A00024

TEC-18

Best - Thermal Data Field Sheets
Wells 100-199

Properties

Best: Beaver County, Utah
Thermo: Beaver County, Utah
Thermex: Millard County, Utah

BEST —
THERMAL DATA - FIELD SHEETS
WELLS 100 - 199

DATE	ISSUED TO
GAYLORD 40	

TEMPERATURE DEPTH LOG

ΔT Well No. 100

Property-Project BEST

Depth Logged

Map ______ Scale ______ Date: Drilled ______ Logged ______

State ______ County ______ Section ______ T ______ R ______

Instrument ______ Operator ______ Elevation ______ ft.

Comments ______

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	100	14	AP	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
1.2 KM EAST OF LIME MOUNTAIN	JEO	/ALH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	30.	113.	15.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
7.0	20.2	5780.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	25.0	45.0	-8.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location SW¼ NE¼ sec 20 T 26 S R 11 W Date 14-April-76

Map Beaver Lake Mtns 15'

Property Best T 26 S R 11 W sec 20 SW¼, NE¼

Drill Hole Best 100 Date Drilled ____ Elevation 5780 ft.

Instrument ____ Operator JED

Comments Along S. side of rd to Skylark mine. Mineral exploration hole. In Monte Cristo L.S. (Recrystalized) 6" bore.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	6379 6248 6197	12.65 ~~4472~~			
10	5942 5903 5890	12.90	.25	50	
15	5817 5813 5812	12.86	-.04	-8	
20	5798 5795 5794	12.90	.04	8	
25	5774 5773 5772	12.99	.09	18	
30	5741 5740 5739	13.13	.14	28	
35	5708 5705 5704	13.29	.16	32	
40	5674 5671 5671	13.41	.12	24	
45	5646 5640 5639	13.57	.16	32	
99999.					
					25-45 m 29°C/Km

TEMPERATURE DEPTH LOG

ΔT Well No. 101

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 0 1	1 7	J L	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
3.8 KM NE ~~BAILEY~~ MOUNTAIN	JED	MLH

KM NE BAILEY MT, ΔUU-CRATER #3

Card B

Map Location

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
43-45	29.8	7200.	F

43,3 Use decimals 29,7

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	8.0	24.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	4.K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	24.0	50.0	-11.3/8	-.5
D				
E				
F				
G				

Final Segment: Start = .999

dup

____ of ____

TEMPERATURE - DEPTH LOG

17

Location _____ Date 18-JULY-76

Map ADAMSVILLE UT 15"

Property BEST T ____ R ____ sec ____

Drill Hole B-101 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments 1" STEEL PIPE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
0.5	4271	2058			
1.0	4710	18.07			
1.5	5472	14.29			
2.0	5969	12.15			
2.5	6418	10.38			
3.0	6749	9.17			
3.5	6966	8.41			
4.0	7075	8.04			
4.5	7117	7.90			
5.0	7110	7.92	0.02		
5.5	7076	8.04	0.12		
6.0	7028	8.20	0.16		
6.5	6957	8.44	0.24		
7.0	6909	8.61	0.17		
7.5	6871	8.74	0.13		
8.0	6840	8.85	0.11		
8.5	6811	8.95	0.10		
9.0	6789	9.03	0.08		
9.5	6765	9.11	0.08		
10.0	6748	9.17	0.06		
10.5	6731	9.23	0.06		

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec _____

Drill Hole B-101 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
11.0	6719	9.28	0.05		
11.5	6708	9.32	0.04		
12.0	6698	9.35	0.03		
12.5	6688	9.39	0.04		
13.0	6682	9.41	0.02		
14.0	6667	9.46	0.05		
15.0	6652	9.52	0.06		
16.0	6634	9.58	0.06		
17.0	6621	9.63	0.05		
18.0	6604	9.69	0.06		
19.0	6592	9.74	0.05		
20.0	6581	9.78	0.04		
21.0	6570	9.82	0.04		
22.0	6558	9.86	0.04		
23.0	6543	9.92	0.06		
24.0	6528	9.97	0.05		
25.0	6514	10.01	0.04		
26.0	6500	10.08	0.07		
28.0	6481	10.15	0.07		
30.0	6460	10.23	0.08		
32	6447	10.27			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec _____

Drill Hole B-101 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments T = 19.5° flow.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
34	6435	10.32	0.05		
36	6426	10.35	0.03		
38	6418	10.38	0.03		
40	6409	10.42	0.04		
42	6401	10.45	0.03		
44	6392	10.48	0.03		
46	6384	10.51	0.03		
48	6376	10.54	0.03		
50	6365	10.58	0.04		
~~52~~	~~6356~~	~~10.~~			
~~54~~	~~6347~~				
~~56~~	~~6341~~				
99999.					

TEMPERATURE - DEPTH LOG

Location Crest of Mineral Range. E. of Negro Mag Wash. Date 14-Apr-76

Map Adamsville 15"

Property BEST T2.7S R8W sec 6 NE¼

Drill Hole Best 101 Date Drilled _____ Elevation 7200 ft.

Instrument _____ Operator JED

Comments Gradient hole - w/ 1" galvanized steel pipe.

Cuttings indicate weathered coarse-grained qtz monzonite.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	7278	7.37			upper 3m. in air
6	6878	8.72	1.35	675	
8	6733	9.23	0.51	255	
10	6706	9.33	0.10	50	
12	6665	9.47	0.14	70	
14	6650	9.53	0.06	30	
16	6615	9.66	0.13	65	
18	6582	9.78	0.12	60	
20	6562	9.85	0.07	35	
22	6538	9.94	0.09	45	
24	6508	10.05	0.11	55	
26	6480	10.15	0.10	50	
28	6461	10.22	0.07	35	
30	6440	10.30	0.08	40	
32	6428	10.35	0.05	25	
34	6416	10.39	0.04	20	
36	6407	10.43	0.04	20	
38	6399	10.46	0.03	15	
40	6391	10.49	0.03	15	
42	6383	10.52	0.03	15	
44	6374	10.55	0.03	15	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

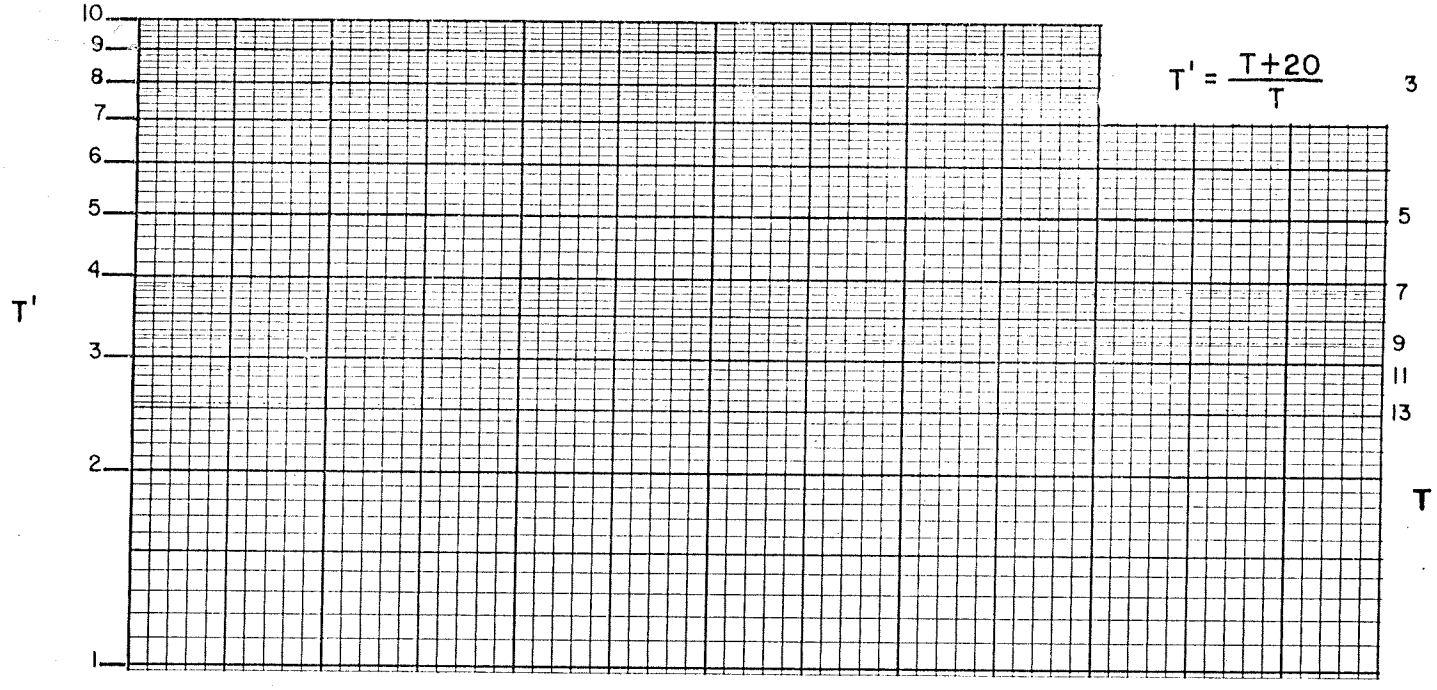
Property _____ T _____ R _____ sec _____

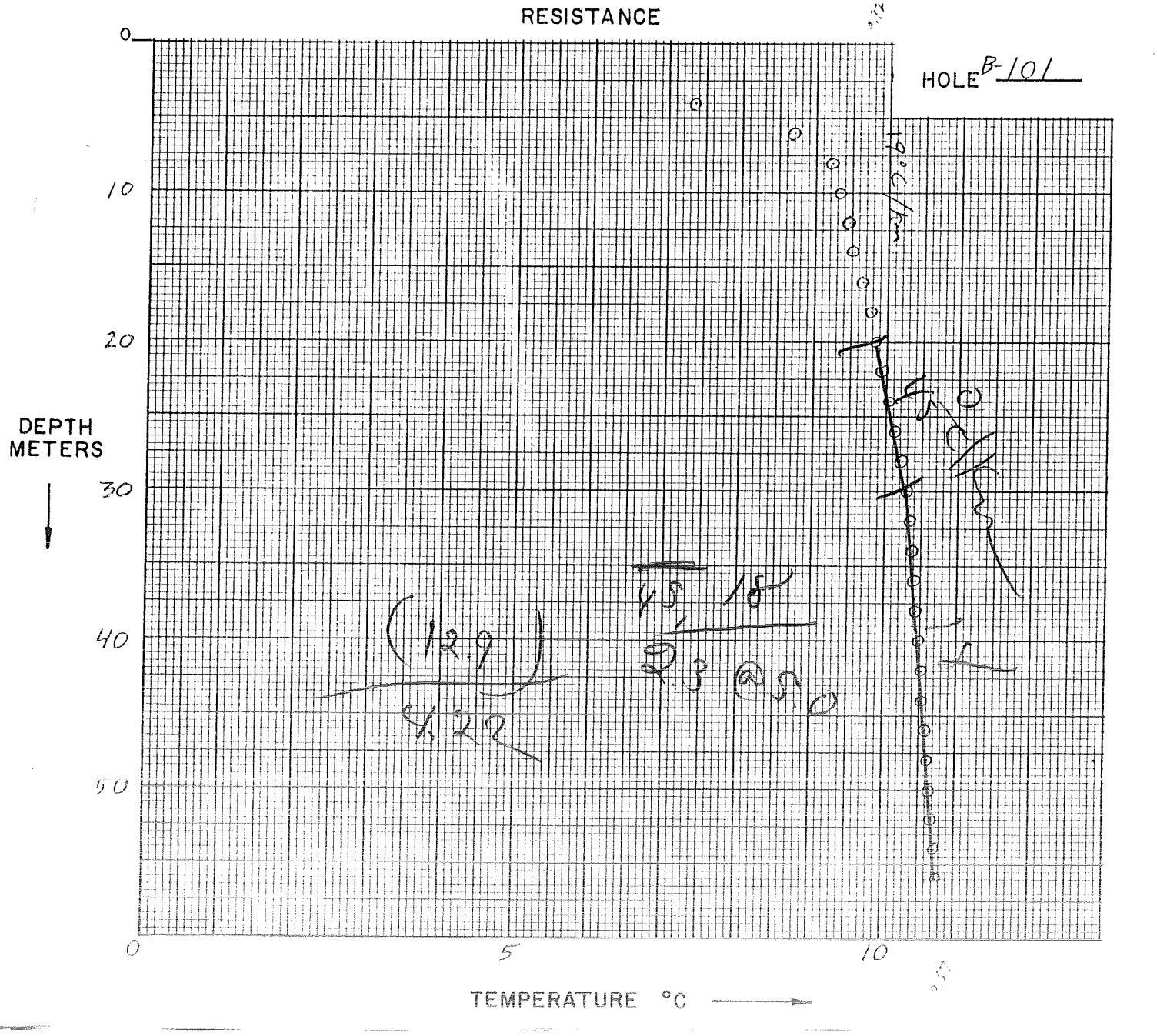
Drill Hole BEST - 101 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	6366	10.58	0.03	15	
48	6356	10.62	0.04	20	
50	6346	10.66	0.04	20	
52	6338	10.69	0.03	15	
54	6330	10.72	0.03	15	
56	6323	10.75	0.03	15	
					36-56 m 16°C/Km


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-101
DEPTH METERS
0
10
20
30
40
50
0
5
10
TEMPERATURE °C

TEMPERATURE DEPTH LOG

ΔT Well No. 102

Property-Project Best

Depth Logged

Map

Scale

Date: Drilled

Logged

State

County

Section

T

R

Instrument

Operator

Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	102	04 (00)	AG (00)	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
3.1 KM NORTH OF BAILEY MTN	JED	MLH

KM N. BAILEY MT, UU 21

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
43.0 (42.9)	24.75 (24.8)	6400.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	9.5	15.5		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	17.5	21.5	-5.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

102 dup

of

TEMPERATURE - DEPTH LOG

Location IN NIGGER MAG WASH Date 4-AUG-76 (~1300)

Map ADAMSVILLE UT, 15"

Property T 27S R 9W sec 1 SW¼ NW¼

Drill Hole B-102 Date Drilled Elevation 6400 ft.

Instrument Operator JED

Comments 3/4" WATER FILLED PVC PIPE. SOIL OF WEATHERED GRANITE. AIR TEMP 20.0°C

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
0.5	4111	21.58			
1.0	4264	20.62			
1.5	4555	18.92	-1.77		
2.0	4883	17.15	-2.00		
2.5	5288	15.15	-1.49		
3.0	5613	13.66	-1.15		
3.5	5882	12.51	-0.52		
4.0	6007	11.99	-0.26		
4.5	6073	11.73	-0.02		
5.0	6076	11.71	0.16		
5.5	6037	11.87	0.20		
6.0	5988	12.07	0.41		
6.5	5890	12.48	0.33		
7.0	5810	12.81	0.34		
7.5	5731	13.15	0.31		
8.0	5659	13.46	0.33		
8.5	5585	13.79	0.28		
9.5 4.0	5455	14.32	0.22		
10.0 9.5	5408	14.54	0.19		
10.5	5365 5367	14.78	0.22		
11.0	5318	15.00			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole B-102 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
11.5	5263	15.26	0.26		
12.0	5222	15.46	0.20		
12.5	5180	15.66	0.20		
13.0	5141	15.85	0.19		
13.5	5100	16.05	0.20		
14.0	5062	16.24	0.19		
14.5	5031	16.40	0.16		
15.0	4994	16.58	0.18		
15.5	4949	16.81	0.23		
16.0	4922	16.95	0.14		
16.5	4890	17.11	0.16		
17.0	4866	17.24	0.13		
17.5	4838	17.39	0.15		
18.0	4817	17.50	0.11		
18.5	4798	17.61	0.11		
19.0	4779	17.70	0.09		
19.5	4765	17.83	0.13		
20.0	4735	17.93	0.10		
20.5	4713	18.05	0.12		
21.0	4697	18.14	0.09		
21.5	4679	18.24	0.10		
99999.					

TEMPERATURE - DEPTH LOG

Location NEGRO MAG WASH. Date 14-APRIL-76

Map ADAMSVILLE 15'

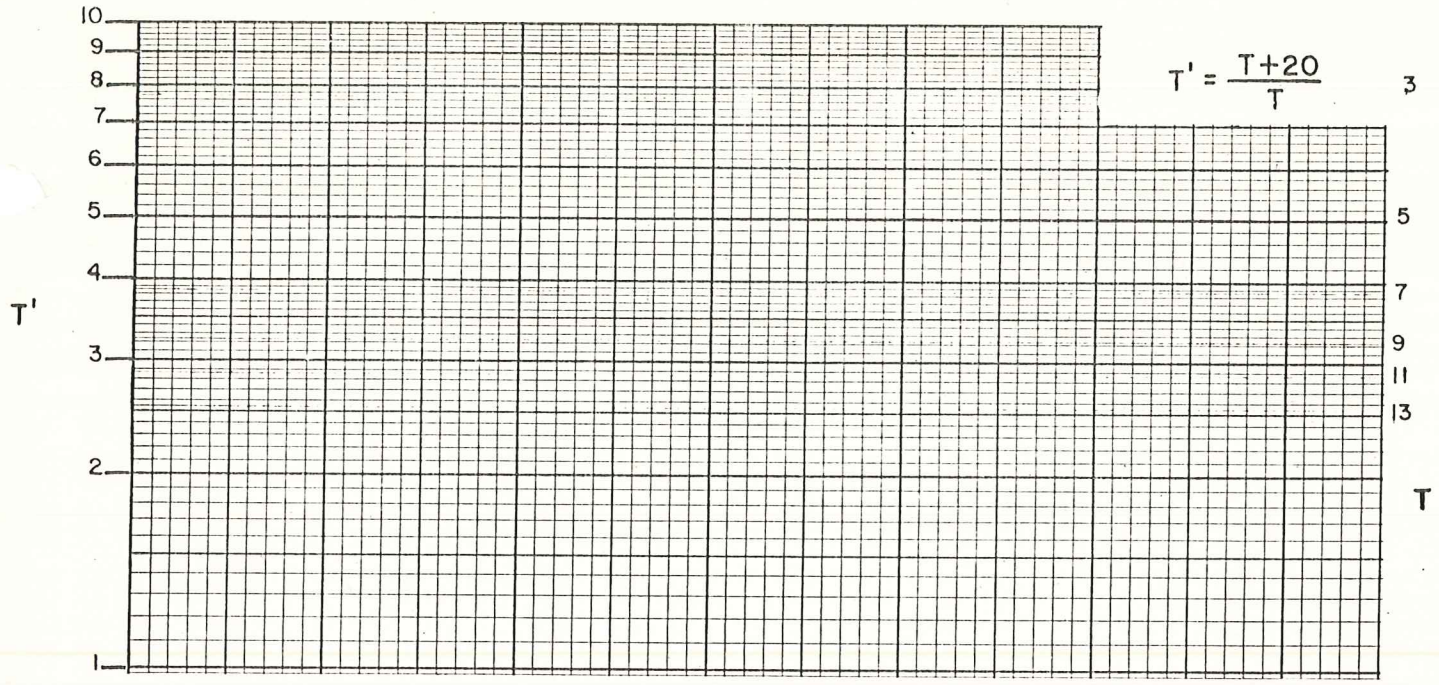
Property BEST T 27S R 9W sec/ CENTER W. EDGE

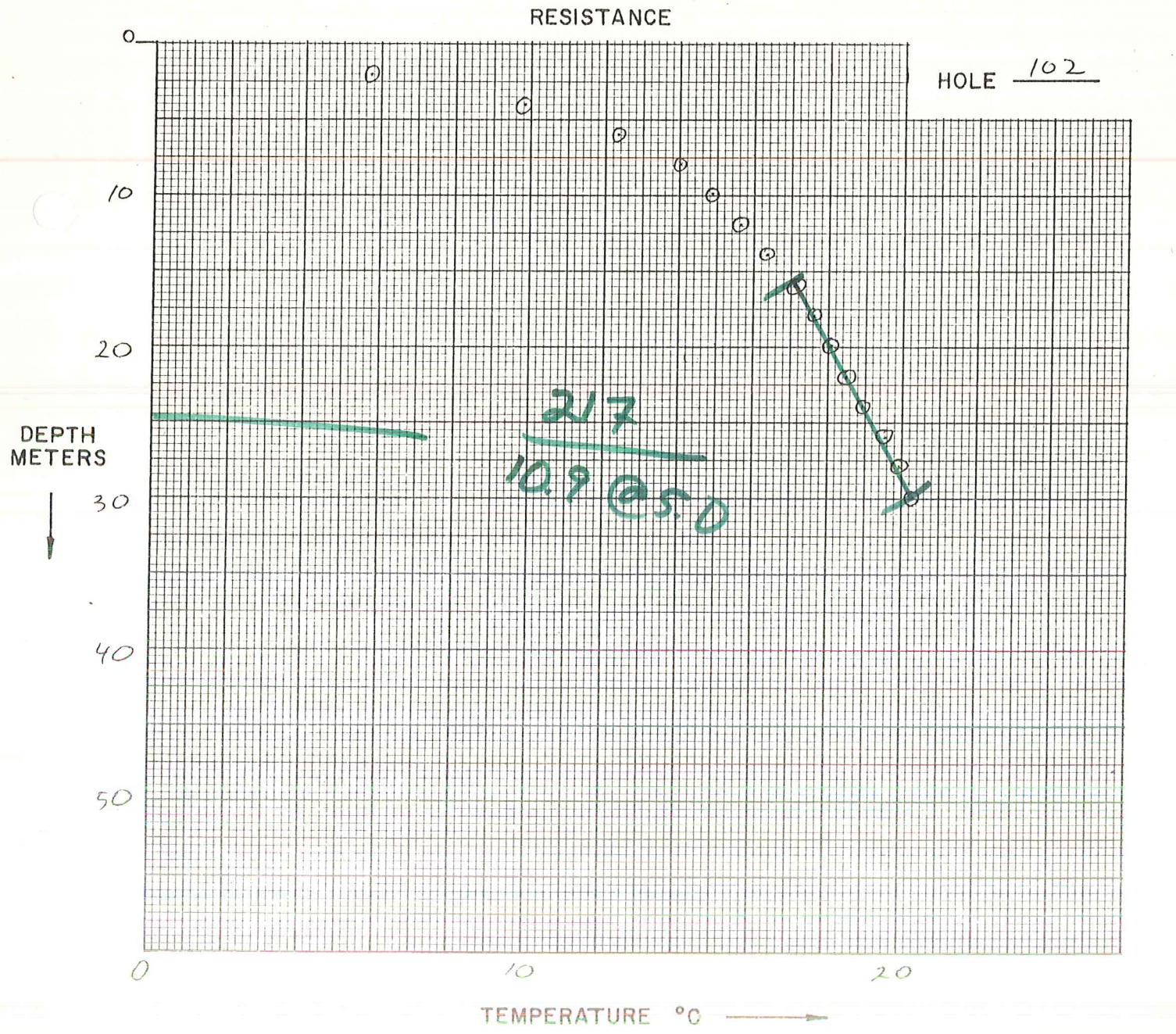
Drill Hole BEST-102 Date Drilled ____ Elevation 6400 ft.

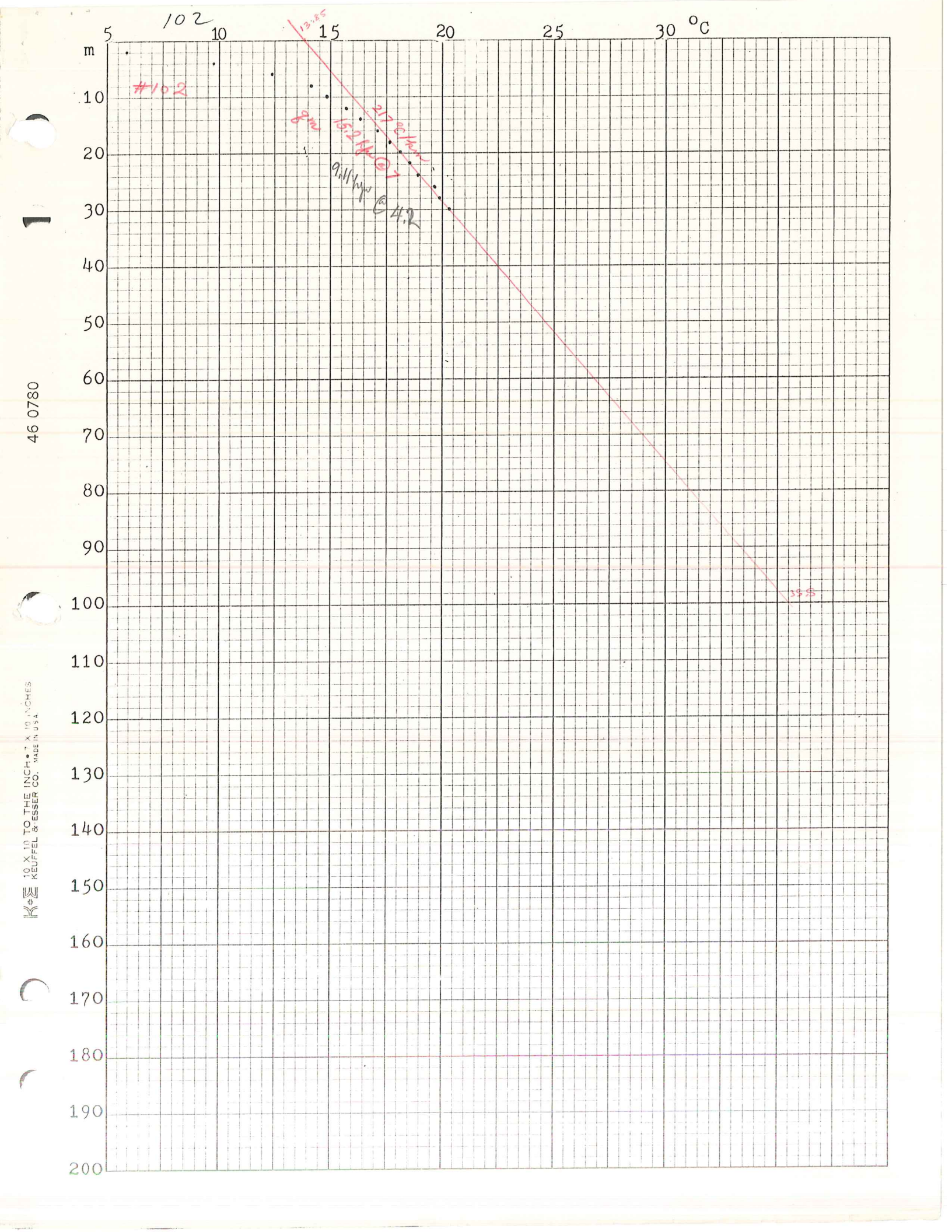
Instrument ____ Operator ____

Comments PHILLIPS GRADIENT HOLE. 3/4" PVC PIPE 6" ABOVE SURFACE. MED-GRAINED QTZ MONZONITE.

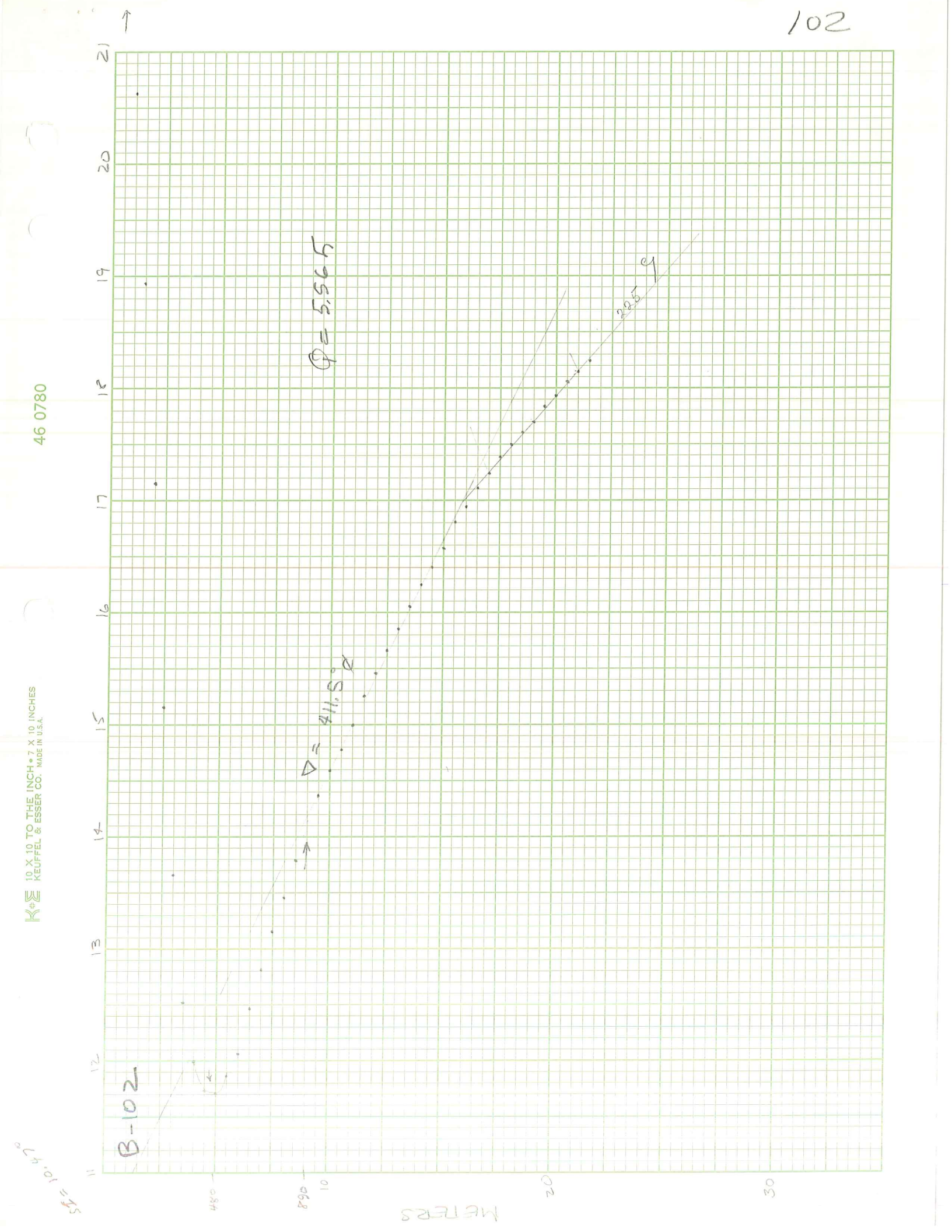
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
2	7754	5.87			
4	6585	9.76	3.89	1945	
6	5919	12.35	2.59	1295	
8	5531	14.02	1.67	835	
10	5347	14.87	.85	425	
12	5179	15.67	.80	400	
14	5026	16.42	.75	375	
16	4886	17.14	.72	360	
18	4791	17.64	.50	250	
20	4704	18.10	.46	230	
22	4629	18.51	.41	205	
24	4545	18.98	.47	235	
26	4439	19.59	.61	305	
28	4375	19.96	.37	185	
30	4315	20.32	.36	180	
					GRADIENT 20-30m 222 °C/km


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE 102
DEPTH METERS
0
10
20
30
40
50
2.17
10.9 @ 5.0
0
10
20
TEMPERATURE °C



46 0780
KE 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.



46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 103

Property-Project Best

Depth Logged

Map ____ Scale ____ Date: Drilled ____ Logged ____

State ____ County ____ Section ____ T ____ R ____

Instrument ____ Operator ____ Elevation ____ ft.

Comments ____

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	103	31	JL	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
3.3 KM SE OF BRADSHAW MTN	JED	MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	15.	113.	00.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,–) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
~~10.45~~ 8.9	~~41.05~~ 4.10	6330.		F

Use decimals

80: Write M if meters

SEGMENT DEPTH

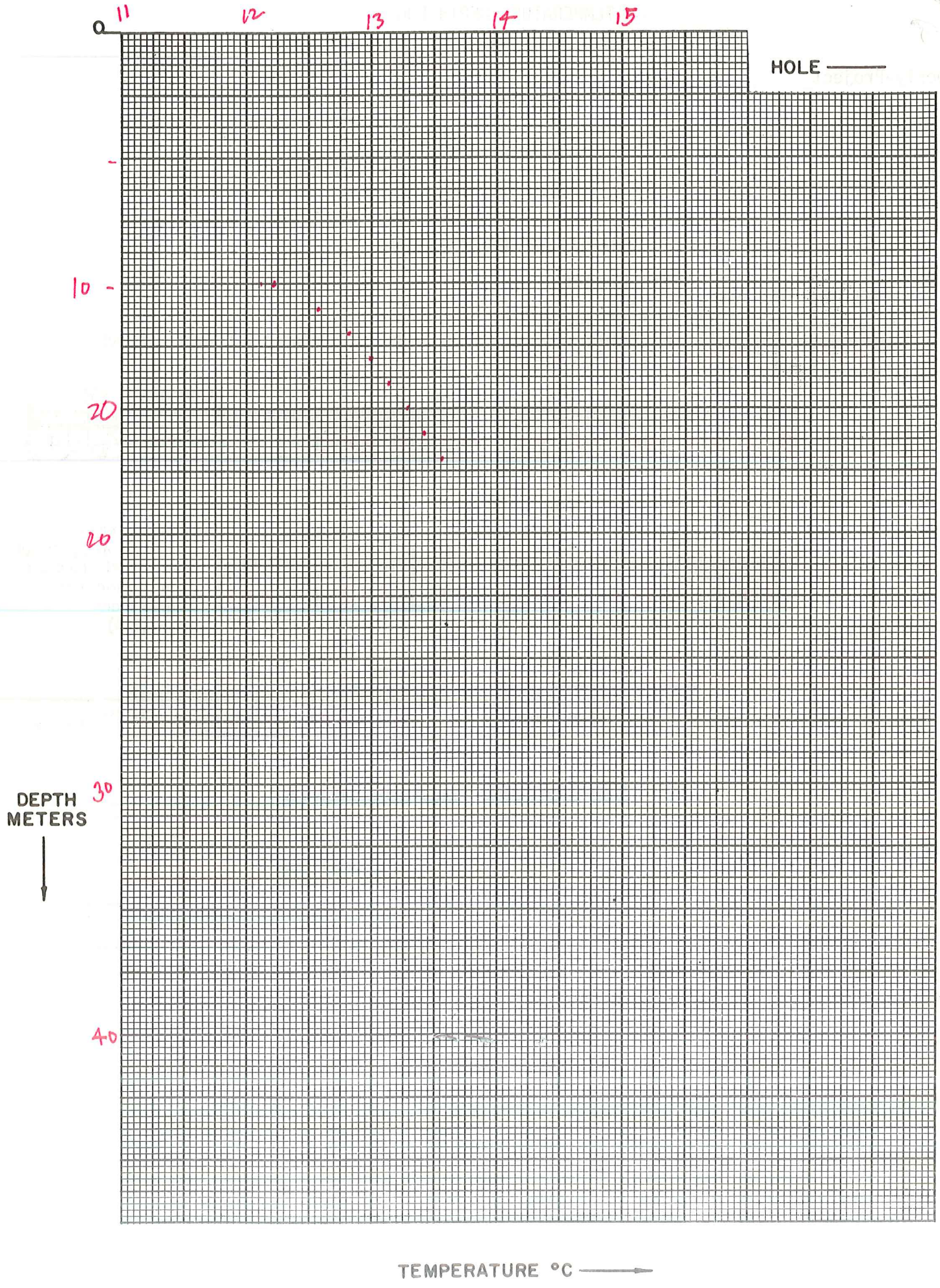
	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	16.0	24.0	-7.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999


11
12
13
14
15
HOLE
10
20
30
40
DEPTH METERS
TEMPERATURE °C

probably 103.

of

TEMPERATURE - DEPTH LOG

Location 200 m S. OF LINCOLN MINE Date 31-JULY-76

Map CAVE CANYON UT. 7½"

Property T 29S R 9W sec 20 NW¼ SE¼

Drill Hole B-~~106~~ 103 Date Drilled Elevation ft.

Instrument Operator JEO

Comments 3/4" PVC PIPE WATER FILLED IN 2" MINERAL EXPLORATION HOLE, CUTTINGS OF LIMESTONE & MINOR MARBLE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	5853	12.63			
			-0.89		
6	6069	11.74			
			0.16	80	
8	6031	11.90			
			0.32	154	
10	5951	12.22			
			0.36	180	
12	5865	12.58			
			0.24	120	
14	5809	12.82			
			0.17	85	
16	5768	12.99			
			0.15	75	
18	5734	13.14			
			0.15	75	
20	5699	13.29			
			0.13	65	
22	5669	13.42			
			0.14	70	
24	5636	13.56			GRADIENT 18-24m 70°C/Km
99999.					

TEMPERATURE - DEPTH LOG

Location 0.2 MILE SOUTH OF LINCOLN MINE Date 15-APRIL-76

Map Adamsville 15" Cave Canyon 7½

Property BEST T 29S R 9W sec 20 NW¼ SE¼

Drill Hole BEST 103 Date Drilled _____ Elevation 6330 ft.

Instrument _____ Operator JED

Comments 2" CORE HOLE, LT-GRAY TO DK-GRAY THICK BEDDED TO MSV PARTLY REXLIZED LIMESTONE. CALCITE FILLING FRACTURES,

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6486 6395 6373	10.97			
	6364		0.89	445	
6	6069 6053	11.86			
	6042 6041		0.61	305	
8	5906 5895				
	5892 5892	12.47			
10	5825 5819		0.31	155	
	5818 5817	12.78			
12	5783 5780		0.17	85	
	5778 5778	12.95			
14	5755 5754		0.11	55	HANDFULL OF RUBBLE FELL INTO HOLE, AT 14 m
	5753 5753	13.06			
16	5738 5734		0.09	45	
	5732 5732	13.15			
18	5714 5710		0.10	50	
	5708 5708	13.25			
20	5684 5679		0.14	70	
	5677 5676	13.39			
22	5652 5647		0.13	65	
	5645 5645	1352			
24	5618 5613		0.16	80	
	5610 [illegible]	13.68			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

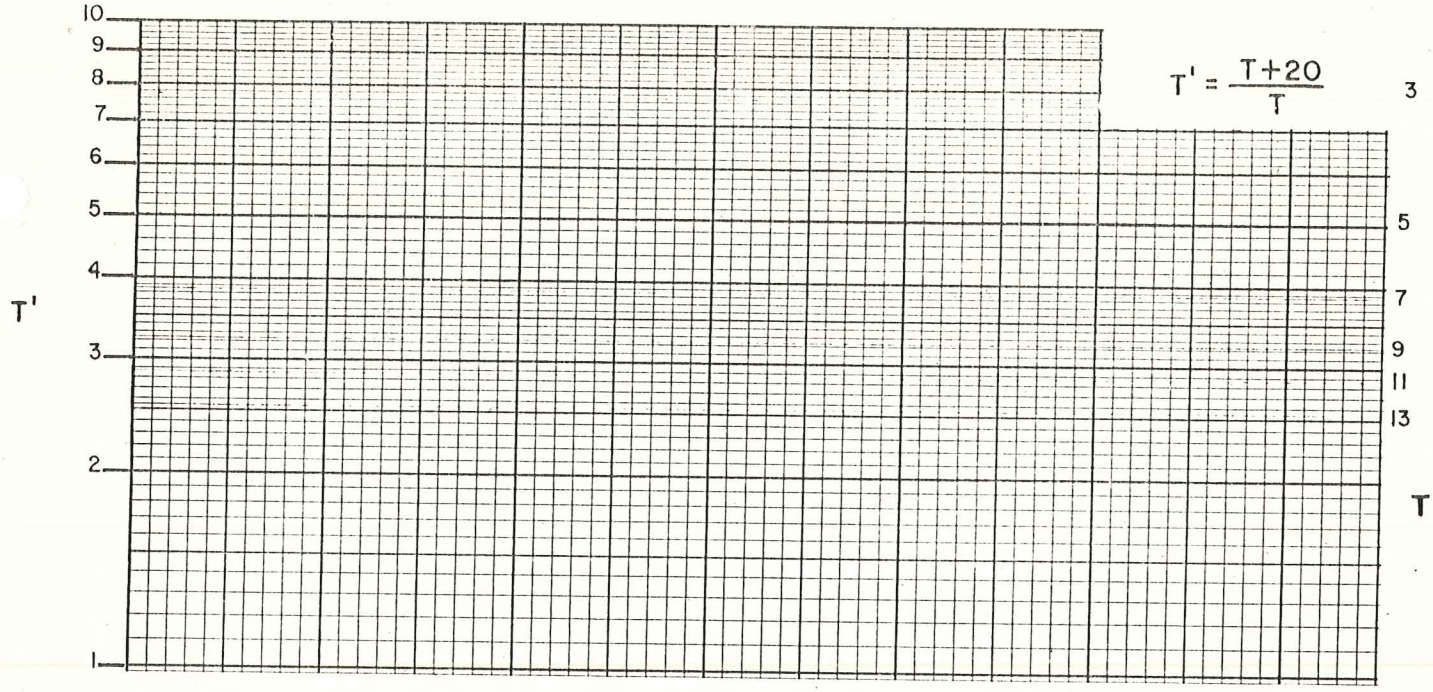
Property _____ T ____ R ____ sec _____

Drill Hole BEST-103 Date Drilled _____ Elevation ____ ft.

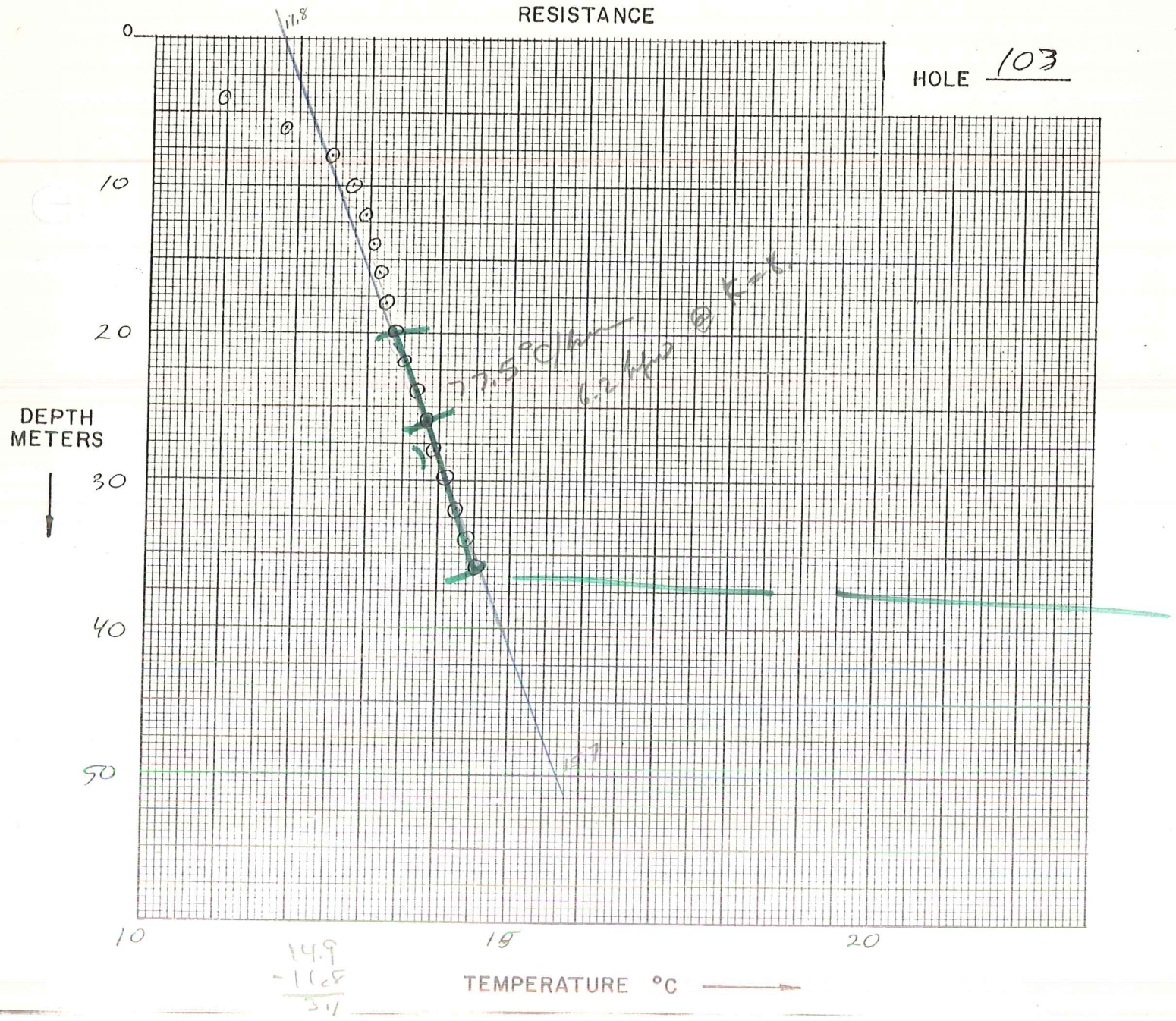
Instrument _____ Operator _____

Comments _____

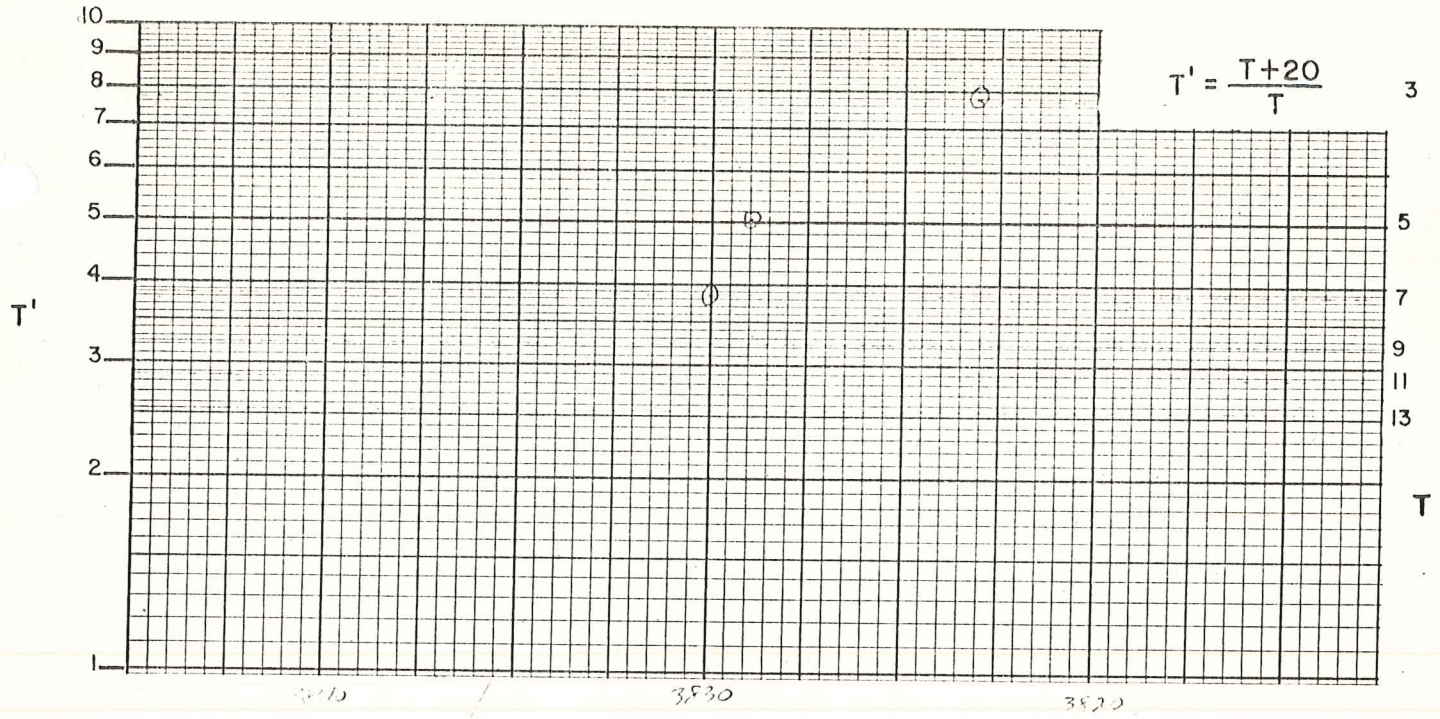
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
26	5573 5573	13.84	.16	80	
28	5546	13.96	.12	60	
30	5514	14.11	.15	75	
32	5481	14.26	.15	75	
34	5446	14.41	.15	75	
36	5417	14.55	.14	70	
					GRADIENT 26-36m 71°C/Km

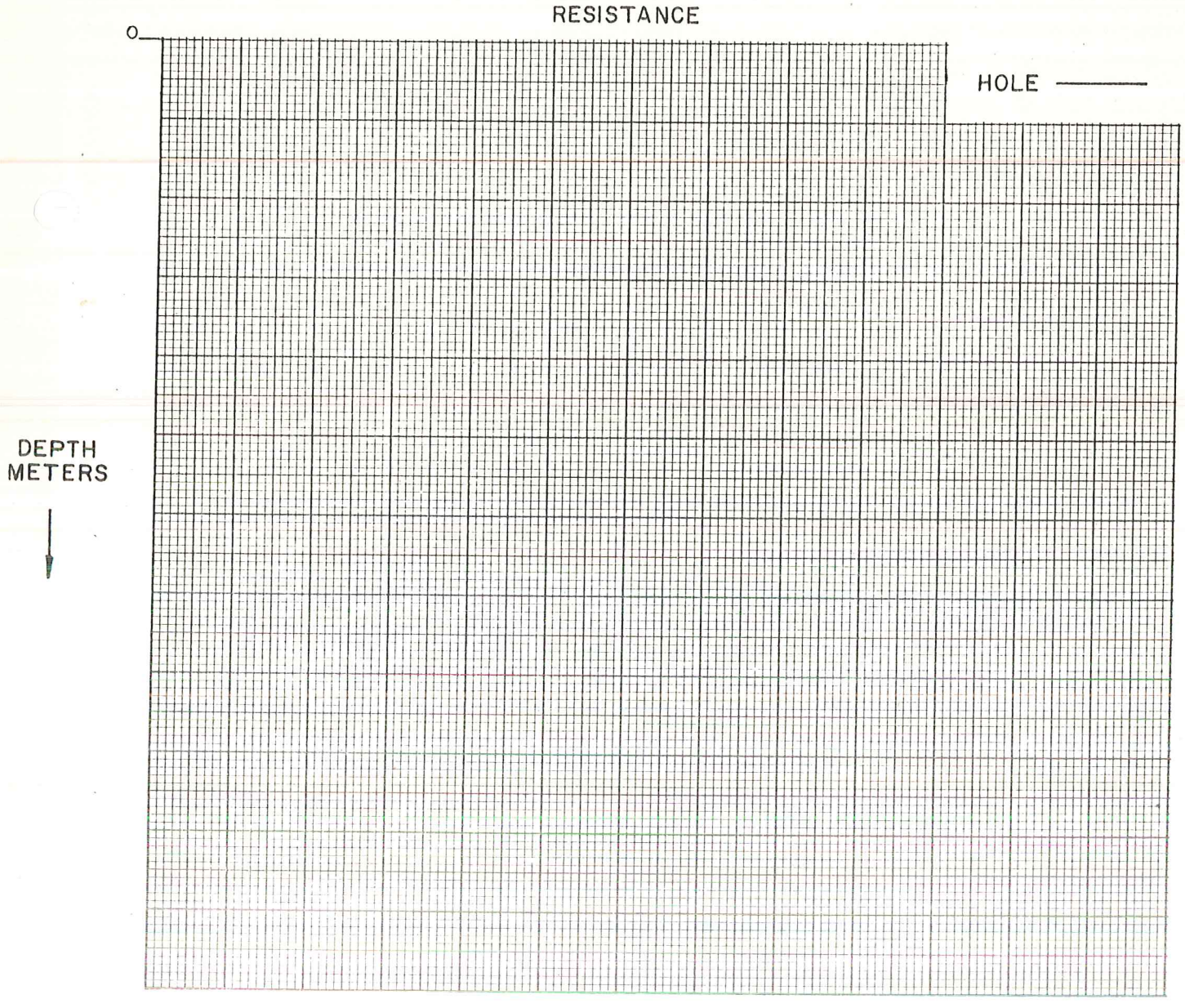


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13

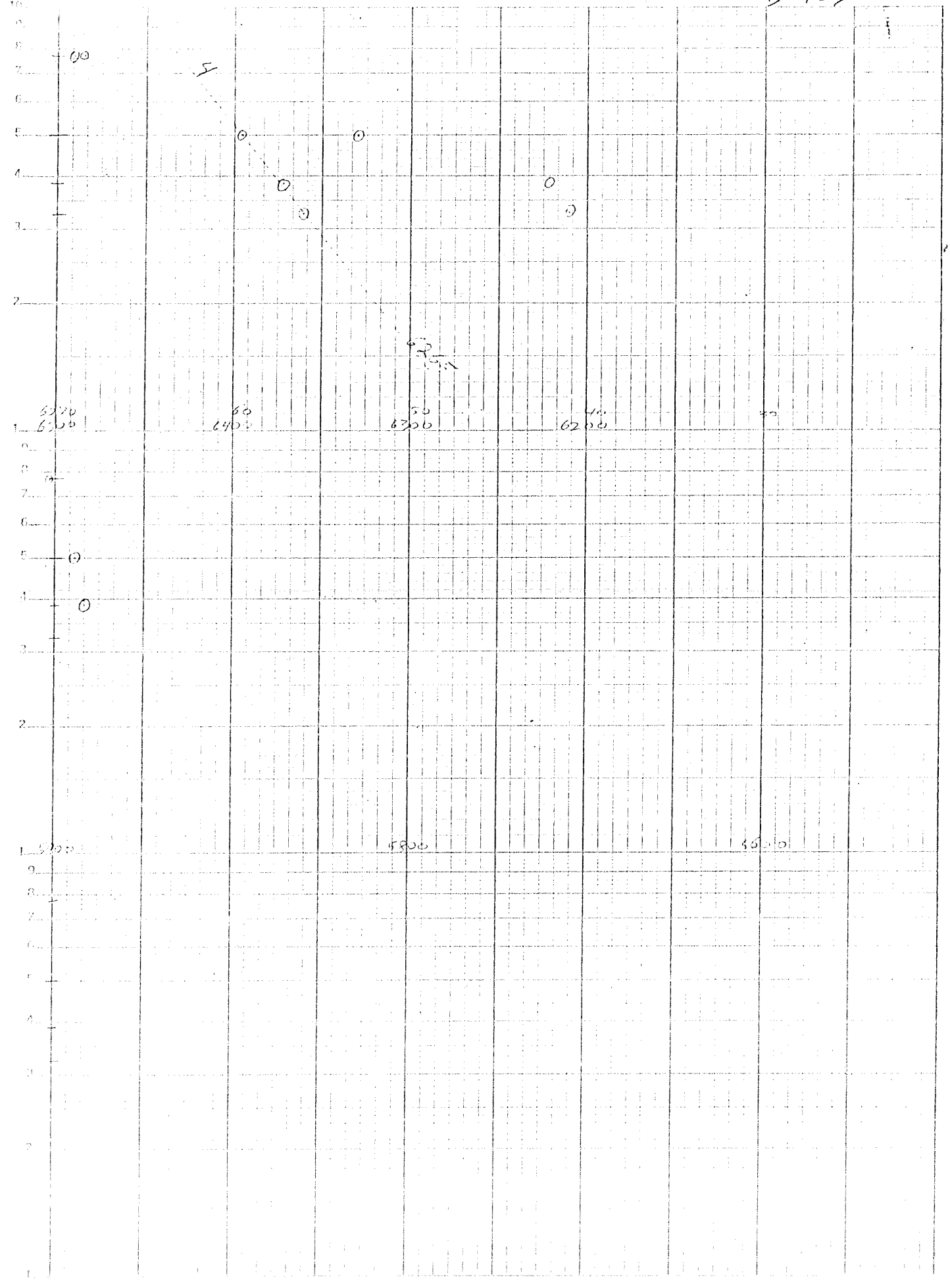


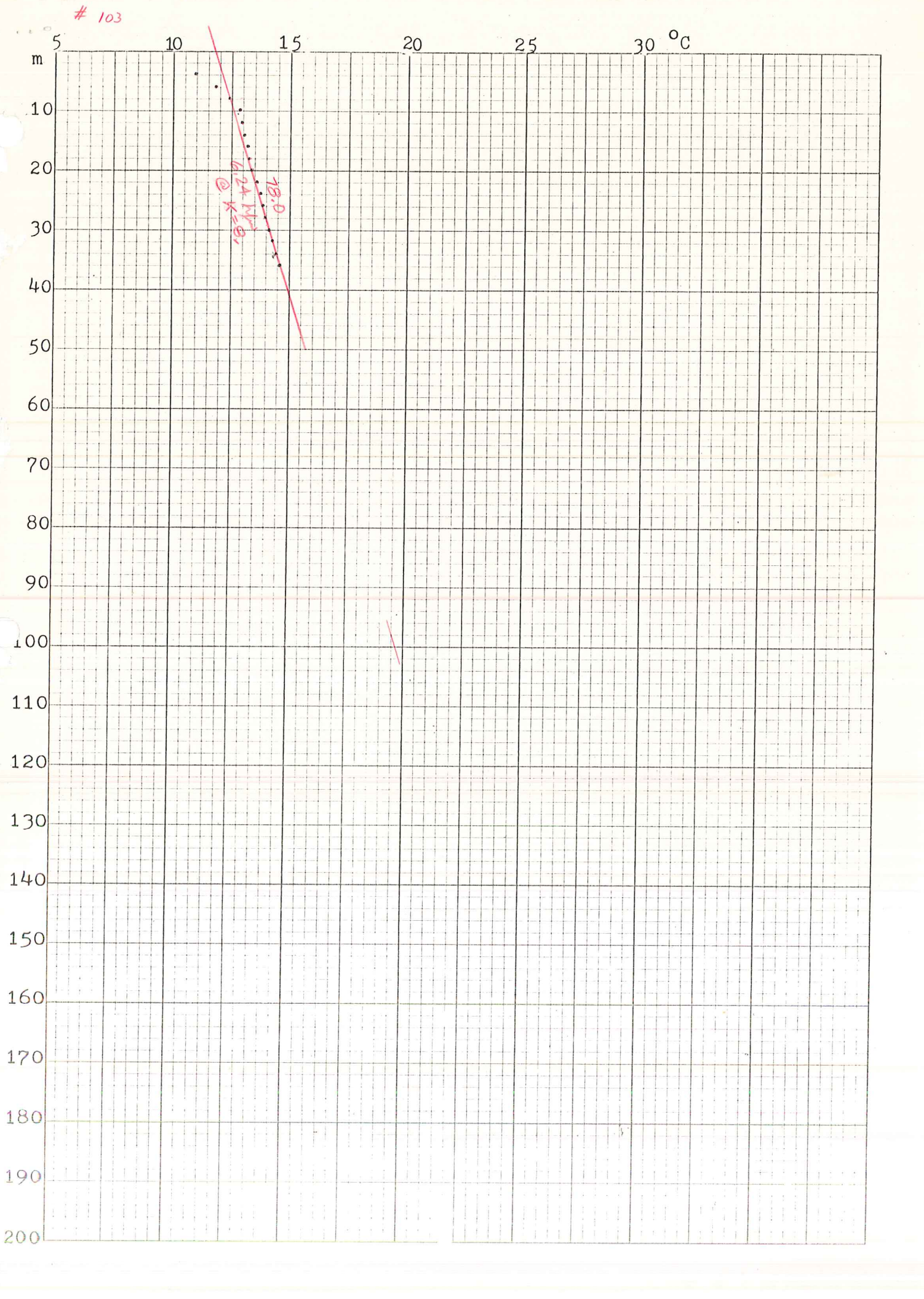
RESISTANCE
HOLE 103
DEPTH METERS
0
10
20
30
40
50
10
15
20
TEMPERATURE °C
11.8
15.7
77.5 °C/km
6.2 kpa @ K=8.
14.9
-11.8
3.1


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T
3815
3830
3832


RESISTANCE
0
HOLE
DEPTH
METERS
TEMPERATURE °C

B-103




103
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
79.0
6.24 MW
@ K=8,

TEMPERATURE DEPTH LOG

ΔT Well No. 104

Property-Project Lincoln 778 Depth Logged

Map Cave Canyon Scale 7½ Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA	MO →	YR	*
778	104	15	AP	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
0.5KM S. LINCOLN MINE, 2IN CORE	JED	ALL

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
CM	7.5	38.	15.	113.	0.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
9.1	41.05	6300.	F

Use decimals

← Write M if meters

TEMPERATURE MEASUREMENTS

SEGMENT DEPTH

	Start	End	K	ΔK
C	20.	26.	8.	1.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	28.	36.	-8.	-1.5
D				
E				
F				
G				

Final Segment: Start = 999

Date Logged: _____ ΔT Well No. 104

Use Decimals

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
4.		10,97					
6.		11.86					
8.		12.47					
10.		12.78					
12.		12.95					
14.		13,06					
16.		13.15					
18.		13.25					
20.		13.39					
22.		13.52					
24.		13.68					
26.		13.84					
28.		13.96					
30.		14.11					
32.		14.26					
34.		14.41					
36.		14.55					
99999.							

AFTER LAST DEPTH ENTER 99999.

K=Conductivity

page _____ of _____

104 of

TEMPERATURE - DEPTH LOG

Location 0.2 MILE SOUTH OF LINCOLN MINE Date 15-APRIL-76

Map Adamsville 15" Cane Creek 7½

Property BEST T 29S R 9W sec 20 NW¼ SE¼

Drill Hole BEST ~~103~~ 104 Date Drilled _____ Elevation 6330 ft.

Instrument _____ Operator JED

Comments 2" CORE HOLE, LT-GRAY TO DK-GRAY THICK BEDDED TO MSV PARTLY REXLIZED LIMESTONE. CALCITE FILLING FRACTURE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6486 6395 6373	10.97			
	6364		0.89	445	
6	6069 6053	11.86			
	6042 6041				
8	5906 5895		0.61	305	
	5892 5892	12.47			
10	5825 5819		0.31	155	
	5818 5817	12.78			
12	5783 5780		0.17	85	
	5778 5778	12.95			
14	5755 5754		0.11	55	HANDFULL OF RUBBLE FL INTO HOLE AT 14 m
	5753 5753	13.06			
16	5738 5734		0.09	45	
	5732 5732	13.15			
18	5714 5710		0.10	50	
	5708 5708	13.25			
20	5684 5679		0.14	70	
	5677 5676	13.39			
22	5652 5647		0.13	65	
	5645 5645	1352			
24	5618 5613		0.16	80	
	5610	13.68			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

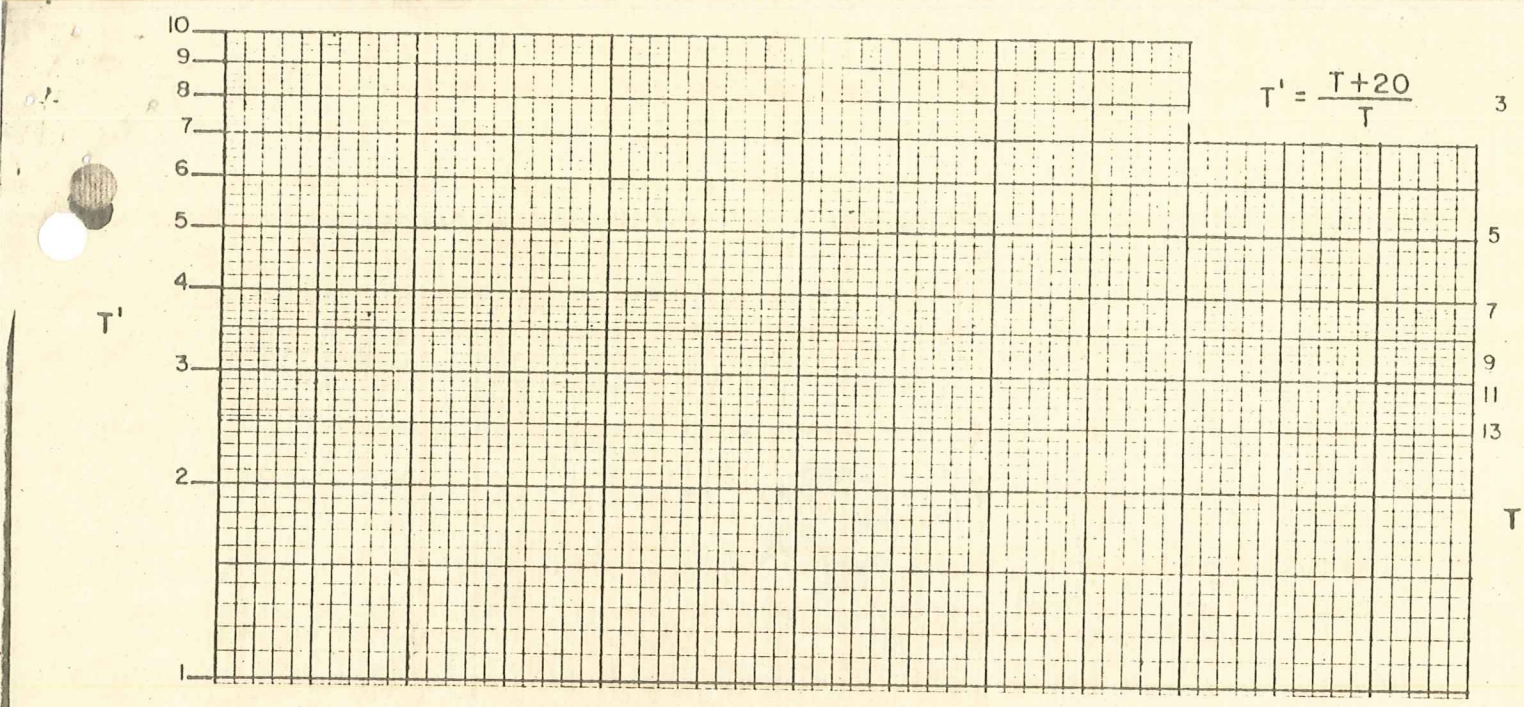
Property _____ T ____ R ____ sec ____

Drill Hole BEST - ~~105~~ 104 Date Drilled _____ Elevation ____ ft.

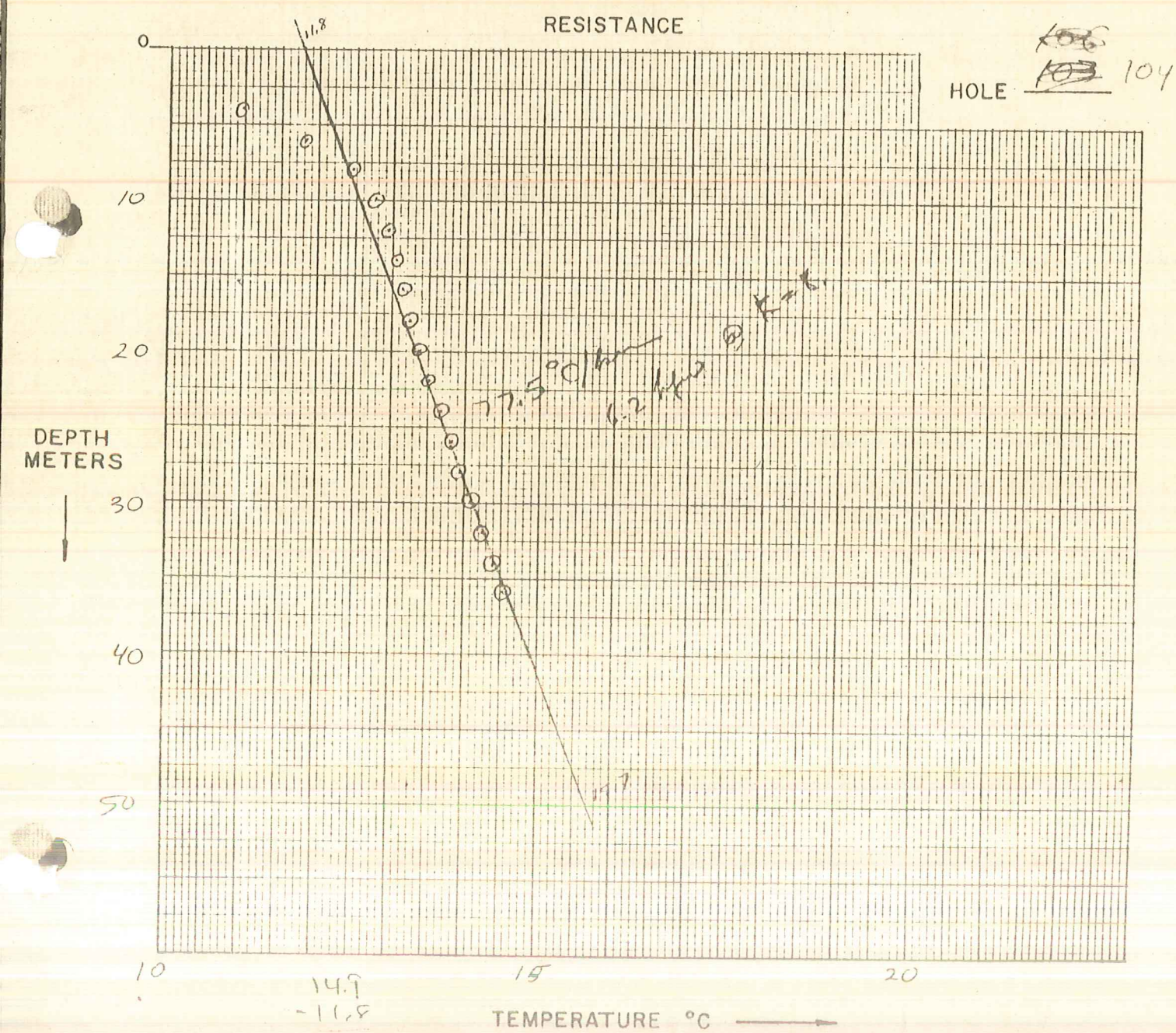
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
26	5573 5578	13.84	.16	80	
28	5546	13.96	.12	60	
30	5514	14.11	.15	75	
32	5481	14.26	.15	75	
34	5446	14.41	.15	75	
36	5417	14.55	.14	70	
					GRADIENT 26-36m 71°C/Km



T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13



RESISTANCE
HOLE ~~106~~ ~~103~~ 104
DEPTH METERS
0
10
20
30
40
50
11.8
77.5 °C/km
6.2 kpa @ K=1
14.9
-11.8
10
15
20
TEMPERATURE °C

TEMPERATURE - DEPTH LOG

Location ~~~100m South of Lincoln Mine adit.~~~ Date 17-APRIL-76

Map ADAMSVILLE

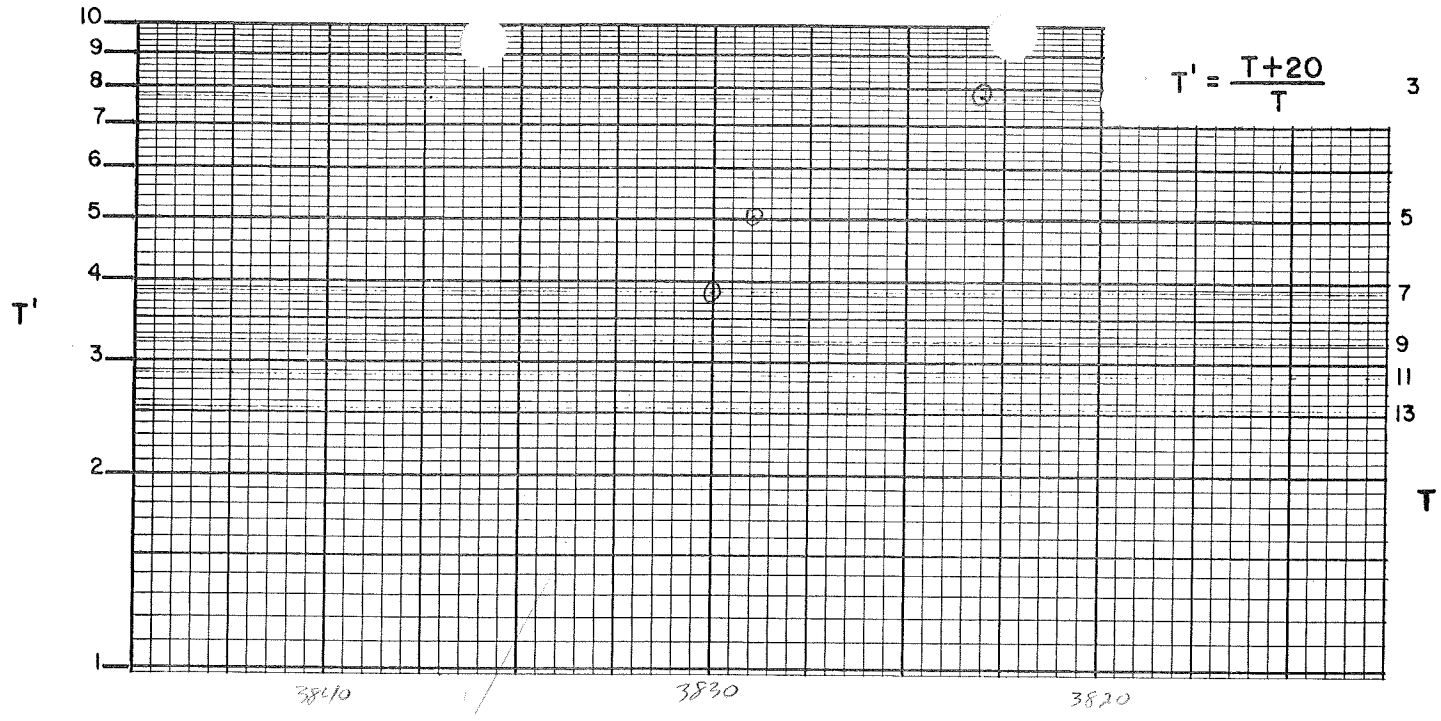
Property BEST T 27S R 9W sec 16 SE 1/4

Drill Hole BLACKWELL #7 BEST-105 Date Drilled ____ Elevation 5860 ft.

