	A1	933	G	C2-N2	-5.28	1.29	1.34
24	BA	13	G	N7-C5	5.28	1.42	1.39
25	BB	49	A	N7-C5	5.28	1.42	1.39
1	AA	22	G	N3-C4	5.28	1.39	1.35
3	A1	664	G	C4'-O4'	-5.28	1.38	1.45
25	BB	61	C	C4-N4	-5.28	1.29	1.33
25	BB	2269	G	C6-N1	-5.28	1.35	1.39
25	BB	2478	A	C6-N1	-5.28	1.31	1.35
10	AI	31	ARG	CZ-NH2	-5.27	1.26	1.33
25	BB	902	C	O3'-P	-5.27	1.54	1.61
25	BB	1938	A	N7-C5	5.27	1.42	1.39
30	BG	103	ARG	CZ-NH1	-5.27	1.26	1.33
25	BB	146	A	O3'-P	-5.27	1.54	1.61
25	BB	511	U	O3'-P	-5.27	1.54	1.61
25	BB	571	U	O3'-P	-5.27	1.54	1.61
25	BB	1293	C	N3-C4	-5.27	1.30	1.33
25	BB	1965	C	C4'-O4'	-5.27	1.38	1.45
25	BB	2673	G	N1-C2	-5.27	1.33	1.37
3	A1	1049	U	O3'-P	-5.27	1.54	1.61
24	BA	68	C	C4-N4	-5.27	1.29	1.33
3	A1	725	G	N1-C2	-5.27	1.33	1.37
25	BB	2415	G	N3-C4	5.27	1.39	1.35
3	A1	1355	G	C5'-C4'	5.27	1.57	1.51
16	AQ	32	ARG	CZ-NH2	-5.27	1.26	1.33
25	BB	930	G	P-O5'	5.27	1.65	1.59
25	BB	1041	G	C6-N1	-5.27	1.35	1.39
25	BB	1197	G	C2-N2	-5.27	1.29	1.34
25	BB	1540	G	C2-N2	-5.27	1.29	1.34
25	BB	2117	A	P-O5'	5.27	1.65	1.59
25	BB	2209	G	O3'-P	-5.27	1.54	1.61
25	BB	2409	G	C6-N1	-5.27	1.35	1.39
3	A1	1243	C	C4-N4	-5.27	1.29	1.33
3	A1	78	A	C6-N6	-5.26	1.29	1.33
3	A1	1343	G	P-O5'	5.26	1.65	1.59
3	A1	1401	G	P-O5'	-5.26	1.54	1.59
25	BB	1441	G	C2-N2	-5.26	1.29	1.34
25	BB	2187	U	O3'-P	5.26	1.67	1.61
25	BB	2695	U	P-O5'	-5.26	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	428	G	C2-N2	-5.26	1.29	1.34
3	A1	741	G	N1-C2	-5.26	1.33	1.37
3	A1	1092	A	N3-C4	5.26	1.38	1.34
3	A1	1167	A	N7-C5	5.26	1.42	1.39
3	A1	1438	G	C5-C6	5.26	1.47	1.42
25	BB	468	G	C2-N2	-5.26	1.29	1.34
25	BB	900	A	N7-C5	5.26	1.42	1.39
25	BB	1120	G	N1-C2	-5.26	1.33	1.37
25	BB	1367	A	C6-N6	-5.26	1.29	1.33
25	BB	2145	C	C4-N4	-5.26	1.29	1.33
1	AA	46	G	C2-N2	-5.26	1.29	1.34
3	A1	138	G	N7-C5	5.26	1.42	1.39
3	A1	1242	G	C2-N2	-5.26	1.29	1.34
25	BB	983	A	P-O5'	5.26	1.65	1.59
25	BB	1073	A	C6-N1	-5.26	1.31	1.35
25	BB	1204	A	N3-C4	5.26	1.38	1.34
25	BB	1239	G	C2-N2	-5.26	1.29	1.34
25	BB	2623	G	N1-C2	-5.26	1.33	1.37
25	BB	2791	G	C8-N7	5.26	1.34	1.30
3	A1	267	C	N3-C4	-5.26	1.30	1.33
3	A1	703	G	N3-C4	5.26	1.39	1.35
3	A1	1218	C	N1-C6	5.26	1.40	1.37
3	A1	1531	A	N7-C5	5.26	1.42	1.39
25	BB	66	C	N3-C4	-5.26	1.30	1.33
25	BB	89	A	C6-N1	-5.26	1.31	1.35
25	BB	922	C	N3-C4	-5.26	1.30	1.33
1	AP	32	C	C4-N4	-5.26	1.29	1.33
3	A1	509	A	N7-C5	5.26	1.42	1.39
3	A1	1071	C	N3-C4	-5.26	1.30	1.33
25	BB	46	G	C2-N2	-5.26	1.29	1.34
25	BB	539	G	N1-C2	-5.26	1.33	1.37
3	A1	709	U	O3'-P	-5.26	1.54	1.61
25	BB	760	G	C2-N2	-5.26	1.29	1.34
25	BB	961	C	N3-C4	-5.26	1.30	1.33
25	BB	1164	C	N3-C4	-5.26	1.30	1.33
25	BB	2650	U	P-O5'	-5.26	1.54	1.59
25	BB	2761	A	N3-C4	5.26	1.38	1.34
3	A1	781	A	P-O5'	-5.25	1.54	1.59
25	BB	2265	U	O3'-P	-5.25	1.54	1.61
25	BB	1885	A	N7-C5	5.25	1.42	1.39
25	BB	2144	G	C2-N2	-5.25	1.29	1.34
1	AP	48	C	C5'-C4'	5.25	1.57	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	182	A	C6-N1	-5.25	1.31	1.35
3	A1	1520	C	C3'-C2'	5.25	1.58	1.52
25	BB	1140	C	C4-N4	-5.25	1.29	1.33
25	BB	1720	U	C5'-C4'	5.25	1.57	1.51
25	BB	2677	G	C2-N2	-5.25	1.29	1.34
25	BB	2701	U	C5'-C4'	5.25	1.57	1.51
25	BB	2771	C	C4-N4	-5.25	1.29	1.33
1	AP	53	G	N1-C2	-5.25	1.33	1.37
3	A1	1432	G	C2-N2	-5.25	1.29	1.34
3	A1	1482	G	N9-C4	5.25	1.42	1.38
25	BB	490	C	C4-N4	-5.25	1.29	1.33
25	BB	952	G	C2-N2	-5.25	1.29	1.34
25	BB	1252	G	C2-N2	-5.25	1.29	1.34
25	BB	2059	A	O3'-P	-5.25	1.54	1.61
3	A1	94	G	C2-N2	-5.25	1.29	1.34
3	A1	377	G	N1-C2	-5.25	1.33	1.37
24	BA	107	G	C4'-O4'	-5.25	1.38	1.45
25	BB	53	A	C6-N6	-5.25	1.29	1.33
25	BB	1048	A	P-O5'	5.25	1.65	1.59
25	BB	2113	U	O3'-P	-5.25	1.54	1.61
1	AE	66	A	N3-C4	5.25	1.38	1.34
25	BB	1684	G	N1-C2	-5.25	1.33	1.37
1	AP	58	A	C6-N1	-5.24	1.31	1.35
24	BA	44	G	P-O5'	-5.24	1.54	1.59
25	BB	1729	U	P-O5'	-5.24	1.54	1.59
25	BB	2439	A	N7-C5	5.24	1.42	1.39
25	BB	507	A	C6-N6	-5.24	1.29	1.33
25	BB	1387	A	C6-N6	-5.24	1.29	1.33
25	BB	2784	U	O3'-P	-5.24	1.54	1.61
1	AA	10	G	N1-C2	-5.24	1.33	1.37
3	A1	230	G	C2-N2	-5.24	1.29	1.34
3	A1	1006	G	C2-N2	-5.24	1.29	1.34
24	BA	107	G	C2-N2	-5.24	1.29	1.34
25	BB	306	U	O3'-P	-5.24	1.54	1.61
25	BB	2626	C	C4-N4	-5.24	1.29	1.33
25	BB	2890	G	C6-N1	-5.24	1.35	1.39
3	A1	264	C	N3-C4	-5.24	1.30	1.33
3	A1	1225	A	C6-N1	-5.24	1.31	1.35
25	BB	749	A	N7-C5	5.24	1.42	1.39
25	BB	1462	C	N3-C4	-5.24	1.30	1.33
25	BB	1811	G	C2-N2	-5.24	1.29	1.34
25	BB	2053	G	C2-N2	-5.24	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2239	G	C5'-C4'	5.24	1.57	1.51
1	AP	35	A	C2-N3	-5.24	1.28	1.33
3	A1	771	G	N9-C4	-5.24	1.33	1.38
10	AI	56	ARG	CZ-NH1	-5.24	1.26	1.33
25	BB	1017	G	N1-C2	-5.24	1.33	1.37
25	BB	1218	G	C2-N2	-5.24	1.29	1.34
1	AA	8	U	C5'-C4'	5.24	1.57	1.51
3	A1	164	G	C5'-C4'	5.24	1.57	1.51
25	BB	1448	G	C2-N2	-5.24	1.29	1.34
1	AP	30	G	C2-N2	-5.23	1.29	1.34
1	AA	47	U	P-O5'	5.23	1.65	1.59
3	A1	338	A	N7-C5	5.23	1.42	1.39
3	A1	679	C	N3-C4	-5.23	1.30	1.33
25	BB	733	G	C2-N2	-5.23	1.29	1.34
25	BB	1064	C	P-O5'	5.23	1.65	1.59
25	BB	1596	A	P-O5'	-5.23	1.54	1.59
25	BB	2009	A	C6-N6	-5.23	1.29	1.33
25	BB	2686	G	O3'-P	-5.23	1.54	1.61
3	A1	457	G	C6-N1	-5.23	1.35	1.39
3	A1	824	G	C2-N2	-5.23	1.29	1.34
25	BB	1124	G	C2-N2	-5.23	1.29	1.34
25	BB	1194	A	N7-C5	5.23	1.42	1.39
25	BB	1697	G	C6-N1	-5.23	1.35	1.39
25	BB	2005	A	N7-C5	5.23	1.42	1.39
25	BB	1667	G	O3'-P	-5.23	1.54	1.61
25	BB	2267	A	C6-N6	-5.23	1.29	1.33
1	AP	23	A	C6-N6	-5.23	1.29	1.33
25	BB	190	A	N3-C4	5.23	1.38	1.34
25	BB	756	A	N9-C4	5.23	1.41	1.37
25	BB	1129	A	C6-N1	-5.23	1.31	1.35
25	BB	1595	C	P-O5'	5.23	1.65	1.59
25	BB	2020	A	C5'-C4'	5.23	1.57	1.51
25	BB	2285	C	C4-N4	-5.23	1.29	1.33
25	BB	2846	G	N7-C5	5.23	1.42	1.39
25	BB	531	C	N3-C4	-5.23	1.30	1.33
25	BB	1129	A	N7-C5	5.23	1.42	1.39
25	BB	2375	G	N7-C5	5.23	1.42	1.39
25	BB	2534	A	C4'-O4'	-5.23	1.38	1.45
3	A1	141	G	N7-C5	5.22	1.42	1.39
3	A1	905	U	P-O5'	5.22	1.65	1.59
10	AI	31	ARG	NE-CZ	-5.22	1.26	1.33
25	BB	1868	C	C5-C6	5.22	1.38	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2184	A	N3-C4	5.22	1.38	1.34
3	A1	260	G	N1-C2	-5.22	1.33	1.37
3	A1	402	G	N1-C2	-5.22	1.33	1.37
3	A1	633	G	N3-C4	5.22	1.39	1.35
24	BA	11	C	C4-N4	-5.22	1.29	1.33
25	BB	865	C	C5'-C4'	5.22	1.57	1.51
25	BB	1941	C	N1-C6	5.22	1.40	1.37
1	AA	45	G	P-O5'	5.22	1.65	1.59
3	A1	64	G	P-O5'	5.22	1.65	1.59
3	A1	934	C	N3-C4	-5.22	1.30	1.33
25	BB	2729	G	C2-N2	-5.22	1.29	1.34
3	A1	96	U	O3'-P	-5.22	1.54	1.61
3	A1	991	U	C5'-C4'	5.22	1.57	1.51
3	A1	1415	G	O3'-P	-5.22	1.54	1.61
25	BB	258	G	P-O5'	-5.22	1.54	1.59
25	BB	355	U	C4-C5	5.22	1.48	1.43
25	BB	1996	C	N3-C4	-5.22	1.30	1.33
25	BB	2205	A	N7-C5	5.22	1.42	1.39
25	BB	2725	A	C6-N6	-5.22	1.29	1.33
34	BK	68	ARG	CZ-NH2	-5.22	1.26	1.33
37	BN	269	ARG	CZ-NH1	-5.22	1.26	1.33
3	A1	302	G	N1-C2	-5.22	1.33	1.37
3	A1	1259	C	C4-N4	-5.22	1.29	1.33
25	BB	51	G	P-O5'	-5.22	1.54	1.59
2	AM	20	U	N1-C2	5.22	1.43	1.38
25	BB	680	C	C4-N4	-5.22	1.29	1.33
3	A1	52	C	N3-C4	-5.21	1.30	1.33
3	A1	1170	A	C6-N1	-5.21	1.31	1.35
25	BB	540	C	P-O5'	5.21	1.65	1.59
25	BB	1640	A	C5'-C4'	5.21	1.57	1.51
25	BB	2346	A	N7-C5	5.21	1.42	1.39
3	A1	526	C	C4-N4	-5.21	1.29	1.33
25	BB	302	C	C4'-O4'	-5.21	1.38	1.45
25	BB	559	G	C5'-C4'	5.21	1.57	1.51
3	A1	314	C	N3-C4	-5.21	1.30	1.33
25	BB	142	A	C6-N6	-5.21	1.29	1.33
25	BB	815	C	C4-N4	-5.21	1.29	1.33
25	BB	864	G	O3'-P	-5.21	1.54	1.61
25	BB	1966	A	N7-C5	5.21	1.42	1.39
25	BB	2551	C	N3-C4	-5.21	1.30	1.33
25	BB	2670	A	N1-C2	-5.21	1.29	1.34
25	BB	2685	G	C6-N1	-5.21	1.35	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2749	A	N7-C5	5.21	1.42	1.39
1	AA	46	G	P-O5'	-5.21	1.54	1.59
3	A1	54	C	C4-C5	-5.21	1.38	1.43
3	A1	567	G	P-O5'	-5.21	1.54	1.59
3	A1	716	A	C6-N6	-5.21	1.29	1.33
3	A1	1236	A	O3'-P	-5.21	1.54	1.61
25	BB	512	G	C6-N1	-5.21	1.35	1.39
25	BB	841	G	C5'-C4'	5.21	1.57	1.51
25	BB	924	G	N1-C2	-5.21	1.33	1.37
25	BB	1206	G	C5-C6	5.21	1.47	1.42
25	BB	1426	G	C4'-O4'	-5.21	1.38	1.45
25	BB	1686	C	C4-N4	-5.21	1.29	1.33
25	BB	1722	A	C6-N1	-5.21	1.31	1.35
25	BB	1726	C	O3'-P	-5.21	1.54	1.61
25	BB	1916	A	N3-C4	5.21	1.38	1.34
25	BB	2037	A	N3-C4	5.21	1.38	1.34
25	BB	2490	G	C2-N2	-5.21	1.29	1.34
25	BB	2620	C	C4-N4	-5.21	1.29	1.33
25	BB	1551	A	N7-C5	5.21	1.42	1.39
25	BB	1587	G	C6-N1	-5.21	1.35	1.39
25	BB	1884	G	C5-C6	5.21	1.47	1.42
3	A1	1462	C	C4-N4	-5.21	1.29	1.33
25	BB	143	C	P-O5'	-5.21	1.54	1.59
25	BB	2498	C	O3'-P	-5.21	1.54	1.61
1	AA	71	G	C6-O6	-5.20	1.19	1.24
3	A1	371	A	C4'-O4'	-5.20	1.38	1.45
3	A1	881	G	C2-N2	-5.20	1.29	1.34
25	BB	14	A	C4'-O4'	-5.20	1.38	1.45
25	BB	1368	G	N1-C2	-5.20	1.33	1.37
25	BB	1999	C	C4-N4	-5.20	1.29	1.33
25	BB	2250	G	N1-C2	-5.20	1.33	1.37
25	BB	2824	C	N3-C4	-5.20	1.30	1.33
25	BB	1720	U	P-O5'	-5.20	1.54	1.59
1	AA	21	A	O3'-P	-5.20	1.54	1.61
3	A1	129	A	C6-N6	-5.20	1.29	1.33
3	A1	455	G	N7-C5	5.20	1.42	1.39
25	BB	351	C	N3-C4	-5.20	1.30	1.33
25	BB	1082	U	O3'-P	-5.20	1.54	1.61
25	BB	1206	G	P-O5'	-5.20	1.54	1.59
25	BB	1499	C	N3-C4	-5.20	1.30	1.33
25	BB	2133	G	C5'-C4'	5.20	1.57	1.51
3	A1	980	C	O3'-P	-5.20	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1237	C	C4-N4	-5.20	1.29	1.33
25	BB	359	G	C2-N2	-5.20	1.29	1.34
25	BB	1535	A	N7-C5	5.20	1.42	1.39
25	BB	1950	G	C2-N2	-5.20	1.29	1.34
25	BB	2516	A	C6-N1	-5.20	1.31	1.35
25	BB	2890	G	C5'-C4'	5.20	1.57	1.51
3	A1	1449	C	C4-C5	-5.20	1.38	1.43
3	A1	1487	G	C6-N1	-5.20	1.35	1.39
24	BA	101	A	C6-N6	-5.20	1.29	1.33
25	BB	522	A	N7-C5	5.20	1.42	1.39
25	BB	805	G	C2-N2	-5.20	1.29	1.34
25	BB	2341	G	C2-N2	-5.20	1.29	1.34
28	BE	123	ARG	CZ-NH1	-5.20	1.26	1.33
3	A1	403	C	N3-C4	-5.20	1.30	1.33
3	A1	1497	G	C2-N2	-5.20	1.29	1.34
25	BB	418	C	C4-N4	-5.20	1.29	1.33
25	BB	782	A	C6-N1	-5.20	1.31	1.35
25	BB	1638	C	C4-N4	-5.20	1.29	1.33
25	BB	1770	G	O3'-P	-5.20	1.54	1.61
3	A1	339	C	O3'-P	-5.19	1.54	1.61
3	A1	1304	G	N3-C4	5.19	1.39	1.35
3	A1	1426	G	N7-C5	5.19	1.42	1.39
25	BB	1744	A	N3-C4	5.19	1.38	1.34
1	AE	61	C	C4-N4	-5.19	1.29	1.33
3	A1	1197	A	N7-C5	5.19	1.42	1.39
3	A1	1408	A	N9-C4	-5.19	1.34	1.37
25	BB	685	A	C6-N1	-5.19	1.31	1.35
25	BB	1843	C	N3-C4	-5.19	1.30	1.33
25	BB	1899	A	P-O5'	5.19	1.65	1.59
1	AE	23	A	N3-C4	5.19	1.38	1.34
3	A1	67	C	N3-C4	-5.19	1.30	1.33
3	A1	516	U	C3'-C2'	5.19	1.58	1.52
3	A1	1404	C	N3-C4	-5.19	1.30	1.33
3	A1	1443	C	C4-N4	-5.19	1.29	1.33
25	BB	325	G	N3-C4	5.19	1.39	1.35
25	BB	649	G	N1-C2	-5.19	1.33	1.37
2	AM	12	U	C5-C6	5.19	1.38	1.34
3	A1	9	G	N1-C2	-5.19	1.33	1.37
25	BB	875	G	N7-C5	5.19	1.42	1.39
25	BB	2708	G	N7-C5	5.19	1.42	1.39
25	BB	181	A	N7-C5	5.19	1.42	1.39
25	BB	2027	G	O3'-P	-5.19	1.54	1.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	947	G	N1-C2	-5.18	1.33	1.37
25	BB	308	G	C2-N2	-5.18	1.29	1.34
3	A1	879	C	O3'-P	-5.18	1.54	1.61
3	A1	1437	A	C6-N1	-5.18	1.31	1.35
25	BB	248	G	C2-N2	-5.18	1.29	1.34
25	BB	1017	G	O3'-P	-5.18	1.54	1.61
25	BB	2498	C	C4-N4	-5.18	1.29	1.33
25	BB	1741	C	C5'-C4'	5.18	1.57	1.51
1	AE	19	G	O3'-P	-5.18	1.54	1.61
2	AM	15	U	C2-N3	-5.18	1.34	1.37
3	A1	515	G	O3'-P	-5.18	1.54	1.61
3	A1	1428	A	P-O5'	5.18	1.65	1.59
25	BB	351	C	C4-N4	-5.18	1.29	1.33
25	BB	422	A	C6-N6	-5.18	1.29	1.33
25	BB	555	G	C2-N2	-5.18	1.29	1.34
25	BB	920	A	N7-C5	5.18	1.42	1.39
25	BB	1848	A	N3-C4	5.18	1.38	1.34
3	A1	921	U	O3'-P	-5.18	1.54	1.61
3	A1	953	G	N1-C2	-5.18	1.33	1.37
25	BB	100	U	C5'-C4'	5.18	1.57	1.51
25	BB	157	C	O3'-P	-5.18	1.54	1.61
25	BB	559	G	N3-C4	5.18	1.39	1.35
3	A1	41	G	P-O5'	5.18	1.65	1.59
3	A1	396	C	C4-N4	-5.18	1.29	1.33
7	AF	2	ARG	CZ-NH2	-5.18	1.26	1.33
25	BB	592	A	N7-C5	5.18	1.42	1.39
25	BB	1471	G	N1-C2	-5.18	1.33	1.37
25	BB	2428	G	C2-N2	-5.18	1.29	1.34
25	BB	476	G	C3'-C2'	5.17	1.58	1.52
25	BB	517	C	N3-C4	-5.17	1.30	1.33
25	BB	1319	C	C4-N4	-5.17	1.29	1.33
25	BB	2214	C	C4-N4	-5.17	1.29	1.33
3	A1	1421	G	C2-N2	-5.17	1.29	1.34
25	BB	1924	C	N3-C4	-5.17	1.30	1.33
1	AA	7	U	C2-N3	-5.17	1.34	1.37
25	BB	558	U	O3'-P	-5.17	1.54	1.61
25	BB	1686	C	N3-C4	-5.17	1.30	1.33
25	BB	1745	A	N7-C5	5.17	1.42	1.39
25	BB	2109	U	O3'-P	-5.17	1.54	1.61
1	AA	30	G	P-O5'	5.17	1.65	1.59
1	AA	38	A	C5-C4	-5.17	1.35	1.38
3	A1	42	G	N3-C4	5.17	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	901	A	N7-C5	5.17	1.42	1.39
3	A1	914	A	P-O5'	5.17	1.65	1.59
25	BB	1464	G	C5'-C4'	5.17	1.57	1.51
25	BB	2024	G	C2-N2	-5.17	1.29	1.34
25	BB	2700	A	C6-N1	-5.17	1.31	1.35
3	A1	454	G	N7-C5	5.17	1.42	1.39
3	A1	897	C	C5-C6	5.17	1.38	1.34
3	A1	1336	C	C5'-C4'	5.17	1.57	1.51
3	A1	1459	G	C2-N2	-5.17	1.29	1.34
25	BB	1308	A	C6-N1	-5.17	1.31	1.35
25	BB	1981	A	C5'-C4'	5.17	1.57	1.51
3	A1	191	G	N3-C4	5.17	1.39	1.35
3	A1	539	A	C6-N1	-5.17	1.31	1.35
3	A1	779	C	N3-C4	-5.17	1.30	1.33
25	BB	221	A	O3'-P	-5.17	1.54	1.61
25	BB	1977	A	C6-N1	-5.17	1.31	1.35
3	A1	530	G	C4'-O4'	-5.17	1.38	1.45
3	A1	1067	A	N3-C4	5.17	1.38	1.34
3	A1	78	A	C5-C4	-5.16	1.35	1.38
3	A1	959	A	C5-C4	-5.16	1.35	1.38
3	A1	1127	G	C6-N1	-5.16	1.35	1.39
3	A1	1305	G	P-O5'	5.16	1.65	1.59
15	AO	125	ARG	CZ-NH1	-5.16	1.26	1.33
25	BB	10	A	N3-C4	5.16	1.38	1.34
25	BB	681	G	N7-C5	5.16	1.42	1.39
25	BB	1811	G	N1-C2	-5.16	1.33	1.37
25	BB	1931	U	P-O5'	5.16	1.65	1.59
3	A1	138	G	C2-N2	-5.16	1.29	1.34
3	A1	1356	G	O3'-P	-5.16	1.54	1.61
25	BB	2337	G	C2-N2	-5.16	1.29	1.34
25	BB	2502	G	N1-C2	-5.16	1.33	1.37
25	BB	2543	G	N1-C2	-5.16	1.33	1.37
24	BA	55	U	P-O5'	5.16	1.65	1.59
25	BB	1026	G	C6-N1	-5.16	1.35	1.39
25	BB	1295	C	N3-C4	-5.16	1.30	1.33
25	BB	2532	G	C2-N2	-5.16	1.29	1.34
3	A1	220	G	N1-C2	-5.16	1.33	1.37
3	A1	1189	U	O3'-P	-5.16	1.54	1.61
25	BB	94	A	N7-C5	5.16	1.42	1.39
1	AE	26	G	N1-C2	-5.16	1.33	1.37
3	A1	758	C	P-O5'	5.16	1.65	1.59
3	A1	806	C	C4-N4	-5.16	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1374	A	O3'-P	-5.16	1.54	1.61
15	AO	39	ARG	CZ-NH2	-5.16	1.26	1.33
25	BB	1013	C	C4-N4	-5.16	1.29	1.33
25	BB	1670	C	C4-N4	-5.16	1.29	1.33
25	BB	2367	G	C6-N1	-5.16	1.35	1.39
1	AE	30	G	N7-C5	5.16	1.42	1.39
3	A1	667	G	C2-N2	-5.16	1.29	1.34
3	A1	1500	A	C6-N1	-5.16	1.31	1.35
25	BB	597	G	C2-N2	-5.16	1.29	1.34
25	BB	1087	G	C4'-O4'	-5.16	1.38	1.45
25	BB	1715	G	N1-C2	-5.16	1.33	1.37
25	BB	2327	A	O3'-P	5.16	1.67	1.61
25	BB	2474	U	N1-C2	5.16	1.43	1.38
25	BB	264	C	C4-N4	-5.15	1.29	1.33
25	BB	1410	G	N1-C2	-5.15	1.33	1.37
3	A1	557	G	C2-N2	-5.15	1.29	1.34
3	A1	566	G	N7-C5	5.15	1.42	1.39
3	A1	1284	C	N3-C4	-5.15	1.30	1.33
3	A1	1402	C	C4-C5	-5.15	1.38	1.43
17	AR	159	GLU	CG-CD	5.15	1.59	1.51
25	BB	47	C	P-O5'	-5.15	1.54	1.59
25	BB	313	G	C2-N2	-5.15	1.29	1.34
25	BB	1025	G	N3-C4	5.15	1.39	1.35
25	BB	1577	C	P-O5'	-5.15	1.54	1.59
25	BB	1875	G	N1-C2	-5.15	1.33	1.37
25	BB	2277	G	C2-N2	-5.15	1.29	1.34
25	BB	217	A	P-O5'	5.15	1.64	1.59
25	BB	487	C	C4-N4	-5.15	1.29	1.33
25	BB	641	U	N1-C2	5.15	1.43	1.38
3	A1	198	G	C6-N1	-5.15	1.35	1.39
25	BB	1653	G	N7-C5	5.15	1.42	1.39
25	BB	2191	A	N7-C5	5.15	1.42	1.39
24	BA	93	C	C4'-O4'	-5.15	1.38	1.45
25	BB	212	G	N7-C5	5.15	1.42	1.39
25	BB	231	A	C6-N1	-5.15	1.31	1.35
25	BB	406	G	C2-N2	-5.15	1.29	1.34
25	BB	633	A	N3-C4	5.15	1.38	1.34
25	BB	808	G	C2-N2	-5.15	1.29	1.34
25	BB	2157	G	N7-C5	5.15	1.42	1.39
25	BB	2538	C	C4-N4	-5.15	1.29	1.33
25	BB	2882	A	N3-C4	5.15	1.38	1.34
3	A1	983	A	P-O5'	-5.15	1.54	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1638	C	N1-C6	5.15	1.40	1.37
25	BB	2387	U	P-O5'	5.15	1.64	1.59
25	BB	2634	A	N3-C4	5.15	1.38	1.34
3	A1	774	G	C2-N2	-5.14	1.29	1.34
25	BB	659	G	C2-N2	-5.14	1.29	1.34
25	BB	776	G	C2-N2	-5.14	1.29	1.34
25	BB	1154	G	N3-C4	5.14	1.39	1.35
25	BB	1277	G	N1-C2	-5.14	1.33	1.37
25	BB	1687	G	C2-N2	-5.14	1.29	1.34
25	BB	1740	G	N7-C5	5.14	1.42	1.39
25	BB	1889	A	C6-N1	-5.14	1.31	1.35
3	A1	292	G	C2-N2	-5.14	1.29	1.34
3	A1	1100	C	P-O5'	-5.14	1.54	1.59
24	BA	19	C	O3'-P	-5.14	1.54	1.61
25	BB	1380	G	C2-N2	-5.14	1.29	1.34
25	BB	1860	G	C2-N2	-5.14	1.29	1.34
25	BB	2535	G	N7-C5	5.14	1.42	1.39
25	BB	2658	C	C4'-O4'	-5.14	1.38	1.45
25	BB	1580	A	N3-C4	5.14	1.38	1.34
1	AA	19	G	C6-O6	-5.14	1.19	1.24
3	A1	419	C	C4-N4	-5.14	1.29	1.33
3	A1	488	C	C3'-C2'	5.14	1.58	1.52
3	A1	1012	A	N7-C5	5.14	1.42	1.39
25	BB	1518	C	C4-N4	-5.14	1.29	1.33
25	BB	2079	U	P-O5'	5.14	1.64	1.59
25	BB	2310	C	C4'-O4'	-5.14	1.38	1.45
3	A1	434	U	P-O5'	-5.14	1.54	1.59
3	A1	1115	U	N3-C4	-5.14	1.33	1.38
25	BB	164	C	N3-C4	-5.14	1.30	1.33
25	BB	2702	G	C2-N2	-5.14	1.29	1.34
25	BB	919	U	O3'-P	-5.14	1.54	1.61
25	BB	1436	G	P-O5'	5.14	1.64	1.59
25	BB	1537	G	O3'-P	-5.14	1.54	1.61
25	BB	2057	G	C2-N2	-5.14	1.29	1.34
25	BB	2212	A	P-O5'	5.14	1.64	1.59
25	BB	2313	C	C4-N4	-5.14	1.29	1.33
25	BB	2416	C	C4-C5	-5.14	1.38	1.43
25	BB	2718	G	C2-N2	-5.14	1.29	1.34
3	A1	187	G	P-O5'	-5.13	1.54	1.59
3	A1	1337	G	C2-N2	-5.13	1.29	1.34
25	BB	141	G	N7-C5	5.13	1.42	1.39
25	BB	512	G	C2-N2	-5.13	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	608	A	N7-C5	5.13	1.42	1.39
25	BB	1207	C	C5'-C4'	5.13	1.57	1.51
25	BB	2102	G	C6-N1	-5.13	1.35	1.39
1	AA	34	G	N7-C5	5.13	1.42	1.39
25	BB	2753	A	C6-N6	-5.13	1.29	1.33
3	A1	687	A	C6-N6	-5.13	1.29	1.33
3	A1	1160	G	P-O5'	5.13	1.64	1.59
25	BB	865	C	O3'-P	-5.13	1.54	1.61
25	BB	874	G	C2-N2	-5.13	1.29	1.34
3	A1	209	U	P-O5'	5.13	1.64	1.59
25	BB	2173	A	C6-N6	-5.13	1.29	1.33
25	BB	2304	G	C4'-O4'	-5.13	1.38	1.45
3	A1	265	G	N1-C2	-5.13	1.33	1.37
3	A1	290	C	C4-N4	-5.13	1.29	1.33
25	BB	438	G	C2-N2	-5.13	1.29	1.34
25	BB	1416	G	N7-C5	5.13	1.42	1.39
25	BB	1879	C	C4-N4	-5.13	1.29	1.33
25	BB	1997	C	C4-N4	-5.13	1.29	1.33
25	BB	2538	C	O3'-P	-5.13	1.54	1.61
1	AA	18	G	C5'-C4'	5.13	1.57	1.51
3	A1	52	C	C4-C5	-5.13	1.38	1.43
3	A1	422	C	C4-N4	-5.13	1.29	1.33
3	A1	475	C	C4-C5	-5.13	1.38	1.43
25	BB	542	C	N3-C4	-5.13	1.30	1.33
25	BB	1057	A	N3-C4	5.13	1.38	1.34
25	BB	1737	G	N1-C2	-5.13	1.33	1.37
48	BY	184	ARG	CZ-NH1	-5.13	1.26	1.33
25	BB	675	A	C6-N6	-5.12	1.29	1.33
25	BB	2060	A	N7-C5	5.12	1.42	1.39
1	AE	30	G	N1-C2	-5.12	1.33	1.37
2	AM	13	U	N3-C4	-5.12	1.33	1.38
3	A1	179	A	N7-C5	5.12	1.42	1.39
3	A1	808	C	N3-C4	-5.12	1.30	1.33
3	A1	1356	G	C2-N2	-5.12	1.29	1.34
25	BB	540	C	N1-C6	5.12	1.40	1.37
25	BB	675	A	C6-N1	-5.12	1.31	1.35
25	BB	1062	G	C2-N2	-5.12	1.29	1.34
25	BB	1075	C	C4-N4	-5.12	1.29	1.33
25	BB	2142	A	N3-C4	5.12	1.38	1.34
25	BB	2365	G	C6-N1	-5.12	1.35	1.39
25	BB	2395	C	N3-C4	-5.12	1.30	1.33
25	BB	2574	G	C2-N2	-5.12	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	AP	11	C	C4-C5	-5.12	1.38	1.43
3	A1	1374	A	N7-C5	5.12	1.42	1.39
25	BB	548	G	C6-N1	-5.12	1.35	1.39
25	BB	1013	C	C4'-O4'	-5.12	1.38	1.45
25	BB	2335	A	N3-C4	5.12	1.38	1.34
25	BB	2717	C	C4-N4	-5.12	1.29	1.33
5	AC	68	ARG	CZ-NH2	-5.12	1.26	1.33
25	BB	664	G	C6-N1	-5.12	1.35	1.39
25	BB	1678	A	C6-N1	-5.12	1.31	1.35
25	BB	2697	G	P-O5'	-5.12	1.54	1.59
3	A1	341	C	O3'-P	-5.12	1.55	1.61
3	A1	805	C	N3-C4	-5.12	1.30	1.33
3	A1	987	G	P-O5'	-5.12	1.54	1.59
3	A1	1175	G	C2-N2	-5.12	1.29	1.34
11	AJ	5	ARG	CZ-NH1	-5.12	1.26	1.33
25	BB	125	A	N7-C5	5.12	1.42	1.39
26	BC	21	ARG	CZ-NH1	-5.12	1.26	1.33
3	A1	773	G	N1-C2	-5.12	1.33	1.37
3	A1	1384	C	C4-N4	-5.12	1.29	1.33
25	BB	107	G	C6-N1	-5.12	1.35	1.39
25	BB	371	A	O3'-P	-5.12	1.55	1.61
25	BB	537	G	C6-N1	-5.12	1.35	1.39
25	BB	537	G	N1-C2	-5.12	1.33	1.37
25	BB	1233	C	C3'-C2'	5.12	1.58	1.52
25	BB	2031	A	C6-N1	-5.12	1.31	1.35
25	BB	2224	G	N7-C5	5.12	1.42	1.39
25	BB	2369	A	N3-C4	5.12	1.38	1.34
25	BB	1299	G	C2-N2	-5.11	1.29	1.34
1	AP	57	G	N7-C5	5.11	1.42	1.39
3	A1	704	A	C5'-C4'	5.11	1.57	1.51
3	A1	889	A	P-O5'	5.11	1.64	1.59
25	BB	474	G	N1-C2	-5.11	1.33	1.37
3	A1	83	C	O3'-P	-5.11	1.55	1.61
3	A1	1308	U	O3'-P	-5.11	1.55	1.61
3	A1	1502	A	O3'-P	-5.11	1.55	1.61
25	BB	1903	G	C3'-C2'	5.11	1.58	1.52
25	BB	2123	G	P-O5'	-5.11	1.54	1.59
25	BB	2350	C	N3-C4	-5.11	1.30	1.33
25	BB	2842	G	O3'-P	-5.11	1.55	1.61
3	A1	532	A	P-O5'	5.11	1.64	1.59
3	A1	585	G	C2-N2	-5.11	1.29	1.34
3	A1	1014	A	C6-N6	-5.11	1.29	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1199	U	C5'-C4'	5.11	1.57	1.51
25	BB	248	G	N1-C2	-5.11	1.33	1.37
25	BB	964	C	P-O5'	-5.11	1.54	1.59
25	BB	2610	C	N3-C4	-5.11	1.30	1.33
3	A1	145	G	C5'-C4'	5.11	1.57	1.51
3	A1	1129	C	O3'-P	-5.11	1.55	1.61
3	A1	1220	G	N1-C2	-5.11	1.33	1.37
3	A1	1265	C	C4-C5	-5.11	1.38	1.43
3	A1	1319	A	N7-C5	5.11	1.42	1.39
3	A1	1403	C	N1-C6	5.11	1.40	1.37
9	AH	53	ARG	CZ-NH2	-5.11	1.26	1.33
25	BB	498	G	N3-C4	5.11	1.39	1.35
25	BB	756	A	C5-C6	5.11	1.45	1.41
25	BB	2181	U	C3'-C2'	5.11	1.58	1.52
25	BB	2646	C	N3-C4	-5.11	1.30	1.33
25	BB	2754	U	C3'-C2'	5.11	1.58	1.52
25	BB	2887	A	C6-N1	-5.11	1.31	1.35
3	A1	448	A	P-O5'	5.11	1.64	1.59
3	A1	1309	G	C2-N2	-5.11	1.29	1.34
25	BB	469	G	N7-C5	5.11	1.42	1.39
25	BB	1928	A	C3'-C2'	5.11	1.58	1.52
25	BB	2560	A	N3-C4	5.11	1.38	1.34
3	A1	275	G	N1-C2	-5.10	1.33	1.37
3	A1	1102	A	N3-C4	5.10	1.38	1.34
25	BB	1423	G	N1-C2	-5.10	1.33	1.37
25	BB	1555	G	C5'-C4'	5.10	1.57	1.51
25	BB	2281	A	P-O5'	5.10	1.64	1.59
1	AP	34	G	C6-N1	-5.10	1.35	1.39
25	BB	597	G	P-O5'	5.10	1.64	1.59
25	BB	1410	G	N3-C4	5.10	1.39	1.35
25	BB	1529	G	N1-C2	-5.10	1.33	1.37
25	BB	1884	G	N1-C2	-5.10	1.33	1.37
25	BB	2112	G	C5-C6	5.10	1.47	1.42
25	BB	2298	A	C6-N6	-5.10	1.29	1.33
25	BB	2517	C	C4-N4	-5.10	1.29	1.33
25	BB	82	U	N3-C4	-5.10	1.33	1.38
25	BB	682	G	C2-N2	-5.10	1.29	1.34
25	BB	777	G	C2-N2	-5.10	1.29	1.34
1	AP	3	G	N7-C5	5.10	1.42	1.39
3	A1	148	G	C2'-O2'	5.10	1.48	1.41
3	A1	446	G	C6-N1	-5.10	1.35	1.39
3	A1	881	G	P-O5'	5.10	1.64	1.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	927	G	C2-N2	-5.10	1.29	1.34
3	A1	1000	A	C6-N1	-5.10	1.31	1.35
3	A1	1111	A	N7-C5	5.10	1.42	1.39
13	AL	80	ARG	CZ-NH2	-5.10	1.26	1.33
25	BB	69	C	C4-N4	-5.10	1.29	1.33
25	BB	547	A	C3'-C2'	5.10	1.58	1.52
25	BB	1381	G	N1-C2	-5.10	1.33	1.37
3	A1	275	G	C2-N2	-5.10	1.29	1.34
3	A1	774	G	P-O5'	-5.10	1.54	1.59
3	A1	1074	G	N1-C2	-5.10	1.33	1.37
25	BB	11	C	P-O5'	5.10	1.64	1.59
25	BB	757	G	C2-N2	-5.10	1.29	1.34
25	BB	1225	G	N1-C2	-5.10	1.33	1.37
25	BB	2581	G	C2-N2	-5.10	1.29	1.34
25	BB	101	A	C6-N1	-5.10	1.31	1.35
25	BB	472	A	N7-C5	5.10	1.42	1.39
25	BB	725	G	C6-N1	-5.10	1.35	1.39
25	BB	1149	G	O3'-P	-5.10	1.55	1.61
25	BB	1908	C	P-O5'	5.10	1.64	1.59
25	BB	1944	U	N1-C2	5.10	1.43	1.38
25	BB	2576	G	C2-N2	-5.10	1.29	1.34
1	AA	27	C	C4-N4	-5.09	1.29	1.33
3	A1	639	G	N1-C2	-5.09	1.33	1.37
3	A1	722	G	C2-N2	-5.09	1.29	1.34
3	A1	1459	G	N1-C2	-5.09	1.33	1.37
25	BB	300	A	C6-N1	-5.09	1.31	1.35
25	BB	1215	G	N3-C4	5.09	1.39	1.35
25	BB	2639	A	N7-C5	5.09	1.42	1.39
3	A1	833	G	N3-C4	5.09	1.39	1.35
25	BB	272	A	C2'-O2'	5.09	1.48	1.41
25	BB	1319	C	N3-C4	-5.09	1.30	1.33
27	BD	70	ARG	CZ-NH1	-5.09	1.26	1.33
3	A1	733	G	N7-C5	5.09	1.42	1.39
3	A1	1379	G	N7-C5	5.09	1.42	1.39
25	BB	515	A	N7-C5	5.09	1.42	1.39
25	BB	1142	A	N7-C5	5.09	1.42	1.39
25	BB	1750	G	N1-C2	-5.09	1.33	1.37
3	A1	110	C	O3'-P	-5.09	1.55	1.61
3	A1	257	G	O3'-P	-5.09	1.55	1.61
3	A1	351	G	C6-N1	-5.09	1.35	1.39
3	A1	891	U	C5'-C4'	5.09	1.57	1.51
3	A1	1518	A	C6-N1	-5.09	1.31	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	1617	C	P-O5'	5.09	1.64	1.59
3	A1	671	G	N7-C5	5.09	1.42	1.39
25	BB	757	G	O4'-C1'	5.09	1.48	1.41
25	BB	2693	G	C2-N2	-5.09	1.29	1.34
29	BF	6	ARG	CZ-NH2	-5.09	1.26	1.33
3	A1	147	G	C2-N2	-5.09	1.29	1.34
3	A1	510	A	C6-N6	-5.09	1.29	1.33
3	A1	1173	U	P-O5'	5.09	1.64	1.59
24	BA	2	G	O3'-P	-5.09	1.55	1.61
25	BB	651	G	C2-N2	-5.09	1.29	1.34
25	BB	722	A	N7-C5	5.09	1.42	1.39
25	BB	950	G	N7-C5	5.09	1.42	1.39
25	BB	2413	G	C2-N2	-5.09	1.29	1.34
3	A1	1099	G	O3'-P	-5.08	1.55	1.61
3	A1	1262	C	N3-C4	-5.08	1.30	1.33
25	BB	2564	A	C5-C4	-5.08	1.35	1.38
2	AM	7	U	C5-C6	5.08	1.38	1.34
3	A1	211	G	O3'-P	-5.08	1.55	1.61
3	A1	1204	A	C5'-C4'	5.08	1.57	1.51
25	BB	648	G	C2-N2	-5.08	1.29	1.34
25	BB	793	A	N3-C4	5.08	1.38	1.34
25	BB	1103	A	N7-C5	5.08	1.42	1.39
25	BB	1952	A	C6-N1	-5.08	1.31	1.35
25	BB	2660	A	N9-C4	5.08	1.40	1.37
3	A1	1237	C	P-O5'	5.08	1.64	1.59
3	A1	1242	G	N3-C4	5.08	1.39	1.35
25	BB	7	G	C6-N1	-5.08	1.35	1.39
25	BB	1930	G	N7-C5	5.08	1.42	1.39
25	BB	2620	C	N3-C4	-5.08	1.30	1.33
53	B4	97	ARG	CZ-NH1	-5.08	1.26	1.33
3	A1	635	A	N7-C5	5.08	1.42	1.39
3	A1	872	A	N3-C4	5.08	1.37	1.34
3	A1	973	G	N9-C4	5.08	1.42	1.38
24	BA	6	G	C2-N2	-5.08	1.29	1.34
25	BB	122	G	C2-N2	-5.08	1.29	1.34
25	BB	430	A	C6-N6	-5.08	1.29	1.33
30	BG	90	ARG	CZ-NH2	-5.08	1.26	1.33
3	A1	376	G	N1-C2	-5.08	1.33	1.37
3	A1	544	G	C2-N2	-5.08	1.29	1.34
25	BB	415	A	C6-N1	-5.08	1.31	1.35
25	BB	1643	G	N7-C5	5.08	1.42	1.39
25	BB	2047	C	N3-C4	-5.08	1.30	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2780	G	N1-C2	-5.08	1.33	1.37
32	BI	38	ARG	CZ-NH1	-5.08	1.26	1.33
3	A1	1475	G	C2-N2	-5.08	1.29	1.34
24	BA	40	U	P-O5'	5.08	1.64	1.59
25	BB	750	A	N3-C4	5.08	1.37	1.34
3	A1	169	C	C4-N4	-5.08	1.29	1.33
3	A1	424	G	C5-C6	5.08	1.47	1.42
3	A1	1042	A	C6-N1	-5.08	1.31	1.35
12	AK	56	ARG	CZ-NH2	-5.08	1.26	1.33
16	AQ	20	ARG	CZ-NH1	-5.08	1.26	1.33
25	BB	486	C	N3-C4	-5.08	1.30	1.33
25	BB	1355	G	C2-N2	-5.08	1.29	1.34
25	BB	1599	U	O3'-P	-5.08	1.55	1.61
25	BB	1663	G	C2-N2	-5.08	1.29	1.34
25	BB	1807	G	C2-N2	-5.08	1.29	1.34
25	BB	2057	G	N1-C2	-5.08	1.33	1.37
25	BB	2092	U	O3'-P	-5.08	1.55	1.61
25	BB	2242	G	N3-C4	5.08	1.39	1.35
25	BB	2274	A	O3'-P	-5.08	1.55	1.61
3	A1	541	G	O3'-P	-5.07	1.55	1.61
3	A1	664	G	N9-C4	5.07	1.42	1.38
24	BA	112	G	P-O5'	-5.07	1.54	1.59
25	BB	285	G	N3-C4	5.07	1.39	1.35
25	BB	1459	G	N1-C2	-5.07	1.33	1.37
25	BB	2275	C	N1-C6	5.07	1.40	1.37
3	A1	1357	A	N7-C5	5.07	1.42	1.39
25	BB	814	C	N3-C4	-5.07	1.30	1.33
25	BB	2055	C	C4-N4	-5.07	1.29	1.33
3	A1	189	A	N3-C4	5.07	1.37	1.34
3	A1	588	G	O3'-P	-5.07	1.55	1.61
3	A1	710	G	C2-N2	-5.07	1.29	1.34
25	BB	1408	G	N3-C4	5.07	1.39	1.35
25	BB	1649	G	N7-C5	5.07	1.42	1.39
25	BB	2428	G	N7-C5	5.07	1.42	1.39
25	BB	2466	C	N3-C4	-5.07	1.30	1.33
32	BI	108	ARG	CZ-NH2	-5.07	1.26	1.33
1	AP	21	A	N7-C5	5.07	1.42	1.39
2	AM	3	U	C2-N3	-5.07	1.34	1.37
3	A1	658	C	C4-N4	-5.07	1.29	1.33
21	AV	87	ARG	CZ-NH1	-5.07	1.26	1.33
3	A1	891	U	N1-C2	5.07	1.43	1.38
3	A1	1458	G	N7-C5	5.07	1.42	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	58	G	N7-C5	5.07	1.42	1.39
25	BB	247	G	C5'-C4'	5.07	1.57	1.51
25	BB	1801	A	N7-C5	5.07	1.42	1.39
3	A1	346	G	C2-N2	-5.07	1.29	1.34
3	A1	352	C	C5'-C4'	5.07	1.57	1.51
3	A1	430	A	C6-N6	-5.07	1.29	1.33
3	A1	433	G	P-O5'	-5.07	1.54	1.59
3	A1	615	G	C2-N2	-5.07	1.29	1.34
3	A1	965	U	C4'-C3'	5.07	1.58	1.53
3	A1	1159	U	C3'-C2'	5.07	1.58	1.52
3	A1	1190	G	O3'-P	-5.07	1.55	1.61
25	BB	776	G	N9-C4	5.07	1.42	1.38
25	BB	1482	G	N3-C4	5.07	1.39	1.35
25	BB	1557	C	N3-C4	-5.07	1.30	1.33
3	A1	1326	U	O3'-P	-5.06	1.55	1.61
25	BB	2468	A	C6-N1	-5.06	1.32	1.35
2	AM	9	U	C5-C6	5.06	1.38	1.34
3	A1	27	G	N7-C5	5.06	1.42	1.39
3	A1	615	G	N3-C4	5.06	1.39	1.35
3	A1	1016	A	P-O5'	5.06	1.64	1.59
3	A1	1265	C	N3-C4	-5.06	1.30	1.33
15	AO	178	ARG	CZ-NH2	-5.06	1.26	1.33
25	BB	490	C	C4'-C3'	5.06	1.58	1.53
25	BB	712	G	O3'-P	5.06	1.67	1.61
25	BB	2551	C	C5-C6	5.06	1.38	1.34
25	BB	2706	A	N7-C5	5.06	1.42	1.39
1	AE	42	G	N7-C5	5.06	1.42	1.39
3	A1	31	G	O3'-P	-5.06	1.55	1.61
3	A1	735	C	C4-N4	-5.06	1.29	1.33
3	A1	1350	A	N7-C5	5.06	1.42	1.39
25	BB	1480	C	C5'-C4'	5.06	1.57	1.51
3	A1	335	C	N3-C4	-5.06	1.30	1.33
3	A1	1005	A	C6-N6	-5.06	1.29	1.33
3	A1	1077	G	N1-C2	-5.06	1.33	1.37
3	A1	1419	G	N3-C4	5.06	1.39	1.35
24	BA	105	G	C2-N2	-5.06	1.29	1.34
25	BB	962	G	N1-C2	-5.06	1.33	1.37
25	BB	2204	G	N7-C5	5.06	1.42	1.39
33	BJ	91	ARG	CZ-NH2	-5.06	1.26	1.33
41	BR	29	ARG	CZ-NH2	-5.06	1.26	1.33
47	BX	19	ARG	CZ-NH2	-5.06	1.26	1.33
3	A1	646	G	C2-N2	-5.06	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	925	G	N1-C2	-5.06	1.33	1.37
3	A1	938	A	O3'-P	-5.06	1.55	1.61
5	AC	105	ARG	CZ-NH2	-5.06	1.26	1.33
25	BB	800	A	N7-C5	5.06	1.42	1.39
25	BB	1845	G	N1-C2	-5.06	1.33	1.37
25	BB	2885	G	N7-C5	5.06	1.42	1.39
37	BN	42	ARG	CZ-NH2	-5.06	1.26	1.33
3	A1	118	U	C2-N3	-5.05	1.34	1.37
25	BB	1960	A	C4'-C3'	5.05	1.58	1.53
25	BB	2049	G	N1-C2	-5.05	1.33	1.37
25	BB	2381	A	C6-N1	-5.05	1.32	1.35
3	A1	328	C	C4-C5	-5.05	1.39	1.43
25	BB	261	G	N1-C2	-5.05	1.33	1.37
25	BB	1540	G	C2'-O2'	5.05	1.48	1.41
25	BB	1959	G	C2-N2	-5.05	1.29	1.34
25	BB	2693	G	N1-C2	-5.05	1.33	1.37
3	A1	182	A	O3'-P	-5.05	1.55	1.61
3	A1	305	G	C2-N2	-5.05	1.29	1.34
3	A1	669	G	N7-C5	5.05	1.42	1.39
3	A1	831	A	P-O5'	5.05	1.64	1.59
25	BB	157	C	C4-N4	-5.05	1.29	1.33
25	BB	491	G	P-O5'	-5.05	1.54	1.59
25	BB	1315	C	N3-C4	-5.05	1.30	1.33
3	A1	35	G	N1-C2	-5.05	1.33	1.37
25	BB	757	G	N3-C4	5.05	1.39	1.35
25	BB	446	G	N3-C4	5.05	1.39	1.35
25	BB	935	C	C5'-C4'	5.05	1.57	1.51
1	AE	64	A	N7-C5	5.05	1.42	1.39
3	A1	1296	C	C4-N4	-5.05	1.29	1.33
25	BB	655	A	C4'-C3'	5.05	1.58	1.53
25	BB	888	C	C4-N4	-5.05	1.29	1.33
25	BB	911	A	C6-N1	-5.05	1.32	1.35
25	BB	1323	C	C4-N4	-5.05	1.29	1.33
25	BB	1750	G	N7-C5	5.05	1.42	1.39
25	BB	2072	C	C4-N4	-5.05	1.29	1.33
3	A1	232	G	C2-N2	-5.04	1.29	1.34
25	BB	933	A	N3-C4	5.04	1.37	1.34
25	BB	1395	A	N3-C4	5.04	1.37	1.34
25	BB	1632	A	C5-C4	-5.04	1.35	1.38
25	BB	1767	G	C2-N2	-5.04	1.29	1.34
3	A1	267	C	N1-C6	5.04	1.40	1.37
3	A1	681	A	C6-N1	-5.04	1.32	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	464	U	P-O5'	5.04	1.64	1.59
25	BB	636	G	N1-C2	-5.04	1.33	1.37
25	BB	1076	C	C4-N4	-5.04	1.29	1.33
25	BB	1371	G	C2-N2	-5.04	1.29	1.34
25	BB	1726	C	C4-C5	-5.04	1.39	1.43
25	BB	1745	A	C6-N1	-5.04	1.32	1.35
25	BB	1824	G	C2-N2	-5.04	1.29	1.34
25	BB	2349	G	C6-N1	-5.04	1.36	1.39
30	BG	8	ARG	CZ-NH2	-5.04	1.26	1.33
1	AA	51	G	C5'-C4'	5.04	1.57	1.51
3	A1	850	U	C3'-C2'	5.04	1.58	1.52
3	A1	1043	G	N1-C2	-5.04	1.33	1.37
24	BA	60	C	N3-C4	-5.04	1.30	1.33
25	BB	32	C	N3-C4	-5.04	1.30	1.33
25	BB	246	C	C4'-O4'	-5.04	1.39	1.45
25	BB	277	G	N3-C4	5.04	1.39	1.35
25	BB	1876	A	C6-N1	-5.04	1.32	1.35
36	BM	6	ARG	CZ-NH1	-5.04	1.26	1.33
2	AM	10	U	C3'-C2'	-5.04	1.47	1.52
1	AE	42	G	P-O5'	5.04	1.64	1.59
3	A1	699	C	N3-C4	-5.04	1.30	1.33
3	A1	1424	U	C4-O4	-5.04	1.19	1.23
25	BB	187	G	N7-C5	5.04	1.42	1.39
25	BB	354	A	N1-C2	-5.04	1.29	1.34
25	BB	726	G	O3'-P	-5.04	1.55	1.61
25	BB	896	A	C3'-C2'	5.04	1.58	1.52
25	BB	1144	A	N7-C5	5.04	1.42	1.39
25	BB	2663	G	P-O5'	5.04	1.64	1.59
3	A1	1255	G	N1-C2	-5.04	1.33	1.37
25	BB	110	G	N1-C2	-5.04	1.33	1.37
25	BB	805	G	N7-C5	5.04	1.42	1.39
25	BB	1642	G	C2-N2	-5.04	1.29	1.34
25	BB	2019	A	C6-N6	-5.04	1.29	1.33
1	AP	32	C	C5'-C4'	5.04	1.57	1.51
3	A1	1353	G	P-O5'	5.04	1.64	1.59
25	BB	324	A	C6-N1	-5.04	1.32	1.35
25	BB	2670	A	C6-N1	-5.04	1.32	1.35
3	A1	217	C	N3-C4	-5.03	1.30	1.33
3	A1	568	G	N1-C2	-5.03	1.33	1.37
25	BB	409	G	C2-N2	-5.03	1.29	1.34
25	BB	765	C	N3-C4	-5.03	1.30	1.33
25	BB	809	G	C2-N2	-5.03	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	969	G	C2-N2	-5.03	1.29	1.34
25	BB	1809	A	N7-C5	5.03	1.42	1.39
25	BB	2191	A	O4'-C1'	5.03	1.48	1.41
25	BB	2736	A	N7-C5	5.03	1.42	1.39
3	A1	733	G	C2-N2	-5.03	1.29	1.34
3	A1	1435	G	C2-N2	-5.03	1.29	1.34
25	BB	2470	G	C5-C6	5.03	1.47	1.42
25	BB	2870	C	C4-N4	-5.03	1.29	1.33
49	BZ	98	ARG	CZ-NH2	-5.03	1.26	1.33
1	AP	10	G	C2-N2	-5.03	1.29	1.34
3	A1	447	G	N1-C2	-5.03	1.33	1.37
24	BA	86	G	N1-C2	-5.03	1.33	1.37
25	BB	103	A	O3'-P	-5.03	1.55	1.61
25	BB	883	G	C4'-C3'	5.03	1.58	1.53
25	BB	1787	A	N7-C5	5.03	1.42	1.39
25	BB	2332	C	O3'-P	-5.03	1.55	1.61
25	BB	2668	G	N3-C4	5.03	1.39	1.35
1	AP	67	A	N7-C5	5.03	1.42	1.39
25	BB	372	G	N1-C2	-5.03	1.33	1.37
25	BB	672	C	N3-C4	-5.03	1.30	1.33
32	BI	52	ARG	CZ-NH2	-5.03	1.26	1.33
1	AE	38	A	C6-N1	-5.03	1.32	1.35
3	A1	303	A	N7-C5	5.03	1.42	1.39
3	A1	734	G	N1-C2	-5.03	1.33	1.37
3	A1	1090	U	C2-N3	-5.03	1.34	1.37
12	AK	62	ARG	CZ-NH1	-5.03	1.26	1.33
24	BA	8	C	N3-C4	-5.03	1.30	1.33
25	BB	1389	G	N3-C4	5.03	1.39	1.35
25	BB	1538	G	N7-C5	5.03	1.42	1.39
25	BB	1754	A	P-O5'	-5.03	1.54	1.59
3	A1	1457	G	C2-N2	-5.03	1.29	1.34
25	BB	447	A	N7-C5	5.03	1.42	1.39
25	BB	1704	C	C4-N4	-5.03	1.29	1.33
25	BB	2685	G	C2-N2	-5.03	1.29	1.34
25	BB	367	G	N1-C2	-5.02	1.33	1.37
24	BA	112	G	C6-N1	-5.02	1.36	1.39
25	BB	941	A	C6-N1	-5.02	1.32	1.35
25	BB	1877	A	C6-N1	-5.02	1.32	1.35
1	AP	72	C	C2-N3	-5.02	1.31	1.35
3	A1	226	G	C2-N2	-5.02	1.29	1.34
25	BB	2003	A	N7-C5	5.02	1.42	1.39
3	A1	226	G	C6-N1	-5.02	1.36	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	A1	1219	A	N7-C5	5.02	1.42	1.39
24	BA	69	G	C2-N2	-5.02	1.29	1.34
25	BB	841	G	N1-C2	-5.02	1.33	1.37
25	BB	1525	A	N7-C5	5.02	1.42	1.39
25	BB	1752	C	C4-N4	-5.02	1.29	1.33
25	BB	2773	C	C4-N4	-5.02	1.29	1.33
25	BB	2860	A	O3'-P	-5.02	1.55	1.61
3	A1	893	C	N3-C4	-5.02	1.30	1.33
25	BB	149	A	C5'-C4'	5.02	1.57	1.51
25	BB	463	G	N1-C2	-5.02	1.33	1.37
25	BB	845	A	P-O5'	5.02	1.64	1.59
25	BB	1123	C	C4-N4	-5.02	1.29	1.33
25	BB	1392	A	C4'-O4'	-5.02	1.39	1.45
25	BB	2025	C	N3-C4	-5.02	1.30	1.33
25	BB	2201	G	N7-C5	5.02	1.42	1.39
25	BB	2846	G	N1-C2	-5.02	1.33	1.37
37	BN	176	ARG	CZ-NH1	-5.02	1.26	1.33
25	BB	530	G	P-O5'	-5.02	1.54	1.59
25	BB	590	A	C6-N1	-5.02	1.32	1.35
25	BB	1079	C	N3-C4	-5.02	1.30	1.33
3	A1	792	A	N3-C4	5.01	1.37	1.34
3	A1	1124	G	N1-C2	-5.01	1.33	1.37
3	A1	1309	G	N1-C2	-5.01	1.33	1.37
18	AS	53	ARG	CZ-NH1	-5.01	1.26	1.33
25	BB	618	G	C2-N2	-5.01	1.29	1.34
25	BB	716	A	O3'-P	-5.01	1.55	1.61
25	BB	844	A	C6-N1	-5.01	1.32	1.35
25	BB	1011	G	C2-N2	-5.01	1.29	1.34
3	A1	87	C	N1-C6	5.01	1.40	1.37
3	A1	417	G	C2-N2	-5.01	1.29	1.34
3	A1	618	C	C4-N4	-5.01	1.29	1.33
3	A1	776	G	C2-N2	-5.01	1.29	1.34
25	BB	656	G	N1-C2	-5.01	1.33	1.37
25	BB	2219	U	N3-C4	-5.01	1.33	1.38
25	BB	2459	A	N7-C5	5.01	1.42	1.39
25	BB	2539	C	C5-C6	5.01	1.38	1.34
25	BB	2565	A	N3-C4	5.01	1.37	1.34
9	AH	16	ARG	CZ-NH2	-5.01	1.26	1.33
25	BB	356	G	N3-C4	5.01	1.39	1.35
25	BB	424	G	N3-C4	5.01	1.39	1.35
25	BB	2430	A	C6-N6	-5.01	1.29	1.33
25	BB	2731	G	C2-N2	-5.01	1.29	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	BB	2781	A	C6-N1	-5.01	1.32	1.35
25	BB	2902	C	C4-N4	-5.01	1.29	1.33
1	AE	2	C	N1-C6	5.01	1.40	1.37
3	A1	1300	G	C2-N2	-5.01	1.29	1.34
25	BB	330	A	C6-N6	-5.01	1.29	1.33
1	AE	74	C	N3-C4	-5.01	1.30	1.33
25	BB	1936	A	N7-C5	5.01	1.42	1.39
25	BB	2266	A	C6-N1	-5.01	1.32	1.35
25	BB	2293	G	C6-N1	-5.01	1.36	1.39
25	BB	2434	A	N3-C4	5.01	1.37	1.34
25	BB	2452	C	C4-N4	-5.01	1.29	1.33
25	BB	2531	A	C6-N1	-5.01	1.32	1.35
25	BB	2708	G	C2-N2	-5.01	1.29	1.34
1	AE	21	A	C5'-C4'	5.00	1.57	1.51
3	A1	156	C	O3'-P	5.00	1.67	1.61
3	A1	545	C	C4-N4	-5.00	1.29	1.33
25	BB	182	A	N3-C4	5.00	1.37	1.34
25	BB	1031	G	N1-C2	-5.00	1.33	1.37
25	BB	1784	A	N7-C5	5.00	1.42	1.39
25	BB	1854	A	O3'-P	-5.00	1.55	1.61
25	BB	2645	G	N1-C2	-5.00	1.33	1.37
25	BB	2744	G	N3-C4	5.00	1.39	1.35
1	AP	65	G	O3'-P	5.00	1.67	1.61
1	AE	42	G	N1-C2	-5.00	1.33	1.37
3	A1	61	G	N7-C5	5.00	1.42	1.39
3	A1	993	G	C6-N1	-5.00	1.36	1.39
3	A1	1019	A	C6-N6	-5.00	1.29	1.33
25	BB	897	C	N3-C4	-5.00	1.30	1.33
25	BB	1489	C	O3'-P	-5.00	1.55	1.61
25	BB	2069	G	N7-C5	5.00	1.42	1.39
1	AE	52	U	N3-C4	-5.00	1.33	1.38
25	BB	1626	A	N9-C4	5.00	1.40	1.37
25	BB	2712	C	N3-C4	-5.00	1.30	1.33

