

** MAIN FRAME COMBINED LOAD CONDITION 荷重組合 **

NOTE LOADING L LONG TERM
 TERM S SHORT TERM

LOAD NO.	LOADING TERM	
1	(L)	DEAD+LIV
2	(S)	DEAD+LIV + 1.00RSNOW
3	(S)	DEAD+LIV + 1.00RWIND (R)
4	(S)	DEAD+LIV + 1.00RWIND (L)
5	(S)	DEAD+LIV + 1.00RSEIS (R)
6	(S)	DEAD+LIV + 1.00RSEIS (L)

** MAIN FRAME NODAL POINT DISPLACEMENT TABLE (FOR COMBINED LOAD) 主桁点部変位
 ** 1 - FRAME

NOBE NO.	LOAD NO.	X- DISP. (CM)	Z- DISP. (CM)	Y- ROTAT. (RADIAN)	LOAD NO.	X- DISP. (CM)	Z- DISP. (CM)	Y- ROTAT. (RADIAN)	
1	1	0.00	0.00	-0.00	2	0.00	0.00	-0.00	
	3	0.00	0.00	0.00		4	0.00	0.00	-0.00
	5	0.00	0.00	0.01		6	0.00	0.00	-0.01
2	1	-0.07	-0.05	0.00	2	-0.10	-0.05	0.00	
	3	0.58	-0.04	0.00		4	-0.56	-0.04	0.00
	5	4.78	-0.04	0.01		6	-4.92	-0.06	-0.00
3	1	-0.08	-0.05	-0.00	2	-0.12	-0.06	-0.00	
	3	0.57	-0.03	-0.00		4	-0.57	-0.04	-0.00
	5	4.76	-0.05	0.00		6	-4.93	-0.04	-0.01
4	1	0.00	0.00	0.00	2	0.00	0.00	0.00	
	3	0.00	0.00	0.00		4	0.00	0.00	-0.00
	5	0.00	0.00	0.01		6	0.00	0.00	-0.01
5	1	0.00	0.00	0.00	2	0.00	0.00	0.00	
	3	0.00	0.00	0.00		4	0.00	0.00	-0.00
	5	0.00	0.00	0.01		6	0.00	0.00	-0.01
6	1	0.10	-0.04	-0.00	2	0.12	-0.05	-0.00	
	3	0.62	-0.03	-0.00		4	-0.38	-0.03	-0.00
	5	4.42	-0.05	0.00		6	-4.22	-0.04	-0.01
7	1	0.10	-0.01	-0.00	2	0.12	-0.01	-0.00	
	3	0.62	0.02	0.00		4	-0.38	0.00	-0.00
	5	4.42	-0.01	0.00		6	-4.21	0.00	-0.00
8	1	0.10	-0.01	0.00	2	0.12	-0.01	-0.00	
	3	0.62	-0.11	0.00		4	-0.38	0.07	-0.00
	5	4.42	-0.76	0.00		6	-4.21	0.74	-0.00