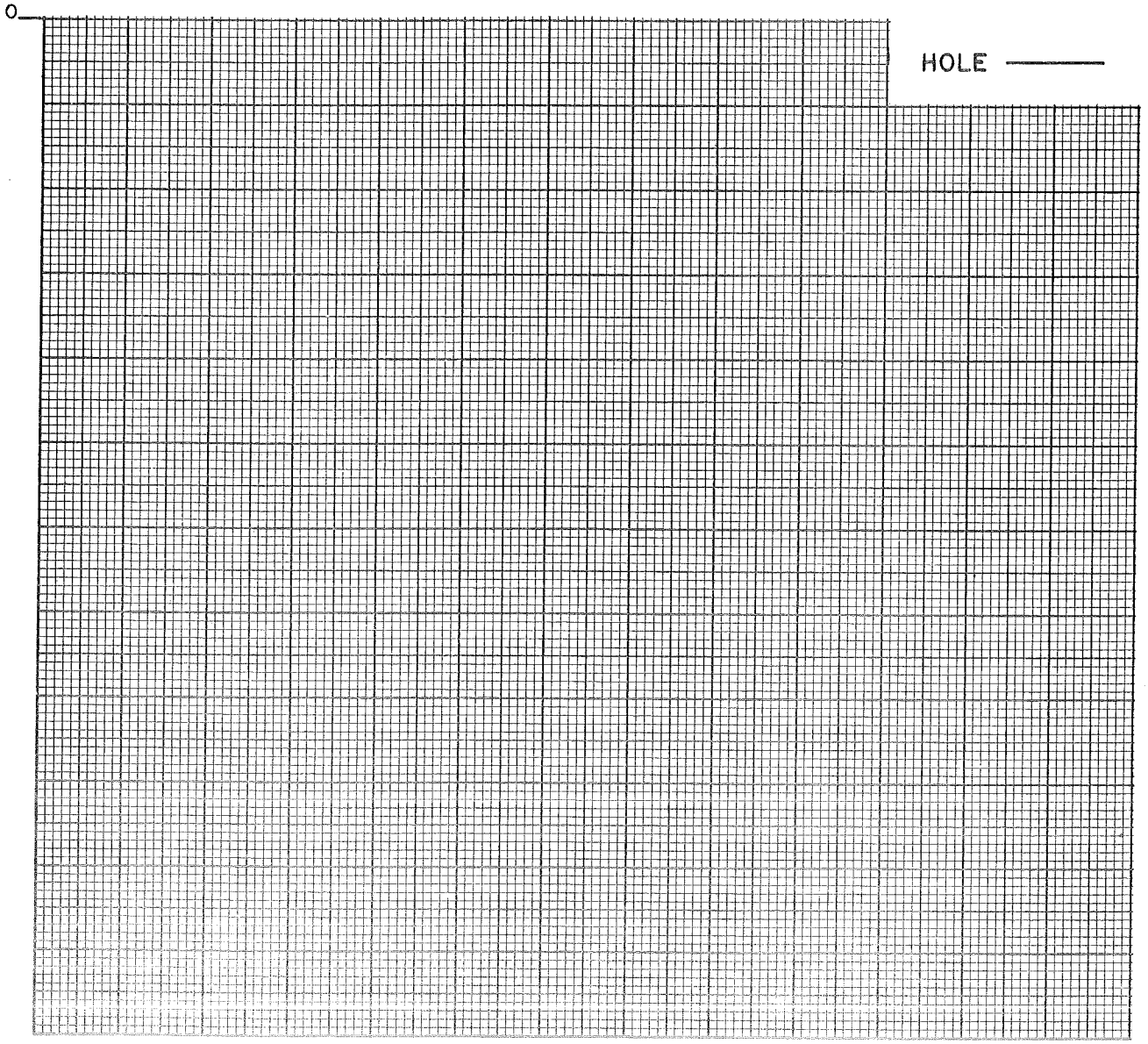
Instrument ____ Operator JED

Comments DRILLED IN ALLUVIUM, BOTTOMED WHEN CONTACTED HARD ROCK (QTZ MONZONITE OR SCHIST)

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4					
6					
8					
10	3823 (3) 3829 (5) 3830 (3)	23.40			READING FLUCTIATES UP & DOWN.
12	3487	25.94	2.54	1270	
14	3192	28.34	2.40	1200	
16	2918	30.81	2.47	1235	
18	2705	32.94	2.13	1065	
20	2600	34.06	1.88	940	
					~~DEPTH NOT SUFFICIENT FOR VALID GRADIENT.~~



RESISTANCE



DEPTH METERS

TEMPERATURE °C

TEMPERATURE DEPTH LOG

ΔT Well No. 106

Property-Project Best

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* (19–20)
755	106	31	JL	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
3.6 KM SE OF BRADSHAW MTN	JED	MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
~~9.1~~ 9.8	~~41.0~~ 41.15	6360.		F

Use decimals

Write M if meters

SEGMENT DEPTH

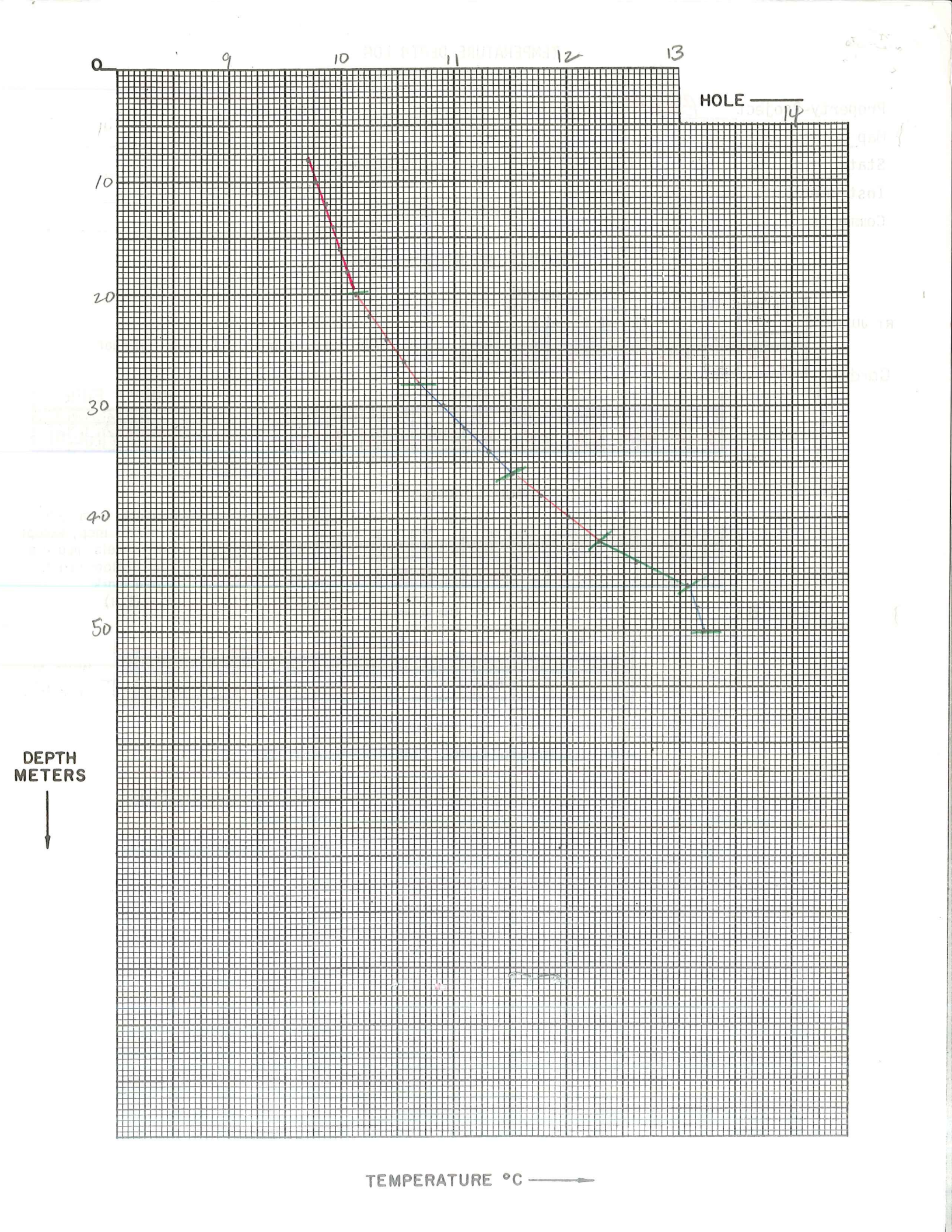
	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	8.0	20.0		
D	28.0	36.0		
E	42.0	46.0		
F	.999			
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	20.0	28.0	-7.0	.5
D	36.0	42.0		
E	46.0	50.0		-.5
F				
G				

Final Segment: Start = .999


0
9
10
11
12
13
HOLE 14
10
20
30
40
50
DEPTH METERS
TEMPERATURE °C

pw 1068

____ of ____

TEMPERATURE - DEPTH LOG

Location 50m E. OF LINCOLN MINE. Date 31-JULY-76

Map CAVE CANYON UT 7½"

Property BEST T 29S R 9W sec 20 NW¼ SE¼

Drill Hole B-~~105~~ 106 Date Drilled ____ Elevation 6360 ft.

Instrument ____ Operator JED

Comments 3/4" PVC PIPE WATER FILLED PLACED IN 6" MINERAL EXPLORATION HOLE

CUTTINGS OF MARBLE, DK-GRAY LIMESTONE & REDDISH YELLOW LIMONITE, GOETHITE, SOME CALCITE IN FRACTURES.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6027	11.91			
			-1.82	-910	
6	6496	10.09			
			-0.39	-195	
8	6601	9.70			
			0.06	30	
10	6585	9.76			
			0.10	50	
12	6559	9.86			
			0.07	35	
14	6540	9.93			
			0.05	25	
16	6526	9.98			
			0.07	35	
18	6508	10.05			
			0.08	40	
20	6485	10.13			
			0.11	55	
22	6455	10.24			
			0.16	80	
24	6413	10.40			
			0.15	75	
26	6375	10.55			
			0.14	70	
28	6338	10.69			
			0.21	105	
30	6282	10.90			
			0.19	95	
32	6233	11.09			
			0.21	105	
34.0	6181	11.30			
			0.22	110	
36	6125	11.52			
			0.25	125	
38	6061	11.77			
			0.24	120	
40	6003	12.01			
			0.28	140	
42	5934	12.29			GRADIENT 36-44m 136.3°C/Km
			0.32	160	
44	5859	12.61			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

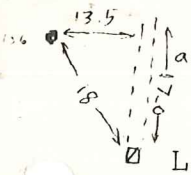
Property _____ T ____ R ____ sec _____

Drill Hole B-106 (~~B-105~~) Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	5750	13.07	0.46	230	
48	5730	13.15	0.08	40	NOTE! RECENT HEAVY RAINS MAY HAVE CAUSED 2-3m OF WATER TO ACCUMULATE IN THE BOTTOM OF THE HOLE CAUSING THE DROP IN GRADIENT.
50	5718	13.21	0.06	30	
99999.					



TEMPERATURE - DEPTH LOG

Location 100 m S. OF LINCOLN MINE ADIT. Date 21-APRIL-76

Map ADAMSVILLE, UTAH 15" Cave Canyon 7½

Property BEST T 29S R 9W sec NW¼ SE¼ 20

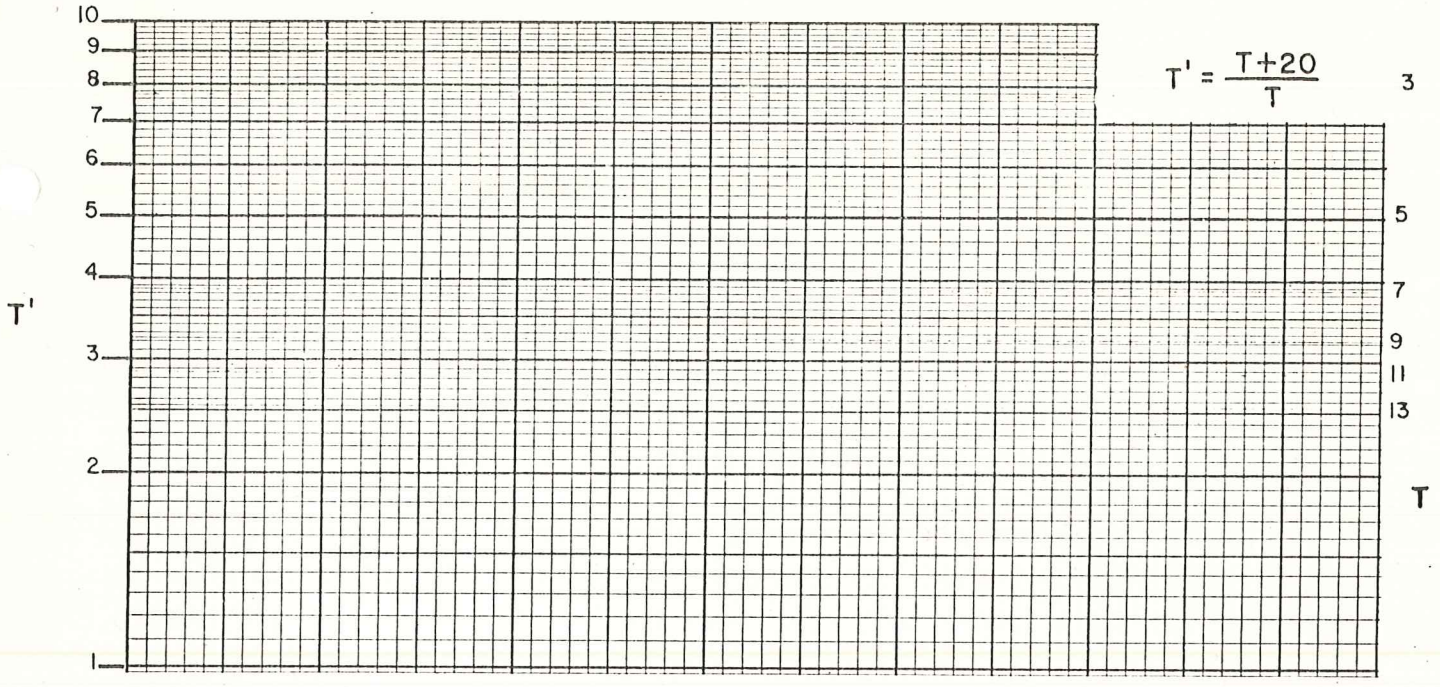
Drill Hole BEST -106 Date Drilled EST. 1975 Elevation 6320 ft.

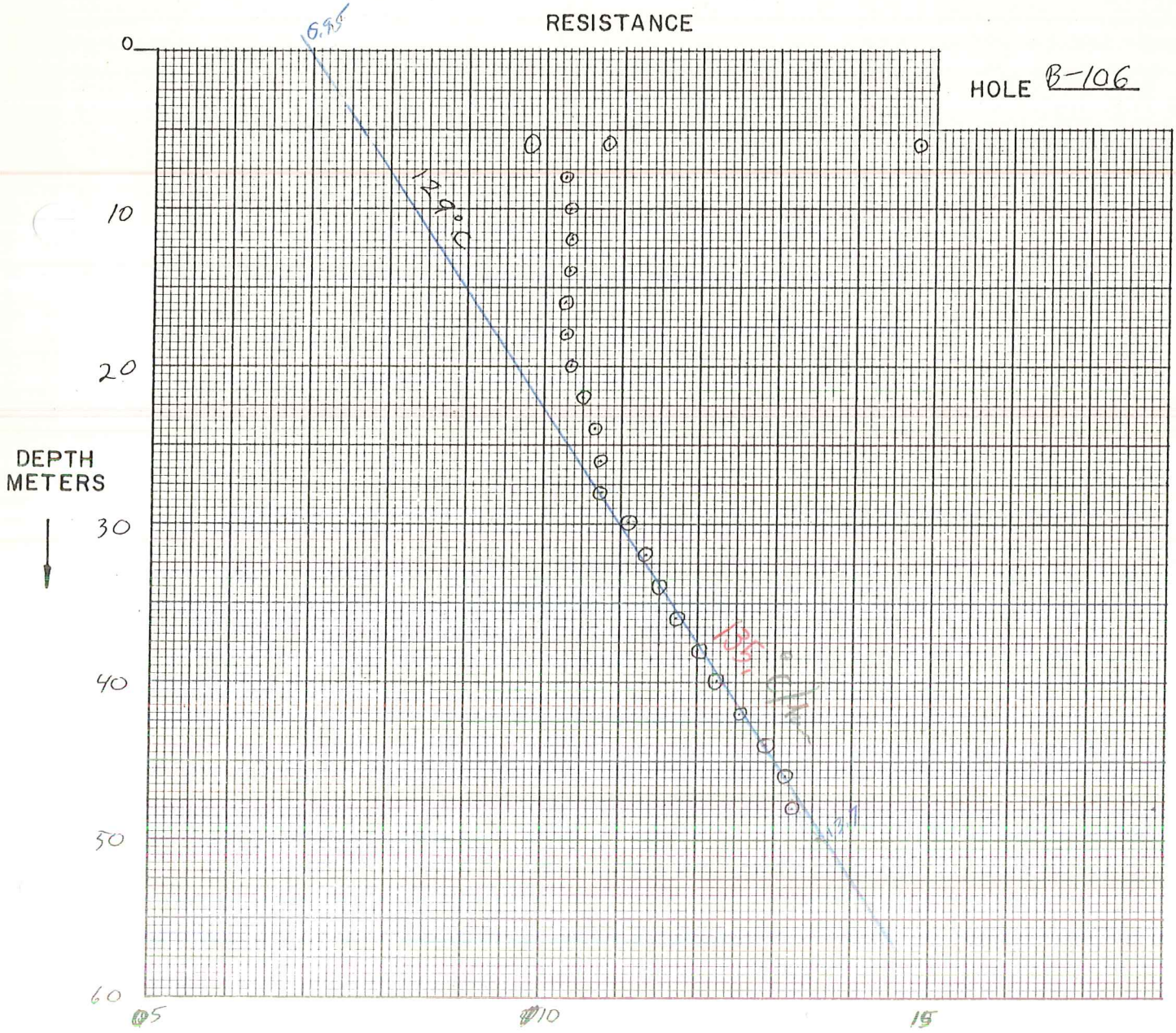
Instrument _____ Operator JCD

Comments DRILLED IN RECRYSTALLIZED LIMESTONE, PARTLY HEMATITIC;

6" UNCASED HOLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6343 (3) 6597 (7) 6554 (9)	~~9.81~~			
6	6581 (3) 6571 (5) 6573 (7)	9.81	~~0.45~~	~~225~~	
8	6492 (3) 6484 (5) 6481 (7)	10.26	0.45	225	
10	6440 (3) 6436 (5) 6436 (7)	10.31	0.05	25	
12	6433 (3) 6433 (5)	10.33	0.02	10	
14	6440	10.30	0.03	15	
16	6448	10.27	-0.03	-15	
18	6445	10.28	0.01	5	
20	6430	10.34	0.06	30	
22	6406 (3) 6401 (5) 6398 (7)	10.51	0.17	85	
24	6371 (3) 6364 (5) 6361 (7)	10.68	0.17	85	
26	6340 (3) 6337 (5) 6335 (7)	10.74	0.06	30	
28	6324 (3) 6319 (5) 6317 (7)	10.77	0.03	15	
30	6283 (3) 6232 (5) 6232 (7)	11.10	0.33	165	
32	6205 (3) 6199 (5) 6195 (7)	11.32	0.22	110	
34	6149 (3) 6144 (5) 6142 (7)	11.50	0.18	90	
36	6093 (3) 6088 (5) 6086 (7)	11.73	0.23	115	
38	6042 (3) 6034 (5) 6029 (7)	12.01	0.28	140	
40	5984 (3) 5974 (5) 5970 (7)	12.26	0.25	125	
42	5925 (3) 5913 (5) 5907 (7)	12.57	0.21	105	
44	5848 (3) 5835 (5) 5827 (7)	12.91	0.34	170	


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-106
DEPTH METERS
0
10
20
30
40
50
60
5
10
15
TEMPERATURE °C

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

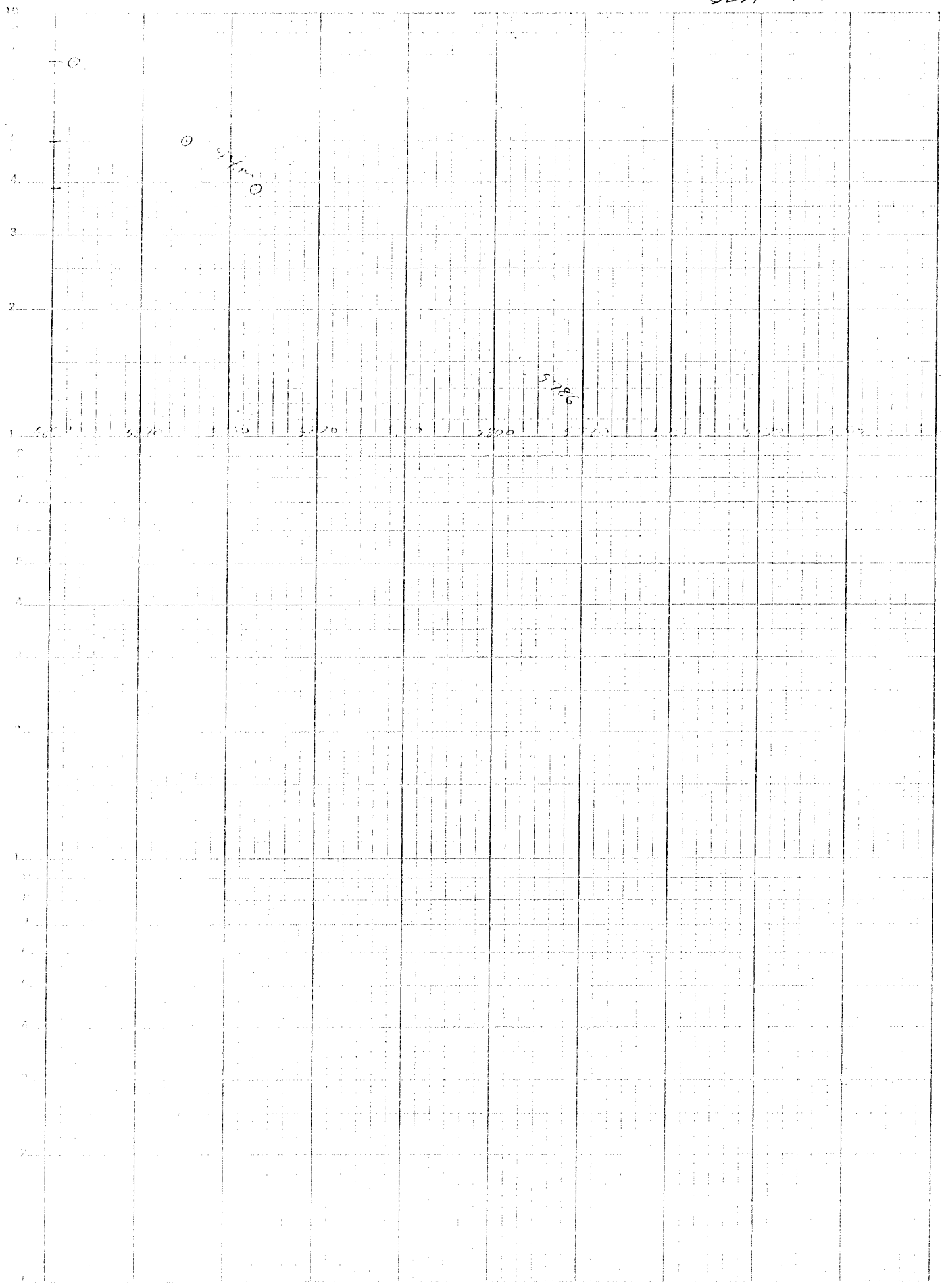
Drill Hole BEST-106 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

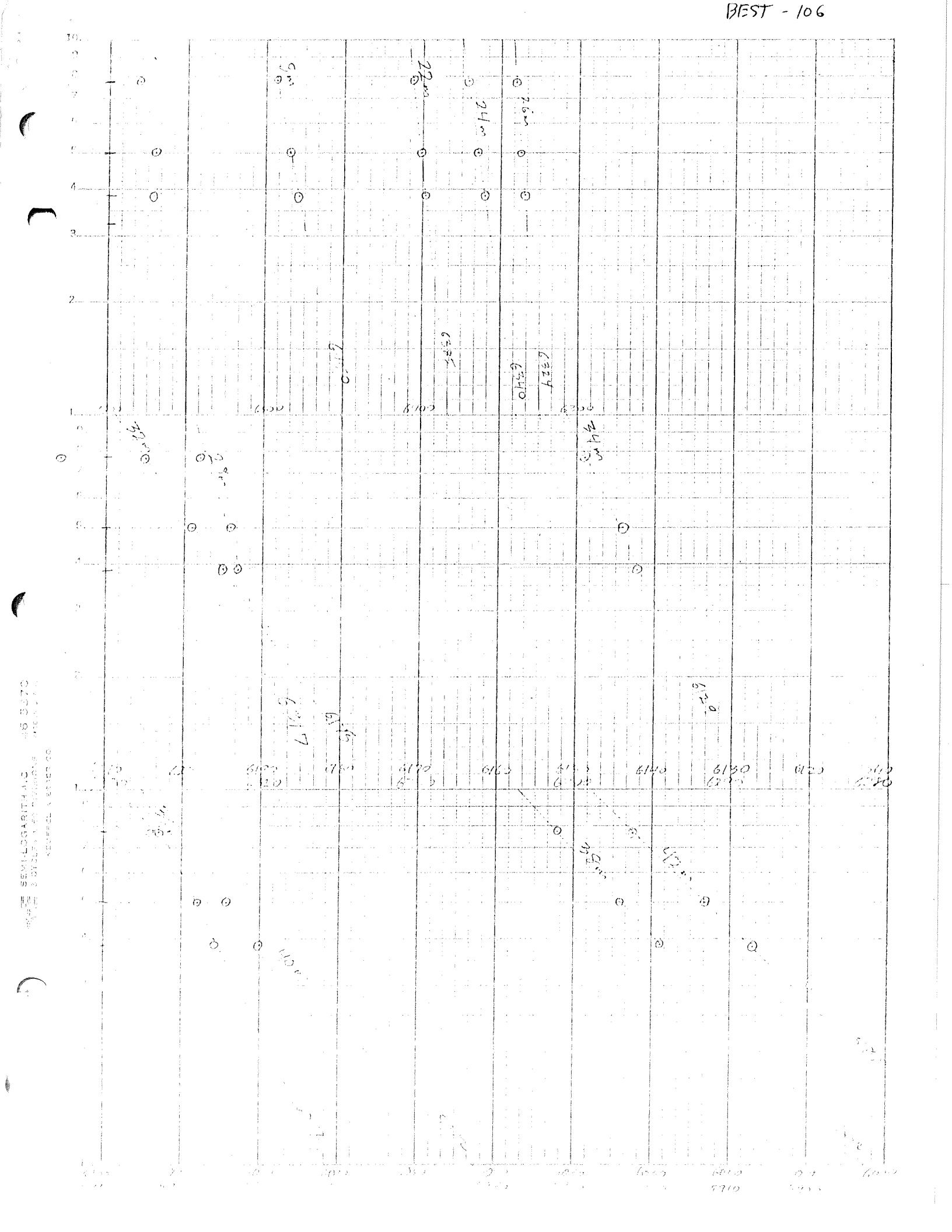
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	5729	13.16	0.25	125	
48	5705	13.26	0.10	50	FINAL READING MAY HAVE BEEN AT A DEPTH LESS THAN 48 m.
					GRADIENT FROM 30 m TO 48 m 120.0 °C/Km

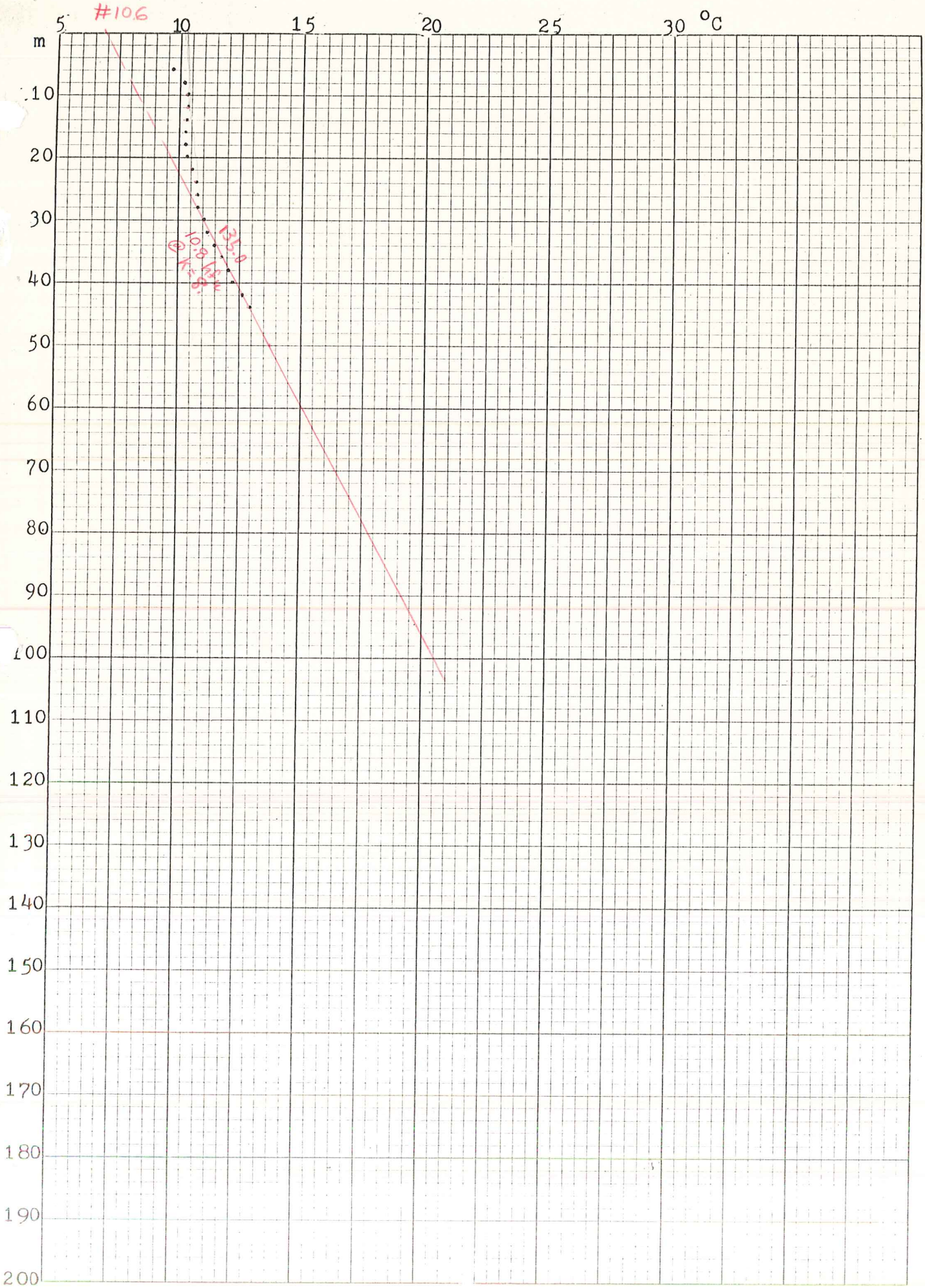
BEST - 106



KEUFFEL & ESSER CO.
SEMILOGARITHMIC 46 8370

BEST - 106





#10.6
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
135.0
10.8 hfu
@ K=8.

46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

HF ≃ K ΔT

TEMPERATURE DEPTH LOG

ΔT Well No. 108

Property-Project Best
Depth Logged
Map
Scale
Date: Drilled
Logged
State
County
Section
T
R
Instrument
Operator
Elevation ft.
Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* (19–20)
755	108	30	AP	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
9.6 KM SE OF THERMO, UTAH	JED	MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00.	113.	15.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
~~30.7~~ 30.5	~~24.3~~ 23.9	5144.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0	38.0	[illegible]	
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	50.0	92.0	~~2.2~~ 5.5	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~ 1 MILE S.W. OF GOVERNMENT WELL Date 30-APRIL-76

Map THERMO

Property BEST T 30S R 11W sec 27 SE¼ NW¼

Drill Hole BEST-108 Date Drilled ____ Elevation 5144 ft.

Instrument ____ Operator JED

Comments PHILLIPS GRADIENT HOLE. 3/4" PVC PIPE. APPEARS TO BE IN VALLEY ALLUVIUM. ABUNDANT PEBBLES UP TO 3 cm.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6138	11.47			
			1.39		
6	5798	12.86			
			1.26		
8	5510	14.12			
			.35	175	
10	5434	14.47			
			.16	80	
12	5399	14.63			
			.20	100	
14	5356	14.83			
			.19	95	
16	5315	15.02			
			.22	110	
18	5268	15.24			
			.19	95	
20	5229	15.43			
			.23	115	
22	5181	15.66			
			.19	95	
24	5141	15.85			
			.20	100	
26	5101	16.05			
			.21	105	
28	5059	16.26			
			.19	95	
30	5020	16.45			
			.18	90	
32	4984	16.63			
			.20	100	
34	4946	16.83			
			.17	85	
36	4912	17.00			
			.17	85	
38	4879	17.17			
			.19	95	
40	4843	17.36			
			.13	65	
42	4818	17.49			
			.14	70	
44	4792	17.63			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec _____

Drill Hole B-108 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	4766	17.77	.14	70	
48	4742	17.89	.12	60	
50	4719	18.02	.13	65	
52	4697	18.14	.12	60	
54	4675	18.26	.12	60	
56	4656	18.36	.10	50	
58	4637	18.47	.11	55	
60	4620	18.56	.09	45	
62	4603	18.65	.09	45	
64	4587	18.74	.09	45	
66	4571	18.83	.09	45	
68	4558	18.91	.08	40	
70	4547	18.97	.06	30	
72	4534	19.04	.07	35	
74	4521	19.11	.07	35	
76	4508	19.19	.08	40	
78	4493	19.27	.08	40	
80	4481	19.34	.07	35	
82	4465	19.43	.09	45	
84	4449	19.53	.10	50	
86	4434	19.61	.08	40	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

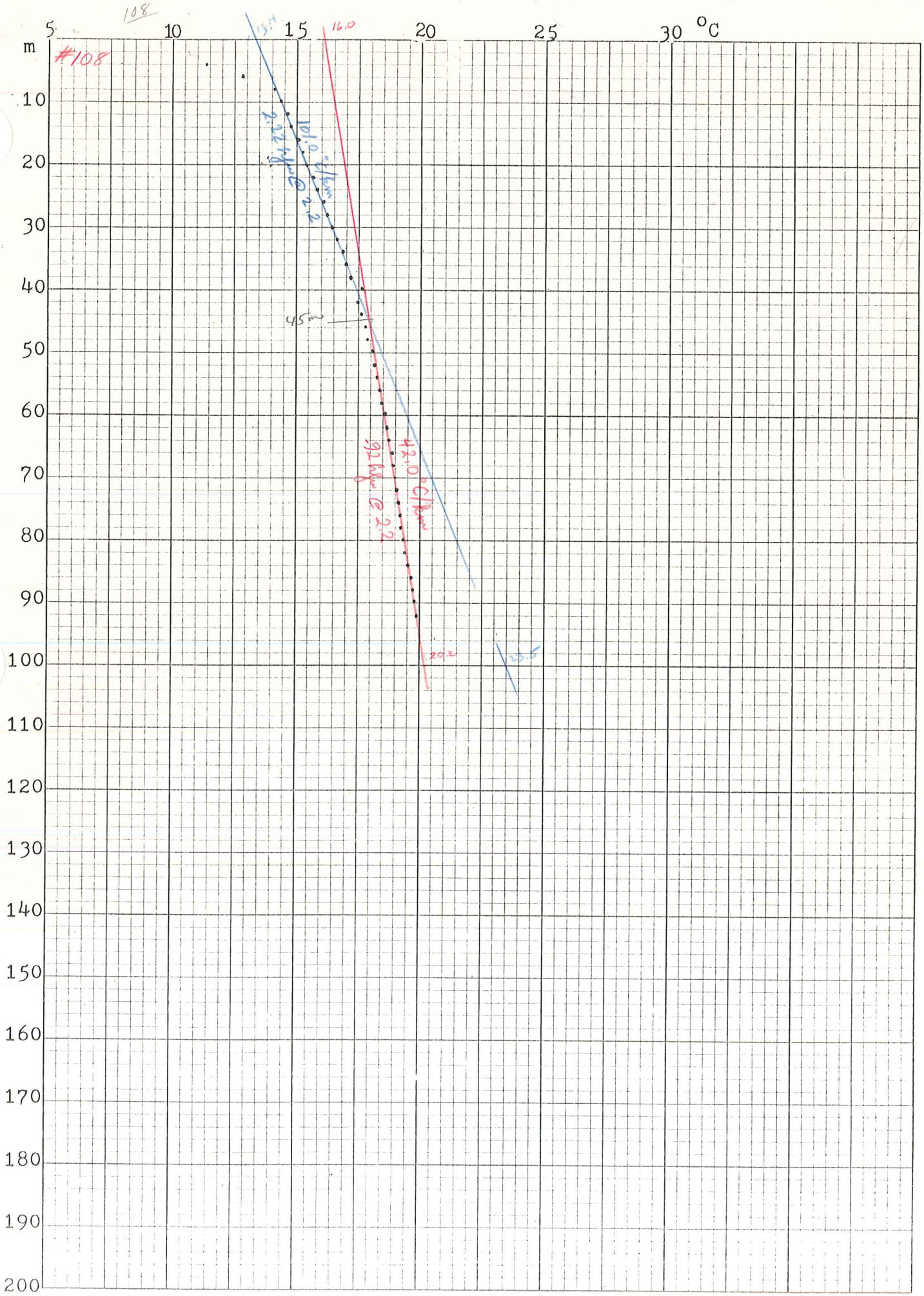
Property _____ T ____ R ____ sec _____

Drill Hole B-108 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
88	4418	19.71	.10	50	
			.08	40	
90	4404	19.79			
			.09	45	
92	4389	19.88			GRADIENT 54-92 m 42.6 °C/km
99999.					



46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 110

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 1 0	1 1	M T	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
I N N W C O R N E R O F D O G V A L L E Y	J E D	/ M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location △ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	3 0 .	1 1 2 .	4 5 .

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
3 1 . 0 5	- 2 2 . 3	5 6 9 0 .	F

Use decimals 22.2

← Write M if meters

SEGMENT DEPTH

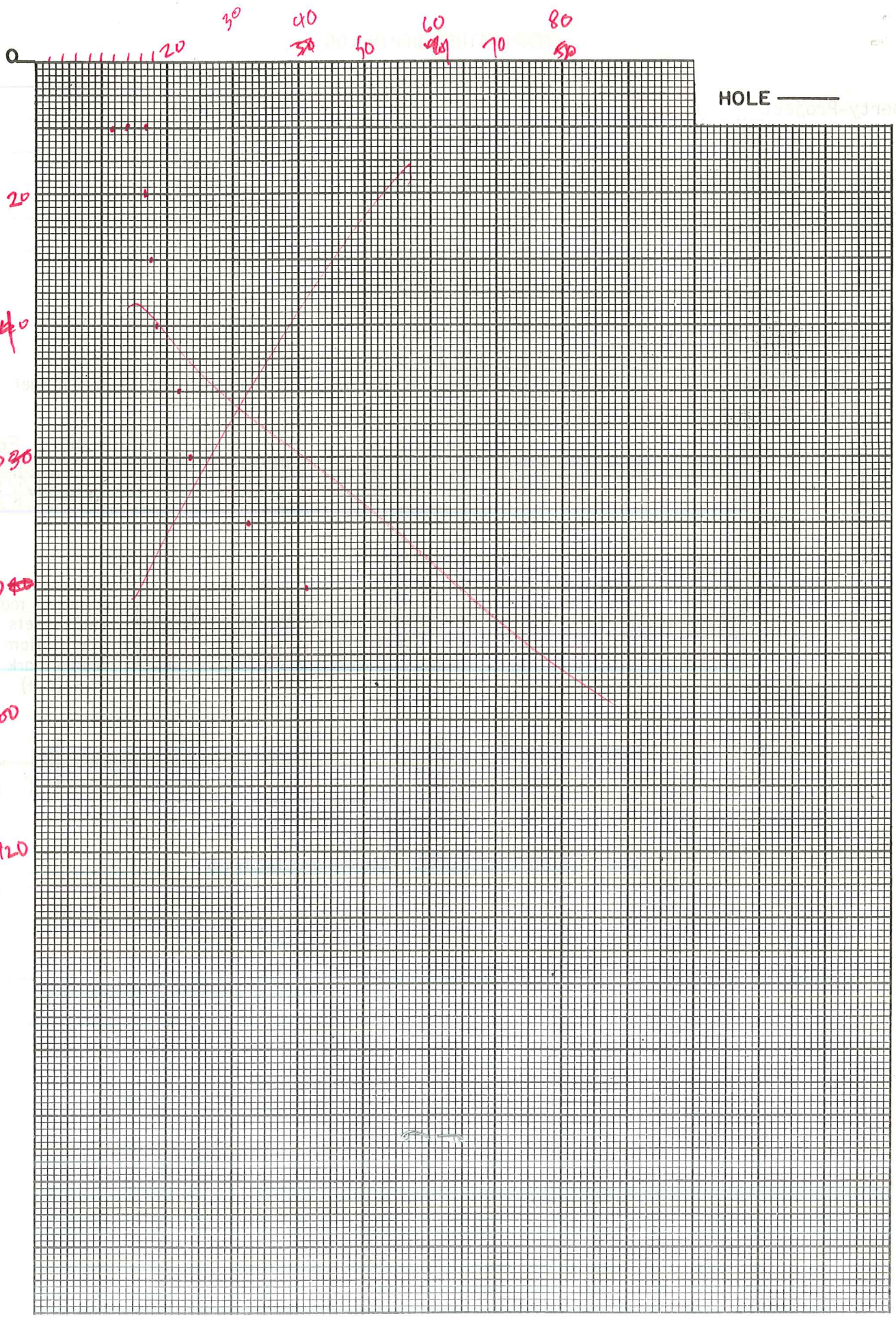
	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	4 0 . 0	8 0 . 0	- 7 . 0	. 5
D	. 9 9 9			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	8 0 . 0	1 2 0 . 0		- . 5
D				
E				
F				
G				

Final Segment: Start = .999


0
20
30
40
50
60
70
80
HOLE
20
40
60
80
100
120
DEPTH METERS
TEMPERATURE °C

TEMPERATURE - DEPTH LOG

Location NW CORNER OF DOG VALLEY Date 11-MAY-76

Map COVE FORT, UT. 15"

Property BEST T 24S R 7W sec 36 SW¼

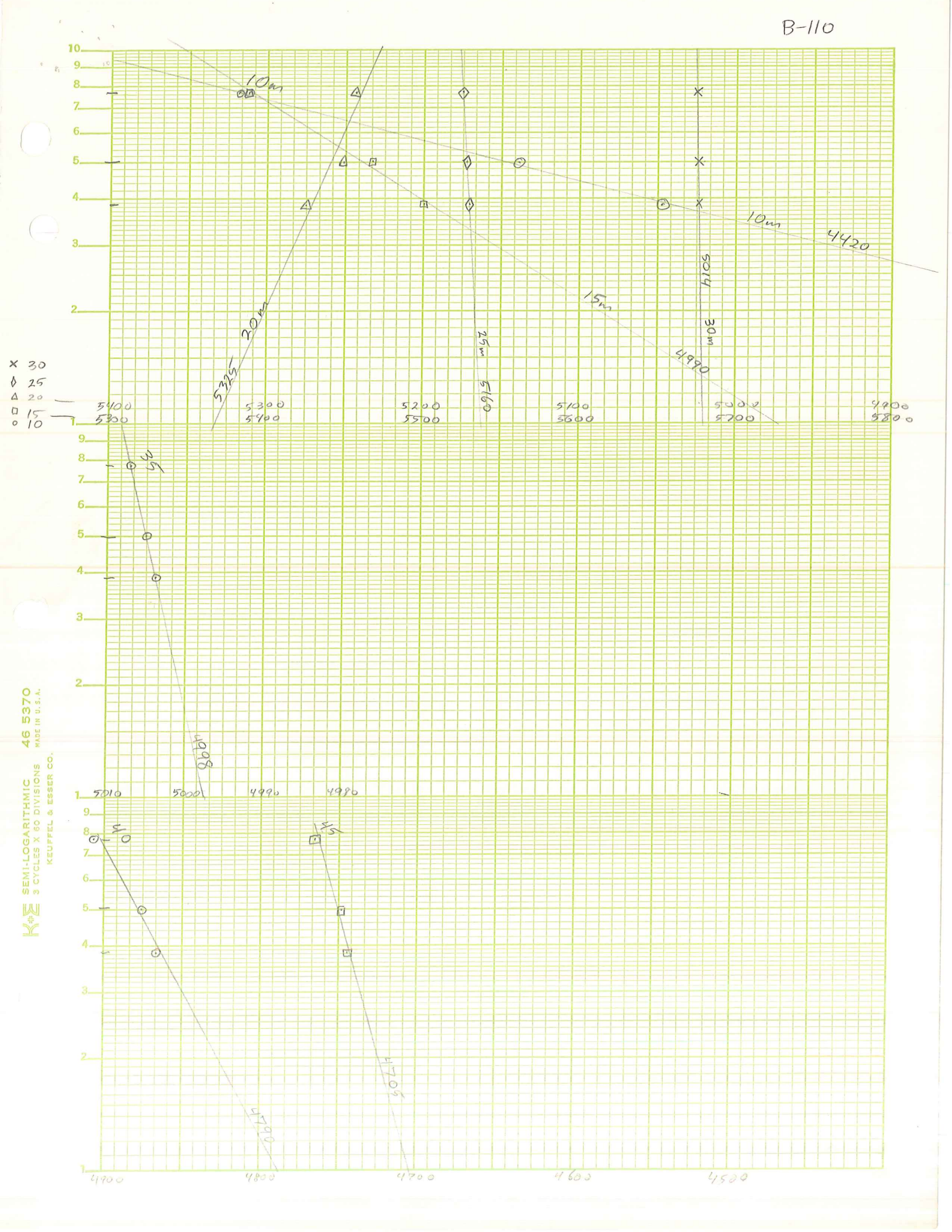
Drill Hole B-110 Date Drilled Elevation 5690 ft.

Instrument Operator JED

Comments RELOGGING FOR 3rd TIME. ABANDONED WATER WELL

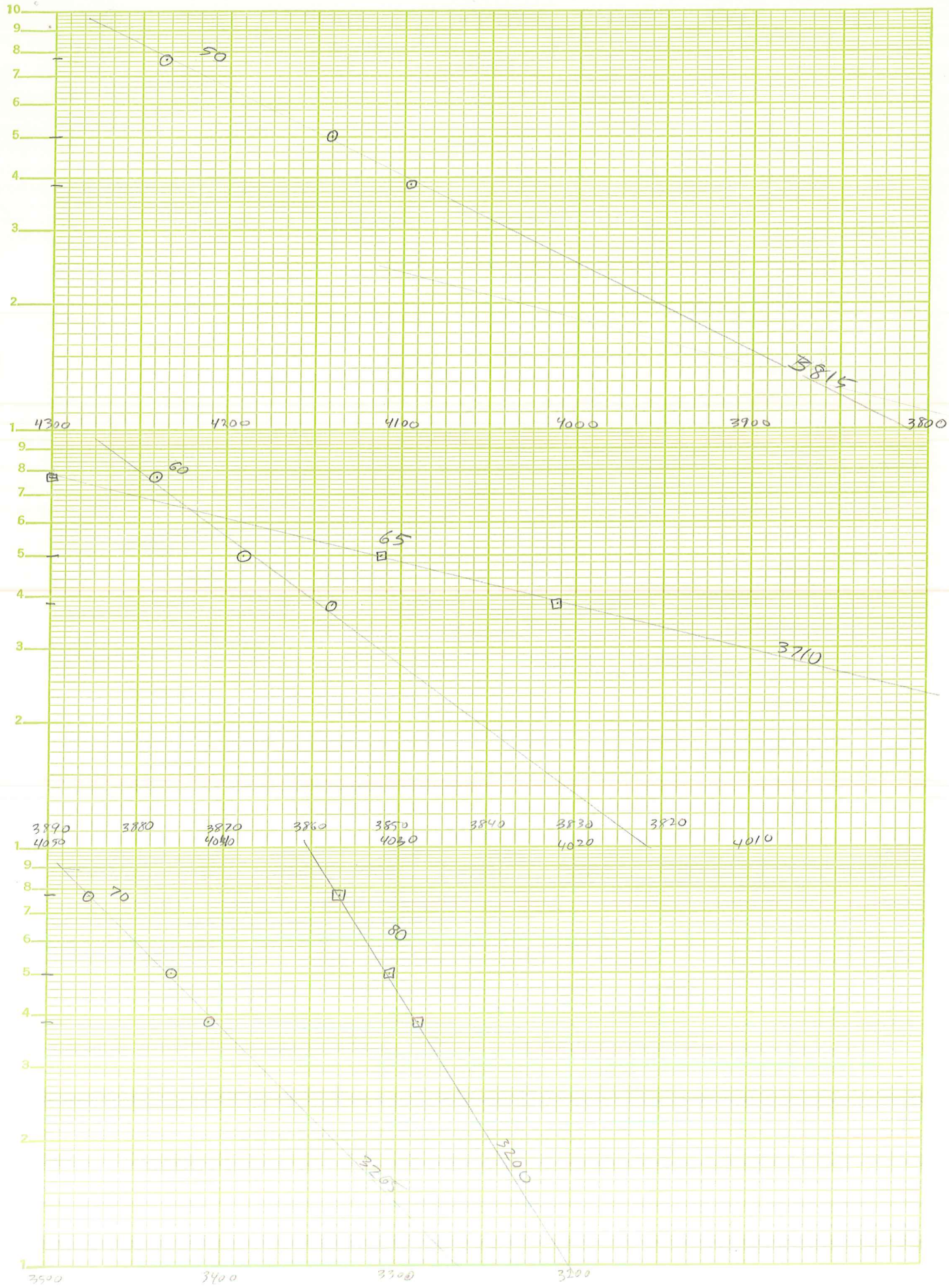
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
	4904				APPARENT AIR MOVEMENT IN HOLE.
10	4935	16.91			
	4930		0.04	4	
	3 4895				" " " "
20	5 4903	16.95			
	7 4921				
	9 4921				
			0.75	75	
	3 4811				
30	5 4804	17.70			
	7 4800		0.83	83	
	3 4695	18.53			
40	5 4672	~~24.74~~			
	7 4664				
	9 4662				
			3.44	344	
	3 4324				
50	5 4244	21.97			
	7 4212				
	9 4191				
			1.47	147	
	3 3942				
60	5 3902	23.44			
	7 3886				
	9 3883				
			4.03	403	
	3 3583				
70	5 3523	27.47			
	7 3485		2.66	266	
	3 3399				
80	5 3319	30.13			
	7 3276		1.44	144	
	3 3022				
90	5 2980	31.57			
	7 2959				
	3 2396				
	5 2269				
100	7 2194				
	9 2170		8.14	814	
	11 2159	39.71			
	13 2146		4.82	482	
	3 1855				
110	5 1848	44.53			
	7 1843		4.89	489	
	3 1566				READING FLUCTUATING,
120	5 1563	49.42			
	7 1559				TOO HOT TO PROBE DEEPER!
99999.					HOLE APPEARS TO EXCEED 125m.
					GRADIENT 50-120m 487.5°C/K

B-110



10m
10m
4420
15m
4990
20m
5325
25m
5160
5014
30m
× 30
◊ 25
△ 20
□ 15
○ 10
5400
5300
5300
5400
5200
5500
5100
5600
5000
5700
4900
5800
35
4998
5010
5000
4990
4980
40
45
4790
4705
4900
4800
4700
4600
4500
SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

B-110



SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

TEMPERATURE - DEPTH LOG

Location N.W. CORNER DOG VALLEY, Date 5-MAY-76

Map COVE FORT, UT. 15"

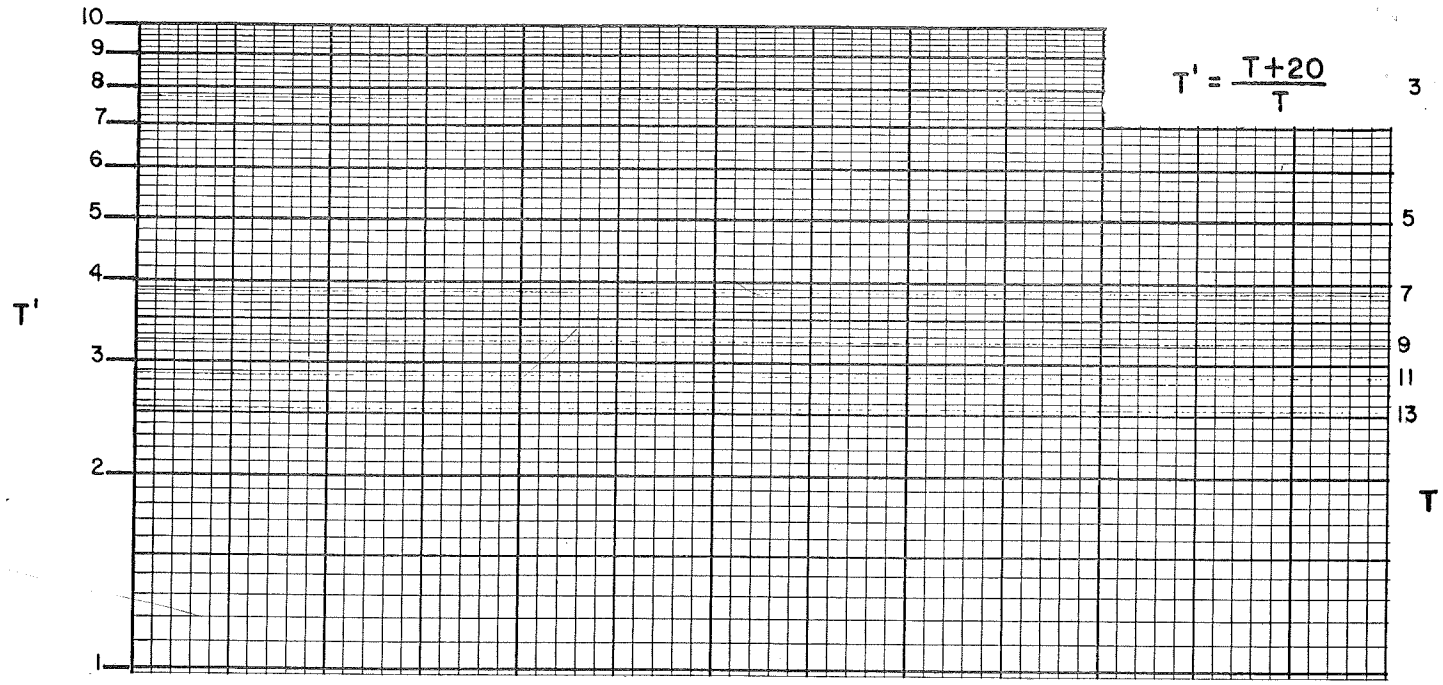
Property BEST T 24S R 7W sec 36 SW ¼

Drill Hole B-110 (cont) Date Drilled ____ Elevation 5690 ft.

Instrument ____ Operator JEO

Comments PICK UP HOLE AT 60m OVERLAP FROM PREVIOUS LOGGING WHEN BATT FAILED.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
60	4115 4056 4013	23.57			
			4.29	429	
70	3519 3457 3430	27.86			
			-0.31		
80	3379 3358 3349	27.55			
90	(3) 3029 (7) 2969 (10) 2964	31.27			
100	(3) 2319 (7) 1858 (10) 1846				
110					
120	1546	49.71			READING FLUCTIATES BETWEEN 1546 & 1555



RESISTANCE

HOLE B-110

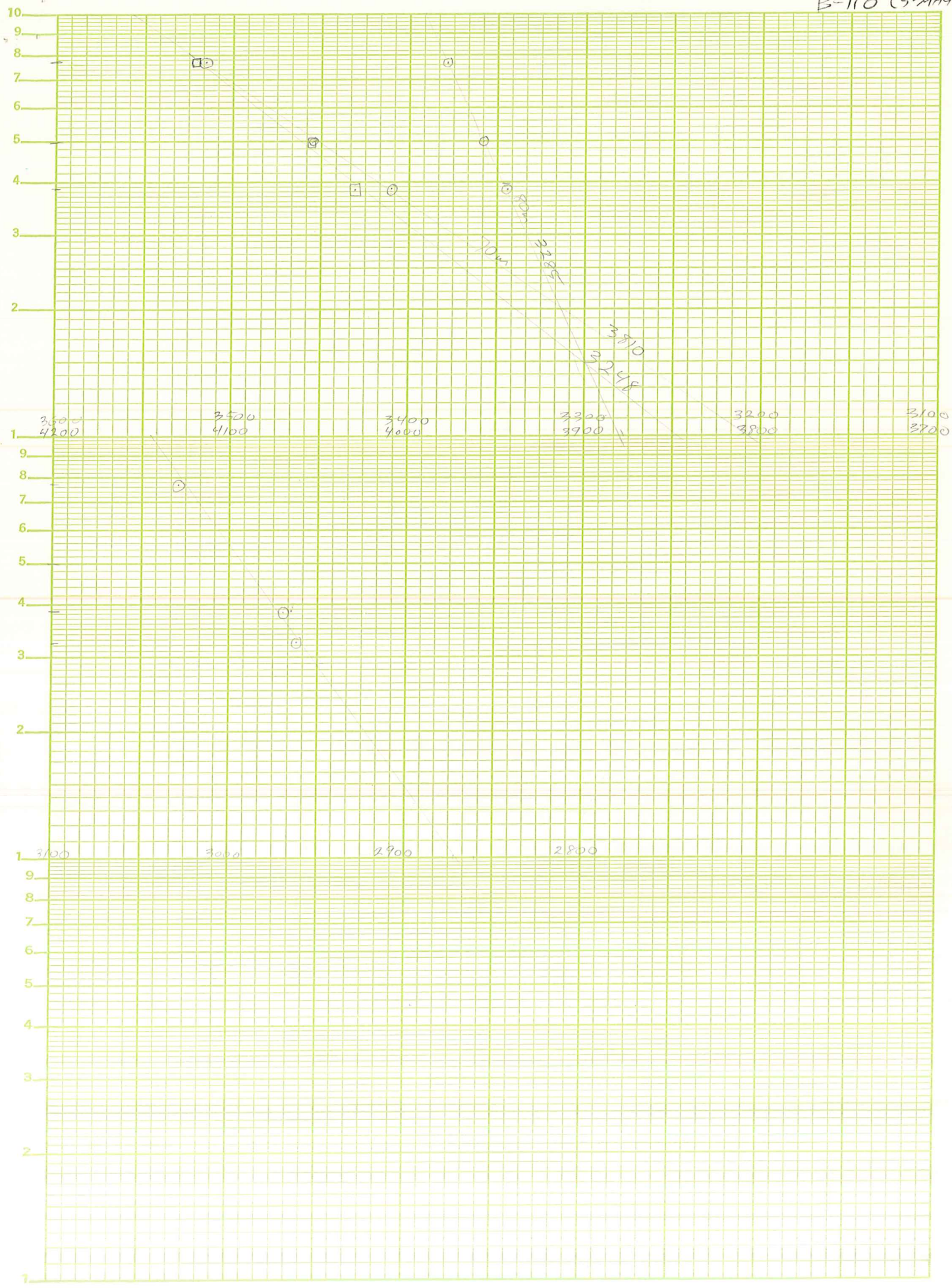
DEPTH METERS

0
10
20
30
40
50
60
70
80
90
100
110
120

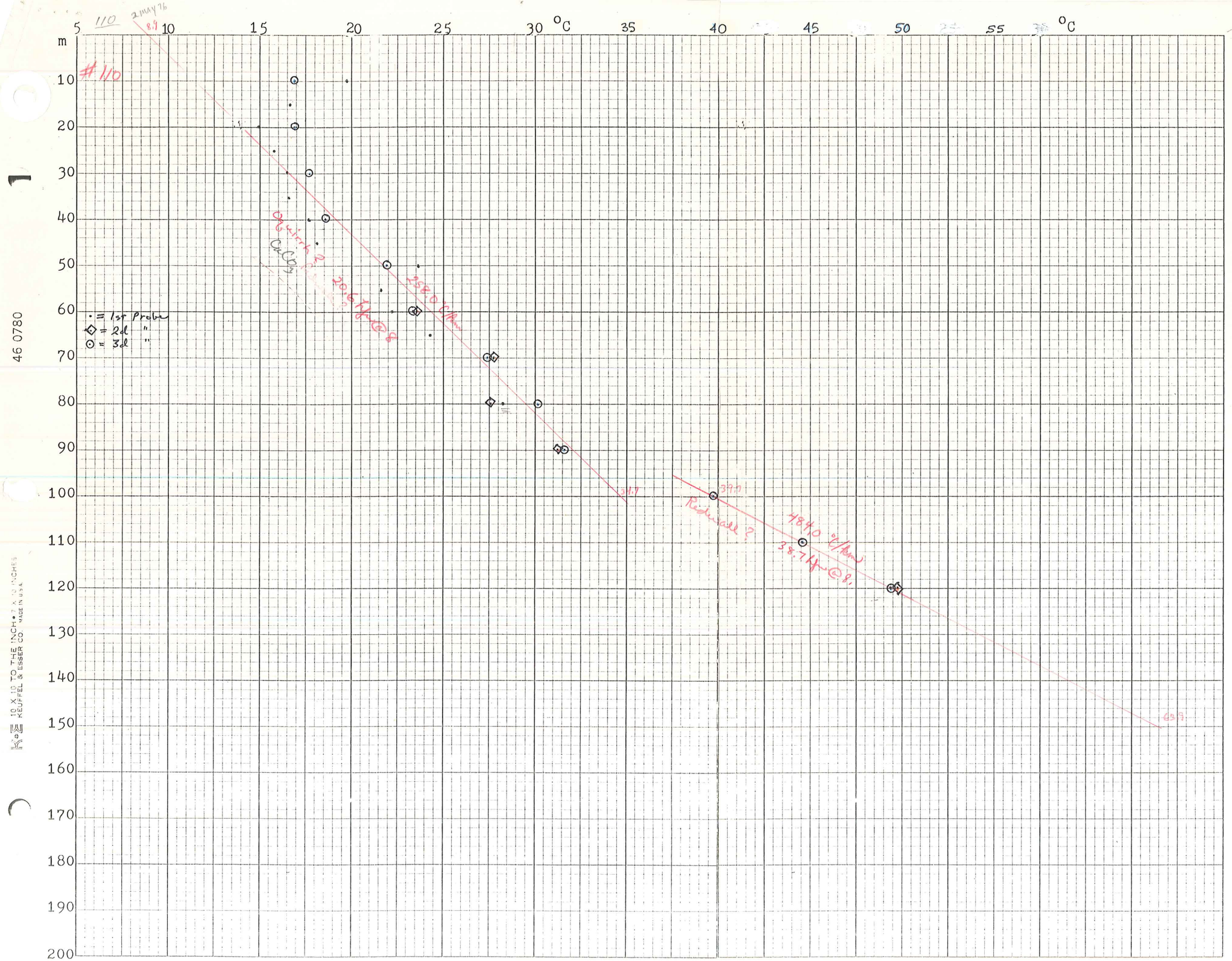
0 10 20 30 40 50 60

TEMPERATURE °C

B-110 (5-MAY-76)



K+E SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.



