

Hungchaoite, $Mg(H_2O)_5B_4O_5(OH)_4 \cdot 2H_2O$: a hydrogen-bonded molecular complex

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Abstract

The hydrated magnesium borate mineral hungchaoite, $MgO \cdot 2B_2O_3 \cdot 9H_2O$, from Furnace Creek borate area, Death Valley, California, is triclinic, space group $P\bar{1}$, with cell dimensions: $a = 8.807(1)$, $b = 10.657(1)$, $c = 7.897(1)\text{\AA}$, $\alpha = 103.39(1)$, $\beta = 108.53(1)$, $\gamma = 97.18(1)^\circ$, and $Z = 2$. The crystal structure has been determined by the symbolic addition method and difference Fourier syntheses, and refined by the method of least squares to an R -factor of 0.049, based on 4860 reflections measured on an automatic single-crystal X-ray diffractometer. All hydrogens have been located and their positions refined.

The crystal structure consists of a molecular complex, $[Mg(H_2O)_5B_4O_5(OH)_4]$, and two water molecules, hydrogen-bonded into a three-dimensional framework; the molecular complex consists of a $[Mg(H_2O)_5(OH)]$ octahedron and the tetraborate polyanion $[B_4O_5(OH)_4]^{4-}$ ($4:2\Delta+2T$) sharing a common tetrahedral (OH) corner. The orientation of the Mg-octahedron with respect to the tetraborate polyanion is fixed by means of an intramolecular hydrogen bond between a water molecule bonded to magnesium and an oxygen atom belonging to the tetraborate polyanion. The average Mg-O, B-O(tetrahedral), and B-O (triangular) bond lengths are: 2.084, 1.476, and 1.368 \AA respectively. All hydrogen atoms are involved in hydrogen bonding. The average O-H, H...O, and O-H...O distances are 0.86, 1.94, and 2.781 \AA respectively. All the hydrogen bonds are nearly straight (av. O-H...O angle 171°), except one, which is bent (O-H...O angle 111°). The two isolated water molecules show a distorted tetrahedral coordination, whereas those bonded to magnesium show a distorted trigonal planar coordination.

Introduction

The hydrous magnesium borate mineral hungchaoite, $MgO \cdot 2B_2O_3 \cdot 9H_2O$, was first reported from salt lakes in China (Chu *et al.*, 1964). No reliable crystallographic data other than the X-ray powder pattern were available for this mineral until its discovery in the Furnace Creek area, Inyo County, Death Valley, California (McAllister, 1970). In Death Valley, hungchaoite occurs as an efflorescence on weathered colemanite, in association with two other magnesium borate minerals, inderite and kurakovite, both with the composition $Mg[B_3O_3(OH)_5] \cdot 5H_2O$, and with ulexite, $NaCa[B_5O_6(OH)_6] \cdot 5H_2O$. The occurrence and description of hungchaoite from the Death Valley region will be presented in a forthcoming paper by Erd *et al.* (in preparation).

Experimental

A colorless transparent hungchaoite crystal ($0.08 \times 0.20 \times 0.25$ mm) from Death Valley was mounted

on the computer-controlled, single-crystal X-ray diffractometer (Syntex P1). The cell dimensions were refined by the least-squares method based on 15 reflections with 2θ values between 25 and 45° measured with MoK α radiation (Table 1). Intensity data for all reflections with $2\theta < 65^\circ$ were collected by the $2\theta-\theta$ scan method, using MoK α radiation monochromatized by reflection from a graphite "single" crystal, and a scintillation counter. The variable scan method was used, the minimum scan rate being 2°/min (50 kV, 15 mA). A total of 4860 reflections were measured, out of which 1373 reflections were less than $3\sigma(I)$, where $\sigma(I)$ is the standard deviation of the intensity, as determined from counting statistics.

These intensities were corrected for Lorentz and polarization factors. Absorption corrections were neglected, because the absorption coefficient of hungchaoite for MoK α radiation is very small (Table 1). An $N(z)$ test based on the measured intensities in-

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CORRECTED SCALE FACTORS(S)

NEW	OLD
1	.21364
	1.00000

CURRENT EXTINCTION CORRECTION 0.

GRID SPECIFICATION-- X IN 22NDS, Y IN 32NDS, Z IN 24THS.

H	K	L	STYL	MIN	MAX
18	22	17	0	.000	.985

39 ATOMS LOADED FROM CARDS SUCCESSFULLY.

ATOM	X	Y	Z	POPP	MULT	POSIT	U	U11	U22	U33	U12	U13	U23	
MG	-.1710	.2264	.1323	1.0000	1.0000	GENL		.0162	.0191	.0178	.0028	.0034	.0067	
B	1	.1811	.3017	.4635	1.0000	1.0000	GENL		.0132	.0146	.0147	.0020	.0036	.0058
B	2	.2240	.0830	.5268	1.0000	1.0000	GENL		.0195	.0167	.0178	.0029	.0049	.0062
B	3	.2786	.2761	.7927	1.0000	1.0000	GENL		.0149	.0158	.0134	.0027	.0046	.0049
B	4	.4629	.4094	.6886	1.0000	1.0000	GENL		.0138	.0169	.0145	.0022	.0052	.0043

ATOM	X	Y	Z	PUPP	MULT	POSIT	U11	U22	U33	U12	U13	U23
1	.1915	.1613	.4107	1.0000	1.0000	GENL	.0205	.0156	.0140	.0045	.0050	.0058
2	.2731	.1322	.7162	1.0000	1.0000	GENL	.0235	.0146	.0142	.0043	.0047	.0053
3	.4437	.3536	.8218	1.0000	1.0000	GENL	.0125	.0230	.0143	.0001	.0024	.0087
4	.3412	.3893	.5202	1.0000	1.0000	GENL	.0137	.0214	.0140	-.0016	.0026	.0077
5	.1544	.3188	.6597	1.0000	1.0000	GENL	.0121	.0180	.0142	.0043	.0049	.0062
6	.0509	.3305	.3391	1.0000	1.0000	GENL	.0147	.0158	.0183	.0013	-.0004	.0078
7	.2053	-.0483	.4429	1.0000	1.0000	GENL	.0592	.0163	.0186	.0090	.0077	.0052
8	.H2	.H3	.2538	.2894	.9672	1.0000	.0222	.0201	.0150	-.0003	.0076	.0042
9	.H4	.H4	.6132	.4891	.7326	1.0000	.0161	.0279	.0157	-.0056	.0036	.0081
10	.W1	.W1	-.3892	.1146	-.0730	1.0000	.0181	.0249	.0299	.0053	-.0020	.0021
11	.W2	.W2	-.1124	.0453	.1426	1.0000	.0196	.0208	.0306	.0028	.0036	.0104
12	.W3	.W3	-.2754	.2192	.3357	1.0000	.0200	.0269	.0230	.0028	.0069	.0063
13	.W4	.W4	-.2754	.3950	.1072	1.0000	.0273	.0218	.0305	.0093	-.0048	.0048
14	.W5	.W5	-.0732	.2266	-.0743	1.0000	.0237	.0332	.0193	-.0012	.0088	.0032
15	.W6	.W6	-.6025	.1502	.2037	1.0000	.0226	.0299	.0256	.0081	.0111	.0092
16	.W7	.W7	-.1081	.4104	.6641	1.0000	.0252	.0254	.0356	.0106	.0144	.0111
17	1	.0783	.4126	.3482	1.0000	1.0000	GENL	.0460	.0623	.0541	.0344	.0465
18	2	.2281	-.0934	.5129	1.0000	1.0000	GENL	.0541	.0563	.0577	.0511	.0641
H	3	.2949	.3679	.05C3	1.0000	1.0000	GENL	.0344	.0465	.0461	.0511	.0563
H	4	.6188	.5188	.6513	1.0000	1.0000	GENL	.0226	.0299	.0356	.0356	.0461
H	5	-.4838	.1279	-.1367	1.0000	1.0000	GENL	.0252	.0254	.0356	.0356	.0461
H	6	-.3898	.0273	-.1206	1.0000	1.0000	GENL	.0116	.0144	.0144	.0144	.0144
H	7	-.1607	-.0126	.1782	1.0000	1.0000	GENL	.0116	.0144	.0144	.0144	.0144
H	8	-.0067	.0593	.2066	1.0000	1.0000	GENL	.0116	.0144	.0144	.0144	.0144
H	9	-.3826	.2102	.3005	1.0000	1.0000	GENL	.0116	.0144	.0144	.0144	.0144
H	10	-.2893	.2899	.4328	1.0000	1.0000	GENL	.0116	.0144	.0144	.0144	.0144
H	11	-.2239	.4744	.1807	1.0000	1.0000	GENL	.0116	.0144	.0144	.0144	.0144
H	12	-.3511	.3900	.0226	1.0000	1.0000	GENL	.0301	.0301	.0301	.0301	.0301
H	13	.0316	.2482	-.0497	1.0000	1.0000	GENL	.0635	.0635	.0635	.0635	.0635
H	14	-.1157	.1683	-.1774	1.0000	1.0000	GENL	.0547	.0547	.0547	.0547	.0547
H	15	-.6610	.1556	.2658	1.0000	1.0000	GENL	.0459	.0459	.0459	.0459	.0459
H	16	-.6433	.1914	.1325	1.0000	1.0000	GENL	.0581	.0581	.0581	.0581	.0581
H	17	-.0255	.3782	.6642	1.0000	1.0000	GENL	.0611	.0611	.0611	.0611	.0611
H	18	-.1425	.4040	.7560	1.0000	1.0000	GENL	.0494	.0494	.0494	.0494	.0494

LOGICAL RECORD 10, UPDATED.
LOGICAL RECORD 11, UPDATED.

39 ATOMS LOADED

***HYPER-PHYSICAL RECORD IN WHICH LOGICAL RECORDS BEGIN

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INTERCHANGED NFILEA = 9 NFILEB = 8.

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MIXD	YES	YES	NO	NO	XRAY	NC

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ISOTROPIC EXTINCTION CORRECTION 0.

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SCALE FACTORS

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INDIVIDUAL ATOM PARAMETERS

***** THERMAL VALUES LISTED ARE MULTIPLIED BY 100*****

ATOM MG	X	Y	Z	POP	PAR.	MULT.	U OR U1	U22	U33	U12	U13	U23
B 1	-170450	.226430	.132340	1.00000	1.000	1.62361	1.90741	1.78151	.27810	.33990	.66970	
B 2	.181130	.301670	.483480	1.00000	1.000	1.31981	1.46261	1.47231	.19920	.35760	.58230	
B 3	.224040	.083030	.526810	1.00000	1.000	1.94581	1.66501	1.77761	.28500	.48720	.62260	
B 4	.276600	.276130	.792740	1.00000	1.000	1.48981	1.57991	1.34281	.26650	.45630	.48730	
B 5	.462860	.409440	.688630	1.00000	1.000	1.37931	1.68971	1.44651	.22450	.51940	.43360	
B 6	.191510	.161300	.410680	1.00000	1.000	2.05031	1.56461	1.40301	.44590	.49730	.58070	
B 7	.273130	.132230	.716190	1.00000	1.000	2.34571	1.45961	1.42431	.43260	.47210	.53110	
B 8	.443660	.353570	.821790	1.00000	1.000	2.30171	1.43381	.01150	.24180	.86510		
B 9	.341160	.389260	.520170	1.00000	1.000	1.37031	2.14321	1.40421	-.15910	.25530	.76730	
B 10	.154440	.318830	.659650	1.00000	1.000	1.21340	1.80401	1.42421	.43100	.48660	.62470	
B 11	.050880	.330520	.339100	1.00000	1.000	1.47441	1.57571	1.82881	.13220	-.04260	.78250	
B 12	.205310	-.048330	.442850	1.00000	1.000	5.92102	1.62651	1.85621	.90150	.76510	.51730	
B 13	.253830	.289350	.967220	1.00000	1.000	2.22171	2.00581	1.29751	-.03410	.75780	.41600	

INDIVIDUAL ATOM PARAMETERS

4* THERMAL VALUES LISTED ARE MULTIPLIED BY 100*

ATOM	X	Y	Z	POP.	PAR.	MULT.	U _{DR}	U _{LL}	U ₂₂	U ₃₃	U ₁₂	U ₁₃	U ₂₃
D	-0.613230	-0.489080	-0.732020	1.000000	1.0000	1.0000	1.61261	2.078921	1.057351	-0.55570	-0.36240	0.81360	
H4	-0.389240	-0.114770	-0.072950	1.000000	1.0000	1.0000	1.80641	2.48821	2.99271	-0.52840	-0.20360	0.20870	
W1	-0.112460	-0.045310	-0.142550	1.000000	1.0000	1.0000	1.95831	2.07871	3.06141	-0.27870	-0.36090	1.03610	
W2	-0.275410	-0.219210	-0.338740	1.000000	1.0000	2.00321	2.68841	2.30091	-0.27640	-0.68900	0.63380		
W3	-0.258380	-0.395030	-0.107200	1.000000	1.0000	2.000000	2.17501	3.04531	-0.92860	-0.48350	0.48060		
W4	-0.075170	-0.226590	-0.074300	1.000000	1.0000	2.000000	2.36611	3.032051	1.93311	-0.11810	0.87790	0.31520	
W5	-0.602470	-0.150240	-0.203660	1.000000	1.0000	2.000000	2.25541	2.98751	2.55831	0.80830	1.10840	0.92410	
W6	-0.106110	-0.410350	-0.664070	1.000000	1.0000	2.000000	2.51501	2.53591	1.05530	1.43651	1.11230		
W7	-0.678250	-0.412570	-0.348180	1.000000	1.0000	4.000000	4.60000						
H	-0.226140	-0.093440	-0.512920	1.000000	1.0000	6.000000	6.23000						
H	-0.294850	-0.367680	-0.050270	1.000000	1.0000	5.000000	5.41000						
H	-0.618790	-0.518840	-0.651280	1.000000	1.0000	3.000000	3.44000						
H	-0.483750	-0.127910	-0.136650	1.000000	1.0000	4.000000	4.65000						
H	-0.389760	-0.027270	-0.120630	1.000000	1.0000	6.000000	6.41000						
H	-0.160740	-0.612550	-0.178200	1.000000	1.0000	5.000000	5.83000						
H	-0.066060	-0.059280	-0.206600	1.000000	1.0000	5.000000	5.77000						
H	-0.382620	-0.210210	-0.300540	1.000000	1.0000	5.000000	5.11000						
H	-0.238290	-0.289890	-0.432760	1.000000	1.0000	6.000000	6.06000						
H	-0.223880	-0.474430	-0.180730	1.000000	1.0000	6.000000	6.11000						
H	-0.351130	-0.390010	-0.022590	1.000000	1.0000	3.001000							
H	-0.031610	-0.248160	-0.049730	1.000000	1.0000	6.000000	6.35000						
H	-0.115700	-0.168300	-0.177350	1.000000	1.0000	5.000000	5.47000						
H	-0.661010	-0.155560	-0.265810	1.000000	1.0000	4.000000	4.59000						
H	-0.643260	-0.191380	-0.132510	1.000000	1.0000	5.000000	5.81000						
H	-0.025500	-0.378190	-0.664150	1.000000	1.0000	6.000000	6.11000						
H	-0.142490	-0.404610	-0.755960	1.000000	1.0000	4.000000	4.94000						

H	K	L	GRP	F0	FC	A	B	SINHLM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	0	1	1	3.080	3.91	-3.91	0.00	0.6974	-10	-48	180	180
0	0	2	1	12.83	13.60	-13.60	0.00	13949	-77	-517	180	180
0	0	3	1	2.75	4.64	-4.64	0.00	20923	-1.89	-5.23	180	180
0	0	4	1	18.11	19.24	-19.24	0.00	27897	-1.13	-7.27	180	180
0	0	5	1	24.80	25.42	-25.42	0.00	34871	-62	-2.86	180	180
0	0	15.00	15.60	0.00	41846	-60	-3.44	0	0	0	0	0
0	0	6	1	2.43	2.10	-2.10	0.00	48820	.33	.50	180	180
0	0	7	1	3.76	4.19	-4.19	0.00	55794	-.43	-.84	180	180
0	0	8	1	2.31	3.15	3.15	0.00	62768	-.84	-.92	0	0
0	0	9	1	1.82	1.78	-1.78	0.00	69743	.03	.03	180	180
0	0	10	1	2.50	1.22	-1.22	0.00	75441	1.28	1.24	180	180
0	0	11	1	6.64	7.71	7.71	0.00	68482	-.88	-2.17	0	0
0	0	12	1	4.60	4.60	4.60	0.00	61526	.05	.12	180	180
0	0	13	1	2.51	2.57	-2.57	0.00	54575	-.06	-.08	180	180
0	0	14	1	6.69	6.83	-6.83	0.00	47631	-.13	-.47	180	180
0	0	15	1	24.22	25.57	-25.57	0.00	40697	-1.35	-6.12	180	180
0	0	16	1	17.13	17.56	-17.56	0.00	33780	-.42	-2.64	180	180
0	0	17	1	26.60	26.86	-26.86	0.00	26892	-.26	-1.10	180	180
0	0	18	1	20.90	22.57	-22.57	0.00	20604	-1.68	-8.00	180	180
0	0	19	1	16.29	17.14	17.14	0.00	13387	-.84	-4.43	0	0
0	0	20	1	9.45	10.52	10.52	0.00	07291	-1.08	-6.48	180	180
0	0	21	1	7.47	6.46	-6.46	0.00	04939	1.01	8.12	0	0
0	0	22	1	12.31	12.04	12.04	0.00	09638	.27	1.66	0	0
0	0	23	1	23.06	23.32	23.32	0.00	16084	-.26	-1.13	0	0
0	0	24	1	30.57	32.80	-32.80	0.00	22842	-2.23	-8.56	180	180
0	0	25	1	12.83	12.77	12.77	0.00	29700	.07	.45	0	0
0	0	26	1	32.00	34.02	34.02	0.00	36602	-1.71	-6.10	0	0
0	0	27	1	2.24	1.85	-1.85	0.00	43528	.39	.58	180	180
0	0	28	1	19.43	20.93	20.93	0.00	50466	-1.50	-8.16	180	180
0	0	29	1	2.80	3.45	-3.45	0.00	57414	-.65	-.96	180	180
0	0	30	1	4.47	5.06	-5.06	0.00	64367	-.59	-1.16	180	180
0	0	31	1	8.18	8.18	-8.18	0.00	71324	-.05	.01	180	180
0	0	32	1	6.83	6.54	6.54	0.00	74472	.28	.67	0	0
0	0	33	1	5.50	5.50	-5.50	0.00	67560	-.47	-.94	180	180
0	0	34	1	3.82	3.72	-3.72	0.00	60662	.11	.19	0	0
0	0	35	1	3.50	2.99	2.99	0.00	53784	.50	.99	0	0
0	0	36	1	18.71	20.08	20.08	0.00	46934	-1.37	-7.61	0	0
0	0	37	1	1.42	.09	.09	0.00	40128	1.33	1.32	0	0
0	0	38	1	22.66	23.89	-23.89	0.00	33390	-1.23	-5.75	180	180
0	0	39	1	6.38	5.85	-5.85	0.00	26775	.53	2.60	180	180
0	0	40	1	30.01	31.03	-31.03	0.00	20399	-1.02	-4.15	180	180
0	0	41	1	20.46	20.91	-20.91	0.00	14583	-.45	-1.95	180	180
0	0	42	1	10.49	11.00	11.00	0.00	10318	-.51	-3.10	0	0
0	0	43	1	42.72	44.21	-44.21	0.00	09877	-1.49	-6.36	180	180
0	0	44	1	54.58	57.44	-57.44	0.00	13636	-2.86	-10.55	180	180
0	0	45	1	12.83	14.17	14.17	0.00	19277	.53	3.11	0	0
0	0	46	1	6.65	6.12	6.12	0.00	25584	.50	.58	0	0
0	0	47	1	1.19	.69	.69	0.00	32167	-.77	-2.46	0	0
0	0	48	1	35.08	35.85	35.85	0.00	38887	-1.34	-7.63	0	0
0	0	49	1	16.65	18.49	-18.49	0.00	45684	-.83	-10.21	180	180
0	0	50	1	1.54	.26	.26	0.00	52527	1.28	1.16	0	0
0	0	51	1	4.28	2.98	-2.98	0.00	59400	1.30	2.81	180	180
0	0	52	1	2.50	2.50	-2.50	0.00	66205	-.70	1.03	0	0

H	K	L	GKP	FU	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT			
0	2	10	1	5.57	-5.57	0.00	73205	-0.01	-0.02		180				
0	3	-11	1	1.88	0.58	-0.58	73820	1.30	.97		180				
0	3	-10	1	1.78	-1.78	0.00	66989	-0.00	-0.00		180				
0	3	-9	1	1.66	.16	-0.16	60191	1.50	1.26		180				
0	3	-8	1	1.56	.71	.71	53439	.85	.76		0				
0	3	-7	1	1.41	19.76	-19.76	46751	-1.35	-7.54	180					
0	3	-6	1	1.36	50.36	53.29	0.00	40162	-2.93	-5.81	0				
0	3	-5	1	1.09	7.09	7.59	0.00	33727	-4.49	-2.26	0				
0	3	-4	1	4.91	4.69	-4.69	0.00	27556	.21	.85	180				
0	3	-3	1	5.46	5.54	-5.54	0.00	21874	-0.07	-0.35	180				
0	3	-2	1	68.17	68.87	68.87	0.00	17172	-.70	-2.29	0				
0	3	-1	1	40.57	42.03	-42.03	0.00	14441	-1.46	-5.13	180				
0	3	0	1	8.08	7.85	7.85	0.00	14816	.23	1.61	0				
0	3	1	1	16.85	17.26	17.26	0.00	18104	-.40	-2.46	0				
0	3	2	1	12.27	12.05	-12.05	0.00	23093	.22	1.66	180				
0	3	3	1	3.00	2.46	-2.46	0.00	28915	.54	1.46	180				
0	3	4	1	3.02	3.64	-3.64	0.00	35159	-.61	-1.39	180				
0	3	5	1	4.08	4.04	-4.04	0.00	41635	.04	.11	180				
0	3	6	1	1.48	.46	.46	0.00	48251	1.02	.97	0				
0	3	7	1	1.56	.23	-.23	0.00	54955	1.32	1.19	180				
0	3	8	1	4.91	4.50	-4.50	0.00	61719	.41	.93	180				
0	3	9	1	9.78	9.62	9.62	0.00	68526	.16	.51	0				
0	3	10	1	5.68	5.66	-5.66	0.00	75363	.02	.05	180				
0	3	11	1	3.50	3.72	-3.72	0.00	73496	-.22	-.30	180				
0	3	12	1	13.31	14.48	-14.48	0.00	66781	-.17	-4.42	180				
0	3	13	1	1.76	3.16	3.16	0.00	60124	-.140	-1.23	0				
0	3	14	1	-8	7.62	7.97	0.00	53549	-.35	-1.23	0				
0	3	15	1	-7	1	6.97	6.97	0.00	47089	-.05	-.18	0			
0	3	16	1	-6	1	11.42	11.69	0.00	40798	-.27	-1.39	180			
0	3	17	1	-5	1	1.37	2.04	-2.04	0.00	34770	-.67	-.69	180		
0	3	18	1	-4	1	12.61	12.15	12.15	0.00	29165	.47	3.21	0		
0	3	19	1	-3	1	21.12	21.58	-21.58	0.00	24282	-.46	-2.30	180		
0	3	20	1	-2	1	1.56	2.61	-2.61	0.00	20636	-.106	-1.66	180		
0	3	21	1	-1	1	4.81	4.78	4.78	0.00	18958	.03	.13	0		
0	3	22	1	0	1	26.00	25.02	-25.02	0.00	19754	.97	3.93	180		
0	3	23	1	1	1	34.85	36.29	36.29	0.00	22767	-.144	-.5.61	0		
0	3	24	1	2	1	6.07	6.48	6.48	0.00	27271	-.42	-2.07	0		
0	3	25	1	3	1	13.76	14.27	14.27	0.00	32656	-.51	-3.36	0		
0	3	26	1	4	1	17.13	17.64	-17.64	0.00	38553	-.52	-3.16	180		
0	3	27	1	5	1	4.41	4.45	4.45	0.00	44761	-.04	-.10	0		
0	3	28	1	6	1	1.52	1.47	1.47	0.00	51167	.05	.04	0		
0	3	29	1	7	1	6.69	6.04	6.04	0.00	57705	.64	1.98	0		
0	3	30	1	8	1	12.93	13.63	13.63	0.00	60462	-.70	-2.85	0		
0	3	31	1	9	1	8.55	9.16	9.15	0.00	64335	-.06	-1.17	0		
0	3	32	1	10	1	-11	1	1	1	71030	-.10	-.10	0		
0	3	33	1	11	1	1.79	.83	-.83	0.00	73502	-.49	-.76	180		
0	3	34	1	12	1	10.77	10.77	10.77	0.00	66936	.97	.76	180		
0	3	35	1	13	1	34.98	35.95	-35.95	0.00	60412	-.61	-2.23	0		
0	3	36	1	14	1	4.00	4.50	4.50	0.00	47935	-.51	-1.14	0		
0	3	37	1	15	1	10.77	10.77	10.77	0.00	42010	-.01	-.03	180		
0	3	38	1	16	1	35.95	35.95	-35.95	0.00	36457	-.97	-2.86	180		
0	3	39	1	17	1	23.52	24.56	-24.56	0.00	31475	-.509	-5.09	180		

	H	K	L	GKP	FO	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
0	6	-10	1	6.24	5.68	-5.68	0.00	•69539	•56	1.31	180	180	
0	8	-9	1	15.97	16.16	-16.16	0.00	•63800	-19	-7.79	180	180	
0	8	-8	1	5.13	5.20	-5.20	0.00	•58331	-08	-19	180	180	
0	8	-7	1	5.73	6.03	-6.03	0.00	•53215	-30	-84	180	180	
0	8	-6	1	4.77	4.50	-4.50	0.00	•48563	27	•73	180	180	
0	8	-5	1	3.48	4.12	-4.12	0.00	•44523	-64	-1.39	180	180	
0	8	-4	1	7.42	7.63	-7.63	0.00	•41273	-21	-86	180	180	
0	8	-3	1	5.40	5.62	-5.62	0.00	•39012	-22	-73	180	180	
0	8	-2	1	6.61	6.65	-6.65	0.00	•37916	-04	-17	180	180	
0	8	-1	1	10.83	10.83	-10.83	0.00	•38087	-33	-1.76	180	180	
0	8	0	1	5.49	5.65	-5.65	0.00	•39509	-16	-59	180	180	
0	8	1	1	18.62	20.01	-20.01	0.00	•42054	-1.39	-7.95	180	180	
0	8	2	1	15.38	16.84	-16.84	0.00	•45534	-1.46	-8.06	180	180	
0	8	3	1	7.37	7.89	-7.89	0.00	•49754	-53	-1.95	180	180	
0	8	4	1	9.63	10.24	-10.24	0.00	•54543	-61	-2.36	180	180	
0	8	5	1	9.99	10.29	-10.29	0.00	•59763	-30	-1.14	180	180	
0	8	6	1	8.48	8.86	-8.86	0.00	•65311	-38	-1.18	180	180	
0	8	7	1	6.52	6.76	-6.76	0.00	•71111	-24	-58	180	180	
0	8	8	1	1.84	2.59	-2.59	0.00	•71075	-74	-56	180	180	
0	8	9	1	-9	5.71	5.49	5.49	0.00	•65622	22	.50	180	180
0	8	10	1	3.44	3.48	-3.48	0.00	•60483	-04	-07	180	180	
0	8	11	1	1.61	0.09	-0.09	0.00	•55744	1.52	1.32	180	180	
0	8	12	1	12.02	12.04	-12.04	0.00	•51515	-02	-09	180	180	
0	8	13	1	18.83	19.58	-19.58	0.00	•47933	-75	-4.18	180	180	
0	8	14	1	15.40	15.88	-15.88	0.00	•45151	-48	-2.63	180	180	
0	8	15	1	16.48	17.23	-17.23	0.00	•43324	-75	-4.28	180	180	
0	8	16	1	10.79	11.77	-11.77	0.00	•42574	-98	-4.90	180	180	
0	8	17	1	-2	11.90	12.58	12.58	0.00	•42958	-68	-3.53	180	180
0	8	18	1	3.10	3.88	-3.88	0.00	•44447	-79	-1.54	180	180	
0	8	19	1	6.87	7.23	-7.23	0.00	•46936	-36	-1.38	180	180	
0	8	20	1	2.71	3.18	-3.18	0.00	•50276	-47	-79	180	180	
0	8	21	1	3.20	4.67	-4.67	0.00	•54311	-1.47	-2.58	180	180	
0	8	22	1	11.15	12.42	-12.42	0.00	•58898	-127	-5.13	180	180	
0	8	23	1	2.34	2.31	-2.31	0.00	•63918	.03	.03	180	180	
0	8	24	1	1.78	1.49	-1.49	0.00	•69278	.29	.23	180	180	
0	8	25	1	6.03	5.47	-5.47	0.00	•74903	.56	1.24	180	180	
0	8	26	1	3.11	2.86	-2.86	0.00	•72914	.25	.31	180	180	
0	8	27	1	10	12.77	12.08	12.08	0.00	•67756	.69	2.53	180	180
0	8	28	1	10	2.62	3.55	3.55	0.00	•62950	-92	-1.08	180	180
0	8	29	1	10	4.75	5.01	-5.01	0.00	•58581	-25	-57	180	180
0	8	30	1	10	-6	1.58	.64	0.00	•54754	.94	.84	180	180
0	8	31	1	10	-5	1.1	1.1	0.00	•51591	-89	-4.34	180	180
0	8	32	1	10	-4	1	1	0.00	•49219	.94	1.65	180	180
0	8	33	1	10	-3	1	1	0.00	•47757	.24	1.11	180	180
0	8	34	1	10	-2	1	1	0.00	•47288	-.93	-4.87	180	180
0	8	35	1	10	-1	1	1	0.00	•47843	-.77	-1.01	180	180
0	8	36	1	10	-5	1	1	0.00	•51591	-.89	-4.34	180	180
0	8	37	1	10	-4	2	•87	0.00	•49386	2.07	6.37	180	180
0	8	38	1	10	-3	1	1	0.00	•51829	.42	1.09	180	180
0	8	39	1	10	-2	1	1	0.00	•55053	1.20	1.07	180	180
0	8	40	1	10	-1	1	1	0.00	•47843	-.24	-.75	180	180
0	8	41	1	10	4	1	1	0.00	•63339	-.05	-.18	180	180
0	8	42	1	10	5	1	1	0.00	•68178	-.03	-.06	180	180
0	8	43	1	10	6	1	1	0.00	•73362	.49	.84	180	180