All (27108) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	74	C	P-O3'-C3'	-78.58	25.40	119.70
1	AP	74	C	O3'-P-O5'	-40.02	27.95	104.00
25	BB	2376	A	N1-C6-N6	-29.09	101.15	118.60
3	A1	1225	A	N1-C6-N6	-28.97	101.22	118.60
3	A1	1250	A	N1-C6-N6	-27.68	101.99	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	804	A	N1-C6-N6	-25.70	103.18	118.60
3	A1	560	A	N1-C6-N6	-24.78	103.73	118.60
25	BB	1383	A	N1-C6-N6	-24.71	103.77	118.60
3	A1	321	A	N1-C6-N6	-24.71	103.78	118.60
25	BB	1508	A	N1-C6-N6	-24.71	103.78	118.60
25	BB	1392	A	N1-C6-N6	-24.46	103.93	118.60
27	BD	108	ARG	NE-CZ-NH2	24.44	132.52	120.30
25	BB	788	A	N1-C6-N6	-24.05	104.17	118.60
3	A1	781	A	N1-C6-N6	-24.04	104.18	118.60
25	BB	1847	A	N1-C6-N6	-23.94	104.24	118.60
25	BB	903	C	N3-C4-C5	23.89	131.46	121.90
3	A1	1081	A	N1-C6-N6	-23.55	104.47	118.60
3	A1	908	A	N1-C6-N6	-23.48	104.51	118.60
3	A1	1170	A	N1-C6-N6	-23.40	104.56	118.60
7	AF	106	ARG	NE-CZ-NH1	23.37	131.99	120.30
25	BB	1952	A	N1-C6-N6	-23.36	104.58	118.60
3	A1	864	A	N1-C6-N6	-23.31	104.61	118.60
25	BB	2469	A	N1-C6-N6	-23.30	104.62	118.60
25	BB	528	A	N1-C6-N6	-23.27	104.64	118.60
3	A1	975	A	N1-C6-N6	-23.21	104.67	118.60
25	BB	2886	A	N1-C6-N6	-23.12	104.73	118.60
3	A1	279	A	N1-C6-N6	-23.11	104.73	118.60
3	A1	914	A	N1-C6-N6	-22.84	104.89	118.60
25	BB	1916	A	N1-C6-N6	-22.79	104.92	118.60
3	A1	412	A	N1-C6-N6	-22.70	104.98	118.60
3	A1	466	A	N1-C6-N6	-22.68	105.00	118.60
24	BA	101	A	N1-C6-N6	-22.67	105.00	118.60
25	BB	219	A	N1-C6-N6	-22.64	105.02	118.60
25	BB	761	A	N1-C6-N6	-22.44	105.14	118.60
1	AE	58	A	N1-C6-N6	-22.36	105.18	118.60
3	A1	1368	A	N1-C6-N6	-22.28	105.23	118.60
25	BB	1789	A	N1-C6-N6	-22.18	105.29	118.60
25	BB	960	A	N1-C6-N6	-22.11	105.33	118.60
25	BB	233	A	N1-C6-N6	-22.00	105.40	118.60
25	BB	508	A	N1-C6-N6	-21.99	105.41	118.60
25	BB	324	A	N1-C6-N6	-21.93	105.44	118.60
3	A1	1318	A	N1-C6-N6	-21.71	105.57	118.60
25	BB	1494	A	N1-C6-N6	-21.63	105.62	118.60
3	A1	468	A	N1-C6-N6	-21.61	105.64	118.60
25	BB	226	A	N1-C6-N6	-21.60	105.64	118.60
25	BB	2670	A	N1-C6-N6	-21.51	105.69	118.60
25	BB	322	A	N1-C6-N6	-21.48	105.72	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AO	142	ARG	NE-CZ-NH1	21.46	131.03	120.30
3	A1	1339	A	N1-C6-N6	-21.40	105.76	118.60
25	BB	1762	A	N1-C6-N6	-21.39	105.77	118.60
3	A1	696	A	N1-C6-N6	-21.21	105.87	118.60
3	A1	1519	A	N1-C6-N6	-21.19	105.89	118.60
25	BB	2619	C	N3-C2-O2	-21.15	107.09	121.90
25	BB	1545	A	N1-C6-N6	-21.14	105.92	118.60
3	A1	649	A	N1-C6-N6	-21.09	105.95	118.60
3	A1	1340	A	P-O3'-C3'	21.08	145.00	119.70
3	A1	1362	A	N1-C6-N6	-21.05	105.97	118.60
25	BB	103	A	N1-C6-N6	-21.00	106.00	118.60
25	BB	1597	A	N1-C6-N6	-20.98	106.01	118.60
25	BB	1937	A	N1-C6-N6	-20.92	106.05	118.60
25	BB	2657	A	N1-C6-N6	-20.88	106.07	118.60
3	A1	1180	A	N1-C6-N6	-20.77	106.14	118.60
3	A1	1044	A	O4'-C1'-N9	20.76	124.81	108.20
25	BB	1470	A	N1-C6-N6	-20.68	106.19	118.60
3	A1	572	A	N1-C6-N6	-20.62	106.23	118.60
7	AF	2	ARG	NE-CZ-NH1	20.57	130.59	120.30
25	BB	1147	A	N1-C6-N6	-20.57	106.25	118.60
27	BD	31	ARG	NE-CZ-NH1	20.55	130.57	120.30
25	BB	300	A	N1-C6-N6	-20.50	106.30	118.60
3	A1	845	A	N1-C6-N6	-20.50	106.30	118.60
25	BB	764	A	N1-C6-N6	-20.48	106.31	118.60
25	BB	1321	A	N1-C6-N6	-20.45	106.33	118.60
25	BB	1603	A	N1-C6-N6	-20.42	106.35	118.60
6	AD	53	ARG	NE-CZ-NH1	20.41	130.50	120.30
25	BB	262	A	N1-C6-N6	-20.40	106.36	118.60
3	A1	1004	A	N1-C6-N6	-20.39	106.37	118.60
3	A1	1274	A	N1-C6-N6	-20.35	106.39	118.60
3	A1	1413	A	N1-C6-N6	-20.34	106.40	118.60
37	BN	268	ARG	NE-CZ-NH1	20.34	130.47	120.30
3	A1	574	A	N1-C6-N6	-20.33	106.40	118.60
25	BB	1194	A	N1-C6-N6	-20.30	106.42	118.60
25	BB	1735	A	N1-C6-N6	-20.27	106.44	118.60
25	BB	631	A	N1-C6-N6	-20.23	106.46	118.60
1	AA	64	A	N1-C6-N6	-20.23	106.46	118.60
25	BB	2070	A	N1-C6-N6	-20.23	106.46	118.60
25	BB	2750	A	N1-C6-N6	-20.17	106.50	118.60
25	BB	1785	A	N1-C6-N6	-20.17	106.50	118.60
48	BY	169	ARG	NE-CZ-NH1	20.17	130.38	120.30
25	BB	735	A	N1-C6-N6	-20.12	106.53	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1544	A	N1-C6-N6	-20.08	106.55	118.60
3	A1	1360	A	N1-C6-N6	-20.08	106.55	118.60
3	A1	1499	A	N1-C6-N6	-20.05	106.57	118.60
25	BB	1213	A	N1-C6-N6	-20.02	106.59	118.60
1	AP	58	A	N1-C6-N6	-20.01	106.59	118.60
3	A1	532	A	N1-C6-N6	-19.97	106.62	118.60
25	BB	981	A	N1-C6-N6	-19.89	106.67	118.60
25	BB	2565	A	N1-C6-N6	-19.88	106.67	118.60
3	A1	1363	A	N1-C6-N6	-19.87	106.68	118.60
3	A1	1238	A	N1-C6-N6	-19.85	106.69	118.60
25	BB	2014	A	N1-C6-N6	-19.83	106.70	118.60
25	BB	1614	A	N1-C6-N6	-19.83	106.70	118.60
25	BB	675	A	N1-C6-N6	-19.81	106.71	118.60
1	AP	35	A	N1-C6-N6	-19.79	106.73	118.60
25	BB	1783	A	N1-C6-N6	-19.75	106.75	118.60
25	BB	592	A	N1-C6-N6	-19.75	106.75	118.60
3	A1	906	A	N1-C6-N6	-19.73	106.77	118.60
25	BB	2873	A	N1-C6-N6	-19.68	106.79	118.60
3	A1	974	A	N1-C6-N6	-19.64	106.81	118.60
3	A1	431	A	N1-C6-N6	-19.63	106.82	118.60
25	BB	2826	A	N1-C6-N6	-19.62	106.83	118.60
29	BF	55	ARG	NE-CZ-NH2	19.57	130.09	120.30
3	A1	155	A	N1-C6-N6	-19.56	106.86	118.60
3	A1	373	A	N1-C6-N6	-19.55	106.87	118.60
1	AA	9	A	N1-C6-N6	-19.52	106.89	118.60
3	A1	1374	A	N1-C6-N6	-19.52	106.89	118.60
10	AI	28	ARG	NE-CZ-NH1	19.51	130.05	120.30
25	BB	472	A	N1-C6-N6	-19.51	106.90	118.60
3	A1	1319	A	N1-C6-N6	-19.49	106.90	118.60
3	A1	152	A	N1-C6-N6	-19.48	106.91	118.60
25	BB	644	A	N1-C6-N6	-19.48	106.91	118.60
3	A1	660	C	N3-C4-N4	-19.46	104.38	118.00
25	BB	2705	A	N1-C6-N6	-19.45	106.93	118.60
25	BB	1913	A	N1-C6-N6	-19.44	106.93	118.60
3	A1	923	A	N1-C6-N6	-19.43	106.94	118.60
3	A1	978	A	N1-C6-N6	-19.43	106.94	118.60
25	BB	1265	A	N1-C6-N6	-19.40	106.96	118.60
25	BB	1866	A	N1-C6-N6	-19.37	106.98	118.60
3	A1	694	A	N1-C6-N6	-19.37	106.98	118.60
25	BB	2425	A	N1-C6-N6	-19.35	106.99	118.60
3	A1	873	A	N1-C6-N6	-19.33	107.00	118.60
25	BB	1890	A	N1-C6-N6	-19.33	107.00	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	928	A	N1-C6-N6	-19.27	107.04	118.60
25	BB	299	A	N1-C6-N6	-19.27	107.04	118.60
25	BB	466	A	N1-C6-N6	-19.26	107.04	118.60
3	A1	759	A	N1-C6-N6	-19.26	107.05	118.60
25	BB	750	A	N1-C6-N6	-19.26	107.05	118.60
36	BM	3	ARG	NE-CZ-NH1	19.25	129.92	120.30
1	AA	29	A	N1-C6-N6	-19.24	107.06	118.60
25	BB	802	A	N1-C6-N6	-19.22	107.07	118.60
3	A1	1360	A	C5-C6-N1	19.21	127.31	117.70
25	BB	687	C	N3-C2-O2	-19.21	108.45	121.90
25	BB	1938	A	N1-C6-N6	-19.20	107.08	118.60
25	BB	2850	A	N1-C6-N6	-19.20	107.08	118.60
25	BB	1272	A	N1-C6-N6	-19.19	107.09	118.60
25	BB	1637	A	N1-C6-N6	-19.12	107.13	118.60
25	BB	368	A	N1-C6-N6	-19.12	107.13	118.60
3	A1	109	A	N1-C6-N6	-19.11	107.14	118.60
25	BB	2173	A	N1-C6-N6	-19.09	107.15	118.60
3	A1	819	A	N1-C6-N6	-19.07	107.16	118.60
25	BB	1453	A	N1-C6-N6	-19.06	107.17	118.60
25	BB	2211	A	N1-C6-N6	-19.03	107.18	118.60
25	BB	515	A	N1-C6-N6	-19.00	107.20	118.60
25	BB	1853	A	N1-C6-N6	-18.99	107.21	118.60
3	A1	65	A	N1-C6-N6	-18.98	107.21	118.60
25	BB	354	A	N1-C6-N6	-18.98	107.21	118.60
24	BA	29	A	N1-C6-N6	-18.98	107.21	118.60
3	A1	621	A	N1-C6-N6	-18.97	107.22	118.60
25	BB	1803	A	N1-C6-N6	-18.96	107.22	118.60
25	BB	2267	A	N1-C6-N6	-18.94	107.23	118.60
3	A1	120	A	N1-C6-N6	-18.94	107.23	118.60
3	A1	228	A	N1-C6-N6	-18.93	107.24	118.60
25	BB	941	A	N1-C6-N6	-18.93	107.25	118.60
3	A1	743	A	N1-C6-N6	-18.92	107.25	118.60
25	BB	294	A	N1-C6-N6	-18.92	107.25	118.60
25	BB	1679	A	N1-C6-N6	-18.90	107.26	118.60
3	A1	465	A	N1-C6-N6	-18.90	107.26	118.60
25	BB	2433	A	N1-C6-N6	-18.86	107.28	118.60
43	BT	12	ARG	NE-CZ-NH2	18.85	129.72	120.30
25	BB	2820	A	N1-C6-N6	-18.83	107.30	118.60
25	BB	1901	A	N1-C6-N6	-18.81	107.31	118.60
25	BB	1953	A	N1-C6-N6	-18.80	107.32	118.60
25	BB	2309	A	N1-C6-N6	-18.78	107.33	118.60
25	BB	1151	A	N1-C6-N6	-18.77	107.33	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1689	A	N1-C6-N6	-18.77	107.34	118.60
25	BB	1046	A	N1-C6-N6	-18.75	107.35	118.60
25	BB	144	A	N1-C6-N6	-18.73	107.36	118.60
25	BB	1028	A	N1-C6-N6	-18.68	107.39	118.60
25	BB	49	A	N1-C6-N6	-18.65	107.41	118.60
25	BB	2284	A	N1-C6-N6	-18.65	107.41	118.60
25	BB	2682	A	N1-C6-N6	-18.64	107.41	118.60
25	BB	526	A	N1-C6-N6	-18.64	107.42	118.60
3	A1	143	A	C5-C6-N1	18.62	127.01	117.70
25	BB	142	A	N1-C6-N6	-18.61	107.43	118.60
25	BB	522	A	N1-C6-N6	-18.61	107.44	118.60
3	A1	1188	A	N1-C6-N6	-18.58	107.45	118.60
25	BB	2560	A	N1-C6-N6	-18.57	107.46	118.60
43	BT	15	ARG	NE-CZ-NH1	18.55	129.57	120.30
25	BB	2632	A	C5-C6-N1	18.54	126.97	117.70
25	BB	685	A	N1-C6-N6	-18.54	107.48	118.60
3	A1	172	A	N1-C6-N6	-18.52	107.48	118.60
23	AX	5	ARG	NE-CZ-NH1	18.52	129.56	120.30
24	BA	27	C	N3-C2-O2	-18.51	108.94	121.90
25	BB	918	A	N1-C6-N6	-18.51	107.50	118.60
25	BB	654	A	N1-C6-N6	-18.50	107.50	118.60
16	AQ	16	ARG	NE-CZ-NH1	18.48	129.54	120.30
25	BB	2062	A	N1-C6-N6	-18.47	107.52	118.60
25	BB	10	A	N1-C6-N6	-18.46	107.53	118.60
6	AD	55	ARG	NE-CZ-NH1	18.45	129.53	120.30
25	BB	2108	A	N1-C6-N6	-18.45	107.53	118.60
3	A1	959	A	C5-C6-N1	18.45	126.92	117.70
25	BB	2327	A	C5-C6-N1	18.43	126.91	117.70
25	BB	2766	A	N1-C6-N6	-18.43	107.54	118.60
25	BB	825	A	N1-C6-N6	-18.42	107.55	118.60
25	BB	1366	A	N1-C6-N6	-18.39	107.56	118.60
25	BB	1981	A	N1-C6-N6	-18.38	107.57	118.60
19	AT	44	ARG	NE-CZ-NH1	18.38	129.49	120.30
25	BB	676	A	N1-C6-N6	-18.38	107.57	118.60
3	A1	389	A	N1-C6-N6	-18.36	107.58	118.60
3	A1	460	A	C5-C6-N1	18.35	126.87	117.70
25	BB	2207	C	N3-C4-N4	-18.33	105.17	118.00
25	BB	2336	A	N1-C6-N6	-18.32	107.61	118.60
25	BB	2317	A	N1-C6-N6	-18.29	107.63	118.60
10	AI	8	ARG	NE-CZ-NH2	18.28	129.44	120.30
25	BB	1650	A	N1-C6-N6	-18.27	107.64	118.60
3	A1	1410	A	N1-C6-N6	-18.25	107.65	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2614	A	N1-C6-N6	-18.25	107.65	118.60
25	BB	216	A	N1-C6-N6	-18.23	107.66	118.60
25	BB	1927	A	N1-C6-N6	-18.22	107.67	118.60
3	A1	622	A	N1-C6-N6	-18.22	107.67	118.60
1	AA	66	A	N1-C6-N6	-18.20	107.68	118.60
3	A1	1529	G	C5-C6-N1	18.20	120.60	111.50
25	BB	401	A	N1-C6-N6	-18.20	107.68	118.60
3	A1	1179	A	N1-C6-N6	-18.18	107.69	118.60
25	BB	2023	C	N3-C2-O2	-18.17	109.18	121.90
1	AP	44	A	N1-C6-N6	-18.17	107.70	118.60
25	BB	1226	A	N1-C6-N6	-18.16	107.70	118.60
42	BS	56	ARG	NE-CZ-NH1	18.16	129.38	120.30
25	BB	227	A	N1-C6-N6	-18.14	107.71	118.60
3	A1	535	A	N1-C6-N6	-18.12	107.73	118.60
25	BB	2600	A	N1-C6-N6	-18.11	107.73	118.60
25	BB	1784	A	N1-C6-N6	-18.09	107.75	118.60
35	BL	8	ARG	NE-CZ-NH1	18.07	129.34	120.30
25	BB	1302	A	N1-C6-N6	-18.05	107.77	118.60
25	BB	825	A	C5-C6-N1	18.03	126.71	117.70
25	BB	502	A	N1-C6-N6	-18.02	107.79	118.60
25	BB	1705	A	N1-C6-N6	-18.02	107.79	118.60
25	BB	547	A	N1-C6-N6	-18.01	107.80	118.60
33	BJ	91	ARG	NE-CZ-NH1	18.01	129.30	120.30
25	BB	2748	A	N1-C6-N6	-17.98	107.81	118.60
25	BB	2386	A	N1-C6-N6	-17.98	107.81	118.60
2	AM	13	U	N3-C2-O2	-17.97	109.62	122.20
3	A1	456	A	N1-C6-N6	-17.95	107.83	118.60
25	BB	1630	A	N1-C6-N6	-17.93	107.84	118.60
25	BB	2071	A	N1-C6-N6	-17.91	107.86	118.60
25	BB	89	A	N1-C6-N6	-17.90	107.86	118.60
25	BB	118	A	N1-C6-N6	-17.90	107.86	118.60
25	BB	2720	U	O4'-C1'-N1	17.90	122.52	108.20
3	A1	926	G	N1-C6-O6	-17.89	109.17	119.90
25	BB	1987	A	N1-C6-N6	-17.88	107.87	118.60
25	BB	2114	A	N1-C6-N6	-17.86	107.88	118.60
3	A1	70	U	O4'-C1'-N1	17.85	122.48	108.20
3	A1	1492	A	N1-C6-N6	-17.83	107.90	118.60
1	AP	35	A	C2-N3-C4	17.80	119.50	110.60
25	BB	2758	A	N1-C6-N6	-17.80	107.92	118.60
25	BB	1570	A	N1-C6-N6	-17.74	107.95	118.60
3	A1	236	A	N1-C6-N6	-17.74	107.95	118.60
3	A1	749	A	N1-C6-N6	-17.74	107.95	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2165	C	N3-C4-C5	17.72	128.99	121.90
25	BB	2564	A	C5-C6-N1	17.71	126.56	117.70
25	BB	633	A	N1-C6-N6	-17.70	107.98	118.60
25	BB	804	A	C5-C6-N1	17.68	126.54	117.70
3	A1	807	A	N1-C6-N6	-17.68	107.99	118.60
3	A1	559	A	N1-C6-N6	-17.67	108.00	118.60
25	BB	711	G	N1-C6-O6	-17.67	109.30	119.90
25	BB	1009	A	N1-C6-N6	-17.64	108.01	118.60
20	AU	91	ARG	NE-CZ-NH1	17.64	129.12	120.30
3	A1	1251	A	N1-C6-N6	-17.63	108.02	118.60
25	BB	2559	C	N3-C4-C5	17.63	128.95	121.90
1	AE	19	G	N1-C6-O6	-17.63	109.32	119.90
3	A1	181	A	N1-C6-N6	-17.62	108.03	118.60
25	BB	1998	A	N1-C6-N6	-17.62	108.03	118.60
1	AE	66	A	N1-C6-N6	-17.61	108.03	118.60
6	AD	35	ARG	NE-CZ-NH1	17.60	129.10	120.30
25	BB	311	A	N1-C6-N6	-17.59	108.04	118.60
25	BB	981	A	C5-C6-N1	17.57	126.48	117.70
29	BF	114	ARG	NE-CZ-NH1	17.57	129.08	120.30
3	A1	451	A	N1-C6-N6	-17.55	108.07	118.60
25	BB	2358	A	N1-C6-N6	-17.55	108.07	118.60
1	AP	9	A	N1-C6-N6	-17.54	108.08	118.60
25	BB	792	A	N1-C6-N6	-17.54	108.08	118.60
25	BB	1459	G	N1-C6-O6	-17.51	109.39	119.90
25	BB	1656	C	N3-C2-O2	-17.50	109.65	121.90
15	AO	126	ARG	NE-CZ-NH1	17.48	129.04	120.30
3	A1	435	A	N1-C6-N6	-17.48	108.11	118.60
3	A1	919	A	N1-C6-N6	-17.46	108.12	118.60
25	BB	1089	A	C5-C6-N1	17.46	126.43	117.70
25	BB	371	A	N1-C6-N6	-17.45	108.13	118.60
25	BB	1496	A	N1-C6-N6	-17.44	108.13	118.60
25	BB	2169	A	N1-C6-N6	-17.41	108.16	118.60
3	A1	938	A	N1-C6-N6	-17.41	108.16	118.60
3	A1	65	A	C4-C5-C6	-17.39	108.31	117.00
25	BB	2119	A	N1-C6-N6	-17.38	108.17	118.60
3	A1	460	A	N1-C6-N6	-17.37	108.18	118.60
3	A1	583	A	N1-C6-N6	-17.35	108.19	118.60
1	AE	76	A	C5-C6-N1	17.35	126.37	117.70
25	BB	693	A	N1-C6-N6	-17.33	108.20	118.60
25	BB	1237	A	C5-C6-N1	17.31	126.36	117.70
25	BB	603	A	C5-C6-N1	17.31	126.35	117.70
3	A1	353	A	O4'-C1'-N9	17.30	122.04	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1728	C	N3-C4-C5	17.27	128.81	121.90
25	BB	1954	G	N1-C6-O6	-17.25	109.55	119.90
3	A1	50	A	N1-C6-N6	-17.24	108.26	118.60
51	B2	132	ARG	NE-CZ-NH1	17.24	128.92	120.30
25	BB	2814	A	C5-C6-N1	17.22	126.31	117.70
25	BB	33	C	N3-C4-C5	17.22	128.79	121.90
3	A1	715	A	N1-C6-N6	-17.20	108.28	118.60
3	A1	496	A	N1-C6-N6	-17.20	108.28	118.60
3	A1	1398	A	N1-C6-N6	-17.20	108.28	118.60
1	AA	58	A	N1-C6-N6	-17.19	108.29	118.60
3	A1	303	A	N1-C6-N6	-17.17	108.30	118.60
3	A1	1340	A	C4'-C3'-C2'	-17.17	85.43	102.60
25	BB	582	A	N1-C6-N6	-17.16	108.30	118.60
25	BB	911	A	N1-C6-N6	-17.16	108.31	118.60
25	BB	2005	A	N1-C6-N6	-17.15	108.31	118.60
25	BB	2094	A	N1-C6-N6	-17.15	108.31	118.60
25	BB	1525	A	N1-C6-N6	-17.14	108.32	118.60
25	BB	2733	A	N1-C6-N6	-17.13	108.33	118.60
25	BB	1301	A	N1-C6-N6	-17.09	108.34	118.60
3	A1	72	A	N1-C6-N6	-17.09	108.35	118.60
25	BB	476	G	N1-C6-O6	-17.08	109.65	119.90
25	BB	2753	A	N1-C6-N6	-17.07	108.36	118.60
25	BB	76	C	N3-C4-N4	-17.05	106.06	118.00
3	A1	313	A	N1-C6-N6	-17.05	108.37	118.60
25	BB	125	A	N1-C6-N6	-17.04	108.38	118.60
25	BB	2700	A	N1-C6-N6	-17.04	108.38	118.60
55	B6	31	GLU	OE1-CD-OE2	-17.04	102.86	123.30
3	A1	51	A	N1-C6-N6	-17.03	108.38	118.60
25	BB	1660	G	O4'-C1'-N9	17.03	121.82	108.20
25	BB	111	A	N1-C6-N6	-17.03	108.38	118.60
25	BB	190	A	N1-C6-N6	-17.03	108.38	118.60
25	BB	1793	C	N3-C2-O2	-17.02	109.99	121.90
25	BB	575	A	N1-C6-N6	-17.01	108.39	118.60
25	BB	2813	A	N1-C6-N6	-17.01	108.40	118.60
3	A1	1520	C	N3-C4-C5	17.00	128.70	121.90
25	BB	104	A	N1-C6-N6	-16.99	108.41	118.60
34	BK	68	ARG	NE-CZ-NH1	16.97	128.78	120.30
25	BB	428	A	N1-C6-N6	-16.96	108.42	118.60
25	BB	603	A	N1-C6-N6	-16.96	108.42	118.60
25	BB	310	A	N1-C6-N6	-16.94	108.43	118.60
50	B1	88	ARG	NE-CZ-NH1	16.92	128.76	120.30
25	BB	2031	A	N1-C6-N6	-16.92	108.45	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	167	A	N1-C6-N6	-16.91	108.45	118.60
25	BB	1572	A	N1-C6-N6	-16.90	108.46	118.60
3	A1	493	A	N1-C6-N6	-16.90	108.46	118.60
3	A1	792	A	C5-C6-N1	16.89	126.14	117.70
25	BB	56	A	N1-C6-N6	-16.89	108.47	118.60
27	BD	64	ARG	NE-CZ-NH1	16.87	128.74	120.30
3	A1	718	A	N1-C6-N6	-16.86	108.48	118.60
1	AP	64	A	N1-C6-N6	-16.86	108.48	118.60
3	A1	747	A	N1-C6-N6	-16.84	108.50	118.60
40	BQ	7	ARG	NE-CZ-NH1	16.84	128.72	120.30
25	BB	2434	A	N1-C6-N6	-16.82	108.51	118.60
3	A1	1036	A	N1-C6-N6	-16.81	108.51	118.60
25	BB	800	A	N1-C6-N6	-16.79	108.53	118.60
25	BB	2077	A	N1-C6-N6	-16.78	108.53	118.60
25	BB	2165	C	N3-C4-N4	-16.78	106.26	118.00
25	BB	951	C	N3-C2-O2	-16.77	110.16	121.90
25	BB	2369	A	N1-C6-N6	-16.77	108.54	118.60
3	A1	26	A	N1-C6-N6	-16.75	108.55	118.60
3	A1	1196	A	C5-C6-N1	16.75	126.08	117.70
3	A1	547	A	N1-C6-N6	-16.74	108.56	118.60
25	BB	477	A	N1-C6-N6	-16.74	108.56	118.60
3	A1	1117	A	N1-C6-N6	-16.73	108.56	118.60
37	BN	176	ARG	NE-CZ-NH1	16.73	128.66	120.30
3	A1	510	A	N1-C6-N6	-16.72	108.57	118.60
3	A1	250	A	N1-C6-N6	-16.71	108.57	118.60
25	BB	1711	A	N1-C6-N6	-16.71	108.57	118.60
25	BB	1564	C	N3-C4-N4	-16.71	106.31	118.00
25	BB	2750	A	C5-C6-N1	16.70	126.05	117.70
32	BI	61	ARG	NE-CZ-NH1	16.70	128.65	120.30
25	BB	1801	A	N1-C6-N6	-16.68	108.59	118.60
25	BB	2829	A	N1-C6-N6	-16.66	108.60	118.60
25	BB	1431	A	N1-C6-N6	-16.66	108.60	118.60
25	BB	1762	A	C5-C6-N1	16.66	126.03	117.70
25	BB	1854	A	N1-C6-N6	-16.65	108.61	118.60
3	A1	320	A	N1-C6-N6	-16.64	108.62	118.60
25	BB	413	C	N3-C4-C5	16.64	128.56	121.90
25	BB	152	A	N1-C6-N6	-16.64	108.62	118.60
25	BB	443	A	N1-C6-N6	-16.64	108.62	118.60
3	A1	499	A	N1-C6-N6	-16.62	108.63	118.60
25	BB	541	A	C5-C6-N1	16.62	126.01	117.70
25	BB	1936	A	N1-C6-N6	-16.61	108.63	118.60
25	BB	1088	A	N1-C6-N6	-16.61	108.63	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2734	A	N1-C6-N6	-16.61	108.63	118.60
3	A1	1285	A	N1-C6-N6	-16.60	108.64	118.60
25	BB	2212	A	N1-C6-N6	-16.55	108.67	118.60
25	BB	161	A	N1-C6-N6	-16.55	108.67	118.60
25	BB	2476	A	N1-C6-N6	-16.55	108.67	118.60
3	A1	119	A	N1-C6-N6	-16.54	108.68	118.60
25	BB	756	A	N1-C6-N6	-16.53	108.68	118.60
3	A1	753	A	N1-C6-N6	-16.52	108.69	118.60
25	BB	231	A	N1-C6-N6	-16.52	108.69	118.60
25	BB	2211	A	C5-C6-N1	16.51	125.95	117.70
25	BB	2171	A	N1-C6-N6	-16.49	108.71	118.60
3	A1	1067	A	N1-C6-N6	-16.49	108.71	118.60
25	BB	2373	G	N3-C2-N2	-16.49	108.36	119.90
3	A1	1493	A	N1-C6-N6	-16.48	108.71	118.60
25	BB	1787	A	N1-C6-N6	-16.48	108.71	118.60
25	BB	603	A	C4-C5-C6	-16.47	108.76	117.00
25	BB	1610	A	N1-C6-N6	-16.46	108.72	118.60
1	AA	70	C	O4'-C1'-N1	16.46	121.37	108.20
4	AB	221	ARG	NE-CZ-NH1	16.45	128.53	120.30
25	BB	101	A	N1-C6-N6	-16.45	108.73	118.60
25	BB	1262	A	N1-C6-N6	-16.45	108.73	118.60
25	BB	586	A	N1-C6-N6	-16.45	108.73	118.60
25	BB	866	A	N1-C6-N6	-16.45	108.73	118.60
1	AA	14	A	N1-C6-N6	-16.43	108.74	118.60
25	BB	2868	A	N1-C6-N6	-16.43	108.74	118.60
25	BB	2003	A	N1-C6-N6	-16.43	108.74	118.60
3	A1	130	A	N1-C6-N6	-16.42	108.75	118.60
3	A1	371	A	N1-C6-N6	-16.41	108.75	118.60
29	BF	10	ARG	NE-CZ-NH1	16.41	128.51	120.30
3	A1	780	A	N1-C6-N6	-16.38	108.77	118.60
3	A1	423	G	O4'-C1'-N9	16.38	121.30	108.20
3	A1	608	A	N1-C6-N6	-16.38	108.78	118.60
25	BB	661	A	N1-C6-N6	-16.38	108.78	118.60
25	BB	2266	A	C5-C6-N1	16.37	125.89	117.70
3	A1	1254	A	C5-C6-N1	16.36	125.88	117.70
25	BB	91	A	N1-C6-N6	-16.36	108.79	118.60
25	BB	1858	A	N1-C6-N6	-16.36	108.79	118.60
25	BB	2183	A	N1-C6-N6	-16.35	108.79	118.60
25	BB	470	A	N1-C6-N6	-16.33	108.80	118.60
3	A1	435	A	C5-C6-N1	16.33	125.86	117.70
25	BB	374	A	N1-C6-N6	-16.31	108.81	118.60
25	BB	2033	A	N1-C6-N6	-16.30	108.82	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	819	A	O4'-C1'-N9	16.30	121.24	108.20
3	A1	181	A	C5-C6-N1	16.30	125.85	117.70
25	BB	1617	C	N3-C2-O2	-16.30	110.49	121.90
3	A1	792	A	N1-C6-N6	-16.29	108.83	118.60
25	BB	1536	C	N1-C2-O2	16.29	128.67	118.90
25	BB	2516	A	N1-C6-N6	-16.29	108.83	118.60
3	A1	949	A	N1-C6-N6	-16.27	108.84	118.60
3	A1	1012	A	N1-C6-N6	-16.27	108.84	118.60
25	BB	384	A	N1-C6-N6	-16.27	108.84	118.60
25	BB	1275	A	N1-C6-N6	-16.27	108.84	118.60
3	A1	1340	A	O4'-C1'-N9	16.25	121.20	108.20
1	AA	56	C	N3-C4-C5	16.25	128.40	121.90
51	B2	91	ARG	NE-CZ-NH1	16.23	128.42	120.30
25	BB	537	G	N1-C6-O6	-16.23	110.16	119.90
25	BB	2184	A	N1-C6-N6	-16.22	108.87	118.60
25	BB	1301	A	C5-C6-N1	16.20	125.80	117.70
8	AG	80	ARG	NE-CZ-NH1	16.20	128.40	120.30
25	BB	716	A	N1-C6-N6	-16.19	108.89	118.60
25	BB	1205	A	N1-C6-N6	-16.18	108.89	118.60
17	AR	80	ARG	NE-CZ-NH2	16.18	128.39	120.30
25	BB	1392	A	C5-C6-N1	16.16	125.78	117.70
3	A1	160	A	N1-C6-N6	-16.16	108.91	118.60
25	BB	2893	A	N1-C6-N6	-16.15	108.91	118.60
25	BB	2725	A	C5-C6-N1	16.15	125.78	117.70
1	AP	61	C	N3-C4-N4	-16.15	106.69	118.00
25	BB	2821	A	N1-C6-N6	-16.13	108.92	118.60
25	BB	878	A	N1-C6-N6	-16.12	108.92	118.60
25	BB	2407	A	N1-C6-N6	-16.12	108.92	118.60
3	A1	563	A	N1-C6-N6	-16.11	108.93	118.60
3	A1	327	A	N1-C6-N6	-16.11	108.93	118.60
25	BB	1134	A	N1-C6-N6	-16.11	108.94	118.60
3	A1	517	G	N3-C2-N2	-16.10	108.63	119.90
3	A1	1311	A	N1-C6-N6	-16.10	108.94	118.60
3	A1	496	A	C5-C6-N1	16.08	125.74	117.70
3	A1	969	A	N1-C6-N6	-16.07	108.96	118.60
3	A1	71	A	N1-C6-N6	-16.06	108.96	118.60
3	A1	864	A	C5-C6-N1	16.05	125.73	117.70
1	AE	76	A	N1-C6-N6	-16.05	108.97	118.60
25	BB	1342	A	N1-C6-N6	-16.05	108.97	118.60
3	A1	190	A	N1-C6-N6	-16.05	108.97	118.60
25	BB	2501	C	N3-C2-O2	-16.04	110.67	121.90
1	AE	36	A	N1-C6-N6	-16.02	108.99	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	422	A	N1-C6-N6	-16.02	108.99	118.60
3	A1	547	A	C5-C6-N1	16.01	125.70	117.70
25	BB	479	A	N1-C6-N6	-16.01	109.00	118.60
25	BB	2439	A	N1-C6-N6	-16.01	109.00	118.60
3	A1	635	A	N1-C6-N6	-16.00	109.00	118.60
1	AE	29	A	C5-C6-N1	15.99	125.70	117.70
3	A1	282	A	N1-C6-N6	-15.98	109.01	118.60
25	BB	1304	A	N1-C6-N6	-15.97	109.02	118.60
3	A1	1239	A	N1-C6-N6	-15.97	109.02	118.60
3	A1	432	A	N1-C6-N6	-15.96	109.03	118.60
25	BB	1919	A	N1-C6-N6	-15.95	109.03	118.60
3	A1	1499	A	C5-C6-N1	15.94	125.67	117.70
25	BB	282	A	N1-C6-N6	-15.94	109.04	118.60
25	BB	753	A	N1-C6-N6	-15.94	109.03	118.60
3	A1	780	A	C5-C6-N1	15.94	125.67	117.70
25	BB	2158	A	O4'-C1'-N9	15.93	120.94	108.20
25	BB	1260	A	N1-C6-N6	-15.93	109.04	118.60
3	A1	1468	A	N1-C6-N6	-15.92	109.05	118.60
3	A1	268	U	C1'-O4'-C4'	-15.91	97.17	109.90
25	BB	2080	A	N1-C6-N6	-15.90	109.06	118.60
25	BB	2327	A	C4-C5-C6	-15.90	109.05	117.00
25	BB	905	A	N1-C6-N6	-15.90	109.06	118.60
3	A1	1433	A	N1-C6-N6	-15.89	109.06	118.60
25	BB	1780	A	N1-C6-N6	-15.89	109.07	118.60
25	BB	2327	A	N1-C6-N6	-15.86	109.08	118.60
3	A1	1520	C	N3-C2-O2	-15.86	110.80	121.90
25	BB	2058	A	N1-C6-N6	-15.86	109.09	118.60
25	BB	2531	A	N1-C6-N6	-15.86	109.09	118.60
3	A1	1203	C	N3-C4-N4	-15.84	106.91	118.00
25	BB	2851	A	N1-C6-N6	-15.84	109.09	118.60
25	BB	590	A	N1-C6-N6	-15.84	109.10	118.60
50	B1	21	ARG	NE-CZ-NH1	15.84	128.22	120.30
30	BG	86	ARG	NE-CZ-NH1	15.83	128.22	120.30
1	AA	14	A	C5-C6-N1	15.83	125.61	117.70
3	A1	1476	A	C5-C6-N1	15.83	125.61	117.70
25	BB	1080	A	N1-C6-N6	-15.83	109.11	118.60
27	BD	121	GLU	OE1-CD-OE2	-15.82	104.31	123.30
3	A1	1360	A	C4-C5-C6	-15.81	109.09	117.00
3	A1	1311	A	C5-C6-N1	15.81	125.61	117.70
25	BB	432	A	N1-C6-N6	-15.81	109.12	118.60
25	BB	1730	C	O4'-C1'-N1	15.80	120.84	108.20
25	BB	742	A	N1-C6-N6	-15.80	109.12	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1509	A	N1-C6-N6	-15.80	109.12	118.60
22	AW	122	ARG	NE-CZ-NH2	15.78	128.19	120.30
25	BB	1328	A	N1-C6-N6	-15.77	109.14	118.60
30	BG	45	ARG	NE-CZ-NH1	15.77	128.19	120.30
25	BB	1932	A	C5-C6-N1	15.76	125.58	117.70
25	BB	2055	C	N3-C2-O2	-15.76	110.87	121.90
25	BB	1641	A	N1-C6-N6	-15.76	109.14	118.60
25	BB	2632	A	N1-C6-N6	-15.76	109.15	118.60
25	BB	1871	A	N1-C6-N6	-15.75	109.15	118.60
25	BB	2679	A	N1-C6-N6	-15.74	109.16	118.60
25	BB	2587	A	N1-C6-N6	-15.74	109.16	118.60
25	BB	1675	C	N3-C2-O2	-15.74	110.88	121.90
25	BB	845	A	N1-C6-N6	-15.72	109.17	118.60
3	A1	1256	A	N1-C6-N6	-15.72	109.17	118.60
25	BB	1069	A	N1-C6-N6	-15.72	109.17	118.60
40	BQ	29	ARG	NE-CZ-NH1	15.71	128.15	120.30
11	AJ	76	ARG	NE-CZ-NH1	15.70	128.15	120.30
25	BB	643	A	N1-C6-N6	-15.69	109.18	118.60
3	A1	782	A	N1-C6-N6	-15.69	109.19	118.60
25	BB	1230	A	N1-C6-N6	-15.69	109.19	118.60
25	BB	2711	A	N1-C6-N6	-15.68	109.19	118.60
25	BB	786	C	N3-C2-O2	-15.67	110.93	121.90
25	BB	1928	A	N1-C6-N6	-15.67	109.20	118.60
25	BB	2015	A	N1-C6-N6	-15.66	109.20	118.60
3	A1	1437	A	N1-C6-N6	-15.65	109.21	118.60
3	A1	482	A	N1-C6-N6	-15.65	109.21	118.60
3	A1	349	A	C5-C6-N1	15.63	125.52	117.70
25	BB	1791	A	N1-C6-N6	-15.63	109.22	118.60
3	A1	1011	C	N3-C4-C5	15.62	128.15	121.90
25	BB	2657	A	C5-C6-N1	15.62	125.51	117.70
3	A1	94	G	N3-C2-N2	-15.62	108.97	119.90
3	A1	110	C	N3-C4-C5	15.61	128.14	121.90
3	A1	827	U	N3-C2-O2	-15.61	111.27	122.20
3	A1	899	C	N1-C2-O2	15.61	128.26	118.90
25	BB	413	C	N3-C4-N4	-15.61	107.08	118.00
3	A1	1152	A	N1-C6-N6	-15.60	109.24	118.60
37	BN	47	ARG	NE-CZ-NH2	15.60	128.10	120.30
3	A1	502	A	N1-C6-N6	-15.60	109.24	118.60
25	BB	1945	G	N1-C6-O6	-15.60	110.54	119.90
14	AN	73	ARG	NE-CZ-NH1	15.59	128.10	120.30
25	BB	2659	G	N3-C2-N2	-15.59	108.99	119.90
25	BB	2311	A	N1-C6-N6	-15.59	109.25	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	759	A	C5-C6-N1	15.58	125.49	117.70
3	A1	65	A	C5-C6-N1	15.57	125.49	117.70
25	BB	41	C	N3-C2-O2	-15.57	111.00	121.90
3	A1	300	A	N1-C6-N6	-15.55	109.27	118.60
3	A1	1508	A	N1-C6-N6	-15.56	109.27	118.60
25	BB	1393	A	N1-C6-N6	-15.55	109.27	118.60
31	BH	30	ARG	NE-CZ-NH1	15.54	128.07	120.30
15	AO	171	ARG	NE-CZ-NH1	15.54	128.07	120.30
25	BB	693	A	C5-C6-N1	15.54	125.47	117.70
25	BB	1107	G	N1-C6-O6	-15.54	110.58	119.90
25	BB	390	U	N3-C2-O2	-15.52	111.34	122.20
1	AP	20	G	C8-N9-C4	-15.51	100.19	106.40
25	BB	1395	A	N1-C6-N6	-15.50	109.30	118.60
25	BB	1932	A	N1-C6-N6	-15.50	109.30	118.60
3	A1	1101	A	N1-C6-N6	-15.49	109.30	118.60
25	BB	1616	A	N1-C6-N6	-15.49	109.31	118.60
25	BB	987	C	N3-C2-O2	-15.48	111.06	121.90
3	A1	900	A	N1-C6-N6	-15.48	109.31	118.60
31	BH	7	ARG	NE-CZ-NH1	15.48	128.04	120.30
25	BB	1241	A	O4'-C1'-N9	15.47	120.58	108.20
25	BB	342	A	N1-C6-N6	-15.47	109.32	118.60
25	BB	2146	C	N3-C4-C5	15.47	128.09	121.90
3	A1	192	A	N1-C6-N6	-15.46	109.32	118.60
25	BB	279	A	N1-C6-N6	-15.46	109.32	118.60
1	AE	64	A	N1-C6-N6	-15.46	109.33	118.60
3	A1	845	A	C5-C6-N1	15.45	125.42	117.70
25	BB	740	C	N3-C2-O2	-15.43	111.10	121.90
25	BB	1591	A	C5-C6-N1	15.43	125.42	117.70
25	BB	2896	C	N3-C4-C5	15.43	128.07	121.90
1	AA	42	G	N3-C2-N2	-15.43	109.10	119.90
25	BB	345	A	N1-C6-N6	-15.43	109.34	118.60
25	BB	2471	A	C4-C5-C6	-15.42	109.29	117.00
25	BB	789	A	N1-C6-N6	-15.42	109.35	118.60
25	BB	2716	C	N3-C4-C5	15.42	128.07	121.90
25	BB	877	A	N1-C6-N6	-15.42	109.35	118.60
25	BB	1957	C	N3-C4-N4	-15.41	107.21	118.00
25	BB	1773	A	N1-C6-N6	-15.41	109.35	118.60
3	A1	787	A	N1-C6-N6	-15.41	109.36	118.60
3	A1	1046	A	N1-C6-N6	-15.41	109.36	118.60
25	BB	1069	A	C5-C6-N1	15.41	125.40	117.70
25	BB	76	C	C5-C4-N4	15.40	130.98	120.20
25	BB	1805	A	C5-C6-N1	15.40	125.40	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
1	AP	11	C	N3-C2-O2	-15.39	111.12	121.90
25	BB	973	A	N1-C6-N6	-15.39	109.36	118.60
23	AX	16	ARG	NE-CZ-NH1	15.39	128.00	120.30
3	A1	706	A	N1-C6-N6	-15.39	109.37	118.60
25	BB	21	A	N1-C6-N6	-15.38	109.37	118.60
25	BB	2472	G	O4'-C1'-N9	15.37	120.49	108.20
3	A1	263	A	N1-C6-N6	-15.36	109.38	118.60
3	A1	1054	C	N3-C2-O2	-15.36	111.14	121.90
25	BB	1515	A	N1-C6-N6	-15.36	109.38	118.60
1	AP	72	C	N3-C4-C5	15.35	128.04	121.90
27	BD	105	ARG	NE-CZ-NH2	-15.35	112.62	120.30
3	A1	1044	A	N1-C6-N6	-15.35	109.39	118.60
25	BB	2268	A	N1-C6-N6	-15.35	109.39	118.60
25	BB	1802	A	N1-C6-N6	-15.34	109.39	118.60
3	A1	1332	A	N1-C6-N6	-15.34	109.40	118.60
25	BB	1510	G	N1-C6-O6	-15.34	110.70	119.90
25	BB	1759	A	N1-C6-N6	-15.34	109.40	118.60
55	B6	13	ARG	NE-CZ-NH1	15.33	127.97	120.30
25	BB	1057	A	N1-C6-N6	-15.32	109.41	118.60
3	A1	1170	A	C5-C6-N1	15.32	125.36	117.70
3	A1	529	G	C4-C5-N7	-15.31	104.67	110.80
25	BB	1810	A	C5-C6-N1	15.31	125.36	117.70
25	BB	2067	G	O4'-C1'-N9	15.31	120.45	108.20
25	BB	1772	A	N1-C6-N6	-15.31	109.42	118.60
3	A1	1219	A	N1-C6-N6	-15.30	109.42	118.60
3	A1	878	A	N1-C6-N6	-15.29	109.43	118.60
25	BB	1786	A	N1-C6-N6	-15.29	109.43	118.60
3	A1	620	C	N3-C2-O2	-15.28	111.20	121.90
3	A1	1105	A	N1-C6-N6	-15.28	109.43	118.60
25	BB	1580	A	N1-C6-N6	-15.28	109.43	118.60
25	BB	2619	C	N1-C2-O2	15.28	128.07	118.90
25	BB	482	A	N1-C6-N6	-15.26	109.44	118.60
40	BQ	29	ARG	NE-CZ-NH2	-15.25	112.67	120.30
29	BF	50	ARG	NE-CZ-NH2	15.25	127.92	120.30
1	AA	65	G	O4'-C1'-N9	15.24	120.39	108.20
25	BB	2469	A	C5-C6-N1	15.24	125.32	117.70
48	BY	77	ARG	NE-CZ-NH1	15.24	127.92	120.30
3	A1	174	A	N1-C6-N6	-15.23	109.46	118.60
25	BB	430	A	N1-C6-N6	-15.22	109.47	118.60
25	BB	1583	A	N1-C6-N6	-15.22	109.47	118.60
25	BB	323	C	N3-C4-N4	-15.21	107.35	118.00
25	BB	1504	A	N1-C6-N6	-15.21	109.47	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	913	A	N1-C6-N6	-15.21	109.47	118.60
3	A1	107	G	N1-C6-O6	-15.20	110.78	119.90
3	A1	533	A	N1-C6-N6	-15.21	109.48	118.60
3	A1	466	A	C4-C5-C6	-15.20	109.40	117.00
25	BB	207	A	N1-C6-N6	-15.20	109.48	118.60
3	A1	1141	C	C2-N3-C4	-15.20	112.30	119.90
25	BB	2260	C	N3-C4-N4	-15.20	107.36	118.00
25	BB	1634	A	N1-C6-N6	-15.19	109.48	118.60
25	BB	144	A	C5-C6-N1	15.19	125.30	117.70
25	BB	2468	A	N1-C6-N6	-15.18	109.49	118.60
1	AA	38	A	N1-C6-N6	-15.18	109.50	118.60
25	BB	2646	C	N3-C2-O2	-15.18	111.28	121.90
25	BB	2163	A	N1-C6-N6	-15.17	109.50	118.60
25	BB	2392	A	N1-C6-N6	-15.17	109.50	118.60
3	A1	716	A	N1-C6-N6	-15.15	109.51	118.60
3	A1	1169	A	C5-C6-N1	15.15	125.28	117.70
25	BB	1755	A	N1-C6-N6	-15.14	109.51	118.60
1	AA	37	G	O4'-C1'-N9	15.14	120.31	108.20
3	A1	681	A	N1-C6-N6	-15.14	109.52	118.60
25	BB	794	A	N1-C6-N6	-15.12	109.53	118.60
3	A1	1503	A	N1-C6-N6	-15.12	109.53	118.60
25	BB	608	A	N1-C6-N6	-15.12	109.53	118.60
3	A1	1007	U	N3-C2-O2	-15.11	111.62	122.20
3	A1	321	A	C5-C6-N1	15.11	125.25	117.70
25	BB	256	A	N1-C6-N6	-15.10	109.54	118.60
25	BB	1569	A	N1-C6-N6	-15.10	109.54	118.60
25	BB	855	G	O4'-C1'-N9	15.09	120.28	108.20
24	BA	99	A	N1-C6-N6	-15.09	109.55	118.60
25	BB	1103	A	N1-C6-N6	-15.09	109.55	118.60
25	BB	1947	C	N3-C4-N4	-15.08	107.44	118.00
3	A1	663	A	N1-C6-N6	-15.06	109.56	118.60
25	BB	1745	A	N1-C6-N6	-15.06	109.56	118.60
25	BB	1821	A	N1-C6-N6	-15.06	109.56	118.60
25	BB	2736	A	N1-C6-N6	-15.06	109.57	118.60
3	A1	44	A	N1-C6-N6	-15.04	109.57	118.60
25	BB	1495	A	N1-C6-N6	-15.04	109.57	118.60
25	BB	1165	A	N1-C6-N6	-15.04	109.57	118.60
3	A1	891	U	O4'-C1'-N1	15.04	120.23	108.20
25	BB	2577	A	N1-C6-N6	-15.04	109.58	118.60
25	BB	2593	U	O4'-C1'-N1	15.04	120.23	108.20
4	AB	20	ARG	NE-CZ-NH1	15.03	127.81	120.30
25	BB	513	A	N1-C6-N6	-15.02	109.59	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	992	C	N3-C2-O2	-15.02	111.39	121.90
25	BB	1330	C	C6-N1-C2	-15.01	114.30	120.30
1	AP	35	A	N1-C2-N3	-15.01	121.80	129.30
25	BB	1596	A	N1-C6-N6	-15.00	109.60	118.60
25	BB	1617	C	N1-C2-O2	15.00	127.90	118.90
25	BB	865	C	O4'-C1'-N1	15.00	120.20	108.20
3	A1	32	A	N1-C6-N6	-14.99	109.60	118.60
3	A1	78	A	N1-C6-N6	-14.99	109.60	118.60
3	A1	196	A	N1-C6-N6	-14.99	109.61	118.60
25	BB	1367	A	N1-C6-N6	-14.99	109.61	118.60
25	BB	1941	C	N3-C4-N4	-14.99	107.51	118.00
3	A1	1299	A	N1-C6-N6	-14.99	109.61	118.60
3	A1	959	A	C4-C5-C6	-14.99	109.51	117.00
25	BB	504	A	N1-C6-N6	-14.98	109.61	118.60
25	BB	368	A	C4-C5-C6	-14.98	109.51	117.00
3	A1	1238	A	C5-C6-N1	14.97	125.19	117.70
25	BB	2883	A	N1-C6-N6	-14.97	109.61	118.60
25	BB	2675	A	N1-C6-N6	-14.97	109.62	118.60
3	A1	7	A	O4'-C1'-N9	14.96	120.16	108.20
25	BB	342	A	C5-C6-N1	14.96	125.18	117.70
3	A1	1500	A	N1-C6-N6	-14.95	109.63	118.60
25	BB	412	A	N1-C6-N6	-14.95	109.63	118.60
1	AP	9	A	C5-C6-N1	14.94	125.17	117.70
3	A1	856	C	N3-C4-C5	14.93	127.87	121.90
25	BB	718	A	N1-C6-N6	-14.92	109.65	118.60
25	BB	105	C	N3-C4-C5	14.92	127.87	121.90
25	BB	2814	A	N1-C6-N6	-14.91	109.65	118.60
3	A1	109	A	C5-C6-N1	14.90	125.15	117.70
25	BB	941	A	C5-C6-N1	14.90	125.15	117.70
24	BA	108	A	N1-C6-N6	-14.90	109.66	118.60
26	BC	9	ARG	NE-CZ-NH1	14.90	127.75	120.30
3	A1	1403	C	N1-C2-O2	14.89	127.84	118.90
3	A1	572	A	C5-C6-N1	14.89	125.14	117.70
25	BB	2227	A	N1-C6-N6	-14.88	109.67	118.60
3	A1	1359	C	O4'-C1'-N1	14.87	120.10	108.20
9	AH	52	ARG	NE-CZ-NH2	14.87	127.73	120.30
3	A1	1483	A	N1-C6-N6	-14.86	109.68	118.60
25	BB	1286	A	N1-C6-N6	-14.86	109.69	118.60
14	AN	23	ARG	NE-CZ-NH1	14.85	127.72	120.30
3	A1	1451	U	N3-C2-O2	-14.85	111.81	122.20
25	BB	1632	A	N1-C6-N6	-14.85	109.69	118.60
25	BB	2764	A	N1-C6-N6	-14.85	109.69	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1870	C	O4'-C1'-N1	14.84	120.07	108.20
3	A1	909	A	N1-C6-N6	-14.84	109.70	118.60
25	BB	1536	C	N3-C2-O2	-14.84	111.51	121.90
25	BB	1763	G	N1-C6-O6	-14.82	111.01	119.90
25	BB	1498	C	N1-C2-O2	14.82	127.79	118.90
53	B4	50	ARG	NE-CZ-NH1	14.82	127.71	120.30
25	BB	1210	G	N3-C2-N2	-14.82	109.53	119.90
47	BX	4	ARG	NE-CZ-NH2	14.81	127.71	120.30
25	BB	1285	A	C5-C6-N1	14.81	125.11	117.70
3	A1	1004	A	C5-C6-N1	14.80	125.10	117.70
25	BB	2432	A	N1-C6-N6	-14.81	109.72	118.60
32	BI	20	ARG	NE-CZ-NH1	-14.80	112.90	120.30
25	BB	376	G	C1'-O4'-C4'	-14.80	98.06	109.90
25	BB	1237	A	N1-C6-N6	-14.80	109.72	118.60
3	A1	784	A	N1-C6-N6	-14.79	109.72	118.60
25	BB	1564	C	N3-C4-C5	14.78	127.81	121.90
3	A1	466	A	C5-C6-N1	14.77	125.09	117.70
25	BB	1774	C	C1'-O4'-C4'	-14.77	98.08	109.90
25	BB	1953	A	C5-C6-N1	14.77	125.09	117.70
3	A1	269	C	N3-C4-C5	14.77	127.81	121.90
3	A1	1093	A	N1-C6-N6	-14.77	109.74	118.60
25	BB	2376	A	C5-C6-N6	14.77	135.51	123.70
14	AN	9	ARG	NE-CZ-NH1	14.76	127.68	120.30
25	BB	2147	A	N1-C6-N6	-14.76	109.74	118.60
25	BB	563	A	N1-C6-N6	-14.75	109.75	118.60
3	A1	523	A	C5-C6-N1	14.74	125.07	117.70
28	BE	69	ARG	NE-CZ-NH1	14.74	127.67	120.30
25	BB	2543	G	O4'-C1'-N9	14.74	119.99	108.20
25	BB	2020	A	N1-C6-N6	-14.74	109.76	118.60
25	BB	2352	A	N1-C6-N6	-14.73	109.76	118.60
25	BB	354	A	C5-C6-N1	14.73	125.07	117.70
25	BB	1384	A	C5-C6-N1	14.72	125.06	117.70
25	BB	1561	C	N3-C4-C5	14.72	127.79	121.90
3	A1	1019	A	N1-C6-N6	-14.72	109.77	118.60
25	BB	5	A	N1-C6-N6	-14.72	109.77	118.60
3	A1	624	C	N3-C4-C5	14.71	127.78	121.90
25	BB	2757	A	C5-C6-N1	14.71	125.06	117.70
3	A1	132	C	N3-C4-C5	14.71	127.78	121.90
25	BB	484	C	N3-C4-N4	-14.70	107.71	118.00
25	BB	722	A	N1-C6-N6	-14.69	109.78	118.60
3	A1	523	A	N1-C6-N6	-14.69	109.78	118.60
25	BB	643	A	C4-C5-C6	-14.69	109.65	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1253	A	N1-C6-N6	-14.69	109.78	118.60
25	BB	446	G	N1-C6-O6	-14.69	111.09	119.90
25	BB	1639	C	N3-C4-C5	14.69	127.77	121.90
25	BB	42	A	N1-C6-N6	-14.67	109.80	118.60
25	BB	1640	A	N1-C6-N6	-14.67	109.80	118.60
25	BB	2809	A	N1-C6-N6	-14.67	109.80	118.60
1	AA	12	U	O4'-C1'-N1	14.66	119.93	108.20
25	BB	2635	A	N1-C6-N6	-14.66	109.80	118.60
25	BB	2520	C	N3-C2-O2	-14.66	111.64	121.90
3	A1	768	A	N1-C6-N6	-14.65	109.81	118.60
25	BB	1387	A	N1-C6-N6	-14.65	109.81	118.60
3	A1	1396	A	N1-C6-N6	-14.65	109.81	118.60
25	BB	749	A	N1-C6-N6	-14.64	109.82	118.60
25	BB	2606	C	N3-C4-C5	14.64	127.76	121.90
15	AO	178	ARG	NE-CZ-NH1	14.63	127.62	120.30
25	BB	1579	A	N1-C6-N6	-14.63	109.82	118.60
24	BA	115	A	N1-C6-N6	-14.63	109.82	118.60
25	BB	2060	A	N1-C6-N6	-14.63	109.82	118.60
25	BB	2247	A	N1-C6-N6	-14.63	109.83	118.60
25	BB	608	A	C5-C6-N1	14.61	125.01	117.70
25	BB	1000	A	N1-C6-N6	-14.61	109.83	118.60
24	BA	60	C	C2-N3-C4	-14.60	112.60	119.90
25	BB	632	A	N1-C6-N6	-14.60	109.84	118.60
3	A1	44	A	C5-C6-N1	14.59	124.99	117.70
3	A1	1082	A	N1-C6-N6	-14.58	109.85	118.60
25	BB	802	A	C5-C6-N1	14.57	124.99	117.70
1	AE	72	C	O4'-C1'-N1	14.57	119.86	108.20
25	BB	1752	C	N3-C4-C5	14.57	127.73	121.90
25	BB	1691	C	N3-C2-O2	-14.56	111.71	121.90
25	BB	2565	A	C5-C6-N1	14.56	124.98	117.70
3	A1	1054	C	C6-N1-C2	-14.56	114.48	120.30
16	AQ	34	ARG	NE-CZ-NH2	14.55	127.58	120.30
3	A1	172	A	C5-C6-N1	14.53	124.97	117.70
3	A1	1157	A	N1-C6-N6	-14.53	109.88	118.60
25	BB	2270	A	N1-C6-N6	-14.53	109.89	118.60
25	BB	73	A	N1-C6-N6	-14.52	109.89	118.60
25	BB	1549	A	N1-C6-N6	-14.51	109.89	118.60
25	BB	2070	A	C5-C6-N1	14.51	124.95	117.70
14	AN	59	ARG	NE-CZ-NH1	14.51	127.55	120.30
25	BB	1434	A	N1-C6-N6	-14.51	109.89	118.60
25	BB	109	C	O4'-C1'-N1	14.50	119.80	108.20
25	BB	1876	A	N1-C6-N6	-14.50	109.90	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2333	A	N1-C6-N6	-14.50	109.90	118.60
25	BB	1913	A	C5-C6-N1	14.49	124.95	117.70
1	AA	37	G	C8-N9-C4	-14.49	100.60	106.40
25	BB	368	A	C5-C6-N1	14.48	124.94	117.70
25	BB	33	C	C2-N3-C4	-14.48	112.66	119.90
25	BB	1214	A	N1-C6-N6	-14.48	109.91	118.60
25	BB	1701	A	N1-C6-N6	-14.47	109.92	118.60
3	A1	595	A	N1-C6-N6	-14.46	109.92	118.60
3	A1	976	G	N1-C6-O6	-14.46	111.22	119.90
3	A1	431	A	C5-C6-N1	14.46	124.93	117.70
25	BB	2430	A	N1-C6-N6	-14.46	109.92	118.60
3	A1	1332	A	C4-C5-C6	-14.46	109.77	117.00
25	BB	1385	A	N1-C6-N6	-14.46	109.93	118.60
25	BB	1687	G	C5-C6-N1	14.45	118.73	111.50
25	BB	2341	G	N1-C6-O6	-14.45	111.23	119.90
3	A1	338	A	N1-C6-N6	-14.45	109.93	118.60
3	A1	364	A	C4-C5-C6	-14.45	109.78	117.00
25	BB	761	A	C5-C6-N1	14.45	124.92	117.70
25	BB	2657	A	C4-C5-C6	-14.45	109.78	117.00
3	A1	397	A	O4'-C1'-N9	14.45	119.76	108.20
3	A1	419	C	N3-C4-C5	14.45	127.68	121.90
25	BB	347	A	N1-C6-N6	-14.44	109.94	118.60
3	A1	371	A	C4-C5-C6	-14.43	109.78	117.00
25	BB	781	A	N1-C6-N6	-14.43	109.94	118.60
24	BA	34	A	C5-C6-N1	14.43	124.92	117.70
3	A1	59	A	N1-C6-N6	-14.42	109.95	118.60
3	A1	1529	G	C6-N1-C2	-14.42	116.45	125.10
25	BB	849	A	N1-C6-N6	-14.41	109.95	118.60
17	AR	187	ARG	NE-CZ-NH2	-14.41	113.10	120.30
3	A1	1332	A	C5-C6-N1	14.39	124.90	117.70
25	BB	226	A	C4-C5-C6	-14.39	109.80	117.00
3	A1	509	A	N1-C6-N6	-14.38	109.97	118.60
25	BB	1664	A	N1-C6-N6	-14.38	109.97	118.60
3	A1	650	G	C1'-O4'-C4'	-14.38	98.40	109.90
3	A1	1102	A	N1-C6-N6	-14.37	109.98	118.60
25	BB	2163	A	C5-C6-N1	14.37	124.89	117.70
52	B3	151	ARG	NE-CZ-NH2	14.37	127.48	120.30
25	BB	2459	A	N1-C6-N6	-14.36	109.98	118.60
25	BB	1947	C	N3-C2-O2	-14.36	111.85	121.90
25	BB	903	C	C2-N3-C4	-14.35	112.72	119.90
25	BB	1652	A	N1-C6-N6	-14.35	109.99	118.60
27	BD	105	ARG	NE-CZ-NH1	14.35	127.47	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	142	A	C5-C6-N1	14.34	124.87	117.70
25	BB	1871	A	C5-C6-N1	14.33	124.87	117.70
3	A1	1507	A	N1-C6-N6	-14.32	110.00	118.60
3	A1	36	C	N3-C4-N4	-14.32	107.98	118.00
25	BB	572	A	N1-C6-N6	-14.31	110.01	118.60
3	A1	1111	A	C5-C6-N1	14.31	124.86	117.70
25	BB	457	A	N1-C6-N6	-14.31	110.01	118.60
25	BB	2770	G	N1-C6-O6	-14.31	111.31	119.90
25	BB	1848	A	N1-C6-N6	-14.31	110.02	118.60
24	BA	42	C	N3-C2-O2	-14.30	111.89	121.90
25	BB	502	A	C5-C6-N1	14.30	124.85	117.70
1	AE	44	A	N1-C6-N6	-14.30	110.02	118.60
3	A1	131	A	N1-C6-N6	-14.30	110.02	118.60
3	A1	366	A	N1-C6-N6	-14.30	110.02	118.60
3	A1	246	A	N1-C6-N6	-14.29	110.02	118.60
3	A1	1163	A	N1-C6-N6	-14.29	110.02	118.60
25	BB	2559	C	C2-N3-C4	-14.29	112.75	119.90
1	AE	14	A	N1-C6-N6	-14.29	110.03	118.60
24	BA	62	C	N3-C4-C5	14.28	127.61	121.90
3	A1	1529	G	N1-C6-O6	-14.28	111.33	119.90
25	BB	1815	A	N1-C6-N6	-14.28	110.03	118.60
25	BB	2266	A	N1-C6-N6	-14.28	110.03	118.60
25	BB	1793	C	N1-C2-O2	14.27	127.46	118.90
1	AA	64	A	C5-C6-N1	14.26	124.83	117.70
25	BB	1008	A	N1-C6-N6	-14.26	110.05	118.60
24	BA	15	A	O4'-C1'-N9	14.26	119.61	108.20
25	BB	1647	U	O4'-C1'-N1	14.26	119.61	108.20
7	AF	86	ARG	NE-CZ-NH1	14.25	127.42	120.30
25	BB	1746	A	N1-C6-N6	-14.25	110.05	118.60
25	BB	1794	A	N1-C6-N6	-14.24	110.06	118.60
25	BB	2274	A	N1-C6-N6	-14.24	110.06	118.60
3	A1	687	A	N1-C6-N6	-14.23	110.06	118.60
25	BB	19	A	N1-C6-N6	-14.23	110.06	118.60
25	BB	477	A	C4-C5-C6	-14.23	109.89	117.00
25	BB	1085	A	N1-C6-N6	-14.23	110.06	118.60
25	BB	2612	C	N3-C2-O2	-14.22	111.94	121.90
3	A1	539	A	N1-C6-N6	-14.22	110.07	118.60
1	AP	35	A	C5-C6-N1	14.22	124.81	117.70
1	AE	29	A	N1-C6-N6	-14.22	110.07	118.60
25	BB	1941	C	N3-C2-O2	-14.20	111.96	121.90
25	BB	882	G	N3-C4-C5	-14.19	121.51	128.60
25	BB	721	A	N1-C6-N6	-14.19	110.09	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	353	A	N1-C6-N6	-14.18	110.09	118.60
25	BB	1067	A	C4-C5-C6	-14.18	109.91	117.00
3	A1	623	C	N3-C4-C5	14.18	127.57	121.90
25	BB	1752	C	N3-C2-O2	-14.17	111.98	121.90
3	A1	1254	A	N1-C6-N6	-14.17	110.10	118.60
3	A1	161	A	N1-C6-N6	-14.17	110.10	118.60
3	A1	924	C	O4'-C1'-N1	14.16	119.53	108.20
3	A1	1046	A	C5-C6-N1	14.16	124.78	117.70
25	BB	2590	A	C5-C6-N1	14.16	124.78	117.70
25	BB	2882	A	N1-C6-N6	-14.15	110.11	118.60
25	BB	2418	A	N1-C6-N6	-14.15	110.11	118.60
25	BB	2611	C	N3-C2-O2	-14.15	112.00	121.90
25	BB	666	A	N1-C6-N6	-14.15	110.11	118.60
25	BB	516	C	N3-C4-C5	14.14	127.56	121.90
3	A1	935	A	N1-C6-N6	-14.14	110.12	118.60
25	BB	172	A	N1-C6-N6	-14.14	110.12	118.60
3	A1	1016	A	N1-C6-N6	-14.13	110.12	118.60
25	BB	1690	A	N1-C6-N6	-14.13	110.12	118.60
3	A1	432	A	C5-C6-N1	14.13	124.76	117.70
17	AR	25	ARG	NE-CZ-NH1	14.13	127.36	120.30
3	A1	1529	G	N3-C4-C5	-14.13	121.54	128.60
25	BB	609	A	N1-C6-N6	-14.13	110.12	118.60
25	BB	1783	A	C5-C6-N1	14.13	124.76	117.70
25	BB	2725	A	C4-C5-C6	-14.12	109.94	117.00
1	AP	62	A	N1-C6-N6	-14.11	110.13	118.60
25	BB	2654	A	N1-C6-N6	-14.11	110.13	118.60
25	BB	2059	A	N1-C6-N6	-14.11	110.13	118.60
3	A1	777	A	N1-C6-N6	-14.11	110.14	118.60
24	BA	101	A	C5-C6-N1	14.11	124.75	117.70
25	BB	689	A	N1-C6-N6	-14.11	110.14	118.60
25	BB	1088	A	C2-N3-C4	14.10	117.65	110.60
3	A1	91	U	O4'-C1'-N1	14.10	119.48	108.20
24	BA	27	C	N1-C2-O2	14.10	127.36	118.90
38	BO	81	ARG	NE-CZ-NH1	14.10	127.35	120.30
3	A1	1282	C	N3-C4-C5	14.10	127.54	121.90
25	BB	675	A	C5-C6-N1	14.10	124.75	117.70
3	A1	993	G	N1-C6-O6	-14.10	111.44	119.90
3	A1	1305	G	O4'-C1'-N9	14.09	119.47	108.20
25	BB	1679	A	C5-C6-N1	14.09	124.74	117.70
3	A1	815	A	N1-C6-N6	-14.08	110.15	118.60
25	BB	844	A	N1-C6-N6	-14.07	110.16	118.60
3	A1	1042	A	C5-C6-N1	14.07	124.74	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1469	A	N1-C6-N6	-14.07	110.16	118.60
20	AU	3	ARG	NE-CZ-NH1	14.06	127.33	120.30
25	BB	453	A	N1-C6-N6	-14.06	110.16	118.60
25	BB	1790	C	O4'-C1'-N1	14.06	119.45	108.20
3	A1	1204	A	N1-C6-N6	-14.06	110.17	118.60
25	BB	943	A	N1-C6-N6	-14.04	110.18	118.60
3	A1	327	A	C5-C6-N1	14.04	124.72	117.70
25	BB	2826	A	C5-C6-N1	14.04	124.72	117.70
3	A1	695	A	N1-C6-N6	-14.04	110.18	118.60
25	BB	71	A	N1-C6-N6	-14.03	110.18	118.60
1	AA	3	G	O4'-C1'-N9	14.02	119.42	108.20
25	BB	1420	A	O4'-C1'-N9	14.02	119.42	108.20
25	BB	960	A	C5-C6-N1	14.02	124.71	117.70
3	A1	382	A	N1-C6-N6	-14.02	110.19	118.60
3	A1	1529	G	C2-N3-C4	14.02	118.91	111.90
25	BB	2750	A	C4-C5-C6	-14.01	110.00	117.00
3	A1	1398	A	C5-C6-N1	14.01	124.70	117.70
25	BB	687	C	N1-C2-O2	14.01	127.30	118.90
25	BB	1133	A	N1-C6-N6	-14.01	110.20	118.60
3	A1	98	A	N1-C6-N6	-14.00	110.20	118.60
25	BB	1001	A	N1-C6-N6	-14.00	110.20	118.60
25	BB	2043	C	N3-C2-O2	-14.00	112.10	121.90
3	A1	189	A	O4'-C1'-N9	13.99	119.39	108.20
20	AU	69	ARG	NE-CZ-NH1	13.99	127.30	120.30
33	BJ	49	ARG	NE-CZ-NH2	13.99	127.30	120.30
25	BB	1535	A	N1-C6-N6	-13.99	110.20	118.60
25	BB	549	G	N3-C2-N2	-13.99	110.11	119.90
25	BB	2114	A	C4-C5-C6	-13.99	110.01	117.00
25	BB	892	A	C5-C6-N1	13.98	124.69	117.70
25	BB	2635	A	C5-C6-N1	13.98	124.69	117.70
24	BA	36	C	O4'-C1'-N1	13.98	119.39	108.20
25	BB	2757	A	N1-C6-N6	-13.98	110.21	118.60
4	AB	73	ARG	NE-CZ-NH1	13.98	127.29	120.30
48	BY	59	ARG	NE-CZ-NH1	13.98	127.29	120.30
8	AG	40	ARG	NE-CZ-NH1	13.97	127.28	120.30
24	BA	46	A	N1-C6-N6	-13.97	110.22	118.60
25	BB	1672	A	N1-C6-N6	-13.97	110.22	118.60
3	A1	77	A	N1-C6-N6	-13.97	110.22	118.60
3	A1	1035	A	N1-C6-N6	-13.96	110.22	118.60
25	BB	2288	A	C5-C6-N1	13.96	124.68	117.70
25	BB	2799	A	C5-C6-N1	13.96	124.68	117.70
9	AH	63	ARG	NE-CZ-NH1	13.96	127.28	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1809	A	N1-C6-N6	-13.96	110.22	118.60
25	BB	105	C	C2-N3-C4	-13.96	112.92	119.90
27	BD	78	ARG	NE-CZ-NH1	13.96	127.28	120.30
3	A1	1534	A	N1-C6-N6	-13.96	110.23	118.60
1	AE	64	A	C4-C5-C6	-13.95	110.02	117.00
25	BB	1161	C	N3-C4-N4	-13.94	108.24	118.00
25	BB	2610	C	N3-C4-C5	13.94	127.48	121.90
25	BB	1315	C	N3-C4-C5	13.94	127.47	121.90
30	BG	17	ARG	NE-CZ-NH1	13.93	127.27	120.30
35	BL	8	ARG	NE-CZ-NH2	-13.93	113.33	120.30
25	BB	1237	A	C4-C5-C6	-13.93	110.04	117.00
3	A1	975	A	C5-C6-N1	13.93	124.66	117.70
25	BB	340	A	C5-C6-N1	13.92	124.66	117.70
25	BB	2377	A	C4-C5-C6	-13.92	110.04	117.00
3	A1	1125	U	C1'-O4'-C4'	-13.92	98.77	109.90
1	AP	31	A	O4'-C1'-N9	13.91	119.33	108.20
25	BB	643	A	C5-C6-N1	13.91	124.66	117.70
25	BB	1535	A	C5-C6-N1	13.91	124.66	117.70
3	A1	787	A	C5-C6-N1	13.91	124.66	117.70
25	BB	735	A	C5-C6-N1	13.91	124.66	117.70
25	BB	2632	A	C2-N3-C4	13.91	117.56	110.60
3	A1	780	A	C4-C5-C6	-13.91	110.04	117.00
25	BB	418	C	N1-C2-O2	13.91	127.25	118.90
25	BB	149	A	N1-C6-N6	-13.90	110.26	118.60
25	BB	1893	C	N3-C4-C5	13.90	127.46	121.90
3	A1	143	A	N1-C6-N6	-13.90	110.26	118.60
25	BB	692	C	N3-C2-O2	-13.90	112.17	121.90
25	BB	1268	A	N1-C6-N6	-13.90	110.26	118.60
25	BB	1713	A	C5-C6-N1	13.90	124.65	117.70
25	BB	391	A	N1-C6-N6	-13.89	110.26	118.60
25	BB	2402	U	N3-C2-O2	-13.89	112.47	122.20
25	BB	2497	A	C5-C6-N1	13.89	124.65	117.70
25	BB	1169	A	N1-C6-N6	-13.89	110.27	118.60
25	BB	2340	A	N1-C6-N6	-13.89	110.27	118.60
33	BJ	63	ARG	NE-CZ-NH1	13.89	127.24	120.30
25	BB	1207	C	N3-C2-O2	-13.88	112.18	121.90
25	BB	1593	A	C5-C6-N1	13.88	124.64	117.70
3	A1	23	C	N3-C2-O2	-13.88	112.19	121.90
25	BB	975	A	N1-C6-N6	-13.88	110.28	118.60
3	A1	223	A	N1-C6-N6	-13.87	110.28	118.60
3	A1	1465	A	C5-C6-N1	13.87	124.64	117.70
3	A1	401	C	C6-N1-C2	-13.87	114.75	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	475	C	N3-C4-N4	-13.87	108.30	118.00
3	A1	1097	C	N3-C4-C5	13.86	127.44	121.90
3	A1	1287	A	N1-C6-N6	-13.86	110.28	118.60
3	A1	166	U	N3-C2-O2	-13.86	112.50	122.20
3	A1	969	A	C4-C5-C6	-13.85	110.07	117.00
48	BY	13	ARG	NE-CZ-NH1	13.85	127.23	120.30
3	A1	1012	A	C5-C6-N1	13.85	124.62	117.70
25	BB	1779	U	O4'-C1'-N1	13.85	119.28	108.20
25	BB	1322	A	N1-C6-N6	-13.84	110.30	118.60
25	BB	1899	A	N1-C6-N6	-13.84	110.30	118.60
25	BB	155	A	C5-C6-N1	13.83	124.62	117.70
25	BB	1924	C	N3-C4-C5	13.83	127.43	121.90
24	BA	70	C	N3-C4-C5	13.81	127.43	121.90
25	BB	2386	A	C5-C6-N1	13.81	124.61	117.70
22	AW	40	ARG	NE-CZ-NH1	13.81	127.21	120.30
25	BB	2483	C	N3-C2-O2	-13.81	112.23	121.90
25	BB	2670	A	C5-C6-N1	13.81	124.60	117.70
55	B6	116	ARG	NE-CZ-NH2	13.80	127.20	120.30
3	A1	1368	A	C4-C5-C6	-13.80	110.10	117.00
25	BB	272	A	C5-C6-N1	13.80	124.60	117.70
25	BB	1490	A	N1-C6-N6	-13.80	110.32	118.60
3	A1	1431	A	N1-C6-N6	-13.79	110.33	118.60
3	A1	250	A	C5-C6-N1	13.78	124.59	117.70
25	BB	1918	A	O4'-C1'-N9	13.78	119.22	108.20
25	BB	2558	C	N3-C2-O2	-13.78	112.26	121.90
25	BB	1272	A	C5-C6-N1	13.77	124.58	117.70
3	A1	964	A	N1-C6-N6	-13.76	110.34	118.60
25	BB	866	A	C4-C5-C6	-13.76	110.12	117.00
25	BB	1155	A	N1-C6-N6	-13.76	110.34	118.60
3	A1	44	A	C4-C5-C6	-13.75	110.12	117.00
24	BA	101	A	C4-C5-C6	-13.75	110.12	117.00
30	BG	30	ARG	NE-CZ-NH1	13.75	127.17	120.30
12	AK	72	ARG	NE-CZ-NH1	13.74	127.17	120.30
25	BB	971	G	N1-C6-O6	-13.74	111.66	119.90
25	BB	74	A	O4'-C1'-N9	13.73	119.19	108.20
18	AS	144	GLU	OE1-CD-OE2	-13.73	106.82	123.30
25	BB	556	A	N1-C6-N6	-13.73	110.36	118.60
25	BB	473	G	N1-C6-O6	-13.73	111.66	119.90
25	BB	1018	U	N3-C2-O2	-13.73	112.59	122.20
3	A1	764	C	C2-N3-C4	-13.72	113.04	119.90
3	A1	719	C	N3-C2-O2	-13.71	112.30	121.90
3	A1	1302	C	N3-C2-O2	-13.71	112.30	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2706	A	N1-C6-N6	-13.71	110.37	118.60
42	BS	59	ARG	NE-CZ-NH1	13.71	127.16	120.30
1	AP	23	A	C5-C6-N1	13.71	124.55	117.70
25	BB	2350	C	N3-C4-C5	13.71	127.38	121.90
25	BB	909	A	N1-C6-N6	-13.70	110.38	118.60
25	BB	1739	A	C5-C6-N1	13.70	124.55	117.70
1	AP	11	C	C6-N1-C2	-13.70	114.82	120.30
25	BB	1206	G	N1-C6-O6	-13.70	111.68	119.90
3	A1	82	G	N1-C6-O6	-13.70	111.68	119.90
25	BB	1387	A	C5-C6-N1	13.70	124.55	117.70
25	BB	1810	A	N1-C6-N6	-13.70	110.38	118.60
3	A1	640	A	C4-C5-C6	-13.70	110.15	117.00
3	A1	1227	A	N1-C6-N6	-13.69	110.38	118.60
41	BR	44	ARG	NE-CZ-NH1	13.69	127.15	120.30
25	BB	219	A	C4-C5-C6	-13.69	110.16	117.00
1	AA	24	G	N7-C8-N9	13.68	119.94	113.10
3	A1	1250	A	C5-C6-N6	13.68	134.64	123.70
25	BB	776	G	N1-C6-O6	-13.68	111.69	119.90
25	BB	1583	A	C5-C6-N1	13.68	124.54	117.70
3	A1	970	C	N3-C4-N4	-13.67	108.43	118.00
20	AU	73	GLU	OE1-CD-OE2	-13.67	106.90	123.30
3	A1	1377	A	N1-C6-N6	-13.66	110.40	118.60
25	BB	2635	A	C4-C5-C6	-13.66	110.17	117.00
25	BB	2245	U	O4'-C1'-N1	13.66	119.13	108.20
3	A1	728	A	N1-C6-N6	-13.65	110.41	118.60
22	AW	11	ARG	NE-CZ-NH2	13.65	127.12	120.30
3	A1	795	C	C6-N1-C2	-13.64	114.84	120.30
25	BB	2725	A	N1-C6-N6	-13.64	110.42	118.60
34	BK	23	GLU	OE1-CD-OE2	-13.63	106.94	123.30
1	AP	58	A	C5-C6-N1	13.63	124.52	117.70
25	BB	2144	G	C8-N9-C4	-13.63	100.95	106.40
45	BV	12	ARG	NE-CZ-NH2	13.63	127.11	120.30
3	A1	559	A	C5-C6-N1	13.62	124.51	117.70
25	BB	701	G	O4'-C1'-N9	13.62	119.10	108.20
25	BB	1307	A	N1-C6-N6	-13.62	110.43	118.60
25	BB	2730	C	N3-C2-O2	-13.62	112.37	121.90
3	A1	1271	A	N1-C6-N6	-13.61	110.43	118.60
17	AR	96	ARG	NE-CZ-NH1	13.61	127.11	120.30
25	BB	1196	C	N3-C4-N4	-13.61	108.47	118.00
1	AP	21	A	N1-C6-N6	-13.61	110.44	118.60
3	A1	356	A	N1-C6-N6	-13.61	110.44	118.60
25	BB	819	A	N1-C6-N6	-13.60	110.44	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	74	A	N1-C6-N6	-13.60	110.44	118.60
3	A1	1155	A	N1-C6-N6	-13.60	110.44	118.60
25	BB	2559	C	N3-C4-N4	-13.59	108.48	118.00
3	A1	383	A	N1-C6-N6	-13.59	110.45	118.60
25	BB	501	A	N1-C6-N6	-13.59	110.45	118.60
25	BB	685	A	C5-C6-N1	13.59	124.49	117.70
25	BB	44	A	N1-C6-N6	-13.58	110.45	118.60
3	A1	372	C	O4'-C1'-N1	13.56	119.05	108.20
25	BB	1274	A	N1-C6-N6	-13.56	110.46	118.60
3	A1	704	A	N1-C6-N6	-13.56	110.47	118.60
3	A1	1456	A	N1-C6-N6	-13.56	110.47	118.60
2	AM	13	U	N1-C2-N3	13.55	123.03	114.90
3	A1	1333	A	N1-C6-N6	-13.55	110.47	118.60
25	BB	1210	G	O4'-C1'-N9	13.55	119.04	108.20
3	A1	1229	A	O4'-C1'-N9	13.55	119.04	108.20
25	BB	699	A	N1-C6-N6	-13.54	110.47	118.60
3	A1	1418	A	C4-C5-N7	-13.54	103.93	110.70
25	BB	734	A	N1-C6-N6	-13.54	110.48	118.60
3	A1	376	G	O4'-C1'-N9	13.53	119.02	108.20
25	BB	645	C	N3-C4-C5	13.53	127.31	121.90
18	AS	28	ARG	NE-CZ-NH1	13.53	127.06	120.30
25	BB	1342	A	C5-C6-N1	13.52	124.46	117.70
19	AT	45	ARG	NE-CZ-NH1	13.52	127.06	120.30
1	AE	21	A	C5-C6-N1	13.52	124.46	117.70
3	A1	712	A	N1-C6-N6	-13.52	110.49	118.60
24	BA	78	A	N1-C6-N6	-13.52	110.49	118.60
25	BB	2335	A	N1-C6-N6	-13.52	110.49	118.60
3	A1	1152	A	C5-C6-N1	13.51	124.46	117.70
25	BB	907	G	N1-C6-O6	-13.51	111.79	119.90
1	AA	58	A	C5-C6-N1	13.51	124.45	117.70
25	BB	41	C	C2-N3-C4	-13.51	113.15	119.90
25	BB	1885	A	N1-C6-N6	-13.51	110.50	118.60
25	BB	900	A	N1-C6-N6	-13.50	110.50	118.60
25	BB	2499	C	O4'-C1'-N1	13.50	119.00	108.20
13	AL	77	ARG	NE-CZ-NH1	13.50	127.05	120.30
25	BB	2486	C	C5-C6-N1	-13.50	114.25	121.00
25	BB	2776	A	N1-C6-N6	-13.50	110.50	118.60
3	A1	1362	A	C5-C6-N1	13.50	124.45	117.70
3	A1	839	C	O4'-C1'-N1	13.50	119.00	108.20
25	BB	1067	A	N1-C6-N6	-13.49	110.50	118.60
25	BB	602	A	C4-C5-C6	-13.49	110.26	117.00
25	BB	1163	G	N3-C2-N2	-13.48	110.46	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2433	A	C5-C6-N1	13.48	124.44	117.70
25	BB	219	A	C5-C6-N1	13.48	124.44	117.70
25	BB	2335	A	C5-C6-N1	13.48	124.44	117.70
3	A1	496	A	C4-C5-C6	-13.48	110.26	117.00
25	BB	1144	A	N1-C6-N6	-13.47	110.52	118.60
25	BB	2663	G	O4'-C1'-N9	13.47	118.97	108.20
3	A1	600	A	C5-C6-N1	13.46	124.43	117.70
25	BB	1073	A	N1-C6-N6	-13.46	110.52	118.60
54	B5	102	ARG	NE-CZ-NH1	13.46	127.03	120.30
25	BB	1015	U	O4'-C1'-N1	13.45	118.96	108.20
3	A1	857	C	N3-C4-C5	13.45	127.28	121.90
3	A1	718	A	C5-C6-N1	13.44	124.42	117.70
25	BB	2108	A	C5-C6-N1	13.44	124.42	117.70
25	BB	94	A	N1-C6-N6	-13.44	110.54	118.60
9	AH	79	ARG	NE-CZ-NH2	13.43	127.02	120.30
25	BB	1669	A	N1-C6-N6	-13.43	110.54	118.60
25	BB	130	C	N3-C4-C5	13.43	127.27	121.90
1	AA	1	G	C5'-C4'-O4'	13.42	125.20	109.10
3	A1	701	U	N3-C2-O2	-13.42	112.81	122.20
25	BB	1549	A	C5-C6-N1	13.42	124.41	117.70
25	BB	1665	A	N1-C6-N6	-13.42	110.55	118.60
3	A1	984	C	N3-C2-O2	-13.42	112.51	121.90
25	BB	1728	C	N3-C4-N4	-13.41	108.61	118.00
25	BB	2775	G	N1-C6-O6	-13.41	111.85	119.90
25	BB	2827	C	O4'-C1'-N1	13.41	118.93	108.20
3	A1	1395	C	N3-C4-C5	13.40	127.26	121.90
25	BB	1552	A	N1-C6-N6	-13.40	110.56	118.60
3	A1	205	A	N1-C6-N6	-13.39	110.56	118.60
25	BB	1870	C	N3-C4-C5	13.39	127.26	121.90
25	BB	2749	A	N1-C6-N6	-13.39	110.56	118.60
25	BB	270	A	N1-C6-N6	-13.39	110.56	118.60
54	B5	64	ARG	NE-CZ-NH2	13.39	127.00	120.30
3	A1	495	A	N1-C6-N6	-13.39	110.57	118.60
25	BB	1126	A	N1-C6-N6	-13.39	110.57	118.60
25	BB	2157	G	N1-C6-O6	-13.38	111.87	119.90
25	BB	2421	G	N1-C6-O6	-13.38	111.87	119.90
3	A1	230	G	N1-C6-O6	-13.38	111.87	119.90
25	BB	2065	C	N3-C4-C5	13.38	127.25	121.90
1	AE	70	C	N3-C2-O2	-13.38	112.54	121.90
25	BB	492	A	C4-C5-C6	-13.37	110.31	117.00
24	BA	62	C	C2-N3-C4	-13.37	113.21	119.90
3	A1	1306	A	N1-C6-N6	-13.37	110.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1502	A	N1-C6-N6	-13.37	110.58	118.60
9	AH	16	ARG	NE-CZ-NH2	13.37	126.98	120.30
55	B6	120	ARG	NE-CZ-NH1	13.36	126.98	120.30
3	A1	1081	A	C5-C6-N1	13.36	124.38	117.70
25	BB	233	A	C5-C6-N1	13.36	124.38	117.70
25	BB	882	G	N1-C6-O6	-13.35	111.89	119.90
3	A1	382	A	C5-C6-N1	13.35	124.37	117.70
25	BB	2319	G	O4'-C1'-N9	13.35	118.88	108.20
25	BB	2890	G	N1-C6-O6	-13.35	111.89	119.90
3	A1	702	A	N1-C6-N6	-13.34	110.59	118.60
25	BB	505	A	N1-C6-N6	-13.34	110.59	118.60
25	BB	1770	G	N1-C6-O6	-13.34	111.89	119.90
3	A1	844	G	N1-C6-O6	-13.34	111.90	119.90
3	A1	1316	G	N1-C6-O6	-13.34	111.90	119.90
3	A1	1274	A	C5-C6-N1	13.34	124.37	117.70
25	BB	649	G	N1-C6-O6	-13.34	111.90	119.90
25	BB	1067	A	C5-C6-N1	13.34	124.37	117.70
3	A1	922	G	C8-N9-C4	-13.32	101.07	106.40
3	A1	50	A	C5-C6-N1	13.32	124.36	117.70
25	BB	1871	A	C4-C5-C6	-13.32	110.34	117.00
3	A1	1286	U	O4'-C1'-N1	13.31	118.85	108.20
3	A1	1342	C	N3-C4-C5	13.31	127.22	121.90
3	A1	960	U	O4'-C1'-N1	13.31	118.85	108.20
3	A1	1236	A	N1-C6-N6	-13.31	110.61	118.60
25	BB	49	A	C5-C6-N1	13.31	124.36	117.70
25	BB	1914	C	O4'-C1'-N1	13.31	118.85	108.20
25	BB	1699	G	O4'-C1'-N9	13.30	118.84	108.20
25	BB	2726	A	O4'-C1'-N9	13.31	118.84	108.20
1	AP	61	C	N3-C4-C5	13.30	127.22	121.90
25	BB	920	A	N1-C6-N6	-13.30	110.62	118.60
17	AR	72	ARG	NE-CZ-NH1	13.29	126.95	120.30
3	A1	1397	C	N3-C2-O2	-13.29	112.60	121.90
3	A1	579	A	N1-C6-N6	-13.29	110.63	118.60
3	A1	914	A	C5-C6-N1	13.29	124.34	117.70
25	BB	602	A	N1-C6-N6	-13.29	110.63	118.60
25	BB	2110	G	N9-C4-C5	13.29	110.71	105.40
25	BB	1522	A	C5-C6-N1	13.28	124.34	117.70
3	A1	915	A	N1-C6-N6	-13.28	110.63	118.60
41	BR	29	ARG	NE-CZ-NH1	13.28	126.94	120.30
25	BB	1355	G	N3-C2-N2	-13.28	110.61	119.90
25	BB	797	G	N1-C6-O6	-13.27	111.94	119.90
3	A1	1005	A	N1-C6-N6	-13.27	110.64	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1342	C	N3-C2-O2	-13.27	112.61	121.90
25	BB	792	A	C5-C6-N1	13.27	124.33	117.70
3	A1	270	A	N1-C6-N6	-13.26	110.64	118.60
3	A1	482	A	C5-C6-N1	13.26	124.33	117.70
3	A1	1513	A	C5-C6-N1	13.26	124.33	117.70
25	BB	970	U	O4'-C1'-N1	13.26	118.81	108.20
3	A1	533	A	C4-C5-C6	-13.26	110.37	117.00
3	A1	766	A	N1-C6-N6	-13.25	110.65	118.60
3	A1	987	G	C6-C5-N7	13.24	138.34	130.40
25	BB	1213	A	C5-C6-N1	13.24	124.32	117.70
8	AG	74	ARG	NE-CZ-NH2	13.24	126.92	120.30
25	BB	725	G	N1-C6-O6	-13.23	111.96	119.90
25	BB	2095	A	N1-C6-N6	-13.23	110.66	118.60
3	A1	448	A	N1-C6-N6	-13.23	110.66	118.60
3	A1	779	C	N3-C2-O2	-13.23	112.64	121.90
3	A1	51	A	C5-C6-N1	13.23	124.31	117.70
3	A1	257	G	N3-C2-N2	-13.22	110.64	119.90
25	BB	863	A	C5-C6-N1	13.22	124.31	117.70
3	A1	974	A	C5-C6-N1	13.22	124.31	117.70
25	BB	1006	C	N3-C2-O2	-13.22	112.65	121.90
55	B6	98	GLU	OE1-CD-OE2	-13.21	107.44	123.30
3	A1	628	G	N1-C6-O6	-13.21	111.97	119.90
25	BB	1319	C	N3-C2-O2	-13.21	112.66	121.90
25	BB	1508	A	C5-C6-N6	13.21	134.27	123.70
3	A1	139	A	N1-C6-N6	-13.21	110.68	118.60
25	BB	475	C	N3-C2-O2	-13.20	112.66	121.90
3	A1	139	A	C5-C6-N1	13.20	124.30	117.70
25	BB	1774	C	N1-C2-O2	13.20	126.82	118.90
25	BB	2524	G	N1-C6-O6	-13.20	111.98	119.90
25	BB	833	A	N1-C6-N6	-13.20	110.68	118.60
3	A1	478	A	C5-C6-N1	13.19	124.30	117.70
3	A1	906	A	C5-C6-N1	13.19	124.30	117.70
3	A1	1239	A	C5-C6-N1	13.18	124.29	117.70
1	AA	4	G	N1-C2-N3	13.18	131.81	123.90
3	A1	993	G	O4'-C1'-N9	13.18	118.74	108.20
3	A1	1513	A	N1-C6-N6	-13.18	110.69	118.60
37	BN	34	GLU	OE1-CD-OE2	-13.18	107.48	123.30
3	A1	1197	A	C5-C6-N1	13.17	124.28	117.70
25	BB	691	C	N3-C4-N4	-13.17	108.78	118.00
25	BB	1635	A	N1-C6-N6	-13.17	110.70	118.60
3	A1	7	A	N1-C6-N6	-13.17	110.70	118.60
25	BB	476	G	C6-C5-N7	13.16	138.30	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	86	G	O4'-C1'-N9	13.16	118.73	108.20
3	A1	866	C	O4'-C1'-N1	13.16	118.72	108.20
25	BB	2825	G	N3-C2-N2	-13.15	110.69	119.90
3	A1	860	A	N1-C6-N6	-13.15	110.71	118.60
25	BB	1941	C	N1-C2-O2	13.14	126.79	118.90
3	A1	1396	A	C5-C6-N1	13.14	124.27	117.70
25	BB	418	C	N3-C2-O2	-13.14	112.70	121.90
25	BB	984	A	N1-C6-N6	-13.14	110.72	118.60
3	A1	794	A	N1-C6-N6	-13.14	110.72	118.60
3	A1	66	A	N1-C6-N6	-13.13	110.72	118.60
25	BB	1014	A	N1-C6-N6	-13.13	110.72	118.60
25	BB	1738	G	N1-C6-O6	-13.13	112.02	119.90
25	BB	324	A	C5-C6-N1	13.12	124.26	117.70
25	BB	881	G	N3-C2-N2	-13.12	110.72	119.90
25	BB	2110	G	C4-C5-N7	-13.12	105.55	110.80
25	BB	1070	A	N1-C6-N6	-13.12	110.73	118.60
4	AB	224	ARG	NE-CZ-NH2	13.12	126.86	120.30
25	BB	1048	A	N1-C6-N6	-13.11	110.73	118.60
3	A1	1225	A	C5-C6-N1	13.11	124.25	117.70
3	A1	33	A	N1-C6-N6	-13.11	110.73	118.60
25	BB	775	G	O4'-C1'-N9	13.11	118.68	108.20
3	A1	539	A	C5-C6-N1	13.10	124.25	117.70
25	BB	2534	A	N1-C6-N6	-13.10	110.74	118.60
3	A1	738	C	N3-C4-C5	13.09	127.14	121.90
3	A1	795	C	N3-C4-N4	-13.09	108.84	118.00
25	BB	325	G	N1-C6-O6	-13.09	112.04	119.90
25	BB	447	A	N1-C6-N6	-13.09	110.75	118.60
25	BB	532	A	N1-C6-N6	-13.09	110.75	118.60
25	BB	1571	A	N1-C6-N6	-13.09	110.75	118.60
3	A1	1188	A	C5-C6-N1	13.08	124.24	117.70
25	BB	278	A	N1-C6-N6	-13.08	110.75	118.60
1	AA	23	A	N1-C6-N6	-13.08	110.75	118.60
1	AE	19	G	C6-C5-N7	13.08	138.25	130.40
3	A1	564	C	N3-C2-O2	-13.08	112.74	121.90
28	BE	48	ARG	NE-CZ-NH1	13.08	126.84	120.30
3	A1	519	C	N3-C2-O2	-13.08	112.75	121.90
3	A1	1302	C	C2-N3-C4	-13.07	113.36	119.90
3	A1	122	G	N3-C2-N2	-13.07	110.75	119.90
3	A1	363	A	N1-C6-N6	-13.07	110.76	118.60
3	A1	490	C	N3-C2-O2	-13.07	112.75	121.90
25	BB	727	A	C5-C6-N1	13.07	124.24	117.70
25	BB	1650	A	C4-C5-C6	-13.07	110.47	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1498	C	N3-C2-O2	-13.07	112.75	121.90
25	BB	1413	A	N1-C6-N6	-13.06	110.76	118.60
25	BB	2145	C	N3-C4-C5	13.06	127.12	121.90
3	A1	648	A	N1-C6-N6	-13.06	110.76	118.60
25	BB	1587	G	N1-C6-O6	-13.06	112.06	119.90
25	BB	2785	C	N3-C4-C5	13.06	127.12	121.90
1	AA	25	C	N3-C2-O2	-13.06	112.76	121.90
25	BB	523	C	N3-C4-N4	-13.06	108.86	118.00
51	B2	114	ARG	NE-CZ-NH1	13.06	126.83	120.30
3	A1	805	C	N3-C2-O2	-13.05	112.76	121.90
25	BB	354	A	C4-C5-C6	-13.05	110.47	117.00
3	A1	1254	A	C4-C5-C6	-13.05	110.47	117.00
3	A1	1340	A	OP1-P-OP2	-13.05	100.02	119.60
25	BB	1590	A	N1-C6-N6	-13.05	110.77	118.60
39	BP	76	ARG	NE-CZ-NH1	13.05	126.83	120.30
3	A1	1081	A	C4-C5-C6	-13.05	110.47	117.00
3	A1	530	G	C5-C6-N1	13.05	118.02	111.50
1	AA	64	A	C4-C5-C6	-13.05	110.48	117.00
25	BB	1383	A	C4-C5-C6	-13.04	110.48	117.00
25	BB	2753	A	C5-C6-N1	13.04	124.22	117.70
25	BB	388	G	N1-C6-O6	-13.03	112.08	119.90
24	BA	34	A	N1-C6-N6	-13.02	110.79	118.60
25	BB	2333	A	C5-C6-N1	13.02	124.21	117.70
25	BB	944	C	N3-C4-C5	13.02	127.11	121.90
3	A1	173	U	O4'-C1'-N1	13.01	118.61	108.20
25	BB	683	U	O4'-C1'-N1	13.01	118.60	108.20
25	BB	905	A	C5-C6-N1	13.00	124.20	117.70
1	AP	21	A	C5-C6-N1	13.00	124.20	117.70
3	A1	600	A	N1-C6-N6	-13.00	110.80	118.60
3	A1	159	G	N3-C2-N2	-13.00	110.80	119.90
25	BB	2501	C	N1-C2-O2	13.00	126.70	118.90
3	A1	1176	A	N1-C6-N6	-13.00	110.80	118.60
25	BB	637	A	C5-C6-N1	13.00	124.20	117.70
25	BB	2042	A	N1-C6-N6	-13.00	110.80	118.60
3	A1	1401	G	N1-C6-O6	-12.99	112.10	119.90
25	BB	1886	U	O4'-C1'-N1	12.99	118.59	108.20
25	BB	2064	C	N3-C2-O2	-12.99	112.81	121.90
25	BB	2267	A	C5-C6-N1	12.99	124.20	117.70
25	BB	655	A	C6-C5-N7	12.99	141.39	132.30
25	BB	423	A	C5-C6-N1	12.99	124.19	117.70
25	BB	1544	A	C5-C6-N1	12.99	124.19	117.70
3	A1	342	C	N3-C4-N4	-12.98	108.91	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	672	U	O4'-C1'-N1	12.98	118.59	108.20
25	BB	352	A	C5-C6-N1	12.98	124.19	117.70
3	A1	994	A	N1-C6-N6	-12.98	110.81	118.60
25	BB	66	C	O4'-C1'-N1	12.98	118.58	108.20
3	A1	396	C	O4'-C1'-N1	12.97	118.58	108.20
25	BB	2013	A	N1-C6-N6	-12.97	110.82	118.60
3	A1	393	A	N1-C6-N6	-12.97	110.82	118.60
3	A1	787	A	C4-C5-C6	-12.97	110.52	117.00
25	BB	1718	G	N9-C4-C5	12.96	110.58	105.40
25	BB	1593	A	C4-C5-C6	-12.96	110.52	117.00
3	A1	1403	C	N3-C2-O2	-12.96	112.83	121.90
25	BB	1153	C	O4'-C1'-N1	12.96	118.56	108.20
25	BB	2774	C	N3-C4-C5	12.95	127.08	121.90
45	BV	39	ARG	NE-CZ-NH1	12.96	126.78	120.30
3	A1	1058	G	O4'-C1'-N9	12.95	118.56	108.20
3	A1	899	C	N3-C2-O2	-12.95	112.84	121.90
3	A1	1375	A	N1-C6-N6	-12.95	110.83	118.60
25	BB	1969	A	N1-C6-N6	-12.95	110.83	118.60
3	A1	679	C	N3-C2-O2	-12.94	112.84	121.90
20	AU	110	ARG	NE-CZ-NH1	12.94	126.77	120.30
3	A1	978	A	C5-C6-N1	12.93	124.17	117.70
3	A1	1128	C	N3-C2-O2	-12.93	112.85	121.90
25	BB	1548	A	N1-C6-N6	-12.93	110.84	118.60
1	AA	61	C	N3-C2-O2	-12.93	112.85	121.90
25	BB	346	A	O4'-C1'-N9	12.93	118.54	108.20
3	A1	363	A	O4'-C1'-N9	12.93	118.54	108.20
25	BB	2799	A	C4-C5-C6	-12.93	110.54	117.00
25	BB	1655	A	N1-C6-N6	-12.92	110.85	118.60
3	A1	704	A	C5-C6-N1	12.92	124.16	117.70
25	BB	1321	A	C5-C6-N1	12.92	124.16	117.70
22	AW	121	ARG	NE-CZ-NH1	12.92	126.76	120.30
25	BB	1998	A	C5-C6-N1	12.92	124.16	117.70
3	A1	279	A	C4-C5-C6	-12.91	110.55	117.00
3	A1	197	A	N1-C6-N6	-12.91	110.85	118.60
25	BB	991	C	OP1-P-OP2	-12.91	100.24	119.60
3	A1	611	C	C6-N1-C2	-12.91	115.14	120.30
27	BD	71	ARG	NE-CZ-NH1	12.91	126.75	120.30
29	BF	59	ARG	NE-CZ-NH1	12.90	126.75	120.30
3	A1	554	A	N1-C6-N6	-12.90	110.86	118.60
3	A1	713	G	N1-C2-N2	-12.90	104.59	116.20
25	BB	1958	C	N3-C2-O2	-12.90	112.87	121.90
3	A1	918	A	N1-C6-N6	-12.89	110.86	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1821	A	C4-C5-C6	-12.89	110.55	117.00
3	A1	536	C	N3-C4-N4	-12.89	108.98	118.00
24	BA	68	C	N3-C4-C5	12.89	127.06	121.90
3	A1	106	C	N3-C2-O2	-12.88	112.88	121.90
3	A1	940	C	N3-C4-C5	12.88	127.05	121.90
3	A1	1418	A	C2-N3-C4	12.88	117.04	110.60
25	BB	844	A	C5-C6-N1	12.88	124.14	117.70
25	BB	1378	A	O4'-C1'-N9	12.88	118.51	108.20
25	BB	1987	A	C5-C6-N1	12.88	124.14	117.70
25	BB	2023	C	C2-N3-C4	-12.88	113.46	119.90
3	A1	1112	C	N3-C4-C5	12.88	127.05	121.90
3	A1	195	A	N1-C6-N6	-12.88	110.87	118.60
3	A1	470	C	N3-C2-O2	-12.88	112.88	121.90
25	BB	241	A	N1-C6-N6	-12.88	110.87	118.60
25	BB	1196	C	N3-C4-C5	12.88	127.05	121.90
25	BB	682	G	N1-C6-O6	-12.87	112.18	119.90
3	A1	169	C	O4'-C1'-N1	12.87	118.49	108.20
25	BB	535	G	N3-C2-N2	-12.86	110.89	119.90
25	BB	1866	A	C4-C5-C6	-12.87	110.57	117.00
6	AD	53	ARG	NH1-CZ-NH2	-12.86	105.25	119.40
25	BB	2055	C	N1-C2-O2	12.86	126.62	118.90
25	BB	1609	A	N1-C6-N6	-12.86	110.88	118.60
25	BB	1639	C	C2-N3-C4	-12.86	113.47	119.90
25	BB	1838	C	N3-C2-O2	-12.86	112.90	121.90
1	AP	23	A	C4-C5-C6	-12.86	110.57	117.00
3	A1	503	C	N3-C4-C5	12.86	127.04	121.90
25	BB	2518	A	N1-C6-N6	-12.86	110.89	118.60
25	BB	1067	A	C5-N7-C8	-12.85	97.47	103.90
25	BB	1746	A	C4-C5-C6	-12.85	110.57	117.00
3	A1	8	A	N1-C6-N6	-12.85	110.89	118.60
3	A1	651	C	N3-C2-O2	-12.85	112.91	121.90
25	BB	226	A	C5-C6-N1	12.85	124.12	117.70
3	A1	767	A	N1-C6-N6	-12.84	110.89	118.60
25	BB	2113	U	C2-N3-C4	-12.84	119.29	127.00
25	BB	2497	A	N1-C6-N6	-12.84	110.89	118.60
3	A1	1430	A	N1-C6-N6	-12.84	110.90	118.60
25	BB	1969	A	C5-C6-N1	12.84	124.12	117.70
3	A1	386	C	N3-C4-C5	12.83	127.03	121.90
25	BB	244	A	N1-C6-N6	-12.83	110.90	118.60
25	BB	2806	C	N3-C4-C5	12.82	127.03	121.90
25	BB	802	A	C4-C5-C6	-12.82	110.59	117.00
34	BK	80	ARG	NE-CZ-NH1	-12.82	113.89	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	830	G	O4'-C1'-N9	12.81	118.45	108.20
3	A1	926	G	C5-C6-N1	12.80	117.90	111.50
25	BB	2108	A	C4-C5-C6	-12.80	110.60	117.00
25	BB	454	A	N1-C6-N6	-12.80	110.92	118.60
25	BB	1925	C	C6-N1-C2	-12.80	115.18	120.30
24	BA	45	A	N1-C6-N6	-12.80	110.92	118.60
52	B3	94	ARG	NE-CZ-NH1	12.80	126.70	120.30
25	BB	362	A	C5-C6-N1	12.79	124.10	117.70
25	BB	1030	C	N3-C4-C5	12.79	127.02	121.90
25	BB	2503	A	N1-C6-N6	-12.79	110.93	118.60
24	BA	3	C	N3-C4-N4	-12.79	109.05	118.00
25	BB	925	A	N1-C6-N6	-12.79	110.93	118.60
25	BB	1176	U	O4'-C1'-N1	12.79	118.43	108.20
3	A1	640	A	C5-C6-N1	12.79	124.09	117.70
25	BB	287	G	N1-C6-O6	-12.78	112.23	119.90
25	BB	448	U	N3-C2-O2	-12.78	113.25	122.20
25	BB	1960	A	N1-C6-N6	-12.78	110.93	118.60
25	BB	426	C	N3-C4-C5	12.78	127.01	121.90
25	BB	2037	A	N1-C6-N6	-12.78	110.93	118.60
25	BB	471	A	N1-C6-N6	-12.78	110.94	118.60
25	BB	2478	A	N1-C6-N6	-12.78	110.94	118.60
25	BB	2346	A	N1-C6-N6	-12.77	110.94	118.60
25	BB	2809	A	C5-C6-N1	12.77	124.09	117.70
1	AA	65	G	C6-N1-C2	-12.77	117.44	125.10
3	A1	1465	A	N1-C6-N6	-12.77	110.94	118.60
3	A1	270	A	O4'-C1'-N9	12.77	118.41	108.20
31	BH	9	ARG	NE-CZ-NH1	12.76	126.68	120.30
25	BB	1889	A	N1-C6-N6	-12.76	110.95	118.60
25	BB	1936	A	C5-C6-N1	12.76	124.08	117.70
25	BB	1419	A	N1-C6-N6	-12.75	110.95	118.60
3	A1	391	G	N3-C2-N2	-12.75	110.97	119.90
25	BB	1802	A	C5-C6-N1	12.75	124.07	117.70
37	BN	62	ARG	NE-CZ-NH2	12.75	126.67	120.30
1	AE	67	A	N1-C6-N6	-12.75	110.95	118.60
3	A1	1375	A	C5-C6-N1	12.75	124.07	117.70
24	BA	62	C	N3-C2-O2	-12.75	112.98	121.90
28	BE	132	ARG	NE-CZ-NH2	12.75	126.67	120.30
25	BB	1045	C	N3-C2-O2	-12.74	112.98	121.90
3	A1	1094	G	N1-C6-O6	-12.74	112.26	119.90
3	A1	872	A	C4-C5-C6	-12.74	110.63	117.00
1	AE	35	A	N1-C6-N6	-12.73	110.96	118.60
3	A1	744	C	N3-C4-C5	12.73	126.99	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1151	A	C5-C6-N1	12.73	124.07	117.70
25	BB	1676	A	N1-C6-N6	-12.72	110.97	118.60
3	A1	1369	C	C6-N1-C2	-12.72	115.21	120.30
25	BB	821	A	N1-C6-N6	-12.71	110.97	118.60
25	BB	2893	A	C5-C6-N1	12.71	124.06	117.70
25	BB	837	C	N1-C2-O2	12.71	126.52	118.90
25	BB	699	A	C5-C6-N1	12.71	124.05	117.70
3	A1	907	A	N1-C6-N6	-12.70	110.98	118.60
3	A1	1397	C	N1-C2-N3	12.70	128.09	119.20
25	BB	1591	A	N1-C6-N6	-12.70	110.98	118.60
25	BB	1517	G	N3-C2-N2	-12.70	111.01	119.90
25	BB	1557	C	N3-C4-C5	12.70	126.98	121.90
25	BB	508	A	C4-C5-C6	-12.70	110.65	117.00
25	BB	362	A	N1-C6-N6	-12.69	110.98	118.60
25	BB	529	A	N1-C6-N6	-12.69	110.98	118.60
25	BB	1640	A	C5-C6-N1	12.69	124.05	117.70
25	BB	1877	A	C5-C6-N1	12.69	124.04	117.70
25	BB	2572	A	C5-C6-N1	12.69	124.05	117.70
25	BB	492	A	N1-C6-N6	-12.69	110.99	118.60
25	BB	616	A	N1-C6-N6	-12.69	110.99	118.60
25	BB	626	A	N1-C6-N6	-12.69	110.99	118.60
3	A1	640	A	N1-C2-N3	-12.68	122.96	129.30
25	BB	103	A	C5-C6-N1	12.68	124.04	117.70
3	A1	872	A	C5-C6-N1	12.68	124.04	117.70
3	A1	1368	A	C5-C6-N1	12.68	124.04	117.70
25	BB	1594	U	C5-C4-O4	12.68	133.51	125.90
25	BB	1977	A	N1-C6-N6	-12.68	110.99	118.60
25	BB	32	C	N3-C2-O2	-12.68	113.03	121.90
25	BB	918	A	C5-C6-N1	12.68	124.04	117.70
25	BB	1626	A	O4'-C1'-N9	12.68	118.34	108.20
25	BB	2144	G	N9-C4-C5	12.67	110.47	105.40
25	BB	274	C	N3-C4-C5	12.67	126.97	121.90
25	BB	2469	A	C4-C5-C6	-12.67	110.67	117.00
25	BB	2380	C	N3-C4-N4	-12.67	109.13	118.00
3	A1	33	A	C5-C6-N1	12.66	124.03	117.70
25	BB	503	A	N1-C6-N6	-12.66	111.00	118.60
25	BB	1084	A	C5-C6-N1	12.66	124.03	117.70
25	BB	2386	A	C4-C5-C6	-12.66	110.67	117.00
25	BB	2602	A	C5-C6-N1	12.66	124.03	117.70
45	BV	3	ARG	NE-CZ-NH2	-12.66	113.97	120.30
25	BB	404	A	N1-C6-N6	-12.66	111.00	118.60
25	BB	672	C	N3-C2-O2	-12.66	113.04	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	BI	20	ARG	NE-CZ-NH2	12.66	126.63	120.30
3	A1	1397	C	C6-N1-C2	-12.65	115.24	120.30
25	BB	1156	A	N1-C6-N6	-12.65	111.01	118.60
24	BA	113	C	N3-C4-C5	12.65	126.96	121.90
25	BB	335	C	N3-C2-O2	-12.65	113.05	121.90
25	BB	550	C	N3-C2-O2	-12.64	113.05	121.90
25	BB	2702	G	O4'-C1'-N9	12.64	118.31	108.20
25	BB	2895	G	N1-C6-O6	-12.64	112.32	119.90
25	BB	1789	A	C5-C6-N1	12.64	124.02	117.70
25	BB	1774	C	N3-C2-O2	-12.63	113.06	121.90
3	A1	967	C	C2-N3-C4	-12.63	113.59	119.90
25	BB	944	C	C2-N3-C4	-12.63	113.59	119.90
3	A1	1178	G	N1-C6-O6	-12.62	112.33	119.90
25	BB	1384	A	C5-N7-C8	-12.62	97.59	103.90
3	A1	815	A	C5-C6-N1	12.62	124.01	117.70
3	A1	908	A	C5-C6-N1	12.61	124.01	117.70
25	BB	1646	C	N3-C4-C5	12.61	126.94	121.90
1	AP	14	A	N1-C6-N6	-12.60	111.04	118.60
25	BB	320	A	N1-C6-N6	-12.60	111.04	118.60
1	AP	43	G	N9-C4-C5	12.60	110.44	105.40
24	BA	63	C	C6-N1-C2	-12.60	115.26	120.30
25	BB	2566	A	N1-C6-N6	-12.60	111.04	118.60
1	AP	31	A	N1-C6-N6	-12.60	111.04	118.60
3	A1	117	G	N3-C2-N2	-12.60	111.08	119.90
25	BB	1143	A	C5-C6-N1	12.60	124.00	117.70
3	A1	129	A	C5-C6-N1	12.59	124.00	117.70
25	BB	2800	A	N1-C6-N6	-12.59	111.05	118.60
25	BB	957	C	N3-C2-O2	-12.59	113.09	121.90
25	BB	990	A	N1-C6-N6	-12.59	111.05	118.60
25	BB	1667	G	N1-C6-O6	-12.59	112.35	119.90
3	A1	857	C	N3-C4-N4	-12.58	109.19	118.00
25	BB	641	U	N3-C2-O2	-12.58	113.39	122.20
25	BB	1961	C	N3-C4-C5	12.58	126.93	121.90
3	A1	807	A	C4-C5-C6	-12.58	110.71	117.00
25	BB	1287	A	N1-C6-N6	-12.58	111.05	118.60
25	BB	2366	A	N1-C6-N6	-12.58	111.05	118.60
25	BB	353	C	N3-C4-C5	12.57	126.93	121.90
25	BB	2711	A	C5-C6-N1	12.56	123.98	117.70
3	A1	1342	C	C2-N3-C4	-12.56	113.62	119.90
25	BB	20	C	C2-N3-C4	-12.56	113.62	119.90
25	BB	541	A	N1-C6-N6	-12.56	111.06	118.60
25	BB	1096	A	C4-C5-C6	-12.56	110.72	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1978	A	N1-C6-N6	-12.56	111.07	118.60
6	AD	109	ARG	NE-CZ-NH2	12.55	126.58	120.30
25	BB	2654	A	C5-C6-N1	12.55	123.98	117.70
1	AA	27	C	C2-N3-C4	-12.55	113.62	119.90
25	BB	2101	A	C4-C5-C6	-12.55	110.72	117.00
25	BB	2049	G	C5-C6-N1	12.55	117.77	111.50
25	BB	2484	G	N1-C6-O6	-12.54	112.37	119.90
9	AH	88	ARG	NE-CZ-NH1	12.54	126.57	120.30
3	A1	115	G	C1'-O4'-C4'	-12.54	99.87	109.90
3	A1	1317	C	N3-C4-C5	12.54	126.92	121.90
3	A1	629	A	N1-C6-N6	-12.54	111.08	118.60
25	BB	2590	A	N1-C6-N6	-12.54	111.08	118.60
25	BB	2682	A	C5-C6-N1	12.54	123.97	117.70
3	A1	1011	C	N3-C2-O2	-12.53	113.13	121.90
25	BB	1656	C	C2-N3-C4	-12.53	113.64	119.90
20	AU	52	ARG	NE-CZ-NH1	12.53	126.56	120.30
25	BB	236	C	N3-C2-O2	-12.53	113.13	121.90
3	A1	1379	G	O4'-C1'-N9	12.52	118.22	108.20
25	BB	1459	G	N9-C4-C5	12.52	110.41	105.40
1	AP	5	A	N1-C6-N6	-12.52	111.09	118.60
3	A1	1404	C	N3-C4-N4	-12.52	109.24	118.00
25	BB	466	A	C5-C6-N1	12.52	123.96	117.70
25	BB	2090	A	N1-C6-N6	-12.52	111.09	118.60
25	BB	1555	G	N1-C6-O6	-12.51	112.39	119.90
25	BB	6	A	N1-C6-N6	-12.51	111.09	118.60
25	BB	1806	C	N3-C4-C5	12.51	126.90	121.90
23	AX	31	ARG	NE-CZ-NH1	12.51	126.55	120.30
25	BB	2205	A	C4-C5-C6	-12.51	110.75	117.00
25	BB	2247	A	C5-C6-N1	12.50	123.95	117.70
26	BC	19	ARG	NE-CZ-NH1	12.50	126.55	120.30
31	BH	25	ARG	NE-CZ-NH1	12.50	126.55	120.30
49	BZ	105	ARG	NE-CZ-NH1	12.50	126.55	120.30
3	A1	1482	G	N3-C4-C5	-12.50	122.35	128.60
3	A1	1004	A	C4-C5-C6	-12.50	110.75	117.00
25	BB	599	A	O4'-C1'-N9	12.50	118.20	108.20
1	AE	31	A	C5-C6-N1	12.49	123.95	117.70
3	A1	889	A	N1-C6-N6	-12.49	111.11	118.60
24	BA	60	C	N3-C4-C5	12.49	126.90	121.90
5	AC	68	ARG	NE-CZ-NH1	12.49	126.54	120.30
25	BB	2598	A	N1-C6-N6	-12.49	111.11	118.60
1	AE	74	C	N3-C4-N4	-12.48	109.26	118.00
3	A1	519	C	C2-N3-C4	-12.48	113.66	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1265	C	N3-C4-C5	12.48	126.89	121.90
3	A1	1141	C	N3-C4-C5	12.48	126.89	121.90
25	BB	631	A	C4-C5-C6	-12.48	110.76	117.00
3	A1	267	C	N3-C4-C5	12.48	126.89	121.90
25	BB	1098	A	N1-C6-N6	-12.48	111.11	118.60
25	BB	1261	C	N3-C2-O2	-12.48	113.17	121.90
25	BB	240	C	C6-N1-C2	-12.47	115.31	120.30
25	BB	7	G	O4'-C1'-N9	12.47	118.18	108.20
3	A1	462	G	O4'-C1'-N9	12.47	118.17	108.20
1	AP	25	C	N3-C4-N4	-12.46	109.28	118.00
25	BB	1040	A	N1-C6-N6	-12.46	111.12	118.60
3	A1	1502	A	N1-C6-N6	-12.46	111.12	118.60
3	A1	607	A	C5-C6-N1	12.46	123.93	117.70
17	AR	69	ARG	NE-CZ-NH1	12.46	126.53	120.30
3	A1	547	A	C4-C5-C6	-12.45	110.77	117.00
25	BB	910	A	N1-C6-N6	-12.45	111.13	118.60
25	BB	1739	A	N1-C6-N6	-12.45	111.13	118.60
3	A1	28	A	N1-C6-N6	-12.45	111.13	118.60
3	A1	197	A	C4-C5-C6	-12.45	110.78	117.00
25	BB	305	C	N3-C2-O2	-12.45	113.19	121.90
3	A1	581	G	N1-C6-O6	-12.44	112.43	119.90
25	BB	1086	A	C5-C6-N1	12.44	123.92	117.70
25	BB	2019	A	N1-C6-N6	-12.44	111.14	118.60
25	BB	2037	A	C5-C6-N1	12.44	123.92	117.70
25	BB	63	A	N1-C6-N6	-12.44	111.14	118.60
25	BB	1600	C	N3-C2-O2	-12.44	113.19	121.90
3	A1	78	A	C5-C6-N1	12.44	123.92	117.70
3	A1	110	C	C2-N3-C4	-12.44	113.68	119.90
25	BB	2807	U	C2-N3-C4	-12.44	119.54	127.00
25	BB	20	C	N3-C4-C5	12.43	126.87	121.90
25	BB	561	G	N1-C6-O6	-12.43	112.44	119.90
24	BA	69	G	N1-C6-O6	-12.43	112.44	119.90
25	BB	412	A	C4-C5-C6	-12.43	110.78	117.00
25	BB	2558	C	C5-C6-N1	-12.43	114.78	121.00
3	A1	386	C	C2-N3-C4	-12.43	113.69	119.90
25	BB	1580	A	C5-C6-N1	12.43	123.91	117.70
25	BB	38	A	N1-C6-N6	-12.42	111.15	118.60
25	BB	2173	A	C5-C6-N1	12.42	123.91	117.70
3	A1	1289	A	N1-C6-N6	-12.42	111.15	118.60
25	BB	650	C	N3-C4-N4	-12.42	109.31	118.00
25	BB	2870	C	N3-C2-O2	-12.42	113.21	121.90
3	A1	149	A	N1-C6-N6	-12.41	111.15	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	839	U	N3-C2-O2	-12.41	113.51	122.20
25	BB	1286	A	C5-C6-N1	12.41	123.91	117.70
25	BB	2606	C	N3-C4-N4	-12.40	109.32	118.00
3	A1	175	C	N3-C4-C5	12.40	126.86	121.90
25	BB	320	A	O4'-C1'-N9	12.40	118.12	108.20
25	BB	1057	A	C5-C6-N1	12.40	123.90	117.70
25	BB	1685	C	N3-C2-O2	-12.40	113.22	121.90
25	BB	2636	C	C2-N3-C4	-12.40	113.70	119.90
25	BB	599	A	C5-C6-N1	12.40	123.90	117.70
25	BB	1606	C	N3-C4-C5	12.40	126.86	121.90
25	BB	1885	A	C4-C5-C6	-12.40	110.80	117.00
3	A1	285	C	N1-C2-O2	12.40	126.34	118.90
25	BB	1579	A	C4-C5-C6	-12.39	110.80	117.00
25	BB	1737	G	C8-N9-C4	-12.39	101.44	106.40
25	BB	2148	G	N1-C6-O6	-12.39	112.47	119.90
1	AE	64	A	C5-C6-N1	12.39	123.89	117.70
25	BB	1189	A	N1-C6-N6	-12.39	111.17	118.60
25	BB	1686	C	N3-C4-N4	-12.39	109.33	118.00
25	BB	1890	A	C5-C6-N1	12.39	123.89	117.70
24	BA	47	C	N3-C2-O2	-12.39	113.23	121.90
25	BB	2471	A	C6-C5-N7	12.38	140.97	132.30
25	BB	269	C	N3-C2-O2	-12.38	113.24	121.90
2	AM	8	U	C4-C5-C6	12.38	127.12	119.70
3	A1	171	A	N1-C6-N6	-12.37	111.18	118.60
25	BB	130	C	N3-C4-N4	-12.38	109.34	118.00
55	B6	9	GLU	OE1-CD-OE2	-12.37	108.45	123.30
1	AA	34	G	N3-C2-N2	-12.37	111.24	119.90
3	A1	143	A	C4-C5-C6	-12.37	110.82	117.00
24	BA	46	A	C5-C6-N1	12.37	123.89	117.70
25	BB	889	C	C2-N3-C4	-12.37	113.72	119.90
25	BB	196	A	N1-C6-N6	-12.37	111.18	118.60
25	BB	1089	A	O4'-C1'-N9	12.37	118.09	108.20
1	AA	53	G	C5-C6-N1	12.36	117.68	111.50
3	A1	71	A	C4-C5-C6	-12.36	110.82	117.00
25	BB	1045	C	C2-N3-C4	-12.36	113.72	119.90
25	BB	1204	A	N1-C6-N6	-12.36	111.18	118.60
25	BB	11	C	C6-N1-C2	-12.36	115.36	120.30
3	A1	923	A	C4-C5-C6	-12.36	110.82	117.00
3	A1	982	U	N3-C2-O2	-12.36	113.55	122.20
15	AO	106	ARG	NE-CZ-NH1	12.36	126.48	120.30
25	BB	362	A	C4-C5-C6	-12.35	110.82	117.00
25	BB	568	U	O4'-C1'-N1	12.35	118.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	52	A	N1-C6-N6	-12.35	111.19	118.60
42	BS	49	ARG	NE-CZ-NH1	12.35	126.48	120.30
28	BE	60	ARG	NE-CZ-NH1	12.35	126.47	120.30
25	BB	50	U	C5-C6-N1	-12.35	116.53	122.70
25	BB	1067	A	N7-C8-N9	12.35	119.97	113.80
25	BB	1087	G	C4-C5-N7	-12.35	105.86	110.80
25	BB	1744	A	N1-C6-N6	-12.35	111.19	118.60
25	BB	2766	A	C4-C5-C6	-12.35	110.83	117.00
25	BB	253	C	N1-C2-O2	12.34	126.31	118.90
25	BB	886	A	N1-C6-N6	-12.34	111.19	118.60
3	A1	613	C	N3-C4-C5	12.34	126.84	121.90
25	BB	182	A	C5-C6-N1	12.34	123.87	117.70
3	A1	1344	C	O4'-C1'-N1	12.33	118.07	108.20
3	A1	578	C	N3-C2-O2	-12.33	113.27	121.90
17	AR	127	ARG	NE-CZ-NH1	12.33	126.46	120.30
25	BB	2169	A	C4-C5-C6	-12.33	110.83	117.00
3	A1	564	C	N1-C2-O2	12.33	126.30	118.90
25	BB	127	A	N1-C6-N6	-12.33	111.20	118.60
25	BB	1809	A	C4-C5-C6	-12.33	110.84	117.00
3	A1	1092	A	N1-C6-N6	-12.32	111.21	118.60
3	A1	80	A	N1-C6-N6	-12.32	111.21	118.60
25	BB	323	C	O4'-C1'-N1	12.32	118.06	108.20
25	BB	1088	A	C5-C6-N1	12.32	123.86	117.70
25	BB	1749	A	N1-C6-N6	-12.32	111.21	118.60
3	A1	10	A	C4-C5-C6	-12.31	110.84	117.00
25	BB	204	A	N1-C6-N6	-12.31	111.21	118.60
1	AA	61	C	N3-C4-C5	12.31	126.83	121.90
3	A1	279	A	C5-C6-N1	12.31	123.86	117.70
25	BB	804	A	C4-C5-C6	-12.31	110.84	117.00
25	BB	2352	A	C5-C6-N1	12.31	123.85	117.70
25	BB	2862	G	N1-C6-O6	-12.31	112.52	119.90
1	AP	5	A	C5-C6-N1	12.30	123.85	117.70
3	A1	572	A	C4-C5-C6	-12.30	110.85	117.00
24	BA	33	G	N3-C2-N2	-12.31	111.28	119.90
3	A1	1145	A	N1-C6-N6	-12.30	111.22	118.60
25	BB	792	A	C4-C5-C6	-12.30	110.85	117.00
25	BB	896	A	N1-C6-N6	-12.30	111.22	118.60
3	A1	728	A	C5-C6-N1	12.30	123.85	117.70
25	BB	95	A	N1-C6-N6	-12.30	111.22	118.60
25	BB	730	A	N1-C6-N6	-12.30	111.22	118.60
25	BB	1028	A	C5-C6-N1	12.30	123.85	117.70
25	BB	1825	U	C1'-O4'-C4'	-12.30	100.06	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	228	A	C5-C6-N1	12.29	123.85	117.70
3	A1	608	A	C5-C6-N1	12.30	123.85	117.70
3	A1	663	A	C5-C6-N1	12.30	123.85	117.70
3	A1	1218	C	O4'-C1'-N1	12.29	118.03	108.20
25	BB	179	C	N3-C4-N4	-12.29	109.39	118.00
25	BB	1462	C	C1'-O4'-C4'	-12.29	100.06	109.90
25	BB	2524	G	C5-C6-N1	12.29	117.64	111.50
25	BB	2676	C	N1-C2-O2	12.29	126.27	118.90
25	BB	1307	A	C5-C6-N1	12.29	123.84	117.70
25	BB	1471	G	C5-C6-N1	12.29	117.64	111.50
3	A1	81	A	N1-C6-N6	-12.29	111.23	118.60
25	BB	731	C	N3-C2-O2	-12.28	113.30	121.90
25	BB	2632	A	C4-C5-C6	-12.28	110.86	117.00
3	A1	175	C	N3-C4-N4	-12.28	109.40	118.00
25	BB	428	A	C4-C5-C6	-12.28	110.86	117.00
3	A1	569	C	N3-C4-C5	12.28	126.81	121.90
3	A1	901	A	N1-C6-N6	-12.28	111.23	118.60
3	A1	1494	G	C5'-C4'-O4'	12.28	123.83	109.10
25	BB	83	A	O4'-C1'-N9	12.28	118.02	108.20
25	BB	1786	A	C5-C6-N1	12.28	123.84	117.70
25	BB	2158	A	N1-C6-N6	-12.27	111.24	118.60
23	AX	89	ARG	NE-CZ-NH1	12.27	126.43	120.30
25	BB	84	A	C5-C6-N1	12.27	123.83	117.70
25	BB	104	A	C5-C6-N1	12.27	123.83	117.70
3	A1	1409	C	C3'-C2'-C1'	12.26	111.31	101.50
3	A1	1013	G	O4'-C1'-N9	12.26	118.01	108.20
25	BB	1884	G	N1-C6-O6	-12.26	112.55	119.90
8	AG	52	ARG	NE-CZ-NH1	12.26	126.43	120.30
25	BB	1786	A	C4-C5-C6	-12.26	110.87	117.00
3	A1	1509	C	C6-N1-C2	-12.25	115.40	120.30
25	BB	975	A	O4'-C1'-N9	12.25	118.00	108.20
6	AD	30	ARG	NE-CZ-NH1	12.25	126.42	120.30
25	BB	1265	A	C5-C6-N1	12.25	123.83	117.70
3	A1	924	C	C6-N1-C2	-12.25	115.40	120.30
25	BB	165	A	N1-C6-N6	-12.25	111.25	118.60
25	BB	2879	A	N1-C6-N6	-12.25	111.25	118.60
3	A1	831	A	C4-C5-C6	-12.25	110.88	117.00
3	A1	1141	C	N3-C2-O2	-12.24	113.33	121.90
25	BB	1320	C	C2-N3-C4	-12.24	113.78	119.90
25	BB	478	A	N1-C6-N6	-12.24	111.26	118.60
25	BB	2009	A	N1-C6-N6	-12.24	111.26	118.60
3	A1	478	A	C4-C5-C6	-12.24	110.88	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	645	C	N3-C4-N4	-12.23	109.44	118.00
3	A1	1132	C	N3-C2-O2	-12.23	113.34	121.90
25	BB	438	G	O4'-C1'-N9	12.23	117.99	108.20
25	BB	672	C	N1-C2-O2	12.23	126.24	118.90
25	BB	2797	U	N3-C2-O2	-12.23	113.64	122.20
25	BB	1694	C	N3-C4-N4	-12.23	109.44	118.00
3	A1	941	G	N1-C6-O6	-12.23	112.56	119.90
3	A1	1007	U	N1-C2-N3	12.23	122.24	114.90
25	BB	1998	A	C4-C5-C6	-12.23	110.89	117.00
25	BB	2857	G	O4'-C1'-N9	12.23	117.98	108.20
14	AN	24	ARG	NE-CZ-NH1	12.22	126.41	120.30
25	BB	719	C	N3-C4-C5	12.22	126.79	121.90
25	BB	2184	A	C5-C6-N1	12.22	123.81	117.70
25	BB	2258	C	N3-C4-C5	12.22	126.79	121.90
25	BB	2305	U	N3-C2-O2	-12.22	113.65	122.20
25	BB	1026	G	N1-C6-O6	-12.21	112.57	119.90
3	A1	288	A	N1-C6-N6	-12.21	111.27	118.60
25	BB	2646	C	N1-C2-O2	12.21	126.23	118.90
3	A1	910	C	N3-C4-C5	12.21	126.78	121.90
25	BB	783	A	N1-C6-N6	-12.21	111.28	118.60
25	BB	2451	A	N1-C6-N6	-12.20	111.28	118.60
25	BB	242	G	C5-C6-N1	12.20	117.60	111.50
3	A1	1503	A	C5-C6-N1	12.20	123.80	117.70
25	BB	2661	G	N1-C6-O6	-12.20	112.58	119.90
25	BB	2142	A	C5-C6-N1	12.19	123.79	117.70
35	BL	78	GLU	OE1-CD-OE2	-12.19	108.68	123.30
3	A1	498	A	N1-C6-N6	-12.18	111.29	118.60
25	BB	705	A	N1-C6-N6	-12.18	111.29	118.60
3	A1	537	G	N1-C6-O6	-12.18	112.59	119.90
25	BB	1066	U	C4-C5-C6	12.18	127.01	119.70
25	BB	121	G	C3'-C2'-C1'	12.17	111.23	101.50
25	BB	2781	A	C5-C6-N1	12.17	123.78	117.70
3	A1	202	G	N1-C6-O6	-12.17	112.60	119.90
3	A1	509	A	C4-C5-C6	-12.17	110.92	117.00
25	BB	2137	U	N3-C2-O2	-12.16	113.69	122.20
25	BB	1722	A	N1-C6-N6	-12.16	111.30	118.60
25	BB	1853	A	C5-C6-N1	12.16	123.78	117.70
25	BB	2870	C	N1-C2-O2	12.16	126.19	118.90
25	BB	764	A	C5-C6-N1	12.16	123.78	117.70
25	BB	2298	A	N1-C6-N6	-12.16	111.31	118.60
25	BB	2691	C	N3-C2-O2	-12.16	113.39	121.90
3	A1	156	C	N3-C4-C5	12.16	126.76	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1164	C	N3-C4-C5	12.15	126.76	121.90
3	A1	507	C	C6-N1-C2	-12.15	115.44	120.30
25	BB	382	A	N1-C6-N6	-12.15	111.31	118.60
25	BB	1366	A	C4-C5-C6	-12.15	110.93	117.00
3	A1	1104	G	C5-C6-N1	12.14	117.57	111.50
1	AE	38	A	N1-C6-N6	-12.14	111.32	118.60
24	BA	113	C	C2-N3-C4	-12.14	113.83	119.90
3	A1	719	C	N3-C4-C5	12.13	126.75	121.90
32	BI	71	ARG	NE-CZ-NH1	12.13	126.36	120.30
25	BB	316	C	N3-C2-O2	-12.12	113.41	121.90
25	BB	1483	G	N1-C6-O6	-12.12	112.62	119.90
36	BM	42	GLU	OE1-CD-OE2	-12.12	108.75	123.30
25	BB	374	A	C5-C6-N1	12.12	123.76	117.70
25	BB	1771	C	N3-C2-O2	-12.12	113.41	121.90
53	B4	68	ARG	NE-CZ-NH1	12.12	126.36	120.30
25	BB	2171	A	C5-C6-N1	12.12	123.76	117.70
25	BB	2331	G	N1-C6-O6	-12.12	112.63	119.90
25	BB	2711	A	C4-C5-C6	-12.12	110.94	117.00
25	BB	2887	A	N1-C6-N6	-12.12	111.33	118.60
24	BA	56	G	N1-C6-O6	-12.11	112.63	119.90
25	BB	34	U	C1'-O4'-C4'	-12.11	100.21	109.90
25	BB	2247	A	C4-C5-C6	-12.11	110.94	117.00
25	BB	2261	C	O4'-C1'-N1	12.11	117.89	108.20
24	BA	105	G	N1-C6-O6	-12.11	112.63	119.90
25	BB	2198	A	O4'-C1'-N9	12.11	117.89	108.20
25	BB	2463	C	N3-C2-O2	-12.11	113.42	121.90
3	A1	243	A	N1-C6-N6	-12.11	111.34	118.60
25	BB	181	A	N1-C6-N6	-12.10	111.34	118.60
25	BB	1924	C	C2-N3-C4	-12.10	113.85	119.90
25	BB	2599	G	C5-C6-N1	12.10	117.55	111.50
3	A1	48	C	N3-C2-O2	-12.09	113.44	121.90
3	A1	931	C	C2-N3-C4	-12.09	113.85	119.90
3	A1	706	A	C4-C5-C6	-12.09	110.95	117.00
3	A1	63	C	N3-C2-O2	-12.09	113.44	121.90
3	A1	719	C	N3-C4-N4	-12.09	109.54	118.00
25	BB	2208	C	C6-N1-C2	-12.08	115.47	120.30
25	BB	1402	U	N3-C2-O2	-12.07	113.75	122.20
25	BB	2826	A	C4-C5-C6	-12.07	110.96	117.00
25	BB	905	A	C4-C5-C6	-12.07	110.96	117.00
25	BB	1223	G	N1-C6-O6	-12.07	112.66	119.90
25	BB	1802	A	C4-C5-C6	-12.07	110.96	117.00
25	BB	2021	C	N3-C2-O2	-12.07	113.45	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2660	A	N1-C6-N6	-12.07	111.36	118.60
3	A1	1509	C	N3-C2-O2	-12.06	113.45	121.90
25	BB	2184	A	C4-C5-C6	-12.06	110.97	117.00
25	BB	1211	C	O4'-C1'-N1	12.06	117.85	108.20
25	BB	2197	U	O4'-C1'-N1	12.06	117.85	108.20
3	A1	454	G	N1-C6-O6	-12.05	112.67	119.90
25	BB	1096	A	N1-C6-N6	-12.05	111.37	118.60
25	BB	1327	A	N1-C6-N6	-12.05	111.37	118.60
25	BB	1612	C	O4'-C1'-N1	12.05	117.84	108.20
25	BB	2196	C	N3-C4-C5	12.05	126.72	121.90
25	BB	2327	A	C2-N3-C4	12.05	116.63	110.60
3	A1	1469	C	N3-C4-C5	12.05	126.72	121.90
25	BB	1744	A	C4-C5-C6	-12.05	110.97	117.00
25	BB	176	A	C4-C5-C6	-12.05	110.98	117.00
25	BB	2773	C	N3-C4-N4	-12.05	109.57	118.00
25	BB	317	G	C5-C6-N1	12.05	117.52	111.50
24	BA	99	A	C5-C6-N1	12.04	123.72	117.70
3	A1	825	A	N1-C6-N6	-12.04	111.37	118.60
17	AR	80	ARG	CD-NE-CZ	12.04	140.46	123.60
1	AE	29	A	C4-C5-C6	-12.04	110.98	117.00
25	BB	1096	A	C5-C6-N1	12.04	123.72	117.70
25	BB	2791	G	C6-C5-N7	12.04	137.62	130.40
25	BB	190	A	C4-C5-C6	-12.04	110.98	117.00
6	AD	13	ARG	NE-CZ-NH2	12.04	126.32	120.30
3	A1	1346	A	N1-C6-N6	-12.03	111.38	118.60
25	BB	538	A	N1-C6-N6	-12.03	111.38	118.60
25	BB	1127	A	N1-C6-N6	-12.03	111.38	118.60
30	BG	69	ARG	NE-CZ-NH1	12.03	126.32	120.30
46	BW	44	ARG	NE-CZ-NH1	12.03	126.32	120.30
3	A1	958	A	N1-C6-N6	-12.03	111.38	118.60
3	A1	1428	A	N1-C6-N6	-12.03	111.38	118.60
25	BB	330	A	O4'-C1'-N9	12.03	117.82	108.20
25	BB	1074	G	C1'-O4'-C4'	-12.02	100.28	109.90
25	BB	1077	A	N1-C6-N6	-12.02	111.39	118.60
25	BB	1392	A	C4-C5-C6	-12.02	110.99	117.00
3	A1	1042	A	C4-C5-C6	-12.02	110.99	117.00
25	BB	502	A	C4-C5-C6	-12.02	110.99	117.00
45	BV	35	ARG	NE-CZ-NH1	12.02	126.31	120.30
25	BB	361	G	C5-C6-N1	12.01	117.51	111.50
3	A1	1049	U	C5-C4-O4	12.01	133.11	125.90
3	A1	236	A	C5-C6-N1	12.01	123.70	117.70
25	BB	332	A	C4-C5-C6	-12.01	111.00	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1046	A	C5-C6-N1	12.01	123.70	117.70
25	BB	655	A	C4-C5-C6	-12.00	111.00	117.00
25	BB	803	U	O4'-C1'-N1	12.00	117.80	108.20
3	A1	1446	A	N1-C6-N6	-12.00	111.40	118.60
25	BB	1502	A	C4-C5-C6	-12.00	111.00	117.00
25	BB	2558	C	N3-C4-N4	-12.00	109.60	118.00
3	A1	365	U	N3-C2-O2	-12.00	113.80	122.20
3	A1	1239	A	C4-C5-C6	-12.00	111.00	117.00
8	AG	58	ARG	NE-CZ-NH2	12.00	126.30	120.30
25	BB	538	A	C5-C6-N1	12.00	123.70	117.70
25	BB	1069	A	C4-C5-C6	-11.99	111.00	117.00
3	A1	397	A	C5-C6-N1	11.99	123.70	117.70
3	A1	765	G	O4'-C1'-N9	11.99	117.79	108.20
3	A1	914	A	C1'-O4'-C4'	-11.99	100.31	109.90
25	BB	57	C	N3-C4-C5	11.99	126.69	121.90
25	BB	2291	U	N3-C2-O2	-11.99	113.81	122.20
3	A1	1403	C	N3-C4-N4	-11.99	109.61	118.00
24	BA	60	C	N3-C2-O2	-11.99	113.51	121.90
25	BB	668	A	N1-C6-N6	-11.99	111.41	118.60
25	BB	1359	A	N1-C6-N6	-11.99	111.41	118.60
3	A1	634	C	N3-C4-N4	-11.98	109.61	118.00
25	BB	1848	A	C4-C5-C6	-11.98	111.01	117.00
25	BB	1854	A	C5-C6-N1	11.98	123.69	117.70
25	BB	2763	G	N1-C6-O6	-11.98	112.71	119.90
3	A1	734	G	N1-C6-O6	-11.98	112.71	119.90
25	BB	2781	A	N1-C6-N6	-11.97	111.42	118.60
3	A1	104	G	N1-C6-O6	-11.97	112.72	119.90
3	A1	1026	G	N3-C2-N2	-11.97	111.52	119.90
3	A1	1507	A	C5-C6-N1	11.97	123.69	117.70
25	BB	2454	G	N1-C6-O6	-11.97	112.72	119.90
3	A1	622	A	C5-C6-N1	11.97	123.68	117.70
25	BB	2052	A	N1-C6-N6	-11.97	111.42	118.60
25	BB	2230	G	C5-C6-N1	11.97	117.48	111.50
25	BB	2888	C	C2-N3-C4	-11.97	113.92	119.90
3	A1	1533	C	N3-C4-C5	11.97	126.69	121.90
25	BB	1628	G	N1-C6-O6	-11.96	112.72	119.90
3	A1	759	A	C4-C5-C6	-11.96	111.02	117.00
25	BB	624	C	N3-C4-C5	11.96	126.68	121.90
25	BB	1028	A	C4-C5-C6	-11.96	111.02	117.00
25	BB	1088	A	O4'-C1'-N9	11.96	117.77	108.20
25	BB	515	A	C4-C5-C6	-11.96	111.02	117.00
25	BB	2146	C	C2-N3-C4	-11.96	113.92	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	466	A	C4-C5-C6	-11.96	111.02	117.00
25	BB	1966	A	C4-C5-C6	-11.96	111.02	117.00
3	A1	679	C	N1-C2-O2	11.95	126.07	118.90
25	BB	2652	C	N3-C4-C5	11.96	126.68	121.90
25	BB	13	A	N1-C6-N6	-11.95	111.43	118.60
25	BB	1475	G	C5-C6-N1	11.95	117.47	111.50
3	A1	1234	C	N3-C4-C5	11.95	126.68	121.90
25	BB	181	A	C4-C5-C6	-11.94	111.03	117.00
25	BB	2114	A	C5-C6-N1	11.94	123.67	117.70
3	A1	272	C	N3-C2-O2	-11.94	113.54	121.90
3	A1	1454	G	N1-C2-N3	11.94	131.06	123.90
3	A1	1383	C	N3-C2-O2	-11.93	113.55	121.90
25	BB	882	G	C6-N1-C2	-11.93	117.94	125.10
25	BB	1591	A	C4-C5-C6	-11.93	111.03	117.00
3	A1	1476	A	N1-C6-N6	-11.93	111.44	118.60
25	BB	2330	G	N9-C4-C5	11.93	110.17	105.40
25	BB	2793	C	N3-C4-C5	11.93	126.67	121.90
25	BB	2726	A	C5-C6-N1	11.93	123.66	117.70
3	A1	1180	A	C5-C6-N1	11.93	123.66	117.70
3	A1	1429	A	N1-C6-N6	-11.92	111.44	118.60
25	BB	1912	A	N1-C6-N6	-11.92	111.45	118.60
3	A1	719	C	C2-N3-C4	-11.92	113.94	119.90
3	A1	1197	A	N1-C6-N6	-11.92	111.45	118.60
25	BB	205	G	O4'-C1'-C2'	-11.92	93.88	105.80
24	BA	42	C	C1'-O4'-C4'	-11.91	100.37	109.90
25	BB	670	A	N1-C6-N6	-11.91	111.45	118.60
25	BB	419	U	O4'-C1'-N1	11.91	117.73	108.20
25	BB	752	A	N1-C6-N6	-11.91	111.45	118.60
25	BB	1474	U	N3-C2-O2	-11.91	113.86	122.20
1	AE	74	C	O4'-C1'-N1	11.91	117.72	108.20
3	A1	535	A	C5-C6-N1	11.91	123.65	117.70
16	AQ	38	GLU	OE1-CD-OE2	-11.91	109.01	123.30
25	BB	706	A	N1-C6-N6	-11.91	111.46	118.60
25	BB	1214	A	C5-C6-N1	11.91	123.65	117.70
3	A1	366	A	C4-C5-C6	-11.90	111.05	117.00
3	A1	1001	C	O4'-C1'-N1	11.90	117.72	108.20
25	BB	1847	A	C5-C6-N1	11.90	123.65	117.70
3	A1	151	A	N1-C6-N6	-11.90	111.46	118.60
3	A1	356	A	C5-C6-N1	11.90	123.65	117.70
22	AW	108	ARG	NE-CZ-NH1	11.90	126.25	120.30
1	AA	4	G	C2-N3-C4	-11.90	105.95	111.90
3	A1	187	G	N1-C6-O6	-11.90	112.76	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1790	C	N3-C2-O2	-11.90	113.57	121.90
25	BB	2145	C	C2-N3-C4	-11.90	113.95	119.90
25	BB	2753	A	C4-C5-C6	-11.90	111.05	117.00
3	A1	285	C	N3-C2-O2	-11.89	113.57	121.90
25	BB	2564	A	N1-C6-N6	-11.89	111.46	118.60
25	BB	988	A	N1-C6-N6	-11.89	111.47	118.60
25	BB	1947	C	N1-C2-O2	11.89	126.03	118.90
3	A1	92	U	O4'-C1'-N1	11.89	117.71	108.20
25	BB	911	A	O4'-C1'-N9	11.88	117.71	108.20
25	BB	1354	A	N1-C6-N6	-11.88	111.47	118.60
25	BB	340	A	N1-C6-N6	-11.88	111.47	118.60
1	AA	35	A	N1-C6-N6	-11.88	111.47	118.60
25	BB	1885	A	C5-C6-N1	11.88	123.64	117.70
3	A1	1532	U	O4'-C1'-N1	11.88	117.70	108.20
25	BB	1902	C	N3-C2-O2	-11.88	113.58	121.90
25	BB	2557	G	N3-C2-N2	-11.88	111.58	119.90
1	AA	46	G	O4'-C1'-N9	11.88	117.70	108.20
25	BB	652	U	N1-C2-N3	11.87	122.03	114.90
25	BB	486	C	N3-C4-N4	-11.87	109.69	118.00
3	A1	408	A	N1-C6-N6	-11.87	111.48	118.60
3	A1	962	C	C5-C6-N1	-11.87	115.06	121.00
25	BB	1459	G	C5-C6-O6	11.87	135.72	128.60
25	BB	2221	G	N1-C6-O6	-11.87	112.78	119.90
25	BB	2553	G	O4'-C1'-N9	11.87	117.70	108.20
3	A1	1188	A	C4-C5-C6	-11.87	111.07	117.00
25	BB	1086	A	C2-N3-C4	11.86	116.53	110.60
3	A1	1251	A	C4-C5-C6	-11.86	111.07	117.00
25	BB	930	G	N3-C2-N2	-11.86	111.60	119.90
25	BB	1342	A	C4-C5-C6	-11.86	111.07	117.00
25	BB	2660	A	C4-C5-C6	-11.86	111.07	117.00
25	BB	1754	A	N1-C6-N6	-11.85	111.49	118.60
25	BB	2337	G	N1-C6-O6	-11.85	112.79	119.90
25	BB	2888	C	N3-C2-O2	-11.85	113.60	121.90
3	A1	76	G	C8-N9-C4	-11.85	101.66	106.40
3	A1	607	A	N1-C6-N6	-11.84	111.50	118.60
25	BB	2311	A	C5-C6-N1	11.84	123.62	117.70
25	BB	84	A	N1-C6-N6	-11.83	111.50	118.60
25	BB	1912	A	C5-C6-N1	11.83	123.62	117.70
3	A1	957	U	C1'-O4'-C4'	-11.83	100.44	109.90
25	BB	1320	C	N3-C4-C5	11.83	126.63	121.90
25	BB	1045	C	O4'-C1'-N1	11.83	117.66	108.20
25	BB	2872	A	N1-C6-N6	-11.83	111.50	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	56	C	N3-C2-O2	-11.82	113.62	121.90
51	B2	111	ARG	NE-CZ-NH2	11.82	126.21	120.30
3	A1	663	A	C4-C5-C6	-11.82	111.09	117.00
3	A1	1220	G	N3-C2-N2	-11.82	111.62	119.90
25	BB	751	A	C5-C6-N1	11.82	123.61	117.70
25	BB	287	G	C5-C6-O6	11.82	135.69	128.60
3	A1	1196	A	N1-C6-N6	-11.82	111.51	118.60
25	BB	1226	A	C5-C6-N1	11.82	123.61	117.70
25	BB	1957	C	N3-C4-C5	11.82	126.63	121.90
25	BB	2179	C	O4'-C1'-N1	11.82	117.65	108.20
25	BB	1459	G	C8-N9-C4	-11.81	101.67	106.40
25	BB	2104	C	N3-C4-N4	-11.81	109.73	118.00
25	BB	2407	A	C5-C6-N1	11.81	123.60	117.70
1	AA	62	A	N1-C6-N6	-11.80	111.52	118.60
25	BB	31	C	N3-C2-O2	-11.80	113.64	121.90
36	BM	76	ARG	NE-CZ-NH1	11.80	126.20	120.30
3	A1	1514	G	N1-C6-O6	-11.80	112.82	119.90
3	A1	1395	C	O4'-C1'-N1	11.79	117.64	108.20
24	BA	61	G	N3-C2-N2	-11.79	111.64	119.90
7	AF	78	ARG	NE-CZ-NH1	11.79	126.20	120.30
25	BB	1701	A	C5-C6-N1	11.79	123.59	117.70
3	A1	998	C	N3-C2-O2	-11.78	113.66	121.90
25	BB	415	A	N1-C6-N6	-11.78	111.53	118.60
25	BB	771	G	N1-C6-O6	-11.78	112.83	119.90
25	BB	2104	C	O4'-C1'-N1	11.78	117.62	108.20
25	BB	208	C	N3-C2-O2	-11.78	113.66	121.90
25	BB	2150	C	C6-N1-C2	-11.78	115.59	120.30
25	BB	2421	G	N3-C4-C5	-11.77	122.71	128.60
1	AA	43	G	C8-N9-C4	-11.77	101.69	106.40
3	A1	864	A	C4-C5-C6	-11.77	111.12	117.00
3	A1	995	C	N3-C4-C5	11.77	126.61	121.90
25	BB	2538	C	C2-N3-C4	-11.77	114.02	119.90
25	BB	2734	A	C4-C5-C6	-11.77	111.12	117.00
25	BB	2740	A	N1-C6-N6	-11.77	111.54	118.60
25	BB	120	U	N3-C2-O2	-11.76	113.97	122.20
25	BB	2644	G	N3-C2-N2	-11.76	111.67	119.90
3	A1	1476	A	C4-C5-C6	-11.76	111.12	117.00
25	BB	2163	A	C4-C5-C6	-11.76	111.12	117.00
25	BB	2171	A	C4-C5-C6	-11.76	111.12	117.00
25	BB	1646	C	C2-N3-C4	-11.76	114.02	119.90
25	BB	1724	G	N9-C4-C5	11.76	110.10	105.40
1	AA	51	G	N3-C2-N2	-11.76	111.67	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	528	C	N3-C2-O2	-11.76	113.67	121.90
3	A1	1011	C	C2-N3-C4	-11.76	114.02	119.90
25	BB	2294	G	N1-C6-O6	-11.76	112.85	119.90
3	A1	145	G	N1-C6-O6	-11.75	112.85	119.90
25	BB	377	G	N1-C6-O6	-11.75	112.85	119.90
3	A1	1518	A	N1-C6-N6	-11.75	111.55	118.60
25	BB	53	A	C5-C6-N1	11.75	123.57	117.70
25	BB	2825	G	N1-C6-O6	-11.75	112.85	119.90
25	BB	1289	C	N3-C2-O2	-11.74	113.68	121.90
3	A1	1389	C	N3-C2-O2	-11.74	113.68	121.90
25	BB	480	A	N1-C6-N6	-11.74	111.56	118.60
32	BI	52	ARG	NE-CZ-NH1	11.74	126.17	120.30
25	BB	775	G	N1-C6-O6	-11.73	112.86	119.90
3	A1	560	A	C5-C6-N1	11.73	123.56	117.70
12	AK	56	ARG	NE-CZ-NH1	11.73	126.17	120.30
25	BB	160	A	N1-C6-N6	-11.73	111.56	118.60
3	A1	1410	A	C4-C5-C6	-11.72	111.14	117.00
15	AO	87	ARG	NE-CZ-NH1	11.72	126.16	120.30
25	BB	80	G	N1-C6-O6	-11.72	112.87	119.90
25	BB	2555	U	C5-C6-N1	-11.72	116.84	122.70
3	A1	372	C	C3'-C2'-C1'	-11.72	92.12	101.50
3	A1	634	C	N3-C4-C5	11.72	126.59	121.90
25	BB	32	C	C2-N3-C4	-11.72	114.04	119.90
25	BB	1471	G	C5-N7-C8	-11.72	98.44	104.30
25	BB	1503	A	N1-C6-N6	-11.72	111.57	118.60
3	A1	790	A	N1-C6-N6	-11.71	111.57	118.60
9	AH	62	ARG	NE-CZ-NH2	-11.71	114.44	120.30
25	BB	131	A	C5'-C4'-O4'	11.71	123.16	109.10
25	BB	414	C	N3-C4-N4	-11.71	109.80	118.00
25	BB	1606	C	O4'-C1'-N1	-11.71	98.83	108.20
25	BB	2604	U	O4'-C1'-N1	11.71	117.57	108.20
3	A1	1390	U	O4'-C1'-N1	11.71	117.57	108.20
3	A1	1216	A	N1-C6-N6	-11.71	111.58	118.60
25	BB	508	A	C5-C6-N1	11.71	123.56	117.70
3	A1	1380	U	N3-C2-O2	-11.71	114.00	122.20
25	BB	1987	A	C4-C5-C6	-11.71	111.15	117.00
44	BU	27	ARG	NE-CZ-NH1	11.71	126.15	120.30
3	A1	890	G	N1-C6-O6	-11.71	112.88	119.90
25	BB	2096	C	N3-C4-N4	-11.71	109.81	118.00
25	BB	2346	A	C5-C6-N1	11.71	123.55	117.70
25	BB	2104	C	N3-C4-C5	11.70	126.58	121.90
3	A1	309	A	N1-C6-N6	-11.70	111.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2170	A	N1-C6-N6	-11.70	111.58	118.60
3	A1	179	A	C5-C6-N1	11.70	123.55	117.70
3	A1	640	A	N1-C6-N6	-11.70	111.58	118.60
3	A1	990	C	N3-C2-O2	-11.70	113.71	121.90
25	BB	2670	A	C4-C5-C6	-11.70	111.15	117.00
25	BB	2592	G	C5-C6-N1	11.70	117.35	111.50
30	BG	64	ARG	NE-CZ-NH1	11.70	126.15	120.30
25	BB	2253	G	N1-C6-O6	-11.69	112.88	119.90
1	AA	37	G	N7-C8-N9	11.69	118.95	113.10
27	BD	49	ARG	NE-CZ-NH1	11.69	126.15	120.30
3	A1	509	A	C5-C6-N1	11.69	123.54	117.70
25	BB	311	A	C5-C6-N1	11.68	123.54	117.70
3	A1	421	U	O4'-C4'-C3'	11.68	115.68	104.00
1	AA	38	A	C5-C6-N1	11.68	123.54	117.70
25	BB	2479	U	N3-C2-O2	-11.68	114.02	122.20
3	A1	1042	A	N1-C6-N6	-11.68	111.59	118.60
25	BB	2517	C	C2-N3-C4	-11.68	114.06	119.90
3	A1	486	U	O4'-C1'-N1	11.68	117.54	108.20
3	A1	1434	A	N1-C6-N6	-11.68	111.59	118.60
25	BB	2295	C	N3-C2-O2	-11.68	113.73	121.90
25	BB	655	A	N1-C6-N6	-11.67	111.60	118.60
25	BB	749	A	C4-C5-C6	-11.67	111.16	117.00
25	BB	1134	A	C5-C6-N1	11.67	123.54	117.70
3	A1	699	C	N3-C4-N4	-11.67	109.83	118.00
19	AT	86	ARG	NE-CZ-NH2	11.67	126.14	120.30
25	BB	507	A	N1-C6-N6	-11.67	111.60	118.60
25	BB	2534	A	C5-C6-N1	11.67	123.53	117.70
3	A1	161	A	C4-C5-C6	-11.67	111.17	117.00
25	BB	1314	C	N3-C2-O2	-11.67	113.73	121.90
25	BB	1710	G	N1-C6-O6	-11.67	112.90	119.90
3	A1	1219	A	C5-C6-N1	11.66	123.53	117.70
25	BB	2551	C	N3-C2-O2	-11.66	113.74	121.90
25	BB	393	C	N3-C2-O2	-11.66	113.74	121.90
22	AW	79	ARG	NE-CZ-NH1	11.66	126.13	120.30
25	BB	2541	A	N1-C6-N6	-11.66	111.61	118.60
3	A1	990	C	C6-N1-C2	-11.66	115.64	120.30
3	A1	1236	A	C5-C6-N1	11.65	123.53	117.70
3	A1	840	C	O4'-C1'-N1	11.65	117.52	108.20
25	BB	1483	G	N9-C4-C5	11.65	110.06	105.40
3	A1	1530	G	N1-C6-O6	-11.65	112.91	119.90
31	BH	94	ARG	NE-CZ-NH1	11.65	126.13	120.30
1	AE	28	C	N3-C4-C5	11.65	126.56	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	539	G	C5-N7-C8	-11.65	98.48	104.30
25	BB	265	A	N1-C6-N6	-11.65	111.61	118.60
29	BF	55	ARG	NH1-CZ-NH2	-11.65	106.59	119.40
3	A1	1045	C	N3-C4-N4	-11.64	109.85	118.00
25	BB	2727	A	N1-C6-N6	-11.64	111.61	118.60
3	A1	139	A	C4-C5-C6	-11.64	111.18	117.00
3	A1	351	G	N1-C6-O6	-11.64	112.92	119.90
1	AP	72	C	C5-C4-N4	-11.63	112.06	120.20
3	A1	1397	C	C2-N3-C4	-11.63	114.08	119.90
1	AA	24	G	C8-N9-C4	-11.63	101.75	106.40
25	BB	1564	C	N3-C2-O2	-11.63	113.76	121.90
25	BB	1153	C	N3-C4-C5	11.63	126.55	121.90
3	A1	968	A	N1-C6-N6	-11.63	111.62	118.60
9	AH	62	ARG	NE-CZ-NH1	11.63	126.11	120.30
25	BB	2126	A	N1-C6-N6	-11.63	111.62	118.60
24	BA	52	A	N1-C6-N6	-11.62	111.63	118.60
25	BB	1593	A	N1-C6-N6	-11.62	111.63	118.60
3	A1	1487	G	N1-C6-O6	-11.62	112.93	119.90
25	BB	472	A	C4-C5-C6	-11.62	111.19	117.00
25	BB	1459	G	N1-C2-N3	11.62	130.87	123.90
25	BB	1517	G	N9-C4-C5	11.62	110.05	105.40
25	BB	2807	U	C5-C6-N1	-11.62	116.89	122.70
25	BB	1964	G	C5-C6-N1	11.61	117.31	111.50
25	BB	2644	G	N9-C4-C5	11.62	110.05	105.40
42	BS	11	GLU	OE1-CD-OE2	-11.62	109.36	123.30
3	A1	518	C	C3'-C2'-C1'	-11.61	92.21	101.50
25	BB	892	A	N1-C6-N6	-11.61	111.63	118.60
25	BB	2594	C	N3-C2-O2	-11.61	113.77	121.90
3	A1	794	A	C4-C5-C6	-11.61	111.20	117.00
3	A1	1444	U	O4'-C1'-N1	11.61	117.49	108.20
20	AU	9	ARG	NE-CZ-NH1	11.61	126.10	120.30
3	A1	433	G	N1-C6-O6	-11.61	112.94	119.90
3	A1	100	G	C1'-O4'-C4'	-11.60	100.62	109.90
25	BB	1784	A	C5-C6-N1	11.60	123.50	117.70
3	A1	1136	C	O4'-C1'-N1	11.60	117.48	108.20
25	BB	160	A	C5-C6-N1	11.60	123.50	117.70
3	A1	430	A	C5-C6-N1	11.59	123.50	117.70
3	A1	931	C	N3-C4-C5	11.59	126.54	121.90
3	A1	1407	C	N3-C4-C5	11.59	126.54	121.90
25	BB	1322	A	C5-C6-N1	11.59	123.49	117.70
25	BB	1935	G	N1-C6-O6	-11.59	112.95	119.90
3	A1	712	A	C5-C6-N1	11.59	123.49	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2547	A	N1-C6-N6	-11.59	111.65	118.60
25	BB	2811	G	C8-N9-C4	-11.59	101.77	106.40
25	BB	2614	A	C4-C5-C6	-11.58	111.21	117.00
50	B1	67	ARG	NE-CZ-NH1	11.58	126.09	120.30
25	BB	443	A	C5-C6-N1	11.58	123.49	117.70
25	BB	489	G	C5-C6-N1	11.58	117.29	111.50
45	BV	3	ARG	NE-CZ-NH1	11.58	126.09	120.30
3	A1	320	A	C4-C5-C6	-11.58	111.21	117.00
3	A1	459	A	N1-C6-N6	-11.58	111.65	118.60
25	BB	172	A	C4-C5-C6	-11.58	111.21	117.00
25	BB	1530	G	N1-C6-O6	-11.58	112.95	119.90
3	A1	844	G	C5-C6-N1	11.57	117.29	111.50
3	A1	1096	C	N3-C4-C5	11.57	126.53	121.90
25	BB	833	A	C5-C6-N1	11.57	123.49	117.70
25	BB	1486	U	C5-C4-O4	-11.57	118.96	125.90
25	BB	2043	C	N3-C4-N4	-11.57	109.90	118.00
25	BB	961	C	N3-C4-C5	11.57	126.53	121.90
25	BB	2044	C	N3-C4-C5	11.57	126.53	121.90
25	BB	257	C	O4'-C1'-N1	11.57	117.45	108.20
25	BB	1522	A	N1-C6-N6	-11.57	111.66	118.60
25	BB	1669	A	C4-C5-C6	-11.57	111.22	117.00
25	BB	1809	A	C5-C6-N1	11.57	123.48	117.70
3	A1	926	G	C2-N3-C4	11.56	117.68	111.90
3	A1	1172	C	C5-C6-N1	-11.56	115.22	121.00
3	A1	750	C	N3-C2-O2	-11.56	113.81	121.90
25	BB	1618	A	N1-C6-N6	-11.56	111.66	118.60
25	BB	1021	A	N1-C6-N6	-11.56	111.66	118.60
25	BB	2375	G	N1-C6-O6	-11.56	112.96	119.90
25	BB	1698	A	N1-C6-N6	-11.56	111.66	118.60
25	BB	1383	A	C5-C6-N1	11.56	123.48	117.70
25	BB	1481	U	O4'-C1'-N1	11.56	117.44	108.20
3	A1	1209	C	N3-C4-C5	11.55	126.52	121.90
41	BR	37	ARG	NE-CZ-NH1	11.55	126.08	120.30
3	A1	453	G	N1-C6-O6	-11.55	112.97	119.90
25	BB	79	C	N3-C4-N4	-11.55	109.92	118.00
55	B6	69	ARG	NE-CZ-NH1	11.55	126.07	120.30
3	A1	946	A	N1-C6-N6	-11.54	111.67	118.60
25	BB	2537	U	O4'-C1'-N1	11.54	117.44	108.20
1	AA	29	A	C5-C6-N6	11.54	132.93	123.70
25	BB	595	C	O4'-C1'-N1	11.54	117.43	108.20
25	BB	1241	A	C8-N9-C4	-11.54	101.18	105.80
3	A1	964	A	C4-C5-C6	-11.54	111.23	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	198	C	N3-C2-O2	-11.54	113.82	121.90
25	BB	541	A	C4-C5-C6	-11.54	111.23	117.00
25	BB	1860	G	N3-C2-N2	-11.54	111.82	119.90
27	BD	17	ARG	NE-CZ-NH1	11.54	126.07	120.30
3	A1	1374	A	C5-C6-N1	11.53	123.47	117.70
25	BB	305	C	C6-N1-C2	-11.53	115.69	120.30
35	BL	110	ARG	NE-CZ-NH2	11.53	126.07	120.30
25	BB	1067	A	C8-N9-C4	-11.53	101.19	105.80
52	B3	169	ARG	NE-CZ-NH1	11.53	126.06	120.30
25	BB	614	A	N1-C6-N6	-11.53	111.69	118.60
3	A1	1207	G	C5-N7-C8	-11.52	98.54	104.30
25	BB	332	A	C5-C6-N1	11.52	123.46	117.70
3	A1	746	A	C4-C5-C6	-11.52	111.24	117.00
25	BB	2425	A	C4-C5-C6	-11.52	111.24	117.00
3	A1	56	U	N3-C2-O2	-11.51	114.14	122.20
3	A1	1249	C	N3-C4-C5	11.51	126.50	121.90
25	BB	1268	A	O4'-C1'-N9	11.51	117.41	108.20
25	BB	2281	A	N1-C6-N6	-11.51	111.69	118.60
1	AE	20	G	C6-C5-N7	11.51	137.30	130.40
3	A1	569	C	N3-C2-O2	-11.51	113.84	121.90
25	BB	1494	A	C4-C5-C6	-11.51	111.25	117.00
3	A1	197	A	C5-C6-N1	11.51	123.45	117.70
3	A1	1139	G	N3-C4-C5	-11.51	122.85	128.60
25	BB	2721	A	N1-C6-N6	-11.51	111.70	118.60
3	A1	642	A	N1-C6-N6	-11.50	111.70	118.60
3	A1	835	U	N3-C2-O2	-11.50	114.15	122.20
1	AA	28	C	N3-C4-N4	-11.50	109.95	118.00
25	BB	475	C	N3-C4-C5	11.50	126.50	121.90
25	BB	768	G	C1'-O4'-C4'	-11.50	100.70	109.90
1	AP	9	A	C4-C5-C6	-11.50	111.25	117.00
3	A1	456	A	C5-C6-N1	11.50	123.45	117.70
3	A1	1110	A	C5-C6-N1	11.50	123.45	117.70
3	A1	1111	A	C4-C5-C6	-11.50	111.25	117.00
3	A1	1191	A	N1-C6-N6	-11.50	111.70	118.60
10	AI	8	ARG	NE-CZ-NH1	-11.50	114.55	120.30
25	BB	1226	A	C4-C5-C6	-11.50	111.25	117.00
25	BB	2858	C	C6-N1-C2	-11.50	115.70	120.30
25	BB	1763	G	C5-C6-O6	11.49	135.50	128.60
25	BB	1631	G	N1-C6-O6	-11.49	113.00	119.90
25	BB	693	A	C4-C5-C6	-11.49	111.25	117.00
3	A1	1207	G	N1-C6-O6	-11.49	113.01	119.90
25	BB	951	C	C2-N3-C4	-11.49	114.16	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2539	C	N1-C2-O2	11.49	125.79	118.90
3	A1	1172	C	C2-N3-C4	-11.48	114.16	119.90
3	A1	1398	A	C4-C5-C6	-11.48	111.26	117.00
25	BB	304	U	C3'-C2'-C1'	11.48	110.69	101.50
3	A1	10	A	N1-C6-N6	-11.48	111.71	118.60
33	BJ	54	ARG	NE-CZ-NH2	11.48	126.04	120.30
1	AE	21	A	C4-C5-C6	-11.48	111.26	117.00
24	BA	61	G	C8-N9-C4	-11.48	101.81	106.40
1	AA	55	U	N3-C2-O2	-11.48	114.17	122.20
1	AE	70	C	N1-C2-O2	11.48	125.79	118.90
25	BB	1048	A	C4-C5-C6	-11.48	111.26	117.00
25	BB	2893	A	C8-N9-C4	11.48	110.39	105.80
37	BN	220	ARG	NE-CZ-NH1	11.48	126.04	120.30
3	A1	1261	A	C5-C6-N1	11.47	123.44	117.70
13	AL	35	ARG	NE-CZ-NH1	11.47	126.04	120.30
25	BB	457	A	C4-C5-C6	-11.47	111.26	117.00
25	BB	2471	A	N1-C6-N6	-11.47	111.72	118.60
25	BB	2488	G	O4'-C1'-N9	11.47	117.38	108.20
25	BB	116	C	N3-C2-O2	-11.47	113.87	121.90
25	BB	1585	C	N3-C4-N4	-11.47	109.97	118.00
3	A1	371	A	C5-C6-N1	11.47	123.43	117.70
3	A1	1005	A	C4-C5-C6	-11.47	111.27	117.00
25	BB	1144	A	C4-C5-C6	-11.47	111.27	117.00
25	BB	1735	A	C5-C6-N1	11.47	123.43	117.70
1	AE	9	A	N1-C6-N6	-11.46	111.72	118.60
3	A1	706	A	C5-C6-N1	11.46	123.43	117.70
25	BB	1287	A	C5-C6-N1	11.46	123.43	117.70
3	A1	1319	A	C5-C6-N1	11.45	123.43	117.70
25	BB	2284	A	C5-C6-N1	11.45	123.43	117.70
25	BB	2670	A	O4'-C1'-N9	11.45	117.36	108.20
3	A1	1287	A	C5-C6-N1	11.45	123.43	117.70
25	BB	182	A	C4-C5-C6	-11.45	111.28	117.00
25	BB	1786	A	O4'-C1'-N9	11.45	117.36	108.20
25	BB	2462	C	N3-C4-N4	-11.45	109.98	118.00
25	BB	1387	A	C4-C5-C6	-11.45	111.28	117.00
1	AA	35	A	C4-C5-C6	-11.44	111.28	117.00
25	BB	1289	C	C6-N1-C2	-11.44	115.72	120.30
30	BG	8	ARG	NE-CZ-NH2	11.44	126.02	120.30
1	AA	66	A	C5-C6-N6	11.44	132.85	123.70
3	A1	533	A	C5-C6-N1	11.44	123.42	117.70
25	BB	242	G	C6-N1-C2	-11.44	118.23	125.10
25	BB	1552	A	C5-C6-N1	11.44	123.42	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
40	BQ	47	ARG	NE-CZ-NH2	11.44	126.02	120.30
24	BA	79	G	O4'-C1'-N9	11.44	117.35	108.20
25	BB	772	C	N3-C2-O2	-11.44	113.89	121.90
25	BB	1691	C	N1-C2-O2	11.44	125.76	118.90
25	BB	1960	A	C4-C5-C6	-11.44	111.28	117.00
3	A1	1093	A	C5-C6-N1	11.44	123.42	117.70
3	A1	1502	A	C5-C6-N1	11.44	123.42	117.70
17	AR	110	ARG	NE-CZ-NH1	11.44	126.02	120.30
1	AA	36	A	C5-C6-N1	11.43	123.42	117.70
3	A1	163	C	N3-C2-O2	-11.43	113.90	121.90
25	BB	151	C	C6-N1-C2	-11.43	115.73	120.30
25	BB	392	U	O4'-C1'-N1	11.43	117.35	108.20
3	A1	52	C	C6-N1-C2	-11.43	115.73	120.30
25	BB	526	A	C5-C6-N1	11.43	123.42	117.70
25	BB	2646	C	C1'-O4'-C4'	-11.43	100.75	109.90
25	BB	893	C	N3-C4-C5	11.43	126.47	121.90
25	BB	2361	G	N3-C2-N2	-11.43	111.90	119.90
1	AA	75	C	C2-N3-C4	-11.43	114.19	119.90
3	A1	246	A	O5'-P-OP1	-11.43	95.42	105.70
3	A1	781	A	C5-C6-N6	11.43	132.84	123.70
25	BB	1434	A	C5-C6-N1	11.43	123.41	117.70
25	BB	1625	C	N3-C4-N4	-11.43	110.00	118.00
25	BB	917	A	N1-C6-N6	-11.42	111.75	118.60
25	BB	2062	A	C4-C5-C6	-11.42	111.29	117.00
25	BB	789	A	C5-C6-N1	11.42	123.41	117.70
25	BB	2042	A	C5-C6-N1	11.42	123.41	117.70
25	BB	1030	C	N3-C2-O2	-11.42	113.91	121.90
3	A1	460	A	C4-C5-C6	-11.42	111.29	117.00
25	BB	1641	A	C4-C5-C6	-11.41	111.29	117.00
25	BB	767	U	N3-C2-O2	-11.41	114.21	122.20
25	BB	1784	A	C4-C5-C6	-11.41	111.29	117.00
25	BB	2873	A	C5-C6-N1	11.41	123.41	117.70
25	BB	2794	C	N3-C2-O2	-11.41	113.91	121.90
3	A1	19	A	N1-C6-N6	-11.41	111.75	118.60
25	BB	270	A	C5-C6-N1	11.41	123.40	117.70
25	BB	701	G	N3-C2-N2	-11.41	111.91	119.90
3	A1	574	A	C5-C6-N1	11.40	123.40	117.70
25	BB	2822	G	OP1-P-OP2	-11.40	102.49	119.60
25	BB	2471	A	C5-C6-N1	11.40	123.40	117.70
25	BB	492	A	C5-C6-N1	11.40	123.40	117.70
25	BB	2317	A	C5-C6-N6	11.40	132.82	123.70
3	A1	602	A	N1-C6-N6	-11.40	111.76	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	266	G	N1-C6-O6	-11.40	113.06	119.90
23	AX	48	ARG	NE-CZ-NH2	11.40	126.00	120.30
25	BB	861	A	C4-C5-C6	-11.40	111.30	117.00
25	BB	2229	U	O4'-C1'-N1	11.40	117.32	108.20
25	BB	2533	U	O4'-C1'-N1	11.39	117.32	108.20
25	BB	1142	A	N1-C6-N6	-11.39	111.77	118.60
3	A1	228	A	C4-C5-C6	-11.39	111.31	117.00
25	BB	689	A	C5-C6-N1	11.39	123.39	117.70
25	BB	838	C	N3-C4-N4	-11.39	110.03	118.00
25	BB	982	C	N3-C2-O2	-11.39	113.93	121.90
25	BB	2023	C	N1-C2-O2	11.39	125.73	118.90
3	A1	101	A	N1-C6-N6	-11.39	111.77	118.60
25	BB	126	A	N1-C6-N6	-11.39	111.77	118.60
3	A1	1031	C	C1'-O4'-C4'	-11.38	100.79	109.90
3	A1	1448	C	N3-C2-O2	-11.38	113.93	121.90
25	BB	275	C	N3-C2-O2	-11.38	113.93	121.90
25	BB	2829	A	C4-C5-C6	-11.38	111.31	117.00
25	BB	10	A	C5-C6-N1	11.38	123.39	117.70
25	BB	1510	G	C6-C5-N7	11.38	137.23	130.40
3	A1	1124	G	N1-C6-O6	-11.38	113.07	119.90
3	A1	1519	A	C5-C6-N1	11.37	123.39	117.70
25	BB	664	G	C5-C6-N1	11.37	117.19	111.50
3	A1	498	A	C4-C5-C6	-11.37	111.31	117.00
3	A1	937	A	C5-C6-N1	11.37	123.38	117.70
25	BB	1907	G	N9-C4-C5	11.37	109.95	105.40
1	AA	65	G	C5-C6-N1	11.37	117.18	111.50
1	AA	55	U	C1'-O4'-C4'	-11.36	100.81	109.90
3	A1	1230	C	N3-C4-C5	11.36	126.45	121.90
25	BB	939	G	N3-C2-N2	-11.36	111.94	119.90
25	BB	2637	U	C3'-C2'-C1'	11.36	110.59	101.50
37	BN	213	ARG	NE-CZ-NH1	11.36	125.98	120.30
3	A1	164	G	C8-N9-C4	-11.36	101.86	106.40
3	A1	1203	C	N3-C4-C5	11.36	126.44	121.90
3	A1	510	A	C5-C6-N1	11.36	123.38	117.70
3	A1	1332	A	C6-C5-N7	11.36	140.25	132.30
25	BB	515	A	C5-C6-N1	11.36	123.38	117.70
25	BB	1247	A	C5-C6-N1	11.35	123.38	117.70
25	BB	1901	A	C4-C5-C6	-11.35	111.32	117.00
25	BB	1525	A	C5-C6-N1	11.35	123.38	117.70
24	BA	47	C	N1-C2-O2	11.35	125.71	118.90
25	BB	1953	A	C4-C5-C6	-11.35	111.33	117.00
25	BB	2658	C	N3-C2-O2	-11.35	113.96	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2676	C	N3-C2-O2	-11.35	113.95	121.90
3	A1	1325	C	C6-N1-C2	-11.35	115.76	120.30
24	BA	15	A	N1-C6-N6	-11.35	111.79	118.60
25	BB	2612	C	N1-C2-O2	11.35	125.71	118.90
25	BB	1771	C	N1-C2-O2	11.34	125.70	118.90
3	A1	1441	A	N1-C6-N6	-11.34	111.80	118.60
3	A1	1508	A	C5-C6-N1	11.34	123.37	117.70
25	BB	1441	G	N1-C6-O6	-11.34	113.10	119.90
25	BB	2498	C	N3-C2-O2	-11.34	113.97	121.90
25	BB	788	A	C5-C6-N6	11.33	132.77	123.70
3	A1	1147	C	O4'-C1'-N1	11.33	117.26	108.20
3	A1	459	A	C5-C6-N1	11.32	123.36	117.70
25	BB	1924	C	O4'-C1'-N1	11.32	117.26	108.20
25	BB	2462	C	N3-C4-C5	11.32	126.43	121.90
3	A1	284	C	N3-C4-N4	-11.32	110.08	118.00
3	A1	1250	A	C5-C6-N1	11.32	123.36	117.70
25	BB	972	A	C5-C6-N1	11.32	123.36	117.70
3	A1	182	A	N1-C6-N6	-11.31	111.81	118.60
3	A1	345	C	C4'-C3'-C2'	-11.31	91.28	102.60
3	A1	522	C	N3-C2-O2	-11.31	113.98	121.90
3	A1	1261	A	N1-C6-N6	-11.31	111.81	118.60
3	A1	705	G	N1-C6-O6	-11.31	113.11	119.90
25	BB	2281	A	C5-C6-N1	11.31	123.36	117.70
25	BB	922	C	C6-N1-C2	-11.31	115.78	120.30
21	AV	76	ARG	NE-CZ-NH2	11.30	125.95	120.30
3	A1	1071	C	N3-C4-C5	11.30	126.42	121.90
25	BB	820	A	N1-C6-N6	-11.30	111.82	118.60
25	BB	825	A	C4-C5-C6	-11.30	111.35	117.00
25	BB	1247	A	N1-C6-N6	-11.30	111.82	118.60
25	BB	1680	U	O4'-C1'-N1	11.30	117.24	108.20
25	BB	1731	G	C6-C5-N7	11.30	137.18	130.40
25	BB	2402	U	C5-C6-N1	-11.30	117.05	122.70
2	AM	8	U	C5-C6-N1	-11.30	117.05	122.70
3	A1	881	G	N1-C6-O6	-11.30	113.12	119.90
3	A1	1112	C	O4'-C1'-N1	11.30	117.24	108.20
25	BB	103	A	C4-C5-C6	-11.30	111.35	117.00
25	BB	654	A	C5-C6-N1	11.30	123.35	117.70
3	A1	28	A	C5-C6-N1	11.29	123.35	117.70
3	A1	79	G	N1-C6-O6	-11.29	113.12	119.90
25	BB	1945	G	C5-C6-N1	11.29	117.15	111.50
25	BB	2118	U	O4'-C1'-N1	11.29	117.23	108.20
25	BB	94	A	C4-C5-C6	-11.29	111.36	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BN	42	ARG	NE-CZ-NH1	11.29	125.94	120.30
25	BB	1806	C	N3-C2-O2	-11.29	114.00	121.90
3	A1	423	G	N1-C6-O6	-11.28	113.13	119.90
3	A1	469	C	C6-N1-C2	-11.28	115.79	120.30
25	BB	1890	A	C4-C5-C6	-11.28	111.36	117.00
3	A1	274	A	N1-C6-N6	-11.28	111.83	118.60
3	A1	497	G	N1-C6-O6	-11.28	113.13	119.90
3	A1	1274	A	C4-C5-C6	-11.28	111.36	117.00
25	BB	732	C	O4'-C1'-N1	11.28	117.22	108.20
25	BB	1384	A	C4-C5-N7	11.28	116.34	110.70
25	BB	2808	G	C5-C6-N1	11.28	117.14	111.50
25	BB	797	G	OP1-P-OP2	-11.27	102.69	119.60
25	BB	861	A	N1-C6-N6	-11.27	111.83	118.60
25	BB	1985	C	N3-C2-O2	-11.27	114.01	121.90
25	BB	279	A	C4-C5-C6	-11.27	111.36	117.00
3	A1	194	C	C2-N3-C4	-11.27	114.27	119.90
25	BB	1471	G	C4'-C3'-C2'	-11.27	91.33	102.60
25	BB	1654	A	N1-C6-N6	-11.27	111.84	118.60
25	BB	1616	A	C5-C6-N1	11.27	123.33	117.70
3	A1	818	G	C6-N1-C2	-11.26	118.34	125.10
25	BB	2560	A	C4-C5-C6	-11.26	111.37	117.00
25	BB	1645	G	N1-C6-O6	-11.26	113.14	119.90
25	BB	1731	G	C4-C5-N7	-11.26	106.30	110.80
3	A1	419	C	C5-C4-N4	-11.26	112.32	120.20
25	BB	2893	A	C4-C5-C6	-11.26	111.37	117.00
3	A1	1033	G	N1-C6-O6	-11.25	113.15	119.90
3	A1	1324	A	N1-C6-N6	-11.25	111.85	118.60
25	BB	1121	C	N3-C2-O2	-11.25	114.02	121.90
3	A1	81	A	C5-C6-N1	11.25	123.33	117.70
25	BB	172	A	C5-C6-N1	11.25	123.33	117.70
25	BB	1072	C	N3-C4-N4	-11.24	110.13	118.00
25	BB	1354	A	C4-C5-C6	-11.24	111.38	117.00
3	A1	1179	A	C5-C6-N6	11.24	132.69	123.70
25	BB	749	A	C5-C6-N1	11.24	123.32	117.70
25	BB	979	A	C5-C6-N1	11.24	123.32	117.70
25	BB	1929	G	C3'-C2'-C1'	11.24	110.49	101.50
3	A1	669	G	N1-C6-O6	-11.23	113.16	119.90
25	BB	2376	A	C5-C6-N1	11.23	123.32	117.70
3	A1	660	C	C2-N3-C4	-11.23	114.28	119.90
3	A1	764	C	N3-C2-O2	-11.23	114.04	121.90
3	A1	818	G	N3-C2-N2	-11.23	112.04	119.90
25	BB	2896	C	N3-C4-N4	-11.23	110.14	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	649	A	C5-C6-N1	11.23	123.31	117.70
23	AX	7	ARG	NE-CZ-NH1	11.23	125.91	120.30
25	BB	208	C	N1-C2-O2	11.23	125.64	118.90
25	BB	783	A	C5-C6-N1	11.23	123.31	117.70
25	BB	2176	A	N1-C6-N6	-11.23	111.86	118.60
3	A1	258	G	N1-C6-O6	-11.22	113.17	119.90
3	A1	502	A	C4-C5-C6	-11.22	111.39	117.00
3	A1	1207	G	C5-C6-N1	11.22	117.11	111.50
3	A1	560	A	C5-C6-N6	11.22	132.68	123.70
25	BB	837	C	N3-C2-O2	-11.22	114.05	121.90
25	BB	2059	A	C5-C6-N1	11.22	123.31	117.70
3	A1	1498	U	C3'-C2'-C1'	11.21	110.47	101.50
24	BA	50	A	C5-C6-N1	11.21	123.31	117.70
25	BB	780	G	C5-C6-N1	11.21	117.11	111.50
25	BB	1413	A	C3'-C2'-C1'	-11.21	92.53	101.50
8	AG	68	ARG	NE-CZ-NH2	11.21	125.91	120.30
25	BB	632	A	C4-C5-C6	-11.21	111.39	117.00
3	A1	925	G	N1-C6-O6	-11.21	113.17	119.90
3	A1	1401	G	C6-C5-N7	11.21	137.12	130.40
25	BB	2030	A	N1-C6-N6	-11.21	111.87	118.60
3	A1	825	A	C5-C6-N1	11.21	123.30	117.70
3	A1	967	C	N3-C4-C5	11.21	126.38	121.90
50	B1	170	ARG	NE-CZ-NH2	11.20	125.90	120.30
3	A1	938	A	C4-C5-C6	-11.20	111.40	117.00
3	A1	1039	G	N3-C2-N2	-11.20	112.06	119.90
3	A1	1225	A	C4-C5-C6	-11.20	111.40	117.00
3	A1	1363	A	C5-C6-N6	11.20	132.66	123.70
24	BA	18	G	N1-C2-N3	11.20	130.62	123.90
25	BB	876	C	O4'-C1'-N1	11.20	117.16	108.20
48	BY	33	ARG	NE-CZ-NH1	11.20	125.90	120.30
25	BB	1952	A	C5-C6-N1	11.20	123.30	117.70
3	A1	643	C	C6-N1-C2	-11.20	115.82	120.30
3	A1	856	C	C2-N3-C4	-11.20	114.30	119.90
25	BB	449	A	C5-C6-N1	11.20	123.30	117.70
25	BB	1730	C	N3-C2-O2	-11.20	114.06	121.90
3	A1	609	A	N1-C6-N6	-11.20	111.88	118.60
25	BB	2610	C	N3-C2-O2	-11.20	114.06	121.90
11	AJ	39	ARG	NE-CZ-NH2	-11.19	114.70	120.30
25	BB	1679	A	C4-C5-C6	-11.20	111.40	117.00
5	AC	97	ARG	NE-CZ-NH2	-11.19	114.70	120.30
3	A1	1339	A	C5-C6-N6	11.19	132.65	123.70
3	A1	1208	C	N3-C2-O2	-11.19	114.07	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	759	A	O4'-C1'-N9	11.19	117.15	108.20
3	A1	873	A	C4-C5-C6	-11.19	111.41	117.00
3	A1	1086	U	O4'-C1'-N1	11.19	117.15	108.20
25	BB	1126	A	C5-C6-N1	11.19	123.29	117.70
3	A1	1489	G	C3'-C2'-C1'	11.18	110.44	101.50
25	BB	413	C	C3'-C2'-C1'	11.18	110.45	101.50
25	BB	1466	U	C5-C6-N1	-11.18	117.11	122.70
25	BB	2225	A	C4-C5-C6	-11.18	111.41	117.00
25	BB	2488	G	C5-C6-N1	11.18	117.09	111.50
3	A1	199	A	N1-C6-N6	-11.18	111.89	118.60
3	A1	574	A	C4-C5-C6	-11.18	111.41	117.00
25	BB	689	A	C4-C5-C6	-11.18	111.41	117.00
25	BB	873	C	N3-C4-N4	-11.18	110.18	118.00
25	BB	1086	A	N1-C6-N6	-11.18	111.89	118.60
25	BB	1853	A	C4-C5-C6	-11.18	111.41	117.00
1	AP	29	A	N1-C6-N6	-11.17	111.90	118.60
25	BB	2900	A	C4-C5-C6	-11.17	111.41	117.00
10	AI	23	ASP	CB-CG-OD2	11.17	128.35	118.30
3	A1	412	A	C5-C6-N1	11.17	123.28	117.70
25	BB	1985	C	N3-C4-C5	11.17	126.37	121.90
3	A1	443	C	N3-C4-N4	-11.17	110.18	118.00
3	A1	1493	A	C5-C6-N1	11.17	123.28	117.70
3	A1	1520	C	C2-N3-C4	-11.17	114.32	119.90
25	BB	272	A	N1-C6-N6	-11.17	111.90	118.60
25	BB	1129	A	N1-C6-N6	-11.17	111.90	118.60
25	BB	928	A	C5-C6-N1	11.16	123.28	117.70
3	A1	170	U	O4'-C1'-N1	11.16	117.13	108.20
3	A1	412	A	O4'-C1'-N9	11.16	117.13	108.20
3	A1	1028	C	C6-N1-C2	-11.16	115.84	120.30
3	A1	679	C	N3-C4-C5	11.16	126.36	121.90
1	AE	66	A	C5-C6-N1	11.16	123.28	117.70
25	BB	2668	G	C1'-O4'-C4'	-11.16	100.97	109.90
25	BB	2788	C	N3-C4-C5	11.16	126.36	121.90
28	BE	59	ARG	NE-CZ-NH1	11.16	125.88	120.30
25	BB	2014	A	C4-C5-C6	-11.15	111.42	117.00
3	A1	908	A	C4-C5-C6	-11.15	111.42	117.00
24	BA	12	C	N1-C2-O2	11.15	125.59	118.90
25	BB	951	C	N1-C2-O2	11.15	125.59	118.90
25	BB	1354	A	C5-C6-N1	11.15	123.28	117.70
25	BB	2205	A	C5-C6-N1	11.15	123.28	117.70
3	A1	946	A	C5-C6-N1	11.15	123.27	117.70
25	BB	1530	G	C6-C5-N7	11.15	137.09	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2901	C	N3-C4-N4	-11.15	110.20	118.00
25	BB	1264	A	N1-C6-N6	-11.14	111.91	118.60
25	BB	2146	C	N3-C2-O2	-11.14	114.10	121.90
1	AE	60	C	N3-C4-N4	-11.14	110.20	118.00
25	BB	528	A	C5-C6-N1	11.14	123.27	117.70
25	BB	876	C	N3-C4-C5	11.14	126.36	121.90
25	BB	1010	A	N1-C6-N6	-11.14	111.92	118.60
3	A1	1277	C	N1-C2-O2	11.13	125.58	118.90
3	A1	889	A	C5-C6-N1	11.13	123.27	117.70
25	BB	1425	G	C5-C6-N1	11.13	117.07	111.50
1	AP	25	C	N3-C2-O2	-11.13	114.11	121.90
3	A1	1492	A	C5-C6-N1	11.13	123.26	117.70
25	BB	854	C	N3-C4-C5	11.12	126.35	121.90
25	BB	1677	A	N1-C6-N6	-11.13	111.92	118.60
25	BB	2706	A	C5-C6-N1	11.12	123.26	117.70
25	BB	599	A	N1-C6-N6	-11.12	111.93	118.60
25	BB	1498	C	N3-C4-C5	11.12	126.35	121.90
41	BR	30	ARG	NE-CZ-NH1	11.12	125.86	120.30
25	BB	936	A	N1-C6-N6	-11.11	111.93	118.60
49	BZ	131	ARG	NE-CZ-NH1	11.11	125.86	120.30
3	A1	433	G	C5-C6-O6	11.11	135.27	128.60
3	A1	614	C	N3-C2-O2	-11.11	114.12	121.90
25	BB	2102	G	N1-C6-O6	-11.11	113.23	119.90
25	BB	2636	C	N3-C4-C5	11.11	126.34	121.90
25	BB	2712	C	N3-C2-O2	-11.11	114.12	121.90
25	BB	2654	A	C4-C5-C6	-11.11	111.45	117.00
1	AE	19	G	C5-C6-O6	11.11	135.26	128.60
25	BB	1273	U	N3-C2-O2	-11.11	114.42	122.20
3	A1	313	A	C5-C6-N1	11.11	123.25	117.70
25	BB	2761	A	N1-C6-N6	-11.11	111.94	118.60
27	BD	108	ARG	NH1-CZ-NH2	-11.11	107.18	119.40
1	AA	19	G	N1-C6-O6	-11.10	113.24	119.90
25	BB	2814	A	C4-C5-C6	-11.10	111.45	117.00
3	A1	1383	C	N3-C4-N4	-11.10	110.23	118.00
3	A1	357	G	N1-C6-O6	-11.10	113.24	119.90
3	A1	73	C	C6-N1-C2	-11.10	115.86	120.30
3	A1	1482	G	C4-C5-N7	-11.09	106.36	110.80
3	A1	513	C	O4'-C1'-N1	11.09	117.07	108.20
3	A1	1270	G	N3-C2-N2	-11.09	112.14	119.90
25	BB	1083	U	O4'-C1'-N1	11.09	117.07	108.20
25	BB	1118	C	N3-C4-C5	11.09	126.33	121.90
25	BB	2766	A	C5-C6-N1	11.09	123.24	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2486	C	C1'-O4'-C4'	-11.08	101.03	109.90
1	AP	21	A	C4-C5-C6	-11.08	111.46	117.00
3	A1	105	G	N1-C6-O6	-11.08	113.25	119.90
3	A1	534	U	N3-C2-O2	-11.08	114.45	122.20
21	AV	116	ARG	NE-CZ-NH2	11.08	125.84	120.30
25	BB	1213	A	C4-C5-C6	-11.08	111.46	117.00
41	BR	44	ARG	NE-CZ-NH2	-11.08	114.76	120.30
1	AE	76	A	C4-C5-C6	-11.07	111.46	117.00
3	A1	120	A	C1'-O4'-C4'	-11.07	101.04	109.90
10	AI	56	ARG	NE-CZ-NH1	11.07	125.84	120.30
25	BB	2716	C	N3-C4-N4	-11.07	110.25	118.00
25	BB	1968	G	N3-C2-N2	-11.07	112.15	119.90
3	A1	987	G	N9-C4-C5	11.07	109.83	105.40
25	BB	1195	G	N1-C6-O6	-11.07	113.26	119.90
25	BB	2062	A	C5-C6-N1	11.07	123.23	117.70
3	A1	70	U	C5-C4-O4	-11.06	119.26	125.90
8	AG	84	ARG	NE-CZ-NH1	11.06	125.83	120.30
25	BB	477	A	C5-C6-N1	11.06	123.23	117.70
36	BM	6	ARG	NE-CZ-NH1	11.06	125.83	120.30
25	BB	601	C	N3-C2-O2	-11.06	114.16	121.90
25	BB	1693	U	N3-C2-O2	-11.06	114.46	122.20
3	A1	373	A	C5-C6-N1	11.06	123.23	117.70
25	BB	1420	A	N1-C6-N6	-11.06	111.96	118.60
25	BB	1669	A	C5-C6-N1	11.06	123.23	117.70
25	BB	2789	C	O4'-C1'-N1	11.06	117.05	108.20
3	A1	156	C	C5'-C4'-O4'	11.05	122.37	109.10
25	BB	1123	C	N3-C4-C5	11.05	126.32	121.90
25	BB	2792	A	N1-C6-N6	-11.05	111.97	118.60
3	A1	1297	G	O4'-C1'-N9	11.05	117.04	108.20
3	A1	212	G	C5-C6-N1	11.05	117.03	111.50
25	BB	626	A	C5-C6-N1	11.05	123.22	117.70
25	BB	1020	A	N1-C6-N6	-11.05	111.97	118.60
25	BB	1433	A	N1-C6-N6	-11.05	111.97	118.60
29	BF	81	ARG	NE-CZ-NH2	11.05	125.83	120.30
3	A1	592	G	N3-C2-N2	-11.05	112.17	119.90
3	A1	611	C	C4-C5-C6	11.05	122.92	117.40
25	BB	344	A	C5-C6-N1	11.05	123.22	117.70
25	BB	90	U	C5-C4-O4	-11.04	119.27	125.90
25	BB	402	A	N1-C6-N6	-11.04	111.97	118.60
25	BB	432	A	C5-C6-N1	11.04	123.22	117.70
25	BB	2850	A	C5-C6-N1	11.04	123.22	117.70
1	AA	60	C	N3-C4-C5	11.04	126.32	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	31	A	N1-C6-N6	-11.04	111.98	118.60
1	AE	68	U	O4'-C1'-N1	11.04	117.03	108.20
24	BA	105	G	C5-C6-N1	11.04	117.02	111.50
25	BB	2006	C	N3-C2-O2	-11.04	114.17	121.90
3	A1	491	G	C8-N9-C4	-11.03	101.99	106.40
3	A1	655	A	N1-C6-N6	-11.03	111.98	118.60
25	BB	1054	A	N1-C6-N6	-11.03	111.98	118.60
3	A1	381	C	N3-C2-O2	-11.03	114.18	121.90
3	A1	48	C	N1-C2-O2	11.03	125.52	118.90
25	BB	197	A	N1-C6-N6	-11.03	111.98	118.60
25	BB	2043	C	O4'-C1'-N1	11.03	117.02	108.20
3	A1	480	U	O4'-C1'-N1	-11.03	99.38	108.20
25	BB	501	A	O4'-C1'-N9	11.03	117.02	108.20
25	BB	661	A	C5-C6-N1	11.02	123.21	117.70
25	BB	847	U	N3-C2-O2	-11.02	114.48	122.20
25	BB	1752	C	N1-C2-O2	11.02	125.52	118.90
3	A1	1225	A	C5-C6-N6	11.02	132.52	123.70
25	BB	299	A	C5-C6-N1	11.02	123.21	117.70
25	BB	1328	A	C5-C6-N1	11.02	123.21	117.70
25	BB	2433	A	C4-C5-C6	-11.02	111.49	117.00
3	A1	1104	G	C6-N1-C2	-11.02	118.49	125.10
3	A1	1298	U	N3-C2-O2	-11.02	114.49	122.20
3	A1	1396	A	C4-C5-C6	-11.02	111.49	117.00
25	BB	900	A	C4-C5-C6	-11.02	111.49	117.00
3	A1	713	G	N3-C2-N2	11.02	127.61	119.90
3	A1	1512	U	N3-C2-O2	-11.02	114.49	122.20
25	BB	2351	G	N1-C6-O6	-11.02	113.29	119.90
3	A1	1504	G	N1-C6-O6	-11.02	113.29	119.90
25	BB	2710	C	N3-C4-C5	11.02	126.31	121.90
24	BA	109	A	N1-C6-N6	-11.01	111.99	118.60
25	BB	1474	U	O4'-C4'-C3'	11.01	115.01	104.00
3	A1	609	A	C5-N7-C8	-11.01	98.40	103.90
3	A1	1152	A	C4-C5-C6	-11.01	111.50	117.00
25	BB	2008	C	N3-C4-C5	11.01	126.31	121.90
3	A1	529	G	N9-C4-C5	11.01	109.80	105.40
25	BB	1032	A	N1-C6-N6	-11.01	112.00	118.60
25	BB	2467	C	N3-C4-N4	-11.01	110.29	118.00
25	BB	300	A	C5-C6-N6	11.01	132.50	123.70
25	BB	1559	U	O4'-C1'-N1	11.01	117.00	108.20
25	BB	1781	U	O4'-C1'-N1	11.01	117.00	108.20
3	A1	924	C	C2-N3-C4	-11.00	114.40	119.90
3	A1	560	A	C4-C5-C6	-11.00	111.50	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	893	C	N3-C4-C5	11.00	126.30	121.90
3	A1	1146	A	N1-C6-N6	-11.00	112.00	118.60
25	BB	489	G	N1-C6-O6	-11.00	113.30	119.90
25	BB	2234	G	C5-C6-O6	11.00	135.20	128.60
25	BB	1244	A	N1-C6-N6	-11.00	112.00	118.60
3	A1	125	U	O4'-C1'-N1	10.99	117.00	108.20
3	A1	1120	C	N3-C4-C5	10.99	126.30	121.90
25	BB	556	A	C5-C6-N1	10.99	123.20	117.70
25	BB	1089	A	C4-C5-C6	-10.99	111.50	117.00
24	BA	88	C	N3-C2-O2	-10.99	114.21	121.90
25	BB	1100	C	N3-C2-O2	-10.99	114.20	121.90
25	BB	2761	A	C5-C6-N1	10.99	123.20	117.70
13	AL	79	TYR	CB-CG-CD2	-10.99	114.41	121.00
47	BX	24	ARG	NE-CZ-NH1	10.99	125.80	120.30
24	BA	39	A	N1-C6-N6	-10.99	112.01	118.60
25	BB	544	C	O4'-C1'-N1	10.99	116.99	108.20
25	BB	1080	A	C4-C5-C6	-10.99	111.51	117.00
27	BD	30	ARG	CD-NE-CZ	10.99	138.98	123.60
3	A1	328	C	C1'-O4'-C4'	-10.98	101.11	109.90
25	BB	127	A	C3'-C2'-C1'	10.98	110.29	101.50
25	BB	737	C	N3-C2-O2	-10.98	114.21	121.90
25	BB	922	C	N3-C2-O2	-10.98	114.21	121.90
25	BB	1785	A	C5-C6-N1	10.98	123.19	117.70
25	BB	1965	C	C2-N3-C4	-10.98	114.41	119.90
1	AE	23	A	C5-C6-N1	10.98	123.19	117.70
3	A1	1298	U	O4'-C1'-N1	10.98	116.99	108.20
25	BB	204	A	C5-C6-N1	10.98	123.19	117.70
25	BB	2125	G	N1-C6-O6	-10.98	113.31	119.90
25	BB	2264	C	N3-C2-O2	-10.98	114.22	121.90
3	A1	328	C	N3-C2-O2	-10.97	114.22	121.90
25	BB	987	C	N3-C4-N4	-10.97	110.32	118.00
3	A1	101	A	C4-C5-C6	-10.97	111.51	117.00
3	A1	1211	U	N1-C2-N3	10.97	121.48	114.90
25	BB	141	G	C5-C6-N1	10.97	116.98	111.50
25	BB	191	A	N1-C6-N6	-10.97	112.02	118.60
25	BB	1583	A	C4-C5-C6	-10.97	111.52	117.00
3	A1	784	A	C4-C5-C6	-10.97	111.52	117.00
25	BB	564	C	N3-C4-N4	-10.97	110.32	118.00
1	AE	21	A	N1-C6-N6	-10.97	112.02	118.60
3	A1	1147	C	N3-C4-C5	10.97	126.29	121.90
1	AP	11	C	C2-N3-C4	-10.96	114.42	119.90
3	A1	559	A	O4'-C1'-N9	10.96	116.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	819	A	C5-C6-N1	10.96	123.18	117.70
25	BB	1212	G	O4'-C1'-N9	-10.96	99.43	108.20
3	A1	999	C	N3-C2-O2	-10.96	114.23	121.90
24	BA	42	C	N1-C2-O2	10.96	125.48	118.90
25	BB	644	A	C5-C6-N1	10.96	123.18	117.70
25	BB	917	A	C5-C6-N1	10.96	123.18	117.70
25	BB	1143	A	C4-C5-C6	-10.96	111.52	117.00
25	BB	1934	C	N3-C2-O2	-10.96	114.23	121.90
3	A1	683	G	N1-C6-O6	-10.96	113.33	119.90
25	BB	1817	G	N1-C6-O6	-10.96	113.32	119.90
3	A1	1251	A	C5-C6-N1	10.96	123.18	117.70
25	BB	343	C	N3-C2-O2	-10.96	114.23	121.90
25	BB	550	C	N3-C4-C5	10.96	126.28	121.90
25	BB	2178	C	N3-C4-C5	10.96	126.28	121.90
25	BB	1221	C	N3-C4-C5	10.95	126.28	121.90
25	BB	2053	G	N1-C6-O6	-10.96	113.33	119.90
1	AE	58	A	C5-C6-N1	10.95	123.18	117.70
3	A1	10	A	C5-C6-N1	10.95	123.17	117.70
25	BB	944	C	N3-C2-O2	-10.95	114.24	121.90
25	BB	1130	U	O4'-C1'-N1	10.95	116.96	108.20
25	BB	271	G	N1-C6-O6	-10.95	113.33	119.90
1	AE	58	A	C4-C5-C6	-10.95	111.53	117.00
3	A1	145	G	C5-C6-N1	10.95	116.97	111.50
3	A1	728	A	C4-C5-C6	-10.94	111.53	117.00
3	A1	967	C	N3-C4-N4	-10.95	110.34	118.00
25	BB	1609	A	C4-C5-C6	-10.95	111.53	117.00
3	A1	1027	C	N3-C2-O2	-10.94	114.24	121.90
25	BB	1913	A	C4-C5-C6	-10.95	111.53	117.00
25	BB	1407	G	N3-C2-N2	-10.94	112.24	119.90
25	BB	2751	G	O4'-C1'-N9	10.94	116.95	108.20
3	A1	193	C	N3-C4-C5	10.94	126.28	121.90
25	BB	472	A	C5-C6-N1	10.94	123.17	117.70
25	BB	2610	C	N1-C2-O2	10.94	125.46	118.90
16	AQ	32	ARG	NE-CZ-NH1	10.93	125.77	120.30
3	A1	1021	A	N1-C6-N6	-10.93	112.04	118.60
25	BB	336	C	N3-C4-N4	-10.93	110.35	118.00
25	BB	1084	A	C1'-O4'-C4'	-10.93	101.16	109.90
25	BB	484	C	C1'-O4'-C4'	-10.93	101.16	109.90
3	A1	344	A	O4'-C1'-N9	-10.92	99.46	108.20
3	A1	1062	U	C5-C6-N1	-10.92	117.24	122.70
24	BA	27	C	C6-N1-C2	-10.92	115.93	120.30
25	BB	308	G	C5-C6-N1	10.92	116.96	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
7	AF	69	ARG	NE-CZ-NH2	10.92	125.76	120.30
3	A1	421	U	C3'-C2'-C1'	10.92	110.23	101.50
25	BB	108	G	C5-C6-N1	10.92	116.96	111.50
25	BB	1289	C	C2-N3-C4	-10.91	114.44	119.90
24	BA	19	C	N3-C4-C5	10.91	126.27	121.90
25	BB	190	A	C5-C6-N1	10.91	123.16	117.70
25	BB	1512	C	N3-C4-C5	10.91	126.27	121.90
37	BN	51	ARG	NE-CZ-NH2	10.91	125.76	120.30
37	BN	166	ARG	NE-CZ-NH1	10.91	125.76	120.30
1	AA	36	A	C4-C5-C6	-10.91	111.55	117.00
3	A1	262	A	N1-C6-N6	-10.91	112.05	118.60
3	A1	1299	A	C4-C5-C6	-10.91	111.55	117.00
3	A1	808	C	C2-N3-C4	-10.91	114.45	119.90
24	BA	91	C	N3-C2-O2	-10.91	114.27	121.90
46	BW	7	ARG	NE-CZ-NH2	10.91	125.75	120.30
3	A1	246	A	C4-C5-C6	-10.90	111.55	117.00
3	A1	348	G	N1-C2-N3	10.90	130.44	123.90
3	A1	990	C	O4'-C1'-N1	10.90	116.92	108.20
25	BB	2047	C	N3-C4-C5	10.90	126.26	121.90
29	BF	38	ARG	NE-CZ-NH1	10.90	125.75	120.30
3	A1	1520	C	N3-C4-N4	-10.90	110.37	118.00
25	BB	412	A	C5-C6-N1	10.90	123.15	117.70
25	BB	881	G	C6-N1-C2	-10.90	118.56	125.10
25	BB	740	C	N1-C2-O2	10.90	125.44	118.90
3	A1	1151	A	C4-C5-C6	-10.90	111.55	117.00
3	A1	1465	A	C4-C5-C6	-10.90	111.55	117.00
48	BY	179	ARG	NE-CZ-NH1	10.90	125.75	120.30
3	A1	848	C	N3-C4-C5	10.89	126.26	121.90
3	A1	1256	A	C4-C5-C6	-10.89	111.55	117.00
25	BB	1156	A	C5-C6-N1	10.89	123.15	117.70
25	BB	1515	A	C5-C6-N1	10.89	123.15	117.70
25	BB	2234	G	N1-C6-O6	-10.89	113.36	119.90
25	BB	1186	G	N1-C6-O6	-10.89	113.37	119.90
25	BB	176	A	O4'-C1'-N9	10.89	116.91	108.20
25	BB	433	C	N3-C2-O2	-10.89	114.28	121.90
25	BB	1614	A	C5-C6-N1	10.89	123.14	117.70
25	BB	2604	U	N3-C2-O2	-10.89	114.58	122.20
25	BB	652	U	C4-C5-C6	10.89	126.23	119.70
25	BB	2600	A	C4-C5-C6	-10.89	111.56	117.00
25	BB	342	A	C4-C5-C6	-10.88	111.56	117.00
27	BD	30	ARG	NE-CZ-NH1	10.88	125.74	120.30
48	BY	141	ARG	NE-CZ-NH1	-10.88	114.86	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	722	G	N3-C2-N2	-10.88	112.28	119.90
25	BB	1607	C	N3-C4-C5	10.88	126.25	121.90
3	A1	69	G	O4'-C1'-N9	10.88	116.90	108.20
3	A1	1277	C	N3-C2-O2	-10.88	114.28	121.90
25	BB	1422	G	N1-C6-O6	-10.88	113.37	119.90
43	BT	16	ARG	NE-CZ-NH1	-10.88	114.86	120.30
25	BB	794	A	C5-C6-N1	10.88	123.14	117.70
25	BB	921	C	N3-C4-C5	10.88	126.25	121.90
25	BB	2697	G	O4'-C1'-N9	10.88	116.90	108.20
25	BB	1805	A	N1-C6-N6	-10.87	112.08	118.60
3	A1	79	G	N3-C4-C5	-10.87	123.16	128.60
25	BB	2388	A	N1-C6-N6	-10.87	112.08	118.60
24	BA	45	A	C5-C6-N1	10.87	123.14	117.70
3	A1	415	A	N1-C6-N6	-10.87	112.08	118.60
3	A1	65	A	C6-C5-N7	10.87	139.91	132.30
15	AO	125	ARG	NE-CZ-NH1	10.87	125.73	120.30
3	A1	491	G	N7-C8-N9	10.87	118.53	113.10
3	A1	923	A	C5-C6-N1	10.87	123.13	117.70
3	A1	1183	U	C4'-C3'-C2'	-10.87	91.73	102.60
25	BB	1167	C	N3-C4-C5	10.86	126.25	121.90
25	BB	2309	A	C2-N3-C4	10.86	116.03	110.60
25	BB	2497	A	C4-C5-C6	-10.86	111.57	117.00
50	B1	102	ARG	NE-CZ-NH1	10.86	125.73	120.30
25	BB	352	A	C4-C5-C6	-10.86	111.57	117.00
25	BB	2572	A	N1-C6-N6	-10.86	112.08	118.60
38	BO	21	ARG	NE-CZ-NH1	10.86	125.73	120.30
25	BB	490	C	N1-C2-O2	10.86	125.41	118.90
25	BB	1146	C	N3-C2-O2	-10.86	114.30	121.90
3	A1	872	A	N1-C6-N6	-10.85	112.09	118.60
25	BB	1999	C	N3-C2-O2	-10.85	114.30	121.90
25	BB	1367	A	C5-C6-N1	10.85	123.13	117.70
25	BB	2379	G	N1-C6-O6	-10.85	113.39	119.90
3	A1	1347	G	O4'-C1'-N9	10.85	116.88	108.20
25	BB	267	C	C2-N3-C4	-10.85	114.48	119.90
25	BB	621	A	N1-C6-N6	-10.85	112.09	118.60
3	A1	979	C	N1-C2-O2	10.85	125.41	118.90
25	BB	1870	C	N3-C4-N4	-10.85	110.41	118.00
1	AP	1	G	N1-C6-O6	-10.84	113.39	119.90
25	BB	863	A	N1-C6-N6	-10.84	112.09	118.60
3	A1	986	U	N3-C2-O2	-10.84	114.61	122.20
25	BB	1584	U	N3-C2-O2	-10.84	114.61	122.20
3	A1	1054	C	N3-C4-C5	10.84	126.24	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	62	A	N1-C6-N6	-10.84	112.10	118.60
25	BB	1730	C	C2-N3-C4	-10.84	114.48	119.90
3	A1	559	A	C4-C5-C6	-10.84	111.58	117.00
25	BB	147	C	N3-C2-O2	-10.84	114.31	121.90
25	BB	764	A	C4-C5-C6	-10.84	111.58	117.00
25	BB	983	A	N1-C6-N6	-10.84	112.10	118.60
2	AM	2	U	O4'-C1'-N1	10.83	116.87	108.20
3	A1	984	C	C2-N3-C4	-10.83	114.48	119.90
25	BB	400	G	N1-C6-O6	-10.83	113.40	119.90
25	BB	501	A	C5-C6-N1	10.83	123.12	117.70
25	BB	1603	A	C5-C6-N1	10.83	123.12	117.70
3	A1	655	A	C5-C6-N1	10.83	123.11	117.70
3	A1	660	C	N3-C2-O2	-10.83	114.32	121.90
3	A1	1168	U	P-O3'-C3'	10.82	132.69	119.70
3	A1	246	A	C5-C6-N1	10.82	123.11	117.70
25	BB	1383	A	C5-C6-N6	10.82	132.36	123.70
25	BB	2173	A	C4-C5-C6	-10.82	111.59	117.00
25	BB	2530	A	N1-C6-N6	-10.82	112.11	118.60
3	A1	1480	A	N1-C6-N6	-10.82	112.11	118.60
25	BB	2421	G	C5-C6-N1	10.82	116.91	111.50
25	BB	81	G	C5-C6-O6	10.82	135.09	128.60
25	BB	840	C	N3-C4-N4	-10.82	110.43	118.00
25	BB	116	C	N1-C2-O2	10.82	125.39	118.90
3	A1	660	C	N3-C4-C5	10.81	126.23	121.90
3	A1	694	A	C5-C6-N1	10.81	123.11	117.70
3	A1	1340	A	C2'-C3'-O3'	10.81	133.29	109.50
3	A1	862	C	O4'-C1'-N1	10.81	116.85	108.20
45	BV	21	ARG	NE-CZ-NH1	10.81	125.70	120.30
25	BB	2644	G	C4-C5-N7	-10.81	106.48	110.80
25	BB	1156	A	O4'-C1'-N9	10.81	116.85	108.20
25	BB	2846	G	N1-C6-O6	-10.81	113.42	119.90
25	BB	1210	G	C5-C6-N1	10.81	116.90	111.50
25	BB	1672	A	C5-C6-N1	10.80	123.10	117.70
25	BB	2807	U	N1-C2-N3	10.80	121.38	114.90
1	AP	8	U	N3-C2-O2	-10.80	114.64	122.20
25	BB	435	C	N3-C2-O2	-10.80	114.34	121.90
25	BB	343	C	C6-N1-C2	-10.80	115.98	120.30
25	BB	523	C	N3-C4-C5	10.80	126.22	121.90
25	BB	1057	A	C4-C5-C6	-10.80	111.60	117.00
25	BB	1428	C	N3-C2-O2	-10.80	114.34	121.90
1	AA	50	U	O4'-C1'-N1	10.79	116.84	108.20
3	A1	513	C	C2-N3-C4	-10.79	114.50	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	845	A	C4-C5-C6	-10.79	111.60	117.00
25	BB	2308	G	O4'-C1'-N9	10.79	116.83	108.20
25	BB	163	C	O4'-C1'-N1	10.79	116.83	108.20
3	A1	143	A	C6-N1-C2	-10.79	112.13	118.60
3	A1	1280	A	O4'-C1'-N9	10.79	116.83	108.20
3	A1	1391	U	O4'-C1'-N1	10.79	116.83	108.20
8	AG	80	ARG	NH1-CZ-NH2	-10.79	107.53	119.40
25	BB	181	A	C5-C6-N1	10.79	123.09	117.70
25	BB	2700	A	C5-C6-N1	10.79	123.09	117.70
3	A1	1219	A	C4-C5-C6	-10.79	111.61	117.00
25	BB	299	A	C4-C5-C6	-10.79	111.61	117.00
25	BB	743	A	N1-C6-N6	-10.79	112.13	118.60
25	BB	2387	U	N3-C2-O2	-10.79	114.65	122.20
25	BB	186	G	N3-C2-N2	10.79	127.45	119.90
25	BB	982	C	N1-C2-O2	10.79	125.37	118.90
25	BB	2091	C	N3-C2-O2	-10.79	114.35	121.90
25	BB	2298	A	C5-C6-N1	10.79	123.09	117.70
25	BB	1572	A	C4-C5-C6	-10.78	111.61	117.00
25	BB	2726	A	C4-C5-C6	-10.78	111.61	117.00
1	AE	39	U	C3'-C2'-C1'	-10.78	92.88	101.50
3	A1	466	A	O4'-C1'-N9	10.78	116.82	108.20
3	A1	935	A	C5-C6-N1	10.78	123.09	117.70
25	BB	886	A	C5-C6-N1	10.78	123.09	117.70
25	BB	800	A	C4-C5-C6	-10.78	111.61	117.00
25	BB	2896	C	O4'-C1'-N1	10.77	116.82	108.20
3	A1	1310	G	N1-C6-O6	-10.77	113.44	119.90
25	BB	745	G	OP1-P-OP2	-10.77	103.44	119.60
25	BB	2534	A	C4-C5-C6	-10.77	111.61	117.00
3	A1	337	G	N3-C4-C5	-10.77	123.22	128.60
3	A1	502	A	C5-C6-N1	10.77	123.08	117.70
24	BA	21	G	N1-C6-O6	-10.77	113.44	119.90
25	BB	165	A	C5-C6-N1	10.77	123.08	117.70
25	BB	1386	C	N3-C4-C5	10.77	126.21	121.90
3	A1	1322	C	C6-N1-C2	-10.77	115.99	120.30
4	AB	20	ARG	NE-CZ-NH2	-10.77	114.92	120.30
25	BB	1937	A	C4-C5-C6	-10.77	111.62	117.00
25	BB	2752	C	N3-C4-N4	-10.77	110.46	118.00
25	BB	91	A	C5-C6-N1	10.76	123.08	117.70
1	AP	38	A	N1-C6-N6	-10.76	112.14	118.60
25	BB	213	A	C4-C5-C6	-10.76	111.62	117.00
25	BB	1276	A	N1-C6-N6	-10.76	112.14	118.60
25	BB	2846	G	C5-C6-N1	10.76	116.88	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2516	A	C4-C5-C6	-10.76	111.62	117.00
25	BB	2523	G	C5-C6-N1	10.76	116.88	111.50
3	A1	71	A	C5-C6-N1	10.75	123.08	117.70
3	A1	954	G	O4'-C1'-N9	10.75	116.80	108.20
25	BB	217	A	C4-C5-C6	-10.75	111.62	117.00
25	BB	426	C	C2-N3-C4	-10.75	114.52	119.90
25	BB	1144	A	C5-C6-N1	10.75	123.08	117.70
25	BB	2354	C	N3-C4-C5	10.75	126.20	121.90
3	A1	59	A	C8-N9-C4	-10.75	101.50	105.80
3	A1	335	C	C4'-C3'-C2'	-10.75	91.85	102.60
3	A1	530	G	N1-C6-O6	-10.75	113.45	119.90
4	AB	62	ARG	NE-CZ-NH1	10.75	125.67	120.30
25	BB	182	A	N1-C6-N6	-10.75	112.15	118.60
25	BB	866	A	C5-C6-N1	10.75	123.07	117.70
25	BB	1254	A	C5-C6-N1	10.75	123.07	117.70
3	A1	412	A	C3'-C2'-C1'	-10.74	92.91	101.50
3	A1	914	A	C4-C5-C6	-10.74	111.63	117.00
1	AP	70	C	C6-N1-C2	-10.74	116.00	120.30
3	A1	1196	A	C1'-O4'-C4'	-10.74	101.31	109.90
25	BB	1459	G	C4-C5-N7	-10.74	106.50	110.80
25	BB	1687	G	N1-C6-O6	-10.74	113.46	119.90
25	BB	2377	A	C6-C5-N7	10.74	139.82	132.30
1	AP	72	C	C2-N3-C4	-10.74	114.53	119.90
3	A1	1087	G	C4-C5-N7	-10.74	106.50	110.80
5	AC	12	ARG	NE-CZ-NH1	10.74	125.67	120.30
25	BB	33	C	O4'-C1'-N1	10.74	116.79	108.20
25	BB	1785	A	C4-C5-C6	-10.74	111.63	117.00
3	A1	60	A	C5-N7-C8	-10.73	98.53	103.90
3	A1	1340	A	C3'-C2'-C1'	10.73	110.09	101.50
25	BB	294	A	C5-C6-N1	10.73	123.07	117.70
25	BB	2003	A	C5-C6-N1	10.73	123.07	117.70
3	A1	872	A	C6-C5-N7	10.73	139.81	132.30
25	BB	544	C	N3-C4-C5	10.73	126.19	121.90
3	A1	857	C	N3-C2-O2	-10.73	114.39	121.90
25	BB	223	A	C5-C6-N1	10.73	123.06	117.70
3	A1	1412	C	N3-C4-C5	10.73	126.19	121.90
25	BB	748	G	O4'-C1'-N9	10.73	116.78	108.20
25	BB	1958	C	C2-N3-C4	-10.73	114.54	119.90
25	BB	2238	G	O4'-C1'-N9	10.73	116.78	108.20
3	A1	110	C	C5-C6-N1	-10.72	115.64	121.00
3	A1	1005	A	C5-C6-N1	10.72	123.06	117.70
3	A1	1405	G	N1-C6-O6	-10.72	113.47	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1775	U	N3-C2-O2	-10.72	114.69	122.20
25	BB	2529	G	C4-C5-N7	-10.72	106.51	110.80
25	BB	251	A	N1-C6-N6	-10.72	112.17	118.60
25	BB	1608	A	N1-C6-N6	-10.72	112.17	118.60
25	BB	2111	U	N3-C2-O2	-10.72	114.70	122.20
25	BB	2207	C	N3-C4-C5	10.72	126.19	121.90
25	BB	2385	C	N3-C2-O2	-10.72	114.39	121.90
25	BB	2425	A	C5-C6-N6	10.72	132.28	123.70
25	BB	1270	C	C1'-O4'-C4'	-10.72	101.33	109.90
25	BB	1584	U	O4'-C1'-N1	10.72	116.78	108.20
25	BB	1891	G	N1-C6-O6	-10.72	113.47	119.90
25	BB	2277	G	C5-C6-N1	10.72	116.86	111.50
25	BB	2542	A	N1-C6-N6	-10.72	112.17	118.60
33	BJ	50	ARG	NE-CZ-NH1	10.72	125.66	120.30
3	A1	1163	A	C4-C5-C6	-10.71	111.64	117.00
25	BB	2358	A	C4-C5-C6	-10.72	111.64	117.00
3	A1	611	C	N3-C2-O2	-10.71	114.40	121.90
24	BA	23	G	N1-C6-O6	-10.71	113.47	119.90
25	BB	1956	U	C5-C6-N1	-10.71	117.34	122.70
3	A1	156	C	O4'-C1'-N1	10.71	116.77	108.20
3	A1	356	A	C4-C5-C6	-10.71	111.65	117.00
3	A1	479	U	N3-C2-O2	-10.71	114.70	122.20
25	BB	2439	A	C5-C6-N1	10.71	123.05	117.70
3	A1	486	U	N3-C2-O2	-10.71	114.71	122.20
3	A1	18	C	N3-C4-N4	-10.70	110.51	118.00
25	BB	1659	G	N1-C6-O6	-10.71	113.48	119.90
3	A1	338	A	C4-C5-C6	-10.70	111.65	117.00
1	AP	50	U	C5-C6-N1	-10.70	117.35	122.70
25	BB	2661	G	C8-N9-C4	-10.70	102.12	106.40
3	A1	1027	C	N1-C2-O2	10.70	125.32	118.90
25	BB	1480	C	N1-C2-O2	10.70	125.32	118.90
25	BB	2744	G	N1-C6-O6	-10.70	113.48	119.90
25	BB	1210	G	C8-N9-C4	-10.70	102.12	106.40
25	BB	2860	A	C5-C6-N1	10.70	123.05	117.70
3	A1	1101	A	C5-C6-N1	10.69	123.05	117.70
25	BB	1927	A	C4-C5-C6	-10.69	111.65	117.00
25	BB	1111	A	C1'-O4'-C4'	-10.69	101.35	109.90
3	A1	1398	A	O4'-C1'-N9	10.69	116.75	108.20
25	BB	940	G	N3-C2-N2	-10.69	112.42	119.90
25	BB	1275	A	C5-C6-N1	10.69	123.05	117.70
1	AE	48	C	N3-C2-O2	-10.69	114.42	121.90
3	A1	364	A	N1-C6-N6	-10.69	112.19	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	675	A	C5-C6-N1	10.69	123.04	117.70
25	BB	582	A	C5-C6-N1	10.69	123.04	117.70
25	BB	866	A	O4'-C1'-N9	10.69	116.75	108.20
25	BB	1274	A	C5-C6-N1	10.69	123.04	117.70
3	A1	1385	G	N1-C6-O6	-10.68	113.49	119.90
25	BB	1990	C	N3-C2-O2	-10.68	114.42	121.90
45	BV	28	ARG	NE-CZ-NH1	10.68	125.64	120.30
3	A1	1046	A	C6-N1-C2	-10.68	112.19	118.60
25	BB	788	A	C5-C6-N1	10.68	123.04	117.70
25	BB	248	G	O4'-C1'-N9	10.68	116.74	108.20
25	BB	1705	A	C6-C5-N7	10.68	139.77	132.30
25	BB	2009	A	C4-C5-C6	-10.68	111.66	117.00
25	BB	428	A	C6-C5-N7	10.67	139.77	132.30
3	A1	336	A	C4-C5-C6	-10.67	111.67	117.00
3	A1	1196	A	C4-C5-C6	-10.67	111.67	117.00
25	BB	540	C	N3-C4-C5	10.67	126.17	121.90
25	BB	1403	A	C5-C6-N1	10.67	123.03	117.70
25	BB	616	A	C5-C6-N1	10.67	123.03	117.70
25	BB	2524	G	C6-N1-C2	-10.67	118.70	125.10
3	A1	1401	G	O4'-C1'-N9	10.67	116.73	108.20
25	BB	2260	C	N3-C2-O2	-10.67	114.43	121.90
25	BB	2806	C	C2-N3-C4	-10.67	114.57	119.90
25	BB	1617	C	N3-C4-C5	10.66	126.17	121.90
3	A1	1316	G	C6-C5-N7	10.66	136.80	130.40
25	BB	1103	A	C5-C6-N1	10.66	123.03	117.70
1	AA	41	U	O4'-C1'-N1	10.66	116.73	108.20
25	BB	2255	G	C5-N7-C8	-10.66	98.97	104.30
25	BB	2614	A	C5-C6-N1	10.66	123.03	117.70
39	BP	10	ARG	NE-CZ-NH2	10.66	125.63	120.30
25	BB	574	A	N1-C6-N6	-10.66	112.20	118.60
25	BB	2716	C	N3-C2-O2	-10.66	114.44	121.90
3	A1	841	C	N3-C4-C5	10.66	126.16	121.90
6	AD	113	ARG	NE-CZ-NH1	10.66	125.63	120.30
25	BB	788	A	C4-C5-C6	-10.66	111.67	117.00
25	BB	2714	G	N1-C6-O6	-10.66	113.51	119.90
25	BB	2808	G	C6-N1-C2	-10.66	118.70	125.10
3	A1	266	G	C8-N9-C4	-10.65	102.14	106.40
3	A1	431	A	C2-N3-C4	10.65	115.93	110.60
3	A1	513	C	N3-C4-C5	10.65	126.16	121.90
3	A1	749	A	C5-C6-N1	10.65	123.03	117.70
3	A1	884	U	O4'-C1'-N1	10.65	116.72	108.20
3	A1	649	A	C4-C5-C6	-10.65	111.67	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1483	A	OP1-P-OP2	-10.65	103.63	119.60
25	BB	909	A	C5-C6-N1	10.65	123.03	117.70
25	BB	6	A	C5-C6-N1	10.65	123.02	117.70
25	BB	962	G	N1-C6-O6	-10.65	113.51	119.90
3	A1	909	A	C5-C6-N1	10.65	123.02	117.70
3	A1	1319	A	C4-C5-C6	-10.65	111.68	117.00
1	AA	21	A	C5-C6-N1	10.64	123.02	117.70
1	AE	23	A	N1-C6-N6	-10.64	112.21	118.60
3	A1	1451	U	N1-C2-N3	10.64	121.29	114.90
25	BB	2321	U	C5-C6-N1	-10.64	117.38	122.70
25	BB	1295	C	N3-C2-O2	-10.64	114.45	121.90
25	BB	1485	U	O4'-C1'-N1	10.64	116.72	108.20
3	A1	1421	G	N1-C6-O6	-10.64	113.52	119.90
3	A1	536	C	N3-C2-O2	-10.64	114.45	121.90
25	BB	1235	G	N1-C6-O6	-10.64	113.52	119.90
25	BB	1954	G	N3-C2-N2	-10.64	112.45	119.90
25	BB	2238	G	OP1-P-OP2	-10.64	103.64	119.60
25	BB	2685	G	N1-C6-O6	-10.64	113.52	119.90
24	BA	99	A	C4-C5-C6	-10.63	111.68	117.00
25	BB	1739	A	C4-C5-C6	-10.63	111.69	117.00
25	BB	2339	C	N3-C2-O2	-10.63	114.46	121.90
25	BB	2418	A	C5-C6-N1	10.63	123.02	117.70
3	A1	17	U	O4'-C1'-N1	10.63	116.70	108.20
3	A1	478	A	N1-C6-N6	-10.63	112.22	118.60
3	A1	959	A	C3'-C2'-C1'	10.62	110.00	101.50
25	BB	2205	A	N1-C6-N6	-10.62	112.22	118.60
25	BB	2407	A	C4-C5-C6	-10.62	111.69	117.00
25	BB	2792	A	N9-C1'-C2'	-10.62	100.19	114.00
25	BB	1459	G	C6-N1-C2	-10.62	118.73	125.10
25	BB	2341	G	C5-C6-N1	10.62	116.81	111.50
3	A1	382	A	C4-C5-C6	-10.62	111.69	117.00
3	A1	999	C	C6-N1-C2	-10.62	116.05	120.30
25	BB	357	C	N3-C4-C5	10.62	126.15	121.90
25	BB	2090	A	C5-C6-N1	10.62	123.01	117.70
25	BB	537	G	C5-C6-N1	10.62	116.81	111.50
25	BB	1871	A	C6-C5-N7	10.62	139.73	132.30
25	BB	2411	A	C5-C6-N1	10.62	123.01	117.70
25	BB	1717	A	N1-C6-N6	-10.62	112.23	118.60
25	BB	1801	A	C2-N3-C4	10.62	115.91	110.60
25	BB	2492	U	O4'-C1'-N1	10.62	116.69	108.20
25	BB	2560	A	C5-C6-N1	10.61	123.01	117.70
3	A1	155	A	C5-C6-N1	10.61	123.00	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	602	A	N1-C2-N3	-10.61	124.00	129.30
25	BB	2662	A	C4-C5-C6	-10.61	111.70	117.00
3	A1	718	A	C4-C5-C6	-10.61	111.70	117.00
3	A1	814	A	N1-C6-N6	-10.61	112.24	118.60
3	A1	962	C	C4-C5-C6	10.61	122.70	117.40
3	A1	1066	C	O4'-C1'-N1	10.61	116.68	108.20
25	BB	652	U	N3-C2-O2	-10.61	114.78	122.20
1	AE	60	C	N3-C2-O2	-10.60	114.48	121.90
3	A1	51	A	C2-N3-C4	10.60	115.90	110.60
3	A1	1204	A	C5-C6-N1	10.60	123.00	117.70
25	BB	1847	A	O4'-C1'-N9	10.60	116.68	108.20
25	BB	2733	A	C5-C6-N1	10.60	123.00	117.70
25	BB	2749	A	C5-C6-N1	10.60	123.00	117.70
3	A1	1362	A	C4-C5-C6	-10.60	111.70	117.00
25	BB	556	A	O4'-C1'-N9	10.60	116.68	108.20
25	BB	2602	A	C4-C5-C6	-10.60	111.70	117.00
25	BB	469	G	N1-C6-O6	-10.60	113.54	119.90
25	BB	2517	C	N3-C4-C5	10.60	126.14	121.90
25	BB	461	C	N3-C2-O2	-10.60	114.48	121.90
3	A1	1492	A	C4-C5-C6	-10.60	111.70	117.00
25	BB	1058	U	N3-C2-O2	-10.60	114.78	122.20
3	A1	266	G	C5-C6-N1	10.59	116.80	111.50
25	BB	490	C	N3-C2-O2	-10.59	114.48	121.90
3	A1	47	C	N3-C4-C5	10.59	126.14	121.90
3	A1	975	A	C4-C5-C6	-10.59	111.70	117.00
25	BB	384	A	C5-C6-N1	10.59	123.00	117.70
25	BB	1907	G	N3-C2-N2	-10.59	112.49	119.90
25	BB	2412	A	C5-C6-N1	10.59	123.00	117.70
3	A1	364	A	C6-C5-N7	10.59	139.71	132.30
3	A1	443	C	N3-C2-O2	-10.59	114.49	121.90
3	A1	1493	A	C8-N9-C4	-10.59	101.57	105.80
25	BB	173	A	N1-C6-N6	-10.59	112.25	118.60
25	BB	346	A	C1'-O4'-C4'	-10.59	101.43	109.90
3	A1	335	C	N1-C2-O2	10.58	125.25	118.90
25	BB	176	A	C5-C6-N1	10.58	122.99	117.70
25	BB	32	C	N3-C4-C5	10.58	126.13	121.90
25	BB	1325	U	N1-C2-N3	10.58	121.25	114.90
3	A1	316	C	C2-N3-C4	-10.58	114.61	119.90
3	A1	1172	C	N3-C2-O2	-10.58	114.50	121.90
25	BB	38	A	C6-C5-N7	10.58	139.71	132.30
25	BB	213	A	N1-C6-N6	-10.58	112.25	118.60
25	BB	901	C	N3-C4-C5	10.58	126.13	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1491	G	N1-C6-O6	-10.57	113.56	119.90
25	BB	1625	C	N3-C4-C5	10.57	126.13	121.90
25	BB	2872	A	C5-C6-N1	10.57	122.99	117.70
25	BB	702	U	C1'-O4'-C4'	-10.57	101.44	109.90
25	BB	1492	G	N1-C6-O6	-10.57	113.56	119.90
25	BB	2171	A	C1'-O4'-C4'	-10.57	101.44	109.90
3	A1	443	C	N3-C4-C5	10.57	126.13	121.90
3	A1	1446	A	C5-C6-N1	10.57	122.98	117.70
25	BB	1569	A	C5-C6-N1	10.57	122.99	117.70
25	BB	1888	G	N1-C6-O6	-10.57	113.56	119.90
3	A1	956	U	N3-C2-O2	-10.57	114.80	122.20
25	BB	2110	G	N3-C4-C5	-10.57	123.32	128.60
25	BB	730	A	C5-C6-N1	10.56	122.98	117.70
3	A1	1483	A	C5-C6-N1	10.56	122.98	117.70
25	BB	2255	G	N7-C8-N9	10.56	118.38	113.10
3	A1	434	U	O4'-C1'-N1	10.56	116.65	108.20
25	BB	1285	A	C8-N9-C4	-10.56	101.58	105.80
3	A1	300	A	C5-C6-N1	10.56	122.98	117.70
3	A1	569	C	N3-C4-N4	-10.56	110.61	118.00
25	BB	174	U	O4'-C1'-N1	10.56	116.65	108.20
25	BB	513	A	C5-C6-N1	10.56	122.98	117.70
3	A1	495	A	C4-C5-C6	-10.56	111.72	117.00
25	BB	362	A	C6-C5-N7	10.56	139.69	132.30
25	BB	526	A	C4-C5-C6	-10.56	111.72	117.00
3	A1	784	A	C5-C6-N1	10.55	122.98	117.70
5	AC	97	ARG	NE-CZ-NH1	10.55	125.58	120.30
21	AV	83	ARG	NE-CZ-NH1	10.55	125.58	120.30
25	BB	1474	U	C3'-C2'-C1'	10.55	109.94	101.50
25	BB	1789	A	C4-C5-C6	-10.55	111.72	117.00
25	BB	2576	G	N1-C6-O6	-10.55	113.57	119.90
3	A1	193	C	N3-C2-O2	-10.55	114.51	121.90
3	A1	648	A	C5-C6-N1	10.55	122.98	117.70
3	A1	739	C	N1-C1'-C2'	-10.55	100.28	114.00
3	A1	1378	C	C5'-C4'-O4'	10.55	121.76	109.10
3	A1	1403	C	C5-C4-N4	10.55	127.59	120.20
25	BB	3	U	N3-C2-O2	-10.55	114.81	122.20
25	BB	217	A	O4'-C1'-N9	10.55	116.64	108.20
25	BB	947	A	N1-C6-N6	-10.55	112.27	118.60
3	A1	255	G	N3-C2-N2	-10.55	112.52	119.90
3	A1	1026	G	C5-C6-N1	10.55	116.77	111.50
25	BB	2135	A	N1-C6-N6	-10.55	112.27	118.60
25	BB	2369	A	O4'-C1'-N9	-10.55	99.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	167	A	C4-C5-C6	-10.54	111.73	117.00
3	A1	583	A	C5-C6-N1	10.54	122.97	117.70
3	A1	613	C	N3-C2-O2	-10.54	114.52	121.90
3	A1	537	G	C5-C6-N1	10.54	116.77	111.50
25	BB	1924	C	N3-C2-O2	-10.54	114.52	121.90
25	BB	2879	A	C5-C6-N1	10.54	122.97	117.70
3	A1	198	G	C4'-C3'-C2'	-10.54	92.06	102.60
3	A1	174	A	C4-C5-C6	-10.54	111.73	117.00
25	BB	11	C	N3-C4-N4	-10.54	110.62	118.00
25	BB	1399	C	N3-C4-N4	-10.54	110.63	118.00
25	BB	2372	U	O4'-C1'-N1	10.54	116.63	108.20
3	A1	159	G	C1'-O4'-C4'	-10.53	101.47	109.90
3	A1	372	C	C2-N3-C4	-10.53	114.63	119.90
25	BB	775	G	N3-C2-N2	-10.53	112.53	119.90
25	BB	1397	U	N3-C2-O2	-10.53	114.83	122.20
3	A1	384	G	N3-C2-N2	-10.53	112.53	119.90
3	A1	660	C	C5-C4-N4	10.53	127.57	120.20
3	A1	1172	C	O4'-C1'-N1	10.53	116.62	108.20
25	BB	66	C	C5-C4-N4	-10.53	112.83	120.20
25	BB	98	G	O4'-C1'-N9	10.53	116.62	108.20
25	BB	101	A	C5-C6-N1	10.53	122.97	117.70
25	BB	2252	G	C5-C6-N1	10.53	116.76	111.50
25	BB	2513	A	N1-C6-N6	-10.53	112.28	118.60
3	A1	1395	C	N3-C2-O2	-10.53	114.53	121.90
25	BB	1239	G	C5-C6-N1	10.53	116.76	111.50
1	AP	51	G	N3-C2-N2	-10.53	112.53	119.90
3	A1	652	U	O4'-C1'-N1	10.53	116.62	108.20
25	BB	1048	A	C5-C6-N1	10.53	122.96	117.70
1	AA	57	G	O4'-C1'-N9	10.52	116.62	108.20
25	BB	269	C	N1-C2-O2	10.52	125.21	118.90
3	A1	1223	C	N3-C4-C5	10.52	126.11	121.90
25	BB	2099	U	C5-C6-N1	-10.52	117.44	122.70
25	BB	2829	A	C5-C6-N1	10.52	122.96	117.70
24	BA	71	C	N3-C2-O2	-10.52	114.54	121.90
2	AM	14	U	N3-C2-O2	-10.52	114.84	122.20
3	A1	1356	G	N3-C4-C5	-10.52	123.34	128.60
25	BB	965	C	N3-C4-C5	10.52	126.11	121.90
25	BB	1320	C	N3-C4-N4	-10.52	110.64	118.00
3	A1	389	A	C5-C6-N6	10.52	132.11	123.70
3	A1	520	A	N1-C6-N6	-10.52	112.29	118.60
48	BY	184	ARG	NE-CZ-NH1	10.52	125.56	120.30
3	A1	1469	C	O4'-C1'-N1	10.51	116.61	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1230	A	C5-C6-N1	10.51	122.96	117.70
25	BB	1285	A	N1-C6-N6	-10.51	112.29	118.60
25	BB	2607	G	O4'-C1'-N9	10.51	116.61	108.20
3	A1	1430	A	O4'-C1'-N9	10.51	116.61	108.20
24	BA	76	G	N1-C6-O6	-10.51	113.59	119.90
25	BB	1822	C	N3-C2-O2	-10.51	114.54	121.90
25	BB	2051	A	N1-C6-N6	-10.51	112.29	118.60
25	BB	2479	U	N1-C2-N3	10.51	121.21	114.90
25	BB	513	A	C4-C5-C6	-10.51	111.75	117.00
3	A1	628	G	C5-C6-N1	10.51	116.75	111.50
25	BB	717	C	N3-C4-C5	10.51	126.10	121.90
25	BB	1427	A	C5-C6-N1	10.51	122.95	117.70
25	BB	1169	A	C5-C6-N1	10.51	122.95	117.70
25	BB	1207	C	N3-C4-C5	10.50	126.10	121.90
3	A1	442	G	N1-C6-O6	-10.50	113.60	119.90
25	BB	2097	A	N1-C6-N6	-10.50	112.30	118.60
25	BB	1364	G	N1-C6-O6	-10.50	113.60	119.90
1	AE	14	A	C5-C6-N1	10.49	122.95	117.70
1	AP	71	G	N1-C6-O6	-10.49	113.60	119.90
24	BA	7	G	N1-C6-O6	-10.49	113.60	119.90
3	A1	293	G	N1-C6-O6	-10.49	113.61	119.90
25	BB	2380	C	C2-N3-C4	-10.49	114.65	119.90
25	BB	2734	A	C5-C6-N1	10.49	122.95	117.70
25	BB	1298	C	N3-C4-C5	10.49	126.10	121.90
24	BA	67	G	N7-C8-N9	10.49	118.34	113.10
25	BB	2313	C	N3-C4-C5	10.49	126.10	121.90
25	BB	2327	A	O4'-C1'-N9	10.49	116.59	108.20
25	BB	1242	U	C5-C6-N1	-10.49	117.46	122.70
25	BB	1675	C	N1-C2-O2	10.49	125.19	118.90
25	BB	1874	C	C6-N1-C2	-10.49	116.11	120.30
25	BB	1922	G	N1-C6-O6	-10.49	113.61	119.90
3	A1	880	C	N3-C2-O2	-10.48	114.56	121.90
25	BB	1797	G	N1-C6-O6	-10.48	113.61	119.90
3	A1	479	U	C2-N3-C4	-10.48	120.71	127.00
3	A1	892	A	C5-C6-N1	10.48	122.94	117.70
25	BB	320	A	C4-C5-C6	-10.48	111.76	117.00
25	BB	892	A	C6-N1-C2	-10.48	112.31	118.60
1	AA	27	C	N3-C4-C5	10.48	126.09	121.90
3	A1	130	A	C5-C6-N1	10.48	122.94	117.70
3	A1	431	A	C6-C5-N7	10.48	139.63	132.30
3	A1	452	A	C4-C5-C6	-10.48	111.76	117.00
3	A1	956	U	N3-C4-C5	-10.48	108.31	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	900	A	C6-C5-N7	10.48	139.63	132.30
3	A1	816	A	N1-C2-N3	-10.47	124.06	129.30
3	A1	1016	A	C4-C5-C6	-10.47	111.76	117.00
25	BB	793	A	N1-C6-N6	-10.47	112.32	118.60
25	BB	2071	A	C5-C6-N1	10.47	122.94	117.70
3	A1	1352	C	N3-C2-O2	-10.47	114.57	121.90
25	BB	229	C	N1-C2-O2	10.47	125.18	118.90
25	BB	1386	C	C2-N3-C4	-10.47	114.67	119.90
25	BB	2104	C	C2-N3-C4	-10.47	114.67	119.90
25	BB	2503	A	C5-C6-N1	10.47	122.93	117.70
3	A1	907	A	C5-C6-N1	10.47	122.93	117.70
25	BB	2442	C	N3-C2-O2	-10.46	114.58	121.90
3	A1	563	A	C5-C6-N1	10.46	122.93	117.70
3	A1	645	G	N9-C4-C5	10.46	109.58	105.40
25	BB	532	A	C4-C5-C6	-10.46	111.77	117.00
25	BB	926	G	N1-C6-O6	-10.46	113.62	119.90
25	BB	1093	G	N1-C6-O6	-10.46	113.62	119.90
25	BB	896	A	C5-C6-N1	10.46	122.93	117.70
25	BB	1051	G	C5-C6-N1	10.46	116.73	111.50
25	BB	1788	C	N3-C4-N4	-10.46	110.68	118.00
25	BB	2594	C	C6-N1-C2	-10.46	116.12	120.30
36	BM	3	ARG	NE-CZ-NH2	-10.46	115.07	120.30
3	A1	35	G	N1-C6-O6	-10.46	113.63	119.90
3	A1	702	A	C5-N7-C8	-10.46	98.67	103.90
3	A1	802	A	N1-C6-N6	-10.45	112.33	118.60
3	A1	912	C	N3-C2-O2	-10.46	114.58	121.90
25	BB	308	G	N1-C6-O6	-10.46	113.63	119.90
25	BB	2207	C	C5-C4-N4	10.46	127.52	120.20
25	BB	771	G	O4'-C1'-N9	10.45	116.56	108.20
25	BB	1847	A	C5-C6-N6	10.46	132.06	123.70
25	BB	2065	C	N3-C4-N4	-10.46	110.68	118.00
25	BB	2886	A	C5-N7-C8	-10.46	98.67	103.90
3	A1	1025	U	O4'-C4'-C3'	10.45	114.46	106.10
3	A1	1534	A	C5-C6-N1	10.45	122.93	117.70
25	BB	1053	C	N3-C4-C5	10.45	126.08	121.90
25	BB	1952	A	C5-C6-N6	10.45	132.06	123.70
25	BB	637	A	C1'-O4'-C4'	-10.45	101.54	109.90
25	BB	1903	G	N1-C6-O6	-10.45	113.63	119.90
25	BB	1398	C	N3-C4-N4	-10.45	110.69	118.00
25	BB	1552	A	C4-C5-C6	-10.45	111.78	117.00
3	A1	272	C	N1-C2-O2	10.45	125.17	118.90
25	BB	100	U	O4'-C1'-N1	10.45	116.56	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1309	G	N1-C6-O6	-10.45	113.63	119.90
25	BB	1791	A	C5-C6-N1	10.44	122.92	117.70
1	AA	29	A	C5-N7-C8	10.44	109.12	103.90
25	BB	265	A	O4'-C1'-N9	10.44	116.55	108.20
25	BB	2736	A	C4-C5-C6	-10.44	111.78	117.00
25	BB	979	A	C4-C5-C6	-10.44	111.78	117.00
25	BB	1106	G	N9-C4-C5	10.44	109.57	105.40
3	A1	1478	U	N3-C2-O2	-10.43	114.90	122.20
3	A1	135	C	N3-C2-O2	-10.43	114.60	121.90
3	A1	1105	A	C4-C5-C6	-10.43	111.78	117.00
25	BB	1320	C	N3-C2-O2	-10.43	114.60	121.90
7	AF	91	ARG	NE-CZ-NH1	10.43	125.51	120.30
25	BB	270	A	C4-C5-C6	-10.43	111.78	117.00
25	BB	346	A	N1-C6-N6	-10.43	112.34	118.60
25	BB	1062	G	C3'-C2'-C1'	10.43	109.84	101.50
25	BB	2050	C	N3-C2-O2	-10.43	114.60	121.90
25	BB	2107	G	N1-C6-O6	-10.43	113.64	119.90
3	A1	76	G	N3-C4-C5	-10.43	123.39	128.60
3	A1	452	A	N1-C6-N6	-10.43	112.34	118.60
3	A1	526	C	C2-N3-C4	-10.43	114.69	119.90
25	BB	1161	C	N3-C4-C5	10.43	126.07	121.90
3	A1	807	A	C5-C6-N1	10.42	122.91	117.70
3	A1	1026	G	N1-C2-N2	10.42	125.58	116.20
25	BB	643	A	C5-N7-C8	-10.42	98.69	103.90
13	AL	31	ARG	NE-CZ-NH1	10.42	125.51	120.30
25	BB	2449	U	N3-C2-O2	-10.42	114.91	122.20
1	AP	70	C	N3-C2-O2	-10.42	114.61	121.90
24	BA	73	A	N1-C6-N6	-10.42	112.35	118.60
25	BB	119	A	O4'-C1'-N9	10.42	116.53	108.20
25	BB	1291	C	N3-C2-O2	-10.42	114.61	121.90
25	BB	1493	C	N3-C2-O2	-10.42	114.61	121.90
24	BA	73	A	C4-C5-C6	-10.41	111.79	117.00
3	A1	514	C	C3'-C2'-C1'	10.41	109.83	101.50
25	BB	1529	G	N1-C6-O6	-10.41	113.65	119.90
25	BB	2066	C	N3-C2-O2	-10.41	114.61	121.90
25	BB	396	G	N1-C6-O6	-10.41	113.65	119.90
25	BB	992	C	N1-C2-O2	10.41	125.15	118.90
3	A1	179	A	C4-C5-C6	-10.41	111.80	117.00
3	A1	1276	G	C8-N9-C4	-10.41	102.24	106.40
9	AH	76	ARG	NE-CZ-NH1	10.41	125.50	120.30
25	BB	1272	A	C4-C5-C6	-10.41	111.80	117.00
25	BB	876	C	N1-C2-O2	10.41	125.14	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1537	G	C2-N3-C4	10.41	117.10	111.90
25	BB	1957	C	N1-C2-O2	10.41	125.14	118.90
3	A1	1014	A	N1-C6-N6	-10.40	112.36	118.60
3	A1	417	G	N3-C4-C5	-10.40	123.40	128.60
3	A1	1054	C	N1-C2-O2	10.40	125.14	118.90
25	BB	1123	C	N3-C4-N4	-10.40	110.72	118.00
3	A1	45	G	N9-C4-C5	10.40	109.56	105.40
25	BB	480	A	C5-C6-N1	10.40	122.90	117.70
25	BB	1960	A	C5-C6-N1	10.40	122.90	117.70
25	BB	1534	U	O4'-C1'-N1	10.39	116.51	108.20
1	AA	14	A	C4-C5-C6	-10.39	111.81	117.00
1	AE	75	C	N3-C2-O2	-10.39	114.63	121.90
3	A1	445	G	O4'-C1'-N9	10.39	116.51	108.20
25	BB	1544	A	C4-C5-C6	-10.39	111.81	117.00
1	AA	56	C	N3-C4-N4	-10.39	110.73	118.00
25	BB	736	C	N3-C2-O2	-10.39	114.63	121.90
25	BB	1280	G	N1-C6-O6	-10.39	113.67	119.90
25	BB	1248	G	O4'-C1'-N9	10.39	116.51	108.20
3	A1	132	C	C2-N3-C4	-10.38	114.71	119.90
3	A1	701	U	N1-C2-N3	10.38	121.13	114.90
25	BB	2663	G	C5-C6-N1	10.38	116.69	111.50
3	A1	363	A	O4'-C4'-C3'	10.38	114.40	106.10
3	A1	509	A	C1'-O4'-C4'	-10.38	101.60	109.90
25	BB	2003	A	C4-C5-C6	-10.38	111.81	117.00
25	BB	2442	C	O4'-C1'-N1	10.38	116.50	108.20
3	A1	514	C	C2-N3-C4	-10.38	114.71	119.90
3	A1	808	C	N3-C4-C5	10.38	126.05	121.90
25	BB	1545	A	C4-C5-C6	-10.37	111.81	117.00
25	BB	2439	A	C3'-C2'-C1'	10.38	109.80	101.50
25	BB	2710	C	O4'-C1'-N1	10.38	116.50	108.20
3	A1	982	U	C5-C6-N1	-10.37	117.51	122.70
25	BB	1102	C	N3-C2-O2	-10.37	114.64	121.90
24	BA	12	C	N3-C2-O2	-10.37	114.64	121.90
3	A1	1203	C	N3-C2-O2	-10.37	114.64	121.90
25	BB	149	A	C4-C5-C6	-10.37	111.81	117.00
1	AA	44	A	N1-C6-N6	-10.37	112.38	118.60
25	BB	644	A	C4-C5-C6	-10.37	111.82	117.00
3	A1	1410	A	C5-C6-N1	10.37	122.88	117.70
25	BB	2480	C	C5-C6-N1	-10.36	115.82	121.00
25	BB	361	G	N1-C6-O6	-10.36	113.68	119.90
25	BB	1393	A	C5-C6-N1	10.36	122.88	117.70
25	BB	1632	A	C5-C6-N1	10.36	122.88	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
32	BI	92	ARG	NE-CZ-NH1	10.36	125.48	120.30
3	A1	836	G	N1-C6-O6	-10.36	113.68	119.90
25	BB	152	A	C5-C6-N1	10.36	122.88	117.70
25	BB	2611	C	N1-C2-O2	10.36	125.12	118.90
25	BB	1687	G	C6-N1-C2	-10.36	118.89	125.10
3	A1	529	G	N1-C6-O6	-10.36	113.69	119.90
5	AC	121	ARG	NE-CZ-NH1	10.36	125.48	120.30
3	A1	385	C	C2-N3-C4	-10.36	114.72	119.90
3	A1	610	U	O4'-C1'-N1	10.36	116.48	108.20
3	A1	912	C	C6-N1-C2	-10.36	116.16	120.30
25	BB	921	C	C2-N3-C4	-10.36	114.72	119.90
50	B1	40	ARG	NE-CZ-NH1	10.36	125.48	120.30
3	A1	794	A	C5-C6-N1	10.35	122.88	117.70
3	A1	29	U	N3-C2-O2	-10.35	114.96	122.20
25	BB	1095	A	N1-C6-N6	-10.35	112.39	118.60
25	BB	1148	U	O4'-C1'-N1	10.35	116.48	108.20
3	A1	161	A	C5-C6-N1	10.34	122.87	117.70
25	BB	99	U	N3-C2-O2	-10.34	114.96	122.20
25	BB	1986	C	N3-C2-O2	-10.34	114.66	121.90
25	BB	2703	C	N3-C2-O2	-10.34	114.66	121.90
1	AP	64	A	C4-C5-C6	-10.34	111.83	117.00
3	A1	1042	A	C5-N7-C8	-10.34	98.73	103.90
3	A1	1252	A	N1-C6-N6	-10.34	112.40	118.60
25	BB	2226	C	N3-C4-C5	10.34	126.03	121.90
3	A1	28	A	C4-C5-C6	-10.34	111.83	117.00
3	A1	754	C	N1-C2-O2	10.34	125.10	118.90
3	A1	754	C	N3-C4-C5	10.34	126.03	121.90
25	BB	308	G	N3-C4-C5	-10.34	123.43	128.60
25	BB	1112	G	O4'-C1'-N9	10.34	116.47	108.20
3	A1	501	C	N3-C2-O2	-10.33	114.67	121.90
3	A1	970	C	C1'-O4'-C4'	-10.33	101.63	109.90
25	BB	1803	A	C4-C5-C6	-10.33	111.83	117.00
25	BB	2380	C	N3-C4-C5	10.33	126.03	121.90
3	A1	1248	A	N1-C6-N6	-10.33	112.40	118.60
3	A1	1409	C	O4'-C1'-N1	10.33	116.46	108.20
25	BB	366	C	N3-C2-O2	-10.33	114.67	121.90
25	BB	701	G	N1-C6-O6	-10.33	113.70	119.90
25	BB	1941	C	C5-C4-N4	10.33	127.43	120.20
25	BB	2539	C	N3-C2-O2	-10.33	114.67	121.90
3	A1	416	G	N3-C2-N2	-10.32	112.67	119.90
3	A1	554	A	C4-C5-C6	-10.32	111.84	117.00
3	A1	1262	C	N3-C4-C5	10.32	126.03	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	62	A	C5-N7-C8	-10.32	98.74	103.90
1	AP	31	A	C5'-C4'-O4'	10.32	121.48	109.10
3	A1	745	G	C5'-C4'-O4'	10.32	121.48	109.10
25	BB	229	C	N3-C2-O2	-10.32	114.68	121.90
25	BB	877	A	C5-C6-N1	10.32	122.86	117.70
25	BB	1453	A	C4-C5-C6	-10.32	111.84	117.00
25	BB	1695	G	N1-C6-O6	-10.32	113.71	119.90
3	A1	1338	G	N3-C2-N2	-10.32	112.68	119.90
25	BB	81	G	N1-C6-O6	-10.32	113.71	119.90
25	BB	883	G	N1-C6-O6	-10.32	113.71	119.90
25	BB	1170	C	N1-C2-O2	10.32	125.09	118.90
25	BB	1807	G	N3-C4-C5	-10.32	123.44	128.60
25	BB	2835	A	N1-C6-N6	-10.32	112.41	118.60
25	BB	2054	A	N1-C6-N6	-10.32	112.41	118.60
25	BB	2847	U	OP1-P-OP2	-10.32	104.12	119.60
3	A1	1270	G	O4'-C1'-N9	10.32	116.45	108.20
25	BB	586	A	C5-C6-N1	10.32	122.86	117.70
3	A1	493	A	C5-C6-N1	10.31	122.86	117.70
3	A1	645	G	C4-C5-N7	-10.31	106.67	110.80
3	A1	716	A	C4-C5-C6	-10.31	111.84	117.00
3	A1	1009	U	C1'-O4'-C4'	-10.31	101.65	109.90
3	A1	1434	A	C5-C6-N1	10.31	122.86	117.70
25	BB	94	A	C6-C5-N7	10.31	139.52	132.30
25	BB	1571	A	C5-C6-N1	10.31	122.86	117.70
32	BI	87	ARG	NE-CZ-NH1	10.31	125.46	120.30
3	A1	1122	U	N3-C2-O2	-10.31	114.98	122.20
25	BB	1353	A	C5-C6-N1	10.31	122.86	117.70
25	BB	1468	U	O4'-C1'-N1	10.31	116.45	108.20
29	BF	16	ARG	NE-CZ-NH1	10.31	125.45	120.30
25	BB	80	G	C3'-C2'-C1'	10.31	109.75	101.50
25	BB	1262	A	C4-C5-C6	-10.31	111.85	117.00
3	A1	676	A	C4-C5-C6	-10.30	111.85	117.00
25	BB	279	A	C6-C5-N7	10.30	139.51	132.30
25	BB	2645	G	C8-N9-C4	-10.30	102.28	106.40
3	A1	73	C	N3-C2-O2	-10.30	114.69	121.90
25	BB	423	A	N1-C6-N6	-10.30	112.42	118.60
3	A1	279	A	C6-C5-N7	10.30	139.51	132.30
3	A1	902	G	N1-C6-O6	-10.30	113.72	119.90
3	A1	1156	G	C5-C6-N1	10.30	116.65	111.50
25	BB	1133	A	C5-C6-N1	10.30	122.85	117.70
25	BB	2564	A	C4-C5-C6	-10.30	111.85	117.00
25	BB	940	G	N3-C4-C5	-10.30	123.45	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	936	C	N3-C2-O2	-10.29	114.69	121.90
25	BB	1271	G	N3-C2-N2	-10.29	112.69	119.90
25	BB	1646	C	C5-C4-N4	-10.29	113.00	120.20
1	AA	75	C	N3-C2-O2	-10.29	114.69	121.90
1	AP	35	A	C4-C5-C6	-10.29	111.85	117.00
3	A1	716	A	C5-C6-N1	10.29	122.85	117.70
25	BB	2752	C	N3-C2-O2	-10.29	114.69	121.90
25	BB	2765	A	N1-C6-N6	-10.29	112.42	118.60
3	A1	1514	G	N3-C2-N2	-10.29	112.70	119.90
25	BB	1416	G	C5-C6-N1	10.29	116.65	111.50
25	BB	1701	A	C4-C5-C6	-10.29	111.85	117.00
31	BH	64	TYR	CB-CG-CD1	-10.29	114.83	121.00
3	A1	907	A	C4-C5-C6	-10.29	111.86	117.00
25	BB	761	A	C4-C5-C6	-10.29	111.86	117.00
25	BB	1571	A	C6-C5-N7	10.29	139.50	132.30
25	BB	1694	C	C3'-C2'-C1'	-10.29	93.27	101.50
3	A1	1363	A	O4'-C1'-N9	10.29	116.43	108.20
25	BB	274	C	C2-N3-C4	-10.28	114.76	119.90
25	BB	2329	U	C5-C6-N1	-10.28	117.56	122.70
3	A1	87	C	N3-C4-C5	10.28	126.01	121.90
3	A1	895	G	C5-C6-N1	10.28	116.64	111.50
25	BB	247	G	N9-C4-C5	10.28	109.51	105.40
25	BB	2659	G	C6-N1-C2	-10.28	118.93	125.10
25	BB	330	A	C5-C6-N1	10.28	122.84	117.70
25	BB	1791	A	C4-C5-C6	-10.28	111.86	117.00
3	A1	341	C	N1-C2-O2	10.28	125.07	118.90
25	BB	205	G	C5-C6-N1	10.28	116.64	111.50
3	A1	1505	G	N3-C2-N2	-10.27	112.71	119.90
25	BB	820	A	C5-C6-N1	10.27	122.84	117.70
25	BB	2534	A	C6-C5-N7	10.27	139.49	132.30
25	BB	158	U	O4'-C1'-N1	10.27	116.42	108.20
25	BB	1360	G	C8-N9-C4	-10.27	102.29	106.40
25	BB	1800	C	C1'-O4'-C4'	-10.27	101.68	109.90
3	A1	1318	A	C5-C6-N6	10.27	131.92	123.70
25	BB	1241	A	N7-C8-N9	10.27	118.93	113.80
3	A1	23	C	O4'-C1'-N1	10.27	116.41	108.20
3	A1	308	C	N3-C2-O2	-10.27	114.71	121.90
25	BB	100	U	N3-C2-O2	-10.27	115.01	122.20
3	A1	702	A	C4-C5-C6	-10.27	111.87	117.00
3	A1	1489	G	C4'-C3'-C2'	-10.27	92.33	102.60
25	BB	1741	C	N1-C2-O2	10.27	125.06	118.90
25	BB	1780	A	O4'-C1'-N9	10.27	116.41	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1925	C	O4'-C1'-N1	10.27	116.41	108.20
3	A1	349	A	C4-C5-C6	-10.26	111.87	117.00
25	BB	693	A	C6-C5-N7	10.26	139.48	132.30
25	BB	2311	A	C4-C5-C6	-10.26	111.87	117.00
3	A1	77	A	C4-C5-C6	-10.26	111.87	117.00
24	BA	24	G	N1-C6-O6	-10.26	113.74	119.90
25	BB	481	G	N1-C6-O6	-10.26	113.74	119.90
25	BB	1330	C	O4'-C1'-N1	10.26	116.41	108.20
25	BB	152	A	C6-C5-N7	10.26	139.48	132.30
25	BB	1323	C	N1-C2-O2	10.26	125.05	118.90
25	BB	1872	A	N1-C6-N6	-10.26	112.45	118.60
25	BB	2265	U	N3-C2-O2	-10.26	115.02	122.20
3	A1	58	C	C6-N1-C2	-10.25	116.20	120.30
3	A1	1183	U	N3-C2-O2	-10.25	115.02	122.20
25	BB	1892	C	N3-C2-O2	-10.25	114.72	121.90
34	BK	79	ARG	NE-CZ-NH1	10.25	125.43	120.30
3	A1	926	G	N3-C4-C5	-10.25	123.47	128.60
24	BA	53	A	N1-C6-N6	-10.25	112.45	118.60
3	A1	1430	A	C5-C6-N1	10.25	122.82	117.70
25	BB	387	U	N3-C2-O2	-10.25	115.03	122.20
25	BB	1348	C	N3-C2-O2	-10.25	114.72	121.90
39	BP	24	ARG	NE-CZ-NH2	10.25	125.42	120.30
3	A1	132	C	N3-C2-O2	-10.25	114.73	121.90
24	BA	90	C	N1-C2-O2	10.25	125.05	118.90
25	BB	2520	C	N1-C2-O2	10.25	125.05	118.90
3	A1	1067	A	C4-C5-C6	-10.24	111.88	117.00
25	BB	2101	A	N1-C6-N6	-10.24	112.45	118.60
25	BB	1297	C	N3-C2-O2	-10.24	114.73	121.90
3	A1	200	G	O4'-C1'-N9	10.24	116.39	108.20
3	A1	873	A	C5-C6-N6	10.24	131.89	123.70
25	BB	1717	A	C5-C6-N1	10.24	122.82	117.70
25	BB	2451	A	C5-C6-N1	10.24	122.82	117.70
25	BB	1905	C	N3-C2-O2	-10.24	114.73	121.90
25	BB	572	A	C5-C6-N1	10.23	122.82	117.70
25	BB	1925	C	N3-C4-C5	10.23	125.99	121.90
25	BB	1411	U	C5-C6-N1	-10.23	117.58	122.70
25	BB	1752	C	C2-N3-C4	-10.23	114.78	119.90
1	AE	73	A	C4-C5-C6	-10.23	111.88	117.00
3	A1	415	A	C5-C6-N1	10.23	122.82	117.70
3	A1	1390	U	C1'-O4'-C4'	-10.23	101.71	109.90
25	BB	164	C	C5-C6-N1	-10.23	115.89	121.00
1	AE	69	U	O4'-C1'-N1	10.23	116.38	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	326	G	O4'-C1'-N9	10.23	116.38	108.20
25	BB	96	C	O4'-C1'-N1	10.23	116.38	108.20
24	BA	2	G	N3-C4-C5	-10.23	123.49	128.60
25	BB	912	C	C5-C6-N1	-10.23	115.89	121.00
25	BB	1437	C	N3-C2-O2	-10.23	114.74	121.90
25	BB	105	C	C5-C6-N1	-10.22	115.89	121.00
25	BB	223	A	O4'-C1'-N9	10.22	116.38	108.20
25	BB	1347	A	N1-C6-N6	-10.22	112.47	118.60
3	A1	938	A	C5-C6-N1	10.22	122.81	117.70
3	A1	75	G	N1-C6-O6	-10.22	113.77	119.90
25	BB	195	A	C4-C5-C6	-10.22	111.89	117.00
25	BB	1150	C	C5'-C4'-O4'	10.22	121.36	109.10
25	BB	981	A	C6-N1-C2	-10.22	112.47	118.60
25	BB	1175	A	C4'-C3'-C2'	-10.22	92.38	102.60
3	A1	472	U	C5-C6-N1	-10.22	117.59	122.70
3	A1	891	U	N3-C2-O2	-10.21	115.05	122.20
3	A1	1520	C	N1-C2-O2	10.22	125.03	118.90
25	BB	1383	A	C6-C5-N7	10.21	139.45	132.30
25	BB	1630	A	C5-C6-N1	10.21	122.81	117.70
25	BB	1650	A	C5-C6-N1	10.21	122.81	117.70
3	A1	902	G	N3-C4-C5	-10.21	123.50	128.60
25	BB	2666	C	N3-C2-O2	-10.21	114.75	121.90
3	A1	1141	C	N3-C4-N4	-10.21	110.85	118.00
25	BB	873	C	C2-N3-C4	-10.21	114.80	119.90
25	BB	1499	C	N3-C2-O2	-10.21	114.75	121.90
25	BB	2160	C	N1-C2-O2	10.21	125.02	118.90
25	BB	5	A	C6-C5-N7	10.21	139.44	132.30
25	BB	2430	A	C5-C6-N1	10.21	122.80	117.70
3	A1	895	G	C2-N3-C4	10.20	117.00	111.90
3	A1	1497	G	C5-C6-N1	10.20	116.60	111.50
3	A1	1531	A	N1-C6-N6	-10.20	112.48	118.60
25	BB	253	C	N3-C2-O2	-10.20	114.76	121.90
25	BB	614	A	C5-C6-N1	10.20	122.80	117.70
25	BB	854	C	C2-N3-C4	-10.20	114.80	119.90
25	BB	1459	G	N3-C4-C5	-10.20	123.50	128.60
3	A1	733	G	O4'-C1'-N9	10.20	116.36	108.20
25	BB	2136	G	C8-N9-C4	-10.20	102.32	106.40
25	BB	2370	G	N1-C6-O6	-10.20	113.78	119.90
3	A1	987	G	N1-C6-O6	-10.20	113.78	119.90
3	A1	1482	G	N9-C4-C5	10.20	109.48	105.40
25	BB	483	A	N1-C6-N6	-10.20	112.48	118.60
24	BA	94	A	N1-C6-N6	-10.20	112.48	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2606	C	N3-C2-O2	-10.20	114.76	121.90
25	BB	435	C	N3-C4-C5	10.19	125.98	121.90
25	BB	2644	G	N1-C2-N3	10.19	130.02	123.90
25	BB	163	C	N1-C2-O2	10.19	125.02	118.90
25	BB	800	A	C5-C6-N1	10.19	122.80	117.70
25	BB	1382	G	N1-C6-O6	-10.19	113.78	119.90
25	BB	352	A	N1-C6-N6	-10.19	112.49	118.60
25	BB	2787	C	O4'-C1'-N1	10.19	116.35	108.20
3	A1	995	C	N3-C2-O2	-10.19	114.77	121.90
25	BB	557	C	C3'-C2'-C1'	10.19	109.65	101.50
25	BB	1907	G	C6-C5-N7	10.19	136.51	130.40
3	A1	217	C	C6-N1-C2	-10.18	116.23	120.30
3	A1	306	A	N1-C6-N6	-10.18	112.49	118.60
3	A1	1345	U	N3-C2-O2	-10.18	115.07	122.20
25	BB	488	G	C8-N9-C4	-10.18	102.33	106.40
25	BB	1432	G	N3-C2-N2	-10.18	112.77	119.90
25	BB	2071	A	OP1-P-OP2	-10.18	104.33	119.60
3	A1	781	A	C5-C6-N1	10.18	122.79	117.70
3	A1	1488	G	C3'-C2'-C1'	-10.18	93.36	101.50
25	BB	1675	C	C6-N1-C2	-10.18	116.23	120.30
25	BB	2145	C	C5-C4-N4	-10.18	113.08	120.20
1	AA	57	G	N1-C6-O6	-10.18	113.79	119.90
3	A1	503	C	N3-C4-N4	-10.18	110.88	118.00
25	BB	1139	G	C5-C6-N1	10.18	116.59	111.50
25	BB	2237	G	N1-C6-O6	-10.18	113.79	119.90
3	A1	855	U	N3-C2-O2	-10.18	115.08	122.20
25	BB	662	G	N3-C2-N2	-10.18	112.78	119.90
25	BB	2260	C	C5-C4-N4	10.18	127.32	120.20
25	BB	1374	G	O4'-C1'-N9	10.17	116.34	108.20
3	A1	101	A	C5-C6-N1	10.17	122.79	117.70
3	A1	768	A	C5-C6-N1	10.17	122.79	117.70
2	AM	17	U	N3-C4-O4	-10.17	112.28	119.40
25	BB	56	A	C5-C6-N1	10.17	122.79	117.70
25	BB	1953	A	C6-C5-N7	10.17	139.42	132.30
25	BB	401	A	C5-C6-N6	10.17	131.84	123.70
25	BB	1253	A	C5-C6-N1	10.17	122.78	117.70
25	BB	2497	A	C2-N3-C4	10.17	115.69	110.60
25	BB	2116	G	O4'-C1'-N9	10.17	116.33	108.20
24	BA	70	C	N3-C4-N4	-10.17	110.88	118.00
25	BB	322	A	C5-C6-N6	10.16	131.83	123.70
25	BB	333	G	N1-C6-O6	-10.16	113.80	119.90
25	BB	489	G	N3-C4-C5	-10.16	123.52	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	19	G	C5-C6-N1	10.16	116.58	111.50
25	BB	1106	G	C4-C5-N7	-10.16	106.73	110.80
25	BB	1957	C	C4-C5-C6	-10.16	112.32	117.40
3	A1	260	G	C5-C6-N1	10.16	116.58	111.50
3	A1	1049	U	N3-C4-O4	-10.16	112.29	119.40
25	BB	317	G	N1-C6-O6	-10.16	113.80	119.90
25	BB	344	A	N1-C6-N6	-10.16	112.50	118.60
3	A1	430	A	N1-C6-N6	-10.16	112.51	118.60
25	BB	1561	C	N3-C2-O2	-10.16	114.79	121.90
25	BB	1800	C	N3-C4-N4	-10.16	110.89	118.00
25	BB	1991	U	C5-C6-N1	-10.16	117.62	122.70
25	BB	2375	G	O4'-C1'-N9	10.16	116.33	108.20
3	A1	1396	A	C2-N3-C4	10.15	115.68	110.60
25	BB	1530	G	C4-C5-C6	-10.15	112.71	118.80
3	A1	747	A	C5-C6-N1	10.15	122.78	117.70
25	BB	42	A	C5-C6-N1	10.15	122.78	117.70
25	BB	987	C	N1-C2-O2	10.15	124.99	118.90
25	BB	1780	A	C5-C6-N1	10.15	122.78	117.70
25	BB	2102	G	O4'-C1'-N9	10.15	116.32	108.20
25	BB	2318	G	C5-N7-C8	-10.15	99.22	104.30
25	BB	1610	A	C4-C5-C6	-10.15	111.92	117.00
25	BB	1744	A	C5-C6-N1	10.15	122.78	117.70
3	A1	258	G	N9-C4-C5	10.15	109.46	105.40
3	A1	1052	U	N3-C2-O2	-10.15	115.10	122.20
25	BB	152	A	O4'-C1'-N9	10.15	116.32	108.20
25	BB	1382	G	C6-C5-N7	10.14	136.49	130.40
25	BB	2791	G	C4-C5-C6	-10.14	112.71	118.80
3	A1	1513	A	C4-C5-C6	-10.14	111.93	117.00
25	BB	791	C	N3-C2-O2	-10.14	114.80	121.90
25	BB	522	A	C5-C6-N6	10.14	131.81	123.70
3	A1	519	C	O4'-C1'-N1	10.14	116.31	108.20
3	A1	892	A	N1-C6-N6	-10.14	112.52	118.60
25	BB	1503	A	C5-C6-N1	10.14	122.77	117.70
25	BB	1561	C	C2-N3-C4	-10.14	114.83	119.90
25	BB	1579	A	C5-C6-N1	10.14	122.77	117.70
3	A1	816	A	C4-C5-C6	-10.14	111.93	117.00
25	BB	372	G	N1-C6-O6	-10.14	113.82	119.90
3	A1	373	A	C4-C5-C6	-10.14	111.93	117.00
25	BB	1787	A	C5-C6-N1	10.14	122.77	117.70
25	BB	2481	G	N3-C4-C5	-10.14	123.53	128.60
25	BB	2626	C	C5-C4-N4	-10.14	113.10	120.20
3	A1	93	U	C5-C6-N1	-10.13	117.63	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	819	A	C4-C5-C6	-10.13	111.93	117.00
3	A1	1369	C	N3-C2-O2	-10.13	114.81	121.90
25	BB	390	U	C5-C6-N1	-10.13	117.63	122.70
25	BB	2011	U	O4'-C1'-N1	10.13	116.31	108.20
3	A1	1168	U	C2-N3-C4	-10.13	120.92	127.00
3	A1	960	U	N3-C2-O2	-10.13	115.11	122.20
3	A1	1359	C	C2-N3-C4	-10.13	114.83	119.90
3	A1	1464	U	C4-C5-C6	10.13	125.78	119.70
25	BB	2590	A	C4-C5-C6	-10.13	111.93	117.00
25	BB	2054	A	C5-C6-N1	10.13	122.77	117.70
24	BA	85	G	N1-C6-O6	-10.13	113.82	119.90
3	A1	826	C	C1'-O4'-C4'	-10.13	101.80	109.90
25	BB	86	G	C6-C5-N7	10.13	136.48	130.40
25	BB	1623	G	N1-C6-O6	-10.13	113.82	119.90
25	BB	1957	C	N3-C2-O2	-10.13	114.81	121.90
25	BB	2833	U	N3-C2-O2	-10.13	115.11	122.20
25	BB	63	A	C5-C6-N1	10.13	122.76	117.70
25	BB	71	A	O4'-C1'-N9	10.13	116.30	108.20
25	BB	974	G	N1-C6-O6	-10.12	113.83	119.90
25	BB	1090	A	N1-C6-N6	-10.12	112.53	118.60
3	A1	182	A	O4'-C1'-C2'	-10.12	95.68	105.80
3	A1	816	A	N1-C6-N6	-10.12	112.53	118.60
25	BB	804	A	C6-C5-N7	10.12	139.38	132.30
25	BB	2111	U	C2-N3-C4	-10.12	120.93	127.00
25	BB	2185	U	N3-C2-O2	-10.12	115.11	122.20
25	BB	303	G	N1-C2-N3	10.12	129.97	123.90
25	BB	725	G	N3-C4-C5	-10.12	123.54	128.60
25	BB	1359	A	C5-C6-N1	10.12	122.76	117.70
1	AA	4	G	N7-C8-N9	10.12	118.16	113.10
3	A1	21	G	N1-C6-O6	-10.12	113.83	119.90
3	A1	65	A	N1-C2-N3	-10.12	124.24	129.30
3	A1	90	C	C6-N1-C2	-10.12	116.25	120.30
3	A1	768	A	C4-C5-C6	-10.12	111.94	117.00
3	A1	1049	U	O4'-C1'-N1	10.12	116.29	108.20
25	BB	499	U	O4'-C1'-N1	10.12	116.29	108.20
25	BB	2511	U	O4'-C1'-N1	10.12	116.29	108.20
33	BJ	52	ARG	NE-CZ-NH2	10.11	125.36	120.30
3	A1	821	G	C6-C5-N7	10.11	136.47	130.40
25	BB	637	A	N1-C6-N6	-10.11	112.53	118.60
25	BB	992	C	C6-N1-C2	-10.11	116.25	120.30
25	BB	1527	G	C5-C6-N1	10.11	116.56	111.50
3	A1	56	U	N1-C2-N3	10.11	120.97	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	962	C	C2-N3-C4	-10.11	114.84	119.90
25	BB	1223	G	C5-C6-N1	10.11	116.56	111.50
25	BB	1703	G	N1-C6-O6	-10.11	113.83	119.90
24	BA	98	G	C2-N3-C4	-10.11	106.85	111.90
25	BB	1319	C	N3-C4-N4	-10.11	110.92	118.00
25	BB	1705	A	C4-C5-C6	-10.11	111.95	117.00
25	BB	2634	A	N1-C6-N6	-10.11	112.54	118.60
3	A1	43	C	N3-C4-N4	-10.10	110.93	118.00
3	A1	147	G	O5'-P-OP2	-10.10	96.61	105.70
3	A1	1120	C	C2-N3-C4	-10.10	114.85	119.90
3	A1	942	G	N1-C6-O6	-10.10	113.84	119.90
25	BB	152	A	C4-C5-C6	-10.10	111.95	117.00
25	BB	1000	A	N9-C4-C5	10.10	109.84	105.80
25	BB	2728	U	C5-C6-N1	-10.10	117.65	122.70
25	BB	2748	A	C5-C6-N6	10.10	131.78	123.70
1	AA	15	G	N3-C2-N2	-10.10	112.83	119.90
1	AE	28	C	N3-C4-N4	-10.10	110.93	118.00
8	AG	64	ARG	NE-CZ-NH1	10.10	125.35	120.30
25	BB	767	U	C1'-O4'-C4'	-10.10	101.82	109.90
25	BB	2538	C	N3-C2-O2	-10.10	114.83	121.90
3	A1	805	C	N3-C4-N4	-10.10	110.93	118.00
25	BB	528	A	C4-C5-C6	-10.10	111.95	117.00
25	BB	1066	U	C5-C6-N1	-10.10	117.65	122.70
25	BB	1207	C	N1-C2-O2	10.10	124.96	118.90
2	AM	6	U	N3-C2-O2	-10.10	115.13	122.20
25	BB	2499	C	N3-C4-C5	10.10	125.94	121.90
3	A1	969	A	C5-C6-N1	10.10	122.75	117.70
25	BB	1308	A	N1-C6-N6	-10.10	112.54	118.60
3	A1	133	U	O4'-C1'-N1	10.09	116.28	108.20
25	BB	1622	G	N9-C4-C5	10.09	109.44	105.40
25	BB	2676	C	C5-C6-N1	-10.09	115.95	121.00
3	A1	988	G	N1-C6-O6	-10.09	113.85	119.90
3	A1	1105	A	C5-C6-N1	10.09	122.75	117.70
25	BB	740	C	C6-N1-C2	-10.09	116.27	120.30
25	BB	1135	C	N3-C2-O2	-10.09	114.84	121.90
25	BB	2341	G	C6-C5-N7	10.09	136.45	130.40
25	BB	52	A	C5-C6-N1	10.09	122.74	117.70
25	BB	361	G	C6-N1-C2	-10.09	119.05	125.10
3	A1	355	C	N3-C4-C5	10.09	125.93	121.90
25	BB	394	C	N3-C2-O2	-10.09	114.84	121.90
3	A1	243	A	C4-C5-C6	-10.08	111.96	117.00
25	BB	2058	A	C4-C5-C6	-10.08	111.96	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	78	A	C2-N3-C4	10.08	115.64	110.60
25	BB	2014	A	C5-C6-N6	10.08	131.76	123.70
25	BB	2418	A	C4-C5-C6	-10.08	111.96	117.00
3	A1	962	C	C3'-C2'-C1'	-10.08	93.44	101.50
25	BB	1006	C	C6-N1-C2	-10.08	116.27	120.30
25	BB	1205	A	C5-C6-N1	10.08	122.74	117.70
25	BB	2610	C	N3-C4-N4	-10.08	110.95	118.00
25	BB	2896	C	C2-N3-C4	-10.08	114.86	119.90
3	A1	77	A	C6-C5-N7	10.07	139.35	132.30
3	A1	1067	A	C5-C6-N1	10.07	122.73	117.70
25	BB	2270	A	C5-C6-N1	10.07	122.73	117.70
25	BB	2704	C	C3'-C2'-C1'	10.07	109.56	101.50
3	A1	747	A	C4-C5-C6	-10.07	111.97	117.00
30	BG	71	ARG	NE-CZ-NH1	10.07	125.33	120.30
25	BB	2365	G	N1-C6-O6	-10.07	113.86	119.90
3	A1	56	U	N3-C4-C5	-10.07	108.56	114.60
25	BB	768	G	N1-C6-O6	-10.07	113.86	119.90
25	BB	1211	C	C2-N3-C4	-10.07	114.87	119.90
2	AM	9	U	C5-C4-O4	-10.06	119.86	125.90
25	BB	2429	G	N1-C6-O6	-10.06	113.86	119.90
24	BA	113	C	N3-C2-O2	-10.06	114.86	121.90
25	BB	528	A	C5-C6-N6	10.06	131.75	123.70
25	BB	1164	C	N3-C2-O2	-10.06	114.86	121.90
25	BB	2498	C	O4'-C1'-N1	10.06	116.25	108.20
25	BB	823	C	N3-C2-O2	-10.06	114.86	121.90
25	BB	1010	A	O4'-C1'-N9	10.06	116.25	108.20
45	BV	12	ARG	NE-CZ-NH1	-10.06	115.27	120.30
25	BB	12	U	N3-C4-C5	-10.06	108.56	114.60
25	BB	1453	A	O4'-C1'-N9	10.06	116.25	108.20
38	BO	5	ARG	NE-CZ-NH1	10.06	125.33	120.30
3	A1	285	C	C5-C6-N1	-10.05	115.97	121.00
25	BB	1873	G	N9-C4-C5	10.05	109.42	105.40
25	BB	2275	C	N3-C4-C5	10.05	125.92	121.90
3	A1	230	G	C4-C5-N7	-10.05	106.78	110.80
3	A1	457	G	N1-C6-O6	-10.05	113.87	119.90
3	A1	781	A	C4-C5-C6	-10.05	111.97	117.00
25	BB	41	C	N1-C2-N3	10.05	126.23	119.20
1	AA	28	C	N3-C4-C5	10.05	125.92	121.90
3	A1	282	A	C5-C6-N1	10.05	122.72	117.70
25	BB	222	A	C8-N9-C4	-10.04	101.78	105.80
25	BB	2165	C	C2-N3-C4	-10.04	114.88	119.90
3	A1	403	C	N3-C4-C5	10.04	125.92	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	921	C	C3'-C2'-C1'	10.04	109.53	101.50
25	BB	1052	C	N3-C4-C5	10.04	125.92	121.90
25	BB	2477	U	C5-C6-N1	-10.04	117.68	122.70
25	BB	473	G	C5-C6-N1	10.04	116.52	111.50
3	A1	226	G	N3-C4-C5	-10.04	123.58	128.60
25	BB	1165	A	C5-C6-N1	10.04	122.72	117.70
3	A1	1082	A	C5-C6-N1	10.04	122.72	117.70
3	A1	816	A	O4'-C1'-N9	-10.04	100.17	108.20
3	A1	1458	G	N1-C6-O6	-10.04	113.88	119.90
25	BB	846	U	O4'-C1'-N1	10.03	116.23	108.20
25	BB	878	A	C4-C5-C6	-10.04	111.98	117.00
25	BB	1718	G	C4-C5-N7	-10.04	106.79	110.80
25	BB	980	A	N1-C6-N6	-10.03	112.58	118.60
25	BB	2060	A	C4-C5-C6	-10.04	111.98	117.00
3	A1	1155	A	C8-N9-C4	10.03	109.81	105.80
25	BB	443	A	C4-C5-C6	-10.03	111.98	117.00
25	BB	1064	C	O4'-C1'-N1	10.03	116.23	108.20
25	BB	2825	G	O4'-C1'-N9	10.03	116.22	108.20
3	A1	1346	A	C5-C6-N1	10.03	122.72	117.70
25	BB	1700	A	C5-C6-N1	10.03	122.72	117.70
3	A1	1524	C	N3-C4-N4	-10.03	110.98	118.00
25	BB	825	A	C1'-O4'-C4'	-10.03	101.88	109.90
54	B5	95	ASP	CB-CG-OD1	10.03	127.33	118.30
1	AE	34	G	C3'-C2'-C1'	10.03	109.52	101.50
25	BB	1597	A	C5-C6-N6	10.03	131.72	123.70
3	A1	640	A	C2-N3-C4	10.03	115.61	110.60
25	BB	2246	G	N1-C6-O6	-10.03	113.89	119.90
28	BE	33	ARG	NE-CZ-NH1	10.03	125.31	120.30
3	A1	211	G	C2-N3-C4	10.02	116.91	111.90
25	BB	53	A	N1-C6-N6	-10.02	112.59	118.60
1	AP	23	A	N1-C2-N3	-10.02	124.29	129.30
3	A1	714	G	N9-C4-C5	10.02	109.41	105.40
3	A1	865	A	N1-C6-N6	-10.02	112.59	118.60
10	AI	25	ARG	NE-CZ-NH2	10.02	125.31	120.30
25	BB	2773	C	C5-C4-N4	10.02	127.22	120.20
25	BB	9	G	O4'-C1'-N9	10.02	116.22	108.20
25	BB	2160	C	N3-C4-C5	10.02	125.91	121.90
25	BB	448	U	N1-C2-O2	10.02	129.81	122.80
25	BB	2024	G	C8-N9-C4	-10.02	102.39	106.40
3	A1	621	A	C5-C6-N6	10.02	131.71	123.70
25	BB	1995	U	N3-C2-O2	-10.02	115.19	122.20
25	BB	2043	C	N1-C2-O2	10.02	124.91	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	2549	G	N1-C6-O6	-10.02	113.89	119.90
25	BB	527	C	N3-C4-C5	10.01	125.91	121.90
25	BB	1713	A	N1-C6-N6	-10.01	112.59	118.60
25	BB	1009	A	C5-C6-N1	10.01	122.71	117.70
3	A1	193	C	N1-C2-O2	10.01	124.91	118.90
3	A1	339	C	N3-C2-O2	-10.01	114.89	121.90
25	BB	926	G	C5-C6-N1	10.01	116.50	111.50
3	A1	282	A	C4-C5-C6	-10.01	112.00	117.00
3	A1	769	G	N3-C2-N2	-10.01	112.90	119.90
25	BB	460	A	C5-C6-N1	10.01	122.70	117.70
25	BB	2558	C	C2-N3-C4	-10.01	114.90	119.90
1	AP	20	G	N9-C4-C5	10.00	109.40	105.40
3	A1	167	A	C5-C6-N1	10.00	122.70	117.70
25	BB	197	A	C5-C6-N1	10.00	122.70	117.70
25	BB	973	A	C5-C6-N1	10.00	122.70	117.70
15	AO	58	ARG	NE-CZ-NH1	10.00	125.30	120.30
25	BB	1514	G	N1-C6-O6	-10.00	113.90	119.90
25	BB	1855	U	C5-C6-N1	-10.00	117.70	122.70
3	A1	162	A	C4-C5-C6	-10.00	112.00	117.00
25	BB	341	C	N3-C2-O2	-10.00	114.90	121.90
25	BB	2049	G	N3-C4-C5	-10.00	123.60	128.60
25	BB	2703	C	C6-N1-C2	-10.00	116.30	120.30
25	BB	676	A	C4-C5-C6	-9.99	112.00	117.00
3	A1	987	G	C4-C5-N7	-9.99	106.80	110.80
25	BB	369	U	O4'-C1'-N1	9.99	116.19	108.20
25	BB	582	A	C4-C5-C6	-9.99	112.00	117.00
25	BB	655	A	N3-C4-N9	-9.99	119.41	127.40
25	BB	1494	A	C5-C6-N6	9.99	131.69	123.70
25	BB	1978	A	C5-C6-N1	9.99	122.70	117.70
25	BB	1216	G	N1-C6-O6	-9.99	113.91	119.90
25	BB	2721	A	C5-C6-N1	9.99	122.69	117.70
2	AM	12	U	C5-C6-N1	-9.99	117.71	122.70
3	A1	1132	C	N1-C2-O2	9.99	124.89	118.90
3	A1	1484	C	O4'-C1'-N1	9.99	116.19	108.20
22	AW	98	ARG	NE-CZ-NH1	9.99	125.29	120.30
25	BB	2730	C	N3-C4-C5	9.99	125.89	121.90
3	A1	1190	G	O4'-C1'-N9	9.98	116.19	108.20
25	BB	345	A	C5-C6-N1	9.98	122.69	117.70
25	BB	2136	G	N9-C4-C5	9.98	109.39	105.40
1	AP	43	G	C8-N9-C4	-9.98	102.41	106.40
25	BB	561	G	C6-N1-C2	-9.98	119.11	125.10
25	BB	1515	A	C4-C5-C6	-9.98	112.01	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	1	G	C4'-C3'-C2'	-9.98	92.62	102.60
25	BB	1148	U	N3-C2-O2	-9.98	115.22	122.20
25	BB	1965	C	C6-N1-C2	-9.98	116.31	120.30
48	BY	124	ARG	NE-CZ-NH1	9.98	125.29	120.30
2	AM	15	U	C5-C6-N1	-9.98	117.71	122.70
3	A1	1491	G	C5-C6-O6	9.98	134.59	128.60
25	BB	1905	C	N1-C2-O2	9.98	124.89	118.90
25	BB	603	A	C6-C5-N7	9.97	139.28	132.30
39	BP	38	ARG	NE-CZ-NH1	9.97	125.29	120.30
1	AP	31	A	C3'-C2'-C1'	9.97	109.48	101.50
25	BB	2473	U	C5-C6-N1	-9.97	117.71	122.70
3	A1	522	C	N3-C4-C5	9.97	125.89	121.90
25	BB	5	A	C4-C5-C6	-9.97	112.02	117.00
25	BB	1913	A	C6-C5-N7	9.97	139.28	132.30
25	BB	2645	G	N9-C4-C5	9.97	109.39	105.40
3	A1	29	U	N1-C2-N3	9.97	120.88	114.90
25	BB	1027	A	C5-C6-N1	9.97	122.68	117.70
3	A1	485	U	O4'-C1'-N1	9.96	116.17	108.20
3	A1	1317	C	N1-C2-O2	9.97	124.88	118.90
25	BB	422	A	C5-C6-N1	9.96	122.68	117.70
25	BB	957	C	N1-C2-N3	9.97	126.18	119.20
25	BB	863	A	C4-C5-C6	-9.96	112.02	117.00
25	BB	1353	A	N1-C6-N6	-9.96	112.62	118.60
25	BB	2161	C	N3-C4-N4	-9.96	111.03	118.00
25	BB	2149	U	N3-C2-O2	-9.96	115.23	122.20
3	A1	432	A	C2-N3-C4	9.96	115.58	110.60
25	BB	844	A	O4'-C1'-N9	9.96	116.17	108.20
3	A1	935	A	C4-C5-C6	-9.96	112.02	117.00
3	A1	1103	C	N3-C4-C5	9.96	125.88	121.90
25	BB	1452	G	N3-C2-N2	-9.96	112.93	119.90
3	A1	897	C	C6-N1-C2	-9.96	116.32	120.30
25	BB	1603	A	C4-C5-C6	-9.96	112.02	117.00
25	BB	1207	C	C2-N3-C4	-9.96	114.92	119.90
25	BB	1210	G	N1-C2-N2	9.96	125.16	116.20
25	BB	1456	G	N3-C2-N2	9.96	126.87	119.90
25	BB	1494	A	C5-C6-N1	9.96	122.68	117.70
3	A1	670	G	N3-C2-N2	-9.95	112.93	119.90
3	A1	1249	C	N3-C2-O2	-9.95	114.93	121.90
25	BB	2169	A	C5-C6-N1	9.95	122.68	117.70
25	BB	2406	A	C5-C6-N1	9.95	122.68	117.70
25	BB	2547	A	C4-C5-C6	-9.95	112.03	117.00
25	BB	2856	A	C5-C6-N1	9.95	122.68	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1420	A	C5-C6-N1	9.95	122.67	117.70
25	BB	1878	G	N7-C8-N9	9.95	118.07	113.10
25	BB	2090	A	C4-C5-C6	-9.95	112.03	117.00
1	AP	2	C	N3-C2-O2	-9.95	114.94	121.90
3	A1	524	G	C8-N9-C4	-9.95	102.42	106.40
3	A1	609	A	C4-C5-N7	9.95	115.67	110.70
3	A1	982	U	C4-C5-C6	9.95	125.67	119.70
25	BB	1465	G	N1-C6-O6	-9.95	113.93	119.90
25	BB	2515	C	N3-C2-O2	-9.95	114.94	121.90
9	AH	52	ARG	NH1-CZ-NH2	-9.94	108.46	119.40
25	BB	1965	C	N1-C2-N3	9.95	126.16	119.20
25	BB	2196	C	C2-N3-C4	-9.94	114.93	119.90
3	A1	411	A	C5-C6-N1	9.94	122.67	117.70
24	BA	54	G	O4'-C4'-C3'	9.94	114.05	106.10
3	A1	827	U	O4'-C1'-N1	9.94	116.15	108.20
3	A1	946	A	C4-C5-C6	-9.94	112.03	117.00
25	BB	735	A	C4-C5-C6	-9.94	112.03	117.00
25	BB	911	A	C5-C6-N1	9.94	122.67	117.70
25	BB	1010	A	C5-C6-N1	9.94	122.67	117.70
3	A1	416	G	C4-C5-N7	-9.94	106.83	110.80
25	BB	236	C	N1-C2-O2	9.94	124.86	118.90
25	BB	368	A	C6-C5-N7	9.93	139.25	132.30
25	BB	2428	G	N1-C6-O6	-9.93	113.94	119.90
3	A1	1268	G	N1-C6-O6	-9.93	113.94	119.90
25	BB	1517	G	C6-C5-N7	9.93	136.36	130.40
25	BB	1528	A	C8-N9-C4	9.93	109.77	105.80
25	BB	447	A	C4-C5-C6	-9.93	112.04	117.00
25	BB	1550	C	N3-C2-O2	-9.93	114.95	121.90
25	BB	1810	A	C4-C5-C6	-9.93	112.04	117.00
25	BB	1864	U	O4'-C1'-N1	9.93	116.14	108.20
25	BB	2252	G	O4'-C1'-N9	9.93	116.14	108.20
1	AE	35	A	C5-C6-N1	9.92	122.66	117.70
3	A1	348	G	C5'-C4'-O4'	9.92	121.01	109.10
3	A1	791	G	C5-C6-N1	9.92	116.46	111.50
25	BB	779	U	C5-C6-N1	-9.92	117.74	122.70
25	BB	2793	C	C2-N3-C4	-9.92	114.94	119.90
3	A1	306	A	O4'-C1'-N9	9.92	116.14	108.20
25	BB	193	U	C5-C6-N1	-9.92	117.74	122.70
25	BB	1828	G	N1-C6-O6	-9.92	113.95	119.90
3	A1	133	U	C5-C6-N1	-9.92	117.74	122.70
3	A1	506	G	N1-C6-O6	-9.92	113.95	119.90
25	BB	746	U	N3-C2-O2	-9.92	115.26	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	904	G	N9-C4-C5	9.92	109.37	105.40
25	BB	1451	C	N3-C2-O2	-9.92	114.96	121.90
36	BM	69	ARG	NE-CZ-NH2	9.92	125.26	120.30
25	BB	2856	A	N1-C6-N6	-9.91	112.65	118.60
25	BB	89	A	O4'-C1'-N9	9.91	116.13	108.20
25	BB	1426	G	N1-C6-O6	-9.91	113.95	119.90
25	BB	2377	A	C5-C6-N1	9.91	122.66	117.70
25	BB	374	A	C4-C5-C6	-9.91	112.05	117.00
25	BB	697	G	N1-C6-O6	-9.91	113.95	119.90
1	AE	6	U	N1-C2-N3	9.91	120.84	114.90
3	A1	1311	A	C4-C5-C6	-9.91	112.05	117.00
26	BC	79	ARG	NE-CZ-NH1	9.91	125.25	120.30
3	A1	23	C	C6-N1-C2	-9.91	116.34	120.30
3	A1	1499	A	C4-C5-C6	-9.91	112.05	117.00
25	BB	1570	A	C5-C6-N6	9.91	131.62	123.70
31	BH	30	ARG	NH1-CZ-NH2	-9.91	108.50	119.40
25	BB	1660	G	C8-N9-C4	-9.91	102.44	106.40
25	BB	1927	A	O4'-C4'-C3'	9.91	114.03	106.10
25	BB	2095	A	O4'-C1'-N9	9.91	116.13	108.20
3	A1	1238	A	C4-C5-C6	-9.90	112.05	117.00
3	A1	1484	C	O5'-P-OP1	-9.90	96.79	105.70
25	BB	1259	G	C8-N9-C4	-9.90	102.44	106.40
25	BB	1612	C	N3-C2-O2	-9.90	114.97	121.90
25	BB	1427	A	N1-C6-N6	-9.90	112.66	118.60
25	BB	2110	G	C8-N9-C4	-9.90	102.44	106.40
25	BB	2819	G	C5-C6-N1	9.90	116.45	111.50
25	BB	1873	G	C4-C5-N7	-9.90	106.84	110.80
3	A1	1399	C	O4'-C1'-N1	9.90	116.12	108.20
25	BB	1300	G	O4'-C1'-N9	9.90	116.12	108.20
25	BB	2157	G	C5-C6-O6	9.90	134.54	128.60
24	BA	92	C	N3-C2-O2	-9.90	114.97	121.90
3	A1	729	A	N1-C6-N6	-9.90	112.66	118.60
3	A1	915	A	C5-C6-N1	9.90	122.65	117.70
25	BB	412	A	N1-C2-N3	-9.90	124.35	129.30
25	BB	981	A	C4-C5-C6	-9.90	112.05	117.00
25	BB	1462	C	O4'-C4'-C3'	9.90	114.02	106.10
25	BB	2421	G	C6-N1-C2	-9.90	119.16	125.10
25	BB	2472	G	N1-C6-O6	-9.90	113.96	119.90
3	A1	746	A	N1-C2-N3	-9.89	124.35	129.30
25	BB	908	C	C2-N3-C4	-9.89	114.95	119.90
25	BB	1745	A	C4-C5-C6	-9.89	112.05	117.00
25	BB	1819	A	N1-C6-N6	-9.89	112.66	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	73	A	C4-C5-C6	-9.89	112.05	117.00
3	A1	924	C	N3-C4-N4	-9.89	111.08	118.00
3	A1	1013	G	N9-C1'-C2'	-9.89	101.12	112.00
54	B5	133	ARG	NE-CZ-NH1	9.89	125.25	120.30
25	BB	1525	A	C2-N3-C4	9.89	115.55	110.60
25	BB	2819	G	N1-C6-O6	-9.89	113.97	119.90
3	A1	841	C	C2-N3-C4	-9.89	114.95	119.90
3	A1	1501	C	N3-C2-O2	-9.89	114.98	121.90
25	BB	1208	C	N3-C4-C5	9.89	125.86	121.90
3	A1	175	C	N3-C2-O2	-9.89	114.98	121.90
3	A1	600	A	C4-C5-C6	-9.88	112.06	117.00
3	A1	1081	A	C5'-C4'-O4'	9.89	120.96	109.10
25	BB	213	A	N1-C2-N3	-9.89	124.36	129.30
25	BB	1072	C	N3-C4-C5	9.88	125.85	121.90
25	BB	1762	A	C4-C5-C6	-9.88	112.06	117.00
48	BY	46	ARG	NE-CZ-NH1	9.88	125.24	120.30
3	A1	840	C	C2-N3-C4	-9.88	114.96	119.90
25	BB	1868	C	N3-C2-O2	-9.88	114.98	121.90
25	BB	802	A	C6-C5-N7	9.88	139.22	132.30
25	BB	2064	C	N1-C2-O2	9.88	124.83	118.90
25	BB	1394	U	O4'-C1'-N1	9.88	116.10	108.20
3	A1	1020	G	N1-C6-O6	-9.88	113.97	119.90
25	BB	2057	G	N3-C2-N2	-9.88	112.99	119.90
25	BB	2178	C	N3-C4-N4	-9.88	111.08	118.00
3	A1	1220	G	C8-N9-C4	-9.88	102.45	106.40
25	BB	1849	G	N1-C6-O6	-9.87	113.98	119.90
3	A1	108	G	N1-C6-O6	-9.87	113.98	119.90
3	A1	577	G	N1-C6-O6	-9.87	113.98	119.90
3	A1	1206	G	C5'-C4'-C3'	-9.87	100.21	116.00
25	BB	1074	G	N1-C6-O6	-9.87	113.98	119.90
25	BB	1385	A	C5-C6-N1	9.87	122.64	117.70
25	BB	1504	A	C4-C5-C6	-9.87	112.06	117.00
25	BB	1274	A	C4-C5-C6	-9.87	112.07	117.00
25	BB	1616	A	C4-C5-C6	-9.87	112.06	117.00
25	BB	2142	A	N1-C6-N6	-9.87	112.68	118.60
25	BB	2227	A	C5-C6-N1	9.87	122.64	117.70
25	BB	1989	G	N1-C6-O6	-9.87	113.98	119.90
25	BB	447	A	C5-C6-N1	9.87	122.63	117.70
25	BB	1479	G	C5-C6-N1	9.87	116.43	111.50
25	BB	2225	A	N1-C6-N6	-9.86	112.68	118.60
25	BB	2811	G	N9-C4-C5	9.86	109.34	105.40
3	A1	1242	G	C5-C6-N1	9.86	116.43	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	378	C	N3-C4-N4	-9.86	111.10	118.00
25	BB	1949	G	N3-C4-C5	-9.86	123.67	128.60
37	BN	228	ASP	CB-CG-OD1	9.86	127.17	118.30
25	BB	2512	C	C2-N3-C4	-9.86	114.97	119.90
3	A1	33	A	C4-C5-C6	-9.86	112.07	117.00
25	BB	2053	G	C5-C6-N1	9.86	116.43	111.50
3	A1	43	C	N3-C4-C5	9.86	125.84	121.90
3	A1	500	G	O4'-C1'-N9	9.86	116.08	108.20
3	A1	882	C	N3-C2-O2	-9.86	115.00	121.90
25	BB	930	G	N1-C2-N3	9.86	129.81	123.90
25	BB	2539	C	N3-C4-C5	9.86	125.84	121.90
3	A1	55	A	C4-C5-C6	-9.85	112.07	117.00
3	A1	214	C	N3-C2-O2	-9.85	115.00	121.90
3	A1	580	C	N3-C4-C5	9.85	125.84	121.90
25	BB	216	A	C5-C6-N6	9.85	131.58	123.70
25	BB	1226	A	O4'-C1'-N9	9.85	116.08	108.20
3	A1	1501	C	N1-C2-O2	9.85	124.81	118.90
22	AW	118	ARG	NE-CZ-NH2	-9.85	115.38	120.30
25	BB	247	G	N3-C2-N2	-9.85	113.01	119.90
25	BB	2791	G	N3-C2-N2	-9.85	113.00	119.90
25	BB	38	A	C4-C5-C6	-9.85	112.08	117.00
3	A1	1515	G	C8-N9-C4	-9.85	102.46	106.40
7	AF	108	ARG	NE-CZ-NH2	9.85	125.22	120.30
25	BB	476	G	C5-C6-N1	9.85	116.42	111.50
25	BB	1425	G	N1-C6-O6	-9.85	113.99	119.90
25	BB	2327	A	C6-C5-N7	9.85	139.19	132.30
25	BB	2674	G	N1-C6-O6	-9.85	113.99	119.90
25	BB	2329	U	O4'-C1'-N1	9.84	116.08	108.20
3	A1	755	G	N3-C2-N2	-9.84	113.01	119.90
25	BB	601	C	N1-C2-O2	9.84	124.81	118.90
25	BB	1309	G	C5-C6-N1	9.84	116.42	111.50
25	BB	1396	U	N3-C2-O2	-9.84	115.31	122.20
25	BB	2241	A	N1-C6-N6	-9.84	112.69	118.60
25	BB	2590	A	C1'-O4'-C4'	-9.84	102.03	109.90
25	BB	920	A	C4-C5-C6	-9.84	112.08	117.00
25	BB	66	C	N3-C2-O2	-9.84	115.01	121.90
25	BB	851	C	N3-C2-O2	-9.84	115.01	121.90
51	B2	147	ARG	NE-CZ-NH1	9.84	125.22	120.30
25	BB	278	A	C4-C5-C6	-9.84	112.08	117.00
25	BB	897	C	N3-C2-O2	-9.84	115.01	121.90
25	BB	982	C	O4'-C1'-N1	9.84	116.07	108.20
25	BB	108	G	N3-C2-N2	-9.84	113.02	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1358	G	C5-C6-N1	9.84	116.42	111.50
1	AP	37	G	C5-N7-C8	-9.83	99.38	104.30
25	BB	1974	C	N3-C4-N4	-9.83	111.12	118.00
3	A1	1086	U	C4-C5-C6	9.83	125.60	119.70
3	A1	1191	A	C5-C6-N1	9.83	122.62	117.70
25	BB	197	A	C4-C5-C6	-9.83	112.08	117.00
25	BB	367	G	C4-C5-N7	-9.83	106.87	110.80
25	BB	436	C	N3-C2-O2	-9.83	115.02	121.90
25	BB	544	C	N3-C4-N4	-9.83	111.12	118.00
25	BB	1143	A	N1-C6-N6	-9.83	112.70	118.60
25	BB	679	C	N3-C2-O2	-9.83	115.02	121.90
3	A1	1418	A	N1-C2-N3	-9.83	124.39	129.30
25	BB	471	A	C4-C5-C6	-9.83	112.09	117.00
25	BB	1852	U	N1-C1'-C2'	9.83	126.78	114.00
25	BB	2516	A	C5-C6-N1	9.83	122.61	117.70
3	A1	486	U	N1-C2-N3	9.83	120.80	114.90
3	A1	1358	U	N3-C2-O2	-9.82	115.32	122.20
25	BB	203	A	C4-C5-C6	-9.82	112.09	117.00
1	AP	27	C	C5-C6-N1	-9.82	116.09	121.00
25	BB	1655	A	C5-C6-N1	9.82	122.61	117.70
3	A1	366	A	C5-C6-N1	9.82	122.61	117.70
3	A1	431	A	C4-C5-C6	-9.82	112.09	117.00
25	BB	422	A	C4-C5-C6	-9.82	112.09	117.00
3	A1	832	G	N9-C4-C5	9.82	109.33	105.40
3	A1	1315	U	C5-C6-N1	-9.82	117.79	122.70
25	BB	1315	C	C2-N3-C4	-9.82	114.99	119.90
3	A1	1153	G	N3-C4-C5	-9.82	123.69	128.60
24	BA	92	C	N1-C2-O2	9.82	124.79	118.90
25	BB	980	A	C5-C6-N1	9.82	122.61	117.70
1	AA	72	C	O4'-C1'-N1	9.82	116.05	108.20
3	A1	1434	A	C4-C5-C6	-9.82	112.09	117.00
25	BB	330	A	C4-C5-C6	-9.82	112.09	117.00
25	BB	1741	C	N3-C4-N4	-9.82	111.13	118.00
25	BB	2145	C	N3-C2-O2	-9.82	115.03	121.90
1	AE	57	G	N1-C6-O6	-9.81	114.01	119.90
3	A1	379	C	O4'-C1'-N1	9.81	116.05	108.20
25	BB	1592	C	N3-C2-O2	-9.81	115.03	121.90
25	BB	1896	G	N3-C4-C5	-9.81	123.69	128.60
25	BB	718	A	C8-N9-C4	-9.81	101.88	105.80
3	A1	1457	G	C8-N9-C4	-9.81	102.48	106.40
24	BA	58	A	N1-C6-N6	-9.81	112.71	118.60
25	BB	2211	A	C4-C5-C6	-9.81	112.09	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	545	C	C5'-C4'-O4'	9.81	120.87	109.10
25	BB	1949	G	N1-C6-O6	-9.81	114.02	119.90
1	AE	44	A	C5-C6-N1	9.80	122.60	117.70
3	A1	841	C	N3-C2-O2	-9.80	115.04	121.90
25	BB	2512	C	N3-C4-C5	9.80	125.82	121.90
3	A1	980	C	C6-N1-C2	-9.80	116.38	120.30
25	BB	33	C	N3-C2-O2	-9.80	115.04	121.90
25	BB	108	G	C6-N1-C2	-9.80	119.22	125.10
25	BB	1301	A	C4-C5-C6	-9.80	112.10	117.00
25	BB	1632	A	O4'-C1'-N9	9.80	116.04	108.20
25	BB	2825	G	C5-C6-O6	9.80	134.48	128.60
3	A1	102	G	N3-C4-C5	-9.80	123.70	128.60
3	A1	840	C	N3-C2-O2	-9.80	115.04	121.90
3	A1	1260	G	O4'-C1'-N9	-9.80	100.36	108.20
25	BB	711	G	C5-C6-O6	9.80	134.48	128.60
25	BB	2202	U	C5-C6-N1	-9.80	117.80	122.70
25	BB	1300	G	N3-C2-N2	-9.80	113.04	119.90
1	AA	42	G	C4'-C3'-C2'	-9.79	92.81	102.60
25	BB	986	C	N3-C4-C5	9.80	125.82	121.90
30	BG	103	ARG	NE-CZ-NH2	9.80	125.20	120.30
3	A1	1256	A	C5-C6-N1	9.79	122.60	117.70
25	BB	540	C	C4-C5-C6	-9.79	112.50	117.40
25	BB	856	G	C5-C6-N1	9.79	116.40	111.50
31	BH	16	ARG	NE-CZ-NH1	9.79	125.20	120.30
3	A1	1451	U	C2-N3-C4	-9.79	121.13	127.00
25	BB	89	A	C5-C6-N1	9.79	122.59	117.70
25	BB	880	G	C1'-O4'-C4'	-9.79	102.07	109.90
25	BB	1172	C	N3-C4-N4	-9.79	111.15	118.00
25	BB	1907	G	N1-C6-O6	-9.79	114.03	119.90
25	BB	2538	C	N3-C4-C5	9.79	125.81	121.90
3	A1	664	G	N1-C6-O6	-9.79	114.03	119.90
17	AR	62	ARG	NE-CZ-NH1	9.79	125.19	120.30
25	BB	947	A	C5-C6-N1	9.79	122.59	117.70
25	BB	1400	U	O4'-C1'-N1	9.78	116.03	108.20
37	BN	237	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	AE	1	G	C2-N3-C4	9.78	116.79	111.90
3	A1	899	C	O4'-C1'-N1	9.78	116.03	108.20
25	BB	1630	A	C4-C5-C6	-9.78	112.11	117.00
25	BB	1901	A	C6-C5-N7	9.78	139.15	132.30
25	BB	2509	G	N3-C2-N2	-9.78	113.05	119.90
1	AE	58	A	C5-C6-N6	9.78	131.52	123.70
3	A1	511	C	N1-C2-O2	9.78	124.77	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	895	G	N3-C4-C5	-9.78	123.71	128.60
25	BB	144	A	C4-C5-C6	-9.78	112.11	117.00
25	BB	438	G	C5'-C4'-O4'	9.78	120.83	109.10
25	BB	599	A	C4-C5-C6	-9.78	112.11	117.00
25	BB	1670	C	N3-C2-O2	-9.78	115.06	121.90
3	A1	321	A	C4-C5-C6	-9.78	112.11	117.00
25	BB	1724	G	C8-N9-C4	-9.78	102.49	106.40
25	BB	1572	A	C1'-O4'-C4'	-9.78	102.08	109.90
25	BB	2458	G	C3'-C2'-C1'	9.78	109.32	101.50
25	BB	2772	C	N3-C4-N4	-9.78	111.16	118.00
32	BI	102	ARG	NE-CZ-NH1	9.78	125.19	120.30
1	AA	38	A	C2-N3-C4	9.77	115.49	110.60
3	A1	370	C	O4'-C1'-N1	9.77	116.02	108.20
3	A1	747	A	C6-C5-N7	9.77	139.14	132.30
3	A1	1296	C	N3-C2-O2	-9.77	115.06	121.90
25	BB	2358	A	C5-C6-N1	9.77	122.59	117.70
25	BB	265	A	C1'-O4'-C4'	-9.77	102.08	109.90
25	BB	2284	A	C4-C5-C6	-9.77	112.11	117.00
55	B6	35	ARG	NE-CZ-NH1	9.77	125.19	120.30
25	BB	1317	G	C5-C6-N1	9.77	116.39	111.50
25	BB	2467	C	N3-C4-C5	9.77	125.81	121.90
37	BN	68	ARG	NE-CZ-NH1	9.77	125.19	120.30
25	BB	2486	C	C2-N3-C4	-9.77	115.02	119.90
3	A1	1037	C	C6-N1-C2	-9.77	116.39	120.30
25	BB	568	U	C1'-O4'-C4'	-9.77	102.09	109.90
25	BB	1854	A	C4-C5-C6	-9.77	112.12	117.00
3	A1	640	A	C6-C5-N7	9.76	139.13	132.30
25	BB	2577	A	C4'-C3'-C2'	-9.76	92.84	102.60
3	A1	1418	A	C6-C5-N7	9.76	139.13	132.30
3	A1	1466	C	O4'-C1'-N1	9.76	116.01	108.20
25	BB	1966	A	C5-C6-N1	9.76	122.58	117.70
25	BB	1504	A	C5-C6-N1	9.76	122.58	117.70
43	BT	9	ARG	NE-CZ-NH2	9.76	125.18	120.30
25	BB	490	C	N3-C4-C5	9.76	125.80	121.90
25	BB	670	A	C4-C5-C6	-9.76	112.12	117.00
25	BB	1025	G	C3'-C2'-C1'	9.76	109.31	101.50
25	BB	1600	C	N1-C2-O2	9.76	124.75	118.90
25	BB	702	U	C5-C6-N1	-9.76	117.82	122.70
25	BB	1974	C	N3-C4-C5	9.76	125.80	121.90
25	BB	975	A	C4-C5-C6	-9.76	112.12	117.00
25	BB	1931	U	N3-C2-O2	-9.76	115.37	122.20
25	BB	2820	A	C4-C5-C6	-9.76	112.12	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2856	A	C4-C5-C6	-9.76	112.12	117.00
3	A1	56	U	C6-N1-C2	-9.75	115.15	121.00
3	A1	301	G	N3-C4-C5	-9.75	123.72	128.60
3	A1	328	C	N1-C2-O2	9.75	124.75	118.90
3	A1	1306	A	C4'-C3'-C2'	-9.75	92.85	102.60
25	BB	545	U	C1'-O4'-C4'	-9.75	102.10	109.90
25	BB	609	A	C5-C6-N1	9.75	122.58	117.70
25	BB	1503	A	C4-C5-C6	-9.75	112.12	117.00
25	BB	1806	C	C2-N3-C4	-9.75	115.02	119.90
25	BB	199	A	C5-C6-N1	9.75	122.58	117.70
25	BB	1409	U	O4'-C1'-N1	9.75	116.00	108.20
3	A1	688	G	N1-C2-N3	9.75	129.75	123.90
3	A1	1346	A	C4-C5-C6	-9.75	112.13	117.00
24	BA	96	G	N3-C2-N2	-9.75	113.08	119.90
25	BB	439	A	N1-C6-N6	-9.75	112.75	118.60
25	BB	1446	C	N3-C2-O2	-9.75	115.08	121.90
25	BB	2069	G	N1-C6-O6	-9.75	114.05	119.90
25	BB	2313	C	C2-N3-C4	-9.75	115.03	119.90
3	A1	212	G	N1-C6-O6	-9.74	114.06	119.90
25	BB	564	C	N3-C4-C5	9.74	125.80	121.90
25	BB	1470	A	C5-C6-N6	9.74	131.50	123.70
25	BB	1517	G	C8-N9-C4	-9.74	102.50	106.40
25	BB	2361	G	C5-N7-C8	-9.74	99.43	104.30
3	A1	315	A	N1-C6-N6	-9.74	112.76	118.60
3	A1	859	G	C5-C6-N1	9.74	116.37	111.50
25	BB	2524	G	N3-C2-N2	-9.74	113.08	119.90
3	A1	388	G	N3-C4-C5	-9.74	123.73	128.60
3	A1	1242	G	N1-C6-O6	-9.74	114.06	119.90
25	BB	18	U	N3-C2-O2	-9.74	115.38	122.20
25	BB	796	C	N3-C4-N4	-9.74	111.18	118.00
25	BB	1755	A	C5-C6-N1	9.74	122.57	117.70
3	A1	833	G	C4'-C3'-C2'	-9.73	92.87	102.60
25	BB	1384	A	C4-C5-C6	-9.73	112.13	117.00
25	BB	1848	A	N1-C2-N3	-9.73	124.43	129.30
25	BB	457	A	C5-C6-N1	9.73	122.57	117.70
25	BB	1877	A	N1-C6-N6	-9.73	112.76	118.60
25	BB	766	U	C5-C6-N1	-9.73	117.83	122.70
3	A1	1176	A	C4-C5-C6	-9.73	112.14	117.00
3	A1	1346	A	C1'-O4'-C4'	-9.73	102.12	109.90
25	BB	2198	A	N1-C6-N6	-9.73	112.76	118.60
25	BB	1663	G	C3'-C2'-C1'	9.73	109.28	101.50
25	BB	1800	C	O4'-C1'-N1	9.73	115.98	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1085	U	O4'-C1'-N1	9.72	115.98	108.20
3	A1	63	C	N1-C2-O2	9.72	124.73	118.90
24	BA	68	C	O4'-C1'-N1	9.72	115.98	108.20
25	BB	835	C	N3-C2-O2	-9.72	115.09	121.90
3	A1	34	C	N3-C4-C5	9.72	125.79	121.90
25	BB	1496	A	C5-C6-N1	9.72	122.56	117.70
25	BB	1801	A	C5-C6-N1	9.72	122.56	117.70
25	BB	2137	U	C5-C4-O4	-9.72	120.07	125.90
25	BB	2858	C	C5-C4-N4	9.72	127.00	120.20
3	A1	970	C	C5-C4-N4	9.72	127.00	120.20
25	BB	440	C	N3-C2-O2	-9.72	115.10	121.90
25	BB	563	A	C4-C5-C6	-9.72	112.14	117.00
25	BB	851	C	N3-C4-N4	-9.72	111.20	118.00
25	BB	1768	C	N3-C2-O2	-9.72	115.10	121.90
3	A1	923	A	C5'-C4'-C3'	-9.71	100.45	116.00
25	BB	1929	G	N3-C2-N2	-9.72	113.10	119.90
25	BB	199	A	C1'-O4'-C4'	-9.71	102.13	109.90
25	BB	1915	U	N1-C2-N3	9.71	120.73	114.90
25	BB	2256	G	N3-C2-N2	-9.71	113.10	119.90
3	A1	1373	G	N1-C6-O6	-9.71	114.07	119.90
25	BB	134	G	C5-C6-N1	9.71	116.36	111.50
25	BB	1462	C	C6-N1-C2	-9.71	116.42	120.30
25	BB	1133	A	C4-C5-C6	-9.71	112.14	117.00
25	BB	2533	U	C5-C6-N1	-9.71	117.84	122.70
25	BB	125	A	C5-C6-N6	9.71	131.47	123.70
25	BB	1147	A	C4-C5-C6	-9.71	112.14	117.00
25	BB	2530	A	C5-C6-N1	9.71	122.55	117.70
25	BB	2592	G	N1-C6-O6	-9.71	114.07	119.90
3	A1	1250	A	C4-C5-C6	-9.71	112.15	117.00
25	BB	2410	G	N3-C4-C5	-9.71	123.75	128.60
25	BB	2440	C	C2-N3-C4	-9.71	115.05	119.90
3	A1	475	C	O4'-C1'-N1	9.70	115.96	108.20
25	BB	2268	A	C4-C5-C6	-9.70	112.15	117.00
3	A1	287	U	C5'-C4'-O4'	9.70	120.74	109.10
3	A1	468	A	C5-C6-N1	9.70	122.55	117.70
25	BB	484	C	N1-C2-O2	9.70	124.72	118.90
25	BB	1932	A	C4-C5-C6	-9.70	112.15	117.00
33	BJ	12	ARG	NE-CZ-NH1	9.70	125.15	120.30
3	A1	1053	G	C5-C6-N1	9.70	116.35	111.50
3	A1	280	C	N3-C4-C5	9.70	125.78	121.90
25	BB	386	G	N1-C6-O6	-9.70	114.08	119.90
25	BB	708	G	C5-C6-N1	9.70	116.35	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1600	C	N3-C4-C5	9.70	125.78	121.90
25	BB	2367	G	N1-C6-O6	-9.70	114.08	119.90
25	BB	2858	C	C3'-C2'-C1'	9.70	109.26	101.50
3	A1	25	C	N3-C4-N4	-9.70	111.21	118.00
25	BB	388	G	C5-C6-O6	9.70	134.42	128.60
25	BB	2132	U	C5-C6-N1	-9.70	117.85	122.70
1	AE	37	G	C3'-C2'-C1'	9.70	109.26	101.50
3	A1	890	G	O4'-C1'-N9	-9.69	100.44	108.20
25	BB	1134	A	O4'-C1'-N9	9.69	115.95	108.20
25	BB	1172	C	C1'-O4'-C4'	-9.69	102.14	109.90
3	A1	1016	A	C5-C6-N1	9.69	122.55	117.70
24	BA	50	A	C4-C5-C6	-9.69	112.15	117.00
25	BB	1538	G	N1-C2-N3	9.69	129.72	123.90
25	BB	2541	A	C4-C5-C6	-9.69	112.15	117.00
25	BB	11	C	N3-C2-O2	-9.69	115.12	121.90
25	BB	101	A	C4-C5-C6	-9.69	112.15	117.00
25	BB	2728	U	O4'-C1'-N1	9.69	115.95	108.20
3	A1	424	G	N3-C2-N2	-9.69	113.12	119.90
24	BA	110	C	N3-C2-O2	-9.69	115.12	121.90
25	BB	734	A	C4-C5-C6	-9.69	112.16	117.00
25	BB	1416	G	C6-N1-C2	-9.69	119.29	125.10
25	BB	288	U	N3-C2-O2	-9.69	115.42	122.20
3	A1	1214	C	N3-C2-O2	-9.68	115.12	121.90
25	BB	2219	U	O4'-C1'-N1	9.68	115.95	108.20
25	BB	2551	C	N1-C2-O2	9.68	124.71	118.90
1	AA	73	A	C5-C6-N1	9.68	122.54	117.70
3	A1	68	G	C3'-C2'-C1'	-9.68	93.76	101.50
3	A1	89	U	C2-N3-C4	-9.68	121.19	127.00
11	AJ	39	ARG	NE-CZ-NH1	9.68	125.14	120.30
25	BB	1246	A	C4-C5-C6	-9.68	112.16	117.00
3	A1	827	U	N1-C2-O2	9.68	129.57	122.80
25	BB	709	U	N3-C2-O2	-9.68	115.42	122.20
25	BB	1732	C	C2-N3-C4	-9.68	115.06	119.90
3	A1	1453	G	N3-C4-N9	9.68	131.81	126.00
25	BB	972	A	N1-C6-N6	-9.68	112.79	118.60
25	BB	1682	G	N1-C6-O6	-9.68	114.09	119.90
25	BB	2900	A	C5-C6-N1	9.68	122.54	117.70
3	A1	362	G	N1-C6-O6	-9.67	114.10	119.90
25	BB	648	G	C8-N9-C4	-9.67	102.53	106.40
25	BB	738	G	N1-C6-O6	-9.67	114.10	119.90
25	BB	1782	U	O4'-C1'-N1	9.67	115.94	108.20
25	BB	2107	G	N3-C2-N2	-9.67	113.13	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	29	A	C6-C5-N7	9.67	139.07	132.30
3	A1	61	G	N3-C2-N2	-9.67	113.13	119.90
3	A1	131	A	C5-C6-N1	9.67	122.53	117.70
4	AB	138	ARG	NE-CZ-NH1	9.67	125.13	120.30
25	BB	1561	C	N1-C2-O2	9.67	124.70	118.90
25	BB	1654	A	C4-C5-C6	-9.67	112.17	117.00
25	BB	1857	G	N1-C6-O6	-9.67	114.10	119.90
25	BB	1262	A	C5-C6-N1	9.67	122.53	117.70
25	BB	1393	A	C1'-O4'-C4'	-9.67	102.17	109.90
25	BB	1608	A	O4'-C1'-N9	9.67	115.93	108.20
25	BB	2023	C	N3-C4-C5	9.67	125.77	121.90
25	BB	2230	G	N1-C6-O6	-9.67	114.10	119.90
25	BB	513	A	C6-C5-N7	9.66	139.06	132.30
25	BB	786	C	N1-C2-O2	9.66	124.70	118.90
25	BB	446	G	C5-C6-N1	9.66	116.33	111.50
25	BB	1265	A	C4-C5-C6	-9.66	112.17	117.00
3	A1	913	A	C5-C6-N1	9.66	122.53	117.70
25	BB	1774	C	O4'-C1'-N1	9.66	115.93	108.20
1	AE	5	A	N1-C6-N6	-9.66	112.81	118.60
25	BB	1278	C	N3-C4-C5	9.66	125.76	121.90
25	BB	1656	C	N1-C2-O2	9.66	124.69	118.90
3	A1	665	A	C1'-O4'-C4'	-9.66	102.17	109.90
25	BB	2109	U	N3-C2-O2	-9.66	115.44	122.20
3	A1	831	A	N1-C6-N6	-9.65	112.81	118.60
3	A1	1378	C	N3-C4-C5	9.65	125.76	121.90
24	BA	25	U	N3-C2-O2	-9.65	115.44	122.20
25	BB	69	C	N3-C2-O2	-9.65	115.14	121.90
25	BB	330	A	N1-C6-N6	-9.65	112.81	118.60
25	BB	719	C	N3-C4-N4	-9.65	111.24	118.00
25	BB	1252	G	N3-C2-N2	-9.65	113.14	119.90
25	BB	2483	C	C2-N3-C4	-9.65	115.07	119.90
3	A1	199	A	C5-C6-N1	9.65	122.53	117.70
25	BB	1204	A	C5-C6-N1	9.65	122.53	117.70
25	BB	1571	A	C4-C5-C6	-9.65	112.17	117.00
3	A1	57	G	C6-C5-N7	9.65	136.19	130.40
3	A1	1503	A	O5'-P-OP2	-9.65	97.02	105.70
25	BB	2252	G	N1-C6-O6	-9.65	114.11	119.90
1	AE	64	A	C6-C5-N7	9.65	139.05	132.30
25	BB	653	U	C5-C6-N1	-9.65	117.88	122.70
25	BB	964	C	N3-C4-N4	-9.65	111.25	118.00
25	BB	1194	A	C5-C6-N1	9.65	122.52	117.70
29	BF	38	ARG	NE-CZ-NH2	9.65	125.12	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	B1	79	ARG	NE-CZ-NH1	9.65	125.12	120.30
3	A1	1201	A	N1-C6-N6	-9.64	112.81	118.60
3	A1	743	A	C5-C6-N6	9.64	131.41	123.70
3	A1	934	C	N3-C4-C5	9.64	125.76	121.90
3	A1	1066	C	C2-N3-C4	-9.64	115.08	119.90
25	BB	1925	C	N3-C4-N4	-9.64	111.25	118.00
24	BA	27	C	C3'-C2'-C1'	9.64	109.21	101.50
25	BB	1128	G	N1-C6-O6	-9.64	114.12	119.90
25	BB	1816	C	N3-C2-O2	-9.64	115.15	121.90
25	BB	2020	A	C5-C6-N1	9.64	122.52	117.70
1	AP	33	U	C2-N3-C4	-9.64	121.22	127.00
3	A1	365	U	O4'-C1'-N1	9.64	115.91	108.20
3	A1	1072	G	N1-C6-O6	-9.64	114.12	119.90
25	BB	335	C	N3-C4-C5	9.64	125.75	121.90
25	BB	2287	A	N1-C6-N6	-9.64	112.82	118.60
3	A1	660	C	O4'-C1'-N1	9.64	115.91	108.20
25	BB	483	A	C5-C6-N1	9.64	122.52	117.70
3	A1	1053	G	O4'-C1'-N9	9.63	115.91	108.20
3	A1	1279	G	C4-C5-N7	9.63	114.65	110.80
25	BB	1368	G	N1-C6-O6	-9.63	114.12	119.90
34	BK	84	ARG	NE-CZ-NH1	9.63	125.12	120.30
1	AE	61	C	C3'-C2'-C1'	-9.63	93.79	101.50
3	A1	253	A	C5-C6-N1	9.63	122.52	117.70
3	A1	706	A	C1'-O4'-C4'	-9.63	102.19	109.90
3	A1	1464	U	N3-C2-O2	-9.63	115.46	122.20
24	BA	34	A	C4-C5-C6	-9.63	112.18	117.00
25	BB	1041	G	O4'-C1'-N9	-9.63	100.49	108.20
1	AE	20	G	C4-C5-N7	-9.63	106.95	110.80
3	A1	1302	C	N3-C4-C5	9.63	125.75	121.90
15	AO	142	ARG	NE-CZ-NH2	-9.63	115.48	120.30
25	BB	320	A	C6-C5-N7	9.63	139.04	132.30
25	BB	449	A	C4-C5-C6	-9.63	112.19	117.00
25	BB	1966	A	N9-C4-C5	-9.63	101.95	105.80
3	A1	203	G	N3-C2-N2	-9.63	113.16	119.90
25	BB	127	A	C5-C6-N1	9.63	122.51	117.70
3	A1	514	C	C5-C6-N1	-9.63	116.19	121.00
25	BB	925	A	C5-C6-N1	9.63	122.51	117.70
3	A1	301	G	N1-C6-O6	-9.62	114.12	119.90
16	AQ	33	ARG	CD-NE-CZ	9.62	137.07	123.60
3	A1	301	G	C5-C6-N1	9.62	116.31	111.50
3	A1	745	G	C8-N9-C4	-9.62	102.55	106.40
3	A1	937	A	N1-C6-N6	-9.62	112.83	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1097	C	C2-N3-C4	-9.62	115.09	119.90
24	BA	110	C	N3-C4-C5	9.62	125.75	121.90
25	BB	2577	A	C4-C5-C6	-9.62	112.19	117.00
25	BB	41	C	C1'-O4'-C4'	-9.62	102.20	109.90
25	BB	1889	A	C4-C5-C6	-9.62	112.19	117.00
1	AP	23	A	N1-C6-N6	-9.62	112.83	118.60
3	A1	888	G	N1-C6-O6	-9.62	114.13	119.90
25	BB	2067	G	C3'-C2'-C1'	-9.62	93.81	101.50
25	BB	2111	U	O4'-C1'-N1	9.62	115.89	108.20
25	BB	2301	C	C3'-C2'-C1'	9.62	109.19	101.50
25	BB	2647	U	C5'-C4'-O4'	9.62	120.64	109.10
3	A1	475	C	C2-N3-C4	-9.62	115.09	119.90
3	A1	882	C	C2-N3-C4	-9.61	115.09	119.90
25	BB	1281	G	N1-C6-O6	-9.62	114.13	119.90
25	BB	1520	U	C3'-C2'-C1'	9.62	109.19	101.50
25	BB	1585	C	N3-C4-C5	9.61	125.75	121.90
25	BB	2385	C	P-O3'-C3'	9.62	131.24	119.70
3	A1	1519	A	C4-C5-C6	-9.61	112.19	117.00
25	BB	27	G	N3-C2-N2	-9.61	113.17	119.90
25	BB	1455	G	N3-C2-N2	-9.61	113.17	119.90
25	BB	1295	C	C6-N1-C2	-9.61	116.46	120.30
25	BB	1523	U	C4'-C3'-C2'	-9.61	92.99	102.60
25	BB	1792	G	C5-C6-N1	9.61	116.31	111.50
25	BB	149	A	C5-C6-N1	9.61	122.50	117.70
25	BB	893	C	C2-N3-C4	-9.61	115.09	119.90
25	BB	957	C	P-O3'-C3'	9.61	131.23	119.70
25	BB	2270	A	C4-C5-C6	-9.61	112.19	117.00
25	BB	2271	G	N3-C4-C5	-9.61	123.80	128.60
3	A1	722	G	N1-C6-O6	-9.61	114.14	119.90
3	A1	1258	G	C5'-C4'-O4'	9.61	120.63	109.10
25	BB	2063	C	N3-C4-N4	-9.61	111.28	118.00
25	BB	2463	C	C6-N1-C2	-9.61	116.46	120.30
25	BB	797	G	C5-C6-O6	9.60	134.36	128.60
25	BB	1593	A	C6-C5-N7	9.60	139.02	132.30
25	BB	2411	A	C4-C5-C6	-9.60	112.20	117.00
3	A1	614	C	N1-C2-O2	9.60	124.66	118.90
25	BB	2014	A	C6-C5-N7	9.60	139.02	132.30
25	BB	2335	A	C4-C5-C6	-9.60	112.20	117.00
3	A1	361	G	C5-C6-N1	9.60	116.30	111.50
3	A1	1401	G	C1'-O4'-C4'	-9.60	102.22	109.90
25	BB	632	A	C6-C5-N7	9.60	139.02	132.30
25	BB	782	A	N1-C6-N6	-9.60	112.84	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2426	A	N1-C6-N6	-9.60	112.84	118.60
25	BB	2794	C	O4'-C1'-N1	9.60	115.88	108.20
3	A1	1371	G	N1-C6-O6	-9.59	114.14	119.90
24	BA	98	G	N1-C2-N3	9.59	129.66	123.90
25	BB	2081	U	O4'-C1'-N1	9.59	115.88	108.20
1	AP	29	A	O4'-C4'-C3'	9.59	113.77	106.10
3	A1	851	G	C6-C5-N7	9.59	136.16	130.40
3	A1	1211	U	C4-C5-C6	9.59	125.46	119.70
25	BB	1565	C	N3-C4-C5	9.59	125.74	121.90
3	A1	558	G	N1-C6-O6	-9.59	114.15	119.90
3	A1	1341	U	C5-C6-N1	-9.59	117.91	122.70
7	AF	106	ARG	NE-CZ-NH2	-9.59	115.50	120.30
25	BB	933	A	C5-C6-N1	9.59	122.50	117.70
25	BB	1457	U	N3-C2-O2	-9.59	115.49	122.20
25	BB	2191	A	C5-C6-N1	9.59	122.50	117.70
25	BB	1292	G	N1-C6-O6	-9.59	114.15	119.90
25	BB	2854	G	N1-C6-O6	-9.59	114.15	119.90
3	A1	1104	G	N3-C2-N2	-9.59	113.19	119.90
23	AX	37	ARG	NE-CZ-NH1	9.59	125.09	120.30
25	BB	2377	A	N1-C6-N6	-9.59	112.85	118.60
3	A1	727	G	N3-C2-N2	-9.59	113.19	119.90
3	A1	1417	G	N7-C8-N9	9.59	117.89	113.10
3	A1	817	C	C6-N1-C2	-9.58	116.47	120.30
3	A1	348	G	N1-C6-O6	-9.58	114.15	119.90
3	A1	381	C	N3-C4-C5	9.58	125.73	121.90
3	A1	808	C	N3-C2-O2	-9.58	115.19	121.90
15	AO	168	ARG	NE-CZ-NH1	9.58	125.09	120.30
25	BB	2340	A	C5-C6-N1	9.58	122.49	117.70
3	A1	93	U	N3-C2-O2	-9.58	115.49	122.20
3	A1	1316	G	C5-C6-N1	9.58	116.29	111.50
2	AM	5	U	OP1-P-OP2	-9.58	105.23	119.60
3	A1	922	G	N7-C8-N9	9.58	117.89	113.10
3	A1	1245	C	N3-C4-C5	9.58	125.73	121.90
25	BB	154	U	N3-C2-O2	-9.58	115.49	122.20
25	BB	497	A	C4-C5-C6	-9.58	112.21	117.00
25	BB	504	A	C2-N3-C4	9.58	115.39	110.60
25	BB	1570	A	C6-C5-N7	9.58	139.01	132.30
1	AA	31	A	N1-C6-N6	-9.58	112.85	118.60
3	A1	261	U	C5-C6-N1	-9.58	117.91	122.70
3	A1	1454	G	C6-N1-C2	-9.58	119.36	125.10
3	A1	1457	G	N9-C4-C5	9.58	109.23	105.40
25	BB	1617	C	C2-N3-C4	-9.58	115.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	547	A	C8-N9-C4	-9.57	101.97	105.80
1	AP	38	A	C5-C6-N1	9.57	122.49	117.70
3	A1	64	G	N1-C6-O6	-9.57	114.16	119.90
3	A1	67	C	N3-C2-O2	-9.57	115.20	121.90
25	BB	943	A	C5-C6-N1	9.57	122.49	117.70
25	BB	2678	C	O4'-C1'-N1	9.57	115.86	108.20
25	BB	2837	A	N1-C6-N6	-9.57	112.86	118.60
25	BB	448	U	O4'-C1'-N1	9.57	115.86	108.20
25	BB	1494	A	C3'-C2'-C1'	9.57	109.16	101.50
25	BB	1404	C	N3-C4-C5	9.57	125.73	121.90
25	BB	2305	U	N1-C2-N3	9.57	120.64	114.90
3	A1	1318	A	C5-C6-N1	9.57	122.48	117.70
25	BB	1285	A	C2-N3-C4	9.57	115.38	110.60
25	BB	2369	A	C5-C6-N1	9.57	122.48	117.70
52	B3	34	ARG	NE-CZ-NH1	9.56	125.08	120.30
25	BB	920	A	C5-C6-N1	9.56	122.48	117.70
25	BB	925	A	C4-C5-C6	-9.56	112.22	117.00
25	BB	1910	G	C4-C5-N7	-9.56	106.97	110.80
25	BB	2794	C	C6-N1-C2	-9.56	116.47	120.30
3	A1	1036	A	C5-C6-N6	9.56	131.35	123.70
24	BA	11	C	N3-C4-C5	9.56	125.72	121.90
25	BB	100	U	N3-C4-O4	-9.56	112.71	119.40
3	A1	181	A	C6-N1-C2	-9.56	112.86	118.60
25	BB	2330	G	C4-C5-N7	-9.56	106.98	110.80
25	BB	798	G	C3'-C2'-C1'	-9.56	93.85	101.50
1	AP	50	U	C4-C5-C6	9.55	125.43	119.70
3	A1	888	G	N1-C2-N3	9.55	129.63	123.90
3	A1	984	C	C6-N1-C2	-9.55	116.48	120.30
3	A1	1163	A	C5-C6-N1	9.55	122.48	117.70
25	BB	325	G	C5-C6-N1	9.55	116.28	111.50
7	AF	92	ARG	NE-CZ-NH1	9.55	125.08	120.30
25	BB	613	A	N1-C6-N6	-9.55	112.87	118.60
25	BB	1687	G	C5'-C4'-C3'	9.55	131.29	116.00
3	A1	169	C	C1'-O4'-C4'	-9.55	102.26	109.90
3	A1	1129	C	N3-C4-C5	9.55	125.72	121.90
25	BB	1866	A	C5-C6-N6	9.55	131.34	123.70
1	AA	69	U	O4'-C1'-N1	9.55	115.84	108.20
3	A1	274	A	C5-C6-N1	9.55	122.47	117.70
25	BB	390	U	N1-C2-O2	9.55	129.49	122.80
37	BN	174	ARG	NE-CZ-NH1	9.55	125.08	120.30
3	A1	381	C	N3-C4-N4	-9.55	111.32	118.00
3	A1	1510	C	N3-C2-O2	-9.55	115.22	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	857	C	C2-N3-C4	-9.55	115.13	119.90
3	A1	1378	C	N3-C4-N4	-9.55	111.32	118.00
3	A1	1521	C	N3-C2-O2	-9.55	115.22	121.90
25	BB	2635	A	C6-C5-N7	9.55	138.98	132.30
30	BG	118	ARG	NE-CZ-NH1	9.55	125.07	120.30
25	BB	1643	G	O4'-C1'-N9	9.55	115.84	108.20
3	A1	1058	G	N1-C2-N3	9.54	129.63	123.90
3	A1	1468	A	C4-C5-C6	-9.54	112.23	117.00
25	BB	675	A	C4-C5-C6	-9.54	112.23	117.00
25	BB	1795	C	C2-N3-C4	-9.54	115.13	119.90
3	A1	549	C	N3-C4-C5	9.54	125.72	121.90
3	A1	292	G	N1-C6-O6	-9.54	114.18	119.90
3	A1	1044	A	C5-C6-N6	9.54	131.33	123.70
3	A1	1511	G	N3-C2-N2	-9.54	113.22	119.90
25	BB	179	C	N3-C2-O2	-9.54	115.22	121.90
25	BB	648	G	N3-C4-C5	-9.54	123.83	128.60
25	BB	1549	A	C4-C5-C6	-9.54	112.23	117.00
25	BB	2787	C	N3-C4-C5	9.54	125.72	121.90
25	BB	1718	G	C8-N9-C4	-9.54	102.58	106.40
25	BB	2094	A	C5-C6-N6	9.54	131.33	123.70
25	BB	1489	C	N3-C4-C5	9.54	125.72	121.90
25	BB	1604	C	N3-C4-N4	-9.54	111.32	118.00
25	BB	1696	G	N3-C2-N2	-9.54	113.22	119.90
1	AA	43	G	N9-C4-C5	9.53	109.21	105.40
3	A1	792	A	C4-C5-C6	-9.54	112.23	117.00
25	BB	158	U	C4'-C3'-C2'	-9.54	93.06	102.60
25	BB	462	C	N3-C2-O2	-9.54	115.22	121.90
25	BB	1366	A	C5-C6-N1	9.54	122.47	117.70
25	BB	2071	A	C4-C5-C6	-9.54	112.23	117.00
24	BA	29	A	C1'-O4'-C4'	-9.53	102.27	109.90
25	BB	280	U	O4'-C1'-N1	9.53	115.83	108.20
25	BB	458	G	O4'-C1'-N9	9.53	115.83	108.20
25	BB	2127	G	N1-C6-O6	-9.53	114.18	119.90
1	AP	27	C	N3-C2-O2	-9.53	115.23	121.90
3	A1	1413	A	C5-C6-N1	9.53	122.47	117.70
25	BB	750	A	C5-C6-N6	9.53	131.32	123.70
25	BB	2268	A	C6-C5-N7	9.53	138.97	132.30
3	A1	1356	G	C5-C6-N1	9.53	116.26	111.50
25	BB	191	A	C5-C6-N1	9.53	122.46	117.70
25	BB	1281	G	N7-C8-N9	9.53	117.86	113.10
25	BB	2262	U	O4'-C1'-N1	9.53	115.82	108.20
25	BB	2809	A	C6-N1-C2	-9.53	112.88	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	189	A	C5-C6-N1	9.52	122.46	117.70
25	BB	13	A	N1-C2-N3	-9.52	124.54	129.30
25	BB	66	C	N3-C4-C5	9.52	125.71	121.90
25	BB	387	U	O4'-C1'-N1	9.52	115.82	108.20
25	BB	1427	A	C6-C5-N7	9.52	138.97	132.30
25	BB	308	G	N3-C4-N9	9.52	131.71	126.00
25	BB	436	C	C2-N3-C4	-9.52	115.14	119.90
25	BB	960	A	C4-C5-C6	-9.52	112.24	117.00
25	BB	1112	G	N7-C8-N9	9.52	117.86	113.10
25	BB	2143	C	N3-C4-C5	9.52	125.71	121.90
3	A1	160	A	C1'-O4'-C4'	-9.52	102.28	109.90
3	A1	1403	C	C5-C6-N1	-9.52	116.24	121.00
25	BB	1161	C	O4'-C1'-N1	9.52	115.81	108.20
4	AB	221	ARG	NH1-CZ-NH2	-9.52	108.93	119.40
35	BL	110	ARG	NH1-CZ-NH2	-9.52	108.93	119.40
3	A1	919	A	C5-C6-N6	9.51	131.31	123.70
25	BB	485	C	N3-C2-O2	-9.51	115.24	121.90
1	AA	37	G	N9-C4-C5	9.51	109.20	105.40
1	AP	42	G	C4-C5-N7	-9.51	107.00	110.80
3	A1	715	A	C5-C6-N6	9.51	131.31	123.70
25	BB	488	G	O4'-C4'-C3'	9.51	113.71	106.10
25	BB	631	A	C6-C5-N7	9.51	138.96	132.30
25	BB	1538	G	C3'-C2'-C1'	9.51	109.11	101.50
25	BB	1859	U	O4'-C1'-N1	9.51	115.81	108.20
25	BB	2378	A	N1-C6-N6	-9.51	112.89	118.60
29	BF	51	ARG	NE-CZ-NH2	9.51	125.06	120.30
25	BB	2679	A	C4-C5-C6	-9.51	112.25	117.00
3	A1	485	U	C4-C5-C6	9.51	125.40	119.70
25	BB	794	A	C4-C5-C6	-9.51	112.25	117.00
3	A1	998	C	N3-C4-C5	9.51	125.70	121.90
3	A1	1482	G	N3-C2-N2	-9.51	113.25	119.90
25	BB	941	A	C4-C5-C6	-9.51	112.25	117.00
25	BB	2168	G	O4'-C1'-N9	9.51	115.81	108.20
25	BB	207	A	C4-C5-C6	-9.51	112.25	117.00
1	AP	5	A	C4-C5-C6	-9.50	112.25	117.00
3	A1	681	A	C5-C6-N1	9.50	122.45	117.70
3	A1	1138	G	C6-C5-N7	9.50	136.10	130.40
25	BB	654	A	C4-C5-C6	-9.50	112.25	117.00
25	BB	1230	A	C4-C5-C6	-9.50	112.25	117.00
25	BB	1533	C	N3-C4-C5	9.50	125.70	121.90
25	BB	2452	C	N3-C2-O2	-9.50	115.25	121.90
3	A1	342	C	N1-C2-N3	9.50	125.85	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	580	C	C3'-C2'-C1'	9.50	109.10	101.50
3	A1	934	C	N3-C2-O2	-9.50	115.25	121.90
3	A1	1098	C	N3-C2-O2	-9.50	115.25	121.90
25	BB	1535	A	C4-C5-C6	-9.50	112.25	117.00
25	BB	2585	U	OP1-P-OP2	-9.50	105.35	119.60
3	A1	57	G	C4-C5-N7	-9.50	107.00	110.80
25	BB	1425	G	O4'-C1'-N9	9.50	115.80	108.20
25	BB	2850	A	C4-C5-C6	-9.50	112.25	117.00
52	B3	162	ARG	NE-CZ-NH1	9.50	125.05	120.30
3	A1	1182	G	C5-C6-N1	9.49	116.25	111.50
25	BB	1598	A	N1-C6-N6	-9.49	112.90	118.60
1	AP	44	A	C4-C5-C6	-9.49	112.25	117.00
3	A1	1110	A	C4-C5-C6	-9.49	112.25	117.00
25	BB	2330	G	C6-C5-N7	9.49	136.09	130.40
25	BB	2385	C	C6-N1-C2	-9.49	116.50	120.30
29	BF	38	ARG	NH1-CZ-NH2	-9.49	108.96	119.40
1	AP	14	A	C5-C6-N1	9.49	122.44	117.70
25	BB	1693	U	N1-C2-O2	9.49	129.44	122.80
25	BB	2758	A	C4-C5-C6	-9.49	112.26	117.00
1	AE	3	G	C5-C6-N1	9.49	116.24	111.50
3	A1	671	G	N1-C6-O6	-9.49	114.21	119.90
25	BB	574	A	C4-C5-C6	-9.49	112.26	117.00
3	A1	1280	A	C4-C5-C6	-9.48	112.26	117.00
3	A1	1531	A	C4-C5-C6	-9.48	112.26	117.00
7	AF	89	ARG	NE-CZ-NH1	9.48	125.04	120.30
25	BB	231	A	C5-C6-N1	9.48	122.44	117.70
25	BB	677	A	N1-C6-N6	-9.48	112.91	118.60
3	A1	1392	G	N3-C2-N2	-9.48	113.26	119.90
25	BB	900	A	C5-C6-N1	9.48	122.44	117.70
25	BB	2852	G	C5'-C4'-O4'	9.48	120.48	109.10
25	BB	1900	A	N1-C6-N6	-9.48	112.91	118.60
1	AP	71	G	C5-C6-N1	9.48	116.24	111.50
3	A1	130	A	C4-C5-C6	-9.48	112.26	117.00
25	BB	137	U	C5-C4-O4	-9.48	120.21	125.90
25	BB	935	C	N3-C4-C5	9.48	125.69	121.90
3	A1	826	C	N3-C2-O2	-9.48	115.27	121.90
1	AA	71	G	C5-C6-N1	9.47	116.24	111.50
2	AM	1	U	O4'-C1'-N1	9.47	115.78	108.20
3	A1	831	A	C5-C6-N1	9.47	122.44	117.70
3	A1	1102	A	C5-C6-N1	9.47	122.44	117.70
24	BA	37	C	N3-C4-C5	9.47	125.69	121.90
25	BB	383	C	N3-C2-O2	-9.47	115.27	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	753	A	C4-C5-C6	-9.47	112.26	117.00
25	BB	1336	A	C4-C5-C6	-9.47	112.26	117.00
25	BB	2294	G	C5-C6-N1	9.47	116.24	111.50
3	A1	335	C	N3-C4-N4	-9.47	111.37	118.00
3	A1	522	C	N3-C4-N4	-9.47	111.37	118.00
25	BB	1472	C	N3-C2-O2	-9.47	115.27	121.90
25	BB	1824	G	N1-C6-O6	-9.47	114.22	119.90
3	A1	348	G	C6-N1-C2	-9.47	119.42	125.10
3	A1	1372	U	N3-C2-O2	-9.47	115.57	122.20
25	BB	1391	U	C5'-C4'-O4'	9.47	120.46	109.10
25	BB	2712	C	C6-N1-C2	-9.47	116.51	120.30
3	A1	788	U	C2-N3-C4	-9.46	121.32	127.00
25	BB	108	G	N1-C6-O6	-9.46	114.22	119.90
25	BB	2333	A	C5'-C4'-O4'	9.46	120.46	109.10
3	A1	908	A	C5-C6-N6	9.46	131.27	123.70
25	BB	602	A	C3'-C2'-C1'	9.46	109.07	101.50
25	BB	1150	C	N3-C2-O2	-9.46	115.28	121.90
1	AE	51	G	N1-C6-O6	-9.46	114.22	119.90
3	A1	225	C	N3-C4-C5	9.46	125.68	121.90
3	A1	604	G	C5'-C4'-O4'	9.46	120.45	109.10
6	AD	85	ARG	NE-CZ-NH1	9.46	125.03	120.30
24	BA	13	G	N1-C6-O6	-9.46	114.22	119.90
25	BB	218	A	N1-C6-N6	-9.46	112.92	118.60
25	BB	633	A	C5-C6-N1	9.46	122.43	117.70
3	A1	338	A	C5-C6-N1	9.46	122.43	117.70
3	A1	745	G	N1-C6-O6	-9.46	114.23	119.90
3	A1	1222	G	N1-C6-O6	-9.46	114.23	119.90
25	BB	417	C	C6-N1-C2	-9.46	116.52	120.30
6	AD	88	ASP	CB-CG-OD1	9.45	126.81	118.30
25	BB	2309	A	C5-C6-N1	9.45	122.43	117.70
3	A1	412	A	C5-C6-N6	9.45	131.26	123.70
25	BB	273	G	N3-C2-N2	-9.45	113.28	119.90
25	BB	762	U	O4'-C1'-N1	9.45	115.76	108.20
25	BB	504	A	C4-C5-C6	-9.45	112.27	117.00
25	BB	730	A	C4-C5-C6	-9.45	112.27	117.00
25	BB	1030	C	O4'-C1'-N1	9.45	115.76	108.20
25	BB	1807	G	N1-C6-O6	-9.45	114.23	119.90
25	BB	1172	C	N3-C4-C5	9.45	125.68	121.90
3	A1	174	A	C6-C5-N7	9.45	138.91	132.30
3	A1	787	A	C6-C5-N7	9.45	138.91	132.30
3	A1	1429	A	C5-C6-N1	9.45	122.42	117.70
25	BB	624	C	N3-C4-N4	-9.45	111.39	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	2158	A	C4-C5-C6	-9.45	112.28	117.00
25	BB	2730	C	N1-C2-O2	9.45	124.57	118.90
25	BB	631	A	C5-C6-N1	9.45	122.42	117.70
25	BB	1159	U	N3-C2-O2	-9.45	115.59	122.20
25	BB	1453	A	C5-C6-N6	9.45	131.26	123.70
3	A1	744	C	N1-C2-O2	9.45	124.57	118.90
25	BB	8	C	C2-N3-C4	-9.45	115.18	119.90
25	BB	309	A	C5-C6-N1	9.45	122.42	117.70
25	BB	1468	U	N3-C2-O2	-9.45	115.59	122.20
25	BB	2246	G	N3-C2-N2	-9.45	113.29	119.90
3	A1	436	C	N3-C2-O2	-9.44	115.29	121.90
3	A1	1068	G	N1-C6-O6	-9.45	114.23	119.90
3	A1	1153	G	N1-C6-O6	-9.44	114.23	119.90
3	A1	1491	G	O4'-C1'-N9	9.44	115.75	108.20
25	BB	354	A	C2-N3-C4	9.45	115.32	110.60
25	BB	1512	C	N3-C4-N4	-9.45	111.39	118.00
25	BB	1638	C	N3-C2-O2	-9.44	115.29	121.90
3	A1	715	A	O4'-C1'-C2'	-9.44	96.36	105.80
3	A1	1462	C	N3-C2-O2	-9.44	115.29	121.90
25	BB	455	C	N3-C4-C5	9.44	125.68	121.90
3	A1	320	A	C5-C6-N1	9.44	122.42	117.70
3	A1	609	A	C3'-C2'-C1'	-9.44	93.95	101.50
25	BB	1618	A	C5-C6-N1	9.44	122.42	117.70
25	BB	1146	C	N1-C2-O2	9.44	124.56	118.90
25	BB	1211	C	C5-C6-N1	-9.44	116.28	121.00
25	BB	1937	A	C5-C6-N1	9.44	122.42	117.70
26	BC	9	ARG	NE-CZ-NH2	-9.44	115.58	120.30
3	A1	1419	G	N3-C4-N9	9.44	131.66	126.00
3	A1	795	C	N3-C4-C5	9.43	125.67	121.90
1	AA	64	A	C6-C5-N7	9.43	138.90	132.30
25	BB	118	A	O4'-C1'-N9	9.43	115.75	108.20
25	BB	592	A	C5-C6-N6	9.43	131.25	123.70
25	BB	968	C	O4'-C1'-N1	9.43	115.75	108.20
25	BB	1092	C	O4'-C1'-N1	9.43	115.75	108.20
25	BB	192	C	N3-C4-N4	-9.43	111.40	118.00
25	BB	1876	A	C5-C6-N1	9.43	122.42	117.70
25	BB	2821	A	C5-C6-N1	9.43	122.42	117.70
3	A1	206	C	N3-C4-C5	9.43	125.67	121.90
25	BB	2144	G	C4-C5-N7	-9.43	107.03	110.80
3	A1	341	C	N3-C2-O2	-9.42	115.30	121.90
3	A1	457	G	N3-C2-N2	-9.42	113.30	119.90
25	BB	977	G	C5-C6-N1	9.42	116.21	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	8	C	N3-C4-C5	9.42	125.67	121.90
25	BB	390	U	C4-C5-C6	9.42	125.35	119.70
25	BB	2275	C	N1-C2-O2	9.42	124.55	118.90
25	BB	2629	U	C1'-O4'-C4'	-9.42	102.36	109.90
25	BB	561	G	C5-C6-N1	9.42	116.21	111.50
1	AA	57	G	O5'-P-OP2	-9.42	97.22	105.70
25	BB	1189	A	C5-C6-N1	9.42	122.41	117.70
36	BM	77	ARG	NE-CZ-NH1	9.42	125.01	120.30
3	A1	276	G	C8-N9-C4	-9.42	102.63	106.40
25	BB	242	G	N3-C4-C5	-9.42	123.89	128.60
25	BB	783	A	O4'-C1'-N9	9.42	115.73	108.20
25	BB	1026	G	C5-C6-N1	9.42	116.21	111.50
25	BB	1244	A	C4-C5-C6	-9.42	112.29	117.00
25	BB	166	U	O4'-C1'-N1	9.41	115.73	108.20
25	BB	225	C	N3-C2-O2	-9.41	115.31	121.90
25	BB	2813	A	C4-C5-C6	-9.41	112.29	117.00
3	A1	395	C	N3-C2-O2	-9.41	115.31	121.90
3	A1	760	G	N1-C6-O6	-9.41	114.25	119.90
25	BB	332	A	N1-C6-N6	-9.41	112.95	118.60
3	A1	1399	C	C2-N3-C4	-9.41	115.20	119.90
25	BB	1829	A	N1-C6-N6	-9.41	112.95	118.60
25	BB	2330	G	N1-C6-O6	-9.41	114.25	119.90
1	AE	46	G	C3'-C2'-C1'	9.41	109.03	101.50
3	A1	82	G	C5-C6-O6	9.41	134.24	128.60
25	BB	639	U	O4'-C1'-N1	9.41	115.73	108.20
25	BB	1145	C	N3-C2-O2	-9.41	115.31	121.90
25	BB	1590	A	C5-C6-N1	9.41	122.40	117.70
3	A1	1401	G	C5-C6-N1	9.41	116.20	111.50
6	AD	37	TYR	CB-CG-CD2	-9.41	115.36	121.00
25	BB	2268	A	C5-C6-N1	9.41	122.40	117.70
1	AE	45	G	O4'-C1'-N9	9.40	115.72	108.20
3	A1	369	G	N7-C8-N9	9.40	117.80	113.10
24	BA	11	C	N3-C2-O2	-9.40	115.32	121.90
25	BB	1028	A	C6-C5-N7	9.40	138.88	132.30
25	BB	1773	A	C5-C6-N1	9.40	122.40	117.70
25	BB	1827	U	O4'-C1'-N1	9.40	115.72	108.20
25	BB	2096	C	C5-C6-N1	-9.40	116.30	121.00
3	A1	120	A	C5-C6-N1	9.40	122.40	117.70
1	AA	14	A	C6-C5-N7	9.40	138.88	132.30
3	A1	511	C	C3'-C2'-C1'	-9.40	93.98	101.50
25	BB	278	A	N9-C4-C5	9.40	109.56	105.80
25	BB	672	C	O4'-C1'-N1	9.40	115.72	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	2037	A	C4-C5-C6	-9.40	112.30	117.00
25	BB	2126	A	C4-C5-C6	-9.40	112.30	117.00
3	A1	754	C	N3-C4-N4	-9.40	111.42	118.00
24	BA	111	U	O4'-C1'-N1	9.40	115.72	108.20
25	BB	677	A	C5-C6-N1	9.40	122.40	117.70
25	BB	1251	C	N1-C2-O2	9.40	124.54	118.90
25	BB	1755	A	C4-C5-C6	-9.40	112.30	117.00
25	BB	2058	A	C5-C6-N1	9.40	122.40	117.70
25	BB	2851	A	C4-C5-C6	-9.40	112.30	117.00
3	A1	342	C	C6-N1-C2	-9.39	116.54	120.30
25	BB	294	A	C4-C5-C6	-9.39	112.30	117.00
2	AM	12	U	O4'-C1'-N1	9.39	115.72	108.20
3	A1	1500	A	O4'-C1'-N9	9.39	115.72	108.20
25	BB	788	A	C6-C5-N7	9.39	138.88	132.30
25	BB	2052	A	C5-C6-N1	9.39	122.40	117.70
1	AA	74	C	C6-N1-C2	-9.39	116.54	120.30
3	A1	1081	A	C6-C5-N7	9.39	138.87	132.30
25	BB	563	A	C5-C6-N1	9.39	122.39	117.70
25	BB	1006	C	N1-C2-O2	9.39	124.53	118.90
25	BB	1126	A	C4-C5-C6	-9.39	112.30	117.00
25	BB	2401	U	O4'-C1'-N1	9.39	115.71	108.20
25	BB	1392	A	C8-N9-C4	-9.39	102.04	105.80
25	BB	1698	A	N7-C8-N9	9.39	118.50	113.80
25	BB	2448	A	N1-C6-N6	-9.39	112.97	118.60
25	BB	1027	A	N1-C6-N6	-9.39	112.97	118.60
25	BB	2093	G	N7-C8-N9	9.39	117.79	113.10
1	AP	27	C	N3-C4-N4	-9.38	111.43	118.00
3	A1	986	U	C1'-O4'-C4'	-9.38	102.39	109.90
25	BB	1410	G	N3-C2-N2	-9.39	113.33	119.90
25	BB	2533	U	C4-C5-C6	9.39	125.33	119.70
3	A1	1004	A	C6-C5-N7	9.38	138.87	132.30
3	A1	1506	U	O4'-C1'-N1	9.38	115.71	108.20
3	A1	1287	A	C4-C5-C6	-9.38	112.31	117.00
25	BB	570	G	O4'-C1'-N9	9.38	115.70	108.20
25	BB	1289	C	N3-C4-N4	-9.38	111.43	118.00
25	BB	2271	G	N3-C4-N9	9.38	131.63	126.00
3	A1	639	G	N1-C6-O6	-9.38	114.27	119.90
3	A1	986	U	N1-C2-N3	9.38	120.53	114.90
3	A1	1288	A	N1-C6-N6	-9.38	112.97	118.60
25	BB	394	C	O4'-C1'-N1	9.38	115.70	108.20
25	BB	1358	G	N1-C6-O6	-9.38	114.27	119.90
25	BB	2645	G	C5-C6-N1	9.38	116.19	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	432	A	C4-C5-C6	-9.37	112.31	117.00
3	A1	515	G	N1-C6-O6	-9.38	114.28	119.90
3	A1	993	G	C8-N9-C4	-9.38	102.65	106.40
25	BB	90	U	O4'-C1'-N1	9.37	115.70	108.20
25	BB	746	U	O4'-C1'-N1	9.37	115.70	108.20
25	BB	915	C	C5'-C4'-O4'	9.38	120.35	109.10
25	BB	1210	G	C6-N1-C2	-9.37	119.47	125.10
17	AR	80	ARG	NH1-CZ-NH2	-9.37	109.09	119.40
25	BB	73	A	C5-C6-N1	9.37	122.39	117.70
25	BB	2265	U	C5-C6-N1	-9.37	118.01	122.70
3	A1	134	G	N1-C6-O6	-9.37	114.28	119.90
3	A1	474	G	O4'-C1'-N9	9.37	115.70	108.20
20	AU	78	ARG	NE-CZ-NH2	9.37	124.98	120.30
1	AP	9	A	C6-C5-N7	9.37	138.86	132.30
25	BB	273	G	N1-C6-O6	-9.37	114.28	119.90
3	A1	60	A	O4'-C1'-N9	9.37	115.69	108.20
25	BB	839	U	N1-C2-N3	9.37	120.52	114.90
25	BB	1308	A	C5-C6-N1	9.37	122.39	117.70
25	BB	2327	A	N1-C2-N3	-9.37	124.61	129.30
3	A1	1529	G	N3-C4-N9	9.37	131.62	126.00
25	BB	327	G	O4'-C1'-N9	-9.37	100.71	108.20
25	BB	1260	A	C5-C6-N1	9.37	122.38	117.70
25	BB	2564	A	C2-N3-C4	9.37	115.28	110.60
25	BB	2843	G	C8-N9-C4	-9.37	102.65	106.40
25	BB	851	C	C6-N1-C2	-9.37	116.55	120.30
25	BB	2780	G	OP1-P-OP2	-9.37	105.55	119.60
3	A1	211	G	C8-N9-C4	-9.36	102.66	106.40
3	A1	1037	C	N3-C2-O2	-9.36	115.35	121.90
3	A1	1199	U	C5'-C4'-O4'	9.36	120.33	109.10
25	BB	691	C	O4'-C1'-N1	9.36	115.69	108.20
24	BA	67	G	C5-N7-C8	-9.36	99.62	104.30
25	BB	818	G	C5-C6-N1	9.36	116.18	111.50
25	BB	1257	C	N3-C4-C5	9.36	125.64	121.90
25	BB	1587	G	C5-C6-O6	9.36	134.22	128.60
25	BB	1871	A	N1-C2-N3	-9.36	124.62	129.30
25	BB	432	A	O4'-C1'-N9	9.36	115.69	108.20
25	BB	1030	C	N1-C2-O2	9.36	124.52	118.90
3	A1	418	C	C3'-C2'-C1'	9.36	108.99	101.50
3	A1	542	G	N1-C6-O6	-9.36	114.28	119.90
25	BB	1572	A	C4'-C3'-C2'	-9.36	93.24	102.60
25	BB	1786	A	C6-C5-N7	9.36	138.85	132.30
25	BB	1954	G	P-O3'-C3'	9.36	130.93	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1954	G	C5-C6-N1	9.36	116.18	111.50
37	BN	216	ARG	NE-CZ-NH1	9.36	124.98	120.30
3	A1	59	A	C4-C5-C6	-9.36	112.32	117.00
25	BB	646	U	C1'-O4'-C4'	-9.36	102.41	109.90
3	A1	1330	U	O4'-C1'-N1	9.36	115.68	108.20
25	BB	1001	A	C4-C5-C6	-9.36	112.32	117.00
3	A1	468	A	C4-C5-C6	-9.35	112.32	117.00
3	A1	696	A	C5-C6-N6	9.35	131.18	123.70
3	A1	1193	G	C5-C6-N1	9.35	116.18	111.50
25	BB	2225	A	N1-C2-N3	-9.35	124.62	129.30
24	BA	4	C	N3-C4-N4	-9.35	111.45	118.00
25	BB	82	U	N3-C2-O2	-9.35	115.65	122.20
25	BB	126	A	C5-C6-N1	9.35	122.38	117.70
25	BB	587	C	C2-N3-C4	-9.35	115.22	119.90
25	BB	1762	A	C2-N3-C4	9.35	115.28	110.60
25	BB	2191	A	N1-C6-N6	-9.35	112.99	118.60
25	BB	2629	U	OP1-P-OP2	-9.35	105.57	119.60
25	BB	214	G	C5-C6-N1	9.35	116.17	111.50
3	A1	56	U	C4-C5-C6	9.35	125.31	119.70
8	AG	62	ARG	NE-CZ-NH1	9.35	124.97	120.30
25	BB	445	C	C6-N1-C2	-9.35	116.56	120.30
25	BB	1084	A	C4-C5-C6	-9.35	112.33	117.00
25	BB	1167	C	C5'-C4'-O4'	9.35	120.32	109.10
25	BB	1838	C	N1-C2-O2	9.35	124.51	118.90
25	BB	2253	G	C5-C6-O6	9.35	134.21	128.60
51	B2	177	ARG	NE-CZ-NH2	9.35	124.97	120.30
25	BB	731	C	N3-C4-C5	9.35	125.64	121.90
25	BB	2318	G	N1-C6-O6	-9.35	114.29	119.90
4	AB	224	ARG	NH1-CZ-NH2	-9.34	109.12	119.40
25	BB	848	C	N3-C4-C5	9.34	125.64	121.90
3	A1	297	G	C5-N7-C8	-9.34	99.63	104.30
3	A1	335	C	N3-C2-O2	-9.34	115.36	121.90
3	A1	490	C	N1-C2-O2	9.34	124.50	118.90
25	BB	242	G	N1-C6-O6	-9.34	114.30	119.90
3	A1	754	C	N3-C2-O2	-9.34	115.36	121.90
3	A1	1375	A	C4-C5-C6	-9.34	112.33	117.00
35	BL	110	ARG	NE-CZ-NH1	9.34	124.97	120.30
3	A1	1087	G	O4'-C1'-N9	-9.34	100.73	108.20
3	A1	1344	C	N3-C4-C5	9.34	125.63	121.90
25	BB	2760	C	C5-C6-N1	-9.34	116.33	121.00
3	A1	530	G	N3-C2-N2	-9.33	113.37	119.90
3	A1	1380	U	N1-C2-N3	9.33	120.50	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1349	C	N3-C2-O2	-9.33	115.37	121.90
25	BB	262	A	C5-C6-N1	9.33	122.37	117.70
25	BB	1533	C	N3-C2-O2	-9.33	115.37	121.90
25	BB	1970	A	N1-C6-N6	-9.33	113.00	118.60
25	BB	2429	G	C5-C6-N1	9.33	116.17	111.50
25	BB	2886	A	C5-C6-N6	9.33	131.17	123.70
25	BB	1003	G	N3-C2-N2	-9.33	113.37	119.90
3	A1	530	G	C4-C5-C6	-9.33	113.20	118.80
3	A1	1129	C	C2-N3-C4	-9.33	115.23	119.90
3	A1	905	U	O4'-C1'-N1	9.33	115.66	108.20
25	BB	2525	G	N1-C6-O6	-9.33	114.30	119.90
3	A1	630	A	N1-C6-N6	-9.33	113.00	118.60
25	BB	2309	A	C6-C5-N7	9.33	138.83	132.30
25	BB	2387	U	N3-C4-O4	-9.33	112.87	119.40
25	BB	299	A	C2-N3-C4	9.32	115.26	110.60
1	AA	46	G	N3-C4-C5	-9.32	123.94	128.60
3	A1	80	A	C5-C6-N1	9.32	122.36	117.70
3	A1	523	A	C4-C5-C6	-9.32	112.34	117.00
25	BB	495	G	C8-N9-C4	-9.32	102.67	106.40
25	BB	1207	C	C4'-C3'-C2'	-9.32	93.28	102.60
25	BB	1650	A	C6-C5-N7	9.32	138.83	132.30
3	A1	549	C	N3-C4-N4	-9.32	111.47	118.00
3	A1	1043	G	N1-C6-O6	-9.32	114.31	119.90
25	BB	2791	G	N1-C6-O6	-9.32	114.31	119.90
25	BB	2350	C	N3-C2-O2	-9.32	115.38	121.90
25	BB	2621	G	N3-C2-N2	-9.32	113.38	119.90
25	BB	2897	U	N3-C2-O2	-9.32	115.68	122.20
37	BN	220	ARG	NH1-CZ-NH2	-9.32	109.15	119.40
3	A1	1104	G	C5-C6-O6	-9.32	123.01	128.60
3	A1	528	C	C6-N1-C2	-9.32	116.57	120.30
3	A1	1138	G	N1-C6-O6	-9.31	114.31	119.90
25	BB	12	U	C4-C5-C6	9.31	125.29	119.70
25	BB	1754	A	C4-C5-C6	-9.31	112.34	117.00
1	AP	69	U	C5-C6-N1	-9.31	118.04	122.70
3	A1	35	G	N9-C4-C5	9.31	109.12	105.40
25	BB	1721	G	C3'-C2'-C1'	9.31	108.95	101.50
3	A1	1197	A	C4-C5-C6	-9.31	112.35	117.00
25	BB	133	U	N3-C2-O2	-9.31	115.68	122.20
3	A1	1443	C	N3-C2-O2	-9.31	115.39	121.90
3	A1	1101	A	C4-C5-C6	-9.31	112.35	117.00
3	A1	327	A	C3'-C2'-C1'	-9.30	94.06	101.50
3	A1	1289	A	C5-C6-N1	9.30	122.35	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1458	G	C5-C6-N1	9.30	116.15	111.50
25	BB	217	A	N7-C8-N9	9.31	118.45	113.80
25	BB	471	A	C5-C6-N1	9.30	122.35	117.70
25	BB	1235	G	C5-C6-O6	9.30	134.18	128.60
25	BB	2660	A	O4'-C1'-N9	9.30	115.64	108.20
3	A1	973	G	N3-C4-C5	-9.30	123.95	128.60
3	A1	1000	A	N1-C6-N6	-9.30	113.02	118.60
23	AX	9	ARG	NE-CZ-NH1	9.30	124.95	120.30
24	BA	105	G	O4'-C1'-N9	9.30	115.64	108.20
25	BB	1896	G	N1-C6-O6	-9.30	114.32	119.90
25	BB	2808	G	N3-C2-N2	-9.30	113.39	119.90
3	A1	1045	C	C5-C4-N4	9.30	126.71	120.20
3	A1	1433	A	C5-C6-N1	9.30	122.35	117.70
25	BB	566	U	N3-C2-O2	-9.30	115.69	122.20
25	BB	762	U	C5-C6-N1	-9.30	118.05	122.70
25	BB	2054	A	C4-C5-C6	-9.30	112.35	117.00
3	A1	119	A	C5-C6-N1	9.30	122.35	117.70
3	A1	422	C	N3-C4-N4	-9.30	111.49	118.00
1	AA	24	G	C5-N7-C8	-9.29	99.65	104.30
25	BB	111	A	C5-C6-N1	9.29	122.35	117.70
25	BB	758	C	C5-C4-N4	-9.29	113.69	120.20
25	BB	1147	A	C5-C6-N1	9.29	122.35	117.70
25	BB	1917	U	C5-C6-N1	-9.30	118.05	122.70
25	BB	763	G	N3-C2-N2	-9.29	113.39	119.90
25	BB	861	A	C5-C6-N1	9.29	122.35	117.70
25	BB	1981	A	C5-C6-N1	9.29	122.35	117.70
25	BB	2278	A	N1-C6-N6	-9.29	113.02	118.60
3	A1	835	U	C5-C6-N1	-9.29	118.06	122.70
3	A1	953	G	C2-N3-C4	9.29	116.54	111.90
25	BB	1714	U	C1'-O4'-C4'	-9.29	102.47	109.90
25	BB	1892	C	N3-C4-N4	-9.29	111.50	118.00
25	BB	2669	G	N3-C2-N2	-9.29	113.40	119.90
3	A1	1179	A	C4-C5-C6	-9.29	112.36	117.00
3	A1	879	C	N3-C2-O2	-9.28	115.40	121.90
25	BB	198	C	C3'-C2'-C1'	9.28	108.93	101.50
25	BB	677	A	C4-C5-C6	-9.29	112.36	117.00
25	BB	1528	A	C4-C5-C6	-9.29	112.36	117.00
27	BD	80	ASP	CB-CG-OD1	9.28	126.66	118.30
3	A1	1230	C	N1-C2-O2	9.28	124.47	118.90
25	BB	1703	G	C5-C6-N1	9.28	116.14	111.50
39	BP	54	ARG	CD-NE-CZ	9.28	136.60	123.60
25	BB	2450	A	C5-C6-N1	9.28	122.34	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2531	A	C5-C6-N1	9.28	122.34	117.70
3	A1	138	G	N1-C6-O6	-9.28	114.33	119.90
3	A1	914	A	C6-C5-N7	9.28	138.80	132.30
3	A1	1207	G	C4-C5-N7	9.28	114.51	110.80
3	A1	1394	A	N1-C6-N6	-9.28	113.03	118.60
3	A1	1494	G	N7-C8-N9	9.28	117.74	113.10
25	BB	1404	C	C2-N3-C4	-9.28	115.26	119.90
28	BE	2	ARG	NE-CZ-NH1	9.28	124.94	120.30
3	A1	1431	A	C8-N9-C4	-9.28	102.09	105.80
3	A1	257	G	C6-N1-C2	-9.28	119.53	125.10
25	BB	725	G	N3-C4-N9	9.28	131.56	126.00
25	BB	2293	G	N1-C6-O6	-9.28	114.33	119.90
25	BB	2758	A	C5-C6-N1	9.28	122.34	117.70
3	A1	106	C	N1-C2-O2	9.27	124.46	118.90
3	A1	1249	C	N3-C4-N4	-9.27	111.51	118.00
25	BB	1771	C	O4'-C1'-N1	9.27	115.62	108.20
25	BB	2652	C	O4'-C4'-C3'	9.27	113.52	106.10
3	A1	924	C	C5-C6-N1	-9.27	116.36	121.00
25	BB	318	C	N3-C4-N4	-9.27	111.51	118.00
25	BB	504	A	C5-C6-N1	9.27	122.34	117.70
25	BB	1907	G	C8-N9-C4	-9.27	102.69	106.40
25	BB	2521	C	N3-C2-O2	-9.27	115.41	121.90
25	BB	2590	A	O4'-C1'-N9	9.27	115.62	108.20
1	AA	40	C	O4'-C1'-N1	9.27	115.62	108.20
3	A1	744	C	C4-C5-C6	-9.27	112.77	117.40
10	AI	70	ARG	NE-CZ-NH1	9.27	124.94	120.30
25	BB	245	G	O4'-C1'-N9	9.27	115.62	108.20
25	BB	901	C	N3-C4-N4	-9.27	111.51	118.00
25	BB	1179	G	C1'-O4'-C4'	-9.27	102.48	109.90
25	BB	3	U	C5'-C4'-O4'	9.27	120.22	109.10
1	AP	25	C	C2-N3-C4	-9.27	115.27	119.90
3	A1	606	G	C5-C6-N1	9.27	116.13	111.50
25	BB	434	U	C3'-C2'-C1'	-9.27	94.09	101.50
25	BB	323	C	N3-C2-O2	-9.27	115.42	121.90
25	BB	478	A	C4-C5-C6	-9.27	112.37	117.00
25	BB	792	A	C1'-O4'-C4'	-9.27	102.49	109.90
25	BB	1793	C	N3-C4-C5	9.27	125.61	121.90
25	BB	1205	A	C4-C5-C6	-9.27	112.37	117.00
25	BB	2481	G	C2-N3-C4	9.27	116.53	111.90
3	A1	74	A	C4-C5-C6	-9.26	112.37	117.00
3	A1	590	U	O4'-C1'-N1	9.26	115.61	108.20
3	A1	301	G	C6-N1-C2	-9.26	119.54	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	382	A	C4-C5-C6	-9.26	112.37	117.00
25	BB	652	U	C5-C6-N1	-9.26	118.07	122.70
25	BB	1192	G	N1-C6-O6	-9.26	114.34	119.90
25	BB	1490	A	C5-C6-N1	9.26	122.33	117.70
25	BB	2705	A	C5-C6-N1	9.26	122.33	117.70
3	A1	181	A	O4'-C4'-C3'	9.26	113.51	106.10
24	BA	66	A	C5-N7-C8	-9.26	99.27	103.90
25	BB	1846	G	N3-C2-N2	-9.26	113.42	119.90
25	BB	322	A	C4-C5-C6	-9.26	112.37	117.00
3	A1	1058	G	C6-N1-C2	-9.26	119.55	125.10
25	BB	49	A	C4-C5-C6	-9.26	112.37	117.00
3	A1	1453	G	N9-C4-C5	-9.26	101.70	105.40
25	BB	1061	U	O4'-C1'-N1	9.26	115.61	108.20
25	BB	1395	A	C5-C6-N1	9.26	122.33	117.70
25	BB	1408	G	N1-C2-N3	9.26	129.45	123.90
25	BB	1937	A	C5-C6-N6	9.26	131.11	123.70
25	BB	1746	A	C5-C6-N1	9.26	122.33	117.70
3	A1	499	A	C4-C5-C6	-9.25	112.37	117.00
3	A1	530	G	O4'-C4'-C3'	9.25	113.50	106.10
3	A1	622	A	C4-C5-C6	-9.25	112.37	117.00
21	AV	79	ARG	NE-CZ-NH1	9.25	124.93	120.30
25	BB	5	A	C5-C6-N1	9.25	122.33	117.70
25	BB	141	G	C3'-C2'-C1'	9.25	108.90	101.50
1	AA	48	C	N3-C4-C5	9.25	125.60	121.90
1	AE	1	G	N3-C4-N9	9.25	131.55	126.00
3	A1	465	A	C5-C6-N1	9.25	122.33	117.70
25	BB	840	C	N3-C4-C5	9.25	125.60	121.90
3	A1	479	U	N1-C2-N3	9.25	120.45	114.90
25	BB	1098	A	C5-C6-N1	9.25	122.33	117.70
25	BB	1251	C	N3-C2-O2	-9.25	115.42	121.90
25	BB	2331	G	C5-C6-N1	9.25	116.12	111.50
1	AA	54	U	O4'-C1'-N1	9.25	115.60	108.20
3	A1	1376	U	O4'-C1'-N1	9.25	115.60	108.20
25	BB	427	U	O4'-C1'-N1	9.25	115.60	108.20
25	BB	1668	A	N1-C6-N6	-9.25	113.05	118.60
25	BB	1947	C	C5-C4-N4	9.25	126.67	120.20
25	BB	2644	G	C6-N1-C2	-9.25	119.55	125.10
3	A1	153	C	N3-C2-O2	-9.24	115.43	121.90
3	A1	262	A	C4-C5-C6	-9.24	112.38	117.00
3	A1	538	G	N7-C8-N9	9.24	117.72	113.10
25	BB	236	C	N3-C4-N4	-9.24	111.53	118.00
3	A1	230	G	C5-C6-O6	9.24	134.14	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	649	A	P-O3'-C3'	9.24	130.79	119.70
25	BB	627	A	N1-C6-N6	-9.24	113.06	118.60
25	BB	796	C	O5'-P-OP1	-9.24	97.38	105.70
25	BB	1506	U	N1-C2-N3	9.24	120.44	114.90
25	BB	1923	U	O4'-C1'-N1	9.24	115.59	108.20
25	BB	2357	G	C8-N9-C4	-9.24	102.70	106.40
25	BB	2476	A	C5-C6-N1	9.24	122.32	117.70
25	BB	2691	C	C6-N1-C2	-9.24	116.60	120.30
3	A1	918	A	C5-C6-N1	9.24	122.32	117.70
25	BB	368	A	C8-N9-C4	9.24	109.50	105.80
25	BB	1302	A	N1-C2-N3	-9.24	124.68	129.30
25	BB	1575	C	N3-C2-O2	-9.24	115.43	121.90
25	BB	1710	G	C5-C6-N1	9.24	116.12	111.50
25	BB	1852	U	N3-C2-O2	-9.24	115.73	122.20
3	A1	45	G	C8-N9-C4	-9.23	102.71	106.40
3	A1	362	G	N3-C4-C5	-9.23	123.98	128.60
25	BB	278	A	C6-C5-N7	9.23	138.76	132.30
25	BB	581	C	C2-N3-C4	-9.23	115.28	119.90
25	BB	670	A	C2-N3-C4	9.23	115.22	110.60
25	BB	751	A	C2-N3-C4	9.23	115.22	110.60
25	BB	1152	C	C5-C6-N1	-9.23	116.38	121.00
25	BB	1259	G	N3-C4-C5	-9.23	123.98	128.60
25	BB	1741	C	N3-C2-O2	-9.23	115.44	121.90
3	A1	440	C	N3-C2-O2	-9.23	115.44	121.90
3	A1	913	A	C4-C5-C6	-9.23	112.38	117.00
15	AO	10	ARG	NE-CZ-NH2	9.23	124.92	120.30
25	BB	393	C	N1-C2-O2	9.23	124.44	118.90
25	BB	1034	G	N1-C6-O6	-9.23	114.36	119.90
25	BB	2036	C	C5'-C4'-O4'	9.23	120.18	109.10
25	BB	2581	G	O4'-C1'-N9	9.23	115.58	108.20
3	A1	288	A	C5-C6-N1	9.23	122.31	117.70
3	A1	885	G	O4'-C1'-N9	9.23	115.58	108.20
3	A1	1051	C	C4'-C3'-C2'	-9.23	93.37	102.60
25	BB	907	G	C5-C6-O6	9.23	134.14	128.60
25	BB	1594	U	N3-C4-O4	-9.23	112.94	119.40
25	BB	1866	A	N1-C2-N3	-9.23	124.69	129.30
25	BB	1977	A	C5-C6-N1	9.23	122.31	117.70
27	BD	64	ARG	NE-CZ-NH2	-9.23	115.69	120.30
3	A1	823	C	C2-N3-C4	-9.23	115.29	119.90
3	A1	1282	C	N3-C2-O2	-9.23	115.44	121.90
18	AS	44	ARG	NE-CZ-NH2	9.23	124.91	120.30
25	BB	1244	A	C4'-C3'-C2'	-9.23	93.37	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	983	A	N1-C6-N6	-9.22	113.07	118.60
3	A1	1412	C	N3-C2-O2	-9.22	115.44	121.90
25	BB	389	G	N3-C2-N2	-9.22	113.44	119.90
25	BB	776	G	C5-C6-O6	9.22	134.13	128.60
25	BB	1289	C	N3-C4-C5	9.22	125.59	121.90
25	BB	1905	C	N3-C4-N4	-9.22	111.54	118.00
51	B2	79	ARG	NE-CZ-NH1	9.22	124.91	120.30
3	A1	450	G	N1-C6-O6	-9.22	114.37	119.90
3	A1	510	A	C4-C5-C6	-9.22	112.39	117.00
3	A1	1505	G	N1-C6-O6	-9.22	114.37	119.90
11	AJ	76	ARG	NE-CZ-NH2	-9.22	115.69	120.30
25	BB	707	G	C5-C6-N1	9.22	116.11	111.50
25	BB	1036	G	N3-C4-C5	-9.22	123.99	128.60
25	BB	1690	A	O4'-C1'-N9	9.22	115.58	108.20
3	A1	225	C	N3-C4-N4	-9.22	111.55	118.00
25	BB	1642	G	C8-N9-C4	-9.22	102.71	106.40
1	AE	19	G	C4-C5-C6	-9.21	113.27	118.80
3	A1	359	G	C5'-C4'-O4'	9.22	120.16	109.10
3	A1	1426	G	O4'-C1'-N9	9.22	115.57	108.20
25	BB	1260	A	C4-C5-C6	-9.22	112.39	117.00
25	BB	280	U	C5-C6-N1	-9.21	118.09	122.70
25	BB	1517	G	C4-C5-N7	-9.21	107.11	110.80
25	BB	2013	A	C5-C6-N1	9.21	122.31	117.70
25	BB	2018	G	O4'-C1'-N9	9.21	115.57	108.20
25	BB	2440	C	N3-C4-C5	9.22	125.59	121.90
3	A1	298	A	N1-C6-N6	-9.21	113.07	118.60
3	A1	459	A	C4-C5-C6	-9.21	112.39	117.00
3	A1	1261	A	C4-C5-C6	-9.21	112.39	117.00
25	BB	1598	A	C6-C5-N7	9.21	138.75	132.30
3	A1	65	A	C2-N3-C4	9.21	115.20	110.60
25	BB	2619	C	C2-N3-C4	-9.21	115.30	119.90
3	A1	517	G	N9-C4-C5	-9.21	101.72	105.40
3	A1	779	C	N3-C4-C5	9.21	125.58	121.90
3	A1	1033	G	C5-C6-O6	9.21	134.12	128.60
3	A1	1146	A	C5-C6-N1	9.21	122.31	117.70
25	BB	1050	A	N1-C6-N6	-9.21	113.08	118.60
1	AE	66	A	C4-C5-C6	-9.20	112.40	117.00
3	A1	202	G	N1-C2-N3	9.21	129.42	123.90
25	BB	1470	A	O4'-C1'-N9	9.21	115.56	108.20
25	BB	1558	C	N3-C4-C5	9.20	125.58	121.90
3	A1	296	U	N1-C2-N3	9.20	120.42	114.90
3	A1	1218	C	N3-C2-O2	-9.20	115.46	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1961	C	C5-C6-N1	-9.20	116.40	121.00
25	BB	1970	A	C4-C5-C6	-9.20	112.40	117.00
25	BB	2506	U	O4'-C1'-N1	9.20	115.56	108.20
3	A1	160	A	C5-C6-N6	9.20	131.06	123.70
3	A1	471	U	N1-C2-N3	9.20	120.42	114.90
25	BB	188	G	O4'-C1'-N9	9.20	115.56	108.20
25	BB	1534	U	N3-C2-O2	-9.20	115.76	122.20
25	BB	2512	C	N3-C2-O2	-9.20	115.46	121.90
3	A1	60	A	C5-C6-N1	9.20	122.30	117.70
3	A1	533	A	C6-C5-N7	9.20	138.74	132.30
25	BB	711	G	C5-C6-N1	9.20	116.10	111.50
25	BB	2683	C	N3-C4-N4	-9.20	111.56	118.00
1	AE	36	A	C5-C6-N1	9.19	122.30	117.70
25	BB	383	C	C2-N3-C4	-9.19	115.30	119.90
25	BB	1488	C	N3-C4-N4	-9.19	111.56	118.00
25	BB	1626	A	O4'-C1'-C2'	-9.20	96.61	105.80
3	A1	1411	C	N3-C2-O2	-9.19	115.47	121.90
25	BB	1136	G	N1-C6-O6	-9.19	114.38	119.90
3	A1	1202	U	C5'-C4'-O4'	9.19	120.13	109.10
25	BB	692	C	N1-C2-O2	9.19	124.42	118.90
25	BB	1378	A	N1-C6-N6	-9.19	113.09	118.60
25	BB	1809	A	C6-C5-N7	9.19	138.73	132.30
25	BB	2263	C	C5'-C4'-O4'	9.19	120.13	109.10
34	BK	68	ARG	NE-CZ-NH2	-9.19	115.70	120.30
3	A1	661	G	N3-C4-N9	9.19	131.51	126.00
24	BA	60	C	N1-C2-N3	9.19	125.63	119.20
25	BB	484	C	N3-C4-C5	9.19	125.58	121.90
25	BB	2009	A	C5-C6-N1	9.19	122.29	117.70
25	BB	2705	A	C4-C5-C6	-9.19	112.41	117.00
1	AA	36	A	N1-C2-N3	-9.19	124.71	129.30
3	A1	1515	G	N9-C4-C5	9.19	109.08	105.40
3	A1	1155	A	N9-C4-C5	-9.19	102.13	105.80
24	BA	29	A	C5-C6-N6	9.19	131.05	123.70
25	BB	455	C	N3-C2-O2	-9.19	115.47	121.90
25	BB	1673	G	C4'-C3'-C2'	-9.19	93.41	102.60
3	A1	239	U	N3-C2-O2	-9.18	115.77	122.20
25	BB	506	G	C5-C6-N1	9.18	116.09	111.50
25	BB	1367	A	C4-C5-C6	-9.18	112.41	117.00
25	BB	1424	G	N1-C6-O6	-9.18	114.39	119.90
25	BB	1915	U	C6-N1-C2	-9.18	115.49	121.00
3	A1	1243	C	N3-C4-N4	-9.18	111.57	118.00
25	BB	71	A	C4-C5-C6	-9.18	112.41	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1937	A	C6-C5-N7	9.18	138.73	132.30
25	BB	2078	C	N3-C4-C5	9.18	125.57	121.90
3	A1	1443	C	C4'-C3'-C2'	-9.18	93.42	102.60
25	BB	717	C	N3-C4-N4	-9.18	111.58	118.00
25	BB	729	G	O4'-C1'-N9	9.18	115.54	108.20
25	BB	1505	A	N1-C6-N6	-9.18	113.09	118.60
25	BB	1510	G	C5-C6-N1	9.18	116.09	111.50
25	BB	1803	A	C5-C6-N6	9.18	131.04	123.70
3	A1	419	C	C2-N3-C4	-9.18	115.31	119.90
3	A1	463	U	O4'-C1'-N1	9.18	115.54	108.20
3	A1	1516	G	N3-C2-N2	-9.18	113.48	119.90
24	BA	82	U	O4'-C1'-N1	9.18	115.54	108.20
25	BB	343	C	N3-C4-N4	-9.18	111.58	118.00
25	BB	1470	A	C5-C6-N1	9.17	122.29	117.70
3	A1	857	C	N1-C2-O2	9.17	124.40	118.90
25	BB	874	G	N1-C6-O6	-9.17	114.40	119.90
25	BB	1492	G	C8-N9-C4	-9.17	102.73	106.40
25	BB	1665	A	C5-C6-N1	9.17	122.29	117.70
25	BB	2385	C	C2-N3-C4	-9.17	115.31	119.90
25	BB	1246	A	N1-C6-N6	-9.17	113.10	118.60
25	BB	1543	G	C5-N7-C8	-9.17	99.71	104.30
3	A1	714	G	C8-N9-C4	-9.17	102.73	106.40
25	BB	147	C	N3-C4-N4	-9.17	111.58	118.00
25	BB	885	C	N3-C4-C5	9.17	125.57	121.90
25	BB	2301	C	N3-C2-O2	-9.17	115.48	121.90
25	BB	2352	A	C2-N3-C4	9.17	115.19	110.60
3	A1	526	C	N3-C2-O2	-9.17	115.48	121.90
3	A1	1221	G	C6-N1-C2	-9.17	119.60	125.10
3	A1	1388	C	N3-C2-O2	-9.17	115.48	121.90
25	BB	61	C	C1'-O4'-C4'	-9.17	102.56	109.90
3	A1	100	G	C4'-C3'-C2'	-9.17	93.43	102.60
3	A1	730	G	N3-C2-N2	-9.17	113.48	119.90
3	A1	822	U	O4'-C1'-N1	9.17	115.53	108.20
3	A1	1151	A	N1-C6-N6	-9.17	113.10	118.60
3	A1	1173	U	N3-C2-O2	-9.17	115.78	122.20
25	BB	367	G	C6-C5-N7	9.17	135.90	130.40
25	BB	1973	G	N1-C2-N3	9.17	129.40	123.90
25	BB	2102	G	C5-C6-O6	9.17	134.10	128.60
25	BB	2354	C	C2-N3-C4	-9.17	115.32	119.90
25	BB	2773	C	C6-N1-C2	-9.17	116.63	120.30
3	A1	736	C	N3-C4-C5	9.16	125.57	121.90
3	A1	1464	U	N1-C2-N3	9.16	120.40	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1563	U	C5-C6-N1	-9.16	118.12	122.70
25	BB	1927	A	C5-C6-N1	9.16	122.28	117.70
3	A1	845	A	N1-C2-N3	-9.16	124.72	129.30
25	BB	1023	U	N3-C2-O2	-9.16	115.79	122.20
3	A1	620	C	N1-C2-O2	9.16	124.39	118.90
25	BB	877	A	C4-C5-C6	-9.16	112.42	117.00
25	BB	40	U	C5-C4-O4	-9.16	120.41	125.90
25	BB	911	A	C4-C5-C6	-9.16	112.42	117.00
25	BB	968	C	N3-C4-C5	9.16	125.56	121.90
25	BB	1402	U	N1-C2-N3	9.16	120.39	114.90
25	BB	1857	G	C5-C6-N1	9.16	116.08	111.50
25	BB	2704	C	N3-C4-N4	-9.16	111.59	118.00
25	BB	1194	A	C5-C6-N6	9.15	131.02	123.70
25	BB	2308	G	N3-C2-N2	-9.15	113.49	119.90
25	BB	2412	A	C4-C5-C6	-9.15	112.42	117.00
25	BB	2217	G	N1-C6-O6	-9.15	114.41	119.90
3	A1	1234	C	C2-N3-C4	-9.15	115.33	119.90
25	BB	101	A	C1'-O4'-C4'	-9.15	102.58	109.90
25	BB	736	C	C2-N3-C4	-9.15	115.33	119.90
25	BB	871	U	C4-C5-C6	9.15	125.19	119.70
25	BB	2091	C	C1'-O4'-C4'	-9.15	102.58	109.90
25	BB	2813	A	N1-C2-N3	-9.15	124.72	129.30
3	A1	665	A	N1-C6-N6	-9.15	113.11	118.60
25	BB	274	C	C4'-C3'-C2'	-9.15	93.45	102.60
25	BB	583	G	N1-C6-O6	-9.15	114.41	119.90
25	BB	670	A	C5-C6-N1	9.15	122.27	117.70
25	BB	797	G	C4-C5-N7	-9.15	107.14	110.80
25	BB	1697	G	N1-C2-N3	9.15	129.39	123.90
25	BB	2013	A	C4-C5-C6	-9.15	112.43	117.00
3	A1	362	G	C6-N1-C2	-9.14	119.61	125.10
25	BB	371	A	C5-C6-N6	9.14	131.02	123.70
25	BB	824	U	C1'-O4'-C4'	-9.14	102.58	109.90
3	A1	823	C	N3-C4-C5	9.14	125.56	121.90
25	BB	2422	C	N3-C2-O2	-9.14	115.50	121.90
3	A1	38	G	C5-C6-N1	9.14	116.07	111.50
25	BB	1472	C	N3-C4-C5	9.14	125.56	121.90
25	BB	1698	A	C8-N9-C4	-9.14	102.14	105.80
25	BB	2126	A	C5-C6-N1	9.14	122.27	117.70
25	BB	2778	A	N1-C6-N6	-9.14	113.12	118.60
1	AE	73	A	N1-C6-N6	-9.14	113.12	118.60
3	A1	573	A	N9-C4-C5	-9.14	102.14	105.80
25	BB	2168	G	N9-C4-C5	-9.14	101.75	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	74	C	C5-C4-N4	9.14	126.59	120.20
3	A1	1012	A	C4-C5-C6	-9.13	112.43	117.00
24	BA	62	C	N3-C4-N4	-9.14	111.61	118.00
25	BB	1	G	N3-C4-C5	-9.13	124.03	128.60
25	BB	932	U	N3-C2-O2	-9.14	115.81	122.20
47	BX	12	ARG	NE-CZ-NH1	9.14	124.87	120.30
25	BB	1069	A	C2-N3-C4	9.13	115.17	110.60
3	A1	376	G	N1-C6-O6	-9.13	114.42	119.90
3	A1	696	A	C5-C6-N1	9.13	122.27	117.70
1	AE	20	G	C5-C6-N1	9.13	116.06	111.50
3	A1	782	A	C5-C6-N1	9.13	122.27	117.70
3	A1	1242	G	N3-C2-N2	-9.13	113.51	119.90
25	BB	977	G	N1-C6-O6	-9.13	114.42	119.90
3	A1	1085	U	C5-C6-N1	-9.13	118.14	122.70
25	BB	882	G	C5-C6-N1	9.13	116.06	111.50
25	BB	508	A	C5-C6-N6	9.13	131.00	123.70
25	BB	2077	A	C5-C6-N1	9.13	122.26	117.70
25	BB	2287	A	C4-C5-C6	-9.13	112.44	117.00
25	BB	2726	A	N1-C6-N6	-9.13	113.12	118.60
3	A1	51	A	C4'-C3'-C2'	-9.12	93.47	102.60
3	A1	601	G	N3-C4-C5	-9.13	124.04	128.60
25	BB	68	G	N3-C4-C5	-9.13	124.04	128.60
25	BB	757	G	C6-N1-C2	-9.13	119.62	125.10
3	A1	100	G	O4'-C1'-N9	9.12	115.50	108.20
3	A1	625	U	C4'-C3'-C2'	-9.12	93.47	102.60
25	BB	1364	G	C5-C6-O6	9.12	134.07	128.60
25	BB	2656	U	N1-C2-N3	9.12	120.38	114.90
25	BB	2675	A	C5-C6-N1	9.13	122.26	117.70
25	BB	2885	G	C4'-C3'-C2'	-9.12	93.47	102.60
3	A1	1136	C	N3-C2-O2	-9.12	115.52	121.90
25	BB	1996	C	N3-C4-C5	9.12	125.55	121.90
3	A1	354	G	C5-N7-C8	-9.12	99.74	104.30
3	A1	574	A	C6-C5-N7	9.12	138.68	132.30
3	A1	1297	G	C5-C6-N1	9.12	116.06	111.50
3	A1	1470	U	O4'-C1'-N1	9.12	115.50	108.20
25	BB	629	G	N1-C6-O6	-9.12	114.43	119.90
25	BB	1105	U	C5-C6-N1	-9.12	118.14	122.70
25	BB	1491	G	N3-C4-C5	-9.12	124.04	128.60
25	BB	2036	C	N3-C4-C5	9.12	125.55	121.90
3	A1	63	C	N3-C4-C5	9.12	125.55	121.90
2	AM	2	U	N3-C2-O2	-9.11	115.82	122.20
3	A1	94	G	C4-C5-N7	-9.11	107.16	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	266	G	N7-C8-N9	9.12	117.66	113.10
3	A1	872	A	C2-N3-C4	9.12	115.16	110.60
3	A1	922	G	N9-C4-C5	9.12	109.05	105.40
3	A1	937	A	C4-C5-C6	-9.12	112.44	117.00
25	BB	247	G	C8-N9-C4	-9.12	102.75	106.40
25	BB	1699	G	C3'-C2'-C1'	9.12	108.79	101.50
25	BB	2873	A	C4-C5-C6	-9.12	112.44	117.00
3	A1	285	C	N3-C4-C5	9.11	125.55	121.90
3	A1	369	G	C8-N9-C4	-9.11	102.75	106.40
25	BB	780	G	N1-C6-O6	-9.12	114.43	119.90
25	BB	1585	C	C2-N3-C4	-9.11	115.34	119.90
25	BB	1760	C	N3-C4-N4	-9.11	111.62	118.00
1	AP	59	U	O4'-C1'-N1	9.11	115.49	108.20
25	BB	378	C	N1-C2-O2	9.11	124.37	118.90
25	BB	1949	G	C2-N3-C4	9.11	116.45	111.90
25	BB	234	U	N3-C2-O2	-9.11	115.83	122.20
25	BB	995	C	N3-C2-O2	-9.11	115.52	121.90
25	BB	1163	G	N1-C2-N2	9.11	124.40	116.20
25	BB	1450	G	N1-C6-O6	-9.11	114.44	119.90
25	BB	1646	C	N3-C2-O2	-9.11	115.52	121.90
25	BB	2549	G	C5-C6-N1	9.11	116.05	111.50
3	A1	211	G	N9-C4-C5	9.11	109.04	105.40
3	A1	1442	G	O4'-C1'-N9	9.11	115.49	108.20
3	A1	1198	G	N3-C2-N2	-9.11	113.53	119.90
3	A1	1525	G	N3-C2-N2	-9.11	113.53	119.90
25	BB	547	A	C5'-C4'-O4'	9.11	120.03	109.10
25	BB	1052	C	N3-C2-O2	-9.11	115.53	121.90
25	BB	2158	A	C6-C5-N7	9.11	138.68	132.30
25	BB	1754	A	C5-C6-N1	9.11	122.25	117.70
25	BB	2253	G	C3'-C2'-C1'	9.11	108.78	101.50
1	AE	67	A	C4-C5-C6	-9.10	112.45	117.00
25	BB	1021	A	C4-C5-C6	-9.10	112.45	117.00
25	BB	2186	G	N1-C6-O6	-9.10	114.44	119.90
25	BB	2209	G	N3-C2-N2	-9.10	113.53	119.90
3	A1	1127	G	N1-C6-O6	-9.10	114.44	119.90
25	BB	10	A	C4-C5-C6	-9.10	112.45	117.00
25	BB	731	C	N1-C2-O2	9.10	124.36	118.90
25	BB	848	C	O4'-C1'-N1	9.10	115.48	108.20
25	BB	2730	C	C5-C6-N1	-9.10	116.45	121.00
25	BB	824	U	C5-C6-N1	-9.10	118.15	122.70
3	A1	1079	G	N1-C6-O6	-9.10	114.44	119.90
25	BB	318	C	N3-C2-O2	-9.10	115.53	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1570	A	N9-C4-C5	9.10	109.44	105.80
25	BB	2256	G	N1-C6-O6	-9.10	114.44	119.90
25	BB	1550	C	C6-N1-C2	-9.10	116.66	120.30
25	BB	1759	A	C6-C5-N7	9.10	138.67	132.30
3	A1	237	G	N3-C4-C5	-9.10	124.05	128.60
3	A1	1160	G	C5-C6-O6	9.10	134.06	128.60
25	BB	1471	G	N7-C8-N9	9.10	117.65	113.10
35	BL	18	ARG	NE-CZ-NH1	9.10	124.85	120.30
3	A1	1227	A	C2-N3-C4	9.09	115.15	110.60
24	BA	66	A	N7-C8-N9	9.09	118.35	113.80
3	A1	75	G	N3-C4-C5	-9.09	124.06	128.60
25	BB	432	A	C2-N3-C4	9.09	115.14	110.60
25	BB	559	G	C5-C6-N1	9.09	116.04	111.50
25	BB	608	A	C4-C5-C6	-9.09	112.45	117.00
25	BB	2556	C	C5'-C4'-O4'	9.09	120.01	109.10
3	A1	330	C	N3-C2-O2	-9.09	115.54	121.90
3	A1	678	U	C4-C5-C6	9.09	125.15	119.70
3	A1	852	G	C5'-C4'-O4'	9.09	120.00	109.10
3	A1	1504	G	C5-C6-N1	9.09	116.04	111.50
25	BB	344	A	C4-C5-C6	-9.09	112.46	117.00
25	BB	363	G	C6-C5-N7	9.09	135.85	130.40
25	BB	1422	G	C8-N9-C4	-9.09	102.77	106.40
25	BB	1687	G	N3-C2-N2	-9.09	113.54	119.90
25	BB	2157	G	N9-C4-C5	9.09	109.03	105.40
25	BB	2495	G	N1-C6-O6	-9.09	114.45	119.90
25	BB	2716	C	C4-C5-C6	-9.09	112.86	117.40
25	BB	647	G	N1-C6-O6	-9.08	114.45	119.90
25	BB	1206	G	C5-C6-N1	9.08	116.04	111.50
25	BB	1336	A	C5-C6-N1	9.08	122.24	117.70
1	AE	75	C	N1-C2-O2	9.08	124.35	118.90
25	BB	2466	C	N3-C4-N4	-9.08	111.64	118.00
3	A1	726	C	O4'-C1'-N1	9.08	115.46	108.20
25	BB	1480	C	C5'-C4'-O4'	9.08	120.00	109.10
25	BB	2154	A	O4'-C1'-N9	9.08	115.46	108.20
25	BB	2545	G	C3'-C2'-C1'	9.08	108.76	101.50
25	BB	400	G	C4'-C3'-C2'	-9.08	93.52	102.60
3	A1	411	A	N1-C6-N6	-9.08	113.15	118.60
25	BB	436	C	N3-C4-C5	9.08	125.53	121.90
25	BB	1719	G	N1-C6-O6	-9.08	114.45	119.90
25	BB	1918	A	C4-C5-C6	-9.08	112.46	117.00
25	BB	2804	U	C5-C6-N1	-9.08	118.16	122.70
3	A1	968	A	C5-C6-N1	9.07	122.24	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AO	131	ARG	NE-CZ-NH1	9.07	124.84	120.30
25	BB	772	C	O4'-C4'-C3'	9.07	113.36	106.10
25	BB	1018	U	N1-C2-N3	9.07	120.34	114.90
25	BB	98	G	N3-C2-N2	-9.07	113.55	119.90
25	BB	1711	A	C6-C5-N7	9.07	138.65	132.30
25	BB	2289	G	C5-N7-C8	-9.07	99.76	104.30
3	A1	340	U	O5'-P-OP2	-9.07	97.53	105.70
25	BB	2181	U	N3-C2-O2	-9.07	115.85	122.20
3	A1	166	U	N1-C2-O2	9.07	129.15	122.80
3	A1	736	C	C2-N3-C4	-9.07	115.36	119.90
3	A1	1249	C	C2-N3-C4	-9.07	115.37	119.90
3	A1	1413	A	C6-C5-N7	9.07	138.65	132.30
25	BB	2547	A	C5-C6-N1	9.07	122.23	117.70
25	BB	2646	C	N3-C4-C5	9.07	125.53	121.90
3	A1	238	A	O4'-C1'-N9	9.06	115.45	108.20
25	BB	611	C	N3-C2-O2	-9.06	115.56	121.90
25	BB	691	C	C5-C4-N4	9.06	126.55	120.20
25	BB	1045	C	N3-C4-C5	9.06	125.53	121.90
25	BB	1415	U	O4'-C1'-N1	9.06	115.45	108.20
3	A1	242	G	N1-C6-O6	-9.06	114.46	119.90
3	A1	745	G	O4'-C1'-N9	9.06	115.45	108.20
25	BB	322	A	C5-C6-N1	9.06	122.23	117.70
25	BB	705	A	C4-C5-C6	-9.06	112.47	117.00
25	BB	1382	G	C4-C5-N7	-9.06	107.17	110.80
25	BB	1938	A	C5-C6-N1	9.06	122.23	117.70
25	BB	2103	C	C6-N1-C2	-9.06	116.67	120.30
25	BB	928	A	O4'-C1'-N9	9.06	115.44	108.20
25	BB	1434	A	C4-C5-C6	-9.06	112.47	117.00
25	BB	2364	C	N3-C2-O2	-9.06	115.56	121.90
3	A1	1188	A	C6-C5-N7	9.06	138.64	132.30
3	A1	996	A	N1-C6-N6	-9.05	113.17	118.60
25	BB	194	G	O4'-C4'-C3'	9.05	113.34	106.10
25	BB	220	G	C5-N7-C8	-9.05	99.77	104.30
25	BB	2480	C	O4'-C1'-N1	9.05	115.44	108.20
3	A1	1229	A	N1-C6-N6	-9.05	113.17	118.60
25	BB	502	A	C6-C5-N7	9.05	138.64	132.30
25	BB	2287	A	C5-C6-N1	9.05	122.23	117.70
25	BB	2738	A	C5-C6-N1	9.05	122.23	117.70
1	AP	75	C	N3-C2-O2	-9.05	115.56	121.90
3	A1	661	G	N3-C4-C5	-9.05	124.07	128.60
3	A1	1080	A	C5-C6-N1	9.05	122.23	117.70
25	BB	761	A	C6-C5-N7	9.05	138.64	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1459	G	C1'-O4'-C4'	-9.05	102.66	109.90
25	BB	1475	G	C2-N3-C4	9.05	116.43	111.90
25	BB	2135	A	C4-C5-C6	-9.05	112.47	117.00
49	BZ	87	ARG	NE-CZ-NH1	9.05	124.83	120.30
3	A1	412	A	C4-C5-C6	-9.05	112.48	117.00
25	BB	37	C	N3-C2-O2	-9.05	115.57	121.90
3	A1	803	G	N3-C2-N2	-9.05	113.57	119.90
3	A1	1110	A	C6-N1-C2	-9.04	113.17	118.60
25	BB	1850	G	O4'-C1'-N9	9.05	115.44	108.20
25	BB	1959	G	N3-C2-N2	-9.04	113.57	119.90
25	BB	183	C	N3-C2-O2	-9.04	115.57	121.90
25	BB	270	A	C1'-O4'-C4'	-9.04	102.67	109.90
25	BB	1680	U	N3-C2-O2	-9.04	115.87	122.20
25	BB	2015	A	C5-C6-N1	9.04	122.22	117.70
3	A1	796	C	N3-C4-C5	9.04	125.52	121.90
24	BA	17	C	C6-N1-C2	-9.04	116.68	120.30
25	BB	2537	U	C6-N1-C2	-9.04	115.58	121.00
2	AM	13	U	C2-N3-C4	-9.04	121.58	127.00
3	A1	918	A	C4-C5-C6	-9.04	112.48	117.00
3	A1	965	U	C1'-O4'-C4'	-9.04	102.67	109.90
25	BB	31	C	C2-N3-C4	-9.04	115.38	119.90
25	BB	1506	U	C2-N3-C4	-9.04	121.58	127.00
25	BB	2152	G	N3-C4-C5	-9.04	124.08	128.60
25	BB	2492	U	C2-N3-C4	-9.04	121.58	127.00
25	BB	2527	C	N3-C2-O2	-9.04	115.57	121.90
3	A1	972	C	N3-C2-O2	-9.04	115.58	121.90
25	BB	897	C	N1-C2-O2	9.04	124.32	118.90
3	A1	1405	G	C1'-O4'-C4'	-9.03	102.67	109.90
25	BB	1477	A	N1-C6-N6	-9.03	113.18	118.60
25	BB	1502	A	C5-C6-N1	9.04	122.22	117.70
25	BB	1896	G	C8-N9-C4	-9.04	102.79	106.40
25	BB	1689	A	C5-C6-N1	9.03	122.22	117.70
3	A1	1217	C	N3-C4-C5	9.03	125.51	121.90
25	BB	1392	A	C6-N1-C2	-9.03	113.18	118.60
3	A1	1295	U	C3'-C2'-C1'	9.03	108.72	101.50
25	BB	1974	C	C1'-O4'-C4'	-9.03	102.67	109.90
25	BB	2448	A	C5-C6-N1	9.03	122.22	117.70
25	BB	2863	C	C2-N3-C4	-9.03	115.38	119.90
48	BY	128	ARG	NE-CZ-NH1	9.03	124.82	120.30
1	AA	32	C	O4'-C1'-N1	9.03	115.42	108.20
3	A1	651	C	N1-C2-O2	9.03	124.32	118.90
25	BB	1684	G	N3-C2-N2	-9.03	113.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2538	C	N1-C1'-C2'	9.03	125.74	114.00
3	A1	482	A	C4-C5-C6	-9.03	112.49	117.00
3	A1	1413	A	C4-C5-C6	-9.03	112.49	117.00
25	BB	612	G	C3'-C2'-C1'	9.03	108.72	101.50
3	A1	617	G	N1-C6-O6	-9.03	114.48	119.90
25	BB	1089	A	N1-C6-N6	-9.03	113.18	118.60
25	BB	2222	C	C5-C4-N4	-9.03	113.88	120.20
37	BN	220	ARG	NE-CZ-NH2	9.03	124.81	120.30
1	AA	42	G	C2'-C3'-O3'	9.02	129.35	109.50
3	A1	35	G	C6-C5-N7	9.02	135.81	130.40
3	A1	708	C	N3-C2-O2	-9.02	115.58	121.90
6	AD	30	ARG	NE-CZ-NH2	-9.02	115.79	120.30
6	AD	120	ARG	NE-CZ-NH2	9.02	124.81	120.30
25	BB	51	G	N1-C6-O6	-9.02	114.49	119.90
25	BB	1962	C	N3-C4-C5	9.02	125.51	121.90
25	BB	2063	C	C4'-C3'-C2'	-9.02	93.58	102.60
3	A1	48	C	N3-C4-C5	9.02	125.51	121.90
25	BB	1986	C	N3-C4-N4	-9.02	111.69	118.00
1	AA	15	G	C5-N7-C8	-9.02	99.79	104.30
25	BB	227	A	C4-C5-C6	-9.02	112.49	117.00
25	BB	462	C	N3-C4-N4	-9.02	111.69	118.00
25	BB	506	G	N1-C6-O6	-9.02	114.49	119.90
2	AM	13	U	O4'-C1'-N1	9.02	115.41	108.20
3	A1	1187	G	C5-C6-O6	9.02	134.01	128.60
25	BB	928	A	C4-C5-C6	-9.02	112.49	117.00
25	BB	1928	A	C6-C5-N7	9.02	138.61	132.30
25	BB	2177	C	O4'-C1'-N1	9.02	115.42	108.20
25	BB	1414	C	N3-C4-C5	9.02	125.51	121.90
1	AP	43	G	C4-C5-N7	-9.02	107.19	110.80
3	A1	569	C	O4'-C1'-N1	9.02	115.41	108.20
3	A1	588	G	C5-C6-N1	9.02	116.01	111.50
3	A1	771	G	N3-C2-N2	-9.02	113.59	119.90
3	A1	864	A	C2-N3-C4	9.02	115.11	110.60
25	BB	2573	C	N3-C4-N4	-9.02	111.69	118.00
3	A1	577	G	C5-N7-C8	-9.02	99.79	104.30
3	A1	856	C	C5-C6-N1	-9.02	116.49	121.00
17	AR	114	ARG	NE-CZ-NH2	9.02	124.81	120.30
24	BA	13	G	C6-N1-C2	-9.02	119.69	125.10
25	BB	2364	C	C6-N1-C2	-9.02	116.69	120.30
1	AP	15	G	N3-C2-N2	-9.01	113.59	119.90
3	A1	122	G	N1-C2-N3	9.01	129.31	123.90
3	A1	449	G	N7-C8-N9	9.01	117.61	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	631	C	N3-C4-C5	9.01	125.51	121.90
25	BB	323	C	O4'-C1'-C2'	-9.01	96.79	105.80
3	A1	498	A	C5-C6-N1	9.01	122.21	117.70
3	A1	1090	U	N3-C2-O2	-9.01	115.89	122.20
25	BB	827	U	C5-C6-N1	-9.01	118.19	122.70
25	BB	1144	A	C6-C5-N7	9.01	138.61	132.30
25	BB	1574	C	N3-C4-C5	9.01	125.50	121.90
25	BB	2841	C	N3-C4-C5	9.01	125.50	121.90
3	A1	288	A	C4-C5-C6	-9.01	112.50	117.00
3	A1	991	U	N1-C2-N3	9.01	120.31	114.90
3	A1	1279	G	N3-C4-N9	9.01	131.41	126.00
25	BB	92	U	N3-C2-O2	-9.01	115.89	122.20
25	BB	1427	A	C4-C5-C6	-9.01	112.49	117.00
3	A1	1275	A	C5'-C4'-O4'	9.01	119.91	109.10
3	A1	1435	G	O4'-C1'-N9	9.01	115.41	108.20
25	BB	764	A	C6-C5-N7	9.01	138.61	132.30
25	BB	1580	A	C4-C5-C6	-9.01	112.50	117.00
25	BB	2048	G	N1-C6-O6	-9.01	114.49	119.90
25	BB	2900	A	N1-C2-N3	-9.01	124.80	129.30
1	AA	43	G	N3-C4-C5	-9.01	124.10	128.60
1	AE	21	A	C6-C5-N7	9.01	138.60	132.30
25	BB	1879	C	C5'-C4'-O4'	9.01	119.91	109.10
25	BB	2420	C	O4'-C1'-N1	9.01	115.41	108.20
24	BA	4	C	O4'-C1'-N1	9.01	115.40	108.20
25	BB	1538	G	N1-C6-O6	-9.01	114.50	119.90
25	BB	2314	A	C5-C6-N1	9.01	122.20	117.70
25	BB	2760	C	N3-C4-C5	9.01	125.50	121.90
3	A1	421	U	C1'-O4'-C4'	-9.00	102.70	109.90
3	A1	1151	A	C1'-O4'-C4'	-9.00	102.70	109.90
25	BB	1962	C	N3-C4-N4	-9.00	111.70	118.00
25	BB	694	U	C5-C6-N1	-9.00	118.20	122.70
25	BB	1778	U	C1'-O4'-C4'	-9.00	102.70	109.90
25	BB	1860	G	N1-C2-N3	9.00	129.30	123.90
25	BB	1954	G	C5-C6-O6	9.00	134.00	128.60
3	A1	534	U	C5-C6-N1	-9.00	118.20	122.70
3	A1	976	G	N3-C2-N2	-9.00	113.60	119.90
3	A1	1003	G	O4'-C1'-N9	9.00	115.40	108.20
25	BB	1889	A	C5-C6-N1	9.00	122.20	117.70
24	BA	21	G	C5-C6-O6	9.00	134.00	128.60
25	BB	650	C	N1-C2-O2	9.00	124.30	118.90
25	BB	1236	G	N1-C6-O6	-9.00	114.50	119.90
25	BB	1545	A	C5-C6-N6	9.00	130.90	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	940	C	C2-N3-C4	-9.00	115.40	119.90
25	BB	1237	A	C6-C5-N7	9.00	138.60	132.30
25	BB	1508	A	C4-C5-C6	-9.00	112.50	117.00
3	A1	986	U	C5-C6-N1	-9.00	118.20	122.70
25	BB	1080	A	C5-C6-N1	9.00	122.20	117.70
25	BB	1105	U	O4'-C1'-N1	9.00	115.40	108.20
25	BB	1902	C	N3-C4-N4	-9.00	111.70	118.00
25	BB	2334	U	C5'-C4'-O4'	9.00	119.90	109.10
3	A1	1051	C	N3-C2-O2	-8.99	115.60	121.90
25	BB	575	A	C5-C6-N1	8.99	122.20	117.70
25	BB	2451	A	C4-C5-C6	-8.99	112.50	117.00
25	BB	2858	C	N3-C2-O2	-8.99	115.61	121.90
3	A1	346	G	O4'-C1'-N9	8.99	115.39	108.20
3	A1	1080	A	N1-C6-N6	-8.99	113.21	118.60
25	BB	2119	A	C5-C6-N6	8.99	130.89	123.70
2	AM	5	U	C6-N1-C2	-8.99	115.61	121.00
3	A1	1345	U	N1-C2-N3	8.99	120.29	114.90
25	BB	346	A	C5-C6-N1	8.99	122.19	117.70
25	BB	2543	G	C8-N9-C4	-8.99	102.80	106.40
25	BB	819	A	C1'-O4'-C4'	-8.99	102.71	109.90
25	BB	2202	U	N3-C2-O2	-8.99	115.91	122.20
25	BB	2773	C	N3-C2-O2	-8.99	115.61	121.90
3	A1	1346	A	C6-C5-N7	8.98	138.59	132.30
25	BB	35	G	C3'-C2'-C1'	8.98	108.69	101.50
25	BB	1537	G	C5-C6-N1	8.98	115.99	111.50
25	BB	2456	C	O4'-C1'-N1	8.98	115.39	108.20
3	A1	553	A	C1'-O4'-C4'	-8.98	102.71	109.90
3	A1	1117	A	C5-C6-N1	8.98	122.19	117.70
25	BB	94	A	C5-C6-N1	8.98	122.19	117.70
3	A1	258	G	C6-C5-N7	8.98	135.79	130.40
3	A1	888	G	C5-C6-N1	8.98	115.99	111.50
25	BB	557	C	N3-C4-C5	8.98	125.49	121.90
25	BB	1666	G	C5'-C4'-O4'	8.98	119.88	109.10
25	BB	1805	A	C4-C5-C6	-8.98	112.51	117.00
3	A1	315	A	C5-C6-N1	8.98	122.19	117.70
3	A1	485	U	N3-C4-O4	8.98	125.68	119.40
3	A1	700	G	C5-C6-N1	8.98	115.99	111.50
3	A1	864	A	C6-C5-N7	8.98	138.59	132.30
3	A1	1400	C	C6-N1-C2	-8.98	116.71	120.30
25	BB	47	C	N3-C4-N4	-8.98	111.72	118.00
25	BB	2336	A	C4-C5-C6	-8.98	112.51	117.00
3	A1	189	A	N1-C6-N6	-8.97	113.22	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1220	G	N7-C8-N9	8.97	117.59	113.10
25	BB	2158	A	C5-C6-N1	8.97	122.19	117.70
3	A1	1130	A	C8-N9-C4	-8.97	102.21	105.80
3	A1	1224	U	N3-C2-O2	-8.97	115.92	122.20
3	A1	1469	C	C2-N3-C4	-8.97	115.41	119.90
3	A1	1508	A	C4-C5-C6	-8.97	112.51	117.00
25	BB	1684	G	C5-C6-N1	8.97	115.99	111.50
25	BB	2253	G	O4'-C4'-C3'	8.97	113.28	106.10
25	BB	1431	A	C5-C6-N6	8.97	130.88	123.70
1	AE	7	U	O4'-C1'-N1	8.97	115.38	108.20
25	BB	1221	C	C2-N3-C4	-8.97	115.42	119.90
25	BB	1804	C	N3-C4-C5	8.97	125.49	121.90
25	BB	1887	C	N3-C2-O2	-8.97	115.62	121.90
1	AP	37	G	N7-C8-N9	8.97	117.58	113.10
3	A1	380	G	N1-C6-O6	-8.96	114.52	119.90
25	BB	285	G	N1-C6-O6	-8.96	114.52	119.90
25	BB	561	G	N3-C2-N2	-8.97	113.62	119.90
25	BB	676	A	C5-C6-N1	8.96	122.18	117.70
25	BB	1987	A	C6-C5-N7	8.96	138.57	132.30
3	A1	57	G	N9-C4-C5	8.96	108.98	105.40
3	A1	269	C	C2-N3-C4	-8.96	115.42	119.90
3	A1	910	C	N3-C2-O2	-8.96	115.63	121.90
24	BA	13	G	N3-C4-C5	-8.96	124.12	128.60
25	BB	1087	G	N1-C2-N3	8.96	129.28	123.90
25	BB	1634	A	C3'-C2'-C1'	8.96	108.67	101.50
25	BB	1685	C	N1-C2-O2	8.96	124.28	118.90
25	BB	2114	A	C6-C5-N7	8.96	138.57	132.30
25	BB	2720	U	C5-C6-N1	-8.96	118.22	122.70
1	AE	76	A	C2-N3-C4	8.96	115.08	110.60
25	BB	196	A	C4-C5-C6	-8.96	112.52	117.00
25	BB	198	C	C6-N1-C2	-8.96	116.72	120.30
25	BB	687	C	O4'-C1'-N1	8.96	115.37	108.20
24	BA	59	A	N1-C6-N6	-8.96	113.23	118.60
24	BA	73	A	C5-C6-N1	8.96	122.18	117.70
25	BB	1405	U	N3-C2-O2	-8.96	115.93	122.20
25	BB	1961	C	N3-C4-N4	-8.96	111.73	118.00
25	BB	2739	U	O4'-C1'-N1	8.96	115.36	108.20
3	A1	243	A	N1-C2-N3	-8.95	124.82	129.30
3	A1	812	G	C5-C6-N1	8.96	115.98	111.50
3	A1	818	G	C5-C6-N1	8.96	115.98	111.50
25	BB	2086	U	O4'-C1'-N1	-8.96	101.04	108.20
25	BB	2424	C	O4'-C1'-N1	8.95	115.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	51	G	N1-C2-N3	8.95	129.27	123.90
3	A1	703	G	O4'-C4'-C3'	8.95	113.26	106.10
25	BB	359	G	N3-C2-N2	-8.95	113.63	119.90
25	BB	1533	C	N1-C2-O2	8.95	124.27	118.90
30	BG	12	ARG	NE-CZ-NH1	8.95	124.78	120.30
3	A1	634	C	N3-C2-O2	-8.95	115.64	121.90
1	AE	33	U	N3-C4-O4	8.95	125.67	119.40
3	A1	724	G	N1-C2-N3	8.95	129.27	123.90
3	A1	788	U	N3-C2-O2	-8.95	115.94	122.20
3	A1	984	C	N1-C2-N3	8.95	125.46	119.20
3	A1	1096	C	N3-C2-O2	-8.95	115.64	121.90
3	A1	1218	C	N3-C4-N4	-8.95	111.73	118.00
3	A1	1276	G	N9-C4-C5	8.95	108.98	105.40
25	BB	737	C	C2-N3-C4	-8.95	115.42	119.90
25	BB	2485	G	O4'-C1'-N9	8.95	115.36	108.20
10	AI	23	ASP	OD1-CG-OD2	-8.95	106.30	123.30
25	BB	1873	G	C6-C5-N7	8.95	135.77	130.40
3	A1	437	U	N3-C2-O2	-8.95	115.94	122.20
3	A1	749	A	C4-C5-C6	-8.95	112.53	117.00
25	BB	1100	C	C2-N3-C4	-8.95	115.43	119.90
25	BB	1280	G	C5-C6-N1	8.95	115.97	111.50
25	BB	1446	C	C2-N3-C4	-8.95	115.43	119.90
25	BB	1825	U	C5'-C4'-O4'	8.95	119.84	109.10
25	BB	2761	A	C4-C5-C6	-8.95	112.53	117.00
25	BB	2861	U	N3-C2-O2	-8.95	115.94	122.20
3	A1	342	C	C5-C4-N4	8.94	126.46	120.20
3	A1	1269	A	C5-C6-N1	8.94	122.17	117.70
25	BB	1399	C	N3-C2-O2	-8.95	115.64	121.90
25	BB	1731	G	N9-C4-C5	8.95	108.98	105.40
1	AE	37	G	C4'-C3'-C2'	-8.94	93.66	102.60
3	A1	895	G	C6-N1-C2	-8.94	119.73	125.10
25	BB	2428	G	C3'-C2'-C1'	-8.94	94.34	101.50
25	BB	131	A	C5-C6-N1	8.94	122.17	117.70
25	BB	1290	C	N3-C2-O2	-8.94	115.64	121.90
47	BX	36	ARG	NE-CZ-NH1	8.94	124.77	120.30
48	BY	13	ARG	NE-CZ-NH2	-8.94	115.83	120.30
1	AP	46	G	P-O3'-C3'	8.94	130.43	119.70
3	A1	89	U	N1-C2-N3	8.94	120.26	114.90
3	A1	789	U	N1-C2-N3	8.94	120.26	114.90
25	BB	1724	G	N1-C6-O6	-8.94	114.54	119.90
25	BB	449	A	N1-C6-N6	-8.94	113.24	118.60
25	BB	476	G	C4-C5-C6	-8.94	113.44	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1507	C	N3-C4-C5	8.94	125.47	121.90
25	BB	288	U	C5-C6-N1	-8.94	118.23	122.70
25	BB	1044	C	O4'-C1'-N1	8.94	115.35	108.20
25	BB	1474	U	N1-C2-O2	8.94	129.06	122.80
25	BB	2019	A	C5-C6-N1	8.94	122.17	117.70
3	A1	923	A	C6-C5-N7	8.93	138.55	132.30
25	BB	2051	A	C5-C6-N1	8.93	122.17	117.70
25	BB	1253	A	C4-C5-C6	-8.93	112.53	117.00
1	AE	62	A	C5-C6-N1	8.93	122.17	117.70
3	A1	6	G	N1-C6-O6	-8.93	114.54	119.90
3	A1	362	G	N3-C2-N2	-8.93	113.65	119.90
3	A1	1279	G	O4'-C1'-N9	8.93	115.34	108.20
3	A1	1425	U	N1-C2-N3	8.93	120.26	114.90
25	BB	458	G	N7-C8-N9	8.93	117.56	113.10
25	BB	1678	A	N1-C6-N6	-8.93	113.24	118.60
25	BB	2722	G	C3'-C2'-C1'	-8.93	94.36	101.50
3	A1	412	A	N1-C2-N3	-8.93	124.84	129.30
25	BB	1605	C	N3-C4-N4	-8.93	111.75	118.00
3	A1	849	G	C5-C6-N1	8.93	115.96	111.50
3	A1	1297	G	N1-C6-O6	-8.93	114.54	119.90
25	BB	1596	A	C5-C6-N6	8.93	130.84	123.70
25	BB	1763	G	C1'-O4'-C4'	-8.93	102.76	109.90
25	BB	2585	U	N3-C2-O2	-8.93	115.95	122.20
3	A1	25	C	C2-N3-C4	-8.92	115.44	119.90
3	A1	230	G	C6-C5-N7	8.92	135.75	130.40
3	A1	1302	C	O4'-C1'-N1	8.92	115.34	108.20
25	BB	908	C	N3-C2-O2	-8.92	115.65	121.90
25	BB	1021	A	C6-C5-N7	8.92	138.55	132.30
25	BB	2724	U	O4'-C1'-N1	8.92	115.34	108.20
3	A1	60	A	C4-C5-C6	-8.92	112.54	117.00
3	A1	290	C	N3-C4-C5	8.92	125.47	121.90
3	A1	827	U	C5'-C4'-O4'	8.92	119.80	109.10
3	A1	1046	A	C4-C5-C6	-8.92	112.54	117.00
25	BB	671	C	N3-C4-C5	8.92	125.47	121.90
25	BB	1918	A	C3'-C2'-C1'	-8.92	94.36	101.50
25	BB	2716	C	N1-C2-O2	8.92	124.25	118.90
39	BP	54	ARG	NE-CZ-NH2	8.92	124.76	120.30
41	BR	15	ARG	NE-CZ-NH2	8.92	124.76	120.30
1	AA	25	C	C6-N1-C2	-8.92	116.73	120.30
3	A1	1114	C	N3-C4-N4	-8.92	111.76	118.00
25	BB	220	G	N1-C6-O6	-8.92	114.55	119.90
25	BB	1938	A	N9-C4-C5	8.92	109.37	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	732	C	C6-N1-C2	-8.92	116.73	120.30
3	A1	1049	U	C3'-C2'-C1'	8.92	108.63	101.50
3	A1	1092	A	N1-C2-N3	-8.92	124.84	129.30
3	A1	1531	A	C5-C6-N1	8.92	122.16	117.70
25	BB	127	A	C4-C5-C6	-8.92	112.54	117.00
25	BB	2632	A	C6-C5-N7	8.92	138.54	132.30
3	A1	52	C	N3-C4-C5	8.91	125.47	121.90
3	A1	381	C	N1-C2-O2	8.91	124.25	118.90
3	A1	390	U	N3-C2-O2	-8.91	115.96	122.20
3	A1	530	G	C3'-C2'-C1'	8.91	108.63	101.50
3	A1	1471	U	N3-C2-O2	-8.91	115.96	122.20
25	BB	629	G	C5-C6-N1	8.91	115.96	111.50
3	A1	419	C	O4'-C1'-N1	8.91	115.33	108.20
3	A1	596	A	N1-C6-N6	-8.91	113.25	118.60
3	A1	1265	C	C2-N3-C4	-8.91	115.44	119.90
3	A1	152	A	C5-C6-N6	8.91	130.83	123.70
1	AP	11	C	N3-C4-C5	8.91	125.46	121.90
3	A1	1350	A	C5-C6-N1	8.91	122.16	117.70
25	BB	297	G	N9-C4-C5	8.91	108.96	105.40
25	BB	845	A	C4'-C3'-C2'	-8.91	93.69	102.60
25	BB	1745	A	C5-C6-N1	8.91	122.15	117.70
25	BB	1787	A	C4-C5-C6	-8.91	112.55	117.00
25	BB	2412	A	N1-C6-N6	-8.91	113.26	118.60
25	BB	2539	C	C5-C6-N1	-8.91	116.55	121.00
3	A1	198	G	C1'-O4'-C4'	-8.90	102.78	109.90
25	BB	540	C	N3-C4-N4	-8.90	111.77	118.00
3	A1	731	G	N9-C4-C5	8.90	108.96	105.40
3	A1	851	G	N1-C6-O6	-8.90	114.56	119.90
25	BB	656	G	N1-C6-O6	-8.90	114.56	119.90
25	BB	131	A	C4-C5-C6	-8.90	112.55	117.00
25	BB	146	A	N1-C6-N6	-8.90	113.26	118.60
25	BB	438	G	N1-C6-O6	-8.90	114.56	119.90
25	BB	1483	G	C8-N9-C4	-8.90	102.84	106.40
3	A1	468	A	C5-C6-N6	8.90	130.82	123.70
3	A1	1374	A	C4-C5-C6	-8.90	112.55	117.00
3	A1	772	U	C5-C6-N1	-8.90	118.25	122.70
25	BB	326	G	O4'-C1'-N9	8.90	115.32	108.20
25	BB	633	A	C4-C5-C6	-8.90	112.55	117.00
25	BB	2108	A	C6-C5-N7	8.90	138.53	132.30
25	BB	615	U	O4'-C1'-N1	8.90	115.32	108.20
25	BB	1335	C	N3-C2-O2	-8.90	115.67	121.90
3	A1	1413	A	C5-C6-N6	8.90	130.82	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1428	C	C6-N1-C2	-8.90	116.74	120.30
25	BB	1673	G	C8-N9-C4	-8.90	102.84	106.40
25	BB	2408	U	O4'-C1'-N1	8.90	115.32	108.20
3	A1	1509	C	N1-C2-N3	8.90	125.43	119.20
25	BB	1337	G	C5-C6-N1	8.90	115.95	111.50
25	BB	1373	A	N1-C6-N6	-8.90	113.26	118.60
25	BB	1608	A	C5-C6-N1	8.90	122.15	117.70
25	BB	1772	A	C5-C6-N1	8.90	122.15	117.70
25	BB	2208	C	N3-C2-O2	-8.90	115.67	121.90
25	BB	2893	A	O4'-C1'-N9	8.90	115.32	108.20
3	A1	403	C	N3-C4-N4	-8.89	111.78	118.00
3	A1	613	C	N1-C2-O2	8.89	124.24	118.90
3	A1	673	A	C4-C5-C6	-8.89	112.55	117.00
3	A1	1292	G	N1-C6-O6	-8.89	114.56	119.90
25	BB	1241	A	C5-C6-N1	8.89	122.15	117.70
25	BB	1568	G	N3-C4-C5	-8.89	124.15	128.60
25	BB	2886	A	P-O3'-C3'	8.89	130.37	119.70
25	BB	495	G	O4'-C1'-N9	8.89	115.31	108.20
25	BB	2532	G	N1-C6-O6	-8.89	114.56	119.90
25	BB	2131	U	C5-C4-O4	-8.89	120.57	125.90
25	BB	2900	A	N1-C6-N6	-8.89	113.27	118.60
1	AP	42	G	N9-C4-C5	8.89	108.95	105.40
1	AE	46	G	N3-C2-N2	-8.89	113.68	119.90
25	BB	1748	C	N3-C2-O2	-8.89	115.68	121.90
25	BB	97	C	N1-C2-O2	8.89	124.23	118.90
25	BB	2060	A	O4'-C1'-N9	8.89	115.31	108.20
25	BB	2292	U	N3-C2-O2	-8.89	115.98	122.20
3	A1	250	A	C6-N1-C2	-8.88	113.27	118.60
3	A1	1349	A	N1-C6-N6	-8.88	113.27	118.60
25	BB	1170	C	N3-C2-O2	-8.88	115.68	121.90
25	BB	1759	A	C4-C5-C6	-8.88	112.56	117.00
29	BF	50	ARG	NH1-CZ-NH2	-8.89	109.62	119.40
1	AP	10	G	N1-C6-O6	-8.88	114.57	119.90
3	A1	149	A	C4-C5-C6	-8.88	112.56	117.00
24	BA	46	A	C4-C5-C6	-8.88	112.56	117.00
25	BB	162	U	N3-C2-O2	-8.88	115.98	122.20
25	BB	440	C	N1-C2-O2	8.88	124.23	118.90
25	BB	1316	U	C1'-O4'-C4'	-8.88	102.79	109.90
3	A1	296	U	N3-C2-O2	-8.88	115.98	122.20
3	A1	850	U	C1'-O4'-C4'	-8.88	102.80	109.90
25	BB	517	C	C6-N1-C2	-8.88	116.75	120.30
25	BB	2197	U	N3-C2-O2	-8.88	115.98	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	18	G	N3-C2-N2	-8.88	113.68	119.90
25	BB	706	A	C4-C5-C6	-8.88	112.56	117.00
35	BL	95	ARG	NE-CZ-NH1	8.88	124.74	120.30
1	AA	14	A	O3'-P-O5'	-8.88	87.13	104.00
25	BB	476	G	C5-C6-O6	8.88	133.93	128.60
25	BB	1640	A	C4-C5-C6	-8.88	112.56	117.00
3	A1	108	G	N3-C2-N2	-8.88	113.69	119.90
25	BB	217	A	C5-N7-C8	-8.88	99.46	103.90
25	BB	438	G	C1'-O4'-C4'	-8.87	102.80	109.90
25	BB	741	U	O4'-C1'-N1	8.87	115.30	108.20
25	BB	1147	A	C5-C6-N6	8.87	130.80	123.70
25	BB	1641	A	C1'-O4'-C4'	8.87	117.00	109.90
25	BB	1672	A	C4-C5-C6	-8.87	112.56	117.00
8	AG	23	ARG	NE-CZ-NH1	8.87	124.74	120.30
25	BB	1502	A	C6-C5-N7	8.87	138.51	132.30
1	AP	47	U	C5-C6-N1	-8.87	118.26	122.70
3	A1	258	G	C4-C5-N7	-8.87	107.25	110.80
3	A1	1107	C	N3-C4-C5	8.87	125.45	121.90
25	BB	1107	G	C5-C6-O6	8.87	133.92	128.60
25	BB	2266	A	O4'-C1'-N9	8.87	115.30	108.20
25	BB	2631	G	N3-C2-N2	-8.87	113.69	119.90
3	A1	587	G	N1-C2-N2	-8.87	108.22	116.20
25	BB	805	G	O4'-C1'-N9	8.87	115.30	108.20
3	A1	1401	G	C4-C5-N7	-8.87	107.25	110.80
25	BB	987	C	C6-N1-C2	-8.87	116.75	120.30
25	BB	1675	C	N3-C4-N4	-8.87	111.79	118.00
25	BB	1873	G	O4'-C1'-N9	8.87	115.29	108.20
25	BB	1907	G	C4-C5-N7	-8.87	107.25	110.80
25	BB	2543	G	N1-C6-O6	-8.87	114.58	119.90
46	BW	41	ARG	NE-CZ-NH1	8.87	124.73	120.30
1	AA	28	C	C2-N3-C4	-8.87	115.47	119.90
3	A1	40	C	N3-C4-C5	8.87	125.45	121.90
25	BB	1557	C	C2-N3-C4	-8.87	115.47	119.90
1	AA	50	U	N3-C2-O2	-8.86	116.00	122.20
25	BB	1637	A	C5-C6-N6	8.86	130.79	123.70
25	BB	2148	G	N7-C8-N9	8.86	117.53	113.10
25	BB	2206	C	C6-N1-C2	-8.86	116.75	120.30
25	BB	2745	C	N3-C4-C5	8.86	125.44	121.90
3	A1	36	C	C2-N3-C4	-8.86	115.47	119.90
3	A1	529	G	C5-C6-O6	8.86	133.91	128.60
25	BB	203	A	N1-C6-N6	-8.86	113.28	118.60
25	BB	631	A	C5-C6-N6	8.86	130.79	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1969	A	C6-N1-C2	-8.86	113.28	118.60
25	BB	2211	A	C2-N3-C4	8.86	115.03	110.60
25	BB	2281	A	C6-N1-C2	-8.86	113.28	118.60
25	BB	2528	U	N3-C4-O4	-8.86	113.20	119.40
25	BB	2785	C	C2-N3-C4	-8.86	115.47	119.90
3	A1	26	A	C5-C6-N6	8.86	130.78	123.70
3	A1	524	G	N3-C4-C5	-8.86	124.17	128.60
3	A1	1129	C	N3-C2-O2	-8.86	115.70	121.90
3	A1	1360	A	C6-C5-N7	8.86	138.50	132.30
25	BB	335	C	C2-N3-C4	-8.86	115.47	119.90
25	BB	844	A	C5-N7-C8	-8.86	99.47	103.90
25	BB	1100	C	N3-C4-N4	-8.86	111.80	118.00
25	BB	1761	C	C2-N3-C4	-8.86	115.47	119.90
25	BB	2126	A	C5'-C4'-O4'	8.86	119.73	109.10
25	BB	2420	C	N3-C2-O2	-8.86	115.70	121.90
3	A1	492	C	C3'-C2'-C1'	8.85	108.58	101.50
3	A1	1324	A	C5-C6-N1	8.85	122.13	117.70
25	BB	706	A	C5-C6-N1	8.85	122.13	117.70
25	BB	1489	C	C2-N3-C4	-8.85	115.47	119.90
25	BB	2781	A	C4-C5-C6	-8.85	112.57	117.00
3	A1	917	G	N1-C2-N3	8.85	129.21	123.90
3	A1	1052	U	C5-C6-N1	-8.85	118.27	122.70
3	A1	1218	C	C2-N3-C4	-8.85	115.47	119.90
25	BB	1107	G	C6-C5-N7	8.85	135.71	130.40
21	AV	87	ARG	NE-CZ-NH1	8.85	124.73	120.30
25	BB	47	C	N3-C2-O2	-8.85	115.70	121.90
25	BB	1432	G	C5-C6-N1	8.85	115.92	111.50
25	BB	1528	A	C5-C6-N1	8.85	122.13	117.70
25	BB	2239	G	N1-C6-O6	-8.85	114.59	119.90
25	BB	2752	C	N3-C4-C5	8.85	125.44	121.90
31	BH	15	ARG	NE-CZ-NH1	8.85	124.73	120.30
3	A1	258	G	C5-C6-O6	8.85	133.91	128.60
3	A1	603	U	C3'-C2'-C1'	8.85	108.58	101.50
25	BB	2041	U	C5-C6-N1	-8.85	118.28	122.70
3	A1	175	C	C2-N3-C4	-8.85	115.48	119.90
3	A1	535	A	C2-N3-C4	8.85	115.02	110.60
3	A1	832	G	C4-C5-N7	-8.85	107.26	110.80
3	A1	909	A	C4-C5-C6	-8.85	112.58	117.00
25	BB	66	C	C2-N3-C4	-8.85	115.47	119.90
34	BK	21	ARG	NE-CZ-NH1	8.85	124.72	120.30
25	BB	234	U	C3'-C2'-C1'	8.85	108.58	101.50
25	BB	1948	G	O4'-C1'-N9	-8.85	101.12	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	18	G	N9-C4-C5	8.85	108.94	105.40
3	A1	279	A	C5-C6-N6	8.85	130.78	123.70
25	BB	1486	U	N3-C4-O4	8.85	125.59	119.40
25	BB	2045	C	N3-C2-O2	-8.85	115.71	121.90
25	BB	2886	A	C5-C6-N1	8.85	122.12	117.70
1	AP	27	C	C2-N3-C4	-8.84	115.48	119.90
1	AE	16	U	C5-C4-O4	8.84	131.21	125.90
3	A1	693	G	O4'-C4'-C3'	8.84	113.17	106.10
3	A1	713	G	N1-C6-O6	-8.84	114.59	119.90
3	A1	715	A	C6-C5-N7	8.84	138.49	132.30
3	A1	1176	A	C5-N7-C8	-8.84	99.48	103.90
25	BB	2652	C	C2-N3-C4	-8.84	115.48	119.90
3	A1	736	C	N3-C4-N4	-8.84	111.81	118.00
25	BB	1228	G	N1-C2-N3	8.84	129.21	123.90
25	BB	2063	C	N3-C2-O2	-8.84	115.71	121.90
25	BB	2868	A	C5-C6-N1	8.84	122.12	117.70
3	A1	344	A	C4'-C3'-C2'	-8.84	93.76	102.60
25	BB	391	A	C5-C6-N1	8.84	122.12	117.70
25	BB	713	G	C3'-C2'-C1'	8.84	108.57	101.50
25	BB	1145	C	O4'-C4'-C3'	8.84	113.17	106.10
36	BM	76	ARG	CD-NE-CZ	8.84	135.98	123.60
3	A1	110	C	N3-C2-O2	-8.84	115.71	121.90
24	BA	38	C	C2-N3-C4	-8.84	115.48	119.90
25	BB	652	U	C5'-C4'-O4'	8.84	119.71	109.10
25	BB	1863	G	C5-C6-N1	8.84	115.92	111.50
25	BB	2008	C	C2-N3-C4	-8.84	115.48	119.90
25	BB	2479	U	C6-N1-C2	-8.84	115.70	121.00
25	BB	2741	A	C4-C5-C6	-8.84	112.58	117.00
3	A1	76	G	C4'-C3'-C2'	-8.84	93.76	102.60
3	A1	519	C	N1-C2-N3	8.84	125.39	119.20
3	A1	804	U	O4'-C1'-N1	8.84	115.27	108.20
3	A1	1088	G	C3'-C2'-C1'	-8.84	94.43	101.50
3	A1	960	U	C3'-C2'-C1'	-8.84	94.43	101.50
24	BA	8	C	N3-C4-N4	-8.84	111.81	118.00
25	BB	452	G	N1-C6-O6	-8.84	114.60	119.90
25	BB	2749	A	C6-C5-N7	8.84	138.49	132.30
25	BB	195	A	C5-C6-N1	8.84	122.12	117.70
25	BB	1330	C	N3-C2-O2	-8.84	115.71	121.90
24	BA	90	C	N3-C2-O2	-8.83	115.72	121.90
25	BB	1370	C	O4'-C1'-N1	8.83	115.27	108.20
25	BB	2535	G	N1-C6-O6	-8.83	114.60	119.90
25	BB	2890	G	C3'-C2'-C1'	8.83	108.57	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	40	C	C2-N3-C4	-8.83	115.48	119.90
3	A1	1017	U	C5-C6-N1	-8.83	118.28	122.70
3	A1	1079	G	C8-N9-C4	-8.83	102.87	106.40
3	A1	1435	G	C5-N7-C8	-8.83	99.89	104.30
25	BB	2130	U	N3-C2-O2	-8.83	116.02	122.20
25	BB	2457	U	O4'-C1'-N1	8.83	115.26	108.20
49	BZ	201	ARG	NE-CZ-NH1	8.83	124.72	120.30
3	A1	129	A	C4-C5-C6	-8.83	112.59	117.00
25	BB	61	C	N3-C4-N4	-8.83	111.82	118.00
25	BB	155	A	N1-C6-N6	-8.83	113.30	118.60
25	BB	1916	A	C4-C5-C6	-8.83	112.59	117.00
3	A1	536	C	C6-N1-C2	-8.83	116.77	120.30
3	A1	974	A	C4-C5-C6	-8.83	112.59	117.00
25	BB	1112	G	N1-C6-O6	-8.83	114.60	119.90
25	BB	2673	G	O4'-C1'-N9	-8.83	101.14	108.20
1	AP	69	U	N3-C2-O2	-8.82	116.02	122.20
3	A1	1156	G	C4-C5-N7	8.82	114.33	110.80
25	BB	394	C	N1-C2-O2	8.82	124.19	118.90
3	A1	1333	A	C5-C6-N1	8.82	122.11	117.70
25	BB	495	G	N1-C6-O6	-8.82	114.61	119.90
25	BB	675	A	O4'-C1'-N9	8.82	115.26	108.20
25	BB	707	G	N1-C2-N3	8.82	129.19	123.90
25	BB	890	C	C6-N1-C2	-8.82	116.77	120.30
25	BB	985	C	N3-C4-C5	8.82	125.43	121.90
25	BB	2334	U	O4'-C1'-N1	-8.82	101.14	108.20
25	BB	2785	C	N3-C4-N4	-8.82	111.82	118.00
24	BA	118	C	O4'-C1'-N1	8.82	115.26	108.20
25	BB	1899	A	C4-C5-C6	-8.82	112.59	117.00
3	A1	155	A	C4-C5-C6	-8.82	112.59	117.00
3	A1	702	A	C5-C6-N1	8.82	122.11	117.70
25	BB	2137	U	N1-C2-O2	8.82	128.97	122.80
3	A1	1157	A	C5-C6-N1	8.82	122.11	117.70
25	BB	692	C	C1'-O4'-C4'	-8.82	102.84	109.90
25	BB	910	A	C5-C6-N1	8.82	122.11	117.70
3	A1	609	A	N7-C8-N9	8.82	118.21	113.80
2	AM	8	U	N1-C2-N3	8.82	120.19	114.90
3	A1	676	A	C6-C5-N7	8.82	138.47	132.30
25	BB	255	A	N1-C6-N6	-8.82	113.31	118.60
25	BB	694	U	N3-C2-O2	-8.82	116.03	122.20
25	BB	2127	G	N3-C4-C5	-8.82	124.19	128.60
25	BB	529	A	C5-C6-N1	8.81	122.11	117.70
25	BB	650	C	N3-C4-C5	8.81	125.42	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	718	A	C5-C6-N1	8.81	122.11	117.70
25	BB	1483	G	C4-C5-N7	-8.81	107.27	110.80
25	BB	1813	G	N3-C2-N2	-8.81	113.73	119.90
25	BB	2321	U	O4'-C1'-N1	8.81	115.25	108.20
25	BB	1302	A	C5-C6-N6	8.81	130.75	123.70
25	BB	1638	C	N3-C4-C5	8.81	125.42	121.90
25	BB	2225	A	C6-C5-N7	8.81	138.47	132.30
3	A1	1285	A	C5-C6-N1	8.81	122.11	117.70
20	AU	77	ARG	NE-CZ-NH1	8.81	124.70	120.30
25	BB	338	G	N3-C2-N2	-8.81	113.73	119.90
25	BB	888	C	C2-N3-C4	-8.81	115.50	119.90
25	BB	2594	C	O4'-C1'-C2'	-8.81	96.99	105.80
3	A1	1352	C	N1-C2-O2	8.81	124.19	118.90
3	A1	401	C	N1-C2-N3	8.81	125.36	119.20
3	A1	726	C	N1-C2-O2	8.81	124.19	118.90
25	BB	796	C	N3-C2-O2	-8.81	115.73	121.90
25	BB	1468	U	C5-C6-N1	-8.81	118.30	122.70
25	BB	1396	U	O4'-C1'-N1	8.81	115.24	108.20
3	A1	880	C	C2-N3-C4	-8.80	115.50	119.90
25	BB	372	G	C6-C5-N7	8.80	135.68	130.40
25	BB	650	C	N3-C2-O2	-8.80	115.74	121.90
25	BB	1302	A	C4-C5-C6	-8.80	112.60	117.00
25	BB	1328	A	C4-C5-C6	-8.80	112.60	117.00
25	BB	2679	A	C5-C6-N1	8.80	122.10	117.70
3	A1	595	A	C5-C6-N6	8.80	130.74	123.70
3	A1	1295	U	C5-C4-O4	8.80	131.18	125.90
25	BB	184	C	C6-N1-C2	-8.80	116.78	120.30
25	BB	456	C	N3-C4-C5	8.80	125.42	121.90
25	BB	742	A	C4-C5-C6	-8.80	112.60	117.00
25	BB	947	A	C4-C5-C6	-8.80	112.60	117.00
25	BB	2164	C	N3-C2-O2	-8.80	115.74	121.90
25	BB	810	U	O4'-C1'-N1	8.80	115.24	108.20
25	BB	1389	G	N3-C2-N2	-8.80	113.74	119.90
25	BB	1687	G	N3-C4-C5	-8.80	124.20	128.60
25	BB	1877	A	C4-C5-C6	-8.80	112.60	117.00
25	BB	2293	G	C3'-C2'-C1'	-8.80	94.46	101.50
36	BM	6	ARG	NE-CZ-NH2	-8.80	115.90	120.30
24	BA	38	C	N3-C4-C5	8.80	125.42	121.90
24	BA	69	G	C5-C6-N1	8.80	115.90	111.50
25	BB	1947	C	C6-N1-C2	-8.80	116.78	120.30
25	BB	2074	U	O4'-C1'-N1	8.80	115.24	108.20
25	BB	2078	C	N3-C2-O2	-8.80	115.74	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	667	G	C5'-C4'-O4'	8.79	119.65	109.10
25	BB	40	U	N3-C4-O4	8.79	125.56	119.40
25	BB	258	G	N7-C8-N9	8.79	117.50	113.10
25	BB	1016	G	C5-C6-N1	8.79	115.90	111.50
25	BB	1985	C	N1-C2-O2	8.79	124.18	118.90
3	A1	21	G	O4'-C1'-N9	8.79	115.23	108.20
3	A1	1370	G	N1-C6-O6	-8.79	114.62	119.90
25	BB	554	U	C5-C6-N1	-8.79	118.30	122.70
25	BB	775	G	C8-N9-C4	-8.79	102.88	106.40
25	BB	1113	U	O4'-C1'-N1	8.79	115.23	108.20
25	BB	1671	U	O4'-C1'-N1	8.79	115.23	108.20
25	BB	2084	C	C5-C4-N4	-8.79	114.05	120.20
25	BB	2365	G	C3'-C2'-C1'	-8.79	94.47	101.50
3	A1	627	G	C4'-C3'-C2'	-8.79	93.81	102.60
25	BB	703	U	O4'-C1'-N1	8.79	115.23	108.20
3	A1	1158	C	N1-C2-O2	8.79	124.17	118.90
3	A1	187	G	C5-C6-O6	8.79	133.87	128.60
22	AW	123	ARG	NE-CZ-NH2	8.79	124.69	120.30
35	BL	88	ARG	NE-CZ-NH1	8.79	124.69	120.30
3	A1	527	G	C5-C6-N1	8.78	115.89	111.50
3	A1	1362	A	C2-N3-C4	8.78	114.99	110.60
25	BB	310	A	C5-C6-N1	8.78	122.09	117.70
25	BB	2613	U	N3-C2-O2	-8.79	116.05	122.20
3	A1	955	U	C4-C5-C6	8.78	124.97	119.70
25	BB	726	G	N1-C6-O6	-8.78	114.63	119.90
25	BB	1803	A	O4'-C4'-C3'	8.78	113.13	106.10
3	A1	183	C	C6-N1-C2	-8.78	116.79	120.30
3	A1	1368	A	C5-C6-N6	8.78	130.72	123.70
25	BB	1412	U	C5-C6-N1	-8.78	118.31	122.70
25	BB	1627	G	N1-C6-O6	-8.78	114.63	119.90
25	BB	2266	A	C3'-C2'-C1'	8.78	108.53	101.50
1	AE	30	G	N1-C6-O6	-8.78	114.63	119.90
25	BB	1662	U	C1'-O4'-C4'	-8.78	102.88	109.90
25	BB	2603	G	N3-C2-N2	-8.78	113.75	119.90
25	BB	2813	A	C5-C6-N1	8.78	122.09	117.70
3	A1	998	C	C6-N1-C2	-8.78	116.79	120.30
3	A1	1053	G	N1-C6-O6	-8.78	114.63	119.90
25	BB	710	U	C5'-C4'-O4'	8.78	119.63	109.10
25	BB	2527	C	O4'-C1'-N1	8.78	115.22	108.20
25	BB	2595	G	N3-C2-N2	-8.78	113.76	119.90
25	BB	1490	A	C4-C5-C6	-8.78	112.61	117.00
3	A1	1447	A	C5-C6-N1	8.77	122.09	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2831	G	N1-C6-O6	-8.77	114.64	119.90
25	BB	2858	C	N3-C4-N4	-8.77	111.86	118.00
1	AP	23	A	C5'-C4'-O4'	8.77	119.62	109.10
3	A1	479	U	O4'-C1'-N1	8.77	115.22	108.20
3	A1	1058	G	N3-C4-C5	-8.77	124.21	128.60
25	BB	1621	U	O4'-C1'-N1	8.77	115.22	108.20
25	BB	1952	A	C4-C5-C6	-8.77	112.61	117.00
3	A1	217	C	N3-C2-O2	-8.77	115.76	121.90
25	BB	719	C	C2-N3-C4	-8.77	115.52	119.90
25	BB	859	G	C8-N9-C4	-8.77	102.89	106.40
25	BB	1876	A	C4-C5-C6	-8.77	112.61	117.00
25	BB	1929	G	O4'-C1'-N9	8.77	115.21	108.20
25	BB	2316	G	N1-C2-N3	8.77	129.16	123.90
25	BB	2719	G	C8-N9-C4	-8.77	102.89	106.40
3	A1	253	A	C3'-C2'-C1'	8.77	108.51	101.50
3	A1	363	A	C3'-C2'-C1'	8.77	108.51	101.50
3	A1	563	A	C4-C5-C6	-8.77	112.62	117.00
3	A1	1207	G	N7-C8-N9	8.77	117.48	113.10
3	A1	1429	A	C4-C5-C6	-8.77	112.62	117.00
24	BA	49	C	N3-C2-O2	-8.77	115.76	121.90
24	BA	68	C	N1-C2-O2	8.77	124.16	118.90
25	BB	1104	C	C3'-C2'-C1'	8.77	108.51	101.50
25	BB	2101	A	C5-C6-N1	8.77	122.08	117.70
25	BB	2128	G	C5-C6-N1	8.77	115.88	111.50
25	BB	2461	A	O4'-C4'-C3'	8.77	113.11	106.10
1	AE	58	A	C6-C5-N7	8.76	138.44	132.30
25	BB	305	C	O4'-C1'-N1	8.76	115.21	108.20
25	BB	2749	A	C4-C5-C6	-8.76	112.62	117.00
3	A1	1295	U	O4'-C4'-C3'	8.76	113.11	106.10
25	BB	642	U	C4'-C3'-C2'	-8.76	93.84	102.60
25	BB	2730	C	C2-N3-C4	-8.76	115.52	119.90
25	BB	1762	A	C6-C5-N7	8.76	138.43	132.30
1	AA	44	A	C5-C6-N1	8.76	122.08	117.70
3	A1	199	A	C4-C5-C6	-8.76	112.62	117.00
3	A1	330	C	C3'-C2'-C1'	8.76	108.51	101.50
3	A1	424	G	N1-C6-O6	-8.76	114.64	119.90
3	A1	635	A	C4-C5-C6	-8.76	112.62	117.00
3	A1	792	A	OP1-P-OP2	-8.76	106.46	119.60
3	A1	965	U	C3'-C2'-C1'	-8.76	94.49	101.50
25	BB	1804	C	C2-N3-C4	-8.76	115.52	119.90
25	BB	2587	A	C5-C6-N1	8.76	122.08	117.70
3	A1	828	U	N3-C2-O2	-8.76	116.07	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1162	C	N3-C2-O2	-8.76	115.77	121.90
3	A1	1291	U	O4'-C1'-N1	8.76	115.21	108.20
3	A1	1492	A	C8-N9-C4	-8.76	102.30	105.80
25	BB	1958	C	N1-C2-N3	8.76	125.33	119.20
25	BB	2422	C	N3-C4-N4	-8.76	111.87	118.00
3	A1	34	C	N3-C4-N4	-8.76	111.87	118.00
3	A1	501	C	C2-N3-C4	-8.76	115.52	119.90
3	A1	1327	C	C3'-C2'-C1'	8.76	108.51	101.50
37	BN	13	ARG	CD-NE-CZ	8.76	135.86	123.60
3	A1	236	A	C4-C5-C6	-8.76	112.62	117.00
3	A1	966	G	N1-C2-N3	8.76	129.15	123.90
3	A1	1029	U	C1'-O4'-C4'	-8.76	102.89	109.90
3	A1	1155	A	C4-C5-C6	-8.76	112.62	117.00
3	A1	1218	C	C5-C6-N1	-8.76	116.62	121.00
3	A1	1494	G	C5'-C4'-C3'	-8.76	101.99	116.00
25	BB	786	C	C2-N3-C4	-8.76	115.52	119.90
25	BB	922	C	N3-C4-C5	8.76	125.40	121.90
25	BB	1408	G	C5-C6-N1	8.76	115.88	111.50
25	BB	1984	G	C1'-O4'-C4'	-8.76	102.89	109.90
25	BB	2212	A	C5-C6-N6	8.76	130.71	123.70
25	BB	2316	G	N3-C2-N2	-8.76	113.77	119.90
25	BB	2525	G	C5-C6-N1	8.76	115.88	111.50
25	BB	2567	G	N1-C6-O6	-8.76	114.65	119.90
3	A1	893	C	N3-C4-N4	-8.75	111.87	118.00
3	A1	951	G	C3'-C2'-C1'	-8.75	94.50	101.50
3	A1	1120	C	N3-C4-N4	-8.75	111.87	118.00
3	A1	189	A	C4-C5-C6	-8.75	112.62	117.00
3	A1	425	G	C5-C6-N1	8.75	115.88	111.50
3	A1	802	A	C4-C5-C6	-8.75	112.62	117.00
25	BB	538	A	C4-C5-C6	-8.75	112.62	117.00
25	BB	540	C	N1-C2-O2	8.75	124.15	118.90
25	BB	721	A	C5-C6-N1	8.75	122.08	117.70
25	BB	1247	A	C4-C5-C6	-8.75	112.62	117.00
25	BB	1321	A	C4-C5-C6	-8.75	112.62	117.00
25	BB	1928	A	C5-C6-N1	8.75	122.08	117.70
25	BB	587	C	N3-C4-C5	8.75	125.40	121.90
25	BB	1381	G	N1-C6-O6	-8.75	114.65	119.90
25	BB	2084	C	N3-C2-O2	-8.75	115.78	121.90
3	A1	878	A	C5-C6-N6	8.75	130.70	123.70
25	BB	1221	C	C5-C4-N4	-8.75	114.08	120.20
25	BB	1925	C	C4'-C3'-C2'	-8.75	93.85	102.60
3	A1	832	G	N1-C6-O6	-8.75	114.65	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1187	G	N1-C6-O6	-8.75	114.65	119.90
25	BB	297	G	C4-C5-N7	-8.75	107.30	110.80
25	BB	1562	U	O4'-C1'-N1	8.75	115.20	108.20
3	A1	922	G	N3-C2-N2	-8.75	113.78	119.90
25	BB	1737	G	N7-C8-N9	8.75	117.47	113.10
25	BB	2453	A	C5-C6-N1	8.75	122.07	117.70
25	BB	2806	C	C5-C6-N1	-8.75	116.63	121.00
3	A1	919	A	C4-C5-C6	-8.74	112.63	117.00
3	A1	982	U	N1-C2-O2	8.74	128.92	122.80
25	BB	27	G	C5-C6-N1	8.74	115.87	111.50
25	BB	1153	C	C2-N3-C4	-8.74	115.53	119.90
25	BB	1261	C	C2-N3-C4	-8.74	115.53	119.90
25	BB	1522	A	O4'-C4'-C3'	8.74	113.09	106.10
3	A1	726	C	N3-C2-O2	-8.74	115.78	121.90
25	BB	397	U	C5-C6-N1	-8.74	118.33	122.70
25	BB	1196	C	C5-C6-N1	-8.74	116.63	121.00
25	BB	2681	C	N3-C2-O2	-8.74	115.78	121.90
25	BB	484	C	C5-C4-N4	8.74	126.32	120.20
24	BA	31	C	C2-N3-C4	-8.74	115.53	119.90
25	BB	1109	C	C6-N1-C2	-8.74	116.81	120.30
25	BB	1609	A	C5-C6-N1	8.74	122.07	117.70
25	BB	2084	C	N1-C2-O2	8.74	124.14	118.90
25	BB	655	A	N9-C4-C5	8.73	109.29	105.80
25	BB	2833	U	N1-C2-O2	8.73	128.91	122.80
3	A1	511	C	N3-C2-O2	-8.73	115.79	121.90
25	BB	1661	G	O4'-C1'-N9	8.73	115.19	108.20
25	BB	1773	A	C4-C5-C6	-8.73	112.63	117.00
25	BB	2540	C	N3-C4-N4	-8.73	111.89	118.00
25	BB	1339	G	C5-C6-N1	8.73	115.87	111.50
3	A1	35	G	C4-C5-N7	-8.73	107.31	110.80
3	A1	344	A	N1-C6-N6	-8.73	113.36	118.60
25	BB	876	C	N3-C2-O2	-8.73	115.79	121.90
3	A1	364	A	C5-C6-N1	8.73	122.06	117.70
25	BB	1789	A	C5-C6-N6	8.73	130.68	123.70
25	BB	2661	G	C5-C6-N1	8.73	115.86	111.50
3	A1	821	G	C4-C5-C6	-8.73	113.56	118.80
3	A1	1255	G	N1-C6-O6	-8.73	114.66	119.90
25	BB	957	C	C5'-C4'-O4'	8.73	119.58	109.10
25	BB	2089	C	N3-C2-O2	-8.73	115.79	121.90
3	A1	704	A	C4-C5-C6	-8.73	112.64	117.00
3	A1	1257	A	C5-C6-N1	8.73	122.06	117.70
25	BB	151	C	O4'-C1'-N1	8.73	115.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	1980	G	C5-C6-N1	8.73	115.86	111.50
25	BB	1463	C	N3-C4-N4	-8.72	111.89	118.00
3	A1	971	G	C5-C6-O6	8.72	133.83	128.60
3	A1	1170	A	C6-N1-C2	-8.72	113.36	118.60
25	BB	331	C	O4'-C1'-N1	8.72	115.18	108.20
25	BB	1475	G	N3-C2-N2	8.72	126.01	119.90
25	BB	2459	A	C1'-O4'-C4'	-8.72	102.92	109.90
52	B3	162	ARG	NE-CZ-NH2	8.72	124.66	120.30
3	A1	1123	U	C5-C6-N1	-8.72	118.34	122.70
25	BB	1982	U	C3'-C2'-C1'	8.72	108.48	101.50
25	BB	2430	A	C4-C5-C6	-8.72	112.64	117.00
1	AA	70	C	N1-C1'-C2'	-8.72	102.41	112.00
2	AM	3	U	C5-C6-N1	-8.72	118.34	122.70
3	A1	546	A	N1-C6-N6	-8.72	113.37	118.60
3	A1	1302	C	C6-N1-C2	-8.72	116.81	120.30
25	BB	2134	A	C5-C6-N1	8.72	122.06	117.70
25	BB	2631	G	N1-C2-N3	8.72	129.13	123.90
25	BB	2741	A	C5-C6-N1	8.72	122.06	117.70
25	BB	2869	G	N3-C4-C5	-8.72	124.24	128.60
3	A1	577	G	C5-C6-N1	8.72	115.86	111.50
24	BA	71	C	C6-N1-C2	-8.72	116.81	120.30
25	BB	671	C	N3-C2-O2	-8.72	115.80	121.90
1	AP	25	C	N3-C4-C5	8.71	125.39	121.90
1	AE	37	G	C5-C6-O6	8.71	133.83	128.60
25	BB	141	G	N1-C6-O6	-8.71	114.67	119.90
25	BB	280	U	C4-C5-C6	8.71	124.93	119.70
25	BB	679	C	C3'-C2'-C1'	8.72	108.47	101.50
25	BB	919	U	N1-C2-N3	8.71	120.13	114.90
25	BB	1403	A	C4-C5-C6	-8.71	112.64	117.00
3	A1	738	C	N1-C2-O2	8.71	124.13	118.90
3	A1	1227	A	C5-C6-N6	8.71	130.67	123.70
24	BA	61	G	N3-C4-C5	-8.71	124.24	128.60
1	AP	10	G	C1'-O4'-C4'	-8.71	102.93	109.90
25	BB	88	G	N9-C4-C5	-8.71	101.92	105.40
25	BB	176	A	C5-N7-C8	-8.71	99.54	103.90
25	BB	386	G	C4'-C3'-C2'	-8.71	93.89	102.60
25	BB	855	G	N1-C2-N3	8.71	129.13	123.90
37	BN	181	ARG	NE-CZ-NH2	8.71	124.66	120.30
25	BB	2154	A	N1-C6-N6	-8.71	113.37	118.60
25	BB	2191	A	O4'-C1'-N9	8.71	115.17	108.20
3	A1	414	A	N1-C6-N6	-8.71	113.38	118.60
3	A1	484	G	N1-C6-O6	-8.71	114.67	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	798	U	O4'-C1'-N1	8.71	115.17	108.20
25	BB	915	C	N3-C4-C5	8.71	125.38	121.90
25	BB	1325	U	N3-C2-O2	-8.71	116.10	122.20
3	A1	1147	C	C2-N3-C4	-8.71	115.55	119.90
3	A1	1428	A	C5'-C4'-O4'	8.71	119.55	109.10
3	A1	1497	G	C2'-C3'-O3'	8.71	128.66	109.50
25	BB	179	C	C5-C4-N4	8.71	126.30	120.20
25	BB	263	G	O4'-C1'-N9	8.71	115.17	108.20
25	BB	1214	A	O4'-C1'-N9	8.71	115.17	108.20
25	BB	1745	A	C6-C5-N7	8.71	138.40	132.30
25	BB	1233	C	N3-C4-C5	8.71	125.38	121.90
3	A1	1181	G	N3-C2-N2	-8.70	113.81	119.90
25	BB	1698	A	OP1-P-OP2	-8.70	106.54	119.60
25	BB	239	C	C6-N1-C2	-8.70	116.82	120.30
25	BB	484	C	N3-C2-O2	-8.70	115.81	121.90
25	BB	509	C	N3-C4-C5	8.70	125.38	121.90
25	BB	1117	C	N3-C2-O2	-8.70	115.81	121.90
25	BB	1429	G	N1-C6-O6	-8.70	114.68	119.90
25	BB	1504	A	C6-C5-N7	8.70	138.39	132.30
25	BB	1713	A	C4-C5-C6	-8.70	112.65	117.00
25	BB	2169	A	C6-C5-N7	8.70	138.39	132.30
25	BB	2480	C	C4-C5-C6	8.70	121.75	117.40
25	BB	2665	A	C5-C6-N1	8.70	122.05	117.70
3	A1	1430	A	C6-C5-N7	8.70	138.39	132.30
25	BB	632	A	C5-C6-N1	8.70	122.05	117.70
3	A1	664	G	O4'-C1'-N9	8.70	115.16	108.20
25	BB	504	A	N1-C2-N3	-8.70	124.95	129.30
25	BB	590	A	C5-C6-N1	8.70	122.05	117.70
25	BB	1564	C	N1-C2-O2	8.70	124.12	118.90
25	BB	2080	A	C4-C5-C6	-8.70	112.65	117.00
25	BB	2823	A	O4'-C1'-N9	8.70	115.16	108.20
25	BB	193	U	N3-C2-O2	-8.70	116.11	122.20
1	AA	61	C	N3-C4-N4	-8.70	111.91	118.00
1	AP	44	A	C5-C6-N6	8.70	130.66	123.70
1	AE	39	U	C5'-C4'-O4'	8.70	119.53	109.10
3	A1	207	C	N3-C2-O2	-8.70	115.81	121.90
25	BB	300	A	C8-N9-C4	-8.69	102.32	105.80
25	BB	1037	G	N3-C4-C5	-8.69	124.25	128.60
25	BB	1641	A	C5-C6-N1	8.69	122.05	117.70
25	BB	2330	G	C8-N9-C4	-8.69	102.92	106.40
25	BB	2710	C	N3-C4-N4	-8.70	111.91	118.00
1	AA	48	C	N3-C2-O2	-8.69	115.81	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1196	A	C2-N3-C4	8.69	114.95	110.60
25	BB	402	A	C5-C6-N6	8.69	130.65	123.70
25	BB	2460	U	N3-C2-O2	-8.69	116.12	122.20
3	A1	1353	G	N3-C4-C5	-8.69	124.25	128.60
25	BB	760	G	N1-C6-O6	-8.69	114.69	119.90
25	BB	2076	U	O4'-C1'-C2'	-8.69	97.11	105.80
3	A1	491	G	N1-C6-O6	-8.69	114.69	119.90
3	A1	615	G	N1-C6-O6	-8.69	114.69	119.90
3	A1	715	A	C4-C5-N7	-8.69	106.36	110.70
3	A1	830	G	N1-C6-O6	-8.69	114.69	119.90
3	A1	1132	C	N3-C4-N4	-8.69	111.92	118.00
25	BB	1631	G	C5-C6-N1	8.69	115.84	111.50
25	BB	1656	C	N1-C2-N3	8.69	125.28	119.20
25	BB	1918	A	N1-C6-N6	-8.69	113.39	118.60
25	BB	2860	A	N1-C6-N6	-8.69	113.39	118.60
3	A1	154	U	C5-C6-N1	-8.68	118.36	122.70
1	AE	67	A	C5-C6-N1	8.68	122.04	117.70
3	A1	374	A	N1-C6-N6	-8.68	113.39	118.60
3	A1	524	G	N7-C8-N9	8.68	117.44	113.10
25	BB	433	C	O4'-C1'-N1	8.68	115.15	108.20
25	BB	853	C	N3-C4-C5	8.68	125.37	121.90
25	BB	1013	C	N3-C4-N4	-8.68	111.92	118.00
25	BB	1362	C	N3-C2-O2	-8.68	115.82	121.90
25	BB	1901	A	C5-C6-N1	8.68	122.04	117.70
25	BB	1986	C	C2-N3-C4	-8.68	115.56	119.90
25	BB	2203	U	C5-C6-N1	-8.68	118.36	122.70
25	BB	2295	C	O4'-C1'-N1	8.68	115.15	108.20
25	BB	2633	G	O4'-C4'-C3'	8.68	113.05	106.10
1	AE	11	C	N3-C2-O2	-8.68	115.82	121.90
3	A1	401	C	C2-N3-C4	-8.68	115.56	119.90
3	A1	646	G	N3-C4-C5	-8.68	124.26	128.60
25	BB	1142	A	C5-C6-N1	8.68	122.04	117.70
25	BB	1151	A	C5-C6-N6	8.68	130.65	123.70
3	A1	341	C	N3-C4-C5	8.68	125.37	121.90
3	A1	703	G	C5'-C4'-O4'	-8.68	98.69	109.10
3	A1	1211	U	N3-C2-O2	-8.68	116.12	122.20
25	BB	1477	A	C5-C6-N1	8.68	122.04	117.70
3	A1	1322	C	N3-C2-O2	-8.68	115.83	121.90
25	BB	945	A	C4-C5-C6	-8.68	112.66	117.00
25	BB	2216	G	O4'-C1'-N9	8.68	115.14	108.20
3	A1	55	A	C5-C6-N1	8.68	122.04	117.70
3	A1	302	G	C8-N9-C4	-8.68	102.93	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	305	G	C8-N9-C4	-8.68	102.93	106.40
3	A1	956	U	C6-N1-C2	-8.68	115.80	121.00
3	A1	1017	U	N1-C2-N3	8.68	120.11	114.90
9	AH	57	ARG	NE-CZ-NH1	8.68	124.64	120.30
25	BB	91	A	C4-C5-C6	-8.68	112.66	117.00
25	BB	173	A	C4-C5-C6	-8.68	112.66	117.00
25	BB	273	G	N1-C2-N3	8.68	129.10	123.90
25	BB	904	G	C6-C5-N7	8.68	135.60	130.40
25	BB	1466	U	N3-C2-O2	-8.68	116.13	122.20
25	BB	1547	C	N3-C4-N4	-8.68	111.93	118.00
3	A1	122	G	C6-N1-C2	-8.67	119.89	125.10
3	A1	846	G	C8-N9-C4	-8.67	102.93	106.40
25	BB	1420	A	C4-C5-C6	-8.67	112.66	117.00
25	BB	1507	C	C2-N3-C4	-8.67	115.56	119.90
25	BB	2820	A	C5-C6-N6	8.67	130.64	123.70
2	AM	9	U	C2-N3-C4	-8.67	121.80	127.00
3	A1	419	C	C5'-C4'-O4'	8.67	119.50	109.10
3	A1	762	U	O4'-C1'-N1	8.67	115.14	108.20
3	A1	1408	A	N1-C6-N6	-8.67	113.40	118.60
3	A1	1482	G	C6-N1-C2	-8.67	119.90	125.10
25	BB	329	G	N1-C2-N3	8.67	129.10	123.90
1	AP	16	U	N3-C2-O2	-8.67	116.13	122.20
3	A1	776	G	N9-C1'-C2'	-8.67	102.47	112.00
25	BB	624	C	C2-N3-C4	-8.67	115.57	119.90
25	BB	847	U	C5-C6-N1	-8.67	118.37	122.70
25	BB	1152	C	N3-C2-O2	-8.67	115.83	121.90
25	BB	2567	G	C1'-O4'-C4'	-8.67	102.97	109.90
3	A1	441	A	C3'-C2'-C1'	8.66	108.43	101.50
3	A1	470	C	O4'-C1'-N1	8.66	115.13	108.20
3	A1	765	G	N9-C4-C5	8.66	108.87	105.40
3	A1	1353	G	C3'-C2'-C1'	8.66	108.43	101.50
3	A1	1503	A	C4-C5-C6	-8.66	112.67	117.00
3	A1	1512	U	O4'-C1'-N1	8.66	115.13	108.20
25	BB	161	A	C5-C6-N1	8.66	122.03	117.70
25	BB	198	C	O4'-C1'-N1	8.66	115.13	108.20
25	BB	247	G	N1-C6-O6	-8.66	114.70	119.90
25	BB	899	A	N1-C6-N6	-8.66	113.40	118.60
25	BB	903	C	C5-C6-N1	-8.66	116.67	121.00
3	A1	290	C	O4'-C1'-N1	8.66	115.13	108.20
25	BB	1302	A	C6-C5-N7	8.66	138.36	132.30
25	BB	1385	A	C4-C5-C6	-8.66	112.67	117.00
3	A1	517	G	N3-C4-N9	8.66	131.20	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1242	G	C1'-O4'-C4'	-8.66	102.97	109.90
25	BB	1223	G	C1'-O4'-C4'	-8.66	102.97	109.90
25	BB	2594	C	N1-C2-N3	8.66	125.26	119.20
3	A1	1019	A	C5-C6-N1	8.66	122.03	117.70
25	BB	100	U	C5-C4-O4	8.66	131.10	125.90
25	BB	523	C	N3-C2-O2	-8.66	115.84	121.90
25	BB	2092	U	C5-C6-N1	-8.66	118.37	122.70
33	BJ	10	ARG	NE-CZ-NH2	8.66	124.63	120.30
25	BB	2400	G	N3-C4-C5	-8.66	124.27	128.60
3	A1	280	C	N3-C2-O2	-8.66	115.84	121.90
3	A1	812	G	C8-N9-C4	-8.66	102.94	106.40
3	A1	932	C	N3-C2-O2	-8.66	115.84	121.90
1	AP	68	U	C3'-C2'-C1'	-8.66	94.58	101.50
25	BB	819	A	C4-C5-C6	-8.66	112.67	117.00
25	BB	1681	G	O4'-C1'-N9	8.66	115.12	108.20
45	BV	35	ARG	NH1-CZ-NH2	-8.66	109.88	119.40
25	BB	1051	G	C4-C5-C6	-8.65	113.61	118.80
3	A1	352	C	O4'-C1'-N1	-8.65	101.28	108.20
3	A1	741	G	C5-C6-N1	8.65	115.83	111.50
3	A1	1362	A	C6-C5-N7	8.65	138.36	132.30
25	BB	323	C	N3-C4-C5	8.65	125.36	121.90
25	BB	467	G	C1'-O4'-C4'	-8.65	102.98	109.90
25	BB	919	U	N3-C2-O2	-8.65	116.14	122.20
25	BB	692	C	N3-C4-C5	8.65	125.36	121.90
3	A1	1169	A	N1-C6-N6	-8.65	113.41	118.60
3	A1	1171	A	N1-C6-N6	-8.65	113.41	118.60
3	A1	836	G	C8-N9-C4	-8.65	102.94	106.40
25	BB	124	G	N7-C8-N9	8.65	117.43	113.10
25	BB	685	A	C4-C5-C6	-8.65	112.67	117.00
25	BB	1377	G	O4'-C1'-N9	8.65	115.12	108.20
25	BB	1901	A	C5-C6-N6	8.65	130.62	123.70
3	A1	940	C	N3-C4-N4	-8.65	111.95	118.00
3	A1	1232	U	N3-C2-O2	-8.65	116.15	122.20
25	BB	640	C	N3-C2-O2	-8.65	115.85	121.90
25	BB	1290	C	N3-C4-N4	-8.65	111.95	118.00
25	BB	2579	C	N3-C4-C5	8.65	125.36	121.90
25	BB	2499	C	C5-C4-N4	-8.65	114.15	120.20
25	BB	2633	G	N1-C6-O6	-8.65	114.71	119.90
28	BE	132	ARG	CD-NE-CZ	8.65	135.71	123.60
3	A1	211	G	N3-C4-C5	-8.64	124.28	128.60
25	BB	940	G	N3-C4-N9	8.64	131.19	126.00
25	BB	1451	C	C5-C6-N1	-8.64	116.68	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	BG	22	ARG	NE-CZ-NH1	8.64	124.62	120.30
1	AE	1	G	N3-C4-C5	-8.64	124.28	128.60
3	A1	759	A	C6-C5-N7	8.64	138.35	132.30
3	A1	1166	G	N3-C2-N2	-8.64	113.85	119.90
1	AE	24	G	C5'-C4'-O4'	8.64	119.47	109.10
3	A1	35	G	N3-C2-N2	-8.64	113.85	119.90
3	A1	220	G	C5-C6-N1	8.64	115.82	111.50
18	AS	64	GLU	OE1-CD-OE2	-8.64	112.93	123.30
24	BA	31	C	N3-C2-O2	-8.64	115.85	121.90
24	BA	37	C	C5-C4-N4	-8.64	114.15	120.20
25	BB	163	C	N3-C2-O2	-8.64	115.85	121.90
25	BB	2086	U	N3-C2-O2	-8.64	116.15	122.20
3	A1	440	C	O4'-C1'-N1	8.64	115.11	108.20
3	A1	1266	G	C2-N3-C4	-8.64	107.58	111.90
25	BB	2682	A	C4-C5-C6	-8.64	112.68	117.00
3	A1	166	U	C5'-C4'-C3'	-8.64	102.18	116.00
3	A1	238	A	C3'-C2'-C1'	8.64	108.41	101.50
24	BA	3	C	N3-C4-C5	8.64	125.36	121.90
25	BB	710	U	O4'-C1'-N1	8.64	115.11	108.20
25	BB	843	G	N1-C2-N3	8.64	129.08	123.90
1	AA	29	A	C4-C5-N7	-8.64	106.38	110.70
1	AP	27	C	N1-C2-N3	8.63	125.25	119.20
3	A1	743	A	C3'-C2'-C1'	8.63	108.41	101.50
25	BB	361	G	O4'-C1'-N9	8.64	115.11	108.20
1	AA	30	G	C5-C6-O6	8.63	133.78	128.60
1	AP	36	A	C4'-C3'-C2'	-8.63	93.97	102.60
1	AP	42	G	C8-N9-C4	-8.63	102.95	106.40
1	AP	73	A	N1-C6-N6	-8.63	113.42	118.60
3	A1	59	A	N7-C8-N9	8.63	118.12	113.80
3	A1	573	A	C4-C5-C6	-8.63	112.68	117.00
3	A1	311	C	C6-N1-C2	-8.63	116.85	120.30
13	AL	63	ASP	CB-CG-OD2	8.63	126.07	118.30
25	BB	2301	C	N1-C2-O2	8.63	124.08	118.90
25	BB	2621	G	N1-C6-O6	-8.63	114.72	119.90
3	A1	318	G	N1-C2-N2	-8.63	108.43	116.20
3	A1	455	G	C4-C5-C6	-8.63	113.62	118.80
25	BB	1690	A	C4-C5-C6	-8.63	112.68	117.00
3	A1	790	A	C5-C6-N1	8.63	122.02	117.70
3	A1	1100	C	N3-C4-N4	-8.63	111.96	118.00
3	A1	419	C	N3-C2-O2	-8.63	115.86	121.90
3	A1	488	C	N3-C2-O2	-8.63	115.86	121.90
25	BB	66	C	C6-N1-C2	-8.63	116.85	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	731	C	C2-N3-C4	-8.63	115.59	119.90
25	BB	1383	A	C2-N3-C4	8.63	114.91	110.60
25	BB	1945	G	C4-C5-C6	-8.63	113.62	118.80
25	BB	2241	A	C4-C5-C6	-8.63	112.69	117.00
25	BB	2712	C	N1-C2-O2	8.63	124.08	118.90
3	A1	332	G	N1-C6-O6	-8.62	114.72	119.90
3	A1	342	C	N3-C2-O2	-8.62	115.86	121.90
3	A1	379	C	C5-C6-N1	-8.62	116.69	121.00
3	A1	666	G	C5-C6-N1	8.63	115.81	111.50
3	A1	1519	A	C5-C6-N6	8.62	130.60	123.70
25	BB	64	A	O4'-C1'-N9	8.63	115.10	108.20
25	BB	1761	C	N3-C2-O2	-8.63	115.86	121.90
25	BB	2761	A	C1'-O4'-C4'	-8.62	103.00	109.90
3	A1	172	A	C4-C5-C6	-8.62	112.69	117.00
3	A1	420	U	C5-C6-N1	-8.62	118.39	122.70
3	A1	1023	U	N3-C2-O2	-8.62	116.17	122.20
25	BB	550	C	N1-C2-O2	8.62	124.07	118.90
25	BB	1241	A	N1-C6-N6	-8.62	113.43	118.60
25	BB	1637	A	C5-C6-N1	8.62	122.01	117.70
3	A1	1133	G	C5-C6-N1	8.62	115.81	111.50
25	BB	1501	G	N1-C6-O6	-8.62	114.73	119.90
25	BB	1590	A	C4-C5-C6	-8.62	112.69	117.00
3	A1	895	G	C4-C5-N7	-8.62	107.35	110.80
25	BB	936	A	C5-C6-N1	8.62	122.01	117.70
25	BB	2418	A	O4'-C1'-N9	8.62	115.09	108.20
25	BB	428	A	C5-C6-N1	8.62	122.01	117.70
25	BB	751	A	N1-C6-N6	-8.62	113.43	118.60
25	BB	1323	C	O4'-C1'-N1	8.62	115.09	108.20
25	BB	2557	G	N1-C2-N3	8.62	129.07	123.90
25	BB	2566	A	C5-C6-N1	8.62	122.01	117.70
25	BB	2899	A	C5-C6-N1	8.62	122.01	117.70
3	A1	122	G	O4'-C4'-C3'	8.62	112.99	106.10
3	A1	454	G	C5-C6-O6	8.62	133.77	128.60
3	A1	889	A	C4-C5-C6	-8.61	112.69	117.00
3	A1	1239	A	C2-N3-C4	8.62	114.91	110.60
25	BB	208	C	C3'-C2'-C1'	8.62	108.39	101.50
25	BB	1281	G	C3'-C2'-C1'	8.62	108.39	101.50
3	A1	59	A	N9-C4-C5	8.61	109.25	105.80
24	BA	56	G	C3'-C2'-C1'	8.61	108.39	101.50
25	BB	847	U	O4'-C1'-N1	8.61	115.09	108.20
25	BB	1908	C	C2-N3-C4	-8.61	115.59	119.90
3	A1	428	G	N3-C2-N2	-8.61	113.87	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2090	A	N1-C2-N3	-8.61	124.99	129.30
25	BB	2537	U	N3-C2-O2	-8.61	116.17	122.20
25	BB	2604	U	N1-C2-N3	8.61	120.07	114.90
3	A1	20	U	N3-C2-O2	-8.61	116.17	122.20
3	A1	403	C	N3-C2-O2	-8.61	115.87	121.90
3	A1	476	U	C5-C6-N1	-8.61	118.40	122.70
3	A1	629	A	C4-C5-C6	-8.61	112.70	117.00
25	BB	475	C	C6-N1-C2	-8.61	116.86	120.30
25	BB	539	G	C4-C5-N7	8.61	114.24	110.80
3	A1	1509	C	N3-C4-N4	-8.61	111.97	118.00
3	A1	295	C	O4'-C1'-N1	8.61	115.08	108.20
3	A1	80	A	C4-C5-C6	-8.61	112.70	117.00
3	A1	580	C	N3-C2-O2	-8.61	115.88	121.90
3	A1	1112	C	C2-N3-C4	-8.61	115.60	119.90
3	A1	1269	A	N1-C6-N6	-8.61	113.44	118.60
3	A1	1383	C	N1-C2-O2	8.61	124.06	118.90
3	A1	651	C	C2-N3-C4	-8.60	115.60	119.90
3	A1	1316	G	C4-C5-C6	-8.60	113.64	118.80
3	A1	1420	U	C5-C6-N1	-8.60	118.40	122.70
25	BB	592	A	C5-C6-N1	8.60	122.00	117.70
25	BB	1558	C	N3-C2-O2	-8.60	115.88	121.90
25	BB	1567	G	N1-C6-O6	-8.60	114.74	119.90
25	BB	2633	G	C5-C6-N1	8.60	115.80	111.50
1	AA	13	C	N3-C2-O2	-8.60	115.88	121.90
3	A1	528	C	N3-C4-C5	8.60	125.34	121.90
25	BB	723	C	C6-N1-C2	-8.60	116.86	120.30
25	BB	2125	G	C5-C6-N1	8.60	115.80	111.50
3	A1	265	G	C5-C6-N1	8.60	115.80	111.50
3	A1	332	G	N3-C2-N2	-8.60	113.88	119.90
3	A1	1349	A	C5-C6-N1	8.60	122.00	117.70
3	A1	1482	G	C1'-O4'-C4'	-8.60	103.02	109.90
25	BB	2824	C	N3-C4-C5	8.60	125.34	121.90
1	AE	13	C	N3-C4-C5	8.60	125.34	121.90
3	A1	367	U	N3-C2-O2	-8.60	116.18	122.20
25	BB	60	G	N1-C2-N2	-8.60	108.46	116.20
25	BB	227	A	C5-C6-N1	8.60	122.00	117.70
25	BB	1029	A	C1'-O4'-C4'	-8.60	103.02	109.90
25	BB	1680	U	P-O5'-C5'	8.60	134.66	120.90
25	BB	266	G	C5-C6-N1	8.59	115.80	111.50
25	BB	433	C	C2-N3-C4	-8.59	115.60	119.90
25	BB	1132	U	N3-C2-O2	-8.59	116.18	122.20
25	BB	412	A	C2-N3-C4	8.59	114.90	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	507	A	C5-C6-N1	8.59	122.00	117.70
25	BB	832	U	N3-C2-O2	-8.59	116.19	122.20
25	BB	1200	C	C1'-O4'-C4'	-8.59	103.03	109.90
25	BB	1803	A	C6-C5-N7	8.59	138.31	132.30
25	BB	2508	G	N3-C2-N2	-8.59	113.89	119.90
3	A1	1068	G	N3-C4-C5	-8.59	124.31	128.60
3	A1	1495	U	N3-C2-O2	-8.59	116.19	122.20
25	BB	2222	C	C2-N3-C4	-8.59	115.61	119.90
24	BA	73	A	C5'-C4'-C3'	-8.59	102.26	116.00
25	BB	3	U	N1-C2-N3	8.59	120.05	114.90
25	BB	1381	G	C5-C6-N1	8.59	115.80	111.50
25	BB	2482	A	C4-C5-C6	-8.59	112.70	117.00
3	A1	872	A	N1-C2-N3	-8.59	125.01	129.30
3	A1	1460	C	N3-C2-O2	-8.59	115.89	121.90
25	BB	106	C	N3-C2-O2	-8.59	115.89	121.90
25	BB	1326	U	N3-C4-O4	8.59	125.41	119.40
25	BB	2314	A	C4-C5-C6	-8.59	112.71	117.00
3	A1	1047	G	N1-C6-O6	-8.59	114.75	119.90
3	A1	1369	C	N1-C2-O2	8.59	124.05	118.90
25	BB	124	G	C5-N7-C8	-8.59	100.01	104.30
25	BB	1307	A	C4-C5-C6	-8.58	112.71	117.00
25	BB	2638	G	C6-C5-N7	8.58	135.55	130.40
25	BB	2538	C	C5-C4-N4	-8.58	114.19	120.20
3	A1	312	C	C2-N3-C4	-8.58	115.61	119.90
3	A1	993	G	C5-C6-O6	8.58	133.75	128.60
3	A1	998	C	C2-N3-C4	-8.58	115.61	119.90
3	A1	1017	U	C4-C5-C6	8.58	124.85	119.70
3	A1	1087	G	N9-C4-C5	8.58	108.83	105.40
3	A1	1289	A	C2-N3-C4	8.58	114.89	110.60
25	BB	996	A	C5'-C4'-O4'	8.58	119.40	109.10
25	BB	1555	G	C5-C6-N1	8.58	115.79	111.50
1	AA	37	G	N3-C4-C5	-8.58	124.31	128.60
24	BA	41	G	N3-C2-N2	-8.58	113.90	119.90
25	BB	153	U	C6-N1-C2	-8.58	115.85	121.00
3	A1	530	G	C6-C5-N7	8.58	135.55	130.40
25	BB	278	A	C8-N9-C4	-8.58	102.37	105.80
25	BB	968	C	N3-C2-O2	-8.58	115.90	121.90
1	AA	30	G	N1-C6-O6	-8.57	114.76	119.90
3	A1	105	G	N3-C4-C5	-8.57	124.31	128.60
3	A1	529	G	N3-C2-N2	-8.57	113.90	119.90
3	A1	583	A	C6-N1-C2	-8.57	113.45	118.60
25	BB	742	A	C5-C6-N1	8.57	121.99	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1870	C	N1-C2-O2	8.57	124.04	118.90
25	BB	2144	G	C5-C6-O6	8.57	133.74	128.60
25	BB	2558	C	N1-C2-N3	8.57	125.20	119.20
3	A1	597	G	N3-C2-N2	-8.57	113.90	119.90
25	BB	1051	G	O4'-C1'-N9	8.57	115.06	108.20
25	BB	1454	C	N3-C2-O2	-8.57	115.90	121.90
25	BB	2033	A	C5-C6-N1	8.57	121.99	117.70
1	AP	29	A	C1'-O4'-C4'	-8.57	103.05	109.90
25	BB	1106	G	N3-C2-N2	-8.57	113.90	119.90
25	BB	2669	G	C6-C5-N7	8.57	135.54	130.40
44	BU	20	TYR	CB-CG-CD2	-8.57	115.86	121.00
25	BB	1954	G	O4'-C1'-N9	8.57	115.06	108.20
3	A1	1117	A	C4-C5-C6	-8.57	112.72	117.00
3	A1	1497	G	N1-C6-O6	-8.57	114.76	119.90
25	BB	1088	A	C8-N9-C4	-8.57	102.37	105.80
25	BB	1108	U	C5-C6-N1	-8.57	118.42	122.70
25	BB	2008	C	N3-C4-N4	-8.57	112.00	118.00
1	AE	6	U	N3-C2-O2	-8.56	116.20	122.20
1	AE	61	C	N3-C2-O2	-8.56	115.91	121.90
3	A1	9	G	C5-C6-N1	8.56	115.78	111.50
3	A1	651	C	N3-C4-C5	8.56	125.33	121.90
3	A1	942	G	C6-C5-N7	8.56	135.54	130.40
25	BB	335	C	N1-C2-O2	8.56	124.04	118.90
25	BB	1567	G	N9-C4-C5	8.56	108.83	105.40
3	A1	1219	A	C6-C5-N7	8.56	138.29	132.30
24	BA	26	C	C1'-O4'-C4'	-8.56	103.05	109.90
25	BB	996	A	C5-C6-N1	8.56	121.98	117.70
3	A1	1206	G	N3-C4-N9	8.56	131.14	126.00
25	BB	237	C	N3-C4-N4	-8.56	112.01	118.00
25	BB	1547	C	N3-C4-C5	8.56	125.32	121.90
25	BB	1954	G	C6-N1-C2	-8.56	119.97	125.10
25	BB	1981	A	O4'-C1'-N9	8.56	115.05	108.20
25	BB	2092	U	C5'-C4'-C3'	-8.56	102.31	116.00
25	BB	2260	C	O4'-C1'-N1	8.56	115.05	108.20
25	BB	2654	A	O4'-C4'-C3'	8.56	112.95	106.10
25	BB	2705	A	C3'-C2'-C1'	8.56	108.35	101.50
25	BB	2458	G	C5-C6-N1	8.56	115.78	111.50
3	A1	316	C	C5-C6-N1	-8.56	116.72	121.00
3	A1	712	A	C4-C5-C6	-8.56	112.72	117.00
3	A1	327	A	C4-C5-C6	-8.55	112.72	117.00
24	BA	104	A	N1-C6-N6	-8.55	113.47	118.60
24	BA	117	G	C5-C6-N1	8.55	115.78	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	718	A	O4'-C1'-N9	8.55	115.04	108.20
25	BB	977	G	N9-C4-C5	8.55	108.82	105.40
25	BB	2183	A	C4-C5-C6	-8.55	112.72	117.00
25	BB	1923	U	N1-C2-N3	8.55	120.03	114.90
25	BB	2629	U	N3-C2-O2	-8.55	116.21	122.20
25	BB	474	G	N1-C6-O6	-8.55	114.77	119.90
25	BB	2598	A	C5-C6-N1	8.55	121.97	117.70
3	A1	1532	U	N3-C2-O2	-8.55	116.22	122.20
25	BB	2557	G	C6-N1-C2	-8.55	119.97	125.10
25	BB	207	A	O4'-C1'-N9	-8.55	101.36	108.20
25	BB	946	C	N3-C2-O2	-8.55	115.92	121.90
3	A1	963	G	C5'-C4'-O4'	8.54	119.35	109.10
25	BB	128	C	N3-C2-O2	-8.54	115.92	121.90
25	BB	233	A	C4-C5-C6	-8.54	112.73	117.00
25	BB	574	A	C5-C6-N1	8.54	121.97	117.70
25	BB	2766	A	C6-C5-N7	8.54	138.28	132.30
25	BB	407	G	N1-C6-O6	-8.54	114.78	119.90
25	BB	814	C	N3-C4-C5	8.54	125.32	121.90
25	BB	830	G	N3-C2-N2	-8.54	113.92	119.90
25	BB	841	G	N1-C6-O6	-8.54	114.78	119.90
25	BB	1001	A	C6-C5-N7	8.54	138.28	132.30
25	BB	1079	C	N3-C4-C5	8.54	125.32	121.90
25	BB	1100	C	C5-C6-N1	-8.54	116.73	121.00
25	BB	1481	U	C5-C6-N1	-8.54	118.43	122.70
25	BB	1494	A	C6-C5-N7	8.54	138.28	132.30
25	BB	1809	A	N1-C2-N3	-8.54	125.03	129.30
25	BB	2603	G	O4'-C1'-N9	8.54	115.03	108.20
1	AA	55	U	C5-C6-N1	-8.54	118.43	122.70
3	A1	446	G	C5'-C4'-O4'	8.54	119.35	109.10
25	BB	445	C	N3-C2-O2	-8.54	115.92	121.90
25	BB	1658	C	N3-C4-C5	8.54	125.32	121.90
3	A1	478	A	C8-N9-C4	8.54	109.22	105.80
25	BB	1410	G	N1-C2-N3	8.54	129.02	123.90
25	BB	2076	U	N3-C2-O2	-8.54	116.22	122.20
25	BB	1852	U	C4-C5-C6	8.54	124.82	119.70
3	A1	1092	A	N9-C4-C5	-8.54	102.39	105.80
25	BB	2459	A	C4-C5-C6	-8.54	112.73	117.00
24	BA	91	C	N3-C4-N4	-8.53	112.03	118.00
25	BB	602	A	C6-C5-N7	8.53	138.27	132.30
25	BB	2070	A	C4-C5-C6	-8.53	112.73	117.00
3	A1	1257	A	N1-C6-N6	-8.53	113.48	118.60
25	BB	1206	G	C1'-O4'-C4'	-8.53	103.07	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2228	G	O4'-C1'-N9	8.53	115.03	108.20
3	A1	623	C	C5-C4-N4	-8.53	114.23	120.20
3	A1	675	A	C4-C5-C6	-8.53	112.73	117.00
25	BB	1323	C	N3-C2-O2	-8.53	115.93	121.90
25	BB	2111	U	C5-C6-N1	-8.53	118.43	122.70
25	BB	1960	A	O3'-P-O5'	8.53	120.21	104.00
1	AE	72	C	N1-C2-O2	8.53	124.02	118.90
25	BB	1923	U	N3-C2-O2	-8.53	116.23	122.20
25	BB	23	G	O5'-P-OP1	-8.53	98.03	105.70
25	BB	623	C	N3-C4-N4	-8.53	112.03	118.00
25	BB	1557	C	N3-C2-O2	-8.53	115.93	121.90
25	BB	1603	A	C5-C6-N6	8.53	130.52	123.70
25	BB	2201	G	C6-C5-N7	8.53	135.52	130.40
25	BB	2884	U	N3-C2-O2	-8.53	116.23	122.20
3	A1	477	C	C4'-C3'-C2'	-8.52	94.08	102.60
25	BB	1158	C	C6-N1-C2	-8.52	116.89	120.30
24	BA	43	C	N3-C4-N4	-8.52	112.03	118.00
25	BB	623	C	N3-C4-C5	8.52	125.31	121.90
25	BB	1040	A	C4-C5-C6	-8.52	112.74	117.00
25	BB	1318	U	C5'-C4'-C3'	-8.52	102.37	116.00
25	BB	1509	A	C5-C6-N1	8.52	121.96	117.70
25	BB	1767	G	N1-C2-N2	-8.52	108.53	116.20
3	A1	192	A	C4-C5-C6	-8.52	112.74	117.00
3	A1	1203	C	C5-C4-N4	8.52	126.16	120.20
25	BB	1001	A	N9-C4-C5	8.52	109.21	105.80
25	BB	1908	C	C6-N1-C2	-8.52	116.89	120.30
25	BB	2468	A	C5-C6-N1	8.52	121.96	117.70
25	BB	903	C	C5'-C4'-O4'	8.52	119.32	109.10
3	A1	362	G	C5-C6-N1	8.52	115.76	111.50
3	A1	569	C	C2-N3-C4	-8.52	115.64	119.90
25	BB	238	C	C2-N3-C4	-8.52	115.64	119.90
25	BB	1243	C	N1-C2-O2	8.52	124.01	118.90
3	A1	845	A	C2-N3-C4	8.52	114.86	110.60
24	BA	79	G	C5-C6-N1	8.52	115.76	111.50
25	BB	264	C	C2-N3-C4	-8.52	115.64	119.90
25	BB	425	G	O4'-C1'-C2'	-8.52	97.28	105.80
25	BB	2154	A	C5-C6-N1	8.52	121.96	117.70
25	BB	15	G	N7-C8-N9	8.52	117.36	113.10
25	BB	988	A	C4-C5-C6	-8.52	112.74	117.00
3	A1	194	C	C5-C4-N4	-8.51	114.24	120.20
3	A1	423	G	C5-C6-O6	8.51	133.71	128.60
3	A1	958	A	C5-C6-N1	8.51	121.96	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1302	C	N1-C2-N3	8.51	125.16	119.20
3	A1	1303	C	N3-C4-C5	8.51	125.31	121.90
25	BB	540	C	O4'-C1'-N1	8.51	115.01	108.20
25	BB	1055	G	N1-C2-N3	8.51	129.01	123.90
25	BB	1957	C	C5-C4-N4	8.51	126.16	120.20
25	BB	2901	C	N3-C2-O2	-8.51	115.94	121.90
25	BB	1343	G	N3-C4-C5	-8.51	124.34	128.60
25	BB	1711	A	C5-C6-N6	8.51	130.51	123.70
25	BB	2799	A	C6-C5-N7	8.51	138.26	132.30
25	BB	2564	A	C5'-C4'-O4'	8.51	119.31	109.10
18	AS	53	ARG	NE-CZ-NH1	8.51	124.56	120.30
3	A1	679	C	C3'-C2'-C1'	8.51	108.31	101.50
25	BB	1031	G	N1-C6-O6	-8.51	114.79	119.90
25	BB	1376	C	N3-C4-C5	8.51	125.30	121.90
25	BB	2382	G	N1-C2-N3	8.51	129.01	123.90
3	A1	489	C	C4-C5-C6	8.51	121.65	117.40
3	A1	803	G	N1-C2-N3	8.51	129.00	123.90
3	A1	936	C	O4'-C1'-N1	8.51	115.01	108.20
3	A1	1178	G	C5-N7-C8	-8.51	100.05	104.30
3	A1	267	C	N3-C2-O2	-8.51	115.95	121.90
25	BB	74	A	C4-C5-C6	-8.51	112.75	117.00
25	BB	542	C	N3-C4-C5	8.51	125.30	121.90
25	BB	1589	U	C4'-C3'-C2'	-8.51	94.09	102.60
25	BB	1522	A	C4-C5-C6	-8.51	112.75	117.00
25	BB	1687	G	C3'-C2'-C1'	8.51	108.31	101.50
25	BB	1897	G	O4'-C1'-N9	-8.51	101.39	108.20
25	BB	2330	G	C5'-C4'-O4'	8.51	119.31	109.10
25	BB	2707	U	N1-C2-N3	8.51	120.00	114.90
25	BB	2810	A	C5-C6-N1	8.51	121.95	117.70
25	BB	2833	U	O4'-C4'-C3'	8.51	112.91	106.10
3	A1	1179	A	C6-C5-N7	8.50	138.25	132.30
3	A1	662	U	O4'-C1'-N1	8.50	115.00	108.20
3	A1	1128	C	N3-C4-N4	-8.50	112.05	118.00
25	BB	74	A	C5-C6-N1	8.50	121.95	117.70
25	BB	831	G	N1-C6-O6	-8.50	114.80	119.90
25	BB	1088	A	N9-C4-C5	8.50	109.20	105.80
25	BB	1445	G	N7-C8-N9	8.50	117.35	113.10
25	BB	1871	A	C2-N3-C4	8.50	114.85	110.60
25	BB	2516	A	O4'-C4'-C3'	8.50	112.90	106.10
3	A1	645	G	C6-C5-N7	8.50	135.50	130.40
3	A1	1187	G	N7-C8-N9	8.50	117.35	113.10
25	BB	1257	C	C2-N3-C4	-8.50	115.65	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	28	C	O4'-C1'-N1	8.50	115.00	108.20
3	A1	107	G	C5-C6-O6	8.50	133.70	128.60
25	BB	1090	A	C4-C5-C6	-8.50	112.75	117.00
3	A1	78	A	C4-C5-C6	-8.50	112.75	117.00
3	A1	196	A	C5-C6-N1	8.50	121.95	117.70
3	A1	457	G	C5-C6-O6	8.50	133.70	128.60
25	BB	866	A	C5-N7-C8	-8.50	99.65	103.90
25	BB	1222	U	C1'-O4'-C4'	-8.50	103.10	109.90
25	BB	2260	C	N3-C4-C5	8.50	125.30	121.90
25	BB	2365	G	C4-C5-N7	-8.50	107.40	110.80
25	BB	1430	G	N9-C4-C5	8.49	108.80	105.40
25	BB	242	G	N3-C2-N2	-8.49	113.95	119.90
25	BB	605	G	C5-C6-N1	8.49	115.75	111.50
25	BB	641	U	O4'-C1'-N1	8.49	115.00	108.20
25	BB	776	G	N3-C4-N9	8.49	131.10	126.00
25	BB	1146	C	N3-C4-C5	8.49	125.30	121.90
25	BB	1732	C	N3-C4-C5	8.49	125.30	121.90
25	BB	2141	G	O4'-C1'-N9	8.49	115.00	108.20
1	AP	48	C	N3-C4-N4	-8.49	112.06	118.00
1	AA	50	U	C3'-C2'-C1'	8.49	108.29	101.50
2	AM	4	U	O4'-C1'-N1	8.49	114.99	108.20
3	A1	68	G	N1-C6-O6	-8.49	114.81	119.90
3	A1	446	G	N1-C6-O6	-8.49	114.81	119.90
3	A1	1122	U	N1-C2-N3	8.49	119.99	114.90
8	AG	74	ARG	NH1-CZ-NH2	-8.49	110.06	119.40
25	BB	1129	A	N9-C4-C5	8.49	109.20	105.80
25	BB	1989	G	C5-C6-N1	8.49	115.75	111.50
25	BB	2846	G	C6-N1-C2	-8.49	120.00	125.10
25	BB	2158	A	C1'-O4'-C4'	-8.49	103.11	109.90
25	BB	1127	A	C4-C5-C6	-8.49	112.76	117.00
1	AE	44	A	C4-C5-C6	-8.49	112.76	117.00
3	A1	53	A	C4-C5-C6	-8.49	112.76	117.00
3	A1	118	U	N3-C2-O2	-8.49	116.26	122.20
3	A1	285	C	N3-C4-N4	-8.49	112.06	118.00
25	BB	839	U	C4-C5-C6	8.49	124.79	119.70
25	BB	219	A	C5-C6-N6	8.49	130.49	123.70
25	BB	546	U	C5'-C4'-O4'	8.49	119.28	109.10
25	BB	549	G	C8-N9-C4	-8.49	103.00	106.40
25	BB	723	C	N3-C2-O2	-8.49	115.96	121.90
25	BB	1367	A	C2-N3-C4	8.49	114.84	110.60
3	A1	874	G	N1-C6-O6	-8.48	114.81	119.90
3	A1	1303	C	O4'-C1'-N1	8.48	114.99	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	734	G	N3-C4-C5	-8.48	124.36	128.60
25	BB	2367	G	N3-C4-C5	-8.48	124.36	128.60
3	A1	315	A	C1'-O4'-C4'	-8.48	103.12	109.90
25	BB	1642	G	N7-C8-N9	8.48	117.34	113.10
25	BB	2709	G	N3-C4-C5	-8.48	124.36	128.60
3	A1	966	G	N3-C2-N2	-8.48	113.96	119.90
25	BB	1560	G	C5-C6-N1	8.48	115.74	111.50
25	BB	1588	G	N3-C2-N2	-8.48	113.96	119.90
25	BB	2291	U	C1'-O4'-C4'	-8.48	103.12	109.90
1	AA	58	A	C4-C5-C6	-8.48	112.76	117.00
3	A1	207	C	O4'-C1'-N1	8.48	114.98	108.20
3	A1	529	G	N3-C4-C5	-8.48	124.36	128.60
3	A1	997	U	O4'-C1'-N1	-8.48	101.42	108.20
25	BB	1391	U	N3-C2-O2	-8.48	116.27	122.20
25	BB	1694	C	N3-C2-O2	-8.48	115.97	121.90
3	A1	458	U	C5-C6-N1	-8.47	118.46	122.70
3	A1	1004	A	C2-N3-C4	8.47	114.84	110.60
3	A1	1444	U	C5-C6-N1	-8.47	118.46	122.70
25	BB	431	U	C4-C5-C6	8.47	124.78	119.70
25	BB	1249	U	C5-C6-N1	-8.47	118.46	122.70
25	BB	1499	C	C6-N1-C2	-8.47	116.91	120.30
25	BB	2322	A	C3'-C2'-C1'	-8.47	94.72	101.50
25	BB	2346	A	C5'-C4'-O4'	8.47	119.27	109.10
25	BB	655	A	C5-C6-N6	8.47	130.48	123.70
3	A1	1505	G	N9-C4-C5	8.47	108.79	105.40
24	BA	11	C	N3-C4-N4	-8.47	112.07	118.00
25	BB	523	C	N1-C2-O2	8.47	123.98	118.90
25	BB	2476	A	C4-C5-C6	-8.47	112.77	117.00
25	BB	2641	G	C8-N9-C4	-8.47	103.01	106.40
25	BB	2642	G	N1-C6-O6	-8.47	114.82	119.90
1	AE	10	G	C5-C6-N1	8.47	115.73	111.50
3	A1	435	A	C4-C5-C6	-8.47	112.77	117.00
25	BB	521	U	C2-N3-C4	-8.47	121.92	127.00
25	BB	994	C	N1-C2-O2	8.47	123.98	118.90
25	BB	1052	C	C6-N1-C2	-8.47	116.91	120.30
25	BB	1375	U	C5-C6-N1	-8.47	118.47	122.70
1	AA	33	U	O4'-C1'-N1	8.46	114.97	108.20
3	A1	1064	G	C6-C5-N7	8.47	135.48	130.40
3	A1	529	G	C6-C5-N7	8.46	135.48	130.40
4	AB	94	ARG	NE-CZ-NH1	8.46	124.53	120.30
25	BB	219	A	C6-C5-N7	8.46	138.22	132.30
25	BB	1445	G	C2-N3-C4	-8.46	107.67	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1680	U	O4'-C1'-C2'	-8.46	97.33	105.80
3	A1	35	G	C5-C6-N1	8.46	115.73	111.50
3	A1	53	A	N1-C2-N3	-8.46	125.07	129.30
3	A1	127	G	C6-N1-C2	-8.46	120.02	125.10
3	A1	538	G	C5-N7-C8	-8.46	100.07	104.30
25	BB	1041	G	N1-C6-O6	-8.46	114.82	119.90
25	BB	1889	A	N1-C2-N3	-8.46	125.07	129.30
25	BB	2082	A	C5-C6-N1	8.46	121.93	117.70
1	AP	42	G	N3-C4-C5	-8.46	124.37	128.60
3	A1	201	G	C5-C6-N1	8.46	115.73	111.50
25	BB	1705	A	C5-C6-N1	8.46	121.93	117.70
25	BB	2168	G	C4-C5-N7	8.46	114.19	110.80
3	A1	436	C	C2-N3-C4	-8.46	115.67	119.90
25	BB	1045	C	N1-C2-N3	8.46	125.12	119.20
25	BB	1357	C	C5-C6-N1	-8.46	116.77	121.00
25	BB	1752	C	C4'-C3'-C2'	-8.46	94.14	102.60
25	BB	2261	C	N3-C2-O2	-8.46	115.98	121.90
25	BB	2611	C	C6-N1-C2	-8.46	116.92	120.30
3	A1	229	U	N3-C2-O2	-8.46	116.28	122.20
3	A1	642	A	C5-C6-N1	8.46	121.93	117.70
3	A1	1262	C	C2-N3-C4	-8.46	115.67	119.90
3	A1	1380	U	C6-N1-C2	-8.46	115.92	121.00
25	BB	21	A	C5-C6-N1	8.46	121.93	117.70
25	BB	218	A	C5-C6-N1	8.46	121.93	117.70
25	BB	319	G	C6-N1-C2	-8.46	120.03	125.10
25	BB	325	G	N3-C4-N9	8.46	131.07	126.00
25	BB	2582	G	N1-C6-O6	-8.46	114.83	119.90
30	BG	86	ARG	NH1-CZ-NH2	-8.46	110.10	119.40
1	AP	44	A	C6-C5-N7	8.46	138.22	132.30
3	A1	842	U	N3-C4-O4	-8.46	113.48	119.40
3	A1	1058	G	C5-C6-N1	8.46	115.73	111.50
3	A1	1242	G	N1-C2-N3	8.46	128.97	123.90
3	A1	248	C	O4'-C1'-N1	8.45	114.96	108.20
3	A1	297	G	C4-C5-N7	8.45	114.18	110.80
3	A1	602	A	C4-C5-C6	-8.46	112.77	117.00
3	A1	971	G	N1-C6-O6	-8.46	114.83	119.90
25	BB	1154	G	N1-C6-O6	-8.46	114.83	119.90
25	BB	2618	G	N1-C6-O6	-8.45	114.83	119.90
3	A1	81	A	C2-N3-C4	8.45	114.83	110.60
3	A1	149	A	C5-C6-N1	8.45	121.93	117.70
3	A1	727	G	C8-N9-C4	-8.45	103.02	106.40
3	A1	958	A	C4-C5-C6	-8.45	112.77	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1141	C	N1-C2-N3	8.45	125.12	119.20
24	BA	14	U	N3-C2-O2	-8.45	116.28	122.20
25	BB	2594	C	C4-C5-C6	8.45	121.63	117.40
3	A1	879	C	O4'-C1'-N1	8.45	114.96	108.20
3	A1	1102	A	C4-C5-C6	-8.45	112.78	117.00
3	A1	1461	G	C5-N7-C8	-8.45	100.08	104.30
25	BB	678	C	C3'-C2'-C1'	8.45	108.26	101.50
25	BB	334	C	N3-C2-O2	-8.45	115.99	121.90
25	BB	521	U	N1-C2-N3	8.45	119.97	114.90
25	BB	625	G	N1-C6-O6	-8.45	114.83	119.90
25	BB	1069	A	N1-C2-N3	-8.45	125.08	129.30
25	BB	1156	A	C2-N3-C4	8.45	114.82	110.60
25	BB	1973	G	C5-C6-N1	8.45	115.72	111.50
25	BB	2072	C	O4'-C1'-N1	8.45	114.96	108.20
25	BB	2242	G	C5-N7-C8	-8.45	100.08	104.30
1	AE	31	A	C4-C5-C6	-8.45	112.78	117.00
25	BB	2424	C	C1'-O4'-C4'	-8.45	103.14	109.90
25	BB	2801	G	C6-C5-N7	8.45	135.47	130.40
25	BB	97	C	N3-C2-O2	-8.44	115.99	121.90
25	BB	1484	U	C5-C6-N1	-8.45	118.48	122.70
29	BF	75	GLU	OE1-CD-OE2	-8.45	113.16	123.30
3	A1	196	A	C4-C5-C6	-8.44	112.78	117.00
3	A1	910	C	C2-N3-C4	-8.44	115.68	119.90
1	AE	54	U	N3-C2-O2	-8.44	116.29	122.20
3	A1	776	G	N7-C8-N9	8.44	117.32	113.10
25	BB	274	C	N3-C4-N4	-8.44	112.09	118.00
25	BB	278	A	C5-C6-N1	8.44	121.92	117.70
3	A1	410	G	C8-N9-C4	-8.44	103.02	106.40
25	BB	370	G	N3-C4-C5	-8.44	124.38	128.60
25	BB	865	C	N3-C2-O2	-8.44	115.99	121.90
25	BB	1844	C	O4'-C1'-N1	8.44	114.95	108.20
25	BB	2437	G	C5-C6-N1	8.44	115.72	111.50
25	BB	2599	G	C6-N1-C2	-8.44	120.04	125.10
25	BB	2606	C	C2-N3-C4	-8.44	115.68	119.90
25	BB	2856	A	N9-C4-C5	-8.44	102.42	105.80
3	A1	895	G	N3-C2-N2	-8.44	113.99	119.90
25	BB	218	A	P-O3'-C3'	8.44	129.82	119.70
25	BB	353	C	N3-C4-N4	-8.44	112.09	118.00
37	BN	257	ARG	NE-CZ-NH1	8.44	124.52	120.30
3	A1	1154	G	N3-C2-N2	-8.44	114.00	119.90
25	BB	249	C	N1-C2-O2	8.44	123.96	118.90
25	BB	1783	A	C4-C5-C6	-8.44	112.78	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2581	G	N1-C6-O6	-8.44	114.84	119.90
31	BH	55	GLU	OE1-CD-OE2	-8.44	113.18	123.30
25	BB	899	A	C6-C5-N7	8.43	138.20	132.30
3	A1	253	A	N1-C6-N6	-8.43	113.54	118.60
3	A1	779	C	C2-N3-C4	-8.43	115.68	119.90
25	BB	1926	U	C1'-O4'-C4'	-8.43	103.15	109.90
25	BB	2828	G	O4'-C1'-N9	8.43	114.95	108.20
3	A1	746	A	N1-C6-N6	-8.43	113.54	118.60
3	A1	542	G	O4'-C1'-N9	8.43	114.94	108.20
3	A1	713	G	C5-C6-O6	8.43	133.66	128.60
25	BB	1334	G	O4'-C1'-N9	8.43	114.94	108.20
24	BA	41	G	N1-C6-O6	-8.43	114.84	119.90
25	BB	31	C	N3-C4-N4	-8.43	112.10	118.00
3	A1	205	A	C8-N9-C4	-8.43	102.43	105.80
3	A1	1035	A	O4'-C1'-N9	8.43	114.94	108.20
25	BB	21	A	N1-C2-N3	8.43	133.51	129.30
25	BB	899	A	C1'-O4'-C4'	-8.43	103.16	109.90
25	BB	1096	A	C4'-C3'-C2'	-8.43	94.17	102.60
25	BB	1715	G	C4'-C3'-C2'	-8.43	94.17	102.60
3	A1	526	C	N1-C2-N3	8.43	125.10	119.20
3	A1	1049	U	P-O3'-C3'	8.43	129.81	119.70
25	BB	175	G	N1-C2-N2	-8.43	108.62	116.20
25	BB	980	A	C2-N3-C4	8.43	114.81	110.60
25	BB	2373	G	C8-N9-C4	-8.43	103.03	106.40
25	BB	2019	A	C4-C5-C6	-8.43	112.79	117.00
25	BB	2441	U	O4'-C1'-N1	8.43	114.94	108.20
25	BB	2852	G	N1-C6-O6	-8.43	114.84	119.90
25	BB	1394	U	N3-C2-O2	-8.42	116.30	122.20
25	BB	1490	A	N1-C2-N3	-8.42	125.09	129.30
3	A1	503	C	C2-N3-C4	-8.42	115.69	119.90
3	A1	934	C	N1-C2-O2	8.42	123.95	118.90
3	A1	976	G	O4'-C1'-N9	8.42	114.94	108.20
3	A1	1169	A	C5'-C4'-C3'	-8.42	102.52	116.00
25	BB	168	G	N3-C2-N2	-8.42	114.00	119.90
25	BB	666	A	C4-C5-C6	-8.42	112.79	117.00
25	BB	1551	A	N1-C2-N3	-8.42	125.09	129.30
25	BB	2558	C	C5-C4-N4	8.42	126.09	120.20
1	AP	48	C	C2-N3-C4	-8.42	115.69	119.90
1	AE	10	G	N3-C4-C5	-8.42	124.39	128.60
25	BB	1345	C	N3-C2-O2	-8.42	116.00	121.90
25	BB	1386	C	C5-C6-N1	-8.42	116.79	121.00
25	BB	2280	G	C4-C5-N7	-8.42	107.43	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	764	C	N3-C4-C5	8.42	125.27	121.90
25	BB	1440	U	C2-N3-C4	-8.42	121.95	127.00
25	BB	2168	G	N3-C4-N9	8.42	131.05	126.00
25	BB	2538	C	O4'-C1'-C2'	-8.42	97.38	105.80
25	BB	2629	U	O4'-C4'-C3'	8.42	112.83	106.10
25	BB	2654	A	C3'-C2'-C1'	8.42	108.23	101.50
3	A1	833	G	O4'-C4'-C3'	8.42	112.83	106.10
25	BB	7	G	N1-C6-O6	-8.42	114.85	119.90
25	BB	1938	A	C5-C6-N6	8.42	130.43	123.70
25	BB	2309	A	C4-C5-C6	-8.42	112.79	117.00
25	BB	1550	C	N3-C4-N4	-8.42	112.11	118.00
1	AA	6	U	C2-N3-C4	-8.41	121.95	127.00
3	A1	109	A	O4'-C1'-N9	8.41	114.93	108.20
25	BB	311	A	C5'-C4'-O4'	8.41	119.20	109.10
25	BB	2323	G	O4'-C1'-N9	8.41	114.93	108.20
25	BB	2523	G	N1-C6-O6	-8.41	114.85	119.90
3	A1	163	C	C2-N3-C4	-8.41	115.69	119.90
3	A1	1182	G	C6-N1-C2	-8.41	120.05	125.10
25	BB	613	A	C5-C6-N1	8.41	121.91	117.70
25	BB	718	A	N7-C8-N9	8.41	118.01	113.80
25	BB	1070	A	O4'-C1'-N9	8.41	114.93	108.20
3	A1	1425	U	N3-C2-O2	-8.41	116.31	122.20
25	BB	901	C	C2-N3-C4	-8.41	115.69	119.90
3	A1	737	C	N3-C4-N4	-8.41	112.11	118.00
3	A1	1109	C	N3-C4-C5	8.41	125.26	121.90
25	BB	978	G	C5-C6-N1	8.41	115.70	111.50
2	AM	3	U	N3-C2-O2	-8.41	116.31	122.20
3	A1	328	C	O4'-C1'-N1	8.41	114.93	108.20
3	A1	218	U	N3-C2-O2	-8.41	116.32	122.20
3	A1	1432	G	P-O3'-C3'	8.41	129.79	119.70
25	BB	127	A	O4'-C1'-N9	8.41	114.93	108.20
25	BB	589	U	O4'-C1'-N1	-8.41	101.47	108.20
25	BB	975	A	C5-C6-N1	8.41	121.90	117.70
25	BB	1157	G	N3-C4-C5	-8.41	124.40	128.60
25	BB	1505	A	O5'-P-OP2	-8.41	98.14	105.70
25	BB	1852	U	C3'-C2'-C1'	-8.41	94.77	101.50
25	BB	2691	C	N1-C2-O2	8.41	123.94	118.90
1	AA	5	A	C4-C5-N7	8.40	114.90	110.70
1	AP	18	G	N3-C4-N9	8.40	131.04	126.00
3	A1	780	A	N1-C2-N3	-8.40	125.10	129.30
3	A1	1206	G	N9-C4-C5	-8.40	102.04	105.40
3	A1	1489	G	O4'-C4'-C3'	8.40	112.82	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	154	U	N1-C2-N3	8.40	119.94	114.90
25	BB	1527	G	C6-C5-N7	8.40	135.44	130.40
25	BB	2092	U	N3-C4-C5	8.40	119.64	114.60
25	BB	2518	A	C5-C6-N1	8.40	121.90	117.70
25	BB	2556	C	C4'-C3'-C2'	-8.40	94.20	102.60
3	A1	426	U	O4'-C1'-N1	8.40	114.92	108.20
3	A1	523	A	O4'-C4'-C3'	8.40	112.82	106.10
3	A1	586	C	N1-C2-O2	8.40	123.94	118.90
3	A1	60	A	O4'-C1'-C2'	-8.40	97.40	105.80
3	A1	678	U	N1-C2-N3	8.40	119.94	114.90
3	A1	920	U	N3-C2-O2	-8.40	116.32	122.20
6	AD	24	GLU	OE1-CD-OE2	-8.40	113.22	123.30
25	BB	10	A	C3'-C2'-C1'	8.40	108.22	101.50
25	BB	148	U	C1'-O4'-C4'	8.40	116.62	109.90
25	BB	172	A	C8-N9-C4	-8.40	102.44	105.80
25	BB	933	A	O4'-C1'-N9	-8.40	101.48	108.20
25	BB	1074	G	O4'-C1'-N9	8.40	114.92	108.20
25	BB	1660	G	N1-C6-O6	-8.40	114.86	119.90
25	BB	2306	C	O4'-C1'-N1	8.40	114.92	108.20
25	BB	2338	C	N3-C2-O2	-8.40	116.02	121.90
1	AA	29	A	N9-C4-C5	8.40	109.16	105.80
3	A1	162	A	N1-C2-N3	-8.40	125.10	129.30
3	A1	493	A	C4-C5-C6	-8.40	112.80	117.00
3	A1	731	G	C8-N9-C4	-8.40	103.04	106.40
25	BB	145	C	C2-N3-C4	-8.40	115.70	119.90
25	BB	971	G	C5-C6-N1	8.40	115.70	111.50
25	BB	2631	G	O4'-C4'-C3'	8.40	112.82	106.10
1	AA	74	C	C4'-C3'-C2'	-8.40	94.20	102.60
3	A1	599	C	N3-C2-O2	-8.40	116.02	121.90
3	A1	1092	A	C4-C5-C6	-8.40	112.80	117.00
25	BB	1724	G	C4-C5-N7	-8.40	107.44	110.80
25	BB	2066	C	N3-C4-N4	-8.40	112.12	118.00
1	AP	24	G	N3-C2-N2	-8.39	114.02	119.90
3	A1	942	G	C5-C6-N1	8.39	115.70	111.50
25	BB	1042	G	N1-C6-O6	-8.39	114.86	119.90
25	BB	1606	C	N3-C4-N4	-8.39	112.12	118.00
25	BB	2733	A	C4-C5-C6	-8.39	112.80	117.00
3	A1	517	G	N1-C2-N2	8.39	123.75	116.20
25	BB	1527	G	C6-N1-C2	-8.39	120.06	125.10
25	BB	2222	C	C3'-C2'-C1'	8.39	108.22	101.50
25	BB	2592	G	N3-C4-N9	8.39	131.04	126.00
25	BB	2820	A	C5-C6-N1	8.39	121.90	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AO	178	ARG	NE-CZ-NH2	-8.39	116.10	120.30
25	BB	1350	C	N3-C4-N4	-8.39	112.13	118.00
3	A1	342	C	C2-N3-C4	-8.39	115.70	119.90
3	A1	1487	G	C5-C6-O6	8.39	133.63	128.60
25	BB	360	U	O4'-C1'-N1	8.39	114.91	108.20
25	BB	2030	A	C5-C6-N1	8.39	121.90	117.70
25	BB	2843	G	N3-C4-C5	-8.39	124.40	128.60
1	AA	10	G	C5-C6-N1	8.39	115.69	111.50
1	AA	33	U	N3-C2-O2	-8.39	116.33	122.20
3	A1	252	U	O4'-C1'-N1	8.39	114.91	108.20
3	A1	539	A	C4-C5-C6	-8.39	112.81	117.00
3	A1	600	A	C3'-C2'-C1'	8.39	108.21	101.50
25	BB	482	A	C5-C6-N6	8.39	130.41	123.70
25	BB	1805	A	C2-N3-C4	8.39	114.80	110.60
25	BB	1213	A	C6-C5-N7	8.39	138.17	132.30
25	BB	1769	U	O4'-C1'-N1	8.39	114.91	108.20
25	BB	2893	A	N7-C8-N9	-8.39	109.61	113.80
3	A1	60	A	N1-C6-N6	-8.38	113.57	118.60
3	A1	733	G	N1-C6-O6	-8.39	114.87	119.90
3	A1	879	C	C6-N1-C2	-8.38	116.95	120.30
3	A1	1156	G	C5-N7-C8	-8.39	100.11	104.30
3	A1	1461	G	N1-C6-O6	-8.39	114.87	119.90
25	BB	2769	U	O4'-C1'-N1	8.39	114.91	108.20
3	A1	1438	G	C6-C5-N7	8.38	135.43	130.40
25	BB	26	G	N3-C4-C5	-8.38	124.41	128.60
25	BB	1060	U	C2-N3-C4	-8.38	121.97	127.00
3	A1	972	C	C3'-C2'-C1'	8.38	108.20	101.50
3	A1	1178	G	C5-C6-N1	8.38	115.69	111.50
25	BB	832	U	O4'-C1'-N1	8.38	114.91	108.20
25	BB	1056	G	C5-N7-C8	-8.38	100.11	104.30
25	BB	1598	A	C4-C5-C6	-8.38	112.81	117.00
1	AP	48	C	C5'-C4'-C3'	-8.38	102.59	116.00
3	A1	50	A	C6-N1-C2	-8.38	113.57	118.60
25	BB	759	G	N1-C2-N2	-8.38	108.66	116.20
25	BB	1232	G	C8-N9-C4	-8.38	103.05	106.40
25	BB	1378	A	N1-C2-N3	-8.38	125.11	129.30
3	A1	223	A	C4-C5-C6	-8.38	112.81	117.00
3	A1	344	A	N9-C4-C5	8.38	109.15	105.80
3	A1	293	G	C5-C6-N1	8.38	115.69	111.50
3	A1	1410	A	C6-C5-N7	8.38	138.16	132.30
25	BB	82	U	C5-C6-N1	-8.38	118.51	122.70
25	BB	601	C	O4'-C1'-N1	8.38	114.90	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1161	C	N3-C2-O2	-8.38	116.04	121.90
25	BB	1196	C	C5'-C4'-C3'	-8.38	102.59	116.00
25	BB	2562	U	C5-C6-N1	-8.38	118.51	122.70
25	BB	2616	C	N3-C2-O2	-8.38	116.03	121.90
25	BB	6	A	C4-C5-C6	-8.38	112.81	117.00
25	BB	316	C	N1-C2-O2	8.38	123.93	118.90
25	BB	2012	G	O4'-C1'-N9	8.38	114.90	108.20
25	BB	1289	C	N1-C2-N3	8.37	125.06	119.20
2	AM	16	U	O4'-C1'-N1	8.37	114.90	108.20
3	A1	255	G	C8-N9-C4	-8.37	103.05	106.40
3	A1	354	G	N1-C6-O6	-8.37	114.88	119.90
3	A1	773	G	N3-C4-C5	-8.37	124.41	128.60
3	A1	1329	A	C5-C6-N1	8.37	121.89	117.70
3	A1	1344	C	N3-C4-N4	-8.37	112.14	118.00
24	BA	17	C	N3-C2-O2	-8.37	116.04	121.90
24	BA	96	G	C5'-C4'-C3'	-8.37	102.61	116.00
25	BB	345	A	C4-C5-C6	-8.37	112.81	117.00
25	BB	1285	A	C4-C5-C6	-8.37	112.81	117.00
25	BB	1981	A	C4-C5-C6	-8.37	112.81	117.00
25	BB	2815	C	N3-C2-O2	-8.37	116.04	121.90
1	AA	45	G	O4'-C1'-N9	8.37	114.90	108.20
3	A1	432	A	N1-C2-N3	-8.37	125.11	129.30
3	A1	779	C	N1-C2-O2	8.37	123.92	118.90
25	BB	340	A	C4-C5-C6	-8.37	112.81	117.00
25	BB	1635	A	C4-C5-C6	-8.37	112.81	117.00
25	BB	351	C	N3-C4-C5	8.37	125.25	121.90
25	BB	623	C	C2-N3-C4	-8.37	115.72	119.90
25	BB	1150	C	C5-C6-N1	-8.37	116.81	121.00
25	BB	2171	A	O4'-C4'-C3'	8.37	112.80	106.10
25	BB	1864	U	C5-C6-N1	-8.37	118.52	122.70
25	BB	1876	A	C1'-O4'-C4'	-8.37	103.21	109.90
3	A1	1015	G	C6-N1-C2	-8.37	120.08	125.10
3	A1	1352	C	N3-C4-N4	-8.37	112.14	118.00
25	BB	307	G	C6-C5-N7	8.37	135.42	130.40
25	BB	624	C	N3-C2-O2	-8.37	116.04	121.90
25	BB	2531	A	C8-N9-C4	-8.37	102.45	105.80
3	A1	1452	C	N3-C2-O2	-8.36	116.05	121.90
25	BB	203	A	C5-C6-N1	8.36	121.88	117.70
25	BB	467	G	N1-C6-O6	-8.36	114.88	119.90
25	BB	2137	U	O4'-C1'-N1	8.36	114.89	108.20
51	B2	101	ARG	NE-CZ-NH1	8.36	124.48	120.30
1	AA	73	A	N1-C6-N6	-8.36	113.58	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	118	U	N3-C4-O4	-8.36	113.55	119.40
25	BB	293	U	N3-C2-O2	-8.36	116.35	122.20
25	BB	461	C	N1-C2-O2	8.36	123.92	118.90
25	BB	819	A	C5-C6-N1	8.36	121.88	117.70
25	BB	2251	G	C1'-O4'-C4'	-8.36	103.21	109.90
42	BS	63	ARG	NH1-CZ-NH2	-8.36	110.20	119.40
3	A1	165	G	N1-C6-O6	-8.36	114.88	119.90
3	A1	218	U	N3-C4-O4	-8.36	113.55	119.40
3	A1	398	U	C5-C6-N1	-8.36	118.52	122.70
25	BB	881	G	O4'-C1'-N9	-8.36	101.51	108.20
25	BB	1103	A	C4-C5-C6	-8.36	112.82	117.00
25	BB	2248	C	N3-C4-C5	8.36	125.24	121.90
25	BB	2785	C	N3-C2-O2	-8.36	116.05	121.90
3	A1	1203	C	N1-C2-O2	8.36	123.92	118.90
25	BB	2543	G	C5-C6-N1	8.36	115.68	111.50
25	BB	2662	A	C6-C5-N7	8.36	138.15	132.30
25	BB	2849	U	C1'-O4'-C4'	-8.36	103.21	109.90
25	BB	345	A	C5'-C4'-O4'	8.36	119.13	109.10
25	BB	1220	G	N1-C6-O6	-8.36	114.89	119.90
25	BB	1973	G	C6-N1-C2	-8.36	120.09	125.10
34	BK	80	ARG	NE-CZ-NH2	8.36	124.48	120.30
3	A1	142	G	N1-C6-O6	-8.36	114.89	119.90
25	BB	695	G	C6-N1-C2	-8.36	120.09	125.10
25	BB	2286	G	C3'-C2'-C1'	8.36	108.18	101.50
25	BB	2463	C	N3-C4-C5	8.36	125.24	121.90
25	BB	2581	G	C5-C6-N1	8.36	115.68	111.50
53	B4	27	ARG	NE-CZ-NH2	8.36	124.48	120.30
1	AE	60	C	C2-N3-C4	-8.35	115.72	119.90
25	BB	223	A	C6-N1-C2	-8.35	113.59	118.60
17	AR	61	ARG	NE-CZ-NH2	8.35	124.48	120.30
24	BA	64	G	C5-C6-N1	8.35	115.68	111.50
25	BB	781	A	C1'-O4'-C4'	-8.35	103.22	109.90
25	BB	1488	C	N3-C4-C5	8.35	125.24	121.90
25	BB	1506	U	C5-C6-N1	-8.35	118.52	122.70
25	BB	1543	G	C4-C5-N7	8.35	114.14	110.80
25	BB	1975	G	N1-C6-O6	-8.35	114.89	119.90
30	BG	12	ARG	CD-NE-CZ	8.35	135.30	123.60
25	BB	2600	A	C5-C6-N6	8.35	130.38	123.70
1	AP	22	G	C5'-C4'-O4'	8.35	119.12	109.10
3	A1	1162	C	N1-C2-O2	8.35	123.91	118.90
3	A1	1395	C	N1-C2-O2	8.35	123.91	118.90
25	BB	2336	A	C5-C6-N1	8.35	121.88	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
31	BH	102	ARG	CD-NE-CZ	8.35	135.29	123.60
3	A1	343	U	O4'-C1'-N1	8.35	114.88	108.20
3	A1	377	G	C8-N9-C4	-8.35	103.06	106.40
3	A1	1242	G	C6-N1-C2	-8.35	120.09	125.10
25	BB	95	A	C4-C5-C6	-8.35	112.83	117.00
25	BB	459	U	N3-C2-O2	-8.35	116.36	122.20
25	BB	1041	G	C5-C6-N1	8.35	115.67	111.50
25	BB	1854	A	C4'-C3'-C2'	-8.35	94.25	102.60
1	AA	66	A	C3'-C2'-C1'	8.35	108.18	101.50
52	B3	162	ARG	NH1-CZ-NH2	-8.35	110.22	119.40
25	BB	173	A	C5-C6-N1	8.35	121.87	117.70
25	BB	347	A	C5-C6-N6	8.35	130.38	123.70
25	BB	2267	A	C2-N3-C4	8.35	114.77	110.60
25	BB	2530	A	C1'-O4'-C4'	-8.35	103.22	109.90
3	A1	336	A	C6-C5-N7	8.34	138.14	132.30
3	A1	1072	G	C5'-C4'-O4'	8.34	119.11	109.10
25	BB	1000	A	C8-N9-C4	-8.34	102.46	105.80
25	BB	1162	G	N1-C6-O6	-8.34	114.89	119.90
25	BB	1201	U	C1'-O4'-C4'	-8.34	103.23	109.90
25	BB	2400	G	N3-C2-N2	-8.34	114.06	119.90
25	BB	2411	A	N1-C6-N6	-8.34	113.59	118.60
25	BB	2280	G	N9-C4-C5	8.34	108.74	105.40
25	BB	2880	C	C5-C4-N4	-8.34	114.36	120.20
25	BB	341	C	O4'-C1'-N1	8.34	114.87	108.20
25	BB	816	C	C6-N1-C2	-8.34	116.96	120.30
25	BB	2173	A	C5'-C4'-O4'	8.34	119.11	109.10
25	BB	2189	U	C5-C6-N1	-8.34	118.53	122.70
25	BB	2688	G	C5-N7-C8	-8.34	100.13	104.30
25	BB	2660	A	C5-C6-N1	8.34	121.87	117.70
25	BB	557	C	C4'-C3'-C2'	-8.34	94.26	102.60
25	BB	839	U	C5-C6-N1	-8.34	118.53	122.70
25	BB	1585	C	N3-C2-O2	-8.34	116.06	121.90
3	A1	1050	G	C1'-O4'-C4'	-8.34	103.23	109.90
3	A1	1182	G	N3-C4-C5	-8.34	124.43	128.60
25	BB	576	U	N3-C2-O2	-8.34	116.36	122.20
25	BB	2266	A	C4-C5-C6	-8.34	112.83	117.00
25	BB	167	A	N1-C6-N6	-8.34	113.60	118.60
25	BB	309	A	C4-C5-C6	-8.34	112.83	117.00
25	BB	1095	A	O4'-C1'-N9	8.34	114.87	108.20
25	BB	1758	U	O4'-C1'-N1	8.34	114.87	108.20
25	BB	2157	G	C8-N9-C4	-8.34	103.06	106.40
44	BU	43	ARG	CD-NE-CZ	8.34	135.27	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	76	G	N7-C8-N9	8.33	117.27	113.10
3	A1	144	G	N1-C2-N3	8.33	128.90	123.90
3	A1	776	G	C5-N7-C8	-8.33	100.13	104.30
3	A1	1007	U	C2-N3-C4	-8.33	122.00	127.00
25	BB	1569	A	C4-C5-C6	-8.33	112.83	117.00
25	BB	2052	A	C4-C5-C6	-8.33	112.83	117.00
25	BB	2226	C	C2-N3-C4	-8.33	115.73	119.90
3	A1	1481	U	N3-C2-O2	-8.33	116.37	122.20
25	BB	1310	G	N1-C6-O6	-8.33	114.90	119.90
3	A1	137	U	O4'-C1'-N1	8.33	114.86	108.20
24	BA	51	G	N1-C6-O6	-8.33	114.90	119.90
25	BB	881	G	C5-C6-N1	8.33	115.66	111.50
25	BB	1378	A	C4-C5-C6	-8.33	112.84	117.00
25	BB	1855	U	C2-N3-C4	-8.33	122.00	127.00
25	BB	2723	C	N3-C2-O2	-8.33	116.07	121.90
25	BB	1779	U	N3-C2-O2	-8.33	116.37	122.20
3	A1	220	G	C6-N1-C2	-8.32	120.11	125.10
25	BB	512	G	N9-C4-C5	8.32	108.73	105.40
3	A1	648	A	C4-C5-C6	-8.32	112.84	117.00
25	BB	257	C	N3-C2-O2	-8.32	116.07	121.90
25	BB	547	A	C5-C6-N1	8.32	121.86	117.70
25	BB	550	C	C2-N3-C4	-8.32	115.74	119.90
25	BB	2093	G	C5-N7-C8	-8.32	100.14	104.30
25	BB	2600	A	C5-C6-N1	8.32	121.86	117.70
1	AA	65	G	N3-C4-C5	-8.32	124.44	128.60
3	A1	1197	A	C2'-C3'-O3'	8.32	127.81	109.50
25	BB	281	C	N1-C2-O2	8.32	123.89	118.90
25	BB	700	G	C1'-O4'-C4'	-8.32	103.24	109.90
25	BB	1123	C	C2-N3-C4	-8.32	115.74	119.90
25	BB	1314	C	O4'-C1'-N1	8.32	114.86	108.20
25	BB	1452	G	N1-C6-O6	-8.32	114.91	119.90
3	A1	1210	C	C3'-C2'-C1'	8.32	108.16	101.50
25	BB	566	U	N1-C2-N3	8.32	119.89	114.90
25	BB	968	C	C2-N3-C4	-8.32	115.74	119.90
1	AP	66	A	C5-C6-N1	8.32	121.86	117.70
3	A1	111	G	N1-C2-N3	8.32	128.89	123.90
3	A1	137	U	N1-C2-N3	8.32	119.89	114.90
25	BB	1821	A	C5-C6-N1	8.32	121.86	117.70
25	BB	2075	U	N3-C2-O2	-8.32	116.38	122.20
3	A1	1035	A	C3'-C2'-C1'	8.31	108.15	101.50
3	A1	1177	G	C5-C6-N1	8.31	115.66	111.50
3	A1	1498	U	C6-N1-C2	-8.31	116.01	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1285	A	N9-C4-C5	8.31	109.13	105.80
25	BB	1510	G	C4-C5-C6	-8.31	113.81	118.80
25	BB	2593	U	N3-C2-O2	-8.31	116.38	122.20
3	A1	856	C	N3-C4-N4	-8.31	112.18	118.00
25	BB	204	A	C4-C5-C6	-8.31	112.84	117.00
25	BB	196	A	C3'-C2'-C1'	8.31	108.15	101.50
25	BB	482	A	O4'-C1'-N9	8.31	114.85	108.20
25	BB	521	U	C4-C5-C6	8.31	124.69	119.70
25	BB	1523	U	C3'-C2'-C1'	8.31	108.15	101.50
25	BB	1820	U	C1'-O4'-C4'	-8.31	103.25	109.90
25	BB	2246	G	N3-C4-C5	-8.31	124.44	128.60
3	A1	775	G	N3-C4-C5	-8.31	124.45	128.60
3	A1	932	C	C2-N3-C4	-8.31	115.75	119.90
25	BB	2651	C	N3-C4-C5	8.31	125.22	121.90
3	A1	542	G	C6-C5-N7	8.31	135.38	130.40
25	BB	889	C	N1-C2-N3	8.31	125.02	119.20
25	BB	2896	C	C4'-C3'-C2'	-8.31	94.29	102.60
25	BB	1210	G	N7-C8-N9	8.31	117.25	113.10
25	BB	1480	C	N3-C2-O2	-8.31	116.08	121.90
25	BB	1566	A	N1-C6-N6	-8.31	113.61	118.60
3	A1	206	C	C2-N3-C4	-8.30	115.75	119.90
25	BB	1686	C	N3-C4-C5	8.31	125.22	121.90
3	A1	501	C	C5-C6-N1	-8.30	116.85	121.00
25	BB	1069	A	O5'-P-OP2	-8.30	98.23	105.70
3	A1	765	G	N1-C6-O6	-8.30	114.92	119.90
25	BB	2023	C	N1-C2-N3	8.30	125.01	119.20
1	AE	37	G	N1-C6-O6	-8.30	114.92	119.90
3	A1	255	G	N9-C4-C5	8.30	108.72	105.40
3	A1	1236	A	C4-C5-C6	-8.30	112.85	117.00
25	BB	1454	C	N3-C4-N4	-8.30	112.19	118.00
25	BB	1892	C	N1-C2-O2	8.30	123.88	118.90
25	BB	2136	G	N3-C4-C5	-8.30	124.45	128.60
37	BN	132	ARG	NE-CZ-NH1	8.30	124.45	120.30
1	AP	48	C	N3-C4-C5	8.30	125.22	121.90
25	BB	216	A	C4-C5-C6	-8.30	112.85	117.00
3	A1	767	A	C4-C5-C6	-8.30	112.85	117.00
3	A1	809	G	C5-C6-N1	8.30	115.65	111.50
3	A1	1016	A	N1-C2-N3	-8.30	125.15	129.30
3	A1	1487	G	N3-C2-N2	-8.30	114.09	119.90
25	BB	57	C	N3-C4-N4	-8.30	112.19	118.00
3	A1	28	A	C4-C5-N7	8.30	114.85	110.70
3	A1	1292	G	N1-C2-N3	8.29	128.88	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	28	A	C5-C6-N1	8.30	121.85	117.70
25	BB	308	G	C2-N3-C4	8.30	116.05	111.90
25	BB	1463	C	C2-N3-C4	-8.29	115.75	119.90
25	BB	1708	C	C2-N3-C4	-8.30	115.75	119.90
25	BB	2551	C	N3-C4-C5	8.30	125.22	121.90
3	A1	235	C	N1-C2-O2	8.29	123.88	118.90
3	A1	631	C	C3'-C2'-C1'	8.29	108.13	101.50
25	BB	2499	C	C2-N3-C4	-8.29	115.75	119.90
3	A1	294	U	O4'-C1'-N1	8.29	114.83	108.20
3	A1	1040	U	C5'-C4'-O4'	8.29	119.05	109.10
3	A1	1154	G	O4'-C1'-N9	-8.29	101.57	108.20
3	A1	1300	G	N3-C4-N9	8.29	130.97	126.00
3	A1	1430	A	C4-C5-C6	-8.29	112.85	117.00
25	BB	151	C	N3-C2-O2	-8.29	116.10	121.90
25	BB	287	G	C4'-C3'-C2'	-8.29	94.31	102.60
25	BB	2069	G	C5-C6-N1	8.29	115.65	111.50
25	BB	2071	A	C6-C5-N7	8.29	138.10	132.30
25	BB	2192	U	O4'-C1'-N1	8.29	114.83	108.20
25	BB	2705	A	C5-C6-N6	8.29	130.33	123.70
25	BB	2804	U	O4'-C1'-N1	8.29	114.83	108.20
30	BG	63	ARG	NE-CZ-NH2	8.29	124.45	120.30
3	A1	486	U	C2-N3-C4	-8.29	122.03	127.00
3	A1	499	A	C5-C6-N1	8.29	121.84	117.70
25	BB	614	A	O4'-C1'-N9	8.29	114.83	108.20
25	BB	664	G	N1-C6-O6	-8.29	114.93	119.90
25	BB	2499	C	N3-C2-O2	-8.29	116.10	121.90
3	A1	462	G	C3'-C2'-C1'	8.29	108.13	101.50
3	A1	811	C	N3-C2-O2	-8.29	116.10	121.90
3	A1	1522	U	N1-C2-N3	8.29	119.87	114.90
25	BB	1032	A	O4'-C1'-N9	8.29	114.83	108.20
25	BB	1151	A	C5-C6-N1	8.29	121.84	117.70
25	BB	1886	U	C3'-C2'-C1'	8.29	108.13	101.50
25	BB	1967	C	N3-C2-O2	-8.29	116.10	121.90
25	BB	2857	G	N3-C4-C5	-8.29	124.46	128.60
25	BB	545	U	O4'-C4'-C3'	8.29	112.73	106.10
3	A1	1158	C	N3-C2-O2	-8.28	116.10	121.90
20	AU	43	TYR	CB-CG-CD1	-8.29	116.03	121.00
25	BB	588	U	C5-C6-N1	-8.29	118.56	122.70
25	BB	1053	C	N3-C4-N4	-8.28	112.20	118.00
25	BB	1162	G	N3-C4-C5	-8.29	124.46	128.60
25	BB	1290	C	C6-N1-C2	-8.29	116.99	120.30
25	BB	2121	G	N1-C6-O6	-8.29	114.93	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1551	A	C5-C6-N1	8.28	121.84	117.70
25	BB	2803	G	N7-C8-N9	8.29	117.24	113.10
25	BB	2807	U	N3-C2-O2	-8.28	116.40	122.20
25	BB	2831	G	O4'-C4'-C3'	8.28	112.73	106.10
3	A1	507	C	N3-C2-O2	-8.28	116.10	121.90
3	A1	1069	C	N3-C2-O2	-8.28	116.10	121.90
3	A1	1181	G	C5-C6-N1	8.28	115.64	111.50
3	A1	1385	G	N3-C4-C5	-8.28	124.46	128.60
24	BA	12	C	N3-C4-C5	8.28	125.21	121.90
25	BB	124	G	C8-N9-C4	-8.28	103.09	106.40
25	BB	1048	A	C6-C5-N7	8.28	138.10	132.30
25	BB	1532	A	C5-C6-N1	8.28	121.84	117.70
25	BB	329	G	N1-C6-O6	-8.28	114.93	119.90
2	AM	16	U	C5'-C4'-O4'	8.28	119.03	109.10
3	A1	621	A	C4-C5-C6	-8.28	112.86	117.00
3	A1	1447	A	N1-C6-N6	-8.28	113.63	118.60
3	A1	1458	G	O4'-C1'-N9	8.28	114.82	108.20
25	BB	367	G	N9-C4-C5	8.28	108.71	105.40
25	BB	1182	G	N3-C4-C5	-8.28	124.46	128.60
25	BB	1497	U	N1-C2-N3	8.28	119.87	114.90
25	BB	1538	G	N7-C8-N9	8.28	117.24	113.10
25	BB	2256	G	C5-C6-N1	8.28	115.64	111.50
25	BB	2660	A	N1-C2-N3	-8.28	125.16	129.30
3	A1	1089	G	C3'-C2'-C1'	8.28	108.12	101.50
24	BA	23	G	C5-N7-C8	-8.28	100.16	104.30
25	BB	1112	G	C8-N9-C4	-8.28	103.09	106.40
25	BB	273	G	C6-C5-N7	8.28	135.37	130.40
25	BB	980	A	C4-C5-C6	-8.28	112.86	117.00
25	BB	1356	G	C3'-C2'-C1'	8.28	108.12	101.50
25	BB	1598	A	C5-C6-N1	8.28	121.84	117.70
3	A1	427	U	C5-C6-N1	-8.27	118.56	122.70
3	A1	893	C	O4'-C1'-N1	8.27	114.82	108.20
25	BB	373	U	O4'-C1'-N1	8.27	114.82	108.20
25	BB	700	G	N3-C4-C5	-8.27	124.46	128.60
3	A1	12	U	C4-C5-C6	8.27	124.66	119.70
3	A1	72	A	C5-C6-N1	8.27	121.84	117.70
3	A1	215	C	N3-C4-C5	8.27	125.21	121.90
3	A1	692	U	N1-C2-N3	8.27	119.86	114.90
25	BB	950	G	N1-C6-O6	-8.27	114.94	119.90
25	BB	1817	G	C5-C6-O6	8.27	133.56	128.60
25	BB	2863	C	O4'-C4'-C3'	8.27	112.72	106.10
3	A1	92	U	C5-C6-N1	-8.27	118.56	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	11	C	C5-C4-N4	8.27	125.99	120.20
25	BB	604	G	C6-N1-C2	-8.27	120.14	125.10
25	BB	1885	A	C3'-C2'-C1'	8.27	108.11	101.50
25	BB	2023	C	C5-C6-N1	-8.27	116.87	121.00
25	BB	2652	C	N3-C2-O2	-8.27	116.11	121.90
25	BB	2702	G	C5-C6-N1	8.27	115.64	111.50
25	BB	2794	C	N1-C2-N3	8.27	124.99	119.20
3	A1	1205	U	C1'-O4'-C4'	8.27	116.51	109.90
25	BB	1586	A	N1-C6-N6	-8.27	113.64	118.60
3	A1	79	G	C5-C6-N1	8.27	115.63	111.50
25	BB	777	G	N1-C6-O6	-8.27	114.94	119.90
25	BB	987	C	N3-C4-C5	8.27	125.21	121.90
25	BB	1178	C	N3-C2-O2	-8.27	116.11	121.90
25	BB	1916	A	C5-C6-N1	8.27	121.83	117.70
25	BB	2004	G	N7-C8-N9	8.27	117.23	113.10
25	BB	2313	C	N3-C4-N4	-8.27	112.21	118.00
25	BB	2704	C	O4'-C1'-N1	8.27	114.81	108.20
3	A1	696	A	C4-C5-C6	-8.26	112.87	117.00
3	A1	1389	C	N1-C2-O2	8.26	123.86	118.90
3	A1	970	C	C6-N1-C2	-8.26	117.00	120.30
25	BB	130	C	O4'-C1'-N1	8.26	114.81	108.20
25	BB	394	C	N3-C4-N4	-8.26	112.22	118.00
25	BB	923	G	N1-C6-O6	-8.26	114.94	119.90
25	BB	1095	A	C4-C5-C6	-8.26	112.87	117.00
25	BB	1958	C	C6-N1-C2	-8.26	117.00	120.30
25	BB	2056	G	C1'-O4'-C4'	-8.26	103.29	109.90
25	BB	2098	U	C1'-O4'-C4'	-8.26	103.29	109.90
25	BB	2095	A	C8-N9-C4	-8.26	102.50	105.80
25	BB	2318	G	C4-C5-C6	-8.26	113.84	118.80
25	BB	2847	U	O4'-C1'-N1	8.26	114.81	108.20
25	BB	620	G	C6-N1-C2	-8.26	120.14	125.10
3	A1	1025	U	C1'-O4'-C4'	-8.26	103.29	109.90
25	BB	949	G	N1-C6-O6	-8.26	114.94	119.90
25	BB	1691	C	C2-N3-C4	-8.26	115.77	119.90
25	BB	2569	G	N3-C4-C5	-8.26	124.47	128.60
25	BB	2703	C	N1-C2-O2	8.26	123.86	118.90
1	AE	32	C	N3-C4-C5	8.26	125.20	121.90
7	AF	69	ARG	NH1-CZ-NH2	-8.26	110.32	119.40
25	BB	678	C	N3-C2-O2	-8.26	116.12	121.90
25	BB	1008	A	C4-C5-C6	-8.26	112.87	117.00
25	BB	1322	A	C4-C5-C6	-8.26	112.87	117.00
25	BB	1491	G	C8-N9-C4	-8.26	103.10	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2897	U	O4'-C1'-N1	8.26	114.81	108.20
2	AM	10	U	C5-C6-N1	-8.26	118.57	122.70
3	A1	928	G	C8-N9-C4	-8.26	103.10	106.40
24	BA	54	G	N3-C2-N2	-8.26	114.12	119.90
25	BB	1961	C	C6-N1-C2	8.26	123.60	120.30
25	BB	2062	A	C6-C5-N7	8.26	138.08	132.30
3	A1	289	G	O4'-C4'-C3'	8.25	112.70	106.10
3	A1	397	A	N1-C6-N6	-8.25	113.65	118.60
3	A1	694	A	C2-N3-C4	8.25	114.73	110.60
1	AA	8	U	C5'-C4'-O4'	8.25	119.00	109.10
3	A1	421	U	C5-C6-N1	-8.25	118.57	122.70
24	BA	94	A	C5-C6-N1	8.25	121.83	117.70
25	BB	61	C	N3-C4-C5	8.25	125.20	121.90
25	BB	1772	A	C4-C5-C6	-8.25	112.87	117.00
25	BB	1994	C	O4'-C1'-N1	8.25	114.80	108.20
25	BB	2049	G	N3-C4-N9	8.25	130.95	126.00
1	AP	64	A	C5-C6-N6	8.25	130.30	123.70
3	A1	1274	A	C6-C5-N7	8.25	138.07	132.30
25	BB	604	G	C5-C6-N1	8.25	115.63	111.50
25	BB	637	A	C2-N3-C4	8.25	114.72	110.60
25	BB	1437	C	N3-C4-C5	8.25	125.20	121.90
25	BB	1800	C	C4'-C3'-C2'	-8.25	94.35	102.60
25	BB	1912	A	C4-C5-C6	-8.25	112.88	117.00
25	BB	2133	G	N3-C4-C5	-8.25	124.47	128.60
25	BB	2757	A	C6-N1-C2	-8.25	113.65	118.60
30	BG	46	ARG	NE-CZ-NH1	8.25	124.42	120.30
3	A1	119	A	C4-C5-C6	-8.25	112.88	117.00
25	BB	771	G	C5-C6-O6	8.25	133.55	128.60
25	BB	2846	G	C6-C5-N7	8.25	135.35	130.40
25	BB	192	C	N3-C2-O2	-8.25	116.13	121.90
25	BB	600	G	N1-C6-O6	-8.25	114.95	119.90
25	BB	2157	G	C6-C5-N7	8.25	135.35	130.40
37	BN	211	ARG	NE-CZ-NH2	8.25	124.42	120.30
25	BB	2446	G	N1-C6-O6	-8.25	114.95	119.90
25	BB	2539	C	O4'-C4'-C3'	8.25	112.70	106.10
3	A1	949	A	C5-C6-N1	8.24	121.82	117.70
1	AE	18	G	C8-N9-C4	-8.24	103.10	106.40
3	A1	512	U	O4'-C1'-N1	8.24	114.79	108.20
3	A1	608	A	O4'-C1'-N9	8.24	114.80	108.20
4	AB	207	ARG	NE-CZ-NH1	8.24	124.42	120.30
25	BB	324	A	C5-C6-N6	8.24	130.29	123.70
25	BB	350	G	N9-C4-C5	8.24	108.70	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1395	A	C4-C5-C6	-8.24	112.88	117.00
25	BB	766	U	C2-N3-C4	-8.24	122.05	127.00
25	BB	1100	C	N1-C2-N3	8.24	124.97	119.20
25	BB	1274	A	C6-C5-N7	8.24	138.07	132.30
25	BB	2743	U	C1'-O4'-C4'	-8.24	103.31	109.90
3	A1	271	C	O4'-C1'-N1	8.24	114.79	108.20
3	A1	807	A	C6-C5-N7	8.24	138.07	132.30
3	A1	927	G	N1-C6-O6	-8.24	114.95	119.90
24	BA	98	G	C6-N1-C2	-8.24	120.16	125.10
25	BB	954	G	N1-C6-O6	-8.24	114.96	119.90
25	BB	976	G	N1-C6-O6	-8.24	114.96	119.90
25	BB	1614	A	C4-C5-C6	-8.24	112.88	117.00
25	BB	2006	C	N3-C4-N4	-8.24	112.23	118.00
25	BB	2322	A	N1-C6-N6	-8.24	113.66	118.60
1	AA	3	G	C3'-C2'-C1'	8.24	108.09	101.50
1	AA	58	A	C5'-C4'-O4'	-8.24	99.21	109.10
1	AE	41	U	O4'-C1'-N1	8.24	114.79	108.20
3	A1	177	G	O4'-C1'-N9	8.24	114.79	108.20
3	A1	284	C	N3-C2-O2	-8.24	116.13	121.90
3	A1	927	G	C5-C6-N1	8.24	115.62	111.50
3	A1	1366	C	N3-C2-O2	-8.24	116.13	121.90
3	A1	1401	G	N9-C4-C5	8.24	108.69	105.40
24	BA	89	U	C3'-C2'-C1'	8.24	108.09	101.50
25	BB	1528	A	N1-C6-N6	-8.24	113.66	118.60
1	AA	15	G	O4'-C1'-N9	8.23	114.79	108.20
1	AE	34	G	O4'-C4'-C3'	8.23	112.69	106.10
3	A1	540	G	N3-C2-N2	-8.23	114.14	119.90
3	A1	1211	U	C5-C6-N1	-8.23	118.58	122.70
25	BB	1867	G	N3-C4-C5	-8.23	124.48	128.60
25	BB	2095	A	C1'-O4'-C4'	-8.23	103.31	109.90
3	A1	1143	G	N1-C6-O6	-8.23	114.96	119.90
3	A1	1214	C	C6-N1-C2	-8.23	117.01	120.30
1	AP	54	U	O4'-C1'-N1	8.23	114.78	108.20
24	BA	19	C	N3-C2-O2	-8.23	116.14	121.90
25	BB	141	G	C6-C5-N7	8.23	135.34	130.40
25	BB	336	C	N3-C2-O2	-8.23	116.14	121.90
25	BB	522	A	C4-C5-C6	-8.23	112.89	117.00
25	BB	1471	G	N1-C6-O6	-8.23	114.96	119.90
25	BB	1510	G	C3'-C2'-C1'	-8.23	94.92	101.50
25	BB	1836	C	N3-C2-O2	-8.23	116.14	121.90
25	BB	2044	C	C2-N3-C4	-8.23	115.78	119.90
25	BB	2394	C	N3-C2-O2	-8.23	116.14	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	171	A	C5-C6-N1	8.23	121.81	117.70
25	BB	1807	G	C1'-O4'-C4'	-8.23	103.32	109.90
25	BB	2712	C	C5'-C4'-O4'	8.23	118.97	109.10
3	A1	757	U	O4'-C1'-N1	8.23	114.78	108.20
3	A1	1308	U	N3-C2-O2	-8.23	116.44	122.20
25	BB	282	A	C4-C5-C6	-8.23	112.89	117.00
25	BB	369	U	N3-C2-O2	-8.23	116.44	122.20
25	BB	1735	A	C4-C5-C6	-8.23	112.89	117.00
25	BB	776	G	N1-C2-N2	-8.23	108.80	116.20
25	BB	1518	C	C2-N3-C4	-8.23	115.79	119.90
25	BB	1899	A	C5-C6-N1	8.23	121.81	117.70
25	BB	2771	C	C6-N1-C2	-8.23	117.01	120.30
25	BB	1020	A	C8-N9-C4	-8.22	102.51	105.80
25	BB	2152	G	C8-N9-C4	-8.22	103.11	106.40
25	BB	2178	C	C1'-O4'-C4'	-8.22	103.32	109.90
3	A1	810	C	O4'-C1'-N1	-8.22	101.62	108.20
25	BB	301	G	O4'-C1'-N9	8.22	114.78	108.20
25	BB	726	G	C8-N9-C4	-8.22	103.11	106.40
25	BB	809	G	O4'-C1'-N9	8.22	114.78	108.20
25	BB	873	C	N3-C2-O2	-8.22	116.14	121.90
25	BB	979	A	C5'-C4'-O4'	8.22	118.97	109.10
35	BL	84	ARG	NE-CZ-NH1	8.22	124.41	120.30
25	BB	363	G	N1-C6-O6	-8.22	114.97	119.90
25	BB	118	A	C5-C6-N1	8.22	121.81	117.70
25	BB	2131	U	O4'-C1'-N1	8.22	114.78	108.20
3	A1	984	C	N3-C4-N4	-8.22	112.25	118.00
3	A1	1206	G	C5-N7-C8	-8.22	100.19	104.30
25	BB	2291	U	N1-C2-O2	8.22	128.55	122.80
1	AE	74	C	C6-N1-C2	-8.22	117.01	120.30
3	A1	944	G	C5-C6-N1	8.22	115.61	111.50
25	BB	486	C	C5-C4-N4	8.22	125.95	120.20
25	BB	754	U	N1-C2-N3	8.22	119.83	114.90
25	BB	1131	G	N3-C2-N2	-8.22	114.15	119.90
25	BB	1538	G	C4'-C3'-C2'	-8.22	94.38	102.60
25	BB	1828	G	C5-C6-O6	8.22	133.53	128.60
3	A1	156	C	C6-N1-C2	8.22	123.59	120.30
3	A1	536	C	C5-C4-N4	8.21	125.95	120.20
25	BB	67	U	C5-C6-N1	-8.22	118.59	122.70
25	BB	1094	U	C5-C6-N1	-8.22	118.59	122.70
25	BB	2005	A	C4-C5-C6	-8.22	112.89	117.00
3	A1	139	A	C5-N7-C8	-8.21	99.79	103.90
3	A1	788	U	C4'-C3'-C2'	-8.21	94.39	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1441	A	C5-C6-N1	8.21	121.81	117.70
25	BB	921	C	N3-C2-O2	-8.21	116.15	121.90
25	BB	2203	U	O4'-C1'-N1	8.21	114.77	108.20
3	A1	788	U	N1-C2-N3	8.21	119.83	114.90
3	A1	893	C	C1'-O4'-C4'	8.21	116.47	109.90
3	A1	1050	G	N9-C1'-C2'	-8.21	102.97	112.00
3	A1	1170	A	C4-C5-C6	-8.21	112.89	117.00
25	BB	541	A	N1-C2-N3	-8.21	125.19	129.30
25	BB	645	C	N1-C2-O2	8.21	123.83	118.90
25	BB	722	A	C5-C6-N1	8.21	121.81	117.70
25	BB	2211	A	C6-N1-C2	-8.21	113.67	118.60
25	BB	1102	C	N3-C4-C5	8.21	125.18	121.90
25	BB	1349	C	N1-C2-O2	8.21	123.83	118.90
30	BG	103	ARG	NE-CZ-NH1	-8.21	116.19	120.30
55	B6	69	ARG	NH1-CZ-NH2	-8.21	110.37	119.40
1	AA	42	G	N1-C2-N2	8.21	123.59	116.20
3	A1	1069	C	C6-N1-C2	-8.21	117.02	120.30
25	BB	461	C	C6-N1-C2	-8.21	117.02	120.30
25	BB	2728	U	N3-C2-O2	-8.21	116.45	122.20
25	BB	2784	U	N3-C2-O2	-8.21	116.45	122.20
24	BA	29	A	C4-C5-C6	-8.21	112.90	117.00
25	BB	692	C	N3-C4-N4	-8.21	112.25	118.00
25	BB	2431	U	P-O3'-C3'	8.21	129.55	119.70
25	BB	2673	G	C5-C6-N1	8.21	115.60	111.50
25	BB	2770	G	N3-C2-N2	-8.21	114.15	119.90
25	BB	2888	C	C5-C6-N1	-8.21	116.90	121.00
3	A1	8	A	C5-C6-N1	8.21	121.80	117.70
3	A1	584	G	C5-C6-N1	8.21	115.60	111.50
3	A1	1254	A	C2-N3-C4	8.21	114.70	110.60
3	A1	49	U	C5-C6-N1	-8.20	118.60	122.70
24	BA	85	G	N3-C2-N2	-8.21	114.16	119.90
25	BB	713	G	N3-C2-N2	-8.21	114.16	119.90
25	BB	845	A	C5-C6-N6	8.21	130.26	123.70
25	BB	1208	C	C2-N3-C4	-8.20	115.80	119.90
25	BB	2325	G	N3-C4-C5	-8.20	124.50	128.60
25	BB	2466	C	N3-C2-O2	-8.20	116.16	121.90
29	BF	114	ARG	NH1-CZ-NH2	-8.21	110.38	119.40
37	BN	261	ARG	NE-CZ-NH1	8.20	124.40	120.30
3	A1	1524	C	C5-C4-N4	8.20	125.94	120.20
25	BB	1073	A	C5-C6-N1	8.20	121.80	117.70
25	BB	1159	U	C4'-C3'-C2'	-8.20	94.40	102.60
25	BB	2387	U	N1-C2-O2	8.20	128.54	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	BU	5	ARG	NE-CZ-NH1	8.20	124.40	120.30
1	AA	25	C	O4'-C4'-C3'	8.20	112.66	106.10
25	BB	190	A	O4'-C4'-C3'	-8.20	95.80	104.00
1	AP	39	U	C5'-C4'-O4'	8.20	118.94	109.10
3	A1	542	G	N3-C2-N2	-8.20	114.16	119.90
25	BB	739	A	N1-C6-N6	-8.20	113.68	118.60
25	BB	846	U	N3-C2-O2	-8.20	116.46	122.20
25	BB	2546	U	C1'-O4'-C4'	8.20	116.46	109.90
3	A1	79	G	C2-N3-C4	8.20	116.00	111.90
25	BB	1473	G	N3-C2-N2	-8.20	114.16	119.90
25	BB	1926	U	N1-C2-N3	8.20	119.82	114.90
3	A1	23	C	C4'-C3'-C2'	-8.19	94.41	102.60
3	A1	901	A	C5-C6-N1	8.20	121.80	117.70
25	BB	754	U	N3-C2-O2	-8.20	116.46	122.20
25	BB	881	G	C8-N9-C4	-8.20	103.12	106.40
25	BB	1621	U	N3-C2-O2	-8.20	116.46	122.20
25	BB	2396	G	N3-C4-N9	8.20	130.92	126.00
37	BN	188	ARG	NE-CZ-NH1	8.19	124.40	120.30
3	A1	1339	A	C4-C5-C6	-8.19	112.90	117.00
25	BB	881	G	N1-C2-N3	8.19	128.82	123.90
25	BB	1959	G	N1-C6-O6	-8.19	114.98	119.90
25	BB	2209	G	C5-C6-N1	8.19	115.60	111.50
1	AA	46	G	C3'-C2'-C1'	-8.19	94.95	101.50
3	A1	135	C	N3-C4-N4	-8.19	112.27	118.00
3	A1	337	G	N3-C4-N9	8.19	130.91	126.00
25	BB	1483	G	C6-C5-N7	8.19	135.31	130.40
25	BB	2711	A	C6-C5-N7	8.19	138.03	132.30
1	AA	26	G	C5-C6-N1	8.19	115.59	111.50
3	A1	278	G	N1-C6-O6	-8.19	114.99	119.90
3	A1	1313	U	N3-C2-O2	-8.19	116.47	122.20
25	BB	19	A	C4-C5-C6	-8.19	112.91	117.00
25	BB	252	G	N1-C6-O6	-8.19	114.99	119.90
25	BB	423	A	C4-C5-C6	-8.19	112.91	117.00
1	AP	73	A	C5-C6-N1	8.19	121.79	117.70
3	A1	995	C	N1-C2-O2	8.19	123.81	118.90
3	A1	1140	C	N1-C2-O2	8.19	123.81	118.90
3	A1	1442	G	C5-C6-N1	8.19	115.59	111.50
25	BB	357	C	O4'-C1'-N1	8.19	114.75	108.20
3	A1	924	C	C5-C4-N4	8.18	125.93	120.20
3	A1	1104	G	N3-C4-C5	-8.18	124.51	128.60
25	BB	1889	A	C5'-C4'-O4'	-8.18	99.28	109.10
25	BB	324	A	C4-C5-C6	-8.18	112.91	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1696	G	C8-N9-C4	-8.18	103.13	106.40
25	BB	1958	C	N3-C4-N4	-8.18	112.27	118.00
25	BB	2045	C	C5-C4-N4	-8.18	114.47	120.20
3	A1	192	A	C5-C6-N1	8.18	121.79	117.70
3	A1	487	A	C5-C6-N1	8.18	121.79	117.70
3	A1	784	A	O4'-C1'-N9	8.18	114.74	108.20
24	BA	101	A	C5-C6-N6	8.18	130.24	123.70
25	BB	1431	A	N9-C4-C5	8.18	109.07	105.80
25	BB	1795	C	N3-C2-O2	-8.18	116.17	121.90
25	BB	1945	G	C6-C5-N7	8.18	135.31	130.40
25	BB	1958	C	O4'-C1'-N1	8.18	114.75	108.20
25	BB	2483	C	N1-C2-O2	8.18	123.81	118.90
3	A1	1453	G	N1-C6-O6	-8.18	114.99	119.90
25	BB	1726	C	N3-C4-C5	8.18	125.17	121.90
25	BB	33	C	C6-N1-C2	-8.18	117.03	120.30
3	A1	1436	U	C2-N3-C4	-8.18	122.09	127.00
25	BB	87	U	C5-C6-N1	-8.18	118.61	122.70
25	BB	1339	G	N1-C6-O6	-8.18	115.00	119.90
25	BB	1815	A	C5-C6-N1	8.18	121.79	117.70
25	BB	2079	U	O4'-C1'-N1	8.18	114.74	108.20
25	BB	2286	G	N3-C2-N2	-8.18	114.18	119.90
3	A1	50	A	C3'-C2'-C1'	8.17	108.04	101.50
3	A1	1489	G	C1'-O4'-C4'	-8.17	103.36	109.90
25	BB	1076	C	N3-C2-O2	-8.17	116.18	121.90
25	BB	2097	A	C5-C6-N1	8.17	121.79	117.70
25	BB	2160	C	N3-C2-O2	-8.17	116.18	121.90
25	BB	2361	G	C4-C5-N7	8.17	114.07	110.80
25	BB	2471	A	O4'-C1'-N9	8.17	114.74	108.20
3	A1	17	U	N1-C2-N3	8.17	119.80	114.90
3	A1	161	A	C6-C5-N7	8.17	138.02	132.30
3	A1	1155	A	C5-C6-N1	8.17	121.78	117.70
3	A1	1221	G	N1-C2-N3	8.17	128.80	123.90
3	A1	1359	C	N3-C4-C5	8.17	125.17	121.90
24	BA	52	A	N1-C2-N3	-8.17	125.22	129.30
25	BB	645	C	O4'-C4'-C3'	8.17	112.64	106.10
25	BB	892	A	C5'-C4'-O4'	8.17	118.90	109.10
25	BB	1017	G	C5'-C4'-O4'	8.17	118.91	109.10
25	BB	2381	A	O4'-C1'-N9	8.17	114.74	108.20
25	BB	2717	C	N3-C4-N4	-8.17	112.28	118.00
25	BB	2879	A	C4-C5-C6	-8.17	112.92	117.00
3	A1	1401	G	C6-N1-C2	-8.17	120.20	125.10
3	A1	395	C	C2-N3-C4	-8.17	115.82	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	122	G	N1-C6-O6	-8.17	115.00	119.90
25	BB	223	A	C6-C5-N7	8.17	138.02	132.30
25	BB	2713	U	C5-C6-N1	-8.17	118.62	122.70
25	BB	1165	A	C4-C5-C6	-8.17	112.92	117.00
25	BB	2344	U	C5-C6-N1	-8.17	118.62	122.70
25	BB	1935	G	C5-C6-O6	8.16	133.50	128.60
25	BB	2846	G	N3-C2-N2	-8.16	114.19	119.90
1	AA	61	C	N1-C2-O2	8.16	123.80	118.90
1	AP	33	U	N1-C2-N3	8.16	119.80	114.90
24	BA	18	G	C6-N1-C2	-8.16	120.20	125.10
25	BB	1215	G	C5'-C4'-O4'	-8.16	99.30	109.10
25	BB	1678	A	C4-C5-C6	-8.16	112.92	117.00
3	A1	683	G	C5-C6-O6	8.16	133.50	128.60
3	A1	1141	C	C6-N1-C2	-8.16	117.03	120.30
3	A1	1176	A	N7-C8-N9	8.16	117.88	113.80
25	BB	335	C	C1'-O4'-C4'	-8.16	103.37	109.90
25	BB	547	A	C5-C6-N6	8.16	130.23	123.70
25	BB	1366	A	C4'-C3'-C2'	-8.16	94.44	102.60
25	BB	1723	G	C4-C5-N7	-8.16	107.53	110.80
25	BB	2764	A	C5-C6-N1	8.16	121.78	117.70
29	BF	44	ARG	NE-CZ-NH1	8.16	124.38	120.30
1	AE	60	C	N3-C4-C5	8.16	125.16	121.90
3	A1	424	G	C8-N9-C4	-8.16	103.14	106.40
3	A1	1021	A	N1-C2-N3	-8.16	125.22	129.30
25	BB	154	U	C6-N1-C2	-8.16	116.10	121.00
3	A1	1229	A	C1'-O4'-C4'	-8.16	103.37	109.90
25	BB	16	C	C2-N3-C4	-8.16	115.82	119.90
25	BB	206	U	O4'-C1'-N1	8.16	114.73	108.20
25	BB	209	C	N3-C4-C5	8.16	125.16	121.90
25	BB	488	G	N9-C4-C5	8.16	108.66	105.40
25	BB	1077	A	C4-C5-C6	-8.16	112.92	117.00
25	BB	2793	C	C5'-C4'-O4'	8.16	118.89	109.10
3	A1	379	C	N3-C4-C5	8.16	125.16	121.90
3	A1	502	A	C3'-C2'-C1'	8.16	108.03	101.50
3	A1	1337	G	N1-C6-O6	-8.16	115.00	119.90
25	BB	767	U	O4'-C1'-N1	8.16	114.73	108.20
25	BB	2241	A	C5-C6-N1	8.16	121.78	117.70
25	BB	2818	U	O4'-C1'-N1	8.16	114.72	108.20
3	A1	926	G	N9-C4-C5	8.15	108.66	105.40
3	A1	1011	C	O4'-C1'-N1	8.15	114.72	108.20
12	AK	60	ARG	NE-CZ-NH1	8.15	124.38	120.30
25	BB	366	C	C5-C6-N1	-8.15	116.92	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	418	C	N3-C4-C5	8.15	125.16	121.90
25	BB	786	C	O5'-P-OP1	-8.15	98.36	105.70
25	BB	837	C	N3-C4-N4	-8.15	112.29	118.00
3	A1	437	U	C6-N1-C2	-8.15	116.11	121.00
25	BB	1416	G	N1-C2-N3	8.15	128.79	123.90
25	BB	2707	U	C4-C5-C6	8.15	124.59	119.70
25	BB	2082	A	N1-C6-N6	-8.15	113.71	118.60
3	A1	182	A	C4-C5-C6	-8.15	112.92	117.00
3	A1	1003	G	C5'-C4'-O4'	8.15	118.88	109.10
25	BB	153	U	N3-C2-O2	-8.15	116.49	122.20
25	BB	1254	A	C4-C5-C6	-8.15	112.92	117.00
25	BB	2373	G	C3'-C2'-C1'	-8.15	94.98	101.50
25	BB	2671	G	N3-C2-N2	-8.15	114.19	119.90
25	BB	1058	U	C5-C6-N1	-8.15	118.62	122.70
49	BZ	63	ARG	NE-CZ-NH1	8.15	124.38	120.30
1	AE	47	U	C2-N3-C4	-8.15	122.11	127.00
3	A1	475	C	N3-C4-C5	8.15	125.16	121.90
3	A1	638	U	O4'-C1'-N1	8.15	114.72	108.20
3	A1	1442	G	C5-N7-C8	-8.15	100.23	104.30
25	BB	316	C	C6-N1-C2	-8.15	117.04	120.30
25	BB	2543	G	N1-C2-N3	8.15	128.79	123.90
3	A1	1317	C	N3-C2-O2	-8.15	116.20	121.90
25	BB	86	G	C4-C5-N7	-8.15	107.54	110.80
25	BB	1765	U	O4'-C1'-N1	8.15	114.72	108.20
25	BB	2675	A	C4-C5-C6	-8.15	112.93	117.00
3	A1	104	G	C5-C6-O6	8.14	133.49	128.60
3	A1	158	G	N3-C2-N2	-8.14	114.20	119.90
3	A1	795	C	C2-N3-C4	-8.14	115.83	119.90
25	BB	1959	G	C5'-C4'-O4'	8.14	118.87	109.10
3	A1	844	G	C6-N1-C2	-8.14	120.21	125.10
3	A1	976	G	C5-C6-N1	8.14	115.57	111.50
25	BB	207	A	C5-C6-N1	8.14	121.77	117.70
25	BB	977	G	C6-C5-N7	8.14	135.29	130.40
25	BB	2113	U	O4'-C1'-N1	8.14	114.72	108.20
25	BB	2140	G	C5-C6-N1	8.14	115.57	111.50
3	A1	1492	A	P-O3'-C3'	8.14	129.47	119.70
25	BB	1439	A	C4-C5-C6	-8.14	112.93	117.00
3	A1	720	C	C2-N3-C4	-8.14	115.83	119.90
3	A1	955	U	N3-C4-O4	8.14	125.10	119.40
25	BB	1545	A	C4'-C3'-C2'	-8.14	94.46	102.60
25	BB	1673	G	N7-C8-N9	8.14	117.17	113.10
25	BB	2036	C	O4'-C1'-N1	8.14	114.71	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2050	C	C2-N3-C4	-8.14	115.83	119.90
25	BB	2229	U	C3'-C2'-C1'	8.14	108.01	101.50
25	BB	2556	C	C6-N1-C2	-8.14	117.04	120.30
3	A1	201	G	C8-N9-C4	-8.14	103.14	106.40
3	A1	255	G	O4'-C4'-C3'	8.14	112.61	106.10
3	A1	523	A	C6-C5-N7	8.14	138.00	132.30
3	A1	1533	C	N3-C2-O2	-8.14	116.20	121.90
25	BB	351	C	N3-C2-O2	-8.14	116.20	121.90
25	BB	838	C	N3-C4-C5	8.14	125.16	121.90
25	BB	2797	U	N1-C2-O2	8.14	128.50	122.80
3	A1	515	G	C5'-C4'-O4'	8.14	118.86	109.10
25	BB	1103	A	C8-N9-C4	-8.14	102.55	105.80
33	BJ	49	ARG	NE-CZ-NH1	-8.14	116.23	120.30
42	BS	63	ARG	NE-CZ-NH2	8.14	124.37	120.30
25	BB	2264	C	O4'-C4'-C3'	-8.14	95.86	104.00
25	BB	902	C	N3-C4-N4	-8.13	112.31	118.00
1	AA	1	G	O4'-C4'-C3'	8.13	112.61	106.10
3	A1	36	C	C5-C4-N4	8.13	125.89	120.20
3	A1	87	C	C5'-C4'-O4'	8.13	118.86	109.10
3	A1	1093	A	C4-C5-C6	-8.13	112.93	117.00
16	AQ	20	ARG	CD-NE-CZ	8.13	134.98	123.60
25	BB	2097	A	N9-C4-C5	-8.13	102.55	105.80
25	BB	2884	U	C5-C6-N1	-8.13	118.63	122.70
25	BB	155	A	C4-C5-C6	-8.13	112.94	117.00
25	BB	208	C	N3-C4-C5	8.13	125.15	121.90
25	BB	1732	C	N3-C2-O2	-8.13	116.21	121.90
25	BB	2293	G	C5-C6-N1	8.13	115.57	111.50
25	BB	2600	A	C6-C5-N7	8.13	137.99	132.30
25	BB	2653	U	C4-C5-C6	8.13	124.58	119.70
3	A1	294	U	C5-C6-N1	-8.13	118.64	122.70
3	A1	826	C	N3-C4-C5	8.13	125.15	121.90
1	AE	29	A	C2-N3-C4	8.13	114.66	110.60
3	A1	1099	G	C5-C6-N1	8.13	115.56	111.50
25	BB	344	A	C5-N7-C8	-8.13	99.84	103.90
25	BB	226	A	N1-C2-N3	-8.13	125.24	129.30
25	BB	2128	G	C4-C5-C6	-8.13	113.92	118.80
25	BB	2148	G	C5-N7-C8	-8.13	100.24	104.30
3	A1	215	C	C2-N3-C4	-8.12	115.84	119.90
3	A1	247	G	N1-C6-O6	-8.12	115.03	119.90
3	A1	938	A	C6-C5-N7	8.12	137.99	132.30
25	BB	261	G	N1-C6-O6	-8.12	115.03	119.90
25	BB	612	G	C5-C6-N1	8.12	115.56	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	703	U	C4'-C3'-C2'	-8.12	94.48	102.60
25	BB	737	C	C5-C6-N1	-8.12	116.94	121.00
25	BB	1003	G	N9-C4-C5	8.13	108.65	105.40
25	BB	1385	A	O4'-C1'-N9	8.12	114.70	108.20
25	BB	2331	G	N7-C8-N9	8.12	117.16	113.10
25	BB	2674	G	N3-C4-C5	-8.12	124.54	128.60
3	A1	218	U	O4'-C1'-N1	8.12	114.70	108.20
25	BB	290	U	N1-C2-N3	8.12	119.77	114.90
3	A1	237	G	C5-C6-O6	-8.12	123.73	128.60
3	A1	637	C	N3-C2-O2	-8.12	116.22	121.90
25	BB	836	G	C1'-O4'-C4'	-8.12	103.40	109.90
25	BB	1118	C	C5'-C4'-O4'	8.12	118.85	109.10
25	BB	1310	G	O4'-C1'-N9	8.12	114.70	108.20
3	A1	101	A	O4'-C1'-N9	8.12	114.69	108.20
3	A1	574	A	C5-C6-N6	8.12	130.19	123.70
3	A1	1327	C	N3-C4-N4	-8.12	112.32	118.00
25	BB	2792	A	C5-C6-N1	8.12	121.76	117.70
3	A1	1097	C	C5-C6-N1	-8.12	116.94	121.00
3	A1	1508	A	C6-C5-N7	8.12	137.98	132.30
25	BB	118	A	C5-C6-N6	8.12	130.19	123.70
25	BB	210	C	N3-C4-N4	-8.12	112.32	118.00
25	BB	1055	G	N1-C6-O6	-8.12	115.03	119.90
25	BB	1538	G	C5-C6-O6	8.12	133.47	128.60
25	BB	2120	G	C4'-C3'-C2'	-8.12	94.48	102.60
25	BB	2685	G	C5-C6-N1	8.12	115.56	111.50
25	BB	900	A	C3'-C2'-C1'	-8.12	95.01	101.50
25	BB	1899	A	C6-C5-N7	8.12	137.98	132.30
25	BB	2648	G	C3'-C2'-C1'	8.12	107.99	101.50
25	BB	2718	G	N3-C2-N2	-8.12	114.22	119.90
1	AP	9	A	N9-C4-C5	8.12	109.05	105.80
25	BB	524	G	C2-N3-C4	8.12	115.96	111.90
3	A1	47	C	N3-C4-N4	-8.11	112.32	118.00
3	A1	887	G	N9-C4-C5	8.12	108.65	105.40
3	A1	1245	C	C5-C4-N4	-8.12	114.52	120.20
24	BA	68	C	N3-C2-O2	-8.11	116.22	121.90
25	BB	317	G	C4-C5-C6	-8.12	113.93	118.80
25	BB	1151	A	C4-C5-C6	-8.12	112.94	117.00
25	BB	958	U	N3-C2-O2	-8.11	116.52	122.20
25	BB	1283	G	C8-N9-C4	-8.11	103.15	106.40
25	BB	1610	A	C1'-O4'-C4'	-8.12	103.41	109.90
25	BB	1831	G	N1-C6-O6	-8.12	115.03	119.90
1	AA	2	C	N3-C2-O2	-8.11	116.22	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	22	G	C5-N7-C8	-8.11	100.24	104.30
25	BB	556	A	C4-C5-C6	-8.11	112.94	117.00
25	BB	1990	C	N1-C2-O2	8.11	123.77	118.90
1	AE	52	U	N3-C2-O2	-8.11	116.52	122.20
3	A1	529	G	C5-N7-C8	8.11	108.36	104.30
3	A1	1062	U	C4'-C3'-C2'	-8.11	94.49	102.60
25	BB	743	A	C5-C6-N1	8.11	121.76	117.70
25	BB	830	G	N9-C1'-C2'	-8.11	103.08	112.00
25	BB	2529	G	O4'-C4'-C3'	8.11	112.59	106.10
25	BB	2699	C	N3-C4-C5	8.11	125.14	121.90
3	A1	1465	A	C5-N7-C8	-8.11	99.84	103.90
45	BV	41	ARG	NE-CZ-NH1	-8.11	116.24	120.30
3	A1	472	U	N3-C2-O2	-8.11	116.52	122.20
3	A1	1523	G	O4'-C1'-N9	8.11	114.69	108.20
25	BB	324	A	O4'-C1'-N9	8.11	114.69	108.20
25	BB	1012	U	C4-C5-C6	8.11	124.56	119.70
25	BB	2660	A	C6-C5-N7	8.11	137.98	132.30
25	BB	2698	U	C1'-O4'-C4'	-8.11	103.41	109.90
25	BB	1118	C	N3-C4-N4	-8.11	112.33	118.00
25	BB	1589	U	C1'-O4'-C4'	-8.11	103.41	109.90
25	BB	1766	G	C3'-C2'-C1'	8.11	107.99	101.50
25	BB	2727	A	C5-C6-N1	8.11	121.75	117.70
25	BB	2800	A	C5-C6-N1	8.11	121.75	117.70
3	A1	303	A	C5-C6-N6	8.11	130.19	123.70
25	BB	493	G	N1-C6-O6	-8.11	115.04	119.90
25	BB	958	U	O4'-C1'-N1	8.11	114.69	108.20
25	BB	1022	G	C5'-C4'-O4'	8.11	118.83	109.10
25	BB	2135	A	C6-C5-N7	8.11	137.97	132.30
25	BB	2659	G	N1-C2-N3	8.11	128.76	123.90
34	BK	90	ARG	NE-CZ-NH1	8.11	124.35	120.30
3	A1	1279	G	N9-C4-C5	-8.10	102.16	105.40
3	A1	120	A	O4'-C4'-C3'	8.10	112.58	106.10
3	A1	338	A	C6-C5-N7	8.10	137.97	132.30
3	A1	519	C	C5-C6-N1	-8.10	116.95	121.00
3	A1	761	G	C5-C6-N1	8.10	115.55	111.50
3	A1	905	U	C1'-O4'-C4'	-8.10	103.42	109.90
3	A1	1050	G	O4'-C1'-N9	8.10	114.68	108.20
25	BB	130	C	C4-C5-C6	-8.10	113.35	117.40
25	BB	552	U	P-O3'-C3'	8.10	129.42	119.70
25	BB	676	A	C5-C6-N6	8.10	130.18	123.70
25	BB	655	A	N1-C2-N3	-8.10	125.25	129.30
25	BB	998	C	N3-C4-C5	8.10	125.14	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1085	A	C5-C6-N1	8.10	121.75	117.70
25	BB	1337	G	C6-C5-N7	8.10	135.26	130.40
25	BB	1331	G	N1-C6-O6	-8.10	115.04	119.90
25	BB	2355	G	N1-C6-O6	-8.10	115.04	119.90
3	A1	689	C	N3-C4-C5	8.10	125.14	121.90
3	A1	802	A	C5-C6-N1	8.10	121.75	117.70
24	BA	16	G	N9-C4-C5	8.10	108.64	105.40
25	BB	854	C	C5-C6-N1	-8.10	116.95	121.00
25	BB	928	A	C6-C5-N7	8.10	137.97	132.30
25	BB	1052	C	O4'-C1'-N1	8.10	114.68	108.20
25	BB	1719	G	C5-C6-N1	8.10	115.55	111.50
25	BB	2487	G	C5-C6-N1	8.10	115.55	111.50
25	BB	2562	U	O4'-C1'-C2'	-8.10	97.70	105.80
25	BB	2566	A	C4-C5-C6	-8.10	112.95	117.00
25	BB	2601	C	C2-N3-C4	-8.10	115.85	119.90
43	BT	16	ARG	NE-CZ-NH2	8.10	124.35	120.30
1	AA	37	G	C6-N1-C2	-8.10	120.24	125.10
1	AA	51	G	N1-C2-N3	8.10	128.76	123.90
3	A1	204	G	C1'-O4'-C4'	-8.10	103.42	109.90
25	BB	2573	C	N3-C4-C5	8.10	125.14	121.90
3	A1	307	C	N1-C2-O2	8.10	123.76	118.90
25	BB	840	C	C6-N1-C2	-8.10	117.06	120.30
25	BB	1384	A	N9-C4-C5	-8.10	102.56	105.80
25	BB	2696	U	C5'-C4'-O4'	8.10	118.81	109.10
1	AP	43	G	C6-C5-N7	8.09	135.26	130.40
37	BN	13	ARG	NE-CZ-NH1	8.09	124.35	120.30
1	AA	18	G	C5-C6-O6	8.09	133.46	128.60
1	AP	38	A	C4-C5-C6	-8.09	112.95	117.00
25	BB	963	U	C5'-C4'-C3'	-8.09	103.05	116.00
25	BB	1357	C	N1-C1'-C2'	-8.09	103.10	112.00
25	BB	2232	C	C2-N3-C4	-8.09	115.85	119.90
25	BB	2262	U	C5-C6-N1	-8.09	118.65	122.70
3	A1	313	A	C4-C5-C6	-8.09	112.95	117.00
3	A1	1370	G	C5-C6-N1	8.09	115.55	111.50
25	BB	2395	C	N3-C4-C5	8.09	125.14	121.90
3	A1	1231	G	N3-C2-N2	-8.09	114.24	119.90
25	BB	1013	C	N1-C2-O2	8.09	123.75	118.90
25	BB	1548	A	C8-N9-C4	8.09	109.04	105.80
25	BB	2155	U	C3'-C2'-C1'	8.09	107.97	101.50
3	A1	320	A	C6-C5-N7	8.09	137.96	132.30
3	A1	864	A	C1'-O4'-C4'	-8.09	103.43	109.90
3	A1	104	G	C3'-C2'-C1'	-8.09	95.03	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1476	A	C1'-O4'-C4'	-8.09	103.43	109.90
25	BB	339	U	C3'-C2'-C1'	8.09	107.97	101.50
25	BB	1328	A	O4'-C1'-N9	-8.09	101.73	108.20
25	BB	660	C	N3-C4-N4	-8.09	112.34	118.00
25	BB	727	A	C4-C5-C6	-8.09	112.96	117.00
25	BB	1010	A	C4-C5-C6	-8.09	112.96	117.00
25	BB	1096	A	C6-C5-N7	8.09	137.96	132.30
25	BB	2777	G	N7-C8-N9	8.09	117.14	113.10
3	A1	115	G	N3-C4-C5	-8.08	124.56	128.60
3	A1	740	U	N1-C2-N3	8.08	119.75	114.90
25	BB	126	A	C4-C5-C6	-8.08	112.96	117.00
25	BB	1433	A	C4-C5-C6	-8.08	112.96	117.00
25	BB	1928	A	C4-C5-C6	-8.08	112.96	117.00
14	AN	9	ARG	NH1-CZ-NH2	-8.08	110.51	119.40
3	A1	427	U	C3'-C2'-C1'	8.08	107.96	101.50
25	BB	205	G	C6-N1-C2	-8.08	120.25	125.10
25	BB	1080	A	C5-N7-C8	-8.08	99.86	103.90
25	BB	1164	C	C3'-C2'-C1'	8.08	107.96	101.50
25	BB	1583	A	C6-C5-N7	8.08	137.96	132.30
25	BB	2050	C	N3-C4-C5	8.08	125.13	121.90
25	BB	1337	G	N1-C6-O6	-8.08	115.05	119.90
3	A1	1187	G	C8-N9-C4	-8.08	103.17	106.40
3	A1	1203	C	C2-N3-C4	-8.08	115.86	119.90
24	BA	87	U	P-O3'-C3'	8.08	129.39	119.70
25	BB	51	G	C5-C6-O6	8.08	133.45	128.60
25	BB	905	A	C6-C5-N7	8.08	137.95	132.30
51	B2	147	ARG	NH1-CZ-NH2	-8.08	110.52	119.40
3	A1	353	A	C5-C6-N1	8.07	121.74	117.70
25	BB	2669	G	N1-C6-O6	-8.07	115.06	119.90
3	A1	1090	U	C5-C6-N1	-8.07	118.66	122.70
3	A1	1256	A	C5-N7-C8	-8.07	99.86	103.90
25	BB	53	A	C4-C5-C6	-8.07	112.96	117.00
25	BB	495	G	C5-C6-N1	8.07	115.54	111.50
25	BB	1228	G	C2-N3-C4	-8.07	107.86	111.90
25	BB	1375	U	C3'-C2'-C1'	8.07	107.96	101.50
25	BB	1481	U	N3-C2-O2	-8.07	116.55	122.20
25	BB	1870	C	C4-C5-C6	-8.07	113.36	117.40
3	A1	74	A	O4'-C1'-N9	8.07	114.66	108.20
25	BB	1957	C	C3'-C2'-C1'	8.07	107.96	101.50
3	A1	649	A	C5-C6-N6	8.07	130.16	123.70
24	BA	110	C	C5'-C4'-O4'	8.07	118.78	109.10
25	BB	2049	G	C6-N1-C2	-8.07	120.26	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2341	G	N9-C4-C5	8.07	108.63	105.40
1	AE	12	U	C5'-C4'-O4'	8.07	118.78	109.10
2	AM	14	U	C5-C6-N1	-8.07	118.67	122.70
3	A1	144	G	N1-C6-O6	-8.07	115.06	119.90
3	A1	410	G	N3-C4-C5	-8.07	124.57	128.60
24	BA	28	C	N3-C2-O2	-8.07	116.25	121.90
25	BB	2583	G	N3-C2-N2	-8.07	114.25	119.90
25	BB	114	U	N1-C2-N3	8.07	119.74	114.90
25	BB	1258	U	C4'-C3'-C2'	-8.07	94.53	102.60
25	BB	2565	A	O4'-C4'-C3'	8.07	112.55	106.10
25	BB	2733	A	C6-C5-N7	8.07	137.95	132.30
28	BE	69	ARG	NE-CZ-NH2	-8.07	116.27	120.30
1	AE	72	C	N3-C4-N4	-8.06	112.36	118.00
25	BB	580	U	O4'-C1'-N1	8.06	114.65	108.20
25	BB	1287	A	O4'-C1'-N9	8.06	114.65	108.20
25	BB	1334	G	C8-N9-C4	-8.06	103.17	106.40
25	BB	1615	C	C6-N1-C2	-8.06	117.07	120.30
25	BB	1445	G	N1-C6-O6	-8.06	115.06	119.90
25	BB	1718	G	N3-C2-N2	-8.06	114.26	119.90
25	BB	2262	U	N3-C2-O2	-8.06	116.56	122.20
1	AA	9	A	C3'-C2'-C1'	8.06	107.95	101.50
3	A1	1454	G	C8-N9-C4	-8.06	103.18	106.40
24	BA	88	C	N1-C2-O2	8.06	123.74	118.90
25	BB	366	C	O4'-C1'-N1	8.06	114.65	108.20
25	BB	416	U	C5'-C4'-O4'	-8.06	99.43	109.10
25	BB	648	G	C5-C6-N1	8.06	115.53	111.50
25	BB	1607	C	O4'-C4'-C3'	8.06	112.55	106.10
25	BB	1884	G	C5-C6-O6	8.06	133.44	128.60
3	A1	1173	U	C5-C6-N1	-8.06	118.67	122.70
25	BB	1389	G	N1-C6-O6	-8.06	115.06	119.90
25	BB	2357	G	N7-C8-N9	8.06	117.13	113.10
25	BB	2454	G	C5-C6-N1	8.06	115.53	111.50
25	BB	2663	G	C4-C5-C6	-8.06	113.97	118.80
3	A1	174	A	C5-C6-N6	8.06	130.15	123.70
3	A1	580	C	N1-C2-O2	8.05	123.73	118.90
3	A1	858	G	C5-C6-N1	8.05	115.53	111.50
25	BB	637	A	C4-C5-C6	-8.06	112.97	117.00
25	BB	1009	A	C4-C5-C6	-8.05	112.97	117.00
25	BB	1290	C	C2-N3-C4	-8.06	115.87	119.90
25	BB	1763	G	C3'-C2'-C1'	-8.05	95.06	101.50
25	BB	2309	A	C5-C6-N6	8.05	130.14	123.70
25	BB	2467	C	C2-N3-C4	-8.06	115.87	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2895	G	C5-C6-O6	8.05	133.43	128.60
1	AA	27	C	C1'-O4'-C4'	-8.05	103.46	109.90
3	A1	740	U	C2-N3-C4	-8.05	122.17	127.00
3	A1	799	G	C8-N9-C4	-8.05	103.18	106.40
25	BB	1071	G	C6-N1-C2	-8.05	120.27	125.10
1	AP	44	A	C3'-C2'-C1'	8.05	107.94	101.50
1	AE	16	U	P-O3'-C3'	8.05	129.36	119.70
3	A1	495	A	C6-C5-N7	8.05	137.94	132.30
3	A1	1365	G	N1-C6-O6	-8.05	115.07	119.90
25	BB	284	U	N3-C2-O2	-8.05	116.56	122.20
25	BB	2063	C	N1-C2-O2	8.05	123.73	118.90
25	BB	2236	U	C4-C5-C6	8.05	124.53	119.70
25	BB	2301	C	C5'-C4'-C3'	-8.05	103.12	116.00
25	BB	2302	U	N1-C2-N3	8.05	119.73	114.90
3	A1	1263	C	N3-C2-O2	-8.05	116.27	121.90
1	AE	33	U	N3-C2-O2	-8.05	116.57	122.20
3	A1	688	G	C2-N3-C4	-8.05	107.88	111.90
3	A1	732	C	C5-C6-N1	-8.05	116.98	121.00
3	A1	923	A	C5'-C4'-O4'	8.05	118.76	109.10
3	A1	1373	G	C5-C6-O6	8.05	133.43	128.60
25	BB	57	C	C2-N3-C4	-8.05	115.88	119.90
25	BB	391	A	C8-N9-C4	-8.05	102.58	105.80
25	BB	1319	C	N1-C2-O2	8.05	123.73	118.90
25	BB	1359	A	C5-N7-C8	-8.05	99.88	103.90
25	BB	1806	C	C1'-O4'-C4'	-8.05	103.46	109.90
25	BB	2350	C	C2-N3-C4	-8.05	115.88	119.90
25	BB	2365	G	C6-C5-N7	8.05	135.23	130.40
25	BB	2404	U	C5'-C4'-O4'	8.05	118.76	109.10
25	BB	2643	G	N1-C6-O6	-8.05	115.07	119.90
25	BB	2673	G	N1-C6-O6	-8.05	115.07	119.90
1	AP	64	A	N1-C2-N3	-8.04	125.28	129.30
3	A1	318	G	C1'-O4'-C4'	-8.04	103.46	109.90
3	A1	523	A	C6-N1-C2	-8.05	113.77	118.60
25	BB	274	C	C3'-C2'-C1'	8.05	107.94	101.50
25	BB	549	G	N1-C2-N2	8.05	123.44	116.20
25	BB	1518	C	N3-C4-C5	8.05	125.12	121.90
25	BB	1714	U	O4'-C1'-N1	-8.05	101.76	108.20
3	A1	1229	A	C3'-C2'-C1'	8.04	107.94	101.50
3	A1	1532	U	C5'-C4'-C3'	-8.04	103.13	116.00
24	BA	90	C	C5-C4-N4	-8.04	114.57	120.20
25	BB	1878	G	C5-N7-C8	-8.04	100.28	104.30
25	BB	1980	G	N1-C6-O6	-8.04	115.07	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	365	U	C5-C6-N1	-8.04	118.68	122.70
25	BB	564	C	C2-N3-C4	-8.04	115.88	119.90
25	BB	1227	G	N3-C2-N2	-8.04	114.27	119.90
25	BB	2008	C	O4'-C1'-N1	8.04	114.63	108.20
25	BB	1056	G	N7-C8-N9	8.04	117.12	113.10
25	BB	1307	A	C2-N3-C4	8.04	114.62	110.60
25	BB	1655	A	C4-C5-C6	-8.04	112.98	117.00
25	BB	2644	G	C8-N9-C4	-8.04	103.18	106.40
3	A1	267	C	C2-N3-C4	-8.04	115.88	119.90
3	A1	753	A	C4-C5-C6	-8.04	112.98	117.00
3	A1	1193	G	C5'-C4'-O4'	8.04	118.75	109.10
3	A1	1353	G	C5-C6-N1	8.04	115.52	111.50
24	BA	103	U	N3-C2-O2	-8.04	116.57	122.20
25	BB	1134	A	C4-C5-C6	-8.04	112.98	117.00
25	BB	2432	A	O4'-C1'-N9	8.04	114.63	108.20
3	A1	549	C	O4'-C1'-N1	8.04	114.63	108.20
3	A1	1306	A	O4'-C4'-C3'	8.04	112.53	106.10
3	A1	1395	C	N3-C4-N4	-8.04	112.37	118.00
24	BA	29	A	C5-C6-N1	8.04	121.72	117.70
25	BB	549	G	N3-C4-C5	-8.04	124.58	128.60
25	BB	2657	A	C6-C5-N7	8.04	137.93	132.30
25	BB	1146	C	C6-N1-C2	-8.04	117.08	120.30
3	A1	449	G	C5-N7-C8	-8.04	100.28	104.30
3	A1	888	G	C6-C5-N7	8.04	135.22	130.40
24	BA	110	C	N1-C2-O2	8.04	123.72	118.90
25	BB	249	C	N3-C2-O2	-8.04	116.28	121.90
25	BB	1917	U	O4'-C1'-N1	8.03	114.63	108.20
3	A1	765	G	C2-N3-C4	8.03	115.92	111.90
3	A1	6	G	N3-C4-C5	-8.03	124.58	128.60
3	A1	581	G	C5-C6-N1	8.03	115.52	111.50
10	AI	28	ARG	NH1-CZ-NH2	-8.03	110.56	119.40
25	BB	2796	U	C4'-C3'-C2'	-8.03	94.57	102.60
3	A1	716	A	C6-C5-N7	8.03	137.92	132.30
3	A1	1424	U	O4'-C1'-N1	8.03	114.62	108.20
25	BB	1492	G	N3-C4-C5	-8.03	124.58	128.60
25	BB	1735	A	C5-C6-N6	8.03	130.12	123.70
25	BB	706	A	C3'-C2'-C1'	8.03	107.92	101.50
25	BB	1300	G	N1-C2-N3	8.03	128.72	123.90
25	BB	1625	C	N3-C2-O2	-8.03	116.28	121.90
3	A1	131	A	C4-C5-C6	-8.03	112.99	117.00
3	A1	193	C	C6-N1-C2	-8.03	117.09	120.30
3	A1	1400	C	O4'-C1'-N1	8.03	114.62	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	837	C	C5-C6-N1	8.03	125.01	121.00
25	BB	1520	U	N3-C2-O2	-8.03	116.58	122.20
25	BB	553	G	N1-C6-O6	-8.03	115.08	119.90
25	BB	749	A	C6-C5-N7	8.03	137.92	132.30
25	BB	1947	C	C3'-C2'-C1'	-8.03	95.08	101.50
25	BB	1967	C	C6-N1-C2	-8.03	117.09	120.30
25	BB	2875	C	N3-C2-O2	-8.03	116.28	121.90
30	BG	96	ARG	NE-CZ-NH1	8.03	124.31	120.30
3	A1	520	A	C5-C6-N1	8.02	121.71	117.70
3	A1	865	A	C4-C5-C6	-8.02	112.99	117.00
3	A1	1087	G	C6-C5-N7	8.02	135.21	130.40
3	A1	1123	U	N1-C2-N3	8.02	119.71	114.90
3	A1	1368	A	C5-N7-C8	-8.02	99.89	103.90
3	A1	1460	C	C2-N3-C4	-8.02	115.89	119.90
25	BB	83	A	C5-C6-N1	8.02	121.71	117.70
25	BB	164	C	N3-C2-O2	-8.02	116.28	121.90
25	BB	214	G	N1-C6-O6	-8.02	115.09	119.90
3	A1	1521	C	C2-N3-C4	-8.02	115.89	119.90
25	BB	2066	C	O4'-C4'-C3'	8.02	112.52	106.10
40	BQ	47	ARG	NH1-CZ-NH2	-8.02	110.58	119.40
52	B3	152	ARG	CD-NE-CZ	8.02	134.83	123.60
25	BB	2295	C	N1-C2-O2	8.02	123.71	118.90
25	BB	2336	A	C6-C5-N7	8.02	137.91	132.30
3	A1	400	C	C3'-C2'-C1'	-8.02	95.08	101.50
3	A1	1099	G	C6-N1-C2	-8.02	120.29	125.10
24	BA	26	C	O4'-C1'-N1	8.02	114.62	108.20
25	BB	510	C	C4'-C3'-C2'	-8.02	94.58	102.60
25	BB	811	U	N3-C2-O2	-8.02	116.59	122.20
25	BB	2870	C	C1'-O4'-C4'	-8.02	103.48	109.90
25	BB	603	A	N1-C2-N3	-8.02	125.29	129.30
25	BB	1292	G	N7-C8-N9	8.02	117.11	113.10
34	BK	37	GLU	OE1-CD-OE2	-8.02	113.68	123.30
25	BB	1365	A	N1-C2-N3	-8.02	125.29	129.30
25	BB	2120	G	N1-C6-O6	-8.02	115.09	119.90
25	BB	2736	A	C5-C6-N1	8.02	121.71	117.70
1	AP	74	C	OP1-P-O3'	-8.02	87.57	105.20
3	A1	107	G	C5-C6-N1	8.02	115.51	111.50
3	A1	107	G	C6-C5-N7	8.02	135.21	130.40
3	A1	1243	C	C5-C4-N4	8.02	125.81	120.20
25	BB	1480	C	N3-C4-N4	-8.02	112.39	118.00
25	BB	1915	U	C4-C5-C6	8.02	124.51	119.70
25	BB	2658	C	C6-N1-C2	-8.02	117.09	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2897	U	C4-C5-C6	8.02	124.51	119.70
3	A1	49	U	N1-C2-N3	8.01	119.71	114.90
3	A1	496	A	N9-C4-C5	-8.01	102.59	105.80
3	A1	567	G	N1-C6-O6	-8.01	115.09	119.90
3	A1	799	G	O4'-C1'-N9	8.01	114.61	108.20
3	A1	1340	A	O4'-C4'-C3'	8.01	112.51	106.10
1	AP	70	C	C1'-O4'-C4'	-8.01	103.49	109.90
3	A1	19	A	C5-C6-N1	8.01	121.71	117.70
3	A1	309	A	C4-C5-C6	-8.01	112.99	117.00
3	A1	406	G	N3-C4-C5	-8.01	124.59	128.60
3	A1	925	G	O4'-C1'-N9	8.01	114.61	108.20
24	BA	31	C	N3-C4-N4	-8.01	112.39	118.00
25	BB	699	A	C4-C5-C6	-8.01	112.99	117.00
25	BB	1033	U	N3-C2-O2	-8.01	116.59	122.20
25	BB	1089	A	C3'-C2'-C1'	8.01	107.91	101.50
25	BB	1361	G	C5'-C4'-C3'	-8.01	103.18	116.00
25	BB	2072	C	C2-N3-C4	-8.01	115.89	119.90
3	A1	990	C	N1-C2-N3	8.01	124.81	119.20
3	A1	631	C	N3-C4-N4	-8.01	112.39	118.00
3	A1	1266	G	C5-C6-O6	8.01	133.41	128.60
3	A1	1396	A	C3'-C2'-C1'	-8.01	95.09	101.50
25	BB	2288	A	P-O3'-C3'	8.01	129.31	119.70
25	BB	2407	A	C6-C5-N7	8.01	137.91	132.30
25	BB	44	A	C5-C6-N1	8.01	121.70	117.70
25	BB	961	C	N3-C2-O2	-8.01	116.29	121.90
25	BB	1391	U	N1-C2-O2	8.01	128.41	122.80
25	BB	1716	U	C5'-C4'-O4'	8.01	118.71	109.10
25	BB	1983	G	C4'-C3'-C2'	8.01	110.61	102.60
25	BB	2128	G	C6-C5-N7	8.01	135.21	130.40
25	BB	2215	C	N3-C4-N4	-8.01	112.39	118.00
25	BB	2725	A	C6-C5-N7	8.01	137.91	132.30
1	AP	16	U	O4'-C1'-N1	-8.01	101.79	108.20
25	BB	1294	U	O4'-C1'-N1	8.01	114.61	108.20
3	A1	599	C	N1-C2-O2	8.01	123.70	118.90
3	A1	1086	U	C5-C6-N1	-8.01	118.70	122.70
3	A1	1269	A	C4-C5-C6	-8.01	113.00	117.00
25	BB	2628	C	C6-N1-C2	-8.01	117.10	120.30
25	BB	1007	C	C6-N1-C2	-8.01	117.10	120.30
25	BB	2827	C	N3-C2-O2	-8.01	116.30	121.90
1	AA	42	G	C5-C6-N1	8.00	115.50	111.50
1	AP	56	C	C2-N3-C4	-8.00	115.90	119.90
3	A1	706	A	C5'-C4'-O4'	8.00	118.70	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	737	C	O4'-C1'-N1	8.00	114.60	108.20
25	BB	1543	G	N1-C6-O6	-8.00	115.10	119.90
3	A1	276	G	N7-C8-N9	8.00	117.10	113.10
3	A1	838	G	N3-C4-C5	-8.00	124.60	128.60
3	A1	859	G	N1-C6-O6	-8.00	115.10	119.90
3	A1	1336	C	N3-C4-N4	-8.00	112.40	118.00
24	BA	114	C	O4'-C4'-C3'	8.00	112.50	106.10
25	BB	869	G	C4-C5-N7	-8.00	107.60	110.80
25	BB	1005	C	N3-C2-O2	-8.00	116.30	121.90
25	BB	2533	U	P-O3'-C3'	8.00	129.31	119.70
25	BB	1836	C	N3-C4-N4	-8.00	112.40	118.00
25	BB	2418	A	C5'-C4'-O4'	8.00	118.70	109.10
25	BB	2629	U	P-O3'-C3'	8.00	129.30	119.70
1	AE	28	C	O4'-C1'-N1	8.00	114.60	108.20
3	A1	1103	C	N1-C2-O2	8.00	123.70	118.90
3	A1	1389	C	N3-C4-C5	8.00	125.10	121.90
25	BB	1138	G	N3-C4-C5	-8.00	124.60	128.60
25	BB	1721	G	N3-C4-C5	-8.00	124.60	128.60
3	A1	152	A	C5-C6-N1	8.00	121.70	117.70
3	A1	1195	C	N3-C2-O2	-8.00	116.30	121.90
3	A1	1267	C	C1'-O4'-C4'	-8.00	103.50	109.90
25	BB	776	G	N3-C4-C5	-8.00	124.60	128.60
25	BB	1223	G	C6-C5-N7	8.00	135.20	130.40
25	BB	1950	G	C5'-C4'-O4'	8.00	118.70	109.10
25	BB	2567	G	C6-C5-N7	8.00	135.20	130.40
1	AA	4	G	N1-C6-O6	-8.00	115.10	119.90
3	A1	150	U	C2-N3-C4	-8.00	122.20	127.00
25	BB	556	A	N9-C1'-C2'	-8.00	103.20	112.00
25	BB	875	G	C5-C6-N1	8.00	115.50	111.50
25	BB	1963	U	O4'-C4'-C3'	-8.00	96.00	104.00
25	BB	1994	C	N1-C2-O2	8.00	123.70	118.90
3	A1	249	U	N1-C1'-C2'	-8.00	103.21	112.00
3	A1	32	A	C5-C6-N1	7.99	121.70	117.70
25	BB	1581	G	C4-C5-C6	-7.99	114.00	118.80
25	BB	1726	C	N3-C2-O2	-7.99	116.31	121.90
25	BB	2763	G	C5-C6-O6	7.99	133.40	128.60
8	AG	53	ASP	CB-CG-OD1	7.99	125.49	118.30
25	BB	508	A	C1'-O4'-C4'	-7.99	103.51	109.90
25	BB	770	G	C8-N9-C4	-7.99	103.20	106.40
3	A1	1061	G	O4'-C1'-N9	7.99	114.59	108.20
3	A1	1270	G	C5-C6-N1	7.99	115.50	111.50
25	BB	879	G	C5-N7-C8	-7.99	100.31	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1107	G	C5-C6-N1	7.99	115.50	111.50
25	BB	1756	G	C5'-C4'-C3'	-7.99	103.22	116.00
3	A1	373	A	C6-C5-N7	7.99	137.89	132.30
25	BB	1255	U	O4'-C1'-N1	7.99	114.59	108.20
25	BB	2183	A	C5-C6-N6	7.99	130.09	123.70
25	BB	2311	A	O4'-C1'-N9	-7.99	101.81	108.20
25	BB	2670	A	C6-C5-N7	7.99	137.89	132.30
25	BB	2875	C	C2-N3-C4	-7.99	115.91	119.90
25	BB	1960	A	O5'-P-OP2	-7.99	98.51	105.70
3	A1	11	G	C8-N9-C4	-7.99	103.21	106.40
3	A1	397	A	C4-C5-C6	-7.99	113.01	117.00
3	A1	724	G	C5-C6-O6	7.99	133.39	128.60
25	BB	159	G	N7-C8-N9	7.99	117.09	113.10
25	BB	2777	G	N1-C6-O6	-7.99	115.11	119.90
25	BB	2811	G	N7-C8-N9	7.99	117.09	113.10
25	BB	1169	A	C4-C5-C6	-7.98	113.01	117.00
25	BB	1192	G	N7-C8-N9	7.98	117.09	113.10
3	A1	684	U	C1'-O4'-C4'	-7.98	103.51	109.90
25	BB	1376	C	N3-C2-O2	-7.98	116.31	121.90
25	BB	1911	U	C5-C6-N1	-7.98	118.71	122.70
25	BB	2659	G	N1-C6-O6	-7.98	115.11	119.90
3	A1	1087	G	C3'-C2'-C1'	7.98	107.88	101.50
3	A1	1437	A	C5-C6-N1	7.98	121.69	117.70
24	BA	62	C	N1-C2-O2	7.98	123.69	118.90
25	BB	15	G	C5-N7-C8	-7.98	100.31	104.30
25	BB	723	C	C4-C5-C6	7.98	121.39	117.40
25	BB	931	U	N1-C2-N3	7.98	119.69	114.90
25	BB	1628	G	C5-C6-O6	7.98	133.39	128.60
25	BB	1934	C	C6-N1-C2	-7.98	117.11	120.30
25	BB	2168	G	C5-N7-C8	-7.98	100.31	104.30
25	BB	2557	G	O4'-C1'-N9	7.98	114.58	108.20
3	A1	263	A	C5-C6-N6	7.98	130.08	123.70
3	A1	798	U	N3-C2-O2	-7.98	116.61	122.20
3	A1	970	C	C4-C5-C6	-7.98	113.41	117.40
25	BB	999	U	C5-C6-N1	-7.98	118.71	122.70
25	BB	1572	A	C5-C6-N6	7.98	130.08	123.70
25	BB	2669	G	C4-C5-N7	-7.98	107.61	110.80
1	AP	14	A	C4-C5-C6	-7.98	113.01	117.00
1	AP	58	A	C4-C5-C6	-7.98	113.01	117.00
3	A1	426	U	N1-C2-N3	7.98	119.69	114.90
3	A1	1087	G	N3-C2-N2	-7.98	114.32	119.90
3	A1	1417	G	C5-N7-C8	-7.98	100.31	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1164	C	C2-N3-C4	-7.98	115.91	119.90
25	BB	1479	G	C4-C5-N7	7.98	113.99	110.80
25	BB	1654	A	C5-C6-N1	7.98	121.69	117.70
1	AA	29	A	O4'-C4'-C3'	7.98	112.48	106.10
25	BB	594	U	C5-C4-O4	-7.98	121.11	125.90
25	BB	674	G	N1-C6-O6	-7.98	115.11	119.90
25	BB	1055	G	C4'-C3'-C2'	-7.98	94.62	102.60
25	BB	2669	G	C5'-C4'-C3'	-7.98	103.24	116.00
52	B3	2	ARG	NE-CZ-NH1	7.98	124.29	120.30
25	BB	314	C	N3-C2-O2	-7.97	116.32	121.90
25	BB	1913	A	O4'-C1'-N9	7.97	114.58	108.20
25	BB	2547	A	N1-C2-N3	-7.97	125.31	129.30
3	A1	487	A	N1-C6-N6	-7.97	113.82	118.60
3	A1	988	G	C5-C6-O6	7.97	133.38	128.60
25	BB	964	C	N3-C4-C5	7.97	125.09	121.90
25	BB	2330	G	N3-C4-N9	-7.97	121.22	126.00
25	BB	1482	G	N3-C4-N9	7.97	130.78	126.00
25	BB	1918	A	N1-C2-N3	-7.97	125.31	129.30
3	A1	118	U	C3'-C2'-C1'	7.97	107.88	101.50
3	A1	288	A	C5'-C4'-O4'	-7.97	99.54	109.10
25	BB	2048	G	C5-C6-N1	7.97	115.48	111.50
25	BB	2668	G	O4'-C1'-N9	7.97	114.58	108.20
3	A1	519	C	N3-C4-C5	7.97	125.09	121.90
3	A1	1074	G	N1-C6-O6	-7.97	115.12	119.90
3	A1	1195	C	O4'-C1'-N1	7.97	114.57	108.20
8	AG	40	ARG	NE-CZ-NH2	-7.97	116.32	120.30
25	BB	315	G	N3-C2-N2	-7.97	114.32	119.90
25	BB	2172	U	N3-C2-O2	-7.97	116.62	122.20
1	AP	65	G	C5-C6-N1	7.96	115.48	111.50
10	AI	56	ARG	NH1-CZ-NH2	-7.96	110.64	119.40
25	BB	1139	G	N9-C1'-C2'	7.96	124.35	114.00
25	BB	1437	C	N1-C2-O2	7.96	123.68	118.90
25	BB	1689	A	C5-C6-N6	7.96	130.07	123.70
25	BB	2144	G	N1-C6-O6	-7.96	115.12	119.90
25	BB	2320	U	C4-C5-C6	7.96	124.48	119.70
25	BB	2336	A	C5-C6-N6	7.96	130.07	123.70
1	AE	32	C	C6-N1-C2	-7.96	117.12	120.30
3	A1	1282	C	N3-C4-N4	-7.96	112.43	118.00
25	BB	602	A	C4'-C3'-C2'	-7.96	94.64	102.60
25	BB	1205	A	N9-C4-C5	-7.96	102.62	105.80
25	BB	2153	C	N3-C2-O2	-7.96	116.33	121.90
3	A1	1404	C	N3-C4-C5	7.96	125.08	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	31	C	N3-C4-C5	7.96	125.08	121.90
25	BB	2463	C	C2-N3-C4	-7.96	115.92	119.90
1	AA	25	C	N1-C2-O2	7.96	123.67	118.90
3	A1	374	A	C5-C6-N1	7.96	121.68	117.70
3	A1	797	C	N3-C4-C5	7.96	125.08	121.90
3	A1	987	G	N3-C4-N9	-7.96	121.22	126.00
3	A1	999	C	N1-C2-O2	7.96	123.67	118.90
3	A1	1281	C	C2-N3-C4	-7.96	115.92	119.90
3	A1	1500	A	C5-C6-N1	7.96	121.68	117.70
25	BB	2288	A	C2-N3-C4	7.96	114.58	110.60
25	BB	2479	U	O4'-C1'-N1	7.96	114.57	108.20
3	A1	631	C	N3-C2-O2	-7.96	116.33	121.90
25	BB	1100	C	C5-C4-N4	7.96	125.77	120.20
25	BB	1304	A	C5-C6-N6	7.96	130.07	123.70
25	BB	1624	U	O4'-C1'-N1	7.96	114.57	108.20
25	BB	1737	G	N9-C4-C5	7.96	108.58	105.40
25	BB	2678	C	N3-C2-O2	-7.96	116.33	121.90
25	BB	2790	U	O4'-C1'-N1	7.96	114.56	108.20
3	A1	1225	A	C6-C5-N7	7.96	137.87	132.30
3	A1	1318	A	C4-C5-C6	-7.96	113.02	117.00
25	BB	1499	C	O4'-C1'-N1	7.96	114.56	108.20
3	A1	299	G	C1'-O4'-C4'	7.95	116.26	109.90
24	BA	21	G	N7-C8-N9	7.95	117.08	113.10
25	BB	1042	G	C4-C5-N7	-7.95	107.62	110.80
25	BB	1738	G	C5-C6-O6	7.95	133.37	128.60
25	BB	2752	C	N1-C2-O2	7.95	123.67	118.90
29	BF	51	ARG	CD-NE-CZ	7.95	134.73	123.60
3	A1	53	A	C6-C5-N7	7.95	137.87	132.30
3	A1	311	C	N3-C2-O2	-7.95	116.33	121.90
3	A1	496	A	C2-N3-C4	7.95	114.58	110.60
3	A1	831	A	N1-C2-N3	-7.95	125.33	129.30
25	BB	1947	C	N3-C4-C5	7.95	125.08	121.90
25	BB	1987	A	C8-N9-C4	-7.95	102.62	105.80
25	BB	2601	C	O4'-C1'-N1	7.95	114.56	108.20
3	A1	744	C	N3-C4-N4	-7.95	112.44	118.00
3	A1	1208	C	C5-C6-N1	-7.95	117.03	121.00
3	A1	1084	G	N1-C6-O6	-7.95	115.13	119.90
3	A1	1206	G	C4-C5-N7	7.95	113.98	110.80
25	BB	1376	C	C2-N3-C4	-7.95	115.93	119.90
25	BB	261	G	C1'-O4'-C4'	-7.95	103.54	109.90
25	BB	865	C	C2-N3-C4	-7.95	115.93	119.90
25	BB	904	G	C8-N9-C4	-7.95	103.22	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1003	G	O4'-C4'-C3'	7.95	112.46	106.10
25	BB	1283	G	N1-C6-O6	-7.95	115.13	119.90
25	BB	1663	G	C4'-C3'-C2'	-7.95	94.65	102.60
25	BB	1939	U	N3-C2-O2	-7.95	116.64	122.20
25	BB	2329	U	O3'-P-O5'	7.95	119.10	104.00
25	BB	2585	U	O4'-C1'-N1	7.95	114.56	108.20
40	BQ	7	ARG	NE-CZ-NH2	-7.95	116.33	120.30
3	A1	1395	C	C2-N3-C4	-7.94	115.93	119.90
25	BB	1242	U	C4-C5-C6	7.94	124.47	119.70
3	A1	331	G	N3-C2-N2	-7.94	114.34	119.90
25	BB	803	U	C5-C6-N1	-7.94	118.73	122.70
25	BB	1208	C	N3-C2-O2	-7.94	116.34	121.90
25	BB	1326	U	C1'-O4'-C4'	-7.94	103.55	109.90
25	BB	1605	C	N3-C4-C5	7.94	125.08	121.90
25	BB	1866	A	C5-C6-N1	7.94	121.67	117.70
25	BB	2728	U	O4'-C1'-C2'	-7.94	97.86	105.80
25	BB	205	G	C8-N9-C4	-7.94	103.22	106.40
25	BB	225	C	C2-N3-C4	-7.94	115.93	119.90
25	BB	702	U	C4-C5-C6	7.94	124.46	119.70
25	BB	2097	A	C4-C5-C6	-7.94	113.03	117.00
25	BB	2587	A	C4'-C3'-C2'	-7.94	94.66	102.60
25	BB	2832	U	C5-C6-N1	-7.94	118.73	122.70
3	A1	702	A	C3'-C2'-C1'	7.94	107.85	101.50
25	BB	2201	G	C4-C5-N7	-7.94	107.62	110.80
3	A1	644	U	N3-C2-O2	-7.94	116.64	122.20
3	A1	778	G	C8-N9-C4	-7.94	103.22	106.40
25	BB	119	A	C4-C5-C6	-7.94	113.03	117.00
25	BB	1325	U	C4-C5-C6	7.94	124.46	119.70
25	BB	1553	A	N1-C6-N6	-7.94	113.84	118.60
25	BB	2059	A	C4-C5-C6	-7.94	113.03	117.00
25	BB	2793	C	O4'-C1'-N1	7.94	114.55	108.20
3	A1	187	G	C8-N9-C4	-7.94	103.23	106.40
3	A1	763	G	N3-C2-N2	-7.93	114.34	119.90
3	A1	925	G	C3'-C2'-C1'	7.93	107.85	101.50
25	BB	327	G	C8-N9-C4	-7.93	103.23	106.40
25	BB	392	U	N3-C2-O2	-7.93	116.64	122.20
25	BB	844	A	N7-C8-N9	7.93	117.77	113.80
25	BB	1126	A	C2-N3-C4	7.93	114.57	110.60
25	BB	2383	G	C8-N9-C4	-7.93	103.23	106.40
25	BB	2811	G	C5'-C4'-C3'	-7.93	103.31	116.00
3	A1	685	G	C1'-O4'-C4'	-7.93	103.55	109.90
3	A1	987	G	C5-C6-O6	7.93	133.36	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1393	U	N3-C2-O2	-7.93	116.65	122.20
25	BB	194	G	C1'-O4'-C4'	-7.93	103.56	109.90
25	BB	479	A	C5-C6-N6	7.93	130.04	123.70
25	BB	680	C	N3-C2-O2	-7.93	116.35	121.90
25	BB	734	A	C5-C6-N1	7.93	121.67	117.70
25	BB	848	C	C2-N3-C4	-7.93	115.93	119.90
3	A1	667	G	N9-C4-C5	7.93	108.57	105.40
3	A1	794	A	C6-C5-N7	7.93	137.85	132.30
25	BB	47	C	C5-C6-N1	-7.93	117.03	121.00
1	AP	18	G	C3'-C2'-C1'	-7.93	95.16	101.50
3	A1	88	U	N3-C4-O4	-7.93	113.85	119.40
3	A1	848	C	C2-N3-C4	-7.93	115.94	119.90
3	A1	912	C	C4'-C3'-C2'	-7.93	94.67	102.60
25	BB	1785	A	C5-C6-N6	7.93	130.04	123.70
25	BB	2755	C	N3-C4-N4	-7.93	112.45	118.00
25	BB	739	A	C1'-O4'-C4'	-7.93	103.56	109.90
25	BB	1125	G	C6-N1-C2	-7.93	120.34	125.10
25	BB	1475	G	C4'-C3'-C2'	-7.93	94.67	102.60
25	BB	2174	C	N3-C2-O2	-7.93	116.35	121.90
1	AA	55	U	C4'-C3'-C2'	-7.93	94.67	102.60
25	BB	2021	C	C2-N3-C4	-7.93	115.94	119.90
25	BB	2550	G	C4'-C3'-C2'	-7.93	94.67	102.60
3	A1	449	G	C8-N9-C4	-7.92	103.23	106.40
3	A1	1282	C	C2-N3-C4	-7.92	115.94	119.90
25	BB	35	G	O4'-C1'-N9	7.92	114.54	108.20
25	BB	507	A	C6-C5-N7	7.92	137.85	132.30
25	BB	960	A	O4'-C1'-N9	7.92	114.54	108.20
25	BB	2806	C	C5-C4-N4	-7.92	114.65	120.20
3	A1	506	G	C5-C6-O6	7.92	133.35	128.60
3	A1	1522	U	N3-C2-O2	-7.92	116.65	122.20
1	AP	26	G	C5-C6-O6	7.92	133.35	128.60
3	A1	201	G	N1-C6-O6	-7.92	115.15	119.90
3	A1	540	G	C8-N9-C4	-7.92	103.23	106.40
3	A1	779	C	N3-C4-N4	-7.92	112.45	118.00
3	A1	1113	C	N3-C2-O2	-7.92	116.36	121.90
3	A1	1365	G	C8-N9-C4	-7.92	103.23	106.40
3	A1	1457	G	N1-C2-N3	7.92	128.65	123.90
25	BB	1261	C	N3-C4-C5	7.92	125.07	121.90
25	BB	1538	G	O4'-C4'-C3'	7.92	112.44	106.10
25	BB	1852	U	N1-C2-N3	7.92	119.65	114.90
25	BB	1958	C	N3-C4-C5	7.92	125.07	121.90
25	BB	2508	G	O4'-C1'-N9	7.92	114.54	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2599	G	N1-C6-O6	-7.92	115.15	119.90
3	A1	82	G	N3-C4-C5	-7.92	124.64	128.60
3	A1	1173	U	N1-C2-O2	7.92	128.34	122.80
25	BB	1174	U	O4'-C1'-N1	7.92	114.54	108.20
25	BB	2108	A	C3'-C2'-C1'	-7.92	95.16	101.50
32	BI	88	ARG	NE-CZ-NH2	7.92	124.26	120.30
3	A1	773	G	C5-C6-N1	7.92	115.46	111.50
3	A1	1492	A	C6-C5-N7	7.92	137.84	132.30
25	BB	249	C	N3-C4-N4	-7.92	112.46	118.00
25	BB	1099	G	C5-N7-C8	-7.92	100.34	104.30
25	BB	1614	A	C5-C6-N6	7.92	130.03	123.70
25	BB	1784	A	C6-C5-N7	7.92	137.84	132.30
3	A1	26	A	C6-C5-N7	7.92	137.84	132.30
25	BB	1640	A	C2-N3-C4	7.92	114.56	110.60
1	AP	22	G	N1-C6-O6	-7.92	115.15	119.90
3	A1	578	C	N3-C4-C5	7.92	125.07	121.90
3	A1	1290	G	N3-C2-N2	-7.92	114.36	119.90
25	BB	1	G	C5-C6-N1	7.92	115.46	111.50
25	BB	1538	G	C1'-O4'-C4'	-7.92	103.57	109.90
25	BB	2673	G	N3-C2-N2	-7.92	114.36	119.90
3	A1	170	U	O4'-C1'-C2'	-7.91	97.89	105.80
3	A1	349	A	C2-N3-C4	7.91	114.56	110.60
3	A1	1294	G	C5-C6-N1	7.91	115.46	111.50
24	BA	117	G	C4-C5-C6	-7.91	114.05	118.80
25	BB	106	C	C4-C5-C6	7.91	121.36	117.40
25	BB	200	U	C3'-C2'-C1'	7.91	107.83	101.50
25	BB	1748	C	N3-C4-C5	7.91	125.06	121.90
25	BB	2182	U	N3-C4-O4	-7.91	113.86	119.40
25	BB	287	G	C1'-O4'-C4'	-7.91	103.57	109.90
25	BB	541	A	C2-N3-C4	7.91	114.56	110.60
25	BB	1637	A	C4-C5-C6	-7.91	113.04	117.00
25	BB	2060	A	C1'-O4'-C4'	-7.91	103.57	109.90
1	AA	29	A	C6-C5-N7	7.91	137.84	132.30
1	AE	72	C	N3-C2-O2	-7.91	116.36	121.90
3	A1	293	G	N3-C4-C5	-7.91	124.64	128.60
3	A1	682	G	N1-C6-O6	-7.91	115.15	119.90
3	A1	1298	U	C5-C6-N1	-7.91	118.74	122.70
25	BB	266	G	C2-N3-C4	7.91	115.86	111.90
25	BB	852	U	C5-C6-N1	-7.91	118.75	122.70
25	BB	1680	U	C4-C5-C6	7.91	124.45	119.70
25	BB	2217	G	C5-C6-N1	7.91	115.45	111.50
25	BB	2619	C	N1-C2-N3	7.91	124.74	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	8	U	N1-C2-O2	7.91	128.34	122.80
3	A1	641	U	N3-C2-O2	-7.91	116.66	122.20
3	A1	1227	A	C1'-O4'-C4'	-7.91	103.57	109.90
25	BB	139	U	N3-C2-O2	-7.91	116.67	122.20
25	BB	1544	A	C6-C5-N7	7.91	137.84	132.30
25	BB	2182	U	C5-C4-O4	7.91	130.65	125.90
3	A1	746	A	C5-C6-N1	7.91	121.65	117.70
25	BB	230	G	N1-C6-O6	-7.91	115.16	119.90
25	BB	868	U	O4'-C1'-N1	7.91	114.53	108.20
25	BB	933	A	C4-C5-C6	-7.91	113.05	117.00
25	BB	2268	A	C5'-C4'-C3'	-7.91	103.35	116.00
25	BB	2278	A	C5-C6-N1	7.91	121.65	117.70
3	A1	147	G	O4'-C1'-N9	7.91	114.52	108.20
3	A1	676	A	C5-C6-N1	7.91	121.65	117.70
3	A1	771	G	C5-C6-N1	7.91	115.45	111.50
3	A1	911	U	C4'-C3'-C2'	-7.91	94.69	102.60
3	A1	1267	C	N3-C4-C5	7.91	125.06	121.90
3	A1	1468	A	C6-C5-N7	7.91	137.83	132.30
15	AO	58	ARG	NE-CZ-NH2	-7.91	116.35	120.30
25	BB	1800	C	N3-C2-O2	-7.91	116.37	121.90
25	BB	2112	G	C6-C5-N7	7.91	135.14	130.40
25	BB	2356	U	N3-C2-O2	-7.91	116.67	122.20
25	BB	132	G	N1-C6-O6	-7.90	115.16	119.90
25	BB	1630	A	C6-C5-N7	7.90	137.83	132.30
25	BB	1797	G	C5-C6-N1	7.90	115.45	111.50
49	BZ	49	ARG	NE-CZ-NH2	-7.90	116.35	120.30
3	A1	504	C	C5-C6-N1	-7.90	117.05	121.00
3	A1	632	U	O4'-C1'-N1	7.90	114.52	108.20
25	BB	1	G	C8-N9-C4	-7.90	103.24	106.40
25	BB	314	C	C5'-C4'-O4'	7.90	118.58	109.10
25	BB	756	A	C5-C6-N1	7.90	121.65	117.70
25	BB	1194	A	C4-C5-C6	-7.90	113.05	117.00
25	BB	2308	G	C4-C5-N7	-7.90	107.64	110.80
25	BB	2753	A	C5'-C4'-O4'	7.90	118.58	109.10
3	A1	451	A	C5-C6-N1	7.90	121.65	117.70
3	A1	618	C	C3'-C2'-C1'	7.90	107.82	101.50
3	A1	1297	G	C8-N9-C4	-7.90	103.24	106.40
3	A1	1406	U	C5-C4-O4	7.90	130.64	125.90
25	BB	236	C	N3-C4-C5	7.90	125.06	121.90
25	BB	869	G	N9-C4-C5	7.90	108.56	105.40
25	BB	1097	U	N3-C2-O2	-7.90	116.67	122.20
25	BB	1299	G	N1-C6-O6	-7.90	115.16	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1656	C	N3-C4-C5	7.90	125.06	121.90
25	BB	2700	A	C2-N3-C4	7.90	114.55	110.60
29	BF	18	ARG	NE-CZ-NH2	7.90	124.25	120.30
3	A1	325	A	N1-C6-N6	-7.90	113.86	118.60
25	BB	1863	G	N1-C2-N3	7.90	128.64	123.90
3	A1	808	C	N3-C4-N4	-7.90	112.47	118.00
3	A1	1183	U	C3'-C2'-C1'	7.90	107.82	101.50
25	BB	196	A	C5-C6-N1	7.90	121.65	117.70
25	BB	1746	A	O4'-C4'-C3'	-7.90	96.10	104.00
25	BB	1953	A	N9-C4-C5	7.90	108.96	105.80
3	A1	502	A	C1'-O4'-C4'	-7.90	103.58	109.90
25	BB	470	A	C5-C6-N6	7.90	130.02	123.70
25	BB	526	A	C6-C5-N7	7.90	137.83	132.30
25	BB	2184	A	C6-C5-N7	7.90	137.83	132.30
3	A1	759	A	C2-N3-C4	7.89	114.55	110.60
16	AQ	33	ARG	C-N-CA	7.89	141.43	121.70
25	BB	362	A	C4'-C3'-C2'	-7.89	94.70	102.60
25	BB	1834	U	N1-C2-N3	7.89	119.64	114.90
25	BB	2459	A	C5-C6-N1	7.89	121.65	117.70
25	BB	2590	A	C6-C5-N7	7.89	137.83	132.30
3	A1	880	C	C4'-C3'-C2'	-7.89	94.71	102.60
25	BB	812	C	N3-C2-O2	-7.89	116.38	121.90
25	BB	1036	G	N1-C6-O6	-7.89	115.16	119.90
25	BB	1296	G	N1-C6-O6	-7.89	115.16	119.90
25	BB	1922	G	C6-C5-N7	7.89	135.13	130.40
25	BB	2425	A	C6-C5-N7	7.89	137.82	132.30
25	BB	2539	C	C4'-C3'-C2'	-7.89	94.71	102.60
3	A1	164	G	C5-C6-N1	7.89	115.44	111.50
3	A1	111	G	C8-N9-C4	-7.89	103.24	106.40
25	BB	541	A	O4'-C1'-N9	7.89	114.51	108.20
25	BB	569	U	N3-C2-O2	-7.89	116.68	122.20
25	BB	226	A	C5-C6-N6	7.89	130.01	123.70
25	BB	706	A	N1-C2-N3	-7.89	125.36	129.30
3	A1	23	C	C2-N3-C4	-7.89	115.96	119.90
3	A1	810	C	N3-C2-O2	-7.89	116.38	121.90
3	A1	941	G	C5-C6-O6	7.89	133.33	128.60
24	BA	63	C	N3-C2-O2	-7.89	116.38	121.90
25	BB	80	G	C5-C6-N1	7.89	115.44	111.50
25	BB	314	C	C6-N1-C2	-7.89	117.14	120.30
25	BB	662	G	N1-C6-O6	-7.89	115.17	119.90
25	BB	1172	C	N3-C2-O2	-7.89	116.38	121.90
25	BB	1260	A	C1'-O4'-C4'	-7.89	103.59	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1955	U	C5-C6-N1	-7.89	118.76	122.70
25	BB	2706	A	O4'-C4'-C3'	7.89	112.41	106.10
3	A1	1048	G	C4-C5-C6	-7.88	114.07	118.80
6	AD	53	ARG	NE-CZ-NH2	7.88	124.24	120.30
25	BB	134	G	N1-C6-O6	-7.88	115.17	119.90
25	BB	669	G	C5-C6-N1	7.88	115.44	111.50
25	BB	1065	U	C1'-O4'-C4'	-7.88	103.59	109.90
25	BB	1847	A	C5'-C4'-C3'	-7.88	103.39	116.00
25	BB	2273	A	N1-C6-N6	-7.88	113.87	118.60
25	BB	2520	C	C6-N1-C2	-7.88	117.15	120.30
25	BB	2886	A	C4-C5-N7	7.88	114.64	110.70
3	A1	956	U	C5-C4-O4	7.88	130.63	125.90
3	A1	1402	C	C5-C4-N4	-7.88	114.68	120.20
3	A1	1482	G	C8-N9-C4	-7.88	103.25	106.40
3	A1	352	C	C5'-C4'-O4'	7.88	118.56	109.10
3	A1	402	G	C5-C6-N1	7.88	115.44	111.50
3	A1	451	A	C5-C6-N6	7.88	130.01	123.70
3	A1	1245	C	C5'-C4'-O4'	7.88	118.56	109.10
3	A1	1449	C	N3-C4-C5	7.88	125.05	121.90
24	BA	25	U	C2-N3-C4	-7.88	122.27	127.00
25	BB	484	C	O4'-C4'-C3'	7.88	112.40	106.10
25	BB	648	G	C6-N1-C2	-7.88	120.37	125.10
25	BB	1589	U	O4'-C4'-C3'	7.88	112.40	106.10
25	BB	2043	C	C1'-O4'-C4'	7.88	116.20	109.90
25	BB	455	C	N1-C2-O2	7.88	123.63	118.90
25	BB	2478	A	C5-C6-N6	7.88	130.00	123.70
25	BB	2564	A	C6-N1-C2	-7.88	113.87	118.60
3	A1	758	C	O4'-C1'-N1	7.88	114.50	108.20
3	A1	843	U	C5'-C4'-O4'	7.88	118.55	109.10
25	BB	111	A	O4'-C1'-N9	7.88	114.50	108.20
25	BB	435	C	N1-C2-O2	7.88	123.63	118.90
25	BB	1066	U	N3-C2-O2	-7.88	116.69	122.20
25	BB	1528	A	N7-C8-N9	-7.88	109.86	113.80
25	BB	1583	A	C8-N9-C4	7.88	108.95	105.80
25	BB	1724	G	C6-C5-N7	7.88	135.13	130.40
25	BB	2158	A	C3'-C2'-C1'	7.88	107.80	101.50
25	BB	2435	A	N1-C6-N6	-7.88	113.87	118.60
1	AA	4	G	N9-C1'-C2'	-7.88	103.34	112.00
3	A1	436	C	C5-C6-N1	-7.88	117.06	121.00
8	AG	12	ARG	CD-NE-CZ	7.88	134.63	123.60
25	BB	53	A	O4'-C4'-C3'	7.88	112.40	106.10
25	BB	244	A	C4-C5-C6	-7.88	113.06	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2443	C	P-O3'-C3'	7.88	129.15	119.70
25	BB	1863	G	C6-N1-C2	-7.88	120.38	125.10
25	BB	2753	A	C5-N7-C8	-7.88	99.96	103.90
2	AM	4	U	C1'-O4'-C4'	-7.87	103.60	109.90
3	A1	1056	U	C2'-C3'-O3'	7.87	126.82	109.50
3	A1	1355	G	N3-C2-N2	-7.87	114.39	119.90
25	BB	290	U	C5-C4-O4	7.87	130.62	125.90
25	BB	778	G	N3-C2-N2	-7.87	114.39	119.90
25	BB	1283	G	N7-C8-N9	7.87	117.04	113.10
25	BB	1890	A	C6-C5-N7	7.87	137.81	132.30
25	BB	2708	G	N3-C2-N2	-7.87	114.39	119.90
25	BB	551	G	C5'-C4'-O4'	7.87	118.55	109.10
25	BB	1903	G	C5-C6-O6	7.87	133.32	128.60
25	BB	2788	C	C2-N3-C4	-7.87	115.96	119.90
3	A1	536	C	N3-C4-C5	7.87	125.05	121.90
3	A1	1433	A	C4-C5-C6	-7.87	113.07	117.00
25	BB	732	C	N3-C4-C5	7.87	125.05	121.90
25	BB	1675	C	O4'-C1'-N1	-7.87	101.91	108.20
25	BB	2064	C	O4'-C1'-N1	7.87	114.50	108.20
25	BB	2886	A	N9-C4-C5	-7.87	102.65	105.80
25	BB	1083	U	C5-C6-N1	-7.87	118.77	122.70
25	BB	1919	A	C5-C6-N1	7.87	121.63	117.70
25	BB	2780	G	C5-C6-N1	7.87	115.43	111.50
1	AA	73	A	O4'-C1'-N9	7.87	114.49	108.20
3	A1	781	A	C6-C5-N7	7.87	137.81	132.30
3	A1	1374	A	C6-C5-N7	7.87	137.81	132.30
12	AK	47	ARG	NE-CZ-NH2	7.87	124.23	120.30
25	BB	638	G	C5-C6-N1	7.87	115.43	111.50
25	BB	1595	C	C2-N3-C4	-7.87	115.97	119.90
25	BB	1858	A	C4-C5-C6	-7.87	113.07	117.00
25	BB	1875	G	N7-C8-N9	7.87	117.03	113.10
3	A1	149	A	C6-C5-N7	7.86	137.80	132.30
3	A1	266	G	C5-N7-C8	-7.86	100.37	104.30
3	A1	475	C	N1-C1'-C2'	-7.86	103.35	112.00
25	BB	187	G	C3'-C2'-C1'	7.86	107.79	101.50
25	BB	2166	U	C5-C6-N1	-7.86	118.77	122.70
25	BB	2283	C	C5-C6-N1	-7.86	117.07	121.00
51	B2	21	TYR	CB-CG-CD2	-7.86	116.28	121.00
25	BB	1284	A	N1-C6-N6	-7.86	113.88	118.60
25	BB	1545	A	C5-C6-N1	7.86	121.63	117.70
25	BB	2678	C	N3-C4-N4	-7.86	112.50	118.00
1	AE	67	A	C6-C5-N7	7.86	137.80	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	737	C	O4'-C1'-N1	7.86	114.49	108.20
3	A1	855	U	N1-C2-O2	7.86	128.30	122.80
3	A1	1317	C	C5-C4-N4	-7.86	114.70	120.20
25	BB	281	C	N3-C4-N4	-7.86	112.50	118.00
25	BB	496	G	C5-C6-N1	7.86	115.43	111.50
25	BB	760	G	O4'-C1'-N9	7.86	114.49	108.20
25	BB	957	C	C2-N3-C4	-7.86	115.97	119.90
25	BB	1874	C	N3-C2-O2	-7.86	116.40	121.90
3	A1	1264	U	O4'-C1'-N1	7.86	114.49	108.20
1	AA	61	C	C2-N3-C4	-7.86	115.97	119.90
3	A1	1191	A	C4-C5-C6	-7.86	113.07	117.00
3	A1	1355	G	N1-C6-O6	-7.86	115.19	119.90
3	A1	1385	G	O4'-C1'-N9	7.86	114.49	108.20
25	BB	1362	C	N1-C2-O2	7.86	123.61	118.90
25	BB	1793	C	C1'-O4'-C4'	-7.86	103.61	109.90
25	BB	1926	U	N3-C2-O2	-7.86	116.70	122.20
3	A1	681	A	C4-C5-C6	-7.86	113.07	117.00
24	BA	76	G	C5-C6-N1	7.86	115.43	111.50
25	BB	1008	A	C5-C6-N1	7.86	121.63	117.70
25	BB	1603	A	C6-C5-N7	7.86	137.80	132.30
25	BB	2224	G	N1-C6-O6	-7.86	115.19	119.90
25	BB	2363	G	C8-N9-C4	-7.86	103.26	106.40
25	BB	2548	U	C5-C6-N1	-7.86	118.77	122.70
3	A1	809	G	O4'-C1'-N9	7.85	114.48	108.20
3	A1	900	A	C5-C6-N6	7.85	129.98	123.70
3	A1	1206	G	C5'-C4'-O4'	7.85	118.53	109.10
25	BB	2392	A	C5-C6-N6	7.85	129.98	123.70
3	A1	66	A	C5-C6-N1	7.85	121.63	117.70
3	A1	645	G	C8-N9-C4	-7.85	103.26	106.40
3	A1	1191	A	C8-N9-C4	-7.85	102.66	105.80
10	AI	5	ARG	NE-CZ-NH1	7.85	124.23	120.30
11	AJ	5	ARG	NE-CZ-NH1	7.85	124.23	120.30
25	BB	417	C	N3-C2-O2	-7.85	116.40	121.90
25	BB	665	U	N3-C2-O2	-7.85	116.70	122.20
25	BB	908	C	N3-C4-N4	-7.85	112.50	118.00
25	BB	1167	C	N3-C4-N4	-7.85	112.50	118.00
25	BB	1255	U	C1'-O4'-C4'	-7.85	103.62	109.90
25	BB	2548	U	O4'-C4'-C3'	7.85	112.38	106.10
25	BB	2691	C	O4'-C1'-N1	7.85	114.48	108.20
1	AE	23	A	C4-C5-C6	-7.85	113.08	117.00
25	BB	227	A	C5-C6-N6	7.85	129.98	123.70
25	BB	382	A	C5-C6-N1	7.85	121.62	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1508	A	C5-C6-N1	7.85	121.63	117.70
25	BB	2803	G	C5-C6-N1	7.85	115.42	111.50
1	AA	74	C	N3-C2-O2	-7.85	116.41	121.90
1	AP	44	A	C5-C6-N1	7.85	121.62	117.70
1	AE	11	C	C4'-C3'-C2'	-7.85	94.75	102.60
3	A1	1063	C	N3-C2-O2	-7.85	116.41	121.90
3	A1	1068	G	C4-C5-N7	-7.85	107.66	110.80
3	A1	1113	C	N3-C4-N4	-7.85	112.51	118.00
25	BB	88	G	C5-C6-N1	7.85	115.42	111.50
25	BB	617	G	C4'-C3'-C2'	7.85	110.45	102.60
25	BB	1369	G	N1-C6-O6	-7.85	115.19	119.90
25	BB	1678	A	C5'-C4'-O4'	-7.85	99.68	109.10
25	BB	1731	G	C5-C6-N1	7.85	115.42	111.50
25	BB	1909	C	N3-C4-N4	-7.85	112.50	118.00
25	BB	2778	A	C5-C6-N1	7.85	121.62	117.70
1	AE	2	C	N3-C2-O2	-7.85	116.41	121.90
3	A1	66	A	C4-C5-C6	-7.85	113.08	117.00
3	A1	302	G	N9-C4-C5	7.85	108.54	105.40
3	A1	578	C	C2-N3-C4	-7.85	115.98	119.90
25	BB	45	G	O4'-C1'-N9	7.85	114.48	108.20
25	BB	227	A	C5-N7-C8	-7.85	99.98	103.90
25	BB	884	U	C5-C6-N1	-7.85	118.78	122.70
25	BB	1841	U	N3-C2-O2	-7.85	116.71	122.20
25	BB	2488	G	C8-N9-C4	-7.85	103.26	106.40
31	BH	36	TYR	CB-CG-CD1	-7.85	116.29	121.00
3	A1	93	U	O4'-C1'-N1	7.85	114.48	108.20
3	A1	355	C	P-O3'-C3'	7.85	129.12	119.70
3	A1	1038	C	N3-C2-O2	-7.85	116.41	121.90
3	A1	44	A	C6-C5-N7	7.84	137.79	132.30
3	A1	398	U	N3-C2-O2	-7.84	116.71	122.20
3	A1	855	U	C5-C6-N1	-7.84	118.78	122.70
3	A1	1309	G	O4'-C1'-N9	7.84	114.48	108.20
25	BB	403	U	O4'-C1'-N1	7.84	114.48	108.20
3	A1	147	G	C3'-C2'-C1'	7.84	107.78	101.50
25	BB	131	A	C1'-O4'-C4'	-7.84	103.62	109.90
25	BB	2380	C	O4'-C1'-N1	7.84	114.47	108.20
25	BB	2415	G	N1-C6-O6	-7.84	115.19	119.90
3	A1	102	G	N1-C2-N3	7.84	128.60	123.90
3	A1	130	A	C5-N7-C8	-7.84	99.98	103.90
3	A1	470	C	C5-C6-N1	-7.84	117.08	121.00
3	A1	833	G	O4'-C1'-N9	7.84	114.47	108.20
3	A1	850	U	O4'-C1'-N1	7.84	114.47	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1488	G	N7-C8-N9	7.84	117.02	113.10
25	BB	496	G	N1-C6-O6	-7.84	115.19	119.90
25	BB	1035	U	C5-C6-N1	-7.84	118.78	122.70
25	BB	1153	C	N3-C2-O2	-7.84	116.41	121.90
25	BB	2623	G	N1-C6-O6	-7.84	115.20	119.90
20	AU	4	ARG	CD-NE-CZ	7.84	134.58	123.60
25	BB	176	A	N1-C6-N6	-7.84	113.90	118.60
25	BB	2570	G	N1-C6-O6	-7.84	115.20	119.90
3	A1	377	G	C5-C6-N1	7.84	115.42	111.50
3	A1	1460	C	C5-C6-N1	-7.84	117.08	121.00
25	BB	279	A	C5-C6-N1	7.84	121.62	117.70
25	BB	1588	G	N1-C6-O6	-7.84	115.20	119.90
25	BB	2481	G	N1-C6-O6	-7.84	115.20	119.90
49	BZ	87	ARG	NH1-CZ-NH2	-7.84	110.78	119.40
3	A1	1502	A	C4-C5-C6	-7.84	113.08	117.00
25	BB	17	G	C5'-C4'-C3'	-7.84	103.46	116.00
25	BB	578	G	N3-C2-N2	-7.84	114.41	119.90
25	BB	2268	A	C2-N3-C4	7.84	114.52	110.60
1	AE	47	U	N3-C4-O4	-7.83	113.92	119.40
3	A1	416	G	N9-C4-C5	7.83	108.53	105.40
19	AT	86	ARG	NH1-CZ-NH2	-7.83	110.78	119.40
25	BB	83	A	C4-C5-C6	-7.83	113.08	117.00
25	BB	2337	G	C8-N9-C4	-7.83	103.27	106.40
25	BB	2809	A	C3'-C2'-C1'	7.83	107.77	101.50
1	AA	57	G	C4'-C3'-C2'	-7.83	94.77	102.60
3	A1	191	G	C5-C6-N1	7.83	115.42	111.50
3	A1	1456	A	C5-C6-N1	7.83	121.62	117.70
25	BB	15	G	N3-C2-N2	-7.83	114.42	119.90
25	BB	463	G	O4'-C1'-N9	7.83	114.47	108.20
25	BB	1449	G	C2-N3-C4	7.83	115.82	111.90
25	BB	2823	A	C5-C6-N1	7.83	121.62	117.70
3	A1	1066	C	N3-C4-C5	7.83	125.03	121.90
3	A1	1239	A	C6-C5-N7	7.83	137.78	132.30
25	BB	536	G	N1-C6-O6	-7.83	115.20	119.90
25	BB	1319	C	N3-C4-C5	7.83	125.03	121.90
25	BB	1426	G	C5-C6-O6	7.83	133.30	128.60
25	BB	2246	G	C5-C6-N1	7.83	115.42	111.50
25	BB	2773	C	N1-C2-N3	7.83	124.68	119.20
3	A1	157	U	C5-C4-O4	-7.83	121.20	125.90
9	AH	16	ARG	NH1-CZ-NH2	-7.83	110.79	119.40
25	BB	191	A	C4-C5-C6	-7.83	113.08	117.00
25	BB	693	A	C2-N3-C4	7.83	114.52	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1927	A	C6-C5-N7	7.83	137.78	132.30
25	BB	2876	G	C8-N9-C4	-7.83	103.27	106.40
3	A1	676	A	N1-C6-N6	-7.83	113.90	118.60
3	A1	1142	G	N3-C2-N2	-7.83	114.42	119.90
3	A1	1198	G	N9-C4-C5	7.83	108.53	105.40
25	BB	1454	C	N1-C2-O2	7.83	123.60	118.90
25	BB	1454	C	N3-C4-C5	7.83	125.03	121.90
25	BB	1772	A	N1-C2-N3	-7.83	125.39	129.30
25	BB	2815	C	C6-N1-C2	-7.83	117.17	120.30
3	A1	722	G	N3-C4-C5	-7.83	124.69	128.60
25	BB	2280	G	C8-N9-C4	-7.83	103.27	106.40
25	BB	2644	G	C6-C5-N7	7.83	135.10	130.40
3	A1	332	G	C5-N7-C8	-7.83	100.39	104.30
3	A1	1079	G	N9-C4-C5	7.83	108.53	105.40
3	A1	1407	C	N3-C4-N4	-7.83	112.52	118.00
25	BB	510	C	N3-C2-O2	-7.83	116.42	121.90
25	BB	1999	C	N1-C2-O2	7.83	123.59	118.90
45	BV	14	ARG	NE-CZ-NH2	7.83	124.21	120.30
3	A1	884	U	N3-C2-O2	-7.82	116.72	122.20
3	A1	1075	U	O4'-C1'-N1	7.82	114.46	108.20
25	BB	2143	C	C2-N3-C4	-7.82	115.99	119.90
25	BB	2750	A	C6-C5-N7	7.82	137.78	132.30
3	A1	1094	G	C5-C6-O6	7.82	133.29	128.60
25	BB	755	U	N1-C2-N3	7.82	119.59	114.90
25	BB	1510	G	C8-N9-C4	-7.82	103.27	106.40
25	BB	1729	U	C5-C6-N1	-7.82	118.79	122.70
25	BB	2045	C	C4'-C3'-C2'	-7.82	94.78	102.60
25	BB	604	G	N3-C4-C5	-7.82	124.69	128.60
25	BB	1891	G	C5-C6-N1	7.82	115.41	111.50
25	BB	2011	U	C5-C4-O4	7.82	130.59	125.90
29	BF	6	ARG	NE-CZ-NH1	7.82	124.21	120.30
25	BB	1049	C	N3-C4-C5	7.82	125.03	121.90
25	BB	1600	C	C2-N3-C4	-7.82	115.99	119.90
25	BB	2688	G	N7-C8-N9	7.82	117.01	113.10
3	A1	1319	A	C6-C5-N7	7.82	137.77	132.30
25	BB	1090	A	C2'-C3'-O3'	7.82	126.70	109.50
25	BB	1487	U	N3-C2-O2	-7.82	116.73	122.20
25	BB	2659	G	C4-C5-N7	-7.82	107.67	110.80
1	AE	32	C	N3-C4-N4	-7.82	112.53	118.00
3	A1	334	C	N3-C4-C5	7.82	125.03	121.90
3	A1	831	A	C5-N7-C8	-7.82	99.99	103.90
3	A1	1257	A	C4-C5-C6	-7.82	113.09	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	50	A	C6-C5-N7	7.82	137.77	132.30
25	BB	1218	G	N1-C6-O6	-7.82	115.21	119.90
25	BB	1433	A	C5-C6-N1	7.82	121.61	117.70
25	BB	1728	C	C2-N3-C4	-7.82	115.99	119.90
25	BB	2024	G	N3-C4-C5	-7.82	124.69	128.60
25	BB	2450	A	N1-C6-N6	-7.82	113.91	118.60
1	AE	9	A	O4'-C1'-N9	7.81	114.45	108.20
25	BB	1069	A	O4'-C1'-N9	7.81	114.45	108.20
25	BB	1240	U	N3-C2-O2	-7.81	116.73	122.20
25	BB	2488	G	N1-C6-O6	-7.81	115.21	119.90
3	A1	586	C	C4'-C3'-C2'	-7.81	94.79	102.60
3	A1	610	U	N3-C2-O2	-7.81	116.73	122.20
3	A1	887	G	C8-N9-C4	-7.81	103.28	106.40
3	A1	1122	U	C5-C6-N1	-7.81	118.79	122.70
25	BB	79	C	C5-C4-N4	7.81	125.67	120.20
25	BB	1555	G	O4'-C1'-N9	7.81	114.45	108.20
1	AP	26	G	N3-C2-N2	-7.81	114.43	119.90
46	BW	12	ARG	NE-CZ-NH1	7.81	124.20	120.30
3	A1	978	A	C4-C5-C6	-7.81	113.09	117.00
3	A1	1123	U	C2-N3-C4	-7.81	122.31	127.00
3	A1	1283	U	O5'-P-OP2	-7.81	98.67	105.70
25	BB	691	C	N3-C2-O2	-7.81	116.43	121.90
25	BB	1711	A	C4-C5-N7	-7.81	106.80	110.70
25	BB	1967	C	N3-C4-C5	7.81	125.02	121.90
25	BB	2718	G	N1-C6-O6	-7.81	115.22	119.90
1	AA	5	A	N9-C4-C5	-7.81	102.68	105.80
1	AE	49	C	O4'-C1'-N1	7.81	114.45	108.20
3	A1	55	A	C6-C5-N7	7.81	137.77	132.30
3	A1	74	A	C5-C6-N1	7.81	121.60	117.70
3	A1	490	C	C6-N1-C2	-7.81	117.18	120.30
3	A1	756	C	N3-C2-O2	-7.81	116.44	121.90
3	A1	1082	A	C4-C5-C6	-7.81	113.10	117.00
3	A1	1204	A	C5'-C4'-O4'	7.81	118.47	109.10
3	A1	1281	C	N3-C2-O2	-7.81	116.43	121.90
3	A1	1352	C	N3-C4-C5	7.81	125.02	121.90
25	BB	1424	G	C5-C6-N1	7.81	115.40	111.50
1	AA	57	G	C3'-C2'-C1'	7.81	107.74	101.50
1	AP	19	G	N1-C6-O6	-7.81	115.22	119.90
3	A1	240	G	C8-N9-C4	-7.81	103.28	106.40
3	A1	1054	C	C2-N3-C4	-7.81	116.00	119.90
3	A1	1275	A	C3'-C2'-C1'	7.81	107.75	101.50
25	BB	649	G	C5-C6-N1	7.81	115.40	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1512	C	O4'-C1'-N1	7.81	114.44	108.20
3	A1	760	G	C5-C6-O6	7.80	133.28	128.60
3	A1	915	A	C4'-C3'-C2'	-7.80	94.80	102.60
3	A1	1356	G	C2-N3-C4	7.80	115.80	111.90
3	A1	1455	G	C5-C6-N1	7.80	115.40	111.50
24	BA	47	C	C6-N1-C2	-7.80	117.18	120.30
25	BB	422	A	C6-C5-N7	7.80	137.76	132.30
25	BB	2526	G	O4'-C1'-N9	7.80	114.44	108.20
25	BB	2573	C	N3-C2-O2	-7.80	116.44	121.90
25	BB	2895	G	C3'-C2'-C1'	7.80	107.74	101.50
1	AA	45	G	N1-C6-O6	-7.80	115.22	119.90
3	A1	458	U	O4'-C1'-N1	7.80	114.44	108.20
3	A1	701	U	C2-N3-C4	-7.80	122.32	127.00
3	A1	1313	U	N1-C2-N3	7.80	119.58	114.90
25	BB	909	A	C6-N1-C2	-7.80	113.92	118.60
25	BB	1836	C	N3-C4-C5	7.80	125.02	121.90
25	BB	2087	G	N1-C6-O6	-7.80	115.22	119.90
25	BB	2683	C	N3-C2-O2	-7.80	116.44	121.90
3	A1	274	A	N9-C1'-C2'	-7.80	103.42	112.00
3	A1	860	A	C4-C5-C6	-7.80	113.10	117.00
10	AI	23	ASP	CB-CG-OD1	7.80	125.32	118.30
25	BB	733	G	N3-C4-C5	-7.80	124.70	128.60
25	BB	2642	G	O4'-C4'-C3'	7.80	112.34	106.10
53	B4	51	ARG	NE-CZ-NH1	7.80	124.20	120.30
3	A1	37	U	C6-N1-C2	-7.80	116.32	121.00
3	A1	307	C	N3-C2-O2	-7.80	116.44	121.90
3	A1	799	G	N1-C6-O6	-7.80	115.22	119.90
3	A1	838	G	N7-C8-N9	7.80	117.00	113.10
25	BB	653	U	O4'-C1'-N1	7.80	114.44	108.20
25	BB	944	C	N3-C4-N4	-7.80	112.54	118.00
25	BB	1340	U	C5-C6-N1	-7.80	118.80	122.70
1	AA	15	G	N7-C8-N9	7.80	117.00	113.10
3	A1	224	U	O4'-C1'-N1	7.80	114.44	108.20
3	A1	527	G	N1-C6-O6	-7.80	115.22	119.90
3	A1	529	G	C1'-O4'-C4'	-7.80	103.66	109.90
3	A1	1093	A	O4'-C1'-N9	7.80	114.44	108.20
3	A1	1134	G	N1-C2-N2	-7.80	109.18	116.20
3	A1	1462	C	O4'-C1'-N1	7.80	114.44	108.20
25	BB	1221	C	N3-C2-O2	-7.80	116.44	121.90
3	A1	207	C	C2-N3-C4	-7.80	116.00	119.90
3	A1	222	C	N3-C4-N4	-7.80	112.54	118.00
3	A1	499	A	C6-C5-N7	7.80	137.76	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	566	G	C6-C5-N7	7.80	135.08	130.40
3	A1	933	G	C5-C6-N1	7.80	115.40	111.50
25	BB	52	A	C4-C5-C6	-7.80	113.10	117.00
25	BB	63	A	C4-C5-C6	-7.80	113.10	117.00
25	BB	326	G	N7-C8-N9	7.80	117.00	113.10
1	AA	65	G	N1-C2-N3	7.79	128.58	123.90
3	A1	386	C	O4'-C1'-N1	7.79	114.44	108.20
3	A1	840	C	C3'-C2'-C1'	7.79	107.74	101.50
3	A1	1448	C	C5'-C4'-O4'	7.79	118.45	109.10
25	BB	886	A	N9-C4-C5	7.79	108.92	105.80
25	BB	2170	A	OP1-P-OP2	-7.79	107.91	119.60
3	A1	257	G	C6-C5-N7	7.79	135.08	130.40
3	A1	401	C	N3-C4-N4	-7.79	112.55	118.00
3	A1	647	C	C4-C5-C6	-7.79	113.50	117.40
3	A1	1090	U	N3-C4-O4	-7.79	113.94	119.40
25	BB	212	G	C5-C6-N1	7.79	115.40	111.50
25	BB	658	U	N3-C2-O2	-7.79	116.75	122.20
25	BB	943	A	C4-C5-C6	-7.79	113.10	117.00
25	BB	1966	A	C4-C5-N7	7.79	114.60	110.70
25	BB	2104	C	N3-C2-O2	-7.79	116.44	121.90
3	A1	1209	C	O4'-C1'-C2'	-7.79	98.01	105.80
25	BB	472	A	C5-C6-N6	7.79	129.93	123.70
25	BB	544	C	C6-N1-C2	-7.79	117.18	120.30
25	BB	1283	G	N9-C4-C5	7.79	108.52	105.40
25	BB	1342	A	C6-C5-N7	7.79	137.75	132.30
25	BB	1406	U	C3'-C2'-C1'	7.79	107.73	101.50
25	BB	1634	A	C5-C6-N1	7.79	121.60	117.70
25	BB	2553	G	C5-C6-N1	7.79	115.39	111.50
25	BB	2845	U	C3'-C2'-C1'	7.79	107.73	101.50
3	A1	1514	G	N9-C4-C5	7.79	108.52	105.40
25	BB	1357	C	C4'-C3'-C2'	-7.79	94.81	102.60
25	BB	1660	G	N7-C8-N9	7.79	116.99	113.10
25	BB	1984	G	C5-C6-N1	7.79	115.39	111.50
3	A1	335	C	C3'-C2'-C1'	7.79	107.73	101.50
24	BA	14	U	N1-C2-N3	7.79	119.57	114.90
25	BB	477	A	N1-C2-N3	-7.79	125.41	129.30
25	BB	1574	C	N3-C4-N4	-7.79	112.55	118.00
25	BB	2548	U	C1'-O4'-C4'	-7.79	103.67	109.90
1	AA	17	U	C2-N3-C4	-7.79	122.33	127.00
3	A1	1016	A	C6-C5-N7	7.79	137.75	132.30
3	A1	1109	C	N3-C2-O2	-7.79	116.45	121.90
25	BB	483	A	C4-C5-C6	-7.79	113.11	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	714	U	N3-C2-O2	-7.79	116.75	122.20
25	BB	2331	G	C5-N7-C8	-7.79	100.41	104.30
25	BB	2770	G	C5-C6-N1	7.79	115.39	111.50
25	BB	2837	A	C5-C6-N1	7.79	121.59	117.70
3	A1	832	G	C6-C5-N7	7.78	135.07	130.40
3	A1	901	A	C4-C5-C6	-7.78	113.11	117.00
3	A1	1150	A	C1'-O4'-C4'	-7.78	103.67	109.90
3	A1	1293	C	O4'-C1'-N1	7.78	114.43	108.20
3	A1	1407	C	C4-C5-C6	-7.78	113.51	117.40
24	BA	99	A	C5-N7-C8	-7.78	100.01	103.90
25	BB	2420	C	O4'-C1'-C2'	-7.78	98.02	105.80
25	BB	2776	A	C5-C6-N1	7.78	121.59	117.70
3	A1	200	G	C8-N9-C4	-7.78	103.29	106.40
3	A1	837	U	O4'-C1'-N1	7.78	114.43	108.20
3	A1	1181	G	C3'-C2'-C1'	7.78	107.73	101.50
3	A1	1429	A	O4'-C1'-N9	7.78	114.43	108.20
25	BB	838	C	O5'-P-OP1	-7.78	98.70	105.70
25	BB	1497	U	C5-C6-N1	-7.78	118.81	122.70
25	BB	1805	A	O4'-C1'-N9	7.78	114.42	108.20
25	BB	2791	G	N9-C4-C5	7.78	108.51	105.40
25	BB	2876	G	C4-C5-N7	-7.78	107.69	110.80
1	AP	51	G	C6-N1-C2	-7.78	120.43	125.10
3	A1	316	C	O5'-C5'-C4'	7.78	126.48	111.70
3	A1	393	A	C5-C6-N1	7.78	121.59	117.70
3	A1	606	G	N3-C4-C5	-7.78	124.71	128.60
3	A1	1258	G	C4-C5-N7	-7.78	107.69	110.80
25	BB	423	A	O4'-C1'-N9	7.78	114.42	108.20
25	BB	560	C	C4'-C3'-C2'	-7.78	94.82	102.60
25	BB	926	G	N3-C4-C5	-7.78	124.71	128.60
25	BB	1186	G	C5-C6-O6	7.78	133.27	128.60
25	BB	1757	A	C4-C5-C6	-7.78	113.11	117.00
25	BB	2024	G	C6-N1-C2	-7.78	120.43	125.10
25	BB	2436	G	C1'-O4'-C4'	-7.78	103.68	109.90
3	A1	441	A	O4'-C1'-N9	-7.78	101.98	108.20
3	A1	756	C	N3-C4-C5	7.78	125.01	121.90
25	BB	498	G	O4'-C1'-N9	7.78	114.42	108.20
1	AE	19	G	C5-C6-N1	7.78	115.39	111.50
3	A1	418	C	O4'-C4'-C3'	7.78	112.32	106.10
3	A1	755	G	C2'-C3'-O3'	7.78	126.61	109.50
3	A1	940	C	N3-C2-O2	-7.78	116.46	121.90
3	A1	1358	U	O4'-C1'-N1	7.78	114.42	108.20
3	A1	1404	C	C3'-C2'-C1'	7.78	107.72	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	62	U	C5-C6-N1	-7.78	118.81	122.70
25	BB	2594	C	C2-N3-C4	-7.78	116.01	119.90
25	BB	2614	A	C6-C5-N7	7.78	137.74	132.30
25	BB	2646	C	C2-N3-C4	-7.78	116.01	119.90
3	A1	226	G	N1-C6-O6	-7.78	115.23	119.90
3	A1	512	U	N3-C2-O2	-7.78	116.76	122.20
3	A1	700	G	C6-N1-C2	-7.78	120.44	125.10
3	A1	835	U	C4-C5-C6	7.78	124.36	119.70
3	A1	998	C	N1-C2-N3	7.78	124.64	119.20
25	BB	273	G	C5-C6-N1	7.78	115.39	111.50
25	BB	365	U	C5'-C4'-C3'	-7.78	103.56	116.00
25	BB	961	C	C2-N3-C4	-7.78	116.01	119.90
25	BB	2103	C	N3-C2-O2	-7.78	116.46	121.90
2	AM	19	U	C5-C6-N1	-7.77	118.81	122.70
25	BB	1119	U	N3-C2-O2	-7.77	116.76	122.20
25	BB	2266	A	C6-N1-C2	-7.77	113.94	118.60
1	AE	5	A	O4'-C1'-N9	7.77	114.42	108.20
3	A1	131	A	O4'-C1'-N9	7.77	114.42	108.20
25	BB	69	C	N3-C4-N4	-7.77	112.56	118.00
25	BB	1440	U	C5-C6-N1	-7.77	118.81	122.70
25	BB	1773	A	C5'-C4'-C3'	-7.77	103.56	116.00
25	BB	1815	A	C4-C5-C6	-7.77	113.11	117.00
25	BB	2032	G	N1-C6-O6	-7.77	115.24	119.90
25	BB	2177	C	C5-C4-N4	-7.77	114.76	120.20
3	A1	1210	C	C5'-C4'-O4'	7.77	118.42	109.10
3	A1	1339	A	C5-C6-N1	7.77	121.58	117.70
25	BB	220	G	N7-C8-N9	7.77	116.99	113.10
25	BB	1561	C	C5-C6-N1	-7.77	117.11	121.00
1	AA	53	G	C4'-C3'-C2'	-7.77	94.83	102.60
1	AP	4	G	O4'-C1'-N9	7.77	114.42	108.20
3	A1	426	U	C5-C6-N1	-7.77	118.81	122.70
3	A1	881	G	C5-C6-N1	7.77	115.39	111.50
3	A1	1182	G	N1-C2-N3	7.77	128.56	123.90
3	A1	1352	C	O4'-C1'-N1	7.77	114.42	108.20
25	BB	671	C	N3-C4-N4	-7.77	112.56	118.00
25	BB	753	A	C5-C6-N1	7.77	121.58	117.70
25	BB	1760	C	N3-C2-O2	-7.77	116.46	121.90
1	AP	68	U	C4'-C3'-C2'	7.77	110.37	102.60
3	A1	238	A	C4-C5-C6	-7.77	113.12	117.00
3	A1	414	A	O4'-C1'-N9	7.77	114.41	108.20
3	A1	667	G	C8-N9-C4	-7.77	103.29	106.40
3	A1	1011	C	N1-C2-O2	7.77	123.56	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1445	U	N3-C2-O2	-7.77	116.76	122.20
25	BB	222	A	C5-C6-N1	7.77	121.58	117.70
25	BB	311	A	C4-C5-C6	-7.77	113.12	117.00
25	BB	1049	C	N3-C2-O2	-7.77	116.46	121.90
25	BB	2346	A	C4-C5-C6	-7.77	113.12	117.00
3	A1	11	G	N3-C4-C5	-7.77	124.72	128.60
3	A1	639	G	C3'-C2'-C1'	7.77	107.71	101.50
25	BB	1049	C	N1-C2-O2	7.77	123.56	118.90
25	BB	2117	A	N1-C6-N6	-7.77	113.94	118.60
25	BB	2349	G	N1-C6-O6	-7.77	115.24	119.90
3	A1	803	G	N1-C6-O6	-7.76	115.24	119.90
3	A1	886	G	C5'-C4'-C3'	-7.76	103.58	116.00
3	A1	1211	U	C6-N1-C2	-7.76	116.34	121.00
19	AT	38	ARG	NE-CZ-NH2	7.76	124.18	120.30
25	BB	1253	A	OP1-P-OP2	-7.76	107.95	119.60
25	BB	1766	G	N3-C4-C5	-7.76	124.72	128.60
25	BB	203	A	C6-C5-N7	7.76	137.73	132.30
3	A1	40	C	N3-C4-N4	-7.76	112.57	118.00
3	A1	179	A	C6-C5-N7	7.76	137.73	132.30
3	A1	206	C	C5-C4-N4	-7.76	114.77	120.20
3	A1	727	G	N1-C6-O6	-7.76	115.24	119.90
3	A1	935	A	C3'-C2'-C1'	7.76	107.71	101.50
3	A1	1163	A	O4'-C1'-N9	7.76	114.41	108.20
22	AW	10	ARG	NE-CZ-NH1	7.76	124.18	120.30
25	BB	848	C	C5-C6-N1	-7.76	117.12	121.00
25	BB	2375	G	C5-C6-N1	7.76	115.38	111.50
3	A1	343	U	N1-C2-N3	7.76	119.56	114.90
25	BB	1020	A	N9-C4-C5	7.76	108.90	105.80
25	BB	1362	C	O4'-C1'-N1	7.76	114.41	108.20
25	BB	2205	A	C6-C5-N7	7.76	137.73	132.30
3	A1	387	U	N3-C2-O2	-7.76	116.77	122.20
3	A1	654	G	O4'-C1'-C2'	-7.76	98.04	105.80
25	BB	1622	G	C4-C5-N7	-7.76	107.70	110.80
25	BB	1949	G	C5'-C4'-C3'	-7.76	103.59	116.00
25	BB	2649	C	C5-C4-N4	7.76	125.63	120.20
3	A1	606	G	C6-N1-C2	-7.76	120.45	125.10
3	A1	1122	U	C4-C5-C6	7.76	124.35	119.70
24	BA	29	A	C6-C5-N7	7.76	137.73	132.30
25	BB	123	G	N3-C4-C5	-7.76	124.72	128.60
25	BB	211	C	C2-N3-C4	-7.76	116.02	119.90
25	BB	1200	C	N1-C2-O2	7.76	123.55	118.90
25	BB	2465	C	C5-C6-N1	-7.76	117.12	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BN	42	ARG	NH1-CZ-NH2	-7.76	110.87	119.40
3	A1	846	G	N1-C6-O6	-7.75	115.25	119.90
3	A1	1376	U	N3-C2-O2	-7.75	116.77	122.20
25	BB	2714	G	N3-C4-C5	-7.75	124.72	128.60
1	AE	61	C	C6-N1-C2	-7.75	117.20	120.30
24	BA	36	C	N3-C4-C5	7.75	125.00	121.90
1	AA	26	G	O4'-C1'-N9	7.75	114.40	108.20
3	A1	1504	G	C1'-O4'-C4'	-7.75	103.70	109.90
25	BB	127	A	O4'-C4'-C3'	7.75	112.30	106.10
25	BB	323	C	C1'-O4'-C4'	7.75	116.10	109.90
25	BB	901	C	N3-C2-O2	-7.75	116.47	121.90
25	BB	2348	U	C3'-C2'-C1'	7.75	107.70	101.50
3	A1	66	A	C5'-C4'-O4'	7.75	118.40	109.10
3	A1	789	U	C4-C5-C6	7.75	124.35	119.70
25	BB	562	U	N3-C2-O2	-7.75	116.78	122.20
25	BB	1334	G	N3-C4-C5	-7.75	124.72	128.60
25	BB	1424	G	C4-C5-C6	-7.75	114.15	118.80
25	BB	2078	C	O4'-C4'-C3'	7.75	112.30	106.10
25	BB	2264	C	N1-C2-O2	7.75	123.55	118.90
3	A1	402	G	N7-C8-N9	7.75	116.97	113.10
3	A1	1157	A	C4-C5-C6	-7.75	113.12	117.00
3	A1	1429	A	P-O5'-C5'	7.75	133.30	120.90
24	BA	79	G	C5-N7-C8	-7.75	100.43	104.30
25	BB	355	U	C5-C4-O4	7.75	130.55	125.90
25	BB	1397	U	N1-C2-O2	7.75	128.22	122.80
25	BB	1606	C	N3-C2-O2	-7.75	116.48	121.90
25	BB	1689	A	C4-C5-C6	-7.75	113.12	117.00
25	BB	2134	A	C4-C5-C6	-7.75	113.12	117.00
25	BB	2707	U	N3-C2-O2	-7.75	116.78	122.20
3	A1	604	G	C5'-C4'-C3'	-7.75	103.61	116.00
3	A1	1334	G	N1-C6-O6	-7.75	115.25	119.90
25	BB	873	C	C6-N1-C2	-7.75	117.20	120.30
25	BB	918	A	C4'-C3'-C2'	-7.75	94.85	102.60
25	BB	1682	G	C5-C6-N1	7.75	115.37	111.50
25	BB	1917	U	O4'-C4'-C3'	-7.75	96.25	104.00
25	BB	2487	G	N1-C6-O6	-7.75	115.25	119.90
25	BB	2540	C	N3-C2-O2	-7.75	116.48	121.90
50	B1	88	ARG	NE-CZ-NH2	-7.75	116.43	120.30
25	BB	874	G	N7-C8-N9	7.75	116.97	113.10
25	BB	903	C	N3-C4-N4	-7.75	112.58	118.00
25	BB	908	C	O4'-C1'-N1	7.75	114.40	108.20
25	BB	909	A	O3'-P-O5'	7.75	118.72	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2266	A	O4'-C1'-C2'	-7.75	98.06	105.80
1	AA	46	G	C1'-O4'-C4'	-7.74	103.70	109.90
1	AA	75	C	N1-C2-N3	7.74	124.62	119.20
3	A1	360	G	C6-N1-C2	-7.74	120.45	125.10
3	A1	967	C	N1-C2-N3	7.74	124.62	119.20
3	A1	1394	A	O4'-C1'-N9	7.74	114.39	108.20
25	BB	789	A	C4-C5-C6	-7.74	113.13	117.00
25	BB	1283	G	C6-C5-N7	7.74	135.05	130.40
25	BB	2289	G	C4-C5-N7	7.74	113.90	110.80
25	BB	2871	U	N3-C2-O2	-7.74	116.78	122.20
1	AP	26	G	C8-N9-C4	-7.74	103.30	106.40
3	A1	1274	A	C2-N3-C4	7.74	114.47	110.60
25	BB	510	C	O4'-C4'-C3'	7.74	112.29	106.10
25	BB	1933	G	C6-C5-N7	7.74	135.04	130.40
25	BB	2061	G	C1'-O4'-C4'	-7.74	103.71	109.90
3	A1	560	A	C6-C5-N7	7.74	137.72	132.30
25	BB	643	A	P-O3'-C3'	7.74	128.99	119.70
25	BB	1440	U	O4'-C1'-N1	7.74	114.39	108.20
25	BB	1670	C	C2-N3-C4	-7.74	116.03	119.90
25	BB	1966	A	C5'-C4'-C3'	-7.74	103.61	116.00
25	BB	2809	A	O4'-C1'-N9	7.74	114.39	108.20
42	BS	63	ARG	NE-CZ-NH1	7.74	124.17	120.30
3	A1	719	C	N1-C2-O2	7.74	123.54	118.90
25	BB	85	G	C5'-C4'-O4'	7.74	118.39	109.10
25	BB	857	G	N1-C2-N3	7.74	128.54	123.90
25	BB	2394	C	O4'-C1'-N1	7.74	114.39	108.20
31	BH	9	ARG	NH1-CZ-NH2	-7.74	110.89	119.40
24	BA	72	G	N1-C6-O6	-7.74	115.26	119.90
25	BB	241	A	O4'-C1'-N9	7.74	114.39	108.20
25	BB	793	A	C5-C6-N1	7.74	121.57	117.70
25	BB	1698	A	C5-C6-N1	7.74	121.57	117.70
1	AP	35	A	P-O3'-C3'	7.74	128.98	119.70
3	A1	236	A	O4'-C4'-C3'	7.74	112.29	106.10
3	A1	1010	U	C5-C6-N1	-7.74	118.83	122.70
25	BB	187	G	C5-C6-N1	7.74	115.37	111.50
25	BB	764	A	C5-C6-N6	7.74	129.89	123.70
25	BB	934	U	C4'-C3'-C2'	-7.74	94.86	102.60
25	BB	1125	G	N1-C2-N3	7.74	128.54	123.90
25	BB	1694	C	N1-C2-O2	7.74	123.54	118.90
25	BB	1620	G	C5'-C4'-O4'	7.73	118.38	109.10
25	BB	2705	A	C6-C5-N7	7.73	137.71	132.30
1	AE	29	A	O4'-C1'-N9	7.73	114.39	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	31	A	C5'-C4'-O4'	7.73	118.38	109.10
3	A1	188	C	C1'-O4'-C4'	-7.73	103.71	109.90
3	A1	347	G	C8-N9-C4	-7.73	103.31	106.40
3	A1	721	G	C6-C5-N7	7.73	135.04	130.40
3	A1	860	A	C5-C6-N1	7.73	121.57	117.70
3	A1	1215	G	C3'-C2'-C1'	-7.73	95.31	101.50
3	A1	1431	A	C5-N7-C8	-7.73	100.03	103.90
25	BB	764	A	O4'-C1'-C2'	-7.73	98.07	105.80
25	BB	1124	G	N3-C2-N2	-7.73	114.49	119.90
25	BB	2833	U	C1'-O4'-C4'	-7.73	103.71	109.90
3	A1	114	U	N3-C2-O2	-7.73	116.79	122.20
3	A1	648	A	C5-N7-C8	-7.73	100.03	103.90
25	BB	412	A	C6-C5-N7	7.73	137.71	132.30
25	BB	1029	A	N1-C6-N6	-7.73	113.96	118.60
25	BB	1081	U	N3-C2-O2	-7.73	116.79	122.20
25	BB	1782	U	N3-C2-O2	-7.73	116.79	122.20
25	BB	1803	A	C5-C6-N1	7.73	121.56	117.70
25	BB	1811	G	N3-C4-C5	-7.73	124.73	128.60
25	BB	1997	C	N3-C2-O2	-7.73	116.49	121.90
1	AP	46	G	N3-C2-N2	-7.73	114.49	119.90
2	AM	4	U	O5'-C5'-C4'	7.73	126.38	111.70
3	A1	818	G	N1-C2-N3	7.73	128.54	123.90
3	A1	1153	G	C5-C6-N1	7.73	115.36	111.50
25	BB	275	C	C6-N1-C2	-7.73	117.21	120.30
25	BB	791	C	N3-C4-N4	-7.73	112.59	118.00
25	BB	1286	A	C2-N3-C4	7.73	114.46	110.60
25	BB	2135	A	N1-C2-N3	-7.73	125.44	129.30
2	AM	20	U	N3-C2-O2	-7.73	116.79	122.20
4	AB	212	TYR	CB-CG-CD2	-7.73	116.36	121.00
24	BA	69	G	C6-N1-C2	-7.73	120.46	125.10
25	BB	1293	C	C5-C6-N1	-7.73	117.14	121.00
25	BB	1611	C	N3-C4-C5	7.73	124.99	121.90
1	AP	11	C	N1-C2-N3	7.73	124.61	119.20
25	BB	299	A	C6-C5-N7	7.73	137.71	132.30
25	BB	2735	G	C5-N7-C8	-7.73	100.44	104.30
3	A1	66	A	C1'-O4'-C4'	-7.72	103.72	109.90
3	A1	415	A	C4-C5-C6	-7.72	113.14	117.00
3	A1	1492	A	N9-C4-C5	7.72	108.89	105.80
25	BB	937	C	N3-C4-C5	7.72	124.99	121.90
25	BB	2198	A	O4'-C4'-C3'	7.72	112.28	106.10
25	BB	2762	C	N3-C4-C5	7.72	124.99	121.90
25	BB	666	A	O4'-C4'-C3'	7.72	112.28	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	963	U	C5-C6-N1	-7.72	118.84	122.70
25	BB	1081	U	C5-C6-N1	-7.72	118.84	122.70
25	BB	1570	A	C4-C5-N7	-7.72	106.84	110.70
25	BB	1987	A	N9-C4-C5	7.72	108.89	105.80
25	BB	2031	A	C5-C6-N6	7.72	129.88	123.70
25	BB	2482	A	N1-C6-N6	-7.72	113.97	118.60
3	A1	1359	C	N3-C4-N4	-7.72	112.59	118.00
25	BB	613	A	C1'-O4'-C4'	-7.72	103.72	109.90
3	A1	528	C	N1-C2-O2	7.72	123.53	118.90
3	A1	654	G	C5'-C4'-O4'	7.72	118.36	109.10
3	A1	833	G	C3'-C2'-C1'	7.72	107.67	101.50
3	A1	835	U	N1-C2-N3	7.72	119.53	114.90
20	AU	3	ARG	NH1-CZ-NH2	-7.72	110.91	119.40
22	AW	122	ARG	NH1-CZ-NH2	-7.72	110.91	119.40
25	BB	42	A	C2-N3-C4	7.72	114.46	110.60
25	BB	470	A	O4'-C1'-N9	7.72	114.38	108.20
25	BB	643	A	C6-N1-C2	-7.72	113.97	118.60
25	BB	1863	G	N3-C2-N2	-7.72	114.50	119.90
25	BB	2363	G	N1-C6-O6	-7.72	115.27	119.90
25	BB	17	G	N1-C6-O6	-7.72	115.27	119.90
25	BB	132	G	C5'-C4'-C3'	-7.72	103.65	116.00
25	BB	350	G	C8-N9-C4	-7.72	103.31	106.40
25	BB	2196	C	N3-C4-N4	-7.72	112.60	118.00
3	A1	617	G	C5-C6-N1	7.71	115.36	111.50
3	A1	952	U	C3'-C2'-C1'	-7.71	95.33	101.50
3	A1	1048	G	C5-C6-N1	7.71	115.36	111.50
3	A1	1086	U	N3-C2-O2	-7.71	116.80	122.20
3	A1	1177	G	N1-C2-N3	7.71	128.53	123.90
25	BB	1874	C	C5'-C4'-O4'	7.71	118.36	109.10
25	BB	2148	G	C5-C6-O6	7.71	133.23	128.60
25	BB	2545	G	C5-N7-C8	-7.71	100.44	104.30
53	B4	68	ARG	NH1-CZ-NH2	-7.71	110.91	119.40
25	BB	1018	U	C5-C6-N1	-7.71	118.84	122.70
25	BB	1515	A	O4'-C1'-N9	7.71	114.37	108.20
25	BB	1657	U	N3-C2-O2	-7.71	116.80	122.20
25	BB	1873	G	N1-C2-N3	7.71	128.53	123.90
3	A1	1128	C	O4'-C1'-N1	7.71	114.37	108.20
3	A1	1489	G	N1-C6-O6	-7.71	115.27	119.90
25	BB	423	A	C6-N1-C2	-7.71	113.97	118.60
25	BB	514	A	C5'-C4'-O4'	7.71	118.35	109.10
25	BB	532	A	C5-C6-N1	7.71	121.56	117.70
25	BB	644	A	C5-C6-N6	7.71	129.87	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	908	C	N3-C4-C5	7.71	124.98	121.90
25	BB	1183	U	O4'-C1'-N1	7.71	114.37	108.20
25	BB	2263	C	N3-C4-N4	-7.71	112.60	118.00
25	BB	2638	G	C5-C6-N1	7.71	115.36	111.50
25	BB	2875	C	N3-C4-C5	7.71	124.98	121.90
24	BA	64	G	C5'-C4'-C3'	-7.71	103.66	116.00
1	AA	2	C	O4'-C1'-N1	7.71	114.37	108.20
3	A1	531	U	N3-C2-O2	-7.71	116.80	122.20
25	BB	232	G	N1-C6-O6	-7.71	115.28	119.90
25	BB	608	A	C5'-C4'-O4'	7.71	118.35	109.10
25	BB	1835	G	N1-C6-O6	-7.71	115.28	119.90
25	BB	2434	A	C5-C6-N1	7.71	121.55	117.70
33	BJ	91	ARG	NE-CZ-NH2	-7.71	116.45	120.30
1	AP	26	G	N7-C8-N9	7.71	116.95	113.10
25	BB	765	C	N3-C2-O2	-7.71	116.51	121.90
25	BB	945	A	P-O3'-C3'	7.71	128.95	119.70
25	BB	1052	C	N1-C2-O2	7.71	123.52	118.90
25	BB	1208	C	O4'-C1'-N1	7.71	114.36	108.20
25	BB	1564	C	C5-C4-N4	7.71	125.59	120.20
25	BB	2252	G	C6-N1-C2	-7.71	120.48	125.10
3	A1	115	G	N1-C6-O6	-7.71	115.28	119.90
25	BB	1761	C	N3-C4-C5	7.71	124.98	121.90
25	BB	2001	C	N3-C2-O2	-7.71	116.51	121.90
25	BB	2443	C	N1-C2-O2	7.71	123.52	118.90
3	A1	435	A	C2-N3-C4	7.70	114.45	110.60
3	A1	853	C	C6-N1-C2	-7.70	117.22	120.30
3	A1	1514	G	C6-C5-N7	7.70	135.02	130.40
25	BB	606	U	C5-C6-N1	-7.70	118.85	122.70
25	BB	2078	C	C2-N3-C4	-7.70	116.05	119.90
3	A1	1356	G	N1-C6-O6	-7.70	115.28	119.90
3	A1	1512	U	N1-C2-O2	7.70	128.19	122.80
25	BB	435	C	C2-N3-C4	-7.70	116.05	119.90
25	BB	469	G	O4'-C1'-N9	7.70	114.36	108.20
25	BB	1575	C	O4'-C1'-N1	7.70	114.36	108.20
25	BB	281	C	O4'-C1'-N1	7.70	114.36	108.20
25	BB	671	C	N1-C2-O2	7.70	123.52	118.90
25	BB	1033	U	N1-C2-N3	7.70	119.52	114.90
25	BB	1452	G	C5-C6-N1	7.70	115.35	111.50
25	BB	2027	G	C8-N9-C4	-7.70	103.32	106.40
3	A1	1292	G	C4'-C3'-C2'	-7.70	94.90	102.60
25	BB	1850	G	N1-C6-O6	-7.70	115.28	119.90
25	BB	2164	C	C5-C6-N1	-7.70	117.15	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2193	G	C5'-C4'-C3'	-7.70	103.68	116.00
3	A1	474	G	C6-C5-N7	7.70	135.02	130.40
3	A1	1531	A	N9-C1'-C2'	-7.70	103.53	112.00
3	A1	976	G	N7-C8-N9	7.70	116.95	113.10
3	A1	1452	C	N1-C2-O2	7.70	123.52	118.90
24	BA	21	G	C8-N9-C4	-7.70	103.32	106.40
25	BB	232	G	N3-C2-N2	-7.70	114.51	119.90
25	BB	883	G	O4'-C1'-C2'	7.70	114.53	107.60
25	BB	1250	G	C5-C6-N1	7.70	115.35	111.50
25	BB	1402	U	C5-C6-N1	-7.70	118.85	122.70
25	BB	2049	G	C5'-C4'-O4'	7.70	118.33	109.10
25	BB	2721	A	C4-C5-C6	-7.70	113.15	117.00
25	BB	2886	A	C4-C5-C6	-7.70	113.15	117.00
1	AA	62	A	C4-C5-C6	-7.69	113.15	117.00
3	A1	291	U	C5-C6-N1	-7.69	118.85	122.70
24	BA	15	A	C3'-C2'-C1'	7.69	107.66	101.50
25	BB	110	G	N3-C4-C5	-7.69	124.75	128.60
25	BB	1413	A	C5-C6-N6	7.69	129.85	123.70
25	BB	1564	C	C2-N3-C4	-7.69	116.05	119.90
25	BB	1855	U	N1-C2-N3	7.69	119.52	114.90
25	BB	2888	C	C4-C5-C6	7.69	121.25	117.40
3	A1	120	A	C5-C6-N6	7.69	129.85	123.70
3	A1	176	C	N3-C2-O2	-7.69	116.52	121.90
3	A1	268	U	N1-C2-O2	7.69	128.19	122.80
3	A1	448	A	C5-C6-N1	7.69	121.55	117.70
3	A1	466	A	C6-C5-N7	7.69	137.68	132.30
3	A1	993	G	C3'-C2'-C1'	7.69	107.65	101.50
25	BB	161	A	C4-C5-C6	-7.69	113.15	117.00
25	BB	371	A	C4-C5-C6	-7.69	113.15	117.00
25	BB	963	U	O4'-C1'-N1	7.69	114.35	108.20
25	BB	1112	G	C5-N7-C8	-7.69	100.45	104.30
25	BB	1833	C	C5'-C4'-O4'	7.69	118.33	109.10
25	BB	2266	A	C4'-C3'-C2'	-7.69	94.91	102.60
25	BB	2385	C	C1'-O4'-C4'	-7.69	103.75	109.90
25	BB	2726	A	C6-C5-N7	7.69	137.69	132.30
3	A1	491	G	N3-C4-C5	-7.69	124.75	128.60
3	A1	722	G	C5-C6-N1	7.69	115.34	111.50
3	A1	926	G	C6-C5-N7	7.69	135.01	130.40
3	A1	1044	A	C3'-C2'-C1'	7.69	107.65	101.50
3	A1	1377	A	C5-C6-N6	7.69	129.85	123.70
25	BB	798	G	C5-C6-N1	7.69	115.35	111.50
25	BB	1051	G	C2-N3-C4	7.69	115.75	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1618	A	C3'-C2'-C1'	7.69	107.65	101.50
25	BB	1727	C	N3-C4-N4	-7.69	112.62	118.00
25	BB	2288	A	N1-C6-N6	-7.69	113.98	118.60
25	BB	2851	A	C5-C6-N1	7.69	121.55	117.70
3	A1	509	A	C4'-C3'-C2'	-7.69	94.91	102.60
3	A1	948	C	N3-C4-N4	-7.69	112.62	118.00
25	BB	1206	G	P-O3'-C3'	7.69	128.93	119.70
3	A1	63	C	N3-C4-N4	-7.69	112.62	118.00
24	BA	79	G	C4-C5-C6	-7.69	114.19	118.80
25	BB	147	C	C5'-C4'-O4'	7.69	118.33	109.10
25	BB	1985	C	N3-C4-N4	-7.69	112.62	118.00
25	BB	2167	U	O4'-C1'-N1	7.69	114.35	108.20
25	BB	2423	U	C5-C4-O4	-7.69	121.29	125.90
25	BB	2529	G	C6-C5-N7	7.69	135.01	130.40
3	A1	186	C	N3-C2-O2	-7.69	116.52	121.90
3	A1	187	G	N9-C4-C5	7.69	108.47	105.40
25	BB	241	A	C5-C6-N1	7.69	121.54	117.70
25	BB	745	G	C5'-C4'-O4'	7.69	118.32	109.10
3	A1	466	A	C5-C6-N6	7.68	129.85	123.70
24	BA	3	C	C5-C4-N4	7.68	125.58	120.20
25	BB	1392	A	N7-C8-N9	7.68	117.64	113.80
25	BB	2176	A	C5-C6-N1	7.68	121.54	117.70
3	A1	331	G	N3-C4-C5	-7.68	124.76	128.60
3	A1	1380	U	C4-C5-C6	7.68	124.31	119.70
25	BB	422	A	O4'-C1'-N9	7.68	114.35	108.20
25	BB	1280	G	O4'-C1'-N9	7.68	114.35	108.20
25	BB	2210	U	C5-C6-N1	-7.68	118.86	122.70
38	BO	6	ARG	NE-CZ-NH1	7.68	124.14	120.30
3	A1	1388	C	N3-C4-C5	7.68	124.97	121.90
24	BA	14	U	C3'-C2'-C1'	-7.68	95.36	101.50
25	BB	400	G	C6-C5-N7	7.68	135.01	130.40
3	A1	214	C	C5-C6-N1	-7.68	117.16	121.00
3	A1	1230	C	C6-N1-C1'	-7.68	111.58	120.80
25	BB	430	A	O4'-C4'-C3'	7.68	112.24	106.10
25	BB	957	C	C6-N1-C2	-7.68	117.23	120.30
25	BB	979	A	N1-C6-N6	-7.68	113.99	118.60
25	BB	1062	G	N1-C2-N3	7.68	128.51	123.90
25	BB	2072	C	C5'-C4'-O4'	7.68	118.32	109.10
25	BB	2370	G	C6-C5-N7	7.68	135.01	130.40
25	BB	2416	C	P-O3'-C3'	7.68	128.91	119.70
25	BB	2473	U	C2-N3-C4	-7.68	122.39	127.00
25	BB	2678	C	N1-C2-O2	7.68	123.51	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	976	G	C5-C6-O6	7.68	133.21	128.60
1	AE	10	G	C2-N3-C4	7.68	115.74	111.90
3	A1	384	G	N1-C6-O6	-7.68	115.29	119.90
3	A1	611	C	N3-C4-C5	-7.68	118.83	121.90
3	A1	777	A	C5-C6-N1	7.68	121.54	117.70
3	A1	1018	G	N3-C2-N2	-7.68	114.53	119.90
3	A1	1385	G	C1'-O4'-C4'	-7.68	103.76	109.90
48	BY	141	ARG	NE-CZ-NH2	7.68	124.14	120.30
1	AA	47	U	C6-N1-C2	-7.67	116.39	121.00
3	A1	744	C	N3-C2-O2	-7.67	116.53	121.90
25	BB	1307	A	O4'-C1'-N9	7.67	114.34	108.20
25	BB	1430	G	C4-C5-N7	-7.67	107.73	110.80
25	BB	2399	G	N1-C6-O6	-7.67	115.30	119.90
3	A1	1059	C	C5'-C4'-C3'	-7.67	103.72	116.00
3	A1	1112	C	N3-C2-O2	-7.67	116.53	121.90
24	BA	25	U	N1-C2-N3	7.67	119.50	114.90
25	BB	399	U	C4-C5-C6	7.67	124.30	119.70
25	BB	599	A	C2-N3-C4	7.67	114.44	110.60
25	BB	1179	G	N1-C2-N3	7.67	128.50	123.90
25	BB	1281	G	C8-N9-C4	-7.67	103.33	106.40
25	BB	2137	U	N3-C4-O4	7.67	124.77	119.40
25	BB	2822	G	C3'-C2'-C1'	7.67	107.64	101.50
3	A1	212	G	C4-C5-C6	-7.67	114.20	118.80
25	BB	1168	G	C5-C6-N1	7.67	115.33	111.50
25	BB	1510	G	C5-C6-O6	7.67	133.20	128.60
3	A1	491	G	O4'-C1'-N9	-7.67	102.07	108.20
3	A1	1058	G	C8-N9-C4	-7.67	103.33	106.40
25	BB	213	A	C6-C5-N7	7.67	137.67	132.30
25	BB	1984	G	N1-C6-O6	-7.67	115.30	119.90
3	A1	205	A	N9-C4-C5	7.67	108.87	105.80
3	A1	567	G	N9-C1'-C2'	-7.67	103.57	112.00
3	A1	930	C	C4'-C3'-C2'	-7.67	94.94	102.60
3	A1	1415	G	C4-C5-N7	-7.67	107.73	110.80
25	BB	147	C	N1-C2-O2	7.67	123.50	118.90
25	BB	2592	G	C6-N1-C2	-7.67	120.50	125.10
25	BB	78	U	N3-C2-O2	-7.66	116.83	122.20
25	BB	1661	G	C8-N9-C4	-7.66	103.33	106.40
25	BB	2219	U	N1-C2-N3	7.66	119.50	114.90
25	BB	2666	C	O4'-C4'-C3'	7.66	112.23	106.10
3	A1	1496	C	N3-C2-O2	-7.66	116.54	121.90
24	BA	66	A	O4'-C4'-C3'	7.66	112.23	106.10
25	BB	104	A	C5'-C4'-O4'	7.66	118.29	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1680	U	N1-C1'-C2'	7.66	123.96	114.00
25	BB	1705	A	C5-C6-N6	7.66	129.83	123.70
25	BB	1854	A	C2'-C3'-O3'	7.66	126.36	109.50
1	AE	33	U	C4-C5-C6	7.66	124.30	119.70
3	A1	28	A	N9-C4-C5	-7.66	102.74	105.80
3	A1	893	C	C6-N1-C2	-7.66	117.24	120.30
25	BB	625	G	C3'-C2'-C1'	-7.66	95.37	101.50
25	BB	1589	U	O4'-C1'-C2'	-7.66	98.14	105.80
3	A1	17	U	C5-C6-N1	-7.66	118.87	122.70
3	A1	1295	U	C4'-C3'-C2'	-7.66	94.94	102.60
22	AW	44	ARG	NE-CZ-NH1	7.66	124.13	120.30
25	BB	132	G	C3'-C2'-C1'	7.66	107.63	101.50
25	BB	240	C	N3-C2-O2	-7.66	116.54	121.90
25	BB	1884	G	C6-C5-N7	7.66	135.00	130.40
3	A1	1400	C	N1-C2-O2	-7.66	114.31	118.90
25	BB	236	C	C5'-C4'-C3'	-7.66	103.75	116.00
25	BB	767	U	N1-C2-N3	7.66	119.49	114.90
55	B6	37	ARG	NE-CZ-NH1	7.66	124.13	120.30
3	A1	84	U	O4'-C1'-N1	7.66	114.32	108.20
25	BB	136	G	N7-C8-N9	7.66	116.93	113.10
25	BB	272	A	C2-N3-C4	7.66	114.43	110.60
25	BB	440	C	C3'-C2'-C1'	7.66	107.62	101.50
25	BB	1355	G	N1-C6-O6	-7.66	115.31	119.90
25	BB	1398	C	C5-C4-N4	7.66	125.56	120.20
25	BB	2439	A	C4-C5-C6	-7.66	113.17	117.00
1	AP	20	G	N7-C8-N9	7.65	116.93	113.10
3	A1	509	A	C6-C5-N7	7.65	137.66	132.30
3	A1	529	G	N1-C2-N3	7.65	128.49	123.90
25	BB	1687	G	N3-C4-N9	7.65	130.59	126.00
25	BB	2338	C	N1-C2-O2	7.65	123.49	118.90
1	AE	75	C	N3-C4-C5	7.65	124.96	121.90
3	A1	194	C	N3-C4-C5	7.65	124.96	121.90
3	A1	308	C	N1-C2-O2	7.65	123.49	118.90
3	A1	641	U	C1'-O4'-C4'	7.65	116.02	109.90
3	A1	804	U	N3-C2-O2	-7.65	116.84	122.20
3	A1	1177	G	N1-C6-O6	-7.65	115.31	119.90
3	A1	1368	A	C5'-C4'-O4'	7.65	118.28	109.10
25	BB	119	A	N1-C6-N6	-7.65	114.01	118.60
25	BB	149	A	C5'-C4'-O4'	7.65	118.28	109.10
25	BB	1039	A	C3'-C2'-C1'	7.65	107.62	101.50
25	BB	1062	G	N7-C8-N9	7.65	116.93	113.10
25	BB	1554	U	N3-C2-O2	-7.65	116.84	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1693	U	C5-C6-N1	-7.65	118.87	122.70
1	AA	25	C	C4'-C3'-C2'	-7.65	94.95	102.60
3	A1	1400	C	N1-C2-N3	7.65	124.56	119.20
25	BB	574	A	C5'-C4'-C3'	-7.65	103.76	116.00
25	BB	608	A	C2-N3-C4	7.65	114.43	110.60
25	BB	762	U	C4-C5-C6	7.65	124.29	119.70
25	BB	791	C	O4'-C1'-N1	7.65	114.32	108.20
1	AA	43	G	C4-C5-N7	-7.65	107.74	110.80
3	A1	694	A	C5-C6-N6	7.65	129.82	123.70
25	BB	1269	A	C5-C6-N1	7.65	121.52	117.70
1	AA	24	G	C5-C6-O6	-7.65	124.01	128.60
3	A1	70	U	C2-N3-C4	-7.65	122.41	127.00
3	A1	262	A	N7-C8-N9	7.65	117.62	113.80
3	A1	289	G	N1-C6-O6	-7.65	115.31	119.90
3	A1	718	A	N9-C4-C5	-7.65	102.74	105.80
3	A1	818	G	N1-C6-O6	-7.65	115.31	119.90
3	A1	1130	A	C5-C6-N1	7.65	121.52	117.70
24	BA	16	G	C4-C5-N7	-7.65	107.74	110.80
25	BB	1967	C	C2-N3-C4	-7.65	116.08	119.90
3	A1	1284	C	N3-C4-N4	-7.65	112.65	118.00
24	BA	6	G	N1-C6-O6	-7.65	115.31	119.90
25	BB	1445	G	N1-C2-N3	7.65	128.49	123.90
25	BB	2749	A	C2-N3-C4	7.65	114.42	110.60
1	AA	66	A	C8-N9-C4	-7.64	102.74	105.80
1	AP	22	G	O4'-C1'-C2'	-7.64	98.16	105.80
1	AP	31	A	C4-C5-C6	-7.64	113.18	117.00
3	A1	846	G	N1-C2-N2	-7.64	109.32	116.20
24	BA	67	G	C8-N9-C4	-7.64	103.34	106.40
25	BB	41	C	C5'-C4'-O4'	-7.64	99.93	109.10
25	BB	61	C	C5-C6-N1	-7.64	117.18	121.00
25	BB	1336	A	N1-C6-N6	-7.64	114.01	118.60
25	BB	2338	C	N3-C4-C5	7.64	124.96	121.90
1	AP	47	U	N3-C4-C5	-7.64	110.01	114.60
3	A1	373	A	C5-C6-N6	7.64	129.81	123.70
3	A1	1288	A	C5-C6-N1	7.64	121.52	117.70
25	BB	67	U	N3-C2-O2	-7.64	116.85	122.20
25	BB	707	G	C6-N1-C2	-7.64	120.52	125.10
25	BB	854	C	N3-C4-N4	-7.64	112.65	118.00
25	BB	1925	C	C4-C5-C6	-7.64	113.58	117.40
25	BB	2051	A	C4-C5-C6	-7.64	113.18	117.00
2	AM	14	U	N1-C2-N3	7.64	119.48	114.90
25	BB	654	A	C5-N7-C8	-7.64	100.08	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1239	G	N1-C6-O6	-7.64	115.31	119.90
3	A1	723	U	C5-C6-N1	-7.64	118.88	122.70
3	A1	1340	A	C4'-C3'-O3'	7.64	128.28	113.00
24	BA	25	U	C5'-C4'-O4'	-7.64	99.93	109.10
25	BB	1786	A	C2-N3-C4	7.64	114.42	110.60
25	BB	1802	A	C6-C5-N7	7.64	137.65	132.30
25	BB	2005	A	C5-C6-N1	7.64	121.52	117.70
25	BB	2078	C	C5-C6-N1	-7.64	117.18	121.00
25	BB	2095	A	C5-C6-N1	7.64	121.52	117.70
3	A1	164	G	N9-C4-C5	7.64	108.45	105.40
3	A1	437	U	N1-C2-N3	7.64	119.48	114.90
3	A1	914	A	C5-C6-N6	7.64	129.81	123.70
3	A1	1255	G	C5-C6-N1	7.64	115.32	111.50
25	BB	281	C	O4'-C4'-C3'	-7.64	96.36	104.00
25	BB	1213	A	C2-N3-C4	7.64	114.42	110.60
25	BB	1460	U	N1-C2-O2	7.64	128.15	122.80
51	B2	147	ARG	NE-CZ-NH2	7.64	124.12	120.30
2	AM	8	U	C2-N3-C4	-7.63	122.42	127.00
3	A1	244	U	N3-C2-O2	-7.63	116.86	122.20
25	BB	371	A	N1-C2-N3	-7.63	125.48	129.30
25	BB	530	G	O4'-C1'-N9	7.63	114.31	108.20
25	BB	619	G	O4'-C1'-N9	7.63	114.31	108.20
25	BB	814	C	P-O3'-C3'	7.63	128.86	119.70
25	BB	970	U	C5-C6-N1	-7.63	118.88	122.70
25	BB	1306	C	N3-C2-O2	-7.63	116.56	121.90
25	BB	1918	A	C5-N7-C8	-7.63	100.08	103.90
25	BB	2246	G	C6-N1-C2	-7.63	120.52	125.10
25	BB	2850	A	C8-N9-C4	-7.63	102.75	105.80
33	BJ	32	ARG	NE-CZ-NH1	7.63	124.12	120.30
1	AP	22	G	O4'-C1'-N9	7.63	114.31	108.20
1	AE	22	G	N7-C8-N9	7.63	116.92	113.10
24	BA	78	A	C5-C6-N1	7.63	121.52	117.70
25	BB	1399	C	O4'-C1'-N1	7.63	114.31	108.20
25	BB	2421	G	N3-C4-N9	7.63	130.58	126.00
25	BB	2547	A	C2-N3-C4	7.63	114.42	110.60
3	A1	145	G	C6-N1-C2	-7.63	120.52	125.10
3	A1	791	G	N1-C6-O6	-7.63	115.32	119.90
25	BB	1786	A	N1-C2-N3	-7.63	125.48	129.30
25	BB	1963	U	C2-N3-C4	-7.63	122.42	127.00
25	BB	1987	A	N7-C8-N9	7.63	117.62	113.80
25	BB	2363	G	N9-C4-C5	7.63	108.45	105.40
3	A1	254	G	O4'-C1'-N9	7.63	114.30	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	247	G	C4-C5-N7	-7.63	107.75	110.80
25	BB	336	C	C5-C4-N4	7.63	125.54	120.20
25	BB	1009	A	C5-N7-C8	-7.63	100.09	103.90
25	BB	2371	G	C6-C5-N7	7.63	134.98	130.40
25	BB	2414	G	C5-C6-N1	7.63	115.31	111.50
3	A1	5	U	O4'-C4'-C3'	7.63	112.20	106.10
25	BB	2058	A	C3'-C2'-C1'	7.63	107.60	101.50
33	BJ	47	ARG	NE-CZ-NH2	7.62	124.11	120.30
37	BN	228	ASP	OD1-CG-OD2	-7.62	108.81	123.30
1	AP	25	C	N1-C2-O2	7.62	123.47	118.90
3	A1	257	G	N9-C4-C5	7.62	108.45	105.40
3	A1	858	G	C6-N1-C2	-7.62	120.53	125.10
3	A1	1332	A	C2-N3-C4	7.62	114.41	110.60
25	BB	136	G	N3-C4-C5	-7.62	124.79	128.60
25	BB	169	G	N3-C2-N2	-7.62	114.56	119.90
25	BB	1515	A	C6-C5-N7	7.62	137.64	132.30
25	BB	1554	U	C5-C6-N1	-7.62	118.89	122.70
25	BB	2049	G	C2-N3-C4	7.62	115.71	111.90
25	BB	2082	A	C4-C5-C6	-7.62	113.19	117.00
25	BB	2364	C	O4'-C1'-N1	7.62	114.30	108.20
25	BB	2456	C	N3-C4-N4	-7.62	112.66	118.00
3	A1	25	C	C5'-C4'-O4'	7.62	118.25	109.10
3	A1	117	G	N1-C2-N2	7.62	123.06	116.20
3	A1	1039	G	C5-C6-N1	7.62	115.31	111.50
25	BB	358	U	O4'-C1'-N1	7.62	114.30	108.20
25	BB	2017	U	N3-C2-O2	-7.62	116.86	122.20
25	BB	2080	A	C6-C5-N7	7.62	137.63	132.30
43	BT	49	ARG	NE-CZ-NH1	7.62	124.11	120.30
3	A1	397	A	C8-N9-C4	-7.62	102.75	105.80
25	BB	136	G	O4'-C1'-N9	-7.62	102.10	108.20
25	BB	776	G	C1'-O4'-C4'	-7.62	103.80	109.90
25	BB	1697	G	N7-C8-N9	7.62	116.91	113.10
25	BB	2854	G	O4'-C1'-N9	7.62	114.30	108.20
1	AP	11	C	N3-C4-N4	-7.62	112.67	118.00
1	AE	62	A	C4-C5-C6	-7.62	113.19	117.00
3	A1	172	A	C2-N3-C4	7.62	114.41	110.60
3	A1	1266	G	N1-C2-N3	7.62	128.47	123.90
25	BB	222	A	C2-N3-C4	7.62	114.41	110.60
25	BB	668	A	C5-C6-N1	7.62	121.51	117.70
25	BB	772	C	N1-C2-O2	7.62	123.47	118.90
25	BB	1386	C	N3-C4-N4	-7.62	112.67	118.00
25	BB	1927	A	C5-C6-N6	7.62	129.80	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2035	G	C6-N1-C2	-7.62	120.53	125.10
3	A1	316	C	N1-C2-N3	7.62	124.53	119.20
3	A1	1284	C	N3-C4-C5	7.62	124.95	121.90
25	BB	103	A	C5-C6-N6	7.62	129.79	123.70
25	BB	187	G	C5-N7-C8	-7.62	100.49	104.30
25	BB	475	C	N1-C2-O2	7.62	123.47	118.90
25	BB	1101	U	N3-C2-O2	-7.62	116.87	122.20
25	BB	2320	U	N3-C4-O4	7.62	124.73	119.40
3	A1	6	G	O3'-P-O5'	-7.62	89.53	104.00
3	A1	54	C	C5-C4-N4	-7.62	114.87	120.20
3	A1	1163	A	C5-N7-C8	-7.62	100.09	103.90
25	BB	1393	A	O4'-C1'-N9	-7.62	102.11	108.20
25	BB	1542	U	N3-C2-O2	-7.62	116.87	122.20
25	BB	1568	G	N1-C6-O6	-7.62	115.33	119.90
3	A1	35	G	C8-N9-C4	-7.61	103.35	106.40
3	A1	45	G	O4'-C4'-C3'	7.61	112.19	106.10
3	A1	1281	C	N3-C4-N4	-7.61	112.67	118.00
25	BB	2190	G	N3-C2-N2	-7.61	114.57	119.90
1	AA	28	C	N3-C2-O2	-7.61	116.57	121.90
3	A1	766	A	C4'-C3'-C2'	-7.61	94.99	102.60
3	A1	990	C	N3-C4-N4	-7.61	112.67	118.00
3	A1	1368	A	C6-C5-N7	7.61	137.63	132.30
25	BB	1039	A	N1-C6-N6	-7.61	114.03	118.60
3	A1	124	C	N1-C2-O2	7.61	123.47	118.90
3	A1	1108	G	O4'-C1'-N9	7.61	114.29	108.20
3	A1	1408	A	C4-C5-C6	-7.61	113.19	117.00
25	BB	145	C	N3-C4-C5	7.61	124.94	121.90
38	BO	85	ARG	NE-CZ-NH1	7.61	124.11	120.30
25	BB	201	C	N3-C2-O2	-7.61	116.57	121.90
25	BB	1514	G	C5-C6-N1	7.61	115.30	111.50
31	BH	10	ARG	NE-CZ-NH1	7.61	124.11	120.30
3	A1	971	G	C8-N9-C4	-7.61	103.36	106.40
3	A1	1190	G	C5-C6-N1	7.61	115.30	111.50
25	BB	829	A	O4'-C1'-N9	7.61	114.28	108.20
25	BB	1101	U	N1-C2-N3	7.61	119.46	114.90
25	BB	1475	G	O4'-C1'-C2'	-7.61	98.19	105.80
25	BB	1714	U	C2-N3-C4	-7.61	122.44	127.00
25	BB	2166	U	N3-C2-O2	-7.61	116.87	122.20
25	BB	2565	A	C4-C5-C6	-7.61	113.20	117.00
3	A1	460	A	C6-N1-C2	-7.61	114.04	118.60
3	A1	838	G	C8-N9-C4	-7.61	103.36	106.40
3	A1	1206	G	N3-C2-N2	-7.61	114.58	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1156	A	C8-N9-C4	-7.61	102.76	105.80
3	A1	393	A	O4'-C1'-N9	7.60	114.28	108.20
25	BB	1053	C	N3-C2-O2	-7.60	116.58	121.90
25	BB	1387	A	C6-C5-N7	7.60	137.62	132.30
3	A1	1052	U	C2-N3-C4	-7.60	122.44	127.00
3	A1	1429	A	C5-N7-C8	-7.60	100.10	103.90
3	A1	1468	A	C5-C6-N1	7.60	121.50	117.70
25	BB	391	A	C4-C5-C6	-7.60	113.20	117.00
25	BB	936	A	O4'-C4'-C3'	7.60	112.18	106.10
25	BB	2318	G	N1-C2-N3	-7.60	119.34	123.90
25	BB	2331	G	N3-C4-C5	-7.60	124.80	128.60
25	BB	2502	G	N1-C6-O6	-7.60	115.34	119.90
25	BB	2844	G	O5'-P-OP2	-7.60	98.86	105.70
1	AE	63	C	O4'-C1'-N1	7.60	114.28	108.20
3	A1	985	C	N3-C4-C5	7.60	124.94	121.90
24	BA	70	C	O4'-C4'-C3'	7.60	112.18	106.10
3	A1	370	C	N3-C2-O2	-7.60	116.58	121.90
3	A1	1180	A	C5-C6-N6	7.60	129.78	123.70
24	BA	106	G	C5'-C4'-O4'	7.60	118.22	109.10
25	BB	413	C	C5'-C4'-O4'	7.60	118.22	109.10
25	BB	647	G	C5-C6-O6	7.60	133.16	128.60
25	BB	990	A	O3'-P-O5'	7.60	118.44	104.00
25	BB	1951	U	C5'-C4'-O4'	7.60	118.22	109.10
25	BB	2185	U	N1-C2-O2	7.60	128.12	122.80
3	A1	26	A	C4-C5-C6	-7.60	113.20	117.00
3	A1	220	G	N3-C2-N2	-7.60	114.58	119.90
3	A1	932	C	N3-C4-C5	7.60	124.94	121.90
25	BB	410	G	N3-C2-N2	-7.60	114.58	119.90
25	BB	756	A	C1'-O4'-C4'	-7.60	103.82	109.90
25	BB	994	C	N3-C2-O2	-7.60	116.58	121.90
25	BB	1262	A	C6-C5-N7	7.60	137.62	132.30
25	BB	1343	G	N9-C4-C5	7.60	108.44	105.40
25	BB	2280	G	N1-C2-N3	7.60	128.46	123.90
25	BB	2409	G	N3-C4-N9	7.60	130.56	126.00
3	A1	190	A	C4-C5-C6	-7.60	113.20	117.00
3	A1	691	G	N3-C2-N2	-7.60	114.58	119.90
25	BB	2131	U	C5'-C4'-O4'	7.60	118.22	109.10
3	A1	258	G	N3-C4-C5	-7.59	124.80	128.60
3	A1	369	G	C5-N7-C8	-7.59	100.50	104.30
3	A1	739	C	N3-C4-C5	7.59	124.94	121.90
3	A1	791	G	O4'-C1'-N9	7.59	114.28	108.20
3	A1	989	U	C3'-C2'-C1'	-7.59	95.42	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	35	C	C1'-O4'-C4'	-7.59	103.82	109.90
24	BA	100	G	N7-C8-N9	7.59	116.90	113.10
25	BB	64	A	C1'-O4'-C4'	-7.59	103.82	109.90
25	BB	281	C	N3-C4-C5	7.59	124.94	121.90
25	BB	1625	C	C6-N1-C2	-7.59	117.26	120.30
25	BB	2230	G	C8-N9-C4	-7.59	103.36	106.40
2	AM	9	U	C3'-C2'-C1'	7.59	107.58	101.50
3	A1	1417	G	N3-C2-N2	-7.59	114.58	119.90
25	BB	431	U	N3-C4-O4	7.59	124.72	119.40
25	BB	441	U	C5-C6-N1	-7.59	118.90	122.70
25	BB	2486	C	C4-C5-C6	7.59	121.20	117.40
1	AE	39	U	O4'-C1'-N1	7.59	114.27	108.20
3	A1	351	G	C5-C6-O6	7.59	133.16	128.60
3	A1	635	A	C5-C6-N1	7.59	121.50	117.70
3	A1	936	C	N1-C2-O2	7.59	123.45	118.90
3	A1	1323	G	O4'-C1'-N9	-7.59	102.13	108.20
24	BA	85	G	C6-C5-N7	7.59	134.96	130.40
25	BB	229	C	N3-C4-N4	-7.59	112.69	118.00
25	BB	814	C	N3-C4-N4	-7.59	112.69	118.00
25	BB	2347	C	N3-C2-O2	-7.59	116.59	121.90
24	BA	60	C	O4'-C1'-N1	7.59	114.27	108.20
24	BA	72	G	O5'-P-OP1	-7.59	98.87	105.70
25	BB	809	G	N1-C6-O6	-7.59	115.35	119.90
25	BB	847	U	C4-C5-C6	7.59	124.25	119.70
25	BB	1625	C	C2-N3-C4	-7.59	116.11	119.90
34	BK	78	ARG	NE-CZ-NH2	7.59	124.09	120.30
25	BB	880	G	N3-C2-N2	-7.59	114.59	119.90
25	BB	1453	A	C5-C6-N1	7.59	121.49	117.70
1	AP	10	G	C5-C6-N1	7.59	115.29	111.50
3	A1	235	C	N3-C2-O2	-7.59	116.59	121.90
3	A1	518	C	N3-C4-N4	-7.59	112.69	118.00
3	A1	661	G	O4'-C1'-N9	-7.59	102.13	108.20
14	AN	59	ARG	NE-CZ-NH2	-7.59	116.51	120.30
25	BB	307	G	N3-C2-N2	-7.59	114.59	119.90
25	BB	1807	G	C5-C6-O6	7.59	133.15	128.60
25	BB	2043	C	C5-C6-N1	-7.59	117.21	121.00
3	A1	624	C	C4-C5-C6	-7.58	113.61	117.40
3	A1	968	A	O4'-C1'-N9	7.58	114.27	108.20
25	BB	1610	A	C5-C6-N6	7.58	129.77	123.70
25	BB	1876	A	C6-C5-N7	7.58	137.61	132.30
25	BB	2032	G	C1'-O4'-C4'	-7.58	103.83	109.90
25	BB	2050	C	N1-C2-O2	7.58	123.45	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2108	A	O4'-C1'-N9	7.58	114.27	108.20
25	BB	2255	G	C8-N9-C4	-7.58	103.37	106.40
25	BB	2360	G	O4'-C1'-N9	7.58	114.27	108.20
25	BB	2371	G	C4-C5-C6	-7.58	114.25	118.80
25	BB	2762	C	N3-C2-O2	-7.58	116.59	121.90
1	AP	75	C	N3-C4-N4	-7.58	112.69	118.00
3	A1	169	C	N3-C4-N4	-7.58	112.69	118.00
3	A1	1424	U	C5-C6-N1	-7.58	118.91	122.70
25	BB	230	G	O4'-C1'-N9	7.58	114.27	108.20
25	BB	1068	G	C3'-C2'-C1'	7.58	107.56	101.50
25	BB	1129	A	O4'-C4'-C3'	7.58	112.17	106.10
25	BB	1176	U	N1-C1'-C2'	-7.58	103.66	112.00
25	BB	2523	G	N3-C4-C5	-7.58	124.81	128.60
25	BB	2570	G	C6-C5-N7	7.58	134.95	130.40
1	AA	33	U	C4'-C3'-C2'	-7.58	95.02	102.60
25	BB	1314	C	C5'-C4'-O4'	7.58	118.20	109.10
25	BB	1690	A	N1-C2-N3	-7.58	125.51	129.30
25	BB	2192	U	C5-C6-N1	-7.58	118.91	122.70
25	BB	2490	G	O4'-C1'-N9	7.58	114.26	108.20
1	AA	10	G	N1-C6-O6	-7.58	115.35	119.90
3	A1	135	C	N1-C2-O2	7.58	123.45	118.90
3	A1	215	C	C5-C6-N1	-7.58	117.21	121.00
3	A1	936	C	N3-C4-N4	-7.58	112.69	118.00
3	A1	1300	G	C5-C6-N1	7.58	115.29	111.50
25	BB	998	C	C2-N3-C4	-7.58	116.11	119.90
25	BB	1232	G	N9-C4-C5	7.58	108.43	105.40
25	BB	1350	C	N3-C4-C5	7.58	124.93	121.90
25	BB	2316	G	C6-N1-C2	-7.58	120.55	125.10
25	BB	2375	G	N3-C4-C5	-7.58	124.81	128.60
3	A1	1022	A	N1-C6-N6	-7.58	114.05	118.60
3	A1	1510	C	N3-C4-N4	-7.58	112.70	118.00
25	BB	71	A	C3'-C2'-C1'	7.58	107.56	101.50
25	BB	271	G	N3-C4-C5	-7.58	124.81	128.60
25	BB	2731	G	C2'-C3'-O3'	7.58	126.17	109.50
3	A1	77	A	N9-C4-C5	7.58	108.83	105.80
3	A1	237	G	P-O3'-C3'	7.58	128.79	119.70
3	A1	822	U	C1'-O4'-C4'	-7.58	103.84	109.90
3	A1	1037	C	N1-C2-N3	7.58	124.50	119.20
25	BB	541	A	N9-C4-C5	-7.58	102.77	105.80
25	BB	1001	A	C5-C6-N1	7.58	121.49	117.70
25	BB	1865	U	C3'-C2'-C1'	7.58	107.56	101.50
25	BB	2020	A	C4-C5-C6	-7.58	113.21	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	11	C	N1-C2-O2	7.57	123.44	118.90
3	A1	952	U	C5-C6-N1	-7.57	118.91	122.70
3	A1	1507	A	C4-C5-C6	-7.57	113.21	117.00
25	BB	1043	C	N3-C4-C5	7.57	124.93	121.90
25	BB	1240	U	O4'-C1'-N1	7.57	114.26	108.20
25	BB	1730	C	N1-C2-N3	7.57	124.50	119.20
25	BB	1852	U	N3-C4-O4	7.57	124.70	119.40
25	BB	2794	C	C2-N3-C4	-7.57	116.11	119.90
5	AC	36	ARG	NE-CZ-NH2	7.57	124.09	120.30
1	AE	39	U	C1'-O4'-C4'	-7.57	103.84	109.90
3	A1	383	A	C5-C6-N1	7.57	121.48	117.70
25	BB	109	C	N3-C4-C5	7.57	124.93	121.90
25	BB	1108	U	N3-C2-O2	-7.57	116.90	122.20
25	BB	1730	C	C4-C5-C6	7.57	121.19	117.40
25	BB	1936	A	C6-N1-C2	-7.57	114.06	118.60
25	BB	2424	C	N3-C4-N4	-7.57	112.70	118.00
25	BB	2498	C	O3'-P-O5'	-7.57	89.62	104.00
25	BB	2769	U	C1'-O4'-C4'	-7.57	103.84	109.90
3	A1	780	A	C2-N3-C4	7.57	114.39	110.60
3	A1	1353	G	C4'-C3'-C2'	-7.57	95.03	102.60
3	A1	1405	G	O4'-C1'-N9	7.57	114.25	108.20
25	BB	1770	G	C5-C6-N1	7.57	115.28	111.50
25	BB	1866	A	C6-C5-N7	7.57	137.60	132.30
1	AA	37	G	N1-C6-O6	-7.57	115.36	119.90
3	A1	40	C	C5'-C4'-C3'	-7.57	103.89	116.00
3	A1	249	U	C5'-C4'-C3'	-7.57	103.89	116.00
25	BB	857	G	C6-N1-C2	-7.57	120.56	125.10
25	BB	1234	U	C5'-C4'-O4'	7.57	118.18	109.10
25	BB	1997	C	N1-C2-O2	7.57	123.44	118.90
25	BB	2190	G	N1-C2-N3	7.57	128.44	123.90
25	BB	2765	A	C5-C6-N1	7.57	121.48	117.70
3	A1	302	G	C4-C5-N7	-7.57	107.77	110.80
3	A1	638	U	C4-C5-C6	7.57	124.24	119.70
3	A1	826	C	C5-C6-N1	-7.57	117.22	121.00
3	A1	1501	C	C6-N1-C2	-7.57	117.27	120.30
25	BB	495	G	N7-C8-N9	7.57	116.88	113.10
25	BB	1366	A	C5-C6-N6	7.57	129.75	123.70
25	BB	1997	C	O4'-C1'-N1	7.57	114.25	108.20
3	A1	995	C	C2-N3-C4	-7.56	116.12	119.90
25	BB	121	G	C8-N9-C4	-7.56	103.37	106.40
25	BB	384	A	C4-C5-C6	-7.56	113.22	117.00
25	BB	604	G	C5'-C4'-O4'	7.56	118.18	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	51	G	C6-C5-N7	7.56	134.94	130.40
3	A1	134	G	O4'-C4'-C3'	7.56	112.15	106.10
25	BB	2096	C	C5-C4-N4	7.56	125.49	120.20
25	BB	2410	G	C8-N9-C4	-7.56	103.38	106.40
25	BB	2439	A	C8-N9-C4	-7.56	102.78	105.80
25	BB	2613	U	O4'-C1'-N1	7.56	114.25	108.20
25	BB	2813	A	O4'-C4'-C3'	7.56	112.15	106.10
1	AA	2	C	C6-N1-C2	-7.56	117.28	120.30
3	A1	130	A	N7-C8-N9	7.56	117.58	113.80
3	A1	534	U	N1-C2-O2	7.56	128.09	122.80
3	A1	202	G	C6-N1-C2	-7.56	120.56	125.10
3	A1	725	G	N1-C6-O6	-7.56	115.36	119.90
25	BB	1949	G	C5'-C4'-O4'	7.56	118.17	109.10
25	BB	2077	A	C5'-C4'-O4'	7.56	118.17	109.10
25	BB	2325	G	C6-N1-C2	-7.56	120.56	125.10
25	BB	2356	U	C5-C6-N1	-7.56	118.92	122.70
25	BB	2650	U	N3-C4-O4	-7.56	114.11	119.40
25	BB	2681	C	C2-N3-C4	-7.56	116.12	119.90
49	BZ	147	TYR	CB-CG-CD1	-7.56	116.46	121.00
3	A1	1039	G	N1-C6-O6	-7.56	115.37	119.90
25	BB	665	U	N1-C2-N3	7.56	119.43	114.90
25	BB	697	G	O4'-C1'-N9	7.56	114.25	108.20
25	BB	2595	G	C5'-C4'-C3'	-7.56	103.91	116.00
25	BB	2650	U	N3-C2-O2	-7.56	116.91	122.20
24	BA	58	A	C4-C5-C6	-7.56	113.22	117.00
25	BB	546	U	N1-C2-N3	7.56	119.43	114.90
25	BB	1360	G	N7-C8-N9	7.56	116.88	113.10
25	BB	2367	G	N3-C4-N9	7.56	130.53	126.00
3	A1	1428	A	C5-C6-N1	7.55	121.48	117.70
3	A1	1480	A	C5-C6-N1	7.55	121.48	117.70
25	BB	1314	C	C2-N3-C4	-7.55	116.12	119.90
25	BB	1449	G	C6-C5-N7	7.55	134.93	130.40
3	A1	365	U	N1-C2-N3	7.55	119.43	114.90
25	BB	33	C	N3-C4-N4	-7.55	112.71	118.00
1	AE	47	U	N1-C2-N3	7.55	119.43	114.90
3	A1	453	G	C4'-C3'-C2'	-7.55	95.05	102.60
3	A1	685	G	N3-C2-N2	-7.55	114.61	119.90
3	A1	1223	C	N3-C2-O2	-7.55	116.61	121.90
3	A1	1297	G	O4'-C1'-C2'	-7.55	98.25	105.80
25	BB	585	G	N1-C6-O6	-7.55	115.37	119.90
25	BB	1161	C	C5-C4-N4	7.55	125.49	120.20
25	BB	1234	U	O4'-C1'-N1	7.55	114.24	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1469	A	C5-C6-N6	7.55	129.74	123.70
25	BB	2135	A	C2-N3-C4	7.55	114.38	110.60
25	BB	2870	C	C2'-C3'-O3'	7.55	126.11	109.50
51	B2	114	ARG	CD-NE-CZ	7.55	134.17	123.60
3	A1	72	A	C5-C6-N6	7.55	129.74	123.70
3	A1	82	G	N9-C4-C5	7.55	108.42	105.40
3	A1	1391	U	C2'-C3'-O3'	7.55	126.11	109.50
8	AG	40	ARG	CD-NE-CZ	7.55	134.17	123.60
25	BB	1471	G	C8-N9-C4	-7.55	103.38	106.40
25	BB	1616	A	C6-C5-N7	7.55	137.58	132.30
25	BB	2073	C	N3-C2-O2	-7.55	116.61	121.90
25	BB	2176	A	C4-C5-C6	-7.55	113.22	117.00
25	BB	2275	C	C3'-C2'-C1'	7.55	107.54	101.50
3	A1	184	G	N1-C2-N2	-7.55	109.41	116.20
6	AD	93	ARG	NE-CZ-NH1	7.55	124.07	120.30
25	BB	164	C	C2-N3-C4	-7.55	116.13	119.90
25	BB	756	A	C4-C5-C6	-7.55	113.23	117.00
3	A1	643	C	N3-C2-O2	-7.55	116.62	121.90
25	BB	272	A	C4-C5-C6	-7.55	113.23	117.00
25	BB	1069	A	C6-C5-N7	7.55	137.58	132.30
25	BB	1296	G	C8-N9-C4	-7.55	103.38	106.40
25	BB	1635	A	C3'-C2'-C1'	7.55	107.54	101.50
25	BB	1902	C	N1-C2-O2	7.55	123.43	118.90
25	BB	2443	C	N3-C2-O2	-7.55	116.62	121.90
3	A1	457	G	C5'-C4'-O4'	7.54	118.15	109.10
3	A1	852	G	N9-C1'-C2'	-7.54	103.70	112.00
25	BB	1880	U	C5-C6-N1	-7.54	118.93	122.70
25	BB	2529	G	C5-C6-O6	7.54	133.13	128.60
1	AA	62	A	N1-C2-N3	-7.54	125.53	129.30
1	AE	38	A	C4-C5-C6	-7.54	113.23	117.00
3	A1	591	U	C5-C6-N1	-7.54	118.93	122.70
3	A1	1128	C	C2-N3-C4	-7.54	116.13	119.90
25	BB	294	A	C2-N3-C4	7.54	114.37	110.60
25	BB	822	G	C5-C6-N1	7.54	115.27	111.50
25	BB	861	A	N1-C2-N3	-7.54	125.53	129.30
25	BB	1431	A	C6-C5-N7	7.54	137.58	132.30
25	BB	1843	C	C2-N3-C4	-7.54	116.13	119.90
1	AP	55	U	C3'-C2'-C1'	7.54	107.53	101.50
1	AE	22	G	C5-C6-N1	7.54	115.27	111.50
3	A1	416	G	C6-C5-N7	7.54	134.92	130.40
3	A1	496	A	C4-C5-N7	7.54	114.47	110.70
3	A1	846	G	N1-C2-N3	7.54	128.43	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	922	G	N3-C4-C5	-7.54	124.83	128.60
3	A1	1100	C	C5-C4-N4	7.54	125.48	120.20
25	BB	105	C	N3-C2-O2	-7.54	116.62	121.90
25	BB	565	C	C2-N3-C4	-7.54	116.13	119.90
25	BB	606	U	C4-C5-C6	7.54	124.22	119.70
25	BB	1329	U	N3-C2-O2	-7.54	116.92	122.20
25	BB	1411	U	O5'-P-OP1	-7.54	98.91	105.70
25	BB	2049	G	O3'-P-O5'	7.54	118.33	104.00
25	BB	2112	G	N1-C6-O6	-7.54	115.38	119.90
25	BB	2886	A	N7-C8-N9	7.54	117.57	113.80
3	A1	259	G	N1-C6-O6	-7.54	115.38	119.90
25	BB	1196	C	C2-N3-C4	-7.54	116.13	119.90
25	BB	2157	G	O4'-C1'-N9	7.54	114.23	108.20
3	A1	550	G	N1-C6-O6	-7.54	115.38	119.90
3	A1	612	C	C6-N1-C2	-7.54	117.28	120.30
3	A1	1020	G	N3-C2-N2	-7.54	114.62	119.90
24	BA	91	C	N1-C2-O2	7.54	123.42	118.90
25	BB	71	A	C5-C6-N1	7.54	121.47	117.70
25	BB	725	G	C5-C6-N1	7.54	115.27	111.50
25	BB	1155	A	C4-C5-C6	-7.54	113.23	117.00
25	BB	1467	U	N3-C2-O2	-7.54	116.92	122.20
25	BB	1785	A	C6-C5-N7	7.54	137.58	132.30
25	BB	2034	U	N3-C2-O2	-7.54	116.92	122.20
25	BB	2332	C	N3-C2-O2	-7.54	116.62	121.90
25	BB	2820	A	O4'-C1'-N9	7.54	114.23	108.20
1	AA	23	A	C5-C6-N1	7.54	121.47	117.70
1	AP	26	G	N1-C6-O6	-7.54	115.38	119.90
3	A1	380	G	C5-C6-O6	7.54	133.12	128.60
3	A1	1281	C	O4'-C1'-N1	7.54	114.23	108.20
25	BB	1501	G	C5-C6-N1	7.54	115.27	111.50
25	BB	2700	A	N7-C8-N9	7.54	117.57	113.80
3	A1	269	C	N3-C2-O2	-7.54	116.63	121.90
25	BB	506	G	C3'-C2'-C1'	-7.54	95.47	101.50
25	BB	540	C	C1'-O4'-C4'	-7.54	103.87	109.90
25	BB	2294	G	C6-N1-C2	-7.54	120.58	125.10
25	BB	117	G	O4'-C4'-C3'	7.53	112.13	106.10
25	BB	401	A	C4-C5-C6	-7.53	113.23	117.00
25	BB	451	U	C5-C6-N1	-7.53	118.93	122.70
25	BB	572	A	C4-C5-C6	-7.53	113.23	117.00
25	BB	1699	G	O4'-C4'-C3'	7.53	112.13	106.10
25	BB	716	A	C5-C6-N6	7.53	129.73	123.70
25	BB	885	C	C2-N3-C4	-7.53	116.13	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2576	G	C8-N9-C4	-7.53	103.39	106.40
3	A1	752	G	N3-C2-N2	-7.53	114.63	119.90
3	A1	955	U	C5-C6-N1	-7.53	118.94	122.70
3	A1	1269	A	C8-N9-C4	-7.53	102.79	105.80
25	BB	506	G	C2-N3-C4	7.53	115.67	111.90
25	BB	1145	C	C3'-C2'-C1'	7.53	107.52	101.50
25	BB	2835	A	O4'-C4'-C3'	7.53	112.12	106.10
25	BB	2896	C	C4-C5-C6	-7.53	113.64	117.40
55	B6	95	ARG	NE-CZ-NH2	7.53	124.07	120.30
3	A1	276	G	N9-C4-C5	7.53	108.41	105.40
3	A1	867	G	C2'-C3'-O3'	7.53	126.06	109.50
25	BB	1643	G	C5-C6-N1	7.53	115.26	111.50
1	AP	60	C	N3-C4-C5	7.53	124.91	121.90
24	BA	72	G	O4'-C1'-N9	7.53	114.22	108.20
25	BB	1070	A	C5-C6-N6	7.53	129.72	123.70
25	BB	1344	U	C5-C6-N1	-7.53	118.94	122.70
25	BB	1543	G	N7-C8-N9	7.53	116.86	113.10
25	BB	1990	C	C2-N3-C4	-7.53	116.14	119.90
25	BB	904	G	C3'-C2'-C1'	7.53	107.52	101.50
25	BB	1098	A	C4-C5-C6	-7.53	113.24	117.00
25	BB	1589	U	O4'-C1'-N1	7.53	114.22	108.20
25	BB	2431	U	N1-C2-N3	7.53	119.42	114.90
1	AA	53	G	C6-N1-C2	-7.52	120.59	125.10
3	A1	52	C	C2-N3-C4	-7.52	116.14	119.90
3	A1	155	A	C5-C6-N6	7.52	129.72	123.70
3	A1	428	G	N7-C8-N9	7.52	116.86	113.10
3	A1	621	A	O4'-C1'-N9	7.52	114.22	108.20
25	BB	514	A	P-O3'-C3'	7.52	128.73	119.70
41	BR	37	ARG	NH1-CZ-NH2	-7.52	111.12	119.40
3	A1	1080	A	C3'-C2'-C1'	7.52	107.52	101.50
25	BB	95	A	C8-N9-C4	-7.52	102.79	105.80
25	BB	1378	A	C5-C6-N1	7.52	121.46	117.70
25	BB	2072	C	N3-C4-C5	7.52	124.91	121.90
1	AE	51	G	C5'-C4'-C3'	-7.52	103.97	116.00
3	A1	187	G	N3-C4-C5	-7.52	124.84	128.60
25	BB	695	G	C5-C6-N1	7.52	115.26	111.50
25	BB	1695	G	N3-C2-N2	-7.52	114.64	119.90
3	A1	50	A	P-O3'-C3'	7.52	128.72	119.70
3	A1	459	A	C4-C5-N7	7.52	114.46	110.70
25	BB	210	C	N3-C2-O2	-7.52	116.64	121.90
25	BB	1752	C	N3-C4-N4	-7.52	112.74	118.00
25	BB	2803	G	N9-C1'-C2'	-7.52	103.73	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2880	C	N3-C2-O2	-7.52	116.64	121.90
3	A1	783	C	N3-C2-O2	-7.52	116.64	121.90
3	A1	839	C	N3-C2-O2	-7.52	116.64	121.90
3	A1	1097	C	N3-C4-N4	-7.52	112.74	118.00
25	BB	51	G	N3-C2-N2	-7.52	114.64	119.90
25	BB	102	U	O4'-C1'-N1	7.52	114.21	108.20
25	BB	1026	G	C4'-C3'-C2'	-7.52	95.08	102.60
3	A1	1265	C	N3-C4-N4	-7.51	112.74	118.00
25	BB	151	C	C5'-C4'-C3'	-7.51	103.98	116.00
25	BB	817	C	N3-C2-O2	-7.51	116.64	121.90
25	BB	1374	G	N1-C6-O6	-7.51	115.39	119.90
25	BB	1627	G	C5-C6-N1	7.51	115.26	111.50
25	BB	2187	U	N3-C2-O2	-7.51	116.94	122.20
25	BB	2371	G	C5-C6-N1	7.51	115.26	111.50
3	A1	889	A	C6-C5-N7	7.51	137.56	132.30
8	AG	80	ARG	NE-CZ-NH2	7.51	124.06	120.30
25	BB	314	C	O4'-C1'-N1	7.51	114.21	108.20
3	A1	959	A	N1-C6-N6	-7.51	114.09	118.60
3	A1	1242	G	O4'-C1'-N9	7.51	114.21	108.20
3	A1	1448	C	C2-N3-C4	-7.51	116.14	119.90
25	BB	172	A	C6-C5-N7	7.51	137.56	132.30
25	BB	1358	G	C6-C5-N7	7.51	134.91	130.40
25	BB	1794	A	C4-C5-C6	-7.51	113.24	117.00
25	BB	2449	U	N1-C2-O2	7.51	128.06	122.80
1	AE	6	U	C4-C5-C6	7.51	124.20	119.70
3	A1	596	A	O4'-C1'-N9	7.51	114.21	108.20
3	A1	1090	U	C5-C4-O4	7.51	130.41	125.90
3	A1	1394	A	C8-N9-C4	-7.51	102.80	105.80
25	BB	429	A	N1-C6-N6	-7.51	114.09	118.60
25	BB	1384	A	N7-C8-N9	7.51	117.56	113.80
25	BB	1660	G	N9-C4-C5	7.51	108.40	105.40
3	A1	620	C	C2-N3-C4	-7.51	116.15	119.90
25	BB	175	G	C2-N3-C4	-7.51	108.15	111.90
25	BB	364	C	O4'-C1'-N1	7.51	114.21	108.20
25	BB	382	A	C5'-C4'-O4'	7.51	118.11	109.10
25	BB	608	A	C6-N1-C2	-7.51	114.09	118.60
25	BB	2289	G	N7-C8-N9	7.51	116.85	113.10
3	A1	76	G	N9-C4-C5	7.51	108.40	105.40
3	A1	442	G	C4'-C3'-C2'	-7.51	95.09	102.60
3	A1	487	A	C4-C5-C6	-7.51	113.25	117.00
3	A1	1446	A	C4-C5-C6	-7.51	113.25	117.00
3	A1	1514	G	O4'-C1'-N9	7.51	114.20	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	113	C	C5-C4-N4	-7.51	114.95	120.20
25	BB	1837	C	C6-N1-C2	-7.51	117.30	120.30
25	BB	2633	G	C1'-O4'-C4'	-7.51	103.89	109.90
3	A1	678	U	C3'-C2'-C1'	7.50	107.50	101.50
25	BB	835	C	N1-C2-O2	7.50	123.40	118.90
25	BB	2761	A	C2-N3-C4	7.50	114.35	110.60
25	BB	260	G	N1-C6-O6	-7.50	115.40	119.90
25	BB	640	C	N1-C2-O2	7.50	123.40	118.90
25	BB	818	G	N1-C6-O6	-7.50	115.40	119.90
25	BB	1058	U	O4'-C1'-N1	7.50	114.20	108.20
25	BB	1367	A	C5'-C4'-C3'	-7.50	104.00	116.00
25	BB	1520	U	C4'-C3'-C2'	-7.50	95.10	102.60
25	BB	2265	U	N1-C2-O2	7.50	128.05	122.80
43	BT	51	ARG	NE-CZ-NH1	7.50	124.05	120.30
3	A1	79	G	C8-N9-C4	-7.50	103.40	106.40
3	A1	87	C	N1-C2-O2	7.50	123.40	118.90
25	BB	523	C	O4'-C1'-N1	7.50	114.20	108.20
25	BB	1241	A	C4-C5-C6	-7.50	113.25	117.00
3	A1	147	G	C5-C6-N1	7.50	115.25	111.50
3	A1	781	A	C1'-O4'-C4'	-7.50	103.90	109.90
24	BA	38	C	N3-C4-N4	-7.50	112.75	118.00
25	BB	48	G	C1'-O4'-C4'	-7.50	103.90	109.90
25	BB	541	A	C4'-C3'-C2'	-7.50	95.10	102.60
3	A1	427	U	O4'-C1'-N1	7.50	114.20	108.20
24	BA	57	A	C3'-C2'-C1'	7.50	107.50	101.50
24	BA	58	A	C5-C6-N1	7.50	121.45	117.70
25	BB	345	A	O5'-C5'-C4'	-7.50	97.45	111.70
25	BB	1888	G	N7-C8-N9	7.50	116.85	113.10
25	BB	2112	G	C8-N9-C4	-7.50	103.40	106.40
33	BJ	2	ARG	NE-CZ-NH1	7.50	124.05	120.30
3	A1	194	C	C5-C6-N1	-7.50	117.25	121.00
3	A1	537	G	C4-C5-C6	-7.50	114.30	118.80
3	A1	1426	G	N3-C4-C5	-7.50	124.85	128.60
7	AF	85	TYR	C-N-CA	7.50	140.44	121.70
25	BB	143	C	N3-C4-C5	7.50	124.90	121.90
25	BB	718	A	C2-N3-C4	7.50	114.35	110.60
25	BB	1316	U	N1-C2-N3	7.50	119.40	114.90
25	BB	1706	C	C5-C4-N4	-7.50	114.95	120.20
25	BB	2014	A	C5-C6-N1	7.50	121.45	117.70
25	BB	2078	C	N1-C2-O2	7.50	123.40	118.90
49	BZ	87	ARG	CD-NE-CZ	7.50	134.09	123.60
25	BB	1575	C	N1-C2-O2	7.50	123.40	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2060	A	C5-C6-N1	7.50	121.45	117.70
3	A1	136	C	N3-C2-O2	-7.49	116.66	121.90
3	A1	923	A	C5-C6-N6	7.49	129.69	123.70
25	BB	530	G	C8-N9-C4	-7.49	103.40	106.40
25	BB	615	U	C4-C5-C6	7.49	124.20	119.70
25	BB	1149	G	C5'-C4'-C3'	-7.49	104.01	116.00
25	BB	2258	C	C2-N3-C4	-7.49	116.15	119.90
25	BB	2554	U	P-O3'-C3'	7.49	128.69	119.70
25	BB	2754	U	C4-C5-C6	7.49	124.20	119.70
3	A1	1354	U	N3-C2-O2	-7.49	116.96	122.20
25	BB	1087	G	C5-N7-C8	7.49	108.05	104.30
25	BB	2782	G	N1-C6-O6	-7.49	115.41	119.90
3	A1	143	A	O4'-C1'-N9	-7.49	102.21	108.20
25	BB	83	A	N1-C6-N6	-7.49	114.11	118.60
25	BB	1102	C	C6-N1-C2	-7.49	117.30	120.30
25	BB	1458	U	C3'-C2'-C1'	-7.49	95.51	101.50
25	BB	1567	G	C8-N9-C4	-7.49	103.40	106.40
25	BB	2093	G	N1-C6-O6	-7.49	115.41	119.90
25	BB	2416	C	N3-C2-O2	-7.49	116.66	121.90
3	A1	140	U	N1-C2-N3	7.49	119.39	114.90
3	A1	198	G	N3-C4-C5	-7.49	124.86	128.60
3	A1	805	C	C2-N3-C4	-7.49	116.16	119.90
3	A1	896	C	N3-C4-C5	7.49	124.89	121.90
3	A1	1012	A	C6-C5-N7	7.49	137.54	132.30
3	A1	1526	G	C6-C5-N7	7.49	134.89	130.40
3	A1	1530	G	N3-C2-N2	-7.49	114.66	119.90
25	BB	882	G	N9-C4-C5	7.49	108.40	105.40
25	BB	1036	G	N9-C4-C5	7.49	108.40	105.40
25	BB	1546	G	N3-C2-N2	-7.49	114.66	119.90
25	BB	1876	A	O5'-P-OP2	-7.49	98.96	105.70
25	BB	2352	A	C6-C5-N7	7.49	137.54	132.30
25	BB	2459	A	C6-C5-N7	7.49	137.54	132.30
25	BB	2876	G	N9-C4-C5	7.49	108.40	105.40
37	BN	86	ARG	NE-CZ-NH2	7.49	124.04	120.30
1	AA	48	C	N1-C2-O2	7.49	123.39	118.90
1	AA	71	G	N1-C6-O6	-7.49	115.41	119.90
3	A1	387	U	C3'-C2'-C1'	7.49	107.49	101.50
3	A1	962	C	C5'-C4'-C3'	-7.49	104.02	116.00
7	AF	100	ARG	NE-CZ-NH2	7.49	124.04	120.30
25	BB	3	U	O4'-C1'-N1	7.49	114.19	108.20
25	BB	2642	G	C5-C6-N1	7.49	115.24	111.50
20	AU	4	ARG	NE-CZ-NH1	7.49	124.04	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	25	U	C5-C4-O4	-7.49	121.41	125.90
25	BB	255	A	C4-C5-C6	-7.49	113.26	117.00
25	BB	1295	C	N1-C2-O2	7.49	123.39	118.90
25	BB	1862	G	N1-C6-O6	-7.49	115.41	119.90
25	BB	2005	A	C5-C6-N6	7.49	129.69	123.70
25	BB	2151	U	C5'-C4'-O4'	7.49	118.08	109.10
25	BB	2365	G	N9-C4-C5	7.49	108.39	105.40
1	AE	63	C	N3-C2-O2	-7.48	116.66	121.90
3	A1	101	A	C6-C5-N7	7.48	137.54	132.30
3	A1	1455	G	N3-C4-C5	-7.48	124.86	128.60
25	BB	143	C	O4'-C1'-N1	7.48	114.19	108.20
25	BB	454	A	C4-C5-C6	-7.48	113.26	117.00
25	BB	2845	U	O4'-C1'-N1	7.48	114.19	108.20
3	A1	648	A	N7-C8-N9	7.48	117.54	113.80
3	A1	926	G	C8-N9-C4	-7.48	103.41	106.40
3	A1	969	A	C6-C5-N7	7.48	137.54	132.30
3	A1	1051	C	N3-C4-C5	7.48	124.89	121.90
24	BA	6	G	O4'-C1'-N9	7.48	114.19	108.20
25	BB	143	C	N3-C2-O2	-7.48	116.66	121.90
25	BB	2530	A	C2-N3-C4	7.48	114.34	110.60
29	BF	59	ARG	NE-CZ-NH2	-7.48	116.56	120.30
24	BA	79	G	N3-C2-N2	-7.48	114.66	119.90
25	BB	1259	G	N9-C4-C5	7.48	108.39	105.40
25	BB	1572	A	C5-C6-N1	7.48	121.44	117.70
25	BB	1607	C	C4-C5-C6	-7.48	113.66	117.40
25	BB	2236	U	P-O3'-C3'	7.48	128.68	119.70
3	A1	357	G	N1-C2-N3	7.48	128.39	123.90
3	A1	1000	A	C5-C6-N1	7.48	121.44	117.70
3	A1	1035	A	C5-C6-N1	7.48	121.44	117.70
3	A1	1109	C	N1-C2-O2	7.48	123.39	118.90
25	BB	1346	G	C1'-O4'-C4'	-7.48	103.92	109.90
1	AP	47	U	C4-C5-C6	7.48	124.19	119.70
1	AE	60	C	C5'-C4'-O4'	7.48	118.07	109.10
3	A1	119	A	C1'-O4'-C4'	-7.48	103.92	109.90
3	A1	235	C	N3-C4-C5	7.48	124.89	121.90
3	A1	745	G	N9-C4-C5	7.48	108.39	105.40
25	BB	756	A	C2-N3-C4	7.48	114.34	110.60
25	BB	1879	C	C4-C5-C6	7.48	121.14	117.40
25	BB	2331	G	C6-N1-C2	-7.48	120.61	125.10
25	BB	2860	A	C4-C5-C6	-7.48	113.26	117.00
3	A1	190	A	C5-C6-N1	7.48	121.44	117.70
25	BB	1266	G	O4'-C1'-N9	7.48	114.18	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1462	C	N3-C2-O2	-7.48	116.67	121.90
3	A1	332	G	N1-C2-N3	7.47	128.38	123.90
25	BB	884	U	N3-C2-O2	-7.47	116.97	122.20
25	BB	1338	G	N1-C2-N3	7.47	128.38	123.90
25	BB	1461	C	O4'-C1'-C2'	-7.47	98.33	105.80
25	BB	1863	G	N1-C6-O6	-7.47	115.42	119.90
25	BB	2052	A	O4'-C1'-N9	-7.47	102.22	108.20
25	BB	2670	A	C5-C6-N6	7.47	129.68	123.70
3	A1	331	G	N7-C8-N9	7.47	116.84	113.10
25	BB	88	G	N1-C6-O6	-7.47	115.42	119.90
25	BB	350	G	O4'-C1'-N9	7.47	114.18	108.20
25	BB	557	C	C2-N3-C4	-7.47	116.16	119.90
25	BB	1703	G	C6-N1-C2	-7.47	120.62	125.10
25	BB	1906	G	C5-N7-C8	-7.47	100.56	104.30
25	BB	2648	G	C5-C6-N1	7.47	115.24	111.50
25	BB	2762	C	C4'-C3'-C2'	-7.47	95.13	102.60
25	BB	2763	G	O4'-C1'-N9	7.47	114.18	108.20
3	A1	1183	U	N1-C2-N3	7.47	119.38	114.90
25	BB	1863	G	N3-C4-C5	-7.47	124.86	128.60
3	A1	213	G	C5-C6-N1	7.47	115.23	111.50
3	A1	1410	A	C1'-O4'-C4'	-7.47	103.92	109.90
3	A1	1520	C	C3'-C2'-C1'	7.47	107.48	101.50
25	BB	899	A	C4-C5-C6	-7.47	113.27	117.00
25	BB	1363	C	N3-C2-O2	-7.47	116.67	121.90
25	BB	2573	C	C2-N3-C4	-7.47	116.17	119.90
3	A1	1093	A	C8-N9-C4	-7.47	102.81	105.80
25	BB	2353	G	O4'-C1'-N9	7.47	114.17	108.20
1	AP	27	C	C5'-C4'-O4'	7.47	118.06	109.10
2	AM	11	U	C4'-C3'-C2'	-7.47	95.13	102.60
3	A1	12	U	N3-C4-O4	7.47	124.63	119.40
3	A1	141	G	N1-C6-O6	-7.47	115.42	119.90
3	A1	1169	A	C6-N1-C2	-7.47	114.12	118.60
25	BB	1414	C	C5'-C4'-O4'	7.47	118.06	109.10
25	BB	1557	C	C5-C6-N1	-7.47	117.27	121.00
25	BB	1741	C	C5-C4-N4	7.47	125.43	120.20
3	A1	35	G	C6-N1-C2	-7.46	120.62	125.10
3	A1	847	G	C8-N9-C4	-7.46	103.41	106.40
3	A1	1358	U	C3'-C2'-C1'	7.46	107.47	101.50
25	BB	838	C	N1-C2-O2	7.46	123.38	118.90
25	BB	1175	A	C5-N7-C8	-7.46	100.17	103.90
25	BB	1332	G	N3-C4-C5	-7.46	124.87	128.60
25	BB	2695	U	N3-C2-O2	-7.46	116.97	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	496	A	N1-C2-N3	-7.46	125.57	129.30
25	BB	1597	A	C5-C6-N1	7.46	121.43	117.70
25	BB	2484	G	C5-C6-N1	7.46	115.23	111.50
3	A1	143	A	O4'-C1'-C2'	7.46	114.31	107.60
3	A1	591	U	C5-C4-O4	-7.46	121.42	125.90
3	A1	1178	G	N7-C8-N9	7.46	116.83	113.10
25	BB	146	A	C4-C5-C6	-7.46	113.27	117.00
25	BB	503	A	O4'-C1'-N9	7.46	114.17	108.20
25	BB	1147	A	C6-C5-N7	7.46	137.52	132.30
25	BB	1439	A	N1-C6-N6	-7.46	114.12	118.60
25	BB	2061	G	O5'-P-OP1	-7.46	98.98	105.70
25	BB	2101	A	C6-C5-N7	7.46	137.52	132.30
25	BB	2323	G	N3-C4-C5	-7.46	124.87	128.60
25	BB	2366	A	C5-C6-N1	7.46	121.43	117.70
3	A1	286	C	N3-C4-C5	7.46	124.88	121.90
3	A1	317	U	C5'-C4'-O4'	7.46	118.05	109.10
25	BB	75	G	O4'-C1'-N9	7.46	114.17	108.20
25	BB	843	G	C4-C5-N7	-7.46	107.82	110.80
25	BB	2709	G	N1-C2-N2	-7.46	109.49	116.20
1	AA	9	A	C5-C6-N6	7.46	129.67	123.70
3	A1	498	A	C6-C5-N7	7.46	137.52	132.30
3	A1	737	C	N3-C2-O2	-7.46	116.68	121.90
3	A1	805	C	N1-C2-N3	7.46	124.42	119.20
3	A1	1354	U	N1-C2-N3	7.46	119.38	114.90
3	A1	1405	G	N1-C2-N2	-7.46	109.49	116.20
25	BB	50	U	C5'-C4'-O4'	7.46	118.05	109.10
25	BB	565	C	C5-C6-N1	-7.46	117.27	121.00
25	BB	1421	G	O4'-C1'-N9	-7.46	102.23	108.20
25	BB	1908	C	O4'-C1'-C2'	-7.46	98.34	105.80
25	BB	2569	G	C5'-C4'-O4'	7.46	118.05	109.10
3	A1	792	A	N9-C4-C5	-7.46	102.82	105.80
3	A1	1503	A	C6-C5-N7	7.46	137.52	132.30
25	BB	861	A	C2'-C3'-O3'	7.46	125.91	109.50
25	BB	1119	U	N1-C2-N3	7.46	119.37	114.90
25	BB	1349	C	N3-C4-C5	7.46	124.88	121.90
25	BB	1604	C	N3-C2-O2	-7.46	116.68	121.90
25	BB	2754	U	C6-N1-C2	-7.46	116.53	121.00
3	A1	81	A	C4-C5-C6	-7.46	113.27	117.00
3	A1	770	C	N3-C2-O2	-7.46	116.68	121.90
3	A1	1449	C	C4'-C3'-C2'	-7.46	95.14	102.60
1	AE	72	C	C5'-C4'-O4'	7.45	118.04	109.10
3	A1	311	C	C4'-C3'-C2'	-7.45	95.15	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	325	A	C5-C6-N1	7.45	121.43	117.70
3	A1	443	C	N1-C2-O2	7.45	123.37	118.90
3	A1	607	A	C4-C5-C6	-7.45	113.27	117.00
3	A1	678	U	C5-C6-N1	-7.45	118.97	122.70
3	A1	727	G	N9-C4-C5	7.45	108.38	105.40
3	A1	979	C	N3-C4-C5	7.45	124.88	121.90
3	A1	1319	A	C5-C6-N6	7.45	129.66	123.70
3	A1	1411	C	N3-C4-N4	-7.45	112.78	118.00
3	A1	1498	U	N1-C2-N3	7.45	119.37	114.90
25	BB	65	U	C2-N3-C4	-7.45	122.53	127.00
25	BB	335	C	C4'-C3'-C2'	-7.45	95.15	102.60
25	BB	618	G	P-O3'-C3'	7.45	128.64	119.70
25	BB	618	G	N7-C8-N9	7.45	116.83	113.10
25	BB	1337	G	N3-C2-N2	-7.45	114.68	119.90
25	BB	1686	C	C5-C4-N4	7.45	125.42	120.20
25	BB	2858	C	N1-C2-N3	7.45	124.42	119.20
25	BB	2860	A	C4'-C3'-C2'	-7.45	95.15	102.60
24	BA	41	G	N9-C1'-C2'	-7.45	103.80	112.00
25	BB	722	A	C2-N3-C4	7.45	114.33	110.60
25	BB	1167	C	C4-C5-C6	-7.45	113.67	117.40
25	BB	1301	A	C6-N1-C2	-7.45	114.13	118.60
1	AP	33	U	C5-C6-N1	-7.45	118.97	122.70
3	A1	739	C	O4'-C1'-N1	7.45	114.16	108.20
3	A1	926	G	C6-N1-C2	-7.45	120.63	125.10
3	A1	1160	G	N1-C6-O6	-7.45	115.43	119.90
25	BB	2055	C	O4'-C1'-N1	7.45	114.16	108.20
25	BB	2278	A	C3'-C2'-C1'	-7.45	95.54	101.50
3	A1	193	C	N3-C4-N4	-7.45	112.79	118.00
25	BB	267	C	N3-C2-O2	-7.45	116.69	121.90
25	BB	387	U	N1-C2-N3	7.45	119.37	114.90
25	BB	1513	U	O4'-C1'-N1	7.45	114.16	108.20
25	BB	1697	G	C8-N9-C4	-7.45	103.42	106.40
3	A1	192	A	C6-C5-N7	7.45	137.51	132.30
3	A1	1035	A	C4-C5-C6	-7.45	113.28	117.00
3	A1	1047	G	C5-C6-N1	7.45	115.22	111.50
3	A1	1156	G	N1-C6-O6	-7.45	115.43	119.90
25	BB	319	G	N1-C2-N3	7.45	128.37	123.90
25	BB	1327	A	C4-C5-C6	-7.45	113.28	117.00
25	BB	1495	A	C5-C6-N1	7.45	121.42	117.70
25	BB	1690	A	C5-C6-N1	7.45	121.42	117.70
25	BB	1695	G	N3-C4-C5	-7.45	124.88	128.60
3	A1	372	C	N3-C4-C5	7.44	124.88	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1424	U	N1-C2-N3	7.44	119.37	114.90
25	BB	185	G	C6-N1-C2	-7.44	120.63	125.10
25	BB	816	C	N3-C4-C5	7.44	124.88	121.90
25	BB	1314	C	N1-C2-N3	7.44	124.41	119.20
25	BB	2890	G	C5-C6-O6	7.44	133.07	128.60
37	BN	202	ARG	NE-CZ-NH1	7.44	124.02	120.30
1	AP	61	C	N3-C2-O2	-7.44	116.69	121.90
3	A1	59	A	C6-C5-N7	7.44	137.51	132.30
3	A1	467	U	N1-C2-N3	7.44	119.36	114.90
3	A1	864	A	C5-C6-N6	7.44	129.65	123.70
3	A1	1316	G	C5'-C4'-C3'	-7.44	104.09	116.00
3	A1	1518	A	C5-C6-N1	7.44	121.42	117.70
25	BB	796	C	C5-C4-N4	7.44	125.41	120.20
25	BB	1461	C	C5'-C4'-O4'	7.44	118.03	109.10
25	BB	1860	G	N7-C8-N9	7.44	116.82	113.10
25	BB	2567	G	C4-C5-C6	-7.44	114.33	118.80
25	BB	2806	C	C4'-C3'-C2'	-7.44	95.16	102.60
48	BY	13	ARG	CD-NE-CZ	7.44	134.02	123.60
3	A1	124	C	N3-C2-O2	-7.44	116.69	121.90
3	A1	519	C	O3'-P-O5'	7.44	118.14	104.00
25	BB	394	C	N3-C4-C5	7.44	124.88	121.90
25	BB	1410	G	N1-C6-O6	-7.44	115.44	119.90
25	BB	1586	A	C4-C5-C6	-7.44	113.28	117.00
25	BB	1898	U	N1-C2-N3	7.44	119.36	114.90
25	BB	2135	A	C5-C6-N1	7.44	121.42	117.70
25	BB	2439	A	C5-N7-C8	-7.44	100.18	103.90
1	AE	16	U	N3-C4-O4	-7.44	114.19	119.40
1	AE	33	U	C5'-C4'-C3'	-7.44	104.10	116.00
3	A1	460	A	C5-N7-C8	-7.44	100.18	103.90
4	AB	224	ARG	NE-CZ-NH1	7.44	124.02	120.30
25	BB	584	C	N3-C2-O2	-7.44	116.69	121.90
25	BB	2031	A	C4-C5-C6	-7.44	113.28	117.00
25	BB	2455	G	O4'-C1'-N9	7.44	114.15	108.20
25	BB	2551	C	O4'-C4'-C3'	7.44	112.05	106.10
25	BB	2799	A	N1-C6-N6	-7.44	114.14	118.60
3	A1	475	C	N3-C2-O2	-7.44	116.69	121.90
3	A1	634	C	N1-C2-O2	7.44	123.36	118.90
3	A1	1028	C	N3-C2-O2	-7.44	116.69	121.90
3	A1	1263	C	N3-C4-N4	-7.44	112.79	118.00
25	BB	157	C	N1-C2-O2	7.44	123.36	118.90
25	BB	172	A	N7-C8-N9	7.44	117.52	113.80
25	BB	1514	G	N3-C4-C5	-7.44	124.88	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1703	G	C6-C5-N7	7.44	134.86	130.40
25	BB	2060	A	C6-C5-N7	7.44	137.51	132.30
25	BB	2373	G	N7-C8-N9	7.44	116.82	113.10
25	BB	2770	G	N1-C2-N3	7.44	128.36	123.90
3	A1	646	G	N1-C6-O6	-7.44	115.44	119.90
10	AI	51	ARG	NE-CZ-NH1	7.44	124.02	120.30
25	BB	748	G	C8-N9-C4	-7.44	103.43	106.40
25	BB	2396	G	N1-C6-O6	-7.44	115.44	119.90
25	BB	2516	A	C4'-C3'-C2'	-7.44	95.16	102.60
3	A1	107	G	N3-C4-C5	-7.43	124.88	128.60
3	A1	366	A	C5-N7-C8	-7.43	100.18	103.90
3	A1	792	A	C6-N1-C2	-7.43	114.14	118.60
3	A1	1108	G	N3-C2-N2	-7.43	114.70	119.90
3	A1	1494	G	C8-N9-C4	-7.43	103.43	106.40
25	BB	120	U	O4'-C1'-N1	7.43	114.15	108.20
25	BB	864	G	C5-C6-N1	7.43	115.22	111.50
25	BB	2040	G	N1-C6-O6	-7.43	115.44	119.90
1	AP	33	U	N1-C2-O2	-7.43	117.60	122.80
3	A1	646	G	C5-C6-N1	7.43	115.22	111.50
3	A1	1094	G	C1'-O4'-C4'	-7.43	103.95	109.90
25	BB	1359	A	C4-C5-C6	-7.43	113.28	117.00
25	BB	1547	C	C5'-C4'-C3'	-7.43	104.11	116.00
25	BB	1897	G	N1-C6-O6	-7.43	115.44	119.90
25	BB	2523	G	C6-N1-C2	-7.43	120.64	125.10
3	A1	455	G	C5-C6-N1	7.43	115.22	111.50
25	BB	933	A	N1-C6-N6	-7.43	114.14	118.60
25	BB	1410	G	C2-N3-C4	-7.43	108.19	111.90
3	A1	745	G	N1-C2-N3	7.43	128.36	123.90
3	A1	1489	G	N3-C4-C5	-7.43	124.89	128.60
25	BB	669	G	N3-C4-C5	-7.43	124.89	128.60
25	BB	1775	U	N1-C2-O2	7.43	128.00	122.80
3	A1	1302	C	N3-C4-N4	-7.43	112.80	118.00
25	BB	1401	G	C3'-C2'-C1'	7.43	107.44	101.50
25	BB	1728	C	N3-C2-O2	-7.43	116.70	121.90
3	A1	184	G	N3-C4-C5	-7.43	124.89	128.60
3	A1	420	U	C4-C5-C6	7.43	124.16	119.70
3	A1	1098	C	C1'-O4'-C4'	-7.43	103.96	109.90
25	BB	798	G	N1-C6-O6	-7.43	115.44	119.90
25	BB	1388	G	C8-N9-C4	-7.43	103.43	106.40
25	BB	1602	U	C5-C6-N1	-7.43	118.99	122.70
3	A1	272	C	C5'-C4'-O4'	7.42	118.01	109.10
3	A1	338	A	C5'-C4'-C3'	-7.42	104.12	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	372	C	C5-C6-N1	-7.42	117.29	121.00
3	A1	551	U	C5-C6-N1	-7.42	118.99	122.70
25	BB	172	A	C5-N7-C8	-7.42	100.19	103.90
25	BB	1779	U	N1-C2-N3	7.42	119.36	114.90
25	BB	2040	G	C5-C6-N1	7.42	115.21	111.50
25	BB	2632	A	N1-C2-N3	-7.42	125.59	129.30
3	A1	164	G	C2-N3-C4	7.42	115.61	111.90
3	A1	334	C	C4'-C3'-C2'	-7.42	95.18	102.60
25	BB	828	U	C5-C6-N1	-7.42	118.99	122.70
25	BB	1577	C	N3-C4-C5	7.42	124.87	121.90
25	BB	1685	C	N3-C4-C5	7.42	124.87	121.90
3	A1	492	C	N3-C4-C5	7.42	124.87	121.90
3	A1	628	G	C4-C5-C6	-7.42	114.35	118.80
3	A1	1398	A	C1'-O4'-C4'	-7.42	103.96	109.90
15	AO	87	ARG	NH1-CZ-NH2	-7.42	111.24	119.40
25	BB	1389	G	C4-C5-N7	7.42	113.77	110.80
25	BB	1829	A	C4-C5-C6	-7.42	113.29	117.00
25	BB	2063	C	C6-N1-C2	-7.42	117.33	120.30
25	BB	2353	G	C4-C5-C6	-7.42	114.35	118.80
25	BB	2388	A	C6-C5-N7	7.42	137.50	132.30
25	BB	2309	A	C5'-C4'-O4'	7.42	118.00	109.10
3	A1	23	C	N1-C2-O2	7.42	123.35	118.90
3	A1	206	C	C5-C6-N1	-7.42	117.29	121.00
3	A1	1279	G	C3'-C2'-C1'	7.42	107.44	101.50
25	BB	222	A	O4'-C1'-N9	7.42	114.14	108.20
25	BB	1399	C	N1-C2-O2	7.42	123.35	118.90
25	BB	2011	U	C3'-C2'-C1'	7.42	107.44	101.50
25	BB	2242	G	C5-C6-N1	7.42	115.21	111.50
25	BB	2543	G	C6-N1-C2	-7.42	120.65	125.10
25	BB	2636	C	N3-C2-O2	-7.42	116.71	121.90
3	A1	176	C	C2-N3-C4	-7.42	116.19	119.90
3	A1	1120	C	C5-C6-N1	-7.42	117.29	121.00
25	BB	271	G	N9-C4-C5	7.42	108.37	105.40
25	BB	635	C	N3-C4-C5	7.42	124.87	121.90
25	BB	972	A	C4-C5-C6	-7.42	113.29	117.00
30	BG	106	ASP	CB-CG-OD1	7.42	124.97	118.30
3	A1	1295	U	N3-C2-O2	-7.42	117.01	122.20
3	A1	1399	C	N3-C2-O2	-7.42	116.71	121.90
1	AP	10	G	O4'-C4'-C3'	7.41	112.03	106.10
3	A1	1300	G	C6-N1-C2	-7.41	120.65	125.10
25	BB	767	U	C2-N3-C4	-7.41	122.55	127.00
25	BB	1294	U	C5-C6-N1	-7.41	118.99	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1761	C	O4'-C1'-N1	7.41	114.13	108.20
25	BB	2100	G	N9-C4-C5	7.41	108.36	105.40
25	BB	2250	G	C5-C6-N1	7.41	115.21	111.50
25	BB	2383	G	N7-C8-N9	7.41	116.81	113.10
25	BB	2448	A	C4-C5-C6	-7.41	113.29	117.00
2	AM	7	U	C5-C6-N1	-7.41	118.99	122.70
3	A1	846	G	N9-C4-C5	7.41	108.36	105.40
3	A1	1384	C	N3-C2-O2	-7.41	116.71	121.90
25	BB	26	G	C5-C6-N1	7.41	115.21	111.50
25	BB	378	C	N3-C4-C5	7.41	124.86	121.90
25	BB	2759	G	N1-C6-O6	-7.41	115.45	119.90
1	AP	21	A	C6-C5-N7	7.41	137.49	132.30
3	A1	170	U	C1'-O4'-C4'	-7.41	103.97	109.90
3	A1	1134	G	N3-C2-N2	7.41	125.09	119.90
3	A1	1220	G	N1-C6-O6	-7.41	115.45	119.90
3	A1	1271	A	C5-C6-N1	7.41	121.41	117.70
3	A1	1495	U	N1-C1'-C2'	-7.41	103.85	112.00
25	BB	981	A	C6-C5-N7	7.41	137.49	132.30
25	BB	1206	G	C6-N1-C2	-7.41	120.65	125.10
25	BB	1667	G	C5-C6-N1	7.41	115.20	111.50
25	BB	1883	U	O4'-C1'-N1	7.41	114.13	108.20
25	BB	2202	U	N1-C2-O2	7.41	127.99	122.80
3	A1	47	C	C2-N3-C4	-7.41	116.20	119.90
3	A1	316	C	N3-C2-O2	-7.41	116.71	121.90
25	BB	837	C	O4'-C1'-N1	7.41	114.13	108.20
25	BB	1125	G	C5-C6-N1	7.41	115.20	111.50
25	BB	1148	U	N1-C2-N3	7.41	119.34	114.90
25	BB	1321	A	P-O3'-C3'	7.41	128.59	119.70
25	BB	2086	U	C5'-C4'-O4'	7.41	117.99	109.10
32	BI	102	ARG	NH1-CZ-NH2	-7.41	111.25	119.40
34	BK	79	ARG	NE-CZ-NH2	-7.41	116.60	120.30
53	B4	97	ARG	NE-CZ-NH2	7.41	124.00	120.30
25	BB	14	A	C5-C6-N1	7.41	121.40	117.70
25	BB	1664	A	C5-C6-N6	7.41	129.63	123.70
25	BB	1669	A	P-O3'-C3'	7.41	128.59	119.70
25	BB	2827	C	C3'-C2'-C1'	7.41	107.43	101.50
1	AA	51	G	C6-N1-C2	-7.41	120.66	125.10
1	AP	20	G	N1-C6-O6	-7.41	115.46	119.90
1	AP	74	C	N3-C2-O2	-7.41	116.72	121.90
3	A1	801	U	C5-C6-N1	-7.41	119.00	122.70
3	A1	1150	A	C4-C5-C6	-7.41	113.30	117.00
19	AT	44	ARG	NE-CZ-NH2	-7.41	116.60	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	20	C	N1-C2-N3	7.41	124.38	119.20
25	BB	516	C	C2-N3-C4	-7.41	116.20	119.90
25	BB	1483	G	C5-C6-O6	7.41	133.04	128.60
25	BB	1612	C	N1-C2-O2	7.41	123.34	118.90
25	BB	1635	A	C6-C5-N7	7.41	137.48	132.30
25	BB	1930	G	N1-C6-O6	-7.41	115.46	119.90
3	A1	917	G	C6-N1-C2	-7.40	120.66	125.10
3	A1	1025	U	N1-C2-N3	7.40	119.34	114.90
3	A1	1052	U	N1-C2-N3	7.40	119.34	114.90
25	BB	1404	C	O4'-C1'-N1	-7.40	102.28	108.20
1	AA	56	C	C2-N3-C4	-7.40	116.20	119.90
3	A1	354	G	N7-C8-N9	7.40	116.80	113.10
3	A1	410	G	N9-C4-C5	7.40	108.36	105.40
3	A1	616	G	C5-C6-N1	7.40	115.20	111.50
3	A1	714	G	C4-C5-N7	-7.40	107.84	110.80
3	A1	780	A	C6-C5-N7	7.40	137.48	132.30
14	AN	73	ARG	NH1-CZ-NH2	-7.40	111.26	119.40
24	BA	23	G	C5-C6-N1	7.40	115.20	111.50
25	BB	1673	G	C5-N7-C8	-7.40	100.60	104.30
25	BB	1950	G	N1-C6-O6	-7.40	115.46	119.90
25	BB	2127	G	C5-C6-O6	7.40	133.04	128.60
1	AE	26	G	N1-C2-N3	7.40	128.34	123.90
25	BB	72	U	C5-C6-N1	-7.40	119.00	122.70
25	BB	1226	A	C6-C5-N7	7.40	137.48	132.30
25	BB	2373	G	N1-C6-O6	-7.40	115.46	119.90
1	AE	40	C	N3-C4-C5	7.40	124.86	121.90
3	A1	51	A	C8-N9-C4	-7.40	102.84	105.80
24	BA	13	G	C4-C5-N7	-7.40	107.84	110.80
25	BB	2106	U	N3-C4-O4	-7.40	114.22	119.40
1	AA	37	G	C5-C6-N1	7.40	115.20	111.50
3	A1	609	A	N9-C4-C5	-7.40	102.84	105.80
3	A1	1110	A	O4'-C1'-N9	7.40	114.12	108.20
25	BB	1905	C	C3'-C2'-C1'	7.40	107.42	101.50
25	BB	1914	C	C5-C6-N1	-7.40	117.30	121.00
25	BB	2127	G	C8-N9-C4	-7.40	103.44	106.40
1	AA	65	G	C5-C6-O6	-7.40	124.16	128.60
3	A1	162	A	C2-N3-C4	7.40	114.30	110.60
3	A1	461	A	N1-C6-N6	-7.40	114.16	118.60
3	A1	1065	U	O4'-C1'-C2'	-7.40	98.40	105.80
25	BB	2474	U	O4'-C1'-N1	7.40	114.12	108.20
3	A1	777	A	C8-N9-C4	-7.39	102.84	105.80
3	A1	826	C	N3-C4-N4	-7.39	112.82	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	41	G	C5'-C4'-O4'	7.39	117.97	109.10
25	BB	528	A	C6-C5-N7	7.39	137.48	132.30
25	BB	602	A	C5-C6-N1	7.39	121.40	117.70
25	BB	960	A	C5-C6-N6	7.39	129.62	123.70
25	BB	1058	U	C5'-C4'-O4'	7.39	117.97	109.10
25	BB	1526	C	N3-C4-C5	7.39	124.86	121.90
25	BB	2080	A	C5-C6-N6	7.39	129.62	123.70
25	BB	2470	G	C4-C5-N7	-7.39	107.84	110.80
25	BB	2483	C	O4'-C1'-C2'	-7.39	98.41	105.80
3	A1	1111	A	N1-C6-N6	-7.39	114.17	118.60
25	BB	385	C	N3-C2-O2	-7.39	116.72	121.90
25	BB	1246	A	C6-C5-N7	7.39	137.47	132.30
25	BB	2758	A	C5-C6-N6	7.39	129.61	123.70
3	A1	1399	C	N1-C2-N3	7.39	124.37	119.20
24	BA	113	C	O4'-C1'-N1	7.39	114.11	108.20
25	BB	458	G	C8-N9-C4	-7.39	103.44	106.40
25	BB	701	G	C5-C6-N1	7.39	115.20	111.50
25	BB	1099	G	N7-C8-N9	7.39	116.80	113.10
25	BB	1425	G	P-O3'-C3'	7.39	128.57	119.70
25	BB	1960	A	C6-C5-N7	7.39	137.47	132.30
25	BB	2225	A	C5-C6-N1	7.39	121.40	117.70
25	BB	2887	A	C5-C6-N6	7.39	129.61	123.70
3	A1	474	G	C4'-C3'-C2'	-7.39	95.21	102.60
3	A1	628	G	C5-N7-C8	-7.39	100.61	104.30
3	A1	1398	A	O4'-C4'-C3'	7.39	112.01	106.10
3	A1	1492	A	C2-N3-C4	7.39	114.30	110.60
25	BB	275	C	C2-N3-C4	-7.39	116.20	119.90
25	BB	745	G	C5-C6-N1	7.39	115.19	111.50
25	BB	878	A	C5-C6-N1	7.39	121.39	117.70
25	BB	961	C	O5'-P-OP2	-7.39	99.05	105.70
25	BB	1365	A	C4-C5-C6	-7.39	113.31	117.00
3	A1	154	U	N3-C2-O2	-7.39	117.03	122.20
3	A1	218	U	C5-C4-O4	7.39	130.33	125.90
3	A1	1204	A	C4-C5-C6	-7.39	113.31	117.00
25	BB	548	G	N1-C6-O6	-7.39	115.47	119.90
25	BB	2567	G	O4'-C4'-C3'	7.39	112.01	106.10
3	A1	450	G	N3-C2-N2	-7.39	114.73	119.90
3	A1	522	C	C2-N3-C4	-7.39	116.21	119.90
3	A1	531	U	O4'-C1'-N1	7.39	114.11	108.20
3	A1	579	A	C5-C6-N6	7.39	129.61	123.70
3	A1	724	G	N1-C6-O6	-7.39	115.47	119.90
3	A1	1281	C	C5-C6-N1	-7.39	117.31	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1336	C	C2-N3-C4	-7.39	116.21	119.90
3	A1	1396	A	N1-C2-N3	-7.39	125.61	129.30
25	BB	13	A	C5-C6-N1	7.39	121.39	117.70
25	BB	120	U	N1-C2-O2	7.39	127.97	122.80
25	BB	598	U	C5-C6-N1	-7.39	119.01	122.70
25	BB	1127	A	C5-C6-N1	7.39	121.39	117.70
25	BB	1699	G	C6-N1-C2	-7.39	120.67	125.10
25	BB	1861	G	O4'-C4'-C3'	7.39	112.01	106.10
25	BB	2525	G	N3-C4-C5	-7.39	124.91	128.60
3	A1	107	G	C4-C5-N7	-7.38	107.85	110.80
3	A1	1064	G	N1-C6-O6	-7.38	115.47	119.90
25	BB	86	G	N9-C4-C5	7.38	108.35	105.40
25	BB	615	U	N1-C2-N3	7.38	119.33	114.90
25	BB	818	G	C8-N9-C4	-7.38	103.45	106.40
25	BB	1389	G	C5-N7-C8	-7.38	100.61	104.30
25	BB	1668	A	C5-C6-N1	7.38	121.39	117.70
25	BB	2275	C	N3-C2-O2	-7.38	116.73	121.90
25	BB	2310	C	C2-N3-C4	-7.38	116.21	119.90
3	A1	1296	C	O4'-C1'-N1	7.38	114.11	108.20
25	BB	657	U	C1'-O4'-C4'	-7.38	103.99	109.90
25	BB	1100	C	C1'-O4'-C4'	7.38	115.81	109.90
25	BB	1707	G	C5-C6-N1	7.38	115.19	111.50
1	AE	60	C	C5'-C4'-C3'	-7.38	104.19	116.00
3	A1	95	C	N3-C2-O2	-7.38	116.73	121.90
15	AO	130	ARG	NE-CZ-NH2	7.38	123.99	120.30
25	BB	620	G	C5-C6-N1	7.38	115.19	111.50
39	BP	16	GLU	OE1-CD-OE2	-7.38	114.44	123.30
25	BB	1898	U	N3-C4-C5	-7.38	110.17	114.60
3	A1	274	A	C6-N1-C2	-7.38	114.17	118.60
3	A1	1415	G	N1-C6-O6	-7.38	115.47	119.90
25	BB	646	U	N1-C2-N3	7.38	119.33	114.90
25	BB	1331	G	C5-C6-N1	7.38	115.19	111.50
25	BB	2482	A	C5-C6-N1	7.38	121.39	117.70
25	BB	2572	A	C2-N3-C4	7.38	114.29	110.60
25	BB	2656	U	C6-N1-C2	-7.38	116.57	121.00
30	BG	45	ARG	NH1-CZ-NH2	-7.38	111.28	119.40
44	BU	43	ARG	NE-CZ-NH1	7.38	123.99	120.30
52	B3	68	ARG	NE-CZ-NH1	7.38	123.99	120.30
1	AA	74	C	O4'-C4'-C3'	7.38	112.00	106.10
1	AP	8	U	C4'-C3'-C2'	-7.38	95.22	102.60
3	A1	1330	U	C1'-O4'-C4'	-7.38	104.00	109.90
3	A1	1431	A	N7-C8-N9	7.38	117.49	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	185	G	C8-N9-C4	-7.38	103.45	106.40
25	BB	889	C	C4-C5-C6	7.38	121.09	117.40
25	BB	1427	A	N9-C4-C5	7.38	108.75	105.80
25	BB	1522	A	C4'-C3'-C2'	-7.38	95.22	102.60
25	BB	2155	U	C4'-C3'-C2'	-7.38	95.22	102.60
3	A1	77	A	O5'-P-OP1	-7.38	99.06	105.70
3	A1	315	A	C4-C5-C6	-7.38	113.31	117.00
3	A1	616	G	C1'-O4'-C4'	-7.38	104.00	109.90
25	BB	1374	G	N9-C4-C5	7.38	108.35	105.40
25	BB	1552	A	O4'-C1'-N9	7.38	114.10	108.20
50	B1	21	ARG	NH1-CZ-NH2	-7.38	111.29	119.40
3	A1	699	C	C5-C4-N4	7.37	125.36	120.20
3	A1	741	G	N3-C4-C5	-7.37	124.91	128.60
24	BA	77	U	O4'-C1'-N1	7.37	114.10	108.20
25	BB	768	G	C5-C6-N1	7.37	115.19	111.50
25	BB	820	A	C4-C5-C6	-7.37	113.31	117.00
25	BB	837	C	C6-N1-C2	-7.37	117.35	120.30
25	BB	1334	G	N1-C6-O6	-7.37	115.48	119.90
25	BB	1902	C	C2-N3-C4	-7.37	116.21	119.90
3	A1	1485	U	C2-N3-C4	-7.37	122.58	127.00
25	BB	384	A	C6-C5-N7	7.37	137.46	132.30
25	BB	1241	A	C5-N7-C8	-7.37	100.21	103.90
25	BB	1411	U	C4-C5-C6	7.37	124.12	119.70
37	BN	256	THR	CA-CB-CG2	7.37	122.72	112.40
25	BB	305	C	N1-C2-N3	7.37	124.36	119.20
25	BB	1642	G	O4'-C1'-N9	7.37	114.10	108.20
25	BB	1680	U	C5-C6-N1	-7.37	119.02	122.70
33	BJ	69	ARG	NE-CZ-NH2	7.37	123.98	120.30
1	AP	72	C	O4'-C1'-N1	7.37	114.09	108.20
3	A1	109	A	C2-N3-C4	7.37	114.28	110.60
3	A1	141	G	C3'-C2'-C1'	-7.37	95.60	101.50
3	A1	694	A	N1-C2-N3	-7.37	125.62	129.30
24	BA	118	C	C4-C5-C6	7.37	121.08	117.40
25	BB	259	G	N1-C6-O6	-7.37	115.48	119.90
25	BB	366	C	C4-C5-C6	7.37	121.08	117.40
25	BB	1268	A	C4-C5-C6	-7.37	113.32	117.00
25	BB	1893	C	C2-N3-C4	-7.37	116.22	119.90
25	BB	2103	C	N1-C2-O2	7.37	123.32	118.90
25	BB	2507	C	O4'-C1'-N1	7.37	114.09	108.20
25	BB	2549	G	C4-C5-C6	-7.37	114.38	118.80
25	BB	2661	G	C6-C5-N7	7.37	134.82	130.40
3	A1	360	G	N3-C2-N2	-7.37	114.74	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1419	G	N3-C4-C5	-7.37	124.92	128.60
22	AW	10	ARG	NH1-CZ-NH2	-7.37	111.30	119.40
25	BB	407	G	C5-C6-N1	7.37	115.18	111.50
25	BB	2345	G	N3-C4-C5	-7.37	124.92	128.60
3	A1	752	G	C6-N1-C2	-7.37	120.68	125.10
3	A1	1080	A	C4-C5-C6	-7.37	113.32	117.00
25	BB	904	G	C4-C5-N7	-7.37	107.85	110.80
25	BB	1386	C	P-O3'-C3'	7.37	128.54	119.70
25	BB	2775	G	C5-C6-O6	7.37	133.02	128.60
1	AA	9	A	C5-C6-N1	7.36	121.38	117.70
1	AE	5	A	C5-C6-N1	7.36	121.38	117.70
3	A1	538	G	C4-C5-C6	-7.36	114.38	118.80
3	A1	849	G	C4-C5-C6	-7.36	114.38	118.80
15	AO	167	TYR	CB-CG-CD2	-7.36	116.58	121.00
25	BB	485	C	N1-C2-O2	7.36	123.32	118.90
25	BB	2808	G	C5-N7-C8	-7.36	100.62	104.30
3	A1	527	G	C4'-C3'-C2'	-7.36	95.24	102.60
3	A1	1325	C	N3-C2-O2	-7.36	116.75	121.90
25	BB	1760	C	C5-C4-N4	7.36	125.35	120.20
25	BB	2639	A	C5-C6-N1	7.36	121.38	117.70
25	BB	2670	A	C2-N3-C4	7.36	114.28	110.60
25	BB	2892	G	N3-C4-N9	7.36	130.42	126.00
50	B1	114	ARG	NE-CZ-NH1	7.36	123.98	120.30
1	AE	27	C	C6-N1-C2	-7.36	117.36	120.30
1	AE	53	G	N1-C2-N3	7.36	128.32	123.90
3	A1	823	C	O4'-C1'-N1	7.36	114.09	108.20
3	A1	1195	C	N3-C4-C5	7.36	124.84	121.90
17	AR	183	ARG	CD-NE-CZ	7.36	133.90	123.60
25	BB	1055	G	O4'-C1'-N9	7.36	114.09	108.20
25	BB	1400	U	C1'-O4'-C4'	-7.36	104.01	109.90
25	BB	1706	C	N3-C4-C5	7.36	124.84	121.90
25	BB	2203	U	P-O3'-C3'	7.36	128.53	119.70
25	BB	2893	A	N9-C4-C5	-7.36	102.86	105.80
25	BB	739	A	C6-C5-N7	7.36	137.45	132.30
25	BB	2659	G	N9-C4-C5	7.36	108.34	105.40
3	A1	360	G	N3-C4-C5	-7.36	124.92	128.60
25	BB	75	G	N1-C6-O6	-7.36	115.48	119.90
25	BB	158	U	N3-C2-O2	-7.36	117.05	122.20
25	BB	1039	A	C6-C5-N7	7.36	137.45	132.30
25	BB	2307	G	C4'-C3'-C2'	-7.36	95.24	102.60
25	BB	2492	U	O5'-P-OP1	-7.36	99.08	105.70
3	A1	795	C	O4'-C1'-N1	7.36	114.08	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1499	A	C6-N1-C2	-7.36	114.19	118.60
25	BB	1146	C	N3-C4-N4	-7.36	112.85	118.00
25	BB	1790	C	C1'-O4'-C4'	-7.36	104.02	109.90
25	BB	2432	A	C5-C6-N6	7.36	129.59	123.70
25	BB	703	U	C6-N1-C2	-7.35	116.59	121.00
1	AA	16	U	O4'-C1'-N1	7.35	114.08	108.20
3	A1	36	C	N3-C2-O2	-7.35	116.75	121.90
3	A1	1172	C	C4-C5-C6	7.35	121.08	117.40
3	A1	1241	G	O3'-P-O5'	7.35	117.97	104.00
25	BB	1739	A	C5'-C4'-O4'	7.35	117.92	109.10
25	BB	2331	G	O5'-P-OP2	7.35	119.52	110.70
25	BB	2333	A	O4'-C1'-N9	7.35	114.08	108.20
3	A1	1056	U	N3-C2-O2	-7.35	117.05	122.20
25	BB	616	A	C6-N1-C2	-7.35	114.19	118.60
25	BB	1932	A	C2-N3-C4	7.35	114.28	110.60
1	AP	34	G	C5-C6-N1	7.35	115.17	111.50
3	A1	524	G	C5'-C4'-C3'	-7.35	104.24	116.00
3	A1	1303	C	N3-C4-N4	-7.35	112.86	118.00
25	BB	12	U	N1-C2-N3	7.35	119.31	114.90
25	BB	782	A	C5-C6-N1	7.35	121.38	117.70
25	BB	1506	U	O4'-C1'-N1	7.35	114.08	108.20
25	BB	1894	C	C6-N1-C2	-7.35	117.36	120.30
25	BB	1998	A	C6-C5-N7	7.35	137.44	132.30
25	BB	2097	A	C8-N9-C4	7.35	108.74	105.80
52	B3	94	ARG	NE-CZ-NH2	-7.35	116.62	120.30
1	AP	43	G	N3-C4-N9	-7.35	121.59	126.00
3	A1	933	G	N3-C2-N2	-7.35	114.76	119.90
3	A1	1000	A	C5-N7-C8	-7.35	100.23	103.90
25	BB	859	G	O4'-C1'-N9	7.35	114.08	108.20
25	BB	1514	G	C6-N1-C2	-7.35	120.69	125.10
25	BB	1540	G	C5-C6-O6	7.35	133.01	128.60
25	BB	2543	G	C3'-C2'-C1'	7.35	107.38	101.50
25	BB	2755	C	N1-C2-O2	7.35	123.31	118.90
3	A1	58	C	C5'-C4'-O4'	7.35	117.92	109.10
3	A1	93	U	C4-C5-C6	7.35	124.11	119.70
3	A1	181	A	C4-C5-C6	-7.35	113.33	117.00
3	A1	384	G	N9-C4-C5	7.35	108.34	105.40
3	A1	488	C	N1-C2-O2	7.35	123.31	118.90
3	A1	512	U	C5'-C4'-O4'	7.35	117.92	109.10
3	A1	624	C	N3-C4-N4	-7.35	112.86	118.00
3	A1	1362	A	N1-C2-N3	-7.35	125.63	129.30
25	BB	1810	A	C2-N3-C4	7.35	114.27	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2201	G	N1-C6-O6	-7.35	115.49	119.90
3	A1	385	C	C5-C6-N1	-7.34	117.33	121.00
3	A1	576	C	N3-C4-N4	-7.34	112.86	118.00
3	A1	1066	C	C4'-C3'-C2'	-7.34	95.26	102.60
25	BB	162	U	N1-C2-O2	7.34	127.94	122.80
25	BB	689	A	C2-N3-C4	7.34	114.27	110.60
25	BB	910	A	C4-C5-C6	-7.34	113.33	117.00
25	BB	1481	U	N1-C1'-C2'	-7.34	103.92	112.00
25	BB	1652	A	C5-C6-N6	7.34	129.57	123.70
25	BB	2294	G	C5'-C4'-O4'	7.34	117.91	109.10
25	BB	2668	G	C4'-C3'-C2'	-7.34	95.25	102.60
25	BB	2808	G	N1-C2-N3	7.34	128.31	123.90
24	BA	101	A	C6-C5-N7	7.34	137.44	132.30
25	BB	401	A	C4'-C3'-C2'	-7.34	95.26	102.60
25	BB	1794	A	C8-N9-C4	-7.34	102.86	105.80
25	BB	2542	A	C5-C6-N1	7.34	121.37	117.70
39	BP	54	ARG	NH1-CZ-NH2	-7.34	111.32	119.40
3	A1	825	A	O4'-C1'-N9	7.34	114.07	108.20
3	A1	1095	U	N1-C2-N3	7.34	119.30	114.90
25	BB	1121	C	C4-C5-C6	7.34	121.07	117.40
25	BB	1495	A	C4-C5-C6	-7.34	113.33	117.00
25	BB	1723	G	C6-C5-N7	7.34	134.81	130.40
25	BB	2524	G	C3'-C2'-C1'	7.34	107.37	101.50
25	BB	1778	U	C5'-C4'-O4'	7.34	117.91	109.10
25	BB	1986	C	C5-C6-N1	-7.34	117.33	121.00
25	BB	2548	U	O4'-C1'-C2'	7.34	114.21	107.60
25	BB	2672	U	O4'-C1'-N1	7.34	114.07	108.20
2	AM	9	U	N3-C4-C5	7.34	119.00	114.60
12	AK	62	ARG	NE-CZ-NH1	7.34	123.97	120.30
25	BB	227	A	N7-C8-N9	7.34	117.47	113.80
25	BB	1089	A	C6-N1-C2	-7.34	114.20	118.60
25	BB	1111	A	C5-C6-N1	7.34	121.37	117.70
25	BB	1954	G	N1-C2-N3	7.34	128.30	123.90
1	AA	55	U	N1-C2-N3	7.34	119.30	114.90
25	BB	84	A	O4'-C1'-N9	7.34	114.07	108.20
25	BB	198	C	N3-C4-N4	-7.34	112.86	118.00
25	BB	1279	G	N1-C6-O6	-7.34	115.50	119.90
25	BB	1665	A	C1'-O4'-C4'	-7.34	104.03	109.90
25	BB	1841	U	O4'-C1'-N1	7.34	114.07	108.20
25	BB	2386	A	C6-C5-N7	7.34	137.44	132.30
1	AP	46	G	C8-N9-C4	-7.33	103.47	106.40
3	A1	1332	A	N1-C2-N3	-7.33	125.63	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	684	G	N9-C4-C5	7.33	108.33	105.40
25	BB	844	A	C4-C5-C6	-7.33	113.33	117.00
25	BB	996	A	O4'-C1'-N9	7.33	114.07	108.20
25	BB	2324	U	O4'-C1'-C2'	-7.33	98.47	105.80
3	A1	202	G	C5-C6-O6	7.33	133.00	128.60
3	A1	224	U	C4-C5-C6	7.33	124.10	119.70
3	A1	848	C	N3-C2-O2	-7.33	116.77	121.90
25	BB	95	A	C6-C5-N7	7.33	137.43	132.30
25	BB	231	A	C4-C5-C6	-7.33	113.33	117.00
25	BB	1109	C	N3-C4-C5	7.33	124.83	121.90
25	BB	1802	A	C1'-O4'-C4'	-7.33	104.03	109.90
25	BB	1907	G	C5-C6-N1	7.33	115.17	111.50
25	BB	1994	C	N3-C4-C5	7.33	124.83	121.90
3	A1	15	G	N1-C2-N3	7.33	128.30	123.90
3	A1	232	G	N3-C4-C5	-7.33	124.93	128.60
25	BB	178	G	N1-C6-O6	-7.33	115.50	119.90
25	BB	2800	A	C2-N3-C4	7.33	114.27	110.60
1	AA	52	U	O4'-C1'-N1	7.33	114.06	108.20
25	BB	552	U	N3-C2-O2	-7.33	117.07	122.20
3	A1	1437	A	C4-C5-C6	-7.33	113.33	117.00
3	A1	1486	G	N3-C4-C5	-7.33	124.94	128.60
24	BA	85	G	C5-C6-O6	7.33	133.00	128.60
25	BB	434	U	N3-C2-O2	-7.33	117.07	122.20
25	BB	1077	A	C6-C5-N7	7.33	137.43	132.30
25	BB	1290	C	N1-C2-N3	7.33	124.33	119.20
25	BB	1668	A	C4-C5-C6	-7.33	113.33	117.00
25	BB	1934	C	N1-C2-O2	7.33	123.30	118.90
25	BB	2046	G	C5-C6-N1	7.33	115.17	111.50
25	BB	2400	G	O5'-P-OP1	-7.33	99.11	105.70
3	A1	1001	C	C5-C4-N4	-7.33	115.07	120.20
25	BB	1002	G	C5-C6-N1	7.33	115.16	111.50
25	BB	2274	A	C4-C5-C6	-7.33	113.34	117.00
1	AE	6	U	C5-C6-N1	-7.33	119.04	122.70
3	A1	331	G	N1-C6-O6	-7.33	115.50	119.90
3	A1	597	G	C8-N9-C4	-7.33	103.47	106.40
25	BB	337	C	N3-C4-N4	-7.33	112.87	118.00
25	BB	673	C	C1'-O4'-C4'	-7.33	104.04	109.90
25	BB	1046	A	C4-C5-C6	-7.33	113.34	117.00
25	BB	1523	U	C4-C5-C6	7.33	124.09	119.70
25	BB	2631	G	C6-N1-C2	-7.33	120.70	125.10
3	A1	111	G	P-O3'-C3'	7.32	128.49	119.70
3	A1	144	G	C6-N1-C2	-7.32	120.71	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	225	C	O4'-C1'-N1	7.32	114.06	108.20
3	A1	432	A	C5'-C4'-O4'	7.32	117.89	109.10
25	BB	332	A	C6-C5-N7	7.32	137.43	132.30
25	BB	641	U	N1-C2-O2	7.32	127.93	122.80
25	BB	1470	A	C4-C5-C6	-7.32	113.34	117.00
25	BB	1822	C	C5'-C4'-C3'	-7.32	104.28	116.00
3	A1	60	A	N7-C8-N9	7.32	117.46	113.80
3	A1	690	G	O5'-P-OP1	-7.32	99.11	105.70
24	BA	44	G	N1-C6-O6	-7.32	115.51	119.90
25	BB	179	C	N1-C2-O2	7.32	123.29	118.90
25	BB	275	C	N1-C2-N3	7.32	124.33	119.20
25	BB	471	A	C4'-C3'-C2'	-7.32	95.28	102.60
25	BB	2641	G	N3-C4-C5	-7.32	124.94	128.60
50	B1	44	ARG	NE-CZ-NH1	7.32	123.96	120.30
2	AM	19	U	C4-C5-C6	7.32	124.09	119.70
3	A1	339	C	C4-C5-C6	7.32	121.06	117.40
25	BB	554	U	C2-N3-C4	-7.32	122.61	127.00
25	BB	872	U	O5'-P-OP1	-7.32	99.11	105.70
25	BB	1001	A	C2-N3-C4	7.32	114.26	110.60
25	BB	1149	G	N3-C4-C5	-7.32	124.94	128.60
25	BB	1678	A	C5-C6-N1	7.32	121.36	117.70
25	BB	2409	G	N3-C4-C5	-7.32	124.94	128.60
3	A1	14	U	N3-C2-O2	-7.32	117.08	122.20
25	BB	1493	C	N1-C2-O2	7.32	123.29	118.90
25	BB	2487	G	C6-C5-N7	7.32	134.79	130.40
25	BB	2570	G	P-O3'-C3'	7.32	128.48	119.70
3	A1	1490	U	C6-N1-C2	-7.32	116.61	121.00
24	BA	103	U	C5-C6-N1	-7.32	119.04	122.70
25	BB	1268	A	C3'-C2'-C1'	7.32	107.35	101.50
25	BB	1432	G	C6-N1-C2	-7.32	120.71	125.10
25	BB	1889	A	C5-N7-C8	-7.32	100.24	103.90
25	BB	2028	U	N1-C2-N3	7.32	119.29	114.90
25	BB	2275	C	O4'-C1'-N1	7.32	114.05	108.20
25	BB	2451	A	C2-N3-C4	7.32	114.26	110.60
3	A1	347	G	N3-C4-C5	-7.32	124.94	128.60
25	BB	303	G	C6-N1-C2	-7.32	120.71	125.10
25	BB	716	A	C1'-O4'-C4'	-7.32	104.05	109.90
25	BB	1804	C	N3-C2-O2	-7.32	116.78	121.90
25	BB	2665	A	N1-C6-N6	-7.32	114.21	118.60
25	BB	2674	G	C2-N3-C4	7.32	115.56	111.90
25	BB	2856	A	C4-C5-N7	7.32	114.36	110.70
3	A1	793	U	N3-C2-O2	-7.31	117.08	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	866	C	N1-C2-O2	7.31	123.29	118.90
25	BB	174	U	N3-C2-O2	-7.31	117.08	122.20
25	BB	2388	A	C4-C5-C6	-7.31	113.34	117.00
25	BB	2685	G	O4'-C4'-C3'	7.31	111.95	106.10
25	BB	2895	G	N9-C4-C5	7.31	108.33	105.40
3	A1	1350	A	C5'-C4'-C3'	-7.31	104.30	116.00
25	BB	954	G	N1-C2-N3	7.31	128.29	123.90
25	BB	1187	G	N3-C4-C5	-7.31	124.94	128.60
25	BB	2373	G	C5-C6-O6	7.31	132.99	128.60
25	BB	2385	C	C5-C6-N1	-7.31	117.34	121.00
25	BB	2433	A	C6-C5-N7	7.31	137.42	132.30
25	BB	2519	U	O4'-C1'-N1	7.31	114.05	108.20
25	BB	2895	G	C6-C5-N7	7.31	134.79	130.40
3	A1	1182	G	N1-C2-N2	-7.31	109.62	116.20
25	BB	1558	C	C3'-C2'-C1'	7.31	107.35	101.50
2	AM	11	U	C3'-C2'-C1'	7.31	107.35	101.50
3	A1	601	G	C6-N1-C2	-7.31	120.72	125.10
3	A1	738	C	C4-C5-C6	-7.31	113.75	117.40
3	A1	782	A	O4'-C1'-N9	7.31	114.05	108.20
25	BB	800	A	C6-C5-N7	7.31	137.42	132.30
25	BB	942	G	N1-C6-O6	-7.31	115.51	119.90
25	BB	1545	A	N1-C2-N3	-7.31	125.64	129.30
25	BB	1875	G	N1-C2-N3	7.31	128.29	123.90
3	A1	159	G	N1-C2-N2	7.31	122.78	116.20
3	A1	425	G	N3-C4-C5	-7.31	124.95	128.60
11	AJ	64	ARG	NE-CZ-NH1	7.31	123.95	120.30
25	BB	389	G	N1-C2-N3	7.31	128.28	123.90
25	BB	603	A	C2-N3-C4	7.31	114.25	110.60
25	BB	643	A	N7-C8-N9	7.31	117.45	113.80
25	BB	1572	A	C6-C5-N7	7.31	137.41	132.30
25	BB	2435	A	C4-C5-C6	-7.31	113.35	117.00
1	AA	26	G	C6-N1-C2	-7.31	120.72	125.10
25	BB	628	G	N9-C1'-C2'	-7.31	103.96	112.00
25	BB	1243	C	N3-C2-O2	-7.31	116.79	121.90
25	BB	1530	G	C5-C6-N1	7.31	115.15	111.50
25	BB	2885	G	C6-C5-N7	7.31	134.78	130.40
3	A1	928	G	N7-C8-N9	7.30	116.75	113.10
3	A1	1425	U	C2-N3-C4	-7.30	122.62	127.00
3	A1	1450	U	O4'-C1'-N1	7.30	114.04	108.20
25	BB	337	C	N3-C2-O2	-7.30	116.79	121.90
25	BB	1610	A	N9-C1'-C2'	-7.30	103.96	112.00
25	BB	2212	A	C5'-C4'-C3'	-7.30	104.31	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2333	A	C4-C5-C6	-7.30	113.35	117.00
25	BB	2394	C	C5'-C4'-O4'	7.30	117.86	109.10
3	A1	188	C	C3'-C2'-C1'	-7.30	95.66	101.50
24	BA	66	A	C4-C5-N7	7.30	114.35	110.70
25	BB	371	A	C2-N3-C4	7.30	114.25	110.60
25	BB	1754	A	C6-C5-N7	7.30	137.41	132.30
25	BB	2004	G	C8-N9-C4	-7.30	103.48	106.40
3	A1	109	A	C4-C5-C6	-7.30	113.35	117.00
3	A1	421	U	C4'-C3'-C2'	-7.30	95.30	102.60
3	A1	599	C	C4'-C3'-C2'	-7.30	95.30	102.60
3	A1	915	A	O4'-C1'-N9	7.30	114.04	108.20
3	A1	1409	C	O4'-C1'-C2'	-7.30	98.50	105.80
25	BB	715	A	N1-C6-N6	-7.30	114.22	118.60
25	BB	985	C	N3-C2-O2	-7.30	116.79	121.90
25	BB	1172	C	C2-N3-C4	-7.30	116.25	119.90
25	BB	1837	C	C4-C5-C6	-7.30	113.75	117.40
25	BB	2361	G	N7-C8-N9	7.30	116.75	113.10
25	BB	2608	G	N3-C4-C5	-7.30	124.95	128.60
3	A1	1219	A	O4'-C4'-C3'	-7.30	96.70	104.00
3	A1	1374	A	C5-C6-N6	7.30	129.54	123.70
3	A1	1491	G	C8-N9-C4	-7.30	103.48	106.40
25	BB	847	U	N1-C2-O2	7.30	127.91	122.80
25	BB	1154	G	C5-C6-O6	7.30	132.98	128.60
25	BB	1195	G	C5'-C4'-C3'	-7.30	104.32	116.00
25	BB	1614	A	O4'-C4'-C3'	7.30	111.94	106.10
25	BB	1848	A	C5-C6-N1	7.30	121.35	117.70
25	BB	2430	A	C2-N3-C4	7.30	114.25	110.60
25	BB	2598	A	C3'-C2'-C1'	7.30	107.34	101.50
25	BB	2787	C	C5-C6-N1	-7.30	117.35	121.00
3	A1	1033	G	C3'-C2'-C1'	-7.30	95.66	101.50
25	BB	278	A	C5'-C4'-O4'	7.30	117.86	109.10
25	BB	849	A	C5-C6-N6	7.30	129.54	123.70
25	BB	2161	C	N3-C2-O2	-7.30	116.79	121.90
1	AE	53	G	N1-C6-O6	-7.30	115.52	119.90
25	BB	21	A	C6-N1-C2	-7.30	114.22	118.60
25	BB	100	U	C6-N1-C2	-7.30	116.62	121.00
25	BB	611	C	N1-C2-O2	7.30	123.28	118.90
25	BB	2074	U	C3'-C2'-C1'	7.30	107.34	101.50
25	BB	2110	G	O3'-P-O5'	-7.30	90.14	104.00
25	BB	2277	G	C2'-C3'-O3'	7.30	125.55	109.50
25	BB	2339	C	C2-N3-C4	-7.30	116.25	119.90
25	BB	2365	G	C5-C6-O6	7.30	132.98	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	132	C	C6-N1-C2	-7.29	117.38	120.30
3	A1	810	C	C2-N3-C4	-7.29	116.25	119.90
25	BB	863	A	C4'-C3'-C2'	-7.29	95.31	102.60
25	BB	1465	G	C5-C6-N1	7.29	115.15	111.50
25	BB	1696	G	C5-C6-N1	7.29	115.15	111.50
25	BB	2850	A	C5-C6-N6	7.29	129.54	123.70
1	AE	34	G	C5-N7-C8	-7.29	100.65	104.30
3	A1	319	G	N3-C2-N2	-7.29	114.79	119.90
3	A1	612	C	C2-N3-C4	-7.29	116.25	119.90
3	A1	901	A	O4'-C4'-C3'	-7.29	96.71	104.00
3	A1	915	A	C4-C5-C6	-7.29	113.35	117.00
3	A1	1181	G	O4'-C4'-C3'	7.29	111.94	106.10
9	AH	88	ARG	NE-CZ-NH2	-7.29	116.65	120.30
25	BB	1188	U	C5-C6-N1	-7.29	119.05	122.70
25	BB	2073	C	C2-N3-C4	-7.29	116.25	119.90
25	BB	2221	G	C5-C6-O6	7.29	132.98	128.60
25	BB	2554	U	C4-C5-C6	7.29	124.08	119.70
25	BB	2554	U	O4'-C1'-N1	7.29	114.03	108.20
1	AA	11	C	O4'-C1'-N1	7.29	114.03	108.20
3	A1	340	U	C6-N1-C2	-7.29	116.63	121.00
3	A1	478	A	C6-C5-N7	7.29	137.40	132.30
25	BB	318	C	C5-C4-N4	7.29	125.30	120.20
25	BB	946	C	N1-C2-O2	7.29	123.27	118.90
25	BB	1090	A	C4'-C3'-O3'	-7.29	94.09	109.40
25	BB	1189	A	C4-C5-C6	-7.29	113.35	117.00
3	A1	1210	C	N3-C4-C5	7.29	124.82	121.90
25	BB	413	C	C4'-C3'-C2'	-7.29	95.31	102.60
25	BB	1046	A	C6-C5-N7	7.29	137.40	132.30
25	BB	1108	U	N1-C2-O2	7.29	127.90	122.80
25	BB	2683	C	C5'-C4'-C3'	-7.29	104.34	116.00
3	A1	369	G	C4-C5-C6	-7.29	114.43	118.80
24	BA	115	A	C5-C6-N6	7.29	129.53	123.70
25	BB	1103	A	C6-C5-N7	7.29	137.40	132.30
25	BB	1129	A	C4-C5-N7	-7.29	107.06	110.70
25	BB	1361	G	O3'-P-O5'	-7.29	90.15	104.00
25	BB	1387	A	O4'-C4'-C3'	7.29	111.93	106.10
25	BB	1577	C	C2-N3-C4	-7.29	116.26	119.90
25	BB	1635	A	C4'-C3'-C2'	-7.29	95.31	102.60
25	BB	1679	A	C6-C5-N7	7.29	137.40	132.30
1	AA	44	A	O5'-P-OP1	7.29	119.44	110.70
25	BB	578	G	C5-C6-N1	7.29	115.14	111.50
51	B2	157	THR	CA-CB-CG2	7.29	122.60	112.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	2	C	C2-N3-C4	-7.29	116.26	119.90
3	A1	257	G	C5-C6-N1	7.29	115.14	111.50
3	A1	348	G	C5-C6-N1	7.29	115.14	111.50
25	BB	825	A	C5'-C4'-O4'	7.29	117.84	109.10
25	BB	1051	G	C5-N7-C8	-7.29	100.66	104.30
25	BB	1831	G	C5-C6-N1	7.29	115.14	111.50
25	BB	2439	A	N7-C8-N9	7.29	117.44	113.80
51	B2	70	ARG	NE-CZ-NH2	7.29	123.94	120.30
3	A1	142	G	C1'-O4'-C4'	-7.28	104.07	109.90
3	A1	293	G	C6-N1-C2	-7.28	120.73	125.10
3	A1	540	G	N7-C8-N9	7.28	116.74	113.10
3	A1	1000	A	C4'-C3'-C2'	-7.28	95.32	102.60
3	A1	1389	C	C2-N3-C4	-7.28	116.26	119.90
25	BB	282	A	C5-C6-N1	7.28	121.34	117.70
25	BB	1459	G	N7-C8-N9	7.28	116.74	113.10
25	BB	1548	A	N9-C4-C5	-7.28	102.89	105.80
25	BB	1732	C	P-O3'-C3'	7.28	128.44	119.70
25	BB	1886	U	C4'-C3'-C2'	-7.28	95.32	102.60
2	AM	5	U	N1-C2-N3	7.28	119.27	114.90
3	A1	61	G	C5'-C4'-C3'	-7.28	104.35	116.00
3	A1	142	G	C8-N9-C4	-7.28	103.49	106.40
3	A1	620	C	N3-C4-C5	7.28	124.81	121.90
3	A1	1007	U	C5-C6-N1	-7.28	119.06	122.70
3	A1	1234	C	C5'-C4'-C3'	-7.28	104.35	116.00
3	A1	1254	A	N1-C2-N3	-7.28	125.66	129.30
25	BB	42	A	C4-C5-C6	-7.28	113.36	117.00
25	BB	1474	U	P-O3'-C3'	7.28	128.44	119.70
25	BB	2300	C	C5-C4-N4	-7.28	115.10	120.20
25	BB	2594	C	C5'-C4'-O4'	7.28	117.84	109.10
1	AA	74	C	C4-C5-C6	-7.28	113.76	117.40
3	A1	764	C	N1-C2-N3	7.28	124.30	119.20
3	A1	1127	G	C5'-C4'-C3'	-7.28	104.35	116.00
3	A1	1222	G	C4-C5-N7	-7.28	107.89	110.80
3	A1	1495	U	C5-C4-O4	7.28	130.27	125.90
25	BB	165	A	C2-N3-C4	7.28	114.24	110.60
25	BB	333	G	O4'-C1'-N9	7.28	114.02	108.20
25	BB	757	G	N3-C4-C5	-7.28	124.96	128.60
25	BB	853	C	C2-N3-C4	-7.28	116.26	119.90
25	BB	1307	A	C3'-C2'-C1'	7.28	107.33	101.50
25	BB	1364	G	C5-N7-C8	-7.28	100.66	104.30
25	BB	2093	G	C5-C6-N1	7.28	115.14	111.50
25	BB	890	C	N3-C2-O2	-7.28	116.81	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	932	U	O4'-C1'-N1	7.28	114.02	108.20
25	BB	1327	A	C5-C6-N1	7.28	121.34	117.70
25	BB	1904	G	N3-C2-N2	-7.28	114.81	119.90
25	BB	2422	C	C6-N1-C2	-7.28	117.39	120.30
1	AP	62	A	C5-C6-N6	7.28	129.52	123.70
3	A1	927	G	N3-C2-N2	-7.28	114.81	119.90
3	A1	1015	G	N1-C2-N3	7.28	128.27	123.90
3	A1	1525	G	C8-N9-C4	-7.28	103.49	106.40
25	BB	440	C	N3-C4-C5	7.28	124.81	121.90
25	BB	2035	G	N1-C2-N3	7.28	128.27	123.90
25	BB	2685	G	C1'-O4'-C4'	-7.28	104.08	109.90
1	AA	19	G	C6-N1-C2	-7.28	120.73	125.10
3	A1	38	G	N9-C4-C5	7.28	108.31	105.40
3	A1	251	G	C1'-O4'-C4'	-7.28	104.08	109.90
3	A1	666	G	C6-N1-C2	-7.28	120.73	125.10
3	A1	690	G	N3-C2-N2	-7.28	114.81	119.90
3	A1	1130	A	N9-C4-C5	7.28	108.71	105.80
25	BB	330	A	C1'-O4'-C4'	-7.28	104.08	109.90
25	BB	516	C	N3-C2-O2	-7.28	116.81	121.90
25	BB	674	G	N3-C4-C5	-7.28	124.96	128.60
25	BB	727	A	C6-N1-C2	-7.28	114.23	118.60
25	BB	838	C	N3-C2-O2	-7.28	116.81	121.90
25	BB	1441	G	C5-C6-N1	7.28	115.14	111.50
25	BB	1517	G	N1-C2-N2	7.28	122.75	116.20
25	BB	2481	G	C5-C6-N1	7.28	115.14	111.50
25	BB	2529	G	N1-C6-O6	-7.28	115.53	119.90
3	A1	743	A	C5-C6-N1	7.27	121.34	117.70
25	BB	1030	C	C2-N3-C4	-7.27	116.26	119.90
1	AP	11	C	N1-C2-O2	7.27	123.26	118.90
3	A1	71	A	C5-N7-C8	-7.27	100.26	103.90
3	A1	357	G	N3-C2-N2	-7.27	114.81	119.90
3	A1	395	C	N3-C4-C5	7.27	124.81	121.90
3	A1	795	C	N3-C2-O2	-7.27	116.81	121.90
3	A1	853	C	O4'-C1'-N1	7.27	114.02	108.20
3	A1	925	G	C5-C6-O6	7.27	132.96	128.60
3	A1	977	A	N1-C6-N6	-7.27	114.24	118.60
25	BB	664	G	C6-N1-C2	-7.27	120.74	125.10
25	BB	742	A	C6-C5-N7	7.27	137.39	132.30
25	BB	1292	G	C5-N7-C8	-7.27	100.66	104.30
25	BB	1479	G	N1-C6-O6	-7.27	115.54	119.90
25	BB	1654	A	O4'-C1'-N9	7.27	114.02	108.20
25	BB	2111	U	C5'-C4'-O4'	7.27	117.83	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2420	C	P-O3'-C3'	7.27	128.43	119.70
25	BB	2725	A	C2-N3-C4	7.27	114.24	110.60
25	BB	2751	G	N9-C4-C5	7.27	108.31	105.40
52	B3	173	ALA	N-CA-CB	-7.27	99.92	110.10
1	AP	25	C	O4'-C1'-N1	7.27	114.02	108.20
25	BB	2893	A	C6-C5-N7	7.27	137.39	132.30
1	AA	65	G	C4'-C3'-C2'	-7.27	95.33	102.60
1	AP	24	G	N1-C2-N3	7.27	128.26	123.90
1	AP	66	A	C4-C5-C6	-7.27	113.36	117.00
2	AM	10	U	N1-C2-N3	7.27	119.26	114.90
3	A1	491	G	C5-N7-C8	-7.27	100.67	104.30
3	A1	694	A	C4-C5-C6	-7.27	113.36	117.00
3	A1	1350	A	C4-C5-C6	-7.27	113.37	117.00
24	BA	61	G	N9-C4-C5	7.27	108.31	105.40
25	BB	26	G	N1-C6-O6	-7.27	115.54	119.90
25	BB	437	U	O4'-C1'-N1	-7.27	102.38	108.20
25	BB	470	A	C4-C5-C6	-7.27	113.36	117.00
25	BB	663	G	O4'-C1'-N9	7.27	114.02	108.20
25	BB	1399	C	C3'-C2'-C1'	7.27	107.32	101.50
25	BB	2018	G	C5-C6-N1	7.27	115.14	111.50
25	BB	2541	A	C5-C6-N1	7.27	121.33	117.70
25	BB	2610	C	C2-N3-C4	-7.27	116.27	119.90
1	AA	40	C	C5-C6-N1	-7.27	117.37	121.00
3	A1	98	A	C6-C5-N7	7.27	137.39	132.30
3	A1	151	A	C4-C5-C6	-7.27	113.37	117.00
3	A1	347	G	N9-C4-C5	7.27	108.31	105.40
3	A1	1019	A	C4-C5-C6	-7.27	113.37	117.00
25	BB	19	A	C5-C6-N1	7.27	121.33	117.70
25	BB	341	C	C4-C5-C6	7.27	121.03	117.40
25	BB	595	C	N3-C4-C5	7.27	124.81	121.90
25	BB	948	C	N3-C2-O2	-7.27	116.81	121.90
25	BB	977	G	C6-N1-C2	-7.27	120.74	125.10
25	BB	1061	U	N1-C1'-C2'	7.27	123.45	114.00
25	BB	1131	G	C5-C6-N1	7.27	115.13	111.50
25	BB	2813	A	C5-C6-N6	7.27	129.51	123.70
25	BB	2901	C	N3-C4-C5	7.27	124.81	121.90
25	BB	1660	G	N3-C4-C5	-7.27	124.97	128.60
25	BB	1885	A	C4'-C3'-C2'	-7.27	95.33	102.60
1	AA	4	G	O4'-C1'-N9	7.26	114.01	108.20
3	A1	426	U	C4-C5-C6	7.26	124.06	119.70
3	A1	1293	C	N3-C2-O2	-7.26	116.81	121.90
25	BB	64	A	C5-C6-N1	7.26	121.33	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	1479	G	N9-C4-C5	-7.26	102.49	105.40
25	BB	1585	C	O4'-C1'-C2'	7.26	114.14	107.60
25	BB	1821	A	C6-C5-N7	7.26	137.38	132.30
1	AE	69	U	C5'-C4'-C3'	-7.26	104.38	116.00
3	A1	357	G	C6-C5-N7	7.26	134.76	130.40
3	A1	572	A	C6-C5-N7	7.26	137.38	132.30
25	BB	296	U	N1-C2-N3	7.26	119.26	114.90
25	BB	1084	A	N1-C6-N6	-7.26	114.24	118.60
25	BB	2079	U	C5'-C4'-O4'	7.26	117.81	109.10
25	BB	2171	A	C5-N7-C8	-7.26	100.27	103.90
25	BB	2674	G	C5-C6-O6	7.26	132.96	128.60
25	BB	2769	U	N3-C2-O2	-7.26	117.12	122.20
3	A1	447	G	C8-N9-C4	-7.26	103.50	106.40
3	A1	484	G	C5-C6-O6	7.26	132.96	128.60
3	A1	978	A	C4'-C3'-C2'	-7.26	95.34	102.60
25	BB	1453	A	C6-C5-N7	7.26	137.38	132.30
3	A1	138	G	C5'-C4'-O4'	7.26	117.81	109.10
3	A1	1518	A	C5-N7-C8	-7.26	100.27	103.90
25	BB	8	C	N3-C4-N4	-7.26	112.92	118.00
25	BB	198	C	N1-C2-O2	7.26	123.26	118.90
25	BB	1616	A	O4'-C1'-N9	7.26	114.01	108.20
1	AA	42	G	O5'-C5'-C4'	-7.26	97.91	111.70
25	BB	256	A	C5-C6-N1	7.26	121.33	117.70
25	BB	2589	A	C5-C6-N1	7.26	121.33	117.70
3	A1	503	C	C2'-C3'-O3'	7.26	125.46	109.50
3	A1	1066	C	C6-N1-C2	-7.26	117.40	120.30
3	A1	1342	C	N1-C2-N3	7.26	124.28	119.20
3	A1	1488	G	C6-N1-C2	-7.26	120.75	125.10
25	BB	27	G	C3'-C2'-C1'	7.26	107.31	101.50
25	BB	1293	C	N3-C4-N4	-7.26	112.92	118.00
25	BB	2285	C	N3-C4-N4	-7.26	112.92	118.00
1	AA	39	U	N3-C2-O2	-7.25	117.12	122.20
3	A1	146	G	C5-C6-N1	7.25	115.13	111.50
3	A1	39	G	C5-C6-N1	7.25	115.13	111.50
3	A1	1094	G	C6-C5-N7	7.25	134.75	130.40
25	BB	517	C	C3'-C2'-C1'	7.25	107.30	101.50
25	BB	537	G	C6-N1-C2	-7.25	120.75	125.10
25	BB	581	C	N3-C4-C5	7.25	124.80	121.90
25	BB	997	G	N9-C1'-C2'	-7.25	104.02	112.00
25	BB	1137	G	O4'-C1'-N9	7.25	114.00	108.20
25	BB	1307	A	C4'-C3'-C2'	-7.25	95.35	102.60
25	BB	1937	A	O4'-C1'-N9	-7.25	102.40	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1965	C	N3-C2-O2	-7.25	116.82	121.90
2	AM	13	U	C5'-C4'-O4'	7.25	117.80	109.10
3	A1	21	G	C5-C6-O6	7.25	132.95	128.60
3	A1	319	G	C5-N7-C8	-7.25	100.67	104.30
3	A1	470	C	N1-C2-O2	7.25	123.25	118.90
3	A1	732	C	C2-N3-C4	-7.25	116.28	119.90
3	A1	821	G	P-O3'-C3'	7.25	128.40	119.70
3	A1	1233	G	N3-C2-N2	-7.25	114.82	119.90
3	A1	1248	A	C4'-C3'-C2'	-7.25	95.35	102.60
25	BB	431	U	N3-C4-C5	-7.25	110.25	114.60
25	BB	2668	G	N1-C6-O6	-7.25	115.55	119.90
3	A1	63	C	O4'-C1'-N1	7.25	114.00	108.20
25	BB	273	G	C6-N1-C2	-7.25	120.75	125.10
25	BB	680	C	C4'-C3'-C2'	-7.25	95.35	102.60
25	BB	1858	A	C5-C6-N1	7.25	121.33	117.70
25	BB	2000	C	C2-N3-C4	-7.25	116.28	119.90
25	BB	2076	U	C4-C5-C6	7.25	124.05	119.70
1	AA	61	C	C6-N1-C2	-7.25	117.40	120.30
3	A1	116	A	N1-C6-N6	-7.25	114.25	118.60
3	A1	328	C	N3-C4-C5	7.25	124.80	121.90
3	A1	1481	U	C6-N1-C2	-7.25	116.65	121.00
25	BB	317	G	C6-C5-N7	7.25	134.75	130.40
25	BB	1519	G	O4'-C1'-N9	7.25	114.00	108.20
25	BB	2142	A	C8-N9-C4	-7.25	102.90	105.80
1	AP	28	C	N3-C2-O2	-7.25	116.83	121.90
3	A1	931	C	N3-C2-O2	-7.25	116.83	121.90
3	A1	994	A	C8-N9-C4	-7.25	102.90	105.80
25	BB	1	G	C6-N1-C2	-7.25	120.75	125.10
25	BB	230	G	N3-C2-N2	-7.25	114.83	119.90
25	BB	324	A	C3'-C2'-C1'	7.25	107.30	101.50
25	BB	2664	G	C1'-O4'-C4'	-7.25	104.10	109.90
1	AE	50	U	O5'-P-OP1	-7.25	99.18	105.70
3	A1	1362	A	C5-C6-N6	7.25	129.50	123.70
16	AQ	6	ARG	NE-CZ-NH2	7.25	123.92	120.30
25	BB	321	U	N3-C2-O2	-7.25	117.13	122.20
2	AM	11	U	O4'-C1'-N1	7.24	114.00	108.20
3	A1	158	G	N9-C4-C5	7.24	108.30	105.40
3	A1	240	G	N9-C4-C5	7.24	108.30	105.40
3	A1	544	G	N3-C4-C5	-7.24	124.98	128.60
25	BB	97	C	N3-C4-N4	-7.24	112.93	118.00
25	BB	1439	A	C5-C6-N1	7.24	121.32	117.70
25	BB	1450	G	P-O3'-C3'	7.24	128.39	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1615	C	N3-C4-N4	-7.24	112.93	118.00
25	BB	1924	C	C4'-C3'-C2'	-7.24	95.36	102.60
3	A1	336	A	N1-C6-N6	-7.24	114.25	118.60
24	BA	100	G	N1-C6-O6	-7.24	115.56	119.90
24	BA	100	G	O4'-C1'-N9	7.24	113.99	108.20
25	BB	1112	G	C5-C6-N1	7.24	115.12	111.50
3	A1	153	C	C6-N1-C2	-7.24	117.40	120.30
3	A1	456	A	C4-C5-C6	-7.24	113.38	117.00
25	BB	152	A	N9-C4-C5	7.24	108.70	105.80
25	BB	723	C	O4'-C1'-N1	7.24	113.99	108.20
25	BB	954	G	C5-C6-N1	7.24	115.12	111.50
25	BB	1072	C	C2-N3-C4	-7.24	116.28	119.90
25	BB	1482	G	N3-C4-C5	-7.24	124.98	128.60
25	BB	2253	G	N1-C2-N3	7.24	128.25	123.90
25	BB	2422	C	C5-C4-N4	7.24	125.27	120.20
25	BB	2480	C	C2-N3-C4	-7.24	116.28	119.90
1	AA	15	G	C8-N9-C4	-7.24	103.50	106.40
3	A1	647	C	C3'-C2'-C1'	7.24	107.29	101.50
3	A1	1073	U	N3-C2-O2	-7.24	117.13	122.20
3	A1	1479	C	N3-C4-C5	7.24	124.80	121.90
25	BB	1259	G	O4'-C1'-N9	-7.24	102.41	108.20
25	BB	1582	C	N3-C2-O2	-7.24	116.83	121.90
25	BB	1626	A	C1'-O4'-C4'	-7.24	104.11	109.90
25	BB	2133	G	N9-C4-C5	7.24	108.30	105.40
25	BB	2756	U	N1-C2-N3	7.24	119.24	114.90
1	AP	43	G	C3'-C2'-C1'	-7.24	95.71	101.50
1	AP	52	U	C5-C6-N1	-7.24	119.08	122.70
3	A1	399	G	N1-C6-O6	-7.24	115.56	119.90
3	A1	676	A	C4'-C3'-C2'	-7.24	95.36	102.60
3	A1	1022	A	O4'-C1'-N9	7.24	113.99	108.20
3	A1	1297	G	N7-C8-N9	7.24	116.72	113.10
24	BA	91	C	C5'-C4'-O4'	7.24	117.78	109.10
25	BB	164	C	O4'-C1'-N1	7.24	113.99	108.20
25	BB	859	G	N1-C6-O6	-7.24	115.56	119.90
25	BB	928	A	C5-C6-N6	7.24	129.49	123.70
25	BB	1595	C	N3-C2-O2	-7.24	116.83	121.90
25	BB	1719	G	C2-N3-C4	7.24	115.52	111.90
25	BB	2641	G	C5-C6-N1	7.24	115.12	111.50
25	BB	2884	U	C1'-O4'-C4'	-7.24	104.11	109.90
25	BB	2226	C	N3-C2-O2	-7.23	116.84	121.90
25	BB	2502	G	N1-C2-N2	-7.23	109.69	116.20
3	A1	331	G	C5-C6-O6	7.23	132.94	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	881	G	C4'-C3'-C2'	-7.23	95.37	102.60
24	BA	108	A	C5-C6-N6	7.23	129.49	123.70
25	BB	258	G	C5-C6-N1	7.23	115.12	111.50
25	BB	2133	G	C4-C5-N7	-7.23	107.91	110.80
25	BB	2335	A	C2-N3-C4	7.23	114.22	110.60
25	BB	2510	C	N3-C2-O2	-7.23	116.84	121.90
3	A1	256	U	O4'-C1'-N1	7.23	113.98	108.20
3	A1	547	A	C6-C5-N7	7.23	137.36	132.30
3	A1	725	G	N3-C4-C5	-7.23	124.98	128.60
3	A1	967	C	N3-C2-O2	-7.23	116.84	121.90
25	BB	970	U	C2-N3-C4	-7.23	122.66	127.00
25	BB	1555	G	C2-N3-C4	7.23	115.52	111.90
25	BB	1650	A	C5-C6-N6	7.23	129.49	123.70
25	BB	2214	C	N3-C4-N4	-7.23	112.94	118.00
1	AE	7	U	C4-C5-C6	7.23	124.04	119.70
3	A1	1356	G	C6-N1-C2	-7.23	120.76	125.10
25	BB	1458	U	N1-C1'-C2'	7.23	123.40	114.00
3	A1	226	G	C5-C6-O6	7.23	132.94	128.60
3	A1	624	C	C3'-C2'-C1'	7.23	107.28	101.50
3	A1	659	U	C5'-C4'-O4'	7.23	117.77	109.10
25	BB	16	C	N3-C4-C5	7.23	124.79	121.90
25	BB	1379	U	O4'-C1'-N1	7.23	113.98	108.20
25	BB	1550	C	N3-C4-C5	7.23	124.79	121.90
25	BB	1878	G	N1-C2-N2	-7.23	109.70	116.20
3	A1	83	C	C1'-O4'-C4'	-7.23	104.12	109.90
3	A1	760	G	P-O3'-C3'	7.23	128.37	119.70
25	BB	195	A	N1-C6-N6	-7.23	114.26	118.60
30	BG	96	ARG	NE-CZ-NH2	7.23	123.91	120.30
3	A1	51	A	C3'-C2'-C1'	7.22	107.28	101.50
3	A1	1036	A	C4'-C3'-C2'	-7.22	95.38	102.60
25	BB	914	G	C8-N9-C4	-7.22	103.51	106.40
25	BB	1409	U	N1-C2-N3	7.22	119.23	114.90
25	BB	1952	A	C3'-C2'-C1'	7.22	107.28	101.50
25	BB	2291	U	C5'-C4'-O4'	7.22	117.77	109.10
37	BN	100	ARG	CD-NE-CZ	7.22	133.72	123.60
3	A1	592	G	C5-C6-N1	7.22	115.11	111.50
3	A1	657	U	C5-C6-N1	-7.22	119.09	122.70
3	A1	732	C	N3-C2-O2	-7.22	116.84	121.90
3	A1	749	A	C6-C5-N7	7.22	137.36	132.30
3	A1	779	C	C6-N1-C2	-7.22	117.41	120.30
3	A1	1199	U	C5-C6-N1	-7.22	119.09	122.70
24	BA	38	C	N3-C2-O2	-7.22	116.84	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	814	C	C2-N3-C4	-7.22	116.29	119.90
25	BB	1175	A	N7-C8-N9	7.22	117.41	113.80
25	BB	1355	G	N1-C2-N2	7.22	122.70	116.20
25	BB	1506	U	N3-C2-O2	-7.22	117.14	122.20
25	BB	2368	C	C3'-C2'-C1'	7.22	107.28	101.50
25	BB	2402	U	N1-C2-N3	7.22	119.23	114.90
25	BB	2845	U	C5-C6-N1	-7.22	119.09	122.70
3	A1	1514	G	C5-C6-O6	7.22	132.93	128.60
25	BB	88	G	C4-C5-C6	-7.22	114.47	118.80
25	BB	340	A	C2-N3-C4	7.22	114.21	110.60
1	AP	23	A	C6-C5-N7	7.22	137.35	132.30
3	A1	300	A	C4-C5-C6	-7.22	113.39	117.00
3	A1	1230	C	C2-N1-C1'	7.22	126.74	118.80
25	BB	706	A	O4'-C1'-N9	-7.22	102.42	108.20
25	BB	1004	U	O3'-P-O5'	-7.22	90.28	104.00
25	BB	1631	G	C5-N7-C8	-7.22	100.69	104.30
25	BB	1679	A	C2-N3-C4	7.22	114.21	110.60
25	BB	1738	G	N3-C2-N2	-7.22	114.85	119.90
25	BB	1959	G	C3'-C2'-C1'	7.22	107.28	101.50
25	BB	2331	G	C8-N9-C4	-7.22	103.51	106.40
3	A1	50	A	C5'-C4'-O4'	7.22	117.76	109.10
4	AB	34	ARG	NE-CZ-NH2	7.22	123.91	120.30
25	BB	1179	G	C5'-C4'-C3'	-7.22	104.45	116.00
25	BB	1326	U	C4-C5-C6	7.22	124.03	119.70
25	BB	2255	G	C5-C6-N1	7.22	115.11	111.50
3	A1	296	U	C6-N1-C2	-7.22	116.67	121.00
3	A1	341	C	N3-C4-N4	-7.22	112.95	118.00
3	A1	800	G	C5-C6-N1	7.22	115.11	111.50
3	A1	961	U	C2-N3-C4	-7.22	122.67	127.00
3	A1	1081	A	C5-C6-N6	7.22	129.47	123.70
3	A1	1198	G	N1-C6-O6	-7.22	115.57	119.90
8	AG	32	ASP	CB-CG-OD1	7.22	124.79	118.30
25	BB	1096	A	O4'-C4'-C3'	7.22	111.87	106.10
25	BB	1962	C	N1-C2-O2	7.22	123.23	118.90
50	B1	61	ARG	NE-CZ-NH1	7.22	123.91	120.30
3	A1	115	G	O4'-C1'-N9	-7.21	102.43	108.20
3	A1	264	C	C5'-C4'-O4'	7.21	117.76	109.10
3	A1	720	C	C6-N1-C2	-7.21	117.41	120.30
3	A1	978	A	C2-N3-C4	7.21	114.21	110.60
3	A1	1510	C	N3-C4-C5	7.21	124.79	121.90
25	BB	544	C	N1-C2-O2	7.21	123.23	118.90
25	BB	1492	G	N9-C4-C5	7.21	108.29	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1832	C	N3-C4-C5	7.21	124.79	121.90
1	AP	62	A	C4-C5-C6	-7.21	113.39	117.00
3	A1	13	U	N3-C2-O2	-7.21	117.15	122.20
25	BB	288	U	N1-C2-N3	7.21	119.23	114.90
25	BB	1506	U	C4-C5-C6	7.21	124.03	119.70
25	BB	1979	U	O4'-C1'-N1	7.21	113.97	108.20
25	BB	2092	U	C2-N3-C4	-7.21	122.67	127.00
25	BB	2277	G	C2-N3-C4	7.21	115.51	111.90
25	BB	2637	U	C5-C6-N1	-7.21	119.09	122.70
25	BB	2862	G	C5-C6-O6	7.21	132.93	128.60
3	A1	384	G	C8-N9-C4	-7.21	103.52	106.40
3	A1	620	C	C6-N1-C2	-7.21	117.42	120.30
3	A1	636	U	C1'-O4'-C4'	-7.21	104.13	109.90
25	BB	870	U	C3'-C2'-C1'	7.21	107.27	101.50
25	BB	888	C	C6-N1-C2	-7.21	117.42	120.30
25	BB	965	C	O4'-C4'-C3'	7.21	111.87	106.10
25	BB	1510	G	N7-C8-N9	7.21	116.70	113.10
25	BB	1855	U	C4-C5-C6	7.21	124.03	119.70
25	BB	2224	G	O4'-C1'-N9	7.21	113.97	108.20
25	BB	2805	C	N3-C2-O2	-7.21	116.85	121.90
25	BB	2895	G	C8-N9-C4	-7.21	103.52	106.40
3	A1	314	C	N3-C4-N4	-7.21	112.95	118.00
25	BB	4	U	N3-C2-O2	-7.21	117.15	122.20
25	BB	2722	G	N9-C4-C5	7.21	108.28	105.40
3	A1	173	U	C5-C6-N1	-7.21	119.10	122.70
3	A1	663	A	C5-N7-C8	-7.21	100.30	103.90
3	A1	836	G	C5-C6-O6	7.21	132.93	128.60
25	BB	652	U	C6-N1-C2	-7.21	116.67	121.00
25	BB	660	C	C1'-O4'-C4'	-7.21	104.13	109.90
25	BB	990	A	C4-C5-C6	-7.21	113.40	117.00
25	BB	1396	U	C6-N1-C2	-7.21	116.67	121.00
25	BB	1548	A	C5-C6-N1	7.21	121.30	117.70
3	A1	844	G	C6-C5-N7	7.21	134.72	130.40
3	A1	927	G	C3'-C2'-C1'	7.21	107.27	101.50
25	BB	537	G	C5-C6-O6	7.21	132.92	128.60
25	BB	726	G	N7-C8-N9	7.21	116.70	113.10
25	BB	951	C	N1-C2-N3	7.21	124.25	119.20
25	BB	1073	A	C4-C5-C6	-7.21	113.40	117.00
25	BB	2304	G	N3-C2-N2	-7.21	114.86	119.90
25	BB	2787	C	C4'-C3'-C2'	-7.21	95.39	102.60
3	A1	179	A	N1-C6-N6	-7.21	114.28	118.60
3	A1	691	G	C6-N1-C2	-7.21	120.78	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	824	G	N1-C6-O6	-7.21	115.58	119.90
3	A1	1050	G	C8-N9-C4	-7.21	103.52	106.40
25	BB	524	G	N1-C6-O6	-7.21	115.58	119.90
25	BB	1694	C	N3-C4-C5	7.21	124.78	121.90
25	BB	1858	A	C6-C5-N7	7.21	137.34	132.30
25	BB	2081	U	C4'-C3'-C2'	-7.21	95.39	102.60
25	BB	2157	G	C4-C5-N7	-7.21	107.92	110.80
25	BB	2661	G	O4'-C1'-N9	7.21	113.96	108.20
1	AP	61	C	C2-N3-C4	-7.20	116.30	119.90
3	A1	371	A	C6-C5-N7	7.20	137.34	132.30
3	A1	778	G	C2'-C3'-O3'	7.20	125.35	109.50
3	A1	896	C	N3-C2-O2	-7.20	116.86	121.90
3	A1	1427	C	N3-C4-N4	-7.20	112.96	118.00
12	AK	52	ARG	NE-CZ-NH1	7.20	123.90	120.30
13	AL	77	ARG	NH1-CZ-NH2	-7.20	111.48	119.40
25	BB	273	G	C5'-C4'-O4'	7.20	117.75	109.10
25	BB	489	G	C6-N1-C2	-7.20	120.78	125.10
25	BB	581	C	C6-N1-C2	-7.20	117.42	120.30
25	BB	902	C	N3-C4-C5	7.20	124.78	121.90
25	BB	1284	A	C5-C6-N1	7.20	121.30	117.70
25	BB	2775	G	C5-C6-N1	7.20	115.10	111.50
25	BB	56	A	C4-C5-C6	-7.20	113.40	117.00
25	BB	2350	C	N1-C2-O2	7.20	123.22	118.90
25	BB	2446	G	N3-C2-N2	-7.20	114.86	119.90
40	BQ	49	ASP	CB-CG-OD1	7.20	124.78	118.30
3	A1	227	G	C4-C5-N7	-7.20	107.92	110.80
3	A1	1038	C	C6-N1-C2	-7.20	117.42	120.30
3	A1	1159	U	C5'-C4'-O4'	7.20	117.74	109.10
3	A1	1443	C	C3'-C2'-C1'	7.20	107.26	101.50
24	BA	84	G	O4'-C1'-C2'	7.20	114.08	107.60
25	BB	145	C	N3-C2-O2	-7.20	116.86	121.90
25	BB	408	G	C5'-C4'-O4'	7.20	117.74	109.10
25	BB	1306	C	N1-C2-O2	7.20	123.22	118.90
25	BB	1828	G	C6-C5-N7	7.20	134.72	130.40
25	BB	2131	U	N3-C4-O4	7.20	124.44	119.40
30	BG	30	ARG	NE-CZ-NH2	-7.20	116.70	120.30
1	AP	49	C	N3-C2-O2	-7.20	116.86	121.90
3	A1	1254	A	C4'-C3'-C2'	-7.20	95.40	102.60
3	A1	1485	U	C5'-C4'-O4'	7.20	117.74	109.10
25	BB	477	A	C5-N7-C8	-7.20	100.30	103.90
25	BB	615	U	N3-C2-O2	-7.20	117.16	122.20
25	BB	1267	U	N3-C2-O2	-7.20	117.16	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2237	G	C5-C6-O6	7.20	132.92	128.60
25	BB	2315	G	N3-C4-C5	-7.20	125.00	128.60
25	BB	2461	A	N1-C6-N6	-7.20	114.28	118.60
25	BB	2496	C	C1'-O4'-C4'	-7.20	104.14	109.90
25	BB	2751	G	C8-N9-C4	-7.20	103.52	106.40
3	A1	492	C	N3-C4-N4	-7.20	112.96	118.00
3	A1	587	G	C3'-C2'-C1'	7.20	107.26	101.50
3	A1	604	G	C5-N7-C8	-7.20	100.70	104.30
3	A1	836	G	N1-C2-N2	-7.20	109.72	116.20
3	A1	997	U	C5-C4-O4	-7.20	121.58	125.90
25	BB	1174	U	N3-C4-O4	-7.20	114.36	119.40
25	BB	262	A	C5-C6-N6	7.20	129.46	123.70
25	BB	889	C	C5-C6-N1	-7.20	117.40	121.00
25	BB	1106	G	C8-N9-C4	-7.20	103.52	106.40
25	BB	1419	A	C5-C6-N1	7.20	121.30	117.70
25	BB	2291	U	C5'-C4'-C3'	-7.20	104.49	116.00
36	BM	56	GLU	OE1-CD-OE2	-7.20	114.67	123.30
48	BY	83	ARG	NE-CZ-NH2	7.20	123.90	120.30
3	A1	374	A	C3'-C2'-C1'	7.19	107.25	101.50
3	A1	947	G	C5-C6-N1	7.19	115.10	111.50
3	A1	1467	C	N1-C2-O2	7.19	123.22	118.90
7	AF	78	ARG	NH1-CZ-NH2	-7.19	111.49	119.40
24	BA	23	G	N7-C8-N9	7.19	116.70	113.10
24	BA	33	G	N1-C6-O6	-7.19	115.58	119.90
24	BA	52	A	C2-N3-C4	7.19	114.20	110.60
25	BB	126	A	C1'-O4'-C4'	-7.19	104.15	109.90
25	BB	230	G	C6-C5-N7	7.19	134.72	130.40
25	BB	1584	U	N1-C2-O2	7.19	127.83	122.80
25	BB	1981	A	C6-C5-N7	7.19	137.34	132.30
38	BO	6	ARG	NE-CZ-NH2	-7.19	116.70	120.30
3	A1	425	G	C5-N7-C8	-7.19	100.70	104.30
3	A1	816	A	C6-C5-N7	7.19	137.33	132.30
3	A1	1229	A	N1-C2-N3	-7.19	125.70	129.30
9	AH	87	ARG	NE-CZ-NH2	7.19	123.90	120.30
24	BA	35	C	C4'-C3'-C2'	-7.19	95.41	102.60
24	BA	91	C	C5-C4-N4	7.19	125.23	120.20
25	BB	568	U	C5-C6-N1	-7.19	119.11	122.70
25	BB	663	G	N1-C6-O6	-7.19	115.58	119.90
25	BB	800	A	O4'-C1'-N9	7.19	113.95	108.20
25	BB	1013	C	N3-C2-O2	-7.19	116.87	121.90
25	BB	1091	G	N1-C2-N3	7.19	128.21	123.90
25	BB	1210	G	C2-N3-C4	7.19	115.50	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1361	G	C3'-C2'-C1'	-7.19	95.75	101.50
25	BB	1649	G	N3-C2-N2	7.19	124.93	119.90
25	BB	1857	G	N3-C2-N2	-7.19	114.87	119.90
25	BB	2327	A	C3'-C2'-C1'	7.19	107.25	101.50
25	BB	2529	G	O3'-P-O5'	7.19	117.66	104.00
25	BB	2741	A	N1-C6-N6	-7.19	114.28	118.60
3	A1	109	A	C8-N9-C4	-7.19	102.92	105.80
3	A1	1371	G	N3-C2-N2	-7.19	114.87	119.90
25	BB	1633	G	C5-C6-N1	7.19	115.09	111.50
25	BB	2466	C	C5'-C4'-O4'	7.19	117.73	109.10
3	A1	761	G	N1-C6-O6	-7.19	115.59	119.90
3	A1	821	G	C5-C6-N1	7.19	115.09	111.50
24	BA	83	G	N7-C8-N9	7.19	116.69	113.10
25	BB	72	U	N3-C2-O2	-7.19	117.17	122.20
25	BB	91	A	C6-C5-N7	7.19	137.33	132.30
25	BB	774	G	C8-N9-C4	-7.19	103.53	106.40
25	BB	1138	G	N1-C6-O6	-7.19	115.59	119.90
25	BB	1329	U	C5-C6-N1	-7.19	119.11	122.70
25	BB	1524	G	N1-C2-N3	7.19	128.21	123.90
25	BB	2044	C	N3-C2-O2	-7.19	116.87	121.90
25	BB	2474	U	C3'-C2'-C1'	7.19	107.25	101.50
25	BB	2664	G	C5-C6-N1	7.19	115.09	111.50
25	BB	2883	A	C5-C6-N6	7.19	129.45	123.70
3	A1	819	A	C6-C5-N7	7.19	137.33	132.30
3	A1	988	G	C4'-C3'-C2'	-7.19	95.41	102.60
24	BA	33	G	C5-C6-N1	7.19	115.09	111.50
25	BB	154	U	O4'-C4'-C3'	7.19	111.85	106.10
25	BB	606	U	N1-C2-N3	7.19	119.21	114.90
25	BB	648	G	N9-C4-C5	7.19	108.27	105.40
25	BB	1691	C	O4'-C1'-N1	7.19	113.95	108.20
25	BB	2075	U	C5-C6-N1	-7.19	119.11	122.70
3	A1	678	U	N3-C2-O2	-7.18	117.17	122.20
3	A1	1238	A	C2-N3-C4	7.18	114.19	110.60
3	A1	1404	C	O4'-C1'-N1	7.18	113.95	108.20
25	BB	626	A	C4-C5-C6	-7.18	113.41	117.00
25	BB	1031	G	C5-C6-N1	7.18	115.09	111.50
25	BB	1252	G	N3-C4-C5	-7.18	125.01	128.60
25	BB	1448	G	N1-C6-O6	-7.18	115.59	119.90
25	BB	2134	A	N1-C2-N3	-7.18	125.71	129.30
25	BB	2156	G	N1-C6-O6	-7.18	115.59	119.90
1	AA	2	C	C3'-C2'-C1'	7.18	107.25	101.50
3	A1	267	C	N3-C4-N4	-7.18	112.97	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	453	G	C5-N7-C8	-7.18	100.71	104.30
3	A1	844	G	C8-N9-C4	-7.18	103.53	106.40
24	BA	36	C	N3-C4-N4	-7.18	112.97	118.00
25	BB	71	A	C6-C5-N7	7.18	137.33	132.30
25	BB	264	C	C3'-C2'-C1'	7.18	107.25	101.50
25	BB	332	A	O4'-C1'-N9	-7.18	102.45	108.20
25	BB	549	G	C5-C6-O6	7.18	132.91	128.60
25	BB	724	U	C3'-C2'-C1'	7.18	107.25	101.50
25	BB	949	G	C4'-C3'-C2'	-7.18	95.42	102.60
25	BB	1581	G	C5-C6-N1	7.18	115.09	111.50
25	BB	2080	A	C5-C6-N1	7.18	121.29	117.70
25	BB	2835	A	C4'-C3'-C2'	-7.18	95.42	102.60
3	A1	707	U	C5-C6-N1	-7.18	119.11	122.70
3	A1	947	G	C5-N7-C8	-7.18	100.71	104.30
3	A1	1006	G	N1-C6-O6	-7.18	115.59	119.90
25	BB	96	C	C4'-C3'-C2'	-7.18	95.42	102.60
25	BB	235	U	N3-C2-O2	-7.18	117.17	122.20
25	BB	757	G	O4'-C1'-N9	7.18	113.94	108.20
25	BB	1099	G	C8-N9-C4	-7.18	103.53	106.40
25	BB	1617	C	C5-C6-N1	-7.18	117.41	121.00
25	BB	230	G	C2-N3-C4	7.18	115.49	111.90
25	BB	442	G	N3-C2-N2	-7.18	114.88	119.90
25	BB	1336	A	C5-N7-C8	-7.18	100.31	103.90
25	BB	1509	A	O4'-C1'-N9	-7.18	102.46	108.20
25	BB	1672	A	C8-N9-C4	-7.18	102.93	105.80
3	A1	309	A	C5-C6-N6	7.18	129.44	123.70
3	A1	1037	C	C2-N3-C4	-7.18	116.31	119.90
25	BB	1675	C	C5'-C4'-O4'	-7.18	100.49	109.10
25	BB	2077	A	C2-N3-C4	7.18	114.19	110.60
25	BB	2158	A	N9-C4-C5	7.18	108.67	105.80
1	AE	2	C	N1-C2-N3	7.18	124.22	119.20
3	A1	23	C	C5-C6-N1	-7.18	117.41	121.00
3	A1	98	A	C5-C6-N1	7.18	121.29	117.70
3	A1	150	U	C5-C6-N1	-7.18	119.11	122.70
25	BB	645	C	C1'-O4'-C4'	-7.18	104.16	109.90
25	BB	706	A	O4'-C4'-C3'	7.18	111.84	106.10
25	BB	1250	G	N1-C6-O6	-7.18	115.59	119.90
25	BB	2120	G	N3-C2-N2	-7.18	114.88	119.90
1	AA	58	A	C8-N9-C4	-7.17	102.93	105.80
3	A1	45	G	C4-C5-N7	-7.17	107.93	110.80
3	A1	54	C	N3-C4-N4	7.17	123.02	118.00
3	A1	637	C	N1-C2-N3	7.17	124.22	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1286	A	C4-C5-C6	-7.17	113.41	117.00
25	BB	1863	G	N7-C8-N9	7.17	116.69	113.10
25	BB	2319	G	C3'-C2'-C1'	7.17	107.24	101.50
25	BB	2417	C	N3-C2-O2	-7.17	116.88	121.90
25	BB	2649	C	N1-C2-O2	7.17	123.20	118.90
25	BB	2736	A	C2-N3-C4	7.17	114.19	110.60
34	BK	13	ARG	NE-CZ-NH1	7.17	123.89	120.30
1	AE	53	G	C4'-C3'-C2'	-7.17	95.43	102.60
25	BB	183	C	C6-N1-C2	-7.17	117.43	120.30
25	BB	1471	G	C4-C5-N7	7.17	113.67	110.80
25	BB	1742	U	C5-C6-N1	-7.17	119.11	122.70
1	AP	6	U	C5-C6-N1	-7.17	119.11	122.70
1	AP	67	A	C4-C5-C6	-7.17	113.42	117.00
25	BB	614	A	C4-C5-C6	-7.17	113.41	117.00
25	BB	1162	G	C1'-O4'-C4'	-7.17	104.16	109.90
25	BB	1399	C	N3-C4-C5	7.17	124.77	121.90
25	BB	1483	G	C2-N3-C4	7.17	115.49	111.90
25	BB	2277	G	N3-C4-C5	-7.17	125.02	128.60
25	BB	2850	A	C6-C5-N7	7.17	137.32	132.30
25	BB	1971	U	N3-C4-C5	7.17	118.90	114.60
3	A1	280	C	N1-C2-O2	7.17	123.20	118.90
3	A1	290	C	N3-C2-O2	-7.17	116.88	121.90
3	A1	410	G	N1-C2-N3	7.17	128.20	123.90
3	A1	1239	A	N1-C2-N3	-7.17	125.72	129.30
22	AW	121	ARG	NH1-CZ-NH2	-7.17	111.52	119.40
25	BB	18	U	N1-C2-O2	7.17	127.82	122.80
25	BB	1021	A	N9-C4-C5	7.17	108.67	105.80
25	BB	1071	G	C5-C6-N1	7.17	115.08	111.50
25	BB	1088	A	N3-C4-C5	-7.17	121.78	126.80
25	BB	1121	C	N1-C2-O2	7.17	123.20	118.90
25	BB	1595	C	C5-C6-N1	-7.17	117.42	121.00
3	A1	431	A	N9-C4-C5	7.17	108.67	105.80
3	A1	928	G	C5'-C4'-O4'	7.17	117.70	109.10
3	A1	1260	G	N1-C2-N2	-7.17	109.75	116.20
3	A1	1393	U	C1'-O4'-C4'	-7.17	104.17	109.90
25	BB	205	G	N1-C6-O6	-7.17	115.60	119.90
25	BB	414	C	C5-C4-N4	7.17	125.22	120.20
25	BB	918	A	C2-N3-C4	7.17	114.18	110.60
25	BB	1695	G	C5-C6-N1	7.17	115.08	111.50
25	BB	1989	G	O4'-C1'-N9	7.17	113.93	108.20
25	BB	2531	A	C5-N7-C8	-7.17	100.32	103.90
25	BB	2859	G	C6-N1-C2	-7.17	120.80	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1459	G	C4'-C3'-C2'	-7.17	95.44	102.60
25	BB	213	A	C5-C6-N1	7.17	121.28	117.70
25	BB	217	A	C8-N9-C4	-7.17	102.93	105.80
25	BB	2260	C	N1-C2-O2	7.17	123.20	118.90
1	AE	17	U	N3-C2-O2	-7.16	117.19	122.20
3	A1	1062	U	C2-N3-C4	-7.16	122.70	127.00
3	A1	1220	G	C5-C6-O6	7.16	132.90	128.60
24	BA	71	C	N1-C2-N3	7.16	124.21	119.20
25	BB	97	C	N3-C4-C5	7.16	124.77	121.90
25	BB	1057	A	C6-C5-N7	7.16	137.31	132.30
25	BB	1070	A	O5'-P-OP1	-7.16	99.25	105.70
25	BB	2621	G	N9-C4-C5	7.16	108.27	105.40
3	A1	337	G	O4'-C4'-C3'	7.16	111.83	106.10
3	A1	1023	U	N1-C2-O2	7.16	127.81	122.80
25	BB	939	G	N3-C4-C5	-7.16	125.02	128.60
25	BB	1911	U	C4-C5-C6	7.16	124.00	119.70
25	BB	2637	U	C5'-C4'-O4'	7.16	117.69	109.10
1	AA	46	G	N3-C4-N9	7.16	130.30	126.00
1	AP	43	G	N1-C6-O6	-7.16	115.60	119.90
3	A1	106	C	C5-C6-N1	-7.16	117.42	121.00
3	A1	355	C	C5-C4-N4	-7.16	115.19	120.20
3	A1	1115	U	O4'-C1'-N1	7.16	113.93	108.20
3	A1	1222	G	C5-C6-O6	7.16	132.90	128.60
3	A1	1345	U	C5-C6-N1	-7.16	119.12	122.70
25	BB	1037	G	C2-N3-C4	7.16	115.48	111.90
25	BB	2478	A	C8-N9-C4	-7.16	102.94	105.80
25	BB	2537	U	C5-C4-O4	7.16	130.20	125.90
25	BB	2613	U	C6-N1-C2	-7.16	116.70	121.00
3	A1	36	C	N3-C4-C5	7.16	124.76	121.90
3	A1	573	A	C5-C6-N1	7.16	121.28	117.70
3	A1	1130	A	N1-C6-N6	-7.16	114.31	118.60
24	BA	81	G	C5-C6-N1	7.16	115.08	111.50
25	BB	34	U	C5-C6-N1	-7.16	119.12	122.70
25	BB	198	C	N3-C4-C5	7.16	124.76	121.90
25	BB	207	A	N1-C2-N3	-7.16	125.72	129.30
25	BB	821	A	C5-C6-N1	7.16	121.28	117.70
25	BB	1068	G	O3'-P-O5'	7.16	117.60	104.00
25	BB	2481	G	O4'-C4'-C3'	7.16	111.83	106.10
25	BB	2533	U	N1-C2-N3	7.16	119.19	114.90
25	BB	2776	A	C4-C5-C6	-7.16	113.42	117.00
3	A1	157	U	N3-C4-O4	7.16	124.41	119.40
3	A1	410	G	C3'-C2'-C1'	7.16	107.22	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1008	U	C1'-O4'-C4'	-7.16	104.18	109.90
25	BB	736	C	N3-C4-C5	7.16	124.76	121.90
25	BB	1074	G	N3-C2-N2	-7.16	114.89	119.90
3	A1	1214	C	C2-N3-C4	-7.15	116.32	119.90
25	BB	2124	G	C5-C6-N1	7.15	115.08	111.50
25	BB	2193	G	N3-C4-C5	-7.15	125.02	128.60
25	BB	2715	C	C4'-C3'-C2'	-7.15	95.45	102.60
1	AP	52	U	C4'-C3'-C2'	-7.15	95.45	102.60
1	AE	76	A	O4'-C1'-N9	7.15	113.92	108.20
3	A1	272	C	N3-C4-C5	7.15	124.76	121.90
3	A1	436	C	N3-C4-N4	-7.15	112.99	118.00
3	A1	1150	A	C5-C6-N1	7.15	121.28	117.70
24	BA	92	C	N3-C4-C5	7.15	124.76	121.90
25	BB	526	A	O4'-C1'-N9	7.15	113.92	108.20
25	BB	990	A	C5-C6-N1	7.15	121.28	117.70
25	BB	1194	A	C6-C5-N7	7.15	137.31	132.30
25	BB	1373	A	C5-C6-N1	7.15	121.28	117.70
25	BB	1523	U	N3-C2-O2	-7.15	117.19	122.20
25	BB	1841	U	C5-C6-N1	-7.15	119.12	122.70
25	BB	2098	U	C4-C5-C6	7.15	123.99	119.70
25	BB	2251	G	C4-C5-N7	7.15	113.66	110.80
25	BB	2544	G	O5'-P-OP2	-7.15	99.26	105.70
25	BB	110	G	N1-C6-O6	-7.15	115.61	119.90
25	BB	515	A	C6-C5-N7	7.15	137.31	132.30
25	BB	659	G	N7-C8-N9	7.15	116.67	113.10
25	BB	951	C	C6-N1-C2	-7.15	117.44	120.30
25	BB	1038	G	C2'-C3'-O3'	7.15	125.23	109.50
25	BB	1605	C	N3-C2-O2	-7.15	116.89	121.90
25	BB	1665	A	C2-N3-C4	7.15	114.17	110.60
25	BB	2661	G	N9-C4-C5	7.15	108.26	105.40
3	A1	202	G	N3-C2-N2	-7.15	114.89	119.90
3	A1	531	U	C6-N1-C2	-7.15	116.71	121.00
3	A1	706	A	C5-N7-C8	-7.15	100.33	103.90
25	BB	33	C	N1-C2-N3	7.15	124.20	119.20
25	BB	1332	G	C8-N9-C4	-7.15	103.54	106.40
25	BB	1537	G	N3-C4-C5	-7.15	125.03	128.60
3	A1	1505	G	O4'-C1'-N9	7.15	113.92	108.20
25	BB	73	A	C4-C5-C6	-7.15	113.43	117.00
25	BB	822	G	N3-C4-C5	-7.15	125.03	128.60
25	BB	2462	C	N3-C2-O2	-7.15	116.90	121.90
1	AP	6	U	O4'-C1'-N1	7.15	113.92	108.20
3	A1	399	G	O4'-C1'-N9	7.15	113.92	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AO	64	ARG	NE-CZ-NH2	7.15	123.87	120.30
25	BB	2791	G	C5-C6-N1	7.15	115.07	111.50
3	A1	744	C	N1-C1'-C2'	7.14	123.29	114.00
3	A1	1109	C	C1'-O4'-C4'	-7.14	104.18	109.90
24	BA	86	G	C4-C5-N7	-7.14	107.94	110.80
25	BB	148	U	C2-N3-C4	-7.14	122.71	127.00
25	BB	337	C	N3-C4-C5	7.14	124.76	121.90
25	BB	740	C	C2-N3-C4	-7.14	116.33	119.90
25	BB	762	U	N3-C2-O2	-7.14	117.20	122.20
25	BB	1032	A	C5-C6-N6	7.14	129.42	123.70
3	A1	806	C	N3-C4-C5	7.14	124.76	121.90
3	A1	1414	U	N1-C2-N3	7.14	119.19	114.90
12	AK	31	TYR	CB-CG-CD2	-7.14	116.72	121.00
25	BB	1878	G	N1-C6-O6	-7.14	115.61	119.90
3	A1	502	A	C2'-C3'-O3'	7.14	125.21	109.50
3	A1	517	G	C4-C5-N7	7.14	113.66	110.80
25	BB	1981	A	C5-C6-N6	7.14	129.41	123.70
25	BB	2353	G	N1-C6-O6	-7.14	115.62	119.90
3	A1	1312	G	C5'-C4'-O4'	7.14	117.67	109.10
25	BB	1834	U	C5-C6-N1	-7.14	119.13	122.70
3	A1	169	C	N3-C4-C5	7.14	124.75	121.90
3	A1	177	G	N1-C6-O6	-7.14	115.62	119.90
24	BA	13	G	O4'-C1'-N9	-7.14	102.49	108.20
24	BA	16	G	N3-C2-N2	-7.14	114.90	119.90
3	A1	599	C	O4'-C1'-N1	7.14	113.91	108.20
3	A1	707	U	N3-C2-O2	-7.14	117.20	122.20
3	A1	1099	G	N3-C2-N2	-7.14	114.90	119.90
3	A1	1133	G	C6-N1-C2	-7.14	120.82	125.10
25	BB	984	A	C5-C6-N1	7.14	121.27	117.70
25	BB	1808	A	C4-C5-C6	-7.14	113.43	117.00
25	BB	2232	C	O4'-C1'-N1	7.14	113.91	108.20
25	BB	2339	C	N1-C2-O2	7.14	123.18	118.90
25	BB	2453	A	O5'-P-OP1	-7.14	99.28	105.70
1	AP	19	G	C5-C6-O6	7.13	132.88	128.60
1	AE	57	G	O4'-C4'-C3'	7.13	111.81	106.10
3	A1	243	A	C5-C6-N1	7.13	121.27	117.70
25	BB	199	A	N1-C6-N6	-7.13	114.32	118.60
25	BB	282	A	C5-C6-N6	7.13	129.41	123.70
25	BB	717	C	C4-C5-C6	-7.13	113.83	117.40
25	BB	1260	A	C5'-C4'-O4'	7.13	117.66	109.10
32	BI	98	TYR	CB-CG-CD2	-7.13	116.72	121.00
1	AA	69	U	C1'-O4'-C4'	-7.13	104.19	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	31	A	N9-C1'-C2'	7.13	123.27	114.00
3	A1	381	C	O4'-C1'-C2'	-7.13	98.67	105.80
3	A1	579	A	O4'-C1'-N9	7.13	113.91	108.20
3	A1	776	G	O4'-C1'-N9	7.13	113.91	108.20
12	AK	19	GLU	OE1-CD-OE2	-7.13	114.74	123.30
25	BB	24	G	C8-N9-C4	-7.13	103.55	106.40
25	BB	922	C	N1-C2-O2	7.13	123.18	118.90
25	BB	1588	G	P-O3'-C3'	7.13	128.26	119.70
25	BB	1947	C	C5'-C4'-O4'	-7.13	100.54	109.10
25	BB	2107	G	C3'-C2'-C1'	7.13	107.20	101.50
25	BB	2118	U	N3-C2-O2	-7.13	117.21	122.20
25	BB	2267	A	C4-C5-C6	-7.13	113.43	117.00
25	BB	2888	C	O4'-C1'-N1	7.13	113.91	108.20
30	BG	96	ARG	NH1-CZ-NH2	-7.13	111.56	119.40
3	A1	235	C	N3-C4-N4	-7.13	113.01	118.00
3	A1	1424	U	C2-N3-C4	-7.13	122.72	127.00
25	BB	251	A	C4-C5-C6	-7.13	113.44	117.00
25	BB	2667	C	C2-N3-C4	-7.13	116.33	119.90
3	A1	979	C	N3-C4-N4	-7.13	113.01	118.00
3	A1	1060	U	C3'-C2'-C1'	7.13	107.20	101.50
3	A1	1310	G	N3-C2-N2	-7.13	114.91	119.90
25	BB	338	G	C5-C6-N1	7.13	115.06	111.50
25	BB	1075	C	N3-C2-O2	-7.13	116.91	121.90
25	BB	1140	C	N3-C2-O2	-7.13	116.91	121.90
25	BB	1215	G	N3-C4-C5	-7.13	125.04	128.60
25	BB	1484	U	O4'-C1'-N1	7.13	113.90	108.20
25	BB	2001	C	C4'-C3'-C2'	-7.13	95.47	102.60
3	A1	140	U	N3-C2-O2	-7.13	117.21	122.20
3	A1	467	U	C2-N3-C4	-7.13	122.72	127.00
3	A1	965	U	O4'-C1'-N1	-7.13	102.50	108.20
3	A1	1216	A	C5-C6-N1	7.13	121.26	117.70
24	BA	103	U	N1-C2-N3	7.13	119.18	114.90
25	BB	1109	C	O4'-C1'-N1	7.13	113.90	108.20
25	BB	1227	G	N1-C6-O6	-7.13	115.62	119.90
25	BB	1914	C	N3-C2-O2	-7.13	116.91	121.90
3	A1	226	G	C4-C5-N7	-7.12	107.95	110.80
3	A1	1312	G	C5-C6-N1	7.12	115.06	111.50
25	BB	157	C	O4'-C1'-N1	7.12	113.90	108.20
25	BB	803	U	C2-N3-C4	-7.12	122.72	127.00
25	BB	2263	C	O4'-C1'-N1	7.12	113.90	108.20
25	BB	2710	C	C2-N3-C4	-7.12	116.34	119.90
3	A1	302	G	C6-C5-N7	7.12	134.67	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	479	U	C5-C4-O4	-7.12	121.63	125.90
3	A1	486	U	C6-N1-C2	-7.12	116.73	121.00
25	BB	608	A	C6-C5-N7	7.12	137.29	132.30
25	BB	808	G	N1-C6-O6	-7.12	115.63	119.90
25	BB	1638	C	C5-C6-N1	-7.12	117.44	121.00
25	BB	2018	G	N1-C6-O6	-7.12	115.63	119.90
25	BB	2715	C	C5'-C4'-O4'	7.12	117.65	109.10
3	A1	124	C	C5-C6-N1	-7.12	117.44	121.00
3	A1	190	A	C4'-C3'-C2'	-7.12	95.48	102.60
3	A1	666	G	N1-C6-O6	-7.12	115.63	119.90
3	A1	1150	A	C6-C5-N7	7.12	137.28	132.30
3	A1	1153	G	N3-C4-N9	7.12	130.27	126.00
25	BB	337	C	C3'-C2'-C1'	7.12	107.20	101.50
25	BB	453	A	C4-C5-C6	-7.12	113.44	117.00
25	BB	517	C	N3-C2-O2	-7.12	116.92	121.90
25	BB	2636	C	N1-C2-N3	7.12	124.18	119.20
3	A1	1036	A	C4-C5-C6	-7.12	113.44	117.00
25	BB	804	A	C5-C6-N6	7.12	129.40	123.70
25	BB	1451	C	N3-C4-C5	7.12	124.75	121.90
25	BB	1782	U	C6-N1-C2	-7.12	116.73	121.00
1	AE	16	U	O4'-C1'-N1	7.12	113.89	108.20
3	A1	204	G	O4'-C1'-C2'	7.12	114.01	107.60
3	A1	1110	A	C6-C5-N7	7.12	137.28	132.30
7	AF	28	ARG	NE-CZ-NH2	7.12	123.86	120.30
19	AT	24	ARG	NE-CZ-NH1	7.12	123.86	120.30
24	BA	114	C	C1'-O4'-C4'	-7.12	104.21	109.90
25	BB	1341	G	O4'-C1'-N9	7.12	113.89	108.20
25	BB	2469	A	C6-C5-N7	7.12	137.28	132.30
3	A1	89	U	C3'-C2'-C1'	7.12	107.19	101.50
3	A1	522	C	N1-C2-O2	7.12	123.17	118.90
3	A1	865	A	C5-C6-N1	7.12	121.26	117.70
3	A1	887	G	O4'-C1'-N9	7.12	113.89	108.20
3	A1	1501	C	N3-C4-C5	7.12	124.75	121.90
25	BB	633	A	C5-C6-N6	7.12	129.39	123.70
25	BB	2090	A	C2-N3-C4	7.12	114.16	110.60
25	BB	2473	U	O4'-C1'-N1	7.12	113.89	108.20
25	BB	2684	U	C5-C4-O4	-7.12	121.63	125.90
25	BB	2824	C	O4'-C1'-N1	7.12	113.89	108.20
1	AA	2	C	C4-C5-C6	7.12	120.96	117.40
25	BB	884	U	O4'-C1'-N1	7.12	113.89	108.20
25	BB	2589	A	N1-C6-N6	-7.12	114.33	118.60
25	BB	2807	U	C4-C5-C6	7.12	123.97	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	226	G	C2'-C3'-O3'	7.11	125.15	109.50
25	BB	1052	C	C5'-C4'-O4'	7.11	117.64	109.10
25	BB	1277	G	N1-C6-O6	-7.11	115.63	119.90
25	BB	1711	A	N9-C4-C5	7.11	108.65	105.80
25	BB	2177	C	N1-C2-O2	7.11	123.17	118.90
25	BB	2197	U	O4'-C1'-C2'	-7.11	98.69	105.80
25	BB	2597	G	C5'-C4'-O4'	7.11	117.64	109.10
24	BA	41	G	C2-N3-C4	7.11	115.46	111.90
25	BB	234	U	C4'-C3'-C2'	-7.11	95.49	102.60
25	BB	650	C	C5-C4-N4	7.11	125.18	120.20
25	BB	878	A	C5-C6-N6	7.11	129.39	123.70
3	A1	765	G	C6-C5-N7	7.11	134.67	130.40
25	BB	618	G	C8-N9-C4	-7.11	103.56	106.40
25	BB	2872	A	C6-N1-C2	-7.11	114.33	118.60
25	BB	810	U	N3-C2-O2	-7.11	117.22	122.20
25	BB	954	G	C1'-O4'-C4'	-7.11	104.21	109.90
25	BB	1776	G	N3-C2-N2	-7.11	114.92	119.90
1	AE	25	C	O4'-C1'-N1	7.11	113.89	108.20
3	A1	1026	G	C2-N3-C4	7.11	115.45	111.90
3	A1	1080	A	O4'-C4'-C3'	7.11	111.79	106.10
3	A1	1114	C	C1'-O4'-C4'	-7.11	104.22	109.90
25	BB	324	A	C6-N1-C2	-7.11	114.33	118.60
25	BB	378	C	C1'-O4'-C4'	-7.11	104.22	109.90
25	BB	1078	U	N3-C2-O2	-7.11	117.22	122.20
25	BB	1357	C	N3-C2-O2	-7.11	116.92	121.90
25	BB	1489	C	N3-C2-O2	-7.11	116.92	121.90
25	BB	1957	C	C6-N1-C2	-7.11	117.46	120.30
25	BB	2135	A	N7-C8-N9	-7.11	110.25	113.80
25	BB	2646	C	O4'-C1'-N1	7.11	113.89	108.20
1	AA	3	G	O4'-C1'-C2'	-7.11	98.69	105.80
2	AM	17	U	N3-C4-C5	7.11	118.86	114.60
3	A1	252	U	OP1-P-OP2	-7.11	108.94	119.60
3	A1	422	C	N1-C2-O2	7.11	123.16	118.90
3	A1	596	A	C4-C5-C6	-7.11	113.45	117.00
25	BB	384	A	C8-N9-C4	-7.11	102.96	105.80
25	BB	1687	G	C5-N7-C8	-7.11	100.75	104.30
25	BB	2542	A	C4-C5-C6	-7.11	113.45	117.00
3	A1	539	A	C6-C5-N7	7.10	137.27	132.30
25	BB	974	G	C5-C6-N1	7.10	115.05	111.50
25	BB	2591	C	C5-C6-N1	-7.10	117.45	121.00
3	A1	553	A	C4'-C3'-C2'	-7.10	95.50	102.60
25	BB	20	C	N3-C2-O2	-7.10	116.93	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	286	U	C5-C6-N1	-7.10	119.15	122.70
25	BB	716	A	C5-C6-N1	7.10	121.25	117.70
25	BB	1543	G	O4'-C1'-N9	7.10	113.88	108.20
25	BB	1954	G	C1'-O4'-C4'	-7.10	104.22	109.90
25	BB	2123	G	C1'-O4'-C4'	-7.10	104.22	109.90
25	BB	2621	G	N3-C4-C5	-7.10	125.05	128.60
25	BB	984	A	O4'-C1'-N9	7.10	113.88	108.20
25	BB	1904	G	C8-N9-C4	-7.10	103.56	106.40
1	AA	56	C	C5'-C4'-O4'	7.10	117.62	109.10
1	AP	25	C	P-O3'-C3'	7.10	128.22	119.70
3	A1	166	U	C5-C6-N1	-7.10	119.15	122.70
3	A1	948	C	C4'-C3'-C2'	-7.10	95.50	102.60
21	AV	57	GLU	OE1-CD-OE2	-7.10	114.78	123.30
25	BB	951	C	C5-C4-N4	-7.10	115.23	120.20
25	BB	953	G	C4-C5-N7	-7.10	107.96	110.80
25	BB	1100	C	C4-C5-C6	7.10	120.95	117.40
25	BB	1432	G	N3-C4-C5	-7.10	125.05	128.60
25	BB	2400	G	C2-N3-C4	7.10	115.45	111.90
25	BB	2536	G	N1-C6-O6	-7.10	115.64	119.90
52	B3	34	ARG	NE-CZ-NH2	-7.10	116.75	120.30
1	AE	53	G	C5-C6-N1	7.10	115.05	111.50
3	A1	40	C	O4'-C1'-N1	7.10	113.88	108.20
3	A1	55	A	N1-C6-N6	-7.10	114.34	118.60
3	A1	997	U	C5-C6-N1	-7.10	119.15	122.70
3	A1	1253	G	N7-C8-N9	7.10	116.65	113.10
25	BB	711	G	C6-N1-C2	-7.10	120.84	125.10
25	BB	1834	U	C1'-O4'-C4'	-7.10	104.22	109.90
25	BB	1959	G	C6-N1-C2	-7.10	120.84	125.10
25	BB	2282	G	N3-C2-N2	-7.10	114.93	119.90
25	BB	2457	U	N1-C2-N3	7.10	119.16	114.90
1	AE	27	C	N3-C2-O2	-7.10	116.93	121.90
25	BB	448	U	C5-C4-O4	7.10	130.16	125.90
25	BB	510	C	C2-N3-C4	-7.10	116.35	119.90
25	BB	2117	A	C6-C5-N7	7.10	137.27	132.30
25	BB	2252	G	N3-C4-C5	-7.10	125.05	128.60
25	BB	2262	U	C4-C5-C6	7.10	123.96	119.70
25	BB	2325	G	C5-C6-N1	7.10	115.05	111.50
25	BB	2350	C	N3-C4-N4	-7.10	113.03	118.00
1	AE	30	G	N1-C2-N3	7.09	128.16	123.90
3	A1	672	U	N1-C1'-C2'	-7.09	104.20	112.00
4	AB	152	ASP	CB-CG-OD1	7.09	124.69	118.30
25	BB	261	G	N3-C4-C5	-7.09	125.05	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	438	G	N1-C2-N3	7.09	128.16	123.90
25	BB	1780	A	C4-C5-C6	-7.09	113.45	117.00
25	BB	2028	U	C5-C6-N1	-7.09	119.15	122.70
25	BB	2434	A	C5-C6-N6	7.09	129.38	123.70
25	BB	2468	A	C4-C5-C6	-7.09	113.45	117.00
25	BB	2471	A	N7-C8-N9	-7.09	110.25	113.80
30	BG	4	ARG	NE-CZ-NH1	7.09	123.85	120.30
3	A1	1466	C	C3'-C2'-C1'	7.09	107.17	101.50
25	BB	170	U	C5-C6-N1	-7.09	119.15	122.70
25	BB	334	C	N3-C4-C5	7.09	124.74	121.90
25	BB	453	A	C5-C6-N1	7.09	121.25	117.70
25	BB	505	A	C5-C6-N1	7.09	121.25	117.70
25	BB	2201	G	C4'-C3'-C2'	-7.09	95.51	102.60
25	BB	2484	G	N3-C4-N9	7.09	130.26	126.00
25	BB	2709	G	C6-N1-C2	-7.09	120.84	125.10
1	AP	31	A	C5-C6-N1	7.09	121.25	117.70
3	A1	31	G	C5'-C4'-O4'	7.09	117.61	109.10
3	A1	638	U	N1-C2-N3	7.09	119.16	114.90
3	A1	1320	C	C5-C6-N1	-7.09	117.45	121.00
9	AH	57	ARG	NH1-CZ-NH2	-7.09	111.60	119.40
25	BB	467	G	C5'-C4'-O4'	7.09	117.61	109.10
25	BB	575	A	C5-C6-N6	7.09	129.37	123.70
25	BB	1458	U	P-O3'-C3'	7.09	128.21	119.70
25	BB	2571	U	N1-C2-N3	7.09	119.16	114.90
38	BO	81	ARG	NH1-CZ-NH2	-7.09	111.60	119.40
1	AP	75	C	N3-C4-C5	7.09	124.74	121.90
3	A1	364	A	C3'-C2'-C1'	7.09	107.17	101.50
3	A1	495	A	C3'-C2'-C1'	-7.09	95.83	101.50
3	A1	1373	G	N9-C4-C5	7.09	108.24	105.40
24	BA	33	G	O5'-P-OP1	-7.09	99.32	105.70
25	BB	165	A	N9-C4-C5	7.09	108.64	105.80
25	BB	432	A	N1-C2-N3	-7.09	125.75	129.30
25	BB	589	U	N3-C2-O2	-7.09	117.24	122.20
25	BB	626	A	C6-N1-C2	-7.09	114.35	118.60
25	BB	1766	G	C6-N1-C2	-7.09	120.85	125.10
25	BB	2389	G	N9-C4-C5	7.09	108.24	105.40
25	BB	2843	G	O4'-C1'-N9	7.09	113.87	108.20
25	BB	1348	C	C4'-C3'-C2'	-7.09	95.51	102.60
25	BB	1383	A	C1'-O4'-C4'	-7.09	104.23	109.90
25	BB	2174	C	C1'-O4'-C4'	7.09	115.57	109.90
3	A1	15	G	C6-N1-C2	-7.09	120.85	125.10
3	A1	499	A	C5-C6-N6	7.09	129.37	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1013	G	C5'-C4'-O4'	7.09	117.60	109.10
3	A1	1489	G	C2'-C3'-O3'	7.09	125.09	109.50
15	AO	28	PHE	CB-CG-CD1	-7.09	115.84	120.80
25	BB	1211	C	N3-C2-O2	-7.09	116.94	121.90
25	BB	1666	G	C5-C6-N1	7.09	115.04	111.50
25	BB	2518	A	O3'-P-O5'	7.09	117.47	104.00
25	BB	2550	G	O4'-C1'-N9	7.09	113.87	108.20
25	BB	2686	G	N1-C6-O6	-7.09	115.65	119.90
3	A1	73	C	C3'-C2'-C1'	7.08	107.17	101.50
25	BB	2414	G	N3-C2-N2	-7.08	114.94	119.90
25	BB	2719	G	N7-C8-N9	7.08	116.64	113.10
3	A1	1171	A	O4'-C1'-N9	7.08	113.87	108.20
25	BB	99	U	O3'-P-O5'	-7.08	90.54	104.00
25	BB	645	C	N3-C2-O2	-7.08	116.94	121.90
25	BB	1736	U	C5'-C4'-C3'	-7.08	104.67	116.00
25	BB	1834	U	O4'-C1'-N1	7.08	113.87	108.20
27	BD	31	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
1	AA	1	G	C1'-O4'-C4'	-7.08	104.23	109.90
3	A1	591	U	C2-N3-C4	-7.08	122.75	127.00
3	A1	1488	G	C4-C5-C6	-7.08	114.55	118.80
10	AI	31	ARG	NE-CZ-NH1	7.08	123.84	120.30
15	AO	168	ARG	NH1-CZ-NH2	-7.08	111.61	119.40
24	BA	34	A	C6-C5-N7	7.08	137.26	132.30
25	BB	363	G	C4-C5-N7	-7.08	107.97	110.80
25	BB	2892	G	C5-C6-N1	7.08	115.04	111.50
3	A1	471	U	N3-C2-O2	-7.08	117.24	122.20
25	BB	103	A	C6-C5-N7	7.08	137.26	132.30
25	BB	1718	G	N1-C6-O6	-7.08	115.65	119.90
25	BB	1941	C	C6-N1-C2	-7.08	117.47	120.30
25	BB	2214	C	N3-C2-O2	-7.08	116.94	121.90
25	BB	2354	C	N3-C4-N4	-7.08	113.04	118.00
3	A1	269	C	C5-C4-N4	-7.08	115.25	120.20
3	A1	383	A	O4'-C1'-N9	-7.08	102.54	108.20
3	A1	548	G	C5'-C4'-O4'	7.08	117.59	109.10
25	BB	258	G	C5-N7-C8	-7.08	100.76	104.30
25	BB	2344	U	N1-C2-N3	7.08	119.15	114.90
25	BB	2555	U	C6-N1-C2	7.08	125.25	121.00
1	AA	11	C	C5'-C4'-O4'	7.08	117.59	109.10
3	A1	973	G	C1'-O4'-C4'	-7.08	104.24	109.90
3	A1	1357	A	N1-C6-N6	-7.08	114.35	118.60
53	B4	116	ARG	NE-CZ-NH2	-7.08	116.76	120.30
3	A1	475	C	C5-C6-N1	-7.08	117.46	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	544	G	N7-C8-N9	7.08	116.64	113.10
3	A1	1162	C	C1'-O4'-C4'	-7.08	104.24	109.90
3	A1	1220	G	C5-N7-C8	-7.08	100.76	104.30
3	A1	1228	C	N3-C2-O2	-7.08	116.95	121.90
25	BB	699	A	C6-N1-C2	-7.08	114.36	118.60
25	BB	939	G	C5'-C4'-C3'	-7.08	104.68	116.00
25	BB	1440	U	N1-C2-N3	7.08	119.15	114.90
25	BB	1902	C	N3-C4-C5	7.08	124.73	121.90
30	BG	17	ARG	NH1-CZ-NH2	-7.08	111.62	119.40
3	A1	182	A	C5-N7-C8	-7.07	100.36	103.90
3	A1	1296	C	N1-C2-O2	7.07	123.14	118.90
3	A1	1453	G	C4-C5-N7	7.07	113.63	110.80
25	BB	164	C	N3-C4-C5	7.07	124.73	121.90
25	BB	777	G	O4'-C1'-N9	7.07	113.86	108.20
25	BB	855	G	C6-N1-C2	-7.07	120.86	125.10
25	BB	1000	A	C6-C5-N7	7.07	137.25	132.30
25	BB	1221	C	O4'-C1'-N1	7.07	113.86	108.20
25	BB	1908	C	N3-C2-O2	-7.07	116.95	121.90
25	BB	1916	A	C5-C6-N6	7.07	129.36	123.70
25	BB	2471	A	C3'-C2'-C1'	-7.07	95.84	101.50
25	BB	2758	A	C2'-C3'-O3'	7.07	125.06	109.50
25	BB	2789	C	N3-C2-O2	-7.07	116.95	121.90
3	A1	170	U	C5-C6-N1	-7.07	119.16	122.70
3	A1	541	G	N1-C6-O6	-7.07	115.66	119.90
3	A1	972	C	C6-N1-C2	-7.07	117.47	120.30
21	AV	12	ARG	NE-CZ-NH2	7.07	123.84	120.30
25	BB	1659	G	O4'-C1'-N9	7.07	113.86	108.20
31	BH	33	ARG	NE-CZ-NH1	-7.07	116.76	120.30
3	A1	745	G	C5-C6-O6	7.07	132.84	128.60
3	A1	1133	G	C5-C6-O6	-7.07	124.36	128.60
3	A1	1194	U	C5-C6-N1	-7.07	119.17	122.70
3	A1	1418	A	N7-C8-N9	7.07	117.33	113.80
24	BA	61	G	O4'-C1'-N9	7.07	113.86	108.20
25	BB	8	C	C3'-C2'-C1'	7.07	107.16	101.50
25	BB	205	G	N1-C2-N3	7.07	128.14	123.90
25	BB	278	A	O4'-C1'-N9	-7.07	102.54	108.20
25	BB	513	A	C1'-O4'-C4'	-7.07	104.24	109.90
25	BB	1367	A	N1-C2-N3	-7.07	125.77	129.30
25	BB	1375	U	N1-C2-N3	7.07	119.14	114.90
25	BB	1556	C	N1-C2-O2	7.07	123.14	118.90
25	BB	1664	A	N7-C8-N9	7.07	117.33	113.80
25	BB	2308	G	N9-C4-C5	7.07	108.23	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	554	A	C5-C6-N1	7.07	121.23	117.70
25	BB	794	A	C6-C5-N7	7.07	137.25	132.30
25	BB	1668	A	C6-C5-N7	7.07	137.25	132.30
25	BB	1699	G	C5-C6-N1	7.07	115.03	111.50
25	BB	2354	C	N3-C2-O2	-7.07	116.95	121.90
46	BW	44	ARG	NH1-CZ-NH2	-7.07	111.62	119.40
3	A1	190	A	C5-C6-N6	7.07	129.35	123.70
3	A1	785	G	N1-C6-O6	-7.07	115.66	119.90
3	A1	836	G	C3'-C2'-C1'	7.07	107.15	101.50
25	BB	471	A	O5'-P-OP2	-7.07	99.34	105.70
25	BB	893	C	N3-C4-N4	-7.07	113.05	118.00
25	BB	1022	G	N7-C8-N9	7.07	116.63	113.10
25	BB	1525	A	O4'-C1'-N9	7.07	113.85	108.20
25	BB	1712	U	C5-C4-O4	-7.07	121.66	125.90
25	BB	2345	G	C4'-C3'-C2'	-7.07	95.53	102.60
25	BB	2519	U	C2-N3-C4	-7.07	122.76	127.00
3	A1	59	A	N1-C2-N3	-7.07	125.77	129.30
3	A1	295	C	P-O3'-C3'	7.07	128.18	119.70
25	BB	168	G	C5-N7-C8	7.07	107.83	104.30
25	BB	428	A	C5-C6-N6	7.07	129.35	123.70
25	BB	1031	G	C1'-O4'-C4'	7.07	115.55	109.90
25	BB	1710	G	C6-N1-C2	-7.07	120.86	125.10
25	BB	2651	C	N3-C2-O2	-7.06	116.95	121.90
48	BY	124	ARG	NH1-CZ-NH2	-7.06	111.63	119.40
1	AE	10	G	O4'-C1'-N9	7.06	113.85	108.20
3	A1	733	G	C1'-O4'-C4'	-7.06	104.25	109.90
3	A1	1002	G	O4'-C1'-N9	7.06	113.85	108.20
25	BB	167	A	C4-C5-C6	-7.06	113.47	117.00
25	BB	2337	G	N3-C4-C5	-7.06	125.07	128.60
25	BB	2466	C	C2-N3-C4	-7.06	116.37	119.90
25	BB	2472	G	N9-C1'-C2'	-7.06	104.23	112.00
32	BI	71	ARG	NH1-CZ-NH2	-7.06	111.63	119.40
1	AE	45	G	N1-C6-O6	-7.06	115.66	119.90
25	BB	1938	A	C6-C5-N7	7.06	137.24	132.30
1	AP	5	A	C5-N7-C8	-7.06	100.37	103.90
3	A1	188	C	N3-C4-N4	-7.06	113.06	118.00
3	A1	1251	A	C6-C5-N7	7.06	137.24	132.30
25	BB	1000	A	C5-C6-N1	7.06	121.23	117.70
25	BB	1695	G	C2-N3-C4	7.06	115.43	111.90
25	BB	2274	A	C5-C6-N1	7.06	121.23	117.70
25	BB	2461	A	C4-C5-C6	-7.06	113.47	117.00
25	BB	2528	U	N3-C4-C5	7.06	118.84	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2736	A	C6-C5-N7	7.06	137.24	132.30
3	A1	205	A	N1-C2-N3	-7.06	125.77	129.30
3	A1	476	U	C4'-C3'-C2'	-7.06	95.54	102.60
3	A1	1221	G	N9-C4-C5	7.06	108.22	105.40
25	BB	310	A	C5-C6-N6	7.06	129.35	123.70
25	BB	977	G	O4'-C1'-N9	7.06	113.85	108.20
25	BB	1079	C	N3-C2-O2	-7.06	116.96	121.90
25	BB	1568	G	N3-C4-N9	7.06	130.24	126.00
25	BB	1886	U	N3-C2-O2	-7.06	117.26	122.20
25	BB	212	G	C6-N1-C2	-7.06	120.87	125.10
25	BB	477	A	C6-C5-N7	7.06	137.24	132.30
25	BB	2156	G	C5-N7-C8	-7.06	100.77	104.30
25	BB	2450	A	C4-C5-C6	-7.06	113.47	117.00
25	BB	2777	G	C8-N9-C4	-7.06	103.58	106.40
1	AA	3	G	C5'-C4'-O4'	7.05	117.56	109.10
3	A1	126	G	C8-N9-C4	-7.05	103.58	106.40
3	A1	308	C	N3-C4-N4	-7.05	113.06	118.00
3	A1	325	A	C4-C5-C6	-7.05	113.47	117.00
3	A1	398	U	O4'-C1'-N1	7.05	113.84	108.20
3	A1	653	U	C5-C6-N1	-7.05	119.17	122.70
3	A1	661	G	C6-C5-N7	-7.05	126.17	130.40
3	A1	784	A	C6-C5-N7	7.05	137.24	132.30
24	BA	76	G	N3-C4-C5	-7.05	125.07	128.60
25	BB	905	A	C3'-C2'-C1'	7.05	107.14	101.50
25	BB	1705	A	N9-C4-C5	7.05	108.62	105.80
25	BB	2138	G	C4-C5-C6	-7.05	114.57	118.80
25	BB	2222	C	O4'-C1'-N1	7.05	113.84	108.20
25	BB	2521	C	N3-C4-N4	-7.05	113.06	118.00
1	AP	15	G	C5'-C4'-O4'	7.05	117.56	109.10
3	A1	318	G	N1-C6-O6	-7.05	115.67	119.90
3	A1	1112	C	N3-C4-N4	-7.05	113.06	118.00
3	A1	1493	A	C6-N1-C2	-7.05	114.37	118.60
24	BA	86	G	C6-C5-N7	7.05	134.63	130.40
25	BB	916	G	N7-C8-N9	7.05	116.63	113.10
25	BB	977	G	C8-N9-C4	-7.05	103.58	106.40
25	BB	1819	A	C5-C6-N1	7.05	121.23	117.70
33	BJ	5	ARG	NE-CZ-NH2	7.05	123.83	120.30
1	AP	9	A	O4'-C4'-C3'	7.05	111.74	106.10
1	AP	25	C	C5-C4-N4	7.05	125.14	120.20
3	A1	92	U	C1'-O4'-C4'	-7.05	104.26	109.90
3	A1	279	A	P-O3'-C3'	7.05	128.16	119.70
25	BB	399	U	C5-C6-N1	-7.05	119.17	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	539	G	C3'-C2'-C1'	-7.05	95.86	101.50
25	BB	1926	U	C5-C6-N1	-7.05	119.17	122.70
25	BB	2193	G	C8-N9-C4	-7.05	103.58	106.40
25	BB	2302	U	C2-N3-C4	-7.05	122.77	127.00
25	BB	2484	G	N7-C8-N9	7.05	116.63	113.10
25	BB	2737	G	C5-C6-N1	7.05	115.03	111.50
35	BL	38	TYR	CB-CG-CD2	-7.05	116.77	121.00
1	AP	64	A	C2-N3-C4	7.05	114.12	110.60
3	A1	69	G	C3'-C2'-C1'	-7.05	95.86	101.50
17	AR	55	ARG	NE-CZ-NH1	7.05	123.82	120.30
25	BB	43	G	N3-C2-N2	-7.05	114.97	119.90
25	BB	77	G	N1-C2-N3	7.05	128.13	123.90
25	BB	957	C	N3-C4-N4	-7.05	113.07	118.00
25	BB	1391	U	O4'-C1'-N1	7.05	113.84	108.20
25	BB	1822	C	C2-N3-C4	-7.05	116.38	119.90
25	BB	2778	A	C4-C5-C6	-7.05	113.47	117.00
55	B6	34	ARG	NE-CZ-NH2	7.05	123.83	120.30
3	A1	1240	U	N1-C2-N3	7.05	119.13	114.90
25	BB	642	U	C2-N3-C4	-7.05	122.77	127.00
25	BB	783	A	C5'-C4'-C3'	-7.05	104.72	116.00
25	BB	2481	G	C8-N9-C4	-7.05	103.58	106.40
1	AE	75	C	N3-C4-N4	-7.05	113.07	118.00
3	A1	803	G	C6-N1-C2	-7.05	120.87	125.10
3	A1	836	G	N7-C8-N9	7.05	116.62	113.10
25	BB	621	A	C5-C6-N1	7.05	121.22	117.70
25	BB	739	A	C4-C5-C6	-7.05	113.48	117.00
25	BB	1992	G	N3-C2-N2	-7.05	114.97	119.90
25	BB	2460	U	N1-C2-N3	7.05	119.13	114.90
25	BB	2806	C	C3'-C2'-C1'	7.05	107.14	101.50
3	A1	201	G	C6-C5-N7	7.04	134.63	130.40
3	A1	278	G	C5'-C4'-O4'	7.04	117.55	109.10
3	A1	477	C	C2-N3-C4	-7.04	116.38	119.90
3	A1	611	C	N1-C2-O2	7.04	123.13	118.90
3	A1	1263	C	C5'-C4'-C3'	-7.04	104.73	116.00
25	BB	1162	G	C8-N9-C4	-7.04	103.58	106.40
3	A1	558	G	C5-C6-O6	7.04	132.83	128.60
22	AW	123	ARG	CD-NE-CZ	7.04	133.46	123.60
25	BB	429	A	N9-C4-C5	7.04	108.62	105.80
25	BB	869	G	C1'-O4'-C4'	-7.04	104.27	109.90
25	BB	1891	G	C6-C5-N7	7.04	134.63	130.40
3	A1	159	G	C4-C5-N7	-7.04	107.98	110.80
3	A1	255	G	C6-N1-C2	-7.04	120.88	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	258	G	N3-C2-N2	-7.04	114.97	119.90
3	A1	622	A	C6-C5-N7	7.04	137.23	132.30
3	A1	855	U	O4'-C1'-N1	7.04	113.83	108.20
25	BB	475	C	C4'-C3'-C2'	-7.04	95.56	102.60
25	BB	769	U	C4-C5-C6	7.04	123.92	119.70
25	BB	2704	C	C5-C4-N4	7.04	125.13	120.20
25	BB	2735	G	C5'-C4'-C3'	-7.04	104.73	116.00
25	BB	2841	C	C2-N3-C4	-7.04	116.38	119.90
31	BH	13	ARG	NE-CZ-NH2	7.04	123.82	120.30
33	BJ	12	ARG	NE-CZ-NH2	-7.04	116.78	120.30
39	BP	10	ARG	CD-NE-CZ	7.04	133.46	123.60
25	BB	1214	A	C2-N3-C4	7.04	114.12	110.60
25	BB	1451	C	N1-C2-O2	7.04	123.12	118.90
25	BB	2266	A	O4'-C4'-C3'	7.04	111.73	106.10
25	BB	2619	C	C3'-C2'-C1'	7.04	107.13	101.50
1	AE	20	G	N3-C2-N2	-7.04	114.97	119.90
3	A1	746	A	O4'-C1'-N9	7.04	113.83	108.20
3	A1	1054	C	C4'-C3'-C2'	7.04	109.64	102.60
25	BB	313	G	C3'-C2'-C1'	-7.04	95.87	101.50
25	BB	1124	G	N3-C4-C5	-7.04	125.08	128.60
25	BB	1219	U	O4'-C1'-N1	7.04	113.83	108.20
25	BB	2179	C	N3-C4-C5	7.04	124.72	121.90
25	BB	2813	A	O4'-C1'-N9	7.04	113.83	108.20
25	BB	272	A	C6-N1-C2	-7.04	114.38	118.60
25	BB	2743	U	O4'-C4'-C3'	7.04	111.73	106.10
26	BC	57	TYR	CB-CG-CD2	-7.04	116.78	121.00
3	A1	1221	G	N3-C4-C5	-7.04	125.08	128.60
25	BB	69	C	C2-N3-C4	-7.04	116.38	119.90
25	BB	205	G	O4'-C1'-N9	-7.04	102.57	108.20
25	BB	524	G	N3-C4-C5	-7.04	125.08	128.60
25	BB	969	G	C5-C6-N1	7.04	115.02	111.50
25	BB	1291	C	N1-C2-O2	7.04	123.12	118.90
25	BB	1309	G	O4'-C1'-C2'	-7.04	98.76	105.80
25	BB	1347	A	C4-C5-C6	-7.04	113.48	117.00
25	BB	1473	G	N1-C2-N2	7.04	122.53	116.20
25	BB	1806	C	N1-C2-O2	7.04	123.12	118.90
25	BB	1933	G	N9-C4-C5	7.04	108.21	105.40
25	BB	2248	C	O3'-P-O5'	-7.04	90.63	104.00
48	BY	83	ARG	NH1-CZ-NH2	-7.04	111.66	119.40
3	A1	333	U	O4'-C1'-N1	7.03	113.83	108.20
3	A1	510	A	O5'-P-OP2	7.03	119.14	110.70
24	BA	22	U	C5-C4-O4	7.03	130.12	125.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	267	C	N3-C4-C5	7.03	124.71	121.90
25	BB	945	A	C2-N3-C4	7.03	114.12	110.60
25	BB	2848	G	N1-C2-N3	7.03	128.12	123.90
1	AE	8	U	N3-C2-O2	-7.03	117.28	122.20
1	AE	14	A	C6-N1-C2	-7.03	114.38	118.60
3	A1	591	U	O4'-C1'-N1	7.03	113.83	108.20
25	BB	104	A	C2-N3-C4	7.03	114.12	110.60
25	BB	299	A	C5-C6-N6	7.03	129.32	123.70
25	BB	374	A	O4'-C1'-N9	7.03	113.83	108.20
25	BB	2230	G	N3-C4-C5	-7.03	125.08	128.60
25	BB	2265	U	O4'-C1'-N1	7.03	113.83	108.20
25	BB	2779	U	C3'-C2'-C1'	7.03	107.13	101.50
3	A1	98	A	C4-C5-C6	-7.03	113.48	117.00
3	A1	630	A	C5-C6-N1	7.03	121.22	117.70
25	BB	47	C	N3-C4-C5	7.03	124.71	121.90
25	BB	1137	G	C6-C5-N7	7.03	134.62	130.40
25	BB	2890	G	N3-C4-C5	-7.03	125.08	128.60
3	A1	1058	G	N1-C6-O6	-7.03	115.68	119.90
3	A1	1402	C	N3-C4-C5	7.03	124.71	121.90
25	BB	179	C	O4'-C4'-C3'	-7.03	96.97	104.00
25	BB	768	G	O4'-C1'-N9	7.03	113.82	108.20
25	BB	1321	A	C5-C6-N6	7.03	129.32	123.70
25	BB	1757	A	C2-N3-C4	7.03	114.11	110.60
1	AP	64	A	C5-C6-N1	7.03	121.21	117.70
3	A1	1329	A	N1-C6-N6	-7.03	114.38	118.60
3	A1	1360	A	C2-N3-C4	7.03	114.11	110.60
24	BA	69	G	C8-N9-C4	-7.03	103.59	106.40
25	BB	634	C	N3-C4-C5	7.03	124.71	121.90
25	BB	874	G	C4'-C3'-C2'	-7.03	95.57	102.60
25	BB	1781	U	N3-C2-O2	-7.03	117.28	122.20
25	BB	1818	U	O4'-C1'-N1	7.03	113.82	108.20
25	BB	2254	C	C6-N1-C2	-7.03	117.49	120.30
1	AP	57	G	C8-N9-C4	-7.03	103.59	106.40
3	A1	143	A	C3'-C2'-C1'	-7.03	95.88	101.50
3	A1	929	G	N3-C2-N2	-7.03	114.98	119.90
3	A1	1029	U	C4-C5-C6	7.03	123.92	119.70
3	A1	1294	G	N7-C8-N9	7.03	116.61	113.10
25	BB	214	G	C5-N7-C8	-7.03	100.79	104.30
25	BB	975	A	N1-C2-N3	-7.03	125.79	129.30
25	BB	1286	A	N7-C8-N9	7.03	117.31	113.80
25	BB	1747	U	C4-C5-C6	7.03	123.92	119.70
25	BB	2227	A	C4-C5-C6	-7.03	113.49	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2402	U	N1-C2-O2	7.03	127.72	122.80
3	A1	265	G	N9-C4-C5	7.02	108.21	105.40
3	A1	625	U	O4'-C1'-N1	7.02	113.82	108.20
3	A1	977	A	C3'-C2'-C1'	7.02	107.12	101.50
25	BB	956	G	C5-C6-N1	7.02	115.01	111.50
25	BB	1370	C	N3-C4-C5	7.02	124.71	121.90
25	BB	2050	C	O5'-P-OP2	-7.02	99.38	105.70
25	BB	2770	G	C4-C5-C6	-7.02	114.58	118.80
1	AP	29	A	C5-C6-N1	7.02	121.21	117.70
3	A1	1113	C	N3-C4-C5	7.02	124.71	121.90
3	A1	1127	G	N3-C2-N2	-7.02	114.98	119.90
25	BB	576	U	O4'-C1'-N1	7.02	113.82	108.20
25	BB	1015	U	N3-C2-O2	-7.02	117.28	122.20
25	BB	2035	G	C5-C6-N1	7.02	115.01	111.50
25	BB	2209	G	C6-N1-C2	-7.02	120.89	125.10
25	BB	2652	C	C4'-C3'-C2'	-7.02	95.58	102.60
25	BB	2706	A	C6-N1-C2	-7.02	114.39	118.60
25	BB	2745	C	N3-C4-N4	-7.02	113.08	118.00
3	A1	701	U	O4'-C1'-N1	7.02	113.82	108.20
3	A1	904	U	C3'-C2'-C1'	7.02	107.12	101.50
3	A1	1488	G	C5-N7-C8	-7.02	100.79	104.30
24	BA	26	C	N3-C4-C5	7.02	124.71	121.90
25	BB	20	C	C5-C6-N1	-7.02	117.49	121.00
25	BB	68	G	N1-C6-O6	-7.02	115.69	119.90
25	BB	375	G	C5-C6-N1	7.02	115.01	111.50
25	BB	642	U	O4'-C1'-C2'	-7.02	98.78	105.80
25	BB	735	A	O4'-C4'-C3'	7.02	111.72	106.10
25	BB	1578	U	O4'-C1'-N1	7.02	113.82	108.20
25	BB	2018	G	N3-C2-N2	-7.02	114.99	119.90
3	A1	447	G	N7-C8-N9	7.02	116.61	113.10
3	A1	629	A	C5-N7-C8	-7.02	100.39	103.90
3	A1	1401	G	N3-C2-N2	-7.02	114.99	119.90
25	BB	545	U	N3-C4-O4	7.02	124.31	119.40
25	BB	1460	U	N3-C2-O2	-7.02	117.29	122.20
25	BB	2572	A	C4-C5-C6	-7.02	113.49	117.00
3	A1	437	U	C4-C5-C6	7.02	123.91	119.70
3	A1	453	G	N3-C4-C5	-7.02	125.09	128.60
3	A1	719	C	N1-C2-N3	7.02	124.11	119.20
3	A1	827	U	N1-C2-N3	7.02	119.11	114.90
3	A1	1438	G	N1-C6-O6	-7.02	115.69	119.90
25	BB	27	G	C6-N1-C2	-7.02	120.89	125.10
25	BB	398	C	N3-C4-C5	7.02	124.71	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	815	C	N3-C2-O2	-7.02	116.99	121.90
25	BB	1106	G	N1-C2-N3	7.02	128.11	123.90
25	BB	1257	C	N3-C2-O2	-7.02	116.99	121.90
3	A1	1345	U	C2-N3-C4	-7.02	122.79	127.00
25	BB	2035	G	N3-C4-C5	-7.02	125.09	128.60
25	BB	2091	C	C2-N3-C4	-7.02	116.39	119.90
25	BB	2467	C	C5-C6-N1	-7.02	117.49	121.00
3	A1	708	C	C6-N1-C2	-7.01	117.49	120.30
3	A1	944	G	C1'-O4'-C4'	-7.01	104.29	109.90
3	A1	1139	G	N1-C6-O6	-7.01	115.69	119.90
3	A1	1468	A	C5-C6-N6	7.01	129.31	123.70
3	A1	1526	G	C4-C5-N7	-7.01	108.00	110.80
25	BB	1337	G	C4-C5-C6	-7.01	114.59	118.80
25	BB	1749	A	C5-C6-N1	7.01	121.21	117.70
25	BB	2083	G	N9-C4-C5	7.01	108.21	105.40
25	BB	2145	C	O4'-C1'-N1	7.01	113.81	108.20
3	A1	300	A	O4'-C1'-N9	7.01	113.81	108.20
25	BB	430	A	C5-C6-N1	7.01	121.21	117.70
25	BB	1677	A	C4-C5-C6	-7.01	113.49	117.00
25	BB	1757	A	C6-C5-N7	7.01	137.21	132.30
25	BB	2112	G	C2-N3-C4	7.01	115.41	111.90
25	BB	2206	C	N3-C4-C5	7.01	124.70	121.90
43	BT	15	ARG	NE-CZ-NH2	-7.01	116.79	120.30
3	A1	38	G	C6-N1-C2	-7.01	120.89	125.10
3	A1	419	C	C5-C6-N1	-7.01	117.49	121.00
3	A1	825	A	C6-N1-C2	-7.01	114.39	118.60
3	A1	907	A	C2-N3-C4	7.01	114.11	110.60
3	A1	1282	C	N1-C2-O2	7.01	123.11	118.90
3	A1	1428	A	C2-N3-C4	7.01	114.11	110.60
3	A1	1506	U	C5'-C4'-O4'	7.01	117.52	109.10
24	BA	54	G	N3-C4-C5	-7.01	125.09	128.60
25	BB	230	G	C6-N1-C2	-7.01	120.89	125.10
25	BB	1363	C	N3-C4-C5	7.01	124.70	121.90
25	BB	2460	U	N1-C1'-C2'	7.01	123.11	114.00
25	BB	2578	G	N7-C8-N9	7.01	116.61	113.10
3	A1	525	C	O4'-C1'-N1	7.01	113.81	108.20
3	A1	805	C	O4'-C1'-N1	7.01	113.81	108.20
3	A1	1042	A	N7-C8-N9	7.01	117.31	113.80
3	A1	1111	A	C5-N7-C8	-7.01	100.39	103.90
3	A1	1224	U	C2-N3-C4	-7.01	122.79	127.00
3	A1	1306	A	C5-C6-N6	7.01	129.31	123.70
3	A1	1327	C	N3-C4-C5	7.01	124.70	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1419	G	C5-C6-N1	7.01	115.00	111.50
16	AQ	20	ARG	NE-CZ-NH1	7.01	123.81	120.30
24	BA	57	A	N1-C6-N6	-7.01	114.39	118.60
25	BB	618	G	N3-C4-C5	-7.01	125.09	128.60
25	BB	1728	C	N1-C2-O2	7.01	123.11	118.90
25	BB	1884	G	O4'-C1'-N9	7.01	113.81	108.20
25	BB	2483	C	C5-C6-N1	-7.01	117.50	121.00
25	BB	1016	G	N3-C2-N2	-7.01	114.99	119.90
25	BB	1251	C	N3-C4-N4	-7.01	113.09	118.00
25	BB	1792	G	C6-N1-C2	-7.01	120.89	125.10
1	AP	9	A	C8-N9-C4	-7.01	103.00	105.80
3	A1	222	C	N1-C2-O2	7.01	123.10	118.90
3	A1	339	C	C5-C4-N4	7.01	125.11	120.20
3	A1	729	A	C4'-C3'-C2'	-7.01	95.59	102.60
3	A1	1262	C	O4'-C1'-N1	7.01	113.81	108.20
24	BA	91	C	C6-N1-C2	-7.01	117.50	120.30
25	BB	222	A	N7-C8-N9	7.01	117.30	113.80
25	BB	223	A	N1-C6-N6	-7.01	114.40	118.60
25	BB	460	A	C4-C5-C6	-7.01	113.50	117.00
25	BB	665	U	C5-C6-N1	-7.01	119.20	122.70
25	BB	679	C	C5'-C4'-C3'	-7.01	104.79	116.00
25	BB	840	C	N3-C2-O2	-7.01	117.00	121.90
25	BB	912	C	N3-C2-O2	-7.01	117.00	121.90
25	BB	1523	U	N3-C4-O4	7.01	124.30	119.40
25	BB	1730	C	C2-N1-C1'	7.01	126.51	118.80
25	BB	2047	C	C2-N3-C4	-7.01	116.40	119.90
25	BB	2222	C	N3-C4-C5	7.01	124.70	121.90
25	BB	2841	C	N3-C4-N4	-7.01	113.09	118.00
3	A1	836	G	N3-C4-C5	-7.00	125.10	128.60
24	BA	86	G	O4'-C1'-N9	7.00	113.80	108.20
25	BB	1768	C	C2-N3-C4	-7.00	116.40	119.90
25	BB	1830	C	N3-C2-O2	-7.00	117.00	121.90
40	BQ	11	VAL	CA-CB-CG1	7.00	121.41	110.90
3	A1	525	C	N3-C2-O2	-7.00	117.00	121.90
25	BB	389	G	O4'-C1'-N9	7.00	113.80	108.20
25	BB	797	G	C6-C5-N7	7.00	134.60	130.40
25	BB	2710	C	N3-C2-O2	-7.00	117.00	121.90
25	BB	2826	A	C5-N7-C8	-7.00	100.40	103.90
1	AP	34	G	N3-C4-C5	-7.00	125.10	128.60
3	A1	404	G	C5-C6-N1	7.00	115.00	111.50
3	A1	1395	C	P-O3'-C3'	7.00	128.10	119.70
25	BB	700	G	N1-C2-N3	7.00	128.10	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1381	G	C1'-O4'-C4'	-7.00	104.30	109.90
25	BB	1382	G	C5-C6-O6	7.00	132.80	128.60
25	BB	2574	G	C5-C6-N1	7.00	115.00	111.50
25	BB	2640	G	O4'-C1'-N9	7.00	113.80	108.20
25	BB	2647	U	N1-C2-N3	7.00	119.10	114.90
3	A1	1484	C	C5-C6-N1	-7.00	117.50	121.00
25	BB	65	U	C5-C6-N1	-7.00	119.20	122.70
25	BB	108	G	C5'-C4'-O4'	7.00	117.50	109.10
25	BB	2361	G	C6-N1-C2	-7.00	120.90	125.10
3	A1	1476	A	C2-N3-C4	7.00	114.10	110.60
25	BB	404	A	C4-C5-C6	-7.00	113.50	117.00
25	BB	1739	A	C6-C5-N7	7.00	137.20	132.30
25	BB	2215	C	N3-C4-C5	7.00	124.70	121.90
25	BB	2254	C	N1-C2-N3	7.00	124.10	119.20
25	BB	2522	U	C5-C6-N1	-7.00	119.20	122.70
28	BE	47	ARG	NE-CZ-NH2	7.00	123.80	120.30
3	A1	384	G	N3-C4-C5	-7.00	125.10	128.60
3	A1	1462	C	C4'-C3'-C2'	-7.00	95.60	102.60
25	BB	281	C	N3-C2-O2	-7.00	117.00	121.90
25	BB	780	G	C6-N1-C2	-7.00	120.90	125.10
25	BB	1759	A	C5-C6-N1	7.00	121.20	117.70
25	BB	2436	G	O4'-C1'-N9	7.00	113.80	108.20
1	AP	12	U	C4'-C3'-C2'	-7.00	95.61	102.60
3	A1	1524	C	O4'-C1'-N1	7.00	113.80	108.20
23	AX	48	ARG	NH1-CZ-NH2	-7.00	111.71	119.40
25	BB	1768	C	O4'-C1'-N1	7.00	113.80	108.20
25	BB	1898	U	C4-C5-C6	7.00	123.90	119.70
25	BB	1917	U	C4-C5-C6	7.00	123.90	119.70
25	BB	2043	C	C5-C4-N4	7.00	125.10	120.20
25	BB	2271	G	C5-C6-N1	7.00	115.00	111.50
25	BB	2903	U	C5-C6-N1	-7.00	119.20	122.70
3	A1	209	U	C5-C4-O4	6.99	130.10	125.90
3	A1	843	U	C1'-O4'-C4'	-6.99	104.31	109.90
3	A1	1303	C	N3-C2-O2	-6.99	117.00	121.90
25	BB	193	U	C1'-O4'-C4'	-6.99	104.31	109.90
25	BB	205	G	N9-C4-C5	6.99	108.20	105.40
25	BB	938	G	C8-N9-C4	-6.99	103.60	106.40
3	A1	303	A	C4-C5-C6	-6.99	113.50	117.00
25	BB	124	G	C5-C6-N1	6.99	115.00	111.50
25	BB	1955	U	C4'-C3'-C2'	-6.99	95.61	102.60
25	BB	2525	G	C1'-O4'-C4'	6.99	115.49	109.90
3	A1	369	G	N1-C6-O6	-6.99	115.70	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	847	G	C5-C6-O6	6.99	132.79	128.60
25	BB	642	U	N3-C2-O2	-6.99	117.31	122.20
25	BB	881	G	N7-C8-N9	6.99	116.59	113.10
25	BB	1411	U	N1-C2-N3	6.99	119.09	114.90
25	BB	2801	G	P-O3'-C3'	6.99	128.09	119.70
3	A1	648	A	C8-N9-C4	-6.99	103.00	105.80
25	BB	69	C	N1-C2-N3	6.99	124.09	119.20
25	BB	426	C	C5-C6-N1	-6.99	117.51	121.00
25	BB	775	G	C5-C6-O6	6.99	132.79	128.60
25	BB	1135	C	C2-N3-C4	-6.99	116.41	119.90
25	BB	1964	G	C4-C5-C6	-6.99	114.61	118.80
25	BB	2457	U	C5-C6-N1	-6.99	119.21	122.70
3	A1	126	G	C5-N7-C8	-6.99	100.81	104.30
3	A1	445	G	N1-C6-O6	-6.99	115.71	119.90
3	A1	740	U	C5-C6-N1	-6.99	119.21	122.70
3	A1	1176	A	N1-C2-N3	-6.99	125.81	129.30
3	A1	1350	A	N1-C6-N6	-6.99	114.41	118.60
25	BB	1004	U	C5-C6-N1	-6.99	119.21	122.70
29	BF	51	ARG	NH1-CZ-NH2	-6.99	111.72	119.40
1	AP	9	A	C2-N3-C4	6.99	114.09	110.60
3	A1	994	A	C5-C6-N6	6.99	129.29	123.70
24	BA	108	A	C4-C5-C6	-6.99	113.51	117.00
25	BB	419	U	N1-C2-N3	6.99	119.09	114.90
25	BB	1761	C	N1-C2-N3	6.99	124.09	119.20
25	BB	1956	U	C2-N3-C4	-6.99	122.81	127.00
25	BB	2273	A	C4-C5-C6	-6.99	113.51	117.00
25	BB	2318	G	C5-C6-N1	6.99	114.99	111.50
25	BB	2404	U	C5-C6-N1	-6.99	119.21	122.70
3	A1	305	G	C5'-C4'-C3'	-6.98	104.83	116.00
3	A1	356	A	C6-C5-N7	6.98	137.19	132.30
3	A1	1024	G	C5'-C4'-O4'	6.98	117.48	109.10
3	A1	1210	C	N3-C2-O2	-6.98	117.01	121.90
25	BB	995	C	C2-N3-C4	-6.98	116.41	119.90
25	BB	2135	A	P-O3'-C3'	6.98	128.08	119.70
25	BB	2239	G	N3-C2-N2	-6.98	115.01	119.90
3	A1	635	A	C6-C5-N7	6.98	137.19	132.30
25	BB	421	C	O4'-C4'-C3'	6.98	111.69	106.10
25	BB	1830	C	N1-C2-O2	6.98	123.09	118.90
25	BB	2339	C	O4'-C4'-C3'	6.98	111.69	106.10
3	A1	23	C	C4-C5-C6	6.98	120.89	117.40
3	A1	143	A	C5-N7-C8	-6.98	100.41	103.90
3	A1	225	C	C2'-C3'-O3'	6.98	124.87	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	453	G	C5-C6-N1	6.98	114.99	111.50
3	A1	987	G	O3'-P-O5'	6.98	117.26	104.00
25	BB	54	G	N3-C2-N2	-6.98	115.01	119.90
25	BB	893	C	N3-C2-O2	-6.98	117.01	121.90
25	BB	937	C	N3-C2-O2	-6.98	117.01	121.90
25	BB	1659	G	C6-C5-N7	6.98	134.59	130.40
25	BB	2438	U	C4'-C3'-C2'	-6.98	95.62	102.60
25	BB	2560	A	C5-C6-N6	6.98	129.28	123.70
48	BY	46	ARG	CD-NE-CZ	6.98	133.37	123.60
3	A1	729	A	N1-C2-N3	-6.98	125.81	129.30
25	BB	333	G	C5-C6-O6	6.98	132.79	128.60
25	BB	1567	G	N3-C4-C5	-6.98	125.11	128.60
55	B6	49	ASP	OD1-CG-OD2	-6.98	110.04	123.30
3	A1	664	G	C5-C6-O6	6.98	132.79	128.60
3	A1	1283	U	O4'-C1'-N1	6.98	113.78	108.20
3	A1	1469	C	N3-C2-O2	-6.98	117.02	121.90
3	A1	1515	G	C5-C6-N1	6.98	114.99	111.50
25	BB	393	C	N3-C4-C5	6.98	124.69	121.90
25	BB	659	G	C8-N9-C4	-6.98	103.61	106.40
25	BB	1522	A	C2-N3-C4	6.98	114.09	110.60
25	BB	1765	U	C3'-C2'-C1'	6.98	107.08	101.50
25	BB	1920	C	O4'-C1'-N1	6.98	113.78	108.20
25	BB	2662	A	C5-C6-N1	6.98	121.19	117.70
25	BB	2671	G	N1-C6-O6	-6.98	115.71	119.90
32	BI	100	ARG	NE-CZ-NH1	6.98	123.79	120.30
1	AA	60	C	N3-C2-O2	-6.98	117.02	121.90
1	AE	7	U	N1-C2-N3	6.98	119.08	114.90
25	BB	532	A	O4'-C1'-N9	6.98	113.78	108.20
25	BB	1068	G	O4'-C1'-N9	6.98	113.78	108.20
25	BB	1116	G	N3-C2-N2	-6.98	115.02	119.90
25	BB	1731	G	C6-N1-C2	-6.98	120.92	125.10
25	BB	2024	G	C5-C6-N1	6.98	114.99	111.50
3	A1	302	G	P-O3'-C3'	6.97	128.07	119.70
3	A1	844	G	N7-C8-N9	6.97	116.59	113.10
3	A1	1480	A	C4-C5-C6	-6.97	113.51	117.00
16	AQ	16	ARG	NH1-CZ-NH2	-6.97	111.73	119.40
25	BB	319	G	C5-C6-N1	6.97	114.99	111.50
25	BB	2576	G	N9-C4-C5	6.97	108.19	105.40
3	A1	472	U	C2-N3-C4	-6.97	122.82	127.00
3	A1	526	C	C6-N1-C2	-6.97	117.51	120.30
3	A1	713	G	N7-C8-N9	6.97	116.59	113.10
24	BA	88	C	C6-N1-C2	-6.97	117.51	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2057	G	C1'-O4'-C4'	-6.97	104.32	109.90
25	BB	2121	G	C6-C5-N7	6.97	134.58	130.40
25	BB	2299	U	N3-C2-O2	-6.97	117.32	122.20
1	AA	45	G	C4-C5-C6	-6.97	114.62	118.80
3	A1	1144	G	C5-C6-N1	6.97	114.99	111.50
3	A1	1327	C	C4'-C3'-C2'	-6.97	95.63	102.60
25	BB	444	C	C1'-O4'-C4'	-6.97	104.32	109.90
3	A1	171	A	N9-C4-C5	-6.97	103.01	105.80
3	A1	753	A	C5-C6-N1	6.97	121.18	117.70
25	BB	390	U	N1-C2-N3	6.97	119.08	114.90
25	BB	1210	G	N9-C4-C5	6.97	108.19	105.40
25	BB	2142	A	C6-N1-C2	-6.97	114.42	118.60
25	BB	2349	G	C5-C6-N1	6.97	114.98	111.50
47	BX	14	CYS	CA-CB-SG	-6.97	101.45	114.00
49	BZ	87	ARG	NE-CZ-NH2	6.97	123.78	120.30
25	BB	1315	C	N3-C4-N4	-6.97	113.12	118.00
25	BB	1369	G	P-O3'-C3'	6.97	128.06	119.70
1	AA	7	U	C5'-C4'-O4'	6.97	117.46	109.10
3	A1	252	U	C3'-C2'-C1'	6.97	107.07	101.50
3	A1	737	C	C5-C4-N4	6.97	125.08	120.20
3	A1	926	G	O4'-C1'-N9	-6.97	102.63	108.20
3	A1	1046	A	C5-N7-C8	-6.97	100.42	103.90
25	BB	913	U	O4'-C1'-N1	6.97	113.77	108.20
25	BB	1966	A	N1-C6-N6	-6.97	114.42	118.60
25	BB	2234	G	N9-C1'-C2'	-6.97	104.34	112.00
50	B1	117	ARG	CD-NE-CZ	6.97	133.35	123.60
3	A1	229	U	C3'-C2'-C1'	6.96	107.07	101.50
3	A1	407	U	O4'-C1'-N1	6.96	113.77	108.20
3	A1	1084	G	C4'-C3'-C2'	-6.96	95.64	102.60
24	BA	114	C	N1-C2-O2	6.96	123.08	118.90
25	BB	134	G	C2-N3-C4	6.96	115.38	111.90
25	BB	217	A	C5-C6-N1	6.96	121.18	117.70
25	BB	329	G	N7-C8-N9	6.96	116.58	113.10
25	BB	909	A	N9-C4-C5	6.96	108.59	105.80
25	BB	1029	A	C5-C6-N1	6.96	121.18	117.70
25	BB	1836	C	C6-N1-C2	-6.96	117.51	120.30
25	BB	2294	G	N3-C4-C5	-6.96	125.12	128.60
25	BB	2470	G	N3-C2-N2	-6.96	115.03	119.90
25	BB	2577	A	C5-C6-N6	6.96	129.27	123.70
25	BB	2755	C	N3-C2-O2	-6.96	117.03	121.90
3	A1	360	G	C4-C5-N7	-6.96	108.02	110.80
3	A1	784	A	C1'-O4'-C4'	-6.96	104.33	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1418	A	C3'-C2'-C1'	-6.96	95.93	101.50
25	BB	229	C	C1'-O4'-C4'	-6.96	104.33	109.90
25	BB	2469	A	C5-C6-N6	6.96	129.27	123.70
1	AA	35	A	C6-C5-N7	6.96	137.17	132.30
1	AP	43	G	C8-N9-C1'	6.96	136.05	127.00
3	A1	805	C	C5-C4-N4	6.96	125.07	120.20
25	BB	1012	U	O4'-C1'-N1	6.96	113.77	108.20
25	BB	131	A	N1-C6-N6	-6.96	114.42	118.60
25	BB	932	U	C1'-O4'-C4'	-6.96	104.33	109.90
25	BB	1009	A	C5-C6-N6	6.96	129.27	123.70
25	BB	1541	C	O4'-C1'-N1	6.96	113.77	108.20
25	BB	1604	C	N3-C4-C5	6.96	124.68	121.90
25	BB	1817	G	C6-C5-N7	6.96	134.58	130.40
25	BB	2521	C	N1-C2-O2	6.96	123.08	118.90
1	AE	35	A	C4'-C3'-C2'	-6.96	95.64	102.60
3	A1	599	C	C5-C6-N1	-6.96	117.52	121.00
3	A1	933	G	N3-C4-C5	-6.96	125.12	128.60
3	A1	1357	A	C5-C6-N1	6.96	121.18	117.70
3	A1	1366	C	C5-C6-N1	-6.96	117.52	121.00
3	A1	1394	A	C5-C6-N1	6.96	121.18	117.70
25	BB	542	C	N1-C2-O2	6.96	123.08	118.90
25	BB	625	G	C5'-C4'-O4'	6.96	117.45	109.10
25	BB	761	A	C6-N1-C2	-6.96	114.42	118.60
25	BB	2122	U	N3-C2-O2	-6.96	117.33	122.20
25	BB	2318	G	N7-C8-N9	6.96	116.58	113.10
3	A1	733	G	C6-C5-N7	6.96	134.57	130.40
17	AR	61	ARG	NH1-CZ-NH2	-6.96	111.75	119.40
25	BB	767	U	C5-C4-O4	-6.96	121.73	125.90
25	BB	1443	U	N3-C2-O2	-6.96	117.33	122.20
25	BB	1523	U	O4'-C4'-C3'	6.96	111.67	106.10
25	BB	1536	C	N3-C4-N4	-6.96	113.13	118.00
3	A1	553	A	C5-C6-N1	6.96	121.18	117.70
3	A1	567	G	N9-C4-C5	6.96	108.18	105.40
3	A1	710	G	O4'-C4'-C3'	6.96	111.66	106.10
3	A1	938	A	C2'-C3'-O3'	6.96	124.83	113.70
25	BB	357	C	N3-C2-O2	-6.96	117.03	121.90
25	BB	1436	G	C5-C6-O6	6.96	132.77	128.60
25	BB	1620	G	C1'-O4'-C4'	-6.96	104.34	109.90
25	BB	1794	A	C5-C6-N1	6.96	121.18	117.70
1	AA	46	G	O5'-C5'-C4'	6.95	124.91	111.70
3	A1	298	A	C5-C6-N1	6.95	121.18	117.70
3	A1	474	G	C4-C5-N7	-6.95	108.02	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	801	U	C4-C5-C6	6.95	123.87	119.70
25	BB	69	C	C5-C6-N1	-6.95	117.52	121.00
25	BB	462	C	N1-C2-O2	6.95	123.07	118.90
25	BB	474	G	C5-C6-O6	6.95	132.77	128.60
25	BB	927	A	C4'-C3'-C2'	-6.95	95.65	102.60
25	BB	1019	U	N1-C2-N3	6.95	119.07	114.90
25	BB	1722	A	C5-C6-N1	6.95	121.18	117.70
25	BB	2500	U	C5-C6-N1	-6.95	119.22	122.70
3	A1	387	U	C5-C6-N1	-6.95	119.22	122.70
3	A1	689	C	N3-C2-O2	-6.95	117.03	121.90
25	BB	90	U	C1'-O4'-C4'	-6.95	104.34	109.90
25	BB	330	A	C5-N7-C8	-6.95	100.42	103.90
25	BB	425	G	C5-N7-C8	-6.95	100.82	104.30
25	BB	1049	C	C5'-C4'-O4'	6.95	117.44	109.10
25	BB	1419	A	C1'-O4'-C4'	-6.95	104.34	109.90
25	BB	2277	G	P-O3'-C3'	6.95	128.04	119.70
25	BB	2855	C	N3-C4-C5	6.95	124.68	121.90
3	A1	297	G	N7-C8-N9	6.95	116.58	113.10
3	A1	594	U	N3-C2-O2	-6.95	117.33	122.20
3	A1	1341	U	C2-N3-C4	-6.95	122.83	127.00
3	A1	1369	C	N3-C4-N4	-6.95	113.14	118.00
3	A1	1400	C	C2-N3-C4	-6.95	116.42	119.90
3	A1	1534	A	C2-N3-C4	6.95	114.08	110.60
25	BB	109	C	N3-C4-N4	-6.95	113.13	118.00
25	BB	248	G	N3-C4-N9	6.95	130.17	126.00
25	BB	505	A	C2-N3-C4	6.95	114.08	110.60
25	BB	741	U	N1-C2-N3	6.95	119.07	114.90
25	BB	857	G	C5-C6-N1	6.95	114.97	111.50
25	BB	1483	G	N3-C4-C5	-6.95	125.12	128.60
25	BB	2053	G	C4-C5-C6	-6.95	114.63	118.80
25	BB	2195	U	C5'-C4'-C3'	-6.95	104.88	116.00
25	BB	2880	C	N3-C4-C5	6.95	124.68	121.90
3	A1	10	A	O4'-C1'-N9	6.95	113.76	108.20
3	A1	468	A	C6-C5-N7	6.95	137.16	132.30
3	A1	566	G	C5-C6-N1	6.95	114.97	111.50
3	A1	847	G	C5'-C4'-C3'	-6.95	104.88	116.00
3	A1	1105	A	C6-C5-N7	6.95	137.16	132.30
25	BB	338	G	N3-C4-C5	-6.95	125.12	128.60
25	BB	903	C	N3-C2-O2	-6.95	117.04	121.90
25	BB	1471	G	C6-N1-C2	-6.95	120.93	125.10
25	BB	1531	C	N3-C2-O2	-6.95	117.04	121.90
25	BB	1749	A	O4'-C1'-N9	6.95	113.76	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2359	C	C5-C6-N1	-6.95	117.53	121.00
3	A1	1139	G	N3-C4-N9	6.95	130.17	126.00
3	A1	1376	U	C1'-O4'-C4'	-6.95	104.34	109.90
20	AU	78	ARG	CD-NE-CZ	6.95	133.33	123.60
25	BB	303	G	O4'-C1'-N9	6.95	113.76	108.20
25	BB	456	C	N3-C2-O2	-6.95	117.04	121.90
25	BB	1463	C	N3-C4-C5	6.95	124.68	121.90
25	BB	1913	A	O5'-P-OP2	6.95	119.04	110.70
25	BB	2100	G	C2-N3-C4	6.95	115.37	111.90
25	BB	2752	C	O4'-C4'-C3'	6.95	111.66	106.10
3	A1	58	C	O4'-C1'-N1	6.95	113.76	108.20
3	A1	235	C	C5'-C4'-C3'	-6.95	104.89	116.00
3	A1	253	A	C4-C5-C6	-6.95	113.53	117.00
3	A1	664	G	C3'-C2'-C1'	6.95	107.06	101.50
3	A1	1322	C	N1-C2-O2	6.95	123.07	118.90
3	A1	1522	U	C5-C6-N1	-6.95	119.23	122.70
25	BB	834	G	C5-C6-N1	6.95	114.97	111.50
25	BB	1880	U	C4-C5-C6	6.95	123.87	119.70
25	BB	2158	A	N3-C4-N9	-6.95	121.84	127.40
25	BB	2899	A	C2-N3-C4	6.95	114.07	110.60
26	BC	21	ARG	NE-CZ-NH1	6.95	123.77	120.30
3	A1	16	A	N1-C6-N6	-6.94	114.43	118.60
3	A1	995	C	C5-C6-N1	-6.94	117.53	121.00
3	A1	1093	A	N9-C4-C5	6.94	108.58	105.80
25	BB	1292	G	C5-C6-N1	6.94	114.97	111.50
3	A1	33	A	C8-N9-C4	6.94	108.58	105.80
25	BB	606	U	C1'-O4'-C4'	6.94	115.45	109.90
25	BB	1092	C	N3-C4-N4	-6.94	113.14	118.00
25	BB	1224	U	N3-C2-O2	-6.94	117.34	122.20
25	BB	1477	A	C2-N3-C4	6.94	114.07	110.60
25	BB	1756	G	N3-C2-N2	-6.94	115.04	119.90
25	BB	2552	U	O4'-C1'-N1	6.94	113.75	108.20
25	BB	2702	G	N3-C4-N9	6.94	130.17	126.00
3	A1	899	C	P-O3'-C3'	6.94	128.03	119.70
25	BB	117	G	N9-C4-C5	6.94	108.18	105.40
25	BB	381	G	O4'-C1'-N9	6.94	113.75	108.20
25	BB	614	A	C3'-C2'-C1'	-6.94	95.95	101.50
25	BB	2666	C	N3-C4-N4	-6.94	113.14	118.00
3	A1	307	C	C3'-C2'-C1'	6.94	107.05	101.50
3	A1	1076	U	N3-C2-O2	-6.94	117.34	122.20
25	BB	549	G	N1-C6-O6	-6.94	115.74	119.90
25	BB	1408	G	N3-C2-N2	-6.94	115.04	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1565	C	C5-C6-N1	-6.94	117.53	121.00
25	BB	1708	C	N3-C4-C5	6.94	124.67	121.90
25	BB	2440	C	N3-C4-N4	-6.94	113.14	118.00
3	A1	51	A	C4-C5-C6	-6.94	113.53	117.00
3	A1	316	C	C1'-O4'-C4'	-6.94	104.35	109.90
3	A1	510	A	C6-C5-N7	6.94	137.16	132.30
3	A1	621	A	C6-C5-N7	6.94	137.16	132.30
3	A1	669	G	C5-C6-N1	6.94	114.97	111.50
3	A1	1148	U	C3'-C2'-C1'	6.94	107.05	101.50
3	A1	1270	G	C4'-C3'-C2'	-6.94	95.66	102.60
3	A1	1434	A	C6-C5-N7	6.94	137.16	132.30
4	AB	136	ARG	NE-CZ-NH2	-6.94	116.83	120.30
25	BB	801	G	C1'-O4'-C4'	-6.94	104.35	109.90
25	BB	1242	U	C2-N3-C4	-6.94	122.84	127.00
25	BB	1492	G	N3-C2-N2	-6.94	115.04	119.90
25	BB	2325	G	N3-C2-N2	-6.94	115.04	119.90
3	A1	1381	U	C5-C6-N1	-6.94	119.23	122.70
25	BB	409	G	N1-C6-O6	-6.94	115.74	119.90
25	BB	1421	G	N1-C6-O6	-6.94	115.74	119.90
25	BB	1729	U	C1'-O4'-C4'	-6.94	104.35	109.90
25	BB	1742	U	C5-C4-O4	6.94	130.06	125.90
25	BB	2077	A	C6-C5-N7	6.94	137.16	132.30
25	BB	2273	A	N1-C2-N3	-6.94	125.83	129.30
25	BB	151	C	C3'-C2'-C1'	-6.93	95.95	101.50
25	BB	881	G	C5-N7-C8	-6.93	100.83	104.30
25	BB	1368	G	C4'-C3'-C2'	-6.93	95.67	102.60
25	BB	1919	A	C5-C6-N6	6.93	129.25	123.70
25	BB	2772	C	C5-C4-N4	6.93	125.05	120.20
3	A1	63	C	C5-C6-N1	-6.93	117.53	121.00
3	A1	934	C	OP1-P-OP2	-6.93	109.20	119.60
3	A1	1033	G	C8-N9-C4	-6.93	103.63	106.40
15	AO	135	ARG	NE-CZ-NH1	6.93	123.77	120.30
25	BB	1068	G	C8-N9-C4	6.93	109.17	106.40
25	BB	1494	A	C5'-C4'-O4'	6.93	117.42	109.10
25	BB	1834	U	C2-N3-C4	-6.93	122.84	127.00
25	BB	2066	C	C3'-C2'-C1'	6.93	107.05	101.50
25	BB	2390	U	N3-C2-O2	-6.93	117.35	122.20
48	BY	71	ALA	C-N-CA	6.93	136.86	122.30
24	BA	101	A	O4'-C1'-N9	6.93	113.75	108.20
24	BA	105	G	C5-N7-C8	-6.93	100.83	104.30
25	BB	1464	G	P-O5'-C5'	6.93	131.99	120.90
25	BB	1791	A	C1'-O4'-C4'	-6.93	104.36	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2064	C	C6-N1-C2	-6.93	117.53	120.30
3	A1	1275	A	N1-C6-N6	-6.93	114.44	118.60
3	A1	1305	G	C4'-C3'-C2'	-6.93	95.67	102.60
25	BB	91	A	C3'-C2'-C1'	6.93	107.04	101.50
25	BB	689	A	C6-C5-N7	6.93	137.15	132.30
25	BB	836	G	N1-C6-O6	-6.93	115.74	119.90
25	BB	1270	C	C5-C6-N1	-6.93	117.54	121.00
25	BB	1344	U	O4'-C1'-N1	6.93	113.74	108.20
25	BB	1793	C	C2-N3-C4	-6.93	116.44	119.90
25	BB	2284	A	O4'-C1'-N9	-6.93	102.66	108.20
25	BB	2295	C	N3-C4-C5	6.93	124.67	121.90
25	BB	2638	G	N9-C4-C5	6.93	108.17	105.40
3	A1	11	G	O4'-C1'-N9	6.93	113.74	108.20
3	A1	1220	G	N1-C2-N3	6.93	128.06	123.90
3	A1	1493	A	N9-C4-C5	6.93	108.57	105.80
25	BB	294	A	C6-C5-N7	6.93	137.15	132.30
25	BB	323	C	C5-C4-N4	6.93	125.05	120.20
25	BB	462	C	O4'-C1'-N1	6.93	113.74	108.20
3	A1	127	G	N9-C4-C5	6.93	108.17	105.40
4	AB	62	ARG	CD-NE-CZ	6.93	133.30	123.60
25	BB	80	G	C6-C5-N7	6.93	134.56	130.40
25	BB	176	A	N7-C8-N9	6.93	117.26	113.80
25	BB	233	A	C5-C6-N6	6.93	129.24	123.70
25	BB	1554	U	O4'-C1'-C2'	-6.93	98.87	105.80
25	BB	2037	A	C2-N3-C4	6.93	114.06	110.60
25	BB	2867	G	N3-C2-N2	-6.93	115.05	119.90
45	BV	35	ARG	NE-CZ-NH2	6.93	123.76	120.30
3	A1	386	C	N3-C2-O2	-6.92	117.05	121.90
3	A1	846	G	N7-C8-N9	6.92	116.56	113.10
3	A1	1090	U	N1-C2-N3	6.92	119.06	114.90
3	A1	1117	A	C5-C6-N6	6.92	129.24	123.70
3	A1	1435	G	C4-C5-N7	6.92	113.57	110.80
3	A1	1441	A	N9-C4-C5	-6.92	103.03	105.80
17	AR	61	ARG	NE-CZ-NH1	6.92	123.76	120.30
25	BB	74	A	N1-C6-N6	-6.92	114.44	118.60
25	BB	469	G	C6-C5-N7	6.92	134.56	130.40
25	BB	944	C	N1-C2-N3	6.92	124.05	119.20
25	BB	2467	C	C3'-C2'-C1'	-6.92	95.96	101.50
3	A1	138	G	C5-N7-C8	-6.92	100.84	104.30
24	BA	5	U	C3'-C2'-C1'	-6.92	95.96	101.50
25	BB	521	U	C5-C4-O4	-6.92	121.75	125.90
25	BB	1357	C	O4'-C1'-N1	6.92	113.74	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1934	C	C4'-C3'-C2'	-6.92	95.68	102.60
3	A1	1174	G	C5'-C4'-O4'	6.92	117.41	109.10
3	A1	1449	C	C1'-O4'-C4'	-6.92	104.36	109.90
25	BB	1594	U	N3-C2-O2	-6.92	117.36	122.20
25	BB	1853	A	C6-C5-N7	6.92	137.14	132.30
25	BB	284	U	N1-C2-O2	6.92	127.64	122.80
25	BB	455	C	C6-N1-C2	-6.92	117.53	120.30
25	BB	786	C	N1-C2-N3	6.92	124.04	119.20
25	BB	2823	A	C4-C5-C6	-6.92	113.54	117.00
3	A1	576	C	N3-C2-O2	-6.92	117.06	121.90
3	A1	796	C	N3-C4-N4	-6.92	113.16	118.00
3	A1	910	C	C4'-C3'-C2'	-6.92	95.68	102.60
3	A1	1202	U	N3-C4-O4	6.92	124.24	119.40
25	BB	1420	A	C3'-C2'-C1'	-6.92	95.97	101.50
25	BB	1925	C	C1'-O4'-C4'	-6.92	104.37	109.90
1	AA	7	U	O4'-C1'-N1	6.92	113.73	108.20
3	A1	264	C	C2-N3-C4	-6.92	116.44	119.90
3	A1	658	C	N3-C4-N4	-6.92	113.16	118.00
3	A1	733	G	N9-C4-C5	6.92	108.17	105.40
3	A1	797	C	O4'-C1'-N1	-6.92	102.67	108.20
3	A1	1048	G	N1-C6-O6	-6.92	115.75	119.90
25	BB	39	G	C5'-C4'-O4'	6.92	117.40	109.10
25	BB	537	G	N1-C2-N2	-6.92	109.97	116.20
25	BB	676	A	C6-C5-N7	6.92	137.14	132.30
3	A1	299	G	N3-C4-C5	-6.92	125.14	128.60
3	A1	588	G	C6-N1-C2	-6.92	120.95	125.10
25	BB	47	C	C2-N3-C4	-6.92	116.44	119.90
25	BB	247	G	N1-C2-N3	6.92	128.05	123.90
25	BB	951	C	N3-C4-C5	6.92	124.67	121.90
25	BB	2045	C	C3'-C2'-C1'	6.92	107.03	101.50
3	A1	693	G	O4'-C1'-N9	6.91	113.73	108.20
3	A1	942	G	C6-N1-C2	-6.91	120.95	125.10
3	A1	1274	A	C5-C6-N6	6.91	129.23	123.70
25	BB	157	C	C6-N1-C2	-6.91	117.53	120.30
25	BB	534	U	N1-C2-N3	6.91	119.05	114.90
25	BB	763	G	C4-C5-N7	-6.91	108.03	110.80
25	BB	2547	A	C6-C5-N7	6.91	137.14	132.30
25	BB	2571	U	C1'-O4'-C4'	-6.91	104.37	109.90
25	BB	2821	A	O3'-P-O5'	6.91	117.14	104.00
3	A1	808	C	C5-C6-N1	-6.91	117.54	121.00
24	BA	60	C	C5-C6-N1	-6.91	117.54	121.00
25	BB	53	A	C4'-C3'-C2'	-6.91	95.69	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1012	U	N1-C2-N3	6.91	119.05	114.90
25	BB	1290	C	N3-C4-C5	6.91	124.67	121.90
25	BB	1995	U	N1-C2-N3	6.91	119.05	114.90
25	BB	2472	G	C4'-C3'-C2'	6.91	109.51	102.60
3	A1	213	G	N3-C2-N2	-6.91	115.06	119.90
3	A1	1409	C	N3-C4-C5	6.91	124.66	121.90
5	AC	126	ARG	NE-CZ-NH2	6.91	123.75	120.30
24	BA	2	G	N3-C4-N9	6.91	130.15	126.00
24	BA	85	G	N1-C2-N3	6.91	128.05	123.90
25	BB	156	A	C5-C6-N1	6.91	121.16	117.70
25	BB	638	G	C5'-C4'-C3'	-6.91	104.94	116.00
25	BB	822	G	C6-N1-C2	-6.91	120.95	125.10
25	BB	898	C	C3'-C2'-C1'	-6.91	95.97	101.50
25	BB	1439	A	C6-C5-N7	6.91	137.14	132.30
25	BB	1561	C	O4'-C1'-N1	6.91	113.73	108.20
25	BB	1610	A	C5-C6-N1	6.91	121.16	117.70
25	BB	1691	C	C5-C6-N1	-6.91	117.55	121.00
25	BB	1835	G	N3-C2-N2	-6.91	115.06	119.90
48	BY	169	ARG	NE-CZ-NH2	-6.91	116.84	120.30
3	A1	71	A	O4'-C1'-C2'	-6.91	98.89	105.80
3	A1	826	C	N1-C2-O2	6.91	123.05	118.90
17	AR	46	ARG	NE-CZ-NH1	6.91	123.75	120.30
25	BB	612	G	N1-C6-O6	-6.91	115.75	119.90
25	BB	1052	C	C2-N3-C4	-6.91	116.45	119.90
25	BB	1074	G	N7-C8-N9	6.91	116.55	113.10
25	BB	1110	G	C8-N9-C4	-6.91	103.64	106.40
25	BB	2414	G	N9-C4-C5	6.91	108.16	105.40
2	AM	10	U	N3-C2-O2	-6.91	117.36	122.20
3	A1	649	A	C6-C5-N7	6.91	137.13	132.30
25	BB	939	G	C6-N1-C2	-6.91	120.96	125.10
37	BN	132	ARG	NH1-CZ-NH2	-6.91	111.80	119.40
1	AE	59	U	N3-C2-O2	-6.91	117.36	122.20
3	A1	226	G	C8-N9-C4	-6.91	103.64	106.40
3	A1	379	C	C2-N3-C4	-6.91	116.45	119.90
24	BA	18	G	C2-N3-C4	-6.91	108.45	111.90
25	BB	493	G	C5-C6-N1	6.91	114.95	111.50
25	BB	750	A	C5-C6-N1	6.91	121.15	117.70
25	BB	1595	C	C4-C5-C6	6.91	120.85	117.40
25	BB	1618	A	C4-C5-C6	-6.91	113.55	117.00
25	BB	2339	C	O4'-C1'-N1	-6.91	102.68	108.20
25	BB	2607	G	C3'-C2'-C1'	-6.91	95.98	101.50
1	AP	13	C	N3-C2-O2	-6.90	117.07	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	8	A	C4-C5-C6	-6.90	113.55	117.00
3	A1	92	U	O4'-C1'-C2'	-6.90	98.90	105.80
3	A1	744	C	C5'-C4'-O4'	6.90	117.39	109.10
3	A1	1496	C	N1-C2-O2	6.90	123.04	118.90
24	BA	100	G	C5-N7-C8	-6.90	100.85	104.30
25	BB	1894	C	N3-C2-O2	-6.90	117.07	121.90
25	BB	2688	G	C5-C6-N1	6.90	114.95	111.50
1	AP	36	A	N7-C8-N9	-6.90	110.35	113.80
3	A1	1209	C	C5-C4-N4	-6.90	115.37	120.20
3	A1	1346	A	O4'-C1'-N9	6.90	113.72	108.20
13	AL	2	ARG	CD-NE-CZ	6.90	133.26	123.60
25	BB	1968	G	C5-C6-N1	6.90	114.95	111.50
25	BB	1989	G	C3'-C2'-C1'	6.90	107.02	101.50
25	BB	2283	C	C5'-C4'-C3'	-6.90	104.96	116.00
25	BB	2353	G	C5-C6-N1	6.90	114.95	111.50
25	BB	2802	G	C8-N9-C4	-6.90	103.64	106.40
25	BB	2867	G	N1-C6-O6	-6.90	115.76	119.90
1	AA	62	A	C5'-C4'-O4'	6.90	117.38	109.10
3	A1	1072	G	O4'-C1'-N9	6.90	113.72	108.20
3	A1	1393	U	C5-C6-N1	-6.90	119.25	122.70
24	BA	27	C	N3-C4-C5	6.90	124.66	121.90
25	BB	1239	G	C4-C5-N7	6.90	113.56	110.80
25	BB	1422	G	N7-C8-N9	6.90	116.55	113.10
25	BB	1649	G	N1-C2-N2	-6.90	109.99	116.20
3	A1	59	A	C5-C6-N6	6.90	129.22	123.70
3	A1	278	G	C6-C5-N7	6.90	134.54	130.40
3	A1	568	G	N9-C1'-C2'	-6.90	104.41	112.00
25	BB	810	U	C1'-O4'-C4'	-6.90	104.38	109.90
25	BB	1116	G	N1-C6-O6	-6.90	115.76	119.90
1	AP	23	A	C8-N9-C4	6.90	108.56	105.80
2	AM	4	U	N3-C2-O2	-6.90	117.37	122.20
3	A1	542	G	C4-C5-N7	-6.90	108.04	110.80
3	A1	1286	U	C1'-O4'-C4'	-6.90	104.38	109.90
3	A1	1373	G	C4-C5-N7	-6.90	108.04	110.80
24	BA	57	A	C6-C5-N7	6.90	137.13	132.30
25	BB	783	A	C3'-C2'-C1'	6.90	107.02	101.50
25	BB	2659	G	N3-C4-C5	-6.90	125.15	128.60
3	A1	1164	G	N1-C2-N3	6.90	128.04	123.90
3	A1	1347	G	C6-C5-N7	6.90	134.54	130.40
25	BB	478	A	C5-C6-N1	6.90	121.15	117.70
25	BB	1155	A	C6-C5-N7	6.90	137.13	132.30
25	BB	1671	U	N3-C2-O2	-6.90	117.37	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2474	U	C5-C6-N1	-6.90	119.25	122.70
3	A1	657	U	O4'-C1'-N1	6.89	113.72	108.20
3	A1	892	A	C4-C5-C6	-6.89	113.55	117.00
25	BB	326	G	C1'-O4'-C4'	-6.89	104.38	109.90
25	BB	883	G	C1'-O4'-C4'	-6.89	104.39	109.90
25	BB	1360	G	N9-C4-C5	6.89	108.16	105.40
25	BB	1428	C	N1-C2-O2	6.89	123.04	118.90
25	BB	1553	A	C4-C5-C6	-6.89	113.55	117.00
25	BB	1970	A	C6-C5-N7	6.89	137.13	132.30
25	BB	2395	C	N3-C2-O2	-6.89	117.07	121.90
25	BB	2578	G	N3-C4-C5	-6.89	125.15	128.60
25	BB	2589	A	C4-C5-C6	-6.89	113.55	117.00
3	A1	321	A	C5-C6-N6	6.89	129.21	123.70
3	A1	329	A	C5-C6-N1	6.89	121.15	117.70
3	A1	379	C	C4'-C3'-C2'	-6.89	95.71	102.60
3	A1	589	U	C5-C6-N1	-6.89	119.25	122.70
3	A1	753	A	C5-C6-N6	6.89	129.22	123.70
25	BB	69	C	C6-N1-C2	-6.89	117.54	120.30
25	BB	210	C	N3-C4-C5	6.89	124.66	121.90
25	BB	705	A	C5-C6-N1	6.89	121.15	117.70
25	BB	1027	A	C6-C5-N7	6.89	137.12	132.30
25	BB	1098	A	C6-C5-N7	6.89	137.12	132.30
25	BB	2071	A	C3'-C2'-C1'	-6.89	95.99	101.50
25	BB	2841	C	N3-C2-O2	-6.89	117.08	121.90
3	A1	989	U	N1-C2-O2	6.89	127.62	122.80
25	BB	1590	A	C5'-C4'-O4'	6.89	117.37	109.10
25	BB	1807	G	C8-N9-C4	-6.89	103.64	106.40
25	BB	1925	C	C3'-C2'-C1'	6.89	107.01	101.50
25	BB	2524	G	N1-C2-N3	6.89	128.03	123.90
1	AE	27	C	N3-C4-C5	6.89	124.66	121.90
2	AM	13	U	C5-C6-N1	-6.89	119.25	122.70
3	A1	775	G	N3-C4-N9	6.89	130.13	126.00
3	A1	1059	C	C6-N1-C2	-6.89	117.54	120.30
3	A1	1433	A	C2-N3-C4	6.89	114.05	110.60
3	A1	1488	G	C8-N9-C4	-6.89	103.64	106.40
24	BA	56	G	C5-C6-N1	6.89	114.94	111.50
25	BB	9	G	N1-C2-N2	-6.89	110.00	116.20
25	BB	104	A	C5'-C4'-C3'	-6.89	104.98	116.00
25	BB	395	U	C4'-C3'-C2'	-6.89	95.71	102.60
25	BB	682	G	C5-C6-N1	6.89	114.94	111.50
25	BB	1298	C	N3-C4-N4	-6.89	113.18	118.00
25	BB	1416	G	N1-C6-O6	-6.89	115.77	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1428	C	N3-C4-C5	6.89	124.66	121.90
25	BB	1757	A	N9-C4-C5	6.89	108.56	105.80
25	BB	2611	C	N3-C4-N4	-6.89	113.18	118.00
25	BB	2865	U	N1-C2-N3	6.89	119.03	114.90
3	A1	1457	G	C6-N1-C2	-6.89	120.97	125.10
25	BB	193	U	O4'-C4'-C3'	6.89	111.61	106.10
25	BB	984	A	C4-C5-C6	-6.89	113.56	117.00
25	BB	1300	G	N1-C6-O6	-6.89	115.77	119.90
25	BB	2580	U	N3-C2-O2	-6.89	117.38	122.20
1	AE	33	U	C5-C4-O4	-6.89	121.77	125.90
3	A1	632	U	N3-C2-O2	-6.89	117.38	122.20
17	AR	110	ARG	NE-CZ-NH2	-6.89	116.86	120.30
19	AT	45	ARG	NH1-CZ-NH2	-6.89	111.82	119.40
23	AX	45	ARG	NE-CZ-NH1	6.89	123.74	120.30
24	BA	99	A	N7-C8-N9	6.89	117.24	113.80
25	BB	615	U	C5-C6-N1	-6.89	119.26	122.70
25	BB	1070	A	C4-C5-C6	-6.89	113.56	117.00
25	BB	1389	G	N7-C8-N9	6.89	116.54	113.10
25	BB	2341	G	C4-C5-C6	-6.89	114.67	118.80
1	AE	24	G	C5-C6-N1	6.88	114.94	111.50
3	A1	357	G	C5-C6-N1	6.88	114.94	111.50
3	A1	392	C	N3-C4-C5	6.88	124.65	121.90
3	A1	851	G	C5-C6-N1	6.88	114.94	111.50
25	BB	238	C	N3-C4-C5	6.88	124.65	121.90
25	BB	1222	U	C5-C6-N1	-6.88	119.26	122.70
25	BB	1322	A	C6-C5-N7	6.88	137.12	132.30
3	A1	1068	G	N1-C2-N3	6.88	128.03	123.90
3	A1	1087	G	N1-C6-O6	-6.88	115.77	119.90
25	BB	430	A	C5-C6-N6	6.88	129.21	123.70
25	BB	1103	A	N9-C4-C5	6.88	108.55	105.80
25	BB	1358	G	C6-N1-C2	-6.88	120.97	125.10
25	BB	1377	G	N1-C6-O6	-6.88	115.77	119.90
25	BB	1549	A	C1'-O4'-C4'	-6.88	104.39	109.90
3	A1	781	A	N9-C1'-C2'	-6.88	104.43	112.00
3	A1	1369	C	O4'-C1'-C2'	-6.88	98.92	105.80
25	BB	77	G	N7-C8-N9	6.88	116.54	113.10
25	BB	198	C	C2-N3-C4	-6.88	116.46	119.90
25	BB	276	U	N3-C2-O2	-6.88	117.38	122.20
25	BB	547	A	N9-C4-C5	6.88	108.55	105.80
25	BB	1316	U	C2-N3-C4	-6.88	122.87	127.00
25	BB	1717	A	P-O3'-C3'	6.88	127.96	119.70
25	BB	2223	G	N3-C2-N2	-6.88	115.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2529	G	C3'-C2'-C1'	6.88	107.00	101.50
25	BB	2635	A	C4'-C3'-C2'	-6.88	95.72	102.60
25	BB	50	U	C2-N3-C4	-6.88	122.87	127.00
25	BB	326	G	C3'-C2'-C1'	6.88	107.00	101.50
25	BB	1526	C	N1-C2-O2	6.88	123.03	118.90
1	AP	24	G	C6-N1-C2	-6.88	120.97	125.10
3	A1	87	C	N3-C2-O2	-6.88	117.08	121.90
3	A1	230	G	N3-C2-N2	-6.88	115.08	119.90
24	BA	11	C	N1-C2-O2	6.88	123.03	118.90
25	BB	669	G	N1-C6-O6	-6.88	115.77	119.90
25	BB	1244	A	C6-C5-N7	6.88	137.12	132.30
25	BB	1606	C	N1-C2-O2	6.88	123.03	118.90
25	BB	2498	C	C2-N3-C4	-6.88	116.46	119.90
25	BB	2882	A	C5-C6-N1	6.88	121.14	117.70
25	BB	2884	U	O4'-C1'-N1	6.88	113.70	108.20
1	AA	5	A	C5-N7-C8	-6.88	100.46	103.90
1	AA	30	G	C4-C5-N7	-6.88	108.05	110.80
1	AP	12	U	C5-C4-O4	-6.88	121.77	125.90
3	A1	767	A	C6-C5-N7	6.88	137.11	132.30
25	BB	148	U	O4'-C1'-N1	6.88	113.70	108.20
25	BB	888	C	O4'-C1'-N1	6.88	113.70	108.20
25	BB	1404	C	P-O3'-C3'	6.88	127.95	119.70
25	BB	2056	G	C4-C5-N7	-6.88	108.05	110.80
25	BB	2498	C	C5'-C4'-O4'	6.88	117.35	109.10
25	BB	1762	A	C6-N1-C2	-6.88	114.47	118.60
25	BB	2561	U	C5-C6-N1	-6.88	119.26	122.70
3	A1	77	A	C5-C6-N1	6.87	121.14	117.70
3	A1	371	A	C3'-C2'-C1'	-6.87	96.00	101.50
3	A1	554	A	C6-C5-N7	6.87	137.11	132.30
25	BB	1037	G	N1-C6-O6	-6.87	115.78	119.90
25	BB	1366	A	C5-N7-C8	-6.87	100.46	103.90
25	BB	1655	A	C5'-C4'-O4'	6.87	117.35	109.10
25	BB	2294	G	C2-N3-C4	6.87	115.34	111.90
25	BB	2844	G	C4'-C3'-C2'	-6.87	95.73	102.60
2	AM	9	U	N3-C2-O2	-6.87	117.39	122.20
3	A1	85	U	O4'-C1'-C2'	-6.87	98.93	105.80
3	A1	181	A	C3'-C2'-C1'	6.87	107.00	101.50
3	A1	406	G	OP1-P-OP2	-6.87	109.29	119.60
3	A1	695	A	C5-C6-N1	6.87	121.14	117.70
3	A1	879	C	N3-C4-N4	-6.87	113.19	118.00
3	A1	1196	A	C6-N1-C2	-6.87	114.48	118.60
3	A1	1214	C	C1'-O4'-C4'	-6.87	104.40	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1290	C	C5'-C4'-C3'	-6.87	105.00	116.00
25	BB	1452	G	C5'-C4'-O4'	6.87	117.34	109.10
25	BB	2071	A	C5-C6-N6	6.87	129.20	123.70
25	BB	2632	A	C6-N1-C2	-6.87	114.48	118.60
3	A1	315	A	O4'-C4'-C3'	6.87	111.60	106.10
3	A1	738	C	N3-C2-O2	-6.87	117.09	121.90
3	A1	826	C	O4'-C1'-N1	6.87	113.70	108.20
3	A1	1182	G	C8-N9-C4	-6.87	103.65	106.40
25	BB	148	U	N1-C2-N3	6.87	119.02	114.90
25	BB	1622	G	C8-N9-C4	-6.87	103.65	106.40
25	BB	2207	C	C2-N3-C4	-6.87	116.47	119.90
25	BB	2474	U	O4'-C1'-C2'	-6.87	98.93	105.80
25	BB	2706	A	N9-C4-C5	6.87	108.55	105.80
25	BB	2717	C	C5-C4-N4	6.87	125.01	120.20
25	BB	2766	A	C5-C6-N6	6.87	129.20	123.70
3	A1	13	U	P-O3'-C3'	6.87	127.94	119.70
3	A1	682	G	C3'-C2'-C1'	-6.87	96.00	101.50
3	A1	1190	G	N1-C6-O6	-6.87	115.78	119.90
3	A1	1347	G	C4-C5-N7	-6.87	108.05	110.80
25	BB	996	A	N1-C6-N6	-6.87	114.48	118.60
25	BB	1721	G	N3-C4-N9	6.87	130.12	126.00
25	BB	1770	G	C5-C6-O6	6.87	132.72	128.60
25	BB	1791	A	C6-C5-N7	6.87	137.11	132.30
25	BB	1808	A	C5-N7-C8	-6.87	100.47	103.90
25	BB	1831	G	N1-C2-N3	6.87	128.02	123.90
25	BB	1908	C	N1-C2-N3	6.87	124.01	119.20
25	BB	2077	A	C5-C6-N6	6.87	129.19	123.70
25	BB	1560	G	C6-N1-C2	-6.87	120.98	125.10
25	BB	1771	C	C6-N1-C2	-6.87	117.55	120.30
1	AE	69	U	C5-C6-N1	-6.87	119.27	122.70
3	A1	880	C	N3-C4-C5	6.87	124.65	121.90
25	BB	282	A	C6-C5-N7	6.87	137.10	132.30
25	BB	381	G	C3'-C2'-C1'	6.87	106.99	101.50
25	BB	489	G	N3-C4-N9	6.87	130.12	126.00
25	BB	654	A	N7-C8-N9	6.87	117.23	113.80
25	BB	981	A	C2-N3-C4	6.87	114.03	110.60
25	BB	1671	U	N1-C2-N3	6.87	119.02	114.90
25	BB	1839	G	N1-C6-O6	-6.87	115.78	119.90
25	BB	2839	G	N3-C4-N9	6.87	130.12	126.00
1	AA	3	G	C5'-C4'-C3'	-6.86	105.02	116.00
3	A1	109	A	C5-N7-C8	-6.86	100.47	103.90
3	A1	435	A	C3'-C2'-C1'	6.86	106.99	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1253	G	N3-C4-C5	-6.86	125.17	128.60
3	A1	1324	A	C4-C5-C6	-6.86	113.57	117.00
25	BB	849	A	C8-N9-C4	-6.86	103.05	105.80
25	BB	1245	G	C5-C6-N1	6.86	114.93	111.50
25	BB	2033	A	C5-C6-N6	6.86	129.19	123.70
25	BB	2136	G	N1-C6-O6	-6.86	115.78	119.90
25	BB	2556	C	C3'-C2'-C1'	6.86	106.99	101.50
25	BB	2869	G	N3-C4-N9	6.86	130.12	126.00
13	AL	40	PHE	CB-CG-CD1	-6.86	116.00	120.80
24	BA	116	G	P-O3'-C3'	6.86	127.93	119.70
25	BB	1913	A	C2-N3-C4	6.86	114.03	110.60
25	BB	2533	U	C2-N3-C4	-6.86	122.88	127.00
1	AP	51	G	C8-N9-C4	-6.86	103.66	106.40
3	A1	765	G	C4-C5-N7	-6.86	108.06	110.80
3	A1	1063	C	N3-C4-N4	-6.86	113.20	118.00
25	BB	2272	U	N3-C2-O2	-6.86	117.40	122.20
25	BB	2317	A	C2'-C3'-O3'	6.86	124.68	113.70
3	A1	1045	C	C6-N1-C2	-6.86	117.56	120.30
3	A1	1138	G	C4-C5-C6	-6.86	114.69	118.80
3	A1	1232	U	C4'-C3'-C2'	6.86	109.46	102.60
24	BA	24	G	N3-C2-N2	-6.86	115.10	119.90
25	BB	198	C	P-O3'-C3'	6.86	127.93	119.70
25	BB	941	A	C2-N3-C4	6.86	114.03	110.60
3	A1	330	C	N1-C2-O2	6.86	123.01	118.90
3	A1	436	C	N3-C4-C5	6.86	124.64	121.90
3	A1	525	C	N1-C2-O2	6.86	123.02	118.90
3	A1	888	G	C6-N1-C2	-6.86	120.98	125.10
3	A1	1063	C	N1-C2-O2	6.86	123.02	118.90
25	BB	259	G	N3-C4-C5	-6.86	125.17	128.60
25	BB	872	U	N3-C2-O2	-6.86	117.40	122.20
25	BB	1286	A	C8-N9-C4	-6.86	103.06	105.80
25	BB	1900	A	C5-C6-N1	6.86	121.13	117.70
25	BB	1966	A	O4'-C4'-C3'	6.86	111.59	106.10
25	BB	2761	A	N1-C2-N3	-6.86	125.87	129.30
25	BB	2829	A	C5-N7-C8	-6.86	100.47	103.90
25	BB	2903	U	N3-C2-O2	-6.86	117.40	122.20
3	A1	80	A	O4'-C1'-N9	6.86	113.69	108.20
3	A1	233	C	N3-C4-C5	6.86	124.64	121.90
3	A1	240	G	C3'-C2'-C1'	6.86	106.98	101.50
3	A1	1054	C	C5-C6-N1	6.86	124.43	121.00
3	A1	1311	A	C6-N1-C2	-6.86	114.49	118.60
25	BB	561	G	N1-C2-N3	6.86	128.01	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1633	G	O4'-C4'-C3'	6.86	111.58	106.10
25	BB	1909	C	O4'-C1'-N1	6.86	113.68	108.20
25	BB	2566	A	C1'-O4'-C4'	-6.86	104.42	109.90
25	BB	2815	C	N1-C2-N3	6.86	124.00	119.20
3	A1	124	C	N3-C4-C5	6.85	124.64	121.90
3	A1	682	G	O4'-C1'-N9	6.85	113.68	108.20
25	BB	66	C	N1-C2-N3	6.85	124.00	119.20
25	BB	154	U	C1'-O4'-C4'	-6.85	104.42	109.90
25	BB	1310	G	C1'-O4'-C4'	-6.85	104.42	109.90
25	BB	1694	C	C5-C4-N4	6.85	125.00	120.20
25	BB	2421	G	C8-N9-C4	-6.85	103.66	106.40
25	BB	2668	G	N3-C4-N9	6.85	130.11	126.00
1	AE	29	A	C6-N1-C2	-6.85	114.49	118.60
3	A1	921	U	C2'-C3'-O3'	6.85	124.66	113.70
3	A1	1163	A	N9-C1'-C2'	-6.85	104.46	112.00
25	BB	299	A	O4'-C1'-N9	-6.85	102.72	108.20
25	BB	1103	A	C2-N3-C4	6.85	114.03	110.60
25	BB	1140	C	O4'-C1'-C2'	-6.85	98.95	105.80
25	BB	1151	A	C6-C5-N7	6.85	137.10	132.30
25	BB	1249	U	N3-C2-O2	-6.85	117.40	122.20
25	BB	1394	U	P-O3'-C3'	6.85	127.92	119.70
25	BB	1880	U	C3'-C2'-C1'	-6.85	96.02	101.50
25	BB	2040	G	C6-N1-C2	-6.85	120.99	125.10
25	BB	2282	G	C2'-C3'-O3'	6.85	124.67	113.70
3	A1	205	A	C2-N3-C4	6.85	114.03	110.60
3	A1	965	U	P-O3'-C3'	6.85	127.92	119.70
3	A1	1509	C	C2-N3-C4	-6.85	116.47	119.90
25	BB	1140	C	C4-C5-C6	6.85	120.83	117.40
25	BB	1242	U	N1-C2-N3	6.85	119.01	114.90
25	BB	2228	G	N3-C4-C5	-6.85	125.17	128.60
25	BB	2821	A	C4-C5-C6	-6.85	113.58	117.00
1	AP	50	U	N3-C2-O2	-6.85	117.41	122.20
3	A1	665	A	N1-C2-N3	-6.85	125.88	129.30
3	A1	1021	A	C5-C6-N1	6.85	121.12	117.70
25	BB	424	G	N1-C6-O6	-6.85	115.79	119.90
25	BB	531	C	N3-C2-O2	-6.85	117.11	121.90
25	BB	716	A	O4'-C4'-C3'	6.85	111.58	106.10
25	BB	792	A	C6-C5-N7	6.85	137.09	132.30
25	BB	886	A	C6-C5-N7	6.85	137.09	132.30
25	BB	1112	G	N3-C4-C5	-6.85	125.17	128.60
25	BB	1704	C	N1-C1'-C2'	6.85	122.90	114.00
25	BB	2891	U	O5'-P-OP1	-6.85	99.53	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	259	G	C5-C6-N1	6.85	114.92	111.50
3	A1	1172	C	N3-C4-C5	6.85	124.64	121.90
3	A1	1187	G	N3-C2-N2	-6.85	115.11	119.90
24	BA	108	A	O4'-C4'-C3'	6.85	111.58	106.10
25	BB	449	A	P-O3'-C3'	6.85	127.92	119.70
25	BB	617	G	C8-N9-C4	-6.85	103.66	106.40
25	BB	1056	G	N3-C2-N2	-6.85	115.11	119.90
25	BB	1275	A	C4-C5-C6	-6.85	113.58	117.00
25	BB	1631	G	C4-C5-C6	-6.85	114.69	118.80
25	BB	1727	C	N3-C4-C5	6.85	124.64	121.90
3	A1	1011	C	N3-C4-N4	-6.85	113.21	118.00
3	A1	1089	G	C5'-C4'-O4'	6.85	117.31	109.10
25	BB	514	A	O4'-C4'-C3'	-6.85	97.15	104.00
25	BB	1172	C	N1-C2-O2	6.85	123.01	118.90
25	BB	1980	G	C8-N9-C4	-6.85	103.66	106.40
25	BB	2190	G	C6-N1-C2	-6.85	120.99	125.10
25	BB	2264	C	C3'-C2'-C1'	-6.85	96.02	101.50