** MAIN FRAME MEMBER END STRESS TABLE *引-A 25*

** 1 - FRAME

MEMBER I	J	LOAD NAME	AXIAL (T) (TON)	SHEAR (T) (TON)	MOMENT (L) (T.M)	AXIAL (J) (TON)	SHEAR (J) (TON)	MOMENT (J) (T.M)
1	2	DEAD+LIV	4.73	-4.31	0.00	-15.03	4.31	25.87
		SNOW	3.94	-1.15	0.00	-3.94	1.15	6.87
		WIND (R)	-5.60	2.21	-0.00	5.60	-2.21	-13.26
		WIND (L)	-4.21	0.71	0.00	4.21	-0.71	-4.26
		SEIS (R)	-5.80	0.31	-0.00	5.80	-0.31	-37.88
SEIS (L)	5.80	-0.31	0.00	-5.80	0.31	37.88		
4	6	DEAD+LIV	42.80	4.09	-0.00	-20.55	-4.09	-20.46
		SNOW	5.20	-1.04	-0.00	-5.20	1.04	-3.20
		WIND (R)	-10.49	-0.52	0.00	10.49	0.52	2.58
		WIND (L)	-6.51	-1.93	0.00	6.51	1.93	9.63
		SEIS (R)	-2.18	6.58	-0.00	-2.18	-6.58	-32.91
SEIS (L)	-2.18	-6.58	0.00	2.18	6.58	32.91		
6	3	DEAD+LIV	19.32	4.31	20.46	-14.87	-4.31	-24.77
		SNOW	3.66	1.15	5.20	-3.66	-1.15	-6.35
		WIND (R)	-4.02	-0.44	-2.58	4.02	0.44	3.02
		WIND (L)	-2.41	-2.48	-3.63	5.41	2.45	12.11
		SEIS (R)	-5.80	4.65	-32.91	-5.80	-4.65	-37.55
SEIS (L)	5.80	-4.65	32.91	5.80	4.65	37.55		
5	7	DEAD+LIV	3.27	0.22	-0.00	-3.27	-0.22	-1.10
		SNOW	3.16	0.10	-0.00	-3.16	-0.10	-0.52
		WIND (R)	-13.63	0.08	-0.00	13.63	-0.08	-0.39
		WIND (L)	-3.93	-0.55	0.00	3.93	0.55	2.77
		SEIS (R)	3.62	3.98	0.00	-3.62	-3.98	-19.92
SEIS (L)	-3.62	-3.98	-0.00	3.62	3.98	19.92		
2	3	DEAD+LIV	4.31	15.03	-25.87	-4.31	14.87	24.77
		SNOW	1.15	3.94	-6.87	-1.15	3.66	6.35
		WIND (R)	-1.03	-5.60	13.26	1.03	-4.02	-3.02
		WIND (L)	-1.30	-4.21	4.26	1.30	-5.41	-12.11
		SEIS (R)	-0.64	-5.80	37.88	-0.64	-5.80	-37.55
SEIS (L)	0.64	5.80	-37.88	0.64	5.80	37.55		
6	7	DEAD+LIV	0.22	1.23	0.00	-0.22	2.07	2.30
		SNOW	0.10	1.34	0.00	-0.10	1.96	1.72
		WIND (R)	0.06	-6.47	0.00	-0.06	-6.27	-4.97
		WIND (L)	-1.10	-1.10	0.00	0.55	-2.59	-4.11
		SEIS (R)	3.53	-3.62	0.00	-3.53	3.62	-19.92
SEIS (L)	-3.53	3.62	0.00	3.53	-3.62	19.92		
7	8	DEAD+LIV	-0.00	1.20	-1.20	0.00	-0.00	-0.00
		SNOW	-0.00	1.20	-1.20	0.00	-0.00	-0.00
		WIND (R)	-0.00	-5.36	5.36	-0.00	-0.00	-0.00
		WIND (L)	-0.00	-1.34	1.34	-0.00	0.00	0.00
		SEIS (R)	0.00	-0.00	0.00	0.00	0.00	0.00
SEIS (L)	0.00	0.00	-0.00	0.00	-0.00	-0.00		

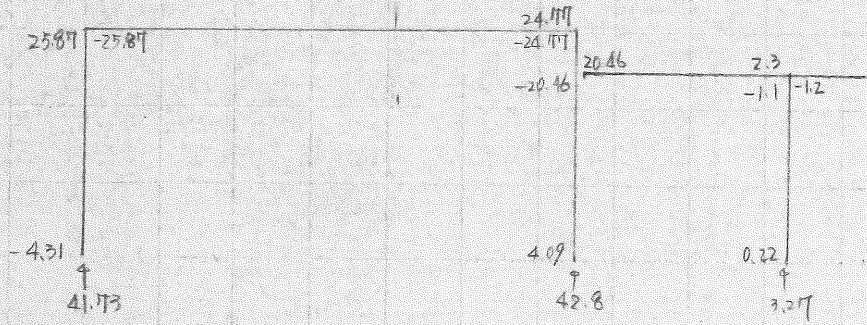
** MAIN FRAME STRESS AND DEFLECTION TABLE (FOR COMBINED LOAD) 主桁の応力及変形量

