

DRILL HOLE DATA SHEETHole Number: L-2Type of Hole: Shallow thermal gradient wellLocation: County Napa State CaliforniaDescription NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 27 Township 10NRange 6W Meridian MDM Elevation 1,920'Surface Ownership: Fee - Norman B. Livermore (620-3024)Minerals Ownership: Fee - Norman B. Livermore (620-3024)Date of: Spud in 7-11-75 Drilling Completed 7-11-75Completion 9-2-75 Abandonment 3-26-76Depth: Permitted 150 m Actual 500'Drilling Information: Lith Log and Temperature/Depth Log attachedWater Encountered: at 90'

Bond Number

Agency Permit Number

AMAX Permit Number

Federal		
State	BND 2-02-60-14	N/A
County	N/A	U-467475
		CA-OG-2002
		CA-NA-3001

Activity

Date

By

Cost of Survey
Support Cost

Drilled	7-11-75	Doshier-Gregson Drilling, Inc.	
TG Logging	8-12-75	AMAX	

Total

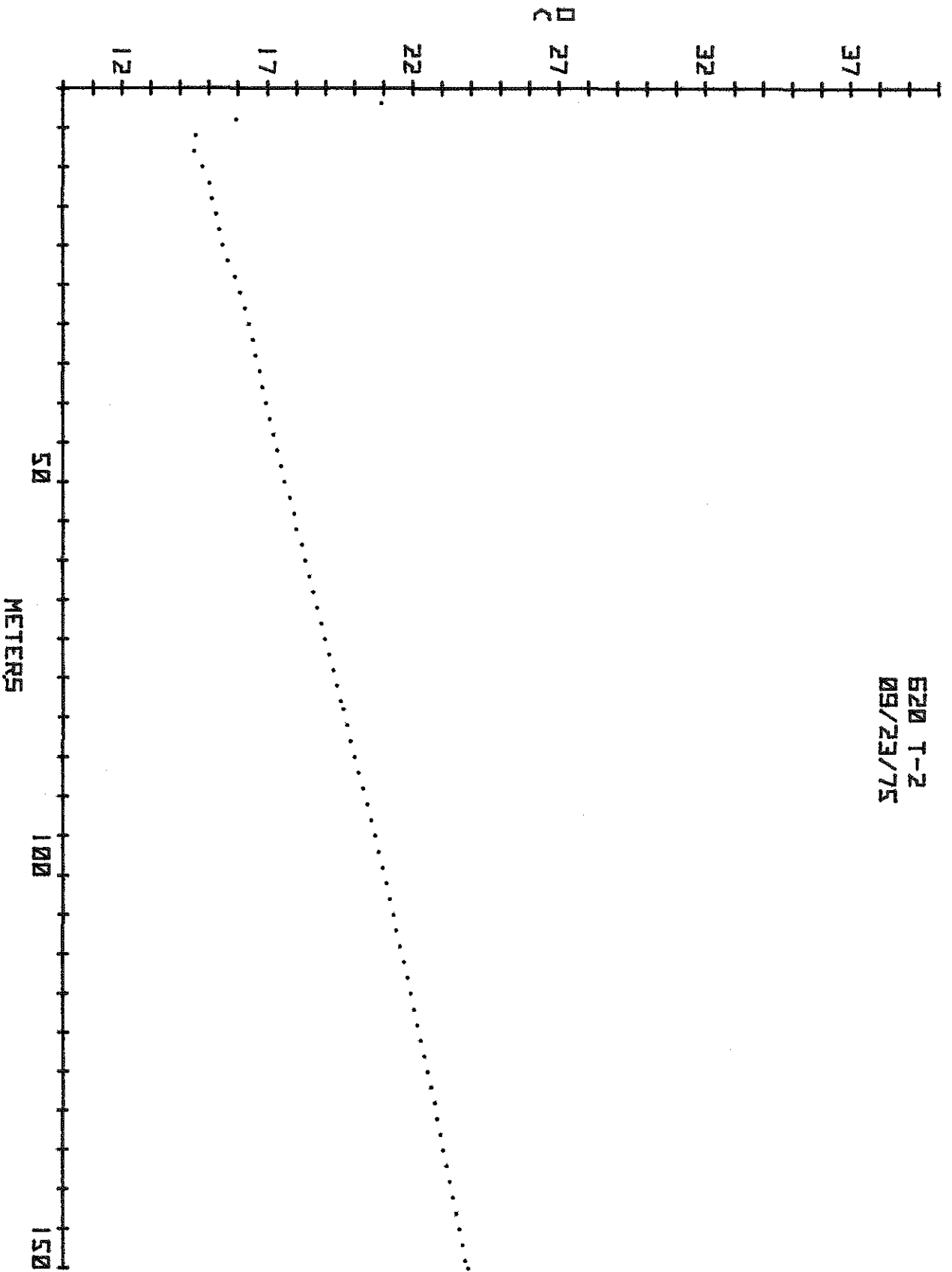