	H	K	L	GKP	FC	FC	A	B	SINTH/LM	BT	W*UF	ANGLE CALC	ANGLE STAT
0	11	-10	1	L	3.88	4.23	C.00	.75033	-	.35	-48	0	
0	11	-9	1	L	5.32	5.18	C.00	.70173	.15	.36	-83	180	
0	11	-8	1	L	5.61	5.97	-5.97	6.00	.65695	-36	-44	-1.01	180
0	11	-7	1	L	5.22	5.66	-5.66	C.00	.61683	-44	-0.01	180	
0	11	-6	1	L	10.35	10.33	-10.33	C.00	.58232	.01	.05	180	
0	11	-5	1	L	10.42	10.63	10.63	C.00	.55448	-.21	-.83	0	
0	11	-4	1	L	10.04	10.07	10.07	C.00	.53435	-.03	-.13	0	
0	11	-3	1	L	6.72	7.17	-7.17	C.00	.52281	-.45	-1.49	180	
0	11	-2	1	L	10.49	11.03	11.03	C.00	.52045	-.54	-2.31	0	
0	11	-1	1	L	4.43	3.48	-3.48	C.00	.52738	.95	2.23	180	
0	11	0	1	L	25.42	26.30	-26.30	C.00	.54324	-.88	-4.06	180	
0	11	1	1	L	6.09	5.99	5.99	C.00	.56730	.10	.29	0	
0	11	2	1	L	2.82	3.06	3.06	C.00	.59856	-.25	-.37	0	
0	11	3	1	L	2.21	4.02	-4.02	C.00	.63596	-.81	-1.63	180	
0	11	4	1	L	8.76	9.50	9.50	C.00	.67849	-.74	-2.22	0	
0	11	5	1	L	12.57	13.77	13.77	C.00	.72524	-1.20	-4.16	0	
0	12	-9	1	L	3.89	3.96	3.96	C.00	.72845	-.07	-.10	0	
0	12	-8	1	L	1.83	2.70	-2.70	C.00	.68687	.86	-.66	180	
0	12	-7	1	L	1.76	1.74	-1.74	C.00	.65013	.02	.01	180	
0	12	-6	1	L	1.68	1.01	-1.01	C.00	.61909	.67	.56	180	
0	12	-5	1	L	9.90	10.23	10.23	C.00	.59465	-.32	-1.19	0	
0	12	-4	1	L	5.17	5.02	5.02	C.00	.57765	.16	.39	0	
0	12	-3	1	L	2.69	3.05	3.05	C.00	.56874	-.36	-.52	0	
0	12	-2	1	L	20.83	21.43	-21.43	C.00	.56832	-.60	-3.00	180	
0	12	-1	1	L	14.69	14.57	-14.57	C.00	.57640	.12	.55	180	
0	12	0	1	L	2.89	3.24	-3.24	C.00	.59263	-.36	-.53	180	
0	12	1	1	L	2.90	1.34	-1.34	C.00	.61637	1.56	2.35	180	
0	12	2	1	L	6.14	6.18	0.00	C.00	.64680	-.04	-.10	0	
0	12	3	1	L	8.08	8.23	8.23	C.00	.68301	-.15	-.45	0	
0	12	4	1	L	7.18	7.46	-7.46	C.00	.72415	-.28	-.72	180	
0	13	-8	1	L	11.62	11.52	11.52	C.00	.71894	.10	.35	0	
0	13	-7	1	L	4.02	3.47	-3.47	C.00	.68538	.55	.93	180	
0	13	-6	1	L	5.52	6.00	0.00	C.00	.65752	-.48	-1.08	0	
0	13	-5	1	L	1.87	1.49	1.49	C.00	.63612	.37	.33	0	
0	13	-4	1	L	2.85	4.00	-4.00	C.00	.62185	-.16	-1.50	180	
0	13	-3	1	L	3.05	2.82	-2.82	C.00	.61521	.23	.32	180	
0	13	-2	1	L	8.91	8.93	0.00	C.00	.61643	-.02	-.06	0	
0	13	-1	1	L	3.89	3.43	-3.43	C.00	.62548	.46	.86	180	
0	13	0	1	L	4.90	5.29	5.29	C.00	.64202	-.39	-.83	0	
0	13	1	1	L	1.76	2.58	-2.58	C.00	.66549	-.82	-.65	180	
0	13	2	1	L	4.27	4.23	4.23	C.00	.69519	.04	.07	0	
0	13	3	1	L	5.52	5.05	-5.05	C.00	.6733	-.02	-.06	0	
0	13	4	1	L	1.90	2.35	2.35	C.00	.75288	-.45	-.33	0	
0	13	5	1	L	1.83	1.26	1.26	C.00	.72228	.57	.43	0	
0	13	6	1	L	2.96	4.52	-4.52	C.00	.69733	-.156	-1.87	180	
0	13	7	1	L	2.70	6.05	6.05	C.00	.67865	-.35	-.81	0	
0	14	-8	1	L	1.76	2.16	-2.16	C.00	.66679	-.40	-.32	0	
0	14	-7	1	L	1.83	1.26	1.26	C.00	.66210	-.69	-.55	180	
0	14	-6	1	L	4.52	4.27	-4.27	C.00	.66473	-.49	-1.10	180	
0	14	-5	1	L	2.70	6.05	6.05	C.00	.67460	-.12	-.44	0	
0	14	-4	1	L	1.79	1.61	1.61	C.00	.69140	-.18	.14	0	
0	14	-3	1	L	4.47	4.60	-4.60	C.00	.71464	-.13	-.23	180	
0	14	-2	1	L	5.59	6.08	6.08	C.00	.66473	-.49	-1.10	180	
0	14	-1	1	L	12.58	12.70	6.00	C.00	.67460	-.12	-.44	0	
0	14	0	1	L	1.79	1.61	1.61	C.00	.69140	-.18	.14	0	
0	14	1	1	L	4.60	4.00	4.00	C.00	.71464	-.13	-.23	180	
0	14	2	1	L	1.30	7.43	7.43	C.00	.74372	-.02	-.06	0	

	H	K	L	GRP	FU	FC	A	B	SINT/HLM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	0	15	-6	-1	1.91	1.27	0.00	•73829	•64	•48	0	1.15	180
1	0	15	-3	1	3.28	3.16	-3.16	0.00	•72206	•11	1.15	180	0
1	0	15	-4	1	1.80	•28	•28	0.00	•71231	1.52	1.18	0	0
1	0	15	-3	1	10.02	10.04	10.04	0.00	•70933	-•03	-•09	0	0
1	0	15	-2	1	8.33	8.63	-8.63	0.00	•71318	-•30	-•87	180	180
1	0	15	-1	1	3.64	3.17	-3.17	0.00	•72376	•48	•74	180	180
1	1	15	0	1	2.17	•86	-•86	0.00	•74079	1.31	1.19	180	180
1	1	16	2	1	12.21	12.59	-12.59	0.00	•75452	-•38	-1.22	180	180
1	1	16	3	1	4.21	3.78	-3.78	0.00	•75161	•43	•67	180	180
1	1	16	4	1	5.45	4.77	4.77	0.00	•75515	•68	1.31	0	0
1	1	16	-1	1	3.12	2.27	-2.27	0.00	•75137	•86	1.06	180	180
1	1	15	0	1	2.83	•92	•92	0.00	•73005	1.91	2.36	0	0
1	1	15	1	1	3.88	3.96	3.96	0.00	•71492	-•08	-•13	0	0
1	1	15	2	1	1.85	2.99	-2.99	0.00	•70638	-1.15	-•87	180	180
1	1	15	3	1	2.93	2.84	-2.84	0.00	•70468	1.08	1.16	180	180
1	1	15	4	1	1.79	•36	•36	0.00	•70985	1.44	1.12	0	0
1	1	15	5	1	11.85	11.94	11.94	0.00	•72176	-•09	-•30	0	0
1	1	15	6	1	5.43	4.91	-4.91	0.00	•74008	•52	1.03	180	180
1	1	14	-2	1	11.37	11.10	11.10	0.00	•72971	•27	•91	0	0
1	1	14	-1	1	4.01	3.77	-3.77	0.00	•70225	•25	•41	180	180
1	1	14	0	1	1.77	•46	•46	0.00	•68084	1.31	1.04	0	0
1	1	14	1	1	7.28	7.33	-7.33	0.00	•66609	-•05	-•14	180	180
1	1	14	2	1	11.35	12.24	12.24	0.00	•65842	-•89	-3.08	0	0
1	1	14	3	1	1.74	•22	-•22	0.00	•65810	1.52	1.23	180	180
1	1	14	4	1	1.97	1.25	1.25	0.00	•66514	•72	•62	0	0
1	1	14	5	1	1.78	•57	•57	0.00	•67930	1.21	•95	0	0
1	1	14	6	1	5.14	5.04	-5.04	0.00	•7015	•10	•21	180	180
1	1	14	7	1	1.87	•61	-•61	0.00	•72712	1.26	•94	180	180
1	1	13	-4	1	8.05	9.63	-9.63	0.00	•75355	-1.58	-4.09	180	180
1	1	13	-3	1	5.53	4.82	-4.82	0.00	•71487	•71	1.53	180	180
1	1	13	-2	1	5.28	5.35	5.35	0.00	•68115	-•07	-•14	0	0
1	1	13	-1	1	5.76	5.93	-5.93	0.00	•65316	-•17	-•38	180	180
1	1	13	0	1	4.41	4.70	4.70	0.00	•63166	-•29	-•57	0	0
1	1	13	1	1	1.67	•12	-•12	0.00	•61734	1.55	1.30	180	180
1	1	13	2	1	1.65	•37	-•37	0.00	•61069	1.28	1.08	180	180
1	1	13	3	1	3.02	3.48	3.48	0.00	•61198	-•46	-•67	0	0
1	1	13	4	1	2.23	1.33	-1.33	0.00	•62113	•90	•97	180	180
1	1	13	5	1	1.74	•58	-•58	0.00	•63783	1.16	•93	180	180
1	1	13	6	1	8.10	7.41	-7.41	0.00	•66150	•69	2.03	180	180
1	1	13	7	1	1.62	1.80	1.80	0.00	•69142	•02	•01	0	0
1	1	13	8	1	7.79	6.50	-6.50	0.00	•72682	1.28	3.51	180	180
1	1	12	-5	1	2.11	1.21	-1.21	0.00	•75151	•90	•76	180	180
1	1	12	-4	1	2.99	7.41	-7.41	0.00	•70726	-•66	-•84	180	180
1	1	12	-3	1	1.76	1.72	-1.72	0.00	•66739	•04	•03	180	180
1	1	12	-2	1	1.71	2.54	-2.54	0.00	•63271	-•83	-•68	180	180
1	1	12	-1	1	10.87	10.99	10.99	0.00	•66412	-•12	-•45	0	0
1	1	12	0	1	7.26	6.98	6.98	0.00	•58252	•28	•86	0	0
1	1	12	1	1	1.58	•58	-•58	0.00	•56870	1.00	•89	180	180
1	1	12	2	1	1.58	2.29	-2.29	0.00	•56325	1.29	1.14	180	180
1	1	12	3	1	3.79	3.81	3.81	0.00	•56639	-•02	-•05	0	0
1	1	12	4	1	15.14	-15.33	-15.33	0.00	•57800	-•19	-•85	180	180
1	1	12	5	1	3.31	3.60	3.60	0.00	•59577	-•29	-•45	0	0
1	1	12	6	1	4.96	6.20	6.20	0.00	•62436	-•260	-•260	0	0

H	K	L	GKP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-12	7	1	4.40	4.69	4.69	0.00	65749	-0.29	-0.54	0	
1	-12	6	1	9.06	9.26	0.00	65605	-0.20	-0.61	180		
1	-12	9	1	1.95	1.37	1.37	0.00	73920	0.58	0.45	0	
1	-11	-6	1	3.81	2.45	-2.45	0.00	75652	1.36	1.99	180	
1	-11	-5	1	11.40	12.02	-12.02	0.00	70713	-0.63	-2.15	180	
1	-11	-4	1	17.20	17.88	0.00	66142	-0.69	-2.89	0		
1	-11	-3	1	1.69	2.27	2.27	0.00	62020	-0.58	-4.46	0	
1	-11	-2	1	3.32	3.57	3.57	0.00	58442	-0.25	-4.3	0	
1	-11	-1	1	1.60	0.55	0.00	55514	1.05	0.92	0		
1	-11	0	1	13.67	14.32	-14.32	0.00	53342	-0.65	-3.03	180	
1	-11	1	1	10.08	10.51	-10.51	0.00	52021	-0.43	-1.85	180	
1	-11	2	1	3.85	3.18	3.18	0.00	51617	0.66	1.45	0	
1	-11	3	1	2.60	1.00	-1.00	0.00	52151	1.60	2.45	180	
1	-11	4	1	12.26	12.40	12.40	0.00	53595	-0.14	-0.63	0	
1	-11	5	1	18.97	19.13	19.13	0.00	55878	-0.16	-0.78	0	
1	-11	6	1	5.39	5.92	5.92	0.00	58903	-0.54	-1.30	0	
1	-11	7	1	5.51	5.53	5.53	0.00	62563	-0.02	-0.05	0	
1	-11	8	1	4.33	4.68	-4.68	0.00	66753	-0.35	-0.63	180	
1	-11	9	1	5.89	6.03	-6.03	0.00	71379	-0.14	-0.31	180	
1	-10	-6	1	2.51	2.83	2.83	0.00	71448	-0.32	-0.34	0	
1	-10	-5	1	1.72	1.55	1.55	0.00	66347	0.17	0.14	0	
1	-10	-4	1	6.22	5.82	5.82	0.00	61613	0.39	1.08	0	
1	-10	-3	1	3.31	2.98	-2.98	0.00	57339	0.33	0.59	180	
1	-10	-2	1	8.78	9.57	-9.57	0.00	53634	-0.79	-3.02	180	
1	-10	-1	1	7.94	7.08	-7.08	0.00	50624	0.86	3.33	180	
1	-10	0	1	17.79	18.42	-18.42	0.00	48438	-0.63	-3.42	180	
1	-10	1	1	2.36	4.9	-4.9	0.00	47190	1.87	2.86	180	
1	-10	2	1	13.15	14.05	-14.05	0.00	46956	-0.90	-4.55	180	
1	-10	3	1	20.22	20.82	-20.82	0.00	47751	-0.61	-3.41	0	
1	-10	4	1	4.64	4.59	4.59	0.00	49525	0.05	0.13	0	
1	-10	5	1	4.64	4.73	4.73	0.00	52178	-0.09	-0.21	0	
1	-10	6	1	1.59	0.14	0.14	0.00	55585	1.44	1.27	0	
1	-10	7	1	2.20	1.40	-1.40	0.00	59616	0.80	0.92	180	
1	-9	-6	1	6.61	6.79	-6.79	0.00	64154	-0.18	-0.47	180	
1	-9	-5	1	2.17	1.60	-1.60	0.00	69099	0.58	0.53	180	
1	-9	-4	1	10	9.40	9.65	0.00	74370	-0.25	-0.71	0	
1	-9	-3	1	1.81	1.40	1.40	0.00	72909	0.41	0.32	0	
1	-9	-2	1	4.32	4.63	4.63	0.00	67345	-0.31	-0.56	0	
1	-9	-1	1	13.37	13.24	-13.24	0.00	45744	0.13	0.66	180	
1	-9	0	1	3.99	3.68	3.68	0.00	43541	0.31	0.79	0	
1	-9	1	1	16.82	17.47	17.47	0.00	42384	-0.65	-3.76	0	
1	-9	2	1	27.04	3.79	4.04	-4.04	48852	-0.26	-0.57	180	
1	-9	3	1	7.79	8.30	8.30	0.00	43467	-0.51	-2.12	0	
1	-9	4	1	7.16	7.43	-7.43	0.00	45627	-0.27	-1.01	180	
1	-9	5	1	15.92	-15.96	0.00	48698	-0.04	-0.21	180		
1	-9	6	1	9.12	-9.57	0.00	52521	-0.45	-1.71	180		
1	-9	7	1	5.35	-5.25	0.00	56945	-0.10	0.27	180		
1	-9	8	1	6.13	6.13	0.00	61841	0.20	0.53	0		
1	-9	9	1	4.44	0.00	0.00	0.00	67105	0.69	1.46	0	

	H	K	L	GKP	FL	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT			
1	-9	10	1		4.80	5.12	5.12	0.00	72658	-32	-58	0	0			
1	-8	-8	1	L	1.89	.71	.71	0.00	75053	1.19	.88	0	0			
1	-8	-7	1	L	3.53	2.42	2.42	0.00	69102	1.10	1.69	0	0			
1	-6	-6	1	L	5.61	4.42	4.42	0.00	63360	.17	.38	0	0			
1	-8	-5	1	L	4.84	4.84	4.84	0.00	57890	-.19	-.17	180	180			
1	-8	-4	1	L	1.71	1.90	1.90	0.00	52776	-1.04	-1.71	0	0			
1	-6	-3	1	L	2.88	3.91	3.91	0.00	48131	.08	.22	180	180			
1	-8	-2	1	L	4.87	4.79	4.79	0.00	44105	-.89	-2.97	0	0			
1	-8	-1	1	L	5.62	6.51	6.51	0.00	41465	14.98	0.00	4C879	-33	-1.89	0	0
1	-8	0	1	L	1.54	.99	.99	0.00	38656	.56	.63	180	180			
1	-8	4	1	L	5.29	5.37	5.37	0.00	37612	-.08	-.29	0	0			
1	-8	2	1	L	4.37	3.32	3.32	0.00	37847	1.05	3.16	180	180			
1	-8	3	1	L	7.17	7.37	7.37	0.00	39337	-.21	-.83	0	0			
1	-8	4	1	L	2.31	2.62	2.62	0.00	41949	-.31	-.46	180	180			
1	-8	5	1	L	13.64	14.30	14.30	0.00	45489	-1.26	-6.40	0	0			
1	-8	6	1	L	18.02	14.30	14.30	0.00	49760	-1.47	-7.73	180	180			
1	-8	7	1	L	3.07	1.99	1.99	0.00	54591	1.08	1.81	0	0			
1	-8	8	1	L	4.16	4.59	4.59	0.00	59846	-.43	-.85	0	0			
1	-8	9	1	L	2.38	4.66	4.66	0.00	65424	-.230	-2.37	180	180			
1	-8	10	1	L	3.22	3.27	3.27	0.00	71248	-.05	-.07	0	0			
1	-7	-8	1	L	1.84	2.46	2.46	0.00	71562	-.61	-.46	180	180			
1	-7	-7	1	L	3.03	1.86	1.86	0.00	65446	1.16	1.61	180	180			
1	-7	-6	1	L	2.57	3.59	3.59	0.00	59519	-1.02	-1.32	180	180			
1	-7	-5	1	L	6.62	7.48	7.48	0.00	53844	-.86	-2.70	180	180			
1	-7	-4	1	L	17.09	18.62	18.62	0.00	48508	-1.53	-6.25	180	180			
1	-7	-3	1	L	18.12	19.75	19.75	0.00	43637	-1.64	-9.58	0	0			
1	-7	-2	1	L	1.42	2.37	2.37	0.00	39404	-.94	-.93	0	0			
1	-7	-1	1	L	4.35	4.17	4.17	0.00	36034	-.18	.58	0	0			
1	-7	0	1	L	6.97	7.40	7.40	0.00	33785	-.43	-1.97	0	0			
1	-7	1	1	L	2.14	1.96	1.96	0.00	32890	.18	.32	180	180			
1	-7	2	1	L	10.57	11.08	11.08	0.00	33456	-.51	-2.96	180	180			
1	-7	3	1	L	1.39	3.13	3.13	0.00	35415	-1.74	-1.76	0	0			
1	-7	4	1	L	1.42	1.65	1.65	0.00	38553	-.23	-.23	180	180			
1	-7	5	1	L	15.28	16.25	16.25	0.00	42612	-.97	-5.43	0	0			
1	-7	6	1	L	10.35	10.76	10.76	0.00	47355	-.41	-1.87	0	0			
1	-7	7	1	L	5.56	5.98	5.98	0.00	52597	-.40	-1.12	180	180			
1	-7	8	1	L	9.10	9.38	9.38	0.00	58204	-.29	-1.04	0	0			
1	-7	9	1	L	3.32	2.86	2.86	0.00	64080	.46	.71	180	180			
1	-7	10	1	L	1.82	1.74	1.74	0.00	70158	.08	.06	180	180			
1	-6	-9	1	L	2.10	1.29	1.29	0.00	74656	.81	.66	180	180			
1	-6	-8	1	L	3.52	2.72	2.72	0.00	68251	.80	1.23	180	180			
1	-6	-7	1	L	10.13	10.14	10.14	0.00	61969	-.01	-.04	180	180			
1	-6	-6	1	L	2.48	2.82	2.82	0.00	55851	-.76	-4.07	0	0			
1	-6	-5	1	L	11.62	11.93	11.93	0.00	49958	-.34	-.45	180	180			
1	-6	-4	1	L	6.23	6.82	6.82	0.00	44380	-.59	-2.02	0	0			
1	-6	-3	1	L	19.44	20.70	20.70	0.00	39250	-1.26	-7.39	0	0			
1	-6	-2	1	L	9.13	9.90	9.90	0.00	34769	-.01	-.04	180	180			
1	-6	-1	1	L	11.35	11.78	11.78	0.00	31217	-.43	-.74	180	180			
1	-6	0	1	L	57.43	59.49	59.49	0.00	28938	-2.07	-5.10	180	180			
1	-6	1	2	L	30.70	31.95	31.95	0.00	28241	-1.24	-4.25	180	180			
1	-6	2	1	L	16.57	16.49	16.49	0.00	29241	.09	.55	0	0			
1	-6	3	1	L	1.30	1.37	1.37	0.00	31777	-.07	-.07	180	180			
1	-6	4	1	L	6.06	6.06	6.06	0.00	35521	-.63	-2.27	0	0			

H	K	L	U	V	W	FU	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-6	3	1	1	1	15.60	16.37	-16.37	0.00	40138	-71	-4.21	180	
1	-6	6	1	1	1	3.79	3.94	3.94	0.00	45361	-15	-3.4	0	
1	-6	7	1	1	1	3.84	3.06	-3.06	0.00	51005	.78	1.72	180	
1	-6	8	1	L	1	2.10	.65	-.65	0.00	56944	1.51	1.73	180	
1	-6	9	1	L	1	1.97	2.14	-2.14	0.00	63095	-.18	-1.16	180	
1	-6	10	1	L	1	3.94	3.06	3.06	0.00	69403	.88	1.43	0	
1	-5	-9	1	L	1	8.21	8.33	-8.33	0.00	71690	.12	-3.5	180	
1	-5	-8	1	L	1	3.16	2.76	2.76	0.00	65146	.39	.58	0	
1	-5	-7	1	L	1	3.14	2.93	2.93	0.00	58701	.21	.34	0	
1	-5	-6	1	L	1	3.33	3.58	3.58	0.00	52391	-.25	-4.7	0	
1	-5	-5	1	L	1	12.88	13.32	13.32	0.00	46273	-.44	-2.24	0	
1	-5	-4	1	L	1	11.86	12.66	12.66	0.00	40433	-.81	-4.24	0	
1	-5	-3	1	L	1	5.59	5.21	5.21	0.00	35011	.38	1.51	0	
1	-5	-2	1	L	1	17.58	18.63	-18.63	0.00	30231	-1.05	-6.85	180	
1	-5	-1	1	L	1	29.61	27.93	27.93	0.00	26446	1.67	5.98	0	
1	-5	0	1	L	1	47.00	47.58	-47.58	0.00	24128	-.58	-1.58	180	
1	-5	1	1	L	1	42.59	42.93	42.93	0.00	23711	-.34	-.94	0	
1	-5	2	1	L	1	40.67	40.41	40.41	0.00	25289	.26	.69	0	
1	-5	3	1	L	1	1.22	1.65	1.65	0.00	28533	-.41	-.46	0	
1	-5	4	1	L	1	3.30	3.00	3.00	0.00	32954	.29	.75	0	
1	-5	5	1	L	1	8.02	8.20	-8.20	0.00	38146	-.18	-.80	180	
1	-5	6	1	L	1	34.34	35.78	-35.78	0.00	43836	-1.44	-4.57	180	
1	-5	7	1	L	1	18.30	19.40	-19.40	0.00	49853	-1.10	-5.83	180	
1	-5	8	1	L	1	1.59	.17	.17	0.00	56092	1.42	1.25	0	
1	-5	9	1	L	1	3.69	4.32	4.32	0.00	62487	-.63	-1.05	0	
1	-5	10	1	L	1	3.94	3.21	3.21	0.00	68994	.73	1.19	0	
1	-5	11	1	L	1	6.22	5.67	5.67	0.00	75584	.55	1.19	0	
1	-4	-10	1	L	1	7.21	6.67	-6.67	0.00	75678	.53	1.34	180	
1	-4	-9	1	L	1	2.06	.92	.92	0.00	68951	1.13	1.02	0	
1	-4	-8	1	L	1	2.55	2.41	2.41	0.00	62278	.14	.17	0	
1	-4	-7	1	L	1	12.23	12.68	-12.68	0.00	55680	-.46	-1.99	180	
1	-4	-6	1	L	1	3.20	3.16	-3.16	0.00	49185	.05	.09	180	
1	-4	-5	1	L	1	4.39	4.48	4.48	0.00	42842	-.09	-.25	0	
1	-4	-4	1	L	1	6.85	6.50	-6.50	0.00	36727	.35	1.50	180	
1	-4	-3	1	L	1	17.62	19.28	-19.28	0.00	3C979	-1.66	-10.49	180	
1	-4	-2	1	L	1	15.61	-15.61	0.00	0.00	25840	-.85	-6.35	180	
1	-4	-1	1	L	1	16.73	15.79	15.79	0.00	21750	.94	5.78	0	
1	-4	0	1	L	1	57.58	59.03	59.03	0.00	19383	-1.44	-4.45	0	
1	-4	1	1	L	1	72.80	75.41	75.41	0.00	19380	-2.61	-8.09	0	
1	-4	2	1	L	1	28.82	30.32	0.00	0.00	21743	-1.49	-5.87	0	
1	-4	3	1	L	1	1.22	.72	0.00	25831	.50	.57	0		
1	-4	4	1	L	1	9.67	10.05	-10.05	0.00	30967	-.38	-2.20	180	
1	-4	5	1	L	1	37.66	39.17	-39.17	0.00	36715	-1.51	-4.41	180	
1	-4	6	1	L	1	37.89	39.98	39.98	0.00	42829	-2.09	-6.80	0	
1	-4	7	1	L	1	6.33	7.17	-7.17	0.00	49172	-.84	-2.74	180	
1	-4	8	1	L	1	1.60	1.79	-1.79	0.00	55667	-.19	-1.17	180	
1	-4	9	1	L	1	1.70	.08	.08	0.00	62265	1.63	1.34	0	
1	-4	10	1	L	1	8.62	8.69	8.69	0.00	68937	-.07	-1.19	0	
1	-4	11	1	L	1	4.85	5.06	-5.06	0.00	75664	-.21	-3.36	180	
1	-3	-10	1	L	1	2.07	.09	.09	0.00	73286	1.98	1.69	0	
1	-3	-9	1	L	1	6.27	6.67	6.67	0.00	66466	-.41	-1.00	0	
1	-3	-8	1	L	1	3.67	3.79	3.79	0.00	59682	-.12	-2.21	0	
1	-3	-7	1	L	1	1.56	2.37	2.37	0.00	52948	-.80	-7.2	180	

