

Electronic structure and absorption spectra of supramolecular complexes of a fullerene crown ether with a π -extended TTF derivative

Demeter Tzeli, Ioannis D. Petsalakis and Giannoula Theodorakopoulos

Supplementary material

- Table 1s: Absolute Energies and Complexation Energies of the **T**, **A**, **B**, benzene₂, C₆₀-benzene, **AT**, and **BT** systems at B3LYP, CAM-B3LYP, M06-HF, and M06-2X/6-31G(d,p) level of theory.
- The coordinates of all the **AT** and **BT** optimized structures are given at B3LYP, CAM-B3LYP, and M06-2X/6-31G(d,p) levels of theory.

Table 1S. Complexation Energies CE(eV) in the gas phase and in CHCl₃ solvent, CE_{sol}, of the **T**, **A**, **B**, **AT** and **BT** complexes at B3LYP, CAM-B3LYP and M06-2X/6-31G(d,p) level of theory.

Structure	B3LYP				CAM-B3LYP				M06-2X				M06-HF		
	-E	CE _u ^a	CE ^b	CE _{sol}	-E	CE _u ^a	CE ^b	CE _{sol}	-E	CE _u ^a	CE ^b	CE _{sol}	-E	CE _u ^a	CE ^b
T	3034.725652				3033.857384				3033.983934						
A	3686.143418				3684.245643				3684.864325						
B	3686.143040				3684.245212				3684.863844						
AT1	6720.921803	1.43	1.08	0.40	6718.168868	1.79	1.39	0.66	6718.936345	2.40	2.02	1.27			
AT2	6720.914743	1.24	0.87	0.15	6718.162683	1.62	1.20	0.42	6718.937291	2.42	2.00	1.19			
AT3									6718.937229	2.42	1.93	1.16			
AT4					6718.157795	1.49	1.06	0.35	6718.931805	2.27	1.84	1.09			
AT5									6718.929992	2.22	1.79	1.06			
BT1									6718.940289	2.50	1.99	1.18			
BT2	6720.915626	1.27	0.92	0.20	6718.162890	1.63	1.25	0.48	6718.935089	2.36	1.97	1.19			
Benzene	232.2582123				232.113833				232.1441867				232.187774		
C60	2286.174104				2284.944970				2285.456457				2285.889422		
Benzene₂	464.517379	0.03	0		464.228679	0.03	-0.01		464.293563	0.14	0.06	0.02	464.380786	0.14	0.04
C60-Benzene	2518.432774	0.01	-0.03		2517.060472	0.05	-0.02		2517.608354	0.21	0.12	0.05	2518.085776	0.23	0.12

AT1: B3LYP/6-31G(d,p)				84	6	0	-6.035383	0.145143	1.669424	174	6	0	1.387902	7.333300	-3.772678
Standard orientation:				85	6	0	-2.170831	2.098759	2.163007	175	1	0	1.390968	10.302735	-1.072553
				86	6	0	-4.225329	3.306626	2.460504	176	1	0	1.891533	8.641553	-0.712850
				87	6	0	-7.062948	-1.804999	2.816376	177	8	0	0.403642	8.801314	-2.150758
Center	Atomic	Atomic	Coordinates (Angstroms)	88	6	0	-5.594727	-3.735668	2.973926	178	6	0	1.242594	8.628912	-3.237031
Number	Number	Type	X Y Z	89	6	0	-2.811888	-2.381782	1.254647	179	6	0	2.198639	7.151814	-4.897894
				90	6	0	-4.243361	-3.916964	2.476539	180	6	0	1.894965	9.707467	-3.828189
				91	6	0	-4.616192	0.501017	-0.155790	181	6	0	2.855215	8.240566	-5.477717
				92	6	0	-2.924424	-1.113994	0.498914	182	1	0	2.334622	6.165789	-5.324513
				93	6	0	-5.966781	0.689420	0.340276	183	6	0	2.706894	9.518968	-4.948026
				94	6	0	-7.168572	-0.536504	2.059471	184	1	0	1.746012	10.700461	-3.415481
				95	6	0	-1.621813	3.187535	1.500743	185	1	0	3.481464	8.077862	-6.348889
				96	1	0	-1.577825	1.203684	2.315348	186	1	0	3.207751	10.366601	-5.403402
				97	6	0	-3.675716	4.417744	1.815213	-----					
				98	1	0	-5.246665	3.362049	2.825625						
				99	6	0	-8.123907	-2.675290	2.357887						
				100	6	0	-6.615326	-4.597521	2.558487						
				101	6	0	-2.529888	-3.433298	0.301640						
				102	6	0	-3.961592	-4.956305	1.582592						
				103	6	0	-4.399120	0.241916	-1.513925						
				104	6	0	-2.702231	-1.418301	-0.899383						
				105	6	0	-7.051770	0.602184	-0.539072						
				106	6	0	-8.293307	-0.659644	1.156857						
				107	8	0	-0.317354	3.141899	1.014321						
				108	6	0	-2.373267	4.363383	1.314344						
				109	1	0	-4.276106	5.311169	1.696274						
				110	6	0	-8.883030	-1.973628	1.338536						
				111	6	0	-7.913254	-4.053408	2.241851						
				112	6	0	-6.324938	-5.665564	1.615034						
				113	6	0	-3.083053	-4.708082	0.465667						
				114	6	0	-2.459352	-2.844217	-1.023396						
				115	6	0	-5.026985	-5.840586	1.137631						
				116	6	0	-3.416499	-0.743432	-1.896653						
				117	6	0	-5.528571	0.137770	-2.424815						
				118	6	0	-8.246190	-0.089122	-0.119924						
				119	6	0	-6.826551	0.312321	-1.946436						
				120	6	0	-0.095864	2.177702	-0.039627						
				121	8	0	-1.750591	5.378248	0.635991						
				122	6	0	-9.398754	-2.668433	0.244845						
				123	6	0	-8.437624	-4.776216	1.097557						
				124	6	0	-7.454768	-5.774744	0.708956						
				125	6	0	-3.598199	-5.431417	-0.682450						
				126	6	0	-2.942378	-3.542977	-2.130144						
				127	6	0	-4.801501	-6.133998	-0.266754						
				128	6	0	-3.929932	-1.470738	-3.043372						
				129	6	0	-5.237712	-0.925403	-3.371023						
				130	6	0	-8.770967	-0.815484	-1.262041						
				131	6	0	-7.892407	-0.566641	-2.393836						
				132	6	0	-0.651625	2.624589	-1.377347						
				133	1	0	0.986461	2.046354	-0.091798						
				134	1	0	-0.551732	1.221503	0.234595						
				135	6	0	-2.490420	6.574242	0.389663						
				136	6	0	-9.333701	-2.080681	-1.083867						
				137	6	0	-9.165152	-4.098066	0.117844						
				138	6	0	-7.240055	-6.053790	-0.641980						
				139	6	0	-3.529064	-4.861992	-1.955643						
				140	6	0	-3.699915	-2.843547	-3.156401						
				141	6	0	-5.886014	-6.236406	-1.139703						
				142	6	0	-6.260243	-1.775532	-3.797298						
				143	6	0	-7.613890	-1.592257	-3.299596						
				144	1	0	-1.705363	2.919235	-1.265694						
				145	1	0	-0.622243	1.768162	-2.069904						
				146	8	0	0.122133	3.702030	-1.893846						
				147	6	0	-1.607344	7.520278	-0.391829						
				148	1	0	-2.794234	7.034743	1.337956						
				149	1	0	-3.390270	6.350100	-0.198972						
				150	6	0	-9.048509	-3.143534	-2.027725						
				151	6	0	-8.944649	-4.390992	-1.284776						
				152	6	0	-8.000263	-5.349215	-1.658793						
				153	6	0	-4.654650	-4.971795	-2.863010						
				154	6	0	-4.759519	-3.724426	-3.606341						
				155	6	0	-5.811102	-5.644541	-2.463704						
				156	6	0	-6.016301	-3.201869	-3.919134						
				157	6	0	-8.204887	-2.905592	-3.114275						
				158	6	0	-0.387396	4.172802	-3.134861						
				159	8	0	-0.514035	7.938847	0.445109						
				160	1	0	-1.223700	7.051804	-1.302425						
				161	1	0	-2.204333	8.393345	-0.681996						
				162	6	0	-7.117961	-5.096638	-2.785703						
				163	6	0	-7.218679	-3.901181	-4.377424						
				164	1	0	-0.585601	3.323533	-3.807310						
				165	1	0	-1.336106	4.709140	-2.984958						
				166	6	0	0.614892	5.071533	-3.825722						
				167	6	0	0.003190	9.243325	0.161326						
				168	1	0	0.274950	5.242303	-4.855403						
				169	1	0	1.593124	4.574551	-3.862171						
				170	8	0	0.709116	6.318968	-3.136211						
				171	1	0	-0.827838	9.919969	-0.074868						
				172	1	0	0.477951	9.598411	1.082144						
				173	6	0	1.026388	9.271334	-0.959837						