LITHOLOGIC LOG

PROPERTY: LIVERMORE 2
Sec 27 T10N R6W

ELEVATION: 1720'
Drilled: 7-11-75

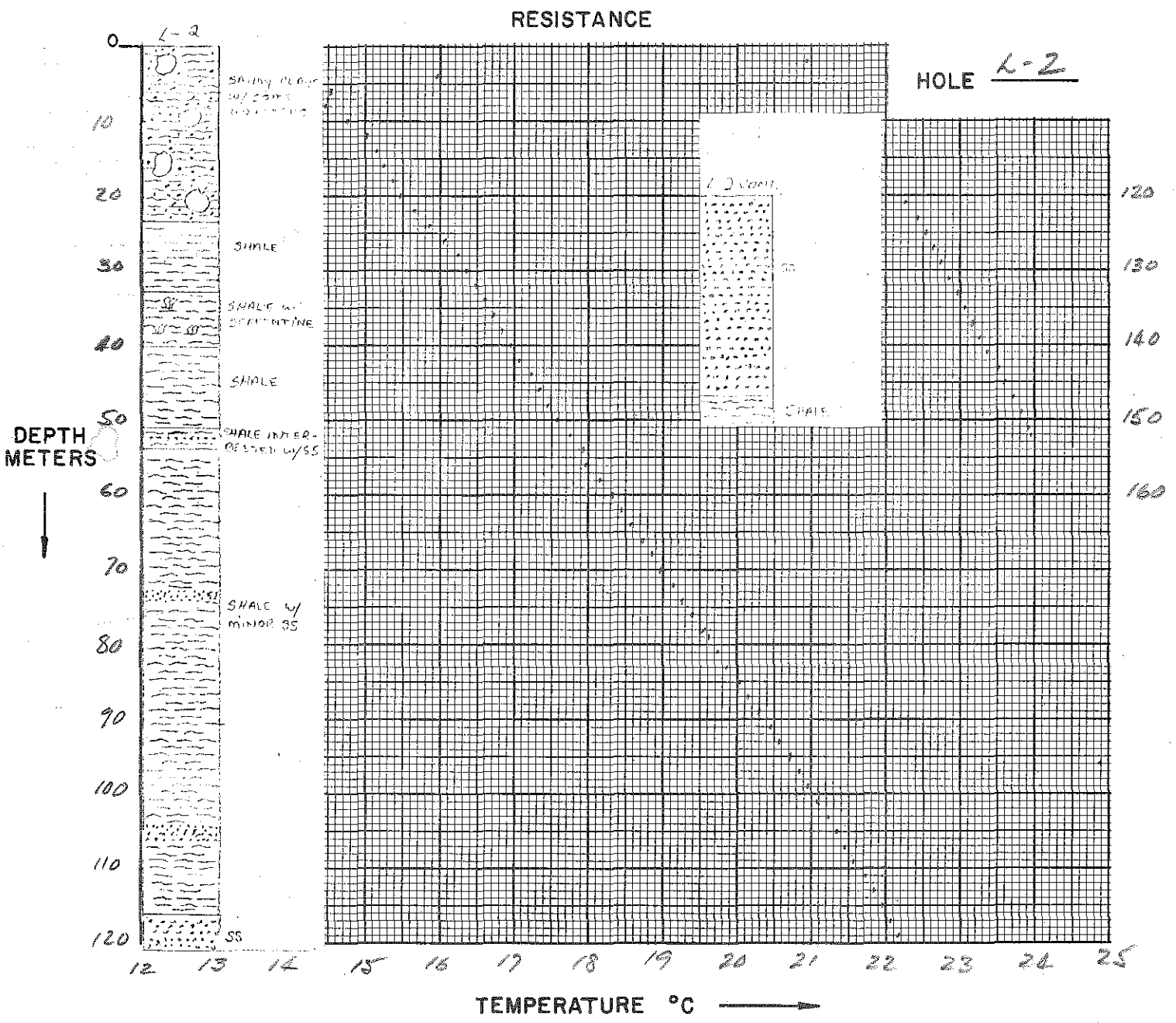
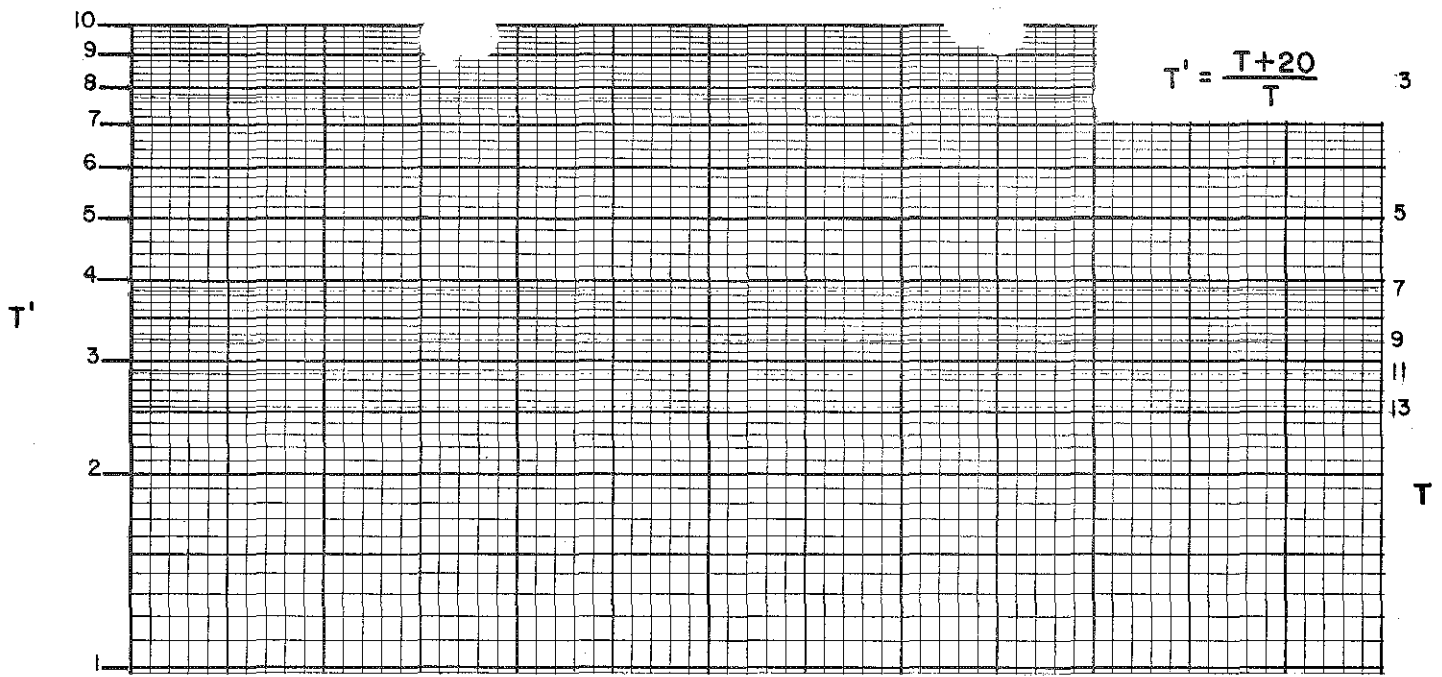
Feet	Description
0-75	Sandy clays with some boulders
75-107	Shale
107-111	Shale with serpentine?
111-130	Shale with serpentine?
130-165	Shale
165-175	Shale interbedded with sandstone
175-378	Shale (some sandstone at 240 and 340)
378-480	Sandstone
480-500	Shale Water at 90'

