

2:55 pm

1-3-85

1124-10
1st Temp. log
($\sim \frac{1}{2}$ day log)

Depth	Resistance	Temp. °C
5	103.40	14.92
10	81.10	21.38
15	79.10	22.04
20	82.42	20.96
25	82.20	21.03
30	77.66	22.52
35	75.32	23.32
40	71.56	24.65
45	68.34	25.84
50	65.34	27.00
55	62.59	28.11
60	57.92	30.11
65	57.54	30.28
70	57.28	30.39
75	57.19	30.43
80	57.11	30.47
85	56.98	30.53
90	56.29	30.84
95	56.51	30.74
100	56.59	30.70
105	56.76	30.63
110	56.71	30.65
115	56.72	30.65
120	56.71	30.65
125	56.70	30.65
130	56.71	30.65
135	56.83	30.60
140	56.93	30.55

145 56.93 30.55
150 56.78 30.62

1-9-85

Hillsboro 1124-10

3:20 pm; Sunny, ~55°F

2nd temp. log (7 day log)

Depth	Res.	Temp.	ΔT	Grad. °C/km	Depth	Res.	Temp.	ΔT	Grad. °C/km
5 M	84.71 (air)	20.24°C	1.32	264	140	56.95	30.54	0.00	0
10	80.57	21.56	0.64	128	145	56.95	30.54	0.07	14
15	78.60	22.20	1.01	202	150	56.79	30.61		
20	75.63	23.21	0.78	156					
25	73.38	23.99	0.94	198					
30	70.79	24.93	0.96	192					
35	68.22	25.89	0.95	190					
40	65.76	26.84	0.92	184					
45	63.46	27.76	0.95	190					
50	61.15	28.71	0.97	194					
55	58.90	29.68	0.58	116					
(H ₂ O at 61M) 60	57.58	30.26	0.15	30					
65	57.24	30.41	0.02	4					
70	57.19	30.43	0.01	2					
75	57.18	30.44	0.04	8					
80	57.08	30.48	0.11	22					
85	56.83	30.59	0.38	76					
90	56.00	30.97	-0.18	-36					
95	56.39	30.79	-0.05	-10					
100	56.51	30.74	-0.09	-18					
105	56.70	30.65	0.02	4					
110	56.65	30.67	0.02	4					
115	56.63	30.69	0.00	0					
120	56.62	30.69	0.01	2					
125	56.61	30.70	0.00	0					
130	56.59	30.70	-0.11	-22					
135	56.84	30.59	-0.05	-10					

~ 91M
highest Temp
Res. 55.92
Temp. 31.01°C

Hole #
10

3rd Temp log
(40 day log)