AT2: B3LYP/6-31G(d,p)							84	6	0	-7.686186	1.478816	1.491574	174	6	0	5.083243	2.660282	-2.330621
Standard orientation:							85	6	0	-2.714243	1.619733	1.108261	175	1	0	4.221853	6.051109	-3.163997
							86	6	0	-4.217324	2.958857	-0.185864	176	1	0	2.904731	6.364131	-2.009254
							87	6	0	-8.389226	-0.165942	3.208598	177	8	0	3.990245	4.684776	-1.613034
Center	Atomic	Atomic	Coordinates (Angstroms)			88	6	0	-7.483696	-2.390043	2.855668	178	6	0	5.154698	4.026355	-2.002209	
Number	Number	Type	X	Y	Z	89	6	0	-5.724858	-1.735950	-0.147663	179	6	0	6.261044	1.975841	-2.644390	
							90	6	0	-6.640300	-2.891755	1.787132	180	6	0	6.376235	4.691497	-1.998795
							91	6	0	-7.332761	1.504722	-0.820570	181	6	0	7.483515	2.652638	-2.645800
							92	6	0	-5.926807	-0.473021	-0.891559	182	1	0	6.240167	0.919573	-2.881460
							93	6	0	-8.178906	2.005081	0.246496	183	6	0	7.547823	4.007456	-2.329269
							94	6	0	-8.588117	1.093875	2.459389	184	1	0	6.399374	5.741674	-1.723826
							95	6	0	-1.684136	1.905561	0.216911	185	1	0	8.388082	2.105517	-2.890397
							96	1	0	-2.492003	1.033712	1.992788	186	1	0	8.499376	4.528019	-2.325634
							97	6	0	-3.190237	3.270630	-1.077193	-----					
							98	1	0	-5.197175	3.393690	-0.354944						
							99	6	0	-9.693458	-0.751059	3.432301						
							100	6	0	-8.731136	-2.978675	3.091767						
							101	6	0	-6.186819	-2.819815	-0.988233						
							102	6	0	-7.069632	-3.962270	0.995034						
							103	6	0	-7.886974	1.207763	-2.070252						
							104	6	0	-6.506479	-0.814015	-2.174160						
							105	6	0	-9.548702	2.187371	0.024789						
							106	6	0	-10.010065	1.252563	2.241627						
							107	8	0	-0.404666	1.420174	0.467528						
							108	6	0	-1.911712	2.732174	-0.898302						
							109	1	0	-3.400358	3.930687	-1.909781						
							110	6	0	-10.692336	0.119527	2.839227						
							111	6	0	-9.865718	-2.138379	3.388590						
							112	6	0	-9.185814	-4.079207	2.255881						
							113	6	0	-6.838607	-3.924453	-0.428671						
							114	6	0	-6.666909	-2.255663	-2.236649						
							115	6	0	-8.373167	-4.561558	1.231180						
							116	6	0	-7.462382	0.017661	-2.766811						
							117	6	0	-9.312853	1.383203	-2.294772						
							118	6	0	-10.489216	1.803641	1.048820						
							119	6	0	-10.126068	1.862781	-1.269430						
							120	6	0	-0.184640	0.046682	0.113003						
							121	8	0	-0.843534	2.957007	-1.730737						
							122	6	0	-11.819882	-0.424037	2.224108						
							123	6	0	-11.031466	-2.706653	2.736906						
							124	6	0	-10.611391	-3.909463	2.035881						
							125	6	0	-7.998630	-4.496480	-1.087796						
							126	6	0	-7.774011	-2.811524	-2.878151						
							127	6	0	-8.948982	-4.891287	-0.060582						
							128	6	0	-8.621172	-0.557475	-3.425206						
							129	6	0	-9.767652	0.288299	-3.134067						
							130	6	0	-11.655069	1.232078	0.399857						
							131	6	0	-11.431473	1.269464	-1.036453						
							132	6	0	0.358121	-0.101287	-1.293829						
							133	1	0	0.539189	-0.348217	0.832967						
							134	1	0	-1.114991	-0.523558	0.210197						
							135	6	0	-1.030202	3.859638	-2.820217						
							136	6	0	-12.306485	0.139189	0.974598						
							137	6	0	-11.989826	-1.867191	2.165564						
							138	6	0	-11.166630	-4.223581	0.794173						
							139	6	0	-8.457908	-3.951340	-2.288599						
							140	6	0	-8.775323	-1.944418	-3.478791						
							141	6	0	-10.318167	-4.724039	-0.275772						
							142	6	0	-11.019445	-0.287346	-2.907743						
							143	6	0	-11.868028	0.213275	-1.838198						
							144	1	0	-0.312736	0.381658	-2.016158						
							145	1	0	0.420456	-1.172561	1.541760						
							146	8	0	1.658461	0.485793	-1.352916						
							147	6	0	0.265039	3.965888	-3.595258						
							148	1	0	-1.323810	4.849637	-2.448359						
							149	1	0	-1.817001	3.492286	-3.492615						
							150	6	0	-12.764226	-0.955050	0.140953						
							151	6	0	-12.568326	-2.195541	0.876915						
							152	6	0	-12.165061	-3.350127	0.203141						
							153	6	0	-9.880307	-3.781701	-2.513356						
							154	6	0	-10.076484	-2.540876	-3.249106						
							155	6	0	-10.792881	-4.158974	-1.526266						
							156	6	0	-11.177411	-1.729502	-2.967565						
							157	6	0	-12.549249	-0.920318	-1.238310						
							158	6	0	2.248282	0.341188	-2.639488						
							159	8	0	1.254352	4.589628	-2.794488						
							160	1	0	0.596692	2.966816	-3.916538						
							161	1	0	0.069631	4.560465	-4.501744						
							162	6	0	-11.935209	-3.310517	-1.231055						
							163	6	0	-12.123564	-2.121360	-1.936507						
							164	1	0	2.176466	-0.705897	-2.970812						
							165	1	0	1.718434	0.962063	-3.376759						
							166	6	0	3.714096	0.711394	-2.601592						
							167	6	0	2.432091	4.914692	-3.519885						
							168	1	0	4.149481	0.490450	-3.585164						
							169	1	0	4.239465	0.122779	-1.840880						
							170	8	0	3.829798	2.103815	-2.309212						
							171	1	0	2.879246	4.014449	-3.963886						
							172	1	0	2.194203	5.615490	-4.336896						
							173	6	0	3.417442	5.587769	-2.583979						

BT2: B3LYP/6-31G(d,p)

Standard orientation:

Center Atomic Atomic Coordinates (Angstroms)
Number Number Type X Y Z

1	6	0	-7.711408	-2.318735	1.981849	84	6	0	7.499007	-0.562048	2.942695	174	6	0	-2.664353	10.191085	2.862933
2	6	0	-8.604018	-3.371699	1.831699	85	6	0	8.024395	0.501127	0.923058	175	1	0	-0.851645	9.273345	3.612406
3	6	0	-9.558053	-3.384907	0.801682	86	6	0	5.900459	0.452350	-2.138809	176	6	0	-3.576074	10.220347	1.810967
4	6	0	-9.589787	-2.297384	-0.116567	87	6	0	7.584101	0.683118	-0.392455	177	1	0	-4.123886	9.439004	-0.112202
5	6	0	-8.669065	-1.258324	0.024068	88	6	0	4.724494	-1.807256	-2.815266	178	1	0	-2.808962	10.819726	3.734905
6	6	0	-7.729919	-1.244110	1.073936	89	6	0	3.769735	0.491217	-3.523932	179	1	0	-4.438853	10.877059	1.853970
7	6	0	-10.506057	-4.494689	0.584155	90	6	0	5.618799	-4.775947	2.902886	180	1	0	-1.271353	4.727075	-0.243753
8	6	0	-10.586103	-2.351992	-1.210048	91	6	0	5.189732	-5.857867	0.860227	181	7	0	-0.949307	4.863975	0.727248
9	6	0	-10.776195	-3.713794	-1.759208	92	6	0	4.762713	-5.661273	-0.454208	182	6	0	-2.145770	4.998709	1.654672
10	6	0	-10.734464	-4.801538	-0.847949	93	6	0	4.043872	-4.035665	-1.987899	183	1	0	-0.571121	2.822382	1.036214
11	6	0	-10.854822	-6.107257	-1.343319	94	6	0	8.051469	-3.336437	3.272010	184	1	0	0.702399	3.719614	0.200472
12	1	0	-10.763227	-6.948960	-0.665257	95	6	0	8.753622	-1.116148	2.459312	185	1	0	-1.736025	5.093004	2.660987
13	6	0	-11.046151	-6.347543	-2.703512	96	6	0	9.080510	-0.456168	1.207439	186	1	0	-2.603606	5.949169	1.380586
14	6	0	-11.090980	-5.279192	-3.597103	97	6	0	7.171123	-0.352826	-2.453353						
15	6	0	-10.941706	-3.975342	-3.126018	98	6	0	5.703471	1.731668	-3.031848						
16	1	0	-6.978578	-2.332721	2.781438	99	6	0	8.191676	-0.063751	-1.477993						
17	1	0	-8.531559	-4.217983	2.505697	100	6	0	5.915957	-2.330006	-3.267012						
18	1	0	-8.645965	-0.453340	-0.701390	101	7	0	4.744655	1.425939	-4.080475						
19	1	0	-11.135578	-7.368207	-3.062521	102	6	0	2.479940	1.163710	-3.059423						
20	1	0	-11.216993	-5.457289	-4.660623	103	1	0	3.485641	-0.222122	-4.302404						
21	1	0	-10.918504	-3.154675	-3.853221	104	6	0	6.871523	-5.326149	2.413528						
22	16	0	-11.189553	0.355472	-0.870464	105	6	0	6.605910	-5.994149	1.150946						
23	6	0	-13.284546	0.242267	-2.500385	106	6	0	5.736928	-5.588881	-1.531449						
24	6	0	-12.640645	1.011751	-1.618086	107	6	0	5.284939	-4.584825	-2.476832						
25	1	0	-14.177903	0.528045	-3.042245	108	6	0	8.062630	-4.622029	2.594803						
26	1	0	-12.931747	2.015714	-1.334476	109	6	0	9.022491	-2.476426	2.619504						
27	6	0	-11.175866	-5.120298	1.599842	110	6	0	9.663139	-1.178429	0.166996						
28	16	0	-12.424092	-6.373150	1.338486	111	6	0	7.177662	-1.582164	-3.076966						
29	6	0	-12.365915	-5.649668	3.893642	112	1	0	5.308869	2.523169	-2.383659						
30	6	0	-13.005118	-6.405819	2.996282	113	1	0	6.646089	2.089962	-3.451531						
31	1	0	-12.607678	-5.589481	4.947660	114	6	0	9.218559	-0.973975	-1.203255						
32	1	0	-13.846082	-7.053675	3.211462	115	6	0	6.209519	-3.736638	-3.095048						
33	16	0	-12.623689	-1.352855	-2.831711	116	6	0	5.336762	1.004132	-5.354259						
34	16	0	-11.004497	-4.692681	3.327819	117	6	0	1.325907	0.393160	-2.883739						
35	6	0	-11.323101	-1.273161	-1.604154	118	6	0	2.418219	2.541707	-2.821765						
36	6	0	-6.795813	-0.178532	1.188423	119	6	0	7.540697	-5.926199	0.116000						
37	6	0	-5.991421	0.730847	1.281156	120	6	0	7.098114	-5.717059	-1.248923						
38	6	0	-5.044451	1.783919	1.379229	121	6	0	9.039285	-4.554927	1.520979						
39	6	0	-4.947150	2.764996	0.367841	122	6	0	9.633192	-3.229710	1.535779						
40	6	0	-4.181147	1.882847	2.489315	123	6	0	9.948791	-2.592803	0.334142						
41	6	0	-4.011362	3.787338	0.458386	124	6	0	8.216426	-2.548403	-2.790547						
42	1	0	-5.624089	2.715235	-0.478663	125	6	0	9.232999	-2.249299	-1.877898						
43	6	0	-3.248112	2.911060	2.570556	126	6	0	7.624239	-3.873868	-2.801759						
44	1	0	-4.257076	1.150171	3.285300	127	1	0	4.542755	0.878053	-6.095314						
45	6	0	-3.135443	3.868179	1.552887	128	1	0	5.911410	0.067609	-5.298863						
46	1	0	-3.955351	4.531626	-0.331194	129	1	0	6.002370	1.792509	-5.715963						
47	1	0	-2.611789	2.981973	3.447731	130	6	0	0.141801	0.983369	-4.246628						
48	1	0	0.861179	2.751089	5.564659	131	1	0	1.347582	-0.673962	-3.079588						
49	6	0	1.139766	3.330223	4.671656	132	6	0	1.234142	3.140937	-3.282500						
50	6	0	0.418278	3.186210	3.485413	133	1	0	3.297839	3.136887	-0.026415						
51	6	0	2.224391	4.205228	4.726558	134	6	0	8.783483	-5.191572	0.304940						
52	6	0	0.767158	3.919573	2.344355	135	6	0	8.062179	-4.846199	-1.902650						
53	1	0	-0.405331	2.480151	3.438938	136	6	0	9.681119	-3.255433	-0.932221						
54	6	0	2.593543	4.925752	3.588129	137	6	0	0.086459	2.350191	-2.190971						
55	1	0	2.790280	4.313695	5.646562	138	1	0	-0.751092	0.386098	-2.289400						
56	6	0	0.019017	3.738783	1.047473	139	8	0	1.096295	4.482317	-2.106744						
57	6	0	1.873550	4.780264	2.403196	140	6	0	9.107216	-4.528177	-0.943180						
58	1	0	3.454626	5.586721	3.620415	141	8	0	-1.074771	2.927718	-1.698910						
59	1	0	2.175832	5.323207	1.511846	142	6	0	2.260578	5.301522	-2.191778						
60	1	0	-0.457573	5.772815	0.740400	143	6	0	-2.137868	3.114820	-2.647552						
61	6	0	3.688261	-0.624165	1.378550	144	6	0	1.888483	6.725750	-1.842887						
62	6	0	3.106558	-1.896099	1.388518	145	1	0	3.036514	4.934625	-1.507522						
63	6	0	4.726972	-0.299120	2.339438	146	1	0	2.665604	5.288473	-3.212448						
64	6	0	3.998628	0.034931	0.126863	147	6	0	-2.131408	4.520152	-3.213883						
65	6	0	3.553433	-2.894695	2.342910	148	1	0	-3.070368	2.928897	-2.108916						
66	6	0	2.847013	-2.559332	0.133755	149	1	0	2.052128	2.388720	-3.462750						
67	6	0	5.150435	-1.252979	3.265269	150	1	0	-0.457573	5.772815	0.740400						
68	6	0	5.693843	0.565318	1.687997	151	1	0	3.688261	-0.624165	1.378550						
69	6	0	5.260875	0.782346	0.324413	152	8	0	3.106558	-1.896099	1.388518						
70	6	0	3.729617	-0.584905	-1.075791	153	8	0	4.726972	-0.299120	2.339438						
71	6	0	4.556901	-2.580563	3.261937	154	1	0	3.998628	0.034931	0.126863						
72	6	0	3.565204	-4.183726	1.669780	155	1	0	3.553433	-2.894695	2.342910						
73	6	0	3.126345	-3.976770	0.300763	156	6	0	2.847013	-2.559332	0.133755						
74	6	0	3.180026	-1.915912	-1.062895	157	6	0	5.150435	-1.252979	3.265269						
75	6	0	6.566119	-1.391453	3.568835	158	1	0	5.693843	0.565318	1.687997						
76	6	0	7.054632	0.438367	1.989593	159	1	0	5.260875	0.782346	0.324413						
77	6	0	6.189384	0.846010	-0.690490	160	6	0	3.729617	-0.584905	-1.075791						
78	6	0	4.530141	-0.352654	-2.364672	161	1	0	4.556901	-2.580563	3.261937						
79	6	0	5.606103	-3.538486	1.949928	162	1	0	3.565204	-4.183726	1.669780						
80	6	0	4.578831	-5.104120	3.943680	163	6	0	3.126345	-3.976770	0.300763						