	H	K	L	GKP	F0	FC	A	B	SINHLM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-3	-6	1	4.01	4.60	-4.60	C.00	•46285	-•59	-1.46	180	180	
1	-3	-3	1	23.99	25.87	-25.87	C.00	•39729	-1.88	-8.60	180	180	
1	-3	-4	1	5.38	5.48	-5.48	C.00	•33343	-•09	-•36	180	180	
1	-3	-3	1	4.79	4.51	-4.51	C.00	•27247	.27	1.13	180	180	
1	-3	-2	1	54.01	54.32	-54.32	C.00	•21686	-•31	-•91	180	180	
1	-3	-1	1	59.97	61.12	-61.12	C.00	•17190	-1.15	-3.79	180	180	
1	-3	0	1	24.45	25.34	0.00	•14765	-•89	-4.09	0	0		
1	-3	1	1	2.71	2.06	2.06	C.00	•15420	.65	1.73	0	0	
1	-3	2	1	2.78	3.10	-3.10	C.00	•18836	-•32	-•86	180	180	
1	-3	3	1	30.05	29.56	29.56	C.00	•23857	.49	1.81	0	0	
1	-3	4	1	5.45	5.91	5.91	C.00	•29677	-•46	-1.89	0	0	
1	-3	5	1	4.25	4.99	-4.99	C.00	•35912	-•74	-2.14	180	180	
1	-3	6	1	22.88	24.27	24.27	C.00	•42377	-1.38	-6.54	0	0	
1	-3	7	1	1.50	2.09	2.09	C.00	•48982	-•58	-•54	0	0	
1	-3	8	1	7.77	8.41	8.41	C.00	•55678	-•64	-2.21	0	0	
1	-3	9	1	6.40	6.18	-6.18	C.00	•62434	.21	.56	180	180	
1	-3	10	1	7.33	7.14	-7.14	C.00	•69234	.19	.51	180	180	
1	-10	1	10.13	10.36	10.36	C.00	•71156	-•23	-•73	0	0		
1	-2	-9	1	1.77	1.77	1.77	C.00	•64265	-•00	-•06	0	0	
1	-2	-8	1	2.84	2.62	-2.62	C.00	•57395	.22	.33	180	180	
1	-2	-7	1	13.34	20.07	20.07	C.00	•50552	-1.73	-9.09	0	0	
1	-2	-6	1	7.67	7.87	-7.87	C.00	•43751	-•20	-•61	180	180	
1	-2	-5	1	11.75	12.15	12.15	C.00	•37015	-•40	-2.36	0	0	
1	-2	-4	1	1.26	.76	-.76	C.00	•30387	.50	.55	180	180	
1	-2	-3	1	21.26	22.37	-22.37	C.00	•23956	-1.11	-6.27	180	180	
1	-2	-2	1	36.84	41.03	-41.03	C.00	•17935	-4.19	-13.06	180	180	
1	-2	-1	1	41.25	41.76	-41.76	C.00	•12912	-.51	-1.90	0	0	
1	-2	0	1	39.01	39.90	-39.90	C.00	•10444	-.89	-3.64	180	180	
1	-2	1	1	51.36	53.23	-53.23	C.00	•12195	-1.87	-7.22	180	180	
1	-2	2	1	18.49	18.23	-18.23	C.00	•16901	.27	1.34	0	0	
1	-2	3	1	8.48	8.25	8.25	C.00	•22800	.24	1.51	0	0	
1	-2	4	1	6.15	6.37	6.37	C.00	•29177	-.22	-1.03	0	0	
1	-2	5	1	19.35	20.94	20.94	C.00	•35778	-1.60	-6.20	0	0	
1	-2	6	1	10.10	10.57	-10.57	C.00	•42498	-.47	-2.25	180	180	
1	-2	7	1	4.90	4.95	-4.95	C.00	•49289	-.05	-.13	180	180	
1	-2	8	1	2.02	.14	0.00	•56125	1.89	2.20	0	0		
1	-2	9	1	3.63	4.27	-4.27	C.00	•62991	-.64	-1.04	180	180	
1	-2	10	1	1.80	2.74	2.74	C.00	•69879	-.95	-.73	0	0	
1	-1	-10	1	8.68	8.41	8.41	C.00	•69314	.48	1.45	0	0	
1	-1	-9	1	16.22	16.77	-16.77	C.00	•62379	-.55	-2.37	180	180	
1	-1	-8	1	11.31	11.80	-11.80	C.00	•55453	-.49	-2.11	180	180	
1	-1	-7	1	3.60	4.24	4.24	C.00	•48542	-.64	-1.34	0	0	
1	-1	-6	1	17.68	19.08	-19.08	C.00	•41652	-1.40	-8.39	0	0	
1	-1	-5	1	30.99	32.68	32.68	C.00	•34795	-1.69	-6.22	0	0	
1	-1	-4	1	34.44	36.74	36.74	C.00	•27996	-2.30	-7.91	0	0	
1	-1	-3	1	8.71	8.38	8.38	C.00	•21310	.32	2.16	0	0	
1	-1	-2	1	6.83	7.82	7.82	C.00	•14893	-.99	-6.01	0	0	
1	-1	-1	1	47.73	50.88	-50.88	C.00	•09313	-3.15	-14.05	180	180	
1	-1	0	1	39.11	39.08	39.08	C.00	•06996	.03	.15	0	0	
1	-1	1	1	17.67	17.74	-17.74	C.00	•10414	-.07	-•34	180	180	
1	-1	2	1	2.42	-2.42	-2.42	C.00	•16286	-.72	-1.25	180	180	
1	-1	3	1	41.88	-40.90	-40.90	C.00	•22788	-.99	2.75	180	180	
1	-1	4	1	43.12	-43.36	-43.36	C.00	•29506	-.24	-•59	0	0	

H	K	L	GRP	FC	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	-1	5	1	L	1.36	1.75	-1.75	0.00	.36322	-39	-41	
1	-1	6	1	L	9.91	10.38	-10.38	0.00	.43188	-47	-2.20	180
1	-1	7	1	L	4.03	3.63	0.00	.50083	.39	.92	0	
1	-1	8	1	L	5.10	4.95	4.95	0.00	.56998	.15	.38	0
1	-1	9	1	L	1.73	1.75	-1.75	0.00	.63926	-0.02	-0.02	180
1	-1	10	1	L	2.36	3.16	3.16	0.00	.70863	-80	-75	0
1	0	-11	1	L	10.47	10.74	-10.74	0.00	.74734	-26	-61	180
1	0	-10	1	L	10.25	10.23	-10.23	0.00	.67782	0.01	.04	180
1	0	-9	1	L	5.26	4.56	-4.56	0.00	.60835	.70	1.68	180
1	0	-8	1	L	4.60	5.32	5.32	0.00	.53896	-72	-1.71	0
1	0	-7	1	L	6.84	7.64	-7.64	0.00	.46967	-80	-2.81	180
1	0	-6	1	L	15.91	16.75	16.75	0.00	.40054	-84	-5.05	0
1	0	-5	1	L	14.82	15.51	15.51	0.00	.33166	-69	-4.61	0
1	0	-4	1	L	45.76	46.56	-46.56	0.00	.26324	-80	-2.08	180
1	0	-3	1	L	19.54	18.59	18.59	0.00	.19575	.95	5.16	0
1	0	-2	1	L	13.51	14.65	-14.65	0.00	.13065	-1.14	-7.13	180
1	0	-1	1	L	44.93	50.02	-50.02	0.00	.07450	-5.09	-25.07	180
1	0	0	1	L	12.86	13.13	13.13	0.00	.06131	-25	-1.39	0
1	1	1	1	L	20.26	19.74	19.74	0.00	.10815	.52	2.65	0
1	1	2	1	L	46.69	47.10	47.10	0.00	.17135	-41	-1.33	0
1	1	3	1	L	17.63	17.33	17.33	0.00	.23823	.30	1.78	0
1	1	4	1	L	17.56	17.65	-17.65	0.00	.30639	-0.09	-55	180
1	1	5	1	L	26.71	27.48	-27.48	0.00	.37513	-77	-3.09	180
1	1	6	1	L	6.18	6.71	-6.71	0.00	.44418	-53	-1.88	180
1	1	7	1	L	7.14	7.45	7.45	0.00	.51343	-32	-1.12	0
1	1	8	1	L	4.12	4.03	-4.03	0.00	.58279	.10	.20	0
1	1	9	1	L	15.41	16.10	16.10	0.00	.65223	-69	-2.80	0
1	1	10	1	L	1.84	2.09	-2.09	0.00	.72173	-24	-1.18	180
1	1	11	1	L	1.86	2.37	2.37	0.00	.73512	-50	-3.36	0
1	1	12	1	L	2.56	1.67	-1.67	0.00	.66582	.89	1.03	180
1	1	13	1	L	1.78	1.58	-1.58	0.00	.59662	.21	.18	180
1	1	14	1	L	6.84	7.46	7.46	0.00	.52757	-62	-2.01	0
1	1	15	1	L	20.11	21.91	21.91	0.00	.45872	-1.80	-9.80	0
1	1	16	1	L	9.52	9.96	-9.96	0.00	.39020	-43	-2.18	180
1	1	17	1	L	16.19	17.21	-17.21	0.00	.32219	-1.02	-6.83	180
1	1	18	1	L	53.53	56.27	-56.27	0.00	.25513	-2.74	-7.25	180
1	1	19	1	L	2.83	6.38	6.38	0.00	.19000	-3.56	-6.93	0
1	1	20	1	L	14.76	15.68	15.68	0.00	.12977	.91	-5.34	0
1	1	21	1	L	39.36	41.47	41.47	0.00	.08548	-2.12	-9.62	0
1	1	22	1	L	7.06	6.58	-6.58	0.00	.08661	.48	3.22	180
1	1	23	1	L	26.03	25.42	25.42	0.00	.13200	.69	2.07	0
1	1	24	1	L	15.99	16.22	-16.22	0.00	.19255	-23	-1.32	180
1	1	25	1	L	58.27	57.07	-57.07	0.00	.25779	1.19	3.16	180
1	1	26	1	L	5.66	5.69	-5.69	0.00	.32490	-0.02	-0.09	180
1	1	27	1	L	15.18	15.57	-15.57	0.00	.39294	-3.9	-2.37	180
1	1	28	1	L	3.07	-3.85	0.00	.46148	-78	-1.53	180	
1	1	29	1	L	11.36	11.16	11.16	0.00	.53033	.20	.88	0
1	1	30	1	L	5.02	5.59	5.59	0.00	.59939	-56	-1.31	0
1	1	31	1	L	3.10	3.44	3.44	0.00	.66860	-35	-4.6	0
1	1	32	1	L	7.73	6.90	-6.90	0.00	.73790	.82	2.15	180
1	1	33	1	L	5.45	4.84	-4.84	0.00	.72606	.61	1.27	180
1	1	34	1	L	6.04	6.04	6.04	0.00	.65732	-1.11	-2.19	0
1	1	35	1	L	11.22	11.77	11.77	0.00	.58881	-2.19	0	0

	H	K	L	GRP	HU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	1	2	-8	1	3.36	2.37	2.37	0.00	.52063	.99	1.93	0	
1	1	2	-7	1	12.99	13.96	-13.96	0.00	.45292	-.98	-4.96	180	
1	1	2	-6	1	16.56	17.23	17.23	0.00	.38594	-.73	-4.56	0	
1	1	2	-5	1	3.68	3.59	3.59	0.00	.32015	.10	.28	0	
1	1	2	-4	1	29.52	30.09	30.09	0.00	.25644	-.57	-2.04	0	
1	1	2	-3	1	6.51	5.92	-5.92	0.00	.19688	.59	3.24	180	
1	1	2	-2	1	9.54	9.92	9.92	0.00	.14658	-.38	-2.79	0	
1	1	2	-1	1	22.25	22.43	22.43	0.00	.11807	-.18	-.88	0	
1	1	2	0	1	10.27	10.91	-10.91	0.00	.12697	-.64	-4.16	180	
1	1	2	1	1	21.93	22.40	-22.40	0.00	.16743	-.47	-2.45	180	
1	1	2	2	1	26.66	25.12	25.12	0.00	.22287	1.55	7.32	0	
1	1	2	3	1	26.79	27.13	-27.13	0.00	.28467	-.34	-1.38	180	
1	1	2	4	1	16.72	17.13	-17.13	0.00	.34947	-.41	-2.62	180	
1	1	2	5	1	13.47	14.04	14.04	0.00	.41588	-.57	-3.12	0	
1	1	2	6	1	16.63	16.38	16.38	0.00	.48322	.25	1.32	0	
1	1	2	7	1	1.95	2.24	-2.24	0.00	.55116	1.31	1.18	180	
1	1	2	8	1	7.22	7.35	-7.35	0.00	.61951	-.13	-.39	180	
1	1	2	9	1	3.21	2.92	-2.92	0.00	.68813	.30	.41	180	
1	1	2	10	1	12.25	11.63	-11.63	0.00	.75696	.62	2.09	180	
1	1	3	-11	1	1.82	1.14	1.14	0.00	.72029	1.68	1.30	180	
1	1	3	-10	1	9.43	10.06	-10.06	0.00	.65246	-.64	-2.08	180	
1	1	3	-9	1	6.93	6.58	6.58	0.00	.58508	.35	1.10	180	
1	1	3	-8	1	4.10	5.40	-5.40	0.00	.51832	-.30	2.77	180	
1	1	3	-7	1	4.75	5.78	-5.78	0.00	.45247	-1.30	-2.77	180	
1	1	3	-6	1	17.42	18.51	-18.51	0.00	.36798	1.04	-2.86	180	
1	1	3	-5	1	4.54	5.06	5.06	0.00	.32567	-.52	-1.77	180	
1	1	3	-4	1	18.89	19.53	19.53	0.00	.26705	-.64	-3.63	0	
1	1	3	-3	1	28.30	28.39	28.39	0.00	.21517	-.09	-.35	0	
1	1	3	-2	1	11.71	12.18	-12.18	0.00	.17616	-.47	-3.50	180	
1	1	3	-1	1	1.43	1.31	-1.31	0.00	.15954	.12	.17	180	
1	1	3	0	1	33.31	33.93	33.93	0.00	.17210	-.62	-1.94	0	
1	1	3	1	1	15.54	15.59	15.59	0.00	.20861	-.05	-.33	0	
1	1	3	2	1	6.54	7.14	-7.14	0.00	.25912	-.60	-3.20	180	
1	1	3	3	1	21.95	21.93	21.93	0.00	.31701	.02	0.9	180	
1	1	3	4	1	8.20	7.69	-7.69	0.00	.37891	.51	2.42	180	
1	1	3	5	1	2.21	2.78	2.78	0.00	.44315	-.57	-8.84	0	
1	1	3	6	1	6.13	6.28	6.28	0.00	.50884	-.15	-4.49	0	
1	1	3	7	1	8.68	8.77	-8.77	0.00	.57549	-.09	-.31	180	
1	1	3	8	1	1.73	1.69	-1.69	0.00	.64279	.03	.03	180	
1	1	3	9	1	6.66	6.77	6.77	0.00	.71056	-.11	-2.25	0	
1	1	4	-11	1	1.82	.88	0.00	0.00	.71787	.94	.72	0	
1	1	4	-9	1	8.32	8.68	-8.68	0.00	.65132	-.36	-1.07	180	
1	1	4	-8	1	7.45	8.07	-8.07	0.00	.58550	-.61	-1.91	180	
1	1	4	-7	1	14.15	15.09	-15.09	0.00	.52071	-.94	-4.52	180	
1	1	4	-6	1	13.19	14.13	14.13	0.00	.45739	-.94	-4.84	0	
1	1	4	-5	1	22.78	23.27	-23.27	0.00	.39622	-.49	-2.44	180	
1	1	4	-4	1	21.36	21.88	21.88	0.00	.33838	-.53	-2.65	0	
1	1	4	-3	1	5.52	6.12	6.12	0.00	.28591	-.60	-2.62	0	
1	1	4	-2	1	67.37	63.89	-63.89	0.00	.24231	3.48	9.52	180	
1	1	4	-1	1	25.55	24.97	24.97	0.00	.21311	.58	2.77	0	
1	1	4	-0	1	23.77	23.97	23.97	0.00	.20455	-.20	-.96	0	
1	1	4	-1	1	1.16	.74	.74	0.00	.21908	.42	.51	0	
1	1	4	-0	1	5.01	5.01	5.01	0.00	.25274	-.17	-.41	0	

	H	K	L	GRP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT	HUNGCH	PAGE	17
1	1	1	4	4	2	1	10.65	11.35	-11.35	0.00	229915	-0.71	-4.54			
1	1	1	4	4	3	1	20.34	21.40	-21.40	C.00	35331	-1.06	-5.15	0		
1	1	1	4	4	3	1	3.58	3.95	-3.95	C.00	41219	-0.37	-0.96	180		
1	1	1	4	4	4	1	2.63	2.65	-2.65	0.00	47402	-0.03	-0.04	180		
1	1	1	4	4	5	1	5.77	5.60	-5.60	C.00	53779	0.17	0.50	180		
1	1	1	4	4	6	1	3.68	3.19	-3.19	C.00	60288	0.49	0.69	0		
1	1	1	4	4	7	1	3.68	3.19	-3.19	C.00	66892	0.49	0.84	180		
1	1	1	4	4	8	1	3.70	3.21	-3.21	C.00	73563	0.09	0.14	180		
1	1	1	4	4	9	1	3.73	3.64	-3.64	C.00	71885	0.26	0.46	0		
1	1	1	5	-11	1	L	4.54	4.28	-4.28	C.00	25435	-0.47	-2.28	180		
1	1	1	5	-10	1	L	1.81	2.73	-2.73	C.00	65391	-0.92	-0.71	0		
1	1	1	5	-9	1	L	3.19	1.83	-1.83	C.00	55007	1.36	2.21	180		
1	1	1	5	-8	1	L	7.75	7.88	-7.88	C.00	52774	-0.14	-0.48	0		
1	1	1	5	-7	1	L	16.45	17.29	-17.29	C.00	46749	-0.84	-4.53	0		
1	1	1	5	-6	1	L	1.85	0.17	-0.17	C.00	41027	1.67	2.09	0		
1	1	1	5	-5	1	L	3.58	2.81	-2.81	C.00	35752	0.77	1.95	180		
1	1	1	5	-4	1	L	25.82	26.45	-26.45	C.00	31153	-0.63	-2.83	180		
1	1	1	5	-3	1	L	25.39	25.83	-25.83	C.00	27570	-0.55	-1.64	180		
1	1	1	5	-2	1	L	20.69	21.15	-21.15	C.00	25435	-0.47	-2.28	180		
1	1	1	5	-1	1	L	1.19	3.7	-3.7	C.00	25121	0.82	0.97	180		
1	1	1	5	0	1	L	59.67	61.76	-61.76	C.00	26693	-2.09	-5.37	0		
1	1	1	5	1	1	L	11.46	12.07	-12.07	C.00	29853	-0.61	-4.10	0		
1	1	1	5	2	1	L	5.45	6.00	-6.00	C.00	34164	-0.55	-2.15	180		
1	1	1	5	3	1	L	8.09	8.59	-8.59	C.00	39248	-0.49	-2.24	0		
1	1	1	5	4	1	L	9.83	10.24	-10.24	C.00	44844	-0.41	-1.95	180		
1	1	1	5	5	1	L	4.46	4.66	-4.66	C.00	50782	-0.20	-0.50	180		
1	1	1	5	6	1	L	14.16	14.56	-14.56	C.00	56955	-0.41	-1.84	180		
1	1	1	5	7	6	L	6.76	7.26	-7.26	C.00	63295	-0.50	-1.34	0		
1	1	1	5	8	1	L	2.96	3.70	-3.70	C.00	69756	-0.73	-0.90	180		
1	1	1	6	-11	1	L	2.49	.67	0.67	C.00	72320	1.83	1.90	0		
1	1	1	6	-10	1	L	3.05	2.10	-2.10	C.00	66020	.94	1.28	0		
1	1	1	6	-9	1	L	17.77	18.02	-18.02	C.00	59870	-0.25	-1.16	0		
1	1	1	6	-8	1	L	2.94	2.29	-2.29	C.00	53921	0.65	1.04	0		
1	1	1	6	-7	1	L	2.07	3.07	-3.07	C.00	48247	-1.00	-1.25	0		
1	1	1	6	-6	1	L	3.07	2.15	-2.15	C.00	42957	.92	1.82	180		
1	1	1	6	-5	1	L	19.68	20.63	-20.63	C.00	38213	-0.95	-5.37	180		
1	1	1	6	-4	1	L	43.43	44.30	-44.30	C.00	34240	-0.87	-1.90	180		
1	1	1	6	-3	1	L	22.42	22.43	-22.43	C.00	31334	-0.01	-0.03	0		
1	1	1	6	-2	1	L	20.72	21.41	-21.41	C.00	29808	-.69	-3.76	0		
1	1	1	6	-1	1	L	11.07	12.05	-12.05	C.00	29875	-0.98	-6.38	0		
1	1	1	6	0	1	L	37.08	38.12	-38.12	C.00	31525	-1.04	-3.36	0		
1	1	1	6	1	1	L	23.22	24.09	-24.09	C.00	34531	-0.87	-4.42	180		
1	1	1	6	2	1	L	9.18	9.32	-9.32	C.00	38578	-0.14	-0.70	180		
1	1	1	6	3	1	L	8.29	8.90	-8.90	C.00	43375	-0.60	-2.67	0		
1	1	1	6	4	1	L	7.68	8.41	-8.41	C.00	48701	-0.53	-2.06	0		
1	1	1	6	5	1	L	1.57	2.36	-2.36	C.00	54401	-0.79	-0.70	0		
1	1	1	6	6	1	L	12.07	12.39	-12.39	C.00	60369	-0.32	-1.27	0		
1	1	1	6	7	1	L	1.77	1.82	-1.82	C.00	66533	-0.04	-0.03	0		
1	1	1	6	8	1	L	3.84	2.03	-2.03	C.00	72844	1.81	2.85	180		
1	1	1	6	9	1	L	3.51	3.63	-3.63	C.00	73087	-0.12	-0.16	0		
1	1	1	6	10	1	L	1.78	1.05	-1.05	C.00	67008	.73	.58	0		
1	1	1	6	11	1	L	3.12	4.18	-4.18	C.00	61120	-1.06	-1.48	180		
1	1	1	6	12	1	L	5.36	5.20	-5.20	C.00	55485	-0.16	-0.62	0		
1	1	1	6	13	1	L	5.08	5.08	-5.08	C.00	50187	-0.45	-1.13	0		

H	K	L	GKP	H0	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	7	-6	1	2.62	2.31	-2.31	0.00	45346	.31	.52	180	180
1	7	-7	1	16.89	17.72	-17.72	0.00	41122	-.83	-4.94	0	0
1	7	-4	1	16.47	16.89	16.89	0.00	37723	-.42	-2.60	180	180
1	7	-3	1	1.34	1.86	1.86	0.00	35388	-.52	-.55	0	0
1	7	-2	1	2.60	2.44	-2.44	0.00	34335	.16	.32	180	180
1	7	-1	1	11.59	11.82	0.00	34681	-.23	-1.38	180	180	
1	7	0	1	18.23	18.95	-18.95	0.00	36386	-.71	-4.51	180	180
1	7	1	1	25.26	26.47	-26.47	0.00	39273	-1.19	-5.61	180	180
1	7	2	1	2.50	2.04	-2.04	0.00	43105	.47	.80	180	180
1	7	3	1	11.54	13.00	-13.00	0.00	47656	-1.46	-6.97	180	180
1	7	4	1	21.26	22.96	22.96	0.00	52738	-1.68	-8.95	0	0
1	7	5	1	16.61	16.97	16.97	0.00	58214	-.35	-1.64	0	0
1	7	6	1	4.91	3.54	3.54	0.00	63982	1.36	3.07	0	0
1	7	7	1	3.94	5.04	5.04	0.00	69970	-1.10	-1.75	0	0
1	7	8	-11	1	1.90	2.03	0.00	74176	-.13	-.10	0	0
1	8	-10	1	1.79	1.16	-1.16	0.00	68340	.63	.49	180	180
1	8	-9	1	3.18	3.00	3.00	0.00	62736	.18	.26	0	0
1	8	-8	-8	1	3.17	1.34	0.00	57433	1.82	2.98	180	180
1	8	-7	1	1.57	.63	.63	0.00	52522	.94	.84	0	0
1	8	-6	1	3.54	3.77	3.77	0.00	48124	-.23	-.48	0	0
1	8	-5	1	5.06	5.99	5.99	0.00	44391	-.93	-2.65	0	0
1	8	-4	1	7.77	7.89	7.89	0.00	41502	-.12	-.50	0	0
1	8	-3	1	2.39	2.48	2.48	0.00	39643	-.09	-.15	0	0
1	8	-2	1	2.74	2.77	2.77	0.00	36962	-.03	-.00	0	0
1	8	-1	1	12.99	13.65	-13.65	0.00	39519	-.67	-3.75	180	180
1	8	0	1	35.19	36.67	-36.67	0.00	41265	-.148	-4.92	180	180
1	8	1	8.40	9.99	9.99	0.00	44058	-.1.60	-6.13	0	0	
1	8	2	4.48	4.94	4.94	0.00	47714	-.46	-1.19	0	0	
1	8	3	1.52	1.39	-1.39	0.00	52053	.13	.12	180	180	
1	8	4	9.55	9.99	-9.99	0.00	56918	-.44	-1.71	180	180	
1	8	5	2.35	2.55	-2.55	0.00	62186	-.20	-.23	180	180	
1	8	6	5.76	5.89	-5.89	0.00	67763	-.13	-.29	180	180	
1	8	7	1.85	1.54	1.54	0.00	73578	.32	.24	0	0	
1	9	-11	1	2.99	.80	-.80	0.00	75573	2.19	2.59	180	180
1	9	-10	1	10.11	11.06	-11.06	0.00	69995	-.95	-2.97	180	180
1	9	-9	1	6.11	6.21	6.21	0.00	64689	-.09	-.24	0	0
1	9	-8	1	3.46	4.58	4.58	0.00	59727	-1.12	-1.82	0	0
1	9	-7	1	1.66	1.48	-1.48	0.00	55201	.17	.15	180	180
1	9	-6	1	13.69	14.75	14.75	0.00	51229	-1.07	-5.15	0	0
1	9	-5	1	7.97	8.67	-8.67	0.00	47946	-.70	-2.74	180	180
1	9	-4	1	7.68	8.22	8.22	0.00	45504	-.53	-2.13	0	0
1	9	-3	1	1.45	.31	.31	0.00	44042	1.14	1.10	0	0
1	9	-2	1	21.81	22.67	22.67	0.00	43657	-.86	-4.57	0	0
1	9	-1	1	5.35	5.85	-5.85	0.00	44380	-.50	-1.62	180	180
1	9	0	1	12.59	13.12	13.12	0.00	46157	-.54	-2.73	0	0
1	9	1	1.48	.49	.49	0.00	48873	.99	.94	0	0	
1	9	2	5.70	5.61	-5.61	0.00	52364	.08	.26	180	180	
1	9	3	1.77	1.85	-1.85	0.00	56540	.33	.39	180	180	
1	9	4	1.64	.67	-.67	0.00	61211	.97	.83	180	180	
1	9	5	1.60	.79	-.79	0.00	66288	-.1.19	-3.04	180	180	
1	9	6	1.82	.25	.25	0.00	71684	1.57	1.20	0	0	
1	9	7	2.12	.10	-.10	0.00	71684	2.02	1.78	180	180	
1	9	8	5.07	5.07	5.07	0.00	66950	.72	1.71	0	0	

	H	K	L	GRP	TU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
1	10	-8	1	5.05	3.95	3.95	0.00	•62328	-1.10	2.4t	0		
1	10	-7	1	8.27	9.97	-9.97	0.00	•58177	-1.71	-5.59	180		
1	10	-6	1	2.15	•27	.27	0.00	•54604	1.08	2.29	0		
1	10	-5	1	1.58	2.92	-2.92	0.00	•51730	-1.34	-1.16	180		
1	10	-4	1	1.50	•47	.47	0.00	•49675	1.03	.96	0		
1	10	-3	1	20.60	21.77	-21.77	0.00	•48544	-1.17	-6.31	180		
1	10	-2	1	13.39	14.33	14.33	0.00	•48401	-.94	-4.73	0		
1	10	-1	1	5.21	4.99	4.99	0.00	•45256	.22	.66	C		
1	10	0	1	9.17	10.17	10.17	0.00	•51058	-1.00	-4.08	0		
1	10	1	1	4.50	4.39	4.39	0.00	•53711	.10	.26	0		
1	10	2	1	1.58	1.05	-1.05	0.00	•57098	.53	.47	180		
1	10	3	1	2.54	3.96	-3.96	0.00	•61097	-1.42	-1.73	180		
1	10	4	1	5.08	5.23	-5.23	0.00	•65595	-.15	-.33	180		
1	10	5	1	9.87	10.26	10.26	0.00	•70497	-.39	-1.23	0		
1	10	6	1	5.94	5.82	5.82	0.00	•75725	.12	.26	0		
1	11	-10	1	5.75	6.09	6.09	0.00	•74186	-.34	-.66	0		
1	11	-9	1	5.30	4.62	4.62	0.00	•69489	.68	1.42	0		
1	11	-8	1	2.52	.97	.97	0.00	•65200	1.55	1.82	0		
1	11	-7	1	4.12	4.06	-4.06	0.00	•61406	.06	.11	180		
1	11	-6	1	21.96	22.57	-22.57	0.00	•58203	-.60	-2.98	180		
1	11	-5	1	4.92	4.31	-4.31	0.00	•55694	.61	1.51	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	.06	.24	0		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.21	-.59	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	.12	.11	0		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.34	.76	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•53975	-.84	-1.57	180		
1	11	-3	1	5.53	5.74	5.74	0.00	•53124	-.30	-.46	0		
1	11	-2	1	1.53	1.41	1.41	0.00	•53180	-.40	-1.36	180		
1	11	-1	1	3.70	3.36	3.36	0.00	•54143	.19	.18	0		
1	11	0	1	4.92	4.31	-4.31	0.00	•55694	-.17	-.41	180		
1	11	-4	1	8.87	8.81	8.81	0.00	•					