110
2 May 76
8.9
5
10
15
20
25
30
°C
35
40
45
50
55
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
#110
• = 1st Probe
◇ = 2d "
⊙ = 3d "
Quirrh ?
CuCO3
20.6 hfu @ 8
258.0 °C/km
34.7
39.0
Redwall ?
484.0 °C/km
38.7 hfu @ 8.
63.9
46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 111

Property-Project Best

Depth Logged

Map | Scale | Date: Drilled | Logged

State | County | Section | T | R

Instrument | Operator | Elevation | ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	111	05	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
6.1 KM N OF DOG VALLEY PEAK	JEO	/ MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
~~36.0~~ 21.45	28.4 / 28.8	~~6200.~~ 6520.		F

Use decimals

Write M if meters

SEGMENT DEPTH

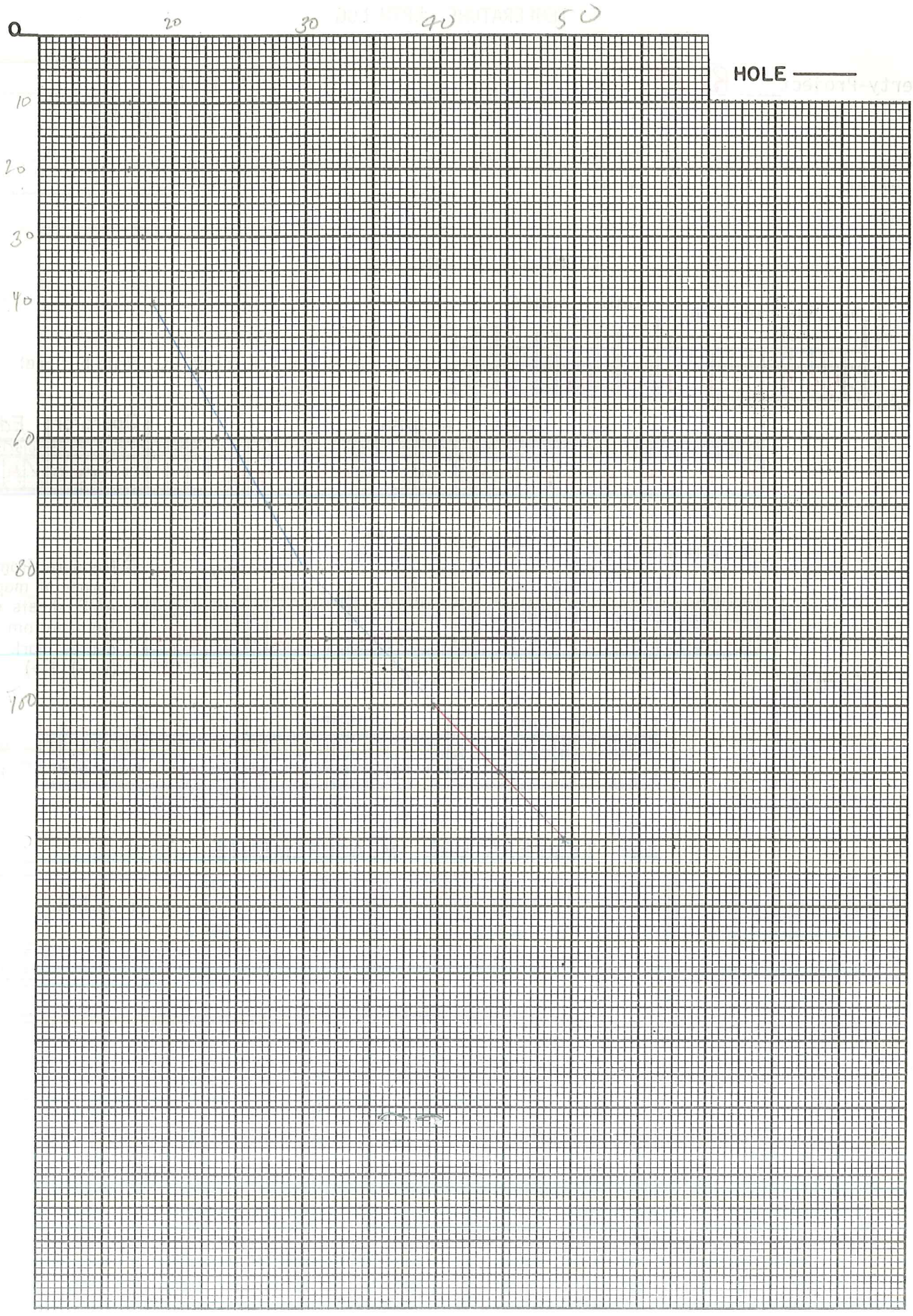
	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0	26.0	-4.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999


0
20
30
40
50
HOLE
10
20
30
40
60
80
100
DEPTH METERS
TEMPERATURE °C

TEMPERATURE - DEPTH LOG

Location PIPE CENTER OF ROAD. Date 5-MAY-76

Map COVE FORT UT. 15"

Property BEST T 24S R 6W sec 20 SE¼

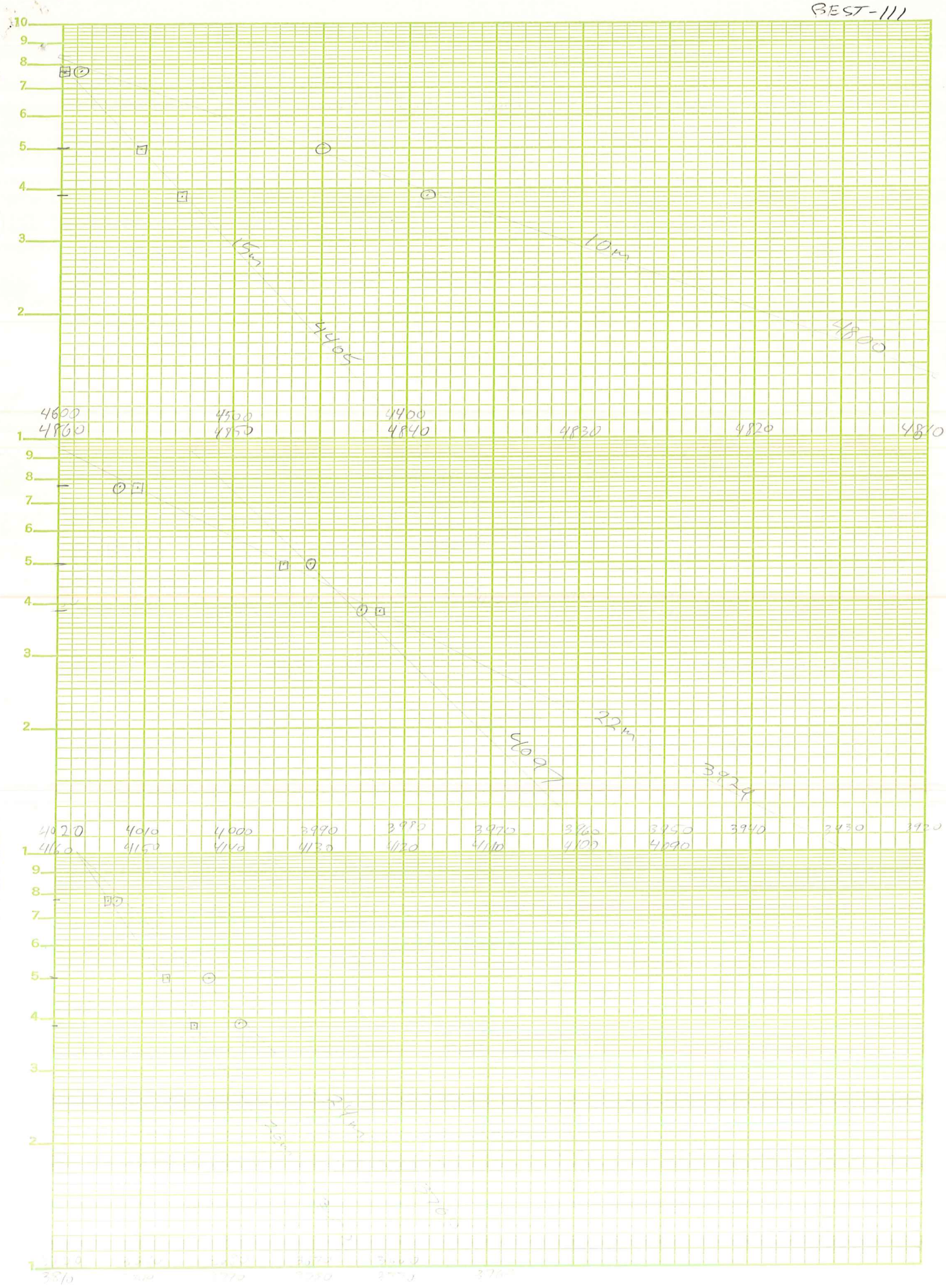
Drill Hole B-111 Date Drilled Elevation ft.

Instrument Operator JEN

Comments 6" STEEL CASED HOLE. ELEMENTAL SULFUR ON INSIDE BORE. SULFUROUS FUMES.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	4859 4845 4839	17.59			
15	4597 4554 4533	19.78	2.19	438	
20	4153 4131 4126	21.66	1.88	376	
22	401 3994 3953	22.76	1.10	550	
24	3803 3742 3781	23.92	1.16	580	
26	3694 3687 3684	24.71	0.79	394	
99999.					AV. GRADIENT 10-26m 445°C/Km
					GRADIENT 424°C/Km

BEST-111



K+E SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

111
#111
m
°C
Mt Belbrup vote
434.0 °C/km
19.57 Hg @ 4.5
17.36 @ 7.0
46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 112

Property-Project Best

Depth Logged

Map ____ Scale ____ Date: Drilled ____ Logged ____

State ____ County ____ Section ____ T ____ R ____

Instrument ____ Operator ____ Elevation ____ ft.

Comments

COMPUTER PROCESSING

Card A (RT JUSTIFY)

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	112	06	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
8.9 KM NW OF TABERNACLE HILL	JED	MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	45.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
~~40.1~~ 39.8	~~22.7~~ 22.4	4649.		F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	26.0	40.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	40.0	68.0	-3.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 5 MILES N.W. OF TABERNACLE HILL Date 6-MAY-76

Map TABERNACLE HILL UT. 15"

Property BEST T 21S R 7W sec 24 NE¼

Drill Hole B-112 Date Drilled ____ Elevation 4649 ft.

Instrument ____ Operator JED

Comments PETERSON WELL BENCH MARK SW¼ NE¼ SEC 24 T 21S, R 7W. WINDMILL WITH PUMP

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	5681	13.37			
7	5658	13.47	0.10	50	
9	5646	13.52	0.05	25	
11	5602	13.71	0.19	95	
13	5578	13.82	0.11	55	
15	5545	13.96	0.14	70	
17	5515	14.10	0.14	70	
19	5482	14.25	0.15	75	
20	5477	14.27	0.02	20	
22	5441	14.44	0.17	85	
24	5410	14.58	0.14	70	
26	5373	14.75	0.17	85	
28	5349	14.86	0.11	55	
30	5319	15.00	0.14	70	
32	5298	15.10	0.10	50	
34	5268	15.24	0.14	70	
36	5238	15.38	0.14	70	
38	5210	15.52	0.14	70	
40	5188	15.62	0.10	50	
42	5157	15.77	0.15	75	
44	5133	15.89	0.12	60	

1m

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

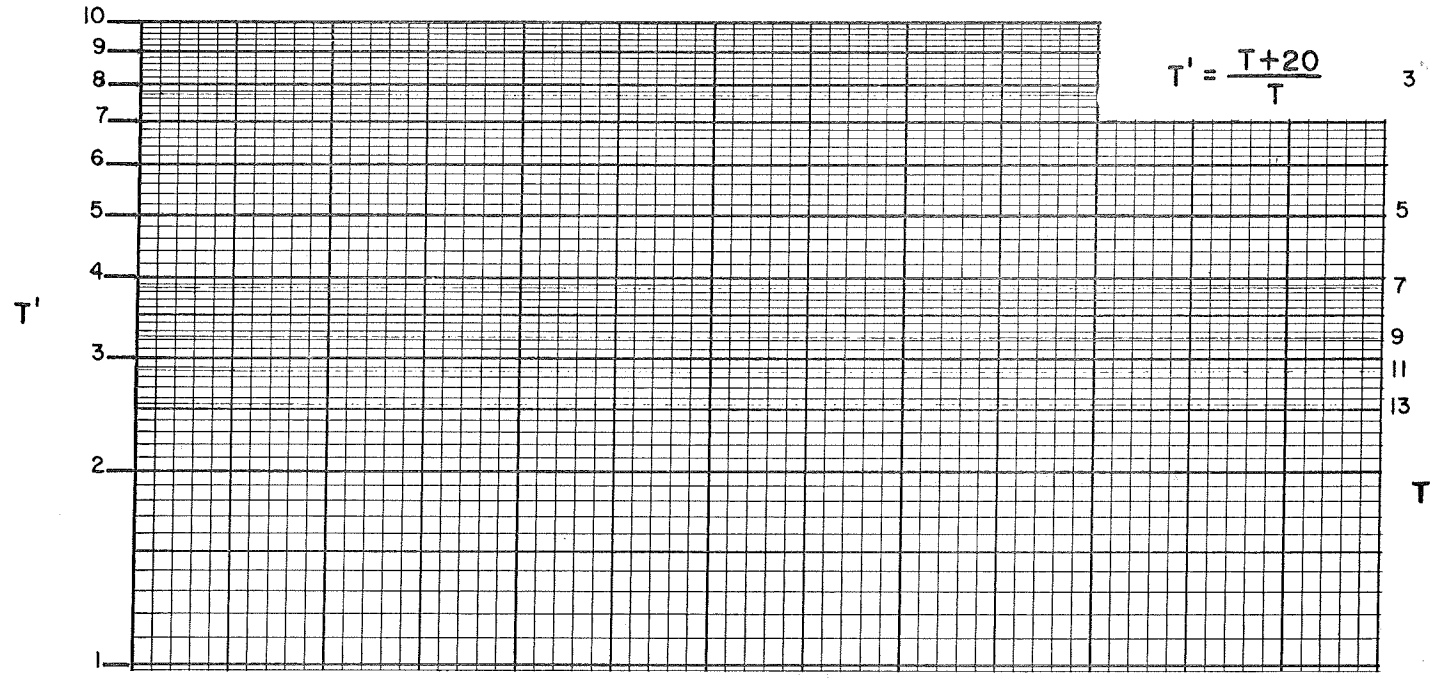
Property _____ T _____ R _____ sec _____

Drill Hole B-112 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments PETERSON WELL

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	5109	16.01	0.12	60	
48	5080	16.15	0.14	70	
50	5047	16.32	0.17	85	
52	5030	16.40	0.08	40	
54	4998	16.56	0.16	80	
56	4961	16.75	0.19	95	
58	4931	16.90	0.15	75	
60	4906	17.03	0.13	65	
62	4877	17.18	0.15	75	
64	4846	17.34	0.16	80	
66	4812	17.52	0.18	90	
68	4794	17.62	0.10	50	> BOTTOM OF HOLE
~~70~~	~~4787~~	~~17.65~~	0.03	15	
~~72~~	~~4788~~				
					GRADIENT 48-68m 73.5°c/Km



RESISTANCE

HOLE B-112

DEPTH METERS

0
10
20
30
40
50
60
70
80
90
100

Δt 26-40 = 62° c/Km

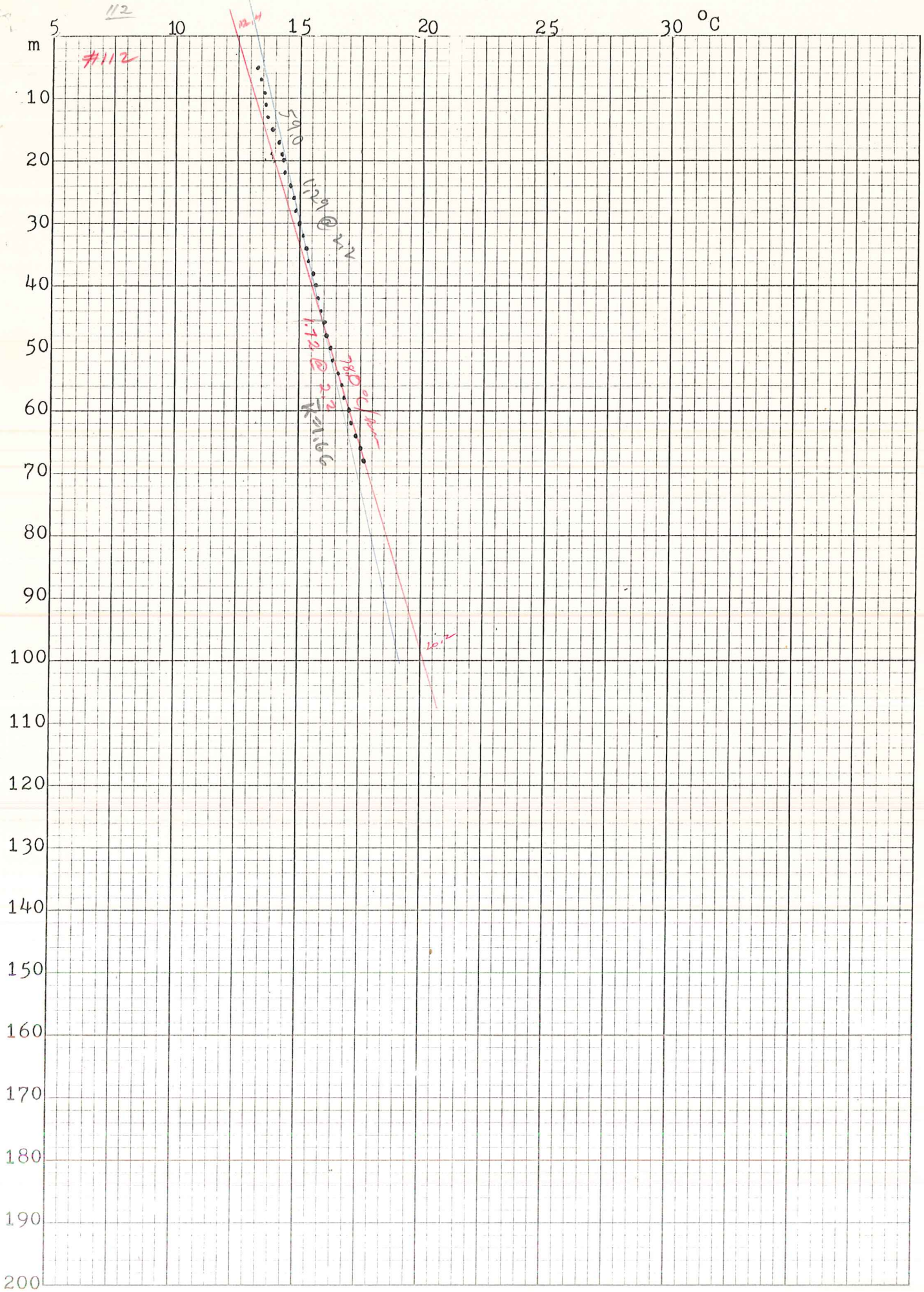
Δt 40-68 = 71.4

(19.86)
2.62

62 = 71.4*
2.1 @ 3.0

10
15
20

TEMPERATURE °C



46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 113

Property-Project Best Depth Logged

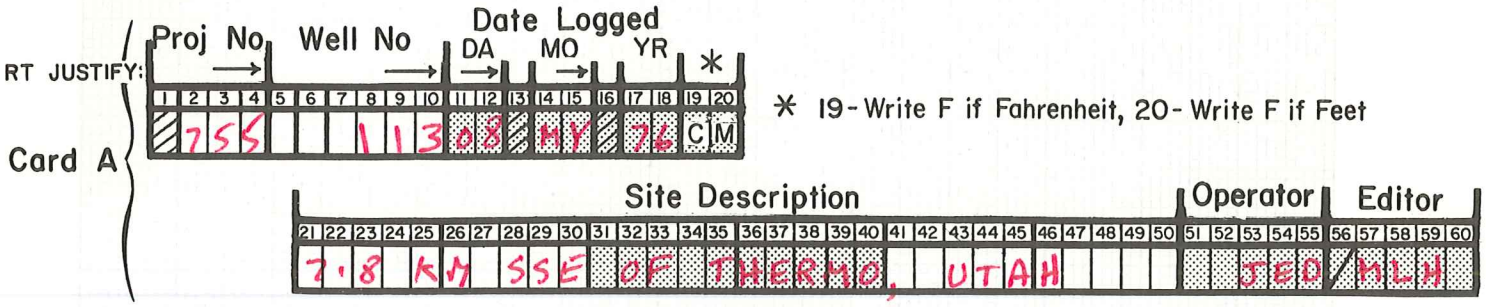
Map Scale Date: Drilled Logged

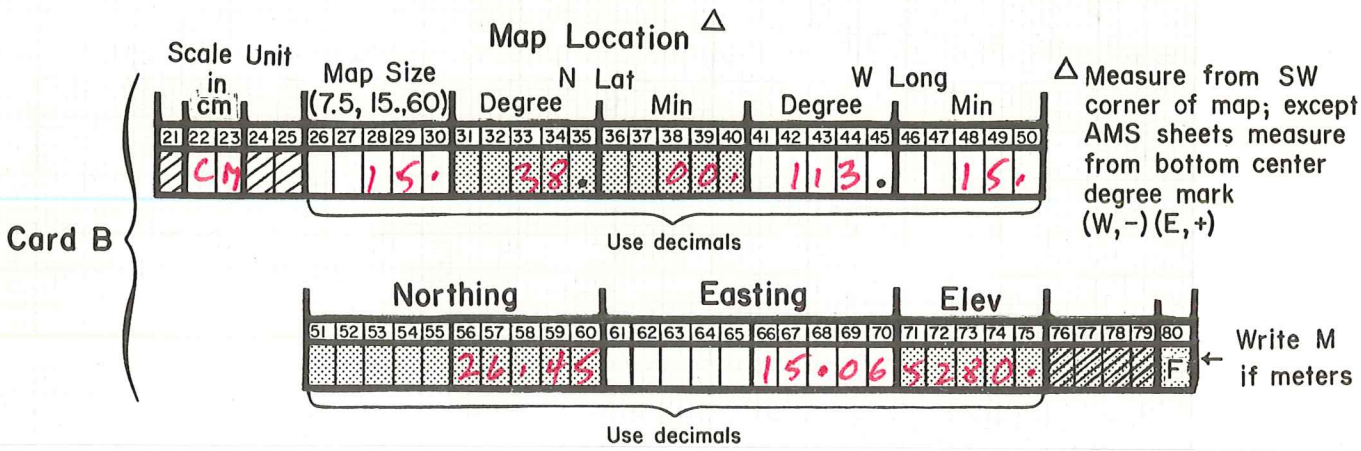
State County Section T R

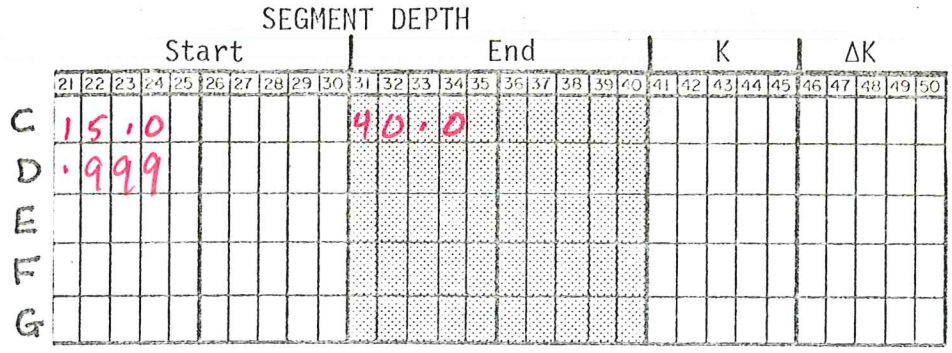
Instrument Operator Elevation ft.

Comments

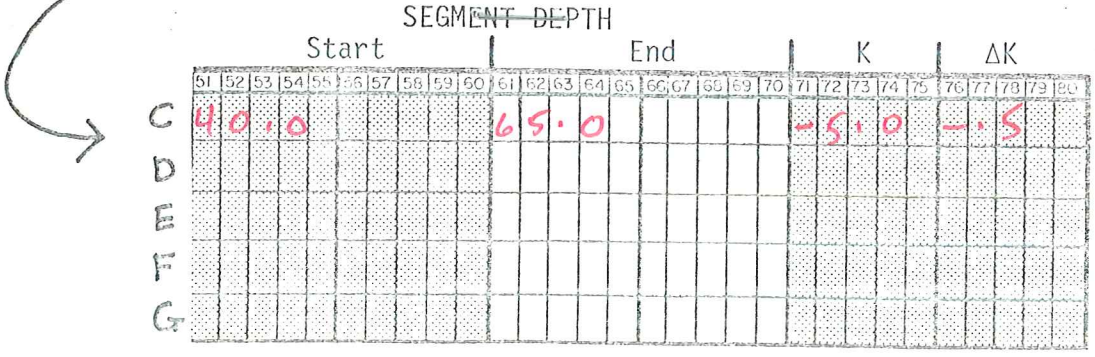
COMPUTER PROCESSING







Continue each card below.



Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1 MILE WEST OF MONUMENT KNOLLS RES. Date 8-MAY-76

Map THERMO UT. 15'

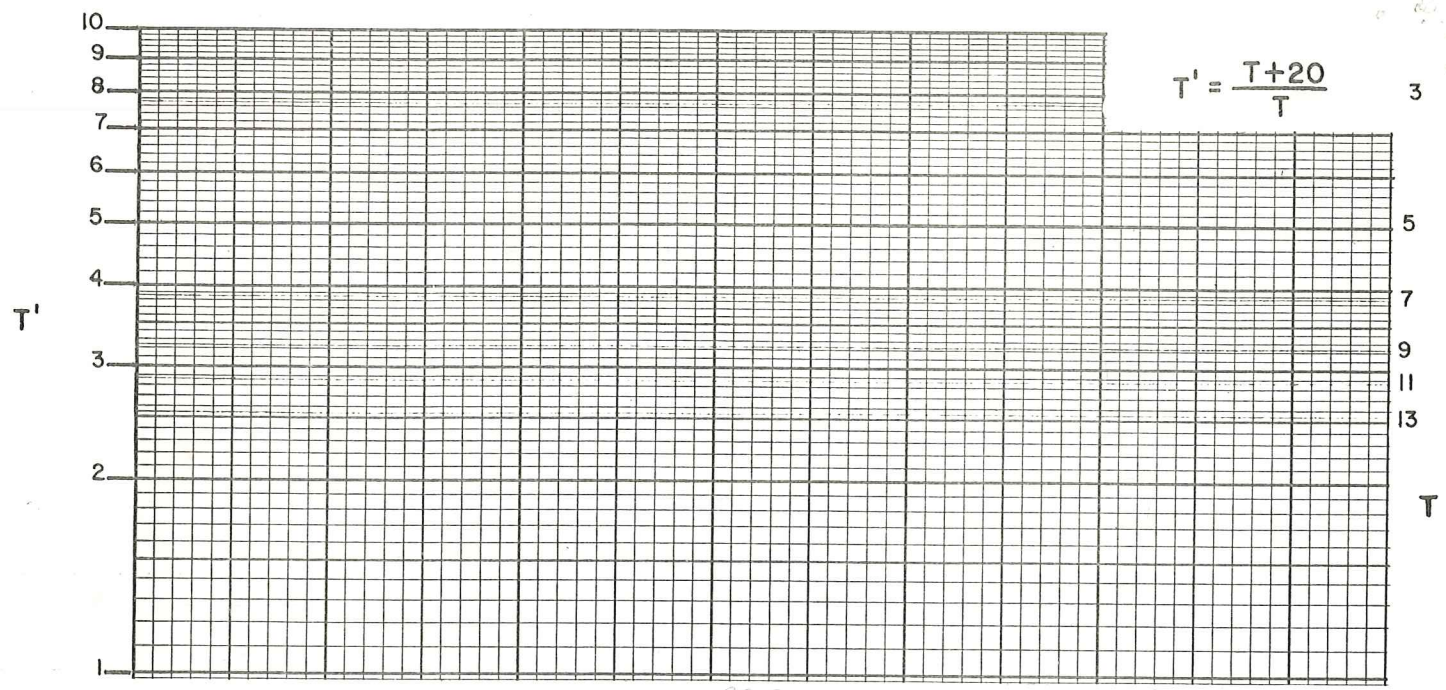
Property BEST T 30S R 12W sec 36 SE¼ SE¼

Drill Hole B-113 Date Drilled (?) Elevation 5280 ft.

Instrument _____ Operator JCD

Comments ABANDONED WINDMILL, 6" STEEL CASING

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	(3) 5669 (5) 5726 (7) 5746	12.50			
10	5410 5356 5330	15.64	3.14	628	
15	4939 4917 4909	17.32	1.68	336	
20	4673 4658 4652	18.61	1.29	258	
25	4496 4483 4477	19.58	0.97	194	
30	4346 4331 4325	20.50	0.92	184	
35	4174 4153 4144	21.72	1.22	244	
40	3988 3979 3975	22.62	0.90	180	
45	3875 3862 3856	23.52	0.90	180	
50	3782 3773 3769	24.04	0.52	104	
55	3672 3666 3666	24.60	0.56	112	
60	3563 3560 3559	25.46	0.86	172	
65	3468 3465 3464	26.18	0.72	144	NO WATER
					30-65m 162°C/Km
					40-65m 142°C/km



RESISTANCE

HOLE B-113

DEPTH METERS

0
10
20
30
40
50
60
70
80
90
100

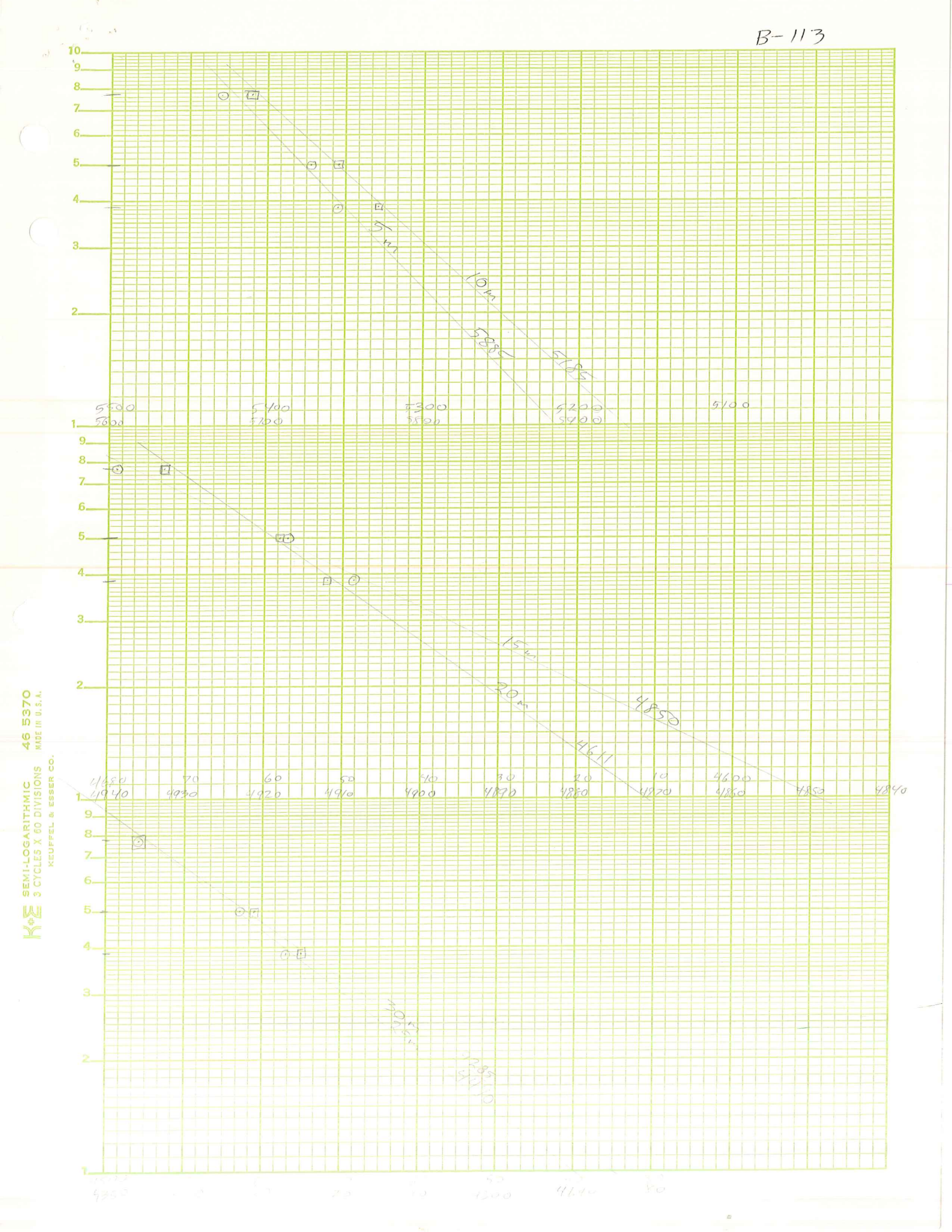
(820) / 1.43

324, 131 / 4.6 @ 5.0

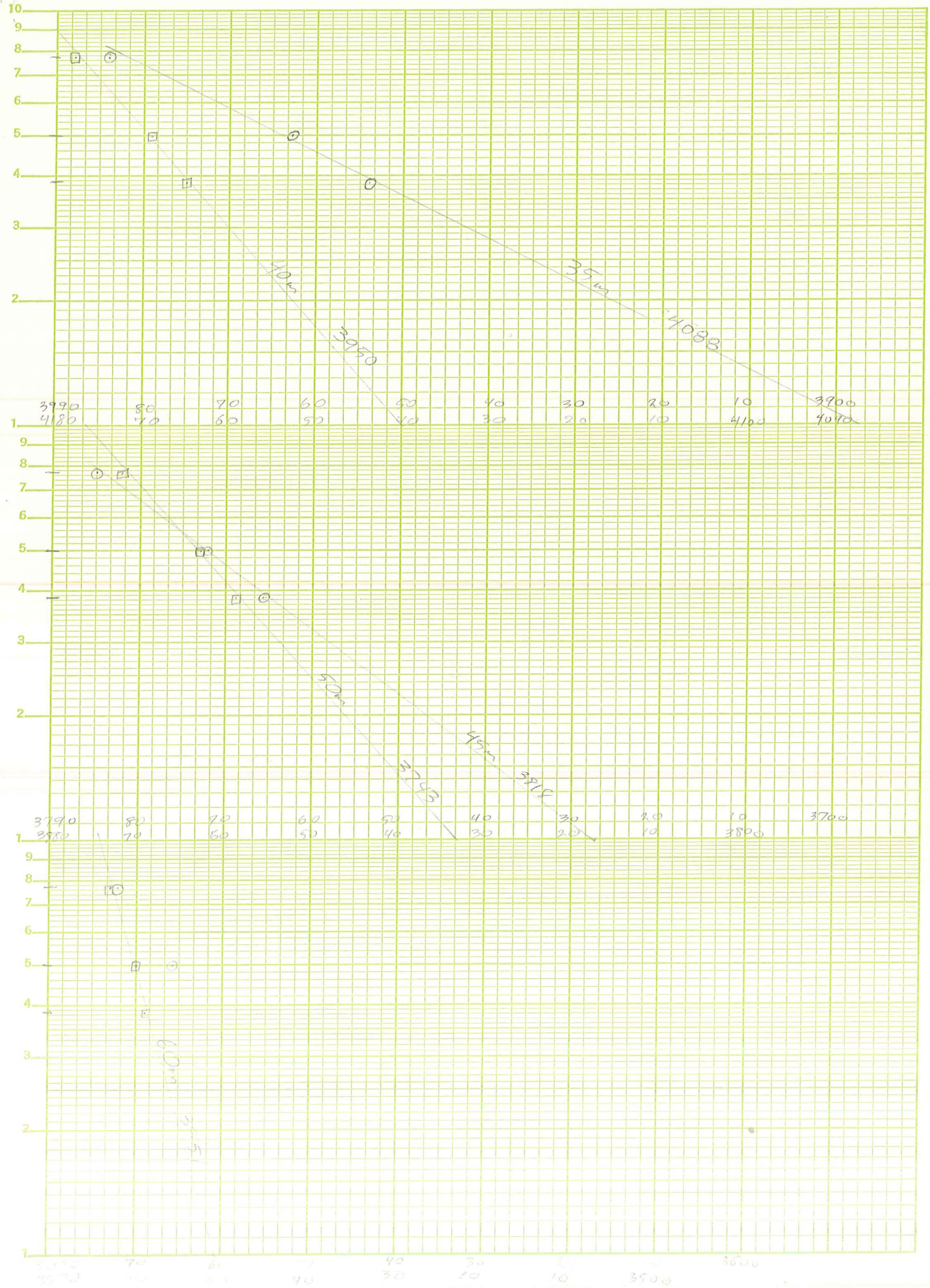
0
10
20
30

TEMPERATURE °C

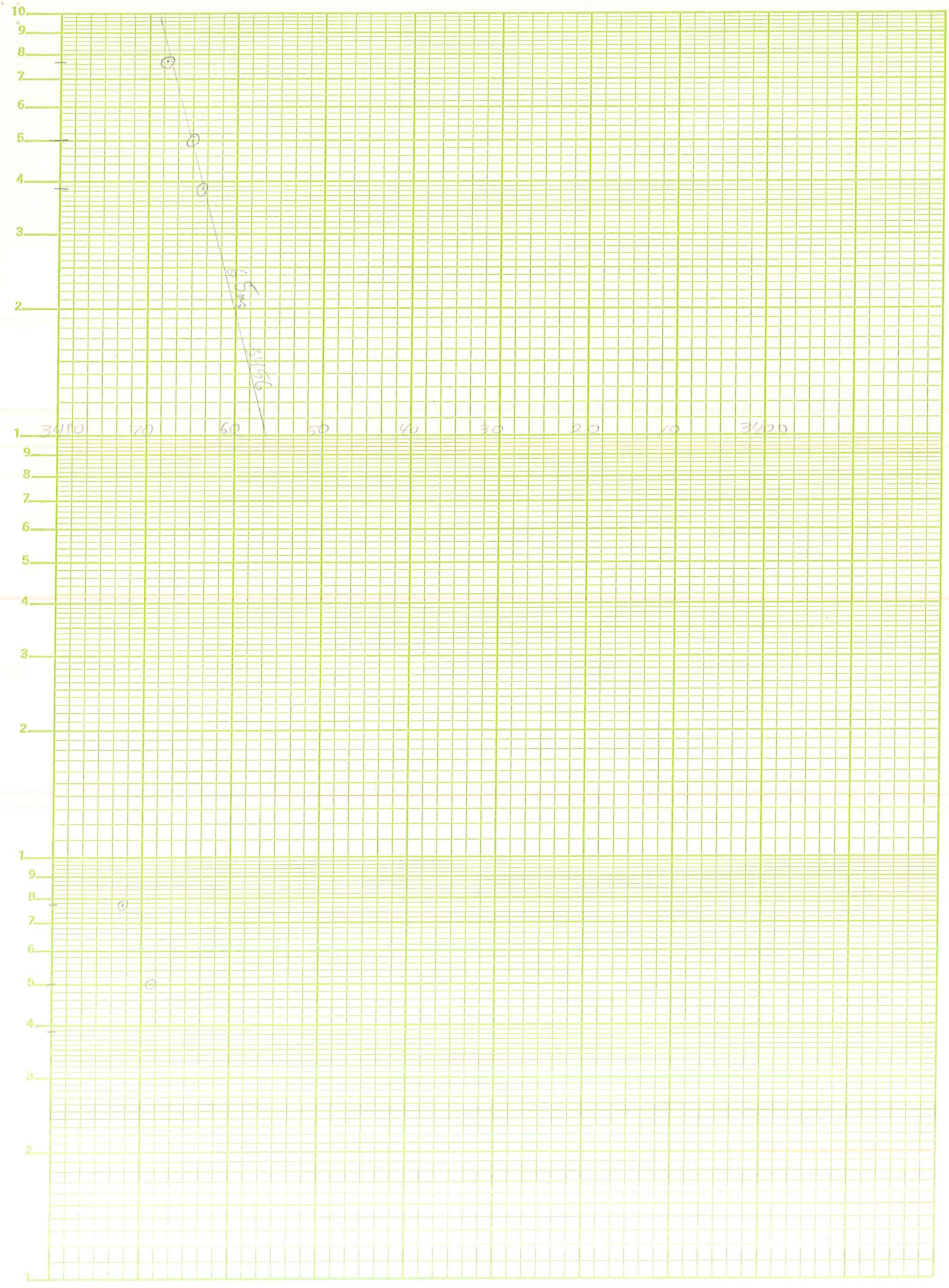
B-113


5M
10M
15M
20M
5885
5785
4850
4611
5500
5400
5300
5200
5100
4940
4930
4920
4910
4900
4890
4880
4870
4860
4850
4840
SEMI-LOGARITHMIC
3 CYCLES X 60 DIVISIONS
KEUFFEL & ESSER CO.
46 5370
MADE IN U.S.A.

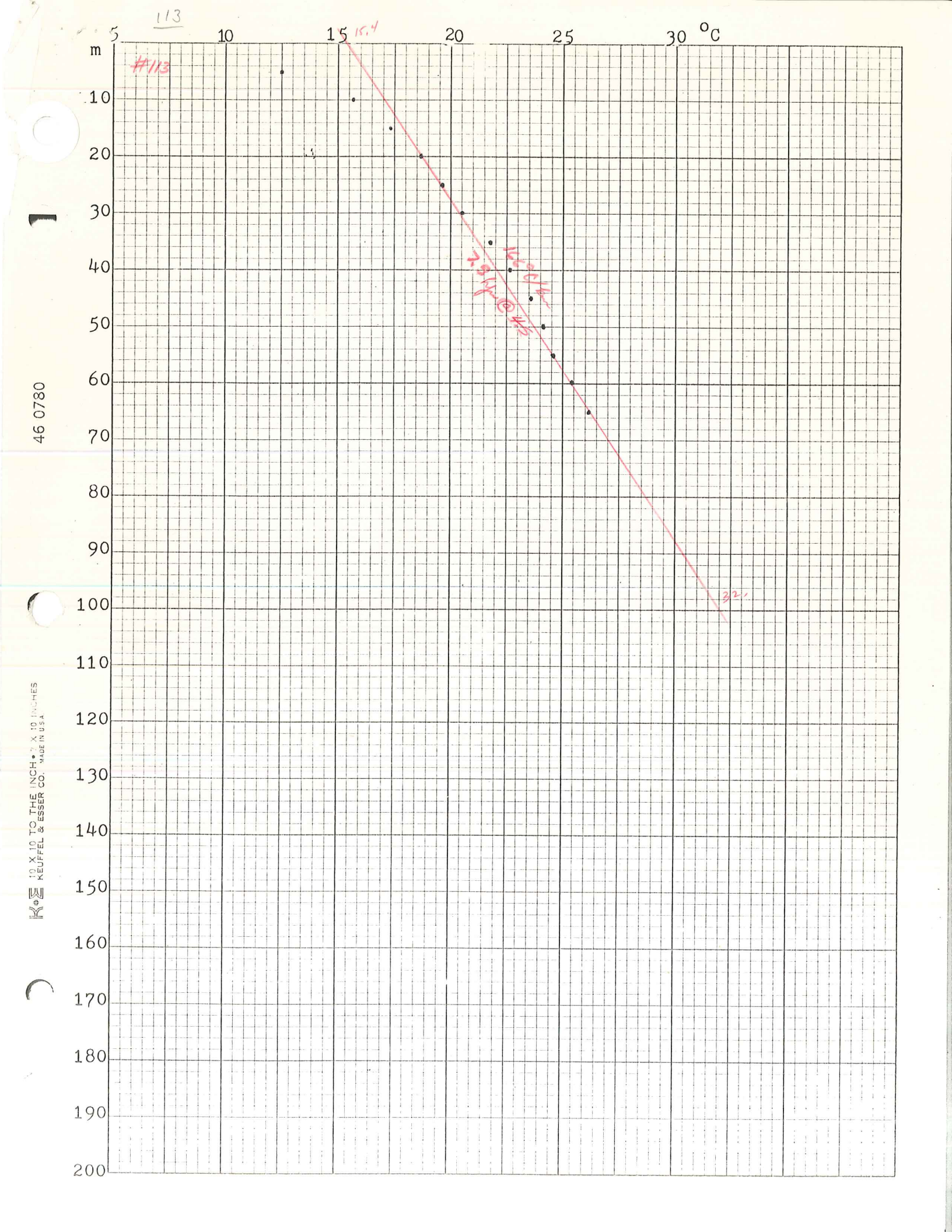
B-113



K+E SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.



SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.



46 0780
KE 10 X 10 TO THE INCH • 2 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 114

Property-Project Best

Depth Logged

Map

Scale

Date: Drilled

Logged

State

County

Section

T

R

Instrument

Operator

Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* (19)	* (20)
755	114	09	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
1.6 KM SE OF MONUMENT PEAK	JEO	/MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00	113.	15.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	(80)
10.25	12.3	6400.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	14.0	44.0	-4.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–79)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1 MILE S.E. OF MONUMENT PEAK Date 9-MAY-76

Map THERMO

Property BEST T 31S R 12W sec 35 SE¼ SE¼

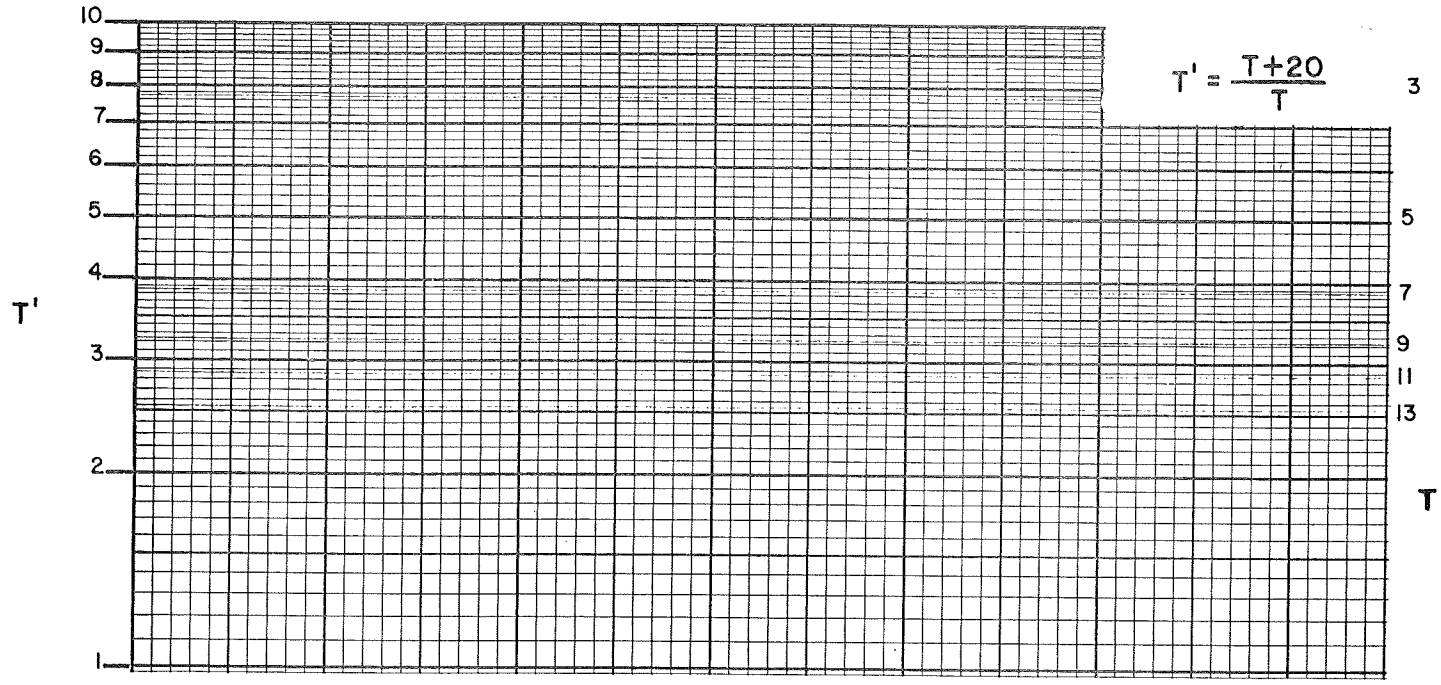
Drill Hole B-114 Date Drilled _____ Elevation 6400 ft.

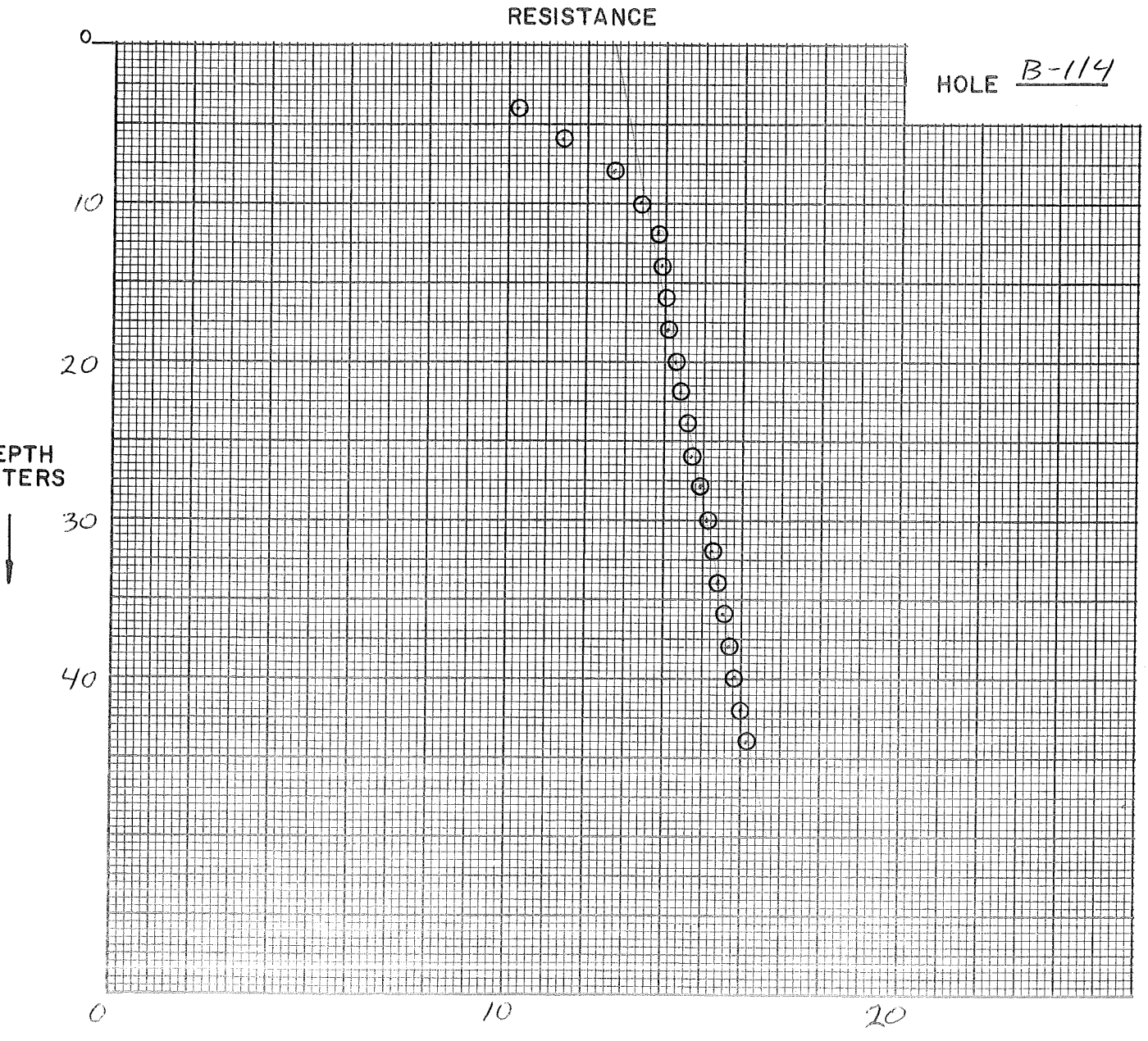
Instrument _____ Operator JEO

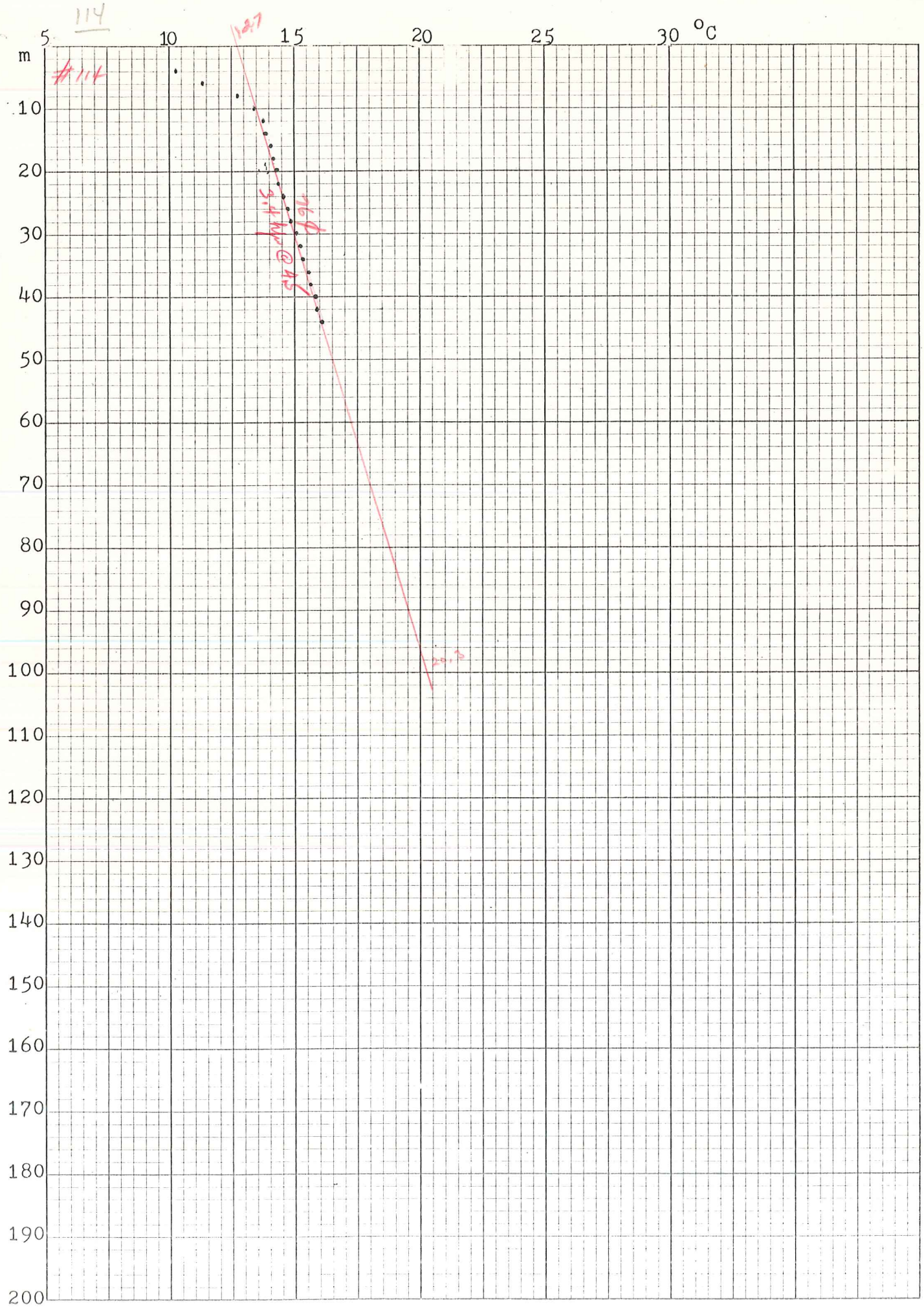
Comments 3/4" PVC PIPE. PHILLIPS GRADIENT HOLE.

SURFACE & CUTTINGS OF PINKISH GRAY RHYOLITE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6450	10.26			
			1.13	565	
6	6157	11.39			
			1.37	685	
8	5822	12.76			
			0.70	350	
10	5659	13.46			
			0.33	165	
12	5584	13.79			
			0.13	65	
14	5554	13.92			
			0.10	50	
16	5533	14.02			
			0.12	60	
18	5507	14.14			
			0.14	70	
20	5475	14.28			
			0.15	75	
22	5443	14.43			
			0.16	80	
24	5408	14.59			
			0.15	75	
26	5374	14.74			
			0.17	85	
28	5339	14.91			
			0.16	80	
30	5305	15.07			
			0.15	75	
32	5272	1522			
			0.15	75	
34	5240	15.37			
			0.15	75	
36	5210	15.52			
			0.15	75	
38	5178	15.67			
			0.15	75	
40	5147	15.82			
			0.15	75	
42	5116	15.97			
			0.16	80	
44	5084	16.13			24-44m 77°C/Km


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T


RESISTANCE
HOLE B-114
0
10
20
30
40
DEPTH METERS
0
10
20
TEMPERATURE °C



46 0780
K+E 10 X 10 TO THE INCH • 1 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 115

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 1 5	0 9	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
2 . C KM SE OF BLUE KNOLL	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	0 0 .	1 1 3 .	1 5 .

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
1 3 . 8 7	~~2 . 6~~ 4,95	5 3 5 0 .	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	1 4 . 0	3 4 . 0		
D	. 9 9 9			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	3 4 . 0	6 4 . 0	- 4 . 5	- . 5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 2 MILES NW OF MONUMENT PEAK Date 9-MAY-76

Map THERMO UT. 15"

Property BEST T 31S R 12W sec 29 EAST MARGIN

Drill Hole B-115 Date Drilled _____ Elevation 5310 ft.

Instrument _____ Operator JEO

Comments 3/4" PVC PIPE - PHILLIPS GRADIENT HOLE. CUTTINGS ~~THIS~~ OF FINE GRAINED PARTLY RECRYSTALLIZED RHYOLITE. ALLUVIUM AT SURFACE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6488	10.12			
			1.58	790	
6	6080	11.70			
			1.52	760	
8	5715	13.22			
			0.61	305	
10	5575	13.83			
			0.22	110	
12	5527	14.05			
			0.15	75	
14	5493	14.20			
			0.20	100	
16	5449	14.40			
			0.26	130	
18	5393	14.66			
			0.23	115	
20	5343	14.89			
			0.19	95	
22	5301	15.08			
			0.19	95	
24	5261	15.27			
			0.19	95	
26	5223	15.46			
			0.18	90	
28	5184	15.64			
			0.20	100	
30	5143	15.84			
			0.19	95	
32	5105	16.03			
			0.20	100	
34	5064	16.23			
			0.18	90	
36	5029	16.41			
			0.17	85	
38	4994	16.58			
			0.19	95	
40	4957	16.77			
			0.16	80	
42	4926	16.93			
			0.17	85	
44	4892	17.10			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

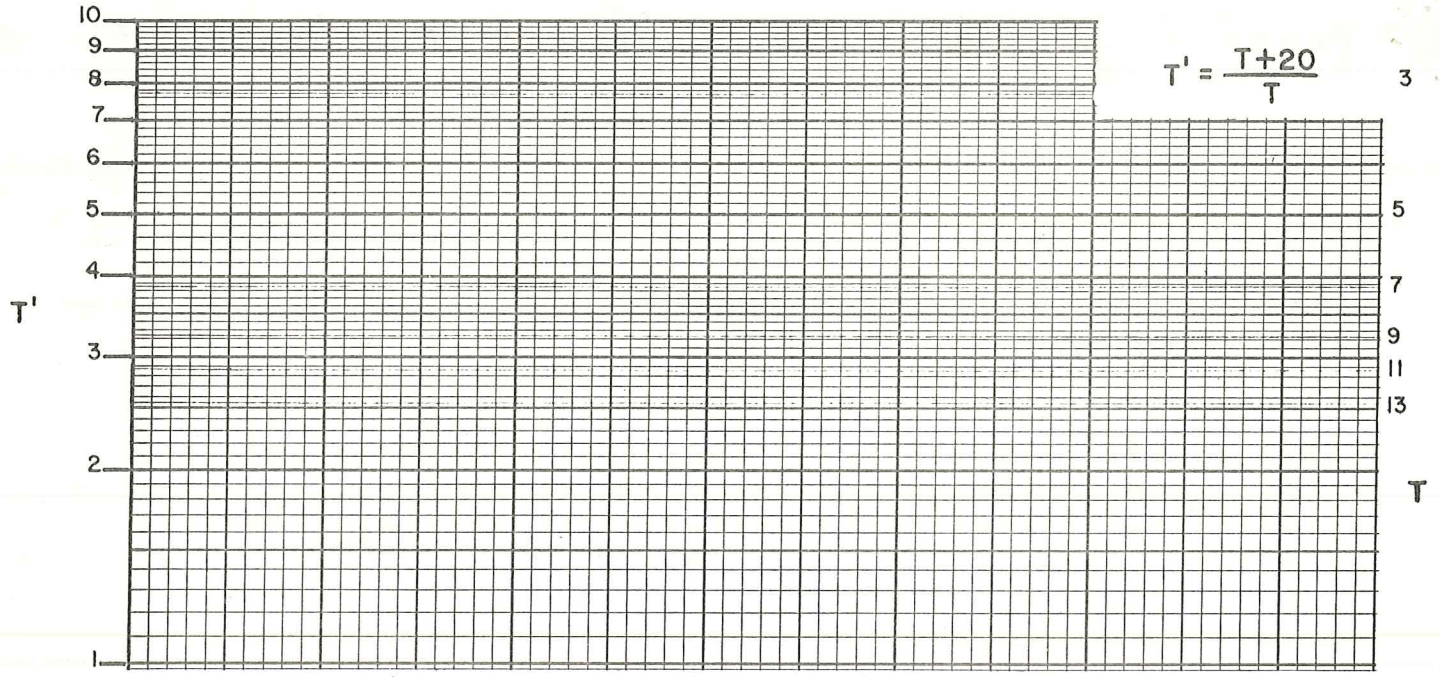
Property _____ T ____ R ____ sec ____

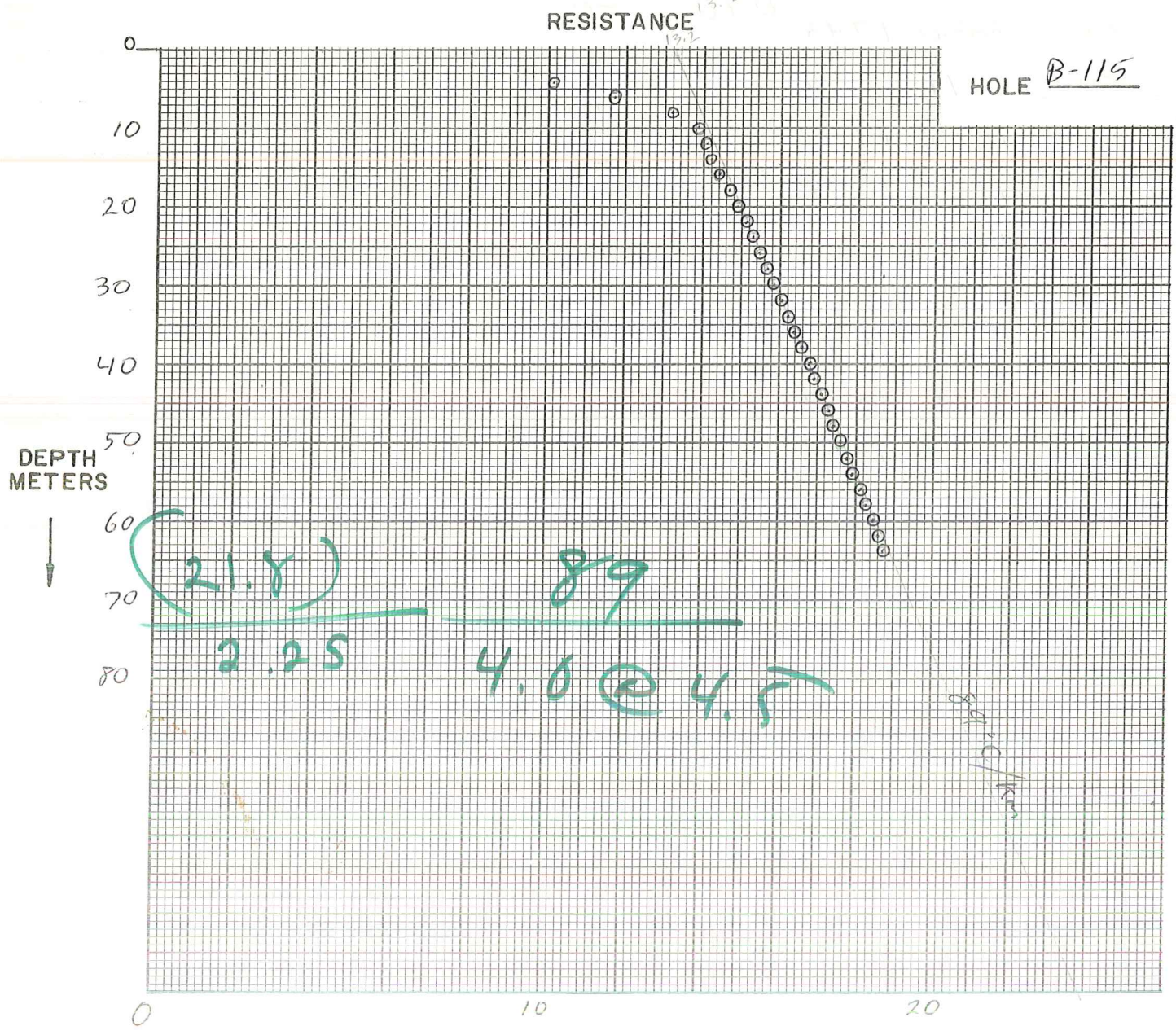
Drill Hole B-115 Date Drilled _____ Elevation ____ ft.

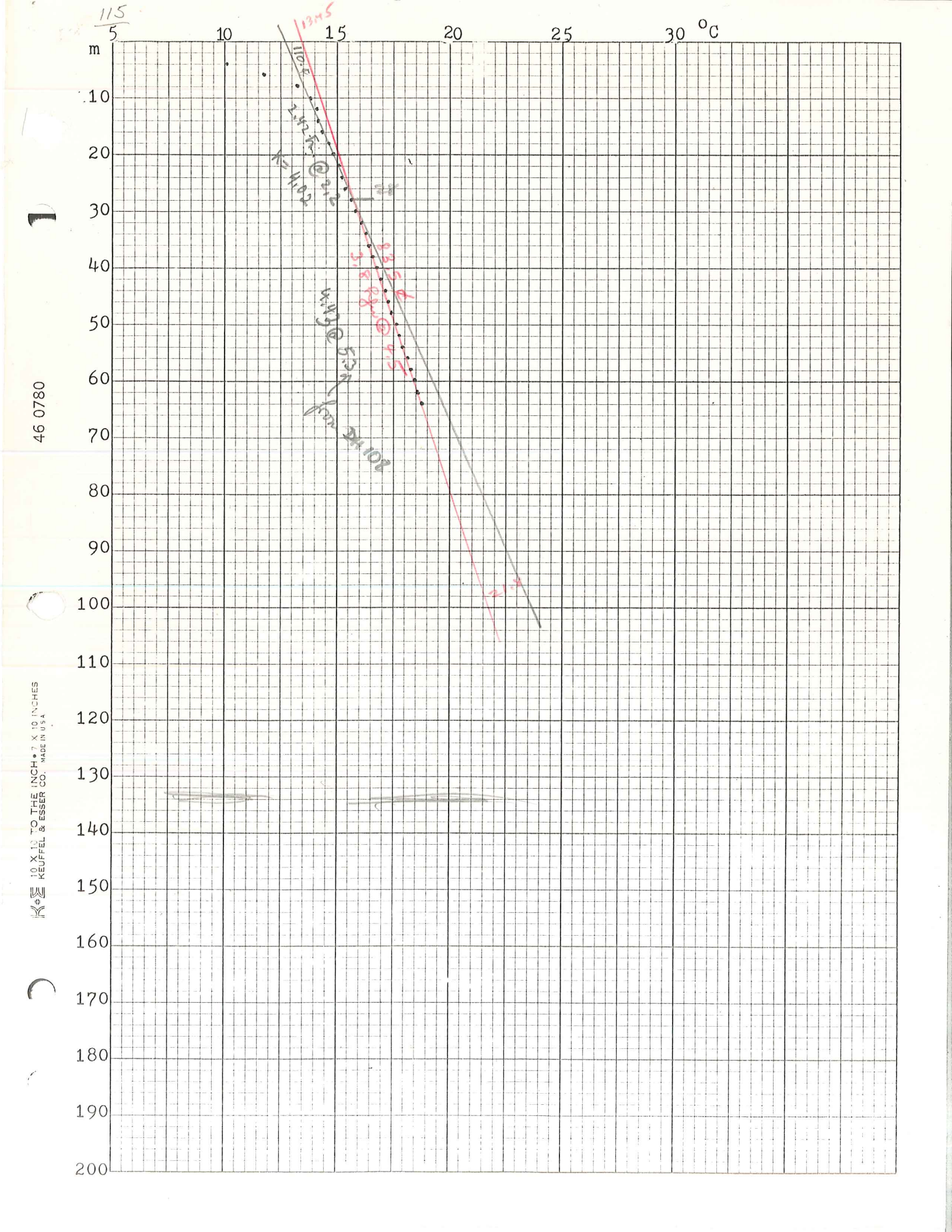
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	4861	17.27	0.17	85	
48	4830	17.43	0.16	80	
50	4799	17.59	0.16	80	
52	4765	17.77	0.18	90	
54	4734	17.94	0.17	85	
56	4702	18.11	0.17	85	
58	4676	18.25	0.14	70	
60	4644	18.43	0.18	90	
62	4614	18.59	0.16	80	
64	4589	18.73	0.14	70	
					20-64m ≈ 87.3°C/km


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-115
DEPTH METERS
0
10
20
30
40
50
60
70
80
0
10
20
TEMPERATURE °C
(21.4)
2.25
89
4.0 @ 4.5


115
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
KE 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 116

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
755	116	07	MY	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
1.0 KM NNW OF THERMO, UTAH	JEO	NLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	06.	113.	15.

Use decimals

Map Location △

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
39.6	10.25	5660.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	22.0	40.0	-2.2	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

55,5...

_____ of _____

TEMPERATURE - DEPTH LOG

Location _____ Date 7-MAY-76

Map THERMO UT. 15''

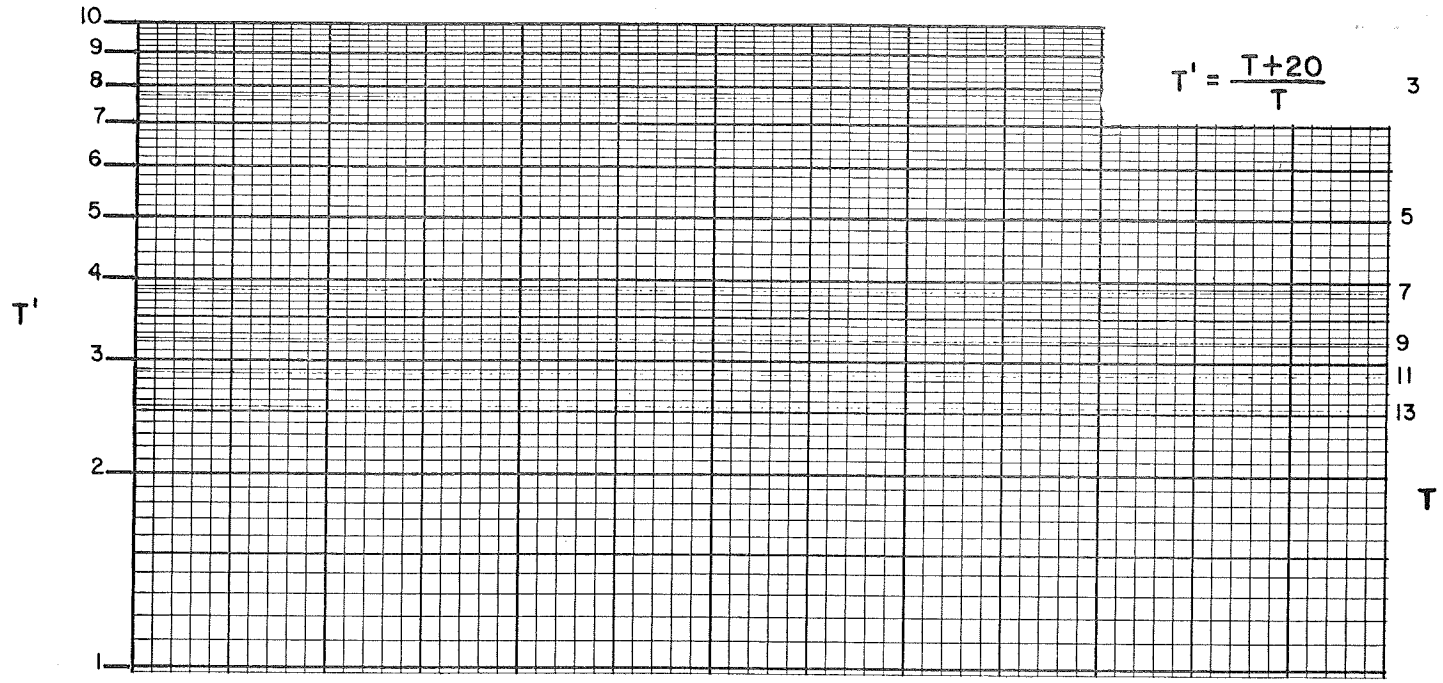
Property BEST T 30S R 12W sec 3 SE¼ SE¼

Drill Hole B-116 Date Drilled _____ Elevation _____ ft.