AT1: CAM-B3LYP/6-31G(d,p)				84	6	0	-5.955415	0.016098	1.684427	174	6	0	1.079671	7.317838	-3.716060
Standard orientation:				85	6	0	-2.201100	2.064752	2.275305	175	1	0	1.049776	10.297514	-1.064793
				86	6	0	-4.300795	3.187857	2.504918	176	1	0	1.592622	8.643154	-0.740794
				87	6	0	-6.940025	-1.978142	2.769004	177	8	0	0.071968	8.795120	-2.133022
				88	6	0	-5.419652	-3.852442	2.937381	178	6	0	0.896890	8.616921	-3.221137
Center	Atomic	Atomic	Coordinates (Angstroms)	89	6	0	-2.647801	-2.381127	1.328266	179	6	0	1.879527	7.128348	-4.839387
Number	Number	Type	X Y Z	90	6	0	-4.052350	-3.978477	2.476928	180	6	0	1.504058	9.694230	-3.846312
1	6	0	9.496080 0.551241 1.015341	91	6	0	-4.501913	0.452671	-0.086921	181	6	0	2.491161	8.216573	-5.455914
2	6	0	10.538553 -0.360617 1.034928	92	6	0	-2.783467	-1.106871	0.589985	182	1	0	2.041834	6.135628	-5.238598
3	6	0	10.443564 -1.582355 0.367425	93	6	0	-5.868672	0.586954	0.371666	183	6	0	2.307318	9.499540	-4.964807
4	6	0	9.267501 -1.878166 -0.358034	94	6	0	-7.068449	-0.702426	2.029588	184	1	0	1.325018	10.691738	-3.459022
5	6	0	8.236664 -0.947584 -0.394833	95	6	0	-1.691770	3.151165	1.592598	185	1	0	3.112477	8.049233	-6.328693
6	6	0	8.331407 0.266155 0.297456	96	1	0	-1.576471	1.197464	2.456469	186	1	0	2.775542	10.347846	-5.450587
7	6	0	11.534575 -2.577648 0.331494	97	6	0	-3.788554	4.300561	1.841616						
8	6	0	9.222887 -3.165655 -1.086191	98	1	0	-5.330396	3.206419	2.847937						
9	6	0	10.515453 -3.525479 -1.712074	99	6	0	-7.952717	-2.872885	2.266292						
10	6	0	11.689901 -3.227665 -0.990617	100	6	0	-6.390587	-4.734008	2.479488						
11	6	0	12.929144 -3.504165 -1.566191	101	6	0	-2.305055	-3.401913	0.369880						
12	1	0	13.838017 -3.230517 -1.042385	102	6	0	-3.712334	-4.983833	1.579899						
13	6	0	13.017618 -4.091787 -2.822463	103	6	0	-4.238528	0.225561	-1.432333						
14	6	0	11.861741 -4.385501 -3.531445	104	6	0	-2.511975	-1.378885	-0.800865						
15	6	0	10.619934 -4.090151 -2.982072	105	6	0	-6.916999	0.476725	-0.533318						
16	1	0	9.587807 1.497703 1.535732	106	6	0	-8.157127	-0.849358	1.095498						
17	1	0	11.454506 -0.101721 1.553009	107	8	0	-0.391070	3.136707	1.111555						
18	1	0	7.351078 -1.140590 -0.988427	108	6	0	-2.484595	4.283248	1.361462						
19	1	0	13.991865 -4.298222 -3.252520	109	1	0	-4.422458	5.164152	1.688754						
20	1	0	11.922401 -4.824510 -4.521545	110	6	0	-8.705240	-2.182215	1.239262						
21	1	0	9.723356 -4.274371 -3.563342	111	6	0	-7.692942	-4.231367	2.135358						
22	16	0	6.616314 -3.611388 -0.246717	112	6	0	-6.037344	-5.772933	1.529850						
23	6	0	6.602669 -6.098329 -1.147403	113	6	0	-2.814237	-4.688469	0.496692						
24	6	0	5.926515 -5.213008 -0.4422915	114	6	0	-2.216342	-2.789993	-0.940015						
25	1	0	6.281643 -7.113001 -1.344614	115	6	0	-4.730754	-5.894926	1.091118						
26	1	0	4.974865 -5.399949 0.057250	116	6	0	-3.214705	-0.715881	-1.801024						
27	6	0	12.256011 -2.928739 1.423404	117	6	0	-5.335276	0.097732	-2.375034						
28	16	0	13.483934 -4.215477 1.419373	118	6	0	-8.094311	-0.259595	-0.161249						
29	6	0	13.029626 -3.382824 3.888610	119	6	0	-6.642068	0.218604	-1.935094						
30	6	0	13.692662 -4.271888 3.156608	120	6	0	-0.154041	2.171131	0.074965						
31	1	0	13.082610 -3.299999 4.966321	121	8	0	-1.899066	5.295151	0.9657642						
32	1	0	14.366466 -5.021682 3.550538	122	6	0	-9.160577	-2.870535	0.127811						
33	16	0	8.118615 -5.585008 -1.858097	123	6	0	-8.158117	-4.950222	0.967021						
34	16	0	12.007993 -2.237738 3.044317	124	6	0	-7.133556	-5.905293	0.592313						
35	6	0	8.141099 -3.977651 -1.092245	125	6	0	-3.270156	-5.407428	-0.675178						
36	6	0	7.262514 1.209639 0.244722	126	6	0	-2.641014	-3.480711	-2.062714						
37	6	0	6.358426 2.011169 0.198958	127	6	0	-4.455974	-6.156190	-0.307011						
38	6	0	5.295470 2.957941 0.148076	128	6	0	-3.669433	-1.440212	-2.970494						
39	6	0	4.165490 2.725865 -0.648959	129	6	0	-4.981769	-0.936054	-3.326129						
40	6	0	5.364237 4.149122 0.883840	130	6	0	-8.559145	-0.983268	-1.326938						
41	6	0	3.132675 3.648805 -0.696372	131	6	0	-7.660609	-0.686510	-2.425697						
42	1	0	4.115822 1.817952 -1.239408	132	6	0	-0.753034	2.583867	-1.247767						
43	6	0	4.328190 5.067009 0.830559	133	1	0	0.930104	2.079372	-0.000990						
44	1	0	6.242081 4.348568 1.487325	134	1	0	-0.567816	1.202781	0.369786						
45	6	0	3.191812 4.824139 0.055575	135	6	0	-2.674406	6.453729	0.390968						
46	1	0	2.270946 3.469014 -1.331058	136	6	0	-9.078517	-2.260091	-1.185763						
47	1	0	4.413549 5.993854 1.391248	137	6	0	-8.875292	-4.285609	-0.014888						
48	1	0	-0.574065 3.384493 5.878132	138	6	0	-6.872855	-6.152130	-0.746581						
49	6	0	-0.593751 4.261659 5.240317	139	6	0	-3.184894	-4.818627	-1.927091						
50	6	0	0.393060 4.436341 4.276702	140	6	0	-3.390506	-2.792254	-3.097100						
51	6	0	-1.593969 5.213320 5.391126	141	6	0	-5.503547	-6.280056	-1.206417						
52	6	0	0.393725 5.568199 3.465579	142	6	0	-5.954674	-1.807247	-3.792801						
53	1	0	1.172492 3.689528 4.159943	143	6	0	-7.323772	-1.679274	-3.333247						
54	6	0	-1.603121 6.343870 4.579724	144	1	0	-1.817786	2.822480	-1.118555						
55	1	0	-2.362757 5.080065 6.144681	145	1	0	-0.690095	1.733353	-1.942723						
56	6	0	1.490934 5.763685 2.454695	146	8	0	-0.049103	3.697128	-1.768627						
57	6	0	-0.611048 6.524563 3.626027	147	6	0	-1.820863	7.414058	-0.395116						
58	1	0	-2.377864 7.093419 4.702208	148	1	0	-2.997329	6.916704	1.330625						
59	7	0	1.007187 5.632993 1.043253	149	1	0	-3.562403	6.191051	-0.197532						
60	1	0	1.935714 6.759733 2.535122	150	6	0	-8.731253	-3.294231	-2.135563						
61	1	0	2.283108 5.028471 2.591221	151	6	0	-8.605456	-4.546002	-1.411861						
62	1	0	-0.623495 7.409754 2.996720	152	6	0	-7.625820	-5.458522	-1.771044						
63	6	0	2.073001 5.826162 -0.005903	153	6	0	-4.276717	-4.951257	-2.866640						
64	1	0	0.282136 6.353488 -0.871324	154	6	0	-4.403227	-3.699365	-3.590422						
65	1	0	0.523213 4.719985 0.927545	155	6	0	-5.411563	-5.665101	-2.514729						
66	1	0	1.548927 5.795075 -0.962614	156	6	0	-5.658619	-3.218433	-3.929432						
67	1	0	2.457714 6.836827 0.147400	157	6	0	-7.872813	-3.011580	-3.186488						
68	1	0	-3.716534 0.987009 6.017690	158	6	0	-0.609221	4.150627	-2.985209						
69	6	0	-2.842507 0.757386 5.383781	159	8	0	-0.749161	7.865265	0.439491						
70	7	0	-3.211369 0.064101 4.163350	160	1	0	-1.419176	6.948147	-1.298192						
71	1	0	-2.154715 0.136139 5.962460	161											