H	K	L	GRP	FU	FC	A	B	SINH/VLM	DF	W*UF	ANGLE CALC	ANGLE STAT
1	13	-1	4	7.031	7.05	C.00	.63942	.26	.74	0	0	
1	13	0	1	4.012	4.03	C.00	.65794	.09	.19	0	0	
1	13	1	1	4.032	4.03	C.00	.68312	-4.29	-11.42	0	0	
1	13	2	1	4.052	4.03	C.00	.71424	-0.03	-0.03	0	0	
1	13	3	1	4.039	4.02	C.00	.75057	-3.20	-3.68	0	0	
1	13	3	1	4.057	4.02	C.00	.75057	.69	1.36	0	0	
1	13	3	1	4.040	4.077	C.00	.75117	1.65	1.24	0	0	
1	14	-8	1	4.087	4.22	C.00	.72262	-1.04	-0.78	180	180	
1	14	-7	1	4.087	4.91	C.00	.69988	.27	.55	180	180	
1	14	-6	1	5.036	5.08	C.00	.68353	.13	.29	180	180	
1	14	-5	1	5.085	5.72	C.00	.67404	-0.60	-1.21	180	180	
1	14	-4	1	5.044	5.74	C.00	.73198	-0.08	-0.27	0	0	
1	14	-3	1	2.023	2.71	C.00	.67169	-0.48	-0.47	180	180	
1	14	-2	1	2.062	2.73	C.00	.67656	-.11	-0.13	180	180	
1	14	-1	1	1.76	1.47	C.00	.68849	.29	.23	180	180	
1	14	0	1	6.086	6.37	C.00	.70714	.49	1.23	180	180	
1	14	1	1	11.017	11.25	C.00	.73198	-0.08	-0.27	0	0	
1	15	-6	1	5.086	5.72	C.00	.74159	.13	.29	180	180	
1	15	-5	1	10.000	10.53	C.00	.72754	.47	1.53	180	180	
1	15	-4	1	2.048	2.48	C.00	.72001	0.00	0.00	180	180	
1	15	-3	1	7.054	6.98	C.00	.71919	.56	1.48	0	0	
1	15	-2	1	3.088	3.59	C.00	.72511	.28	.44	180	180	
1	15	-1	1	3.050	3.33	C.00	.73761	.18	.25	180	180	
1	15	0	1	4.077	3.69	C.00	.75636	1.08	1.99	180	180	
2	-16	2	1	5.020	5.44	C.00	.75225	-0.24	-0.46	180	180	
2	-16	3	1	4.006	2.99	C.00	.75137	1.10	1.76	180	180	
2	-15	-1	1	1.084	0.64	C.00	.74379	1.20	.91	0	0	
2	-15	0	1	2.050	1.75	C.00	.72436	.75	.76	180	180	
2	-15	1	1	14.018	14.12	C.00	.71127	0.05	0.20	180	180	
2	-15	2	1	8.065	8.16	C.00	.70487	.49	1.44	0	0	
2	-15	3	1	1.079	1.28	C.00	.70535	.51	.40	180	180	
2	-15	4	1	2.072	1.37	C.00	.71268	1.35	1.53	0	0	
2	-15	5	1	8.080	8.67	C.00	.72666	.14	.38	180	180	
2	-15	6	1	6.066	6.29	C.00	.70487	.49	1.44	0	0	
2	-14	-3	1	1.083	1.19	C.00	.75190	1.63	1.25	180	180	
2	-14	-2	1	1.082	1.28	C.00	.72067	.54	.41	0	0	
2	-14	-1	1	1.080	1.26	C.00	.71268	0.05	0.20	180	180	
2	-14	0	1	1.077	0.96	C.00	.67570	.81	.82	0	0	
2	-14	1	1	12.026	11.95	C.00	.74691	.36	1.00	180	180	
2	-14	2	1	2.065	2.82	C.00	.75190	1.63	1.25	180	180	
2	-14	3	1	5.080	6.31	C.00	.65981	-.51	.42	180	180	
2	-14	4	1	1.080	1.49	C.00	.66913.	.31	.24	180	180	
2	-13	-4	1	4.041	4.84	C.00	.68545	-.43	-.77	0	0	
2	-13	-3	1	3.041	3.05	C.00	.70438	-.36	.51	0	0	
2	-13	-2	1	2.096	3.29	C.00	.67242	-.33	-.43	180	180	
2	-13	-1	1	1.073	2.00	C.00	.64643	-.47	-.38	0	0	
2	-13	0	1	1.066	1.33	C.00	.62716	-.33	-.28	180	180	
2	-13	1	1	4.016	4.42	C.00	.61523	-.26	-.50	0	0	
2	-13	2	1	5.075	5.51	C.00	.61108	-.24	-.64	180	180	
2	-13	3	1	2.032	-2.32	C.00	.61487	-.46	.61	180	180	
2	-13	4	1	1.057	-1.57	C.00	.62644	-.15	0	0	0	

H	K	L	GRP	FU	FC	A	B	SIN/H/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-13	5	1	7.95	7.79	-7.79	0.00	•64539	•20	•61	180	
2	-13	6	1	2.16	3.58	-3.58	0.00	•67108	-1.42	-1.28	180	
2	-13	7	1	0.00	6.58	6.58	0.00	•70278	-52	-1.14	0	
2	-13	8	1	10.81	10.78	-10.78	0.00	•73972	02	0.08	180	
2	-12	-5	1	7.27	7.49	-7.49	0.00	•73827	-22	-58	160	
2	-12	-4	1	2.42	6.4	•64	0.00	•69539	1.78	1.90	0	
2	-12	-3	1	1.72	•31	•31	0.00	•65713	1.41	1.15	0	
2	-12	-2	1	3.81	2.57	-2.57	0.00	•62435	1.24	2.36	180	
2	-12	-1	1	3.66	3.94	3.94	0.00	•59793	-28	-50	0	
2	-12	0	1	14.93	15.34	15.34	0.00	•57876	-41	-2.26	0	
2	-12	1	1	5.53	5.69	5.69	0.00	•56757	-17	-63	0	
2	-12	2	1	3.86	2.67	2.67	0.00	•56483	1.20	3.68	0	
2	-12	3	1	1.26	•28	•28	0.00	•57066	•98	1.09	0	
2	-12	4	1	1.59	•85	-•85	0.00	•58482	•54	•62	180	
2	-12	5	1	1.35	2.72	-2.72	0.00	•60671	-1.37	-1.42	180	
2	-12	6	1	2.35	1.05	1.05	0.00	•63553	1.30	2.28	0	
2	-12	7	1	1.41	•17	-•17	0.00	•67040	1.24	1.23	180	
2	-12	8	1	5.33	4.94	-4.94	0.00	•71043	•39	1.18	180	
2	-12	9	1	5.33	5.16	5.16	0.00	•75479	•16	•47	0	
2	-11	-6	1	4.09	3.69	-3.69	0.00	•74218	•41	•90	180	
2	-11	-5	1	10.59	10.05	-10.05	0.00	•69398	•53	2.33	180	
2	-11	-4	1	4.46	4.15	-4.15	0.00	•64972	•30	•91	180	
2	-11	-3	1	2.85	-3.85	0.00	•61023	-•96	-2.09	180		
2	-11	-2	1	6.48	6.30	0.00	•57650	-•18	•77	0		
2	-11	-1	1	11.85	11.81	0.00	•54959	•05	•25	0		
2	-11	0	1	6.38	6.78	6.78	0.00	•53054	-•41	-1.78	180	
2	-11	1	1	2.67	1.96	-1.96	0.00	•52022	•71	1.70	180	
2	-11	2	1	17.06	17.60	-17.60	0.00	•51915	-•55	-3.40	180	
2	-11	3	1	5.75	6.04	-6.04	0.00	•52738	-•30	-1.25	180	
2	-11	4	1	1.47	•45	•45	0.00	•54449	1.02	1.42	0	
2	-11	5	1	6.94	7.70	7.70	0.00	•56968	-•75	-3.23	0	
2	-11	6	1	4.01	3.42	3.42	0.00	•60194	•59	1.78	0	
2	-11	7	1	9.49	9.52	9.52	0.00	•64020	-•03	-•15	0	
2	-11	8	1	3.92	3.85	3.85	0.00	•68346	•07	•17	0	
2	-11	9	1	7.06	6.99	-6.99	0.00	•73082	•07	.26	180	
2	-10	-7	1	3.36	3.20	3.20	0.00	•75316	.16	.31	0	
2	-10	-6	1	1.44	1.24	-1.24	0.00	•7021	.20	.19	180	
2	-10	-5	1	1.77	•02	.02	0.00	•65044	1.75	2.22	0	
2	-10	-4	1	1.29	•59	•59	0.00	•60463	•71	•76	0	
2	-10	-3	1	9.84	10.08	10.08	0.00	•56374	-•24	-1.25	0	
2	-10	-2	1	8.32	8.50	8.50	0.00	•52893	-•18	-•88	0	
2	-10	-1	1	9.07	9.17	9.17	0.00	•50145	-•09	-•53	180	
2	-10	0	1	10.03	10.53	-10.53	0.00	•48256	-•49	-2.85	180	
2	-10	1	1	15.51	15.48	-15.48	0.00	•47329	•02	•16	180	
2	-10	2	1	13.74	14.32	-14.32	0.00	•47421	-•58	-3.71	180	
2	-10	3	1	8.66	9.05	9.05	0.00	•48526	-•39	-2.13	0	
2	-10	4	1	6.52	7.00	7.00	0.00	•50577	-•48	-2.29	0	
2	-10	5	1	8.06	8.29	8.29	0.00	•53466	-•23	-1.16	0	
2	-10	6	1	1.26	•78	-•78	0.00	•57065	•48	.54	180	
2	-10	7	1	10.74	10.71	-10.71	0.00	•61250	.03	.14	180	
2	-10	8	1	1.36	.51	.51	0.00	•65909	.84	.87	0	
2	-10	9	1	4.18	-4.18	4.18	0.00	•70948	-•09	-•22	180	
2	-9	1	1	1.82	-•41	•41	0.00	•71387	1.82	1.82	180	

H K L GRP

FU FC A B

SINTH/LM DF

W*DF ANGLE CALC

ANGLE STAT

2	-9	-6	1	L	2.05	.17	.17	0.00	.65928	1.88	2.080	0
2	-9	-4	1	L	4.10	3.36	3.36	0.00	.60779	.74	2.17	0
2	-9	-2	1	L	1.88	2.52	2.52	0.00	.56026	-.65	-1.09	0
2	-9	-2	1	L	1.20	1.19	1.19	0.00	.51779	1.01	1.17	180
2	-9	-1	1	L	14.18	14.51	14.51	0.00	.48172	-.33	-2.11	0
2	-9	0	1	L	5.63	6.18	6.18	0.00	.45357	-.56	-2.65	180
2	-9	1	1	L	1.59	1.68	1.68	0.00	.43489	-.09	-.16	0
2	-9	1	1	L	1.91	2.69	2.69	0.00	.42692	-.77	-1.54	0
2	-9	2	1	L	6.85	7.08	7.08	0.00	.43025	-.23	-1.22	0
2	-9	3	1	L	16.56	16.89	16.89	0.00	.43026	-1.03	-5.52	180
2	-9	4	1	L	5.11	5.79	5.79	0.00	.44464	-.33	-2.26	0
2	-9	5	1	L	6.04	6.27	6.27	0.00	.50205	-.23	-1.06	0
2	-9	6	1	L	21.70	22.73	22.73	0.00	.54206	-1.03	-5.52	180
2	-9	7	1	L	5.08	4.87	4.87	0.00	.58765	.21	.77	180
2	-9	8	1	L	6.86	7.21	7.21	0.00	.63762	-.35	-1.45	180
2	-9	9	1	L	1.44	.30	-.30	0.00	.69102	1.14	1.17	180
2	-9	10	1	L	5.50	5.49	5.49	0.00	.74712	.01	.04	0
2	-8	1	1	L	1.46	2.01	-2.01	0.00	.73455	-.55	-.52	180
2	-8	2	1	L	2.43	1.68	1.68	0.00	.67591	.75	1.29	0
2	-8	3	1	L	7.15	7.31	7.31	0.00	.61957	-.16	-.65	180
2	-8	4	1	L	1.22	.42	.42	0.00	.56623	.80	.92	0
2	-8	5	1	L	1.24	2.02	-2.02	0.00	.51681	-.78	-.88	180
2	-8	6	1	L	10.63	10.95	-10.95	0.00	.47254	-.32	-1.93	180
2	-8	7	1	L	2.74	3.79	3.79	0.00	.43500	-1.05	-2.92	0
2	-8	8	1	L	3.47	3.79	-3.79	0.00	.40606	-.32	-1.11	180
2	-8	9	1	L	11.35	11.66	-11.66	0.00	.38765	-.31	-2.21	180
2	-8	10	1	L	18.92	18.99	18.99	0.00	.38130	-.07	-.39	0
2	-8	11	1	L	35.14	35.35	35.35	0.00	.38760	-.21	-.72	0
2	-8	12	1	L	12.94	13.43	-13.43	0.00	.40596	-.49	-3.45	180
2	-8	13	1	L	7.78	7.93	-7.93	0.00	.43487	-.15	-.88	180
2	-8	14	1	L	16.12	17.23	17.23	0.00	.47237	-1.11	-7.42	0
2	-8	15	1	L	3.24	3.44	-3.44	0.00	.51662	-.20	-.55	180
2	-8	16	1	L	5.47	5.11	5.11	0.00	.56602	.36	1.41	0
2	-8	17	1	L	6.06	5.76	5.76	0.00	.61935	.30	1.12	0
2	-8	18	1	L	3.15	2.73	-2.73	0.00	.67567	.42	.93	180
2	-8	19	1	L	2.73	.58	.58	0.00	.73430	2.15	4.03	0
2	-7	20	1	L	10.71	10.77	10.77	0.00	.69978	-.06	-.26	0
2	-7	21	1	L	5.99	5.87	-5.87	0.00	.63950	.12	.44	180
2	-7	22	1	L	3.29	2.39	2.39	0.00	.58135	.90	2.43	0
2	-7	23	1	L	8.42	8.10	-8.10	0.00	.52603	.32	1.64	180
2	-7	24	1	L	14.43	15.38	-15.38	0.00	.47452	-.95	-6.11	180
2	-7	25	1	L	3.73	3.93	-3.93	0.00	.42820	-.20	-.72	180
2	-7	26	1	L	7.79	8.47	-8.47	0.00	.38894	-.68	-4.08	180
2	-7	27	1	L	29.91	29.62	-29.62	0.00	.35906	.29	1.24	180
2	-7	28	1	L	8.01	8.34	8.34	0.00	.34102	-.34	-2.31	0
2	-7	29	1	L	21.25	22.22	-22.22	0.00	.33675	-.97	-4.81	180
2	-7	30	1	L	4.39	4.90	4.90	0.00	.34674	-.51	-2.43	0
2	-7	31	1	L	16.79	16.95	16.95	0.00	.36985	-.17	-1.15	0
2	-7	32	1	L	1.11	.23	-.23	0.00	.40383	.88	1.11	180
2	-7	33	1	L	20.48	21.57	-21.57	0.00	.44620	-1.09	-6.39	180
2	-7	34	1	L	21.64	22.46	22.46	0.00	.49481	-.82	-4.78	0
2	-7	35	1	L	5.14	6.00	6.00	0.00	.54800	.10	.40	0
2	-7	36	1	L	3.83	6.00	.60457	0.00		1.28	180	

H	K	L	GKP	FG	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-7	9	1	L	2.17	2.51	0.00	.66365	-3.34	-5.55	0	0
2	-7	10	1	L	1.45	.44	C.00	.72463	1.01	.97	180	0
2	-6	9	1	L	4.30	4.00	4.00	.73018	.30	.75	0	0
2	-6	-8	1	L	7.20	7.42	7.42	.66685	-.21	-.65	0	0
2	-6	-7	1	L	4.56	4.72	4.72	.60495	-.15	-.46	180	0
2	-6	-6	1	L	4.04	3.49	3.49	.54493	.55	1.91	0	0
2	-6	-5	1	L	1.37	.42	.42	.48752	.94	1.30	0	0
2	-6	-4	1	L	11.35	11.76	11.76	.43373	-.41	-2.62	0	0
2	-6	-3	1	L	8.89	9.14	9.14	.38510	-.24	-1.61	0	0
2	-6	-2	1	L	9.23	9.56	9.56	.34381	-.33	-2.41	0	0
2	-6	-1	1	L	14.30	13.97	13.97	.31279	.33	2.72	0	0
2	-6	0	1	L	25.48	25.56	25.56	.29529	-.08	-.40	180	0
2	-6	1	1	L	13.51	14.04	14.04	.29375	-.53	-4.19	180	0
2	-6	2	1	L	39.69	40.90	40.90	.30839	-1.21	-3.29	180	0
2	-6	3	1	L	10.49	10.89	10.89	.33712	-.40	-3.07	180	0
2	-6	4	1	L	1.07	1.67	1.67	.37673	-.61	-.80	0	0
2	-6	5	1	L	23.51	24.57	24.57	.42418	-1.06	-.63	0	0
2	-6	6	1	L	3.59	3.84	3.84	.47713	-.25	-.82	0	0
2	-6	7	1	L	3.69	3.85	3.85	.53396	-.16	-.50	180	0
2	-6	8	1	L	9.40	9.15	9.15	.59355	.25	1.25	180	0
2	-6	9	1	L	6.19	5.64	5.64	.65514	.55	2.01	0	0
2	-6	10	1	L	2.78	2.95	2.95	.71823	-.17	-.32	180	0
2	-5	-9	1	L	6.66	6.70	6.70	.70075	-.04	-.13	180	0
2	-5	-8	1	L	10.80	11.19	11.19	.63607	-.40	-1.87	180	0
2	-5	-7	1	L	3.02	3.44	3.44	.57257	-.42	-1.02	180	0
2	-5	-6	1	L	2.75	2.40	2.40	.51070	.35	.87	0	0
2	-5	-5	1	L	6.34	6.32	6.32	.45113	.02	.08	0	0
2	-5	-4	1	L	67.85	70.30	70.30	.39491	-2.45	-5.80	0	0
2	-5	-3	1	L	2.84	3.52	3.52	.34368	-.68	-2.30	180	0
2	-5	-2	1	L	29.23	29.95	29.95	.30001	-.72	-2.76	180	0
2	-5	-1	1	L	24.52	23.58	23.58	.26763	.94	4.73	0	0
2	-5	0	1	L	23.04	22.88	22.88	.25095	.16	.82	180	0
2	-5	1	1	L	32.90	34.60	34.60	.25309	-.17	-.514	180	0
2	-5	2	1	L	12.26	12.88	12.88	.27360	-.62	-.568	0	0
2	-5	3	1	L	7.95	8.34	8.34	.30885	-.40	-2.97	0	0
2	-5	4	1	L	4.29	4.79	4.79	.35447	-.50	-2.28	0	0
2	-5	5	1	L	14.24	15.07	15.07	.40699	-.83	-6.04	0	0
2	-5	6	1	L	6.27	6.78	6.78	.46406	-.52	-2.45	0	0
2	-5	7	1	L	9.59	9.65	9.65	.52421	-.07	-.37	180	0
2	-5	8	1	L	1.42	.05	.05	.58649	1.38	1.68	0	0
2	-5	9	1	L	10.05	-10.05	0.00	.65029	-.45	-2.01	180	0
2	-5	10	1	L	10.24	9.83	9.83	.71519	.41	1.75	0	0
2	-4	-10	1	L	4.98	5.26	-5.26	.74031	-.28	-7.74	180	0
2	-4	-9	1	L	9.21	8.76	-8.76	.67367	.45	1.96	180	0
2	-4	-8	1	L	1.86	2.29	-2.29	.60774	1.56	2.45	180	0
2	-4	-7	1	L	10.09	-10.39	0.00	.54275	-.29	-1.58	180	0
2	-4	-6	1	L	12.60	12.48	0.00	.47911	.12	.77	0	0
2	-4	-5	1	L	8.90	9.43	-9.43	.41742	-.53	-3.22	180	0
2	-4	-4	1	L	1.38	.44	.44	.35870	.94	1.58	0	0
2	-4	-3	1	L	5.68	6.19	-6.19	.30465	-.51	-3.20	180	0
2	-4	-2	1	L	24.09	24.25	0.00	.25825	-.16	-.80	0	0
2	-4	-1	1	L	61.81	63.44	-63.44	.22427	-1.63	-5.33	180	0
2	0	1	1	L	16.77	0.00	.20886	.1.38	-1.38	0	0	

	H	K	L	GRP	FU	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-4	1	1		45.45	47.77	47.77	C.00	.21609	-2.32	-7.75	0	0
2	-4	2	1		13.94	12.88	-12.88	0.00	.24390	1.06	8.54	180	0
2	-4	3	1		29.33	29.20	29.20	0.00	.28636	.12	.49	0	0
2	-4	4	1		7.90	8.18	8.18	0.00	.33801	-.28	-1.94	0	0
2	-4	5	1		38.24	39.62	-39.62	0.00	.39526	-1.37	-4.52	180	0
2	-4	6	1		20.74	20.95	-20.95	0.00	.45599	-.21	-1.35	180	0
2	-4	7	1		5.26	5.00	5.00	0.00	.51900	.27	1.11	180	0
2	-4	8	1		9.17	9.32	9.32	0.00	.58354	-.15	-0.75	0	0
2	-4	9	1		6.93	7.87	7.87	0.00	.64916	-.94	-3.66	0	0
2	-4	10	1		10.06	10.05	10.05	0.00	.71556	.01	.03	0	0
2	-3	11	L		1.76	1.39	0.00	0.00	.71674	.37	.41	0	0
2	-3	12	L		6.21	5.97	-5.97	0.00	.64922	.24	.86	180	0
2	-3	13	L		1.26	2.19	2.19	0.00	.58222	-.92	-1.02	0	0
2	-3	14	L		10.60	11.16	11.16	0.00	.51595	-.56	-3.20	0	0
2	-3	15	L		1.14	.10	-0.10	0.00	.45073	1.04	1.28	180	0
2	-3	16	L		3.00	3.21	3.21	0.00	.38709	-.21	-.69	0	0
2	-3	17	L		22.50	22.84	-22.84	0.00	.32596	-.34	-1.96	180	0
2	-3	18	L		12.77	13.36	-13.36	0.00	.26905	-.59	-4.94	180	0
2	-3	19	L		12.00	11.54	11.54	0.00	.21966	.46	4.05	0	0
2	-3	20	L		42.11	44.09	44.09	0.00	.18397	-1.98	-7.14	0	0
2	-3	21	L		6.75	6.95	-6.95	0.00	.17078	-.20	-1.80	180	0
2	-3	22	L		12.17	12.49	12.49	0.00	.18498	-.32	-2.84	180	0
2	-3	23	L		43.67	-43.67	0.00	0.00	.22134	.67	2.21	180	0
2	-3	24	L		20.30	20.31	20.31	0.00	.27111	-.01	-.05	0	0
2	-3	25	L		21.39	22.22	-22.22	0.00	.32823	-.84	-4.78	180	0
2	-3	26	L		7.01	7.11	-7.11	0.00	.38948	-.11	-6.63	180	0
2	-3	27	L		18.90	20.01	-20.01	0.00	.45319	-1.12	-7.46	180	0
2	-3	28	L		5.30	5.52	0.00	0.00	.51846	-.22	-.95	0	0
2	-3	29	L		2.91	2.19	2.19	0.00	.58476	.71	1.77	0	0
2	-3	30	L		1.36	.41	.41	0.00	.65178	.95	.97	0	0
2	-3	31	L		1.48	.02	.02	0.00	.71932	1.46	1.38	0	0
2	-3	32	L		15.14	14.62	14.62	0.00	.69589	.52	2.58	0	0
2	-2	33	L		1.46	.02	.02	0.00	.62771	.64	1.42	0	0
2	-2	34	L		2.91	2.27	2.27	0.00	.62771	.64	1.42	0	0
2	-2	35	L		1.35	.70	.70	0.00	.55991	.85	1.91	180	0
2	-2	36	L		2.60	1.75	-1.75	0.00	.49266	.23	.27	180	0
2	-2	37	L		1.18	.95	-.95	0.00	.42621	-.44	-3.07	0	0
2	-2	38	L		13.47	13.91	13.91	0.00	0.00	-.55	-3.95	180	0
2	-2	39	L		15.52	16.07	-16.07	0.00	.36100	-.60	-6.34	180	0
2	-2	40	L		1.35	.70	.70	0.00	.29785	.65	1.36	0	0
2	-2	41	L		31.77	31.67	31.67	0.00	.23841	.09	.28	0	0
2	-2	42	L		10.84	10.75	-10.75	0.00	.18626	-.09	.86	180	0
2	-2	43	L		30.83	32.43	-32.43	0.00	.14923	-.60	-6.34	180	0
2	-2	44	L		25.88	26.50	26.50	0.00	.13992	-.62	-2.53	0	0
2	-2	45	L		22.10	22.31	22.31	0.00	.16314	-.21	-1.12	0	0
2	-2	46	L		32.78	30.55	30.55	0.00	.20828	2.23	7.52	0	0
2	-2	47	L		1.22	.18	-.18	0.00	0.00	-.09	1.19	180	0
2	-2	48	L		2.72	3.39	3.39	0.00	.26433	.57	3.73	180	0
2	-2	49	L		1.83	.50	.50	0.00	.32572	1.33	3.39	0	0
2	-2	50	L		15.14	15.51	15.51	0.00	.38992	-.37	-2.80	0	0
2	-2	51	L		2.39	2.31	-2.31	0.00	.45576	.07	.18	180	0
2	-2	52	L		1.22	0.00	0.00	0.00	.52261	1.04	1.19	180	0
2	-2	53	L		8.93	8.93	8.93	0.00	.59013	-.67	-1.42	0	0
2	-2	54	L		7.90	7.53	-7.53	0.00	.65811	-.01	-0.3	180	0
2	-2	55	L		7.28	7.28	7.28	0.00	.72643	.37	1.40	180	0
2	-1	56	L		10.1	1.1	1.1	0.00	.74678	-.05	-1.16	180	0

H	K	L	GRP	HU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	-1	-10	1	L	1.39	.78	-78	C.00	.61	.61	180	180
2	-1	-9	1	L	2.57	3.22	-3.22	0.00	.60945	-.65	-1.24	0
2	-1	-8	1	L	10.39	11.05	11.05	0.00	.54120	-.69	-3.73	0
2	-1	-7	1	L	29.06	30.46	-30.46	C.00	.47339	-1.40	-5.70	180
2	-1	-6	1	L	13.17	13.02	-13.02	0.00	.40623	.15	1.07	180
2	-1	-5	1	L	1.05	.59	.59	0.00	.34011	.45	.60	0
2	-1	-4	1	L	3.40	2.06	-2.06	0.00	.27579	1.34	6.58	180
2	-1	-3	1	L	40.56	40.36	40.36	0.00	.21487	.21	.70	0
2	-1	-2	1	L	14.00	14.19	14.19	C.00	.16127	-.19	-1.32	0
2	-1	-1	1	L	3.61	4.04	-4.04	C.00	.12480	-.42	-2.70	180
2	-1	0	1	L	49.92	51.59	-51.59	C.00	.12194	-1.67	-7.50	180
2	-1	1	1	L	15.35	16.18	16.18	C.00	.15457	-.83	-5.95	0
2	-1	2	1	L	30.65	31.36	31.36	0.00	.20650	-.72	-2.42	0
2	-1	3	1	L	15.58	15.42	15.42	0.00	.26668	.16	1.21	0
2	-1	4	1	L	1.46	1.35	-1.35	C.00	.33065	.11	.21	180
2	-1	5	1	L	2.40	1.78	1.78	0.00	.39656	.62	1.80	0
2	-1	6	1	L	4.09	3.46	3.46	0.00	.46360	.63	2.49	0
2	-1	7	1	L	2.03	2.77	2.77	C.00	.53133	-.74	-1.38	0
2	-1	8	1	L	2.56	2.07	-2.07	0.00	.59953	.49	1.00	180
2	-1	9	1	L	5.04	5.41	5.41	0.00	.66804	-.36	-1.15	0
2	-1	10	1	L	3.06	.53	-.53	C.00	.73679	2.53	5.12	180
2	-1	11	1	L	3.40	3.92	3.92	C.00	.73211	-.52	-1.08	0
2	-1	12	1	L	3.65	3.64	-3.64	0.00	.66332	.01	.03	180
2	-1	13	1	L	9.97	10.21	-10.21	C.00	.59474	-.24	-1.19	180
2	-1	14	1	L	14.00	13.35	-13.35	C.00	.52647	.64	3.92	180
2	-1	15	1	L	4.55	4.18	4.18	C.00	.45865	.37	1.58	0
2	-1	16	1	L	7.14	7.56	7.56	C.00	.39150	-.43	-2.50	0
2	-1	17	1	L	17.18	17.40	17.40	C.00	.32544	-.22	-1.48	0
2	-1	18	1	L	7.36	6.84	-6.84	0.00	.26131	.52	4.13	180
2	-1	19	1	L	18.06	19.45	19.45	0.00	.20094	-1.39	-7.83	0
2	-1	20	1	L	87.16	90.25	-90.25	0.00	.14901	-3.09	-12.59	180
2	-1	21	1	L	11.52	11.52	0.00	C.00	.11728	.00	.02	0
2	-1	22	1	L	63.49	64.94	-64.94	0.00	.12262	-1.45	-6.51	180
2	-1	23	1	L	31.44	31.91	31.91	0.00	.16139	-.47	-1.82	0
2	-1	24	1	L	17.64	18.55	18.55	0.00	.21629	-.91	-6.47	0
2	-1	25	1	L	1.37	.15	-.15	C.00	.27794	1.21	2.66	0
2	-1	26	1	L	3.14	2.31	-2.31	0.00	.34270	.83	3.37	180
2	-1	27	1	L	5.1	2.92	-2.39	0.00	.40910	.52	1.68	180
2	-1	28	1	L	15.41	15.90	-15.90	0.00	.47646	.02	.05	180
2	-1	29	1	L	3.46	1.86	-1.86	0.00	.54442	-.49	-2.96	180
2	-1	30	1	L	3.51	3.05	3.05	0.00	.61278	1.60	4.42	180
2	-1	31	1	L	10	1.89	2.38	0.00	.75026	-.50	-6.62	0
2	-1	32	1	L	1.43	.69	-.69	C.00	.72054	.74	.72	180
2	-1	33	1	L	1.74	3.06	3.06	0.00	.65205	-1.32	-1.81	0
2	-1	34	1	L	1.25	1.05	1.05	C.00	.58385	.20	.23	0
2	-1	35	1	L	14.14	14.13	14.13	0.00	.51607	.01	.06	0
2	-1	36	1	L	3.65	3.59	-3.59	C.00	.44889	.07	.23	180
2	-1	37	1	L	7.14	7.06	7.06	0.00	.38262	.08	.48	0
2	-1	38	1	L	4.66	3.56	3.56	C.00	.25570	1.11	6.99	0
2	-1	39	1	L	90.96	92.43	-92.43	0.00	.19866	-1.48	-5.19	180
2	-1	40	1	L	48.54	48.54	48.54	C.00	.15256	-2.50	-10.00	180