520 T-2
09/23/75



TEMPERATURE VS DEPTH LOG FOR WELL-620 T-2
 89/23/75 L-2

DEPTH METERS	TEMPERATURE DEGREES C	GRADIENT C/KM
2	20.945	-2492.5
4	15.96	-707.5
6	14.545	-35
8	14.475	147.5
10	14.77	120
12	15.01	60
14	15.13	65
16	15.26	57.5
18	15.375	55
20	15.485	90
22	15.665	115
24	15.895	90
26	16.075	80
28	16.235	67.5
30	16.37	60
32	16.49	55
34	16.6	57.5
36	16.715	60
38	16.835	62.5
40	16.96	60
42	17.08	65
44	17.21	67.5
46	17.345	62.5
48	17.47	62.5
50	17.595	85
52	17.765	77.5
54	17.92	27.5
56	17.975	97.5
58	18.17	67.5
60	18.305	70
62	18.445	67.5
64	18.58	65
66	18.71	67.5
68	18.845	67.5
70	18.98	72.5
72	19.125	72.5
74	19.27	65
76	19.4	67.5
78	19.535	70
79	19.605	70
81	19.745	70
83	19.885	65
85	20.015	70
87	20.155	72.5
89	20.3	72.5
91	20.445	70
93	20.585	65
95	20.715	62.5
97	20.84	65
99	20.97	60
101	21.09	60
103	21.21	57.5
105	21.325	65
107	21.455	60
109	21.575	72.5
111	21.72	60
113	21.84	52.5
115	21.945	55
117	22.055	60
119	22.175	55
121	22.285	60
123	22.405	55
125	22.515	60
127	22.635	57.5
129	22.75	50
131	22.85	55
133	22.96	50
135	23.06	57.5
137	23.175	50
139	23.275	55
141	23.385	60
143	23.505	47.5
145	23.6	52.5
147	23.705	50
149	23.805	50
151	23.905	158.3112583



