

Electronic Supporting Information

DFT study of the interaction free energy of π - π complexes of fullerenes with buckybowls and viologen dimers

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¹⁰

Tables 1 and 2

Figures of molecular orbitals of complexes of C₆₀ with viologen dimers.

Cartesian coordinates of all systems investigated

Table 1 Orbital energies, hartrees except where noted. M06-2X/6-31+G**

	HOMO-1	HOMO	LUMO	LUMO+1	$\Delta(H-L)$	$\Delta(H-L)$ in eV
C ₆₀ ^a	-0.27725	-0.27722	-0.11391	-0.11389	-0.16331	-4.44
C ₇₀	-0.27176	-0.26915	-0.11642	-0.11632	-0.15723	-4.28
1	-0.23462	-0.22666	-0.05121	-0.04508	-0.17545	-4.77
2	-0.24203	-0.23431	-0.06940	-0.06311	-0.16491	-4.49
C ₆₀ @ 1	-0.23927	-0.23099	-0.10328	-0.10206	-0.12893	-3.51
C ₆₀ @ 2	-0.24828	-0.24164	-0.10482	-0.10349	-0.13682	-3.72
C70@ 1 A	-0.23945	-0.23162	-0.10667	-0.10600	-0.12495	-3.40
C70@ 2 A	-0.25022	-0.24218	-0.10767	-0.10662	-0.13451	-3.66

^a 5 degenerate homo; 3 degenerate lumo.

5

Table 2 Orbital energies, hartrees except where noted. M06-2X/6-31+G**

	HOMO-1	HOMO	LUMO	LUMO+1	$\Delta(H-L)$	$\Delta(H-L)$ in eV
C ₆₀ ^a	-0.27725	-0.27722	-0.11391	-0.11389	-0.16331	-4.44
C ₆₀ ^a PCM (MeOH)	-0.27160	-0.27156	-0.10827	-0.10825	-0.16329	-4.44
1BP1 ²⁺	-0.62069	-0.61715	-0.34843	-0.285	-0.26872	-7.31
1BP1	-0.28540	-0.1621	0.01123	0.01789	-0.17333	-4.72
1BP1 ²⁺ PCM (MeOH)	-0.38407	-0.38151	-0.11288	-0.04970	-0.26863	-7.31
1BP1 PCM (MeOH)	-0.29552	-0.17224	0.00437	0.01051	-0.17661	-4.81
C ₆₀ @1BP1 ²⁺	-0.42509	-0.42487	-0.32101	-0.27152	-0.10386	-2.83
C ₆₀ @1BP1	-0.25731	-0.17516	-0.10021	-0.0992	-0.07596	-2.07
C ₆₀ @1BP1 ²⁺ PCM (MeOH)	-0.27819	-0.27738	-0.12202	-0.11658	-0.15536	-4.23
C ₆₀ @1BP1 PCM (MeOH)	-0.25781	-0.17022	-0.10167	-0.10040	-0.0686	-1.87
1BP6BP1 ⁴⁺	-0.68445	-0.68338	-0.42109	-0.42028	-0.26229	-7.14
1BP6BP1	-0.16418	-0.16320	0.00851	0.00951	-0.17171	-4.67
C ₆₀ @1BP6BP1 ⁴⁺	-0.53870	-0.53811	-0.41539	-0.4137	-0.12272	-3.34
C ₆₀ @1BP6BP1	-0.16761	-0.16492	-0.08944	-0.08827	-0.07548	-2.05
1BP7BP1 ⁴⁺	-0.67905	-0.67210	-0.41347	-0.41311	-0.25863	-7.04
1BP7BP1	-0.1619	-0.16135	0.00664	0.01239	-0.16799	-4.57
C ₆₀ @1BP7BP1 ^{4+b}	-0.52568	-0.52395	-0.41145	-0.40252	-0.1125	-3.06
C ₆₀ @1BP7BP1	-0.16763	-0.16446	-0.09063	-0.08929	-0.07383	-2.01
1BP8BP1 ⁴⁺	-0.66555	-0.65734	-0.40762	-0.40553	-0.24972	-6.80
1BP8BP1	-0.16231	-0.16196	0.00934	0.00953	-0.17149	-4.67
C ₆₀ @1BP8BP1 ⁴⁺	-0.5417	-0.54135	-0.41174	-0.40976	-0.12961	-3.53
C ₆₀ @1BP8BP1	-0.16781	-0.16396	-0.09016	-0.08936	-0.0738	-2.01
1BP9BP1 ⁴⁺	-0.6447	-0.63286	-0.40298	-0.40282	-0.22988	-6.26
1BP9BP1	-0.1616	-0.16121	0.00885	0.01112	-0.17006	-4.63
C ₆₀ @1BP9BP1 ⁴⁺	-0.54542	-0.54407	-0.41023	-0.41008	-0.13384	-3.64
C ₆₀ @1BP9BP1	-0.16784	-0.16329	-0.09063	-0.08923	-0.07266	-1.98

^a 5 degenerate homo; 3 degenerate lumo. ^bConvergence reached with *sleazy* option of Gaussian09.

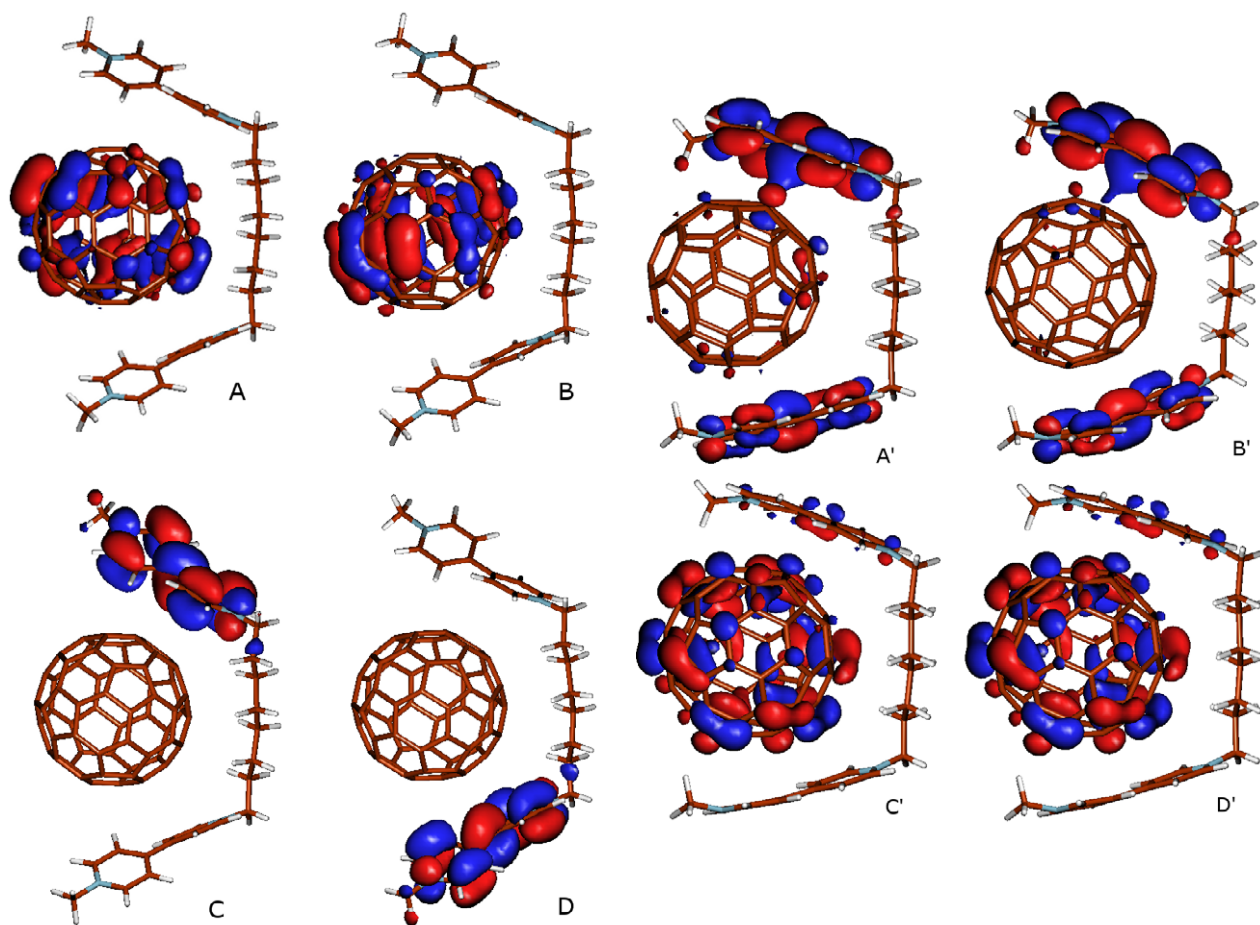


Fig. 1 (Left) Orbitals of the complexes of C_{60} with $1BP8BP1^{2+}$ (cationic form). A: HOMO-1; B: HOMO; C: LUMO; D: LUMO+1. (Right) Orbitals of the
 5 complexes of C_{60} with $1BP8BP1$ (neutral form). A: HOMO-1; B: HOMO; C: LUMO; D: LUMO+1.