H	K	L	GKP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	1	1	-1	35.03	36.32	36.32	C.00	.12967	-1.29	-5.53	0	0
2	1	0	1	2.52	3.62	3.62	C.00	.14171	-1.10	-5.15	0	0
2	1	1	1	85.17	88.38	88.38	C.00	.18187	-3.20	-11.81	0	0
2	2	1	2	40.20	39.48	39.48	C.00	.23622	.72	2.28	0	0
2	1	3	1	8.26	8.73	-8.73	0.00	.29708	.45	-3.54	180	180
2	2	1	4	7.07	7.45	-7.45	0.00	.36116	.37	-2.35	180	180
2	2	1	5	20.22	21.37	-21.37	C.00	.42702	-1.15	-7.39	180	180
2	2	1	6	6.95	6.88	-6.88	0.00	.49394	.06	.32	180	180
2	2	1	7	1.20	.29	.29	0.00	.56155	.90	1.06	0	0
2	2	1	8	1.31	.85	.85	C.00	.62963	.46	.49	0	0
2	2	1	9	1.39	2.35	-2.35	0.00	.69804	-.95	-9.95	180	180
2	2	1	L	1.44	.90	-.90	0.00	.71222	.54	.52	180	180
2	2	1	L	1.41	1.25	-1.25	0.00	.64438	.16	.18	180	180
2	2	2	-9	6.02	5.35	5.35	C.00	.57700	.68	2.96	0	0
2	2	2	-8	7.87	7.62	7.62	C.00	.51025	.25	1.32	0	0
2	2	2	-7	10.60	10.47	10.47	C.00	.44443	.13	.80	0	0
2	2	2	-6	7.21	7.47	-7.47	C.00	.38000	-.26	-1.58	180	180
2	2	2	-5	6.03	5.19	-5.19	C.00	.31783	.84	5.55	180	180
2	2	2	-4	21.87	22.04	-22.04	0.00	.25953	-.17	-.84	180	180
2	2	2	-3	3.18	2.98	2.98	C.00	.20839	.20	1.03	0	0
2	2	2	-2	24.42	24.50	-24.50	C.00	.17096	-.08	-.42	180	180
2	2	2	-1	20.04	20.04	20.04	C.00	.15733	-.01	-.04	0	0
2	2	2	0	20.35	21.35	21.35	C.00	.17322	-1.00	-5.09	0	0
2	2	2	1	12.08	11.91	11.91	C.00	.21211	.17	1.45	0	0
2	2	2	2	34.35	34.51	-34.51	C.00	.26401	-.16	-.48	180	180
2	2	2	3	12.33	11.59	11.59	C.00	.32270	.74	6.16	0	0
2	2	2	4	2.43	2.19	2.19	C.00	.38510	.24	.69	0	0
2	2	2	5	7.22	6.02	8.02	C.00	.44967	-.80	-4.35	0	0
2	2	2	6	20.47	21.34	21.34	C.00	.51558	-.87	-5.41	0	0
2	2	2	7	3.58	1.88	1.88	C.00	.58239	1.70	5.04	0	0
2	2	2	8	6.19	6.41	6.41	C.00	.64981	-.22	-.82	0	0
2	2	2	9	4.54	4.75	4.75	C.00	.71768	-.21	-.56	0	0
2	2	3	-11	2.59	2.12	2.12	C.00	.70725	.47	.77	0	0
2	2	3	-10	9.18	8.18	-8.18	C.00	.64044	.99	4.66	180	180
2	2	3	-9	8.20	8.57	8.57	C.00	.57433	-.37	-1.70	0	0
2	2	3	-8	11.12	11.15	-11.15	C.00	.50918	-.03	-.15	180	180
2	2	3	-7	8.49	8.64	8.64	C.00	.44543	-.15	-.88	0	0
2	2	3	-6	5.66	5.53	5.53	C.00	.38378	.13	.69	0	0
2	2	3	-5	14.05	13.80	13.80	C.00	.32540	.25	2.10	0	0
2	2	3	-4	24.84	24.33	-24.33	C.00	.27242	.51	2.06	180	180
2	2	3	-3	5.69	7.01	7.01	C.00	.22863	-1.33	-10.02	0	0
2	2	3	-2	38.60	39.78	-39.78	C.00	.20014	-1.18	-4.09	180	180
2	2	3	-1	29.53	29.72	-29.72	C.00	.19382	-.19	-.67	180	180
2	2	3	0	20.50	19.36	19.36	C.00	.21168	1.13	6.38	0	0
2	2	3	1	64.66	65.47	-65.47	C.00	.24855	-.81	-2.50	180	180
2	2	3	2	28.49	29.51	-29.51	C.00	.29745	-1.02	-3.98	180	180
2	2	3	3	11.24	11.71	11.71	C.00	.35341	-.47	-3.55	0	0
2	2	3	4	7.23	7.37	7.37	C.00	.41358	-.15	-.88	0	0
2	2	3	5	4.20	4.50	-4.50	C.00	.47638	-.29	-1.16	180	180
2	2	3	6	24.31	24.65	24.65	C.00	.35407	-.34	-1.81	0	0
2	2	3	7	2.20	.74	.74	C.00	.60653	1.47	2.79	0	0
2	2	3	8	1.36	1.51	1.51	C.00	.67301	-.13	-1.13	0	0
2	2	3	9	7.01	6.28	-6.28	C.00	.74010	.73	2.48	180	180

H	K	L	GKP	FU	FC	A	B	SINTH/LM	DT	W*DF	ANGLE CALC	ANGLE STAT
2	4	-11	1	L	1•43	2•29	0	0•00	•70571	••86	-•84	0
2	4	-10	1	L	12•43	12•60	12•60	0•00	•64029	-•17	-•81	0
2	4	-9	1	L	18•03	18•00	-18•00	0•00	•57589	•03	•17	180
2	4	-8	1	L	10•17	9•94	-9•94	0•00	•51289	•24	1•32	180
2	4	-7	1	L	24•08	25•20	25•20	0•00	•45187	-1•12	-5•26	0
2	4	-6	1	L	12•42	12•51	-12•51	C•00	•39376	-•09	-•63	180
2	4	-5	1	L	13•35	13•78	13•78	0•00	•34005	-•43	-3•50	0
2	4	-4	1	L	30•99	31•27	31•27	0•00	•29317	-•27	-1•07	0
2	4	-3	1	L	16•82	17•37	17•37	C•00	•25688	-•55	-3•17	0
2	4	-2	1	L	9•63	10•49	10•49	C•00	•23614	-•86	-8•05	0
2	4	-1	1	L	6•18	5•95	5•95	0•00	•23507	-•22	1•73	0
2	4	0	1	L	28•06	30•06	-30•06	0•00	•25394	-2•00	-8•51	180
2	4	1	1	L	8•20	8•60	-8•60	0•00	•28887	-•40	-3•22	180
2	4	2	1	L	13•03	13•20	13•20	C•00	•33485	-•17	-1•39	0
2	4	3	1	L	24•00	24•38	-24•38	C•00	•38799	-•37	-1•74	180
2	4	4	1	L	2•73	3•72	-3•72	C•00	•44573	-•99	-2•71	180
2	4	5	1	L	4•17	3•97	-3•97	C•00	•50650	•20	•77	180
2	4	6	1	L	25•56	25•97	-25•97	C•00	•56934	-•41	-2•20	180
2	4	7	1	L	4•12	4•29	4•29	C•00	•63361	-•17	-•48	0
2	4	8	1	L	9•52	9•19	9•19	C•00	•69894	•34	1•46	0
2	4	9	1	L	-11	8•95	8•81	C•00	•70763	•14	•59	180
2	4	10	1	L	7•98	8•26	-8•26	C•00	•64395	-•28	-1•24	180
2	4	11	1	L	4•77	4•34	-4•34	C•00	•58166	•43	1•58	180
2	4	12	1	L	6•04	6•54	-6•54	C•00	•52127	-•49	-2•14	180
2	4	13	1	L	11•22	11•43	11•43	C•00	•46350	-•22	-1•40	0
2	4	14	1	L	10•56	10•80	10•80	C•00	•40949	-•24	-1•65	0
2	4	15	1	L	15•89	15•69	15•69	C•00	•36091	•20	1•40	0
2	4	16	1	L	15•93	15•24	-15•24	C•00	•32025	•69	5•18	180
2	4	17	1	L	27•62	27•13	27•13	C•00	•29084	•50	1•94	0
2	4	18	1	L	3•61	2•70	2•70	C•00	•27631	•91	4•78	0
2	4	19	1	L	13•56	13•83	13•83	C•00	•27898	-•27	-2•22	0
2	4	20	1	L	22•41	22•74	22•74	C•00	•29840	-•33	-1•53	0
2	4	21	1	L	4•14	4•50	-4•50	C•00	•33164	-•36	-1•82	180
2	4	22	1	L	20•16	20•46	20•46	C•00	•37504	-•30	-1•71	0
2	4	23	1	L	1•10	•66	-•66	C•00	•42551	•44	•56	180
2	4	24	1	L	2•89	2•84	2•84	C•00	•48081	•06	•17	0
2	4	25	1	L	14•40	14•85	-14•85	C•00	•53948	-•45	-2•66	180
2	4	26	1	L	3•38	3•89	-3•89	C•00	•60052	•51	-1•28	180
2	4	27	1	L	2•32	2•38	-2•38	C•00	•66327	-•05	-•09	180
2	4	28	1	L	1•40	1•50	-1•50	C•00	•72730	-•10	-•10	180
2	4	29	1	L	2•14	•36	-•36	C•00	•71296	•78	2•74	180
2	4	30	1	L	10•26	9•23	-9•23	C•00	•65134	•05	4•95	180
2	4	31	1	L	3•79	3•40	3•40	C•00	•59151	•38	1•10	0
2	4	32	1	L	11•97	11•95	11•95	C•00	•53410	•02	•09	0
2	4	33	1	L	7•89	8•32	-8•32	C•00	•47996	-•44	-2•35	180
2	4	34	1	L	-11•1	4•11	4•11	C•00	•43035	-•30	-1•18	0
2	4	35	1	L	13•28	13•83	-13•83	C•00	•36699	-•56	-4•08	180
2	4	36	1	L	43•67	44•76	-44•76	C•00	•35220	-1•09	-2•71	180
2	4	37	1	L	13•65	14•07	-14•07	C•00	•32873	-•42	-3•41	180
2	4	38	1	L	10•62	10•98	10•98	C•00	•31907	-•36	-2•92	0
2	4	39	1	L	25•35	25•77	-25•77	C•00	•32447	-•42	-1•90	180
2	4	40	1	L	45•25	46•22	-46•22	C•00	•34421	-•98	-2•50	0
2	4	41	1	L	34•39	34•39	34•39	C•00	•37604	-•84	-2•89	0

H	K	L	WKP	FC	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	6	2	1	8.94	8.84	8.84	0.00	41721	.10	.65	0	0
2	6	3	1	28.25	28.76	-28.76	0.00	46524	-.50	-2.09	180	180
2	6	4	1	8.32	8.47	0.00	.51823	-.15	-.76	0	0	
2	6	5	1	10.47	10.38	-10.38	0.00	57481	.09	.45	180	180
2	6	6	1	10.33	10.09	10.09	0.00	63402	.23	1.12	0	0
2	6	7	1	3.10	1.66	1.66	0.00	69518	1.44	3.00	0	0
2	6	8	1	1.47	1.41	1.41	0.00	75782	.05	.05	180	180
2	7	-11	1	2.47	1.54	-1.54	0.00	72165	.93	1.58	0	0
2	7	-10	1	6.03	6.10	6.10	0.00	66233	-.07	-.24	0	0
2	7	-9	1	15.05	15.08	15.08	0.00	60524	-.03	-.19	0	0
2	7	-8	1	2.85	2.35	2.35	0.00	55107	.50	1.32	0	0
2	7	-7	1	1.78	1.67	-1.67	0.00	50077	1.11	2.07	180	180
2	7	-6	1	20.68	21.28	-21.28	0.00	45562	-.60	-3.46	180	180
2	7	-5	1	12.23	12.65	-12.65	0.00	41730	-.42	-2.92	180	180
2	7	-4	1	5.50	5.24	5.24	0.00	38783	.25	1.34	0	0
2	7	-3	1	3.17	3.38	-3.38	0.00	36935	-.21	-.80	180	180
2	7	-2	1	6.20	6.47	6.47	0.00	36352	-.28	-1.70	0	0
2	7	-1	1	24.49	25.57	25.57	0.00	37095	-.108	-5.08	0	0
2	7	0	1	21.96	22.31	-22.31	0.00	39089	-.35	-1.78	180	180
2	7	1	1	8.64	8.79	-8.79	0.00	42156	-.15	-.93	180	180
2	7	2	1	1.97	1.43	1.43	0.00	46082	.54	1.15	0	0
2	7	3	1	13.88	14.01	-14.01	0.00	50668	-.13	-.83	180	180
2	7	4	1	12.75	12.60	-12.60	0.00	55752	.16	.93	180	180
2	7	5	1	6.28	6.67	6.67	0.00	61209	-.39	-1.55	0	0
2	7	6	1	5.60	5.91	5.91	0.00	66948	-.31	-1.05	0	0
2	7	7	2	1.60	4.60	4.60	0.00	72904	.70	2.22	0	0
2	8	-11	1	3.55	3.43	3.43	0.00	73356	.13	.29	0	0
2	8	-10	1	3.91	4.68	-4.68	0.00	67676	-.77	-1.89	180	180
2	8	-9	1	7.94	7.58	7.58	0.00	62260	.36	1.58	0	0
2	8	-8	1	5.83	6.13	-6.13	0.00	57182	-.30	-1.20	180	180
2	8	-7	1	1.17	1.13	-1.13	0.00	52541	.04	.04	180	180
2	8	-6	1	12.30	13.22	13.22	0.00	48463	-.91	-5.71	0	0
2	8	-5	1	1.08	.51	-.51	0.00	45099	.57	.74	180	180
2	8	-4	1	7.95	7.95	7.95	0.00	42621	-.01	-.04	0	0
2	8	-3	1	5.32	5.53	5.53	0.00	41188	-.21	-1.05	0	0
2	8	-2	1	13.70	14.14	14.14	0.00	40910	-.45	-3.21	0	0
2	8	-1	1	7.84	7.92	-7.92	0.00	41810	-.07	-.43	180	180
2	8	0	1	8.35	8.87	8.87	0.00	43816	-.52	-3.14	0	0
2	8	1	1	15.00	15.12	-15.12	0.00	46785	-.12	-.80	180	180
2	8	2	1	7.56	7.44	-7.44	0.00	50549	.12	.61	180	180
2	8	3	1	6.01	5.81	5.81	0.00	54943	.19	.83	0	0
2	8	4	1	9.51	9.95	9.95	0.00	59830	-.43	-2.09	0	0
2	8	5	1	3.80	3.86	3.86	0.00	65098	-.06	-.16	0	0
2	8	6	1	1.63	.58	-.58	0.00	70663	1.05	1.27	180	180
2	8	7	1	10.23	10.03	-10.03	0.00	55337	.20	1.14	180	180
2	9	-11	1	1.47	.37	-.37	0.00	74855	1.10	1.05	0	0
2	9	-10	1	1.39	1.95	-1.95	0.00	69442	-.56	-.56	180	180
2	9	-9	1	6.40	5.86	-.586	0.00	64329	.54	2.05	180	180
2	9	-8	1	3.78	3.41	-.341	0.00	59595	.37	1.06	180	180
2	9	-7	1	10.23	10.03	-10.03	0.00	55337	.20	1.14	180	180
2	9	-6	1	1.19	.35	-.35	0.00	51673	.84	.99	0	0
2	9	-5	1	8.88	8.95	8.95	0.00	48737	-.07	-.41	0	0
2	9	-4	1	10.09	10.76	10.76	0.00	46667	-.67	-4.05	0	0
2	9	-3	1	30.80	32.05	-32.05	0.00	45580	180	180	0	0

H	K	L	GRP	FU	HC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
2	9	-2	1	6.80	7.37	0.00	45548	-0.57	-3.07	0		
2	9	-1	1	2.16	1.89	6.00	46572	.27	.63	0		
2	9	0	1	17.19	17.70	0.00	48585	-0.51	-3.42	0		
2	9	1	1	1.18	1.11	-0.11	51473	1.07	1.27	180		
2	9	2	1	12.29	12.09	0.00	55096	.20	.14	0		
2	9	3	1	3.64	3.30	0.00	59322	.34	.91	0		
2	9	4	1	4.45	3.73	-0.73	64029	.71	2.28	180		
2	9	5	1	3.42	3.45	0.00	69122	-.03	-0.6	0		
2	9	6	1	1.44	1.51	1.51	74519	-.08	-0.7	0		
2	9	7	1	2.70	2.26	0.00	771505	2.44	4.80	0		
2	9	8	1	2.72	1.82	0.00	66700	.90	1.84	180		
2	10	-9	1	3.09	.55	0.00	62306	2.54	6.33	0		
2	10	-8	1	18.71	19.06	0.00	58417	-.35	-2.04	0		
2	10	-7	1	16.01	16.94	0.00	55140	-.94	-5.61	180		
2	10	-6	1	10	-5	1	52588	.16	.84	180		
2	10	-5	1	8.44	8.28	0.00	50870	-.85	-3.15	180		
2	10	-4	1	4.45	5.30	-5.30	50074	-.06	-.25	180		
2	10	-3	1	5.57	5.63	-5.63	50243	.07	.43	180		
2	10	-2	1	9.91	9.84	-9.84	51367	-.48	-5.8	180		
2	10	-1	1	1.16	1.66	-1.66	63782	.42	1.15	180		
2	10	0	1	1.79	1.35	-1.35	68328	-.47	-5.9	180		
2	10	1	1	1.21	.82	0.00	56203	.39	.45	0		
2	10	2	1	1.27	.49	-0.49	59706	.78	.88	180		
2	10	3	1	3.90	3.48	0.00	65280	.41	1.15	0		
2	10	4	1	1.80	2.27	0.00	53385	.44	1.77	180		
2	10	5	1	2.94	2.52	0.00	73257	.42	.76	0		
2	11	-10	1	.95	0.00	0.00	73841	1.69	3.08	0		
2	11	-9	1	3.23	2.82	0.00	69342	.41	.98	0		
2	11	-8	1	18.37	17.66	0.00	65280	.71	3.77	0		
2	11	-7	1	4.49	4.41	0.00	61740	.09	.27	0		
2	11	-6	1	4.25	3.80	0.00	58817	.45	1.46	0		
2	11	-5	1	7.02	7.16	-7.16	56607	-.13	-.61	180		
2	11	-4	1	15.80	16.30	-16.30	55196	-.50	-2.97	180		
2	11	-3	1	3.69	3.49	0.00	54645	.20	.60	180		
2	11	-2	1	14.39	14.35	0.00	54981	.04	.23	0		
2	11	-1	1	1.24	.84	0.00	56186	.41	.48	180		
2	11	0	1	1.21	1.02	0.00	58209	.19	.22	0		
2	11	1	1	9.09	9.14	-9.14	60966	-.05	-.23	180		
2	11	2	1	7.18	6.61	-6.61	64364	.58	2.30	180		
2	11	3	1	1.34	.06	0.00	68308	1.28	1.33	0		
2	11	4	1	1.41	1.06	0.00	72708	.35	.35	0		
2	12	-9	1	2.39	.54	0.00	72226	1.86	3.15	180		
2	12	-8	1	3.62	3.06	-3.06	68480	.56	1.40	180		
2	12	-7	1	6.31	6.27	-6.27	65267	.04	.15	180		
2	12	-6	1	6.07	6.06	0.00	62668	.01	.05	0		
2	12	-5	1	9.15	8.85	0.00	60762	.30	1.53	180		
2	12	-4	1	10.88	10.82	0.00	59617	.06	.32	0		
2	12	-3	1	20.42	20.18	0.00	59275	.25	1.44	0		
2	12	-2	1	1.30	.60	0.00	59751	.71	.76	180		
2	12	-1	1	1.25	.43	0.00	61025	.82	.92	0		
2	12	0	1	3.12	4.44	0.00	63050	-1.32	-3.07	0		
2	12	1	1	9.19	8.67	0.00	65755	.52	2.36	180		
2	12	2	1	9.59	-8.67	0.00	69061	.61	2.79	180		
2	12	3	1	1.04	-9.59	0.00	72888	-.48	-4.8	0		

H K L GRP

FU FC

A B SINH/LM

ANGLE CALC

ANGLE STAT

DF W*DF

DF

2	13	-9	1	3.072	4.049	4.049	0.00	•75323	-0.77	-1.49	0
2	13	-8	1	8.081	8.009	-8.009	0.00	•71878	.72	3.02	180
2	13	-7	1	5.030	4.083	-4.083	0.00	•68967	.47	1.49	180
2	13	-6	1	3.047	4.007	-4.007	0.00	•66662	-.60	-1.43	180
2	13	-5	1	3.081	3.084	3.084	0.00	•65027	-.03	-.06	0
2	13	-4	1	8.010	7.37	7.37	0.00	•64113	.74	3.22	0
2	13	-3	1	7.011	6.466	6.466	0.00	•63951	.55	2.11	0
2	13	-2	1	2.025	.81	-.81	0.00	•64546	1.44	2.41	180
2	13	-1	1	4.033	4.32	-4.32	0.00	•65879	.01	.03	180
2	13	0	1	14.023	13.76	-13.76	0.00	•67905	.47	2.33	180
2	13	1	1	4.098	4.81	4.81	0.00	•70565	.16	.47	0
2	13	2	1	3.011	1.38	1.38	0.00	•73791	1.73	3.53	0
2	14	-8	1	1.49	1.71	1.71	0.00	•75446	-.22	-.20	0
2	14	-7	1	3.067	2.84	2.84	0.00	•72815	1.03	2.49	0
2	14	-6	1	2.044	.23	-.23	0.00	•70776	2.21	4.05	180
2	14	-5	1	4.030	3.47	-3.47	0.00	•69382	.90	2.52	180
2	14	-4	1	2.020	2.34	2.34	0.00	•68670	-.14	-.21	0
2	14	-3	1	5.090	6.80	-6.80	0.00	•68664	-.89	-2.81	180
2	14	-2	1	1.42	1.62	1.62	0.00	•69362	-.20	-.19	0
2	14	-1	1	2.056	2.28	2.28	0.00	•70744	.28	.49	180
2	14	0	1	3.091	3.74	-3.74	0.00	•72771	.16	.37	180
2	14	1	1	7.060	7.28	7.28	0.00	•75392	.68	2.46	0
2	14	2	1	5.053	5.82	5.82	0.00	•74990	-.29	-.63	0
2	15	-5	1	1.554	2.08	2.08	0.00	•73809	-.54	-.49	0
2	15	-4	1	4.031	4.31	-4.31	0.00	•73277	0.00	0.00	180
2	15	-3	1	1.047	1.86	1.86	0.00	•73406	-.39	-.37	0
2	15	-2	1	5.016	4.36	4.36	0.00	•74194	.80	2.35	0
2	15	-1	1	1.459	1.26	1.26	0.00	•75619	.23	.22	0
2	15	0	1	1.57	2.67	2.67	0.00	•75496	-1.09	-.97	0
3	-16	3	1	5.059	5.28	5.28	0.00	•75612	.31	.90	0
3	-15	-1	1	6.900	6.40	6.40	0.00	•74121	.50	1.70	0
3	-15	3	1	5.037	4.61	4.61	0.00	•72384	.76	2.26	0
3	-15	3	1	3.050	4.08	-4.08	0.00	•71290	-.58	-1.21	180
3	-15	2	1	1.039	.31	.31	0.00	•70869	1.08	1.09	0
3	-15	3	1	8.092	8.52	-8.52	0.00	•71132	.41	1.67	180
3	-15	4	1	4.039	3.27	-3.27	0.00	•72072	1.13	2.91	180
3	-15	5	1	1.051	2.58	2.58	0.00	•73664	-1.08	-1.00	0
3	-14	-3	1	7.074	6.97	6.97	0.00	•74611	.77	2.75	0
3	-14	-2	1	11.60	11.95	-11.95	0.00	•71678	-.35	-1.51	180
3	-14	-1	1	7.055	7.39	7.39	0.00	•69324	1.16	.61	0
3	-14	0	1	1.046	.10	.10	0.00	•67611	1.36	1.55	0
3	-14	1	1	3.071	4.16	-4.16	0.00	•66588	-.45	-1.04	180
3	-14	2	1	6.089	6.58	-6.58	0.00	•66286	.31	1.13	180
3	-14	3	1	1.036	1.50	1.50	0.00	•66717	-.14	-.15	0
3	-13	-4	1	3.085	3.17	3.17	0.00	•67865	.68	1.65	0
3	-13	-3	1	1.042	.66	.66	0.00	•69696	.76	.74	0
3	-13	-2	1	1.023	2.90	2.90	0.00	•72157	1.33	3.44	0
3	-13	-1	1	3.034	2.24	-2.24	0.00	•75186	1.09	2.41	180
3	-13	0	1	3.001	3.19	-3.19	0.00	•73447	-.18	-.33	180
3	-13	-3	1	6.006	6.37	6.37	0.00	•69913	-.31	-.97	0
3	-13	-2	1	2.066	2.66	2.66	0.00	•66922	.34	.67	0
3	-13	-1	1	1.063	1.88	1.88	0.00	•64549	.85	.94	0
3	-13	0	1	1.043	2.28	-2.28	0.00	•62863	1.50	1.80	0

H	K	L	GKP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-13	1	1	6.98	0.50	6.50	0.00	.61922	.48	2.03	0	
3	-13	2	1	5.61	5.74	-5.74	0.00	.61759	-.14	-.50	180	
3	-13	3	1	1.34	.36	.36	0.00	.62381	.97	1.02	0	
3	-13	4	1	13.73	13.61	13.61	0.00	.63763	.12	.61	0	
3	-13	5	1	6.36	5.93	-5.93	0.00	.65859	.42	1.59	180	
3	-13	6	1	3.09	2.68	2.68	0.00	.68603	.41	.86	0	
3	-13	7	1	1.46	.63	-.63	0.00	.71921	.84	.80	180	
3	-12	-2	1	2.09	2.78	-2.78	0.00	.72995	-.69	-.92	180	
3	-12	-4	1	1.43	.58	.58	0.00	.68879	.85	.83	0	
3	-12	-3	1	6.25	5.68	-5.68	0.00	.65250	.57	2.11	180	
3	-12	-2	1	7.44	7.33	-7.33	0.00	.62195	.10	.43	180	
3	-12	-1	1	2.23	.32	.32	0.00	.59800	1.91	3.81	0	
3	-12	0	1	6.29	6.49	-6.49	0.00	.58148	-.20	-.82	180	
3	-12	1	1	2.80	1.76	1.76	0.00	.57303	1.04	2.51	0	
3	-12	2	1	9.26	9.37	9.37	0.00	.57300	-.11	-.56		
3	-12	3	1	3.31	1.79	-1.79	0.00	.58140	1.52	4.30	180	
3	-12	4	1	2.81	1.71	1.71	0.00	.59788	1.11	2.65	0	
3	-12	5	1	3.77	3.37	3.37	0.00	.62178	.40	1.17	0	
3	-12	6	1	2.46	3.01	-3.01	0.00	.65230	-.55	-.98	180	
3	-12	7	1	1.74	1.20	1.20	0.00	.68855	.54	.66	0	
3	-12	8	1	12.68	12.53	12.53	0.00	.72969	.16	.67	0	
3	-11	-6	1	1.46	.32	-.32	0.00	.73270	1.14	1.09	180	
3	-11	-5	1	3.22	.74	.74	0.00	.68608	2.49	5.57	0	
3	-11	-4	1	15.90	15.30	-15.30	0.00	.64366	.60	3.18	180	
3	-11	-3	1	2.29	3.38	-3.38	0.00	.60631	-.108	-1.91	180	
3	-11	-2	1	5.44	4.60	4.60	0.00	.57503	.84	3.41	0	
3	-11	-1	1	6.38	6.64	-6.64	0.00	.55085	-.34	-1.64	180	
3	-11	0	1	2.76	2.76	2.76	0.00	.53473	-.01	0.0	180	
3	-11	1	1	1.23	1.23	1.23	0.00	.52741	-.00	-.00	0	
3	-11	2	1	1.29	.33	-.33	0.00	.52926	.97	1.23	180	
3	-11	3	1	7.39	7.73	-7.73	0.00	.54019	-.34	-1.64	180	
3	-11	4	1	3.21	4.78	-4.78	0.00	.55966	-1.58	-3.74	180	
3	-11	5	1	11.39	11.56	-11.56	0.00	.58682	-.17	-.87	180	
3	-11	6	1	6.61	5.90	5.90	0.00	.62067	.71	2.95	0	
3	-11	7	1	3.26	2.34	-2.34	0.00	.66017	.92	1.98	180	
3	-11	8	1	10.23	10.04	10.04	0.00	.70438	.18	.79	0	
3	-11	9	1	1.53	.74	.74	0.00	.75246	.79	.77	0	
3	-10	-7	1	1.48	.52	-.52	0.00	.74263	.96	.91	180	
3	-10	-6	1	5.23	4.64	-4.64	0.00	.69110	.59	1.78	180	
3	-10	-5	1	7.70	7.98	-7.98	0.00	.64302	-.28	-1.12	180	
3	-10	-4	1	2.85	3.08	-3.08	0.00	.59920	-.23	-.50	180	
3	-10	-3	1	8.61	8.44	8.44	0.00	.56067	.18	.89	0	
3	-10	-2	1	21.03	21.80	21.80	0.00	.52856	-.77	-4.46	0	
3	-10	-1	1	1.72	.83	-.83	0.00	.50412	.89	1.59	180	
3	-10	0	1	7.87	8.32	8.32	0.00	.48849	-.44	-2.30	0	
3	-10	-3	1	11.38	11.71	-11.71	0.00	.48254	-.33	-1.99	180	
3	-10	2	1	19.70	19.83	-19.83	0.00	.48660	-.13	-7.77	180	
3	-10	3	1	17.84	18.52	-18.52	0.00	.50046	-.68	-4.38	180	
3	-10	4	1	1.24	2.36	2.36	0.00	.52331	-.12	-1.26	0	
3	-10	5	1	8.51	8.76	8.76	0.00	.55406	-.26	-1.28	0	
3	-10	6	1	10.49	10.21	10.21	0.00	.59147	-.29	1.47	0	
3	-10	7	1	7.37	7.85	7.85	0.00	.63437	-.48	-1.96	0	
3	-10	8	1	7.42	7.00	7.00	0.00	.68171	-.06	180		