TEMPERATURE - DEPTH LOG

Location 2620-030 26117 Date _____

Map _____

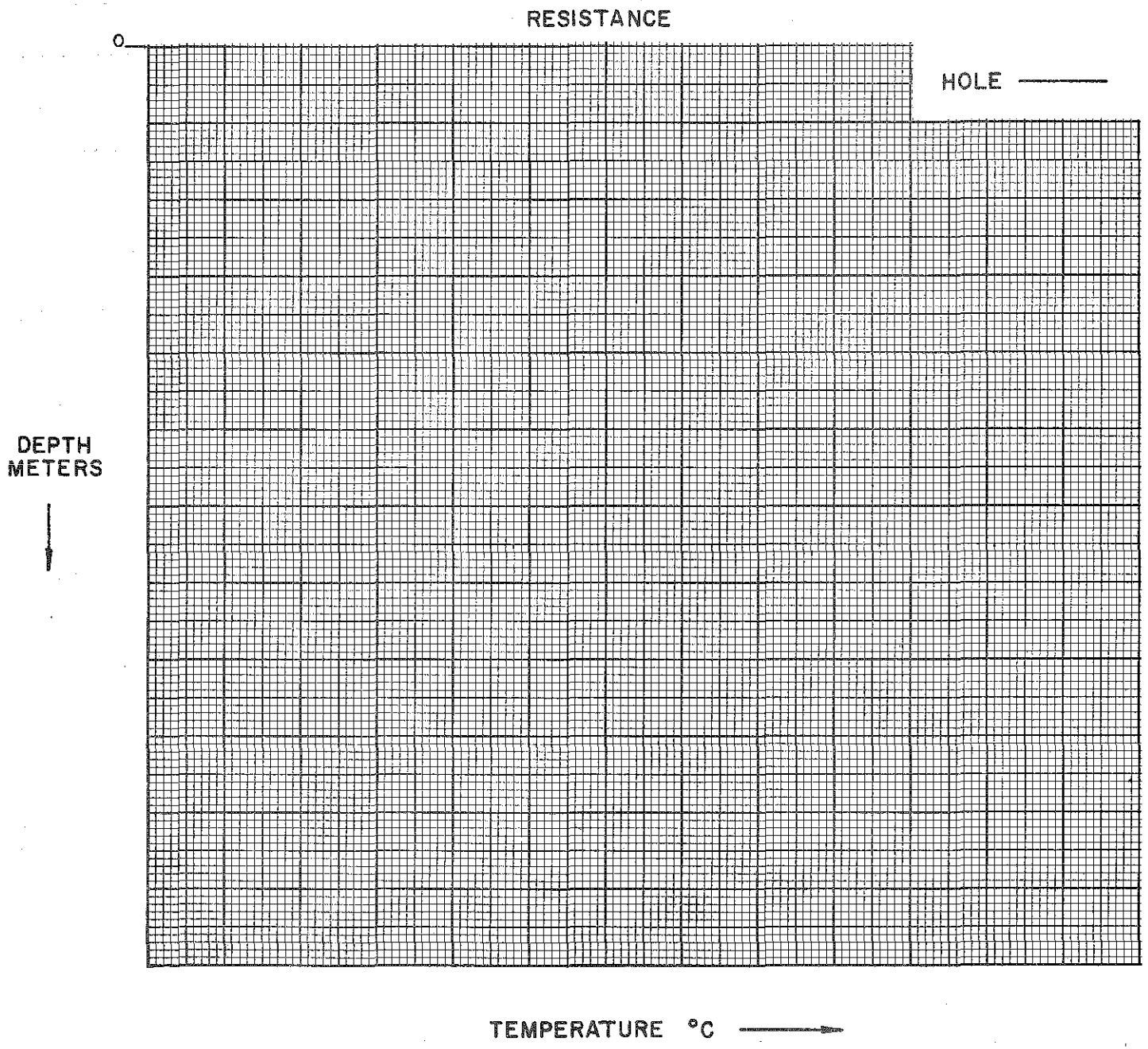