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C60				C	-1.207582	-0.188367	-3.468459	C	-4.672185	-3.182620	2.193017
60				75 C	-1.207488	2.453327	-2.457652	C	-2.814734	0.190537	0.346854
C	1.549117	0.705595	-3.121730	C	-1.207717	3.240362	-1.251363	C	-1.419186	0.121588	0.170112
C	1.033177	-0.639225	-3.341537	C	-1.207449	3.096453	1.573712	150 C	-0.759430	-1.154559	0.157281
5 C	1.599526	-1.722549	-2.668419	C	-1.207428	2.191555	2.694778	C	-1.509814	-2.337223	0.314604
C	2.706939	-1.508388	-1.745316	C	-1.207538	-0.540255	3.431107	C	0.661486	-1.220902	-0.024084
C	3.200755	-0.220188	-1.534432	80 C	-1.207587	-1.886025	2.916742	C	1.427028	-0.017668	-0.197063
C	2.609614	0.910926	-2.237982	C	-1.207480	-3.430010	0.545963	C	0.766143	1.257338	-0.185927
C	3.545861	0.218098	-0.188085	C	-1.207359	-3.356128	-0.892665	155 C	-0.654813	1.322955	-0.002579
10 C	3.381206	-0.651689	0.891552	C	-2.445884	-2.726376	-1.308888	C	2.820867	-0.085102	-0.378818
C	2.865360	-1.996930	0.672154	C	-2.445821	-1.853251	-2.389697	C	3.493485	1.063494	-0.938075
C	2.535411	-2.415601	-0.617944	85 C	-2.445934	0.401935	-2.996911	C	2.836432	2.336523	-0.921563
C	3.165861	1.619337	-0.058960	C	-2.446213	1.699957	-2.501028	C	1.514271	2.440242	-0.349533
C	2.638914	2.091694	1.143918	C	-2.446331	2.975569	-0.544348	160 C	4.731197	0.950416	-1.621306
15 C	2.468061	1.183727	2.271294	C	-2.445768	2.904175	0.843468	C	5.322656	2.037857	-2.237919
C	2.830746	-0.158289	2.147251	C	-2.445957	1.436963	2.661484	C	4.678219	3.286693	-2.222639
C	1.510135	3.013157	1.132448	90 C	-2.446007	0.095163	3.023027	C	3.455295	3.423752	-1.590749
C	0.956808	3.425030	-0.081072	C	-2.445809	-2.087543	2.188665	C	-1.303084	2.573892	0.007630
C	1.506725	2.930442	-1.336765	C	-2.446237	-2.846681	1.024643	165 C	-0.504408	3.750865	0.239752
20 C	2.587702	2.047518	-1.326182	C	-3.227193	-2.417912	-0.123344	C	0.913714	3.686843	0.066948
C	0.641602	2.675700	2.252241	C	-3.227345	-0.629688	-2.336739	C	1.307567	-2.472047	-0.038879
C	1.233088	1.544952	2.955986	95 C	-3.227977	2.028567	-1.321274	C	2.734184	-2.503309	0.178168
C	0.413727	0.548476	3.488017	C	-3.226952	1.883272	1.520440	C	3.500397	-1.302448	0.007724
C	0.792293	-0.852270	3.359710	C	-3.226832	-0.864484	2.260982	170 C	-3.491702	1.406156	-0.041110
25 C	1.974466	-1.198240	2.703342	C	-3.972441	-1.237779	-0.062719	C	-2.727568	2.603267	-0.210356
C	1.995913	-2.334864	1.791952	C	-3.972092	-0.322497	-1.195596	C	1.703205	4.809193	0.422126
C	-0.744560	2.763094	2.111623	100 C	-3.972871	1.038133	-0.676091	C	1.121416	5.973859	0.908798
C	-1.599603	1.722685	2.668533	C	-3.972258	0.964017	0.778468	C	-0.278638	6.034739	1.087840
C	-1.033092	0.639131	3.341292	C	-3.972125	-0.442787	1.157539	175 C	-1.059075	4.945181	0.772567
30 C	-1.549046	-0.705552	3.121530	C	1.207286	-3.430050	0.546007	C	-0.910179	-3.582840	-0.102862
C	-0.420822	-1.627860	3.133356	C	2.446034	-2.846752	1.024736	C	0.508735	-3.647306	-0.273807
C	-0.400143	-2.716242	2.260053	105 C	3.227122	-2.418000	-0.123222	C	4.868966	-1.318324	0.339937
C	0.834475	-3.077659	1.575016	C	3.972392	-1.237890	-0.062547	C	5.499701	-2.469683	0.803308
C	1.322922	-3.191395	-0.844639	C	3.972060	-0.442939	1.157717	180 C	4.747491	-3.649145	0.986974
35 C	0.490408	-3.514931	0.228040	C	3.972293	0.963891	0.778651	C	3.395037	-3.644838	0.688951
C	-0.956681	-3.424564	0.081094	C	3.972954	1.038025	-0.675903	C	-3.391510	3.751921	-0.719595
C	-1.506673	-2.930100	1.336694	110 C	3.972106	-0.322583	-1.195419	C	-4.737771	3.748434	-1.007596
C	-2.588052	-2.047698	1.326381	C	3.226666	-0.864616	2.261102	C	-5.494951	2.569280	-0.825591
C	-2.609912	-0.910933	2.238149	C	3.226955	1.883122	1.520613	185 C	-4.870632	1.414515	-0.370447
40 C	0.744661	-2.763146	-2.111622	C	3.228120	2.028428	-1.321109	C	-1.699259	-4.705724	-0.459043
C	-0.641647	-2.675749	-2.252178	C	3.227496	-0.629768	-2.336632	C	-1.117057	-5.870207	-0.944698
C	-1.510345	-3.013521	-1.132625	115 C	2.445932	-1.853337	-2.389628	C	0.283448	-5.931406	-1.122205
C	-3.165910	-1.619342	0.059011	C	2.445861	-2.726439	-1.308813	C	1.063618	-4.842294	-0.805844
C	-2.639052	-2.091821	-1.143917	C	2.445565	-2.087640	2.188747	190 H	-2.122687	4.971789	1.007790
45 C	-2.467852	-1.183670	-2.271072	C	2.445831	0.095044	3.023125	H	-0.704380	6.937000	1.526325
C	-1.232994	-1.544933	-2.955762	C	2.445880	1.436840	2.661617	O	1.805610	7.101649	1.291682
C	-0.413701	-0.548582	-3.488016	120 C	2.445882	2.904095	0.843595	H	2.784691	4.713052	0.385239
C	0.420825	1.627760	-3.133267	C	2.446492	2.975527	-0.544221	H	-2.780820	-4.609604	-0.423721
C	-0.792240	0.852151	-3.359339	C	2.446311	1.699867	-2.500873	195 O	-1.800578	-6.998402	-1.328509
50 C	-1.974700	1.198336	-2.703630	C	2.446120	0.401882	-2.996847	H	0.709062	-6.833545	-1.561118
C	-2.831052	0.158292	-2.147546	C	1.207719	-1.579411	-3.093770	H	2.127515	-4.868346	-1.039895
C	-3.200694	0.220214	1.534410	125 C	1.207764	-0.188431	-3.468406	H	-2.802205	4.637540	-0.955375
C	-3.545615	-0.218066	0.188004	C	1.207714	2.453353	-2.457591	H	-5.237254	4.622176	-1.425777
C	-3.381204	0.651666	-0.891636	C	1.207957	3.240449	-1.251334	200 O	-6.820731	2.669794	-1.171511
55 C	-2.706808	1.508431	1.745277	C	0.000080	3.522868	-0.557710	H	-5.415729	0.475553	-0.337658
C	-2.865056	1.996760	-0.672104	C	0.000053	3.448358	0.912215	H	2.805399	-4.530397	0.925523
C	-2.535363	2.415626	0.617935	130 C	1.207504	3.096391	1.573787	H	5.200753	-4.545526	1.405848
C	-1.322874	3.191326	0.844611	C	1.207374	2.191508	2.694823	O	6.837818	-2.336040	1.093227
C	-0.490437	3.515174	-0.228097	C	-0.000057	1.619141	3.177874	205 H	5.458342	-0.404092	0.314598
60 C	-1.995935	2.334774	-1.791935	C	1.207292	-3.356161	-0.892615	H	-5.168221	0.142821	1.708914
C	-0.834435	3.077669	-1.575020	C	1.207314	-1.886083	2.916817	H	-6.247314	-1.805373	2.765344
C	0.400199	2.716257	-2.260046	135 C	1.207313	-0.540333	3.431176	H	-5.108682	-4.031281	2.722843
				C	-0.000097	0.197382	3.560947	H	-2.911978	-4.263890	1.632408
				C	0.000108	1.933533	-2.996757	210 H	5.186218	-0.034098	-1.722225
65 C70								H	6.263752	1.913053	-2.775963
70				BOWL1				H	5.115546	4.134753	-2.752731
C	0.000112	0.558710	-3.523298	140 88				H	2.913313	4.366017	-1.672073
C	-0.000141	-2.522267	2.521320	C	-3.452156	-3.320259	1.555112	215 C	7.472576	-3.516241	1.614004
70 C	-0.000119	-3.325206	1.287678	C	-2.833199	-2.233043	0.886307	H	8.519708	-3.226880	1.774123
C	-0.000017	-3.177818	-1.620417	C	-3.487956	-0.959308	0.906819	H	7.025028	-3.830213	2.575087
C	0.000032	-2.252998	-2.765897	145 C	-4.720572	-0.844613	1.599185	C	-3.228651	-6.925950	-1.173203
C	-1.207588	-1.579362	-3.093785	C	-5.312248	-1.931938	2.216837	H	-3.599578	-7.908127	-1.494238

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H	-3.512982	-6.744491	-0.119691	H	-0.877535	-5.443809	0.256652	H	-4.028983	-5.484296	0.607689
H	-3.667146	-6.136480	-1.810925	75 H	-0.884439	5.443772	0.254530	H	-5.570091	-6.374073	-1.126974
C	3.233747	7.029040	1.134768	H	-3.057378	5.859229	1.140999	O	-6.578445	-5.096849	-3.058118
C	3.604969	8.011113	1.455726	H	0.884319	-5.443527	0.254941	150 H	-5.734679	-2.494045	-2.963007
5 H	3.672800	6.239370	1.771767	H	3.057301	-5.858999	1.141314	H	0.185932	2.036502	4.870978
H	3.516840	6.847981	0.080916	H	-6.115194	1.225168	1.142984	O	1.469521	4.435503	4.618782
C	-7.583448	1.460984	-1.008832	80 H	-6.113731	-1.231883	1.143208	H	0.380204	5.782434	2.780423
H	-8.609385	1.731171	-1.290373	H	6.115222	-1.225209	1.142756	H	-1.501674	5.070268	1.331899
H	-7.215869	0.656223	-1.671634	H	6.113763	1.231854	1.143012	155 H	-1.952282	-5.363101	0.140469
10 H	-7.563082	1.108125	0.039190	H	6.357547	-5.253803	2.376517	H	-0.131974	-6.528796	1.347179
				H	4.606327	-5.414336	2.763739	O	1.073058	-5.730442	3.417073
BOWL2				85 H	5.288652	-6.214275	1.294776	H	0.004630	-3.340087	4.223879
80				H	6.351599	5.260493	2.377266	H	-3.583200	5.248989	1.828932
				H	5.280991	6.219669	1.296009	160 H	-5.021077	6.627020	0.406787
15 C	1.627967	-4.665630	0.112236	H	4.600357	5.418843	2.765281	O	-6.161749	5.724649	-1.943605
C	1.314593	-3.448564	-0.570884	H	-6.357842	5.254415	2.375780	H	-5.498136	3.340606	-2.317919
C	2.456169	-2.634843	-0.747839	90 H	-4.606728	5.415210	2.763352	H	-1.952817	-3.190584	5.495408
C	3.742823	-2.782444	-0.123526	H	-5.288713	6.214416	1.293829	H	-1.412068	-2.225701	7.747648
C	3.962694	-3.958294	0.582600	H	-6.351269	-5.260646	2.377557	165 H	-1.332039	0.255586	8.039894
20 C	2.894867	-4.909464	0.634311	H	-5.280990	-6.219899	1.296057	H	-1.574128	1.734088	6.074474
C	2.390899	-1.355433	-1.333116	H	-4.599920	-5.419035	2.765104	H	-3.709180	2.887468	-3.347463
C	1.192012	-0.729516	-1.600219	95				H	-3.670361	1.897780	5.599478
C	0.000855	-1.506834	-1.445439	C60@BOWL1				H	-3.743537	-0.588167	-5.870536
C	0.001687	-2.870615	-0.935348	148				170 H	-3.868368	-2.035929	-3.878346
25 C	1.191182	0.730927	-1.600157	C	-1.521984	0.653386	5.936988	C	-6.513031	7.062671	-1.548744
C	-0.000876	1.506846	-1.445405	100 C	-1.658411	0.128649	4.628551	H	-7.197347	7.417133	-2.330568
C	-1.192036	0.729528	-1.600143	C	-1.702406	-1.290564	4.460925	H	-7.028750	7.076117	-0.570945
C	-1.191206	-0.730911	-1.600110	C	-1.609144	-2.112461	5.611040	H	-5.626609	7.721325	-1.505694
C	3.598265	-0.681521	-1.052634	C	-1.454679	-1.570518	6.876183	175 C	2.014058	3.526527	5.594260
30 C	3.597465	0.685672	-1.052523	C	-1.410087	-0.175385	7.040393	H	2.873427	4.056375	6.025616
C	2.389344	1.358210	-1.332972	105 C	-1.948434	-1.834133	3.145244	H	1.278314	3.297632	6.387534
C	4.451118	1.466378	-0.237017	C	-2.536784	-0.997973	2.177683	H	2.352095	2.585395	5.123257
C	5.418084	0.724011	0.470927	C	-2.479963	0.430244	2.341275	C	-7.089998	-4.233806	-4.090106
C	5.418948	-0.718056	0.470773	C	-1.855002	0.978570	3.476661	180 H	-7.744658	-4.873346	-4.695951
35 C	4.452871	-1.461407	-0.237342	C	-2.943711	1.285611	1.289481	H	-7.675545	-3.397905	-2.665675
C	2.453063	2.637585	-0.747392	110 C	-3.486338	0.725483	0.083694	H	-6.275530	-3.828234	-4.719376
C	3.739489	2.786514	-0.122912	C	-3.555077	-0.699199	-0.072010	C	1.729742	-5.090634	4.526882
C	1.310496	3.449882	-0.570269	C	-3.075358	-1.556015	0.974622	H	2.547595	-5.769744	4.801583
C	1.622222	4.666864	0.113732	C	-3.880755	1.570526	-0.971627	185 H	2.141092	-4.107156	4.234156
40 C	2.888789	4.912061	0.635982	C	-3.968929	1.010012	-2.297956	H	1.045328	-4.963763	5.386251
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C	-2.390909	1.355429	-1.332954	C	-3.846210	1.812726	-3.462342	C	1.249295	2.953952	-2.443169
C	-2.456174	2.634846	-0.747711	C	-3.796570	1.254458	-4.726392	190 C	0.882963	3.053378	-1.098232
45 C	-1.314606	3.448600	-0.570859	C	-3.839565	-0.142724	-4.879113	C	1.888722	3.375958	-0.090121
C	-2.389351	-1.358191	-1.332850	120 C	-3.937721	-0.954095	-3.764090	C	3.216222	3.584577	-0.469537
C	-3.597455	-0.685668	-1.052328	C	-3.039831	-2.949388	0.769453	C	-0.036745	2.083105	-0.521524
C	-3.598257	0.681518	-1.052423	C	-3.882380	-3.504816	-0.260036	C	-0.551380	1.055218	-1.313246
C	-4.452858	1.461406	-0.237131	C	-4.379006	-2.652107	-1.292859	195 C	-0.172631	0.950951	-2.714557
50 C	-3.742824	2.782470	-0.123394	C	-2.800131	2.682358	1.408141	C	0.709836	1.881134	-3.269359
C	-3.962708	3.958394	0.582608	125 C	-3.579363	3.520556	0.531816	C	-0.649690	-0.295633	-0.775253
C	-2.894921	4.909622	0.634138	C	-4.133650	2.963099	-0.666773	C	-0.219857	-0.558539	0.521618
C	-1.628027	4.665773	0.112051	C	-1.550201	-3.160536	2.739955	C	0.312866	0.512426	1.347342
C	-2.453059	-2.637595	-0.747352	C	-2.115140	-3.724277	1.553874	200 C	0.403996	1.805264	0.839545
55 C	-1.310498	-3.449929	-0.570386	C	-5.292286	-3.174226	-2.240105	C	-0.344610	-1.235749	-1.842237
C	-5.418917	0.718034	0.470988	130 C	-5.690699	-4.506288	-2.193659	C	0.371911	-2.401461	-1.557095
C	-5.418049	-0.724039	0.471125	C	-5.203088	-5.349013	-1.169558	C	0.807799	-2.678065	-0.193642
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60 C	-3.957830	-3.962495	0.583630	C	-1.840108	3.187805	2.354895	C	2.509685	-3.395134	-1.657174
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C	-1.622245	-4.667045	0.113373	C	-5.296590	5.072090	-1.098798	C	3.089140	-2.985171	0.710464
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C	5.342614	5.332593	1.951401	C	-3.925266	4.847021	0.874664	210 C	4.840864	-2.862565	-1.029235
65 O	-5.174311	4.107348	1.203605	C	-1.591247	-4.960764	1.086508	C	3.837043	-3.185470	-2.036189
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H	0.877457	5.443519	0.257300	C	0.355472	3.979526	3.961253	C	5.430005	-0.324001	-3.487405
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H	-3.049949	-5.861751	1.143168					C	6.385245	0.486151	-1.357087