AT2: CAM-B3LYP/6-31G(d,p)				Standard orientation:													
Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms)			X	Y	Z									
1	6	0	10.137139	-2.966587	0.705480	84	6	0	-7.643577	1.630549	1.288196	174	6	0	5.167547	2.124996	-2.060540
2	6	0	11.376986	-3.576032	0.603898	85	6	0	-2.685507	1.510985	1.069875	175	1	0	4.499287	5.474941	-3.058622
3	6	0	12.554806	-2.828506	0.633171	86	6	0	-4.081666	2.785299	-0.382151	176	1	0	3.112101	5.872536	-2.019258
4	6	0	12.473377	-1.426576	0.790062	87	6	0	-8.474340	0.171857	3.097892	177	8	0	4.129363	4.204968	-1.465172
5	6	0	11.227477	-0.824957	0.915684	88	6	0	-7.686229	-2.107121	2.949016	178	6	0	5.280970	3.485206	-1.751297
6	6	0	10.049447	-1.580782	0.863744	89	6	0	-5.817119	-1.785422	-0.025211	179	6	0	6.324552	1.383331	-2.277283
7	6	0	13.902764	-3.428802	0.562585	90	6	0	-6.843622	-2.733202	1.952145	180	6	0	6.522550	4.090622	-1.664033
8	6	0	13.746432	-0.675542	0.861504	91	6	0	-7.224172	1.459172	-0.999484	181	6	0	7.570818	1.997951	-2.190710
9	6	0	14.797606	-1.384330	1.626455	92	6	0	-5.930125	-0.576821	-0.869988	182	1	0	6.270742	0.326070	-2.500701
10	6	0	14.877913	-2.783659	1.472371	93	6	0	-8.069700	2.083925	-0.004564	183	6	0	7.676952	3.347777	-1.889568
11	6	0	15.820136	-3.495564	2.213134	94	6	0	-8.584546	1.376356	2.247969	184	1	0	6.572947	5.143109	-1.404673
12	1	0	15.854698	-4.576774	2.141821	95	6	0	-1.619162	1.687718	0.202673	185	1	0	8.463130	1.403574	-2.352500
13	6	0	16.692587	-2.841563	3.074771	96	1	0	-2.519247	0.990656	2.005724	186	1	0	8.649488	3.820630	-1.817281
14	6	0	16.613415	-1.464604	3.225554	97	6	0	-3.016060	2.987290	-1.251416						
15	6	0	15.661178	-0.744808	2.513983	98	1	0	-5.037782	3.237041	-0.623559						
16	1	0	9.232098	-3.563036	0.688594	99	6	0	-9.809366	-0.324557	3.321445						
17	1	0	11.428521	-4.656321	0.534552	100	6	0	-8.961103	-2.605900	3.186448						
18	1	0	11.154269	0.242237	1.088246	101	6	0	-6.312673	-2.902288	-0.791097						
19	1	0	17.417759	-3.414276	3.642916	102	6	0	-7.305142	-3.830540	1.236000						
20	1	0	17.276123	-0.949270	3.912486	103	6	0	-7.754915	1.094346	-2.230143						
21	1	0	15.570356	0.323365	2.676587	104	6	0	-6.490759	-0.987459	-2.134791						
22	16	0	12.741365	1.298889	-0.809771	105	6	0	-9.411708	2.316036	-0.280979						
23	6	0	15.100749	2.463198	-1.082272	106	6	0	-9.984339	1.587868	1.973594						
24	6	0	13.850979	2.447449	-1.533424	107	8	0	-0.374843	1.179701	0.536458						
25	1	0	15.877575	3.130725	-1.432289	108	6	0	-1.771475	2.427306	-0.975745						
26	1	0	13.461178	3.098805	-2.304719	109	1	0	-3.170725	3.582677	-2.141688						
27	6	0	14.235632	-4.407230	-0.313341	110	6	0	-10.741427	0.544879	2.634019						
28	16	0	15.885063	-5.048284	-0.492349	111	6	0	-10.053144	-1.690560	3.380326						
29	6	0	14.314830	-5.999983	-2.396623	112	6	0	-9.449763	-3.741807	2.426167						
30	6	0	15.565077	-5.967202	-1.947564	113	6	0	-7.033206	-3.917515	-0.173458						
31	1	0	13.981802	-6.541963	-3.272098	114	6	0	-6.725246	-2.415988	-2.091261						
32	1	0	16.402220	-6.479096	-2.404263	115	6	0	-8.642081	-4.340736	1.475374						
33	16	0	15.525121	1.337179	0.189649	116	6	0	-7.376729	-0.163190	-2.816444						
34	16	0	13.103958	-5.118486	-1.488274	117	6	0	-9.159349	1.324403	-2.512808						
35	6	0	13.958690	0.490481	0.210491	118	6	0	-10.396738	2.063834	0.735753						
36	6	0	8.779748	-0.943576	0.999369	119	6	0	-9.968026	1.920695	-1.561352						
37	6	0	7.704597	-0.402790	1.116408	120	6	0	-0.190490	-0.208290	0.264773						
38	6	0	6.436653	0.236197	1.240732	121	8	0	-0.665918	2.556892	1.770604						
39	6	0	6.351021	1.617812	1.460227	122	6	0	-11.869800	0.016628	2.030055						
40	6	0	5.250770	-0.504019	1.135919	123	6	0	-11.226649	-2.246052	2.738272						
41	6	0	5.115624	2.235398	1.557383	124	6	0	-10.853578	-3.516991	2.148490						
42	1	0	7.262168	2.196921	1.551674	125	6	0	-8.200981	-4.477716	-0.822288						
43	6	0	4.018242	0.124415	1.225433	126	6	0	-7.834429	-2.958750	-2.718285						
44	1	0	5.309319	-1.576524	0.987296	127	6	0	-9.196838	-4.740809	0.198478						
45	6	0	3.934699	1.500995	1.428812	128	6	0	-8.543502	-0.727195	-3.463487						
46	1	0	5.066100	3.305395	1.740755	129	6	0	-9.647300	0.194295	-3.276399						
47	1	0	3.110143	-0.460061	1.124682	130	6	0	-11.570285	1.504146	0.097239						
48	1	0	4.137034	7.275764	1.896450	131	6	0	-11.305718	1.416555	-1.325730						
49	6	0	3.206174	6.743029	2.060430	132	6	0	0.366947	-0.439065	-1.118338						
50	6	0	2.827769	5.732357	1.185854	133	1	0	0.513760	-0.582262	1.013168						
51	6	0	2.394103	7.078921	3.138811	134	1	0	-1.136610	-0.746432	0.380899						
52	6	0	1.633243	5.035040	1.387751	135	6	0	-0.776210	3.394329	-2.910832						
53	1	0	3.473541	5.479049	0.350469	136	6	0	-12.289989	0.502570	0.729252						
54	6	0	1.204204	6.393145	3.344324	137	6	0	-12.115066	-1.412180	2.078028						
55	1	0	2.690172	7.871998	3.816931	138	6	0	-11.386063	-3.896800	0.926286						
56	6	0	1.169885	3.956227	0.442404	139	6	0	-8.593184	-4.009675	-2.066564						
57	6	0	0.830701	5.372937	2.476481	140	6	0	-8.768328	-2.094026	-3.414071						
58	1	0	0.566309	6.646744	4.184139	141	6	0	-10.538975	-4.521784	-0.070986						
59	7	0	2.170540	2.847195	0.255294	142	6	0	-10.925002	-0.293188	-3.048601						
60	1	0	0.259894	3.488701	0.812037	143	6	0	-11.772738	0.331756	-2.051603						
61	1	0	0.983199	4.336170	-0.562146	144	1	0	-0.285650	0.013861	-1.874468						
62	1	0	-0.098559	4.836206	2.644201	145	1	0	0.422064	-1.520781	-1.309003						
63	6	0	2.608886	2.197954	1.542732	146	8	0	1.665334	0.130169	-1.182052						
64	1	0	2.974578	3.216027	-0.279832	147	6	0	0.554035	3.433823	-3.617873						
65	1	0	1.753474	2.121154	-0.349684	148	1	0	-1.064414	4.408508	-2.609728						
66	1	0	2.662266	2.995016	2.283781	149	1	0	-1.535942	3.006365	-3.600546						
67	1	0	1.800954	1.522409	1.823482	150	6	0	-12.781478	-0.626748	-0.029398						
68	1	0	-6.413398	1.869169	4.216098	151	6	0	-12.673370	-1.810190	0.804035						
69	6	0	-5.318499	1.944545	4.181064	152	6	0	-12.317030	-3.024886	0.239593						
70	7	0	-4.707543	1.307466	3.018543	153	6	0	-9.994341	-3.786240	-2.348916						
71	1	0	-4.916009	1.489540	5.088681	154	6	0	-10.102328	-2.602470	-3.181996						
72	1	0	-5.046820	3.002542	4.195161	155	6	0	-10.946575	-4.034994	-1.372742						
73	6	0	-4.900371	-0.125605	2.933551	156	6	0	-11.157740	-1.722003	-3.001901						
74	6	0	-5.117445	1.856960	1.735652	157	6	0	-12.528482	-0.711566	-1.389710						
75	6	0	-6.184413	-0.397780	2.088614	158	6	0	2.277373	-0.083604	-2.439080						
76	1	0	-4.054221	-0.581573	2.408249	159	8	0	1.510462	4.059513	-2.792929						
77	1	0	-4.953983	-0.576482	3.925993	160	1	0	0.874101	2.416249	-3.881913						
78	6	0	-6.293425	0.913981	1.184299	161	1	0	0.424818	3.996712	-4.554108						
79	1	0	-5.543663	2.850046	0.898669	162	6	0	-12.046890	-3.110625	-1.181974						
80	6	0	-3.942935	2.033450	0.781627	163	6	0	-12.150124	-1.981311	-1.977528						