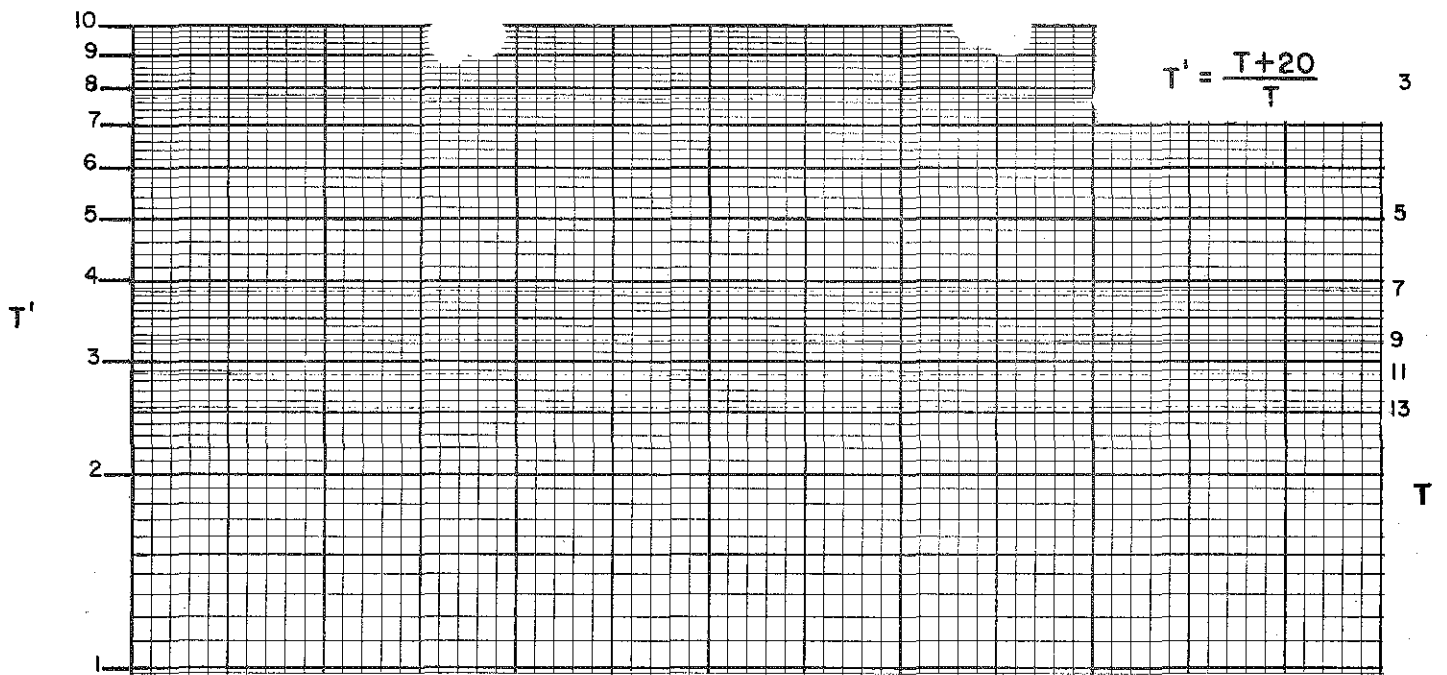
Property _____ T _____ R _____ sec _____