1	AA	9	A	C4-C5-C6	-6.84	113.58	117.00
1	AP	50	U	C4'-C3'-C2'	-6.84	95.76	102.60
3	A1	46	G	P-O3'-C3'	6.84	127.91	119.70
3	A1	368	U	C5'-C4'-O4'	6.84	117.31	109.10
3	A1	393	A	C4-C5-C6	-6.84	113.58	117.00
3	A1	427	U	C4-C5-C6	6.84	123.81	119.70
3	A1	621	A	OP1-P-OP2	-6.84	109.33	119.60
3	A1	877	G	C8-N9-C4	-6.84	103.66	106.40
3	A1	1006	G	C5-C6-N1	6.84	114.92	111.50
3	A1	1066	C	N1-C2-N3	6.84	123.99	119.20
25	BB	99	U	N1-C2-O2	6.84	127.59	122.80
25	BB	758	C	C5-C6-N1	-6.84	117.58	121.00
25	BB	1237	A	C6-N1-C2	-6.84	114.49	118.60
25	BB	1333	G	C5-C6-N1	6.84	114.92	111.50
25	BB	1456	G	N1-C6-O6	-6.84	115.79	119.90
25	BB	2681	C	O4'-C1'-C2'	-6.84	98.96	105.80
25	BB	2760	C	N3-C2-O2	-6.84	117.11	121.90
25	BB	2901	C	C5-C4-N4	6.84	124.99	120.20
25	BB	549	G	C5'-C4'-O4'	6.84	117.31	109.10
3	A1	279	A	C6-N1-C2	-6.84	114.50	118.60
3	A1	345	C	O4'-C4'-C3'	6.84	111.57	106.10
3	A1	489	C	N3-C4-C5	-6.84	119.16	121.90
20	AU	91	ARG	NH1-CZ-NH2	-6.84	111.87	119.40
20	AU	95	ARG	NE-CZ-NH1	6.84	123.72	120.30
25	BB	369	U	C5-C6-N1	-6.84	119.28	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	812	C	N1-C2-O2	6.84	123.00	118.90
25	BB	888	C	C5'-C4'-O4'	6.84	117.31	109.10
25	BB	1267	U	C4-C5-C6	6.84	123.80	119.70
25	BB	1350	C	N3-C2-O2	-6.84	117.11	121.90
25	BB	1505	A	O3'-P-O5'	6.84	117.00	104.00
25	BB	2282	G	N1-C6-O6	-6.84	115.80	119.90
3	A1	674	G	C5-C6-N1	6.84	114.92	111.50
3	A1	940	C	C5'-C4'-O4'	6.84	117.31	109.10
3	A1	1353	G	C2-N3-C4	6.84	115.32	111.90
3	A1	1402	C	C5-C6-N1	-6.84	117.58	121.00
25	BB	343	C	N1-C2-N3	6.84	123.99	119.20
25	BB	940	G	N1-C2-N3	6.84	128.00	123.90
25	BB	1314	C	C6-N1-C2	-6.84	117.56	120.30
25	BB	1316	U	O5'-C5'-C4'	6.84	124.69	111.70
25	BB	1593	A	C6-N1-C2	-6.84	114.50	118.60
25	BB	1649	G	N1-C6-O6	-6.84	115.80	119.90
25	BB	2166	U	O4'-C4'-C3'	-6.84	97.16	104.00
25	BB	2662	A	N1-C6-N6	-6.84	114.50	118.60
3	A1	21	G	C1'-O4'-C4'	-6.84	104.43	109.90
3	A1	131	A	C6-C5-N7	6.84	137.09	132.30
3	A1	378	G	N1-C6-O6	-6.84	115.80	119.90
3	A1	379	C	C1'-O4'-C4'	-6.84	104.43	109.90
3	A1	931	C	N1-C2-N3	6.84	123.99	119.20
24	BA	42	C	N3-C4-C5	6.84	124.64	121.90
25	BB	2335	A	C1'-O4'-C4'	-6.84	104.43	109.90
1	AP	45	G	N3-C2-N2	-6.84	115.11	119.90
3	A1	289	G	C5-C6-N1	6.84	114.92	111.50
3	A1	540	G	N1-C6-O6	-6.84	115.80	119.90
3	A1	1043	G	C4'-C3'-C2'	-6.84	95.76	102.60
3	A1	1383	C	N3-C4-C5	6.84	124.64	121.90
3	A1	1521	C	N3-C4-N4	-6.84	113.22	118.00
25	BB	918	A	C4-C5-C6	-6.84	113.58	117.00
25	BB	1083	U	N1-C2-N3	6.84	119.00	114.90
25	BB	1091	G	N3-C2-N2	-6.84	115.11	119.90
25	BB	1548	A	N7-C8-N9	-6.84	110.38	113.80
25	BB	1823	G	C4'-C3'-C2'	-6.84	95.76	102.60
25	BB	2401	U	C5-C6-N1	-6.84	119.28	122.70
25	BB	2844	G	C8-N9-C4	-6.84	103.67	106.40
1	AA	50	U	N3-C4-O4	6.83	124.19	119.40
3	A1	687	A	C5-C6-N1	6.83	121.12	117.70
25	BB	1813	G	C5-C6-N1	6.83	114.92	111.50
25	BB	2770	G	C5-C6-O6	6.83	132.70	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	287	U	C5'-C4'-C3'	-6.83	105.07	116.00
3	A1	485	U	N1-C2-N3	6.83	119.00	114.90
3	A1	937	A	O4'-C1'-N9	6.83	113.67	108.20
3	A1	955	U	C5'-C4'-C3'	-6.83	105.07	116.00
3	A1	1021	A	C4-C5-C6	-6.83	113.58	117.00
3	A1	1317	C	C4-C5-C6	-6.83	113.98	117.40
4	AB	138	ARG	NE-CZ-NH2	-6.83	116.88	120.30
25	BB	209	C	O4'-C1'-N1	6.83	113.67	108.20
25	BB	525	U	C4'-C3'-C2'	-6.83	95.77	102.60
25	BB	964	C	N3-C2-O2	-6.83	117.12	121.90
25	BB	1236	G	C5-C6-N1	6.83	114.92	111.50
25	BB	1298	C	C5'-C4'-O4'	6.83	117.30	109.10
25	BB	1315	C	N1-C1'-C2'	6.83	122.88	114.00
25	BB	1528	A	N1-C2-N3	-6.83	125.88	129.30
25	BB	1789	A	C6-C5-N7	6.83	137.08	132.30
25	BB	2618	G	C5-C6-O6	6.83	132.70	128.60
25	BB	2631	G	C8-N9-C4	-6.83	103.67	106.40
25	BB	2859	G	O4'-C1'-N9	-6.83	102.73	108.20
48	BY	90	PHE	CB-CG-CD2	-6.83	116.02	120.80
3	A1	107	G	N9-C4-C5	6.83	108.13	105.40
3	A1	319	G	C4-C5-N7	6.83	113.53	110.80
3	A1	401	C	N3-C2-O2	-6.83	117.12	121.90
3	A1	639	G	C5-C6-O6	6.83	132.70	128.60
25	BB	95	A	N9-C4-C5	6.83	108.53	105.80
25	BB	732	C	C5'-C4'-O4'	6.83	117.30	109.10
25	BB	991	C	N3-C2-O2	-6.83	117.12	121.90
25	BB	1037	G	N9-C1'-C2'	-6.83	104.48	112.00
25	BB	1568	G	C2-N3-C4	6.83	115.31	111.90
25	BB	2488	G	N7-C8-N9	6.83	116.52	113.10
25	BB	2615	U	N3-C2-O2	-6.83	117.42	122.20
25	BB	2625	G	C5'-C4'-O4'	6.83	117.30	109.10
25	BB	2773	C	C2-N3-C4	-6.83	116.48	119.90
3	A1	134	G	N7-C8-N9	6.83	116.52	113.10
3	A1	655	A	C4-C5-C6	-6.83	113.58	117.00
3	A1	833	G	N1-C6-O6	-6.83	115.80	119.90
24	BA	96	G	N1-C6-O6	-6.83	115.80	119.90
25	BB	411	G	N3-C2-N2	-6.83	115.12	119.90
25	BB	1547	C	N1-C2-O2	6.83	123.00	118.90
25	BB	1744	A	N1-C2-N3	-6.83	125.89	129.30
3	A1	638	U	C5-C6-N1	-6.83	119.29	122.70
3	A1	966	G	C6-N1-C2	-6.83	121.00	125.10
3	A1	1468	A	N1-C2-N3	-6.83	125.89	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	94	A	N9-C4-C5	6.83	108.53	105.80
25	BB	408	G	N9-C4-C5	6.83	108.13	105.40
25	BB	1348	C	C1'-O4'-C4'	-6.83	104.44	109.90
25	BB	2131	U	C2-N3-C4	-6.83	122.90	127.00
25	BB	2541	A	P-O3'-C3'	6.83	127.89	119.70
25	BB	2645	G	N3-C2-N2	-6.83	115.12	119.90
25	BB	436	C	P-O3'-C3'	6.83	127.89	119.70
25	BB	973	A	C3'-C2'-C1'	6.83	106.96	101.50
25	BB	2367	G	C5-N7-C8	-6.83	100.89	104.30
48	BY	83	ARG	NE-CZ-NH1	6.83	123.71	120.30
3	A1	305	G	C1'-O4'-C4'	-6.83	104.44	109.90
3	A1	1449	C	O4'-C1'-N1	-6.83	102.74	108.20
3	A1	1488	G	C1'-O4'-C4'	-6.83	104.44	109.90
25	BB	476	G	N9-C4-C5	6.83	108.13	105.40
25	BB	970	U	C5-C4-O4	-6.83	121.81	125.90
25	BB	1220	G	C6-C5-N7	6.83	134.50	130.40
25	BB	1265	A	C5-C6-N6	6.83	129.16	123.70
25	BB	1680	U	C4'-C3'-C2'	-6.83	95.77	102.60
25	BB	1732	C	N3-C4-N4	-6.83	113.22	118.00
25	BB	1883	U	N3-C2-O2	-6.83	117.42	122.20
25	BB	2169	A	C5-C6-N6	6.83	129.16	123.70
25	BB	2305	U	C5-C6-N1	-6.83	119.29	122.70
25	BB	2580	U	C4'-C3'-C2'	-6.83	95.77	102.60
25	BB	2666	C	N3-C4-C5	6.83	124.63	121.90
48	BY	184	ARG	NH1-CZ-NH2	-6.83	111.89	119.40
3	A1	354	G	O4'-C1'-C2'	6.82	113.74	107.60
3	A1	434	U	N3-C2-O2	-6.82	117.42	122.20
3	A1	1214	C	N1-C2-N3	6.82	123.98	119.20
25	BB	256	A	N1-C2-N3	-6.82	125.89	129.30
25	BB	292	U	C1'-O4'-C4'	-6.82	104.44	109.90
25	BB	721	A	C4-C5-C6	-6.82	113.59	117.00
25	BB	836	G	O4'-C4'-C3'	6.82	111.56	106.10
25	BB	945	A	C6-C5-N7	6.82	137.08	132.30
25	BB	2228	G	N3-C2-N2	-6.82	115.12	119.90
25	BB	2403	C	C5-C4-N4	-6.82	115.42	120.20
25	BB	2714	G	C8-N9-C4	-6.82	103.67	106.40
25	BB	2766	A	O4'-C4'-C3'	6.82	111.56	106.10
25	BB	2813	A	C5-N7-C8	-6.82	100.49	103.90
53	B4	97	ARG	NH1-CZ-NH2	-6.82	111.89	119.40
3	A1	169	C	O4'-C4'-C3'	6.82	111.56	106.10
3	A1	650	G	N7-C8-N9	6.82	116.51	113.10
3	A1	1124	G	C5-C6-N1	6.82	114.91	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1132	C	N3-C4-C5	6.82	124.63	121.90
3	A1	1406	U	C4'-C3'-C2'	-6.82	95.78	102.60
10	AI	14	ARG	NE-CZ-NH2	6.82	123.71	120.30
25	BB	751	A	O4'-C1'-N9	6.82	113.66	108.20
1	AP	53	G	C8-N9-C4	-6.82	103.67	106.40
3	A1	481	G	N1-C6-O6	-6.82	115.81	119.90
25	BB	253	C	N3-C4-C5	6.82	124.63	121.90
25	BB	556	A	C6-C5-N7	6.82	137.07	132.30
25	BB	1062	G	C6-N1-C2	-6.82	121.01	125.10
3	A1	264	C	N3-C4-N4	-6.82	113.23	118.00
25	BB	917	A	C4-C5-C6	-6.82	113.59	117.00
25	BB	1345	C	O4'-C4'-C3'	6.82	111.56	106.10
1	AA	40	C	N3-C2-O2	-6.82	117.13	121.90
3	A1	5	U	N1-C2-N3	6.82	118.99	114.90
3	A1	344	A	O4'-C4'-C3'	6.82	111.55	106.10
3	A1	396	C	N3-C2-O2	-6.82	117.13	121.90
3	A1	540	G	C3'-C2'-C1'	6.82	106.95	101.50
3	A1	1093	A	N9-C1'-C2'	-6.82	104.50	112.00
3	A1	1205	U	C4'-C3'-C2'	6.82	109.42	102.60
25	BB	223	A	C4-C5-C6	-6.82	113.59	117.00
25	BB	1109	C	C1'-O4'-C4'	-6.82	104.45	109.90
25	BB	1364	G	C3'-C2'-C1'	6.82	106.95	101.50
25	BB	1383	A	N1-C2-N3	-6.82	125.89	129.30
25	BB	1565	C	N3-C2-O2	-6.82	117.13	121.90
25	BB	1959	G	N1-C2-N3	6.82	127.99	123.90
25	BB	2445	G	C5-C6-N1	6.82	114.91	111.50
25	BB	2566	A	N9-C1'-C2'	6.82	122.86	114.00
25	BB	2823	A	N1-C6-N6	-6.82	114.51	118.60
3	A1	305	G	N7-C8-N9	6.82	116.51	113.10
3	A1	399	G	O4'-C4'-C3'	6.82	111.55	106.10
3	A1	434	U	C5-C4-O4	6.82	129.99	125.90
3	A1	1074	G	C5-C6-N1	6.82	114.91	111.50
3	A1	1410	A	C5-C6-N6	6.82	129.15	123.70
3	A1	1529	G	O4'-C1'-C2'	-6.82	98.98	105.80
25	BB	357	C	N3-C4-N4	-6.82	113.23	118.00
25	BB	2123	G	N1-C6-O6	-6.82	115.81	119.90
25	BB	2456	C	N3-C4-C5	6.82	124.63	121.90
24	BA	43	C	N3-C2-O2	-6.81	117.13	121.90
25	BB	161	A	C5-C6-N6	6.81	129.15	123.70
25	BB	911	A	C1'-O4'-C4'	-6.81	104.45	109.90
1	AP	18	G	N1-C6-O6	-6.81	115.81	119.90
3	A1	817	C	N3-C2-O2	-6.81	117.13	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1169	A	C4-C5-C6	-6.81	113.59	117.00
24	BA	70	C	C1'-O4'-C4'	-6.81	104.45	109.90
25	BB	496	G	C6-N1-C2	-6.81	121.01	125.10
25	BB	557	C	C5'-C4'-C3'	-6.81	105.10	116.00
25	BB	920	A	C3'-C2'-C1'	6.81	106.95	101.50
25	BB	1421	G	C8-N9-C4	-6.81	103.67	106.40
25	BB	2689	U	N3-C2-O2	-6.81	117.43	122.20
1	AE	73	A	C5-N7-C8	-6.81	100.49	103.90
3	A1	312	C	N3-C4-C5	6.81	124.62	121.90
3	A1	601	G	N1-C2-N3	6.81	127.99	123.90
22	AW	106	ASP	CB-CG-OD2	6.81	124.43	118.30
25	BB	12	U	C5-C6-N1	-6.81	119.30	122.70
25	BB	167	A	C5-C6-N1	6.81	121.11	117.70
25	BB	456	C	C2-N3-C4	-6.81	116.50	119.90
25	BB	1750	G	N3-C2-N2	-6.81	115.13	119.90
25	BB	2276	G	C5-C6-N1	6.81	114.91	111.50
3	A1	240	G	C5-C6-N1	6.81	114.91	111.50
3	A1	1137	C	N3-C4-N4	-6.81	113.23	118.00
25	BB	89	A	C5-C6-N6	6.81	129.15	123.70
25	BB	1492	G	C5-C6-O6	6.81	132.69	128.60
25	BB	2230	G	C6-N1-C2	-6.81	121.02	125.10
28	BE	126	ARG	NE-CZ-NH2	6.81	123.70	120.30
1	AE	18	G	O5'-P-OP1	6.81	118.87	110.70
3	A1	16	A	C5-C6-N1	6.81	121.10	117.70
25	BB	1334	G	N7-C8-N9	6.81	116.50	113.10
25	BB	1713	A	C5-N7-C8	-6.81	100.50	103.90
25	BB	1810	A	C6-N1-C2	-6.81	114.52	118.60
25	BB	1888	G	C8-N9-C4	-6.81	103.68	106.40
25	BB	2113	U	C5-C6-N1	-6.81	119.30	122.70
25	BB	2321	U	C4-C5-C6	6.81	123.78	119.70
25	BB	2350	C	C5'-C4'-C3'	-6.81	105.11	116.00
25	BB	2567	G	C5-C6-N1	6.81	114.90	111.50
25	BB	2641	G	N7-C8-N9	6.81	116.50	113.10
25	BB	254	G	C5'-C4'-O4'	6.81	117.27	109.10
25	BB	843	G	N9-C4-C5	6.81	108.12	105.40
25	BB	1535	A	C5-N7-C8	-6.81	100.50	103.90
1	AA	27	C	C5'-C4'-O4'	6.80	117.26	109.10
1	AP	58	A	C2-N3-C4	6.80	114.00	110.60
3	A1	953	G	C6-C5-N7	6.80	134.48	130.40
3	A1	999	C	O4'-C1'-N1	6.80	113.64	108.20
25	BB	409	G	N3-C4-C5	-6.80	125.20	128.60
25	BB	828	U	O4'-C1'-N1	6.80	113.64	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	874	G	C8-N9-C4	-6.80	103.68	106.40
25	BB	1068	G	N1-C6-O6	-6.80	115.82	119.90
25	BB	1767	G	O4'-C1'-N9	6.80	113.64	108.20
25	BB	2462	C	O5'-P-OP2	-6.80	99.58	105.70
3	A1	1129	C	C5-C6-N1	-6.80	117.60	121.00
25	BB	472	A	C5-N7-C8	-6.80	100.50	103.90
25	BB	2221	G	C5'-C4'-C3'	-6.80	105.11	116.00
3	A1	394	G	C5-C6-O6	6.80	132.68	128.60
3	A1	1257	A	C5-N7-C8	-6.80	100.50	103.90
3	A1	1361	G	O4'-C1'-N9	6.80	113.64	108.20
25	BB	771	G	N9-C1'-C2'	-6.80	104.52	112.00
25	BB	2077	A	C4-C5-C6	-6.80	113.60	117.00
25	BB	2781	A	O4'-C1'-N9	6.80	113.64	108.20
3	A1	714	G	N3-C4-C5	-6.80	125.20	128.60
3	A1	729	A	C4-C5-C6	-6.80	113.60	117.00
3	A1	955	U	N3-C4-C5	-6.80	110.52	114.60
3	A1	1138	G	C5'-C4'-O4'	6.80	117.26	109.10
3	A1	1320	C	C4'-C3'-C2'	-6.80	95.80	102.60
25	BB	25	U	C3'-C2'-C1'	6.80	106.94	101.50
25	BB	584	C	C2-N3-C4	-6.80	116.50	119.90
25	BB	720	U	C5'-C4'-C3'	-6.80	105.12	116.00
25	BB	757	G	C5-C6-O6	-6.80	124.52	128.60
25	BB	1520	U	O4'-C4'-C3'	6.80	111.54	106.10
25	BB	2116	G	C5-N7-C8	-6.80	100.90	104.30
25	BB	2512	C	N1-C2-O2	6.80	122.98	118.90
25	BB	2764	A	C5'-C4'-C3'	-6.80	105.12	116.00
1	AA	45	G	C1'-O4'-C4'	6.80	115.34	109.90
1	AP	67	A	C5-C6-N1	6.80	121.10	117.70
3	A1	250	A	O4'-C1'-N9	6.80	113.64	108.20
3	A1	310	G	C5'-C4'-O4'	6.80	117.26	109.10
3	A1	319	G	C5-C6-N1	6.80	114.90	111.50
3	A1	614	C	C6-N1-C2	-6.80	117.58	120.30
3	A1	679	C	C2-N3-C4	-6.80	116.50	119.90
25	BB	194	G	C5-C6-N1	6.80	114.90	111.50
25	BB	2811	G	C6-N1-C2	-6.80	121.02	125.10
25	BB	2870	C	N3-C4-C5	6.80	124.62	121.90
1	AA	18	G	C4-C5-N7	-6.80	108.08	110.80
1	AE	36	A	C4'-C3'-C2'	-6.80	95.80	102.60
3	A1	331	G	C8-N9-C4	-6.80	103.68	106.40
3	A1	564	C	N3-C4-C5	6.80	124.62	121.90
3	A1	737	C	C6-N1-C2	-6.80	117.58	120.30
3	A1	1270	G	C5'-C4'-O4'	6.80	117.25	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1339	A	O3'-P-O5'	6.80	116.92	104.00
25	BB	68	G	N3-C4-N9	6.80	130.08	126.00
25	BB	638	G	N1-C6-O6	-6.80	115.82	119.90
25	BB	693	A	N9-C4-C5	6.80	108.52	105.80
25	BB	1095	A	C5-C6-N1	6.80	121.10	117.70
25	BB	1328	A	C6-C5-N7	6.80	137.06	132.30
25	BB	1386	C	N3-C2-O2	-6.80	117.14	121.90
25	BB	1554	U	C4-C5-C6	6.80	123.78	119.70
25	BB	2419	U	N3-C2-O2	-6.80	117.44	122.20
27	BD	29	HIS	C-N-CA	6.80	138.69	121.70
1	AE	21	A	C6-N1-C2	-6.79	114.52	118.60
3	A1	513	C	C5-C4-N4	-6.79	115.44	120.20
3	A1	556	C	N3-C2-O2	-6.79	117.14	121.90
25	BB	301	G	C8-N9-C4	-6.79	103.68	106.40
25	BB	1104	C	O4'-C4'-C3'	6.79	111.54	106.10
25	BB	1676	A	C4-C5-C6	-6.79	113.60	117.00
25	BB	2061	G	N3-C4-C5	-6.79	125.20	128.60
3	A1	1297	G	C5-N7-C8	-6.79	100.90	104.30
25	BB	901	C	O4'-C1'-N1	6.79	113.64	108.20
25	BB	1467	U	C5'-C4'-O4'	6.79	117.25	109.10
25	BB	1837	C	N3-C4-N4	-6.79	113.25	118.00
25	BB	2163	A	P-O3'-C3'	6.79	127.85	119.70
1	AA	37	G	C1'-O4'-C4'	6.79	115.33	109.90
1	AA	42	G	C6-N1-C2	-6.79	121.03	125.10
2	AM	10	U	N3-C4-O4	6.79	124.15	119.40
3	A1	258	G	N1-C2-N3	6.79	127.97	123.90
3	A1	725	G	C5'-C4'-C3'	-6.79	105.13	116.00
24	BA	61	G	C6-N1-C2	-6.79	121.03	125.10
25	BB	299	A	N1-C2-N3	-6.79	125.90	129.30
25	BB	480	A	O4'-C1'-N9	6.79	113.63	108.20
25	BB	753	A	C6-C5-N7	6.79	137.05	132.30
25	BB	797	G	N9-C4-C5	6.79	108.12	105.40
25	BB	963	U	C4-C5-C6	6.79	123.77	119.70
25	BB	1175	A	C8-N9-C4	-6.79	103.08	105.80
25	BB	1283	G	C5-C6-N1	6.79	114.90	111.50
25	BB	1626	A	N1-C2-N3	-6.79	125.90	129.30
3	A1	280	C	O4'-C1'-N1	6.79	113.63	108.20
3	A1	1532	U	C5-C6-N1	-6.79	119.31	122.70
25	BB	1518	C	C6-N1-C2	-6.79	117.58	120.30
25	BB	2616	C	C5-C6-N1	-6.79	117.61	121.00
3	A1	19	A	C4-C5-C6	-6.79	113.61	117.00
3	A1	303	A	C4'-C3'-C2'	-6.79	95.81	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	432	A	C4-C5-C6	-6.79	113.61	117.00
25	BB	1012	U	N3-C4-C5	-6.79	110.53	114.60
25	BB	2239	G	C5-C6-N1	6.79	114.89	111.50
3	A1	321	A	C5'-C4'-O4'	-6.79	100.95	109.10
25	BB	1313	U	O4'-C1'-N1	6.79	113.63	108.20
25	BB	2761	A	C4'-C3'-C2'	-6.79	95.81	102.60
1	AA	58	A	C6-C5-N7	6.79	137.05	132.30
3	A1	402	G	C8-N9-C4	-6.79	103.69	106.40
3	A1	635	A	C5-C6-N6	6.79	129.13	123.70
3	A1	1128	C	N1-C2-N3	6.79	123.95	119.20
3	A1	1439	G	N3-C4-C5	-6.79	125.21	128.60
18	AS	92	ARG	NE-CZ-NH2	6.79	123.69	120.30
25	BB	176	A	C1'-O4'-C4'	6.79	115.33	109.90
25	BB	543	G	N1-C6-O6	-6.79	115.83	119.90
25	BB	1640	A	C6-N1-C2	-6.79	114.53	118.60
25	BB	2004	G	C5-N7-C8	-6.79	100.91	104.30
25	BB	2532	G	C5-C6-O6	6.79	132.67	128.60
25	BB	2804	U	C4-C5-C6	6.79	123.77	119.70
26	BC	93	ARG	NE-CZ-NH1	6.79	123.69	120.30
3	A1	1516	G	C5-C6-O6	-6.78	124.53	128.60
25	BB	79	C	O4'-C1'-N1	6.78	113.63	108.20
25	BB	559	G	N1-C6-O6	-6.78	115.83	119.90
3	A1	1033	G	N3-C4-N9	-6.78	121.93	126.00
3	A1	1430	A	N9-C4-C5	6.78	108.51	105.80
25	BB	271	G	C2-N3-C4	6.78	115.29	111.90
25	BB	551	G	N1-C2-N3	6.78	127.97	123.90
25	BB	1348	C	C6-N1-C2	-6.78	117.59	120.30
25	BB	1459	G	C6-C5-N7	6.78	134.47	130.40
1	AP	19	G	N3-C2-N2	-6.78	115.15	119.90
1	AP	24	G	N3-C4-C5	-6.78	125.21	128.60
1	AE	73	A	C5-C6-N1	6.78	121.09	117.70
3	A1	162	A	C5-C6-N1	6.78	121.09	117.70
3	A1	332	G	C4'-C3'-C2'	-6.78	95.82	102.60
3	A1	683	G	O4'-C4'-C3'	-6.78	97.22	104.00
25	BB	548	G	C1'-O4'-C4'	-6.78	104.48	109.90
25	BB	882	G	N3-C4-N9	6.78	130.07	126.00
25	BB	1260	A	C6-C5-N7	6.78	137.05	132.30
25	BB	1909	C	N3-C4-C5	6.78	124.61	121.90
25	BB	2255	G	N1-C6-O6	-6.78	115.83	119.90
1	AA	3	G	O4'-C4'-C3'	-6.78	97.22	104.00
3	A1	532	A	N7-C8-N9	6.78	117.19	113.80
3	A1	929	G	C5-C6-N1	6.78	114.89	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1181	G	N1-C6-O6	-6.78	115.83	119.90
25	BB	2863	C	N3-C4-N4	-6.78	113.25	118.00
1	AE	18	G	N1-C2-N3	6.78	127.97	123.90
3	A1	182	A	C5-C6-N1	6.78	121.09	117.70
3	A1	353	A	C4-C5-C6	-6.78	113.61	117.00
3	A1	589	U	N1-C2-N3	6.78	118.97	114.90
3	A1	1103	C	C1'-O4'-C4'	-6.78	104.48	109.90
25	BB	399	U	N1-C2-N3	6.78	118.97	114.90
25	BB	570	G	C8-N9-C4	-6.78	103.69	106.40
25	BB	1067	A	C5'-C4'-O4'	6.78	117.23	109.10
25	BB	2093	G	C8-N9-C4	-6.78	103.69	106.40
25	BB	2261	C	N1-C2-O2	6.78	122.97	118.90
3	A1	193	C	C5'-C4'-O4'	6.78	117.23	109.10
3	A1	262	A	C8-N9-C4	-6.78	103.09	105.80
3	A1	1495	U	N1-C2-N3	6.78	118.97	114.90
25	BB	1178	C	N1-C2-O2	6.78	122.97	118.90
25	BB	1397	U	O4'-C1'-N1	6.78	113.62	108.20
25	BB	2394	C	C2-N3-C4	-6.78	116.51	119.90
25	BB	2668	G	O4'-C4'-C3'	6.78	111.52	106.10
25	BB	2892	G	N1-C6-O6	-6.78	115.83	119.90
3	A1	1452	C	O4'-C1'-N1	6.77	113.62	108.20
3	A1	1493	A	N7-C8-N9	6.77	117.19	113.80
25	BB	1737	G	N3-C2-N2	-6.77	115.16	119.90
25	BB	2352	A	C4-C5-C6	-6.77	113.61	117.00
3	A1	327	A	C6-C5-N7	6.77	137.04	132.30
3	A1	609	A	O5'-P-OP2	-6.77	99.60	105.70
3	A1	1482	G	C5-C6-N1	6.77	114.89	111.50
25	BB	412	A	P-O3'-C3'	6.77	127.83	119.70
25	BB	882	G	C2-N3-C4	6.77	115.29	111.90
25	BB	1785	A	C4'-C3'-C2'	-6.77	95.83	102.60
25	BB	2545	G	C5-C6-N1	6.77	114.89	111.50
25	BB	2613	U	N1-C2-N3	6.77	118.96	114.90
34	BK	90	ARG	NH1-CZ-NH2	-6.77	111.95	119.40
3	A1	184	G	N1-C6-O6	-6.77	115.84	119.90
23	AX	48	ARG	CD-NE-CZ	6.77	133.08	123.60
25	BB	10	A	C6-N1-C2	-6.77	114.54	118.60
25	BB	40	U	N3-C2-O2	-6.77	117.46	122.20
25	BB	2041	U	N1-C2-N3	6.77	118.96	114.90
3	A1	1150	A	C2-N3-C4	6.77	113.98	110.60
25	BB	585	G	C5-C6-N1	6.77	114.88	111.50
25	BB	772	C	C6-N1-C2	-6.77	117.59	120.30
25	BB	1446	C	N1-C2-O2	6.77	122.96	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1643	G	C5-N7-C8	-6.77	100.92	104.30
25	BB	1961	C	C4'-C3'-C2'	-6.77	95.83	102.60
25	BB	2181	U	N1-C2-O2	6.77	127.54	122.80
25	BB	2428	G	O4'-C1'-N9	6.77	113.62	108.20
25	BB	2570	G	O4'-C1'-N9	6.77	113.61	108.20
29	BF	24	THR	CA-CB-CG2	6.77	121.88	112.40
3	A1	292	G	N7-C8-N9	6.77	116.48	113.10
3	A1	895	G	N9-C4-C5	6.77	108.11	105.40
3	A1	1421	G	C8-N9-C4	-6.77	103.69	106.40
25	BB	239	C	C2-N3-C4	-6.77	116.52	119.90
25	BB	1370	C	N3-C2-O2	-6.77	117.16	121.90
25	BB	2146	C	N1-C2-O2	6.77	122.96	118.90
25	BB	2484	G	C5-N7-C8	-6.77	100.92	104.30
25	BB	2637	U	O4'-C1'-C2'	-6.77	99.03	105.80
3	A1	1177	G	C5-N7-C8	-6.77	100.92	104.30
3	A1	1220	G	N3-C4-C5	-6.77	125.22	128.60
3	A1	1322	C	O4'-C1'-N1	6.77	113.61	108.20
24	BA	97	C	N3-C4-N4	-6.77	113.26	118.00
25	BB	32	C	C5-C6-N1	-6.77	117.62	121.00
25	BB	370	G	P-O3'-C3'	6.77	127.82	119.70
3	A1	647	C	C5-C6-N1	6.76	124.38	121.00
3	A1	1436	U	N1-C2-N3	6.76	118.96	114.90
3	A1	1441	A	C4-C5-C6	-6.76	113.62	117.00
16	AQ	17	ARG	NE-CZ-NH1	6.76	123.68	120.30
24	BA	97	C	N3-C4-C5	6.76	124.61	121.90
25	BB	769	U	C5-C6-N1	-6.76	119.32	122.70
25	BB	803	U	C3'-C2'-C1'	6.76	106.91	101.50
25	BB	959	A	N1-C6-N6	-6.76	114.54	118.60
25	BB	1206	G	C6-C5-N7	6.76	134.46	130.40
25	BB	1898	U	O4'-C1'-C2'	-6.76	99.04	105.80
25	BB	1910	G	N3-C2-N2	-6.76	115.16	119.90
25	BB	1943	U	O4'-C1'-N1	6.76	113.61	108.20
25	BB	2295	C	N3-C4-N4	-6.76	113.26	118.00
25	BB	2302	U	C5-C6-N1	-6.76	119.32	122.70
25	BB	2760	C	C2-N3-C4	-6.76	116.52	119.90
1	AA	45	G	C5-C6-N1	6.76	114.88	111.50
3	A1	852	G	O4'-C1'-N9	6.76	113.61	108.20
25	BB	733	G	C4'-C3'-C2'	-6.76	95.84	102.60
25	BB	2476	A	C6-C5-N7	6.76	137.03	132.30
3	A1	123	U	O4'-C1'-N1	-6.76	102.79	108.20
3	A1	394	G	N1-C6-O6	-6.76	115.84	119.90
3	A1	775	G	C2-N3-C4	6.76	115.28	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	775	G	N3-C2-N2	-6.76	115.17	119.90
3	A1	1258	G	N1-C6-O6	-6.76	115.84	119.90
3	A1	1365	G	N3-C4-C5	-6.76	125.22	128.60
3	A1	1429	A	OP1-P-OP2	-6.76	109.46	119.60
13	AL	35	ARG	CD-NE-CZ	6.76	133.07	123.60
25	BB	561	G	C4'-C3'-C2'	-6.76	95.84	102.60
25	BB	1880	U	N3-C2-O2	-6.76	117.47	122.20
25	BB	2814	A	C2-N3-C4	6.76	113.98	110.60
1	AE	37	G	O4'-C4'-C3'	6.76	111.51	106.10
1	AE	48	C	N1-C2-O2	6.76	122.96	118.90
3	A1	72	A	C3'-C2'-C1'	6.76	106.91	101.50
3	A1	1104	G	C2-N3-C4	6.76	115.28	111.90
3	A1	1420	U	C4-C5-C6	6.76	123.76	119.70
25	BB	956	G	N1-C6-O6	-6.76	115.84	119.90
25	BB	1112	G	C2-N3-C4	6.76	115.28	111.90
25	BB	1971	U	N3-C4-O4	-6.76	114.67	119.40
25	BB	2255	G	C5'-C4'-O4'	6.76	117.21	109.10
25	BB	2320	U	N1-C2-N3	6.76	118.96	114.90
25	BB	2476	A	C2-N3-C4	6.76	113.98	110.60
51	B2	109	ARG	NE-CZ-NH1	6.76	123.68	120.30
7	AF	2	ARG	NH1-CZ-NH2	-6.76	111.97	119.40
25	BB	1813	G	N1-C6-O6	-6.76	115.84	119.90
25	BB	2286	G	N1-C2-N3	6.76	127.95	123.90
25	BB	2413	G	C3'-C2'-C1'	6.76	106.91	101.50
1	AE	46	G	N1-C2-N2	6.76	122.28	116.20
1	AE	76	A	C1'-O4'-C4'	-6.76	104.50	109.90
3	A1	67	C	N1-C2-O2	6.76	122.95	118.90
3	A1	335	C	C5-C4-N4	6.76	124.93	120.20
3	A1	971	G	N3-C4-C5	-6.76	125.22	128.60
25	BB	579	G	N3-C4-C5	-6.76	125.22	128.60
25	BB	1529	G	N3-C4-C5	-6.76	125.22	128.60
25	BB	1920	C	C4'-C3'-C2'	-6.76	95.84	102.60
25	BB	2462	C	N1-C2-O2	6.76	122.95	118.90
25	BB	2463	C	N1-C2-N3	6.76	123.93	119.20
25	BB	2676	C	N3-C4-N4	-6.76	113.27	118.00
25	BB	2847	U	C5-C6-N1	-6.76	119.32	122.70
25	BB	2850	A	C1'-O4'-C4'	-6.76	104.49	109.90
39	BP	13	ARG	CD-NE-CZ	6.76	133.06	123.60
25	BB	476	G	C4-C5-N7	-6.75	108.10	110.80
25	BB	1914	C	N1-C2-O2	6.75	122.95	118.90
25	BB	2699	C	C5'-C4'-C3'	-6.75	105.19	116.00
3	A1	118	U	O4'-C1'-C2'	-6.75	99.05	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	205	A	C5-C6-N1	6.75	121.08	117.70
3	A1	430	A	C4'-C3'-C2'	-6.75	95.85	102.60
3	A1	534	U	C4-C5-C6	6.75	123.75	119.70
3	A1	607	A	C2-N3-C4	6.75	113.98	110.60
3	A1	728	A	C1'-O4'-C4'	-6.75	104.50	109.90
3	A1	959	A	C4-C5-N7	6.75	114.08	110.70
3	A1	1411	C	C5-C6-N1	-6.75	117.62	121.00
13	AL	54	ARG	NE-CZ-NH1	6.75	123.68	120.30
24	BA	64	G	C5-N7-C8	-6.75	100.92	104.30
25	BB	106	C	C1'-O4'-C4'	-6.75	104.50	109.90
25	BB	186	G	C5-C6-N1	6.75	114.88	111.50
25	BB	1358	G	C2-N3-C4	6.75	115.28	111.90
25	BB	1750	G	N7-C8-N9	6.75	116.48	113.10
25	BB	2294	G	N3-C2-N2	-6.75	115.17	119.90
28	BE	123	ARG	NE-CZ-NH1	6.75	123.68	120.30
3	A1	370	C	C5-C6-N1	-6.75	117.62	121.00
3	A1	643	C	C5'-C4'-O4'	6.75	117.20	109.10
3	A1	1440	U	N3-C2-O2	-6.75	117.47	122.20
24	BA	100	G	C8-N9-C4	-6.75	103.70	106.40
25	BB	612	G	O4'-C1'-N9	6.75	113.60	108.20
25	BB	950	G	N9-C1'-C2'	-6.75	104.57	112.00
25	BB	1206	G	C2'-C3'-O3'	6.75	124.50	113.70
25	BB	1448	G	C5-C6-N1	6.75	114.88	111.50
25	BB	1766	G	N1-C2-N3	6.75	127.95	123.90
25	BB	2284	A	C5-C6-N6	6.75	129.10	123.70
1	AE	17	U	N1-C1'-C2'	-6.75	104.57	112.00
3	A1	163	C	C1'-O4'-C4'	6.75	115.30	109.90
3	A1	1259	C	N1-C2-O2	6.75	122.95	118.90
5	AC	55	ARG	NE-CZ-NH1	6.75	123.67	120.30
25	BB	24	G	N3-C4-C5	-6.75	125.22	128.60
25	BB	68	G	C6-N1-C2	-6.75	121.05	125.10
25	BB	95	A	C5-C6-N1	6.75	121.08	117.70
25	BB	510	C	N3-C4-C5	6.75	124.60	121.90
25	BB	1640	A	C6-C5-N7	6.75	137.03	132.30
3	A1	387	U	C2-N3-C4	-6.75	122.95	127.00
3	A1	891	U	N1-C2-N3	6.75	118.95	114.90
3	A1	1068	G	N9-C4-C5	6.75	108.10	105.40
3	A1	1397	C	P-O3'-C3'	6.75	127.80	119.70
25	BB	239	C	N3-C4-C5	6.75	124.60	121.90
25	BB	1684	G	N3-C4-C5	-6.75	125.23	128.60
25	BB	1713	A	C6-N1-C2	-6.75	114.55	118.60
25	BB	2328	A	O3'-P-O5'	-6.75	91.18	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	2387	U	C5-C4-O4	6.75	129.95	125.90
25	BB	2446	G	C5-C6-N1	6.75	114.87	111.50
25	BB	2901	C	C2-N3-C4	-6.75	116.53	119.90
3	A1	461	A	C5'-C4'-O4'	6.75	117.19	109.10
3	A1	545	C	N3-C4-C5	6.75	124.60	121.90
3	A1	1068	G	C5-C6-O6	6.75	132.65	128.60
3	A1	1320	C	C3'-C2'-C1'	6.75	106.90	101.50
25	BB	503	A	C5-C6-N6	6.75	129.10	123.70
25	BB	1193	G	N1-C6-O6	-6.75	115.85	119.90
25	BB	1590	A	C3'-C2'-C1'	6.75	106.90	101.50
25	BB	1742	U	N3-C2-O2	-6.75	117.48	122.20
25	BB	2079	U	C1'-O4'-C4'	-6.75	104.50	109.90
3	A1	469	C	N3-C2-O2	-6.75	117.18	121.90
3	A1	787	A	N1-C2-N3	-6.75	125.93	129.30
25	BB	654	A	C5-C6-N6	6.75	129.10	123.70
25	BB	1529	G	C5-C6-O6	6.75	132.65	128.60
25	BB	1870	C	N3-C2-O2	-6.75	117.18	121.90
25	BB	2417	C	N3-C4-N4	-6.75	113.28	118.00
3	A1	1044	A	N9-C1'-C2'	-6.74	104.58	112.00
3	A1	1268	G	N3-C4-C5	-6.74	125.23	128.60
25	BB	143	C	N3-C4-N4	-6.74	113.28	118.00
25	BB	145	C	O4'-C1'-N1	6.74	113.59	108.20
25	BB	679	C	N1-C2-O2	6.74	122.95	118.90
25	BB	900	A	N3-C4-N9	-6.74	122.01	127.40
25	BB	1086	A	C4-C5-C6	-6.74	113.63	117.00
25	BB	1802	A	C2-N3-C4	6.74	113.97	110.60
25	BB	2047	C	O4'-C4'-C3'	6.74	111.50	106.10
25	BB	2148	G	O4'-C4'-C3'	6.74	111.50	106.10
25	BB	584	C	N3-C4-N4	-6.74	113.28	118.00
3	A1	18	C	N3-C2-O2	-6.74	117.18	121.90
3	A1	124	C	C3'-C2'-C1'	-6.74	96.11	101.50
3	A1	605	U	N3-C2-O2	-6.74	117.48	122.20
3	A1	1193	G	C6-N1-C2	-6.74	121.06	125.10
3	A1	1314	C	C5-C6-N1	-6.74	117.63	121.00
25	BB	93	G	N3-C2-N2	-6.74	115.18	119.90
25	BB	1213	A	C5-C6-N6	6.74	129.09	123.70
25	BB	2506	U	C5-C6-N1	-6.74	119.33	122.70
25	BB	2828	G	N3-C2-N2	-6.74	115.18	119.90
25	BB	2885	G	C4-C5-N7	-6.74	108.10	110.80
1	AA	16	U	C5-C6-N1	-6.74	119.33	122.70
3	A1	472	U	N1-C2-N3	6.74	118.94	114.90
3	A1	782	A	C4-C5-C6	-6.74	113.63	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	954	G	C5-C6-O6	6.74	132.64	128.60
25	BB	341	C	C5-C6-N1	-6.74	117.63	121.00
25	BB	1300	G	C6-N1-C2	-6.74	121.06	125.10
25	BB	1847	A	C6-N1-C2	-6.74	114.56	118.60
25	BB	2507	C	C6-N1-C2	-6.74	117.61	120.30
48	BY	17	GLU	OE1-CD-OE2	-6.74	115.21	123.30
51	B2	94	ARG	NE-CZ-NH1	6.74	123.67	120.30
54	B5	133	ARG	NE-CZ-NH2	-6.74	116.93	120.30
3	A1	598	U	N1-C2-N3	6.74	118.94	114.90
25	BB	134	G	C8-N9-C4	-6.74	103.70	106.40
25	BB	159	G	O5'-P-OP2	-6.74	99.64	105.70
25	BB	501	A	O4'-C4'-C3'	6.74	111.49	106.10
25	BB	605	G	N1-C6-O6	-6.74	115.86	119.90
25	BB	2373	G	N9-C4-C5	6.74	108.09	105.40
25	BB	2700	A	C8-N9-C4	-6.74	103.11	105.80
25	BB	2848	G	N3-C2-N2	-6.74	115.18	119.90
3	A1	52	C	P-O3'-C3'	6.74	127.78	119.70
3	A1	262	A	C5-C6-N1	6.74	121.07	117.70
3	A1	797	C	C1'-O4'-C4'	-6.74	104.51	109.90
3	A1	1437	A	C5-C6-N6	6.74	129.09	123.70
3	A1	1484	C	N3-C4-C5	6.74	124.59	121.90
25	BB	591	U	C5-C4-O4	6.74	129.94	125.90
25	BB	652	U	C2-N3-C4	-6.74	122.96	127.00
25	BB	1180	U	C4'-C3'-C2'	-6.74	95.86	102.60
25	BB	1543	G	C4'-C3'-C2'	-6.74	95.86	102.60
25	BB	2345	G	C4-C5-N7	-6.74	108.11	110.80
25	BB	2514	U	N3-C2-O2	-6.74	117.48	122.20
25	BB	1139	G	N1-C6-O6	-6.73	115.86	119.90
25	BB	1479	G	C1'-O4'-C4'	-6.73	104.51	109.90
25	BB	2222	C	C5-C6-N1	-6.73	117.63	121.00
25	BB	2794	C	C4'-C3'-C2'	-6.73	95.87	102.60
1	AA	23	A	C4-C5-C6	-6.73	113.63	117.00
3	A1	112	G	O4'-C1'-N9	6.73	113.58	108.20
3	A1	168	G	O4'-C1'-N9	6.73	113.58	108.20
3	A1	1120	C	C1'-O4'-C4'	-6.73	104.51	109.90
25	BB	321	U	N1-C2-N3	6.73	118.94	114.90
25	BB	1911	U	O4'-C1'-N1	6.73	113.59	108.20
25	BB	2125	G	C3'-C2'-C1'	-6.73	96.11	101.50
25	BB	2667	C	N3-C2-O2	-6.73	117.19	121.90
1	AP	61	C	C5-C4-N4	6.73	124.91	120.20
3	A1	202	G	C6-C5-N7	6.73	134.44	130.40
3	A1	302	G	N1-C6-O6	-6.73	115.86	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	592	G	O4'-C4'-C3'	6.73	111.48	106.10
3	A1	1082	A	C8-N9-C4	-6.73	103.11	105.80
3	A1	1305	G	N1-C6-O6	-6.73	115.86	119.90
3	A1	1316	G	N9-C4-C5	6.73	108.09	105.40
24	BA	114	C	N3-C2-O2	-6.73	117.19	121.90
25	BB	244	A	C3'-C2'-C1'	-6.73	96.12	101.50
25	BB	1715	G	N3-C4-C5	-6.73	125.23	128.60
34	BK	58	VAL	CG1-CB-CG2	6.73	121.67	110.90
3	A1	756	C	C2-N3-C4	-6.73	116.54	119.90
3	A1	1477	U	C3'-C2'-C1'	6.73	106.88	101.50
25	BB	1567	G	C5-C6-N1	6.73	114.86	111.50
25	BB	1861	G	C4'-C3'-C2'	-6.73	95.87	102.60
3	A1	107	G	C1'-O4'-C4'	-6.73	104.52	109.90
3	A1	266	G	O4'-C1'-N9	6.73	113.58	108.20
3	A1	1119	C	C2-N3-C4	-6.73	116.54	119.90
25	BB	203	A	C1'-O4'-C4'	6.73	115.28	109.90
25	BB	529	A	C2-N3-C4	6.73	113.96	110.60
25	BB	918	A	C6-C5-N7	6.73	137.01	132.30
25	BB	1291	C	C5-C6-N1	-6.73	117.64	121.00
25	BB	1359	A	C4-C5-N7	6.73	114.06	110.70
25	BB	1726	C	N3-C4-N4	-6.73	113.29	118.00
25	BB	2863	C	N1-C2-N3	6.73	123.91	119.20
25	BB	2872	A	C4-C5-C6	-6.73	113.64	117.00
3	A1	134	G	C8-N9-C4	-6.73	103.71	106.40
3	A1	487	A	N9-C4-C5	6.73	108.49	105.80
3	A1	1003	G	C5-C6-N1	6.73	114.86	111.50
3	A1	1111	A	C2-N3-C4	6.73	113.96	110.60
24	BA	9	G	N1-C6-O6	-6.73	115.86	119.90
24	BA	111	U	N1-C2-N3	6.73	118.94	114.90
25	BB	42	A	C6-C5-N7	6.73	137.01	132.30
25	BB	1304	A	C6-C5-N7	6.73	137.01	132.30
25	BB	1466	U	N1-C2-N3	6.73	118.94	114.90
3	A1	278	G	C1'-O4'-C4'	-6.72	104.52	109.90
3	A1	485	U	N3-C2-O2	-6.72	117.49	122.20
3	A1	511	C	P-O3'-C3'	6.72	127.77	119.70
3	A1	620	C	C5'-C4'-O4'	6.72	117.17	109.10
3	A1	1022	A	C5'-C4'-C3'	-6.72	105.24	116.00
3	A1	1227	A	N1-C2-N3	-6.72	125.94	129.30
25	BB	373	U	C1'-O4'-C4'	-6.72	104.52	109.90
25	BB	545	U	O4'-C1'-N1	6.72	113.58	108.20
25	BB	1687	G	C2-N3-C4	6.72	115.26	111.90
25	BB	1851	U	C3'-C2'-C1'	6.72	106.88	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1854	A	C6-C5-N7	6.72	137.01	132.30
25	BB	2376	A	C5'-C4'-C3'	-6.72	105.24	116.00
3	A1	56	U	C5-C4-O4	6.72	129.93	125.90
3	A1	574	A	C2-N3-C4	6.72	113.96	110.60
3	A1	670	G	N1-C2-N2	6.72	122.25	116.20
3	A1	810	C	N1-C2-O2	6.72	122.93	118.90
3	A1	1273	C	C6-N1-C2	-6.72	117.61	120.30
25	BB	1091	G	N7-C8-N9	6.72	116.46	113.10
25	BB	1325	U	C5-C6-N1	-6.72	119.34	122.70
25	BB	1540	G	C1'-O4'-C4'	-6.72	104.52	109.90
25	BB	1986	C	N1-C2-N3	6.72	123.91	119.20
25	BB	2384	U	N3-C2-O2	-6.72	117.49	122.20
25	BB	2537	U	N1-C2-N3	6.72	118.93	114.90
3	A1	308	C	C4'-C3'-C2'	-6.72	95.88	102.60
3	A1	1457	G	C4-C5-N7	-6.72	108.11	110.80
6	AD	120	ARG	NH1-CZ-NH2	-6.72	112.01	119.40
25	BB	788	A	C2-N3-C4	6.72	113.96	110.60
25	BB	881	G	N3-C4-C5	-6.72	125.24	128.60
25	BB	1929	G	C4'-C3'-C2'	-6.72	95.88	102.60
1	AE	46	G	C4'-C3'-C2'	-6.72	95.88	102.60
3	A1	385	C	N3-C4-C5	6.72	124.59	121.90
3	A1	443	C	C4-C5-C6	-6.72	114.04	117.40
3	A1	882	C	O4'-C1'-N1	6.72	113.58	108.20
3	A1	1079	G	N3-C4-C5	-6.72	125.24	128.60
23	AX	5	ARG	NH1-CZ-NH2	-6.72	112.01	119.40
24	BA	117	G	C6-C5-N7	6.72	134.43	130.40
25	BB	524	G	C5-C6-N1	6.72	114.86	111.50
25	BB	536	G	C6-C5-N7	6.72	134.43	130.40
25	BB	914	G	C1'-O4'-C4'	-6.72	104.53	109.90
25	BB	1896	G	N9-C4-C5	6.72	108.09	105.40
25	BB	2031	A	C5-C6-N1	6.72	121.06	117.70
2	AM	11	U	N3-C2-O2	-6.72	117.50	122.20
3	A1	425	G	N7-C8-N9	6.72	116.46	113.10
25	BB	384	A	N9-C4-C5	6.72	108.49	105.80
25	BB	522	A	N1-C2-N3	-6.72	125.94	129.30
25	BB	577	G	C6-C5-N7	6.72	134.43	130.40
3	A1	677	U	O4'-C1'-N1	6.72	113.57	108.20
3	A1	1236	A	C4'-C3'-C2'	-6.72	95.88	102.60
3	A1	1530	G	C6-C5-N7	6.72	134.43	130.40
25	BB	320	A	C1'-O4'-C4'	-6.72	104.53	109.90
25	BB	871	U	N1-C2-N3	6.72	118.93	114.90
25	BB	898	C	N3-C2-O2	-6.72	117.20	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1166	G	C6-N1-C2	-6.72	121.07	125.10
25	BB	2111	U	N1-C2-O2	6.72	127.50	122.80
25	BB	2442	C	N1-C2-O2	6.72	122.93	118.90
25	BB	2642	G	N3-C2-N2	-6.72	115.20	119.90
27	BD	52	VAL	CA-CB-CG1	6.72	120.97	110.90
33	BJ	52	ARG	NH1-CZ-NH2	-6.72	112.01	119.40
1	AP	4	G	C4'-C3'-C2'	-6.71	95.89	102.60
3	A1	953	G	C5-C6-N1	6.71	114.86	111.50
25	BB	111	A	C4-C5-C6	-6.71	113.64	117.00
25	BB	258	G	C8-N9-C4	-6.71	103.71	106.40
25	BB	756	A	C3'-C2'-C1'	6.71	106.87	101.50
25	BB	834	G	C6-N1-C2	-6.71	121.07	125.10
25	BB	1253	A	O4'-C1'-N9	6.71	113.57	108.20
25	BB	1325	U	C2-N3-C4	-6.71	122.97	127.00
25	BB	1368	G	O4'-C4'-C3'	6.71	111.47	106.10
25	BB	1400	U	O4'-C4'-C3'	-6.71	97.29	104.00
25	BB	1414	C	N1-C2-O2	6.71	122.93	118.90
25	BB	1672	A	C6-C5-N7	6.71	137.00	132.30
25	BB	1746	A	C6-C5-N7	6.71	137.00	132.30
25	BB	2199	A	N1-C6-N6	-6.71	114.57	118.60
25	BB	2656	U	C4-C5-C6	6.71	123.73	119.70
47	BX	24	ARG	NE-CZ-NH2	-6.71	116.94	120.30
25	BB	1058	U	C4'-C3'-C2'	-6.71	95.89	102.60
25	BB	1552	A	C5-N7-C8	-6.71	100.54	103.90
25	BB	2048	G	C6-N1-C2	-6.71	121.07	125.10
3	A1	665	A	C5-C6-N1	6.71	121.06	117.70
3	A1	1321	U	O4'-C1'-N1	6.71	113.57	108.20
25	BB	211	C	C5-C6-N1	-6.71	117.64	121.00
25	BB	261	G	N1-C2-N3	6.71	127.93	123.90
25	BB	555	G	C3'-C2'-C1'	6.71	106.87	101.50
25	BB	1281	G	C5-N7-C8	-6.71	100.94	104.30
25	BB	1520	U	C5'-C4'-O4'	6.71	117.15	109.10
25	BB	1581	G	N1-C6-O6	-6.71	115.87	119.90
25	BB	1925	C	N3-C2-O2	-6.71	117.20	121.90
25	BB	2070	A	C6-C5-N7	6.71	137.00	132.30
25	BB	2355	G	C5-C6-O6	6.71	132.63	128.60
25	BB	2519	U	C2-N1-C1'	6.71	125.75	117.70
52	B3	38	ASP	CB-CG-OD2	6.71	124.34	118.30
3	A1	682	G	C5-C6-N1	6.71	114.86	111.50
3	A1	1219	A	C5'-C4'-O4'	6.71	117.15	109.10
9	AH	67	ASP	CB-CG-OD2	6.71	124.34	118.30
20	AU	2	ARG	NE-CZ-NH1	6.71	123.66	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	23	G	C4-C5-N7	6.71	113.48	110.80
3	A1	699	C	O4'-C4'-C3'	6.71	111.47	106.10
3	A1	926	G	C5-C6-O6	6.71	132.62	128.60
3	A1	1030	U	O4'-C1'-N1	6.71	113.57	108.20
3	A1	1144	G	O4'-C1'-N9	6.71	113.57	108.20
3	A1	1293	C	C4'-C3'-C2'	-6.71	95.89	102.60
3	A1	1315	U	N3-C2-O2	-6.71	117.50	122.20
24	BA	59	A	C4-C5-C6	-6.71	113.64	117.00
25	BB	359	G	C6-N1-C2	-6.71	121.08	125.10
25	BB	823	C	N3-C4-N4	-6.71	113.31	118.00
25	BB	938	G	N1-C6-O6	-6.71	115.88	119.90
25	BB	1973	G	C1'-O4'-C4'	-6.71	104.53	109.90
25	BB	2508	G	N1-C6-O6	-6.71	115.88	119.90
3	A1	691	G	N1-C2-N3	6.71	127.92	123.90
3	A1	964	A	C5-C6-N1	6.71	121.05	117.70
3	A1	1170	A	C5-C6-N6	6.71	129.06	123.70
3	A1	1322	C	N3-C4-N4	-6.71	113.31	118.00
3	A1	1324	A	C6-C5-N7	6.71	137.00	132.30
25	BB	1018	U	C4-C5-C6	6.71	123.72	119.70
25	BB	1040	A	C5-C6-N1	6.71	121.05	117.70
25	BB	1382	G	C5'-C4'-O4'	6.71	117.15	109.10
25	BB	1952	A	C6-C5-N7	6.71	137.00	132.30
25	BB	2100	G	N1-C6-O6	-6.71	115.88	119.90
25	BB	2607	G	OP1-P-OP2	-6.71	109.54	119.60
25	BB	2631	G	N3-C4-C5	-6.71	125.25	128.60
46	BW	41	ARG	NH1-CZ-NH2	-6.71	112.02	119.40
3	A1	1300	G	N3-C4-C5	-6.71	125.25	128.60
25	BB	1274	A	O4'-C1'-N9	-6.71	102.84	108.20
25	BB	1959	G	O5'-P-OP2	-6.71	99.67	105.70
25	BB	2358	A	C5-C6-N6	6.71	129.06	123.70
3	A1	197	A	C6-C5-N7	6.70	136.99	132.30
3	A1	533	A	C1'-O4'-C4'	6.70	115.26	109.90
3	A1	1491	G	N7-C8-N9	6.70	116.45	113.10
25	BB	977	G	C4-C5-N7	-6.70	108.12	110.80
25	BB	1295	C	N3-C4-C5	6.70	124.58	121.90
25	BB	2787	C	O4'-C4'-C3'	6.70	111.46	106.10
25	BB	2801	G	O4'-C1'-N9	6.70	113.56	108.20
1	AP	58	A	O4'-C1'-N9	-6.70	102.84	108.20
3	A1	329	A	N1-C6-N6	-6.70	114.58	118.60
3	A1	1000	A	C3'-C2'-C1'	6.70	106.86	101.50
25	BB	2156	G	O4'-C1'-N9	6.70	113.56	108.20
25	BB	2541	A	C6-C5-N7	6.70	136.99	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2733	A	C3'-C2'-C1'	6.70	106.86	101.50
3	A1	462	G	N1-C2-N3	6.70	127.92	123.90
3	A1	553	A	O4'-C4'-C3'	6.70	111.46	106.10
24	BA	39	A	C8-N9-C4	-6.70	103.12	105.80
24	BA	83	G	C8-N9-C4	-6.70	103.72	106.40
25	BB	1718	G	N3-C4-N9	-6.70	121.98	126.00
25	BB	2328	A	C4-C5-C6	-6.70	113.65	117.00
25	BB	2472	G	C8-N9-C4	-6.70	103.72	106.40
25	BB	2817	U	C5'-C4'-O4'	6.70	117.14	109.10
3	A1	486	U	C3'-C2'-C1'	6.70	106.86	101.50
3	A1	918	A	C3'-C2'-C1'	6.70	106.86	101.50
3	A1	1055	A	C4'-C3'-C2'	-6.70	95.90	102.60
3	A1	1298	U	N1-C2-N3	6.70	118.92	114.90
17	AR	75	TYR	CB-CG-CD1	-6.70	116.98	121.00
25	BB	760	G	C5'-C4'-O4'	6.70	117.14	109.10
25	BB	1480	C	C5-C6-N1	-6.70	117.65	121.00
25	BB	1560	G	C5'-C4'-O4'	6.70	117.14	109.10
25	BB	2177	C	N3-C2-O2	-6.70	117.21	121.90
25	BB	2601	C	C5-C6-N1	-6.70	117.65	121.00
25	BB	2806	C	C6-N1-C2	6.70	122.98	120.30
33	BJ	32	ARG	CD-NE-CZ	6.70	132.98	123.60
3	A1	221	C	N3-C2-O2	-6.70	117.21	121.90
3	A1	840	C	N3-C4-N4	-6.70	113.31	118.00
3	A1	921	U	C5-C6-N1	-6.70	119.35	122.70
25	BB	2144	G	C5'-C4'-C3'	-6.70	105.28	116.00
25	BB	2397	G	N3-C4-C5	-6.70	125.25	128.60
3	A1	996	A	C3'-C2'-C1'	6.70	106.86	101.50
25	BB	1310	G	C5-C6-N1	6.70	114.85	111.50
25	BB	1484	U	N3-C2-O2	-6.70	117.51	122.20
3	A1	141	G	C5-C6-O6	6.69	132.62	128.60
3	A1	952	U	N3-C2-O2	-6.69	117.51	122.20
3	A1	1286	U	C3'-C2'-C1'	-6.69	96.14	101.50
3	A1	1376	U	N1-C2-N3	6.69	118.92	114.90
5	AC	82	GLU	OE1-CD-OE2	-6.69	115.27	123.30
25	BB	689	A	N1-C2-N3	-6.69	125.95	129.30
25	BB	1987	A	C5-N7-C8	-6.69	100.55	103.90
25	BB	2076	U	N1-C2-N3	6.69	118.92	114.90
3	A1	130	A	C8-N9-C4	-6.69	103.12	105.80
3	A1	608	A	C4-C5-C6	-6.69	113.65	117.00
3	A1	664	G	O4'-C4'-C3'	6.69	111.45	106.10
25	BB	391	A	N7-C8-N9	6.69	117.15	113.80
25	BB	649	G	C5-C6-O6	6.69	132.62	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1244	A	C5-C6-N1	6.69	121.05	117.70
25	BB	1298	C	N3-C2-O2	-6.69	117.22	121.90
25	BB	1934	C	C2'-C3'-O3'	6.69	124.41	113.70
31	BH	25	ARG	NE-CZ-NH2	-6.69	116.95	120.30
3	A1	110	C	N3-C4-N4	-6.69	113.32	118.00
3	A1	507	C	N1-C2-N3	6.69	123.88	119.20
11	AJ	26	ARG	NE-CZ-NH1	6.69	123.64	120.30
24	BA	50	A	N1-C6-N6	-6.69	114.58	118.60
25	BB	173	A	C5'-C4'-C3'	-6.69	105.30	116.00
25	BB	265	A	C5-C6-N6	6.69	129.05	123.70
25	BB	1327	A	O4'-C1'-N9	6.69	113.55	108.20
1	AE	65	G	C8-N9-C4	-6.69	103.72	106.40
3	A1	674	G	N3-C2-N2	-6.69	115.22	119.90
3	A1	877	G	N9-C4-C5	6.69	108.08	105.40
25	BB	1961	C	C2-N3-C4	-6.69	116.56	119.90
28	BE	18	ARG	NE-CZ-NH1	6.69	123.64	120.30
1	AE	55	U	C5'-C4'-O4'	6.69	117.12	109.10
2	AM	16	U	N3-C2-O2	-6.69	117.52	122.20
3	A1	144	G	N3-C2-N2	-6.69	115.22	119.90
3	A1	334	C	O4'-C4'-C3'	6.69	111.45	106.10
3	A1	350	G	N3-C2-N2	6.69	124.58	119.90
3	A1	741	G	N1-C6-O6	-6.69	115.89	119.90
3	A1	761	G	C6-N1-C2	-6.69	121.09	125.10
3	A1	1075	U	C5-C6-N1	-6.69	119.36	122.70
25	BB	128	C	C2-N3-C4	-6.69	116.56	119.90
25	BB	987	C	C2-N3-C4	-6.69	116.56	119.90
25	BB	1027	A	C6-N1-C2	-6.69	114.59	118.60
25	BB	1375	U	O4'-C1'-N1	6.69	113.55	108.20
25	BB	1552	A	C2-N3-C4	6.69	113.94	110.60
25	BB	2370	G	O4'-C1'-N9	6.69	113.55	108.20
25	BB	2661	G	C4-C5-C6	-6.69	114.79	118.80
3	A1	827	U	C1'-O4'-C4'	-6.69	104.55	109.90
3	A1	1466	C	N1-C2-O2	6.69	122.91	118.90
25	BB	47	C	N1-C2-O2	6.69	122.91	118.90
25	BB	1491	G	C4'-C3'-C2'	-6.69	95.91	102.60
25	BB	2736	A	C3'-C2'-C1'	6.69	106.85	101.50
3	A1	405	U	O3'-P-O5'	6.68	116.70	104.00
25	BB	109	C	C5'-C4'-O4'	6.68	117.12	109.10
25	BB	267	C	C4'-C3'-C2'	-6.68	95.92	102.60
25	BB	542	C	O4'-C1'-N1	6.68	113.55	108.20
25	BB	1195	G	N3-C4-C5	-6.68	125.26	128.60
25	BB	1372	U	C5-C6-N1	-6.68	119.36	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1964	G	C6-N1-C2	-6.68	121.09	125.10
25	BB	1964	G	N1-C6-O6	-6.68	115.89	119.90
25	BB	2001	C	O4'-C4'-C3'	6.68	111.45	106.10
25	BB	2592	G	N3-C4-C5	-6.68	125.26	128.60
25	BB	2630	G	N1-C6-O6	-6.68	115.89	119.90
43	BT	12	ARG	CD-NE-CZ	6.68	132.96	123.60
3	A1	566	G	N9-C4-C5	6.68	108.07	105.40
3	A1	1246	A	N1-C6-N6	-6.68	114.59	118.60
6	AD	35	ARG	CD-NE-CZ	6.68	132.96	123.60
25	BB	514	A	C5-C6-N1	6.68	121.04	117.70
25	BB	824	U	O4'-C4'-C3'	6.68	111.44	106.10
25	BB	1158	C	C5'-C4'-C3'	-6.68	105.31	116.00
25	BB	1174	U	C5-C4-O4	6.68	129.91	125.90
25	BB	1268	A	C5-C6-N6	6.68	129.05	123.70
25	BB	1572	A	O4'-C1'-N9	6.68	113.55	108.20
25	BB	2487	G	N9-C1'-C2'	-6.68	104.65	112.00
25	BB	2537	U	O5'-C5'-C4'	6.68	124.40	111.70
25	BB	2656	U	N3-C2-O2	-6.68	117.52	122.20
25	BB	294	A	C5-C6-N6	6.68	129.04	123.70
25	BB	832	U	C5-C6-N1	-6.68	119.36	122.70
25	BB	1051	G	C6-C5-N7	6.68	134.41	130.40
25	BB	1737	G	O4'-C1'-N9	6.68	113.55	108.20
25	BB	2358	A	C6-C5-N7	6.68	136.98	132.30
3	A1	1202	U	N3-C2-O2	-6.68	117.53	122.20
25	BB	897	C	C1'-O4'-C4'	6.68	115.24	109.90
25	BB	1117	C	C5'-C4'-O4'	6.68	117.11	109.10
25	BB	1141	U	O3'-P-O5'	6.68	116.69	104.00
25	BB	1363	C	C6-N1-C2	-6.68	117.63	120.30
25	BB	1429	G	N3-C4-C5	-6.68	125.26	128.60
1	AA	50	U	C4'-C3'-C2'	-6.68	95.92	102.60
3	A1	1511	G	C6-N1-C2	-6.68	121.09	125.10
25	BB	849	A	O4'-C1'-N9	6.68	113.54	108.20
25	BB	1252	G	O4'-C1'-N9	6.68	113.54	108.20
25	BB	1375	U	C4-C5-C6	6.68	123.71	119.70
1	AP	72	C	C5-C6-N1	-6.68	117.66	121.00
1	AE	22	G	C8-N9-C4	-6.68	103.73	106.40
3	A1	1476	A	C6-C5-N7	6.68	136.97	132.30
25	BB	137	U	C2-N3-C4	-6.68	122.99	127.00
25	BB	668	A	C4-C5-C6	-6.68	113.66	117.00
25	BB	882	G	C4-C5-N7	-6.68	108.13	110.80
25	BB	922	C	C2-N3-C4	-6.68	116.56	119.90
25	BB	1001	A	C8-N9-C4	-6.68	103.13	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1760	C	O4'-C1'-N1	6.68	113.54	108.20
25	BB	2389	G	O4'-C4'-C3'	6.68	111.44	106.10
25	BB	2884	U	C5'-C4'-O4'	6.68	117.11	109.10
30	BG	8	ARG	NH1-CZ-NH2	-6.68	112.06	119.40
1	AE	47	U	C5-C6-N1	-6.67	119.36	122.70
3	A1	1406	U	O4'-C1'-N1	6.67	113.54	108.20
25	BB	158	U	N1-C2-N3	6.67	118.90	114.90
25	BB	221	A	P-O5'-C5'	6.67	131.58	120.90
25	BB	646	U	C6-N1-C2	-6.67	117.00	121.00
25	BB	745	G	N1-C6-O6	-6.67	115.89	119.90
25	BB	1091	G	C8-N9-C4	-6.67	103.73	106.40
25	BB	1195	G	C5-C6-O6	6.67	132.60	128.60
25	BB	2581	G	N1-C2-N2	-6.67	110.19	116.20
25	BB	2831	G	N3-C2-N2	-6.67	115.23	119.90
3	A1	86	G	C4'-C3'-C2'	-6.67	95.93	102.60
3	A1	559	A	C1'-O4'-C4'	-6.67	104.56	109.90
3	A1	640	A	C3'-C2'-C1'	6.67	106.84	101.50
3	A1	807	A	O4'-C4'-C3'	6.67	111.44	106.10
20	AU	78	ARG	NH1-CZ-NH2	-6.67	112.06	119.40
25	BB	615	U	C1'-O4'-C4'	6.67	115.24	109.90
25	BB	956	G	N3-C2-N2	-6.67	115.23	119.90
25	BB	1529	G	N3-C2-N2	-6.67	115.23	119.90
25	BB	2481	G	N7-C8-N9	6.67	116.44	113.10
25	BB	2555	U	C5'-C4'-O4'	6.67	117.11	109.10
1	AA	24	G	O4'-C4'-C3'	6.67	111.44	106.10
3	A1	367	U	N1-C2-N3	6.67	118.90	114.90
3	A1	914	A	C2-N3-C4	6.67	113.94	110.60
3	A1	1021	A	C2-N3-C4	6.67	113.94	110.60
25	BB	97	C	O4'-C1'-N1	6.67	113.54	108.20
25	BB	509	C	N3-C4-N4	-6.67	113.33	118.00
25	BB	859	G	C3'-C2'-C1'	6.67	106.84	101.50
25	BB	1166	G	N3-C4-C5	-6.67	125.26	128.60
37	BN	79	ARG	NE-CZ-NH2	6.67	123.64	120.30
3	A1	617	G	C5-N7-C8	-6.67	100.97	104.30
3	A1	736	C	N3-C2-O2	-6.67	117.23	121.90
3	A1	954	G	O4'-C1'-C2'	-6.67	99.13	105.80
25	BB	1373	A	C4-C5-C6	-6.67	113.67	117.00
25	BB	2005	A	C4'-C3'-C2'	-6.67	95.93	102.60
1	AP	73	A	C4-C5-C6	-6.67	113.67	117.00
3	A1	818	G	C5'-C4'-C3'	-6.67	105.33	116.00
3	A1	939	G	C5'-C4'-O4'	6.67	117.10	109.10
3	A1	1415	G	C5-C6-O6	6.67	132.60	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	390	U	O4'-C1'-C2'	-6.67	99.13	105.80
25	BB	457	A	N1-C2-N3	-6.67	125.97	129.30
25	BB	774	G	N3-C4-C5	-6.67	125.27	128.60
25	BB	1739	A	C4'-C3'-C2'	-6.67	95.93	102.60
25	BB	2099	U	C3'-C2'-C1'	6.67	106.83	101.50
25	BB	2472	G	N1-C2-N3	6.67	127.90	123.90
25	BB	2835	A	N1-C2-N3	-6.67	125.97	129.30
3	A1	592	G	C6-N1-C2	-6.67	121.10	125.10
24	BA	116	G	N1-C6-O6	-6.67	115.90	119.90
25	BB	530	G	N7-C8-N9	6.67	116.43	113.10
25	BB	1062	G	C5-C6-O6	-6.67	124.60	128.60
25	BB	2120	G	N7-C8-N9	6.67	116.43	113.10
3	A1	772	U	O4'-C1'-N1	6.67	113.53	108.20
24	BA	39	A	C4-C5-C6	-6.67	113.67	117.00
25	BB	412	A	C3'-C2'-C1'	6.67	106.83	101.50
25	BB	728	G	C6-C5-N7	6.67	134.40	130.40
25	BB	1007	C	N1-C2-N3	6.67	123.86	119.20
25	BB	1610	A	O4'-C1'-N9	6.67	113.53	108.20
25	BB	2085	U	C5-C6-N1	-6.67	119.37	122.70
25	BB	2489	U	N3-C2-O2	-6.67	117.53	122.20
25	BB	2574	G	N3-C4-C5	-6.67	125.27	128.60
3	A1	471	U	C5'-C4'-O4'	6.66	117.10	109.10
3	A1	485	U	N3-C4-C5	-6.66	110.60	114.60
25	BB	38	A	C5-C6-N1	6.66	121.03	117.70
25	BB	163	C	N3-C4-C5	6.66	124.56	121.90
25	BB	510	C	C3'-C2'-C1'	6.66	106.83	101.50
25	BB	2032	G	C5-C6-N1	6.66	114.83	111.50
25	BB	2557	G	N7-C8-N9	6.66	116.43	113.10
25	BB	2805	C	N1-C1'-C2'	-6.66	104.67	112.00
3	A1	567	G	C8-N9-C4	-6.66	103.73	106.40
3	A1	601	G	C5-C6-N1	6.66	114.83	111.50
3	A1	689	C	C2-N3-C4	-6.66	116.57	119.90
25	BB	2774	C	C2-N3-C4	-6.66	116.57	119.90
3	A1	818	G	C4'-C3'-C2'	6.66	109.26	102.60
3	A1	874	G	C4-C5-N7	-6.66	108.14	110.80
3	A1	1245	C	C2-N3-C4	-6.66	116.57	119.90
3	A1	1263	C	O4'-C1'-N1	6.66	113.53	108.20
3	A1	1338	G	C8-N9-C4	-6.66	103.74	106.40
24	BA	20	G	N1-C6-O6	-6.66	115.90	119.90
25	BB	112	U	C2-N3-C4	-6.66	123.00	127.00
25	BB	1074	G	N3-C4-C5	-6.66	125.27	128.60
25	BB	1673	G	N3-C2-N2	-6.66	115.24	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1945	G	O4'-C1'-N9	6.66	113.53	108.20
25	BB	2377	A	C3'-C2'-C1'	-6.66	96.17	101.50
25	BB	2560	A	C6-C5-N7	6.66	136.96	132.30
32	BI	73	PHE	CB-CG-CD2	-6.66	116.14	120.80
3	A1	10	A	C6-C5-N7	6.66	136.96	132.30
3	A1	258	G	N9-C1'-C2'	6.66	122.66	114.00
3	A1	303	A	C5-C6-N1	6.66	121.03	117.70
3	A1	741	G	C6-N1-C2	-6.66	121.10	125.10
3	A1	1129	C	C5'-C4'-O4'	6.66	117.09	109.10
3	A1	1261	A	C6-C5-N7	6.66	136.96	132.30
24	BA	6	G	C5-C6-N1	6.66	114.83	111.50
25	BB	386	G	C5-C6-N1	6.66	114.83	111.50
25	BB	517	C	N3-C4-N4	-6.66	113.34	118.00
25	BB	781	A	C5-C6-N1	6.66	121.03	117.70
25	BB	1757	A	C8-N9-C4	-6.66	103.14	105.80
25	BB	1790	C	C2-N3-C4	-6.66	116.57	119.90
3	A1	628	G	N1-C2-N2	-6.66	110.21	116.20
3	A1	742	G	C5-C6-N1	6.66	114.83	111.50
3	A1	1151	A	N1-C2-N3	-6.66	125.97	129.30
25	BB	474	G	N3-C4-C5	-6.66	125.27	128.60
25	BB	1388	G	N9-C4-C5	6.66	108.06	105.40
1	AA	40	C	C5'-C4'-O4'	6.66	117.09	109.10
3	A1	246	A	C5-N7-C8	-6.66	100.57	103.90
3	A1	417	G	C8-N9-C4	-6.66	103.74	106.40
3	A1	531	U	C5'-C4'-O4'	6.66	117.09	109.10
3	A1	606	G	N7-C8-N9	6.66	116.43	113.10
3	A1	806	C	N3-C2-O2	-6.66	117.24	121.90
3	A1	1315	U	C3'-C2'-C1'	6.66	106.82	101.50
25	BB	492	A	C6-C5-N7	6.66	136.96	132.30
25	BB	494	G	C5-N7-C8	-6.66	100.97	104.30
25	BB	624	C	C4'-C3'-C2'	-6.66	95.94	102.60
25	BB	2127	G	O4'-C1'-N9	6.66	113.52	108.20
25	BB	2357	G	O4'-C1'-N9	6.66	113.53	108.20
25	BB	2674	G	O4'-C1'-N9	6.66	113.52	108.20
25	BB	2277	G	C6-C5-N7	6.65	134.39	130.40
1	AA	1	G	C4-C5-C6	-6.65	114.81	118.80
1	AP	69	U	N1-C1'-C2'	-6.65	104.68	112.00
3	A1	487	A	C6-C5-N7	6.65	136.96	132.30
3	A1	637	C	C6-N1-C2	-6.65	117.64	120.30
3	A1	890	G	C5-C6-O6	6.65	132.59	128.60
3	A1	915	A	C2-N3-C4	6.65	113.93	110.60
24	BA	53	A	C4'-C3'-C2'	-6.65	95.95	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	88	C	O4'-C1'-N1	6.65	113.52	108.20
24	BA	89	U	N3-C2-O2	-6.65	117.54	122.20
25	BB	179	C	N1-C1'-C2'	-6.65	104.68	112.00
25	BB	737	C	N3-C4-C5	6.65	124.56	121.90
25	BB	1354	A	C3'-C2'-C1'	6.65	106.82	101.50
25	BB	2483	C	O4'-C4'-C3'	-6.65	97.35	104.00
25	BB	2850	A	N7-C8-N9	6.65	117.13	113.80
3	A1	515	G	C4-C5-C6	-6.65	114.81	118.80
3	A1	1139	G	C6-N1-C2	-6.65	121.11	125.10
3	A1	1229	A	C5'-C4'-C3'	-6.65	105.36	116.00
3	A1	1353	G	N3-C4-N9	6.65	129.99	126.00
3	A1	1387	G	C5-N7-C8	-6.65	100.97	104.30
3	A1	1505	G	C4-C5-N7	-6.65	108.14	110.80
25	BB	442	G	N1-C2-N3	6.65	127.89	123.90
25	BB	679	C	N3-C4-N4	-6.65	113.34	118.00
25	BB	740	C	O4'-C1'-N1	6.65	113.52	108.20
25	BB	867	C	N3-C2-O2	-6.65	117.25	121.90
25	BB	1737	G	N1-C2-N3	6.65	127.89	123.90
25	BB	1750	G	C3'-C2'-C1'	-6.65	96.18	101.50
25	BB	2803	G	N1-C6-O6	-6.65	115.91	119.90
1	AA	4	G	C5-C6-O6	6.65	132.59	128.60
2	AM	2	U	N1-C2-N3	6.65	118.89	114.90
2	AM	13	U	O5'-C5'-C4'	6.65	124.33	111.70
25	BB	181	A	C4'-C3'-C2'	-6.65	95.95	102.60
25	BB	1987	A	C2-N3-C4	6.65	113.92	110.60
25	BB	2318	G	C4-C5-N7	6.65	113.46	110.80
3	A1	24	U	C5-C4-O4	-6.65	121.91	125.90
3	A1	444	G	C4'-C3'-C2'	-6.65	95.95	102.60
3	A1	954	G	N1-C6-O6	-6.65	115.91	119.90
3	A1	1445	U	C4'-C3'-C2'	-6.65	95.95	102.60
25	BB	37	C	N1-C2-O2	6.65	122.89	118.90
25	BB	104	A	C4-C5-C6	-6.65	113.68	117.00
25	BB	261	G	C5-C6-O6	6.65	132.59	128.60
25	BB	1547	C	N3-C2-O2	-6.65	117.25	121.90
25	BB	1718	G	C5-C6-O6	6.65	132.59	128.60
25	BB	2608	G	N1-C6-O6	-6.65	115.91	119.90
25	BB	2658	C	N1-C2-O2	6.65	122.89	118.90
1	AA	10	G	O4'-C4'-C3'	6.65	111.42	106.10
3	A1	1336	C	N3-C4-C5	6.65	124.56	121.90
25	BB	33	C	C1'-O4'-C4'	-6.65	104.58	109.90
25	BB	117	G	C3'-C2'-C1'	6.65	106.82	101.50
25	BB	192	C	N3-C4-C5	6.65	124.56	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	566	U	C4-C5-C6	6.65	123.69	119.70
25	BB	1066	U	N1-C2-N3	6.65	118.89	114.90
25	BB	2414	G	N1-C6-O6	-6.65	115.91	119.90
3	A1	230	G	N9-C4-C5	6.64	108.06	105.40
3	A1	365	U	C4-C5-C6	6.64	123.69	119.70
3	A1	606	G	C8-N9-C4	-6.64	103.74	106.40
3	A1	1026	G	N1-C6-O6	-6.64	115.91	119.90
24	BA	83	G	N1-C2-N3	6.64	127.89	123.90
25	BB	181	A	N9-C4-C5	-6.64	103.14	105.80
25	BB	451	U	O4'-C1'-N1	6.64	113.52	108.20
25	BB	621	A	C2-N3-C4	6.64	113.92	110.60
25	BB	1068	G	C6-C5-N7	6.64	134.39	130.40
25	BB	2567	G	O4'-C1'-N9	6.64	113.52	108.20
3	A1	125	U	C3'-C2'-C1'	6.64	106.81	101.50
3	A1	1056	U	C3'-C2'-C1'	-6.64	96.19	101.50
3	A1	1058	G	N7-C8-N9	6.64	116.42	113.10
24	BA	26	C	N3-C4-N4	-6.64	113.35	118.00
25	BB	971	G	C5-C6-O6	6.64	132.59	128.60
25	BB	1031	G	C6-N1-C2	-6.64	121.11	125.10
25	BB	1647	U	N1-C2-N3	6.64	118.89	114.90
25	BB	1853	A	C5-C6-N6	6.64	129.01	123.70
3	A1	620	C	N1-C2-N3	6.64	123.85	119.20
3	A1	661	G	N1-C2-N3	6.64	127.88	123.90
3	A1	959	A	N1-C2-N3	-6.64	125.98	129.30
25	BB	199	A	C6-N1-C2	-6.64	114.61	118.60
25	BB	367	G	N1-C6-O6	-6.64	115.92	119.90
25	BB	985	C	N3-C4-N4	-6.64	113.35	118.00
25	BB	1973	G	N1-C6-O6	-6.64	115.92	119.90
1	AE	23	A	N7-C8-N9	6.64	117.12	113.80
3	A1	428	G	C8-N9-C4	-6.64	103.74	106.40
3	A1	446	G	C1'-O4'-C4'	6.64	115.21	109.90
3	A1	527	G	N3-C2-N2	-6.64	115.25	119.90
25	BB	640	C	C6-N1-C2	-6.64	117.64	120.30
25	BB	725	G	O4'-C1'-N9	-6.64	102.89	108.20
25	BB	859	G	N9-C4-C5	6.64	108.06	105.40
25	BB	1217	U	C5'-C4'-O4'	-6.64	101.13	109.10
25	BB	1592	C	C6-N1-C2	-6.64	117.64	120.30
25	BB	1736	U	N1-C2-N3	6.64	118.88	114.90
25	BB	1809	A	C2-N3-C4	6.64	113.92	110.60
25	BB	2771	C	O3'-P-O5'	6.64	116.61	104.00
1	AP	74	C	N1-C2-O2	6.64	122.88	118.90
3	A1	1177	G	C6-N1-C2	-6.64	121.12	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1428	A	C4-C5-C6	-6.64	113.68	117.00
25	BB	809	G	C1'-O4'-C4'	-6.64	104.59	109.90
25	BB	1619	G	N1-C6-O6	-6.64	115.92	119.90
25	BB	2614	A	C5-C6-N6	6.64	129.01	123.70
27	BD	80	ASP	OD1-CG-OD2	-6.64	110.69	123.30
3	A1	413	G	N1-C2-N3	6.64	127.88	123.90
3	A1	880	C	C3'-C2'-C1'	6.64	106.81	101.50
3	A1	987	G	C4-C5-C6	-6.64	114.82	118.80
3	A1	1222	G	N3-C4-C5	-6.64	125.28	128.60
25	BB	446	G	C5-C6-O6	6.64	132.58	128.60
25	BB	521	U	N3-C4-O4	6.64	124.05	119.40
25	BB	775	G	N7-C8-N9	6.64	116.42	113.10
25	BB	899	A	O4'-C1'-N9	6.64	113.51	108.20
25	BB	2781	A	N9-C1'-C2'	-6.64	104.70	112.00
25	BB	2875	C	C1'-O4'-C4'	-6.64	104.59	109.90
1	AP	69	U	C5'-C4'-O4'	6.63	117.06	109.10
3	A1	49	U	N3-C2-O2	-6.63	117.56	122.20
3	A1	561	U	N3-C2-O2	-6.63	117.56	122.20
3	A1	1020	G	C5-C6-N1	6.63	114.82	111.50
3	A1	1412	C	N3-C4-N4	-6.63	113.36	118.00
24	BA	26	C	C2-N3-C4	-6.63	116.58	119.90
25	BB	246	C	C6-N1-C2	-6.63	117.65	120.30
25	BB	579	G	N1-C6-O6	-6.63	115.92	119.90
25	BB	1191	G	N1-C6-O6	-6.63	115.92	119.90
25	BB	1469	A	C4-C5-C6	-6.63	113.68	117.00
25	BB	1727	C	C2-N3-C4	-6.63	116.58	119.90
25	BB	2244	U	N3-C2-O2	-6.63	117.56	122.20
25	BB	2734	A	C6-C5-N7	6.63	136.94	132.30
25	BB	680	C	N3-C4-C5	6.63	124.55	121.90
25	BB	1228	G	O3'-P-O5'	-6.63	91.40	104.00
25	BB	1422	G	C5-C6-N1	6.63	114.82	111.50
25	BB	1790	C	C3'-C2'-C1'	-6.63	96.19	101.50
25	BB	2735	G	N1-C6-O6	-6.63	115.92	119.90
3	A1	446	G	N3-C4-C5	-6.63	125.28	128.60
3	A1	518	C	C5'-C4'-O4'	6.63	117.06	109.10
3	A1	1450	U	C1'-O4'-C4'	-6.63	104.59	109.90
11	AJ	5	ARG	CD-NE-CZ	6.63	132.88	123.60
25	BB	1447	C	N3-C2-O2	-6.63	117.26	121.90
25	BB	1620	G	O4'-C1'-N9	6.63	113.51	108.20
25	BB	2478	A	C3'-C2'-C1'	-6.63	96.19	101.50
25	BB	2880	C	N1-C2-O2	6.63	122.88	118.90
25	BB	2902	C	N3-C4-N4	-6.63	113.36	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1724	G	N3-C2-N2	-6.63	115.26	119.90
25	BB	2284	A	C5'-C4'-O4'	6.63	117.06	109.10
1	AA	75	C	C3'-C2'-O2'	6.63	132.52	113.30
3	A1	624	C	C2-N3-C4	-6.63	116.59	119.90
3	A1	1051	C	C5-C6-N1	-6.63	117.69	121.00
3	A1	1320	C	O4'-C1'-N1	6.63	113.50	108.20
25	BB	49	A	C2-N3-C4	6.63	113.91	110.60
25	BB	196	A	O4'-C1'-N9	6.63	113.50	108.20
25	BB	1607	C	N3-C4-N4	-6.63	113.36	118.00
3	A1	181	A	C2-N3-C4	6.63	113.91	110.60
3	A1	424	G	N3-C4-C5	-6.63	125.29	128.60
3	A1	470	C	N1-C2-N3	6.63	123.84	119.20
3	A1	605	U	C5-C6-N1	-6.63	119.39	122.70
3	A1	1155	A	O4'-C4'-C3'	6.63	111.40	106.10
3	A1	1480	A	C4'-C3'-C2'	-6.63	95.97	102.60
3	A1	1494	G	C5-N7-C8	-6.63	100.99	104.30
25	BB	416	U	N3-C2-O2	-6.63	117.56	122.20
25	BB	583	G	N3-C2-N2	-6.63	115.26	119.90
25	BB	612	G	C6-N1-C2	-6.63	121.12	125.10
25	BB	655	A	C6-N1-C2	6.63	122.58	118.60
25	BB	692	C	C2-N3-C4	-6.63	116.59	119.90
25	BB	1139	G	C4-C5-C6	-6.63	114.82	118.80
25	BB	1261	C	N1-C2-N3	6.63	123.84	119.20
25	BB	1358	G	N3-C4-C5	-6.63	125.29	128.60
25	BB	1408	G	O4'-C1'-N9	6.63	113.50	108.20
25	BB	2799	A	O4'-C1'-N9	6.63	113.50	108.20
3	A1	465	A	C5-C6-N6	6.62	129.00	123.70
3	A1	749	A	C5-C6-N6	6.62	129.00	123.70
3	A1	1144	G	C6-N1-C2	-6.62	121.12	125.10
3	A1	1445	U	O4'-C1'-N1	6.62	113.50	108.20
3	A1	1530	G	C4-C5-C6	-6.62	114.83	118.80
6	AD	55	ARG	NH1-CZ-NH2	-6.62	112.11	119.40
3	A1	70	U	N3-C4-O4	6.62	124.04	119.40
3	A1	870	U	N3-C2-O2	-6.62	117.56	122.20
25	BB	256	A	C5-C6-N6	6.62	129.00	123.70
25	BB	584	C	N3-C4-C5	6.62	124.55	121.90
25	BB	612	G	C4-C5-N7	6.62	113.45	110.80
25	BB	643	A	C4-C5-N7	6.62	114.01	110.70
25	BB	658	U	N1-C2-N3	6.62	118.87	114.90
25	BB	766	U	C1'-O4'-C4'	-6.62	104.60	109.90
25	BB	971	G	O4'-C1'-N9	6.62	113.50	108.20
25	BB	2066	C	C6-N1-C2	-6.62	117.65	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2792	A	C6-C5-N7	6.62	136.94	132.30
48	BY	33	ARG	NE-CZ-NH2	-6.62	116.99	120.30
3	A1	488	C	C5-C4-N4	-6.62	115.56	120.20
3	A1	550	G	N3-C4-N9	6.62	129.97	126.00
3	A1	647	C	C5-C4-N4	-6.62	115.56	120.20
25	BB	239	C	C5'-C4'-O4'	6.62	117.05	109.10
25	BB	599	A	N1-C2-N3	-6.62	125.99	129.30
25	BB	2465	C	N1-C2-O2	6.62	122.87	118.90
2	AM	4	U	C3'-C2'-C1'	-6.62	96.20	101.50
3	A1	588	G	N1-C6-O6	-6.62	115.93	119.90
3	A1	964	A	C8-N9-C4	6.62	108.45	105.80
3	A1	1065	U	C5-C6-N1	-6.62	119.39	122.70
25	BB	1437	C	N3-C4-N4	-6.62	113.37	118.00
25	BB	1829	A	C5-C6-N1	6.62	121.01	117.70
25	BB	2107	G	N3-C4-C5	-6.62	125.29	128.60
25	BB	2234	G	O4'-C1'-C2'	6.62	113.56	107.60
25	BB	2416	C	C3'-C2'-C1'	-6.62	96.20	101.50
34	BK	90	ARG	NE-CZ-NH2	6.62	123.61	120.30
1	AP	1	G	N3-C4-N9	6.62	129.97	126.00
3	A1	181	A	C8-N9-C4	-6.62	103.15	105.80
3	A1	699	C	C5'-C4'-C3'	-6.62	105.41	116.00
3	A1	840	C	N1-C2-N3	6.62	123.83	119.20
3	A1	960	U	C5-C6-N1	-6.62	119.39	122.70
3	A1	1332	A	N9-C4-C5	6.62	108.45	105.80
23	AX	89	ARG	NH1-CZ-NH2	-6.62	112.12	119.40
24	BA	76	G	C4-C5-N7	-6.62	108.15	110.80
25	BB	52	A	C5'-C4'-O4'	6.62	117.04	109.10
25	BB	873	C	C1'-O4'-C4'	-6.62	104.61	109.90
25	BB	978	G	N3-C2-N2	-6.62	115.27	119.90
25	BB	1320	C	N1-C2-N3	6.62	123.83	119.20
25	BB	1921	G	C5-C6-N1	6.62	114.81	111.50
25	BB	2029	G	N1-C2-N3	6.62	127.87	123.90
43	BT	12	ARG	NH1-CZ-NH2	-6.62	112.12	119.40
1	AA	19	G	O4'-C1'-C2'	-6.62	99.18	105.80
25	BB	372	G	C4-C5-N7	-6.62	108.15	110.80
25	BB	486	C	C1'-O4'-C4'	-6.62	104.61	109.90
25	BB	506	G	C4-C5-C6	-6.62	114.83	118.80
25	BB	867	C	C2-N3-C4	-6.62	116.59	119.90
25	BB	969	G	N3-C2-N2	-6.62	115.27	119.90
25	BB	1885	A	C6-C5-N7	6.62	136.93	132.30
3	A1	263	A	C4-C5-C6	-6.62	113.69	117.00
3	A1	329	A	C4-C5-C6	-6.62	113.69	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	801	U	N1-C2-N3	6.62	118.87	114.90
3	A1	1481	U	C2-N1-C1'	6.62	125.64	117.70
4	AB	62	ARG	NH1-CZ-NH2	-6.62	112.12	119.40
17	AR	145	ARG	NE-CZ-NH1	6.62	123.61	120.30
25	BB	932	U	C2-N3-C4	-6.62	123.03	127.00
25	BB	1392	A	C5-C6-N6	6.62	128.99	123.70
25	BB	1393	A	C2-N3-C4	6.62	113.91	110.60
25	BB	2156	G	O4'-C4'-C3'	6.62	111.39	106.10
25	BB	2336	A	O4'-C1'-N9	6.62	113.49	108.20
1	AE	19	G	C3'-C2'-C1'	-6.61	96.21	101.50
3	A1	795	C	N1-C2-N3	6.61	123.83	119.20
3	A1	1404	C	C4'-C3'-C2'	-6.61	95.99	102.60
18	AS	28	ARG	NH1-CZ-NH2	-6.61	112.12	119.40
25	BB	318	C	N1-C2-O2	6.61	122.87	118.90
25	BB	1659	G	C4-C5-C6	-6.61	114.83	118.80
25	BB	1718	G	C6-C5-N7	6.61	134.37	130.40
3	A1	766	A	C5-C6-N1	6.61	121.01	117.70
24	BA	85	G	N9-C4-C5	6.61	108.05	105.40
25	BB	878	A	C6-C5-N7	6.61	136.93	132.30
25	BB	904	G	N3-C4-N9	-6.61	122.03	126.00
25	BB	1472	C	N1-C2-O2	6.61	122.87	118.90
25	BB	2152	G	C5'-C4'-C3'	-6.61	105.42	116.00
3	A1	1200	C	C3'-C2'-C1'	-6.61	96.21	101.50
3	A1	1318	A	C6-C5-N7	6.61	136.93	132.30
25	BB	382	A	C8-N9-C4	6.61	108.44	105.80
25	BB	439	A	C4-C5-C6	-6.61	113.69	117.00
25	BB	1638	C	N1-C2-O2	6.61	122.87	118.90
25	BB	2363	G	N3-C2-N2	-6.61	115.27	119.90
25	BB	2449	U	C3'-C2'-C1'	6.61	106.79	101.50
25	BB	2805	C	O4'-C1'-N1	6.61	113.49	108.20
1	AA	37	G	N1-C2-N3	6.61	127.86	123.90
3	A1	441	A	C5-C6-N1	6.61	121.00	117.70
3	A1	573	A	C4-C5-N7	6.61	114.00	110.70
3	A1	673	A	N1-C6-N6	-6.61	114.63	118.60
3	A1	1168	U	O4'-C1'-N1	6.61	113.49	108.20
3	A1	1438	G	C4-C5-N7	-6.61	108.16	110.80
25	BB	1272	A	C6-C5-N7	6.61	136.93	132.30
1	AP	66	A	C5-N7-C8	-6.61	100.60	103.90
1	AE	10	G	C3'-C2'-C1'	6.61	106.79	101.50
3	A1	849	G	N1-C6-O6	-6.61	115.94	119.90
7	AF	59	VAL	CA-CB-CG2	6.61	120.81	110.90
25	BB	2499	C	N1-C2-O2	6.61	122.86	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
36	BM	69	ARG	NH1-CZ-NH2	-6.61	112.13	119.40
1	AE	69	U	C4-C5-C6	6.61	123.66	119.70
3	A1	47	C	C6-N1-C2	-6.61	117.66	120.30
3	A1	193	C	C4-C5-C6	-6.61	114.10	117.40
3	A1	343	U	N1-C1'-C2'	-6.61	104.73	112.00
3	A1	691	G	C5-C6-N1	6.61	114.80	111.50
3	A1	1128	C	C6-N1-C2	-6.61	117.66	120.30
3	A1	1399	C	C6-N1-C2	-6.61	117.66	120.30
25	BB	242	G	C2-N3-C4	6.61	115.20	111.90
25	BB	369	U	C5'-C4'-O4'	6.61	117.03	109.10
25	BB	400	G	C5-C6-N1	6.61	114.80	111.50
25	BB	609	A	C4-C5-C6	-6.61	113.70	117.00
25	BB	2056	G	N1-C6-O6	-6.61	115.94	119.90
25	BB	2355	G	C8-N9-C4	-6.61	103.76	106.40
25	BB	2445	G	N1-C6-O6	-6.61	115.94	119.90
25	BB	2613	U	O4'-C1'-C2'	-6.61	99.19	105.80
25	BB	2620	C	N3-C2-O2	-6.61	117.28	121.90
37	BN	40	GLY	C-N-CA	6.61	136.17	122.30
3	A1	15	G	P-O3'-C3'	6.60	127.62	119.70
3	A1	619	U	C3'-C2'-C1'	6.60	106.78	101.50
3	A1	1289	A	O4'-C1'-N9	-6.60	102.92	108.20
25	BB	995	C	C6-N1-C2	-6.60	117.66	120.30
3	A1	76	G	N1-C2-N3	6.60	127.86	123.90
3	A1	104	G	O4'-C1'-N9	6.60	113.48	108.20
3	A1	113	G	P-O3'-C3'	6.60	127.62	119.70
3	A1	191	G	N3-C4-C5	-6.60	125.30	128.60
3	A1	294	U	O4'-C4'-C3'	6.60	111.38	106.10
3	A1	621	A	C5-C6-N1	6.60	121.00	117.70
3	A1	1019	A	C6-C5-N7	6.60	136.92	132.30
25	BB	446	G	C6-N1-C2	-6.60	121.14	125.10
25	BB	509	C	C2-N3-C4	-6.60	116.60	119.90
25	BB	798	G	C6-C5-N7	6.60	134.36	130.40
25	BB	1550	C	C2-N3-C4	-6.60	116.60	119.90
25	BB	1888	G	C5-N7-C8	-6.60	101.00	104.30
25	BB	1912	A	C6-N1-C2	-6.60	114.64	118.60
25	BB	2115	G	O4'-C1'-N9	6.60	113.48	108.20
25	BB	2246	G	P-O3'-C3'	6.60	127.62	119.70
25	BB	2427	C	N3-C2-O2	-6.60	117.28	121.90
25	BB	2877	G	N1-C2-N3	6.60	127.86	123.90
1	AA	64	A	C2-N3-C4	6.60	113.90	110.60
3	A1	910	C	N3-C4-N4	-6.60	113.38	118.00
25	BB	966	G	N1-C6-O6	-6.60	115.94	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2522	U	C3'-C2'-C1'	6.60	106.78	101.50
3	A1	153	C	C2-N3-C4	-6.60	116.60	119.90
3	A1	1193	G	C5'-C4'-C3'	-6.60	105.44	116.00
3	A1	1247	U	N3-C2-O2	-6.60	117.58	122.20
3	A1	1407	C	N1-C2-O2	6.60	122.86	118.90
3	A1	1522	U	C1'-O4'-C4'	-6.60	104.62	109.90
25	BB	123	G	N1-C6-O6	-6.60	115.94	119.90
25	BB	205	G	N3-C4-C5	-6.60	125.30	128.60
25	BB	625	G	C5-C6-N1	6.60	114.80	111.50
25	BB	829	A	C5-C6-N1	6.60	121.00	117.70
25	BB	921	C	N3-C4-N4	-6.60	113.38	118.00
25	BB	1366	A	C6-C5-N7	6.60	136.92	132.30
25	BB	1721	G	N1-C6-O6	-6.60	115.94	119.90
25	BB	1951	U	C5-C4-O4	6.60	129.86	125.90
25	BB	2216	G	C5'-C4'-O4'	6.60	117.02	109.10
3	A1	154	U	N1-C2-N3	6.60	118.86	114.90
3	A1	1275	A	C4-C5-C6	-6.60	113.70	117.00
25	BB	230	G	C5-C6-N1	6.60	114.80	111.50
25	BB	742	A	C1'-O4'-C4'	-6.60	104.62	109.90
25	BB	926	G	C2-N3-C4	6.60	115.20	111.90
25	BB	1900	A	C4-C5-C6	-6.60	113.70	117.00
25	BB	1914	C	C5'-C4'-C3'	-6.60	105.44	116.00
25	BB	2006	C	N1-C2-O2	6.60	122.86	118.90
25	BB	2355	G	C1'-O4'-C4'	-6.60	104.62	109.90
25	BB	2482	A	C4'-C3'-C2'	-6.60	96.00	102.60
3	A1	38	G	C6-C5-N7	6.60	134.36	130.40
3	A1	583	A	C6-C5-N7	6.60	136.92	132.30
3	A1	1494	G	N1-C2-N2	-6.60	110.26	116.20
25	BB	1623	G	C6-C5-N7	6.60	134.36	130.40
25	BB	2689	U	N3-C4-O4	6.60	124.02	119.40
1	AA	39	U	N1-C2-N3	6.59	118.86	114.90
3	A1	397	A	C1'-O4'-C4'	-6.59	104.62	109.90
3	A1	514	C	N3-C2-O2	-6.59	117.28	121.90
3	A1	990	C	N1-C1'-C2'	-6.59	104.75	112.00
3	A1	1128	C	N1-C2-O2	6.59	122.86	118.90
7	AF	106	ARG	NH1-CZ-NH2	-6.59	112.14	119.40
25	BB	69	C	N3-C4-C5	6.59	124.54	121.90
25	BB	297	G	C6-C5-N7	6.59	134.36	130.40
25	BB	444	C	N3-C4-N4	-6.59	113.38	118.00
25	BB	934	U	N3-C2-O2	-6.59	117.58	122.20
25	BB	1104	C	C6-N1-C2	-6.59	117.66	120.30
25	BB	1367	A	O4'-C4'-C3'	6.59	111.38	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1507	C	C4'-C3'-C2'	-6.59	96.01	102.60
25	BB	1975	G	C5-C6-N1	6.59	114.80	111.50
25	BB	2734	A	N1-C2-N3	-6.59	126.00	129.30
46	BW	39	ARG	NE-CZ-NH2	6.59	123.60	120.30
1	AA	17	U	C5-C6-N1	-6.59	119.40	122.70
1	AP	57	G	C1'-O4'-C4'	-6.59	104.63	109.90
3	A1	500	G	P-O3'-C3'	6.59	127.61	119.70
3	A1	925	G	O4'-C4'-C3'	6.59	111.37	106.10
3	A1	1234	C	N3-C2-O2	-6.59	117.28	121.90
25	BB	368	A	O4'-C1'-N9	6.59	113.47	108.20
25	BB	613	A	C3'-C2'-C1'	-6.59	96.23	101.50
25	BB	1072	C	O5'-P-OP1	-6.59	99.77	105.70
25	BB	1849	G	C5-C6-O6	6.59	132.56	128.60
1	AA	42	G	O4'-C1'-N9	6.59	113.47	108.20
3	A1	60	A	C4-C5-N7	6.59	114.00	110.70
3	A1	553	A	C4-C5-C6	-6.59	113.70	117.00
3	A1	696	A	C6-C5-N7	6.59	136.91	132.30
3	A1	826	C	C2-N3-C4	-6.59	116.60	119.90
3	A1	1111	A	C5'-C4'-C3'	-6.59	105.45	116.00
3	A1	1497	G	C4-C5-C6	-6.59	114.84	118.80
24	BA	103	U	C4'-C3'-C2'	-6.59	96.01	102.60
25	BB	588	U	N3-C2-O2	-6.59	117.59	122.20
25	BB	825	A	C6-N1-C2	-6.59	114.64	118.60
25	BB	869	G	C6-C5-N7	6.59	134.35	130.40
25	BB	892	A	O4'-C1'-N9	6.59	113.47	108.20
25	BB	1062	G	C5-N7-C8	-6.59	101.00	104.30
25	BB	1087	G	P-O3'-C3'	6.59	127.61	119.70
25	BB	1581	G	C6-C5-N7	6.59	134.35	130.40
25	BB	1714	U	N3-C2-O2	-6.59	117.58	122.20
25	BB	1822	C	N1-C2-N3	6.59	123.81	119.20
25	BB	1898	U	C6-N1-C2	-6.59	117.05	121.00
25	BB	2279	G	O4'-C1'-N9	6.59	113.47	108.20
25	BB	2447	G	C8-N9-C4	-6.59	103.76	106.40
25	BB	2490	G	C5-C6-N1	6.59	114.80	111.50
3	A1	332	G	N7-C8-N9	6.59	116.39	113.10
3	A1	462	G	C2-N3-C4	-6.59	108.61	111.90
25	BB	7	G	C5-C6-O6	6.59	132.55	128.60
25	BB	1620	G	C6-N1-C2	-6.59	121.15	125.10
32	BI	52	ARG	NH1-CZ-NH2	-6.59	112.15	119.40
3	A1	384	G	N1-C2-N3	6.59	127.85	123.90
3	A1	1309	G	N3-C4-C5	-6.59	125.31	128.60
25	BB	512	G	C8-N9-C4	-6.59	103.77	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	809	G	N3-C2-N2	-6.59	115.29	119.90
3	A1	349	A	N1-C6-N6	-6.59	114.65	118.60
3	A1	925	G	N3-C4-C5	-6.59	125.31	128.60
24	BA	76	G	C6-C5-N7	6.59	134.35	130.40
25	BB	136	G	C3'-C2'-C1'	6.59	106.77	101.50
25	BB	659	G	C3'-C2'-C1'	-6.59	96.23	101.50
25	BB	1045	C	C6-N1-C2	-6.59	117.67	120.30
25	BB	1121	C	O4'-C1'-N1	6.59	113.47	108.20
25	BB	1252	G	C5-C6-N1	6.59	114.79	111.50
25	BB	1403	A	N1-C6-N6	-6.59	114.65	118.60
25	BB	1828	G	N3-C2-N2	-6.59	115.29	119.90
3	A1	212	G	C4-C5-N7	6.58	113.43	110.80
3	A1	1149	C	N3-C4-C5	6.58	124.53	121.90
25	BB	248	G	N9-C4-C5	-6.58	102.77	105.40
25	BB	1093	G	C5-C6-O6	6.58	132.55	128.60
25	BB	1357	C	C4-C5-C6	6.58	120.69	117.40
3	A1	180	U	N1-C2-N3	6.58	118.85	114.90
3	A1	308	C	C6-N1-C2	-6.58	117.67	120.30
3	A1	548	G	N3-C2-N2	-6.58	115.29	119.90
3	A1	709	U	C6-N1-C2	-6.58	117.05	121.00
3	A1	799	G	C6-C5-N7	6.58	134.35	130.40
3	A1	1523	G	C8-N9-C4	-6.58	103.77	106.40
24	BA	16	G	C8-N9-C4	-6.58	103.77	106.40
25	BB	1255	U	C3'-C2'-C1'	-6.58	96.23	101.50
25	BB	2476	A	C5-C6-N6	6.58	128.97	123.70
28	BE	69	ARG	CD-NE-CZ	6.58	132.82	123.60
1	AA	19	G	N7-C8-N9	-6.58	109.81	113.10
3	A1	48	C	O4'-C1'-N1	6.58	113.47	108.20
3	A1	137	U	C2-N3-C4	-6.58	123.05	127.00
3	A1	424	G	N9-C4-C5	6.58	108.03	105.40
3	A1	1285	A	C3'-C2'-C1'	-6.58	96.23	101.50
25	BB	751	A	N3-C4-C5	-6.58	122.19	126.80
25	BB	1847	A	N9-C1'-C2'	-6.58	104.76	112.00
25	BB	1896	G	C4-C5-N7	-6.58	108.17	110.80
25	BB	2525	G	N9-C1'-C2'	6.58	122.56	114.00
25	BB	2788	C	N3-C2-O2	-6.58	117.29	121.90
3	A1	1306	A	C1'-O4'-C4'	-6.58	104.64	109.90
25	BB	297	G	N3-C2-N2	-6.58	115.29	119.90
25	BB	1158	C	C3'-C2'-C1'	-6.58	96.24	101.50
25	BB	1215	G	O4'-C1'-N9	6.58	113.46	108.20
3	A1	517	G	C8-N9-C4	6.58	109.03	106.40
3	A1	750	C	N1-C2-N3	6.58	123.81	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	907	A	C6-C5-N7	6.58	136.91	132.30
3	A1	1085	U	N3-C2-O2	-6.58	117.59	122.20
25	BB	1632	A	C5-N7-C8	-6.58	100.61	103.90
25	BB	1990	C	C2-N1-C1'	6.58	126.04	118.80
39	BP	54	ARG	NE-CZ-NH1	6.58	123.59	120.30
3	A1	115	G	C5-C6-O6	6.58	132.55	128.60
3	A1	913	A	C4'-C3'-C2'	-6.58	96.02	102.60
25	BB	430	A	C4-C5-C6	-6.58	113.71	117.00
25	BB	777	G	C6-C5-N7	6.58	134.35	130.40
25	BB	931	U	N3-C2-O2	-6.58	117.60	122.20
25	BB	1287	A	C4-C5-C6	-6.58	113.71	117.00
1	AE	31	A	O4'-C1'-N9	6.58	113.46	108.20
3	A1	238	A	N1-C6-N6	-6.58	114.66	118.60
3	A1	495	A	C5-C6-N6	6.58	128.96	123.70
3	A1	793	U	O4'-C1'-N1	6.58	113.46	108.20
3	A1	822	U	C2-N3-C4	-6.58	123.05	127.00
3	A1	1272	G	C1'-O4'-C4'	-6.58	104.64	109.90
25	BB	53	A	C6-C5-N7	6.58	136.90	132.30
25	BB	87	U	N3-C2-O2	-6.58	117.60	122.20
25	BB	118	A	C6-C5-N7	6.58	136.90	132.30
25	BB	246	C	N3-C2-O2	-6.58	117.30	121.90
25	BB	264	C	N1-C2-N3	6.58	123.80	119.20
25	BB	310	A	C4-C5-C6	-6.58	113.71	117.00
25	BB	329	G	N3-C2-N2	-6.58	115.30	119.90
25	BB	342	A	C6-C5-N7	6.58	136.90	132.30
25	BB	1652	A	C1'-O4'-C4'	-6.58	104.64	109.90
25	BB	1675	C	N1-C2-N3	6.58	123.80	119.20
25	BB	2096	C	O3'-P-O5'	6.58	116.50	104.00
25	BB	2892	G	N3-C4-C5	-6.58	125.31	128.60
17	AR	170	LEU	CB-CG-CD2	6.57	122.18	111.00
20	AU	142	ARG	CD-NE-CZ	6.57	132.80	123.60
24	BA	83	G	O4'-C1'-N9	6.57	113.46	108.20
25	BB	312	G	N1-C2-N3	6.57	127.84	123.90
25	BB	666	A	C6-C5-N7	6.57	136.90	132.30
25	BB	1170	C	C5'-C4'-O4'	6.57	116.99	109.10
25	BB	1555	G	N3-C4-C5	-6.57	125.31	128.60
25	BB	1717	A	C4-C5-C6	-6.57	113.71	117.00
25	BB	1790	C	N1-C2-O2	6.57	122.84	118.90
25	BB	2116	G	C2-N3-C4	-6.57	108.61	111.90
25	BB	2607	G	N1-C6-O6	-6.57	115.96	119.90
3	A1	258	G	C8-N9-C4	-6.57	103.77	106.40
3	A1	259	G	C1'-O4'-C4'	-6.57	104.64	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
53	B4	97	ARG	NE-CZ-NH1	6.57	123.59	120.30
1	AE	19	G	C5'-C4'-O4'	-6.57	101.22	109.10
1	AE	20	G	N1-C6-O6	-6.57	115.96	119.90
3	A1	59	A	C2-N3-C4	6.57	113.89	110.60
3	A1	940	C	N1-C2-O2	6.57	122.84	118.90
3	A1	1063	C	O4'-C4'-C3'	-6.57	97.43	104.00
24	BA	81	G	C5'-C4'-O4'	6.57	116.98	109.10
25	BB	394	C	C6-N1-C2	-6.57	117.67	120.30
25	BB	1087	G	C6-N1-C2	-6.57	121.16	125.10
25	BB	1877	A	C6-C5-N7	6.57	136.90	132.30
25	BB	1880	U	N1-C2-N3	6.57	118.84	114.90
25	BB	2788	C	C4-C5-C6	-6.57	114.11	117.40
25	BB	2819	G	N1-C2-N2	-6.57	110.29	116.20
3	A1	5	U	N3-C2-O2	-6.57	117.60	122.20
25	BB	234	U	N3-C4-O4	6.57	124.00	119.40
25	BB	397	U	C4-C5-C6	6.57	123.64	119.70
25	BB	1523	U	C1'-O4'-C4'	-6.57	104.64	109.90
25	BB	2092	U	C1'-O4'-C4'	-6.57	104.64	109.90
25	BB	2197	U	N1-C2-O2	6.57	127.40	122.80
3	A1	39	G	N1-C6-O6	-6.57	115.96	119.90
3	A1	516	U	C5'-C4'-C3'	-6.57	105.49	116.00
3	A1	1159	U	C5-C6-N1	-6.57	119.42	122.70
25	BB	670	A	N1-C2-N3	-6.57	126.02	129.30
25	BB	868	U	C5'-C4'-C3'	-6.57	105.49	116.00
25	BB	1081	U	C4-C5-C6	6.57	123.64	119.70
25	BB	1302	A	C2-N3-C4	6.57	113.88	110.60
25	BB	1377	G	C5-C6-O6	6.57	132.54	128.60
25	BB	1591	A	C6-C5-N7	6.57	136.90	132.30
25	BB	2282	G	N3-C4-C5	-6.57	125.32	128.60
25	BB	2386	A	C3'-C2'-C1'	-6.57	96.25	101.50
25	BB	2544	G	N1-C6-O6	-6.57	115.96	119.90
25	BB	2867	G	C5'-C4'-C3'	-6.57	105.49	116.00
36	BM	18	GLU	OE1-CD-OE2	-6.57	115.42	123.30
3	A1	133	U	N3-C2-O2	-6.57	117.60	122.20
3	A1	145	G	O4'-C1'-N9	6.57	113.45	108.20
3	A1	187	G	O4'-C1'-N9	6.57	113.45	108.20
3	A1	1232	U	C6-N1-C2	-6.57	117.06	121.00
25	BB	440	C	N3-C4-N4	-6.57	113.40	118.00
25	BB	727	A	N1-C6-N6	-6.57	114.66	118.60
25	BB	797	G	N3-C2-N2	-6.57	115.30	119.90
25	BB	837	C	C4-C5-C6	-6.57	114.12	117.40
25	BB	1432	G	C8-N9-C4	-6.57	103.77	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1939	U	N1-C1'-C2'	6.57	122.53	114.00
25	BB	2335	A	N9-C1'-C2'	-6.57	104.78	112.00
1	AP	65	G	C6-N1-C2	-6.56	121.16	125.10
3	A1	488	C	C5-C6-N1	-6.56	117.72	121.00
25	BB	278	A	C2-N3-C4	6.56	113.88	110.60
25	BB	613	A	C4-C5-C6	-6.56	113.72	117.00
25	BB	954	G	O5'-P-OP1	-6.56	99.79	105.70
25	BB	1495	A	C5-C6-N6	6.56	128.95	123.70
25	BB	2381	A	N1-C6-N6	-6.56	114.66	118.60
25	BB	2498	C	N1-C2-O2	6.56	122.84	118.90
25	BB	2733	A	C6-N1-C2	-6.56	114.66	118.60
33	BJ	63	ARG	NE-CZ-NH2	-6.56	117.02	120.30
1	AA	75	C	C6-N1-C2	-6.56	117.67	120.30
3	A1	116	A	C4-C5-C6	-6.56	113.72	117.00
3	A1	370	C	C4-C5-C6	6.56	120.68	117.40
24	BA	28	C	C5-C6-N1	-6.56	117.72	121.00
25	BB	2713	U	N3-C2-O2	-6.56	117.61	122.20
3	A1	761	G	N3-C4-C5	-6.56	125.32	128.60
3	A1	1354	U	C5'-C4'-C3'	-6.56	105.50	116.00
25	BB	2755	C	O4'-C1'-N1	6.56	113.45	108.20
3	A1	12	U	N3-C4-C5	-6.56	110.66	114.60
3	A1	477	C	N3-C4-C5	6.56	124.52	121.90
3	A1	702	A	C4-C5-N7	6.56	113.98	110.70
3	A1	724	G	O4'-C1'-N9	6.56	113.45	108.20
3	A1	820	U	N3-C2-O2	-6.56	117.61	122.20
3	A1	1038	C	N1-C2-N3	6.56	123.79	119.20
3	A1	1280	A	N1-C2-N3	-6.56	126.02	129.30
3	A1	1387	G	C5-C6-N1	6.56	114.78	111.50
25	BB	323	C	C2-N3-C4	-6.56	116.62	119.90
25	BB	751	A	N3-C4-N9	6.56	132.65	127.40
25	BB	1035	U	O4'-C1'-C2'	-6.56	99.24	105.80
25	BB	2486	C	O4'-C1'-N1	6.56	113.45	108.20
25	BB	2813	A	N7-C8-N9	6.56	117.08	113.80
3	A1	28	A	C5-N7-C8	-6.56	100.62	103.90
3	A1	306	A	C4-C5-C6	-6.56	113.72	117.00
3	A1	700	G	O4'-C1'-N9	-6.56	102.95	108.20
3	A1	1050	G	C5-C6-N1	6.56	114.78	111.50
3	A1	1051	C	O4'-C4'-C3'	6.56	111.35	106.10
3	A1	1476	A	P-O3'-C3'	6.56	127.57	119.70
25	BB	573	U	C5-C6-N1	-6.56	119.42	122.70
25	BB	1412	U	C5'-C4'-C3'	-6.56	105.51	116.00
25	BB	1707	G	C5-N7-C8	-6.56	101.02	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2025	C	N3-C4-C5	6.56	124.52	121.90
25	BB	2419	U	N1-C2-N3	6.56	118.83	114.90
25	BB	2474	U	N3-C4-C5	6.56	118.53	114.60
3	A1	240	G	C6-C5-N7	6.56	134.33	130.40
3	A1	915	A	C8-N9-C4	-6.56	103.18	105.80
3	A1	1146	A	O4'-C1'-N9	-6.56	102.95	108.20
3	A1	1247	U	C5-C6-N1	-6.56	119.42	122.70
3	A1	1342	C	N1-C2-O2	6.56	122.83	118.90
25	BB	725	G	C5-C6-O6	6.56	132.53	128.60
25	BB	2889	C	N3-C2-O2	-6.56	117.31	121.90
37	BN	60	ALA	CB-CA-C	6.56	119.93	110.10
1	AA	59	U	O4'-C1'-N1	6.55	113.44	108.20
1	AP	70	C	O4'-C1'-C2'	6.55	113.50	107.60
3	A1	127	G	C4-C5-N7	-6.55	108.18	110.80
3	A1	271	C	C5'-C4'-O4'	6.55	116.96	109.10
3	A1	1043	G	O4'-C4'-C3'	6.55	111.34	106.10
25	BB	113	U	N3-C2-O2	-6.55	117.61	122.20
25	BB	1578	U	C1'-O4'-C4'	6.55	115.14	109.90
25	BB	1799	G	N1-C6-O6	-6.55	115.97	119.90
25	BB	1966	A	C4'-C3'-C2'	-6.55	96.05	102.60
25	BB	2045	C	N3-C4-C5	6.55	124.52	121.90
25	BB	2273	A	C5-C6-N1	6.55	120.98	117.70
25	BB	2864	G	C5-C6-N1	6.55	114.78	111.50
32	BI	50	ARG	NE-CZ-NH1	6.55	123.58	120.30
25	BB	317	G	O4'-C1'-N9	6.55	113.44	108.20
25	BB	1611	C	N3-C2-O2	-6.55	117.31	121.90
25	BB	1810	A	C2'-C3'-O3'	6.55	124.18	113.70
1	AP	20	G	O4'-C1'-N9	6.55	113.44	108.20
2	AM	6	U	N1-C2-N3	6.55	118.83	114.90
3	A1	237	G	N3-C2-N2	-6.55	115.31	119.90
3	A1	864	A	N1-C2-N3	-6.55	126.02	129.30
3	A1	1122	U	C2-N3-C4	-6.55	123.07	127.00
25	BB	495	G	C5'-C4'-O4'	6.55	116.96	109.10
25	BB	620	G	C5-N7-C8	-6.55	101.02	104.30
25	BB	1701	A	C5'-C4'-C3'	-6.55	105.52	116.00
25	BB	2800	A	N1-C2-N3	-6.55	126.02	129.30
25	BB	2827	C	C2-N3-C4	-6.55	116.62	119.90
3	A1	410	G	N3-C2-N2	-6.55	115.31	119.90
3	A1	465	A	C4-C5-C6	-6.55	113.72	117.00
3	A1	685	G	C6-C5-N7	6.55	134.33	130.40
3	A1	844	G	C4-C5-C6	-6.55	114.87	118.80
3	A1	873	A	C5-N7-C8	-6.55	100.62	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	939	G	N1-C6-O6	-6.55	115.97	119.90
25	BB	1994	C	N3-C2-O2	-6.55	117.31	121.90
25	BB	2760	C	N3-C4-N4	-6.55	113.42	118.00
25	BB	673	C	N3-C4-N4	-6.55	113.42	118.00
25	BB	1118	C	C2-N3-C4	-6.55	116.63	119.90
25	BB	1879	C	C5-C6-N1	-6.55	117.73	121.00
25	BB	2473	U	C1'-O4'-C4'	-6.55	104.66	109.90
52	B3	91	VAL	CA-CB-CG2	6.55	120.72	110.90
1	AA	63	C	O4'-C1'-N1	6.55	113.44	108.20
2	AM	15	U	O4'-C1'-N1	6.55	113.44	108.20
3	A1	213	G	C5-C6-O6	-6.55	124.67	128.60
3	A1	703	G	O4'-C1'-N9	6.55	113.44	108.20
3	A1	1402	C	N1-C2-O2	6.55	122.83	118.90
25	BB	706	A	C2-N3-C4	6.55	113.87	110.60
25	BB	1099	G	C5-C6-N1	6.55	114.77	111.50
25	BB	1686	C	C2-N3-C4	-6.55	116.63	119.90
25	BB	2029	G	C6-N1-C2	-6.55	121.17	125.10
25	BB	2031	A	C6-C5-N7	6.55	136.88	132.30
3	A1	20	U	N1-C2-N3	6.54	118.83	114.90
3	A1	57	G	C5'-C4'-C3'	-6.54	105.53	116.00
3	A1	67	C	N3-C4-C5	6.54	124.52	121.90
3	A1	94	G	N1-C6-O6	-6.54	115.97	119.90
25	BB	405	U	C5'-C4'-O4'	6.54	116.95	109.10
25	BB	954	G	C6-C5-N7	6.54	134.33	130.40
25	BB	1261	C	N3-C4-N4	-6.54	113.42	118.00
3	A1	317	U	O5'-P-OP2	-6.54	99.81	105.70
3	A1	333	U	C5-C6-N1	-6.54	119.43	122.70
3	A1	336	A	N3-C4-N9	-6.54	122.17	127.40
3	A1	514	C	N3-C4-C5	6.54	124.52	121.90
3	A1	993	G	C5-C6-N1	6.54	114.77	111.50
3	A1	1514	G	C4-C5-N7	-6.54	108.18	110.80
6	AD	109	ARG	NH1-CZ-NH2	-6.54	112.20	119.40
25	BB	162	U	C5'-C4'-C3'	-6.54	105.53	116.00
25	BB	424	G	C5'-C4'-O4'	6.54	116.95	109.10
25	BB	907	G	C5'-C4'-O4'	6.54	116.95	109.10
25	BB	1795	C	N3-C4-C5	6.54	124.52	121.90
25	BB	2824	C	N1-C2-O2	6.54	122.83	118.90
1	AP	3	G	N9-C1'-C2'	-6.54	104.80	112.00
2	AM	18	U	C3'-C2'-C1'	-6.54	96.27	101.50
3	A1	1082	A	C5-N7-C8	-6.54	100.63	103.90
9	AH	71	ARG	NE-CZ-NH1	6.54	123.57	120.30
24	BA	14	U	O4'-C1'-N1	6.54	113.43	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	450	G	N1-C6-O6	-6.54	115.97	119.90
25	BB	712	G	N1-C6-O6	-6.54	115.97	119.90
25	BB	738	G	N1-C2-N2	6.54	122.09	116.20
25	BB	884	U	N1-C1'-C2'	-6.54	104.80	112.00
25	BB	1500	G	N1-C6-O6	-6.54	115.97	119.90
25	BB	1561	C	C1'-O4'-C4'	-6.54	104.67	109.90
25	BB	2420	C	N1-C2-O2	6.54	122.83	118.90
3	A1	286	C	N1-C2-O2	6.54	122.82	118.90
3	A1	668	G	C4-C5-N7	-6.54	108.18	110.80
25	BB	758	C	N3-C4-N4	6.54	122.58	118.00
25	BB	1367	A	C4'-C3'-C2'	-6.54	96.06	102.60
25	BB	2204	G	C5'-C4'-O4'	6.54	116.95	109.10
25	BB	2365	G	C1'-O4'-C4'	-6.54	104.67	109.90
25	BB	2488	G	C6-N1-C2	-6.54	121.18	125.10
1	AE	54	U	C5'-C4'-C3'	-6.54	105.54	116.00
3	A1	240	G	C4-C5-N7	-6.54	108.19	110.80
3	A1	933	G	C6-N1-C2	-6.54	121.18	125.10
3	A1	1058	G	N9-C1'-C2'	-6.54	104.81	112.00
3	A1	1453	G	C8-N9-C4	6.54	109.02	106.40
3	A1	1457	G	N1-C6-O6	-6.54	115.98	119.90
3	A1	1469	C	C4'-C3'-C2'	-6.54	96.06	102.60
3	A1	1502	A	O4'-C1'-N9	6.54	113.43	108.20
25	BB	670	A	C6-C5-N7	6.54	136.88	132.30
25	BB	2087	G	O4'-C1'-N9	6.54	113.43	108.20
25	BB	2147	A	C5-C6-N6	6.54	128.93	123.70
25	BB	2517	C	C5-C6-N1	-6.54	117.73	121.00
25	BB	2619	C	N3-C4-N4	-6.54	113.42	118.00
3	A1	27	G	O4'-C1'-N9	6.54	113.43	108.20
3	A1	129	A	N1-C6-N6	-6.54	114.68	118.60
3	A1	702	A	N7-C8-N9	6.54	117.07	113.80
25	BB	470	A	C5-C6-N1	6.54	120.97	117.70
25	BB	1067	A	C6-C5-N7	6.54	136.88	132.30
25	BB	2106	U	C3'-C2'-C1'	6.54	106.73	101.50
3	A1	670	G	N1-C6-O6	-6.54	115.98	119.90
3	A1	1276	G	C3'-C2'-C1'	-6.54	96.27	101.50
3	A1	1398	A	C6-C5-N7	6.54	136.88	132.30
25	BB	115	C	C6-N1-C2	-6.54	117.69	120.30
25	BB	395	U	N3-C2-O2	-6.54	117.63	122.20
25	BB	1259	G	N7-C8-N9	6.54	116.37	113.10
25	BB	1425	G	C6-N1-C2	-6.54	121.18	125.10
25	BB	2297	A	C5-C6-N1	6.54	120.97	117.70
25	BB	2848	G	C5-C6-N1	6.54	114.77	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	35	A	C5-C6-N1	6.53	120.97	117.70
3	A1	126	G	C8-N9-C1'	6.53	135.49	127.00
3	A1	1335	U	O4'-C1'-N1	6.53	113.43	108.20
3	A1	1440	U	C1'-O4'-C4'	-6.53	104.67	109.90
3	A1	1518	A	P-O3'-C3'	6.53	127.54	119.70
15	AO	180	ASP	CB-CG-OD2	6.53	124.18	118.30
25	BB	140	C	N3-C2-O2	-6.53	117.33	121.90
25	BB	398	C	N3-C4-N4	-6.53	113.43	118.00
25	BB	1429	G	N3-C2-N2	-6.53	115.33	119.90
25	BB	1613	G	O4'-C1'-N9	6.53	113.43	108.20
25	BB	1704	C	N3-C2-O2	-6.53	117.33	121.90
25	BB	2313	C	N3-C2-O2	-6.53	117.33	121.90
25	BB	2456	C	C1'-O4'-C4'	-6.53	104.67	109.90
3	A1	91	U	O4'-C4'-C3'	6.53	111.33	106.10
3	A1	116	A	C5-C6-N1	6.53	120.97	117.70
3	A1	880	C	C6-N1-C2	-6.53	117.69	120.30
3	A1	887	G	C6-C5-N7	6.53	134.32	130.40
3	A1	993	G	N9-C4-C5	6.53	108.01	105.40
3	A1	1356	G	C4-C5-N7	-6.53	108.19	110.80
24	BA	109	A	C5-C6-N1	6.53	120.97	117.70
25	BB	1060	U	C5-C6-N1	-6.53	119.43	122.70
25	BB	2121	G	C5-C6-N1	6.53	114.77	111.50
3	A1	821	G	N1-C6-O6	-6.53	115.98	119.90
3	A1	1396	A	C6-C5-N7	6.53	136.87	132.30
25	BB	131	A	C5'-C4'-C3'	-6.53	105.55	116.00
25	BB	753	A	C5-C6-N6	6.53	128.93	123.70
25	BB	2170	A	O4'-C1'-C2'	6.53	113.48	107.60
25	BB	2374	C	C1'-O4'-C4'	-6.53	104.67	109.90
3	A1	301	G	C2-N3-C4	6.53	115.16	111.90
3	A1	927	G	C6-N1-C2	-6.53	121.18	125.10
55	B6	99	ARG	NE-CZ-NH1	6.53	123.56	120.30
1	AE	69	U	C4'-C3'-C2'	-6.53	96.07	102.60
3	A1	97	G	C2-N3-C4	6.53	115.16	111.90
3	A1	102	G	C6-N1-C2	-6.53	121.18	125.10
3	A1	442	G	C5-C6-N1	6.53	114.76	111.50
3	A1	526	C	N3-C4-C5	6.53	124.51	121.90
3	A1	795	C	C5-C4-N4	6.53	124.77	120.20
3	A1	797	C	C2-N3-C4	-6.53	116.64	119.90
3	A1	990	C	C5-C4-N4	6.53	124.77	120.20
3	A1	1216	A	C4-C5-C6	-6.53	113.74	117.00
25	BB	146	A	N1-C2-N3	-6.53	126.04	129.30
25	BB	700	G	N3-C4-N9	6.53	129.92	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1087	G	C6-C5-N7	6.53	134.32	130.40
25	BB	1727	C	O4'-C1'-N1	6.53	113.42	108.20
1	AE	18	G	N7-C8-N9	6.53	116.36	113.10
3	A1	71	A	N1-C2-N3	-6.53	126.04	129.30
3	A1	316	C	O4'-C4'-C3'	6.53	111.32	106.10
3	A1	453	G	N3-C2-N2	-6.53	115.33	119.90
3	A1	585	G	O4'-C1'-N9	-6.53	102.98	108.20
3	A1	788	U	C5-C6-N1	-6.53	119.44	122.70
3	A1	842	U	O4'-C1'-N1	6.53	113.42	108.20
24	BA	78	A	C8-N9-C4	-6.53	103.19	105.80
25	BB	31	C	N1-C2-N3	6.53	123.77	119.20
25	BB	159	G	C5-C6-O6	6.53	132.51	128.60
25	BB	421	C	N3-C2-O2	-6.53	117.33	121.90
25	BB	1197	G	C4'-C3'-C2'	-6.53	96.07	102.60
25	BB	1556	C	C4-C5-C6	-6.53	114.14	117.40
3	A1	378	G	C2-N3-C4	6.52	115.16	111.90
25	BB	325	G	C3'-C2'-C1'	-6.52	96.28	101.50
25	BB	1257	C	C5-C6-N1	-6.52	117.74	121.00
25	BB	1585	C	C3'-C2'-C1'	-6.52	96.28	101.50
25	BB	1770	G	C6-C5-N7	6.52	134.31	130.40
25	BB	2136	G	N7-C8-N9	6.52	116.36	113.10
25	BB	2180	U	O4'-C1'-N1	6.52	113.42	108.20
25	BB	2221	G	N3-C4-C5	-6.52	125.34	128.60
25	BB	2240	U	C3'-C2'-C1'	6.52	106.72	101.50
25	BB	2296	U	C5'-C4'-C3'	-6.52	105.56	116.00
25	BB	2437	G	C6-N1-C2	-6.52	121.19	125.10
25	BB	2605	U	O4'-C1'-N1	6.52	113.42	108.20
25	BB	2742	G	C5-C6-N1	6.52	114.76	111.50
1	AP	70	C	N1-C2-N3	6.52	123.77	119.20
3	A1	665	A	C4-C5-C6	-6.52	113.74	117.00
3	A1	1521	C	C6-N1-C2	-6.52	117.69	120.30
25	BB	61	C	C6-N1-C2	6.52	122.91	120.30
25	BB	116	C	N3-C4-C5	6.52	124.51	121.90
25	BB	466	A	C5-C6-N6	6.52	128.92	123.70
25	BB	488	G	C1'-O4'-C4'	-6.52	104.68	109.90
25	BB	548	G	C5-C6-O6	6.52	132.51	128.60
25	BB	1667	G	N7-C8-N9	6.52	116.36	113.10
25	BB	2022	U	N1-C2-N3	6.52	118.81	114.90
49	BZ	89	GLU	OE1-CD-OE2	-6.52	115.47	123.30
3	A1	411	A	C4-C5-C6	-6.52	113.74	117.00
3	A1	580	C	C5'-C4'-C3'	-6.52	105.57	116.00
3	A1	820	U	C4'-C3'-C2'	-6.52	96.08	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	178	G	N9-C1'-C2'	-6.52	104.83	112.00
25	BB	433	C	C5-C6-N1	-6.52	117.74	121.00
25	BB	852	U	C2-N3-C4	-6.52	123.09	127.00
25	BB	1099	G	C4-C5-C6	-6.52	114.89	118.80
25	BB	2175	C	C6-N1-C2	-6.52	117.69	120.30
3	A1	31	G	C8-N9-C4	-6.52	103.79	106.40
3	A1	176	C	N1-C2-N3	6.52	123.76	119.20
3	A1	554	A	C3'-C2'-C1'	6.52	106.72	101.50
3	A1	1232	U	N1-C2-N3	6.52	118.81	114.90
3	A1	1381	U	C1'-O4'-C4'	-6.52	104.68	109.90
20	AU	52	ARG	CD-NE-CZ	6.52	132.73	123.60
24	BA	8	C	N3-C4-C5	6.52	124.51	121.90
25	BB	559	G	C4-C5-N7	6.52	113.41	110.80
25	BB	1088	A	C6-C5-N7	6.52	136.86	132.30
25	BB	1901	A	N1-C2-N3	-6.52	126.04	129.30
25	BB	2173	A	C5-C6-N6	6.52	128.92	123.70
25	BB	2675	A	C1'-O4'-C4'	-6.52	104.69	109.90
3	A1	1002	G	C5-C6-N1	6.52	114.76	111.50
3	A1	1331	G	N3-C2-N2	-6.52	115.34	119.90
24	BA	79	G	N7-C8-N9	6.52	116.36	113.10
25	BB	687	C	C6-N1-C2	-6.52	117.69	120.30
25	BB	1023	U	C4'-C3'-C2'	-6.52	96.08	102.60
25	BB	1374	G	C6-C5-N7	6.52	134.31	130.40
25	BB	1538	G	C5'-C4'-C3'	-6.52	105.57	116.00
25	BB	1621	U	C5'-C4'-C3'	-6.52	105.57	116.00
25	BB	2259	U	N3-C2-O2	-6.52	117.64	122.20
25	BB	2317	A	C4-C5-C6	-6.52	113.74	117.00
25	BB	2711	A	O4'-C1'-C2'	-6.52	99.28	105.80
32	BI	102	ARG	NE-CZ-NH2	6.52	123.56	120.30
43	BT	39	ARG	NE-CZ-NH2	6.52	123.56	120.30
1	AA	50	U	O4'-C4'-C3'	6.52	111.31	106.10
3	A1	358	U	O4'-C1'-C2'	-6.52	99.28	105.80
3	A1	1321	U	N3-C2-O2	-6.52	117.64	122.20
25	BB	1046	A	C3'-C2'-C1'	6.52	106.71	101.50
25	BB	1770	G	C6-N1-C2	-6.52	121.19	125.10
25	BB	2313	C	C3'-C2'-C1'	6.52	106.71	101.50
25	BB	2490	G	N1-C6-O6	-6.52	115.99	119.90
25	BB	2694	G	N3-C2-N2	-6.52	115.34	119.90
25	BB	2790	U	C5-C6-N1	-6.52	119.44	122.70
1	AA	71	G	C4-C5-C6	-6.51	114.89	118.80
3	A1	976	G	C5-N7-C8	-6.51	101.04	104.30
3	A1	1252	A	N9-C1'-C2'	-6.51	104.83	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	AO	155	ARG	CD-NE-CZ	6.51	132.72	123.60
25	BB	408	G	C8-N9-C4	-6.51	103.80	106.40
25	BB	441	U	O4'-C1'-N1	6.51	113.41	108.20
25	BB	776	G	P-O3'-C3'	6.51	127.52	119.70
25	BB	1041	G	N1-C2-N2	-6.51	110.34	116.20
25	BB	2770	G	C6-C5-N7	6.51	134.31	130.40
3	A1	397	A	N7-C8-N9	6.51	117.06	113.80
3	A1	1408	A	C6-C5-N7	6.51	136.86	132.30
10	AI	11	ALA	CB-CA-C	6.51	119.87	110.10
25	BB	1729	U	N3-C2-O2	-6.51	117.64	122.20
1	AE	53	G	N3-C4-N9	6.51	129.91	126.00
3	A1	94	G	C6-C5-N7	6.51	134.31	130.40
3	A1	422	C	C5-C6-N1	-6.51	117.74	121.00
3	A1	723	U	N1-C1'-C2'	6.51	122.47	114.00
25	BB	1394	U	O4'-C1'-C2'	-6.51	99.29	105.80
25	BB	1538	G	N9-C1'-C2'	-6.51	104.84	112.00
25	BB	1540	G	N1-C2-N3	6.51	127.81	123.90
25	BB	2133	G	C8-N9-C4	-6.51	103.80	106.40
25	BB	2472	G	N9-C4-C5	6.51	108.00	105.40
25	BB	2508	G	C4'-C3'-C2'	-6.51	96.09	102.60
1	AA	20	G	O4'-C4'-C3'	6.51	111.31	106.10
3	A1	136	C	O4'-C1'-N1	6.51	113.41	108.20
3	A1	1521	C	C5'-C4'-O4'	6.51	116.91	109.10
3	A1	1533	C	C2-N3-C4	-6.51	116.64	119.90
9	AH	28	VAL	CG1-CB-CG2	-6.51	100.49	110.90
25	BB	8	C	C4'-C3'-C2'	-6.51	96.09	102.60
25	BB	297	G	C5'-C4'-O4'	6.51	116.91	109.10
25	BB	791	C	N1-C2-O2	6.51	122.81	118.90
25	BB	1156	A	C6-N1-C2	-6.51	114.69	118.60
25	BB	1336	A	C4'-C3'-C2'	-6.51	96.09	102.60
25	BB	1736	U	N3-C2-O2	-6.51	117.64	122.20
25	BB	1971	U	C5-C6-N1	-6.51	119.44	122.70
1	AA	58	A	C6-N1-C2	-6.51	114.69	118.60
1	AP	18	G	N1-C2-N3	6.51	127.81	123.90
3	A1	678	U	C5'-C4'-O4'	6.51	116.91	109.10
3	A1	1090	U	O4'-C1'-N1	6.51	113.41	108.20
3	A1	1263	C	C5-C4-N4	6.51	124.76	120.20
8	AG	32	ASP	OD1-CG-OD2	-6.51	110.94	123.30
25	BB	870	U	O4'-C1'-N1	6.51	113.41	108.20
3	A1	201	G	N9-C4-C5	6.51	108.00	105.40
3	A1	223	A	C5-C6-N6	6.51	128.91	123.70
3	A1	812	G	N7-C8-N9	6.51	116.35	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1147	C	C5-C6-N1	-6.51	117.75	121.00
3	A1	1234	C	N3-C4-N4	-6.51	113.45	118.00
25	BB	72	U	C2-N3-C4	-6.51	123.10	127.00
25	BB	1020	A	C6-C5-N7	6.51	136.85	132.30
25	BB	1181	U	O4'-C1'-N1	6.51	113.41	108.20
25	BB	1540	G	C4-C5-N7	-6.51	108.20	110.80
25	BB	1609	A	O4'-C1'-N9	6.51	113.41	108.20
25	BB	2340	A	C2-N3-C4	6.51	113.85	110.60
2	AM	11	U	C5-C4-O4	6.50	129.80	125.90
3	A1	1150	A	N1-C2-N3	-6.50	126.05	129.30
3	A1	1370	G	C6-C5-N7	6.50	134.30	130.40
25	BB	304	U	N3-C2-O2	-6.50	117.65	122.20
25	BB	2606	C	N1-C2-O2	6.50	122.80	118.90
25	BB	2665	A	C6-C5-N7	6.50	136.85	132.30
1	AA	28	C	N1-C1'-C2'	-6.50	104.85	112.00
3	A1	334	C	N1-C2-O2	6.50	122.80	118.90
3	A1	979	C	N3-C2-O2	-6.50	117.35	121.90
3	A1	994	A	C4-C5-C6	-6.50	113.75	117.00
3	A1	1007	U	O4'-C1'-N1	6.50	113.40	108.20
14	AN	23	ARG	NE-CZ-NH2	-6.50	117.05	120.30
25	BB	43	G	O4'-C1'-N9	6.50	113.40	108.20
25	BB	440	C	C5'-C4'-C3'	-6.50	105.59	116.00
25	BB	681	G	N9-C4-C5	-6.50	102.80	105.40
25	BB	697	G	C5-C6-O6	6.50	132.50	128.60
25	BB	918	A	C6-N1-C2	-6.50	114.70	118.60
25	BB	2639	A	O4'-C1'-N9	-6.50	103.00	108.20
25	BB	2811	G	C5-C6-N1	6.50	114.75	111.50
3	A1	42	G	N3-C4-C5	-6.50	125.35	128.60
3	A1	745	G	N7-C8-N9	6.50	116.35	113.10
3	A1	1130	A	C4-C5-C6	-6.50	113.75	117.00
3	A1	1264	U	C3'-C2'-C1'	-6.50	96.30	101.50
25	BB	761	A	C4'-C3'-C2'	-6.50	96.10	102.60
25	BB	1007	C	C2-N3-C4	-6.50	116.65	119.90
25	BB	1466	U	O4'-C1'-C2'	6.50	113.45	107.60
25	BB	1674	G	C6-C5-N7	6.50	134.30	130.40
25	BB	2118	U	C5-C6-N1	-6.50	119.45	122.70
25	BB	2243	U	N3-C2-O2	-6.50	117.65	122.20
25	BB	2735	G	C5-C6-N1	6.50	114.75	111.50
1	AA	43	G	N7-C8-N9	6.50	116.35	113.10
3	A1	178	C	N3-C2-O2	-6.50	117.35	121.90
25	BB	110	G	C5-C6-N1	6.50	114.75	111.50
25	BB	517	C	N1-C2-N3	6.50	123.75	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2714	G	C5-C6-N1	6.50	114.75	111.50
25	BB	2766	A	O4'-C1'-N9	-6.50	103.00	108.20
3	A1	293	G	C8-N9-C4	-6.50	103.80	106.40
3	A1	714	G	N3-C2-N2	-6.50	115.35	119.90
3	A1	909	A	C5-N7-C8	-6.50	100.65	103.90
3	A1	1471	U	N3-C4-O4	6.50	123.95	119.40
25	BB	516	C	N3-C4-N4	-6.50	113.45	118.00
25	BB	619	G	N1-C6-O6	-6.50	116.00	119.90
25	BB	1513	U	N3-C2-O2	-6.50	117.65	122.20
25	BB	2116	G	C4-C5-N7	6.50	113.40	110.80
25	BB	2134	A	C2-N3-C4	6.50	113.85	110.60
25	BB	2460	U	C5'-C4'-O4'	6.50	116.90	109.10
25	BB	2560	A	C4'-C3'-C2'	-6.50	96.10	102.60
3	A1	36	C	C1'-O4'-C4'	6.50	115.10	109.90
3	A1	578	C	C6-N1-C2	-6.50	117.70	120.30
3	A1	626	G	N3-C4-C5	-6.50	125.35	128.60
3	A1	1388	C	C2-N3-C4	-6.50	116.65	119.90
24	BA	13	G	N3-C2-N2	-6.50	115.35	119.90
25	BB	638	G	C5'-C4'-O4'	6.50	116.89	109.10
25	BB	937	C	N3-C4-N4	-6.50	113.45	118.00
25	BB	1517	G	N1-C6-O6	-6.50	116.00	119.90
25	BB	1557	C	N1-C2-O2	6.50	122.80	118.90
25	BB	1632	A	C4-C5-N7	6.50	113.95	110.70
25	BB	2254	C	O4'-C1'-C2'	-6.50	99.30	105.80
25	BB	2332	C	C2-N3-C4	-6.50	116.65	119.90
25	BB	2835	A	C2-N3-C4	6.50	113.85	110.60
3	A1	597	G	N7-C8-N9	6.50	116.35	113.10
25	BB	1177	G	C6-C5-N7	6.50	134.30	130.40
1	AP	53	G	C5-C6-N1	6.49	114.75	111.50
7	AF	86	ARG	CD-NE-CZ	6.49	132.69	123.60
25	BB	1110	G	N3-C2-N2	-6.49	115.36	119.90
25	BB	1293	C	N3-C2-O2	-6.49	117.36	121.90
25	BB	1309	G	C4'-C3'-C2'	-6.49	96.11	102.60
25	BB	1926	U	O4'-C4'-C3'	6.49	111.30	106.10
25	BB	2097	A	C3'-C2'-C1'	6.49	106.69	101.50
25	BB	2395	C	N3-C4-N4	-6.49	113.45	118.00
25	BB	2665	A	C8-N9-C4	-6.49	103.20	105.80
3	A1	1013	G	C5-C6-N1	6.49	114.75	111.50
24	BA	24	G	C5-C6-N1	6.49	114.75	111.50
25	BB	433	C	N1-C2-O2	6.49	122.80	118.90
25	BB	1375	U	C2-N3-C4	-6.49	123.11	127.00
25	BB	1508	A	C6-C5-N7	6.49	136.84	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2868	A	C8-N9-C4	-6.49	103.20	105.80
25	BB	2885	G	N1-C6-O6	-6.49	116.00	119.90
3	A1	257	G	N1-C2-N3	6.49	127.79	123.90
3	A1	993	G	C6-C5-N7	6.49	134.29	130.40
3	A1	1114	C	C6-N1-C2	-6.49	117.70	120.30
3	A1	1451	U	O4'-C1'-N1	6.49	113.39	108.20
25	BB	61	C	C2-N3-C4	-6.49	116.66	119.90
25	BB	89	A	C2-N3-C4	6.49	113.84	110.60
25	BB	136	G	C5-N7-C8	-6.49	101.06	104.30
25	BB	1697	G	N1-C2-N2	-6.49	110.36	116.20
25	BB	2292	U	C1'-O4'-C4'	-6.49	104.71	109.90
25	BB	2591	C	C4-C5-C6	6.49	120.64	117.40
25	BB	2759	G	C6-C5-N7	6.49	134.29	130.40
1	AA	62	A	C5-C6-N1	6.49	120.94	117.70
3	A1	78	A	C5'-C4'-O4'	6.49	116.89	109.10
3	A1	228	A	C5-C6-N6	6.49	128.89	123.70
25	BB	1532	A	C4-C5-C6	-6.49	113.76	117.00
25	BB	1848	A	C6-C5-N7	6.49	136.84	132.30
25	BB	2419	U	C2-N3-C4	-6.49	123.11	127.00
25	BB	2655	G	C2-N3-C4	6.49	115.14	111.90
3	A1	269	C	N1-C2-O2	6.49	122.79	118.90
3	A1	422	C	C3'-C2'-C1'	6.49	106.69	101.50
3	A1	1516	G	N3-C4-C5	-6.49	125.36	128.60
20	AU	137	ARG	NE-CZ-NH2	6.49	123.54	120.30
25	BB	1383	A	C5-N7-C8	-6.49	100.66	103.90
25	BB	2338	C	C1'-O4'-C4'	-6.49	104.71	109.90
25	BB	2717	C	N3-C2-O2	-6.49	117.36	121.90
1	AA	4	G	C8-N9-C4	-6.49	103.81	106.40
1	AE	19	G	C4-C5-N7	-6.49	108.20	110.80
3	A1	290	C	P-O3'-C3'	6.49	127.48	119.70
3	A1	834	U	C5-C4-O4	6.49	129.79	125.90
3	A1	1221	G	C1'-O4'-C4'	6.49	115.09	109.90
3	A1	1285	A	C5-C6-N6	6.49	128.89	123.70
3	A1	1425	U	C5-C6-N1	-6.49	119.46	122.70
4	AB	94	ARG	NH1-CZ-NH2	-6.49	112.27	119.40
25	BB	14	A	C1'-O4'-C4'	6.49	115.09	109.90
25	BB	700	G	C6-N1-C2	-6.49	121.21	125.10
25	BB	1086	A	C8-N9-C4	-6.49	103.21	105.80
25	BB	2582	G	N3-C4-C5	-6.49	125.36	128.60
1	AE	44	A	C6-C5-N7	6.48	136.84	132.30
3	A1	337	G	N1-C6-O6	-6.48	116.01	119.90
3	A1	1154	G	C4'-C3'-C2'	-6.48	96.12	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1184	G	N9-C4-C5	6.48	107.99	105.40
25	BB	41	C	C5-C6-N1	-6.48	117.76	121.00
25	BB	259	G	C2-N3-C4	6.48	115.14	111.90
25	BB	556	A	C3'-C2'-C1'	6.48	106.69	101.50
25	BB	1739	A	C3'-C2'-C1'	6.48	106.69	101.50
25	BB	2537	U	N3-C4-C5	-6.48	110.71	114.60
1	AP	2	C	N1-C2-O2	6.48	122.79	118.90
3	A1	134	G	C5-C6-O6	6.48	132.49	128.60
3	A1	407	U	C5-C4-O4	6.48	129.79	125.90
3	A1	519	C	C4'-C3'-C2'	-6.48	96.12	102.60
3	A1	931	C	C3'-C2'-C1'	6.48	106.69	101.50
3	A1	1338	G	N1-C6-O6	-6.48	116.01	119.90
24	BA	96	G	C5'-C4'-O4'	6.48	116.88	109.10
25	BB	606	U	C3'-C2'-C1'	6.48	106.69	101.50
25	BB	658	U	O4'-C1'-N1	6.48	113.39	108.20
25	BB	1270	C	N3-C2-O2	-6.48	117.36	121.90
25	BB	1749	A	C4-C5-C6	-6.48	113.76	117.00
25	BB	2319	G	N3-C4-C5	-6.48	125.36	128.60
25	BB	2576	G	C5-C6-N1	6.48	114.74	111.50
3	A1	312	C	N3-C2-O2	-6.48	117.36	121.90
3	A1	700	G	O4'-C4'-C3'	6.48	111.28	106.10
3	A1	708	C	C5'-C4'-C3'	-6.48	105.63	116.00
3	A1	1276	G	O5'-C5'-C4'	6.48	124.01	111.70
24	BA	61	G	C3'-C2'-C1'	6.48	106.68	101.50
25	BB	1042	G	N9-C4-C5	6.48	107.99	105.40
25	BB	1259	G	N1-C2-N2	-6.48	110.37	116.20
25	BB	2549	G	O4'-C1'-N9	-6.48	103.02	108.20
25	BB	2669	G	C5-C6-N1	6.48	114.74	111.50
3	A1	72	A	C4-C5-C6	-6.48	113.76	117.00
3	A1	542	G	N1-C2-N3	6.48	127.79	123.90
3	A1	663	A	C4-C5-N7	6.48	113.94	110.70
25	BB	1654	A	C6-C5-N7	6.48	136.84	132.30
25	BB	2565	A	C3'-C2'-C1'	6.48	106.68	101.50
3	A1	88	U	C5-C4-O4	6.48	129.79	125.90
3	A1	253	A	C5-N7-C8	-6.48	100.66	103.90
3	A1	544	G	C6-N1-C2	-6.48	121.21	125.10
3	A1	1078	U	N1-C2-N3	6.48	118.79	114.90
3	A1	1177	G	N7-C8-N9	6.48	116.34	113.10
3	A1	1211	U	C5'-C4'-C3'	-6.48	105.64	116.00
25	BB	359	G	N1-C2-N3	6.48	127.79	123.90
25	BB	404	A	N1-C2-N3	-6.48	126.06	129.30
25	BB	2367	G	C5-C6-N1	6.48	114.74	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2514	U	C5'-C4'-C3'	-6.48	105.64	116.00
25	BB	2692	G	N9-C1'-C2'	6.48	122.42	114.00
29	BF	10	ARG	NE-CZ-NH2	-6.48	117.06	120.30
3	A1	479	U	C5-C6-N1	-6.48	119.46	122.70
3	A1	1166	G	N1-C2-N3	6.48	127.79	123.90
3	A1	1243	C	N3-C2-O2	-6.48	117.37	121.90
25	BB	210	C	C6-N1-C1'	6.48	128.57	120.80
25	BB	444	C	C5'-C4'-O4'	6.48	116.87	109.10
25	BB	1335	C	N3-C4-N4	-6.48	113.47	118.00
1	AE	65	G	O4'-C4'-C3'	-6.47	97.53	104.00
3	A1	399	G	C5-C6-N1	6.47	114.74	111.50
3	A1	564	C	N3-C4-N4	-6.47	113.47	118.00
3	A1	1497	G	P-O3'-C3'	6.47	127.47	119.70
25	BB	606	U	N1-C2-O2	-6.47	118.27	122.80
25	BB	674	G	C5-C6-N1	6.47	114.74	111.50
25	BB	1125	G	N1-C6-O6	-6.47	116.02	119.90
25	BB	1205	A	O4'-C1'-N9	-6.47	103.02	108.20
25	BB	1222	U	P-O3'-C3'	6.47	127.47	119.70
25	BB	1788	C	N3-C2-O2	-6.47	117.37	121.90
25	BB	2390	U	N1-C2-N3	6.47	118.78	114.90
25	BB	2424	C	C6-N1-C2	-6.47	117.71	120.30
25	BB	2510	C	C5-C6-N1	-6.47	117.76	121.00
25	BB	2689	U	N1-C2-N3	6.47	118.78	114.90
25	BB	2694	G	O4'-C1'-C2'	-6.47	99.33	105.80
25	BB	2839	G	C5-C6-N1	6.47	114.74	111.50
25	BB	2842	G	C3'-C2'-C1'	6.47	106.68	101.50
37	BN	42	ARG	CD-NE-CZ	6.47	132.66	123.60
3	A1	281	G	N7-C8-N9	6.47	116.34	113.10
24	BA	3	C	C4'-C3'-C2'	-6.47	96.13	102.60
25	BB	354	A	N1-C2-N3	-6.47	126.06	129.30
25	BB	475	C	N1-C2-N3	6.47	123.73	119.20
25	BB	497	A	C2'-C3'-O3'	6.47	124.06	113.70
25	BB	507	A	O4'-C1'-N9	6.47	113.38	108.20
25	BB	635	C	N3-C4-N4	-6.47	113.47	118.00
25	BB	781	A	C4-C5-C6	-6.47	113.76	117.00
25	BB	1512	C	C5'-C4'-C3'	-6.47	105.64	116.00
25	BB	2795	C	C5-C6-N1	-6.47	117.76	121.00
25	BB	478	A	C3'-C2'-C1'	6.47	106.68	101.50
25	BB	2183	A	C5-C6-N1	6.47	120.94	117.70
25	BB	2639	A	N1-C6-N6	-6.47	114.72	118.60
3	A1	464	U	N3-C2-O2	-6.47	117.67	122.20
3	A1	569	C	N1-C2-O2	6.47	122.78	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	871	U	C5-C6-N1	-6.47	119.47	122.70
3	A1	917	G	P-O3'-C3'	6.47	127.46	119.70
3	A1	938	A	C5-C6-N6	6.47	128.88	123.70
3	A1	968	A	C3'-C2'-C1'	6.47	106.67	101.50
3	A1	1190	G	C2-N3-C4	6.47	115.14	111.90
25	BB	377	G	C5-C6-O6	6.47	132.48	128.60
25	BB	458	G	C3'-C2'-C1'	-6.47	96.33	101.50
25	BB	490	C	C5-C6-N1	-6.47	117.77	121.00
25	BB	904	G	N7-C8-N9	6.47	116.33	113.10
25	BB	1302	A	N9-C4-C5	6.47	108.39	105.80
25	BB	1330	C	N1-C2-N3	6.47	123.73	119.20
25	BB	1350	C	C3'-C2'-C1'	6.47	106.67	101.50
25	BB	1624	U	C5-C6-N1	-6.47	119.47	122.70
25	BB	1724	G	N3-C4-C5	-6.47	125.36	128.60
25	BB	1856	U	N3-C2-O2	-6.47	117.67	122.20
25	BB	2373	G	N1-C2-N3	6.47	127.78	123.90
25	BB	2527	C	N1-C2-O2	6.47	122.78	118.90
25	BB	2883	A	C5-C6-N1	6.47	120.94	117.70
1	AE	62	A	C5'-C4'-O4'	6.47	116.86	109.10
3	A1	271	C	C3'-C2'-C1'	6.47	106.67	101.50
3	A1	604	G	N7-C8-N9	6.47	116.33	113.10
3	A1	851	G	C2-N3-C4	6.47	115.13	111.90
3	A1	1109	C	N3-C4-N4	-6.47	113.47	118.00
15	AO	106	ARG	NH1-CZ-NH2	-6.47	112.29	119.40
25	BB	1314	C	C5'-C4'-C3'	-6.47	105.65	116.00
25	BB	2581	G	N3-C4-N9	6.47	129.88	126.00
3	A1	262	A	C5-N7-C8	-6.47	100.67	103.90
3	A1	656	G	N3-C4-C5	-6.47	125.37	128.60
3	A1	1064	G	N3-C2-N2	-6.47	115.37	119.90
3	A1	1176	A	C8-N9-C4	-6.47	103.21	105.80
25	BB	215	G	C5-C6-N1	6.47	114.73	111.50
25	BB	376	G	C5'-C4'-O4'	6.47	116.86	109.10
25	BB	1575	C	N3-C4-C5	6.47	124.49	121.90
25	BB	1773	A	C6-C5-N7	6.47	136.83	132.30
25	BB	2218	G	O4'-C1'-N9	6.47	113.37	108.20
25	BB	2233	U	C5'-C4'-O4'	6.47	116.86	109.10
25	BB	2249	U	C5-C6-N1	-6.47	119.47	122.70
25	BB	2558	C	C4-C5-C6	6.47	120.63	117.40
1	AA	17	U	C5'-C4'-O4'	6.46	116.86	109.10
3	A1	824	G	C6-N1-C2	-6.46	121.22	125.10
3	A1	835	U	C5-C4-O4	6.46	129.78	125.90
3	A1	1376	U	C4-C5-C6	6.46	123.58	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1130	U	C3'-C2'-C1'	6.46	106.67	101.50
25	BB	1501	G	O5'-P-OP1	6.46	118.46	110.70
25	BB	1635	A	C5-C6-N1	6.46	120.93	117.70
25	BB	2356	U	C1'-O4'-C4'	-6.46	104.73	109.90
25	BB	1207	C	O4'-C1'-N1	6.46	113.37	108.20
25	BB	2204	G	C8-N9-C4	-6.46	103.81	106.40
1	AP	27	C	C4-C5-C6	6.46	120.63	117.40
3	A1	114	U	C6-N1-C2	-6.46	117.12	121.00
3	A1	1129	C	N1-C2-O2	6.46	122.78	118.90
3	A1	1243	C	C4'-C3'-C2'	-6.46	96.14	102.60
3	A1	1406	U	C1'-O4'-C4'	-6.46	104.73	109.90
3	A1	1464	U	C5-C6-N1	-6.46	119.47	122.70
24	BA	19	C	C2-N3-C4	-6.46	116.67	119.90
25	BB	119	A	O4'-C1'-C2'	-6.46	99.34	105.80
25	BB	211	C	N3-C4-N4	-6.46	113.48	118.00
25	BB	362	A	C2-N3-C4	6.46	113.83	110.60
25	BB	1698	A	C4-C5-C6	-6.46	113.77	117.00
3	A1	119	A	C5-C6-N6	6.46	128.87	123.70
25	BB	18	U	C5-C6-N1	-6.46	119.47	122.70
25	BB	534	U	C4'-C3'-C2'	-6.46	96.14	102.60
25	BB	1166	G	N3-C2-N2	-6.46	115.38	119.90
25	BB	2658	C	O4'-C1'-N1	6.46	113.37	108.20
3	A1	1096	C	C2-N3-C4	-6.46	116.67	119.90
3	A1	1139	G	O4'-C1'-N9	6.46	113.37	108.20
3	A1	1520	C	O4'-C4'-C3'	6.46	111.27	106.10
24	BA	41	G	O4'-C1'-N9	6.46	113.37	108.20
25	BB	142	A	C2-N3-C4	6.46	113.83	110.60
25	BB	231	A	C5-C6-N6	6.46	128.87	123.70
25	BB	361	G	N1-C2-N3	6.46	127.78	123.90
25	BB	396	G	C5-C6-O6	6.46	132.47	128.60
25	BB	1013	C	O4'-C1'-N1	6.46	113.37	108.20
25	BB	1826	G	N3-C2-N2	-6.46	115.38	119.90
25	BB	2426	A	C5-C6-N1	6.46	120.93	117.70
25	BB	2501	C	C2-N3-C4	-6.46	116.67	119.90
25	BB	2698	U	C5-C6-N1	-6.46	119.47	122.70
25	BB	2850	A	N9-C4-C5	6.46	108.38	105.80
3	A1	408	A	N9-C4-C5	6.46	108.38	105.80
3	A1	647	C	N3-C4-C5	6.46	124.48	121.90
3	A1	709	U	C4'-C3'-C2'	-6.46	96.14	102.60
3	A1	773	G	C4'-C3'-C2'	-6.46	96.14	102.60
3	A1	932	C	C3'-C2'-C1'	6.46	106.67	101.50
5	AC	126	ARG	CD-NE-CZ	6.46	132.64	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
6	AD	65	TYR	CB-CG-CD2	-6.46	117.13	121.00
25	BB	254	G	N3-C2-N2	-6.46	115.38	119.90
25	BB	507	A	C4-C5-C6	-6.46	113.77	117.00
25	BB	616	A	N9-C4-C5	6.46	108.38	105.80
25	BB	655	A	C4-C5-N7	-6.46	107.47	110.70
25	BB	701	G	P-O3'-C3'	6.46	127.45	119.70
25	BB	1370	C	C6-N1-C2	-6.46	117.72	120.30
25	BB	1527	G	C4-C5-N7	-6.46	108.22	110.80
25	BB	1800	C	C5-C4-N4	6.46	124.72	120.20
25	BB	2418	A	N1-C2-N3	-6.46	126.07	129.30
3	A1	994	A	N7-C8-N9	6.46	117.03	113.80
25	BB	490	C	O4'-C1'-N1	6.46	113.36	108.20
25	BB	921	C	O4'-C4'-C3'	6.46	111.26	106.10
25	BB	929	U	C4'-C3'-C2'	-6.46	96.14	102.60
25	BB	2406	A	C4-C5-C6	-6.46	113.77	117.00
3	A1	68	G	O4'-C1'-N9	6.45	113.36	108.20
3	A1	181	A	C1'-O4'-C4'	-6.45	104.74	109.90
3	A1	276	G	C5-N7-C8	-6.45	101.07	104.30
3	A1	593	U	C5'-C4'-C3'	-6.45	105.67	116.00
3	A1	926	G	C4-C5-N7	-6.45	108.22	110.80
3	A1	1223	C	C2-N3-C4	-6.45	116.67	119.90
3	A1	1405	G	C5-C6-N1	6.45	114.73	111.50
25	BB	165	A	C6-C5-N7	6.45	136.82	132.30
25	BB	489	G	P-O3'-C3'	6.45	127.44	119.70
25	BB	628	G	C5-N7-C8	-6.45	101.07	104.30
25	BB	1012	U	C5-C6-N1	-6.45	119.47	122.70
25	BB	1042	G	C6-C5-N7	6.45	134.27	130.40
25	BB	2199	A	C5-C6-N1	6.45	120.93	117.70
25	BB	2484	G	C4-C5-N7	6.45	113.38	110.80
3	A1	275	G	N1-C6-O6	-6.45	116.03	119.90
3	A1	1278	G	N3-C4-C5	-6.45	125.37	128.60
21	AV	116	ARG	NH1-CZ-NH2	-6.45	112.30	119.40
25	BB	798	G	C5'-C4'-O4'	6.45	116.84	109.10
25	BB	1604	C	N1-C2-O2	6.45	122.77	118.90
25	BB	1657	U	C2-N3-C4	-6.45	123.13	127.00
25	BB	2065	C	N1-C1'-C2'	6.45	122.39	114.00
25	BB	2528	U	C2-N3-C4	-6.45	123.13	127.00
25	BB	2626	C	C6-N1-C2	-6.45	117.72	120.30
3	A1	58	C	C5'-C4'-C3'	-6.45	105.68	116.00
3	A1	121	U	N1-C2-N3	6.45	118.77	114.90
3	A1	629	A	N7-C8-N9	6.45	117.03	113.80
3	A1	770	C	O4'-C1'-N1	6.45	113.36	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1180	A	C4-C5-C6	-6.45	113.78	117.00
24	BA	34	A	C4'-C3'-C2'	-6.45	96.15	102.60
25	BB	165	A	C8-N9-C4	-6.45	103.22	105.80
25	BB	407	G	N3-C4-C5	-6.45	125.38	128.60
25	BB	1106	G	C5-C6-O6	6.45	132.47	128.60
25	BB	2156	G	N7-C8-N9	6.45	116.33	113.10
1	AA	2	C	N3-C4-C5	-6.45	119.32	121.90
3	A1	200	G	N3-C2-N2	-6.45	115.39	119.90
3	A1	553	A	C2-N3-C4	6.45	113.83	110.60
3	A1	1372	U	O4'-C1'-N1	6.45	113.36	108.20
10	AI	56	ARG	NE-CZ-NH2	6.45	123.52	120.30
25	BB	10	A	C5-C6-N6	6.45	128.86	123.70
25	BB	440	C	C5'-C4'-O4'	6.45	116.84	109.10
25	BB	478	A	C6-C5-N7	6.45	136.81	132.30
25	BB	581	C	O4'-C1'-N1	6.45	113.36	108.20
25	BB	1843	C	O4'-C4'-C3'	6.45	111.26	106.10
3	A1	964	A	C6-C5-N7	6.45	136.81	132.30
3	A1	999	C	N3-C4-C5	6.45	124.48	121.90
25	BB	977	G	N3-C4-C5	-6.45	125.38	128.60
25	BB	1748	C	C2-N3-C4	-6.45	116.68	119.90
1	AA	60	C	N1-C2-O2	6.45	122.77	118.90
1	AP	66	A	N7-C8-N9	6.45	117.02	113.80
3	A1	727	G	N7-C8-N9	6.45	116.32	113.10
24	BA	25	U	C6-N1-C2	-6.45	117.13	121.00
25	BB	761	A	C5-C6-N6	6.45	128.86	123.70
25	BB	838	C	C5-C6-N1	-6.45	117.78	121.00
25	BB	924	G	N1-C6-O6	-6.45	116.03	119.90
25	BB	1091	G	N9-C4-C5	6.45	107.98	105.40
25	BB	1917	U	C4'-C3'-C2'	6.45	109.05	102.60
25	BB	2851	A	C5-C6-N6	6.45	128.86	123.70
48	BY	33	ARG	CD-NE-CZ	6.45	132.62	123.60
3	A1	497	G	C5-C6-O6	6.44	132.47	128.60
3	A1	660	C	N1-C2-O2	6.44	122.77	118.90
3	A1	777	A	C2-N3-C4	6.44	113.82	110.60
24	BA	16	G	O4'-C1'-N9	6.44	113.36	108.20
25	BB	302	C	C1'-O4'-C4'	-6.44	104.75	109.90
25	BB	323	C	N1-C2-O2	6.44	122.77	118.90
25	BB	487	C	C6-N1-C2	-6.44	117.72	120.30
25	BB	999	U	O4'-C1'-N1	6.44	113.36	108.20
27	BD	49	ARG	NH1-CZ-NH2	-6.44	112.31	119.40
1	AA	36	A	N1-C6-N6	-6.44	114.73	118.60
3	A1	500	G	N1-C6-O6	-6.44	116.03	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	697	U	O4'-C1'-N1	6.44	113.35	108.20
3	A1	734	G	C6-N1-C2	-6.44	121.23	125.10
3	A1	1201	A	O5'-P-OP2	-6.44	99.90	105.70
3	A1	1415	G	C5'-C4'-C3'	-6.44	105.69	116.00
24	BA	96	G	N1-C2-N2	6.44	122.00	116.20
25	BB	182	A	C6-C5-N7	6.44	136.81	132.30
25	BB	684	G	N1-C6-O6	-6.44	116.03	119.90
25	BB	737	C	N1-C2-O2	6.44	122.77	118.90
25	BB	1136	G	C3'-C2'-C1'	6.44	106.65	101.50
25	BB	1812	U	C4-C5-C6	6.44	123.57	119.70
25	BB	2621	G	C4-C5-N7	-6.44	108.22	110.80
37	BN	176	ARG	NH1-CZ-NH2	-6.44	112.31	119.40
3	A1	54	C	C4-C5-C6	6.44	120.62	117.40
3	A1	450	G	C5-C6-N1	6.44	114.72	111.50
3	A1	1259	C	N3-C2-O2	-6.44	117.39	121.90
24	BA	69	G	N7-C8-N9	6.44	116.32	113.10
25	BB	537	G	N7-C8-N9	6.44	116.32	113.10
25	BB	1657	U	C5-C6-N1	-6.44	119.48	122.70
25	BB	1981	A	C2'-C3'-O3'	6.44	124.00	113.70
25	BB	2300	C	O4'-C1'-C2'	6.44	113.40	107.60
25	BB	2347	C	C6-N1-C2	-6.44	117.72	120.30
25	BB	2474	U	C2-N3-C4	-6.44	123.14	127.00
3	A1	638	U	C5'-C4'-C3'	-6.44	105.70	116.00
3	A1	1027	C	N3-C4-N4	-6.44	113.49	118.00
3	A1	1450	U	O4'-C4'-C3'	6.44	111.25	106.10
25	BB	98	G	C8-N9-C1'	6.44	135.37	127.00
25	BB	823	C	N1-C2-O2	6.44	122.76	118.90
25	BB	1611	C	C5'-C4'-O4'	6.44	116.83	109.10
25	BB	1786	A	C8-N9-C4	-6.44	103.22	105.80
25	BB	2379	G	C5-C6-N1	6.44	114.72	111.50
25	BB	2683	C	C6-N1-C2	-6.44	117.72	120.30
27	BD	35	VAL	C-N-CA	6.44	135.82	122.30
3	A1	808	C	C3'-C2'-C1'	6.44	106.65	101.50
24	BA	33	G	C6-N1-C2	-6.44	121.24	125.10
25	BB	4	U	C5-C6-N1	-6.44	119.48	122.70
25	BB	86	G	C8-N9-C4	-6.44	103.83	106.40
25	BB	312	G	N1-C6-O6	-6.44	116.04	119.90
25	BB	1616	A	C3'-C2'-C1'	6.44	106.65	101.50
25	BB	2236	U	N3-C4-O4	6.44	123.91	119.40
25	BB	2268	A	O4'-C1'-N9	-6.44	103.05	108.20
25	BB	2794	C	C3'-C2'-C1'	6.44	106.65	101.50
50	B1	193	VAL	CA-CB-CG1	6.44	120.56	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	587	G	N1-C6-O6	-6.44	116.04	119.90
25	BB	163	C	N3-C4-N4	-6.44	113.50	118.00
25	BB	1496	A	C5-C6-N6	6.44	128.85	123.70
25	BB	2595	G	C5-C6-O6	-6.44	124.74	128.60
25	BB	2751	G	N1-C6-O6	-6.44	116.04	119.90
37	BN	268	ARG	NE-CZ-NH2	-6.44	117.08	120.30
3	A1	295	C	C5-C4-N4	6.43	124.70	120.20
3	A1	313	A	C6-C5-N7	6.43	136.80	132.30
3	A1	353	A	C4'-C3'-C2'	-6.43	96.17	102.60
3	A1	390	U	C1'-O4'-C4'	-6.43	104.75	109.90
3	A1	589	U	C3'-C2'-C1'	-6.43	96.35	101.50
3	A1	607	A	O4'-C4'-C3'	6.43	111.25	106.10
3	A1	1226	C	C6-N1-C2	-6.43	117.73	120.30
25	BB	341	C	N1-C2-N3	6.43	123.70	119.20
25	BB	421	C	C1'-O4'-C4'	-6.43	104.75	109.90
25	BB	421	C	C4'-C3'-C2'	-6.43	96.17	102.60
25	BB	467	G	N1-C2-N3	6.43	127.76	123.90
25	BB	636	G	N1-C6-O6	-6.43	116.04	119.90
25	BB	675	A	C1'-O4'-C4'	-6.43	104.75	109.90
25	BB	2222	C	O3'-P-O5'	-6.43	91.77	104.00
25	BB	2413	G	N3-C2-N2	-6.43	115.40	119.90
3	A1	154	U	C4-C5-C6	6.43	123.56	119.70
3	A1	530	G	C6-N1-C2	-6.43	121.24	125.10
3	A1	1116	U	N1-C2-N3	6.43	118.76	114.90
3	A1	1515	G	N7-C8-N9	6.43	116.32	113.10
25	BB	471	A	C2-N3-C4	6.43	113.82	110.60
25	BB	883	G	C4-C5-N7	-6.43	108.23	110.80
25	BB	911	A	C5-C6-N6	6.43	128.85	123.70
25	BB	1206	G	C5'-C4'-C3'	-6.43	105.71	116.00
25	BB	1728	C	C4-C5-C6	-6.43	114.18	117.40
25	BB	2084	C	N3-C4-C5	6.43	124.47	121.90
25	BB	2682	A	C6-C5-N7	6.43	136.80	132.30
3	A1	586	C	N3-C4-C5	6.43	124.47	121.90
25	BB	698	C	N3-C2-O2	-6.43	117.40	121.90
25	BB	791	C	C5'-C4'-C3'	-6.43	105.71	116.00
25	BB	873	C	C5-C4-N4	6.43	124.70	120.20
1	AE	19	G	N3-C4-N9	-6.43	122.14	126.00
3	A1	36	C	C3'-C2'-C1'	6.43	106.64	101.50
3	A1	75	G	N3-C4-N9	6.43	129.86	126.00
3	A1	102	G	N3-C4-N9	6.43	129.86	126.00
3	A1	327	A	C6-N1-C2	-6.43	114.74	118.60
3	A1	651	C	N1-C1'-C2'	6.43	122.36	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1017	U	C3'-C2'-C1'	-6.43	96.36	101.50
24	BA	28	C	N1-C2-O2	6.43	122.76	118.90
24	BA	63	C	O4'-C1'-N1	6.43	113.34	108.20
25	BB	295	G	C5-C6-N1	6.43	114.72	111.50
25	BB	336	C	N1-C2-O2	6.43	122.76	118.90
25	BB	779	U	O4'-C1'-N1	6.43	113.34	108.20
25	BB	784	G	N1-C6-O6	-6.43	116.04	119.90
25	BB	1432	G	N1-C6-O6	-6.43	116.04	119.90
25	BB	1480	C	N3-C4-C5	6.43	124.47	121.90
25	BB	1706	C	C2-N3-C4	-6.43	116.69	119.90
25	BB	2325	G	C4'-C3'-C2'	-6.43	96.17	102.60
25	BB	2808	G	N1-C6-O6	-6.43	116.04	119.90
1	AE	66	A	C6-C5-N7	6.43	136.80	132.30
3	A1	1465	A	N7-C8-N9	6.43	117.01	113.80
25	BB	86	G	N1-C6-O6	-6.43	116.04	119.90
25	BB	1379	U	C1'-O4'-C4'	-6.43	104.76	109.90
25	BB	1528	A	C5'-C4'-O4'	6.43	116.81	109.10
25	BB	2089	C	C5'-C4'-O4'	6.43	116.81	109.10
25	BB	2213	U	O4'-C4'-C3'	6.43	111.24	106.10
3	A1	53	A	N1-C6-N6	-6.43	114.74	118.60
3	A1	94	G	C5-C6-O6	6.43	132.46	128.60
3	A1	359	G	C5-N7-C8	-6.43	101.09	104.30
3	A1	948	C	N3-C2-O2	-6.43	117.40	121.90
3	A1	1388	C	O4'-C4'-C3'	6.43	111.24	106.10
25	BB	1239	G	N3-C4-N9	6.43	129.85	126.00
25	BB	1246	A	C5-C6-N1	6.43	120.91	117.70
25	BB	1301	A	C2-N3-C4	6.43	113.81	110.60
25	BB	1309	G	P-O3'-C3'	6.43	127.41	119.70
25	BB	2298	A	C4-C5-C6	-6.43	113.79	117.00
25	BB	2532	G	C6-C5-N7	6.43	134.25	130.40
1	AP	68	U	C5-C6-N1	-6.42	119.49	122.70
3	A1	77	A	C3'-C2'-C1'	6.42	106.64	101.50
3	A1	578	C	N1-C2-N3	6.42	123.70	119.20
3	A1	1018	G	O4'-C1'-N9	6.42	113.34	108.20
3	A1	1024	G	C6-N1-C2	-6.42	121.25	125.10
3	A1	1115	U	C2-N3-C4	-6.42	123.14	127.00
3	A1	1374	A	C5'-C4'-O4'	6.42	116.81	109.10
24	BA	27	C	N1-C2-N3	6.42	123.70	119.20
25	BB	17	G	O4'-C4'-C3'	6.42	111.24	106.10
25	BB	159	G	C5-N7-C8	-6.42	101.09	104.30
25	BB	398	C	C1'-O4'-C4'	-6.42	104.76	109.90
25	BB	1250	G	C6-N1-C2	-6.42	121.25	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	58	A	C5-C6-N6	6.42	128.84	123.70
4	AB	198	VAL	CA-CB-CG2	6.42	120.53	110.90
24	BA	20	G	C6-C5-N7	6.42	134.25	130.40
25	BB	185	G	N9-C4-C5	6.42	107.97	105.40
25	BB	304	U	C5-C4-O4	6.42	129.75	125.90
25	BB	348	A	O4'-C1'-N9	6.42	113.34	108.20
25	BB	1299	G	C5'-C4'-O4'	-6.42	101.39	109.10
25	BB	1770	G	C4-C5-N7	-6.42	108.23	110.80
25	BB	2420	C	C3'-C2'-C1'	6.42	106.64	101.50
3	A1	394	G	C5'-C4'-O4'	6.42	116.81	109.10
3	A1	835	U	C4'-C3'-C2'	-6.42	96.18	102.60
3	A1	1032	G	N3-C4-C5	-6.42	125.39	128.60
3	A1	1071	C	N3-C2-O2	-6.42	117.41	121.90
25	BB	134	G	N3-C4-C5	-6.42	125.39	128.60
25	BB	221	A	C4-C5-C6	-6.42	113.79	117.00
25	BB	918	A	O4'-C1'-C2'	-6.42	99.38	105.80
25	BB	2277	G	C6-N1-C2	-6.42	121.25	125.10
25	BB	2464	G	N1-C6-O6	-6.42	116.05	119.90
3	A1	1006	G	C4-C5-C6	-6.42	114.95	118.80
24	BA	80	U	C5-C6-N1	-6.42	119.49	122.70
25	BB	254	G	N1-C2-N3	6.42	127.75	123.90
25	BB	322	A	C3'-C2'-C1'	6.42	106.64	101.50
25	BB	1990	C	N3-C4-C5	6.42	124.47	121.90
25	BB	2693	G	C5-C6-N1	6.42	114.71	111.50
1	AA	11	C	N3-C4-C5	6.42	124.47	121.90
1	AE	8	U	N1-C2-N3	6.42	118.75	114.90
3	A1	988	G	N3-C2-N2	-6.42	115.41	119.90
3	A1	1492	A	C5-C6-N6	6.42	128.83	123.70
15	AO	10	ARG	NH1-CZ-NH2	-6.42	112.34	119.40
17	AR	43	ARG	NE-CZ-NH1	6.42	123.51	120.30
25	BB	329	G	C8-N9-C4	-6.42	103.83	106.40
25	BB	470	A	C6-C5-N7	6.42	136.79	132.30
25	BB	536	G	C4-C5-N7	-6.42	108.23	110.80
25	BB	1917	U	N3-C2-O2	-6.42	117.71	122.20
25	BB	2208	C	N3-C4-C5	6.42	124.47	121.90
1	AP	46	G	N9-C4-C5	6.42	107.97	105.40
1	AE	63	C	N3-C4-C5	6.42	124.47	121.90
2	AM	13	U	C6-N1-C2	-6.42	117.15	121.00
3	A1	1230	C	N3-C2-O2	-6.42	117.41	121.90
3	A1	1256	A	C6-C5-N7	6.42	136.79	132.30
3	A1	1421	G	N3-C4-C5	-6.42	125.39	128.60
25	BB	319	G	O4'-C1'-N9	6.42	113.33	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	880	G	N1-C2-N3	6.42	127.75	123.90
25	BB	1830	C	N3-C4-C5	6.42	124.47	121.90
25	BB	2065	C	N1-C2-O2	6.42	122.75	118.90
25	BB	2204	G	N1-C6-O6	-6.42	116.05	119.90
25	BB	2400	G	C8-N9-C4	-6.42	103.83	106.40
1	AA	57	G	C8-N9-C4	-6.42	103.83	106.40
3	A1	1500	A	C4-C5-C6	-6.42	113.79	117.00
25	BB	975	A	C6-C5-N7	6.42	136.79	132.30
25	BB	1547	C	C3'-C2'-C1'	6.42	106.63	101.50
25	BB	1758	U	N3-C2-O2	-6.42	117.71	122.20
25	BB	2082	A	C5'-C4'-O4'	6.42	116.80	109.10
1	AE	28	C	C2-N3-C4	-6.41	116.69	119.90
3	A1	411	A	C3'-C2'-C1'	6.41	106.63	101.50
3	A1	873	A	C5-C6-N1	6.41	120.91	117.70
24	BA	51	G	C4-C5-C6	-6.41	114.95	118.80
25	BB	2	G	P-O3'-C3'	6.41	127.40	119.70
25	BB	12	U	N3-C4-O4	6.41	123.89	119.40
25	BB	141	G	C4-C5-C6	-6.41	114.95	118.80
25	BB	1142	A	C4-C5-C6	-6.41	113.79	117.00
25	BB	1161	C	N1-C2-O2	6.41	122.75	118.90
25	BB	1703	G	C2-N3-C4	6.41	115.11	111.90
25	BB	1752	C	C3'-C2'-C1'	6.41	106.63	101.50
25	BB	1892	C	C5-C6-N1	-6.41	117.79	121.00
25	BB	2400	G	C1'-O4'-C4'	6.41	115.03	109.90
3	A1	329	A	C1'-O4'-C4'	-6.41	104.77	109.90
3	A1	436	C	N1-C2-O2	6.41	122.75	118.90
25	BB	290	U	C5-C6-N1	-6.41	119.49	122.70
3	A1	163	C	C5-C6-N1	-6.41	117.79	121.00
3	A1	962	C	C5'-C4'-O4'	6.41	116.79	109.10
3	A1	978	A	C5-N7-C8	-6.41	100.69	103.90
3	A1	1502	A	C6-C5-N7	6.41	136.79	132.30
25	BB	1156	A	O4'-C1'-C2'	-6.41	99.39	105.80
25	BB	1493	C	C5-C4-N4	-6.41	115.71	120.20
25	BB	1621	U	C2-N1-C1'	6.41	125.39	117.70
25	BB	1667	G	C5-C6-O6	6.41	132.45	128.60
25	BB	2198	A	C4-C5-C6	-6.41	113.80	117.00
25	BB	2387	U	C1'-O4'-C4'	-6.41	104.77	109.90
25	BB	2830	C	N3-C2-O2	-6.41	117.41	121.90
15	AO	126	ARG	NE-CZ-NH2	-6.41	117.10	120.30
25	BB	175	G	N1-C6-O6	-6.41	116.05	119.90
25	BB	299	A	C5'-C4'-O4'	6.41	116.79	109.10
25	BB	348	A	C4-C5-C6	-6.41	113.80	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	534	U	N3-C2-O2	-6.41	117.71	122.20
25	BB	604	G	N1-C2-N3	6.41	127.75	123.90
25	BB	1016	G	N1-C2-N2	6.41	121.97	116.20
25	BB	1305	C	N3-C4-C5	6.41	124.46	121.90
25	BB	1618	A	O4'-C1'-N9	6.41	113.33	108.20
25	BB	1956	U	C4-C5-C6	6.41	123.55	119.70
25	BB	2047	C	N3-C4-N4	-6.41	113.51	118.00
25	BB	2553	G	N1-C6-O6	-6.41	116.06	119.90
3	A1	73	C	N1-C2-N3	6.41	123.69	119.20
3	A1	791	G	C5-N7-C8	-6.41	101.10	104.30
3	A1	1232	U	C5-C4-O4	6.41	129.74	125.90
3	A1	1245	C	N3-C2-O2	-6.41	117.42	121.90
3	A1	1324	A	O4'-C1'-N9	6.41	113.33	108.20
1	AP	37	G	C2-N3-C4	-6.41	108.70	111.90
3	A1	378	G	C5-C6-N1	6.41	114.70	111.50
3	A1	535	A	C4-C5-C6	-6.41	113.80	117.00
3	A1	563	A	C8-N9-C4	-6.41	103.24	105.80
3	A1	1145	A	O4'-C1'-N9	6.41	113.32	108.20
3	A1	1302	C	C3'-C2'-C1'	6.41	106.62	101.50
17	AR	183	ARG	NE-CZ-NH1	6.41	123.50	120.30
25	BB	1	G	N9-C4-C5	6.41	107.96	105.40
25	BB	1162	G	C5-C6-O6	6.41	132.44	128.60
25	BB	1216	G	C5'-C4'-O4'	6.41	116.79	109.10
25	BB	1265	A	O4'-C1'-N9	6.41	113.32	108.20
25	BB	1298	C	C2-N3-C4	-6.41	116.70	119.90
25	BB	2333	A	C2-N3-C4	6.41	113.80	110.60
25	BB	2389	G	C8-N9-C4	-6.41	103.84	106.40
1	AE	69	U	C5'-C4'-O4'	6.40	116.78	109.10
3	A1	23	C	N1-C2-N3	6.40	123.68	119.20
3	A1	224	U	C2'-C3'-O3'	6.40	123.95	113.70
3	A1	238	A	N1-C2-N3	-6.40	126.10	129.30
3	A1	865	A	C5-N7-C8	-6.40	100.70	103.90
3	A1	1033	G	N9-C4-C5	6.40	107.96	105.40
3	A1	1198	G	C8-N9-C4	-6.40	103.84	106.40
3	A1	1346	A	C5'-C4'-O4'	6.40	116.78	109.10
25	BB	806	C	N3-C2-O2	-6.40	117.42	121.90
25	BB	845	A	C5-N7-C8	-6.40	100.70	103.90
25	BB	1192	G	C5-C6-N1	6.40	114.70	111.50
1	AE	34	G	N7-C8-N9	6.40	116.30	113.10
3	A1	418	C	C5'-C4'-O4'	6.40	116.78	109.10
3	A1	553	A	N9-C4-C5	-6.40	103.24	105.80
7	AF	2	ARG	NE-CZ-NH2	-6.40	117.10	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	54	G	C8-N9-C4	-6.40	103.84	106.40
25	BB	784	G	C5-C6-N1	6.40	114.70	111.50
25	BB	1711	A	C5-C6-N1	6.40	120.90	117.70
25	BB	1856	U	C5-C6-N1	-6.40	119.50	122.70
25	BB	2036	C	N3-C4-N4	-6.40	113.52	118.00
25	BB	2248	C	O4'-C1'-N1	6.40	113.32	108.20
25	BB	2657	A	C2-N3-C4	6.40	113.80	110.60
1	AA	74	C	N1-C2-O2	6.40	122.74	118.90
1	AP	31	A	C4'-C3'-O3'	6.40	125.80	113.00
3	A1	281	G	C6-N1-C2	-6.40	121.26	125.10
3	A1	424	G	N7-C8-N9	6.40	116.30	113.10
3	A1	699	C	C3'-C2'-C1'	6.40	106.62	101.50
3	A1	849	G	C5-N7-C8	-6.40	101.10	104.30
3	A1	1213	A	C5-C6-N1	6.40	120.90	117.70
3	A1	1258	G	C5'-C4'-C3'	-6.40	105.76	116.00
24	BA	35	C	N3-C2-O2	-6.40	117.42	121.90
25	BB	321	U	C1'-O4'-C4'	-6.40	104.78	109.90
25	BB	406	G	N1-C2-N3	6.40	127.74	123.90
25	BB	480	A	C5'-C4'-C3'	-6.40	105.76	116.00
25	BB	797	G	N1-C2-N3	6.40	127.74	123.90
25	BB	863	A	C2-N3-C4	6.40	113.80	110.60
25	BB	1929	G	C1'-O4'-C4'	-6.40	104.78	109.90
25	BB	2247	A	C5-N7-C8	-6.40	100.70	103.90
25	BB	546	U	C2-N3-C4	-6.40	123.16	127.00
25	BB	867	C	C5-C6-N1	-6.40	117.80	121.00
1	AA	29	A	O4'-C1'-N9	6.40	113.32	108.20
1	AA	48	C	N3-C4-N4	-6.40	113.52	118.00
1	AE	20	G	C4-C5-C6	-6.40	114.96	118.80
3	A1	158	G	C8-N9-C4	-6.40	103.84	106.40
3	A1	271	C	C2-N3-C4	-6.40	116.70	119.90
3	A1	344	A	O5'-P-OP2	-6.40	99.94	105.70
3	A1	577	G	C4-C5-N7	6.40	113.36	110.80
22	AW	94	ARG	NE-CZ-NH1	6.40	123.50	120.30
25	BB	190	A	C6-C5-N7	6.40	136.78	132.30
25	BB	265	A	C4'-C3'-C2'	-6.40	96.20	102.60
25	BB	1474	U	C5-C6-N1	-6.40	119.50	122.70
25	BB	1907	G	N3-C4-N9	-6.40	122.16	126.00
25	BB	1939	U	P-O3'-C3'	6.40	127.38	119.70
25	BB	1959	G	O4'-C4'-C3'	6.40	111.22	106.10
25	BB	2330	G	C5-C6-O6	6.40	132.44	128.60
25	BB	2466	C	C5'-C4'-C3'	-6.40	105.76	116.00
25	BB	2657	A	N1-C2-N3	-6.40	126.10	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	346	G	N9-C4-C5	6.40	107.96	105.40
3	A1	1167	A	O4'-C1'-N9	6.40	113.32	108.20
25	BB	60	G	N1-C6-O6	-6.40	116.06	119.90
25	BB	153	U	N1-C2-N3	6.40	118.74	114.90
25	BB	684	G	C8-N9-C4	-6.40	103.84	106.40
25	BB	891	G	C6-C5-N7	6.40	134.24	130.40
25	BB	972	A	C5'-C4'-O4'	6.40	116.78	109.10
25	BB	983	A	C4-C5-C6	-6.40	113.80	117.00
25	BB	1475	G	N1-C6-O6	-6.40	116.06	119.90
25	BB	2662	A	C4'-C3'-C2'	-6.40	96.20	102.60
25	BB	2683	C	C5'-C4'-O4'	6.40	116.78	109.10
1	AA	54	U	N3-C2-O2	-6.39	117.72	122.20
1	AP	57	G	O4'-C1'-N9	6.39	113.31	108.20
3	A1	44	A	C5-N7-C8	-6.39	100.70	103.90
3	A1	476	U	C5'-C4'-O4'	6.39	116.77	109.10
3	A1	628	G	O4'-C1'-C2'	6.39	113.36	107.60
24	BA	7	G	C5-C6-N1	6.39	114.70	111.50
25	BB	239	C	N1-C2-N3	6.39	123.68	119.20
25	BB	1021	A	N3-C4-N9	-6.39	122.28	127.40
25	BB	2868	A	C2-N3-C4	6.39	113.80	110.60
41	BR	37	ARG	CD-NE-CZ	6.39	132.55	123.60
42	BS	49	ARG	NH1-CZ-NH2	-6.39	112.37	119.40
1	AE	10	G	C8-N9-C4	-6.39	103.84	106.40
3	A1	153	C	N1-C2-N3	6.39	123.67	119.20
3	A1	876	C	N3-C2-O2	-6.39	117.42	121.90
3	A1	907	A	N1-C2-N3	-6.39	126.10	129.30
25	BB	142	A	C4-C5-C6	-6.39	113.80	117.00
25	BB	168	G	C4-C5-N7	-6.39	108.24	110.80
25	BB	1028	A	N9-C4-C5	6.39	108.36	105.80
25	BB	1317	G	N3-C4-C5	-6.39	125.40	128.60
25	BB	1545	A	O4'-C4'-C3'	6.39	111.22	106.10
25	BB	2118	U	C4-C5-C6	6.39	123.54	119.70
25	BB	2469	A	O3'-P-O5'	6.39	116.15	104.00
25	BB	2619	C	C6-N1-C2	-6.39	117.74	120.30
3	A1	186	C	C6-N1-C2	-6.39	117.74	120.30
3	A1	783	C	C6-N1-C2	-6.39	117.74	120.30
3	A1	883	C	O4'-C1'-N1	6.39	113.31	108.20
3	A1	1426	G	C5-C6-N1	6.39	114.69	111.50
3	A1	1439	G	C4-C5-N7	-6.39	108.24	110.80
19	AT	79	ARG	NE-CZ-NH2	6.39	123.50	120.30
25	BB	653	U	O4'-C1'-C2'	-6.39	99.41	105.80
3	A1	109	A	N7-C8-N9	6.39	117.00	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	713	G	O4'-C4'-C3'	-6.39	97.61	104.00
3	A1	746	A	C6-C5-N7	6.39	136.77	132.30
3	A1	748	G	C3'-C2'-C1'	-6.39	96.39	101.50
3	A1	830	G	C5-C6-N1	6.39	114.69	111.50
3	A1	984	C	C5-C4-N4	6.39	124.67	120.20
3	A1	1024	G	N1-C2-N3	6.39	127.73	123.90
3	A1	1310	G	C5-C6-N1	6.39	114.69	111.50
3	A1	1329	A	C4-C5-C6	-6.39	113.81	117.00
17	AR	19	PHE	CB-CG-CD2	-6.39	116.33	120.80
24	BA	34	A	C6-N1-C2	-6.39	114.77	118.60
25	BB	180	G	C3'-C2'-C1'	6.39	106.61	101.50
25	BB	317	G	C6-N1-C2	-6.39	121.27	125.10
25	BB	668	A	C6-C5-N7	6.39	136.77	132.30
25	BB	1237	A	C2-N3-C4	6.39	113.79	110.60
25	BB	1960	A	O5'-P-OP1	-6.39	99.95	105.70
25	BB	2237	G	N1-C2-N3	6.39	127.73	123.90
3	A1	903	G	C8-N9-C4	-6.39	103.84	106.40
3	A1	1405	G	N1-C2-N3	6.39	127.73	123.90
24	BA	6	G	N3-C2-N2	-6.39	115.43	119.90
25	BB	1955	U	O4'-C1'-C2'	-6.39	99.41	105.80
25	BB	2139	U	C5-C6-N1	-6.39	119.51	122.70
25	BB	2360	G	C1'-O4'-C4'	-6.39	104.79	109.90
25	BB	2494	G	C5-C6-N1	6.39	114.69	111.50
36	BM	12	ARG	CD-NE-CZ	6.39	132.54	123.60
1	AA	1	G	C3'-C2'-C1'	6.39	106.61	101.50
1	AP	65	G	N1-C2-N3	6.39	127.73	123.90
3	A1	159	G	O5'-P-OP1	-6.39	99.95	105.70
3	A1	373	A	C5'-C4'-O4'	6.39	116.76	109.10
3	A1	388	G	N3-C4-N9	6.39	129.83	126.00
3	A1	576	C	N3-C4-C5	6.39	124.45	121.90
3	A1	584	G	N3-C4-C5	-6.39	125.41	128.60
15	AO	163	ARG	NE-CZ-NH2	6.39	123.49	120.30
25	BB	212	G	O4'-C4'-C3'	6.39	111.21	106.10
25	BB	309	A	C6-C5-N7	6.39	136.77	132.30
25	BB	1209	U	C4'-C3'-C2'	-6.39	96.21	102.60
25	BB	1384	A	N1-C6-N6	-6.39	114.77	118.60
25	BB	1902	C	C1'-O4'-C4'	-6.39	104.79	109.90
25	BB	2626	C	N3-C4-N4	6.39	122.47	118.00
25	BB	2701	U	N3-C4-O4	6.39	123.87	119.40
25	BB	2803	G	C5-N7-C8	-6.39	101.11	104.30
1	AE	61	C	N1-C2-O2	6.38	122.73	118.90
3	A1	434	U	C3'-C2'-C1'	-6.38	96.39	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	910	C	P-O3'-C3'	6.38	127.36	119.70
3	A1	1424	U	N3-C2-O2	-6.38	117.73	122.20
25	BB	864	G	C3'-C2'-C1'	-6.38	96.39	101.50
25	BB	1011	G	N3-C2-N2	-6.38	115.43	119.90
25	BB	1168	G	C6-N1-C2	-6.38	121.27	125.10
25	BB	1180	U	N3-C2-O2	-6.38	117.73	122.20
25	BB	1491	G	N9-C4-C5	6.38	107.95	105.40
25	BB	345	A	C5'-C4'-C3'	-6.38	105.79	116.00
25	BB	1353	A	C4-C5-C6	-6.38	113.81	117.00
25	BB	1798	U	N3-C2-O2	-6.38	117.73	122.20
25	BB	2230	G	N9-C4-C5	6.38	107.95	105.40
1	AE	5	A	C5'-C4'-O4'	6.38	116.76	109.10
3	A1	125	U	C5-C6-N1	-6.38	119.51	122.70
3	A1	730	G	N1-C2-N2	6.38	121.94	116.20
3	A1	1073	U	C4-C5-C6	6.38	123.53	119.70
3	A1	1493	A	C1'-O4'-C4'	6.38	115.00	109.90
24	BA	97	C	O4'-C1'-N1	-6.38	103.09	108.20
25	BB	739	A	C5-C6-N1	6.38	120.89	117.70
25	BB	1548	A	N1-C2-N3	-6.38	126.11	129.30
25	BB	1746	A	OP1-P-OP2	-6.38	110.03	119.60
25	BB	1834	U	C4-C5-C6	6.38	123.53	119.70
25	BB	1908	C	C4-C5-C6	6.38	120.59	117.40
25	BB	2319	G	C5-C6-N1	6.38	114.69	111.50
25	BB	2598	A	C4-C5-C6	-6.38	113.81	117.00
25	BB	2650	U	N1-C2-N3	6.38	118.73	114.90
25	BB	2869	G	N1-C2-N3	6.38	127.73	123.90
3	A1	71	A	C6-C5-N7	6.38	136.77	132.30
25	BB	460	A	N1-C6-N6	-6.38	114.77	118.60
25	BB	531	C	N3-C4-C5	6.38	124.45	121.90
25	BB	1894	C	C1'-O4'-C4'	-6.38	104.80	109.90
25	BB	2417	C	N3-C4-C5	6.38	124.45	121.90
3	A1	750	C	C2-N3-C4	-6.38	116.71	119.90
3	A1	931	C	C4'-C3'-C2'	-6.38	96.22	102.60
25	BB	126	A	C4'-C3'-C2'	-6.38	96.22	102.60
25	BB	541	A	C1'-O4'-C4'	-6.38	104.80	109.90
25	BB	901	C	N1-C2-O2	6.38	122.73	118.90
25	BB	1334	G	C5-C6-N1	6.38	114.69	111.50
25	BB	1890	A	C5-C6-N6	6.38	128.80	123.70
25	BB	1948	G	O5'-P-OP1	-6.38	99.96	105.70
25	BB	2540	C	N3-C4-C5	6.38	124.45	121.90
25	BB	2897	U	C5-C6-N1	-6.38	119.51	122.70
3	A1	200	G	N1-C6-O6	-6.38	116.08	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	603	U	C5-C6-N1	-6.38	119.51	122.70
3	A1	698	G	N3-C4-C5	-6.38	125.41	128.60
3	A1	1243	C	C6-N1-C2	-6.38	117.75	120.30
3	A1	1367	C	N3-C2-O2	-6.38	117.44	121.90
3	A1	1385	G	C5-C6-O6	6.38	132.43	128.60
25	BB	360	U	C5-C6-N1	-6.38	119.51	122.70
25	BB	645	C	C4-C5-C6	-6.38	114.21	117.40
25	BB	664	G	N1-C2-N3	6.38	127.72	123.90
25	BB	673	C	N3-C4-C5	6.38	124.45	121.90
25	BB	1000	A	C5-C6-N6	6.38	128.80	123.70
25	BB	1087	G	N9-C4-C5	6.38	107.95	105.40
25	BB	2113	U	C3'-C2'-C1'	6.38	106.60	101.50
25	BB	2267	A	C1'-O4'-C4'	-6.38	104.80	109.90
3	A1	57	G	C2-N3-C4	6.38	115.09	111.90
3	A1	900	A	C4-C5-C6	-6.38	113.81	117.00
25	BB	907	G	N3-C4-C5	-6.38	125.41	128.60
25	BB	2063	C	C5-C4-N4	6.38	124.66	120.20
25	BB	2159	G	N3-C4-C5	-6.38	125.41	128.60
25	BB	2447	G	O4'-C1'-N9	6.38	113.30	108.20
38	BO	95	PHE	CB-CG-CD1	-6.38	116.34	120.80
3	A1	51	A	C6-C5-N7	6.37	136.76	132.30
3	A1	99	C	N3-C2-O2	-6.37	117.44	121.90
3	A1	191	G	N3-C4-N9	6.37	129.82	126.00
3	A1	1093	A	C6-N1-C2	-6.37	114.78	118.60
3	A1	1281	C	N3-C4-C5	6.37	124.45	121.90
25	BB	108	G	C2'-C3'-O3'	6.37	123.90	113.70
25	BB	374	A	C6-C5-N7	6.37	136.76	132.30
25	BB	1039	A	C4-C5-N7	-6.37	107.51	110.70
25	BB	1254	A	C6-C5-N7	6.37	136.76	132.30
25	BB	1311	G	C5-C6-N1	6.37	114.69	111.50
25	BB	2021	C	N1-C2-O2	6.37	122.72	118.90
25	BB	2112	G	C5-C6-N1	6.37	114.69	111.50
25	BB	2128	G	N1-C6-O6	-6.37	116.08	119.90
25	BB	2295	C	C2-N3-C4	-6.37	116.71	119.90
25	BB	2632	A	C5'-C4'-O4'	6.37	116.75	109.10
25	BB	2766	A	N9-C1'-C2'	6.37	122.29	114.00
37	BN	268	ARG	NH1-CZ-NH2	-6.37	112.39	119.40
3	A1	142	G	N3-C4-C5	-6.37	125.41	128.60
3	A1	403	C	N1-C2-O2	6.37	122.72	118.90
3	A1	963	G	C2-N3-C4	-6.37	108.71	111.90
3	A1	996	A	C5-C6-N1	6.37	120.89	117.70
24	BA	65	U	C5-C6-N1	-6.37	119.51	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	5	A	C5'-C4'-O4'	6.37	116.75	109.10
25	BB	240	C	N1-C2-N3	6.37	123.66	119.20
25	BB	777	G	C4-C5-C6	-6.37	114.98	118.80
25	BB	2357	G	C5-N7-C8	-6.37	101.11	104.30
25	BB	2565	A	C4'-C3'-C2'	-6.37	96.23	102.60
25	BB	2748	A	C4-C5-C6	-6.37	113.81	117.00
25	BB	2859	G	C5-C6-N1	6.37	114.69	111.50
1	AE	39	U	C6-N1-C2	-6.37	117.18	121.00
3	A1	1492	A	C3'-C2'-C1'	-6.37	96.40	101.50
25	BB	1882	U	N1-C2-O2	-6.37	118.34	122.80
25	BB	1891	G	C6-N1-C2	-6.37	121.28	125.10
25	BB	2424	C	N3-C2-O2	-6.37	117.44	121.90
41	BR	30	ARG	CD-NE-CZ	6.37	132.52	123.60
3	A1	379	C	C6-N1-C2	6.37	122.85	120.30
3	A1	609	A	C6-C5-N7	-6.37	127.84	132.30
3	A1	1253	G	C5-C6-N1	6.37	114.69	111.50
3	A1	1498	U	N3-C2-O2	-6.37	117.74	122.20
25	BB	33	C	N1-C1'-C2'	6.37	122.28	114.00
25	BB	817	C	P-O3'-C3'	6.37	127.34	119.70
25	BB	912	C	C4'-C3'-C2'	-6.37	96.23	102.60
25	BB	1002	G	N1-C6-O6	-6.37	116.08	119.90
25	BB	1384	A	C6-N1-C2	-6.37	114.78	118.60
25	BB	1436	G	N1-C6-O6	-6.37	116.08	119.90
25	BB	1539	U	C3'-C2'-C1'	-6.37	96.41	101.50
25	BB	1566	A	C5-C6-N1	6.37	120.89	117.70
25	BB	2512	C	C5-C6-N1	-6.37	117.82	121.00
25	BB	2816	G	N9-C4-C5	6.37	107.95	105.40
3	A1	578	C	N3-C4-N4	-6.37	113.54	118.00
3	A1	634	C	C2-N3-C4	-6.37	116.72	119.90
3	A1	883	C	C6-N1-C2	-6.37	117.75	120.30
3	A1	1122	U	O4'-C1'-N1	6.37	113.29	108.20
3	A1	1135	U	N3-C2-O2	-6.37	117.74	122.20
25	BB	693	A	N1-C2-N3	-6.37	126.12	129.30
25	BB	1350	C	C2-N3-C4	-6.37	116.72	119.90
1	AE	32	C	C2-N3-C4	-6.37	116.72	119.90
3	A1	377	G	C6-N1-C2	-6.37	121.28	125.10
3	A1	377	G	O4'-C1'-N9	6.37	113.29	108.20
3	A1	589	U	C2-N3-C4	-6.37	123.18	127.00
3	A1	944	G	N1-C2-N3	6.37	127.72	123.90
3	A1	1123	U	O4'-C1'-N1	6.37	113.29	108.20
4	AB	207	ARG	NH1-CZ-NH2	-6.37	112.40	119.40
25	BB	463	G	N9-C1'-C2'	-6.37	105.00	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	696	G	O4'-C1'-C2'	6.37	113.33	107.60
1	AA	38	A	C6-N1-C2	-6.36	114.78	118.60
1	AP	49	C	C5-C6-N1	-6.36	117.82	121.00
1	AE	14	A	C4-C5-C6	-6.36	113.82	117.00
3	A1	310	G	C5-C6-N1	6.36	114.68	111.50
3	A1	1523	G	N1-C6-O6	-6.36	116.08	119.90
25	BB	23	G	N1-C6-O6	-6.36	116.08	119.90
25	BB	662	G	C3'-C2'-C1'	6.36	106.59	101.50
25	BB	731	C	C1'-O4'-C4'	-6.36	104.81	109.90
25	BB	1066	U	N3-C4-C5	-6.36	110.78	114.60
25	BB	1248	G	C8-N9-C4	-6.36	103.86	106.40
25	BB	1538	G	C2-N3-C4	-6.36	108.72	111.90
25	BB	1857	G	N7-C8-N9	6.36	116.28	113.10
25	BB	2344	U	N3-C2-O2	-6.36	117.75	122.20
25	BB	2525	G	C5'-C4'-O4'	6.36	116.74	109.10
1	AA	4	G	C5'-C4'-O4'	6.36	116.73	109.10
3	A1	1526	G	N1-C6-O6	-6.36	116.08	119.90
25	BB	1883	U	C5'-C4'-C3'	-6.36	105.82	116.00
25	BB	2071	A	N9-C1'-C2'	6.36	122.27	114.00
25	BB	2076	U	N3-C4-O4	6.36	123.85	119.40
25	BB	2868	A	C5-C6-N6	6.36	128.79	123.70
3	A1	266	G	C4-C5-C6	-6.36	114.98	118.80
14	AN	17	ARG	CD-NE-CZ	6.36	132.51	123.60
24	BA	46	A	C6-N1-C2	-6.36	114.78	118.60
25	BB	384	A	C2-N3-C4	6.36	113.78	110.60
25	BB	481	G	N3-C4-C5	-6.36	125.42	128.60
25	BB	727	A	O4'-C1'-N9	6.36	113.29	108.20
25	BB	1390	U	O4'-C1'-N1	6.36	113.29	108.20
25	BB	1759	A	C5-C6-N6	6.36	128.79	123.70
25	BB	1925	C	C2-N1-C1'	6.36	125.80	118.80
25	BB	2180	U	N1-C2-N3	6.36	118.72	114.90
25	BB	2377	A	N3-C4-N9	-6.36	122.31	127.40
25	BB	2552	U	C6-N1-C2	-6.36	117.18	121.00
25	BB	2668	G	N3-C4-C5	-6.36	125.42	128.60
3	A1	693	G	C4'-C3'-C2'	-6.36	96.24	102.60
3	A1	1499	A	C2-N3-C4	6.36	113.78	110.60
25	BB	1426	G	C1'-O4'-C4'	-6.36	104.81	109.90
25	BB	1595	C	N1-C2-N3	6.36	123.65	119.20
3	A1	43	C	C2-N3-C4	-6.36	116.72	119.90
3	A1	571	U	C5-C6-N1	-6.36	119.52	122.70
3	A1	1503	A	C6-N1-C2	-6.36	114.79	118.60
3	A1	1529	G	C4-C5-C6	-6.36	114.99	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	298	G	N1-C2-N3	6.36	127.72	123.90
25	BB	301	G	O4'-C1'-C2'	-6.36	99.44	105.80
25	BB	312	G	O4'-C1'-N9	6.36	113.29	108.20
25	BB	1372	U	C5-C4-O4	-6.36	122.09	125.90
25	BB	1694	C	C5'-C4'-O4'	6.36	116.73	109.10
25	BB	2364	C	N3-C4-C5	6.36	124.44	121.90
25	BB	2593	U	N1-C2-O2	6.36	127.25	122.80
25	BB	2604	U	C5-C6-N1	-6.36	119.52	122.70
37	BN	211	ARG	NH1-CZ-NH2	-6.36	112.41	119.40
3	A1	888	G	P-O3'-C3'	6.36	127.33	119.70
3	A1	932	C	N1-C2-N3	6.36	123.65	119.20
3	A1	1181	G	C5-N7-C8	-6.36	101.12	104.30
9	AH	57	ARG	NE-CZ-NH2	6.36	123.48	120.30
25	BB	50	U	C6-N1-C2	6.36	124.81	121.00
25	BB	214	G	C4-C5-N7	6.36	113.34	110.80
25	BB	569	U	C5-C6-N1	-6.36	119.52	122.70
25	BB	593	U	C5-C6-N1	-6.36	119.52	122.70
25	BB	658	U	C6-N1-C2	-6.36	117.19	121.00
25	BB	761	A	C2-N3-C4	6.36	113.78	110.60
25	BB	1197	G	C5-C6-N1	6.36	114.68	111.50
25	BB	1223	G	C4-C5-C6	-6.36	114.99	118.80
25	BB	1566	A	O4'-C1'-N9	6.36	113.28	108.20
25	BB	2070	A	C3'-C2'-C1'	6.36	106.58	101.50
25	BB	2545	G	N3-C2-N2	-6.36	115.45	119.90
25	BB	2738	A	C4-C5-C6	-6.36	113.82	117.00
1	AP	31	A	C6-C5-N7	6.35	136.75	132.30
3	A1	330	C	N1-C1'-C2'	6.35	122.26	114.00
3	A1	368	U	N3-C2-O2	-6.35	117.75	122.20
3	A1	641	U	C3'-C2'-C1'	6.35	106.58	101.50
3	A1	1444	U	N3-C2-O2	-6.35	117.75	122.20
18	AS	44	ARG	NH1-CZ-NH2	-6.35	112.41	119.40
24	BA	56	G	C5-C6-O6	6.35	132.41	128.60
25	BB	383	C	C5-C6-N1	-6.35	117.82	121.00
25	BB	2392	A	C3'-C2'-C1'	6.35	106.58	101.50
25	BB	2400	G	N9-C4-C5	6.35	107.94	105.40
25	BB	2476	A	O4'-C4'-C3'	6.35	111.18	106.10
1	AP	1	G	C5-C6-N1	6.35	114.68	111.50
3	A1	270	A	C5-C6-N1	6.35	120.88	117.70
3	A1	480	U	C2'-C3'-O3'	6.35	123.86	113.70
3	A1	615	G	C6-C5-N7	6.35	134.21	130.40
3	A1	1082	A	N7-C8-N9	6.35	116.98	113.80
25	BB	733	G	C6-N1-C2	-6.35	121.29	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	1232	G	N3-C4-N9	-6.35	122.19	126.00
25	BB	1368	G	N9-C4-C5	6.35	107.94	105.40
25	BB	1408	G	C6-N1-C2	-6.35	121.29	125.10
25	BB	1413	A	C5-N7-C8	-6.35	100.72	103.90
25	BB	2000	C	C5-C6-N1	-6.35	117.82	121.00
25	BB	2756	U	N3-C2-O2	-6.35	117.75	122.20
25	BB	2840	C	N3-C4-N4	-6.35	113.55	118.00
3	A1	288	A	C6-C5-N7	6.35	136.75	132.30
3	A1	755	G	N1-C2-N3	6.35	127.71	123.90
3	A1	855	U	C4'-C3'-C2'	-6.35	96.25	102.60
9	AH	33	ALA	N-CA-CB	-6.35	101.21	110.10
25	BB	232	G	N1-C2-N2	6.35	121.92	116.20
25	BB	1555	G	C5'-C4'-O4'	6.35	116.72	109.10
25	BB	1917	U	N1-C2-N3	6.35	118.71	114.90
25	BB	2085	U	N1-C2-N3	6.35	118.71	114.90
25	BB	2665	A	C6-N1-C2	-6.35	114.79	118.60
25	BB	2862	G	N3-C4-C5	-6.35	125.42	128.60
32	BI	32	VAL	CA-CB-CG2	6.35	120.43	110.90
1	AP	33	U	N3-C4-O4	-6.35	114.95	119.40
3	A1	815	A	C4-C5-C6	-6.35	113.83	117.00
3	A1	910	C	O4'-C1'-N1	6.35	113.28	108.20
3	A1	1403	C	C3'-C2'-C1'	6.35	106.58	101.50
24	BA	3	C	N3-C2-O2	-6.35	117.46	121.90
25	BB	474	G	C4-C5-N7	-6.35	108.26	110.80
25	BB	541	A	C4-C5-N7	6.35	113.88	110.70
25	BB	541	A	C5'-C4'-O4'	6.35	116.72	109.10
25	BB	620	G	C3'-C2'-C1'	6.35	106.58	101.50
25	BB	719	C	N3-C2-O2	-6.35	117.46	121.90
25	BB	1712	U	N1-C2-N3	6.35	118.71	114.90
25	BB	2174	C	N1-C2-O2	6.35	122.71	118.90
25	BB	2416	C	C6-N1-C2	-6.35	117.76	120.30
25	BB	2747	G	N7-C8-N9	6.35	116.27	113.10
25	BB	2836	U	O4'-C1'-N1	6.35	113.28	108.20
1	AA	26	G	C6-C5-N7	6.35	134.21	130.40
1	AA	75	C	C1'-O4'-C4'	-6.35	104.82	109.90
1	AP	68	U	N3-C2-O2	-6.35	117.76	122.20
3	A1	205	A	C6-C5-N7	6.35	136.74	132.30
3	A1	670	G	C6-C5-N7	6.35	134.21	130.40
3	A1	759	A	C8-N9-C4	-6.35	103.26	105.80
3	A1	911	U	C5-C6-N1	-6.35	119.53	122.70
3	A1	947	G	N1-C6-O6	-6.35	116.09	119.90
3	A1	1041	G	O4'-C1'-N9	6.35	113.28	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	404	A	C3'-C2'-C1'	6.35	106.58	101.50
25	BB	411	G	N9-C4-C5	6.35	107.94	105.40
25	BB	511	U	C5-C6-N1	-6.35	119.53	122.70
25	BB	646	U	N3-C4-C5	-6.35	110.79	114.60
25	BB	876	C	N3-C4-N4	-6.35	113.56	118.00
25	BB	936	A	C4-C5-C6	-6.35	113.83	117.00
25	BB	937	C	C3'-C2'-C1'	6.35	106.58	101.50
25	BB	1184	U	O4'-C1'-N1	6.35	113.28	108.20
25	BB	1208	C	N3-C4-N4	-6.35	113.56	118.00
25	BB	1857	G	C6-C5-N7	6.35	134.21	130.40
25	BB	2076	U	C5-C6-N1	-6.35	119.53	122.70
25	BB	2310	C	C5-C6-N1	-6.35	117.83	121.00
25	BB	2394	C	C6-N1-C2	-6.35	117.76	120.30
25	BB	2417	C	C6-N1-C2	-6.35	117.76	120.30
3	A1	1133	G	N7-C8-N9	6.35	116.27	113.10
3	A1	1339	A	C3'-C2'-C1'	6.35	106.58	101.50
25	BB	327	G	C2-N3-C4	-6.35	108.73	111.90
25	BB	1922	G	C1'-O4'-C4'	-6.35	104.82	109.90
25	BB	1936	A	C6-C5-N7	6.35	136.74	132.30
25	BB	2389	G	C6-C5-N7	6.35	134.21	130.40
25	BB	2666	C	C2-N3-C4	-6.35	116.73	119.90
25	BB	2701	U	C3'-C2'-C1'	-6.35	96.42	101.50
3	A1	764	C	C5-C4-N4	-6.34	115.76	120.20
3	A1	874	G	N3-C2-N2	-6.34	115.46	119.90
4	AB	203	ASP	CB-CG-OD1	6.34	124.01	118.30
25	BB	724	U	C5-C4-O4	-6.34	122.09	125.90
25	BB	1007	C	N3-C4-N4	-6.34	113.56	118.00
25	BB	1095	A	C3'-C2'-C1'	6.34	106.58	101.50
25	BB	1410	G	C5'-C4'-O4'	6.34	116.71	109.10
50	B1	154	ASP	CB-CG-OD1	6.34	124.01	118.30
3	A1	615	G	N3-C4-C5	-6.34	125.43	128.60
3	A1	880	C	N1-C2-N3	6.34	123.64	119.20
3	A1	1268	G	O5'-P-OP1	-6.34	99.99	105.70
25	BB	445	C	N3-C4-N4	-6.34	113.56	118.00
25	BB	1285	A	C6-N1-C2	-6.34	114.79	118.60
25	BB	1368	G	C8-N9-C4	-6.34	103.86	106.40
25	BB	1949	G	C8-N9-C4	-6.34	103.86	106.40
25	BB	2034	U	O5'-P-OP2	-6.34	99.99	105.70
25	BB	2142	A	C5'-C4'-O4'	6.34	116.71	109.10
3	A1	866	C	C1'-O4'-C4'	-6.34	104.83	109.90
3	A1	1035	A	C6-C5-N7	6.34	136.74	132.30
3	A1	1445	U	C5'-C4'-C3'	-6.34	105.85	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	50	A	C2-N3-C4	6.34	113.77	110.60
25	BB	84	A	C4-C5-C6	-6.34	113.83	117.00
25	BB	941	A	C6-N1-C2	-6.34	114.80	118.60
25	BB	1939	U	O4'-C1'-N1	6.34	113.27	108.20
25	BB	2088	A	C4-C5-C6	-6.34	113.83	117.00
25	BB	2285	C	N3-C2-O2	-6.34	117.46	121.90
25	BB	2820	A	C3'-C2'-C1'	6.34	106.57	101.50
25	BB	2827	C	N3-C4-C5	6.34	124.44	121.90
25	BB	2855	C	N1-C2-O2	6.34	122.70	118.90
3	A1	19	A	C6-C5-N7	6.34	136.74	132.30
3	A1	1390	U	C5-C6-N1	-6.34	119.53	122.70
25	BB	216	A	C4'-C3'-C2'	-6.34	96.26	102.60
25	BB	551	G	N3-C4-C5	-6.34	125.43	128.60
25	BB	730	A	C6-C5-N7	6.34	136.74	132.30
25	BB	744	U	N1-C2-N3	6.34	118.70	114.90
25	BB	787	C	C2-N3-C4	-6.34	116.73	119.90
25	BB	973	A	C4-C5-C6	-6.34	113.83	117.00
25	BB	1540	G	N1-C6-O6	-6.34	116.10	119.90
25	BB	1665	A	C4-C5-C6	-6.34	113.83	117.00
25	BB	1766	G	O4'-C4'-C3'	6.34	111.17	106.10
25	BB	1970	A	C5-C6-N1	6.34	120.87	117.70
25	BB	2018	G	N7-C8-N9	6.34	116.27	113.10
25	BB	2036	C	N3-C2-O2	-6.34	117.46	121.90
25	BB	2230	G	O4'-C1'-N9	6.34	113.27	108.20
25	BB	2232	C	N3-C2-O2	-6.34	117.46	121.90
25	BB	2313	C	N1-C2-N3	6.34	123.64	119.20
25	BB	2409	G	O4'-C1'-N9	6.34	113.27	108.20
53	B4	116	ARG	NE-CZ-NH1	6.34	123.47	120.30
16	AQ	31	VAL	CA-CB-CG2	6.34	120.41	110.90
25	BB	329	G	C5-N7-C8	-6.34	101.13	104.30
25	BB	1878	G	N3-C2-N2	6.34	124.34	119.90
25	BB	1924	C	N3-C4-N4	-6.34	113.56	118.00
3	A1	322	C	N3-C4-C5	6.34	124.44	121.90
25	BB	200	U	O5'-P-OP1	-6.34	100.00	105.70
25	BB	352	A	C6-C5-N7	6.34	136.74	132.30
25	BB	607	U	O4'-C1'-N1	6.34	113.27	108.20
25	BB	1282	U	C4'-C3'-C2'	-6.34	96.26	102.60
1	AA	19	G	C6-C5-N7	6.33	134.20	130.40
1	AP	58	A	N9-C1'-C2'	6.33	122.23	114.00
1	AE	69	U	C1'-O4'-C4'	-6.33	104.83	109.90
3	A1	1525	G	N7-C8-N9	6.33	116.27	113.10
25	BB	331	C	N3-C4-N4	-6.33	113.57	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1343	G	P-O3'-C3'	6.33	127.30	119.70
25	BB	2233	U	N1-C2-N3	6.33	118.70	114.90
25	BB	2401	U	N3-C2-O2	-6.33	117.77	122.20
3	A1	243	A	C1'-O4'-C4'	-6.33	104.83	109.90
3	A1	330	C	C6-N1-C2	-6.33	117.77	120.30
3	A1	495	A	N3-C4-N9	-6.33	122.33	127.40
3	A1	593	U	N3-C2-O2	-6.33	117.77	122.20
3	A1	765	G	N3-C4-C5	-6.33	125.43	128.60
3	A1	1045	C	C5'-C4'-O4'	6.33	116.70	109.10
3	A1	1102	A	N1-C2-N3	-6.33	126.13	129.30
25	BB	141	G	C6-N1-C2	-6.33	121.30	125.10
25	BB	160	A	C6-N1-C2	-6.33	114.80	118.60
25	BB	271	G	C5-C6-N1	6.33	114.67	111.50
25	BB	1310	G	N3-C2-N2	-6.33	115.47	119.90
25	BB	1317	G	C2-N3-C4	6.33	115.07	111.90
25	BB	1516	G	C4-C5-C6	-6.33	115.00	118.80
25	BB	2037	A	C6-C5-N7	6.33	136.73	132.30
25	BB	2250	G	C6-N1-C2	-6.33	121.30	125.10
25	BB	2545	G	N7-C8-N9	6.33	116.27	113.10
25	BB	2726	A	C5'-C4'-O4'	6.33	116.70	109.10
3	A1	328	C	O5'-P-OP2	-6.33	100.00	105.70
3	A1	449	G	C5'-C4'-C3'	-6.33	105.87	116.00
3	A1	853	C	C5'-C4'-C3'	-6.33	105.87	116.00
3	A1	1140	C	N3-C2-O2	-6.33	117.47	121.90
25	BB	147	C	O4'-C1'-N1	-6.33	103.14	108.20
25	BB	187	G	C4-C5-N7	6.33	113.33	110.80
25	BB	629	G	N7-C8-N9	6.33	116.27	113.10
25	BB	885	C	N3-C2-O2	-6.33	117.47	121.90
25	BB	1457	U	N1-C2-O2	6.33	127.23	122.80
25	BB	2437	G	N1-C6-O6	-6.33	116.10	119.90
25	BB	2859	G	C5-N7-C8	-6.33	101.13	104.30
37	BN	111	ALA	CA-C-N	6.33	128.86	116.20
1	AA	65	G	C8-N9-C4	-6.33	103.87	106.40
1	AE	69	U	N1-C1'-C2'	-6.33	105.04	112.00
3	A1	444	G	N3-C4-N9	6.33	129.80	126.00
3	A1	1519	A	C6-C5-N7	6.33	136.73	132.30
25	BB	526	A	C5-C6-N6	6.33	128.76	123.70
25	BB	1734	G	O4'-C1'-N9	6.33	113.26	108.20
25	BB	1794	A	C5-C6-N6	6.33	128.76	123.70
3	A1	51	A	C5'-C4'-O4'	-6.33	101.50	109.10
3	A1	789	U	C6-N1-C2	-6.33	117.20	121.00
3	A1	1040	U	N1-C2-N3	6.33	118.70	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1151	A	C2-N3-C4	6.33	113.76	110.60
3	A1	1369	C	C4'-C3'-C2'	-6.33	96.27	102.60
25	BB	441	U	C4-C5-C6	6.33	123.50	119.70
25	BB	740	C	N3-C4-N4	-6.33	113.57	118.00
25	BB	914	G	N3-C4-C5	-6.33	125.44	128.60
25	BB	959	A	C5'-C4'-O4'	6.33	116.69	109.10
25	BB	1077	A	C2-N3-C4	6.33	113.76	110.60
25	BB	1533	C	C2-N3-C4	-6.33	116.74	119.90
25	BB	1655	A	C2'-C3'-O3'	6.33	123.83	113.70
25	BB	1702	G	N1-C6-O6	-6.33	116.10	119.90
25	BB	2144	G	N7-C8-N9	6.33	116.26	113.10
25	BB	2792	A	C4-C5-C6	-6.33	113.84	117.00
25	BB	2848	G	C6-N1-C2	-6.33	121.30	125.10
25	BB	405	U	C3'-C2'-C1'	-6.33	96.44	101.50
25	BB	475	C	C5'-C4'-O4'	6.33	116.69	109.10
25	BB	1729	U	O4'-C4'-C3'	6.33	111.16	106.10
25	BB	1959	G	N9-C4-C5	6.33	107.93	105.40
25	BB	2041	U	C2-N3-C4	-6.33	123.20	127.00
25	BB	2452	C	C2-N3-C4	-6.33	116.74	119.90
3	A1	472	U	O4'-C4'-C3'	6.33	111.16	106.10
3	A1	584	G	C6-N1-C2	-6.33	121.31	125.10
3	A1	844	G	C1'-O4'-C4'	-6.33	104.84	109.90
3	A1	1096	C	C4-C5-C6	-6.33	114.24	117.40
3	A1	1138	G	N3-C2-N2	6.33	124.33	119.90
25	BB	1038	G	N1-C6-O6	-6.33	116.11	119.90
25	BB	1083	U	C2-N3-C4	-6.33	123.20	127.00
25	BB	1787	A	C6-C5-N7	6.33	136.73	132.30
25	BB	1858	A	C5-C6-N6	6.33	128.76	123.70
54	B5	66	PHE	CB-CG-CD2	-6.33	116.37	120.80
3	A1	251	G	O4'-C1'-N9	6.32	113.26	108.20
24	BA	103	U	O4'-C4'-C3'	6.32	111.16	106.10
25	BB	143	C	N1-C2-O2	6.32	122.69	118.90
25	BB	446	G	C6-C5-N7	6.32	134.19	130.40
25	BB	613	A	C4'-C3'-C2'	6.32	108.92	102.60
25	BB	932	U	N1-C2-N3	6.32	118.69	114.90
25	BB	941	A	C6-C5-N7	6.32	136.73	132.30
25	BB	1155	A	C5-C6-N6	6.32	128.76	123.70
25	BB	1345	C	C3'-C2'-C1'	6.32	106.56	101.50
25	BB	1419	A	C4-C5-C6	-6.32	113.84	117.00
25	BB	1691	C	N1-C1'-C2'	-6.32	105.04	112.00
25	BB	2108	A	C6-N1-C2	-6.32	114.81	118.60
25	BB	2849	U	N1-C2-N3	6.32	118.69	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	167	A	C5-C6-N6	6.32	128.76	123.70
3	A1	397	A	C5-N7-C8	-6.32	100.74	103.90
3	A1	1031	C	C2-N3-C4	-6.32	116.74	119.90
3	A1	1207	G	C4-C5-C6	-6.32	115.01	118.80
3	A1	1414	U	N3-C2-O2	-6.32	117.77	122.20
25	BB	15	G	C5'-C4'-O4'	6.32	116.69	109.10
25	BB	377	G	C5-C6-N1	6.32	114.66	111.50
25	BB	1261	C	N1-C2-O2	6.32	122.69	118.90
25	BB	2021	C	C5-C6-N1	-6.32	117.84	121.00
29	BF	18	ARG	NH1-CZ-NH2	-6.32	112.44	119.40
1	AE	42	G	C5-C6-N1	6.32	114.66	111.50
3	A1	240	G	N1-C6-O6	-6.32	116.11	119.90
3	A1	813	U	O4'-C1'-N1	6.32	113.26	108.20
24	BA	40	U	O4'-C4'-C3'	6.32	111.16	106.10
25	BB	851	C	N1-C2-O2	6.32	122.69	118.90
25	BB	858	G	C3'-C2'-C1'	6.32	106.56	101.50
25	BB	1770	G	O4'-C1'-N9	-6.32	103.14	108.20
25	BB	2286	G	N3-C4-C5	-6.32	125.44	128.60
25	BB	2483	C	O4'-C1'-N1	6.32	113.26	108.20
1	AP	49	C	C2-N3-C4	-6.32	116.74	119.90
3	A1	353	A	C6-C5-N7	6.32	136.72	132.30
3	A1	461	A	C5'-C4'-C3'	-6.32	105.89	116.00
3	A1	898	G	N1-C6-O6	-6.32	116.11	119.90
3	A1	1420	U	O4'-C1'-N1	6.32	113.25	108.20
25	BB	217	A	C5'-C4'-O4'	6.32	116.68	109.10
25	BB	305	C	C2-N3-C4	-6.32	116.74	119.90
25	BB	1084	A	C2-N3-C4	6.32	113.76	110.60
25	BB	1341	G	O4'-C1'-C2'	-6.32	99.48	105.80
3	A1	42	G	C5-C6-N1	6.32	114.66	111.50
3	A1	602	A	O4'-C1'-N9	6.32	113.25	108.20
3	A1	729	A	C2-N3-C4	6.32	113.76	110.60
3	A1	905	U	C5-C6-N1	-6.32	119.54	122.70
3	A1	910	C	N1-C2-O2	6.32	122.69	118.90
3	A1	919	A	C5'-C4'-O4'	-6.32	101.52	109.10
3	A1	928	G	C5-C6-O6	6.32	132.39	128.60
3	A1	1151	A	C3'-C2'-C1'	-6.32	96.45	101.50
3	A1	1186	G	N1-C6-O6	-6.32	116.11	119.90
3	A1	1376	U	C5-C6-N1	-6.32	119.54	122.70
4	AB	13	VAL	CG1-CB-CG2	-6.32	100.79	110.90
25	BB	659	G	C5-N7-C8	-6.32	101.14	104.30
25	BB	884	U	C4-C5-C6	6.32	123.49	119.70
25	BB	896	A	C4-C5-C6	-6.32	113.84	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1188	U	C4-C5-C6	6.32	123.49	119.70
25	BB	1431	A	C4-C5-C6	-6.32	113.84	117.00
25	BB	1634	A	C5-C6-N6	6.32	128.75	123.70
25	BB	2292	U	C2-N3-C4	-6.32	123.21	127.00
25	BB	2355	G	N7-C8-N9	6.32	116.26	113.10
25	BB	2791	G	C1'-O4'-C4'	6.32	114.95	109.90
1	AA	9	A	C2-N3-C4	6.32	113.76	110.60
1	AE	37	G	O4'-C1'-N9	6.32	113.25	108.20
3	A1	32	A	C4'-C3'-C2'	-6.32	96.28	102.60
3	A1	265	G	C6-N1-C2	-6.32	121.31	125.10
3	A1	655	A	C6-C5-N7	6.32	136.72	132.30
3	A1	1161	C	C5-C4-N4	6.32	124.62	120.20
25	BB	244	A	C5-C6-N6	6.32	128.75	123.70
25	BB	1175	A	C1'-O4'-C4'	-6.32	104.85	109.90
25	BB	1905	C	N3-C4-C5	6.32	124.43	121.90
25	BB	2168	G	N1-C6-O6	-6.32	116.11	119.90
25	BB	2231	U	C5-C6-N1	-6.32	119.54	122.70
25	BB	2846	G	C4-C5-C6	-6.32	115.01	118.80
37	BN	132	ARG	NE-CZ-NH2	6.32	123.46	120.30
3	A1	539	A	C6-N1-C2	-6.31	114.81	118.60
3	A1	1190	G	N7-C8-N9	6.31	116.26	113.10
25	BB	1249	U	N1-C2-N3	6.31	118.69	114.90
25	BB	1364	G	C1'-O4'-C4'	6.31	114.95	109.90
3	A1	33	A	C6-C5-N7	6.31	136.72	132.30
3	A1	530	G	C5-N7-C8	-6.31	101.14	104.30
3	A1	1251	A	C5-C6-N6	6.31	128.75	123.70
3	A1	1431	A	C1'-O4'-C4'	-6.31	104.85	109.90
3	A1	1443	C	N3-C4-N4	-6.31	113.58	118.00
24	BA	73	A	C6-C5-N7	6.31	136.72	132.30
25	BB	109	C	C2-N3-C4	-6.31	116.74	119.90
25	BB	286	U	C5-C4-O4	6.31	129.69	125.90
25	BB	565	C	N3-C4-C5	6.31	124.42	121.90
25	BB	1556	C	C3'-C2'-C1'	-6.31	96.45	101.50
25	BB	1565	C	C2-N3-C4	-6.31	116.74	119.90
25	BB	2328	A	N1-C6-N6	-6.31	114.81	118.60
25	BB	2410	G	C2-N3-C4	6.31	115.06	111.90
1	AA	71	G	C5-N7-C8	-6.31	101.14	104.30
3	A1	468	A	C5'-C4'-O4'	-6.31	101.53	109.10
3	A1	1071	C	O4'-C1'-N1	6.31	113.25	108.20
3	A1	1173	U	O4'-C1'-N1	6.31	113.25	108.20
3	A1	1281	C	O4'-C1'-C2'	-6.31	99.49	105.80
25	BB	606	U	C2-N3-C4	-6.31	123.21	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1600	C	C3'-C2'-C1'	6.31	106.55	101.50
25	BB	2483	C	N1-C2-N3	6.31	123.62	119.20
3	A1	391	G	N1-C2-N3	6.31	127.69	123.90
3	A1	577	G	C4-C5-C6	-6.31	115.01	118.80
3	A1	676	A	C1'-O4'-C4'	-6.31	104.85	109.90
3	A1	687	A	C5-C6-N6	6.31	128.75	123.70
3	A1	721	G	C5-C6-N1	6.31	114.65	111.50
3	A1	1339	A	C6-C5-N7	6.31	136.72	132.30
25	BB	71	A	O4'-C4'-C3'	6.31	111.15	106.10
25	BB	925	A	C6-C5-N7	6.31	136.72	132.30
25	BB	1243	C	N3-C4-C5	6.31	124.42	121.90
25	BB	2378	A	C5-C6-N1	6.31	120.86	117.70
3	A1	7	A	O4'-C1'-C2'	-6.31	99.49	105.80
3	A1	577	G	C4'-C3'-C2'	-6.31	96.29	102.60
3	A1	861	G	C5-N7-C8	-6.31	101.15	104.30
3	A1	868	C	C2-N3-C4	-6.31	116.75	119.90
3	A1	1014	A	C6-N1-C2	-6.31	114.81	118.60
3	A1	1382	C	C2'-C3'-O3'	6.31	123.79	113.70
25	BB	207	A	C5-C6-N6	6.31	128.75	123.70
25	BB	354	A	C6-C5-N7	6.31	136.72	132.30
25	BB	633	A	C4-C5-N7	6.31	113.85	110.70
25	BB	776	G	N3-C2-N2	6.31	124.31	119.90
25	BB	938	G	N7-C8-N9	6.31	116.25	113.10
25	BB	1679	A	C4'-C3'-C2'	-6.31	96.29	102.60
25	BB	1999	C	C2-N3-C4	-6.31	116.75	119.90
25	BB	2559	C	N3-C2-O2	-6.31	117.48	121.90
25	BB	2830	C	N3-C4-N4	-6.31	113.58	118.00
55	B6	13	ARG	NH1-CZ-NH2	-6.31	112.46	119.40
3	A1	211	G	C5-C6-N1	6.31	114.65	111.50
3	A1	298	A	C4-C5-C6	-6.31	113.85	117.00
3	A1	646	G	C3'-C2'-C1'	6.31	106.54	101.50
3	A1	1324	A	C2-N3-C4	6.31	113.75	110.60
25	BB	1472	C	C2-N3-C4	-6.31	116.75	119.90
25	BB	1910	G	C4'-C3'-C2'	-6.31	96.29	102.60
25	BB	2493	U	C5'-C4'-O4'	6.31	116.67	109.10
25	BB	2578	G	N1-C6-O6	-6.31	116.12	119.90
3	A1	295	C	C6-N1-C2	-6.30	117.78	120.30
3	A1	1035	A	C2-N3-C4	6.30	113.75	110.60
24	BA	84	G	N1-C6-O6	-6.30	116.12	119.90
25	BB	96	C	C5-C6-N1	-6.30	117.85	121.00
25	BB	734	A	C5'-C4'-O4'	6.30	116.67	109.10
25	BB	1736	U	N1-C1'-C2'	6.30	122.20	114.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1793	C	C5'-C4'-C3'	-6.30	105.91	116.00
25	BB	1859	U	C4'-C3'-C2'	-6.30	96.30	102.60
25	BB	2066	C	N1-C2-O2	6.30	122.68	118.90
25	BB	2089	C	N1-C2-O2	6.30	122.68	118.90
25	BB	2203	U	C1'-O4'-C4'	-6.30	104.86	109.90
25	BB	2317	A	C6-C5-N7	6.30	136.71	132.30
25	BB	2484	G	C5-C6-O6	6.30	132.38	128.60
25	BB	2484	G	N3-C4-C5	-6.30	125.45	128.60
25	BB	2737	G	C6-C5-N7	6.30	134.18	130.40
1	AP	2	C	C2-N3-C4	-6.30	116.75	119.90
3	A1	279	A	C5'-C4'-O4'	6.30	116.66	109.10
3	A1	1068	G	C8-N9-C4	-6.30	103.88	106.40
25	BB	96	C	N3-C2-O2	-6.30	117.49	121.90
25	BB	371	A	C6-C5-N7	6.30	136.71	132.30
25	BB	588	U	O4'-C1'-C2'	6.30	113.27	107.60
3	A1	913	A	C6-C5-N7	6.30	136.71	132.30
3	A1	1156	G	N3-C4-N9	6.30	129.78	126.00
3	A1	1230	C	O4'-C1'-N1	6.30	113.24	108.20
25	BB	52	A	C6-C5-N7	6.30	136.71	132.30
25	BB	329	G	C6-N1-C2	-6.30	121.32	125.10
25	BB	529	A	N9-C1'-C2'	6.30	122.19	114.00
25	BB	1309	G	O4'-C1'-N9	6.30	113.24	108.20
25	BB	1784	A	C5-C6-N6	6.30	128.74	123.70
25	BB	1996	C	N3-C2-O2	-6.30	117.49	121.90
25	BB	2315	G	C5-C6-N1	6.30	114.65	111.50
25	BB	2486	C	C5'-C4'-O4'	6.30	116.66	109.10
25	BB	2604	U	C3'-C2'-C1'	6.30	106.54	101.50
1	AA	3	G	N3-C4-C5	-6.30	125.45	128.60
3	A1	120	A	O4'-C1'-N9	6.30	113.24	108.20
3	A1	320	A	C5-C6-N6	6.30	128.74	123.70
3	A1	430	A	C6-N1-C2	-6.30	114.82	118.60
3	A1	470	C	C6-N1-C2	-6.30	117.78	120.30
3	A1	622	A	C2-N3-C4	6.30	113.75	110.60
3	A1	972	C	C5'-C4'-O4'	6.30	116.66	109.10
23	AX	37	ARG	NE-CZ-NH2	-6.30	117.15	120.30
24	BA	39	A	N7-C8-N9	6.30	116.95	113.80
25	BB	1303	G	N1-C6-O6	-6.30	116.12	119.90
25	BB	2478	A	N7-C8-N9	6.30	116.95	113.80
39	BP	40	ARG	NE-CZ-NH2	6.30	123.45	120.30
3	A1	171	A	C4-C5-C6	-6.30	113.85	117.00
3	A1	385	C	O4'-C1'-N1	6.30	113.24	108.20
3	A1	1265	C	C1'-O4'-C4'	-6.30	104.86	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	59	U	N1-C2-N3	6.30	118.68	114.90
25	BB	1123	C	C5-C6-N1	-6.30	117.85	121.00
25	BB	1155	A	C5-C6-N1	6.30	120.85	117.70
25	BB	1228	G	C5-C6-N1	6.30	114.65	111.50
25	BB	2355	G	C5'-C4'-C3'	-6.30	105.92	116.00
3	A1	49	U	C4-C5-C6	6.30	123.48	119.70
3	A1	92	U	C4'-C3'-C2'	-6.30	96.30	102.60
3	A1	544	G	N1-C2-N3	6.30	127.68	123.90
3	A1	550	G	N1-C2-N3	6.30	127.68	123.90
3	A1	705	G	C5-C6-N1	6.30	114.65	111.50
25	BB	515	A	C5-C6-N6	6.30	128.74	123.70
25	BB	564	C	N3-C2-O2	-6.30	117.49	121.90
25	BB	982	C	N3-C4-N4	-6.30	113.59	118.00
25	BB	1252	G	C2-N3-C4	6.30	115.05	111.90
25	BB	1512	C	N1-C1'-C2'	-6.30	105.07	112.00
25	BB	1921	G	C5'-C4'-O4'	6.30	116.66	109.10
25	BB	2479	U	C1'-O4'-C4'	-6.30	104.86	109.90
55	B6	38	GLY	C-N-CA	6.30	137.44	121.70
3	A1	20	U	O4'-C1'-N1	6.29	113.24	108.20
3	A1	677	U	C5'-C4'-O4'	6.29	116.66	109.10
3	A1	1035	A	N1-C2-N3	-6.29	126.15	129.30
3	A1	1133	G	C8-N9-C4	-6.29	103.88	106.40
25	BB	886	A	C2-N3-C4	6.29	113.75	110.60
25	BB	1698	A	C5-N7-C8	-6.29	100.75	103.90
25	BB	2139	U	O4'-C1'-N1	6.29	113.24	108.20
25	BB	2587	A	C5-C6-N6	6.29	128.74	123.70
3	A1	260	G	C6-N1-C2	-6.29	121.32	125.10
3	A1	799	G	N9-C4-C5	6.29	107.92	105.40
3	A1	923	A	O4'-C1'-N9	6.29	113.23	108.20
18	AS	156	ARG	NE-CZ-NH1	6.29	123.45	120.30
25	BB	35	G	N1-C6-O6	-6.29	116.12	119.90
25	BB	126	A	C2-N3-C4	6.29	113.75	110.60
25	BB	760	G	C6-C5-N7	6.29	134.18	130.40
25	BB	1455	G	C6-C5-N7	6.29	134.18	130.40
25	BB	1551	A	C2-N3-C4	6.29	113.75	110.60
25	BB	2032	G	N1-C2-N3	6.29	127.68	123.90
25	BB	2650	U	C5-C6-N1	-6.29	119.55	122.70
25	BB	2781	A	C2-N3-C4	6.29	113.75	110.60
38	BO	41	VAL	CA-CB-CG1	6.29	120.34	110.90
1	AA	30	G	N3-C2-N2	-6.29	115.50	119.90
1	AA	53	G	C5-C6-O6	-6.29	124.83	128.60
1	AA	57	G	O4'-C4'-C3'	6.29	111.13	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	16	U	C5-C6-N1	-6.29	119.55	122.70
25	BB	1014	A	C5-C6-N6	6.29	128.73	123.70
25	BB	1501	G	C6-N1-C2	-6.29	121.33	125.10
25	BB	2055	C	C2-N3-C4	-6.29	116.75	119.90
3	A1	970	C	N3-C4-C5	6.29	124.42	121.90
3	A1	1411	C	N1-C2-O2	6.29	122.67	118.90
25	BB	163	C	C5-C6-N1	-6.29	117.86	121.00
25	BB	691	C	C1'-O4'-C4'	-6.29	104.87	109.90
25	BB	783	A	C4-C5-C6	-6.29	113.86	117.00
25	BB	1296	G	N3-C4-C5	-6.29	125.45	128.60
25	BB	1904	G	C6-N1-C2	-6.29	121.33	125.10
1	AE	52	U	C5-C6-N1	-6.29	119.56	122.70
2	AM	15	U	N3-C4-C5	6.29	118.37	114.60
3	A1	313	A	O5'-C5'-C4'	-6.29	99.75	111.70
3	A1	563	A	N7-C8-N9	6.29	116.94	113.80
3	A1	951	G	O4'-C1'-N9	6.29	113.23	108.20
3	A1	1440	U	N3-C4-O4	6.29	123.80	119.40
25	BB	171	U	O4'-C1'-N1	6.29	113.23	108.20
25	BB	682	G	C5-C6-O6	6.29	132.37	128.60
25	BB	861	A	C5-N7-C8	-6.29	100.76	103.90
25	BB	888	C	N3-C4-C5	6.29	124.42	121.90
25	BB	1543	G	C5-C6-N1	6.29	114.64	111.50
25	BB	1945	G	C6-N1-C2	-6.29	121.33	125.10
25	BB	2240	U	N3-C2-O2	-6.29	117.80	122.20
25	BB	2888	C	N1-C2-N3	6.29	123.60	119.20
25	BB	1254	A	N1-C6-N6	-6.29	114.83	118.60
25	BB	1488	C	N3-C2-O2	-6.29	117.50	121.90
25	BB	1808	A	C5-C6-N1	6.29	120.84	117.70
25	BB	1843	C	N3-C4-C5	6.29	124.42	121.90
25	BB	1988	G	C5-C6-N1	6.29	114.64	111.50
25	BB	2249	U	N3-C2-O2	-6.29	117.80	122.20
25	BB	2363	G	N7-C8-N9	6.29	116.24	113.10
25	BB	2763	G	O4'-C4'-C3'	6.29	111.13	106.10
37	BN	261	ARG	NE-CZ-NH2	-6.29	117.16	120.30
55	B6	64	VAL	CA-CB-CG1	6.29	120.33	110.90
1	AA	68	U	O4'-C1'-N1	6.29	113.23	108.20
1	AE	53	G	O4'-C1'-N9	-6.29	103.17	108.20
2	AM	12	U	C4'-C3'-C2'	-6.29	96.31	102.60
3	A1	773	G	C8-N9-C4	-6.29	103.89	106.40
9	AH	63	ARG	NE-CZ-NH2	-6.29	117.16	120.30
24	BA	92	C	N3-C4-N4	-6.29	113.60	118.00
25	BB	99	U	P-O3'-C3'	6.29	127.24	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	177	G	C5'-C4'-O4'	6.29	116.64	109.10
25	BB	247	G	O4'-C1'-N9	6.29	113.23	108.20
25	BB	886	A	C4-C5-C6	-6.29	113.86	117.00
25	BB	1242	U	O4'-C1'-N1	6.29	113.23	108.20
25	BB	1643	G	C2'-C3'-O3'	6.29	123.76	113.70
25	BB	2414	G	C8-N9-C4	-6.29	103.89	106.40
1	AE	26	G	C4'-C3'-C2'	-6.28	96.32	102.60
3	A1	771	G	C6-N1-C2	-6.28	121.33	125.10
25	BB	80	G	C4-C5-C6	-6.28	115.03	118.80
25	BB	472	A	N7-C8-N9	6.28	116.94	113.80
25	BB	534	U	O3'-P-O5'	6.28	115.94	104.00
25	BB	964	C	C2-N3-C4	-6.28	116.76	119.90
25	BB	1103	A	N7-C8-N9	6.28	116.94	113.80
25	BB	1591	A	C5'-C4'-C3'	-6.28	105.94	116.00
25	BB	1966	A	C8-N9-C4	6.28	108.31	105.80
25	BB	2159	G	C8-N9-C4	-6.28	103.89	106.40
25	BB	2461	A	C1'-O4'-C4'	-6.28	104.87	109.90
25	BB	2777	G	C5-N7-C8	-6.28	101.16	104.30
25	BB	2879	A	C6-C5-N7	6.28	136.70	132.30
3	A1	1497	G	C4-N9-C1'	-6.28	118.33	126.50
3	A1	1500	A	C5'-C4'-C3'	-6.28	105.95	116.00
25	BB	111	A	C6-C5-N7	6.28	136.70	132.30
25	BB	458	G	C5-N7-C8	-6.28	101.16	104.30
25	BB	684	G	C6-C5-N7	6.28	134.17	130.40
25	BB	2003	A	C6-C5-N7	6.28	136.70	132.30
25	BB	2023	C	N3-C4-N4	-6.28	113.60	118.00
25	BB	2582	G	C5-C6-N1	6.28	114.64	111.50
3	A1	530	G	C2-N3-C4	6.28	115.04	111.90
3	A1	1310	G	N1-C2-N3	6.28	127.67	123.90
25	BB	218	A	N9-C4-C5	6.28	108.31	105.80
25	BB	306	U	N3-C2-O2	-6.28	117.80	122.20
25	BB	1182	G	O4'-C1'-N9	6.28	113.22	108.20
25	BB	1210	G	N1-C6-O6	-6.28	116.13	119.90
25	BB	1978	A	C4-C5-C6	-6.28	113.86	117.00
25	BB	2328	A	C5-C6-N1	6.28	120.84	117.70
37	BN	79	ARG	NE-CZ-NH1	6.28	123.44	120.30
49	BZ	98	ARG	NE-CZ-NH1	6.28	123.44	120.30
25	BB	407	G	N3-C2-N2	-6.28	115.50	119.90
25	BB	867	C	P-O3'-C3'	6.28	127.23	119.70
25	BB	1600	C	N3-C4-N4	-6.28	113.60	118.00
25	BB	1937	A	C5'-C4'-C3'	-6.28	105.95	116.00
25	BB	2108	A	C2-N3-C4	6.28	113.74	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	B2	7	TYR	CB-CG-CD1	-6.28	117.23	121.00
1	AE	63	C	C2-N3-C4	-6.28	116.76	119.90
2	AM	4	U	C5'-C4'-C3'	6.28	126.04	116.00
3	A1	298	A	N1-C2-N3	-6.28	126.16	129.30
3	A1	689	C	O4'-C1'-N1	6.28	113.22	108.20
3	A1	833	G	C5-C6-N1	6.28	114.64	111.50
3	A1	961	U	O4'-C1'-N1	6.28	113.22	108.20
3	A1	1005	A	C6-C5-N7	6.28	136.69	132.30
3	A1	1285	A	C4-C5-C6	-6.28	113.86	117.00
3	A1	1301	U	P-O3'-C3'	6.28	127.23	119.70
3	A1	1431	A	C5-C6-N6	6.28	128.72	123.70
25	BB	326	G	N1-C6-O6	-6.28	116.13	119.90
25	BB	404	A	C5-C6-N6	6.28	128.72	123.70
25	BB	1343	G	C1'-O4'-C4'	-6.28	104.88	109.90
25	BB	1585	C	C1'-O4'-C4'	-6.28	104.88	109.90
25	BB	1643	G	C4-C5-N7	6.28	113.31	110.80
25	BB	1680	U	O4'-C4'-C3'	6.28	111.12	106.10
25	BB	2066	C	N3-C4-C5	6.28	124.41	121.90
25	BB	2549	G	C6-C5-N7	6.28	134.17	130.40
1	AA	57	G	C6-C5-N7	6.28	134.16	130.40
3	A1	22	G	N1-C2-N3	6.28	127.67	123.90
3	A1	301	G	N9-C4-C5	6.28	107.91	105.40
3	A1	663	A	C3'-C2'-C1'	6.28	106.52	101.50
3	A1	1119	C	C3'-C2'-C1'	6.28	106.52	101.50
3	A1	1464	U	C6-N1-C2	-6.28	117.23	121.00
25	BB	683	U	C1'-O4'-C4'	-6.28	104.88	109.90
25	BB	736	C	N1-C2-N3	6.28	123.59	119.20
25	BB	1456	G	N1-C2-N2	-6.28	110.55	116.20
25	BB	2526	G	N3-C4-N9	6.28	129.76	126.00
3	A1	447	G	N3-C4-C5	-6.27	125.46	128.60
3	A1	1427	C	C2-N3-C4	-6.27	116.76	119.90
25	BB	768	G	N3-C4-C5	-6.27	125.46	128.60
25	BB	1284	A	O4'-C1'-N9	6.27	113.22	108.20
25	BB	1928	A	C5-C6-N6	6.27	128.72	123.70
1	AA	17	U	N3-C4-C5	6.27	118.36	114.60
1	AP	10	G	N3-C4-N9	6.27	129.76	126.00
3	A1	295	C	N3-C4-N4	-6.27	113.61	118.00
3	A1	1288	A	C4-C5-C6	-6.27	113.86	117.00
6	AD	8	ARG	NE-CZ-NH1	6.27	123.44	120.30
25	BB	99	U	P-O5'-C5'	6.27	130.94	120.90
25	BB	620	G	N1-C6-O6	-6.27	116.14	119.90
25	BB	954	G	C6-N1-C2	-6.27	121.34	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2263	C	N3-C2-O2	-6.27	117.51	121.90
25	BB	2300	C	N1-C2-O2	6.27	122.66	118.90
25	BB	2469	A	C5-N7-C8	-6.27	100.76	103.90
3	A1	172	A	C5-N7-C8	-6.27	100.76	103.90
3	A1	502	A	N1-C2-N3	-6.27	126.17	129.30
3	A1	807	A	C5-C6-N6	6.27	128.72	123.70
3	A1	1079	G	C5-C6-O6	6.27	132.36	128.60
3	A1	1495	U	C4-C5-C6	6.27	123.46	119.70
25	BB	926	G	O4'-C1'-N9	6.27	113.22	108.20
25	BB	1740	G	N1-C6-O6	-6.27	116.14	119.90
25	BB	1951	U	N3-C2-O2	-6.27	117.81	122.20
1	AA	49	C	C4'-C3'-C2'	-6.27	96.33	102.60
3	A1	500	G	C6-N1-C2	-6.27	121.34	125.10
3	A1	859	G	C4-C5-C6	-6.27	115.04	118.80
3	A1	982	U	N3-C4-C5	-6.27	110.84	114.60
3	A1	1515	G	C2-N3-C4	6.27	115.03	111.90
25	BB	720	U	C5-C4-O4	6.27	129.66	125.90
25	BB	839	U	C5'-C4'-O4'	6.27	116.62	109.10
25	BB	1213	A	N1-C2-N3	-6.27	126.17	129.30
25	BB	1845	G	N1-C6-O6	-6.27	116.14	119.90
25	BB	2214	C	C6-N1-C2	-6.27	117.79	120.30
25	BB	2229	U	O4'-C1'-C2'	-6.27	99.53	105.80
25	BB	2271	G	C6-N1-C2	-6.27	121.34	125.10
25	BB	2760	C	C4'-C3'-C2'	-6.27	96.33	102.60
1	AE	6	U	N1-C1'-C2'	-6.27	105.11	112.00
3	A1	1482	G	C5-N7-C8	6.27	107.43	104.30
24	BA	23	G	C3'-C2'-C1'	6.27	106.51	101.50
25	BB	1	G	C5'-C4'-C3'	-6.27	105.97	116.00
25	BB	44	A	C8-N9-C4	-6.27	103.29	105.80
25	BB	249	C	N3-C4-C5	6.27	124.41	121.90
25	BB	1566	A	C5'-C4'-C3'	-6.27	105.97	116.00
25	BB	1878	G	C8-N9-C4	-6.27	103.89	106.40
25	BB	1906	G	P-O3'-C3'	6.27	127.22	119.70
25	BB	2340	A	C8-N9-C4	-6.27	103.29	105.80
25	BB	2481	G	C6-N1-C2	-6.27	121.34	125.10
25	BB	2630	G	C3'-C2'-C1'	-6.27	96.48	101.50
3	A1	76	G	C6-N1-C2	-6.27	121.34	125.10
3	A1	364	A	O4'-C1'-N9	-6.27	103.19	108.20
3	A1	1405	G	C6-N1-C2	-6.27	121.34	125.10
25	BB	60	G	N1-C2-N3	6.27	127.66	123.90
25	BB	2033	A	C4-C5-C6	-6.27	113.87	117.00
25	BB	2817	U	C5'-C4'-C3'	-6.27	105.97	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	54	C	C3'-C2'-C1'	-6.26	96.49	101.50
3	A1	532	A	O4'-C1'-N9	6.26	113.21	108.20
17	AR	13	ARG	CD-NE-CZ	6.26	132.37	123.60
25	BB	521	U	OP1-P-OP2	-6.26	110.20	119.60
25	BB	770	G	N7-C8-N9	6.26	116.23	113.10
25	BB	945	A	N1-C2-N3	-6.26	126.17	129.30
25	BB	1734	G	O3'-P-O5'	6.26	115.90	104.00
25	BB	1854	A	C2-N3-C4	6.26	113.73	110.60
25	BB	1949	G	O4'-C1'-N9	6.26	113.21	108.20
25	BB	2382	G	C6-N1-C2	-6.26	121.34	125.10
25	BB	2662	A	N3-C4-N9	-6.26	122.39	127.40
25	BB	2665	A	O4'-C1'-N9	-6.26	103.19	108.20
25	BB	2740	A	C6-C5-N7	6.26	136.69	132.30
36	BM	73	ARG	NE-CZ-NH2	6.26	123.43	120.30
37	BN	68	ARG	NH1-CZ-NH2	-6.26	112.51	119.40
3	A1	1208	C	C2-N3-C4	-6.26	116.77	119.90
3	A1	1256	A	C4'-C3'-C2'	6.26	108.86	102.60
25	BB	111	A	C5-C6-N6	6.26	128.71	123.70
25	BB	873	C	N3-C4-C5	6.26	124.41	121.90
25	BB	1048	A	C3'-C2'-C1'	-6.26	96.49	101.50
25	BB	1720	U	N1-C2-N3	6.26	118.66	114.90
25	BB	2880	C	C2-N3-C4	-6.26	116.77	119.90
1	AA	3	G	C2-N3-C4	6.26	115.03	111.90
3	A1	1448	C	N1-C2-O2	6.26	122.66	118.90
24	BA	75	G	O4'-C1'-N9	6.26	113.21	108.20
25	BB	356	G	C6-C5-N7	6.26	134.16	130.40
25	BB	1392	A	C5-N7-C8	-6.26	100.77	103.90
25	BB	1979	U	C5'-C4'-C3'	-6.26	105.98	116.00
25	BB	2679	A	C5-C6-N6	6.26	128.71	123.70
25	BB	2736	A	C4'-C3'-C2'	-6.26	96.34	102.60
1	AA	22	G	N3-C2-N2	-6.26	115.52	119.90
3	A1	36	C	N1-C2-N3	6.26	123.58	119.20
3	A1	442	G	C3'-C2'-C1'	6.26	106.51	101.50
3	A1	560	A	O4'-C1'-N9	6.26	113.21	108.20
3	A1	580	C	O4'-C1'-C2'	-6.26	99.54	105.80
3	A1	1172	C	N1-C2-N3	6.26	123.58	119.20
3	A1	1268	G	C5-C6-N1	6.26	114.63	111.50
3	A1	1344	C	C2-N3-C4	-6.26	116.77	119.90
25	BB	158	U	C5-C6-N1	-6.26	119.57	122.70
25	BB	170	U	C4-C5-C6	6.26	123.45	119.70
25	BB	466	A	C5-N7-C8	-6.26	100.77	103.90
25	BB	865	C	N3-C4-C5	6.26	124.40	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1535	A	C4-C5-N7	6.26	113.83	110.70
25	BB	2204	G	N9-C4-C5	6.26	107.90	105.40
3	A1	78	A	N1-C2-N3	-6.26	126.17	129.30
3	A1	419	C	O4'-C4'-C3'	-6.26	97.74	104.00
25	BB	601	C	C5'-C4'-O4'	6.26	116.61	109.10
25	BB	834	G	N1-C2-N3	6.26	127.66	123.90
25	BB	852	U	N3-C2-O2	-6.26	117.82	122.20
25	BB	1021	A	C5-C6-N1	6.26	120.83	117.70
25	BB	1437	C	C4'-C3'-C2'	-6.26	96.34	102.60
25	BB	2571	U	C5-C6-N1	-6.26	119.57	122.70
25	BB	2619	C	N3-C4-C5	6.26	124.40	121.90
1	AA	64	A	C5-C6-N6	6.26	128.71	123.70
1	AE	53	G	N3-C2-N2	-6.26	115.52	119.90
2	AM	3	U	C3'-C2'-C1'	-6.26	96.50	101.50
3	A1	96	U	N3-C2-O2	-6.26	117.82	122.20
3	A1	951	G	C5-C6-N1	6.26	114.63	111.50
24	BA	63	C	N1-C2-N3	6.26	123.58	119.20
25	BB	249	C	C1'-O4'-C4'	-6.26	104.89	109.90
25	BB	256	A	C4-C5-C6	-6.26	113.87	117.00
25	BB	649	G	C4-C5-C6	-6.26	115.05	118.80
25	BB	1300	G	C8-N9-C4	-6.26	103.90	106.40
25	BB	2709	G	N3-C4-N9	6.26	129.75	126.00
25	BB	2712	C	N1-C1'-C2'	6.26	122.13	114.00
37	BN	213	ARG	NH1-CZ-NH2	-6.26	112.52	119.40
25	BB	399	U	O4'-C1'-N1	6.25	113.20	108.20
25	BB	911	A	C6-C5-N7	6.25	136.68	132.30
25	BB	1922	G	C4-C5-C6	-6.25	115.05	118.80
25	BB	2117	A	C4-C5-C6	-6.25	113.87	117.00
25	BB	2315	G	N1-C6-O6	-6.25	116.15	119.90
1	AA	71	G	N7-C8-N9	6.25	116.23	113.10
3	A1	854	U	C1'-O4'-C4'	-6.25	104.90	109.90
3	A1	948	C	C6-N1-C2	-6.25	117.80	120.30
25	BB	296	U	C3'-C2'-C1'	-6.25	96.50	101.50
25	BB	300	A	C5-C6-N1	6.25	120.83	117.70
25	BB	569	U	N1-C2-N3	6.25	118.65	114.90
25	BB	1774	C	O5'-C5'-C4'	-6.25	99.82	111.70
25	BB	1985	C	C2-N3-C4	-6.25	116.77	119.90
25	BB	2092	U	C6-N1-C2	6.25	124.75	121.00
3	A1	70	U	N3-C2-O2	-6.25	117.82	122.20
3	A1	559	A	C2-N3-C4	6.25	113.73	110.60
3	A1	1130	A	O3'-P-O5'	-6.25	92.12	104.00
3	A1	1444	U	N1-C2-O2	6.25	127.18	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	100	U	P-O3'-C3'	6.25	127.20	119.70
25	BB	999	U	N1-C2-N3	6.25	118.65	114.90
25	BB	1044	C	C2-N3-C4	-6.25	116.77	119.90
25	BB	1232	G	C8-N9-C1'	6.25	135.13	127.00
25	BB	1676	A	O4'-C4'-C3'	6.25	111.10	106.10
25	BB	2337	G	C5-C6-O6	6.25	132.35	128.60
25	BB	2504	U	C5-C6-N1	-6.25	119.57	122.70
25	BB	2664	G	O4'-C1'-C2'	6.25	113.23	107.60
3	A1	351	G	N3-C2-N2	-6.25	115.53	119.90
3	A1	422	C	C2-N1-C1'	6.25	125.68	118.80
3	A1	647	C	O4'-C1'-N1	6.25	113.20	108.20
25	BB	372	G	C5-C6-O6	6.25	132.35	128.60
25	BB	952	G	C3'-C2'-C1'	-6.25	96.50	101.50
1	AE	56	C	N1-C2-O2	6.25	122.65	118.90
3	A1	1098	C	C6-N1-C2	-6.25	117.80	120.30
3	A1	1341	U	O4'-C1'-N1	6.25	113.20	108.20
3	A1	1447	A	C4-C5-C6	-6.25	113.88	117.00
22	AW	10	ARG	NE-CZ-NH2	6.25	123.42	120.30
25	BB	41	C	N1-C2-O2	6.25	122.65	118.90
25	BB	327	G	P-O3'-C3'	6.25	127.20	119.70
25	BB	1631	G	N1-C2-N3	6.25	127.65	123.90
25	BB	1822	C	C5'-C4'-O4'	6.25	116.60	109.10
25	BB	1988	G	N1-C6-O6	-6.25	116.15	119.90
25	BB	2385	C	N1-C2-O2	6.25	122.65	118.90
27	BD	78	ARG	NE-CZ-NH2	-6.25	117.18	120.30
32	BI	61	ARG	NH1-CZ-NH2	-6.25	112.53	119.40
3	A1	250	A	C4-C5-C6	-6.25	113.88	117.00
3	A1	656	G	N3-C4-N9	6.25	129.75	126.00
3	A1	1413	A	N9-C4-C5	6.25	108.30	105.80
25	BB	337	C	C2-N3-C4	-6.25	116.78	119.90
25	BB	707	G	N1-C6-O6	-6.25	116.15	119.90
25	BB	870	U	N1-C1'-C2'	-6.25	105.13	112.00
25	BB	1156	A	C4-C5-C6	-6.25	113.88	117.00
25	BB	1651	G	C1'-O4'-C4'	-6.25	104.90	109.90
25	BB	2635	A	O4'-C1'-N9	-6.25	103.20	108.20
1	AA	37	G	N9-C1'-C2'	-6.25	105.13	112.00
3	A1	76	G	N3-C2-N2	-6.25	115.53	119.90
3	A1	166	U	C3'-C2'-C1'	-6.25	96.50	101.50
3	A1	545	C	N3-C2-O2	-6.25	117.53	121.90
3	A1	708	C	N1-C2-O2	6.25	122.65	118.90
3	A1	747	A	C5-C6-N6	6.25	128.70	123.70
3	A1	1412	C	C2-N3-C4	-6.25	116.78	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
8	AG	64	ARG	NH1-CZ-NH2	-6.25	112.53	119.40
25	BB	436	C	C5-C6-N1	-6.25	117.88	121.00
25	BB	1445	G	C5-C6-N1	6.25	114.62	111.50
25	BB	2656	U	C1'-O4'-C4'	-6.25	104.90	109.90
48	BY	169	ARG	NH1-CZ-NH2	-6.25	112.53	119.40
1	AA	1	G	C5-C6-N1	6.24	114.62	111.50
3	A1	156	C	N1-C2-O2	6.24	122.65	118.90
3	A1	163	C	O4'-C4'-C3'	-6.24	97.76	104.00
3	A1	521	G	C5'-C4'-O4'	6.24	116.59	109.10
3	A1	734	G	N9-C1'-C2'	-6.24	105.13	112.00
3	A1	890	G	C1'-O4'-C4'	-6.24	104.91	109.90
3	A1	1482	G	C4'-C3'-C2'	-6.24	96.36	102.60
25	BB	205	G	C5'-C4'-O4'	-6.24	101.61	109.10
25	BB	501	A	C2-N3-C4	6.24	113.72	110.60
25	BB	1685	C	C2-N3-C4	-6.24	116.78	119.90
3	A1	481	G	C3'-C2'-C1'	6.24	106.49	101.50
5	AC	35	ASP	CB-CG-OD2	-6.24	112.68	118.30
24	BA	76	G	C6-N1-C2	-6.24	121.36	125.10
25	BB	379	G	N3-C2-N2	-6.24	115.53	119.90
25	BB	1988	G	C4'-C3'-C2'	-6.24	96.36	102.60
25	BB	2472	G	C5-C6-O6	6.24	132.34	128.60
1	AP	32	C	C6-N1-C2	-6.24	117.80	120.30
3	A1	31	G	N1-C2-N2	-6.24	110.58	116.20
3	A1	222	C	O4'-C1'-N1	6.24	113.19	108.20
3	A1	767	A	C5-C6-N1	6.24	120.82	117.70
3	A1	956	U	C4-C5-C6	6.24	123.44	119.70
3	A1	1150	A	N9-C4-C5	6.24	108.30	105.80
25	BB	32	C	N1-C2-N3	6.24	123.57	119.20
25	BB	382	A	N9-C4-C5	-6.24	103.30	105.80
25	BB	626	A	C4'-C3'-C2'	6.24	108.84	102.60
25	BB	660	C	O4'-C1'-N1	6.24	113.19	108.20
25	BB	965	C	C3'-C2'-C1'	6.24	106.49	101.50
25	BB	1141	U	N3-C2-O2	-6.24	117.83	122.20
25	BB	1636	U	C1'-O4'-C4'	-6.24	104.91	109.90
25	BB	1689	A	C6-C5-N7	6.24	136.67	132.30
25	BB	2546	U	C5'-C4'-O4'	6.24	116.59	109.10
25	BB	2788	C	N3-C4-N4	-6.24	113.63	118.00
1	AA	19	G	N3-C2-N2	-6.24	115.53	119.90
1	AA	47	U	O4'-C1'-N1	6.24	113.19	108.20
1	AE	18	G	N1-C6-O6	-6.24	116.16	119.90
1	AE	36	A	C5-C6-N6	6.24	128.69	123.70
3	A1	1233	G	N9-C4-C5	6.24	107.89	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1485	U	N1-C1'-C2'	6.24	122.11	114.00
3	A1	1530	G	O4'-C4'-C3'	6.24	111.09	106.10
25	BB	48	G	C5-C6-N1	6.24	114.62	111.50
25	BB	365	U	N3-C2-O2	-6.24	117.83	122.20
25	BB	446	G	C3'-C2'-C1'	6.24	106.49	101.50
25	BB	501	A	C4-C5-C6	-6.24	113.88	117.00
25	BB	639	U	N1-C1'-C2'	-6.24	105.14	112.00
25	BB	645	C	C6-N1-C2	-6.24	117.81	120.30
25	BB	838	C	C5-C4-N4	6.24	124.57	120.20
25	BB	996	A	C4-C5-C6	-6.24	113.88	117.00
25	BB	1661	G	N7-C8-N9	6.24	116.22	113.10
25	BB	2494	G	N1-C6-O6	-6.24	116.16	119.90
40	BQ	49	ASP	CB-CG-OD2	-6.24	112.68	118.30
1	AE	25	C	N3-C2-O2	-6.24	117.53	121.90
25	BB	836	G	C5-C6-N1	6.24	114.62	111.50
25	BB	1220	G	C2-N3-C4	6.24	115.02	111.90
25	BB	1518	C	C5'-C4'-O4'	6.24	116.58	109.10
1	AE	60	C	N1-C2-N3	6.24	123.56	119.20
3	A1	26	A	C2-N3-C4	6.24	113.72	110.60
3	A1	721	G	N1-C6-O6	-6.24	116.16	119.90
25	BB	225	C	N1-C2-O2	6.24	122.64	118.90
25	BB	411	G	N1-C2-N3	6.24	127.64	123.90
25	BB	578	G	C6-N1-C2	-6.24	121.36	125.10
25	BB	922	C	C1'-O4'-C4'	-6.24	104.91	109.90
25	BB	1128	G	C5-C6-N1	6.24	114.62	111.50
25	BB	1766	G	C4-C5-N7	-6.24	108.31	110.80
25	BB	1790	C	N1-C2-N3	6.24	123.56	119.20
25	BB	2070	A	C6-N1-C2	-6.24	114.86	118.60
25	BB	2381	A	C4-C5-C6	-6.24	113.88	117.00
1	AA	18	G	N1-C6-O6	-6.23	116.16	119.90
1	AP	42	G	C2-N3-C4	6.23	115.02	111.90
25	BB	185	G	C5-C6-N1	6.23	114.62	111.50
25	BB	646	U	N3-C2-O2	-6.23	117.84	122.20
25	BB	888	C	C4'-C3'-C2'	-6.23	96.37	102.60
25	BB	2112	G	N3-C4-C5	-6.23	125.48	128.60
25	BB	2133	G	C2-N3-C4	6.23	115.02	111.90
25	BB	2715	C	N3-C2-O2	-6.23	117.54	121.90
54	B5	122	GLU	OE1-CD-OE2	-6.23	115.82	123.30
1	AE	60	C	C5-C4-N4	6.23	124.56	120.20
3	A1	29	U	O4'-C1'-N1	6.23	113.19	108.20
3	A1	284	C	C5-C4-N4	6.23	124.56	120.20
3	A1	1062	U	C5'-C4'-O4'	-6.23	101.62	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	15	A	C2-N3-C4	6.23	113.72	110.60
25	BB	9	G	N3-C4-C5	-6.23	125.48	128.60
25	BB	371	A	C5-C6-N1	6.23	120.82	117.70
25	BB	976	G	C5-C6-O6	6.23	132.34	128.60
25	BB	1535	A	C2-N3-C4	6.23	113.72	110.60
25	BB	1591	A	C5-N7-C8	-6.23	100.78	103.90
25	BB	1999	C	C5-C6-N1	-6.23	117.88	121.00
25	BB	2107	G	N7-C8-N9	6.23	116.22	113.10
25	BB	2338	C	O4'-C1'-N1	6.23	113.19	108.20
3	A1	141	G	C1'-O4'-C4'	-6.23	104.92	109.90
3	A1	199	A	O3'-P-O5'	6.23	115.84	104.00
3	A1	583	A	O4'-C1'-N9	6.23	113.18	108.20
3	A1	892	A	C6-C5-N7	6.23	136.66	132.30
3	A1	1171	A	C2-N3-C4	6.23	113.72	110.60
3	A1	1423	G	C1'-O4'-C4'	-6.23	104.92	109.90
3	A1	1534	A	C6-N1-C2	-6.23	114.86	118.60
24	BA	49	C	C3'-C2'-C1'	6.23	106.48	101.50
25	BB	2714	G	C2-N3-C4	6.23	115.02	111.90
3	A1	1200	C	C2-N3-C4	-6.23	116.78	119.90
25	BB	79	C	N3-C4-C5	6.23	124.39	121.90
25	BB	108	G	N3-C4-C5	-6.23	125.49	128.60
25	BB	1228	G	O4'-C1'-N9	-6.23	103.22	108.20
25	BB	2248	C	N3-C4-N4	-6.23	113.64	118.00
25	BB	2271	G	N1-C6-O6	-6.23	116.16	119.90
1	AA	20	G	O5'-P-OP1	6.23	118.17	110.70
1	AE	32	C	N3-C2-O2	-6.23	117.54	121.90
2	AM	7	U	O4'-C1'-N1	6.23	113.18	108.20
3	A1	149	A	C3'-C2'-C1'	6.23	106.48	101.50
3	A1	163	C	N1-C2-O2	6.23	122.64	118.90
3	A1	596	A	C5-C6-N1	6.23	120.81	117.70
3	A1	1263	C	N1-C2-N3	6.23	123.56	119.20
25	BB	155	A	C6-N1-C2	-6.23	114.86	118.60
25	BB	538	A	C2-N3-C4	6.23	113.71	110.60
25	BB	552	U	C5-C6-N1	-6.23	119.59	122.70
25	BB	612	G	O4'-C4'-C3'	6.23	111.08	106.10
25	BB	875	G	C6-N1-C2	-6.23	121.36	125.10
25	BB	1086	A	N1-C2-N3	-6.23	126.19	129.30
25	BB	1093	G	N1-C2-N2	-6.23	110.59	116.20
25	BB	1273	U	N1-C2-O2	6.23	127.16	122.80
25	BB	1373	A	C6-C5-N7	6.23	136.66	132.30
25	BB	1828	G	C4'-C3'-C2'	-6.23	96.37	102.60
25	BB	2205	A	C4'-C3'-C2'	-6.23	96.37	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	49	C	C3'-C2'-C1'	-6.23	96.52	101.50
3	A1	1384	C	C2-N3-C4	-6.23	116.79	119.90
3	A1	1534	A	C8-N9-C4	-6.23	103.31	105.80
24	BA	107	G	C6-C5-N7	6.23	134.14	130.40
25	BB	915	C	O4'-C1'-N1	6.23	113.18	108.20
25	BB	1175	A	C2'-C3'-O3'	6.23	123.66	113.70
25	BB	1532	A	N9-C4-C5	-6.23	103.31	105.80
25	BB	2100	G	N3-C4-C5	-6.23	125.49	128.60
3	A1	637	C	C2-N3-C4	-6.22	116.79	119.90
3	A1	651	C	C5-C6-N1	-6.22	117.89	121.00
25	BB	26	G	O4'-C1'-N9	-6.22	103.22	108.20
25	BB	224	U	O4'-C1'-N1	6.22	113.18	108.20
25	BB	465	G	N1-C6-O6	-6.22	116.17	119.90
25	BB	638	G	N3-C4-C5	-6.22	125.49	128.60
25	BB	696	G	N1-C6-O6	-6.22	116.17	119.90
25	BB	2067	G	N3-C2-N2	-6.22	115.54	119.90
25	BB	2379	G	N3-C4-C5	-6.22	125.49	128.60
25	BB	2650	U	C5-C4-O4	6.22	129.63	125.90
25	BB	2668	G	N1-C2-N3	6.22	127.64	123.90
25	BB	2805	C	N1-C2-O2	6.22	122.64	118.90
25	BB	2870	C	N3-C4-N4	-6.22	113.64	118.00
3	A1	728	A	C4'-C3'-C2'	-6.22	96.38	102.60
3	A1	877	G	N3-C2-N2	-6.22	115.54	119.90
3	A1	1037	C	C4'-C3'-C2'	-6.22	96.38	102.60
3	A1	1282	C	C4-C5-C6	-6.22	114.29	117.40
24	BA	13	G	C5-C6-N1	6.22	114.61	111.50
25	BB	870	U	C4'-C3'-C2'	-6.22	96.38	102.60
25	BB	1338	G	P-O3'-C3'	6.22	127.17	119.70
25	BB	1375	U	N3-C2-O2	-6.22	117.84	122.20
25	BB	1935	G	O4'-C1'-C2'	6.22	113.20	107.60
25	BB	2220	U	C4-C5-C6	6.22	123.43	119.70
25	BB	2889	C	O4'-C1'-N1	6.22	113.18	108.20
25	BB	755	U	N3-C2-O2	-6.22	117.84	122.20
25	BB	1811	G	N1-C6-O6	-6.22	116.17	119.90
1	AE	24	G	C6-C5-N7	6.22	134.13	130.40
1	AE	67	A	C3'-C2'-C1'	-6.22	96.52	101.50
3	A1	272	C	N3-C4-N4	-6.22	113.65	118.00
3	A1	524	G	C1'-O4'-C4'	-6.22	104.92	109.90
3	A1	666	G	N1-C2-N3	6.22	127.63	123.90
3	A1	823	C	C5-C4-N4	-6.22	115.85	120.20
3	A1	869	G	N1-C6-O6	-6.22	116.17	119.90
3	A1	1139	G	C8-N9-C4	-6.22	103.91	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	532	A	C6-C5-N7	6.22	136.65	132.30
25	BB	752	A	C4-C5-C6	-6.22	113.89	117.00
25	BB	1430	G	N3-C2-N2	-6.22	115.55	119.90
25	BB	1680	U	N1-C2-N3	6.22	118.63	114.90
25	BB	1801	A	C5-C6-N6	6.22	128.68	123.70
25	BB	1939	U	C3'-C2'-C1'	6.22	106.47	101.50
25	BB	2504	U	N1-C2-N3	6.22	118.63	114.90
25	BB	2553	G	N7-C8-N9	6.22	116.21	113.10
25	BB	2737	G	C4'-C3'-C2'	-6.22	96.38	102.60
25	BB	2810	A	N1-C6-N6	-6.22	114.87	118.60
25	BB	2888	C	N1-C2-O2	6.22	122.63	118.90
3	A1	25	C	C5-C4-N4	6.22	124.55	120.20
3	A1	353	A	N9-C1'-C2'	-6.22	105.16	112.00
3	A1	376	G	C5-C6-O6	6.22	132.33	128.60
3	A1	1505	G	P-O3'-C3'	6.22	127.16	119.70
25	BB	638	G	C2-N3-C4	6.22	115.01	111.90
25	BB	953	G	N3-C4-C5	-6.22	125.49	128.60
25	BB	1096	A	O4'-C1'-N9	-6.22	103.22	108.20
25	BB	1137	G	N1-C6-O6	-6.22	116.17	119.90
25	BB	2028	U	C2-N3-C4	-6.22	123.27	127.00
25	BB	2283	C	C4'-C3'-C2'	-6.22	96.38	102.60
1	AA	67	A	O5'-P-OP2	-6.22	100.10	105.70
1	AE	34	G	C5-C6-N1	6.22	114.61	111.50
3	A1	90	C	N3-C2-O2	-6.22	117.55	121.90
3	A1	200	G	C5-C6-N1	6.22	114.61	111.50
3	A1	768	A	C6-C5-N7	6.22	136.65	132.30
3	A1	808	C	O4'-C1'-N1	6.22	113.17	108.20
24	BA	14	U	N1-C1'-C2'	-6.22	105.16	112.00
25	BB	800	A	C5-C6-N6	6.22	128.67	123.70
25	BB	988	A	C6-C5-N7	6.22	136.65	132.30
25	BB	1659	G	C5-C6-N1	6.22	114.61	111.50
25	BB	2673	G	C6-C5-N7	6.22	134.13	130.40
25	BB	2724	U	N3-C2-O2	-6.22	117.85	122.20
3	A1	121	U	O4'-C4'-C3'	6.21	111.07	106.10
3	A1	187	G	C6-N1-C2	-6.21	121.37	125.10
3	A1	453	G	C3'-C2'-C1'	6.21	106.47	101.50
3	A1	773	G	C6-N1-C2	-6.21	121.37	125.10
3	A1	838	G	N3-C2-N2	6.21	124.25	119.90
3	A1	952	U	C4-C5-C6	6.21	123.43	119.70
3	A1	1028	C	O4'-C1'-N1	6.21	113.17	108.20
3	A1	1029	U	N3-C2-O2	-6.21	117.85	122.20
3	A1	1043	G	N1-C2-N3	6.21	127.63	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1085	U	N1-C2-N3	6.21	118.63	114.90
3	A1	1488	G	N1-C6-O6	-6.21	116.17	119.90
22	AW	17	ARG	NE-CZ-NH1	6.21	123.41	120.30
25	BB	117	G	C8-N9-C4	-6.21	103.91	106.40
25	BB	207	A	C6-C5-N7	6.21	136.65	132.30
25	BB	222	A	N1-C6-N6	-6.21	114.87	118.60
25	BB	572	A	O4'-C1'-N9	6.21	113.17	108.20
25	BB	835	C	N3-C4-C5	6.21	124.39	121.90
25	BB	1139	G	O4'-C1'-N9	-6.21	103.23	108.20
25	BB	1411	U	P-O3'-C3'	6.21	127.16	119.70
25	BB	1713	A	C1'-O4'-C4'	-6.21	104.93	109.90
25	BB	2127	G	C4'-C3'-C2'	-6.21	96.39	102.60
25	BB	2258	C	N3-C2-O2	-6.21	117.55	121.90
25	BB	2637	U	N3-C2-O2	-6.21	117.85	122.20
49	BZ	173	ASP	CB-CG-OD2	6.21	123.89	118.30
1	AA	21	A	C4-C5-C6	-6.21	113.89	117.00
1	AA	32	C	C5-C4-N4	6.21	124.55	120.20
1	AE	53	G	C6-N1-C2	-6.21	121.37	125.10
3	A1	1140	C	O4'-C4'-C3'	6.21	111.07	106.10
25	BB	146	A	C5-C6-N1	6.21	120.81	117.70
25	BB	196	A	O4'-C1'-C2'	-6.21	99.59	105.80
25	BB	413	C	C4-C5-C6	-6.21	114.29	117.40
25	BB	673	C	N3-C2-O2	-6.21	117.55	121.90
25	BB	1016	G	C2-N3-C4	6.21	115.01	111.90
25	BB	1613	G	C6-C5-N7	6.21	134.13	130.40
25	BB	1648	U	C5-C4-O4	6.21	129.63	125.90
25	BB	1702	G	C5-C6-N1	6.21	114.61	111.50
25	BB	2519	U	C5-C4-O4	-6.21	122.17	125.90
25	BB	2586	U	C5-C4-O4	6.21	129.63	125.90
1	AP	46	G	C5'-C4'-O4'	6.21	116.55	109.10
3	A1	577	G	N7-C8-N9	6.21	116.21	113.10
3	A1	718	A	C8-N9-C4	6.21	108.28	105.80
3	A1	721	G	C4-C5-C6	-6.21	115.07	118.80
3	A1	1103	C	N3-C2-O2	-6.21	117.55	121.90
3	A1	1197	A	C6-C5-N7	6.21	136.65	132.30
3	A1	1240	U	N3-C2-O2	-6.21	117.85	122.20
3	A1	1295	U	C5'-C4'-O4'	6.21	116.56	109.10
3	A1	1523	G	C5-C6-N1	6.21	114.61	111.50
24	BA	72	G	C8-N9-C4	-6.21	103.92	106.40
25	BB	360	U	C2-N3-C4	-6.21	123.27	127.00
25	BB	463	G	N1-C6-O6	-6.21	116.17	119.90
25	BB	479	A	N9-C4-C5	6.21	108.28	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1672	A	P-O3'-C3'	6.21	127.16	119.70
25	BB	1728	C	O4'-C1'-N1	6.21	113.17	108.20
25	BB	2292	U	C6-N1-C2	-6.21	117.27	121.00
25	BB	2458	G	C6-N1-C2	-6.21	121.37	125.10
1	AA	41	U	C1'-O4'-C4'	6.21	114.87	109.90
1	AP	65	G	C4'-C3'-C2'	-6.21	96.39	102.60
3	A1	211	G	C4-N9-C1'	6.21	134.57	126.50
3	A1	974	A	C5-C6-N6	6.21	128.67	123.70
3	A1	1225	A	O4'-C1'-N9	6.21	113.17	108.20
3	A1	1377	A	C6-C5-N7	6.21	136.65	132.30
25	BB	199	A	C6-C5-N7	6.21	136.65	132.30
55	B6	27	ARG	NE-CZ-NH1	6.21	123.41	120.30
1	AP	27	C	C6-N1-C2	-6.21	117.82	120.30
3	A1	8	A	P-O3'-C3'	6.21	127.15	119.70
3	A1	1208	C	O4'-C1'-N1	6.21	113.17	108.20
24	BA	31	C	N1-C2-N3	6.21	123.55	119.20
25	BB	383	C	C4-C5-C6	6.21	120.50	117.40
25	BB	387	U	C5'-C4'-C3'	-6.21	106.07	116.00
25	BB	662	G	C5-C6-N1	6.21	114.60	111.50
25	BB	898	C	O4'-C1'-C2'	6.21	113.19	107.60
25	BB	1498	C	C1'-O4'-C4'	-6.21	104.93	109.90
25	BB	1942	C	N3-C4-N4	-6.21	113.65	118.00
25	BB	2029	G	C5-C6-N1	6.21	114.61	111.50
25	BB	2191	A	C5'-C4'-C3'	-6.21	106.06	116.00
25	BB	2518	A	C4-C5-C6	-6.21	113.90	117.00
25	BB	2640	G	C4'-C3'-C2'	-6.21	96.39	102.60
25	BB	2756	U	O4'-C1'-C2'	-6.21	99.59	105.80
1	AA	51	G	C5-N7-C8	-6.21	101.20	104.30
3	A1	422	C	C6-N1-C1'	-6.21	113.35	120.80
3	A1	509	A	N1-C2-N3	-6.21	126.20	129.30
3	A1	515	G	C1'-O4'-C4'	-6.21	104.94	109.90
3	A1	863	U	O4'-C1'-N1	6.21	113.17	108.20
3	A1	986	U	N1-C1'-C2'	-6.21	105.17	112.00
3	A1	1123	U	N3-C2-O2	-6.21	117.86	122.20
3	A1	1279	G	O4'-C4'-C3'	6.21	111.06	106.10
24	BA	51	G	N7-C8-N9	6.21	116.20	113.10
24	BA	54	G	N3-C4-N9	6.21	129.72	126.00
25	BB	971	G	N7-C8-N9	6.21	116.20	113.10
25	BB	1276	A	C4-C5-C6	-6.21	113.90	117.00
25	BB	1309	G	C6-N1-C2	-6.21	121.38	125.10
25	BB	1845	G	O4'-C1'-N9	6.21	113.17	108.20
25	BB	2076	U	O4'-C1'-N1	6.21	113.17	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2543	G	N7-C8-N9	6.21	116.20	113.10
25	BB	2765	A	C4-C5-C6	-6.21	113.90	117.00
3	A1	486	U	O4'-C4'-C3'	6.21	111.06	106.10
25	BB	2649	C	N3-C4-N4	-6.21	113.66	118.00
25	BB	2849	U	N3-C2-O2	-6.21	117.86	122.20
3	A1	441	A	N9-C1'-C2'	6.20	122.06	114.00
3	A1	496	A	C5-N7-C8	-6.20	100.80	103.90
3	A1	814	A	C8-N9-C4	-6.20	103.32	105.80
3	A1	827	U	C6-N1-C2	-6.20	117.28	121.00
3	A1	968	A	C6-N1-C2	-6.20	114.88	118.60
3	A1	988	G	O4'-C1'-N9	6.20	113.16	108.20
3	A1	1028	C	N1-C2-N3	6.20	123.54	119.20
3	A1	1254	A	C4-C5-N7	6.20	113.80	110.70
3	A1	1312	G	N1-C6-O6	-6.20	116.18	119.90
3	A1	1482	G	O4'-C1'-C2'	-6.20	99.60	105.80
25	BB	523	C	C5-C4-N4	6.20	124.54	120.20
25	BB	894	U	C5-C6-N1	-6.20	119.60	122.70
25	BB	1192	G	C5-N7-C8	-6.20	101.20	104.30
25	BB	2225	A	O4'-C4'-C3'	6.20	111.06	106.10
25	BB	2384	U	N1-C2-N3	6.20	118.62	114.90
25	BB	2653	U	N3-C4-O4	6.20	123.74	119.40
3	A1	513	C	N3-C2-O2	-6.20	117.56	121.90
3	A1	1094	G	C4-C5-C6	-6.20	115.08	118.80
25	BB	149	A	C6-C5-N7	6.20	136.64	132.30
25	BB	175	G	N1-C2-N3	6.20	127.62	123.90
25	BB	192	C	O5'-P-OP1	-6.20	100.12	105.70
25	BB	242	G	C1'-O4'-C4'	-6.20	104.94	109.90
25	BB	253	C	C5'-C4'-C3'	-6.20	106.08	116.00
25	BB	414	C	C5'-C4'-C3'	-6.20	106.08	116.00
25	BB	606	U	O4'-C1'-N1	6.20	113.16	108.20
25	BB	655	A	N3-C4-C5	6.20	131.14	126.80
25	BB	945	A	C5-C6-N1	6.20	120.80	117.70
25	BB	1845	G	C5-C6-N1	6.20	114.60	111.50
25	BB	2056	G	O5'-C5'-C4'	6.20	123.48	111.70
1	AP	41	U	C4'-C3'-C2'	-6.20	96.40	102.60
3	A1	286	C	O4'-C1'-N1	6.20	113.16	108.20
3	A1	630	A	N1-C2-N3	6.20	132.40	129.30
3	A1	633	G	N1-C6-O6	-6.20	116.18	119.90
3	A1	1080	A	C5-N7-C8	-6.20	100.80	103.90
3	A1	1313	U	C4-C5-C6	6.20	123.42	119.70
25	BB	611	C	C1'-O4'-C4'	-6.20	104.94	109.90
25	BB	1269	A	C4-C5-C6	-6.20	113.90	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2268	A	N9-C4-C5	6.20	108.28	105.80
25	BB	2274	A	C1'-O4'-C4'	-6.20	104.94	109.90
25	BB	2283	C	O4'-C1'-N1	6.20	113.16	108.20
37	BN	202	ARG	NH1-CZ-NH2	-6.20	112.58	119.40
1	AA	57	G	C5'-C4'-O4'	6.20	116.54	109.10
3	A1	447	G	N1-C2-N2	-6.20	110.62	116.20
3	A1	675	A	C3'-C2'-C1'	6.20	106.46	101.50
3	A1	874	G	N3-C4-C5	-6.20	125.50	128.60
3	A1	1044	A	O4'-C1'-C2'	-6.20	99.60	105.80
25	BB	455	C	N3-C4-N4	-6.20	113.66	118.00
25	BB	533	G	O4'-C1'-N9	6.20	113.16	108.20
25	BB	1248	G	C6-N1-C2	-6.20	121.38	125.10
25	BB	1290	C	O4'-C1'-N1	6.20	113.16	108.20
25	BB	1448	G	N3-C4-C5	-6.20	125.50	128.60
25	BB	1585	C	C5-C6-N1	-6.20	117.90	121.00
25	BB	1800	C	N3-C4-C5	6.20	124.38	121.90
25	BB	1817	G	C8-N9-C4	-6.20	103.92	106.40
25	BB	2457	U	C4-C5-C6	6.20	123.42	119.70
3	A1	324	G	N1-C2-N3	6.20	127.62	123.90
3	A1	376	G	N9-C4-C5	6.20	107.88	105.40
3	A1	528	C	O4'-C1'-N1	-6.20	103.24	108.20
3	A1	719	C	O4'-C1'-N1	-6.20	103.24	108.20
25	BB	44	A	C4-C5-C6	-6.20	113.90	117.00
25	BB	173	A	C6-C5-N7	6.20	136.64	132.30
25	BB	1641	A	O4'-C4'-C3'	-6.20	97.80	104.00
25	BB	2395	C	N1-C2-O2	6.20	122.62	118.90
1	AP	49	C	C4-C5-C6	6.20	120.50	117.40
3	A1	106	C	C4-C5-C6	6.20	120.50	117.40
3	A1	152	A	C4-C5-C6	-6.20	113.90	117.00
3	A1	182	A	C4-C5-N7	6.20	113.80	110.70
3	A1	1032	G	C5-C6-N1	6.20	114.60	111.50
3	A1	1280	A	N1-C6-N6	-6.20	114.88	118.60
25	BB	124	G	O5'-P-OP2	-6.20	100.12	105.70
25	BB	985	C	O4'-C1'-N1	6.20	113.16	108.20
25	BB	1168	G	P-O3'-C3'	6.20	127.13	119.70
25	BB	1475	G	N3-C4-C5	-6.20	125.50	128.60
25	BB	1959	G	C5-C6-N1	6.20	114.60	111.50
25	BB	1982	U	O4'-C4'-C3'	6.20	111.06	106.10
25	BB	2274	A	C5-C6-N6	6.20	128.66	123.70
25	BB	2744	G	C5-C6-N1	6.20	114.60	111.50
39	BP	19	ARG	NE-CZ-NH1	6.20	123.40	120.30
3	A1	45	G	N3-C4-C5	-6.19	125.50	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1104	G	C1'-O4'-C4'	-6.19	104.94	109.90
17	AR	62	ARG	CD-NE-CZ	6.19	132.27	123.60
25	BB	783	A	C2-N3-C4	6.19	113.70	110.60
25	BB	1456	G	C5-C6-N1	6.19	114.60	111.50
25	BB	2364	C	C2-N3-C4	-6.19	116.80	119.90
3	A1	339	C	N3-C4-N4	-6.19	113.67	118.00
3	A1	424	G	C5-C6-O6	6.19	132.32	128.60
3	A1	1158	C	O4'-C1'-N1	-6.19	103.25	108.20
3	A1	1411	C	C2'-C3'-O3'	6.19	123.61	113.70
24	BA	18	G	O4'-C1'-N9	-6.19	103.25	108.20
25	BB	221	A	C8-N9-C4	6.19	108.28	105.80
25	BB	950	G	N7-C8-N9	6.19	116.20	113.10
25	BB	1924	C	C3'-C2'-C1'	6.19	106.45	101.50
25	BB	2175	C	O4'-C4'-C3'	6.19	111.06	106.10
25	BB	2369	A	C5-C6-N6	6.19	128.65	123.70
25	BB	2693	G	N3-C4-C5	-6.19	125.50	128.60
3	A1	276	G	C5-C6-N1	6.19	114.59	111.50
3	A1	532	A	C5-C6-N1	6.19	120.80	117.70
3	A1	891	U	C6-N1-C2	-6.19	117.29	121.00
24	BA	118	C	C5-C6-N1	-6.19	117.91	121.00
25	BB	773	U	C4'-C3'-C2'	-6.19	96.41	102.60
25	BB	908	C	N1-C2-N3	6.19	123.53	119.20
25	BB	1211	C	N3-C4-C5	6.19	124.38	121.90
25	BB	1548	A	N3-C4-N9	6.19	132.35	127.40
25	BB	1918	A	N7-C8-N9	6.19	116.89	113.80
25	BB	2200	C	N1-C2-O2	6.19	122.61	118.90
25	BB	2544	G	C4'-C3'-C2'	-6.19	96.41	102.60
3	A1	845	A	C6-C5-N7	6.19	136.63	132.30
3	A1	906	A	C4-C5-C6	-6.19	113.91	117.00
24	BA	93	C	C1'-O4'-C4'	-6.19	104.95	109.90
25	BB	218	A	C8-N9-C4	-6.19	103.32	105.80
25	BB	1378	A	C6-C5-N7	6.19	136.63	132.30
25	BB	1465	G	N3-C4-C5	-6.19	125.50	128.60
25	BB	2726	A	C2-N3-C4	6.19	113.69	110.60
25	BB	2808	G	P-O3'-C3'	6.19	127.13	119.70
1	AE	14	A	C6-C5-N7	6.19	136.63	132.30
1	AE	49	C	N3-C2-O2	-6.19	117.57	121.90
3	A1	86	G	C1'-O4'-C4'	-6.19	104.95	109.90
3	A1	270	A	C3'-C2'-C1'	-6.19	96.55	101.50
3	A1	329	A	C6-C5-N7	6.19	136.63	132.30
3	A1	333	U	C2-N3-C4	-6.19	123.29	127.00
3	A1	1036	A	C5'-C4'-O4'	6.19	116.53	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1054	C	N1-C2-N3	6.19	123.53	119.20
25	BB	348	A	C5-C6-N1	6.19	120.79	117.70
25	BB	420	C	O4'-C1'-C2'	6.19	113.17	107.60
25	BB	1544	A	C5-C6-N6	6.19	128.65	123.70
25	BB	1954	G	N3-C4-C5	-6.19	125.51	128.60
25	BB	2040	G	C6-C5-N7	6.19	134.11	130.40
25	BB	2182	U	C5-C6-N1	-6.19	119.61	122.70
25	BB	2223	G	C3'-C2'-C1'	-6.19	96.55	101.50
25	BB	2245	U	N3-C2-O2	-6.19	117.87	122.20
25	BB	2296	U	C5-C6-N1	-6.19	119.61	122.70
25	BB	2737	G	C3'-C2'-C1'	6.19	106.45	101.50
3	A1	378	G	C5'-C4'-C3'	-6.19	106.10	116.00
3	A1	458	U	C4-C5-C6	6.19	123.41	119.70
3	A1	669	G	N3-C2-N2	-6.19	115.57	119.90
24	BA	4	C	C5-C4-N4	6.19	124.53	120.20
24	BA	51	G	C8-N9-C4	-6.19	103.93	106.40
25	BB	165	A	C4-C5-C6	-6.19	113.91	117.00
25	BB	709	U	N1-C2-N3	6.19	118.61	114.90
25	BB	1304	A	C5-C6-N1	6.19	120.79	117.70
25	BB	2875	C	N1-C2-N3	6.19	123.53	119.20
51	B2	21	TYR	CG-CD2-CE2	-6.19	116.35	121.30
3	A1	32	A	C5-C6-N6	6.18	128.65	123.70
3	A1	47	C	C4'-C3'-C2'	-6.18	96.42	102.60
3	A1	312	C	N1-C2-N3	6.18	123.53	119.20
3	A1	508	U	C5'-C4'-O4'	6.18	116.52	109.10
3	A1	770	C	N1-C2-O2	6.18	122.61	118.90
3	A1	1229	A	N9-C4-C5	-6.18	103.33	105.80
3	A1	1493	A	O5'-P-OP1	-6.18	100.13	105.70
25	BB	54	G	C6-N1-C2	-6.18	121.39	125.10
25	BB	239	C	N3-C2-O2	-6.18	117.57	121.90
25	BB	242	G	O4'-C4'-C3'	6.18	111.05	106.10
25	BB	328	U	C5-C6-N1	-6.18	119.61	122.70
25	BB	897	C	C5-C6-N1	-6.18	117.91	121.00
25	BB	1083	U	P-O3'-C3'	6.18	127.12	119.70
25	BB	1380	G	C6-C5-N7	6.18	134.11	130.40
25	BB	2297	A	C2'-C3'-O3'	6.18	123.60	113.70
25	BB	2301	C	O4'-C4'-C3'	6.18	111.05	106.10
25	BB	2638	G	C5'-C4'-O4'	6.18	116.52	109.10
27	BD	18	ARG	CD-NE-CZ	6.18	132.26	123.60
3	A1	247	G	C3'-C2'-C1'	-6.18	96.56	101.50
3	A1	1145	A	N9-C4-C5	6.18	108.27	105.80
3	A1	1384	C	C5-C4-N4	-6.18	115.87	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	234	U	C4-C5-C6	6.18	123.41	119.70
25	BB	331	C	N3-C4-C5	6.18	124.37	121.90
25	BB	1795	C	N1-C2-N3	6.18	123.53	119.20
25	BB	2577	A	C5-C6-N1	6.18	120.79	117.70
25	BB	2599	G	C5-N7-C8	-6.18	101.21	104.30
25	BB	2710	C	C5-C6-N1	-6.18	117.91	121.00
3	A1	668	G	C4'-C3'-C2'	-6.18	96.42	102.60
25	BB	209	C	N3-C2-O2	-6.18	117.57	121.90
25	BB	481	G	N1-C2-N3	6.18	127.61	123.90
25	BB	535	G	N1-C2-N2	6.18	121.76	116.20
25	BB	614	A	C6-C5-N7	6.18	136.63	132.30
25	BB	1129	A	C6-C5-N7	6.18	136.63	132.30
25	BB	1634	A	C2-N3-C4	6.18	113.69	110.60
3	A1	9	G	O3'-P-O5'	-6.18	92.26	104.00
3	A1	190	A	C6-C5-N7	6.18	136.63	132.30
3	A1	996	A	O4'-C1'-N9	6.18	113.14	108.20
25	BB	504	A	C5-N7-C8	-6.18	100.81	103.90
25	BB	586	A	C4-C5-C6	-6.18	113.91	117.00
25	BB	781	A	C6-C5-N7	6.18	136.62	132.30
25	BB	837	C	C2-N1-C1'	6.18	125.60	118.80
25	BB	948	C	N3-C4-C5	6.18	124.37	121.90
25	BB	1374	G	C5-C6-N1	6.18	114.59	111.50
25	BB	1641	A	C2'-C3'-O3'	6.18	123.59	113.70
25	BB	1781	U	C1'-O4'-C4'	-6.18	104.96	109.90
25	BB	2289	G	N1-C6-O6	-6.18	116.19	119.90
25	BB	2661	G	C8-N9-C1'	6.18	135.03	127.00
3	A1	799	G	N7-C8-N9	6.18	116.19	113.10
3	A1	1301	U	C5-C6-N1	-6.18	119.61	122.70
25	BB	1160	G	C5-C6-N1	6.18	114.59	111.50
25	BB	2466	C	C3'-C2'-C1'	6.18	106.44	101.50
25	BB	2638	G	N1-C6-O6	-6.18	116.19	119.90
28	BE	48	ARG	NE-CZ-NH2	-6.18	117.21	120.30
3	A1	36	C	O4'-C1'-N1	6.18	113.14	108.20
3	A1	408	A	C8-N9-C4	-6.18	103.33	105.80
3	A1	454	G	N3-C4-C5	-6.18	125.51	128.60
3	A1	526	C	O4'-C1'-N1	6.18	113.14	108.20
3	A1	734	G	C5-C6-N1	6.18	114.59	111.50
24	BA	59	A	C6-C5-N7	6.18	136.62	132.30
24	BA	97	C	N3-C2-O2	-6.18	117.58	121.90
25	BB	20	C	N3-C4-N4	-6.18	113.68	118.00
25	BB	350	G	P-O3'-C3'	6.18	127.11	119.70
25	BB	368	A	N7-C8-N9	-6.18	110.71	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	448	U	P-O3'-C3'	6.18	127.11	119.70
25	BB	532	A	C3'-C2'-C1'	6.18	106.44	101.50
25	BB	641	U	C5-C4-O4	-6.18	122.19	125.90
25	BB	806	C	N3-C4-C5	6.18	124.37	121.90
25	BB	2666	C	N1-C2-O2	6.18	122.61	118.90
1	AA	67	A	C4-C5-N7	-6.17	107.61	110.70
3	A1	629	A	O4'-C1'-N9	6.17	113.14	108.20
3	A1	729	A	C6-C5-N7	6.17	136.62	132.30
3	A1	744	C	O3'-P-O5'	-6.17	92.27	104.00
3	A1	1383	C	C5-C4-N4	6.17	124.52	120.20
25	BB	348	A	N1-C6-N6	-6.17	114.90	118.60
25	BB	1451	C	O4'-C1'-N1	-6.17	103.26	108.20
25	BB	1726	C	N1-C2-O2	6.17	122.60	118.90
25	BB	1919	A	C6-N1-C2	-6.17	114.89	118.60
25	BB	2808	G	O5'-P-OP2	-6.17	100.14	105.70
1	AP	45	G	C8-N9-C4	-6.17	103.93	106.40
3	A1	154	U	O4'-C1'-C2'	6.17	113.16	107.60
3	A1	650	G	N1-C2-N3	6.17	127.60	123.90
25	BB	16	C	N3-C4-N4	-6.17	113.68	118.00
25	BB	100	U	N1-C2-O2	6.17	127.12	122.80
25	BB	1524	G	N1-C2-N2	-6.17	110.64	116.20
25	BB	1868	C	N1-C2-O2	6.17	122.60	118.90
25	BB	2422	C	N1-C2-O2	6.17	122.60	118.90
25	BB	2626	C	N3-C2-O2	-6.17	117.58	121.90
25	BB	2750	A	C2-N3-C4	6.17	113.69	110.60
25	BB	2785	C	N1-C2-O2	6.17	122.60	118.90
1	AE	22	G	N3-C2-N2	-6.17	115.58	119.90
3	A1	87	C	C4-C5-C6	-6.17	114.31	117.40
3	A1	277	C	C5-C6-N1	-6.17	117.91	121.00
3	A1	1145	A	C3'-C2'-C1'	-6.17	96.56	101.50
25	BB	858	G	N3-C2-N2	-6.17	115.58	119.90
25	BB	1233	C	C6-N1-C2	-6.17	117.83	120.30
25	BB	1338	G	N3-C4-C5	-6.17	125.51	128.60
25	BB	1374	G	C8-N9-C4	-6.17	103.93	106.40
25	BB	1545	A	C5'-C4'-C3'	-6.17	106.12	116.00
25	BB	1768	C	N3-C4-C5	6.17	124.37	121.90
25	BB	1959	G	C6-C5-N7	6.17	134.10	130.40
25	BB	2141	G	C8-N9-C4	-6.17	103.93	106.40
25	BB	2800	A	C4-C5-C6	-6.17	113.92	117.00
38	BO	5	ARG	C-N-CA	6.17	137.13	121.70
3	A1	1161	C	C5-C6-N1	-6.17	117.92	121.00
25	BB	112	U	C5'-C4'-C3'	-6.17	106.13	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1143	A	C2-N3-C4	6.17	113.69	110.60
25	BB	1333	G	C6-N1-C2	-6.17	121.40	125.10
25	BB	1708	C	C6-N1-C2	-6.17	117.83	120.30
53	B4	147	VAL	CG1-CB-CG2	-6.17	101.03	110.90
3	A1	292	G	C4'-C3'-C2'	-6.17	96.43	102.60
3	A1	851	G	C4-C5-C6	-6.17	115.10	118.80
3	A1	931	C	C5-C4-N4	-6.17	115.88	120.20
3	A1	1161	C	O4'-C1'-N1	6.17	113.14	108.20
3	A1	1212	U	O4'-C1'-N1	6.17	113.14	108.20
3	A1	1328	C	C1'-O4'-C4'	-6.17	104.96	109.90
6	AD	20	VAL	CA-CB-CG1	6.17	120.15	110.90
9	AH	20	ASP	CB-CG-OD1	6.17	123.85	118.30
24	BA	61	G	N1-C2-N2	6.17	121.75	116.20
25	BB	24	G	N7-C8-N9	6.17	116.18	113.10
25	BB	175	G	C1'-O4'-C4'	-6.17	104.97	109.90
25	BB	351	C	O4'-C4'-C3'	-6.17	97.83	104.00
25	BB	391	A	C5-N7-C8	-6.17	100.82	103.90
25	BB	637	A	C6-N1-C2	-6.17	114.90	118.60
25	BB	1180	U	O5'-P-OP1	-6.17	100.15	105.70
25	BB	1307	A	C6-C5-N7	6.17	136.62	132.30
25	BB	1499	C	N1-C2-N3	6.17	123.52	119.20
25	BB	1820	U	C5-C6-N1	-6.17	119.61	122.70
25	BB	2204	G	C5-N7-C8	-6.17	101.22	104.30
3	A1	281	G	C5-N7-C8	-6.17	101.22	104.30
3	A1	306	A	O4'-C1'-C2'	-6.17	99.63	105.80
3	A1	429	U	O4'-C1'-N1	6.17	113.13	108.20
3	A1	470	C	C4-C5-C6	6.17	120.48	117.40
3	A1	504	C	C2-N3-C4	-6.17	116.82	119.90
25	BB	597	G	C3'-C2'-C1'	-6.17	96.57	101.50
25	BB	643	A	C8-N9-C4	-6.17	103.33	105.80
25	BB	687	C	C2-N3-C4	-6.17	116.82	119.90
25	BB	1095	A	N1-C2-N3	-6.17	126.22	129.30
25	BB	1281	G	C4'-C3'-C2'	-6.17	96.43	102.60
25	BB	1410	G	C1'-O4'-C4'	-6.17	104.97	109.90
25	BB	1588	G	N1-C2-N3	6.17	127.60	123.90
25	BB	2125	G	O4'-C1'-N9	6.17	113.13	108.20
25	BB	2306	C	C2-N3-C4	-6.17	116.82	119.90
25	BB	2468	A	N7-C8-N9	6.17	116.88	113.80
1	AE	28	C	C4'-C3'-C2'	-6.17	96.44	102.60
3	A1	17	U	C2-N3-C4	-6.17	123.30	127.00
3	A1	579	A	C5-N7-C8	-6.17	100.82	103.90
3	A1	1289	A	N1-C2-N3	-6.17	126.22	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1684	G	N3-C4-N9	6.17	129.70	126.00
2	AM	3	U	C4'-C3'-C2'	-6.16	96.44	102.60
3	A1	430	A	O4'-C1'-N9	6.16	113.13	108.20
3	A1	780	A	P-O3'-C3'	6.16	127.10	119.70
3	A1	1176	A	C5-C6-N1	6.16	120.78	117.70
3	A1	1280	A	C1'-O4'-C4'	-6.16	104.97	109.90
5	AC	121	ARG	NH1-CZ-NH2	-6.16	112.62	119.40
25	BB	1223	G	C8-N9-C4	6.16	108.87	106.40
25	BB	2432	A	C8-N9-C4	-6.16	103.33	105.80
3	A1	118	U	C5-C6-N1	-6.16	119.62	122.70
3	A1	493	A	C5-C6-N6	6.16	128.63	123.70
3	A1	934	C	C2-N3-C4	-6.16	116.82	119.90
3	A1	1077	G	C5-C6-N1	6.16	114.58	111.50
3	A1	1492	A	C1'-O4'-C4'	-6.16	104.97	109.90
4	AB	129	THR	N-CA-CB	6.16	122.01	110.30
25	BB	703	U	C2-N1-C1'	6.16	125.09	117.70
25	BB	1335	C	O4'-C4'-C3'	-6.16	97.84	104.00
25	BB	1645	G	C6-C5-N7	6.16	134.10	130.40
25	BB	1999	C	N3-C4-C5	6.16	124.36	121.90
25	BB	2598	A	O4'-C1'-N9	6.16	113.13	108.20
1	AA	25	C	O4'-C1'-N1	6.16	113.13	108.20
3	A1	30	U	O4'-C1'-N1	6.16	113.13	108.20
3	A1	490	C	C3'-C2'-C1'	6.16	106.43	101.50
3	A1	551	U	O4'-C1'-N1	6.16	113.13	108.20
3	A1	811	C	N1-C2-O2	6.16	122.60	118.90
25	BB	31	C	N1-C2-O2	6.16	122.60	118.90
25	BB	205	G	N7-C8-N9	6.16	116.18	113.10
25	BB	762	U	C5'-C4'-C3'	-6.16	106.14	116.00
25	BB	844	A	C4-C5-N7	6.16	113.78	110.70
25	BB	1168	G	N3-C4-C5	-6.16	125.52	128.60
25	BB	1467	U	C5'-C4'-C3'	-6.16	106.14	116.00
25	BB	1529	G	C6-C5-N7	6.16	134.10	130.40
25	BB	1768	C	N1-C2-O2	6.16	122.60	118.90
25	BB	1785	A	N1-C2-N3	-6.16	126.22	129.30
25	BB	1918	A	C6-N1-C2	6.16	122.30	118.60
25	BB	2187	U	O4'-C1'-N1	6.16	113.13	108.20
25	BB	2595	G	N9-C1'-C2'	-6.16	105.22	112.00
3	A1	720	C	N1-C2-N3	6.16	123.51	119.20
3	A1	740	U	C4-C5-C6	6.16	123.39	119.70
3	A1	1064	G	C5-C6-N1	6.16	114.58	111.50
3	A1	1163	A	N7-C8-N9	6.16	116.88	113.80
3	A1	1236	A	C6-C5-N7	6.16	136.61	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1305	G	C5-C6-O6	6.16	132.29	128.60
25	BB	282	A	C4'-C3'-C2'	-6.16	96.44	102.60
25	BB	503	A	C4-C5-C6	-6.16	113.92	117.00
25	BB	857	G	C5'-C4'-O4'	6.16	116.49	109.10
25	BB	1226	A	C5-C6-N6	6.16	128.63	123.70
25	BB	1330	C	N3-C4-N4	-6.16	113.69	118.00
25	BB	1784	A	C1'-O4'-C4'	-6.16	104.97	109.90
25	BB	1910	G	N9-C4-C5	6.16	107.86	105.40
25	BB	1976	U	N1-C2-N3	6.16	118.60	114.90
25	BB	2055	C	N3-C4-C5	6.16	124.36	121.90
25	BB	2375	G	N3-C2-N2	-6.16	115.59	119.90
25	BB	2811	G	C4'-C3'-C2'	-6.16	96.44	102.60
3	A1	47	C	N1-C2-N3	6.16	123.51	119.20
3	A1	334	C	C5-C4-N4	-6.16	115.89	120.20
25	BB	2648	G	C6-C5-N7	6.16	134.09	130.40
25	BB	2831	G	N1-C2-N3	6.16	127.59	123.90
1	AE	13	C	C4'-C3'-C2'	-6.16	96.44	102.60
1	AE	38	A	C5-N7-C8	-6.16	100.82	103.90
3	A1	54	C	C5'-C4'-O4'	6.16	116.49	109.10
3	A1	307	C	O4'-C4'-C3'	6.16	111.02	106.10
3	A1	1114	C	C5-C4-N4	6.16	124.51	120.20
25	BB	66	C	N3-C4-N4	-6.16	113.69	118.00
25	BB	383	C	N3-C4-C5	6.16	124.36	121.90
25	BB	518	G	C5-C6-N1	6.16	114.58	111.50
25	BB	890	C	N1-C2-N3	6.16	123.51	119.20
25	BB	954	G	C4-C5-C6	-6.16	115.11	118.80
25	BB	1189	A	C6-N1-C2	-6.16	114.91	118.60
25	BB	1344	U	C4-C5-C6	6.16	123.39	119.70
25	BB	2061	G	O4'-C1'-N9	6.16	113.12	108.20
25	BB	2095	A	C4-C5-C6	-6.16	113.92	117.00
25	BB	2504	U	C4-C5-C6	6.16	123.39	119.70
25	BB	2592	G	C4-C5-N7	6.16	113.26	110.80
25	BB	2762	C	N3-C4-N4	-6.16	113.69	118.00
1	AP	18	G	N9-C4-C5	-6.15	102.94	105.40
3	A1	182	A	O4'-C1'-N9	6.15	113.12	108.20
3	A1	523	A	C4'-C3'-C2'	-6.15	96.45	102.60
3	A1	854	U	N3-C4-C5	-6.15	110.91	114.60
7	AF	97	ARG	NE-CZ-NH1	6.15	123.38	120.30
25	BB	315	G	N1-C2-N3	6.15	127.59	123.90
25	BB	326	G	C5-C6-O6	6.15	132.29	128.60
25	BB	539	G	C5-C6-N1	6.15	114.58	111.50
25	BB	1352	U	O4'-C1'-C2'	-6.15	99.65	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1967	C	N1-C2-N3	6.15	123.51	119.20
3	A1	209	U	C4-C5-C6	6.15	123.39	119.70
3	A1	587	G	N3-C2-N2	6.15	124.21	119.90
3	A1	668	G	N9-C4-C5	6.15	107.86	105.40
3	A1	722	G	C6-N1-C2	-6.15	121.41	125.10
3	A1	1272	G	N3-C2-N2	-6.15	115.59	119.90
25	BB	75	G	N3-C2-N2	-6.15	115.59	119.90
25	BB	1032	A	C2-N3-C4	-6.15	107.52	110.60
25	BB	1238	G	N7-C8-N9	6.15	116.18	113.10
25	BB	1241	A	N9-C4-C5	6.15	108.26	105.80
25	BB	1263	U	C5-C6-N1	-6.15	119.62	122.70
25	BB	1839	G	N3-C4-C5	-6.15	125.52	128.60
25	BB	1895	C	N3-C2-O2	-6.15	117.59	121.90
25	BB	2058	A	N1-C2-N3	-6.15	126.22	129.30
25	BB	2129	C	N3-C2-O2	-6.15	117.59	121.90
25	BB	2527	C	O4'-C1'-C2'	6.15	113.14	107.60
3	A1	148	G	C8-N9-C1'	6.15	135.00	127.00
3	A1	234	C	N3-C2-O2	-6.15	117.59	121.90
3	A1	520	A	N9-C4-C5	-6.15	103.34	105.80
3	A1	764	C	C1'-O4'-C4'	-6.15	104.98	109.90
18	AS	137	ARG	NE-CZ-NH1	6.15	123.38	120.30
25	BB	129	C	C4'-C3'-C2'	-6.15	96.45	102.60
25	BB	886	A	C6-N1-C2	-6.15	114.91	118.60
25	BB	1157	G	C8-N9-C4	-6.15	103.94	106.40
25	BB	1164	C	N1-C2-O2	6.15	122.59	118.90
25	BB	1414	C	N3-C2-O2	-6.15	117.59	121.90
25	BB	1803	A	O5'-P-OP2	-6.15	100.16	105.70
25	BB	2229	U	C4-C5-C6	6.15	123.39	119.70
55	B6	49	ASP	CB-CG-OD1	6.15	123.84	118.30
1	AE	66	A	C5-C6-N6	6.15	128.62	123.70
3	A1	662	U	C5-C6-N1	-6.15	119.63	122.70
3	A1	1420	U	P-O3'-C3'	6.15	127.08	119.70
3	A1	1487	G	C5'-C4'-O4'	6.15	116.48	109.10
25	BB	153	U	N3-C4-C5	-6.15	110.91	114.60
25	BB	297	G	N1-C6-O6	-6.15	116.21	119.90
25	BB	591	U	N3-C4-O4	-6.15	115.09	119.40
25	BB	756	A	C5-C6-N6	6.15	128.62	123.70
25	BB	1952	A	C1'-O4'-C4'	-6.15	104.98	109.90
25	BB	2245	U	N1-C2-N3	6.15	118.59	114.90
25	BB	2437	G	N3-C4-C5	-6.15	125.53	128.60
3	A1	34	C	N3-C2-O2	-6.15	117.60	121.90
3	A1	91	U	C3'-C2'-C1'	6.15	106.42	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	140	U	C5-C6-N1	-6.15	119.63	122.70
3	A1	196	A	C1'-O4'-C4'	-6.15	104.98	109.90
3	A1	1522	U	C2-N3-C4	-6.15	123.31	127.00
25	BB	223	A	N9-C4-C5	6.15	108.26	105.80
25	BB	698	C	C5'-C4'-O4'	6.15	116.48	109.10
25	BB	733	G	N3-C4-N9	6.15	129.69	126.00
25	BB	985	C	C3'-C2'-C1'	6.15	106.42	101.50
25	BB	1564	C	C1'-O4'-C4'	-6.15	104.98	109.90
25	BB	1634	A	C4-C5-C6	-6.15	113.93	117.00
25	BB	1839	G	C5-N7-C8	-6.15	101.23	104.30
25	BB	2721	A	C4'-C3'-C2'	-6.15	96.45	102.60
25	BB	2843	G	N7-C8-N9	6.15	116.17	113.10
51	B2	176	PHE	C-N-CA	6.15	137.07	121.70
3	A1	1267	C	O4'-C1'-N1	6.15	113.12	108.20
25	BB	21	A	C5-C6-N6	6.15	128.62	123.70
25	BB	536	G	N3-C4-C5	-6.15	125.53	128.60
25	BB	962	G	C5-C6-O6	6.15	132.29	128.60
25	BB	1273	U	C5-C6-N1	-6.15	119.63	122.70
25	BB	1713	A	C2-N3-C4	6.15	113.67	110.60
25	BB	2513	A	C3'-C2'-C1'	-6.15	96.58	101.50
30	BG	90	ARG	NE-CZ-NH1	6.15	123.37	120.30
3	A1	333	U	N3-C2-O2	-6.14	117.90	122.20
3	A1	968	A	C8-N9-C4	-6.14	103.34	105.80
25	BB	461	C	C3'-C2'-C1'	6.14	106.42	101.50
25	BB	695	G	N1-C2-N3	6.14	127.59	123.90
25	BB	876	C	C4-C5-C6	-6.14	114.33	117.40
25	BB	1212	G	N1-C2-N3	6.14	127.59	123.90
25	BB	1462	C	C6-N1-C1'	6.14	128.17	120.80
25	BB	1817	G	N1-C2-N3	6.14	127.59	123.90
25	BB	2706	A	C6-C5-N7	6.14	136.60	132.30
1	AP	26	G	C5'-C4'-O4'	6.14	116.47	109.10
3	A1	52	C	C1'-O4'-C4'	-6.14	104.98	109.90
3	A1	202	G	C4-C5-N7	-6.14	108.34	110.80
3	A1	691	G	N1-C6-O6	-6.14	116.22	119.90
3	A1	1422	G	O4'-C1'-N9	6.14	113.11	108.20
24	BA	78	A	C6-N1-C2	-6.14	114.91	118.60
25	BB	30	G	N1-C6-O6	-6.14	116.21	119.90
25	BB	249	C	C5'-C4'-C3'	-6.14	106.17	116.00
25	BB	1705	A	N1-C2-N3	-6.14	126.23	129.30
25	BB	1884	G	N1-C2-N2	-6.14	110.67	116.20
25	BB	1913	A	C2'-C3'-O3'	6.14	123.53	113.70
25	BB	2027	G	N9-C4-C5	6.14	107.86	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2106	U	O4'-C1'-N1	6.14	113.11	108.20
25	BB	2728	U	C5-C4-O4	-6.14	122.22	125.90
3	A1	1206	G	N9-C1'-C2'	-6.14	105.25	112.00
3	A1	1299	A	C6-C5-N7	6.14	136.60	132.30
25	BB	630	G	C5-C6-N1	6.14	114.57	111.50
25	BB	1039	A	C5-N7-C8	6.14	106.97	103.90
3	A1	773	G	O4'-C1'-N9	6.14	113.11	108.20
3	A1	1120	C	N3-C2-O2	-6.14	117.60	121.90
3	A1	1327	C	C2-N3-C4	-6.14	116.83	119.90
25	BB	211	C	N3-C4-C5	6.14	124.36	121.90
25	BB	415	A	C5-N7-C8	-6.14	100.83	103.90
25	BB	590	A	C2-N3-C4	6.14	113.67	110.60
25	BB	889	C	O4'-C1'-N1	6.14	113.11	108.20
25	BB	1039	A	N9-C4-C5	6.14	108.26	105.80
25	BB	2457	U	C5'-C4'-C3'	-6.14	106.18	116.00
1	AA	27	C	C4'-C3'-C2'	-6.14	96.46	102.60
3	A1	814	A	C1'-O4'-C4'	6.14	114.81	109.90
25	BB	901	C	C5-C6-N1	-6.14	117.93	121.00
25	BB	1975	G	C6-N1-C2	-6.14	121.42	125.10
3	A1	803	G	C5-C6-N1	6.14	114.57	111.50
3	A1	1015	G	N9-C1'-C2'	-6.14	105.25	112.00
3	A1	1419	G	C4'-C3'-C2'	-6.14	96.46	102.60
24	BA	64	G	P-O3'-C3'	6.14	127.06	119.70
25	BB	540	C	N3-C2-O2	-6.14	117.60	121.90
25	BB	1381	G	C6-N1-C2	-6.14	121.42	125.10
25	BB	1581	G	C4'-C3'-C2'	-6.14	96.46	102.60
25	BB	1796	U	O4'-C1'-N1	6.14	113.11	108.20
25	BB	2048	G	C4'-C3'-C2'	-6.14	96.46	102.60
25	BB	2508	G	C2'-C3'-O3'	6.14	123.52	113.70
25	BB	2821	A	C5-C6-N6	6.14	128.61	123.70
25	BB	2899	A	C4-C5-C6	-6.14	113.93	117.00
3	A1	223	A	C5-C6-N1	6.13	120.77	117.70
17	AR	153	ARG	NE-CZ-NH1	6.13	123.37	120.30
25	BB	183	C	C2-N3-C4	-6.13	116.83	119.90
25	BB	573	U	N1-C2-N3	6.13	118.58	114.90
25	BB	745	G	N7-C8-N9	6.13	116.17	113.10
25	BB	1223	G	C5'-C4'-C3'	-6.13	106.18	116.00
25	BB	1262	A	C5'-C4'-O4'	6.13	116.46	109.10
25	BB	1339	G	C3'-C2'-C1'	6.13	106.41	101.50
25	BB	1463	C	C5-C6-N1	-6.13	117.93	121.00
25	BB	1691	C	N3-C4-C5	6.13	124.35	121.90
25	BB	1847	A	C4-C5-C6	-6.13	113.93	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2506	U	P-O3'-C3'	6.13	127.06	119.70
30	BG	67	PHE	CB-CG-CD1	-6.13	116.50	120.80
3	A1	256	U	N3-C2-O2	-6.13	117.91	122.20
25	BB	2487	G	O4'-C1'-N9	6.13	113.11	108.20
3	A1	291	U	C2-N3-C4	-6.13	123.32	127.00
3	A1	307	C	N3-C4-C5	6.13	124.35	121.90
3	A1	791	G	C6-N1-C2	-6.13	121.42	125.10
3	A1	805	C	N1-C2-O2	6.13	122.58	118.90
3	A1	1278	G	C5'-C4'-C3'	-6.13	106.19	116.00
3	A1	1368	A	N7-C8-N9	6.13	116.87	113.80
25	BB	53	A	N9-C4-C5	6.13	108.25	105.80
25	BB	604	G	C5'-C4'-C3'	-6.13	106.19	116.00
25	BB	849	A	N7-C8-N9	6.13	116.87	113.80
25	BB	925	A	C5'-C4'-O4'	6.13	116.46	109.10
25	BB	1206	G	N9-C4-C5	6.13	107.85	105.40
25	BB	1609	A	C5-N7-C8	-6.13	100.83	103.90
25	BB	1827	U	N3-C2-O2	-6.13	117.91	122.20
25	BB	1968	G	N3-C4-C5	-6.13	125.53	128.60
25	BB	2400	G	N1-C2-N2	6.13	121.72	116.20
25	BB	2467	C	N3-C2-O2	-6.13	117.61	121.90
25	BB	2470	G	C1'-O4'-C4'	-6.13	105.00	109.90
25	BB	2595	G	C5-C6-N1	6.13	114.56	111.50
25	BB	2722	G	C5'-C4'-O4'	6.13	116.46	109.10
25	BB	2819	G	O4'-C1'-C2'	-6.13	99.67	105.80
25	BB	2873	A	C5-C6-N6	6.13	128.60	123.70
37	BN	202	ARG	NE-CZ-NH2	6.13	123.37	120.30
3	A1	343	U	C5-C4-O4	6.13	129.58	125.90
3	A1	1434	A	P-O3'-C3'	6.13	127.06	119.70
3	A1	1500	A	C5-C6-N6	6.13	128.60	123.70
7	AF	108	ARG	NH1-CZ-NH2	-6.13	112.66	119.40
25	BB	1939	U	O4'-C1'-C2'	-6.13	99.67	105.80
25	BB	2526	G	N3-C4-C5	-6.13	125.53	128.60
3	A1	413	G	N3-C2-N2	-6.13	115.61	119.90
3	A1	1003	G	N1-C2-N2	-6.13	110.69	116.20
3	A1	1258	G	C6-C5-N7	6.13	134.08	130.40
25	BB	537	G	C8-N9-C4	-6.13	103.95	106.40
25	BB	653	U	P-O3'-C3'	6.13	127.06	119.70
25	BB	896	A	C6-N1-C2	-6.13	114.92	118.60
25	BB	900	A	C2-N3-C4	6.13	113.67	110.60
25	BB	1494	A	C4'-C3'-C2'	-6.13	96.47	102.60
25	BB	1499	C	C2-N3-C4	-6.13	116.84	119.90
25	BB	1509	A	C5-C6-N6	6.13	128.60	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1527	G	N1-C6-O6	-6.13	116.22	119.90
25	BB	1841	U	C3'-C2'-C1'	6.13	106.40	101.50
25	BB	2311	A	C6-C5-N7	6.13	136.59	132.30
1	AP	61	C	C5'-C4'-O4'	6.13	116.45	109.10
3	A1	918	A	O4'-C1'-N9	6.13	113.10	108.20
24	BA	53	A	C5-C6-N1	6.13	120.76	117.70
25	BB	194	G	N1-C6-O6	-6.13	116.22	119.90
25	BB	316	C	C5'-C4'-C3'	-6.13	106.20	116.00
25	BB	797	G	N3-C4-C5	-6.13	125.54	128.60
25	BB	900	A	N1-C2-N3	-6.13	126.24	129.30
25	BB	970	U	N3-C2-O2	-6.13	117.91	122.20
25	BB	1552	A	N7-C8-N9	6.13	116.86	113.80
25	BB	1555	G	P-O3'-C3'	6.13	127.05	119.70
25	BB	1757	A	N1-C2-N3	-6.13	126.24	129.30
25	BB	2175	C	C3'-C2'-C1'	6.13	106.40	101.50
25	BB	2214	C	N1-C2-O2	6.13	122.58	118.90
25	BB	2348	U	O4'-C1'-N1	6.13	113.10	108.20
25	BB	2491	U	C6-N1-C2	-6.13	117.32	121.00
3	A1	77	A	C5-C6-N6	6.12	128.60	123.70
3	A1	231	U	C6-N1-C2	-6.12	117.33	121.00
3	A1	1399	C	N3-C4-C5	6.12	124.35	121.90
25	BB	1058	U	N1-C2-O2	6.12	127.09	122.80
25	BB	1510	G	O4'-C1'-N9	6.12	113.10	108.20
3	A1	1485	U	C1'-O4'-C4'	-6.12	105.00	109.90
25	BB	321	U	C4'-C3'-C2'	-6.12	96.48	102.60
25	BB	1206	G	C5-C6-O6	6.12	132.27	128.60
25	BB	1421	G	N9-C4-C5	6.12	107.85	105.40
25	BB	1492	G	C4-C5-N7	-6.12	108.35	110.80
1	AP	46	G	N1-C6-O6	-6.12	116.23	119.90
3	A1	117	G	N3-C4-C5	-6.12	125.54	128.60
3	A1	587	G	N1-C2-N3	6.12	127.57	123.90
3	A1	792	A	C4-C5-N7	6.12	113.76	110.70
3	A1	861	G	N7-C8-N9	6.12	116.16	113.10
3	A1	1048	G	C4'-C3'-C2'	-6.12	96.48	102.60
3	A1	1505	G	N1-C2-N3	6.12	127.57	123.90
25	BB	469	G	C5-C6-N1	6.12	114.56	111.50
25	BB	590	A	C5-C6-N6	6.12	128.60	123.70
25	BB	878	A	O4'-C1'-C2'	-6.12	99.68	105.80
25	BB	1402	U	C4-C5-C6	6.12	123.37	119.70
25	BB	1667	G	C8-N9-C4	-6.12	103.95	106.40
25	BB	2088	A	C4'-C3'-C2'	-6.12	96.48	102.60
25	BB	2567	G	C4'-C3'-C2'	-6.12	96.48	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
30	BG	90	ARG	NE-CZ-NH2	6.12	123.36	120.30
32	BI	111	GLU	OE1-CD-OE2	-6.12	115.95	123.30
3	A1	11	G	N7-C8-N9	6.12	116.16	113.10
3	A1	224	U	C5-C6-N1	-6.12	119.64	122.70
3	A1	489	C	C6-N1-C2	-6.12	117.85	120.30
18	AS	91	SER	C-N-CA	6.12	137.00	121.70
25	BB	197	A	N1-C2-N3	-6.12	126.24	129.30
25	BB	1126	A	N1-C2-N3	-6.12	126.24	129.30
25	BB	1318	U	C5'-C4'-O4'	6.12	116.44	109.10
25	BB	1385	A	C6-C5-N7	6.12	136.58	132.30
25	BB	1573	G	C5'-C4'-C3'	-6.12	106.21	116.00
25	BB	1590	A	N1-C2-N3	-6.12	126.24	129.30
34	BK	34	GLU	OE1-CD-OE2	-6.12	115.96	123.30
3	A1	1085	U	C3'-C2'-C1'	6.12	106.39	101.50
3	A1	1221	G	N3-C2-N2	-6.12	115.62	119.90
3	A1	1454	G	N3-C2-N2	-6.12	115.62	119.90
3	A1	1511	G	C5'-C4'-O4'	6.12	116.44	109.10
7	AF	86	ARG	NH1-CZ-NH2	-6.12	112.67	119.40
24	BA	41	G	N3-C4-C5	-6.12	125.54	128.60
25	BB	475	C	C5-C4-N4	6.12	124.48	120.20
25	BB	550	C	C5'-C4'-O4'	6.12	116.44	109.10
25	BB	898	C	C1'-O4'-C4'	-6.12	105.00	109.90
25	BB	1535	A	N1-C2-N3	-6.12	126.24	129.30
25	BB	1843	C	N3-C2-O2	-6.12	117.62	121.90
25	BB	1868	C	O4'-C1'-N1	6.12	113.09	108.20
25	BB	2366	A	C4-C5-C6	-6.12	113.94	117.00
25	BB	2550	G	N1-C6-O6	-6.12	116.23	119.90
25	BB	2802	G	N7-C8-N9	6.12	116.16	113.10
37	BN	79	ARG	NH1-CZ-NH2	-6.12	112.67	119.40
3	A1	211	G	N7-C8-N9	6.12	116.16	113.10
3	A1	384	G	C6-N1-C2	-6.12	121.43	125.10
3	A1	983	A	C6-C5-N7	6.12	136.58	132.30
25	BB	397	U	N3-C2-O2	-6.12	117.92	122.20
25	BB	677	A	C6-C5-N7	6.12	136.58	132.30
25	BB	1387	A	C5-N7-C8	-6.12	100.84	103.90
25	BB	2754	U	N1-C2-N3	6.12	118.57	114.90
1	AP	72	C	N3-C2-O2	-6.12	117.62	121.90
3	A1	6	G	N3-C4-N9	6.12	129.67	126.00
3	A1	363	A	C5-C6-N1	6.12	120.76	117.70
3	A1	432	A	C5-N7-C8	-6.12	100.84	103.90
3	A1	709	U	N1-C2-N3	6.12	118.57	114.90
3	A1	1057	G	C5-C6-N1	6.12	114.56	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1460	C	N3-C4-C5	6.12	124.35	121.90
6	AD	108	ASP	CB-CG-OD1	-6.12	112.80	118.30
25	BB	160	A	O5'-C5'-C4'	-6.12	100.08	111.70
25	BB	502	A	C3'-C2'-C1'	6.12	106.39	101.50
25	BB	513	A	N9-C4-C5	6.12	108.25	105.80
25	BB	1368	G	N3-C4-C5	-6.12	125.54	128.60
25	BB	2828	G	C5-C6-N1	6.12	114.56	111.50
1	AE	76	A	C6-N1-C2	-6.11	114.93	118.60
3	A1	376	G	N3-C4-C5	-6.11	125.54	128.60
3	A1	478	A	C1'-O4'-C4'	-6.11	105.01	109.90
3	A1	844	G	N9-C4-C5	6.11	107.85	105.40
3	A1	1217	C	C2-N3-C4	-6.11	116.84	119.90
3	A1	1521	C	N1-C2-N3	6.11	123.48	119.20
25	BB	1080	A	C5-C6-N6	6.11	128.59	123.70
25	BB	1490	A	N9-C4-C5	-6.11	103.36	105.80
25	BB	1892	C	C5-C4-N4	6.11	124.48	120.20
25	BB	1942	C	C6-N1-C2	-6.11	117.86	120.30
1	AE	58	A	C2-N3-C4	6.11	113.66	110.60
3	A1	174	A	O4'-C4'-C3'	6.11	110.99	106.10
3	A1	1040	U	C6-N1-C2	-6.11	117.33	121.00
25	BB	1612	C	O4'-C4'-C3'	6.11	110.99	106.10
1	AP	53	G	C6-N1-C2	-6.11	121.43	125.10
1	AE	52	U	O4'-C1'-N1	6.11	113.09	108.20
3	A1	25	C	C5-C6-N1	-6.11	117.94	121.00
3	A1	422	C	N3-C2-O2	-6.11	117.62	121.90
3	A1	1005	A	C5-N7-C8	-6.11	100.84	103.90
3	A1	1466	C	O4'-C4'-C3'	6.11	110.99	106.10
25	BB	38	A	N9-C4-C5	6.11	108.24	105.80
25	BB	571	U	C2-N3-C4	-6.11	123.33	127.00
25	BB	1302	A	C5-C6-N1	6.11	120.75	117.70
25	BB	1422	G	N9-C4-C5	6.11	107.84	105.40
25	BB	1505	A	C5-C6-N1	6.11	120.75	117.70
25	BB	1512	C	C1'-O4'-C4'	-6.11	105.01	109.90
25	BB	1988	G	C6-N1-C2	-6.11	121.43	125.10
25	BB	2875	C	C6-N1-C2	-6.11	117.86	120.30
3	A1	377	G	N9-C4-C5	6.11	107.84	105.40
24	BA	113	C	N1-C2-N3	6.11	123.48	119.20
25	BB	1272	A	C6-N1-C2	-6.11	114.94	118.60
25	BB	2045	C	N1-C2-O2	6.11	122.57	118.90
25	BB	2099	U	N3-C2-O2	-6.11	117.92	122.20
25	BB	2443	C	C2'-C3'-O3'	6.11	123.47	113.70
3	A1	622	A	C5-C6-N6	6.11	128.59	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	630	A	C6-N1-C2	-6.11	114.94	118.60
3	A1	950	U	C5'-C4'-O4'	6.11	116.43	109.10
3	A1	986	U	C4-C5-C6	6.11	123.36	119.70
3	A1	1174	G	N9-C4-C5	6.11	107.84	105.40
25	BB	120	U	C5'-C4'-O4'	6.11	116.43	109.10
25	BB	210	C	N1-C2-N3	6.11	123.48	119.20
25	BB	415	A	C4-C5-N7	6.11	113.75	110.70
25	BB	999	U	O4'-C4'-C3'	-6.11	97.89	104.00
25	BB	1518	C	O5'-P-OP1	-6.11	100.20	105.70
25	BB	1676	A	C5-C6-N1	6.11	120.75	117.70
25	BB	1693	U	C5-C4-O4	6.11	129.56	125.90
25	BB	1838	C	C5-C6-N1	-6.11	117.95	121.00
3	A1	258	G	C6-N1-C2	-6.11	121.44	125.10
3	A1	657	U	N3-C2-O2	-6.11	117.93	122.20
3	A1	1175	G	N1-C6-O6	-6.11	116.24	119.90
25	BB	116	C	C6-N1-C2	-6.11	117.86	120.30
25	BB	252	G	C5-C6-N1	6.11	114.55	111.50
25	BB	454	A	C5-C6-N1	6.11	120.75	117.70
25	BB	987	C	N1-C2-N3	6.11	123.47	119.20
25	BB	1544	A	O4'-C1'-N9	6.11	113.08	108.20
25	BB	1963	U	C5-C4-O4	-6.11	122.24	125.90
25	BB	2056	G	N9-C4-C5	6.11	107.84	105.40
25	BB	2269	G	N1-C6-O6	-6.11	116.24	119.90
25	BB	2900	A	C2-N3-C4	6.11	113.65	110.60
25	BB	1364	G	N9-C4-C5	-6.10	102.96	105.40
25	BB	2624	G	N3-C2-N2	-6.10	115.63	119.90
25	BB	2881	U	N3-C2-O2	-6.10	117.93	122.20
1	AA	54	U	C5'-C4'-O4'	6.10	116.42	109.10
3	A1	122	G	C5-C6-N1	6.10	114.55	111.50
3	A1	822	U	C5'-C4'-C3'	-6.10	106.24	116.00
3	A1	1051	C	O4'-C1'-C2'	-6.10	99.70	105.80
3	A1	1254	A	C5-N7-C8	-6.10	100.85	103.90
3	A1	1284	C	C3'-C2'-C1'	6.10	106.38	101.50
3	A1	1476	A	C6-N1-C2	-6.10	114.94	118.60
24	BA	9	G	C5-N7-C8	-6.10	101.25	104.30
24	BA	84	G	O4'-C1'-N9	6.10	113.08	108.20
25	BB	164	C	C3'-C2'-C1'	-6.10	96.62	101.50
25	BB	354	A	C1'-O4'-C4'	-6.10	105.02	109.90
25	BB	821	A	C4-C5-C6	-6.10	113.95	117.00
25	BB	1161	C	C2-N3-C4	-6.10	116.85	119.90
25	BB	1441	G	N3-C4-N9	6.10	129.66	126.00
25	BB	2047	C	C1'-O4'-C4'	-6.10	105.02	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2646	C	C5-C6-N1	-6.10	117.95	121.00
3	A1	207	C	N1-C2-N3	6.10	123.47	119.20
3	A1	692	U	N3-C2-O2	-6.10	117.93	122.20
3	A1	805	C	P-O3'-C3'	6.10	127.02	119.70
3	A1	807	A	C3'-C2'-C1'	6.10	106.38	101.50
3	A1	1039	G	C3'-C2'-C1'	-6.10	96.62	101.50
3	A1	1513	A	C6-C5-N7	6.10	136.57	132.30
24	BA	105	G	C6-N1-C2	-6.10	121.44	125.10
25	BB	262	A	C4-C5-C6	-6.10	113.95	117.00
25	BB	310	A	C6-C5-N7	6.10	136.57	132.30
25	BB	1656	C	C6-N1-C2	-6.10	117.86	120.30
25	BB	1697	G	C2-N3-C4	-6.10	108.85	111.90
25	BB	2242	G	C2'-C3'-O3'	6.10	123.46	113.70
51	B2	127	TYR	CB-CG-CD2	-6.10	117.34	121.00
3	A1	1238	A	C3'-C2'-C1'	-6.10	96.62	101.50
3	A1	1367	C	C2-N3-C4	-6.10	116.85	119.90
17	AR	103	ARG	NE-CZ-NH1	6.10	123.35	120.30
25	BB	105	C	O4'-C1'-N1	6.10	113.08	108.20
25	BB	206	U	N3-C2-O2	-6.10	117.93	122.20
25	BB	279	A	N9-C4-C5	6.10	108.24	105.80
25	BB	1419	A	C6-C5-N7	6.10	136.57	132.30
25	BB	1977	A	C4-C5-C6	-6.10	113.95	117.00
25	BB	2074	U	N3-C2-O2	-6.10	117.93	122.20
25	BB	2361	G	C5-C6-N1	6.10	114.55	111.50
1	AA	73	A	C6-C5-N7	6.10	136.57	132.30
3	A1	342	C	C5'-C4'-O4'	6.10	116.42	109.10
3	A1	778	G	N7-C8-N9	6.10	116.15	113.10
3	A1	858	G	C4'-C3'-C2'	-6.10	96.50	102.60
3	A1	1518	A	C4-C5-C6	-6.10	113.95	117.00
21	AV	83	ARG	NH1-CZ-NH2	-6.10	112.69	119.40
25	BB	115	C	C3'-C2'-C1'	6.10	106.38	101.50
25	BB	201	C	N3-C4-C5	6.10	124.34	121.90
25	BB	205	G	N1-C2-N2	-6.10	110.71	116.20
25	BB	669	G	N3-C4-N9	6.10	129.66	126.00
25	BB	731	C	C5-C6-N1	-6.10	117.95	121.00
25	BB	1503	A	C6-C5-N7	6.10	136.57	132.30
25	BB	1684	G	N1-C6-O6	-6.10	116.24	119.90
25	BB	2073	C	N3-C4-C5	6.10	124.34	121.90
25	BB	2428	G	C5-C6-N1	6.10	114.55	111.50
25	BB	2447	G	N1-C6-O6	-6.10	116.24	119.90
25	BB	2654	A	C6-C5-N7	6.10	136.57	132.30
1	AA	2	C	C5-C6-N1	-6.10	117.95	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	43	G	N9-C1'-C2'	-6.10	105.29	112.00
25	BB	175	G	N7-C8-N9	6.10	116.15	113.10
25	BB	507	A	C1'-O4'-C4'	-6.10	105.02	109.90
25	BB	689	A	C8-N9-C4	-6.10	103.36	105.80
25	BB	2071	A	C2-N3-C4	6.10	113.65	110.60
25	BB	2289	G	N1-C2-N2	-6.10	110.71	116.20
25	BB	2614	A	N1-C2-N3	-6.10	126.25	129.30
25	BB	2716	C	C2-N3-C4	-6.10	116.85	119.90
1	AA	16	U	C3'-C2'-C1'	6.09	106.38	101.50
3	A1	884	U	N1-C2-N3	6.09	118.56	114.90
3	A1	1290	G	N1-C2-N3	6.09	127.56	123.90
3	A1	1292	G	C6-N1-C2	-6.09	121.44	125.10
3	A1	1388	C	C5'-C4'-C3'	-6.09	106.25	116.00
25	BB	153	U	O4'-C1'-N1	6.09	113.08	108.20
25	BB	239	C	N3-C4-N4	-6.09	113.73	118.00
25	BB	1766	G	N1-C6-O6	-6.09	116.24	119.90
25	BB	2710	C	C1'-O4'-C4'	-6.09	105.02	109.90
33	BJ	47	ARG	NH1-CZ-NH2	-6.09	112.70	119.40
3	A1	358	U	C4'-C3'-C2'	-6.09	96.51	102.60
3	A1	435	A	C1'-O4'-C4'	6.09	114.77	109.90
3	A1	911	U	C2-N3-C4	-6.09	123.34	127.00
3	A1	1107	C	C2-N3-C4	-6.09	116.85	119.90
3	A1	1433	A	C5-C6-N6	6.09	128.57	123.70
25	BB	737	C	N3-C4-N4	-6.09	113.73	118.00
25	BB	2682	A	C5-C6-N6	6.09	128.57	123.70
1	AE	71	G	N1-C6-O6	-6.09	116.25	119.90
3	A1	1320	C	C2-N3-C4	-6.09	116.85	119.90
25	BB	481	G	C5-C6-O6	6.09	132.25	128.60
25	BB	537	G	C6-C5-N7	6.09	134.06	130.40
25	BB	630	G	C5-N7-C8	-6.09	101.25	104.30
25	BB	1647	U	C5'-C4'-C3'	-6.09	106.25	116.00
25	BB	1772	A	O4'-C1'-N9	6.09	113.07	108.20
30	BG	69	ARG	CD-NE-CZ	6.09	132.13	123.60
1	AP	38	A	N1-C2-N3	-6.09	126.26	129.30
3	A1	407	U	N3-C4-O4	-6.09	115.14	119.40
24	BA	30	C	C5-C6-N1	-6.09	117.96	121.00
25	BB	308	G	O4'-C1'-N9	6.09	113.07	108.20
25	BB	1016	G	C4-C5-C6	-6.09	115.15	118.80
25	BB	1376	C	C3'-C2'-C1'	6.09	106.37	101.50
25	BB	1664	A	C4-C5-C6	-6.09	113.95	117.00
25	BB	1676	A	C4'-C3'-C2'	-6.09	96.51	102.60
25	BB	1933	G	C6-N1-C2	-6.09	121.45	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2015	A	C5-C6-N6	6.09	128.57	123.70
25	BB	2095	A	O4'-C4'-C3'	6.09	110.97	106.10
25	BB	2596	U	C4-C5-C6	6.09	123.35	119.70
25	BB	2804	U	N3-C2-O2	-6.09	117.94	122.20
3	A1	315	A	C3'-C2'-C1'	-6.09	96.63	101.50
3	A1	769	G	O4'-C1'-N9	-6.09	103.33	108.20
25	BB	3	U	C5'-C4'-C3'	-6.09	106.26	116.00
25	BB	30	G	C6-C5-N7	6.09	134.05	130.40
25	BB	98	G	C3'-C2'-C1'	6.09	106.37	101.50
25	BB	871	U	N3-C4-C5	-6.09	110.95	114.60
25	BB	1944	U	O4'-C1'-N1	6.09	113.07	108.20
3	A1	100	G	O3'-P-O5'	-6.09	92.44	104.00
3	A1	340	U	N3-C2-O2	-6.09	117.94	122.20
3	A1	441	A	C4-C5-C6	-6.09	113.96	117.00
3	A1	583	A	C5-C6-N6	6.09	128.57	123.70
25	BB	245	G	N1-C6-O6	-6.09	116.25	119.90
25	BB	429	A	C4'-C3'-C2'	-6.09	96.51	102.60
25	BB	875	G	N1-C6-O6	-6.09	116.25	119.90
25	BB	1478	G	N3-C2-N2	-6.09	115.64	119.90
25	BB	2376	A	C6-N1-C2	-6.09	114.95	118.60
25	BB	2531	A	C5-C6-N6	6.09	128.57	123.70
25	BB	2628	C	N1-C2-N3	6.09	123.46	119.20
3	A1	150	U	C2'-C3'-O3'	6.08	123.44	113.70
3	A1	286	C	N3-C2-O2	-6.08	117.64	121.90
3	A1	1012	A	C6-N1-C2	-6.08	114.95	118.60
24	BA	41	G	C5-C6-N1	6.08	114.54	111.50
25	BB	181	A	C8-N9-C4	6.08	108.23	105.80
25	BB	1072	C	N3-C2-O2	-6.08	117.64	121.90
1	AP	11	C	C2-N1-C1'	6.08	125.49	118.80
3	A1	333	U	C5-C4-O4	-6.08	122.25	125.90
3	A1	438	U	C5-C6-N1	-6.08	119.66	122.70
3	A1	699	C	N3-C4-C5	6.08	124.33	121.90
3	A1	912	C	N1-C2-N3	6.08	123.46	119.20
3	A1	956	U	C2-N3-C4	6.08	130.65	127.00
24	BA	77	U	C5'-C4'-O4'	6.08	116.40	109.10
25	BB	489	G	C2-N3-C4	6.08	114.94	111.90
25	BB	851	C	C5-C4-N4	6.08	124.46	120.20
25	BB	906	U	C5'-C4'-O4'	6.08	116.40	109.10
25	BB	1299	G	N1-C2-N3	6.08	127.55	123.90
25	BB	1560	G	N1-C6-O6	-6.08	116.25	119.90
25	BB	2502	G	P-O3'-C3'	6.08	127.00	119.70
25	BB	2740	A	O4'-C1'-N9	6.08	113.07	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
48	BY	104	VAL	CG1-CB-CG2	-6.08	101.17	110.90
1	AP	56	C	N3-C2-O2	-6.08	117.64	121.90
3	A1	257	G	C8-N9-C4	-6.08	103.97	106.40
3	A1	720	C	N3-C2-O2	-6.08	117.64	121.90
3	A1	1077	G	O4'-C1'-N9	6.08	113.06	108.20
3	A1	1276	G	N7-C8-N9	6.08	116.14	113.10
25	BB	166	U	N1-C2-N3	6.08	118.55	114.90
25	BB	545	U	N3-C2-O2	-6.08	117.94	122.20
25	BB	962	G	O4'-C4'-C3'	6.08	110.96	106.10
25	BB	1226	A	C1'-O4'-C4'	-6.08	105.03	109.90
25	BB	1431	A	C8-N9-C4	-6.08	103.37	105.80
25	BB	1769	U	N3-C2-O2	-6.08	117.94	122.20
25	BB	1961	C	N1-C2-O2	6.08	122.55	118.90
25	BB	2733	A	C5-C6-N6	6.08	128.56	123.70
25	BB	2862	G	C5-C6-N1	6.08	114.54	111.50
25	BB	2882	A	C4-C5-C6	-6.08	113.96	117.00
30	BG	2	ARG	NE-CZ-NH1	6.08	123.34	120.30
1	AE	39	U	N3-C4-O4	6.08	123.66	119.40
3	A1	185	U	O4'-C1'-N1	6.08	113.06	108.20
3	A1	314	C	N3-C2-O2	-6.08	117.64	121.90
3	A1	472	U	N3-C4-O4	-6.08	115.14	119.40
3	A1	942	G	C4-C5-N7	-6.08	108.37	110.80
3	A1	1171	A	C5-C6-N1	6.08	120.74	117.70
3	A1	1189	U	N1-C2-N3	6.08	118.55	114.90
25	BB	663	G	C4'-C3'-C2'	-6.08	96.52	102.60
25	BB	1074	G	C8-N9-C4	-6.08	103.97	106.40
25	BB	1092	C	N1-C2-O2	6.08	122.55	118.90
25	BB	1821	A	C5-C6-N6	6.08	128.56	123.70
25	BB	2749	A	O4'-C1'-N9	6.08	113.06	108.20
25	BB	2851	A	C6-C5-N7	6.08	136.56	132.30
3	A1	27	G	N1-C6-O6	-6.08	116.25	119.90
3	A1	210	C	O4'-C1'-N1	6.08	113.06	108.20
3	A1	801	U	O4'-C1'-N1	6.08	113.06	108.20
3	A1	865	A	C5'-C4'-O4'	6.08	116.39	109.10
3	A1	1446	A	C1'-O4'-C4'	-6.08	105.04	109.90
25	BB	142	A	C6-N1-C2	-6.08	114.95	118.60
25	BB	157	C	N3-C2-O2	-6.08	117.64	121.90
25	BB	247	G	C4'-C3'-C2'	-6.08	96.52	102.60
25	BB	1035	U	C5'-C4'-O4'	6.08	116.39	109.10
25	BB	1475	G	C6-C5-N7	6.08	134.05	130.40
25	BB	1630	A	C5-C6-N6	6.08	128.56	123.70
25	BB	1875	G	C5-N7-C8	-6.08	101.26	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2006	C	C5-C4-N4	6.08	124.45	120.20
25	BB	2083	G	C4-C5-N7	-6.08	108.37	110.80
25	BB	2219	U	C5-C4-O4	6.08	129.55	125.90
25	BB	2275	C	N3-C4-N4	-6.08	113.75	118.00
25	BB	2411	A	C6-C5-N7	6.08	136.56	132.30
25	BB	2470	G	C6-C5-N7	6.08	134.05	130.40
25	BB	2526	G	C2-N3-C4	6.08	114.94	111.90
25	BB	2578	G	C6-N1-C2	-6.08	121.45	125.10
42	BS	56	ARG	NE-CZ-NH2	-6.08	117.26	120.30
1	AP	20	G	C4-C5-N7	-6.08	108.37	110.80
3	A1	735	C	O4'-C1'-N1	6.08	113.06	108.20
3	A1	1008	U	N1-C1'-C2'	-6.08	105.32	112.00
3	A1	1520	C	C6-N1-C2	-6.08	117.87	120.30
25	BB	479	A	C4'-C3'-C2'	-6.08	96.52	102.60
25	BB	487	C	N3-C2-O2	-6.08	117.65	121.90
25	BB	1484	U	N1-C2-N3	6.08	118.55	114.90
25	BB	2641	G	O4'-C1'-N9	6.08	113.06	108.20
25	BB	238	C	C5-C6-N1	-6.08	117.96	121.00
25	BB	399	U	N3-C2-O2	-6.08	117.95	122.20
25	BB	458	G	N9-C4-C5	6.08	107.83	105.40
25	BB	1083	U	C4'-C3'-C2'	-6.08	96.52	102.60
25	BB	1380	G	N1-C6-O6	-6.08	116.25	119.90
25	BB	2022	U	C5-C6-N1	-6.08	119.66	122.70
25	BB	2127	G	C3'-C2'-C1'	6.08	106.36	101.50
25	BB	2328	A	C3'-C2'-C1'	6.08	106.36	101.50
27	BD	17	ARG	NE-CZ-NH2	-6.08	117.26	120.30
25	BB	5	A	O5'-P-OP1	-6.07	100.23	105.70
25	BB	503	A	P-O3'-C3'	6.07	126.99	119.70
25	BB	888	C	P-O3'-C3'	6.07	126.99	119.70
25	BB	1077	A	N1-C2-N3	-6.07	126.26	129.30
25	BB	1106	G	N3-C4-C5	-6.07	125.56	128.60
25	BB	1152	C	C2-N3-C4	-6.07	116.86	119.90
3	A1	318	G	N3-C2-N2	6.07	124.15	119.90
3	A1	368	U	N3-C4-O4	6.07	123.65	119.40
25	BB	68	G	C4-C5-N7	-6.07	108.37	110.80
25	BB	2219	U	N3-C4-O4	-6.07	115.15	119.40
3	A1	10	A	N1-C2-N3	-6.07	126.26	129.30
3	A1	31	G	N3-C4-C5	-6.07	125.56	128.60
3	A1	360	G	N1-C2-N3	6.07	127.54	123.90
3	A1	469	C	C5'-C4'-O4'	6.07	116.38	109.10
3	A1	671	G	N1-C2-N3	6.07	127.54	123.90
3	A1	753	A	C3'-C2'-C1'	-6.07	96.64	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1258	G	N3-C4-C5	-6.07	125.56	128.60
3	A1	1436	U	C5-C4-O4	-6.07	122.26	125.90
9	AH	53	ARG	NE-CZ-NH1	6.07	123.33	120.30
17	AR	110	ARG	CD-NE-CZ	6.07	132.10	123.60
25	BB	290	U	C4-C5-C6	6.07	123.34	119.70
25	BB	855	G	N9-C1'-C2'	-6.07	105.32	112.00
25	BB	939	G	C5-C6-N1	6.07	114.53	111.50
25	BB	2030	A	C2-N3-C4	6.07	113.64	110.60
25	BB	2393	U	C5-C6-N1	-6.07	119.67	122.70
25	BB	2620	C	C1'-O4'-C4'	-6.07	105.04	109.90
25	BB	2679	A	C6-C5-N7	6.07	136.55	132.30
28	BE	78	ARG	NE-CZ-NH2	6.07	123.34	120.30
1	AE	16	U	C2'-C3'-O3'	6.07	123.41	113.70
3	A1	236	A	C6-C5-N7	6.07	136.55	132.30
3	A1	361	G	N1-C6-O6	-6.07	116.26	119.90
3	A1	1145	A	C6-C5-N7	6.07	136.55	132.30
3	A1	1185	G	C4-C5-N7	6.07	113.23	110.80
3	A1	1312	G	C4-C5-C6	-6.07	115.16	118.80
25	BB	389	G	C6-N1-C2	-6.07	121.46	125.10
25	BB	476	G	C2'-C3'-O3'	6.07	123.41	113.70
25	BB	1588	G	C1'-O4'-C4'	-6.07	105.05	109.90
25	BB	1651	G	O4'-C1'-N9	6.07	113.06	108.20
25	BB	1719	G	N3-C4-C5	-6.07	125.56	128.60
25	BB	2566	A	C5'-C4'-O4'	6.07	116.38	109.10
25	BB	2790	U	C5-C4-O4	-6.07	122.26	125.90
2	AM	17	U	C5'-C4'-C3'	-6.07	106.29	116.00
3	A1	197	A	P-O3'-C3'	6.07	126.98	119.70
3	A1	267	C	C5-C6-N1	-6.07	117.97	121.00
3	A1	1053	G	N7-C8-N9	6.07	116.13	113.10
3	A1	1100	C	C5'-C4'-O4'	6.07	116.38	109.10
3	A1	1301	U	N3-C2-O2	-6.07	117.95	122.20
3	A1	1357	A	C2-N3-C4	6.07	113.63	110.60
25	BB	691	C	N1-C2-O2	6.07	122.54	118.90
25	BB	1543	G	C3'-C2'-C1'	6.07	106.35	101.50
25	BB	1875	G	C8-N9-C4	-6.07	103.97	106.40
25	BB	1966	A	C3'-C2'-C1'	6.07	106.35	101.50
25	BB	2190	G	C5-C6-N1	6.07	114.53	111.50
25	BB	2554	U	C5-C6-N1	-6.07	119.67	122.70
3	A1	176	C	N3-C4-C5	6.07	124.33	121.90
3	A1	359	G	N3-C2-N2	-6.07	115.66	119.90
3	A1	629	A	C5-C6-N6	6.07	128.55	123.70
3	A1	833	G	N3-C4-C5	-6.07	125.57	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1294	G	C5-N7-C8	-6.07	101.27	104.30
3	A1	1382	C	N1-C2-O2	6.07	122.54	118.90
25	BB	796	C	C6-N1-C2	-6.07	117.87	120.30
25	BB	985	C	C2-N3-C4	-6.07	116.87	119.90
25	BB	1056	G	O3'-P-O5'	-6.07	92.48	104.00
25	BB	1145	C	N1-C2-O2	6.07	122.54	118.90
25	BB	2037	A	N1-C2-N3	-6.07	126.27	129.30
25	BB	2166	U	C5'-C4'-O4'	6.07	116.38	109.10
25	BB	2251	G	N3-C2-N2	-6.07	115.65	119.90
25	BB	2742	G	N7-C8-N9	6.07	116.13	113.10
55	B6	34	ARG	NH1-CZ-NH2	-6.07	112.73	119.40
1	AE	35	A	C4-C5-C6	-6.06	113.97	117.00
3	A1	227	G	N9-C4-C5	6.06	107.83	105.40
3	A1	352	C	N3-C4-N4	-6.06	113.75	118.00
3	A1	1153	G	C2-N3-C4	6.06	114.93	111.90
21	AV	113	ARG	NE-CZ-NH1	6.06	123.33	120.30
25	BB	429	A	C8-N9-C4	-6.06	103.38	105.80
25	BB	674	G	N1-C2-N3	6.06	127.54	123.90
25	BB	1727	C	N1-C1'-C2'	-6.06	105.33	112.00
1	AE	38	A	C5-C6-N6	6.06	128.55	123.70
3	A1	467	U	C4'-C3'-C2'	-6.06	96.54	102.60
25	BB	85	G	O4'-C4'-C3'	6.06	110.95	106.10
25	BB	87	U	C5'-C4'-O4'	6.06	116.37	109.10
25	BB	851	C	N3-C4-C5	6.06	124.33	121.90
25	BB	1986	C	N3-C4-C5	6.06	124.33	121.90
25	BB	2379	G	C8-N9-C4	-6.06	103.97	106.40
25	BB	2863	C	C4'-C3'-C2'	-6.06	96.54	102.60
1	AA	68	U	C4'-C3'-C2'	-6.06	96.54	102.60
1	AP	36	A	P-O3'-C3'	6.06	126.97	119.70
3	A1	159	G	C4'-C3'-C2'	-6.06	96.54	102.60
3	A1	159	G	O4'-C4'-C3'	6.06	110.95	106.10
3	A1	284	C	C2-N3-C4	-6.06	116.87	119.90
3	A1	1036	A	C6-C5-N7	6.06	136.54	132.30
3	A1	192	A	C5-C6-N6	6.06	128.55	123.70
3	A1	739	C	C5-C4-N4	-6.06	115.96	120.20
3	A1	1525	G	C5-C6-N1	6.06	114.53	111.50
23	AX	72	ARG	NE-CZ-NH1	6.06	123.33	120.30
25	BB	1028	A	C5-C6-N6	6.06	128.55	123.70
25	BB	1119	U	C6-N1-C2	-6.06	117.36	121.00
25	BB	1291	C	N3-C4-C5	6.06	124.32	121.90
25	BB	1585	C	N1-C2-N3	6.06	123.44	119.20
25	BB	1987	A	C3'-C2'-C1'	6.06	106.35	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2508	G	C1'-O4'-C4'	-6.06	105.05	109.90
25	BB	2533	U	N3-C4-O4	6.06	123.64	119.40
25	BB	2805	C	C5-C6-N1	-6.06	117.97	121.00
35	BL	18	ARG	NH1-CZ-NH2	-6.06	112.73	119.40
3	A1	22	G	N3-C2-N2	-6.06	115.66	119.90
3	A1	75	G	C2-N3-C4	6.06	114.93	111.90
3	A1	782	A	C5-C6-N6	6.06	128.55	123.70
3	A1	1045	C	C2-N3-C4	-6.06	116.87	119.90
3	A1	1244	G	C1'-O4'-C4'	-6.06	105.06	109.90
24	BA	51	G	C5-C6-N1	6.06	114.53	111.50
25	BB	600	G	C5-C6-N1	6.06	114.53	111.50
25	BB	903	C	C5-C4-N4	-6.06	115.96	120.20
25	BB	1156	A	N9-C4-C5	6.06	108.22	105.80
25	BB	1638	C	N3-C4-N4	-6.06	113.76	118.00
25	BB	2740	A	C5-C6-N1	6.06	120.73	117.70
25	BB	2847	U	C2-N3-C4	-6.06	123.36	127.00
3	A1	603	U	O4'-C4'-C3'	6.06	110.94	106.10
3	A1	797	C	C5-C6-N1	-6.06	117.97	121.00
3	A1	815	A	C2-N3-C4	6.06	113.63	110.60
25	BB	77	G	N3-C2-N2	-6.06	115.66	119.90
25	BB	896	A	C5-N7-C8	-6.06	100.87	103.90
25	BB	1997	C	N3-C4-C5	6.06	124.32	121.90
25	BB	2070	A	C5-C6-N6	6.06	128.54	123.70
25	BB	2266	A	C2-N3-C4	6.06	113.63	110.60
25	BB	2375	G	C6-N1-C2	-6.06	121.47	125.10
25	BB	2591	C	N3-C4-N4	-6.06	113.76	118.00
25	BB	2596	U	P-O3'-C3'	6.06	126.97	119.70
25	BB	2774	C	N3-C2-O2	-6.06	117.66	121.90
3	A1	11	G	C3'-C2'-C1'	6.05	106.34	101.50
3	A1	97	G	C5-C6-N1	6.05	114.53	111.50
3	A1	195	A	C5-C6-N1	6.05	120.73	117.70
3	A1	305	G	N9-C4-C5	6.05	107.82	105.40
3	A1	544	G	N3-C4-N9	6.05	129.63	126.00
3	A1	615	G	C2-N3-C4	6.05	114.93	111.90
3	A1	674	G	C6-N1-C2	-6.05	121.47	125.10
25	BB	73	A	C6-C5-N7	6.05	136.54	132.30
25	BB	254	G	O4'-C1'-N9	6.05	113.04	108.20
25	BB	266	G	N1-C6-O6	-6.05	116.27	119.90
25	BB	462	C	C5-C4-N4	6.05	124.44	120.20
25	BB	622	G	C5-C6-N1	6.05	114.53	111.50
25	BB	767	U	C5-C6-N1	-6.05	119.67	122.70
25	BB	904	G	P-O3'-C3'	6.05	126.97	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1319	C	N1-C2-N3	6.05	123.44	119.20
25	BB	1396	U	N1-C2-N3	6.05	118.53	114.90
25	BB	1529	G	O4'-C1'-N9	6.05	113.04	108.20
25	BB	1647	U	N3-C2-O2	-6.05	117.96	122.20
25	BB	1964	G	O4'-C1'-N9	-6.05	103.36	108.20
25	BB	2414	G	C4'-C3'-C2'	-6.05	96.55	102.60
25	BB	2486	C	N3-C2-O2	-6.05	117.66	121.90
1	AA	63	C	N3-C4-N4	-6.05	113.76	118.00
3	A1	850	U	N3-C2-O2	-6.05	117.96	122.20
3	A1	947	G	C4-C5-C6	-6.05	115.17	118.80
3	A1	1024	G	N1-C6-O6	-6.05	116.27	119.90
17	AR	43	ARG	NE-CZ-NH2	6.05	123.33	120.30
25	BB	1739	A	C6-N1-C2	-6.05	114.97	118.60
25	BB	1837	C	O4'-C1'-N1	6.05	113.04	108.20
25	BB	1995	U	C5'-C4'-O4'	6.05	116.36	109.10
25	BB	2719	G	N3-C2-N2	-6.05	115.66	119.90
25	BB	2736	A	C5-C6-N6	6.05	128.54	123.70
3	A1	347	G	C5-C6-N1	6.05	114.53	111.50
3	A1	717	U	N1-C1'-C2'	-6.05	105.34	112.00
3	A1	753	A	C6-C5-N7	6.05	136.53	132.30
3	A1	969	A	N3-C4-C5	6.05	131.04	126.80
3	A1	1493	A	N9-C1'-C2'	6.05	121.87	114.00
25	BB	273	G	C4-C5-C6	-6.05	115.17	118.80
25	BB	719	C	C3'-C2'-C1'	6.05	106.34	101.50
25	BB	1721	G	O4'-C1'-N9	-6.05	103.36	108.20
25	BB	2042	A	C6-C5-N7	6.05	136.54	132.30
25	BB	2080	A	N9-C4-C5	6.05	108.22	105.80
25	BB	2244	U	C5-C6-N1	-6.05	119.67	122.70
25	BB	2420	C	N3-C4-N4	-6.05	113.77	118.00
25	BB	2570	G	C6-N1-C2	-6.05	121.47	125.10
25	BB	2787	C	C2-N3-C4	-6.05	116.87	119.90
29	BF	55	ARG	NE-CZ-NH1	6.05	123.33	120.30
3	A1	32	A	C4-C5-C6	-6.05	113.98	117.00
3	A1	163	C	N1-C2-N3	6.05	123.44	119.20
3	A1	323	U	O4'-C1'-N1	6.05	113.04	108.20
3	A1	640	A	C4'-C3'-C2'	-6.05	96.55	102.60
3	A1	762	U	N3-C2-O2	-6.05	117.97	122.20
3	A1	984	C	O4'-C1'-N1	6.05	113.04	108.20
3	A1	1296	C	C6-N1-C2	-6.05	117.88	120.30
3	A1	1412	C	O4'-C1'-N1	6.05	113.04	108.20
5	AC	92	ARG	CD-NE-CZ	6.05	132.07	123.60
25	BB	1252	G	N9-C4-C5	6.05	107.82	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1398	C	N3-C2-O2	-6.05	117.67	121.90
25	BB	1780	A	C6-C5-N7	6.05	136.53	132.30
25	BB	1858	A	N9-C4-C5	6.05	108.22	105.80
25	BB	1942	C	N1-C2-O2	6.05	122.53	118.90
25	BB	2364	C	N1-C2-N3	6.05	123.44	119.20
25	BB	2468	A	C5-C6-N6	6.05	128.54	123.70
1	AP	35	A	C5'-C4'-O4'	6.05	116.36	109.10
3	A1	656	G	N1-C6-O6	-6.05	116.27	119.90
3	A1	700	G	C1'-O4'-C4'	-6.05	105.06	109.90
3	A1	1428	A	C3'-C2'-C1'	-6.05	96.66	101.50
25	BB	725	G	C4'-C3'-C2'	-6.05	96.55	102.60
25	BB	1135	C	N1-C2-N3	6.05	123.43	119.20
25	BB	2664	G	C6-N1-C2	-6.05	121.47	125.10
3	A1	890	G	C5-C6-N1	6.05	114.52	111.50
3	A1	904	U	O4'-C4'-C3'	6.05	110.94	106.10
3	A1	1510	C	C2-N3-C4	-6.05	116.88	119.90
24	BA	108	A	C6-C5-N7	6.05	136.53	132.30
25	BB	622	G	N1-C2-N2	-6.05	110.76	116.20
25	BB	1437	C	C2-N3-C4	-6.05	116.88	119.90
25	BB	1725	U	C5-C6-N1	-6.05	119.68	122.70
25	BB	1933	G	C4-C5-N7	-6.05	108.38	110.80
25	BB	2104	C	C5-C6-N1	-6.05	117.98	121.00
25	BB	893	C	N1-C2-O2	6.04	122.53	118.90
25	BB	1093	G	C4'-C3'-C2'	-6.04	96.56	102.60
3	A1	189	A	C3'-C2'-C1'	6.04	106.33	101.50
3	A1	805	C	C5'-C4'-O4'	6.04	116.35	109.10
3	A1	930	C	N3-C4-N4	-6.04	113.77	118.00
3	A1	967	C	C6-N1-C2	-6.04	117.88	120.30
3	A1	1028	C	C4'-C3'-C2'	-6.04	96.56	102.60
8	AG	53	ASP	CB-CG-OD2	-6.04	112.86	118.30
25	BB	177	G	N1-C2-N3	6.04	127.53	123.90
25	BB	703	U	N1-C2-N3	6.04	118.53	114.90
25	BB	762	U	C4'-C3'-C2'	-6.04	96.56	102.60
25	BB	1007	C	N3-C2-O2	-6.04	117.67	121.90
25	BB	1530	G	C5'-C4'-O4'	6.04	116.35	109.10
25	BB	2412	A	C6-C5-N7	6.04	136.53	132.30
25	BB	2597	G	C4-C5-N7	-6.04	108.38	110.80
38	BO	36	GLU	OE1-CD-OE2	-6.04	116.05	123.30
1	AA	67	A	C6-C5-N7	6.04	136.53	132.30
1	AP	57	G	N7-C8-N9	6.04	116.12	113.10
3	A1	33	A	C6-N1-C2	-6.04	114.97	118.60
3	A1	646	G	N3-C4-N9	6.04	129.62	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1417	G	N1-C2-N3	6.04	127.53	123.90
25	BB	156	A	O4'-C1'-N9	6.04	113.03	108.20
25	BB	776	G	N7-C8-N9	6.04	116.12	113.10
25	BB	835	C	C4'-C3'-C2'	-6.04	96.56	102.60
25	BB	980	A	N1-C2-N3	-6.04	126.28	129.30
25	BB	1930	G	C5-C6-N1	6.04	114.52	111.50
25	BB	2337	G	C5-C6-N1	6.04	114.52	111.50
25	BB	2402	U	C4-C5-C6	6.04	123.33	119.70
3	A1	476	U	O4'-C1'-N1	6.04	113.03	108.20
25	BB	2161	C	C5-C4-N4	6.04	124.43	120.20
25	BB	2461	A	C6-C5-N7	6.04	136.53	132.30
1	AA	57	G	N7-C8-N9	6.04	116.12	113.10
3	A1	434	U	O3'-P-O5'	-6.04	92.53	104.00
3	A1	512	U	C5-C6-N1	-6.04	119.68	122.70
3	A1	724	G	C1'-O4'-C4'	-6.04	105.07	109.90
3	A1	888	G	N3-C2-N2	-6.04	115.67	119.90
3	A1	919	A	C5-N7-C8	-6.04	100.88	103.90
3	A1	1421	G	C5-C6-N1	6.04	114.52	111.50
25	BB	99	U	C5-C6-N1	-6.04	119.68	122.70
25	BB	260	G	N3-C2-N2	-6.04	115.67	119.90
25	BB	426	C	C5-C4-N4	-6.04	115.97	120.20
25	BB	1252	G	C6-N1-C2	-6.04	121.48	125.10
25	BB	1497	U	C2-N3-C4	-6.04	123.38	127.00
25	BB	1820	U	C3'-C2'-C1'	-6.04	96.67	101.50
25	BB	2052	A	C5-N7-C8	-6.04	100.88	103.90
25	BB	2254	C	N3-C2-O2	-6.04	117.67	121.90
25	BB	2425	A	C5-C6-N1	6.04	120.72	117.70
25	BB	2432	A	C4-C5-C6	-6.04	113.98	117.00
3	A1	446	G	N3-C2-N2	-6.04	115.67	119.90
3	A1	1237	C	C4'-C3'-C2'	-6.04	96.56	102.60
25	BB	734	A	C4'-C3'-C2'	-6.04	96.56	102.60
25	BB	1033	U	C2-N3-C4	-6.04	123.38	127.00
25	BB	2136	G	C4-C5-N7	-6.04	108.39	110.80
25	BB	2410	G	N9-C4-C5	6.04	107.81	105.40
1	AP	37	G	C4-C5-N7	6.04	113.21	110.80
3	A1	138	G	C5-C6-N1	6.04	114.52	111.50
3	A1	227	G	N1-C2-N3	6.04	127.52	123.90
3	A1	612	C	N3-C2-O2	-6.04	117.68	121.90
3	A1	921	U	P-O3'-C3'	6.04	126.94	119.70
3	A1	1004	A	C5-C6-N6	6.04	128.53	123.70
3	A1	1198	G	C6-C5-N7	6.04	134.02	130.40
3	A1	1427	C	C3'-C2'-C1'	6.04	106.33	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	250	G	C5'-C4'-O4'	6.04	116.34	109.10
25	BB	675	A	C5-C6-N6	6.04	128.53	123.70
25	BB	1100	C	O4'-C4'-C3'	-6.04	97.97	104.00
25	BB	1528	A	C6-C5-N7	6.04	136.53	132.30
25	BB	2058	A	C6-C5-N7	6.04	136.53	132.30
25	BB	2391	G	C6-C5-N7	6.04	134.02	130.40
25	BB	2480	C	C1'-O4'-C4'	-6.04	105.07	109.90
1	AP	1	G	N3-C4-C5	-6.03	125.58	128.60
3	A1	635	A	P-O3'-C3'	6.03	126.94	119.70
3	A1	1073	U	N1-C2-N3	6.03	118.52	114.90
25	BB	206	U	N1-C2-O2	6.03	127.02	122.80
25	BB	214	G	C4-C5-C6	-6.03	115.18	118.80
25	BB	479	A	C3'-C2'-C1'	6.03	106.33	101.50
25	BB	511	U	O4'-C1'-C2'	-6.03	99.77	105.80
25	BB	708	G	N3-C4-C5	-6.03	125.58	128.60
25	BB	771	G	C6-C5-N7	6.03	134.02	130.40
25	BB	1611	C	N1-C2-O2	6.03	122.52	118.90
25	BB	1701	A	C6-C5-N7	6.03	136.52	132.30
25	BB	2673	G	N9-C4-C5	6.03	107.81	105.40
25	BB	2807	U	O4'-C1'-C2'	6.03	113.03	107.60
50	B1	69	ARG	NE-CZ-NH2	6.03	123.32	120.30
1	AE	56	C	N1-C2-N3	6.03	123.42	119.20
3	A1	246	A	C6-C5-N7	6.03	136.52	132.30
25	BB	1100	C	C5'-C4'-O4'	6.03	116.34	109.10
25	BB	1641	A	C6-C5-N7	6.03	136.52	132.30
25	BB	2361	G	N1-C2-N3	6.03	127.52	123.90
25	BB	2901	C	C4'-C3'-C2'	-6.03	96.57	102.60
3	A1	122	G	C5'-C4'-O4'	-6.03	101.86	109.10
3	A1	131	A	C5'-C4'-O4'	-6.03	101.86	109.10
3	A1	156	C	C4-C5-C6	-6.03	114.38	117.40
3	A1	207	C	N3-C4-C5	6.03	124.31	121.90
3	A1	287	U	N3-C4-O4	6.03	123.62	119.40
3	A1	667	G	C4-C5-N7	-6.03	108.39	110.80
3	A1	1181	G	N3-C4-C5	-6.03	125.58	128.60
3	A1	1252	A	C4-C5-C6	-6.03	113.98	117.00
25	BB	274	C	N1-C2-N3	6.03	123.42	119.20
25	BB	450	G	N3-C4-C5	-6.03	125.58	128.60
25	BB	466	A	N1-C2-N3	-6.03	126.28	129.30
25	BB	559	G	C5-N7-C8	-6.03	101.28	104.30
25	BB	762	U	O4'-C4'-C3'	6.03	110.92	106.10
25	BB	1027	A	C2-N3-C4	6.03	113.61	110.60
25	BB	1378	A	C2-N3-C4	6.03	113.61	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1893	C	N3-C2-O2	-6.03	117.68	121.90
25	BB	1893	C	O4'-C1'-N1	6.03	113.02	108.20
25	BB	1984	G	N3-C4-C5	-6.03	125.58	128.60
25	BB	2122	U	C5-C4-O4	6.03	129.52	125.90
25	BB	2159	G	N9-C4-C5	6.03	107.81	105.40
25	BB	2216	G	C8-N9-C4	-6.03	103.99	106.40
25	BB	2252	G	C5'-C4'-C3'	-6.03	106.35	116.00
25	BB	2506	U	C4'-C3'-O3'	6.03	125.06	113.00
38	BO	93	ARG	CD-NE-CZ	6.03	132.04	123.60
1	AA	53	G	C4-C5-C6	-6.03	115.18	118.80
25	BB	414	C	N3-C4-C5	6.03	124.31	121.90
25	BB	1398	C	C5-C6-N1	-6.03	117.98	121.00
25	BB	1463	C	N1-C2-N3	6.03	123.42	119.20
25	BB	1873	G	C8-N9-C4	-6.03	103.99	106.40
25	BB	1988	G	C1'-O4'-C4'	-6.03	105.08	109.90
25	BB	2418	A	C6-C5-N7	6.03	136.52	132.30
3	A1	406	G	C1'-O4'-C4'	6.03	114.72	109.90
3	A1	1143	G	C5-C6-N1	6.03	114.51	111.50
3	A1	1419	G	N1-C2-N2	-6.03	110.78	116.20
25	BB	1020	A	N7-C8-N9	6.03	116.81	113.80
25	BB	1083	U	C4-C5-C6	6.03	123.32	119.70
25	BB	1297	C	N1-C2-O2	6.03	122.52	118.90
25	BB	1304	A	C4-C5-C6	-6.03	113.99	117.00
25	BB	1908	C	N1-C1'-C2'	6.03	121.83	114.00
25	BB	2063	C	O4'-C1'-C2'	-6.03	99.77	105.80
25	BB	2364	C	O4'-C4'-C3'	-6.03	97.97	104.00
25	BB	2641	G	C5-N7-C8	-6.03	101.29	104.30
28	BE	21	ARG	NE-CZ-NH1	6.03	123.31	120.30
51	B2	149	ARG	NE-CZ-NH1	6.03	123.31	120.30
1	AA	13	C	O4'-C4'-C3'	-6.03	97.97	104.00
1	AA	73	A	N9-C4-C5	-6.03	103.39	105.80
3	A1	222	C	N3-C2-O2	-6.03	117.68	121.90
3	A1	846	G	C5-N7-C8	-6.03	101.29	104.30
3	A1	1434	A	C5'-C4'-O4'	6.03	116.33	109.10
17	AR	145	ARG	NE-CZ-NH2	-6.03	117.29	120.30
25	BB	139	U	O4'-C1'-N1	6.03	113.02	108.20
25	BB	678	C	N3-C4-C5	6.03	124.31	121.90
25	BB	1194	A	C5'-C4'-O4'	-6.03	101.87	109.10
25	BB	1311	G	C5'-C4'-O4'	6.03	116.33	109.10
25	BB	1560	G	N1-C2-N3	6.03	127.52	123.90
3	A1	1152	A	C5-N7-C8	-6.02	100.89	103.90
3	A1	1216	A	C4'-C3'-C2'	-6.02	96.58	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	70	C	C2-N3-C4	-6.02	116.89	119.90
25	BB	187	G	N7-C8-N9	6.02	116.11	113.10
25	BB	191	A	O4'-C4'-C3'	6.02	110.92	106.10
25	BB	271	G	O4'-C1'-C2'	-6.02	99.78	105.80
25	BB	2120	G	C5-C6-O6	6.02	132.21	128.60
1	AP	48	C	C5-C6-N1	-6.02	117.99	121.00
3	A1	82	G	C8-N9-C4	-6.02	103.99	106.40
24	BA	36	C	N3-C2-O2	-6.02	117.69	121.90
25	BB	1129	A	O4'-C1'-N9	6.02	113.02	108.20
25	BB	2585	U	N1-C2-N3	6.02	118.51	114.90
13	AL	24	SER	C-N-CA	6.02	134.94	122.30
25	BB	1642	G	C5-N7-C8	-6.02	101.29	104.30
25	BB	1673	G	N1-C6-O6	-6.02	116.29	119.90
25	BB	1897	G	C5-C6-N1	6.02	114.51	111.50
25	BB	1973	G	C8-N9-C4	-6.02	103.99	106.40
3	A1	346	G	C4-C5-N7	-6.02	108.39	110.80
3	A1	919	A	N7-C8-N9	6.02	116.81	113.80
3	A1	945	G	C8-N9-C4	-6.02	103.99	106.40
24	BA	12	C	C5-C4-N4	-6.02	115.99	120.20
25	BB	141	G	N3-C4-C5	-6.02	125.59	128.60
25	BB	170	U	N1-C2-N3	6.02	118.51	114.90
25	BB	220	G	C5-C6-N1	6.02	114.51	111.50
25	BB	357	C	C2-N3-C4	-6.02	116.89	119.90
25	BB	388	G	C6-C5-N7	6.02	134.01	130.40
25	BB	1503	A	N1-C2-N3	-6.02	126.29	129.30
25	BB	2130	U	N1-C2-O2	6.02	127.01	122.80
25	BB	2255	G	C4-C5-N7	6.02	113.21	110.80
25	BB	2678	C	N3-C4-C5	6.02	124.31	121.90
3	A1	61	G	O4'-C1'-N9	6.02	113.02	108.20
3	A1	1077	G	C4-C5-N7	-6.02	108.39	110.80
3	A1	1465	A	C8-N9-C4	-6.02	103.39	105.80
24	BA	34	A	C2'-C3'-O3'	6.02	123.33	113.70
25	BB	79	C	N3-C2-O2	-6.02	117.69	121.90
25	BB	687	C	N1-C2-N3	6.02	123.41	119.20
25	BB	1230	A	O4'-C1'-N9	6.02	113.01	108.20
25	BB	1435	G	N1-C6-O6	-6.02	116.29	119.90
25	BB	1817	G	N9-C4-C5	6.02	107.81	105.40
25	BB	2283	C	C2-N3-C4	-6.02	116.89	119.90
25	BB	2453	A	C6-N1-C2	-6.02	114.99	118.60
25	BB	2550	G	C5-C6-N1	6.02	114.51	111.50
53	B4	105	ALA	CB-CA-C	6.02	119.13	110.10
3	A1	591	U	N1-C2-N3	6.02	118.51	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1448	C	N1-C2-N3	6.02	123.41	119.20
4	AB	96	LEU	C-N-CA	6.02	134.93	122.30
25	BB	96	C	C1'-O4'-C4'	-6.02	105.09	109.90
25	BB	1671	U	O5'-C5'-C4'	6.02	123.13	111.70
25	BB	1917	U	C5-C4-O4	6.02	129.51	125.90
3	A1	435	A	N1-C2-N3	-6.01	126.29	129.30
3	A1	1021	A	C1'-O4'-C4'	-6.01	105.09	109.90
3	A1	1026	G	C4-C5-C6	-6.01	115.19	118.80
3	A1	1440	U	N1-C2-O2	6.01	127.01	122.80
25	BB	211	C	O4'-C1'-N1	6.01	113.01	108.20
25	BB	472	A	C6-C5-N7	6.01	136.51	132.30
25	BB	1009	A	N7-C8-N9	6.01	116.81	113.80
25	BB	1110	G	N7-C8-N9	6.01	116.11	113.10
25	BB	1842	G	C5'-C4'-C3'	-6.01	106.38	116.00
25	BB	2839	G	C6-N1-C2	-6.01	121.49	125.10
3	A1	1354	U	C5-C6-N1	-6.01	119.69	122.70
25	BB	26	G	C8-N9-C4	-6.01	104.00	106.40
25	BB	490	C	C2-N3-C4	-6.01	116.89	119.90
25	BB	1179	G	C6-N1-C2	-6.01	121.49	125.10
25	BB	1991	U	N1-C2-N3	6.01	118.51	114.90
31	BH	16	ARG	CD-NE-CZ	6.01	132.02	123.60
1	AA	57	G	C5-C6-O6	6.01	132.21	128.60
1	AE	3	G	N1-C6-O6	-6.01	116.29	119.90
3	A1	696	A	N1-C2-N3	-6.01	126.30	129.30
3	A1	739	C	O5'-C5'-C4'	6.01	123.12	111.70
3	A1	1410	A	C4'-C3'-C2'	-6.01	96.59	102.60
25	BB	593	U	C4-C5-C6	6.01	123.31	119.70
25	BB	746	U	N1-C2-N3	6.01	118.51	114.90
25	BB	1145	C	C2-N3-C4	-6.01	116.89	119.90
25	BB	1760	C	N1-C2-O2	6.01	122.51	118.90
25	BB	2029	G	C5'-C4'-O4'	6.01	116.31	109.10
25	BB	2145	C	C5-C6-N1	-6.01	117.99	121.00
1	AP	29	A	C4'-C3'-C2'	-6.01	96.59	102.60
3	A1	1059	C	O4'-C1'-N1	6.01	113.01	108.20
25	BB	179	C	N3-C4-C5	6.01	124.30	121.90
25	BB	914	G	N1-C6-O6	-6.01	116.29	119.90
25	BB	1453	A	C1'-O4'-C4'	-6.01	105.09	109.90
25	BB	1641	A	C5-C6-N6	6.01	128.51	123.70
25	BB	1674	G	N9-C4-C5	6.01	107.80	105.40
25	BB	2011	U	N3-C4-O4	-6.01	115.19	119.40
25	BB	2314	A	N9-C4-C5	-6.01	103.40	105.80
3	A1	71	A	C5'-C4'-C3'	-6.01	106.39	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1	G	C2-N3-C4	6.01	114.90	111.90
25	BB	1701	A	C4'-C3'-C2'	-6.01	96.59	102.60
25	BB	2025	C	N3-C4-N4	-6.01	113.79	118.00
25	BB	2443	C	N3-C4-C5	6.01	124.30	121.90
1	AE	54	U	C5-C6-N1	-6.01	119.70	122.70
3	A1	29	U	C2-N3-C4	-6.01	123.40	127.00
3	A1	311	C	C1'-O4'-C4'	-6.01	105.09	109.90
3	A1	367	U	C5-C6-N1	-6.01	119.70	122.70
24	BA	105	G	N7-C8-N9	6.01	116.10	113.10
25	BB	897	C	N3-C4-N4	-6.01	113.80	118.00
25	BB	2164	C	N1-C2-O2	6.01	122.50	118.90
25	BB	2192	U	O4'-C1'-C2'	-6.01	99.79	105.80
25	BB	2595	G	C6-N1-C2	-6.01	121.50	125.10
3	A1	396	C	N1-C2-O2	6.00	122.50	118.90
3	A1	1213	A	C4-C5-C6	-6.00	114.00	117.00
3	A1	1335	U	O3'-P-O5'	-6.00	92.59	104.00
4	AB	34	ARG	NH1-CZ-NH2	-6.00	112.80	119.40
25	BB	565	C	C3'-C2'-C1'	6.00	106.30	101.50
25	BB	682	G	N9-C4-C5	6.00	107.80	105.40
25	BB	1712	U	P-O3'-C3'	6.00	126.91	119.70
3	A1	269	C	C5-C6-N1	-6.00	118.00	121.00
3	A1	823	C	C2'-C3'-O3'	6.00	123.31	113.70
3	A1	1138	G	N1-C2-N2	-6.00	110.80	116.20
24	BA	17	C	N1-C2-N3	6.00	123.40	119.20
25	BB	452	G	N7-C8-N9	6.00	116.10	113.10
25	BB	522	A	C6-C5-N7	6.00	136.50	132.30
25	BB	748	G	N9-C4-C5	6.00	107.80	105.40
25	BB	1062	G	C8-N9-C4	-6.00	104.00	106.40
25	BB	2178	C	C2-N3-C4	-6.00	116.90	119.90
25	BB	2330	G	C4'-C3'-C2'	-6.00	96.60	102.60
25	BB	2653	U	N1-C2-N3	6.00	118.50	114.90
40	BQ	52	ARG	NE-CZ-NH1	6.00	123.30	120.30
1	AA	46	G	O4'-C4'-C3'	6.00	110.90	106.10
1	AE	42	G	C5-N7-C8	-6.00	101.30	104.30
3	A1	53	A	C2-N3-C4	6.00	113.60	110.60
3	A1	214	C	N1-C2-O2	6.00	122.50	118.90
3	A1	645	G	N1-C2-N3	6.00	127.50	123.90
3	A1	734	G	C5-C6-O6	6.00	132.20	128.60
3	A1	862	C	C3'-C2'-C1'	-6.00	96.70	101.50
3	A1	919	A	C6-C5-N7	6.00	136.50	132.30
3	A1	1000	A	C4-C5-N7	6.00	113.70	110.70
3	A1	1024	G	N3-C4-C5	-6.00	125.60	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	313	G	N3-C2-N2	-6.00	115.70	119.90
25	BB	912	C	C4-C5-C6	6.00	120.40	117.40
25	BB	923	G	C8-N9-C4	-6.00	104.00	106.40
25	BB	1528	A	C3'-C2'-C1'	-6.00	96.70	101.50
25	BB	1570	A	N3-C4-N9	-6.00	122.60	127.40
25	BB	1699	G	C5'-C4'-C3'	-6.00	106.40	116.00
25	BB	1938	A	O4'-C1'-N9	6.00	113.00	108.20
25	BB	2651	C	C5'-C4'-O4'	6.00	116.30	109.10
25	BB	2867	G	N3-C4-C5	-6.00	125.60	128.60
25	BB	2890	G	C2-N3-C4	6.00	114.90	111.90
3	A1	354	G	C4-C5-C6	-6.00	115.20	118.80
3	A1	1454	G	N9-C4-C5	6.00	107.80	105.40
3	A1	1494	G	N3-C2-N2	6.00	124.10	119.90
25	BB	270	A	C6-C5-N7	6.00	136.50	132.30
25	BB	685	A	N9-C4-C5	-6.00	103.40	105.80
25	BB	1178	C	O4'-C1'-N1	6.00	113.00	108.20
25	BB	1653	G	N1-C6-O6	-6.00	116.30	119.90
25	BB	2021	C	N1-C2-N3	6.00	123.40	119.20
25	BB	2342	C	N3-C4-N4	-6.00	113.80	118.00
25	BB	2494	G	N1-C2-N3	6.00	127.50	123.90
3	A1	160	A	C8-N9-C4	-6.00	103.40	105.80
3	A1	277	C	C2-N3-C4	-6.00	116.90	119.90
3	A1	530	G	O4'-C1'-N9	6.00	113.00	108.20
3	A1	936	C	N3-C4-C5	6.00	124.30	121.90
3	A1	1011	C	C6-N1-C2	-6.00	117.90	120.30
3	A1	1483	A	C4-C5-C6	-6.00	114.00	117.00
12	AK	22	TYR	CB-CG-CD2	-6.00	117.40	121.00
25	BB	317	G	C8-N9-C4	-6.00	104.00	106.40
25	BB	417	C	C5-C4-N4	6.00	124.40	120.20
25	BB	483	A	N1-C2-N3	-6.00	126.30	129.30
25	BB	845	A	C4-C5-N7	6.00	113.70	110.70
25	BB	909	A	C6-C5-N7	6.00	136.50	132.30
25	BB	911	A	C4'-C3'-C2'	-6.00	96.60	102.60
25	BB	913	U	P-O3'-C3'	6.00	126.90	119.70
25	BB	1018	U	N1-C2-O2	6.00	127.00	122.80
25	BB	1445	G	C5-N7-C8	-6.00	101.30	104.30
25	BB	1560	G	C6-C5-N7	6.00	134.00	130.40
25	BB	1887	C	C4'-C3'-C2'	-6.00	96.60	102.60
25	BB	2061	G	C8-N9-C4	-6.00	104.00	106.40
25	BB	2083	G	O3'-P-O5'	6.00	115.40	104.00
25	BB	2271	G	C3'-C2'-C1'	-6.00	96.70	101.50
25	BB	2511	U	N3-C2-O2	-6.00	118.00	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	56	C	C5-C6-N1	-6.00	118.00	121.00
3	A1	111	G	N3-C2-N2	-6.00	115.70	119.90
3	A1	1053	G	C3'-C2'-C1'	-6.00	96.70	101.50
25	BB	180	G	C5'-C4'-O4'	6.00	116.30	109.10
25	BB	327	G	N3-C2-N2	-6.00	115.70	119.90
25	BB	557	C	O4'-C1'-N1	6.00	113.00	108.20
25	BB	623	C	C3'-C2'-C1'	6.00	106.30	101.50
25	BB	1264	A	C4-C5-C6	-6.00	114.00	117.00
25	BB	1788	C	C5-C4-N4	6.00	124.40	120.20
25	BB	2173	A	C6-C5-N7	6.00	136.50	132.30
25	BB	2251	G	C5-N7-C8	-6.00	101.30	104.30
25	BB	2260	C	C2-N3-C4	-6.00	116.90	119.90
25	BB	2863	C	C6-N1-C2	-6.00	117.90	120.30
3	A1	234	C	N3-C4-N4	-6.00	113.80	118.00
3	A1	745	G	C4-C5-N7	-6.00	108.40	110.80
3	A1	787	A	C5'-C4'-O4'	6.00	116.29	109.10
3	A1	900	A	C5-C6-N1	6.00	120.70	117.70
3	A1	1221	G	C4-C5-N7	-6.00	108.40	110.80
3	A1	1450	U	N1-C2-N3	6.00	118.50	114.90
24	BA	56	G	C6-C5-N7	6.00	134.00	130.40
25	BB	617	G	N9-C1'-C2'	-6.00	105.41	112.00
25	BB	667	U	C5-C6-N1	-6.00	119.70	122.70
25	BB	698	C	C2-N3-C4	-6.00	116.90	119.90
25	BB	1821	A	N1-C2-N3	-6.00	126.30	129.30
25	BB	1852	U	C5-C6-N1	-6.00	119.70	122.70
25	BB	2472	G	C6-C5-N7	6.00	134.00	130.40
25	BB	2807	U	C4'-C3'-C2'	6.00	108.59	102.60
25	BB	2863	C	C1'-O4'-C4'	-6.00	105.10	109.90
3	A1	1191	A	C6-C5-N7	5.99	136.50	132.30
6	AD	85	ARG	CD-NE-CZ	5.99	131.99	123.60
25	BB	378	C	C5'-C4'-C3'	-5.99	106.41	116.00
25	BB	573	U	N3-C2-O2	-5.99	118.00	122.20
25	BB	1438	U	C3'-C2'-C1'	-5.99	96.70	101.50
25	BB	1441	G	C4-C5-C6	-5.99	115.20	118.80
25	BB	1888	G	N1-C2-N3	5.99	127.50	123.90
25	BB	1929	G	N1-C2-N3	5.99	127.50	123.90
25	BB	2058	A	C5-C6-N6	5.99	128.50	123.70
25	BB	2308	G	C6-N1-C2	-5.99	121.50	125.10
55	B6	125	TYR	CB-CG-CD1	-5.99	117.40	121.00
3	A1	1013	G	C4-C5-C6	-5.99	115.20	118.80
4	AB	34	ARG	NE-CZ-NH1	5.99	123.30	120.30
25	BB	586	A	C3'-C2'-C1'	5.99	106.29	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	978	G	C6-C5-N7	5.99	134.00	130.40
25	BB	1617	C	C4'-C3'-C2'	-5.99	96.61	102.60
25	BB	2599	G	C4-C5-C6	-5.99	115.20	118.80
1	AA	3	G	C4-C5-N7	-5.99	108.40	110.80
1	AP	40	C	N3-C4-C5	5.99	124.30	121.90
3	A1	77	A	N3-C4-N9	-5.99	122.61	127.40
3	A1	523	A	N9-C4-C5	5.99	108.20	105.80
3	A1	769	G	C3'-C2'-C1'	-5.99	96.71	101.50
3	A1	908	A	C6-C5-N7	5.99	136.49	132.30
3	A1	956	U	O4'-C1'-N1	5.99	112.99	108.20
3	A1	1084	G	C3'-C2'-C1'	5.99	106.29	101.50
3	A1	1169	A	N7-C8-N9	5.99	116.80	113.80
24	BA	69	G	C4-C5-C6	-5.99	115.21	118.80
25	BB	396	G	C6-C5-N7	5.99	133.99	130.40
25	BB	490	C	O4'-C1'-C2'	-5.99	99.81	105.80
25	BB	809	G	N3-C4-C5	-5.99	125.61	128.60
25	BB	1789	A	C2-N3-C4	5.99	113.59	110.60
25	BB	1953	A	C6-N1-C2	-5.99	115.01	118.60
25	BB	2287	A	O4'-C4'-C3'	-5.99	98.01	104.00
3	A1	9	G	C5-N7-C8	-5.99	101.31	104.30
3	A1	381	C	C3'-C2'-C1'	5.99	106.29	101.50
3	A1	406	G	N1-C2-N3	5.99	127.49	123.90
24	BA	95	U	N3-C4-C5	5.99	118.19	114.60
25	BB	185	G	N3-C4-C5	-5.99	125.61	128.60
25	BB	626	A	C5'-C4'-O4'	5.99	116.28	109.10
25	BB	994	C	C3'-C2'-C1'	-5.99	96.71	101.50
25	BB	1046	A	C5-C6-N6	5.99	128.49	123.70
25	BB	1564	C	C4-C5-C6	-5.99	114.41	117.40
25	BB	1969	A	C4-C5-C6	-5.99	114.01	117.00
25	BB	2334	U	C1'-O4'-C4'	-5.99	105.11	109.90
3	A1	549	C	C5'-C4'-O4'	5.99	116.28	109.10
25	BB	654	A	P-O3'-C3'	5.99	126.88	119.70
25	BB	1158	C	N3-C2-O2	-5.99	117.71	121.90
25	BB	1634	A	N1-C2-N3	-5.99	126.31	129.30
25	BB	2270	A	C6-C5-N7	5.99	136.49	132.30
25	BB	2449	U	O4'-C4'-C3'	5.99	110.89	106.10
3	A1	201	G	N3-C4-C5	-5.99	125.61	128.60
3	A1	1349	A	C6-N1-C2	-5.99	115.01	118.60
3	A1	1351	U	C1'-O4'-C4'	-5.99	105.11	109.90
25	BB	927	A	N1-C2-N3	-5.99	126.31	129.30
25	BB	1207	C	C5-C6-N1	-5.99	118.01	121.00
25	BB	1525	A	N3-C4-C5	-5.99	122.61	126.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1787	A	C5-C6-N6	5.99	128.49	123.70
25	BB	1803	A	C3'-C2'-C1'	5.99	106.29	101.50
25	BB	2185	U	N1-C1'-C2'	-5.99	105.42	112.00
25	BB	2445	G	C1'-O4'-C4'	-5.99	105.11	109.90
25	BB	2684	U	C5-C6-N1	-5.99	119.71	122.70
37	BN	51	ARG	NH1-CZ-NH2	-5.99	112.82	119.40
45	BV	14	ARG	CD-NE-CZ	5.99	131.98	123.60
3	A1	656	G	C5-C6-N1	5.98	114.49	111.50
24	BA	42	C	C2-N3-C4	-5.98	116.91	119.90
25	BB	781	A	C5-C6-N6	5.98	128.49	123.70
25	BB	799	G	N1-C2-N2	-5.98	110.81	116.20
25	BB	2548	U	C2-N3-C4	-5.98	123.41	127.00
1	AA	50	U	C6-N1-C2	-5.98	117.41	121.00
1	AP	37	G	N1-C2-N3	5.98	127.49	123.90
1	AE	40	C	C2-N3-C4	-5.98	116.91	119.90
3	A1	417	G	N3-C4-N9	5.98	129.59	126.00
3	A1	553	A	N1-C2-N3	-5.98	126.31	129.30
3	A1	937	A	C6-C5-N7	5.98	136.49	132.30
3	A1	982	U	C4'-C3'-C2'	-5.98	96.62	102.60
25	BB	1102	C	C5'-C4'-O4'	5.98	116.28	109.10
25	BB	2322	A	C5-C6-N1	5.98	120.69	117.70
25	BB	2811	G	N9-C1'-C2'	-5.98	105.42	112.00
55	B6	34	ARG	NE-CZ-NH1	5.98	123.29	120.30
1	AP	71	G	N1-C2-N2	-5.98	110.82	116.20
2	AM	14	U	C5'-C4'-C3'	5.98	125.57	116.00
3	A1	381	C	C6-N1-C2	-5.98	117.91	120.30
3	A1	763	G	N7-C8-N9	5.98	116.09	113.10
3	A1	1098	C	N1-C2-N3	5.98	123.39	119.20
3	A1	1280	A	P-O3'-C3'	5.98	126.88	119.70
25	BB	118	A	C4-C5-C6	-5.98	114.01	117.00
25	BB	664	G	N3-C4-C5	-5.98	125.61	128.60
25	BB	801	G	O4'-C4'-C3'	5.98	110.88	106.10
25	BB	1873	G	N1-C6-O6	-5.98	116.31	119.90
25	BB	2358	A	C1'-O4'-C4'	-5.98	105.12	109.90
25	BB	2591	C	N3-C2-O2	-5.98	117.71	121.90
27	BD	91	SER	N-CA-CB	-5.98	101.53	110.50
3	A1	221	C	O4'-C1'-N1	5.98	112.98	108.20
3	A1	422	C	C5-C4-N4	5.98	124.39	120.20
3	A1	1338	G	N7-C8-N9	5.98	116.09	113.10
25	BB	308	G	C6-N1-C2	-5.98	121.51	125.10
25	BB	1412	U	O4'-C1'-N1	5.98	112.98	108.20
25	BB	2015	A	C4-C5-C6	-5.98	114.01	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
28	BE	33	ARG	NH1-CZ-NH2	-5.98	112.82	119.40
1	AP	51	G	O4'-C1'-N9	5.98	112.98	108.20
3	A1	30	U	N3-C2-O2	-5.98	118.02	122.20
3	A1	210	C	C2-N3-C4	-5.98	116.91	119.90
3	A1	210	C	N3-C4-N4	-5.98	113.82	118.00
3	A1	566	G	N7-C8-N9	5.98	116.09	113.10
3	A1	1442	G	C4'-C3'-C2'	-5.98	96.62	102.60
4	AB	49	PHE	CB-CG-CD1	-5.98	116.62	120.80
25	BB	111	A	C2-N3-C4	5.98	113.59	110.60
25	BB	869	G	C4'-C3'-C2'	-5.98	96.62	102.60
25	BB	1037	G	N9-C4-C5	5.98	107.79	105.40
25	BB	1268	A	C5-C6-N1	5.98	120.69	117.70
25	BB	1521	G	N1-C6-O6	-5.98	116.31	119.90
25	BB	2238	G	N1-C2-N3	5.98	127.49	123.90
25	BB	2707	U	C1'-O4'-C4'	-5.98	105.12	109.90
33	BJ	2	ARG	NH1-CZ-NH2	-5.98	112.83	119.40
1	AP	66	A	OP1-P-OP2	-5.98	110.64	119.60
3	A1	1124	G	O4'-C4'-C3'	-5.98	98.02	104.00
3	A1	1310	G	C6-C5-N7	5.98	133.99	130.40
25	BB	332	A	N1-C2-N3	-5.98	126.31	129.30
25	BB	378	C	N3-C2-O2	-5.98	117.72	121.90
25	BB	613	A	C6-C5-N7	5.98	136.48	132.30
25	BB	1101	U	C2-N3-C4	-5.98	123.41	127.00
25	BB	1475	G	C4-C5-C6	-5.98	115.21	118.80
25	BB	1656	C	C5-C6-N1	-5.98	118.01	121.00
25	BB	2500	U	N3-C2-O2	-5.98	118.02	122.20
1	AA	47	U	N3-C2-O2	-5.97	118.02	122.20
1	AE	17	U	N1-C2-O2	5.97	126.98	122.80
1	AE	46	G	N3-C4-C5	-5.97	125.61	128.60
3	A1	103	U	N3-C2-O2	-5.97	118.02	122.20
3	A1	306	A	N1-C2-N3	-5.97	126.31	129.30
3	A1	308	C	C5'-C4'-C3'	-5.97	106.44	116.00
3	A1	875	U	C2-N3-C4	-5.97	123.42	127.00
25	BB	123	G	C5-C6-N1	5.97	114.49	111.50
25	BB	149	A	C3'-C2'-C1'	-5.97	96.72	101.50
25	BB	571	U	C5-C6-N1	-5.97	119.71	122.70
25	BB	2345	G	C2'-C3'-O3'	5.97	123.26	113.70
25	BB	2491	U	O4'-C4'-C3'	5.97	110.88	106.10
25	BB	2763	G	N7-C8-N9	5.97	116.09	113.10
2	AM	14	U	C4-C5-C6	5.97	123.28	119.70
3	A1	725	G	C8-N9-C4	-5.97	104.01	106.40
3	A1	954	G	C1'-O4'-C4'	5.97	114.68	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1432	G	N1-C2-N3	5.97	127.48	123.90
25	BB	179	C	O4'-C1'-N1	5.97	112.98	108.20
25	BB	344	A	C4-C5-N7	5.97	113.69	110.70
25	BB	666	A	C5-C6-N1	5.97	120.69	117.70
25	BB	829	A	C8-N9-C4	5.97	108.19	105.80
25	BB	879	G	C4'-C3'-C2'	5.97	108.57	102.60
25	BB	1017	G	N9-C4-C5	5.97	107.79	105.40
25	BB	1432	G	O4'-C1'-N9	-5.97	103.42	108.20
25	BB	1737	G	N3-C4-C5	-5.97	125.61	128.60
25	BB	2800	A	C3'-C2'-C1'	-5.97	96.72	101.50
25	BB	2899	A	C6-C5-N7	5.97	136.48	132.30
3	A1	984	C	C3'-C2'-C1'	5.97	106.28	101.50
3	A1	1325	C	C5'-C4'-O4'	5.97	116.27	109.10
25	BB	41	C	C5-C4-N4	-5.97	116.02	120.20
25	BB	916	G	C8-N9-C4	-5.97	104.01	106.40
25	BB	1416	G	N3-C4-C5	-5.97	125.61	128.60
25	BB	1468	U	P-O3'-C3'	5.97	126.86	119.70
25	BB	1848	A	C5-C6-N6	5.97	128.48	123.70
25	BB	2132	U	C4-C5-C6	5.97	123.28	119.70
3	A1	289	G	C1'-O4'-C4'	-5.97	105.12	109.90
3	A1	423	G	N3-C2-N2	-5.97	115.72	119.90
3	A1	1125	U	O4'-C4'-C3'	5.97	110.88	106.10
11	AJ	69	THR	CA-CB-CG2	5.97	120.76	112.40
25	BB	475	C	C4-C5-C6	-5.97	114.42	117.40
25	BB	733	G	N1-C2-N3	5.97	127.48	123.90
25	BB	1233	C	C2-N3-C4	-5.97	116.92	119.90
25	BB	1402	U	C1'-O4'-C4'	-5.97	105.12	109.90
25	BB	2300	C	C1'-O4'-C4'	-5.97	105.12	109.90
1	AA	16	U	O5'-P-OP2	-5.97	100.33	105.70
1	AA	72	C	N3-C4-N4	-5.97	113.82	118.00
3	A1	658	C	N3-C4-C5	5.97	124.29	121.90
3	A1	741	G	C8-N9-C4	-5.97	104.01	106.40
3	A1	1092	A	C5-C6-N1	5.97	120.68	117.70
3	A1	1300	G	N1-C2-N3	5.97	127.48	123.90
3	A1	1307	U	C5-C6-N1	-5.97	119.72	122.70
25	BB	200	U	O4'-C4'-C3'	5.97	110.88	106.10
25	BB	2181	U	C4'-C3'-C2'	-5.97	96.63	102.60
1	AE	57	G	C5-N7-C8	-5.97	101.32	104.30
3	A1	82	G	O4'-C4'-C3'	5.97	110.87	106.10
3	A1	110	C	P-O3'-C3'	5.97	126.86	119.70
3	A1	295	C	C1'-O4'-C4'	5.97	114.67	109.90
25	BB	966	G	O4'-C1'-N9	5.97	112.97	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1538	G	N1-C2-N2	-5.97	110.83	116.20
25	BB	2735	G	C1'-O4'-C4'	-5.97	105.13	109.90
52	B3	95	ALA	N-CA-CB	-5.97	101.75	110.10
3	A1	82	G	C4-C5-N7	-5.96	108.41	110.80
3	A1	150	U	N1-C2-N3	5.96	118.48	114.90
3	A1	486	U	C4-C5-C6	5.96	123.28	119.70
3	A1	1056	U	N1-C2-N3	5.96	118.48	114.90
25	BB	152	A	C5-C6-N6	5.96	128.47	123.70
25	BB	300	A	C2-N3-C4	5.96	113.58	110.60
25	BB	420	C	C4'-C3'-C2'	5.96	108.56	102.60
25	BB	624	C	O4'-C1'-N1	5.96	112.97	108.20
25	BB	712	G	N1-C2-N3	5.96	127.48	123.90
25	BB	1050	A	C4-C5-C6	-5.96	114.02	117.00
25	BB	1393	A	C4-C5-C6	-5.96	114.02	117.00
25	BB	2120	G	O4'-C1'-N9	5.96	112.97	108.20
3	A1	337	G	N1-C2-N2	-5.96	110.83	116.20
3	A1	462	G	O3'-P-O5'	5.96	115.33	104.00
24	BA	85	G	C4-C5-N7	-5.96	108.42	110.80
25	BB	342	A	C2-N3-C4	5.96	113.58	110.60
25	BB	485	C	O4'-C1'-N1	5.96	112.97	108.20
25	BB	911	A	N9-C1'-C2'	-5.96	105.44	112.00
25	BB	1274	A	C8-N9-C4	-5.96	103.42	105.80
25	BB	1644	C	C1'-O4'-C4'	5.96	114.67	109.90
25	BB	1925	C	C5-C6-N1	5.96	123.98	121.00
3	A1	29	U	C5-C6-N1	-5.96	119.72	122.70
3	A1	321	A	C5-N7-C8	-5.96	100.92	103.90
3	A1	655	A	C2-N3-C4	5.96	113.58	110.60
3	A1	1164	G	C5'-C4'-O4'	5.96	116.25	109.10
3	A1	1410	A	N1-C2-N3	-5.96	126.32	129.30
25	BB	320	A	C5-C6-N6	5.96	128.47	123.70
25	BB	380	G	O4'-C1'-C2'	5.96	112.97	107.60
25	BB	483	A	C2-N3-C4	5.96	113.58	110.60
25	BB	780	G	C6-C5-N7	5.96	133.98	130.40
25	BB	1048	A	O5'-P-OP2	-5.96	100.33	105.70
25	BB	1224	U	O4'-C1'-N1	5.96	112.97	108.20
25	BB	1521	G	C6-C5-N7	5.96	133.98	130.40
25	BB	2219	U	N3-C2-O2	-5.96	118.03	122.20
25	BB	2572	A	C6-C5-N7	5.96	136.47	132.30
3	A1	733	G	O4'-C4'-C3'	5.96	110.87	106.10
3	A1	848	C	C5-C4-N4	-5.96	116.03	120.20
25	BB	1111	A	N1-C6-N6	-5.96	115.02	118.60
25	BB	1915	U	C2-N3-C4	-5.96	123.42	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2327	A	C5'-C4'-O4'	5.96	116.25	109.10
1	AA	71	G	C3'-C2'-C1'	5.96	106.27	101.50
1	AE	38	A	N9-C4-C5	-5.96	103.42	105.80
3	A1	419	C	N1-C2-O2	5.96	122.47	118.90
3	A1	532	A	C5-N7-C8	-5.96	100.92	103.90
3	A1	684	U	C5-C6-N1	-5.96	119.72	122.70
3	A1	847	G	N7-C8-N9	5.96	116.08	113.10
15	AO	30	ASP	CB-CG-OD1	5.96	123.66	118.30
25	BB	264	C	N3-C4-C5	5.96	124.28	121.90
25	BB	303	G	N9-C4-C5	5.96	107.78	105.40
25	BB	415	A	C5-C6-N6	5.96	128.47	123.70
25	BB	710	U	C5-C6-N1	-5.96	119.72	122.70
25	BB	799	G	C5-C6-N1	5.96	114.48	111.50
25	BB	959	A	C5-C6-N1	5.96	120.68	117.70
25	BB	1288	G	C6-N1-C2	-5.96	121.53	125.10
25	BB	1343	G	C2-N3-C4	5.96	114.88	111.90
25	BB	1703	G	P-O3'-C3'	5.96	126.85	119.70
25	BB	2048	G	N3-C4-C5	-5.96	125.62	128.60
25	BB	2198	A	C3'-C2'-C1'	5.96	106.27	101.50
25	BB	2503	A	O4'-C1'-N9	5.96	112.97	108.20
25	BB	2779	U	O4'-C1'-N1	5.96	112.97	108.20
25	BB	2902	C	N1-C2-O2	5.96	122.48	118.90
1	AP	69	U	C2-N3-C4	-5.96	123.43	127.00
3	A1	292	G	C5-C6-O6	5.96	132.17	128.60
3	A1	357	G	O4'-C4'-C3'	5.96	110.86	106.10
24	BA	69	G	C6-C5-N7	5.96	133.97	130.40
25	BB	80	G	C5'-C4'-C3'	-5.96	106.47	116.00
25	BB	146	A	O4'-C1'-N9	5.96	112.97	108.20
25	BB	596	U	O4'-C4'-C3'	-5.96	98.04	104.00
25	BB	892	A	C2-N3-C4	5.96	113.58	110.60
25	BB	2334	U	N1-C2-N3	5.96	118.47	114.90
25	BB	2345	G	N3-C2-N2	-5.96	115.73	119.90
25	BB	2380	C	N3-C2-O2	-5.96	117.73	121.90
25	BB	2553	G	C5-N7-C8	-5.96	101.32	104.30
25	BB	2645	G	N1-C6-O6	-5.96	116.33	119.90
25	BB	2844	G	N9-C4-C5	5.96	107.78	105.40
49	BZ	98	ARG	CD-NE-CZ	5.96	131.94	123.60
3	A1	493	A	C8-N9-C4	-5.96	103.42	105.80
3	A1	837	U	C5-C6-N1	-5.96	119.72	122.70
25	BB	1303	G	N3-C2-N2	-5.96	115.73	119.90
3	A1	276	G	C6-N1-C2	-5.95	121.53	125.10
3	A1	868	C	N3-C4-C5	5.95	124.28	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1185	G	N9-C4-C5	-5.95	103.02	105.40
3	A1	1443	C	N1-C2-O2	5.95	122.47	118.90
25	BB	27	G	C6-C5-N7	5.95	133.97	130.40
25	BB	106	C	N1-C2-O2	5.95	122.47	118.90
25	BB	107	G	C5'-C4'-O4'	5.95	116.25	109.10
25	BB	293	U	C4'-C3'-C2'	-5.95	96.65	102.60
25	BB	500	G	N9-C1'-C2'	-5.95	105.45	112.00
25	BB	537	G	N3-C2-N2	-5.95	115.73	119.90
25	BB	739	A	N9-C4-C5	5.95	108.18	105.80
25	BB	1613	G	C5-C6-N1	5.95	114.48	111.50
25	BB	1748	C	N1-C2-N3	5.95	123.37	119.20
25	BB	2223	G	C5-N7-C8	-5.95	101.32	104.30
51	B2	156	THR	CA-CB-CG2	5.95	120.74	112.40
3	A1	922	G	C4-C5-N7	-5.95	108.42	110.80
3	A1	959	A	C6-N1-C2	-5.95	115.03	118.60
3	A1	1451	U	C5-C6-N1	-5.95	119.72	122.70
24	BA	11	C	C2-N3-C4	-5.95	116.92	119.90
25	BB	35	G	N9-C4-C5	5.95	107.78	105.40
25	BB	673	C	C2-N3-C4	-5.95	116.92	119.90
25	BB	849	A	C4-C5-C6	-5.95	114.02	117.00
25	BB	2662	A	N1-C2-N3	-5.95	126.32	129.30
25	BB	2681	C	C3'-C2'-C1'	-5.95	96.74	101.50
1	AP	35	A	C6-C5-N7	5.95	136.47	132.30
1	AP	63	C	N3-C4-N4	-5.95	113.83	118.00
3	A1	127	G	N3-C2-N2	-5.95	115.73	119.90
3	A1	585	G	N1-C2-N2	-5.95	110.84	116.20
3	A1	753	A	O4'-C1'-N9	5.95	112.96	108.20
3	A1	1114	C	O4'-C1'-N1	5.95	112.96	108.20
3	A1	1208	C	N1-C2-N3	5.95	123.37	119.20
3	A1	1247	U	C5'-C4'-O4'	5.95	116.24	109.10
25	BB	75	G	C5-C6-N1	5.95	114.47	111.50
25	BB	536	G	N9-C4-C5	5.95	107.78	105.40
25	BB	1985	C	C4'-C3'-C2'	-5.95	96.65	102.60
25	BB	2211	A	C6-C5-N7	5.95	136.47	132.30
25	BB	2415	G	C5-C6-O6	5.95	132.17	128.60
32	BI	19	PHE	CB-CG-CD2	-5.95	116.63	120.80
3	A1	332	G	C5-C6-N1	5.95	114.47	111.50
3	A1	648	A	C2-N3-C4	5.95	113.57	110.60
3	A1	697	U	C4-C5-C6	5.95	123.27	119.70
3	A1	1358	U	N1-C2-N3	5.95	118.47	114.90
17	AR	62	ARG	NE-CZ-NH2	-5.95	117.33	120.30
24	BA	20	G	C5-C6-N1	5.95	114.47	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1084	A	C6-C5-N7	5.95	136.46	132.30
25	BB	1429	G	C8-N9-C4	-5.95	104.02	106.40
25	BB	2254	C	C2-N3-C4	-5.95	116.93	119.90
25	BB	2629	U	N1-C2-O2	5.95	126.96	122.80
25	BB	2702	G	C2-N3-C4	5.95	114.87	111.90
3	A1	341	C	C4-C5-C6	-5.95	114.43	117.40
3	A1	524	G	O3'-P-O5'	5.95	115.30	104.00
25	BB	150	U	C4'-C3'-C2'	-5.95	96.65	102.60
25	BB	521	U	N1-C1'-C2'	5.95	121.73	114.00
25	BB	760	G	C1'-O4'-C4'	-5.95	105.14	109.90
25	BB	1881	C	C5-C6-N1	-5.95	118.03	121.00
25	BB	1950	G	C8-N9-C1'	5.95	134.73	127.00
3	A1	113	G	N1-C6-O6	-5.95	116.33	119.90
21	AV	64	TYR	CB-CG-CD1	-5.95	117.43	121.00
24	BA	112	G	N1-C6-O6	-5.95	116.33	119.90
25	BB	137	U	C5-C6-N1	-5.95	119.73	122.70
25	BB	355	U	N3-C2-O2	-5.95	118.04	122.20
25	BB	519	U	C5-C6-N1	-5.95	119.73	122.70
25	BB	1337	G	C6-N1-C2	-5.95	121.53	125.10
25	BB	1413	A	N7-C8-N9	5.95	116.77	113.80
25	BB	1860	G	C8-N9-C4	-5.95	104.02	106.40
25	BB	1877	A	C2-N3-C4	5.95	113.57	110.60
25	BB	2471	A	O3'-P-O5'	-5.95	92.70	104.00
25	BB	2630	G	C5-C6-O6	5.95	132.17	128.60
3	A1	1457	G	N3-C4-C5	-5.94	125.63	128.60
19	AT	30	THR	OG1-CB-CG2	-5.94	96.33	110.00
25	BB	98	G	C4-N9-C1'	-5.94	118.77	126.50
25	BB	2163	A	C1'-O4'-C4'	-5.94	105.14	109.90
25	BB	2330	G	N7-C8-N9	5.94	116.07	113.10
3	A1	137	U	C5-C6-N1	-5.94	119.73	122.70
3	A1	844	G	N1-C2-N3	5.94	127.47	123.90
3	A1	1169	A	C5-N7-C8	-5.94	100.93	103.90
3	A1	1326	U	O4'-C1'-N1	5.94	112.95	108.20
3	A1	1434	A	C3'-C2'-C1'	5.94	106.25	101.50
24	BA	10	G	C5-N7-C8	-5.94	101.33	104.30
24	BA	47	C	C3'-C2'-C1'	5.94	106.25	101.50
24	BA	68	C	N1-C1'-C2'	-5.94	105.46	112.00
25	BB	560	C	C3'-C2'-C1'	5.94	106.25	101.50
25	BB	653	U	C5-C4-O4	-5.94	122.33	125.90
25	BB	681	G	C5-C6-N1	5.94	114.47	111.50
25	BB	789	A	C5'-C4'-O4'	5.94	116.23	109.10
25	BB	871	U	N3-C2-O2	-5.94	118.04	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1048	A	O4'-C1'-N9	5.94	112.95	108.20
25	BB	1049	C	N3-C4-N4	-5.94	113.84	118.00
25	BB	1620	G	N3-C2-N2	-5.94	115.74	119.90
25	BB	1904	G	N3-C4-C5	-5.94	125.63	128.60
25	BB	2141	G	O4'-C4'-C3'	5.94	110.85	106.10
25	BB	2403	C	C2-N3-C4	-5.94	116.93	119.90
25	BB	2521	C	C1'-O4'-C4'	-5.94	105.14	109.90
25	BB	2574	G	N1-C6-O6	-5.94	116.33	119.90
3	A1	180	U	N3-C2-O2	-5.94	118.04	122.20
3	A1	527	G	C4-C5-C6	-5.94	115.23	118.80
3	A1	722	G	C3'-C2'-C1'	5.94	106.25	101.50
3	A1	954	G	C3'-C2'-C1'	5.94	106.25	101.50
3	A1	958	A	C1'-O4'-C4'	-5.94	105.15	109.90
6	AD	35	ARG	NE-CZ-NH2	-5.94	117.33	120.30
25	BB	317	G	C5-N7-C8	-5.94	101.33	104.30
25	BB	413	C	N3-C2-O2	-5.94	117.74	121.90
25	BB	846	U	P-O3'-C3'	5.94	126.83	119.70
25	BB	1017	G	O5'-P-OP1	-5.94	100.35	105.70
25	BB	1063	G	N3-C4-N9	5.94	129.56	126.00
25	BB	1096	A	O5'-P-OP2	5.94	117.83	110.70
25	BB	1162	G	C2'-C3'-O3'	5.94	123.21	113.70
25	BB	1171	G	O4'-C1'-N9	-5.94	103.45	108.20
25	BB	2427	C	N3-C4-N4	-5.94	113.84	118.00
25	BB	2572	A	O4'-C1'-N9	5.94	112.95	108.20
25	BB	2661	G	N7-C8-N9	5.94	116.07	113.10
48	BY	197	THR	C-N-CA	5.94	134.77	122.30
3	A1	780	A	C5-N7-C8	-5.94	100.93	103.90
3	A1	1148	U	N3-C2-O2	-5.94	118.04	122.20
3	A1	1302	C	N1-C2-O2	5.94	122.46	118.90
3	A1	1325	C	O3'-P-O5'	5.94	115.28	104.00
25	BB	1575	C	C5-C6-N1	-5.94	118.03	121.00
25	BB	1919	A	C6-C5-N7	5.94	136.46	132.30
3	A1	170	U	N1-C2-N3	5.94	118.46	114.90
3	A1	399	G	C3'-C2'-C1'	5.94	106.25	101.50
3	A1	569	C	N1-C2-N3	5.94	123.36	119.20
3	A1	613	C	C2-N3-C4	-5.94	116.93	119.90
3	A1	649	A	C4'-C3'-C2'	-5.94	96.66	102.60
25	BB	133	U	N1-C2-O2	5.94	126.96	122.80
25	BB	156	A	C4-C5-C6	-5.94	114.03	117.00
25	BB	286	U	N3-C2-O2	-5.94	118.04	122.20
25	BB	774	G	N7-C8-N9	5.94	116.07	113.10
25	BB	1590	A	N9-C4-C5	-5.94	103.42	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1711	A	C1'-O4'-C4'	-5.94	105.15	109.90
25	BB	1889	A	P-O3'-C3'	5.94	126.83	119.70
25	BB	1889	A	O4'-C1'-N9	5.94	112.95	108.20
25	BB	2416	C	N1-C2-O2	5.94	122.46	118.90
25	BB	2826	A	C5-C6-N6	5.94	128.45	123.70
25	BB	2849	U	C4-C5-C6	5.94	123.26	119.70
25	BB	2890	G	C6-C5-N7	5.94	133.96	130.40
3	A1	402	G	C5-N7-C8	-5.94	101.33	104.30
3	A1	544	G	C5-N7-C8	-5.94	101.33	104.30
3	A1	903	G	N9-C4-C5	5.94	107.77	105.40
3	A1	928	G	O4'-C4'-C3'	5.94	110.85	106.10
3	A1	1190	G	C1'-O4'-C4'	-5.94	105.15	109.90
25	BB	366	C	N1-C2-N3	5.94	123.36	119.20
25	BB	696	G	C6-C5-N7	5.94	133.96	130.40
25	BB	828	U	N3-C4-O4	5.94	123.56	119.40
25	BB	1065	U	O4'-C1'-N1	5.94	112.95	108.20
25	BB	1077	A	C5-C6-N6	5.94	128.45	123.70
25	BB	1297	C	C6-N1-C2	-5.94	117.93	120.30
25	BB	2756	U	C4'-C3'-C2'	-5.94	96.66	102.60
3	A1	81	A	C6-C5-N7	5.93	136.45	132.30
3	A1	1435	G	P-O3'-C3'	-5.93	112.58	119.70
25	BB	14	A	N1-C6-N6	-5.93	115.04	118.60
25	BB	407	G	N3-C4-N9	5.93	129.56	126.00
25	BB	433	C	N1-C1'-C2'	-5.93	105.47	112.00
25	BB	1306	C	N3-C4-C5	5.93	124.27	121.90
25	BB	2110	G	C2-N3-C4	5.93	114.87	111.90
25	BB	2529	G	N1-C2-N3	5.93	127.46	123.90
51	B2	132	ARG	NH1-CZ-NH2	-5.93	112.87	119.40
1	AA	9	A	C4'-C3'-C2'	-5.93	96.67	102.60
3	A1	669	G	C6-N1-C2	-5.93	121.54	125.10
3	A1	1032	G	O4'-C1'-N9	5.93	112.95	108.20
3	A1	1515	G	C6-C5-N7	5.93	133.96	130.40
25	BB	48	G	N1-C6-O6	-5.93	116.34	119.90
25	BB	222	A	N9-C4-C5	5.93	108.17	105.80
25	BB	288	U	C4-C5-C6	5.93	123.26	119.70
25	BB	1270	C	O4'-C4'-C3'	5.93	110.85	106.10
25	BB	1767	G	C4'-C3'-O3'	5.93	124.86	113.00
25	BB	2091	C	N1-C2-N3	5.93	123.35	119.20
25	BB	2223	G	C5-C6-N1	5.93	114.47	111.50
25	BB	2250	G	N3-C4-C5	-5.93	125.63	128.60
25	BB	2432	A	C4'-C3'-C2'	-5.93	96.67	102.60
25	BB	2516	A	C6-C5-N7	5.93	136.45	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2890	G	O4'-C1'-N9	5.93	112.95	108.20
51	B2	124	ARG	NE-CZ-NH2	5.93	123.27	120.30
3	A1	230	G	C5-N7-C8	5.93	107.27	104.30
3	A1	539	A	O4'-C1'-N9	5.93	112.94	108.20
3	A1	935	A	C1'-O4'-C4'	-5.93	105.16	109.90
7	AF	28	ARG	CD-NE-CZ	5.93	131.90	123.60
25	BB	213	A	N7-C8-N9	5.93	116.77	113.80
25	BB	663	G	C5-C6-N1	5.93	114.47	111.50
25	BB	666	A	C5-C6-N6	5.93	128.44	123.70
25	BB	2898	U	C4'-C3'-C2'	-5.93	96.67	102.60
1	AA	70	C	O3'-P-O5'	-5.93	92.73	104.00
3	A1	305	G	O4'-C4'-C3'	5.93	110.84	106.10
3	A1	410	G	N7-C8-N9	5.93	116.06	113.10
3	A1	902	G	C2-N3-C4	5.93	114.86	111.90
3	A1	1250	A	C6-C5-N7	5.93	136.45	132.30
3	A1	1276	G	N3-C4-C5	-5.93	125.64	128.60
3	A1	1399	C	N3-C4-N4	-5.93	113.85	118.00
25	BB	521	U	C5-C6-N1	-5.93	119.73	122.70
25	BB	750	A	C4-C5-C6	-5.93	114.03	117.00
25	BB	1466	U	C1'-O4'-C4'	-5.93	105.16	109.90
25	BB	2157	G	N7-C8-N9	5.93	116.06	113.10
25	BB	2306	C	N3-C2-O2	-5.93	117.75	121.90
25	BB	2700	A	C5-N7-C8	-5.93	100.94	103.90
3	A1	243	A	C6-C5-N7	5.93	136.45	132.30
3	A1	669	G	N1-C2-N3	5.93	127.46	123.90
3	A1	979	C	C5-C6-N1	-5.93	118.04	121.00
3	A1	1371	G	C4-C5-N7	5.93	113.17	110.80
25	BB	1204	A	O4'-C1'-N9	5.93	112.94	108.20
25	BB	2042	A	C4-C5-C6	-5.93	114.04	117.00
1	AA	33	U	N1-C2-N3	5.93	118.46	114.90
1	AE	72	C	N3-C4-C5	5.93	124.27	121.90
3	A1	569	C	C1'-O4'-C4'	-5.93	105.16	109.90
3	A1	765	G	C8-N9-C4	-5.93	104.03	106.40
3	A1	886	G	C3'-C2'-C1'	5.93	106.24	101.50
3	A1	1054	C	C4-C5-C6	-5.93	114.44	117.40
3	A1	1394	A	N7-C8-N9	5.93	116.76	113.80
25	BB	96	C	N3-C4-N4	-5.93	113.85	118.00
25	BB	484	C	C5'-C4'-O4'	5.93	116.21	109.10
25	BB	1669	A	C3'-C2'-C1'	5.93	106.24	101.50
25	BB	1745	A	O5'-P-OP2	-5.93	100.37	105.70
25	BB	1850	G	C5'-C4'-C3'	-5.93	106.52	116.00
25	BB	2105	U	N3-C2-O2	-5.93	118.05	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2661	G	O5'-C5'-C4'	5.93	122.96	111.70
1	AA	5	A	C5-C6-N1	5.92	120.66	117.70
3	A1	74	A	C1'-O4'-C4'	5.92	114.64	109.90
3	A1	349	A	N1-C2-N3	-5.92	126.34	129.30
3	A1	531	U	N1-C2-N3	5.92	118.45	114.90
3	A1	785	G	N1-C2-N2	-5.92	110.87	116.20
3	A1	1230	C	C5'-C4'-O4'	-5.92	101.99	109.10
25	BB	413	C	C2-N3-C4	-5.92	116.94	119.90
25	BB	914	G	C5-C6-N1	5.92	114.46	111.50
25	BB	1826	G	C5-C6-N1	5.92	114.46	111.50
25	BB	2090	A	C6-C5-N7	5.92	136.45	132.30
25	BB	2167	U	C1'-O4'-C4'	-5.92	105.16	109.90
3	A1	21	G	C5-N7-C8	-5.92	101.34	104.30
3	A1	1108	G	N3-C4-C5	-5.92	125.64	128.60
3	A1	1248	A	C4-C5-C6	-5.92	114.04	117.00
3	A1	1482	G	O4'-C1'-N9	5.92	112.94	108.20
25	BB	1514	G	C3'-C2'-C1'	5.92	106.24	101.50
25	BB	2232	C	N1-C2-N3	5.92	123.35	119.20
25	BB	2372	U	O3'-P-O5'	-5.92	92.75	104.00
3	A1	182	A	N7-C8-N9	5.92	116.76	113.80
3	A1	189	A	C6-C5-N7	5.92	136.44	132.30
3	A1	496	A	O4'-C1'-N9	5.92	112.94	108.20
3	A1	657	U	N1-C2-N3	5.92	118.45	114.90
3	A1	959	A	C5-C6-N6	-5.92	118.96	123.70
3	A1	1382	C	N3-C2-O2	-5.92	117.75	121.90
25	BB	1260	A	C5-C6-N6	5.92	128.44	123.70
25	BB	1430	G	C6-C5-N7	5.92	133.95	130.40
25	BB	1433	A	O4'-C1'-C2'	5.92	112.93	107.60
25	BB	1731	G	O4'-C1'-N9	5.92	112.94	108.20
25	BB	1970	A	P-O3'-C3'	5.92	126.81	119.70
25	BB	2035	G	N3-C4-N9	5.92	129.55	126.00
25	BB	2153	C	O4'-C1'-N1	5.92	112.94	108.20
25	BB	2757	A	C5'-C4'-O4'	5.92	116.21	109.10
25	BB	2829	A	C5-C6-N6	5.92	128.44	123.70
1	AP	34	G	N3-C2-N2	-5.92	115.76	119.90
3	A1	887	G	C5-C6-N1	5.92	114.46	111.50
25	BB	212	G	N1-C2-N3	5.92	127.45	123.90
25	BB	616	A	C2-N3-C4	5.92	113.56	110.60
25	BB	691	C	N3-C4-C5	5.92	124.27	121.90
25	BB	1704	C	C5-C4-N4	5.92	124.34	120.20
25	BB	2049	G	N3-C2-N2	-5.92	115.76	119.90
25	BB	2151	U	N3-C2-O2	-5.92	118.06	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2303	G	N1-C2-N3	5.92	127.45	123.90
3	A1	59	A	C5-N7-C8	-5.92	100.94	103.90
3	A1	134	G	C5-N7-C8	-5.92	101.34	104.30
3	A1	233	C	N3-C2-O2	-5.92	117.76	121.90
3	A1	242	G	C5-C6-O6	5.92	132.15	128.60
3	A1	1029	U	C5'-C4'-C3'	-5.92	106.53	116.00
3	A1	1043	G	C5-C6-O6	5.92	132.15	128.60
3	A1	1174	G	C8-N9-C4	-5.92	104.03	106.40
3	A1	1493	A	C5-N7-C8	-5.92	100.94	103.90
25	BB	45	G	N1-C6-O6	-5.92	116.35	119.90
25	BB	493	G	C3'-C2'-C1'	5.92	106.23	101.50
25	BB	804	A	C2-N3-C4	5.92	113.56	110.60
25	BB	1407	G	C6-N1-C2	-5.92	121.55	125.10
25	BB	1501	G	N9-C4-C5	5.92	107.77	105.40
25	BB	1719	G	N3-C2-N2	-5.92	115.76	119.90
25	BB	1929	G	P-O5'-C5'	-5.92	111.43	120.90
25	BB	2536	G	C3'-C2'-C1'	-5.92	96.77	101.50
25	BB	2718	G	O4'-C1'-N9	5.92	112.94	108.20
31	BH	46	GLU	OE1-CD-OE2	-5.92	116.20	123.30
1	AA	33	U	C5-C4-O4	-5.92	122.35	125.90
3	A1	98	A	O3'-P-O5'	-5.92	92.76	104.00
3	A1	134	G	N9-C4-C5	5.92	107.77	105.40
3	A1	902	G	C5-C6-N1	5.92	114.46	111.50
3	A1	1095	U	C5-C6-N1	-5.92	119.74	122.70
3	A1	1294	G	C8-N9-C4	-5.92	104.03	106.40
3	A1	1363	A	C5-C6-N1	5.92	120.66	117.70
14	AN	28	ARG	NE-CZ-NH1	5.92	123.26	120.30
16	AQ	37	TYR	CB-CG-CD2	-5.92	117.45	121.00
25	BB	8	C	C5'-C4'-C3'	-5.92	106.53	116.00
25	BB	199	A	C4-C5-C6	-5.92	114.04	117.00
25	BB	271	G	C4-C5-N7	-5.92	108.43	110.80
25	BB	1129	A	C8-N9-C4	-5.92	103.43	105.80
25	BB	1446	C	N3-C4-C5	5.92	124.27	121.90
25	BB	1455	G	C4-C5-C6	-5.92	115.25	118.80
25	BB	1696	G	O4'-C1'-N9	5.92	112.93	108.20
25	BB	1976	U	C5-C6-N1	-5.92	119.74	122.70
25	BB	2134	A	C5'-C4'-O4'	5.92	116.20	109.10
28	BE	144	GLU	OE1-CD-OE2	-5.92	116.20	123.30
3	A1	142	G	O4'-C1'-N9	-5.92	103.47	108.20
3	A1	537	G	C6-C5-N7	5.92	133.95	130.40
3	A1	899	C	N3-C4-C5	5.92	124.27	121.90
3	A1	949	A	C5-C6-N6	5.92	128.43	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1509	C	N3-C4-C5	5.92	124.27	121.90
25	BB	550	C	C5-C6-N1	-5.92	118.04	121.00
25	BB	625	G	O4'-C1'-N9	5.92	112.93	108.20
25	BB	1509	A	C2-N3-C4	5.92	113.56	110.60
25	BB	2214	C	O4'-C1'-N1	5.92	112.93	108.20
25	BB	2377	A	N1-C2-N3	-5.92	126.34	129.30
3	A1	42	G	C6-N1-C2	-5.91	121.55	125.10
3	A1	583	A	C4-C5-C6	-5.91	114.04	117.00
3	A1	921	U	O4'-C1'-N1	5.91	112.93	108.20
3	A1	1490	U	P-O5'-C5'	5.91	130.36	120.90
25	BB	408	G	N7-C8-N9	5.91	116.06	113.10
25	BB	1076	C	C6-N1-C2	-5.91	117.94	120.30
25	BB	1910	G	C5-C6-O6	5.91	132.15	128.60
25	BB	2129	C	N1-C2-O2	5.91	122.45	118.90
25	BB	2693	G	C8-N9-C4	-5.91	104.03	106.40
3	A1	550	G	N9-C4-C5	-5.91	103.03	105.40
25	BB	216	A	O4'-C1'-N9	5.91	112.93	108.20
25	BB	666	A	C3'-C2'-C1'	5.91	106.23	101.50
25	BB	1399	C	C5-C4-N4	5.91	124.34	120.20
25	BB	1893	C	C4-C5-C6	-5.91	114.44	117.40
25	BB	2692	G	N3-C2-N2	-5.91	115.76	119.90
29	BF	16	ARG	NH1-CZ-NH2	-5.91	112.90	119.40
3	A1	232	G	O4'-C1'-N9	5.91	112.93	108.20
3	A1	301	G	C4-C5-N7	-5.91	108.44	110.80
25	BB	734	A	C6-C5-N7	5.91	136.44	132.30
25	BB	740	C	N1-C2-N3	5.91	123.34	119.20
25	BB	748	G	N3-C4-C5	-5.91	125.64	128.60
25	BB	1193	G	N3-C2-N2	-5.91	115.76	119.90
25	BB	1543	G	N1-C2-N3	5.91	127.45	123.90
25	BB	1643	G	N7-C8-N9	5.91	116.06	113.10
25	BB	1775	U	O4'-C1'-N1	5.91	112.93	108.20
25	BB	2809	A	C4-C5-C6	-5.91	114.05	117.00
25	BB	2836	U	N3-C2-O2	-5.91	118.06	122.20
1	AE	45	G	N3-C4-C5	-5.91	125.64	128.60
3	A1	349	A	C5-N7-C8	-5.91	100.95	103.90
24	BA	38	C	C5'-C4'-O4'	5.91	116.19	109.10
25	BB	177	G	O4'-C1'-N9	5.91	112.93	108.20
25	BB	957	C	O4'-C1'-N1	5.91	112.93	108.20
25	BB	1359	A	O4'-C1'-N9	5.91	112.93	108.20
25	BB	1776	G	C4'-C3'-C2'	-5.91	96.69	102.60
25	BB	1777	U	C3'-C2'-C1'	-5.91	96.77	101.50
25	BB	1910	G	N1-C6-O6	-5.91	116.35	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1924	C	N1-C2-N3	5.91	123.34	119.20
25	BB	2396	G	N9-C4-C5	-5.91	103.04	105.40
25	BB	2570	G	N9-C4-C5	5.91	107.76	105.40
52	B3	163	TYR	CB-CG-CD1	-5.91	117.45	121.00
25	BB	484	C	C5-C6-N1	-5.91	118.05	121.00
25	BB	1319	C	C2-N3-C4	-5.91	116.95	119.90
25	BB	1558	C	N3-C4-N4	-5.91	113.86	118.00
25	BB	1783	A	C5-C6-N6	5.91	128.43	123.70
25	BB	1909	C	C2-N3-C4	-5.91	116.95	119.90
25	BB	2370	G	C4-C5-C6	-5.91	115.26	118.80
25	BB	2421	G	N1-C2-N3	5.91	127.44	123.90
25	BB	2525	G	C2-N3-C4	5.91	114.85	111.90
25	BB	2559	C	C4-C5-C6	-5.91	114.45	117.40
25	BB	2811	G	O4'-C4'-C3'	5.91	110.83	106.10
3	A1	501	C	C4-C5-C6	5.91	120.35	117.40
3	A1	836	G	N9-C4-C5	5.91	107.76	105.40
3	A1	837	U	C4'-C3'-C2'	-5.91	96.69	102.60
3	A1	913	A	O4'-C1'-C2'	-5.91	99.89	105.80
24	BA	62	C	N1-C2-N3	5.91	123.33	119.20
25	BB	180	G	C5-N7-C8	-5.91	101.35	104.30
25	BB	528	A	C2-N3-C4	5.91	113.55	110.60
25	BB	1299	G	C4-C5-N7	-5.91	108.44	110.80
25	BB	1973	G	N9-C4-C5	5.91	107.76	105.40
3	A1	333	U	C1'-O4'-C4'	-5.90	105.18	109.90
3	A1	415	A	C2-N3-C4	5.90	113.55	110.60
3	A1	1469	C	C1'-O4'-C4'	-5.90	105.18	109.90
12	AK	72	ARG	NH1-CZ-NH2	-5.90	112.91	119.40
22	AW	54	VAL	CA-CB-CG2	5.90	119.76	110.90
25	BB	1747	U	C5-C6-N1	-5.90	119.75	122.70
25	BB	2801	G	C5-C6-N1	5.90	114.45	111.50
1	AP	48	C	N3-C2-O2	-5.90	117.77	121.90
3	A1	9	G	O4'-C1'-C2'	-5.90	99.90	105.80
3	A1	362	G	N3-C4-N9	5.90	129.54	126.00
3	A1	518	C	C2-N3-C4	-5.90	116.95	119.90
3	A1	1442	G	N7-C8-N9	5.90	116.05	113.10
7	AF	56	ARG	CD-NE-CZ	5.90	131.86	123.60
24	BA	23	G	N3-C4-N9	5.90	129.54	126.00
25	BB	31	C	O4'-C1'-N1	5.90	112.92	108.20
25	BB	562	U	C4-C5-C6	5.90	123.24	119.70
25	BB	965	C	N3-C2-O2	-5.90	117.77	121.90
25	BB	1116	G	C5-C6-N1	5.90	114.45	111.50
25	BB	1356	G	N7-C8-N9	5.90	116.05	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2062	A	C5-C6-N6	5.90	128.42	123.70
25	BB	2067	G	C1'-O4'-C4'	-5.90	105.18	109.90
25	BB	2278	A	P-O3'-C3'	5.90	126.78	119.70
1	AE	16	U	N1-C2-O2	5.90	126.93	122.80
3	A1	134	G	N3-C2-N2	-5.90	115.77	119.90
3	A1	143	A	C1'-O4'-C4'	-5.90	105.18	109.90
3	A1	451	A	C4-C5-C6	-5.90	114.05	117.00
3	A1	702	A	C4'-C3'-C2'	-5.90	96.70	102.60
3	A1	896	C	N1-C2-O2	5.90	122.44	118.90
3	A1	1457	G	C1'-O4'-C4'	-5.90	105.18	109.90
9	AH	78	THR	CA-CB-CG2	5.90	120.66	112.40
24	BA	98	G	C4'-C3'-C2'	-5.90	96.70	102.60
25	BB	30	G	N9-C4-C5	5.90	107.76	105.40
25	BB	132	G	C4-C5-N7	-5.90	108.44	110.80
25	BB	289	G	C4'-C3'-C2'	-5.90	96.70	102.60
25	BB	799	G	N1-C6-O6	-5.90	116.36	119.90
25	BB	1022	G	C8-N9-C4	-5.90	104.04	106.40
25	BB	1466	U	C4-C5-C6	5.90	123.24	119.70
25	BB	1496	A	C5-N7-C8	-5.90	100.95	103.90
25	BB	2220	U	N3-C2-O2	-5.90	118.07	122.20
25	BB	2402	U	C5-C4-O4	5.90	129.44	125.90
25	BB	2644	G	C5'-C4'-C3'	-5.90	106.56	116.00
25	BB	2822	G	N9-C1'-C2'	5.90	121.67	114.00
25	BB	2830	C	O4'-C1'-N1	5.90	112.92	108.20
25	BB	671	C	O4'-C1'-N1	-5.90	103.48	108.20
25	BB	681	G	C5-N7-C8	-5.90	101.35	104.30
25	BB	859	G	N3-C4-C5	-5.90	125.65	128.60
2	AM	14	U	C5-C4-O4	5.90	129.44	125.90
3	A1	15	G	N3-C2-N2	-5.90	115.77	119.90
3	A1	98	A	C5-C6-N6	5.90	128.42	123.70
3	A1	309	A	N7-C8-N9	5.90	116.75	113.80
3	A1	802	A	O4'-C1'-N9	5.90	112.92	108.20
3	A1	833	G	N9-C1'-C2'	-5.90	105.51	112.00
3	A1	917	G	N3-C2-N2	-5.90	115.77	119.90
3	A1	962	C	N1-C2-N3	5.90	123.33	119.20
25	BB	170	U	N3-C2-O2	-5.90	118.07	122.20
25	BB	457	A	C6-C5-N7	5.90	136.43	132.30
25	BB	469	G	C4-C5-C6	-5.90	115.26	118.80
25	BB	587	C	C5-C6-N1	-5.90	118.05	121.00
25	BB	983	A	C5-C6-N1	5.90	120.65	117.70
25	BB	1060	U	O4'-C1'-N1	5.90	112.92	108.20
25	BB	1826	G	N7-C8-N9	5.90	116.05	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2885	G	N9-C4-C5	5.90	107.76	105.40
3	A1	50	A	C2-N3-C4	5.90	113.55	110.60
3	A1	628	G	N3-C4-N9	5.90	129.54	126.00
3	A1	1172	C	C3'-C2'-C1'	5.90	106.22	101.50
3	A1	1344	C	C5-C6-N1	-5.90	118.05	121.00
25	BB	763	G	N9-C4-C5	5.90	107.76	105.40
25	BB	1551	A	C4-C5-C6	-5.90	114.05	117.00
2	AM	13	U	O5'-P-OP1	-5.89	100.39	105.70
3	A1	103	U	P-O3'-C3'	5.89	126.77	119.70
3	A1	179	A	N9-C4-C5	5.89	108.16	105.80
3	A1	238	A	C5-C6-N1	5.89	120.65	117.70
3	A1	779	C	O4'-C1'-N1	5.89	112.92	108.20
3	A1	978	A	C5-C6-N6	5.89	128.41	123.70
3	A1	1154	G	N1-C2-N2	5.89	121.50	116.20
3	A1	1209	C	OP1-P-OP2	-5.89	110.76	119.60
3	A1	1269	A	C2'-C3'-O3'	5.89	123.13	113.70
25	BB	1288	G	C3'-C2'-C1'	5.89	106.22	101.50
25	BB	1905	C	C6-N1-C2	-5.89	117.94	120.30
25	BB	2201	G	O4'-C4'-C3'	5.89	110.81	106.10
25	BB	2723	C	N1-C2-O2	5.89	122.44	118.90
45	BV	34	ARG	NE-CZ-NH2	5.89	123.25	120.30
52	B3	151	ARG	NH1-CZ-NH2	-5.89	112.92	119.40
3	A1	420	U	N3-C4-O4	5.89	123.53	119.40
3	A1	433	G	C4-C5-N7	-5.89	108.44	110.80
3	A1	825	A	C2-N3-C4	5.89	113.55	110.60
3	A1	1257	A	N1-C2-N3	-5.89	126.35	129.30
3	A1	1279	G	C6-C5-N7	-5.89	126.86	130.40
25	BB	505	A	C6-C5-N7	5.89	136.43	132.30
25	BB	695	G	N3-C4-C5	-5.89	125.65	128.60
25	BB	967	U	P-O3'-C3'	5.89	126.77	119.70
25	BB	1343	G	C6-N1-C2	-5.89	121.56	125.10
25	BB	1708	C	O4'-C1'-N1	5.89	112.91	108.20
25	BB	2005	A	C6-C5-N7	5.89	136.43	132.30
25	BB	2353	G	C6-C5-N7	5.89	133.94	130.40
3	A1	29	U	C4-C5-C6	5.89	123.23	119.70
3	A1	127	G	N3-C4-C5	-5.89	125.65	128.60
3	A1	397	A	C2-N3-C4	5.89	113.55	110.60
25	BB	68	G	C4-N9-C1'	5.89	134.16	126.50
25	BB	872	U	C5'-C4'-C3'	-5.89	106.57	116.00
25	BB	1679	A	C5'-C4'-O4'	5.89	116.17	109.10
3	A1	238	A	C6-C5-N7	5.89	136.42	132.30
3	A1	240	G	N3-C4-C5	-5.89	125.66	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	570	G	N1-C6-O6	-5.89	116.37	119.90
3	A1	836	G	C1'-O4'-C4'	5.89	114.61	109.90
3	A1	930	C	N3-C2-O2	-5.89	117.78	121.90
3	A1	980	C	N1-C2-N3	5.89	123.32	119.20
3	A1	1249	C	C5'-C4'-C3'	-5.89	106.58	116.00
25	BB	1058	U	N3-C4-O4	-5.89	115.28	119.40
25	BB	1743	G	C8-N9-C4	-5.89	104.04	106.40
25	BB	2286	G	P-O5'-C5'	5.89	130.32	120.90
25	BB	2349	G	C5-N7-C8	-5.89	101.36	104.30
25	BB	2863	C	N3-C2-O2	-5.89	117.78	121.90
3	A1	212	G	C5-N7-C8	-5.89	101.36	104.30
25	BB	1135	C	N3-C4-N4	-5.89	113.88	118.00
25	BB	1516	G	C6-C5-N7	5.89	133.93	130.40
25	BB	1677	A	C6-C5-N7	5.89	136.42	132.30
25	BB	1959	G	C4-C5-N7	-5.89	108.44	110.80
25	BB	2515	C	N1-C2-O2	5.89	122.43	118.90
1	AP	35	A	C5-C6-N6	5.89	128.41	123.70
3	A1	211	G	C4-C5-N7	-5.89	108.44	110.80
3	A1	365	U	C6-N1-C2	-5.89	117.47	121.00
3	A1	627	G	C3'-C2'-C1'	5.89	106.21	101.50
3	A1	868	C	C5-C6-N1	-5.89	118.06	121.00
3	A1	969	A	N1-C2-N3	-5.89	126.36	129.30
3	A1	1199	U	C3'-C2'-C1'	5.89	106.21	101.50
25	BB	1008	A	C6-C5-N7	5.89	136.42	132.30
25	BB	1088	A	C6-N1-C2	-5.89	115.07	118.60
25	BB	1158	C	N1-C2-N3	5.89	123.32	119.20
25	BB	1703	G	C4-C5-C6	-5.89	115.27	118.80
25	BB	2456	C	N1-C2-O2	5.89	122.43	118.90
3	A1	1242	G	C5'-C4'-O4'	5.88	116.16	109.10
3	A1	1386	G	C8-N9-C4	-5.88	104.05	106.40
25	BB	93	G	C4-C5-N7	-5.88	108.45	110.80
25	BB	209	C	C2-N3-C4	-5.88	116.96	119.90
25	BB	923	G	C6-C5-N7	5.88	133.93	130.40
25	BB	1107	G	C4'-C3'-C2'	5.88	108.48	102.60
25	BB	1439	A	C8-N9-C4	5.88	108.15	105.80
25	BB	2036	C	N1-C2-O2	5.88	122.43	118.90
25	BB	2129	C	N3-C4-C5	5.88	124.25	121.90
25	BB	2497	A	N1-C2-N3	-5.88	126.36	129.30
25	BB	2820	A	C5'-C4'-C3'	-5.88	106.58	116.00
3	A1	1355	G	C6-N1-C2	-5.88	121.57	125.10
25	BB	296	U	C6-N1-C2	-5.88	117.47	121.00
25	BB	363	G	N9-C4-C5	5.88	107.75	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1137	G	C3'-C2'-C1'	5.88	106.21	101.50
25	BB	1177	G	C5'-C4'-O4'	5.88	116.16	109.10
25	BB	1470	A	C3'-C2'-C1'	5.88	106.21	101.50
25	BB	2503	A	C4-C5-C6	-5.88	114.06	117.00
1	AA	15	G	C6-N1-C2	-5.88	121.57	125.10
3	A1	200	G	N1-C2-N3	5.88	127.43	123.90
3	A1	1498	U	O4'-C4'-C3'	5.88	110.81	106.10
25	BB	77	G	C8-N9-C4	-5.88	104.05	106.40
25	BB	153	U	C4-C5-C6	5.88	123.23	119.70
25	BB	1159	U	N1-C2-O2	5.88	126.92	122.80
25	BB	1239	G	C4-C5-C6	-5.88	115.27	118.80
25	BB	1448	G	C4'-C3'-C2'	-5.88	96.72	102.60
25	BB	2024	G	O4'-C4'-C3'	5.88	110.81	106.10
25	BB	2132	U	N3-C2-O2	-5.88	118.08	122.20
25	BB	2173	A	C2-N3-C4	5.88	113.54	110.60
25	BB	2715	C	C1'-O4'-C4'	-5.88	105.19	109.90
25	BB	2737	G	C4-C5-C6	-5.88	115.27	118.80
25	BB	2765	A	C1'-O4'-C4'	-5.88	105.19	109.90
25	BB	2801	G	N1-C2-N3	5.88	127.43	123.90
51	B2	21	TYR	CD1-CG-CD2	5.88	124.37	117.90
3	A1	434	U	C1'-O4'-C4'	-5.88	105.20	109.90
3	A1	1274	A	N9-C1'-C2'	5.88	121.64	114.00
25	BB	22	C	N3-C2-O2	-5.88	117.78	121.90
25	BB	680	C	C5'-C4'-O4'	5.88	116.16	109.10
25	BB	1643	G	N1-C2-N3	5.88	127.43	123.90
25	BB	2084	C	O4'-C4'-C3'	5.88	110.80	106.10
1	AA	74	C	C1'-O4'-C4'	-5.88	105.20	109.90
3	A1	55	A	N1-C2-N3	-5.88	126.36	129.30
3	A1	1078	U	C4-C5-C6	5.88	123.23	119.70
3	A1	1266	G	C5-C6-N1	-5.88	108.56	111.50
3	A1	1373	G	N3-C4-C5	-5.88	125.66	128.60
25	BB	282	A	C5'-C4'-C3'	-5.88	106.59	116.00
25	BB	329	G	C5-C6-N1	5.88	114.44	111.50
25	BB	471	A	C8-N9-C4	5.88	108.15	105.80
25	BB	1016	G	C6-C5-N7	5.88	133.93	130.40
25	BB	1193	G	C6-C5-N7	5.88	133.93	130.40
25	BB	1204	A	C4-C5-C6	-5.88	114.06	117.00
25	BB	1313	U	N3-C2-O2	-5.88	118.08	122.20
25	BB	1434	A	O4'-C1'-N9	5.88	112.90	108.20
25	BB	1845	G	C4-C5-C6	-5.88	115.27	118.80
25	BB	2130	U	C5'-C4'-C3'	-5.88	106.59	116.00
25	BB	2691	C	C3'-C2'-C1'	5.88	106.20	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AE	62	A	C4'-C3'-C2'	-5.88	96.72	102.60
3	A1	334	C	C2'-C3'-O3'	5.88	123.10	113.70
3	A1	928	G	C1'-O4'-C4'	-5.88	105.20	109.90
3	A1	966	G	C8-N9-C4	-5.88	104.05	106.40
3	A1	1071	C	C2-N3-C4	-5.88	116.96	119.90
3	A1	1448	C	O4'-C1'-N1	5.88	112.90	108.20
25	BB	16	C	C6-N1-C2	-5.88	117.95	120.30
25	BB	38	A	N3-C4-N9	-5.88	122.70	127.40
25	BB	878	A	C4'-C3'-C2'	-5.88	96.72	102.60
25	BB	924	G	C5-C6-N1	5.88	114.44	111.50
25	BB	1511	G	N3-C4-C5	-5.88	125.66	128.60
25	BB	1579	A	C6-C5-N7	5.88	136.41	132.30
1	AE	49	C	C6-N1-C2	-5.88	117.95	120.30
2	AM	8	U	C4'-C3'-C2'	-5.88	96.72	102.60
3	A1	584	G	C4'-C3'-C2'	-5.88	96.72	102.60
3	A1	1294	G	C5-C6-O6	-5.88	125.08	128.60
25	BB	35	G	C4-C5-N7	-5.88	108.45	110.80
25	BB	279	A	C3'-C2'-C1'	-5.88	96.80	101.50
25	BB	745	G	N3-C2-N2	-5.88	115.79	119.90
25	BB	1744	A	C6-C5-N7	5.88	136.41	132.30
25	BB	2334	U	C5-C6-N1	-5.88	119.76	122.70
25	BB	2492	U	C1'-O4'-C4'	-5.88	105.20	109.90
25	BB	2854	G	C4'-C3'-C2'	-5.88	96.72	102.60
1	AE	23	A	C8-N9-C4	-5.87	103.45	105.80
3	A1	535	A	C5-C6-N6	5.87	128.40	123.70
3	A1	1138	G	C4-C5-N7	-5.87	108.45	110.80
24	BA	83	G	C5'-C4'-C3'	-5.87	106.60	116.00
25	BB	26	G	C2-N3-C4	5.87	114.84	111.90
25	BB	449	A	C2'-C3'-O3'	5.87	123.10	113.70
25	BB	803	U	N1-C2-N3	5.87	118.42	114.90
25	BB	1509	A	O4'-C4'-C3'	5.87	110.80	106.10
25	BB	1757	A	C5'-C4'-O4'	5.87	116.15	109.10
3	A1	59	A	C5-C6-N1	5.87	120.64	117.70
3	A1	200	G	N3-C4-C5	-5.87	125.67	128.60
3	A1	487	A	C8-N9-C4	-5.87	103.45	105.80
3	A1	551	U	C1'-O4'-C4'	-5.87	105.20	109.90
3	A1	943	U	N3-C2-O2	-5.87	118.09	122.20
3	A1	1181	G	C6-N1-C2	-5.87	121.58	125.10
3	A1	1389	C	N3-C4-N4	-5.87	113.89	118.00
25	BB	93	G	N1-C2-N3	5.87	127.42	123.90
25	BB	190	A	C5-C6-N6	5.87	128.40	123.70
25	BB	258	G	C6-N1-C2	-5.87	121.58	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	740	C	C3'-C2'-C1'	5.87	106.20	101.50
25	BB	755	U	C1'-O4'-C4'	-5.87	105.20	109.90
25	BB	1214	A	C6-N1-C2	-5.87	115.08	118.60
25	BB	1328	A	C6-N1-C2	-5.87	115.08	118.60
25	BB	1826	G	O4'-C1'-N9	5.87	112.90	108.20
25	BB	1867	G	C4'-C3'-C2'	-5.87	96.73	102.60
25	BB	2226	C	O4'-C1'-N1	5.87	112.90	108.20
25	BB	2672	U	C1'-O4'-C4'	-5.87	105.20	109.90
25	BB	2821	A	C6-C5-N7	5.87	136.41	132.30
1	AP	33	U	C5'-C4'-O4'	5.87	116.14	109.10
1	AP	60	C	C5'-C4'-O4'	5.87	116.14	109.10
1	AE	10	G	N3-C4-N9	5.87	129.52	126.00
3	A1	592	G	C1'-O4'-C4'	-5.87	105.20	109.90
3	A1	1016	A	P-O3'-C3'	5.87	126.74	119.70
25	BB	1819	A	C4-C5-C6	-5.87	114.06	117.00
25	BB	2201	G	N1-C2-N3	5.87	127.42	123.90
25	BB	2634	A	C4-C5-C6	-5.87	114.06	117.00
3	A1	382	A	C2-N3-C4	5.87	113.53	110.60
3	A1	564	C	C1'-O4'-C4'	-5.87	105.21	109.90
3	A1	1103	C	N3-C4-N4	-5.87	113.89	118.00
3	A1	1134	G	N3-C4-C5	-5.87	125.67	128.60
3	A1	1251	A	C1'-O4'-C4'	-5.87	105.21	109.90
3	A1	1389	C	C6-N1-C2	-5.87	117.95	120.30
25	BB	139	U	P-O3'-C3'	5.87	126.74	119.70
25	BB	675	A	C6-C5-N7	5.87	136.41	132.30
25	BB	874	G	C5-N7-C8	-5.87	101.37	104.30
25	BB	922	C	OP1-P-OP2	-5.87	110.80	119.60
25	BB	1321	A	O4'-C1'-C2'	-5.87	99.93	105.80
25	BB	1442	U	N3-C2-O2	-5.87	118.09	122.20
25	BB	1475	G	C8-N9-C4	-5.87	104.05	106.40
25	BB	1767	G	N9-C1'-C2'	-5.87	105.54	112.00
25	BB	2027	G	N3-C4-C5	-5.87	125.67	128.60
25	BB	2616	C	C2-N3-C4	-5.87	116.97	119.90
25	BB	2876	G	N3-C4-C5	-5.87	125.67	128.60
3	A1	572	A	C5-C6-N6	5.87	128.39	123.70
24	BA	19	C	N1-C2-O2	5.87	122.42	118.90
25	BB	800	A	N1-C2-N3	-5.87	126.37	129.30
25	BB	1084	A	O4'-C1'-N9	5.87	112.89	108.20
25	BB	1367	A	C1'-O4'-C4'	-5.87	105.21	109.90
25	BB	2764	A	C5-C6-N6	5.87	128.39	123.70
1	AE	13	C	C5'-C4'-C3'	5.87	125.38	116.00
3	A1	388	G	O4'-C1'-N9	5.87	112.89	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	807	A	O3'-P-O5'	5.87	115.14	104.00
3	A1	1003	G	C5'-C4'-C3'	-5.87	106.62	116.00
3	A1	1094	G	C5-C6-N1	5.87	114.43	111.50
3	A1	1325	C	N1-C2-N3	5.87	123.31	119.20
15	AO	71	ARG	NE-CZ-NH2	-5.87	117.37	120.30
24	BA	64	G	N3-C4-C5	-5.87	125.67	128.60
25	BB	355	U	N1-C2-N3	5.87	118.42	114.90
25	BB	522	A	O5'-C5'-C4'	-5.87	100.55	111.70
25	BB	625	G	C5-N7-C8	-5.87	101.37	104.30
25	BB	1228	G	C4-N9-C1'	-5.87	118.88	126.50
25	BB	1933	G	N1-C6-O6	-5.87	116.38	119.90
25	BB	2340	A	C4-C5-C6	-5.87	114.07	117.00
25	BB	2482	A	N1-C2-N3	-5.87	126.37	129.30
33	BJ	110	GLU	C-N-CA	5.87	136.36	121.70
3	A1	366	A	N9-C4-C5	-5.86	103.45	105.80
3	A1	1188	A	C2'-C3'-O3'	5.86	123.08	113.70
3	A1	1451	U	N1-C2-O2	5.86	126.91	122.80
25	BB	174	U	C4-C5-C6	5.86	123.22	119.70
25	BB	325	G	N9-C4-C5	-5.86	103.05	105.40
25	BB	502	A	O4'-C4'-C3'	5.86	110.79	106.10
25	BB	617	G	N3-C2-N2	-5.86	115.80	119.90
25	BB	828	U	C4-C5-C6	5.86	123.22	119.70
25	BB	1405	U	C5-C6-N1	-5.86	119.77	122.70
25	BB	1412	U	N3-C2-O2	-5.86	118.09	122.20
25	BB	2466	C	O4'-C1'-N1	5.86	112.89	108.20
25	BB	2679	A	N1-C2-N3	-5.86	126.37	129.30
25	BB	2791	G	N3-C4-N9	-5.86	122.48	126.00
31	BH	64	TYR	CB-CG-CD2	5.86	124.52	121.00
3	A1	236	A	C2-N3-C4	5.86	113.53	110.60
3	A1	1430	A	C8-N9-C4	-5.86	103.45	105.80
19	AT	16	GLU	OE1-CD-OE2	-5.86	116.27	123.30
25	BB	256	A	C3'-C2'-C1'	5.86	106.19	101.50
25	BB	772	C	C3'-C2'-C1'	5.86	106.19	101.50
25	BB	939	G	C4'-C3'-C2'	-5.86	96.74	102.60
25	BB	1877	A	C6-N1-C2	-5.86	115.08	118.60
25	BB	2290	G	O4'-C4'-C3'	5.86	110.79	106.10
31	BH	111	ARG	NE-CZ-NH1	5.86	123.23	120.30
3	A1	217	C	N1-C2-O2	5.86	122.42	118.90
3	A1	362	G	N1-C2-N3	5.86	127.42	123.90
3	A1	808	C	N1-C2-N3	5.86	123.30	119.20
3	A1	1262	C	C5'-C4'-O4'	5.86	116.13	109.10
25	BB	240	C	C5'-C4'-O4'	5.86	116.13	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	894	U	C5-C4-O4	5.86	129.42	125.90
25	BB	1023	U	C3'-C2'-C1'	5.86	106.19	101.50
25	BB	1133	A	N1-C2-N3	-5.86	126.37	129.30
25	BB	1940	U	C5-C4-O4	-5.86	122.38	125.90
25	BB	2107	G	C5-C6-N1	5.86	114.43	111.50
25	BB	2404	U	C3'-C2'-C1'	5.86	106.19	101.50
25	BB	2466	C	C4'-C3'-C2'	-5.86	96.74	102.60
25	BB	2770	G	C6-N1-C2	-5.86	121.58	125.10
3	A1	348	G	C6-C5-N7	5.86	133.91	130.40
3	A1	1482	G	N1-C2-N3	5.86	127.42	123.90
25	BB	1931	U	N1-C2-O2	5.86	126.90	122.80
25	BB	2832	U	C2-N3-C4	-5.86	123.48	127.00
1	AP	29	A	C5-N7-C8	-5.86	100.97	103.90
2	AM	11	U	N1-C2-N3	5.86	118.41	114.90
3	A1	278	G	C5-C6-N1	5.86	114.43	111.50
3	A1	491	G	C5-C6-O6	5.86	132.12	128.60
3	A1	695	A	C4-C5-C6	-5.86	114.07	117.00
24	BA	35	C	C5-C4-N4	5.86	124.30	120.20
25	BB	7	G	N9-C1'-C2'	-5.86	105.56	112.00
25	BB	420	C	C5'-C4'-C3'	-5.86	106.63	116.00
25	BB	930	G	C4-C5-N7	-5.86	108.46	110.80
25	BB	1091	G	O4'-C4'-C3'	-5.86	98.14	104.00
25	BB	1248	G	N3-C2-N2	-5.86	115.80	119.90
25	BB	1496	A	O5'-P-OP2	-5.86	100.43	105.70
25	BB	1499	C	N1-C1'-C2'	-5.86	105.56	112.00
25	BB	1922	G	C5-C6-O6	5.86	132.11	128.60
25	BB	2751	G	C1'-O4'-C4'	5.86	114.59	109.90
3	A1	204	G	C8-N9-C4	-5.86	104.06	106.40
3	A1	602	A	P-O5'-C5'	5.86	130.27	120.90
3	A1	1339	A	N1-C2-N3	-5.86	126.37	129.30
3	A1	1344	C	N3-C2-O2	-5.86	117.80	121.90
25	BB	452	G	N3-C4-C5	-5.86	125.67	128.60
25	BB	868	U	C5-C6-N1	-5.86	119.77	122.70
25	BB	1443	U	O4'-C1'-N1	5.86	112.88	108.20
25	BB	1781	U	C5'-C4'-O4'	5.86	116.13	109.10
25	BB	213	A	C5-N7-C8	-5.85	100.97	103.90
25	BB	328	U	C4-C5-C6	5.85	123.21	119.70
25	BB	791	C	P-O3'-C3'	5.85	126.72	119.70
25	BB	2466	C	C5-C4-N4	5.85	124.30	120.20
3	A1	163	C	C5'-C4'-O4'	5.85	116.12	109.10
3	A1	383	A	C4'-C3'-C2'	-5.85	96.75	102.60
3	A1	652	U	C1'-O4'-C4'	-5.85	105.22	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	939	G	C5-C6-N1	5.85	114.43	111.50
3	A1	1110	A	N1-C2-N3	5.85	132.23	129.30
24	BA	35	C	N3-C4-N4	-5.85	113.90	118.00
25	BB	180	G	N1-C2-N3	5.85	127.41	123.90
25	BB	820	A	C2-N3-C4	5.85	113.53	110.60
25	BB	1246	A	C5'-C4'-C3'	-5.85	106.64	116.00
25	BB	1348	C	N1-C2-O2	5.85	122.41	118.90
25	BB	1550	C	N1-C2-N3	5.85	123.30	119.20
25	BB	1963	U	C5-C6-N1	-5.85	119.77	122.70
25	BB	2243	U	N1-C2-N3	5.85	118.41	114.90
25	BB	2346	A	C6-C5-N7	5.85	136.40	132.30
1	AA	55	U	C4-C5-C6	5.85	123.21	119.70
3	A1	30	U	C6-N1-C2	-5.85	117.49	121.00
3	A1	487	A	O4'-C1'-N9	5.85	112.88	108.20
15	AO	126	ARG	NH1-CZ-NH2	-5.85	112.96	119.40
24	BA	6	G	N1-C2-N3	5.85	127.41	123.90
25	BB	2114	A	C5-C6-N6	5.85	128.38	123.70
50	B1	4	VAL	CG1-CB-CG2	-5.85	101.54	110.90
3	A1	214	C	N3-C4-C5	5.85	124.24	121.90
3	A1	645	G	N1-C2-N2	-5.85	110.94	116.20
3	A1	815	A	C6-N1-C2	-5.85	115.09	118.60
3	A1	1011	C	N1-C1'-C2'	-5.85	105.57	112.00
24	BA	79	G	N1-C6-O6	-5.85	116.39	119.90
25	BB	186	G	C4-C5-C6	-5.85	115.29	118.80
25	BB	523	C	O5'-C5'-C4'	-5.85	100.58	111.70
25	BB	795	C	C1'-O4'-C4'	-5.85	105.22	109.90
25	BB	1198	U	C3'-C2'-C1'	5.85	106.18	101.50
25	BB	1546	G	N7-C8-N9	5.85	116.02	113.10
25	BB	1580	A	C6-N1-C2	-5.85	115.09	118.60
25	BB	1612	C	N3-C4-C5	5.85	124.24	121.90
25	BB	1922	G	O4'-C4'-C3'	5.85	110.78	106.10
25	BB	1938	A	C6-N1-C2	-5.85	115.09	118.60
25	BB	2820	A	C1'-O4'-C4'	5.85	114.58	109.90
1	AA	68	U	N1-C2-N3	5.85	118.41	114.90
3	A1	123	U	C3'-C2'-C1'	5.85	106.18	101.50
3	A1	134	G	C4'-C3'-C2'	-5.85	96.75	102.60
3	A1	814	A	C5-N7-C8	-5.85	100.98	103.90
3	A1	1289	A	C4-C5-C6	-5.85	114.08	117.00
3	A1	1485	U	N3-C2-O2	-5.85	118.11	122.20
25	BB	267	C	N1-C2-N3	5.85	123.29	119.20
25	BB	735	A	C5-C6-N6	5.85	128.38	123.70
25	BB	1707	G	N1-C2-N2	-5.85	110.94	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1886	U	N1-C2-O2	5.85	126.89	122.80
25	BB	1995	U	C5-C6-N1	-5.85	119.78	122.70
25	BB	2212	A	C5-C6-N1	5.85	120.62	117.70
25	BB	2666	C	C4'-C3'-C2'	-5.85	96.75	102.60
1	AA	13	C	N3-C4-N4	-5.85	113.91	118.00
3	A1	1207	G	C8-N9-C4	-5.85	104.06	106.40
24	BA	83	G	C1'-O4'-C4'	-5.85	105.22	109.90
25	BB	364	C	N3-C2-O2	-5.85	117.81	121.90
25	BB	1117	C	N1-C2-O2	5.85	122.41	118.90
25	BB	1910	G	N3-C4-C5	-5.85	125.68	128.60
25	BB	2242	G	N7-C8-N9	5.85	116.02	113.10
3	A1	125	U	C4-C5-C6	5.84	123.21	119.70
3	A1	127	G	C5-C6-N1	5.84	114.42	111.50
3	A1	789	U	N3-C2-O2	-5.84	118.11	122.20
3	A1	1188	A	C5-N7-C8	-5.84	100.98	103.90
3	A1	1271	A	C8-N9-C4	-5.84	103.46	105.80
3	A1	1457	G	C5-C6-N1	5.84	114.42	111.50
3	A1	1505	G	C8-N9-C4	-5.84	104.06	106.40
25	BB	356	G	O4'-C1'-N9	5.84	112.88	108.20
25	BB	988	A	C5-C6-N1	5.84	120.62	117.70
25	BB	1276	A	C6-C5-N7	5.84	136.39	132.30
25	BB	1767	G	C4'-C3'-C2'	-5.84	96.75	102.60
25	BB	2041	U	N3-C2-O2	-5.84	118.11	122.20
3	A1	15	G	C5-C6-N1	5.84	114.42	111.50
3	A1	37	U	O4'-C1'-N1	5.84	112.87	108.20
3	A1	290	C	N1-C2-O2	5.84	122.41	118.90
23	AX	16	ARG	NH1-CZ-NH2	-5.84	112.97	119.40
25	BB	1148	U	C5-C6-N1	-5.84	119.78	122.70
30	BG	71	ARG	NH1-CZ-NH2	-5.84	112.97	119.40
3	A1	26	A	C5-C6-N1	5.84	120.62	117.70
3	A1	360	G	C5'-C4'-C3'	-5.84	106.65	116.00
3	A1	1145	A	C5-C6-N6	5.84	128.37	123.70
3	A1	1371	G	N1-C2-N3	5.84	127.41	123.90
3	A1	1417	G	C8-N9-C4	-5.84	104.06	106.40
25	BB	999	U	N3-C2-O2	-5.84	118.11	122.20
25	BB	1219	U	N3-C2-O2	-5.84	118.11	122.20
25	BB	1311	G	N3-C2-N2	-5.84	115.81	119.90
25	BB	2285	C	C5-C6-N1	-5.84	118.08	121.00
25	BB	2702	G	C8-N9-C4	5.84	108.74	106.40
25	BB	2860	A	C3'-C2'-C1'	5.84	106.17	101.50
1	AP	51	G	N7-C8-N9	5.84	116.02	113.10
3	A1	167	A	C5'-C4'-C3'	-5.84	106.66	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	313	A	C5-C6-N6	5.84	128.37	123.70
3	A1	628	G	C1'-O4'-C4'	-5.84	105.23	109.90
3	A1	755	G	C6-N1-C2	-5.84	121.60	125.10
3	A1	912	C	C4-C5-C6	5.84	120.32	117.40
3	A1	962	C	C2'-C3'-O3'	5.84	123.04	113.70
3	A1	993	G	C5-N7-C8	-5.84	101.38	104.30
3	A1	1124	G	N3-C4-C5	-5.84	125.68	128.60
25	BB	126	A	C6-C5-N7	5.84	136.39	132.30
25	BB	804	A	C6-N1-C2	-5.84	115.10	118.60
25	BB	1503	A	O4'-C1'-N9	5.84	112.87	108.20
25	BB	1721	G	N1-C2-N2	-5.84	110.94	116.20
25	BB	1755	A	C6-C5-N7	5.84	136.39	132.30
25	BB	2177	C	C1'-O4'-C4'	-5.84	105.23	109.90
25	BB	2847	U	C5'-C4'-C3'	-5.84	106.66	116.00
3	A1	572	A	N1-C2-N3	-5.84	126.38	129.30
3	A1	1256	A	O4'-C1'-N9	5.84	112.87	108.20
25	BB	307	G	N1-C6-O6	-5.84	116.40	119.90
25	BB	780	G	C4-C5-C6	-5.84	115.30	118.80
25	BB	808	G	C8-N9-C4	-5.84	104.06	106.40
25	BB	1525	A	C8-N9-C4	-5.84	103.47	105.80
25	BB	1680	U	O5'-C5'-C4'	5.84	122.79	111.70
25	BB	1811	G	O4'-C1'-N9	5.84	112.87	108.20
25	BB	1879	C	O4'-C1'-N1	5.84	112.87	108.20
25	BB	2456	C	N3-C2-O2	-5.84	117.81	121.90
1	AA	27	C	N1-C2-N3	5.84	123.28	119.20
1	AE	20	G	C6-N1-C2	-5.84	121.60	125.10
3	A1	107	G	O4'-C1'-N9	5.84	112.87	108.20
3	A1	331	G	O4'-C1'-N9	5.84	112.87	108.20
3	A1	612	C	N1-C2-N3	5.84	123.29	119.20
3	A1	654	G	N3-C2-N2	-5.84	115.81	119.90
3	A1	792	A	C5-N7-C8	-5.84	100.98	103.90
3	A1	1492	A	C6-N1-C2	-5.84	115.10	118.60
25	BB	32	C	O4'-C1'-N1	5.84	112.87	108.20
25	BB	272	A	C5'-C4'-C3'	-5.84	106.66	116.00
25	BB	553	G	N3-C2-N2	5.84	123.99	119.90
25	BB	703	U	C3'-C2'-C1'	5.84	106.17	101.50
25	BB	785	G	C4'-C3'-C2'	-5.84	96.76	102.60
25	BB	850	U	C3'-C2'-C1'	5.84	106.17	101.50
25	BB	873	C	P-O3'-C3'	5.84	126.70	119.70
25	BB	1338	G	C5'-C4'-C3'	-5.84	106.66	116.00
25	BB	1352	U	C5-C6-N1	-5.84	119.78	122.70
25	BB	2413	G	N1-C2-N3	5.84	127.40	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2586	U	O4'-C1'-N1	5.84	112.87	108.20
25	BB	2590	A	C6-N1-C2	-5.84	115.10	118.60
25	BB	2628	C	N3-C4-C5	5.84	124.23	121.90
25	BB	2701	U	N3-C2-O2	-5.84	118.11	122.20
25	BB	2797	U	C5'-C4'-O4'	5.84	116.10	109.10
3	A1	7	A	C5-C6-N1	5.83	120.62	117.70
3	A1	270	A	C5-C6-N6	5.83	128.37	123.70
24	BA	31	C	N3-C4-C5	5.83	124.23	121.90
25	BB	132	G	C5-C6-O6	5.83	132.10	128.60
25	BB	305	C	N1-C2-O2	5.83	122.40	118.90
25	BB	711	G	N3-C4-C5	-5.83	125.68	128.60
25	BB	748	G	C1'-O4'-C4'	-5.83	105.23	109.90
25	BB	1645	G	C5-C6-N1	5.83	114.42	111.50
25	BB	1724	G	C2-N3-C4	5.83	114.82	111.90
25	BB	2663	G	C5-N7-C8	-5.83	101.38	104.30
32	BI	112	ARG	NE-CZ-NH1	5.83	123.22	120.30
55	B6	120	ARG	NE-CZ-NH2	-5.83	117.38	120.30
3	A1	127	G	N1-C6-O6	-5.83	116.40	119.90
3	A1	1087	G	C5'-C4'-O4'	5.83	116.10	109.10
25	BB	139	U	C5-C4-O4	5.83	129.40	125.90
25	BB	151	C	N1-C2-N3	5.83	123.28	119.20
25	BB	1542	U	O4'-C1'-N1	5.83	112.87	108.20
25	BB	2002	G	N3-C4-C5	-5.83	125.68	128.60
25	BB	2246	G	N9-C4-C5	5.83	107.73	105.40
25	BB	2342	C	C5'-C4'-O4'	5.83	116.10	109.10
25	BB	2578	G	C8-N9-C4	-5.83	104.07	106.40
2	AM	2	U	C5-C4-O4	5.83	129.40	125.90
3	A1	887	G	C2-N3-C4	5.83	114.81	111.90
3	A1	1338	G	C5-C6-N1	5.83	114.42	111.50
3	A1	1348	U	C5-C6-N1	-5.83	119.78	122.70
24	BA	56	G	N3-C2-N2	-5.83	115.82	119.90
25	BB	228	C	C5-C6-N1	-5.83	118.08	121.00
25	BB	369	U	N3-C4-O4	-5.83	115.32	119.40
25	BB	568	U	O4'-C4'-C3'	5.83	110.77	106.10
25	BB	892	A	C4-C5-C6	-5.83	114.08	117.00
25	BB	1838	C	C2-N3-C4	-5.83	116.98	119.90
25	BB	2310	C	N3-C4-C5	5.83	124.23	121.90
25	BB	2343	U	C5-C6-N1	-5.83	119.78	122.70
25	BB	2382	G	O3'-P-O5'	-5.83	92.92	104.00
30	BG	54	LEU	CB-CG-CD1	5.83	120.91	111.00
3	A1	254	G	N7-C8-N9	5.83	116.02	113.10
3	A1	422	C	C1'-O4'-C4'	5.83	114.56	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1094	G	C8-N9-C4	-5.83	104.07	106.40
3	A1	1351	U	C5'-C4'-O4'	5.83	116.10	109.10
3	A1	1530	G	C5-C6-N1	5.83	114.42	111.50
25	BB	142	A	C1'-O4'-C4'	5.83	114.56	109.90
25	BB	1171	G	C6-C5-N7	5.83	133.90	130.40
25	BB	1277	G	C4'-C3'-C2'	-5.83	96.77	102.60
25	BB	1341	G	N3-C2-N2	-5.83	115.82	119.90
25	BB	1394	U	C4'-C3'-C2'	-5.83	96.77	102.60
1	AE	34	G	C4-C5-C6	-5.83	115.30	118.80
3	A1	566	G	C4-C5-N7	-5.83	108.47	110.80
3	A1	1326	U	O5'-P-OP1	-5.83	100.45	105.70
25	BB	67	U	C4'-C3'-C2'	-5.83	96.77	102.60
25	BB	579	G	C5-C6-N1	5.83	114.41	111.50
25	BB	665	U	C4-C5-C6	5.83	123.20	119.70
25	BB	712	G	N3-C4-N9	5.83	129.50	126.00
25	BB	2119	A	C6-C5-N7	5.83	136.38	132.30
25	BB	2377	A	C1'-O4'-C4'	-5.83	105.24	109.90
25	BB	2601	C	N1-C2-N3	5.83	123.28	119.20
2	AM	5	U	P-O3'-C3'	5.83	126.69	119.70
3	A1	108	G	C5-C6-O6	5.83	132.10	128.60
3	A1	228	A	C6-C5-N7	5.83	136.38	132.30
25	BB	81	G	N1-C2-N3	5.83	127.40	123.90
25	BB	636	G	C6-C5-N7	5.83	133.90	130.40
25	BB	864	G	C5-N7-C8	-5.83	101.39	104.30
25	BB	1882	U	C2-N3-C4	-5.83	123.50	127.00
1	AE	22	G	O4'-C1'-N9	5.83	112.86	108.20
3	A1	649	A	C2'-C3'-O3'	5.83	123.02	113.70
3	A1	759	A	N1-C2-N3	-5.83	126.39	129.30
25	BB	177	G	C5'-C4'-C3'	-5.83	106.68	116.00
25	BB	216	A	C3'-C2'-C1'	5.83	106.16	101.50
25	BB	262	A	C5'-C4'-O4'	5.83	116.09	109.10
25	BB	549	G	N9-C4-C5	5.83	107.73	105.40
25	BB	556	A	C2-N3-C4	5.83	113.51	110.60
25	BB	755	U	O4'-C1'-N1	5.83	112.86	108.20
25	BB	1064	C	N3-C2-O2	-5.83	117.82	121.90
25	BB	1331	G	C4'-C3'-C2'	-5.83	96.77	102.60
25	BB	1731	G	N1-C6-O6	-5.83	116.40	119.90
25	BB	2100	G	C5-C6-N1	5.83	114.41	111.50
25	BB	2502	G	C4'-C3'-C2'	-5.83	96.78	102.60
25	BB	2648	G	C4-C5-C6	-5.83	115.30	118.80
25	BB	2896	C	N3-C2-O2	-5.83	117.82	121.90
3	A1	34	C	C5'-C4'-O4'	5.82	116.09	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	158	G	C4-C5-N7	-5.82	108.47	110.80
3	A1	521	G	C5-C6-N1	5.82	114.41	111.50
3	A1	626	G	O4'-C1'-N9	5.82	112.86	108.20
3	A1	1019	A	C4'-C3'-C2'	-5.82	96.78	102.60
3	A1	1146	A	C2-N3-C4	5.82	113.51	110.60
3	A1	1253	G	O5'-P-OP2	-5.82	100.46	105.70
3	A1	1516	G	O4'-C1'-N9	5.82	112.86	108.20
25	BB	674	G	N3-C2-N2	-5.82	115.82	119.90
25	BB	854	C	N3-C2-O2	-5.82	117.82	121.90
25	BB	868	U	C4-C5-C6	5.82	123.19	119.70
25	BB	891	G	O4'-C1'-N9	5.82	112.86	108.20
25	BB	2267	A	C6-N1-C2	-5.82	115.11	118.60
25	BB	2744	G	C5-N7-C8	-5.82	101.39	104.30
3	A1	583	A	N9-C4-C5	5.82	108.13	105.80
3	A1	816	A	C5-C6-N6	5.82	128.36	123.70
3	A1	1027	C	O4'-C1'-N1	5.82	112.86	108.20
25	BB	660	C	C5-C4-N4	5.82	124.28	120.20
25	BB	2003	A	C1'-O4'-C4'	-5.82	105.24	109.90
25	BB	2054	A	C6-C5-N7	5.82	136.38	132.30
1	AA	45	G	C2-N3-C4	5.82	114.81	111.90
3	A1	25	C	N3-C4-C5	5.82	124.23	121.90
3	A1	851	G	N9-C4-C5	5.82	107.73	105.40
3	A1	1360	A	N1-C2-N3	-5.82	126.39	129.30
25	BB	110	G	N3-C4-N9	5.82	129.49	126.00
25	BB	375	G	C6-N1-C2	-5.82	121.61	125.10
25	BB	538	A	C4'-C3'-C2'	-5.82	96.78	102.60
25	BB	1273	U	N1-C2-N3	5.82	118.39	114.90
25	BB	1321	A	C3'-C2'-C1'	-5.82	96.84	101.50
25	BB	1426	G	O4'-C1'-C2'	5.82	112.84	107.60
25	BB	1799	G	C5-C6-N1	5.82	114.41	111.50
25	BB	1972	G	C5'-C4'-O4'	5.82	116.08	109.10
25	BB	2050	C	N3-C4-N4	-5.82	113.92	118.00
25	BB	2378	A	C4-C5-C6	-5.82	114.09	117.00
25	BB	2508	G	C3'-C2'-C1'	-5.82	96.84	101.50
25	BB	2524	G	C5-N7-C8	-5.82	101.39	104.30
25	BB	2842	G	C5'-C4'-O4'	5.82	116.08	109.10
3	A1	354	G	C1'-O4'-C4'	-5.82	105.25	109.90
3	A1	416	G	C4'-C3'-C2'	-5.82	96.78	102.60
25	BB	84	A	C6-N1-C2	-5.82	115.11	118.60
25	BB	449	A	C6-C5-N7	5.82	136.37	132.30
25	BB	636	G	O4'-C4'-C3'	5.82	110.75	106.10
25	BB	705	A	C6-C5-N7	5.82	136.37	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	841	G	N3-C4-C5	-5.82	125.69	128.60
25	BB	1700	A	C6-N1-C2	-5.82	115.11	118.60
25	BB	1839	G	N3-C4-N9	5.82	129.49	126.00
1	AP	8	U	O4'-C1'-N1	5.82	112.85	108.20
1	AE	46	G	O4'-C1'-C2'	-5.82	99.98	105.80
3	A1	159	G	C6-C5-N7	5.82	133.89	130.40
3	A1	673	A	C6-C5-N7	5.82	136.37	132.30
3	A1	757	U	O4'-C4'-C3'	5.82	110.75	106.10
3	A1	1050	G	N3-C4-C5	-5.82	125.69	128.60
3	A1	1058	G	C1'-O4'-C4'	-5.82	105.25	109.90
3	A1	1158	C	C3'-C2'-C1'	-5.82	96.85	101.50
3	A1	1205	U	N3-C2-O2	-5.82	118.13	122.20
3	A1	1413	A	C4'-C3'-C2'	-5.82	96.78	102.60
3	A1	1441	A	C8-N9-C4	5.82	108.13	105.80
25	BB	144	A	C6-C5-N7	5.82	136.37	132.30
25	BB	891	G	C4-C5-N7	-5.82	108.47	110.80
25	BB	1400	U	P-O5'-C5'	5.82	130.21	120.90
25	BB	1443	U	C3'-C2'-C1'	5.82	106.15	101.50
25	BB	1574	C	C4'-C3'-C2'	-5.82	96.78	102.60
25	BB	1584	U	C3'-C2'-C1'	5.82	106.15	101.50
25	BB	1709	U	N1-C1'-C2'	5.82	121.56	114.00
25	BB	1759	A	O4'-C1'-N9	5.82	112.85	108.20
25	BB	1814	G	C4-C5-N7	5.82	113.13	110.80
25	BB	2069	G	C5'-C4'-O4'	5.82	116.08	109.10
25	BB	2642	G	C2-N3-C4	5.82	114.81	111.90
3	A1	320	A	N1-C2-N3	-5.82	126.39	129.30
3	A1	542	G	C5-C6-O6	5.82	132.09	128.60
3	A1	844	G	C5-N7-C8	-5.82	101.39	104.30
3	A1	858	G	C3'-C2'-C1'	5.82	106.15	101.50
3	A1	946	A	N1-C2-N3	-5.82	126.39	129.30
3	A1	1104	G	O4'-C1'-N9	5.82	112.85	108.20
3	A1	1161	C	N3-C4-N4	-5.82	113.93	118.00
3	A1	1305	G	O4'-C4'-C3'	5.82	110.75	106.10
24	BA	82	U	N3-C2-O2	-5.82	118.13	122.20
25	BB	474	G	O4'-C1'-N9	5.82	112.85	108.20
25	BB	485	C	C4-C5-C6	5.82	120.31	117.40
25	BB	869	G	N3-C4-N9	-5.82	122.51	126.00
25	BB	914	G	C5'-C4'-O4'	5.82	116.08	109.10
25	BB	1220	G	C5-C6-N1	5.82	114.41	111.50
25	BB	1282	U	C5-C6-N1	-5.82	119.79	122.70
25	BB	1479	G	N3-C2-N2	-5.82	115.83	119.90
25	BB	1713	A	P-O3'-C3'	-5.82	112.72	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1771	C	O4'-C1'-C2'	-5.82	99.98	105.80
25	BB	1906	G	C4-C5-N7	5.82	113.13	110.80
25	BB	2063	C	O4'-C1'-N1	5.82	112.85	108.20
25	BB	2209	G	C2-N3-C4	5.82	114.81	111.90
25	BB	2491	U	N1-C2-N3	5.82	118.39	114.90
25	BB	2585	U	C5-C6-N1	-5.82	119.79	122.70
25	BB	2754	U	C5-C6-N1	-5.82	119.79	122.70
25	BB	2855	C	C5-C4-N4	-5.82	116.13	120.20
1	AA	4	G	N1-C2-N2	-5.81	110.97	116.20
1	AE	26	G	C8-N9-C4	-5.81	104.08	106.40
3	A1	105	G	C3'-C2'-C1'	-5.81	96.85	101.50
3	A1	551	U	N1-C2-N3	5.81	118.39	114.90
3	A1	916	U	O4'-C4'-C3'	5.81	110.75	106.10
3	A1	1042	A	N1-C2-N3	-5.81	126.39	129.30
3	A1	1315	U	C4-C5-C6	5.81	123.19	119.70
24	BA	90	C	N3-C4-C5	5.81	124.23	121.90
25	BB	1877	A	C5'-C4'-O4'	5.81	116.08	109.10
25	BB	2535	G	C4-C5-C6	-5.81	115.31	118.80
3	A1	132	C	N1-C2-N3	5.81	123.27	119.20
3	A1	142	G	C5-C6-N1	5.81	114.41	111.50
3	A1	267	C	N1-C2-O2	5.81	122.39	118.90
3	A1	431	A	C4'-C3'-C2'	-5.81	96.79	102.60
3	A1	615	G	C4-C5-N7	-5.81	108.47	110.80
3	A1	1208	C	N1-C2-O2	5.81	122.39	118.90
25	BB	19	A	C5-C6-N6	5.81	128.35	123.70
25	BB	83	A	C1'-O4'-C4'	-5.81	105.25	109.90
25	BB	207	A	P-O3'-C3'	5.81	126.67	119.70
25	BB	350	G	C4-C5-N7	-5.81	108.47	110.80
25	BB	413	C	N1-C2-O2	5.81	122.39	118.90
25	BB	801	G	O4'-C1'-N9	5.81	112.85	108.20
25	BB	971	G	P-O3'-C3'	5.81	126.67	119.70
25	BB	1735	A	C8-N9-C4	-5.81	103.47	105.80
25	BB	2012	G	C5'-C4'-O4'	-5.81	102.12	109.10
25	BB	2236	U	N1-C2-N3	5.81	118.39	114.90
25	BB	2454	G	C5'-C4'-O4'	5.81	116.08	109.10
25	BB	2462	C	N1-C1'-C2'	5.81	121.56	114.00
1	AA	8	U	O4'-C1'-N1	5.81	112.85	108.20
3	A1	975	A	C6-C5-N7	5.81	136.37	132.30
3	A1	1370	G	C6-N1-C2	-5.81	121.61	125.10
25	BB	738	G	C2-N3-C4	5.81	114.81	111.90
25	BB	775	G	N9-C4-C5	5.81	107.72	105.40
25	BB	1248	G	C5-C6-N1	5.81	114.41	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1479	G	C4-C5-C6	-5.81	115.31	118.80
25	BB	1639	C	N3-C2-O2	-5.81	117.83	121.90
25	BB	1998	A	C2-N3-C4	5.81	113.51	110.60
25	BB	2030	A	O4'-C1'-N9	5.81	112.85	108.20
3	A1	105	G	C5-C6-O6	5.81	132.09	128.60
3	A1	262	A	C5'-C4'-O4'	5.81	116.07	109.10
3	A1	296	U	C4-C5-C6	5.81	123.19	119.70
3	A1	451	A	O4'-C1'-N9	5.81	112.85	108.20
3	A1	823	C	N3-C2-O2	-5.81	117.83	121.90
3	A1	895	G	N1-C6-O6	-5.81	116.41	119.90
3	A1	906	A	C5'-C4'-C3'	-5.81	106.70	116.00
3	A1	1049	U	C2-N3-C4	-5.81	123.51	127.00
3	A1	1107	C	C1'-O4'-C4'	-5.81	105.25	109.90
3	A1	1229	A	C4-C5-C6	-5.81	114.09	117.00
25	BB	250	G	O4'-C1'-N9	5.81	112.85	108.20
25	BB	572	A	N9-C4-C5	-5.81	103.48	105.80
25	BB	1351	C	C3'-C2'-C1'	5.81	106.15	101.50
25	BB	1469	A	C8-N9-C4	-5.81	103.48	105.80
25	BB	2168	G	O4'-C4'-C3'	5.81	110.75	106.10
25	BB	2202	U	P-O3'-C3'	5.81	126.67	119.70
25	BB	2538	C	N1-C2-O2	5.81	122.39	118.90
1	AE	40	C	C4'-C3'-C2'	-5.81	96.79	102.60
3	A1	12	U	C5-C6-N1	-5.81	119.80	122.70
3	A1	57	G	N1-C6-O6	-5.81	116.42	119.90
3	A1	339	C	C5-C6-N1	-5.81	118.10	121.00
3	A1	487	A	N7-C8-N9	5.81	116.70	113.80
3	A1	1319	A	C1'-O4'-C4'	-5.81	105.25	109.90
3	A1	1490	U	N3-C4-O4	5.81	123.47	119.40
3	A1	1532	U	O5'-P-OP1	-5.81	100.47	105.70
24	BA	16	G	C3'-C2'-C1'	5.81	106.15	101.50
25	BB	516	C	O4'-C4'-C3'	5.81	110.75	106.10
25	BB	574	A	C5'-C4'-O4'	5.81	116.07	109.10
25	BB	574	A	C5-N7-C8	-5.81	101.00	103.90
25	BB	589	U	C5-C6-N1	-5.81	119.80	122.70
25	BB	697	G	C6-C5-N7	5.81	133.88	130.40
25	BB	1428	C	C4'-C3'-C2'	-5.81	96.79	102.60
25	BB	2281	A	N7-C8-N9	-5.81	110.90	113.80
25	BB	2871	U	C5-C6-N1	-5.81	119.80	122.70
25	BB	2877	G	N3-C2-N2	-5.81	115.83	119.90
37	BN	228	ASP	CB-CG-OD2	5.81	123.53	118.30
3	A1	375	U	O5'-C5'-C4'	-5.81	100.67	111.70
3	A1	565	U	C5-C6-N1	-5.81	119.80	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2024	G	N7-C8-N9	5.81	116.00	113.10
25	BB	2604	U	C5'-C4'-O4'	5.81	116.07	109.10
1	AA	36	A	C2-N3-C4	5.80	113.50	110.60
3	A1	115	G	N1-C2-N3	5.80	127.38	123.90
3	A1	973	G	N3-C4-N9	5.80	129.48	126.00
3	A1	1373	G	C6-C5-N7	5.80	133.88	130.40
25	BB	16	C	N1-C1'-C2'	5.80	121.55	114.00
25	BB	50	U	N3-C4-C5	5.80	118.08	114.60
25	BB	1014	A	C4-C5-C6	-5.80	114.10	117.00
25	BB	1541	C	N3-C4-N4	-5.80	113.94	118.00
25	BB	1852	U	C5'-C4'-C3'	-5.80	106.71	116.00
25	BB	1986	C	C1'-O4'-C4'	-5.80	105.26	109.90
25	BB	2379	G	C3'-C2'-C1'	-5.80	96.86	101.50
25	BB	2715	C	N1-C2-O2	5.80	122.38	118.90
3	A1	9	G	C6-N1-C2	-5.80	121.62	125.10
3	A1	81	A	C6-N1-C2	-5.80	115.12	118.60
17	AR	43	ARG	NH1-CZ-NH2	-5.80	113.02	119.40
25	BB	1732	C	N1-C2-N3	5.80	123.26	119.20
1	AP	9	A	C6-N1-C2	-5.80	115.12	118.60
1	AE	51	G	C1'-O4'-C4'	-5.80	105.26	109.90
3	A1	211	G	N1-C6-O6	-5.80	116.42	119.90
3	A1	1046	A	C4'-C3'-C2'	-5.80	96.80	102.60
3	A1	1530	G	C5-C6-O6	5.80	132.08	128.60
19	AT	98	GLU	OE1-CD-OE2	-5.80	116.34	123.30
25	BB	22	C	C5-C6-N1	-5.80	118.10	121.00
25	BB	124	G	O4'-C1'-N9	5.80	112.84	108.20
25	BB	151	C	N3-C4-N4	-5.80	113.94	118.00
25	BB	244	A	O4'-C1'-N9	5.80	112.84	108.20
25	BB	1704	C	N3-C4-N4	-5.80	113.94	118.00
25	BB	1918	A	C5'-C4'-O4'	5.80	116.06	109.10
25	BB	2069	G	C4-C5-C6	-5.80	115.32	118.80
25	BB	2295	C	C3'-C2'-C1'	5.80	106.14	101.50
3	A1	202	G	C5-C6-N1	5.80	114.40	111.50
3	A1	1035	A	C5-C6-N6	5.80	128.34	123.70
25	BB	1	G	N1-C6-O6	-5.80	116.42	119.90
25	BB	271	G	C6-C5-N7	5.80	133.88	130.40
25	BB	277	G	N3-C2-N2	-5.80	115.84	119.90
25	BB	703	U	C4-C5-C6	5.80	123.18	119.70
25	BB	836	G	C4'-C3'-C2'	-5.80	96.80	102.60
25	BB	1915	U	N3-C4-C5	-5.80	111.12	114.60
25	BB	1926	U	C4-C5-C6	5.80	123.18	119.70
25	BB	2372	U	C1'-O4'-C4'	-5.80	105.26	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2500	U	C1'-O4'-C4'	-5.80	105.26	109.90
25	BB	2532	G	O4'-C4'-C3'	-5.80	98.20	104.00
25	BB	2652	C	C3'-C2'-C1'	5.80	106.14	101.50
25	BB	2785	C	C4-C5-C6	-5.80	114.50	117.40
25	BB	2799	A	C8-N9-C4	5.80	108.12	105.80
25	BB	2820	A	N1-C2-N3	-5.80	126.40	129.30
25	BB	2845	U	N3-C2-O2	-5.80	118.14	122.20
50	B1	61	ARG	CD-NE-CZ	5.80	131.72	123.60
3	A1	515	G	C5-C6-N1	5.80	114.40	111.50
3	A1	1084	G	C5-C6-O6	5.80	132.08	128.60
3	A1	1238	A	C6-C5-N7	5.80	136.36	132.30
3	A1	1407	C	N3-C2-O2	-5.80	117.84	121.90
25	BB	1420	A	C5-N7-C8	-5.80	101.00	103.90
25	BB	1677	A	C5'-C4'-O4'	5.80	116.06	109.10
25	BB	2050	C	C5-C6-N1	-5.80	118.10	121.00
25	BB	2424	C	C2-N3-C4	-5.80	117.00	119.90
3	A1	87	C	C5-C4-N4	-5.80	116.14	120.20
3	A1	357	G	C3'-C2'-C1'	5.80	106.14	101.50
3	A1	509	A	C2-N3-C4	5.80	113.50	110.60
3	A1	750	C	C5-C6-N1	-5.80	118.10	121.00
3	A1	890	G	C6-C5-N7	5.80	133.88	130.40
3	A1	957	U	C4'-C3'-C2'	-5.80	96.80	102.60
3	A1	1505	G	C6-C5-N7	5.80	133.88	130.40
25	BB	319	G	N3-C2-N2	-5.80	115.84	119.90
25	BB	593	U	O3'-P-O5'	-5.80	92.99	104.00
25	BB	629	G	C8-N9-C4	-5.80	104.08	106.40
25	BB	640	C	C3'-C2'-C1'	5.80	106.14	101.50
25	BB	762	U	P-O3'-C3'	5.80	126.66	119.70
25	BB	1428	C	O4'-C4'-C3'	5.80	110.74	106.10
25	BB	1632	A	C3'-C2'-C1'	5.80	106.14	101.50
25	BB	1969	A	C3'-C2'-C1'	5.80	106.14	101.50
25	BB	2319	G	N9-C1'-C2'	-5.80	105.62	112.00
25	BB	2734	A	C5-C6-N6	5.80	128.34	123.70
1	AE	65	G	N9-C4-C5	5.79	107.72	105.40
3	A1	724	G	C2-N3-C4	-5.79	109.00	111.90
3	A1	1133	G	N3-C4-C5	-5.79	125.70	128.60
3	A1	1441	A	C4-C5-N7	5.79	113.60	110.70
6	AD	88	ASP	OD1-CG-OD2	-5.79	112.29	123.30
25	BB	105	C	C5-C4-N4	-5.79	116.14	120.20
25	BB	443	A	C5-N7-C8	-5.79	101.00	103.90
25	BB	810	U	C5'-C4'-O4'	5.79	116.05	109.10
3	A1	490	C	N3-C4-N4	-5.79	113.94	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	597	G	N1-C2-N2	5.79	121.42	116.20
3	A1	1110	A	C8-N9-C4	-5.79	103.48	105.80
3	A1	1184	G	N1-C6-O6	-5.79	116.42	119.90
3	A1	1282	C	C3'-C2'-C1'	5.79	106.14	101.50
4	AB	87	ASP	CB-CG-OD1	5.79	123.51	118.30
25	BB	247	G	C5-C6-O6	5.79	132.08	128.60
25	BB	518	G	N1-C6-O6	-5.79	116.42	119.90
25	BB	539	G	N7-C8-N9	5.79	116.00	113.10
25	BB	543	G	C5-C6-N1	5.79	114.40	111.50
25	BB	809	G	N1-C2-N3	5.79	127.38	123.90
25	BB	840	C	C2-N3-C4	-5.79	117.00	119.90
25	BB	1468	U	N3-C4-O4	-5.79	115.34	119.40
25	BB	1617	C	C2'-C3'-O3'	5.79	122.97	113.70
25	BB	1653	G	C5-C6-N1	5.79	114.40	111.50
25	BB	1662	U	C5'-C4'-O4'	5.79	116.05	109.10
25	BB	1667	G	C6-C5-N7	5.79	133.88	130.40
25	BB	2146	C	N3-C4-N4	-5.79	113.94	118.00
25	BB	2218	G	C5-C6-N1	5.79	114.40	111.50
25	BB	2483	C	C6-N1-C2	-5.79	117.98	120.30
3	A1	122	G	C3'-C2'-C1'	5.79	106.13	101.50
3	A1	220	G	C4-C5-N7	5.79	113.12	110.80
3	A1	322	C	C2-N3-C4	-5.79	117.00	119.90
3	A1	359	G	C5'-C4'-C3'	-5.79	106.73	116.00
25	BB	180	G	C5'-C4'-C3'	-5.79	106.73	116.00
25	BB	279	A	N1-C2-N3	-5.79	126.40	129.30
25	BB	453	A	C5-C6-N6	5.79	128.33	123.70
25	BB	821	A	C5'-C4'-C3'	-5.79	106.73	116.00
25	BB	920	A	C6-C5-N7	5.79	136.35	132.30
25	BB	1173	U	N3-C2-O2	-5.79	118.14	122.20
25	BB	2334	U	C4-C5-C6	5.79	123.17	119.70
25	BB	2470	G	C8-N9-C4	-5.79	104.08	106.40
25	BB	2670	A	C5'-C4'-O4'	5.79	116.05	109.10
25	BB	2735	G	N7-C8-N9	5.79	116.00	113.10
27	BD	98	ARG	NE-CZ-NH1	5.79	123.19	120.30
49	BZ	179	LEU	CB-CG-CD1	5.79	120.84	111.00
3	A1	1046	A	O3'-P-O5'	-5.79	93.00	104.00
3	A1	1098	C	O4'-C1'-N1	5.79	112.83	108.20
25	BB	92	U	C1'-O4'-C4'	-5.79	105.27	109.90
25	BB	423	A	C5'-C4'-C3'	-5.79	106.74	116.00
25	BB	452	G	C5-C6-O6	5.79	132.07	128.60
25	BB	646	U	C4-C5-C6	5.79	123.17	119.70
3	A1	333	U	N1-C2-N3	5.79	118.37	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	517	G	C1'-O4'-C4'	-5.79	105.27	109.90
3	A1	700	G	C5-C6-O6	-5.79	125.13	128.60
3	A1	991	U	C4-C5-C6	5.79	123.17	119.70
3	A1	1082	A	C2-N3-C4	5.79	113.49	110.60
22	AW	118	ARG	NE-CZ-NH1	5.79	123.19	120.30
25	BB	242	G	N1-C2-N3	5.79	127.37	123.90
25	BB	328	U	OP2-P-O3'	5.79	117.94	105.20
25	BB	914	G	N7-C8-N9	5.79	115.99	113.10
25	BB	1407	G	N1-C2-N3	5.79	127.37	123.90
25	BB	1729	U	C2-N3-C4	-5.79	123.53	127.00
25	BB	2097	A	OP1-P-OP2	-5.79	110.92	119.60
25	BB	2100	G	C6-C5-N7	5.79	133.87	130.40
25	BB	2557	G	C5-N7-C8	-5.79	101.41	104.30
43	BT	5	ASN	C-N-CA	5.79	136.17	121.70
1	AE	43	G	N1-C6-O6	-5.79	116.43	119.90
3	A1	214	C	C2-N3-C4	-5.79	117.01	119.90
3	A1	319	G	C4-C5-C6	-5.79	115.33	118.80
3	A1	747	A	C2-N3-C4	5.79	113.49	110.60
3	A1	1178	G	C8-N9-C4	-5.79	104.08	106.40
3	A1	1191	A	N9-C4-C5	5.79	108.11	105.80
25	BB	738	G	C4'-C3'-C2'	-5.79	96.81	102.60
25	BB	828	U	O3'-P-O5'	5.79	115.00	104.00
25	BB	1993	U	C5'-C4'-O4'	5.79	116.04	109.10
25	BB	2183	A	C3'-C2'-C1'	-5.79	96.87	101.50
25	BB	2469	A	N1-C2-N3	-5.79	126.41	129.30
3	A1	345	C	O4'-C1'-N1	5.79	112.83	108.20
3	A1	631	C	C4'-C3'-C2'	-5.79	96.81	102.60
3	A1	1083	U	C3'-C2'-C1'	5.79	106.13	101.50
25	BB	125	A	P-O3'-C3'	5.79	126.64	119.70
25	BB	171	U	C5-C4-O4	-5.79	122.43	125.90
25	BB	688	U	O4'-C1'-N1	5.79	112.83	108.20
25	BB	1878	G	C5-C6-N1	5.79	114.39	111.50
25	BB	2191	A	C4-C5-C6	-5.79	114.11	117.00
25	BB	2208	C	N3-C4-N4	-5.79	113.95	118.00
25	BB	2412	A	C5'-C4'-C3'	-5.79	106.74	116.00
25	BB	2565	A	C5-C6-N6	5.79	128.33	123.70
25	BB	2578	G	N9-C1'-C2'	5.79	121.52	114.00
25	BB	2638	G	C5'-C4'-C3'	-5.79	106.75	116.00
25	BB	2850	A	N9-C1'-C2'	-5.79	105.64	112.00
1	AA	13	C	C5-C6-N1	-5.78	118.11	121.00
1	AP	36	A	C8-N9-C4	5.78	108.11	105.80
3	A1	260	G	C4-C5-C6	-5.78	115.33	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	406	G	C8-N9-C4	-5.78	104.09	106.40
3	A1	542	G	C1'-O4'-C4'	-5.78	105.27	109.90
3	A1	750	C	N1-C2-O2	5.78	122.37	118.90
3	A1	1295	U	C5-C6-N1	-5.78	119.81	122.70
3	A1	1431	A	C5-C6-N1	5.78	120.59	117.70
25	BB	1008	A	C5-C6-N6	5.78	128.33	123.70
25	BB	1285	A	N7-C8-N9	5.78	116.69	113.80
25	BB	1322	A	O4'-C1'-C2'	-5.78	100.02	105.80
25	BB	1419	A	C5'-C4'-C3'	-5.78	106.75	116.00
25	BB	1644	C	N1-C1'-C2'	5.78	121.52	114.00
25	BB	1669	A	O5'-P-OP2	-5.78	100.49	105.70
25	BB	1835	G	O4'-C1'-N9	5.78	112.83	108.20
25	BB	2497	A	C6-C5-N7	5.78	136.35	132.30
25	BB	2552	U	N1-C2-N3	5.78	118.37	114.90
25	BB	2626	C	C4'-C3'-O3'	5.78	124.57	113.00
25	BB	2714	G	N7-C8-N9	5.78	115.99	113.10
38	BO	58	VAL	CA-CB-CG2	5.78	119.58	110.90
40	BQ	7	ARG	CD-NE-CZ	5.78	131.70	123.60
50	B1	74	LYS	C-N-CA	5.78	136.16	121.70
3	A1	566	G	C8-N9-C4	-5.78	104.09	106.40
25	BB	2164	C	C4'-C3'-C2'	-5.78	96.82	102.60
25	BB	2621	G	C6-N1-C2	-5.78	121.63	125.10
3	A1	519	C	N1-C1'-C2'	5.78	121.51	114.00
3	A1	1335	U	C5'-C4'-O4'	5.78	116.04	109.10
25	BB	775	G	C1'-O4'-C4'	-5.78	105.28	109.90
25	BB	1115	G	C5'-C4'-C3'	-5.78	106.75	116.00
25	BB	1208	C	N1-C2-N3	5.78	123.25	119.20
25	BB	1230	A	C2-N3-C4	5.78	113.49	110.60
25	BB	1715	G	O4'-C4'-C3'	5.78	110.72	106.10
25	BB	2001	C	N3-C4-C5	5.78	124.21	121.90
25	BB	2084	C	C5-C6-N1	-5.78	118.11	121.00
25	BB	2118	U	N3-C4-O4	5.78	123.45	119.40
25	BB	2474	U	C1'-O4'-C4'	5.78	114.52	109.90
25	BB	2793	C	N3-C4-N4	-5.78	113.95	118.00
1	AA	67	A	N1-C6-N6	-5.78	115.13	118.60
3	A1	18	C	O4'-C1'-N1	5.78	112.82	108.20
3	A1	205	A	C5-C6-N6	5.78	128.32	123.70
3	A1	1269	A	C6-C5-N7	5.78	136.34	132.30
25	BB	282	A	C8-N9-C4	-5.78	103.49	105.80
25	BB	1332	G	C2-N3-C4	5.78	114.79	111.90
25	BB	1587	G	N7-C8-N9	5.78	115.99	113.10
25	BB	1669	A	O4'-C4'-C3'	5.78	110.72	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2459	A	C5-C6-N6	5.78	128.32	123.70
3	A1	27	G	C4-C5-N7	-5.78	108.49	110.80
3	A1	425	G	O4'-C1'-N9	-5.78	103.58	108.20
3	A1	548	G	C3'-C2'-C1'	-5.78	96.88	101.50
3	A1	567	G	C6-C5-N7	5.78	133.87	130.40
3	A1	579	A	C5'-C4'-O4'	-5.78	102.17	109.10
3	A1	667	G	N3-C4-C5	-5.78	125.71	128.60
3	A1	725	G	C5-C6-N1	5.78	114.39	111.50
3	A1	849	G	C5'-C4'-O4'	5.78	116.03	109.10
3	A1	1179	A	N3-C4-N9	-5.78	122.78	127.40
3	A1	1438	G	N9-C4-C5	5.78	107.71	105.40
25	BB	349	U	C5-C6-N1	-5.78	119.81	122.70
25	BB	375	G	N1-C6-O6	-5.78	116.43	119.90
25	BB	1139	G	C5-N7-C8	-5.78	101.41	104.30
25	BB	2032	G	O4'-C4'-C3'	5.78	110.72	106.10
25	BB	2056	G	N3-C4-C5	-5.78	125.71	128.60
25	BB	2201	G	N3-C2-N2	-5.78	115.86	119.90
25	BB	2438	U	O4'-C1'-C2'	-5.78	100.02	105.80
25	BB	2757	A	C1'-O4'-C4'	-5.78	105.28	109.90
25	BB	2763	G	C8-N9-C4	-5.78	104.09	106.40
25	BB	2869	G	C5-C6-N1	5.78	114.39	111.50
1	AE	2	C	C3'-C2'-C1'	-5.78	96.88	101.50
3	A1	118	U	C2-N3-C4	-5.78	123.53	127.00
3	A1	318	G	C5-C6-N1	5.78	114.39	111.50
3	A1	444	G	O4'-C1'-N9	5.78	112.82	108.20
3	A1	570	G	C5'-C4'-C3'	-5.78	106.76	116.00
3	A1	870	U	C1'-O4'-C4'	-5.78	105.28	109.90
3	A1	914	A	N9-C1'-C2'	5.78	121.51	114.00
3	A1	1070	U	C5-C6-N1	-5.78	119.81	122.70
3	A1	1269	A	N9-C4-C5	5.78	108.11	105.80
3	A1	1462	C	C5'-C4'-C3'	-5.78	106.76	116.00
8	AG	8	ARG	NE-CZ-NH2	-5.78	117.41	120.30
24	BA	37	C	O4'-C1'-N1	5.78	112.82	108.20
25	BB	442	G	O4'-C4'-C3'	5.78	110.72	106.10
25	BB	627	A	C4-C5-C6	-5.78	114.11	117.00
25	BB	627	A	C6-C5-N7	5.78	136.34	132.30
25	BB	1333	G	N3-C2-N2	-5.78	115.86	119.90
25	BB	1698	A	O4'-C1'-N9	5.78	112.82	108.20
25	BB	1837	C	N1-C2-O2	5.78	122.37	118.90
25	BB	1867	G	O4'-C1'-N9	5.78	112.82	108.20
25	BB	2097	A	C4-C5-N7	5.78	113.59	110.70
1	AA	21	A	C5-N7-C8	-5.77	101.01	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	25	C	P-O3'-C3'	5.77	126.63	119.70
3	A1	332	G	C2-N3-C4	-5.77	109.01	111.90
3	A1	385	C	C5-C4-N4	-5.77	116.16	120.20
3	A1	534	U	O4'-C1'-N1	5.77	112.82	108.20
3	A1	1127	G	C8-N9-C4	-5.77	104.09	106.40
25	BB	226	A	C6-C5-N7	5.77	136.34	132.30
25	BB	445	C	N1-C2-N3	5.77	123.24	119.20
25	BB	634	C	C4'-C3'-C2'	-5.77	96.83	102.60
25	BB	1184	U	C4'-C3'-C2'	-5.77	96.83	102.60
25	BB	1196	C	C5-C4-N4	5.77	124.24	120.20
25	BB	1262	A	C5-C6-N6	5.77	128.32	123.70
25	BB	1955	U	N1-C2-N3	5.77	118.36	114.90
25	BB	2023	C	C3'-C2'-C1'	-5.77	96.88	101.50
25	BB	2552	U	O4'-C1'-C2'	-5.77	100.03	105.80
25	BB	2859	G	C3'-C2'-C1'	5.77	106.12	101.50
3	A1	290	C	C2-N3-C4	-5.77	117.01	119.90
3	A1	671	G	N3-C2-N2	-5.77	115.86	119.90
3	A1	1416	G	N1-C6-O6	-5.77	116.44	119.90
21	AV	76	ARG	NE-CZ-NH1	-5.77	117.41	120.30
25	BB	741	U	N3-C2-O2	-5.77	118.16	122.20
25	BB	818	G	C6-N1-C2	-5.77	121.64	125.10
25	BB	1040	A	O4'-C1'-N9	5.77	112.82	108.20
25	BB	1094	U	O3'-P-O5'	5.77	114.97	104.00
25	BB	1221	C	P-O3'-C3'	5.77	126.63	119.70
25	BB	1369	G	C5-C6-O6	5.77	132.06	128.60
25	BB	1455	G	N1-C6-O6	-5.77	116.44	119.90
25	BB	1632	A	N9-C1'-C2'	-5.77	105.65	112.00
25	BB	1673	G	C1'-O4'-C4'	-5.77	105.28	109.90
25	BB	1730	C	C5-C6-N1	-5.77	118.11	121.00
25	BB	2024	G	C4'-C3'-C2'	-5.77	96.83	102.60
25	BB	2581	G	N3-C4-C5	-5.77	125.71	128.60
25	BB	2719	G	N9-C4-C5	5.77	107.71	105.40
3	A1	298	A	C8-N9-C4	-5.77	103.49	105.80
24	BA	16	G	C4'-C3'-C2'	-5.77	96.83	102.60
24	BA	49	C	N1-C2-O2	5.77	122.36	118.90
25	BB	517	C	O4'-C1'-N1	5.77	112.82	108.20
25	BB	637	A	C6-C5-N7	5.77	136.34	132.30
25	BB	1095	A	C4'-C3'-C2'	-5.77	96.83	102.60
25	BB	1203	U	P-O3'-C3'	5.77	126.62	119.70
25	BB	2453	A	C2-N3-C4	5.77	113.48	110.60
1	AA	25	C	C1'-O4'-C4'	-5.77	105.28	109.90
3	A1	338	A	O4'-C1'-N9	5.77	112.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	841	C	N1-C2-O2	5.77	122.36	118.90
3	A1	1068	G	N1-C2-N2	-5.77	111.01	116.20
3	A1	1309	G	C5'-C4'-C3'	-5.77	106.77	116.00
4	AB	62	ARG	CB-CA-C	5.77	121.94	110.40
8	AG	32	ASP	CB-CG-OD2	5.77	123.49	118.30
24	BA	21	G	N3-C2-N2	-5.77	115.86	119.90
25	BB	260	G	N1-C2-N3	5.77	127.36	123.90
25	BB	266	G	N3-C4-C5	-5.77	125.72	128.60
25	BB	301	G	C5-C6-N1	5.77	114.39	111.50
25	BB	658	U	C4-C5-C6	5.77	123.16	119.70
25	BB	789	A	C2-N3-C4	5.77	113.48	110.60
25	BB	1387	A	C6-N1-C2	-5.77	115.14	118.60
25	BB	1429	G	C5'-C4'-O4'	5.77	116.02	109.10
25	BB	1488	C	C3'-C2'-C1'	5.77	106.12	101.50
25	BB	1816	C	C6-N1-C2	-5.77	117.99	120.30
25	BB	2242	G	C4-C5-N7	5.77	113.11	110.80
25	BB	2446	G	P-O3'-C3'	5.77	126.62	119.70
25	BB	2471	A	N1-C2-N3	-5.77	126.42	129.30
37	BN	42	ARG	NE-CZ-NH2	5.77	123.19	120.30
3	A1	57	G	N3-C4-C5	-5.77	125.72	128.60
3	A1	369	G	C5-C6-N1	5.77	114.38	111.50
3	A1	1410	A	C2-N3-C4	5.77	113.48	110.60
6	AD	120	ARG	CD-NE-CZ	5.77	131.68	123.60
25	BB	108	G	C8-N9-C4	-5.77	104.09	106.40
25	BB	235	U	C5'-C4'-O4'	5.77	116.02	109.10
25	BB	274	C	O4'-C1'-C2'	-5.77	100.03	105.80
25	BB	1459	G	C5-C6-N1	5.77	114.38	111.50
25	BB	1737	G	N1-C6-O6	-5.77	116.44	119.90
25	BB	2056	G	C2-N3-C4	5.77	114.78	111.90
36	BM	72	GLN	C-N-CA	5.77	136.12	121.70
3	A1	501	C	N1-C2-N3	5.77	123.24	119.20
3	A1	1003	G	N1-C6-O6	-5.77	116.44	119.90
25	BB	879	G	C4-C5-N7	5.77	113.11	110.80
25	BB	1047	G	O4'-C1'-N9	-5.77	103.59	108.20
25	BB	1272	A	C5-C6-N6	5.77	128.31	123.70
25	BB	1703	G	C2'-C3'-O3'	5.77	122.92	113.70
25	BB	1805	A	C6-N1-C2	-5.77	115.14	118.60
3	A1	88	U	C1'-O4'-C4'	-5.76	105.29	109.90
3	A1	130	A	C5-C6-N6	5.76	128.31	123.70
3	A1	220	G	N1-C2-N3	5.76	127.36	123.90
3	A1	223	A	C8-N9-C4	-5.76	103.49	105.80
3	A1	297	G	N1-C6-O6	-5.76	116.44	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	766	A	C5-C6-N6	5.76	128.31	123.70
3	A1	777	A	C5-C6-N6	5.76	128.31	123.70
3	A1	833	G	N3-C4-N9	5.76	129.46	126.00
3	A1	1184	G	C6-C5-N7	5.76	133.86	130.40
3	A1	1281	C	O4'-C4'-C3'	5.76	110.71	106.10
25	BB	297	G	N1-C2-N3	5.76	127.36	123.90
25	BB	475	C	C2-N3-C4	-5.76	117.02	119.90
25	BB	829	A	C4-C5-C6	-5.76	114.12	117.00
25	BB	1565	C	N1-C2-O2	5.76	122.36	118.90
25	BB	1597	A	C4-C5-C6	-5.76	114.12	117.00
25	BB	1643	G	N3-C4-N9	5.76	129.46	126.00
25	BB	1983	G	O4'-C1'-C2'	5.76	112.79	107.60
25	BB	1983	G	O4'-C1'-N9	5.76	112.81	108.20
25	BB	2107	G	C5-N7-C8	-5.76	101.42	104.30
25	BB	2445	G	C4'-C3'-C2'	-5.76	96.83	102.60
25	BB	2487	G	C4-C5-C6	-5.76	115.34	118.80
25	BB	2516	A	C5-C6-N6	5.76	128.31	123.70
25	BB	2814	A	C6-C5-N7	5.76	136.34	132.30
3	A1	132	C	O4'-C1'-N1	5.76	112.81	108.20
3	A1	142	G	O4'-C1'-C2'	-5.76	100.04	105.80
3	A1	592	G	C5-N7-C8	-5.76	101.42	104.30
3	A1	724	G	N1-C2-N2	-5.76	111.01	116.20
25	BB	35	G	O4'-C4'-C3'	5.76	110.71	106.10
25	BB	519	U	O4'-C1'-C2'	5.76	112.79	107.60
25	BB	883	G	C5-C6-O6	5.76	132.06	128.60
25	BB	1888	G	C5-C6-N1	5.76	114.38	111.50
1	AE	48	C	C5-C6-N1	-5.76	118.12	121.00
3	A1	198	G	C3'-C2'-C1'	5.76	106.11	101.50
3	A1	536	C	N1-C2-O2	5.76	122.36	118.90
25	BB	93	G	N1-C6-O6	-5.76	116.44	119.90
25	BB	1005	C	N1-C2-O2	5.76	122.36	118.90
25	BB	1274	A	C5'-C4'-C3'	-5.76	106.78	116.00
25	BB	1368	G	C5-C6-O6	5.76	132.06	128.60
25	BB	1666	G	C5'-C4'-C3'	-5.76	106.78	116.00
25	BB	1892	C	O5'-P-OP1	-5.76	100.52	105.70
25	BB	1963	U	N3-C4-C5	5.76	118.06	114.60
25	BB	2596	U	N3-C2-O2	-5.76	118.17	122.20
29	BF	51	ARG	NE-CZ-NH1	5.76	123.18	120.30
3	A1	377	G	N7-C8-N9	5.76	115.98	113.10
3	A1	741	G	N7-C8-N9	5.76	115.98	113.10
3	A1	961	U	N3-C4-C5	5.76	118.06	114.60
3	A1	977	A	O4'-C1'-N9	5.76	112.81	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	A1	1395	C	C4-C5-C6	-5.76	114.52	117.40
8	AG	23	ARG	CD-NE-CZ	5.76	131.66	123.60
25	BB	513	A	C2-N3-C4	5.76	113.48	110.60
25	BB	607	U	N3-C4-O4	-5.76	115.37	119.40
25	BB	1029	A	C4'-C3'-C2'	-5.76	96.84	102.60
25	BB	1038	G	N3-C2-N2	-5.76	115.87	119.90
25	BB	1281	G	N9-C4-C5	5.76	107.70	105.40
25	BB	1473	G	N1-C6-O6	-5.76	116.44	119.90
25	BB	1474	U	O4'-C1'-N1	-5.76	103.59	108.20
25	BB	1710	G	N3-C4-C5	-5.76	125.72	128.60
25	BB	1932	A	C6-C5-N7	5.76	136.33	132.30
25	BB	2513	A	C4-C5-C6	-5.76	114.12	117.00
3	A1	502	A	N9-C1'-C2'	-5.76	105.67	112.00
3	A1	1530	G	C1'-O4'-C4'	-5.76	105.29	109.90
25	BB	209	C	N3-C4-N4	-5.76	113.97	118.00
25	BB	221	A	O4'-C1'-C2'	-5.76	100.04	105.80
25	BB	826	U	N3-C2-O2	-5.76	118.17	122.20
25	BB	2886	A	N1-C2-N3	-5.76	126.42	129.30
39	BP	24	ARG	NE-CZ-NH1	-5.76	117.42	120.30
1	AA	45	G	C4-C5-N7	-5.76	108.50	110.80
3	A1	482	A	C6-N1-C2	-5.76	115.15	118.60
3	A1	825	A	C6-C5-N7	5.76	136.33	132.30
3	A1	841	C	N3-C4-N4	-5.76	113.97	118.00
3	A1	1086	U	N1-C2-N3	5.76	118.35	114.90
3	A1	1127	G	C5'-C4'-O4'	5.76	116.01	109.10
3	A1	1226	C	N1-C2-O2	5.76	122.35	118.90
25	BB	111	A	C2'-C3'-O3'	5.76	122.91	113.70
25	BB	295	G	C6-N1-C2	-5.76	121.65	125.10
25	BB	1172	C	C5'-C4'-C3'	-5.76	106.79	116.00
25	BB	1259	G	C5-C6-O6	5.76	132.05	128.60
25	BB	1730	C	C6-N1-C1'	-5.76	113.89	120.80
25	BB	2020	A	C6-C5-N7	5.76	136.33	132.30
25	BB	2047	C	N3-C2-O2	-5.76	117.87	121.90
25	BB	2593	U	C5-C6-N1	-5.76	119.82	122.70
25	BB	2709	G	C5-C6-N1	5.76	114.38	111.50
48	BY	83	ARG	CD-NE-CZ	5.76	131.66	123.60
1	AE	42	G	O4'-C1'-N9	5.75	112.80	108.20
24	BA	42	C	N3-C4-N4	-5.75	113.97	118.00
25	BB	13	A	C4-C5-C6	-5.75	114.12	117.00
25	BB	128	C	C4'-C3'-C2'	-5.75	96.84	102.60
25	BB	264	C	C5-C6-N1	-5.75	118.12	121.00
51	B2	91	ARG	NH1-CZ-NH2	-5.75	113.07	119.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	3	G	N1-C6-O6	-5.75	116.45	119.90
1	AE	62	A	O5'-C5'-C4'	-5.75	100.77	111.70
3	A1	105	G	C5-C6-N1	5.75	114.38	111.50
3	A1	396	C	C5'-C4'-O4'	5.75	116.00	109.10
3	A1	926	G	N9-C1'-C2'	5.75	121.48	114.00
3	A1	1050	G	N7-C8-N9	5.75	115.98	113.10
3	A1	1489	G	O4'-C1'-N9	5.75	112.80	108.20
25	BB	172	A	C2-N3-C4	5.75	113.48	110.60
25	BB	216	A	C5-C6-N1	5.75	120.58	117.70
25	BB	766	U	C4-C5-C6	5.75	123.15	119.70
25	BB	866	A	C4-C5-N7	5.75	113.58	110.70
25	BB	1033	U	P-O3'-C3'	5.75	126.60	119.70
25	BB	1277	G	N1-C2-N3	5.75	127.35	123.90
25	BB	1473	G	P-O3'-C3'	5.75	126.61	119.70
25	BB	1525	A	N9-C4-C5	5.75	108.10	105.80
25	BB	1849	G	C1'-O4'-C4'	-5.75	105.30	109.90
25	BB	2218	G	N3-C2-N2	-5.75	115.87	119.90
25	BB	2414	G	C6-C5-N7	5.75	133.85	130.40
25	BB	2682	A	C2-N3-C4	5.75	113.48	110.60
1	AA	57	G	N1-C2-N3	5.75	127.35	123.90
1	AP	3	G	N3-C2-N2	-5.75	115.87	119.90
1	AP	10	G	N3-C4-C5	-5.75	125.72	128.60
3	A1	478	A	N1-C2-N3	-5.75	126.42	129.30
3	A1	866	C	N3-C2-O2	-5.75	117.87	121.90
3	A1	982	U	C5-C4-O4	5.75	129.35	125.90
24	BA	58	A	O4'-C4'-C3'	-5.75	98.25	104.00
24	BA	102	G	O4'-C1'-N9	5.75	112.80	108.20
25	BB	249	C	C3'-C2'-C1'	-5.75	96.90	101.50
25	BB	654	A	C4-C5-N7	5.75	113.58	110.70
25	BB	855	G	N9-C4-C5	5.75	107.70	105.40
25	BB	1228	G	N3-C2-N2	-5.75	115.87	119.90
25	BB	1635	A	C2-N3-C4	5.75	113.47	110.60
25	BB	1712	U	N3-C4-O4	5.75	123.43	119.40
25	BB	2024	G	N3-C2-N2	-5.75	115.87	119.90
25	BB	2060	A	C5-C6-N6	5.75	128.30	123.70
25	BB	2076	U	C1'-O4'-C4'	-5.75	105.30	109.90
25	BB	2191	A	P-O3'-C3'	5.75	126.60	119.70
25	BB	2595	G	C1'-O4'-C4'	-5.75	105.30	109.90
49	BZ	63	ARG	NH1-CZ-NH2	-5.75	113.07	119.40
3	A1	383	A	N9-C4-C5	5.75	108.10	105.80
3	A1	701	U	C5-C6-N1	-5.75	119.83	122.70
3	A1	762	U	C4'-C3'-C2'	-5.75	96.85	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	770	C	N3-C4-C5	5.75	124.20	121.90
3	A1	905	U	C2-N3-C4	-5.75	123.55	127.00
3	A1	1061	G	N3-C4-C5	-5.75	125.72	128.60
25	BB	472	A	C5'-C4'-O4'	5.75	116.00	109.10
25	BB	1060	U	O4'-C1'-C2'	-5.75	100.05	105.80
25	BB	1212	G	O4'-C4'-C3'	5.75	110.70	106.10
25	BB	1339	G	C1'-O4'-C4'	-5.75	105.30	109.90
25	BB	1486	U	O3'-P-O5'	5.75	114.92	104.00
25	BB	1705	A	C2-N3-C4	5.75	113.47	110.60
25	BB	1711	A	C3'-C2'-C1'	-5.75	96.90	101.50
25	BB	2519	U	C5'-C4'-O4'	5.75	116.00	109.10
3	A1	179	A	C3'-C2'-C1'	-5.75	96.90	101.50
3	A1	185	U	N3-C2-O2	-5.75	118.18	122.20
3	A1	249	U	N3-C2-O2	-5.75	118.18	122.20
3	A1	344	A	C8-N9-C4	-5.75	103.50	105.80
3	A1	909	A	C4-C5-N7	5.75	113.57	110.70
3	A1	1096	C	N1-C2-O2	5.75	122.35	118.90
3	A1	1136	C	N1-C2-O2	5.75	122.35	118.90
3	A1	1340	A	C5'-C4'-O4'	-5.75	102.20	109.10
25	BB	414	C	C1'-O4'-C4'	-5.75	105.30	109.90
25	BB	1317	G	C2'-C3'-O3'	5.75	122.90	113.70
25	BB	1491	G	N1-C6-O6	-5.75	116.45	119.90
25	BB	2693	G	N1-C6-O6	-5.75	116.45	119.90
3	A1	629	A	P-O3'-C3'	5.75	126.60	119.70
3	A1	661	G	C5-N7-C8	-5.75	101.43	104.30
3	A1	1530	G	C5'-C4'-O4'	5.75	116.00	109.10
25	BB	28	A	C4-C5-C6	-5.75	114.13	117.00
25	BB	30	G	C4'-C3'-C2'	-5.75	96.85	102.60
25	BB	773	U	O4'-C1'-N1	5.75	112.80	108.20
25	BB	1714	U	N1-C2-N3	5.75	118.35	114.90
25	BB	1833	C	C2-N3-C4	-5.75	117.03	119.90
49	BZ	40	ASP	CB-CG-OD1	5.75	123.47	118.30
1	AE	51	G	C4'-C3'-C2'	-5.75	96.86	102.60
3	A1	152	A	C8-N9-C4	-5.75	103.50	105.80
3	A1	779	C	C5'-C4'-O4'	-5.75	102.21	109.10
3	A1	1000	A	O4'-C1'-N9	5.75	112.80	108.20
3	A1	1052	U	N1-C1'-C2'	-5.75	105.68	112.00
24	BA	30	C	N3-C4-C5	5.75	124.20	121.90
25	BB	1249	U	O4'-C1'-N1	5.75	112.80	108.20
25	BB	1545	A	C2-N3-C4	5.75	113.47	110.60
25	BB	1943	U	C5-C6-N1	-5.75	119.83	122.70
25	BB	2392	A	C2'-C3'-O3'	5.75	122.89	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2481	G	N9-C4-C5	5.75	107.70	105.40
25	BB	2597	G	N1-C6-O6	-5.75	116.45	119.90
25	BB	2618	G	C1'-O4'-C4'	-5.75	105.30	109.90
1	AP	55	U	C4'-C3'-C2'	-5.74	96.86	102.60
3	A1	229	U	O4'-C4'-C3'	5.74	110.70	106.10
3	A1	318	G	N1-C2-N3	5.74	127.35	123.90
3	A1	874	G	C5-C6-O6	5.74	132.05	128.60
3	A1	1058	G	N1-C2-N2	-5.74	111.03	116.20
3	A1	1124	G	N3-C4-N9	5.74	129.45	126.00
3	A1	1238	A	O4'-C1'-N9	5.74	112.80	108.20
25	BB	342	A	C6-N1-C2	-5.74	115.15	118.60
25	BB	517	C	C4'-C3'-C2'	-5.74	96.86	102.60
25	BB	710	U	C5'-C4'-C3'	-5.74	106.81	116.00
25	BB	910	A	N1-C2-N3	-5.74	126.43	129.30
25	BB	1003	G	C8-N9-C4	-5.74	104.10	106.40
25	BB	1391	U	C5-C6-N1	-5.74	119.83	122.70
25	BB	1644	C	P-O3'-C3'	5.74	126.59	119.70
25	BB	2645	G	P-O3'-C3'	5.74	126.59	119.70
25	BB	2722	G	C8-N9-C4	-5.74	104.10	106.40
49	BZ	153	ARG	NE-CZ-NH1	5.74	123.17	120.30
3	A1	502	A	O4'-C1'-N9	5.74	112.79	108.20
3	A1	814	A	C5-C6-N1	5.74	120.57	117.70
3	A1	995	C	C2-N1-C1'	-5.74	112.48	118.80
24	BA	111	U	C1'-O4'-C4'	5.74	114.49	109.90
25	BB	250	G	C5-C6-N1	5.74	114.37	111.50
25	BB	701	G	C6-C5-N7	5.74	133.84	130.40
25	BB	705	A	C5'-C4'-O4'	5.74	115.99	109.10
25	BB	936	A	O3'-P-O5'	5.74	114.91	104.00
25	BB	1545	A	C6-C5-N7	5.74	136.32	132.30
25	BB	2110	G	N1-C6-O6	-5.74	116.45	119.90
25	BB	2193	G	C4'-C3'-C2'	-5.74	96.86	102.60
25	BB	2370	G	C5-C6-N1	5.74	114.37	111.50
3	A1	397	A	C6-N1-C2	-5.74	115.16	118.60
3	A1	1432	G	O4'-C4'-C3'	5.74	110.69	106.10
25	BB	275	C	N3-C4-C5	5.74	124.20	121.90
25	BB	877	A	O4'-C1'-N9	-5.74	103.61	108.20
25	BB	1512	C	C2-N3-C4	-5.74	117.03	119.90
25	BB	1614	A	C2'-C3'-O3'	5.74	122.89	113.70
25	BB	2053	G	C6-C5-N7	5.74	133.84	130.40
25	BB	2383	G	C5'-C4'-O4'	5.74	115.99	109.10
25	BB	2508	G	P-O3'-C3'	5.74	126.59	119.70
25	BB	2616	C	C3'-C2'-C1'	-5.74	96.91	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2748	A	C1'-O4'-C4'	-5.74	105.31	109.90
1	AA	19	G	C8-N9-C4	5.74	108.69	106.40
3	A1	169	C	C5-C6-N1	-5.74	118.13	121.00
3	A1	361	G	C4'-C3'-C2'	-5.74	96.86	102.60
3	A1	661	G	C8-N9-C4	-5.74	104.10	106.40
3	A1	933	G	C8-N9-C4	-5.74	104.11	106.40
25	BB	445	C	C5'-C4'-O4'	5.74	115.98	109.10
25	BB	1527	G	C5'-C4'-O4'	5.74	115.99	109.10
25	BB	1995	U	C4-C5-C6	5.74	123.14	119.70
25	BB	2202	U	C5-C4-O4	-5.74	122.46	125.90
25	BB	2299	U	N1-C2-N3	5.74	118.34	114.90
25	BB	2321	U	N3-C2-O2	-5.74	118.18	122.20
25	BB	2558	C	N1-C2-O2	5.74	122.34	118.90
25	BB	2647	U	N3-C2-O2	-5.74	118.18	122.20
45	BV	21	ARG	CD-NE-CZ	5.74	131.63	123.60
3	A1	222	C	C5-C6-N1	-5.74	118.13	121.00
25	BB	1343	G	C8-N9-C4	-5.74	104.11	106.40
25	BB	1390	U	N3-C2-O2	-5.74	118.18	122.20
1	AA	29	A	N7-C8-N9	-5.74	110.93	113.80
1	AA	48	C	C6-N1-C2	-5.74	118.01	120.30
3	A1	339	C	O4'-C1'-N1	5.74	112.79	108.20
3	A1	364	A	C1'-O4'-C4'	5.74	114.49	109.90
3	A1	1476	A	C2'-C3'-O3'	5.74	122.88	113.70
3	A1	1483	A	C2-N3-C4	5.74	113.47	110.60
25	BB	277	G	C6-C5-N7	5.74	133.84	130.40
25	BB	618	G	N1-C6-O6	-5.74	116.46	119.90
25	BB	795	C	N1-C2-O2	5.74	122.34	118.90
25	BB	1079	C	C5'-C4'-C3'	-5.74	106.82	116.00
25	BB	1590	A	O4'-C1'-N9	5.74	112.79	108.20
25	BB	1891	G	C4-C5-C6	-5.74	115.36	118.80
25	BB	2392	A	C4-C5-C6	-5.74	114.13	117.00
25	BB	2683	C	N1-C2-N3	5.74	123.22	119.20
1	AA	51	G	O4'-C1'-N9	5.73	112.79	108.20
1	AE	51	G	N3-C2-N2	-5.73	115.89	119.90
3	A1	181	A	C5'-C4'-C3'	-5.73	106.83	116.00
25	BB	85	G	C4'-C3'-C2'	-5.73	96.87	102.60
25	BB	970	U	C4-C5-C6	5.73	123.14	119.70
25	BB	1330	C	C5-C4-N4	5.73	124.21	120.20
25	BB	1497	U	C4'-C3'-C2'	-5.73	96.87	102.60
25	BB	1842	G	N7-C8-N9	5.73	115.97	113.10
25	BB	2653	U	C5-C6-N1	-5.73	119.83	122.70
25	BB	2855	C	N1-C1'-C2'	-5.73	105.69	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
43	BT	49	ARG	CD-NE-CZ	5.73	131.63	123.60
1	AA	44	A	C5'-C4'-O4'	5.73	115.98	109.10
3	A1	78	A	C6-C5-N7	5.73	136.31	132.30
3	A1	336	A	C5-C6-N1	5.73	120.57	117.70
3	A1	425	G	C6-N1-C2	-5.73	121.66	125.10
3	A1	767	A	C5-C6-N6	5.73	128.29	123.70
3	A1	1047	G	O4'-C1'-N9	5.73	112.78	108.20
3	A1	1355	G	N3-C4-C5	-5.73	125.73	128.60
24	BA	60	C	C4'-C3'-C2'	-5.73	96.87	102.60
25	BB	463	G	C5-C6-N1	5.73	114.37	111.50
25	BB	1409	U	N3-C2-O2	-5.73	118.19	122.20
25	BB	2107	G	N1-C2-N3	5.73	127.34	123.90
25	BB	2224	G	N1-C2-N2	-5.73	111.04	116.20
25	BB	2418	A	C2-N3-C4	5.73	113.47	110.60
25	BB	2463	C	N1-C2-O2	5.73	122.34	118.90
3	A1	8	A	C2-N3-C4	5.73	113.47	110.60
3	A1	445	G	N3-C2-N2	-5.73	115.89	119.90
3	A1	788	U	C3'-C2'-C1'	5.73	106.08	101.50
3	A1	1073	U	C5-C6-N1	-5.73	119.83	122.70
3	A1	1454	G	N1-C6-O6	-5.73	116.46	119.90
24	BA	107	G	O3'-P-O5'	-5.73	93.11	104.00
25	BB	74	A	C5-N7-C8	-5.73	101.03	103.90
25	BB	140	C	C5-C6-N1	-5.73	118.14	121.00
25	BB	493	G	N3-C2-N2	-5.73	115.89	119.90
25	BB	621	A	C5'-C4'-O4'	5.73	115.98	109.10
25	BB	1832	C	N1-C2-O2	5.73	122.34	118.90
25	BB	1915	U	O4'-C1'-N1	5.73	112.78	108.20
25	BB	1933	G	N3-C4-N9	-5.73	122.56	126.00
3	A1	265	G	C4-C5-N7	-5.73	108.51	110.80
3	A1	878	A	C4-C5-C6	-5.73	114.14	117.00
3	A1	944	G	C6-N1-C2	-5.73	121.66	125.10
25	BB	626	A	C5'-C4'-C3'	-5.73	106.83	116.00
25	BB	1186	G	C5-N7-C8	-5.73	101.44	104.30
25	BB	1337	G	N1-C2-N3	5.73	127.34	123.90
25	BB	1373	A	C3'-C2'-C1'	5.73	106.08	101.50
25	BB	1743	G	O3'-P-O5'	5.73	114.89	104.00
25	BB	2858	C	O4'-C4'-C3'	5.73	110.68	106.10
29	BF	81	ARG	CD-NE-CZ	5.73	131.62	123.60
3	A1	951	G	N1-C6-O6	-5.73	116.46	119.90
3	A1	1356	G	N3-C4-N9	5.73	129.44	126.00
25	BB	90	U	C2-N3-C4	-5.73	123.56	127.00
25	BB	825	A	C2-N3-C4	5.73	113.46	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	877	A	N1-C2-N3	-5.73	126.44	129.30
25	BB	1390	U	C3'-C2'-C1'	-5.73	96.92	101.50
25	BB	1570	A	C4-C5-C6	-5.73	114.14	117.00
25	BB	1976	U	O4'-C4'-C3'	5.73	110.68	106.10
25	BB	1991	U	N3-C2-O2	-5.73	118.19	122.20
3	A1	159	G	N1-C6-O6	-5.73	116.46	119.90
24	BA	104	A	C5-C6-N1	5.73	120.56	117.70
25	BB	1427	A	P-O3'-C3'	5.73	126.57	119.70
25	BB	2697	G	C6-N1-C2	-5.73	121.67	125.10
25	BB	2779	U	P-O3'-C3'	5.73	126.57	119.70
1	AE	57	G	C4'-C3'-C2'	-5.72	96.88	102.60
3	A1	195	A	C2-N3-C4	5.72	113.46	110.60
3	A1	269	C	C5'-C4'-C3'	-5.72	106.84	116.00
3	A1	334	C	C1'-O4'-C4'	-5.72	105.32	109.90
3	A1	517	G	C2'-C3'-O3'	5.72	122.86	113.70
3	A1	1101	A	C6-C5-N7	5.72	136.31	132.30
3	A1	1360	A	C6-N1-C2	-5.72	115.17	118.60
3	A1	1514	G	C3'-C2'-C1'	5.72	106.08	101.50
23	AX	31	ARG	CD-NE-CZ	5.72	131.61	123.60
24	BA	74	U	C3'-C2'-C1'	5.72	106.08	101.50
25	BB	109	C	C6-N1-C2	-5.72	118.01	120.30
25	BB	471	A	C3'-C2'-C1'	5.72	106.08	101.50
25	BB	709	U	C5-C6-N1	-5.72	119.84	122.70
25	BB	802	A	C6-N1-C2	-5.72	115.17	118.60
25	BB	1092	C	C4'-C3'-C2'	-5.72	96.88	102.60
25	BB	1106	G	C5'-C4'-O4'	5.72	115.97	109.10
25	BB	1175	A	O4'-C4'-C3'	5.72	110.68	106.10
25	BB	1355	G	O4'-C1'-N9	5.72	112.78	108.20
25	BB	1783	A	C5-N7-C8	-5.72	101.04	103.90
25	BB	2277	G	C5'-C4'-C3'	-5.72	106.84	116.00
25	BB	2285	C	N1-C2-O2	5.72	122.33	118.90
25	BB	2406	A	C2-N3-C4	5.72	113.46	110.60
25	BB	2441	U	C2-N3-C4	-5.72	123.56	127.00
1	AE	73	A	N1-C2-N3	-5.72	126.44	129.30
3	A1	138	G	C4-C5-C6	-5.72	115.37	118.80
3	A1	545	C	C3'-C2'-C1'	-5.72	96.92	101.50
3	A1	618	C	N3-C2-O2	-5.72	117.89	121.90
3	A1	1000	A	N9-C4-C5	-5.72	103.51	105.80
25	BB	1474	U	C4'-C3'-C2'	-5.72	96.88	102.60
25	BB	1896	G	C6-N1-C2	-5.72	121.67	125.10
25	BB	1939	U	C4'-C3'-C2'	-5.72	96.88	102.60
25	BB	2126	A	C1'-O4'-C4'	-5.72	105.32	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2373	G	N1-C2-N2	5.72	121.35	116.20
25	BB	2689	U	O5'-P-OP1	-5.72	100.55	105.70
25	BB	2746	U	N3-C4-O4	5.72	123.41	119.40
3	A1	11	G	C4'-C3'-C2'	-5.72	96.88	102.60
3	A1	120	A	C4-C5-C6	-5.72	114.14	117.00
3	A1	1183	U	C5-C6-N1	-5.72	119.84	122.70
3	A1	1478	U	C4-C5-C6	5.72	123.13	119.70
24	BA	64	G	N1-C6-O6	-5.72	116.47	119.90
24	BA	82	U	C4'-C3'-C2'	-5.72	96.88	102.60
25	BB	294	A	N1-C2-N3	-5.72	126.44	129.30
25	BB	351	C	C2-N3-C4	-5.72	117.04	119.90
25	BB	1178	C	C5-C6-N1	-5.72	118.14	121.00
25	BB	1980	G	O4'-C4'-C3'	5.72	110.68	106.10
36	BM	6	ARG	CD-NE-CZ	5.72	131.61	123.60
37	BN	211	ARG	NE-CZ-NH1	5.72	123.16	120.30
1	AA	55	U	C2-N3-C4	-5.72	123.57	127.00
1	AE	54	U	O4'-C1'-N1	5.72	112.78	108.20
3	A1	254	G	N3-C4-C5	-5.72	125.74	128.60
3	A1	351	G	N3-C4-N9	5.72	129.43	126.00
3	A1	500	G	N3-C4-C5	-5.72	125.74	128.60
3	A1	569	C	O4'-C4'-C3'	-5.72	98.28	104.00
3	A1	623	C	N1-C2-O2	5.72	122.33	118.90
3	A1	713	G	C8-N9-C4	-5.72	104.11	106.40
3	A1	988	G	C6-C5-N7	5.72	133.83	130.40
3	A1	1110	A	N7-C8-N9	5.72	116.66	113.80
25	BB	362	A	N1-C2-N3	-5.72	126.44	129.30
25	BB	557	C	O4'-C4'-C3'	5.72	110.67	106.10
25	BB	724	U	N3-C4-C5	5.72	118.03	114.60
25	BB	782	A	O4'-C1'-N9	5.72	112.78	108.20
25	BB	1138	G	C4-C5-N7	-5.72	108.51	110.80
25	BB	1561	C	N3-C4-N4	-5.72	114.00	118.00
25	BB	2033	A	C6-C5-N7	5.72	136.30	132.30
25	BB	2143	C	P-O3'-C3'	5.72	126.56	119.70
3	A1	359	G	N7-C8-N9	5.72	115.96	113.10
25	BB	258	G	C5-C6-O6	-5.72	125.17	128.60
25	BB	2349	G	C4-C5-N7	5.72	113.09	110.80
25	BB	2871	U	N1-C2-N3	5.72	118.33	114.90
1	AA	74	C	C6-N1-C1'	5.72	127.66	120.80
2	AM	8	U	N3-C2-O2	-5.72	118.20	122.20
3	A1	345	C	C1'-O4'-C4'	-5.72	105.33	109.90
3	A1	582	C	C2-N3-C4	-5.72	117.04	119.90
3	A1	879	C	N1-C2-N3	5.72	123.20	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1260	G	N3-C2-N2	5.72	123.90	119.90
3	A1	1383	C	C2-N3-C4	-5.72	117.04	119.90
12	AK	56	ARG	NH1-CZ-NH2	-5.72	113.11	119.40
25	BB	299	A	P-O3'-C3'	5.72	126.56	119.70
25	BB	370	G	N9-C1'-C2'	5.72	121.43	114.00
25	BB	415	A	N9-C4-C5	-5.72	103.51	105.80
25	BB	491	G	N3-C4-C5	-5.72	125.74	128.60
25	BB	784	G	C2-N3-C4	5.72	114.76	111.90
25	BB	830	G	C1'-O4'-C4'	-5.72	105.33	109.90
25	BB	1008	A	O4'-C1'-N9	5.72	112.77	108.20
25	BB	1205	A	C4'-C3'-C2'	-5.72	96.88	102.60
25	BB	1335	C	O4'-C1'-N1	5.72	112.77	108.20
25	BB	1393	A	C6-N1-C2	-5.72	115.17	118.60
25	BB	1491	G	C3'-C2'-C1'	5.72	106.07	101.50
25	BB	1914	C	O4'-C4'-C3'	5.72	110.67	106.10
25	BB	2279	G	N3-C4-C5	-5.72	125.74	128.60
25	BB	2621	G	C6-C5-N7	5.72	133.83	130.40
1	AA	43	G	C2-N3-C4	5.71	114.76	111.90
2	AM	13	U	N1-C2-O2	5.71	126.80	122.80
3	A1	50	A	C4-C5-C6	-5.71	114.14	117.00
3	A1	365	U	P-O3'-C3'	5.71	126.56	119.70
3	A1	638	U	N3-C2-O2	-5.71	118.20	122.20
3	A1	682	G	C6-C5-N7	5.71	133.83	130.40
3	A1	875	U	N1-C2-N3	5.71	118.33	114.90
3	A1	1005	A	O4'-C1'-N9	5.71	112.77	108.20
3	A1	1388	C	C4'-C3'-C2'	-5.71	96.89	102.60
25	BB	82	U	N3-C4-C5	5.71	118.03	114.60
25	BB	353	C	C2-N3-C4	-5.71	117.04	119.90
25	BB	375	G	N7-C8-N9	5.71	115.96	113.10
25	BB	1052	C	O4'-C4'-C3'	5.71	110.67	106.10
25	BB	1189	A	C6-C5-N7	5.71	136.30	132.30
25	BB	2791	G	N1-C2-N2	5.71	121.34	116.20
51	B2	163	GLU	OE1-CD-OE2	-5.71	116.44	123.30
3	A1	906	A	C5-C6-N6	5.71	128.27	123.70
3	A1	1083	U	O4'-C4'-C3'	5.71	110.67	106.10
24	BA	8	C	C4'-C3'-C2'	-5.71	96.89	102.60
25	BB	2452	C	C6-N1-C2	-5.71	118.02	120.30
25	BB	2580	U	O3'-P-O5'	5.71	114.86	104.00
25	BB	2582	G	C6-N1-C2	-5.71	121.67	125.10
1	AP	61	C	N1-C2-O2	5.71	122.33	118.90
3	A1	51	A	N1-C2-N3	-5.71	126.44	129.30
3	A1	257	G	C4-C5-N7	-5.71	108.52	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	785	G	C4'-C3'-C2'	-5.71	96.89	102.60
3	A1	853	C	C4-C5-C6	-5.71	114.55	117.40
3	A1	1011	C	C5'-C4'-C3'	-5.71	106.86	116.00
24	BA	23	G	N3-C4-C5	-5.71	125.74	128.60
25	BB	27	G	N1-C6-O6	-5.71	116.47	119.90
25	BB	723	C	C2-N3-C4	-5.71	117.04	119.90
25	BB	937	C	N1-C2-O2	5.71	122.33	118.90
25	BB	1259	G	N1-C2-N3	5.71	127.33	123.90
25	BB	1324	G	N9-C4-C5	5.71	107.69	105.40
25	BB	1908	C	O4'-C1'-N1	5.71	112.77	108.20
25	BB	2050	C	O4'-C1'-N1	5.71	112.77	108.20
25	BB	2068	U	N3-C4-O4	5.71	123.40	119.40
25	BB	2185	U	C5'-C4'-C3'	-5.71	106.86	116.00
3	A1	19	A	C4'-C3'-C2'	-5.71	96.89	102.60
3	A1	311	C	N1-C2-N3	5.71	123.20	119.20
3	A1	688	G	C5'-C4'-O4'	5.71	115.95	109.10
25	BB	2566	A	P-O3'-C3'	5.71	126.55	119.70
25	BB	2711	A	C3'-C2'-C1'	5.71	106.07	101.50
3	A1	391	G	C6-N1-C2	-5.71	121.67	125.10
3	A1	476	U	C4-C5-C6	5.71	123.12	119.70
3	A1	507	C	C2-N3-C4	-5.71	117.05	119.90
16	AQ	34	ARG	NH1-CZ-NH2	-5.71	113.12	119.40
25	BB	766	U	N1-C2-N3	5.71	118.33	114.90
25	BB	939	G	N1-C6-O6	-5.71	116.47	119.90
25	BB	1024	G	N1-C6-O6	-5.71	116.47	119.90
25	BB	1505	A	C6-C5-N7	5.71	136.30	132.30
25	BB	1731	G	C2'-C3'-O3'	5.71	122.83	113.70
25	BB	1802	A	N1-C2-N3	-5.71	126.44	129.30
25	BB	2136	G	C5-C6-N1	5.71	114.35	111.50
25	BB	2259	U	O5'-P-OP1	-5.71	100.56	105.70
35	BL	68	ASP	CB-CG-OD2	5.71	123.44	118.30
47	BX	4	ARG	CD-NE-CZ	5.71	131.59	123.60
1	AP	71	G	C4-C5-C6	-5.71	115.38	118.80
3	A1	712	A	O4'-C1'-N9	5.71	112.77	108.20
3	A1	1068	G	C4'-C3'-C2'	-5.71	96.89	102.60
3	A1	1166	G	C6-N1-C2	-5.71	121.68	125.10
3	A1	1500	A	N9-C1'-C2'	-5.71	105.72	112.00
25	BB	120	U	C6-N1-C2	-5.71	117.58	121.00
25	BB	659	G	N9-C4-C5	5.71	107.68	105.40
25	BB	874	G	C5-C6-N1	5.71	114.35	111.50
25	BB	1172	C	C5-C6-N1	-5.71	118.15	121.00
25	BB	1208	C	C6-N1-C2	-5.71	118.02	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1525	A	C5-C6-N6	5.71	128.26	123.70
25	BB	1545	A	C5'-C4'-O4'	5.71	115.95	109.10
25	BB	1993	U	N3-C2-O2	-5.71	118.20	122.20
1	AP	21	A	C5'-C4'-C3'	-5.71	106.87	116.00
3	A1	101	A	C3'-C2'-C1'	5.71	106.06	101.50
25	BB	491	G	C5-C6-N1	5.71	114.35	111.50
25	BB	1475	G	N1-C2-N2	-5.71	111.07	116.20
25	BB	1657	U	C1'-O4'-C4'	-5.71	105.34	109.90
25	BB	1874	C	P-O3'-C3'	5.71	126.55	119.70
25	BB	2000	C	N3-C4-C5	5.71	124.18	121.90
25	BB	2811	G	P-O3'-C3'	5.71	126.55	119.70
1	AA	60	C	C2-N3-C4	-5.70	117.05	119.90
1	AA	61	C	N1-C2-N3	5.70	123.19	119.20
1	AE	63	C	P-O3'-C3'	5.70	126.55	119.70
3	A1	76	G	N1-C6-O6	-5.70	116.48	119.90
3	A1	625	U	N1-C2-N3	5.70	118.32	114.90
3	A1	906	A	C6-N1-C2	-5.70	115.18	118.60
3	A1	1208	C	N3-C4-C5	5.70	124.18	121.90
3	A1	1215	G	C6-C5-N7	5.70	133.82	130.40
3	A1	1492	A	N7-C8-N9	5.70	116.65	113.80
25	BB	121	G	C1'-O4'-C4'	5.70	114.46	109.90
25	BB	1140	C	C5-C6-N1	-5.70	118.15	121.00
25	BB	1350	C	N1-C2-O2	5.70	122.32	118.90
25	BB	1567	G	C2-N3-C4	5.70	114.75	111.90
25	BB	1707	G	O3'-P-O5'	-5.70	93.17	104.00
25	BB	2498	C	N1-C2-N3	5.70	123.19	119.20
3	A1	287	U	N1-C2-N3	5.70	118.32	114.90
3	A1	1150	A	C3'-C2'-C1'	-5.70	96.94	101.50
7	AF	91	ARG	NH1-CZ-NH2	-5.70	113.13	119.40
1	AA	4	G	C3'-C2'-C1'	5.70	106.06	101.50
3	A1	418	C	C4'-C3'-C2'	-5.70	96.90	102.60
3	A1	810	C	N3-C4-C5	5.70	124.18	121.90
3	A1	823	C	C4'-C3'-C2'	-5.70	96.90	102.60
3	A1	930	C	C1'-O4'-C4'	-5.70	105.34	109.90
3	A1	1478	U	N1-C2-O2	5.70	126.79	122.80
15	AO	78	LYS	C-N-CA	5.70	135.95	121.70
25	BB	315	G	O4'-C1'-N9	5.70	112.76	108.20
25	BB	860	U	C3'-C2'-C1'	5.70	106.06	101.50
25	BB	1804	C	C5-C6-N1	-5.70	118.15	121.00
25	BB	2350	C	C4'-C3'-C2'	-5.70	96.90	102.60
25	BB	2376	A	N9-C4-C5	5.70	108.08	105.80
25	BB	2389	G	C4-C5-N7	-5.70	108.52	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2483	C	N3-C4-C5	5.70	124.18	121.90
25	BB	2566	A	N1-C2-N3	-5.70	126.45	129.30
25	BB	2882	A	C5-C6-N6	5.70	128.26	123.70
1	AA	58	A	O4'-C1'-N9	-5.70	103.64	108.20
1	AA	75	C	C5-C4-N4	-5.70	116.21	120.20
3	A1	392	C	N3-C4-N4	-5.70	114.01	118.00
3	A1	606	G	N1-C6-O6	-5.70	116.48	119.90
3	A1	1059	C	C3'-C2'-C1'	5.70	106.06	101.50
3	A1	1533	C	C4'-C3'-C2'	-5.70	96.90	102.60
25	BB	58	G	N9-C4-C5	5.70	107.68	105.40
25	BB	539	G	O5'-P-OP2	-5.70	100.57	105.70
25	BB	1538	G	C5'-C4'-O4'	5.70	115.94	109.10
25	BB	1638	C	C3'-C2'-C1'	-5.70	96.94	101.50
25	BB	2855	C	N3-C2-O2	-5.70	117.91	121.90
3	A1	71	A	O3'-P-O5'	5.70	114.83	104.00
3	A1	1136	C	N3-C4-N4	-5.70	114.01	118.00
25	BB	760	G	N9-C4-C5	5.70	107.68	105.40
25	BB	1125	G	P-O3'-C3'	5.70	126.54	119.70
25	BB	1316	U	C5-C6-N1	-5.70	119.85	122.70
25	BB	1526	C	N3-C2-O2	-5.70	117.91	121.90
25	BB	1583	A	N7-C8-N9	-5.70	110.95	113.80
25	BB	2797	U	C5-C6-N1	-5.70	119.85	122.70
25	BB	2899	A	N1-C6-N6	-5.70	115.18	118.60
1	AE	7	U	C5-C6-N1	-5.70	119.85	122.70
3	A1	281	G	C5-C6-N1	5.70	114.35	111.50
3	A1	391	G	C5-N7-C8	-5.70	101.45	104.30
3	A1	573	A	C5-N7-C8	-5.70	101.05	103.90
3	A1	836	G	N1-C2-N3	5.70	127.32	123.90
3	A1	948	C	N3-C4-C5	5.70	124.18	121.90
3	A1	981	U	C2-N3-C4	-5.70	123.58	127.00
3	A1	1136	C	C5-C6-N1	-5.70	118.15	121.00
6	AD	120	ARG	NE-CZ-NH1	5.70	123.15	120.30
25	BB	57	C	C5-C6-N1	-5.70	118.15	121.00
25	BB	186	G	N1-C2-N2	-5.70	111.07	116.20
25	BB	856	G	C6-N1-C2	-5.70	121.68	125.10
25	BB	893	C	C5-C4-N4	-5.70	116.21	120.20
25	BB	913	U	N3-C2-O2	-5.70	118.21	122.20
25	BB	1096	A	N1-C2-N3	-5.70	126.45	129.30
25	BB	1895	C	C3'-C2'-C1'	5.70	106.06	101.50
25	BB	2333	A	C6-N1-C2	-5.70	115.18	118.60
1	AA	75	C	C5'-C4'-O4'	5.69	115.93	109.10
3	A1	16	A	C4-C5-C6	-5.69	114.15	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	166	U	N1-C2-N3	5.69	118.32	114.90
3	A1	1218	C	N3-C4-C5	5.69	124.18	121.90
15	AO	21	TRP	CG-CD2-CE3	-5.69	128.78	133.90
25	BB	411	G	C6-N1-C2	-5.69	121.68	125.10
25	BB	882	G	N3-C2-N2	-5.69	115.91	119.90
1	AE	36	A	C4-C5-C6	-5.69	114.15	117.00
3	A1	408	A	O4'-C1'-N9	5.69	112.75	108.20
3	A1	524	G	C4'-C3'-C2'	-5.69	96.91	102.60
3	A1	529	G	C8-N9-C4	-5.69	104.12	106.40
3	A1	801	U	P-O3'-C3'	5.69	126.53	119.70
3	A1	1167	A	C1'-O4'-C4'	-5.69	105.34	109.90
3	A1	1235	U	C2-N3-C4	-5.69	123.58	127.00
3	A1	1313	U	C5'-C4'-O4'	5.69	115.93	109.10
3	A1	1434	A	C2-N3-C4	5.69	113.45	110.60
6	AD	66	ILE	CA-CB-CG1	5.69	121.81	111.00
25	BB	260	G	C5-C6-N1	5.69	114.35	111.50
25	BB	276	U	N1-C2-N3	5.69	118.32	114.90
25	BB	512	G	O4'-C1'-N9	-5.69	103.64	108.20
25	BB	588	U	C4-C5-C6	5.69	123.12	119.70
25	BB	604	G	N3-C2-N2	-5.69	115.92	119.90
25	BB	629	G	C5-N7-C8	-5.69	101.45	104.30
25	BB	1193	G	C5-C6-N1	5.69	114.35	111.50
25	BB	1223	G	O4'-C1'-N9	-5.69	103.65	108.20
25	BB	1715	G	C8-N9-C4	-5.69	104.12	106.40
25	BB	1849	G	C4-C5-C6	-5.69	115.38	118.80
25	BB	2646	C	O4'-C4'-C3'	5.69	110.65	106.10
25	BB	2680	U	C5-C6-N1	-5.69	119.85	122.70
25	BB	2843	G	N9-C4-C5	5.69	107.68	105.40
37	BN	61	TYR	CB-CG-CD2	-5.69	117.58	121.00
1	AP	75	C	C2-N3-C4	-5.69	117.06	119.90
3	A1	147	G	C6-N1-C2	-5.69	121.69	125.10
3	A1	178	C	C2-N3-C4	-5.69	117.06	119.90
3	A1	295	C	N1-C1'-C2'	5.69	121.40	114.00
3	A1	675	A	N1-C6-N6	-5.69	115.19	118.60
3	A1	978	A	N7-C8-N9	5.69	116.65	113.80
3	A1	1474	U	C4-C5-C6	5.69	123.11	119.70
3	A1	1532	U	C5-C4-O4	5.69	129.31	125.90
24	BA	9	G	C4'-C3'-C2'	-5.69	96.91	102.60
25	BB	85	G	C5-C6-N1	5.69	114.34	111.50
25	BB	605	G	C6-C5-N7	5.69	133.81	130.40
25	BB	1479	G	C6-N1-C2	-5.69	121.69	125.10
25	BB	1534	U	N1-C2-N3	5.69	118.31	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1787	A	C2-N3-C4	5.69	113.44	110.60
25	BB	1981	A	C5'-C4'-O4'	5.69	115.93	109.10
25	BB	2269	G	N1-C2-N2	-5.69	111.08	116.20
25	BB	2870	C	N1-C1'-C2'	5.69	121.40	114.00
25	BB	16	C	C2-N1-C1'	5.69	125.06	118.80
25	BB	586	A	C5-C6-N6	5.69	128.25	123.70
25	BB	642	U	C3'-C2'-C1'	5.69	106.05	101.50
25	BB	926	G	N3-C4-N9	5.69	129.41	126.00
25	BB	1323	C	N3-C4-N4	-5.69	114.02	118.00
25	BB	1728	C	O5'-P-OP2	-5.69	100.58	105.70
25	BB	2180	U	C4-C5-C6	5.69	123.11	119.70
25	BB	2458	G	N3-C4-C5	-5.69	125.76	128.60
3	A1	363	A	C8-N9-C4	-5.69	103.53	105.80
20	AU	110	ARG	NH1-CZ-NH2	-5.69	113.14	119.40
25	BB	370	G	N3-C2-N2	-5.69	115.92	119.90
25	BB	380	G	N3-C2-N2	-5.69	115.92	119.90
25	BB	680	C	N1-C2-O2	5.69	122.31	118.90
25	BB	1627	G	N3-C4-C5	-5.69	125.76	128.60
25	BB	1848	A	P-O3'-C3'	5.69	126.53	119.70
25	BB	1891	G	N1-C2-N3	5.69	127.31	123.90
25	BB	1980	G	N7-C8-N9	5.69	115.94	113.10
25	BB	2747	G	C8-N9-C4	-5.69	104.12	106.40
25	BB	2863	C	N3-C4-C5	5.69	124.17	121.90
31	BH	30	ARG	NE-CZ-NH2	5.69	123.14	120.30
3	A1	538	G	C8-N9-C4	-5.69	104.13	106.40
25	BB	70	G	C5-C6-N1	5.69	114.34	111.50
25	BB	782	A	C3'-C2'-C1'	5.69	106.05	101.50
25	BB	950	G	C5-C6-N1	5.69	114.34	111.50
25	BB	2489	U	C5'-C4'-O4'	5.69	115.92	109.10
35	BL	11	ARG	NE-CZ-NH2	5.69	123.14	120.30
3	A1	347	G	C6-N1-C2	-5.68	121.69	125.10
3	A1	1076	U	N1-C2-O2	5.68	126.78	122.80
3	A1	1212	U	C4-C5-C6	5.68	123.11	119.70
3	A1	1270	G	N1-C6-O6	-5.68	116.49	119.90
3	A1	1291	U	C3'-C2'-C1'	5.68	106.05	101.50
17	AR	12	ARG	NE-CZ-NH1	5.68	123.14	120.30
25	BB	289	G	C8-N9-C4	-5.68	104.13	106.40
25	BB	429	A	N3-C4-N9	-5.68	122.85	127.40
25	BB	551	G	C5'-C4'-C3'	-5.68	106.91	116.00
25	BB	588	U	N1-C2-N3	5.68	118.31	114.90
25	BB	1338	G	C2'-C3'-O3'	5.68	122.80	113.70
25	BB	1582	C	C6-N1-C2	-5.68	118.03	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2293	G	C5-N7-C8	-5.68	101.46	104.30
25	BB	2465	C	O3'-P-O5'	5.68	114.80	104.00
25	BB	2859	G	N3-C2-N2	-5.68	115.92	119.90
38	BO	84	PHE	CB-CA-C	5.68	121.77	110.40
3	A1	1186	G	C5-C6-N1	5.68	114.34	111.50
3	A1	1517	G	C8-N9-C4	-5.68	104.13	106.40
24	BA	44	G	C3'-C2'-C1'	-5.68	96.95	101.50
24	BA	81	G	C6-C5-N7	5.68	133.81	130.40
25	BB	50	U	N3-C2-O2	-5.68	118.22	122.20
25	BB	660	C	N3-C2-O2	-5.68	117.92	121.90
25	BB	763	G	N3-C4-C5	-5.68	125.76	128.60
25	BB	808	G	O4'-C1'-N9	5.68	112.75	108.20
25	BB	1085	A	C8-N9-C4	-5.68	103.53	105.80
25	BB	1552	A	C6-C5-N7	5.68	136.28	132.30
25	BB	1684	G	N1-C2-N2	5.68	121.31	116.20
25	BB	1923	U	C4-C5-C6	5.68	123.11	119.70
25	BB	2264	C	C6-N1-C2	-5.68	118.03	120.30
25	BB	2415	G	C6-C5-N7	5.68	133.81	130.40
25	BB	2535	G	C5-N7-C8	-5.68	101.46	104.30
3	A1	494	G	C6-C5-N7	5.68	133.81	130.40
3	A1	580	C	O4'-C1'-N1	5.68	112.75	108.20
24	BA	78	A	C4-C5-C6	-5.68	114.16	117.00
24	BA	80	U	N1-C1'-C2'	5.68	121.39	114.00
25	BB	508	A	N9-C4-C5	-5.68	103.53	105.80
25	BB	2153	C	N1-C1'-C2'	-5.68	105.75	112.00
25	BB	2415	G	C4-C5-C6	-5.68	115.39	118.80
3	A1	425	G	N1-C6-O6	-5.68	116.49	119.90
3	A1	1072	G	C5-C6-N1	5.68	114.34	111.50
3	A1	1284	C	C2-N3-C4	-5.68	117.06	119.90
3	A1	1461	G	C4-C5-N7	5.68	113.07	110.80
24	BA	40	U	C4-C5-C6	5.68	123.11	119.70
25	BB	356	G	O3'-P-O5'	-5.68	93.21	104.00
25	BB	738	G	C5-C6-O6	5.68	132.01	128.60
25	BB	1492	G	N9-C1'-C2'	-5.68	105.75	112.00
51	B2	173	ASP	CB-CG-OD2	5.68	123.41	118.30
3	A1	99	C	C5'-C4'-C3'	-5.68	106.92	116.00
24	BA	37	C	N1-C2-O2	5.68	122.31	118.90
25	BB	2628	C	N3-C2-O2	-5.68	117.92	121.90
25	BB	2635	A	N1-C2-N3	-5.68	126.46	129.30
25	BB	2897	U	N1-C2-N3	5.68	118.31	114.90
3	A1	339	C	N1-C2-N3	5.68	123.17	119.20
3	A1	553	A	N1-C6-N6	-5.68	115.19	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	740	U	N3-C2-O2	-5.68	118.23	122.20
3	A1	893	C	C2-N3-C4	-5.68	117.06	119.90
3	A1	1015	G	C5-C6-O6	-5.68	125.19	128.60
3	A1	1152	A	C1'-O4'-C4'	-5.68	105.36	109.90
3	A1	1217	C	N3-C2-O2	-5.68	117.93	121.90
24	BA	94	A	C2-N3-C4	5.68	113.44	110.60
24	BA	110	C	C6-N1-C2	-5.68	118.03	120.30
25	BB	53	A	C8-N9-C4	-5.68	103.53	105.80
25	BB	81	G	N7-C8-N9	5.68	115.94	113.10
25	BB	792	A	C2-N3-C4	5.68	113.44	110.60
25	BB	1006	C	C4'-C3'-C2'	-5.68	96.92	102.60
25	BB	1050	A	C6-C5-N7	5.68	136.27	132.30
25	BB	1244	A	N9-C4-C5	5.68	108.07	105.80
25	BB	1329	U	C1'-O4'-C4'	-5.68	105.36	109.90
25	BB	1485	U	C4'-C3'-C2'	-5.68	96.92	102.60
25	BB	1795	C	C5-C6-N1	-5.68	118.16	121.00
25	BB	2063	C	C3'-C2'-C1'	5.68	106.04	101.50
25	BB	2884	U	N1-C2-O2	5.68	126.77	122.80
3	A1	972	C	C4-C5-C6	5.67	120.24	117.40
3	A1	1295	U	C1'-O4'-C4'	-5.67	105.36	109.90
24	BA	86	G	N9-C4-C5	5.67	107.67	105.40
25	BB	326	G	C5-N7-C8	-5.67	101.46	104.30
25	BB	749	A	P-O3'-C3'	5.67	126.51	119.70
25	BB	888	C	N1-C2-N3	5.67	123.17	119.20
25	BB	1517	G	N7-C8-N9	5.67	115.94	113.10
25	BB	1744	A	C2-N3-C4	5.67	113.44	110.60
25	BB	2026	U	N1-C1'-C2'	5.67	121.38	114.00
25	BB	2121	G	N9-C4-C5	5.67	107.67	105.40
25	BB	2230	G	C2-N3-C4	5.67	114.74	111.90
25	BB	2246	G	C8-N9-C4	-5.67	104.13	106.40
25	BB	2651	C	N1-C2-O2	5.67	122.30	118.90
25	BB	2800	A	C5'-C4'-C3'	-5.67	106.92	116.00
25	BB	2882	A	C3'-C2'-C1'	5.67	106.04	101.50
52	B3	168	VAL	CG1-CB-CG2	-5.67	101.82	110.90
3	A1	760	G	C5'-C4'-O4'	5.67	115.91	109.10
3	A1	1193	G	C1'-O4'-C4'	-5.67	105.36	109.90
25	BB	570	G	N1-C6-O6	-5.67	116.50	119.90
25	BB	680	C	C1'-O4'-C4'	-5.67	105.36	109.90
25	BB	1531	C	C6-N1-C2	-5.67	118.03	120.30
25	BB	1645	G	C4-C5-C6	-5.67	115.40	118.80
25	BB	2801	G	C4-C5-C6	-5.67	115.40	118.80
3	A1	445	G	N3-C4-N9	5.67	129.40	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	673	A	C5-C6-N1	5.67	120.54	117.70
3	A1	788	U	N3-C4-C5	5.67	118.00	114.60
3	A1	923	A	N1-C2-N3	-5.67	126.46	129.30
3	A1	1129	C	C5-C4-N4	-5.67	116.23	120.20
3	A1	1278	G	N1-C6-O6	-5.67	116.50	119.90
3	A1	1528	U	N3-C2-O2	-5.67	118.23	122.20
24	BA	76	G	N9-C4-C5	5.67	107.67	105.40
25	BB	794	A	N9-C4-C5	5.67	108.07	105.80
25	BB	823	C	C5-C4-N4	5.67	124.17	120.20
25	BB	1049	C	O4'-C4'-C3'	-5.67	98.33	104.00
25	BB	1355	G	C6-N1-C2	-5.67	121.70	125.10
25	BB	1910	G	C8-N9-C4	-5.67	104.13	106.40
34	BK	83	TYR	CB-CG-CD1	-5.67	117.60	121.00
49	BZ	4	ASP	CB-CG-OD1	5.67	123.40	118.30
3	A1	64	G	C5-C6-N1	5.67	114.33	111.50
3	A1	367	U	C3'-C2'-C1'	5.67	106.04	101.50
3	A1	502	A	C2-N3-C4	5.67	113.44	110.60
3	A1	1025	U	C2-N3-C4	-5.67	123.60	127.00
3	A1	1133	G	C2-N3-C4	5.67	114.73	111.90
25	BB	791	C	C6-N1-C2	-5.67	118.03	120.30
1	AA	50	U	C5-C4-O4	-5.67	122.50	125.90
1	AP	69	U	N1-C2-O2	5.67	126.77	122.80
1	AE	9	A	C5-C6-N6	5.67	128.24	123.70
3	A1	175	C	C5-C6-N1	-5.67	118.17	121.00
3	A1	727	G	C6-C5-N7	5.67	133.80	130.40
3	A1	927	G	C4'-C3'-C2'	-5.67	96.93	102.60
3	A1	1371	G	C4'-C3'-C2'	-5.67	96.93	102.60
3	A1	1383	C	C4-C5-C6	-5.67	114.57	117.40
25	BB	183	C	N1-C2-N3	5.67	123.17	119.20
25	BB	385	C	C6-N1-C2	-5.67	118.03	120.30
25	BB	463	G	C3'-C2'-C1'	5.67	106.03	101.50
25	BB	471	A	C6-C5-N7	5.67	136.27	132.30
25	BB	698	C	N3-C4-N4	-5.67	114.03	118.00
25	BB	842	U	N3-C2-O2	-5.67	118.23	122.20
25	BB	871	U	C5-C6-N1	-5.67	119.87	122.70
25	BB	915	C	N3-C4-N4	-5.67	114.03	118.00
25	BB	1439	A	C5'-C4'-C3'	-5.67	106.93	116.00
25	BB	1773	A	C5-C6-N6	5.67	128.24	123.70
25	BB	1899	A	N3-C4-N9	-5.67	122.86	127.40
25	BB	2101	A	N3-C4-N9	-5.67	122.86	127.40
25	BB	2308	G	C6-C5-N7	5.67	133.80	130.40
25	BB	2405	G	C2'-C3'-O3'	5.67	122.77	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2636	C	C5-C6-N1	-5.67	118.17	121.00
30	BG	46	ARG	NH1-CZ-NH2	-5.67	113.17	119.40
30	BG	90	ARG	CD-NE-CZ	5.67	131.54	123.60
1	AE	18	G	C8-N9-C1'	5.67	134.37	127.00
2	AM	11	U	C2'-C3'-O3'	5.67	122.77	113.70
3	A1	875	U	C2'-C3'-O3'	5.67	122.77	113.70
3	A1	1197	A	C4'-C3'-C2'	-5.67	96.93	102.60
3	A1	1213	A	C8-N9-C4	5.67	108.07	105.80
3	A1	1453	G	N3-C2-N2	-5.67	115.93	119.90
25	BB	304	U	N1-C2-O2	5.67	126.77	122.80
25	BB	501	A	C3'-C2'-C1'	5.67	106.03	101.50
25	BB	502	A	C6-N1-C2	-5.67	115.20	118.60
25	BB	819	A	C4'-C3'-C2'	-5.67	96.93	102.60
25	BB	1625	C	O4'-C1'-C2'	-5.67	100.13	105.80
25	BB	1665	A	C6-C5-N7	5.67	136.27	132.30
25	BB	1699	G	N9-C1'-C2'	-5.67	105.77	112.00
25	BB	1765	U	C4-C5-C6	5.67	123.10	119.70
25	BB	1777	U	P-O3'-C3'	5.67	126.50	119.70
2	AM	7	U	C1'-O4'-C4'	-5.67	105.37	109.90
3	A1	810	C	P-O3'-C3'	5.67	126.50	119.70
25	BB	92	U	N1-C2-N3	5.67	118.30	114.90
25	BB	1320	C	C5-C6-N1	-5.67	118.17	121.00
3	A1	492	C	C4'-C3'-C2'	-5.66	96.94	102.60
3	A1	590	U	O3'-P-O5'	-5.66	93.24	104.00
3	A1	979	C	C4'-C3'-C2'	5.66	108.26	102.60
3	A1	1488	G	O4'-C1'-C2'	5.66	112.70	107.60
15	AO	71	ARG	NE-CZ-NH1	5.66	123.13	120.30
25	BB	49	A	C5-C6-N6	5.66	128.23	123.70
25	BB	289	G	N1-C6-O6	-5.66	116.50	119.90
25	BB	307	G	C4-C5-C6	-5.66	115.40	118.80
25	BB	479	A	C5-C6-N1	5.66	120.53	117.70
25	BB	496	G	N1-C2-N3	5.66	127.30	123.90
25	BB	778	G	C8-N9-C4	-5.66	104.14	106.40
25	BB	994	C	N3-C4-C5	5.66	124.17	121.90
25	BB	1031	G	N1-C2-N3	5.66	127.30	123.90
25	BB	1244	A	N3-C4-N9	-5.66	122.87	127.40
25	BB	1658	C	N3-C2-O2	-5.66	117.94	121.90
25	BB	1876	A	C4'-C3'-C2'	-5.66	96.94	102.60
25	BB	2108	A	C1'-O4'-C4'	-5.66	105.37	109.90
25	BB	2320	U	C6-N1-C2	-5.66	117.60	121.00
25	BB	2488	G	C5-N7-C8	-5.66	101.47	104.30
25	BB	2510	C	N1-C2-O2	5.66	122.30	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2564	A	C5-N7-C8	-5.66	101.07	103.90
25	BB	2877	G	N1-C6-O6	-5.66	116.50	119.90
3	A1	746	A	C8-N9-C4	5.66	108.06	105.80
3	A1	795	C	C6-N1-C1'	5.66	127.59	120.80
3	A1	1320	C	O4'-C1'-C2'	-5.66	100.14	105.80
3	A1	1447	A	C2-N3-C4	5.66	113.43	110.60
25	BB	207	A	C2-N3-C4	5.66	113.43	110.60
25	BB	258	G	C6-C5-N7	5.66	133.80	130.40
25	BB	785	G	C5-N7-C8	-5.66	101.47	104.30
25	BB	1661	G	N1-C6-O6	-5.66	116.50	119.90
25	BB	2496	C	N3-C4-N4	-5.66	114.04	118.00
25	BB	2535	G	C5'-C4'-C3'	-5.66	106.94	116.00
3	A1	86	G	N9-C4-C5	5.66	107.66	105.40
3	A1	442	G	N1-C2-N3	5.66	127.30	123.90
3	A1	512	U	C5'-C4'-C3'	-5.66	106.94	116.00
3	A1	611	C	C5-C4-N4	5.66	124.16	120.20
3	A1	845	A	C5-C6-N6	5.66	128.23	123.70
3	A1	1357	A	C4'-C3'-C2'	-5.66	96.94	102.60
3	A1	1399	C	C5-C6-N1	-5.66	118.17	121.00
25	BB	96	C	N1-C2-O2	5.66	122.30	118.90
25	BB	120	U	C1'-O4'-C4'	-5.66	105.37	109.90
25	BB	422	A	C5-C6-N6	5.66	128.23	123.70
25	BB	575	A	C4-C5-C6	-5.66	114.17	117.00
25	BB	1024	G	N7-C8-N9	5.66	115.93	113.10
25	BB	1210	G	N3-C4-C5	-5.66	125.77	128.60
25	BB	1211	C	C5'-C4'-C3'	-5.66	106.94	116.00
25	BB	1659	G	O4'-C4'-C3'	-5.66	98.34	104.00
25	BB	2042	A	C6-N1-C2	-5.66	115.20	118.60
25	BB	2096	C	C2-N3-C4	-5.66	117.07	119.90
25	BB	2281	A	C6-C5-N7	5.66	136.26	132.30
25	BB	2526	G	C5-C6-N1	5.66	114.33	111.50
25	BB	2572	A	N1-C2-N3	-5.66	126.47	129.30
25	BB	2722	G	C6-C5-N7	5.66	133.80	130.40
25	BB	2902	C	C5-C4-N4	5.66	124.16	120.20
2	AM	17	U	C5'-C4'-O4'	5.66	115.89	109.10
3	A1	297	G	O4'-C1'-N9	5.66	112.73	108.20
3	A1	350	G	C8-N9-C4	-5.66	104.14	106.40
3	A1	554	A	C2'-C3'-O3'	5.66	122.75	113.70
3	A1	886	G	O4'-C1'-C2'	-5.66	100.14	105.80
3	A1	964	A	O4'-C1'-N9	5.66	112.73	108.20
24	BA	54	G	C3'-C2'-C1'	5.66	106.03	101.50
25	BB	1951	U	N3-C4-C5	-5.66	111.20	114.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1966	A	C5-N7-C8	-5.66	101.07	103.90
25	BB	1968	G	C3'-C2'-C1'	5.66	106.03	101.50
25	BB	2697	G	C4'-C3'-C2'	-5.66	96.94	102.60
46	BW	7	ARG	NH1-CZ-NH2	-5.66	113.17	119.40
1	AP	36	A	C4-C5-C6	-5.66	114.17	117.00
24	BA	7	G	C6-C5-N7	5.66	133.79	130.40
25	BB	117	G	C4-C5-N7	-5.66	108.54	110.80
25	BB	1119	U	C3'-C2'-C1'	5.66	106.03	101.50
25	BB	1675	C	C5-C4-N4	5.66	124.16	120.20
25	BB	2389	G	C5-C6-N1	5.66	114.33	111.50
3	A1	198	G	N1-C6-O6	-5.66	116.51	119.90
3	A1	257	G	N1-C6-O6	-5.66	116.51	119.90
3	A1	846	G	C5-C6-N1	5.66	114.33	111.50
3	A1	1247	U	C4-C5-C6	5.66	123.09	119.70
3	A1	1293	C	N3-C4-N4	-5.66	114.04	118.00
3	A1	1507	A	C4'-C3'-C2'	-5.66	96.94	102.60
4	AB	87	ASP	CB-CG-OD2	-5.66	113.21	118.30
25	BB	127	A	C6-C5-N7	5.66	136.26	132.30
25	BB	476	G	C1'-O4'-C4'	-5.66	105.38	109.90
25	BB	804	A	C1'-O4'-C4'	-5.66	105.38	109.90
25	BB	1219	U	C1'-O4'-C4'	5.66	114.42	109.90
25	BB	1387	A	C1'-O4'-C4'	-5.66	105.38	109.90
25	BB	1573	G	N3-C4-C5	-5.66	125.77	128.60
25	BB	1683	U	C3'-C2'-C1'	5.66	106.03	101.50
25	BB	1929	G	O4'-C1'-C2'	-5.66	100.14	105.80
25	BB	2089	C	C4-C5-C6	5.66	120.23	117.40
25	BB	2157	G	O3'-P-O5'	5.66	114.75	104.00
25	BB	2752	C	C5'-C4'-O4'	-5.66	102.31	109.10
25	BB	841	G	C5-C6-N1	5.65	114.33	111.50
25	BB	1525	A	N9-C1'-C2'	-5.65	105.78	112.00
25	BB	1639	C	C5-C6-N1	-5.65	118.17	121.00
25	BB	1639	C	O4'-C1'-N1	5.65	112.72	108.20
25	BB	1821	A	C5'-C4'-O4'	5.65	115.89	109.10
25	BB	2119	A	C5'-C4'-O4'	-5.65	102.31	109.10
25	BB	2263	C	N1-C2-O2	5.65	122.29	118.90
25	BB	2324	U	N3-C2-O2	-5.65	118.24	122.20
1	AA	10	G	C5'-C4'-O4'	5.65	115.88	109.10
1	AA	72	C	C5'-C4'-C3'	5.65	125.04	116.00
3	A1	316	C	C4-C5-C6	5.65	120.23	117.40
3	A1	723	U	C5-C4-O4	5.65	129.29	125.90
3	A1	853	C	N3-C4-N4	-5.65	114.04	118.00
3	A1	1007	U	C6-N1-C2	-5.65	117.61	121.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1145	A	C2-N3-C4	5.65	113.43	110.60
25	BB	4	U	N1-C2-N3	5.65	118.29	114.90
25	BB	201	C	C1'-O4'-C4'	-5.65	105.38	109.90
25	BB	303	G	N3-C2-N2	-5.65	115.94	119.90
25	BB	542	C	N3-C2-O2	-5.65	117.94	121.90
25	BB	716	A	N7-C8-N9	-5.65	110.97	113.80
25	BB	866	A	C6-C5-N7	5.65	136.26	132.30
25	BB	965	C	C2-N3-C4	-5.65	117.07	119.90
25	BB	992	C	N1-C2-N3	5.65	123.16	119.20
25	BB	1148	U	C4-C5-C6	5.65	123.09	119.70
1	AP	6	U	C5-C4-O4	-5.65	122.51	125.90
3	A1	74	A	C4'-C3'-C2'	5.65	108.25	102.60
3	A1	350	G	N7-C8-N9	5.65	115.93	113.10
3	A1	1237	C	C6-N1-C2	-5.65	118.04	120.30
3	A1	1462	C	N1-C2-O2	5.65	122.29	118.90
24	BA	35	C	N1-C2-O2	5.65	122.29	118.90
25	BB	723	C	N1-C2-N3	5.65	123.16	119.20
25	BB	1032	A	C4-C5-C6	-5.65	114.17	117.00
25	BB	1422	G	C5-N7-C8	-5.65	101.47	104.30
25	BB	1463	C	C4'-C3'-C2'	-5.65	96.95	102.60
25	BB	1561	C	C6-N1-C2	5.65	122.56	120.30
25	BB	1563	U	C2-N3-C4	-5.65	123.61	127.00
25	BB	2116	G	N3-C4-C5	5.65	131.43	128.60
25	BB	2673	G	C6-N1-C2	-5.65	121.71	125.10
53	B4	87	GLU	OE1-CD-OE2	-5.65	116.52	123.30
3	A1	403	C	C2-N3-C4	-5.65	117.08	119.90
3	A1	493	A	C2-N3-C4	5.65	113.42	110.60
3	A1	601	G	N3-C4-N9	5.65	129.39	126.00
3	A1	657	U	C2-N3-C4	-5.65	123.61	127.00
3	A1	1022	A	C4'-C3'-C2'	-5.65	96.95	102.60
3	A1	1163	A	C6-C5-N7	5.65	136.25	132.30
3	A1	1481	U	N1-C2-N3	5.65	118.29	114.90
17	AR	96	ARG	NH1-CZ-NH2	-5.65	113.19	119.40
25	BB	953	G	C5-N7-C8	5.65	107.12	104.30
25	BB	1354	A	C6-C5-N7	5.65	136.25	132.30
25	BB	2491	U	N3-C2-O2	-5.65	118.25	122.20
25	BB	2579	C	C4'-C3'-C2'	-5.65	96.95	102.60
3	A1	336	A	C5-N7-C8	-5.65	101.08	103.90
3	A1	648	A	C4'-C3'-C2'	-5.65	96.95	102.60
3	A1	813	U	C5-C6-N1	-5.65	119.88	122.70
8	AG	58	ARG	NH1-CZ-NH2	-5.65	113.19	119.40
25	BB	424	G	C5-C6-N1	5.65	114.32	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	770	G	N3-C4-C5	-5.65	125.78	128.60
25	BB	846	U	N1-C2-N3	5.65	118.29	114.90
25	BB	1003	G	C4-C5-N7	-5.65	108.54	110.80
25	BB	1833	C	O4'-C1'-N1	5.65	112.72	108.20
25	BB	2018	G	C5-N7-C8	-5.65	101.48	104.30
25	BB	2189	U	C1'-O4'-C4'	-5.65	105.38	109.90
25	BB	2286	G	N1-C6-O6	-5.65	116.51	119.90
25	BB	2533	U	C5-C4-O4	-5.65	122.51	125.90
25	BB	2803	G	C1'-O4'-C4'	-5.65	105.38	109.90
3	A1	1187	G	C5-N7-C8	-5.65	101.48	104.30
24	BA	71	C	N3-C4-N4	-5.65	114.05	118.00
25	BB	648	G	C2-N3-C4	5.65	114.72	111.90
25	BB	2721	A	C2-N3-C4	5.65	113.42	110.60
1	AP	37	G	C4'-C3'-C2'	-5.64	96.95	102.60
3	A1	98	A	C8-N9-C4	-5.64	103.54	105.80
3	A1	227	G	P-O3'-C3'	5.64	126.47	119.70
3	A1	325	A	N1-C2-N3	-5.64	126.48	129.30
3	A1	988	G	C4-C5-N7	-5.64	108.54	110.80
25	BB	271	G	C6-N1-C2	-5.64	121.71	125.10
25	BB	484	C	C3'-C2'-C1'	5.64	106.02	101.50
25	BB	603	A	C4'-C3'-C2'	-5.64	96.96	102.60
25	BB	689	A	C4'-C3'-C2'	-5.64	96.95	102.60
25	BB	1069	A	O3'-P-O5'	-5.64	93.28	104.00
25	BB	1221	C	N1-C2-O2	5.64	122.29	118.90
25	BB	1712	U	C4'-C3'-C2'	-5.64	96.95	102.60
25	BB	1891	G	O5'-C5'-C4'	-5.64	100.98	111.70
25	BB	2262	U	N1-C2-N3	5.64	118.29	114.90
25	BB	2345	G	N1-C6-O6	-5.64	116.51	119.90
25	BB	2395	C	C6-N1-C2	-5.64	118.04	120.30
25	BB	2577	A	C6-C5-N7	5.64	136.25	132.30
3	A1	339	C	C6-N1-C2	-5.64	118.04	120.30
3	A1	397	A	N9-C4-C5	5.64	108.06	105.80
3	A1	423	G	N7-C8-N9	5.64	115.92	113.10
3	A1	683	G	N7-C8-N9	5.64	115.92	113.10
14	AN	39	GLU	OE1-CD-OE2	-5.64	116.53	123.30
25	BB	752	A	C5-C6-N6	5.64	128.21	123.70
25	BB	775	G	C5'-C4'-O4'	5.64	115.87	109.10
25	BB	1111	A	O4'-C4'-C3'	5.64	110.61	106.10
25	BB	1518	C	N1-C2-N3	5.64	123.15	119.20
25	BB	1717	A	C6-N1-C2	-5.64	115.21	118.60
25	BB	2108	A	N9-C4-C5	5.64	108.06	105.80
25	BB	2416	C	C1'-O4'-C4'	-5.64	105.39	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2544	G	P-O5'-C5'	5.64	129.93	120.90
50	B1	7	ASP	CB-CG-OD2	5.64	123.38	118.30
3	A1	486	U	P-O3'-C3'	5.64	126.47	119.70
3	A1	882	C	N1-C2-O2	5.64	122.28	118.90
25	BB	1871	A	N9-C4-C5	5.64	108.06	105.80
25	BB	2175	C	P-O3'-C3'	5.64	126.47	119.70
51	B2	29	ARG	NE-CZ-NH1	5.64	123.12	120.30
1	AA	33	U	C2-N3-C4	-5.64	123.62	127.00
1	AA	51	G	C3'-C2'-C1'	5.64	106.01	101.50
3	A1	108	G	C8-N9-C4	-5.64	104.14	106.40
3	A1	413	G	C4'-C3'-C2'	-5.64	96.96	102.60
3	A1	414	A	C5'-C4'-O4'	5.64	115.87	109.10
3	A1	812	G	C5'-C4'-C3'	-5.64	106.98	116.00
3	A1	1137	C	O4'-C1'-N1	5.64	112.71	108.20
25	BB	386	G	O4'-C1'-N9	5.64	112.71	108.20
25	BB	848	C	C3'-C2'-C1'	5.64	106.01	101.50
25	BB	916	G	C5-N7-C8	-5.64	101.48	104.30
25	BB	1000	A	O5'-P-OP2	-5.64	100.62	105.70
25	BB	1496	A	C4-C5-C6	-5.64	114.18	117.00
25	BB	2151	U	N1-C2-O2	5.64	126.75	122.80
25	BB	2274	A	N7-C8-N9	5.64	116.62	113.80
25	BB	2421	G	N7-C8-N9	5.64	115.92	113.10
25	BB	2476	A	C1'-O4'-C4'	-5.64	105.39	109.90
25	BB	2525	G	O4'-C1'-C2'	-5.64	100.16	105.80
25	BB	2530	A	N1-C2-N3	-5.64	126.48	129.30
25	BB	2864	G	O4'-C1'-N9	5.64	112.71	108.20
1	AA	1	G	O5'-C5'-C4'	5.64	122.41	111.70
3	A1	963	G	N1-C2-N3	5.64	127.28	123.90
3	A1	1013	G	C1'-O4'-C4'	-5.64	105.39	109.90
24	BA	6	G	C5'-C4'-O4'	5.64	115.87	109.10
24	BA	14	U	C4-C5-C6	5.64	123.08	119.70
25	BB	728	G	C4-C5-C6	-5.64	115.42	118.80
25	BB	1023	U	N1-C2-O2	5.64	126.75	122.80
25	BB	2065	C	N3-C2-O2	-5.64	117.95	121.90
25	BB	2451	A	N1-C2-N3	-5.64	126.48	129.30
1	AE	33	U	N1-C2-N3	5.64	118.28	114.90
3	A1	290	C	C5-C6-N1	-5.64	118.18	121.00
3	A1	300	A	C6-N1-C2	-5.64	115.22	118.60
3	A1	380	G	N7-C8-N9	5.64	115.92	113.10
3	A1	391	G	N1-C2-N2	5.64	121.27	116.20
3	A1	430	A	C4-C5-C6	-5.64	114.18	117.00
3	A1	432	A	N7-C8-N9	5.64	116.62	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	458	U	N3-C2-O2	-5.64	118.25	122.20
3	A1	644	U	N1-C2-O2	5.64	126.75	122.80
3	A1	828	U	O4'-C4'-C3'	5.64	110.61	106.10
3	A1	1357	A	C6-C5-N7	5.64	136.25	132.30
3	A1	1358	U	C4'-C3'-C2'	-5.64	96.96	102.60
3	A1	1450	U	C6-N1-C2	-5.64	117.62	121.00
25	BB	589	U	O4'-C4'-C3'	5.64	110.61	106.10
25	BB	674	G	C4'-C3'-C2'	-5.64	96.96	102.60
25	BB	892	A	O4'-C1'-C2'	-5.64	100.16	105.80
25	BB	1034	G	N3-C4-C5	-5.64	125.78	128.60
25	BB	1806	C	N3-C4-N4	-5.64	114.06	118.00
25	BB	2256	G	C6-N1-C2	-5.64	121.72	125.10
25	BB	2461	A	C5-C6-N1	5.64	120.52	117.70
25	BB	2693	G	N1-C2-N3	5.64	127.28	123.90
1	AE	37	G	C2-N3-C4	-5.63	109.08	111.90
3	A1	410	G	N1-C6-O6	-5.63	116.52	119.90
3	A1	681	A	C6-N1-C2	-5.63	115.22	118.60
3	A1	1183	U	C2-N3-C4	-5.63	123.62	127.00
3	A1	1376	U	C5'-C4'-C3'	-5.63	106.98	116.00
25	BB	19	A	C5'-C4'-C3'	-5.63	106.98	116.00
25	BB	36	G	O4'-C4'-C3'	5.63	110.61	106.10
25	BB	475	C	N1-C1'-C2'	5.63	121.32	114.00
25	BB	617	G	C6-N1-C2	-5.63	121.72	125.10
25	BB	881	G	C5'-C4'-C3'	-5.63	106.98	116.00
25	BB	2196	C	O4'-C1'-N1	5.63	112.71	108.20
25	BB	2392	A	C5-C6-N1	5.63	120.52	117.70
25	BB	2693	G	C6-N1-C2	-5.63	121.72	125.10
25	BB	2815	C	C2-N3-C4	-5.63	117.08	119.90
25	BB	2903	U	N1-C2-O2	5.63	126.74	122.80
1	AA	38	A	OP1-P-O3'	5.63	117.59	105.20
3	A1	239	U	N1-C2-N3	5.63	118.28	114.90
3	A1	539	A	C1'-O4'-C4'	-5.63	105.39	109.90
3	A1	614	C	N3-C4-N4	-5.63	114.06	118.00
3	A1	1052	U	C3'-C2'-C1'	5.63	106.01	101.50
3	A1	1462	C	C6-N1-C2	-5.63	118.05	120.30
24	BA	9	G	C4-C5-N7	5.63	113.05	110.80
25	BB	311	A	C5-C6-N6	5.63	128.21	123.70
25	BB	397	U	N1-C2-N3	5.63	118.28	114.90
25	BB	1489	C	C5-C6-N1	-5.63	118.18	121.00
1	AE	6	U	C2-N3-C4	-5.63	123.62	127.00
3	A1	237	G	C2'-C3'-O3'	5.63	122.71	113.70
3	A1	355	C	C2'-C3'-O3'	5.63	122.71	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	431	A	C6-N1-C2	-5.63	115.22	118.60
3	A1	971	G	N7-C8-N9	5.63	115.92	113.10
3	A1	1233	G	C2'-C3'-O3'	5.63	122.71	113.70
3	A1	1295	U	N3-C4-O4	-5.63	115.46	119.40
25	BB	134	G	N9-C4-C5	5.63	107.65	105.40
25	BB	498	G	N1-C6-O6	-5.63	116.52	119.90
25	BB	867	C	N1-C2-O2	5.63	122.28	118.90
25	BB	1181	U	N3-C2-O2	-5.63	118.26	122.20
3	A1	453	G	N3-C4-N9	5.63	129.38	126.00
3	A1	1045	C	C1'-O4'-C4'	5.63	114.40	109.90
17	AR	150	LYS	C-N-CA	5.63	135.78	121.70
25	BB	304	U	N3-C4-O4	-5.63	115.46	119.40
25	BB	775	G	C5-C6-N1	5.63	114.31	111.50
25	BB	799	G	N7-C8-N9	5.63	115.92	113.10
25	BB	1429	G	N7-C8-N9	5.63	115.92	113.10
25	BB	1587	G	O4'-C1'-N9	-5.63	103.70	108.20
25	BB	2546	U	O5'-C5'-C4'	-5.63	101.00	111.70
25	BB	2626	C	C2-N3-C4	-5.63	117.08	119.90
25	BB	2698	U	C4-C5-C6	5.63	123.08	119.70
25	BB	2862	G	C2-N3-C4	5.63	114.72	111.90
41	BR	30	ARG	NE-CZ-NH2	-5.63	117.48	120.30
49	BZ	122	ARG	NE-CZ-NH1	5.63	123.11	120.30
3	A1	114	U	C5'-C4'-O4'	5.63	115.86	109.10
3	A1	405	U	C5-C6-N1	-5.63	119.89	122.70
3	A1	1032	G	O3'-P-O5'	5.63	114.70	104.00
3	A1	1238	A	C1'-O4'-C4'	-5.63	105.40	109.90
25	BB	47	C	O4'-C4'-C3'	5.63	110.60	106.10
25	BB	71	A	C5-C6-N6	5.63	128.20	123.70
25	BB	565	C	N3-C2-O2	-5.63	117.96	121.90
25	BB	622	G	N1-C6-O6	-5.63	116.52	119.90
25	BB	783	A	C2'-C3'-O3'	5.63	122.70	113.70
25	BB	1071	G	C5-C6-O6	-5.63	125.22	128.60
25	BB	1651	G	C5-C6-N1	5.63	114.31	111.50
25	BB	1851	U	O4'-C1'-N1	5.63	112.70	108.20
25	BB	1893	C	N1-C2-O2	5.63	122.28	118.90
25	BB	1934	C	C2-N1-C1'	5.63	124.99	118.80
25	BB	1934	C	C4'-C3'-O3'	-5.63	97.58	109.40
25	BB	2349	G	C6-N1-C2	-5.63	121.72	125.10
25	BB	2874	C	C6-N1-C2	-5.63	118.05	120.30
3	A1	599	C	C3'-C2'-C1'	5.63	106.00	101.50
3	A1	664	G	C4-C5-N7	-5.63	108.55	110.80
3	A1	691	G	C6-C5-N7	5.63	133.78	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	881	G	N9-C4-C5	5.63	107.65	105.40
3	A1	1470	U	C2-N3-C4	-5.63	123.62	127.00
25	BB	602	A	C6-N1-C2	5.63	121.98	118.60
25	BB	1080	A	N1-C2-N3	-5.63	126.49	129.30
25	BB	1143	A	C5-N7-C8	-5.63	101.09	103.90
25	BB	1280	G	C2-N3-C4	5.63	114.71	111.90
25	BB	1315	C	C1'-O4'-C4'	5.63	114.40	109.90
25	BB	1600	C	C5-C6-N1	-5.63	118.19	121.00
25	BB	1675	C	C4'-C3'-C2'	-5.63	96.97	102.60
25	BB	2557	G	N3-C4-C5	-5.63	125.79	128.60
25	BB	2659	G	C5'-C4'-O4'	5.63	115.85	109.10
25	BB	2776	A	C5'-C4'-O4'	5.63	115.85	109.10
50	B1	8	ALA	CB-CA-C	5.63	118.54	110.10
55	B6	44	TYR	CB-CG-CD1	-5.63	117.62	121.00
1	AE	57	G	C4-C5-C6	-5.62	115.42	118.80
2	AM	8	U	N3-C4-O4	5.62	123.34	119.40
3	A1	64	G	C5-N7-C8	-5.62	101.49	104.30
3	A1	387	U	N3-C4-C5	5.62	117.97	114.60
3	A1	472	U	O4'-C1'-N1	5.62	112.70	108.20
3	A1	735	C	N1-C2-O2	5.62	122.28	118.90
3	A1	1019	A	C1'-O4'-C4'	-5.62	105.40	109.90
3	A1	1114	C	C4'-C3'-C2'	-5.62	96.97	102.60
25	BB	187	G	N1-C6-O6	-5.62	116.53	119.90
25	BB	545	U	C5-C4-O4	-5.62	122.53	125.90
25	BB	663	G	N3-C4-C5	-5.62	125.79	128.60
25	BB	1196	C	C6-N1-C2	5.62	122.55	120.30
25	BB	2249	U	P-O3'-C3'	5.62	126.45	119.70
25	BB	2540	C	C2-N3-C4	-5.62	117.09	119.90
25	BB	2685	G	N7-C8-N9	5.62	115.91	113.10
1	AP	62	A	C6-C5-N7	5.62	136.24	132.30
3	A1	198	G	O4'-C1'-N9	5.62	112.70	108.20
3	A1	377	G	N3-C4-C5	-5.62	125.79	128.60
3	A1	760	G	N3-C4-C5	-5.62	125.79	128.60
3	A1	953	G	N1-C6-O6	-5.62	116.53	119.90
3	A1	1370	G	N3-C2-N2	-5.62	115.96	119.90
25	BB	65	U	C5-C4-O4	-5.62	122.53	125.90
25	BB	317	G	N7-C8-N9	5.62	115.91	113.10
25	BB	359	G	O4'-C1'-N9	5.62	112.70	108.20
25	BB	553	G	N3-C4-N9	5.62	129.37	126.00
25	BB	883	G	N3-C4-C5	-5.62	125.79	128.60
25	BB	1493	C	C2-N3-C4	-5.62	117.09	119.90
25	BB	1706	C	O5'-P-OP1	5.62	117.45	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1766	G	C5-C6-N1	5.62	114.31	111.50
25	BB	1980	G	C5-N7-C8	-5.62	101.49	104.30
25	BB	2176	A	C3'-C2'-C1'	5.62	106.00	101.50
25	BB	2711	A	N1-C2-N3	-5.62	126.49	129.30
25	BB	2713	U	C5'-C4'-C3'	-5.62	107.00	116.00
3	A1	35	G	C3'-C2'-C1'	5.62	106.00	101.50
3	A1	318	G	C6-N1-C2	-5.62	121.73	125.10
3	A1	635	A	N1-C2-N3	-5.62	126.49	129.30
3	A1	764	C	O4'-C4'-C3'	5.62	110.60	106.10
3	A1	1233	G	C6-N1-C2	-5.62	121.73	125.10
3	A1	1325	C	O4'-C1'-C2'	5.62	112.66	107.60
6	AD	35	ARG	NH1-CZ-NH2	-5.62	113.22	119.40
24	BA	60	C	C3'-C2'-C1'	5.62	106.00	101.50
25	BB	550	C	O4'-C1'-N1	5.62	112.70	108.20
25	BB	1742	U	C3'-C2'-C1'	5.62	106.00	101.50
25	BB	1790	C	C6-N1-C2	-5.62	118.05	120.30
25	BB	1804	C	C5'-C4'-O4'	5.62	115.84	109.10
25	BB	1953	A	O4'-C4'-C3'	5.62	110.60	106.10
25	BB	2102	G	N7-C8-N9	-5.62	110.29	113.10
25	BB	2199	A	O4'-C4'-C3'	5.62	110.60	106.10
25	BB	2209	G	N1-C6-O6	-5.62	116.53	119.90
25	BB	2386	A	C2-N3-C4	5.62	113.41	110.60
25	BB	2397	G	C3'-C2'-C1'	5.62	106.00	101.50
25	BB	2476	A	N1-C2-N3	-5.62	126.49	129.30
25	BB	2772	C	O5'-P-OP2	-5.62	100.64	105.70
25	BB	2861	U	C5-C4-O4	5.62	129.27	125.90
3	A1	198	G	C5'-C4'-C3'	-5.62	107.01	116.00
3	A1	827	U	C2-N1-C1'	5.62	124.44	117.70
3	A1	832	G	O4'-C1'-N9	-5.62	103.70	108.20
3	A1	959	A	O4'-C1'-N9	5.62	112.70	108.20
25	BB	381	G	P-O3'-C3'	5.62	126.44	119.70
25	BB	735	A	C4'-C3'-C2'	-5.62	96.98	102.60
25	BB	1846	G	C5-C6-N1	5.62	114.31	111.50
1	AA	44	A	O3'-P-O5'	5.62	114.68	104.00
3	A1	237	G	C6-N1-C2	-5.62	121.73	125.10
3	A1	546	A	C5'-C4'-C3'	-5.62	107.01	116.00
3	A1	975	A	C5-C6-N6	5.62	128.20	123.70
3	A1	1128	C	N3-C4-C5	5.62	124.15	121.90
3	A1	1202	U	C1'-O4'-C4'	-5.62	105.41	109.90
5	AC	73	VAL	CG1-CB-CG2	-5.62	101.91	110.90
25	BB	193	U	O4'-C1'-C2'	5.62	112.66	107.60
25	BB	559	G	N3-C4-N9	5.62	129.37	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	559	G	N9-C4-C5	-5.62	103.15	105.40
25	BB	1478	G	C5'-C4'-C3'	-5.62	107.01	116.00
25	BB	2472	G	C5'-C4'-O4'	-5.62	102.36	109.10
25	BB	2779	U	C5'-C4'-O4'	-5.62	102.36	109.10
3	A1	1164	G	C1'-O4'-C4'	-5.62	105.41	109.90
20	AU	30	MET	C-N-CA	5.62	135.74	121.70
25	BB	171	U	N3-C4-C5	5.62	117.97	114.60
25	BB	1412	U	C4-C5-C6	5.62	123.07	119.70
25	BB	2116	G	C5'-C4'-O4'	-5.62	102.36	109.10
25	BB	2816	G	C6-C5-N7	5.62	133.77	130.40
25	BB	2902	C	O4'-C4'-C3'	5.62	110.59	106.10
1	AA	27	C	C5-C4-N4	-5.62	116.27	120.20
1	AP	14	A	C6-C5-N7	5.62	136.23	132.30
3	A1	108	G	N7-C8-N9	5.62	115.91	113.10
3	A1	425	G	C8-N9-C4	-5.62	104.15	106.40
3	A1	831	A	C4-C5-N7	5.62	113.51	110.70
3	A1	864	A	C5'-C4'-O4'	5.62	115.84	109.10
3	A1	935	A	O3'-P-O5'	5.62	114.67	104.00
3	A1	1296	C	N3-C4-N4	-5.62	114.07	118.00
3	A1	1470	U	N1-C2-N3	5.62	118.27	114.90
24	BA	30	C	O4'-C4'-C3'	5.62	110.59	106.10
24	BA	66	A	OP1-P-OP2	-5.62	111.18	119.60
25	BB	251	A	C6-C5-N7	5.62	136.23	132.30
25	BB	376	G	N3-C2-N2	-5.62	115.97	119.90
25	BB	2406	A	N1-C2-N3	-5.62	126.49	129.30
25	BB	2421	G	N1-C2-N2	-5.62	111.15	116.20
25	BB	2458	G	N1-C2-N2	-5.62	111.14	116.20
25	BB	2615	U	C4'-C3'-C2'	-5.62	96.98	102.60
25	BB	2643	G	O4'-C1'-N9	5.62	112.69	108.20
25	BB	2811	G	C8-N9-C1'	5.62	134.30	127.00
52	B3	2	ARG	NH1-CZ-NH2	-5.62	113.22	119.40
1	AA	50	U	C5-C6-N1	-5.61	119.89	122.70
1	AE	2	C	C6-N1-C2	-5.61	118.06	120.30
3	A1	111	G	C2-N3-C4	-5.61	109.09	111.90
3	A1	343	U	C4-C5-C6	5.61	123.07	119.70
3	A1	556	C	C6-N1-C2	-5.61	118.06	120.30
3	A1	646	G	C8-N9-C4	-5.61	104.16	106.40
3	A1	1156	G	N9-C4-C5	-5.61	103.16	105.40
3	A1	1499	A	C6-C5-N7	5.61	136.23	132.30
25	BB	200	U	C4'-C3'-C2'	-5.61	96.99	102.60
25	BB	230	G	N9-C4-C5	5.61	107.65	105.40
25	BB	364	C	C4-C5-C6	5.61	120.21	117.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	430	A	C6-C5-N7	5.61	136.23	132.30
25	BB	702	U	O4'-C4'-C3'	-5.61	98.39	104.00
25	BB	713	G	C4'-C3'-C2'	-5.61	96.99	102.60
25	BB	938	G	O4'-C1'-N9	5.61	112.69	108.20
25	BB	1083	U	N3-C2-O2	-5.61	118.27	122.20
25	BB	1234	U	C3'-C2'-C1'	5.61	105.99	101.50
25	BB	1326	U	C5-C4-O4	-5.61	122.53	125.90
25	BB	1471	G	C3'-C2'-C1'	5.61	105.99	101.50
25	BB	2281	A	C4-C5-C6	-5.61	114.19	117.00
25	BB	2480	C	C5'-C4'-O4'	5.61	115.83	109.10
25	BB	2722	G	C5-C6-N1	5.61	114.31	111.50
30	BG	72	ASP	CB-CG-OD2	5.61	123.35	118.30
33	BJ	54	ARG	NH1-CZ-NH2	-5.61	113.22	119.40
3	A1	1065	U	O4'-C1'-N1	5.61	112.69	108.20
15	AO	21	TRP	CE2-CD2-CG	5.61	111.79	107.30
25	BB	61	C	O4'-C1'-C2'	-5.61	100.19	105.80
25	BB	217	A	N3-C4-N9	-5.61	122.91	127.40
25	BB	547	A	N7-C8-N9	5.61	116.61	113.80
25	BB	833	A	C4-C5-C6	-5.61	114.19	117.00
25	BB	1251	C	C1'-O4'-C4'	-5.61	105.41	109.90
25	BB	2136	G	C6-N1-C2	-5.61	121.73	125.10
25	BB	2305	U	C3'-C2'-C1'	5.61	105.99	101.50
25	BB	2318	G	C2-N3-C4	5.61	114.71	111.90
3	A1	481	G	P-O3'-C3'	5.61	126.43	119.70
3	A1	574	A	N1-C2-N3	-5.61	126.50	129.30
3	A1	692	U	C4-C5-C6	5.61	123.07	119.70
3	A1	812	G	C5'-C4'-O4'	5.61	115.83	109.10
3	A1	970	C	N3-C2-O2	-5.61	117.97	121.90
3	A1	1094	G	N7-C8-N9	5.61	115.91	113.10
3	A1	1371	G	C1'-O4'-C4'	-5.61	105.41	109.90
3	A1	1502	A	C2-N3-C4	5.61	113.41	110.60
25	BB	406	G	C1'-O4'-C4'	-5.61	105.41	109.90
25	BB	531	C	N1-C2-O2	5.61	122.27	118.90
25	BB	540	C	P-O3'-C3'	5.61	126.43	119.70
25	BB	864	G	N1-C6-O6	-5.61	116.53	119.90
25	BB	875	G	N3-C2-N2	-5.61	115.97	119.90
25	BB	1251	C	N3-C4-C5	5.61	124.14	121.90
25	BB	1325	U	C6-N1-C2	-5.61	117.63	121.00
25	BB	2510	C	N3-C4-N4	-5.61	114.07	118.00
25	BB	2579	C	C2-N3-C4	-5.61	117.09	119.90
25	BB	2623	G	C6-C5-N7	5.61	133.77	130.40
3	A1	923	A	O4'-C1'-C2'	-5.61	100.19	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1446	C	O4'-C1'-N1	5.61	112.69	108.20
25	BB	1622	G	C6-N1-C2	-5.61	121.73	125.10
25	BB	2578	G	N1-C2-N3	5.61	127.27	123.90
25	BB	2837	A	C1'-O4'-C4'	5.61	114.39	109.90
50	B1	141	MET	C-N-CA	5.61	135.72	121.70
3	A1	142	G	N7-C8-N9	5.61	115.90	113.10
3	A1	197	A	C4'-C3'-C2'	-5.61	96.99	102.60
3	A1	340	U	N1-C2-N3	5.61	118.26	114.90
3	A1	756	C	C5-C4-N4	-5.61	116.27	120.20
3	A1	1099	G	C8-N9-C4	-5.61	104.16	106.40
3	A1	1237	C	C5'-C4'-C3'	-5.61	107.03	116.00
25	BB	1171	G	N1-C6-O6	-5.61	116.53	119.90
25	BB	1602	U	P-O3'-C3'	5.61	126.43	119.70
25	BB	1670	C	N1-C2-O2	5.61	122.26	118.90
25	BB	1952	A	O4'-C4'-C3'	5.61	110.59	106.10
25	BB	1957	C	O4'-C1'-N1	5.61	112.69	108.20
25	BB	2352	A	C6-N1-C2	-5.61	115.23	118.60
3	A1	551	U	C4-C5-C6	5.61	123.06	119.70
3	A1	888	G	C4-C5-C6	-5.61	115.44	118.80
3	A1	1255	G	C4'-C3'-C2'	-5.61	97.00	102.60
3	A1	1410	A	O4'-C1'-N9	5.61	112.68	108.20
3	A1	1533	C	N1-C2-O2	5.61	122.26	118.90
8	AG	23	ARG	NH1-CZ-NH2	-5.61	113.23	119.40
25	BB	370	G	N3-C4-N9	5.61	129.36	126.00
25	BB	454	A	C5-C6-N6	5.61	128.19	123.70
25	BB	1025	G	O3'-P-O5'	-5.61	93.35	104.00
25	BB	2385	C	N3-C4-C5	5.61	124.14	121.90
25	BB	2387	U	C5-C6-N1	-5.61	119.90	122.70
25	BB	2860	A	O4'-C1'-N9	5.61	112.68	108.20
3	A1	1482	G	O4'-C4'-C3'	5.60	110.58	106.10
24	BA	105	G	N3-C2-N2	-5.60	115.98	119.90
25	BB	209	C	C3'-C2'-C1'	5.60	105.98	101.50
25	BB	2388	A	C2-N3-C4	5.60	113.40	110.60
25	BB	2531	A	N7-C8-N9	5.60	116.60	113.80
37	BN	12	ARG	NE-CZ-NH1	5.60	123.10	120.30
3	A1	645	G	N3-C4-C5	-5.60	125.80	128.60
3	A1	1011	C	N1-C2-N3	5.60	123.12	119.20
3	A1	1069	C	N1-C2-O2	5.60	122.26	118.90
3	A1	1077	G	N3-C4-C5	-5.60	125.80	128.60
3	A1	1217	C	N3-C4-N4	-5.60	114.08	118.00
3	A1	1280	A	C5'-C4'-O4'	5.60	115.82	109.10
7	AF	85	TYR	O-C-N	-5.60	113.74	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	29	A	C4'-C3'-C2'	-5.60	97.00	102.60
24	BA	105	G	C5'-C4'-O4'	5.60	115.82	109.10
25	BB	1693	U	C3'-C2'-C1'	5.60	105.98	101.50
25	BB	2110	G	C6-C5-N7	5.60	133.76	130.40
3	A1	502	A	C6-C5-N7	5.60	136.22	132.30
3	A1	537	G	C6-N1-C2	-5.60	121.74	125.10
3	A1	630	A	C5'-C4'-O4'	5.60	115.82	109.10
3	A1	709	U	N3-C2-O2	-5.60	118.28	122.20
3	A1	882	C	C5-C6-N1	-5.60	118.20	121.00
3	A1	1188	A	C5-C6-N6	5.60	128.18	123.70
25	BB	325	G	N3-C4-C5	-5.60	125.80	128.60
25	BB	363	G	C5-C6-O6	5.60	131.96	128.60
25	BB	886	A	C5'-C4'-O4'	5.60	115.82	109.10
25	BB	1673	G	C5-C6-N1	5.60	114.30	111.50
25	BB	2003	A	C5-C6-N6	5.60	128.18	123.70
25	BB	2435	A	C5'-C4'-O4'	5.60	115.82	109.10
25	BB	2602	A	N1-C6-N6	-5.60	115.24	118.60
2	AM	19	U	N1-C2-N3	5.60	118.26	114.90
3	A1	81	A	C8-N9-C4	-5.60	103.56	105.80
3	A1	98	A	N9-C4-C5	5.60	108.04	105.80
3	A1	103	U	N1-C2-N3	5.60	118.26	114.90
3	A1	148	G	C4-N9-C1'	-5.60	119.22	126.50
3	A1	618	C	C1'-O4'-C4'	-5.60	105.42	109.90
3	A1	959	A	C6-C5-N7	5.60	136.22	132.30
3	A1	1031	C	C3'-C2'-C1'	-5.60	97.02	101.50
3	A1	1302	C	C2-N1-C1'	5.60	124.96	118.80
3	A1	1365	G	N7-C8-N9	5.60	115.90	113.10
3	A1	1421	G	C5-C6-O6	5.60	131.96	128.60
24	BA	101	A	C4'-C3'-C2'	-5.60	97.00	102.60
25	BB	304	U	P-O3'-C3'	5.60	126.42	119.70
25	BB	463	G	P-O3'-C3'	5.60	126.42	119.70
25	BB	562	U	N1-C1'-C2'	5.60	121.28	114.00
25	BB	1815	A	C5-C6-N6	5.60	128.18	123.70
25	BB	2274	A	C5-N7-C8	-5.60	101.10	103.90
25	BB	2571	U	C4-C5-C6	5.60	123.06	119.70
25	BB	2864	G	C6-N1-C2	-5.60	121.74	125.10
1	AP	53	G	N9-C4-C5	5.60	107.64	105.40
3	A1	354	G	OP2-P-O3'	5.60	117.52	105.20
3	A1	696	A	C8-N9-C4	-5.60	103.56	105.80
3	A1	874	G	C6-C5-N7	5.60	133.76	130.40
3	A1	1008	U	C5'-C4'-C3'	-5.60	107.05	116.00
3	A1	1223	C	N3-C4-N4	-5.60	114.08	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AX	97	ASP	CB-CG-OD1	5.60	123.34	118.30
25	BB	6	A	C5'-C4'-C3'	-5.60	107.04	116.00
25	BB	57	C	N3-C2-O2	-5.60	117.98	121.90
25	BB	148	U	O4'-C1'-C2'	-5.60	100.20	105.80
25	BB	331	C	C5'-C4'-O4'	5.60	115.82	109.10
25	BB	505	A	C4-C5-C6	-5.60	114.20	117.00
25	BB	544	C	N3-C2-O2	-5.60	117.98	121.90
25	BB	1573	G	C8-N9-C4	-5.60	104.16	106.40
25	BB	2065	C	C2-N3-C4	-5.60	117.10	119.90
25	BB	2290	G	N1-C6-O6	-5.60	116.54	119.90
25	BB	2458	G	O4'-C4'-C3'	5.60	110.58	106.10
25	BB	2826	A	C6-C5-N7	5.60	136.22	132.30
30	BG	90	ARG	NH1-CZ-NH2	-5.60	113.24	119.40
32	BI	98	TYR	CB-CG-CD1	5.60	124.36	121.00
1	AA	17	U	N3-C4-O4	-5.60	115.48	119.40
3	A1	731	G	C5'-C4'-O4'	5.60	115.81	109.10
3	A1	814	A	N7-C8-N9	5.60	116.60	113.80
17	AR	72	ARG	NE-CZ-NH2	-5.60	117.50	120.30
25	BB	366	C	N3-C4-N4	-5.60	114.08	118.00
25	BB	1122	G	P-O3'-C3'	-5.60	112.98	119.70
25	BB	1915	U	C2'-C3'-O3'	5.60	122.65	113.70
25	BB	2278	A	C2-N3-C4	5.60	113.40	110.60
3	A1	172	A	C6-N1-C2	-5.59	115.24	118.60
3	A1	454	G	C4-C5-C6	-5.59	115.44	118.80
3	A1	1366	C	N3-C4-C5	5.59	124.14	121.90
24	BA	35	C	C2-N1-C1'	5.59	124.95	118.80
24	BA	69	G	N3-C2-N2	-5.59	115.98	119.90
25	BB	516	C	N1-C2-O2	5.59	122.26	118.90
25	BB	912	C	C3'-C2'-C1'	5.59	105.98	101.50
25	BB	1044	C	N3-C4-C5	5.59	124.14	121.90
25	BB	1238	G	C5-N7-C8	-5.59	101.50	104.30
39	BP	83	ALA	CB-CA-C	5.59	118.49	110.10
51	B2	114	ARG	NE-CZ-NH2	-5.59	117.50	120.30
3	A1	1464	U	N3-C4-C5	-5.59	111.24	114.60
25	BB	401	A	C1'-O4'-C4'	-5.59	105.43	109.90
25	BB	629	G	C4-C5-C6	-5.59	115.44	118.80
25	BB	903	C	C4-C5-C6	-5.59	114.60	117.40
25	BB	1102	C	N1-C2-O2	5.59	122.26	118.90
25	BB	1296	G	N7-C8-N9	5.59	115.90	113.10
25	BB	2397	G	N3-C4-N9	5.59	129.36	126.00
1	AP	47	U	C2'-C3'-O3'	5.59	122.65	113.70
3	A1	88	U	C2'-C3'-O3'	5.59	122.64	113.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	257	G	N1-C2-N2	5.59	121.23	116.20
3	A1	346	G	C6-C5-N7	5.59	133.75	130.40
3	A1	533	A	P-O3'-C3'	5.59	126.41	119.70
3	A1	1205	U	N1-C2-N3	5.59	118.25	114.90
13	AL	55	GLN	OE1-CD-NE2	-5.59	109.04	121.90
25	BB	236	C	C6-N1-C2	-5.59	118.06	120.30
25	BB	346	A	C4-C5-C6	-5.59	114.20	117.00
25	BB	653	U	C5'-C4'-O4'	-5.59	102.39	109.10
25	BB	843	G	O5'-P-OP2	-5.59	100.67	105.70
25	BB	870	U	N1-C2-N3	5.59	118.25	114.90
25	BB	910	A	C1'-O4'-C4'	-5.59	105.43	109.90
25	BB	1122	G	O5'-C5'-C4'	-5.59	101.08	111.70
25	BB	1635	A	C5-C6-N6	5.59	128.17	123.70
25	BB	1739	A	O5'-P-OP2	-5.59	100.67	105.70
25	BB	1916	A	O4'-C4'-C3'	5.59	110.57	106.10
25	BB	2191	A	O5'-P-OP2	-5.59	100.67	105.70
25	BB	2351	G	N9-C4-C5	5.59	107.64	105.40
25	BB	2451	A	C6-C5-N7	5.59	136.21	132.30
1	AA	4	G	C5-N7-C8	-5.59	101.50	104.30
3	A1	51	A	N9-C4-C5	5.59	108.04	105.80
3	A1	188	C	C5-C4-N4	5.59	124.11	120.20
3	A1	1294	G	C5'-C4'-O4'	5.59	115.81	109.10
25	BB	148	U	C5-C6-N1	-5.59	119.91	122.70
25	BB	274	C	C6-N1-C2	-5.59	118.06	120.30
25	BB	1175	A	C4-C5-C6	-5.59	114.21	117.00
25	BB	1814	G	N3-C4-N9	5.59	129.35	126.00
25	BB	2090	A	O4'-C1'-N9	5.59	112.67	108.20
25	BB	2351	G	C8-N9-C4	-5.59	104.16	106.40
25	BB	2482	A	O3'-P-O5'	-5.59	93.38	104.00
25	BB	2753	A	C4-C5-N7	5.59	113.50	110.70
54	B5	23	VAL	CG1-CB-CG2	-5.59	101.96	110.90
3	A1	170	U	C4-C5-C6	5.59	123.05	119.70
3	A1	715	A	C3'-C2'-C1'	5.59	105.97	101.50
3	A1	728	A	C3'-C2'-C1'	5.59	105.97	101.50
3	A1	1201	A	O5'-P-OP1	5.59	117.41	110.70
3	A1	1465	A	C6-N1-C2	-5.59	115.25	118.60
3	A1	1525	G	N1-C6-O6	-5.59	116.55	119.90
25	BB	233	A	O4'-C4'-C3'	5.59	110.57	106.10
25	BB	1647	U	C5-C6-N1	-5.59	119.91	122.70
25	BB	2137	U	C3'-C2'-C1'	-5.59	97.03	101.50
25	BB	2256	G	OP1-P-OP2	-5.59	111.22	119.60
25	BB	2811	G	C4-C5-N7	-5.59	108.56	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	187	G	N1-C2-N3	5.59	127.25	123.90
3	A1	188	C	C4'-C3'-C2'	-5.59	97.01	102.60
3	A1	326	G	C8-N9-C4	-5.59	104.17	106.40
3	A1	463	U	C5-C4-O4	-5.59	122.55	125.90
3	A1	903	G	N3-C4-C5	-5.59	125.81	128.60
3	A1	1020	G	N7-C8-N9	5.59	115.89	113.10
3	A1	1331	G	N1-C2-N3	5.59	127.25	123.90
25	BB	176	A	C4-C5-N7	5.59	113.49	110.70
25	BB	201	C	C4'-C3'-C2'	-5.59	97.01	102.60
25	BB	263	G	C5'-C4'-O4'	5.59	115.80	109.10
25	BB	644	A	OP2-P-O3'	5.59	117.49	105.20
25	BB	852	U	N1-C2-N3	5.59	118.25	114.90
25	BB	1301	A	O4'-C1'-N9	5.59	112.67	108.20
25	BB	1482	G	C5-C6-N1	5.59	114.29	111.50
25	BB	2079	U	N3-C2-O2	-5.59	118.29	122.20
25	BB	2339	C	N3-C4-C5	5.59	124.13	121.90
3	A1	808	C	OP1-P-OP2	-5.58	111.22	119.60
3	A1	853	C	N3-C4-C5	5.58	124.13	121.90
3	A1	1085	U	C1'-O4'-C4'	5.58	114.37	109.90
25	BB	105	C	C1'-O4'-C4'	-5.58	105.43	109.90
25	BB	1623	G	C5-C6-O6	5.58	131.95	128.60
25	BB	1635	A	N9-C4-C5	5.58	108.03	105.80
25	BB	2017	U	O4'-C1'-N1	5.58	112.67	108.20
25	BB	2140	G	N9-C1'-C2'	5.58	121.26	114.00
25	BB	2341	G	C5-C6-O6	5.58	131.95	128.60
32	BI	112	ARG	CD-NE-CZ	5.58	131.42	123.60
3	A1	109	A	C6-N1-C2	-5.58	115.25	118.60
3	A1	830	G	N7-C8-N9	5.58	115.89	113.10
3	A1	1263	C	C5-C6-N1	-5.58	118.21	121.00
24	BA	20	G	C5'-C4'-O4'	5.58	115.80	109.10
24	BA	35	C	O4'-C1'-N1	5.58	112.67	108.20
25	BB	145	C	N3-C4-N4	-5.58	114.09	118.00
25	BB	711	G	C5-N7-C8	-5.58	101.51	104.30
25	BB	743	A	O4'-C1'-N9	-5.58	103.73	108.20
25	BB	986	C	O4'-C1'-N1	5.58	112.67	108.20
25	BB	1019	U	N3-C2-O2	-5.58	118.29	122.20
25	BB	1210	G	C6-C5-N7	5.58	133.75	130.40
25	BB	1238	G	O3'-P-O5'	5.58	114.61	104.00
25	BB	1523	U	C5-C6-N1	-5.58	119.91	122.70
25	BB	1644	C	C6-N1-C2	-5.58	118.07	120.30
25	BB	2276	G	N3-C4-C5	-5.58	125.81	128.60
25	BB	2486	C	N3-C4-N4	-5.58	114.09	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2496	C	O5'-P-OP2	-5.58	100.67	105.70
25	BB	2506	U	C4-C5-C6	5.58	123.05	119.70
25	BB	2621	G	C8-N9-C4	-5.58	104.17	106.40
25	BB	2725	A	C6-N1-C2	-5.58	115.25	118.60
1	AE	50	U	C5-C6-N1	-5.58	119.91	122.70
3	A1	90	C	O4'-C1'-N1	5.58	112.67	108.20
3	A1	171	A	C5'-C4'-C3'	-5.58	107.07	116.00
3	A1	363	A	N7-C8-N9	5.58	116.59	113.80
24	BA	54	G	C2-N3-C4	5.58	114.69	111.90
25	BB	90	U	N3-C4-C5	5.58	117.95	114.60
25	BB	1226	A	C2-N3-C4	5.58	113.39	110.60
25	BB	1558	C	C2-N3-C4	-5.58	117.11	119.90
25	BB	1581	G	N3-C2-N2	-5.58	115.99	119.90
25	BB	1704	C	N1-C2-O2	5.58	122.25	118.90
25	BB	1839	G	N7-C8-N9	5.58	115.89	113.10
25	BB	2227	A	C2-N3-C4	5.58	113.39	110.60
25	BB	2227	A	C3'-C2'-C1'	5.58	105.97	101.50
25	BB	2529	G	N9-C4-C5	5.58	107.63	105.40
25	BB	2790	U	C4'-C3'-C2'	-5.58	97.02	102.60
1	AA	11	C	C6-N1-C2	-5.58	118.07	120.30
3	A1	1057	G	O4'-C1'-N9	-5.58	103.74	108.20
3	A1	1281	C	C4'-C3'-C2'	-5.58	97.02	102.60
3	A1	1316	G	C8-N9-C4	-5.58	104.17	106.40
25	BB	1347	A	C5-C6-N6	5.58	128.16	123.70
25	BB	1662	U	C5-C6-N1	-5.58	119.91	122.70
25	BB	2454	G	O4'-C1'-N9	5.58	112.66	108.20
25	BB	2696	U	C1'-O4'-C4'	-5.58	105.44	109.90
3	A1	98	A	C3'-C2'-C1'	5.58	105.96	101.50
3	A1	204	G	N3-C4-C5	-5.58	125.81	128.60
3	A1	838	G	C5-N7-C8	-5.58	101.51	104.30
3	A1	958	A	C8-N9-C4	5.58	108.03	105.80
3	A1	1472	U	C1'-O4'-C4'	-5.58	105.44	109.90
25	BB	646	U	O4'-C1'-N1	5.58	112.66	108.20
25	BB	1134	A	O4'-C4'-C3'	5.58	110.56	106.10
25	BB	1483	G	C5-C6-N1	5.58	114.29	111.50
25	BB	1543	G	N9-C1'-C2'	-5.58	105.86	112.00
25	BB	1588	G	N9-C4-C5	5.58	107.63	105.40
25	BB	2064	C	C5'-C4'-C3'	5.58	124.93	116.00
25	BB	2388	A	C5-C6-N1	5.58	120.49	117.70
25	BB	2702	G	C1'-O4'-C4'	-5.58	105.44	109.90
25	BB	2706	A	C4-C5-C6	-5.58	114.21	117.00
25	BB	2864	G	C5'-C4'-O4'	5.58	115.80	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
44	BU	23	THR	CA-CB-CG2	5.58	120.21	112.40
1	AA	50	U	N1-C2-N3	5.58	118.25	114.90
3	A1	682	G	C5'-C4'-O4'	5.58	115.79	109.10
25	BB	598	U	O4'-C1'-N1	5.58	112.66	108.20
25	BB	913	U	C1'-O4'-C4'	-5.58	105.44	109.90
25	BB	1133	A	C3'-C2'-C1'	-5.58	97.04	101.50
25	BB	2452	C	O5'-C5'-C4'	5.58	122.30	111.70
30	BG	69	ARG	NE-CZ-NH2	-5.58	117.51	120.30
50	B1	102	ARG	NH1-CZ-NH2	-5.58	113.27	119.40
1	AP	1	G	O4'-C1'-N9	5.58	112.66	108.20
1	AE	40	C	N3-C2-O2	-5.58	118.00	121.90
3	A1	76	G	O5'-C5'-C4'	-5.58	101.11	111.70
3	A1	612	C	P-O3'-C3'	5.58	126.39	119.70
3	A1	1257	A	O4'-C1'-C2'	-5.58	100.22	105.80
25	BB	488	G	N3-C4-C5	-5.58	125.81	128.60
25	BB	757	G	C5-C6-N1	5.58	114.29	111.50
25	BB	1427	A	C2-N3-C4	5.58	113.39	110.60
25	BB	1785	A	C1'-O4'-C4'	-5.58	105.44	109.90
25	BB	2072	C	C5-C6-N1	-5.58	118.21	121.00
25	BB	2709	G	N1-C2-N3	5.58	127.25	123.90
1	AA	56	C	N3-C2-O2	-5.57	118.00	121.90
3	A1	44	A	C5'-C4'-C3'	-5.57	107.08	116.00
3	A1	80	A	C6-C5-N7	5.57	136.20	132.30
3	A1	202	G	N9-C4-C5	5.57	107.63	105.40
3	A1	782	A	N9-C1'-C2'	-5.57	105.87	112.00
18	AS	127	TYR	CB-CG-CD2	5.57	124.34	121.00
24	BA	51	G	C6-C5-N7	5.57	133.74	130.40
25	BB	276	U	C4'-C3'-C2'	-5.57	97.03	102.60
25	BB	376	G	O4'-C1'-N9	5.57	112.66	108.20
25	BB	433	C	C5'-C4'-O4'	5.57	115.79	109.10
25	BB	576	U	O3'-P-O5'	5.57	114.59	104.00
25	BB	935	C	C5'-C4'-O4'	5.57	115.79	109.10
25	BB	998	C	N3-C2-O2	-5.57	118.00	121.90
25	BB	1901	A	N7-C8-N9	-5.57	111.01	113.80
25	BB	2095	A	C5'-C4'-O4'	5.57	115.79	109.10
25	BB	2531	A	C3'-C2'-C1'	5.57	105.96	101.50
25	BB	2700	A	C6-N1-C2	-5.57	115.26	118.60
25	BB	2737	G	N1-C6-O6	-5.57	116.56	119.90
25	BB	2760	C	C5'-C4'-O4'	5.57	115.79	109.10
1	AE	37	G	C6-C5-N7	5.57	133.74	130.40
3	A1	628	G	C2'-C3'-O3'	5.57	122.62	113.70
3	A1	957	U	O4'-C1'-N1	5.57	112.66	108.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1053	G	C4-C5-C6	-5.57	115.46	118.80
9	AH	59	VAL	CA-CB-CG1	5.57	119.26	110.90
24	BA	43	C	C6-N1-C2	-5.57	118.07	120.30
25	BB	371	A	C5'-C4'-C3'	-5.57	107.09	116.00
25	BB	2366	A	N1-C2-N3	-5.57	126.51	129.30
25	BB	2694	G	N1-C6-O6	-5.57	116.56	119.90
1	AE	42	G	N1-C6-O6	-5.57	116.56	119.90
3	A1	96	U	O4'-C1'-N1	5.57	112.66	108.20
3	A1	523	A	C3'-C2'-C1'	5.57	105.96	101.50
3	A1	659	U	C5-C4-O4	-5.57	122.56	125.90
3	A1	734	G	N1-C2-N3	5.57	127.24	123.90
3	A1	1077	G	N9-C1'-C2'	-5.57	105.87	112.00
3	A1	1347	G	N9-C4-C5	5.57	107.63	105.40
25	BB	135	U	C2'-C3'-O3'	5.57	122.61	113.70
25	BB	313	G	N3-C4-C5	-5.57	125.81	128.60
25	BB	570	G	N7-C8-N9	5.57	115.89	113.10
25	BB	929	U	N3-C2-O2	-5.57	118.30	122.20
25	BB	999	U	C2-N3-C4	-5.57	123.66	127.00
25	BB	1063	G	N1-C2-N3	5.57	127.24	123.90
25	BB	1136	G	C5-C6-O6	5.57	131.94	128.60
25	BB	1208	C	N1-C1'-C2'	-5.57	105.87	112.00
25	BB	1395	A	C5-C6-N6	5.57	128.16	123.70
25	BB	1992	G	C5-C6-N1	5.57	114.28	111.50
25	BB	2043	C	C2'-C3'-O3'	5.57	122.61	113.70
25	BB	2546	U	O4'-C1'-N1	5.57	112.66	108.20
25	BB	2859	G	N7-C8-N9	5.57	115.89	113.10
3	A1	1150	A	N1-C6-N6	-5.57	115.26	118.60
25	BB	37	C	C5'-C4'-C3'	-5.57	107.09	116.00
25	BB	148	U	C5'-C4'-O4'	-5.57	102.42	109.10
25	BB	226	A	C5'-C4'-C3'	-5.57	107.09	116.00
25	BB	440	C	C6-N1-C2	-5.57	118.07	120.30
25	BB	713	G	C6-C5-N7	5.57	133.74	130.40
25	BB	799	G	O4'-C1'-N9	5.57	112.66	108.20
25	BB	1790	C	N3-C4-C5	5.57	124.13	121.90
25	BB	2140	G	N1-C6-O6	-5.57	116.56	119.90
25	BB	2725	A	C4'-C3'-C2'	-5.57	97.03	102.60
1	AA	21	A	C6-N1-C2	-5.57	115.26	118.60
3	A1	15	G	C3'-C2'-C1'	-5.57	97.05	101.50
3	A1	40	C	C5-C6-N1	-5.57	118.22	121.00
3	A1	65	A	C5-N7-C8	-5.57	101.12	103.90
3	A1	1505	G	C5-C6-O6	5.57	131.94	128.60
25	BB	320	A	C5-C6-N1	5.57	120.48	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	361	G	P-O3'-C3'	5.57	126.38	119.70
25	BB	440	C	C4-C5-C6	-5.57	114.62	117.40
25	BB	818	G	C5-N7-C8	-5.57	101.52	104.30
25	BB	1552	A	C8-N9-C4	-5.57	103.57	105.80
25	BB	1696	G	N9-C4-C5	5.57	107.63	105.40
25	BB	1706	C	N3-C2-O2	-5.57	118.00	121.90
25	BB	1738	G	N3-C4-C5	-5.57	125.82	128.60
25	BB	1780	A	O4'-C1'-C2'	-5.57	100.23	105.80
25	BB	2866	U	C5-C6-N1	-5.57	119.92	122.70
3	A1	72	A	O5'-P-OP1	-5.57	100.69	105.70
3	A1	718	A	O4'-C1'-C2'	-5.57	100.23	105.80
3	A1	805	C	C6-N1-C2	-5.57	118.07	120.30
3	A1	828	U	C5-C6-N1	-5.57	119.92	122.70
3	A1	1198	G	O4'-C4'-C3'	5.57	110.55	106.10
3	A1	1230	C	C4'-C3'-C2'	-5.57	97.03	102.60
3	A1	1489	G	N3-C4-N9	5.57	129.34	126.00
25	BB	430	A	C2-N3-C4	5.57	113.38	110.60
25	BB	539	G	C2'-C3'-O3'	5.57	122.60	113.70
25	BB	1237	A	N9-C1'-C2'	-5.57	105.88	112.00
25	BB	1431	A	C5-C6-N1	5.57	120.48	117.70
25	BB	1580	A	P-O3'-C3'	5.57	126.38	119.70
25	BB	1734	G	C8-N9-C4	-5.57	104.17	106.40
25	BB	1945	G	N3-C2-N2	-5.57	116.00	119.90
25	BB	1963	U	O3'-P-O5'	5.57	114.57	104.00
25	BB	1998	A	N1-C2-N3	-5.57	126.52	129.30
25	BB	2146	C	C5'-C4'-O4'	5.57	115.78	109.10
25	BB	2382	G	C4'-C3'-C2'	-5.57	97.03	102.60
25	BB	2673	G	C8-N9-C4	-5.57	104.17	106.40
25	BB	2683	C	O4'-C1'-N1	-5.57	103.75	108.20
25	BB	2725	A	O4'-C1'-N9	5.57	112.65	108.20
3	A1	81	A	O5'-C5'-C4'	-5.56	101.13	111.70
3	A1	255	G	C5-C6-N1	5.56	114.28	111.50
3	A1	610	U	C5-C6-N1	-5.56	119.92	122.70
3	A1	1040	U	C5-C4-O4	-5.56	122.56	125.90
3	A1	1485	U	O4'-C1'-N1	-5.56	103.75	108.20
25	BB	442	G	O4'-C1'-N9	5.56	112.65	108.20
25	BB	481	G	C5'-C4'-O4'	5.56	115.78	109.10
25	BB	648	G	N7-C8-N9	5.56	115.88	113.10
25	BB	898	C	N3-C4-C5	5.56	124.13	121.90
25	BB	995	C	O4'-C1'-N1	5.56	112.65	108.20
25	BB	1217	U	C5-C6-N1	-5.56	119.92	122.70
25	BB	1643	G	N1-C2-N2	-5.56	111.19	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1681	G	C4-C5-C6	-5.56	115.46	118.80
25	BB	1710	G	C5'-C4'-O4'	5.56	115.78	109.10
25	BB	2818	U	C3'-C2'-C1'	5.56	105.95	101.50
1	AA	28	C	C5-C4-N4	5.56	124.09	120.20
3	A1	81	A	O4'-C1'-N9	5.56	112.65	108.20
3	A1	216	U	N3-C2-O2	-5.56	118.31	122.20
3	A1	631	C	C5-C6-N1	-5.56	118.22	121.00
3	A1	819	A	C5-C6-N6	5.56	128.15	123.70
3	A1	838	G	N1-C6-O6	-5.56	116.56	119.90
3	A1	1051	C	C2-N3-C4	-5.56	117.12	119.90
3	A1	1110	A	O4'-C1'-C2'	-5.56	100.24	105.80
3	A1	1532	U	C5'-C4'-O4'	5.56	115.78	109.10
25	BB	119	A	C5-C6-N1	5.56	120.48	117.70
25	BB	258	G	N9-C4-C5	5.56	107.62	105.40
25	BB	378	C	C4'-C3'-C2'	-5.56	97.04	102.60
25	BB	385	C	O4'-C1'-N1	5.56	112.65	108.20
25	BB	534	U	C3'-C2'-C1'	5.56	105.95	101.50
25	BB	1216	G	C5-C6-O6	5.56	131.94	128.60
25	BB	1487	U	N1-C2-O2	5.56	126.69	122.80
25	BB	1676	A	C5-N7-C8	-5.56	101.12	103.90
25	BB	1678	A	O4'-C1'-N9	5.56	112.65	108.20
25	BB	1792	G	N3-C4-C5	-5.56	125.82	128.60
25	BB	2123	G	O5'-C5'-C4'	-5.56	101.13	111.70
25	BB	2493	U	C4-C5-C6	5.56	123.04	119.70
25	BB	2760	C	C6-N1-C2	5.56	122.53	120.30
25	BB	2882	A	O4'-C1'-C2'	-5.56	100.24	105.80
35	BL	92	ARG	NE-CZ-NH2	5.56	123.08	120.30
3	A1	598	U	C1'-O4'-C4'	-5.56	105.45	109.90
3	A1	798	U	N1-C2-N3	5.56	118.24	114.90
3	A1	1039	G	C4-C5-C6	-5.56	115.46	118.80
3	A1	1504	G	O4'-C4'-C3'	5.56	110.55	106.10
25	BB	64	A	C4'-C3'-O3'	-5.56	97.72	109.40
25	BB	623	C	O4'-C1'-N1	5.56	112.65	108.20
25	BB	680	C	O4'-C1'-N1	5.56	112.65	108.20
25	BB	1057	A	N1-C2-N3	-5.56	126.52	129.30
3	A1	916	U	C5-C6-N1	-5.56	119.92	122.70
3	A1	1045	C	N1-C2-N3	5.56	123.09	119.20
24	BA	68	C	N3-C4-N4	-5.56	114.11	118.00
25	BB	199	A	O4'-C1'-N9	-5.56	103.75	108.20
25	BB	384	A	C5-C6-N6	5.56	128.15	123.70
25	BB	1019	U	C2-N3-C4	-5.56	123.66	127.00
25	BB	1571	A	C6-N1-C2	-5.56	115.27	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1896	G	C2-N3-C4	5.56	114.68	111.90
25	BB	2049	G	C5-C6-O6	-5.56	125.27	128.60
25	BB	2267	A	N9-C1'-C2'	5.56	121.23	114.00
25	BB	2535	G	C5-C6-O6	5.56	131.94	128.60
31	BH	7	ARG	CA-CB-CG	5.56	125.63	113.40
1	AA	12	U	C4'-C3'-O3'	5.56	124.11	113.00
3	A1	39	G	N3-C4-C5	-5.56	125.82	128.60
3	A1	319	G	N1-C6-O6	-5.56	116.56	119.90
3	A1	866	C	C5-C4-N4	-5.56	116.31	120.20
3	A1	1270	G	C6-N1-C2	-5.56	121.77	125.10
15	AO	142	ARG	NH1-CZ-NH2	-5.56	113.29	119.40
25	BB	378	C	C5-C6-N1	-5.56	118.22	121.00
25	BB	699	A	C6-C5-N7	5.56	136.19	132.30
25	BB	702	U	O4'-C1'-N1	5.56	112.65	108.20
25	BB	855	G	C5-C6-N1	5.56	114.28	111.50
25	BB	1485	U	O4'-C4'-C3'	5.56	110.55	106.10
25	BB	1621	U	C5'-C4'-O4'	5.56	115.77	109.10
25	BB	2183	A	C5'-C4'-O4'	5.56	115.77	109.10
3	A1	209	U	N3-C2-O2	-5.56	118.31	122.20
3	A1	1206	G	C5-C6-N1	5.56	114.28	111.50
3	A1	1427	C	C5'-C4'-O4'	5.56	115.77	109.10
25	BB	2419	U	C5-C6-N1	-5.56	119.92	122.70
1	AE	39	U	C4-C5-C6	5.55	123.03	119.70
3	A1	75	G	C5-C6-N1	5.55	114.28	111.50
3	A1	443	C	C2-N3-C4	-5.55	117.12	119.90
3	A1	974	A	P-O3'-C3'	5.55	126.36	119.70
3	A1	984	C	P-O3'-C3'	5.55	126.36	119.70
3	A1	1416	G	C1'-O4'-C4'	-5.55	105.46	109.90
25	BB	277	G	C5-C6-N1	5.55	114.28	111.50
25	BB	407	G	C3'-C2'-C1'	-5.55	97.06	101.50
25	BB	617	G	C5-C6-N1	5.55	114.28	111.50
25	BB	854	C	N1-C2-O2	5.55	122.23	118.90
25	BB	1052	C	C4'-C3'-C2'	-5.55	97.05	102.60
25	BB	1921	G	C4-C5-C6	-5.55	115.47	118.80
25	BB	2018	G	C8-N9-C4	-5.55	104.18	106.40
25	BB	2287	A	C6-C5-N7	5.55	136.19	132.30
25	BB	2540	C	N1-C2-O2	5.55	122.23	118.90
25	BB	2577	A	C3'-C2'-C1'	5.55	105.94	101.50
25	BB	2889	C	C5'-C4'-O4'	5.55	115.77	109.10
3	A1	669	G	C8-N9-C4	-5.55	104.18	106.40
3	A1	1405	G	N3-C4-C5	-5.55	125.82	128.60
24	BA	56	G	C4-C5-C6	-5.55	115.47	118.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1253	A	C1'-O4'-C4'	-5.55	105.46	109.90
25	BB	2828	G	C1'-O4'-C4'	-5.55	105.46	109.90
51	B2	79	ARG	NH1-CZ-NH2	-5.55	113.29	119.40
3	A1	76	G	C1'-O4'-C4'	-5.55	105.46	109.90
3	A1	484	G	C1'-O4'-C4'	-5.55	105.46	109.90
25	BB	204	A	C2-N3-C4	5.55	113.38	110.60
25	BB	208	C	C1'-O4'-C4'	-5.55	105.46	109.90
25	BB	280	U	C5'-C4'-C3'	-5.55	107.12	116.00
25	BB	402	A	C5'-C4'-O4'	-5.55	102.44	109.10
25	BB	796	C	C2-N3-C4	-5.55	117.12	119.90
25	BB	1001	A	N1-C2-N3	-5.55	126.52	129.30
25	BB	1251	C	C6-N1-C2	-5.55	118.08	120.30
25	BB	1346	G	N1-C6-O6	-5.55	116.57	119.90
25	BB	1861	G	N1-C6-O6	-5.55	116.57	119.90
25	BB	1878	G	C5'-C4'-O4'	5.55	115.76	109.10
25	BB	2128	G	C5-N7-C8	-5.55	101.52	104.30
25	BB	2523	G	C1'-O4'-C4'	-5.55	105.46	109.90
25	BB	2551	C	C5'-C4'-C3'	-5.55	107.12	116.00
25	BB	2775	G	C6-C5-N7	5.55	133.73	130.40
25	BB	2799	A	C6-N1-C2	-5.55	115.27	118.60
25	BB	2802	G	N3-C4-C5	-5.55	125.82	128.60
25	BB	2845	U	C4'-C3'-C2'	-5.55	97.05	102.60
1	AE	49	C	N3-C4-C5	5.55	124.12	121.90
3	A1	236	A	C1'-O4'-C4'	-5.55	105.46	109.90
3	A1	440	C	C5-C6-N1	-5.55	118.23	121.00
3	A1	558	G	C8-N9-C4	-5.55	104.18	106.40
3	A1	812	G	C6-N1-C2	-5.55	121.77	125.10
12	AK	47	ARG	NH1-CZ-NH2	-5.55	113.30	119.40
25	BB	139	U	P-O5'-C5'	5.55	129.78	120.90
25	BB	797	G	C6-N1-C2	-5.55	121.77	125.10
25	BB	891	G	C5-C6-N1	5.55	114.28	111.50
25	BB	1170	C	C4-C5-C6	5.55	120.17	117.40
25	BB	1888	G	C5-C6-O6	5.55	131.93	128.60
25	BB	1910	G	C8-N9-C1'	5.55	134.22	127.00
25	BB	1949	G	C5-C6-N1	5.55	114.28	111.50
25	BB	2141	G	N1-C2-N3	5.55	127.23	123.90
25	BB	2629	U	C5-C6-N1	-5.55	119.92	122.70
48	BY	107	VAL	CA-CB-CG1	5.55	119.22	110.90
3	A1	393	A	C6-C5-N7	5.55	136.18	132.30
3	A1	602	A	C5-N7-C8	-5.55	101.13	103.90
3	A1	664	G	N3-C4-C5	-5.55	125.83	128.60
3	A1	793	U	N1-C2-O2	5.55	126.68	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
23	AX	7	ARG	CD-NE-CZ	5.55	131.37	123.60
25	BB	2791	G	C8-N9-C4	-5.55	104.18	106.40
1	AA	52	U	C3'-C2'-C1'	5.55	105.94	101.50
1	AE	39	U	N1-C2-N3	5.55	118.23	114.90
3	A1	312	C	C3'-C2'-C1'	5.55	105.94	101.50
3	A1	630	A	C5'-C4'-C3'	-5.55	107.12	116.00
3	A1	663	A	N1-C2-N3	-5.55	126.53	129.30
3	A1	705	G	C5-C6-O6	5.55	131.93	128.60
3	A1	1181	G	N7-C8-N9	5.55	115.87	113.10
3	A1	1233	G	C6-C5-N7	5.55	133.73	130.40
23	AX	86	ALA	N-CA-CB	-5.55	102.34	110.10
24	BA	38	C	C5-C6-N1	-5.55	118.23	121.00
25	BB	14	A	C4-C5-C6	-5.55	114.23	117.00
25	BB	233	A	C2-N3-C4	5.55	113.37	110.60
25	BB	310	A	C6-N1-C2	-5.55	115.27	118.60
25	BB	1521	G	C4-C5-N7	-5.55	108.58	110.80
25	BB	1715	G	C5'-C4'-O4'	5.55	115.76	109.10
25	BB	1779	U	C5'-C4'-O4'	5.55	115.76	109.10
25	BB	1832	C	N3-C2-O2	-5.55	118.02	121.90
25	BB	2369	A	C4-C5-C6	-5.55	114.23	117.00
25	BB	2460	U	C5-C6-N1	-5.55	119.93	122.70
25	BB	2726	A	C5-N7-C8	-5.55	101.13	103.90
42	BS	4	ASP	CB-CG-OD2	5.55	123.29	118.30
2	AM	12	U	C6-N1-C2	5.54	124.33	121.00
3	A1	410	G	C6-N1-C2	-5.54	121.77	125.10
3	A1	1397	C	N3-C4-N4	-5.54	114.12	118.00
25	BB	19	A	O4'-C1'-N9	5.54	112.64	108.20
25	BB	448	U	C5-C6-N1	-5.54	119.93	122.70
25	BB	1264	A	C5-C6-N1	5.54	120.47	117.70
25	BB	1404	C	N3-C2-O2	-5.54	118.02	121.90
25	BB	1762	A	N9-C4-C5	5.54	108.02	105.80
1	AP	61	C	C3'-C2'-C1'	5.54	105.94	101.50
3	A1	50	A	N3-C4-C5	-5.54	122.92	126.80
3	A1	493	A	C5'-C4'-O4'	-5.54	102.45	109.10
3	A1	623	C	C2-N3-C4	-5.54	117.13	119.90
3	A1	886	G	N9-C1'-C2'	5.54	121.21	114.00
3	A1	1469	C	C5-C4-N4	-5.54	116.32	120.20
25	BB	23	G	C8-N9-C4	-5.54	104.18	106.40
25	BB	373	U	N1-C1'-C2'	-5.54	105.90	112.00
25	BB	1337	G	C1'-O4'-C4'	-5.54	105.47	109.90
25	BB	1458	U	C5'-C4'-O4'	-5.54	102.45	109.10
25	BB	1874	C	N1-C2-O2	5.54	122.23	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2455	G	N1-C6-O6	-5.54	116.57	119.90
25	BB	2810	A	C2-N3-C4	5.54	113.37	110.60
1	AP	69	U	N3-C4-C5	5.54	117.92	114.60
3	A1	495	A	C5-C6-N1	5.54	120.47	117.70
3	A1	1175	G	C5-C6-N1	5.54	114.27	111.50
25	BB	647	G	C4-C5-N7	-5.54	108.58	110.80
25	BB	865	C	N1-C2-N3	5.54	123.08	119.20
25	BB	972	A	C3'-C2'-C1'	-5.54	97.07	101.50
25	BB	1414	C	N3-C4-N4	-5.54	114.12	118.00
25	BB	1888	G	N3-C2-N2	-5.54	116.02	119.90
25	BB	2033	A	C8-N9-C4	-5.54	103.58	105.80
25	BB	2266	A	C1'-O4'-C4'	-5.54	105.47	109.90
25	BB	2732	G	N3-C4-N9	5.54	129.32	126.00
25	BB	2779	U	N3-C2-O2	-5.54	118.32	122.20
3	A1	1085	U	C2-N3-C4	-5.54	123.68	127.00
3	A1	1096	C	C1'-O4'-C4'	-5.54	105.47	109.90
25	BB	424	G	N1-C2-N3	5.54	127.22	123.90
25	BB	1745	A	C5-C6-N6	5.54	128.13	123.70
3	A1	191	G	C3'-C2'-C1'	-5.54	97.07	101.50
3	A1	454	G	N1-C2-N3	5.54	127.22	123.90
3	A1	456	A	C2-N3-C4	5.54	113.37	110.60
3	A1	492	C	O4'-C4'-C3'	5.54	110.53	106.10
3	A1	759	A	N9-C4-C5	5.54	108.02	105.80
3	A1	1189	U	O4'-C1'-N1	5.54	112.63	108.20
3	A1	1406	U	O4'-C1'-C2'	-5.54	100.26	105.80
25	BB	45	G	C5-C6-N1	5.54	114.27	111.50
25	BB	563	A	C6-C5-N7	5.54	136.18	132.30
25	BB	1015	U	N1-C1'-C2'	-5.54	105.91	112.00
25	BB	1372	U	N3-C2-O2	-5.54	118.32	122.20
25	BB	1423	G	N1-C2-N3	5.54	127.22	123.90
25	BB	1516	G	C5-C6-N1	5.54	114.27	111.50
25	BB	2461	A	O4'-C1'-C2'	5.54	112.58	107.60
25	BB	2674	G	N3-C4-N9	5.54	129.32	126.00
25	BB	2884	U	O5'-C5'-C4'	-5.54	101.18	111.70
25	BB	804	A	C5'-C4'-C3'	-5.54	107.14	116.00
25	BB	1006	C	O4'-C1'-C2'	-5.54	100.26	105.80
25	BB	1102	C	C2-N3-C4	-5.54	117.13	119.90
25	BB	1669	A	N9-C1'-C2'	5.54	121.20	114.00
25	BB	1796	U	C5'-C4'-O4'	5.54	115.75	109.10
25	BB	2053	G	C6-N1-C2	-5.54	121.78	125.10
50	B1	67	ARG	NH1-CZ-NH2	-5.54	113.31	119.40
3	A1	106	C	C4'-C3'-C2'	-5.54	97.06	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	369	G	C6-C5-N7	5.54	133.72	130.40
3	A1	466	A	C6-N1-C2	-5.54	115.28	118.60
3	A1	645	G	N1-C6-O6	-5.54	116.58	119.90
3	A1	1451	U	C6-N1-C2	-5.54	117.68	121.00
11	AJ	64	ARG	NH1-CZ-NH2	-5.54	113.31	119.40
25	BB	371	A	C3'-C2'-C1'	5.54	105.93	101.50
25	BB	787	C	N3-C4-C5	5.54	124.11	121.90
25	BB	1239	G	O4'-C1'-N9	5.54	112.63	108.20
25	BB	1295	C	N3-C4-N4	-5.54	114.12	118.00
25	BB	1646	C	C5'-C4'-C3'	-5.54	107.14	116.00
1	AE	49	C	N3-C4-N4	-5.53	114.13	118.00
3	A1	496	A	C3'-C2'-C1'	5.53	105.93	101.50
3	A1	1225	A	C1'-O4'-C4'	5.53	114.33	109.90
3	A1	1376	U	C3'-C2'-C1'	5.53	105.93	101.50
3	A1	1418	A	N1-C6-N6	-5.53	115.28	118.60
3	A1	1446	A	C4'-C3'-C2'	-5.53	97.07	102.60
24	BA	83	G	O4'-C4'-C3'	5.53	110.53	106.10
25	BB	137	U	N1-C2-N3	5.53	118.22	114.90
25	BB	383	C	C5-C4-N4	-5.53	116.33	120.20
25	BB	662	G	N1-C2-N2	5.53	121.18	116.20
25	BB	911	A	N1-C2-N3	-5.53	126.53	129.30
25	BB	967	U	C5'-C4'-O4'	5.53	115.74	109.10
25	BB	1026	G	O3'-P-O5'	5.53	114.52	104.00
25	BB	1141	U	O4'-C1'-N1	5.53	112.63	108.20
25	BB	1408	G	C4-C5-N7	5.53	113.01	110.80
25	BB	1584	U	P-O3'-C3'	5.53	126.34	119.70
25	BB	2428	G	C1'-O4'-C4'	-5.53	105.47	109.90
25	BB	2648	G	N1-C6-O6	-5.53	116.58	119.90
53	B4	149	GLU	CA-CB-CG	5.53	125.57	113.40
3	A1	420	U	C5-C4-O4	-5.53	122.58	125.90
25	BB	476	G	N3-C4-N9	-5.53	122.68	126.00
25	BB	872	U	C1'-O4'-C4'	-5.53	105.47	109.90
25	BB	1099	G	N1-C6-O6	-5.53	116.58	119.90
25	BB	1306	C	N3-C4-N4	-5.53	114.13	118.00
1	AA	4	G	C6-N1-C2	-5.53	121.78	125.10
1	AA	66	A	C6-C5-N7	5.53	136.17	132.30
3	A1	35	G	C5'-C4'-C3'	-5.53	107.15	116.00
3	A1	181	A	N9-C4-C5	5.53	108.01	105.80
3	A1	261	U	N3-C2-O2	-5.53	118.33	122.20
3	A1	282	A	C5-C6-N6	5.53	128.12	123.70
3	A1	1488	G	N9-C1'-C2'	-5.53	105.92	112.00
25	BB	483	A	O5'-C5'-C4'	-5.53	101.19	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	936	A	C5-N7-C8	-5.53	101.14	103.90
25	BB	1082	U	O4'-C1'-C2'	-5.53	100.27	105.80
25	BB	1228	G	C8-N9-C4	5.53	108.61	106.40
25	BB	2192	U	C4'-C3'-C2'	-5.53	97.07	102.60
25	BB	2440	C	N1-C2-N3	5.53	123.07	119.20
25	BB	2655	G	C3'-C2'-C1'	-5.53	97.08	101.50
25	BB	46	G	C4'-C3'-C2'	-5.53	97.07	102.60
25	BB	344	A	C5'-C4'-O4'	5.53	115.73	109.10
25	BB	763	G	N1-C6-O6	-5.53	116.58	119.90
25	BB	1533	C	O4'-C1'-N1	5.53	112.62	108.20
25	BB	2542	A	O3'-P-O5'	-5.53	93.50	104.00
29	BF	18	ARG	NE-CZ-NH1	5.53	123.06	120.30
1	AP	7	U	C3'-C2'-C1'	5.53	105.92	101.50
1	AE	43	G	C5-C6-N1	5.53	114.26	111.50
3	A1	260	G	C5-C6-O6	-5.53	125.28	128.60
3	A1	280	C	C6-N1-C2	-5.53	118.09	120.30
3	A1	812	G	N9-C4-C5	5.53	107.61	105.40
3	A1	1006	G	O4'-C1'-N9	-5.53	103.78	108.20
25	BB	264	C	N3-C2-O2	-5.53	118.03	121.90
25	BB	499	U	N3-C4-O4	5.53	123.27	119.40
25	BB	1501	G	O3'-P-O5'	-5.53	93.50	104.00
1	AA	62	A	C3'-C2'-C1'	-5.53	97.08	101.50
3	A1	390	U	N1-C2-N3	5.53	118.22	114.90
3	A1	566	G	N1-C6-O6	-5.53	116.58	119.90
3	A1	696	A	C2-N3-C4	5.53	113.36	110.60
3	A1	724	G	C6-N1-C2	-5.53	121.78	125.10
3	A1	749	A	C3'-C2'-C1'	5.53	105.92	101.50
3	A1	1003	G	N9-C1'-C2'	-5.53	105.92	112.00
3	A1	1014	A	C5-C6-N1	5.53	120.46	117.70
3	A1	1271	A	C5-C6-N6	5.53	128.12	123.70
3	A1	1350	A	C6-C5-N7	5.53	136.17	132.30
4	AB	221	ARG	CD-NE-CZ	5.53	131.34	123.60
6	AD	30	ARG	CD-NE-CZ	5.53	131.34	123.60
25	BB	39	G	C5'-C4'-C3'	-5.53	107.16	116.00
25	BB	326	G	C8-N9-C4	-5.53	104.19	106.40
25	BB	490	C	C4'-C3'-C2'	-5.53	97.08	102.60
25	BB	645	C	C5'-C4'-C3'	-5.53	107.16	116.00
25	BB	692	C	P-O3'-C3'	5.53	126.33	119.70
25	BB	886	A	C8-N9-C4	-5.53	103.59	105.80
25	BB	984	A	C4'-C3'-C2'	5.53	108.13	102.60
25	BB	1013	C	C5-C4-N4	5.53	124.07	120.20
25	BB	1929	G	C5'-C4'-C3'	-5.53	107.16	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1958	C	O4'-C1'-C2'	-5.53	100.27	105.80
25	BB	2109	U	O4'-C1'-N1	5.53	112.62	108.20
25	BB	2349	G	N3-C4-N9	5.53	129.31	126.00
25	BB	2537	U	C4-C5-C6	5.53	123.02	119.70
25	BB	2608	G	C3'-C2'-C1'	5.53	105.92	101.50
25	BB	2645	G	C6-N1-C2	-5.53	121.78	125.10
25	BB	2732	G	N3-C4-C5	-5.53	125.84	128.60
25	BB	2782	G	O4'-C4'-C3'	5.53	110.52	106.10
3	A1	377	G	N3-C2-N2	-5.52	116.03	119.90
3	A1	834	U	C4-C5-C6	5.52	123.01	119.70
3	A1	1038	C	C5-C4-N4	-5.52	116.33	120.20
3	A1	1202	U	N1-C2-O2	5.52	126.67	122.80
25	BB	352	A	N1-C2-N3	-5.52	126.54	129.30
25	BB	1136	G	C4'-C3'-C2'	-5.52	97.08	102.60
25	BB	1543	G	N3-C2-N2	-5.52	116.03	119.90
25	BB	1556	C	N3-C4-C5	5.52	124.11	121.90
25	BB	1943	U	C5-C4-O4	-5.52	122.59	125.90
25	BB	2112	G	N7-C8-N9	5.52	115.86	113.10
25	BB	2495	G	C5-C6-O6	5.52	131.91	128.60
25	BB	2553	G	C8-N9-C4	-5.52	104.19	106.40
25	BB	2697	G	C5-C6-N1	5.52	114.26	111.50
1	AP	27	C	N3-C4-C5	5.52	124.11	121.90
1	AP	36	A	C5-C6-N1	5.52	120.46	117.70
1	AP	58	A	N1-C2-N3	-5.52	126.54	129.30
1	AP	64	A	C6-C5-N7	5.52	136.17	132.30
3	A1	91	U	C4'-C3'-C2'	-5.52	97.08	102.60
3	A1	276	G	N3-C2-N2	-5.52	116.03	119.90
3	A1	766	A	O4'-C1'-N9	5.52	112.62	108.20
3	A1	969	A	C8-N9-C4	5.52	108.01	105.80
3	A1	1252	A	C5-C6-N1	5.52	120.46	117.70
3	A1	1274	A	N1-C2-N3	-5.52	126.54	129.30
3	A1	1361	G	C5'-C4'-O4'	5.52	115.73	109.10
25	BB	375	G	O4'-C4'-C3'	5.52	110.52	106.10
25	BB	617	G	N1-C2-N3	5.52	127.21	123.90
25	BB	674	G	C6-N1-C2	-5.52	121.79	125.10
25	BB	1383	A	N7-C8-N9	5.52	116.56	113.80
25	BB	1682	G	C5'-C4'-C3'	-5.52	107.17	116.00
25	BB	1750	G	N9-C4-C5	5.52	107.61	105.40
25	BB	2034	U	N1-C1'-C2'	5.52	121.18	114.00
25	BB	2470	G	N9-C4-C5	5.52	107.61	105.40
25	BB	2681	C	C1'-O4'-C4'	-5.52	105.48	109.90
1	AP	53	G	N3-C4-C5	-5.52	125.84	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	606	G	N3-C4-N9	5.52	129.31	126.00
3	A1	1328	C	C5'-C4'-O4'	5.52	115.72	109.10
25	BB	325	G	C4-C5-N7	5.52	113.01	110.80
25	BB	1113	U	C1'-O4'-C4'	5.52	114.32	109.90
25	BB	1262	A	C1'-O4'-C4'	-5.52	105.48	109.90
25	BB	2590	A	O4'-C4'-C3'	5.52	110.52	106.10
25	BB	2659	G	N1-C2-N2	5.52	121.17	116.20
25	BB	2677	G	C1'-O4'-C4'	-5.52	105.48	109.90
3	A1	853	C	C5'-C4'-O4'	5.52	115.72	109.10
3	A1	1387	G	N7-C8-N9	5.52	115.86	113.10
24	BA	51	G	C5-N7-C8	-5.52	101.54	104.30
25	BB	270	A	N1-C2-N3	-5.52	126.54	129.30
25	BB	682	G	C8-N9-C4	-5.52	104.19	106.40
25	BB	951	C	C2-N1-C1'	5.52	124.87	118.80
25	BB	1031	G	N3-C2-N2	-5.52	116.04	119.90
25	BB	1107	G	O5'-C5'-C4'	-5.52	101.22	111.70
25	BB	1758	U	N1-C2-O2	5.52	126.66	122.80
25	BB	1868	C	C5'-C4'-O4'	5.52	115.72	109.10
25	BB	1900	A	C6-C5-N7	5.52	136.16	132.30
25	BB	2507	C	C2-N3-C4	-5.52	117.14	119.90
25	BB	2555	U	O4'-C1'-N1	5.52	112.61	108.20
1	AP	34	G	C5-C6-O6	-5.52	125.29	128.60
1	AE	18	G	C6-N1-C2	-5.52	121.79	125.10
3	A1	104	G	C6-C5-N7	5.52	133.71	130.40
3	A1	151	A	C5-C6-N1	5.52	120.46	117.70
3	A1	619	U	N3-C2-O2	-5.52	118.34	122.20
3	A1	884	U	C6-N1-C2	-5.52	117.69	121.00
3	A1	942	G	N9-C4-C5	5.52	107.61	105.40
3	A1	1197	A	C6-N1-C2	-5.52	115.29	118.60
3	A1	1210	C	C1'-O4'-C4'	5.52	114.31	109.90
24	BA	100	G	O5'-P-OP1	5.52	117.32	110.70
25	BB	17	G	N9-C1'-C2'	-5.52	105.93	112.00
25	BB	710	U	C4-C5-C6	5.52	123.01	119.70
25	BB	1273	U	O4'-C1'-N1	5.52	112.61	108.20
25	BB	1409	U	P-O3'-C3'	5.52	126.32	119.70
25	BB	1722	A	N9-C4-C5	5.52	108.01	105.80
25	BB	1863	G	C5-N7-C8	-5.52	101.54	104.30
25	BB	2051	A	C4'-C3'-C2'	-5.52	97.08	102.60
25	BB	2094	A	C4-C5-C6	-5.52	114.24	117.00
25	BB	2296	U	C3'-C2'-C1'	-5.52	97.09	101.50
49	BZ	122	ARG	NE-CZ-NH2	5.52	123.06	120.30
52	B3	97	VAL	CA-CB-CG1	5.52	119.18	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	592	G	C4'-C3'-C2'	-5.52	97.08	102.60
25	BB	592	A	C4-C5-C6	-5.52	114.24	117.00
25	BB	755	U	C5-C6-N1	-5.52	119.94	122.70
25	BB	1801	A	C8-N9-C4	-5.52	103.59	105.80
50	B1	44	ARG	NH1-CZ-NH2	-5.52	113.33	119.40
50	B1	83	VAL	CA-CB-CG1	5.52	119.17	110.90
1	AP	53	G	N1-C6-O6	-5.51	116.59	119.90
3	A1	858	G	C5-C6-O6	-5.51	125.29	128.60
3	A1	1150	A	O4'-C1'-C2'	5.51	112.56	107.60
3	A1	1477	U	O4'-C4'-C3'	5.51	110.51	106.10
23	AX	49	PHE	CB-CG-CD2	-5.51	116.94	120.80
25	BB	286	U	N3-C4-O4	-5.51	115.54	119.40
25	BB	433	C	N3-C4-C5	5.51	124.11	121.90
25	BB	626	A	C6-C5-N7	5.51	136.16	132.30
25	BB	709	U	C5'-C4'-O4'	5.51	115.72	109.10
25	BB	894	U	N3-C4-O4	-5.51	115.54	119.40
25	BB	1017	G	N1-C6-O6	-5.51	116.59	119.90
25	BB	1150	C	C2-N3-C4	-5.51	117.14	119.90
25	BB	1156	A	C6-C5-N7	5.51	136.16	132.30
25	BB	1984	G	N3-C4-N9	5.51	129.31	126.00
25	BB	2765	A	C6-C5-N7	5.51	136.16	132.30
3	A1	433	G	C6-C5-N7	5.51	133.71	130.40
3	A1	868	C	C5'-C4'-C3'	-5.51	107.18	116.00
3	A1	1323	G	C4'-C3'-C2'	-5.51	97.09	102.60
24	BA	6	G	C6-N1-C2	-5.51	121.79	125.10
25	BB	316	C	C5-C4-N4	5.51	124.06	120.20
25	BB	681	G	C2-N3-C4	-5.51	109.14	111.90
25	BB	770	G	O4'-C4'-C3'	5.51	110.51	106.10
25	BB	1228	G	C5'-C4'-C3'	-5.51	107.18	116.00
25	BB	1726	C	C6-N1-C2	-5.51	118.09	120.30
1	AP	22	G	C5-C6-O6	5.51	131.91	128.60
3	A1	122	G	C1'-O4'-C4'	-5.51	105.49	109.90
3	A1	616	G	N3-C2-N2	-5.51	116.04	119.90
3	A1	952	U	P-O3'-C3'	5.51	126.31	119.70
3	A1	1138	G	C5-C6-O6	5.51	131.91	128.60
3	A1	1345	U	N3-C4-O4	-5.51	115.54	119.40
24	BA	27	C	O4'-C1'-C2'	-5.51	100.29	105.80
25	BB	522	A	C5-C6-N1	5.51	120.46	117.70
25	BB	554	U	N3-C2-O2	-5.51	118.34	122.20
25	BB	1408	G	N1-C6-O6	-5.51	116.59	119.90
25	BB	1635	A	N1-C2-N3	-5.51	126.54	129.30
25	BB	1794	A	N7-C8-N9	5.51	116.56	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	1960	A	N1-C2-N3	-5.51	126.55	129.30
25	BB	2157	G	N3-C4-C5	-5.51	125.84	128.60
25	BB	2300	C	O4'-C1'-N1	5.51	112.61	108.20
31	BH	2	ASP	CB-CG-OD2	5.51	123.26	118.30
3	A1	235	C	O5'-P-OP1	-5.51	100.74	105.70
3	A1	350	G	N1-C2-N2	-5.51	111.24	116.20
3	A1	1152	A	C5'-C4'-O4'	5.51	115.71	109.10
3	A1	1238	A	C5-C6-N6	5.51	128.11	123.70
3	A1	1311	A	C5'-C4'-O4'	5.51	115.71	109.10
23	AX	49	PHE	CB-CG-CD1	5.51	124.66	120.80
25	BB	230	G	N3-C4-C5	-5.51	125.84	128.60
25	BB	505	A	N1-C2-N3	-5.51	126.55	129.30
25	BB	977	G	N1-C2-N3	5.51	127.21	123.90
25	BB	1039	A	C5-C6-N1	5.51	120.45	117.70
25	BB	1587	G	N3-C4-C5	-5.51	125.84	128.60
25	BB	2406	A	N1-C6-N6	-5.51	115.30	118.60
25	BB	2428	G	C6-C5-N7	5.51	133.71	130.40
25	BB	2816	G	C4-C5-N7	-5.51	108.60	110.80
25	BB	2830	C	C1'-O4'-C4'	-5.51	105.49	109.90
1	AA	2	C	O5'-P-OP2	5.51	117.31	110.70
1	AP	52	U	C5-C4-O4	5.51	129.21	125.90
3	A1	43	C	C4'-C3'-C2'	-5.51	97.09	102.60
3	A1	623	C	C5'-C4'-O4'	5.51	115.71	109.10
3	A1	1079	G	C6-C5-N7	5.51	133.71	130.40
3	A1	1356	G	C5-N7-C8	5.51	107.05	104.30
3	A1	1409	C	N3-C2-O2	-5.51	118.05	121.90
20	AU	43	TYR	CB-CG-CD2	5.51	124.31	121.00
22	AW	40	ARG	NE-CZ-NH2	-5.51	117.55	120.30
25	BB	2352	A	N9-C4-C5	5.51	108.00	105.80
3	A1	463	U	N3-C2-O2	-5.51	118.34	122.20
3	A1	1091	U	C5'-C4'-O4'	5.51	115.71	109.10
3	A1	1162	C	N3-C4-N4	-5.51	114.14	118.00
9	AH	52	ARG	NE-CZ-NH1	5.51	123.05	120.30
25	BB	336	C	N3-C4-C5	5.51	124.10	121.90
25	BB	376	G	P-O3'-C3'	5.51	126.31	119.70
25	BB	489	G	N3-C2-N2	-5.51	116.05	119.90
25	BB	628	G	C5-C6-O6	-5.51	125.30	128.60
25	BB	862	G	C5-C6-N1	5.51	114.25	111.50
25	BB	1136	G	C2-N3-C4	5.51	114.65	111.90
25	BB	1341	G	N1-C2-N3	5.51	127.20	123.90
25	BB	2149	U	N1-C2-O2	5.51	126.65	122.80
25	BB	2411	A	C2-N3-C4	5.51	113.35	110.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2702	G	C4'-C3'-C2'	-5.51	97.09	102.60
25	BB	2881	U	N1-C2-N3	5.51	118.20	114.90
3	A1	629	A	C4'-C3'-C2'	-5.50	97.09	102.60
3	A1	953	G	C4-C5-C6	-5.50	115.50	118.80
3	A1	1040	U	N3-C4-O4	5.50	123.25	119.40
25	BB	961	C	N3-C4-N4	-5.50	114.15	118.00
25	BB	1266	G	C1'-O4'-C4'	-5.50	105.50	109.90
25	BB	1665	A	C8-N9-C4	-5.50	103.60	105.80
25	BB	1996	C	C2-N3-C4	-5.50	117.15	119.90
25	BB	2067	G	P-O3'-C3'	5.50	126.31	119.70
1	AA	3	G	C5-N7-C8	5.50	107.05	104.30
2	AM	5	U	O4'-C4'-C3'	-5.50	98.50	104.00
3	A1	238	A	C2-N3-C4	5.50	113.35	110.60
3	A1	478	A	C5'-C4'-C3'	-5.50	107.19	116.00
3	A1	811	C	O3'-P-O5'	-5.50	93.54	104.00
3	A1	1454	G	C1'-O4'-C4'	5.50	114.30	109.90
25	BB	93	G	N9-C4-C5	5.50	107.60	105.40
25	BB	385	C	N3-C4-N4	-5.50	114.15	118.00
25	BB	389	G	C5-C6-N1	5.50	114.25	111.50
25	BB	793	A	O3'-P-O5'	-5.50	93.54	104.00
25	BB	798	G	O4'-C4'-C3'	-5.50	98.50	104.00
25	BB	1536	C	C5-C4-N4	5.50	124.05	120.20
25	BB	1788	C	C6-N1-C2	-5.50	118.10	120.30
25	BB	2268	A	C5'-C4'-O4'	5.50	115.70	109.10
25	BB	2293	G	O4'-C1'-C2'	5.50	112.55	107.60
25	BB	2507	C	N3-C2-O2	-5.50	118.05	121.90
25	BB	2802	G	C4'-C3'-C2'	-5.50	97.10	102.60
1	AA	61	C	C3'-C2'-C1'	5.50	105.90	101.50
1	AP	67	A	O4'-C1'-N9	5.50	112.60	108.20
1	AE	71	G	C6-C5-N7	5.50	133.70	130.40
3	A1	246	A	O4'-C4'-C3'	5.50	110.50	106.10
3	A1	530	G	N7-C8-N9	5.50	115.85	113.10
3	A1	586	C	N3-C2-O2	-5.50	118.05	121.90
3	A1	607	A	O4'-C1'-N9	-5.50	103.80	108.20
3	A1	653	U	C4-C5-C6	5.50	123.00	119.70
3	A1	837	U	C5'-C4'-C3'	-5.50	107.20	116.00
3	A1	924	C	N3-C2-O2	-5.50	118.05	121.90
3	A1	1049	U	O4'-C4'-C3'	5.50	110.50	106.10
3	A1	1293	C	C6-N1-C2	-5.50	118.10	120.30
3	A1	1450	U	N3-C2-O2	-5.50	118.35	122.20
20	AU	94	ARG	NE-CZ-NH1	5.50	123.05	120.30
24	BA	44	G	N3-C4-C5	-5.50	125.85	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	134	G	C5-N7-C8	-5.50	101.55	104.30
25	BB	561	G	N3-C4-N9	5.50	129.30	126.00
25	BB	641	U	N1-C2-N3	5.50	118.20	114.90
25	BB	801	G	N7-C8-N9	5.50	115.85	113.10
25	BB	1763	G	N3-C4-C5	-5.50	125.85	128.60
25	BB	1811	G	N3-C4-N9	5.50	129.30	126.00
25	BB	2338	C	N3-C4-N4	-5.50	114.15	118.00
25	BB	2570	G	C8-N9-C4	-5.50	104.20	106.40
25	BB	2669	G	N1-C2-N2	5.50	121.15	116.20
3	A1	85	U	N3-C2-O2	-5.50	118.35	122.20
3	A1	678	U	C6-N1-C2	-5.50	117.70	121.00
25	BB	678	C	N3-C4-N4	-5.50	114.15	118.00
25	BB	949	G	C6-C5-N7	5.50	133.70	130.40
25	BB	1182	G	N3-C4-N9	5.50	129.30	126.00
25	BB	1622	G	C1'-O4'-C4'	-5.50	105.50	109.90
25	BB	2472	G	C6-N1-C2	-5.50	121.80	125.10
25	BB	2663	G	C6-C5-N7	5.50	133.70	130.40
25	BB	2754	U	C5'-C4'-O4'	5.50	115.70	109.10
25	BB	2818	U	C5-C6-N1	-5.50	119.95	122.70
42	BS	56	ARG	NH1-CZ-NH2	-5.50	113.35	119.40
1	AP	1	G	C5-C6-O6	5.50	131.90	128.60
1	AE	3	G	C2-N3-C4	5.50	114.65	111.90
3	A1	31	G	N9-C4-C5	5.50	107.60	105.40
3	A1	453	G	N7-C8-N9	5.50	115.85	113.10
3	A1	530	G	C5'-C4'-C3'	-5.50	107.20	116.00
3	A1	1062	U	C4-C5-C6	5.50	123.00	119.70
3	A1	1112	C	C6-N1-C2	-5.50	118.10	120.30
3	A1	1487	G	C8-N9-C4	-5.50	104.20	106.40
25	BB	61	C	O4'-C1'-N1	5.50	112.60	108.20
25	BB	170	U	C5'-C4'-O4'	5.50	115.70	109.10
25	BB	213	A	C2-N3-C4	5.50	113.35	110.60
25	BB	346	A	C2-N3-C4	5.50	113.35	110.60
25	BB	537	G	C4-C5-C6	-5.50	115.50	118.80
25	BB	928	A	N9-C4-C5	5.50	108.00	105.80
25	BB	1099	G	C4-C5-N7	5.50	113.00	110.80
25	BB	1152	C	N1-C2-N3	5.50	123.05	119.20
25	BB	1216	G	C5-N7-C8	-5.50	101.55	104.30
25	BB	1338	G	N3-C2-N2	-5.50	116.05	119.90
25	BB	1749	A	O4'-C4'-C3'	5.50	110.50	106.10
25	BB	1750	G	C8-N9-C4	-5.50	104.20	106.40
25	BB	1975	G	P-O3'-C3'	5.50	126.30	119.70
25	BB	2289	G	C5-C6-N1	5.50	114.25	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2351	G	N3-C2-N2	-5.50	116.05	119.90
25	BB	2488	G	O3'-P-O5'	5.50	114.45	104.00
31	BH	113	ALA	N-CA-CB	-5.50	102.40	110.10
1	AE	7	U	C5'-C4'-C3'	-5.50	107.21	116.00
3	A1	255	G	C5'-C4'-C3'	-5.50	107.20	116.00
3	A1	288	A	O4'-C4'-C3'	-5.50	98.50	104.00
3	A1	582	C	O5'-P-OP1	-5.50	100.75	105.70
3	A1	672	U	OP1-P-OP2	-5.50	111.36	119.60
3	A1	993	G	C6-N1-C2	-5.50	121.80	125.10
3	A1	1388	C	N3-C4-N4	-5.50	114.15	118.00
3	A1	1488	G	O5'-C5'-C4'	-5.50	101.25	111.70
25	BB	79	C	C5-C6-N1	-5.50	118.25	121.00
25	BB	189	G	N3-C4-C5	-5.50	125.85	128.60
25	BB	756	A	C4'-C3'-C2'	-5.50	97.10	102.60
25	BB	1026	G	O4'-C1'-C2'	-5.50	100.30	105.80
25	BB	1844	C	C2-N3-C4	-5.50	117.15	119.90
25	BB	2160	C	O4'-C1'-N1	-5.50	103.80	108.20
25	BB	2288	A	C6-N1-C2	-5.50	115.30	118.60
1	AA	20	G	N3-C2-N2	5.50	123.75	119.90
1	AE	16	U	N3-C2-O2	-5.50	118.35	122.20
3	A1	1298	U	C4-C5-C6	5.50	123.00	119.70
25	BB	421	C	C5-C4-N4	-5.50	116.35	120.20
25	BB	1763	G	P-O3'-C3'	5.50	126.29	119.70
25	BB	2083	G	N3-C2-N2	-5.50	116.05	119.90
25	BB	2250	G	C3'-C2'-C1'	5.50	105.90	101.50
25	BB	2662	A	O4'-C4'-C3'	5.50	110.50	106.10
25	BB	2664	G	C3'-C2'-C1'	-5.50	97.10	101.50
1	AA	10	G	N3-C4-C5	-5.49	125.85	128.60
3	A1	581	G	N7-C8-N9	5.49	115.85	113.10
3	A1	693	G	N3-C4-C5	-5.49	125.85	128.60
24	BA	36	C	C5'-C4'-C3'	-5.49	107.21	116.00
25	BB	621	A	C4-C5-C6	-5.49	114.25	117.00
25	BB	1239	G	N3-C4-C5	-5.49	125.85	128.60
25	BB	1312	U	C5-C6-N1	-5.49	119.95	122.70
25	BB	1655	A	P-O3'-C3'	5.49	126.29	119.70
25	BB	2478	A	N9-C4-C5	5.49	108.00	105.80
3	A1	239	U	O4'-C1'-N1	5.49	112.59	108.20
3	A1	284	C	N3-C4-C5	5.49	124.10	121.90
25	BB	192	C	N1-C2-O2	5.49	122.19	118.90
25	BB	747	U	P-O3'-C3'	5.49	126.29	119.70
25	BB	2150	C	N3-C2-O2	-5.49	118.06	121.90
30	BG	45	ARG	CD-NE-CZ	5.49	131.29	123.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	615	G	N9-C4-C5	5.49	107.60	105.40
3	A1	644	U	C3'-C2'-C1'	-5.49	97.11	101.50
3	A1	654	G	N7-C8-N9	5.49	115.85	113.10
3	A1	919	A	C5-C6-N1	5.49	120.44	117.70
3	A1	955	U	N3-C2-O2	-5.49	118.36	122.20
3	A1	1331	G	N1-C6-O6	-5.49	116.61	119.90
25	BB	136	G	C8-N9-C4	-5.49	104.20	106.40
25	BB	334	C	N1-C2-O2	5.49	122.19	118.90
25	BB	393	C	O3'-P-O5'	5.49	114.43	104.00
25	BB	567	U	C5-C6-N1	-5.49	119.95	122.70
25	BB	720	U	N3-C4-O4	-5.49	115.56	119.40
25	BB	896	A	C5'-C4'-C3'	5.49	124.78	116.00
25	BB	997	G	N3-C2-N2	-5.49	116.06	119.90
25	BB	1105	U	C4'-C3'-C2'	-5.49	97.11	102.60
25	BB	1364	G	C2-N3-C4	-5.49	109.16	111.90
25	BB	1692	U	C5-C6-N1	-5.49	119.95	122.70
25	BB	1881	C	N3-C4-N4	-5.49	114.16	118.00
25	BB	2039	U	N1-C2-N3	5.49	118.19	114.90
25	BB	2170	A	C5-C6-N6	5.49	128.09	123.70
25	BB	2268	A	C5-C6-N6	5.49	128.09	123.70
25	BB	2415	G	C5'-C4'-O4'	5.49	115.69	109.10
25	BB	2452	C	N1-C2-O2	5.49	122.19	118.90
25	BB	2466	C	O4'-C4'-C3'	5.49	110.49	106.10
30	BG	87	PHE	CB-CG-CD1	-5.49	116.96	120.80
33	BJ	29	ARG	CD-NE-CZ	5.49	131.29	123.60
51	B2	101	ARG	CD-NE-CZ	5.49	131.29	123.60
3	A1	195	A	C5-C6-N6	5.49	128.09	123.70
3	A1	436	C	C5'-C4'-O4'	5.49	115.69	109.10
3	A1	720	C	N3-C4-C5	5.49	124.10	121.90
3	A1	779	C	N1-C2-N3	5.49	123.04	119.20
3	A1	891	U	C1'-O4'-C4'	-5.49	105.51	109.90
3	A1	1063	C	C5-C6-N1	-5.49	118.25	121.00
3	A1	1138	G	O5'-C5'-C4'	5.49	122.13	111.70
17	AR	187	ARG	NH1-CZ-NH2	5.49	125.44	119.40
25	BB	614	A	C8-N9-C4	-5.49	103.61	105.80
25	BB	714	U	C5-C6-N1	-5.49	119.96	122.70
25	BB	719	C	C4'-C3'-C2'	-5.49	97.11	102.60
25	BB	853	C	C4'-C3'-C2'	-5.49	97.11	102.60
25	BB	881	G	C4-C5-N7	5.49	113.00	110.80
25	BB	1779	U	C2-N3-C4	-5.49	123.71	127.00
25	BB	1824	G	C5-C6-O6	5.49	131.89	128.60
25	BB	2085	U	C2-N3-C4	-5.49	123.71	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2341	G	C2-N3-C4	5.49	114.64	111.90
25	BB	2376	A	C4-C5-C6	-5.49	114.26	117.00
25	BB	2468	A	C5-N7-C8	-5.49	101.16	103.90
25	BB	2837	A	C4-C5-C6	-5.49	114.26	117.00
49	BZ	128	LEU	C-N-CA	5.49	133.82	122.30
54	B5	126	ARG	NE-CZ-NH1	5.49	123.04	120.30
3	A1	130	A	O4'-C1'-N9	5.49	112.59	108.20
3	A1	355	C	N1-C2-O2	5.49	122.19	118.90
3	A1	552	U	C5-C6-N1	-5.49	119.96	122.70
8	AG	51	PRO	N-CD-CG	5.49	111.43	103.20
24	BA	46	A	C5-N7-C8	-5.49	101.16	103.90
25	BB	277	G	N1-C6-O6	-5.49	116.61	119.90
25	BB	610	C	O4'-C1'-N1	5.49	112.59	108.20
25	BB	624	C	N1-C2-O2	5.49	122.19	118.90
25	BB	1248	G	N1-C2-N3	5.49	127.19	123.90
25	BB	2564	A	C1'-O4'-C4'	-5.49	105.51	109.90
25	BB	2656	U	O4'-C1'-N1	5.49	112.59	108.20
25	BB	2893	A	C2-N3-C4	5.49	113.34	110.60
3	A1	431	A	N1-C2-N3	-5.49	126.56	129.30
3	A1	799	G	C5-C6-N1	5.49	114.24	111.50
3	A1	906	A	C2-N3-C4	5.49	113.34	110.60
3	A1	1107	C	N3-C2-O2	-5.49	118.06	121.90
3	A1	1269	A	O5'-P-OP1	-5.49	100.76	105.70
3	A1	1485	U	C5'-C4'-C3'	-5.49	107.22	116.00
5	AC	36	ARG	CD-NE-CZ	5.49	131.28	123.60
24	BA	105	G	N3-C4-N9	5.49	129.29	126.00
25	BB	20	C	C5'-C4'-C3'	-5.49	107.22	116.00
25	BB	268	C	N3-C4-N4	-5.49	114.16	118.00
25	BB	353	C	C3'-C2'-C1'	5.49	105.89	101.50
25	BB	912	C	C5'-C4'-C3'	-5.49	107.22	116.00
25	BB	1389	G	O4'-C1'-N9	5.49	112.59	108.20
25	BB	1703	G	N3-C2-N2	-5.49	116.06	119.90
25	BB	2122	U	N1-C2-N3	5.49	118.19	114.90
3	A1	171	A	C4-C5-N7	5.48	113.44	110.70
3	A1	452	A	C5-C6-N6	5.48	128.09	123.70
3	A1	457	G	C3'-C2'-C1'	5.48	105.89	101.50
3	A1	464	U	O4'-C1'-N1	5.48	112.59	108.20
3	A1	845	A	O5'-P-OP2	-5.48	100.76	105.70
3	A1	1049	U	N1-C2-N3	5.48	118.19	114.90
5	AC	12	ARG	CD-NE-CZ	5.48	131.28	123.60
24	BA	21	G	C5-N7-C8	-5.48	101.56	104.30
25	BB	105	C	C3'-C2'-C1'	5.48	105.89	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	387	U	C6-N1-C2	-5.48	117.71	121.00
25	BB	402	A	N9-C1'-C2'	-5.48	105.97	112.00
25	BB	468	G	N3-C2-N2	-5.48	116.06	119.90
25	BB	1187	G	C2-N3-C4	5.48	114.64	111.90
25	BB	1262	A	O4'-C1'-N9	5.48	112.59	108.20
25	BB	1409	U	C2-N3-C4	-5.48	123.71	127.00
25	BB	1685	C	O4'-C1'-N1	5.48	112.59	108.20
25	BB	2684	U	N3-C2-O2	-5.48	118.36	122.20
48	BY	92	VAL	CA-CB-CG1	5.48	119.13	110.90
1	AP	28	C	P-O5'-C5'	5.48	129.67	120.90
1	AP	31	A	C4'-C3'-C2'	5.48	108.08	102.60
3	A1	151	A	C5'-C4'-C3'	-5.48	107.23	116.00
3	A1	268	U	O4'-C1'-N1	5.48	112.59	108.20
3	A1	511	C	C6-N1-C2	-5.48	118.11	120.30
3	A1	563	A	C6-C5-N7	5.48	136.14	132.30
23	AX	43	PRO	C-N-CA	5.48	135.41	121.70
24	BA	14	U	C1'-O4'-C4'	-5.48	105.52	109.90
25	BB	101	A	N9-C1'-C2'	5.48	121.13	114.00
25	BB	725	G	C2-N3-C4	5.48	114.64	111.90
25	BB	1230	A	C5'-C4'-C3'	-5.48	107.23	116.00
25	BB	1285	A	C6-C5-N7	5.48	136.14	132.30
25	BB	1528	A	C2-N3-C4	5.48	113.34	110.60
25	BB	1982	U	N3-C2-O2	-5.48	118.36	122.20
25	BB	2094	A	C5'-C4'-C3'	-5.48	107.23	116.00
25	BB	2437	G	C2-N3-C4	5.48	114.64	111.90
25	BB	2651	C	C2-N3-C4	-5.48	117.16	119.90
25	BB	2825	G	C3'-C2'-C1'	5.48	105.89	101.50
25	BB	2828	G	N1-C6-O6	-5.48	116.61	119.90
48	BY	83	ARG	C-N-CA	5.48	135.41	121.70
3	A1	11	G	C5'-C4'-C3'	-5.48	107.23	116.00
3	A1	260	G	C6-C5-N7	5.48	133.69	130.40
3	A1	353	A	C5-C6-N6	5.48	128.09	123.70
3	A1	1056	U	C5-C6-N1	-5.48	119.96	122.70
3	A1	1357	A	C4-C5-C6	-5.48	114.26	117.00
3	A1	1390	U	N1-C1'-C2'	-5.48	105.97	112.00
3	A1	1526	G	O4'-C1'-N9	5.48	112.58	108.20
25	BB	857	G	C1'-O4'-C4'	-5.48	105.52	109.90
25	BB	1279	G	N3-C2-N2	-5.48	116.06	119.90
25	BB	1837	C	C3'-C2'-C1'	5.48	105.88	101.50
25	BB	1928	A	C5'-C4'-O4'	5.48	115.67	109.10
25	BB	1982	U	O4'-C1'-N1	5.48	112.58	108.20
25	BB	2413	G	N1-C6-O6	-5.48	116.61	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2536	G	C1'-O4'-C4'	-5.48	105.52	109.90
52	B3	152	ARG	NE-CZ-NH1	-5.48	117.56	120.30
1	AE	65	G	C3'-C2'-C1'	-5.48	97.12	101.50
3	A1	37	U	C4'-C3'-C2'	-5.48	97.12	102.60
3	A1	529	G	C5'-C4'-O4'	5.48	115.67	109.10
3	A1	572	A	C3'-C2'-C1'	5.48	105.88	101.50
25	BB	247	G	C6-C5-N7	5.48	133.69	130.40
27	BD	30	ARG	NE-CZ-NH2	-5.48	117.56	120.30
3	A1	1092	A	C5-C6-N6	5.48	128.08	123.70
3	A1	1201	A	C5-C6-N6	5.48	128.08	123.70
3	A1	1238	A	C5'-C4'-O4'	5.48	115.67	109.10
3	A1	1300	G	C3'-C2'-C1'	5.48	105.88	101.50
25	BB	188	G	C8-N9-C4	-5.48	104.21	106.40
25	BB	479	A	C6-C5-N7	5.48	136.13	132.30
25	BB	714	U	C1'-O4'-C4'	-5.48	105.52	109.90
25	BB	815	C	C6-N1-C2	-5.48	118.11	120.30
25	BB	995	C	C5-C4-N4	-5.48	116.36	120.20
25	BB	1169	A	C2-N3-C4	5.48	113.34	110.60
25	BB	1945	G	C5-C6-O6	5.48	131.89	128.60
25	BB	1955	U	P-O3'-C3'	5.48	126.27	119.70
25	BB	1977	A	C1'-O4'-C4'	-5.48	105.52	109.90
25	BB	2057	G	O4'-C1'-N9	5.48	112.58	108.20
25	BB	2206	C	O4'-C1'-N1	5.48	112.58	108.20
25	BB	2383	G	O5'-P-OP1	5.48	117.27	110.70
25	BB	2611	C	C5-C4-N4	5.48	124.03	120.20
25	BB	2661	G	C6-N1-C2	-5.48	121.81	125.10
25	BB	2771	C	N3-C2-O2	-5.48	118.06	121.90
25	BB	2813	A	C2-N3-C4	5.48	113.34	110.60
25	BB	473	G	N3-C4-N9	5.48	129.29	126.00
25	BB	1570	A	C3'-C2'-C1'	5.48	105.88	101.50
25	BB	1725	U	N1-C2-N3	5.48	118.19	114.90
25	BB	2845	U	C1'-O4'-C4'	-5.48	105.52	109.90
39	BP	55	ASP	C-N-CA	5.48	135.39	121.70
1	AA	15	G	C8-N9-C1'	5.47	134.12	127.00
3	A1	433	G	O4'-C1'-N9	5.47	112.58	108.20
3	A1	666	G	C5-N7-C8	-5.47	101.56	104.30
3	A1	791	G	C4-C5-C6	-5.47	115.52	118.80
3	A1	919	A	C8-N9-C4	-5.47	103.61	105.80
3	A1	1000	A	C1'-O4'-C4'	-5.47	105.52	109.90
25	BB	135	U	O4'-C1'-N1	5.47	112.58	108.20
25	BB	1327	A	C1'-O4'-C4'	-5.47	105.52	109.90
25	BB	1465	G	C5'-C4'-C3'	-5.47	107.24	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1530	G	C5-C6-O6	5.47	131.88	128.60
25	BB	1548	A	C2-N3-C4	5.47	113.34	110.60
25	BB	1931	U	O4'-C1'-N1	5.47	112.58	108.20
25	BB	2020	A	C4'-C3'-C2'	-5.47	97.13	102.60
25	BB	2252	G	N3-C4-N9	5.47	129.28	126.00
25	BB	2698	U	C4'-C3'-C2'	-5.47	97.13	102.60
25	BB	2701	U	C5-C4-O4	-5.47	122.62	125.90
25	BB	2744	G	N7-C8-N9	5.47	115.84	113.10
25	BB	2757	A	C2-N3-C4	5.47	113.34	110.60
1	AP	45	G	O5'-P-OP2	-5.47	100.78	105.70
3	A1	159	G	C6-N1-C2	-5.47	121.82	125.10
3	A1	874	G	O4'-C1'-N9	5.47	112.58	108.20
3	A1	1121	U	C5'-C4'-O4'	5.47	115.67	109.10
3	A1	1124	G	C5-C6-O6	5.47	131.88	128.60
25	BB	674	G	C5'-C4'-O4'	5.47	115.67	109.10
25	BB	1485	U	N1-C1'-C2'	5.47	121.11	114.00
25	BB	1514	G	N3-C2-N2	-5.47	116.07	119.90
25	BB	2123	G	N3-C4-C5	-5.47	125.86	128.60
25	BB	2351	G	C5-C6-O6	5.47	131.88	128.60
25	BB	2454	G	C6-C5-N7	5.47	133.68	130.40
25	BB	2861	U	N1-C2-N3	5.47	118.18	114.90
25	BB	2875	C	P-O3'-C3'	5.47	126.27	119.70
48	BY	77	ARG	NE-CZ-NH2	-5.47	117.56	120.30
3	A1	1515	G	C5'-C4'-O4'	-5.47	102.53	109.10
22	AW	11	ARG	NE-CZ-NH1	-5.47	117.56	120.30
25	BB	530	G	N9-C4-C5	5.47	107.59	105.40
25	BB	1887	C	N1-C2-O2	5.47	122.18	118.90
25	BB	2091	C	N1-C2-O2	5.47	122.18	118.90
25	BB	2328	A	C6-C5-N7	5.47	136.13	132.30
1	AP	20	G	N3-C4-C5	-5.47	125.86	128.60
3	A1	165	G	C5-C6-O6	5.47	131.88	128.60
3	A1	266	G	C6-C5-N7	5.47	133.68	130.40
3	A1	350	G	O4'-C1'-N9	5.47	112.58	108.20
3	A1	474	G	N9-C4-C5	5.47	107.59	105.40
3	A1	743	A	C4-C5-C6	-5.47	114.27	117.00
3	A1	887	G	C4-C5-N7	-5.47	108.61	110.80
3	A1	1231	G	C5-N7-C8	-5.47	101.56	104.30
3	A1	1299	A	C5-C6-N6	5.47	128.08	123.70
3	A1	1320	C	C4-C5-C6	5.47	120.14	117.40
3	A1	1367	C	C5'-C4'-O4'	5.47	115.66	109.10
25	BB	188	G	N1-C2-N3	5.47	127.18	123.90
25	BB	1525	A	C6-C5-N7	5.47	136.13	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2049	G	N1-C6-O6	-5.47	116.62	119.90
25	BB	2493	U	C1'-O4'-C4'	-5.47	105.52	109.90
25	BB	2506	U	C5'-C4'-O4'	5.47	115.66	109.10
25	BB	2698	U	N3-C2-O2	-5.47	118.37	122.20
3	A1	27	G	C5-C6-O6	5.47	131.88	128.60
3	A1	344	A	C1'-O4'-C4'	-5.47	105.53	109.90
3	A1	378	G	C2'-C3'-O3'	5.47	122.45	113.70
3	A1	429	U	C5-C6-N1	-5.47	119.97	122.70
3	A1	473	U	C5-C6-N1	-5.47	119.97	122.70
3	A1	667	G	C6-C5-N7	5.47	133.68	130.40
25	BB	145	C	C5-C6-N1	-5.47	118.27	121.00
25	BB	1467	U	N1-C2-N3	5.47	118.18	114.90
2	AM	18	U	O4'-C1'-N1	5.47	112.57	108.20
3	A1	824	G	N1-C2-N2	-5.47	111.28	116.20
3	A1	846	G	C6-N1-C2	-5.47	121.82	125.10
3	A1	1025	U	C5'-C4'-O4'	-5.47	102.54	109.10
3	A1	1095	U	C4-C5-C6	5.47	122.98	119.70
3	A1	1133	G	C5-N7-C8	-5.47	101.57	104.30
3	A1	1529	G	C8-N9-C4	-5.47	104.21	106.40
24	BA	10	G	N1-C6-O6	-5.47	116.62	119.90
25	BB	117	G	C6-C5-N7	5.47	133.68	130.40
25	BB	379	G	C8-N9-C4	-5.47	104.21	106.40
25	BB	552	U	C4-C5-C6	5.47	122.98	119.70
25	BB	1249	U	C5'-C4'-O4'	5.47	115.66	109.10
25	BB	1342	A	O4'-C4'-C3'	5.47	110.47	106.10
25	BB	1559	U	C6-N1-C2	-5.47	117.72	121.00
25	BB	1659	G	C5-C6-O6	5.47	131.88	128.60
25	BB	1752	C	C5-C6-N1	-5.47	118.27	121.00
25	BB	1959	G	O5'-C5'-C4'	5.47	122.09	111.70
25	BB	2171	A	N7-C8-N9	5.47	116.53	113.80
25	BB	2190	G	N1-C6-O6	-5.47	116.62	119.90
25	BB	2238	G	C5-C6-O6	5.47	131.88	128.60
25	BB	2518	A	N9-C1'-C2'	-5.47	105.99	112.00
25	BB	2589	A	C6-N1-C2	-5.47	115.32	118.60
25	BB	2863	C	C5'-C4'-O4'	5.47	115.66	109.10
3	A1	206	C	P-O3'-C3'	-5.46	113.14	119.70
3	A1	326	G	N3-C2-N2	-5.46	116.08	119.90
3	A1	701	U	C6-N1-C2	-5.46	117.72	121.00
3	A1	770	C	C6-N1-C2	-5.46	118.11	120.30
3	A1	1358	U	C6-N1-C2	-5.46	117.72	121.00
24	BA	66	A	N1-C6-N6	-5.46	115.32	118.60
25	BB	419	U	C2-N3-C4	-5.46	123.72	127.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	548	G	O4'-C1'-N9	5.46	112.57	108.20
25	BB	644	A	C6-N1-C2	-5.46	115.32	118.60
25	BB	889	C	N3-C2-O2	-5.46	118.08	121.90
25	BB	905	A	N1-C2-N3	-5.46	126.57	129.30
25	BB	990	A	C1'-O4'-C4'	5.46	114.27	109.90
25	BB	1424	G	C5-N7-C8	-5.46	101.57	104.30
25	BB	1560	G	C3'-C2'-C1'	-5.46	97.13	101.50
25	BB	2155	U	O4'-C4'-C3'	5.46	110.47	106.10
25	BB	2190	G	N9-C4-C5	5.46	107.59	105.40
25	BB	2324	U	O4'-C1'-N1	5.46	112.57	108.20
1	AE	30	G	C5-C6-O6	5.46	131.88	128.60
3	A1	988	G	N1-C2-N2	5.46	121.12	116.20
25	BB	494	G	C4-C5-C6	-5.46	115.52	118.80
25	BB	1591	A	C6-N1-C2	-5.46	115.32	118.60
25	BB	1834	U	C5-C4-O4	-5.46	122.62	125.90
25	BB	1904	G	N9-C4-C5	5.46	107.58	105.40
25	BB	2164	C	C3'-C2'-C1'	5.46	105.87	101.50
1	AP	4	G	N9-C1'-C2'	-5.46	105.99	112.00
1	AP	21	A	P-O3'-C3'	5.46	126.25	119.70
1	AE	24	G	C4-C5-C6	-5.46	115.52	118.80
3	A1	153	C	C5'-C4'-C3'	-5.46	107.26	116.00
3	A1	415	A	C6-C5-N7	5.46	136.12	132.30
3	A1	961	U	C5-C6-N1	-5.46	119.97	122.70
3	A1	1070	U	N1-C2-N3	5.46	118.18	114.90
3	A1	1277	C	O4'-C1'-N1	5.46	112.57	108.20
3	A1	1533	C	C5-C4-N4	-5.46	116.38	120.20
24	BA	58	A	C8-N9-C4	-5.46	103.62	105.80
25	BB	89	A	C4-C5-C6	-5.46	114.27	117.00
25	BB	338	G	N3-C4-N9	5.46	129.28	126.00
25	BB	401	A	C5-C6-N1	5.46	120.43	117.70
25	BB	654	A	C5'-C4'-O4'	5.46	115.65	109.10
25	BB	737	C	N1-C2-N3	5.46	123.02	119.20
25	BB	791	C	C5-C4-N4	5.46	124.02	120.20
25	BB	850	U	O4'-C4'-C3'	5.46	110.47	106.10
25	BB	1036	G	C4-C5-N7	-5.46	108.61	110.80
25	BB	1143	A	C6-C5-N7	5.46	136.12	132.30
25	BB	1233	C	C1'-O4'-C4'	5.46	114.27	109.90
25	BB	1524	G	C5'-C4'-C3'	-5.46	107.26	116.00
25	BB	2106	U	O4'-C4'-C3'	5.46	110.47	106.10
25	BB	2107	G	C5-C6-O6	5.46	131.88	128.60
25	BB	2359	C	C4-C5-C6	5.46	120.13	117.40
25	BB	2808	G	N7-C8-N9	5.46	115.83	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	27	C	C5-C4-N4	5.46	124.02	120.20
3	A1	437	U	N1-C1'-C2'	-5.46	105.99	112.00
3	A1	1178	G	N3-C4-C5	-5.46	125.87	128.60
3	A1	1352	C	C5'-C4'-O4'	5.46	115.65	109.10
8	AG	16	ALA	N-CA-CB	-5.46	102.46	110.10
25	BB	855	G	C8-N9-C4	-5.46	104.22	106.40
25	BB	1074	G	N9-C1'-C2'	-5.46	105.99	112.00
1	AA	18	G	C5'-C4'-O4'	-5.46	102.55	109.10
3	A1	101	A	O5'-P-OP2	5.46	117.25	110.70
3	A1	200	G	C6-N1-C2	-5.46	121.83	125.10
3	A1	398	U	N1-C2-N3	5.46	118.17	114.90
3	A1	467	U	N1-C2-O2	-5.46	118.98	122.80
3	A1	839	C	C6-N1-C2	-5.46	118.12	120.30
4	AB	94	ARG	NE-CZ-NH2	5.46	123.03	120.30
24	BA	66	A	C8-N9-C4	-5.46	103.62	105.80
25	BB	698	C	O4'-C1'-N1	5.46	112.57	108.20
25	BB	755	U	C4-C5-C6	5.46	122.97	119.70
25	BB	1831	G	C6-N1-C2	-5.46	121.83	125.10
25	BB	2362	C	N3-C4-N4	-5.46	114.18	118.00
25	BB	2391	G	C1'-O4'-C4'	-5.46	105.53	109.90
2	AM	16	U	C5'-C4'-C3'	-5.46	107.27	116.00
3	A1	47	C	N3-C2-O2	-5.46	118.08	121.90
3	A1	352	C	O5'-P-OP2	-5.46	100.79	105.70
3	A1	386	C	N1-C2-N3	5.46	123.02	119.20
3	A1	713	G	C2-N3-C4	-5.46	109.17	111.90
25	BB	412	A	C4'-C3'-C2'	-5.46	97.14	102.60
25	BB	443	A	C6-C5-N7	5.46	136.12	132.30
25	BB	660	C	C6-N1-C2	-5.46	118.12	120.30
25	BB	859	G	N3-C2-N2	-5.46	116.08	119.90
25	BB	1794	A	N9-C4-C5	5.46	107.98	105.80
25	BB	2112	G	O5'-P-OP2	5.46	117.25	110.70
25	BB	2565	A	C6-N1-C2	-5.46	115.33	118.60
3	A1	856	C	N3-C2-O2	-5.46	118.08	121.90
3	A1	1088	G	C1'-O4'-C4'	-5.46	105.54	109.90
25	BB	159	G	N1-C6-O6	-5.46	116.63	119.90
25	BB	1276	A	C3'-C2'-C1'	-5.46	97.14	101.50
3	A1	12	U	C1'-O4'-C4'	-5.45	105.54	109.90
3	A1	203	G	N1-C2-N2	5.45	121.11	116.20
3	A1	395	C	N1-C2-O2	5.45	122.17	118.90
3	A1	593	U	N1-C2-N3	5.45	118.17	114.90
3	A1	844	G	N3-C2-N2	-5.45	116.08	119.90
3	A1	1019	A	C5-C6-N6	5.45	128.06	123.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1200	C	C5-C6-N1	-5.45	118.27	121.00
15	AO	125	ARG	NH1-CZ-NH2	-5.45	113.40	119.40
25	BB	277	G	C4'-C3'-C2'	-5.45	97.15	102.60
25	BB	627	A	O4'-C1'-N9	5.45	112.56	108.20
25	BB	1241	A	C6-C5-N7	5.45	136.12	132.30
25	BB	1290	C	O4'-C4'-C3'	5.45	110.46	106.10
25	BB	1343	G	C4-C5-N7	-5.45	108.62	110.80
25	BB	2514	U	N1-C2-N3	5.45	118.17	114.90
25	BB	2580	U	N1-C1'-C2'	5.45	121.09	114.00
25	BB	2620	C	N3-C4-N4	-5.45	114.18	118.00
25	BB	2872	A	C8-N9-C4	-5.45	103.62	105.80
3	A1	1166	G	C5'-C4'-O4'	5.45	115.64	109.10
24	BA	9	G	C5-C6-N1	5.45	114.23	111.50
25	BB	177	G	C6-N1-C2	-5.45	121.83	125.10
25	BB	738	G	O5'-P-OP2	-5.45	100.79	105.70
25	BB	2294	G	N3-C4-N9	5.45	129.27	126.00
2	AM	19	U	N3-C2-O2	-5.45	118.39	122.20
3	A1	187	G	N3-C2-N2	-5.45	116.08	119.90
3	A1	336	A	N9-C4-C5	5.45	107.98	105.80
3	A1	735	C	N3-C4-C5	5.45	124.08	121.90
3	A1	824	G	N1-C2-N3	5.45	127.17	123.90
3	A1	930	C	N1-C2-N3	5.45	123.02	119.20
3	A1	934	C	O4'-C1'-N1	5.45	112.56	108.20
3	A1	1519	A	C5'-C4'-O4'	5.45	115.64	109.10
25	BB	222	A	N3-C4-C5	-5.45	122.98	126.80
25	BB	796	C	N1-C2-N3	5.45	123.02	119.20
25	BB	849	A	C5-C6-N1	5.45	120.43	117.70
25	BB	1532	A	N1-C6-N6	-5.45	115.33	118.60
25	BB	1555	G	C3'-C2'-C1'	-5.45	97.14	101.50
25	BB	1904	G	N1-C2-N3	5.45	127.17	123.90
25	BB	1952	A	C2-N3-C4	5.45	113.33	110.60
25	BB	2850	A	C5-N7-C8	-5.45	101.17	103.90
46	BW	29	ARG	NE-CZ-NH1	5.45	123.03	120.30
3	A1	14	U	O4'-C1'-N1	5.45	112.56	108.20
3	A1	49	U	O3'-P-O5'	5.45	114.35	104.00
3	A1	154	U	C3'-C2'-C1'	-5.45	97.14	101.50
3	A1	354	G	P-O3'-C3'	5.45	126.24	119.70
3	A1	510	A	C1'-O4'-C4'	-5.45	105.54	109.90
3	A1	675	A	C1'-O4'-C4'	-5.45	105.54	109.90
3	A1	957	U	N3-C4-O4	5.45	123.21	119.40
3	A1	1127	G	C5-C6-N1	5.45	114.22	111.50
3	A1	1431	A	O5'-C5'-C4'	-5.45	101.35	111.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1324	G	N3-C2-N2	-5.45	116.09	119.90
25	BB	1527	G	N9-C4-C5	5.45	107.58	105.40
25	BB	1849	G	C5'-C4'-O4'	5.45	115.64	109.10
25	BB	2221	G	C5-C6-N1	5.45	114.22	111.50
25	BB	2351	G	C6-N1-C2	-5.45	121.83	125.10
25	BB	2693	G	C5'-C4'-O4'	5.45	115.64	109.10
26	BC	93	ARG	CD-NE-CZ	5.45	131.23	123.60
32	BI	108	ARG	CD-NE-CZ	5.45	131.23	123.60
1	AE	49	C	N1-C2-O2	5.45	122.17	118.90
3	A1	143	A	C4-C5-N7	5.45	113.42	110.70
3	A1	1050	G	C6-N1-C2	-5.45	121.83	125.10
4	AB	15	PHE	CB-CG-CD2	-5.45	116.99	120.80
25	BB	29	U	N3-C2-O2	-5.45	118.39	122.20
25	BB	840	C	N1-C2-N3	5.45	123.01	119.20
25	BB	1115	G	O4'-C1'-N9	5.45	112.56	108.20
25	BB	1160	G	C5'-C4'-O4'	5.45	115.64	109.10
25	BB	1652	A	C5-C6-N1	5.45	120.42	117.70
25	BB	1778	U	O4'-C1'-N1	5.45	112.56	108.20
1	AA	52	U	C5'-C4'-O4'	5.45	115.64	109.10
3	A1	31	G	N1-C6-O6	-5.45	116.63	119.90
3	A1	414	A	C3'-C2'-C1'	5.45	105.86	101.50
3	A1	665	A	C8-N9-C4	5.45	107.98	105.80
3	A1	800	G	C6-N1-C2	-5.45	121.83	125.10
3	A1	947	G	N7-C8-N9	5.45	115.82	113.10
3	A1	992	U	O4'-C1'-C2'	-5.45	100.36	105.80
3	A1	1002	G	N1-C6-O6	-5.45	116.63	119.90
3	A1	1078	U	O4'-C4'-C3'	5.45	110.46	106.10
3	A1	1390	U	C5'-C4'-O4'	5.45	115.64	109.10
6	AD	15	VAL	CA-CB-CG2	5.45	119.07	110.90
25	BB	50	U	C3'-C2'-C1'	-5.45	97.14	101.50
25	BB	148	U	C5-C4-O4	-5.45	122.63	125.90
25	BB	350	G	N1-C2-N3	5.45	127.17	123.90
25	BB	577	G	N3-C2-N2	-5.45	116.09	119.90
25	BB	650	C	C5'-C4'-C3'	-5.45	107.29	116.00
25	BB	861	A	O4'-C4'-C3'	5.45	110.46	106.10
25	BB	878	A	C2-N3-C4	5.45	113.32	110.60
25	BB	962	G	C4'-C3'-C2'	-5.45	97.15	102.60
25	BB	1624	U	C4-C5-C6	5.45	122.97	119.70
25	BB	2005	A	C1'-O4'-C4'	-5.45	105.54	109.90
25	BB	2112	G	C4-C5-C6	-5.45	115.53	118.80
25	BB	2217	G	C1'-O4'-C4'	-5.45	105.54	109.90
25	BB	2745	C	N3-C2-O2	-5.45	118.09	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2758	A	C5'-C4'-O4'	5.45	115.64	109.10
3	A1	463	U	C1'-O4'-C4'	-5.44	105.55	109.90
3	A1	751	U	C4-C5-C6	5.44	122.97	119.70
3	A1	1067	A	C2-N3-C4	5.44	113.32	110.60
3	A1	1071	C	N3-C4-N4	-5.44	114.19	118.00
24	BA	17	C	C1'-O4'-C4'	-5.44	105.54	109.90
25	BB	380	G	N1-C2-N3	5.44	127.17	123.90
25	BB	1317	G	C4'-C3'-C2'	-5.44	97.16	102.60
25	BB	1645	G	C5-C6-O6	5.44	131.87	128.60
25	BB	1850	G	C1'-O4'-C4'	-5.44	105.55	109.90
25	BB	2496	C	C5'-C4'-O4'	5.44	115.63	109.10
36	BM	42	GLU	CG-CD-OE1	5.44	129.19	118.30
1	AE	19	G	C1'-O4'-C4'	-5.44	105.55	109.90
1	AE	75	C	O5'-C5'-C4'	-5.44	101.36	111.70
3	A1	229	U	N1-C2-N3	5.44	118.17	114.90
3	A1	554	A	C5'-C4'-C3'	-5.44	107.29	116.00
3	A1	780	A	C3'-C2'-C1'	5.44	105.85	101.50
25	BB	68	G	N1-C2-N3	5.44	127.17	123.90
25	BB	91	A	C5-C6-N6	5.44	128.05	123.70
25	BB	208	C	C5'-C4'-O4'	5.44	115.63	109.10
25	BB	348	A	N9-C4-C5	-5.44	103.62	105.80
25	BB	845	A	C5-C6-N1	5.44	120.42	117.70
25	BB	963	U	N3-C4-O4	5.44	123.21	119.40
25	BB	1075	C	N3-C4-C5	5.44	124.08	121.90
25	BB	1576	U	C5'-C4'-C3'	-5.44	107.29	116.00
25	BB	1693	U	C4-C5-C6	5.44	122.97	119.70
25	BB	1952	A	C6-N1-C2	-5.44	115.33	118.60
25	BB	2249	U	C4'-C3'-C2'	-5.44	97.16	102.60
25	BB	2357	G	N1-C6-O6	-5.44	116.64	119.90
25	BB	2812	G	C5'-C4'-C3'	-5.44	107.29	116.00
1	AP	57	G	N9-C4-C5	5.44	107.58	105.40
1	AE	16	U	C2-N1-C1'	5.44	124.23	117.70
1	AE	19	G	O4'-C1'-N9	5.44	112.55	108.20
3	A1	738	C	C2-N3-C4	-5.44	117.18	119.90
3	A1	1219	A	O4'-C1'-N9	-5.44	103.85	108.20
3	A1	1281	C	C1'-O4'-C4'	-5.44	105.55	109.90
24	BA	55	U	C5-C4-O4	5.44	129.16	125.90
24	BA	112	G	N9-C4-C5	5.44	107.58	105.40
25	BB	102	U	C5-C4-O4	-5.44	122.64	125.90
25	BB	341	C	C6-N1-C2	-5.44	118.12	120.30
25	BB	444	C	O4'-C1'-N1	5.44	112.55	108.20
25	BB	498	G	C5-C6-N1	5.44	114.22	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	615	U	C2-N3-C4	-5.44	123.73	127.00
25	BB	715	A	C6-C5-N7	5.44	136.11	132.30
25	BB	921	C	N1-C2-N3	5.44	123.01	119.20
25	BB	971	G	C8-N9-C4	-5.44	104.22	106.40
25	BB	1158	C	C2-N3-C4	-5.44	117.18	119.90
25	BB	1168	G	N1-C6-O6	-5.44	116.64	119.90
25	BB	1222	U	C2-N3-C4	-5.44	123.74	127.00
25	BB	1228	G	N9-C4-C5	-5.44	103.22	105.40
25	BB	1342	A	C5'-C4'-C3'	-5.44	107.30	116.00
25	BB	1426	G	C5'-C4'-C3'	-5.44	107.30	116.00
25	BB	1463	C	N3-C2-O2	-5.44	118.09	121.90
25	BB	2006	C	C5-C6-N1	-5.44	118.28	121.00
25	BB	2096	C	O4'-C1'-N1	-5.44	103.85	108.20
25	BB	2209	G	N1-C2-N2	5.44	121.10	116.20
25	BB	2535	G	N1-C2-N3	5.44	127.17	123.90
1	AA	25	C	N1-C2-N3	5.44	123.01	119.20
3	A1	416	G	C3'-C2'-C1'	5.44	105.85	101.50
25	BB	1020	A	C5-C6-N1	5.44	120.42	117.70
25	BB	1074	G	C5-C6-N1	5.44	114.22	111.50
25	BB	2320	U	C3'-C2'-C1'	5.44	105.85	101.50
25	BB	2496	C	N3-C2-O2	-5.44	118.09	121.90
48	BY	77	ARG	NH1-CZ-NH2	-5.44	113.42	119.40
1	AE	38	A	O4'-C1'-N9	5.44	112.55	108.20
3	A1	166	U	C1'-O4'-C4'	-5.44	105.55	109.90
3	A1	666	G	O4'-C1'-N9	-5.44	103.85	108.20
3	A1	1260	G	N3-C4-C5	-5.44	125.88	128.60
24	BA	117	G	N1-C6-O6	-5.44	116.64	119.90
25	BB	141	G	P-O3'-C3'	5.44	126.22	119.70
25	BB	274	C	N1-C2-O2	-5.44	115.64	118.90
25	BB	806	C	C5'-C4'-C3'	-5.44	107.30	116.00
25	BB	1782	U	C4-C5-C6	5.44	122.96	119.70
25	BB	2718	G	C5-C6-O6	5.44	131.86	128.60
25	BB	2895	G	C5-C6-N1	5.44	114.22	111.50
3	A1	7	A	C5-C6-N6	5.44	128.05	123.70
3	A1	385	C	N1-C1'-C2'	-5.44	106.02	112.00
3	A1	1280	A	C5-C6-N1	5.44	120.42	117.70
13	AL	79	TYR	CB-CG-CD1	5.44	124.26	121.00
22	AW	105	ARG	CD-NE-CZ	5.44	131.21	123.60
25	BB	327	G	N3-C4-N9	-5.44	122.74	126.00
25	BB	343	C	C2-N3-C4	-5.44	117.18	119.90
25	BB	529	A	N3-C4-N9	5.44	131.75	127.40
25	BB	1730	C	C6-N1-C2	-5.44	118.13	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1989	G	N9-C1'-C2'	-5.44	106.02	112.00
25	BB	2061	G	N1-C6-O6	-5.44	116.64	119.90
1	AA	34	G	N1-C2-N2	5.43	121.09	116.20
3	A1	114	U	C3'-C2'-C1'	-5.43	97.15	101.50
3	A1	299	G	C2-N3-C4	5.43	114.62	111.90
3	A1	335	C	C5-C6-N1	-5.43	118.28	121.00
3	A1	671	G	C6-C5-N7	5.43	133.66	130.40
3	A1	996	A	P-O5'-C5'	5.43	129.59	120.90
4	AB	126	ASP	CB-CG-OD1	5.43	123.19	118.30
25	BB	8	C	C5'-C4'-O4'	5.43	115.62	109.10
25	BB	147	C	C5-C4-N4	5.43	124.00	120.20
25	BB	363	G	C4-C5-C6	-5.43	115.54	118.80
25	BB	899	A	C5'-C4'-O4'	5.43	115.62	109.10
25	BB	1000	A	C2-N3-C4	5.43	113.32	110.60
25	BB	1105	U	C3'-C2'-C1'	-5.43	97.15	101.50
25	BB	1312	U	N3-C2-O2	-5.43	118.40	122.20
25	BB	1445	G	C8-N9-C4	-5.43	104.23	106.40
25	BB	2194	U	O4'-C1'-N1	5.43	112.55	108.20
25	BB	2429	G	N3-C2-N2	-5.43	116.10	119.90
25	BB	2860	A	C5'-C4'-O4'	-5.43	102.58	109.10
1	AE	67	A	C1'-O4'-C4'	-5.43	105.56	109.90
3	A1	167	A	C5-N7-C8	-5.43	101.18	103.90
3	A1	431	A	C5-C6-N6	5.43	128.04	123.70
3	A1	575	G	N3-C2-N2	-5.43	116.10	119.90
3	A1	838	G	O3'-P-O5'	5.43	114.32	104.00
3	A1	966	G	N3-C4-C5	-5.43	125.88	128.60
3	A1	1089	G	C5'-C4'-C3'	-5.43	107.31	116.00
10	AI	39	PHE	CB-CG-CD1	-5.43	117.00	120.80
24	BA	2	G	C2-N3-C4	5.43	114.62	111.90
24	BA	69	G	O4'-C1'-N9	5.43	112.55	108.20
25	BB	490	C	C1'-O4'-C4'	-5.43	105.55	109.90
25	BB	1014	A	C5-C6-N1	5.43	120.42	117.70
25	BB	1197	G	N3-C4-C5	-5.43	125.88	128.60
25	BB	1425	G	N3-C2-N2	-5.43	116.10	119.90
25	BB	1565	C	N3-C4-N4	-5.43	114.20	118.00
25	BB	1591	A	C8-N9-C4	-5.43	103.63	105.80
25	BB	1623	G	C5-C6-N1	5.43	114.22	111.50
25	BB	1715	G	O3'-P-O5'	-5.43	93.68	104.00
25	BB	1928	A	O4'-C1'-N9	5.43	112.55	108.20
25	BB	1929	G	N3-C4-C5	-5.43	125.88	128.60
1	AA	3	G	OP2-P-O3'	5.43	117.15	105.20
3	A1	408	A	C5-C6-N1	5.43	120.42	117.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	453	G	C5-C6-O6	5.43	131.86	128.60
3	A1	1330	U	C5'-C4'-O4'	5.43	115.62	109.10
3	A1	1490	U	C5-C4-O4	-5.43	122.64	125.90
25	BB	207	A	N9-C1'-C2'	5.43	121.06	114.00
25	BB	1026	G	C4-C5-C6	-5.43	115.54	118.80
25	BB	1268	A	C8-N9-C4	-5.43	103.63	105.80
25	BB	1703	G	C4'-C3'-C2'	-5.43	97.17	102.60
25	BB	2664	G	O4'-C1'-N9	-5.43	103.86	108.20
1	AE	11	C	C1'-O4'-C4'	-5.43	105.56	109.90
3	A1	95	C	C6-N1-C2	-5.43	118.13	120.30
3	A1	413	G	C6-C5-N7	5.43	133.66	130.40
3	A1	544	G	N1-C6-O6	-5.43	116.64	119.90
3	A1	620	C	C5'-C4'-C3'	-5.43	107.31	116.00
3	A1	977	A	C2-N3-C4	5.43	113.31	110.60
3	A1	1257	A	C2-N3-C4	5.43	113.31	110.60
3	A1	1514	G	C5-C6-N1	5.43	114.22	111.50
4	AB	165	ALA	N-CA-CB	-5.43	102.50	110.10
25	BB	960	A	C6-C5-N7	5.43	136.10	132.30
25	BB	1031	G	N3-C4-C5	-5.43	125.89	128.60
25	BB	1348	C	O4'-C4'-C3'	5.43	110.44	106.10
25	BB	1602	U	N3-C2-O2	-5.43	118.40	122.20
25	BB	1870	C	C1'-O4'-C4'	-5.43	105.56	109.90
25	BB	2165	C	N1-C2-O2	-5.43	115.64	118.90
25	BB	2317	A	C1'-O4'-C4'	-5.43	105.56	109.90
25	BB	2360	G	C4'-C3'-C2'	-5.43	97.17	102.60
25	BB	2373	G	C4-C5-N7	-5.43	108.63	110.80
25	BB	2396	G	N3-C4-C5	-5.43	125.89	128.60
25	BB	2431	U	N3-C2-O2	-5.43	118.40	122.20
25	BB	2432	A	C6-C5-N7	5.43	136.10	132.30
29	BF	4	PRO	C-N-CA	5.43	135.27	121.70
37	BN	68	ARG	CD-NE-CZ	5.43	131.20	123.60
3	A1	213	G	C6-N1-C2	-5.43	121.84	125.10
3	A1	364	A	C5'-C4'-O4'	-5.43	102.59	109.10
3	A1	536	C	N1-C2-N3	5.43	123.00	119.20
3	A1	751	U	O3'-P-O5'	-5.43	93.69	104.00
25	BB	525	U	C5-C6-N1	-5.43	119.99	122.70
25	BB	871	U	O3'-P-O5'	5.43	114.31	104.00
25	BB	1311	G	N1-C6-O6	-5.43	116.64	119.90
25	BB	1518	C	C1'-O4'-C4'	5.43	114.24	109.90
25	BB	2088	A	C5-C6-N1	5.43	120.41	117.70
52	B3	150	TYR	CB-CG-CD2	-5.43	117.74	121.00
1	AE	5	A	C8-N9-C4	-5.43	103.63	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	112	G	N3-C2-N2	-5.43	116.10	119.90
3	A1	354	G	N3-C4-N9	-5.43	122.75	126.00
3	A1	640	A	O4'-C4'-C3'	5.43	110.44	106.10
3	A1	1161	C	N3-C2-O2	-5.43	118.10	121.90
3	A1	1465	A	C6-C5-N7	5.43	136.10	132.30
25	BB	659	G	C2'-C3'-O3'	5.43	122.38	113.70
25	BB	960	A	C1'-O4'-C4'	-5.43	105.56	109.90
25	BB	1627	G	C5-N7-C8	-5.43	101.59	104.30
25	BB	1780	A	C5-C6-N6	5.43	128.04	123.70
25	BB	2345	G	C5-N7-C8	5.43	107.01	104.30
25	BB	2810	A	C6-N1-C2	-5.43	115.34	118.60
2	AM	2	U	C4'-C3'-C2'	-5.42	97.18	102.60
3	A1	385	C	N1-C2-N3	5.42	123.00	119.20
3	A1	766	A	N7-C8-N9	5.42	116.51	113.80
3	A1	862	C	O3'-P-O5'	5.42	114.31	104.00
3	A1	1288	A	N9-C1'-C2'	-5.42	106.03	112.00
3	A1	1366	C	C2-N3-C4	-5.42	117.19	119.90
3	A1	1430	A	O5'-P-OP1	-5.42	100.82	105.70
25	BB	90	U	O4'-C1'-C2'	-5.42	100.38	105.80
25	BB	185	G	N9-C1'-C2'	-5.42	106.03	112.00
25	BB	477	A	C5'-C4'-C3'	-5.42	107.32	116.00
25	BB	696	G	C4-C5-N7	-5.42	108.63	110.80
25	BB	822	G	N3-C4-N9	5.42	129.25	126.00
25	BB	863	A	C5-N7-C8	-5.42	101.19	103.90
25	BB	1600	C	O4'-C1'-N1	5.42	112.54	108.20
25	BB	1638	C	C2-N3-C4	-5.42	117.19	119.90
25	BB	1684	G	C6-N1-C2	-5.42	121.85	125.10
25	BB	1927	A	C1'-O4'-C4'	-5.42	105.56	109.90
25	BB	1935	G	C8-N9-C4	-5.42	104.23	106.40
25	BB	2382	G	N3-C4-C5	-5.42	125.89	128.60
25	BB	2682	A	C6-N1-C2	-5.42	115.34	118.60
25	BB	2881	U	O4'-C1'-N1	5.42	112.54	108.20
50	B1	13	THR	CA-CB-CG2	5.42	120.00	112.40
50	B1	170	ARG	NE-CZ-NH1	-5.42	117.59	120.30
1	AA	17	U	O4'-C1'-N1	5.42	112.54	108.20
3	A1	246	A	C1'-O4'-C4'	-5.42	105.56	109.90
3	A1	1310	G	C5-C6-O6	5.42	131.85	128.60
25	BB	1	G	C1'-O4'-C4'	-5.42	105.56	109.90
25	BB	497	A	C5-C6-N1	5.42	120.41	117.70
25	BB	871	U	P-O3'-C3'	5.42	126.21	119.70
25	BB	912	C	C2-N3-C4	-5.42	117.19	119.90
25	BB	1211	C	C5-C4-N4	-5.42	116.40	120.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1677	A	O3'-P-O5'	-5.42	93.70	104.00
1	AP	5	A	C6-C5-N7	5.42	136.09	132.30
3	A1	839	C	P-O5'-C5'	5.42	129.57	120.90
3	A1	1044	A	C4-C5-C6	-5.42	114.29	117.00
3	A1	1277	C	N3-C4-C5	5.42	124.07	121.90
25	BB	271	G	C5-C6-O6	5.42	131.85	128.60
25	BB	582	A	C5-C6-N6	5.42	128.04	123.70
25	BB	704	G	C5'-C4'-O4'	5.42	115.61	109.10
25	BB	1030	C	C5-C4-N4	-5.42	116.41	120.20
25	BB	1695	G	O4'-C1'-N9	5.42	112.54	108.20
25	BB	1916	A	P-O3'-C3'	5.42	126.21	119.70
25	BB	2158	A	C5'-C4'-C3'	-5.42	107.32	116.00
1	AA	64	A	C5-N7-C8	-5.42	101.19	103.90
3	A1	804	U	C4-C5-C6	5.42	122.95	119.70
25	BB	163	C	C1'-O4'-C4'	5.42	114.24	109.90
25	BB	670	A	O4'-C1'-N9	5.42	112.54	108.20
25	BB	760	G	C5-C6-N1	5.42	114.21	111.50
25	BB	1418	G	N1-C2-N3	5.42	127.15	123.90
25	BB	1421	G	N7-C8-N9	5.42	115.81	113.10
25	BB	2390	U	O4'-C1'-N1	5.42	112.54	108.20
25	BB	2429	G	C6-N1-C2	-5.42	121.85	125.10
25	BB	2705	A	C2-N3-C4	5.42	113.31	110.60
1	AE	14	A	C5'-C4'-O4'	5.42	115.60	109.10
3	A1	55	A	O4'-C1'-N9	5.42	112.53	108.20
3	A1	918	A	C4'-C3'-C2'	-5.42	97.18	102.60
3	A1	1130	A	C6-C5-N7	5.42	136.09	132.30
3	A1	1435	G	N7-C8-N9	5.42	115.81	113.10
3	A1	1484	C	C3'-C2'-C1'	-5.42	97.17	101.50
11	AJ	10	ARG	CD-NE-CZ	5.42	131.19	123.60
25	BB	93	G	C5-C6-O6	5.42	131.85	128.60
25	BB	383	C	O4'-C4'-C3'	-5.42	98.58	104.00
25	BB	415	A	C4-C5-C6	-5.42	114.29	117.00
25	BB	497	A	N1-C2-N3	-5.42	126.59	129.30
25	BB	579	G	N3-C4-N9	5.42	129.25	126.00
25	BB	673	C	C5-C6-N1	-5.42	118.29	121.00
25	BB	741	U	C3'-C2'-C1'	5.42	105.83	101.50
25	BB	1402	U	O5'-P-OP1	-5.42	100.82	105.70
25	BB	1943	U	N3-C4-O4	5.42	123.19	119.40
25	BB	2110	G	C6-N1-C2	-5.42	121.85	125.10
25	BB	2638	G	C4-C5-N7	-5.42	108.63	110.80
25	BB	2764	A	C4-C5-C6	-5.42	114.29	117.00
1	AA	37	G	N3-C2-N2	-5.42	116.11	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	139	A	C4-C5-N7	5.42	113.41	110.70
3	A1	304	U	C5'-C4'-C3'	-5.42	107.33	116.00
3	A1	608	A	C6-C5-N7	5.42	136.09	132.30
3	A1	1092	A	C8-N9-C4	5.42	107.97	105.80
3	A1	1231	G	N7-C8-N9	5.42	115.81	113.10
3	A1	1355	G	N7-C8-N9	5.42	115.81	113.10
3	A1	1364	U	N3-C4-C5	5.42	117.85	114.60
3	A1	1513	A	C6-N1-C2	-5.42	115.35	118.60
24	BA	64	G	N3-C4-N9	5.42	129.25	126.00
24	BA	103	U	C1'-O4'-C4'	-5.42	105.57	109.90
25	BB	191	A	C6-C5-N7	5.42	136.09	132.30
25	BB	351	C	P-O3'-C3'	-5.42	113.20	119.70
25	BB	586	A	C8-N9-C4	-5.42	103.63	105.80
25	BB	668	A	C5'-C4'-O4'	5.42	115.60	109.10
25	BB	1081	U	N1-C2-N3	5.42	118.15	114.90
25	BB	1094	U	C2'-C3'-O3'	5.42	122.37	113.70
25	BB	1137	G	C4-C5-C6	-5.42	115.55	118.80
25	BB	1195	G	N9-C4-C5	5.42	107.57	105.40
25	BB	1224	U	N1-C2-O2	5.42	126.59	122.80
25	BB	1333	G	N1-C2-N3	5.42	127.15	123.90
25	BB	1609	A	C6-C5-N7	5.42	136.09	132.30
25	BB	2054	A	O4'-C4'-C3'	5.42	110.43	106.10
25	BB	2230	G	C6-C5-N7	5.42	133.65	130.40
25	BB	2319	G	N7-C8-N9	5.42	115.81	113.10
25	BB	2668	G	N1-C2-N2	-5.42	111.33	116.20
3	A1	268	U	N3-C4-O4	-5.42	115.61	119.40
3	A1	500	G	N1-C2-N3	5.42	127.15	123.90
25	BB	225	C	N3-C4-C5	5.42	124.07	121.90
25	BB	577	G	C4-C5-C6	-5.42	115.55	118.80
25	BB	581	C	N3-C4-N4	-5.42	114.21	118.00
25	BB	644	A	C5-N7-C8	-5.42	101.19	103.90
25	BB	2601	C	N3-C4-N4	-5.42	114.21	118.00
25	BB	2892	G	C5'-C4'-C3'	-5.42	107.34	116.00
1	AP	4	G	C6-C5-N7	5.41	133.65	130.40
3	A1	435	A	N3-C4-N9	5.41	131.73	127.40
3	A1	525	C	N3-C4-C5	5.41	124.07	121.90
3	A1	1082	A	C6-N1-C2	-5.41	115.35	118.60
3	A1	1510	C	N1-C2-O2	5.41	122.15	118.90
14	AN	3	ILE	CA-CB-CG1	5.41	121.28	111.00
25	BB	121	G	N7-C8-N9	5.41	115.81	113.10
25	BB	375	G	C5-N7-C8	-5.41	101.59	104.30
25	BB	1532	A	C5'-C4'-O4'	5.41	115.60	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2096	C	C4-C5-C6	5.41	120.11	117.40
25	BB	2302	U	O4'-C1'-N1	5.41	112.53	108.20
25	BB	2416	C	N3-C4-C5	5.41	124.06	121.90
25	BB	2748	A	C5-C6-N1	5.41	120.41	117.70
25	BB	2799	A	C2-N3-C4	5.41	113.31	110.60
29	BF	10	ARG	NH1-CZ-NH2	-5.41	113.44	119.40
31	BH	13	ARG	NH1-CZ-NH2	-5.41	113.44	119.40
3	A1	374	A	C4-C5-C6	-5.41	114.29	117.00
6	AD	13	ARG	NE-CZ-NH1	-5.41	117.59	120.30
24	BA	117	G	O4'-C1'-N9	-5.41	103.87	108.20
25	BB	160	A	C4-C5-C6	-5.41	114.29	117.00
25	BB	400	G	N9-C4-C5	5.41	107.56	105.40
25	BB	484	C	C5'-C4'-C3'	-5.41	107.34	116.00
3	A1	1339	A	C2'-C3'-O3'	5.41	122.36	113.70
24	BA	79	G	C6-C5-N7	5.41	133.65	130.40
25	BB	73	A	C2-N3-C4	5.41	113.31	110.60
25	BB	881	G	C5'-C4'-O4'	5.41	115.59	109.10
25	BB	1525	A	C6-N1-C2	-5.41	115.35	118.60
25	BB	1779	U	C4-C5-C6	5.41	122.95	119.70
25	BB	2075	U	O3'-P-O5'	5.41	114.28	104.00
25	BB	2373	G	C5'-C4'-C3'	-5.41	107.34	116.00
25	BB	2559	C	N1-C2-N3	5.41	122.99	119.20
25	BB	2844	G	N7-C8-N9	5.41	115.81	113.10
1	AE	28	C	OP2-P-O3'	5.41	117.10	105.20
3	A1	733	G	C4'-C3'-C2'	-5.41	97.19	102.60
3	A1	779	C	P-O3'-C3'	5.41	126.19	119.70
3	A1	969	A	C5-C6-N6	5.41	128.03	123.70
3	A1	990	C	C2-N3-C4	-5.41	117.20	119.90
3	A1	1193	G	C4'-C3'-O3'	5.41	123.82	113.00
3	A1	1221	G	C5'-C4'-O4'	5.41	115.59	109.10
3	A1	1315	U	C2-N3-C4	-5.41	123.75	127.00
3	A1	1325	C	N3-C4-N4	-5.41	114.21	118.00
3	A1	1366	C	N1-C2-O2	5.41	122.14	118.90
3	A1	1520	C	N1-C2-N3	5.41	122.99	119.20
16	AQ	16	ARG	CD-NE-CZ	5.41	131.17	123.60
25	BB	13	A	C2-N3-C4	5.41	113.30	110.60
25	BB	60	G	C2-N3-C4	-5.41	109.20	111.90
25	BB	109	C	N3-C2-O2	-5.41	118.11	121.90
25	BB	169	G	C3'-C2'-C1'	5.41	105.83	101.50
25	BB	285	G	C5-C6-N1	5.41	114.20	111.50
25	BB	291	G	C5-C6-N1	5.41	114.20	111.50
25	BB	306	U	N1-C2-N3	5.41	118.14	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1231	U	C5-C6-N1	-5.41	120.00	122.70
25	BB	1359	A	N9-C4-C5	-5.41	103.64	105.80
25	BB	1413	A	N3-C4-N9	5.41	131.73	127.40
25	BB	1424	G	C6-C5-N7	5.41	133.65	130.40
25	BB	1685	C	C5-C6-N1	-5.41	118.30	121.00
25	BB	2086	U	N1-C2-N3	5.41	118.14	114.90
25	BB	2163	A	C6-C5-N7	5.41	136.09	132.30
25	BB	2289	G	N3-C2-N2	5.41	123.69	119.90
25	BB	2407	A	C6-N1-C2	-5.41	115.36	118.60
25	BB	2617	U	C5'-C4'-O4'	-5.41	102.61	109.10
25	BB	2646	C	N3-C4-N4	-5.41	114.21	118.00
2	AM	15	U	N3-C2-O2	-5.41	118.42	122.20
3	A1	277	C	O4'-C1'-N1	-5.41	103.87	108.20
3	A1	383	A	C4-C5-C6	-5.41	114.30	117.00
3	A1	1020	G	C5'-C4'-C3'	-5.41	107.35	116.00
3	A1	1162	C	C5'-C4'-C3'	5.41	124.65	116.00
23	AX	67	ILE	CA-CB-CG1	5.41	121.27	111.00
24	BA	30	C	N3-C2-O2	-5.41	118.11	121.90
25	BB	241	A	C4-C5-C6	-5.41	114.30	117.00
25	BB	443	A	C6-N1-C2	-5.41	115.36	118.60
25	BB	459	U	O4'-C1'-N1	5.41	112.53	108.20
25	BB	1367	A	C6-C5-N7	5.41	136.09	132.30
25	BB	1452	G	C6-C5-N7	5.41	133.64	130.40
25	BB	1532	A	C5'-C4'-C3'	-5.41	107.35	116.00
25	BB	1902	C	N1-C2-N3	5.41	122.98	119.20
25	BB	1932	A	C6-N1-C2	-5.41	115.36	118.60
25	BB	1934	C	O4'-C1'-N1	5.41	112.53	108.20
25	BB	2139	U	C2-N3-C4	-5.41	123.76	127.00
25	BB	2282	G	C8-N9-C4	-5.41	104.24	106.40
55	B6	35	ARG	CD-NE-CZ	5.41	131.17	123.60
3	A1	121	U	C3'-C2'-C1'	5.41	105.82	101.50
3	A1	241	G	N3-C2-N2	-5.41	116.12	119.90
3	A1	317	U	N1-C2-N3	5.41	118.14	114.90
3	A1	563	A	C5-C6-N6	5.41	128.02	123.70
3	A1	1158	C	N1-C1'-C2'	5.41	121.03	114.00
3	A1	1230	C	O4'-C4'-C3'	5.41	110.42	106.10
25	BB	341	C	C5'-C4'-C3'	-5.41	107.35	116.00
25	BB	1651	G	C6-C5-N7	5.41	133.64	130.40
25	BB	1828	G	N9-C4-C5	5.41	107.56	105.40
25	BB	2103	C	C4'-C3'-C2'	-5.41	97.19	102.60
25	BB	2379	G	C6-C5-N7	5.41	133.64	130.40
25	BB	2508	G	N1-C2-N3	5.41	127.14	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2580	U	C1'-O4'-C4'	-5.41	105.58	109.90
3	A1	732	C	C5'-C4'-C3'	-5.40	107.35	116.00
25	BB	117	G	C5'-C4'-C3'	-5.40	107.35	116.00
25	BB	739	A	P-O3'-C3'	5.40	126.19	119.70
25	BB	970	U	C4'-C3'-C2'	-5.40	97.20	102.60
25	BB	1674	G	C4-C5-C6	-5.40	115.56	118.80
25	BB	2532	G	C8-N9-C4	5.40	108.56	106.40
25	BB	2756	U	C2'-C3'-O3'	5.40	122.35	113.70
1	AP	6	U	C2-N3-C4	-5.40	123.76	127.00
1	AE	23	A	C4'-C3'-C2'	-5.40	97.20	102.60
3	A1	462	G	O4'-C4'-C3'	5.40	110.42	106.10
3	A1	1141	C	C5-C6-N1	-5.40	118.30	121.00
3	A1	1250	A	C5'-C4'-O4'	5.40	115.58	109.10
3	A1	1295	U	N1-C2-O2	5.40	126.58	122.80
12	AK	56	ARG	CD-NE-CZ	5.40	131.16	123.60
25	BB	660	C	O5'-P-OP1	-5.40	100.84	105.70
25	BB	1050	A	N1-C2-N3	-5.40	126.60	129.30
25	BB	1619	G	C5-C6-N1	5.40	114.20	111.50
25	BB	1857	G	C6-N1-C2	-5.40	121.86	125.10
25	BB	2217	G	C4-C5-C6	-5.40	115.56	118.80
25	BB	2293	G	N7-C8-N9	5.40	115.80	113.10
25	BB	2383	G	N1-C2-N3	5.40	127.14	123.90
25	BB	2620	C	O4'-C1'-N1	5.40	112.52	108.20
25	BB	2691	C	C2-N1-C1'	5.40	124.74	118.80
38	BO	10	VAL	CG1-CB-CG2	-5.40	102.25	110.90
1	AE	33	U	C6-N1-C2	-5.40	117.76	121.00
3	A1	185	U	C5-C4-O4	5.40	129.14	125.90
3	A1	216	U	N1-C2-N3	5.40	118.14	114.90
3	A1	731	G	C2-N3-C4	5.40	114.60	111.90
3	A1	735	C	N3-C2-O2	-5.40	118.12	121.90
3	A1	997	U	C2-N3-C4	-5.40	123.76	127.00
24	BA	30	C	C5'-C4'-O4'	5.40	115.58	109.10
24	BA	111	U	N3-C4-O4	-5.40	115.62	119.40
25	BB	694	U	C4'-C3'-C2'	-5.40	97.20	102.60
25	BB	1086	A	O4'-C1'-N9	5.40	112.52	108.20
25	BB	1627	G	N7-C8-N9	5.40	115.80	113.10
25	BB	1784	A	O4'-C4'-C3'	5.40	110.42	106.10
25	BB	2219	U	C5-C6-N1	-5.40	120.00	122.70
25	BB	2783	U	O4'-C4'-C3'	-5.40	98.60	104.00
35	BL	110	ARG	CD-NE-CZ	5.40	131.16	123.60
3	A1	45	G	N7-C8-N9	5.40	115.80	113.10
3	A1	97	G	C8-N9-C4	-5.40	104.24	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1337	G	C5-C6-O6	5.40	131.84	128.60
25	BB	413	C	O4'-C1'-N1	5.40	112.52	108.20
25	BB	1683	U	N1-C2-N3	5.40	118.14	114.90
25	BB	2008	C	N3-C2-O2	-5.40	118.12	121.90
25	BB	2480	C	O4'-C4'-C3'	5.40	110.42	106.10
1	AA	74	C	N3-C4-C5	5.40	124.06	121.90
1	AE	23	A	C5-N7-C8	-5.40	101.20	103.90
3	A1	791	G	O3'-P-O5'	5.40	114.25	104.00
3	A1	854	U	P-O3'-C3'	5.40	126.18	119.70
3	A1	1088	G	N3-C4-C5	-5.40	125.90	128.60
3	A1	1511	G	N1-C6-O6	-5.40	116.66	119.90
25	BB	287	G	O4'-C4'-C3'	5.40	110.42	106.10
25	BB	312	G	C1'-O4'-C4'	5.40	114.22	109.90
25	BB	327	G	C4-C5-N7	-5.40	108.64	110.80
25	BB	694	U	C2-N3-C4	-5.40	123.76	127.00
25	BB	1446	C	C6-N1-C2	-5.40	118.14	120.30
25	BB	1452	G	C6-N1-C2	-5.40	121.86	125.10
25	BB	1553	A	C5-C6-N1	5.40	120.40	117.70
25	BB	1824	G	C4'-C3'-C2'	-5.40	97.20	102.60
25	BB	1855	U	O4'-C1'-N1	5.40	112.52	108.20
25	BB	2146	C	C5'-C4'-C3'	-5.40	107.36	116.00
25	BB	2235	G	P-O3'-C3'	5.40	126.18	119.70
25	BB	2468	A	C2-N3-C4	5.40	113.30	110.60
25	BB	2688	G	N1-C6-O6	-5.40	116.66	119.90
35	BL	30	SER	C-N-CA	5.40	135.19	121.70
3	A1	661	G	C1'-O4'-C4'	-5.40	105.58	109.90
3	A1	1226	C	N3-C2-O2	-5.40	118.12	121.90
25	BB	1237	A	C8-N9-C4	5.40	107.96	105.80
1	AE	57	G	C5-C6-N1	5.39	114.20	111.50
3	A1	193	C	O4'-C1'-C2'	-5.39	100.41	105.80
3	A1	497	G	C5-C6-N1	5.39	114.20	111.50
3	A1	606	G	C5-N7-C8	-5.39	101.60	104.30
3	A1	693	G	C1'-O4'-C4'	-5.39	105.58	109.90
3	A1	700	G	N1-C2-N3	5.39	127.14	123.90
3	A1	706	A	C6-C5-N7	5.39	136.08	132.30
3	A1	715	A	C5-C6-N1	5.39	120.40	117.70
3	A1	751	U	N3-C4-O4	5.39	123.18	119.40
3	A1	886	G	C5-N7-C8	-5.39	101.60	104.30
3	A1	998	C	O4'-C1'-N1	5.39	112.52	108.20
3	A1	1060	U	P-O3'-C3'	5.39	126.17	119.70
3	A1	1311	A	C6-C5-N7	5.39	136.08	132.30
3	A1	1426	G	P-O3'-C3'	5.39	126.17	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1442	G	C4-C5-C6	-5.39	115.56	118.80
25	BB	17	G	C8-N9-C4	-5.39	104.24	106.40
25	BB	904	G	O4'-C4'-C3'	5.39	110.42	106.10
25	BB	1071	G	O3'-P-O5'	5.39	114.25	104.00
25	BB	1228	G	C6-N1-C2	-5.39	121.86	125.10
25	BB	1266	G	C2'-C3'-O3'	5.39	122.33	113.70
25	BB	1570	A	C8-N9-C4	-5.39	103.64	105.80
25	BB	1767	G	C1'-O4'-C4'	-5.39	105.58	109.90
25	BB	1910	G	C6-C5-N7	5.39	133.64	130.40
25	BB	2199	A	C5'-C4'-C3'	-5.39	107.37	116.00
25	BB	2206	C	C5'-C4'-O4'	5.39	115.57	109.10
25	BB	2208	C	N1-C2-N3	5.39	122.98	119.20
25	BB	2433	A	C5-C6-N6	5.39	128.01	123.70
1	AP	67	A	N1-C6-N6	-5.39	115.36	118.60
3	A1	30	U	C5'-C4'-O4'	5.39	115.57	109.10
3	A1	294	U	N3-C2-O2	-5.39	118.42	122.20
3	A1	608	A	C2-N3-C4	5.39	113.30	110.60
3	A1	933	G	N7-C8-N9	5.39	115.80	113.10
3	A1	1130	A	N7-C8-N9	5.39	116.50	113.80
3	A1	1184	G	N7-C8-N9	5.39	115.80	113.10
3	A1	1298	U	N1-C2-O2	5.39	126.58	122.80
24	BA	50	A	N9-C4-C5	5.39	107.96	105.80
24	BA	86	G	N1-C2-N3	5.39	127.14	123.90
25	BB	225	C	C3'-C2'-C1'	5.39	105.81	101.50
25	BB	488	G	C4'-C3'-C2'	-5.39	97.21	102.60
25	BB	586	A	C2-N3-C4	5.39	113.30	110.60
25	BB	690	G	N1-C6-O6	-5.39	116.67	119.90
25	BB	923	G	N7-C8-N9	5.39	115.80	113.10
25	BB	1044	C	P-O3'-C3'	5.39	126.17	119.70
25	BB	1121	C	C5-C4-N4	5.39	123.97	120.20
25	BB	1515	A	C4'-C3'-C2'	-5.39	97.21	102.60
25	BB	1703	G	N3-C4-C5	-5.39	125.90	128.60
25	BB	1915	U	O4'-C4'-C3'	-5.39	98.61	104.00
25	BB	2144	G	N3-C4-N9	-5.39	122.76	126.00
25	BB	2488	G	N3-C4-C5	-5.39	125.90	128.60
25	BB	2582	G	C6-C5-N7	5.39	133.64	130.40
25	BB	2813	A	C1'-O4'-C4'	-5.39	105.59	109.90
25	BB	2830	C	C4'-C3'-C2'	-5.39	97.21	102.60
3	A1	31	G	C1'-O4'-C4'	-5.39	105.59	109.90
3	A1	761	G	N3-C2-N2	-5.39	116.13	119.90
3	A1	955	U	C5'-C4'-O4'	5.39	115.57	109.10
25	BB	82	U	N1-C2-O2	5.39	126.57	122.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	634	C	N3-C4-N4	-5.39	114.23	118.00
25	BB	888	C	O4'-C1'-C2'	-5.39	100.41	105.80
25	BB	1697	G	C5-N7-C8	-5.39	101.61	104.30
25	BB	1757	A	N9-C1'-C2'	5.39	121.01	114.00
25	BB	2892	G	C6-N1-C2	-5.39	121.87	125.10
1	AP	9	A	C1'-O4'-C4'	-5.39	105.59	109.90
3	A1	300	A	O4'-C1'-C2'	-5.39	100.41	105.80
3	A1	418	C	C5-C4-N4	5.39	123.97	120.20
3	A1	474	G	C3'-C2'-C1'	5.39	105.81	101.50
3	A1	791	G	N3-C4-N9	5.39	129.23	126.00
24	BA	25	U	N3-C4-O4	5.39	123.17	119.40
25	BB	850	U	C5-C6-N1	-5.39	120.00	122.70
25	BB	1606	C	C2-N3-C4	-5.39	117.20	119.90
25	BB	1742	U	C4-C5-C6	5.39	122.93	119.70
25	BB	2587	A	C4-C5-C6	-5.39	114.31	117.00
25	BB	2739	U	C2'-C3'-O3'	5.39	122.32	113.70
25	BB	2852	G	O4'-C1'-N9	5.39	112.51	108.20
52	B3	174	LYS	CA-CB-CG	5.39	125.26	113.40
3	A1	315	A	C6-C5-N7	5.39	136.07	132.30
3	A1	408	A	C5-C6-N6	5.39	128.01	123.70
3	A1	444	G	N9-C4-C5	-5.39	103.25	105.40
3	A1	751	U	N3-C2-O2	-5.39	118.43	122.20
3	A1	782	A	C6-N1-C2	-5.39	115.37	118.60
3	A1	1361	G	C5-C6-N1	5.39	114.19	111.50
25	BB	1251	C	O4'-C4'-C3'	5.39	110.41	106.10
25	BB	1744	A	C4'-C3'-C2'	-5.39	97.21	102.60
25	BB	1907	G	N1-C2-N2	5.39	121.05	116.20
25	BB	2644	G	N3-C4-N9	-5.39	122.77	126.00
25	BB	2880	C	C3'-C2'-C1'	5.39	105.81	101.50
1	AA	21	A	O4'-C1'-N9	-5.39	103.89	108.20
3	A1	686	U	C5'-C4'-O4'	5.39	115.56	109.10
3	A1	846	G	C3'-C2'-C1'	-5.39	97.19	101.50
3	A1	920	U	C5-C6-N1	-5.39	120.01	122.70
3	A1	1307	U	C4-C5-C6	5.39	122.93	119.70
25	BB	333	G	C1'-O4'-C4'	-5.39	105.59	109.90
25	BB	430	A	C4'-C3'-C2'	-5.39	97.21	102.60
25	BB	580	U	N1-C2-N3	5.39	118.13	114.90
25	BB	718	A	C4-C5-C6	-5.39	114.31	117.00
25	BB	939	G	C1'-O4'-C4'	-5.39	105.59	109.90
25	BB	1062	G	C5-C6-N1	5.39	114.19	111.50
25	BB	1281	G	O4'-C4'-C3'	5.39	110.41	106.10
25	BB	1567	G	C4-C5-N7	-5.39	108.65	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1583	A	O4'-C1'-N9	5.39	112.51	108.20
25	BB	1889	A	N7-C8-N9	5.39	116.49	113.80
25	BB	2162	G	C4-C5-N7	-5.39	108.65	110.80
25	BB	2306	C	N1-C1'-C2'	-5.39	106.08	112.00
25	BB	2576	G	N3-C4-C5	-5.39	125.91	128.60
25	BB	2705	A	N9-C4-C5	5.39	107.95	105.80
25	BB	2741	A	C5'-C4'-O4'	5.39	115.56	109.10
25	BB	2816	G	C8-N9-C4	-5.39	104.25	106.40
25	BB	2859	G	C5-C6-O6	-5.39	125.37	128.60
3	A1	11	G	N9-C4-C5	5.38	107.55	105.40
3	A1	260	G	C4'-C3'-C2'	-5.38	97.22	102.60
3	A1	1022	A	C4-C5-C6	-5.38	114.31	117.00
3	A1	1236	A	C5'-C4'-O4'	5.38	115.56	109.10
24	BA	79	G	N9-C1'-C2'	-5.38	106.08	112.00
25	BB	354	A	C8-N9-C4	-5.38	103.65	105.80
25	BB	498	G	N1-C2-N3	5.38	127.13	123.90
25	BB	590	A	C4-C5-C6	-5.38	114.31	117.00
25	BB	1232	G	C5-N7-C8	-5.38	101.61	104.30
25	BB	1383	A	N9-C4-C5	5.38	107.95	105.80
25	BB	1810	A	C6-C5-N7	5.38	136.07	132.30
25	BB	2671	G	N3-C4-C5	-5.38	125.91	128.60
37	BN	47	ARG	NH1-CZ-NH2	-5.38	113.48	119.40
1	AA	56	C	P-O3'-C3'	5.38	126.16	119.70
3	A1	494	G	O4'-C1'-N9	5.38	112.51	108.20
3	A1	1235	U	N1-C2-N3	5.38	118.13	114.90
3	A1	1467	C	N3-C2-O2	-5.38	118.13	121.90
25	BB	920	A	O4'-C4'-C3'	5.38	110.41	106.10
25	BB	1200	C	N3-C4-N4	-5.38	114.23	118.00
25	BB	1913	A	C5-C6-N6	5.38	128.01	123.70
25	BB	2203	U	C2-N3-C4	-5.38	123.77	127.00
41	BR	57	GLU	OE1-CD-OE2	-5.38	116.84	123.30
1	AE	20	G	C5'-C4'-O4'	5.38	115.56	109.10
1	AE	69	U	P-O3'-C3'	5.38	126.16	119.70
3	A1	77	A	C8-N9-C4	-5.38	103.65	105.80
3	A1	421	U	C4-C5-C6	5.38	122.93	119.70
3	A1	669	G	N7-C8-N9	5.38	115.79	113.10
3	A1	895	G	P-O3'-C3'	5.38	126.16	119.70
3	A1	1139	G	C5-C6-N1	5.38	114.19	111.50
3	A1	1461	G	C5'-C4'-C3'	-5.38	107.39	116.00
7	AF	64	VAL	C-N-CA	5.38	135.16	121.70
24	BA	95	U	C5'-C4'-C3'	-5.38	107.39	116.00
25	BB	344	A	C4'-C3'-C2'	-5.38	97.22	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1079	C	N1-C2-O2	5.38	122.13	118.90
25	BB	1225	G	C5'-C4'-O4'	5.38	115.56	109.10
25	BB	1252	G	N1-C6-O6	-5.38	116.67	119.90
25	BB	2127	G	N9-C4-C5	5.38	107.55	105.40
25	BB	2167	U	C4'-C3'-C2'	-5.38	97.22	102.60
25	BB	2236	U	N3-C2-O2	-5.38	118.43	122.20
25	BB	2299	U	N3-C4-O4	-5.38	115.63	119.40
3	A1	357	G	C5'-C4'-O4'	5.38	115.56	109.10
3	A1	1501	C	N3-C4-N4	-5.38	114.23	118.00
25	BB	65	U	N3-C4-O4	5.38	123.17	119.40
25	BB	1159	U	C5-C6-N1	-5.38	120.01	122.70
25	BB	1294	U	C3'-C2'-C1'	5.38	105.80	101.50
25	BB	2677	G	N1-C2-N3	5.38	127.13	123.90
3	A1	382	A	C6-C5-N7	5.38	136.06	132.30
3	A1	677	U	N3-C2-O2	-5.38	118.44	122.20
3	A1	966	G	O3'-P-O5'	5.38	114.22	104.00
3	A1	1004	A	C6-N1-C2	-5.38	115.37	118.60
3	A1	1294	G	C4-C5-C6	-5.38	115.57	118.80
3	A1	1491	G	C5-N7-C8	-5.38	101.61	104.30
25	BB	185	G	N1-C2-N3	5.38	127.13	123.90
25	BB	495	G	N9-C4-C5	5.38	107.55	105.40
25	BB	505	A	C5-C6-N6	5.38	128.00	123.70
25	BB	735	A	C2-N3-C4	5.38	113.29	110.60
25	BB	787	C	N3-C2-O2	-5.38	118.14	121.90
25	BB	1008	A	P-O3'-C3'	5.38	126.15	119.70
25	BB	1053	C	C4-C5-C6	-5.38	114.71	117.40
25	BB	1096	A	C2-N3-C4	5.38	113.29	110.60
25	BB	1170	C	C5'-C4'-C3'	-5.38	107.39	116.00
25	BB	1841	U	C4-C5-C6	5.38	122.93	119.70
25	BB	2071	A	P-O3'-C3'	5.38	126.15	119.70
25	BB	2125	G	N9-C1'-C2'	-5.38	106.08	112.00
25	BB	2169	A	O4'-C1'-N9	-5.38	103.90	108.20
25	BB	2786	U	C4'-C3'-C2'	-5.38	97.22	102.60
25	BB	2869	G	N1-C6-O6	-5.38	116.67	119.90
38	BO	2	ALA	C-N-CA	5.38	135.14	121.70
1	AP	31	A	N9-C4-C5	5.38	107.95	105.80
1	AE	28	C	C1'-O4'-C4'	-5.38	105.60	109.90
3	A1	416	G	N1-C2-N2	5.38	121.04	116.20
3	A1	500	G	C5-C6-N1	5.38	114.19	111.50
3	A1	1265	C	N3-C2-O2	-5.38	118.14	121.90
3	A1	1267	C	C4-C5-C6	-5.38	114.71	117.40
3	A1	1431	A	O4'-C4'-C3'	5.38	110.40	106.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	287	G	C5'-C4'-O4'	5.38	115.55	109.10
25	BB	435	C	C5-C6-N1	-5.38	118.31	121.00
25	BB	1022	G	N3-C2-N2	-5.38	116.14	119.90
25	BB	1485	U	C5-C6-N1	-5.38	120.01	122.70
25	BB	1816	C	P-O3'-C3'	5.38	126.15	119.70
25	BB	2006	C	N1-C2-N3	5.38	122.96	119.20
25	BB	2022	U	N3-C2-O2	-5.38	118.44	122.20
25	BB	2106	U	C5-C4-O4	5.38	129.13	125.90
25	BB	2175	C	N1-C2-O2	5.38	122.13	118.90
25	BB	2285	C	C5-C4-N4	5.38	123.96	120.20
25	BB	2666	C	C6-N1-C2	-5.38	118.15	120.30
25	BB	2783	U	C4-C5-C6	5.38	122.93	119.70
1	AA	44	A	C1'-O4'-C4'	-5.38	105.60	109.90
3	A1	440	C	N1-C2-O2	5.38	122.12	118.90
3	A1	700	G	C4'-C3'-C2'	-5.38	97.22	102.60
3	A1	790	A	C3'-C2'-C1'	-5.38	97.20	101.50
3	A1	1431	A	N9-C4-C5	5.38	107.95	105.80
24	BA	52	A	C5-C6-N6	5.38	128.00	123.70
25	BB	307	G	P-O3'-C3'	5.38	126.15	119.70
25	BB	413	C	C5-C4-N4	5.38	123.96	120.20
25	BB	1068	G	O4'-C1'-C2'	-5.38	100.42	105.80
25	BB	1198	U	N1-C2-N3	5.38	118.12	114.90
25	BB	1960	A	P-O3'-C3'	5.38	126.15	119.70
25	BB	2173	A	N1-C2-N3	-5.38	126.61	129.30
3	A1	226	G	N9-C4-C5	5.37	107.55	105.40
3	A1	520	A	C8-N9-C4	5.37	107.95	105.80
3	A1	725	G	N3-C2-N2	-5.37	116.14	119.90
3	A1	811	C	C5-C6-N1	-5.37	118.31	121.00
3	A1	1019	A	C5'-C4'-O4'	5.37	115.55	109.10
3	A1	1130	A	C2-N3-C4	5.37	113.29	110.60
3	A1	1220	G	N9-C4-C5	5.37	107.55	105.40
25	BB	919	U	C2-N3-C4	-5.37	123.78	127.00
25	BB	996	A	C5'-C4'-C3'	-5.37	107.40	116.00
25	BB	1166	G	N1-C2-N3	5.37	127.12	123.90
25	BB	1232	G	N1-C2-N3	5.37	127.12	123.90
25	BB	1325	U	O4'-C1'-N1	5.37	112.50	108.20
25	BB	1486	U	O4'-C1'-N1	5.37	112.50	108.20
25	BB	1905	C	C5-C4-N4	5.37	123.96	120.20
25	BB	2352	A	C8-N9-C4	-5.37	103.65	105.80
25	BB	2579	C	C5'-C4'-O4'	5.37	115.55	109.10
28	BE	60	ARG	NH1-CZ-NH2	-5.37	113.49	119.40
1	AA	29	A	C8-N9-C4	-5.37	103.65	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	43	G	C1'-O4'-C4'	-5.37	105.60	109.90
3	A1	271	C	C4'-C3'-C2'	-5.37	97.23	102.60
3	A1	491	G	O4'-C4'-C3'	5.37	110.40	106.10
3	A1	498	A	C5'-C4'-O4'	5.37	115.55	109.10
3	A1	934	C	P-O3'-C3'	5.37	126.14	119.70
3	A1	972	C	C5'-C4'-C3'	-5.37	107.41	116.00
3	A1	1180	A	C2-N3-C4	5.37	113.29	110.60
20	AU	9	ARG	NE-CZ-NH2	-5.37	117.61	120.30
25	BB	8	C	N1-C2-N3	5.37	122.96	119.20
25	BB	179	C	C5-C6-N1	-5.37	118.31	121.00
25	BB	189	G	N7-C8-N9	5.37	115.78	113.10
25	BB	313	G	N9-C4-C5	5.37	107.55	105.40
25	BB	378	C	C5-C4-N4	5.37	123.96	120.20
25	BB	516	C	C1'-O4'-C4'	-5.37	105.60	109.90
25	BB	832	U	C1'-O4'-C4'	-5.37	105.60	109.90
25	BB	1178	C	N3-C4-N4	-5.37	114.24	118.00
25	BB	1249	U	C4-C5-C6	5.37	122.92	119.70
25	BB	1574	C	C2-N3-C4	-5.37	117.21	119.90
25	BB	1595	C	C4'-C3'-C2'	-5.37	97.23	102.60
25	BB	1887	C	N3-C4-N4	-5.37	114.24	118.00
25	BB	2107	G	C6-N1-C2	-5.37	121.88	125.10
25	BB	2395	C	C3'-C2'-C1'	5.37	105.80	101.50
25	BB	2466	C	N3-C4-C5	5.37	124.05	121.90
25	BB	2475	C	N3-C2-O2	-5.37	118.14	121.90
25	BB	2670	A	P-O3'-C3'	5.37	126.15	119.70
25	BB	2677	G	N1-C6-O6	-5.37	116.68	119.90
37	BN	261	ARG	CA-CB-CG	5.37	125.22	113.40
25	BB	224	U	C5'-C4'-C3'	-5.37	107.41	116.00
25	BB	995	C	N3-C4-C5	5.37	124.05	121.90
25	BB	1586	A	C5-N7-C8	-5.37	101.22	103.90
25	BB	2182	U	C4'-C3'-C2'	-5.37	97.23	102.60
25	BB	2244	U	C1'-O4'-C4'	-5.37	105.60	109.90
1	AE	67	A	N9-C4-C5	5.37	107.95	105.80
3	A1	77	A	C5'-C4'-C3'	-5.37	107.41	116.00
3	A1	331	G	C4'-C3'-C2'	-5.37	97.23	102.60
3	A1	655	A	N1-C2-N3	-5.37	126.61	129.30
3	A1	976	G	N1-C2-N3	5.37	127.12	123.90
3	A1	1318	A	O4'-C1'-N9	5.37	112.50	108.20
3	A1	1393	U	N1-C2-N3	5.37	118.12	114.90
3	A1	1533	C	C6-N1-C2	-5.37	118.15	120.30
8	AG	74	ARG	NE-CZ-NH1	5.37	122.98	120.30
25	BB	193	U	N1-C2-N3	5.37	118.12	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	255	A	C5-C6-N1	5.37	120.38	117.70
25	BB	369	U	P-O3'-C3'	5.37	126.14	119.70
25	BB	1084	A	C8-N9-C4	-5.37	103.65	105.80
25	BB	1086	A	C6-N1-C2	-5.37	115.38	118.60
25	BB	1468	U	N1-C2-N3	5.37	118.12	114.90
25	BB	1543	G	C4-C5-C6	-5.37	115.58	118.80
25	BB	1583	A	C6-N1-C2	-5.37	115.38	118.60
25	BB	1683	U	C5-C6-N1	-5.37	120.02	122.70
25	BB	1840	G	C3'-C2'-C1'	5.37	105.80	101.50
25	BB	2012	G	P-O3'-C3'	5.37	126.14	119.70
25	BB	2515	C	C6-N1-C2	-5.37	118.15	120.30
25	BB	2667	C	N1-C2-N3	5.37	122.96	119.20
25	BB	2707	U	C6-N1-C2	-5.37	117.78	121.00
3	A1	67	C	C2-N3-C4	-5.37	117.22	119.90
3	A1	593	U	O4'-C1'-N1	5.37	112.49	108.20
3	A1	623	C	C4-C5-C6	-5.37	114.72	117.40
3	A1	1336	C	N3-C2-O2	-5.37	118.14	121.90
8	AG	83	VAL	CG1-CB-CG2	-5.37	102.31	110.90
24	BA	73	A	C4'-C3'-C2'	-5.37	97.23	102.60
24	BA	83	G	N1-C6-O6	-5.37	116.68	119.90
25	BB	11	C	N1-C2-O2	5.37	122.12	118.90
25	BB	392	U	C4-C5-C6	5.37	122.92	119.70
25	BB	1818	U	C5-C6-N1	-5.37	120.02	122.70
25	BB	2190	G	O3'-P-O5'	5.37	114.20	104.00
25	BB	2224	G	C5'-C4'-O4'	5.37	115.54	109.10
25	BB	2897	U	C5'-C4'-C3'	-5.37	107.41	116.00
3	A1	68	G	C5-C6-N1	5.37	114.18	111.50
3	A1	241	G	C1'-O4'-C4'	-5.37	105.61	109.90
3	A1	476	U	C3'-C2'-C1'	5.37	105.79	101.50
3	A1	1355	G	N1-C2-N3	5.37	127.12	123.90
3	A1	1388	C	N1-C2-N3	5.37	122.96	119.20
3	A1	1470	U	N1-C1'-C2'	5.37	120.97	114.00
3	A1	1524	C	N1-C2-O2	5.37	122.12	118.90
25	BB	217	A	C6-C5-N7	5.37	136.06	132.30
25	BB	337	C	O4'-C1'-N1	5.37	112.49	108.20
25	BB	436	C	C3'-C2'-C1'	-5.37	97.21	101.50
25	BB	661	A	C5-C6-N6	5.37	127.99	123.70
25	BB	711	G	N7-C8-N9	5.37	115.78	113.10
25	BB	1288	G	N3-C2-N2	-5.37	116.14	119.90
25	BB	1544	A	C5'-C4'-C3'	-5.37	107.42	116.00
25	BB	2014	A	N3-C4-N9	-5.37	123.11	127.40
25	BB	2149	U	N1-C2-N3	5.37	118.12	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2300	C	O4'-C4'-C3'	5.37	110.39	106.10
25	BB	2498	C	C1'-O4'-C4'	-5.37	105.61	109.90
25	BB	2553	G	C4-C5-N7	5.37	112.95	110.80
40	BQ	29	ARG	CD-NE-CZ	5.37	131.11	123.60
55	B6	134	ALA	CB-CA-C	5.37	118.15	110.10
1	AP	28	C	N1-C2-O2	5.36	122.12	118.90
3	A1	160	A	C4'-C3'-C2'	-5.36	97.24	102.60
3	A1	179	A	C8-N9-C4	-5.36	103.65	105.80
3	A1	273	U	C4-C5-C6	5.36	122.92	119.70
3	A1	292	G	C2-N3-C4	5.36	114.58	111.90
3	A1	347	G	N1-C6-O6	-5.36	116.68	119.90
3	A1	357	G	C4-C5-C6	-5.36	115.58	118.80
3	A1	363	A	C5-C6-N6	5.36	127.99	123.70
3	A1	898	G	P-O3'-C3'	5.36	126.14	119.70
3	A1	1229	A	C4-C5-N7	5.36	113.38	110.70
20	AU	109	LYS	C-N-CA	5.36	135.11	121.70
25	BB	896	A	C5'-C4'-O4'	-5.36	102.66	109.10
25	BB	900	A	N9-C4-C5	5.36	107.94	105.80
25	BB	1509	A	C6-N1-C2	-5.36	115.38	118.60
25	BB	1718	G	N7-C8-N9	5.36	115.78	113.10
25	BB	1830	C	O3'-P-O5'	5.36	114.19	104.00
25	BB	1875	G	C4'-C3'-C2'	-5.36	97.24	102.60
25	BB	1935	G	N3-C4-C5	-5.36	125.92	128.60
25	BB	2406	A	C6-C5-N7	5.36	136.06	132.30
1	AA	42	G	N1-C2-N3	5.36	127.12	123.90
1	AE	59	U	O4'-C1'-N1	5.36	112.49	108.20
3	A1	622	A	N1-C2-N3	-5.36	126.62	129.30
3	A1	937	A	C5'-C4'-C3'	-5.36	107.42	116.00
24	BA	108	A	C5-C6-N1	5.36	120.38	117.70
25	BB	210	C	C2-N3-C4	-5.36	117.22	119.90
25	BB	1951	U	C6-N1-C2	-5.36	117.78	121.00
25	BB	2335	A	N1-C2-N3	-5.36	126.62	129.30
25	BB	2694	G	N9-C4-C5	5.36	107.55	105.40
25	BB	2874	C	C4'-C3'-C2'	-5.36	97.24	102.60
3	A1	243	A	C2-N3-C4	5.36	113.28	110.60
3	A1	511	C	C4-C5-C6	-5.36	114.72	117.40
3	A1	866	C	N3-C4-C5	5.36	124.04	121.90
3	A1	956	U	N1-C2-N3	5.36	118.12	114.90
3	A1	1469	C	C2'-C3'-O3'	5.36	122.28	113.70
25	BB	282	A	N1-C2-N3	-5.36	126.62	129.30
25	BB	288	U	C2-N3-C4	-5.36	123.78	127.00
25	BB	380	G	C6-N1-C2	-5.36	121.88	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	396	G	C2-N3-C4	5.36	114.58	111.90
25	BB	537	G	C5-N7-C8	-5.36	101.62	104.30
25	BB	724	U	O4'-C4'-C3'	5.36	110.39	106.10
25	BB	1135	C	C3'-C2'-C1'	5.36	105.79	101.50
25	BB	1625	C	N1-C2-N3	5.36	122.95	119.20
25	BB	1694	C	C4-C5-C6	-5.36	114.72	117.40
25	BB	1858	A	O4'-C1'-N9	5.36	112.49	108.20
25	BB	1959	G	N3-C4-C5	-5.36	125.92	128.60
25	BB	2549	G	C6-N1-C2	-5.36	121.88	125.10
25	BB	2580	U	O4'-C1'-N1	5.36	112.49	108.20
25	BB	2853	C	C5'-C4'-O4'	5.36	115.53	109.10
25	BB	1228	G	C5'-C4'-O4'	5.36	115.53	109.10
25	BB	1517	G	N3-C4-N9	-5.36	122.78	126.00
25	BB	1664	A	C8-N9-C4	-5.36	103.66	105.80
25	BB	1782	U	N3-C4-C5	-5.36	111.39	114.60
25	BB	1946	U	N1-C1'-C2'	-5.36	106.11	112.00
25	BB	2131	U	N3-C2-O2	-5.36	118.45	122.20
25	BB	2291	U	C4'-C3'-C2'	-5.36	97.24	102.60
3	A1	175	C	N1-C2-O2	5.36	122.11	118.90
3	A1	310	G	N1-C6-O6	-5.36	116.69	119.90
3	A1	946	A	C6-C5-N7	5.36	136.05	132.30
3	A1	1064	G	N9-C4-C5	5.36	107.54	105.40
3	A1	1406	U	C3'-C2'-C1'	-5.36	97.21	101.50
24	BA	105	G	C4-C5-C6	-5.36	115.59	118.80
25	BB	4	U	C4-C5-C6	5.36	122.91	119.70
25	BB	24	G	C2-N3-C4	5.36	114.58	111.90
25	BB	162	U	C3'-C2'-C1'	5.36	105.79	101.50
25	BB	344	A	C1'-O4'-C4'	-5.36	105.61	109.90
25	BB	349	U	C5'-C4'-C3'	-5.36	107.43	116.00
25	BB	493	G	C5'-C4'-O4'	5.36	115.53	109.10
25	BB	722	A	C5-C6-N6	5.36	127.99	123.70
25	BB	961	C	C6-N1-C2	-5.36	118.16	120.30
25	BB	1016	G	C5'-C4'-O4'	5.36	115.53	109.10
25	BB	1092	C	C3'-C2'-C1'	5.36	105.79	101.50
25	BB	1354	A	C5'-C4'-O4'	5.36	115.53	109.10
25	BB	1493	C	O4'-C4'-C3'	5.36	110.39	106.10
25	BB	2120	G	N3-C4-N9	5.36	129.21	126.00
25	BB	2405	G	C1'-O4'-C4'	-5.36	105.61	109.90
25	BB	2460	U	C6-N1-C2	-5.36	117.78	121.00
25	BB	2694	G	C8-N9-C1'	5.36	133.96	127.00
25	BB	2763	G	C1'-O4'-C4'	-5.36	105.61	109.90
3	A1	573	A	N1-C6-N6	-5.36	115.39	118.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	771	G	C5'-C4'-O4'	-5.36	102.67	109.10
3	A1	793	U	C1'-O4'-C4'	-5.36	105.61	109.90
24	BA	39	A	O4'-C1'-C2'	-5.36	100.44	105.80
25	BB	8	C	C5-C6-N1	-5.36	118.32	121.00
25	BB	234	U	N1-C2-N3	5.36	118.11	114.90
25	BB	373	U	C4-C5-C6	5.36	122.91	119.70
25	BB	719	C	O3'-P-O5'	-5.36	93.82	104.00
25	BB	735	A	C6-C5-N7	5.36	136.05	132.30
25	BB	814	C	C5-C6-N1	-5.36	118.32	121.00
25	BB	1514	G	N3-C4-N9	5.36	129.21	126.00
25	BB	1843	C	N1-C2-N3	5.36	122.95	119.20
25	BB	2201	G	P-O5'-C5'	5.36	129.47	120.90
25	BB	2242	G	N1-C6-O6	-5.36	116.69	119.90
25	BB	2339	C	C1'-O4'-C4'	-5.36	105.62	109.90
25	BB	2385	C	N1-C2-N3	5.36	122.95	119.20
25	BB	2736	A	O4'-C4'-C3'	5.36	110.39	106.10
3	A1	532	A	C3'-C2'-C1'	-5.35	97.22	101.50
3	A1	775	G	C5-C6-N1	5.35	114.18	111.50
3	A1	1106	G	C5-N7-C8	-5.35	101.62	104.30
25	BB	350	G	C6-C5-N7	5.35	133.61	130.40
25	BB	1415	U	O4'-C1'-C2'	-5.35	100.45	105.80
25	BB	1582	C	N3-C4-N4	-5.35	114.25	118.00
25	BB	2431	U	C4-C5-C6	5.35	122.91	119.70
1	AA	62	A	C4-C5-N7	5.35	113.38	110.70
3	A1	504	C	C3'-C2'-C1'	5.35	105.78	101.50
3	A1	692	U	O4'-C4'-C3'	5.35	110.38	106.10
3	A1	878	A	O4'-C1'-N9	5.35	112.48	108.20
3	A1	916	U	O4'-C1'-N1	5.35	112.48	108.20
3	A1	1064	G	C4-C5-C6	-5.35	115.59	118.80
3	A1	1314	C	P-O3'-C3'	5.35	126.12	119.70
25	BB	88	G	O4'-C1'-N9	5.35	112.48	108.20
25	BB	448	U	C4'-C3'-C2'	-5.35	97.25	102.60
25	BB	477	A	C5-C6-N6	5.35	127.98	123.70
25	BB	753	A	N1-C2-N3	-5.35	126.62	129.30
25	BB	915	C	N1-C2-O2	5.35	122.11	118.90
25	BB	1053	C	N1-C2-O2	5.35	122.11	118.90
25	BB	1388	G	C2-N3-C4	5.35	114.58	111.90
25	BB	1825	U	C2-N3-C4	-5.35	123.79	127.00
25	BB	1826	G	N1-C6-O6	-5.35	116.69	119.90
25	BB	2432	A	C5-C6-N1	5.35	120.38	117.70
25	BB	2763	G	N3-C4-C5	-5.35	125.92	128.60
3	A1	145	G	C1'-O4'-C4'	-5.35	105.62	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	757	U	C2-N3-C4	-5.35	123.79	127.00
3	A1	1042	A	C4-C5-N7	5.35	113.38	110.70
3	A1	1517	G	N9-C4-C5	5.35	107.54	105.40
25	BB	408	G	C3'-C2'-C1'	-5.35	97.22	101.50
25	BB	703	U	O4'-C4'-C3'	5.35	110.38	106.10
25	BB	984	A	C5-C6-N6	5.35	127.98	123.70
25	BB	1027	A	C4-C5-N7	-5.35	108.02	110.70
25	BB	2893	A	C6-N1-C2	-5.35	115.39	118.60
1	AA	10	G	C6-N1-C2	-5.35	121.89	125.10
1	AA	31	A	C4-C5-C6	-5.35	114.33	117.00
1	AA	58	A	C3'-C2'-O2'	5.35	128.82	113.30
1	AE	48	C	N3-C4-N4	-5.35	114.25	118.00
3	A1	111	G	C6-N1-C2	-5.35	121.89	125.10
3	A1	902	G	C5'-C4'-C3'	-5.35	107.44	116.00
3	A1	1492	A	C4-C5-N7	-5.35	108.03	110.70
15	AO	125	ARG	CD-NE-CZ	5.35	131.09	123.60
18	AS	111	ARG	NE-CZ-NH2	5.35	122.97	120.30
24	BA	102	G	C5'-C4'-O4'	5.35	115.52	109.10
25	BB	265	A	O5'-C5'-C4'	5.35	121.86	111.70
25	BB	534	U	C4-C5-C6	5.35	122.91	119.70
25	BB	641	U	C2-N3-C4	-5.35	123.79	127.00
25	BB	726	G	P-O3'-C3'	5.35	126.12	119.70
25	BB	978	G	N1-C6-O6	-5.35	116.69	119.90
25	BB	1431	A	C5'-C4'-C3'	-5.35	107.44	116.00
25	BB	1500	G	N3-C4-C5	-5.35	125.92	128.60
25	BB	1509	A	C4-C5-C6	-5.35	114.33	117.00
25	BB	1588	G	O4'-C1'-C2'	5.35	112.41	107.60
25	BB	1891	G	N3-C2-N2	-5.35	116.16	119.90
25	BB	2317	A	P-O3'-C3'	5.35	126.12	119.70
25	BB	2389	G	N1-C6-O6	-5.35	116.69	119.90
25	BB	2900	A	C6-C5-N7	5.35	136.04	132.30
3	A1	101	A	N1-C2-N3	-5.35	126.63	129.30
3	A1	117	G	C6-N1-C2	-5.35	121.89	125.10
3	A1	573	A	C8-N9-C4	5.35	107.94	105.80
3	A1	942	G	C3'-C2'-C1'	5.35	105.78	101.50
3	A1	1260	G	C5'-C4'-O4'	5.35	115.52	109.10
3	A1	1392	G	N3-C4-C5	-5.35	125.93	128.60
3	A1	1412	C	C5'-C4'-C3'	-5.35	107.44	116.00
24	BA	60	C	C6-N1-C2	-5.35	118.16	120.30
25	BB	337	C	C5-C6-N1	-5.35	118.33	121.00
25	BB	476	G	N3-C2-N2	5.35	123.64	119.90
25	BB	581	C	N3-C2-O2	-5.35	118.16	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	907	G	C1'-O4'-C4'	-5.35	105.62	109.90
25	BB	2006	C	O4'-C1'-N1	5.35	112.48	108.20
25	BB	2349	G	N1-C2-N3	5.35	127.11	123.90
25	BB	2358	A	C8-N9-C4	-5.35	103.66	105.80
25	BB	2421	G	C3'-C2'-C1'	-5.35	97.22	101.50
25	BB	2689	U	C6-N1-C2	-5.35	117.79	121.00
25	BB	2751	G	O4'-C1'-C2'	-5.35	100.45	105.80
3	A1	459	A	O4'-C4'-C3'	-5.35	98.65	104.00
3	A1	825	A	N9-C4-C5	5.35	107.94	105.80
3	A1	1081	A	O5'-C5'-C4'	-5.35	101.54	111.70
3	A1	1119	C	N3-C4-C5	5.35	124.04	121.90
25	BB	101	A	C5-C6-N6	5.35	127.98	123.70
25	BB	167	A	C4'-C3'-C2'	-5.35	97.25	102.60
25	BB	216	A	C5-N7-C8	-5.35	101.23	103.90
25	BB	2086	U	C5-C6-N1	-5.35	120.03	122.70
25	BB	2348	U	C5'-C4'-C3'	5.35	124.55	116.00
25	BB	2857	G	C5-C6-N1	5.35	114.17	111.50
25	BB	2867	G	C1'-O4'-C4'	5.35	114.18	109.90
1	AE	25	C	N3-C4-C5	5.34	124.04	121.90
1	AE	27	C	N1-C2-O2	5.34	122.11	118.90
3	A1	69	G	C5-C6-O6	5.34	131.81	128.60
3	A1	581	G	C5'-C4'-O4'	5.34	115.51	109.10
3	A1	628	G	C2-N3-C4	5.34	114.57	111.90
25	BB	114	U	N3-C2-O2	-5.34	118.46	122.20
25	BB	609	A	C5'-C4'-O4'	5.34	115.51	109.10
25	BB	1034	G	C5-C6-O6	5.34	131.81	128.60
25	BB	1180	U	C3'-C2'-C1'	5.34	105.78	101.50
25	BB	1321	A	C6-N1-C2	-5.34	115.39	118.60
25	BB	1752	C	C1'-O4'-C4'	-5.34	105.62	109.90
25	BB	1928	A	C6-N1-C2	-5.34	115.39	118.60
25	BB	2383	G	C5-N7-C8	-5.34	101.63	104.30
25	BB	2494	G	C6-N1-C2	-5.34	121.89	125.10
3	A1	263	A	C5'-C4'-O4'	5.34	115.51	109.10
3	A1	391	G	N7-C8-N9	5.34	115.77	113.10
3	A1	1211	U	O4'-C1'-N1	5.34	112.47	108.20
25	BB	83	A	C3'-C2'-C1'	-5.34	97.23	101.50
25	BB	1562	U	C1'-O4'-C4'	-5.34	105.63	109.90
25	BB	1712	U	O4'-C4'-C3'	5.34	110.37	106.10
25	BB	1992	G	C4-C5-N7	5.34	112.94	110.80
25	BB	2813	A	N9-C1'-C2'	-5.34	106.12	112.00
1	AP	20	G	C6-C5-N7	5.34	133.60	130.40
1	AP	20	G	N3-C4-N9	-5.34	122.80	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AM	15	U	O4'-C4'-C3'	-5.34	98.66	104.00
3	A1	257	G	P-O3'-C3'	5.34	126.11	119.70
3	A1	656	G	C6-N1-C2	-5.34	121.90	125.10
3	A1	1198	G	C6-N1-C2	-5.34	121.90	125.10
3	A1	1493	A	C5-C6-N6	5.34	127.97	123.70
23	AX	31	ARG	NH1-CZ-NH2	-5.34	113.52	119.40
25	BB	152	A	N3-C4-N9	-5.34	123.13	127.40
25	BB	245	G	C5-C6-N1	5.34	114.17	111.50
25	BB	439	A	C5-C6-N1	5.34	120.37	117.70
25	BB	704	G	N3-C2-N2	-5.34	116.16	119.90
25	BB	852	U	C3'-C2'-C1'	-5.34	97.23	101.50
25	BB	1050	A	C5-C6-N6	5.34	127.97	123.70
25	BB	1137	G	C5-C6-N1	5.34	114.17	111.50
25	BB	1477	A	C3'-C2'-C1'	5.34	105.77	101.50
25	BB	1660	G	C6-N1-C2	-5.34	121.89	125.10
25	BB	2247	A	C6-C5-N7	5.34	136.04	132.30
25	BB	2784	U	N1-C2-N3	5.34	118.11	114.90
52	B3	128	THR	CA-CB-CG2	5.34	119.88	112.40
1	AA	46	G	O3'-P-O5'	5.34	114.15	104.00
3	A1	373	A	C2-N3-C4	5.34	113.27	110.60
3	A1	466	A	C5-N7-C8	-5.34	101.23	103.90
3	A1	750	C	C3'-C2'-C1'	5.34	105.77	101.50
3	A1	1077	G	C6-C5-N7	5.34	133.60	130.40
3	A1	1224	U	C5-C6-N1	-5.34	120.03	122.70
18	AS	111	ARG	NH1-CZ-NH2	-5.34	113.53	119.40
25	BB	10	A	C6-C5-N7	5.34	136.04	132.30
25	BB	238	C	N3-C2-O2	-5.34	118.16	121.90
25	BB	461	C	C2-N3-C4	-5.34	117.23	119.90
25	BB	918	A	C2'-C3'-O3'	5.34	122.24	113.70
25	BB	1578	U	C4-C5-C6	5.34	122.90	119.70
25	BB	1719	G	C6-C5-N7	5.34	133.60	130.40
25	BB	1912	A	O4'-C1'-N9	5.34	112.47	108.20
25	BB	2267	A	O4'-C4'-C3'	5.34	110.37	106.10
25	BB	2565	A	C2-N3-C4	5.34	113.27	110.60
25	BB	2814	A	C6-N1-C2	-5.34	115.40	118.60
29	BF	103	TYR	CB-CG-CD2	-5.34	117.80	121.00
52	B3	80	GLU	OE1-CD-OE2	-5.34	116.89	123.30
1	AA	50	U	C4-C5-C6	5.34	122.90	119.70
3	A1	71	A	C2-N3-C4	5.34	113.27	110.60
3	A1	545	C	C6-N1-C2	-5.34	118.17	120.30
3	A1	1159	U	C4-C5-C6	5.34	122.90	119.70
3	A1	1375	A	C6-C5-N7	5.34	136.04	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	39	A	N9-C4-C5	5.34	107.94	105.80
25	BB	77	G	C4'-C3'-C2'	5.34	107.94	102.60
25	BB	936	A	C4-C5-N7	5.34	113.37	110.70
25	BB	1056	G	C5-C6-N1	5.34	114.17	111.50
25	BB	1181	U	C3'-C2'-C1'	5.34	105.77	101.50
25	BB	1506	U	C1'-O4'-C4'	-5.34	105.63	109.90
25	BB	1676	A	N7-C8-N9	5.34	116.47	113.80
25	BB	2048	G	N1-C2-N3	5.34	127.10	123.90
25	BB	2613	U	C1'-O4'-C4'	-5.34	105.63	109.90
3	A1	250	A	C5'-C4'-O4'	5.34	115.50	109.10
3	A1	392	C	N3-C2-O2	-5.34	118.16	121.90
3	A1	609	A	N3-C4-N9	5.34	131.67	127.40
25	BB	155	A	C8-N9-C4	-5.34	103.67	105.80
25	BB	406	G	C8-N9-C4	-5.34	104.27	106.40
25	BB	566	U	C5-C6-N1	-5.34	120.03	122.70
25	BB	615	U	N3-C4-O4	5.34	123.14	119.40
25	BB	758	C	C3'-C2'-C1'	5.34	105.77	101.50
25	BB	836	G	C5'-C4'-C3'	-5.34	107.46	116.00
25	BB	1002	G	C3'-C2'-C1'	-5.34	97.23	101.50
25	BB	1212	G	C8-N9-C4	-5.34	104.27	106.40
25	BB	1430	G	C8-N9-C4	-5.34	104.27	106.40
25	BB	1687	G	N7-C8-N9	5.34	115.77	113.10
25	BB	1763	G	C8-N9-C4	-5.34	104.27	106.40
25	BB	1880	U	O4'-C1'-N1	5.34	112.47	108.20
25	BB	1986	C	C5-C4-N4	5.34	123.94	120.20
25	BB	2087	G	C5-C6-N1	5.34	114.17	111.50
25	BB	2331	G	N1-C2-N3	5.34	127.10	123.90
25	BB	2482	A	C5-N7-C8	-5.34	101.23	103.90
3	A1	365	U	C2-N1-C1'	5.33	124.10	117.70
24	BA	16	G	C5'-C4'-C3'	-5.33	107.46	116.00
25	BB	47	C	C5'-C4'-C3'	-5.33	107.46	116.00
25	BB	622	G	N1-C2-N3	5.33	127.10	123.90
25	BB	930	G	C3'-C2'-C1'	5.33	105.77	101.50
25	BB	1194	A	N7-C8-N9	-5.33	111.13	113.80
25	BB	1216	G	C4-C5-C6	-5.33	115.60	118.80
25	BB	2051	A	C3'-C2'-C1'	-5.33	97.23	101.50
25	BB	2803	G	C5'-C4'-O4'	5.33	115.50	109.10
3	A1	613	C	C4-C5-C6	-5.33	114.73	117.40
3	A1	733	G	C5-C6-O6	5.33	131.80	128.60
3	A1	1052	U	C1'-O4'-C4'	-5.33	105.63	109.90
3	A1	1248	A	C5-C6-N1	5.33	120.37	117.70
3	A1	1342	C	N3-C4-N4	-5.33	114.27	118.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1374	A	C2-N3-C4	5.33	113.27	110.60
3	A1	1411	C	N3-C4-C5	5.33	124.03	121.90
3	A1	1427	C	C5-C6-N1	-5.33	118.33	121.00
3	A1	1481	U	C1'-O4'-C4'	-5.33	105.63	109.90
24	BA	27	C	C2-N3-C4	-5.33	117.23	119.90
25	BB	292	U	C5-C6-N1	-5.33	120.03	122.70
25	BB	659	G	N1-C2-N3	5.33	127.10	123.90
25	BB	706	A	C4'-C3'-C2'	-5.33	97.27	102.60
25	BB	1300	G	C2-N3-C4	-5.33	109.23	111.90
25	BB	1324	G	N1-C2-N3	5.33	127.10	123.90
25	BB	1470	A	C6-C5-N7	5.33	136.03	132.30
25	BB	1502	A	N3-C4-N9	-5.33	123.13	127.40
25	BB	1564	C	N1-C1'-C2'	5.33	120.93	114.00
25	BB	1617	C	P-O3'-C3'	5.33	126.10	119.70
25	BB	1960	A	O4'-C1'-N9	5.33	112.47	108.20
25	BB	1977	A	C5'-C4'-O4'	5.33	115.50	109.10
25	BB	2056	G	C6-C5-N7	5.33	133.60	130.40
25	BB	2228	G	C5-C6-N1	5.33	114.17	111.50
25	BB	2379	G	N9-C4-C5	5.33	107.53	105.40
25	BB	2501	C	C3'-C2'-C1'	5.33	105.77	101.50
1	AE	73	A	C4-C5-N7	5.33	113.37	110.70
3	A1	223	A	C5'-C4'-C3'	-5.33	107.47	116.00
3	A1	292	G	C8-N9-C4	-5.33	104.27	106.40
25	BB	1150	C	O4'-C1'-C2'	5.33	112.40	107.60
25	BB	1171	G	N3-C2-N2	-5.33	116.17	119.90
25	BB	1608	A	C6-C5-N7	5.33	136.03	132.30
25	BB	1980	G	C5'-C4'-C3'	-5.33	107.47	116.00
25	BB	2149	U	C6-N1-C2	-5.33	117.80	121.00
25	BB	2198	A	C5-C6-N1	5.33	120.36	117.70
25	BB	2339	C	N1-C1'-C2'	5.33	120.93	114.00
25	BB	2462	C	C4-C5-C6	-5.33	114.73	117.40
52	B3	46	ASP	CB-CG-OD1	-5.33	113.50	118.30
3	A1	613	C	C3'-C2'-C1'	-5.33	97.24	101.50
3	A1	1154	G	C5-C6-N1	5.33	114.17	111.50
24	BA	98	G	C5'-C4'-O4'	5.33	115.50	109.10
25	BB	1010	A	C6-C5-N7	5.33	136.03	132.30
25	BB	2070	A	C2-N3-C4	5.33	113.27	110.60
25	BB	2446	G	C6-N1-C2	-5.33	121.90	125.10
25	BB	2487	G	C1'-O4'-C4'	-5.33	105.64	109.90
1	AE	25	C	C2-N3-C4	-5.33	117.24	119.90
2	AM	6	U	P-O3'-C3'	5.33	126.09	119.70
3	A1	18	C	C6-N1-C2	-5.33	118.17	120.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	143	A	C5'-C4'-O4'	5.33	115.49	109.10
3	A1	199	A	C5-N7-C8	-5.33	101.24	103.90
3	A1	319	G	N9-C4-C5	-5.33	103.27	105.40
3	A1	392	C	N1-C2-O2	5.33	122.10	118.90
3	A1	627	G	C5'-C4'-O4'	5.33	115.50	109.10
3	A1	774	G	C5-C6-N1	5.33	114.16	111.50
3	A1	1213	A	N7-C8-N9	-5.33	111.14	113.80
3	A1	1259	C	C4'-C3'-C2'	-5.33	97.27	102.60
3	A1	1455	G	C8-N9-C4	-5.33	104.27	106.40
3	A1	1531	A	C4'-C3'-C2'	-5.33	97.27	102.60
15	AO	21	TRP	NE1-CE2-CD2	-5.33	101.97	107.30
25	BB	30	G	C8-N9-C1'	5.33	133.93	127.00
25	BB	506	G	P-O3'-C3'	5.33	126.09	119.70
25	BB	678	C	C2-N3-C4	-5.33	117.23	119.90
25	BB	1042	G	N1-C2-N3	5.33	127.10	123.90
25	BB	1076	C	O4'-C1'-N1	5.33	112.46	108.20
25	BB	1292	G	C8-N9-C4	-5.33	104.27	106.40
25	BB	1319	C	C5-C4-N4	5.33	123.93	120.20
25	BB	1464	G	C4-C5-N7	-5.33	108.67	110.80
25	BB	1501	G	N3-C2-N2	-5.33	116.17	119.90
25	BB	1675	C	N3-C4-C5	5.33	124.03	121.90
25	BB	1734	G	C2-N3-C4	-5.33	109.24	111.90
25	BB	2016	U	N1-C1'-C2'	5.33	120.93	114.00
25	BB	2292	U	N1-C2-O2	5.33	126.53	122.80
25	BB	2542	A	C5'-C4'-O4'	-5.33	102.71	109.10
25	BB	2617	U	C3'-C2'-C1'	-5.33	97.24	101.50
1	AP	29	A	N7-C8-N9	5.33	116.46	113.80
3	A1	222	C	N3-C4-C5	5.33	124.03	121.90
3	A1	771	G	N1-C2-N3	5.33	127.10	123.90
3	A1	1294	G	C2-N3-C4	5.33	114.56	111.90
5	AC	110	THR	CA-CB-CG2	5.33	119.86	112.40
6	AD	106	VAL	O-C-N	-5.33	114.18	122.70
25	BB	226	A	C4-C5-N7	5.33	113.36	110.70
25	BB	1270	C	C2-N3-C4	-5.33	117.24	119.90
25	BB	1860	G	C2-N3-C4	-5.33	109.24	111.90
3	A1	742	G	C6-N1-C2	-5.33	121.91	125.10
3	A1	767	A	O4'-C1'-N9	5.33	112.46	108.20
3	A1	952	U	C2-N3-C4	-5.33	123.80	127.00
3	A1	1389	C	C5'-C4'-C3'	-5.33	107.48	116.00
3	A1	1393	U	O4'-C1'-C2'	5.33	112.39	107.60
3	A1	1415	G	C5'-C4'-O4'	5.33	115.49	109.10
25	BB	181	A	C4-C5-N7	5.33	113.36	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	578	G	N3-C4-C5	-5.33	125.94	128.60
25	BB	1245	G	C6-N1-C2	-5.33	121.91	125.10
25	BB	1579	A	C3'-C2'-C1'	-5.33	97.24	101.50
25	BB	1888	G	C3'-C2'-C1'	5.33	105.76	101.50
25	BB	1950	G	N3-C2-N2	-5.33	116.17	119.90
25	BB	2290	G	C5-C6-N1	5.33	114.16	111.50
25	BB	2411	A	C2'-C3'-O3'	5.33	122.22	113.70
25	BB	2874	C	P-O3'-C3'	5.33	126.09	119.70
1	AP	23	A	C2-N3-C4	5.32	113.26	110.60
1	AE	6	U	C6-N1-C2	-5.32	117.81	121.00
3	A1	162	A	C6-C5-N7	5.32	136.03	132.30
3	A1	172	A	P-O3'-C3'	5.32	126.09	119.70
3	A1	880	C	C5-C6-N1	-5.32	118.34	121.00
3	A1	943	U	C5-C6-N1	-5.32	120.04	122.70
24	BA	5	U	N3-C4-O4	5.32	123.13	119.40
24	BA	73	A	N1-C2-N3	-5.32	126.64	129.30
24	BA	85	G	O4'-C1'-N9	-5.32	103.94	108.20
25	BB	247	G	N3-C4-C5	-5.32	125.94	128.60
25	BB	698	C	N3-C4-C5	5.32	124.03	121.90
25	BB	726	G	C5-C6-N1	5.32	114.16	111.50
25	BB	902	C	N1-C2-O2	5.32	122.09	118.90
25	BB	1088	A	C4-C5-C6	-5.32	114.34	117.00
25	BB	1193	G	C2-N3-C4	5.32	114.56	111.90
25	BB	1582	C	C4'-C3'-O3'	5.32	123.64	113.00
25	BB	2044	C	C5'-C4'-C3'	-5.32	107.48	116.00
25	BB	2099	U	C1'-O4'-C4'	5.32	114.16	109.90
25	BB	2109	U	N1-C2-O2	5.32	126.53	122.80
25	BB	2129	C	O4'-C1'-N1	5.32	112.46	108.20
25	BB	2465	C	N3-C2-O2	-5.32	118.17	121.90
25	BB	2567	G	C3'-C2'-C1'	5.32	105.76	101.50
25	BB	2627	G	N1-C6-O6	-5.32	116.71	119.90
1	AE	37	G	N9-C1'-C2'	-5.32	106.15	112.00
3	A1	218	U	C1'-O4'-C4'	5.32	114.16	109.90
3	A1	250	A	C2-N3-C4	5.32	113.26	110.60
3	A1	1361	G	N1-C6-O6	-5.32	116.71	119.90
25	BB	1076	C	N3-C4-N4	-5.32	114.28	118.00
25	BB	1354	A	C4'-C3'-C2'	-5.32	97.28	102.60
25	BB	1535	A	C1'-O4'-C4'	-5.32	105.64	109.90
25	BB	1643	G	N1-C6-O6	-5.32	116.71	119.90
25	BB	2125	G	C4-C5-C6	-5.32	115.61	118.80
25	BB	2430	A	C3'-C2'-C1'	5.32	105.76	101.50
25	BB	2817	U	N3-C2-O2	-5.32	118.47	122.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	B2	148	VAL	CG1-CB-CG2	-5.32	102.39	110.90
1	AP	15	G	C4'-C3'-C2'	-5.32	97.28	102.60
3	A1	153	C	P-O3'-C3'	5.32	126.08	119.70
3	A1	308	C	C1'-O4'-C4'	-5.32	105.64	109.90
3	A1	768	A	N1-C2-N3	-5.32	126.64	129.30
3	A1	1206	G	N7-C8-N9	5.32	115.76	113.10
3	A1	1288	A	C4'-C3'-C2'	5.32	107.92	102.60
20	AU	137	ARG	NH1-CZ-NH2	-5.32	113.55	119.40
24	BA	81	G	C4'-C3'-C2'	-5.32	97.28	102.60
25	BB	235	U	N1-C2-N3	5.32	118.09	114.90
25	BB	257	C	N1-C2-O2	5.32	122.09	118.90
25	BB	461	C	C5-C4-N4	-5.32	116.48	120.20
25	BB	663	G	N9-C1'-C2'	-5.32	106.15	112.00
25	BB	725	G	C3'-C2'-C1'	5.32	105.76	101.50
25	BB	953	G	N9-C4-C5	5.32	107.53	105.40
25	BB	1070	A	C6-C5-N7	5.32	136.03	132.30
25	BB	1721	G	O4'-C4'-C3'	5.32	110.36	106.10
25	BB	2450	A	C2-N3-C4	5.32	113.26	110.60
25	BB	2657	A	C5-C6-N6	5.32	127.96	123.70
3	A1	218	U	C5'-C4'-O4'	5.32	115.48	109.10
3	A1	405	U	C4-C5-C6	5.32	122.89	119.70
3	A1	858	G	O4'-C1'-N9	-5.32	103.94	108.20
3	A1	1152	A	O5'-P-OP1	5.32	117.08	110.70
24	BA	7	G	C3'-C2'-C1'	5.32	105.76	101.50
25	BB	1436	G	C8-N9-C4	-5.32	104.27	106.40
25	BB	1833	C	N3-C4-N4	-5.32	114.28	118.00
25	BB	1907	G	C6-N1-C2	-5.32	121.91	125.10
25	BB	2118	U	C3'-C2'-C1'	-5.32	97.25	101.50
25	BB	2312	U	N3-C4-O4	5.32	123.12	119.40
25	BB	2360	G	N3-C4-C5	-5.32	125.94	128.60
3	A1	100	G	C5-N7-C8	-5.32	101.64	104.30
3	A1	380	G	C8-N9-C4	-5.32	104.27	106.40
3	A1	1061	G	N1-C6-O6	-5.32	116.71	119.90
3	A1	1180	A	C6-N1-C2	-5.32	115.41	118.60
25	BB	5	A	C2-N3-C4	5.32	113.26	110.60
25	BB	511	U	N3-C4-C5	5.32	117.79	114.60
25	BB	1106	G	N9-C1'-C2'	-5.32	106.15	112.00
25	BB	2073	C	C5-C6-N1	-5.32	118.34	121.00
25	BB	2200	C	N3-C4-N4	-5.32	114.28	118.00
1	AP	17	U	C5-C4-O4	5.32	129.09	125.90
1	AE	16	U	C5'-C4'-C3'	-5.32	107.49	116.00
3	A1	814	A	O4'-C4'-C3'	-5.32	98.68	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	938	A	O4'-C1'-N9	5.32	112.45	108.20
25	BB	55	G	N3-C4-C5	-5.32	125.94	128.60
25	BB	132	G	O4'-C1'-N9	5.32	112.45	108.20
25	BB	419	U	C5'-C4'-C3'	-5.32	107.50	116.00
25	BB	660	C	N1-C2-N3	5.32	122.92	119.20
25	BB	1052	C	N1-C1'-C2'	-5.32	106.15	112.00
25	BB	1356	G	P-O3'-C3'	5.32	126.08	119.70
25	BB	1391	U	O4'-C4'-C3'	-5.32	98.69	104.00
25	BB	1699	G	N3-C4-C5	-5.32	125.94	128.60
25	BB	1870	C	O4'-C4'-C3'	5.32	110.35	106.10
25	BB	2242	G	P-O3'-C3'	5.32	126.08	119.70
25	BB	2630	G	O3'-P-O5'	5.32	114.10	104.00
29	BF	38	ARG	N-CA-CB	-5.32	101.03	110.60
3	A1	146	G	P-O3'-C3'	5.31	126.08	119.70
3	A1	873	A	N7-C8-N9	5.31	116.46	113.80
3	A1	1103	C	C5-C6-N1	-5.31	118.34	121.00
3	A1	1448	C	C5-C6-N1	-5.31	118.34	121.00
14	AN	42	ASP	CB-CG-OD1	-5.31	113.52	118.30
45	BV	3	ARG	C-N-CA	5.31	134.98	121.70
1	AA	53	G	C5-N7-C8	-5.31	101.64	104.30
3	A1	138	G	O4'-C1'-N9	5.31	112.45	108.20
3	A1	602	A	C5'-C4'-O4'	5.31	115.47	109.10
3	A1	913	A	C5-C6-N6	5.31	127.95	123.70
3	A1	1059	C	C5'-C4'-O4'	5.31	115.48	109.10
25	BB	816	C	C1'-O4'-C4'	-5.31	105.65	109.90
25	BB	1009	A	C8-N9-C4	-5.31	103.67	105.80
25	BB	1039	A	C4'-C3'-C2'	-5.31	97.29	102.60
25	BB	1107	G	C4-C5-C6	-5.31	115.61	118.80
25	BB	1107	G	C4-C5-N7	-5.31	108.67	110.80
25	BB	1288	G	N1-C2-N3	5.31	127.09	123.90
25	BB	1829	A	C6-C5-N7	5.31	136.02	132.30
25	BB	1962	C	N3-C2-O2	-5.31	118.18	121.90
25	BB	2061	G	O4'-C4'-C3'	5.31	110.35	106.10
25	BB	2444	G	C5-C6-N1	5.31	114.16	111.50
25	BB	2607	G	C5-C6-N1	5.31	114.16	111.50
25	BB	2805	C	C4-C5-C6	5.31	120.06	117.40
27	BD	31	ARG	NE-CZ-NH2	-5.31	117.64	120.30
30	BG	118	ARG	NH1-CZ-NH2	-5.31	113.56	119.40
31	BH	94	ARG	NE-CZ-NH2	-5.31	117.64	120.30
3	A1	1251	A	C4'-C3'-C2'	-5.31	97.29	102.60
25	BB	228	C	C4-C5-C6	5.31	120.06	117.40
25	BB	768	G	N3-C4-N9	5.31	129.19	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	BB	776	G	C5-C6-N1	5.31	114.16	111.50
25	BB	807	U	N3-C2-O2	-5.31	118.48	122.20
25	BB	1494	A	O4'-C1'-N9	5.31	112.45	108.20
25	BB	1825	U	O4'-C1'-N1	5.31	112.45	108.20
25	BB	2579	C	N3-C2-O2	-5.31	118.18	121.90
3	A1	40	C	N3-C2-O2	-5.31	118.18	121.90
3	A1	167	A	C6-C5-N7	5.31	136.02	132.30
3	A1	581	G	C5-C6-O6	5.31	131.79	128.60
3	A1	904	U	C5-C6-N1	-5.31	120.05	122.70
3	A1	956	U	C1'-O4'-C4'	-5.31	105.65	109.90
3	A1	1477	U	N3-C2-O2	-5.31	118.48	122.20
3	A1	1486	G	N1-C2-N3	5.31	127.09	123.90
24	BA	115	A	C4'-C3'-C2'	-5.31	97.29	102.60
25	BB	54	G	C5-C6-N1	5.31	114.15	111.50
25	BB	899	A	C5'-C4'-C3'	-5.31	107.51	116.00
25	BB	1410	G	N9-C1'-C2'	-5.31	106.16	112.00
25	BB	1630	A	P-O3'-C3'	5.31	126.07	119.70
25	BB	2140	G	C5-N7-C8	-5.31	101.64	104.30
25	BB	2184	A	C8-N9-C4	5.31	107.92	105.80
25	BB	2242	G	C4-C5-C6	-5.31	115.61	118.80
25	BB	2578	G	C4-N9-C1'	5.31	133.40	126.50
25	BB	2667	C	N3-C4-C5	5.31	124.02	121.90
25	BB	2853	C	C6-N1-C2	-5.31	118.18	120.30
54	B5	102	ARG	NE-CZ-NH2	-5.31	117.65	120.30
3	A1	66	A	O4'-C1'-N9	5.31	112.45	108.20
3	A1	155	A	C2-N3-C4	5.31	113.25	110.60
3	A1	209	U	N1-C2-N3	5.31	118.08	114.90
3	A1	313	A	C3'-C2'-C1'	5.31	105.75	101.50
3	A1	357	G	C5-C6-O6	5.31	131.78	128.60
3	A1	909	A	N9-C4-C5	-5.31	103.68	105.80
3	A1	967	C	C4'-C3'-O3'	5.31	123.61	113.00
3	A1	985	C	N3-C4-N4	-5.31	114.28	118.00
3	A1	1012	A	C2-N3-C4	5.31	113.25	110.60
25	BB	826	U	N1-C2-O2	5.31	126.52	122.80
25	BB	1052	C	O5'-P-OP2	5.31	117.07	110.70
25	BB	1269	A	N1-C6-N6	-5.31	115.42	118.60
25	BB	1452	G	C4-C5-C6	-5.31	115.61	118.80
25	BB	1679	A	C5-C6-N6	5.31	127.95	123.70
25	BB	1722	A	C4-C5-C6	-5.31	114.35	117.00
25	BB	2215	C	C6-N1-C2	-5.31	118.18	120.30
25	BB	2367	G	C6-N1-C2	-5.31	121.92	125.10
3	A1	1163	A	C5'-C4'-O4'	5.31	115.47	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	AS	99	SER	C-N-CA	5.31	134.96	121.70
25	BB	550	C	N3-C4-N4	-5.31	114.28	118.00
25	BB	656	G	C5-C6-O6	5.31	131.78	128.60
25	BB	667	U	C4-C5-C6	5.31	122.88	119.70
25	BB	856	G	N1-C6-O6	-5.31	116.72	119.90
25	BB	1557	C	C3'-C2'-C1'	5.31	105.75	101.50
25	BB	1581	G	C5-N7-C8	-5.31	101.65	104.30
25	BB	2146	C	N1-C2-N3	5.31	122.91	119.20
25	BB	2156	G	C3'-C2'-C1'	5.31	105.75	101.50
25	BB	2458	G	C5-C6-O6	-5.31	125.42	128.60
1	AA	42	G	C4-C5-C6	-5.30	115.62	118.80
3	A1	557	G	C5'-C4'-O4'	5.30	115.47	109.10
3	A1	773	G	N3-C4-N9	5.30	129.18	126.00
3	A1	1020	G	C8-N9-C4	-5.30	104.28	106.40
3	A1	1064	G	C6-N1-C2	-5.30	121.92	125.10
3	A1	1386	G	O5'-P-OP1	-5.30	100.93	105.70
25	BB	368	A	N1-C2-N3	-5.30	126.65	129.30
25	BB	583	G	C5-C6-N1	5.30	114.15	111.50
25	BB	681	G	N1-C6-O6	-5.30	116.72	119.90
25	BB	924	G	N3-C4-C5	-5.30	125.95	128.60
25	BB	985	C	N1-C2-O2	5.30	122.08	118.90
25	BB	2292	U	N1-C1'-C2'	-5.30	106.17	112.00
25	BB	2469	A	C8-N9-C4	-5.30	103.68	105.80
25	BB	2570	G	N1-C2-N3	5.30	127.08	123.90
25	BB	2618	G	O4'-C1'-C2'	5.30	112.37	107.60
3	A1	309	A	C5-N7-C8	-5.30	101.25	103.90
3	A1	1011	C	C5'-C4'-O4'	5.30	115.46	109.10
3	A1	1461	G	N1-C2-N2	-5.30	111.43	116.20
3	A1	1483	A	P-O3'-C3'	5.30	126.06	119.70
18	AS	68	ARG	CD-NE-CZ	5.30	131.02	123.60
25	BB	1464	G	N3-C2-N2	-5.30	116.19	119.90
25	BB	1624	U	N3-C2-O2	-5.30	118.49	122.20
25	BB	1737	G	C6-C5-N7	5.30	133.58	130.40
25	BB	1816	C	C4'-C3'-C2'	-5.30	97.30	102.60
25	BB	2091	C	C3'-C2'-C1'	5.30	105.74	101.50
25	BB	2143	C	C3'-C2'-C1'	5.30	105.74	101.50
1	AE	18	G	C5-C6-N1	5.30	114.15	111.50
1	AE	58	A	N1-C2-N3	-5.30	126.65	129.30
3	A1	855	U	C5'-C4'-C3'	-5.30	107.52	116.00
3	A1	1032	G	N3-C4-N9	5.30	129.18	126.00
3	A1	1124	G	C1'-O4'-C4'	-5.30	105.66	109.90
3	A1	1371	G	C5-C6-N1	5.30	114.15	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1420	U	N3-C2-O2	-5.30	118.49	122.20
13	AL	2	ARG	NE-CZ-NH1	5.30	122.95	120.30
17	AR	56	GLU	OE1-CD-OE2	-5.30	116.94	123.30
25	BB	361	G	C4'-C3'-C2'	-5.30	97.30	102.60
25	BB	508	A	C6-C5-N7	5.30	136.01	132.30
25	BB	1063	G	C5'-C4'-O4'	5.30	115.46	109.10
25	BB	1434	A	C2-N3-C4	5.30	113.25	110.60
25	BB	1539	U	C1'-O4'-C4'	-5.30	105.66	109.90
25	BB	1743	G	N9-C4-C5	5.30	107.52	105.40
25	BB	2681	C	O5'-P-OP1	-5.30	100.93	105.70
25	BB	2760	C	N1-C2-O2	5.30	122.08	118.90
25	BB	2825	G	OP1-P-OP2	-5.30	111.65	119.60
44	BU	27	ARG	CD-NE-CZ	5.30	131.02	123.60
1	AE	18	G	N3-C4-C5	-5.30	125.95	128.60
3	A1	100	G	O4'-C4'-C3'	5.30	110.34	106.10
3	A1	217	C	O4'-C1'-N1	5.30	112.44	108.20
3	A1	232	G	C6-N1-C2	-5.30	121.92	125.10
3	A1	334	C	C5'-C4'-C3'	-5.30	107.52	116.00
3	A1	621	A	C4'-C3'-C2'	-5.30	97.30	102.60
3	A1	706	A	C5'-C4'-C3'	-5.30	107.52	116.00
3	A1	844	G	C5'-C4'-O4'	-5.30	102.74	109.10
3	A1	903	G	C6-N1-C2	-5.30	121.92	125.10
20	AU	94	ARG	CD-NE-CZ	5.30	131.02	123.60
25	BB	197	A	C3'-C2'-C1'	5.30	105.74	101.50
25	BB	487	C	C2'-C3'-O3'	5.30	122.18	113.70
25	BB	1044	C	C5'-C4'-O4'	5.30	115.46	109.10
25	BB	1540	G	N9-C4-C5	5.30	107.52	105.40
25	BB	2174	C	C5-C4-N4	-5.30	116.49	120.20
25	BB	2196	C	N3-C2-O2	-5.30	118.19	121.90
25	BB	2440	C	C1'-O4'-C4'	-5.30	105.66	109.90
25	BB	2735	G	O3'-P-O5'	5.30	114.07	104.00
25	BB	2761	A	C4-C5-N7	5.30	113.35	110.70
25	BB	2811	G	O4'-C1'-N9	5.30	112.44	108.20
25	BB	2822	G	N1-C6-O6	-5.30	116.72	119.90
29	BF	6	ARG	NE-CZ-NH2	-5.30	117.65	120.30
30	BG	74	GLU	OE1-CD-OE2	-5.30	116.94	123.30
55	B6	116	ARG	NE-CZ-NH1	-5.30	117.65	120.30
1	AA	37	G	C5-N7-C8	-5.30	101.65	104.30
1	AE	53	G	O4'-C4'-C3'	5.30	110.34	106.10
3	A1	26	A	N9-C1'-C2'	5.30	120.89	114.00
3	A1	1401	G	C4-C5-C6	-5.30	115.62	118.80
25	BB	273	G	O3'-P-O5'	5.30	114.07	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	345	A	C5-C6-N6	5.30	127.94	123.70
25	BB	473	G	C5-C6-O6	5.30	131.78	128.60
25	BB	655	A	C3'-C2'-C1'	-5.30	97.26	101.50
25	BB	682	G	C3'-C2'-C1'	-5.30	97.26	101.50
25	BB	931	U	C5-C6-N1	-5.30	120.05	122.70
25	BB	1901	A	C8-N9-C4	5.30	107.92	105.80
25	BB	2623	G	C6-N1-C2	-5.30	121.92	125.10
25	BB	2823	A	C1'-O4'-C4'	-5.30	105.66	109.90
25	BB	2839	G	N3-C4-C5	-5.30	125.95	128.60
1	AE	53	G	N3-C4-C5	-5.30	125.95	128.60
3	A1	197	A	N3-C4-N9	-5.30	123.16	127.40
3	A1	423	G	C4'-C3'-C2'	-5.30	97.30	102.60
3	A1	810	C	C5-C6-N1	-5.30	118.35	121.00
3	A1	927	G	C8-N9-C4	-5.30	104.28	106.40
3	A1	1053	G	P-O3'-C3'	5.30	126.06	119.70
3	A1	1418	A	C5-N7-C8	5.30	106.55	103.90
3	A1	1493	A	O3'-P-O5'	5.30	114.06	104.00
24	BA	6	G	P-O3'-C3'	5.30	126.06	119.70
25	BB	283	G	C5-C6-N1	5.30	114.15	111.50
25	BB	297	G	C6-N1-C2	-5.30	121.92	125.10
25	BB	793	A	O4'-C4'-C3'	5.30	110.34	106.10
25	BB	808	G	C5-C6-N1	5.30	114.15	111.50
25	BB	950	G	C5-N7-C8	-5.30	101.65	104.30
25	BB	1157	G	C5-C6-N1	5.30	114.15	111.50
25	BB	1722	A	C6-C5-N7	5.30	136.01	132.30
25	BB	2042	A	C1'-O4'-C4'	-5.30	105.66	109.90
25	BB	2158	A	C6-N1-C2	-5.30	115.42	118.60
25	BB	2267	A	C6-C5-N7	5.30	136.01	132.30
25	BB	2408	U	C3'-C2'-C1'	-5.30	97.26	101.50
25	BB	2604	U	C6-N1-C2	-5.30	117.82	121.00
48	BY	130	GLN	C-N-CA	5.30	134.94	121.70
3	A1	126	G	N7-C8-N9	5.29	115.75	113.10
3	A1	843	U	N3-C4-C5	-5.29	111.42	114.60
3	A1	1342	C	C6-N1-C2	-5.29	118.18	120.30
25	BB	1	G	C6-C5-N7	5.29	133.58	130.40
25	BB	1096	A	C1'-O4'-C4'	-5.29	105.66	109.90
25	BB	1616	A	C5'-C4'-O4'	5.29	115.45	109.10
25	BB	1932	A	P-O3'-C3'	5.29	126.05	119.70
1	AP	14	A	C8-N9-C4	5.29	107.92	105.80
3	A1	501	C	N1-C2-O2	5.29	122.08	118.90
3	A1	638	U	P-O3'-C3'	5.29	126.05	119.70
3	A1	1045	C	C4'-C3'-C2'	5.29	107.89	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1100	C	O4'-C1'-N1	5.29	112.44	108.20
25	BB	140	C	C2-N3-C4	-5.29	117.25	119.90
25	BB	198	C	N1-C2-N3	5.29	122.91	119.20
25	BB	302	C	C6-N1-C1'	5.29	127.15	120.80
25	BB	442	G	C5'-C4'-C3'	-5.29	107.53	116.00
25	BB	572	A	N1-C2-N3	-5.29	126.65	129.30
25	BB	729	G	N1-C6-O6	-5.29	116.72	119.90
25	BB	967	U	O4'-C1'-N1	5.29	112.44	108.20
25	BB	1127	A	C6-C5-N7	5.29	136.00	132.30
25	BB	1216	G	C5-C6-N1	5.29	114.15	111.50
25	BB	1349	C	P-O3'-C3'	5.29	126.05	119.70
25	BB	1460	U	O4'-C1'-C2'	-5.29	100.51	105.80
25	BB	1642	G	N9-C4-C5	5.29	107.52	105.40
25	BB	1779	U	C3'-C2'-C1'	5.29	105.73	101.50
25	BB	2183	A	C5-N7-C8	-5.29	101.25	103.90
25	BB	2287	A	C4'-C3'-C2'	5.29	107.89	102.60
25	BB	2303	G	C4-C5-N7	-5.29	108.68	110.80
25	BB	2341	G	C6-N1-C2	-5.29	121.92	125.10
25	BB	2887	A	N7-C8-N9	5.29	116.45	113.80
1	AA	6	U	O4'-C1'-N1	5.29	112.43	108.20
1	AE	29	A	N9-C4-C5	5.29	107.92	105.80
1	AE	43	G	N7-C8-N9	5.29	115.75	113.10
3	A1	47	C	C5'-C4'-C3'	5.29	124.47	116.00
3	A1	126	G	C5-C6-N1	5.29	114.14	111.50
3	A1	197	A	O4'-C4'-C3'	5.29	110.33	106.10
3	A1	1215	G	C4'-C3'-C2'	5.29	107.89	102.60
3	A1	1359	C	C1'-O4'-C4'	-5.29	105.67	109.90
3	A1	1522	U	C4-C5-C6	5.29	122.87	119.70
25	BB	142	A	O4'-C1'-N9	-5.29	103.97	108.20
25	BB	369	U	C5-C4-O4	5.29	129.07	125.90
25	BB	887	U	N3-C4-C5	-5.29	111.42	114.60
25	BB	1062	G	C1'-O4'-C4'	5.29	114.13	109.90
25	BB	1486	U	C2-N3-C4	-5.29	123.83	127.00
25	BB	1723	G	C6-N1-C2	5.29	128.28	125.10
25	BB	2455	G	C8-N9-C4	-5.29	104.28	106.40
25	BB	2758	A	C5'-C4'-C3'	-5.29	107.53	116.00
3	A1	723	U	C1'-O4'-C4'	-5.29	105.67	109.90
3	A1	1368	A	O4'-C1'-N9	5.29	112.43	108.20
3	A1	1534	A	C3'-C2'-C1'	5.29	105.73	101.50
25	BB	732	C	C2-N3-C4	-5.29	117.25	119.90
25	BB	805	G	N1-C6-O6	-5.29	116.73	119.90
25	BB	1023	U	C4-C5-C6	5.29	122.87	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1328	A	N9-C4-C5	5.29	107.92	105.80
25	BB	1457	U	O4'-C1'-N1	5.29	112.43	108.20
25	BB	1527	G	N1-C2-N3	5.29	127.07	123.90
25	BB	1804	C	C3'-C2'-C1'	5.29	105.73	101.50
25	BB	2279	G	N3-C2-N2	-5.29	116.20	119.90
25	BB	2351	G	C5-C6-N1	5.29	114.14	111.50
1	AA	26	G	O5'-P-OP2	-5.29	100.94	105.70
3	A1	75	G	C6-N1-C2	-5.29	121.93	125.10
3	A1	632	U	C5-C6-N1	-5.29	120.06	122.70
3	A1	725	G	C5'-C4'-O4'	5.29	115.45	109.10
3	A1	1067	A	O4'-C1'-N9	5.29	112.43	108.20
3	A1	1109	C	C5-C6-N1	-5.29	118.36	121.00
25	BB	201	C	N1-C2-O2	5.29	122.07	118.90
25	BB	637	A	N1-C2-N3	-5.29	126.66	129.30
25	BB	1232	G	N1-C6-O6	-5.29	116.73	119.90
25	BB	1700	A	C1'-O4'-C4'	5.29	114.13	109.90
25	BB	1936	A	C2-N3-C4	5.29	113.24	110.60
25	BB	2890	G	C5-C6-N1	5.29	114.14	111.50
1	AP	75	C	N1-C2-O2	5.29	122.07	118.90
3	A1	263	A	C5'-C4'-C3'	-5.29	107.54	116.00
3	A1	299	G	C8-N9-C4	-5.29	104.28	106.40
3	A1	387	U	N1-C2-N3	5.29	118.07	114.90
25	BB	525	U	C4-C5-C6	5.29	122.87	119.70
25	BB	1407	G	N9-C4-C5	5.29	107.52	105.40
25	BB	1592	C	N1-C2-O2	5.29	122.07	118.90
25	BB	1806	C	C4'-C3'-O3'	5.29	123.57	113.00
25	BB	2831	G	N9-C4-C5	5.29	107.52	105.40
3	A1	64	G	C1'-O4'-C4'	-5.29	105.67	109.90
3	A1	74	A	C6-C5-N7	5.29	136.00	132.30
3	A1	693	G	C5-C6-O6	-5.29	125.43	128.60
20	AU	78	ARG	NE-CZ-NH1	5.29	122.94	120.30
24	BA	99	A	N1-C2-N3	-5.29	126.66	129.30
25	BB	199	A	OP1-P-OP2	-5.29	111.67	119.60
25	BB	604	G	N1-C6-O6	-5.29	116.73	119.90
25	BB	828	U	P-O3'-C3'	5.29	126.04	119.70
25	BB	1343	G	N1-C6-O6	-5.29	116.73	119.90
25	BB	1422	G	C5-C6-O6	5.29	131.77	128.60
25	BB	1441	G	C5-N7-C8	-5.29	101.66	104.30
25	BB	1780	A	C2-N3-C4	5.29	113.24	110.60
25	BB	2146	C	O4'-C1'-N1	5.29	112.43	108.20
25	BB	2178	C	N3-C2-O2	-5.29	118.20	121.90
25	BB	2196	C	C4'-C3'-C2'	-5.29	97.31	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2322	A	C4-C5-C6	-5.29	114.36	117.00
25	BB	2740	A	C4-C5-C6	-5.29	114.36	117.00
3	A1	56	U	P-O3'-C3'	5.28	126.04	119.70
3	A1	602	A	C6-C5-N7	5.28	136.00	132.30
3	A1	945	G	N7-C8-N9	5.28	115.74	113.10
3	A1	1156	G	N9-C1'-C2'	-5.28	106.19	112.00
3	A1	1416	G	P-O3'-C3'	5.28	126.04	119.70
24	BA	108	A	N1-C2-N3	-5.28	126.66	129.30
25	BB	456	C	C3'-C2'-C1'	5.28	105.73	101.50
25	BB	588	U	C2-N3-C4	-5.28	123.83	127.00
25	BB	617	G	O4'-C1'-N9	5.28	112.43	108.20
25	BB	788	A	C4'-C3'-C2'	-5.28	97.32	102.60
25	BB	1073	A	C5-N7-C8	-5.28	101.26	103.90
25	BB	1217	U	O4'-C4'-C3'	5.28	110.33	106.10
25	BB	1814	G	C5-N7-C8	-5.28	101.66	104.30
25	BB	2034	U	C5-C6-N1	-5.28	120.06	122.70
25	BB	2290	G	N3-C4-C5	-5.28	125.96	128.60
25	BB	2325	G	P-O3'-C3'	5.28	126.04	119.70
25	BB	2549	G	N1-C2-N3	5.28	127.07	123.90
25	BB	2601	C	N3-C2-O2	-5.28	118.20	121.90
25	BB	2757	A	C4-C5-C6	-5.28	114.36	117.00
25	BB	2787	C	C6-N1-C2	5.28	122.41	120.30
25	BB	2879	A	O4'-C1'-N9	5.28	112.43	108.20
3	A1	266	G	N9-C4-C5	5.28	107.51	105.40
3	A1	598	U	C4'-C3'-C2'	-5.28	97.32	102.60
17	AR	46	ARG	NE-CZ-NH2	-5.28	117.66	120.30
24	BA	9	G	N7-C8-N9	5.28	115.74	113.10
24	BA	15	A	O4'-C1'-C2'	-5.28	100.52	105.80
24	BA	42	C	C6-N1-C2	-5.28	118.19	120.30
25	BB	25	U	N3-C4-O4	5.28	123.10	119.40
25	BB	469	G	C5-C6-O6	5.28	131.77	128.60
25	BB	669	G	C6-N1-C2	-5.28	121.93	125.10
25	BB	973	A	C5-C6-N6	5.28	127.93	123.70
25	BB	1386	C	N1-C2-N3	5.28	122.90	119.20
25	BB	1793	C	N3-C4-N4	-5.28	114.30	118.00
25	BB	2104	C	P-O3'-C3'	5.28	126.04	119.70
25	BB	2379	G	C5-C6-O6	5.28	131.77	128.60
25	BB	2659	G	C8-N9-C4	-5.28	104.29	106.40
25	BB	2685	G	N3-C4-C5	-5.28	125.96	128.60
25	BB	2775	G	C4-C5-C6	-5.28	115.63	118.80
25	BB	2802	G	C5-C6-N1	5.28	114.14	111.50
29	BF	110	GLU	OE1-CD-OE2	-5.28	116.96	123.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	21	A	C5-C6-N6	-5.28	119.48	123.70
1	AA	66	A	C4-C5-C6	-5.28	114.36	117.00
3	A1	57	G	O4'-C1'-N9	5.28	112.42	108.20
3	A1	563	A	N9-C1'-C2'	5.28	120.87	114.00
3	A1	741	G	P-O3'-C3'	5.28	126.04	119.70
3	A1	1046	A	N1-C2-N3	5.28	131.94	129.30
3	A1	1427	C	N3-C2-O2	-5.28	118.20	121.90
25	BB	283	G	N9-C1'-C2'	-5.28	106.19	112.00
25	BB	560	C	C2-N3-C4	-5.28	117.26	119.90
25	BB	962	G	C5-C6-N1	5.28	114.14	111.50
25	BB	1020	A	C4-C5-C6	-5.28	114.36	117.00
25	BB	1232	G	N7-C8-N9	5.28	115.74	113.10
25	BB	1350	C	C5-C6-N1	-5.28	118.36	121.00
25	BB	1386	C	O4'-C1'-N1	5.28	112.42	108.20
25	BB	1461	C	N3-C2-O2	-5.28	118.20	121.90
25	BB	1653	G	N1-C2-N3	5.28	127.07	123.90
25	BB	1675	C	C2-N3-C4	-5.28	117.26	119.90
25	BB	1711	A	C5'-C4'-O4'	5.28	115.44	109.10
25	BB	2461	A	C5'-C4'-C3'	-5.28	107.55	116.00
25	BB	2487	G	N3-C2-N2	-5.28	116.20	119.90
31	BH	16	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
3	A1	175	C	N1-C2-N3	5.28	122.89	119.20
3	A1	750	C	N3-C4-N4	-5.28	114.30	118.00
3	A1	1181	G	N1-C2-N2	5.28	120.95	116.20
3	A1	1524	C	C3'-C2'-C1'	-5.28	97.28	101.50
20	AU	95	ARG	NE-CZ-NH2	-5.28	117.66	120.30
25	BB	559	G	C4-C5-C6	-5.28	115.63	118.80
25	BB	1266	G	N1-C6-O6	-5.28	116.73	119.90
25	BB	1570	A	O4'-C4'-C3'	5.28	110.32	106.10
25	BB	1806	C	P-O3'-C3'	5.28	126.03	119.70
25	BB	2689	U	C4'-C3'-C2'	5.28	107.88	102.60
1	AA	44	A	OP1-P-O3'	5.28	116.81	105.20
1	AP	66	A	C6-N1-C2	-5.28	115.43	118.60
3	A1	48	C	C2-N3-C4	-5.28	117.26	119.90
3	A1	121	U	C5'-C4'-O4'	5.28	115.43	109.10
3	A1	217	C	N1-C1'-C2'	-5.28	106.19	112.00
3	A1	438	U	O4'-C1'-C2'	-5.28	100.52	105.80
3	A1	772	U	N3-C2-O2	-5.28	118.51	122.20
3	A1	1019	A	O4'-C4'-C3'	5.28	110.32	106.10
3	A1	1284	C	O4'-C1'-N1	5.28	112.42	108.20
3	A1	1286	U	N1-C2-N3	5.28	118.07	114.90
3	A1	1521	C	N3-C4-C5	5.28	124.01	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1526	G	N3-C2-N2	-5.28	116.21	119.90
9	AH	53	ARG	NH1-CZ-NH2	-5.28	113.59	119.40
25	BB	79	C	C1'-O4'-C4'	-5.28	105.68	109.90
25	BB	171	U	C2-N3-C4	-5.28	123.83	127.00
25	BB	221	A	C1'-O4'-C4'	-5.28	105.68	109.90
25	BB	381	G	C1'-O4'-C4'	5.28	114.12	109.90
25	BB	417	C	N3-C4-N4	-5.28	114.31	118.00
25	BB	738	G	N3-C2-N2	-5.28	116.21	119.90
25	BB	1352	U	O3'-P-O5'	5.28	114.03	104.00
25	BB	1559	U	N1-C2-N3	5.28	118.07	114.90
25	BB	1821	A	C4'-C3'-C2'	5.28	107.88	102.60
25	BB	2024	G	O3'-P-O5'	5.28	114.03	104.00
25	BB	2463	C	C5'-C4'-O4'	5.28	115.43	109.10
25	BB	2650	U	C5'-C4'-O4'	-5.28	102.77	109.10
25	BB	2888	C	N3-C4-C5	5.28	124.01	121.90
1	AA	32	C	C2-N3-C4	5.28	122.54	119.90
3	A1	379	C	N3-C4-N4	-5.28	114.31	118.00
3	A1	584	G	N3-C2-N2	-5.28	116.21	119.90
3	A1	631	C	C2-N3-C4	-5.28	117.26	119.90
3	A1	660	C	N1-C2-N3	5.28	122.89	119.20
3	A1	812	G	N1-C6-O6	-5.28	116.73	119.90
3	A1	941	G	C4'-C3'-C2'	-5.28	97.33	102.60
3	A1	1192	C	O4'-C1'-N1	5.28	112.42	108.20
3	A1	1466	C	N3-C2-O2	-5.28	118.21	121.90
3	A1	1493	A	C2-N3-C4	5.28	113.24	110.60
3	A1	1525	G	C6-N1-C2	-5.28	121.94	125.10
25	BB	555	G	C5-C6-N1	5.28	114.14	111.50
25	BB	718	A	C5-C6-N6	5.28	127.92	123.70
25	BB	744	U	C5-C6-N1	-5.28	120.06	122.70
25	BB	845	A	N9-C4-C5	-5.28	103.69	105.80
25	BB	1202	G	N1-C2-N3	5.28	127.06	123.90
25	BB	1332	G	C5-C6-N1	5.28	114.14	111.50
25	BB	1367	A	C2'-C3'-O3'	5.28	122.14	113.70
25	BB	1555	G	O4'-C4'-C3'	-5.28	98.72	104.00
25	BB	1978	A	C2-N3-C4	5.28	113.24	110.60
25	BB	2151	U	C4'-C3'-C2'	-5.28	97.32	102.60
25	BB	2612	C	C5-C6-N1	-5.28	118.36	121.00
25	BB	2769	U	N1-C2-N3	5.28	118.06	114.90
3	A1	671	G	C5-C6-N1	5.27	114.14	111.50
24	BA	13	G	N3-C4-N9	5.27	129.16	126.00
25	BB	303	G	N1-C6-O6	-5.27	116.74	119.90
25	BB	599	A	C5-N7-C8	-5.27	101.26	103.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2045	C	C2-N3-C4	-5.27	117.26	119.90
25	BB	2222	C	N1-C2-N3	5.27	122.89	119.20
3	A1	69	G	C1'-O4'-C4'	-5.27	105.68	109.90
3	A1	747	A	N9-C4-C5	5.27	107.91	105.80
3	A1	1448	C	N3-C4-N4	-5.27	114.31	118.00
3	A1	1495	U	C6-N1-C2	-5.27	117.84	121.00
6	AD	113	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
25	BB	1115	G	N1-C6-O6	-5.27	116.74	119.90
25	BB	1230	A	N1-C2-N3	-5.27	126.66	129.30
25	BB	1528	A	N9-C4-C5	-5.27	103.69	105.80
25	BB	1633	G	N3-C2-N2	-5.27	116.21	119.90
25	BB	1834	U	N1-C1'-C2'	-5.27	106.20	112.00
25	BB	1945	G	C5'-C4'-C3'	-5.27	107.56	116.00
42	BS	20	ASN	CB-CA-C	5.27	120.94	110.40
3	A1	59	A	N3-C4-N9	-5.27	123.18	127.40
3	A1	309	A	C6-C5-N7	5.27	135.99	132.30
3	A1	960	U	N1-C2-O2	5.27	126.49	122.80
3	A1	1244	G	C5-C6-N1	5.27	114.14	111.50
3	A1	1253	G	P-O5'-C5'	5.27	129.33	120.90
3	A1	1508	A	C6-N1-C2	-5.27	115.44	118.60
7	AF	89	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
25	BB	212	G	C3'-C2'-C1'	5.27	105.72	101.50
25	BB	345	A	C1'-O4'-C4'	5.27	114.12	109.90
25	BB	762	U	C5-C4-O4	5.27	129.06	125.90
25	BB	952	G	N9-C1'-C2'	-5.27	106.20	112.00
25	BB	2138	G	C5'-C4'-C3'	-5.27	107.57	116.00
45	BV	39	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
1	AA	57	G	O4'-C1'-C2'	-5.27	100.53	105.80
3	A1	38	G	N3-C4-C5	-5.27	125.97	128.60
3	A1	149	A	C6-N1-C2	-5.27	115.44	118.60
3	A1	161	A	N3-C4-N9	-5.27	123.18	127.40
3	A1	162	A	C5-N7-C8	-5.27	101.27	103.90
3	A1	305	G	O4'-C1'-N9	5.27	112.42	108.20
3	A1	324	G	N7-C8-N9	5.27	115.73	113.10
3	A1	366	A	C4-C5-N7	5.27	113.33	110.70
3	A1	959	A	O4'-C4'-C3'	5.27	110.31	106.10
3	A1	973	G	C8-N9-C4	-5.27	104.29	106.40
3	A1	1197	A	O4'-C4'-C3'	5.27	110.32	106.10
3	A1	1317	C	C4'-C3'-C2'	-5.27	97.33	102.60
24	BA	30	C	C5'-C4'-C3'	-5.27	107.57	116.00
25	BB	818	G	N9-C4-C5	5.27	107.51	105.40
25	BB	1066	U	O4'-C4'-C3'	-5.27	98.73	104.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1281	G	C5-C6-O6	5.27	131.76	128.60
25	BB	1339	G	N1-C2-N2	-5.27	111.46	116.20
25	BB	1490	A	C5'-C4'-C3'	-5.27	107.57	116.00
25	BB	1591	A	N7-C8-N9	5.27	116.44	113.80
25	BB	1605	C	N1-C2-O2	5.27	122.06	118.90
25	BB	1794	A	C6-C5-N7	5.27	135.99	132.30
25	BB	1804	C	C5'-C4'-C3'	-5.27	107.57	116.00
25	BB	2175	C	N3-C2-O2	-5.27	118.21	121.90
28	BE	59	ARG	NH1-CZ-NH2	-5.27	113.60	119.40
1	AP	28	C	C5-C6-N1	-5.27	118.37	121.00
3	A1	284	C	P-O3'-C3'	5.27	126.02	119.70
3	A1	302	G	N3-C4-C5	-5.27	125.97	128.60
3	A1	902	G	C5'-C4'-O4'	5.27	115.42	109.10
3	A1	1013	G	N7-C8-N9	5.27	115.73	113.10
3	A1	1105	A	N3-C4-N9	-5.27	123.19	127.40
25	BB	31	C	C1'-O4'-C4'	-5.27	105.69	109.90
25	BB	802	A	C5-C6-N6	5.27	127.91	123.70
25	BB	1145	C	C4'-C3'-C2'	-5.27	97.33	102.60
25	BB	1338	G	C6-N1-C2	-5.27	121.94	125.10
25	BB	1648	U	C5-C6-N1	-5.27	120.07	122.70
25	BB	1905	C	C5'-C4'-O4'	5.27	115.42	109.10
25	BB	1970	A	O4'-C1'-N9	5.27	112.41	108.20
25	BB	2126	A	C6-C5-N7	5.27	135.99	132.30
25	BB	2483	C	C4'-C3'-C2'	-5.27	97.33	102.60
25	BB	2519	U	C6-N1-C1'	-5.27	113.83	121.20
25	BB	2558	C	N3-C4-C5	5.27	124.01	121.90
25	BB	2641	G	C5'-C4'-C3'	-5.27	107.57	116.00
3	A1	77	A	N7-C8-N9	5.27	116.43	113.80
3	A1	445	G	N1-C2-N3	5.27	127.06	123.90
25	BB	338	G	N1-C2-N2	5.27	120.94	116.20
25	BB	424	G	N1-C2-N2	-5.27	111.46	116.20
25	BB	480	A	C6-N1-C2	-5.27	115.44	118.60
25	BB	711	G	C6-C5-N7	5.27	133.56	130.40
25	BB	1197	G	N1-C6-O6	-5.27	116.74	119.90
25	BB	1200	C	N3-C2-O2	-5.27	118.21	121.90
25	BB	1271	G	N9-C4-C5	5.27	107.51	105.40
25	BB	1631	G	C6-N1-C2	-5.27	121.94	125.10
25	BB	2113	U	N3-C4-C5	5.27	117.76	114.60
25	BB	2243	U	C5-C6-N1	-5.27	120.07	122.70
3	A1	818	G	C1'-O4'-C4'	5.26	114.11	109.90
3	A1	1115	U	N1-C2-N3	5.26	118.06	114.90
3	A1	1253	G	C8-N9-C4	-5.26	104.30	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1308	U	N1-C2-O2	5.26	126.48	122.80
25	BB	293	U	N1-C2-O2	5.26	126.48	122.80
25	BB	832	U	C3'-C2'-C1'	5.26	105.71	101.50
25	BB	1024	G	C8-N9-C4	-5.26	104.29	106.40
25	BB	1035	U	C4-C5-C6	5.26	122.86	119.70
25	BB	1511	G	N3-C4-N9	5.26	129.16	126.00
25	BB	1831	G	N3-C2-N2	-5.26	116.22	119.90
25	BB	2124	G	N1-C6-O6	-5.26	116.74	119.90
25	BB	2394	C	N1-C2-N3	5.26	122.89	119.20
25	BB	2557	G	O4'-C1'-C2'	-5.26	100.53	105.80
25	BB	2602	A	C6-C5-N7	5.26	135.99	132.30
25	BB	2612	C	C2-N3-C4	-5.26	117.27	119.90
3	A1	51	A	N7-C8-N9	5.26	116.43	113.80
3	A1	1152	A	C6-N1-C2	-5.26	115.44	118.60
3	A1	1505	G	N3-C4-C5	-5.26	125.97	128.60
25	BB	58	G	N3-C4-C5	-5.26	125.97	128.60
25	BB	622	G	C5'-C4'-C3'	-5.26	107.58	116.00
25	BB	792	A	O4'-C1'-C2'	-5.26	100.54	105.80
25	BB	1023	U	C5-C6-N1	-5.26	120.07	122.70
25	BB	1042	G	C5-C6-O6	5.26	131.76	128.60
25	BB	1614	A	C6-C5-N7	5.26	135.98	132.30
25	BB	2835	A	O4'-C1'-N9	5.26	112.41	108.20
3	A1	589	U	O4'-C1'-N1	5.26	112.41	108.20
3	A1	629	A	C8-N9-C4	-5.26	103.69	105.80
3	A1	859	G	C4'-C3'-O3'	5.26	123.52	113.00
3	A1	1078	U	N3-C2-O2	-5.26	118.52	122.20
3	A1	1146	A	C6-N1-C2	-5.26	115.44	118.60
25	BB	81	G	O5'-P-OP1	-5.26	100.97	105.70
25	BB	138	U	N1-C2-N3	5.26	118.06	114.90
25	BB	937	C	C2-N3-C4	-5.26	117.27	119.90
25	BB	966	G	N3-C2-N2	-5.26	116.22	119.90
25	BB	986	C	N3-C4-N4	-5.26	114.32	118.00
25	BB	1067	A	C2-N3-C4	5.26	113.23	110.60
25	BB	1075	C	N3-C4-N4	-5.26	114.32	118.00
25	BB	1335	C	N1-C2-O2	5.26	122.06	118.90
25	BB	1524	G	C4'-C3'-C2'	-5.26	97.34	102.60
25	BB	1531	C	O4'-C1'-N1	5.26	112.41	108.20
25	BB	1938	A	C4-C5-C6	-5.26	114.37	117.00
25	BB	2145	C	N1-C2-O2	5.26	122.06	118.90
25	BB	2202	U	C4-C5-C6	5.26	122.86	119.70
25	BB	2214	C	C3'-C2'-C1'	5.26	105.71	101.50
25	BB	2576	G	N7-C8-N9	5.26	115.73	113.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2581	G	N3-C2-N2	5.26	123.58	119.90
25	BB	2611	C	N1-C2-N3	5.26	122.88	119.20
25	BB	2750	A	C6-N1-C2	-5.26	115.44	118.60
31	BH	53	THR	C-N-CA	5.26	134.85	121.70
48	BY	135	GLY	C-N-CA	5.26	134.85	121.70
52	B3	46	ASP	CB-CG-OD2	5.26	123.03	118.30
1	AA	27	C	N1-C2-O2	-5.26	115.74	118.90
1	AA	44	A	C6-N1-C2	-5.26	115.44	118.60
3	A1	52	C	C5'-C4'-C3'	-5.26	107.58	116.00
3	A1	264	C	N3-C2-O2	-5.26	118.22	121.90
3	A1	544	G	C2'-C3'-O3'	5.26	122.11	113.70
3	A1	881	G	C8-N9-C4	-5.26	104.30	106.40
3	A1	1162	C	P-O5'-C5'	5.26	129.31	120.90
3	A1	1495	U	N3-C4-C5	-5.26	111.44	114.60
24	BA	83	G	C5-C6-O6	5.26	131.76	128.60
25	BB	477	A	O4'-C1'-N9	-5.26	103.99	108.20
25	BB	584	C	C5-C6-N1	-5.26	118.37	121.00
25	BB	834	G	C5'-C4'-O4'	5.26	115.41	109.10
25	BB	1017	G	C8-N9-C4	-5.26	104.30	106.40
25	BB	1141	U	N3-C4-O4	5.26	123.08	119.40
25	BB	1181	U	C5'-C4'-O4'	5.26	115.41	109.10
25	BB	1425	G	C5'-C4'-C3'	-5.26	107.58	116.00
25	BB	2283	C	N3-C4-C5	5.26	124.00	121.90
25	BB	2323	G	C5-C6-N1	5.26	114.13	111.50
25	BB	2334	U	C5'-C4'-C3'	-5.26	107.59	116.00
1	AA	57	G	C4-C5-N7	-5.26	108.70	110.80
1	AP	19	G	C5-N7-C8	-5.26	101.67	104.30
3	A1	962	C	N3-C2-O2	-5.26	118.22	121.90
3	A1	1261	A	C2-N3-C4	5.26	113.23	110.60
3	A1	1453	G	O4'-C1'-N9	5.26	112.41	108.20
3	A1	1483	A	N9-C4-C5	-5.26	103.70	105.80
23	AX	7	ARG	NH1-CZ-NH2	-5.26	113.62	119.40
25	BB	547	A	C2-N3-C4	5.26	113.23	110.60
25	BB	910	A	C4-C5-N7	5.26	113.33	110.70
25	BB	1587	G	C5-N7-C8	-5.26	101.67	104.30
25	BB	2046	G	O4'-C1'-N9	5.26	112.41	108.20
25	BB	2176	A	N1-C2-N3	-5.26	126.67	129.30
25	BB	2452	C	N3-C4-C5	5.26	124.00	121.90
25	BB	2513	A	O3'-P-O5'	-5.26	94.01	104.00
25	BB	2598	A	C5'-C4'-C3'	-5.26	107.59	116.00
3	A1	60	A	C8-N9-C4	-5.26	103.70	105.80
3	A1	186	C	C1'-O4'-C4'	5.26	114.11	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	643	C	C5'-C4'-C3'	-5.26	107.59	116.00
3	A1	719	C	C5-C6-N1	-5.26	118.37	121.00
3	A1	719	C	C6-N1-C2	-5.26	118.20	120.30
3	A1	1278	G	C3'-C2'-C1'	5.26	105.70	101.50
20	AU	32	ASP	CB-CG-OD1	-5.26	113.57	118.30
25	BB	118	A	N7-C8-N9	-5.26	111.17	113.80
25	BB	120	U	N1-C2-N3	5.26	118.05	114.90
25	BB	286	U	C4'-C3'-C2'	-5.26	97.34	102.60
25	BB	308	G	N7-C8-N9	5.26	115.73	113.10
25	BB	1187	G	N1-C6-O6	-5.26	116.75	119.90
25	BB	1460	U	C5'-C4'-O4'	5.26	115.41	109.10
25	BB	1921	G	N1-C6-O6	-5.26	116.75	119.90
25	BB	2172	U	N1-C2-N3	5.26	118.05	114.90
25	BB	2471	A	O4'-C1'-C2'	5.26	112.33	107.60
25	BB	2505	G	C3'-C2'-C1'	-5.26	97.29	101.50
45	BV	28	ARG	CD-NE-CZ	5.26	130.96	123.60
3	A1	1233	G	C5-C6-N1	5.25	114.13	111.50
3	A1	1508	A	C3'-C2'-C1'	-5.25	97.30	101.50
25	BB	32	C	N1-C2-O2	5.25	122.05	118.90
25	BB	505	A	P-O3'-C3'	5.25	126.01	119.70
25	BB	1875	G	C6-N1-C2	-5.25	121.95	125.10
25	BB	2018	G	C4-C5-C6	-5.25	115.65	118.80
25	BB	2489	U	N3-C4-O4	-5.25	115.72	119.40
1	AP	61	C	C1'-O4'-C4'	5.25	114.10	109.90
3	A1	304	U	C5'-C4'-O4'	5.25	115.41	109.10
3	A1	854	U	C4-C5-C6	5.25	122.85	119.70
3	A1	1174	G	N7-C8-N9	5.25	115.73	113.10
3	A1	1308	U	O4'-C1'-N1	5.25	112.40	108.20
3	A1	1494	G	OP1-P-OP2	-5.25	111.72	119.60
24	BA	72	G	N3-C4-C5	-5.25	125.97	128.60
25	BB	35	G	C6-C5-N7	5.25	133.55	130.40
25	BB	693	A	N9-C1'-C2'	5.25	120.83	114.00
25	BB	973	A	N9-C1'-C2'	5.25	120.83	114.00
25	BB	1549	A	C8-N9-C4	5.25	107.90	105.80
25	BB	1592	C	N1-C2-N3	5.25	122.88	119.20
25	BB	1639	C	C5'-C4'-O4'	5.25	115.41	109.10
25	BB	1674	G	N3-C4-N9	-5.25	122.85	126.00
25	BB	1863	G	C4'-C3'-C2'	-5.25	97.35	102.60
25	BB	1987	A	C5-C6-N6	5.25	127.90	123.70
25	BB	2189	U	O4'-C1'-C2'	5.25	112.33	107.60
25	BB	2230	G	C3'-C2'-C1'	5.25	105.70	101.50
25	BB	2768	U	N1-C2-N3	5.25	118.05	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
2	AM	12	U	P-O5'-C5'	-5.25	112.50	120.90
3	A1	7	A	C4-C5-C6	-5.25	114.37	117.00
3	A1	544	G	C8-N9-C4	-5.25	104.30	106.40
3	A1	593	U	C4'-C3'-C2'	-5.25	97.35	102.60
3	A1	601	G	O4'-C4'-C3'	5.25	110.30	106.10
3	A1	695	A	C5-C6-N6	5.25	127.90	123.70
3	A1	733	G	C8-N9-C4	-5.25	104.30	106.40
3	A1	842	U	N3-C2-O2	-5.25	118.52	122.20
3	A1	851	G	C4-C5-N7	-5.25	108.70	110.80
3	A1	996	A	O4'-C4'-C3'	5.25	110.30	106.10
3	A1	1066	C	N3-C2-O2	-5.25	118.22	121.90
3	A1	1466	C	C2-N3-C4	5.25	122.53	119.90
25	BB	379	G	N9-C4-C5	5.25	107.50	105.40
25	BB	447	A	C5-N7-C8	-5.25	101.27	103.90
25	BB	591	U	O4'-C1'-N1	5.25	112.40	108.20
25	BB	692	C	N1-C2-N3	5.25	122.88	119.20
25	BB	718	A	C5'-C4'-O4'	-5.25	102.80	109.10
25	BB	1450	G	C5-C6-N1	5.25	114.13	111.50
25	BB	2232	C	C4'-C3'-C2'	-5.25	97.35	102.60
25	BB	2348	U	O4'-C4'-C3'	5.25	110.30	106.10
25	BB	2433	A	C5'-C4'-C3'	-5.25	107.60	116.00
25	BB	2686	G	C5'-C4'-O4'	5.25	115.40	109.10
1	AP	16	U	N1-C2-N3	5.25	118.05	114.90
1	AP	18	G	N3-C4-C5	-5.25	125.97	128.60
3	A1	752	G	N1-C2-N3	5.25	127.05	123.90
3	A1	936	C	C6-N1-C2	-5.25	118.20	120.30
3	A1	1066	C	O3'-P-O5'	-5.25	94.02	104.00
3	A1	1117	A	C2-N3-C4	5.25	113.22	110.60
6	AD	112	ALA	C-N-CA	5.25	134.82	121.70
25	BB	624	C	C5-C6-N1	-5.25	118.38	121.00
25	BB	768	G	N3-C2-N2	-5.25	116.22	119.90
25	BB	1067	A	C4'-C3'-C2'	-5.25	97.35	102.60
25	BB	1709	U	C5-C6-N1	-5.25	120.08	122.70
25	BB	1896	G	C5-C6-O6	5.25	131.75	128.60
25	BB	2177	C	N3-C4-N4	5.25	121.67	118.00
3	A1	91	U	P-O3'-C3'	5.25	126.00	119.70
3	A1	119	A	C3'-C2'-C1'	5.25	105.70	101.50
3	A1	411	A	C4'-C3'-C2'	-5.25	97.35	102.60
3	A1	705	G	N1-C2-N3	5.25	127.05	123.90
3	A1	790	A	C4-C5-C6	-5.25	114.38	117.00
3	A1	1267	C	N3-C4-N4	-5.25	114.33	118.00
3	A1	1506	U	C5-C6-N1	-5.25	120.08	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	49	C	C5'-C4'-O4'	5.25	115.40	109.10
25	BB	70	G	N1-C6-O6	-5.25	116.75	119.90
25	BB	93	G	C6-C5-N7	5.25	133.55	130.40
25	BB	778	G	O4'-C1'-C2'	-5.25	100.55	105.80
25	BB	956	G	O4'-C4'-C3'	5.25	110.30	106.10
25	BB	1245	G	C6-C5-N7	5.25	133.55	130.40
25	BB	1251	C	N1-C1'-C2'	5.25	120.82	114.00
25	BB	1299	G	N3-C4-C5	-5.25	125.98	128.60
25	BB	1453	A	C5'-C4'-C3'	-5.25	107.60	116.00
25	BB	1811	G	C5-N7-C8	-5.25	101.68	104.30
25	BB	2276	G	C5-N7-C8	-5.25	101.68	104.30
25	BB	2470	G	N7-C8-N9	5.25	115.72	113.10
3	A1	66	A	OP1-P-O3'	-5.25	93.66	105.20
3	A1	680	C	N3-C4-C5	5.25	124.00	121.90
3	A1	1018	G	C5-C6-N1	5.25	114.12	111.50
3	A1	1096	C	C6-N1-C2	-5.25	118.20	120.30
3	A1	1143	G	C3'-C2'-C1'	-5.25	97.30	101.50
3	A1	1459	G	C2'-C3'-O3'	5.25	122.09	113.70
24	BA	108	A	O4'-C1'-N9	5.25	112.40	108.20
25	BB	167	A	C5-N7-C8	-5.25	101.28	103.90
25	BB	208	C	P-O5'-C5'	5.25	129.29	120.90
25	BB	315	G	C6-C5-N7	5.25	133.55	130.40
25	BB	383	C	N1-C2-O2	5.25	122.05	118.90
25	BB	789	A	O4'-C1'-N9	5.25	112.40	108.20
25	BB	1019	U	C5-C6-N1	-5.25	120.08	122.70
25	BB	1037	G	C5'-C4'-O4'	5.25	115.40	109.10
25	BB	1553	A	C6-C5-N7	5.25	135.97	132.30
25	BB	1929	G	C6-N1-C2	-5.25	121.95	125.10
25	BB	2094	A	C5-C6-N1	5.25	120.32	117.70
25	BB	2147	A	C4-C5-C6	-5.25	114.38	117.00
25	BB	2454	G	C4-C5-C6	-5.25	115.65	118.80
25	BB	2674	G	C5'-C4'-C3'	-5.25	107.61	116.00
38	BO	88	ASP	O-C-N	-5.25	114.28	123.20
43	BT	15	ARG	NH1-CZ-NH2	-5.25	113.63	119.40
1	AE	25	C	O4'-C4'-C3'	5.25	110.30	106.10
3	A1	5	U	P-O3'-C3'	5.25	125.99	119.70
25	BB	268	C	C6-N1-C2	-5.25	118.20	120.30
25	BB	647	G	O4'-C4'-C3'	5.25	110.30	106.10
25	BB	1666	G	C4-C5-C6	-5.25	115.65	118.80
25	BB	2044	C	C4'-C3'-C2'	-5.25	97.36	102.60
1	AA	1	G	C5'-C4'-C3'	-5.24	107.61	116.00
1	AE	57	G	C5-C6-O6	5.24	131.75	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	149	A	O4'-C1'-N9	5.24	112.39	108.20
3	A1	959	A	N9-C1'-C2'	5.24	120.82	114.00
3	A1	976	G	C8-N9-C4	-5.24	104.30	106.40
3	A1	1300	G	C5'-C4'-C3'	-5.24	107.61	116.00
3	A1	1515	G	N3-C4-C5	-5.24	125.98	128.60
25	BB	55	G	C5-C6-N1	5.24	114.12	111.50
25	BB	106	C	C5-C6-N1	-5.24	118.38	121.00
25	BB	487	C	C2-N3-C4	-5.24	117.28	119.90
25	BB	597	G	N1-C2-N3	5.24	127.05	123.90
25	BB	709	U	C2-N3-C4	-5.24	123.85	127.00
25	BB	1272	A	N7-C8-N9	5.24	116.42	113.80
25	BB	1447	C	O4'-C1'-N1	5.24	112.39	108.20
25	BB	2145	C	N1-C2-N3	5.24	122.87	119.20
25	BB	2256	G	C6-C5-N7	5.24	133.55	130.40
25	BB	2485	G	C4'-C3'-C2'	-5.24	97.36	102.60
3	A1	455	G	N1-C6-O6	-5.24	116.75	119.90
3	A1	548	G	O4'-C1'-C2'	-5.24	100.56	105.80
3	A1	567	G	C4-C5-N7	-5.24	108.70	110.80
3	A1	954	G	C6-N1-C2	5.24	128.25	125.10
3	A1	1239	A	C3'-C2'-C1'	-5.24	97.31	101.50
3	A1	1372	U	N1-C2-N3	5.24	118.05	114.90
25	BB	1289	C	P-O5'-C5'	5.24	129.29	120.90
25	BB	1452	G	O5'-P-OP2	-5.24	100.98	105.70
25	BB	1498	C	O4'-C1'-N1	5.24	112.39	108.20
25	BB	2138	G	C6-C5-N7	5.24	133.54	130.40
25	BB	2208	C	C5'-C4'-O4'	-5.24	102.81	109.10
25	BB	2645	G	N7-C8-N9	5.24	115.72	113.10
49	BZ	24	ARG	NE-CZ-NH1	5.24	122.92	120.30
3	A1	211	G	C6-C5-N7	5.24	133.54	130.40
3	A1	338	A	C3'-C2'-C1'	5.24	105.69	101.50
3	A1	552	U	N3-C4-O4	-5.24	115.73	119.40
3	A1	936	C	C1'-O4'-C4'	5.24	114.09	109.90
3	A1	1246	A	C4-C5-C6	-5.24	114.38	117.00
3	A1	1361	G	N3-C4-C5	-5.24	125.98	128.60
12	AK	62	ARG	CD-NE-CZ	5.24	130.94	123.60
25	BB	561	G	C5-N7-C8	-5.24	101.68	104.30
25	BB	694	U	N1-C2-N3	5.24	118.05	114.90
25	BB	1646	C	N1-C2-N3	5.24	122.87	119.20
25	BB	1649	G	N7-C8-N9	5.24	115.72	113.10
25	BB	1996	C	N1-C2-O2	5.24	122.04	118.90
25	BB	2357	G	P-O3'-C3'	5.24	125.99	119.70
25	BB	2623	G	C4-C5-N7	-5.24	108.70	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
37	BN	175	LEU	C-N-CA	5.24	134.80	121.70
49	BZ	100	VAL	CG1-CB-CG2	-5.24	102.52	110.90
3	A1	406	G	C6-N1-C2	-5.24	121.96	125.10
3	A1	603	U	N1-C2-N3	5.24	118.04	114.90
3	A1	1371	G	C2-N3-C4	-5.24	109.28	111.90
23	AX	66	GLU	OE1-CD-OE2	-5.24	117.01	123.30
24	BA	40	U	C5'-C4'-O4'	5.24	115.39	109.10
25	BB	36	G	C5'-C4'-O4'	5.24	115.39	109.10
25	BB	88	G	C2-N3-C4	-5.24	109.28	111.90
25	BB	158	U	C4-C5-C6	5.24	122.84	119.70
25	BB	384	A	C6-N1-C2	-5.24	115.46	118.60
25	BB	552	U	N1-C2-O2	5.24	126.47	122.80
25	BB	842	U	C1'-O4'-C4'	5.24	114.09	109.90
25	BB	1159	U	O4'-C1'-N1	5.24	112.39	108.20
25	BB	1573	G	C5'-C4'-O4'	5.24	115.39	109.10
25	BB	1723	G	N9-C4-C5	5.24	107.50	105.40
25	BB	1920	C	C5-C4-N4	-5.24	116.53	120.20
25	BB	2649	C	N3-C2-O2	-5.24	118.23	121.90
53	B4	51	ARG	NH1-CZ-NH2	-5.24	113.64	119.40
3	A1	271	C	N3-C2-O2	-5.24	118.23	121.90
3	A1	546	A	N7-C8-N9	5.24	116.42	113.80
3	A1	903	G	N1-C2-N3	5.24	127.04	123.90
25	BB	213	A	O4'-C1'-N9	5.24	112.39	108.20
25	BB	2172	U	C4-C5-C6	5.24	122.84	119.70
25	BB	2623	G	N3-C4-C5	-5.24	125.98	128.60
25	BB	2832	U	O4'-C1'-N1	5.24	112.39	108.20
3	A1	129	A	O5'-P-OP1	-5.24	100.99	105.70
3	A1	996	A	C4'-C3'-C2'	-5.24	97.36	102.60
3	A1	1178	G	C5-C6-O6	5.24	131.74	128.60
3	A1	1280	A	C8-N9-C1'	5.24	137.12	127.70
3	A1	1385	G	O4'-C4'-C3'	5.24	110.29	106.10
3	A1	1492	A	O4'-C4'-C3'	5.24	110.29	106.10
24	BA	36	C	N1-C2-O2	5.24	122.04	118.90
25	BB	307	G	C5'-C4'-C3'	-5.24	107.62	116.00
25	BB	659	G	N3-C2-N2	-5.24	116.24	119.90
25	BB	913	U	N1-C2-O2	5.24	126.47	122.80
25	BB	1131	G	O5'-P-OP1	-5.24	100.99	105.70
25	BB	1286	A	C6-N1-C2	-5.24	115.46	118.60
25	BB	2201	G	C2'-C3'-O3'	5.24	122.08	113.70
25	BB	2257	U	C5-C6-N1	-5.24	120.08	122.70
31	BH	30	ARG	CD-NE-CZ	5.24	130.93	123.60
55	B6	11	VAL	CA-CB-CG2	5.24	118.75	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	32	C	C5'-C4'-O4'	5.23	115.38	109.10
3	A1	465	A	C5'-C4'-O4'	5.23	115.38	109.10
3	A1	819	A	C3'-C2'-C1'	5.23	105.69	101.50
3	A1	1013	G	C5-N7-C8	-5.23	101.68	104.30
3	A1	1187	G	O4'-C1'-N9	5.23	112.39	108.20
19	AT	44	ARG	NH1-CZ-NH2	-5.23	113.64	119.40
25	BB	1	G	N7-C8-N9	5.23	115.72	113.10
25	BB	2623	G	C5'-C4'-C3'	-5.23	107.63	116.00
25	BB	2696	U	N3-C2-O2	-5.23	118.54	122.20
2	AM	1	U	N1-C2-N3	5.23	118.04	114.90
3	A1	59	A	C5'-C4'-O4'	5.23	115.38	109.10
3	A1	669	G	C5-C6-O6	5.23	131.74	128.60
3	A1	991	U	C5-C6-N1	-5.23	120.08	122.70
3	A1	1032	G	N3-C2-N2	-5.23	116.24	119.90
3	A1	1055	A	C5'-C4'-O4'	5.23	115.38	109.10
3	A1	1213	A	N1-C6-N6	-5.23	115.46	118.60
3	A1	1393	U	C4-C5-C6	5.23	122.84	119.70
3	A1	1449	C	N1-C2-O2	5.23	122.04	118.90
25	BB	313	G	C6-N1-C2	-5.23	121.96	125.10
25	BB	404	A	C5'-C4'-C3'	-5.23	107.63	116.00
25	BB	645	C	C5'-C4'-O4'	5.23	115.38	109.10
25	BB	660	C	C4'-C3'-C2'	-5.23	97.37	102.60
25	BB	875	G	C5-N7-C8	-5.23	101.68	104.30
25	BB	952	G	N3-C4-C5	-5.23	125.98	128.60
25	BB	1782	U	N1-C2-N3	5.23	118.04	114.90
25	BB	1852	U	N3-C4-C5	-5.23	111.46	114.60
25	BB	2053	G	P-O3'-C3'	5.23	125.98	119.70
25	BB	2228	G	C2-N3-C4	5.23	114.52	111.90
25	BB	2539	C	C6-N1-C2	5.23	122.39	120.30
25	BB	2540	C	C5-C6-N1	-5.23	118.38	121.00
1	AP	5	A	C1'-O4'-C4'	-5.23	105.72	109.90
3	A1	233	C	N3-C4-N4	-5.23	114.34	118.00
3	A1	297	G	N3-C2-N2	-5.23	116.24	119.90
3	A1	1105	A	N9-C4-C5	5.23	107.89	105.80
3	A1	1241	G	N3-C2-N2	-5.23	116.24	119.90
3	A1	1297	G	C4-C5-C6	-5.23	115.66	118.80
3	A1	1439	G	C2-N3-C4	5.23	114.52	111.90
25	BB	225	C	O4'-C1'-N1	5.23	112.38	108.20
25	BB	353	C	C4-C5-C6	-5.23	114.78	117.40
25	BB	874	G	C5'-C4'-C3'	-5.23	107.63	116.00
25	BB	964	C	C3'-C2'-C1'	5.23	105.68	101.50
25	BB	1125	G	N1-C2-N2	-5.23	111.49	116.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1858	A	C4'-C3'-C2'	-5.23	97.37	102.60
25	BB	2276	G	C8-N9-C4	-5.23	104.31	106.40
25	BB	2369	A	C6-N1-C2	-5.23	115.46	118.60
25	BB	2507	C	N3-C4-C5	5.23	123.99	121.90
25	BB	2513	A	C6-C5-N7	5.23	135.96	132.30
25	BB	2823	A	C5-N7-C8	-5.23	101.28	103.90
1	AP	62	A	C5-C6-N1	5.23	120.31	117.70
3	A1	292	G	N3-C4-C5	-5.23	125.98	128.60
3	A1	346	G	N3-C4-C5	-5.23	125.98	128.60
3	A1	447	G	N3-C2-N2	5.23	123.56	119.90
24	BA	114	C	C4'-C3'-C2'	-5.23	97.37	102.60
25	BB	443	A	C2-N3-C4	5.23	113.22	110.60
25	BB	894	U	C5'-C4'-O4'	-5.23	102.83	109.10
25	BB	1416	G	C1'-O4'-C4'	-5.23	105.72	109.90
25	BB	1641	A	P-O3'-C3'	5.23	125.97	119.70
3	A1	336	A	C8-N9-C4	-5.23	103.71	105.80
3	A1	540	G	C5'-C4'-C3'	-5.23	107.64	116.00
3	A1	1253	G	C5-N7-C8	-5.23	101.69	104.30
25	BB	41	C	C4'-C3'-C2'	-5.23	97.37	102.60
25	BB	261	G	N3-C4-N9	5.23	129.14	126.00
25	BB	300	A	N3-C4-C5	-5.23	123.14	126.80
25	BB	497	A	C6-C5-N7	5.23	135.96	132.30
25	BB	659	G	C5-C6-N1	5.23	114.11	111.50
25	BB	794	A	C8-N9-C4	-5.23	103.71	105.80
25	BB	937	C	O4'-C1'-N1	5.23	112.38	108.20
25	BB	1207	C	N1-C2-N3	5.23	122.86	119.20
25	BB	1271	G	N1-C2-N2	5.23	120.91	116.20
25	BB	1373	A	C5'-C4'-O4'	5.23	115.37	109.10
25	BB	2091	C	C5-C6-N1	-5.23	118.39	121.00
25	BB	2392	A	C6-C5-N7	5.23	135.96	132.30
25	BB	2751	G	N7-C8-N9	5.23	115.71	113.10
48	BY	45	TYR	CB-CG-CD2	-5.23	117.86	121.00
1	AE	5	A	C6-C5-N7	5.23	135.96	132.30
3	A1	578	C	C3'-C2'-C1'	5.23	105.68	101.50
3	A1	718	A	C4'-C3'-C2'	-5.23	97.37	102.60
3	A1	719	C	C4'-C3'-C2'	-5.23	97.37	102.60
3	A1	1084	G	C5'-C4'-O4'	5.23	115.37	109.10
5	AC	105	ARG	NE-CZ-NH2	-5.23	117.69	120.30
25	BB	167	A	N7-C8-N9	5.23	116.41	113.80
25	BB	411	G	N3-C4-C5	-5.23	125.99	128.60
25	BB	775	G	N1-C2-N2	5.23	120.90	116.20
25	BB	1038	G	C5-C6-O6	5.23	131.74	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1672	A	C6-N1-C2	-5.23	115.47	118.60
25	BB	2455	G	C2-N3-C4	5.23	114.51	111.90
25	BB	2596	U	C6-N1-C2	-5.23	117.86	121.00
1	AP	4	G	N1-C6-O6	-5.22	116.77	119.90
3	A1	275	G	O4'-C1'-N9	5.22	112.38	108.20
3	A1	547	A	C2-N3-C4	5.22	113.21	110.60
3	A1	812	G	O4'-C1'-C2'	-5.22	100.58	105.80
3	A1	1430	A	C3'-C2'-C1'	5.22	105.68	101.50
25	BB	180	G	C1'-O4'-C4'	-5.22	105.72	109.90
25	BB	279	A	C2-N3-C4	5.22	113.21	110.60
25	BB	549	G	O4'-C1'-N9	5.22	112.38	108.20
25	BB	563	A	O4'-C4'-C3'	5.22	110.28	106.10
25	BB	587	C	N3-C2-O2	-5.22	118.24	121.90
25	BB	1195	G	C5-C6-N1	5.22	114.11	111.50
25	BB	1230	A	C5'-C4'-O4'	5.22	115.37	109.10
25	BB	1369	G	N3-C4-C5	-5.22	125.99	128.60
25	BB	1804	C	O4'-C4'-C3'	5.22	110.28	106.10
25	BB	2064	C	P-O3'-C3'	5.22	125.97	119.70
25	BB	2519	U	C4'-C3'-C2'	-5.22	97.38	102.60
25	BB	2766	A	C2-N3-C4	5.22	113.21	110.60
3	A1	129	A	O3'-P-O5'	-5.22	94.08	104.00
3	A1	220	G	N3-C4-N9	5.22	129.13	126.00
3	A1	256	U	C5-C6-N1	-5.22	120.09	122.70
3	A1	362	G	O4'-C1'-N9	5.22	112.38	108.20
3	A1	515	G	C8-N9-C4	5.22	108.49	106.40
3	A1	539	A	C4'-C3'-C2'	-5.22	97.38	102.60
3	A1	929	G	C6-N1-C2	-5.22	121.97	125.10
3	A1	1239	A	C5-N7-C8	-5.22	101.29	103.90
25	BB	377	G	C4-C5-N7	-5.22	108.71	110.80
25	BB	1152	C	N3-C4-C5	5.22	123.99	121.90
25	BB	1166	G	O4'-C1'-N9	5.22	112.38	108.20
25	BB	1523	U	C5-C4-O4	-5.22	122.77	125.90
25	BB	1735	A	C6-C5-N7	5.22	135.96	132.30
25	BB	1785	A	C2-N3-C4	5.22	113.21	110.60
25	BB	2283	C	C6-N1-C2	5.22	122.39	120.30
25	BB	2297	A	C5'-C4'-C3'	-5.22	107.64	116.00
25	BB	2333	A	C5'-C4'-C3'	-5.22	107.64	116.00
25	BB	2697	G	N1-C6-O6	-5.22	116.77	119.90
34	BK	103	ALA	CB-CA-C	5.22	117.94	110.10
3	A1	1133	G	N9-C1'-C2'	-5.22	106.26	112.00
3	A1	1456	A	C5'-C4'-O4'	5.22	115.36	109.10
23	AX	51	VAL	CA-CB-CG1	5.22	118.73	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	661	A	C6-N1-C2	-5.22	115.47	118.60
25	BB	924	G	C2-N3-C4	5.22	114.51	111.90
25	BB	1449	G	C4-C5-C6	-5.22	115.67	118.80
25	BB	1812	U	N1-C2-N3	5.22	118.03	114.90
25	BB	1887	C	C5-C6-N1	-5.22	118.39	121.00
25	BB	2048	G	C5'-C4'-O4'	-5.22	102.83	109.10
25	BB	2189	U	C5'-C4'-O4'	5.22	115.36	109.10
28	BE	45	GLY	O-C-N	-5.22	114.35	122.70
1	AP	29	A	C4-C5-C6	-5.22	114.39	117.00
3	A1	435	A	C5'-C4'-O4'	5.22	115.36	109.10
3	A1	1297	G	C6-N1-C2	-5.22	121.97	125.10
15	AO	152	VAL	CA-CB-CG1	5.22	118.73	110.90
25	BB	193	U	O4'-C1'-N1	5.22	112.38	108.20
25	BB	1441	G	C5-C6-O6	5.22	131.73	128.60
25	BB	1514	G	C4-C5-N7	-5.22	108.71	110.80
25	BB	1592	C	C5-C6-N1	-5.22	118.39	121.00
25	BB	1738	G	C6-N1-C2	-5.22	121.97	125.10
25	BB	1875	G	N1-C2-N2	-5.22	111.50	116.20
25	BB	2509	G	N1-C2-N3	5.22	127.03	123.90
25	BB	2675	A	C5'-C4'-C3'	-5.22	107.65	116.00
25	BB	2895	G	N3-C4-C5	-5.22	125.99	128.60
1	AP	40	C	C5'-C4'-O4'	5.22	115.36	109.10
1	AP	45	G	C5-C6-N1	5.22	114.11	111.50
3	A1	145	G	C4-C5-C6	-5.22	115.67	118.80
3	A1	1135	U	C4'-C3'-C2'	-5.22	97.38	102.60
3	A1	1294	G	O3'-P-O5'	5.22	113.91	104.00
3	A1	1353	G	N3-C2-N2	-5.22	116.25	119.90
18	AS	67	ARG	CD-NE-CZ	5.22	130.91	123.60
25	BB	278	A	N9-C1'-C2'	5.22	120.78	114.00
25	BB	786	C	N3-C4-C5	5.22	123.99	121.90
25	BB	1171	G	C8-N9-C4	5.22	108.49	106.40
25	BB	1304	A	C2-N3-C4	5.22	113.21	110.60
25	BB	1953	A	C2-N3-C4	5.22	113.21	110.60
25	BB	2343	U	C3'-C2'-C1'	5.22	105.67	101.50
25	BB	2427	C	O4'-C1'-N1	5.22	112.37	108.20
25	BB	2536	G	O4'-C4'-C3'	-5.22	98.78	104.00
3	A1	339	C	N3-C4-C5	-5.22	119.81	121.90
3	A1	540	G	N1-C2-N3	5.22	127.03	123.90
3	A1	549	C	N1-C1'-C2'	-5.22	106.26	112.00
3	A1	862	C	N1-C2-O2	5.22	122.03	118.90
3	A1	991	U	C5-C4-O4	5.22	129.03	125.90
3	A1	1134	G	C6-C5-N7	5.22	133.53	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	329	G	C3'-C2'-C1'	5.22	105.67	101.50
25	BB	992	C	P-O3'-C3'	5.22	125.96	119.70
25	BB	1666	G	C6-C5-N7	5.22	133.53	130.40
25	BB	1687	G	C4'-C3'-C2'	5.22	107.82	102.60
25	BB	2831	G	C1'-O4'-C4'	-5.22	105.73	109.90
1	AA	38	A	C1'-O4'-C4'	-5.21	105.73	109.90
1	AE	69	U	C3'-C2'-C1'	5.21	105.67	101.50
3	A1	200	G	O5'-P-OP2	-5.21	101.01	105.70
3	A1	353	A	C4'-C3'-O3'	5.21	123.43	113.00
3	A1	790	A	N7-C8-N9	-5.21	111.19	113.80
3	A1	846	G	O3'-P-O5'	-5.21	94.09	104.00
3	A1	980	C	N3-C4-C5	5.21	123.99	121.90
3	A1	1105	A	O4'-C1'-N9	5.21	112.37	108.20
3	A1	1449	C	N3-C2-O2	-5.21	118.25	121.90
24	BA	14	U	C2-N3-C4	-5.21	123.87	127.00
24	BA	43	C	N3-C4-C5	5.21	123.99	121.90
25	BB	5	A	C5-C6-N6	5.21	127.87	123.70
25	BB	478	A	N1-C2-N3	-5.21	126.69	129.30
25	BB	491	G	C3'-C2'-C1'	-5.21	97.33	101.50
25	BB	1039	A	P-O3'-C3'	5.21	125.96	119.70
25	BB	1097	U	C5-C6-N1	-5.21	120.09	122.70
25	BB	1667	G	N9-C4-C5	5.21	107.49	105.40
25	BB	2308	G	N3-C4-C5	-5.21	125.99	128.60
25	BB	2556	C	O4'-C1'-C2'	-5.21	100.58	105.80
25	BB	2662	A	C8-N9-C4	-5.21	103.71	105.80
25	BB	2874	C	N3-C4-C5	5.21	123.99	121.90
30	BG	67	PHE	CB-CG-CD2	5.21	124.45	120.80
3	A1	77	A	O4'-C4'-C3'	5.21	110.27	106.10
3	A1	932	C	C6-N1-C2	-5.21	118.22	120.30
25	BB	403	U	C2-N3-C4	-5.21	123.87	127.00
25	BB	1173	U	C5-C6-N1	-5.21	120.09	122.70
25	BB	2254	C	C4-C5-C6	5.21	120.01	117.40
25	BB	2424	C	N1-C2-N3	5.21	122.85	119.20
25	BB	2539	C	C1'-O4'-C4'	-5.21	105.73	109.90
25	BB	2873	A	O4'-C1'-N9	5.21	112.37	108.20
3	A1	528	C	C2-N3-C4	-5.21	117.29	119.90
3	A1	579	A	N7-C8-N9	5.21	116.41	113.80
3	A1	747	A	O4'-C1'-C2'	-5.21	100.59	105.80
3	A1	1134	G	C5-C6-N1	5.21	114.11	111.50
3	A1	1256	A	C5-C6-N6	5.21	127.87	123.70
24	BA	110	C	C2-N3-C4	-5.21	117.29	119.90
25	BB	17	G	C5'-C4'-O4'	5.21	115.35	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	68	G	C8-N9-C1'	-5.21	120.22	127.00
25	BB	101	A	C6-C5-N7	5.21	135.95	132.30
25	BB	517	C	C2-N3-C4	-5.21	117.29	119.90
25	BB	541	A	C3'-C2'-C1'	5.21	105.67	101.50
25	BB	586	A	O4'-C1'-N9	5.21	112.37	108.20
25	BB	722	A	C4-C5-C6	-5.21	114.39	117.00
25	BB	1179	G	N9-C1'-C2'	-5.21	106.27	112.00
25	BB	1218	G	N3-C4-C5	-5.21	125.99	128.60
25	BB	1275	A	C5-C6-N6	5.21	127.87	123.70
25	BB	1329	U	C5-C4-O4	5.21	129.03	125.90
25	BB	1351	C	N3-C2-O2	-5.21	118.25	121.90
25	BB	1404	C	N3-C4-N4	-5.21	114.35	118.00
25	BB	1544	A	C6-N1-C2	-5.21	115.47	118.60
25	BB	1990	C	N3-C4-N4	-5.21	114.35	118.00
25	BB	2228	G	N1-C6-O6	-5.21	116.77	119.90
3	A1	150	U	C4'-C3'-C2'	-5.21	97.39	102.60
3	A1	605	U	P-O3'-C3'	-5.21	113.45	119.70
3	A1	674	G	N9-C1'-C2'	-5.21	106.27	112.00
24	BA	112	G	C8-N9-C1'	5.21	133.77	127.00
25	BB	684	G	N3-C2-N2	-5.21	116.25	119.90
25	BB	918	A	C5-C6-N6	5.21	127.87	123.70
25	BB	1379	U	N3-C4-C5	-5.21	111.47	114.60
25	BB	1637	A	C5'-C4'-O4'	5.21	115.35	109.10
25	BB	1977	A	O4'-C1'-N9	5.21	112.37	108.20
25	BB	2470	G	C5'-C4'-C3'	-5.21	107.66	116.00
1	AA	60	C	C5'-C4'-C3'	-5.21	107.67	116.00
1	AP	8	U	C3'-C2'-C1'	5.21	105.67	101.50
1	AP	26	G	C3'-C2'-C1'	-5.21	97.33	101.50
3	A1	883	C	C4'-C3'-C2'	-5.21	97.39	102.60
3	A1	1132	C	C6-N1-C2	-5.21	118.22	120.30
3	A1	1365	G	C4'-C3'-C2'	5.21	107.81	102.60
3	A1	1489	G	C5-C6-N1	5.21	114.10	111.50
3	A1	1490	U	N3-C2-O2	-5.21	118.55	122.20
24	BA	22	U	C5'-C4'-C3'	-5.21	107.67	116.00
25	BB	28	A	O4'-C1'-N9	5.21	112.37	108.20
25	BB	121	G	N3-C4-C5	-5.21	126.00	128.60
25	BB	368	A	C5-C6-N6	5.21	127.87	123.70
25	BB	627	A	C5-C6-N1	5.21	120.31	117.70
25	BB	1505	A	C4-C5-C6	-5.21	114.40	117.00
25	BB	1731	G	N1-C2-N3	5.21	127.03	123.90
25	BB	1808	A	N1-C6-N6	-5.21	115.47	118.60
25	BB	1973	G	N3-C2-N2	-5.21	116.25	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2648	G	N7-C8-N9	5.21	115.70	113.10
25	BB	2655	G	N3-C4-C5	-5.21	126.00	128.60
3	A1	118	U	N1-C2-O2	5.21	126.44	122.80
3	A1	343	U	O3'-P-O5'	5.21	113.89	104.00
3	A1	718	A	C4-C5-N7	5.21	113.30	110.70
3	A1	824	G	C5'-C4'-C3'	-5.21	107.67	116.00
3	A1	1333	A	C6-N1-C2	-5.21	115.48	118.60
3	A1	1527	U	N1-C2-N3	5.21	118.02	114.90
25	BB	451	U	N1-C2-N3	5.21	118.02	114.90
25	BB	578	G	C5-C6-O6	-5.21	125.48	128.60
25	BB	988	A	C5-C6-N6	5.21	127.86	123.70
25	BB	1059	G	N3-C4-N9	5.21	129.12	126.00
25	BB	1281	G	C5-C6-N1	5.21	114.10	111.50
25	BB	1491	G	C5'-C4'-C3'	-5.21	107.67	116.00
25	BB	2092	U	C5-C4-O4	-5.21	122.78	125.90
25	BB	2706	A	C2-N3-C4	5.21	113.20	110.60
25	BB	2789	C	N1-C2-O2	5.21	122.02	118.90
25	BB	2891	U	O4'-C4'-C3'	-5.21	98.79	104.00
31	BH	102	ARG	NE-CZ-NH1	5.21	122.90	120.30
40	BQ	8	GLU	OE1-CD-OE2	-5.21	117.05	123.30
1	AP	66	A	C8-N9-C4	-5.21	103.72	105.80
3	A1	259	G	C8-N9-C4	-5.21	104.32	106.40
3	A1	745	G	N3-C2-N2	-5.21	116.26	119.90
3	A1	1271	A	C4-C5-C6	-5.21	114.40	117.00
3	A1	1287	A	N1-C2-N3	-5.21	126.70	129.30
3	A1	1458	G	C4-C5-C6	-5.21	115.68	118.80
24	BA	20	G	C4-C5-C6	-5.21	115.68	118.80
25	BB	1150	C	C4-C5-C6	5.21	120.00	117.40
25	BB	2158	A	C5-N7-C8	-5.21	101.30	103.90
25	BB	2377	A	N3-C4-C5	5.21	130.44	126.80
25	BB	2425	A	C5-N7-C8	-5.21	101.30	103.90
25	BB	2700	A	O4'-C1'-C2'	5.21	112.28	107.60
3	A1	839	C	O5'-P-OP2	-5.20	101.02	105.70
3	A1	1031	C	C2-N1-C1'	5.20	124.52	118.80
3	A1	1068	G	O4'-C1'-N9	5.20	112.36	108.20
3	A1	1207	G	N3-C2-N2	-5.20	116.26	119.90
3	A1	1345	U	C3'-C2'-C1'	5.20	105.66	101.50
3	A1	1425	U	C3'-C2'-C1'	5.20	105.66	101.50
18	AS	92	ARG	NH1-CZ-NH2	-5.20	113.68	119.40
21	AV	70	VAL	CG1-CB-CG2	-5.20	102.58	110.90
25	BB	68	G	N1-C2-N2	-5.20	111.52	116.20
25	BB	129	C	N3-C2-O2	-5.20	118.26	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	214	G	P-O3'-C3'	5.20	125.94	119.70
25	BB	473	G	N9-C1'-C2'	-5.20	106.28	112.00
25	BB	1063	G	C4'-C3'-C2'	-5.20	97.40	102.60
25	BB	1585	C	C5-C4-N4	5.20	123.84	120.20
25	BB	1658	C	O4'-C1'-N1	5.20	112.36	108.20
25	BB	2178	C	C3'-C2'-C1'	-5.20	97.34	101.50
25	BB	2215	C	C3'-C2'-C1'	-5.20	97.34	101.50
25	BB	2408	U	C1'-O4'-C4'	-5.20	105.74	109.90
25	BB	2535	G	O4'-C1'-N9	-5.20	104.04	108.20
3	A1	118	U	O4'-C1'-N1	5.20	112.36	108.20
3	A1	343	U	C5-C6-N1	-5.20	120.10	122.70
3	A1	1377	A	C4-C5-C6	-5.20	114.40	117.00
16	AQ	35	GLU	OE1-CD-OE2	-5.20	117.06	123.30
25	BB	1707	G	C5'-C4'-O4'	5.20	115.34	109.10
25	BB	1924	C	N1-C2-O2	5.20	122.02	118.90
25	BB	2046	G	C5-C6-O6	-5.20	125.48	128.60
1	AP	12	U	N3-C4-O4	5.20	123.04	119.40
1	AP	38	A	C4'-C3'-C2'	5.20	107.80	102.60
3	A1	67	C	C6-N1-C2	-5.20	118.22	120.30
3	A1	281	G	N1-C2-N3	5.20	127.02	123.90
3	A1	594	U	C5-C4-O4	5.20	129.02	125.90
3	A1	739	C	C6-N1-C2	5.20	122.38	120.30
3	A1	786	G	C5'-C4'-O4'	5.20	115.34	109.10
3	A1	1147	C	C4'-C3'-C2'	-5.20	97.40	102.60
3	A1	1181	G	C2-N3-C4	5.20	114.50	111.90
25	BB	30	G	C1'-O4'-C4'	-5.20	105.74	109.90
25	BB	472	A	O4'-C4'-C3'	5.20	110.26	106.10
25	BB	1122	G	N3-C4-C5	-5.20	126.00	128.60
25	BB	1252	G	C8-N9-C4	-5.20	104.32	106.40
25	BB	1727	C	N3-C2-O2	-5.20	118.26	121.90
25	BB	2665	A	N9-C4-C5	5.20	107.88	105.80
25	BB	2730	C	N1-C2-N3	5.20	122.84	119.20
3	A1	85	U	C5-C4-O4	-5.20	122.78	125.90
3	A1	146	G	C3'-C2'-C1'	-5.20	97.34	101.50
3	A1	170	U	N3-C2-O2	-5.20	118.56	122.20
3	A1	449	G	N1-C6-O6	-5.20	116.78	119.90
3	A1	615	G	C5-C6-N1	5.20	114.10	111.50
3	A1	1069	C	C2-N3-C4	-5.20	117.30	119.90
3	A1	1145	A	C5-C6-N1	5.20	120.30	117.70
3	A1	1449	C	C4-C5-C6	-5.20	114.80	117.40
3	A1	1507	A	C2-N3-C4	5.20	113.20	110.60
3	A1	1526	G	N9-C4-C5	5.20	107.48	105.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	15	G	C8-N9-C4	-5.20	104.32	106.40
25	BB	303	G	C8-N9-C4	-5.20	104.32	106.40
25	BB	386	G	O4'-C1'-C2'	-5.20	100.60	105.80
25	BB	509	C	C5-C6-N1	-5.20	118.40	121.00
25	BB	551	G	N3-C4-N9	5.20	129.12	126.00
25	BB	681	G	C4-C5-C6	-5.20	115.68	118.80
25	BB	1331	G	N3-C4-C5	-5.20	126.00	128.60
25	BB	1544	A	C2-N3-C4	5.20	113.20	110.60
25	BB	1582	C	O4'-C1'-N1	5.20	112.36	108.20
25	BB	1633	G	N1-C6-O6	-5.20	116.78	119.90
25	BB	1801	A	C4-C5-C6	-5.20	114.40	117.00
25	BB	2148	G	N1-C2-N3	5.20	127.02	123.90
25	BB	2193	G	O4'-C4'-C3'	5.20	110.26	106.10
25	BB	2436	G	P-O3'-C3'	5.20	125.94	119.70
25	BB	2593	U	C1'-O4'-C4'	-5.20	105.74	109.90
25	BB	2885	G	C3'-C2'-C1'	5.20	105.66	101.50
3	A1	375	U	N1-C2-N3	5.20	118.02	114.90
3	A1	392	C	C4'-C3'-C2'	-5.20	97.40	102.60
25	BB	644	A	C6-C5-N7	5.20	135.94	132.30
25	BB	853	C	C5-C4-N4	-5.20	116.56	120.20
25	BB	961	C	O4'-C4'-C3'	5.20	110.26	106.10
25	BB	1223	G	C6-N1-C2	-5.20	121.98	125.10
25	BB	1610	A	C5-N7-C8	-5.20	101.30	103.90
25	BB	1895	C	O4'-C4'-C3'	5.20	110.26	106.10
3	A1	1121	U	N3-C2-O2	-5.20	118.56	122.20
3	A1	1444	U	C4-C5-C6	5.20	122.82	119.70
9	AH	31	LEU	O-C-N	-5.20	114.39	122.70
25	BB	296	U	C4-C5-C6	5.20	122.82	119.70
25	BB	466	A	C6-C5-N7	5.20	135.94	132.30
25	BB	647	G	N9-C4-C5	5.20	107.48	105.40
25	BB	1417	C	O4'-C4'-C3'	5.20	110.26	106.10
25	BB	1615	C	C5'-C4'-O4'	5.20	115.33	109.10
25	BB	1743	G	C2-N3-C4	5.20	114.50	111.90
25	BB	1919	A	C4-C5-C6	-5.20	114.40	117.00
25	BB	2069	G	C6-C5-N7	5.20	133.52	130.40
25	BB	2092	U	O4'-C1'-N1	-5.20	104.04	108.20
25	BB	2592	G	N9-C4-C5	-5.20	103.32	105.40
25	BB	2625	G	C1'-O4'-C4'	-5.20	105.74	109.90
1	AE	2	C	N3-C4-C5	5.19	123.98	121.90
1	AE	51	G	C5-C6-N1	5.19	114.10	111.50
3	A1	358	U	N3-C4-O4	5.19	123.04	119.40
3	A1	417	G	C2-N3-C4	5.19	114.50	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	557	G	O4'-C1'-N9	5.19	112.36	108.20
3	A1	713	G	C5-N7-C8	-5.19	101.70	104.30
3	A1	1445	U	O3'-P-O5'	5.19	113.87	104.00
25	BB	244	A	C5-C6-N1	5.19	120.30	117.70
25	BB	728	G	C5-C6-N1	5.19	114.10	111.50
25	BB	1664	A	C5-C6-N1	5.19	120.30	117.70
25	BB	2068	U	C4-C5-C6	5.19	122.82	119.70
25	BB	2240	U	C2-N3-C4	-5.19	123.88	127.00
3	A1	99	C	C5-C6-N1	-5.19	118.40	121.00
3	A1	181	A	C6-C5-N7	5.19	135.94	132.30
3	A1	184	G	N1-C2-N3	5.19	127.02	123.90
3	A1	220	G	C5'-C4'-C3'	-5.19	107.69	116.00
3	A1	283	U	N1-C2-N3	5.19	118.02	114.90
3	A1	436	C	O4'-C1'-C2'	5.19	112.27	107.60
3	A1	478	A	N9-C4-C5	-5.19	103.72	105.80
3	A1	675	A	C4'-C3'-C2'	-5.19	97.41	102.60
3	A1	1189	U	C2-N3-C4	-5.19	123.89	127.00
3	A1	1318	A	C1'-O4'-C4'	-5.19	105.75	109.90
25	BB	708	G	N3-C4-N9	5.19	129.12	126.00
25	BB	734	A	C5-C6-N6	5.19	127.86	123.70
25	BB	930	G	O4'-C4'-C3'	5.19	110.25	106.10
25	BB	1278	C	C3'-C2'-C1'	5.19	105.65	101.50
25	BB	1361	G	C2-N3-C4	5.19	114.50	111.90
25	BB	1364	G	C4-C5-N7	5.19	112.88	110.80
25	BB	1440	U	C4-C5-C6	5.19	122.82	119.70
25	BB	1449	G	N1-C2-N2	5.19	120.87	116.20
25	BB	1508	A	P-O3'-C3'	5.19	125.93	119.70
25	BB	1589	U	C3'-C2'-C1'	5.19	105.65	101.50
25	BB	2216	G	N7-C8-N9	5.19	115.70	113.10
25	BB	2342	C	C5-C4-N4	5.19	123.83	120.20
25	BB	2515	C	N1-C1'-C2'	5.19	120.75	114.00
25	BB	2555	U	C4-C5-C6	5.19	122.82	119.70
25	BB	2585	U	N3-C4-O4	-5.19	115.77	119.40
25	BB	2755	C	C5-C6-N1	-5.19	118.40	121.00
25	BB	2813	A	C4-C5-N7	5.19	113.30	110.70
3	A1	35	G	N3-C4-C5	-5.19	126.00	128.60
3	A1	51	A	O3'-P-O5'	5.19	113.86	104.00
3	A1	326	G	N9-C4-C5	5.19	107.48	105.40
3	A1	635	A	O5'-P-OP2	-5.19	101.03	105.70
3	A1	668	G	C5-C6-O6	5.19	131.72	128.60
3	A1	679	C	C5-C4-N4	-5.19	116.57	120.20
3	A1	705	G	P-O3'-C3'	5.19	125.93	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	795	C	C1'-O4'-C4'	-5.19	105.75	109.90
3	A1	993	G	P-O3'-C3'	5.19	125.93	119.70
3	A1	1139	G	C2-N3-C4	5.19	114.50	111.90
16	AQ	40	PRO	CA-N-CD	-5.19	104.23	111.50
24	BA	82	U	C1'-O4'-C4'	-5.19	105.75	109.90
25	BB	538	A	N1-C2-N3	-5.19	126.70	129.30
25	BB	544	C	C1'-O4'-C4'	-5.19	105.75	109.90
25	BB	1588	G	N3-C4-C5	-5.19	126.00	128.60
25	BB	2142	A	C2-N3-C4	5.19	113.19	110.60
48	BY	165	MET	O-C-N	-5.19	114.38	123.20
24	BA	71	C	P-O3'-C3'	5.19	125.93	119.70
25	BB	1097	U	N1-C2-N3	5.19	118.01	114.90
25	BB	2119	A	C4-C5-C6	-5.19	114.41	117.00
3	A1	47	C	C6-N1-C1'	5.19	127.03	120.80
3	A1	212	G	C4'-C3'-C2'	-5.19	97.41	102.60
3	A1	231	U	N1-C2-N3	5.19	118.01	114.90
3	A1	289	G	C6-N1-C2	-5.19	121.99	125.10
3	A1	429	U	P-O3'-C3'	5.19	125.93	119.70
3	A1	1099	G	C6-C5-N7	5.19	133.51	130.40
3	A1	1190	G	C5'-C4'-C3'	-5.19	107.70	116.00
3	A1	1208	C	O4'-C4'-C3'	5.19	110.25	106.10
3	A1	1221	G	C5-C6-N1	5.19	114.09	111.50
3	A1	1371	G	C5-N7-C8	-5.19	101.71	104.30
3	A1	1442	G	N1-C6-O6	-5.19	116.79	119.90
8	AG	62	ARG	NH1-CZ-NH2	-5.19	113.69	119.40
10	AI	55	ASP	CB-CG-OD2	5.19	122.97	118.30
25	BB	36	G	N3-C2-N2	-5.19	116.27	119.90
25	BB	401	A	C6-C5-N7	5.19	135.93	132.30
25	BB	572	A	C2-N3-C4	5.19	113.19	110.60
25	BB	711	G	C8-N9-C4	-5.19	104.33	106.40
25	BB	866	A	N3-C4-C5	5.19	130.43	126.80
25	BB	1028	A	C8-N9-C4	-5.19	103.72	105.80
25	BB	1051	G	N7-C8-N9	5.19	115.69	113.10
25	BB	1090	A	C6-C5-N7	5.19	135.93	132.30
25	BB	1514	G	N1-C2-N3	5.19	127.01	123.90
25	BB	1666	G	N7-C8-N9	5.19	115.69	113.10
25	BB	1957	C	C5-C6-N1	5.19	123.59	121.00
25	BB	2036	C	O4'-C4'-C3'	-5.19	98.81	104.00
25	BB	2276	G	N7-C8-N9	5.19	115.69	113.10
25	BB	2427	C	C2-N3-C4	-5.19	117.31	119.90
25	BB	2514	U	C5-C6-N1	-5.19	120.11	122.70
25	BB	2890	G	C4-C5-N7	-5.19	108.72	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	B2	44	ALA	N-CA-CB	-5.19	102.84	110.10
51	B2	132	ARG	CD-NE-CZ	5.19	130.86	123.60
3	A1	476	U	OP2-P-O3'	5.19	116.61	105.20
3	A1	1029	U	C5-C6-N1	-5.19	120.11	122.70
3	A1	1093	A	C5'-C4'-O4'	5.19	115.32	109.10
3	A1	1376	U	C2'-C3'-O3'	5.19	122.00	113.70
4	AB	224	ARG	C-N-CA	5.19	134.66	121.70
25	BB	83	A	O4'-C1'-C2'	-5.19	100.61	105.80
25	BB	175	G	C4-C5-N7	-5.19	108.73	110.80
25	BB	191	A	P-O3'-C3'	5.19	125.92	119.70
25	BB	208	C	C4'-C3'-C2'	-5.19	97.41	102.60
25	BB	268	C	N3-C2-O2	-5.19	118.27	121.90
25	BB	1023	U	O4'-C1'-N1	5.19	112.35	108.20
25	BB	1356	G	C5-N7-C8	-5.19	101.71	104.30
25	BB	1548	A	C5-C6-N6	5.19	127.85	123.70
25	BB	1667	G	C5-N7-C8	-5.19	101.71	104.30
25	BB	2119	A	C3'-C2'-C1'	5.19	105.65	101.50
25	BB	2486	C	N1-C2-N3	5.19	122.83	119.20
25	BB	2526	G	C3'-C2'-C1'	5.19	105.65	101.50
3	A1	1484	C	C2-N3-C4	-5.18	117.31	119.90
22	AW	11	ARG	CD-NE-CZ	5.18	130.86	123.60
25	BB	581	C	N1-C2-N3	5.18	122.83	119.20
25	BB	768	G	C6-N1-C2	-5.18	121.99	125.10
25	BB	1026	G	C6-N1-C2	-5.18	121.99	125.10
25	BB	1192	G	C1'-O4'-C4'	5.18	114.05	109.90
25	BB	1302	A	C8-N9-C4	-5.18	103.73	105.80
25	BB	2179	C	N1-C2-O2	5.18	122.01	118.90
3	A1	118	U	C5-C4-O4	5.18	129.01	125.90
3	A1	380	G	C3'-C2'-C1'	-5.18	97.35	101.50
3	A1	608	A	C6-N1-C2	-5.18	115.49	118.60
3	A1	677	U	N1-C2-N3	5.18	118.01	114.90
3	A1	1031	C	C4-C5-C6	5.18	119.99	117.40
3	A1	1057	G	N1-C6-O6	-5.18	116.79	119.90
3	A1	1241	G	C4-C5-N7	-5.18	108.73	110.80
3	A1	1528	U	C5'-C4'-O4'	5.18	115.32	109.10
24	BA	32	U	N3-C2-O2	-5.18	118.57	122.20
24	BA	49	C	C5-C6-N1	-5.18	118.41	121.00
25	BB	220	G	C4-C5-N7	5.18	112.87	110.80
25	BB	634	C	N3-C2-O2	-5.18	118.27	121.90
25	BB	701	G	N1-C2-N2	5.18	120.86	116.20
25	BB	818	G	N7-C8-N9	5.18	115.69	113.10
25	BB	1163	G	C5-C6-N1	5.18	114.09	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1364	G	N7-C8-N9	5.18	115.69	113.10
25	BB	1440	U	C5-C4-O4	-5.18	122.79	125.90
25	BB	1700	A	N1-C6-N6	-5.18	115.49	118.60
25	BB	1791	A	C5-C6-N6	5.18	127.85	123.70
25	BB	2538	C	C5-C6-N1	-5.18	118.41	121.00
25	BB	2582	G	N9-C4-C5	5.18	107.47	105.40
3	A1	959	A	C5-N7-C8	-5.18	101.31	103.90
20	AU	68	VAL	CG1-CB-CG2	-5.18	102.61	110.90
24	BA	68	C	C5'-C4'-O4'	5.18	115.32	109.10
25	BB	45	G	N3-C4-C5	-5.18	126.01	128.60
25	BB	850	U	N1-C2-N3	5.18	118.01	114.90
25	BB	1175	A	O4'-C1'-N9	5.18	112.34	108.20
25	BB	1616	A	C1'-O4'-C4'	-5.18	105.75	109.90
25	BB	1806	C	N1-C2-N3	5.18	122.83	119.20
25	BB	2662	A	N9-C4-C5	5.18	107.87	105.80
1	AA	34	G	N1-C2-N3	5.18	127.01	123.90
1	AE	67	A	C8-N9-C4	-5.18	103.73	105.80
3	A1	79	G	C6-C5-N7	5.18	133.51	130.40
3	A1	168	G	N7-C8-N9	5.18	115.69	113.10
3	A1	209	U	C6-N1-C2	-5.18	117.89	121.00
3	A1	337	G	C5'-C4'-C3'	-5.18	107.71	116.00
3	A1	1413	A	C1'-O4'-C4'	-5.18	105.76	109.90
3	A1	1462	C	C2-N3-C4	-5.18	117.31	119.90
25	BB	1060	U	C5'-C4'-O4'	5.18	115.31	109.10
25	BB	1274	A	C4'-C3'-C2'	-5.18	97.42	102.60
25	BB	1898	U	N3-C2-O2	-5.18	118.57	122.20
25	BB	2188	U	O4'-C1'-N1	5.18	112.34	108.20
25	BB	2466	C	N1-C2-N3	5.18	122.83	119.20
25	BB	2568	U	O3'-P-O5'	-5.18	94.16	104.00
25	BB	2664	G	C5-C6-O6	-5.18	125.49	128.60
26	BC	69	GLU	OE1-CD-OE2	-5.18	117.08	123.30
3	A1	63	C	C2-N3-C4	-5.18	117.31	119.90
3	A1	209	U	O5'-P-OP1	-5.18	101.04	105.70
3	A1	755	G	C5-C6-N1	5.18	114.09	111.50
3	A1	757	U	N1-C2-N3	5.18	118.01	114.90
3	A1	881	G	C1'-O4'-C4'	-5.18	105.76	109.90
3	A1	927	G	N1-C2-N3	5.18	127.01	123.90
3	A1	1013	G	N1-C2-N2	-5.18	111.54	116.20
3	A1	1508	A	O4'-C4'-C3'	-5.18	98.82	104.00
17	AR	178	GLU	OE1-CD-OE2	-5.18	117.09	123.30
24	BA	82	U	O5'-C5'-C4'	5.18	121.54	111.70
24	BA	105	G	C5'-C4'-C3'	-5.18	107.72	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	54	G	O4'-C1'-N9	5.18	112.34	108.20
25	BB	172	A	N1-C2-N3	-5.18	126.71	129.30
25	BB	361	G	N3-C4-C5	-5.18	126.01	128.60
25	BB	812	C	N3-C4-C5	5.18	123.97	121.90
25	BB	1273	U	C5'-C4'-O4'	5.18	115.31	109.10
25	BB	1589	U	N1-C1'-C2'	5.18	120.73	114.00
3	A1	225	C	P-O3'-C3'	5.18	125.91	119.70
3	A1	511	C	O4'-C1'-N1	5.18	112.34	108.20
3	A1	752	G	C8-N9-C1'	5.18	133.73	127.00
3	A1	1244	G	C8-N9-C4	-5.18	104.33	106.40
3	A1	1292	G	C5-C6-N1	5.18	114.09	111.50
3	A1	1400	C	C6-N1-C1'	5.18	127.01	120.80
3	A1	1451	U	N1-C1'-C2'	5.18	120.73	114.00
3	A1	1473	G	C3'-C2'-C1'	-5.18	97.36	101.50
15	AO	163	ARG	NH1-CZ-NH2	-5.18	113.70	119.40
24	BA	98	G	C5-C6-N1	5.18	114.09	111.50
25	BB	80	G	N9-C4-C5	5.18	107.47	105.40
25	BB	914	G	C6-N1-C2	-5.18	121.99	125.10
25	BB	1025	G	C5-C6-O6	-5.18	125.49	128.60
25	BB	1125	G	N3-C4-C5	-5.18	126.01	128.60
25	BB	1223	G	N3-C2-N2	-5.18	116.28	119.90
25	BB	1491	G	C4-C5-N7	-5.18	108.73	110.80
25	BB	1633	G	C6-C5-N7	5.18	133.51	130.40
25	BB	2413	G	C5'-C4'-O4'	5.18	115.31	109.10
25	BB	2425	A	N9-C1'-C2'	-5.18	106.31	112.00
1	AP	20	G	C5-C6-O6	5.17	131.70	128.60
1	AP	65	G	N7-C8-N9	5.17	115.69	113.10
3	A1	123	U	C5-C6-N1	-5.17	120.11	122.70
3	A1	184	G	C5-C6-O6	5.17	131.71	128.60
3	A1	414	A	C5-C6-N1	5.17	120.29	117.70
3	A1	501	C	N3-C4-N4	-5.17	114.38	118.00
3	A1	736	C	N1-C2-N3	5.17	122.82	119.20
3	A1	989	U	N3-C2-O2	-5.17	118.58	122.20
3	A1	1281	C	C3'-C2'-C1'	5.17	105.64	101.50
24	BA	7	G	C8-N9-C4	-5.17	104.33	106.40
25	BB	485	C	C1'-O4'-C4'	-5.17	105.76	109.90
25	BB	1501	G	C8-N9-C4	-5.17	104.33	106.40
25	BB	1944	U	C5'-C4'-O4'	5.17	115.31	109.10
25	BB	2074	U	C5-C6-N1	-5.17	120.11	122.70
25	BB	2084	C	C5'-C4'-O4'	5.17	115.31	109.10
25	BB	2153	C	N1-C2-O2	5.17	122.00	118.90
25	BB	2224	G	C5-C6-O6	5.17	131.71	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2465	C	C1'-O4'-C4'	-5.17	105.76	109.90
25	BB	2560	A	N1-C2-N3	-5.17	126.71	129.30
25	BB	2786	U	C4'-C3'-O3'	5.17	123.35	113.00
25	BB	2803	G	C8-N9-C4	-5.17	104.33	106.40
1	AP	47	U	N3-C2-O2	-5.17	118.58	122.20
1	AE	76	A	C6-C5-N7	5.17	135.92	132.30
3	A1	935	A	C6-C5-N7	5.17	135.92	132.30
25	BB	574	A	C6-C5-N7	5.17	135.92	132.30
25	BB	585	G	N3-C4-C5	-5.17	126.01	128.60
25	BB	1950	G	C4-N9-C1'	-5.17	119.78	126.50
25	BB	2493	U	N3-C2-O2	-5.17	118.58	122.20
3	A1	86	G	C8-N9-C4	-5.17	104.33	106.40
3	A1	198	G	N1-C2-N3	5.17	127.00	123.90
3	A1	771	G	C3'-C2'-C1'	5.17	105.64	101.50
3	A1	873	A	C4'-C3'-C2'	-5.17	97.43	102.60
3	A1	1232	U	O4'-C1'-N1	-5.17	104.06	108.20
3	A1	1459	G	N3-C4-C5	-5.17	126.01	128.60
3	A1	1518	A	N7-C8-N9	5.17	116.39	113.80
25	BB	969	G	N1-C6-O6	-5.17	116.80	119.90
25	BB	1038	G	O4'-C1'-N9	5.17	112.34	108.20
25	BB	1510	G	N9-C4-C5	5.17	107.47	105.40
25	BB	1580	A	N9-C4-C5	-5.17	103.73	105.80
25	BB	1612	C	C6-N1-C2	-5.17	118.23	120.30
25	BB	1657	U	N1-C2-N3	5.17	118.00	114.90
25	BB	1674	G	N1-C6-O6	-5.17	116.80	119.90
25	BB	1706	C	P-O5'-C5'	5.17	129.17	120.90
25	BB	2314	A	N1-C2-N3	-5.17	126.71	129.30
25	BB	2726	A	N1-C2-N3	-5.17	126.71	129.30
1	AP	23	A	N9-C4-C5	-5.17	103.73	105.80
3	A1	954	G	O5'-P-OP2	5.17	116.90	110.70
3	A1	1338	G	N1-C2-N3	5.17	127.00	123.90
25	BB	392	U	C4'-C3'-C2'	-5.17	97.43	102.60
25	BB	425	G	N7-C8-N9	5.17	115.69	113.10
25	BB	630	G	O4'-C1'-N9	5.17	112.34	108.20
25	BB	1132	U	N1-C2-O2	5.17	126.42	122.80
25	BB	1971	U	C2-N3-C4	-5.17	123.90	127.00
37	BN	60	ALA	N-CA-CB	-5.17	102.86	110.10
1	AA	15	G	C4-C5-N7	5.17	112.87	110.80
3	A1	105	G	N3-C4-N9	5.17	129.10	126.00
3	A1	261	U	C5-C4-O4	-5.17	122.80	125.90
3	A1	715	A	O4'-C1'-N9	5.17	112.33	108.20
24	BA	36	C	O5'-P-OP2	5.17	116.90	110.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	177	G	N3-C4-C5	-5.17	126.02	128.60
25	BB	184	C	C5-C6-N1	5.17	123.58	121.00
25	BB	898	C	C6-N1-C2	-5.17	118.23	120.30
25	BB	1291	C	C2-N3-C4	-5.17	117.32	119.90
25	BB	1498	C	O4'-C4'-C3'	5.17	110.23	106.10
25	BB	1530	G	N3-C4-C5	5.17	131.18	128.60
25	BB	1938	A	C8-N9-C4	-5.17	103.73	105.80
25	BB	2063	C	C2-N1-C1'	5.17	124.49	118.80
25	BB	2190	G	C8-N9-C4	-5.17	104.33	106.40
25	BB	2490	G	C6-C5-N7	5.17	133.50	130.40
25	BB	2687	U	N1-C2-N3	5.17	118.00	114.90
25	BB	2725	A	C3'-C2'-C1'	-5.17	97.36	101.50
25	BB	2827	C	N1-C2-O2	5.17	122.00	118.90
3	A1	5	U	O4'-C1'-N1	5.17	112.33	108.20
3	A1	53	A	O4'-C4'-C3'	-5.17	98.83	104.00
3	A1	73	C	O4'-C1'-N1	5.17	112.33	108.20
3	A1	730	G	O4'-C1'-N9	5.17	112.33	108.20
3	A1	822	U	N1-C2-N3	5.17	118.00	114.90
3	A1	1159	U	C5'-C4'-C3'	-5.17	107.73	116.00
3	A1	1385	G	C5-C6-N1	5.17	114.08	111.50
25	BB	277	G	N9-C1'-C2'	-5.17	106.32	112.00
25	BB	654	A	C8-N9-C4	-5.17	103.73	105.80
25	BB	811	U	C5-C6-N1	-5.17	120.12	122.70
25	BB	1156	A	C1'-O4'-C4'	-5.17	105.77	109.90
25	BB	1195	G	C4-C5-N7	-5.17	108.73	110.80
25	BB	1338	G	N1-C6-O6	-5.17	116.80	119.90
25	BB	1980	G	N9-C1'-C2'	5.17	120.72	114.00
25	BB	2536	G	N1-C2-N2	-5.17	111.55	116.20
25	BB	2574	G	N3-C4-N9	5.17	129.10	126.00
25	BB	2669	G	N9-C4-C5	5.17	107.47	105.40
25	BB	2723	C	C4'-C3'-C2'	-5.17	97.43	102.60
3	A1	751	U	C5'-C4'-C3'	-5.17	107.74	116.00
3	A1	941	G	O4'-C1'-N9	5.17	112.33	108.20
3	A1	968	A	C1'-O4'-C4'	-5.17	105.77	109.90
9	AH	63	ARG	CD-NE-CZ	5.17	130.83	123.60
25	BB	1292	G	N3-C4-C5	-5.17	126.02	128.60
25	BB	1576	U	N3-C2-O2	-5.17	118.58	122.20
25	BB	1716	U	O3'-P-O5'	-5.17	94.19	104.00
25	BB	1945	G	O4'-C4'-C3'	-5.17	98.83	104.00
25	BB	2597	G	N9-C4-C5	5.17	107.47	105.40
1	AA	1	G	N9-C1'-C2'	-5.16	106.32	112.00
3	A1	61	G	N9-C1'-C2'	-5.16	106.32	112.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	258	G	C1'-O4'-C4'	5.16	114.03	109.90
3	A1	428	G	N3-C4-C5	-5.16	126.02	128.60
3	A1	796	C	C5-C6-N1	-5.16	118.42	121.00
3	A1	897	C	N1-C2-N3	5.16	122.81	119.20
3	A1	968	A	O4'-C1'-C2'	-5.16	100.64	105.80
3	A1	1449	C	C6-N1-C2	-5.16	118.23	120.30
4	AB	118	THR	CA-CB-CG2	5.16	119.63	112.40
24	BA	19	C	O4'-C1'-N1	5.16	112.33	108.20
25	BB	292	U	O4'-C4'-C3'	5.16	110.23	106.10
25	BB	382	A	N1-C2-N3	-5.16	126.72	129.30
25	BB	387	U	C1'-O4'-C4'	-5.16	105.77	109.90
25	BB	685	A	C5-C6-N6	5.16	127.83	123.70
25	BB	754	U	O4'-C1'-N1	5.16	112.33	108.20
25	BB	756	A	C5'-C4'-O4'	5.16	115.30	109.10
25	BB	778	G	N1-C6-O6	-5.16	116.80	119.90
25	BB	919	U	O3'-P-O5'	-5.16	94.19	104.00
25	BB	991	C	C6-N1-C2	-5.16	118.23	120.30
25	BB	1095	A	C6-C5-N7	5.16	135.91	132.30
25	BB	1374	G	C4-C5-N7	-5.16	108.73	110.80
25	BB	1759	A	N9-C1'-C2'	-5.16	106.32	112.00
25	BB	2123	G	C4-C5-N7	-5.16	108.73	110.80
25	BB	2401	U	O4'-C4'-C3'	5.16	110.23	106.10
25	BB	2503	A	C2-N3-C4	5.16	113.18	110.60
25	BB	2553	G	C6-N1-C2	-5.16	122.00	125.10
25	BB	2826	A	C1'-O4'-C4'	-5.16	105.77	109.90
3	A1	455	G	N9-C4-C5	-5.16	103.33	105.40
3	A1	949	A	C3'-C2'-C1'	5.16	105.63	101.50
6	AD	85	ARG	NH1-CZ-NH2	-5.16	113.72	119.40
22	AW	48	ARG	NE-CZ-NH1	5.16	122.88	120.30
25	BB	921	C	O4'-C1'-N1	5.16	112.33	108.20
25	BB	1826	G	C6-C5-N7	5.16	133.50	130.40
25	BB	2151	U	C1'-O4'-C4'	-5.16	105.77	109.90
25	BB	2230	G	C4-C5-C6	-5.16	115.70	118.80
26	BC	12	GLN	CB-CA-C	5.16	120.72	110.40
31	BH	111	ARG	NH1-CZ-NH2	-5.16	113.72	119.40
34	BK	68	ARG	CD-NE-CZ	5.16	130.83	123.60
3	A1	176	C	N3-C4-N4	-5.16	114.39	118.00
3	A1	551	U	C2-N3-C4	-5.16	123.90	127.00
3	A1	677	U	C2'-C3'-O3'	5.16	121.95	113.70
3	A1	1456	A	C5-C6-N6	5.16	127.83	123.70
25	BB	23	G	N9-C4-C5	5.16	107.46	105.40
25	BB	43	G	N3-C4-C5	-5.16	126.02	128.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	159	G	C2'-C3'-O3'	5.16	121.96	113.70
25	BB	532	A	C5-N7-C8	-5.16	101.32	103.90
25	BB	939	G	N1-C2-N3	5.16	127.00	123.90
25	BB	1153	C	C5-C4-N4	-5.16	116.59	120.20
25	BB	1202	G	N3-C2-N2	-5.16	116.29	119.90
25	BB	1900	A	O4'-C1'-N9	5.16	112.33	108.20
25	BB	2267	A	C5-C6-N6	5.16	127.83	123.70
25	BB	2448	A	C1'-O4'-C4'	-5.16	105.77	109.90
25	BB	2503	A	C6-C5-N7	5.16	135.91	132.30
25	BB	2759	G	C4'-C3'-C2'	-5.16	97.44	102.60
52	B3	54	ARG	NE-CZ-NH1	5.16	122.88	120.30
3	A1	186	C	C4-C5-C6	5.16	119.98	117.40
3	A1	580	C	C2-N3-C4	-5.16	117.32	119.90
3	A1	1009	U	C5-C6-N1	-5.16	120.12	122.70
3	A1	1072	G	C6-C5-N7	5.16	133.50	130.40
3	A1	1126	U	O4'-C1'-N1	5.16	112.33	108.20
25	BB	7	G	N1-C2-N2	-5.16	111.56	116.20
25	BB	175	G	N3-C2-N2	5.16	123.51	119.90
25	BB	247	G	C6-N1-C2	-5.16	122.00	125.10
25	BB	380	G	N1-C6-O6	-5.16	116.80	119.90
25	BB	865	C	C3'-C2'-C1'	-5.16	97.37	101.50
25	BB	1365	A	N1-C6-N6	-5.16	115.50	118.60
25	BB	1413	A	N9-C4-C5	-5.16	103.74	105.80
25	BB	1633	G	N9-C1'-C2'	5.16	120.71	114.00
25	BB	1660	G	C1'-O4'-C4'	-5.16	105.77	109.90
25	BB	1794	A	C5-N7-C8	-5.16	101.32	103.90
25	BB	1947	C	C4-C5-C6	-5.16	114.82	117.40
25	BB	2003	A	C5-N7-C8	-5.16	101.32	103.90
25	BB	2108	A	C5-C6-N6	5.16	127.83	123.70
25	BB	2407	A	N9-C1'-C2'	5.16	120.71	114.00
25	BB	2537	U	P-O3'-C3'	5.16	125.89	119.70
1	AA	70	C	N3-C4-C5	5.16	123.96	121.90
3	A1	300	A	C4'-C3'-C2'	-5.16	97.44	102.60
3	A1	369	G	C5'-C4'-O4'	-5.16	102.91	109.10
3	A1	804	U	C5-C4-O4	5.16	128.99	125.90
3	A1	1172	C	C1'-O4'-C4'	-5.16	105.78	109.90
25	BB	787	C	C1'-O4'-C4'	-5.16	105.77	109.90
25	BB	1253	A	C5-N7-C8	-5.16	101.32	103.90
25	BB	1506	U	C5-C4-O4	-5.16	122.81	125.90
25	BB	1857	G	O4'-C1'-N9	5.16	112.33	108.20
25	BB	2771	C	N1-C2-N3	5.16	122.81	119.20
25	BB	2811	G	N1-C6-O6	-5.16	116.81	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AP	47	U	C5-C4-O4	5.16	128.99	125.90
3	A1	435	A	C6-N1-C2	-5.16	115.51	118.60
3	A1	682	G	C8-N9-C4	-5.16	104.34	106.40
3	A1	882	C	C4-C5-C6	5.16	119.98	117.40
3	A1	913	A	O4'-C4'-C3'	5.16	110.22	106.10
3	A1	1106	G	C4-C5-C6	-5.16	115.71	118.80
3	A1	1178	G	O5'-C5'-C4'	-5.16	101.91	111.70
3	A1	1204	A	C6-C5-N7	5.16	135.91	132.30
3	A1	1315	U	N1-C2-N3	5.16	117.99	114.90
3	A1	1394	A	C5-N7-C8	-5.16	101.32	103.90
25	BB	451	U	C4-C5-C6	5.16	122.79	119.70
25	BB	717	C	O4'-C1'-N1	5.16	112.32	108.20
25	BB	743	A	C4-C5-C6	-5.16	114.42	117.00
25	BB	922	C	C4-C5-C6	-5.16	114.82	117.40
25	BB	1281	G	N1-C2-N3	5.16	126.99	123.90
25	BB	1562	U	N3-C2-O2	-5.16	118.59	122.20
25	BB	1606	C	N1-C1'-C2'	5.16	120.70	114.00
25	BB	1801	A	C6-C5-N7	5.16	135.91	132.30
25	BB	1861	G	C4-C5-N7	-5.16	108.74	110.80
25	BB	2089	C	C3'-C2'-C1'	-5.16	97.38	101.50
25	BB	2179	C	C3'-C2'-C1'	5.16	105.62	101.50
25	BB	2425	A	O5'-P-OP1	5.16	116.89	110.70
25	BB	2582	G	N1-C2-N3	5.16	126.99	123.90
25	BB	2667	C	C1'-O4'-C4'	-5.16	105.78	109.90
3	A1	1511	G	C8-N9-C4	-5.15	104.34	106.40
25	BB	3	U	C4-C5-C6	5.15	122.79	119.70
25	BB	37	C	C5-C6-N1	-5.15	118.42	121.00
25	BB	907	G	C8-N9-C4	-5.15	104.34	106.40
25	BB	1051	G	N1-C6-O6	-5.15	116.81	119.90
25	BB	1711	A	C2-N3-C4	5.15	113.18	110.60
25	BB	2171	A	C6-C5-N7	5.15	135.91	132.30
3	A1	64	G	O3'-P-O5'	-5.15	94.21	104.00
3	A1	365	U	N1-C2-O2	5.15	126.41	122.80
3	A1	524	G	C4'-C3'-O3'	5.15	123.31	113.00
3	A1	691	G	N9-C4-C5	5.15	107.46	105.40
3	A1	792	A	OP1-P-O3'	5.15	116.53	105.20
3	A1	1087	G	C4'-C3'-O3'	5.15	123.30	113.00
3	A1	1347	G	C5-C6-N1	5.15	114.08	111.50
25	BB	128	C	N1-C2-N3	5.15	122.81	119.20
25	BB	237	C	O5'-P-OP2	-5.15	101.06	105.70
25	BB	797	G	O4'-C1'-N9	5.15	112.32	108.20
25	BB	1156	A	C5'-C4'-C3'	-5.15	107.76	116.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1240	U	N1-C2-O2	5.15	126.41	122.80
25	BB	1272	A	C2-N3-C4	5.15	113.18	110.60
25	BB	1278	C	C4-C5-C6	-5.15	114.82	117.40
25	BB	1696	G	C6-N1-C2	-5.15	122.01	125.10
25	BB	2148	G	N3-C4-N9	5.15	129.09	126.00
25	BB	2681	C	N1-C2-N3	5.15	122.81	119.20
3	A1	894	G	C6-C5-N7	5.15	133.49	130.40
3	A1	1382	C	N1-C1'-C2'	5.15	120.69	114.00
25	BB	28	A	C6-N1-C2	-5.15	115.51	118.60
25	BB	311	A	C5-N7-C8	-5.15	101.33	103.90
25	BB	518	G	C3'-C2'-C1'	-5.15	97.38	101.50
25	BB	555	G	O4'-C4'-C3'	5.15	110.22	106.10
25	BB	1294	U	C5'-C4'-O4'	5.15	115.28	109.10
25	BB	1803	A	O4'-C1'-N9	5.15	112.32	108.20
25	BB	2319	G	C4-N9-C1'	5.15	133.19	126.50
25	BB	2699	C	N3-C4-N4	-5.15	114.39	118.00
25	BB	2764	A	C1'-O4'-C4'	-5.15	105.78	109.90
25	BB	2794	C	N3-C4-N4	-5.15	114.39	118.00
25	BB	2883	A	C4-C5-C6	-5.15	114.42	117.00
1	AA	4	G	C4'-C3'-C2'	-5.15	97.45	102.60
1	AP	14	A	N7-C8-N9	-5.15	111.23	113.80
3	A1	386	C	C5-C4-N4	-5.15	116.60	120.20
3	A1	431	A	C4-C5-N7	-5.15	108.12	110.70
3	A1	768	A	C5'-C4'-O4'	5.15	115.28	109.10
8	AG	52	ARG	NH1-CZ-NH2	-5.15	113.74	119.40
25	BB	2	G	C4'-C3'-C2'	-5.15	97.45	102.60
25	BB	769	U	O4'-C1'-N1	5.15	112.32	108.20
25	BB	929	U	N1-C2-O2	5.15	126.40	122.80
25	BB	984	A	C5'-C4'-C3'	-5.15	107.76	116.00
25	BB	1009	A	C4-C5-N7	5.15	113.27	110.70
25	BB	1129	A	C5-C6-N1	5.15	120.28	117.70
25	BB	1134	A	C2-N3-C4	5.15	113.17	110.60
25	BB	1189	A	C5-N7-C8	-5.15	101.33	103.90
25	BB	1190	G	P-O3'-C3'	5.15	125.88	119.70
25	BB	1625	C	C5-C4-N4	5.15	123.81	120.20
25	BB	1834	U	N3-C2-O2	-5.15	118.60	122.20
25	BB	2204	G	C8-N9-C1'	5.15	133.69	127.00
25	BB	2414	G	O4'-C4'-C3'	5.15	110.22	106.10
1	AA	22	G	C5-N7-C8	-5.15	101.73	104.30
3	A1	286	C	C2-N3-C4	-5.15	117.33	119.90
3	A1	650	G	O4'-C4'-C3'	5.15	110.22	106.10
3	A1	722	G	N1-C2-N3	5.15	126.99	123.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	BA	115	A	C5-C6-N1	5.15	120.27	117.70
25	BB	403	U	C4'-C3'-C2'	-5.15	97.45	102.60
25	BB	494	G	N1-C6-O6	-5.15	116.81	119.90
25	BB	588	U	C1'-O4'-C4'	-5.15	105.78	109.90
25	BB	684	G	C4-C5-N7	-5.15	108.74	110.80
25	BB	763	G	C3'-C2'-C1'	5.15	105.62	101.50
25	BB	1230	A	C5-C6-N6	5.15	127.82	123.70
25	BB	1311	G	N3-C4-C5	-5.15	126.03	128.60
25	BB	1458	U	N1-C2-N3	5.15	117.99	114.90
25	BB	1677	A	O4'-C1'-N9	5.15	112.32	108.20
25	BB	2095	A	C5-C6-N6	5.15	127.82	123.70
25	BB	2434	A	C2-N3-C4	5.15	113.17	110.60
25	BB	2707	U	O4'-C1'-C2'	-5.15	100.65	105.80
25	BB	2731	G	N1-C6-O6	-5.15	116.81	119.90
2	AM	1	U	C1'-O4'-C4'	-5.15	105.78	109.90
3	A1	284	C	C6-N1-C2	-5.15	118.24	120.30
3	A1	390	U	C5-C6-N1	-5.15	120.13	122.70
3	A1	729	A	P-O3'-C3'	5.15	125.88	119.70
3	A1	1419	G	N9-C4-C5	-5.15	103.34	105.40
25	BB	713	G	C5-C6-N1	5.15	114.07	111.50
25	BB	982	C	N3-C4-C5	5.15	123.96	121.90
25	BB	2435	A	C1'-O4'-C4'	-5.15	105.78	109.90
25	BB	2483	C	O3'-P-O5'	-5.15	94.22	104.00
25	BB	2748	A	C5'-C4'-C3'	-5.15	107.77	116.00
3	A1	154	U	C2-N3-C4	-5.14	123.91	127.00
3	A1	395	C	P-O3'-C3'	5.14	125.87	119.70
3	A1	401	C	N3-C4-C5	5.14	123.96	121.90
3	A1	688	G	N1-C2-N2	-5.14	111.57	116.20
3	A1	1076	U	C1'-O4'-C4'	-5.14	105.78	109.90
3	A1	1157	A	C5-C6-N6	5.14	127.82	123.70
3	A1	1199	U	C4-C5-C6	5.14	122.79	119.70
3	A1	1471	U	N1-C2-O2	5.14	126.40	122.80
24	BA	22	U	C5-C6-N1	-5.14	120.13	122.70
24	BA	27	C	N3-C4-N4	-5.14	114.40	118.00
25	BB	6	A	C6-N1-C2	-5.14	115.51	118.60
25	BB	46	G	P-O3'-C3'	5.14	125.87	119.70
25	BB	286	U	N1-C2-N3	5.14	117.99	114.90
25	BB	309	A	N1-C6-N6	-5.14	115.51	118.60
25	BB	433	C	N1-C2-N3	5.14	122.80	119.20
25	BB	1000	A	C4-C5-C6	-5.14	114.43	117.00
25	BB	1015	U	C1'-O4'-C4'	-5.14	105.78	109.90
25	BB	1031	G	C8-N9-C4	-5.14	104.34	106.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1115	G	C6-C5-N7	5.14	133.49	130.40
25	BB	1179	G	C4'-C3'-C2'	-5.14	97.45	102.60
25	BB	1206	G	C4-C5-N7	-5.14	108.74	110.80
25	BB	1283	G	C2-N3-C4	5.14	114.47	111.90
25	BB	1348	C	N1-C2-N3	5.14	122.80	119.20
25	BB	1600	C	O3'-P-O5'	5.14	113.78	104.00
25	BB	1738	G	C8-N9-C4	-5.14	104.34	106.40
25	BB	1801	A	N9-C4-C5	5.14	107.86	105.80
25	BB	1811	G	N7-C8-N9	5.14	115.67	113.10
25	BB	1857	G	C4-C5-C6	-5.14	115.71	118.80
25	BB	2049	G	C5-N7-C8	-5.14	101.73	104.30
25	BB	2078	C	C5'-C4'-O4'	5.14	115.27	109.10
25	BB	2236	U	O4'-C1'-N1	5.14	112.31	108.20
25	BB	2378	A	C6-C5-N7	5.14	135.90	132.30
25	BB	2464	G	C5'-C4'-C3'	-5.14	107.77	116.00
25	BB	2664	G	N3-C4-C5	-5.14	126.03	128.60
53	B4	50	ARG	NH1-CZ-NH2	-5.14	113.74	119.40
1	AE	45	G	O4'-C1'-C2'	-5.14	100.66	105.80
3	A1	229	U	C2-N3-C4	-5.14	123.92	127.00
3	A1	1130	A	C4'-C3'-C2'	5.14	107.74	102.60
3	A1	1433	A	C6-C5-N7	5.14	135.90	132.30
25	BB	358	U	C5'-C4'-O4'	5.14	115.27	109.10
25	BB	436	C	N1-C2-O2	5.14	121.98	118.90
25	BB	553	G	C5'-C4'-O4'	5.14	115.27	109.10
25	BB	819	A	C2'-C3'-O3'	5.14	121.93	113.70
25	BB	1219	U	C5'-C4'-O4'	5.14	115.27	109.10
25	BB	1623	G	C5'-C4'-C3'	-5.14	107.77	116.00
25	BB	1998	A	C5-C6-N6	5.14	127.81	123.70
25	BB	2345	G	N3-C4-N9	5.14	129.09	126.00
2	AM	18	U	O4'-C4'-C3'	-5.14	98.86	104.00
3	A1	152	A	C5-N7-C8	-5.14	101.33	103.90
3	A1	1196	A	C6-C5-N7	5.14	135.90	132.30
3	A1	1234	C	C3'-C2'-C1'	-5.14	97.39	101.50
25	BB	38	A	C5-C6-N6	5.14	127.81	123.70
25	BB	210	C	C2-N1-C1'	-5.14	113.14	118.80
25	BB	467	G	N3-C2-N2	-5.14	116.30	119.90
25	BB	1405	U	N1-C2-O2	5.14	126.40	122.80
25	BB	1470	A	C5'-C4'-O4'	5.14	115.27	109.10
25	BB	1530	G	N3-C2-N2	-5.14	116.30	119.90
25	BB	1933	G	N1-C2-N3	5.14	126.98	123.90
25	BB	1968	G	C4'-C3'-C2'	-5.14	97.46	102.60
1	AA	14	A	N1-C2-N3	-5.14	126.73	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1000	A	C5'-C4'-O4'	5.14	115.27	109.10
3	A1	1355	G	C8-N9-C4	-5.14	104.34	106.40
3	A1	1363	A	C6-C5-N7	5.14	135.90	132.30
3	A1	1365	G	N1-C2-N2	-5.14	111.57	116.20
3	A1	1373	G	C4'-C3'-C2'	-5.14	97.46	102.60
3	A1	1411	C	O4'-C4'-C3'	-5.14	98.86	104.00
3	A1	1471	U	C4'-C3'-C2'	-5.14	97.46	102.60
25	BB	256	A	C5'-C4'-O4'	-5.14	102.93	109.10
25	BB	366	C	C2-N3-C4	-5.14	117.33	119.90
25	BB	1545	A	C3'-C2'-C1'	5.14	105.61	101.50
25	BB	1699	G	N3-C2-N2	-5.14	116.30	119.90
25	BB	1825	U	N1-C2-N3	5.14	117.98	114.90
25	BB	2204	G	O3'-P-O5'	-5.14	94.23	104.00
25	BB	2357	G	N9-C4-C5	5.14	107.46	105.40
25	BB	2411	A	N1-C2-N3	-5.14	126.73	129.30
25	BB	2606	C	C5-C6-N1	-5.14	118.43	121.00
25	BB	2713	U	C2-N3-C4	-5.14	123.92	127.00
25	BB	2725	A	C1'-O4'-C4'	-5.14	105.79	109.90
25	BB	2731	G	N1-C2-N3	5.14	126.98	123.90
25	BB	2756	U	C4-C5-C6	5.14	122.78	119.70
37	BN	166	ARG	NE-CZ-NH2	-5.14	117.73	120.30
3	A1	132	C	N1-C2-O2	5.14	121.98	118.90
3	A1	481	G	C5-C6-N1	5.14	114.07	111.50
3	A1	753	A	C5'-C4'-C3'	5.14	124.22	116.00
3	A1	866	C	C2-N1-C1'	5.14	124.45	118.80
25	BB	106	C	C5-C4-N4	5.14	123.80	120.20
25	BB	340	A	C6-N1-C2	-5.14	115.52	118.60
25	BB	660	C	C2-N3-C4	-5.14	117.33	119.90
25	BB	1473	G	C2'-C3'-O3'	5.14	121.92	113.70
25	BB	2084	C	C2-N3-C4	-5.14	117.33	119.90
25	BB	2124	G	O4'-C1'-N9	5.14	112.31	108.20
25	BB	2524	G	C5'-C4'-C3'	-5.14	107.78	116.00
1	AA	16	U	C2-N3-C4	-5.14	123.92	127.00
1	AA	71	G	O4'-C4'-C3'	5.14	110.21	106.10
1	AE	15	G	C5-N7-C8	-5.14	101.73	104.30
16	AQ	32	ARG	NE-CZ-NH2	-5.14	117.73	120.30
16	AQ	40	PRO	N-CD-CG	5.14	110.91	103.20
24	BA	95	U	C2'-C3'-O3'	5.14	121.92	113.70
24	BA	106	G	O4'-C1'-N9	-5.14	104.09	108.20
25	BB	108	G	C2-N3-C4	5.14	114.47	111.90
25	BB	164	C	C5-C4-N4	-5.14	116.60	120.20
25	BB	318	C	C3'-C2'-C1'	-5.14	97.39	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	324	A	C6-C5-N7	5.14	135.90	132.30
25	BB	882	G	N1-C2-N3	5.14	126.98	123.90
25	BB	945	A	N1-C6-N6	-5.14	115.52	118.60
25	BB	1321	A	C6-C5-N7	5.14	135.90	132.30
25	BB	1488	C	C2-N3-C4	-5.14	117.33	119.90
25	BB	1706	C	C5-C6-N1	-5.14	118.43	121.00
25	BB	2845	U	C5'-C4'-C3'	-5.14	107.78	116.00
2	AM	12	U	C4'-C3'-O3'	5.13	123.27	113.00
3	A1	9	G	C3'-C2'-C1'	-5.13	97.39	101.50
3	A1	274	A	N9-C4-C5	5.13	107.85	105.80
3	A1	408	A	C6-C5-N7	5.13	135.90	132.30
3	A1	757	U	C5'-C4'-O4'	5.13	115.26	109.10
3	A1	876	C	C5'-C4'-C3'	-5.13	107.79	116.00
3	A1	881	G	C2-N3-C4	5.13	114.47	111.90
3	A1	959	A	C4'-C3'-C2'	-5.13	97.47	102.60
3	A1	1198	G	C5-C6-N1	5.13	114.07	111.50
3	A1	1352	C	C2-N3-C4	-5.13	117.33	119.90
3	A1	1440	U	O4'-C4'-C3'	5.13	110.21	106.10
25	BB	186	G	N1-C6-O6	-5.13	116.82	119.90
25	BB	338	G	N1-C6-O6	-5.13	116.82	119.90
25	BB	501	A	C6-C5-N7	5.13	135.89	132.30
25	BB	897	C	C3'-C2'-C1'	5.13	105.61	101.50
25	BB	1092	C	C5'-C4'-O4'	5.13	115.26	109.10
25	BB	1248	G	C1'-O4'-C4'	-5.13	105.79	109.90
25	BB	1620	G	N1-C2-N3	5.13	126.98	123.90
25	BB	1775	U	C4'-C3'-C2'	5.13	107.73	102.60
25	BB	2142	A	N3-C4-C5	-5.13	123.21	126.80
25	BB	2542	A	O4'-C4'-C3'	5.13	110.21	106.10
32	BI	100	ARG	CD-NE-CZ	5.13	130.79	123.60
34	BK	46	GLU	OE1-CD-OE2	-5.13	117.14	123.30
48	BY	59	ARG	CA-CB-CG	5.13	124.70	113.40
3	A1	177	G	O4'-C4'-C3'	-5.13	98.87	104.00
3	A1	1397	C	C5-C4-N4	-5.13	116.61	120.20
25	BB	53	A	C2-N3-C4	5.13	113.17	110.60
25	BB	507	A	C4-C5-N7	-5.13	108.13	110.70
25	BB	561	G	N9-C1'-C2'	-5.13	106.35	112.00
25	BB	1392	A	N9-C4-C5	5.13	107.85	105.80
25	BB	1859	U	O3'-P-O5'	-5.13	94.25	104.00
25	BB	1885	A	C5'-C4'-O4'	5.13	115.26	109.10
52	B3	148	ARG	NE-CZ-NH2	-5.13	117.73	120.30
3	A1	5	U	C5-C6-N1	-5.13	120.14	122.70
3	A1	27	G	C3'-C2'-C1'	5.13	105.61	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	41	G	N3-C4-N9	5.13	129.08	126.00
3	A1	189	A	C4'-C3'-C2'	-5.13	97.47	102.60
3	A1	735	C	N3-C4-N4	-5.13	114.41	118.00
3	A1	792	A	O4'-C1'-N9	5.13	112.31	108.20
3	A1	932	C	N3-C4-N4	-5.13	114.41	118.00
3	A1	963	G	N1-C2-N2	-5.13	111.58	116.20
3	A1	1268	G	O4'-C1'-N9	5.13	112.31	108.20
8	AG	9	GLU	OE1-CD-OE2	-5.13	117.14	123.30
25	BB	33	C	C4-C5-C6	-5.13	114.83	117.40
25	BB	53	A	C6-N1-C2	-5.13	115.52	118.60
25	BB	168	G	N9-C4-C5	5.13	107.45	105.40
25	BB	645	C	O5'-P-OP2	-5.13	101.08	105.70
25	BB	663	G	C5'-C4'-O4'	5.13	115.26	109.10
25	BB	785	G	N1-C6-O6	-5.13	116.82	119.90
25	BB	1064	C	C6-N1-C2	-5.13	118.25	120.30
25	BB	1433	A	C6-C5-N7	5.13	135.89	132.30
25	BB	1578	U	N1-C2-N3	5.13	117.98	114.90
25	BB	1985	C	C3'-C2'-C1'	5.13	105.61	101.50
25	BB	2047	C	C5-C6-N1	-5.13	118.43	121.00
25	BB	2323	G	C6-N1-C2	-5.13	122.02	125.10
25	BB	2454	G	C5-C6-O6	5.13	131.68	128.60
3	A1	986	U	C2-N3-C4	-5.13	123.92	127.00
3	A1	1256	A	O3'-P-O5'	-5.13	94.25	104.00
3	A1	1302	C	P-O3'-C3'	5.13	125.86	119.70
3	A1	1328	C	C5'-C4'-C3'	-5.13	107.79	116.00
3	A1	1510	C	C5'-C4'-O4'	5.13	115.25	109.10
15	AO	21	TRP	NE1-CE2-CZ2	5.13	136.04	130.40
25	BB	151	C	C2'-C3'-O3'	5.13	121.91	113.70
25	BB	954	G	N7-C8-N9	5.13	115.67	113.10
25	BB	1777	U	N3-C2-O2	-5.13	118.61	122.20
1	AE	16	U	C6-N1-C2	-5.13	117.92	121.00
3	A1	74	A	C5-C6-N6	5.13	127.80	123.70
3	A1	222	C	C5'-C4'-O4'	5.13	115.25	109.10
3	A1	1037	C	C2'-C3'-O3'	5.13	121.91	113.70
3	A1	1067	A	C5-C6-N6	5.13	127.80	123.70
3	A1	1195	C	C5-C6-N1	-5.13	118.44	121.00
3	A1	1234	C	C6-N1-C2	-5.13	118.25	120.30
25	BB	208	C	C2-N3-C4	-5.13	117.33	119.90
25	BB	351	C	N1-C2-O2	5.13	121.98	118.90
25	BB	584	C	C4'-C3'-C2'	-5.13	97.47	102.60
25	BB	585	G	N3-C4-N9	5.13	129.08	126.00
25	BB	1266	G	C5-C6-N1	5.13	114.06	111.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1290	C	C3'-C2'-C1'	5.13	105.60	101.50
25	BB	1667	G	C4-C5-C6	-5.13	115.72	118.80
25	BB	2073	C	C5-C4-N4	-5.13	116.61	120.20
25	BB	2226	C	N1-C2-N3	5.13	122.79	119.20
25	BB	2298	A	C5-N7-C8	-5.13	101.34	103.90
25	BB	2741	A	C5-N7-C8	-5.13	101.34	103.90
25	BB	2761	A	C5-N7-C8	-5.13	101.34	103.90
42	BS	59	ARG	NH1-CZ-NH2	-5.13	113.76	119.40
1	AE	45	G	C5-C6-N1	5.13	114.06	111.50
3	A1	704	A	C2-N3-C4	5.13	113.16	110.60
25	BB	425	G	C3'-C2'-C1'	5.13	105.60	101.50
25	BB	1384	A	O4'-C1'-N9	5.13	112.30	108.20
25	BB	1425	G	N3-C4-N9	5.13	129.08	126.00
25	BB	1489	C	C1'-O4'-C4'	5.13	114.00	109.90
25	BB	1646	C	C5-C6-N1	-5.13	118.44	121.00
25	BB	1720	U	N3-C2-O2	-5.13	118.61	122.20
25	BB	2712	C	C5'-C4'-C3'	-5.13	107.80	116.00
25	BB	2811	G	N3-C4-C5	-5.13	126.04	128.60
28	BE	73	ILE	CA-CB-CG1	5.13	120.74	111.00
28	BE	82	LEU	O-C-N	-5.13	114.50	122.70
34	BK	55	ASP	CB-CG-OD2	-5.13	113.69	118.30
3	A1	136	C	N1-C2-O2	5.12	121.97	118.90
3	A1	1100	C	N3-C2-O2	-5.12	118.31	121.90
25	BB	226	A	N9-C4-C5	-5.12	103.75	105.80
25	BB	1280	G	C6-C5-N7	5.12	133.47	130.40
25	BB	1603	A	C4'-C3'-C2'	-5.12	97.47	102.60
25	BB	1938	A	P-O3'-C3'	5.12	125.85	119.70
25	BB	2388	A	C3'-C2'-C1'	5.12	105.60	101.50
25	BB	2620	C	P-O3'-C3'	5.12	125.85	119.70
1	AA	53	G	C5'-C4'-O4'	5.12	115.25	109.10
1	AE	36	A	C6-N1-C2	-5.12	115.53	118.60
3	A1	97	G	N3-C4-C5	-5.12	126.04	128.60
3	A1	157	U	O4'-C4'-C3'	5.12	110.20	106.10
3	A1	315	A	C5'-C4'-C3'	-5.12	107.80	116.00
3	A1	1201	A	C3'-C2'-C1'	-5.12	97.40	101.50
3	A1	1224	U	N1-C2-O2	5.12	126.39	122.80
3	A1	1301	U	C4-C5-C6	5.12	122.78	119.70
3	A1	1304	G	C5-N7-C8	-5.12	101.74	104.30
3	A1	1454	G	C2-N3-C4	-5.12	109.34	111.90
24	BA	13	G	N1-C2-N3	5.12	126.97	123.90
24	BA	101	A	C5-N7-C8	-5.12	101.34	103.90
25	BB	8	C	N3-C2-O2	-5.12	118.31	121.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	10	A	C8-N9-C4	5.12	107.85	105.80
25	BB	616	A	C6-C5-N7	5.12	135.89	132.30
25	BB	913	U	C5-C6-N1	-5.12	120.14	122.70
25	BB	1215	G	C2-N3-C4	5.12	114.46	111.90
25	BB	1608	A	C2'-C3'-O3'	5.12	121.90	113.70
25	BB	1804	C	O3'-P-O5'	5.12	113.74	104.00
25	BB	1965	C	N3-C4-C5	5.12	123.95	121.90
25	BB	2115	G	C5-C6-O6	5.12	131.67	128.60
25	BB	2865	U	C2-N3-C4	-5.12	123.93	127.00
29	BF	10	ARG	C-N-CA	5.12	134.51	121.70
50	B1	196	VAL	CG1-CB-CG2	-5.12	102.70	110.90
2	AM	14	U	C4'-C3'-O3'	5.12	123.25	113.00
3	A1	83	C	O4'-C1'-C2'	-5.12	100.68	105.80
3	A1	270	A	C4-C5-C6	-5.12	114.44	117.00
3	A1	425	G	C5'-C4'-C3'	5.12	124.19	116.00
3	A1	558	G	N9-C4-C5	5.12	107.45	105.40
3	A1	787	A	C2-N3-C4	5.12	113.16	110.60
3	A1	924	C	P-O3'-C3'	5.12	125.84	119.70
3	A1	1313	U	C6-N1-C2	-5.12	117.93	121.00
3	A1	1420	U	C1'-O4'-C4'	-5.12	105.80	109.90
25	BB	366	C	N1-C2-O2	5.12	121.97	118.90
25	BB	416	U	N1-C2-O2	5.12	126.39	122.80
25	BB	465	G	C1'-O4'-C4'	-5.12	105.80	109.90
25	BB	512	G	C4-C5-N7	-5.12	108.75	110.80
25	BB	625	G	N7-C8-N9	5.12	115.66	113.10
25	BB	1205	A	C4-C5-N7	5.12	113.26	110.70
25	BB	1228	G	C4-C5-C6	-5.12	115.73	118.80
25	BB	1517	G	C5-C6-N1	5.12	114.06	111.50
25	BB	2120	G	N1-C2-N2	5.12	120.81	116.20
25	BB	2159	G	N1-C6-O6	-5.12	116.83	119.90
25	BB	2317	A	C5'-C4'-O4'	-5.12	102.95	109.10
25	BB	2728	U	N1-C2-O2	5.12	126.39	122.80
25	BB	2845	U	N1-C2-O2	5.12	126.39	122.80
3	A1	539	A	C3'-C2'-C1'	-5.12	97.40	101.50
3	A1	573	A	N9-C1'-C2'	5.12	120.66	114.00
3	A1	883	C	C3'-C2'-C1'	5.12	105.60	101.50
3	A1	1505	G	O3'-P-O5'	5.12	113.73	104.00
25	BB	504	A	C5-C6-N6	5.12	127.80	123.70
25	BB	1368	G	C6-C5-N7	5.12	133.47	130.40
25	BB	1417	C	C2-N3-C4	-5.12	117.34	119.90
25	BB	1421	G	N1-C2-N2	-5.12	111.59	116.20
25	BB	1626	A	O5'-P-OP2	-5.12	101.09	105.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
1	AA	66	A	N7-C8-N9	5.12	116.36	113.80
1	AP	21	A	O4'-C1'-N9	-5.12	104.11	108.20
1	AP	72	C	C5'-C4'-O4'	5.12	115.24	109.10
3	A1	200	G	N9-C4-C5	5.12	107.45	105.40
3	A1	824	G	N7-C8-N9	5.12	115.66	113.10
3	A1	849	G	N7-C8-N9	5.12	115.66	113.10
3	A1	1178	G	N3-C2-N2	-5.12	116.32	119.90
3	A1	1235	U	O5'-P-OP1	-5.12	101.09	105.70
3	A1	1268	G	C1'-O4'-C4'	-5.12	105.81	109.90
3	A1	1304	G	N9-C4-C5	-5.12	103.35	105.40
4	AB	21	TYR	CB-CG-CD1	-5.12	117.93	121.00
25	BB	242	G	N3-C4-N9	5.12	129.07	126.00
25	BB	358	U	C4'-C3'-C2'	-5.12	97.48	102.60
25	BB	432	A	N9-C1'-C2'	-5.12	106.37	112.00
25	BB	471	A	N1-C2-N3	-5.12	126.74	129.30
25	BB	1575	C	C5'-C4'-O4'	5.12	115.24	109.10
25	BB	1777	U	C5-C6-N1	-5.12	120.14	122.70
25	BB	1826	G	C4'-C3'-C2'	-5.12	97.48	102.60
25	BB	2420	C	C4'-C3'-C2'	-5.12	97.48	102.60
25	BB	2628	C	C2-N3-C4	-5.12	117.34	119.90
51	B2	41	GLU	OE1-CD-OE2	-5.12	117.16	123.30
3	A1	31	G	C4-C5-N7	-5.12	108.75	110.80
3	A1	284	C	O3'-P-O5'	-5.12	94.28	104.00
3	A1	881	G	C6-C5-N7	5.12	133.47	130.40
25	BB	1252	G	C6-C5-N7	5.12	133.47	130.40
25	BB	1345	C	N1-C2-O2	5.12	121.97	118.90
25	BB	1684	G	O4'-C1'-N9	5.12	112.29	108.20
25	BB	2827	C	P-O3'-C3'	5.12	125.84	119.70
1	AP	33	U	C4'-C3'-C2'	-5.12	97.48	102.60
3	A1	64	G	C4'-C3'-C2'	5.12	107.72	102.60
3	A1	289	G	N3-C4-C5	-5.12	126.04	128.60
3	A1	406	G	N3-C4-N9	5.12	129.07	126.00
3	A1	581	G	C5'-C4'-C3'	-5.12	107.81	116.00
3	A1	1334	G	C3'-C2'-C1'	5.12	105.59	101.50
25	BB	96	C	N3-C4-C5	5.12	123.95	121.90
25	BB	301	G	C6-N1-C2	-5.12	122.03	125.10
25	BB	508	A	N1-C2-N3	-5.12	126.74	129.30
25	BB	961	C	C4-C5-C6	-5.12	114.84	117.40
25	BB	1129	A	C1'-O4'-C4'	-5.12	105.81	109.90
25	BB	1761	C	N1-C1'-C2'	-5.12	106.37	112.00
25	BB	2107	G	P-O3'-C3'	5.12	125.84	119.70
25	BB	2158	A	N7-C8-N9	5.12	116.36	113.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2270	A	O4'-C1'-N9	5.12	112.29	108.20
25	BB	2568	U	C3'-C2'-C1'	5.12	105.59	101.50
25	BB	2747	G	N1-C2-N3	5.12	126.97	123.90
25	BB	2790	U	C2-N3-C4	-5.12	123.93	127.00
3	A1	108	G	O4'-C1'-N9	5.11	112.29	108.20
3	A1	177	G	C1'-O4'-C4'	-5.11	105.81	109.90
3	A1	887	G	N3-C4-C5	-5.11	126.04	128.60
3	A1	980	C	N3-C2-O2	-5.11	118.32	121.90
3	A1	1180	A	C6-C5-N7	5.11	135.88	132.30
3	A1	1264	U	N1-C2-N3	5.11	117.97	114.90
3	A1	1451	U	C4-C5-C6	5.11	122.77	119.70
24	BA	108	A	C3'-C2'-C1'	5.11	105.59	101.50
25	BB	9	G	N1-C2-N3	5.11	126.97	123.90
25	BB	211	C	N1-C2-N3	5.11	122.78	119.20
25	BB	883	G	C6-C5-N7	5.11	133.47	130.40
25	BB	1376	C	C1'-O4'-C4'	5.11	113.99	109.90
25	BB	1430	G	C5'-C4'-O4'	5.11	115.24	109.10
25	BB	1723	G	C5-C6-O6	5.11	131.67	128.60
25	BB	1768	C	N3-C4-N4	-5.11	114.42	118.00
25	BB	1789	A	C3'-C2'-C1'	5.11	105.59	101.50
25	BB	1861	G	C6-C5-N7	5.11	133.47	130.40
25	BB	2109	U	N1-C2-N3	5.11	117.97	114.90
25	BB	2501	C	C5-C6-N1	-5.11	118.44	121.00
33	BJ	3	VAL	CA-CB-CG1	5.11	118.57	110.90
3	A1	268	U	N3-C2-O2	-5.11	118.62	122.20
3	A1	1003	G	C4'-C3'-C2'	5.11	107.71	102.60
3	A1	1331	G	C4-C5-C6	-5.11	115.73	118.80
25	BB	219	A	C4'-C3'-C2'	5.11	107.71	102.60
25	BB	1022	G	C1'-O4'-C4'	-5.11	105.81	109.90
25	BB	1375	U	C4'-C3'-C2'	-5.11	97.49	102.60
1	AE	40	C	C5'-C4'-C3'	-5.11	107.82	116.00
3	A1	83	C	O5'-P-OP2	-5.11	101.10	105.70
3	A1	99	C	C4'-C3'-C2'	-5.11	97.49	102.60
3	A1	218	U	C5'-C4'-C3'	-5.11	107.82	116.00
3	A1	842	U	C5-C4-O4	5.11	128.97	125.90
3	A1	867	G	O4'-C1'-N9	5.11	112.29	108.20
3	A1	1336	C	C5-C6-N1	-5.11	118.44	121.00
3	A1	1452	C	O4'-C4'-C3'	5.11	110.19	106.10
3	A1	1477	U	C5-C6-N1	-5.11	120.14	122.70
24	BA	78	A	C5-C6-N6	5.11	127.79	123.70
25	BB	562	U	N3-C4-O4	5.11	122.98	119.40
25	BB	641	U	C5-C6-N1	-5.11	120.14	122.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	729	G	C8-N9-C4	-5.11	104.36	106.40
25	BB	775	G	C5-N7-C8	-5.11	101.75	104.30
25	BB	850	U	C4-C5-C6	5.11	122.77	119.70
25	BB	877	A	C5-C6-N6	5.11	127.79	123.70
25	BB	1049	C	O4'-C1'-N1	5.11	112.29	108.20
25	BB	1816	C	N1-C2-O2	5.11	121.97	118.90
25	BB	2363	G	C8-N9-C1'	5.11	133.64	127.00
25	BB	2793	C	C5'-C4'-C3'	-5.11	107.82	116.00
31	BH	54	VAL	C-N-CA	5.11	134.48	121.70
3	A1	1353	G	C4-C5-N7	5.11	112.84	110.80
25	BB	682	G	C6-C5-N7	5.11	133.47	130.40
25	BB	2721	A	C6-C5-N7	5.11	135.88	132.30
26	BC	23	ALA	N-CA-CB	-5.11	102.95	110.10
3	A1	111	G	N7-C8-N9	5.11	115.65	113.10
3	A1	264	C	N3-C4-C5	5.11	123.94	121.90
3	A1	298	A	C2-N3-C4	5.11	113.15	110.60
3	A1	473	U	P-O3'-C3'	5.11	125.83	119.70
3	A1	981	U	O4'-C1'-N1	5.11	112.29	108.20
3	A1	1013	G	C5'-C4'-C3'	-5.11	107.83	116.00
3	A1	1334	G	N7-C8-N9	5.11	115.65	113.10
9	AH	86	LEU	N-CA-C	5.11	124.79	111.00
25	BB	387	U	P-O3'-C3'	5.11	125.83	119.70
25	BB	759	G	N1-C2-N3	5.11	126.96	123.90
25	BB	1284	A	C5'-C4'-O4'	5.11	115.23	109.10
25	BB	2277	G	C5-C6-O6	-5.11	125.54	128.60
25	BB	2309	A	N1-C2-N3	-5.11	126.75	129.30
25	BB	2362	C	C5-C4-N4	5.11	123.78	120.20
25	BB	2445	G	O4'-C1'-N9	5.11	112.29	108.20
25	BB	2623	G	N9-C4-C5	5.11	107.44	105.40
25	BB	2658	C	N1-C2-N3	5.11	122.78	119.20
25	BB	2693	G	C4'-C3'-C2'	-5.11	97.49	102.60
37	BN	269	ARG	NE-CZ-NH2	5.11	122.85	120.30
41	BR	30	ARG	CB-CA-C	5.11	120.62	110.40
1	AE	74	C	P-O3'-C3'	5.11	125.83	119.70
3	A1	196	A	C5-C6-N6	5.11	127.78	123.70
3	A1	207	C	C5-C4-N4	-5.11	116.63	120.20
3	A1	314	C	C1'-O4'-C4'	-5.11	105.82	109.90
3	A1	344	A	C6-N1-C2	-5.11	115.54	118.60
3	A1	448	A	C5-C6-N6	5.11	127.78	123.70
3	A1	602	A	C5-C6-N1	5.11	120.25	117.70
3	A1	834	U	C5-C6-N1	-5.11	120.15	122.70
3	A1	1301	U	N1-C2-N3	5.11	117.96	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1430	A	C2-N3-C4	5.11	113.15	110.60
25	BB	59	U	N3-C2-O2	-5.11	118.63	122.20
25	BB	106	C	C5'-C4'-C3'	-5.11	107.83	116.00
25	BB	449	A	N1-C2-N3	-5.11	126.75	129.30
25	BB	1033	U	C5'-C4'-C3'	-5.11	107.83	116.00
25	BB	1179	G	C3'-C2'-C1'	5.11	105.58	101.50
25	BB	1478	G	C3'-C2'-C1'	5.11	105.58	101.50
25	BB	1681	G	C5-C6-N1	5.11	114.05	111.50
25	BB	2326	C	N1-C1'-C2'	-5.11	106.38	112.00
25	BB	2509	G	O4'-C1'-N9	5.11	112.28	108.20
1	AE	40	C	O4'-C1'-N1	5.10	112.28	108.20
25	BB	80	G	C5-C6-O6	5.10	131.66	128.60
25	BB	546	U	C5-C6-N1	-5.10	120.15	122.70
25	BB	762	U	N1-C2-N3	5.10	117.96	114.90
25	BB	1452	G	P-O3'-C3'	5.10	125.82	119.70
25	BB	1478	G	N1-C6-O6	-5.10	116.84	119.90
25	BB	1695	G	N3-C4-N9	5.10	129.06	126.00
25	BB	2546	U	C3'-C2'-C1'	5.10	105.58	101.50
25	BB	2881	U	C6-N1-C2	-5.10	117.94	121.00
36	BM	37	ASP	CB-CG-OD1	-5.10	113.71	118.30
1	AA	54	U	C5-C6-N1	-5.10	120.15	122.70
3	A1	352	C	O5'-P-OP1	5.10	116.82	110.70
3	A1	1017	U	C2-N3-C4	-5.10	123.94	127.00
3	A1	1040	U	N3-C2-O2	-5.10	118.63	122.20
3	A1	1074	G	N3-C4-C5	-5.10	126.05	128.60
3	A1	1427	C	N3-C4-C5	5.10	123.94	121.90
3	A1	1431	A	C4-C5-C6	-5.10	114.45	117.00
3	A1	1487	G	N7-C8-N9	5.10	115.65	113.10
24	BA	18	G	C5-C6-O6	-5.10	125.54	128.60
24	BA	117	G	C1'-O4'-C4'	-5.10	105.82	109.90
25	BB	82	U	N3-C4-O4	-5.10	115.83	119.40
25	BB	205	G	C4'-C3'-C2'	-5.10	97.50	102.60
25	BB	479	A	C8-N9-C4	-5.10	103.76	105.80
25	BB	968	C	N3-C4-N4	-5.10	114.43	118.00
25	BB	1120	G	N1-C2-N3	5.10	126.96	123.90
25	BB	2170	A	C5-C6-N1	5.10	120.25	117.70
25	BB	2204	G	N7-C8-N9	5.10	115.65	113.10
25	BB	2556	C	N3-C2-O2	-5.10	118.33	121.90
25	BB	2665	A	C5'-C4'-C3'	-5.10	107.84	116.00
25	BB	2722	G	N3-C4-C5	-5.10	126.05	128.60
48	BY	102	ALA	CB-CA-C	5.10	117.75	110.10
3	A1	357	G	C6-N1-C2	-5.10	122.04	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	515	A	C5'-C4'-O4'	5.10	115.22	109.10
25	BB	1261	C	O4'-C1'-N1	5.10	112.28	108.20
25	BB	2584	U	N3-C2-O2	-5.10	118.63	122.20
50	B1	117	ARG	C-N-CA	5.10	134.45	121.70
1	AE	34	G	C4'-C3'-C2'	-5.10	97.50	102.60
3	A1	94	G	N9-C4-C5	5.10	107.44	105.40
3	A1	609	A	C1'-O4'-C4'	-5.10	105.82	109.90
3	A1	902	G	N3-C4-N9	5.10	129.06	126.00
7	AF	70	ARG	NE-CZ-NH2	5.10	122.85	120.30
24	BA	72	G	C5-C6-N1	5.10	114.05	111.50
25	BB	297	G	C5'-C4'-C3'	-5.10	107.84	116.00
25	BB	444	C	N3-C2-O2	-5.10	118.33	121.90
25	BB	605	G	C8-N9-C4	-5.10	104.36	106.40
25	BB	1068	G	N3-C2-N2	-5.10	116.33	119.90
25	BB	1203	U	C2-N3-C4	-5.10	123.94	127.00
25	BB	1743	G	C4'-C3'-C2'	-5.10	97.50	102.60
25	BB	1917	U	C2-N3-C4	-5.10	123.94	127.00
25	BB	2165	C	O4'-C1'-C2'	5.10	112.19	107.60
25	BB	2447	G	N3-C4-C5	-5.10	126.05	128.60
25	BB	2748	A	C6-C5-N7	5.10	135.87	132.30
38	BO	58	VAL	C-N-CA	5.10	134.45	121.70
2	AM	17	U	C4-C5-C6	-5.10	116.64	119.70
3	A1	453	G	C6-N1-C2	-5.10	122.04	125.10
3	A1	460	A	N7-C8-N9	5.10	116.35	113.80
3	A1	491	G	N9-C1'-C2'	5.10	120.63	114.00
25	BB	935	C	C2-N3-C4	-5.10	117.35	119.90
25	BB	965	C	N1-C2-O2	5.10	121.96	118.90
25	BB	1092	C	N3-C2-O2	-5.10	118.33	121.90
25	BB	1278	C	C2-N3-C4	-5.10	117.35	119.90
25	BB	1809	A	N9-C4-C5	5.10	107.84	105.80
25	BB	2205	A	N3-C4-C5	5.10	130.37	126.80
25	BB	2513	A	O4'-C1'-C2'	-5.10	100.70	105.80
25	BB	2566	A	C3'-C2'-C1'	-5.10	97.42	101.50
1	AA	26	G	C4-C5-N7	-5.10	108.76	110.80
3	A1	381	C	C4'-C3'-C2'	-5.10	97.50	102.60
3	A1	1261	A	C6-N1-C2	-5.10	115.54	118.60
3	A1	1472	U	C2'-C3'-O3'	5.10	121.85	113.70
12	AK	42	ARG	CD-NE-CZ	5.10	130.73	123.60
25	BB	328	U	N1-C2-N3	5.10	117.96	114.90
25	BB	1657	U	C5-C4-O4	-5.10	122.84	125.90
25	BB	1690	A	C5-C6-N6	5.10	127.78	123.70
25	BB	2245	U	C4-C5-C6	5.10	122.76	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	26	A	C4'-C3'-C2'	5.09	107.69	102.60
3	A1	351	G	C5'-C4'-O4'	5.09	115.21	109.10
3	A1	824	G	C5-N7-C8	-5.09	101.75	104.30
3	A1	899	C	O4'-C1'-C2'	-5.09	100.70	105.80
3	A1	1017	U	N3-C2-O2	-5.09	118.63	122.20
3	A1	1111	A	C6-C5-N7	5.09	135.87	132.30
3	A1	1201	A	N3-C4-C5	-5.09	123.23	126.80
3	A1	1371	G	C5-C6-O6	5.09	131.66	128.60
3	A1	1533	C	C4-C5-C6	-5.09	114.85	117.40
25	BB	207	A	O3'-P-O5'	5.09	113.68	104.00
25	BB	745	G	N3-C4-C5	-5.09	126.05	128.60
25	BB	746	U	C6-N1-C2	-5.09	117.94	121.00
25	BB	875	G	N7-C8-N9	5.09	115.65	113.10
25	BB	1504	A	C5-C6-N6	5.09	127.78	123.70
25	BB	2027	G	C5-C6-N1	5.09	114.05	111.50
25	BB	2229	U	N1-C2-N3	5.09	117.96	114.90
25	BB	2272	U	O4'-C1'-N1	5.09	112.28	108.20
25	BB	2447	G	N9-C4-C5	5.09	107.44	105.40
25	BB	2641	G	C6-N1-C2	-5.09	122.04	125.10
25	BB	2776	A	C6-C5-N7	5.09	135.87	132.30
3	A1	54	C	C5-C6-N1	-5.09	118.45	121.00
25	BB	1666	G	N1-C6-O6	-5.09	116.84	119.90
50	B1	22	ASP	CB-CG-OD1	-5.09	113.72	118.30
1	AP	72	C	C4'-C3'-C2'	-5.09	97.51	102.60
1	AE	9	A	C4'-C3'-C2'	-5.09	97.51	102.60
1	AE	48	C	C2-N3-C4	-5.09	117.35	119.90
3	A1	91	U	N3-C2-O2	-5.09	118.64	122.20
3	A1	98	A	O4'-C4'-C3'	5.09	110.17	106.10
3	A1	448	A	O4'-C1'-N9	5.09	112.27	108.20
3	A1	484	G	C5'-C4'-O4'	5.09	115.21	109.10
3	A1	566	G	C6-N1-C2	-5.09	122.05	125.10
3	A1	745	G	P-O3'-C3'	5.09	125.81	119.70
3	A1	1180	A	C5'-C4'-C3'	-5.09	107.86	116.00
3	A1	1293	C	O4'-C4'-C3'	5.09	110.17	106.10
25	BB	2	G	C6-N1-C2	-5.09	122.05	125.10
25	BB	150	U	C3'-C2'-C1'	5.09	105.57	101.50
25	BB	359	G	O4'-C4'-C3'	5.09	110.17	106.10
25	BB	629	G	C6-C5-N7	5.09	133.46	130.40
25	BB	958	U	C5-C4-O4	5.09	128.96	125.90
25	BB	1182	G	N1-C2-N2	-5.09	111.62	116.20
25	BB	1205	A	C5-N7-C8	-5.09	101.36	103.90
25	BB	1269	A	C6-C5-N7	5.09	135.87	132.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1419	A	O4'-C4'-C3'	5.09	110.17	106.10
25	BB	1733	G	C4'-C3'-C2'	-5.09	97.51	102.60
25	BB	1781	U	N1-C2-O2	5.09	126.36	122.80
25	BB	1863	G	C8-N9-C4	-5.09	104.36	106.40
25	BB	1935	G	O3'-P-O5'	-5.09	94.33	104.00
25	BB	2052	A	N9-C1'-C2'	5.09	120.62	114.00
25	BB	2308	G	C2-N3-C4	5.09	114.45	111.90
25	BB	2308	G	C5-C6-N1	5.09	114.05	111.50
25	BB	2375	G	C5-C6-O6	5.09	131.65	128.60
25	BB	2634	A	C5-C6-N6	5.09	127.77	123.70
25	BB	2713	U	N3-C4-O4	-5.09	115.84	119.40
41	BR	10	ARG	NE-CZ-NH1	5.09	122.84	120.30
3	A1	681	A	C5-C6-N6	5.09	127.77	123.70
3	A1	816	A	C6-N1-C2	5.09	121.65	118.60
3	A1	1102	A	C5'-C4'-O4'	5.09	115.21	109.10
24	BA	74	U	C1'-O4'-C4'	-5.09	105.83	109.90
25	BB	273	G	N9-C1'-C2'	-5.09	106.40	112.00
25	BB	566	U	C6-N1-C2	-5.09	117.95	121.00
25	BB	1262	A	C2-N3-C4	5.09	113.14	110.60
25	BB	1363	C	C3'-C2'-C1'	5.09	105.57	101.50
25	BB	1388	G	C6-C5-N7	5.09	133.45	130.40
25	BB	1591	A	C5'-C4'-O4'	5.09	115.21	109.10
25	BB	1593	A	C8-N9-C4	5.09	107.84	105.80
25	BB	1992	G	N3-C4-N9	5.09	129.05	126.00
25	BB	2442	C	C2-N1-C1'	5.09	124.40	118.80
25	BB	2690	U	P-O3'-C3'	5.09	125.81	119.70
28	BE	110	VAL	CA-CB-CG1	5.09	118.53	110.90
1	AA	34	G	C5-C6-O6	5.09	131.65	128.60
3	A1	117	G	C5-C6-N1	5.09	114.04	111.50
3	A1	367	U	C4-C5-C6	5.09	122.75	119.70
3	A1	1198	G	N3-C4-C5	-5.09	126.06	128.60
24	BA	94	A	C4-C5-C6	-5.09	114.46	117.00
25	BB	83	A	C5'-C4'-O4'	5.09	115.20	109.10
25	BB	184	C	C5'-C4'-C3'	-5.09	107.86	116.00
25	BB	888	C	C5'-C4'-C3'	-5.09	107.86	116.00
25	BB	1030	C	P-O3'-C3'	5.09	125.81	119.70
25	BB	1708	C	N1-C2-N3	5.09	122.76	119.20
25	BB	1879	C	N3-C4-N4	-5.09	114.44	118.00
25	BB	2241	A	C6-C5-N7	5.09	135.86	132.30
25	BB	2513	A	C5-C6-N1	5.09	120.24	117.70
1	AA	19	G	C4-C5-C6	-5.09	115.75	118.80
3	A1	124	C	C4'-C3'-C2'	5.09	107.69	102.60