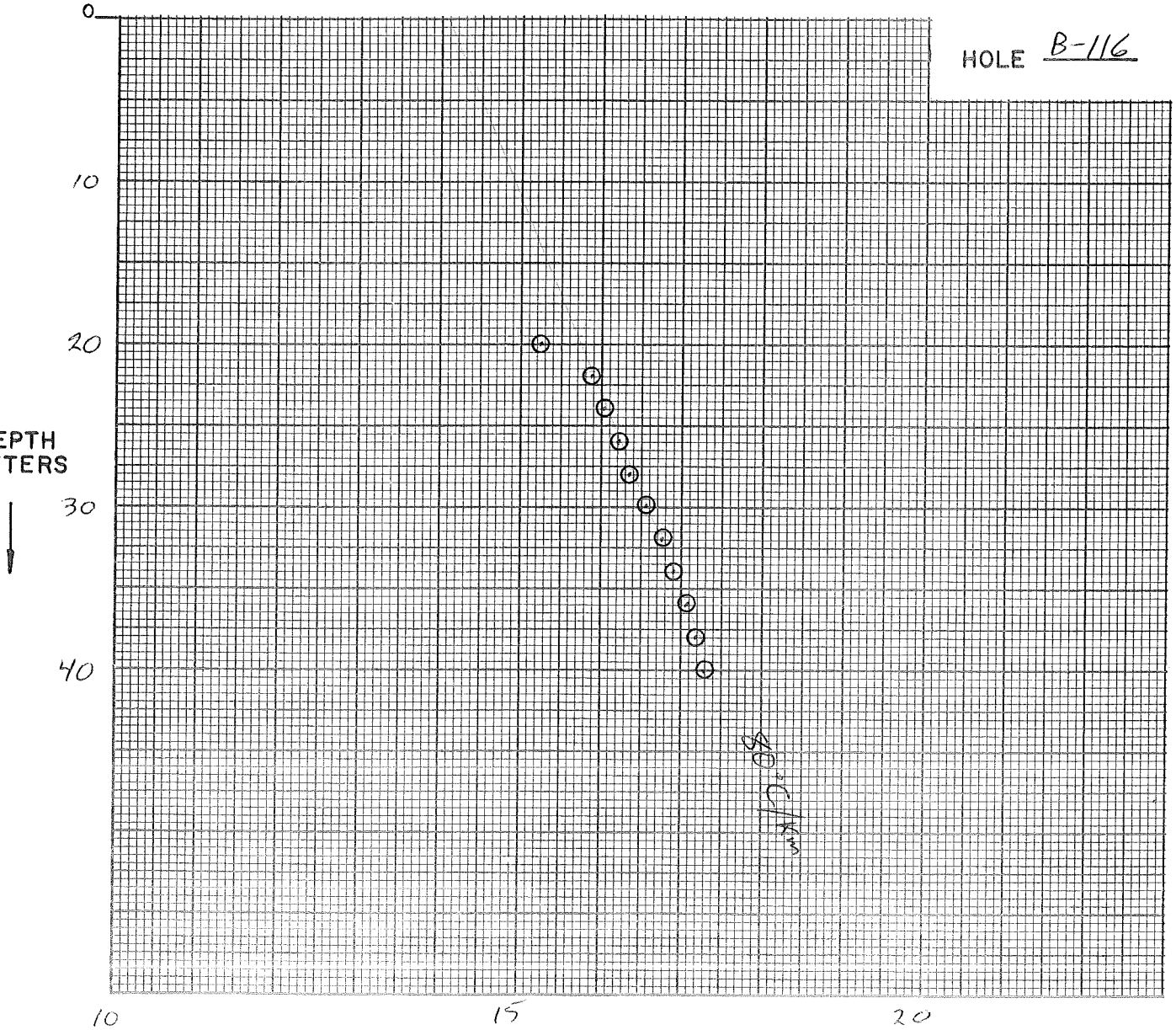
Instrument _____ Operator JED

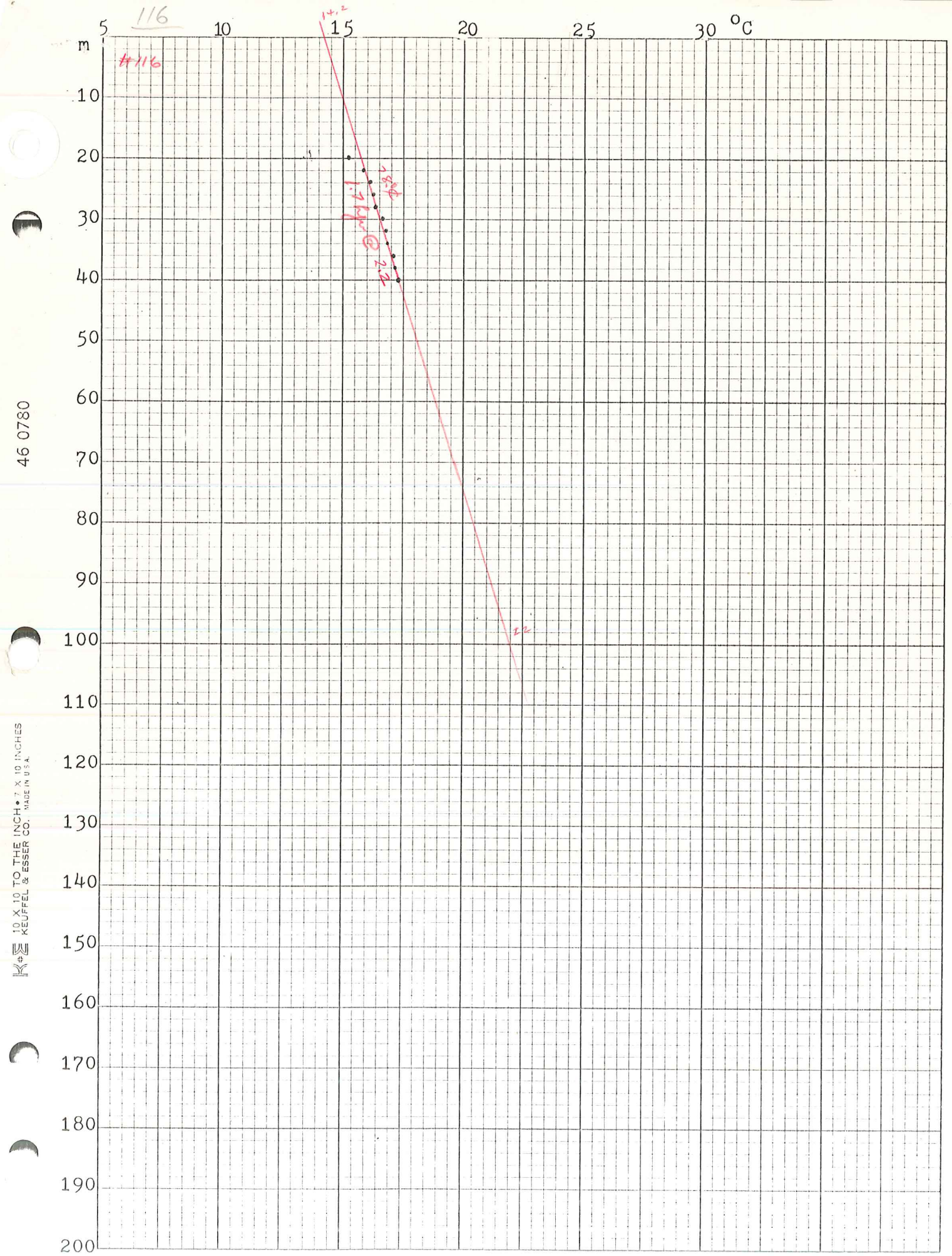
Comments WINDMILL NEAR THERMO RR. CROSSING, 6" CASED WELL. NOT PUMPING AT TIME, PROBABLY PUMPED RECENTLY (WITHIN WEEK)

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5492				
12					READOUT DRIFTING
14					
20	5170	15.23			STABLE READING.
22	5137	15.87	.64		
24	5106	16.02	.15	75	
26	5068	16.21	.19	95	
28	5038	16.36	.15	75	
30	5000	16.55	.19	95	
32	4958	16.76	.21	105	
34	4931	16.90	.14	70	
36	4904	17.04	.14	70	
38	4877	17.18	.14	70	
40	4852	17.31	.13	65	
					GRADIENT 22-40m 80.0°c/K


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T

RESISTANCE


0
10
20
30
40
HOLE B-116
DEPTH METERS
10
15
20
TEMPERATURE °C


116
5
10
15
20
25
30
°C
m
#116
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
14.2
1.7 hr @ 2.2
22
46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 118

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 1 8	1 0	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
6 . 6 K M S E O F T H E R M O . U T A H	J E D	M C H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	0 0 .	1 1 3 .	1 5 .

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
2 9 . 4 5	~~1 7 . 1~~	S 1 0 0 .	F

Use decimals 1685

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	1 5 . 0	2 9 . 0	- 2 . 2	- . 5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	. 9 9 9			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 3.5 MILES W. OF GOVERNMENT WELL Date 10-MAY-76

Map THERMO UT. 15"

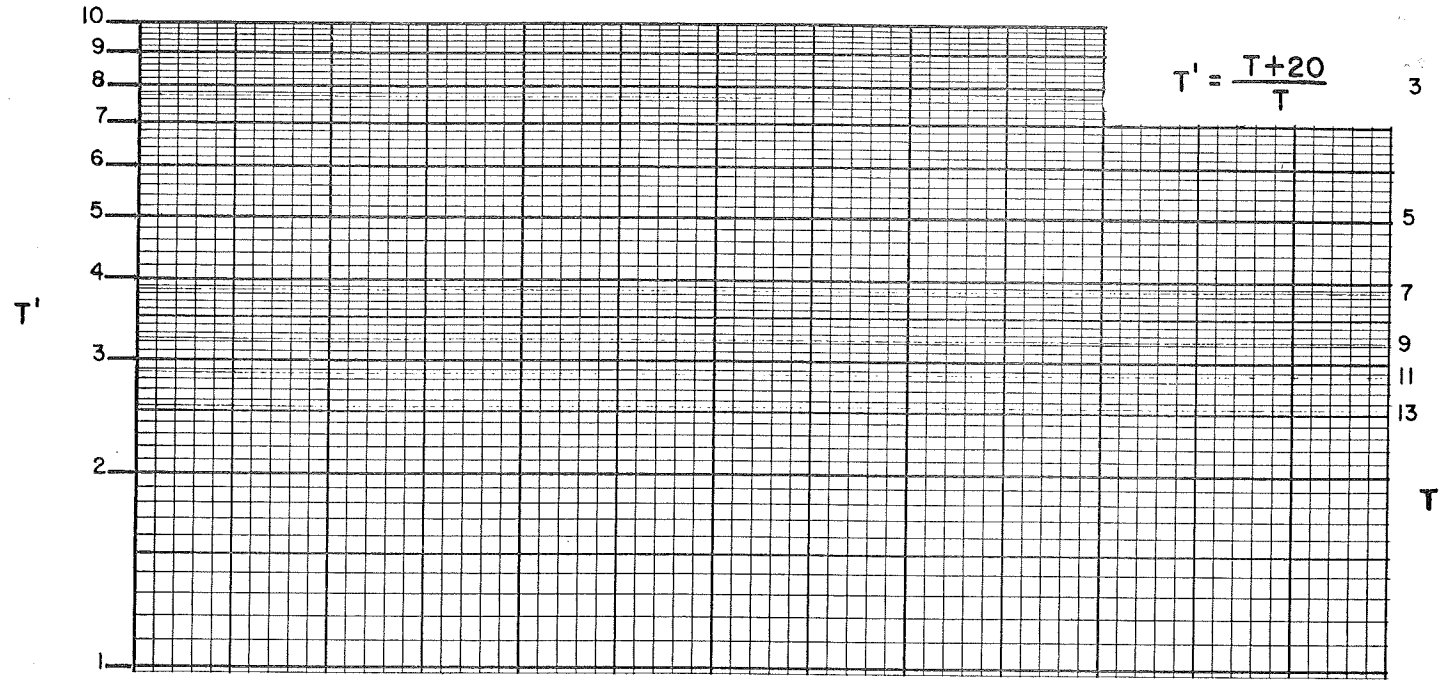
Property BEST T 30S R 12W sec 30 SE¼

Drill Hole B-118 Date Drilled _____ Elevation 5100 ft.

Instrument _____ Operator JED

Comments 4" CASED WATER OBSERVATION WELL, DRILLED BY STATE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	3 5516 5 5639 7 5680	13.40			
	9 5674 11 5678				
15	3 5365		2.48	496	
+2	5 5318	15.88			
	7 5285		0.52	104	
20	5172 5142 5123	16.40			
			0.33	66	
25	4996 4989 4986	16.73			NOTE CHANGE TO 2m INTERVALS.
			0.25	125	
27	4923 4916 4916	16.98			
			0.07	35	
29	4902	17.05			WATER IN BOTTOM 1 METER
					15-29m 83.6°C/Km
					GRADIENT 20-29m 72.7°C/Km



RESISTANCE

HOLE B-118

DEPTH METERS

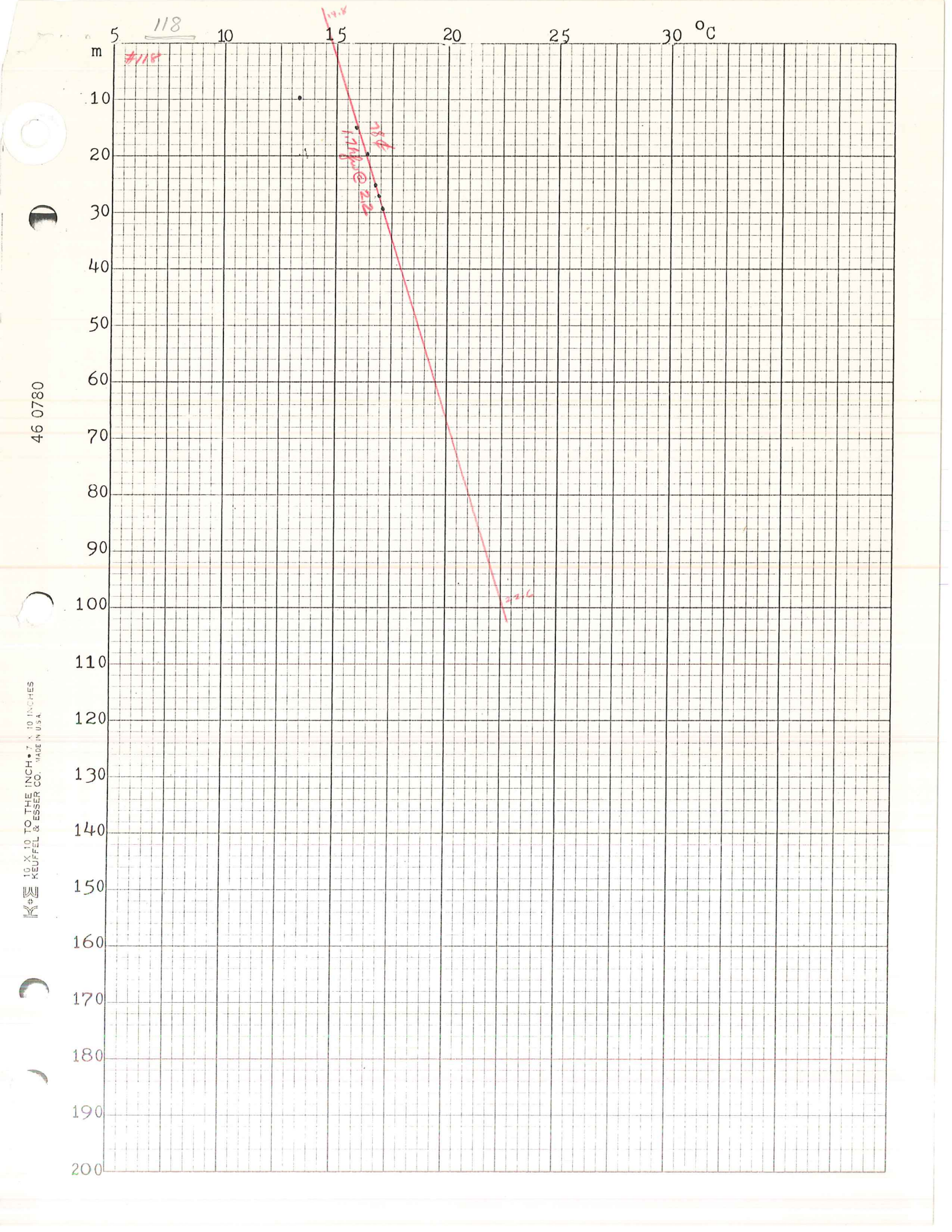
0
10
20
30
40

10
15
20

TEMPERATURE °C

B-118

KE SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.


118
5
10
15
20
25
30
°C
m
#118
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 119

Property-Project Best Depth Logged ____

Map ____ Scale ____ Date: Drilled ____ Logged ____

State ____ County ____ Section ____ T ____ R ____

Instrument ____ Operator ____ Elevation ____ ft.

Comments ____

COMPUTER PROCESSING

Card A (RT JUSTIFY)

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (13–15)	YR (16–18)	* 19	* 20
755	119	02	JL	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
2.5 KM SOUTH OF THERMO, UTAH	JED	MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00.	113.	15.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
34.2	10.4	5027.		F

Use decimals

80: Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	20.0	50.0		
D	100.0	170.0		
E	.999			
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	50.0	80.0		
D	180.0	270.0	-3.8	-.5
E				
F				
G				

Final Segment: Start = .999

_____ of _____

TEMPERATURE - DEPTH LOG

AT CORNER SECTION MARKER

Location 1.5 MILES S. OF THERMO RR. SIDING Date 2-JULY-76

Map THERMO UT. 15"

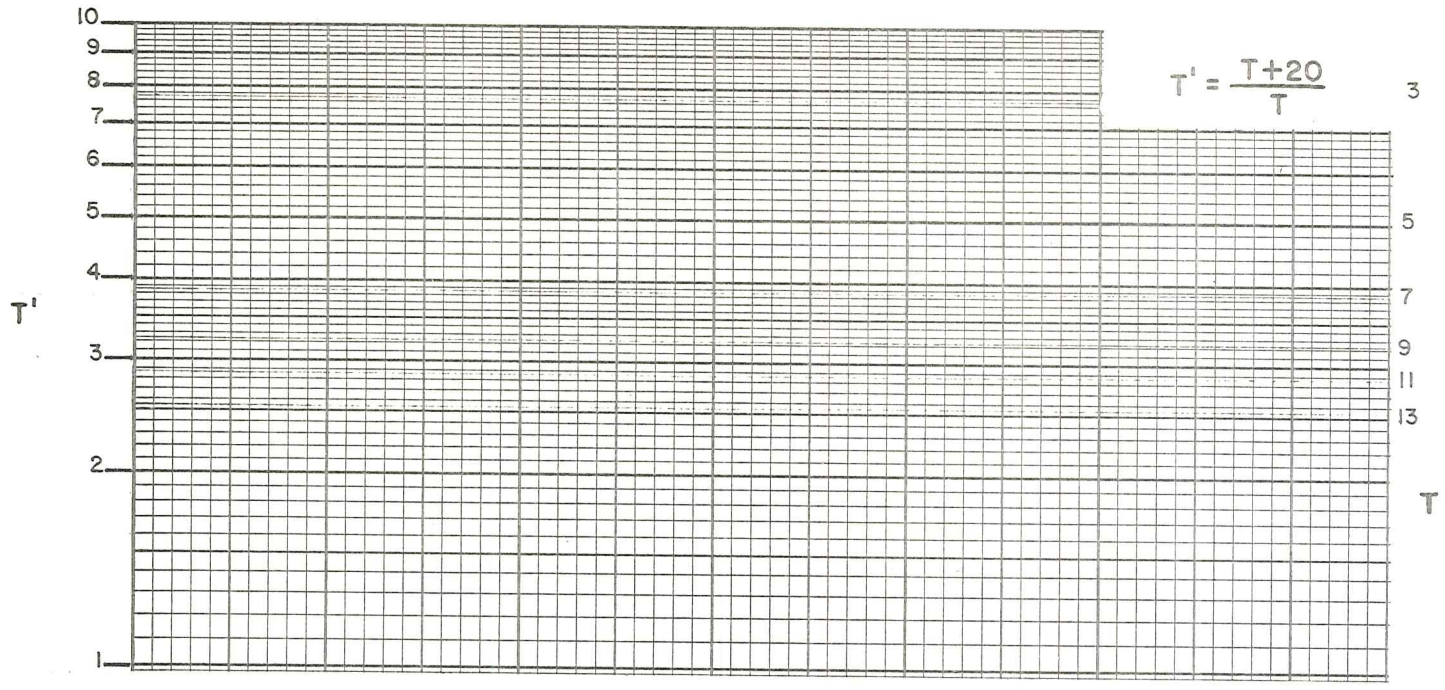
Property BEST T 30 S R 12 W sec 14 SW¼ SW¼

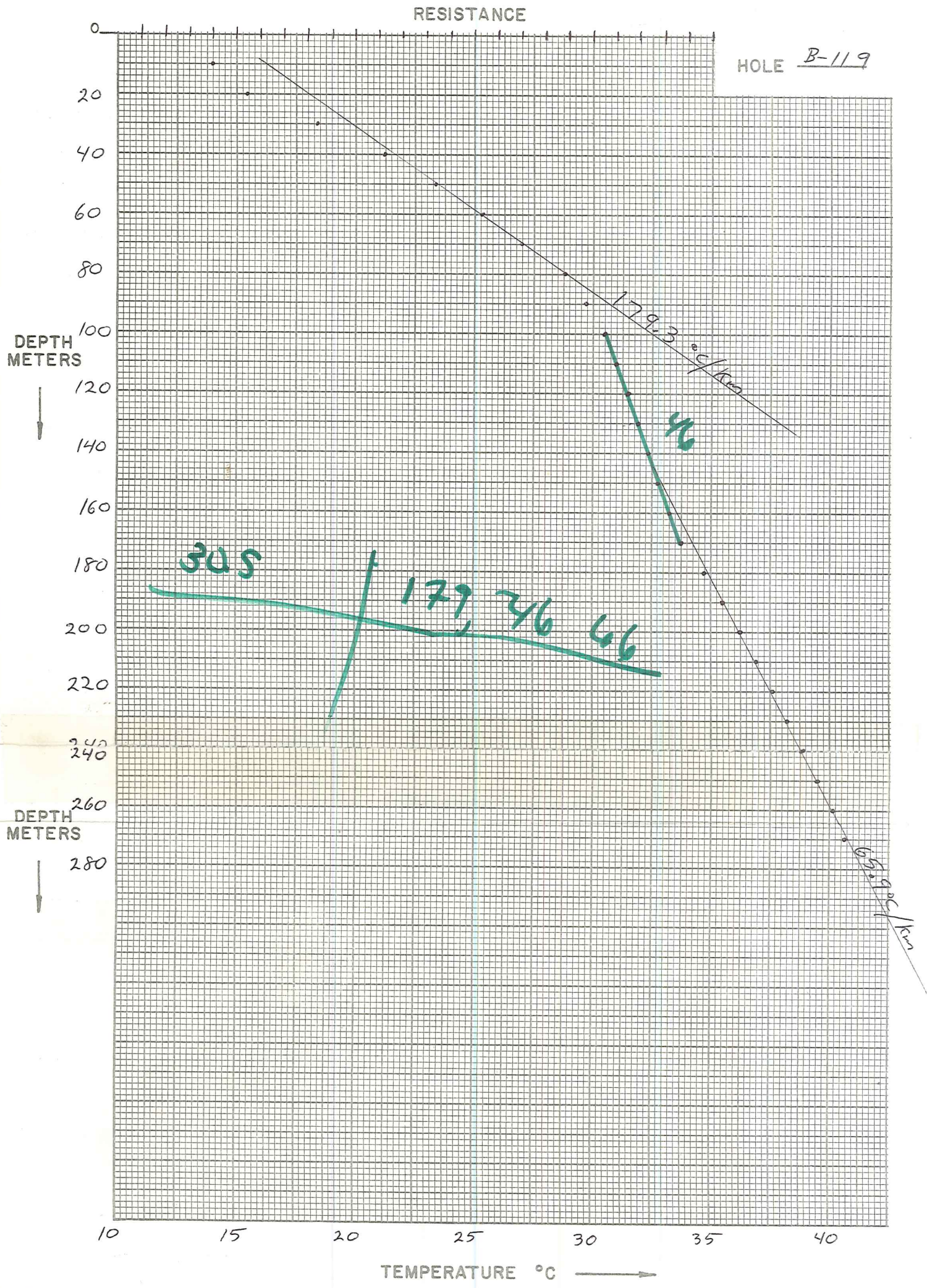
Drill Hole B-119 Date Drilled _____ Elevation 5025 ft.

Instrument _____ Operator JED

Comments [3rd LOGGING] USING PROBE WITH NEW CABLE, OLD CABLE APPARENTLY STRETCHED.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5530	14.03			
20	5223	15.46			
30	4643	18.43			
40	4169	21.21			
50	3833	23.42			
60	3574	25.28			
70	3358	26.96			
80	3138	28.80			
90	3036	29.71			
100	2953	30.48			
110	2893	31.05			
120	2848	31.49			
130	2804	31.92			
140	2766	32.31			
150	2723	32.75			
160	2675	33.25			
170	2631	33.72			
180	2540	34.73			GRADIENT 50-80m 179.3°C/Km
190	2472	35.50			GRADIENT 190-260m 65.9°C/Km
200	2409	36.25			
210	2353	36.93			


T' = T+20 / T
T'
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
T


RESISTANCE
HOLE B-119
0
20
40
60
80
100
120
140
160
180
200
220
240
260
280
DEPTH METERS
DEPTH METERS
179.3 °C/Km
46
305
179
246
66
65.9°C/Km
10
15
20
25
30
35
40
TEMPERATURE °C

TEMPERATURE - DEPTH LOG

Location ______________________ Date __________

Map ______________________

Property ______________________ T _____ R _____ sec _____

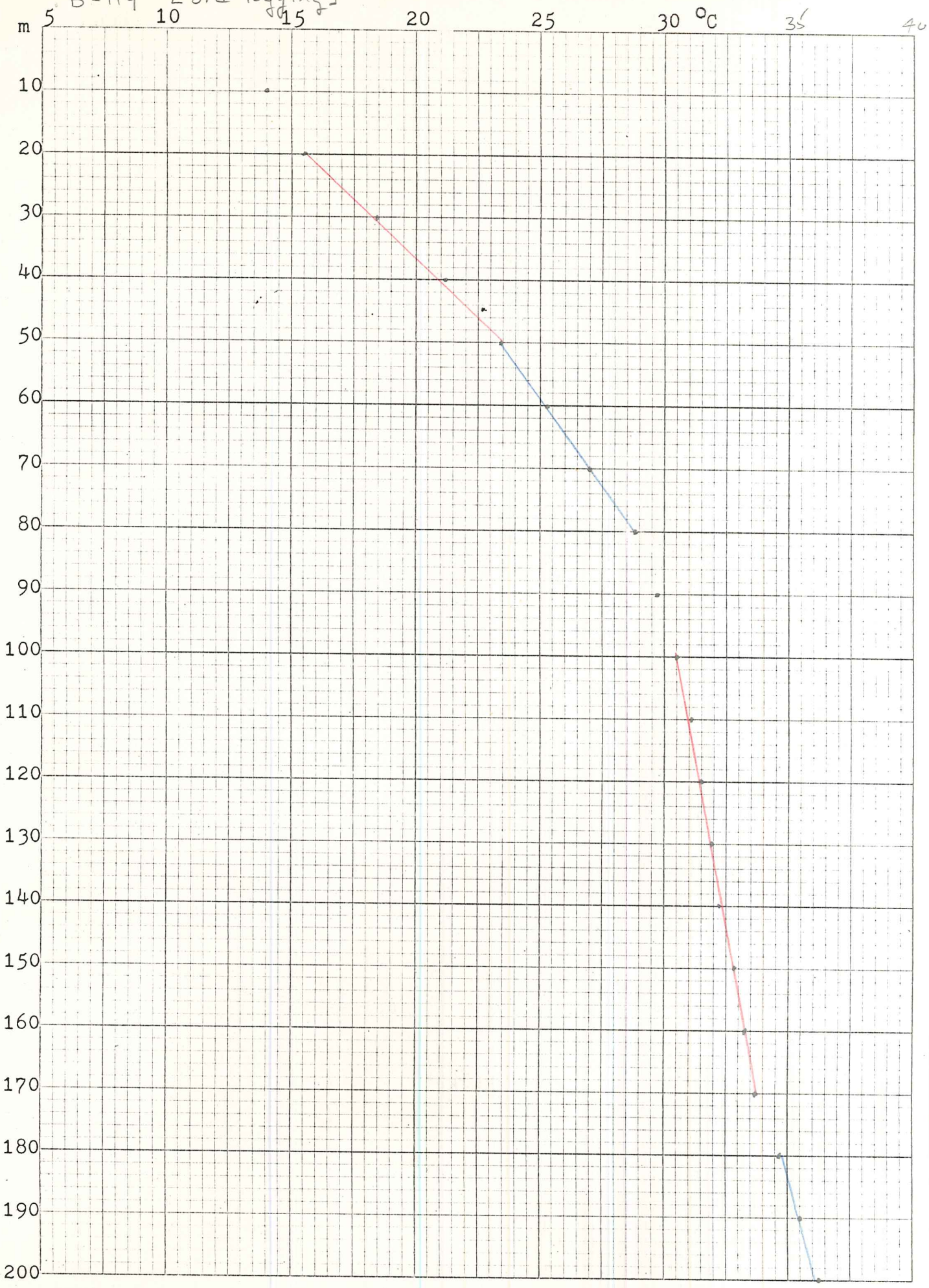
Drill Hole B-119 Date Drilled __________ Elevation _____ ft.

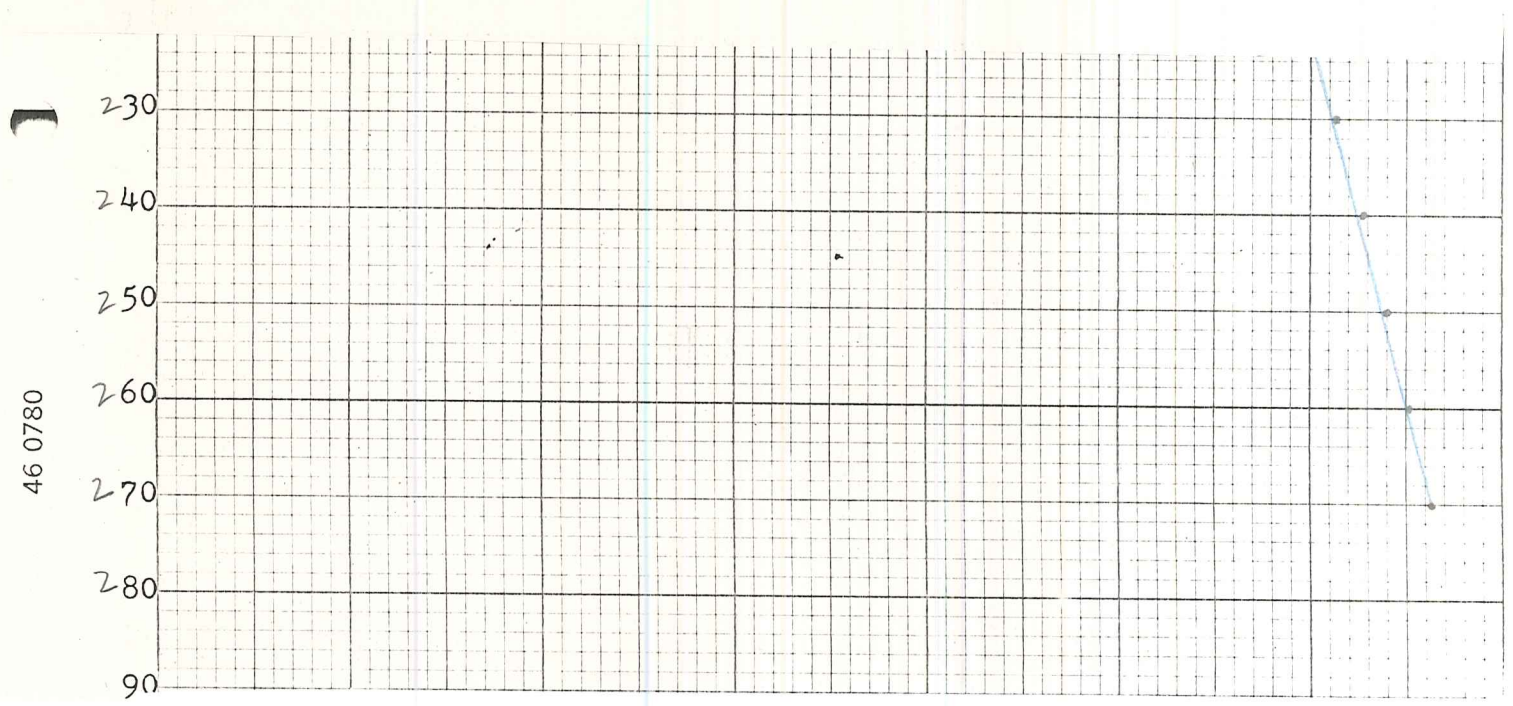
Instrument __________ Operator __________

Comments ______________________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
220	2300	37.59				
230	2250	38.24				
240	2200	38.90				
250	2155	39.51				
260	2112	40.11				
270	2071	40.69				

B-119 [3rd logging]





46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE - DEPTH LOG

Location AT CORNER SECTION MARKER 1.5 MILES S. OF THERMO RR SIDING Date 17-MAY-76

Map THERMO UT. 15"

Property BEST T 30S R 12W sec 14 SWŁ SWŁ

Drill Hole B-119 Date Drilled _____ Elevation 5025 ft.

Instrument _____ Operator JED

Comments [LOGGING HOLE FOR 2nd TIME] 1" GALVANIZED STEEL PIPE.

PHILLIPS GRADIENT HOLE, PROBABLY DRILLED ENTIRELY IN VALLEY FILL.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
~~10~~						
10	5492	14.20				
15	5339	14.91	0.71	142		
20	5205	15.54	0.63	126		
25	4837	17.39	1.85	370		
30	4611	18.61	1.22	244		
35	4369	19.99	1.38	276		
40	4138	21.40	1.41	282		
45	3938	22.70	1.30	260		
50	3806	23.60	0.90	180		
55	3687	24.44	0.84	168		
60	3544	25.50	1.06	212		
65	3439	26.31	0.81	162		
70	3331	27.17	0.86	172		NOTE: HIGH GRADIENT ABOVE 50m.
75	3208	28.20	1.03	206		
80	3105	29.09	0.89	178		
85	3065	29.45	0.36	72		
90	3012	29.93	0.48	96		
95	2968	30.34	0.41	82		
100	2933	30.67	0.33	66		
105	2893	31.05	0.38	76		

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-119 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
110	2874	31,23	0,18	36	
115	2849	31,48	0,25	50	
120	2827	31,69	0,21	42	
125	2805	31,91	0,22	44	
130	2785	32,11	0,20	40	
135	2766	32,31	0,20	40	
140	2746	32,51	0,20	40	
145	2725	32,73	0,22	44	
150	2703	32,96	0,23	46	
155	2680	33,20	0,24	48	
160	2654	33,47	0,27	54	
165	2624	33,80	0,33	66	
170	2592	34,15	0,35	70	
175	2554	34,57	0,42	84	
180	2518	34,97	0,40	80	
185	2482	35,39	0,42	84	
190	2450	35,76	0,37	74	
195	2417	36,15	0,39	78	
200	2386	36,52	0,37	74	
205	2357	36,88	0,36	72	
210	2331	37,20	0,32	64	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

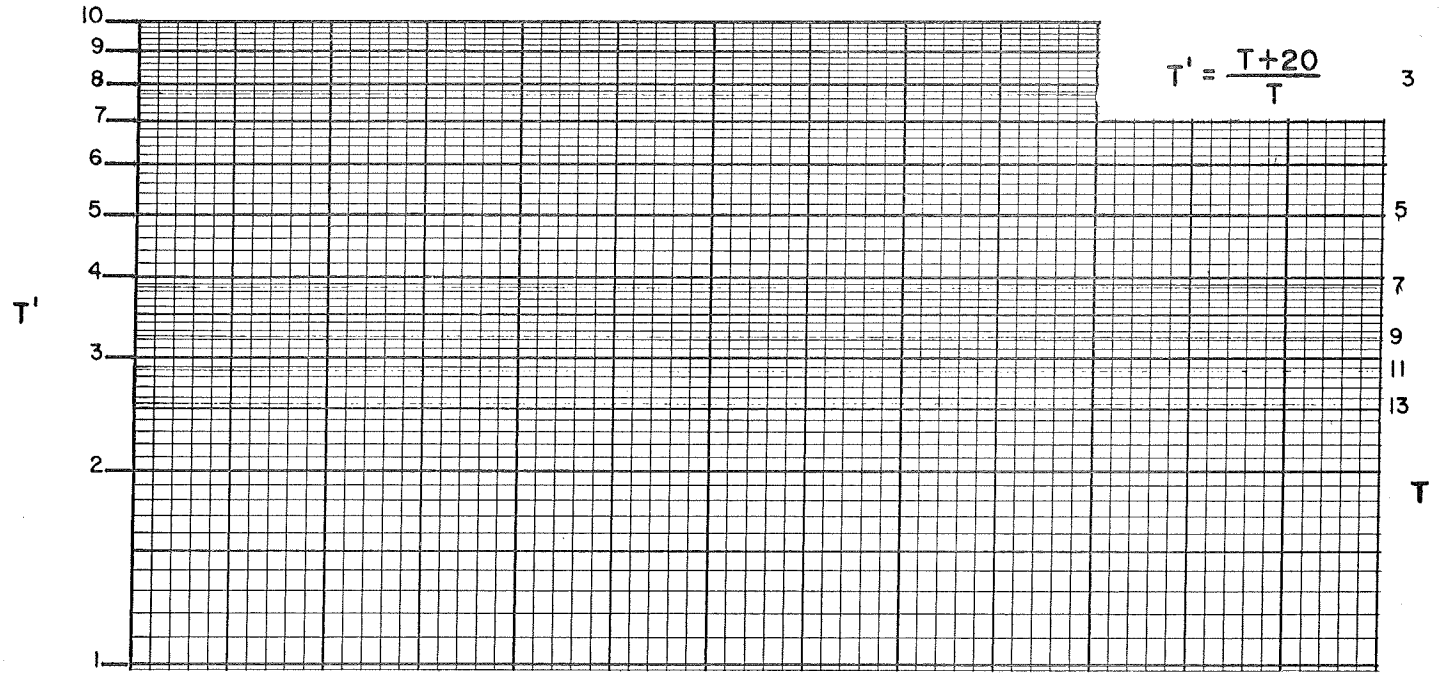
Property _____ T ____ R ____ sec ____

Drill Hole B-119 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

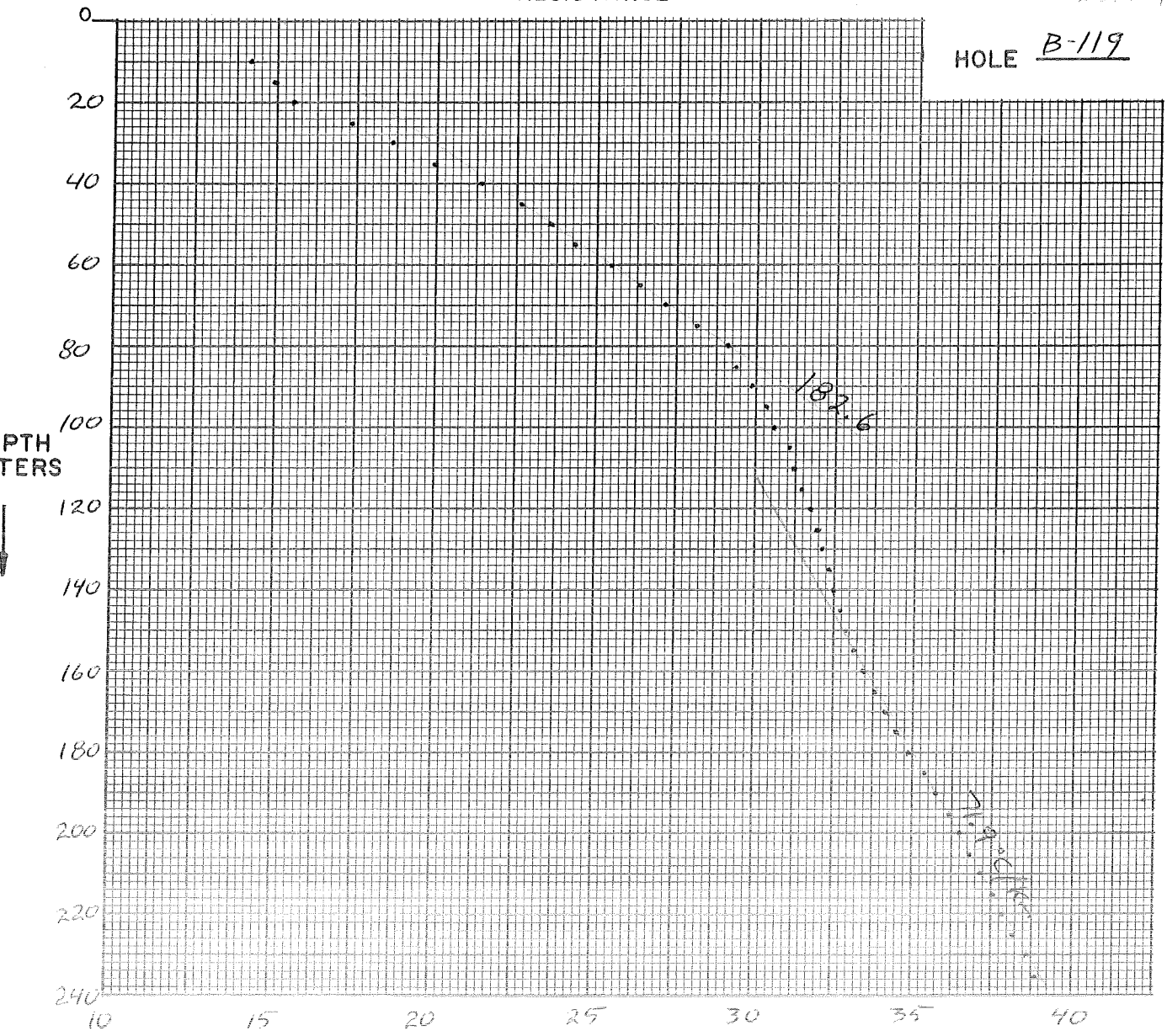
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
215	2303	37.55	0.35	70	
220	2277	37.89	0.34	68	
225	2253	38.20	0.31	62	
230	2227	38.54	0.34	68	
235	2203	38.86	0.32	64	GRADIENT 160-235m 71.9°C/Km
~~240~~					

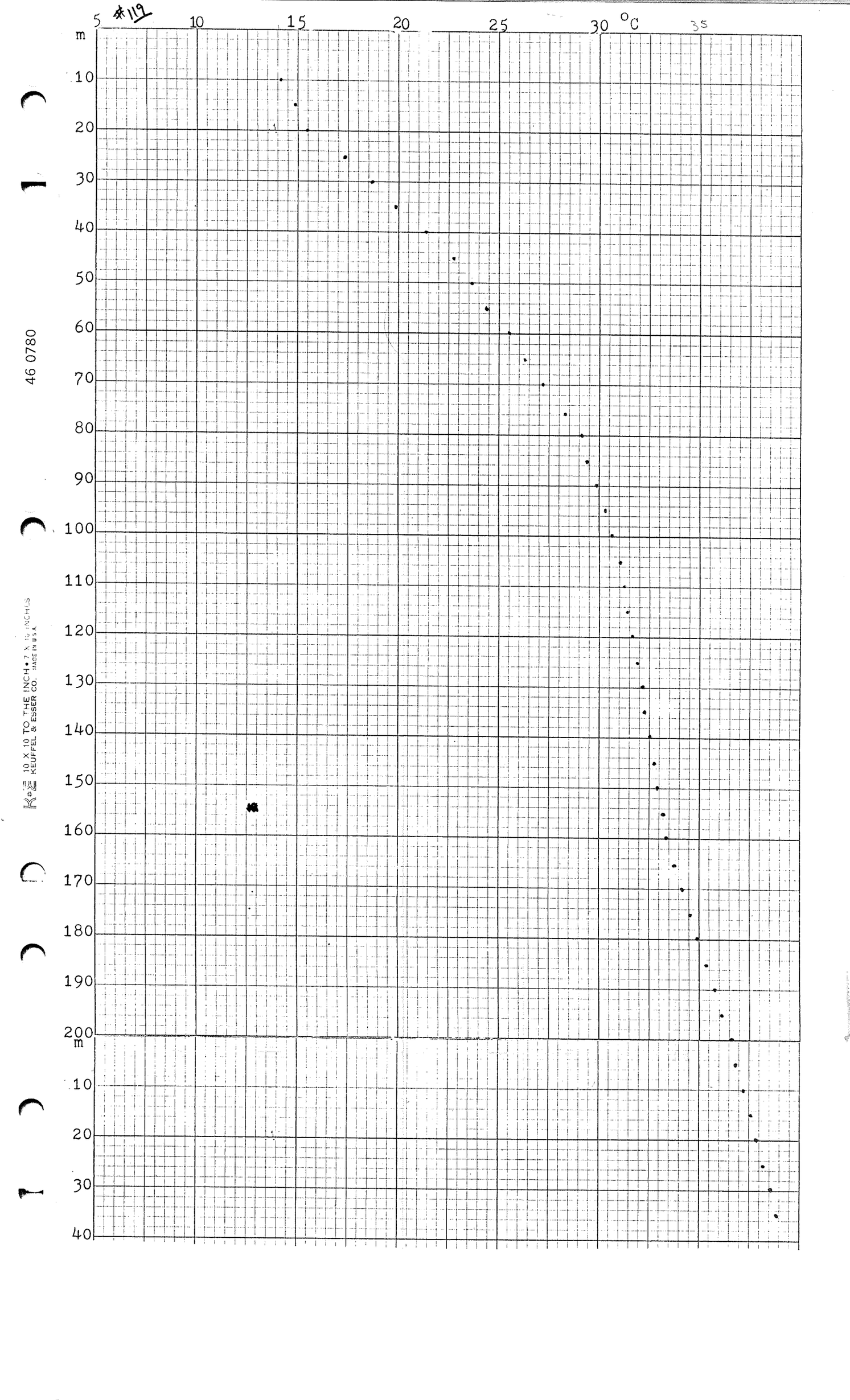


RESISTANCE

28,571

HOLE B-119




#119
5
10
15
20
25
30
°C
35
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
m
10
20
30
40
46 0780
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE - DEPTH LOG

AT CORNER SECTION MARKER.

Location 1.5 MILES SOUTH OF THERMO RR. CROSSING Date 10-MAY-76

Map THERMO UT. 15"

Property BEST T 30S R 12W sec 14 SW¼ SW¼

Drill Hole B-119 Date Drilled _____ Elevation 5025 ft.

Instrument _____ Operator JED

Comments 1" GALVANIZED STEEL PIPE. PHILLIPS GRADIENT HOLE POSSIBLY DRILLED ENTIRELY IN VALLEY FILL

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5493	14.20			HOLE HAD BEEN DISTURBED
15	5342	14.89	0.69	138	8-MAY-76, BY MATERIAL
20	5198	15.58	0.69	138	FALLING IN HOLE, 6" HOLE
25	4837	17.39	1.81	362	SURROUNDING 1" PIPE ~~NOT~~ NOT
30	4611	18.61	1.22	244	FILLED IN. WATER AT ~50'
35	4368	20.00	1.39	278	IN DRILLED HOLE.
40	4137	21.41	1.41	282	
45	3938	22.70	1.29	258	
50	3807	23.60	1.10	220	
55	3686	24.45	0.85	170	
60	3544	25.50	1.05	210	
65	3437	26.33	0.83	166	
70	3331	27.17	0.84	168	
75	3208	28.20	1.03	206	
80	3104	29.10	0.90	180	
85	3065	29.45	0.35	70	
90	3012	29.93	0.48	96	
95	2968	30.34	0.41	82	
100	2933	30.67	0.33	66	
105	2900	30.98	0.31	62	
110	2874	31.23	0.25	50	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

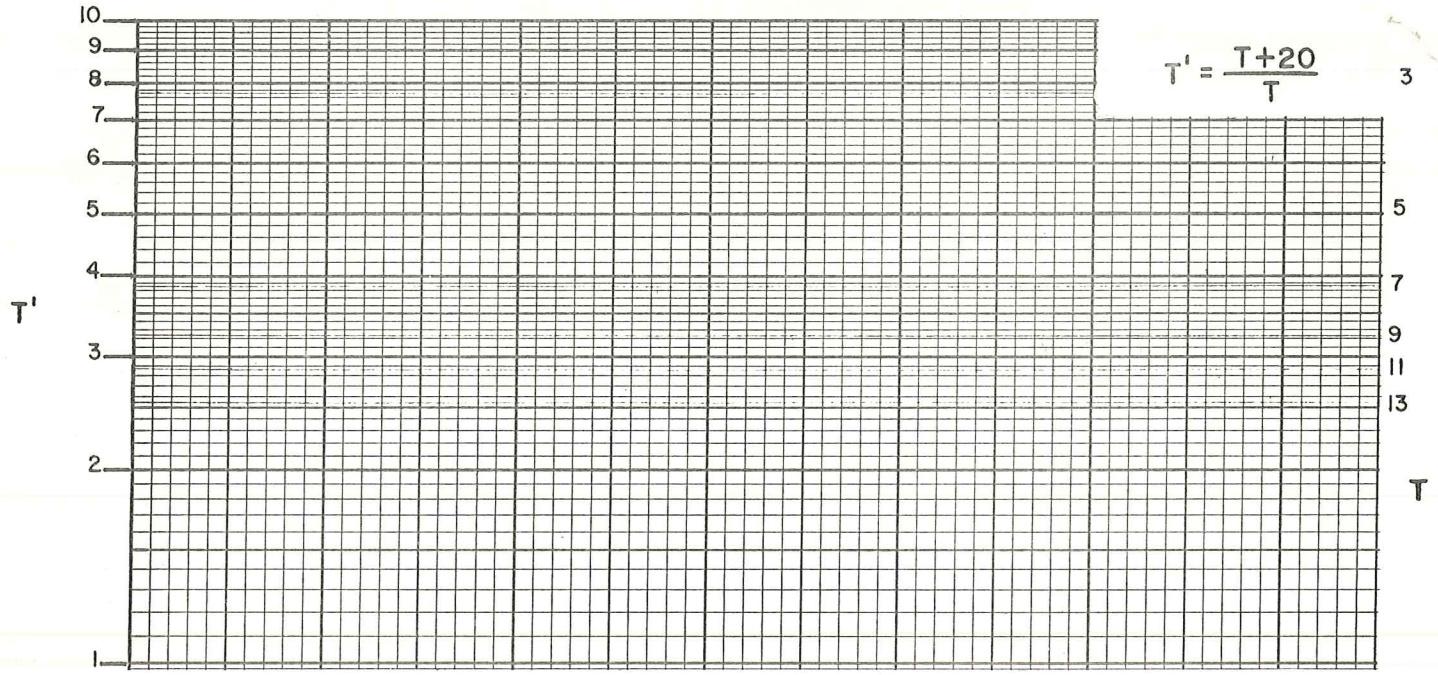
Property _____ T _____ R _____ sec _____

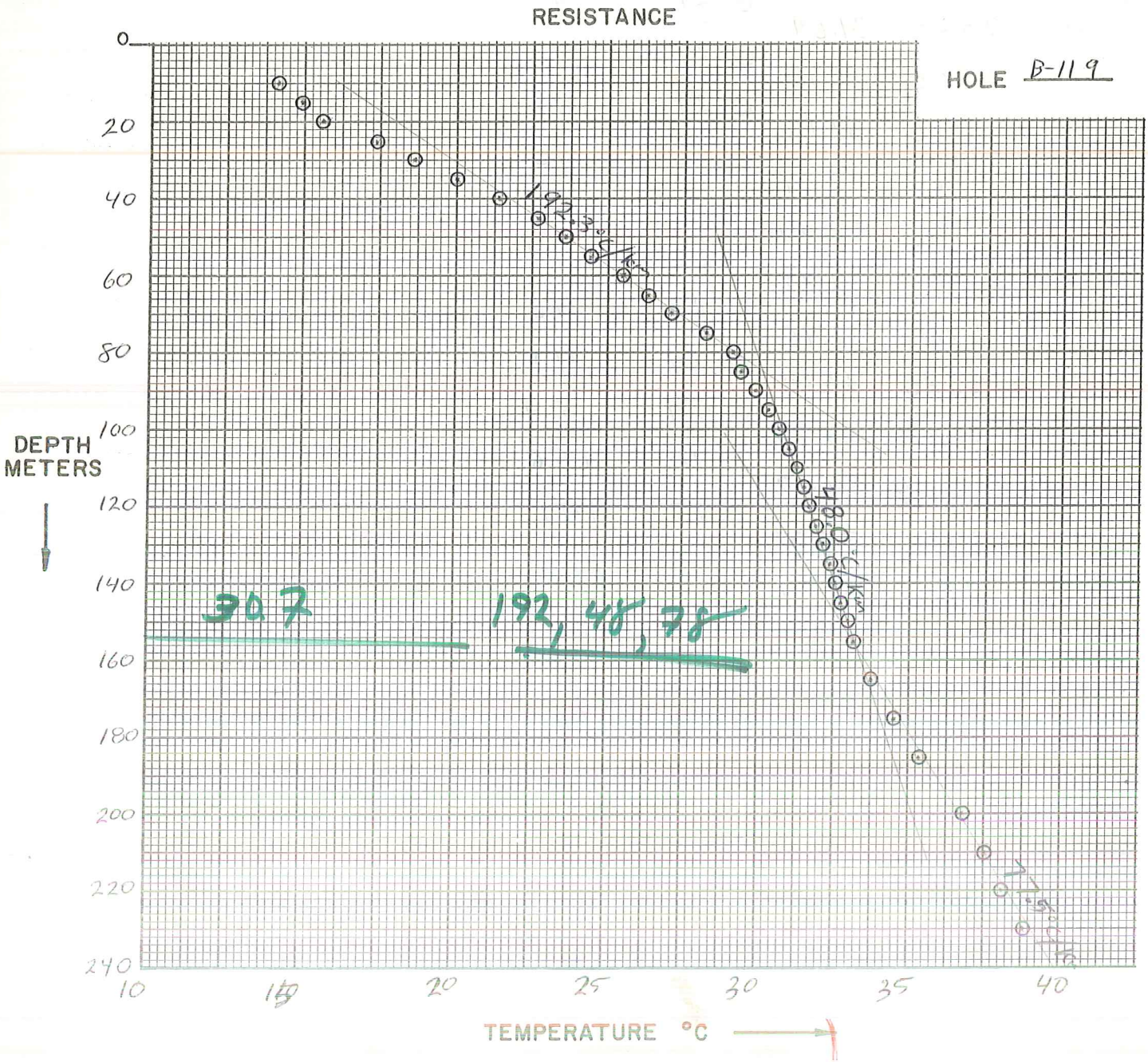
Drill Hole B-119 Date Drilled _____ Elevation _____ ft.

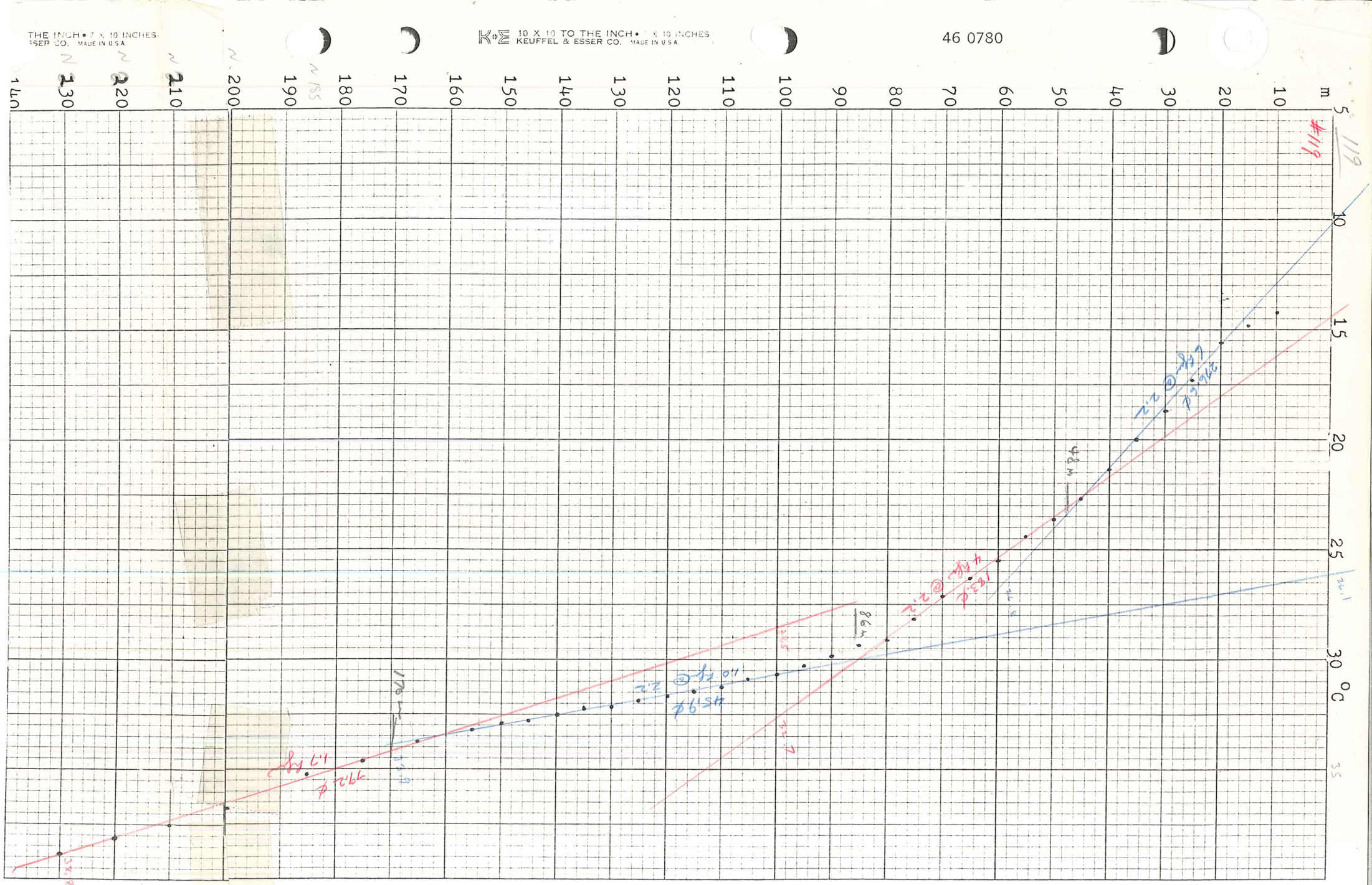
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
115	2849	31.48	0.25	50	
120	2828	31.69	0.21	42	
125	2806	31.90	0.21	42	
130	2786	32.11	0.21	42	
135	2766	32.31	0.20	40	
140	2746	32.51	0.20	40	
145	2725	32.73	0.22	44	
150	2703	32.96	0.23	46	
155	2680	33.20	0.24	48	
165	2625	33.79	0.59	59	NOTE CHANGE TO 10m INTERVAL
175	2554	34.57	0.78	156	
~185	2486	35.34	0.77	154	PAST 185m NOT MARKED.
~200	2360	36.84	1.50	100	
~210	2306	37.52	0.68	68	
~220	2255	38.17	0.65	65	
~230	2205	38.83	0.66	66	HOLE DEEPER. RAN OUT OF CABLE.
					GRADIENT 165-230m 77.5°C/Km
					100-165m 48.0°C/Km
					40-80 192.3°C/Km


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-119
DEPTH METERS
0
20
40
60
80
100
120
140
160
180
200
220
240
10
15
20
25
30
35
40
TEMPERATURE °C
192, 48, 78
307



THE INCH • 7 X 10 INCHES
ESSER CO. MADE IN U.S.A.
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 0780
#119
m
°C

TEMPERATURE DEPTH LOG

ΔT Well No. 120

Property-Project Best Depth Logged

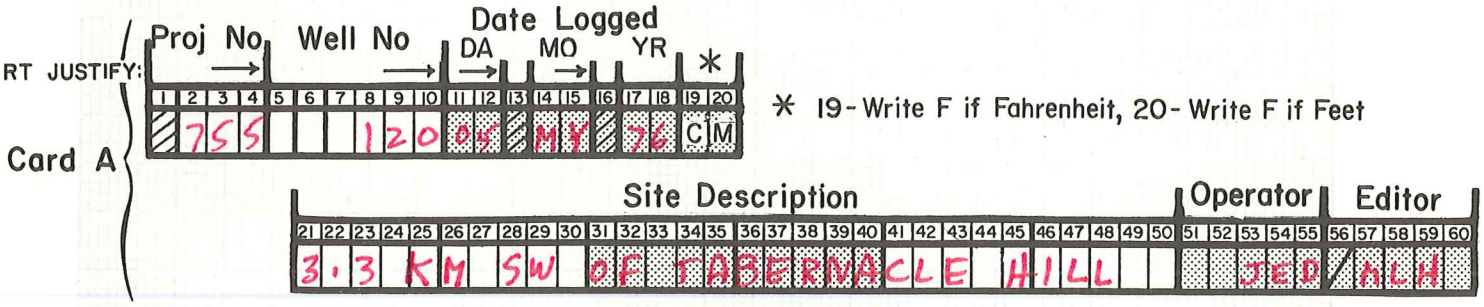
Map Scale Date: Drilled Logged

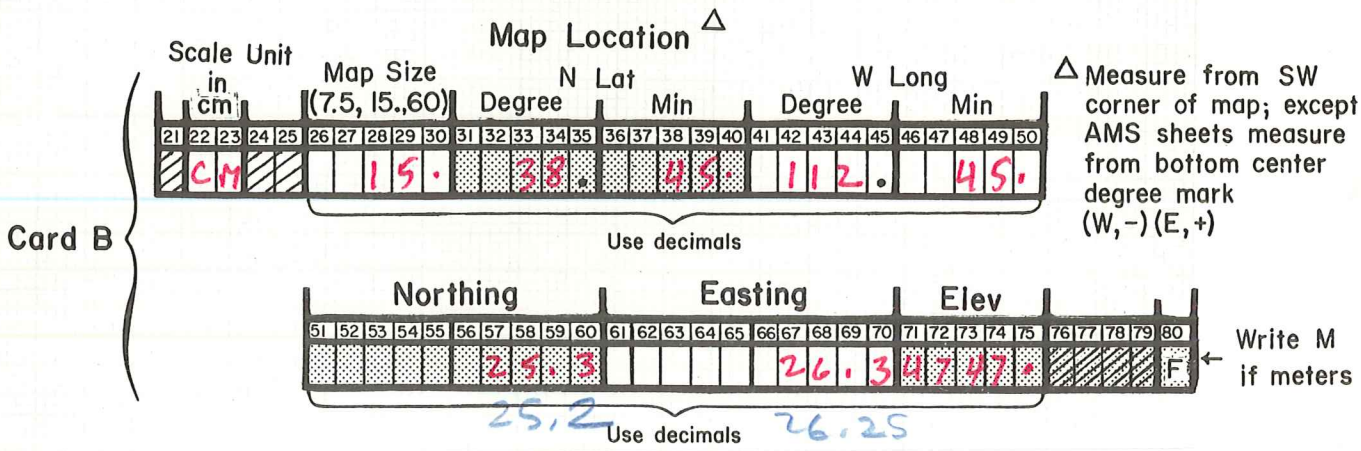
State County Section T R

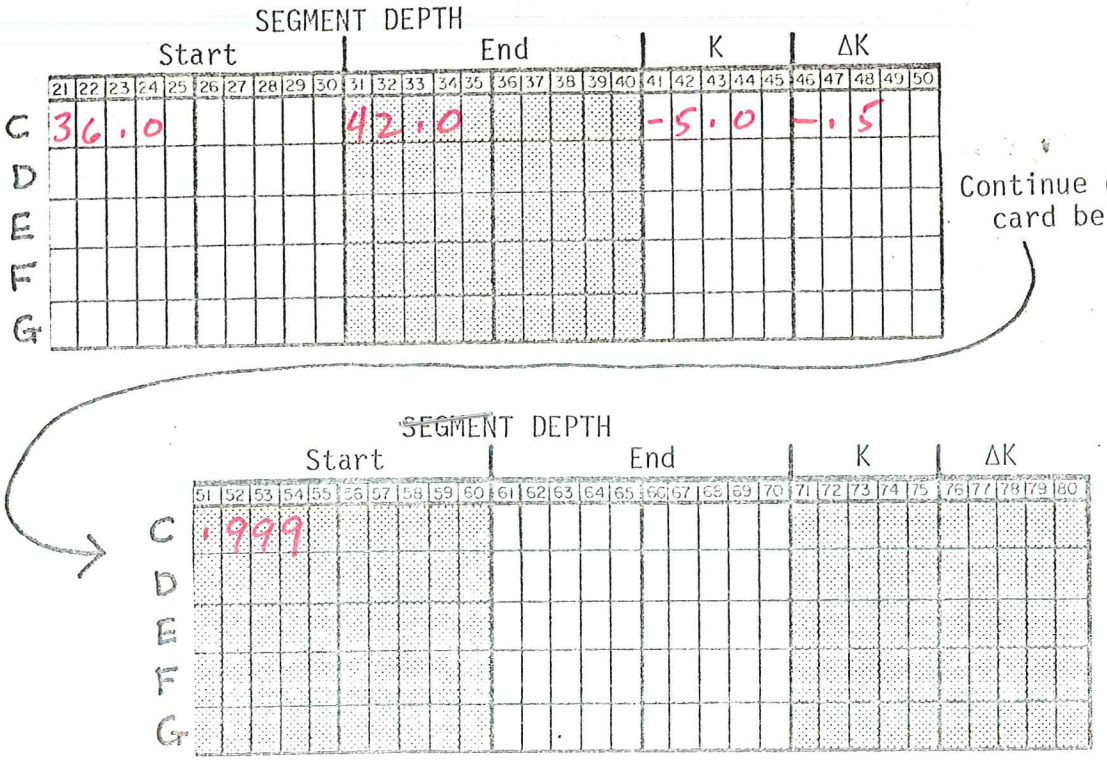
Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING







Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 2 MILES S.W. OF TABERNACLE HILL Date 5-MAY-76

Map TABERNACLE HILL, UT. 15"

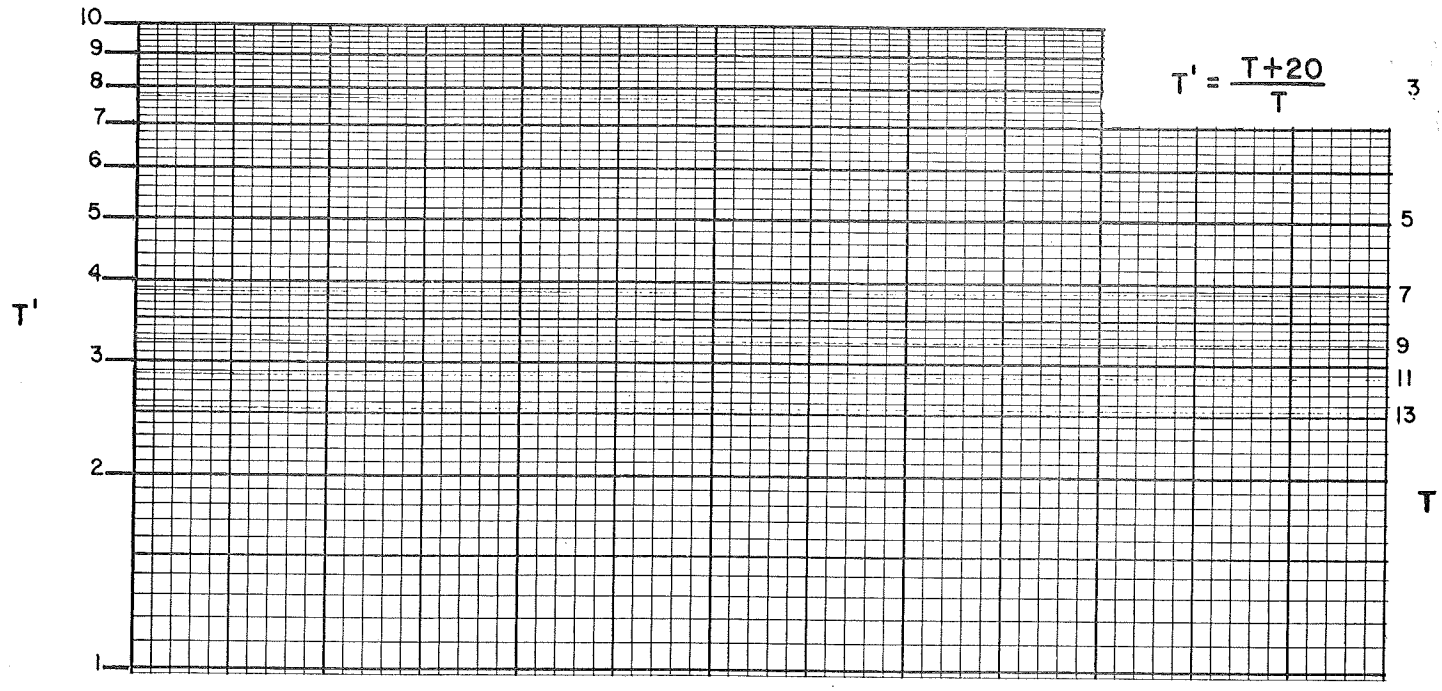
Property BEST T 22S R 6W sec CORNER OF SECS. 17, 18, 19 & 20

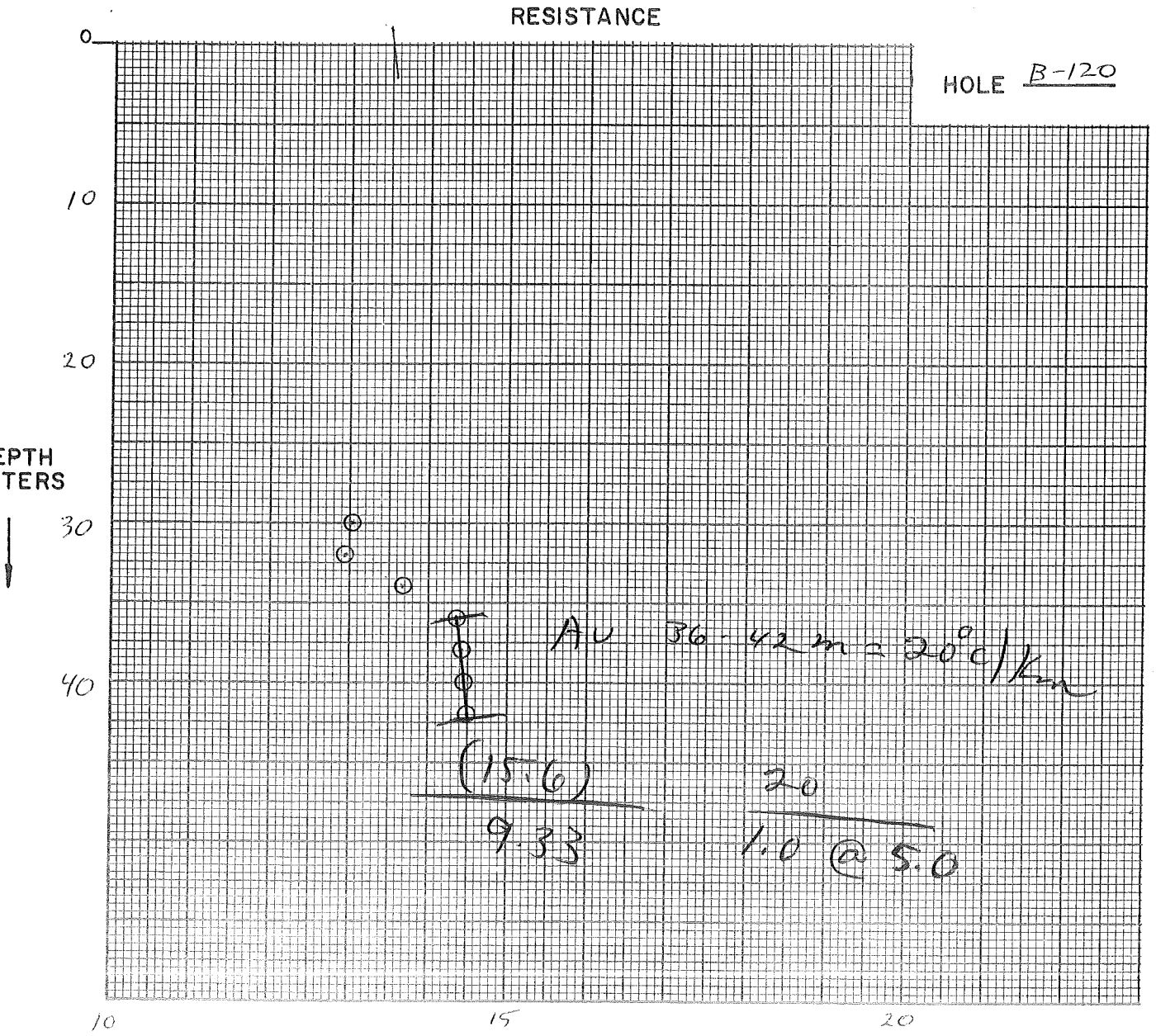
Drill Hole B-120 Date Drilled _____ Elevation 4747 ft.