AT4: CAM-B3LYP/6-31G(d,p)						84	6	0	5.855783	0.779814	0.796221	174	6	0	-4.526645	4.018735	2.199743
Standard orientation:						85	6	0	3.046873	3.309590	-1.360964	175	1	0	-4.500188	8.095943	1.658464
Center	Atomic	Atomic	Coordinates (Angstroms)			86	6	0	4.198189	4.081251	0.592636	176	1	0	-4.029283	7.024570	0.324629
Number	Number	Type	X	Y	Z	87	6	0	7.898906	-0.398341	0.044749	177	8	0	-3.709674	6.241001	2.210757
						88	6	0	7.610242	-1.647615	-2.007187	178	6	0	-4.793566	5.397478	2.265062
						89	6	0	4.192079	-0.952448	-2.526786	179	6	0	-5.578587	3.117747	2.327855
						90	6	0	6.427638	-1.822786	-2.824407	180	6	0	-6.091292	5.849399	2.432252
						91	6	0	3.562577	0.355557	0.843984	181	6	0	-6.882296	3.583229	2.493869
						92	6	0	3.371065	-0.327619	-1.466897	182	1	0	-5.402780	2.050062	2.292130
						93	6	0	4.740984	0.536729	1.665408	183	6	0	-7.143029	4.942082	2.540109
						94	6	0	7.072153	0.228855	1.100026	184	1	0	-6.281050	6.915345	2.494326
						95	6	0	1.897908	3.937957	-0.926927	185	1	0	-7.689497	2.865008	2.585780
						96	1	0	3.048374	2.760564	-2.295732	186	1	0	-8.156269	5.304568	2.670085
						97	6	0	3.046516	4.734328	1.030136	-----					
						98	1	0	5.097080	4.136210	1.198804						
						99	6	0	8.546908	-1.546890	0.627325						
						100	6	0	8.255250	-2.755058	-1.471616						
						101	6	0	3.668213	-2.276041	-2.755583						
						102	6	0	5.941159	-3.099866	-3.075115						
						103	6	0	2.572979	-0.538680	1.234878						
						104	6	0	2.361130	-1.282255	-1.079274						
						105	6	0	4.886071	-0.192332	2.839178						
						106	6	0	7.237406	-0.551985	2.301159						
						107	8	0	0.721500	3.884537	-1.654517						
						108	6	0	1.882861	4.654492	0.277877						
						109	1	0	3.069863	5.297241	1.954515						
						110	6	0	8.145092	-1.643891	2.015244						
						111	6	0	8.738180	-2.703611	-0.118297						
						112	6	0	7.736681	-4.087066	-1.721076						
						113	6	0	4.523030	-3.333829	-3.040263						
						114	6	0	2.540337	-2.482127	-1.870460						
						115	6	0	6.607840	-4.255244	-2.503526						
						116	6	0	1.954142	-1.381380	0.246494						
						117	6	0	2.731903	-1.309486	2.454988						
						118	6	0	6.169475	-0.750477	3.167768						
						119	6	0	3.861597	-1.140968	3.236645						
						120	6	0	0.116775	2.577680	-1.744510						
						121	8	0	0.691486	5.226040	0.598948						
						122	6	0	7.947496	-2.884012	2.597841						
						123	6	0	8.519280	-4.001580	0.486353						
						124	6	0	7.900242	-4.858713	-0.506039						
						125	6	0	4.295854	-4.632656	-2.440708						
						126	6	0	2.315312	-3.726368	-1.305705						
						127	6	0	5.586697	-5.204269	-2.109705						
						128	6	0	1.728885	-2.682863	0.841633						
						129	6	0	2.210204	-2.638153	2.208741						
						130	6	0	5.954045	-2.050986	3.768891						
						131	6	0	4.524998	-2.292502	3.812065						
						132	6	0	-0.167463	1.932947	-0.407051						
						133	1	0	-0.809660	2.725315	-2.300607						
						134	1	0	0.776882	1.919423	-2.318776						
						135	6	0	0.567570	5.913149	1.833009						
						136	6	0	6.822043	-3.094254	3.488935						
						137	6	0	8.132974	-4.090654	1.814268						
						138	6	0	6.922519	-5.764752	-0.125663						
						139	6	0	3.216203	-4.826143	-1.593415						
						140	6	0	1.907775	-3.829221	0.082956						
						141	6	0	5.739572	-5.941031	-0.945613						
						142	6	0	2.846591	-3.742429	2.755349						
						143	6	0	4.029411	-3.565631	3.574872						
						144	1	0	0.738858	1.935917	0.214002						
						145	1	0	-0.422821	0.878637	-0.594885						
						146	8	0	-1.231440	2.593656	0.239860						
						147	6	0	-0.891365	6.235515	2.018835						
						148	1	0	1.183517	6.819104	1.179237						
						149	1	0	0.890497	5.272230	2.662816						
						150	6	0	6.305403	-4.423470	3.246694						
						151	6	0	7.115408	-5.038902	2.211426						
						152	6	0	6.522268	-5.857622	1.263109						
						153	6	0	3.375151	-5.598620	-0.380710						
						154	6	0	2.565928	-4.982881	0.655241						
						155	6	0	4.609311	-6.143467	-0.062583						
						156	6	0	3.026902	-4.940877	1.962094						
						157	6	0	4.939414	-4.655277	3.287892						
						158	6	0	-1.457022	2.121645	1.550484						
						159	8	0	-1.325562	7.135149	0.984880						
						160	1	0	-1.494900	5.327549	1.996039						
						161	1	0	-1.027067	6.714448	2.994441						
						162	6	0	5.092509	-6.092948	1.303107						
						163	6	0	4.319707	-5.507172	2.922116						
						164	1	0	-1.221942	1.050454	1.625103						
						165	1	0	-0.816967	2.653685	2.269007						
						166	6	0	-2.912487	2.286078	1.915263						
						167	6	0	-2.390859	8.001836	1.359723						
						168	1	0	-3.104623	1.803017	2.882125						
						169	1	0	-3.524697	1.793542	1.151716						
						170	8	0	-3.223590	3.667333	1.990301						
						171	1	0	-2.193127	8.400824	2.361824						
						172	1	0	-2.381944	8.838840	0.654928						
						173	6	0	-3.760455	7.350385	1.337545						