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	C	6.069488	1.423500	-0.287172		C	-3.489092	-1.060115	4.584011		C	2.586877	0.518934	2.033953
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	C	4.137608	-2.414130	-3.234933		C	2.988026	-2.751017	3.220051		C	-2.120903	-0.239325	-0.536802
	C	2.774406	-2.045262	1.782877		C	3.119853	-1.876960	4.287819	150	C	-2.877470	0.908380	-0.778488
5	C	3.962834	-1.243453	2.046145		C	1.989823	-1.706628	5.146188		C	-3.182102	1.816464	0.319026
	C	3.838513	0.112990	2.361363		C	0.740761	-2.241265	4.859691		C	3.432781	1.477219	1.474379
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	C	3.100177	-1.886745	-4.005154		H	3.340365	-1.887328	-5.470281		C	-0.845725	0.123146	-2.622263
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	C	0.964625	-0.892631	-3.907492		H	-3.642446	-0.453506	5.475484		C	-2.629164	1.704979	-1.973463
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	C	3.206909	-0.536830	-4.545093		H	2.090141	-1.095782	6.042378		C	-2.775520	3.110414	-1.612252
	C	4.347562	0.227598	-4.292667		O	4.299694	-1.193363	4.397418		C	-1.929430	4.070514	-2.172566
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20	C	1.588578	2.604498	1.108943		H	-6.136428	-0.197622	0.622849		C	-2.600555	4.203838	0.598802
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	C	4.009417	2.297312	1.485731		C	4.299532	-0.098013	5.338052		C	-0.940172	4.731479	2.188210
	C	4.217628	1.641269	-3.965785		H	5.266934	0.398344	5.189711	170	C	0.131401	4.213116	2.917515
25	C	4.916303	2.861334	-1.934237		H	3.476782	0.608452	5.121746		C	-2.119934	3.912056	1.943040
	C	5.219758	1.963293	-2.958714		H	4.226202	-0.456403	6.380074					
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						H	6.418290	-0.412666	-4.317940					
						H	5.563836	-1.495074	-5.471158					
						H	4.685300	-0.110860	-4.704867					
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						105	H	-5.167850	1.373231	-5.323583				
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						C	-1.388654	5.138954	-1.341920					
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						145	C	-2.180710	2.607663	2.438415				
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Supplementary Material (ESI) for New Journal of Chemistry
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C	0.258838	1.438312	5.618527	C	-3.243548	3.174256	0.330205	C	-2.030435	3.561360	-2.754455
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20 H	1.993437	6.451783	0.136065	C	-1.145093	-1.889245	-3.799681	O	-4.890914	-3.768233	-2.618583
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35 H	-1.783515	3.18250	5.143257	C	-5.482073	-1.469951	-2.479618	H	-1.428411	-1.002827	6.239388
C	6.928301	-1.234119	-6.076376	C	0.839813	-0.394252	-1.269600	H	1.927429	5.342656	-2.412454
H	7.527686	-1.418931	-6.977381	110 C	-2.144808	-0.855983	-3.999543	H	2.459047	5.668817	-0.032543
H	7.569440	-1.318026	-5.180341	C	-3.444794	-1.470906	-3.906198	H	-4.345168	-3.865194	2.639091
H	6.109532	-1.974663	-6.012702	C	-4.559312	-0.761685	-3.381538	185 H	-4.950199	-4.135988	0.267423
40 C	-1.642079	6.532966	-1.751194	C	-2.721437	-2.013770	3.031967	H	-1.986794	-4.519570	5.766971
H	-2.510856	7.085517	-2.131847	115 C70@BOWL2_A				H	-0.879047	-3.130256	5.472073
H	-1.972131	5.756575	-1.035304	150				H	-2.043467	-3.092132	6.858887
H	-0.949005	7.230362	-1.245441	C	-1.930604	0.686357	5.047297	H	-4.503101	-5.557203	-3.483434
C	-1.393461	-1.387758	2.940834	C	-2.673875	1.239701	3.954926	190 H	-5.158902	-4.342946	-4.635563
45 C	-1.933101	0.482541	-3.568871	120 C	-3.636712	0.339131	3.453953	H	-3.439737	-4.231662	-4.082133
C	-0.706829	0.791454	-2.818345	C	-3.750466	-1.062041	3.763391	H	2.453896	3.873208	-6.160014
C	0.560218	0.521085	-0.224829	C	-2.907891	-1.567046	4.744822	H	1.558520	2.333018	-5.898173
C	0.407351	0.008581	1.140101	C	-2.052337	-0.645823	5.421482	195 H	0.836555	3.644203	-6.912199
C	-0.420232	0.720321	2.043910	C	-4.381600	0.599149	2.281276	H	4.583984	5.114844	3.384952
50 C	-1.313708	0.031510	2.935891	125 C	-4.083916	1.654603	1.437316	H	3.467950	5.240034	4.789740
C	-3.865553	-1.173452	3.111814	C	-3.113950	2.603754	1.901671	H	3.697447	3.652288	3.948988
C	-5.065327	-1.475747	2.373611	C	-2.397158	2.456841	3.166604	C	2.202217	-0.343245	-3.648974
C	-6.327651	-1.227714	-0.146528	C	-4.423459	1.489715	0.019495	200 C	2.607564	-3.847963	2.148311
C	-6.170752	-0.721210	-1.486266	C	-3.803846	2.253883	-1.025407	C	3.147237	-4.420042	0.903814
55 C	-4.397643	0.641280	-3.220579	130 C	-3.029571	3.352693	-0.530681	C	3.531494	-3.934163	-1.941857
C	-3.098217	1.257344	-3.312279	C	-2.704849	3.527910	0.885726	C	3.307750	-2.963376	-3.025673
C	-0.746294	1.849905	-1.868967	C	-4.953257	-0.622019	1.856393	C	1.994099	-2.826479	-3.551487
C	-0.116412	1.711737	-0.585847	C	-5.278774	-0.772773	0.337715	C	1.446597	-1.530052	-3.860934
C	-0.878936	2.471971	0.383459	C	-5.009577	0.293481	-0.348111	205 C	0.145200	0.725330	-2.755993
60 C	-1.030847	1.983001	1.675600	135 C	-5.255399	-2.023039	-0.127627	C	-0.381409	1.726635	-1.540194
C	-2.489384	0.862546	3.117688	C	-5.013162	-3.135522	0.701201	C	-0.746942	0.806384	1.217871
C	-3.744919	0.268903	3.201199	C	-4.658177	-2.977473	2.085881	C	-0.530912	-0.142698	2.276418
C	-5.690828	-0.221035	2.001839	C	-4.547473	-1.704227	2.676150	C	0.530635	-2.684032	2.897479
C	-6.311216	-0.098521	0.763142	C	-4.880430	-0.247544	-1.645540	210 C	1.197798	-3.831130	2.332147
65 C	-6.053756	0.722988	-1.406915	140 C	-5.082173	-1.668575	-1.569594	C	2.235518	-4.929984	-0.059744
C	-5.182702	1.391534	-2.259452	C	-4.308641	0.470854	-2.714725	C	2.425845	-4.690761	-1.467725
C	-3.076347	2.393415	-2.410008	C	-4.216609	-0.320071	-3.907067	C	1.117517	-4.595886	-2.086859
C	-1.917741	2.686450	-1.700708	C	-4.466265	-1.686358	-3.901093	C	0.905645	-3.677976	-3.110928
C	-2.000157	3.090507	-0.303184	C	-4.821754	-2.407578	-2.717742	215 C	0.016843	-1.576649	-3.615657
70 C	-2.314233	2.086397	2.347629	145 C	-3.711010	1.784598	-2.405763	C	-0.618125	-0.469144	-3.065558
C	-4.881596	0.868195	2.522013	C	-2.248124	4.034535	-1.443391	C	-1.461392	0.433727	-1.090867
C	-6.153038	1.118663	-0.013090					C	-1.649922	0.202567	0.261825
C	-4.372323	2.489774	-1.758789					C	-1.301710	-1.332568	1.983103