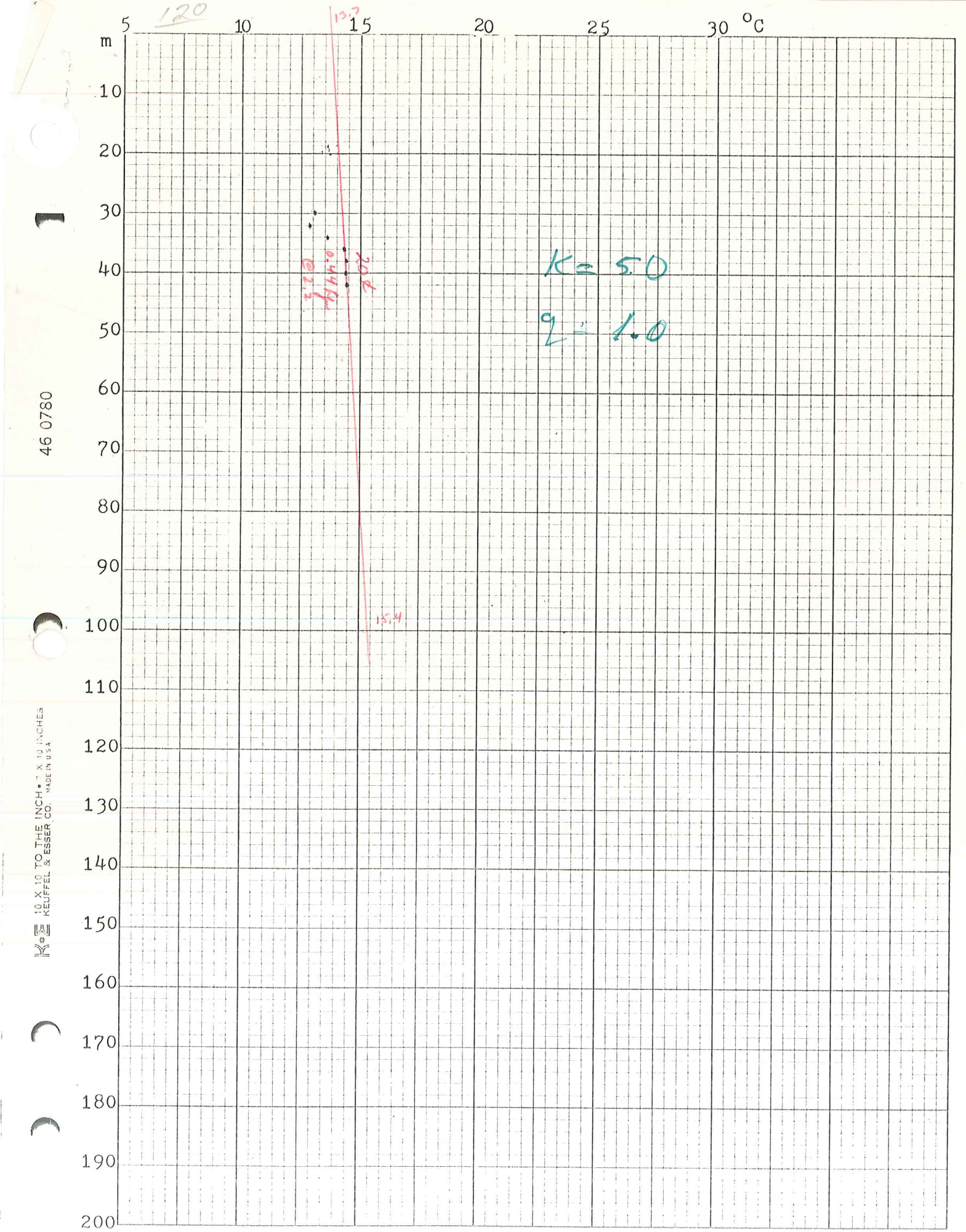
Instrument _____ Operator JED

Comments WATER WELL w/ 24" CASING. NOT PUMPING AT TIME.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
30	5762	13.02			
			-0.09	-45	
32	5782	12.93			
			0.74	370	
34	5612	13.67			
			0.69	345	
36	5458	14.36			
			0.06	30	
38	5445	14.42			
			0.02	10	
40	5439	14.44			
			0.04	20	
42	5431	14.48			
	~~5430~~				BOTTOM OF WELL


T' = T+20 / T
T'
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
T


RESISTANCE
HOLE B-120
0
10
20
30
40
DEPTH METERS
Au 36.42 m = 20°C/Km
(15.6)
9.33
20
1.0 @ 5.0
10
15
20
TEMPERATURE °C


120
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
13.7
14.0
15.4
K = 5.0
q = 1.0
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 121

Property-Project Best

Depth Logged

Map

Scale

Date: Drilled

Logged

State

County

Section

T

R

Instrument

Operator

Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	121	14	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
7.1 KM SW OF BAILEY MOUNTAIN	JED	MLH

Card B

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	15.	113.	00.

Map Location Δ — Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
32.67	16.4	5775.		F

Use decimals

80: Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	8.9	14.4		
D	19.9	29.9	-4.0	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	14.4	19.4		
D	.999			
E				
F				
G				

Final Segment: Start = .999

121 dup of

TEMPERATURE - DEPTH LOG

Location _____ Date 16-JULY-76

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-121 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator FIELD

Comments 3/4 PVC. 0.1 m ABOVE GROUND

Subtract .1m from all readings

	Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
0.4	0.5	3646	24.74			1
0.9	1.0	4114	21.56			
1.4	1.5	4572	18.83			
1.9	2.0	4919	16.96			
2.4	2.5	5301	15.08			
2.9	3.0	5506	14.14			
3.4	3.5	5693	13.31			
3.9	4.0	5806	12.83			
4.4	4.5	5870	12.56	-0.13		
4.9	5.0	5901	12.43	-0.02		
5.4	5.5	5905	12.41	0.04		
5.9	6.0	5896	12.45	0.11		
6.4	6.5	5870	12.56	0.15		
6.9	7.0	5833	12.71	0.15		
7.4	7.5	5799	12.86	0.17		
7.9	8.0	5759	13.03	0.13		
8.4	8.5	5728	13.16	0.17		
8.9	9.0	5690	13.33	0.16		
9.4	9.5	5653	13.49	0.15		
9.9	10.0	5618	13.64	0.16		
9.4	10.5	5583	13.80			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-121 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

	Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10.9	11.0	5548	13.95	0.15		
				0.10		
11.4	11.5	5525	14.05			
				0.09		
11.9	12.0	5505	14.14			
				0.18		
12.4	12.5	5467	14.32			
				0.16		
12.9	13.0	5432	14.48			
				0.18		
13.4	13.5	5392	14.66			
				0.12		
13.9	14.0	5366	14.78			
				0.12		
14.4	14.5	5340	14.90			
				0.06		
14.9	15.0	5328	14.96			
				0.07		
15.4	15.5	5313	15.03			
				0.06		
15.9	16.0	5299	15.09			
				0.13		
16.4	16.5	5272	15.22			
				0.11		
16.9	17.0	5249	15.33			
				0.13		
17.4	17.5	5223	15.46			
				0.08		
17.9	18.0	5205	15.54			
				0.06		
18.4	18.5	5192	15.60			
				0.05		
18.9	19.0	5183	15.65			
				0.15		
19.4	19.5	5161	15.80			
				0.19		
19.9	20.0	5143	15.99			
				0.15		
20.4	20.5	5083	16.14			
				0.10		
20.9	21.0	5062	16.24			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

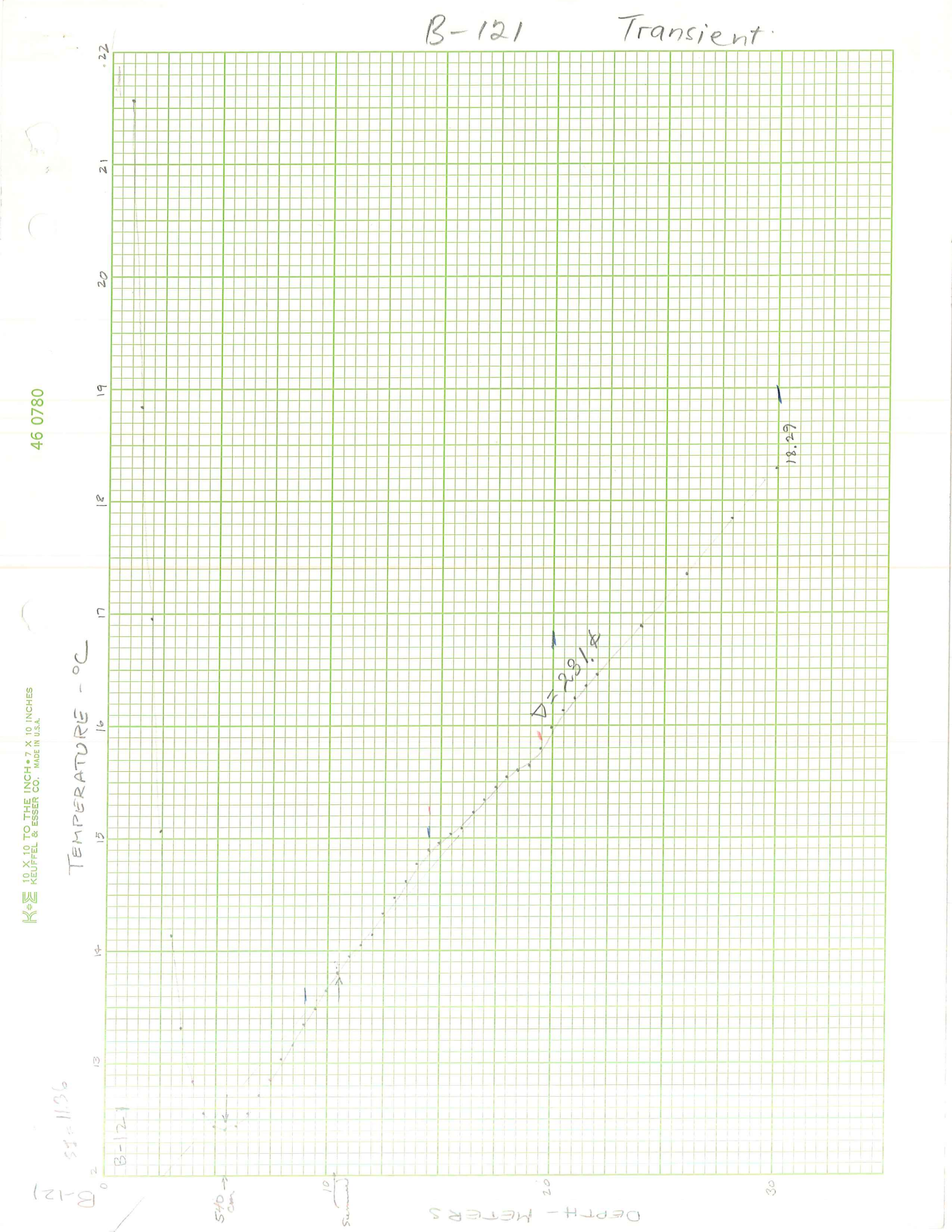
Drill Hole B-12 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
21.4	21.5	5038	16.36	0.12	
21.9	22.0	5019	16.46	0.10	
23.9	24	4933	16.89	0.43	
25.9	26	4844	17.35	0.46	
27.9	28	4753	17.84	0.49	
29.9	30	4669	18.29	0.45	
	99999.				

B-121 Transient



46 0780

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sz = 11.36

B-121

TEMPERATURE - DEPTH LOG

Location MOUTH OF RANCH CANYON Date 14-MAY-76

Map ADAMSVILLE

Property BEST T 27S R 9W sec 29 NE¼ SE¼

Drill Hole B-121 Date Drilled ____ Elevation 5775 ft.

Instrument ____ Operator JEL

Comments 3/4 PVC PIPE. PHILLIPS GRADIENT HOLE. QTZ MONZONITE CUTTINGS AROUND HOLE. PROBABLY BOTTOMS OUT IN SAME. MOST IN VALLEY FILL

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
8	5360	14.81			
10	5314	15.02	0.82	410	
12	5144	15.84	0.35	175	
14	5073	16.19	0.58	290	
16	4957	16.77	0.79	395	
18	4804	17.56	0.13	65	
20	4780	17.69	0.50	250	
22	4686	18.19	0.49	245	
24	4599	18.68	0.55	275	
26	4501	19.23	0.39	195	
28	4433	19.62	0.50	250	
30	4347	20.12	0.44	220	
32	4274	20.56	0.23	115	
34	4236	20.79	0.37	185	
36	4177	21.16	0.46	230	
38	4104	21.62	0.39	195	
40	4043	22.01	0.28	140	
42	3997	22.29	0.38	190	
44	3943	22.67	0.37	185	
46	3887	23.04	0.35	175	
48	3837	23.39			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole B-121 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
50	3792	23.70	0.31	155	
52	3731	24.13	0.43	215	
54	3682	24.48	0.35	175	
56	3654	24.68	0.20	100	
58	3598	25.10	0.42	210	
60	3548	25.47	0.37	185	
62	3512	25.74	0.27	135	
64	34.71	26.06	0.22	110	
66	3441	26.30	0.24	120	
68	3418	26.48	0.18	90	
70	3381	26.77	0.29	145	
72	3345	27.06	0.29	145	
74	3308	27.36	0.30	150	
76	3267	27.70	0.34	170	
78	3217	28.12	0.42	210	
80	3185	28.39	0.27	135	
82	3146	28.73	0.34	170	
84	3114	29.01	0.28	140	
86	3081	29.31	0.30	150	
88	3050	29.59	0.28	140	
90	3024	29.82	0.23	115	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

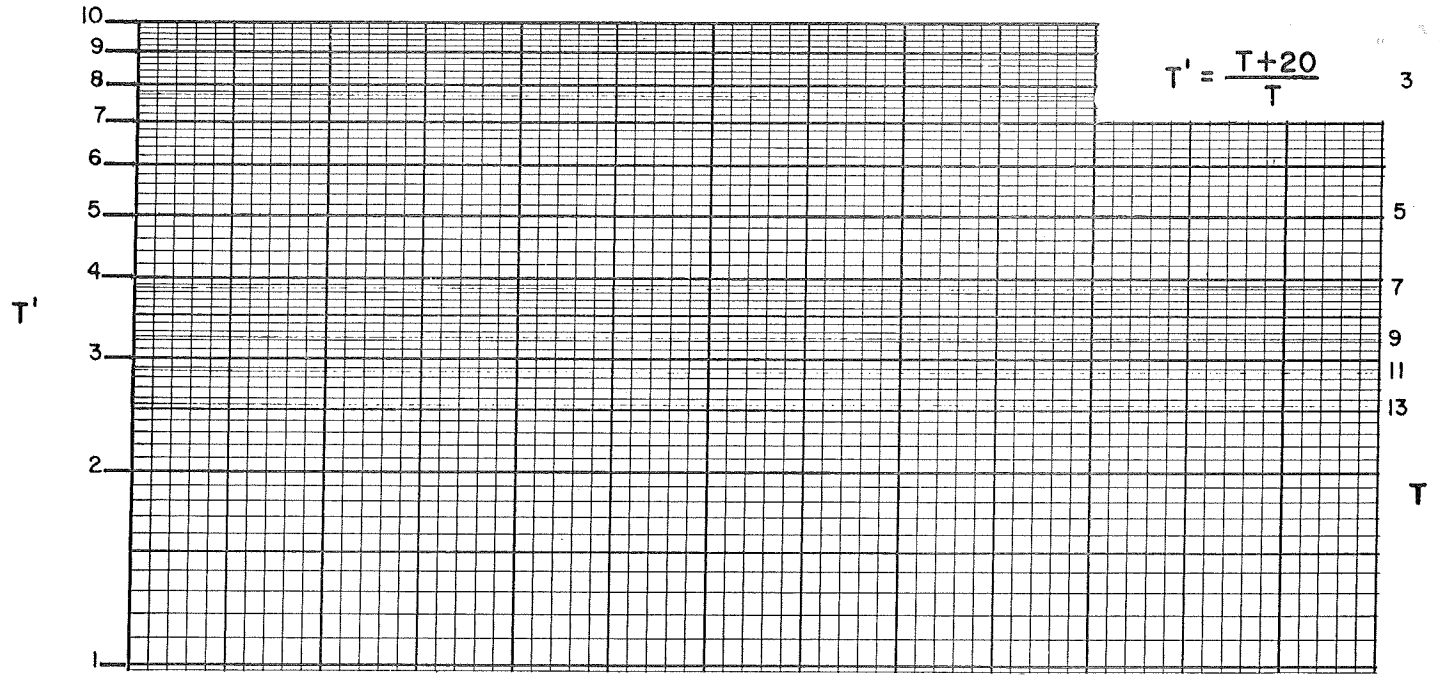
Property _____ T _____ R _____ sec _____

Drill Hole B-121 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
93 (B)	2978	30.24	0.42	210	NOTE 3m INTERVAL 90-93 ONLY
95	2953	30.48	0.24	120	
97	2925	30.74	0.26	130	
99	2896	31.02	0.28	140	
102	2849	31.48	0.46	230	NOTE 3m INTERVAL 99-102 ONLY.
104	2818	31.78	0.30	150	
106	2788	32.09	0.31	155	
108	2759	32.38	0.27	135	
					GRADIENT 68-108m 147.5 °C/Km



T' = (T+20)/T
T'
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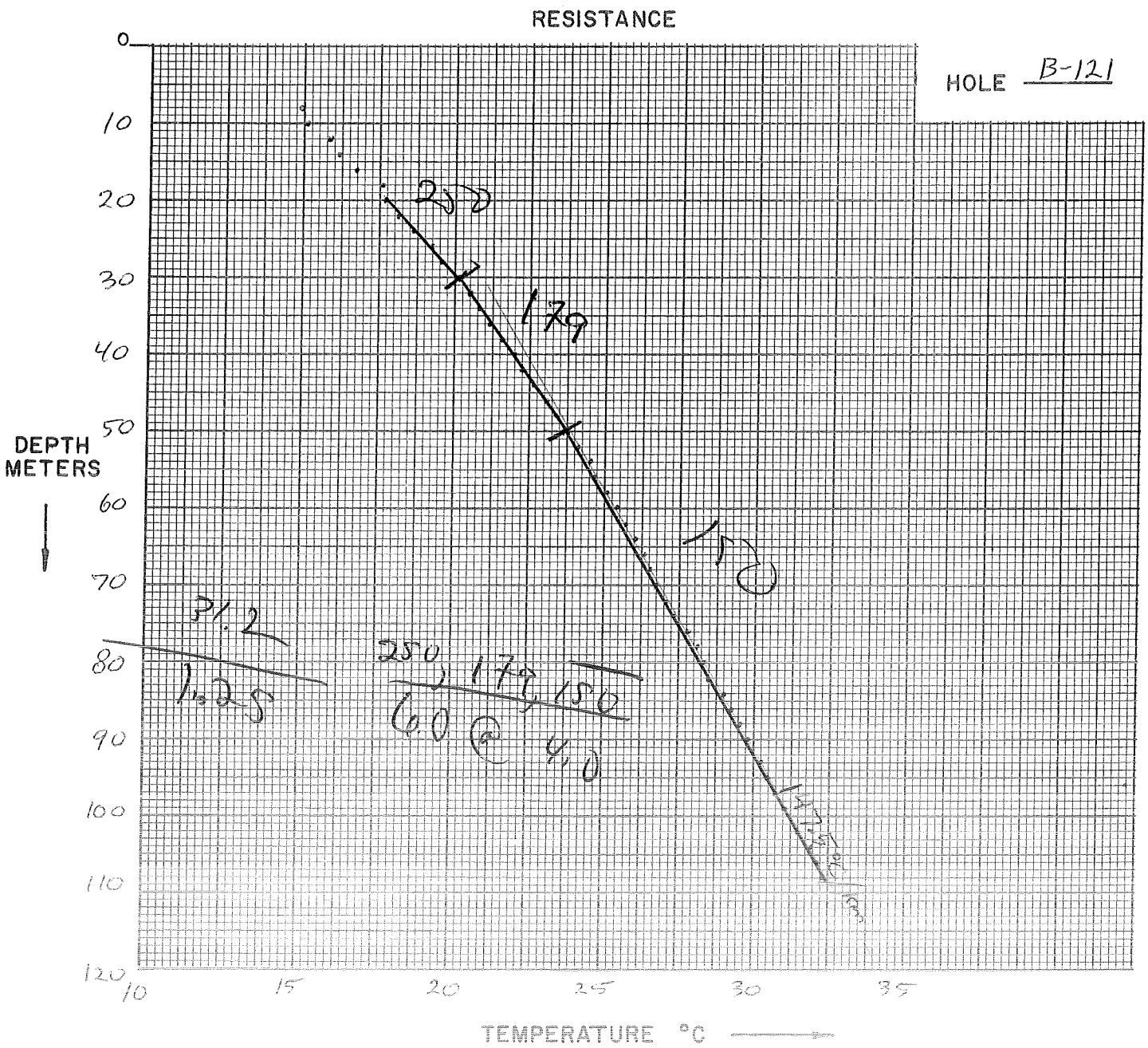
11
13



RESISTANCE
HOLE B-121
DEPTH METERS
TEMPERATURE °C
0
10
20
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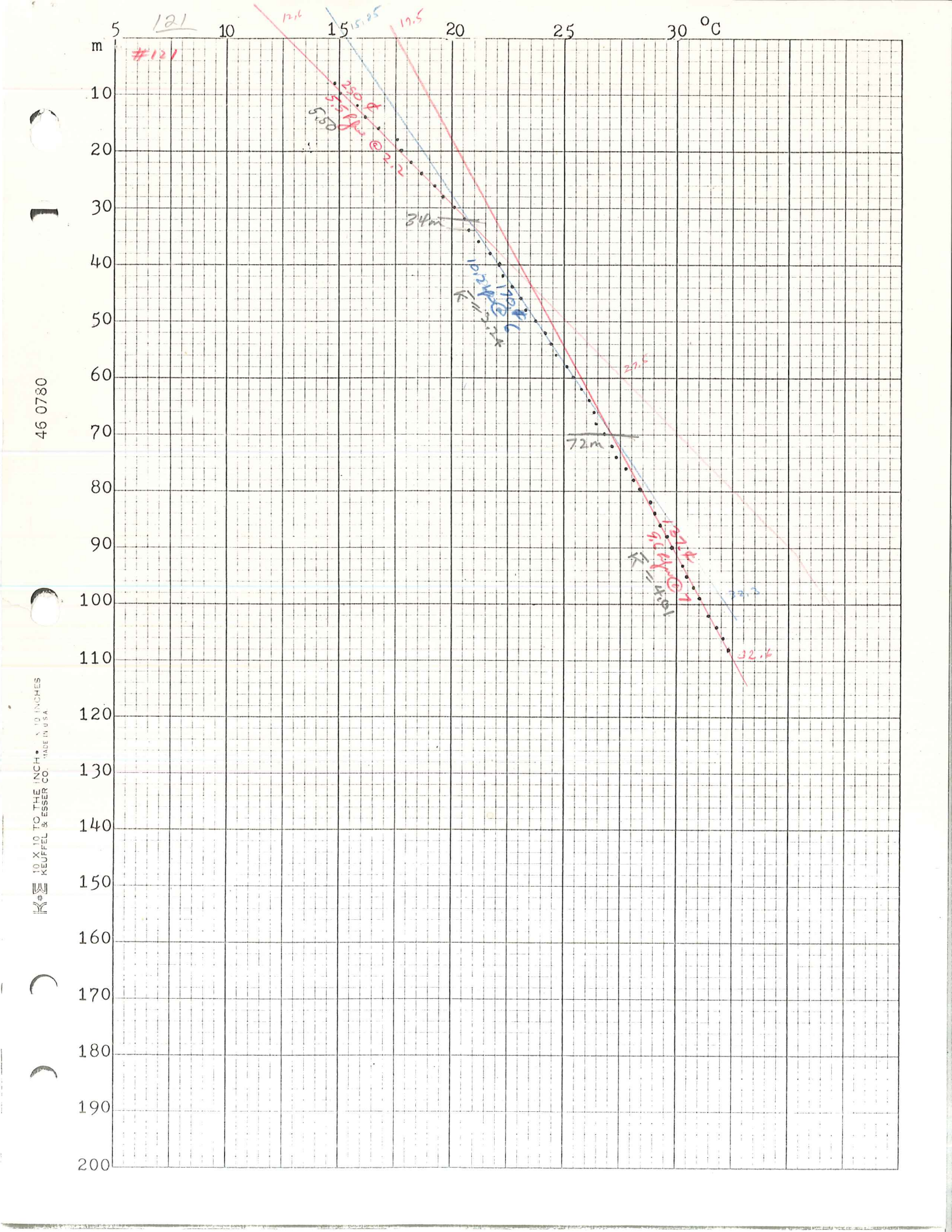
40
50
60
70
80
90
100
110
120
10
15
20
25
30
35
250
179
150
31.2
1.25
250, 179, 150
6.0 @ 4.0


121
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12.6
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17.5
22.5
32.4
34m
72m
46 0780
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TEMPERATURE DEPTH LOG

ΔT Well No. 122

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 2 2	1 4	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
3.3 KM NNW OF BAILEY MOUNTAIN	JED	HLH

Card B

Map Location Δ

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
42.8	23.3	6180.	F

← Write M if meters

Use decimals

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	10.0	30.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location _____ Date 14-MAY-76

Map ADAMSVILLE UT. 15"

Property BEST T 27S R 9W sec 2 SW¼

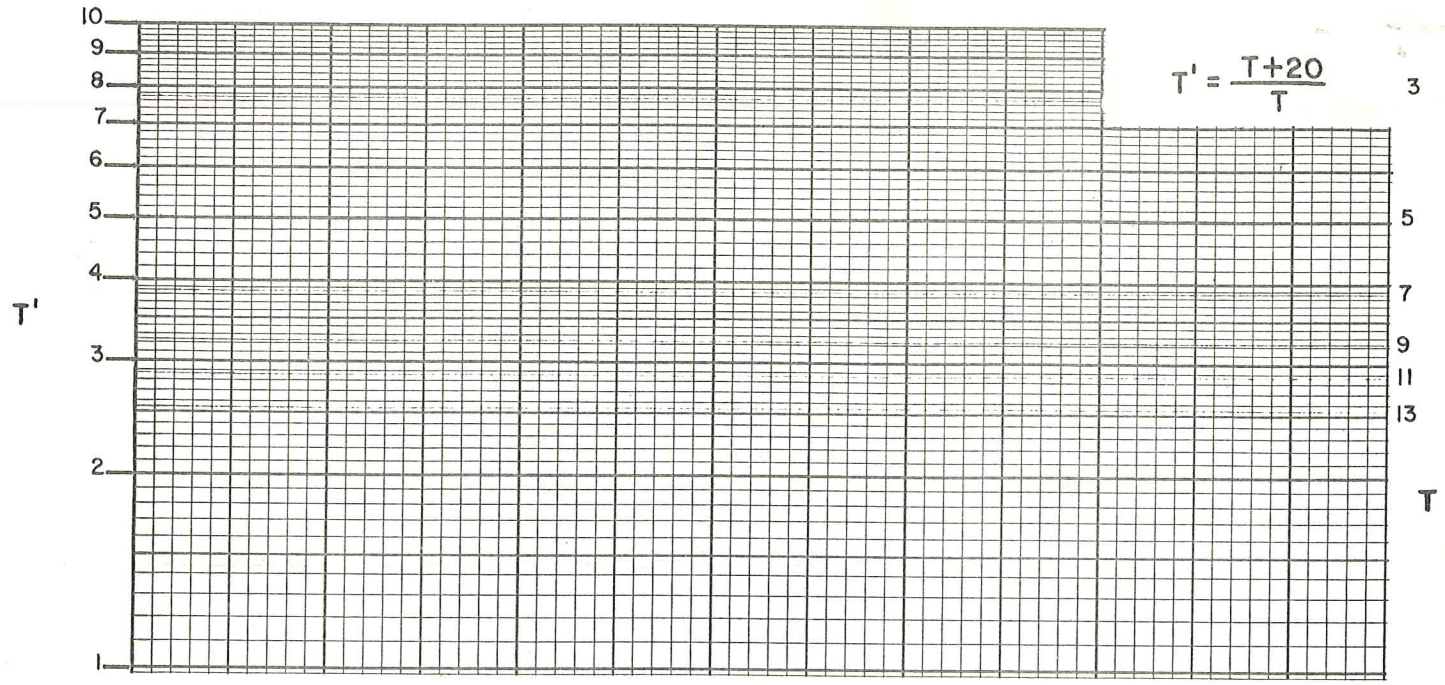
Drill Hole B-122 Date Drilled _____ Elevation 6180 ft.

Instrument _____ Operator JEW

Comments 3/4" PVC PIPE. PHILLIPS GRADIENT HOLE.

DRILLED IN VALLEY FILL. POSSIBLY BOTTOMS IN ~~GRA~~ QTZ MONZONITE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
1	5921	12.35			
2	6581	9.78	-2.57	-1285	
4	6402	10.44	0.66	330	
6	5853	12.63	2.19	1095	
8	5476	14.28	0.65	325	
10	5287	15.15	0.87	435	
12	5148	15.82	0.67	335	
14	5032	16.39	0.57	285	
16	4894	17.09	0.70	350	
18	4811	17.53	0.44	220	
20	4692	18.16	0.63	315	
22	4576	18.80	0.64	320	
24	4480	19.35	0.55	275	
26	4358	20.06	0.71	355	
28	4318	20.30	0.24	120	
30	4246	20.73	0.43	215	GRADIENT 20-30m 257 °C/Km


T' = T+20 / T
T'
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3
5
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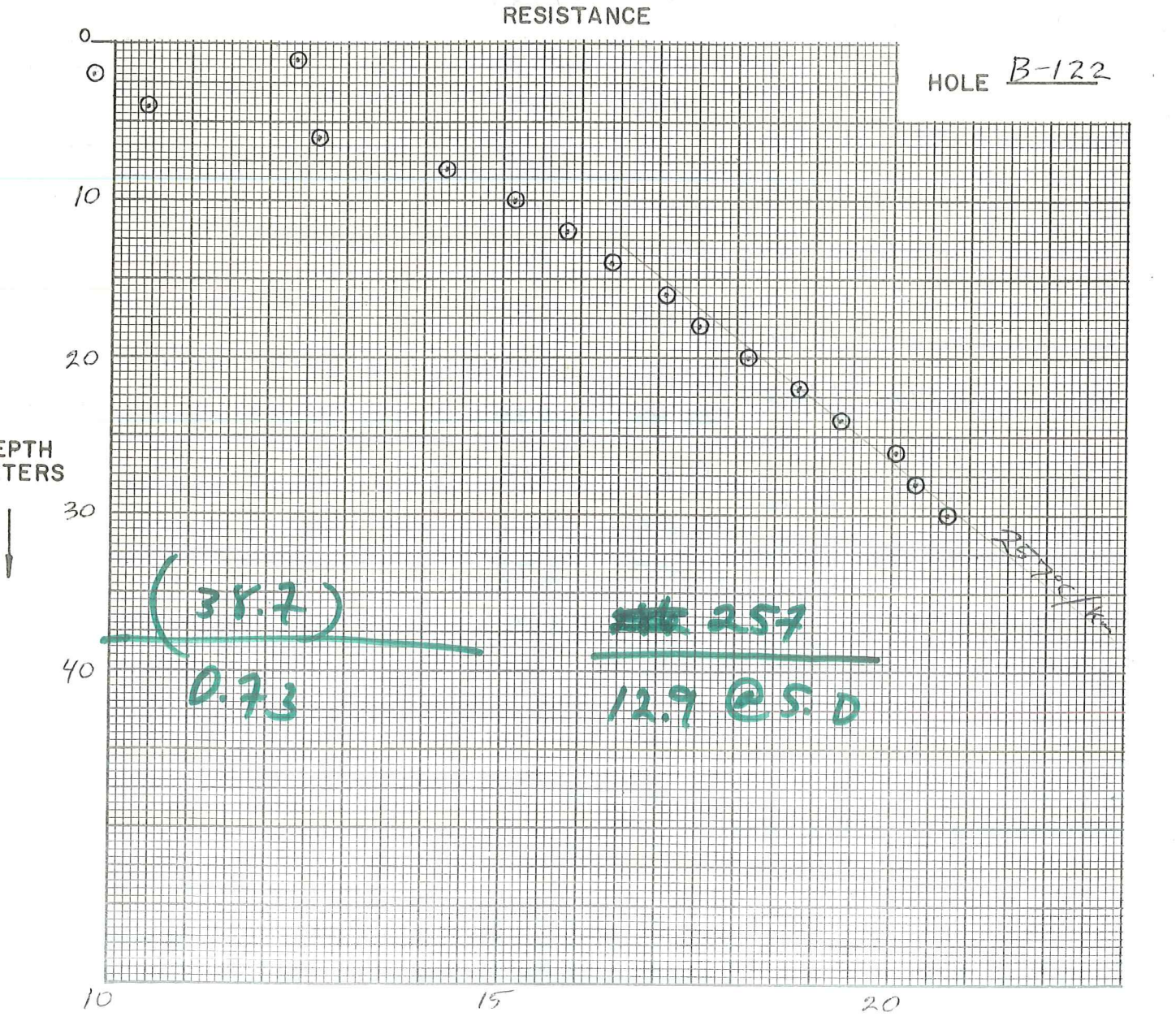
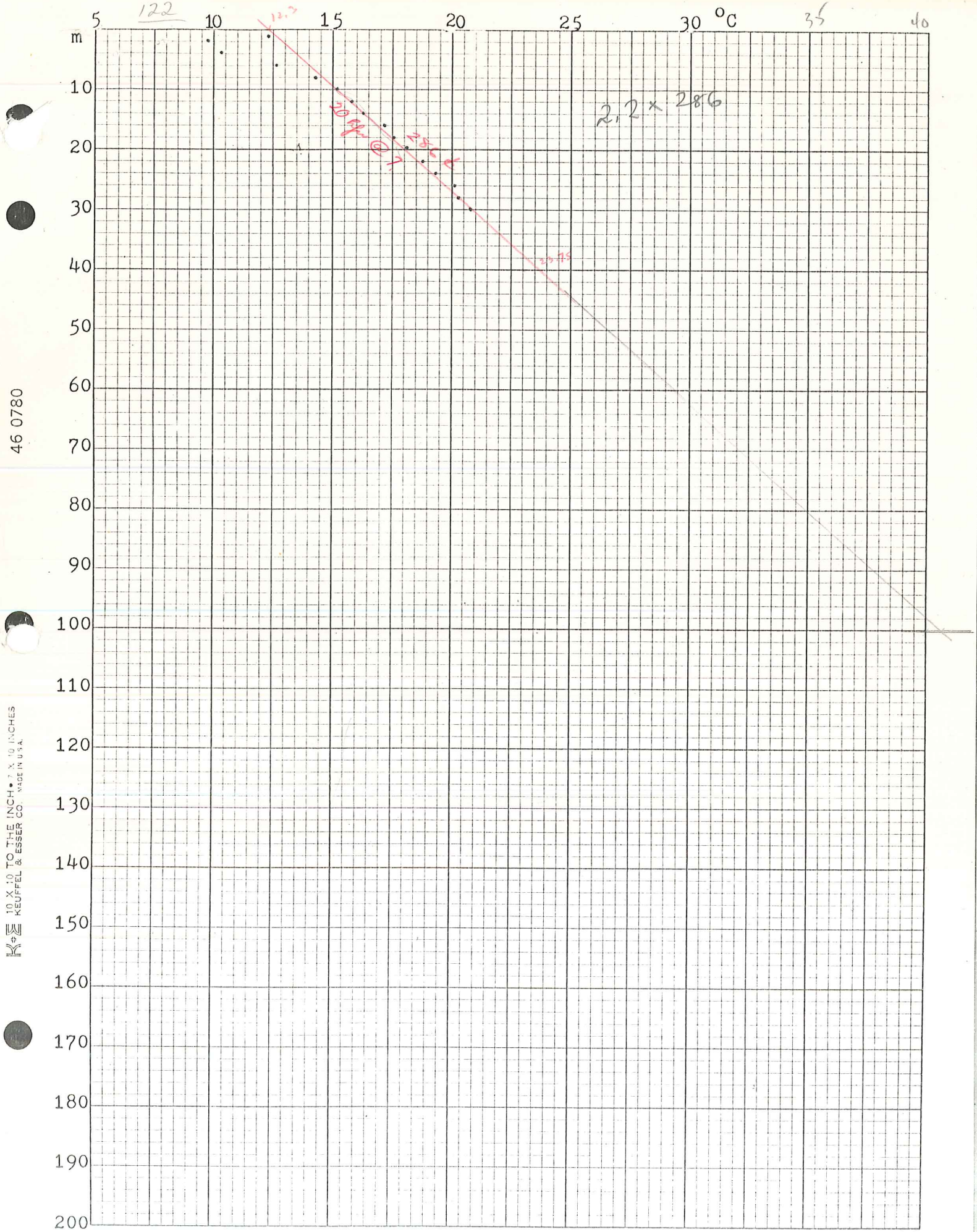
9
11
13
T


RESISTANCE
HOLE B-122
DEPTH METERS
0
10
20
30
40
10
15
20
TEMPERATURE °C
(38.2)
0.73
2.57
12.9 @ 5.0


122
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30 °C
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2.2 x 286
46 0780
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TEMPERATURE DEPTH LOG

ΔT Well No. 123

Property-Project Best   Depth Logged ____

Map ____ Scale ____ Date: Drilled ____ Logged ____

State ____ County ____ Section ____ T ____ R ____

Instrument ____ Operator ____ Elevation ____ ft.

Comments ____

COMPUTER PROCESSING

Card A (RT JUSTIFY)

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	123	14	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
7.7 KM ENE OF READ, UTAH	JED	MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	30.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
40.3	37.5	5010.		F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	20.0	40.0		
D	60.0	80.0		
E	106.0	150.0		-.5
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	40.0	60.0		
D	80.0	106.0	-5.0	.5
E	.999			
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location SE CORNER SEC 31. W. SIDE OF RD. Date 14-MAY-76

Map READ UT. 7½"

Property BEST T 25S R 9W sec 31 SE¼ SE¼

Drill Hole B-123 Date Drilled _____ Elevation 5010 ft.

Instrument _____ Operator JEO

Comments 3/4" PVC PIPE PHILLIPS GRADIENT HOLE. APPEARS TO BE DRILLED ENTIRELY IN VALLEY FILL.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	5918	12.36			
6	s				
8	5535	14.01	1.65	413	
10	5452	14.38	0.37	185	
12	5425	14.51	0.13	65	
14	5374	14.74	0.23	115	
16	5298	15.10	0.36	180	
18	5278	15.19	0.09	45	
20	5199	15.57	0.38	190	
22	5150	15.81	0.24	120	
24	5111	16.00	0.19	95	
26	5084	16.13	0.13	65	
28	5040	16.35	0.22	110	
30	5010	16.50	0.15	75	
32	4957	16.77	0.27	135	
34	4925	16.93	0.16	80	
36	4894	17.09	0.16	80	
38	4870	17.22	0.13	65	
40	4843	17.36	0.14	70	
42	4824	17.46	0.10	50	
44	4804	17.56	0.10	50	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole B-123 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	4773	17.73	0.17	85	
48	4748	17.86	0.13	65	
50	4735	17.93	0.07	35	
52	4718	18.02	0.09	45	
54	4694	18.15	0.13	65	
56	4683	18.21	0.06	30	
58	4670	18.28	0.07	35	
60	4647	18.41	0.13	65	
62	4635	18.48	0.07	35	
64	4623	18.54	0.06	30	
66	4609	18.62	0.08	40	
68	4594	18.70	0.08	40	
70	4582	18.77	0.07	35	
72	4572	18.83	0.06	30	
74	4560	18.89	0.06	30	
76	4546	18.97	0.08	40	
78	4543	18.99	0.02	10	
80	4537	19.02	0.03	15	
82	4527	19.08	0.06	30	
84	4515	19.15	0.07	35	
86	4502	19.22	0.07	35	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole B-123 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
88	4489	19.30	0.08	40	
90	4472	19.39	0.09	45	
92	4457	19.48	0.09	45	
94	4445	19.55	0.07	35	
96	4432	19.63	0.08	40	
98	4419	19.70	0.07	35	
100	4405	19.78	0.08	40	
102	4393	19.85	0.07	35	
104	4381	19.92	0.07	35	
106	4370	19.99	0.07	35	
108	4356	20.07	0.08	40	
110	4342	20.16	0.09	45	
112	4329	20.23	0.07	35	
114	4313	20.33	0.10	50	
116	4296	20.43	0.10	50	
118	4278	20.54	0.12	60	
120	4262	20.64	0.10	50	
122	4244	20.75	0.11	55	
124	4228	20.85	0.10	50	
126	4207	20.97	0.12	60	
128	4183	21.12	0.15	75	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

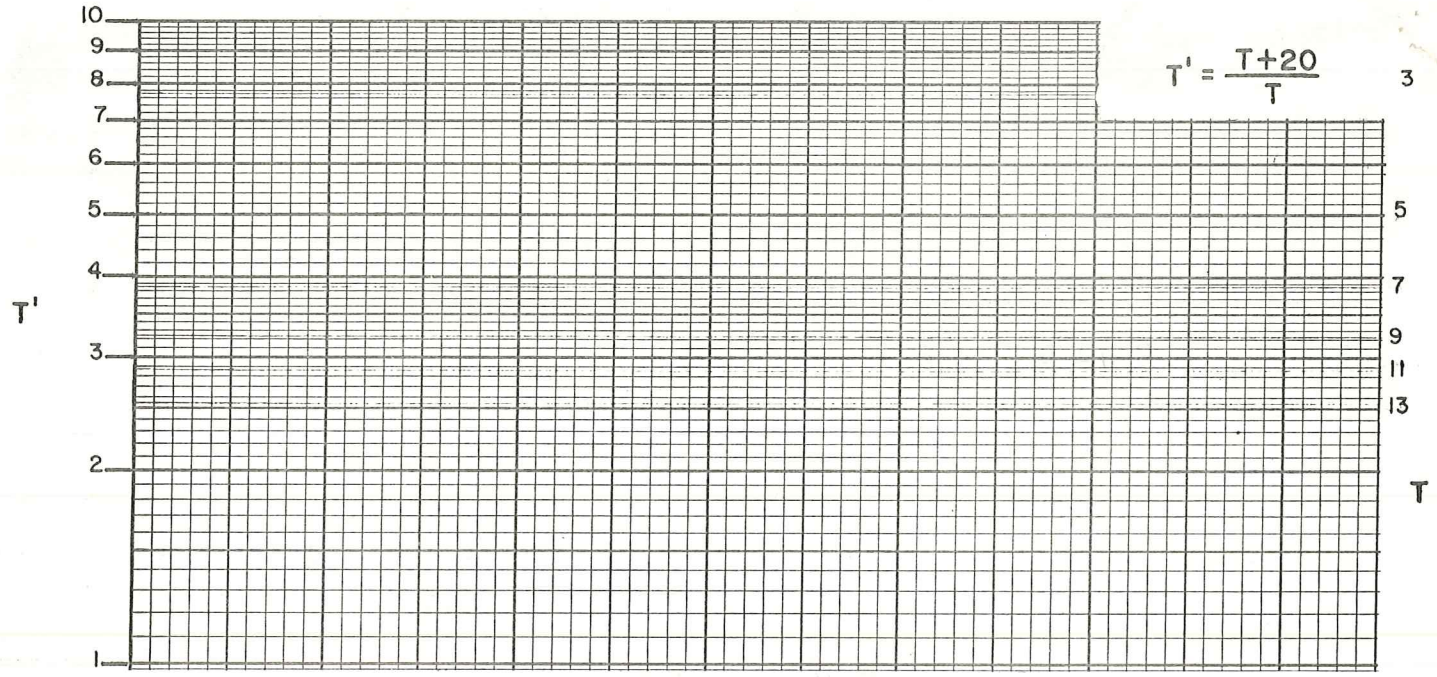
Property _____ T _____ R _____ sec _____

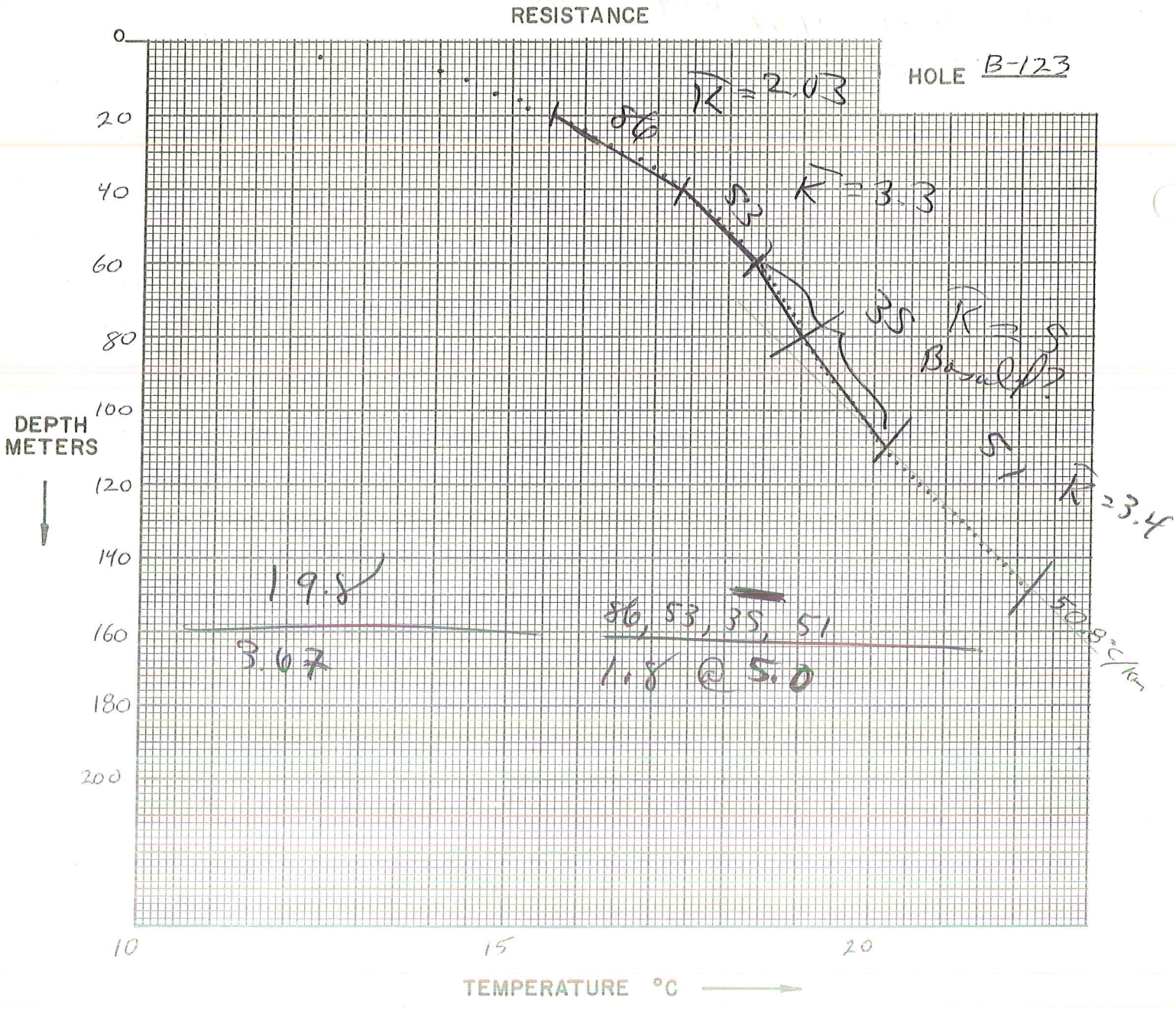
Drill Hole B-123 Date Drilled _____ Elevation _____ ft.

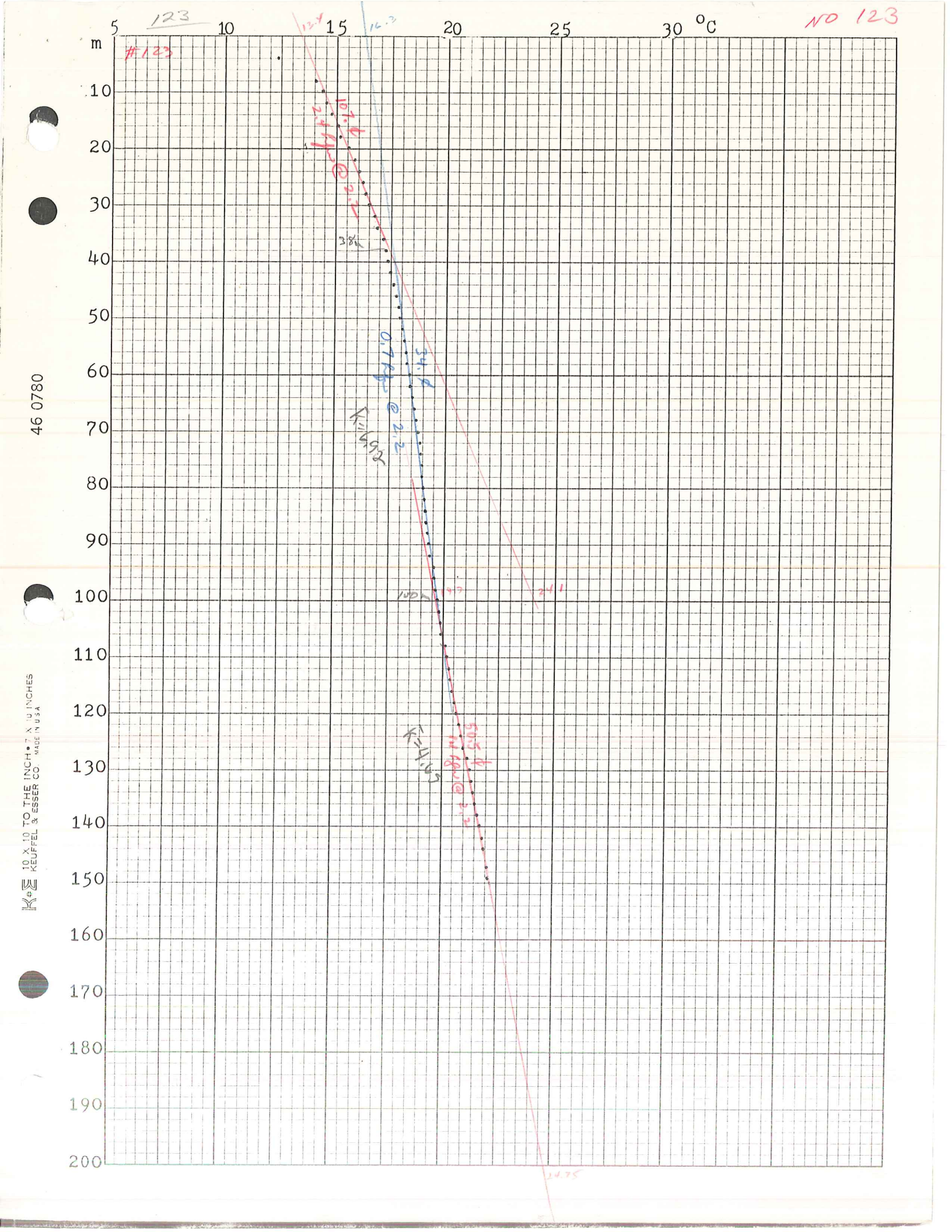
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
130	4166	21.23	0.11	55	
132	4152	21.32	0.09	45	
134	4137	21.41	0.09	45	
136	4123	21.50	0.09	45	
138	4105	21.61	0.11	55	
140	4088	21.72	0.11	55	
142	4073	21.82	0.10	50	
144	4059	21.91	0.09	45	144-147 ONLY. NOTE 3m INTERVAL
147	4039	22.04	0.13	65	
149	4023	22.14	0.10	50	
150	4015	22.19	0.05	50	
					GRADIENT 110-150m 50.8°C/Km


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-123
DEPTH METERS
0
20
40
60
80
100
120
140
160
180
200
86
K = 2.03
53
K' = 3.3
35
K
51
K = 3.4
19.8
3.67
86, 53, 35, 51
1.8 @ 5.0
50.8°C/km
10
15
20
TEMPERATURE °C


123
NO 123
#123
5
10
15
20
25
30 °C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

Transient 123

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B-123

TEMPERATURE DEPTH LOG

ΔT Well No. 124

Property-Project Best

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–5)	Well No (6–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	124	14	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
8.0 KM SW OF SOUTH TWIN PEAK	JEC/	MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	37.5	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	80
30.1	15.5	5230.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	25.0	35.0		
D	50.0	75.0	-3.5	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	35.0	50.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 5 MILES S.W. OF S. TWIN PEAK Date 14-MAY-76

Map ANTELOPE SPRING UT. 7½"

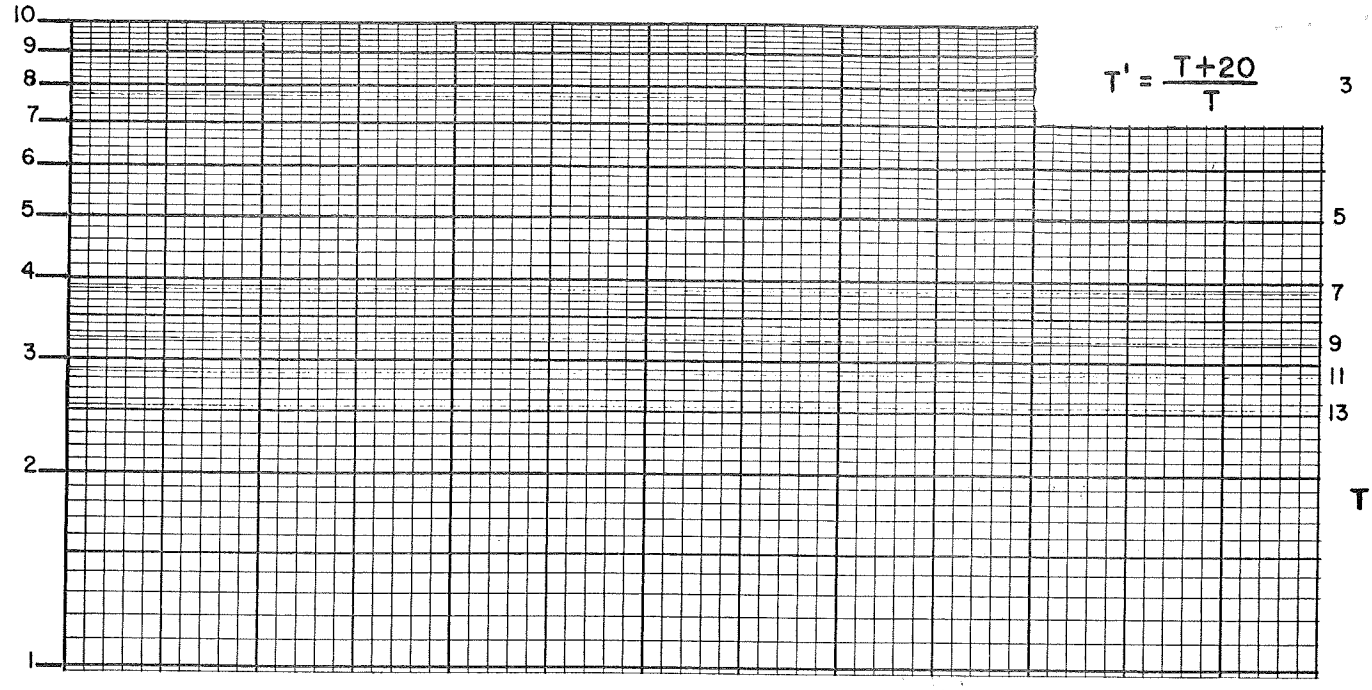
Property BEST T 24S R 9W sec 26 SW¼ SE¼

Drill Hole B-124 Date Drilled _____ Elevation 5230 ft.

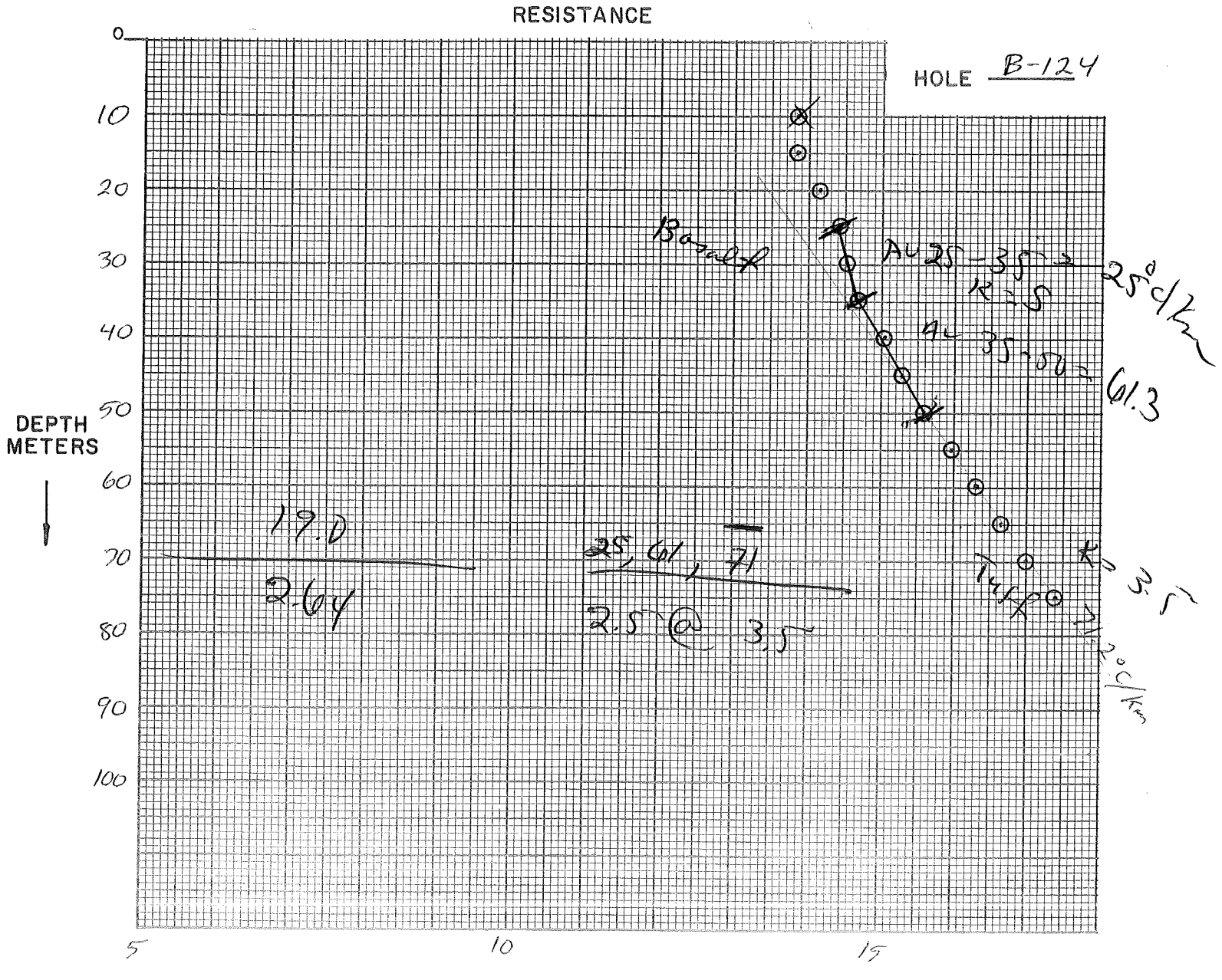
Instrument _____ Operator JCD

Comments 1" GALVANIZED STEEL PIPE. PROBABLY DRILLED ENTIRELY IN VALLEY FILL. PIPE BURIED & GRASS PLANTED ON DRILL SITE.

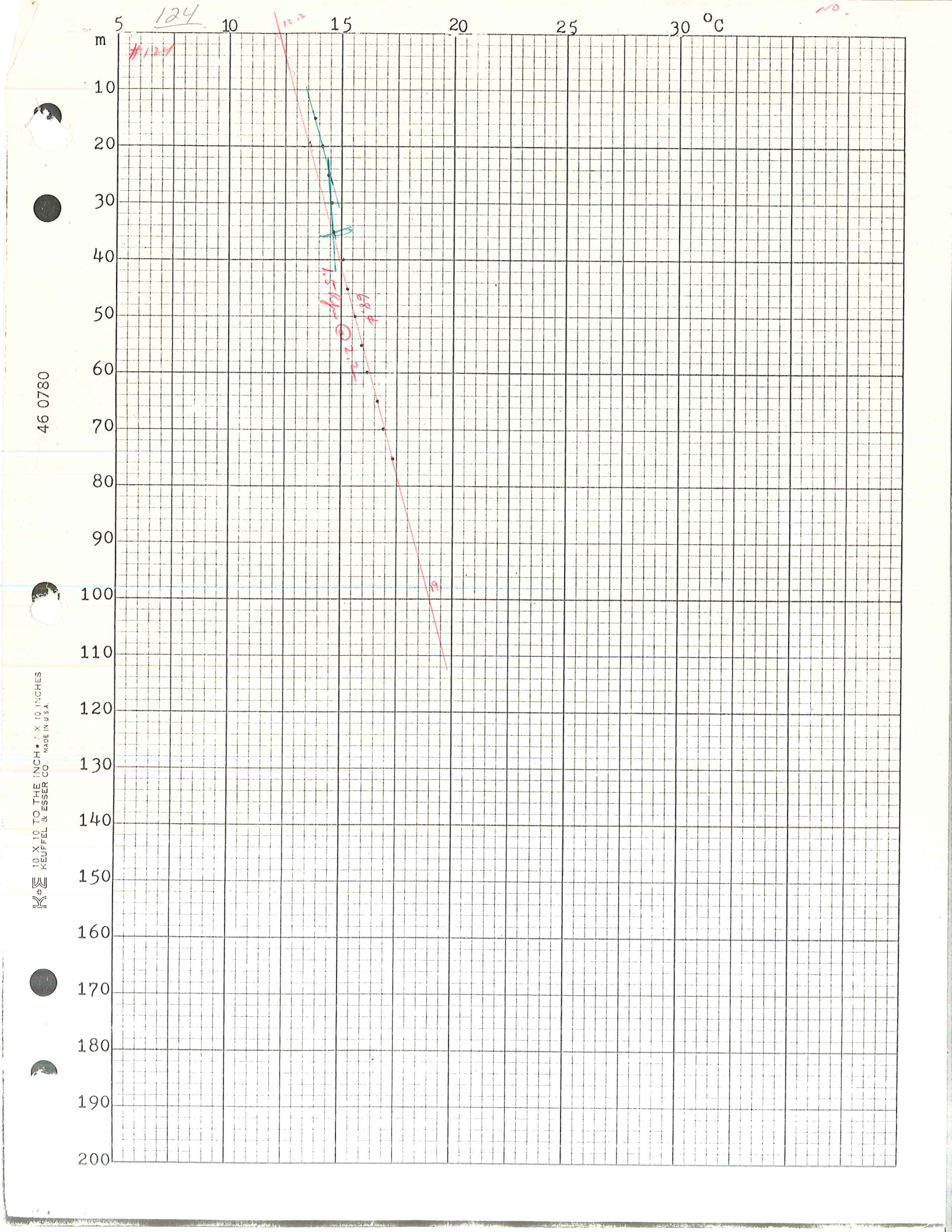
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
15	5574	13.84 ~~13.40~~			
20	5503	14.15	0.31	62	
25	5441	14.43	0.28	56	
30	5422	14.52	0.09	18	
35	5387	14.68	0.16	32	
40	5314	15.02	0.34	68	
45	5258	15.29	0.27	54	
50	5193	15.60	0.31	62	
55	5116	15.97	0.37	74	
60	5050	16.30	0.33	66	
65	4978	16.66	0.36	72	
70	4914	16.99	0.33	66	
75	4840	17.38	0.39	78	
					GRADENT 50-75m 71.2°C/Km



T' = (T+20)/T
T'
T



RESISTANCE
HOLE B-124
DEPTH METERS
TEMPERATURE °C
Basalt
Au 25-35 = 25°C/km
K = 5
Au 35-50 = 61.3
Tuff
K = 3.5
19.0
2.64
25, 61, 71
2.5 @ 3.5



124
#124
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
12.2
7.5 kPa @ 2.2
68.4
19
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 125

Property-Project Best Depth Logged ______

Map ______ Scale ______ Date: Drilled ______ Logged ______

State ______ County ______ Section ______ T ______ R ______

Instrument ______ Operator ______ Elevation ______ ft.