AT1: M06-2X/6-31G(d,p)			Standard orientation:														
Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X Y Z														
1	6	0	8.927793	1.250167	0.885455	84	6	0	-5.557674	-0.642012	1.747067	174	6	0	-0.419056	7.890244	-3.492121
2	6	0	9.994154	0.364857	0.940181	85	6	0	-2.277254	1.895693	2.500000	175	1	0	-0.291765	10.433693	-0.696346
3	6	0	9.950278	-0.861114	0.270156	86	6	0	-4.540809	2.652854	2.732706	176	1	0	0.185631	8.719779	-0.738597
4	6	0	8.807629	-1.186020	-0.499459	87	6	0	-6.274082	-2.816154	2.689825	177	8	0	-1.524415	9.182678	-1.805575
5	6	0	7.753111	-0.281276	-0.573679	88	6	0	-4.486840	-4.442963	2.868621	178	6	0	-0.839436	9.134316	-2.999573
6	6	0	7.794607	0.932518	0.127030	89	6	0	-1.893254	-2.478001	1.492671	179	6	0	0.266504	7.835466	-4.703743
7	6	0	11.059502	-1.834963	0.286710	90	6	0	-3.092772	-4.333159	2.484880	180	6	0	-0.579438	10.296774	-3.708387
8	6	0	8.817001	-2.476811	-1.221101	91	6	0	-4.095661	0.112744	0.089228	181	6	0	0.523770	9.010010	-5.411208
9	6	0	10.139553	-2.835665	-1.780259	92	6	0	-2.190074	-1.203307	0.801625	182	1	0	0.610224	6.887855	-5.101192
10	6	0	11.278774	-2.511440	-1.011940	93	6	0	-5.491426	0.009923	0.469117	183	6	0	0.101597	10.239494	-4.922687
11	6	0	12.547539	-2.793872	-1.521565	94	6	0	-6.563965	-1.538415	1.997177	184	1	0	-0.936557	11.237575	-3.301340
12	1	0	13.429223	-2.493513	-0.964110	95	6	0	-1.971073	3.030110	1.773743	185	1	0	1.057995	8.951745	-6.353207
13	6	0	12.697011	-3.416566	-2.753730	96	1	0	-1.510420	1.145798	2.674419	186	1	0	0.297124	11.148774	-5.479395
14	6	0	11.574860	-3.736146	-3.513382	97	6	0	-4.230623	3.822666	2.037748						
15	6	0	10.305204	-3.431953	-3.031682	98	1	0	-5.558723	2.495400	3.078446						
16	1	0	8.974059	2.199424	1.407720	99	6	0	-7.106124	-3.830170	2.086857						
17	1	0	10.889052	0.647606	1.484598	100	6	0	-5.282951	-5.439973	2.314403						
18	1	0	6.894495	-0.494985	-1.202101	101	6	0	-1.343679	-3.383251	0.512636						
19	1	0	13.691199	-3.627212	-3.137156	102	6	0	-2.549765	-5.227589	1.566821						
20	1	0	11.685282	-4.199095	-4.488294	103	6	0	-3.727529	-0.000594	-2.248739						
21	1	0	9.435797	-3.630295	-3.650895	104	6	0	-1.805183	-1.355730	-0.582339						
22	16	0	6.185850	-2.953248	-0.484339	105	6	0	-6.461697	-0.212888	-0.502904						
23	6	0	6.258321	-5.455938	-1.342470	106	6	0	-7.564968	-1.801305	1.0971384						
24	6	0	5.537888	-4.572418	-0.655169	107	8	0	-0.705731	3.181266	1.232575						
25	1	0	5.965862	-6.480374	-1.535154	108	6	0	-2.946404	4.010985	1.532796						
26	1	0	4.573495	-4.770968	-0.205444	109	1	0	-5.005300	4.561368	1.875554						
27	6	0	11.740912	-2.159346	1.415754	110	6	0	-7.902944	-3.210239	1.044743						
28	16	0	12.975838	-3.434805	1.481384	111	6	0	-6.629657	-5.125745	1.913208						
29	6	0	12.386926	-2.582730	3.917021	112	6	0	-4.720237	-6.361925	1.342315						
30	6	0	13.091317	-3.477631	3.227391	113	6	0	-1.651953	-4.739808	0.552837						
31	1	0	12.384461	-2.489234	4.995325	114	6	0	-1.283405	-2.696098	-0.763777						
32	1	0	13.747869	-4.220365	3.662310	115	6	0	-3.386820	-6.259191	0.978273						
33	16	0	7.785528	-4.919668	-2.010907	116	6	0	-2.548822	-0.754712	-1.595371						
34	16	0	11.411714	-1.446441	3.009852	117	6	0	-4.740744	-0.246641	-2.262500						
35	6	0	7.744810	-3.305142	-1.266066	118	6	0	-7.527986	-1.142658	-0.234288						
36	6	0	6.699265	1.846735	0.049854	119	6	0	-6.074505	-0.352117	-1.897003						
37	6	0	5.770649	2.623836	-0.005570	120	6	0	-0.472072	2.313155	0.114714						
38	6	0	4.670904	3.531431	-0.051397	121	8	0	-2.551449	5.092262	0.796315						
39	6	0	3.548731	3.256420	-0.849484	122	6	0	-8.185150	-3.902736	-0.122787						
40	6	0	4.693833	4.716235	0.701269	123	6	0	-6.912854	-5.845426	0.686582						
41	6	0	2.470566	4.130478	-0.873494	124	6	0	-5.731810	-6.611717	0.333283						
42	1	0	3.540737	2.354682	-1.452277	125	6	0	-1.928033	-5.458418	-0.675923						
43	6	0	3.611685	5.583927	0.671973	126	6	0	-1.535621	-3.385568	-1.940562						
44	1	0	5.567458	4.945535	1.301082	127	6	0	-3.000824	-6.400781	-0.412707						
45	6	0	2.480493	5.292894	-0.096588	128	6	0	-2.822232	-1.479208	-2.821786						
46	1	0	1.605811	3.917523	-1.496406	129	6	0	-4.178753	-1.164992	-3.234428						
47	1	0	3.648121	6.503624	1.251666	130	6	0	-7.810505	-1.868759	-1.457222						
48	1	0	-0.622044	2.891980	5.571299	131	6	0	-6.911783	-1.378841	-2.486863						
49	6	0	-0.868179	3.783258	5.003121	132	6	0	-1.238545	2.768618	-1.102916						
50	6	0	0.044252	4.284344	4.079701	133	1	0	0.605509	2.342668	-0.063640						
51	6	0	-2.089152	4.423814	5.193345	134	1	0	-0.767044	1.287622	0.367956						
52	6	0	-0.250626	5.437387	3.353699	135	6	0	-3.503891	6.134462	0.641841						
53	1	0	0.988213	3.772345	3.915394	136	6	0	-8.130407	-3.218141	-1.402910						
54	6	0	-2.385970	5.580372	4.473803	137	6	0	-7.673386	-5.248529	-0.308830						
55	1	0	-2.806790	4.028304	5.905389	138	6	0	-5.364628	-6.746078	-0.998683						
56	6	0	0.751567	5.959608	2.359032	139	6	0	-1.869711	-4.798134	-1.895600						
57	6	0	-1.466078	6.093675	3.564812	140	6	0	-2.328495	-2.766344	-2.988949						
58	1	0	-3.333933	6.086084	4.628377	141	6	0	-3.968142	-6.636425	-1.379844						
59	7	0	0.268829	5.832793	0.946383	142	6	0	-4.977995	-2.152152	-3.796357						
60	1	0	0.964750	7.023170	2.513404	143	6	0	-6.374089	-2.260835	-3.414963						
61	1	0	1.688222	5.404217	2.429410	144	1	0	-2.311833	2.834609	-0.866662						
62	1	0	-1.700251	6.994943	3.002995	145	1	0	-1.118366	2.022803	-1.903133						
63	6	0	1.291119	6.212338	-0.089645	146	8	0	-0.746014	4.030278	-1.526925						
64	1	0	-0.555974	6.451809	0.830509	147	6	0	-2.841423	7.274440	-0.090078						
65	1	0	-0.084464	4.868938	0.791712	148	1	0	-3.847789	6.471816	1.628906						
66	1	0	0.758368	6.210876	-1.044051	149	1	0	-4.368450	5.778443	0.065770						
67	1	0	1.595304	7.236948	0.145804	150	6	0	-7.574294	-4.136457	-2.374961						
68	1	0	-3.664679	0.454090	6.210006	151	6	0	-7.292808	-5.391504	-1.698672						
69	6	0	-2.745872	0.411177	5.599197	152	6	0	-6.162274	-6.122817	-2.036832						
70	7	0	-2.954509	-0.292897	4.345617	153	6	0	-2.876460	-5.047630	-2.905464						
71	1	0	-1.966761	-0.091904	6.177062	154	6	0	-3.159487	-3.792797	-3.582141						
72	1	0	-2.422224	1.433611	5.387950	155	6	0	-3.903936	-5.946397	-2.653843						
73	6	0	-3.457133	-1.643016	4.537447	156	6	0	-4.456614	-3.493520	-3.975948						
74	6	0	-3.961194	0.328611	3.505119	157	6	0	-6.715063	-3.669663	-3.360192						
75	6	0	-3.849650	-2.109749	3.112576	158	6	0	-1.494746	4.511075	-2.626586						
76	1	0	-2.701696	-2.289838	4.991651	159	8	0	-1.799917	7.781421	0.745916						
77	1	0	-4.355332	-1.648426	5.182520	160	1	0	-2.426386	6.954140	-1.051012						
78	6	0	-4.170634	-0.735236	2.368497	161	1	0	-3.581162	8.060970	-0.280218						
79	1	0	-4.924759	0.418029	4.046404	162	6	0	-5.260202	-5.628829	-3.060506						
80	6	0	-3.579189	1.676742	2.958755	163	6	0	-								