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	173	U	N3-C2-O2	-5.09	118.64	122.20
3	A1	177	G	C4'-C3'-C2'	-5.09	97.51	102.60
3	A1	918	A	C6-C5-N7	5.09	135.86	132.30
3	A1	919	A	C3'-C2'-C1'	5.09	105.57	101.50
3	A1	1257	A	C3'-C2'-C1'	5.09	105.57	101.50
3	A1	1316	G	C5-C6-O6	5.09	131.65	128.60
24	BA	28	C	C3'-C2'-C1'	5.09	105.57	101.50
25	BB	139	U	N1-C2-O2	5.09	126.36	122.80
25	BB	271	G	C4'-C3'-C2'	-5.09	97.51	102.60
25	BB	476	G	P-O3'-C3'	5.09	125.80	119.70
25	BB	501	A	C6-N1-C2	-5.09	115.55	118.60
25	BB	664	G	C4-C5-C6	-5.09	115.75	118.80
25	BB	673	C	O4'-C1'-N1	5.09	112.27	108.20
25	BB	718	A	C5-N7-C8	-5.09	101.36	103.90
25	BB	917	A	C6-N1-C2	-5.09	115.55	118.60
25	BB	1061	U	C1'-O4'-C4'	-5.09	105.83	109.90
25	BB	1074	G	C5-C6-O6	5.09	131.65	128.60
25	BB	1090	A	O4'-C1'-N9	5.09	112.27	108.20
25	BB	1215	G	C5'-C4'-C3'	-5.09	107.86	116.00
25	BB	1277	G	C1'-O4'-C4'	-5.09	105.83	109.90
25	BB	1545	A	C5-N7-C8	-5.09	101.36	103.90
25	BB	1831	G	C5-N7-C8	-5.09	101.76	104.30
25	BB	1861	G	C5'-C4'-O4'	5.09	115.20	109.10
25	BB	2267	A	O4'-C1'-N9	-5.09	104.13	108.20
25	BB	2280	G	C6-C5-N7	5.09	133.45	130.40
25	BB	2616	C	N3-C4-N4	-5.09	114.44	118.00
25	BB	2881	U	P-O3'-C3'	5.09	125.80	119.70
37	BN	174	ARG	NE-CZ-NH2	-5.09	117.76	120.30
1	AE	59	U	C5-C6-N1	-5.08	120.16	122.70
24	BA	69	G	C5-C6-O6	5.08	131.65	128.60
25	BB	938	G	N9-C4-C5	5.08	107.43	105.40
25	BB	1277	G	N3-C4-C5	-5.08	126.06	128.60
25	BB	2196	C	C5'-C4'-C3'	-5.08	107.86	116.00
25	BB	2378	A	C5-N7-C8	5.08	106.44	103.90
25	BB	2610	C	C3'-C2'-C1'	5.08	105.57	101.50
3	A1	87	C	C1'-O4'-C4'	-5.08	105.83	109.90
3	A1	704	A	P-O3'-C3'	5.08	125.80	119.70
3	A1	714	G	C6-N1-C2	-5.08	122.05	125.10
3	A1	1069	C	N3-C4-C5	5.08	123.93	121.90
3	A1	1238	A	O4'-C1'-C2'	-5.08	100.72	105.80
3	A1	1332	A	C1'-O4'-C4'	-5.08	105.83	109.90
3	A1	1449	C	C5'-C4'-O4'	5.08	115.20	109.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	764	A	C1'-O4'-C4'	-5.08	105.83	109.90
25	BB	971	G	O3'-P-O5'	-5.08	94.34	104.00
25	BB	1446	C	N3-C4-N4	-5.08	114.44	118.00
25	BB	1535	A	N7-C8-N9	5.08	116.34	113.80
25	BB	1550	C	O4'-C1'-N1	5.08	112.27	108.20
25	BB	1617	C	O4'-C1'-N1	5.08	112.27	108.20
1	AP	35	A	C4'-C3'-C2'	-5.08	97.52	102.60
3	A1	64	G	C5'-C4'-C3'	-5.08	107.87	116.00
3	A1	160	A	OP1-P-OP2	-5.08	111.98	119.60
3	A1	201	G	C2-N3-C4	5.08	114.44	111.90
3	A1	460	A	C6-C5-N7	5.08	135.86	132.30
3	A1	546	A	C5-C6-N1	5.08	120.24	117.70
3	A1	706	A	N1-C2-N3	-5.08	126.76	129.30
3	A1	1249	C	C4'-C3'-C2'	5.08	107.68	102.60
3	A1	1477	U	C5'-C4'-C3'	-5.08	107.87	116.00
15	AO	180	ASP	CB-CG-OD1	-5.08	113.73	118.30
25	BB	159	G	C8-N9-C4	-5.08	104.37	106.40
25	BB	175	G	C6-C5-N7	5.08	133.45	130.40
25	BB	205	G	P-O3'-C3'	5.08	125.80	119.70
25	BB	215	G	C6-N1-C2	-5.08	122.05	125.10
25	BB	622	G	N7-C8-N9	5.08	115.64	113.10
25	BB	1316	U	N3-C2-O2	-5.08	118.64	122.20
25	BB	1551	A	C6-C5-N7	5.08	135.86	132.30
25	BB	1861	G	N1-C2-N3	5.08	126.95	123.90
25	BB	2144	G	O4'-C4'-C3'	5.08	110.17	106.10
25	BB	2386	A	C1'-O4'-C4'	-5.08	105.83	109.90
25	BB	2467	C	O4'-C1'-N1	5.08	112.27	108.20
25	BB	2621	G	C5-C6-O6	5.08	131.65	128.60
25	BB	2660	A	C3'-C2'-C1'	5.08	105.57	101.50
32	BI	93	LYS	C-N-CA	5.08	134.41	121.70
1	AP	12	U	C1'-O4'-C4'	-5.08	105.84	109.90
1	AP	36	A	C5'-C4'-C3'	5.08	124.13	116.00
3	A1	110	C	N1-C2-N3	5.08	122.76	119.20
3	A1	722	G	C4'-C3'-C2'	-5.08	97.52	102.60
3	A1	1083	U	N1-C2-N3	5.08	117.95	114.90
3	A1	1219	A	C6-N1-C2	-5.08	115.55	118.60
3	A1	1234	C	O4'-C1'-C2'	5.08	112.17	107.60
3	A1	1385	G	P-O3'-C3'	5.08	125.80	119.70
3	A1	1400	C	O4'-C1'-C2'	-5.08	100.72	105.80
3	A1	1491	G	O5'-P-OP1	5.08	116.80	110.70
15	AO	60	ALA	N-CA-CB	-5.08	102.99	110.10
25	BB	252	G	C6-C5-N7	5.08	133.45	130.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	404	A	C5-C6-N1	5.08	120.24	117.70
25	BB	1018	U	P-O3'-C3'	5.08	125.80	119.70
25	BB	1080	A	N7-C8-N9	5.08	116.34	113.80
25	BB	1286	A	O4'-C1'-N9	5.08	112.26	108.20
25	BB	1613	G	C4-C5-N7	-5.08	108.77	110.80
25	BB	1736	U	C5'-C4'-O4'	5.08	115.20	109.10
25	BB	2311	A	O4'-C1'-C2'	5.08	112.17	107.60
47	BX	4	ARG	NH1-CZ-NH2	-5.08	113.81	119.40
49	BZ	123	ILE	CA-CB-CG1	5.08	120.65	111.00
1	AP	68	U	C5-C4-O4	-5.08	122.85	125.90
3	A1	277	C	C5'-C4'-O4'	5.08	115.19	109.10
3	A1	298	A	C6-C5-N7	5.08	135.85	132.30
3	A1	911	U	N1-C2-N3	5.08	117.95	114.90
3	A1	1176	A	O4'-C1'-N9	5.08	112.26	108.20
3	A1	1410	A	N9-C1'-C2'	-5.08	106.41	112.00
3	A1	1517	G	C4-C5-N7	-5.08	108.77	110.80
25	BB	75	G	C2'-C3'-O3'	5.08	121.83	113.70
25	BB	393	C	C6-N1-C2	-5.08	118.27	120.30
25	BB	1089	A	C6-C5-N7	5.08	135.85	132.30
25	BB	1301	A	C6-C5-N7	5.08	135.85	132.30
25	BB	1876	A	C3'-C2'-C1'	-5.08	97.44	101.50
25	BB	1923	U	C5-C6-N1	-5.08	120.16	122.70
25	BB	1984	G	N1-C2-N2	-5.08	111.63	116.20
25	BB	2057	G	C6-C5-N7	5.08	133.45	130.40
25	BB	2309	A	C1'-O4'-C4'	-5.08	105.84	109.90
25	BB	2652	C	N1-C2-O2	5.08	121.95	118.90
25	BB	2708	G	C5'-C4'-O4'	5.08	115.19	109.10
25	BB	2753	A	O5'-P-OP2	5.08	116.80	110.70
25	BB	2859	G	N1-C2-N3	5.08	126.95	123.90
49	BZ	122	ARG	NH1-CZ-NH2	-5.08	113.81	119.40
1	AE	18	G	C6-C5-N7	5.08	133.45	130.40
3	A1	137	U	C4-C5-C6	5.08	122.75	119.70
3	A1	594	U	C5-C6-N1	-5.08	120.16	122.70
3	A1	1412	C	N1-C2-O2	5.08	121.95	118.90
25	BB	889	C	C6-N1-C2	-5.08	118.27	120.30
25	BB	1870	C	O5'-C5'-C4'	5.08	121.35	111.70
1	AE	2	C	C5'-C4'-O4'	5.08	115.19	109.10
3	A1	163	C	C4-C5-C6	5.08	119.94	117.40
3	A1	187	G	C4'-C3'-C2'	-5.08	97.53	102.60
3	A1	245	U	O4'-C1'-C2'	5.08	112.17	107.60
3	A1	1156	G	N7-C8-N9	5.08	115.64	113.10
3	A1	1306	A	C4-C5-C6	-5.08	114.46	117.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1488	G	C5-C6-N1	5.08	114.04	111.50
25	BB	114	U	C4-C5-C6	5.08	122.75	119.70
25	BB	210	C	C6-N1-C2	-5.08	118.27	120.30
25	BB	326	G	N1-C2-N3	5.08	126.95	123.90
25	BB	541	A	C6-N1-C2	-5.08	115.56	118.60
25	BB	983	A	C5'-C4'-C3'	-5.08	107.88	116.00
25	BB	1434	A	C6-C5-N7	5.08	135.85	132.30
25	BB	1498	C	C5-C4-N4	-5.08	116.65	120.20
25	BB	1522	A	P-O3'-C3'	5.08	125.79	119.70
25	BB	1539	U	O5'-P-OP1	-5.08	101.13	105.70
25	BB	1601	G	C5'-C4'-O4'	5.08	115.19	109.10
25	BB	1669	A	C5-N7-C8	-5.08	101.36	103.90
25	BB	1735	A	C6-N1-C2	-5.08	115.55	118.60
25	BB	1980	G	N9-C4-C5	5.08	107.43	105.40
25	BB	2125	G	N3-C4-N9	5.08	129.04	126.00
25	BB	2654	A	C2-N3-C4	5.08	113.14	110.60
37	BN	206	LYS	O-C-N	-5.08	114.58	122.70
3	A1	24	U	N3-C2-O2	-5.07	118.65	122.20
3	A1	173	U	N1-C2-O2	5.07	126.35	122.80
3	A1	187	G	C4-C5-N7	-5.07	108.77	110.80
3	A1	203	G	N1-C6-O6	-5.07	116.86	119.90
3	A1	456	A	C3'-C2'-C1'	5.07	105.56	101.50
3	A1	600	A	C6-C5-N7	5.07	135.85	132.30
3	A1	603	U	C4'-C3'-C2'	-5.07	97.53	102.60
3	A1	710	G	N9-C1'-C2'	-5.07	106.42	112.00
3	A1	737	C	N1-C2-N3	5.07	122.75	119.20
3	A1	859	G	C8-N9-C4	-5.07	104.37	106.40
3	A1	1205	U	C4-C5-C6	5.07	122.75	119.70
3	A1	1224	U	O3'-P-O5'	-5.07	94.36	104.00
3	A1	1351	U	P-O3'-C3'	5.07	125.79	119.70
3	A1	1364	U	N3-C2-O2	-5.07	118.65	122.20
3	A1	1421	G	C2-N3-C4	5.07	114.44	111.90
3	A1	1509	C	C5-C4-N4	5.07	123.75	120.20
24	BA	99	A	C2'-C3'-O3'	5.07	121.82	113.70
25	BB	766	U	P-O3'-C3'	5.07	125.79	119.70
25	BB	1208	C	C5'-C4'-O4'	5.07	115.19	109.10
25	BB	1402	U	O4'-C1'-N1	-5.07	104.14	108.20
25	BB	1665	A	N9-C4-C5	5.07	107.83	105.80
25	BB	1882	U	O4'-C1'-N1	5.07	112.26	108.20
25	BB	1897	G	C5'-C4'-O4'	5.07	115.19	109.10
25	BB	1968	G	N3-C4-N9	5.07	129.04	126.00
25	BB	2080	A	C3'-C2'-C1'	-5.07	97.44	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2596	U	O4'-C1'-N1	5.07	112.26	108.20
25	BB	2883	A	C8-N9-C4	-5.07	103.77	105.80
3	A1	771	G	C4-C5-C6	-5.07	115.76	118.80
3	A1	1443	C	N3-C4-C5	5.07	123.93	121.90
25	BB	39	G	C5-C6-N1	5.07	114.04	111.50
25	BB	1227	G	P-O5'-C5'	5.07	129.02	120.90
25	BB	1402	U	C4'-C3'-C2'	-5.07	97.53	102.60
25	BB	2230	G	O4'-C4'-C3'	5.07	110.16	106.10
25	BB	2300	C	N3-C2-O2	-5.07	118.35	121.90
25	BB	2625	G	N1-C6-O6	-5.07	116.86	119.90
1	AE	5	A	N9-C4-C5	5.07	107.83	105.80
1	AE	20	G	O4'-C4'-C3'	5.07	110.16	106.10
3	A1	130	A	C1'-O4'-C4'	-5.07	105.84	109.90
3	A1	247	G	C8-N9-C1'	5.07	133.59	127.00
3	A1	403	C	C3'-C2'-C1'	5.07	105.56	101.50
3	A1	868	C	C5-C4-N4	-5.07	116.65	120.20
3	A1	901	A	C5'-C4'-O4'	5.07	115.19	109.10
25	BB	217	A	C5'-C4'-C3'	-5.07	107.89	116.00
25	BB	669	G	C8-N9-C4	-5.07	104.37	106.40
25	BB	760	G	C4-C5-N7	-5.07	108.77	110.80
25	BB	979	A	N1-C2-N3	-5.07	126.77	129.30
25	BB	998	C	C3'-C2'-C1'	5.07	105.56	101.50
25	BB	1079	C	O4'-C1'-N1	-5.07	104.14	108.20
25	BB	1209	U	C1'-O4'-C4'	-5.07	105.84	109.90
25	BB	1600	C	C1'-O4'-C4'	-5.07	105.84	109.90
25	BB	1731	G	N3-C4-C5	-5.07	126.06	128.60
25	BB	1899	A	N9-C4-C5	5.07	107.83	105.80
25	BB	2148	G	N3-C4-C5	-5.07	126.06	128.60
25	BB	2606	C	C4'-C3'-C2'	-5.07	97.53	102.60
25	BB	2739	U	N3-C2-O2	-5.07	118.65	122.20
3	A1	639	G	C5'-C4'-C3'	-5.07	107.89	116.00
3	A1	702	A	O4'-C4'-C3'	5.07	110.16	106.10
3	A1	1218	C	C5-C4-N4	5.07	123.75	120.20
3	A1	1518	A	C5'-C4'-C3'	-5.07	107.89	116.00
25	BB	3	U	O5'-C5'-C4'	-5.07	102.07	111.70
25	BB	328	U	O4'-C1'-N1	5.07	112.26	108.20
25	BB	341	C	C2'-C3'-O3'	5.07	121.81	113.70
25	BB	907	G	N3-C4-N9	5.07	129.04	126.00
25	BB	990	A	C5-N7-C8	-5.07	101.36	103.90
25	BB	2188	U	C6-N1-C2	-5.07	117.96	121.00
25	BB	2285	C	C3'-C2'-C1'	-5.07	97.44	101.50
25	BB	2523	G	N3-C4-N9	5.07	129.04	126.00