Comments ______

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	125	15	00	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
7.8 KM SW OF BAILEY MOUNTAIN	JEC	MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
30.95	16.1	5800.		F

Use decimals

Write M ← if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	16.0	36.0	-4.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location _____ Date 15

Map ADAMSVILLE UT. 15"

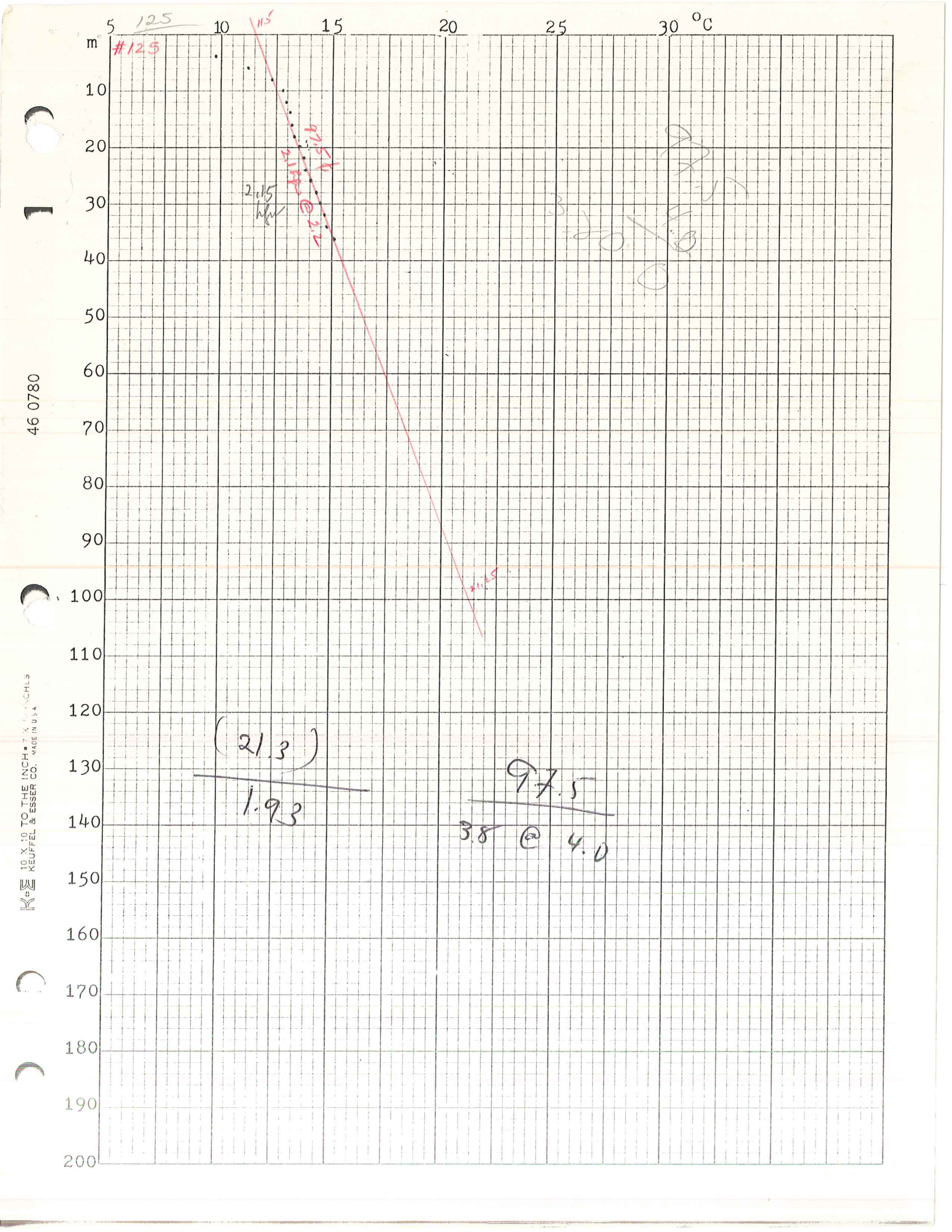
Property BEST T ____ R ____ sec ____

Drill Hole B-125 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator JEU

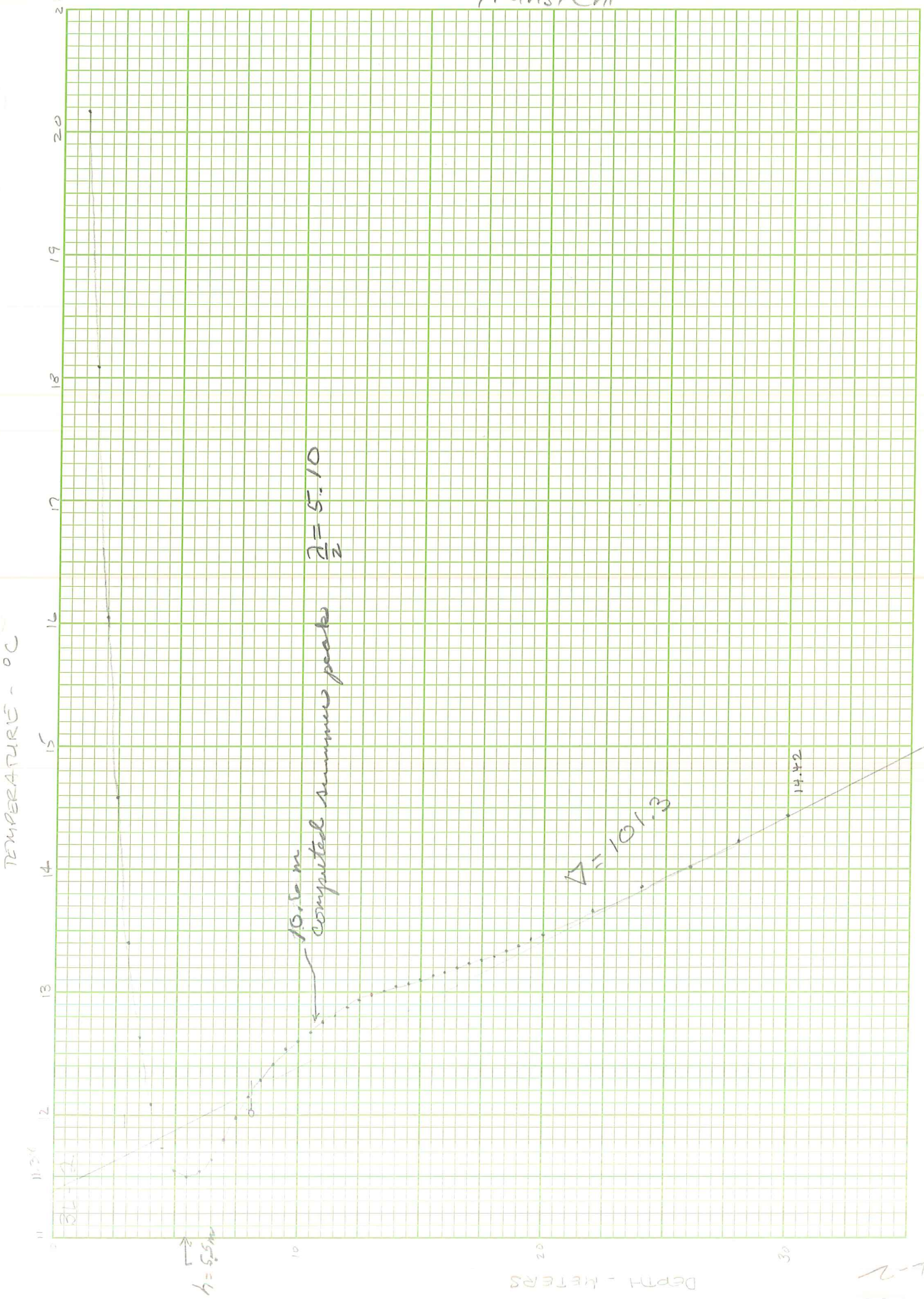
Comments 1" STEEL PIPE. SURFACE SANDY SOIL OF WEATHERED QTZ MONZONITE. (BLACK WELL HOLE # 2) BOISE SITE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
4	6586	9.76				
			1.41	705		
6	6212	11.17				
			1.21	605		
8	5913	12.38				
			0.44	220		
10	5808	12.82				
			0.15	75		
12	5772	12.97				
			0.12	60		
14	5745	13.09				
			0.12	60		
16	5717	13.21				
			0.13	65		
18	5686	13.34				-18
			0.18	90		
20	5646	13.52				
			0.19	95		
22	5602	13.71				
			0.17	85		
24	5564	13.88				
			0.18	90		
26	5523	14.06				
			0.22	110	93.3	1.68
28	5476	14.28				
			0.21	105		
30	5428	14.49				
			0.18	90		
32	5390	14.67				
			0.17	85		
34	5354	14.84				
			0.18	90		
36	5315	15.02				-36



46 0780
KE 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

Transient VH 2 #125



46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES KEUFFEL & ESSER CO. MADE IN U.S.A.

2-78

TEMPERATURE DEPTH LOG

ΔT Well No. 126

Property-Project Bast

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	126	17	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
9.0 KM SOUTH OF THERMO, UTAH	JED	MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00.	113.	15.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
9.2	~~23.8~~	5190.		F

23.9 Use decimals 9.3

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	14.0	30.0	-3.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 3 MILES ~~MILE~~ S-SE OF THERMO H.S. Date 17-MAY-76

Map THERMO UT, 15"

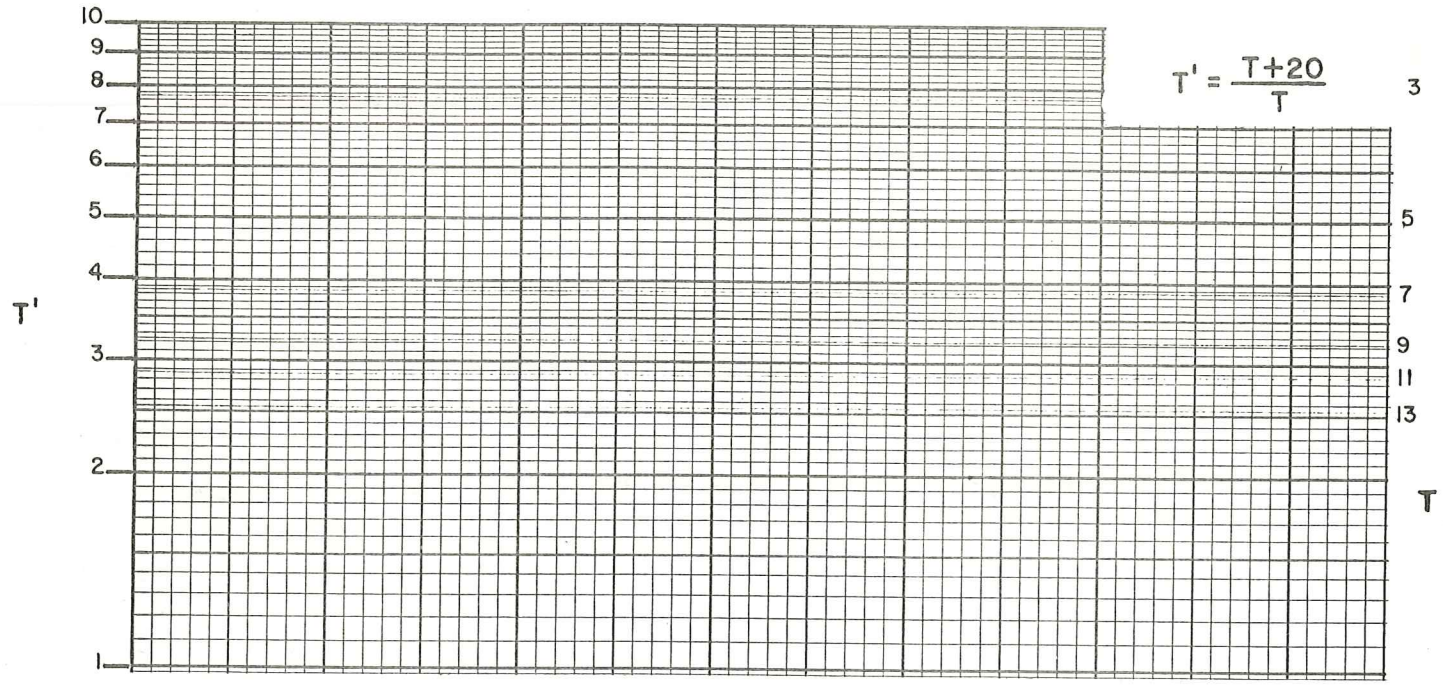
Property BEST T 31S R 12W sec 3 SE¼

Drill Hole B-126 Date Drilled ____ Elevation 5190 ft.

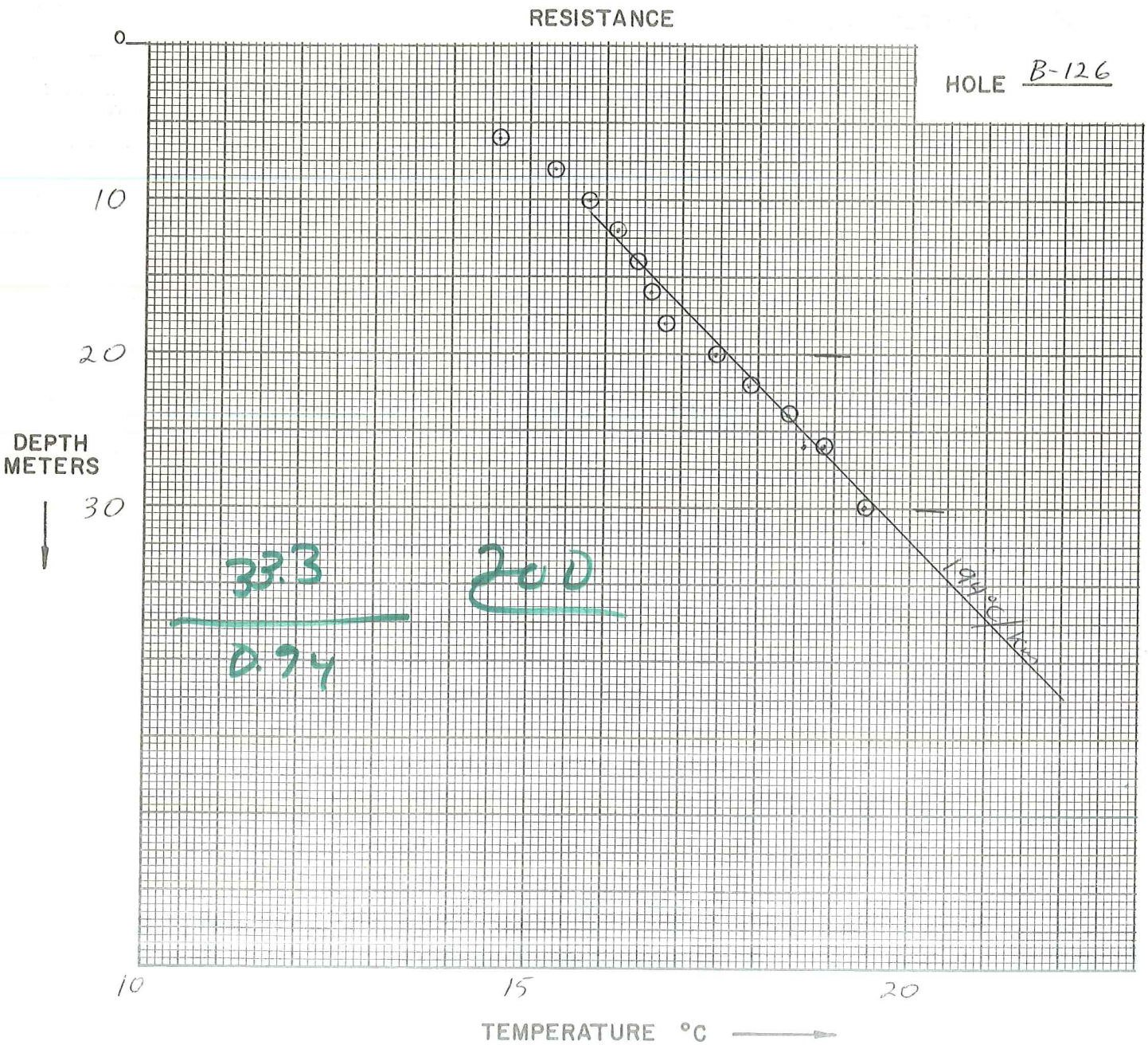
Instrument ____ Operator JED

Comments 1" GALVANIZED STEEL PIPE PHILLIPS GRADIENT HOLE

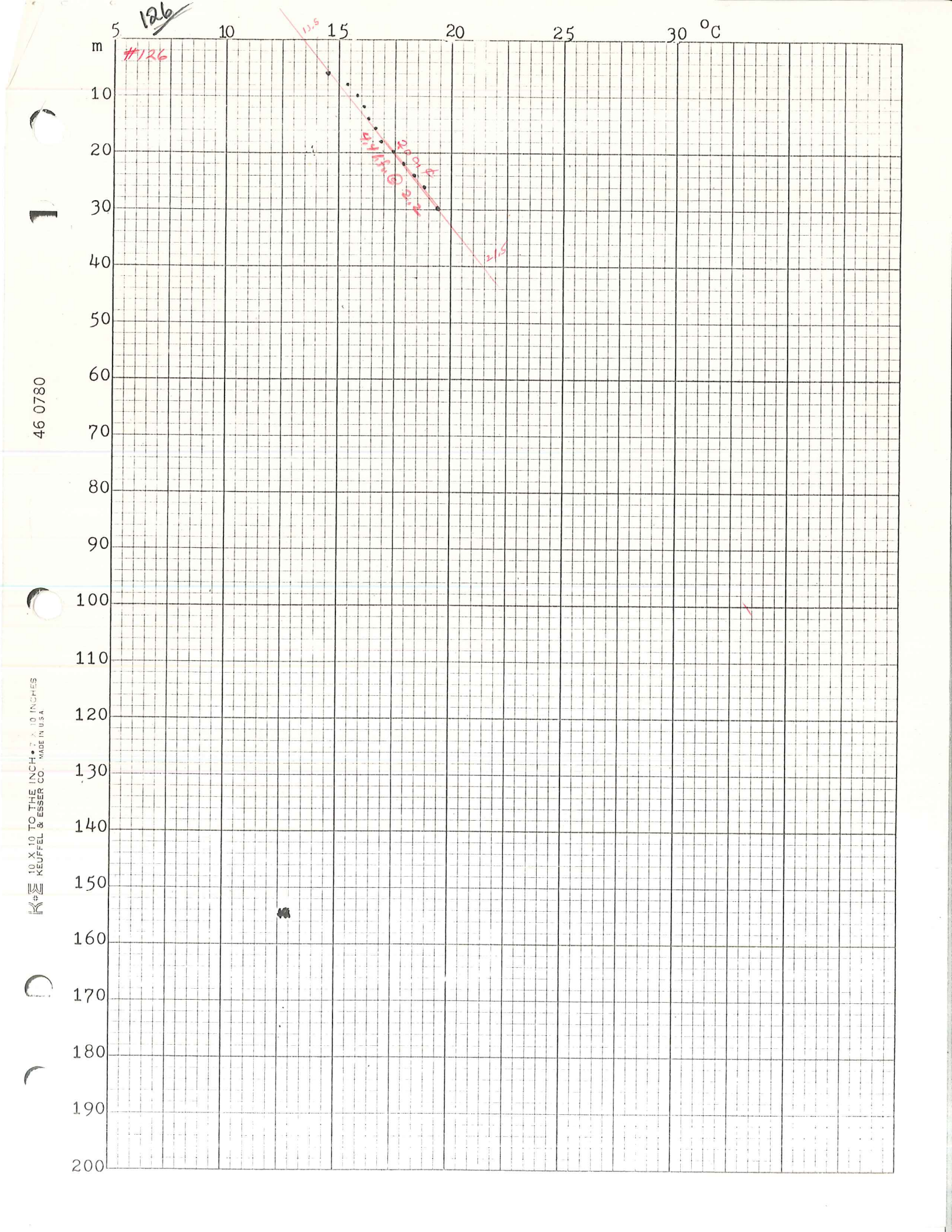
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	5425 5926 5425	14.51			
8	5250	15.33	0.47	235	
10	5151	15.80	0.35	175	
12	5081	16.15	0.27	135	
14	5026	16.42	0.19	95	
16	4989	16.61	0.19	95	
18	4951	16.80	0.67	335	
20	4822	17.47	0.44	220	
22	4739	17.91	0.49	245	
24	4649	18.40	0.46	230	
26	4567	18.86	0.55	138	
28	—	—			
30	4469	19.41			GRADIENT 20-30 m 194 °C/Km



T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13



RESISTANCE
HOLE B-126
DEPTH METERS
0
10
20
30
10
15
20
TEMPERATURE °C
33.3
0.94
200
194°C/km


126
#126
m
°C
5
10
15
20
25
30
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
13.5
21.5
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 127

Property-Project Best

Depth Logged

Map

Scale

Date: Drilled

Logged

State

County

Section

T

R

Instrument

Operator

Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	(13)	MO (14–15)	(16)	YR (17–18)	* 19	* 20
755	127	18		MY		76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
6.6 KM SOUTH OF BLACK POINT	JED	/ MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	45.	112.	45.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
0.9	11.38	5160.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	12.0	27.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	27.0	35.0	-3.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~4 MILES S.E. OF TWIN PEAKS Date 18-MAY-76

Map TABERNACLE HILL UT. 15"

Property BEST T 24S R 7W sec 5 NW¼

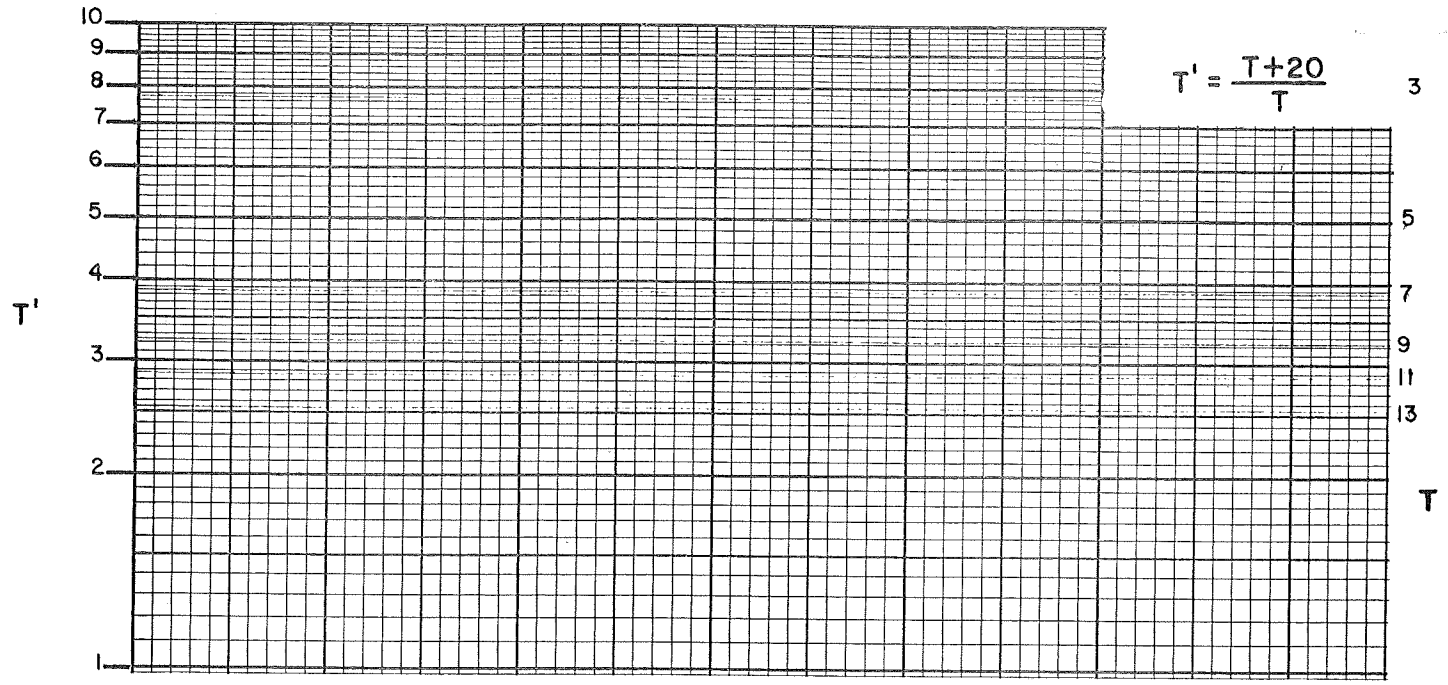
Drill Hole B-127 Date Drilled _____ Elevation 5160 ft.

Instrument _____ Operator JED

Comments 8" CASED WATER WELL. HOLE BEGINS IN VALLEY FILL.

RECENT BURIED BASALT FLOW 40m TO WEST. POSSIBLE OLDER INTERBEDDED BSLT. FLOWS IN VALLEY FILL.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
	55				
10	3 5506 5 5688 7 5720 9 5741				
12	5701	13.28	0.06	30	
14	5686	13.34	0.13	65	
16	5656	13.47	0.12	60	
18	5630	13.59	0.14	70	
20	5598	13.73	0.12	60	
~~22~~21	5570	13.85	0.16	80	
~~24~~23	5535	14.01	0.21	105	
~~26~~25	5489	14.22	0.23	115	
~~28~~27	5437	14.45	0.22	110	
~~30~~29	5389	14.67	0.34	170	
~~33~~31	5317	15.01	0.55	132.5	
35	5202	15.56			GRADIENT 25-35m 134°C/km



RESISTANCE

HOLE B-127

DEPTH METERS

0
10
20
30

Au 20 - 27-2 102.8

Au 27 - 35 = 138.2

(24.0)

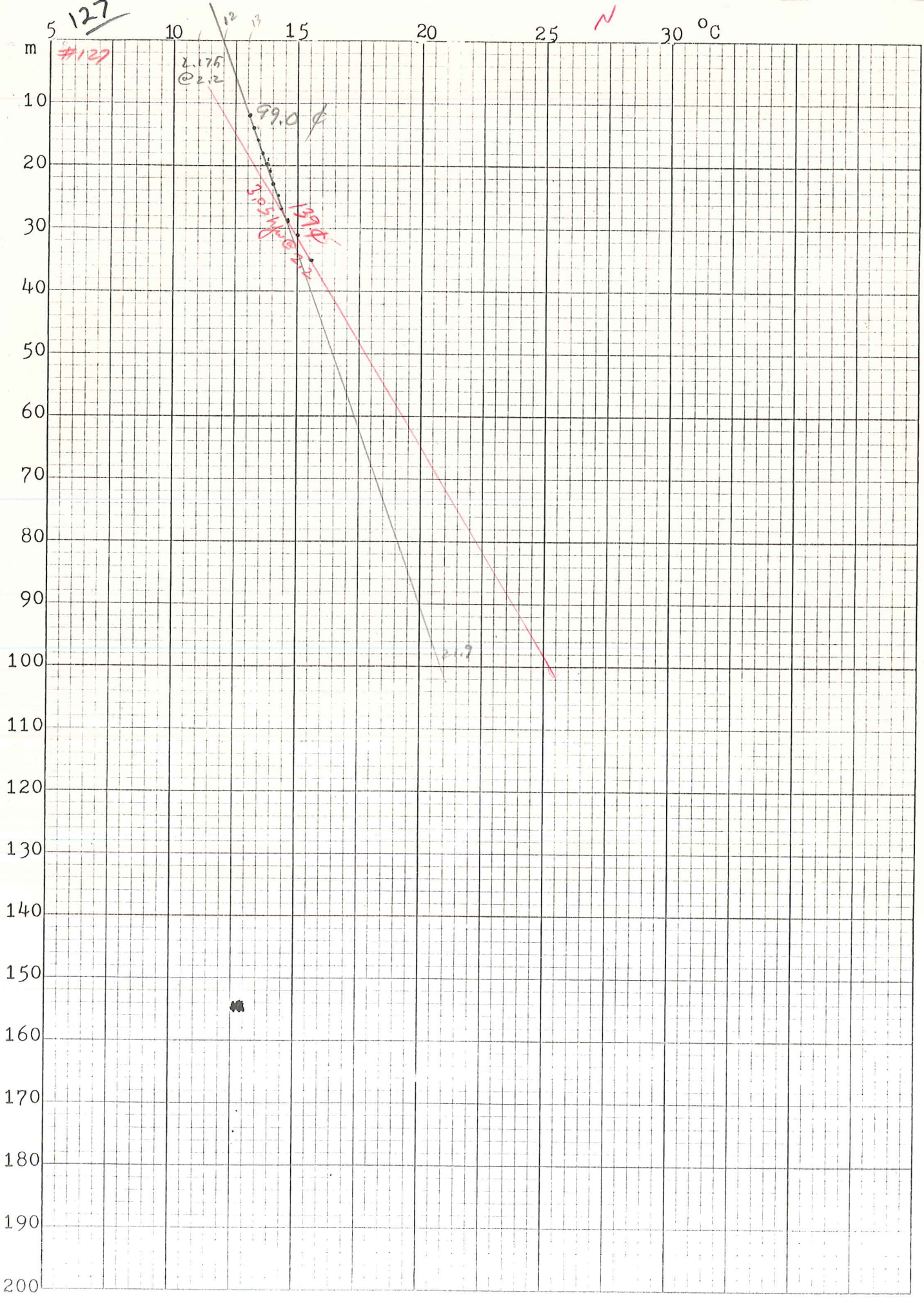
1.83

102.8, 138.2

4.2 @ 3.0

10 15 20

TEMPERATURE °C


127
#127
N
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
2.175
@2.2
99.0 ¢
3.05 hfw @ 2.2
139 ¢
21.9
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 128

Property-Project Best Depth Logged ____

Map ____ Scale ____ Date: Drilled ____ Logged ____

State ____ County ____ Section ____ T ____ R ____

Instrument ____ Operator ____ Elevation ____ ft.

Comments ____

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	128	19	MY	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
3.3 KM NNE OF THERMO, UTAH	JED	MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00.	113.	15.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
43.1	12.9	5090.		F

42.9

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	22.0	30.0	-2.2	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1.5 MILES N.E OF THERMO RR CROSSING Date 19-MAY-76

Map THERMO UT 15"

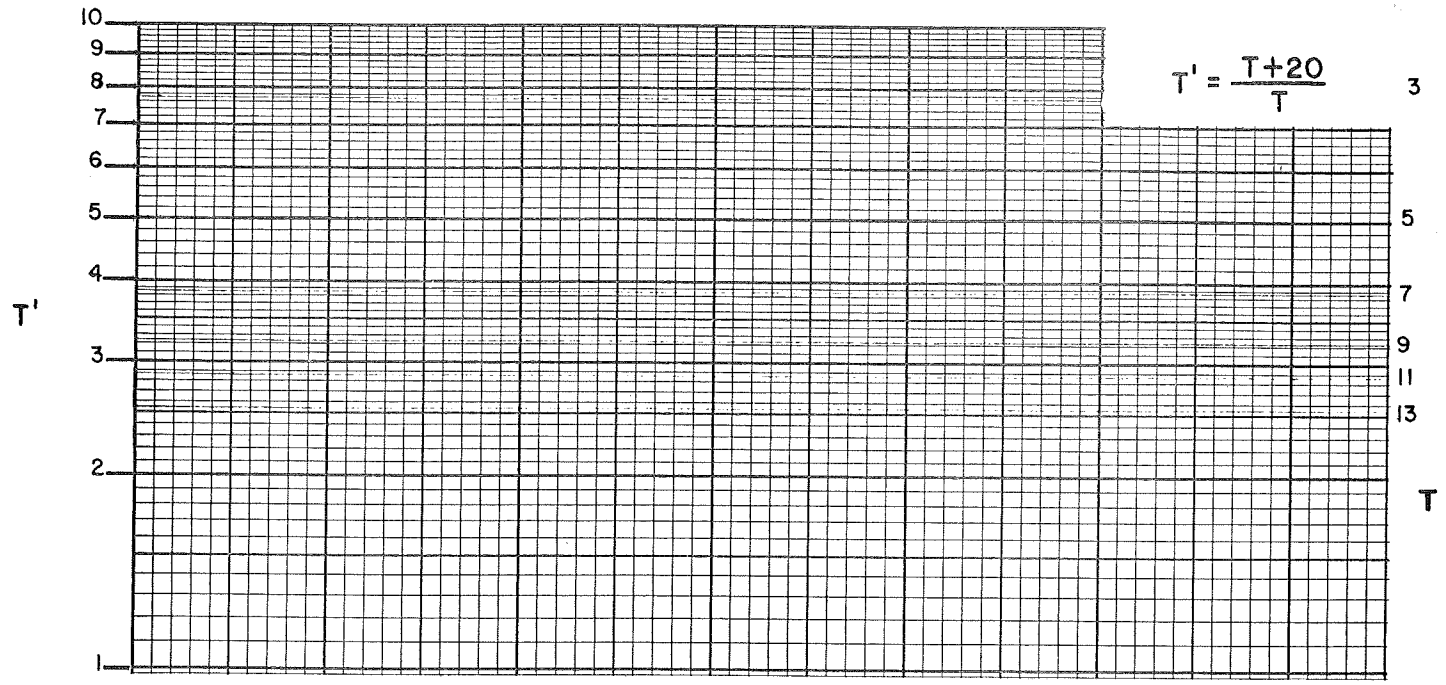
Property BEST T 29S R 12W sec 35 NE¼ SE¼

Drill Hole B-128 Date Drilled _____ Elevation 5090 ft.

Instrument _____ Operator JED

Comments 6" CASED WATER WELL (WIND MILL) DRILLED IN VALLEY FILL.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5724	13.18			
			-0.05	-25	
12	5736	13.13			
			0.04	20	
14	5725	13.17			
			0.25	125	
16	5669	13.42			
			0.20	100	
18	5623	13.62			
			0.21	105	
20	5575	13.83			
			0.33	165	
22	5501	14.16			
			0.02	10	
24	5496	14.18			
			0.10	50	
26	5475	14.28			
			0.06	30	WIND MILL PUMPS BRIEFLY IN STRONG GUSTS OF WIND.., DISCONTINUED READINGS!
28	5461	14.34			
			0.11	55	
30	5437	14.45			
					GRADIENT 24-30m 45°C/Km



RESISTANCE

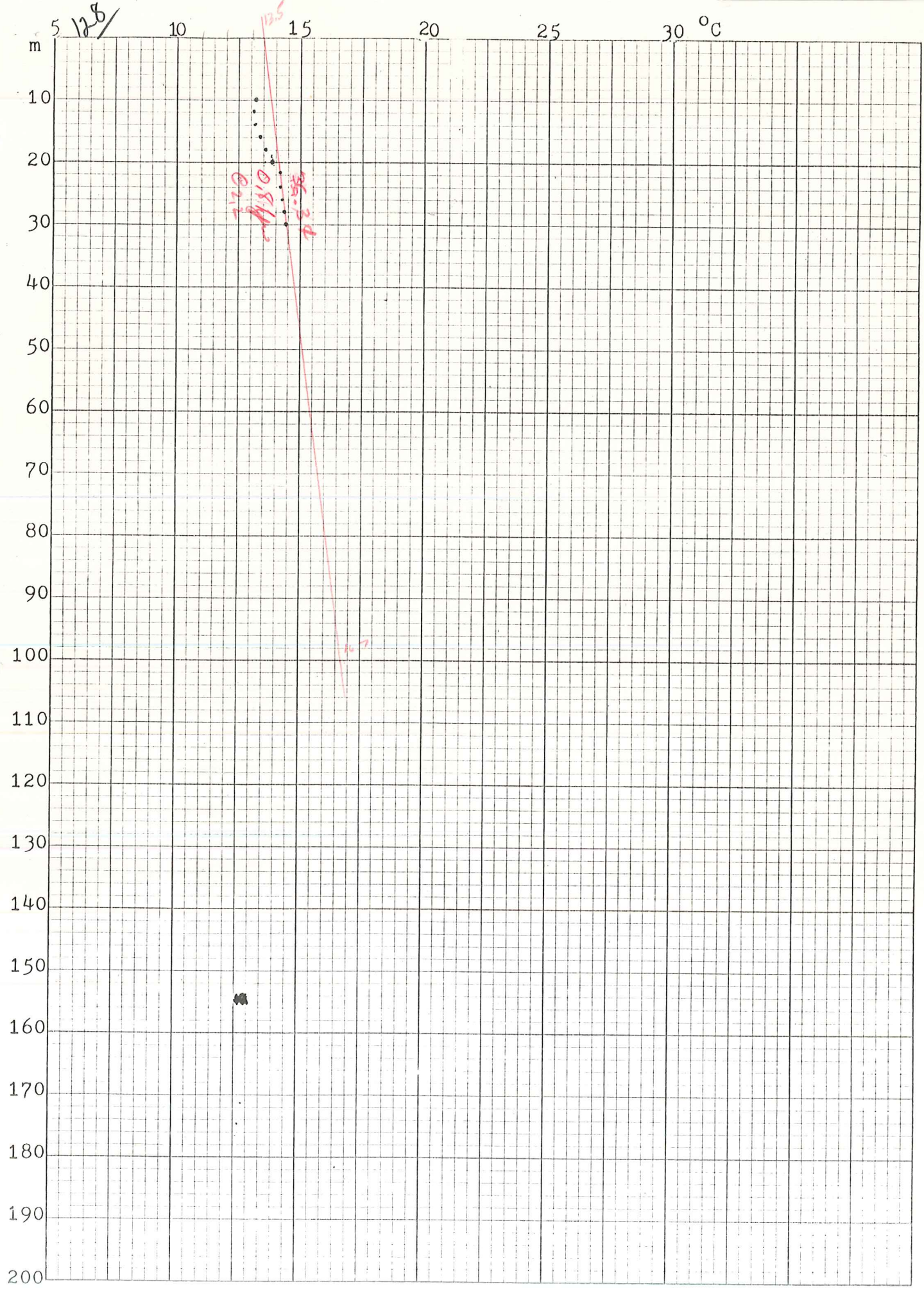
HOLE B-128

DEPTH METERS

0
10
20
30
40
50

5
10
15

TEMPERATURE °C


5 128
10
15
20
25
30 °C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
13.5
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 129

Property-Project Bust Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 2 9	2 0	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
2 . 9 K M N E O F T H E R M O , U T A H	J E D	M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	0 0 .	1 1 3 .	1 5 .

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
4 2 - 2	1 3 . 0 5	5 0 9 5 .	F

42.0

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	1 5 . 0	4 0 . 0	- 2 . 2	- . 5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	. 9 9 9			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~ 1 MILE NORTH OF THERMO RR CROSSING Date 20-MAY-76

Map THERMO UT. 15"

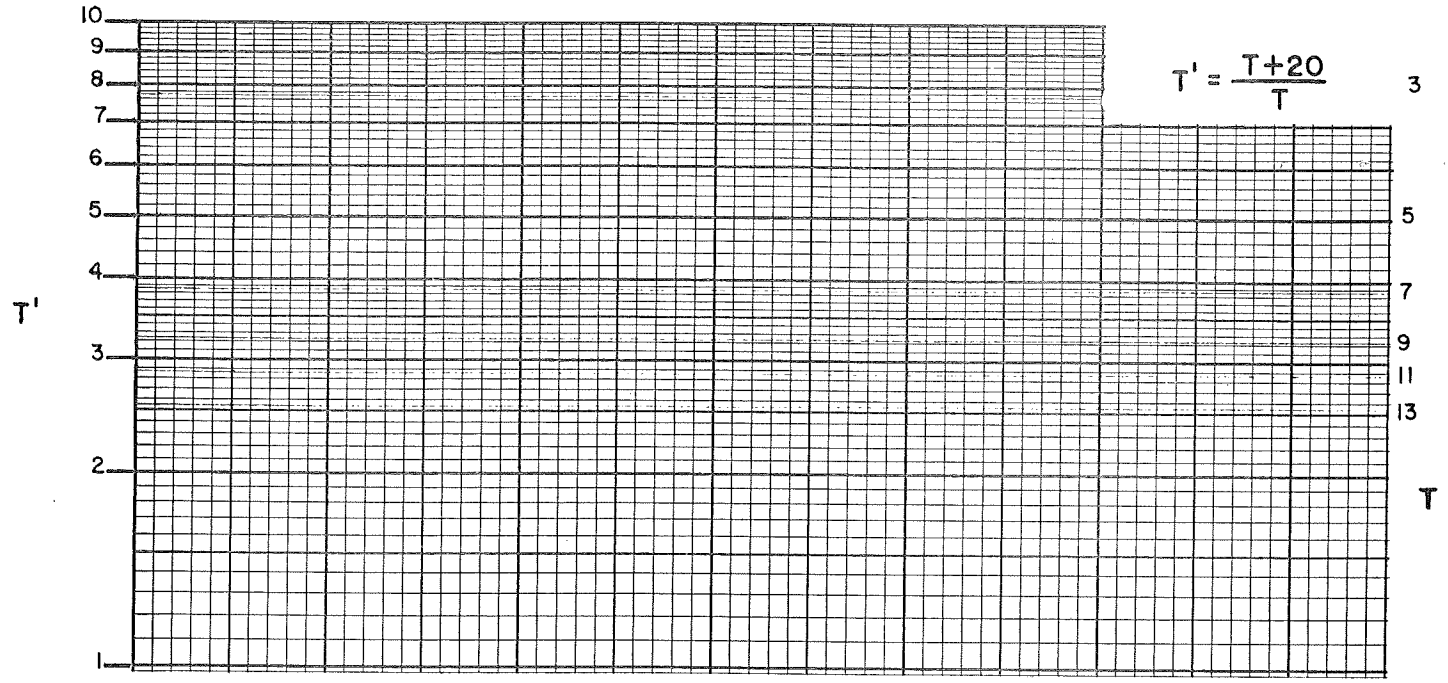
Property BEST T 29S R 12W sec 36 SW¼ SW¼

Drill Hole B-~~128~~ 129 Date Drilled _____ Elevation 5095 ft.

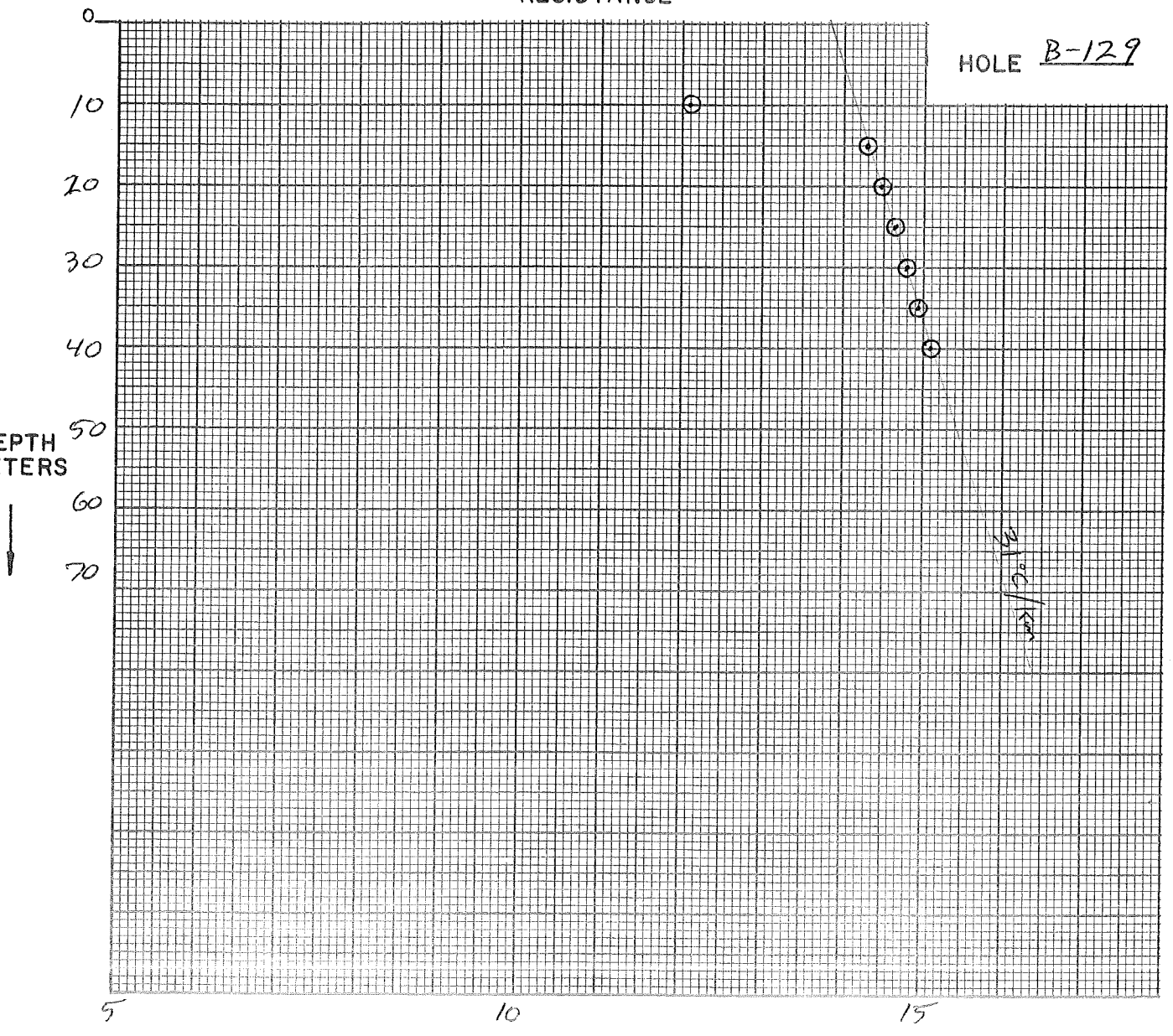
Instrument _____ Operator JCO

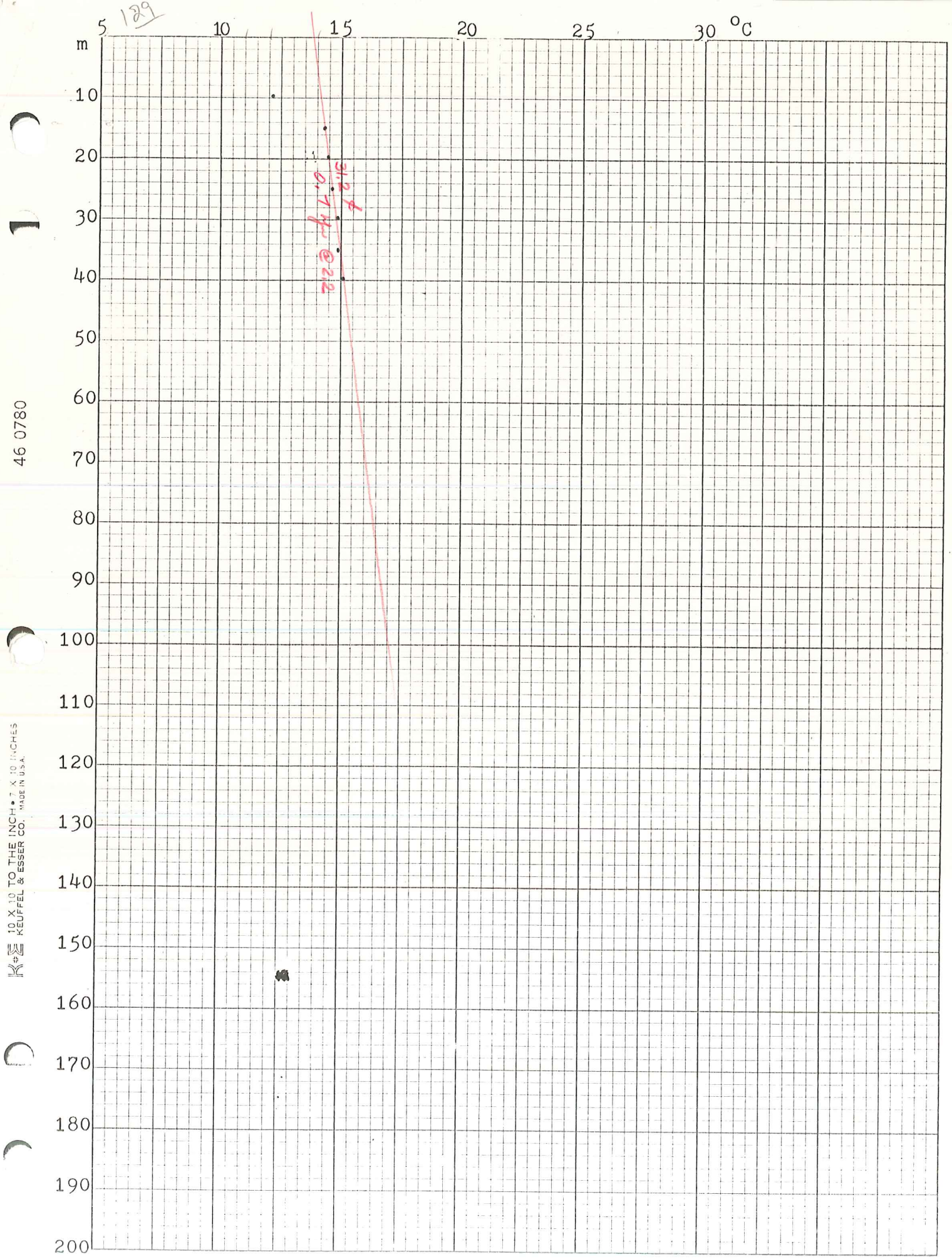
Comments 1" GALVANIZED STEEL PIPE SET IN 6" UNCASED HOLE. PIPE PLUGED SO PROBED OPEN HOLE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5180 5356 5446	12.08			
			2.23	446	
15	5468	14.31			
			0.17	34	
20	5430	14.48			
			0.19	38	
25	5389	14.67			
			0.14	28	
30	5359	14.81			
			0.13	26	
35	5332	14.94			
			0.15	30	
40	5299	15.09			
45					HOLE CAVED
					GRADIENT 15-40m 31.2°C/Km


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T

RESISTANCE


0
10
20
30
40
50
60
70
HOLE B-129
DEPTH METERS
5
10
15
TEMPERATURE °C


129
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
31.2 ¢
0.7 ¢ @ 2.2
46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 131

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 3 1	2 0	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
3. 3 K M N W O F U P T O N , U T A H	J E D	/ M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location △ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	~~1 5~~ 7.5	3 8 .	1 5 .	1 1 3 .	7 . 5

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
4 4 . 6	1 2 . 0 5	5 1 6 0 .	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	20.0	45.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	45.0	95.0	-8.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~ 5 MILES S.W. OF MILFORD Date 20-MAY-76

Map MILFORD UT. 15"

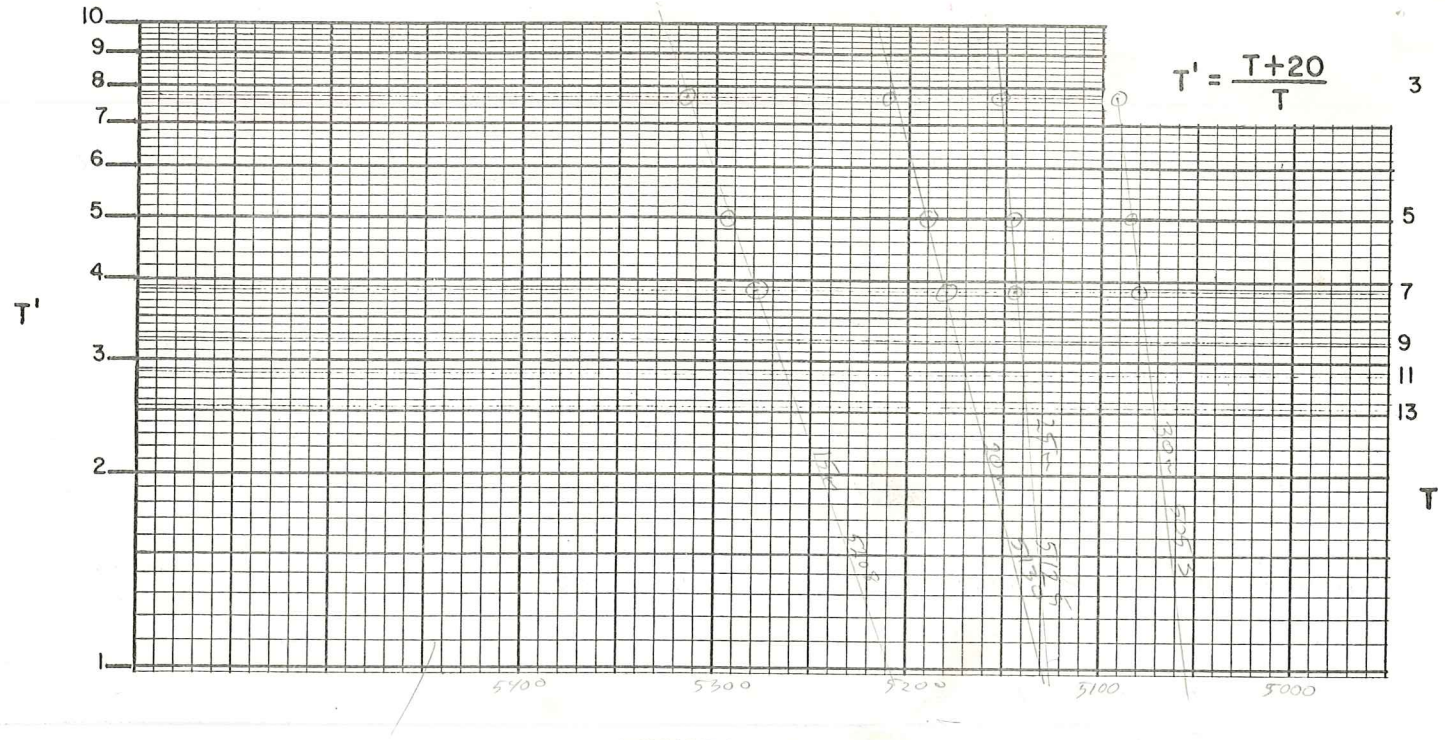
Property BEST. T 28S R 11W sec 28

Drill Hole B-131 Date Drilled ____ Elevation 5160 ft.

Instrument ____ Operator JCP

Comments 6" CASED MINERAL EXPLORATION HOLE. DRILLED IN MED GRAINED LT-GRAY TO WHITE MARBLE, CLOSE PROXIMITY TO GRANITIC INTRUSIVE. INTERSECTING N-S E-W FLTS ½ MILE WEST.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5325 5367 5363	14.78			
			0.75		
15	5315 5293 5278	15.53			
			0.38		
20	5210 5189 5180	15.91			
			0.02		
25	5153 5147 5145	15.93			
			0.36		
30	5092 5084 5080	16.29			
			0.13	65	
35	5029 5028 5028	16.42			
			0.10	20	NOT IN WATER BUT READING STABILIZES IN ~ 2 MIN.
40	5006	16.52			
			0.08	16	
~~45~~	4990	16.60			
			0.09	18	
50	4973	16.69			
			0.13	~~65~~ 26	
55	4947	16.82			
			0.07	~~35~~ 14	
60	4934	16.89			
			0.07	~~35~~ 14	
65	4920	16.96			
			0.05	~~25~~ 10	
70	4911	17.01			
			0.05	~~25~~ 10	
75	4901	17.06			
			0.05	~~25~~ 10	
80	4891	17.11			
			0.06	~~30~~ 12	
85	4880	17.17			
			0.05	~~25~~ 10	
90	4869	17.22			
			0.06	~~30~~ 12	
95	4858	17.28			
					GRADIENT 55-95m 11.5°C/Km



RESISTANCE

HOLE B-131

DEPTH METERS

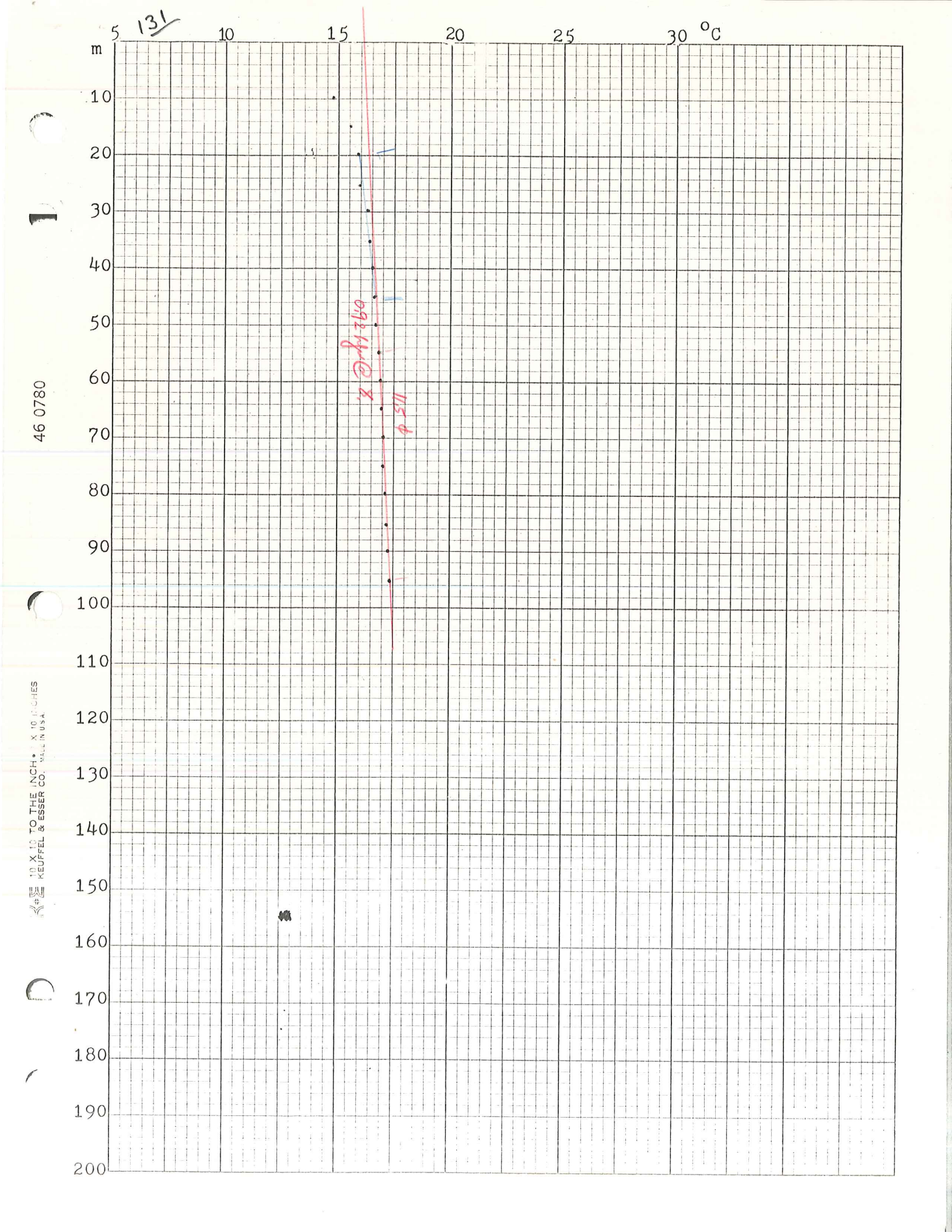
0
10
20
30
40
50
60
70
80
90
100

(17.4)
16.35

11.5
0.9 @ 8.0

5
10
15

TEMPERATURE °C


131
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 133

Property-Project Best Depth Logged

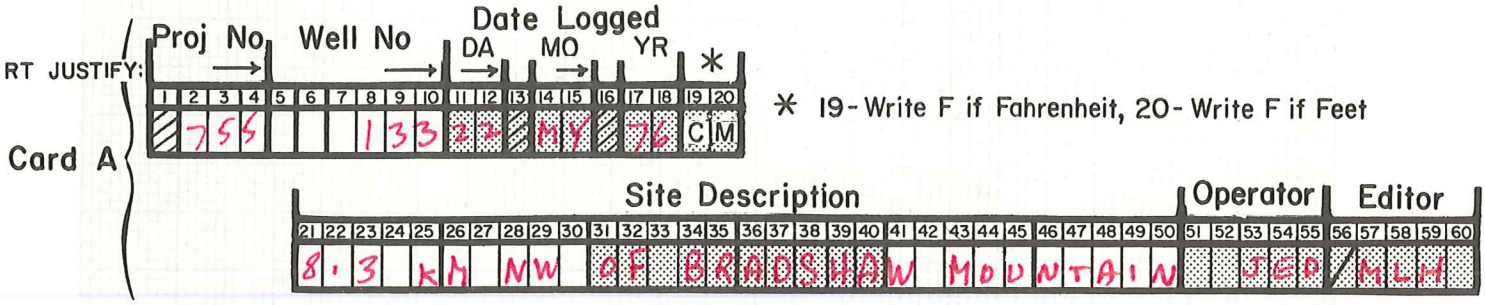
Map Scale Date: Drilled Logged

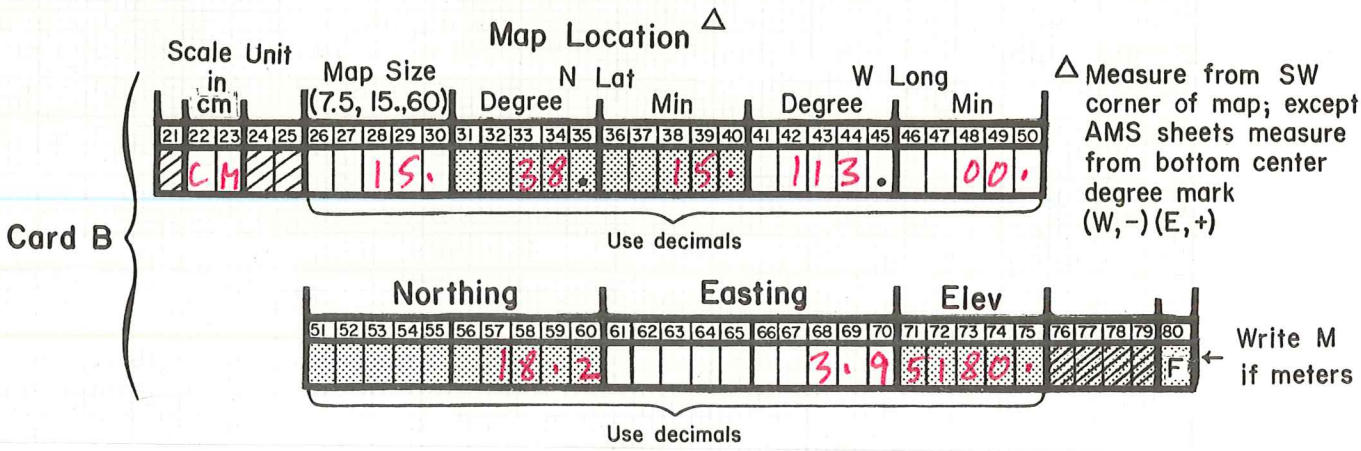
State County Section T R

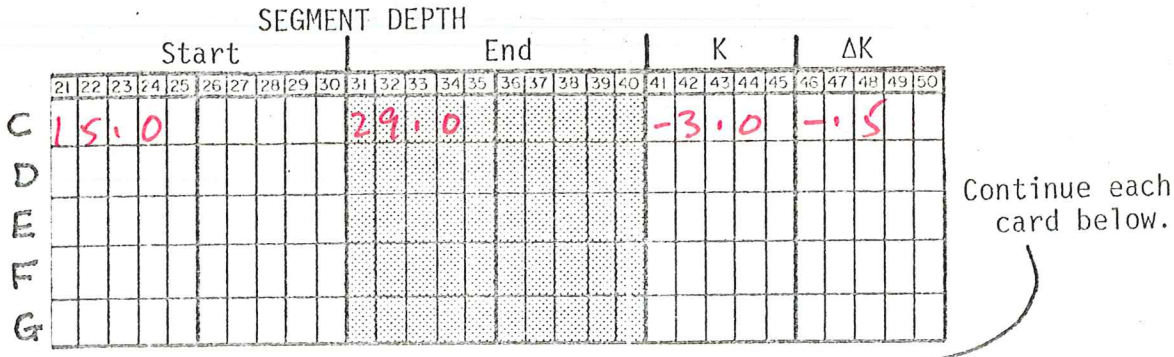
Instrument Operator Elevation ft.

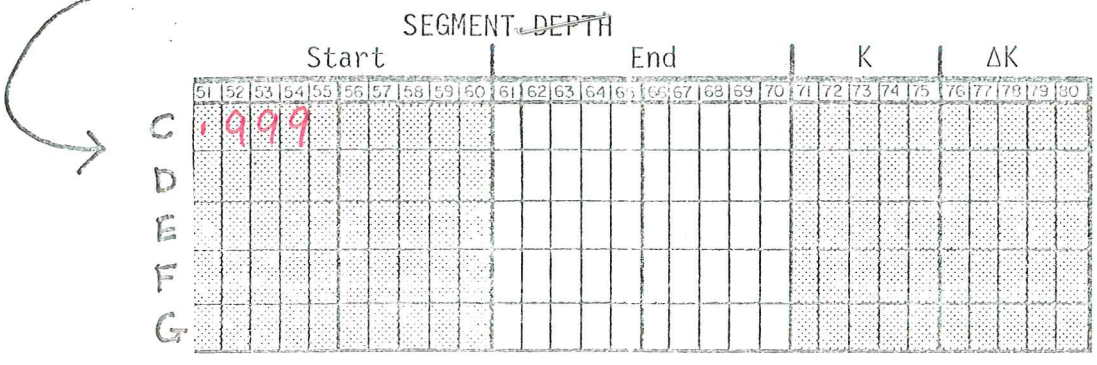
Comments

COMPUTER PROCESSING









Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~ 7 MILES S.E. OF MILFORD Date 22-MAY-76

Map ADAMSVILLE UT. 15''

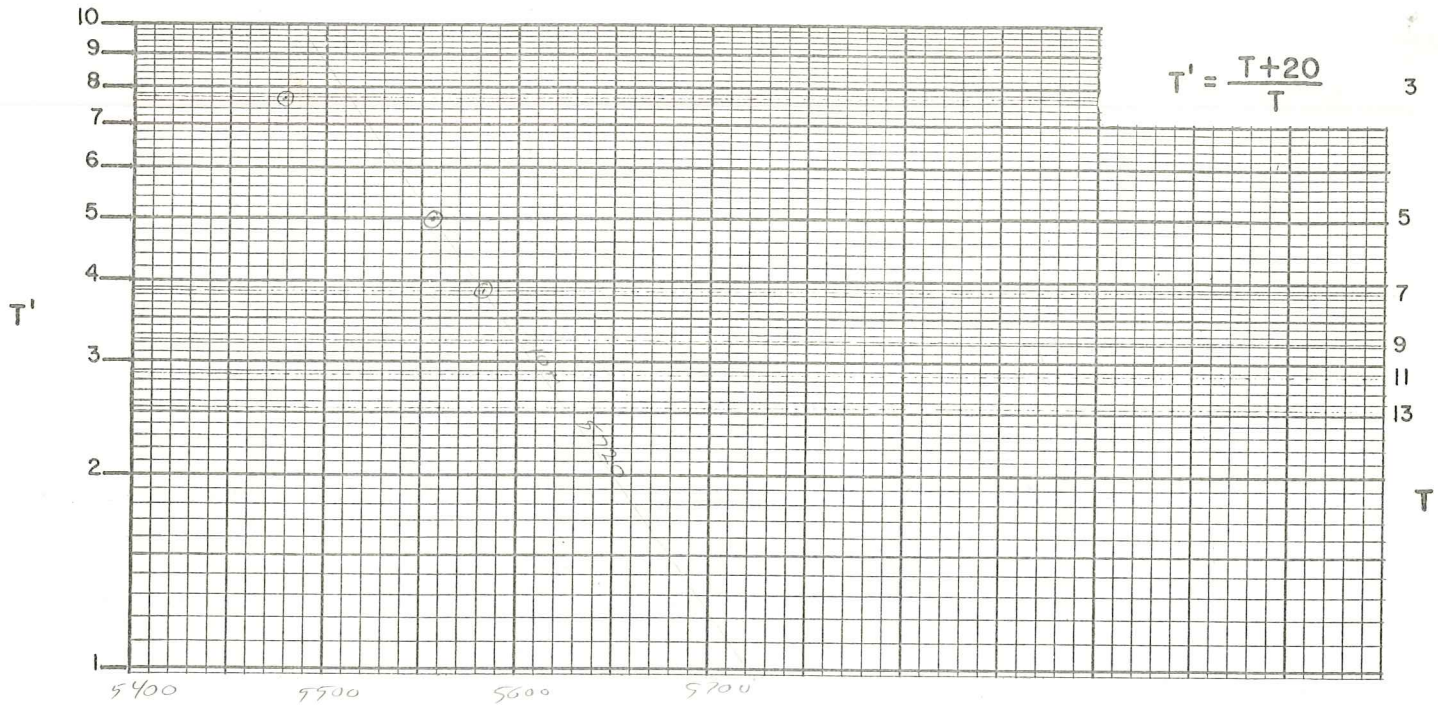
Property BEST T 28S R 10W sec 28 NE¼ NE¼

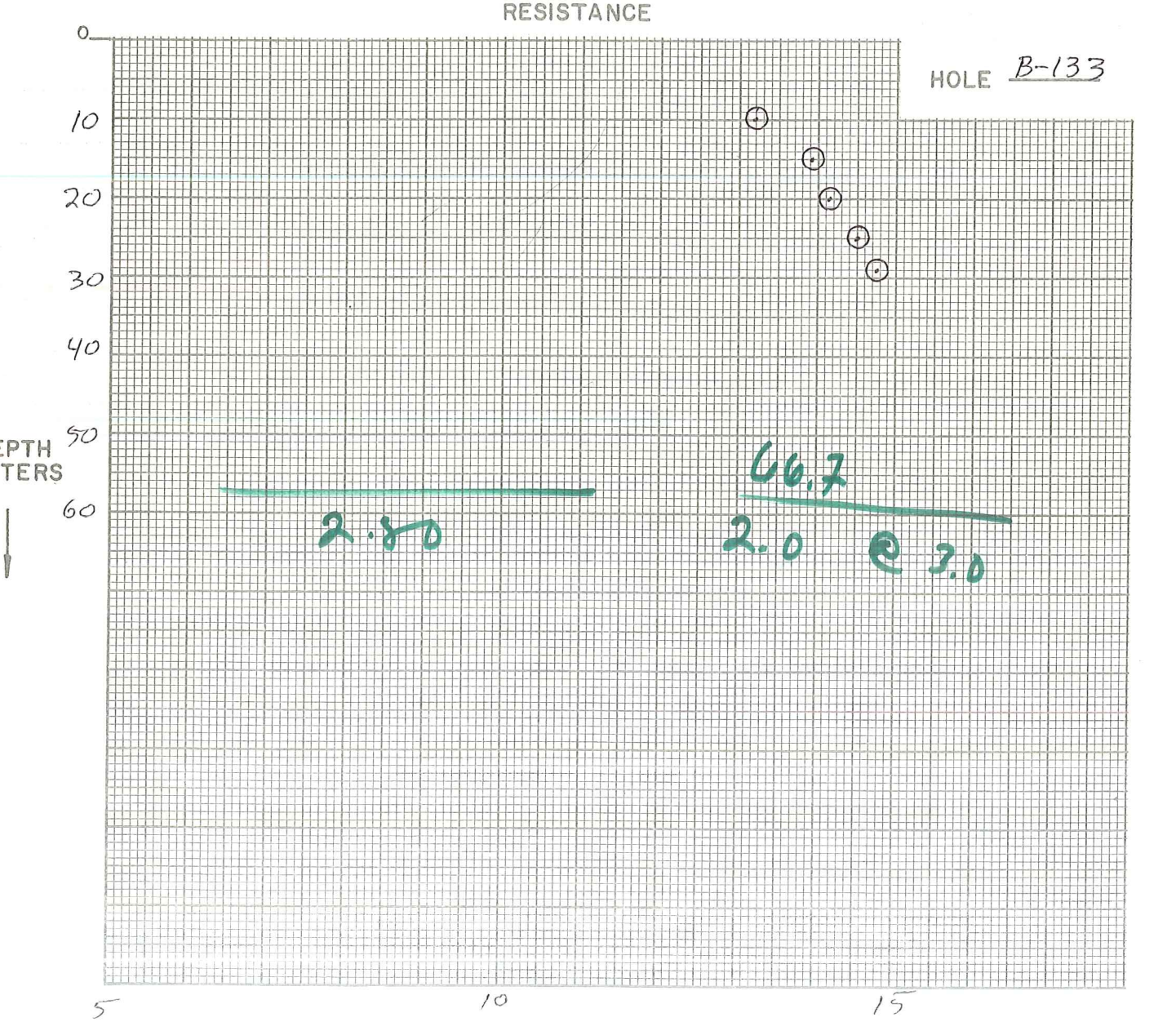
Drill Hole B-13 Date Drilled ____ Elevation 5180 ft.