	C	-0.784703	-2.586581	2.290713		C	-3.500386	-0.916612	-4.251997		C	3.106920	-0.212414	-4.210251
	C	0.299387	-4.441530	1.371150	75	C	-3.700620	-2.957916	0.325551		C	3.778207	-2.637017	-2.914614
	C	0.809526	-4.984120	0.196225		C	-4.321704	-3.496502	-0.859459		C	4.252823	-3.205351	-1.679012
	C	0.107807	-4.789958	-1.060723		C	-4.550529	-2.638603	-1.977822	150	C	5.091325	-2.586095	0.950945
5	C	-0.329780	-2.913117	-3.159566		C	-3.676790	2.677157	1.044392		C	3.509308	-1.508941	1.882871
	C	-1.629211	-0.647656	-2.041281		C	-4.296559	3.502776	0.035434		C	5.159841	1.295708	2.214959
	C	-2.016669	-1.120601	0.735884	80	C	-4.540255	2.952679	-1.264829		C	4.816755	2.530493	1.554917
	C	-0.938866	-3.681175	1.347769		C	-2.561149	-3.187154	2.516054		C	3.881509	3.645187	-0.872566
	C	-1.076018	-4.045615	-1.092273		C	-2.943754	-3.749096	1.257489	155	C	3.453987	3.331168	-2.211601
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	C	-1.971045	-1.925771	-1.597493		C	-5.644978	-4.468963	-3.166975		C	4.373238	1.713514	-3.815770
	C	-2.160001	-2.168460	-0.173610	85	C	-5.438752	-5.312846	-2.051802		C	4.498992	-0.602838	-4.088838
	C	-1.611464	-3.479475	0.138005		C	-4.801555	-4.829683	-0.930140		C	4.828880	-1.793823	-3.452639
	C	4.378564	-3.918023	0.403914		C	-2.523255	2.332584	3.211923	160	C	5.598702	-2.715071	-1.449589
15	C	5.149173	-2.929977	1.135039		C	-2.902541	3.198760	2.136887		C	6.010025	-2.411112	-0.157504
	C	5.834024	-2.078708	0.177899		C	-5.208226	3.737447	-2.221424		C	6.363513	-0.665288	1.352926
	C	5.973962	-0.710651	0.429417	90	C	-5.629889	5.035405	-1.936031		C	6.289943	0.713719	1.515317
	C	5.438246	-0.143199	1.659042		C	-5.412195	5.572838	-0.649460		C	5.734423	2.715074	0.446973
20	C	4.886321	1.168621	1.347276		C	-4.764318	4.807303	0.306170	165	C	5.274181	3.261286	-0.745495
	C	5.080427	1.410762	-0.075823		C	-2.384651	-5.004150	0.887256		C	5.721725	2.717373	-2.015666
	C	5.751528	0.248846	-0.643452		C	-1.491699	-5.669252	1.693577		C	5.294218	0.590709	-3.857434
	C	4.788480	-0.968786	2.580595	95	C	-1.084589	-5.094607	2.919492		C	5.970172	-1.487702	-2.554788
	C	3.710515	1.595606	1.971353		C	-1.622221	-3.877744	3.323055		C	6.813171	-1.227130	0.090868
	C	4.087354	2.067186	-0.808232		C	-1.569085	2.782647	4.158322	170	C	6.660823	1.596260	0.422752
25	C	5.398218	-2.016332	-1.917857		C	-1.014037	4.054101	4.071829		C	6.606020	1.635879	-2.045587
	C	5.245540	-1.624472	-2.169622		C	-1.425800	3.929512	3.039782		C	6.388251	0.547287	-2.988423
	C	5.457656	-2.541666	-1.146633	100	C	-2.330657	4.501679	2.096762		C	6.732490	-0.700347	-2.320231
	C	4.638431	-2.388528	2.309621		H	-4.721981	-5.465471	-0.047542		C	7.164941	-0.382818	-0.965966
30	C	3.560976	-0.525721	3.218846		H	-5.835259	-6.326973	-2.093975	175	C	7.087053	1.061592	-0.796265
	C	3.033381	0.726514	2.922920		O	-6.310391	-4.567635	-4.218287		C	1.603689	3.324298	-0.094571
	C	2.677449	2.268960	1.202089		H	-5.456364	-2.457529	-3.925568		C	0.663167	2.831247	0.828944
	C	2.862140	2.498128	-0.156795	105	H	-1.199586	2.071889	4.892628		C	-0.360649	2.145457	0.057462
	C	3.718091	1.588640	-2.130789		O	-0.024274	4.540448	4.886193		C	-0.865365	0.926384	0.506056
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35	C	4.138151	-1.812292	-3.086579		H	-2.542976	5.144518	1.243289		C	-0.318324	-1.086854	1.589538
	C	3.589230	-0.515472	-3.393137		H	-2.596539	-5.404052	-0.103938		C	-0.745030	-1.404355	0.232582
	C	2.285777	1.748194	-2.297467	110	H	-1.023986	-6.603131	1.381493		C	-1.081839	-0.158508	-0.434321
	C	1.757915	2.303277	-1.077714		O	-0.114414	-5.791150	3.593262		C	0.581778	1.023170	2.501847
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40	C	0.264518	1.719573	0.819461		H	-4.671117	5.198565	1.320037		C	-0.112585	-2.423671	-0.478514
	C	1.383716	1.828438	1.687083		H	-5.781971	6.561378	-0.384352		C	-0.790279	0.017639	-1.787759
	C	1.601863	0.880005	2.748275	115	O	-6.281341	5.684534	-2.956598		C	-0.241741	1.279663	-2.249697
	C	0.707856	-0.203146	2.964190		H	-5.477380	3.321243	-3.191477		C	-0.032042	1.381847	-1.347213
	C	4.568294	-3.678049	-1.004292		H	-3.128073	-3.213683	5.209825	190	C	1.122521	2.285082	2.023850
45	C	3.341226	-2.817080	2.795265		H	-3.158425	-2.257157	7.483557		C	1.679066	0.278844	3.090541
	C	2.676159	-1.668189	3.357021		H	-3.145978	0.223879	7.793116		C	1.751535	-1.102811	2.930586
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	C	1.524080	0.832045	-3.075743		H	-3.453458	2.926653	-3.757438		C	0.987020	-3.155419	0.126939
50	C70@BOWL1_B					H	-2.784362	1.961146	-5.920689	195	C	0.217089	-2.228017	-1.879764
158						H	-2.745582	-0.520846	-6.222516		C	-0.114099	-1.037991	-2.519747
						H	-3.401498	-1.997457	-4.357798		C	0.750308	1.002581	-3.271104
					125	C	-6.748890	7.008671	-2.643688		C	0.827949	-4.028085	-3.439323
	C	-3.017134	0.628255	5.686960		H	-7.228682	7.363052	-3.565463		C	1.501458	-2.849564	-2.136146
	C	-2.947503	0.108095	4.370812		H	-7.490049	6.995496	-1.823390	200	C	1.976247	-3.419776	-0.899576
55	C	-2.955462	-1.310745	4.192899		H	-5.914507	7.683588	-2.377864		C	3.364984	-3.474471	-0.602228
	C	-3.032163	-2.135418	5.342684		C	5.030910	3.581242	5.806819		C	3.801705	-3.153287	0.766634
	C	-3.074525	-1.597781	6.617926	130	H	1.326524	4.123059	6.333931		C	2.814898	-2.804827	1.729279
	C	-3.067034	-0.203552	6.792228		H	-0.224245	3.229076	6.533146		C	3.032598	-1.726270	2.661304
	C	-2.997019	-1.852032	2.852773		H	0.958455	2.714988	5.267996	205	C	4.239519	-0.973447	2.649855
60	C	-3.428939	-1.010020	1.806927		C	-6.552881	-4.177320	-5.339024		C	1.175666	3.116204	-1.435644
	C	-3.427785	0.416894	1.988067		H	-7.059637	-4.807057	-6.081810		C	2.539064	2.318472	2.331448
	C	-2.983994	0.965581	3.208842	135	H	-7.206691	-3.331060	-5.060732		C	2.882056	1.081771	2.990886
	C	-3.752003	1.278276	0.890860		H	-5.608234	-3.787274	-5.760088		C	4.161843	0.486610	2.822279
	C	-4.024242	0.722838	-0.406179		C	0.433007	-5.113316	4.739976	210	C	2.404177	-2.323946	-3.099692
65	C	-4.025098	-0.698650	-0.585951		H	1.213620	-5.784578	5.120560					
	C	-3.757136	-1.563692	0.527627		H	0.877990	-4.141616	4.453553					
	C	-4.186787	1.571757	-1.515265	140	H	-0.332567	-4.951215	5.520508					
	C	-3.935187	1.030105	-2.827091		C	2.054970	-1.063295	-3.775761	150				
	C	-3.928363	-0.391557	-3.005065		C	3.470793	2.982771	1.488109	215	C	3.355259	-1.145069	-4.391771
70	C	-4.186727	-1.244253	-1.872281		C	2.983693	3.562626	0.225331		C	3.985629	-0.830443	-3.145438
	C	-3.528232	1.850151	-3.911066		C	2.118276	2.927010	-2.482075		C	4.187750	-1.974967	-2.346853
	C	-3.128861	1.306769	-5.118351	145	C	1.897726	1.826675	-3.436872		C	3.634617	-3.285866	-2.561367
	C	-3.110155	-0.089397	-5.288945		C	3.029576	1.216423	-4.041965		C	2.943189	-3.499770	-3.745011

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C	2.879407	-2.418702	-4.676555	H	0.894914	5.208958	-5.866730	
C	4.641137	-1.892796	-1.010340	75 H	-0.214830	4.059229	-5.017592	1BP14+
C	4.745393	-0.690777	-0.332784	C	-2.710380	-0.716763	-3.709166	28
C	4.567354	0.509208	-1.100672	C	-2.282434	-1.913148	2.955129	150 C
5 C	4.206598	0.489096	-2.517820	C	-2.439717	-3.036920	2.015505	C
C	4.602806	-0.731314	1.127306	C	-2.711049	-3.735149	-0.798624	C
C	4.260855	0.423270	1.910364	80 C	-2.775958	-3.183634	-2.162130	C
C	4.324559	1.652785	1.170347	C	-3.975777	-2.544587	-2.579103	C
C	4.473436	1.692698	-0.290007	C	-3.942207	-1.323557	-3.343602	155 C
10 C	4.363496	-3.131597	-0.389726	C	-3.715875	1.489855	-3.162037	H
C	4.226262	-3.170202	0.968232	C	-3.560408	2.589239	-2.243351	H
C	4.371697	-1.970299	1.701176	85 C	-3.296841	3.270857	0.490709	C
C	3.375967	-4.090467	1.628949	C	-3.233572	2.729755	1.825232	H
C	2.805307	-5.078505	0.804065	C	-3.297791	0.333895	3.332644	160 H
15 C	2.956184	-5.042203	-0.624883	C	-3.413669	-1.099800	3.239113	C
C	3.676065	-4.012928	-1.260034	C	-3.716890	-3.257124	1.432391	C
C	3.666243	-2.123611	2.913339	90 C	-3.851334	-3.603571	0.040485	C
C	3.069419	-3.434129	2.932425	C	-5.091542	-3.029820	-0.444960	N
C	3.326472	-1.030036	3.733055	C	-5.152569	-2.509130	-1.732408	165 C
20 C	2.527389	-1.425930	4.856078	C	-5.099782	-0.531866	-2.975494	C
C	1.970459	-2.693835	4.944806	C	-4.987603	0.851132	-2.884287	H
C	2.153246	-3.694846	3.941390	95 C	-4.736819	2.634209	-1.396211	H
C	3.618007	0.321282	3.217902	C	-4.606823	2.966595	-0.052980	C
C	3.799496	2.780518	1.781349	C	-4.504878	2.091180	2.109017	170 H
25 C	3.062946	2.712210	2.986345	C	-4.536582	0.915479	2.850573	H
C	2.976704	1.536107	3.755937	C	-4.723727	-1.407983	2.698733	H
C	4.070850	2.851517	-0.929627	100 C	-4.872505	-2.467654	1.811699	H
C	3.502290	3.967754	-0.276676	C	-5.739772	-2.333198	0.653270	H
C	3.359340	3.928446	1.080667	C	-5.863984	-1.266768	-1.982143	175 H
30 C	2.299804	4.582620	1.756131	C	-5.634825	1.564118	-1.796302	H
C	2.159475	3.832577	3.034296	C	-5.369711	2.246420	0.952231	H
C	1.193979	3.839025	4.033129	105 C	-5.432680	-0.161607	2.467112	C
C	1.209889	2.764237	4.970161	C	-6.417656	-1.133442	0.420799	180 1BP1
C	2.043492	1.661575	4.836411	C	-6.480623	-0.587531	-0.927796	28
35 C	3.622181	2.866214	-2.268232	C	-6.363759	0.861096	-0.833091	C
C	3.731746	1.749301	-3.118349	C	-6.227760	1.210415	0.574630	C
C	1.488706	5.407666	0.955872	110 C	-6.259631	-0.022364	1.349962	C
C	1.647776	5.455921	-0.472213	C	-1.314294	-3.441417	1.246395	C
C	2.617675	4.676536	-1.127736	C	-0.007611	-2.442211	1.435251	185 N
40 C	2.766512	4.007860	-2.452415	C	0.677978	-2.820636	0.156131	C
C	2.066763	4.090877	-3.648048	C	1.482764	-1.733197	-0.192088	C
C	2.339530	3.101004	-4.642268	115 C	1.627477	-0.619835	0.733545	H
C	3.131561	1.986070	-4.398715	C	1.653170	0.613098	-0.040814	H
O	1.451613	-4.866453	3.873199	C	1.513753	0.261282	-1.441638	190 C
45 C	0.302037	-4.949022	4.743255	C	1.411105	-1.184562	-1.539245	H
O	0.264968	4.841955	4.002344	C	0.973642	-0.646741	1.964220	H
C	-0.809755	4.727226	4.959529	120 C	1.043561	1.766912	0.452877	C
O	1.141865	5.090420	-3.770234	C	0.776539	1.079668	-2.297044	C
C	0.308787	5.029968	-4.947887	C	0.553615	-1.753768	-2.483245	195 C
50 O	2.320947	-4.706708	-3.905869	C	-0.285191	-2.879896	-2.112260	N
C	1.424355	-4.799068	-5.033641	C	-0.224826	-3.399992	-0.822961	C
H	2.330678	-0.752122	5.682408	125 C	0.137407	-2.717358	3.219049	C
H	1.347643	-2.919264	5.809322	C	0.323350	0.548978	2.469319	H
H	1.893050	3.202889	-5.630167	C	0.357191	1.729527	1.733127	200 H
55 H	3.277398	1.305258	-5.229989	C	0.253359	2.599824	-0.432660	C
H	1.925626	0.885324	5.81492	C	0.127284	2.268961	-1.777251	H
H	0.506306	2.770939	5.800981	130 C	-0.122596	0.484843	-3.268164	H
H	3.192988	-0.394918	-5.155747	C	-0.234745	-0.900506	-3.356117	H
H	2.391093	-2.573237	-5.637222	C	-1.572377	-2.727312	-2.766476	205 H
60 H	0.632203	5.922603	1.396616	C	-1.540073	-1.504799	-3.518894	H
H	0.902311	6.002084	-1.054137	C	-1.312546	1.310650	-3.354831	H
H	2.376934	-5.752228	-1.218910	135 C	-1.158178	2.411426	-2.433183	H
H	2.118480	-5.814167	1.227161	C	-2.279136	2.972562	-1.761625	H
H	0.948706	-5.782569	-4.933526	C	-2.142624	3.326145	-0.337494	210
65 H	0.655595	-4.005508	-4.999054	C	-0.896231	3.088992	0.303287	1BP6BP14+
H	1.972288	-4.751285	-5.991227	C	-0.832130	2.550397	1.639097	66
H	-0.227958	-5.855646	4.423584	140 C	-2.014713	2.233351	2.361972	C
H	0.599115	-5.049685	5.802191	C	-1.448600	-3.786430	-0.147297	C
H	-0.352375	-4.067049	4.617514	C	-1.012138	-1.281893	3.050752	215 C
70 H	-1.475505	5.570045	4.735131	C	-0.895817	0.153061	3.145082	C
H	-1.357655	3.775526	4.834839	C	-2.047992	0.985950	3.147204	C
H	-0.438192	4.815664	5.995785	145 C	-2.592258	0.746990	-3.615347	N
H	-0.421916	5.838181	-4.816254					C