H	K	L	GRP	TU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT	
3	-10	9	1	1.46	1.86	-1.86	0.60	73265	-38	-36	180		
3	-9	-7	1	L	2.79	2.58	-2.58	0.00	70368	.21	.38	180	
3	-6	1	L		5.84	6.15	-6.15	0.00	65059	-.34	-1.17	180	
3	-5	1	L		4.59	3.60	3.60	0.00	60092	.99	3.43	0	
3	-4	1	L		12.50	12.89	12.89	0.00	55558	-.39	-2.16	0	
3	-3	1	L		12.26	12.22	12.22	0.00	51571	.04	.24	0	
3	-2	1	L		2.75	2.44	-2.44	0.00	48268	.30	.79	180	
3	-1	1	L		1.17	1.79	1.79	0.00	45795	-.63	-.75	0	
3	0	1	L		2.45	2.00	-2.00	0.00	44294	.46	1.16	180	
3	-9	1	L		20.85	21.71	-21.71	0.00	43863	-.85	-4.69	180	
3	-9	2	1		20.97	21.97	21.97	0.00	44534	-1.00	-5.43	0	
3	-9	3	1		5.55	5.46	-5.46	0.00	46259	.09	.44	180	
3	-9	4	1		10.91	11.46	-11.46	0.00	48926	-.55	-3.29	180	
3	-9	5	1		20.15	20.51	20.51	0.00	52391	-.37	-2.02	0	
3	-9	6	1		8.70	9.24	9.24	0.00	56509	-.55	-2.61	0	
3	-9	7	1		6.23	5.96	-5.96	0.00	61147	.27	1.10	180	
3	-9	8	1		8.15	8.58	-8.58	0.00	66197	-.43	-1.71	180	
3	-9	9	1	L	2.58	7.72	7.72	0.00	71570	1.86	3.19	0	
3	-8	-8	1	L	2.75	2.03	-2.03	0.00	72343	.72	1.35	180	
3	-8	-7	1	L	3.92	3.64	-3.64	0.00	66612	.28	.73	180	
3	-8	-6	1	L	7.08	7.35	-7.35	0.00	61139	-.27	-1.14	180	
3	-8	-5	1	L	2.79	3.92	-3.92	0.00	56002	-1.13	-2.52	180	
3	-8	-4	1	L	8.91	8.47	8.47	0.00	51300	.44	2.39	0	
3	-8	-3	1	L	6.48	6.90	-6.90	0.00	47164	-.42	-2.09	180	
3	-8	-2	1	L	3.54	3.80	3.80	0.00	43755	-.26	-.93	0	
3	-8	-1	1	L	1.74	1.00	1.00	0.00	41253	.74	1.50	0	
3	-8	0	1	L	8.71	9.29	9.29	0.00	39830	-.58	-3.71	0	
3	-8	1	1	L	17.77	18.25	-18.25	0.00	39602	-.48	-3.15	180	
3	-8	2	1	L	20.81	21.84	21.84	0.00	40589	-1.03	-5.49	0	
3	-8	3	1	L	8.56	9.54	-9.54	0.00	42708	.98	-5.87	180	
3	-8	4	1	L	13.90	14.72	14.72	0.00	45800	-.82	-5.39	0	
3	-8	5	1	L	20.70	21.73	-21.73	0.00	49686	-1.03	-5.98	180	
3	-8	6	1	L	12.37	12.16	-12.16	0.00	54194	.22	1.22	180	
3	-8	7	1	L	4.14	1.56	-1.56	0.00	59182	.39	1.24	180	
3	-8	8	1	L	2.18	.53	-.53	0.00	64540	1.65	2.70	0	
3	-8	9	1	L	1.46	1.57	1.57	0.00	70182	-.11	-1.12	0	
3	-7	-9	1	L	1.42	1.55	-1.55	0.00	74977	-.14	-1.14	180	
3	-7	-8	1	L	2.83	4.08	4.08	0.00	68904	-.25	-2.25	0	
3	-7	-7	1	L	1.33	.24	-.24	0.00	63018	1.09	1.15	180	
3	-7	-6	1	L	7.40	7.29	7.29	0.00	57377	.11	.50	0	
3	-7	-5	1	L	4.35	5.02	5.02	0.00	52059	-.67	-2.33	0	
3	-7	-4	1	L	9.00	9.04	-9.04	0.00	47175	-.04	-24	180	
3	-7	-3	1	L	15.91	16.57	-16.57	0.00	42873	-.66	-4.70	180	
3	-7	-2	1	L	5.72	6.15	6.15	0.00	39345	-.43	-2.21	0	
3	-7	-1	1	L	10.00	10.25	10.25	0.00	36813	-.25	-1.77	0	
3	-7	0	1	L	11.79	12.59	12.59	0.00	35492	-.80	-6.17	0	
3	-7	1	1	L	8.10	8.45	8.45	0.00	35517	-.35	-2.36	0	
3	-7	2	1	L	15.03	15.81	-15.81	0.00	36885	-.78	-5.55	180	
3	-7	3	1	L	2.18	1.79	1.79	0.00	39456	.39	1.00	0	
3	-7	4	1	L	7.26	7.85	7.85	0.00	43016	-.59	-3.27	0	
3	-7	5	1	L	1.13	1.45	-1.45	0.00	47342	-.31	-3.39	180	
3	-7	6	1	L	5.53	5.67	-5.67	0.00	52244	-.23	-5.57	180	
3	-7	7	1	L	2.51	2.74	2.74	0.00	57574	-.49	-4.49	180	

H	K	L	GRP	FC	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-7	8	1	15.81	15.73	-15.73	0.00	.63226	.08	.40	180	
3	-7	9	1	9.45	8.93	8.93	0.00	.69120	.52	2.20		
3	-7	10	1	3.86	3.61	-3.61	0.00	.75199	.25	.56	180	
3	-6	-9	1	4.89	5.87	5.87	0.00	.71867	-.98	-2.61	0	
3	-6	-8	1	3.67	2.60	2.60	0.00	.65657	1.07	2.72	0	
3	-6	-7	1	3.95	3.79	3.79	0.00	.59618	.16	.46	0	
3	-6	-6	1	4.17	3.72	-3.72	0.00	.53804	.45	1.66	180	
3	-6	-5	1	17.77	18.01	-18.01	0.00	.48300	-.24	-1.60	180	
3	-6	-4	1	3.85	3.46	3.46	0.00	.43221	.39	1.45	0	
3	-6	-3	1	5.83	6.19	-6.19	0.00	.38737	-.36	-1.92	180	
3	-6	-2	1	3.00	1.52	-1.52	0.00	.35076	1.48	.542	180	
3	-6	-1	1	5.15	4.84	4.84	0.00	.32518	.31	1.74	0	
3	-6	0	1	28.50	28.25	28.25	0.00	.31333	.25	1.16	0	
3	-6	1	1	10.51	10.40	10.40	0.00	.31676	.11	.91	0	
3	-6	2	1	13.65	14.24	-14.24	0.00	.33500	-.59	-4.81	180	
3	-6	3	1	18.62	18.77	18.77	0.00	.36585	-.15	-.93	0	
3	-6	4	1	5.58	5.61	5.61	0.00	.40643	-.03	-.16	0	
3	-6	5	1	1.71	.85	-.85	0.00	.45416	.86	1.55	180	
3	-6	6	1	7.41	7.43	7.43	0.00	.50702	-.02	-.09	0	
3	-6	7	1	11.74	11.78	11.78	0.00	.56356	-.04	-.22	0	
3	-6	8	1	3.09	3.02	-3.02	0.00	.62278	.07	.17	180	
3	-6	9	1	5.83	6.09	-6.09	0.00	.68399	-.25	-.86	180	
3	-6	10	1	4.46	5.26	-5.26	0.00	.74670	-.80	-1.97	180	
3	-6	11	1	1.46	2.10	2.10	0.00	.75420	-.64	-.61	0	
3	-6	12	1	1.74	1.71	1.71	0.00	.68970	.03	.04	0	
3	-5	13	1	5.27	5.13	-5.13	0.00	.62632	.15	.51	180	
3	-5	14	1	4.67	5.26	-5.26	0.00	.56445	-.58	-1.95	180	
3	-5	15	1	2.81	1.41	-1.41	0.00	.50463	1.40	3.76	180	
3	-5	16	1	33.57	34.61	-34.61	0.00	.44770	-1.05	-3.86	180	
3	-5	17	1	14.68	14.91	14.91	0.00	.39489	-.24	-1.73	0	
3	-5	18	1	11.28	11.72	11.72	0.00	.34811	-.44	-3.39	0	
3	-5	19	1	48.89	49.85	49.85	0.00	.31007	-.96	-2.61	0	
3	-5	20	1	26.54	26.61	-26.61	0.00	.28431	-.07	-.28	180	
3	-5	21	1	26.01	27.00	-27.00	0.00	.27433	-.99	-3.98	180	
3	-5	22	1	43.52	45.50	-45.50	0.00	.28179	-1.98	-5.69	180	
3	-5	23	1	1.37	1.36	1.36	0.00	.30542	-.00	.01	0	
3	-5	24	1	5.17	5.23	5.23	0.00	.34188	-.06	-.30	0	
3	-5	25	1	9.30	9.82	9.82	0.00	.38758	-.52	-3.46	0	
3	-5	26	1	22.14	23.40	23.40	0.00	.43963	-1.25	-6.98	0	
3	-5	27	1	1.71	1.27	-1.27	0.00	.49605	.43	.73	180	
3	-5	28	1	2.05	1.62	1.62	0.00	.55550	.43	.77	0	
3	-5	29	1	10.10	9.97	9.97	0.00	.61711	.13	.65	0	
3	-5	30	1	4.48	4.19	-4.19	0.00	.68030	.29	.81	180	
3	-5	31	1	3.38	3.45	-3.45	0.00	.74465	-.07	-.15	180	
3	-5	32	1	2.02	2.00	-2.00	0.00	.72864	.02	.03	180	
3	-5	33	1	3.44	2.32	-2.32	0.00	.66315	1.12	2.78	180	
3	-5	34	1	6.18	6.40	-6.40	0.00	.59862	-.22	-.83	180	
3	-5	35	1	1.25	1.95	1.95	0.00	.53540	-.70	-.78	0	
3	-5	36	1	4.09	4.31	4.31	0.00	.47402	-.22	-.80	0	
3	-5	37	1	13.75	14.40	14.40	0.00	.41528	-.65	-4.59	0	
3	-5	38	1	1.06	.82	.82	0.00	.36049	.24	.32	0	
3	-5	39	1	12.75	13.28	13.28	0.00	.31173	-.53	-4.40	0	
3	-5	40	1	8.25	-8.25	-8.25	0.00	.27227	-.35	-2.86	180	

H	K	L	GRP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-4	-1	1	44.77	45.27	-45.27	0.00	24659	-50	-1.54	180	
3	-4	0	1	18.55	19.18	-19.18	C.06	23920	-63	-3.82	180	
3	-4	1	1	13.03	13.74	-13.74	C.00	25169	-70	-6.47	180	
3	-4	2	1	25.70	25.90	-25.90	C.00	28145	-20	-9.6	180	
3	-4	3	1	45.36	45.90	-45.90	C.00	32374	-54	-1.44	0	
3	-4	4	1	1.07	1.80	-1.80	C.00	37433	-73	-9.6	180	
3	-4	5	1	7.45	7.95	-7.95	C.00	43032	-49	-2.79	0	
3	-4	6	1	16.67	17.05	-17.05	C.00	48984	-38	-2.53	180	
3	-4	7	1	5.21	5.15	-5.15	C.00	55177	06	.24	180	
3	-4	8	1	13.57	13.57	-13.57	C.00	61537	00	.01	180	
3	-4	9	1	2.18	1.37	1.37	C.00	68018	.81	1.22	0	
3	-4	10	1	1.51	1.38	1.38	C.00	74588	.13	.12	0	
3	-4	11	1	8.06	7.83	7.83	C.00	7C561	.24	.90	0	
3	-3	12	1	3.86	2.99	2.99	C.00	63931	.87	2.45	0	
3	-3	13	1	1.81	1.62	-1.62	C.00	57384	.19	.31	180	
3	-3	14	1	1.17	.64	-.64	C.00	50950	.53	.63	180	
3	-3	15	1	1.73	1.50	1.50	C.00	44678	.24	.47	0	
3	-3	16	1	14.90	15.20	15.20	C.00	38648	-.30	-2.27	0	
3	-3	17	1	10.29	10.16	10.16	C.00	32992	.13	1.05	0	
3	-3	18	1	12.07	12.39	-12.39	C.00	27938	-.31	-2.82	180	
3	-3	19	1	3.80	2.41	2.41	C.00	23873	1.39	7.87	0	
3	-3	20	1	25.91	26.78	-26.78	C.00	21368	-.8	-4.07	180	
3	-3	21	1	16.00	15.72	-15.72	C.00	20989	.28	1.96	180	
3	-3	22	1	58.15	60.67	60.67	C.00	22842	-2.52	-8.20	0	
3	-3	23	1	52.10	53.78	53.78	C.00	26462	-1.68	-5.02	0	
3	-3	24	1	21.47	21.58	-21.58	C.00	31241	-.11	-.58	180	
3	-3	25	1	13.34	13.80	-13.80	C.00	36730	-.46	-3.56	180	
3	-3	26	1	8.48	8.28	8.28	C.00	42655	.20	1.26	0	
3	-3	27	1	19.09	20.08	-20.08	C.00	48857	-.99	-6.60	180	
3	-3	28	1	2.17	2.77	2.77	C.00	55244	-.61	-1.18	0	
3	-3	29	1	3.60	1.97	1.97	C.00	61759	1.63	4.52	0	
3	-3	30	1	2.35	1.62	1.62	C.00	68364	.73	1.21	0	
3	-3	31	1	2.48	2.89	2.89	C.00	75036	-.40	-.65	0	
3	-3	32	1	10.11	7.11	7.11	C.00	75275	.19	.73	180	
3	-3	33	1	8.48	8.29	-8.29	C.00	68537	-.13	-.21	180	
3	-3	34	1	2.45	2.58	-2.58	C.00	61851	1.22	2.91	180	
3	-3	35	1	1.75	1.54	-1.54	C.00	36214	-.54	-3.13	180	
3	-3	36	1	2.35	1.62	1.62	C.00	30433	-.34	-2.15	0	
3	-3	37	1	18.68	18.75	18.75	C.00	55237	-.07	-.46	0	
3	-3	38	1	6.15	8.61	-8.61	C.00	48723	-.47	-2.61	180	
3	-3	39	1	1.12	1.63	-1.63	C.00	42357	-.50	-.63	180	
3	-3	40	1	5.81	6.35	-6.35	C.00	36214	-.54	-3.13	180	
3	-3	41	1	18.17	18.50	18.50	C.00	30433	-.34	-2.15	0	
3	-2	42	1	12.95	13.39	-13.39	C.00	32561	-.47	-3.89	180	
3	-2	43	1	16.71	16.11	-16.11	C.00	21151	.60	4.27	180	
3	-2	44	1	8.06	7.66	7.66	C.00	30867	.68	1.73	0	
3	-2	45	1	5.69	6.18	-6.18	C.00	36684	-.29	-1.65	180	
3	-2	46	1	18.65	19.58	19.58	C.00	42848	-.93	-6.49	0	
3	-2	47	1	6.45	6.60	6.60	C.00	49228	-.15	-7.74	0	
3	-2	48	1	11.01	11.20	11.20	C.00	55751	-.19	-1.05	0	
3	-2	49	1	2.72	2.72	2.72	C.00	62372	.76	2.03	0	

	H	K	L	GRP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	-2	9	1		5.13	5.02	0.00	.69062	-0.11	.36	0		
3	-1	-11	1		9.87	10.22	0.00	.73578	-1.35	-1.35	0		
3	-1	-10	1		5.83	5.24	0.00	.66817	.59	2.07	180		
3	-1	-9	1	L	6.57	6.83	0.00	.60106	-.26	-1.03	0		
3	-1	-8	1		1.19	.72	0.00	.53461	.46	.55	0		
3	-1	-7	1		12.32	-12.30	0.00	.46913	.01	.08	180		
3	-1	-6	1		11.27	11.28	0.00	.40507	-.01	-.10	0		
3	-1	-5	1		19.45	19.25	0.00	.34323	.20	1.21	0		
3	-1	-4	1		34.86	34.06	0.00	.28507	.80	2.24	180		
3	-1	-3	1		18.54	19.24	0.00	.23333	-.70	-4.26	0		
3	-1	-2	1		8.94	8.89	0.00	.19328	.05	.48	180		
3	-1	-1	1		22.64	24.20	0.00	.17319	-1.56	-7.92	180		
3	-1	0	1		22.62	22.77	0.00	.17989	-.15	-.77	180		
3	-1	1	1		8.87	8.57	0.00	.21085	.30	2.87	0		
3	-1	2	1	L	66.74	68.44	0.00	.25745	-1.70	-5.17	180		
3	-1	3	1		.96	.70	0.00	.31278	.26	.37	180		
3	-1	4	1		3.02	1.74	0.00	.37297	1.28	4.65	180		
3	-1	5	1		8.38	8.64	0.00	.43602	-.27	-1.58	180		
3	-1	6	1		19.07	20.21	0.00	.50085	-1.15	-7.46	0		
3	-1	7	1		3.64	3.35	0.00	.56685	.29	.87	180		
3	-1	8	1		7.98	-7.98	0.00	.63365	.05	.22	180		
3	-1	9	1		6.11	6.33	0.00	.70102	-.22	-.70	0		
3	0	-11	1		8.17	7.94	0.00	.72180	.23	.86	0		
3	0	-10	1	L	1.40	1.82	0.00	.65426	-.42	-.42	0		
3	0	-9	1		3.61	2.91	0.00	.58725	.70	1.97	180		
3	0	-8	1		11.71	11.49	0.00	.52095	.21	1.24	180		
3	0	-7	1		13.19	12.57	0.00	.45568	.61	4.05	180		
3	0	-6	1	L	1.04	.70	0.00	.39196	.33	.45	0		
3	0	-5	1		7.73	7.65	0.00	.33068	.08	.57	0		
3	0	-4	1		78.13	78.95	0.00	.27347	-.82	-2.41	0		
3	0	-3	1		18.59	20.64	0.00	.22351	-2.05	-12.80	0		
3	0	-2	1	L	.88	1.05	0.00	.18669	-.18	-.28	180		
3	0	-1	1		65.42	68.42	0.00	.17169	-3.00	-11.31	0		
3	0	0	1		19.69	20.21	0.00	.18394	.52	-3.13	180		
3	1	1	1		41.12	41.38	0.00	.21889	-.27	-.88	180		
3	1	2	1		6.52	6.78	0.00	.26781	-.26	-2.01	180		
3	1	3	1		11.75	12.31	0.00	.32444	.56	-4.50	0		
3	1	4	1		8.37	8.33	0.00	.38539	.04	.24	180		
3	1	5	1		9.13	9.73	0.00	.44891	-.60	-3.63	180		
3	1	6	1		10.42	10.89	0.00	.51405	-.46	-2.65	180		
3	1	7	1		10.60	10.53	0.00	.58025	.06	.33	180		
3	0	8	1		4.69	5.07	0.00	.64720	-.38	-1.14	0		
3	0	9	1		4.08	3.92	0.00	.71469	.16	.41	180		
3	1	-11	1		4.34	4.20	0.00	.71098	.14	.36	180		
3	1	-10	1	L	1.36	1.17	0.00	.64385	.19	.19	180		
3	1	-9	1		16.69	16.84	0.00	.57735	-.15	-.85	180		
3	1	-8	1		15.67	16.27	0.00	.51171	-.60	-3.82	180		
3	1	-7	1		12.70	12.85	0.00	.44732	-.15	-.96	0		
3	1	-6	1		8.61	8.75	0.00	.38479	-.14	-.91	0		
3	1	-5	1		11.03	10.63	0.00	.32521	.41	3.23	180		
3	1	-4	1		25.37	25.81	0.00	.27054	-.44	-2.21	0		
3	1	-3	1		1.89	2.20	0.00	.22438	1.69	5.69	180		
3	1	-2	1		10.94	12.14	0.00	.19295	-.21	-12.29	180		

H	K	L	GRP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	1	-1	1	30.74	29.66	29.66	0.00	•18396	1.07	3.083	0	0
3	1	0	1	8.25	7.90	-7.90	0.00	•20045	.35	3.032	180	0
3	1	1	1	36.21	35.98	35.98	0.00	•23717	.23	.74	0	0
3	1	2	1	20.76	21.08	21.08	0.00	•28644	-.32	-1.79	0	0
3	1	3	1	37.65	38.94	38.94	0.00	•34289	-1.29	-4.65	0	0
3	1	4	1	1.05	•33	•33	0.00	•40351	.72	.96	0	0
3	1	5	1	1.10	1.24	1.24	0.00	•46673	-.14	-.18	0	0
3	1	6	1	18.34	18.60	-18.60	0.00	•53152	-.27	-1.66	180	0
3	1	7	1	14.42	15.30	-15.30	0.00	•59745	-.89	-4.88	180	0
3	1	8	1	3.43	2.25	2.25	0.00	•66416	1.17	2.98	0	0
3	1	9	1	1.42	.62	.62	0.00	•73144	.80	.79	0	0
3	2	-11	1	5.39	4.74	4.74	0.00	•70346	.65	2.12	0	0
3	2	-10	1	10.36	10.02	-10.02	0.00	•63711	.34	1.62	180	0
3	2	-9	1	1.75	2.30	-2.30	0.00	•57156	-.55	-.75	180	0
3	2	-8	1	5.69	6.07	6.07	0.00	•50713	-.38	-1.65	0	0
3	2	-7	1	5.72	5.30	5.30	0.00	•44431	.42	2.09	0	0
3	2	-6	1	13.13	13.25	-13.25	0.00	•38389	-.2	-.9	180	0
3	2	-5	1	5.50	5.83	-5.83	0.00	•32719	-.33	-2.04	180	0
3	2	-4	1	45.80	47.30	-47.30	0.00	•27653	-1.50	-4.33	180	0
3	2	-3	1	43.20	44.21	-44.21	0.00	•23582	-1.01	-3.22	180	0
3	2	-2	1	6.48	6.38	-6.38	0.00	•21091	.10	.85	180	0
3	2	-1	1	29.07	27.83	-27.83	0.00	•20756	1.24	4.18	180	0
3	2	0	1	41.33	40.91	40.91	0.00	•22674	.42	1.37	0	0
3	2	1	1	45.77	45.92	45.92	0.00	•26356	-.15	-.45	0	0
3	2	2	1	6.38	6.20	6.20	0.00	•31184	.17	1.19	0	0
3	2	3	1	3.79	4.11	4.11	0.00	•36709	-.32	-1.36	0	0
3	2	4	1	1.12	1.38	1.38	0.00	•42661	-.27	-.33	0	0
3	2	5	1	27.83	29.00	-29.00	0.00	•48884	-1.17	-5.23	180	0
3	2	6	1	5.36	5.17	5.17	0.00	•55287	.19	.77	0	0
3	2	7	1	9.17	9.05	9.05	0.00	•61813	.11	.54	0	0
3	2	8	1	7.33	7.22	7.22	0.00	•68428	.11	.41	0	0
3	2	9	1	9.99	9.19	-9.19	0.00	•75108	.80	3.20	180	0
3	2	-11	1	1.40	1.64	-1.64	0.00	•69937	-.24	-.24	180	0
3	3	-10	1	12.65	12.42	12.42	0.00	•63415	.23	1.17	0	0
3	3	-9	1	3.15	3.89	3.89	0.00	•57000	-.75	-1.84	0	0
3	3	-8	1	9.69	10.11	10.11	0.00	•50734	-.42	-2.39	0	0
3	3	-7	1	4.93	5.45	5.45	0.00	•44678	-.53	-2.32	0	0
3	3	-6	1	3.46	3.36	3.36	0.00	•38930	.09	.34	0	0
3	3	-5	1	13.63	13.63	-13.63	0.00	•33649	.01	.06	180	0
3	3	-4	1	16.92	17.58	-17.58	0.00	•29091	-.65	-4.30	180	0
3	3	-3	1	30.03	29.84	29.84	0.00	•25643	.20	.84	0	0
3	3	-2	1	1.87	4.0	4.0	0.00	•23794	.47	.75	0	0
3	3	-1	1	37.50	35.60	-35.60	0.00	•23917	1.90	5.97	180	0
3	3	0	1	13.16	13.11	-13.11	0.00	•25983	.05	.42	180	0
3	3	1	1	1.94	.59	-.59	0.00	•29590	.35	.52	180	0
3	3	2	1	.98	.05	.05	0.00	•34253	.93	1.32	0	0
3	3	3	1	8.84	8.88	8.88	0.00	•39601	-.04	-.27	180	0
3	3	4	1	7.40	6.97	-6.97	0.00	•45393	.42	2.31	180	0
3	3	5	1	2.84	4.23	4.23	0.00	•51478	-1.39	-3.26	0	0
3	3	6	1	3.12	1.24	1.24	0.00	•57765	1.88	4.69	0	0
3	3	7	1	4.41	4.77	4.77	0.00	•64195	-.37	-1.11	0	0
3	3	8	1	6.32	5.65	5.65	0.00	•70727	.67	2.42	0	0
3	3	-11	1	7.36	-7.43	-7.43	-6.9874	-7.07	-7.07	180	0	

H	K	L	GRP	FU	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	4	-10	1	6.43	6.04	0.00	63503	.39	1.54	0	0	
3	4	-9	1	2.52	2.12	0.00	57272	.40	.83	0	0	
3	4	-8	1	1.81	1.60	0.00	51233	.21	.36	180	0	
3	4	-7	1	2.79	3.09	0.00	45463	-.30	-.84	180	0	
3	4	-6	1	4.27	4.45	0.00	40077	-.18	-.79	0	0	
3	4	-5	1	14.97	15.04	0.00	35253	-.07	-.58	0	0	
3	4	-4	1	.98	.56	0.00	31252	.42	.60	180	0	
3	4	-3	1	19.10	19.98	0.00	28422	-.88	-4.87	0	0	
3	4	-2	1	18.85	18.72	0.00	27134	.12	.77	180	0	
3	4	-1	1	19.98	19.46	0.00	27604	.52	2.92	0	0	
3	4	0	1	7.23	7.14	0.00	2.9748	.09	.69	180	0	
3	4	1	1	.96	.21	0.00	.33245	.76	1.10	180	0	
3	4	2	1	2.42	2.27	0.00	.37720	.15	.44	0	0	
3	4	3	1	1.08	.27	0.00	.42868	.81	1.05	180	0	
3	4	4	1	11.03	11.18	0.00	.48475	-.15	-.88	0	0	
3	4	5	1	7.23	7.91	0.00	.54398	-.68	-3.19	0	0	
3	4	6	1	1.82	1.48	0.00	.60546	.34	.52	180	0	
3	4	7	1	2.93	3.62	0.00	.66857	-.69	-1.43	180	0	
3	4	8	1	5.54	4.65	0.00	.73288	.89	2.81	180	0	
3	4	9	1	1.40	1.05	0.00	.70161	.35	.35	180	0	
3	4	10	1	1.37	1.24	0.00	.63973	.13	.13	180	0	
3	4	11	1	8.00	8.10	0.00	.57965	-.10	-.50	180	0	
3	4	12	1	8.82	9.23	0.00	.52197	-.41	-2.16	180	0	
3	4	13	1	27.50	28.70	0.00	.46759	-.19	-4.90	180	0	
3	4	14	1	17.98	18.84	0.00	.41780	-.86	-.53	0	0	
3	4	15	1	4.84	4.98	0.00	.37444	-.14	-.76	0	0	
3	4	16	1	15.90	16.58	0.00	.30905	-.67	-4.86	180	0	
3	4	17	1	19.10	19.69	0.00	.31634	-.60	-3.46	180	0	
3	4	18	1	5.69	9.95	0.00	.33817	.16	1.20	0	0	
3	4	19	1	10.11	9.95	0.00	.33997	-.28	-1.99	0	0	
3	4	20	1	13.66	13.85	0.00	.37199	-.19	-1.52	0	0	
3	4	21	1	4.55	4.41	0.00	.31730	.14	.80	180	0	
3	4	22	1	21.96	22.33	0.00	.41487	-.37	-1.97	0	0	
3	4	23	1	16.75	17.80	0.00	.46431	-.06	-7.17	180	0	
3	4	24	1	5.69	6.10	0.00	.51845	-.42	-1.73	0	0	
3	4	25	1	1.84	.13	0.00	.57595	1.71	2.80	180	0	
3	4	26	1	10.61	11.02	0.00	.63590	-.41	-1.96	0	0	
3	4	27	1	11.10	11.39	0.00	.53600	-.29	-1.69	180	0	
3	4	28	1	7.89	7.85	0.00	.69768	.04	.15	180	0	
3	4	29	1	3.75	2.47	0.00	.70791	1.27	3.20	180	0	
3	4	30	1	5.04	5.12	0.00	.64817	-.19	-.69	180	0	
3	4	31	1	5.86	6.05	0.00	.59063	.91	2.49	180	0	
3	4	32	1	3.07	2.16	0.00	.40126	.19	1.25	0	0	
3	4	33	1	8.01	8.33	0.00	.37198	-.32	-2.13	180	0	
3	4	34	1	5.20	5.39	0.00	.48526	-.19	-.81	0	0	
3	4	35	1	2.47	-2.47	0.00	.43975	-.08	-.36	0	0	
3	4	36	1	11.49	17.70	0.00	.38092	-.21	-1.36	180	0	
3	4	37	1	6.61	6.68	0.00	.41364	-.07	-.40	0	0	
3	4	38	1	5.41	0.00	0.00	.45478	-.11	-.51	0	0	
3	4	39	1	10.51	10.51	0.00	.50228	-.36	-2.09	0	0	