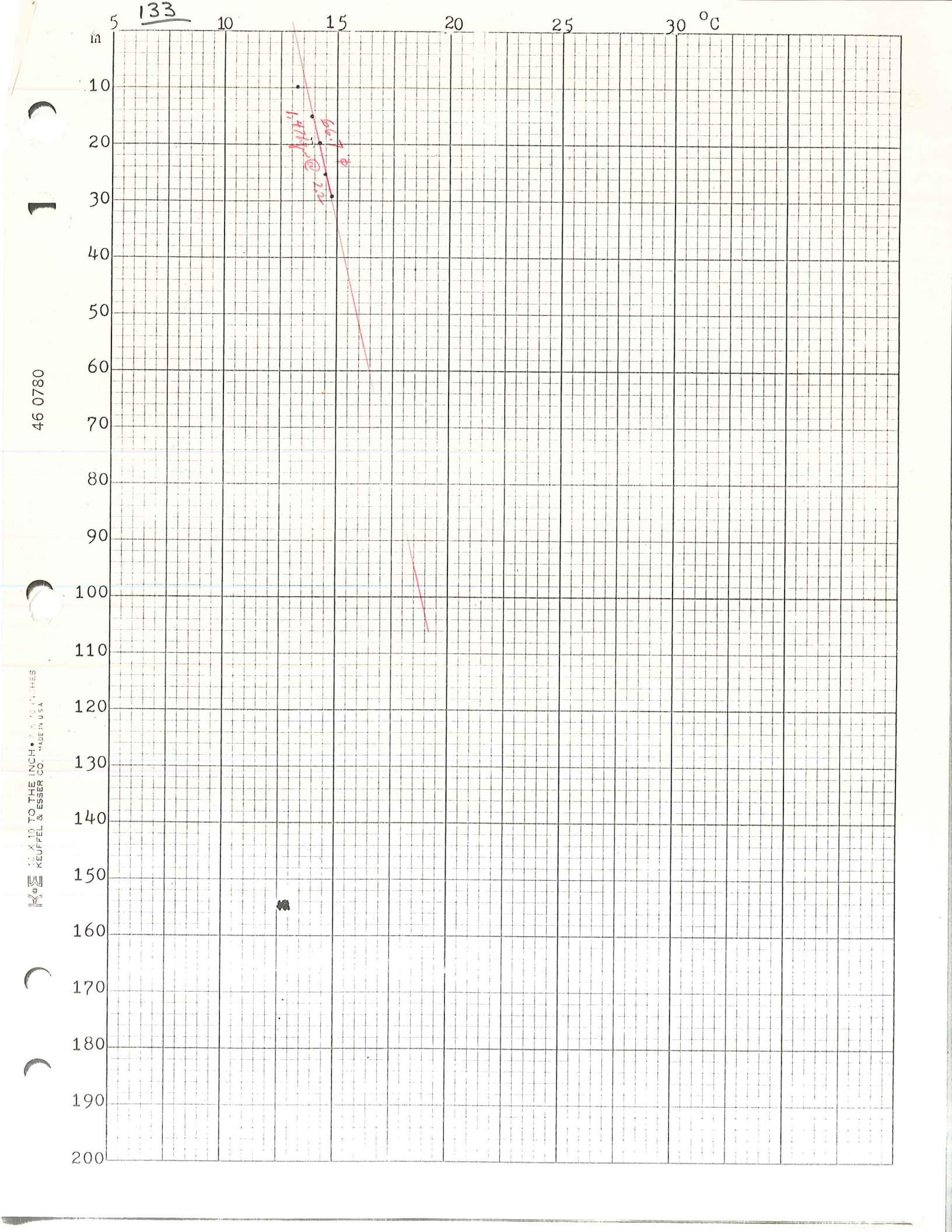
Instrument ____ Operator JED

Comments 4" CASED WATER OBSERVATION WELL. PROBABLY DRILLED ENTIRELY IN VLY FILL.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5479 5556 5581	13.20			
			0.72	144	
15	5554	13.92			
			0.22	44	
20	5507	14.14			
			0.35	70	
25	5429	14.49			
			0.25	~~70~~ 50	
29	5375	14.74			WATER BOTTOM 2m.
					GRADIENT 15-29m 58.6°C/Km


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T
5400
5500
5600
5700
RESISTANCE


HOLE B-133
0
10
20
30
40
50
60
DEPTH METERS
2.80
66.7
2.0 @ 3.0
5
10
15
TEMPERATURE °C


133
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
66.7 ϕ
1.47 kg @ 2.2
46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 134

Property-Project Best | Depth Logged

Map | Scale | Date: Drilled | Logged

State | County | Section | T | R

Instrument | Operator | Elevation ft.

Comments

Change segments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* (19–20)
755	134	23	MY	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
0.6 KM SW OF CREOLE MINE	JEO	/ MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	15.	113.	00.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
4.05	39.6	6140.		F

← Write M if meters

Use decimals

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0 (20.)	45.0 (40.)	-4.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 0.8 MILES S.W. OF CREOLE MINE Date 23-MAY-76

Map CAVE CANYON 7½"

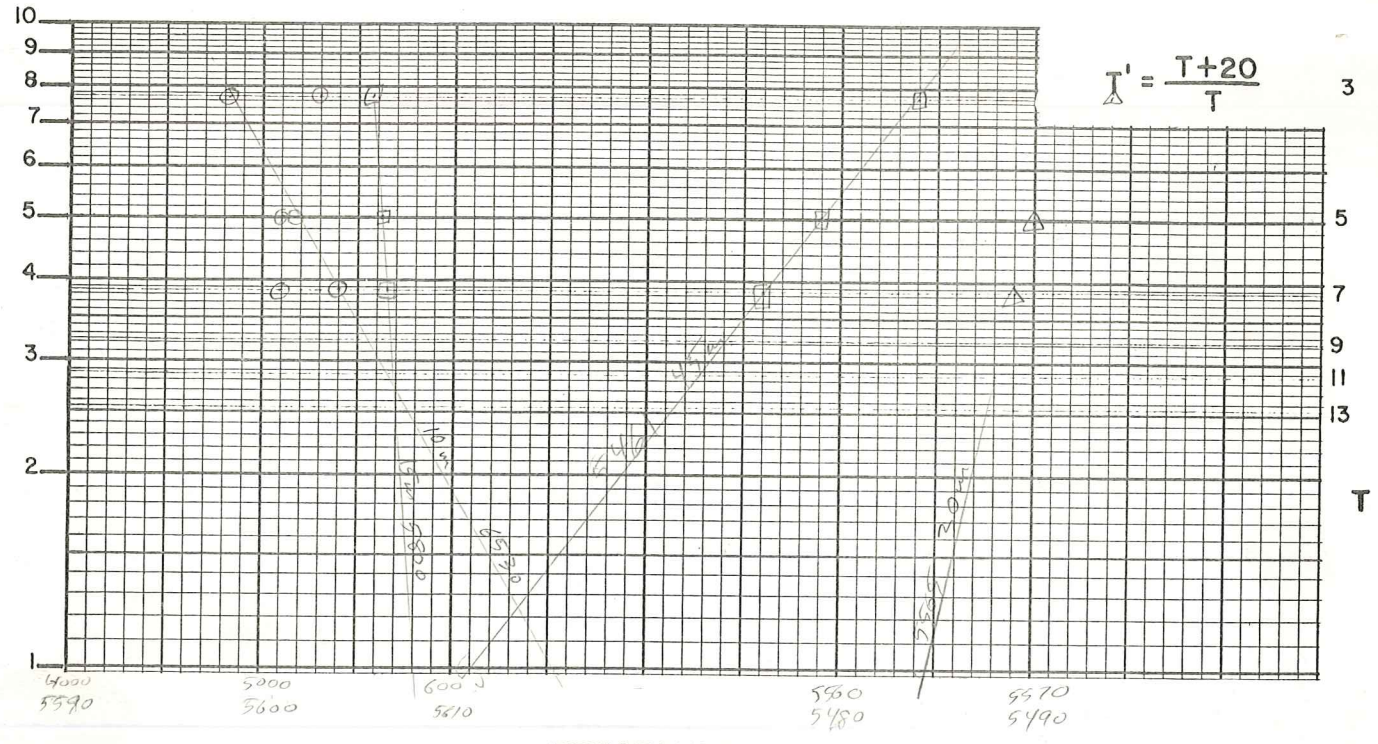
Property BEST T 29S R 9W sec 29 SE¼ NW¼

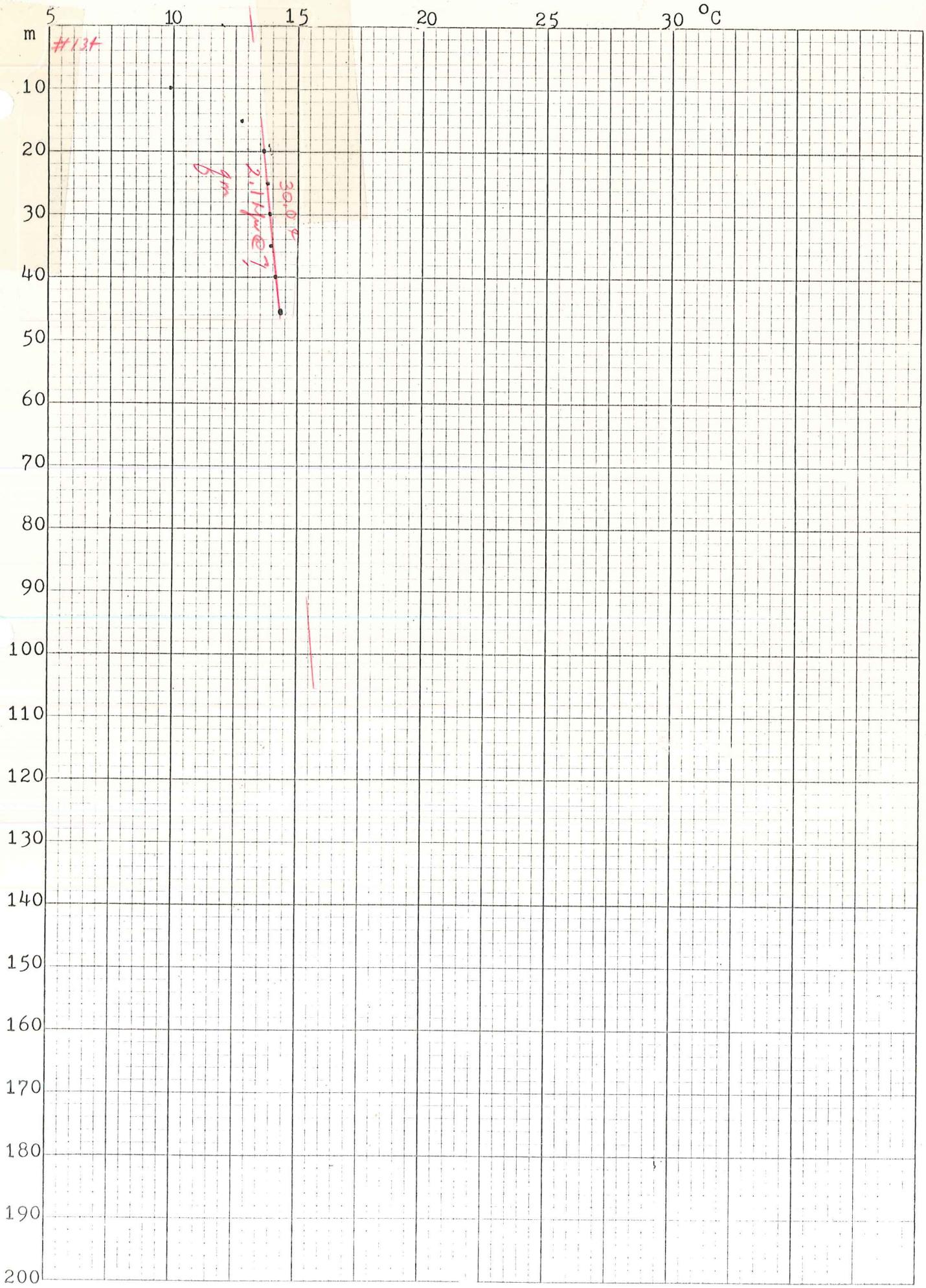
Drill Hole B-134 Date Drilled ____ Elevation ~~6120~~ 6140 ft.

Instrument ____ Operator JEP

Comments 6" UNCASED MINERAL EXPLORATION HOLE. APPARENTLY DRILLED IN ALTERED BIOTITE-QTZ MONZONITE. ~0.1 MILE WEST OF HOLE LOGGED BY JOE MEIGS. SULFIDE MINERALIZATION IN 20-40% OF SURFACE RK.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
ON OR NEAR CONTACT WITH MARBLE					
10	4824 5183 5403	9.96			
			2.89	578	
15	5574 5620 5648	12.85			
			0.74	148	
20	5629 5629 5629	13.59			
			0.13	26	
25	5603 5601 5601	13.72			
			0.16	32	
30	5574 5570 5569	13.88			
			0.10	20	
35	5542 5541 5541	13.98			
			0.14	28	
40	5513 5511 5511	14.12			
			0.22	44	
45	5484 5479 5476	14.34			GRADIENT 20-45m 30 °C/Km


T' = (T+20)/T
T'
T
RESISTANCE
HOLE B-134
DEPTH METERS
TEMPERATURE °C
26.5
44
30°C/Km
26.5, 44
1.9 @ 9.5



5
10
15
20
25
30
°C
m
#134
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200

TEMPERATURE DEPTH LOG

ΔT Well No. 140

Property-Project Beot

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	(13)	MO (14–15)	(16)	YR (17–18)	* (19)	* (20)
755	140	28		MY		76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
1.6 KM SE OF COYOTE SPRING	JED	/MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	45.	112.	52.5

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	(80)
6.25	7.25	5050.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	15.0	55.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	55.0	91.0	-5.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 6 MILES E-SE OF TWIN PKS. 10m NORTH OF RD. Date 28-MAY-76

Map CRUZ UT. 7½''

Property BEST T 23S R 9W sec 34 SW¼ SW¼

Drill Hole B-~~139~~ 140 Date Drilled ____ Elevation 5050 ft.

Instrument ____ Operator JED

Comments 1" GALVANIZED STEEL PIPE. CUTTINGS ~80% GRAY RHYOLITE W/ FLOW BANDING & PUMICE FRAGS. REST OBSIDIAN & PUMICE. HOLE ~ 10m NORTH OF RD.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5158 5273 5325 5345				
15	5379	14.72 ~~15.72~~			IN WATER
17	5347	14.87 ~~15.87~~	0.15	75	
19	5317	14.97 ~~15.97~~	0.10	50	
* 21	5286	15.16	0.19	95	
23	5258	15.29	0.13	65	
25	5228	15.43	0.14	70	
27	5195	15.59	0.16	80	
29 ~~30~~	5171	15.71	0.12	60	
31	5156	15.78	0.07	35	
33	5127	15.92	0.14	70	
35	5090	16.10	0.18	90	
37	5074	16.18	0.08	40	
39	5064	16.23	0.05	25	
41	5021	16.45	0.22	110	
43	4981	16.65	0.20	100	
45	4971	16.70	0.05	25	
47	4958	16.76	0.06	30	
49	4942	16.85	0.09	45	
51	4907	17.03	0.18	90	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

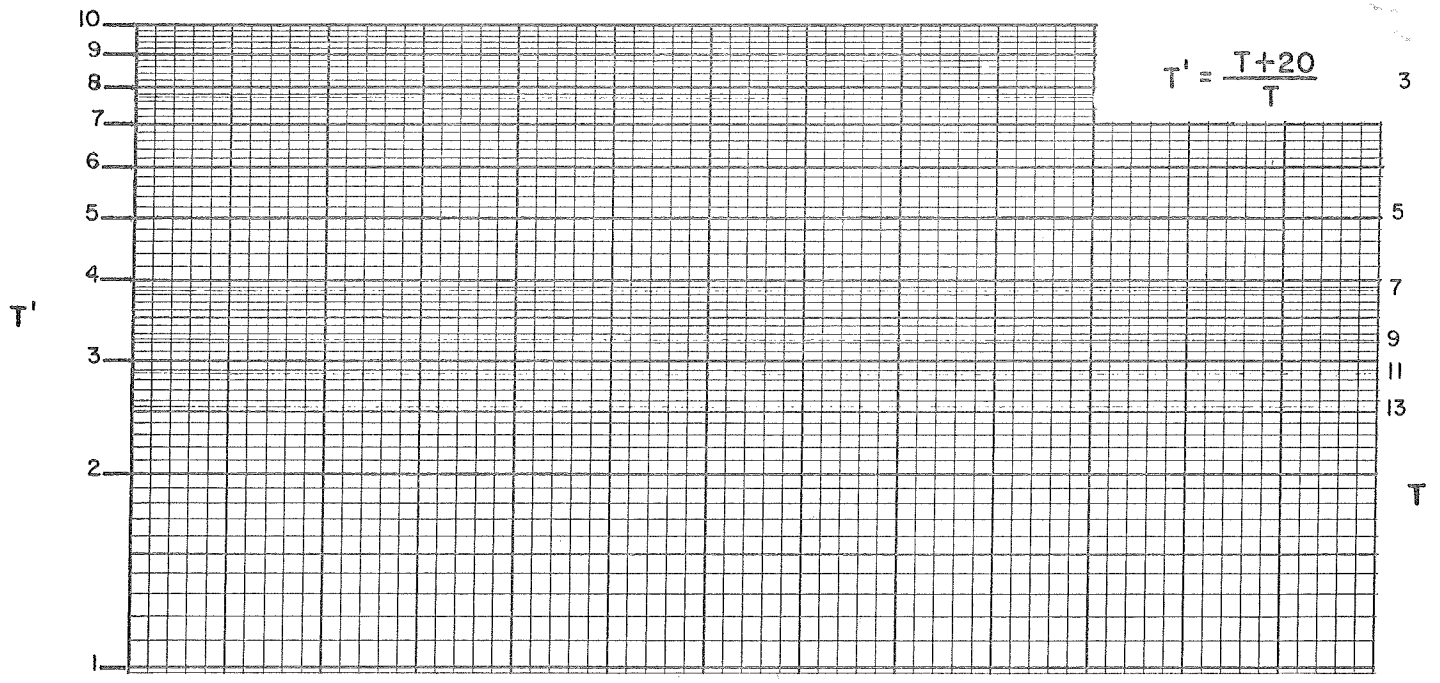
Property _____ T _____ R _____ sec _____

Drill Hole B-190 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
53	4868	17.23	0.20	100	
55	4838	17.39	0.16	80	
57	4809	17.54	0.15	75	
59	4795	17.61	0.07	35	
61	4776	17.71	0.10	50	
63	4758	17.81	0.10	50	
65	4744	17.88	0.07	35	
67	4732	17.95	0.07	35	
69	4718	18.02	0.07	35	
71	4703	18.10	0.08	40	
73	4687	18.19	0.09	45	
75	4671	18.28	0.09	45	
77	4654	18.37	0.09	45	
79	4637	18.47	0.10	50	
81	4620	18.56	0.09	45	
83	4603	18.65	0.09	45	
85	4584	18.76	0.11	55	
87	4566	18.86	0.10	50	
89	4547	18.97	0.11	55	
91	4527	19.08	0.11	55	
					GRADIENT 71-91m 49.0°C/km



RESISTANCE

HOLE B-140

DEPTH METERS

0
10
20
30
40
50
60
70
80
90
100
110

Δv 43-49 = 33

Δv 49-57 = 86

Δv 57-71 = 40

Δv 71-91 = 49

(19.4)

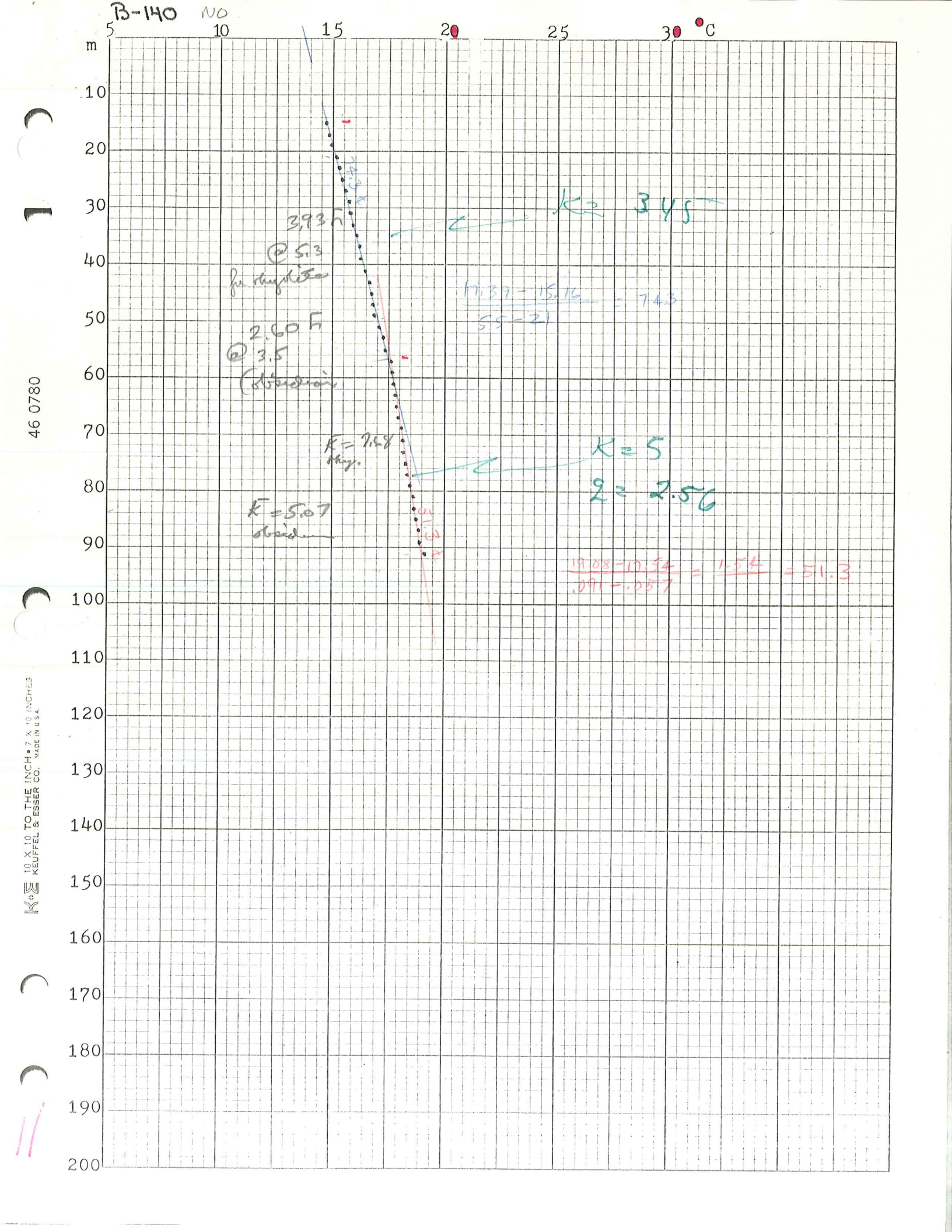
3.82

33, 86, 40, 49

2.0 @ S.D

10
15
20

TEMPERATURE °C


B-140 NO
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
74.3
3.93 F
@ 5.3
for rhyolite
2.60 F
@ 3.5
(obsidian
K = 7.68
rhyo.
K = 5.07
obsidian
K = 3.45
17.39 − 15.16 / 55 − 21 = 74.3
K = 5
q = 2.56
19.08 − 17.54 / .091 − .057 = 1.54 / = 51.3
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 142

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY: →

Proj No	Well No	Date Logged DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 4 2	3 1	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
6.6 KM EAST OF ANTELOPE MTN	JED	MLH

Card B

Map Location Δ

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	7.5	38.	37.5	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W, -) (E, +)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
2.0	44.05	5560.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	40.0	65.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

WELL LOG FOR B-142 SEC 21 T25S, R8W

DRILLED @ MARCH, 1936

0-20 SOIL

20-104 BSLT

104-116 SOIL ZONE

116-220 BSLT

220-270 "WHITE LIME"

270-320 "LIME SHELLS & SHALE"

TEMPERATURE - DEPTH LOG

Location ~50 m SOUTH OF RD Date 31-MAY-76

Map ANTELOPE SP UT. 7½"

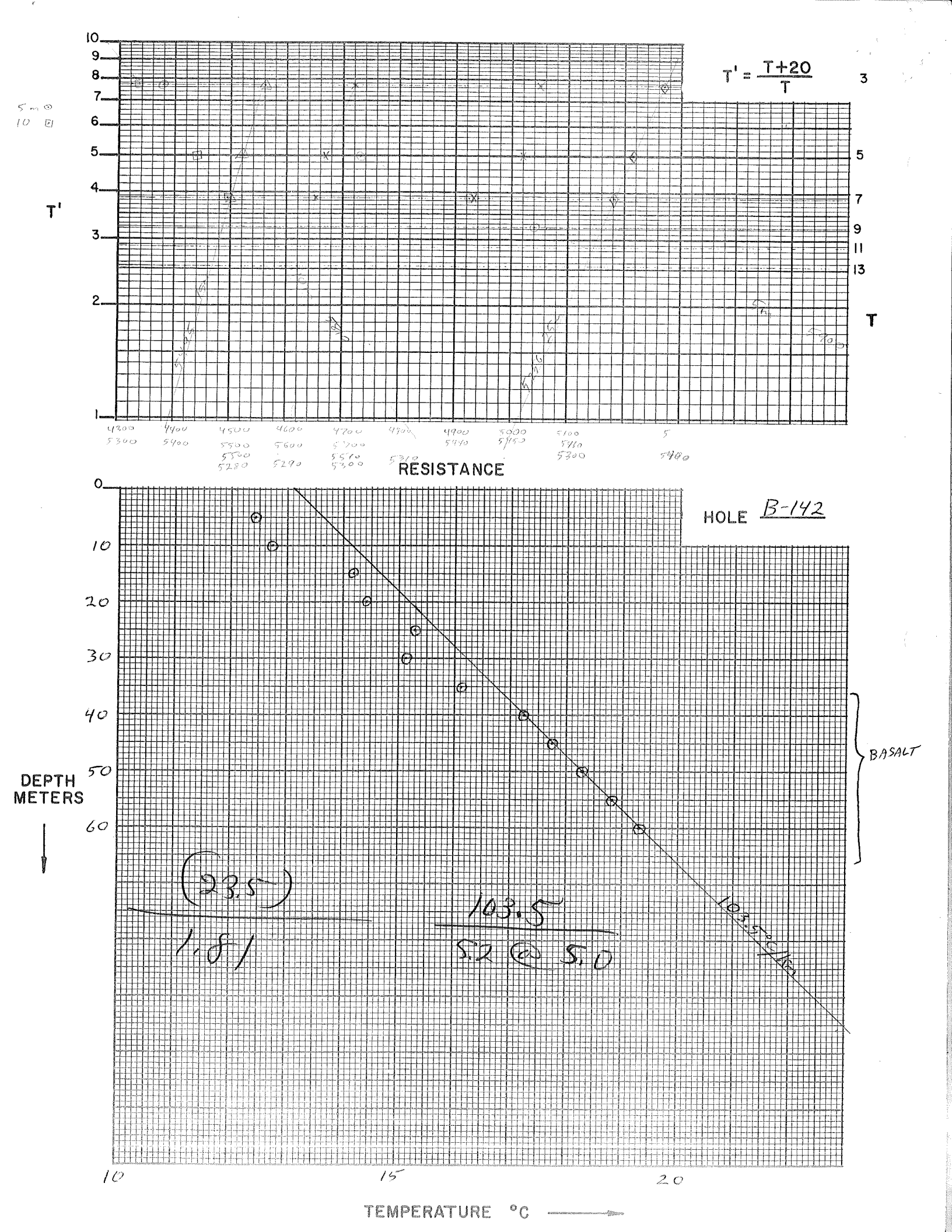
Property BEST. T 25S R 8W sec 21 NW¼ NE¼

Drill Hole B-142 Date Drilled ____ Elevation 5560 ft.

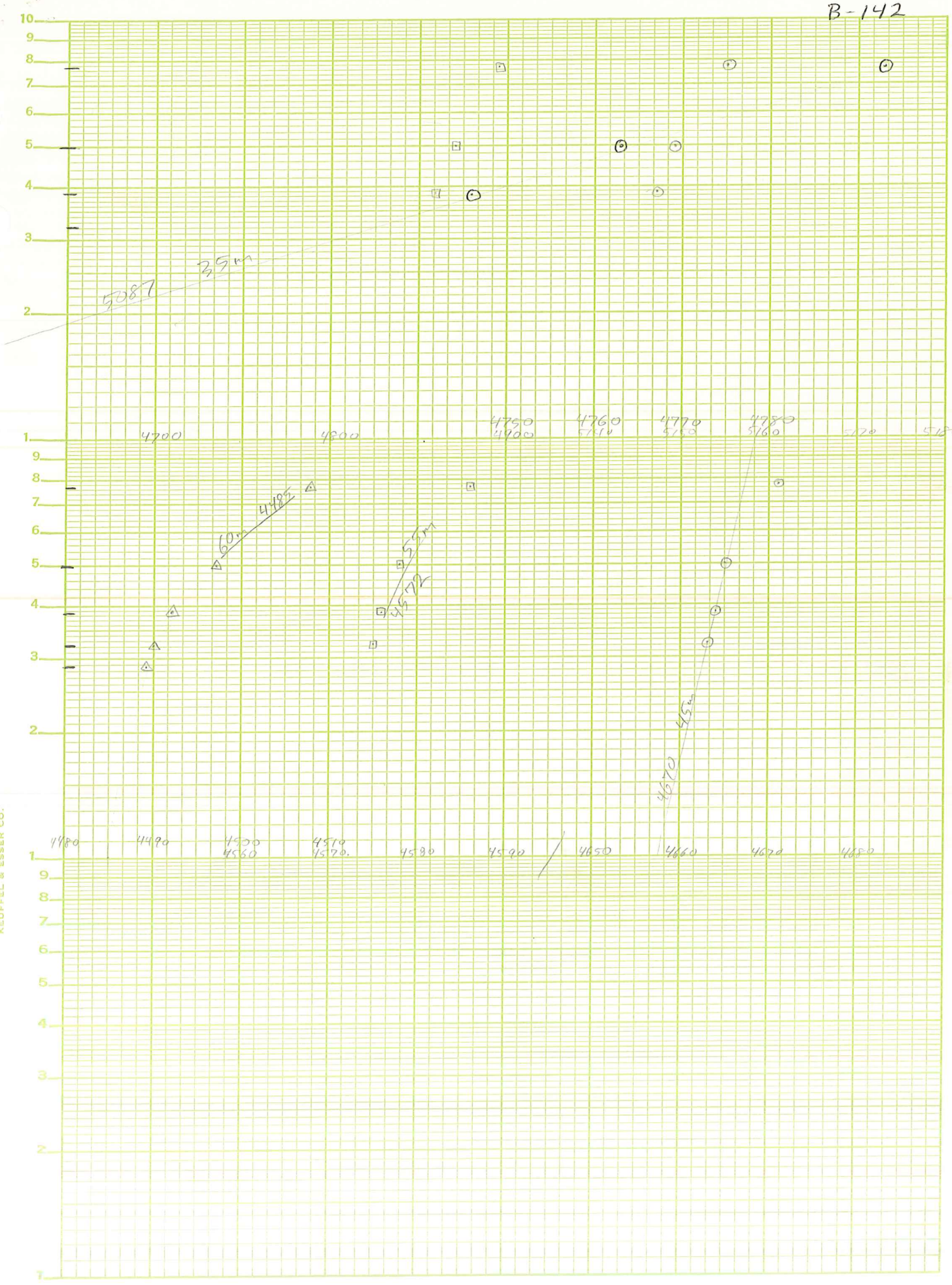
Instrument ____ Operator JEL

Comments 6" CASED, ABANDONED WATER WELL. BASALT RUBBLE AT SURFACE. PROBABLY VLY FILL AT DEPTH.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	3 4379 5 4733 7 4923				
	9 5043	12.43			
	5336		0.38		
10	5438 5494	12.81			
	5503		1.38		
15	5501 5500	14.19			
	3 5455		0.24		
20	5 5452 7 5443	14.43			READING FLOATING.
	9 5449				
	5386		0.87		
25	5358 5340	15.30			
	5302		-0.17		
30	5297 5295	15.13			
	5173		0.99		
35	5143 5126	16.12			
	3 4895				
40	5 4870 7 4863				
	9 4864		1.13		
	11 4863	17.25			
	3 4775		0.51	102	
45	5 4769 7 4767	17.76			
	9 4768				
	3 4671		0.52	104	
50	5 4665 7 4664	18.28			
	9 4663				
	4586		0.55 ~~0.45~~	110	
55	4578 4576	18.83			
	4575				
	4508		0.49	98	
60	4997 4492	19.32			
	4490 4489				
65 (?)	4439 4438 4438	19.60			PROBABLY NOT 65m. 63-65
					GRADIENT 40-60m 103.5°C/Km

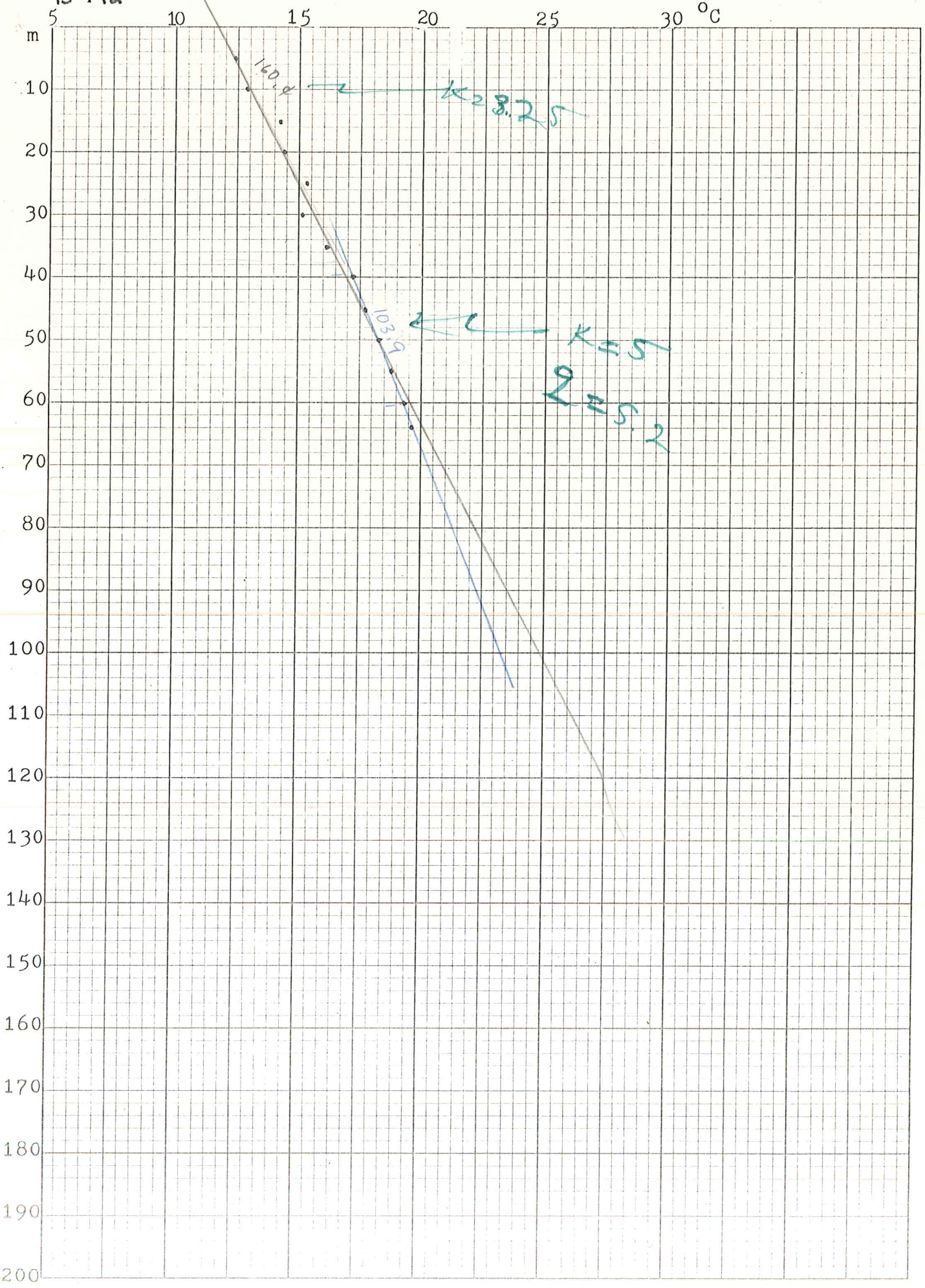

T' = T+20 / T
T'
T
RESISTANCE
HOLE B-142
DEPTH METERS
BASALT
TEMPERATURE °C
(23.5)
1.81
103.5
5.2 @ 5.0

B-142



K&E 46 5370
SEMI-LOGARITHMIC
3 CYCLES X 60 DIVISIONS
MADE IN U.S.A.
KEUFFEL & ESSER CO.

B-142



46 0780

10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 143

Property-Project Rest Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 4 3	3 1	M Y	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
8.0 KM NW OF COVE FORT, UTAH	JED	HLH

Card B

Map Location Δ

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
23.85	11.82	5860.	F

Use decimals 22,65 11,2 5800.

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	15.0	30.0		
D	65.0	125.0	-5.0	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	30.0	65.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 100m S. OF BLACK Rk. ROAD. Date 31-MAY-76

Map COVE FORT UT. 15"

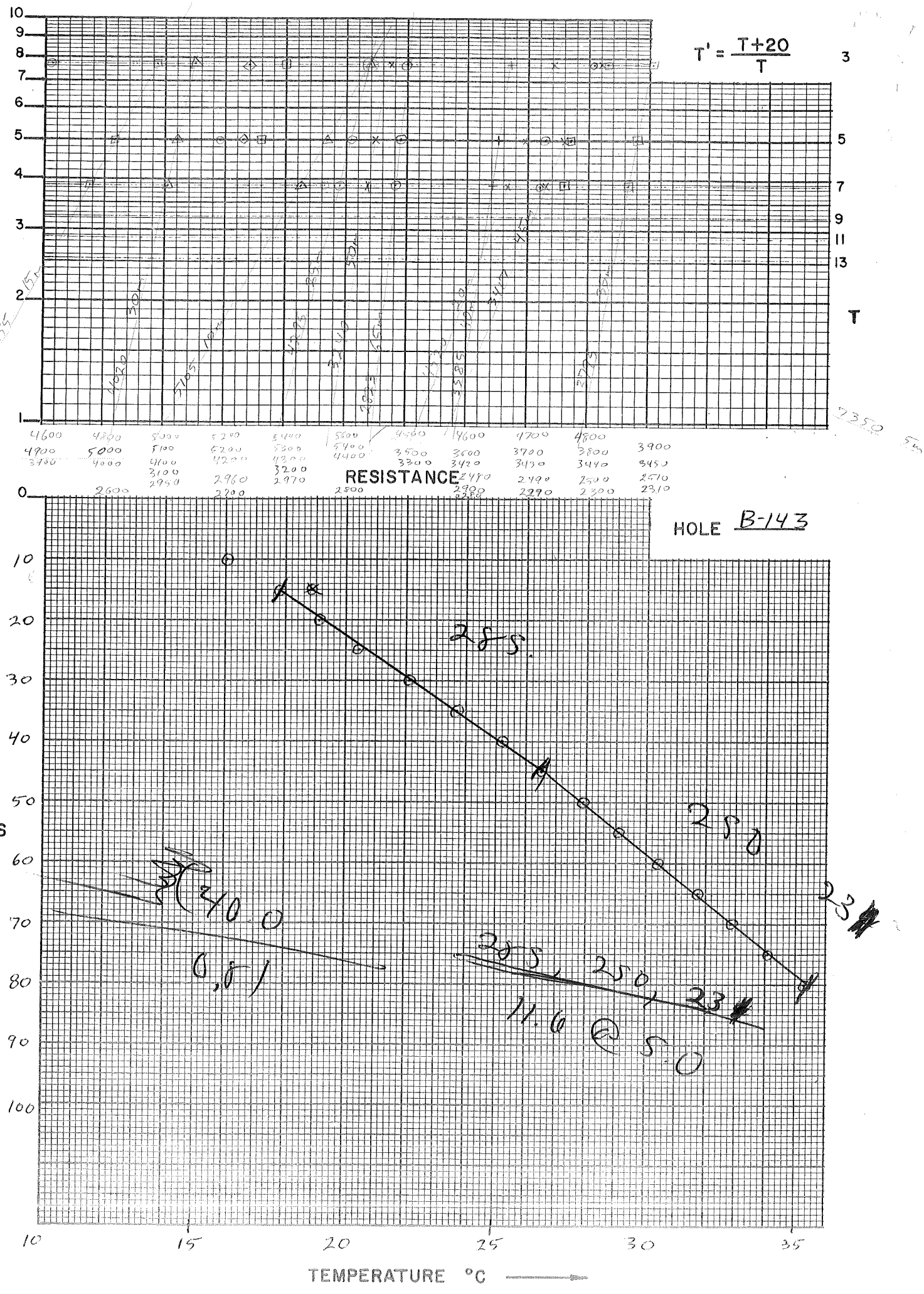
Property BEST T 25S R 7W sec 17 SE¼ SW¼

Drill Hole B-143 Date Drilled ____ Elevation 5860 ft.

Instrument ____ Operator JED

Comments 4" CASED ABANDONED WATER WELL. IN SMALL VLY FILLED w/ ALLUVIUM SURROUNDED BY RECENT BASALT FLOWS. NO CUTTINGS NEAR HOLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	4624 5182 5540	7.14			
10	5437 5367 5324	16.03	1.79	358	
15	5084 5017 4975	17.82	1.30	260	
20	4743 4696 4666	19.12	1.32	264	
25	4436 4408 4388	20.44	1.72	344	
30	4151 4118 4105	22.16	1.52	304	
35	3905 3878 3867	23.68	1.51	302	
40	3671 3651 3643	25.19	1.29	258	
45	3442 3436 3533	26.48	1.45	290	
50	3287 3274 3269	27.93	1.17	234	
55	3108 3105 3105	29.10	1.29	258	AT 9 min READING STILL 2965. CALLED 2963
60	2970 2966 2965	30.39	1.34	268	
65	2851 2844 2841	31.73	1.11	222	AT 9mm READING STILL 2716 CALLED 2714.
70	2720 2716 2716	32.84	1.22	244	
75	2602 2600 2600	34.06	1.23	246	AT 9min READING AT 2491 CALLED 2490
80	2501 2493 2492	35.29	1.19	238	
85	2391 2391 2390	36.48	1.18	236	AT 9 min READING AT 2296 CALLED 2295
90	2303 2297 2296	37.66	1.17	234	
95	2206 2205 2205	38.83	1.16	232	
100	2120 2120 2120	39.99	1.15	230	STILL IN AIR BUT READING STABALIZES IN ABOUT 2-3 MIN
105	2040	41.14	(CONT)		



T' = (T+20)/T
T'
T
RESISTANCE
HOLE B-143
DEPTH METERS
TEMPERATURE °C
285
250
23
40.0
0.81
285, 250, 23
11.6 @ 5.0

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

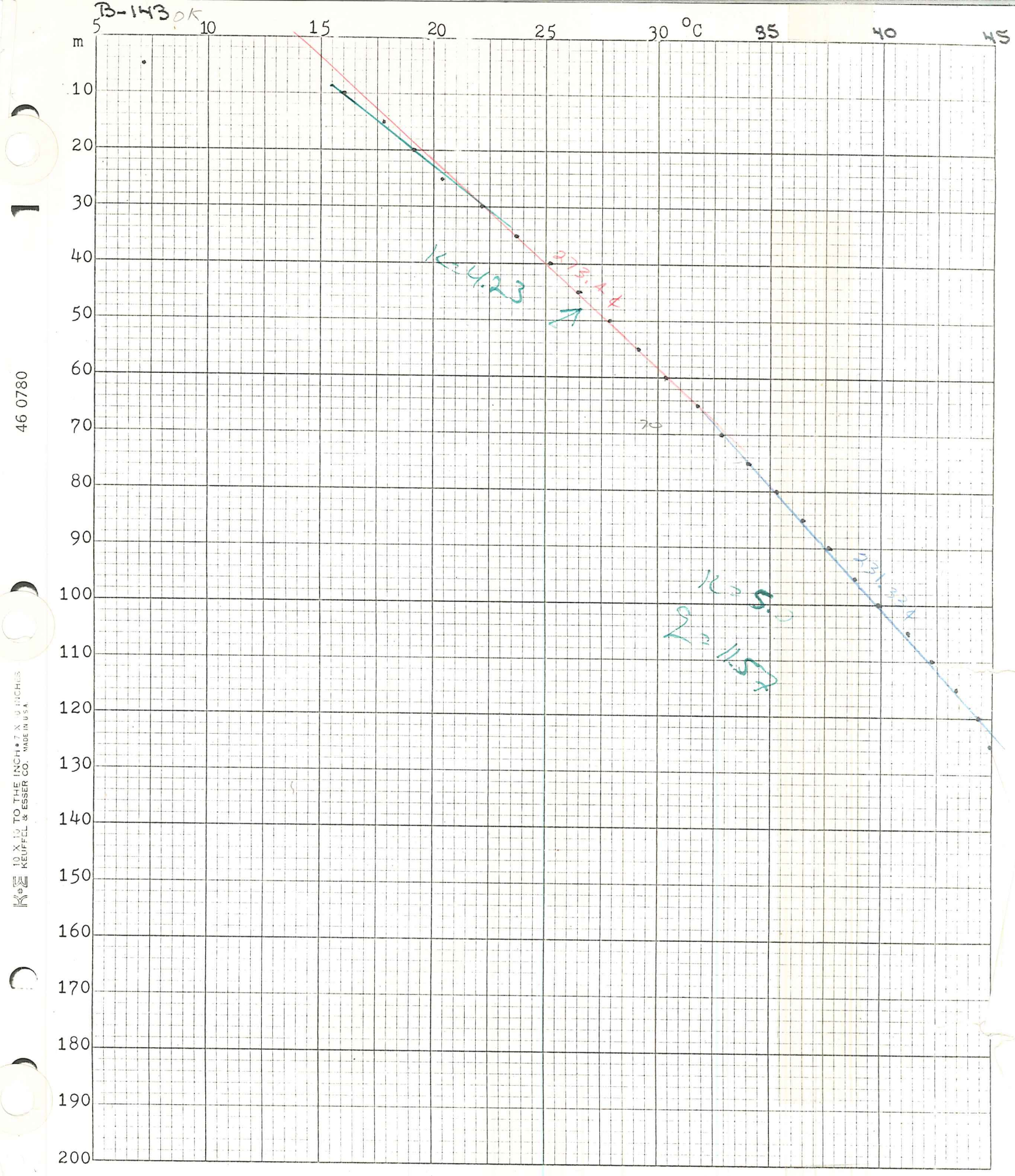
Property _____ T _____ R _____ sec _____

Drill Hole B-143 Date Drilled _____ Elevation _____ ft.

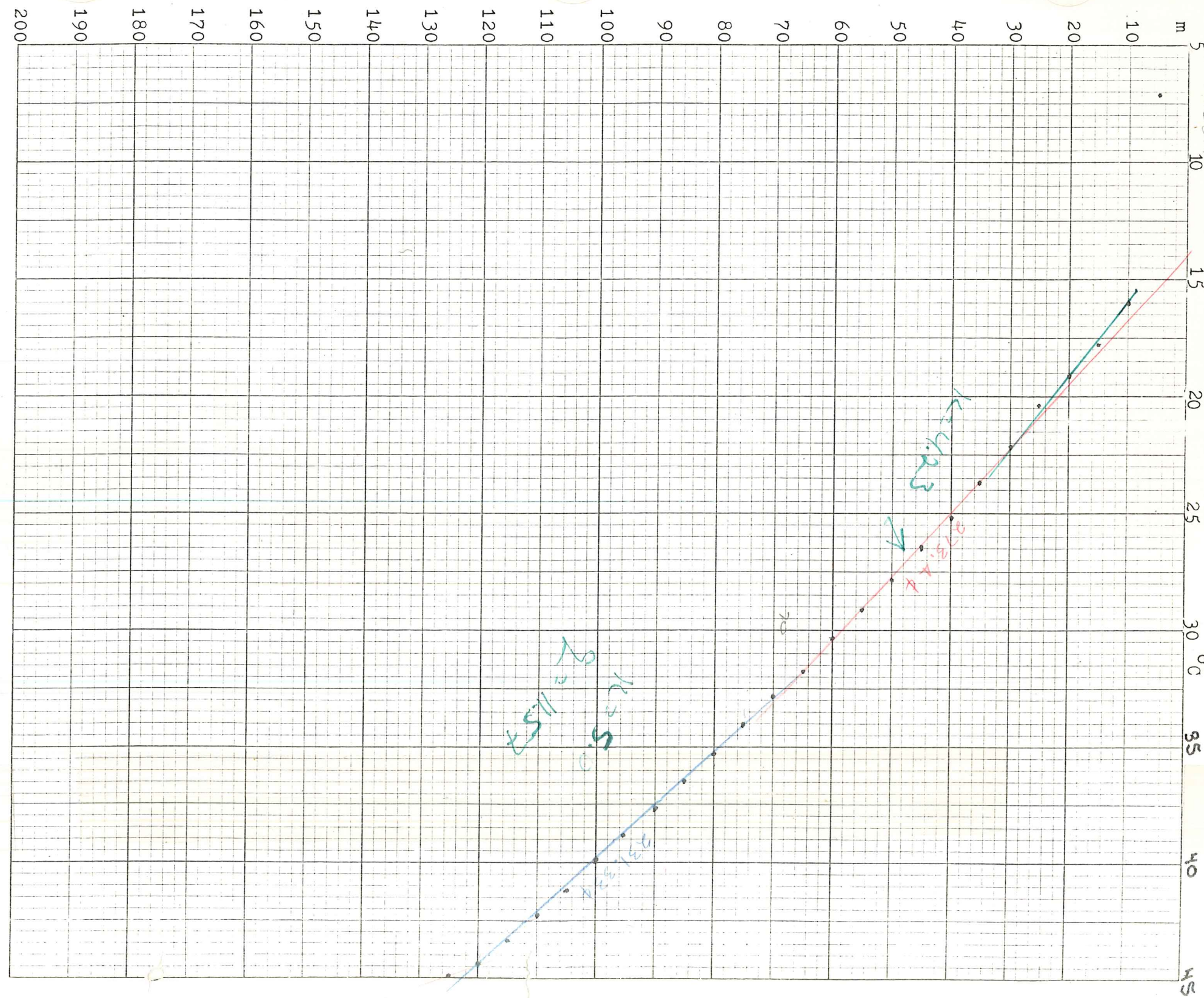
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
110	1965	42.27	1.13	226	
115	1892	43.41	1.14	228	
120	1828	44.47	1.06	212	WATER ~120m.
125	1800	44.94	0.47	94	
					GRADIENT 65-115 m 233.6°C/Km


B-143 ok
°C
m
K = 4.23
273.44
K = 5.0
Σ = 11.57
231.324
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.



TEMPERATURE DEPTH LOG

ΔT Well No. 146

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
755	146	10	JE	76	CM

* 19- Write F if Fahrenheit, 20- Write F if Feet

Site Description	Operator	Editor
5.8 KM NE OF BAILEY MOUNTAIN MT, 0075	JCD	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
42.9	34.3	6940.	F
42,25	34.2	6920.	

Use decimals ← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	16.0	48.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	48.0	86.0	-5.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~0.3 MILE S. OF WILLOW SP. 3 mi W. OF Rd. Date 10-JUNE-76

Map ADAMSVILLE 15"

Property BEST T 27 S R 8W, sec 4 NW¼ SE¼

Drill Hole B-146 Date Drilled _____ Elevation 6960 ft.

Instrument _____ Operator JED

Comments 1" PVC PIPE. DRILLED IN MED-GRAINED QTZ MONZONITE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	7206	7.61			
			0.12	60	
6	7168	7.73			
			0.37	185	
8	7059	8.10			
			0.25	125	
10	6984	8.35			
			0.18	90	
12	6933	8.53			
			0.28	140	
14	6850	8.81			
			0.28	140	
16	6772	9.09			
			0.13	65	
18	6735	9.22			
			0.11	55	
20	6704	9.33			
			0.11	55	
22	6674	9.44			
			0.10	50	
24	6647	9.54			
			0.09	45	
26	6621	9.63			
			0.09	45	
28	6596	9.72			
			0.10	50	
30	6570	9.82			
			0.08	40	
32	6547	9.90			
			0.09	45	
34	6524	9.99			
			0.07	35	
36	6503	10.06			
			0.09	45	
38	6481	10.15			
			0.08	40	
40	6458	10.23			
			0.08	40	
42	6437	10.31			
			0.08	40	
44	6417	10.39			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

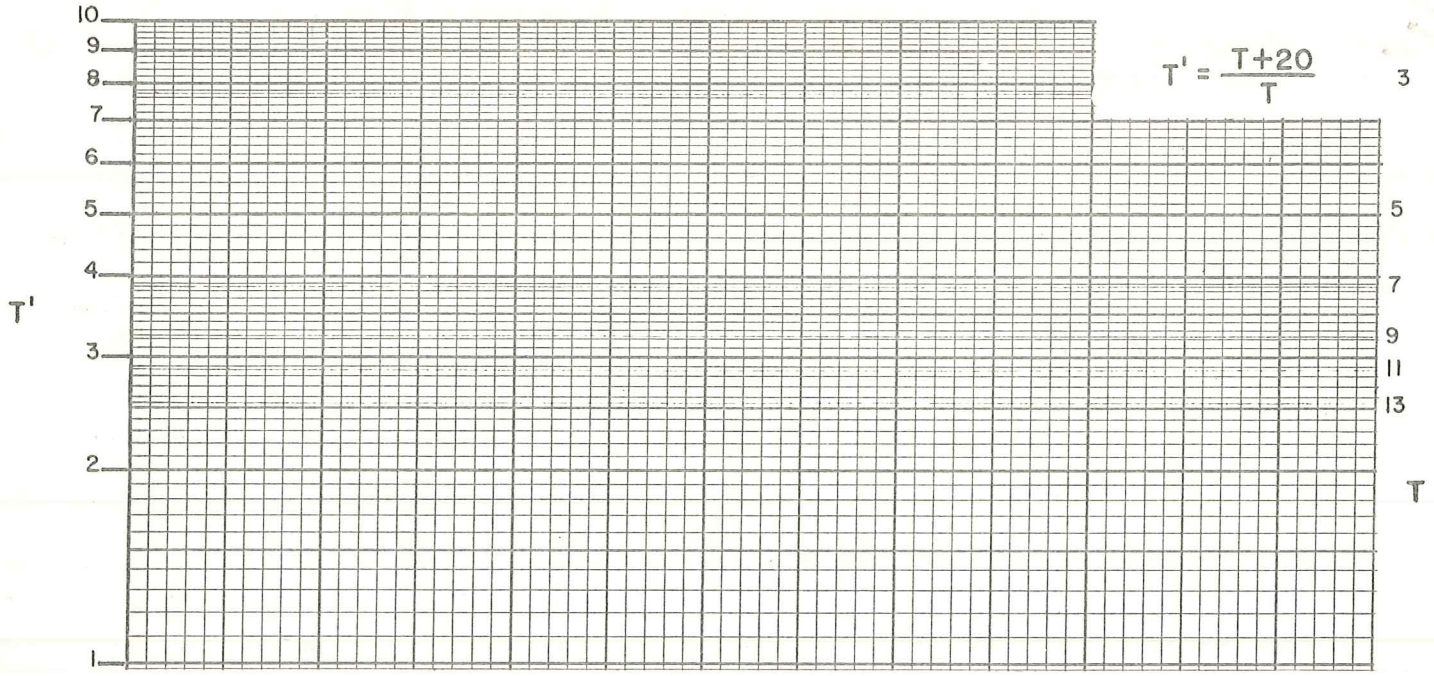
Property _____ T _____ R _____ sec _____

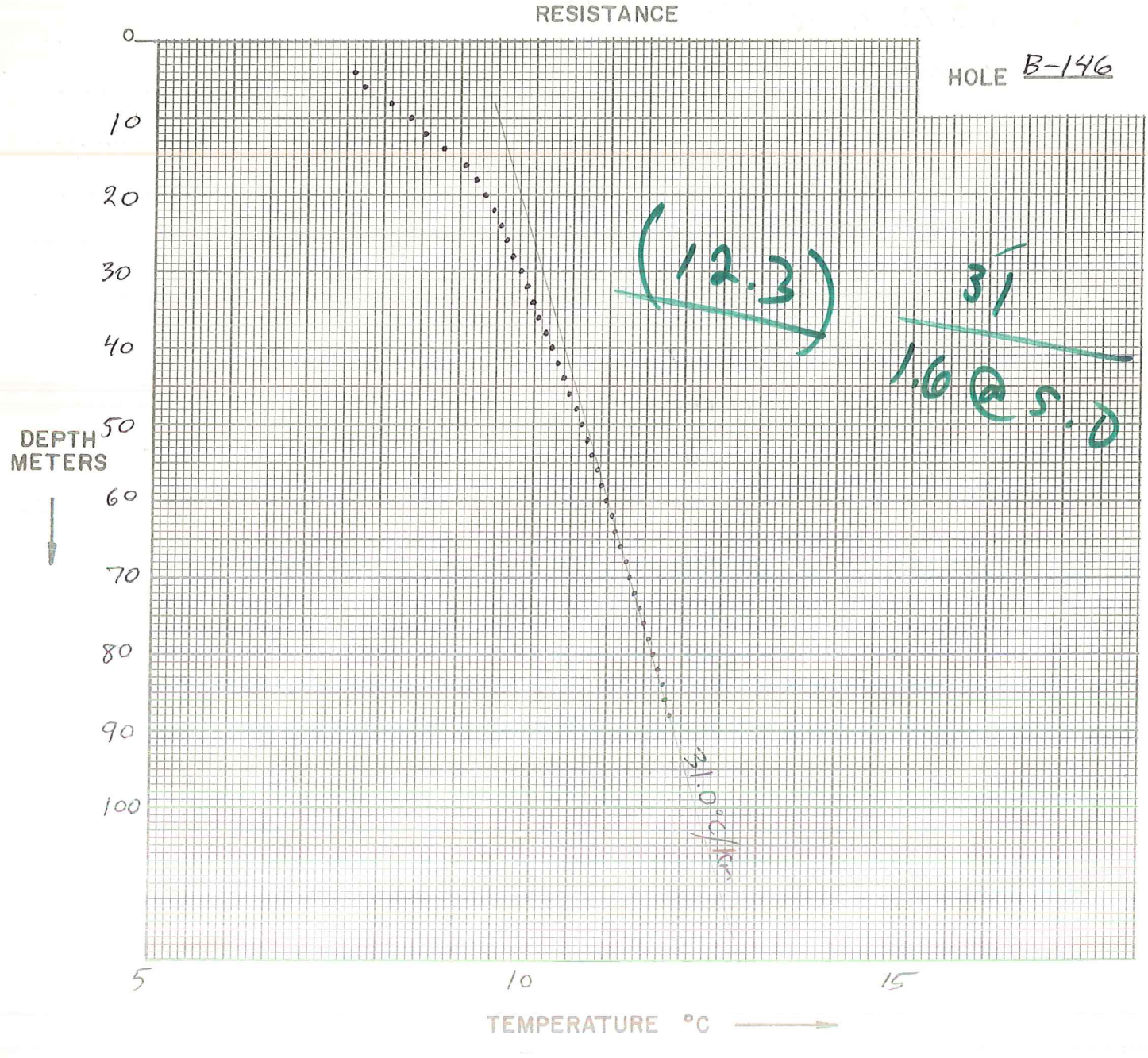
Drill Hole B-146 Date Drilled _____ Elevation _____ ft.

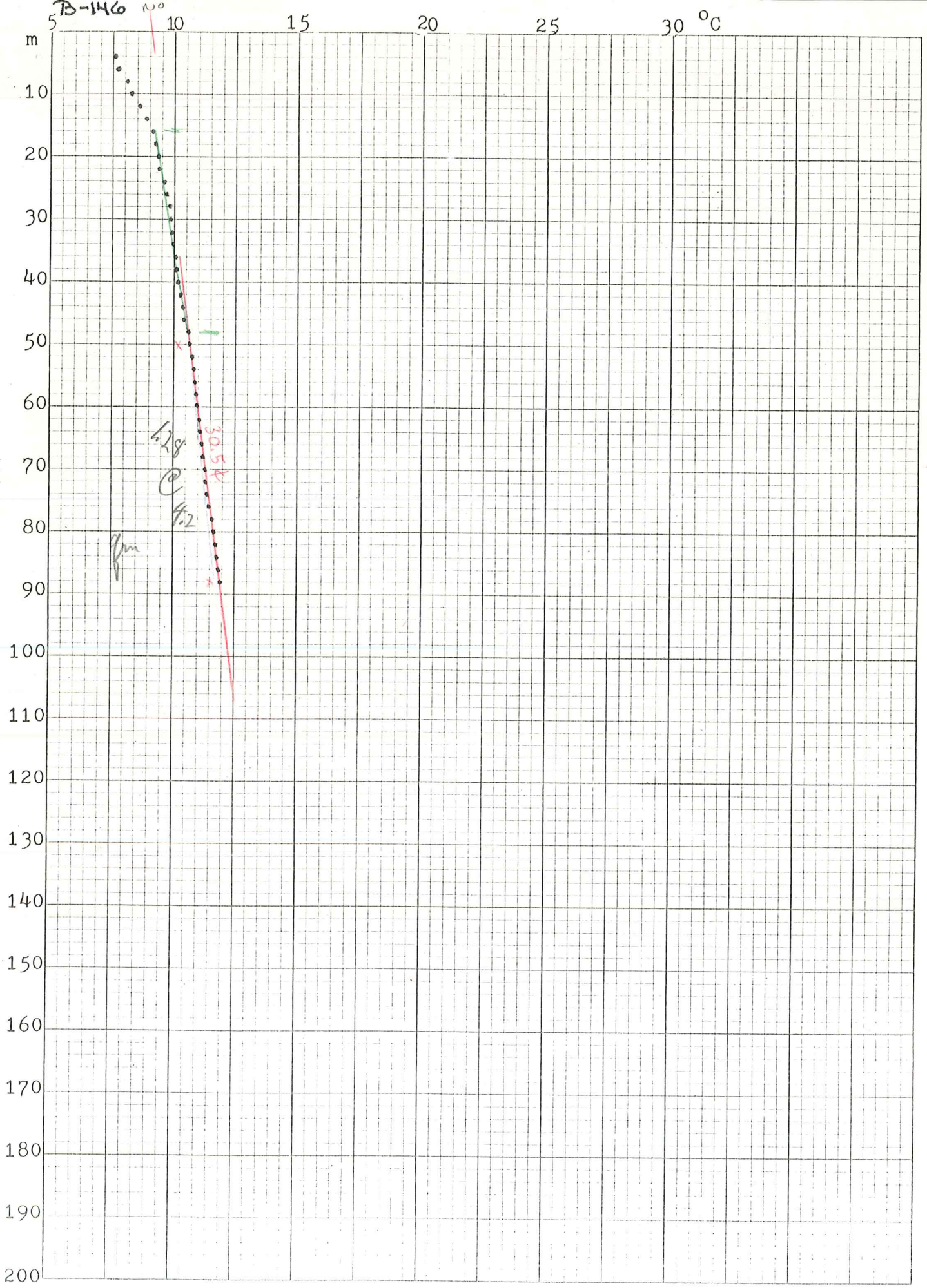
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
46	6396	10.47	0.08	40	
48	6372	10.56	0.09	45	
50	6352	10.63	0.07	35	
52	6332	10.71	0.08	40	
54	6314	10.78	0.07	35	
56	6295	10.85	0.07	35	
58	6277	10.92	0.07	35	
60	6261	10.98	0.06	30	
62	6244	11.05	0.07	35	
64	6230	11.10	0.05	25	
66	6211	11:18	0.08	40	
68	6195	11.24	0.06	30	
70	6180	11.30	0.06	30	
72	6163	11.37	0.07	35	
74	6146	11.43	0.06	30	
76	6131	11.49	0.06	30	
78	6114	11.56	0.07	35	
80	6099	11.62	0.06	30	
82	6084	11.68	0.06	30	GRADIENT 66-86m 31.0°c/km
84	6070	11.74	0.06	30	
86	6056	11.80	0.06	30	
88	6042	11.85	0.05	25 (?)	PROBABLY NOT 2m.


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-146
(12.3) 31
1.6 @ S.D
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
5
10
15
TEMPERATURE °C



46 0780
K+E 10 X 10 TO THE INCH • 1 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 147

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY: Proj No → (1–4), Well No → (5–10); Date Logged: DA (11–12), MO (14–15), YR (17–18); * (19–20)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	7	5	5				1	4	7	0	6		J	L		7	6	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50), Operator (51–55), Editor (56–60)

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
8	.	9		K	M		S	W		O	F		C	I	N	D	E	R		C	R	A	T	E	R							J	E	O	/	M	L	H	

Card B

Map Location Δ: Scale Unit in cm (22–23), Map Size (7.5, 15., 60) (26–30), N Lat Degree (31–35), Min (36–40), W Long Degree (41–45), Min (46–50)

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	C	M					1	5	.			3	8	.			3	0	.		1	1	2	.			4	5	.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60), Easting (61–70), Elev (71–75), (76–79), 80

51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
							4	.	0							1	0	.	3	6	0	2	5	.					F

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	16.0	54.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~3.5 MILES S.W. OF CINDER CRATER Date 6-JULY-76

Map COVE FORT UT, 15"

Property BEST T 26S R 7W sec 30 NE¼ NE¼

Drill Hole B-147 Date Drilled _____ Elevation 6025 ft.

Instrument _____ Operator JED

Comments 3/4" STEEL PIPE. DRILLED IN LT-GRAY WELDED TUFF.

2nd LOGGING.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	6057	11.79			
			0.33	165	
12	5977	12.12			
			0.21	105	
14	5925	12.33			
			0.14	70	
16	5892	12.47			
			0.07	35	
18	5874	12.54			
			0.11	55	
20	5848	12.65			
			0.09	45	
22	5827	12.74			
			0.07	35	
24	5810	12.81			
			0.10	50	
26	5786	12.91			
			0.17	85	
28	5748	13.08			
			0.10	50	
30	5723	13.18			
			0.09	45	
32	5704	13.27			
			0.08	40	
34	5685	13.35			
			0.10	50	
36	5661	13.45			
			0.10	50	
38	5638	13.55			
			0.10	50	
40	5617	13.65			
			0.09	45	
42	5595	13.74			
			0.10	50	
44	5574	13.84			GRADIENT 28-54m 44.6°C/km
			0.08	40	
46	5556	13.92			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

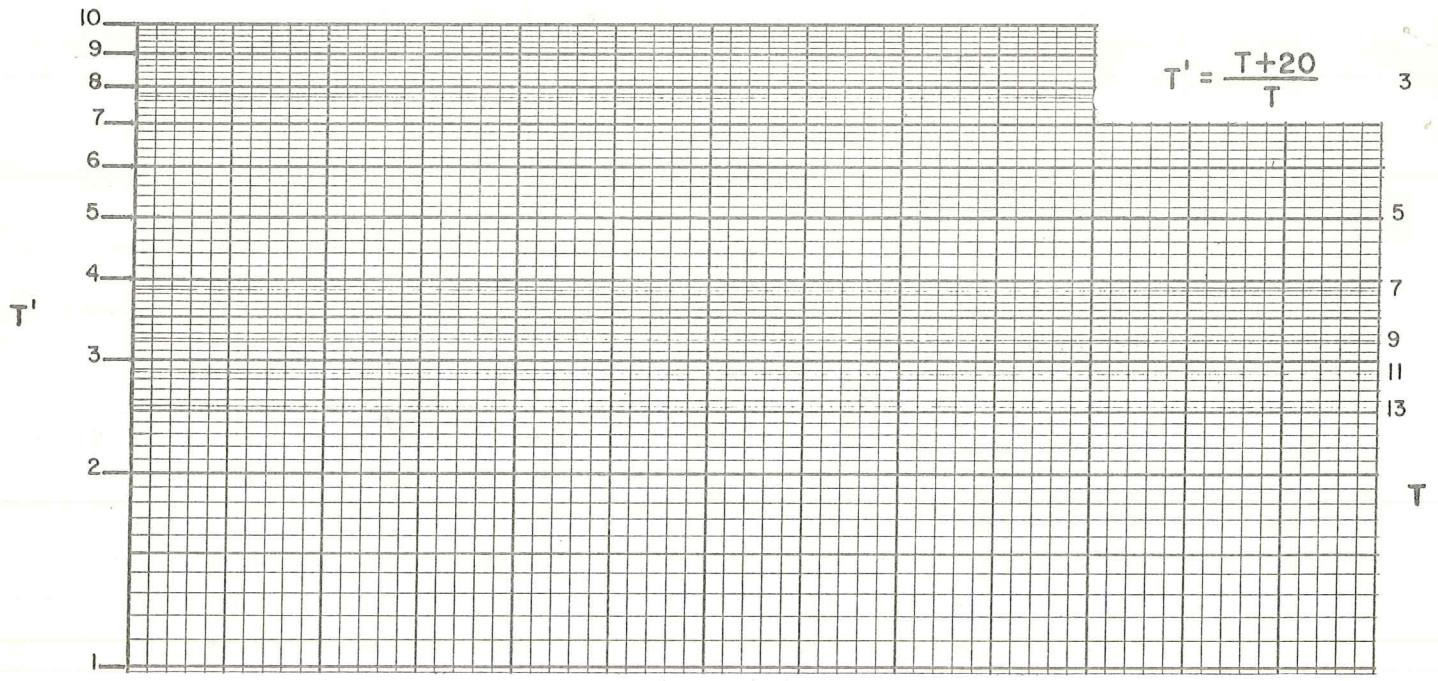
Property _____ T ____ R ____ sec ____

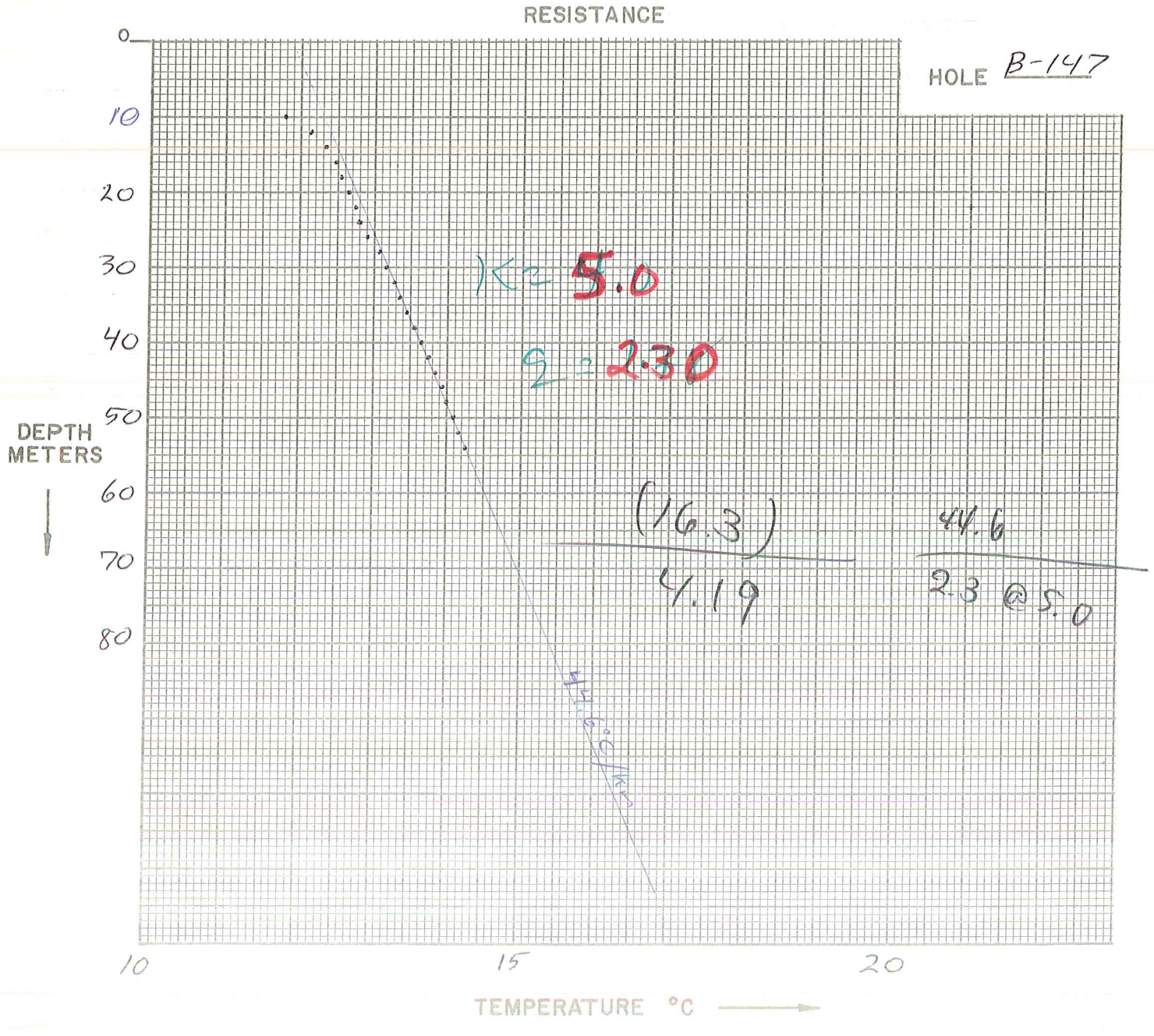
Drill Hole B-147 Date Drilled _____ Elevation ____ ft.

