

S.R.C. Hillsboro

Project

1124-7

Time Log	Over burden (#2/ft)	Set/Cmt. Surface	Rock hammer (#9/ft); rotary (#14/ft)	Set 3/4" steel pipe	Charges
1-28-85 1:00 pm 2:30 pm				Backfilled hole/Cmt. top of 3/4" Steel Pipe + fill pipe with H <sub>2</sub> O From 1:00 to 2:30pm Cmt 2sk	(1.5 X 70) (2 X #4)
Hole # 1124-7 was completed at 5:00pm on 1-25-85. Steel pipe was filled with H <sub>2</sub> O + hole was backfilled at 2:30 pm on 1-28-85					

1124-G

2<sup>nd</sup> Temp log  
(14 day log)

1-22-85

3:00 pm

cloudy &amp; cold ~ 40-45°F

Depth	Res.	Temp.	$\Delta T$	Grad °C/km	
5M	93.37	17.66°C	1.27		
10	89.01	18.93	0.39	78	
15	87.71	19.32	0.49	98	
20	86.09	19.81	0.35	70	
25	84.97	20.16	0.41	81	
30	83.64	20.57	0.32	64	
35	82.63	20.89	0.39	78	
H <sub>2</sub> O @ 42M	40	81.44	21.28	0.44	88
	45	80.06	21.72	0.35	70
	50	79.00	22.07	0.38	76
	55	77.87	22.45	0.40	80
	60	76.68	22.85	0.36	72
	65	75.62	23.21	0.42	84
	70	74.43	23.63	0.31	62
	75	73.54	23.94	0.52	104
	80	72.08	24.46	0.35	70
	85	71.11	24.81	0.36	72
	90	70.14	25.17	0.34	68
	95	69.22	25.51	0.31	62
	100	68.40	25.82	0.25	76
	103.3	67.73	26.07		