[illegible]

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	H	1.282599	-3.639286	0.852146		H	-0.842669	-0.457001	1.174857		C	-1.576624	1.173999	-0.063501
	H	1.258159	-3.617862	-0.920658	75	C	-3.196776	0.145477	-0.216806		H	-1.035221	-0.781507	-0.834539
	C	3.827129	-3.001408	-0.102227		H	-1.625507	1.642327	0.031101		H	-1.024980	-0.673291	0.934924
	H	2.560249	-1.434270	-0.897063		H	-1.591645	0.808600	-1.538436	150	C	-3.091964	0.920043	-0.039171
5	H	2.611660	-1.495244	0.873677		C	-4.198337	1.162003	-0.772938		H	-1.297144	1.830186	0.781809
	N	5.071561	-2.233295	-0.106176		H	-3.304308	-0.830777	-0.718656		H	-1.308229	1.718877	-0.988250
	H	3.861817	-3.687901	0.761109	80	H	-3.359940	0.001327	0.865406		C	-3.903532	2.227852	-0.142367
	H	3.808885	-3.618865	-1.016974		N	-5.661316	0.843948	-0.520081		H	-3.380494	0.259480	-0.876113
	C	5.572149	-1.731529	1.104451		H	-4.036350	2.152891	-0.323637	155	H	-3.376767	0.397428	0.891438
10	C	6.477083	-0.723754	1.154681		H	-4.103327	1.255302	-1.867134		N	-5.351723	2.014104	-0.142350
	C	6.958376	-0.040253	-0.036479		C	6.324127	-0.234828	1.466642		H	-3.664279	2.895347	0.703098
	C	6.343738	-0.531764	-1.260205	85	C	7.656753	0.114615	1.319877		H	-3.643545	2.762792	-1.072811
	C	5.444113	-1.545437	-1.271011		C	8.372328	-0.277300	0.174373		C	5.954094	-1.490858	1.296500
	H	5.210531	-2.248552	1.995532		C	7.673684	-0.998005	-0.811099	160	C	7.166048	-0.884965	1.275343
15	H	6.849451	-0.429645	2.135808		C	6.339322	-1.321896	-0.628790		C	7.918195	-0.678347	0.047095
	C	7.901756	0.976923	-0.007680		H	5.743068	0.022654	2.351801		C	7.215999	-1.152418	-1.135323
	H	6.612251	-0.086458	-2.218288	90	H	8.140060	0.656218	2.133297		C	6.001920	-1.751547	-1.074616
	H	4.987942	-1.922353	-2.188462		C	9.807459	0.034475	0.021672		H	5.388556	-1.652719	2.216441
	C	8.373614	1.669435	-1.197104		H	8.156399	-1.303099	-1.740425	165	H	7.580660	-0.553221	2.227211
20	C	9.289595	2.667146	-1.148843		H	5.765684	-1.888428	-1.363115		C	9.171291	-0.083670	0.006886
	N	9.819009	3.142861	0.059459		C	10.673908	-0.853113	-0.642668		H	7.669811	-1.032532	-2.118753
	C	9.445611	2.455434	1.223000	95	C	12.021140	-0.558068	-0.762065		H	5.471738	-2.108683	-0.959817
	C	8.530132	1.456159	1.213893		N	12.530793	0.598312	-0.247080		C	9.929109	0.113141	-1.219579
	H	7.981170	1.394342	-2.176051		C	11.714708	1.479335	0.395060	170	C	11.144905	0.711516	-1.239909
25	H	9.643164	3.190444	-2.039028		C	10.360936	1.215683	0.541916		N	11.744817	1.234319	-0.085310
	C	11.058215	3.909027	0.045160		H	10.319408	-1.802127	-1.045198		C	11.085062	0.994268	1.129126
	H	9.920620	2.814361	2.137687	100	H	12.731301	-1.222140	-1.256696		C	9.869153	0.398830	1.188266
	H	8.266811	1.006941	2.171514		C	13.991403	0.881239	-0.387359		H	9.519415	-0.226734	-2.170575
	C	-5.444076	-1.545383	1.271047		H	12.182212	2.387433	0.775973	175	H	11.718037	0.857039	-2.157338
30	C	-6.343696	-0.531706	1.260222		H	9.745035	1.963062	1.043131		C	13.177052	1.501394	-0.080504
	C	-6.958377	-0.040253	0.036495		C	-6.572173	1.853606	-0.644266		H	11.611746	1.356321	2.013854
	C	-6.477127	-0.723812	-1.154649	105	C	-7.925172	1.621887	-0.469903		H	9.410104	0.290264	2.170524
	C	-5.572194	-1.731587	-1.104403		C	-8.391117	0.328733	-0.169830		C	-6.002113	1.752541	1.073944
	H	-4.987876	-1.922258	2.188500		C	-7.432801	-0.690670	-0.046529	180	C	-7.216057	1.153184	1.135017
35	H	-6.612174	-0.086353	2.218293		C	-6.083827	-0.414143	-0.219690		C	-7.918212	0.678346	-0.047121
	C	-7.901755	0.976923	0.007679		H	-6.172625	2.837852	-0.892131		C	-7.166152	0.884465	-1.275505
	H	-6.849525	-0.429746	-2.135778	110	H	-8.613629	2.457089	-0.604067		C	-5.954314	1.490575	-1.297025
	H	-5.210606	-2.248654	-1.995471		C	-9.832384	0.058713	0.004254		H	-5.471987	2.110299	1.958945
	C	-8.530181	1.456093	-1.213895		H	-7.719282	-1.709971	0.214055	185	H	-7.669832	1.033771	2.118510
40	C	-9.445656	2.455371	-1.223020		H	-5.314909	-1.177678	-0.121977		C	-9.171184	0.083433	-0.006552
	N	-9.819003	3.142864	-0.059502		C	-10.400624	-1.158944	-0.411546		H	-7.580700	0.552075	-2.227178
	C	-9.289541	2.667215	1.148805	115	C	-11.756775	-1.387608	-0.251880		H	-5.388811	1.651974	-2.217070
	C	-8.373563	1.669503	1.197084		N	-12.561829	-0.444108	0.318161		C	-9.869103	-0.399584	-1.187685
	H	-8.266903	1.006819	-2.171502		C	-12.037870	0.741222	0.735337	190	C	-11.084863	-0.995286	-1.128186
45	H	-9.920704	2.814247	-2.137707		C	-10.686048	1.011751	0.583639		N	-11.744399	-1.235129	0.086410
	C	-11.058197	3.909048	-0.045195		H	-9.802044	-1.931373	-0.895659		C	-11.144482	-0.711748	1.240753
	H	-9.643071	3.190566	2.038975	120	H	-12.244204	-2.309985	-0.570849		C	-9.828819	-0.113112	1.220071
	H	-7.981079	1.394463	2.176031		C	-14.019675	-0.728824	0.481442		H	-9.410246	-0.291136	-2.170039
	H	-11.020383	4.637129	0.780507		H	-12.732348	1.448258	1.188346	195	H	-11.611617	-1.357668	-2.012756
50	H	-11.149764	4.459963	-0.994408		H	-10.308993	1.965164	0.953834		C	-13.176625	-1.502341	0.081852
	H	-11.955878	3.271791	0.083735		H	-14.507877	0.147588	0.923449		H	-11.717464	-0.857095	2.158312
	H	-11.149747	4.460001	0.994345	125	H	-14.453254	-0.940546	-0.506487		H	-9.519077	0.227166	2.170903
	H	11.955892	3.271749	-0.083688		H	-14.139148	-1.598572	1.143920		H	-13.456889	-1.969293	1.039322
	H	11.020448	4.637055	-0.780591		H	14.204623	1.871297	0.031951	200	H	-13.784797	-0.586202	-0.057588
55						H	14.555660	0.112828	0.161179		H	-13.407655	-2.206819	-0.732730
						H	14.257318	0.860179	-1.453524		H	13.408064	2.205809	0.734114
											H	13.785120	0.585186	0.059016
											H	13.457509	1.968347	-1.037901