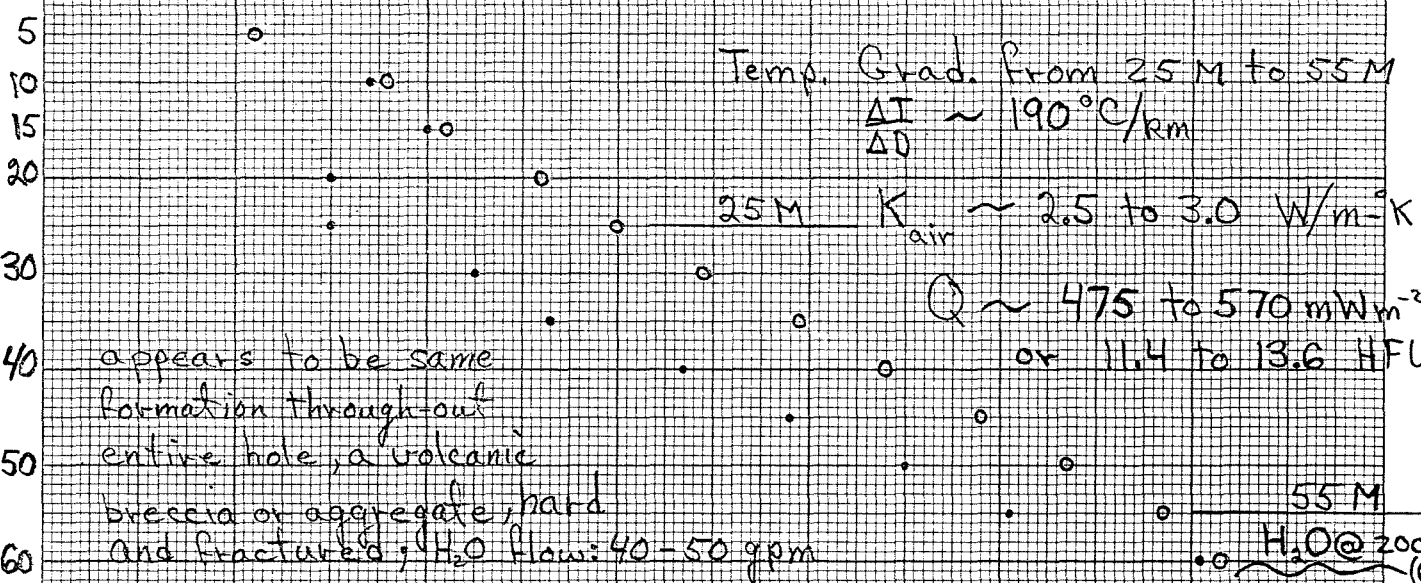
2-11-85
6:15 pm

dusk, warm ~ 50

Depth	Res.	Temp.	ΔT	Grad.	Depth	Res.	Temp.	ΔT	Grad.
5M	87.00	19.54			130	55.84	31.05		
			2.10	420 °C/km				-.13	-26
10	80.32	21.64			135	56.12	30.92		
			.73	146				-.07	-14
15	78.09	22.37			140	56.27	30.85		
			.92	184				-.02	-4
20	75.41	23.29			145	56.32	30.83		
			.88	176				+.10	+20
25	72.88	24.17			150	56.09	30.93		
			.95	190					
30	70.27	25.12							
			.99	198					
35	67.64	26.11							
			.97	194					
40	65.15	27.08							
			.96	192					
45	62.76	28.04							
			.99	198					
50	60.39	29.03							
			.97	194					
55	58.15	30.00							
			.59	118					
60	56.85	30.59							
			.14	28					
65	56.54	30.73							
			.03	6					
70	56.47	30.76							
			0.00	0					
75	56.47	30.76							
(78)	(56.45)	(30.77)	.06	12					
80	56.34	30.82							
			.13	26					
85	56.06	30.95							
			.37	74					
90	55.26	31.32							
highest Temp (91)	(55.18)	(31.35)	-.17	-34					
95	55.62	31.15							
			-.08	-16					
100	55.78	31.07							
(102)	(55.99)	(30.98)	-.04	-8					
105	55.88	31.03							
(107)	(55.86)	(31.04)	-.01	-2					
110	55.89	31.02							
(113)	(55.87)	(31.03)	0.00	0					
115	55.90	31.02							
			+.01	+2					
120	55.88	31.03							
			-.01	-2					
125	55.89	31.02							
			+.03	6					

Centigrade

18 20 22 24 26 28 30 32



appears to be same formation through-out entire hole, a volcanic breccia or aggregate, hard and fractured; H₂O flow: 40-50 gpm

Temp. Grad. From 25 M to 55 M
 $\Delta T \sim 190^\circ\text{C}/\text{km}$
 $\Delta D \sim 30$

25 M $K_{\text{air}} \sim 2.5 \text{ to } 3.0 \text{ W/m}^2\text{K}$

$Q \sim 475 \text{ to } 570 \text{ mWm}^{-2}$
or 11.4 to 13.6 HFU

55 M
H₂O @ 200 ft (61)

**
Major fracture
or very permeable layer
@ 299 ft (91 M)

Highest tem
31.01

1124-10 was completed
at 6:10 pm on 1-2-85; steel pipe filled with H₂O
at ~9:00am, 1-3-85

1st Temp. log (~ 1/2 day log)
logged by: R. Lohse
probe: NMSU/Spafford
Date: 1-3-85
Time: 2:55 pm
Weather: partly cloudy, cold, ~40°F

2nd Temp. log (7 day log)
logged by: R. Lohse
probe: NMSU/Spafford
Date: 1-9-85
Time: 3:20pm
Weather: Sunny, cool, ~55°F

• ⇒ 1/2 day temp. log
○ ⇒ 7 day temp. log

permanently
lost circulation @
493 ft

25120

Meters



Centigrade