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	117	G	C4-C5-N7	-5.07	108.77	110.80
3	A1	160	A	N7-C8-N9	5.07	116.33	113.80
3	A1	456	A	C6-C5-N7	5.07	135.85	132.30
3	A1	508	U	N1-C2-N3	5.07	117.94	114.90
3	A1	590	U	OP2-P-O3'	5.07	116.35	105.20
3	A1	609	A	C4'-C3'-C2'	-5.07	97.53	102.60
3	A1	644	U	O4'-C1'-N1	5.07	112.25	108.20
3	A1	728	A	C6-C5-N7	5.07	135.85	132.30
3	A1	838	G	C2-N3-C4	5.07	114.43	111.90
3	A1	887	G	C5'-C4'-O4'	5.07	115.18	109.10
3	A1	1262	C	P-O3'-C3'	5.07	125.78	119.70
3	A1	1388	C	C1'-O4'-C4'	-5.07	105.85	109.90
3	A1	1475	G	N1-C6-O6	-5.07	116.86	119.90
25	BB	78	U	C4'-C3'-C2'	-5.07	97.53	102.60
25	BB	225	C	C5-C6-N1	-5.07	118.47	121.00
25	BB	233	A	O4'-C1'-N9	5.07	112.25	108.20
25	BB	907	G	C5-C6-N1	5.07	114.03	111.50
25	BB	944	C	C5-C6-N1	-5.07	118.47	121.00
25	BB	1135	C	C6-N1-C2	-5.07	118.27	120.30
25	BB	1283	G	C4-C5-C6	-5.07	115.76	118.80
25	BB	1621	U	N1-C2-O2	5.07	126.35	122.80
25	BB	2094	A	C6-C5-N7	5.07	135.85	132.30
25	BB	2230	G	C4'-C3'-C2'	-5.07	97.53	102.60
25	BB	2332	C	N1-C2-N3	5.07	122.75	119.20
25	BB	2399	G	N3-C4-C5	-5.07	126.07	128.60
25	BB	2867	G	O4'-C1'-C2'	-5.07	100.73	105.80
1	AP	15	G	O4'-C1'-N9	5.07	112.25	108.20
3	A1	456	A	C6-N1-C2	-5.07	115.56	118.60
3	A1	517	G	C6-C5-N7	-5.07	127.36	130.40
3	A1	567	G	N7-C8-N9	5.07	115.63	113.10
3	A1	895	G	C5'-C4'-C3'	-5.07	107.90	116.00
3	A1	1499	A	C5-C6-N6	5.07	127.75	123.70
24	BA	10	G	N7-C8-N9	5.07	115.63	113.10
25	BB	72	U	N1-C2-N3	5.07	117.94	114.90
25	BB	86	G	C4'-C3'-C2'	-5.07	97.53	102.60
25	BB	117	G	N1-C6-O6	-5.07	116.86	119.90
25	BB	237	C	C5-C4-N4	5.07	123.75	120.20
25	BB	277	G	C4-C5-C6	-5.07	115.76	118.80
25	BB	361	G	N3-C4-N9	5.07	129.04	126.00
25	BB	402	A	C2-N3-C4	5.07	113.13	110.60
25	BB	478	A	C5'-C4'-C3'	-5.07	107.89	116.00
25	BB	1076	C	N1-C2-O2	5.07	121.94	118.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1245	G	N9-C4-C5	5.07	107.43	105.40
25	BB	1429	G	C5-C6-O6	5.07	131.64	128.60
25	BB	1491	G	C5'-C4'-O4'	5.07	115.18	109.10
25	BB	1507	C	C4'-C3'-O3'	5.07	123.13	113.00
25	BB	1874	C	O3'-P-O5'	5.07	113.62	104.00
25	BB	2075	U	P-O3'-C3'	5.07	125.78	119.70
25	BB	2104	C	N1-C2-O2	5.07	121.94	118.90
25	BB	2363	G	C5-C6-N1	5.07	114.03	111.50
25	BB	2455	G	N3-C4-C5	-5.07	126.07	128.60
25	BB	2489	U	C5-C6-N1	-5.07	120.17	122.70
25	BB	2839	G	N3-C2-N2	-5.07	116.35	119.90
25	BB	2895	G	C4'-C3'-C2'	-5.07	97.53	102.60
3	A1	148	G	N1-C2-N3	5.06	126.94	123.90
3	A1	863	U	C5-C6-N1	-5.06	120.17	122.70
3	A1	1037	C	C5'-C4'-C3'	-5.06	107.90	116.00
25	BB	496	G	N3-C2-N2	-5.06	116.36	119.90
25	BB	1270	C	C5-C4-N4	-5.06	116.66	120.20
25	BB	1311	G	C5'-C4'-C3'	-5.06	107.90	116.00
25	BB	1788	C	N3-C4-C5	5.06	123.92	121.90
25	BB	1903	G	N3-C4-N9	5.06	129.04	126.00
25	BB	1916	A	C5'-C4'-C3'	-5.06	107.90	116.00
25	BB	2334	U	C4'-C3'-C2'	-5.06	97.54	102.60
25	BB	2379	G	O4'-C1'-N9	5.06	112.25	108.20
25	BB	2722	G	C2-N3-C4	5.06	114.43	111.90
25	BB	2735	G	C4-C5-N7	5.06	112.83	110.80
1	AP	65	G	N3-C4-C5	-5.06	126.07	128.60
1	AE	51	G	C4-C5-N7	-5.06	108.78	110.80
1	AE	71	G	C4'-C3'-C2'	-5.06	97.54	102.60
3	A1	75	G	C5-C6-O6	5.06	131.64	128.60
3	A1	282	A	C6-C5-N7	5.06	135.84	132.30
3	A1	472	U	C5'-C4'-C3'	-5.06	107.90	116.00
3	A1	481	G	N3-C2-N2	-5.06	116.36	119.90
3	A1	741	G	N3-C4-N9	5.06	129.04	126.00
3	A1	924	C	C1'-O4'-C4'	-5.06	105.85	109.90
3	A1	1034	G	N3-C2-N2	-5.06	116.36	119.90
3	A1	1065	U	N1-C1'-C2'	5.06	120.58	114.00
3	A1	1372	U	N1-C2-O2	5.06	126.34	122.80
3	A1	1493	A	C4-C5-C6	-5.06	114.47	117.00
17	AR	2	ARG	NE-CZ-NH2	5.06	122.83	120.30
24	BA	57	A	C4-C5-C6	-5.06	114.47	117.00
25	BB	562	U	N1-C2-O2	5.06	126.34	122.80
25	BB	1058	U	N1-C2-N3	5.06	117.94	114.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1267	U	N3-C4-O4	5.06	122.94	119.40
25	BB	1299	G	C8-N9-C1'	5.06	133.58	127.00
25	BB	1319	C	O4'-C4'-C3'	-5.06	98.94	104.00
25	BB	1402	U	C6-N1-C2	-5.06	117.96	121.00
25	BB	1681	G	C5-N7-C8	-5.06	101.77	104.30
25	BB	1944	U	O4'-C4'-C3'	5.06	110.15	106.10
25	BB	2420	C	C1'-O4'-C4'	-5.06	105.85	109.90
25	BB	2746	U	C4'-C3'-C2'	-5.06	97.54	102.60
41	BR	29	ARG	NE-CZ-NH2	-5.06	117.77	120.30
52	B3	170	THR	CA-CB-CG2	5.06	119.49	112.40
1	AE	27	C	OP1-P-OP2	-5.06	112.01	119.60
3	A1	771	G	C5-N7-C8	-5.06	101.77	104.30
3	A1	1016	A	C2-N3-C4	5.06	113.13	110.60
3	A1	1454	G	C4'-C3'-C2'	5.06	107.66	102.60
25	BB	924	G	O4'-C4'-C3'	5.06	110.15	106.10
3	A1	70	U	C5'-C4'-O4'	5.06	115.17	109.10
3	A1	814	A	C4-C5-C6	-5.06	114.47	117.00
3	A1	1066	C	O4'-C1'-C2'	-5.06	100.74	105.80
3	A1	1214	C	C3'-C2'-C1'	-5.06	97.45	101.50
3	A1	1455	G	N3-C2-N2	-5.06	116.36	119.90
3	A1	1464	U	N3-C4-O4	5.06	122.94	119.40
25	BB	463	G	C5-N7-C8	-5.06	101.77	104.30
25	BB	529	A	C4-C5-C6	-5.06	114.47	117.00
25	BB	655	A	N7-C8-N9	5.06	116.33	113.80
25	BB	979	A	C4'-C3'-C2'	-5.06	97.54	102.60
25	BB	1160	G	N7-C8-N9	5.06	115.63	113.10
25	BB	2754	U	P-O3'-C3'	5.06	125.77	119.70
3	A1	157	U	N1-C2-N3	5.06	117.94	114.90
3	A1	597	G	N9-C4-C5	5.06	107.42	105.40
3	A1	791	G	N9-C4-C5	-5.06	103.38	105.40
3	A1	883	C	N3-C2-O2	-5.06	118.36	121.90
3	A1	939	G	C6-C5-N7	5.06	133.44	130.40
3	A1	1041	G	C6-C5-N7	5.06	133.44	130.40
3	A1	1143	G	N3-C4-C5	-5.06	126.07	128.60
9	AH	18	ALA	CB-CA-C	5.06	117.69	110.10
25	BB	313	G	C4-C5-N7	-5.06	108.78	110.80
25	BB	377	G	C5'-C4'-O4'	-5.06	103.03	109.10
25	BB	547	A	C2'-C3'-O3'	5.06	121.79	113.70
25	BB	748	G	C4-C5-N7	-5.06	108.78	110.80
25	BB	866	A	N7-C8-N9	5.06	116.33	113.80
25	BB	958	U	N1-C2-N3	5.06	117.94	114.90
25	BB	961	C	N1-C2-N3	5.06	122.74	119.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	984	A	C6-C5-N7	5.06	135.84	132.30
25	BB	1061	U	C4-C5-C6	5.06	122.73	119.70
25	BB	1223	G	C2-N3-C4	5.06	114.43	111.90
25	BB	1254	A	C2-N3-C4	5.06	113.13	110.60
25	BB	2093	G	N3-C4-C5	-5.06	126.07	128.60
25	BB	2123	G	C5-C6-N1	5.06	114.03	111.50
25	BB	2713	U	N1-C2-N3	5.06	117.94	114.90
25	BB	2852	G	C5-C6-N1	5.06	114.03	111.50
32	BI	27	VAL	CA-CB-CG2	5.06	118.48	110.90
50	B1	14	VAL	CG1-CB-CG2	-5.06	102.81	110.90
3	A1	8	A	N1-C2-N3	-5.06	126.77	129.30
3	A1	79	G	N9-C4-C5	5.06	107.42	105.40
3	A1	174	A	N3-C4-N9	-5.06	123.36	127.40
3	A1	493	A	C6-C5-N7	5.06	135.84	132.30
3	A1	1061	G	N3-C4-N9	5.06	129.03	126.00
3	A1	1201	A	C5'-C4'-O4'	-5.06	103.03	109.10
3	A1	1249	C	N1-C2-O2	5.06	121.93	118.90
3	A1	1280	A	C6-C5-N7	5.06	135.84	132.30
3	A1	1321	U	C2-N1-C1'	5.06	123.77	117.70
3	A1	1419	G	C3'-C2'-C1'	5.06	105.55	101.50
3	A1	1419	G	C4-C5-N7	5.06	112.82	110.80
25	BB	552	U	C4'-C3'-O3'	5.06	123.11	113.00
25	BB	1374	G	N7-C8-N9	5.06	115.63	113.10
25	BB	2166	U	N1-C2-O2	5.06	126.34	122.80
25	BB	2591	C	C1'-O4'-C4'	5.06	113.94	109.90
25	BB	2670	A	O3'-P-O5'	5.06	113.61	104.00
25	BB	2846	G	N1-C2-N3	5.06	126.93	123.90
1	AA	56	C	OP1-P-O3'	5.05	116.32	105.20
1	AA	59	U	C3'-C2'-C1'	5.05	105.54	101.50
3	A1	702	A	N9-C4-C5	-5.05	103.78	105.80
3	A1	1151	A	C6-C5-N7	5.05	135.84	132.30
3	A1	1315	U	C4'-C3'-C2'	-5.05	97.55	102.60
3	A1	1401	G	OP1-P-O3'	5.05	116.32	105.20
10	AI	35	ARG	CD-NE-CZ	5.05	130.68	123.60
25	BB	178	G	C6-C5-N7	5.05	133.43	130.40
25	BB	467	G	C3'-C2'-C1'	5.05	105.54	101.50
25	BB	847	U	N1-C1'-C2'	-5.05	106.44	112.00
25	BB	882	G	C5'-C4'-O4'	5.05	115.17	109.10
25	BB	1132	U	O4'-C1'-N1	5.05	112.24	108.20
25	BB	1243	C	C1'-O4'-C4'	-5.05	105.86	109.90
25	BB	1362	C	O5'-P-OP1	5.05	116.77	110.70
25	BB	1448	G	C6-N1-C2	-5.05	122.07	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1620	G	C3'-C2'-C1'	5.05	105.54	101.50
25	BB	1768	C	P-O3'-C3'	5.05	125.77	119.70
25	BB	1821	A	N3-C4-C5	5.05	130.34	126.80
25	BB	1958	C	C2-N1-C1'	5.05	124.36	118.80
25	BB	2496	C	C5-C6-N1	-5.05	118.47	121.00
25	BB	2647	U	C5-C6-N1	-5.05	120.17	122.70
25	BB	2834	G	C8-N9-C4	-5.05	104.38	106.40
51	B2	101	ARG	NH1-CZ-NH2	-5.05	113.84	119.40
1	AA	21	A	O3'-P-O5'	5.05	113.60	104.00
3	A1	361	G	P-O5'-C5'	-5.05	112.81	120.90
25	BB	67	U	O4'-C1'-N1	5.05	112.24	108.20
25	BB	899	A	O4'-C4'-C3'	5.05	110.14	106.10
25	BB	931	U	C4-C5-C6	5.05	122.73	119.70
25	BB	1580	A	C4'-C3'-C2'	-5.05	97.55	102.60
25	BB	2663	G	N1-C6-O6	-5.05	116.87	119.90
25	BB	2732	G	P-O3'-C3'	5.05	125.76	119.70
25	BB	2764	A	C8-N9-C4	-5.05	103.78	105.80
1	AE	51	G	C5-C6-O6	5.05	131.63	128.60
3	A1	175	C	C5-C4-N4	5.05	123.74	120.20
3	A1	178	C	N3-C4-C5	5.05	123.92	121.90
3	A1	218	U	N1-C2-O2	5.05	126.34	122.80
3	A1	372	C	N3-C2-O2	-5.05	118.36	121.90
3	A1	989	U	C5-C6-N1	-5.05	120.17	122.70
3	A1	1062	U	N1-C2-N3	5.05	117.93	114.90
3	A1	1091	U	C5-C6-N1	-5.05	120.17	122.70
3	A1	1379	G	C6-C5-N7	5.05	133.43	130.40
25	BB	224	U	N3-C2-O2	-5.05	118.66	122.20
25	BB	565	C	N3-C4-N4	-5.05	114.46	118.00
25	BB	1136	G	N3-C2-N2	5.05	123.44	119.90
25	BB	1976	U	N3-C2-O2	-5.05	118.66	122.20
25	BB	2201	G	C3'-C2'-C1'	5.05	105.54	101.50
25	BB	2787	C	N3-C4-N4	-5.05	114.46	118.00
25	BB	2829	A	C6-C5-N7	5.05	135.84	132.30
3	A1	27	G	C6-C5-N7	5.05	133.43	130.40
3	A1	44	A	C6-N1-C2	-5.05	115.57	118.60
3	A1	232	G	N1-C6-O6	-5.05	116.87	119.90
3	A1	464	U	C4'-C3'-C2'	-5.05	97.55	102.60
3	A1	547	A	C5-N7-C8	-5.05	101.38	103.90
3	A1	549	C	N1-C2-O2	5.05	121.93	118.90
3	A1	843	U	N3-C2-O2	-5.05	118.67	122.20
3	A1	879	C	C2-N3-C4	-5.05	117.38	119.90
3	A1	1087	G	C6-N1-C2	-5.05	122.07	125.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1242	G	C4-C5-C6	-5.05	115.77	118.80
3	A1	1446	A	O4'-C1'-N9	5.05	112.24	108.20
24	BA	40	U	C5-C6-N1	-5.05	120.17	122.70
25	BB	44	A	C5-C6-N6	5.05	127.74	123.70
25	BB	230	G	C8-N9-C4	-5.05	104.38	106.40
25	BB	375	G	N3-C4-C5	-5.05	126.08	128.60
25	BB	630	G	P-O5'-C5'	5.05	128.98	120.90
25	BB	1158	C	O4'-C1'-N1	-5.05	104.16	108.20
25	BB	1236	G	N3-C2-N2	-5.05	116.37	119.90
25	BB	1361	G	C5-C6-N1	5.05	114.02	111.50
25	BB	1441	G	C2'-C3'-O3'	5.05	121.78	113.70
25	BB	2060	A	N1-C2-N3	-5.05	126.78	129.30
25	BB	2112	G	N9-C4-C5	5.05	107.42	105.40
25	BB	2424	C	C5'-C4'-O4'	5.05	115.16	109.10
25	BB	2490	G	C3'-C2'-C1'	-5.05	97.46	101.50
25	BB	2638	G	C4-C5-C6	-5.05	115.77	118.80
25	BB	2786	U	N1-C2-O2	5.05	126.33	122.80
37	BN	263	ASP	C-N-CA	5.05	134.32	121.70
1	AP	45	G	N1-C2-N2	5.05	120.74	116.20
3	A1	560	A	C3'-C2'-C1'	-5.05	97.46	101.50
3	A1	769	G	N1-C6-O6	-5.05	116.87	119.90
3	A1	1418	A	O4'-C1'-N9	5.05	112.24	108.20
25	BB	11	C	N1-C2-N3	5.05	122.73	119.20
25	BB	2209	G	N3-C4-C5	-5.05	126.08	128.60
25	BB	2226	C	C5'-C4'-O4'	5.05	115.16	109.10
25	BB	2293	G	N3-C4-C5	-5.05	126.08	128.60
25	BB	2359	C	N3-C4-N4	-5.05	114.47	118.00
1	AP	58	A	C5-N7-C8	-5.05	101.38	103.90
3	A1	380	G	N1-C2-N2	-5.05	111.66	116.20
3	A1	546	A	O3'-P-O5'	5.05	113.59	104.00
3	A1	1517	G	N3-C4-C5	-5.05	126.08	128.60
24	BA	10	G	N1-C2-N3	5.05	126.93	123.90
25	BB	178	G	N1-C2-N2	-5.05	111.66	116.20
25	BB	534	U	C5-C6-N1	-5.05	120.18	122.70
25	BB	646	U	C5-C4-O4	5.05	128.93	125.90
25	BB	1040	A	C6-C5-N7	5.05	135.83	132.30
25	BB	1908	C	C5-C6-N1	-5.05	118.48	121.00
25	BB	2248	C	C4-C5-C6	-5.05	114.88	117.40
25	BB	2287	A	C5-N7-C8	-5.05	101.38	103.90
25	BB	2618	G	C3'-C2'-C1'	-5.05	97.46	101.50
25	BB	2727	A	C6-N1-C2	-5.05	115.57	118.60
25	BB	2814	A	N1-C2-N3	-5.05	126.78	129.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	809	G	C4-C5-C6	-5.04	115.77	118.80
24	BA	19	C	N3-C4-N4	-5.04	114.47	118.00
25	BB	379	G	P-O3'-C3'	5.04	125.75	119.70
25	BB	434	U	N1-C1'-C2'	5.04	120.56	114.00
25	BB	817	C	C2'-C3'-O3'	5.04	121.77	113.70
25	BB	1617	C	C5-C4-N4	-5.04	116.67	120.20
51	B2	166	ARG	NE-CZ-NH1	5.04	122.82	120.30
1	AP	6	U	C3'-C2'-C1'	5.04	105.53	101.50
1	AP	46	G	OP2-P-O3'	5.04	116.30	105.20
3	A1	301	G	C1'-O4'-C4'	-5.04	105.86	109.90
3	A1	541	G	N3-C2-N2	-5.04	116.37	119.90
3	A1	1003	G	O5'-P-OP2	5.04	116.75	110.70
3	A1	1118	U	C4'-C3'-C2'	-5.04	97.56	102.60
3	A1	1288	A	O4'-C1'-N9	5.04	112.23	108.20
21	AV	20	ASN	CA-CB-CG	5.04	124.50	113.40
24	BA	81	G	C2-N3-C4	5.04	114.42	111.90
25	BB	843	G	N1-C6-O6	-5.04	116.87	119.90
25	BB	1348	C	C5-C6-N1	-5.04	118.48	121.00
25	BB	1417	C	N3-C2-O2	-5.04	118.37	121.90
25	BB	1442	U	O4'-C1'-N1	-5.04	104.17	108.20
25	BB	1770	G	N9-C4-C5	5.04	107.42	105.40
25	BB	2130	U	C5-C6-N1	-5.04	120.18	122.70
25	BB	2462	C	C2'-C3'-O3'	5.04	121.77	113.70
1	AP	70	C	C3'-C2'-C1'	-5.04	97.47	101.50
3	A1	112	G	C5'-C4'-O4'	5.04	115.15	109.10
3	A1	688	G	C6-N1-C2	-5.04	122.08	125.10
3	A1	738	C	O4'-C1'-N1	5.04	112.23	108.20
3	A1	1191	A	N7-C8-N9	5.04	116.32	113.80
3	A1	1405	G	O4'-C4'-C3'	5.04	110.13	106.10
5	AC	24	ALA	C-N-CA	5.04	134.30	121.70
25	BB	44	A	N7-C8-N9	5.04	116.32	113.80
25	BB	80	G	O3'-P-O5'	5.04	113.58	104.00
25	BB	226	A	C2-N3-C4	5.04	113.12	110.60
25	BB	517	C	N3-C4-C5	5.04	123.92	121.90
25	BB	783	A	C6-N1-C2	-5.04	115.58	118.60
25	BB	883	G	O5'-C5'-C4'	-5.04	102.12	111.70
25	BB	954	G	C8-N9-C4	-5.04	104.38	106.40
25	BB	1275	A	C2-N3-C4	5.04	113.12	110.60
25	BB	1916	A	C1'-O4'-C4'	-5.04	105.87	109.90
25	BB	2366	A	O5'-P-OP2	5.04	116.75	110.70
25	BB	2367	G	C4'-C3'-C2'	-5.04	97.56	102.60
25	BB	2396	G	C4-C5-N7	5.04	112.82	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2665	A	C4-C5-C6	-5.04	114.48	117.00
3	A1	1474	U	O3'-P-O5'	5.04	113.58	104.00
3	A1	1500	A	C6-C5-N7	5.04	135.83	132.30
25	BB	307	G	N1-C2-N3	5.04	126.92	123.90
25	BB	483	A	O4'-C1'-N9	5.04	112.23	108.20
25	BB	569	U	O4'-C1'-N1	5.04	112.23	108.20
25	BB	598	U	C4-C5-C6	5.04	122.72	119.70
25	BB	910	A	C5'-C4'-C3'	-5.04	107.94	116.00
25	BB	1631	G	C5'-C4'-O4'	5.04	115.15	109.10
25	BB	2343	U	N3-C2-O2	-5.04	118.67	122.20
25	BB	2633	G	C2'-C3'-O3'	5.04	121.76	113.70
25	BB	2711	A	C2-N3-C4	5.04	113.12	110.60
43	BT	14	MET	CA-CB-CG	5.04	121.87	113.30
1	AE	10	G	N1-C6-O6	-5.04	116.88	119.90
3	A1	422	C	O4'-C1'-N1	5.04	112.23	108.20
3	A1	1329	A	C5-N7-C8	-5.04	101.38	103.90
3	A1	1426	G	C5'-C4'-C3'	-5.04	107.94	116.00
25	BB	320	A	N3-C4-N9	-5.04	123.37	127.40
25	BB	400	G	C5-C6-O6	5.04	131.62	128.60
25	BB	713	G	C4-C5-C6	-5.04	115.78	118.80
25	BB	873	C	C4'-C3'-C2'	-5.04	97.56	102.60
25	BB	1090	A	N1-C2-N3	-5.04	126.78	129.30
25	BB	1155	A	O4'-C1'-N9	-5.04	104.17	108.20
25	BB	1181	U	C5-C6-N1	-5.04	120.18	122.70
25	BB	1286	A	C5-N7-C8	-5.04	101.38	103.90
25	BB	1884	G	C3'-C2'-C1'	5.04	105.53	101.50
25	BB	2016	U	C3'-C2'-C1'	-5.04	97.47	101.50
25	BB	2172	U	N3-C4-C5	-5.04	111.58	114.60
25	BB	2694	G	C1'-O4'-C4'	-5.04	105.87	109.90
1	AP	70	C	N3-C4-C5	-5.04	119.89	121.90
3	A1	703	G	C4'-C3'-C2'	-5.04	97.56	102.60
3	A1	766	A	C4-C5-C6	-5.04	114.48	117.00
3	A1	944	G	C5'-C4'-C3'	-5.04	107.94	116.00
3	A1	1483	A	N9-C1'-C2'	5.04	120.55	114.00
24	BA	3	C	C1'-O4'-C4'	-5.04	105.87	109.90
25	BB	188	G	N9-C4-C5	5.04	107.42	105.40
25	BB	521	U	N3-C2-O2	-5.04	118.67	122.20
25	BB	859	G	N7-C8-N9	5.04	115.62	113.10
25	BB	1121	C	C6-N1-C2	-5.04	118.28	120.30
25	BB	2251	G	C2'-C3'-O3'	5.04	121.76	113.70
25	BB	2354	C	C5-C6-N1	-5.04	118.48	121.00
25	BB	2644	G	C3'-C2'-C1'	5.04	105.53	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
50	B1	191	ASP	CB-CG-OD2	5.04	122.83	118.30
3	A1	261	U	N1-C2-N3	5.04	117.92	114.90
3	A1	397	A	C6-C5-N7	5.04	135.82	132.30
3	A1	476	U	N3-C2-O2	-5.04	118.67	122.20
3	A1	587	G	O4'-C1'-C2'	-5.04	100.77	105.80
3	A1	827	U	O4'-C1'-C2'	-5.04	100.76	105.80
3	A1	912	C	N1-C2-O2	5.04	121.92	118.90
3	A1	1251	A	N1-C2-N3	-5.04	126.78	129.30
3	A1	1312	G	C5'-C4'-C3'	-5.04	107.94	116.00
3	A1	1506	U	C1'-O4'-C4'	-5.04	105.87	109.90
18	AS	111	ARG	NE-CZ-NH1	5.04	122.82	120.30
25	BB	408	G	C6-C5-N7	5.04	133.42	130.40
25	BB	823	C	C5-C6-N1	-5.04	118.48	121.00
25	BB	1151	A	C5'-C4'-O4'	5.04	115.14	109.10
25	BB	1588	G	O4'-C4'-C3'	5.04	110.13	106.10
25	BB	1681	G	C5'-C4'-O4'	5.04	115.14	109.10
25	BB	1682	G	C6-N1-C2	-5.04	122.08	125.10
25	BB	1724	G	C5-C6-O6	5.04	131.62	128.60
25	BB	1926	U	C5-C4-O4	5.04	128.92	125.90
25	BB	2086	U	C5-C4-O4	5.04	128.92	125.90
25	BB	2144	G	C6-C5-N7	5.04	133.42	130.40
25	BB	2319	G	C1'-O4'-C4'	-5.04	105.87	109.90
25	BB	2603	G	P-O3'-C3'	5.04	125.74	119.70
43	BT	29	VAL	CG1-CB-CG2	-5.04	102.84	110.90
3	A1	46	G	C6-C5-N7	5.03	133.42	130.40
3	A1	242	G	C6-C5-N7	5.03	133.42	130.40
3	A1	265	G	C6-C5-N7	5.03	133.42	130.40
3	A1	766	A	C8-N9-C4	-5.03	103.79	105.80
3	A1	799	G	N3-C4-C5	-5.03	126.08	128.60
3	A1	1134	G	N1-C6-O6	-5.03	116.88	119.90
17	AR	165	GLU	OE1-CD-OE2	-5.03	117.26	123.30
25	BB	181	A	N1-C2-N3	-5.03	126.78	129.30
25	BB	228	C	N3-C4-N4	-5.03	114.48	118.00
25	BB	285	G	N3-C2-N2	5.03	123.42	119.90
25	BB	398	C	N3-C2-O2	-5.03	118.38	121.90
25	BB	530	G	C5'-C4'-C3'	-5.03	107.95	116.00
25	BB	594	U	N3-C4-O4	5.03	122.92	119.40
25	BB	1480	C	C6-N1-C2	5.03	122.31	120.30
25	BB	1701	A	C6-N1-C2	-5.03	115.58	118.60
25	BB	1883	U	C4'-C3'-C2'	-5.03	97.57	102.60
25	BB	2223	G	P-O3'-C3'	5.03	125.74	119.70
25	BB	2279	G	P-O3'-C3'	5.03	125.74	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	2667	C	C5-C6-N1	-5.03	118.48	121.00
25	BB	2796	U	O4'-C1'-C2'	-5.03	100.77	105.80
25	BB	2819	G	C6-N1-C2	-5.03	122.08	125.10
33	BJ	2	ARG	NE-CZ-NH2	5.03	122.82	120.30
1	AP	56	C	N1-C2-N3	5.03	122.72	119.20
3	A1	37	U	O5'-P-OP1	-5.03	101.17	105.70
3	A1	300	A	C5-C6-N6	5.03	127.73	123.70
3	A1	1477	U	C2-N3-C4	-5.03	123.98	127.00
17	AR	47	LEU	CA-CB-CG	5.03	126.87	115.30
24	BA	29	A	C5'-C4'-O4'	5.03	115.14	109.10
25	BB	446	G	N1-C2-N3	5.03	126.92	123.90
25	BB	835	C	C1'-O4'-C4'	-5.03	105.87	109.90
25	BB	1310	G	C4-C5-C6	-5.03	115.78	118.80
25	BB	1472	C	C3'-C2'-C1'	-5.03	97.47	101.50
25	BB	1605	C	C5'-C4'-C3'	-5.03	107.95	116.00
25	BB	1735	A	C5'-C4'-O4'	5.03	115.14	109.10
25	BB	1763	G	N7-C8-N9	5.03	115.62	113.10
25	BB	1892	C	N3-C4-C5	5.03	123.91	121.90
25	BB	2245	U	C5-C6-N1	-5.03	120.18	122.70
25	BB	2777	G	C5-C6-O6	5.03	131.62	128.60
25	BB	2785	C	C6-N1-C2	-5.03	118.29	120.30
34	BK	51	VAL	CA-CB-CG2	5.03	118.45	110.90
1	AE	9	A	C2-N3-C4	-5.03	108.08	110.60
3	A1	95	C	N3-C4-C5	5.03	123.91	121.90
3	A1	164	G	N1-C6-O6	-5.03	116.88	119.90
3	A1	278	G	O4'-C1'-N9	5.03	112.22	108.20
3	A1	443	C	O4'-C1'-N1	5.03	112.22	108.20
3	A1	559	A	C5'-C4'-O4'	5.03	115.14	109.10
3	A1	593	U	C2-N3-C4	-5.03	123.98	127.00
3	A1	996	A	C2-N3-C4	5.03	113.12	110.60
3	A1	1128	C	C4'-C3'-O3'	5.03	123.06	113.00
3	A1	1442	G	O5'-C5'-C4'	-5.03	102.14	111.70
3	A1	1523	G	N7-C8-N9	5.03	115.61	113.10
17	AR	183	ARG	NE-CZ-NH2	-5.03	117.78	120.30
24	BA	13	G	O3'-P-O5'	5.03	113.56	104.00
24	BA	62	C	C5-C6-N1	-5.03	118.48	121.00
25	BB	67	U	N1-C2-O2	5.03	126.32	122.80
25	BB	154	U	O4'-C1'-C2'	5.03	112.13	107.60
25	BB	334	C	N3-C4-N4	-5.03	114.48	118.00
25	BB	748	G	C5'-C4'-O4'	5.03	115.14	109.10
25	BB	1368	G	C3'-C2'-C1'	5.03	105.53	101.50
25	BB	1392	A	C1'-O4'-C4'	5.03	113.92	109.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	1574	C	C5-C6-N1	-5.03	118.48	121.00
25	BB	1575	C	C1'-O4'-C4'	-5.03	105.88	109.90
25	BB	1661	G	P-O3'-C3'	5.03	125.74	119.70
25	BB	1677	A	C5-C6-N6	5.03	127.72	123.70
25	BB	2082	A	C6-C5-N7	5.03	135.82	132.30
25	BB	2320	U	C5-C4-O4	-5.03	122.88	125.90
25	BB	2830	C	C6-N1-C2	-5.03	118.29	120.30
3	A1	784	A	C6-N1-C2	-5.03	115.58	118.60
25	BB	142	A	C4-C5-N7	5.03	113.22	110.70
25	BB	514	A	C4-C5-C6	-5.03	114.49	117.00
25	BB	632	A	C5'-C4'-O4'	5.03	115.13	109.10
25	BB	1820	U	O4'-C4'-C3'	5.03	110.12	106.10
25	BB	2401	U	C4'-C3'-C2'	-5.03	97.57	102.60
25	BB	2404	U	C4'-C3'-C2'	-5.03	97.57	102.60
25	BB	2543	G	P-O3'-C3'	5.03	125.73	119.70
25	BB	2588	G	N3-C2-N2	-5.03	116.38	119.90
25	BB	2871	U	C3'-C2'-C1'	-5.03	97.48	101.50
1	AE	20	G	C3'-C2'-C1'	5.03	105.52	101.50
2	AM	10	U	C5'-C4'-C3'	-5.03	107.95	116.00
3	A1	343	U	N3-C2-O2	-5.03	118.68	122.20
3	A1	532	A	C8-N9-C4	-5.03	103.79	105.80
3	A1	535	A	C3'-C2'-C1'	5.03	105.52	101.50
3	A1	536	C	C2-N3-C4	-5.03	117.39	119.90
3	A1	777	A	C6-N1-C2	-5.03	115.58	118.60
3	A1	902	G	C5-C6-O6	5.03	131.62	128.60
3	A1	941	G	C5-C6-N1	5.03	114.01	111.50
3	A1	1157	A	C6-N1-C2	-5.03	115.58	118.60
25	BB	754	U	C5-C6-N1	-5.03	120.19	122.70
25	BB	995	C	N1-C2-N3	5.03	122.72	119.20
25	BB	1029	A	O4'-C1'-N9	-5.03	104.18	108.20
25	BB	1099	G	C5'-C4'-O4'	5.03	115.13	109.10
25	BB	1588	G	C5-C6-O6	5.03	131.62	128.60
25	BB	1622	G	N3-C2-N2	-5.03	116.38	119.90
25	BB	2068	U	C4'-C3'-C2'	-5.03	97.57	102.60
25	BB	2092	U	C5'-C4'-O4'	5.03	115.13	109.10
25	BB	2269	G	N1-C2-N3	5.03	126.92	123.90
25	BB	2393	U	N1-C1'-C2'	5.03	120.54	114.00
25	BB	2532	G	C4-C5-C6	-5.03	115.78	118.80
25	BB	2623	G	C4'-C3'-C2'	-5.03	97.57	102.60
25	BB	2642	G	N1-C2-N2	5.03	120.72	116.20
39	BP	76	ARG	C-N-CA	5.03	134.27	121.70
3	A1	31	G	N3-C2-N2	5.03	123.42	119.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	81	A	P-O3'-C3'	5.03	125.73	119.70
3	A1	174	A	N9-C1'-C2'	-5.03	106.47	112.00
3	A1	315	A	O4'-C1'-N9	5.03	112.22	108.20
3	A1	430	A	C5'-C4'-O4'	5.03	115.13	109.10
3	A1	448	A	C2-N3-C4	5.03	113.11	110.60
3	A1	593	U	C3'-C2'-C1'	5.03	105.52	101.50
3	A1	794	A	N1-C2-N3	-5.03	126.79	129.30
3	A1	811	C	N1-C1'-C2'	-5.03	106.47	112.00
3	A1	1012	A	N9-C4-C5	5.03	107.81	105.80
3	A1	1173	U	C5-C4-O4	-5.03	122.89	125.90
3	A1	1476	A	N9-C1'-C2'	-5.03	106.47	112.00
25	BB	94	A	N3-C4-N9	-5.03	123.38	127.40
25	BB	468	G	C5'-C4'-O4'	5.03	115.13	109.10
25	BB	623	C	N1-C2-N3	5.03	122.72	119.20
25	BB	684	G	C5-C6-N1	5.03	114.01	111.50
25	BB	765	C	N1-C2-N3	5.03	122.72	119.20
25	BB	997	G	C5'-C4'-O4'	5.03	115.13	109.10
25	BB	1912	A	C6-C5-N7	5.03	135.82	132.30
25	BB	2195	U	O4'-C1'-N1	5.03	112.22	108.20
25	BB	2298	A	C6-N1-C2	-5.03	115.58	118.60
25	BB	2464	G	O4'-C1'-C2'	5.03	112.12	107.60
25	BB	2536	G	C5'-C4'-O4'	5.03	115.13	109.10
25	BB	2777	G	O4'-C1'-N9	5.03	112.22	108.20
32	BI	52	ARG	CD-NE-CZ	5.03	130.63	123.60
48	BY	124	ARG	NE-CZ-NH2	5.03	122.81	120.30
54	B5	126	ARG	CD-NE-CZ	5.03	130.64	123.60
3	A1	493	A	N7-C8-N9	5.02	116.31	113.80
25	BB	185	G	N7-C8-N9	5.02	115.61	113.10
25	BB	456	C	N1-C2-O2	5.02	121.92	118.90
25	BB	526	A	C2-N3-C4	5.02	113.11	110.60
25	BB	574	A	C1'-O4'-C4'	-5.02	105.88	109.90
25	BB	575	A	C8-N9-C4	-5.02	103.79	105.80
25	BB	1067	A	C4-C5-N7	5.02	113.21	110.70
25	BB	1306	C	O4'-C1'-N1	5.02	112.22	108.20
25	BB	1317	G	N1-C6-O6	-5.02	116.89	119.90
25	BB	1419	A	C5-C6-N6	5.02	127.72	123.70
25	BB	1666	G	C5-N7-C8	-5.02	101.79	104.30
25	BB	2035	G	N3-C2-N2	-5.02	116.38	119.90
1	AE	3	G	N3-C4-C5	-5.02	126.09	128.60
3	A1	17	U	C4-C5-C6	5.02	122.71	119.70
3	A1	266	G	C2-N3-C4	5.02	114.41	111.90
3	A1	799	G	C4-C5-N7	-5.02	108.79	110.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	1067	A	C6-C5-N7	5.02	135.82	132.30
3	A1	1212	U	O3'-P-O5'	5.02	113.54	104.00
25	BB	1449	G	N7-C8-N9	5.02	115.61	113.10
25	BB	1953	A	C8-N9-C4	-5.02	103.79	105.80
25	BB	1977	A	C6-C5-N7	5.02	135.82	132.30
25	BB	2323	G	N3-C4-N9	5.02	129.01	126.00
25	BB	2538	C	N1-C2-N3	5.02	122.72	119.20
25	BB	2573	C	C6-N1-C2	-5.02	118.29	120.30
44	BU	41	VAL	CA-CB-CG2	-5.02	103.36	110.90
50	B1	10	SER	CB-CA-C	-5.02	100.56	110.10
3	A1	57	G	P-O3'-C3'	5.02	125.72	119.70
3	A1	413	G	C4'-C3'-O3'	5.02	123.04	113.00
3	A1	675	A	C6-C5-N7	5.02	135.81	132.30
25	BB	1055	G	C5-C6-O6	5.02	131.61	128.60
25	BB	1277	G	C5-C6-O6	5.02	131.61	128.60
25	BB	2411	A	C1'-O4'-C4'	-5.02	105.88	109.90
25	BB	2876	G	O4'-C1'-N9	5.02	112.22	108.20
3	A1	438	U	C3'-C2'-C1'	5.02	105.52	101.50
3	A1	628	G	C4-C5-N7	5.02	112.81	110.80
3	A1	1003	G	N3-C2-N2	5.02	123.41	119.90
3	A1	1265	C	C4'-C3'-O3'	5.02	123.04	113.00
24	BA	16	G	C6-C5-N7	5.02	133.41	130.40
25	BB	34	U	N1-C1'-C2'	5.02	120.53	114.00
25	BB	114	U	C1'-O4'-C4'	-5.02	105.88	109.90
25	BB	525	U	O4'-C1'-N1	5.02	112.22	108.20
25	BB	648	G	C4'-C3'-C2'	5.02	107.62	102.60
25	BB	774	G	N1-C6-O6	-5.02	116.89	119.90
25	BB	1093	G	N1-C2-N3	5.02	126.91	123.90
25	BB	1532	A	O4'-C1'-C2'	5.02	112.12	107.60
25	BB	2095	A	O4'-C1'-C2'	5.02	112.12	107.60
25	BB	2258	C	C6-N1-C2	-5.02	118.29	120.30
25	BB	2435	A	C6-C5-N7	5.02	135.81	132.30
25	BB	2448	A	O4'-C1'-N9	-5.02	104.18	108.20
25	BB	2541	A	C4'-C3'-C2'	-5.02	97.58	102.60
25	BB	2569	G	C8-N9-C4	-5.02	104.39	106.40
25	BB	2733	A	C8-N9-C4	-5.02	103.79	105.80
52	B3	61	TRP	NE1-CE2-CD2	-5.02	102.28	107.30
3	A1	45	G	C6-N1-C2	-5.02	122.09	125.10
3	A1	210	C	C6-N1-C2	-5.02	118.29	120.30
3	A1	570	G	N3-C4-N9	5.02	129.01	126.00
3	A1	847	G	C2-N3-C4	-5.02	109.39	111.90
3	A1	859	G	C5-N7-C8	-5.02	101.79	104.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	882	C	N1-C2-N3	5.02	122.71	119.20
3	A1	993	G	N3-C4-C5	-5.02	126.09	128.60
3	A1	1465	A	C2-N3-C4	5.02	113.11	110.60
25	BB	73	A	C5-C6-N6	5.02	127.71	123.70
25	BB	87	U	N1-C1'-C2'	-5.02	106.48	112.00
25	BB	92	U	C6-N1-C2	-5.02	117.99	121.00
25	BB	662	G	C6-N1-C2	-5.02	122.09	125.10
25	BB	816	C	C2-N3-C4	-5.02	117.39	119.90
25	BB	1157	G	N7-C8-N9	5.02	115.61	113.10
25	BB	1510	G	C4-C5-N7	-5.02	108.79	110.80
25	BB	1587	G	C8-N9-C4	-5.02	104.39	106.40
25	BB	1944	U	C2-N3-C4	-5.02	123.99	127.00
25	BB	2240	U	C4'-C3'-C2'	-5.02	97.58	102.60
25	BB	2601	C	C1'-O4'-C4'	-5.02	105.89	109.90
25	BB	2812	G	C4'-C3'-C2'	-5.02	97.58	102.60
25	BB	2835	A	C5-C6-N1	5.02	120.21	117.70
50	B1	172	ALA	N-CA-CB	-5.02	103.08	110.10
1	AE	49	C	C5'-C4'-O4'	5.02	115.12	109.10
3	A1	688	G	N1-C6-O6	-5.02	116.89	119.90
3	A1	801	U	C5'-C4'-O4'	5.02	115.12	109.10
25	BB	241	A	C6-C5-N7	5.02	135.81	132.30
25	BB	1742	U	N1-C2-O2	5.02	126.31	122.80
25	BB	1896	G	C2'-C3'-O3'	5.02	121.72	113.70
25	BB	1931	U	C6-N1-C2	-5.02	117.99	121.00
25	BB	2006	C	C4'-C3'-C2'	-5.02	97.58	102.60
25	BB	2873	A	C6-C5-N7	5.02	135.81	132.30
3	A1	36	C	C5-C6-N1	-5.01	118.49	121.00
3	A1	49	U	O4'-C4'-C3'	5.01	110.11	106.10
3	A1	361	G	C4-C5-C6	-5.01	115.79	118.80
3	A1	481	G	N1-C2-N3	5.01	126.91	123.90
3	A1	677	U	C1'-O4'-C4'	-5.01	105.89	109.90
3	A1	1131	G	O4'-C1'-C2'	5.01	112.11	107.60
3	A1	1198	G	N7-C8-N9	5.01	115.61	113.10
3	A1	1211	U	C6-N1-C1'	5.01	128.22	121.20
3	A1	1222	G	C5-N7-C8	5.01	106.81	104.30
3	A1	1245	C	N1-C2-O2	5.01	121.91	118.90
3	A1	1428	A	O5'-P-OP1	5.01	116.72	110.70
3	A1	1480	A	O4'-C1'-N9	5.01	112.21	108.20
7	AF	85	TYR	CA-C-N	5.01	128.23	117.20
25	BB	347	A	C6-C5-N7	5.01	135.81	132.30
25	BB	354	A	C5-N7-C8	-5.01	101.39	103.90
25	BB	368	A	N9-C4-C5	-5.01	103.79	105.80