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C	-5.063080	-2.006999	0.101281	C	-7.601498	-0.380616	1.232028		
C	-3.861904	-1.042187	0.058334	75 C	-6.700853	-1.391536	1.232710		
C	-2.546995	-1.856517	0.051678	N	-6.328716	-2.070747	0.062762		
C	-1.290845	-0.959871	0.022053	C	-6.833588	-1.563127	-1.143445		C60@1BP1BP14+
5 C	-0.001990	-1.808708	0.001120	C	-7.741423	-0.556383	-1.183795	150 88	C 4.834902 -0.514963 0.361670
C	1.284445	-0.956183	-0.020536	C	-5.084197	-2.840135	0.052334	C	4.444860 -0.164713 1.719269
C	2.542980	-1.849471	-0.049367	80 C	-3.818051	-1.961682	-0.011171	C	3.738835 -1.302763 2.292648
C	3.855983	-1.032068	-0.057455	C	-2.534690	-2.805476	-0.010499	C	3.693344 -2.358014 1.288096
C	5.058817	-1.994735	-0.099247	C	-1.257175	-1.947525	-0.031945	155 C	4.371116 -1.869449 0.094294
10 N	6.383193	-1.274382	-0.078546	C	0.021181	-2.802477	-0.025939	C	4.031454 1.134386 2.013187
C	6.981701	-0.987515	1.112115	C	1.305794	-1.956978	-0.030551	C	2.889014 1.352617 2.889423
C	8.201712	-0.333186	1.155080	85 C	2.576997	-2.824292	-0.006996	C	2.212931 0.263627 3.439400
C	8.848821	0.044830	-0.035003	C	3.866463	-1.989854	-0.006076	C	2.648156 -1.093018 3.135658
C	8.200655	-0.249572	-1.247649	C	5.127935	-2.877316	0.057192	160 C	2.140599 2.494493 2.379542
15 C	6.976803	-0.899542	-1.247197	N	6.376429	-2.117856	0.068592	C	0.748181 2.504126 2.445978
C	10.162256	0.717381	-0.004951	C	6.753539	-1.443505	1.240736	C	0.040171 1.364978 3.017454
C	11.120497	0.500407	-1.008320	90 C	7.648558	-0.426042	1.238127	C	0.758016 0.268117 3.500501
C	12.353548	1.132776	-0.948127	C	8.255276	0.083486	0.018398	C	1.461345 -1.927503 3.007189
N	12.653964	1.978844	0.075847	C	7.780677	-0.593300	-1.178884	165 C	0.292601 -1.086609 3.234474
20 C	11.739667	2.214204	1.061283	C	6.879095	-1.605661	-1.136651	C	-0.874509 -1.296094 2.499024
C	10.501833	1.595905	1.040413	C	9.188984	1.110903	-0.001083	C	-1.616284 -0.151432 1.985136
C	13.983518	2.658090	0.132041	95 C	9.804940	1.613307	-1.219275	C	-1.170034 1.149433 2.238693
C	-13.977027	2.667406	-0.118892	C	10.729169	2.605657	-1.216747	C	-1.209518 2.158837 1.181852
H	1.276883	-0.296049	-0.905779	N	11.199659	3.191912	-0.032815	170 C	-0.025475 2.994788 1.311824
25 H	1.311204	-0.304036	0.870285	C	10.578854	2.787198	1.158280	C	2.821372 2.980048 1.184795
H	0.013928	-2.467285	0.887922	C	9.653144	1.796480	1.194650	C	2.080596 3.453380 0.100921
H	-0.015996	-2.468057	-0.885133	100 C	11.845436	4.498275	-0.090515	C	0.626421 3.455419 0.163849
H	-1.285126	-0.298911	0.906696	C	-12.329286	4.059644	-0.031907	C	0.118529 3.109746 -1.158883
H	-1.319409	-0.308570	-0.869349	H	1.319438	-1.308720	-0.925427	175 C	-1.026619 2.319380 -1.287332
30 H	-2.534081	-2.525299	-0.827214	H	1.306350	-1.284428	0.846614	C	-1.693182 1.824480 -0.088265
H	-2.508362	-2.501648	0.947275	H	0.018274	-3.456599	0.865528	C	-2.106454 -0.499279 0.659474
H	-3.887027	-0.371965	0.934618	105 H	0.019184	-3.470392	-0.907084	C	-2.136662 0.464919 -0.352765
H	2.531979	-2.517185	0.830350	H	-1.253442	-1.274597	0.844927	C	-1.072086 1.261688 -2.293285
H	2.505750	-2.495824	-0.944139	H	-1.263741	-1.299598	-0.927101	180 C	-1.768516 0.119074 -1.715651
35 H	3.879415	-0.363104	-0.934707	H	-2.534064	-3.480047	-0.886937	C	-1.354920 -1.185599 -2.007962
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H	5.060876	-2.669870	0.768879	110 H	-3.822767	-1.271499	0.852334	C	-1.690204 -1.860306 0.357041
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40 H	8.630971	0.041474	-2.206840	H	3.918243	-1.361270	-0.912450	C	1.417685 -2.937300 2.045958
H	6.442177	-1.150300	-2.163601	H	3.876249	-1.302829	0.858641	C	2.558571 -3.159321 1.167813
H	10.938181	-0.189881	-1.832574	115 H	5.105154	-3.501844	0.967004	C	4.796192 0.448933 -0.647936
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H	12.043084	2.909017	1.845537	H	7.922141	0.006282	2.201220	190 C	3.988647 2.140604 0.958957
45 H	9.796023	1.833013	1.836968	H	8.156397	-0.293405	-2.156620	C	0.596401 -3.498373 -0.092457
H	13.831729	3.744579	0.054089	H	6.524290	-2.117701	-2.032461	C	-0.149281 -3.037440 -1.180834
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H	-5.055397	-2.617818	1.015403	H	11.195235	2.982455	-2.129053	C	-0.216138 -1.406917 -2.886275
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50 H	-6.451136	-1.165730	2.163902	H	9.257115	1.515342	2.170106	C	3.887222 -2.204398 -1.170373
H	-8.638179	0.029216	2.203832	H	11.120652	5.332019	-0.171786	C	2.699685 -3.036218 -1.296532
H	-8.659901	-0.171773	-2.132510	125 H	12.517293	4.526155	-0.962911	C	1.923301 -2.546004 -2.428430
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H	-9.783714	1.832348	-1.837250	H	-5.121114	-3.520989	-0.815258	200 C	3.845263 -1.196907 -2.223651
55 H	-12.016968	2.930301	-1.844372	H	-6.240387	-1.773810	2.146713	C	4.289561 0.099839 -1.967602
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60 H	-14.740464	1.911171	-0.355740	H	-11.197428	2.979743	-2.134352	C	2.383211 1.038539 -3.227412
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H	5.051711	-2.607167	-1.012292	H	-12.292234	4.781315	0.799302	C	1.260795 2.890119 -2.037009
65 1BP9BP1				H	-12.425388	4.616460	-0.976615	210 C	2.472888 3.104017 -1.258347
75				H	-13.225850	3.419239	0.094000	C	-4.992525 0.834720 -0.029361
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70 C	-10.555436	2.813313	1.149620					215 C	-4.595918 2.895921 1.178018
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								C	-5.424049 -1.373242 1.094305

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88

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126

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C	2.848159	-2.597785	2.635454
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C	-0.535507	-2.353461	3.786246
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165 C	-2.034432	0.494681	2.233034
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C	-6.203491	2.038081	-0.466826

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C	-5.707173	3.246010	-0.987826	H	5.260342	3.726771	1.811374	C	0.616968	-3.251356	3.428851
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5 H	-6.065359	3.643017	-1.938065	N	6.094059	-2.219049	-2.359408	129			
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C60@1BP6BP1				95 C	3.450347	-1.001906	0.704379	C	-1.511207	4.758384	-0.019914
126				C	3.229221	-2.397742	0.356849	C	-2.436570	4.194965	1.078544
C	-6.697407	-2.739572	-2.601264	C	2.726431	-2.748249	-0.903680	170 C	-3.691072	3.524542	0.473735
25 H	-6.953937	-2.822677	-3.667775	C	2.397768	-1.700889	-1.872562	C	-4.488592	2.813799	1.581519
H	-7.504745	-3.185999	-2.002071	C	2.663526	-2.123022	2.624647	N	-5.771444	2.216789	1.064746
H	-5.756216	-3.284460	-2.407778	100 C	2.577527	-0.358109	-1.524989	C	-5.735738	1.065660	0.332637
N	-6.564796	-1.325776	-2.250092	C	1.596287	0.640582	-1.908283	C	-6.903389	0.504282	-0.160158
C	-5.984466	-0.435862	-3.144141	C	0.435076	0.252448	-2.598684	175 C	-8.148163	1.109366	0.094672
30 C	-5.566672	0.800498	-2.759365	C	-0.941699	1.747516	-1.187739	C	-8.150638	2.298185	0.843958
C	-5.645583	1.243389	-1.387961	C	-0.850669	0.820194	-2.233587	C	-6.961038	2.833212	1.311592
C	-6.295185	0.308896	-0.506390	105 C	-0.077683	2.324503	0.930872	C	-9.410488	0.520217	-0.395579
C	-6.694593	-0.923268	-0.927098	C	-1.495730	2.025377	1.079513	C	-10.591991	0.608323	0.362448
H	-5.893169	-0.798867	-4.167969	C	-2.025942	1.674906	-0.228864	180 C	-11.769649	0.051260	-0.108050
35 H	-5.126144	1.442591	-3.520173	C	-2.990233	0.656455	-0.343496	N	-11.807788	-0.583824	-1.314740
H	-6.431658	0.548545	0.546894	C	-2.887241	-0.317778	-1.414434	C	-10.679394	-0.681199	-2.072189
H	-7.136330	-1.660050	-0.256614	C	-1.853516	-0.239188	-2.348921	C	-9.478938	-0.145259	-1.630920
C	-5.065754	2.449375	-0.939530	110 C	-1.182778	-1.452036	-2.792460	C	-13.100559	-1.141978	-1.814813
C	-4.315776	3.321038	-1.803742	C	0.230786	-1.149981	-2.941725	185 C	9.459359	-0.416532	-1.173753
40 C	-3.573035	4.357840	-1.319777	C	1.194360	-2.104589	-2.581350	C	3.238929	1.031619	-0.839745
N	-3.541426	4.677342	0.028372	C	0.776359	-3.398063	-2.055983	C	2.929310	0.405986	-2.119930
C	-4.307359	3.896054	0.886999	C	1.796342	-4.109519	1.430452	C	3.387918	-0.887381	-2.384063
C	-5.069485	2.860144	0.442011	115 C	1.722730	-3.792366	-1.019178	C	4.190044	-1.598416	-1.394009
H	-5.636876	2.299209	1.183181	C	1.268270	-4.468713	0.123237	190 C	4.502387	-0.990214	-0.173741
45 H	-2.969252	4.992581	-1.966711	C	0.705904	-4.184585	2.392763	C	4.005507	0.348905	0.110349
H	-4.252626	4.172130	1.939964	C	-0.584795	-3.688072	-1.911743	C	1.568708	0.785925	-2.483707
C	-2.470633	5.540430	0.571417	C	-0.497964	-4.589427	1.676713	C	0.729621	-0.146883	-3.094577
H	-2.781721	6.598566	0.511911	120 C	-1.057455	-4.389236	-0.723831	C	1.212011	-1.491037	-3.381041
H	-2.379015	5.275085	1.636826	C	-0.148000	-4.763630	0.272999	195 C	2.514525	-1.854770	-3.035436
50 C	-1.108632	5.329952	-0.131761	C	-1.586759	-2.700701	-2.288303	C	0.113931	-2.422157	-3.158713
H	-1.031795	5.980120	-1.020456	C	-2.346264	-3.823397	-0.355873	C	-1.047291	-1.652479	-2.735223
H	-1.047377	4.285830	-0.478056	C	-2.681055	-3.655145	0.989252	C	-0.667843	-0.246096	-2.696213
C	0.066225	5.606156	0.822562	125 C	-2.672902	-2.778901	-1.327120	C	0.363761	-3.671263	-2.591153
H	-0.007310	6.630429	1.235160	C	-1.736182	-4.048084	2.028601	200 C	-0.539611	-4.210740	-1.583585
55 H	-0.000653	4.904506	1.673681	C	-1.826960	-3.073061	3.107913	C	-1.655091	-3.475614	-1.181324
C	1.436614	5.431488	0.141249	C	-3.319329	-1.611955	-0.899121	C	-1.913642	-2.168662	-1.770074
H	1.554967	6.200363	-0.646033	C	-3.355210	-2.439969	1.433499	C	-2.432430	-1.298978	-0.721623
H	1.477106	4.444278	-0.352356	130 C	-3.666368	-1.438400	0.504546	C	-2.077514	0.053471	-0.689780
C	2.586637	5.547609	1.156492	C	-2.826771	-2.081561	2.739661	205 C	-1.173044	0.591711	-1.699952
60 H	2.465523	6.475037	1.745278	C	-3.450721	-0.038267	0.847144	C	1.722985	-4.050073	-2.228036
H	2.538889	4.700713	1.864189	C	-2.953579	0.308495	2.107479	C	2.775074	-3.161827	-2.446463
C	3.980768	5.585622	0.502673	C	-1.948574	1.361287	2.227890	C	-0.293202	1.554857	-1.050553
H	3.995979	6.311563	-0.327847	135 C	0.830981	1.955323	1.934692	C	1.047070	1.655468	-1.435371
H	4.738406	5.901586	1.237503	C	2.119364	1.385268	1.564545	210 C	0.262918	-4.921469	-0.596215
65 N	4.418511	4.288375	-0.030927	C	-0.672237	-2.683650	3.793845	C	1.660288	-4.821834	-0.994285
C	5.089314	3.386977	0.789505	C	1.618387	-2.195965	3.548847	C	2.653123	-4.671643	-0.025530
C	5.500501	2.172400	0.336731	C	1.356951	0.262143	3.489862	C	3.748696	-3.738989	-0.250245
C	5.241154	1.731095	-1.011854	140 C	2.446414	0.339563	2.533565	C	3.811404	-3.003456	-1.435261
C	4.538493	2.693241	-1.824410	C	0.950512	-0.983580	3.996378	215 C	-2.494026	-2.071031	0.514920
70 C	4.140190	3.901239	-1.333353	C	-0.464477	-1.281236	4.139184	C	-2.013326	-3.415862	0.229159
H	3.591499	4.630487	-1.930305	C	0.358047	1.257374	3.120298	C	-0.081614	-4.862663	0.754368
H	4.266100	2.450793	-2.850429	145 C	-1.007018	0.967354	3.261050	C	-1.243176	-4.092344	1.175904
H	6.011707	1.518108	1.041666	C	-1.426576	-0.328037	3.784662	C	-2.189766	-1.463346	1.735653
				C	-2.629592	-0.733978	3.074177				