andesitic lava flow

$$\frac{\Delta T}{\Delta D} \sim 70^\circ \text{C/km}$$

$$K_{\text{H}_2\text{O}} \sim 4.5 \text{ W/m} \cdot \text{k}$$

$$Q \sim 315 \text{ mWm}^{-2}$$

$$7.5 \text{ HFU}$$

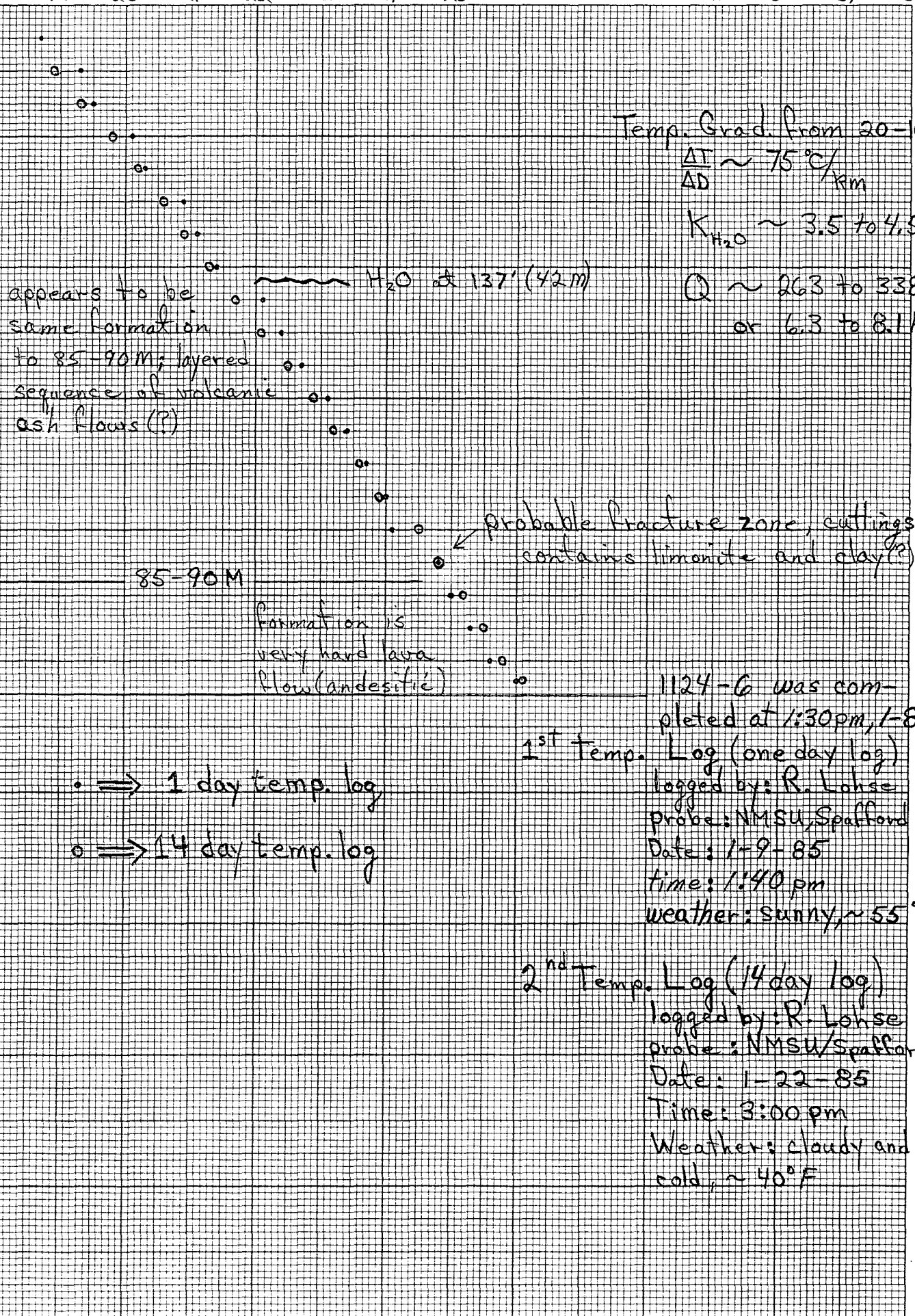
(Centigrade)

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

5  
10  
15  
20  
30  
40  
50  
60  
70  
80  
90  
100  
110  
120  
130  
140  
150

25120

(Meters)



Temp. Grad. from 20-100M

$\frac{\Delta T}{\Delta D} \sim 75 \text{ } ^\circ\text{C}/\text{km}$

$K_{H_2O} \sim 3.5 \text{ to } 4.5$

$Q \sim 263 \text{ to } 338 \text{ mW/m}^2$   
or 6.3 to 8.1 HFU

appears to be same formation to 85-90M; layered sequence of volcanic ash flows (?)

H<sub>2</sub>O at 137' (42m)

probable fracture zone, cuttings contains limonite and clay(?)

85-90M

formation is very hard lava flow (andesitic)

1124-6 was completed at 1:30pm, 1-8-85

1<sup>st</sup> Temp. Log (one day log)

logged by: R. Lohse  
probe: NMSU, Spafford  
Date: 1-9-85  
time: 1:40 pm  
weather: sunny, ~ 55°F

• ⇒ 1 day temp. log

○ ⇒ 14 day temp. log

2<sup>nd</sup> Temp. Log (14 day log)

logged by: R. Lohse  
probe: NMSU/Spafford  
Date: 1-22-85  
Time: 3:00 pm  
Weather: cloudy and cold, ~ 40°F



1-9-85 Hillsboro 1124-G  
1:40 pm Sunny ~ 55°F

Depth	Res	Temp	$\Delta T$
5	89.87	18.68	
10	87.79	19.30	
15	87.01	19.53	
20	85.27	20.07	
25	84.46	20.32	
30	82.76	20.85	
35	82.05	21.08	
40	81.16	21.37	
45	78.82	22.13	
50	78.11	22.37	
55	77.06	22.72	
60	76.07	23.06	
65	75.21	23.35	
70	74.23	23.70	
75	73.32	24.02	
80	72.98	24.14	
85	71.24	24.76	
90	70.54	25.02	
95	69.70	25.33	
100	68.91	25.63	
103.3	67.85	26.03	