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	369	U	N1-C2-N3	5.01	117.91	114.90
25	BB	784	G	N3-C4-C5	-5.01	126.09	128.60
25	BB	1704	C	C5'-C4'-C3'	-5.01	107.97	116.00
25	BB	1717	A	C6-C5-N7	5.01	135.81	132.30
25	BB	1858	A	P-O3'-C3'	5.01	125.72	119.70
25	BB	2238	G	N1-C6-O6	-5.01	116.89	119.90
25	BB	2345	G	C2-N3-C4	5.01	114.41	111.90
25	BB	2349	G	N3-C4-C5	-5.01	126.09	128.60
25	BB	2480	C	N3-C2-O2	-5.01	118.39	121.90
3	A1	50	A	N3-C4-N9	5.01	131.41	127.40
7	AF	103	THR	CA-CB-CG2	5.01	119.42	112.40
25	BB	269	C	N1-C1'-C2'	5.01	120.52	114.00
25	BB	304	U	O5'-C5'-C4'	-5.01	102.17	111.70
25	BB	957	C	C5-C6-N1	-5.01	118.49	121.00
25	BB	978	G	C8-N9-C4	-5.01	104.39	106.40
25	BB	1875	G	OP2-P-O3'	5.01	116.23	105.20
25	BB	2535	G	N7-C8-N9	5.01	115.61	113.10
1	AA	60	C	O4'-C1'-C2'	-5.01	100.79	105.80
3	A1	415	A	C3'-C2'-C1'	5.01	105.51	101.50
3	A1	447	G	O4'-C4'-C3'	5.01	110.11	106.10
3	A1	485	U	C5-C6-N1	-5.01	120.19	122.70
3	A1	729	A	N9-C4-C5	5.01	107.80	105.80
3	A1	984	C	C4-C5-C6	5.01	119.91	117.40
3	A1	1079	G	C2-N3-C4	5.01	114.41	111.90
3	A1	1396	A	C5'-C4'-O4'	5.01	115.11	109.10
24	BA	25	U	C4-C5-C6	5.01	122.71	119.70
24	BA	68	C	C2-N3-C4	-5.01	117.39	119.90
24	BA	102	G	N9-C1'-C2'	-5.01	106.49	112.00
25	BB	141	G	C2-N3-C4	5.01	114.41	111.90
25	BB	178	G	C5'-C4'-C3'	-5.01	107.98	116.00
25	BB	199	A	C4-C5-N7	-5.01	108.19	110.70
25	BB	420	C	N1-C2-O2	5.01	121.91	118.90
25	BB	1298	C	O4'-C4'-C3'	-5.01	98.99	104.00
25	BB	1516	G	C5-N7-C8	-5.01	101.79	104.30
25	BB	1578	U	C5'-C4'-O4'	5.01	115.11	109.10
25	BB	1645	G	O4'-C4'-C3'	5.01	110.11	106.10
25	BB	1719	G	C4-C5-C6	-5.01	115.79	118.80
25	BB	1800	C	N1-C2-O2	5.01	121.91	118.90
25	BB	2003	A	N7-C8-N9	5.01	116.31	113.80
25	BB	2008	C	O5'-P-OP2	-5.01	101.19	105.70
25	BB	2416	C	C5-C4-N4	-5.01	116.69	120.20
25	BB	2483	C	C3'-C2'-C1'	5.01	105.51	101.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
51	B2	49	LEU	CB-CA-C	5.01	119.72	110.20
2	AM	3	U	O4'-C1'-N1	5.01	112.21	108.20
3	A1	111	G	N1-C6-O6	-5.01	116.89	119.90
3	A1	562	U	C4'-C3'-C2'	5.01	107.61	102.60
3	A1	634	C	P-O3'-C3'	5.01	125.71	119.70
3	A1	777	A	N9-C4-C5	5.01	107.80	105.80
22	AW	58	GLU	OE1-CD-OE2	-5.01	117.29	123.30
25	BB	127	A	P-O3'-C3'	5.01	125.71	119.70
25	BB	339	U	C5-C4-O4	-5.01	122.89	125.90
25	BB	423	A	C1'-O4'-C4'	-5.01	105.89	109.90
25	BB	619	G	C5-C6-O6	5.01	131.60	128.60
25	BB	1079	C	C4'-C3'-C2'	-5.01	97.59	102.60
25	BB	1248	G	N9-C4-C5	5.01	107.40	105.40
25	BB	1559	U	C5-C4-O4	5.01	128.91	125.90
25	BB	1776	G	C8-N9-C4	-5.01	104.40	106.40
25	BB	2103	C	C2'-C3'-O3'	5.01	121.72	113.70
25	BB	2270	A	C1'-O4'-C4'	-5.01	105.89	109.90
25	BB	2372	U	N3-C2-O2	-5.01	118.69	122.20
25	BB	2516	A	O4'-C1'-N9	5.01	112.21	108.20
25	BB	2800	A	C8-N9-C4	5.01	107.80	105.80
25	BB	2898	U	C5-C4-O4	-5.01	122.89	125.90
25	BB	2903	U	C4-C5-C6	5.01	122.71	119.70
3	A1	662	U	O5'-C5'-C4'	-5.01	102.19	111.70
3	A1	888	G	C4'-C3'-O3'	5.01	123.02	113.00
3	A1	1013	G	C8-N9-C4	-5.01	104.40	106.40
25	BB	381	G	N1-C2-N2	-5.01	111.69	116.20
25	BB	882	G	C4'-C3'-C2'	-5.01	97.59	102.60
25	BB	900	A	O5'-P-OP2	-5.01	101.19	105.70
25	BB	928	A	C2-N3-C4	5.01	113.10	110.60
25	BB	2318	G	C3'-C2'-C1'	5.01	105.51	101.50
25	BB	2887	A	C4-C5-C6	-5.01	114.50	117.00
25	BB	2887	A	C5-N7-C8	-5.01	101.40	103.90
3	A1	79	G	C6-N1-C2	-5.01	122.10	125.10
3	A1	751	U	N3-C4-C5	-5.01	111.60	114.60
3	A1	794	A	C5-N7-C8	-5.01	101.40	103.90
3	A1	816	A	N3-C4-N9	-5.01	123.39	127.40
3	A1	906	A	C3'-C2'-C1'	5.01	105.51	101.50
3	A1	1460	C	N1-C2-N3	5.01	122.70	119.20
25	BB	255	A	C5'-C4'-C3'	-5.01	107.99	116.00
25	BB	367	G	N1-C2-N3	5.01	126.90	123.90
25	BB	592	A	C5'-C4'-O4'	5.01	115.11	109.10
25	BB	780	G	C2-N3-C4	5.01	114.40	111.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	BB	843	G	C5-C6-O6	5.01	131.60	128.60
25	BB	1121	C	N1-C2-N3	5.01	122.70	119.20
25	BB	1123	C	N3-C2-O2	-5.01	118.40	121.90
25	BB	1502	A	C3'-C2'-C1'	5.01	105.51	101.50
25	BB	1842	G	C5-N7-C8	-5.01	101.80	104.30
25	BB	1884	G	C4-C5-N7	-5.01	108.80	110.80
25	BB	2288	A	N3-C4-C5	-5.01	123.30	126.80
25	BB	2538	C	C5'-C4'-O4'	5.01	115.11	109.10
32	BI	46	VAL	CA-CB-CG1	5.01	118.41	110.90
33	BJ	91	ARG	NH1-CZ-NH2	-5.01	113.89	119.40
3	A1	836	G	C5-N7-C8	-5.00	101.80	104.30
3	A1	892	A	C2-N3-C4	5.00	113.10	110.60
25	BB	563	A	C2-N3-C4	5.00	113.10	110.60
25	BB	1098	A	O4'-C1'-N9	5.00	112.20	108.20
25	BB	1686	C	N1-C1'-C2'	5.00	120.51	114.00
25	BB	1990	C	C6-N1-C1'	-5.00	114.80	120.80
25	BB	2147	A	N1-C2-N3	-5.00	126.80	129.30
25	BB	2441	U	C5-C6-N1	-5.00	120.20	122.70
51	B2	149	ARG	NH1-CZ-NH2	-5.00	113.89	119.40
3	A1	95	C	N1-C2-O2	5.00	121.90	118.90
3	A1	99	C	O4'-C4'-C3'	5.00	110.10	106.10
3	A1	348	G	C5'-C4'-C3'	-5.00	107.99	116.00
3	A1	530	G	C8-N9-C4	-5.00	104.40	106.40
3	A1	927	G	C5-N7-C8	-5.00	101.80	104.30
3	A1	1409	C	C6-N1-C2	-5.00	118.30	120.30
3	A1	1439	G	C5'-C4'-O4'	-5.00	103.09	109.10
4	AB	166	ASP	CB-CG-OD2	5.00	122.80	118.30
24	BA	23	G	C4'-C3'-C2'	-5.00	97.60	102.60
25	BB	537	G	N3-C4-C5	-5.00	126.10	128.60
25	BB	600	G	N3-C4-N9	5.00	129.00	126.00
25	BB	877	A	C5'-C4'-C3'	-5.00	108.00	116.00
25	BB	1093	G	C1'-O4'-C4'	-5.00	105.90	109.90
25	BB	1186	G	C4-C5-N7	5.00	112.80	110.80
25	BB	1513	U	O5'-P-OP2	5.00	116.70	110.70
25	BB	1923	U	C2-N3-C4	-5.00	124.00	127.00
25	BB	1949	G	C5-C6-O6	5.00	131.60	128.60
25	BB	1992	G	C5-N7-C8	-5.00	101.80	104.30
25	BB	2002	G	C8-N9-C4	-5.00	104.40	106.40
25	BB	2471	A	N3-C4-C5	5.00	130.30	126.80
25	BB	2899	A	C5'-C4'-O4'	-5.00	103.10	109.10
3	A1	79	G	O4'-C1'-N9	5.00	112.20	108.20
3	A1	190	A	P-O3'-C3'	5.00	125.70	119.70