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C	-1.391063	-2.171927	2.726731	H	-4.889575	6.058908	0.139948	C	-1.987495	-2.536675	-2.390485
C	-0.925478	-3.456637	2.449343	75 H	-2.907536	5.024406	-1.979834	C	-1.716925	-3.704650	-1.561307
C	0.434212	-3.835170	2.812437	H	-3.049990	6.749855	-1.578015	C	-0.350471	-4.129847	-1.810699
C	0.954424	-4.705417	1.765462	H	-2.330718	4.523845	0.437096	150 C	0.438539	-4.613203	-0.757644
5 C	2.292419	-4.613007	1.384470	H	-2.457366	6.263861	0.810118	C	-0.118645	-4.692983	0.588656
C	-1.807633	-0.057872	1.772874	H	-0.504955	4.922791	-1.155402	C	0.935603	-4.351658	1.534467
C	-1.752505	0.684246	0.586971	80 H	-0.627171	6.684891	-0.949096	C	0.625386	-3.607702	2.680428
C	-0.647201	1.603862	0.360448	H	-0.023255	4.766982	1.376764	C	0.693357	-1.451054	3.637683
C	-0.514448	-1.205575	3.375284	H	0.181595	6.537584	1.374095	155 C	1.065071	-0.119529	3.398899
10 C	-0.770665	0.101455	2.785496	H	1.662478	4.545432	-0.441935	C	0.049220	0.866299	3.038859
C	0.342912	1.758220	1.334033	H	2.013252	6.292698	-0.360779	C	-1.289639	0.478086	2.928887
C	0.280909	0.993610	2.571052	85 H	2.166690	4.481708	2.116384	C	-1.674228	-0.905284	3.174621
C	0.789114	-1.567865	3.718607	H	2.990809	6.049782	1.876499	C	-0.699336	-1.849939	3.516128
C	1.272206	-2.911195	3.433670	N	3.869324	4.366179	0.926686	160 C	-0.740645	-3.185325	2.932674
15 C	2.669425	-2.813334	3.035283	C	4.194422	4.202214	-0.412307	C	-1.754767	-3.512802	2.021796
C	3.167265	-3.644458	2.032194	H	5.232565	3.139411	-1.900750	C	-1.432895	-4.286345	0.826463
C	1.887084	-0.636838	3.492026	90 C	5.023596	3.206215	-0.833826	C	-2.256262	-3.789356	-0.269412
C	1.640453	0.620426	2.938719	C	5.553352	2.227086	0.080015	C	-3.070225	-2.698304	0.252380
C	1.739572	1.862674	0.936235	C	5.354522	2.553965	1.470797	165 C	-3.315768	-1.573610	-0.541339
20 C	2.081929	1.808900	-0.419896	C	4.523220	3.560389	1.851700	C	-3.284791	-0.242313	0.041384
C	4.067990	-3.104923	1.022352	C	6.148281	1.018571	-0.340461	C	-2.111868	0.984680	1.836142
C	4.442485	-1.761197	1.062832	95 C	6.321265	0.664810	-1.725761	C	-3.006717	-0.082168	1.412263
C	2.543618	1.156185	1.928984	C	6.718847	-0.579285	-2.108239	C	-2.730474	-1.250230	2.229860
C	3.657191	0.414037	1.523308	N	7.025086	-1.566450	-1.177000	170 C	-2.770222	-2.538784	1.670341
25 C	3.921719	-0.893022	2.111098	C	6.908481	-1.255104	0.165622	C	0.230409	-3.216451	-2.786816
C	3.049824	-1.407950	3.072192	C	6.522414	-0.017248	0.586409	C	1.566923	-2.828180	-2.676554
H	2.483543	7.183671	-0.646144	100 C	7.179547	-2.959166	-1.601987	C	1.950201	-1.445372	-2.925795
H	2.083489	6.644916	1.002362	H	3.752931	4.919103	-1.101061	C	0.972616	-0.501777	-3.275215
H	0.787675	5.304822	-1.457772	H	4.301011	3.779766	2.896223	175 C	-0.417787	-0.904815	-3.390608
30 H	0.162754	6.831813	-0.824564	H	5.824620	1.995922	2.253298	C	-0.785668	-2.234455	-3.151475
H	0.409296	4.246850	0.854120	H	6.815428	-0.877591	-3.151913	C	2.136663	-4.048631	0.772085
H	-0.247538	5.806326	1.411667	105 H	6.092303	1.385633	-2.509664	C	2.987582	-3.017974	1.186821
H	-1.378351	4.005317	-0.817132	H	6.443429	0.146763	1.659225	C	3.569470	-2.108024	0.208142
H	-1.992948	5.637274	-0.484670	H	7.133144	-2.068339	0.855802	180 C	3.620264	-0.780396	0.796703
35 H	-1.883888	3.549880	1.690014	H	7.672633	-2.982865	-2.585124	C	3.348492	0.348641	-0.002567
H	-2.741143	5.010895	1.757009	H	7.808175	-3.490429	-0.872334	C	3.030963	0.178526	-1.413961
H	-3.384240	2.786074	-0.289473	110 H	6.198717	-3.459462	-1.671902	C	3.003733	-1.098899	-1.984213
H	-4.322190	4.281020	-0.023287	N	-5.013281	4.119499	-0.617765	C	3.281952	-2.273149	-1.157574
H	-4.771598	3.508287	2.385456	C	-5.033149	3.516856	0.630242	185 C	2.390790	-3.336784	-1.583048
40 H	-3.908111	1.984702	2.015763	C	-5.376573	2.207512	0.790136	C	1.830895	-4.216364	-0.643578
H	-9.075819	2.836826	1.052478	C	-5.707205	1.361409	-0.330833	C	2.020392	1.158492	-1.776114
H	-6.920997	3.751301	1.897647	115 C	-5.627672	2.018345	-1.609939	C	1.695544	1.921479	-0.580371
H	-6.832747	-0.432835	-0.713606	C	-5.286662	3.330155	-1.728720	C	0.382144	2.335235	-0.340488
H	-4.750681	0.622617	0.174612	C	-6.040346	-0.000929	-0.187379	190 C	1.007871	0.830803	-2.687588
45 H	-10.605637	1.082816	1.344711	C	-6.105144	-0.656015	1.098733	C	-0.360421	1.257931	-2.440355
H	-12.704874	0.086634	0.451779	C	-6.215319	-2.007329	1.206760	C	-0.673590	2.003627	-1.290914
H	-10.779819	-1.193202	-3.029217	120 N	-6.359661	-2.822966	0.092607	C	-1.242864	0.182457	-2.868403
H	-8.608614	-0.227888	-2.282569	C	-6.391767	-2.220066	-1.158181	C	2.509641	1.411199	0.513482
H	-13.630880	-1.620061	-0.980872	C	-6.272231	-0.871812	-1.308304	195 C60@1BP8BP14+			
50 H	-13.704468	-0.318069	-2.225358	H	-4.765227	4.163219	1.466266	132			
H	-12.892475	-1.880854	-2.597861	H	-5.354506	1.799736	1.799088	N	8.419401	-1.438877	0.911456
H	3.233289	4.925115	1.881061	125 H	-5.822313	1.461641	-2.525467	C	8.664715	-0.165519	1.337299
H	5.029199	3.209624	1.693688	H	-5.217407	3.840013	-2.690000	200 C	7.870698	0.887103	0.914809
H	3.127588	5.460210	-2.260256	H	-6.021710	-0.078738	2.017269	C	6.807725	0.658586	0.022790
55 H	4.937516	3.792752	-2.606779	H	-6.198710	-2.527661	2.164578	C	6.573212	-0.661890	-0.392464
H	7.212737	2.754642	1.280811	H	-6.510942	-2.902171	-2.000014	C	7.381576	-1.690375	0.064657
H	5.632647	1.692442	-2.620216	130 H	-6.303866	-0.473011	-2.321415	C	5.993521	1.777928	-0.486696
H	7.515733	0.083089	-2.856309	C	-6.139169	-4.265473	0.196635	205 C	5.648086	2.864459	0.333907
H	9.013436	1.077918	0.915454	H	-5.076539	-4.512763	0.013369	C	4.966197	3.948900	-0.195297
60 H	9.173259	-1.173531	-1.914119	H	-6.416119	-4.596813	1.207662	N	4.622876	3.981016	-1.513034
H	9.694403	-0.898133	-0.215723	H	-6.769631	-4.785491	-0.540794	C	4.891779	2.912201	-2.316144
H	10.330843	0.150796	-1.534923	135 C	1.513296	-2.533641	3.113184	C	5.571487	1.809806	-1.826902
C60@1BP7BP1				C	2.667877	-2.246737	2.380071	210 C	3.962729	5.202157	-2.098589
65 129				C	3.054692	-0.860632	2.133558	C	2.430494	5.133869	-2.024233
C	2.671413	5.121419	1.369638	C	2.264736	0.178939	2.640493	C	1.859648	5.288834	-0.603833
C	1.684943	5.419683	0.228982	140 C	0.626787	1.780783	2.065527	C	0.320172	5.382813	-0.634828
C	0.249823	5.631509	0.745523	C	-0.169306	2.262655	1.006798	C	-0.307420	5.296950	0.767366
C	-0.745975	5.717846	-0.425901	C	-1.558876	1.865554	0.897015	215 C	-1.842954	5.149618	0.707702
70 C	-2.209377	5.537368	0.012808	C	-1.875073	1.706945	-0.528110	C	-2.442670	4.971426	2.113432
C	-3.170983	5.730264	-1.171197	C	-2.704872	0.657270	-0.932503	C	-3.974928	5.055339	2.161340
C	-4.651539	5.531746	-0.798409	145 C	-2.396087	-0.108466	-2.134572	N	-4.651629	3.873410	1.514460
H	-5.306265	5.937780	-1.586916	C	-2.777318	-1.495299	-1.888607	C	-4.830711	2.728739	2.232247