H	K	L	GRP	FL	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	6	4	1	7.32	7.70	-7.70	0.00	.55450	-38	-1.81	180	180
3	6	5	1	10.46	10.06	-10.06	0.00	.61023	34	1.73	180	180
3	6	6	1	1.35	.35	-.35	0.00	.66860	99	1.03	0	0
3	6	7	1	2.21	1.80	1.80	0.00	.72897	40	.57	0	0
3	7	-11	1	1.46	1.19	1.19	0.00	.71757	27	.26	0	0
3	7	-10	1	3.21	3.29	3.29	0.00	.66021	08	-.20	0	0
3	7	-9	1	1.27	.37	.37	0.00	.60546	90	.99	0	0
3	7	-8	1	8.30	7.57	7.57	0.00	.55410	73	3.59	0	0
3	7	-7	1	28.36	28.61	28.61	0.00	.50713	25	-.96	0	0
3	7	-6	1	3.98	4.98	4.98	0.00	.46591	100	-3.78	0	0
3	7	-5	1	1.65	-1.65	0.00	.43208	.19	.41	180	180	180
3	7	-4	1	15.00	15.50	-15.50	0.00	.40748	50	-3.59	180	180
3	7	-3	1	25.17	26.02	-26.02	0.00	.39385	85	-3.90	180	180
3	7	-2	1	11.49	11.76	11.76	0.00	.39233	27	-1.96	0	0
3	7	-1	1	31.04	31.70	31.70	0.00	.40306	67	-2.62	0	0
3	7	0	1	2.13	1.16	-1.16	0.00	.42510	97	2.35	180	180
3	7	1	1	4.92	4.65	4.65	0.00	.45684	27	1.25	180	180
3	7	2	1	11.48	11.25	-11.25	0.00	.49640	23	1.42	180	180
3	7	3	1	14.64	14.68	-14.68	0.00	.54209	04	-.22	180	180
3	7	4	1	1.59	1.34	-1.34	0.00	.59248	26	.35	180	180
3	7	5	1	1.36	1.40	1.40	0.00	.64648	04	-.04	0	0
3	7	6	1	3.63	3.51	-3.51	0.00	.70325	11	.27	180	180
3	8	-11	1	3.04	3.02	-3.02	0.00	.73044	02	0.04	180	180
3	8	-10	1	1.97	.79	-.79	0.00	.67565	1.18	1.80	180	180
3	8	-9	1	1.56	1.61	-1.61	0.00	.62386	06	-.08	180	180
3	8	-8	1	5.41	5.25	5.25	0.00	.57587	16	.66	0	0
3	8	-7	1	13.76	14.40	-14.40	0.00	.53270	64	-3.75	180	180
3	8	-6	1	1.16	.86	0.86	0.00	.49563	30	.37	0	0
3	8	-5	1	3.68	4.47	4.47	0.00	.46611	78	-2.67	0	0
3	8	-4	1	9.39	9.69	9.69	0.00	.44564	30	-1.88	0	0
3	8	-3	1	10.21	10.03	10.03	0.00	.43549	18	1.15	0	0
3	8	-2	1	14.10	14.26	14.26	0.00	.43640	16	-1.13	0	0
3	8	-1	1	1.27	.54	-.54	0.00	.4829	73	1.06	180	180
3	8	0	1	19.43	20.13	20.13	0.00	.47033	69	-4.16	0	0
3	8	1	1	19.53	19.84	-19.84	0.00	.50118	31	-1.75	180	180
3	8	2	1	13.04	13.26	-13.26	0.00	.53934	21	-1.24	180	180
3	8	3	1	3.80	3.85	3.85	0.00	.58337	05	-.15	0	0
3	8	4	1	3.85	4.01	-4.01	0.00	.63204	17	-4.45	180	180
3	8	5	1	1.37	.04	.04	0.00	.68437	33	1.36	0	0
3	8	6	1	13.19	13.10	13.10	0.00	.73958	09	.40	0	0
3	9	-11	1	4.88	3.76	-3.76	0.00	.74637	12	3.20	180	180
3	9	-10	1	1.85	2.28	-2.28	0.00	.69427	42	-.55	180	180
3	9	-9	1	2.80	3.37	-3.37	0.00	.64552	57	-1.13	180	180
3	9	-8	1	8.50	8.70	-8.70	0.00	.60092	20	-.92	180	180
3	9	-7	1	6.67	7.91	7.91	0.00	.56146	24	-5.23	0	0
3	9	-6	1	14.25	15.06	-15.06	0.00	.52830	81	4.91	180	180
3	9	-5	1	1.65	2.65	-2.65	0.00	.50269	100	-1.63	180	180
3	9	-4	1	7.05	7.22	-7.22	0.00	.48582	17	-.91	180	180
3	9	-3	1	27.33	28.06	28.06	0.00	.47861	74	-2.97	0	0
3	9	-2	1	4.32	4.84	-4.84	0.00	.48150	52	-1.98	180	180
3	9	-1	1	11.11	10.97	-10.97	0.00	.49432	14	.86	180	180
3	9	0	1	4.15	-4.15	-4.15	0.00	.51631	27	1.05	180	180
3	9	1	1	0.00	.000	.000	.000	.54639	00	0.00	0	0

	H	K	L	GRP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	9	2	1	L	2.19	.84	-.84	0.00	.58329	1.35	2.63	180	
3	9	3	1	L	5.70	5.23	5.23	0.00	.62582	.47	1.80		
3	9	4	1	L	1.38	1.07	-1.07	0.00	.67290	.31	.32	180	
3	9	5	1	L	2.84	3.09	-3.09	0.00	.72365	-.25	-.44	180	
3	10	-10	1	L	1.42	1.87	1.87	0.00	.71582	-.45	-.45	0	
3	10	-9	1	L	7.59	6.81	-6.81	0.00	.67012	.79	3.32	180	
3	10	-8	1	L	2.26	2.93	-2.93	0.00	.62886	-.67	-1.20	180	
3	10	-7	1	L	14.65	14.57	14.57	0.00	.59294	.08	.46	0	
3	10	-6	1	L	4.87	5.10	-5.10	0.00	.56341	-.23	-.82	180	
3	10	-5	1	L	1.17	.43	.43	0.00	.54131	.74	.88	0	
3	10	-4	1	L	2.23	1.91	-1.91	0.00	.52756	.32	.72	180	
3	10	-3	1	L	4.38	4.81	-4.81	0.00	.52283	-.43	-1.65	180	
3	10	-2	1	L	6.14	6.24	-6.24	0.00	.52737	-.10	-.44	180	
3	10	-1	1	L	14.87	15.32	15.32	0.00	.54094	-.46	-2.73	0	
3	10	0	1	L	2.09	.20	.20	0.00	.56288	1.89	3.72	0	
3	10	1	1	L	1.26	.32	-.32	0.00	.59227	.94	1.04	180	
3	10	2	1	L	11.27	10.99	10.99	0.00	.62806	.28	1.38	0	
3	10	3	1	L	8.21	8.69	-8.69	0.00	.66922	-.48	-1.97	180	
3	10	4	1	L	4.80	2.99	-2.99	0.00	.71484	1.81	5.37	180	
3	11	-10	1	L	4.74	4.80	4.80	0.00	.74004	-.06	-.17	0	
3	11	-9	1	L	2.14	2.20	2.20	0.00	.69736	-.07	-.10	0	
3	11	-8	1	L	4.11	4.64	4.64	0.00	.65931	-.53	-1.48	180	
3	11	-7	1	L	1.32	1.71	-1.71	0.00	.62674	-.39	-.41	180	
3	11	-6	1	L	8.39	8.41	8.41	0.00	.60054	-.03	-.12	0	
3	11	-5	1	L	1.22	.29	-.29	0.00	.58156	.93	1.07	180	
3	11	-4	1	L	11.93	11.86	-11.86	0.00	.57053	0.07	.41	180	
3	11	-3	1	L	1.39	2.42	2.42	0.00	.56791	-.03	-1.30	180	
3	11	-2	1	L	3.03	3.09	-3.09	0.00	.57382	-.06	-.16	180	
3	11	-1	1	L	2.76	3.07	-3.07	0.00	.58801	-.30	-.68	180	
3	11	0	1	L	12.90	12.78	12.78	0.00	.60988	-.12	.63	0	
3	11	1	1	L	12.74	13.08	13.08	0.00	.63867	-.33	-1.68	180	
3	11	2	1	L	2.25	1.41	-1.41	0.00	.67347	.84	1.45	180	
3	11	3	1	L	2.64	2.24	-2.24	0.00	.71341	.60	1.15	180	
3	11	4	1	L	4.32	3.35	3.35	0.00	.75767	.97	2.46	0	
3	12	-9	1	L	16.89	16.58	16.58	0.00	.72694	.31	1.52	0	
3	12	-8	1	L	2.80	1.81	1.81	0.00	.69196	.99	1.92	0	
3	12	-7	1	L	3.20	4.61	-4.61	0.00	.66250	-.41	-2.85	180	
3	12	-6	1	L	10.96	10.50	-10.50	0.00	.63932	.45	2.20	180	
3	12	-5	1	L	1.35	2.36	-2.36	0.00	.62312	-1.01	-1.05	180	
3	12	-4	1	L	11.74	12.23	-12.23	0.00	.61446	-.50	-2.47	180	
3	12	-3	1	L	2.36	1.04	-1.04	0.00	.61365	1.32	2.59	180	
3	12	-2	1	L	6.21	5.77	5.77	0.00	.62073	.44	1.82	0	
3	12	-1	1	L	3.86	4.43	4.43	0.00	.63543	-.57	-1.62	0	
3	12	0	1	L	1.47	1.18	-.18	0.00	.65724	1.29	1.52	180	
3	12	1	1	L	2.03	1.28	1.28	0.00	.68548	.75	1.10	0	
3	12	2	1	L	2.64	2.26	-2.26	0.00	.71940	.39	.75	180	
3	12	3	1	L	8.05	7.47	-7.47	0.00	.72650	.58	2.35	180	
3	13	-7	1	L	2.84	3.35	3.35	0.00	.69992	-.51	-.97	0	
3	13	-6	1	L	4.13	3.40	-3.40	0.00	.67948	.72	2.12	180	
3	13	-5	1	L	3.16	0.00	0.00	0.00	.66576	.05	.12	180	
3	13	-4	1	L	5.97	5.35	-5.35	0.00	.65917	.62	2.29	0	
3	13	-3	1	L	1.33	.67	-.67	0.00	.65992	.66	.70	180	
3	13	-2	1	L	4.18	0.00	0.00	0.00	.66800	.16	0	0	

H	K	L	GRP	FC	FU	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
3	13	-1	1	L	1.39	.54	0.00	•68313	-•85	.86	0	0	
3	13	0	1	L	7.13	7.27	-7.27	0.00	•70488	-•14	-•51	180	180
3	13	1	1	L	8.06	8.23	-8.23	0.00	•73264	-•16	-•60		
3	14	-7	1	L	1.87	•12	•12	0.00	•73874	1.75	2.06	0	0
3	14	-6	1	L	1.46	2.40	2.40	0.00	•72079	-•92	-•89	0	0
3	14	-5	1	L	8.36	8.00	8.00	0.00	•70927	•35	1.47	0	0
3	14	-4	1	L	3.05	1.50	1.50	0.00	•70450	1.55	3.34	0	0
3	14	-3	1	L	1.96	2.19	-2.19	0.00	•70661	-•22	-•30	180	180
3	14	-2	1	L	3.42	2.41	2.41	0.00	•71555	1.01	2.42	0	0
3	14	-1	1	L	3.51	2.85	-2.85	0.00	•73106	.66	1.49	180	180
3	14	0	1	L	1.45	.61	-.61	0.00	•75274	.84	.81	180	180
3	15	-5	1	L	1.97	3.49	-3.49	0.00	•75350	-1.52	-1.77	180	180
3	15	-4	1	L	2.31	.72	0.00	•75034	1.60	2.48	0	0	
3	15	-3	1	L	4.93	4.20	-4.20	0.00	•75364	.73	2.09	180	180
3	15	-1	1	L	7.30	7.19	7.19	0.00	•74369	.11	.37	0	0
4	-15	0	1	L	1.45	.05	.05	0.00	•72850	1.40	1.36	0	0
4	-15	1	1	L	5.17	4.81	4.81	0.00	•71976	.37	1.08	0	0
4	-15	2	1	L	1.44	.66	-.66	0.00	•71773	.79	.76	180	180
4	-15	3	1	L	4.96	4.58	-4.58	0.00	•72246	.38	1.07	180	180
4	-15	4	1	L	3.77	4.23	-4.23	0.00	•73382	-.45	-1.03	180	180
4	-15	5	1	L	6.30	5.97	-5.97	0.00	•75151	.33	1.11	180	180
4	-15	6	1	L	6.92	6.78	6.78	0.00	•74534	.14	.50	0	0
4	-14	-3	1	L	4.80	4.19	4.19	0.00	•71812	.62	1.72	0	0
4	-14	-2	1	L	3.30	3.70	3.70	0.00	•69683	-.40	-.82	0	0
4	-14	-1	1	L	1.37	.59	-.59	0.00	•68205	.77	.79	180	180
4	-14	0	1	L	6.96	6.93	6.93	0.00	•67419	.03	.12	0	0
4	-14	1	1	L	9.06	9.23	-9.23	0.00	•67350	-.16	-.69	180	180
4	-14	2	1	L	4.57	4.82	-4.82	0.00	•68000	-.25	-.72	180	180
4	-14	3	1	L	1.46	1.69	1.69	0.00	•69349	-.23	-.22	0	0
4	-14	4	1	L	3.39	4.23	-4.23	0.00	•71357	-.84	-1.68	180	180
4	-14	5	1	L	10.16	9.31	9.31	0.00	•73970	.85	3.47	0	0
4	-14	6	1	L	1.47	1.29	-1.29	0.00	•73248	.17	.17	180	180
4	-13	-4	1	L	1.47	1.29	-1.29	0.00	•6924	-.51	-.48	0	0
4	-13	-3	1	L	1.98	1.98	1.98	0.00	•67162	-.18	-.66	0	0
4	-13	-2	1	L	6.13	6.31	6.31	0.00	•65035	.83	2.16	180	180
4	-13	-1	1	L	3.81	2.98	-2.98	0.00	•63604	.41	1.18	180	180
4	-13	0	1	L	4.07	3.65	-3.65	0.00	•62919	-.12	-.55	0	0
4	-13	1	1	L	10.07	10.67	10.67	0.00	•63003	-.47	1.02	180	180
4	-13	2	1	L	2.79	2.32	-2.32	0.00	•63853	2.10	3.39	180	180
4	-13	3	1	L	2.14	.04	-.04	0.00	•65439	1.98	3.98	180	180
4	-13	4	1	L	2.79	.81	-.81	0.00	•68761	.49	1.20	0	0
4	-12	-4	1	L	1.44	4.00	3.51	0.00	•68761	-.52	-.55	180	180
4	-12	-3	1	L	1.46*	1.98	-1.98	0.00	•67711	1.21	1.90	180	180
4	-12	-2	1	L	3.11	3.17	3.17	0.00	•65362	-.06	-.12	0	0
4	-12	-1	1	L	1.45	.01	-.01	0.00	•74036	1.44	1.39	180	180
4	-12	0	1	L	2.59	.04	-.04	0.00	•72673	-1.15	-1.11	180	180
4	-12	-1	1	L	5.58	5.75	5.75	0.00	•60432	-.17	-.61	0	0
4	-12	0	1	L	3.21	2.72	-2.72	0.00	•59059	.49	1.27	180	180
4	-12	1	1	L	9.62	9.82	-9.82	0.00	•58490	-.20	-.99	180	180
4	-12	2	1	L	14.01	14.07	14.07	0.00	•58749	-.05	-.30	0	0
4	-12	3	1	L	7.66	7.79	7.79	0.00	•61678	-.12	-.51	180	180
5	1	1	L	1.03	2.41	1.03	0.00	•64238	1.39	2.65			

	H	K	L	GRP	FO	FC	A	B	SINH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-12	6	1	L	1•40	1•01	1•01	0•00	.67424	.39	.39	0	
4	-12	7	1	L	16•20	16•07	-16•07	0•00	.71154	.13	.61	180	
4	-12	8	1	L	9•52	9•11	9•11	0•00	.75346	.42	1•62	0	
4	-11	-6	1	L	1•46	1•20	1•20	0•00	.72828	.25	.24	0	
4	-11	-5	1	L	9•94	10•14	10•14	0•00	.68361	.20	-.87	0	
4	-11	-4	1	L	4•76	5•89	-5•89	0•00	.64342	-1•13	-3•22	180	
4	-11	-3	1	L	10•95	10•98	-10•98	0•00	.60858	-.03	-.17	180	
4	-11	-2	1	L	5•24	5•42	-5•42	0•00	.58008	-.18	-.67	180	
4	-11	-1	1	L	3•81	4•77	-4•77	0•00	.55887	-.96	-2•84	180	
4	-11	0	1	L	13•64	13•50	13•50	0•00	.54581	.15	.84	0	
4	-11	1	1	L	11•19	12•20	12•20	0•00	.54149	-1•02	-5•29	0	
4	-11	2	1	L	4•73	5•20	5•20	0•00	.54611	-.48	-1•69	0	
4	-11	3	1	L	5•39	4•65	-4•65	0•00	.55946	.74	3•06	180	
4	-11	4	1	L	5•29	5•66	5•66	0•00	.58093	-.37	-1•37	0	
4	-11	5	1	L	1•28	-.36	-.36	0•00	.60967	.92	1•01	180	
4	-11	6	1	L	3•31	.68	-.68	0•00	.64470	2•62	7•13	180	
4	-11	7	1	L	3•79	3•62	-3•62	0•00	.68506	.17	.42	180	
4	-11	8	1	L	5•93	5•59	-5•59	0•00	.72987	.34	1•12	180	
4	-11	9	1	L	2•76	.65	.65	0•00	.73707	2•11	3•82	0	
4	-10	-6	1	L	7•26	7•72	-7•72	0•00	.68736	-.46	-1•74	180	
4	-10	-5	1	L	3•50	3•33	3•33	0•00	.64139	.17	.44	0	
4	-10	-4	1	L	10•72	10•77	-10•77	0•00	.60003	-.06	-.29	180	
4	-10	-3	1	L	10•20	10•11	-10•11	0•00	.56426	.09	.46	180	
4	-10	-2	1	L	1•26	1•35	-1•35	0•00	.53527	-.08	-.09	180	
4	-10	-1	1	L	11•40	11•32	11•32	0•00	.51415	.07	.43	0	
4	-10	0	1	L	6•05	6•29	6•29	0•00	.50190	-.23	-1•02	0	
4	-10	1	1	L	10•16	10•43	10•43	0•00	.49919	-.27	-1•52	0	
4	-10	2	1	L	2•79	3•04	3•04	0•00	.50617	-.24	-.65	0	
4	-10	3	1	L	7•84	8•37	8•37	0•00	.52245	-.53	-2•64	180	
4	-10	4	1	L	6•05	5•96	-5•96	0•00	.54720	.09	.40	180	
4	-10	5	1	L	1•26	1•33	-1•33	0•00	.57933	-.07	-.08	180	
4	-10	6	1	L	10•40	10•78	10•78	0•00	.61770	-.38	-1•81	0	
4	-10	7	1	L	16•75	17•29	17•29	0•00	.66122	-.54	-2•78	0	
4	-10	8	1	L	5•93	5•26	-5•26	0•00	.70894	.67	2•13	180	
4	-9	-8	1	L	2•83	.37	.37	0•00	.75286	2•46	4•55	0	
4	-9	-7	1	L	2•90	1•09	1•09	0•00	.69874	1•81	4•01	0	
4	-9	-6	1	L	3•94	3•17	3•17	0•00	.64763	.77	2•07	0	
4	-9	-5	1	L	15•84	15•49	-15•49	0•00	.60027	.35	1•92	180	
4	-9	-4	1	L	2•53	.59	-.59	0•00	.55764	1•93	4•54	180	
4	-9	-3	1	L	12•06	12•28	12•28	0•00	.52089	-.22	-1•28	0	
4	-9	-2	1	L	2•44	3•11	-3•11	0•00	.49134	-.66	-1•61	180	
4	-9	-1	1	L	6•35	6•41	6•41	0•00	.47035	-.06	-.28	0	
4	-9	0	1	L	3•78	3•72	3•72	0•00	.45911	.06	.21	0	
4	-9	1	1	L	43•39	45•42	-45•42	0•00	.45832	-2•03	-6•04	180	
4	-9	2	1	L	10•64	10•17	-10•17	0•00	.46803	.47	2•90	180	
4	-9	3	1	L	5•43	5•51	-.51	0•00	.48763	-.09	-.39	180	
4	-9	4	1	L	15•80	16•17	16•17	0•00	.51599	-.37	-2•27	0	
4	-9	5	1	L	2•31	.37	.37	0•00	.55175	1•93	4•13	0	
4	-9	6	1	L	12•32	12•38	12•38	0•00	.59359	-.05	-.29	0	
4	-9	7	1	L	1•95	.72	.72	0•00	.64030	1•24	2•19	0	
4	-9	8	1	L	7•67	7•64	7•64	0•00	.69091	.02	.09	0	
4	-9	9	1	L	1•53	2•34	-.34	0•00	.74462	-.81	-.74	180	
4	-8	1	1	L	.37	0•00	0•00	0•00	.71739	1•10	1•05	0	

H	K	L	GRP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-8	-7	1	L	2.27	1.20	0.00	.66188	1.07	1.81	180	
4	-8	-6	1	L	6.27	6.89	0.00	.60931	-0.62	-2.45	0	
4	-8	-5	1	L	5.87	5.95	0.00	.56049	-0.08	-0.32	180	
4	-8	-4	1	L	2.43	4.44	0.00	.51649	1.99	4.74	0	
4	-8	-3	1	L	2.72	2.72	0.00	.47866	-0.00	-0.00	0	
4	-8	-2	1	L	3.78	2.70	0.00	.44854	1.07	4.05	0	
4	-8	-1	1	L	2.69	2.66	0.00	.42778	0.03	0.07	0	
4	-8	0	1	L	9.10	9.70	0.00	.41777	-0.60	-3.69	180	
4	-8	1	1	L	7.33	7.20	0.00	.41927	0.14	.79	180	
4	-8	2	1	L	12.19	12.45	0.00	.43218	-0.27	-1.80	180	
4	-8	3	1	L	1.28	.93	0.00	.45552	0.35	.47	0	
4	-8	4	1	L	10.54	11.03	0.00	.48779	-0.49	-2.87	0	
4	-8	5	1	L	1.23	2.16	0.00	.52737	-0.93	-1.06	180	
4	-8	6	1	L	3.34	2.27	0.00	.57273	1.07	2.97	180	
4	-8	7	1	L	7.48	7.22	0.00	.62261	0.26	1.14	180	
4	-8	8	1	L	10.55	10.91	0.00	.67602	-0.36	-1.60	180	
4	-8	9	1	L	2.98	1.60	0.00	.73218	1.38	2.62	180	
4	-7	-9	1	L	1.53	.14	-0.14	.74276	1.39	1.27	180	
4	-7	-8	1	L	4.86	4.75	0.00	.68366	0.11	0.34	180	
4	-7	-7	1	L	6.61	6.90	0.00	.62675	-0.30	-1.15	0	
4	-7	-6	1	L	5.04	5.13	0.00	.57268	-0.09	-0.33	180	
4	-7	-5	1	L	1.19	.76	-0.76	.52234	0.42	.50	180	
4	-7	-4	1	L	9.96	10.66	0.00	.47692	-0.70	-4.17	0	
4	-7	-3	1	L	15.19	15.61	0.00	.43793	-0.42	-2.91	0	
4	-7	-2	1	L	8.08	7.88	0.00	.40724	0.20	1.22	180	
4	-7	-1	1	L	2.48	2.13	0.00	.38683	0.35	.98	180	
4	-7	0	1	L	2.85	2.53	0.00	.37836	0.32	1.06	180	
4	-7	1	1	L	22.71	23.62	0.00	.38263	-0.91	-4.73	0	
4	-7	2	1	L	1.09	.16	0.00	.39923	0.92	1.19	180	
4	-7	3	1	L	5.56	5.84	0.00	.42672	-0.27	-1.31	180	
4	-7	4	1	L	2.80	2.36	0.00	.46316	0.44	1.25	180	
4	-7	5	1	L	7.52	7.64	0.00	.50664	-1.12	-0.63	180	
4	-7	6	1	L	5.53	5.41	0.00	.55549	0.12	0.47	180	
4	-7	7	1	L	9.15	8.65	0.00	.60843	0.49	2.41	0	
4	-7	8	1	L	3.38	2.38	0.00	.66448	1.00	2.41	0	
4	-7	9	1	L	1.40	.86	0.00	.72291	0.54	.54	180	
4	-6	-9	1	L	1.46	2.30	0.00	.71227	-0.85	-0.81	0	
4	-6	-8	1	L	3.65	2.72	0.00	.65192	0.93	2.52	0	
4	-6	-7	1	L	6.42	6.11	0.00	.59364	0.30	1.28	0	
4	-6	-6	1	L	3.81	3.02	0.00	.53810	0.79	2.61	0	
4	-6	-5	1	L	11.61	12.38	0.00	.48623	-0.77	-4.62	180	
4	-6	-4	1	L	8.23	-8.47	0.00	.43933	-0.24	-1.43	180	
4	-6	-3	1	L	10.41	-10.98	0.00	.39916	-0.57	-3.82	180	
4	-6	-2	1	L	19.14	19.40	0.00	.36794	-2.26	-1.59	0	
4	-6	-1	1	L	17.39	17.89	0.00	.34808	-0.50	-3.37	180	
4	-6	0	1	L	6.57	6.76	0.00	.34157	-0.18	-1.17	180	
4	-6	1	1	L	5.81	5.50	0.00	.34914	0.31	1.88	180	
4	-6	2	1	L	17.29	17.71	0.00	.36995	-0.42	-2.85	0	
4	-6	3	1	L	10.42	10.98	0.00	.40194	-0.56	-3.78	180	
4	-6	4	1	L	3.67	4.42	0.00	.44269	-0.75	-2.66	180	
4	-6	5	1	L	7.41	8.03	0.00	.49002	-0.62	-3.16	0	
4	-6	6	1	L	1.81	1.49	0.00	.54221	-0.33	-0.57	0	
4	-6	7	1	L	1.51	1.81	0.00	.59799	-0.39	0	0	