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
3	A1	442	G	C5-C6-O6	5.00	131.60	128.60
3	A1	996	A	C4-C5-C6	-5.00	114.50	117.00
3	A1	1200	C	C5'-C4'-O4'	-5.00	103.10	109.10
3	A1	1362	A	C5'-C4'-O4'	5.00	115.10	109.10
25	BB	365	U	C5-C4-O4	5.00	128.90	125.90
25	BB	564	C	O4'-C1'-C2'	-5.00	100.80	105.80
25	BB	848	C	C4'-C3'-C2'	-5.00	97.60	102.60
25	BB	1211	C	OP1-P-OP2	-5.00	112.10	119.60
25	BB	1533	C	C5-C6-N1	-5.00	118.50	121.00
25	BB	1695	G	C6-C5-N7	5.00	133.40	130.40
25	BB	2011	U	C5'-C4'-C3'	-5.00	108.00	116.00
25	BB	2770	G	C2-N3-C4	-5.00	109.40	111.90
25	BB	2854	G	N9-C1'-C2'	-5.00	106.50	112.00

All (10) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
1	AP	31	A	C2',C1'
3	A1	13	U	C2',C1'
3	A1	1198	G	C4'
3	A1	1483	A	C2'
14	AN	13	SER	CA
25	BB	1687	G	C1'
25	BB	1959	G	C2',C1'

