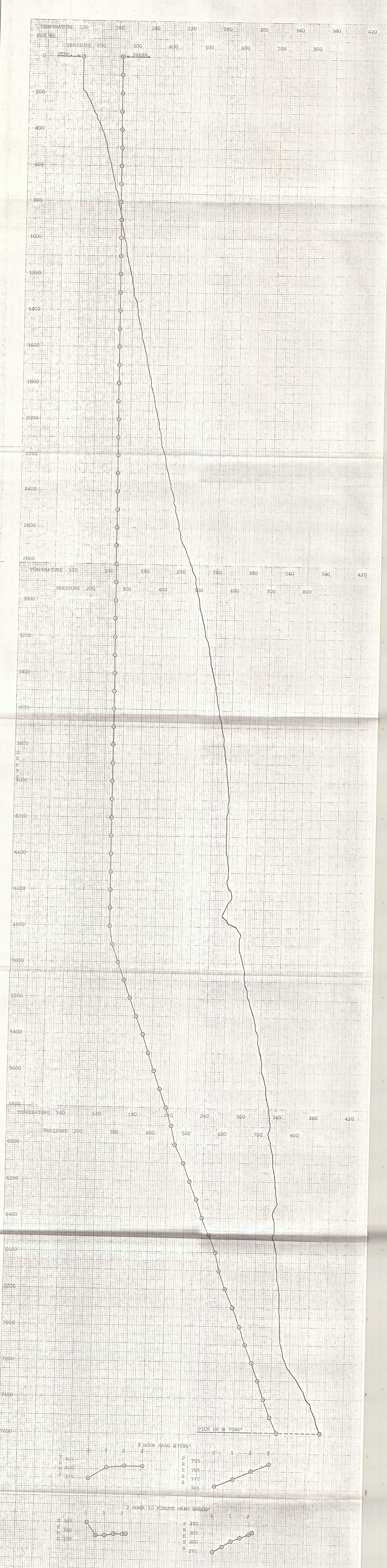


SUBSURFACE SURVEY

OWNER THERMOGENICS, INC. FIELD GEYSERS WELL NAME K - 1A
 PICK UP @ 7586' ELEV. DATE May 1, to May 2, 1977
 LINER DESCRIPTION: Open hole @ 4200' MPP 1/2" TD 3-23-77
 PERFORATIONS: MPP 1/2" TD 3-23-77
 TUBING DETAIL: DEPTH 7579' ZONE

WELL STATUS: STATIC PUMP SHOE: ON PRODUCTION
 SURVEYED: TUB. [X] ANN. [] ENGAGE STYLUS 2:45 pm 5-1 DISENGAGE STYLUS
 PICK UP @ 7586' TIME ON BOTTOM 9:35 pm 5-1 TIME OFF BOTTOM 12:35 am 1
 ELEMENT RANGE 1800W & 100-558 SERIAL NO. 8109N & 10136 CLOCK 12 hr. TURN 15
 PURPOSE: STATIC TEMPERATURE & PRESSURE TRAVERSE SURVEY MAX. T. 402.9 @ 7586'
 REMARKS: Traverse 20' per minute 0 to pick up. Hang 3 hr. @ pick up. STABILIZATION PERIOD
 Pull up to 6000', Hang for 2 hr. PRESSURES: START FINISH
 DATE: 5-1 5-2
 CASING PSI OBS: 2258 300W
 TUBING PSI OBS:
 TUBING PSI COR:
 TUBING PSI COR:
 PRESS. STYLUS: 7586' & 600'
 INSTRUMENT HUNG @