	H	K	L	GKP	FU	FC	A	B	SIN TH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT	
4	-6	8	1	9.66	10.30	0.00	.65645	-43	-1.89	-1.89	0			
4	-6	9	1	2.46	.89	0.00	.71693	57	2.48	180				
4	-5	-10	1	2.69	2.98	0.00	.74692	29	-4.49	0				
4	-5	-9	1	4.83	5.04	0.00	.68398	21	-6.62	0				
4	-5	-8	1	3.07	3.07	0.00	.62249	20	5.66	0				
4	-5	-7	1	5.17	4.82	0.00	.56293	35	1.33	0				
4	-5	-6	1	14.30	14.33	-14.33	.50598	03	-1.18	180				
4	-5	-5	1	6.86	7.46	7.46	.45262	60	-3.12	0				
4	-5	-4	1	12.91	13.26	-13.26	.40429	35	-2.46	180				
4	-5	-3	1	3.43	3.68	3.68	.36298	25	-0.96	0				
4	-5	-2	1	16.50	16.73	16.73	.33135	23	-1.70	0				
4	-5	-1	1	9.41	9.73	9.73	.31234	32	-2.55	0				
4	-5	0	1	10.06	10.09	10.09	.30831	03	-2.22	0				
4	-5	1	1	2.88	3.40	-3.40	.31980	52	-1.98	180				
4	-5	2	1	35.01	35.49	-35.49	.34529	46	-1.74	180				
4	-5	3	1	26.10	27.44	-27.44	.38197	34	-6.26	180				
4	-5	4	1	13.75	14.22	-14.22	.42697	47	-3.28	180				
4	-5	5	1	9.57	9.50	9.50	.47795	07	0					
4	-5	6	1	1.18	.94	-0.94	0.00	23	.28	180				
4	-5	7	1	5.97	6.50	6.50	.59151	54	-2.15	0				
4	-5	8	1	4.62	4.45	-4.45	.65208	17	.52	180				
4	-5	9	1	3.51	.15	-0.15	.71432	35	8.14	180				
4	-4	-10	1	1.43	.10	0.00	.72200	34	1.31	0				
4	-4	-9	1	12.27	11.85	11.85	.65819	43	2.05	0				
4	-4	-8	1	9.81	10.23	-10.23	.59571	42	-2.04	180				
4	-4	-7	1	19.76	20.08	-20.08	.53502	29	-1.76	180				
4	-4	-6	1	9.21	9.53	-9.53	.47682	33	-1.89	180				
4	-4	-5	1	28.82	29.47	29.47	0.00	42214	64	-2.84	0			
4	-4	-4	1	1.06	.75	.75	0.00	37251	31	.41	0			
4	-4	-3	1	46.11	47.63	47.63	0.00	33024	52	-3.97	0			
4	-4	-2	1	33.12	34.16	34.16	0.00	29847	04	-4.01	0			
4	-4	-1	1	5.99	6.16	-6.16	0.00	28078	16	-1.11	180			
4	-4	0	1	7.31	6.89	6.89	0.00	27985	42	3.27	0			
4	-4	1	18.68	19.31	-19.31	0.00	29584	63	-4.13	180				
4	-4	2	1	7.01	7.88	-7.88	0.00	32628	87	-5.98	180			
4	-4	3	1	1.04	.71	.71	0.00	36759	34	.45	0			
4	-4	4	1	4.30	4.68	4.68	0.00	41655	37	-1.59	0			
4	-4	5	1	7.67	7.62	7.62	0.00	47078	05	.26	0			
4	-4	6	1	5.31	5.61	5.61	0.00	52866	30	-1.23	0			
4	-4	7	1	7.23	7.94	-7.94	0.00	58912	71	-3.00	180			
4	-4	8	1	16.30	16.78	-16.78	0.00	65143	48	-2.44	180			
4	-4	9	1	1.48	2.03	2.03	0.00	71512	56	.58	0			
4	-4	-10	1	3.54	1.80	-1.80	0.00	69969	74	4.38	180			
4	-4	-9	1	11.19	11.07	-11.07	0.00	63519	13	.63	180			
4	-4	-8	1	2.64	2.65	-2.65	0.00	57194	00	-0.01	180			
4	-4	-7	1	3.42	3.52	-3.52	0.00	51038	10	-3.24	180			
4	-4	-6	1	9.00	9.69	-9.69	0.00	45120	69	-4.12	180			
4	-4	-5	1	10.62	10.75	-10.75	0.00	39548	13	-8.87	180			
4	-4	-4	1	18.90	19.13	19.13	0.00	34491	23	-1.38	0			
4	-4	-3	1	16.03	15.75	-15.75	0.00	30206	27	2.01	180			
4	-4	-2	1	21.48	0.00	-21.48	0.00	27065	55	-3.15	180			
4	-4	-1	1	26.39	0.00	-26.39	0.00	25493	88	3.72	0			
4	-3	-1	1	11.85	11.92	-11.92	0.00	25779	07	-0.64	0			

		H	K	L	GKP	FU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	-3	1	1	1	4	17.72	17.60	0.00	•27866	•13	•78	180	-1.32	-3.57
4	-3	2	1	5	49.05	50.37	0.00	•31396	0.00	•1.32	0	0	0	0
4	-3	3	1	1	22.14	22.39	0.00	•35948	-2.26	-1.37	180	-0.26	-1.37	0
4	-3	4	1	1	16.84	17.20	0.00	•41183	-0.36	-2.68	180	-1.26	-7.75	0
4	-3	5	1	1	10.69	11.95	0.00	•46873	-1.26	-7.75	180	-0.70	-4.32	180
4	-3	6	1	1	16.77	17.47	0.00	•52872	-0.70	-4.32	180	-1.70	-1.33	180
4	-3	7	1	1	13.57	13.82	0.00	•59085	-2.24	-1.33	180	-0.58	-0.58	180
4	-3	8	1	1	6.58	6.67	0.00	•65452	-0.09	-3.35	180	0.00	0.00	180
4	-3	9	1	1	3.67	3.76	0.00	•71932	-0.09	-2.21	180	0.00	0.00	180
4	-2	-11	1	1	8.16	8.27	0.00	•74602	-0.08	-2.29	180	0.00	0.00	180
4	-2	-10	1	1	2.63	1.89	-1.89	•68023	•74	1.33	180	0.00	0.00	180
4	-2	-9	1	1	1.40	1.88	0.00	•61531	-0.55	0.00	180	0.00	0.00	180
4	-2	-8	1	1	9.79	9.40	0.00	•55158	•39	2.05	180	0.00	0.00	180
4	-2	-7	1	1	10.63	10.70	0.00	•48949	-0.07	-4.4	0	0.00	0.00	0
4	-2	-6	1	1	1.26	•77	0.00	•42974	•49	•73	0	0.00	0.00	0
4	-2	-5	1	1	12.25	12.40	-12.40	•37349	-1.10	180	180	0.00	0.00	180
4	-2	-4	1	1	20.00	19.94	-19.94	•32254	•05	•30	180	0.00	0.00	180
4	-2	-3	1	1	34.97	35.67	-35.67	•27982	-2.02	180	180	0.00	0.00	180
4	-2	-2	1	1	31.46	31.28	-31.28	•24960	•18	•79	180	0.00	0.00	180
4	-2	-1	1	1	21.37	21.60	-21.60	•23669	-2.23	-1.22	180	0.00	0.00	180
4	-2	0	1	1	14.34	14.20	-14.20	•24388	•13	1.02	180	0.00	0.00	180
4	-2	1	1	2.44	2.23	-2.23	•26955	•21	•85	180	0.00	0.00	180	
4	-2	2	1	1	18.59	19.40	0.00	•30914	-0.81	-5.18	0	0.00	0.00	0
4	-2	3	1	1	3.44	3.44	0.00	•35805	-0.39	-1.46	0	0.00	0.00	0
4	-2	4	1	1	1.10	1.95	-1.95	•41300	-0.85	-1.08	180	0.00	0.00	180
4	-2	5	1	1	8.40	9.05	-9.05	•47187	-0.65	-3.65	180	0.00	0.00	180
4	-2	6	1	1	4.01	4.10	0.00	•53337	-0.09	-3.33	0	0.00	0.00	0
4	-2	7	1	1	2.91	1.90	0.00	•59668	1.01	2.48	0	0.00	0.00	0
4	-2	8	1	1	4.72	2.62	0.00	•66129	2.10	6.99	0	0.00	0.00	0
4	-2	9	1	1	1.45	•62	0.00	•72685	•83	•80	0	0.00	0.00	0
4	-1	-11	1	1	13.17	13.09	0.00	•72978	•08	•36	0	0.00	0.00	0
4	-1	-10	1	1	6.68	7.23	0.00	•66388	-0.55	-1.96	180	0.00	0.00	180
4	-1	-9	1	1	9.47	9.44	0.00	•59886	•03	•15	0	0.00	0.00	0
4	-1	-8	1	1	20.65	20.40	0.00	•53502	•25	1.57	0	0.00	0.00	0
4	-1	-7	1	1	7.78	8.22	0.00	•47285	-4.3	-2.42	0	0.00	0.00	0
4	-1	-6	1	1	2.32	1.14	0.00	•41311	1.18	3.18	180	0.00	0.00	180
4	-1	-5	1	1	2.08	2.59	0.00	•35701	-0.51	-1.30	0	0.00	0.00	0
4	-1	-4	1	1	3.05	2.47	0.00	•30657	•57	2.42	0	0.00	0.00	0
4	-1	-3	1	1	8.50	8.80	0.00	•26502	-0.21	-1.75	180	0.00	0.00	180
4	-1	-2	1	1	28.00	28.60	0.00	•23711	-0.52	-2.31	0	0.00	0.00	0
4	-1	-1	1	1	56.91	56.20	0.00	•22789	•71	2.31	180	0.00	0.00	180
4	-1	0	1	1	7.90	7.22	-7.22	•23952	•68	6.03	180	0.00	0.00	180
4	-1	1	1	7.23	7.14	-7.14	•26933	•09	•74	180	0.00	0.00	180	
4	-1	2	1	1	31.69	33.12	-33.12	•31215	-1.43	-5.41	180	0.00	0.00	180
4	-1	3	1	1	15.89	16.26	0.00	•36340	-0.38	-2.74	0	0.00	0.00	0
4	-1	4	1	1	22.91	24.50	0.00	•42001	-1.59	-8.58	0	0.00	0.00	0
4	-1	5	1	1	19.34	19.85	0.00	•48009	-0.52	-3.50	180	0.00	0.00	180
4	-1	6	1	1	4.16	4.16	0.00	•54249	•91	3.78	0	0.00	0.00	0
4	-1	7	1	1	9.28	9.24	0.00	•60649	•05	•22	0	0.00	0.00	0
4	-1	8	1	1	1.42	2.05	0.00	•67164	-0.64	-0.63	0	0.00	0.00	0
4	-1	9	1	1	5.73	4.89	-4.89	•73763	•84	2.68	180	0.00	0.00	180
4	-1	10	1	1	5.50	5.40	-5.40	•71659	•10	•31	180	0.00	0.00	180
4	-1	11	1	1	5.89	5.89	0.00	•65088	•56	2.24	0	0.00	0.00	0

H	K	L	GKP	TU	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT
4	4	4	4	-9	1	3.99	3.90	3.90	0.00	•58611	•09	•28
4	4	4	4	-8	1	7.20	8.22	-8.22	0.00	•52261	-1.03	-4.95
4	4	4	4	-7	1	8.11	8.31	8.31	0.00	•46093	-•20	-1.14
4	4	4	4	-6	1	1.11	2.51	-2.51	0.00	•40189	-1.40	-1.76
4	4	4	4	-5	1	24.13	24.29	-24.29	0.00	•34684	-•16	-•78
4	4	4	4	-4	1	30.46	30.86	30.86	0.00	•29801	-•39	-1.54
4	4	4	4	-3	1	17.10	17.29	17.29	0.00	•25895	-•19	-1.36
4	4	4	4	-2	1	30.39	32.13	32.13	0.00	•23457	-1.74	-7.76
4	4	4	4	-1	1	6.93	6.65	6.65	0.00	•22961	-•28	2.42
4	4	4	4	0	1	14.70	15.12	-15.12	0.00	•24525	-•42	-3.42
4	4	4	4	1	1	14.11	15.06	-15.06	0.00	•27803	-•95	-8.10
4	4	4	4	2	1	6.40	6.64	-6.64	0.00	•32277	-•24	-1.61
4	4	4	4	3	1	7.46	7.74	7.74	0.00	•37522	-•29	-1.84
4	4	4	4	4	1	6.43	7.09	-7.09	0.00	•43259	-•66	-3.60
4	4	4	4	5	1	22.60	23.37	23.37	0.00	•49315	-•77	-4.81
4	4	4	4	6	1	2.18	1.02	1.02	0.00	•55587	1.15	2.25
4	4	4	4	7	1	1.30	1.11	-1.11	0.00	•62009	•19	•21
4	4	4	4	8	1	1.38	2.28	-2.28	0.00	•68540	-•90	-•91
4	4	4	4	9	1	1.46	•84	•84	0.00	•75150	.64	.60
4	4	4	4	10	1	2.04	1.11	1.11	0.00	•70662	.93	1.22
4	4	4	4	11	1	5.66	5.71	-5.71	0.00	•64143	-•05	-•17
4	4	4	4	12	1	2.15	•34	•34	0.00	•57732	1.81	3.66
4	4	4	4	13	1	21.64	-21.64	0.00	•51467	-•58	-3.43	
4	4	4	4	14	1	17.18	17.25	-17.25	0.00	•45409	-•06	-•45
4	4	4	4	15	1	2.08	2.22	-2.22	0.00	•39654	-•14	-•33
4	4	4	4	16	1	1.08	•42	•42	0.00	•34354	.66	1.00
4	4	4	4	17	1	34.07	35.55	35.55	0.00	•29752	-1.47	-4.08
4	4	4	4	18	1	32.14	33.51	33.51	0.00	•26219	-1.37	-4.06
4	4	4	4	19	1	17.11	-13.11	-13.11	0.00	•24229	•73	5.96
4	4	4	4	20	1	71.11	72.49	-72.49	0.00	•24163	-1.38	-4.35
4	4	4	4	21	1	11.42	10.91	10.91	0.00	•26038	.51	4.81
4	4	4	4	22	1	19.04	-18.88	-18.88	0.00	•29486	.16	.97
4	4	4	4	23	1	3.40	3.24	3.24	0.00	•34031	.16	.68
4	4	4	4	24	1	7.73	7.63	7.63	0.00	•39295	.09	.57
4	4	4	4	25	1	1.29	2.80	2.80	0.00	•57321	-1.50	-1.63
4	4	4	4	26	1	1.32	•37	•37	0.00	•63724	.95	1.01
4	4	4	4	27	1	4.74	5.06	5.06	0.00	•70236	-•32	-•88
4	4	4	4	28	1	2.34	•32	•32	0.00	•69999	2.02	3.56
4	4	4	4	29	1	4.00	4.00	4.00	0.00	•63569	-•00	-•01
4	4	4	4	30	1	4.82	4.76	-4.76	0.00	•57267	•05	.19
4	4	4	4	31	1	5.89	6.58	6.58	0.00	•51139	-•70	-3.23
4	4	4	4	32	1	5.26	5.08	-5.08	0.00	•45258	.18	.87
4	4	4	4	33	1	16.89	16.89	16.89	0.00	•39731	-•19	-1.32
4	4	4	4	34	1	18.70	19.11	19.11	0.00	•34730	-•41	-2.62
4	4	4	4	35	1	3.95	4.05	-4.05	0.00	•30513	-•09	-•49
4	4	4	4	36	1	26.46	-27.09	-27.09	0.00	•27444	-•63	-2.56
4	4	4	4	37	1	7.25	7.25	7.25	0.00	•25934	1.31	11.83
4	4	4	4	38	1	56.39	-57.30	-57.30	0.00	•26255	-.91	-2.74
4	4	4	4	39	1	19.58	-19.76	-19.76	0.00	•28343	-.18	-•98
4	4	4	4	40	1	18.50	18.68	18.68	0.00	•31852	-.18	-1.14
4	4	4	4	41	1	25.41	25.41	25.41	0.00	•36375	-.20	-•97

	H	K	L	GRP	FU	FC	A	B	SINT/HLM	DF	W*DF	ANGLE CALC	ANGLE STAT	
4	4	4	2	3	2.31	.27	.27	0.00	.41581	2.03	5.80	0		
4	4	4	2	3	3.79	3.92	-3.92	0.00	.47245	-.12	-47	180		
4	4	4	2	3	7.15	7.26	-7.26	0.00	.53221	-.11	-53	180		
4	4	4	2	3	16.14	16.71	-16.71	0.00	.59415	-.58	-3.30	180		
4	4	4	2	3	5.98	5.87	-5.87	0.00	.65766	.11	.42	180		
4	4	4	2	3	1.43	.60	-.60	0.00	.72231	.83	.81	180		
4	4	4	2	3	5.24	5.31	-5.31	0.00	.69681	-.07	-22	180		
4	4	4	3	3	5.51	5.54	5.54	0.00	.63375	-.03	-12	0		
4	4	4	3	3	1.24	.74	-.74	0.00	.57226	.51	.57	180		
4	4	4	3	3	4.72	3.98	3.98	0.00	.51287	.74	.97	0		
4	4	4	3	3	9.87	10.44	10.44	0.00	.45643	-.57	-3.46	0		
4	4	4	3	3	14.64	14.69	14.69	0.00	.40416	-.05	-58	0		
4	4	4	3	3	7.74	7.93	7.93	0.00	.35790	-.20	-1.33	0		
4	4	4	3	3	6.76	6.20	6.20	0.00	.32026	.55	3.91	0		
4	4	4	3	3	13.46	13.40	-13.40	0.00	.29456	.07	.60	180		
4	4	4	3	3	-2.16	22.78	-22.78	0.00	.28407	.38	1.58	180		
4	4	4	3	3	56.05	56.21	56.21	0.00	.29044	-.16	-46	0		
4	4	4	3	3	13.25	14.11	14.11	0.00	.31263	-.85	-7.01	0		
4	4	4	3	3	6.16	6.28	6.28	0.00	.34764	-.12	-7.75	0		
4	4	4	3	3	9.01	9.39	-9.39	0.00	.39204	-.39	-2.63	180		
4	4	4	3	3	11.38	11.72	-11.72	0.00	.44302	-.34	-2.25	180		
4	4	4	3	3	10.52	10.84	-10.84	0.00	.49856	-.31	-1.83	180		
4	4	4	3	3	8.45	8.43	8.43	0.00	.55731	.01	.05	0		
4	4	4	3	3	9.08	9.34	-9.34	0.00	.61834	-.26	-1.16	180		
4	4	4	3	3	4.33	4.79	4.79	0.00	.68105	-.46	-1.25	0		
4	4	4	3	3	1.45	.27	.27	0.00	.74501	1.18	1.14	0		
4	4	4	3	3	-11.1	-1.08	-1.08	0.00	.69712	.36	.35	180		
4	4	4	4	4	1.31	.64	-.64	0.00	.63566	.67	.72	180		
4	4	4	4	4	4.46	3.94	-3.94	0.00	.57609	.52	1.82	180		
4	4	4	4	4	6.37	6.46	6.46	0.00	.51907	-.09	-42	0		
4	4	4	4	4	29.03	30.77	-30.77	0.00	.46552	-.174	-6.27	180		
4	4	4	4	4	11.58	11.94	11.94	0.00	.41679	-.35	-2.47	0		
4	4	4	4	4	6.28	6.68	6.68	0.00	.37476	-.42	-2.56	0		
4	4	4	4	4	9.96	9.92	9.92	0.00	.34191	.04	.34	0		
4	4	4	4	4	9.22	-9.09	-9.09	0.00	.32108	.14	1.04	180		
4	4	4	4	4	24.13	25.77	25.77	0.00	.31466	-1.64	-7.37	0		
4	4	4	4	4	-1	1.22	-1.22	0.00	.32350	-.26	-3.8	180		
4	4	4	4	4	0	6.69	6.66	-6.66	0.00	.34645	.03	.19	180	
4	4	4	4	4	5.58	5.47	5.47	0.00	.38095	.11	.61	0		
4	4	4	4	4	2.22	1.53	1.53	0.00	.42421	.70	1.94	0		
4	4	4	4	4	14.50	14.64	-14.64	0.00	.47383	-.14	-8.88	180		
4	4	4	4	4	1.21	1.97	1.97	0.00	.52801	-.76	-8.8	0		
4	4	4	4	4	3.66	3.53	3.53	0.00	.58550	.13	.36	0		
4	4	4	4	4	11.78	11.64	11.64	0.00	.64541	.14	.71	0		
4	4	4	4	4	1.45	.04	.04	0.00	.70712	1.41	1.36	0		
4	4	4	4	4	7.15	7.35	7.35	0.00	.7092	-.20	-7.5	0		
4	4	4	4	4	-11	1	1	L	.64138	.70	3.06	180		
4	4	4	4	4	7.52	-6.82	-6.82	0.00	.58410	-.32	-1.51	180		
4	4	4	4	4	-9	7.97	-8.29	0.00	.52981	-.17	-7.4	0		
5	5	5	5	5	-8	6.04	0.00	0.00	.47955	.11	.71	180		
5	5	5	5	5	-7	16.12	-16.02	0.00	.43469	-.16	-9.91	180		
5	5	5	5	5	-6	7.27	-7.27	0.00	.39708	-.28	-1.85	180		
5	5	5	5	5	-5	16.44	-16.44	0.00	.36895	-.56	-3.16	0		

H	K	L	GKP	FU	FC	A	B	SINTH/LM	DR	W*DF	ANGLE CALC	ANGLE STAT		
4	5	-3	1	9.65	10.23	0.00	35256	-58	-4.29	0				
4	5	-2	1	3.44	3.08	0.00	34957	36	1.62	0				
4	5	-1	1	7.13	7.11	0.00	36032	02	.11	0				
4	5	0	1	12.15	12.61	-12.61	0.00	38365	-46	-3.40	180			
4	5	1	1	5.14	5.60	-5.60	0.00	41746	-45	-2.15	180			
4	5	2	1	12.01	12.19	-12.19	0.00	45945	-18	-1.17	180			
4	5	3	1	27.30	27.65	-27.65	0.00	50758	-35	-1.53	0			
4	5	4	1	3.99	4.49	-4.49	0.00	56027	-50	-1.66	180			
4	5	5	1	1.65	2.58	-2.58	0.00	61637	09	.50	180			
4	5	6	1	2.00	1.99	-1.99	0.00	67501	-93	-1.14	180			
4	5	7	1	L	L	L	73559	02	.02	180				
4	6	-11	1	5.04	5.41	5.41	0.00	70815	-37	-1.06	0			
4	6	-10	1	1.32	1.36	-1.36	0.00	65080	-04	-0.04	180			
4	6	-9	1	4.11	4.72	-4.72	0.00	59610	-61	-1.76	180			
4	6	-8	1	16.69	17.45	-17.45	0.00	54484	-77	-4.60	180			
4	6	-7	1	12.20	12.71	12.71	0.00	49810	-51	-3.10	0			
4	6	-6	1	14.37	14.78	14.78	0.00	45725	-40	-2.78	0			
4	6	-5	1	2.36	2.68	2.68	0.00	42401	-31	-.86	0			
4	6	-4	1	1.06	.82	-.82	0.00	40027	-24	.31	180			
4	6	-3	1	2.46	2.31	2.31	0.00	38779	15	.45	0			
4	6	-2	1	14.57	15.13	-15.13	0.00	38764	-56	-4.25	180			
4	6	-1	1	12.24	12.18	12.18	0.00	39936	05	.39	0			
4	6	0	1	6.86	7.23	-7.23	0.00	42336	-37	-2.08	180			
4	6	1	1	11.16	11.27	11.27	0.00	45641	-11	-.72	0			
4	6	2	1	2.96	3.08	3.08	C.00	49710	-12	-.36	0			
4	6	3	1	14.42	14.84	14.84	0.00	54373	-42	-2.54	180			
4	6	4	1	6.43	6.49	-6.49	0.00	59489	-06	-.24	180			
4	6	5	1	L	1.45	2.03	0.00	64952	-57	-.62	0			
4	6	6	1	7.82	8.20	-8.20	0.00	70682	-38	-1.43	180			
4	6	7	1	-11	1	8.80	-8.91	0.00	71871	-11	-.43	180		
4	6	8	1	6.94	6.73	6.73	0.00	66377	21	.82	0			
4	6	9	1	10.22	9.94	-9.94	0.00	61186	29	1.41	180			
4	6	10	1	11.72	11.96	11.96	0.00	56381	-24	-1.31	0			
4	6	11	1	12.71	12.67	12.67	0.00	52069	04	.25	0			
4	6	12	1	3.91	3.95	-3.95	0.00	46382	-05	-.18	180			
4	6	13	1	3.89	3.54	-3.54	0.00	45472	.35	1.41	180			
4	6	14	1	14.89	15.61	15.61	0.00	43496	-72	-5.08	0			
4	6	15	1	29.26	30.71	-30.71	0.00	42584	-145	-5.48	180			
4	6	16	1	23.41	24.20	-24.20	0.00	42804	-79	-3.76	180			
4	6	17	1	1.68	2.32	-2.32	0.00	44138	-63	-1.23	180			
4	6	18	1	11.89	12.70	12.70	0.00	46492	-82	-5.37	0			
4	6	19	1	18.71	19.00	19.00	0.00	49720	-28	-1.85	0			
4	6	20	1	17.64	17.87	17.87	0.00	53666	-22	-.40	0			
4	6	21	1	5.63	5.39	5.39	0.00	58182	24	.96	0			
4	6	22	1	3.84	2.90	-2.90	0.00	63148	94	2.66	180			
4	6	23	1	1.37	.66	0.00	68464	71	.73	0				
4	6	24	1	1.47	1.96	-1.96	0.00	74057	50	-.47	180			
4	6	25	1	7.95	8.07	-8.07	0.00	73245	12	-.46	180			
4	6	26	1	1.42	.18	-.18	0.00	68009	25	.96	180			
4	6	27	1	6.67	6.79	6.79	0.00	63110	-12	-.51	0			
4	6	28	1	7.54	7.78	7.78	0.00	58633	-24	-1.12	0			
4	6	29	1	3.14	3.14	3.14	0.00	54682	15	.45	0			
4	6	30	1	5.55	5.55	5.55	0.00	51377	-20	-.86	180			

		H	K	L	GKP	FC	A	B	SINTH/LM	DF	W*DF	ANGLE CALC	ANGLE STAT	
4	4	8	-5	1	7.00	7.26	-7.26	0.00	•48850	-•26	-1.30	180	180	
4	4	8	-4	1	31.84	33.35	-33.35	0.00	•47227	-1.51	-5.33	180	180	
4	4	8	-3	1	15.86	16.00	-16.00	0.00	•46602	-1.13	-9.0	0	0	
4	4	8	-2	1	2.46	1.53	-1.53	0.00	•47015	•.93	2.53	180	180	
4	4	8	-1	1	9.39	10.26	-10.26	0.00	•46439	-•87	-5.07	180	180	
4	4	8	0	1	2.55	2.03	-2.03	0.00	•50789	.52	1.33	0	0	
4	4	8	1	1	9.58	9.85	-9.85	0.00	•53944	-•28	-1.46	0	0	
4	4	8	2	1	13.04	12.65	-13.65	0.00	•57773	-•61	-3.30	180	180	
4	4	8	3	1	4.81	4.29	-4.29	0.00	•62151	.52	1.79	180	180	
4	4	8	4	1	1.38	•71	-•91	0.00	•66971	•.47	•48	180	180	
4	4	8	5	1	1.61	•26	-•26	0.00	•72143	1.35	1.66	180	180	
4	4	9	6	1	6.80	6.12	-6.12	0.00	•74921	.68	2.39	0	0	
4	4	9	7	1	2.52	•62	-•62	0.00	•69952	1.90	3.46	0	0	
4	4	9	8	1	2.44	•75	-•75	0.00	•65352	1.70	3.06	180	180	
4	4	9	9	1	1.72	•42	-•42	0.00	•61202	1.30	1.99	0	0	
4	4	9	-7	1	1.24	•94	-•94	0.00	•57600	.30	•34	0	0	
4	4	9	-6	1	1.70	1.67	-1.67	0.00	•54655	.03	.05	180	180	
4	4	9	-5	1	15.41	15.87	-15.87	0.00	•52477	-•46	-2.82	0	0	
4	4	9	-4	1	6.31	5.82	-5.82	0.00	•51164	.49	2.44	180	180	
4	4	9	-3	1	8.36	8.30	-8.30	0.00	•50783	.06	.34	0	0	
4	4	9	-2	1	3.97	4.01	-4.01	0.00	•51356	-•05	-1.17	180	180	
4	4	9	-1	1	3.74	4.11	-4.11	0.00	•52851	-•37	-1.24	0	0	
4	4	9	0	1	7.97	7.88	-7.88	0.00	•55193	.09	.43	180	180	
4	4	9	1	1	8.45	8.45	-8.45	0.00	•58280	-•00	-•01	180	180	
4	4	9	2	1	9.33	9.07	-9.07	0.00	•62002	.26	1.27	180	180	
4	4	9	3	1	8.96	9.12	-9.12	0.00	•66250	-•16	-•69	180	180	
4	4	9	4	1	4.92	4.32	-4.32	0.00	•70932	.60	1.74	0	0	
4	4	9	-10	1	11.49	11.22	-11.22	0.00	•72182	.27	1.21	0	0	
4	4	9	-9	1	2.36	2.03	-2.03	0.00	•67879	.33	.62	180	180	
4	4	9	10	-8	1	10.30	10.31	-10.31	0.00	•64049	~.01	-•04	180	180
4	4	9	-7	1	3.47	3.64	-3.64	0.00	•60780	-•17	-•45	180	180	
4	4	9	-6	1	12.56	12.96	-12.96	0.00	•58168	-•40	-2.14	0	0	
4	4	9	-5	1	3.85	3.28	-3.28	0.00	•56303	.58	1.90	0	0	
4	4	9	-4	1	6.48	6.70	-6.70	0.00	•55261	-•22	-1.00	0	0	
4	4	9	-3	1	5.92	6.01	-6.01	0.00	•55090	-•09	-•42	0	0	
4	4	9	-2	1	8.15	8.26	-8.26	0.00	•55796	-•10	-•51	180	180	
4	4	9	-1	1	6.85	7.15	-7.15	0.00	•57349	-•30	-1.35	0	0	
4	4	10	-4	1	2.81	2.49	-2.49	0.00	•59681	.32	.76	180	180	
4	4	10	0	1	3.78	3.69	-3.69	0.00	•62706	.09	.25	0	0	
4	4	10	1	2	6.27	7.00	-7.00	0.00	•66329	-•73	-2.57	0	0	
4	4	10	3	1	3.36	2.34	-2.34	0.00	•70457	1.02	2.31	180	180	
4	4	10	4	1	1.50	•68	-•68	0.00	•75009	.82	.77	180	180	
4	4	11	-10	1	17.42	17.13	-17.13	0.00	•74672	.29	1.37	180	180	
4	4	11	-9	1	3.74	3.59	-3.59	0.00	•76662	.15	.36	0	0	
4	4	11	-8	1	2.44	2.64	-2.64	0.00	•67139	-•20	-•36	0	0	
4	4	11	-7	1	1.93	3.72	-3.72	0.00	•64183	-•78	-2.54	180	180	
4	4	11	-6	1	3.62	2.63	-2.63	0.00	•61876	.99	2.85	0	0	
4	4	11	-5	1	6.84	6.69	-6.69	0.00	•60291	.15	.64	0	0	
4	4	11	-4	1	11.05	11.56	-11.56	0.00	•59487	-•50	-2.59	180	180	
4	4	11	-3	1	2.82	3.81	-3.81	0.00	•59494	-•99	-2.21	180	180	
4	4	11	-2	1	1.00	-1.00	-1.00	0.00	•60314	.28	.31	180	180	
4	4	11	-1	1	1.44	1.72	-1.72	0.00	•61914	-•28	-•34	0	0	
4	4	11	0	1	3.73	3.30	-3.30	0.00	•64235	1.14	0	0	0	