** 1 - FRAME

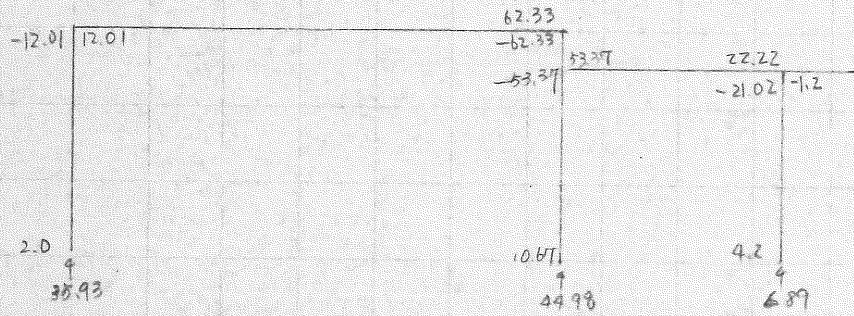
MEMBER I - J	LOAD NO.	AXIAL (T)	SHEAR (T)	MOMENT (T.M)	AXIAL (J)	SHEAR (T)	MOMENT (J)	DEFLECTION (L/DELT.)	(CM)
1 2	1	41.73	-4.31	0.00	-15.03	4.31	25.37	2230.02	0.269
	2	45.67	-5.46	0.00	-16.97	5.46	32.74	1761.99	0.341
	3	36.14	-2.10	0.00	-9.44	2.10	12.61	4574.27	0.131
	4	37.53	-3.60	0.00	-10.83	3.60	21.61	2669.31	0.225
	5	29.93	2.00	0.00	-9.33	-2.00	-12.01	4801.13	-0.125
	6	47.54	-10.62	0.00	-20.64	10.62	63.74	904.87	0.663
4 6	1	42.80	4.09	-0.00	-20.55	-4.09	-20.46	3383.37	-0.148
	2	47.99	3.13	-0.00	-23.74	-3.13	-25.66	2697.61	-0.185
	3	32.51	3.58	0.00	-10.06	-3.58	-17.38	3871.22	-0.129
	4	36.24	2.16	0.00	-14.04	-2.16	-10.82	6394.75	-0.078
	5	44.98	10.67	-0.00	-22.73	10.67	-53.37	1236.99	-0.366
	6	40.62	-2.49	0.00	-18.37	2.49	12.45	5559.60	0.090
6 3	1	19.32	4.31	20.46	-14.87	-4.31	-24.77	7652.17	-0.013
	2	13.18	5.46	25.66	-18.73	-5.46	-31.11	6095.30	-0.016
	3	19.29	3.67	7.88	-10.54	-3.67	-21.75	8732.52	-0.011
	4	13.90	1.83	0.82	-9.45	-1.83	-12.96	14739.93	-0.007
	5	25.12	-0.96	-3.37	-20.67	0.96	-62.33	2991.38	-0.033
	6	17.51	-3.34	-7.45	-9.09	3.34	12.79	13711.64	0.007
5 7	1	3.27	0.22	-0.00	-3.27	-0.22	-1.10	20390.61	-0.025
	2	0.43	0.32	-0.00	-6.43	-0.32	-1.62	13792.67	-0.036
	3	-10.37	-0.30	-0.00	10.37	-0.30	-1.48	15071.55	-0.033
	4	-0.66	0.33	-0.00	-0.66	0.33	1.67	13392.34	-0.037
	5	6.89	4.20	-0.00	-6.89	-4.20	-21.02	1064.67	-0.470
	6	-0.35	-3.76	-0.00	0.35	3.76	18.82	1188.82	0.421
2 3	1	4.31	15.03	-20.46	-4.31	14.87	24.77	734.10	-1.771
	2	5.46	18.73	-25.66	-5.46	18.73	31.11	562.35	-2.232
	3	3.67	10.54	-7.88	-3.67	10.54	21.75	1083.25	-1.200
	4	1.83	9.45	-0.82	-1.83	9.45	12.96	1078.33	-1.206
	5	4.98	-14.93	3.37	4.98	-14.93	62.33	726.76	-1.789
	6	3.67	20.64	-63.74	-3.67	19.06	-12.79	741.60	-1.753
6 7	1	0.22	1.23	0.00	-0.22	2.07	2.30	16394.05	-0.034
	2	0.32	1.23	0.00	-0.32	4.03	4.02	7062.14	-0.078
	3	-0.30	0.23	0.00	-0.30	-6.21	-2.68	2547.19	-0.216
	4	-0.33	0.14	0.00	0.33	-0.52	-1.31	21872.19	-0.025
	5	3.75	-3.39	0.00	-3.75	5.69	22.22	1609.82	-0.342
	6	-3.31	4.85	0.00	3.31	-1.95	-17.32	1345.57	-0.489
7 6	1	-0.00	1.20	-1.20	0.00	-0.00	-0.00	0.00	0.001
	2	-0.00	2.40	-2.40	0.00	-0.00	-0.00	0.00	0.002
	3	-0.00	-4.16	4.16	0.00	-0.00	-0.00	0.00	-0.003
	4	-0.00	-0.14	0.14	0.00	-0.00	-0.00	0.00	-0.000
	5	-0.00	1.20	-1.20	0.00	0.00	0.00	0.00	0.001
	6	-0.00	1.20	-1.20	0.00	-0.00	-0.00	0.00	0.001