AT4: M06-2X/6-31G(d,p)				84	6	0	5.581973	0.533584	0.624045	174	6	0	-4.127435	3.676745	1.999881
Standard orientation:				85	6	0	3.202360	3.393396	-1.609491	175	1	0	-4.142661	7.811270	2.048783
Center Number	Atomic Number	Atomic Type	Coordinates (Angstroms) X Y Z	86	6	0	4.367685	3.727797	0.470708	176	1	0	-3.605320	7.007664	0.509094
				87	6	0	7.430178	-0.965301	-0.064088	177	8	0	-3.352560	5.890943	2.271190
				88	6	0	6.951973	-2.255355	-2.059985	178	6	0	-4.426357	5.045641	2.137548
				89	6	0	3.665619	-1.079496	-2.627880	179	6	0	-5.163049	2.749165	1.965735
				90	6	0	5.751152	-2.290571	-0.872876	180	6	0	-5.745445	5.468456	2.195498
				91	6	0	3.248092	0.467958	0.681864	181	6	0	-6.488725	3.183856	2.035729
				92	6	0	2.946298	-0.286266	-1.602572	182	1	0	-4.960900	1.686457	1.889703
				93	6	0	4.444294	0.508887	1.500862	183	6	0	-6.782787	4.535677	2.134380
				94	6	0	6.708883	-0.172461	0.960350	184	1	0	-5.962432	6.526122	2.305045
				95	6	0	2.103459	4.050813	-1.090964	185	1	0	-7.284007	2.445492	2.009995
				96	1	0	3.171738	2.967971	-2.609572	186	1	0	-7.811767	4.873561	2.180192
				97	6	0	3.260462	4.393902	1.000143	-----					
				98	1	0	5.248101	3.580632	1.091173						
				99	6	0	7.900898	-2.171037	0.575492						
				100	6	0	7.428211	-3.422099	-1.469685						
				101	6	0	2.952718	-2.323147	-2.795882						
				102	6	0	5.078767	-3.493351	-3.066270						
				103	6	0	2.135750	-0.253790	1.110985						
				104	6	0	1.809196	-1.066708	-1.171023						
				105	6	0	4.482185	-0.179681	2.710301						
				106	6	0	6.757519	-0.912777	2.198526						
				107	8	0	0.939019	4.212525	-1.817425						
				108	6	0	2.115646	4.541028	0.226367						
				109	1	0	3.301835	4.790507	2.007596						
				110	6	0	7.491356	-2.142157	1.966750						
				111	6	0	7.916007	-3.378960	-0.115416						
				112	6	0	6.712995	-4.673134	-1.656647						
				113	6	0	3.640241	-3.510858	-3.026613						
				114	6	0	1.807099	-2.317149	-1.905558						
				115	6	0	5.568370	-4.708594	-2.437374						
				116	6	0	1.395439	-1.042916	0.159077						
				117	6	0	2.180567	-0.982848	2.367372						
				118	6	0	5.670716	-0.909057	3.068894						
				119	6	0	3.326722	-0.947161	3.146736						
				120	6	0	0.227645	2.989192	-2.108948						
				121	8	0	0.961398	5.132461	0.633846						
				122	6	0	7.110756	-3.311438	2.606674						
				123	6	0	7.506797	-4.601626	0.549246						
				124	6	0	6.762483	-5.403649	-0.405358						
				125	6	0	3.223016	-4.732400	-2.366021						
				126	6	0	1.399385	-3.487990	-1.283288						
				127	6	0	4.416417	-5.476253	-2.560900						
				128	6	0	0.979743	-2.268112	0.813695						
				129	6	0	1.464309	-2.230909	2.182168						
				130	6	0	5.263904	-2.134164	3.729862						
				131	6	0	3.813092	-2.158367	3.778675						
				132	6	0	0.025323	2.087363	-0.910952						
				133	1	0	-0.737446	3.310351	-2.521080						
				134	1	0	0.778924	2.431638	-2.875799						
				135	6	0	0.839445	5.488321	2.000111						
				136	6	0	5.966265	-3.308766	3.502217						
				137	6	0	7.112654	-4.568550	1.879556						
				138	6	0	5.660267	-6.137187	0.013007						
				139	6	0	2.126177	-4.724007	-1.514997						
				140	6	0	0.984224	-3.464278	0.108276						
				141	6	0	4.460495	-6.173837	-0.804107						
				142	6	0	1.933042	-3.392899	2.782070						
				143	6	0	3.132001	-3.355512	3.599273						
				144	1	0	0.994260	1.848537	-0.445546						
				145	1	0	-0.400493	1.140498	-1.277428						
				146	8	0	-0.848133	2.694891	0.013814						
				147	6	0	-0.609377	5.843409	2.202154						
				148	1	0	1.512361	6.321391	2.242000						
				149	1	0	1.088618	4.627982	2.636119						
				150	6	0	5.257502	-4.558138	3.319987						
				151	6	0	5.965742	-5.336388	2.316850						
				152	6	0	5.253953	-6.103561	1.404514						
				153	6	0	2.171291	-5.455775	-0.266518						
				154	6	0	1.465515	-4.676349	0.737441						
				155	6	0	3.313445	-6.163761	0.083163						
				156	6	0	1.931505	-4.642318	2.044694						
				157	6	0	3.870442	-4.582952	3.366972						
				158	6	0	-1.008470	1.953563	1.204779						
				159	8	0	-0.932702	6.969835	1.368556						
				160	1	0	-1.229224	4.985696	1.935713						
				161	1	0	-0.797201	6.099288	3.251380						
				162	6	0	3.803319	-6.121089	1.449247						
				163	6	0	3.127599	-5.379508	2.057491						
				164	1	0	-0.739583	0.897279	1.4054079						
				165	1	0	-0.358191	2.359022	1.995631						
				166	6	0	-2.467834	2.009567	1.609755						
				167	6	0	-2.011793	7.771659	1.832784						
				168	1	0	-2.657866	1.398281	2.502998						
				169	1	0	-3.069908	1.612151	0.778699						
				170	8	0	-2.803802	3.363955	1.856340						
				171	1	0	-1.871573	7.975820	2.902281						
				172	1	0	-1.952949	8.719684	1.288836						
				173	6	0	-3.382877	7.144185	1.618939						

AT5: M06-2X/6-31G(d,p)				84	6	0	5.878942	1.005233	1.035012	174	6	0	-5.017988	3.441254	1.260173
Standard orientation:				85	6	0	3.219689	3.426543	-1.225193	175	1	0	-4.761150	7.518085	1.948482
				86	6	0	4.085164	4.060309	0.928834	176	1	0	-4.175631	7.031706	0.339281
				87	6	0	8.086326	0.001735	0.531533	177	8	0	-4.115659	5.541964	1.763981
Center	Atomic	Atomic	Coordinates (Angstroms)	88	6	0	8.194490	-1.099840	-1.624206	178	6	0	-5.216336	4.833131	1.376178
Number	Number	Type	X Y Z	89	6	0	4.851699	-0.545102	-2.625729	179	6	0	-6.095173	2.622278	0.946012
				90	6	0	7.161084	-1.274082	-2.626506	180	6	0	-6.453946	5.390398	1.100897
				91	6	0	3.631361	0.467862	0.693216	181	6	0	-7.350309	3.188965	0.693885
				92	6	0	3.840663	-0.047155	-1.665809	182	1	0	-5.966788	1.548748	0.855213
				93	6	0	4.658734	0.644733	1.701478	183	6	0	-7.527106	4.561904	0.751535
				94	6	0	7.070265	0.501061	1.488442	184	1	0	-6.595920	6.463572	1.170542
				95	6	0	1.958952	3.815172	-0.820513	185	1	0	-8.184558	2.539305	0.451273
				96	1	0	3.366803	2.982544	-2.206014	186	1	0	-8.496615	5.001043	0.544879
				97	6	0	2.817810	4.488484	1.332124						
				98	1	0	4.914972	4.126297	1.627576						
				99	6	0	8.708429	-1.155898	1.128878						
				100	6	0	8.818726	-2.213018	-1.070505						
				101	6	0	4.453112	-1.872973	-3.024855						
				102	6	0	6.799026	-2.552798	-3.039823						
				103	6	0	2.649965	-0.505506	0.861437						
				104	6	0	2.842951	-1.079474	-1.507332						
				105	6	0	4.669191	-0.166069	2.832313						
				106	6	0	7.097734	-0.362110	2.645337						
				107	8	0	0.847510	3.599186	-1.618964						
				108	6	0	1.750925	4.368000	0.452756						
				109	1	0	2.674559	4.909647	2.320465						
				110	6	0	8.105736	-1.381349	2.428933						
				111	6	0	9.084725	-2.241536	0.343953						
				112	6	0	8.427002	-3.548191	-1.488587						
				113	6	0	5.407971	-2.861456	-3.244425						
				114	6	0	3.216860	-2.204799	-2.342337						
				115	6	0	7.441925	-3.713905	-2.449500						
				116	6	0	2.243164	-1.301151	-0.269730						
				117	6	0	2.669723	-1.360452	2.036851						
				118	6	0	5.922353	-0.681406	3.319490						
				119	6	0	3.656878	-1.195428	2.997008						
				120	6	0	0.459921	2.208870	-1.598048						
				121	8	0	0.467828	4.738822	0.700768						
				122	6	0	7.899052	-2.673236	2.887312						
				123	6	0	8.856799	-3.593442	0.817166						
				124	6	0	8.451327	-4.403008	-0.317562						
				125	6	0	5.173453	-4.214283	-2.777162						
				126	6	0	2.986689	-3.500641	-1.905524						
				127	6	0	6.433424	-4.742801	-2.286143						
				128	6	0	2.012421	-2.656286	0.193022						
				129	6	0	2.276308	-2.692637	1.620449						
				130	6	0	5.699176	-2.035797	3.788162						
				131	6	0	4.296270	-2.353621	3.589893						
				132	6	0	-0.053755	1.705453	-0.264995						
				133	1	0	-0.318676	2.096430	-2.352396						
				134	1	0	1.330191	1.605893	-1.884821						
				135	6	0	0.079964	5.004363	2.037149						
				136	6	0	6.664894	-3.009741	3.575508						
				137	6	0	8.277291	-3.805384	2.060219						
				138	6	0	7.484903	-5.387363	-0.158032						
				139	6	0	3.989849	-4.527840	-2.123119						
				140	6	0	2.378675	-3.731057	-0.606447						
				141	6	0	6.453048	-5.560424	-1.164445						
				142	6	0	2.891958	-3.803282	2.183052						
				143	6	0	3.923819	-3.629947	3.188876						
				144	1	0	0.634012	1.983548	0.550295						
				145	1	0	-0.044479	0.604674	-0.323717						
				146	8	0	-1.363014	2.166908	-0.019122						
				147	6	0	-1.402208	5.272198	1.983992						
				148	1	0	0.622979	5.874100	2.430189						
				149	1	0	0.290830	4.130172	2.668369						
				150	6	0	6.275284	-4.342194	3.163640						
				151	6	0	7.272378	-4.834038	2.227476						
				152	6	0	6.883142	-5.608000	1.142758						
				153	6	0	4.010008	-5.383515	-0.955193						
				154	6	0	3.014125	-4.891183	-0.017913						
				155	6	0	5.214614	-5.888224	-0.484895						
				156	6	0	3.266484	-4.927460	1.346714						
				157	6	0	4.934612	-4.646997	2.973840						
				158	6	0	-1.935993	1.512126	1.094957						
				159	8	0	-1.610885	6.510202	1.282221						
				160	1	0	-1.919596	4.462095	1.462330						
				161	1	0	-1.811035	5.346531	2.996421						
				162	6	0	5.479849	-5.918835	0.941330						
				163	6	0	4.528508	-5.450622	1.835840						
				164	1	0	-1.717930	0.434184	1.052622						
				165	1	0	-1.516641	1.902490	2.036139						
				166	6	0	-3.436336	1.682723	1.087706						
				167	6	0	-2.625410	7.343630	1.821677						
				168	1	0	-3.883835	0.990003	1.813473						
				169	1	0	-3.828759	1.450920	0.089479						
				170	8	0	-3.736966	3.021422	1.440679						
				171	1	0	-2.541033	7.354029	2.915450						
				172	1	0	-2.440274	8.357891	1.453993						
				173	6	0	-4.021015	6.901761	1.418946						