All (3101) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
3	A1	100	G	Sidechain
3	A1	1000	A	Sidechain
3	A1	1001	C	Sidechain
3	A1	1002	G	Sidechain
3	A1	1003	G	Sidechain
3	A1	1005	A	Sidechain
3	A1	1006	G	Sidechain
3	A1	1009	U	Sidechain
3	A1	1010	U	Sidechain
3	A1	1013	G	Sidechain
3	A1	1014	A	Sidechain
3	A1	1015	G	Sidechain
3	A1	1016	A	Sidechain
3	A1	1017	U	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1018	G	Sidechain
3	A1	102	G	Sidechain
3	A1	1021	A	Sidechain
3	A1	1022	A	Sidechain
3	A1	1023	U	Sidechain
3	A1	1024	G	Sidechain
3	A1	1025	U	Sidechain
3	A1	1026	G	Sidechain
3	A1	1028	C	Sidechain
3	A1	1029	U	Sidechain
3	A1	1034	G	Sidechain
3	A1	1039	G	Sidechain
3	A1	104	G	Sidechain
3	A1	1040	U	Sidechain
3	A1	1043	G	Sidechain
3	A1	1044	A	Sidechain
3	A1	1047	G	Sidechain
3	A1	1048	G	Sidechain
3	A1	1049	U	Sidechain
3	A1	105	G	Sidechain
3	A1	1051	C	Sidechain
3	A1	1052	U	Sidechain
3	A1	1053	G	Sidechain
3	A1	1056	U	Sidechain
3	A1	1058	G	Sidechain
3	A1	106	C	Sidechain
3	A1	1061	G	Sidechain
3	A1	1062	U	Sidechain
3	A1	1064	G	Sidechain
3	A1	1065	U	Sidechain
3	A1	1066	C	Sidechain
3	A1	1068	G	Sidechain
3	A1	107	G	Sidechain
3	A1	1070	U	Sidechain
3	A1	1071	C	Sidechain
3	A1	1073	U	Sidechain
3	A1	1074	G	Sidechain
3	A1	1075	U	Sidechain
3	A1	1077	G	Sidechain
3	A1	1078	U	Sidechain
3	A1	1079	G	Sidechain
3	A1	108	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1080	A	Sidechain
3	A1	1081	A	Sidechain
3	A1	1082	A	Sidechain
3	A1	1083	U	Sidechain
3	A1	1084	G	Sidechain
3	A1	1087	G	Sidechain
3	A1	1088	G	Sidechain
3	A1	1089	G	Sidechain
3	A1	109	A	Sidechain
3	A1	1091	U	Sidechain
3	A1	1092	A	Sidechain
3	A1	1093	A	Sidechain
3	A1	1097	C	Sidechain
3	A1	1098	C	Sidechain
3	A1	1099	G	Sidechain
3	A1	11	G	Sidechain
3	A1	110	C	Sidechain
3	A1	1100	C	Sidechain
3	A1	1101	A	Sidechain
3	A1	1104	G	Sidechain
3	A1	1105	A	Sidechain
3	A1	1108	G	Sidechain
3	A1	1109	C	Sidechain
3	A1	111	G	Sidechain
3	A1	1110	A	Sidechain
3	A1	1114	C	Sidechain
3	A1	1115	U	Sidechain
3	A1	1116	U	Sidechain
3	A1	1117	A	Sidechain
3	A1	1118	U	Sidechain
3	A1	1119	C	Sidechain
3	A1	112	G	Sidechain
3	A1	1120	C	Sidechain
3	A1	1121	U	Sidechain
3	A1	1122	U	Sidechain
3	A1	1127	G	Sidechain
3	A1	1129	C	Sidechain
3	A1	113	G	Sidechain
3	A1	1130	A	Sidechain
3	A1	1132	C	Sidechain
3	A1	1133	G	Sidechain
3	A1	1136	C	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1137	C	Sidechain
3	A1	1138	G	Sidechain
3	A1	1139	G	Sidechain
3	A1	114	U	Sidechain
3	A1	1141	C	Sidechain
3	A1	1143	G	Sidechain
3	A1	1144	G	Sidechain
3	A1	1145	A	Sidechain
3	A1	1149	C	Sidechain
3	A1	115	G	Sidechain
3	A1	1150	A	Sidechain
3	A1	1151	A	Sidechain
3	A1	1152	A	Sidechain
3	A1	1153	G	Sidechain
3	A1	1154	G	Sidechain
3	A1	1155	A	Sidechain
3	A1	1158	C	Sidechain
3	A1	1160	G	Sidechain
3	A1	1163	A	Sidechain
3	A1	1164	G	Sidechain
3	A1	1166	G	Sidechain
3	A1	1168	U	Sidechain
3	A1	1170	A	Sidechain
3	A1	1173	U	Sidechain
3	A1	1174	G	Sidechain
3	A1	1175	G	Sidechain
3	A1	1177	G	Sidechain
3	A1	1178	G	Sidechain
3	A1	1179	A	Sidechain
3	A1	118	U	Sidechain
3	A1	1180	A	Sidechain
3	A1	1181	G	Sidechain
3	A1	1182	G	Sidechain
3	A1	1184	G	Sidechain
3	A1	1189	U	Sidechain
3	A1	119	A	Sidechain
3	A1	1190	G	Sidechain
3	A1	1192	C	Sidechain
3	A1	1193	G	Sidechain
3	A1	1194	U	Sidechain
3	A1	1196	A	Sidechain
3	A1	1197	A	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1198	G	Sidechain
3	A1	12	U	Sidechain
3	A1	120	A	Sidechain
3	A1	1201	A	Sidechain
3	A1	1203	C	Sidechain
3	A1	1204	A	Sidechain
3	A1	1205	U	Sidechain
3	A1	1206	G	Sidechain
3	A1	1207	G	Sidechain
3	A1	1209	C	Sidechain
3	A1	121	U	Sidechain
3	A1	1211	U	Sidechain
3	A1	1213	A	Sidechain
3	A1	1218	C	Sidechain
3	A1	122	G	Sidechain
3	A1	1220	G	Sidechain
3	A1	1223	C	Sidechain
3	A1	1224	U	Sidechain
3	A1	1225	A	Sidechain
3	A1	1229	A	Sidechain
3	A1	1233	G	Sidechain
3	A1	1234	C	Sidechain
3	A1	1236	A	Sidechain
3	A1	1237	C	Sidechain
3	A1	1239	A	Sidechain
3	A1	1240	U	Sidechain
3	A1	1241	G	Sidechain
3	A1	1242	G	Sidechain
3	A1	1244	G	Sidechain
3	A1	1245	C	Sidechain
3	A1	1248	A	Sidechain
3	A1	1249	C	Sidechain
3	A1	1251	A	Sidechain
3	A1	1253	G	Sidechain
3	A1	1254	A	Sidechain
3	A1	1255	G	Sidechain
3	A1	1256	A	Sidechain
3	A1	1257	A	Sidechain
3	A1	1258	G	Sidechain
3	A1	126	G	Sidechain
3	A1	1261	A	Sidechain
3	A1	1264	U	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1266	G	Sidechain
3	A1	1267	C	Sidechain
3	A1	1268	G	Sidechain
3	A1	1272	G	Sidechain
3	A1	1276	G	Sidechain
3	A1	1277	C	Sidechain
3	A1	1278	G	Sidechain
3	A1	1279	G	Sidechain
3	A1	128	G	Sidechain
3	A1	1281	C	Sidechain
3	A1	1286	U	Sidechain
3	A1	1287	A	Sidechain
3	A1	1289	A	Sidechain
3	A1	1292	G	Sidechain
3	A1	1293	C	Sidechain
3	A1	1294	G	Sidechain
3	A1	1297	G	Sidechain
3	A1	130	A	Sidechain
3	A1	1300	G	Sidechain
3	A1	1301	U	Sidechain
3	A1	1305	G	Sidechain
3	A1	1307	U	Sidechain
3	A1	1311	A	Sidechain
3	A1	1312	G	Sidechain
3	A1	1315	U	Sidechain
3	A1	1316	G	Sidechain
3	A1	1317	C	Sidechain
3	A1	1319	A	Sidechain
3	A1	132	C	Sidechain
3	A1	1321	U	Sidechain
3	A1	1322	C	Sidechain
3	A1	1323	G	Sidechain
3	A1	1324	A	Sidechain
3	A1	1325	C	Sidechain
3	A1	1326	U	Sidechain
3	A1	1327	C	Sidechain
3	A1	133	U	Sidechain
3	A1	1331	G	Sidechain
3	A1	1335	U	Sidechain
3	A1	1338	G	Sidechain
3	A1	134	G	Sidechain
3	A1	1345	U	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1347	G	Sidechain
3	A1	1348	U	Sidechain
3	A1	1349	A	Sidechain
3	A1	135	C	Sidechain
3	A1	1350	A	Sidechain
3	A1	1352	C	Sidechain
3	A1	1353	G	Sidechain
3	A1	1354	U	Sidechain
3	A1	1358	U	Sidechain
3	A1	1359	C	Sidechain
3	A1	1362	A	Sidechain
3	A1	1364	U	Sidechain
3	A1	1365	G	Sidechain
3	A1	1366	C	Sidechain
3	A1	1368	A	Sidechain
3	A1	1369	C	Sidechain
3	A1	137	U	Sidechain
3	A1	1371	G	Sidechain
3	A1	1373	G	Sidechain
3	A1	1374	A	Sidechain
3	A1	1375	A	Sidechain
3	A1	1376	U	Sidechain
3	A1	1377	A	Sidechain
3	A1	1378	C	Sidechain
3	A1	1379	G	Sidechain
3	A1	138	G	Sidechain
3	A1	1380	U	Sidechain
3	A1	1382	C	Sidechain
3	A1	1384	C	Sidechain
3	A1	1386	G	Sidechain
3	A1	1387	G	Sidechain
3	A1	1388	C	Sidechain
3	A1	1390	U	Sidechain
3	A1	1393	U	Sidechain
3	A1	1395	C	Sidechain
3	A1	1396	A	Sidechain
3	A1	1397	C	Sidechain
3	A1	1398	A	Sidechain
3	A1	14	U	Sidechain
3	A1	140	U	Sidechain
3	A1	1400	C	Sidechain
3	A1	1401	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1403	C	Sidechain
3	A1	1404	C	Sidechain
3	A1	1405	G	Sidechain
3	A1	1406	U	Sidechain
3	A1	1408	A	Sidechain
3	A1	1409	C	Sidechain
3	A1	141	G	Sidechain
3	A1	1410	A	Sidechain
3	A1	1412	C	Sidechain
3	A1	1414	U	Sidechain
3	A1	1415	G	Sidechain
3	A1	1416	G	Sidechain
3	A1	1418	A	Sidechain
3	A1	1419	G	Sidechain
3	A1	1420	U	Sidechain
3	A1	1421	G	Sidechain
3	A1	1422	G	Sidechain
3	A1	1423	G	Sidechain
3	A1	1424	U	Sidechain
3	A1	1426	G	Sidechain
3	A1	1428	A	Sidechain
3	A1	1430	A	Sidechain
3	A1	1432	G	Sidechain
3	A1	1433	A	Sidechain
3	A1	1435	G	Sidechain
3	A1	1438	G	Sidechain
3	A1	1439	G	Sidechain
3	A1	144	G	Sidechain
3	A1	1440	U	Sidechain
3	A1	1442	G	Sidechain
3	A1	1443	C	Sidechain
3	A1	1446	A	Sidechain
3	A1	1447	A	Sidechain
3	A1	1448	C	Sidechain
3	A1	145	G	Sidechain
3	A1	1450	U	Sidechain
3	A1	1454	G	Sidechain
3	A1	1455	G	Sidechain
3	A1	1457	G	Sidechain
3	A1	1459	G	Sidechain
3	A1	1460	C	Sidechain
3	A1	1461	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1464	U	Sidechain
3	A1	1468	A	Sidechain
3	A1	1469	C	Sidechain
3	A1	1472	U	Sidechain
3	A1	1473	G	Sidechain
3	A1	1475	G	Sidechain
3	A1	1476	A	Sidechain
3	A1	1477	U	Sidechain
3	A1	1478	U	Sidechain
3	A1	148	G	Sidechain
3	A1	1480	A	Sidechain
3	A1	1481	U	Sidechain
3	A1	1482	G	Sidechain
3	A1	1483	A	Sidechain
3	A1	1485	U	Sidechain
3	A1	1487	G	Sidechain
3	A1	1488	G	Sidechain
3	A1	1489	G	Sidechain
3	A1	149	A	Sidechain
3	A1	1490	U	Sidechain
3	A1	1491	G	Sidechain
3	A1	1492	A	Sidechain
3	A1	1493	A	Sidechain
3	A1	1495	U	Sidechain
3	A1	15	G	Sidechain
3	A1	150	U	Sidechain
3	A1	1504	G	Sidechain
3	A1	1505	G	Sidechain
3	A1	1507	A	Sidechain
3	A1	151	A	Sidechain
3	A1	1510	C	Sidechain
3	A1	1511	G	Sidechain
3	A1	1513	A	Sidechain
3	A1	1514	G	Sidechain
3	A1	1515	G	Sidechain
3	A1	1518	A	Sidechain
3	A1	1519	A	Sidechain
3	A1	152	A	Sidechain
3	A1	1520	C	Sidechain
3	A1	1521	C	Sidechain
3	A1	1522	U	Sidechain
3	A1	1526	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	1527	U	Sidechain
3	A1	1529	G	Sidechain
3	A1	153	C	Sidechain
3	A1	1530	G	Sidechain
3	A1	1531	A	Sidechain
3	A1	1532	U	Sidechain
3	A1	156	C	Sidechain
3	A1	158	G	Sidechain
3	A1	159	G	Sidechain
3	A1	16	A	Sidechain
3	A1	160	A	Sidechain
3	A1	161	A	Sidechain
3	A1	162	A	Sidechain
3	A1	163	C	Sidechain
3	A1	164	G	Sidechain
3	A1	165	G	Sidechain
3	A1	166	U	Sidechain
3	A1	167	A	Sidechain
3	A1	168	G	Sidechain
3	A1	172	A	Sidechain
3	A1	173	U	Sidechain
3	A1	174	A	Sidechain
3	A1	178	C	Sidechain
3	A1	179	A	Sidechain
3	A1	182	A	Sidechain
3	A1	183	C	Sidechain
3	A1	184	G	Sidechain
3	A1	185	U	Sidechain
3	A1	186	C	Sidechain
3	A1	187	G	Sidechain
3	A1	188	C	Sidechain
3	A1	189	A	Sidechain
3	A1	190	A	Sidechain
3	A1	191	G	Sidechain
3	A1	192	A	Sidechain
3	A1	198	G	Sidechain
3	A1	199	A	Sidechain
3	A1	200	G	Sidechain
3	A1	202	G	Sidechain
3	A1	203	G	Sidechain
3	A1	204	G	Sidechain
3	A1	205	A	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	208	U	Sidechain
3	A1	209	U	Sidechain
3	A1	210	C	Sidechain
3	A1	213	G	Sidechain
3	A1	214	C	Sidechain
3	A1	215	C	Sidechain
3	A1	217	C	Sidechain
3	A1	218	U	Sidechain
3	A1	219	U	Sidechain
3	A1	22	G	Sidechain
3	A1	220	G	Sidechain
3	A1	222	C	Sidechain
3	A1	225	C	Sidechain
3	A1	226	G	Sidechain
3	A1	227	G	Sidechain
3	A1	228	A	Sidechain
3	A1	229	U	Sidechain
3	A1	23	C	Sidechain
3	A1	230	G	Sidechain
3	A1	231	U	Sidechain
3	A1	233	C	Sidechain
3	A1	237	G	Sidechain
3	A1	238	A	Sidechain
3	A1	24	U	Sidechain
3	A1	240	G	Sidechain
3	A1	241	G	Sidechain
3	A1	244	U	Sidechain
3	A1	249	U	Sidechain
3	A1	25	C	Sidechain
3	A1	250	A	Sidechain
3	A1	253	A	Sidechain
3	A1	254	G	Sidechain
3	A1	255	G	Sidechain
3	A1	257	G	Sidechain
3	A1	258	G	Sidechain
3	A1	259	G	Sidechain
3	A1	26	A	Sidechain
3	A1	260	G	Sidechain
3	A1	261	U	Sidechain
3	A1	262	A	Sidechain
3	A1	264	C	Sidechain
3	A1	265	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	266	G	Sidechain
3	A1	267	C	Sidechain
3	A1	269	C	Sidechain
3	A1	27	G	Sidechain
3	A1	271	C	Sidechain
3	A1	275	G	Sidechain
3	A1	277	C	Sidechain
3	A1	279	A	Sidechain
3	A1	284	C	Sidechain
3	A1	285	C	Sidechain
3	A1	286	C	Sidechain
3	A1	288	A	Sidechain
3	A1	289	G	Sidechain
3	A1	291	U	Sidechain
3	A1	292	G	Sidechain
3	A1	294	U	Sidechain
3	A1	295	C	Sidechain
3	A1	297	G	Sidechain
3	A1	300	A	Sidechain
3	A1	301	G	Sidechain
3	A1	302	G	Sidechain
3	A1	303	A	Sidechain
3	A1	305	G	Sidechain
3	A1	307	C	Sidechain
3	A1	308	C	Sidechain
3	A1	309	A	Sidechain
3	A1	31	G	Sidechain
3	A1	310	G	Sidechain
3	A1	311	C	Sidechain
3	A1	312	C	Sidechain
3	A1	313	A	Sidechain
3	A1	317	U	Sidechain
3	A1	318	G	Sidechain
3	A1	319	G	Sidechain
3	A1	320	A	Sidechain
3	A1	321	A	Sidechain
3	A1	322	C	Sidechain
3	A1	323	U	Sidechain
3	A1	324	G	Sidechain
3	A1	326	G	Sidechain
3	A1	327	A	Sidechain
3	A1	330	C	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	331	G	Sidechain
3	A1	332	G	Sidechain
3	A1	333	U	Sidechain
3	A1	334	C	Sidechain
3	A1	336	A	Sidechain
3	A1	337	G	Sidechain
3	A1	340	U	Sidechain
3	A1	341	C	Sidechain
3	A1	343	U	Sidechain
3	A1	346	G	Sidechain
3	A1	348	G	Sidechain
3	A1	35	G	Sidechain
3	A1	350	G	Sidechain
3	A1	351	G	Sidechain
3	A1	352	C	Sidechain
3	A1	353	A	Sidechain
3	A1	354	G	Sidechain
3	A1	356	A	Sidechain
3	A1	357	G	Sidechain
3	A1	358	U	Sidechain
3	A1	359	G	Sidechain
3	A1	360	G	Sidechain
3	A1	361	G	Sidechain
3	A1	362	G	Sidechain
3	A1	363	A	Sidechain
3	A1	367	U	Sidechain
3	A1	368	U	Sidechain
3	A1	369	G	Sidechain
3	A1	37	U	Sidechain
3	A1	371	A	Sidechain
3	A1	372	C	Sidechain
3	A1	375	U	Sidechain
3	A1	376	G	Sidechain
3	A1	377	G	Sidechain
3	A1	378	G	Sidechain
3	A1	38	G	Sidechain
3	A1	381	C	Sidechain
3	A1	382	A	Sidechain
3	A1	384	G	Sidechain
3	A1	388	G	Sidechain
3	A1	389	A	Sidechain
3	A1	39	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	390	U	Sidechain
3	A1	391	G	Sidechain
3	A1	392	C	Sidechain
3	A1	395	C	Sidechain
3	A1	396	C	Sidechain
3	A1	398	U	Sidechain
3	A1	399	G	Sidechain
3	A1	40	C	Sidechain
3	A1	400	C	Sidechain
3	A1	401	C	Sidechain
3	A1	404	G	Sidechain
3	A1	406	G	Sidechain
3	A1	409	U	Sidechain
3	A1	41	G	Sidechain
3	A1	410	G	Sidechain
3	A1	411	A	Sidechain
3	A1	412	A	Sidechain
3	A1	413	G	Sidechain
3	A1	414	A	Sidechain
3	A1	415	A	Sidechain
3	A1	416	G	Sidechain
3	A1	417	G	Sidechain
3	A1	419	C	Sidechain
3	A1	42	G	Sidechain
3	A1	420	U	Sidechain
3	A1	421	U	Sidechain
3	A1	422	C	Sidechain
3	A1	423	G	Sidechain
3	A1	424	G	Sidechain
3	A1	425	G	Sidechain
3	A1	427	U	Sidechain
3	A1	428	G	Sidechain
3	A1	429	U	Sidechain
3	A1	432	A	Sidechain
3	A1	433	G	Sidechain
3	A1	434	U	Sidechain
3	A1	435	A	Sidechain
3	A1	436	C	Sidechain
3	A1	437	U	Sidechain
3	A1	438	U	Sidechain
3	A1	44	A	Sidechain
3	A1	440	C	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	442	G	Sidechain
3	A1	443	C	Sidechain
3	A1	445	G	Sidechain
3	A1	446	G	Sidechain
3	A1	447	G	Sidechain
3	A1	449	G	Sidechain
3	A1	45	G	Sidechain
3	A1	450	G	Sidechain
3	A1	452	A	Sidechain
3	A1	453	G	Sidechain
3	A1	454	G	Sidechain
3	A1	456	A	Sidechain
3	A1	457	G	Sidechain
3	A1	458	U	Sidechain
3	A1	459	A	Sidechain
3	A1	461	A	Sidechain
3	A1	463	U	Sidechain
3	A1	465	A	Sidechain
3	A1	467	U	Sidechain
3	A1	470	C	Sidechain
3	A1	473	U	Sidechain
3	A1	474	G	Sidechain
3	A1	475	C	Sidechain
3	A1	476	U	Sidechain
3	A1	478	A	Sidechain
3	A1	480	U	Sidechain
3	A1	483	C	Sidechain
3	A1	485	U	Sidechain
3	A1	486	U	Sidechain
3	A1	487	A	Sidechain
3	A1	489	C	Sidechain
3	A1	491	G	Sidechain
3	A1	493	A	Sidechain
3	A1	494	G	Sidechain
3	A1	497	G	Sidechain
3	A1	499	A	Sidechain
3	A1	50	A	Sidechain
3	A1	501	C	Sidechain
3	A1	504	C	Sidechain
3	A1	505	G	Sidechain
3	A1	506	G	Sidechain
3	A1	508	U	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	511	C	Sidechain
3	A1	512	U	Sidechain
3	A1	514	C	Sidechain
3	A1	515	G	Sidechain
3	A1	517	G	Sidechain
3	A1	518	C	Sidechain
3	A1	519	C	Sidechain
3	A1	52	C	Sidechain
3	A1	521	G	Sidechain
3	A1	522	C	Sidechain
3	A1	523	A	Sidechain
3	A1	524	G	Sidechain
3	A1	525	C	Sidechain
3	A1	528	C	Sidechain
3	A1	529	G	Sidechain
3	A1	530	G	Sidechain
3	A1	531	U	Sidechain
3	A1	532	A	Sidechain
3	A1	533	A	Sidechain
3	A1	534	U	Sidechain
3	A1	535	A	Sidechain
3	A1	536	C	Sidechain
3	A1	537	G	Sidechain
3	A1	538	G	Sidechain
3	A1	539	A	Sidechain
3	A1	540	G	Sidechain
3	A1	541	G	Sidechain
3	A1	542	G	Sidechain
3	A1	547	A	Sidechain
3	A1	548	G	Sidechain
3	A1	549	C	Sidechain
3	A1	55	A	Sidechain
3	A1	550	G	Sidechain
3	A1	553	A	Sidechain
3	A1	554	A	Sidechain
3	A1	555	U	Sidechain
3	A1	556	C	Sidechain
3	A1	558	G	Sidechain
3	A1	559	A	Sidechain
3	A1	560	A	Sidechain
3	A1	561	U	Sidechain
3	A1	562	U	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	563	A	Sidechain
3	A1	565	U	Sidechain
3	A1	566	G	Sidechain
3	A1	567	G	Sidechain
3	A1	568	G	Sidechain
3	A1	569	C	Sidechain
3	A1	57	G	Sidechain
3	A1	570	G	Sidechain
3	A1	572	A	Sidechain
3	A1	573	A	Sidechain
3	A1	574	A	Sidechain
3	A1	575	G	Sidechain
3	A1	576	C	Sidechain
3	A1	577	G	Sidechain
3	A1	578	C	Sidechain
3	A1	581	G	Sidechain
3	A1	585	G	Sidechain
3	A1	586	C	Sidechain
3	A1	587	G	Sidechain
3	A1	59	A	Sidechain
3	A1	590	U	Sidechain
3	A1	591	U	Sidechain
3	A1	592	G	Sidechain
3	A1	593	U	Sidechain
3	A1	594	U	Sidechain
3	A1	595	A	Sidechain
3	A1	596	A	Sidechain
3	A1	597	G	Sidechain
3	A1	598	U	Sidechain
3	A1	6	G	Sidechain
3	A1	602	A	Sidechain
3	A1	603	U	Sidechain
3	A1	606	G	Sidechain
3	A1	607	A	Sidechain
3	A1	608	A	Sidechain
3	A1	610	U	Sidechain
3	A1	611	C	Sidechain
3	A1	612	C	Sidechain
3	A1	613	C	Sidechain
3	A1	614	C	Sidechain
3	A1	617	G	Sidechain
3	A1	621	A	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	625	U	Sidechain
3	A1	626	G	Sidechain
3	A1	627	G	Sidechain
3	A1	628	G	Sidechain
3	A1	63	C	Sidechain
3	A1	632	U	Sidechain
3	A1	633	G	Sidechain
3	A1	634	C	Sidechain
3	A1	635	A	Sidechain
3	A1	636	U	Sidechain
3	A1	637	C	Sidechain
3	A1	638	U	Sidechain
3	A1	639	G	Sidechain
3	A1	640	A	Sidechain
3	A1	641	U	Sidechain
3	A1	642	A	Sidechain
3	A1	647	C	Sidechain
3	A1	648	A	Sidechain
3	A1	649	A	Sidechain
3	A1	650	G	Sidechain
3	A1	652	U	Sidechain
3	A1	653	U	Sidechain
3	A1	654	G	Sidechain
3	A1	656	G	Sidechain
3	A1	657	U	Sidechain
3	A1	660	C	Sidechain
3	A1	661	G	Sidechain
3	A1	662	U	Sidechain
3	A1	664	G	Sidechain
3	A1	666	G	Sidechain
3	A1	669	G	Sidechain
3	A1	670	G	Sidechain
3	A1	672	U	Sidechain
3	A1	674	G	Sidechain
3	A1	676	A	Sidechain
3	A1	678	U	Sidechain
3	A1	68	G	Sidechain
3	A1	681	A	Sidechain
3	A1	682	G	Sidechain
3	A1	686	U	Sidechain
3	A1	688	G	Sidechain
3	A1	690	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	691	G	Sidechain
3	A1	694	A	Sidechain
3	A1	695	A	Sidechain
3	A1	697	U	Sidechain
3	A1	698	G	Sidechain
3	A1	70	U	Sidechain
3	A1	700	G	Sidechain
3	A1	701	U	Sidechain
3	A1	702	A	Sidechain
3	A1	703	G	Sidechain
3	A1	706	A	Sidechain
3	A1	707	U	Sidechain
3	A1	708	C	Sidechain
3	A1	709	U	Sidechain
3	A1	71	A	Sidechain
3	A1	710	G	Sidechain
3	A1	711	G	Sidechain
3	A1	712	A	Sidechain
3	A1	715	A	Sidechain
3	A1	716	A	Sidechain
3	A1	717	U	Sidechain
3	A1	718	A	Sidechain
3	A1	719	C	Sidechain
3	A1	720	C	Sidechain
3	A1	721	G	Sidechain
3	A1	722	G	Sidechain
3	A1	724	G	Sidechain
3	A1	725	G	Sidechain
3	A1	727	G	Sidechain
3	A1	728	A	Sidechain
3	A1	729	A	Sidechain
3	A1	73	C	Sidechain
3	A1	732	C	Sidechain
3	A1	734	G	Sidechain
3	A1	736	C	Sidechain
3	A1	737	C	Sidechain
3	A1	738	C	Sidechain
3	A1	74	A	Sidechain
3	A1	741	G	Sidechain
3	A1	742	G	Sidechain
3	A1	743	A	Sidechain
3	A1	747	A	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	748	G	Sidechain
3	A1	749	A	Sidechain
3	A1	75	G	Sidechain
3	A1	752	G	Sidechain
3	A1	754	C	Sidechain
3	A1	755	G	Sidechain
3	A1	756	C	Sidechain
3	A1	757	U	Sidechain
3	A1	759	A	Sidechain
3	A1	76	G	Sidechain
3	A1	760	G	Sidechain
3	A1	762	U	Sidechain
3	A1	764	C	Sidechain
3	A1	766	A	Sidechain
3	A1	769	G	Sidechain
3	A1	770	C	Sidechain
3	A1	771	G	Sidechain
3	A1	775	G	Sidechain
3	A1	776	G	Sidechain
3	A1	778	G	Sidechain
3	A1	781	A	Sidechain
3	A1	785	G	Sidechain
3	A1	788	U	Sidechain
3	A1	789	U	Sidechain
3	A1	79	G	Sidechain
3	A1	791	G	Sidechain
3	A1	792	A	Sidechain
3	A1	794	A	Sidechain
3	A1	795	C	Sidechain
3	A1	796	C	Sidechain
3	A1	797	C	Sidechain
3	A1	798	U	Sidechain
3	A1	8	A	Sidechain
3	A1	800	G	Sidechain
3	A1	801	U	Sidechain
3	A1	802	A	Sidechain
3	A1	803	G	Sidechain
3	A1	809	G	Sidechain
3	A1	81	A	Sidechain
3	A1	810	C	Sidechain
3	A1	811	C	Sidechain
3	A1	812	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	814	A	Sidechain
3	A1	816	A	Sidechain
3	A1	817	C	Sidechain
3	A1	818	G	Sidechain
3	A1	82	G	Sidechain
3	A1	820	U	Sidechain
3	A1	821	G	Sidechain
3	A1	822	U	Sidechain
3	A1	824	G	Sidechain
3	A1	826	C	Sidechain
3	A1	827	U	Sidechain
3	A1	828	U	Sidechain
3	A1	829	G	Sidechain
3	A1	830	G	Sidechain
3	A1	832	G	Sidechain
3	A1	833	G	Sidechain
3	A1	834	U	Sidechain
3	A1	836	G	Sidechain
3	A1	838	G	Sidechain
3	A1	843	U	Sidechain
3	A1	845	A	Sidechain
3	A1	847	G	Sidechain
3	A1	849	G	Sidechain
3	A1	852	G	Sidechain
3	A1	853	C	Sidechain
3	A1	855	U	Sidechain
3	A1	858	G	Sidechain
3	A1	859	G	Sidechain
3	A1	862	C	Sidechain
3	A1	863	U	Sidechain
3	A1	865	A	Sidechain
3	A1	867	G	Sidechain
3	A1	868	C	Sidechain
3	A1	869	G	Sidechain
3	A1	87	C	Sidechain
3	A1	871	U	Sidechain
3	A1	872	A	Sidechain
3	A1	874	G	Sidechain
3	A1	875	U	Sidechain
3	A1	877	G	Sidechain
3	A1	878	A	Sidechain
3	A1	880	C	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	881	G	Sidechain
3	A1	883	C	Sidechain
3	A1	884	U	Sidechain
3	A1	885	G	Sidechain
3	A1	886	G	Sidechain
3	A1	89	U	Sidechain
3	A1	890	G	Sidechain
3	A1	891	U	Sidechain
3	A1	892	A	Sidechain
3	A1	893	C	Sidechain
3	A1	894	G	Sidechain
3	A1	895	G	Sidechain
3	A1	897	C	Sidechain
3	A1	9	G	Sidechain
3	A1	90	C	Sidechain
3	A1	901	A	Sidechain
3	A1	903	G	Sidechain
3	A1	905	U	Sidechain
3	A1	906	A	Sidechain
3	A1	908	A	Sidechain
3	A1	91	U	Sidechain
3	A1	910	C	Sidechain
3	A1	911	U	Sidechain
3	A1	913	A	Sidechain
3	A1	917	G	Sidechain
3	A1	919	A	Sidechain
3	A1	92	U	Sidechain
3	A1	920	U	Sidechain
3	A1	923	A	Sidechain
3	A1	924	C	Sidechain
3	A1	925	G	Sidechain
3	A1	926	G	Sidechain
3	A1	927	G	Sidechain
3	A1	929	G	Sidechain
3	A1	93	U	Sidechain
3	A1	931	C	Sidechain
3	A1	932	C	Sidechain
3	A1	933	G	Sidechain
3	A1	935	A	Sidechain
3	A1	937	A	Sidechain
3	A1	938	A	Sidechain
3	A1	939	G	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	94	G	Sidechain
3	A1	940	C	Sidechain
3	A1	941	G	Sidechain
3	A1	942	G	Sidechain
3	A1	944	G	Sidechain
3	A1	945	G	Sidechain
3	A1	95	C	Sidechain
3	A1	950	U	Sidechain
3	A1	951	G	Sidechain
3	A1	952	U	Sidechain
3	A1	953	G	Sidechain
3	A1	954	G	Sidechain
3	A1	955	U	Sidechain
3	A1	956	U	Sidechain
3	A1	958	A	Sidechain
3	A1	959	A	Sidechain
3	A1	960	U	Sidechain
3	A1	961	U	Sidechain
3	A1	962	C	Sidechain
3	A1	963	G	Sidechain
3	A1	964	A	Sidechain
3	A1	965	U	Sidechain
3	A1	967	C	Sidechain
3	A1	968	A	Sidechain
3	A1	969	A	Sidechain
3	A1	97	G	Sidechain
3	A1	970	C	Sidechain
3	A1	971	G	Sidechain
3	A1	973	G	Sidechain
3	A1	974	A	Sidechain
3	A1	975	A	Sidechain
3	A1	976	G	Sidechain
3	A1	977	A	Sidechain
3	A1	978	A	Sidechain
3	A1	979	C	Sidechain
3	A1	98	A	Sidechain
3	A1	981	U	Sidechain
3	A1	984	C	Sidechain
3	A1	985	C	Sidechain
3	A1	987	G	Sidechain
3	A1	988	G	Sidechain
3	A1	99	C	Sidechain

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Mol	Chain	Res	Type	Group
3	A1	990	C	Sidechain
3	A1	992	U	Sidechain
3	A1	993	G	Sidechain
3	A1	994	A	Sidechain
3	A1	996	A	Sidechain
3	A1	998	C	Sidechain
3	A1	999	C	Sidechain
1	AA	1	G	Sidechain
1	AA	10	G	Sidechain
1	AA	11	C	Sidechain
1	AA	12	U	Sidechain
1	AA	14	A	Sidechain
1	AA	15	G	Sidechain
1	AA	16	U	Sidechain
1	AA	17	U	Sidechain
1	AA	18	G	Sidechain
1	AA	19	G	Sidechain
1	AA	22	G	Sidechain
1	AA	23	A	Sidechain
1	AA	28	C	Sidechain
1	AA	29	A	Sidechain
1	AA	3	G	Sidechain
1	AA	31	A	Sidechain
1	AA	32	C	Sidechain
1	AA	33	U	Sidechain
1	AA	34	G	Sidechain
1	AA	35	A	Sidechain
1	AA	36	A	Sidechain
1	AA	37	G	Sidechain
1	AA	38	A	Sidechain
1	AA	4	G	Sidechain
1	AA	41	U	Sidechain
1	AA	42	G	Sidechain
1	AA	43	G	Sidechain
1	AA	44	A	Sidechain
1	AA	45	G	Sidechain
1	AA	46	G	Sidechain
1	AA	47	U	Sidechain
1	AA	49	C	Sidechain
1	AA	5	A	Sidechain
1	AA	50	U	Sidechain
1	AA	51	G	Sidechain

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Mol	Chain	Res	Type	Group
1	AA	53	G	Sidechain
1	AA	54	U	Sidechain
1	AA	55	U	Sidechain
1	AA	57	G	Sidechain
1	AA	58	A	Sidechain
1	AA	6	U	Sidechain
1	AA	60	C	Sidechain
1	AA	61	C	Sidechain
1	AA	63	C	Sidechain
1	AA	64	A	Sidechain
1	AA	65	G	Sidechain
1	AA	67	A	Sidechain
1	AA	68	U	Sidechain
1	AA	69	U	Sidechain
1	AA	7	U	Sidechain
1	AA	71	G	Sidechain
1	AA	73	A	Sidechain
1	AA	75	C	Sidechain
1	AA	8	U	Sidechain
1	AA	9	A	Sidechain
4	AB	21	TYR	Sidechain
4	AB	34	ARG	Sidechain
4	AB	49	PHE	Peptide
5	AC	36	ARG	Sidechain
5	AC	51	PHE	Sidechain
5	AC	97	ARG	Sidechain
6	AD	13	ARG	Sidechain
6	AD	2	THR	Peptide
6	AD	49	ARG	Sidechain
6	AD	82	ARG	Sidechain
6	AD	9	LYS	Peptide
6	AD	94	TYR	Sidechain
6	AD	97	VAL	Peptide
1	AE	10	G	Sidechain
1	AE	11	C	Sidechain
1	AE	12	U	Sidechain
1	AE	13	C	Sidechain
1	AE	14	A	Sidechain
1	AE	15	G	Sidechain
1	AE	16	U	Sidechain
1	AE	17	U	Sidechain
1	AE	18	G	Sidechain

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Mol	Chain	Res	Type	Group
1	AE	2	C	Sidechain
1	AE	20	G	Sidechain
1	AE	21	A	Sidechain
1	AE	23	A	Sidechain
1	AE	24	G	Sidechain
1	AE	26	G	Sidechain
1	AE	27	C	Sidechain
1	AE	29	A	Sidechain
1	AE	30	G	Sidechain
1	AE	31	A	Sidechain
1	AE	32	C	Sidechain
1	AE	33	U	Sidechain
1	AE	34	G	Sidechain
1	AE	35	A	Sidechain
1	AE	37	G	Sidechain
1	AE	38	A	Sidechain
1	AE	39	U	Sidechain
1	AE	4	G	Sidechain
1	AE	42	G	Sidechain
1	AE	46	G	Sidechain
1	AE	48	C	Sidechain
1	AE	5	A	Sidechain
1	AE	50	U	Sidechain
1	AE	52	U	Sidechain
1	AE	53	G	Sidechain
1	AE	54	U	Sidechain
1	AE	55	U	Sidechain
1	AE	57	G	Sidechain
1	AE	58	A	Sidechain
1	AE	59	U	Sidechain
1	AE	6	U	Sidechain
1	AE	62	A	Sidechain
1	AE	67	A	Sidechain
1	AE	70	C	Sidechain
1	AE	71	G	Sidechain
1	AE	72	C	Sidechain
1	AE	73	A	Sidechain
1	AE	74	C	Sidechain
1	AE	76	A	Sidechain
1	AE	9	A	Sidechain
7	AF	104	ASN	Peptide
7	AF	106	ARG	Sidechain

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Mol	Chain	Res	Type	Group
7	AF	112	ARG	Sidechain
7	AF	79	LEU	Peptide
7	AF	94	LEU	Peptide
8	AG	20	PHE	Peptide
8	AG	60	ARG	Sidechain
8	AG	68	ARG	Sidechain
8	AG	84	ARG	Sidechain
9	AH	41	HIS	Sidechain
9	AH	45	HIS	Sidechain
9	AH	52	ARG	Sidechain
9	AH	57	ARG	Sidechain
9	AH	62	ARG	Sidechain
10	AI	40	ASN	Peptide
10	AI	5	ARG	Sidechain
10	AI	56	ARG	Sidechain
11	AJ	33	TYR	Sidechain
11	AJ	54	ILE	Peptide
11	AJ	64	ARG	Sidechain
11	AJ	80	LYS	Peptide
13	AL	2	ARG	Sidechain
13	AL	31	ARG	Sidechain
13	AL	35	ARG	Peptide
13	AL	37	SER	Peptide
13	AL	4	LEU	Peptide
13	AL	51	HIS	Peptide
13	AL	66	VAL	Peptide
13	AL	77	ARG	Sidechain
2	AM	10	U	Sidechain
2	AM	12	U	Sidechain
2	AM	13	U	Sidechain
2	AM	15	U	Sidechain
2	AM	17	U	Sidechain
2	AM	19	U	Sidechain
2	AM	20	U	Sidechain
2	AM	3	U	Sidechain
2	AM	4	U	Sidechain
14	AN	9	ARG	Sidechain
15	AO	39	ARG	Sidechain
15	AO	41	TYR	Sidechain
15	AO	62	SER	Peptide
1	AP	10	G	Sidechain
1	AP	11	C	Sidechain

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Mol	Chain	Res	Type	Group
1	AP	13	C	Sidechain
1	AP	15	G	Sidechain
1	AP	16	U	Sidechain
1	AP	17	U	Sidechain
1	AP	18	G	Sidechain
1	AP	19	G	Sidechain
1	AP	20	G	Sidechain
1	AP	21	A	Sidechain
1	AP	22	G	Sidechain
1	AP	24	G	Sidechain
1	AP	25	C	Sidechain
1	AP	26	G	Sidechain
1	AP	27	C	Sidechain
1	AP	28	C	Sidechain
1	AP	29	A	Sidechain
1	AP	3	G	Sidechain
1	AP	30	G	Sidechain
1	AP	31	A	Sidechain
1	AP	32	C	Sidechain
1	AP	33	U	Sidechain
1	AP	34	G	Sidechain
1	AP	35	A	Sidechain
1	AP	37	G	Sidechain
1	AP	4	G	Sidechain
1	AP	41	U	Sidechain
1	AP	42	G	Sidechain
1	AP	43	G	Sidechain
1	AP	44	A	Sidechain
1	AP	45	G	Sidechain
1	AP	47	U	Sidechain
1	AP	48	C	Sidechain
1	AP	5	A	Sidechain
1	AP	50	U	Sidechain
1	AP	53	G	Sidechain
1	AP	56	C	Sidechain
1	AP	58	A	Sidechain
1	AP	6	U	Sidechain
1	AP	60	C	Sidechain
1	AP	61	C	Sidechain
1	AP	62	A	Sidechain
1	AP	64	A	Sidechain
1	AP	66	A	Sidechain

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Mol	Chain	Res	Type	Group
1	AP	69	U	Sidechain
1	AP	71	G	Sidechain
1	AP	72	C	Sidechain
1	AP	73	A	Sidechain
1	AP	8	U	Sidechain
1	AP	9	A	Sidechain
16	AQ	34	ARG	Sidechain
16	AQ	44	ARG	Sidechain
16	AQ	6	ARG	Peptide
16	AQ	9	GLU	Peptide
17	AR	102	TYR	Sidechain
17	AR	103	ARG	Sidechain
17	AR	140	ASP	Peptide
17	AR	22	SER	Peptide,Mainchain
17	AR	56	GLU	Peptide
17	AR	69	ARG	Sidechain
18	AS	156	ARG	Sidechain
18	AS	25	LYS	Peptide
18	AS	26	GLY	Peptide
19	AT	49	TYR	Sidechain
19	AT	72	ASP	Sidechain
19	AT	8	PHE	Sidechain
19	AT	91	ARG	Sidechain
20	AU	118	ARG	Sidechain
20	AU	17	PHE	Sidechain
20	AU	73	GLU	Sidechain
20	AU	9	ARG	Peptide
21	AV	50	VAL	Peptide
21	AV	79	ARG	Sidechain
22	AW	118	ARG	Sidechain
22	AW	126	PHE	Peptide
22	AW	17	ARG	Sidechain
22	AW	24	ASN	Peptide
23	AX	62	ARG	Sidechain
23	AX	68	ARG	Sidechain
23	AX	73	LEU	Peptide
23	AX	9	ARG	Sidechain
50	B1	101	TYR	Sidechain
50	B1	102	ARG	Sidechain
50	B1	115	GLN	Peptide
50	B1	191	ASP	Peptide
50	B1	40	ARG	Sidechain

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Mol	Chain	Res	Type	Group
50	B1	45	ALA	Peptide
50	B1	49	ARG	Sidechain
50	B1	69	ARG	Sidechain
50	B1	78	TRP	Peptide
51	B2	111	ARG	Sidechain
51	B2	147	ARG	Sidechain
51	B2	149	ARG	Sidechain
51	B2	19	PHE	Sidechain
51	B2	74	ALA	Peptide
51	B2	94	ARG	Sidechain
52	B3	108	PHE	Peptide
52	B3	148	ARG	Sidechain
52	B3	151	ARG	Sidechain
52	B3	68	ARG	Sidechain
52	B3	93	TYR	Sidechain
53	B4	116	ARG	Sidechain
53	B4	16	GLY	Peptide
53	B4	31	VAL	Peptide
53	B4	91	PHE	Sidechain
54	B5	133	ARG	Sidechain
54	B5	51	GLY	Peptide
54	B5	66	PHE	Peptide
55	B6	109	LEU	Peptide
55	B6	124	VAL	Peptide
55	B6	31	GLU	Sidechain
55	B6	34	ARG	Sidechain
55	B6	49	ASP	Sidechain
55	B6	69	ARG	Sidechain
55	B6	75	TYR	Sidechain
55	B6	98	GLU	Sidechain
24	BA	10	G	Sidechain
24	BA	100	G	Sidechain
24	BA	101	A	Sidechain
24	BA	103	U	Sidechain
24	BA	104	A	Sidechain
24	BA	105	G	Sidechain
24	BA	106	G	Sidechain
24	BA	107	G	Sidechain
24	BA	108	A	Sidechain
24	BA	109	A	Sidechain
24	BA	112	G	Sidechain
24	BA	113	C	Sidechain

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Mol	Chain	Res	Type	Group
24	BA	114	C	Sidechain
24	BA	116	G	Sidechain
24	BA	118	C	Sidechain
24	BA	12	C	Sidechain
24	BA	13	G	Sidechain
24	BA	15	A	Sidechain
24	BA	16	G	Sidechain
24	BA	18	G	Sidechain
24	BA	2	G	Sidechain
24	BA	22	U	Sidechain
24	BA	23	G	Sidechain
24	BA	25	U	Sidechain
24	BA	26	C	Sidechain
24	BA	29	A	Sidechain
24	BA	31	C	Sidechain
24	BA	32	U	Sidechain
24	BA	33	G	Sidechain
24	BA	36	C	Sidechain
24	BA	37	C	Sidechain
24	BA	38	C	Sidechain
24	BA	41	G	Sidechain
24	BA	43	C	Sidechain
24	BA	44	G	Sidechain
24	BA	47	C	Sidechain
24	BA	48	U	Sidechain
24	BA	5	U	Sidechain
24	BA	50	A	Sidechain
24	BA	51	G	Sidechain
24	BA	53	A	Sidechain
24	BA	54	G	Sidechain
24	BA	55	U	Sidechain
24	BA	57	A	Sidechain
24	BA	60	C	Sidechain
24	BA	61	G	Sidechain
24	BA	64	G	Sidechain
24	BA	65	U	Sidechain
24	BA	66	A	Sidechain
24	BA	69	G	Sidechain
24	BA	7	G	Sidechain
24	BA	72	G	Sidechain
24	BA	73	A	Sidechain
24	BA	74	U	Sidechain

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Mol	Chain	Res	Type	Group
24	BA	75	G	Sidechain
24	BA	76	G	Sidechain
24	BA	77	U	Sidechain
24	BA	78	A	Sidechain
24	BA	80	U	Sidechain
24	BA	81	G	Sidechain
24	BA	83	G	Sidechain
24	BA	87	U	Sidechain
24	BA	93	C	Sidechain
24	BA	94	A	Sidechain
24	BA	95	U	Sidechain
24	BA	98	G	Sidechain
25	BB	1	G	Sidechain
25	BB	1000	A	Sidechain
25	BB	1001	A	Sidechain
25	BB	1003	G	Sidechain
25	BB	1007	C	Sidechain
25	BB	1008	A	Sidechain
25	BB	1009	A	Sidechain
25	BB	1010	A	Sidechain
25	BB	1011	G	Sidechain
25	BB	1012	U	Sidechain
25	BB	1013	C	Sidechain
25	BB	1016	G	Sidechain
25	BB	1017	G	Sidechain
25	BB	1019	U	Sidechain
25	BB	102	U	Sidechain
25	BB	1020	A	Sidechain
25	BB	1021	A	Sidechain
25	BB	1022	G	Sidechain
25	BB	1023	U	Sidechain
25	BB	1024	G	Sidechain
25	BB	1025	G	Sidechain
25	BB	1026	G	Sidechain
25	BB	1027	A	Sidechain
25	BB	1028	A	Sidechain
25	BB	1031	G	Sidechain
25	BB	1033	U	Sidechain
25	BB	1035	U	Sidechain
25	BB	1036	G	Sidechain
25	BB	1041	G	Sidechain
25	BB	1044	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1045	C	Sidechain
25	BB	1046	A	Sidechain
25	BB	1047	G	Sidechain
25	BB	1049	C	Sidechain
25	BB	105	C	Sidechain
25	BB	1050	A	Sidechain
25	BB	1051	G	Sidechain
25	BB	1052	C	Sidechain
25	BB	1054	A	Sidechain
25	BB	1057	A	Sidechain
25	BB	1059	G	Sidechain
25	BB	1060	U	Sidechain
25	BB	1061	U	Sidechain
25	BB	1064	C	Sidechain
25	BB	1065	U	Sidechain
25	BB	1066	U	Sidechain
25	BB	1069	A	Sidechain
25	BB	1070	A	Sidechain
25	BB	1073	A	Sidechain
25	BB	1074	G	Sidechain
25	BB	1078	U	Sidechain
25	BB	1079	C	Sidechain
25	BB	108	G	Sidechain
25	BB	1080	A	Sidechain
25	BB	1081	U	Sidechain
25	BB	1082	U	Sidechain
25	BB	1083	U	Sidechain
25	BB	1089	A	Sidechain
25	BB	1093	G	Sidechain
25	BB	1095	A	Sidechain
25	BB	1098	A	Sidechain
25	BB	1099	G	Sidechain
25	BB	11	C	Sidechain
25	BB	110	G	Sidechain
25	BB	1100	C	Sidechain
25	BB	1102	C	Sidechain
25	BB	1104	C	Sidechain
25	BB	1107	G	Sidechain
25	BB	1108	U	Sidechain
25	BB	1109	C	Sidechain
25	BB	111	A	Sidechain
25	BB	1110	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1111	A	Sidechain
25	BB	1113	U	Sidechain
25	BB	1115	G	Sidechain
25	BB	1116	G	Sidechain
25	BB	1118	C	Sidechain
25	BB	1119	U	Sidechain
25	BB	112	U	Sidechain
25	BB	1120	G	Sidechain
25	BB	1121	C	Sidechain
25	BB	1122	G	Sidechain
25	BB	1124	G	Sidechain
25	BB	1125	G	Sidechain
25	BB	1128	G	Sidechain
25	BB	1129	A	Sidechain
25	BB	113	U	Sidechain
25	BB	1132	U	Sidechain
25	BB	1134	A	Sidechain
25	BB	1137	G	Sidechain
25	BB	1139	G	Sidechain
25	BB	114	U	Sidechain
25	BB	1145	C	Sidechain
25	BB	1148	U	Sidechain
25	BB	115	C	Sidechain
25	BB	1150	C	Sidechain
25	BB	1151	A	Sidechain
25	BB	1152	C	Sidechain
25	BB	1154	G	Sidechain
25	BB	1156	A	Sidechain
25	BB	1157	G	Sidechain
25	BB	116	C	Sidechain
25	BB	1160	G	Sidechain
25	BB	1162	G	Sidechain
25	BB	1163	G	Sidechain
25	BB	1165	A	Sidechain
25	BB	1168	G	Sidechain
25	BB	117	G	Sidechain
25	BB	1170	C	Sidechain
25	BB	1172	C	Sidechain
25	BB	1174	U	Sidechain
25	BB	1175	A	Sidechain
25	BB	1176	U	Sidechain
25	BB	1178	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1179	G	Sidechain
25	BB	118	A	Sidechain
25	BB	1180	U	Sidechain
25	BB	1181	U	Sidechain
25	BB	1186	G	Sidechain
25	BB	1189	A	Sidechain
25	BB	1190	G	Sidechain
25	BB	1192	G	Sidechain
25	BB	1193	G	Sidechain
25	BB	1194	A	Sidechain
25	BB	1197	G	Sidechain
25	BB	1199	U	Sidechain
25	BB	12	U	Sidechain
25	BB	120	U	Sidechain
25	BB	1201	U	Sidechain
25	BB	1203	U	Sidechain
25	BB	1206	G	Sidechain
25	BB	1208	C	Sidechain
25	BB	1209	U	Sidechain
25	BB	121	G	Sidechain
25	BB	1210	G	Sidechain
25	BB	1213	A	Sidechain
25	BB	1214	A	Sidechain
25	BB	1216	G	Sidechain
25	BB	1217	U	Sidechain
25	BB	1218	G	Sidechain
25	BB	1219	U	Sidechain
25	BB	122	G	Sidechain
25	BB	1220	G	Sidechain
25	BB	1221	C	Sidechain
25	BB	1222	U	Sidechain
25	BB	1223	G	Sidechain
25	BB	1224	U	Sidechain
25	BB	1225	G	Sidechain
25	BB	1227	G	Sidechain
25	BB	1228	G	Sidechain
25	BB	1229	C	Sidechain
25	BB	1230	A	Sidechain
25	BB	1232	G	Sidechain
25	BB	1233	C	Sidechain
25	BB	1234	U	Sidechain
25	BB	1235	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1236	G	Sidechain
25	BB	1237	A	Sidechain
25	BB	1238	G	Sidechain
25	BB	1239	G	Sidechain
25	BB	1241	A	Sidechain
25	BB	1242	U	Sidechain
25	BB	1243	C	Sidechain
25	BB	1245	G	Sidechain
25	BB	1250	G	Sidechain
25	BB	1251	C	Sidechain
25	BB	1252	G	Sidechain
25	BB	1253	A	Sidechain
25	BB	1257	C	Sidechain
25	BB	1260	A	Sidechain
25	BB	1262	A	Sidechain
25	BB	1263	U	Sidechain
25	BB	1265	A	Sidechain
25	BB	1268	A	Sidechain
25	BB	1273	U	Sidechain
25	BB	1274	A	Sidechain
25	BB	1277	G	Sidechain
25	BB	1278	C	Sidechain
25	BB	1279	G	Sidechain
25	BB	128	C	Sidechain
25	BB	1281	G	Sidechain
25	BB	1282	U	Sidechain
25	BB	1283	G	Sidechain
25	BB	1286	A	Sidechain
25	BB	1288	G	Sidechain
25	BB	1290	C	Sidechain
25	BB	1291	C	Sidechain
25	BB	1292	G	Sidechain
25	BB	1293	C	Sidechain
25	BB	1297	C	Sidechain
25	BB	1299	G	Sidechain
25	BB	130	C	Sidechain
25	BB	1300	G	Sidechain
25	BB	1302	A	Sidechain
25	BB	1305	C	Sidechain
25	BB	1307	A	Sidechain
25	BB	1308	A	Sidechain
25	BB	1309	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	131	A	Sidechain
25	BB	1310	G	Sidechain
25	BB	1311	G	Sidechain
25	BB	1315	C	Sidechain
25	BB	1317	G	Sidechain
25	BB	1318	U	Sidechain
25	BB	1319	C	Sidechain
25	BB	132	G	Sidechain
25	BB	1320	C	Sidechain
25	BB	1321	A	Sidechain
25	BB	1323	C	Sidechain
25	BB	1324	G	Sidechain
25	BB	1326	U	Sidechain
25	BB	1327	A	Sidechain
25	BB	1328	A	Sidechain
25	BB	1329	U	Sidechain
25	BB	1330	C	Sidechain
25	BB	1332	G	Sidechain
25	BB	1334	G	Sidechain
25	BB	1335	C	Sidechain
25	BB	1337	G	Sidechain
25	BB	1338	G	Sidechain
25	BB	1339	G	Sidechain
25	BB	134	G	Sidechain
25	BB	1342	A	Sidechain
25	BB	1343	G	Sidechain
25	BB	1345	C	Sidechain
25	BB	1346	G	Sidechain
25	BB	1348	C	Sidechain
25	BB	135	U	Sidechain
25	BB	1350	C	Sidechain
25	BB	1351	C	Sidechain
25	BB	1352	U	Sidechain
25	BB	1353	A	Sidechain
25	BB	1355	G	Sidechain
25	BB	1357	C	Sidechain
25	BB	1358	G	Sidechain
25	BB	1364	G	Sidechain
25	BB	1365	A	Sidechain
25	BB	1366	A	Sidechain
25	BB	1367	A	Sidechain
25	BB	1369	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	137	U	Sidechain
25	BB	1371	G	Sidechain
25	BB	1379	U	Sidechain
25	BB	138	U	Sidechain
25	BB	1380	G	Sidechain
25	BB	1381	G	Sidechain
25	BB	1382	G	Sidechain
25	BB	1383	A	Sidechain
25	BB	1387	A	Sidechain
25	BB	1388	G	Sidechain
25	BB	1389	G	Sidechain
25	BB	139	U	Sidechain
25	BB	1391	U	Sidechain
25	BB	1392	A	Sidechain
25	BB	1393	A	Sidechain
25	BB	1394	U	Sidechain
25	BB	1396	U	Sidechain
25	BB	14	A	Sidechain
25	BB	140	C	Sidechain
25	BB	1400	U	Sidechain
25	BB	1403	A	Sidechain
25	BB	1404	C	Sidechain
25	BB	1405	U	Sidechain
25	BB	1407	G	Sidechain
25	BB	1408	G	Sidechain
25	BB	141	G	Sidechain
25	BB	1412	U	Sidechain
25	BB	1413	A	Sidechain
25	BB	1416	G	Sidechain
25	BB	1420	A	Sidechain
25	BB	1421	G	Sidechain
25	BB	1422	G	Sidechain
25	BB	1424	G	Sidechain
25	BB	1425	G	Sidechain
25	BB	1426	G	Sidechain
25	BB	143	C	Sidechain
25	BB	1432	G	Sidechain
25	BB	1433	A	Sidechain
25	BB	1434	A	Sidechain
25	BB	1435	G	Sidechain
25	BB	144	A	Sidechain
25	BB	1440	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1442	U	Sidechain
25	BB	1443	U	Sidechain
25	BB	1444	G	Sidechain
25	BB	1445	G	Sidechain
25	BB	1446	C	Sidechain
25	BB	1450	G	Sidechain
25	BB	1451	C	Sidechain
25	BB	1452	G	Sidechain
25	BB	1455	G	Sidechain
25	BB	1458	U	Sidechain
25	BB	1459	G	Sidechain
25	BB	146	A	Sidechain
25	BB	1462	C	Sidechain
25	BB	1464	G	Sidechain
25	BB	1467	U	Sidechain
25	BB	1468	U	Sidechain
25	BB	1469	A	Sidechain
25	BB	1471	G	Sidechain
25	BB	1473	G	Sidechain
25	BB	1474	U	Sidechain
25	BB	1476	U	Sidechain
25	BB	1477	A	Sidechain
25	BB	1478	G	Sidechain
25	BB	1479	G	Sidechain
25	BB	1480	C	Sidechain
25	BB	1482	G	Sidechain
25	BB	1483	G	Sidechain
25	BB	1485	U	Sidechain
25	BB	1486	U	Sidechain
25	BB	1487	U	Sidechain
25	BB	1488	C	Sidechain
25	BB	1489	C	Sidechain
25	BB	1490	A	Sidechain
25	BB	1492	G	Sidechain
25	BB	1493	C	Sidechain
25	BB	1495	A	Sidechain
25	BB	1496	A	Sidechain
25	BB	1497	U	Sidechain
25	BB	1499	C	Sidechain
25	BB	15	G	Sidechain
25	BB	1500	G	Sidechain
25	BB	1501	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1503	A	Sidechain
25	BB	1507	C	Sidechain
25	BB	1509	A	Sidechain
25	BB	151	C	Sidechain
25	BB	1511	G	Sidechain
25	BB	1514	G	Sidechain
25	BB	1515	A	Sidechain
25	BB	1516	G	Sidechain
25	BB	1517	G	Sidechain
25	BB	1519	G	Sidechain
25	BB	1521	G	Sidechain
25	BB	1522	A	Sidechain
25	BB	1524	G	Sidechain
25	BB	1525	A	Sidechain
25	BB	1529	G	Sidechain
25	BB	1532	A	Sidechain
25	BB	1533	C	Sidechain
25	BB	1535	A	Sidechain
25	BB	1536	C	Sidechain
25	BB	1537	G	Sidechain
25	BB	1538	G	Sidechain
25	BB	154	U	Sidechain
25	BB	1541	C	Sidechain
25	BB	1546	G	Sidechain
25	BB	1547	C	Sidechain
25	BB	1549	A	Sidechain
25	BB	1551	A	Sidechain
25	BB	1552	A	Sidechain
25	BB	1553	A	Sidechain
25	BB	1554	U	Sidechain
25	BB	1555	G	Sidechain
25	BB	1556	C	Sidechain
25	BB	1557	C	Sidechain
25	BB	1558	C	Sidechain
25	BB	1560	G	Sidechain
25	BB	1561	C	Sidechain
25	BB	1562	U	Sidechain
25	BB	1563	U	Sidechain
25	BB	1565	C	Sidechain
25	BB	157	C	Sidechain
25	BB	1570	A	Sidechain
25	BB	1574	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1576	U	Sidechain
25	BB	1579	A	Sidechain
25	BB	158	U	Sidechain
25	BB	1581	G	Sidechain
25	BB	1582	C	Sidechain
25	BB	1583	A	Sidechain
25	BB	1586	A	Sidechain
25	BB	1587	G	Sidechain
25	BB	1588	G	Sidechain
25	BB	1589	U	Sidechain
25	BB	1590	A	Sidechain
25	BB	1593	A	Sidechain
25	BB	1594	U	Sidechain
25	BB	1597	A	Sidechain
25	BB	1598	A	Sidechain
25	BB	1599	U	Sidechain
25	BB	16	C	Sidechain
25	BB	1600	C	Sidechain
25	BB	1602	U	Sidechain
25	BB	1605	C	Sidechain
25	BB	1607	C	Sidechain
25	BB	1608	A	Sidechain
25	BB	161	A	Sidechain
25	BB	1610	A	Sidechain
25	BB	1613	G	Sidechain
25	BB	1615	C	Sidechain
25	BB	1616	A	Sidechain
25	BB	1617	C	Sidechain
25	BB	1618	A	Sidechain
25	BB	162	U	Sidechain
25	BB	1620	G	Sidechain
25	BB	1622	G	Sidechain
25	BB	1623	G	Sidechain
25	BB	1625	C	Sidechain
25	BB	1626	A	Sidechain
25	BB	1627	G	Sidechain
25	BB	1628	G	Sidechain
25	BB	1630	A	Sidechain
25	BB	1631	G	Sidechain
25	BB	1639	C	Sidechain
25	BB	164	C	Sidechain
25	BB	1640	A	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1641	A	Sidechain
25	BB	1642	G	Sidechain
25	BB	1645	G	Sidechain
25	BB	1648	U	Sidechain
25	BB	165	A	Sidechain
25	BB	1650	A	Sidechain
25	BB	1651	G	Sidechain
25	BB	1653	G	Sidechain
25	BB	1654	A	Sidechain
25	BB	1657	U	Sidechain
25	BB	1658	C	Sidechain
25	BB	1659	G	Sidechain
25	BB	166	U	Sidechain
25	BB	1660	G	Sidechain
25	BB	1661	G	Sidechain
25	BB	1662	U	Sidechain
25	BB	1667	G	Sidechain
25	BB	1669	A	Sidechain
25	BB	1671	U	Sidechain
25	BB	1672	A	Sidechain
25	BB	1673	G	Sidechain
25	BB	1678	A	Sidechain
25	BB	1681	G	Sidechain
25	BB	1682	G	Sidechain
25	BB	1683	U	Sidechain
25	BB	1684	G	Sidechain
25	BB	1685	C	Sidechain
25	BB	1687	G	Sidechain
25	BB	1690	A	Sidechain
25	BB	1692	U	Sidechain
25	BB	1695	G	Sidechain
25	BB	1696	G	Sidechain
25	BB	1698	A	Sidechain
25	BB	1699	G	Sidechain
25	BB	1700	A	Sidechain
25	BB	1701	A	Sidechain
25	BB	1702	G	Sidechain
25	BB	1703	G	Sidechain
25	BB	1705	A	Sidechain
25	BB	1707	G	Sidechain
25	BB	1708	C	Sidechain
25	BB	1709	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	171	U	Sidechain
25	BB	1710	G	Sidechain
25	BB	1711	A	Sidechain
25	BB	1715	G	Sidechain
25	BB	1716	U	Sidechain
25	BB	1718	G	Sidechain
25	BB	1719	G	Sidechain
25	BB	172	A	Sidechain
25	BB	1720	U	Sidechain
25	BB	1721	G	Sidechain
25	BB	1722	A	Sidechain
25	BB	1723	G	Sidechain
25	BB	1724	G	Sidechain
25	BB	1726	C	Sidechain
25	BB	1729	U	Sidechain
25	BB	173	A	Sidechain
25	BB	1730	C	Sidechain
25	BB	1731	G	Sidechain
25	BB	1733	G	Sidechain
25	BB	1734	G	Sidechain
25	BB	1736	U	Sidechain
25	BB	1737	G	Sidechain
25	BB	1738	G	Sidechain
25	BB	1739	A	Sidechain
25	BB	174	U	Sidechain
25	BB	1742	U	Sidechain
25	BB	1745	A	Sidechain
25	BB	175	G	Sidechain
25	BB	1752	C	Sidechain
25	BB	1755	A	Sidechain
25	BB	1756	G	Sidechain
25	BB	1759	A	Sidechain
25	BB	1760	C	Sidechain
25	BB	1761	C	Sidechain
25	BB	1762	A	Sidechain
25	BB	1763	G	Sidechain
25	BB	1765	U	Sidechain
25	BB	1767	G	Sidechain
25	BB	1768	C	Sidechain
25	BB	1769	U	Sidechain
25	BB	177	G	Sidechain
25	BB	1771	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1772	A	Sidechain
25	BB	1774	C	Sidechain
25	BB	1775	U	Sidechain
25	BB	1776	G	Sidechain
25	BB	178	G	Sidechain
25	BB	1780	A	Sidechain
25	BB	1781	U	Sidechain
25	BB	1782	U	Sidechain
25	BB	1783	A	Sidechain
25	BB	1785	A	Sidechain
25	BB	1786	A	Sidechain
25	BB	1788	C	Sidechain
25	BB	179	C	Sidechain
25	BB	1791	A	Sidechain
25	BB	1792	G	Sidechain
25	BB	1795	C	Sidechain
25	BB	1798	U	Sidechain
25	BB	1799	G	Sidechain
25	BB	18	U	Sidechain
25	BB	1802	A	Sidechain
25	BB	1806	C	Sidechain
25	BB	1807	G	Sidechain
25	BB	1808	A	Sidechain
25	BB	1809	A	Sidechain
25	BB	181	A	Sidechain
25	BB	1811	G	Sidechain
25	BB	1814	G	Sidechain
25	BB	1815	A	Sidechain
25	BB	1816	C	Sidechain
25	BB	182	A	Sidechain
25	BB	1820	U	Sidechain
25	BB	1821	A	Sidechain
25	BB	1822	C	Sidechain
25	BB	1823	G	Sidechain
25	BB	1825	U	Sidechain
25	BB	1826	G	Sidechain
25	BB	1827	U	Sidechain
25	BB	1828	G	Sidechain
25	BB	183	C	Sidechain
25	BB	1830	C	Sidechain
25	BB	1833	C	Sidechain
25	BB	1835	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1836	C	Sidechain
25	BB	1837	C	Sidechain
25	BB	1838	C	Sidechain
25	BB	1839	G	Sidechain
25	BB	184	C	Sidechain
25	BB	1840	G	Sidechain
25	BB	1841	U	Sidechain
25	BB	1842	G	Sidechain
25	BB	1846	G	Sidechain
25	BB	1847	A	Sidechain
25	BB	1849	G	Sidechain
25	BB	185	G	Sidechain
25	BB	1851	U	Sidechain
25	BB	1853	A	Sidechain
25	BB	1855	U	Sidechain
25	BB	1857	G	Sidechain
25	BB	1858	A	Sidechain
25	BB	1859	U	Sidechain
25	BB	1860	G	Sidechain
25	BB	1862	G	Sidechain
25	BB	1864	U	Sidechain
25	BB	1865	U	Sidechain
25	BB	1867	G	Sidechain
25	BB	1869	G	Sidechain
25	BB	187	G	Sidechain
25	BB	1870	C	Sidechain
25	BB	1871	A	Sidechain
25	BB	1875	G	Sidechain
25	BB	1878	G	Sidechain
25	BB	1879	C	Sidechain
25	BB	188	G	Sidechain
25	BB	1880	U	Sidechain
25	BB	1882	U	Sidechain
25	BB	1883	U	Sidechain
25	BB	1884	G	Sidechain
25	BB	1885	A	Sidechain
25	BB	1886	U	Sidechain
25	BB	1888	G	Sidechain
25	BB	1889	A	Sidechain
25	BB	189	G	Sidechain
25	BB	1890	A	Sidechain
25	BB	1891	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1892	C	Sidechain
25	BB	1893	C	Sidechain
25	BB	1894	C	Sidechain
25	BB	1896	G	Sidechain
25	BB	1898	U	Sidechain
25	BB	1899	A	Sidechain
25	BB	19	A	Sidechain
25	BB	190	A	Sidechain
25	BB	1901	A	Sidechain
25	BB	1904	G	Sidechain
25	BB	1905	C	Sidechain
25	BB	1907	G	Sidechain
25	BB	1909	C	Sidechain
25	BB	1910	G	Sidechain
25	BB	1912	A	Sidechain
25	BB	1915	U	Sidechain
25	BB	1916	A	Sidechain
25	BB	1917	U	Sidechain
25	BB	192	C	Sidechain
25	BB	1920	C	Sidechain
25	BB	1921	G	Sidechain
25	BB	1922	G	Sidechain
25	BB	1924	C	Sidechain
25	BB	1925	C	Sidechain
25	BB	1928	A	Sidechain
25	BB	1929	G	Sidechain
25	BB	1930	G	Sidechain
25	BB	1931	U	Sidechain
25	BB	1932	A	Sidechain
25	BB	1933	G	Sidechain
25	BB	1935	G	Sidechain
25	BB	1938	A	Sidechain
25	BB	1939	U	Sidechain
25	BB	1940	U	Sidechain
25	BB	1942	C	Sidechain
25	BB	1943	U	Sidechain
25	BB	1944	U	Sidechain
25	BB	1945	G	Sidechain
25	BB	1946	U	Sidechain
25	BB	1948	G	Sidechain
25	BB	1949	G	Sidechain
25	BB	1950	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	1951	U	Sidechain
25	BB	1952	A	Sidechain
25	BB	1953	A	Sidechain
25	BB	1955	U	Sidechain
25	BB	1956	U	Sidechain
25	BB	1959	G	Sidechain
25	BB	196	A	Sidechain
25	BB	1961	C	Sidechain
25	BB	1962	C	Sidechain
25	BB	1963	U	Sidechain
25	BB	1964	G	Sidechain
25	BB	1965	C	Sidechain
25	BB	1967	C	Sidechain
25	BB	1968	G	Sidechain
25	BB	1969	A	Sidechain
25	BB	1971	U	Sidechain
25	BB	1972	G	Sidechain
25	BB	1973	G	Sidechain
25	BB	1975	G	Sidechain
25	BB	1976	U	Sidechain
25	BB	1977	A	Sidechain
25	BB	198	C	Sidechain
25	BB	1980	G	Sidechain
25	BB	1981	A	Sidechain
25	BB	1983	G	Sidechain
25	BB	1984	G	Sidechain
25	BB	1989	G	Sidechain
25	BB	199	A	Sidechain
25	BB	1990	C	Sidechain
25	BB	1992	G	Sidechain
25	BB	1994	C	Sidechain
25	BB	1996	C	Sidechain
25	BB	2	G	Sidechain
25	BB	20	C	Sidechain
25	BB	200	U	Sidechain
25	BB	2000	C	Sidechain
25	BB	2001	C	Sidechain
25	BB	2002	G	Sidechain
25	BB	2004	G	Sidechain
25	BB	201	C	Sidechain
25	BB	2010	G	Sidechain
25	BB	2011	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2012	G	Sidechain
25	BB	2013	A	Sidechain
25	BB	2017	U	Sidechain
25	BB	2018	G	Sidechain
25	BB	2020	A	Sidechain
25	BB	2021	C	Sidechain
25	BB	2022	U	Sidechain
25	BB	2024	G	Sidechain
25	BB	2028	U	Sidechain
25	BB	203	A	Sidechain
25	BB	2031	A	Sidechain
25	BB	2032	G	Sidechain
25	BB	2033	A	Sidechain
25	BB	2035	G	Sidechain
25	BB	2038	G	Sidechain
25	BB	2039	U	Sidechain
25	BB	2040	G	Sidechain
25	BB	2044	C	Sidechain
25	BB	2048	G	Sidechain
25	BB	205	G	Sidechain
25	BB	2050	C	Sidechain
25	BB	2051	A	Sidechain
25	BB	2053	G	Sidechain
25	BB	2056	G	Sidechain
25	BB	2057	G	Sidechain
25	BB	2059	A	Sidechain
25	BB	206	U	Sidechain
25	BB	2060	A	Sidechain
25	BB	2061	G	Sidechain
25	BB	2062	A	Sidechain
25	BB	2068	U	Sidechain
25	BB	2069	G	Sidechain
25	BB	2071	A	Sidechain
25	BB	2073	C	Sidechain
25	BB	2075	U	Sidechain
25	BB	2076	U	Sidechain
25	BB	2077	A	Sidechain
25	BB	208	C	Sidechain
25	BB	2083	G	Sidechain
25	BB	2087	G	Sidechain
25	BB	2088	A	Sidechain
25	BB	2089	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	209	C	Sidechain
25	BB	2090	A	Sidechain
25	BB	2093	G	Sidechain
25	BB	2095	A	Sidechain
25	BB	2096	C	Sidechain
25	BB	2097	A	Sidechain
25	BB	2098	U	Sidechain
25	BB	2099	U	Sidechain
25	BB	21	A	Sidechain
25	BB	2100	G	Sidechain
25	BB	2101	A	Sidechain
25	BB	2102	G	Sidechain
25	BB	2103	C	Sidechain
25	BB	2104	C	Sidechain
25	BB	2105	U	Sidechain
25	BB	2106	U	Sidechain
25	BB	2107	G	Sidechain
25	BB	2109	U	Sidechain
25	BB	2110	G	Sidechain
25	BB	2111	U	Sidechain
25	BB	2112	G	Sidechain
25	BB	2113	U	Sidechain
25	BB	2115	G	Sidechain
25	BB	2116	G	Sidechain
25	BB	2117	A	Sidechain
25	BB	2118	U	Sidechain
25	BB	2122	U	Sidechain
25	BB	2125	G	Sidechain
25	BB	2126	A	Sidechain
25	BB	2127	G	Sidechain
25	BB	2128	G	Sidechain
25	BB	213	A	Sidechain
25	BB	2130	U	Sidechain
25	BB	2131	U	Sidechain
25	BB	2133	G	Sidechain
25	BB	2136	G	Sidechain
25	BB	2138	G	Sidechain
25	BB	2140	G	Sidechain
25	BB	2141	G	Sidechain
25	BB	2144	G	Sidechain
25	BB	2145	C	Sidechain
25	BB	2147	A	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2148	G	Sidechain
25	BB	2149	U	Sidechain
25	BB	2151	U	Sidechain
25	BB	2152	G	Sidechain
25	BB	2154	A	Sidechain
25	BB	2155	U	Sidechain
25	BB	2156	G	Sidechain
25	BB	2157	G	Sidechain
25	BB	2160	C	Sidechain
25	BB	2161	C	Sidechain
25	BB	2162	G	Sidechain
25	BB	2164	C	Sidechain
25	BB	2165	C	Sidechain
25	BB	2166	U	Sidechain
25	BB	2168	G	Sidechain
25	BB	2169	A	Sidechain
25	BB	2170	A	Sidechain
25	BB	2172	U	Sidechain
25	BB	2173	A	Sidechain
25	BB	2175	C	Sidechain
25	BB	2177	C	Sidechain
25	BB	2179	C	Sidechain
25	BB	2180	U	Sidechain
25	BB	2183	A	Sidechain
25	BB	2184	A	Sidechain
25	BB	2185	U	Sidechain
25	BB	2186	G	Sidechain
25	BB	2188	U	Sidechain
25	BB	2191	A	Sidechain
25	BB	2192	U	Sidechain
25	BB	2193	G	Sidechain
25	BB	2195	U	Sidechain
25	BB	2199	A	Sidechain
25	BB	220	G	Sidechain
25	BB	2200	C	Sidechain
25	BB	2201	G	Sidechain
25	BB	2202	U	Sidechain
25	BB	2204	G	Sidechain
25	BB	2205	A	Sidechain
25	BB	2206	C	Sidechain
25	BB	2209	G	Sidechain
25	BB	221	A	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2210	U	Sidechain
25	BB	2213	U	Sidechain
25	BB	2214	C	Sidechain
25	BB	2215	C	Sidechain
25	BB	2216	G	Sidechain
25	BB	2217	G	Sidechain
25	BB	2218	G	Sidechain
25	BB	2219	U	Sidechain
25	BB	2220	U	Sidechain
25	BB	2221	G	Sidechain
25	BB	2223	G	Sidechain
25	BB	2224	G	Sidechain
25	BB	2225	A	Sidechain
25	BB	2227	A	Sidechain
25	BB	2228	G	Sidechain
25	BB	2229	U	Sidechain
25	BB	2231	U	Sidechain
25	BB	2234	G	Sidechain
25	BB	2235	G	Sidechain
25	BB	2236	U	Sidechain
25	BB	2240	U	Sidechain
25	BB	2241	A	Sidechain
25	BB	2243	U	Sidechain
25	BB	2244	U	Sidechain
25	BB	2245	U	Sidechain
25	BB	2246	G	Sidechain
25	BB	2249	U	Sidechain
25	BB	2251	G	Sidechain
25	BB	2252	G	Sidechain
25	BB	2256	G	Sidechain
25	BB	2257	U	Sidechain
25	BB	2259	U	Sidechain
25	BB	2262	U	Sidechain
25	BB	2265	U	Sidechain
25	BB	2269	G	Sidechain
25	BB	2271	G	Sidechain
25	BB	2273	A	Sidechain
25	BB	2274	A	Sidechain
25	BB	2275	C	Sidechain
25	BB	2276	G	Sidechain
25	BB	2277	G	Sidechain
25	BB	2279	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2284	A	Sidechain
25	BB	2285	C	Sidechain
25	BB	2286	G	Sidechain
25	BB	2288	A	Sidechain
25	BB	2289	G	Sidechain
25	BB	2291	U	Sidechain
25	BB	2292	U	Sidechain
25	BB	2294	G	Sidechain
25	BB	2297	A	Sidechain
25	BB	2298	A	Sidechain
25	BB	23	G	Sidechain
25	BB	230	G	Sidechain
25	BB	2302	U	Sidechain
25	BB	2303	G	Sidechain
25	BB	2304	G	Sidechain
25	BB	2307	G	Sidechain
25	BB	2310	C	Sidechain
25	BB	2311	A	Sidechain
25	BB	2312	U	Sidechain
25	BB	2316	G	Sidechain
25	BB	2318	G	Sidechain
25	BB	232	G	Sidechain
25	BB	2322	A	Sidechain
25	BB	2323	G	Sidechain
25	BB	2324	U	Sidechain
25	BB	2326	C	Sidechain
25	BB	2327	A	Sidechain
25	BB	2328	A	Sidechain
25	BB	233	A	Sidechain
25	BB	2330	G	Sidechain
25	BB	2334	U	Sidechain
25	BB	2336	A	Sidechain
25	BB	2337	G	Sidechain
25	BB	2339	C	Sidechain
25	BB	234	U	Sidechain
25	BB	2340	A	Sidechain
25	BB	2341	G	Sidechain
25	BB	2343	U	Sidechain
25	BB	2344	U	Sidechain
25	BB	2345	G	Sidechain
25	BB	2347	C	Sidechain
25	BB	2348	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2349	G	Sidechain
25	BB	2350	C	Sidechain
25	BB	2351	G	Sidechain
25	BB	2352	A	Sidechain
25	BB	2353	G	Sidechain
25	BB	2355	G	Sidechain
25	BB	2357	G	Sidechain
25	BB	2358	A	Sidechain
25	BB	2359	C	Sidechain
25	BB	2360	G	Sidechain
25	BB	2361	G	Sidechain
25	BB	2364	C	Sidechain
25	BB	2365	G	Sidechain
25	BB	2367	G	Sidechain
25	BB	2368	C	Sidechain
25	BB	2371	G	Sidechain
25	BB	2373	G	Sidechain
25	BB	2374	C	Sidechain
25	BB	2375	G	Sidechain
25	BB	2376	A	Sidechain
25	BB	238	C	Sidechain
25	BB	2380	C	Sidechain
25	BB	2381	A	Sidechain
25	BB	2382	G	Sidechain
25	BB	2385	C	Sidechain
25	BB	2387	U	Sidechain
25	BB	2388	A	Sidechain
25	BB	239	C	Sidechain
25	BB	2390	U	Sidechain
25	BB	2391	G	Sidechain
25	BB	2393	U	Sidechain
25	BB	2396	G	Sidechain
25	BB	2399	G	Sidechain
25	BB	24	G	Sidechain
25	BB	240	C	Sidechain
25	BB	2400	G	Sidechain
25	BB	2401	U	Sidechain
25	BB	2404	U	Sidechain
25	BB	2406	A	Sidechain
25	BB	2407	A	Sidechain
25	BB	2409	G	Sidechain
25	BB	2410	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2411	A	Sidechain
25	BB	2412	A	Sidechain
25	BB	2413	G	Sidechain
25	BB	2415	G	Sidechain
25	BB	2416	C	Sidechain
25	BB	2418	A	Sidechain
25	BB	2419	U	Sidechain
25	BB	242	G	Sidechain
25	BB	2424	C	Sidechain
25	BB	2425	A	Sidechain
25	BB	2426	A	Sidechain
25	BB	2428	G	Sidechain
25	BB	2429	G	Sidechain
25	BB	243	U	Sidechain
25	BB	2430	A	Sidechain
25	BB	2432	A	Sidechain
25	BB	2435	A	Sidechain
25	BB	2436	G	Sidechain
25	BB	2437	G	Sidechain
25	BB	2441	U	Sidechain
25	BB	2443	C	Sidechain
25	BB	2446	G	Sidechain
25	BB	2447	G	Sidechain
25	BB	2449	U	Sidechain
25	BB	245	G	Sidechain
25	BB	2452	C	Sidechain
25	BB	2453	A	Sidechain
25	BB	2454	G	Sidechain
25	BB	2457	U	Sidechain
25	BB	2458	G	Sidechain
25	BB	2460	U	Sidechain
25	BB	2462	C	Sidechain
25	BB	2464	G	Sidechain
25	BB	2467	C	Sidechain
25	BB	2469	A	Sidechain
25	BB	247	G	Sidechain
25	BB	2470	G	Sidechain
25	BB	2471	A	Sidechain
25	BB	2472	G	Sidechain
25	BB	2473	U	Sidechain
25	BB	2476	A	Sidechain
25	BB	2477	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2479	U	Sidechain
25	BB	248	G	Sidechain
25	BB	2480	C	Sidechain
25	BB	2481	G	Sidechain
25	BB	2482	A	Sidechain
25	BB	2483	C	Sidechain
25	BB	2484	G	Sidechain
25	BB	2488	G	Sidechain
25	BB	2489	U	Sidechain
25	BB	2492	U	Sidechain
25	BB	2493	U	Sidechain
25	BB	2494	G	Sidechain
25	BB	2496	C	Sidechain
25	BB	2497	A	Sidechain
25	BB	2499	C	Sidechain
25	BB	250	G	Sidechain
25	BB	2502	G	Sidechain
25	BB	2503	A	Sidechain
25	BB	2504	U	Sidechain
25	BB	2505	G	Sidechain
25	BB	2506	U	Sidechain
25	BB	2507	C	Sidechain
25	BB	2508	G	Sidechain
25	BB	2509	G	Sidechain
25	BB	2510	C	Sidechain
25	BB	2511	U	Sidechain
25	BB	2516	A	Sidechain
25	BB	2518	A	Sidechain
25	BB	2519	U	Sidechain
25	BB	2520	C	Sidechain
25	BB	2521	C	Sidechain
25	BB	2522	U	Sidechain
25	BB	2523	G	Sidechain
25	BB	2524	G	Sidechain
25	BB	2525	G	Sidechain
25	BB	2526	G	Sidechain
25	BB	2527	C	Sidechain
25	BB	2528	U	Sidechain
25	BB	2529	G	Sidechain
25	BB	253	C	Sidechain
25	BB	2530	A	Sidechain
25	BB	2531	A	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2532	G	Sidechain
25	BB	2536	G	Sidechain
25	BB	2538	C	Sidechain
25	BB	2539	C	Sidechain
25	BB	254	G	Sidechain
25	BB	2540	C	Sidechain
25	BB	2541	A	Sidechain
25	BB	2543	G	Sidechain
25	BB	2544	G	Sidechain
25	BB	2545	G	Sidechain
25	BB	2548	U	Sidechain
25	BB	2549	G	Sidechain
25	BB	255	A	Sidechain
25	BB	2550	G	Sidechain
25	BB	2551	C	Sidechain
25	BB	2552	U	Sidechain
25	BB	2553	G	Sidechain
25	BB	2556	C	Sidechain
25	BB	2557	G	Sidechain
25	BB	2559	C	Sidechain
25	BB	256	A	Sidechain
25	BB	2560	A	Sidechain
25	BB	2562	U	Sidechain
25	BB	2563	U	Sidechain
25	BB	2564	A	Sidechain
25	BB	2566	A	Sidechain
25	BB	2567	G	Sidechain
25	BB	2569	G	Sidechain
25	BB	257	C	Sidechain
25	BB	2570	G	Sidechain
25	BB	2571	U	Sidechain
25	BB	2573	C	Sidechain
25	BB	2575	C	Sidechain
25	BB	2576	G	Sidechain
25	BB	2577	A	Sidechain
25	BB	2578	G	Sidechain
25	BB	2579	C	Sidechain
25	BB	258	G	Sidechain
25	BB	2581	G	Sidechain
25	BB	2585	U	Sidechain
25	BB	2586	U	Sidechain
25	BB	2588	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	259	G	Sidechain
25	BB	2591	C	Sidechain
25	BB	2592	G	Sidechain
25	BB	2593	U	Sidechain
25	BB	2594	C	Sidechain
25	BB	2595	G	Sidechain
25	BB	2596	U	Sidechain
25	BB	2597	G	Sidechain
25	BB	2599	G	Sidechain
25	BB	26	G	Sidechain
25	BB	2600	A	Sidechain
25	BB	2601	C	Sidechain
25	BB	2602	A	Sidechain
25	BB	2603	G	Sidechain
25	BB	2605	U	Sidechain
25	BB	2607	G	Sidechain
25	BB	2609	U	Sidechain
25	BB	261	G	Sidechain
25	BB	2611	C	Sidechain
25	BB	2612	C	Sidechain
25	BB	2613	U	Sidechain
25	BB	2614	A	Sidechain
25	BB	2615	U	Sidechain
25	BB	2616	C	Sidechain
25	BB	2617	U	Sidechain
25	BB	262	A	Sidechain
25	BB	2621	G	Sidechain
25	BB	2622	U	Sidechain
25	BB	2623	G	Sidechain
25	BB	2624	G	Sidechain
25	BB	2625	G	Sidechain
25	BB	2626	C	Sidechain
25	BB	2627	G	Sidechain
25	BB	2629	U	Sidechain
25	BB	263	G	Sidechain
25	BB	2632	A	Sidechain
25	BB	2634	A	Sidechain
25	BB	2635	A	Sidechain
25	BB	2636	C	Sidechain
25	BB	264	C	Sidechain
25	BB	2643	G	Sidechain
25	BB	2645	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2646	C	Sidechain
25	BB	2649	C	Sidechain
25	BB	265	A	Sidechain
25	BB	2650	U	Sidechain
25	BB	2652	C	Sidechain
25	BB	2653	U	Sidechain
25	BB	2654	A	Sidechain
25	BB	2655	G	Sidechain
25	BB	2657	A	Sidechain
25	BB	2658	C	Sidechain
25	BB	2659	G	Sidechain
25	BB	266	G	Sidechain
25	BB	2661	G	Sidechain
25	BB	2662	A	Sidechain
25	BB	2663	G	Sidechain
25	BB	2664	G	Sidechain
25	BB	2668	G	Sidechain
25	BB	267	C	Sidechain
25	BB	2670	A	Sidechain
25	BB	2671	G	Sidechain
25	BB	2673	G	Sidechain
25	BB	2674	G	Sidechain
25	BB	2675	A	Sidechain
25	BB	2676	C	Sidechain
25	BB	2677	G	Sidechain
25	BB	2680	U	Sidechain
25	BB	2682	A	Sidechain
25	BB	2688	G	Sidechain
25	BB	2692	G	Sidechain
25	BB	2693	G	Sidechain
25	BB	2694	G	Sidechain
25	BB	2699	C	Sidechain
25	BB	27	G	Sidechain
25	BB	270	A	Sidechain
25	BB	2701	U	Sidechain
25	BB	2702	G	Sidechain
25	BB	2703	C	Sidechain
25	BB	2709	G	Sidechain
25	BB	2710	C	Sidechain
25	BB	2713	U	Sidechain
25	BB	2714	G	Sidechain
25	BB	2715	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2718	G	Sidechain
25	BB	272	A	Sidechain
25	BB	2721	A	Sidechain
25	BB	2722	G	Sidechain
25	BB	2724	U	Sidechain
25	BB	2726	A	Sidechain
25	BB	2727	A	Sidechain
25	BB	2728	U	Sidechain
25	BB	2729	G	Sidechain
25	BB	273	G	Sidechain
25	BB	2730	C	Sidechain
25	BB	2731	G	Sidechain
25	BB	2732	G	Sidechain
25	BB	2733	A	Sidechain
25	BB	2736	A	Sidechain
25	BB	2739	U	Sidechain
25	BB	274	C	Sidechain
25	BB	2742	G	Sidechain
25	BB	2744	G	Sidechain
25	BB	2745	C	Sidechain
25	BB	2746	U	Sidechain
25	BB	2747	G	Sidechain
25	BB	2748	A	Sidechain
25	BB	2751	G	Sidechain
25	BB	2752	C	Sidechain
25	BB	2753	A	Sidechain
25	BB	2754	U	Sidechain
25	BB	2755	C	Sidechain
25	BB	2756	U	Sidechain
25	BB	2757	A	Sidechain
25	BB	2759	G	Sidechain
25	BB	276	U	Sidechain
25	BB	2760	C	Sidechain
25	BB	2761	A	Sidechain
25	BB	2763	G	Sidechain
25	BB	2765	A	Sidechain
25	BB	2766	A	Sidechain
25	BB	2767	C	Sidechain
25	BB	2771	C	Sidechain
25	BB	2772	C	Sidechain
25	BB	2774	C	Sidechain
25	BB	2775	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2777	G	Sidechain
25	BB	2778	A	Sidechain
25	BB	2779	U	Sidechain
25	BB	278	A	Sidechain
25	BB	2780	G	Sidechain
25	BB	2781	A	Sidechain
25	BB	2782	G	Sidechain
25	BB	2784	U	Sidechain
25	BB	2785	C	Sidechain
25	BB	2786	U	Sidechain
25	BB	2788	C	Sidechain
25	BB	2789	C	Sidechain
25	BB	279	A	Sidechain
25	BB	2791	G	Sidechain
25	BB	2793	C	Sidechain
25	BB	2794	C	Sidechain
25	BB	2795	C	Sidechain
25	BB	2796	U	Sidechain
25	BB	2798	U	Sidechain
25	BB	2799	A	Sidechain
25	BB	280	U	Sidechain
25	BB	2801	G	Sidechain
25	BB	2802	G	Sidechain
25	BB	2803	G	Sidechain
25	BB	2805	C	Sidechain
25	BB	2806	C	Sidechain
25	BB	2808	G	Sidechain
25	BB	2811	G	Sidechain
25	BB	2812	G	Sidechain
25	BB	2813	A	Sidechain
25	BB	2819	G	Sidechain
25	BB	282	A	Sidechain
25	BB	2820	A	Sidechain
25	BB	2825	G	Sidechain
25	BB	2828	G	Sidechain
25	BB	2829	A	Sidechain
25	BB	283	G	Sidechain
25	BB	2831	G	Sidechain
25	BB	2832	U	Sidechain
25	BB	2834	G	Sidechain
25	BB	2836	U	Sidechain
25	BB	2838	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	2842	G	Sidechain
25	BB	2843	G	Sidechain
25	BB	2844	G	Sidechain
25	BB	2846	G	Sidechain
25	BB	2847	U	Sidechain
25	BB	2848	G	Sidechain
25	BB	2849	U	Sidechain
25	BB	2850	A	Sidechain
25	BB	2851	A	Sidechain
25	BB	2852	G	Sidechain
25	BB	2854	G	Sidechain
25	BB	2855	C	Sidechain
25	BB	2856	A	Sidechain
25	BB	2857	G	Sidechain
25	BB	2858	C	Sidechain
25	BB	2859	G	Sidechain
25	BB	286	U	Sidechain
25	BB	2864	G	Sidechain
25	BB	2866	U	Sidechain
25	BB	2867	G	Sidechain
25	BB	287	G	Sidechain
25	BB	2871	U	Sidechain
25	BB	2873	A	Sidechain
25	BB	2876	G	Sidechain
25	BB	2879	A	Sidechain
25	BB	288	U	Sidechain
25	BB	2881	U	Sidechain
25	BB	2884	U	Sidechain
25	BB	2885	G	Sidechain
25	BB	2886	A	Sidechain
25	BB	2887	A	Sidechain
25	BB	2890	G	Sidechain
25	BB	2892	G	Sidechain
25	BB	2894	G	Sidechain
25	BB	2896	C	Sidechain
25	BB	2897	U	Sidechain
25	BB	2899	A	Sidechain
25	BB	290	U	Sidechain
25	BB	2901	C	Sidechain
25	BB	293	U	Sidechain
25	BB	294	A	Sidechain
25	BB	295	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	297	G	Sidechain
25	BB	299	A	Sidechain
25	BB	3	U	Sidechain
25	BB	30	G	Sidechain
25	BB	305	C	Sidechain
25	BB	306	U	Sidechain
25	BB	307	G	Sidechain
25	BB	308	G	Sidechain
25	BB	31	C	Sidechain
25	BB	311	A	Sidechain
25	BB	313	G	Sidechain
25	BB	315	G	Sidechain
25	BB	316	C	Sidechain
25	BB	317	G	Sidechain
25	BB	319	G	Sidechain
25	BB	32	C	Sidechain
25	BB	320	A	Sidechain
25	BB	321	U	Sidechain
25	BB	322	A	Sidechain
25	BB	323	C	Sidechain
25	BB	325	G	Sidechain
25	BB	326	G	Sidechain
25	BB	327	G	Sidechain
25	BB	329	G	Sidechain
25	BB	33	C	Sidechain
25	BB	336	C	Sidechain
25	BB	338	G	Sidechain
25	BB	339	U	Sidechain
25	BB	340	A	Sidechain
25	BB	341	C	Sidechain
25	BB	342	A	Sidechain
25	BB	343	C	Sidechain
25	BB	345	A	Sidechain
25	BB	347	A	Sidechain
25	BB	348	A	Sidechain
25	BB	349	U	Sidechain
25	BB	35	G	Sidechain
25	BB	350	G	Sidechain
25	BB	351	C	Sidechain
25	BB	352	A	Sidechain
25	BB	354	A	Sidechain
25	BB	355	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	356	G	Sidechain
25	BB	357	C	Sidechain
25	BB	358	U	Sidechain
25	BB	361	G	Sidechain
25	BB	362	A	Sidechain
25	BB	364	C	Sidechain
25	BB	365	U	Sidechain
25	BB	370	G	Sidechain
25	BB	371	A	Sidechain
25	BB	372	G	Sidechain
25	BB	374	A	Sidechain
25	BB	376	G	Sidechain
25	BB	381	G	Sidechain
25	BB	384	A	Sidechain
25	BB	385	C	Sidechain
25	BB	386	G	Sidechain
25	BB	387	U	Sidechain
25	BB	389	G	Sidechain
25	BB	39	G	Sidechain
25	BB	390	U	Sidechain
25	BB	394	C	Sidechain
25	BB	396	G	Sidechain
25	BB	397	U	Sidechain
25	BB	399	U	Sidechain
25	BB	4	U	Sidechain
25	BB	401	A	Sidechain
25	BB	402	A	Sidechain
25	BB	403	U	Sidechain
25	BB	405	U	Sidechain
25	BB	406	G	Sidechain
25	BB	407	G	Sidechain
25	BB	409	G	Sidechain
25	BB	41	C	Sidechain
25	BB	410	G	Sidechain
25	BB	415	A	Sidechain
25	BB	416	U	Sidechain
25	BB	419	U	Sidechain
25	BB	420	C	Sidechain
25	BB	423	A	Sidechain
25	BB	424	G	Sidechain
25	BB	427	U	Sidechain
25	BB	431	U	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	433	C	Sidechain
25	BB	436	C	Sidechain
25	BB	437	U	Sidechain
25	BB	438	G	Sidechain
25	BB	439	A	Sidechain
25	BB	44	A	Sidechain
25	BB	440	C	Sidechain
25	BB	441	U	Sidechain
25	BB	442	G	Sidechain
25	BB	443	A	Sidechain
25	BB	446	G	Sidechain
25	BB	449	A	Sidechain
25	BB	450	G	Sidechain
25	BB	453	A	Sidechain
25	BB	456	C	Sidechain
25	BB	46	G	Sidechain
25	BB	461	C	Sidechain
25	BB	462	C	Sidechain
25	BB	463	G	Sidechain
25	BB	464	U	Sidechain
25	BB	465	G	Sidechain
25	BB	466	A	Sidechain
25	BB	467	G	Sidechain
25	BB	468	G	Sidechain
25	BB	470	A	Sidechain
25	BB	471	A	Sidechain
25	BB	473	G	Sidechain
25	BB	474	G	Sidechain
25	BB	475	C	Sidechain
25	BB	476	G	Sidechain
25	BB	477	A	Sidechain
25	BB	478	A	Sidechain
25	BB	48	G	Sidechain
25	BB	480	A	Sidechain
25	BB	481	G	Sidechain
25	BB	482	A	Sidechain
25	BB	483	A	Sidechain
25	BB	484	C	Sidechain
25	BB	485	C	Sidechain
25	BB	487	C	Sidechain
25	BB	488	G	Sidechain
25	BB	489	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	49	A	Sidechain
25	BB	490	C	Sidechain
25	BB	492	A	Sidechain
25	BB	496	G	Sidechain
25	BB	498	G	Sidechain
25	BB	499	U	Sidechain
25	BB	50	U	Sidechain
25	BB	501	A	Sidechain
25	BB	502	A	Sidechain
25	BB	505	A	Sidechain
25	BB	507	A	Sidechain
25	BB	509	C	Sidechain
25	BB	51	G	Sidechain
25	BB	510	C	Sidechain
25	BB	513	A	Sidechain
25	BB	515	A	Sidechain
25	BB	518	G	Sidechain
25	BB	522	A	Sidechain
25	BB	524	G	Sidechain
25	BB	526	A	Sidechain
25	BB	527	C	Sidechain
25	BB	529	A	Sidechain
25	BB	530	G	Sidechain
25	BB	532	A	Sidechain
25	BB	535	G	Sidechain
25	BB	536	G	Sidechain
25	BB	537	G	Sidechain
25	BB	541	A	Sidechain
25	BB	542	C	Sidechain
25	BB	543	G	Sidechain
25	BB	544	C	Sidechain
25	BB	545	U	Sidechain
25	BB	547	A	Sidechain
25	BB	548	G	Sidechain
25	BB	55	G	Sidechain
25	BB	551	G	Sidechain
25	BB	553	G	Sidechain
25	BB	554	U	Sidechain
25	BB	555	G	Sidechain
25	BB	556	A	Sidechain
25	BB	558	U	Sidechain
25	BB	559	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	56	A	Sidechain
25	BB	561	G	Sidechain
25	BB	565	C	Sidechain
25	BB	566	U	Sidechain
25	BB	567	U	Sidechain
25	BB	568	U	Sidechain
25	BB	57	C	Sidechain
25	BB	570	G	Sidechain
25	BB	573	U	Sidechain
25	BB	576	U	Sidechain
25	BB	577	G	Sidechain
25	BB	580	U	Sidechain
25	BB	581	C	Sidechain
25	BB	582	A	Sidechain
25	BB	583	G	Sidechain
25	BB	584	C	Sidechain
25	BB	585	G	Sidechain
25	BB	587	C	Sidechain
25	BB	588	U	Sidechain
25	BB	589	U	Sidechain
25	BB	59	U	Sidechain
25	BB	590	A	Sidechain
25	BB	592	A	Sidechain
25	BB	593	U	Sidechain
25	BB	594	U	Sidechain
25	BB	596	U	Sidechain
25	BB	597	G	Sidechain
25	BB	598	U	Sidechain
25	BB	6	A	Sidechain
25	BB	60	G	Sidechain
25	BB	602	A	Sidechain
25	BB	604	G	Sidechain
25	BB	606	U	Sidechain
25	BB	608	A	Sidechain
25	BB	61	C	Sidechain
25	BB	610	C	Sidechain
25	BB	612	G	Sidechain
25	BB	615	U	Sidechain
25	BB	617	G	Sidechain
25	BB	618	G	Sidechain
25	BB	619	G	Sidechain
25	BB	620	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	623	C	Sidechain
25	BB	624	C	Sidechain
25	BB	625	G	Sidechain
25	BB	626	A	Sidechain
25	BB	629	G	Sidechain
25	BB	630	G	Sidechain
25	BB	631	A	Sidechain
25	BB	632	A	Sidechain
25	BB	633	A	Sidechain
25	BB	636	G	Sidechain
25	BB	639	U	Sidechain
25	BB	640	C	Sidechain
25	BB	642	U	Sidechain
25	BB	644	A	Sidechain
25	BB	645	C	Sidechain
25	BB	646	U	Sidechain
25	BB	647	G	Sidechain
25	BB	649	G	Sidechain
25	BB	65	U	Sidechain
25	BB	654	A	Sidechain
25	BB	655	A	Sidechain
25	BB	656	G	Sidechain
25	BB	658	U	Sidechain
25	BB	66	C	Sidechain
25	BB	664	G	Sidechain
25	BB	665	U	Sidechain
25	BB	666	A	Sidechain
25	BB	669	G	Sidechain
25	BB	67	U	Sidechain
25	BB	672	C	Sidechain
25	BB	673	C	Sidechain
25	BB	675	A	Sidechain
25	BB	676	A	Sidechain
25	BB	677	A	Sidechain
25	BB	678	C	Sidechain
25	BB	679	C	Sidechain
25	BB	68	G	Sidechain
25	BB	681	G	Sidechain
25	BB	682	G	Sidechain
25	BB	683	U	Sidechain
25	BB	686	U	Sidechain
25	BB	687	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	688	U	Sidechain
25	BB	689	A	Sidechain
25	BB	690	G	Sidechain
25	BB	691	C	Sidechain
25	BB	693	A	Sidechain
25	BB	694	U	Sidechain
25	BB	695	G	Sidechain
25	BB	696	G	Sidechain
25	BB	698	C	Sidechain
25	BB	699	A	Sidechain
25	BB	7	G	Sidechain
25	BB	700	G	Sidechain
25	BB	701	G	Sidechain
25	BB	704	G	Sidechain
25	BB	707	G	Sidechain
25	BB	708	G	Sidechain
25	BB	709	U	Sidechain
25	BB	711	G	Sidechain
25	BB	712	G	Sidechain
25	BB	713	G	Sidechain
25	BB	716	A	Sidechain
25	BB	717	C	Sidechain
25	BB	719	C	Sidechain
25	BB	72	U	Sidechain
25	BB	721	A	Sidechain
25	BB	722	A	Sidechain
25	BB	725	G	Sidechain
25	BB	727	A	Sidechain
25	BB	728	G	Sidechain
25	BB	729	G	Sidechain
25	BB	73	A	Sidechain
25	BB	731	C	Sidechain
25	BB	732	C	Sidechain
25	BB	733	G	Sidechain
25	BB	734	A	Sidechain
25	BB	735	A	Sidechain
25	BB	736	C	Sidechain
25	BB	738	G	Sidechain
25	BB	739	A	Sidechain
25	BB	740	C	Sidechain
25	BB	742	A	Sidechain
25	BB	743	A	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	744	U	Sidechain
25	BB	745	G	Sidechain
25	BB	746	U	Sidechain
25	BB	747	U	Sidechain
25	BB	748	G	Sidechain
25	BB	749	A	Sidechain
25	BB	75	G	Sidechain
25	BB	752	A	Sidechain
25	BB	753	A	Sidechain
25	BB	754	U	Sidechain
25	BB	757	G	Sidechain
25	BB	758	C	Sidechain
25	BB	759	G	Sidechain
25	BB	76	C	Sidechain
25	BB	760	G	Sidechain
25	BB	761	A	Sidechain
25	BB	762	U	Sidechain
25	BB	763	G	Sidechain
25	BB	765	C	Sidechain
25	BB	766	U	Sidechain
25	BB	767	U	Sidechain
25	BB	768	G	Sidechain
25	BB	77	G	Sidechain
25	BB	770	G	Sidechain
25	BB	771	G	Sidechain
25	BB	774	G	Sidechain
25	BB	776	G	Sidechain
25	BB	777	G	Sidechain
25	BB	779	U	Sidechain
25	BB	78	U	Sidechain
25	BB	780	G	Sidechain
25	BB	781	A	Sidechain
25	BB	782	A	Sidechain
25	BB	783	A	Sidechain
25	BB	786	C	Sidechain
25	BB	788	A	Sidechain
25	BB	79	C	Sidechain
25	BB	790	U	Sidechain
25	BB	791	C	Sidechain
25	BB	794	A	Sidechain
25	BB	795	C	Sidechain
25	BB	796	C	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	799	G	Sidechain
25	BB	8	C	Sidechain
25	BB	800	A	Sidechain
25	BB	801	G	Sidechain
25	BB	803	U	Sidechain
25	BB	804	A	Sidechain
25	BB	808	G	Sidechain
25	BB	809	G	Sidechain
25	BB	811	U	Sidechain
25	BB	812	C	Sidechain
25	BB	813	U	Sidechain
25	BB	814	C	Sidechain
25	BB	816	C	Sidechain
25	BB	818	G	Sidechain
25	BB	820	A	Sidechain
25	BB	825	A	Sidechain
25	BB	829	A	Sidechain
25	BB	83	A	Sidechain
25	BB	830	G	Sidechain
25	BB	831	G	Sidechain
25	BB	832	U	Sidechain
25	BB	834	G	Sidechain
25	BB	836	G	Sidechain
25	BB	837	C	Sidechain
25	BB	838	C	Sidechain
25	BB	842	U	Sidechain
25	BB	843	G	Sidechain
25	BB	844	A	Sidechain
25	BB	847	U	Sidechain
25	BB	848	C	Sidechain
25	BB	849	A	Sidechain
25	BB	851	C	Sidechain
25	BB	852	U	Sidechain
25	BB	854	C	Sidechain
25	BB	858	G	Sidechain
25	BB	859	G	Sidechain
25	BB	86	G	Sidechain
25	BB	860	U	Sidechain
25	BB	861	A	Sidechain
25	BB	862	G	Sidechain
25	BB	863	A	Sidechain
25	BB	864	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	865	C	Sidechain
25	BB	867	C	Sidechain
25	BB	870	U	Sidechain
25	BB	871	U	Sidechain
25	BB	873	C	Sidechain
25	BB	874	G	Sidechain
25	BB	875	G	Sidechain
25	BB	876	C	Sidechain
25	BB	879	G	Sidechain
25	BB	88	G	Sidechain
25	BB	880	G	Sidechain
25	BB	882	G	Sidechain
25	BB	883	G	Sidechain
25	BB	885	C	Sidechain
25	BB	887	U	Sidechain
25	BB	889	C	Sidechain
25	BB	89	A	Sidechain
25	BB	891	G	Sidechain
25	BB	892	A	Sidechain
25	BB	893	C	Sidechain
25	BB	894	U	Sidechain
25	BB	896	A	Sidechain
25	BB	898	C	Sidechain
25	BB	901	C	Sidechain
25	BB	902	C	Sidechain
25	BB	904	G	Sidechain
25	BB	905	A	Sidechain
25	BB	906	U	Sidechain
25	BB	907	G	Sidechain
25	BB	909	A	Sidechain
25	BB	91	A	Sidechain
25	BB	911	A	Sidechain
25	BB	916	G	Sidechain
25	BB	918	A	Sidechain
25	BB	92	U	Sidechain
25	BB	922	C	Sidechain
25	BB	923	G	Sidechain
25	BB	924	G	Sidechain
25	BB	925	A	Sidechain
25	BB	929	U	Sidechain
25	BB	93	G	Sidechain
25	BB	930	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	931	U	Sidechain
25	BB	932	U	Sidechain
25	BB	934	U	Sidechain
25	BB	936	A	Sidechain
25	BB	937	C	Sidechain
25	BB	939	G	Sidechain
25	BB	94	A	Sidechain
25	BB	940	G	Sidechain
25	BB	942	G	Sidechain
25	BB	943	A	Sidechain
25	BB	947	A	Sidechain
25	BB	948	C	Sidechain
25	BB	949	G	Sidechain
25	BB	950	G	Sidechain
25	BB	952	G	Sidechain
25	BB	953	G	Sidechain
25	BB	954	G	Sidechain
25	BB	955	U	Sidechain
25	BB	96	C	Sidechain
25	BB	960	A	Sidechain
25	BB	961	C	Sidechain
25	BB	963	U	Sidechain
25	BB	964	C	Sidechain
25	BB	965	C	Sidechain
25	BB	966	G	Sidechain
25	BB	967	U	Sidechain
25	BB	969	G	Sidechain
25	BB	970	U	Sidechain
25	BB	971	G	Sidechain
25	BB	974	G	Sidechain
25	BB	976	G	Sidechain
25	BB	977	G	Sidechain
25	BB	978	G	Sidechain
25	BB	979	A	Sidechain
25	BB	98	G	Sidechain
25	BB	980	A	Sidechain
25	BB	981	A	Sidechain
25	BB	983	A	Sidechain
25	BB	984	A	Sidechain
25	BB	985	C	Sidechain
25	BB	986	C	Sidechain
25	BB	989	G	Sidechain

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Mol	Chain	Res	Type	Group
25	BB	99	U	Sidechain
25	BB	991	C	Sidechain
25	BB	994	C	Sidechain
25	BB	996	A	Sidechain
25	BB	997	G	Sidechain
25	BB	998	C	Sidechain
25	BB	999	U	Sidechain
26	BC	22	ALA	Peptide
26	BC	57	TYR	Sidechain
26	BC	93	ARG	Sidechain
27	BD	105	ARG	Sidechain
27	BD	11	ALA	Peptide
27	BD	121	GLU	Sidechain
27	BD	30	ARG	Peptide
27	BD	33	ALA	Peptide
27	BD	40	LYS	Peptide
28	BE	117	THR	Peptide
28	BE	41	ARG	Sidechain
28	BE	47	ARG	Peptide
28	BE	54	GLN	Peptide
28	BE	78	ARG	Sidechain
28	BE	80	SER	Peptide
29	BF	110	GLU	Peptide
29	BF	51	ARG	Sidechain
29	BF	59	ARG	Sidechain
29	BF	66	ARG	Sidechain
30	BG	17	ARG	Sidechain
30	BG	30	ARG	Sidechain
30	BG	6	SER	Peptide
30	BG	63	ARG	Sidechain
31	BH	111	ARG	Sidechain
32	BI	102	ARG	Sidechain
32	BI	63	ILE	Peptide
32	BI	97	TYR	Sidechain
32	BI	98	TYR	Sidechain
33	BJ	23	TYR	Sidechain
33	BJ	24	TYR	Sidechain
33	BJ	46	TYR	Sidechain
33	BJ	47	ARG	Sidechain
34	BK	23	GLU	Sidechain
34	BK	75	VAL	Peptide
34	BK	79	ARG	Sidechain

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Mol	Chain	Res	Type	Group
34	BK	81	LYS	Peptide
34	BK	84	ARG	Sidechain
35	BL	25	ARG	Sidechain
35	BL	78	GLU	Peptide
35	BL	8	ARG	Sidechain
35	BL	84	ARG	Sidechain
35	BL	95	ARG	Sidechain
36	BM	38	ALA	Peptide
37	BN	125	PRO	Peptide
37	BN	145	MET	Peptide
37	BN	155	ARG	Sidechain
37	BN	19	VAL	Peptide
37	BN	192	GLY	Peptide
37	BN	207	ALA	Peptide
37	BN	246	PRO	Peptide
37	BN	257	ARG	Sidechain
37	BN	51	ARG	Sidechain
37	BN	65	ASP	Peptide
37	BN	79	ARG	Peptide
37	BN	95	TYR	Sidechain
38	BO	4	ILE	Peptide
38	BO	71	ILE	Peptide
38	BO	75	ALA	Peptide
38	BO	81	ARG	Sidechain
39	BP	31	LEU	Peptide
39	BP	67	LYS	Peptide
39	BP	81	ILE	Peptide
40	BQ	39	GLN	Peptide
40	BQ	48	ARG	Sidechain
40	BQ	52	ARG	Sidechain
41	BR	10	ARG	Sidechain
41	BR	15	ARG	Sidechain
41	BR	37	ARG	Peptide
42	BS	49	ARG	Sidechain
42	BS	6	HIS	Peptide
42	BS	69	SER	Peptide
43	BT	39	ARG	Sidechain
43	BT	47	TYR	Sidechain
44	BU	20	TYR	Sidechain
44	BU	24	LYS	Peptide
44	BU	32	LYS	Peptide
44	BU	34	GLU	Peptide

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Mol	Chain	Res	Type	Group
44	BU	51	ALA	Peptide
45	BV	12	ARG	Sidechain
45	BV	35	ARG	Sidechain
46	BW	26	ALA	Peptide
46	BW	32	LEU	Peptide
46	BW	39	ARG	Sidechain
46	BW	63	TYR	Sidechain
47	BX	12	ARG	Sidechain
47	BX	36	ARG	Sidechain
48	BY	118	PHE	Sidechain
48	BY	119	ALA	Peptide
48	BY	129	THR	Peptide
48	BY	134	HIS	Peptide
48	BY	147	GLY	Peptide
48	BY	176	ASP	Peptide
48	BY	46	ARG	Peptide
48	BY	59	ARG	Sidechain
48	BY	7	LYS	Peptide
49	BZ	20	TYR	Sidechain
49	BZ	217	ARG	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	AA	1600	0	760	11	0
1	AE	1622	0	769	7	0
1	AP	1600	0	755	42	0
2	AM	397	0	202	6	0
3	A1	32828	0	15511	162	0
4	AB	1704	0	1732	9	0
5	AC	876	0	887	3	0
6	AD	954	0	1019	4	0
7	AF	883	0	944	1	0
8	AG	773	0	825	2	0
9	AH	715	0	742	2	0
10	AI	648	0	666	5	0
11	AJ	648	0	691	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
12	AK	455	0	478	0	0
13	AL	637	0	665	0	0
14	AN	664	0	714	4	0
15	AO	1624	0	1699	5	0
16	AQ	425	0	449	1	0
17	AR	1642	0	1710	9	0
18	AS	1105	0	1148	4	0
19	AT	817	0	808	2	0
20	AU	1174	0	1230	3	0
21	AV	978	0	1034	0	0
22	AW	1021	0	1070	1	0
23	AX	786	0	828	4	0
24	BA	2504	0	1208	11	0
25	BB	62317	0	29633	224	0
26	BC	752	0	780	4	0
27	BD	930	0	1000	5	0
28	BE	1052	0	1129	9	0
29	BF	1073	0	1157	8	0
30	BG	1007	0	1045	4	0
31	BH	899	0	935	2	0
32	BI	916	0	965	6	0
33	BJ	946	0	1022	8	0
34	BK	815	0	839	4	0
35	BL	856	0	922	0	0
36	BM	777	0	840	2	0
37	BN	2053	0	2122	9	0
38	BO	779	0	834	2	0
39	BP	633	0	656	1	0
40	BQ	508	0	543	3	0
41	BR	448	0	491	2	0
42	BS	548	0	552	2	0
43	BT	443	0	461	2	0
44	BU	440	0	485	2	0
45	BV	376	0	418	2	0
46	BW	503	0	574	7	0
47	BX	301	0	343	1	0
48	BY	1564	0	1616	7	0
49	BZ	1687	0	1814	3	0
50	B1	1551	0	1619	7	0
51	B2	1419	0	1460	8	0
52	B3	1322	0	1374	3	0
53	B4	1110	0	1148	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
54	B5	1031	0	1088	4	0
55	B6	1112	0	1147	2	0
All	All	149248	0	97556	534	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 2.

All (534) 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)
25:BB:1687:G:C2'	25:BB:1687:G:C3'	1.91	1.47
25:BB:1687:G:C2'	25:BB:1687:G:C1'	1.93	1.45
1:AP:31:A:C2'	3:A1:1340:A:H3'	1.45	1.44
25:BB:1687:G:C3'	25:BB:1687:G:C4'	1.96	1.43
1:AP:31:A:C2'	1:AP:31:A:C3'	2.01	1.39
1:AP:31:A:C2'	1:AP:31:A:C1'	2.02	1.36
1:AP:31:A:C3'	1:AP:31:A:C4'	2.11	1.26
25:BB:1687:G:C1'	25:BB:1687:G:O4'	1.87	1.21
25:BB:1687:G:C4'	25:BB:1687:G:O4'	1.87	1.21
1:AP:31:A:C4'	3:A1:1340:A:C3'	2.30	1.10
1:AP:31:A:C1'	1:AP:31:A:O4'	1.99	1.09
1:AP:31:A:C1'	3:A1:1340:A:C3'	2.31	1.08
1:AP:31:A:C4'	1:AP:31:A:O4'	2.03	1.06
1:AP:31:A:C3'	3:A1:1340:A:C3'	2.33	1.05
3:A1:1418:A:C4	25:BB:1960:A:P	2.49	1.05
3:A1:1418:A:C6	25:BB:1960:A:P	2.50	1.05
1:AP:31:A:C2'	3:A1:1340:A:C3'	2.35	1.04
3:A1:1418:A:C2	25:BB:1960:A:P	2.50	1.04
3:A1:1418:A:C5	25:BB:1960:A:P	2.52	1.02
3:A1:1429:A:P	25:BB:1687:G:C1'	2.48	1.01
3:A1:1429:A:P	25:BB:1687:G:C4'	2.49	1.01
3:A1:1429:A:P	25:BB:1687:G:C3'	2.55	0.95
1:AP:31:A:C4'	3:A1:1340:A:O3'	2.16	0.93
3:A1:1429:A:P	25:BB:1687:G:C2'	2.56	0.93
3:A1:1418:A:C6	25:BB:1959:G:O3'	2.21	0.93
1:AP:31:A:C1'	3:A1:1340:A:H3'	1.99	0.93
3:A1:1418:A:C5	25:BB:1959:G:O3'	2.21	0.92
3:A1:1418:A:C2	25:BB:1959:G:O3'	2.22	0.92
1:AP:31:A:C3'	3:A1:1340:A:O3'	2.18	0.91
3:A1:1418:A:C4	25:BB:1959:G:O3'	2.22	0.91
1:AP:31:A:C1'	3:A1:1340:A:O3'	2.20	0.90

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A1:1429:A:O5'	25:BB:1687:G:C4'	2.20	0.90
1:AP:31:A:H2'	3:A1:1340:A:H3'	1.52	0.90
1:AP:31:A:C2'	3:A1:1340:A:O3'	2.20	0.90
1:AP:31:A:C3'	3:A1:1340:A:H3'	2.02	0.90
1:AP:31:A:O4'	3:A1:1340:A:C3'	2.21	0.89
3:A1:1429:A:O5'	25:BB:1687:G:C1'	2.22	0.88
3:A1:1429:A:O5'	25:BB:1687:G:C3'	2.24	0.86
3:A1:1429:A:O5'	25:BB:1687:G:C2'	2.23	0.86
1:AP:75:C:C5	25:BB:2253:G:O6	2.22	0.84
3:A1:1418:A:N3	25:BB:1960:A:P	2.52	0.82
3:A1:1418:A:N1	25:BB:1960:A:P	2.53	0.81
3:A1:1429:A:P	25:BB:1687:G:O4'	2.40	0.80
1:AP:31:A:O4'	3:A1:1340:A:O3'	2.08	0.70
3:A1:1418:A:N1	25:BB:1959:G:O3'	2.23	0.70
3:A1:129:A:H61	3:A1:232:G:H1	1.39	0.69
3:A1:1429:A:HO5'	25:BB:1687:G:C2'	2.06	0.68
3:A1:1429:A:O5'	25:BB:1687:G:O4'	2.12	0.67
17:AR:131:ILE:HD12	17:AR:131:ILE:H	1.61	0.65
42:BS:5:ILE:HD12	42:BS:5:ILE:H	1.62	0.64
25:BB:1251:C:H1'	25:BB:1252:G:H3'	1.80	0.63
17:AR:27:ILE:HD12	17:AR:27:ILE:H	1.65	0.62
3:A1:1429:A:C5'	25:BB:1687:G:C4'	2.78	0.61
3:A1:1418:A:C4	25:BB:1959:G:C3'	2.83	0.61
15:AO:86:LEU:O	15:AO:90:VAL:HG22	2.01	0.60
32:BI:29:VAL:HG13	32:BI:31:VAL:HG23	1.82	0.60
1:AA:61:C:H2'	1:AA:62:A:C8	2.36	0.60
51:B2:2:LYS:HE3	51:B2:2:LYS:HA	1.81	0.60
3:A1:772:U:H3	3:A1:807:A:H61	1.47	0.60
26:BC:2:PHE:CE1	26:BC:50:MET:SD	2.95	0.60
4:AB:53:LEU:HD22	4:AB:53:LEU:H	1.67	0.60
24:BA:81:G:C5	24:BA:82:U:C5	2.90	0.60
3:A1:589:U:H3	3:A1:650:G:N2	2.00	0.59
1:AA:48:C:C5	1:AA:59:U:C4	2.91	0.59
28:BE:77:ILE:HG13	28:BE:78:ARG:H	1.67	0.59
25:BB:633:A:C5	25:BB:634:C:H1'	2.37	0.59
17:AR:131:ILE:H	17:AR:131:ILE:CD1	2.15	0.59
1:AA:48:C:H2'	1:AA:59:U:H1'	1.84	0.58
3:A1:1229:A:H2'	3:A1:1230:C:H2'	1.85	0.58
25:BB:18:U:H1'	33:BJ:20:ALA:HB1	1.84	0.58
51:B2:103:ILE:HG22	51:B2:175:PRO:HD3	1.85	0.58
54:B5:36:GLU:HA	54:B5:39:LYS:HE2	1.86	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A1:1429:A:P	25:BB:1687:G:H1'	2.42	0.58
1:AP:31:A:C4'	3:A1:1340:A:C2'	2.82	0.57
25:BB:2886:A:H2'	25:BB:2886:A:N3	2.20	0.57
24:BA:75:G:H21	26:BC:88:HIS:CD2	2.21	0.57
55:B6:122:LEU:HD23	55:B6:122:LEU:H	1.69	0.57
3:A1:335:C:H2'	3:A1:336:A:C8	2.40	0.56
15:AO:156:LEU:HD23	15:AO:156:LEU:H	1.70	0.56
1:AP:31:A:C1'	3:A1:1340:A:H4'	2.35	0.56
3:A1:321:A:N6	3:A1:332:G:H1	2.03	0.56
3:A1:1016:A:C6	3:A1:1017:U:H1'	2.41	0.56
25:BB:827:U:C6	25:BB:2426:A:H2'	2.40	0.56
48:BY:172:VAL:HG13	48:BY:173:GLN:H	1.70	0.56
1:AP:31:A:C1'	3:A1:1341:U:P	2.94	0.56
3:A1:954:G:H1	3:A1:1226:C:N4	2.04	0.56
18:AS:10:LEU:HD12	18:AS:10:LEU:H	1.70	0.56
22:AW:14:SER:HA	22:AW:15:ALA:HB3	1.87	0.56
54:B5:79:LEU:HD21	54:B5:128:ILE:HG22	1.88	0.55
3:A1:411:A:N6	3:A1:428:G:H1'	2.22	0.55
25:BB:978:G:H1	25:BB:986:C:N4	2.04	0.55
3:A1:1256:A:H4'	3:A1:1258:G:H1'	1.88	0.55
1:AP:74:C:O2'	1:AP:75:C:H5"	2.05	0.55
14:AN:38:ILE:HD13	14:AN:82:ILE:HG22	1.89	0.55
25:BB:2821:A:H3'	25:BB:2822:G:H5"	1.89	0.55
25:BB:1065:U:C6	25:BB:1066:U:H1'	2.42	0.55
25:BB:1981:A:H4'	25:BB:1981:A:OP2	2.06	0.54
25:BB:703:U:H2'	25:BB:704:G:C2	2.42	0.54
37:BN:249:VAL:HG13	37:BN:250:GLN:H	1.72	0.54
3:A1:25:C:N4	3:A1:26:A:H62	2.05	0.54
3:A1:1016:A:C5	3:A1:1017:U:H1'	2.43	0.54
3:A1:1317:C:C5	3:A1:1318:A:H1'	2.42	0.54
3:A1:730:G:H2'	3:A1:731:G:H5'	1.90	0.53
39:BP:27:GLY:HA2	39:BP:61:LYS:HE2	1.89	0.53
3:A1:1429:A:P	25:BB:1687:G:H3'	2.48	0.53
25:BB:771:G:H2'	25:BB:772:C:H5"	1.89	0.53
14:AN:3:ILE:CD1	14:AN:3:ILE:H	2.21	0.53
25:BB:2425:A:H1'	25:BB:2427:C:N4	2.24	0.53
3:A1:797:C:H2'	3:A1:798:U:H5"	1.90	0.53
3:A1:411:A:H61	3:A1:428:G:H1'	1.73	0.53
17:AR:131:ILE:HD12	17:AR:131:ILE:N	2.23	0.53
25:BB:646:U:C5	25:BB:647:G:C6	2.97	0.53
25:BB:2286:G:OP1	44:BU:29:LYS:HE3	2.09	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
34:BK:47:VAL:HG13	34:BK:49:ILE:H	1.73	0.53
25:BB:2061:G:H21	25:BB:2062:A:N6	2.07	0.52
25:BB:451:U:H3'	25:BB:452:G:H5'	1.91	0.52
1:AP:31:A:C1'	3:A1:1340:A:C4'	2.87	0.52
3:A1:1307:U:H2'	3:A1:1308:U:C6	2.44	0.52
3:A1:1429:A:OP1	25:BB:1687:G:H2'	2.10	0.52
25:BB:782:A:H4'	25:BB:783:A:H5"	1.91	0.52
25:BB:1349:C:H3'	25:BB:1350:C:H5"	1.90	0.52
52:B3:36:LEU:HD11	52:B3:42:VAL:HG13	1.92	0.52
3:A1:1418:A:C5	25:BB:1960:A:OP2	2.62	0.52
25:BB:447:A:H61	25:BB:455:C:N4	2.08	0.52
29:BF:46:ILE:HD12	29:BF:46:ILE:N	2.24	0.52
1:AP:31:A:O4'	3:A1:1340:A:C4'	2.58	0.51
25:BB:1937:A:H3'	25:BB:1938:A:H5"	1.93	0.51
2:AM:14:U:H3'	2:AM:15:U:C4'	2.40	0.51
14:AN:3:ILE:H	14:AN:3:ILE:HD13	1.75	0.51
48:BY:118:PHE:CE2	48:BY:120:GLY:HA3	2.46	0.51
53:B4:95:GLY:HA3	53:B4:121:VAL:HG21	1.93	0.51
25:BB:1140:C:H1'	25:BB:1143:A:N7	2.24	0.51
40:BQ:14:LEU:H	40:BQ:14:LEU:HD22	1.75	0.51
54:B5:77:VAL:HA	54:B5:80:LYS:HE2	1.92	0.51
3:A1:47:C:C6	3:A1:365:U:H3'	2.45	0.51
18:AS:37:VAL:HG11	18:AS:113:VAL:HG12	1.93	0.51
24:BA:29:A:H4'	24:BA:29:A:OP1	2.11	0.51
25:BB:730:A:OP1	25:BB:1775:U:H1'	2.10	0.51
25:BB:28:A:H3'	25:BB:29:U:H5"	1.93	0.51
33:BJ:16:ILE:HD13	33:BJ:16:ILE:H	1.76	0.51
4:AB:29:PHE:CE1	4:AB:44:LYS:HE2	2.45	0.51
18:AS:80:LEU:H	18:AS:80:LEU:HD23	1.76	0.51
48:BY:46:ARG:HD3	48:BY:80:TRP:CZ3	2.46	0.50
3:A1:1101:A:H1'	4:AB:97:GLY:HA2	1.93	0.50
3:A1:1428:A:O3'	25:BB:1687:G:H3'	2.11	0.50
11:AJ:32:ILE:HG12	11:AJ:33:TYR:H	1.74	0.50
32:BI:35:SER:HB3	32:BI:40:GLN:HA	1.93	0.50
46:BW:46:LYS:HE3	46:BW:48:MET:SD	2.51	0.50
25:BB:331:C:H41	25:BB:1210:G:H2'	1.75	0.50
3:A1:982:U:H2'	3:A1:982:U:O2	2.10	0.50
25:BB:2254:C:H2'	25:BB:2255:G:C5	2.47	0.50
1:AE:32:C:C5	1:AE:33:U:C5	2.99	0.50
3:A1:975:A:H4'	3:A1:976:G:H5"	1.93	0.50
3:A1:1429:A:H5"	25:BB:1687:G:H4'	1.93	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:2525:G:C6	25:BB:2526:G:C6	3.00	0.50
25:BB:2680:U:H3	25:BB:2727:A:N6	2.09	0.50
24:BA:104:A:C5	24:BA:105:G:H1'	2.47	0.50
25:BB:295:G:H2'	25:BB:296:U:H5'	1.94	0.49
30:BG:119:SER:OG	30:BG:121:LYS:HE2	2.12	0.49
1:AP:31:A:O4'	3:A1:1340:A:H4'	2.11	0.49
3:A1:137:U:H1'	3:A1:227:G:N2	2.26	0.49
25:BB:1746:A:H2'	25:BB:1747:U:C6	2.47	0.49
25:BB:207:A:C2	25:BB:208:C:H1'	2.48	0.49
25:BB:2124:G:H3'	25:BB:2125:G:H5"	1.93	0.49
47:BX:23:ILE:HD13	47:BX:23:ILE:H	1.77	0.49
3:A1:13:U:H3	6:AD:12:ALA:HB2	1.76	0.49
3:A1:1305:G:H1'	3:A1:1307:U:C4	2.47	0.49
1:AP:31:A:H1'	3:A1:1341:U:P	2.52	0.49
23:AX:38:GLY:H	23:AX:39:PRO:CD	2.26	0.49
25:BB:1191:G:OP2	28:BE:36:LYS:HE3	2.12	0.49
3:A1:1418:A:N3	25:BB:1959:G:O3'	2.27	0.48
3:A1:1497:G:H3'	3:A1:1498:U:C6	2.48	0.48
25:BB:2472:G:H1'	25:BB:2479:U:O4	2.13	0.48
34:BK:47:VAL:HG22	34:BK:48:LYS:H	1.78	0.48
3:A1:1275:A:C5	3:A1:1276:G:H1'	2.47	0.48
5:AC:115:ILE:HD12	5:AC:115:ILE:H	1.78	0.48
3:A1:496:A:H61	3:A1:498:A:N6	2.12	0.48
3:A1:625:U:H2'	3:A1:626:G:C8	2.48	0.48
10:AI:9:HIS:CG	10:AI:10:GLY:H	2.31	0.48
1:AP:31:A:H4'	3:A1:1340:A:C2'	2.42	0.48
3:A1:158:G:H3'	3:A1:159:G:H5"	1.96	0.48
25:BB:1798:U:C5	25:BB:1819:A:C2	3.01	0.48
1:AP:31:A:C3'	3:A1:1340:A:C2'	2.92	0.48
25:BB:641:U:H1'	46:BW:43:LEU:HD12	1.94	0.48
25:BB:1943:U:H3'	25:BB:1944:U:H5"	1.95	0.48
25:BB:1470:A:N6	25:BB:1521:G:H1'	2.28	0.48
3:A1:207:C:H2'	3:A1:208:U:O4'	2.14	0.48
3:A1:1256:A:H4'	3:A1:1258:G:C1'	2.43	0.48
25:BB:1232:G:H3'	25:BB:1233:C:H5"	1.95	0.48
27:BD:32:TYR:CE2	27:BD:67:LYS:HE2	2.49	0.48
25:BB:1245:G:H5'	50:B1:33:VAL:HG22	1.94	0.48
3:A1:1219:A:C2	3:A1:1220:G:H1'	2.49	0.48
6:AD:9:LYS:H	6:AD:10:PRO:HD3	1.79	0.48
25:BB:1800:C:H42	25:BB:1817:G:N2	2.11	0.48
25:BB:1846:G:N2	25:BB:1848:A:H62	2.12	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A1:1429:A:C5'	25:BB:1687:G:O4'	2.62	0.47
25:BB:138:U:C5	25:BB:140:C:C2	3.02	0.47
25:BB:2138:G:C6	25:BB:2139:U:C4	3.02	0.47
33:BJ:30:VAL:HG23	33:BJ:31:TYR:H	1.79	0.47
1:AE:63:C:H2'	1:AE:64:A:C8	2.49	0.47
25:BB:1999:C:H1'	25:BB:2687:U:H1'	1.95	0.47
1:AP:56:C:C5	1:AP:57:G:C6	3.03	0.47
25:BB:1639:C:H3'	25:BB:1640:A:H5"	1.95	0.47
25:BB:2639:A:H1'	25:BB:2778:A:N1	2.30	0.47
1:AA:42:G:C2	1:AA:43:G:C4	3.02	0.47
3:A1:184:G:C6	3:A1:185:U:C4	3.02	0.47
3:A1:397:A:C5	3:A1:547:A:H2'	2.50	0.47
3:A1:1225:A:H3'	3:A1:1226:C:H5"	1.97	0.47
3:A1:1300:G:C6	3:A1:1334:G:H2'	2.50	0.47
3:A1:1402:C:C5	3:A1:1403:C:C6	3.03	0.47
25:BB:1175:A:H2'	25:BB:1176:U:H5'	1.97	0.47
34:BK:80:ARG:CD	34:BK:81:LYS:H	2.28	0.47
46:BW:28:LEU:CD1	46:BW:35:LYS:HE2	2.44	0.47
25:BB:308:G:C2	25:BB:501:A:C8	3.02	0.47
37:BN:110:LYS:O	37:BN:111:ALA:HB2	2.15	0.47
18:AS:24:VAL:HG22	18:AS:25:LYS:H	1.80	0.47
25:BB:2314:A:H1'	51:B2:154:THR:HG21	1.96	0.47
25:BB:2817:U:H3'	25:BB:2818:U:H5"	1.97	0.47
25:BB:2273:A:C2	25:BB:2274:A:C5	3.03	0.47
25:BB:2790:U:H5'	25:BB:2892:G:H1'	1.97	0.47
28:BE:95:LEU:N	28:BE:95:LEU:HD22	2.31	0.47
3:A1:54:C:C5	3:A1:352:C:C5	3.03	0.46
25:BB:2443:C:OP2	50:B1:63:LYS:HE2	2.16	0.46
3:A1:376:G:P	10:AI:5:ARG:HH21	2.39	0.46
25:BB:1532:A:C2	25:BB:1540:G:C5	3.04	0.46
29:BF:97:GLN:H	29:BF:98:PRO:HD3	1.80	0.46
51:B2:60:SER:HB2	51:B2:88:VAL:HG11	1.98	0.46
25:BB:842:U:H3'	25:BB:843:G:H5"	1.98	0.46
25:BB:1273:U:H3'	25:BB:1274:A:H5"	1.97	0.46
25:BB:1912:A:C2	25:BB:1919:A:C6	3.04	0.46
31:BH:34:HIS:CD2	31:BH:35:ILE:H	2.33	0.46
3:A1:1441:A:H3'	3:A1:1442:G:H5"	1.96	0.46
3:A1:1446:A:C4	3:A1:1447:A:N7	2.84	0.46
51:B2:103:ILE:HG22	51:B2:175:PRO:CD	2.45	0.46
1:AP:30:G:O2'	3:A1:1339:A:C8	2.69	0.46
1:AP:37:G:C6	1:AP:38:A:C5	3.04	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A1:5:U:H4'	3:A1:6:G:H5"	1.98	0.46
3:A1:1057:G:H21	23:AX:57:VAL:HG21	1.81	0.46
3:A1:502:A:H2'	3:A1:503:C:H4'	1.98	0.46
3:A1:978:A:N6	3:A1:1319:A:C6	2.83	0.46
3:A1:1418:A:C4	25:BB:1959:G:H3'	2.51	0.46
3:A1:1429:A:H5"	25:BB:1687:G:C4'	2.45	0.46
7:AF:92:ARG:HD2	7:AF:94:LEU:HD11	1.98	0.46
25:BB:771:G:H2'	25:BB:772:C:C5'	2.46	0.46
25:BB:2043:C:N4	25:BB:2625:G:H1	2.13	0.46
25:BB:2601:C:H2'	25:BB:2602:A:H5'	1.97	0.46
30:BG:108:ALA:HB1	30:BG:109:PRO:HD2	1.97	0.46
1:AA:19:G:N2	1:AA:57:G:H1'	2.31	0.46
3:A1:500:G:H4'	3:A1:501:C:OP1	2.16	0.46
24:BA:24:G:H1'	24:BA:56:G:O6	2.16	0.46
24:BA:30:C:H3'	24:BA:31:C:C6	2.51	0.46
25:BB:1528:A:C8	25:BB:1544:A:C8	3.04	0.46
3:A1:26:A:N3	3:A1:26:A:H2'	2.30	0.46
3:A1:172:A:H2'	3:A1:174:A:C5	2.51	0.46
1:AA:73:A:H2'	1:AA:74:C:H5'	1.98	0.45
2:AM:14:U:H4'	2:AM:15:U:OP2	2.16	0.45
3:A1:1194:U:H4'	3:A1:1195:C:OP2	2.14	0.45
25:BB:714:U:H1'	25:BB:718:A:N1	2.31	0.45
25:BB:2720:U:C2	25:BB:2846:G:H4'	2.51	0.45
37:BN:111:ALA:H	37:BN:112:GLY:HA2	1.82	0.45
37:BN:198:GLU:H	37:BN:198:GLU:CD	2.17	0.45
20:AU:125:ASP:HB3	20:AU:131:GLY:HA2	1.98	0.45
25:BB:278:A:N3	25:BB:362:A:H1'	2.31	0.45
25:BB:990:A:H2'	25:BB:1186:G:N2	2.30	0.45
32:BI:13:LYS:HE3	32:BI:15:ASP:OD2	2.16	0.45
1:AA:11:C:H2'	1:AA:12:U:C6	2.51	0.45
6:AD:86:VAL:HG12	6:AD:87:LYS:HD2	1.96	0.45
25:BB:712:G:H1	25:BB:719:C:N4	2.15	0.45
1:AA:23:A:H2'	1:AA:24:G:C8	2.52	0.45
3:A1:1127:G:H5"	3:A1:1128:C:C6	2.52	0.45
3:A1:1130:A:H3'	3:A1:1131:G:C8	2.52	0.45
24:BA:78:A:C6	24:BA:79:G:C2	3.04	0.45
20:AU:50:ALA:HA	20:AU:57:GLU:HB2	1.99	0.45
25:BB:356:G:H2'	25:BB:357:C:C6	2.51	0.45
25:BB:2358:A:H5"	46:BW:49:VAL:HG23	1.98	0.45
34:BK:67:GLY:HA2	34:BK:99:THR:HG22	1.98	0.45
1:AA:39:U:H2'	1:AA:40:C:H5'	1.98	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
31:BH:106:LEU:N	31:BH:106:LEU:HD22	2.32	0.45
3:A1:952:U:H1'	3:A1:964:A:N6	2.32	0.45
3:A1:1500:A:H2'	3:A1:1501:C:H5"	1.98	0.45
25:BB:1070:A:C2	54:B5:9:LYS:HE2	2.52	0.45
25:BB:2126:A:C2	25:BB:2173:A:C6	3.05	0.45
37:BN:175:LEU:HD13	37:BN:175:LEU:H	1.82	0.45
3:A1:383:A:C5	3:A1:384:G:H1'	2.51	0.45
25:BB:570:G:P	25:BB:972:A:H4'	2.57	0.45
41:BR:30:ARG:HG3	41:BR:31:ILE:H	1.82	0.45
3:A1:810:C:O2'	3:A1:898:G:H4'	2.17	0.45
3:A1:1098:C:H2'	3:A1:1099:G:O4'	2.17	0.45
3:A1:1441:A:H3'	3:A1:1442:G:C5'	2.47	0.44
8:AG:12:ARG:HD3	8:AG:54:SER:HA	1.98	0.44
1:AP:31:A:H5'	3:A1:1341:U:C6	2.52	0.44
2:AM:14:U:H3'	2:AM:15:U:H4'	1.99	0.44
25:BB:720:U:H2'	25:BB:721:A:C8	2.52	0.44
25:BB:733:G:N2	25:BB:734:A:C8	2.85	0.44
40:BQ:2:LYS:O	40:BQ:3:ALA:HB3	2.17	0.44
3:A1:283:U:H2'	3:A1:284:C:H5'	2.00	0.44
11:AJ:32:ILE:CG1	11:AJ:33:TYR:H	2.31	0.44
25:BB:2561:U:H2'	25:BB:2562:U:C4'	2.48	0.44
25:BB:2731:G:H4'	25:BB:2732:G:OP1	2.17	0.44
3:A1:887:G:C2	3:A1:888:G:H1'	2.53	0.44
25:BB:1471:G:C8	25:BB:1472:C:C5	3.05	0.44
29:BF:97:GLN:H	29:BF:98:PRO:CD	2.30	0.44
50:B1:108:ILE:HD12	50:B1:108:ILE:H	1.83	0.44
51:B2:159:ALA:HB1	51:B2:165:GLY:HA3	2.00	0.44
1:AE:25:C:C4	1:AE:26:G:C5	3.06	0.44
2:AM:12:U:H4'	2:AM:13:U:OP1	2.17	0.44
3:A1:468:A:C8	3:A1:468:A:H5"	2.53	0.44
25:BB:323:C:HO2'	25:BB:323:C:H6	1.64	0.44
25:BB:1252:G:H1	33:BJ:36:GLN:NE2	2.16	0.44
25:BB:143:C:H1'	36:BM:2:ILE:HG21	2.00	0.44
25:BB:1777:U:C4	25:BB:1981:A:C8	3.06	0.44
25:BB:2055:C:H4'	25:BB:2056:G:H5'	2.00	0.44
3:A1:1429:A:H5'	25:BB:1687:G:C8	2.53	0.44
3:A1:1492:A:H3'	25:BB:1913:A:N7	2.33	0.44
24:BA:52:A:H4'	24:BA:52:A:OP1	2.17	0.44
25:BB:1273:U:O2	25:BB:2003:A:H1'	2.17	0.44
3:A1:1073:U:H3	3:A1:1103:C:N4	2.16	0.44
3:A1:1515:G:H3'	3:A1:1516:G:O4'	2.18	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:54:G:H5”	45:BV:35:ARG:CZ	2.47	0.44
25:BB:804:A:C2	28:BE:46:VAL:HG11	2.53	0.44
25:BB:1916:A:C8	25:BB:1917:U:C5	3.05	0.44
25:BB:2273:A:C2	25:BB:2274:A:C6	3.06	0.44
1:AP:28:C:H2’	1:AP:29:A:C8	2.53	0.44
4:AB:128:LEU:HD13	4:AB:128:LEU:C	2.39	0.44
15:AO:51:VAL:HG13	15:AO:51:VAL:O	2.17	0.44
24:BA:62:C:H2’	24:BA:63:C:C5	2.52	0.44
25:BB:2790:U:C6	25:BB:2893:A:C5	3.06	0.44
28:BE:106:GLU:H	28:BE:106:GLU:CD	2.21	0.44
3:A1:408:A:OP1	17:AR:21:LYS:HE2	2.18	0.43
3:A1:439:U:H1’	17:AR:118:SER:O	2.18	0.43
24:BA:81:G:C4	24:BA:82:U:C6	3.05	0.43
25:BB:674:G:H2’	25:BB:675:A:H1’	1.99	0.43
28:BE:117:THR:O	28:BE:120:VAL:HG23	2.18	0.43
46:BW:28:LEU:HD11	46:BW:35:LYS:HE2	1.99	0.43
25:BB:2860:A:C5	25:BB:2861:U:H1’	2.53	0.43
27:BD:11:ALA:CB	27:BD:63:VAL:HG11	2.48	0.43
6:AD:110:LYS:HD3	6:AD:110:LYS:H	1.83	0.43
25:BB:499:U:O2’	38:BO:42:LYS:HE3	2.18	0.43
3:A1:129:A:N6	3:A1:232:G:H1	2.12	0.43
25:BB:671:C:H2’	25:BB:672:C:C2	2.54	0.43
25:BB:1311:G:H22	25:BB:1602:U:P	2.42	0.43
25:BB:1502:A:OP1	37:BN:96:LYS:HE2	2.18	0.43
44:BU:8:ILE:CD1	44:BU:10:LEU:HD11	2.47	0.43
3:A1:977:A:H1’	3:A1:983:A:N1	2.34	0.43
10:AI:75:ILE:HA	10:AI:78:VAL:HG12	1.99	0.43
23:AX:38:GLY:H	23:AX:39:PRO:HD2	1.82	0.43
25:BB:402:A:H61	25:BB:423:A:H61	1.65	0.43
3:A1:242:G:H4’	3:A1:242:G:OP1	2.18	0.43
3:A1:579:A:H1’	3:A1:580:C:C5	2.54	0.43
29:BF:114:ARG:HG3	29:BF:114:ARG:HH11	1.83	0.43
3:A1:1429:A:OP1	25:BB:1687:G:C2’	2.64	0.43
25:BB:1189:A:OP2	25:BB:1189:A:C8	2.72	0.43
25:BB:2339:C:H1’	25:BB:2340:A:C8	2.54	0.43
3:A1:26:A:H5’	3:A1:27:G:OP2	2.19	0.43
3:A1:44:A:P	10:AI:12:LYS:HE2	2.59	0.43
3:A1:430:A:H2’	3:A1:431:A:H5’	2.00	0.43
4:AB:70:GLY:HA3	4:AB:79:VAL:HG21	2.00	0.43
25:BB:53:A:H62	25:BB:54:G:N2	2.15	0.43
25:BB:2194:U:H2’	25:BB:2195:U:H4’	2.01	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
49:BZ:20:TYR:HA	49:BZ:211:LYS:HB2	2.00	0.43
4:AB:66:ILE:HD12	4:AB:66:ILE:H	1.84	0.43
4:AB:86:CYS:SG	4:AB:221:ARG:HD3	2.59	0.43
4:AB:95:TRP:CZ3	4:AB:100:LEU:HD13	2.53	0.43
25:BB:2136:G:O6	25:BB:2156:G:H1'	2.19	0.43
25:BB:2467:C:H4'	29:BF:117:PHE:CZ	2.54	0.43
38:BO:84:PHE:HB2	38:BO:94:PHE:CD1	2.54	0.43
1:AE:71:G:C2	1:AE:72:C:H1'	2.53	0.43
3:A1:138:G:C5	3:A1:226:G:C2	3.07	0.43
3:A1:283:U:C2'	3:A1:284:C:H5'	2.49	0.43
9:AH:38:LEU:HD23	9:AH:41:HIS:CE1	2.53	0.43
25:BB:1710:G:C6	25:BB:1711:A:C6	3.07	0.43
25:BB:1773:A:H5"	25:BB:1790:C:H41	1.84	0.43
25:BB:1850:G:N2	25:BB:1851:U:H1'	2.34	0.43
25:BB:1854:A:H5"	25:BB:1855:U:C5	2.54	0.43
25:BB:2064:C:H1'	25:BB:2065:C:C4	2.53	0.43
25:BB:2748:A:H2'	25:BB:2749:A:C8	2.53	0.43
1:AA:12:U:C4	1:AA:13:C:C4	3.06	0.42
3:A1:864:A:H2'	3:A1:865:A:C8	2.54	0.42
25:BB:658:U:C4	25:BB:659:G:C4	3.07	0.42
1:AP:31:A:N9	3:A1:1340:A:H4'	2.34	0.42
3:A1:766:A:N1	3:A1:1511:G:H1'	2.34	0.42
5:AC:22:ILE:CD1	5:AC:22:ILE:H	2.31	0.42
25:BB:352:A:H2'	25:BB:353:C:O4'	2.18	0.42
36:BM:7:LEU:HD23	36:BM:46:ALA:HA	2.00	0.42
1:AP:29:A:C2	1:AP:42:G:C2	3.06	0.42
17:AR:94:GLU:HG3	17:AR:190:LEU:HD11	2.02	0.42
25:BB:538:A:O2'	55:B6:7:LYS:HE3	2.19	0.42
25:BB:1155:A:C8	25:BB:1157:G:C8	3.08	0.42
25:BB:1199:U:H3	33:BJ:1:ALA:N	2.18	0.42
43:BT:53:VAL:HG23	43:BT:54:ILE:H	1.85	0.42
1:AP:74:C:H2'	1:AP:75:C:H5'	1.34	0.42
3:A1:515:G:H2'	3:A1:516:U:C6	2.55	0.42
20:AU:73:GLU:OE2	20:AU:75:LYS:HE2	2.19	0.42
25:BB:308:G:H1'	25:BB:501:A:H5'	2.01	0.42
25:BB:2391:G:H2'	46:BW:31:ILE:HG21	2.02	0.42
26:BC:21:ARG:CZ	26:BC:87:GLN:HG3	2.50	0.42
48:BY:14:ILE:HD12	48:BY:14:ILE:HA	1.97	0.42
2:AM:14:U:H3'	2:AM:15:U:O4'	2.20	0.42
19:AT:67:PRO:O	19:AT:70:VAL:HG22	2.20	0.42
25:BB:208:C:H2'	25:BB:209:C:C6	2.54	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
25:BB:1142:A:C2	25:BB:1144:A:H1'	2.55	0.42
25:BB:1528:A:C6	25:BB:1529:G:H1'	2.54	0.42
25:BB:2005:A:H3'	25:BB:2006:C:H5"	2.00	0.42
25:BB:2256:G:N3	25:BB:2275:C:H5'	2.34	0.42
19:AT:55:HIS:CD2	19:AT:56:LYS:HE2	2.54	0.42
1:AP:14:A:H2'	1:AP:15:G:H5'	2.00	0.42
1:AE:25:C:H2'	1:AE:26:G:C8	2.55	0.42
25:BB:866:A:H2'	25:BB:867:C:C6	2.54	0.42
25:BB:1076:C:H2'	25:BB:1077:A:O4'	2.19	0.42
25:BB:2327:A:C2	25:BB:2328:A:N7	2.88	0.42
32:BI:71:ARG:HH22	32:BI:101:GLU:CD	2.22	0.42
37:BN:252:LYS:HE2	37:BN:253:GLY:O	2.20	0.42
48:BY:172:VAL:HG13	48:BY:173:GLN:N	2.33	0.42
1:AE:70:C:H2'	1:AE:71:G:C8	2.55	0.42
3:A1:1409:C:H2'	3:A1:1410:A:C8	2.55	0.42
25:BB:1901:A:C8	25:BB:1902:C:C5	3.08	0.42
25:BB:2027:G:H2'	25:BB:2028:U:C5	2.54	0.42
25:BB:2177:C:H5'	49:BZ:212:ALA:HB3	2.02	0.42
53:B4:6:LEU:HD23	53:B4:15:LEU:HA	2.02	0.42
1:AP:26:G:H2'	1:AP:27:C:O4'	2.20	0.42
3:A1:690:G:N2	3:A1:696:A:H62	2.17	0.42
3:A1:973:G:H2'	3:A1:974:A:C2	2.55	0.42
25:BB:45:G:H2'	25:BB:215:G:H2'	2.02	0.42
25:BB:230:G:H4'	25:BB:230:G:OP1	2.18	0.42
25:BB:1285:A:C8	25:BB:1328:A:H5"	2.53	0.42
25:BB:1697:G:H3'	25:BB:1698:A:H5"	2.02	0.42
43:BT:41:HIS:CD2	43:BT:48:TYR:HA	2.55	0.42
51:B2:103:ILE:HG22	51:B2:175:PRO:CG	2.49	0.42
3:A1:548:G:C8	3:A1:548:G:H5"	2.55	0.41
25:BB:1324:G:N2	25:BB:1330:C:H1'	2.34	0.41
25:BB:1923:U:H2'	25:BB:1924:C:C6	2.54	0.41
25:BB:2360:G:OP2	46:BW:46:LYS:HE2	2.20	0.41
3:A1:70:U:C5	3:A1:94:G:C5	3.08	0.41
24:BA:97:C:C2	26:BC:14:LYS:HD2	2.55	0.41
25:BB:2140:G:C6	25:BB:2141:G:C5	3.08	0.41
25:BB:2512:C:H5'	25:BB:2513:A:OP2	2.20	0.41
25:BB:2848:G:H2'	32:BI:94:ALA:O	2.20	0.41
11:AJ:16:MET:CB	11:AJ:19:SER:HB2	2.50	0.41
15:AO:156:LEU:H	15:AO:156:LEU:CD2	2.32	0.41
25:BB:1295:C:H2'	25:BB:1296:G:O5'	2.20	0.41
30:BG:1:MET:H1	30:BG:4:ARG:HG2	1.84	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
50:B1:108:ILE:HD12	50:B1:108:ILE:N	2.35	0.41
1:AP:40:C:H2'	1:AP:41:U:C6	2.56	0.41
3:A1:120:A:N3	3:A1:122:G:H1'	2.35	0.41
17:AR:46:ARG:HG2	17:AR:47:LEU:H	1.86	0.41
25:BB:61:C:H1'	40:BQ:41:HIS:CE1	2.55	0.41
25:BB:71:A:O5'	25:BB:72:U:H2'	2.20	0.41
25:BB:873:C:H4'	29:BF:64:TRP:CZ2	2.56	0.41
25:BB:1009:A:N6	33:BJ:54:ARG:HE	2.18	0.41
25:BB:1199:U:H3	33:BJ:1:ALA:H2	1.68	0.41
25:BB:1890:A:C4	25:BB:2234:G:H1'	2.55	0.41
25:BB:2156:G:H4'	25:BB:2158:A:C5	2.55	0.41
25:BB:2690:U:C5	30:BG:1:MET:HG3	2.55	0.41
28:BE:95:LEU:HD22	28:BE:95:LEU:H	1.85	0.41
33:BJ:63:ARG:H	33:BJ:63:ARG:HD3	1.85	0.41
3:A1:172:A:H2'	3:A1:174:A:C6	2.56	0.41
5:AC:41:LEU:HD21	5:AC:76:TYR:HB2	2.02	0.41
25:BB:406:G:C2	25:BB:407:G:C6	3.08	0.41
52:B3:6:ALA:H	52:B3:7:PRO:HD2	1.85	0.41
1:AA:68:U:H2'	1:AA:69:U:H5'	2.01	0.41
15:AO:90:VAL:HG23	15:AO:98:ALA:HB3	2.02	0.41
25:BB:1091:G:H2'	25:BB:1092:C:O4'	2.21	0.41
49:BZ:204:TYR:HA	49:BZ:215:VAL:HG23	2.02	0.41
1:AP:14:A:N1	1:AP:22:G:H1'	2.35	0.41
3:A1:1395:C:H1'	3:A1:1396:A:OP1	2.20	0.41
17:AR:53:GLN:HB2	17:AR:202:LEU:HD13	2.02	0.41
23:AX:102:LEU:HD23	23:AX:102:LEU:C	2.41	0.41
25:BB:584:C:H42	50:B1:79:ARG:HG2	1.85	0.41
25:BB:607:U:OP1	50:B1:95:LYS:HE2	2.20	0.41
25:BB:1854:A:H2'	25:BB:1855:U:H5'	2.02	0.41
25:BB:2138:G:C5	25:BB:2139:U:C5	3.09	0.41
25:BB:2199:A:H1'	25:BB:2225:A:N1	2.35	0.41
41:BR:15:ARG:HG2	41:BR:16:LEU:H	1.86	0.41
2:AM:4:U:C6	3:A1:1506:U:C6	3.09	0.41
3:A1:1418:A:C4	25:BB:1960:A:OP2	2.72	0.41
25:BB:1254:A:H2'	50:B1:69:ARG:HH21	1.86	0.41
27:BD:24:VAL:HG12	27:BD:25:LEU:N	2.36	0.41
42:BS:5:ILE:H	42:BS:5:ILE:CD1	2.29	0.41
51:B2:19:PHE:CE2	51:B2:164:GLU:HB3	2.56	0.41
3:A1:342:C:H2'	3:A1:343:U:H5'	2.03	0.41
3:A1:1034:G:O2'	3:A1:1035:A:H5'	2.21	0.41
3:A1:1418:A:N1	25:BB:1960:A:OP1	2.53	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A1:1428:A:O3'	25:BB:1687:G:C3'	2.68	0.41
4:AB:31:PHE:CD1	4:AB:41:ASN:HA	2.55	0.41
14:AN:3:ILE:HD13	14:AN:3:ILE:N	2.36	0.41
16:AQ:34:ARG:HH11	16:AQ:36:PHE:HA	1.85	0.41
25:BB:707:G:O5'	37:BN:25:LYS:HE2	2.21	0.41
25:BB:1036:G:C5	25:BB:1120:G:C6	3.09	0.41
25:BB:2654:A:H4'	25:BB:2655:G:H4'	2.02	0.41
37:BN:231:HIS:CD2	37:BN:242:HIS:CD2	3.08	0.41
48:BY:115:GLY:HA2	48:BY:165:MET:SD	2.61	0.41
48:BY:143:PRO:HA	48:BY:144:GLY:HA2	1.96	0.41
25:BB:1198:U:H5'	25:BB:1198:U:C6	2.56	0.41
25:BB:1946:U:OP1	25:BB:1946:U:H4'	2.21	0.41
25:BB:2366:A:H2'	25:BB:2366:A:N3	2.36	0.41
25:BB:2758:A:C6	25:BB:2759:G:H1'	2.56	0.41
29:BF:15:GLY:HA2	29:BF:74:THR:HG21	2.03	0.41
52:B3:126:THR:HG23	52:B3:128:THR:H	1.86	0.41
1:AE:72:C:H4'	25:BB:1884:G:H3'	2.03	0.40
3:A1:1188:A:H2'	3:A1:1189:U:C6	2.56	0.40
3:A1:1269:A:H3'	3:A1:1270:G:C5'	2.51	0.40
25:BB:602:A:C2	25:BB:656:G:C6	3.09	0.40
25:BB:2728:U:C2	25:BB:2729:G:C8	3.09	0.40
25:BB:2862:G:C6	25:BB:2863:C:N4	2.89	0.40
3:A1:6:G:N3	3:A1:6:G:H2'	2.36	0.40
3:A1:197:A:H4'	3:A1:198:G:OP1	2.22	0.40
3:A1:758:C:O2'	3:A1:880:C:H1'	2.21	0.40
8:AG:9:GLU:HB3	8:AG:59:GLN:HE22	1.86	0.40
25:BB:84:A:N3	25:BB:85:G:H1'	2.36	0.40
25:BB:598:U:H4'	28:BE:20:GLY:HA3	2.03	0.40
25:BB:1000:A:C5	25:BB:1001:A:C6	3.09	0.40
25:BB:1356:G:C8	25:BB:1356:G:H5"	2.56	0.40
25:BB:1414:C:C5	25:BB:1415:U:C5	3.09	0.40
27:BD:35:VAL:N	27:BD:36:GLY:HA2	2.37	0.40
29:BF:103:TYR:CZ	29:BF:105:MET:HB2	2.56	0.40
32:BI:92:ARG:HB2	32:BI:110:LYS:HG2	2.03	0.40
3:A1:1189:U:C5	3:A1:1190:G:C5	3.09	0.40
10:AI:9:HIS:CG	10:AI:10:GLY:N	2.89	0.40
25:BB:860:U:O2	25:BB:860:U:H2'	2.21	0.40
25:BB:1757:A:OP1	25:BB:1757:A:H3'	2.21	0.40
27:BD:19:VAL:HG23	27:BD:43:ILE:HD13	2.01	0.40
3:A1:972:C:C5	3:A1:973:G:N2	2.89	0.40
3:A1:1390:U:H2'	3:A1:1391:U:H5'	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
9:AH:2:LEU:HD23	9:AH:2:LEU:H	1.86	0.40
25:BB:873:C:C2	25:BB:905:A:N6	2.89	0.40
25:BB:1611:C:C2'	45:BV:6:GLN:HE21	2.35	0.40
25:BB:1810:A:H5"	25:BB:1811:G:C2	2.57	0.40
25:BB:2173:A:C5	25:BB:2174:C:C5	3.09	0.40
25:BB:2520:C:C2	25:BB:2521:C:O2	2.74	0.40
3:A1:872:A:HO2'	3:A1:872:A:H8	1.69	0.40
25:BB:630:G:H1	28:BE:69:ARG:NH2	2.19	0.40
25:BB:1516:G:H1	25:BB:1732:C:H42	1.69	0.40
25:BB:2468:A:N6	25:BB:2481:G:C2	2.90	0.40
25:BB:2851:A:H2'	25:BB:2852:G:H5'	2.02	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
4	AB	216/241 (90%)	178 (82%)	33 (15%)	5 (2%)	6 34
5	AC	115/129 (89%)	91 (79%)	17 (15%)	7 (6%)	1 17
6	AD	121/124 (98%)	78 (64%)	28 (23%)	15 (12%)	0 5
7	AF	112/118 (95%)	80 (71%)	24 (21%)	8 (7%)	1 14
8	AG	94/101 (93%)	69 (73%)	20 (21%)	5 (5%)	2 19
9	AH	86/89 (97%)	73 (85%)	11 (13%)	2 (2%)	6 34
10	AI	80/82 (98%)	55 (69%)	15 (19%)	10 (12%)	0 5
11	AJ	78/84 (93%)	52 (67%)	18 (23%)	8 (10%)	0 8
12	AK	53/75 (71%)	44 (83%)	7 (13%)	2 (4%)	3 24
13	AL	77/92 (84%)	51 (66%)	19 (25%)	7 (9%)	1 11
14	AN	83/87 (95%)	66 (80%)	13 (16%)	4 (5%)	2 21

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
15	AO	204/233 (88%)	151 (74%)	38 (19%)	15 (7%)	1	14
16	AQ	49/71 (69%)	35 (71%)	8 (16%)	6 (12%)	0	6
17	AR	203/206 (98%)	161 (79%)	29 (14%)	13 (6%)	1	16
18	AS	148/159 (93%)	114 (77%)	20 (14%)	14 (10%)	0	10
19	AT	98/135 (73%)	80 (82%)	13 (13%)	5 (5%)	2	19
20	AU	148/179 (83%)	118 (80%)	19 (13%)	11 (7%)	1	14
21	AV	127/130 (98%)	103 (81%)	19 (15%)	5 (4%)	3	23
22	AW	125/130 (96%)	95 (76%)	23 (18%)	7 (6%)	2	19
23	AX	96/103 (93%)	78 (81%)	9 (9%)	9 (9%)	0	10
26	BC	92/94 (98%)	74 (80%)	14 (15%)	4 (4%)	2	22
27	BD	119/123 (97%)	90 (76%)	16 (13%)	13 (11%)	0	8
28	BE	142/144 (99%)	91 (64%)	30 (21%)	21 (15%)	0	3
29	BF	134/136 (98%)	73 (54%)	40 (30%)	21 (16%)	0	3
30	BG	125/127 (98%)	84 (67%)	32 (26%)	9 (7%)	1	14
31	BH	115/117 (98%)	72 (63%)	32 (28%)	11 (10%)	0	10
32	BI	112/115 (97%)	63 (56%)	32 (29%)	17 (15%)	0	4
33	BJ	115/118 (98%)	77 (67%)	27 (24%)	11 (10%)	0	10
34	BK	101/103 (98%)	59 (58%)	33 (33%)	9 (9%)	1	11
35	BL	108/110 (98%)	72 (67%)	27 (25%)	9 (8%)	1	12
36	BM	97/99 (98%)	69 (71%)	18 (19%)	10 (10%)	0	8
37	BN	265/270 (98%)	165 (62%)	61 (23%)	39 (15%)	0	4
38	BO	100/103 (97%)	60 (60%)	22 (22%)	18 (18%)	0	3
39	BP	82/85 (96%)	44 (54%)	21 (26%)	17 (21%)	0	2
40	BQ	61/63 (97%)	42 (69%)	14 (23%)	5 (8%)	1	12
41	BR	56/59 (95%)	38 (68%)	13 (23%)	5 (9%)	1	11
42	BS	68/70 (97%)	38 (56%)	22 (32%)	8 (12%)	0	6
43	BT	54/57 (95%)	32 (59%)	11 (20%)	11 (20%)	0	2
44	BU	52/54 (96%)	33 (64%)	14 (27%)	5 (10%)	0	10
45	BV	44/46 (96%)	33 (75%)	6 (14%)	5 (11%)	0	7
46	BW	62/64 (97%)	35 (56%)	20 (32%)	7 (11%)	0	7
47	BX	36/38 (95%)	23 (64%)	8 (22%)	5 (14%)	0	4

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
48	BY	207/209 (99%)	113 (55%)	54 (26%)	40 (19%)	0 2
49	BZ	211/213 (99%)	163 (77%)	33 (16%)	15 (7%)	1 14
50	B1	199/201 (99%)	111 (56%)	53 (27%)	35 (18%)	0 3
51	B2	176/178 (99%)	123 (70%)	26 (15%)	27 (15%)	0 3
52	B3	174/177 (98%)	149 (86%)	20 (12%)	5 (3%)	4 29
53	B4	147/149 (99%)	103 (70%)	33 (22%)	11 (8%)	1 13
54	B5	139/142 (98%)	113 (81%)	17 (12%)	9 (6%)	1 16
55	B6	138/140 (99%)	79 (57%)	41 (30%)	18 (13%)	0 5
All	All	5844/6172 (95%)	4093 (70%)	1173 (20%)	578 (10%)	1 9

All (578) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	AB	36	LYS
4	AB	97	GLY
4	AB	169	HIS
6	AD	9	LYS
6	AD	15	VAL
6	AD	19	ASN
6	AD	34	THR
6	AD	49	ARG
6	AD	113	ARG
7	AF	44	ILE
7	AF	65	GLU
7	AF	101	THR
8	AG	64	ARG
9	AH	86	LEU
10	AI	72	ALA
11	AJ	68	LYS
12	AK	70	THR
12	AK	71	ASP
13	AL	25	GLY
13	AL	36	ARG
13	AL	37	SER
14	AN	3	ILE
15	AO	14	VAL
15	AO	25	THR
15	AO	50	SER
15	AO	159	ALA

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Mol	Chain	Res	Type
16	AQ	9	GLU
16	AQ	16	ARG
16	AQ	39	LYS
17	AR	32	LYS
17	AR	36	ALA
17	AR	131	ILE
17	AR	151	GLN
17	AR	152	SER
18	AS	20	VAL
18	AS	25	LYS
18	AS	100	GLU
18	AS	124	ALA
19	AT	55	HIS
20	AU	31	VAL
20	AU	34	LYS
20	AU	35	LYS
20	AU	56	SER
20	AU	88	VAL
21	AV	106	SER
23	AX	80	THR
27	BD	17	ARG
27	BD	30	ARG
27	BD	32	TYR
27	BD	95	ILE
28	BE	13	LYS
28	BE	77	ILE
28	BE	128	THR
28	BE	143	GLU
29	BF	5	LYS
29	BF	11	LYS
29	BF	30	SER
29	BF	59	ARG
29	BF	74	THR
30	BG	28	LEU
30	BG	61	ALA
31	BH	9	ARG
31	BH	16	ARG
31	BH	28	VAL
31	BH	46	GLU
31	BH	54	VAL
32	BI	94	ALA
33	BJ	5	ARG

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Mol	Chain	Res	Type
34	BK	24	LYS
35	BL	20	VAL
35	BL	93	ALA
36	BM	73	ARG
36	BM	88	LYS
36	BM	92	ASN
37	BN	53	ILE
37	BN	58	LYS
37	BN	111	ALA
37	BN	159	THR
37	BN	217	PRO
37	BN	235	GLU
38	BO	3	LYS
38	BO	6	ARG
38	BO	18	LYS
38	BO	43	LYS
38	BO	61	GLU
38	BO	67	SER
38	BO	73	ASN
38	BO	100	GLU
39	BP	9	THR
39	BP	11	ASN
39	BP	28	GLU
39	BP	35	ILE
39	BP	56	HIS
39	BP	77	LYS
40	BQ	2	LYS
40	BQ	3	ALA
40	BQ	42	LEU
41	BR	51	SER
42	BS	20	ASN
42	BS	45	THR
42	BS	50	ASP
43	BT	6	LYS
43	BT	10	SER
43	BT	29	VAL
44	BU	42	VAL
44	BU	50	GLU
45	BV	3	ARG
46	BW	20	GLY
47	BX	5	ALA
47	BX	34	LYS

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Mol	Chain	Res	Type
48	BY	14	ILE
48	BY	29	VAL
48	BY	47	ALA
48	BY	155	VAL
48	BY	191	GLY
49	BZ	24	ARG
49	BZ	94	GLN
49	BZ	161	ASP
49	BZ	172	GLU
50	B1	17	THR
50	B1	78	TRP
50	B1	90	GLN
50	B1	105	LEU
50	B1	142	ALA
50	B1	144	GLU
50	B1	165	HIS
50	B1	189	THR
51	B2	42	ALA
51	B2	77	LYS
51	B2	116	LEU
51	B2	122	ASP
51	B2	145	VAL
51	B2	159	ALA
51	B2	177	ARG
52	B3	170	THR
53	B4	3	VAL
53	B4	77	THR
54	B5	17	ALA
54	B5	93	ASN
55	B6	39	LYS
55	B6	49	ASP
55	B6	64	VAL
6	AD	40	THR
6	AD	50	LYS
6	AD	109	ARG
7	AF	25	GLY
7	AF	112	ARG
8	AG	89	ARG
9	AH	19	ASN
10	AI	8	ARG
10	AI	31	ARG
10	AI	51	ARG

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Mol	Chain	Res	Type
11	AJ	6	THR
11	AJ	37	ILE
11	AJ	53	GLY
13	AL	78	THR
14	AN	13	SER
15	AO	4	VAL
15	AO	78	LYS
15	AO	106	ARG
16	AQ	34	ARG
17	AR	17	ASP
17	AR	129	VAL
18	AS	70	MET
18	AS	72	ASN
18	AS	107	GLY
18	AS	126	ALA
19	AT	4	TYR
19	AT	92	THR
21	AV	19	ALA
22	AW	39	GLY
22	AW	54	VAL
22	AW	69	GLY
22	AW	118	ARG
23	AX	63	ASP
23	AX	99	GLN
26	BC	37	PRO
27	BD	77	ILE
28	BE	22	GLY
28	BE	75	ALA
28	BE	80	SER
28	BE	100	ILE
28	BE	140	GLY
29	BF	6	ARG
29	BF	9	PHE
29	BF	38	ARG
29	BF	52	ALA
29	BF	64	TRP
29	BF	70	ASP
29	BF	83	GLY
29	BF	127	LYS
30	BG	18	GLN
30	BG	19	ALA
30	BG	99	LYS

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Mol	Chain	Res	Type
31	BH	3	LYS
31	BH	36	TYR
31	BH	52	SER
31	BH	55	GLU
32	BI	33	GLU
32	BI	40	GLN
32	BI	58	PHE
32	BI	60	VAL
32	BI	67	GLU
32	BI	79	VAL
33	BJ	3	VAL
33	BJ	15	LYS
33	BJ	25	GLY
34	BK	7	SER
34	BK	99	THR
34	BK	101	ILE
35	BL	7	HIS
35	BL	19	LEU
35	BL	64	ALA
35	BL	74	ILE
35	BL	106	VAL
36	BM	81	LYS
36	BM	87	LEU
37	BN	4	LYS
37	BN	32	LEU
37	BN	143	VAL
37	BN	162	GLN
37	BN	170	TYR
37	BN	176	ARG
37	BN	219	VAL
37	BN	221	GLY
37	BN	227	VAL
37	BN	230	PRO
37	BN	238	ASN
37	BN	249	VAL
37	BN	252	LYS
37	BN	260	LYS
37	BN	266	ILE
38	BO	57	ILE
38	BO	64	ILE
38	BO	82	VAL
39	BP	10	ARG

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Mol	Chain	Res	Type
39	BP	33	GLY
39	BP	55	ASP
39	BP	65	LYS
39	BP	69	GLU
39	BP	74	LYS
40	BQ	32	ALA
41	BR	14	GLY
42	BS	12	ILE
42	BS	27	THR
43	BT	8	THR
43	BT	15	ARG
43	BT	17	SER
43	BT	38	LEU
44	BU	17	GLY
45	BV	2	LYS
45	BV	43	THR
46	BW	2	LYS
46	BW	4	LYS
46	BW	41	ARG
46	BW	63	TYR
47	BX	3	VAL
47	BX	8	LYS
47	BX	14	CYS
48	BY	33	ARG
48	BY	97	SER
48	BY	131	ASP
48	BY	135	GLY
48	BY	146	ILE
48	BY	147	GLY
48	BY	159	LYS
48	BY	160	LYS
48	BY	171	THR
48	BY	172	VAL
49	BZ	50	GLU
49	BZ	116	SER
49	BZ	195	LYS
50	B1	4	VAL
50	B1	22	ASP
50	B1	57	LYS
50	B1	73	ILE
50	B1	75	SER
50	B1	77	ILE

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Mol	Chain	Res	Type
50	B1	118	LEU
50	B1	146	VAL
50	B1	170	ARG
50	B1	171	ASP
50	B1	172	ALA
50	B1	175	ILE
50	B1	186	VAL
50	B1	193	VAL
51	B2	30	VAL
51	B2	38	GLY
51	B2	65	LEU
51	B2	76	PHE
51	B2	80	GLN
51	B2	106	ALA
51	B2	108	PRO
51	B2	132	ARG
51	B2	144	LYS
51	B2	152	ASP
52	B3	99	GLY
52	B3	118	ALA
53	B4	12	LEU
54	B5	59	THR
55	B6	11	VAL
55	B6	41	LYS
55	B6	63	ALA
55	B6	95	ARG
4	AB	21	TYR
5	AC	23	HIS
5	AC	52	ARG
5	AC	112	VAL
6	AD	22	ALA
6	AD	25	ALA
6	AD	78	VAL
6	AD	104	SER
7	AF	23	GLY
7	AF	49	GLU
8	AG	41	TRP
10	AI	59	HIS
11	AJ	43	LEU
13	AL	4	LEU
13	AL	71	GLY
14	AN	64	GLY

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Mol	Chain	Res	Type
15	AO	79	LYS
15	AO	176	THR
16	AQ	10	PRO
17	AR	28	ASP
17	AR	34	GLU
17	AR	125	ASN
17	AR	190	LEU
18	AS	24	VAL
19	AT	44	ARG
19	AT	94	HIS
20	AU	30	MET
20	AU	76	SER
20	AU	110	ARG
22	AW	128	LYS
23	AX	38	GLY
23	AX	46	LYS
23	AX	60	ASP
23	AX	69	THR
26	BC	66	ASP
27	BD	3	GLN
27	BD	46	ALA
27	BD	51	LYS
28	BE	5	THR
28	BE	39	LYS
28	BE	98	ALA
28	BE	125	LEU
29	BF	77	PRO
29	BF	94	ALA
29	BF	97	GLN
30	BG	11	ASN
30	BG	98	LEU
30	BG	123	GLU
31	BH	26	LEU
32	BI	41	ALA
32	BI	56	SER
32	BI	86	LYS
32	BI	96	LEU
33	BJ	7	VAL
33	BJ	31	TYR
34	BK	31	GLU
35	BL	80	PRO
36	BM	16	VAL

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Mol	Chain	Res	Type
36	BM	46	ALA
36	BM	78	SER
37	BN	98	GLY
37	BN	160	TYR
37	BN	169	ALA
37	BN	182	LYS
37	BN	225	ASN
38	BO	33	VAL
38	BO	59	GLU
38	BO	71	ILE
39	BP	61	LYS
39	BP	78	PHE
40	BQ	16	THR
41	BR	13	ILE
42	BS	4	ASP
42	BS	7	PRO
42	BS	34	LEU
43	BT	49	ARG
44	BU	2	LYS
44	BU	5	ARG
45	BV	4	THR
46	BW	26	ALA
48	BY	4	LEU
48	BY	10	GLY
48	BY	31	ALA
48	BY	38	LYS
48	BY	46	ARG
48	BY	56	LYS
48	BY	89	GLU
48	BY	99	GLU
48	BY	127	PHE
48	BY	136	ASN
48	BY	139	SER
48	BY	145	SER
48	BY	169	ARG
48	BY	183	GLU
49	BZ	197	GLU
49	BZ	214	LYS
50	B1	11	ALA
50	B1	83	VAL
51	B2	3	LEU
51	B2	19	PHE

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Mol	Chain	Res	Type
51	B2	64	PRO
53	B4	14	SER
53	B4	131	SER
53	B4	141	LYS
54	B5	4	VAL
54	B5	51	GLY
54	B5	92	PRO
55	B6	14	ASP
55	B6	99	ARG
55	B6	104	ALA
5	AC	54	SER
5	AC	87	GLY
5	AC	88	PRO
5	AC	102	ALA
7	AF	64	VAL
8	AG	5	MET
11	AJ	27	PHE
14	AN	15	LYS
15	AO	105	VAL
15	AO	157	GLY
16	AQ	11	PHE
18	AS	83	PRO
18	AS	101	GLY
18	AS	127	TYR
20	AU	6	ILE
23	AX	40	ILE
23	AX	43	PRO
26	BC	43	ASP
27	BD	26	GLY
27	BD	55	GLY
28	BE	9	ALA
29	BF	40	ARG
32	BI	106	ALA
33	BJ	24	TYR
34	BK	34	GLU
34	BK	69	GLY
35	BL	70	LYS
36	BM	72	GLN
37	BN	57	HIS
37	BN	127	ASN
37	BN	141	HIS
37	BN	181	ARG

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Mol	Chain	Res	Type
38	BO	53	GLN
38	BO	54	PRO
38	BO	84	PHE
39	BP	34	SER
41	BR	18	LYS
43	BT	4	GLN
46	BW	14	LYS
48	BY	84	LEU
48	BY	86	GLU
48	BY	115	GLY
48	BY	123	LYS
48	BY	126	ASN
48	BY	186	LEU
49	BZ	37	LYS
50	B1	71	GLY
50	B1	123	LYS
50	B1	166	LYS
50	B1	176	ASP
51	B2	71	LYS
51	B2	125	GLY
53	B4	63	ALA
53	B4	88	GLY
54	B5	18	ASN
54	B5	79	LEU
55	B6	9	GLU
55	B6	47	HIS
55	B6	65	THR
4	AB	128	LEU
6	AD	121	PRO
10	AI	11	ALA
10	AI	45	GLU
11	AJ	34	GLY
15	AO	107	LYS
15	AO	126	ARG
18	AS	105	ILE
21	AV	64	TYR
22	AW	106	ASP
27	BD	6	THR
28	BE	12	SER
28	BE	52	GLY
29	BF	121	ALA
30	BG	74	GLU

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Mol	Chain	Res	Type
31	BH	62	LEU
32	BI	4	ILE
32	BI	11	GLN
32	BI	21	PRO
32	BI	31	VAL
33	BJ	22	GLY
33	BJ	73	ILE
33	BJ	106	THR
37	BN	54	GLY
37	BN	107	LYS
37	BN	191	LEU
39	BP	4	LYS
41	BR	32	GLY
43	BT	34	GLY
43	BT	35	GLU
45	BV	44	VAL
49	BZ	77	LYS
49	BZ	129	GLY
50	B1	55	SER
51	B2	49	LEU
51	B2	160	LYS
53	B4	15	LEU
53	B4	35	LYS
54	B5	15	GLY
8	AG	55	SER
15	AO	156	LEU
15	AO	173	PRO
17	AR	128	VAL
22	AW	30	ASN
27	BD	76	VAL
28	BE	10	GLU
28	BE	42	SER
28	BE	59	ARG
29	BF	17	ASN
29	BF	55	ARG
29	BF	78	LEU
37	BN	27	LYS
38	BO	35	VAL
48	BY	87	GLY
48	BY	142	VAL
48	BY	198	GLY
49	BZ	38	GLY

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Mol	Chain	Res	Type
49	BZ	169	ILE
50	B1	113	VAL
50	B1	129	PRO
52	B3	6	ALA
53	B4	116	ARG
55	B6	124	VAL
55	B6	127	GLY
11	AJ	11	VAL
18	AS	90	GLY
20	AU	87	PRO
28	BE	16	GLY
33	BJ	30	VAL
36	BM	65	GLY
37	BN	140	VAL
39	BP	47	GLY
48	BY	104	VAL
48	BY	205	PRO
50	B1	120	VAL
55	B6	81	ILE
10	AI	2	VAL
32	BI	83	ILE
34	BK	27	ILE
34	BK	72	VAL
50	B1	196	VAL
51	B2	39	VAL
51	B2	75	GLY
6	AD	27	PRO
10	AI	64	GLY
13	AL	66	VAL
26	BC	32	GLY
28	BE	46	VAL
37	BN	9	SER
37	BN	41	GLY
10	AI	15	PRO
20	AU	7	GLY
21	AV	81	GLY
27	BD	63	VAL
37	BN	151	GLY
49	BZ	137	PRO
50	B1	89	PRO
55	B6	100	VAL
21	AV	71	VAL

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Mol	Chain	Res	Type
37	BN	178	GLY
50	B1	128	ALA
51	B2	136	ILE
52	B3	155	PRO
55	B6	73	VAL
17	AR	6	PRO

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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	
4	AB	180/199 (90%)	164 (91%)	16 (9%)	9	30
5	AC	90/99 (91%)	81 (90%)	9 (10%)	7	26
6	AD	103/104 (99%)	87 (84%)	16 (16%)	2	14
7	AF	92/96 (96%)	84 (91%)	8 (9%)	10	31
8	AG	79/84 (94%)	75 (95%)	4 (5%)	24	48
9	AH	76/77 (99%)	73 (96%)	3 (4%)	32	56
10	AI	65/65 (100%)	61 (94%)	4 (6%)	18	43
11	AJ	74/78 (95%)	69 (93%)	5 (7%)	16	41
12	AK	48/66 (73%)	44 (92%)	4 (8%)	11	34
13	AL	70/79 (89%)	59 (84%)	11 (16%)	2	14
14	AN	65/66 (98%)	59 (91%)	6 (9%)	9	29
15	AO	170/190 (90%)	158 (93%)	12 (7%)	14	39
16	AQ	44/61 (72%)	40 (91%)	4 (9%)	9	29
17	AR	172/173 (99%)	156 (91%)	16 (9%)	9	28
18	AS	113/119 (95%)	98 (87%)	15 (13%)	4	18
19	AT	87/116 (75%)	77 (88%)	10 (12%)	5	21
20	AU	123/147 (84%)	108 (88%)	15 (12%)	5	20
21	AV	104/105 (99%)	98 (94%)	6 (6%)	20	45
22	AW	105/107 (98%)	98 (93%)	7 (7%)	16	41

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
23	AX	86/90 (96%)	78 (91%)	8 (9%)	9	28
26	BC	78/78 (100%)	74 (95%)	4 (5%)	24	48
27	BD	102/104 (98%)	98 (96%)	4 (4%)	32	56
28	BE	103/103 (100%)	84 (82%)	19 (18%)	1	9
29	BF	109/109 (100%)	95 (87%)	14 (13%)	4	18
30	BG	103/103 (100%)	90 (87%)	13 (13%)	4	19
31	BH	87/87 (100%)	81 (93%)	6 (7%)	15	40
32	BI	99/100 (99%)	96 (97%)	3 (3%)	41	63
33	BJ	89/90 (99%)	78 (88%)	11 (12%)	4	19
34	BK	84/84 (100%)	73 (87%)	11 (13%)	4	18
35	BL	93/93 (100%)	83 (89%)	10 (11%)	6	23
36	BM	83/83 (100%)	69 (83%)	14 (17%)	2	12
37	BN	213/215 (99%)	189 (89%)	24 (11%)	6	21
38	BO	83/84 (99%)	76 (92%)	7 (8%)	11	33
39	BP	62/63 (98%)	55 (89%)	7 (11%)	6	21
40	BQ	55/55 (100%)	47 (86%)	8 (14%)	3	15
41	BR	48/49 (98%)	46 (96%)	2 (4%)	30	54
42	BS	62/62 (100%)	58 (94%)	4 (6%)	17	42
43	BT	47/48 (98%)	35 (74%)	12 (26%)	0	3
44	BU	48/48 (100%)	45 (94%)	3 (6%)	18	43
45	BV	38/38 (100%)	34 (90%)	4 (10%)	7	24
46	BW	51/51 (100%)	43 (84%)	8 (16%)	2	14
47	BX	34/34 (100%)	30 (88%)	4 (12%)	5	20
48	BY	164/164 (100%)	145 (88%)	19 (12%)	5	21
49	BZ	187/187 (100%)	174 (93%)	13 (7%)	15	40
50	B1	165/165 (100%)	147 (89%)	18 (11%)	6	23
51	B2	149/149 (100%)	130 (87%)	19 (13%)	4	18
52	B3	137/138 (99%)	125 (91%)	12 (9%)	10	31
53	B4	114/114 (100%)	104 (91%)	10 (9%)	10	31
54	B5	109/110 (99%)	102 (94%)	7 (6%)	17	42
55	B6	114/114 (100%)	107 (94%)	7 (6%)	18	44

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
All	All	4856/5043 (96%)	4380 (90%)	476 (10%)	11 26

All (476) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
4	AB	14	HIS
4	AB	31	PHE
4	AB	38	HIS
4	AB	59	ILE
4	AB	84	LEU
4	AB	87	ASP
4	AB	92	ASN
4	AB	93	HIS
4	AB	94	ARG
4	AB	101	THR
4	AB	131	LYS
4	AB	185	ILE
4	AB	187	ASP
4	AB	202	ASN
4	AB	203	ASP
4	AB	206	ILE
5	AC	22	ILE
5	AC	25	SER
5	AC	30	ILE
5	AC	36	ARG
5	AC	39	ASN
5	AC	68	ARG
5	AC	78	ILE
5	AC	100	ASN
5	AC	123	PRO
6	AD	11	ARG
6	AD	13	ARG
6	AD	20	VAL
6	AD	23	LEU
6	AD	24	GLU
6	AD	38	THR
6	AD	50	LYS
6	AD	64	SER
6	AD	79	ILE
6	AD	87	LYS
6	AD	94	TYR
6	AD	98	ARG

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Mol	Chain	Res	Type
6	AD	110	LYS
6	AD	111	GLN
6	AD	119	LYS
6	AD	121	PRO
7	AF	7	ASN
7	AF	8	ILE
7	AF	28	ARG
7	AF	29	SER
7	AF	41	ASP
7	AF	59	VAL
7	AF	77	LYS
7	AF	82	LEU
8	AG	45	LEU
8	AG	50	LEU
8	AG	52	ARG
8	AG	68	ARG
9	AH	57	ARG
9	AH	72	LYS
9	AH	86	LEU
10	AI	17	TYR
10	AI	23	ASP
10	AI	63	GLN
10	AI	74	LEU
11	AJ	10	ARG
11	AJ	25	GLU
11	AJ	27	PHE
11	AJ	46	HIS
11	AJ	76	ARG
12	AK	25	ILE
12	AK	34	GLU
12	AK	49	LYS
12	AK	72	ARG
13	AL	5	LYS
13	AL	6	LYS
13	AL	11	ASP
13	AL	12	LEU
13	AL	14	LEU
13	AL	19	GLU
13	AL	39	ILE
13	AL	40	PHE
13	AL	50	VAL
13	AL	56	HIS

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Mol	Chain	Res	Type
13	AL	73	PHE
14	AN	3	ILE
14	AN	9	ARG
14	AN	69	ASN
14	AN	73	ARG
14	AN	78	LEU
14	AN	85	LEU
15	AO	17	TRP
15	AO	24	ASN
15	AO	40	GLN
15	AO	86	LEU
15	AO	106	ARG
15	AO	127	VAL
15	AO	129	PHE
15	AO	139	ASN
15	AO	163	ARG
15	AO	174	LEU
15	AO	187	GLU
15	AO	198	LYS
16	AQ	3	ILE
16	AQ	32	ARG
16	AQ	34	ARG
16	AQ	39	LYS
17	AR	13	ARG
17	AR	14	GLU
17	AR	40	HIS
17	AR	47	LEU
17	AR	48	SER
17	AR	69	ARG
17	AR	80	ARG
17	AR	89	LEU
17	AR	109	THR
17	AR	112	GLU
17	AR	119	HIS
17	AR	131	ILE
17	AR	163	GLN
17	AR	170	LEU
17	AR	189	ASP
17	AR	196	GLU
18	AS	14	LEU
18	AS	42	ASN
18	AS	47	PHE

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Mol	Chain	Res	Type
18	AS	53	ARG
18	AS	80	LEU
18	AS	81	GLN
18	AS	87	VAL
18	AS	88	HIS
18	AS	89	THR
18	AS	105	ILE
18	AS	110	MET
18	AS	141	ASP
18	AS	144	GLU
18	AS	145	ASN
18	AS	156	ARG
19	AT	1	MET
19	AT	11	HIS
19	AT	15	SER
19	AT	16	GLU
19	AT	17	GLN
19	AT	33	GLU
19	AT	46	GLN
19	AT	72	ASP
19	AT	86	ARG
19	AT	93	LYS
20	AU	4	ARG
20	AU	12	LEU
20	AU	14	ASP
20	AU	43	TYR
20	AU	55	LYS
20	AU	58	LEU
20	AU	74	VAL
20	AU	75	LYS
20	AU	79	VAL
20	AU	88	VAL
20	AU	95	ARG
20	AU	98	LEU
20	AU	115	MET
20	AU	132	THR
20	AU	137	ARG
21	AV	20	ASN
21	AV	24	VAL
21	AV	53	ASP
21	AV	72	GLU
21	AV	75	GLN

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Mol	Chain	Res	Type
21	AV	79	ARG
22	AW	8	THR
22	AW	40	ARG
22	AW	71	ILE
22	AW	105	ARG
22	AW	118	ARG
22	AW	125	GLN
22	AW	128	LYS
23	AX	15	HIS
23	AX	19	ASP
23	AX	27	GLU
23	AX	53	ILE
23	AX	71	LEU
23	AX	89	ARG
23	AX	92	LEU
23	AX	100	ILE
26	BC	7	GLU
26	BC	42	LEU
26	BC	76	ASP
26	BC	92	VAL
27	BD	9	ASN
27	BD	20	MET
27	BD	52	VAL
27	BD	90	ASN
28	BE	6	LEU
28	BE	18	ARG
28	BE	19	LEU
28	BE	35	HIS
28	BE	47	ARG
28	BE	54	GLN
28	BE	63	LYS
28	BE	78	ARG
28	BE	92	LEU
28	BE	93	ASN
28	BE	101	ILE
28	BE	104	GLN
28	BE	106	GLU
28	BE	109	LYS
28	BE	112	LEU
28	BE	125	LEU
28	BE	126	ARG
28	BE	141	LYS

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Mol	Chain	Res	Type
28	BE	144	GLU
29	BF	6	ARG
29	BF	18	ARG
29	BF	22	GLN
29	BF	44	ARG
29	BF	51	ARG
29	BF	71	LYS
29	BF	76	LYS
29	BF	82	MET
29	BF	90	GLU
29	BF	95	LEU
29	BF	114	ARG
29	BF	115	GLU
29	BF	127	LYS
29	BF	136	MET
30	BG	4	ARG
30	BG	10	LEU
30	BG	18	GLN
30	BG	32	GLU
30	BG	52	ILE
30	BG	63	ARG
30	BG	73	ASN
30	BG	83	LEU
30	BG	89	SER
30	BG	99	LYS
30	BG	113	ILE
30	BG	115	LEU
30	BG	121	LYS
31	BH	9	ARG
31	BH	20	GLU
31	BH	30	ARG
31	BH	31	THR
31	BH	65	THR
31	BH	84	GLU
32	BI	73	PHE
32	BI	83	ILE
32	BI	99	LEU
33	BJ	7	VAL
33	BJ	13	HIS
33	BJ	16	ILE
33	BJ	21	LYS
33	BJ	31	TYR

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Mol	Chain	Res	Type
33	BJ	40	LYS
33	BJ	52	ARG
33	BJ	63	ARG
33	BJ	73	ILE
33	BJ	90	ASP
33	BJ	91	ARG
34	BK	23	GLU
34	BK	27	ILE
34	BK	41	ILE
34	BK	47	VAL
34	BK	59	ILE
34	BK	80	ARG
34	BK	82	HIS
34	BK	84	ARG
34	BK	87	GLN
34	BK	97	LYS
34	BK	98	ILE
35	BL	4	ILE
35	BL	24	ILE
35	BL	38	TYR
35	BL	46	LEU
35	BL	59	GLU
35	BL	67	ASP
35	BL	85	ILE
35	BL	90	LYS
35	BL	98	LYS
35	BL	100	THR
36	BM	1	MET
36	BM	2	ILE
36	BM	5	GLU
36	BM	6	ARG
36	BM	10	VAL
36	BM	12	ARG
36	BM	15	HIS
36	BM	33	LYS
36	BM	42	GLU
36	BM	51	PHE
36	BM	68	LYS
36	BM	73	ARG
36	BM	80	TRP
36	BM	87	LEU
37	BN	3	VAL

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Mol	Chain	Res	Type
37	BN	4	LYS
37	BN	13	ARG
37	BN	24	HIS
37	BN	29	PHE
37	BN	42	ARG
37	BN	49	THR
37	BN	61	TYR
37	BN	65	ASP
37	BN	66	PHE
37	BN	82	TYR
37	BN	104	LEU
37	BN	107	LYS
37	BN	113	ASP
37	BN	123	ILE
37	BN	141	HIS
37	BN	155	ARG
37	BN	175	LEU
37	BN	179	GLU
37	BN	181	ARG
37	BN	215	VAL
37	BN	231	HIS
37	BN	239	PHE
37	BN	269	ARG
38	BO	5	ARG
38	BO	24	VAL
38	BO	25	LYS
38	BO	34	ILE
38	BO	38	ILE
38	BO	73	ASN
38	BO	95	PHE
39	BP	2	HIS
39	BP	10	ARG
39	BP	24	ARG
39	BP	36	ILE
39	BP	45	HIS
39	BP	50	VAL
39	BP	77	LYS
40	BQ	27	ASN
40	BQ	31	GLN
40	BQ	36	GLN
40	BQ	38	GLN
40	BQ	39	GLN

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Mol	Chain	Res	Type
40	BQ	43	LEU
40	BQ	47	ARG
40	BQ	59	GLU
41	BR	17	PRO
41	BR	50	VAL
42	BS	30	HIS
42	BS	36	VAL
42	BS	47	LYS
42	BS	70	LYS
43	BT	3	GLN
43	BT	4	GLN
43	BT	8	THR
43	BT	16	ARG
43	BT	17	SER
43	BT	31	LYS
43	BT	36	LYS
43	BT	37	HIS
43	BT	39	ARG
43	BT	42	ILE
43	BT	48	TYR
43	BT	51	ARG
44	BU	42	VAL
44	BU	53	ILE
44	BU	54	LYS
45	BV	2	LYS
45	BV	4	THR
45	BV	25	LYS
45	BV	35	ARG
46	BW	4	LYS
46	BW	6	VAL
46	BW	12	ARG
46	BW	23	HIS
46	BW	28	LEU
46	BW	29	ARG
46	BW	43	LEU
46	BW	46	LYS
47	BX	12	ARG
47	BX	23	ILE
47	BX	24	ARG
47	BX	32	LYS
48	BY	20	VAL
48	BY	22	ILE

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Mol	Chain	Res	Type
48	BY	26	VAL
48	BY	36	GLN
48	BY	38	LYS
48	BY	62	LYS
48	BY	67	HIS
48	BY	77	ARG
48	BY	84	LEU
48	BY	110	THR
48	BY	123	LYS
48	BY	125	TRP
48	BY	126	ASN
48	BY	128	ARG
48	BY	131	ASP
48	BY	165	MET
48	BY	177	VAL
48	BY	184	ARG
48	BY	201	LEU
49	BZ	5	LYS
49	BZ	24	ARG
49	BZ	34	LEU
49	BZ	39	ILE
49	BZ	62	LYS
49	BZ	87	ARG
49	BZ	106	GLN
49	BZ	123	ILE
49	BZ	131	ARG
49	BZ	167	VAL
49	BZ	191	GLU
49	BZ	196	VAL
49	BZ	208	THR
50	B1	4	VAL
50	B1	13	THR
50	B1	23	PHE
50	B1	51	GLU
50	B1	57	LYS
50	B1	69	ARG
50	B1	74	LYS
50	B1	109	LEU
50	B1	117	ARG
50	B1	120	VAL
50	B1	130	LYS
50	B1	132	LYS

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Mol	Chain	Res	Type
50	B1	152	GLU
50	B1	154	ASP
50	B1	162	ARG
50	B1	189	THR
50	B1	191	ASP
50	B1	194	LYS
51	B2	2	LYS
51	B2	4	HIS
51	B2	11	VAL
51	B2	19	PHE
51	B2	46	LYS
51	B2	49	LEU
51	B2	56	LEU
51	B2	63	LYS
51	B2	65	LEU
51	B2	77	LYS
51	B2	80	GLN
51	B2	99	PHE
51	B2	131	VAL
51	B2	136	ILE
51	B2	142	TYR
51	B2	146	ASP
51	B2	154	THR
51	B2	160	LYS
51	B2	177	ARG
52	B3	23	ILE
52	B3	32	LEU
52	B3	34	ARG
52	B3	42	VAL
52	B3	47	ASN
52	B3	54	ARG
52	B3	59	ASP
52	B3	88	LEU
52	B3	100	ASN
52	B3	130	ILE
52	B3	146	ASP
52	B3	150	TYR
53	B4	5	LEU
53	B4	11	ASN
53	B4	17	ASP
53	B4	18	GLN
53	B4	25	TYR

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Mol	Chain	Res	Type
53	B4	43	ASN
53	B4	44	ILE
53	B4	60	GLU
53	B4	79	THR
53	B4	133	GLN
54	B5	46	ASP
54	B5	54	ILE
54	B5	63	ASP
54	B5	64	ARG
54	B5	85	ILE
54	B5	92	PRO
54	B5	121	ILE
55	B6	39	LYS
55	B6	67	ASN
55	B6	72	LYS
55	B6	75	TYR
55	B6	81	ILE
55	B6	102	GLU
55	B6	108	MET

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (23) such sidechains are listed below:

Mol	Chain	Res	Type
4	AB	202	ASN
5	AC	21	HIS
6	AD	58	ASN
7	AF	99	GLN
8	AG	70	HIS
9	AH	41	HIS
10	AI	26	ASN
14	AN	54	GLN
17	AR	130	ASN
23	AX	56	HIS
23	AX	58	ASN
27	BD	5	GLN
31	BH	34	HIS
33	BJ	36	GLN
34	BK	91	GLN
37	BN	133	ASN
40	BQ	41	HIS
43	BT	4	GLN
44	BU	45	HIS

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Mol	Chain	Res	Type
45	BV	6	GLN
48	BY	136	ASN
48	BY	148	GLN
55	B6	76	HIS

5.3.3 RNA (i)

Mol	Chain	Analysed	Backbone Outliers	Pucker Outliers
1	AA	75/76 (98%)	20 (26%)	8 (10%)
1	AE	75/76 (98%)	11 (14%)	1 (1%)
1	AP	74/76 (97%)	15 (20%)	6 (8%)
2	AM	20/20 (100%)	9 (45%)	7 (35%)
24	BA	116/117 (99%)	37 (31%)	11 (9%)
25	BB	2901/2903 (99%)	1516 (52%)	511 (17%)
3	A1	1529/1530 (99%)	753 (49%)	280 (18%)
All	All	4790/4798 (99%)	2361 (49%)	824 (17%)

All (2361) RNA backbone outliers are listed below:

Mol	Chain	Res	Type
1	AA	2	C
1	AA	3	G
1	AA	10	G
1	AA	13	C
1	AA	17	U
1	AA	18	G
1	AA	20	G
1	AA	23	A
1	AA	27	C
1	AA	28	C
1	AA	33	U
1	AA	42	G
1	AA	43	G
1	AA	44	A
1	AA	46	G
1	AA	47	U
1	AA	48	C
1	AA	52	U
1	AA	59	U
1	AA	75	C
1	AP	8	U

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Mol	Chain	Res	Type
1	AP	9	A
1	AP	10	G
1	AP	13	C
1	AP	16	U
1	AP	17	U
1	AP	19	G
1	AP	21	A
1	AP	31	A
1	AP	32	C
1	AP	40	C
1	AP	49	C
1	AP	59	U
1	AP	68	U
1	AP	75	C
1	AE	9	A
1	AE	13	C
1	AE	14	A
1	AE	15	G
1	AE	17	U
1	AE	18	G
1	AE	19	G
1	AE	21	A
1	AE	36	A
1	AE	46	G
1	AE	76	A
2	AM	2	U
2	AM	3	U
2	AM	5	U
2	AM	6	U
2	AM	7	U
2	AM	10	U
2	AM	13	U
2	AM	14	U
2	AM	15	U
3	A1	6	G
3	A1	7	A
3	A1	8	A
3	A1	9	G
3	A1	10	A
3	A1	12	U
3	A1	14	U
3	A1	15	G

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Mol	Chain	Res	Type
3	A1	16	A
3	A1	20	U
3	A1	22	G
3	A1	25	C
3	A1	26	A
3	A1	27	G
3	A1	28	A
3	A1	29	U
3	A1	30	U
3	A1	31	G
3	A1	32	A
3	A1	36	C
3	A1	39	G
3	A1	42	G
3	A1	46	G
3	A1	47	C
3	A1	48	C
3	A1	49	U
3	A1	50	A
3	A1	51	A
3	A1	52	C
3	A1	60	A
3	A1	61	G
3	A1	65	A
3	A1	66	A
3	A1	67	C
3	A1	69	G
3	A1	70	U
3	A1	76	G
3	A1	83	C
3	A1	84	U
3	A1	85	U
3	A1	86	G
3	A1	87	C
3	A1	89	U
3	A1	93	U
3	A1	94	G
3	A1	95	C
3	A1	96	U
3	A1	100	G
3	A1	103	U
3	A1	105	G

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Mol	Chain	Res	Type
3	A1	106	C
3	A1	107	G
3	A1	108	G
3	A1	109	A
3	A1	112	G
3	A1	114	U
3	A1	118	U
3	A1	119	A
3	A1	120	A
3	A1	121	U
3	A1	122	G
3	A1	123	U
3	A1	124	C
3	A1	125	U
3	A1	129	A
3	A1	130	A
3	A1	131	A
3	A1	142	G
3	A1	143	A
3	A1	149	A
3	A1	150	U
3	A1	153	C
3	A1	159	G
3	A1	163	C
3	A1	169	C
3	A1	170	U
3	A1	171	A
3	A1	172	A
3	A1	175	C
3	A1	176	C
3	A1	182	A
3	A1	184	G
3	A1	186	C
3	A1	188	C
3	A1	189	A
3	A1	191	G
3	A1	198	G
3	A1	201	G
3	A1	209	U
3	A1	210	C
3	A1	212	G
3	A1	214	C

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Mol	Chain	Res	Type
3	A1	217	C
3	A1	220	G
3	A1	224	U
3	A1	225	C
3	A1	226	G
3	A1	227	G
3	A1	229	U
3	A1	230	G
3	A1	234	C
3	A1	238	A
3	A1	239	U
3	A1	240	G
3	A1	241	G
3	A1	242	G
3	A1	244	U
3	A1	245	U
3	A1	246	A
3	A1	250	A
3	A1	251	G
3	A1	252	U
3	A1	254	G
3	A1	256	U
3	A1	257	G
3	A1	261	U
3	A1	264	C
3	A1	265	G
3	A1	266	G
3	A1	267	C
3	A1	268	U
3	A1	274	A
3	A1	277	C
3	A1	280	C
3	A1	281	G
3	A1	287	U
3	A1	289	G
3	A1	290	C
3	A1	291	U
3	A1	293	G
3	A1	294	U
3	A1	295	C
3	A1	296	U
3	A1	297	G

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Mol	Chain	Res	Type
3	A1	298	A
3	A1	299	G
3	A1	300	A
3	A1	301	G
3	A1	305	G
3	A1	306	A
3	A1	307	C
3	A1	309	A
3	A1	311	C
3	A1	312	C
3	A1	313	A
3	A1	316	C
3	A1	317	U
3	A1	318	G
3	A1	319	G
3	A1	320	A
3	A1	325	A
3	A1	326	G
3	A1	327	A
3	A1	328	C
3	A1	329	A
3	A1	330	C
3	A1	331	G
3	A1	332	G
3	A1	338	A
3	A1	339	C
3	A1	344	A
3	A1	345	C
3	A1	352	C
3	A1	353	A
3	A1	354	G
3	A1	356	A
3	A1	358	U
3	A1	359	G
3	A1	363	A
3	A1	364	A
3	A1	365	U
3	A1	366	A
3	A1	367	U
3	A1	368	U
3	A1	369	G
3	A1	370	C

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Mol	Chain	Res	Type
3	A1	371	A
3	A1	372	C
3	A1	373	A
3	A1	374	A
3	A1	376	G
3	A1	379	C
3	A1	381	C
3	A1	382	A
3	A1	391	G
3	A1	396	C
3	A1	397	A
3	A1	398	U
3	A1	400	C
3	A1	401	C
3	A1	406	G
3	A1	412	A
3	A1	414	A
3	A1	415	A
3	A1	421	U
3	A1	422	C
3	A1	423	G
3	A1	424	G
3	A1	425	G
3	A1	426	U
3	A1	427	U
3	A1	428	G
3	A1	429	U
3	A1	432	A
3	A1	433	G
3	A1	435	A
3	A1	438	U
3	A1	439	U
3	A1	441	A
3	A1	442	G
3	A1	446	G
3	A1	449	G
3	A1	451	A
3	A1	454	G
3	A1	462	G
3	A1	463	U
3	A1	465	A
3	A1	467	U

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Mol	Chain	Res	Type
3	A1	468	A
3	A1	469	C
3	A1	471	U
3	A1	476	U
3	A1	479	U
3	A1	483	C
3	A1	485	U
3	A1	486	U
3	A1	487	A
3	A1	493	A
3	A1	498	A
3	A1	499	A
3	A1	500	G
3	A1	501	C
3	A1	503	C
3	A1	504	C
3	A1	505	G
3	A1	506	G
3	A1	508	U
3	A1	512	U
3	A1	516	U
3	A1	518	C
3	A1	519	C
3	A1	521	G
3	A1	522	C
3	A1	523	A
3	A1	524	G
3	A1	528	C
3	A1	529	G
3	A1	530	G
3	A1	531	U
3	A1	532	A
3	A1	535	A
3	A1	536	C
3	A1	543	U
3	A1	547	A
3	A1	550	G
3	A1	551	U
3	A1	553	A
3	A1	554	A
3	A1	555	U
3	A1	560	A

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Mol	Chain	Res	Type
3	A1	561	U
3	A1	564	C
3	A1	565	U
3	A1	567	G
3	A1	568	G
3	A1	570	G
3	A1	571	U
3	A1	572	A
3	A1	573	A
3	A1	574	A
3	A1	578	C
3	A1	580	C
3	A1	581	G
3	A1	582	C
3	A1	586	C
3	A1	587	G
3	A1	588	G
3	A1	591	U
3	A1	598	U
3	A1	601	G
3	A1	602	A
3	A1	607	A
3	A1	608	A
3	A1	610	U
3	A1	619	U
3	A1	622	A
3	A1	623	C
3	A1	625	U
3	A1	630	A
3	A1	631	C
3	A1	639	G
3	A1	642	A
3	A1	649	A
3	A1	650	G
3	A1	651	C
3	A1	652	U
3	A1	653	U
3	A1	654	G
3	A1	655	A
3	A1	665	A
3	A1	666	G
3	A1	667	G

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Mol	Chain	Res	Type
3	A1	670	G
3	A1	671	G
3	A1	673	A
3	A1	681	A
3	A1	682	G
3	A1	683	G
3	A1	684	U
3	A1	685	G
3	A1	687	A
3	A1	688	G
3	A1	695	A
3	A1	697	U
3	A1	699	C
3	A1	701	U
3	A1	702	A
3	A1	703	G
3	A1	705	G
3	A1	706	A
3	A1	715	A
3	A1	716	A
3	A1	718	A
3	A1	719	C
3	A1	720	C
3	A1	721	G
3	A1	723	U
3	A1	724	G
3	A1	726	C
3	A1	727	G
3	A1	731	G
3	A1	732	C
3	A1	733	G
3	A1	735	C
3	A1	736	C
3	A1	741	G
3	A1	742	G
3	A1	743	A
3	A1	744	C
3	A1	747	A
3	A1	748	G
3	A1	753	A
3	A1	755	G
3	A1	756	C

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Mol	Chain	Res	Type
3	A1	763	G
3	A1	764	C
3	A1	771	G
3	A1	774	G
3	A1	776	G
3	A1	777	A
3	A1	781	A
3	A1	783	C
3	A1	784	A
3	A1	785	G
3	A1	789	U
3	A1	790	A
3	A1	791	G
3	A1	792	A
3	A1	793	U
3	A1	796	C
3	A1	797	C
3	A1	798	U
3	A1	801	U
3	A1	805	C
3	A1	808	C
3	A1	811	C
3	A1	812	G
3	A1	813	U
3	A1	815	A
3	A1	817	C
3	A1	818	G
3	A1	819	A
3	A1	820	U
3	A1	821	G
3	A1	822	U
3	A1	823	C
3	A1	826	C
3	A1	827	U
3	A1	828	U
3	A1	829	G
3	A1	830	G
3	A1	841	C
3	A1	843	U
3	A1	844	G
3	A1	846	G
3	A1	847	G

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Mol	Chain	Res	Type
3	A1	849	G
3	A1	855	U
3	A1	856	C
3	A1	857	C
3	A1	858	G
3	A1	861	G
3	A1	862	C
3	A1	863	U
3	A1	865	A
3	A1	867	G
3	A1	868	C
3	A1	869	G
3	A1	870	U
3	A1	871	U
3	A1	872	A
3	A1	873	A
3	A1	874	G
3	A1	876	C
3	A1	877	G
3	A1	880	C
3	A1	881	G
3	A1	882	C
3	A1	883	C
3	A1	884	U
3	A1	885	G
3	A1	887	G
3	A1	889	A
3	A1	890	G
3	A1	891	U
3	A1	892	A
3	A1	893	C
3	A1	894	G
3	A1	899	C
3	A1	900	A
3	A1	901	A
3	A1	902	G
3	A1	906	A
3	A1	907	A
3	A1	910	C
3	A1	911	U
3	A1	914	A
3	A1	915	A

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Mol	Chain	Res	Type
3	A1	916	U
3	A1	918	A
3	A1	919	A
3	A1	920	U
3	A1	921	U
3	A1	922	G
3	A1	923	A
3	A1	924	C
3	A1	925	G
3	A1	926	G
3	A1	927	G
3	A1	931	C
3	A1	934	C
3	A1	936	C
3	A1	938	A
3	A1	939	G
3	A1	943	U
3	A1	944	G
3	A1	945	G
3	A1	953	G
3	A1	956	U
3	A1	957	U
3	A1	961	U
3	A1	962	C
3	A1	963	G
3	A1	964	A
3	A1	965	U
3	A1	966	G
3	A1	967	C
3	A1	968	A
3	A1	969	A
3	A1	970	C
3	A1	971	G
3	A1	972	C
3	A1	973	G
3	A1	974	A
3	A1	976	G
3	A1	977	A
3	A1	978	A
3	A1	979	C
3	A1	980	C
3	A1	981	U

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Mol	Chain	Res	Type
3	A1	982	U
3	A1	984	C
3	A1	986	U
3	A1	991	U
3	A1	992	U
3	A1	993	G
3	A1	994	A
3	A1	997	U
3	A1	998	C
3	A1	999	C
3	A1	1000	A
3	A1	1002	G
3	A1	1004	A
3	A1	1017	U
3	A1	1026	G
3	A1	1029	U
3	A1	1030	U
3	A1	1031	C
3	A1	1037	C
3	A1	1045	C
3	A1	1049	U
3	A1	1050	G
3	A1	1051	C
3	A1	1052	U
3	A1	1053	G
3	A1	1054	C
3	A1	1055	A
3	A1	1057	G
3	A1	1058	G
3	A1	1062	U
3	A1	1063	C
3	A1	1064	G
3	A1	1065	U
3	A1	1066	C
3	A1	1067	A
3	A1	1068	G
3	A1	1069	C
3	A1	1071	C
3	A1	1072	G
3	A1	1077	G
3	A1	1078	U
3	A1	1081	A

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Mol	Chain	Res	Type
3	A1	1082	A
3	A1	1083	U
3	A1	1084	G
3	A1	1085	U
3	A1	1089	G
3	A1	1094	G
3	A1	1097	C
3	A1	1101	A
3	A1	1103	C
3	A1	1104	G
3	A1	1106	G
3	A1	1109	C
3	A1	1110	A
3	A1	1111	A
3	A1	1116	U
3	A1	1117	A
3	A1	1123	U
3	A1	1124	G
3	A1	1125	U
3	A1	1126	U
3	A1	1127	G
3	A1	1128	C
3	A1	1129	C
3	A1	1130	A
3	A1	1131	G
3	A1	1133	G
3	A1	1135	U
3	A1	1137	C
3	A1	1139	G
3	A1	1140	C
3	A1	1141	C
3	A1	1142	G
3	A1	1143	G
3	A1	1146	A
3	A1	1148	U
3	A1	1149	C
3	A1	1152	A
3	A1	1154	G
3	A1	1158	C
3	A1	1159	U
3	A1	1162	C
3	A1	1167	A

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Mol	Chain	Res	Type
3	A1	1168	U
3	A1	1169	A
3	A1	1170	A
3	A1	1171	A
3	A1	1177	G
3	A1	1178	G
3	A1	1180	A
3	A1	1182	G
3	A1	1183	U
3	A1	1189	U
3	A1	1191	A
3	A1	1193	G
3	A1	1195	C
3	A1	1196	A
3	A1	1198	G
3	A1	1199	U
3	A1	1200	C
3	A1	1201	A
3	A1	1202	U
3	A1	1203	C
3	A1	1209	C
3	A1	1212	U
3	A1	1217	C
3	A1	1218	C
3	A1	1221	G
3	A1	1223	C
3	A1	1224	U
3	A1	1225	A
3	A1	1226	C
3	A1	1227	A
3	A1	1229	A
3	A1	1230	C
3	A1	1231	G
3	A1	1233	G
3	A1	1235	U
3	A1	1237	C
3	A1	1238	A
3	A1	1239	A
3	A1	1240	U
3	A1	1241	G
3	A1	1242	G
3	A1	1250	A

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Mol	Chain	Res	Type
3	A1	1251	A
3	A1	1253	G
3	A1	1256	A
3	A1	1257	A
3	A1	1258	G
3	A1	1262	C
3	A1	1263	C
3	A1	1266	G
3	A1	1268	G
3	A1	1270	G
3	A1	1276	G
3	A1	1278	G
3	A1	1279	G
3	A1	1280	A
3	A1	1281	C
3	A1	1283	U
3	A1	1287	A
3	A1	1290	G
3	A1	1292	G
3	A1	1296	C
3	A1	1297	G
3	A1	1298	U
3	A1	1299	A
3	A1	1300	G
3	A1	1301	U
3	A1	1302	C
3	A1	1309	G
3	A1	1310	G
3	A1	1318	A
3	A1	1319	A
3	A1	1320	C
3	A1	1322	C
3	A1	1323	G
3	A1	1326	U
3	A1	1330	U
3	A1	1334	G
3	A1	1336	C
3	A1	1337	G
3	A1	1338	G
3	A1	1339	A
3	A1	1340	A
3	A1	1341	U

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Mol	Chain	Res	Type
3	A1	1343	G
3	A1	1344	C
3	A1	1345	U
3	A1	1346	A
3	A1	1347	G
3	A1	1351	U
3	A1	1352	C
3	A1	1357	A
3	A1	1359	C
3	A1	1361	G
3	A1	1362	A
3	A1	1363	A
3	A1	1364	U
3	A1	1365	G
3	A1	1366	C
3	A1	1367	C
3	A1	1370	G
3	A1	1371	G
3	A1	1374	A
3	A1	1377	A
3	A1	1378	C
3	A1	1379	G
3	A1	1380	U
3	A1	1381	U
3	A1	1384	C
3	A1	1388	C
3	A1	1392	G
3	A1	1393	U
3	A1	1395	C
3	A1	1396	A
3	A1	1397	C
3	A1	1398	A
3	A1	1399	C
3	A1	1400	C
3	A1	1401	G
3	A1	1402	C
3	A1	1404	C
3	A1	1405	G
3	A1	1406	U
3	A1	1409	C
3	A1	1410	A
3	A1	1412	C

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Mol	Chain	Res	Type
3	A1	1414	U
3	A1	1415	G
3	A1	1416	G
3	A1	1417	G
3	A1	1418	A
3	A1	1419	G
3	A1	1421	G
3	A1	1427	C
3	A1	1428	A
3	A1	1429	A
3	A1	1432	G
3	A1	1434	A
3	A1	1442	G
3	A1	1444	U
3	A1	1445	U
3	A1	1446	A
3	A1	1447	A
3	A1	1450	U
3	A1	1451	U
3	A1	1452	C
3	A1	1456	A
3	A1	1460	C
3	A1	1461	G
3	A1	1469	C
3	A1	1470	U
3	A1	1471	U
3	A1	1473	G
3	A1	1474	U
3	A1	1475	G
3	A1	1476	A
3	A1	1477	U
3	A1	1479	C
3	A1	1480	A
3	A1	1481	U
3	A1	1482	G
3	A1	1483	A
3	A1	1484	C
3	A1	1485	U
3	A1	1486	G
3	A1	1488	G
3	A1	1490	U
3	A1	1491	G

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Mol	Chain	Res	Type
3	A1	1492	A
3	A1	1493	A
3	A1	1494	G
3	A1	1495	U
3	A1	1496	C
3	A1	1497	G
3	A1	1498	U
3	A1	1499	A
3	A1	1501	C
3	A1	1502	A
3	A1	1504	G
3	A1	1505	G
3	A1	1506	U
3	A1	1507	A
3	A1	1508	A
3	A1	1510	C
3	A1	1516	G
3	A1	1517	G
3	A1	1519	A
3	A1	1520	C
3	A1	1521	C
3	A1	1522	U
3	A1	1523	G
3	A1	1525	G
3	A1	1526	G
3	A1	1527	U
3	A1	1528	U
3	A1	1529	G
3	A1	1530	G
3	A1	1531	A
3	A1	1534	A
24	BA	11	C
24	BA	13	G
24	BA	14	U
24	BA	15	A
24	BA	16	G
24	BA	23	G
24	BA	27	C
24	BA	29	A
24	BA	30	C
24	BA	31	C
24	BA	34	A

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Mol	Chain	Res	Type
24	BA	35	C
24	BA	40	U
24	BA	41	G
24	BA	42	C
24	BA	44	G
24	BA	45	A
24	BA	46	A
24	BA	51	G
24	BA	52	A
24	BA	54	G
24	BA	57	A
24	BA	58	A
24	BA	65	U
24	BA	66	A
24	BA	67	G
24	BA	70	C
24	BA	72	G
24	BA	75	G
24	BA	80	U
24	BA	82	U
24	BA	88	C
24	BA	98	G
24	BA	100	G
24	BA	105	G
24	BA	108	A
24	BA	109	A
25	BB	3	U
25	BB	4	U
25	BB	7	G
25	BB	9	G
25	BB	10	A
25	BB	11	C
25	BB	12	U
25	BB	13	A
25	BB	14	A
25	BB	15	G
25	BB	16	C
25	BB	17	G
25	BB	18	U
25	BB	20	C
25	BB	23	G
25	BB	24	G

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Mol	Chain	Res	Type
25	BB	25	U
25	BB	26	G
25	BB	27	G
25	BB	29	U
25	BB	31	C
25	BB	33	C
25	BB	34	U
25	BB	35	G
25	BB	36	G
25	BB	40	U
25	BB	45	G
25	BB	48	G
25	BB	49	A
25	BB	50	U
25	BB	52	A
25	BB	55	G
25	BB	57	C
25	BB	59	U
25	BB	61	C
25	BB	62	U
25	BB	63	A
25	BB	64	A
25	BB	65	U
25	BB	67	U
25	BB	68	G
25	BB	69	C
25	BB	70	G
25	BB	71	A
25	BB	72	U
25	BB	73	A
25	BB	74	A
25	BB	75	G
25	BB	81	G
25	BB	84	A
25	BB	85	G
25	BB	88	G
25	BB	89	A
25	BB	90	U
25	BB	91	A
25	BB	92	U
25	BB	96	C
25	BB	100	U

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Mol	Chain	Res	Type
25	BB	101	A
25	BB	102	U
25	BB	103	A
25	BB	104	A
25	BB	105	C
25	BB	106	C
25	BB	107	G
25	BB	112	U
25	BB	113	U
25	BB	114	U
25	BB	117	G
25	BB	118	A
25	BB	119	A
25	BB	120	U
25	BB	122	G
25	BB	124	G
25	BB	125	A
25	BB	126	A
25	BB	128	C
25	BB	129	C
25	BB	130	C
25	BB	131	A
25	BB	142	A
25	BB	144	A
25	BB	149	A
25	BB	150	U
25	BB	152	A
25	BB	162	U
25	BB	164	C
25	BB	165	A
25	BB	170	U
25	BB	178	G
25	BB	186	G
25	BB	187	G
25	BB	188	G
25	BB	189	G
25	BB	190	A
25	BB	192	C
25	BB	194	G
25	BB	195	A
25	BB	196	A
25	BB	197	A

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Mol	Chain	Res	Type
25	BB	200	U
25	BB	204	A
25	BB	205	G
25	BB	207	A
25	BB	208	C
25	BB	212	G
25	BB	213	A
25	BB	216	A
25	BB	222	A
25	BB	223	A
25	BB	224	U
25	BB	227	A
25	BB	228	C
25	BB	230	G
25	BB	235	U
25	BB	239	C
25	BB	243	U
25	BB	246	C
25	BB	248	G
25	BB	249	C
25	BB	250	G
25	BB	251	A
25	BB	254	G
25	BB	264	C
25	BB	265	A
25	BB	270	A
25	BB	275	C
25	BB	277	G
25	BB	278	A
25	BB	281	C
25	BB	294	A
25	BB	297	G
25	BB	302	C
25	BB	308	G
25	BB	310	A
25	BB	311	A
25	BB	312	G
25	BB	316	C
25	BB	317	G
25	BB	318	C
25	BB	319	G
25	BB	321	U

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Mol	Chain	Res	Type
25	BB	322	A
25	BB	323	C
25	BB	324	A
25	BB	325	G
25	BB	327	G
25	BB	328	U
25	BB	329	G
25	BB	330	A
25	BB	331	C
25	BB	333	G
25	BB	334	C
25	BB	335	C
25	BB	336	C
25	BB	340	A
25	BB	347	A
25	BB	351	C
25	BB	361	G
25	BB	362	A
25	BB	370	G
25	BB	371	A
25	BB	372	G
25	BB	376	G
25	BB	377	G
25	BB	379	G
25	BB	380	G
25	BB	381	G
25	BB	382	A
25	BB	384	A
25	BB	385	C
25	BB	386	G
25	BB	387	U
25	BB	389	G
25	BB	391	A
25	BB	392	U
25	BB	393	C
25	BB	394	C
25	BB	398	C
25	BB	403	U
25	BB	404	A
25	BB	405	U
25	BB	406	G
25	BB	409	G

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Mol	Chain	Res	Type
25	BB	411	G
25	BB	413	C
25	BB	422	A
25	BB	423	A
25	BB	424	G
25	BB	426	C
25	BB	427	U
25	BB	431	U
25	BB	433	C
25	BB	434	U
25	BB	435	C
25	BB	437	U
25	BB	438	G
25	BB	441	U
25	BB	443	A
25	BB	444	C
25	BB	447	A
25	BB	448	U
25	BB	449	A
25	BB	450	G
25	BB	451	U
25	BB	452	G
25	BB	453	A
25	BB	454	A
25	BB	455	C
25	BB	456	C
25	BB	459	U
25	BB	462	C
25	BB	463	G
25	BB	464	U
25	BB	465	G
25	BB	467	G
25	BB	469	G
25	BB	470	A
25	BB	474	G
25	BB	475	C
25	BB	476	G
25	BB	477	A
25	BB	478	A
25	BB	479	A
25	BB	481	G
25	BB	482	A

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Mol	Chain	Res	Type
25	BB	484	C
25	BB	491	G
25	BB	495	G
25	BB	498	G
25	BB	500	G
25	BB	502	A
25	BB	503	A
25	BB	504	A
25	BB	505	A
25	BB	508	A
25	BB	509	C
25	BB	510	C
25	BB	511	U
25	BB	512	G
25	BB	513	A
25	BB	515	A
25	BB	520	G
25	BB	522	A
25	BB	525	U
25	BB	526	A
25	BB	527	C
25	BB	528	A
25	BB	529	A
25	BB	530	G
25	BB	531	C
25	BB	533	G
25	BB	534	U
25	BB	535	G
25	BB	536	G
25	BB	540	C
25	BB	543	G
25	BB	544	C
25	BB	547	A
25	BB	548	G
25	BB	550	C
25	BB	551	G
25	BB	552	U
25	BB	553	G
25	BB	554	U
25	BB	555	G
25	BB	556	A
25	BB	559	G

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Mol	Chain	Res	Type
25	BB	562	U
25	BB	564	C
25	BB	565	C
25	BB	566	U
25	BB	567	U
25	BB	568	U
25	BB	569	U
25	BB	570	G
25	BB	571	U
25	BB	572	A
25	BB	573	U
25	BB	574	A
25	BB	575	A
25	BB	576	U
25	BB	577	G
25	BB	580	U
25	BB	581	C
25	BB	582	A
25	BB	583	G
25	BB	584	C
25	BB	585	G
25	BB	586	A
25	BB	587	C
25	BB	588	U
25	BB	589	U
25	BB	590	A
25	BB	591	U
25	BB	592	A
25	BB	593	U
25	BB	594	U
25	BB	598	U
25	BB	600	G
25	BB	603	A
25	BB	607	U
25	BB	610	C
25	BB	614	A
25	BB	615	U
25	BB	616	A
25	BB	619	G
25	BB	620	G
25	BB	623	C
25	BB	627	A

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Mol	Chain	Res	Type
25	BB	628	G
25	BB	629	G
25	BB	634	C
25	BB	637	A
25	BB	638	G
25	BB	642	U
25	BB	643	A
25	BB	644	A
25	BB	645	C
25	BB	646	U
25	BB	653	U
25	BB	654	A
25	BB	655	A
25	BB	658	U
25	BB	660	C
25	BB	661	A
25	BB	664	G
25	BB	665	U
25	BB	668	A
25	BB	669	G
25	BB	670	A
25	BB	671	C
25	BB	672	C
25	BB	673	C
25	BB	675	A
25	BB	676	A
25	BB	677	A
25	BB	678	C
25	BB	679	C
25	BB	683	U
25	BB	684	G
25	BB	685	A
25	BB	686	U
25	BB	687	C
25	BB	688	U
25	BB	690	G
25	BB	691	C
25	BB	692	C
25	BB	696	G
25	BB	697	G
25	BB	701	G
25	BB	702	U

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Mol	Chain	Res	Type
25	BB	703	U
25	BB	704	G
25	BB	705	A
25	BB	707	G
25	BB	708	G
25	BB	715	A
25	BB	716	A
25	BB	719	C
25	BB	722	A
25	BB	727	A
25	BB	728	G
25	BB	729	G
25	BB	730	A
25	BB	732	C
25	BB	733	G
25	BB	734	A
25	BB	736	C
25	BB	740	C
25	BB	742	A
25	BB	743	A
25	BB	744	U
25	BB	745	G
25	BB	747	U
25	BB	748	G
25	BB	749	A
25	BB	750	A
25	BB	756	A
25	BB	757	G
25	BB	759	G
25	BB	760	G
25	BB	762	U
25	BB	763	G
25	BB	764	A
25	BB	765	C
25	BB	766	U
25	BB	767	U
25	BB	768	G
25	BB	769	U
25	BB	770	G
25	BB	772	C
25	BB	773	U
25	BB	774	G

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Mol	Chain	Res	Type
25	BB	775	G
25	BB	776	G
25	BB	777	G
25	BB	779	U
25	BB	780	G
25	BB	783	A
25	BB	784	G
25	BB	786	C
25	BB	788	A
25	BB	789	A
25	BB	790	U
25	BB	791	C
25	BB	792	A
25	BB	793	A
25	BB	794	A
25	BB	796	C
25	BB	797	G
25	BB	799	G
25	BB	802	A
25	BB	803	U
25	BB	804	A
25	BB	806	C
25	BB	808	G
25	BB	809	G
25	BB	810	U
25	BB	811	U
25	BB	812	C
25	BB	815	C
25	BB	818	G
25	BB	820	A
25	BB	821	A
25	BB	823	C
25	BB	825	A
25	BB	826	U
25	BB	827	U
25	BB	830	G
25	BB	831	G
25	BB	832	U
25	BB	834	G
25	BB	835	C
25	BB	836	G
25	BB	837	C

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Mol	Chain	Res	Type
25	BB	838	C
25	BB	839	U
25	BB	843	G
25	BB	846	U
25	BB	847	U
25	BB	856	G
25	BB	860	U
25	BB	861	A
25	BB	862	G
25	BB	865	C
25	BB	868	U
25	BB	869	G
25	BB	872	U
25	BB	878	A
25	BB	887	U
25	BB	888	C
25	BB	889	C
25	BB	897	C
25	BB	899	A
25	BB	900	A
25	BB	901	C
25	BB	902	C
25	BB	906	U
25	BB	908	C
25	BB	909	A
25	BB	910	A
25	BB	911	A
25	BB	912	C
25	BB	914	G
25	BB	915	C
25	BB	919	U
25	BB	920	A
25	BB	921	C
25	BB	922	C
25	BB	932	U
25	BB	933	A
25	BB	934	U
25	BB	936	A
25	BB	937	C
25	BB	941	A
25	BB	942	G
25	BB	943	A

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Mol	Chain	Res	Type
25	BB	944	C
25	BB	945	A
25	BB	947	A
25	BB	948	C
25	BB	951	C
25	BB	952	G
25	BB	953	G
25	BB	954	G
25	BB	955	U
25	BB	956	G
25	BB	957	C
25	BB	958	U
25	BB	959	A
25	BB	960	A
25	BB	961	C
25	BB	964	C
25	BB	965	C
25	BB	966	G
25	BB	967	U
25	BB	968	C
25	BB	969	G
25	BB	971	G
25	BB	972	A
25	BB	974	G
25	BB	975	A
25	BB	976	G
25	BB	978	G
25	BB	980	A
25	BB	983	A
25	BB	984	A
25	BB	985	C
25	BB	988	A
25	BB	991	C
25	BB	992	C
25	BB	993	G
25	BB	994	C
25	BB	996	A
25	BB	998	C
25	BB	1003	G
25	BB	1004	U
25	BB	1006	C
25	BB	1007	C

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Mol	Chain	Res	Type
25	BB	1008	A
25	BB	1009	A
25	BB	1010	A
25	BB	1011	G
25	BB	1012	U
25	BB	1013	C
25	BB	1014	A
25	BB	1015	U
25	BB	1016	G
25	BB	1022	G
25	BB	1023	U
25	BB	1024	G
25	BB	1026	G
25	BB	1027	A
25	BB	1028	A
25	BB	1029	A
25	BB	1031	G
25	BB	1033	U
25	BB	1034	G
25	BB	1035	U
25	BB	1036	G
25	BB	1046	A
25	BB	1047	G
25	BB	1049	C
25	BB	1050	A
25	BB	1058	U
25	BB	1059	G
25	BB	1060	U
25	BB	1061	U
25	BB	1062	G
25	BB	1069	A
25	BB	1070	A
25	BB	1072	C
25	BB	1079	C
25	BB	1082	U
25	BB	1083	U
25	BB	1087	G
25	BB	1088	A
25	BB	1090	A
25	BB	1091	G
25	BB	1092	C
25	BB	1098	A

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Mol	Chain	Res	Type
25	BB	1104	C
25	BB	1110	G
25	BB	1112	G
25	BB	1124	G
25	BB	1126	A
25	BB	1127	A
25	BB	1128	G
25	BB	1129	A
25	BB	1130	U
25	BB	1131	G
25	BB	1132	U
25	BB	1133	A
25	BB	1134	A
25	BB	1135	C
25	BB	1136	G
25	BB	1138	G
25	BB	1139	G
25	BB	1140	C
25	BB	1141	U
25	BB	1142	A
25	BB	1143	A
25	BB	1144	A
25	BB	1153	C
25	BB	1155	A
25	BB	1156	A
25	BB	1158	C
25	BB	1159	U
25	BB	1161	C
25	BB	1162	G
25	BB	1172	C
25	BB	1175	A
25	BB	1176	U
25	BB	1177	G
25	BB	1185	G
25	BB	1186	G
25	BB	1188	U
25	BB	1189	A
25	BB	1190	G
25	BB	1192	G
25	BB	1198	U
25	BB	1200	C
25	BB	1201	U

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Mol	Chain	Res	Type
25	BB	1203	U
25	BB	1204	A
25	BB	1205	A
25	BB	1207	C
25	BB	1208	C
25	BB	1210	G
25	BB	1211	C
25	BB	1212	G
25	BB	1213	A
25	BB	1214	A
25	BB	1216	G
25	BB	1217	U
25	BB	1218	G
25	BB	1219	U
25	BB	1220	G
25	BB	1221	C
25	BB	1224	U
25	BB	1225	G
25	BB	1226	A
25	BB	1227	G
25	BB	1230	A
25	BB	1233	C
25	BB	1234	U
25	BB	1235	G
25	BB	1236	G
25	BB	1237	A
25	BB	1238	G
25	BB	1239	G
25	BB	1240	U
25	BB	1241	A
25	BB	1242	U
25	BB	1243	C
25	BB	1244	A
25	BB	1246	A
25	BB	1248	G
25	BB	1249	U
25	BB	1251	C
25	BB	1252	G
25	BB	1253	A
25	BB	1254	A
25	BB	1256	G
25	BB	1257	C

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Mol	Chain	Res	Type
25	BB	1258	U
25	BB	1260	A
25	BB	1261	C
25	BB	1262	A
25	BB	1264	A
25	BB	1265	A
25	BB	1266	G
25	BB	1268	A
25	BB	1269	A
25	BB	1270	C
25	BB	1272	A
25	BB	1274	A
25	BB	1275	A
25	BB	1276	A
25	BB	1282	U
25	BB	1284	A
25	BB	1285	A
25	BB	1287	A
25	BB	1300	G
25	BB	1301	A
25	BB	1302	A
25	BB	1303	G
25	BB	1305	C
25	BB	1306	C
25	BB	1308	A
25	BB	1309	G
25	BB	1310	G
25	BB	1311	G
25	BB	1313	U
25	BB	1314	C
25	BB	1315	C
25	BB	1316	U
25	BB	1321	A
25	BB	1323	C
25	BB	1324	G
25	BB	1325	U
25	BB	1326	U
25	BB	1327	A
25	BB	1330	C
25	BB	1331	G
25	BB	1332	G
25	BB	1333	G

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Mol	Chain	Res	Type
25	BB	1334	G
25	BB	1338	G
25	BB	1339	G
25	BB	1341	G
25	BB	1342	A
25	BB	1343	G
25	BB	1344	U
25	BB	1345	C
25	BB	1346	G
25	BB	1347	A
25	BB	1348	C
25	BB	1349	C
25	BB	1350	C
25	BB	1351	C
25	BB	1352	U
25	BB	1353	A
25	BB	1357	C
25	BB	1360	G
25	BB	1362	C
25	BB	1363	C
25	BB	1364	G
25	BB	1365	A
25	BB	1368	G
25	BB	1371	G
25	BB	1372	U
25	BB	1374	G
25	BB	1375	U
25	BB	1378	A
25	BB	1379	U
25	BB	1380	G
25	BB	1384	A
25	BB	1385	A
25	BB	1390	U
25	BB	1391	U
25	BB	1392	A
25	BB	1393	A
25	BB	1394	U
25	BB	1395	A
25	BB	1396	U
25	BB	1399	C
25	BB	1400	U
25	BB	1403	A

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Mol	Chain	Res	Type
25	BB	1404	C
25	BB	1405	U
25	BB	1413	A
25	BB	1416	G
25	BB	1417	C
25	BB	1419	A
25	BB	1420	A
25	BB	1421	G
25	BB	1425	G
25	BB	1426	G
25	BB	1428	C
25	BB	1430	G
25	BB	1432	G
25	BB	1438	U
25	BB	1439	A
25	BB	1442	U
25	BB	1444	G
25	BB	1446	C
25	BB	1450	G
25	BB	1451	C
25	BB	1454	C
25	BB	1457	U
25	BB	1458	U
25	BB	1459	G
25	BB	1460	U
25	BB	1461	C
25	BB	1462	C
25	BB	1467	U
25	BB	1469	A
25	BB	1471	G
25	BB	1472	C
25	BB	1473	G
25	BB	1474	U
25	BB	1475	G
25	BB	1476	U
25	BB	1478	G
25	BB	1479	G
25	BB	1482	G
25	BB	1490	A
25	BB	1491	G
25	BB	1497	U
25	BB	1498	C

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Mol	Chain	Res	Type
25	BB	1508	A
25	BB	1509	A
25	BB	1510	G
25	BB	1514	G
25	BB	1524	G
25	BB	1530	G
25	BB	1532	A
25	BB	1540	G
25	BB	1544	A
25	BB	1554	U
25	BB	1558	C
25	BB	1559	U
25	BB	1560	G
25	BB	1561	C
25	BB	1566	A
25	BB	1567	G
25	BB	1568	G
25	BB	1569	A
25	BB	1572	A
25	BB	1574	C
25	BB	1578	U
25	BB	1581	G
25	BB	1585	C
25	BB	1589	U
25	BB	1590	A
25	BB	1597	A
25	BB	1598	A
25	BB	1599	U
25	BB	1600	C
25	BB	1601	G
25	BB	1604	C
25	BB	1605	C
25	BB	1607	C
25	BB	1608	A
25	BB	1609	A
25	BB	1610	A
25	BB	1614	A
25	BB	1615	C
25	BB	1616	A
25	BB	1617	C
25	BB	1618	A
25	BB	1619	G

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Mol	Chain	Res	Type
25	BB	1620	G
25	BB	1621	U
25	BB	1626	A
25	BB	1627	G
25	BB	1631	G
25	BB	1634	A
25	BB	1635	A
25	BB	1636	U
25	BB	1639	C
25	BB	1640	A
25	BB	1642	G
25	BB	1644	C
25	BB	1646	C
25	BB	1648	U
25	BB	1649	G
25	BB	1651	G
25	BB	1654	A
25	BB	1655	A
25	BB	1656	C
25	BB	1657	U
25	BB	1658	C
25	BB	1661	G
25	BB	1662	U
25	BB	1663	G
25	BB	1665	A
25	BB	1666	G
25	BB	1668	A
25	BB	1669	A
25	BB	1670	C
25	BB	1672	A
25	BB	1674	G
25	BB	1675	C
25	BB	1677	A
25	BB	1678	A
25	BB	1679	A
25	BB	1680	U
25	BB	1681	G
25	BB	1682	G
25	BB	1686	C
25	BB	1687	G
25	BB	1689	A
25	BB	1691	C

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Mol	Chain	Res	Type
25	BB	1693	U
25	BB	1694	C
25	BB	1695	G
25	BB	1698	A
25	BB	1699	G
25	BB	1700	A
25	BB	1701	A
25	BB	1702	G
25	BB	1703	G
25	BB	1704	C
25	BB	1706	C
25	BB	1715	G
25	BB	1716	U
25	BB	1718	G
25	BB	1722	A
25	BB	1723	G
25	BB	1730	C
25	BB	1731	G
25	BB	1732	C
25	BB	1738	G
25	BB	1739	A
25	BB	1745	A
25	BB	1749	A
25	BB	1750	G
25	BB	1752	C
25	BB	1754	A
25	BB	1755	A
25	BB	1756	G
25	BB	1757	A
25	BB	1758	U
25	BB	1762	A
25	BB	1763	G
25	BB	1764	C
25	BB	1766	G
25	BB	1767	G
25	BB	1768	C
25	BB	1769	U
25	BB	1770	G
25	BB	1773	A
25	BB	1774	C
25	BB	1775	U
25	BB	1776	G

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Mol	Chain	Res	Type
25	BB	1777	U
25	BB	1778	U
25	BB	1779	U
25	BB	1780	A
25	BB	1781	U
25	BB	1782	U
25	BB	1783	A
25	BB	1784	A
25	BB	1785	A
25	BB	1789	A
25	BB	1790	C
25	BB	1791	A
25	BB	1793	C
25	BB	1800	C
25	BB	1802	A
25	BB	1803	A
25	BB	1805	A
25	BB	1807	G
25	BB	1809	A
25	BB	1810	A
25	BB	1811	G
25	BB	1812	U
25	BB	1813	G
25	BB	1814	G
25	BB	1816	C
25	BB	1817	G
25	BB	1819	A
25	BB	1820	U
25	BB	1821	A
25	BB	1822	C
25	BB	1824	G
25	BB	1825	U
25	BB	1826	G
25	BB	1827	U
25	BB	1828	G
25	BB	1829	A
25	BB	1830	C
25	BB	1835	G
25	BB	1836	C
25	BB	1837	C
25	BB	1838	C
25	BB	1844	C

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Mol	Chain	Res	Type
25	BB	1847	A
25	BB	1849	G
25	BB	1852	U
25	BB	1855	U
25	BB	1858	A
25	BB	1859	U
25	BB	1869	G
25	BB	1870	C
25	BB	1873	G
25	BB	1875	G
25	BB	1883	U
25	BB	1885	A
25	BB	1888	G
25	BB	1889	A
25	BB	1890	A
25	BB	1891	G
25	BB	1892	C
25	BB	1894	C
25	BB	1896	G
25	BB	1897	G
25	BB	1899	A
25	BB	1900	A
25	BB	1901	A
25	BB	1903	G
25	BB	1906	G
25	BB	1907	G
25	BB	1909	C
25	BB	1912	A
25	BB	1913	A
25	BB	1914	C
25	BB	1915	U
25	BB	1916	A
25	BB	1918	A
25	BB	1919	A
25	BB	1920	C
25	BB	1926	U
25	BB	1928	A
25	BB	1929	G
25	BB	1930	G
25	BB	1931	U
25	BB	1932	A
25	BB	1933	G

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Mol	Chain	Res	Type
25	BB	1934	C
25	BB	1935	G
25	BB	1936	A
25	BB	1937	A
25	BB	1938	A
25	BB	1939	U
25	BB	1940	U
25	BB	1942	C
25	BB	1943	U
25	BB	1944	U
25	BB	1945	G
25	BB	1946	U
25	BB	1947	C
25	BB	1948	G
25	BB	1952	A
25	BB	1953	A
25	BB	1954	G
25	BB	1955	U
25	BB	1956	U
25	BB	1957	C
25	BB	1958	C
25	BB	1959	G
25	BB	1961	C
25	BB	1962	C
25	BB	1963	U
25	BB	1964	G
25	BB	1965	C
25	BB	1967	C
25	BB	1968	G
25	BB	1969	A
25	BB	1971	U
25	BB	1972	G
25	BB	1973	G
25	BB	1977	A
25	BB	1978	A
25	BB	1979	U
25	BB	1980	G
25	BB	1981	A
25	BB	1982	U
25	BB	1983	G
25	BB	1984	G
25	BB	1986	C

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Mol	Chain	Res	Type
25	BB	1989	G
25	BB	1990	C
25	BB	1992	G
25	BB	1995	U
25	BB	1997	C
25	BB	1999	C
25	BB	2001	C
25	BB	2002	G
25	BB	2003	A
25	BB	2004	G
25	BB	2006	C
25	BB	2007	U
25	BB	2010	G
25	BB	2011	U
25	BB	2013	A
25	BB	2015	A
25	BB	2018	G
25	BB	2020	A
25	BB	2021	C
25	BB	2022	U
25	BB	2023	C
25	BB	2025	C
25	BB	2026	U
25	BB	2027	G
25	BB	2028	U
25	BB	2030	A
25	BB	2031	A
25	BB	2032	G
25	BB	2033	A
25	BB	2034	U
25	BB	2035	G
25	BB	2036	C
25	BB	2037	A
25	BB	2043	C
25	BB	2044	C
25	BB	2046	G
25	BB	2047	C
25	BB	2049	G
25	BB	2050	C
25	BB	2051	A
25	BB	2052	A
25	BB	2054	A

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Mol	Chain	Res	Type
25	BB	2055	C
25	BB	2056	G
25	BB	2057	G
25	BB	2060	A
25	BB	2061	G
25	BB	2062	A
25	BB	2063	C
25	BB	2064	C
25	BB	2066	C
25	BB	2067	G
25	BB	2068	U
25	BB	2069	G
25	BB	2071	A
25	BB	2072	C
25	BB	2075	U
25	BB	2076	U
25	BB	2077	A
25	BB	2079	U
25	BB	2080	A
25	BB	2086	U
25	BB	2090	A
25	BB	2091	C
25	BB	2092	U
25	BB	2093	G
25	BB	2095	A
25	BB	2099	U
25	BB	2103	C
25	BB	2104	C
25	BB	2105	U
25	BB	2106	U
25	BB	2109	U
25	BB	2113	U
25	BB	2114	A
25	BB	2116	G
25	BB	2118	U
25	BB	2121	G
25	BB	2123	G
25	BB	2125	G
25	BB	2126	A
25	BB	2127	G
25	BB	2132	U
25	BB	2136	G

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Mol	Chain	Res	Type
25	BB	2138	G
25	BB	2144	G
25	BB	2145	C
25	BB	2146	C
25	BB	2147	A
25	BB	2148	G
25	BB	2149	U
25	BB	2154	A
25	BB	2158	A
25	BB	2159	G
25	BB	2163	A
25	BB	2164	C
25	BB	2172	U
25	BB	2174	C
25	BB	2176	A
25	BB	2178	C
25	BB	2179	C
25	BB	2182	U
25	BB	2192	U
25	BB	2195	U
25	BB	2196	C
25	BB	2197	U
25	BB	2198	A
25	BB	2199	A
25	BB	2203	U
25	BB	2204	G
25	BB	2211	A
25	BB	2212	A
25	BB	2213	U
25	BB	2214	C
25	BB	2215	C
25	BB	2223	G
25	BB	2228	G
25	BB	2229	U
25	BB	2235	G
25	BB	2239	G
25	BB	2240	U
25	BB	2242	G
25	BB	2243	U
25	BB	2244	U
25	BB	2245	U
25	BB	2246	G

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Mol	Chain	Res	Type
25	BB	2247	A
25	BB	2249	U
25	BB	2250	G
25	BB	2251	G
25	BB	2254	C
25	BB	2255	G
25	BB	2256	G
25	BB	2257	U
25	BB	2258	C
25	BB	2259	U
25	BB	2261	C
25	BB	2266	A
25	BB	2269	G
25	BB	2270	A
25	BB	2271	G
25	BB	2272	U
25	BB	2273	A
25	BB	2274	A
25	BB	2275	C
25	BB	2276	G
25	BB	2277	G
25	BB	2278	A
25	BB	2279	G
25	BB	2282	G
25	BB	2283	C
25	BB	2286	G
25	BB	2289	G
25	BB	2290	G
25	BB	2292	U
25	BB	2293	G
25	BB	2295	C
25	BB	2297	A
25	BB	2305	U
25	BB	2307	G
25	BB	2308	G
25	BB	2310	C
25	BB	2312	U
25	BB	2313	C
25	BB	2314	A
25	BB	2317	A
25	BB	2318	G
25	BB	2320	U

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Mol	Chain	Res	Type
25	BB	2321	U
25	BB	2322	A
25	BB	2323	G
25	BB	2325	G
25	BB	2326	C
25	BB	2327	A
25	BB	2331	G
25	BB	2332	C
25	BB	2333	A
25	BB	2334	U
25	BB	2335	A
25	BB	2336	A
25	BB	2337	G
25	BB	2338	C
25	BB	2343	U
25	BB	2345	G
25	BB	2346	A
25	BB	2347	C
25	BB	2349	G
25	BB	2353	G
25	BB	2354	C
25	BB	2356	U
25	BB	2358	A
25	BB	2360	G
25	BB	2361	G
25	BB	2364	C
25	BB	2367	G
25	BB	2370	G
25	BB	2371	G
25	BB	2374	C
25	BB	2376	A
25	BB	2379	G
25	BB	2382	G
25	BB	2383	G
25	BB	2384	U
25	BB	2385	C
25	BB	2387	U
25	BB	2388	A
25	BB	2390	U
25	BB	2391	G
25	BB	2392	A
25	BB	2393	U

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Mol	Chain	Res	Type
25	BB	2394	C
25	BB	2397	G
25	BB	2398	U
25	BB	2402	U
25	BB	2403	C
25	BB	2406	A
25	BB	2407	A
25	BB	2408	U
25	BB	2409	G
25	BB	2417	C
25	BB	2418	A
25	BB	2420	C
25	BB	2421	G
25	BB	2422	C
25	BB	2423	U
25	BB	2424	C
25	BB	2425	A
25	BB	2426	A
25	BB	2428	G
25	BB	2430	A
25	BB	2431	U
25	BB	2432	A
25	BB	2433	A
25	BB	2434	A
25	BB	2435	A
25	BB	2437	G
25	BB	2439	A
25	BB	2440	C
25	BB	2442	C
25	BB	2444	G
25	BB	2446	G
25	BB	2447	G
25	BB	2448	A
25	BB	2449	U
25	BB	2451	A
25	BB	2453	A
25	BB	2454	G
25	BB	2455	G
25	BB	2456	C
25	BB	2457	U
25	BB	2458	G
25	BB	2459	A

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Mol	Chain	Res	Type
25	BB	2461	A
25	BB	2465	C
25	BB	2467	C
25	BB	2468	A
25	BB	2472	G
25	BB	2473	U
25	BB	2474	U
25	BB	2475	C
25	BB	2476	A
25	BB	2478	A
25	BB	2480	C
25	BB	2482	A
25	BB	2484	G
25	BB	2486	C
25	BB	2489	U
25	BB	2490	G
25	BB	2491	U
25	BB	2492	U
25	BB	2495	G
25	BB	2496	C
25	BB	2497	A
25	BB	2498	C
25	BB	2499	C
25	BB	2500	U
25	BB	2501	C
25	BB	2502	G
25	BB	2503	A
25	BB	2504	U
25	BB	2505	G
25	BB	2507	C
25	BB	2508	G
25	BB	2509	G
25	BB	2510	C
25	BB	2511	U
25	BB	2512	C
25	BB	2513	A
25	BB	2514	U
25	BB	2516	A
25	BB	2517	C
25	BB	2518	A
25	BB	2519	U
25	BB	2520	C

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Mol	Chain	Res	Type
25	BB	2521	C
25	BB	2522	U
25	BB	2523	G
25	BB	2529	G
25	BB	2530	A
25	BB	2531	A
25	BB	2532	G
25	BB	2534	A
25	BB	2536	G
25	BB	2538	C
25	BB	2539	C
25	BB	2540	C
25	BB	2542	A
25	BB	2543	G
25	BB	2544	G
25	BB	2545	G
25	BB	2547	A
25	BB	2548	U
25	BB	2549	G
25	BB	2551	C
25	BB	2552	U
25	BB	2553	G
25	BB	2554	U
25	BB	2555	U
25	BB	2556	C
25	BB	2557	G
25	BB	2558	C
25	BB	2559	C
25	BB	2562	U
25	BB	2563	U
25	BB	2566	A
25	BB	2567	G
25	BB	2570	G
25	BB	2571	U
25	BB	2572	A
25	BB	2573	C
25	BB	2574	G
25	BB	2575	C
25	BB	2576	G
25	BB	2577	A
25	BB	2578	G
25	BB	2579	C

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Mol	Chain	Res	Type
25	BB	2580	U
25	BB	2581	G
25	BB	2582	G
25	BB	2584	U
25	BB	2586	U
25	BB	2587	A
25	BB	2588	G
25	BB	2590	A
25	BB	2591	C
25	BB	2594	C
25	BB	2595	G
25	BB	2598	A
25	BB	2599	G
25	BB	2601	C
25	BB	2602	A
25	BB	2604	U
25	BB	2609	U
25	BB	2610	C
25	BB	2612	C
25	BB	2613	U
25	BB	2614	A
25	BB	2615	U
25	BB	2616	C
25	BB	2617	U
25	BB	2620	C
25	BB	2621	G
25	BB	2622	U
25	BB	2623	G
25	BB	2627	G
25	BB	2629	U
25	BB	2630	G
25	BB	2637	U
25	BB	2638	G
25	BB	2639	A
25	BB	2640	G
25	BB	2641	G
25	BB	2642	G
25	BB	2644	G
25	BB	2646	C
25	BB	2647	U
25	BB	2649	C
25	BB	2653	U

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Mol	Chain	Res	Type
25	BB	2654	A
25	BB	2655	G
25	BB	2661	G
25	BB	2663	G
25	BB	2666	C
25	BB	2675	A
25	BB	2676	C
25	BB	2677	G
25	BB	2678	C
25	BB	2681	C
25	BB	2682	A
25	BB	2683	C
25	BB	2684	U
25	BB	2689	U
25	BB	2690	U
25	BB	2691	C
25	BB	2694	G
25	BB	2695	U
25	BB	2696	U
25	BB	2699	C
25	BB	2700	A
25	BB	2701	U
25	BB	2709	G
25	BB	2710	C
25	BB	2711	A
25	BB	2712	C
25	BB	2714	G
25	BB	2715	C
25	BB	2716	C
25	BB	2718	G
25	BB	2719	G
25	BB	2720	U
25	BB	2721	A
25	BB	2722	G
25	BB	2726	A
25	BB	2727	A
25	BB	2728	U
25	BB	2729	G
25	BB	2731	G
25	BB	2732	G
25	BB	2733	A
25	BB	2735	G

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Mol	Chain	Res	Type
25	BB	2745	C
25	BB	2750	A
25	BB	2751	G
25	BB	2752	C
25	BB	2753	A
25	BB	2755	C
25	BB	2756	U
25	BB	2757	A
25	BB	2758	A
25	BB	2759	G
25	BB	2764	A
25	BB	2765	A
25	BB	2766	A
25	BB	2767	C
25	BB	2769	U
25	BB	2770	G
25	BB	2771	C
25	BB	2775	G
25	BB	2776	A
25	BB	2777	G
25	BB	2779	U
25	BB	2780	G
25	BB	2781	A
25	BB	2784	U
25	BB	2785	C
25	BB	2791	G
25	BB	2796	U
25	BB	2797	U
25	BB	2799	A
25	BB	2801	G
25	BB	2807	U
25	BB	2808	G
25	BB	2811	G
25	BB	2815	C
25	BB	2816	G
25	BB	2818	U
25	BB	2819	G
25	BB	2820	A
25	BB	2821	A
25	BB	2822	G
25	BB	2828	G
25	BB	2829	A

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Mol	Chain	Res	Type
25	BB	2836	U
25	BB	2839	G
25	BB	2841	C
25	BB	2844	G
25	BB	2847	U
25	BB	2848	G
25	BB	2849	U
25	BB	2850	A
25	BB	2857	G
25	BB	2858	C
25	BB	2859	G
25	BB	2864	G
25	BB	2865	U
25	BB	2870	C
25	BB	2871	U
25	BB	2872	A
25	BB	2873	A
25	BB	2875	C
25	BB	2880	C
25	BB	2881	U
25	BB	2882	A
25	BB	2883	A
25	BB	2884	U
25	BB	2886	A
25	BB	2887	A
25	BB	2890	G
25	BB	2891	U
25	BB	2894	G
25	BB	2895	G
25	BB	2903	U

All (824) RNA pucker outliers are listed below:

Mol	Chain	Res	Type
1	AA	1	G
1	AA	19	G
1	AA	22	G
1	AA	27	C
1	AA	32	C
1	AA	42	G
1	AA	44	A
1	AA	55	U

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Mol	Chain	Res	Type
1	AP	9	A
1	AP	18	G
1	AP	58	A
1	AP	63	C
1	AP	65	G
1	AP	74	C
1	AE	16	U
2	AM	1	U
2	AM	4	U
2	AM	5	U
2	AM	9	U
2	AM	11	U
2	AM	12	U
2	AM	14	U
3	A1	6	G
3	A1	12	U
3	A1	15	G
3	A1	21	G
3	A1	25	C
3	A1	26	A
3	A1	29	U
3	A1	31	G
3	A1	46	G
3	A1	48	C
3	A1	50	A
3	A1	60	A
3	A1	65	A
3	A1	70	U
3	A1	83	C
3	A1	86	G
3	A1	87	C
3	A1	93	U
3	A1	115	G
3	A1	118	U
3	A1	119	A
3	A1	121	U
3	A1	122	G
3	A1	124	C
3	A1	142	G
3	A1	149	A
3	A1	159	G
3	A1	170	U

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Mol	Chain	Res	Type
3	A1	174	A
3	A1	190	A
3	A1	197	A
3	A1	209	U
3	A1	214	C
3	A1	218	U
3	A1	224	U
3	A1	225	C
3	A1	226	G
3	A1	237	G
3	A1	240	G
3	A1	244	U
3	A1	264	C
3	A1	278	G
3	A1	293	G
3	A1	303	A
3	A1	306	A
3	A1	316	C
3	A1	317	U
3	A1	328	C
3	A1	355	C
3	A1	357	G
3	A1	363	A
3	A1	366	A
3	A1	368	U
3	A1	370	C
3	A1	372	C
3	A1	376	G
3	A1	381	C
3	A1	390	U
3	A1	397	A
3	A1	399	G
3	A1	400	C
3	A1	421	U
3	A1	422	C
3	A1	427	U
3	A1	432	A
3	A1	438	U
3	A1	441	A
3	A1	445	G
3	A1	468	A
3	A1	470	C

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Mol	Chain	Res	Type
3	A1	484	G
3	A1	486	U
3	A1	500	G
3	A1	503	C
3	A1	504	C
3	A1	505	G
3	A1	509	A
3	A1	510	A
3	A1	523	A
3	A1	530	G
3	A1	545	C
3	A1	559	A
3	A1	572	A
3	A1	573	A
3	A1	580	C
3	A1	583	A
3	A1	587	G
3	A1	589	U
3	A1	597	G
3	A1	607	A
3	A1	625	U
3	A1	629	A
3	A1	632	U
3	A1	649	A
3	A1	651	C
3	A1	652	U
3	A1	654	G
3	A1	665	A
3	A1	670	G
3	A1	672	U
3	A1	680	C
3	A1	682	G
3	A1	684	U
3	A1	688	G
3	A1	706	A
3	A1	709	U
3	A1	715	A
3	A1	720	C
3	A1	723	U
3	A1	727	G
3	A1	731	G
3	A1	743	A

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Mol	Chain	Res	Type
3	A1	744	C
3	A1	755	G
3	A1	773	G
3	A1	774	G
3	A1	777	A
3	A1	783	C
3	A1	785	G
3	A1	794	A
3	A1	795	C
3	A1	798	U
3	A1	805	C
3	A1	807	A
3	A1	811	C
3	A1	813	U
3	A1	821	G
3	A1	823	C
3	A1	825	A
3	A1	826	C
3	A1	827	U
3	A1	830	G
3	A1	846	G
3	A1	850	U
3	A1	864	A
3	A1	867	G
3	A1	869	G
3	A1	870	U
3	A1	872	A
3	A1	875	U
3	A1	881	G
3	A1	884	U
3	A1	886	G
3	A1	887	G
3	A1	888	G
3	A1	891	U
3	A1	893	C
3	A1	906	A
3	A1	910	C
3	A1	914	A
3	A1	919	A
3	A1	920	U
3	A1	921	U
3	A1	924	C

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Mol	Chain	Res	Type
3	A1	925	G
3	A1	934	C
3	A1	937	A
3	A1	938	A
3	A1	952	U
3	A1	956	U
3	A1	957	U
3	A1	962	C
3	A1	963	G
3	A1	964	A
3	A1	965	U
3	A1	968	A
3	A1	971	G
3	A1	972	C
3	A1	973	G
3	A1	975	A
3	A1	976	G
3	A1	979	C
3	A1	980	C
3	A1	981	U
3	A1	992	U
3	A1	993	G
3	A1	997	U
3	A1	1000	A
3	A1	1004	A
3	A1	1009	U
3	A1	1016	A
3	A1	1025	U
3	A1	1028	C
3	A1	1036	A
3	A1	1040	U
3	A1	1049	U
3	A1	1052	U
3	A1	1054	C
3	A1	1056	U
3	A1	1062	U
3	A1	1067	A
3	A1	1081	A
3	A1	1083	U
3	A1	1109	C
3	A1	1125	U
3	A1	1130	A

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Mol	Chain	Res	Type
3	A1	1136	C
3	A1	1140	C
3	A1	1141	C
3	A1	1148	U
3	A1	1151	A
3	A1	1152	A
3	A1	1158	C
3	A1	1159	U
3	A1	1162	C
3	A1	1167	A
3	A1	1173	U
3	A1	1188	A
3	A1	1194	U
3	A1	1197	A
3	A1	1198	G
3	A1	1199	U
3	A1	1202	U
3	A1	1204	A
3	A1	1209	C
3	A1	1214	C
3	A1	1216	A
3	A1	1217	C
3	A1	1220	G
3	A1	1225	A
3	A1	1242	G
3	A1	1250	A
3	A1	1255	G
3	A1	1262	C
3	A1	1267	C
3	A1	1270	G
3	A1	1278	G
3	A1	1279	G
3	A1	1281	C
3	A1	1286	U
3	A1	1289	A
3	A1	1296	C
3	A1	1298	U
3	A1	1300	G
3	A1	1337	G
3	A1	1340	A
3	A1	1343	G
3	A1	1344	C

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Mol	Chain	Res	Type
3	A1	1346	A
3	A1	1350	A
3	A1	1351	U
3	A1	1363	A
3	A1	1365	G
3	A1	1366	C
3	A1	1367	C
3	A1	1378	C
3	A1	1381	U
3	A1	1382	C
3	A1	1386	G
3	A1	1391	U
3	A1	1395	C
3	A1	1397	C
3	A1	1398	A
3	A1	1399	C
3	A1	1400	C
3	A1	1401	G
3	A1	1410	A
3	A1	1414	U
3	A1	1420	U
3	A1	1426	G
3	A1	1452	C
3	A1	1459	G
3	A1	1469	C
3	A1	1472	U
3	A1	1475	G
3	A1	1476	A
3	A1	1479	C
3	A1	1482	G
3	A1	1483	A
3	A1	1485	U
3	A1	1494	G
3	A1	1497	G
3	A1	1503	A
3	A1	1504	G
3	A1	1516	G
3	A1	1518	A
3	A1	1519	A
3	A1	1520	C
3	A1	1526	G
3	A1	1530	G

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Mol	Chain	Res	Type
24	BA	25	U
24	BA	26	C
24	BA	29	A
24	BA	33	G
24	BA	34	A
24	BA	50	A
24	BA	51	G
24	BA	65	U
24	BA	98	G
24	BA	102	G
24	BA	105	G
25	BB	6	A
25	BB	13	A
25	BB	16	C
25	BB	17	G
25	BB	19	A
25	BB	33	C
25	BB	35	G
25	BB	48	G
25	BB	61	C
25	BB	64	A
25	BB	69	C
25	BB	70	G
25	BB	73	A
25	BB	75	G
25	BB	83	A
25	BB	90	U
25	BB	91	A
25	BB	95	A
25	BB	100	U
25	BB	101	A
25	BB	102	U
25	BB	106	C
25	BB	112	U
25	BB	117	G
25	BB	120	U
25	BB	125	A
25	BB	147	C
25	BB	149	A
25	BB	151	C
25	BB	185	G
25	BB	190	A

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Mol	Chain	Res	Type
25	BB	194	G
25	BB	196	A
25	BB	207	A
25	BB	221	A
25	BB	226	A
25	BB	232	G
25	BB	242	G
25	BB	247	G
25	BB	250	G
25	BB	256	A
25	BB	280	U
25	BB	281	C
25	BB	301	G
25	BB	313	G
25	BB	320	A
25	BB	321	U
25	BB	322	A
25	BB	332	A
25	BB	333	G
25	BB	339	U
25	BB	376	G
25	BB	379	G
25	BB	381	G
25	BB	384	A
25	BB	391	A
25	BB	409	G
25	BB	410	G
25	BB	425	G
25	BB	444	C
25	BB	446	G
25	BB	448	U
25	BB	449	A
25	BB	453	A
25	BB	454	A
25	BB	456	C
25	BB	463	G
25	BB	464	U
25	BB	469	G
25	BB	473	G
25	BB	475	C
25	BB	476	G
25	BB	478	A

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Mol	Chain	Res	Type
25	BB	486	C
25	BB	497	A
25	BB	501	A
25	BB	503	A
25	BB	514	A
25	BB	528	A
25	BB	529	A
25	BB	532	A
25	BB	533	G
25	BB	535	G
25	BB	536	G
25	BB	546	U
25	BB	547	A
25	BB	552	U
25	BB	555	G
25	BB	564	C
25	BB	565	C
25	BB	568	U
25	BB	570	G
25	BB	574	A
25	BB	575	A
25	BB	589	U
25	BB	593	U
25	BB	613	A
25	BB	619	G
25	BB	633	A
25	BB	637	A
25	BB	641	U
25	BB	645	C
25	BB	653	U
25	BB	664	G
25	BB	672	C
25	BB	683	U
25	BB	685	A
25	BB	691	C
25	BB	694	U
25	BB	696	G
25	BB	698	C
25	BB	700	G
25	BB	701	G
25	BB	704	G
25	BB	718	A

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Mol	Chain	Res	Type
25	BB	721	A
25	BB	727	A
25	BB	729	G
25	BB	732	C
25	BB	734	A
25	BB	739	A
25	BB	742	A
25	BB	748	G
25	BB	760	G
25	BB	763	G
25	BB	764	A
25	BB	768	G
25	BB	769	U
25	BB	772	C
25	BB	774	G
25	BB	776	G
25	BB	781	A
25	BB	782	A
25	BB	783	A
25	BB	784	G
25	BB	792	A
25	BB	796	C
25	BB	808	G
25	BB	810	U
25	BB	811	U
25	BB	814	C
25	BB	819	A
25	BB	824	U
25	BB	825	A
25	BB	855	G
25	BB	861	A
25	BB	864	G
25	BB	867	C
25	BB	899	A
25	BB	908	C
25	BB	914	G
25	BB	918	A
25	BB	921	C
25	BB	932	U
25	BB	936	A
25	BB	954	G
25	BB	957	C

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Mol	Chain	Res	Type
25	BB	958	U
25	BB	960	A
25	BB	967	U
25	BB	968	C
25	BB	971	G
25	BB	973	A
25	BB	974	G
25	BB	975	A
25	BB	976	G
25	BB	979	A
25	BB	982	C
25	BB	983	A
25	BB	996	A
25	BB	1008	A
25	BB	1010	A
25	BB	1015	U
25	BB	1022	G
25	BB	1030	C
25	BB	1038	G
25	BB	1046	A
25	BB	1058	U
25	BB	1061	U
25	BB	1062	G
25	BB	1070	A
25	BB	1074	G
25	BB	1087	G
25	BB	1090	A
25	BB	1094	U
25	BB	1111	A
25	BB	1139	G
25	BB	1143	A
25	BB	1144	A
25	BB	1157	G
25	BB	1175	A
25	BB	1185	G
25	BB	1188	U
25	BB	1193	G
25	BB	1198	U
25	BB	1200	C
25	BB	1201	U
25	BB	1203	U
25	BB	1204	A

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Mol	Chain	Res	Type
25	BB	1206	G
25	BB	1209	U
25	BB	1210	G
25	BB	1212	G
25	BB	1216	G
25	BB	1219	U
25	BB	1226	A
25	BB	1235	G
25	BB	1250	G
25	BB	1251	C
25	BB	1252	G
25	BB	1253	A
25	BB	1256	G
25	BB	1257	C
25	BB	1259	G
25	BB	1270	C
25	BB	1284	A
25	BB	1286	A
25	BB	1287	A
25	BB	1305	C
25	BB	1308	A
25	BB	1313	U
25	BB	1314	C
25	BB	1323	C
25	BB	1324	G
25	BB	1326	U
25	BB	1330	C
25	BB	1333	G
25	BB	1338	G
25	BB	1341	G
25	BB	1343	G
25	BB	1351	C
25	BB	1352	U
25	BB	1356	G
25	BB	1361	G
25	BB	1367	A
25	BB	1371	G
25	BB	1379	U
25	BB	1383	A
25	BB	1390	U
25	BB	1393	A
25	BB	1399	C

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Mol	Chain	Res	Type
25	BB	1403	A
25	BB	1419	A
25	BB	1425	G
25	BB	1437	C
25	BB	1441	G
25	BB	1450	G
25	BB	1451	C
25	BB	1454	C
25	BB	1457	U
25	BB	1461	C
25	BB	1462	C
25	BB	1466	U
25	BB	1468	U
25	BB	1473	G
25	BB	1474	U
25	BB	1477	A
25	BB	1485	U
25	BB	1555	G
25	BB	1558	C
25	BB	1567	G
25	BB	1568	G
25	BB	1575	C
25	BB	1580	A
25	BB	1588	G
25	BB	1597	A
25	BB	1599	U
25	BB	1608	A
25	BB	1614	A
25	BB	1615	C
25	BB	1616	A
25	BB	1617	C
25	BB	1618	A
25	BB	1641	A
25	BB	1643	G
25	BB	1647	U
25	BB	1654	A
25	BB	1655	A
25	BB	1656	C
25	BB	1657	U
25	BB	1662	U
25	BB	1668	A
25	BB	1669	A

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Mol	Chain	Res	Type
25	BB	1678	A
25	BB	1680	U
25	BB	1681	G
25	BB	1693	U
25	BB	1698	A
25	BB	1699	G
25	BB	1702	G
25	BB	1717	A
25	BB	1721	G
25	BB	1722	A
25	BB	1744	A
25	BB	1754	A
25	BB	1756	G
25	BB	1757	A
25	BB	1758	U
25	BB	1766	G
25	BB	1767	G
25	BB	1774	C
25	BB	1775	U
25	BB	1776	G
25	BB	1777	U
25	BB	1778	U
25	BB	1780	A
25	BB	1789	A
25	BB	1800	C
25	BB	1805	A
25	BB	1806	C
25	BB	1807	G
25	BB	1810	A
25	BB	1813	G
25	BB	1816	C
25	BB	1821	A
25	BB	1825	U
25	BB	1833	C
25	BB	1837	C
25	BB	1846	G
25	BB	1849	G
25	BB	1854	A
25	BB	1874	C
25	BB	1876	A
25	BB	1889	A
25	BB	1890	A

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Mol	Chain	Res	Type
25	BB	1895	C
25	BB	1896	G
25	BB	1906	G
25	BB	1913	A
25	BB	1917	U
25	BB	1919	A
25	BB	1930	G
25	BB	1934	C
25	BB	1935	G
25	BB	1937	A
25	BB	1939	U
25	BB	1942	C
25	BB	1947	C
25	BB	1952	A
25	BB	1954	G
25	BB	1958	C
25	BB	1961	C
25	BB	1962	C
25	BB	1967	C
25	BB	1970	A
25	BB	1972	G
25	BB	1977	A
25	BB	1981	A
25	BB	1982	U
25	BB	1983	G
25	BB	1994	C
25	BB	2003	A
25	BB	2010	G
25	BB	2012	G
25	BB	2020	A
25	BB	2022	U
25	BB	2030	A
25	BB	2032	G
25	BB	2034	U
25	BB	2035	G
25	BB	2036	C
25	BB	2043	C
25	BB	2045	C
25	BB	2046	G
25	BB	2052	A
25	BB	2053	G
25	BB	2054	A

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Mol	Chain	Res	Type
25	BB	2061	G
25	BB	2066	C
25	BB	2070	A
25	BB	2072	C
25	BB	2079	U
25	BB	2107	G
25	BB	2117	A
25	BB	2125	G
25	BB	2126	A
25	BB	2147	A
25	BB	2148	G
25	BB	2149	U
25	BB	2173	A
25	BB	2178	C
25	BB	2194	U
25	BB	2195	U
25	BB	2198	A
25	BB	2203	U
25	BB	2227	A
25	BB	2228	G
25	BB	2232	C
25	BB	2238	G
25	BB	2239	G
25	BB	2242	G
25	BB	2244	U
25	BB	2249	U
25	BB	2251	G
25	BB	2259	U
25	BB	2266	A
25	BB	2270	A
25	BB	2272	U
25	BB	2274	A
25	BB	2275	C
25	BB	2277	G
25	BB	2278	A
25	BB	2282	G
25	BB	2290	G
25	BB	2293	G
25	BB	2311	A
25	BB	2313	C
25	BB	2322	A
25	BB	2330	G

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Mol	Chain	Res	Type
25	BB	2333	A
25	BB	2334	U
25	BB	2335	A
25	BB	2336	A
25	BB	2346	A
25	BB	2356	U
25	BB	2366	A
25	BB	2382	G
25	BB	2385	C
25	BB	2399	G
25	BB	2420	C
25	BB	2423	U
25	BB	2431	U
25	BB	2432	A
25	BB	2436	G
25	BB	2443	C
25	BB	2445	G
25	BB	2446	G
25	BB	2448	A
25	BB	2455	G
25	BB	2456	C
25	BB	2458	G
25	BB	2460	U
25	BB	2472	G
25	BB	2474	U
25	BB	2479	U
25	BB	2481	G
25	BB	2485	G
25	BB	2488	G
25	BB	2489	U
25	BB	2491	U
25	BB	2492	U
25	BB	2495	G
25	BB	2496	C
25	BB	2497	A
25	BB	2498	C
25	BB	2502	G
25	BB	2506	U
25	BB	2509	G
25	BB	2521	C
25	BB	2529	G
25	BB	2530	A

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Mol	Chain	Res	Type
25	BB	2533	U
25	BB	2536	G
25	BB	2541	A
25	BB	2543	G
25	BB	2546	U
25	BB	2548	U
25	BB	2554	U
25	BB	2556	C
25	BB	2564	A
25	BB	2566	A
25	BB	2570	G
25	BB	2571	U
25	BB	2573	C
25	BB	2575	C
25	BB	2577	A
25	BB	2578	G
25	BB	2579	C
25	BB	2580	U
25	BB	2589	A
25	BB	2590	A
25	BB	2593	U
25	BB	2594	C
25	BB	2601	C
25	BB	2610	C
25	BB	2615	U
25	BB	2620	C
25	BB	2638	G
25	BB	2646	C
25	BB	2675	A
25	BB	2677	G
25	BB	2681	C
25	BB	2689	U
25	BB	2690	U
25	BB	2694	G
25	BB	2700	A
25	BB	2711	A
25	BB	2725	A
25	BB	2726	A
25	BB	2730	C
25	BB	2731	G
25	BB	2752	C
25	BB	2754	U

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Mol	Chain	Res	Type
25	BB	2756	U
25	BB	2758	A
25	BB	2760	C
25	BB	2766	A
25	BB	2776	A
25	BB	2819	G
25	BB	2823	A
25	BB	2827	C
25	BB	2849	U
25	BB	2858	C
25	BB	2870	C
25	BB	2872	A
25	BB	2875	C
25	BB	2880	C
25	BB	2889	C
25	BB	2890	G
25	BB	2891	U
25	BB	2894	G

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

There are no ligands in this entry.

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
25	BB	1
1	AP	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	BB	1959:G	O3'	1960:A	P	3.50
1	AP	74:C	O3'	75:C	P	1.08

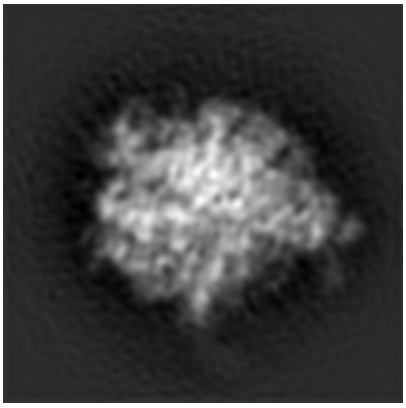
6 Map visualisation (i)

This section contains visualisations of the EMDB entry EMD-1055. These allow visual inspection of the internal detail of the map and identification of artifacts.

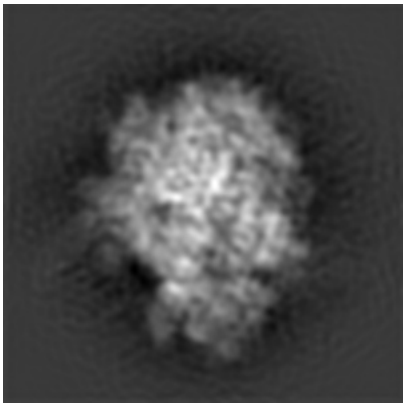
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections (i)

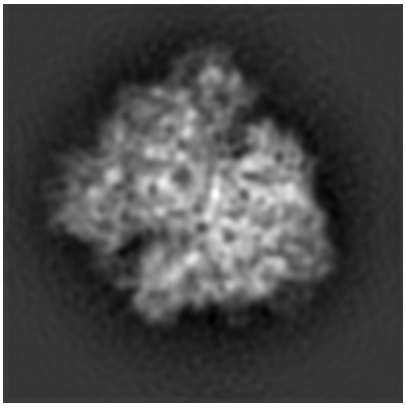
6.1.1 Primary map



X



Y

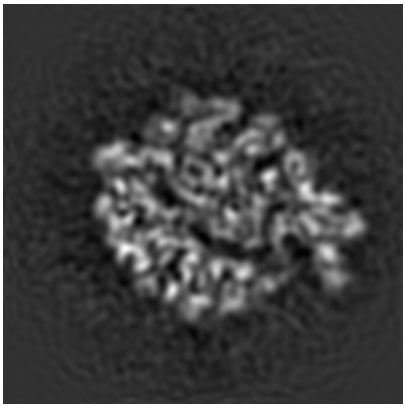


Z

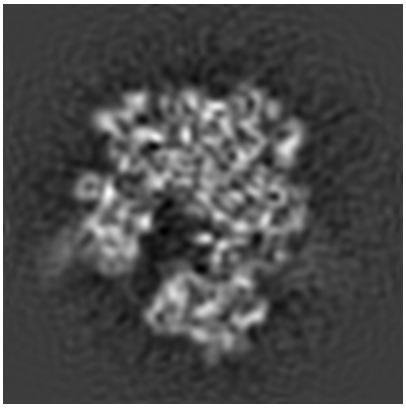
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

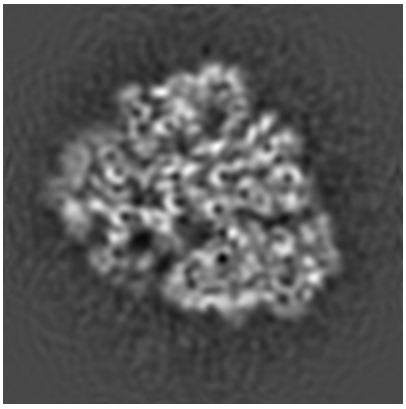
6.2.1 Primary map



X Index: 65



Y Index: 65

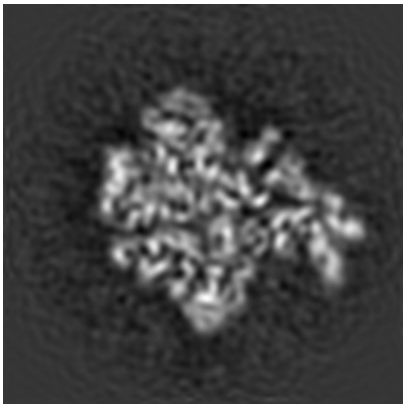


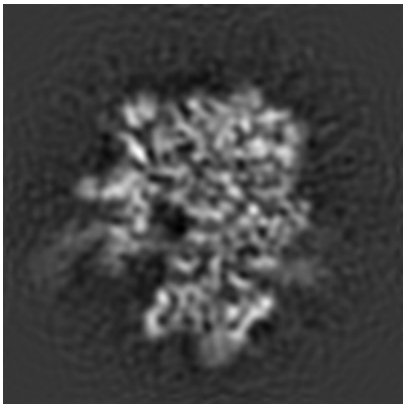
Z Index: 65

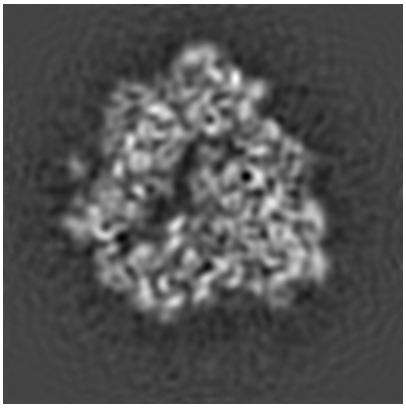
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

6.3.1 Primary map


X Index: 68

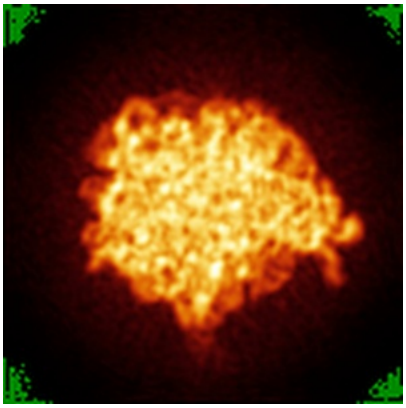

Y Index: 68

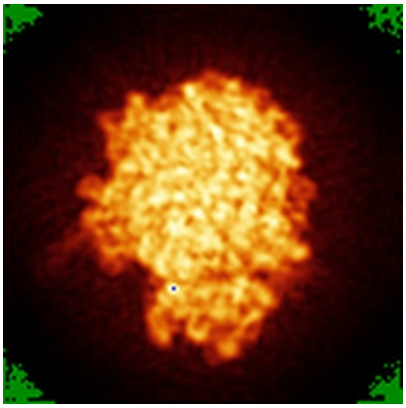

Z Index: 59

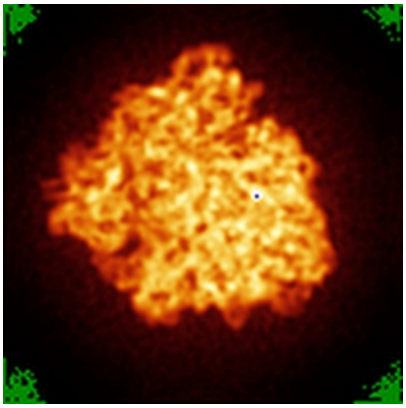
The images above show the largest variance slices of the map in three orthogonal directions.

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

6.4.1 Primary map


X

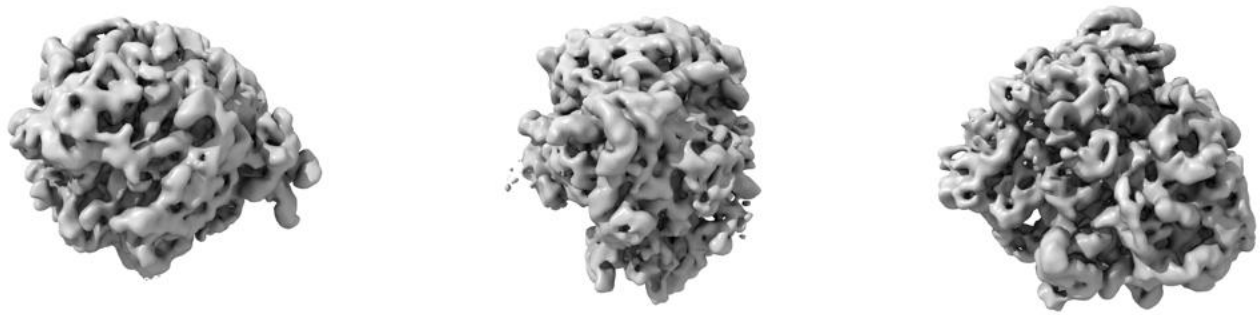

Y


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 57.2. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

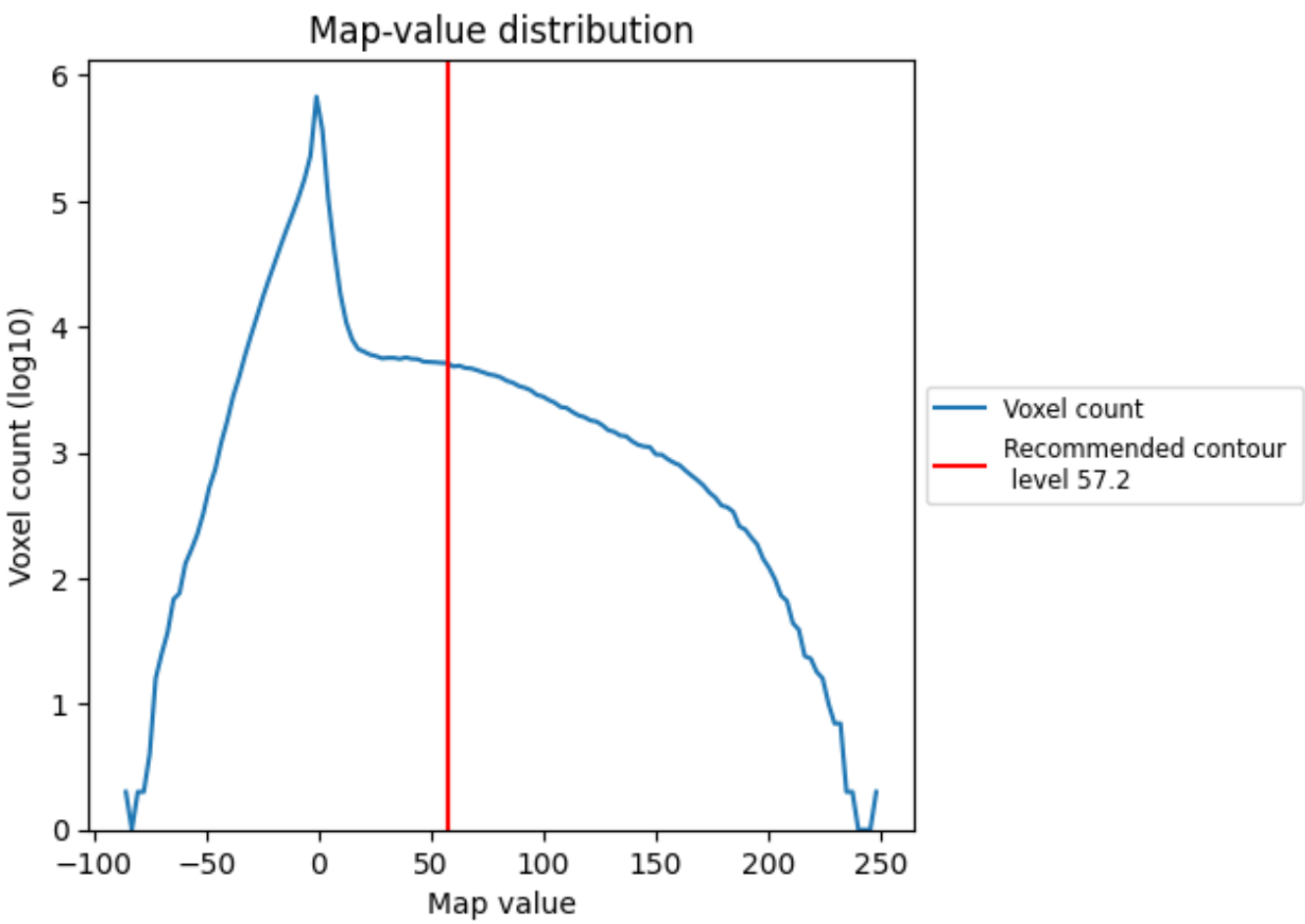
6.6 Mask visualisation (i)

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

7 Map analysis (i)

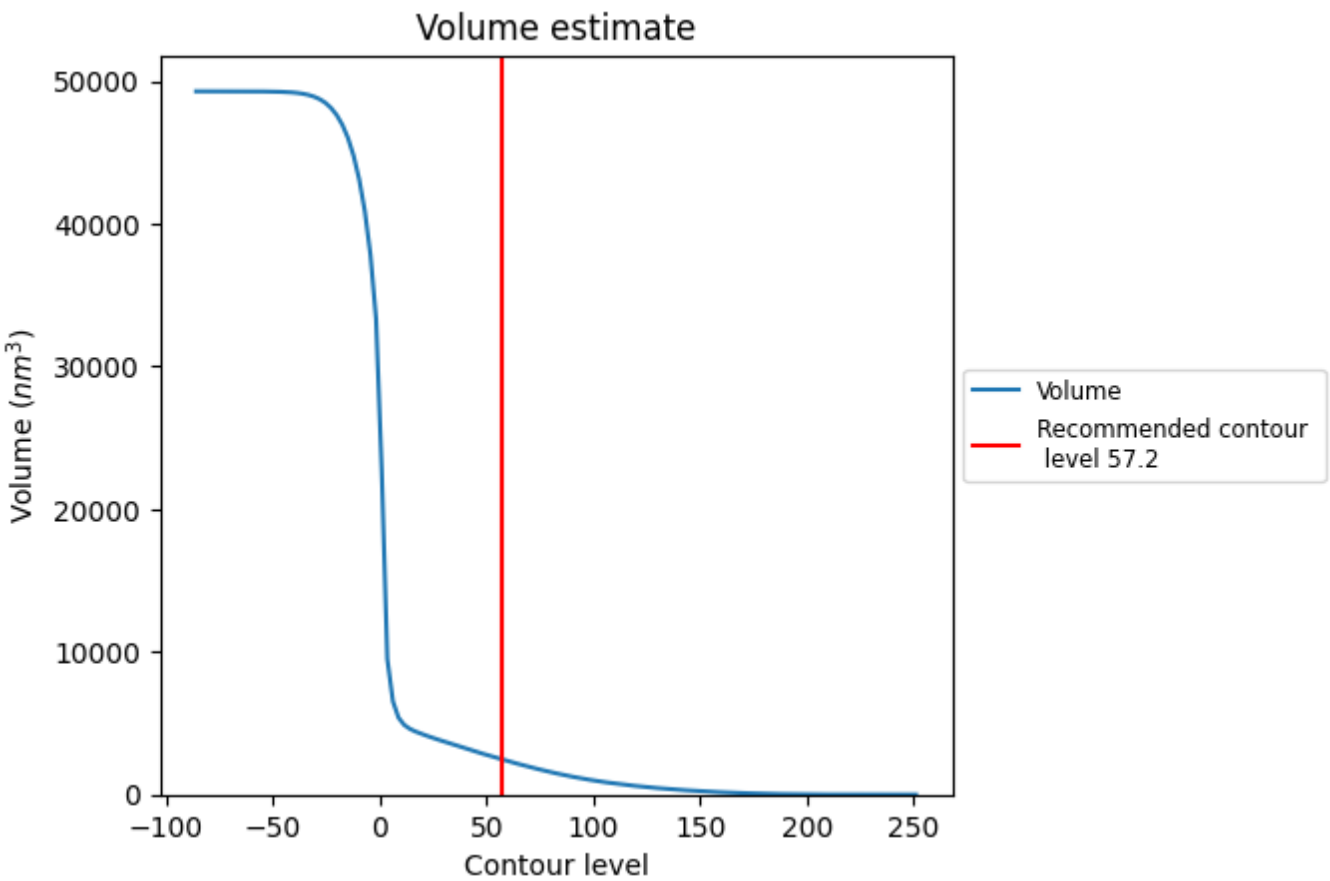
This section contains the results of statistical analysis of the map.

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.

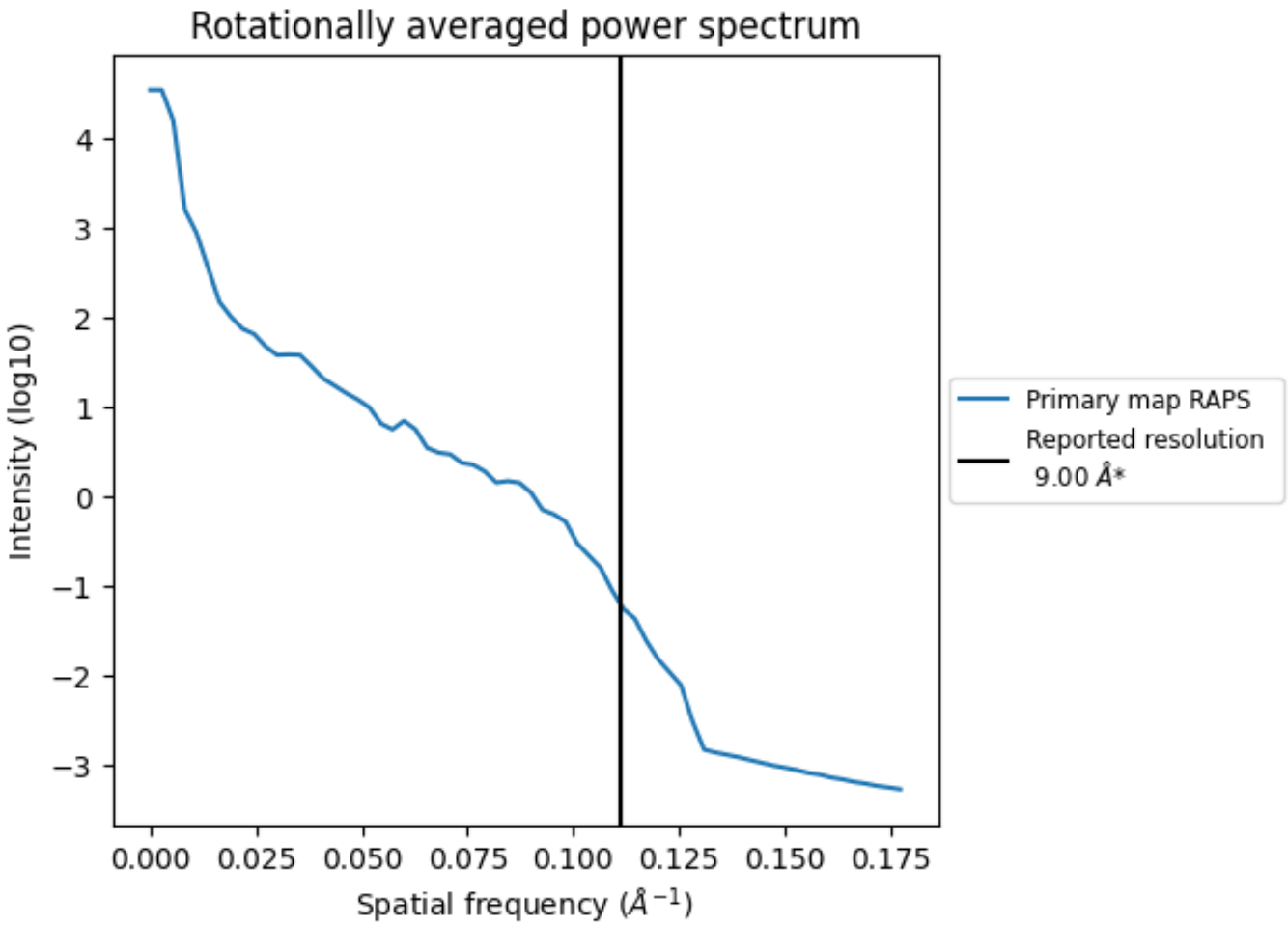
7.2 Volume estimate (i)



The volume at the recommended contour level is 2467 nm^3; this corresponds to an approximate mass of 2228 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 0.111 Å^{-1}

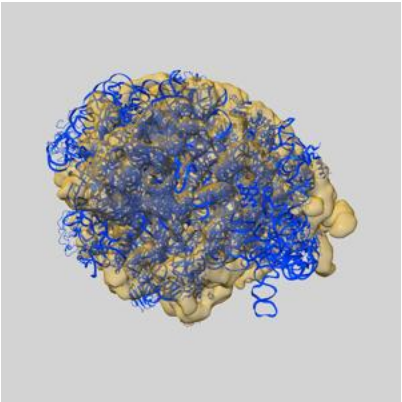
8 Fourier-Shell correlation (i)

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

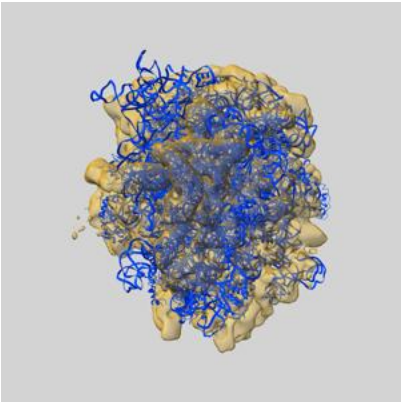
9 Map-model fit (i)

This section contains information regarding the fit between EMDB map EMD-1055 and PDB model 4V65. Per-residue inclusion information can be found in section 3 on page 14.

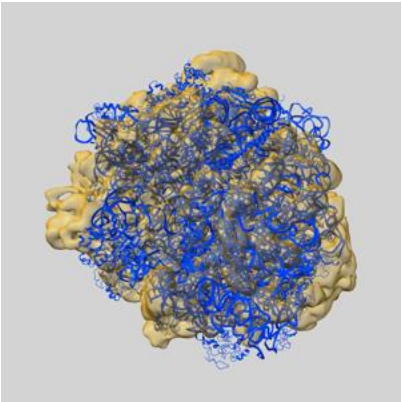
9.1 Map-model overlay (i)



X



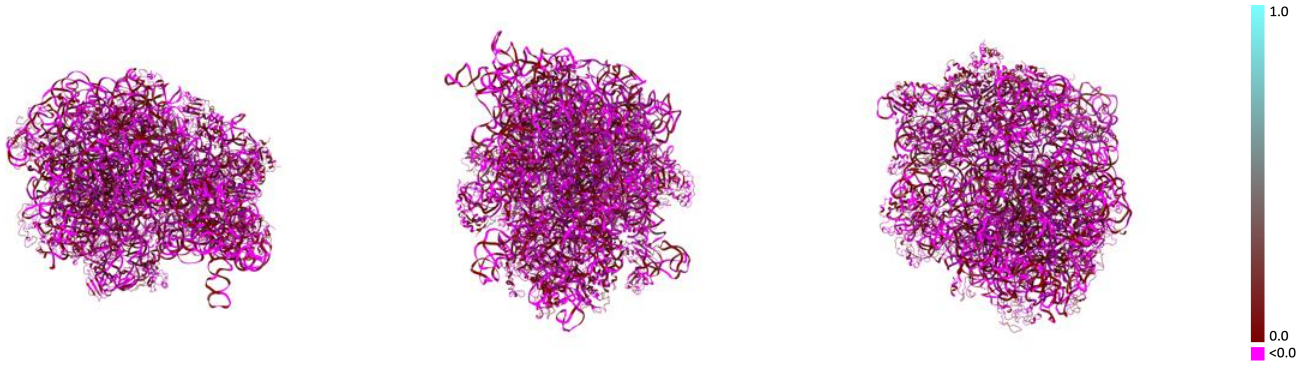
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 57.2 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.

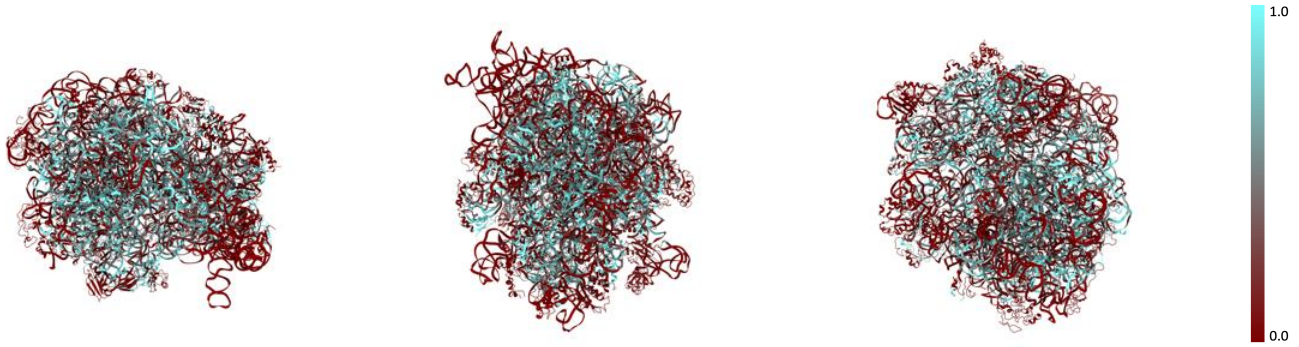
9.2 Q-score mapped to coordinate model (i)



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.

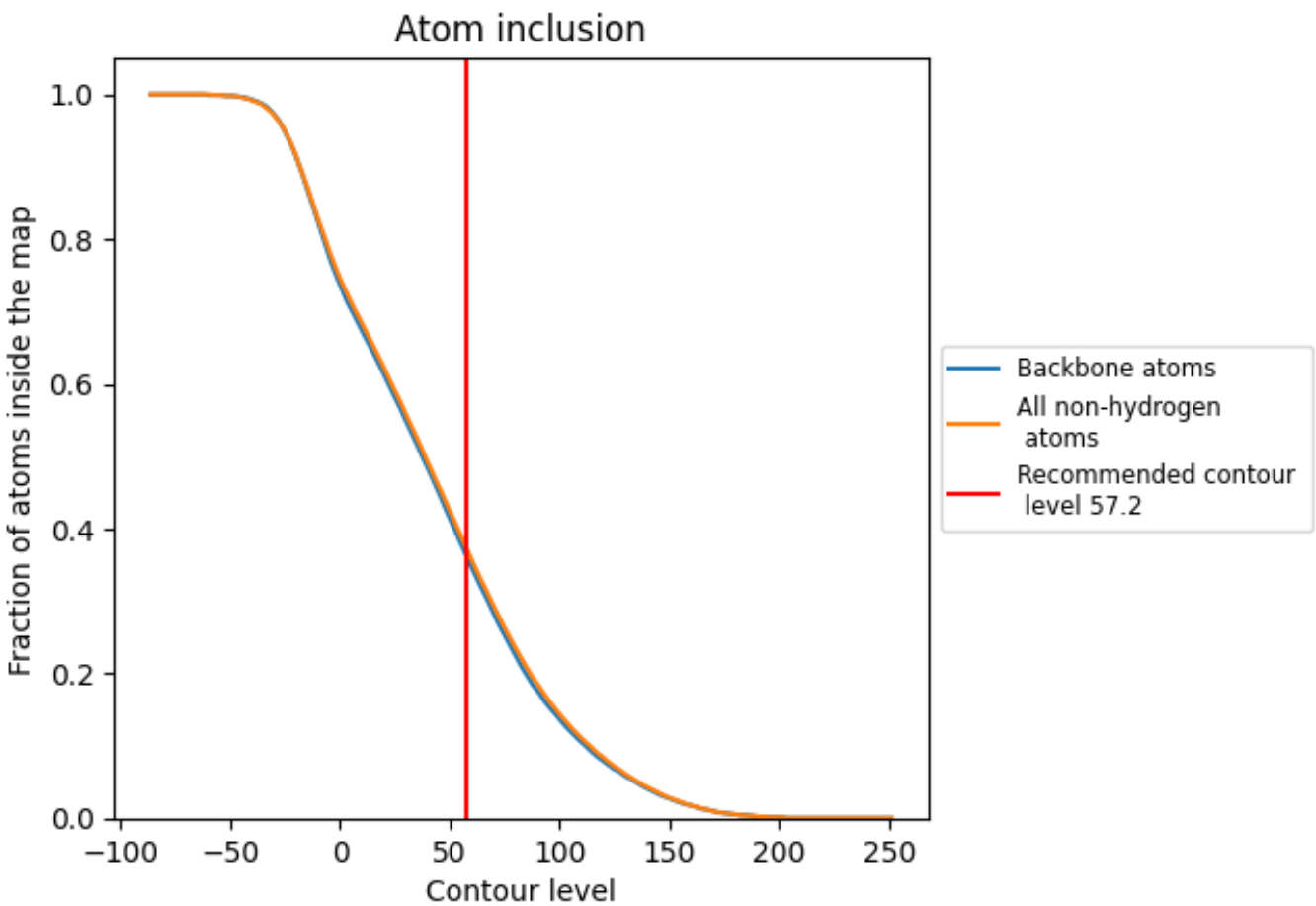
9.3 Atom inclusion mapped to coordinate model (i)



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 (57.2).

9.4 Atom inclusion (i)



At the recommended contour level, 37% of all backbone atoms, 38% 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 (57.2) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.3760	-0.0070
A1	0.3220	-0.0130
AA	0.3780	-0.0130
AB	0.2190	-0.0010
AC	0.4260	-0.0050
AD	0.2170	-0.0200
AE	0.4110	-0.0070
AF	0.4210	-0.0010
AG	0.0860	-0.0290
AH	0.1550	-0.0100
AI	0.0000	-0.0440
AJ	0.2480	-0.0170
AK	0.5960	0.0120
AL	0.0340	-0.0240
AM	0.6420	0.0200
AN	0.4280	0.0120
AO	0.6140	0.0210
AP	0.4060	-0.0080
AQ	0.3970	-0.0520
AR	0.3640	-0.0030
AS	0.5510	-0.0110
AT	0.2370	-0.0150
AU	0.5410	0.0030
AV	0.4380	0.0190
AW	0.1440	0.0260
AX	0.2300	0.0050
B1	0.2650	0.0020
B2	0.6520	0.0280
B3	0.1800	-0.0280
B4	0.0720	-0.0250
B5	0.4570	-0.0390
B6	0.5180	0.0080
BA	0.2920	-0.0240
BB	0.4270	-0.0050
BC	0.2500	-0.0150

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Continued from previous page...

Chain	Atom inclusion	Q-score
BD	0.4830	0.0040
BE	0.3080	-0.0030
BF	0.3510	-0.0060
BG	0.5990	-0.0100
BH	0.3760	-0.0030
BI	0.4390	-0.0430
BJ	0.1550	-0.0360
BK	0.0730	-0.0250
BL	0.5110	0.0130
BM	0.2860	-0.0330
BN	0.4240	-0.0100
BO	0.0000	-0.0070
BP	0.6370	0.0410
BQ	0.4540	0.0330
BR	0.4200	-0.0110
BS	0.3110	-0.0130
BT	0.4940	-0.0230
BU	0.1760	-0.0250
BV	0.5110	0.0300
BW	0.2590	-0.0140
BX	0.3060	-0.0010
BY	0.5940	0.0050
BZ	0.0400	0.0080