応力図

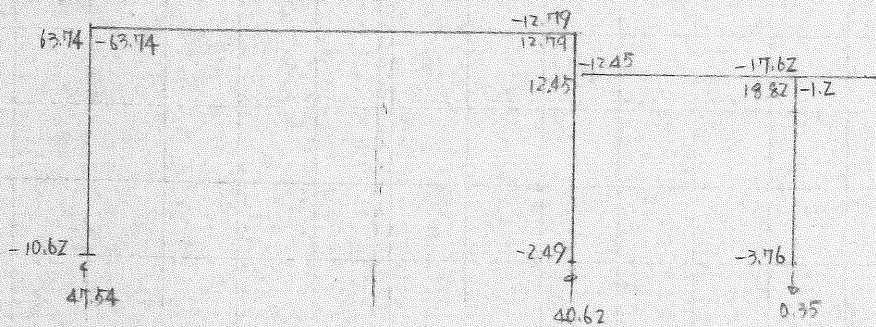
1) VERT



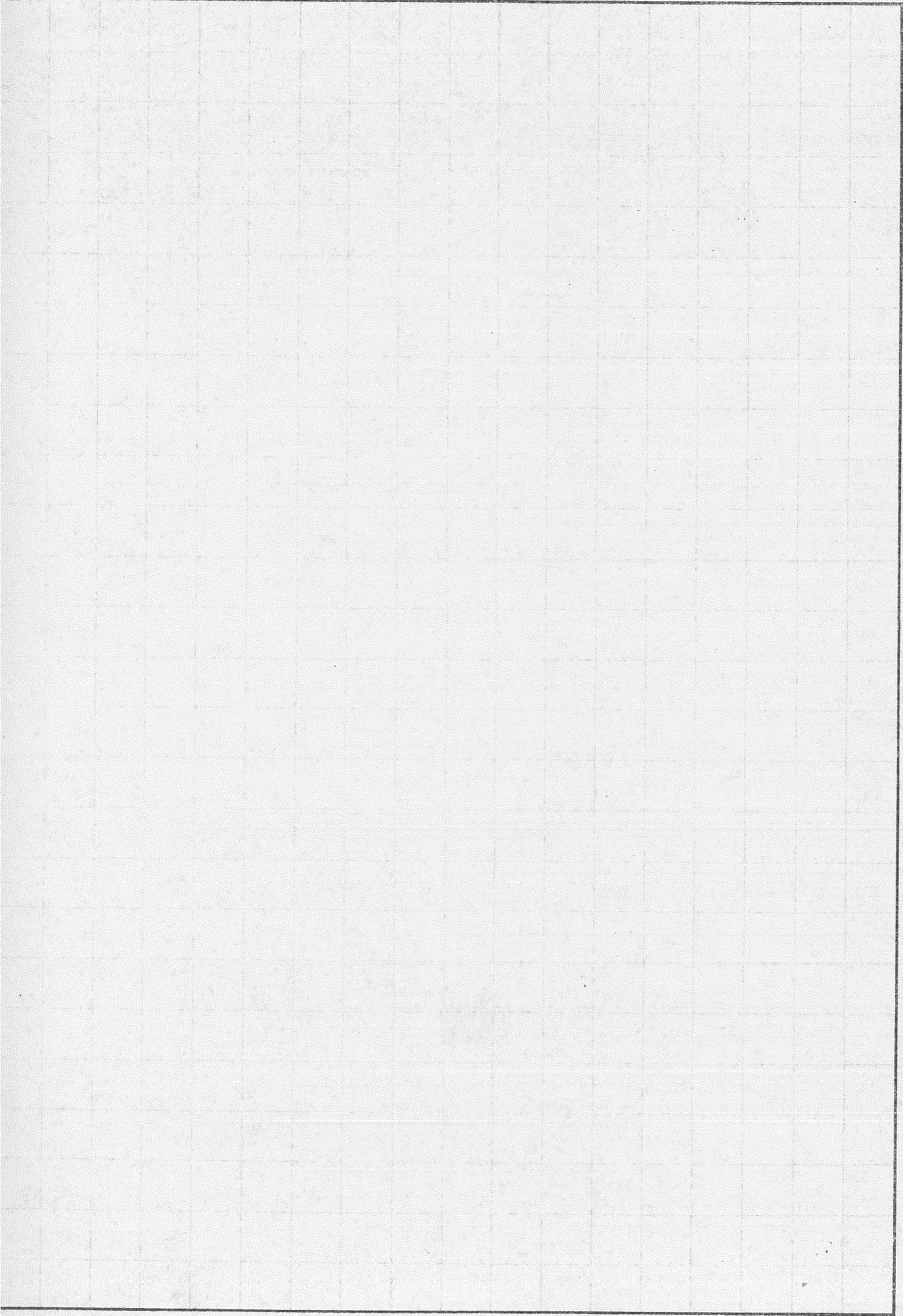
5) V+SEIS →



6) V+SEIS ←



No. 38



** MAIN FRAME REACTION TABLE (FOR COMBINED LOAD) 基礎用反力

** 1 - FRAME

NODE NO.	LOAD NO.	H. FORCE (TON)	V. FORCE (TON)	MOMENT (T.M)	NODE NO.	LOAD NO.	H. FORCE (TON)	V. FORCE (TON)	MOMENT (T.M)
1	1	4.31	41.73	0.00	4	1	-4.09	42.80	0.00
	2	5.45	45.67	0.00		2	-3.13	47.99	0.00
	3	2.10	36.14	0.00		3	-3.58	32.31	0.00
	4	3.60	37.53	0.00		4	-2.16	35.29	0.00
	5	-2.00	35.93	0.00		5	-10.67	44.98	0.00
	6	10.62	47.54	0.00		6	2.49	40.62	0.00
5	1	-0.22	3.27	0.00					
	2	-0.32	6.43	0.00					
	3	-0.30	-10.37	0.00					
	4	0.33	-0.66	0.00					
	5	-4.70	6.89	0.00					
	6	3.76	-0.35	0.00					

** DESIGN OF MAIN FRAME 断面設計

柱の断面設計の別紙参照

* ALL STRESSES ARE REPLACED WITH SHORT TERM F = 2400. (KG/CM2)

σ=γσ

* 1 - FRAME

MEMBER	LOAD	M1	M2	MOMENT	AXIAL	LX	LY	PC,FT	LB	C	F8	SIGMA/F	DESIGN MEMBER		
I	J	(T.M)	(T.M)	SHEAR	(T)	(M)	(M)	(KG/CM2)	(M)		ES	TAU/F			