BT2: M06-2X/6-31G(d,p)

Standard orientation:							84	6	0	-5.981151	-0.719408	-2.995983	174	6	0	0.268614	9.148857	-4.006044
Standard orientation:							85	6	0	-6.985228	0.105693	-1.051501	175	1	0	-1.328492	7.730522	-4.372903
Standard orientation:							86	6	0	-5.480394	-0.023892	2.341766	176	6	0	1.161367	9.628121	-3.056478
Standard orientation:							87	6	0	-6.822395	0.211810	3.026514	177	1	0	1.881462	9.502091	-1.043754
Center	Atomic	Atomic	Coordinates (Angstroms)			88	6	0	-4.218780	-2.199827	3.081036	178	1	0	0.271755	9.545546	-0.014694	
Number	Number	Type	X	Y	Z	89	6	0	-3.639305	0.133634	4.054985	179	1	0	1.868314	10.408253	-3.316813	
1	6	0	7.275680	-1.647219	-1.994161	90	6	0	-3.701356	-4.712661	-2.881713	180	1	0	0.098739	4.472349	0.532607	
2	6	0	8.325598	-2.547360	-1.885597	91	6	0	-3.544915	-5.925025	-0.876568	181	7	0	-0.359032	4.419308	-0.394128	
3	6	0	9.257765	-2.449055	-0.848481	92	6	0	-3.395697	-5.806360	0.498561	182	6	0	0.650266	4.671454	-1.480492	
4	6	0	9.106254	-1.428256	0.119468	93	6	0	-3.157808	-4.265917	2.251275	183	1	0	-0.272334	2.325674	-0.471884	
5	6	0	8.035008	-0.545635	0.020704	94	6	0	-6.156010	-3.485832	-3.615734	184	1	0	-1.654359	2.992286	0.413634	
6	6	0	7.121674	-0.635275	-1.038975	95	6	0	-7.233985	-1.429041	-2.806127	185	1	0	0.108012	4.614804	-2.426460	
7	6	0	10.381519	-3.390566	-0.675863	96	6	0	-7.858304	-0.917096	-1.600974	186	1	0	0.984012	5.697855	-1.329134	
8	6	0	10.090359	-1.383258	1.222879	97	6	0	-6.685801	-0.966177	2.343116							
9	6	0	10.505077	-2.720471	1.702923	98	6	0	-5.614765	1.166084	3.350269							
10	6	0	10.655430	-3.739227	0.736652	99	6	0	-7.534375	-0.684142	1.216716							
11	6	0	11.003837	-5.026065	1.151378	100	6	0	-5.402054	-2.869732	3.254488							
12	1	0	11.063579	-5.827422	0.421626	101	7	0	-4.800884	0.877717	4.517877							
13	6	0	11.233645	-5.304694	2.495489	102	6	0	-2.442103	1.001724	3.716973							
14	6	0	11.086269	-4.301328	3.446416	103	1	0	-3.333252	-0.576025	4.829849							
15	6	0	10.708713	-3.021467	3.050780	104	6	0	-4.953703	-5.419262	-2.685488							
16	1	0	6.556703	-1.735668	-2.801061	105	6	0	-4.856775	-6.166991	-1.444998							
17	1	0	8.400573	-3.361566	-2.598864	106	6	0	-4.553851	-5.921456	1.366550							
18	1	0	7.875497	0.206646	0.786121	107	6	0	-4.398548	-4.968966	2.448900							
19	1	0	11.504273	-6.310801	2.797902	108	6	0	-6.152194	-4.819591	-3.043537							
20	1	0	11.241612	-4.516383	4.498370	109	6	0	-7.317418	-2.782089	-3.106505							
21	1	0	10.538543	-2.257808	3.803237	110	6	0	-8.537469	-1.775882	-0.750823							
22	16	0	10.253721	1.376954	1.013691	111	6	0	-6.680991	-2.230653	2.871770							
23	6	0	12.331631	1.512304	2.647439	112	1	0	-5.253571	2.067215	2.844147							
24	6	0	11.581342	2.209645	1.797172	113	1	0	-6.655120	1.341943	3.634213							
25	1	0	13.170010	1.910587	3.204699	114	6	0	-8.381342	-1.653566	0.688955							
26	1	0	11.720370	3.256801	1.561092	115	6	0	-5.502725	-4.272914	2.929119							
27	6	0	11.156596	-3.812461	-1.708214	116	6	0	-5.540270	0.174424	5.568437							
28	16	0	12.594251	-4.835284	-1.499620	117	6	0	-1.184412	0.411850	3.601700							
29	6	0	12.436599	-3.947944	-3.987630	118	6	0	-2.601235	2.347375	3.388849							
30	6	0	13.189333	-4.637868	-3.133404	119	6	0	-5.963376	-6.276725	-0.614674							
31	1	0	12.679353	-3.767295	-5.026917	120	6	0	-5.808798	-6.149312	0.819594							
32	1	0	14.136567	-5.102951	-3.375139	121	6	0	-7.312132	-4.939147	-2.179976							
33	16	0	11.923526	-0.170598	2.905174	122	6	0	-8.032213	-3.680830	-2.217994							
34	16	0	10.920068	-3.303624	-3.394158	123	6	0	-8.631590	-3.188363	-1.066904							
35	6	0	10.642530	-0.229836	1.672699	124	6	0	-7.533696	-3.257795	2.321963							
36	6	0	6.025618	0.278071	-1.122423	125	6	0	-8.383566	-2.976503	1.257409							
37	6	0	5.093783	1.049840	-1.193476	126	6	0	-6.813563	-4.515903	2.358287							
38	6	0	3.991822	1.953483	-1.275634	127	1	0	-4.888540	0.036843	6.433887							
39	6	0	3.825248	2.965386	-0.315142	128	1	0	-5.920602	-0.809308	5.255793							
40	6	0	3.066388	1.855947	-2.324497	129	1	0	-6.386807	0.789738	5.879901							
41	6	0	2.750106	3.836683	-0.395107	130	6	0	-0.118938	1.133773	3.075769							
42	1	0	4.559890	3.062652	0.477684	131	1	0	-1.045937	-0.630760	3.873378							
43	6	0	1.990261	2.731777	-2.393773	132	6	0	-1.541887	3.072285	2.847430							
44	1	0	3.205206	1.093280	-3.082541	133	1	0	-3.560335	2.809898	3.574867							
45	6	0	1.809242	3.716472	-1.421743	134	6	0	-7.218891	-5.648317	-0.990404							
46	1	0	2.636262	4.633791	0.336488	135	6	0	-6.965575	-5.434950	1.331068							
47	1	0	1.294160	2.663741	-3.224691	136	6	0	-8.533859	-3.931349	0.176733							
48	1	0	-2.102282	1.501571	-4.765985	137	6	0	-0.300896	2.446525	2.667240							
49	6	0	-2.398895	2.110853	-3.918662	138	1	0	0.856121	0.678506	2.932985							
50	6	0	-1.555782	2.218264	-2.814092	139	8	0	-1.645208	4.366666	2.403357							
51	6	0	-3.630648	2.757393	-3.920738	140	6	0	-7.839955	-5.132522	0.211793							
52	6	0	-1.933231	2.981335	-1.709106	141	8	0	0.715623	3.117721	2.019888							
53	1	0	-0.617023	1.672197	-2.791835	142	6	0	-2.941211	4.940968	2.472290							
54	6	0	-4.022421	3.506467	-2.812006	143	6	0	1.682375	3.723811	2.877311							
55	1	0	-4.294114	2.662084	-4.773981	144	6	0	-2.915028	6.301193	1.826378							
56	6	0	-1.054364	3.089033	-0.491777	145	1	0	-3.662900	4.303653	1.941837							
57	6	0	-3.178639	3.615286	-1.711844	146	1	0	-3.259315	5.036246	3.518364							
58	1	0	-4.996233	3.986615	-2.797685	147	6	0	1.313019	5.162672	3.151184							
59	1	0	-3.484818	4.188660	-0.839262	148	1	0	2.639538	3.669271	2.353285							
60	1	0	-1.054205	5.185400	-0.415770	149	1	0	1.760862	3.164966	3.815887							
61	6	0	-2.554031	-0.562502	-0.733928	150	1	0	-2.117159	6.921164	2.258177							
62	6	0	-1.850303	-1.763179	-0.717895	151	1	0	-3.876046	6.795270	2.030950							
63	6	0	-3.427374	-0.256369	-1.850167	152	8	0	-2.733977	6.151855	0.435409							
64	6	0	-3.159199	-0.046123	0.472259	153	8	0	1.258220	5.841117	1.906970							
65	6	0	-2.000375	-2.710646	-1.805491	154	1	0	0.338107	5.220921	3.654775							
66	6	0	-1.759555	-2.507719	0.511528	155	1	0	2.073664	5.621538	3.800334							
67	6	0	-3.562046	-1.154546	-2.898501	156	6</											