Drill Hole 2-0 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
44	4872	17.21			
			.135	67.5	
46	4846	17.345			
			.125	62.5	
48	4822	17.47			
			.125	62.5	
50	4798	17.595			
			.17	85	
52	4766	17.765			
			.155	77.5	
54	4737	17.92			
			.055	27.5	
56	4727	17.995			
			.195	97.5	
58	4691	18.17			
			.135	67.5	
60	4666	18.305			
			.14	70	
62	4641	18.445			
			.135	67.5	
64	4616	18.58			
			.13	65	
66	4593	18.71			
			.135	67.5	
68	4569	18.845			
			.135	67.5	
70	4545	18.98			
			.145	72.5	
72	4519	19.125			
			.145	72.5	
74	4494	19.27			
			.13	65	
76	4471	19.40			
			.135	67.5	
78	4448	19.535			
			.09	35*	
79	4436	19.605			dropped probe to 81m then retrieved
			.14	70	
81	4412	19.745			
			.14	70	
83	4388	19.885			
			.125	62.5	



TEMPERATURE - DEPTH LOG

Location CAV 137-234 16.1m Date _____

Map _____

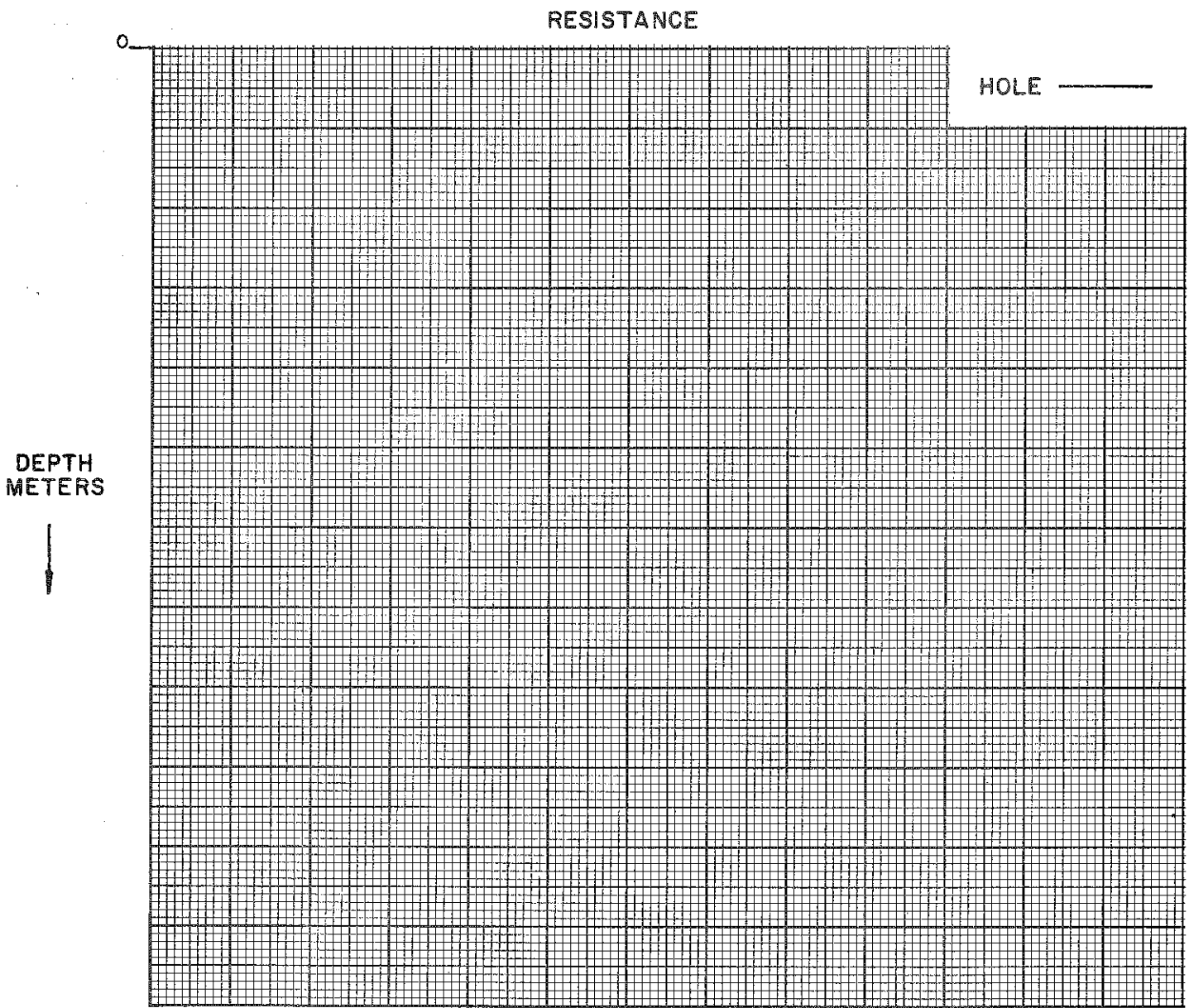
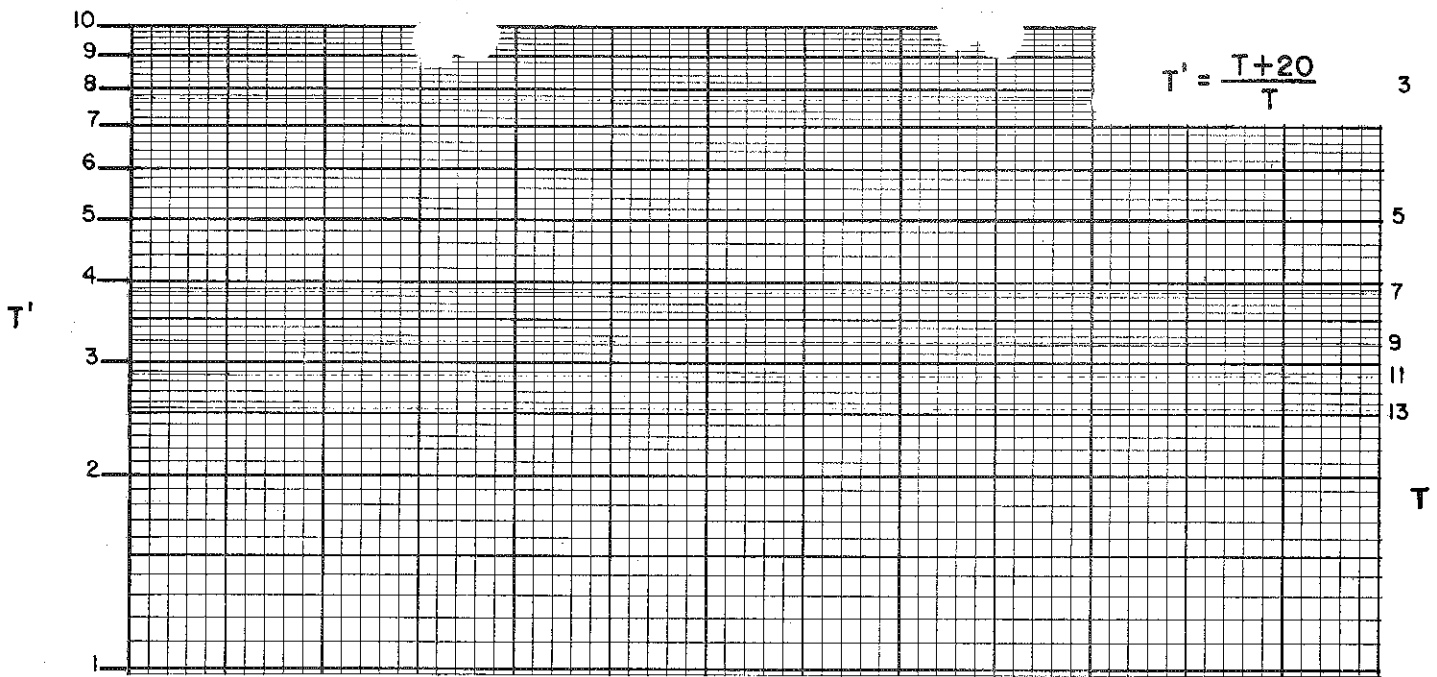
Property _____ T _____ R _____ sec _____

Drill Hole L-2 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
85	4366	20.015			
			.14	70	
87	4342	20.155			
			.145	72.5	
89	4318	20.30			
			.145	72.5	
91	4294	20.445			
			.14	70	
93	4271	20.585			
			.13	65	
95	4249	20.715			
			.135	67.5	
97	4229	20.84			
			.13	65	
99	4208	20.97			
			.12	60	
101	4188	21.09			
			.12	60	
103	4169	21.21			
			.115	57.5	
105	4151	21.325			
			.13	65	
107	4130	21.455			
			.12	60	
109	4111	21.575			
			.145	72.5	
111	4088	21.72			
			.12	60	
113	4070	21.84			
			.105	52.5	
115	4053	21.945			
			.11	55	
117	4036	22.055			
			.12	60	
119	4018	22.175			
			.11	55	
121	4001	22.285			
			.12	60	
123	3983	22.405			
			.11	55	
125	3966	22.515			
			.12	60	



TEMPERATURE °C ———→