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C	-5.537326	1.661417	1.703187	H	0.120725	4.436928	1.315595	C	-6.140569	-3.387530	-2.060509
C	-6.077832	1.741167	0.408103	75 H	-0.051642	6.200478	1.347894	C	-3.296844	-2.573428	0.030261
C	-5.830176	2.911983	-0.329484	H	0.024057	6.330547	-1.117845	C	-3.441587	-1.349302	-0.629053
C	-5.121341	3.958878	0.238181	H	-0.079015	4.567890	-1.265132	150 C	-3.309757	-0.100281	0.097009
5 C	-6.913932	0.650756	-0.128399	H	2.271467	6.197952	-0.128527	C	-3.012819	-0.116985	1.475134
C	-8.007372	0.922364	-0.967176	H	2.157014	4.423990	0.019812	C	-2.835767	-1.389236	2.153751
C	-8.814376	-0.108810	-1.422971	80 H	2.074622	4.193773	-2.483989	C	-2.984112	-2.597174	1.454119
N	-8.554837	-1.400015	-1.077803	H	2.059443	5.955380	-2.661680	C	-2.648879	0.850208	-0.777706
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10 C	-6.669164	-0.692859	0.211241	H	-2.269610	6.052135	0.231779	C	-1.401009	1.745415	1.167216
C	-9.449019	-2.500581	-1.546761	H	-2.102475	4.285711	0.064967	C	-2.029117	0.813185	2.003670
C	9.308979	-2.546307	1.373321	85 H	-2.099441	4.022832	2.563658	C	-0.502198	2.042254	-1.000555
C	3.356078	-2.574135	0.218840	H	-2.079993	5.780084	2.771944	C	0.576252	2.181910	-0.028110
C	3.357152	-1.608432	1.228477	H	-4.344459	5.086032	3.196504	160 C	0.018516	2.004833	1.306458
15 C	3.270847	-0.195132	0.883549	H	-4.344196	5.949136	1.637576	C	-1.253539	0.118325	3.027517
C	3.188228	0.192966	-0.457292	H	-4.426057	2.723591	3.244916	C	0.113078	0.375666	3.165818
C	3.195078	-0.812620	-1.515393	90 H	-5.702539	0.763527	2.333927	C	0.768969	1.338221	2.295223
C	3.269198	-2.169671	-1.179348	H	-6.184277	3.022503	-1.354929	C	2.090995	0.829064	1.984109
C	2.443548	0.464480	1.887442	H	-4.934691	4.896366	-0.286004	165 C	2.622135	0.997024	0.699420
20 C	1.570780	1.486836	1.508402	H	-8.272619	1.942956	-1.244167	C	1.854360	1.693767	-0.323969
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25 C	0.087788	2.184130	-0.187684	H	-10.118163	-2.111616	-2.323235	C	-2.403588	0.198411	-2.059633
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C	-0.452462	1.851297	-1.429957	H	4.712716	4.829764	0.393651	C	2.958693	-1.491211	2.052265
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C	-0.179848	0.571662	2.992836	H	8.956172	-3.490420	0.942983	180 C	3.366910	-2.555354	-0.008282
35 C	0.733868	-0.490183	3.394213	H	10.335306	-2.342534	1.034073	C	2.708406	-3.515939	0.869318
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C	-1.792707	0.285445	-2.567913	C60@1BP8BP1				C	0.554001	-2.038432	3.497753
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40 C	-3.305818	-1.103372	-1.195897	N	-6.407088	-2.043604	-1.545143	C	-1.757508	-1.243584	3.123874
C	-3.315976	-0.134122	-0.187809	115 C	-6.115218	-0.928547	-2.318143	C	1.815859	-1.413343	-3.039756
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45 C	-3.223512	-2.517474	-0.852936	C	-6.574374	-1.863244	-0.175840	C	1.312892	-2.774029	-2.940005
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C	-1.433869	-1.406466	3.257571	C	-2.573210	5.248353	2.182879	C	-1.022632	-3.554023	2.620381
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55 C	-2.228230	-3.970428	0.884793	C	-0.442339	5.447108	0.789069	C	-1.805944	-4.351316	0.409518
C	-1.663012	-3.618824	2.180586	130 C	0.144137	5.481885	-0.630825	C	0.031993	-4.658070	-1.217822
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60 C	2.582631	-1.823138	2.443799	N	4.461184	4.328155	-1.564793	C	1.770377	-4.413923	0.351270
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C	1.840184	-4.002859	1.541971	C	5.237153	2.073138	-1.863101	H	7.130004	-3.893181	1.138051
C	0.500309	-4.568132	1.460448	C	5.507244	1.906420	-0.459437	210 H	-0.230227	4.605356	-1.189591
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65 C	2.443830	-3.144026	-1.879852	C	4.686233	4.205021	-0.201398	H	-0.019443	4.583019	1.332023
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	H	1.931119	4.430208	-2.534693		C	-1.238920	0.100930	-2.940501	H	-6.302703	-2.641457	2.569429	
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10	H	6.430964	-0.945340	3.090273		C	-3.391231	-1.468634	-0.543843	H	4.525201	4.518596	-1.305232	
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25	H	-5.111615	-3.706031	-1.805970		C	1.130515	-0.128952	3.296808	C	5.508704	-1.932919	-3.056000	
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30	C	-6.848701	-1.412696	-1.034685		C	1.453994	-2.570175	3.076079	C	5.860570	2.962260	0.669054	
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40	C	-5.639037	2.717394	-1.899126		C	1.964125	-4.178466	0.778558	C	-2.443069	5.507640	-0.447453	
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45	C	-2.209489	5.659636	0.140670		C	-0.328965	-4.712675	0.644700	C	-5.779008	1.954416	0.210842	
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	C	0.259223	5.566485	0.765851	120	C	-2.422090	-2.321359	-0.211344	C	-5.333724	2.224352	-2.153670	
	C	1.719560	5.386547	0.300502		C	-1.902756	-3.704241	-1.507170	C	-5.096473	3.548799	-1.938841	
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50	C	4.169571	5.476147	1.132290		C	-0.560002	-4.207423	-1.761747	C	-6.421934	-0.900550	-0.216645	
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55	C	5.519781	2.615661	-0.934795		H	-0.700665	4.399919	-0.794363	C	-5.750795	-4.283712	-1.556628	
	C	4.882270	3.793583	-0.573989		H	0.152893	6.564206	1.227765	C	5.444327	-2.485144	-2.340283	
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	C	8.679328	-0.927931	0.113776		H	1.972971	6.190134	-0.414707	205	C	1.810975	1.516856	2.117205
60	N	8.372731	-1.651339	-1.001822		H	2.489573	6.368295	-0.073727	C	1.801741	0.522970	2.811762	
	C	7.302889	-1.302853	-1.771240		H	2.476754	4.605503	2.198562	C	2.542729	-0.661369	3.044962	
	C	6.521413	-0.205604	-1.445522	135	H	-3.051285	5.578497	-1.870142	C	3.321156	-0.900391	1.839411	
	C	9.227517	-2.818281	-1.372892		H	-3.265360	4.088871	-0.916708	C	0.473791	2.088635	2.021111	
	C	-6.865815	-4.598706	0.957888		H	-4.874178	5.470406	0.620375	210	C	-0.362514	1.939284	3.018486
65	C	3.393603	0.108526	-0.143675		H	-4.725951	6.792676	-0.537773	C	0.460367	0.473960	3.740159	
	C	2.637194	1.253141	0.350188		H	-6.785171	5.638383	-1.090527	C	-0.091962	-0.746137	4.142955	
	C	1.830805	1.764020	-0.751329	140	H	-5.620555	5.222541	-2.377954	C	-1.482011	-1.054633	3.847063	
	C	2.094275	0.944376	-1.926061		H	-6.947995	4.125963	0.812561	C	-2.705666	-0.127102	3.153957	
	C	3.060710	-0.079224	-1.552237		H	-7.288451	1.733931	1.453266	215	C	-1.698442	1.142407	2.733278
70	C	1.053621	0.632144	-2.802591		H	-5.448922	0.638433	-2.339416	C	-2.262835	1.479157	1.427262	
	C	-0.290066	1.133425	-2.546442		H	-5.191715	3.074661	-2.826697	C	-3.185619	0.423605	1.048473	
	C	-0.541089	1.923950	-1.425595	145	H	-7.039467	-1.127474	-2.069933	C	-3.182191	-0.574850	2.109307	
	C	0.542195	2.238453	-0.505453		H	-7.232035	-5.224013	-1.407685	C	-3.261860	-1.940513	1.799892	

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	C	-3.337430	-2.366830	0.405695		C	1.516060	-3.985014	2.150767		H	-4.975406	6.037886	-1.424822
	C	-3.300025	-1.409681	-0.610386		C	2.396737	-2.957429	2.513500		H	-5.539045	3.756375	1.368488
	C	-3.244128	0.004711	-0.296604		C	3.234615	-2.322909	1.514469		H	-5.992645	1.357421	1.095123
	C	-1.456314	2.105044	0.465291		C	3.157931	-2.728318	0.173786		H	-5.212447	1.847210	-3.167727
5	C	-1.530163	1.672770	-0.934912		C	3.172046	-1.739298	-0.893720		H	-4.807620	4.238899	-2.731872
	C	-2.403031	0.642669	-1.296528		C	1.437804	-4.410710	0.757060		H	-5.529274	-0.135639	-3.438971
	C	-1.971423	-0.379637	-2.246593		C	2.242677	-3.793965	-0.207977		H	-5.594355	-2.593790	-3.571944
	C	-2.540330	-1.650628	-1.824114		C	-0.466579	-2.793084	-2.531457		H	-6.737759	-2.928893	0.447379
	C	-1.569037	-2.472804	3.523311		C	0.352368	-3.752669	-1.803431		H	-6.713379	-0.483802	0.746633
10	C	-2.442654	-2.901451	2.514548		C	1.686484	-3.459057	-1.514499		H	-6.490611	-4.857565	-0.977112
	C	-2.013428	-3.926731	1.568350		C	2.264249	-2.185512	-1.935420		H	-4.750806	-4.419545	-1.101835
	C	-2.575139	-3.600709	0.263827		C	1.474940	-1.261834	-2.635378		H	6.028341	5.564634	0.934407
	C	-1.819023	-3.827285	-0.897901		C	0.088582	-1.568809	-2.929928		H	5.306511	5.974774	-0.643032
	C	-1.805983	-2.835947	-1.965066		C	-0.683760	-0.333858	-2.789213		H	6.043972	3.315877	1.683948
15	C	-0.236483	-3.044366	3.621757		H	-1.220184	4.983921	1.254167		H	6.327714	0.953413	1.065997
	C	0.177582	-4.028462	2.712381		H	-1.215041	6.719927	0.874702		H	5.019206	2.008582	-2.959244
	C	-0.731924	-4.475554	1.665001		H	0.227270	6.329639	-1.107627		H	4.795652	4.333631	-2.185794
	C	0.048427	-4.716455	0.456406		H	0.109280	4.569188	-0.889731		H	5.213533	0.093956	-3.519263
	C	-0.486478	-4.395836	-0.797055		H	1.350677	6.534835	1.133316		H	5.185635	-2.306576	-4.027798
20	C	0.679503	-1.977285	4.000829		H	1.189144	4.781795	1.378047		H	6.540034	-3.286811	-0.184193
	C	-0.068130	2.398103	0.764714		H	2.679969	4.320695	-0.543078		H	6.620424	-0.929726	0.483640
	C	1.966095	-1.931012	3.460766		H	2.800325	6.061867	-0.914570		H	6.076594	-4.964333	-1.750262
	C	2.001761	1.615504	-0.349630		H	3.805082	6.458276	1.380806		H	4.392504	-4.386768	-2.013571
	C	0.715264	2.159341	-0.445775		H	3.738968	4.709426	1.695439		H	5.523403	-4.551303	-3.404684
25	C	-0.189745	1.718044	-1.494997		H	-2.391568	6.155236	-1.343029		H	-5.735143	-4.653110	-2.591704
	C	0.228140	0.732623	-2.409105		H	-2.473562	4.460094	-0.798151					
	C	1.559784	0.160934	-2.304006		H	-3.724749	5.234153	1.278071					
	C	2.426841	0.587656	-1.292680		H	-3.713695	6.891745	0.645786					
	C	3.249803	-0.371514	-0.576635		H	-5.887217	5.933373	0.103460					