1	2	6	0.0	31.9	63.7	63.7	-20.8	0.00	6.00	1480.	6.00	1.75	2171. 1350.	0.910 0.113	H- 582# 300#12.0#12.0
4	6	5	-0.0	26.7	-53.4	53.4	-22.7	0.00	5.00	1719.	5.00	1.75	2366. 1350.	0.713 0.113	H- 582# 300#12.0#17.0
6	3	5	53.4	57.8	-62.3	62.3	-20.7	0.00	1.00	2368.	1.00	1.07	2400. 1350.	0.784 0.095	H- 582# 300#12.0#17.0
5	7	5	0.0	10.5	-21.0	21.0	-6.9	0.00	5.00	1985.	5.00	1.75	2400. 1350.	0.476 0.091	H- 344# 340#10.0#16.0
2	3	6	-63.7	32.9	8.2	63.7	-3.7	0.00	3.25	1694.	3.25	1.62	2400. 1350.	0.504 0.212	H- 606# 201#12.0#20.0
			-8.2	10.5	-23.1	23.1	-3.7	0.00	3.25	1694.	3.25	2.16	2400. 1350.	0.337 0.136	
			23.1	29.6	-30.1	30.1	-3.7	0.00	3.25	1694.	3.25	1.12	2400. 1350.	0.435 0.060	
			30.1	24.5	-12.8	30.1	-3.7	0.00	3.25	1694.	3.25	1.36	2400. 1350.	0.435 0.092	
6	7	5	0.0	3.9	8.8	8.8	-3.7	0.00	2.75	1895.	2.75	1.75	2400. 1350.	0.210 0.060	H- 500# 200#10.0#16.0
			-8.8	15.0	22.2	22.2	-3.7	0.00	2.75	1895.	2.75	1.38	2400. 1350.	0.501 0.084	
7	8	3	4.2	1.0	-0.0	4.2	0.0	0.00	2.00	2400.	2.00	1.75	2400. 1350.	0.091 0.062	H- 500# 200#10.0#16.0