BY: THOMAS & CONNELL



DEPTH.	TEMP.	PRESS.	DEPTH.	TEMP.	PRESS.	DEPTH.	TEMP.	PRESS.	DEPTH.	TEMP.	PRESS.
0	100.0	259	2040	192.9	267	4080	279.0		6120	337.5	
20	100.0		2060	193.6		4100	279.0	273	6140	338.2	
40	100.0		2100	194.3		4120	278.7		6160	339.1	
60	100.0		2180	194.6	267	4140	278.5		6180	339.8	
80	100.3		2120	195.1		4160	278.3		6200	340.0	513
100	100.3	259	2160	195.6		4180	277.6		6220	340.7	
120	100.3		2180	197.5		4200	277.3	273	6240	341.2	
140	100.3		2180	198.5		4220	277.1		6260	341.6	
160	100.3		2200	199.5	268	4240	277.1		6280	342.1	
180	100.3		2220	200.2		4260	277.1		6300	342.8	533
200	104.3	260	2240	200.7		4280	277.3		6320	343.0	
220	105.8		2260	201.8		4300	277.6	273	6340	341.1	
240	108.1		2280	202.5		4320	277.6		6360	339.1	
260	110.6		2300	203.8	268	4340	277.6		6380	338.4	
280	112.4		2320	204.3		4360	277.6		6400	339.3	549
300	113.6	260	2340	205.0		4380	277.8		6420	340.2	
320	116.2		2360	206.2		4400	278.3	274	6440	340.5	
340	117.7		2380	206.9		4420	279.0		6460	340.5	
360	119.7		2400	208.1	269	4440	279.9		6480	340.0	
380	121.5		2420	209.3		4460	280.1		6500	338.9	570
400	122.9	261	2440	210.3		4480	280.4		6520	339.3	
420	124.2		2460	210.8		4500	280.4	274	6540	340.7	
440	125.0		2480	212.0		4520	280.1		6560	341.4	
460	126.3		2500	212.9	269	4540	279.7		6580	342.3	
480	128.0		2520	213.9		4560	279.4		6600	343.2	588
500	128.8	262	2540	214.4		4580	280.6		6620	343.5	
520	129.3		2560	215.6		4600	280.7	274	6640	343.7	
540	130.5		2580	216.0		4620	284.4		6660	343.9	
560	131.8		2600	216.5	269	4640	284.4		6680	343.5	
580	132.3		2620	218.0		4660	281.3		6700	344.1	600
600	133.3	262	2640	218.9		4680	279.4		6720	344.4	
620	134.8		2660	219.6		4700	277.1	274	6740	344.6	
640	135.8		2680	221.1		4720	275.4		6760	345.3	
660	136.0		2700	223.5	269	4740	274.5		6780	346.0	
680	137.3		2720	225.2		4760	279.4		6800	347.4	617
700	138.0	262	2740	226.8		4780	281.8		6820	347.1	
720	138.5		2760	228.5		4800	290.0	274	6840	347.4	
740	140.5		2780	229.7		4820	292.6		6860	347.4	
760	141.0		2800	231.4	270	4840	295.4		6880	347.8	
780	142.3		2820	232.8		4860	294.9		6900	347.1	639
800	142.8	263	2840	233.6		4880	294.2		6920	347.6	
820	143.5		2860	235.0		4900	294.7	283	6940	348.5	
840	144.5		2880	236.0		4920	294.7		6960	348.5	
860	145.3		2900	236.9	270	4940	294.9		7000	348.0	659
880	146.0		2920	237.9		4960	295.4		7020	348.3	
900	146.3	264	2940	238.8		4980	296.8		7040	348.5	
920	146.8		2960	239.6		5000	297.7	299	7060	348.5	
940	147.3		2980	240.3		5020	298.1		7080	349.0	
960	148.3		3000	241.0	270	5040	299.3		7100	349.7	
980	149.0		3020	241.7		5060	300.0		7120	350.6	676
1000	149.5	265	3040	242.4		5080	301.0	318	7140	352.0	
1020	151.0		3060	243.4		5100	301.8		7160	352.9	
1060	152.2		3100	244.4		5120	301.8		7180	354.3	
1080	152.5		3120	246.3	270	5140	303.0		7200	355.4	695
1100	153.4	266	3140	247.2		5160	304.1		7220	357.5	
1120	154.7		3160	248.2		5180	304.8		7240	360.7	
1140	155.6		3180	248.9		5200	306.8	336	7260	363.0	
1160	156.9		3200	249.8	271	5220	307.6		7280	366.2	
1180	157.8		3240	251.0		5240	308.7		7300	369.0	713
1200	158.3	266	3280	252.2		5260	309.9		7320	371.3	
1220	159.1		3320	253.1		5280	311.0		7340	373.1	
1240	159.6		3360	253.6		5300	312.4	354	7360	376.1	
1260	160.3		3300	254.8	271	5340	314.0		7380	377.5	
1280	161.3		3320	255.2		5380	314.9		7400	379.8	729
1300	161.5	266	3340	255.9		5360	316.3		7420	383.2	
1320	162.7		3360	256.4		5400	317.2	374	7440	384.2	
1340	164.2		3380	257.3		5420	317.5		7460	385.1	
1360	165.2		3400	258.3	272	5440	317.7		7480	387.1	
1380	165.7		3420	259.5		5460	318.4		7500	389.3	748
1400	166.2	266	3440	260.4		5480	319.8		7520	390.4	
1420	166.7		3460	261.1		5500	320.2	390	7540	391.9	
1440	167.2		3480	261.8		5520	321.1		7560	393.0	
1460	168.4		3500	262.3	272	5540	322.1		7580	394.4	
1480	169.6		3520	263.0		5560	322.3		7686	395.7	768
1500	170.1	266	3540	263.5		5580	322.8				
1520	171.1		3560	264.4		5600	322.8	407	0	3 HOURS HANG @ 7586'	768
1540	171.8		3580	265.1		5620	324.1		0	395.7	768
1560	172.8		3600	266.3	273	5640	325.1		1	401.8	776
1580	173.5		3620	266.7		5660	326.0		2	402.7	785
1600	174.5	266	3640	267.4		5680	327.1	424	3	402.9	793
1620	175.2		3660	268.4		5700	327.8				
1640	176.0		3680	269.1		5720	328.3				
1660	177.0		3700	269.8	273	5740	328.7		2	hr. 10 Minute hang @ 6000'	
1680	177.9		3720	270.5		5760	329.0		0	345.7	298
1700	178.6	266	3740	271.7		5780	329.0		1/2	hr. 338.6	295
1720	179.6		3760	272.1		5800	330.6		1	338.9	301
1740	180.1		3780	272.4		5820	332.3		1 1/2	339.1	303
1760	181.1		3800	272.9	273	5840	332.0		2	339.3	305
1780	182.1		3820	273.3		5860	332.4		2	hr. 10m. 339.3	306
1800	182.8	266	3840	273.8		5880	333.1				
1820	183.8		3860	274.3		5900	333.1	459	6	HR. 17 MINUTE HANG @ 7586'	
1840	184.5		3880	274.7		5920	333.0		0	374.9	
1860	185.3		3900	275.7	273	5940	332.7		1	406.6	
1880	186.0		3920	276.1		5960	332.6		1	407.3	
1900	186.8	266	3940	276.4		5980	332.6		1 1/2	407.5	
1920	187.7		3960	276.8		6000	334.0	479	2	407.7	
1940	188.7		3980	277.3		6020	334.0		3	408.0	
1960	189.4		4000	277.6	273	6040	335.2		4	408.2	
1980	190.2		4020	278.0		6060	337.2		5	408.4	
2000	191.2	267	4040	278.3		6080	337.7		6	hr. 17m. 408.6	
2020	192.1		4060	278.5		6100	337.9	494			