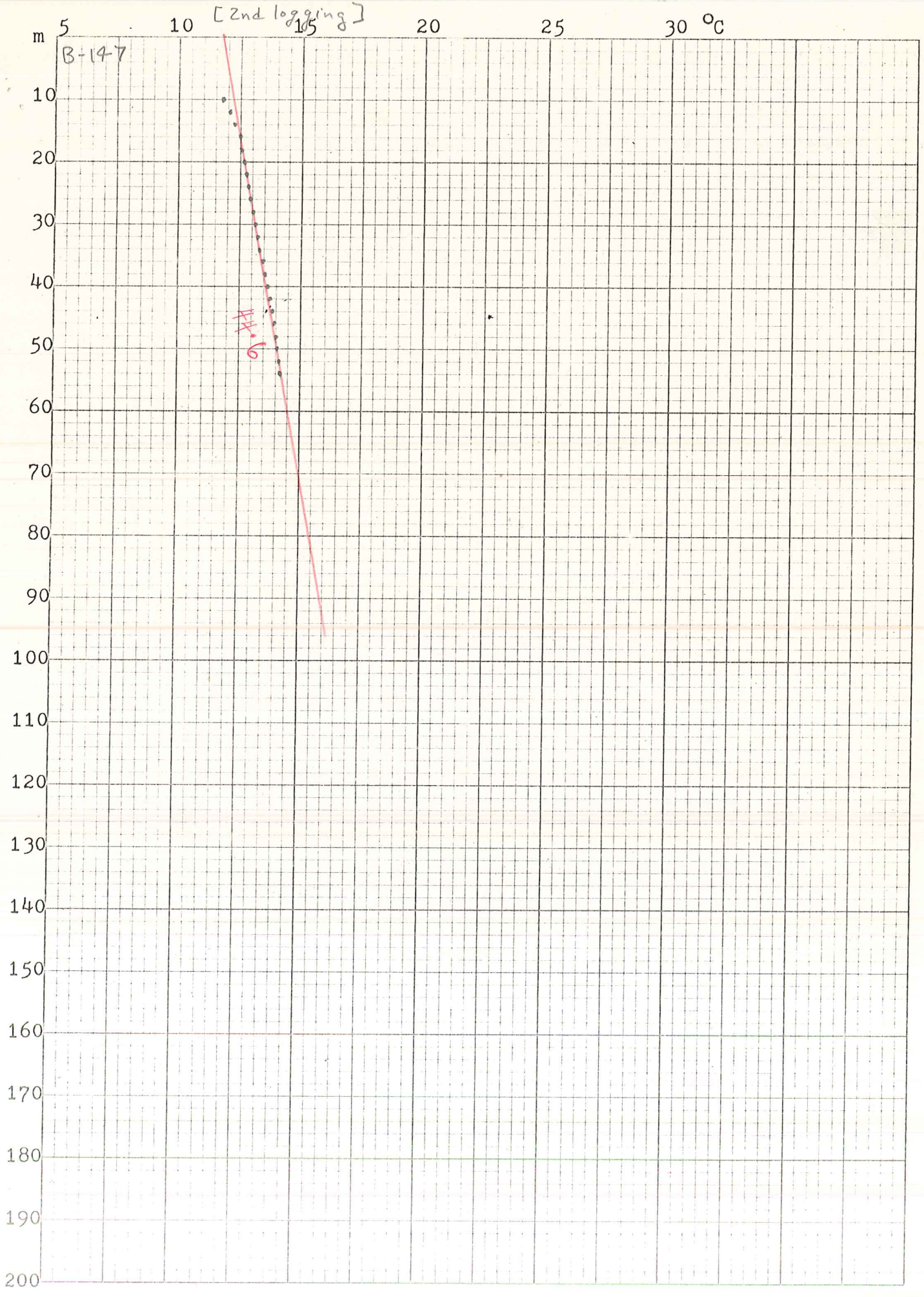
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
48	5537	14.00	0.08	40	
50	5518	14.09	0.09	45	
52	5501	14.16	0.07	35	
54	5483	14.24	0.08	40	


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-147
0
10
20
30
40
50
60
70
80
DEPTH METERS
K = 5.0
Q = 2.30
(16.3)
4.19
44.6
2.3 @ 5.0
10
15
20
TEMPERATURE °C


[2nd logging]
5
10
15
20
25
30 °C
m
B-14-7
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE - DEPTH LOG

Location ~3.5 MILES S.W OF CINDER CRATER Date 10-JUNE-76

Map COVE FORT UT. 15"

Property BEST T 26 S R 7 W sec 30 NE¼ NE¼

Drill Hole B-147 Date Drilled ____ Elevation 6025 ft.

Instrument ____ Operator JED

Comments 3/4" STEEL PIPE. HUNT GRADIENT HOLE. DRILLED IN LT-GRAY WELDED TUFF. [HOLE V. RECENTLY DRILLED. PROBABLY IN LAST DAY OR TWO. WILL RELOG AT LATER DATE. DATA TENATIVE]

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6269	10.95			
			0.73	365	
8	6085	11.68			
			0.59	295	
10	5940	12.27			
			0.30	150	
12	5868	12.57			
			0.23	115	
14	5813	12.80			
			0.17	85	
16	5772	12.97			
			0.05	25	
18	5760	13.02			
			0.12	60	
20	5734	13.14			
			0.03	15	
22	5726	13.17			
			0.04	20	
24	5735	13.13			
			0.09	45	
26	5714	13.22			
			0.35	175	
28	5634	13.57			
			0.05	25	
30	5627	13.60			
~~32~~	~~5627~~				
			0.12	20	
34	5627				
36	5599	13.72			
			0.09	45	
38	5580	13.81			
			0.08	40	
40	5562	13.89			
			0.09	45	
42	5542	13.98			
			0.09	45	
44	5522	14.07			GRADIENT 36-52m 38.1°C/Km
			0.05	25	
46	5511	14.12			

TEMPERATURE - DEPTH LOG

Location ______________________ Date ____________

Map ______________________

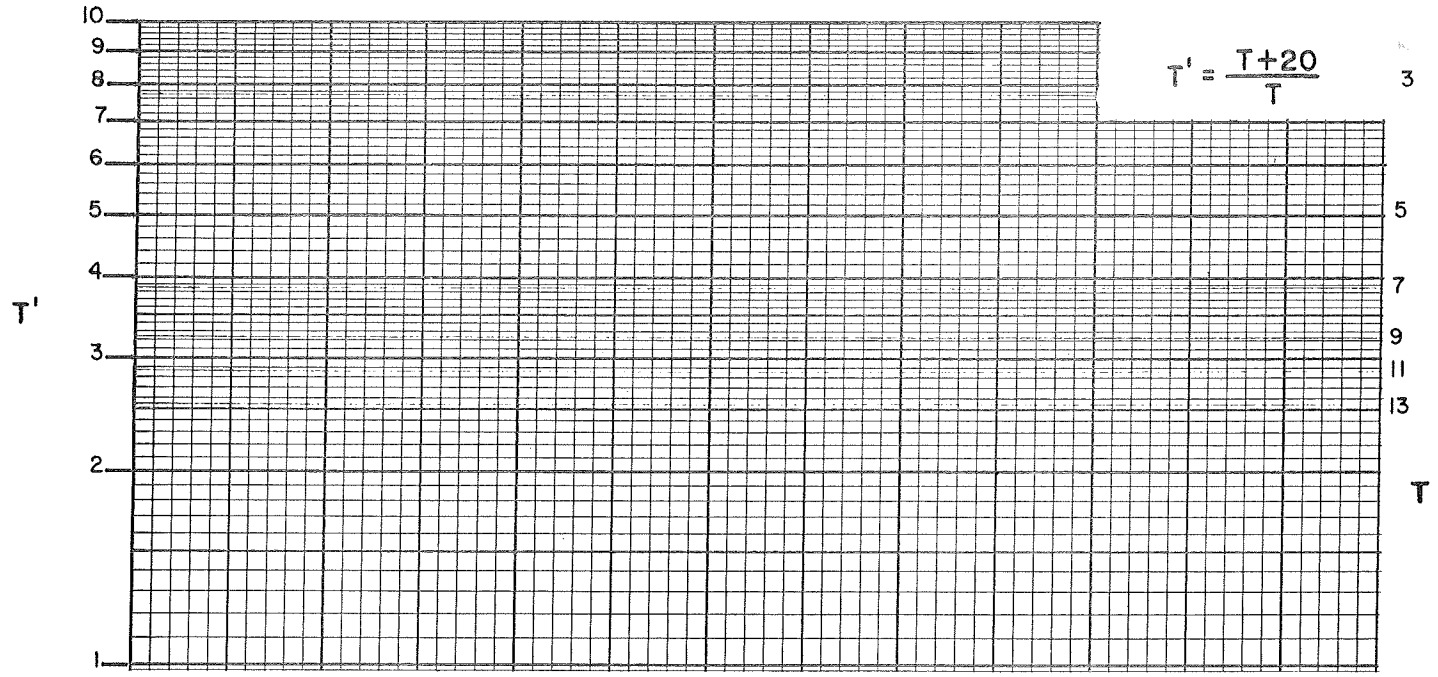
Property ______________________ T ______ R ______ sec ______

Drill Hole B-147 Date Drilled ____________ Elevation ________ ft.

Instrument ______________________ Operator ______________________

Comments ______________________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
48	5495	14.19	0.07	35		
50	5480	14.26	0.07	35		
52	5463	14.33	0.07 ~~0.05~~	35		
54(?)	5453	14.38	0.05	25		NOT FULL 2m INCREMENT.



RESISTANCE

HOLE B-147

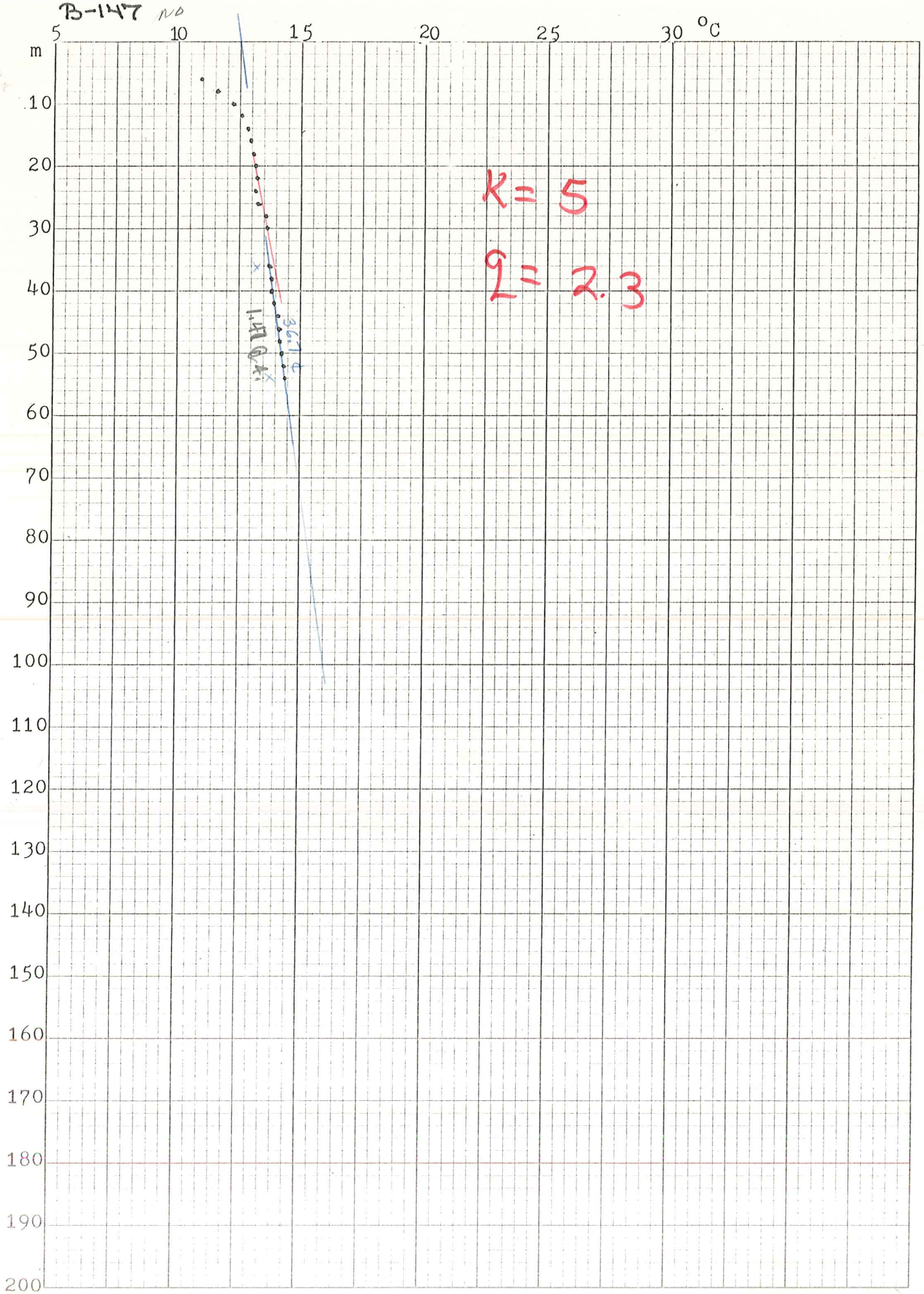
DEPTH METERS

0
10
20
30
40
50
60
70

5
10
15

TEMPERATURE °C

B-147 NO



46 0780

KE 10 X 10 TO THE INCH • 5 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 148

Property-Project Rest Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 4 8	1 0	J E	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
7.6 KM SW OF CINDER CRATER	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5.	3 8.	3 0.	1 1 2.	4 5.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
0.7	1 0. 6	6 2 8 0.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	2 2. 0	4 6. 0		
D	6 0. 0	7 2. 0		- . 5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK	
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80	
C	4 6. 0	6 0. 0	- 5 . 5	. 5	
D	. 9 9 9				
E					
F					
G					

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location IN FOURMILE CANYON ~ 1 MILE W. OF FOURMILE RIDGE Date 10-JUNE-76

Map COVE FORT UT. 15"

Property BEST T 26S R 7W sec NE¼ SE¼

Drill Hole B-148 Date Drilled _____ Elevation 6280 ft.

Instrument _____ Operator JEV

Comments 3/4" STEEL PIPE. HUNT GRADIENT HOLE, DRILLED IN POORLY WELDED TO NON-WELDED TUFF. LT-GRAY.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6888	8.60			
			0.62	310	
8	6713	9.30			
			0.26	130	
10	6640	9.56			
			0.16	80	
12	6598	9.72			
			0.16	80	
14	6554	9.88			
			0.16	80	
16	6509	10.04			
			0.17	85	
18	6464	10.21			
			0.16	80	
20	6422	10.37			
			0.15	75	
22	6383	10.52			
			0.15	75	
24	6343	10.67			
			0.13	65	
26	6309	10.80			
			0.12	60	
28	6278	10.92			
			0.13	65	
30	6245	11.05			
			0.12	60	
32	6214	11.17			
			0.11	55	
34	6185	11.28			
			0.10	50	
36	6159	11.38			
			0.10	50	
38	6135	11.48			
			0.10	50	
40	6109	11.58			
			0.11	55	
42	6082	11.69			
			0.11	55	
44	6056	11.80			
			0.09	45	
46	6033	11.89			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

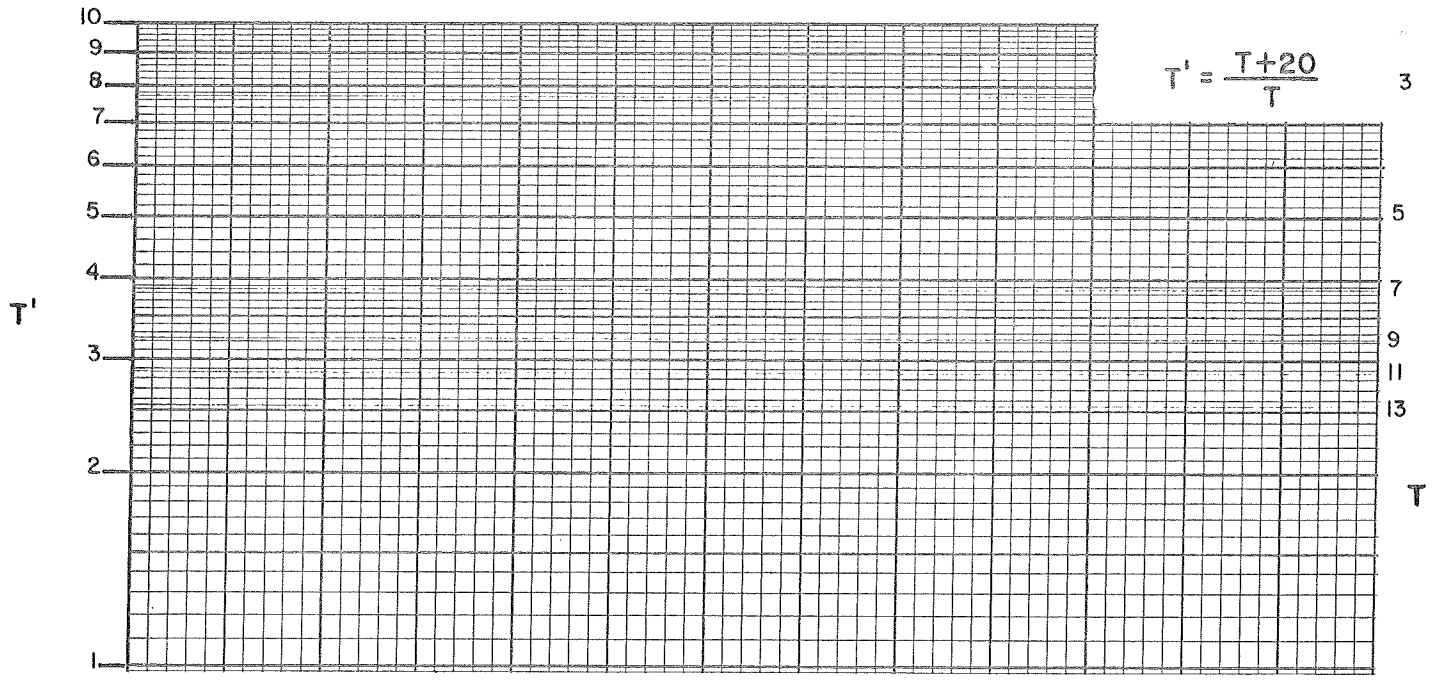
Property _____ T _____ R _____ sec _____

Drill Hole B-148 Date Drilled _____ Elevation _____ ft.

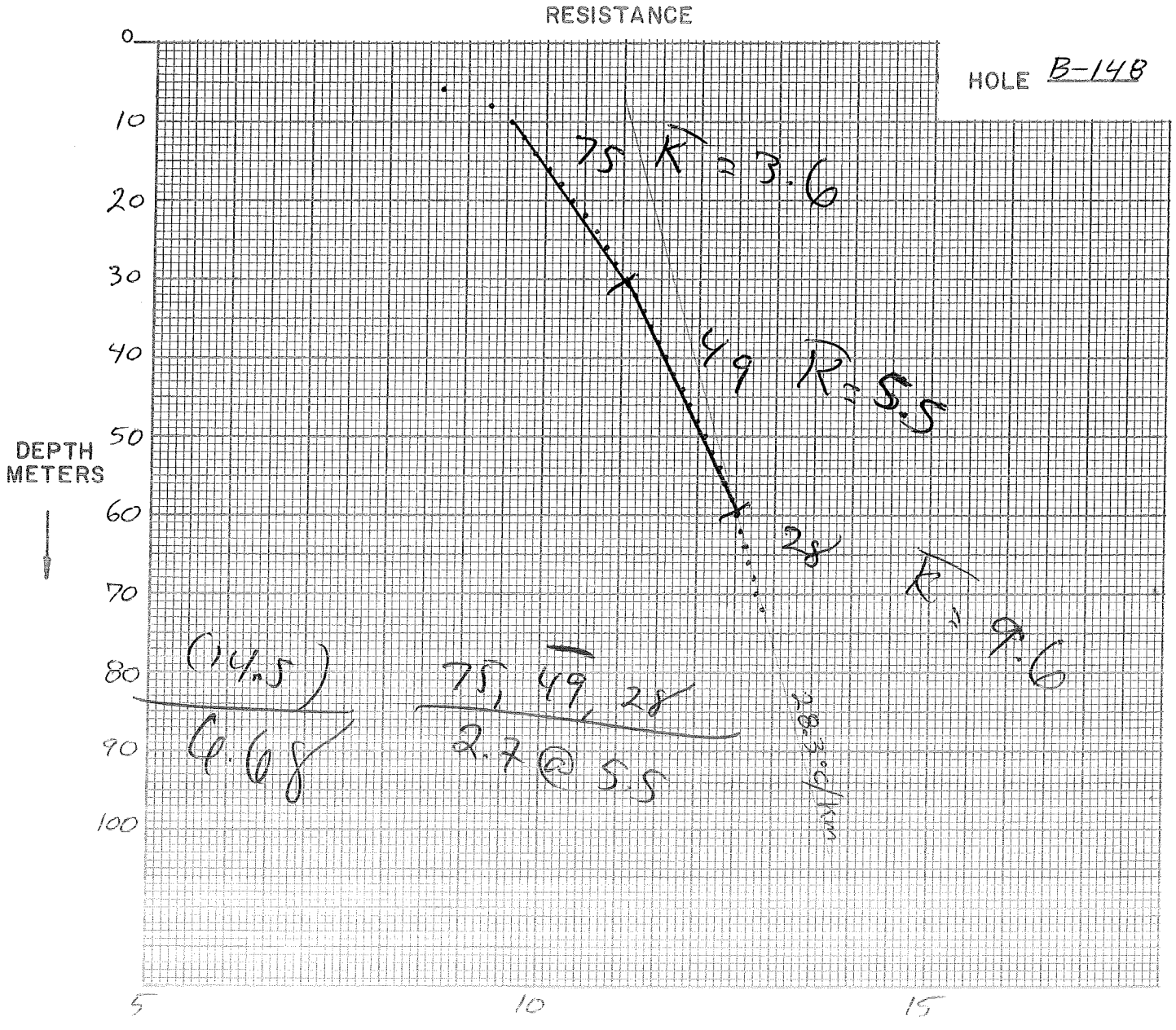
Instrument _____ Operator _____

Comments _____

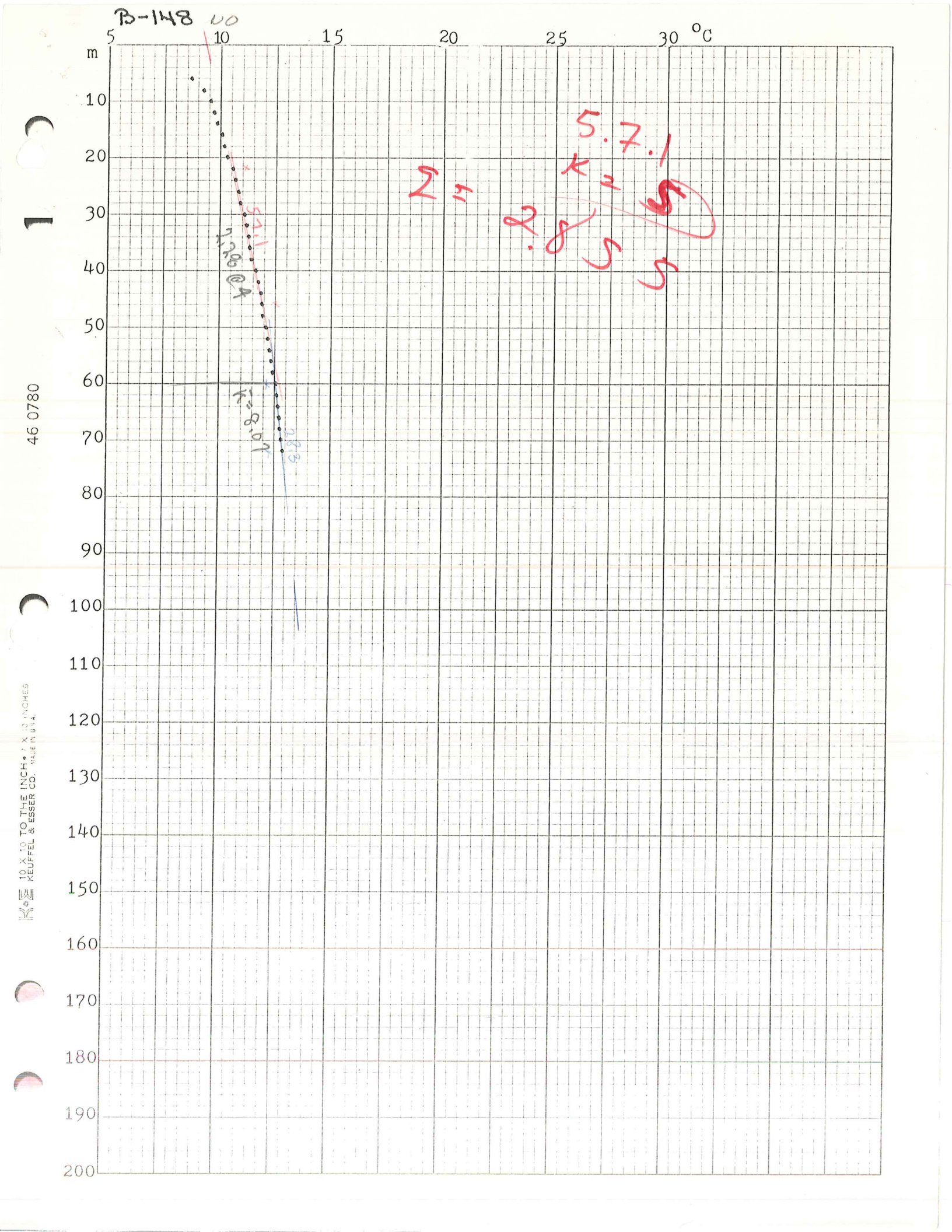
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
48	6008	11.99	0.10	50	
50	5985	12.08	0.09	45	
52	5962	12.18	0.10	50	
54	5940	12.27	0.09	45	
56	5919	12.36	0.09	45	
58	5898	12.44	0.08	40	
60	5881	12.51	0.07	35	
62	5868	12.57	0.06	30	
64	5853	12.63	0.06	30	
66	5841	12.68	0.05	25	
68	5827	12.74	0.06	30	
70	5815	12.79	0.05	25	
72	5802	12.85	0.06	30	GRADIENT 60-72m 28.3°C/km



T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13



RESISTANCE
HOLE B-148
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
75 K̄ = 3.6
49 K̄ = 5.5
28
K̄ = 9.6
(14.5)
6.68
75, 49, 28
2.7 @ 5.5
28.3°C/km
5
10
15
TEMPERATURE °C


B-148 00
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 149

Property-Project Rest Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 4 9	1 1	J L	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
5.4 KM SW OF CINDER CRATER	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
7.0	8.35	5980.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	20.0	40.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~3 MILES S.W. OF CINDER CRATER Date 11-JULY-76

Map COVE FORT UT. 15'

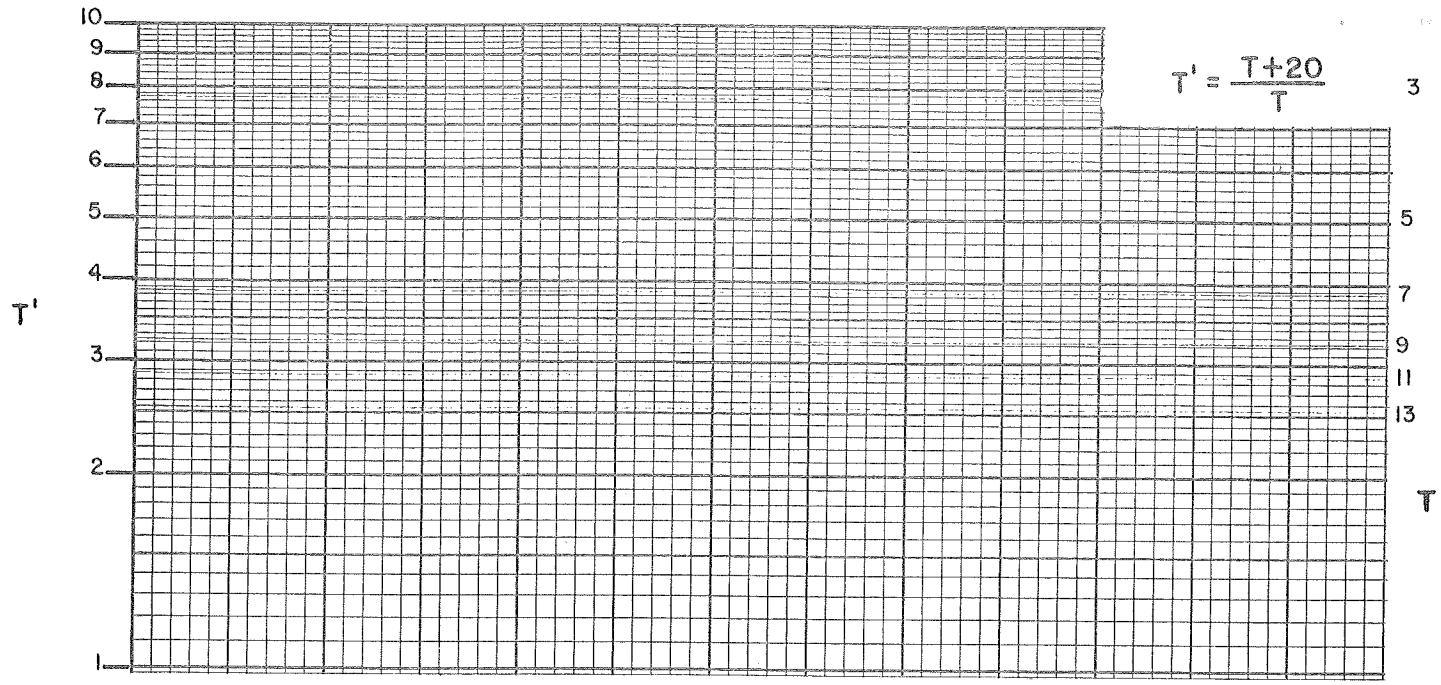
Property BEST T 26S R 7W sec 19 NW¼ NW¼

Drill Hole B-149 Date Drilled _____ Elevation ~~6~~5980 ft.

Instrument _____ Operator JEK

Comments REPEAT HOLE B-149 TO CHECK NEW PROBE CABLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6					
8					
10	6071	11.73			
12	6022	11.93	0.20	100	
14	5988	12.07	0.14	70	
16	5958	12.19	0.12	60	
18	5926	12.33	0.14	70	
20	5900	12.43	0.10	50	
22	5880	12.52	0.09	45	
24	5863	12.59	0.07	35	
26	5846	12.66	0.07	35	
28	5828	12.74	0.08	40	
30	5813	12.80	0.06	30	
32	5795	12.88	0.08	40	
34	5778	12.95	0.07	35	
36	5761	13.02	0.07	35	
38	5747	13.08	0.06	30	
40	5732	13.14	0.06	30	
42	5717	13.21	0.07	35	
					GRADIENT 26-42m 34.4°C/Km



RESISTANCE

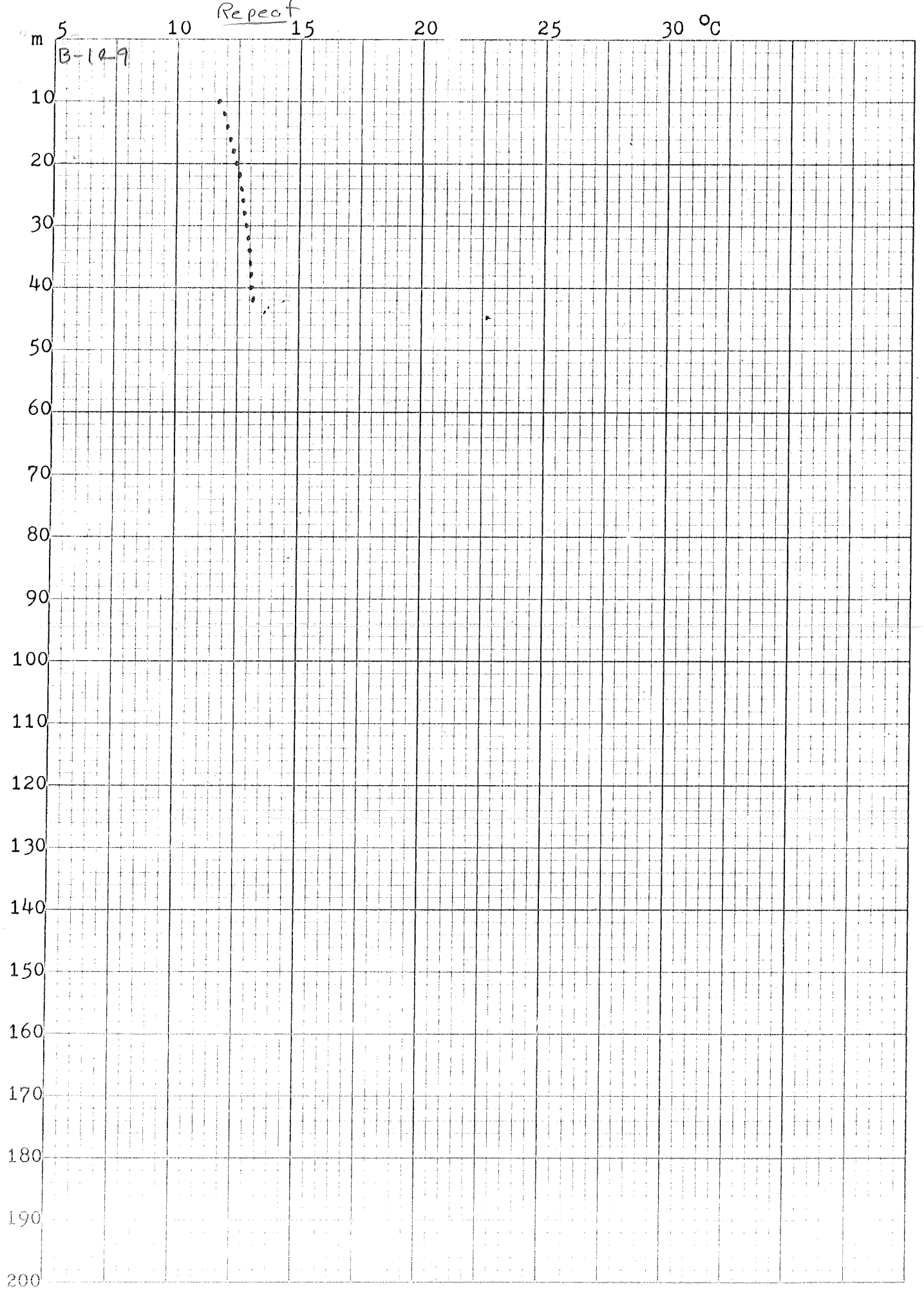
HOLE B-149

DEPTH METERS

0
10
20
30
40
50
60

5
10
15

TEMPERATURE °C



46 0780

10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE - DEPTH LOG

Location ~3 MILES S.W. OF CINDER CRATER Date 10-JUNE-76

Map COVE FORT UT 15"

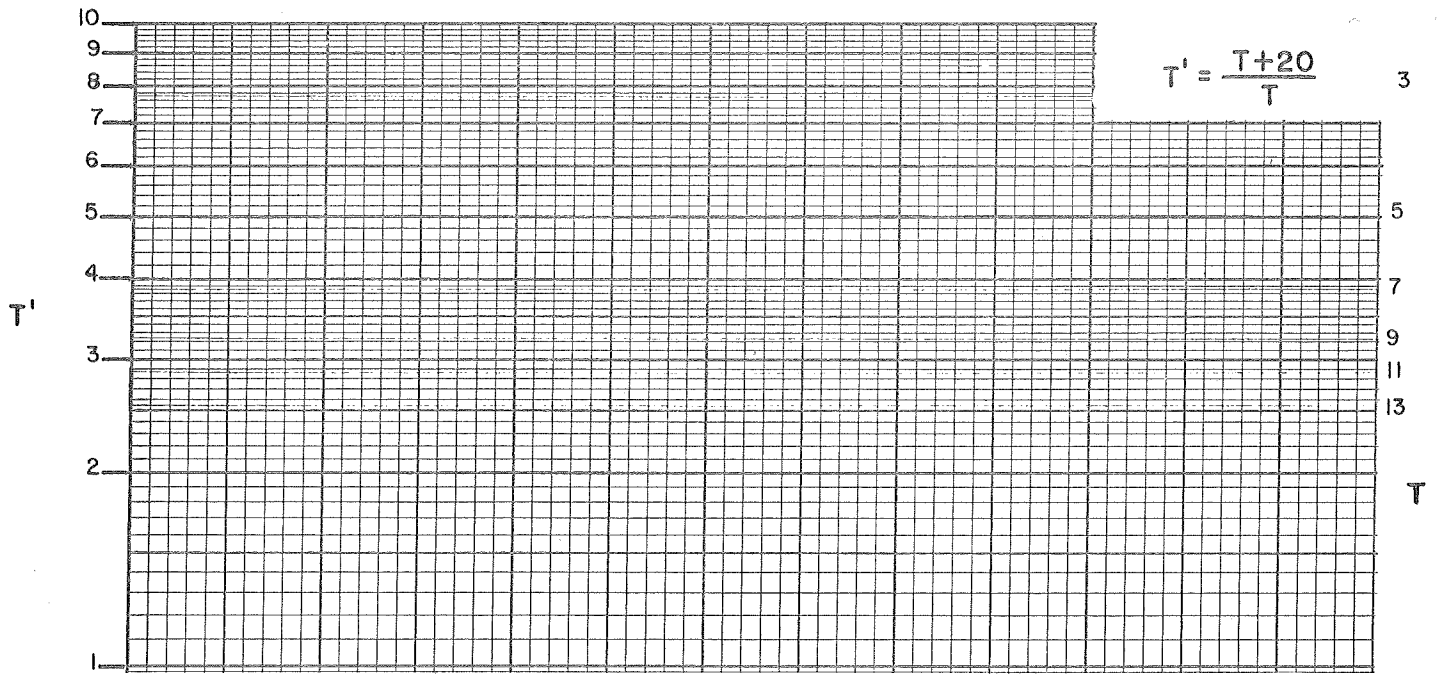
Property BEST T 26S R 7W sec 19 NW¼ NW¼

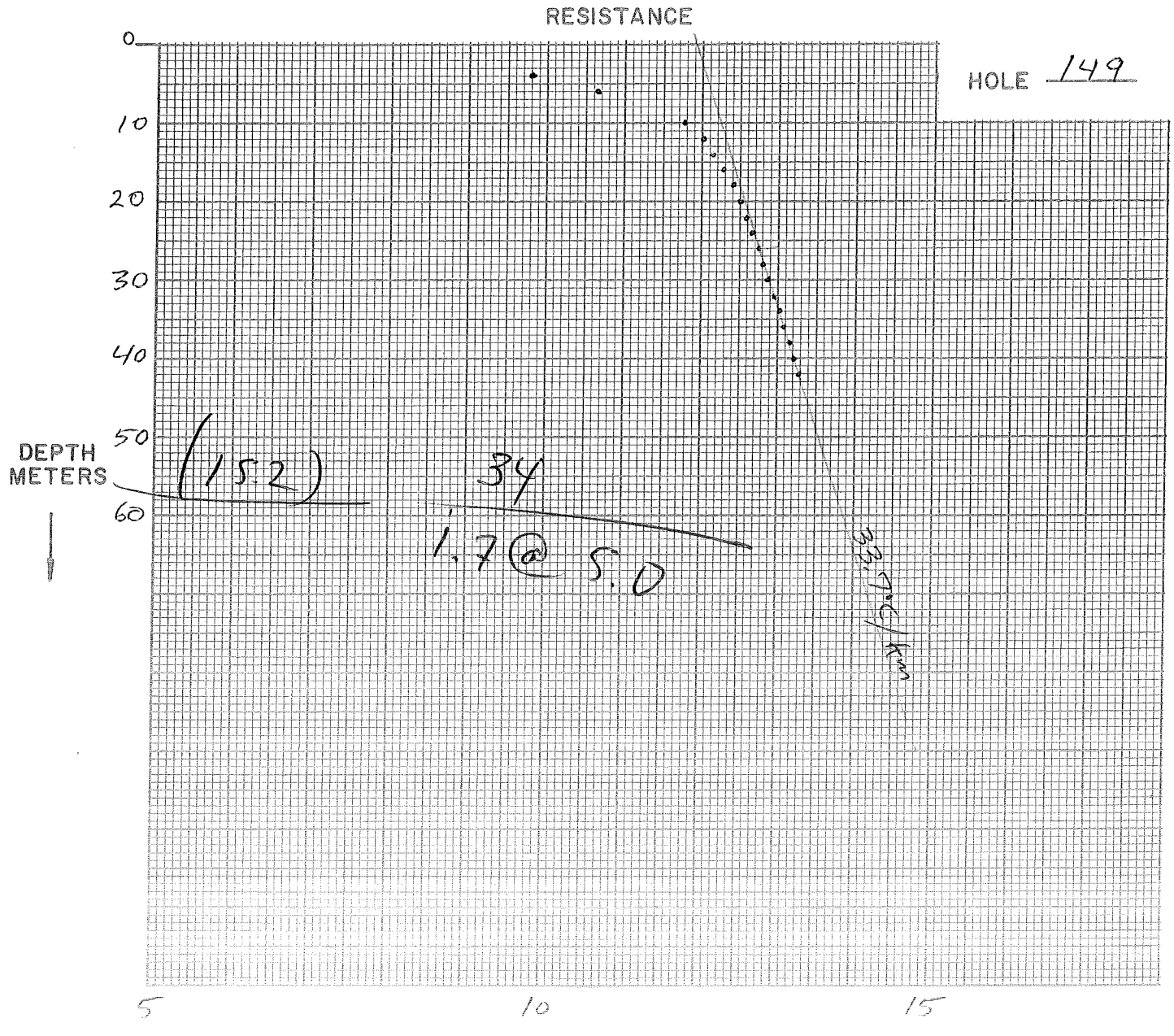
Drill Hole B-149 Date Drilled _____ Elevation ~~5960~~ 6060 ft.

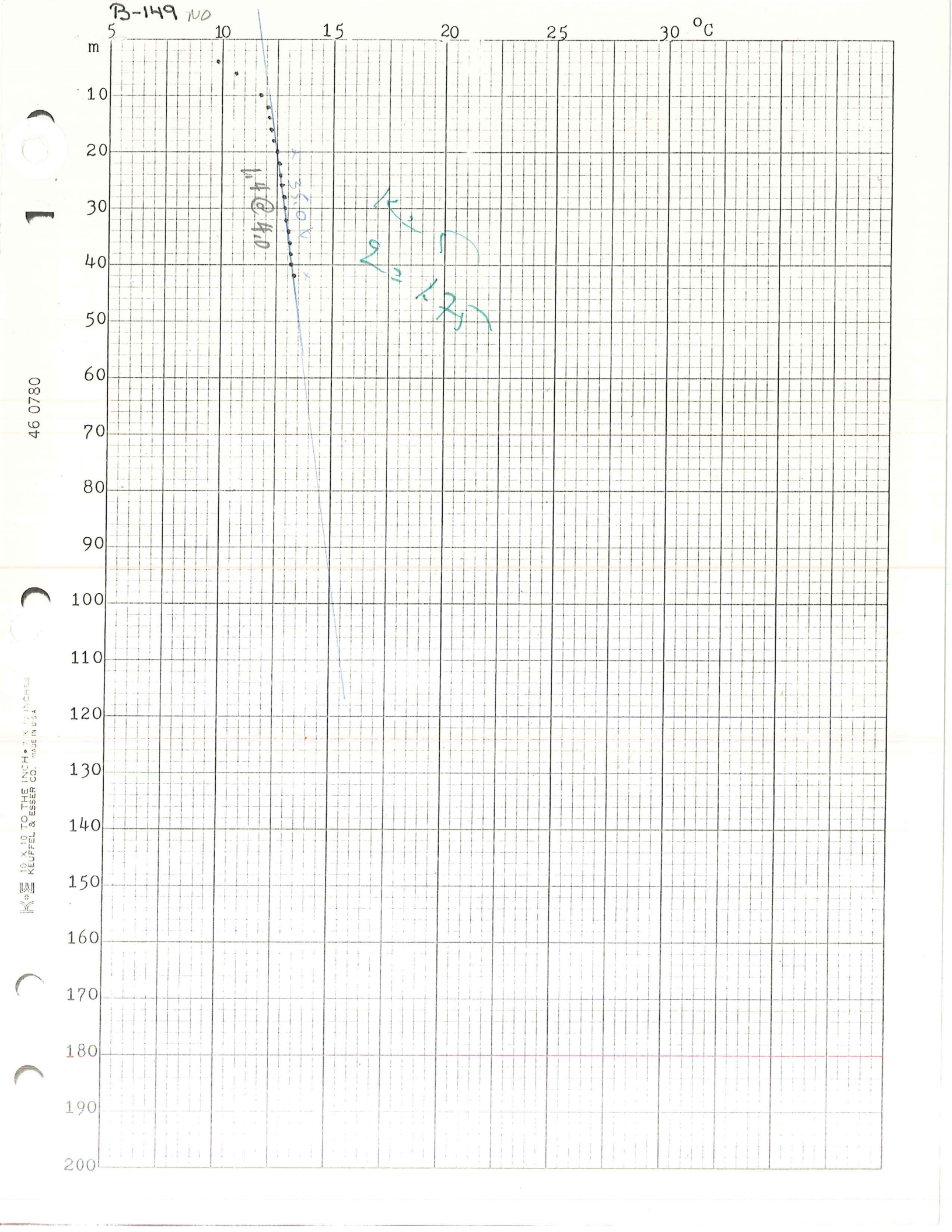
Instrument _____ Operator JEO

Comments 1" PVC PIPE, DRILLED IN APHANITIC DK-MED GRAY BASALT, PROBABLY BOTTOMED IN CINDERS

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6572	9.81			
6	6348	10.65	0.84	420	
8			1.13	283	
10	6060	11.78			
12	6001	12.02	0.24	120	
14	5967	12.16	0.14	70	
16	5938	12.28	0.12	60	
18	5907	12.41	0.13	65	
20	5881	12.51	0.10	50	
22	5861	12.60	0.09	45	
24	5845	12.66	0.06	30	
26	5828	12.74	0.08	40	
28	5810	12.81	0.07	35	
30	5793	12.88	0.07	35	
32	5777	12.95	0.07	35	
34	5761	13.02	0.07	35	
36	5744	13.09	0.07	35	
38	5729	13.16	0.07	35	
40	5714	13.22	0.06	30	
42	5700	13.28	0.06	30	
					GRADIENT 26-42m 33.75°C/Km


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE 149
DEPTH METERS
0
10
20
30
40
50
60
(152)
34
1.7 @ 5.0
5
10
15
TEMPERATURE °C


B-149 NO
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
1.4@40
3500
46 0780
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 150

Property-Project Rest Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 5 0	1 0	J E	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
5 . 4 K M S W O F C I N D E R C R A T E R	J E D	M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	3 0 .	1 1 2 .	4 5 .

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
7 . 2 5	8 . 2 5	6 0 6 0 .	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	1 5 . 0	3 5 . 8	- 5 . 0	- . 5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	. 9 9 9			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~3 MILES S.W. OF CINDER CRATER. 0.1 MILE N. OF B-149 Date 10-JUNE-76

Map COVE FORT UT 15"

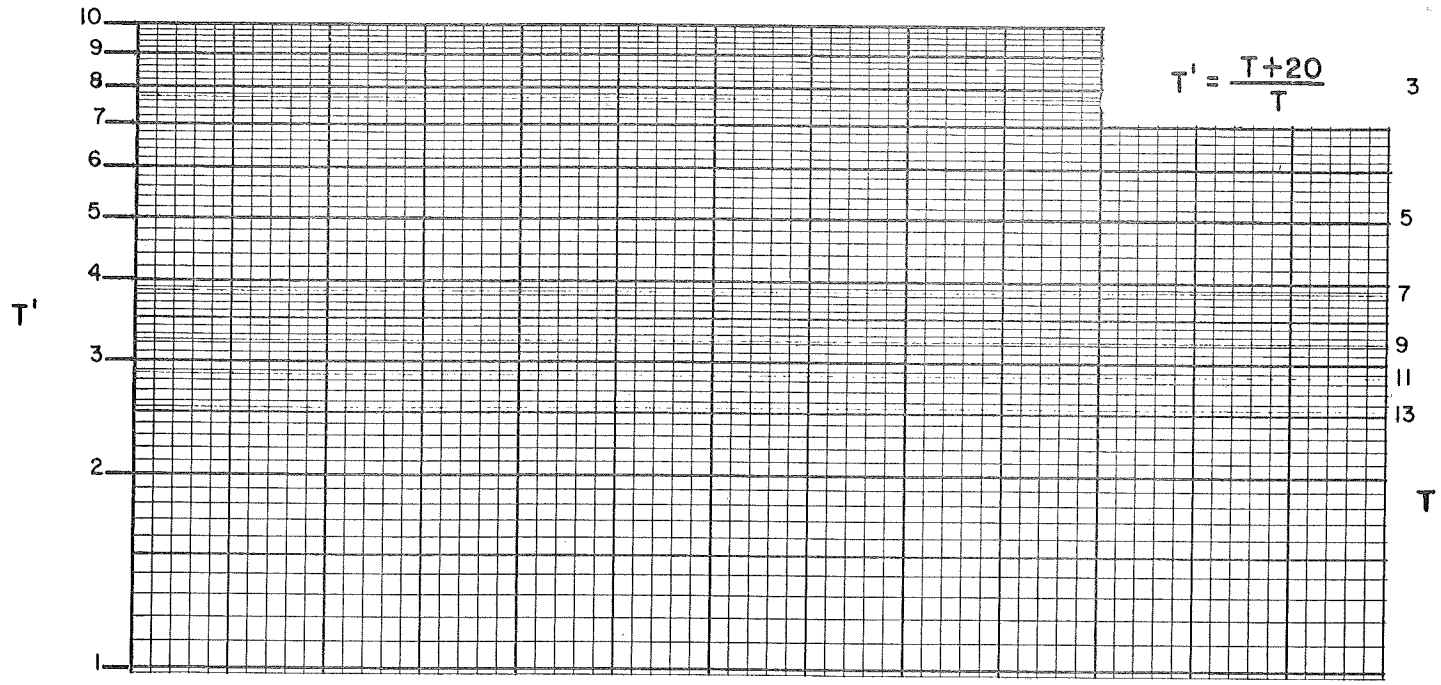
Property BEST T 26S R 7W sec 19 NW¼ NW¼

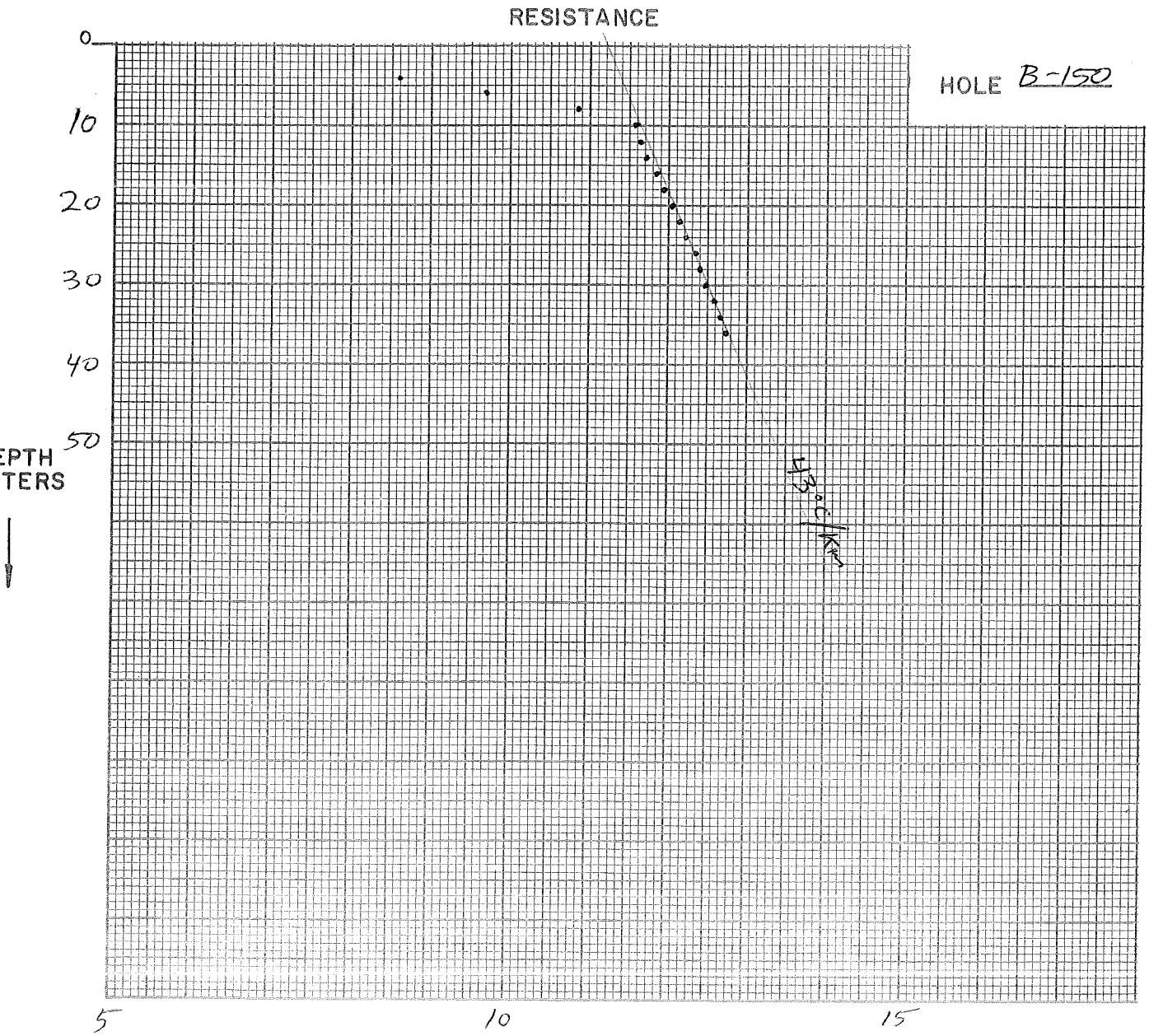
Drill Hole B-150 Date Drilled ____ Elevation 6060 ft.

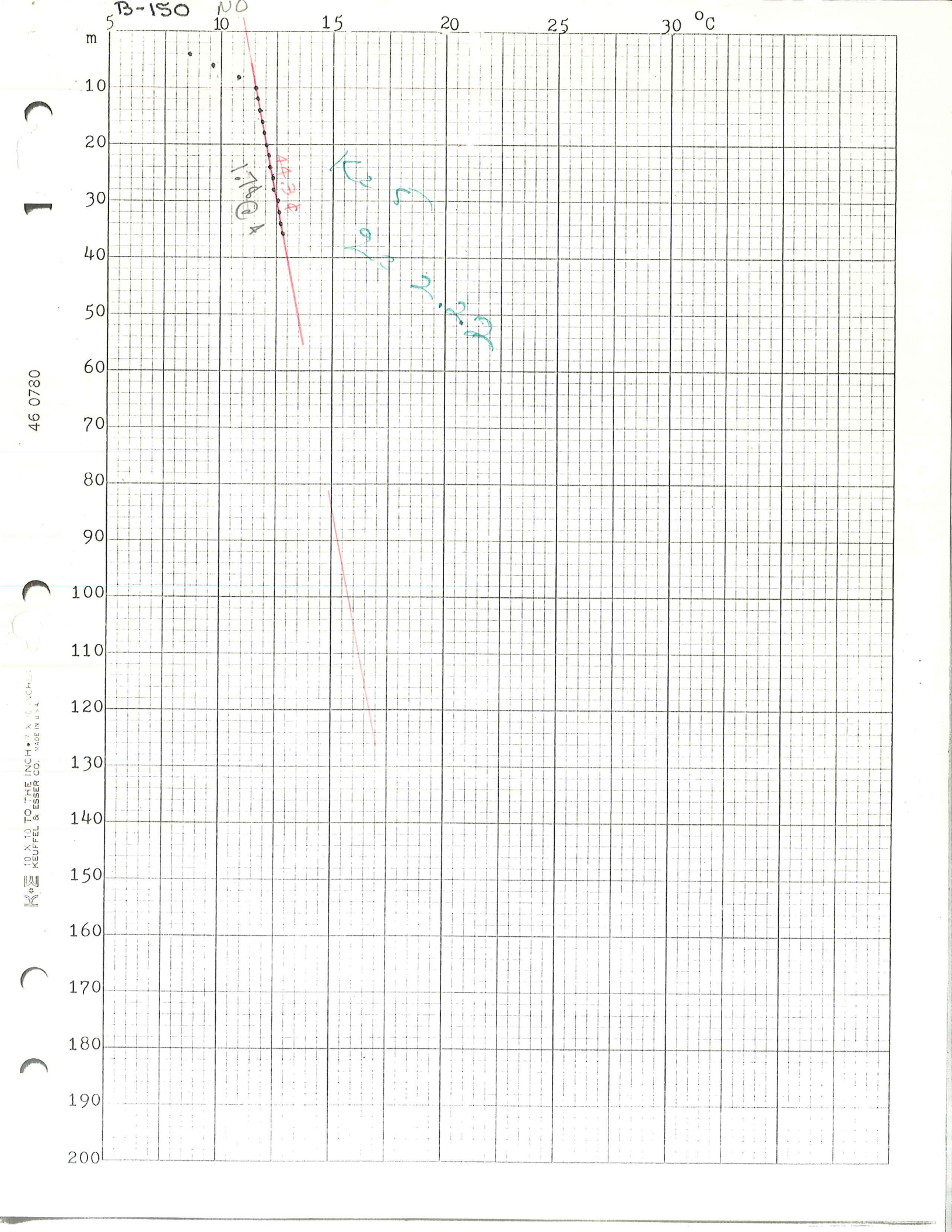
Instrument ____ Operator JEO

Comments 3/4" STEEL PIPE, HUNT GRADIENT HOLE, DRILLED IN DK GRAY BSLT & ZONES OF CINDER (PROBABLY BOTTOMED IN CINDER)

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
4	6916	8.59			
			1.10	550	
6	6605	9.69			
			1.16	580	
8	6296	10.85			
			0.74	370	
10	6108	11.59			
			0.04	20	
12	6097	11.63			
			0.10	50	
14	6072	11.73			
			0.13	65	
16	6040	11.86			
			0.09	45	
18	6017	11.95			
			0.10	50	
20	5994	12.05			
			0.10	50	
22	5969	12.15			
			0.09	45	
24	5947	12.24			
			0.09	45	
26	5926	12.33			
			0.09	45	
28	5903	12.42			
			0.09	45	
30	5882	12.51			
			0.08	40	
32	5863	12.59			
			0.08	40	
34	5844	12.67			
			0.06	~33	
35.8	5829	12.73			GRADIENT 24-34m 43 °C/km


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T


RESISTANCE
0
10
20
30
40
50
DEPTH METERS
HOLE B-150
1.3°C/KΩ
5
10
15
TEMPERATURE °C


B-150
5
10
15
20
25
30 °C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 151

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	151	11	JE	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
4.6 KM NE OF PINNACLE PASS	JED	MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	30.	112.	52.5

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
39.05	40.7	5590.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

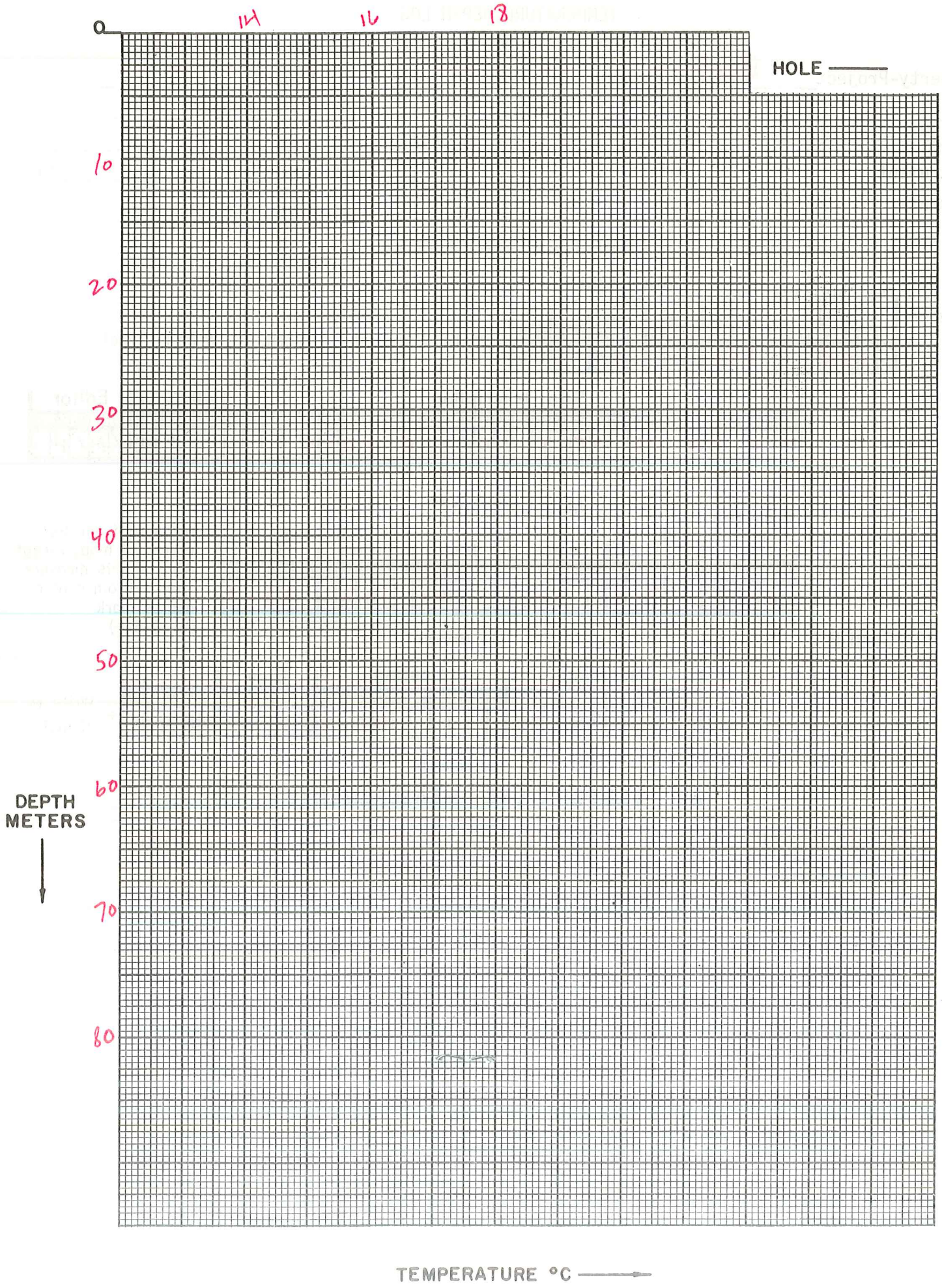
	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	20.0	30.0	-2.2	.5
D	60.0	80.0		-.5
E				
F				
G				

Continue each card below.

SEGMENT ~~DEPTH~~

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	35.0	50.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999


0
14
16
18
HOLE
10
20
30
40
50
60
70
80
DEPTH METERS
TEMPERATURE °C

TEMPERATURE - DEPTH LOG

Location _____ Date 11-JUNE-76

Map PENNICLE PASS 7½"

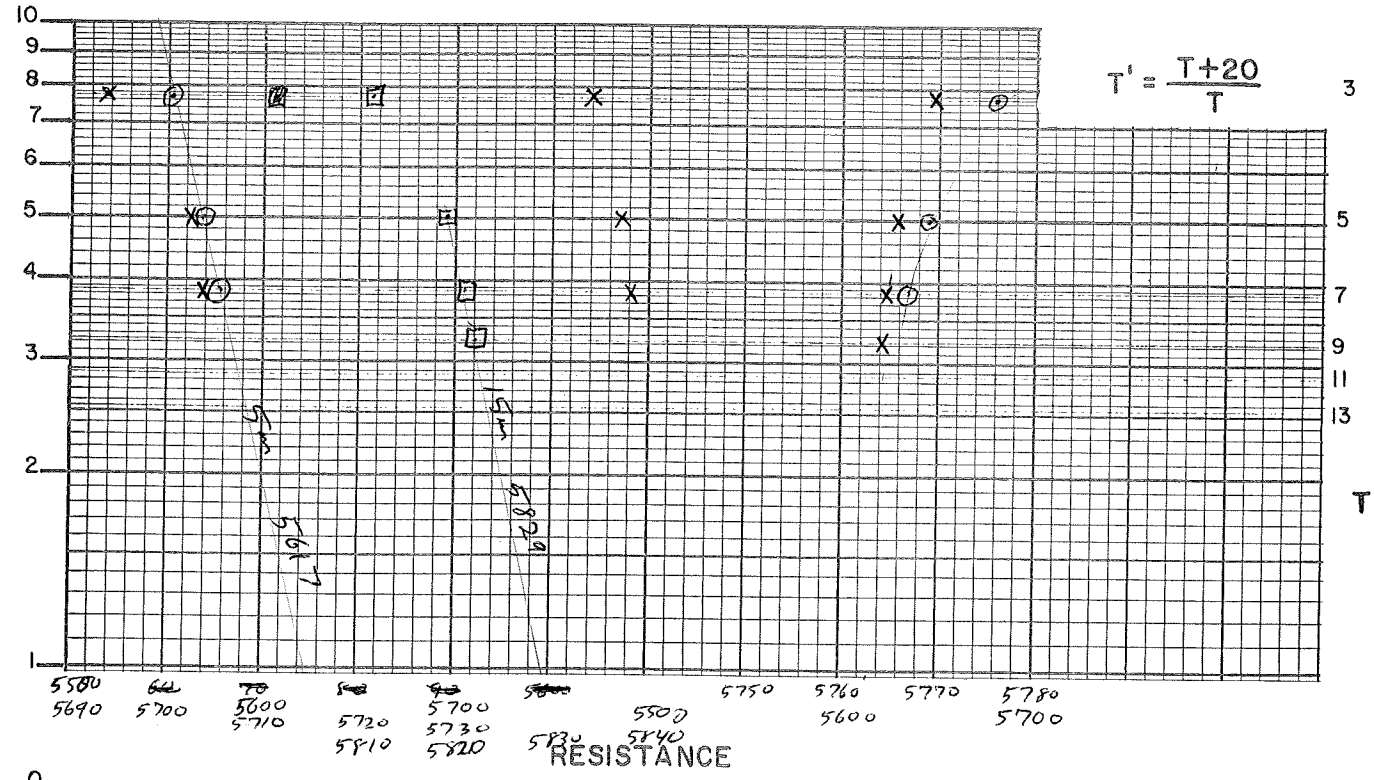
Property BEST T 26S R 8W sec 4 NW¼ NW¼

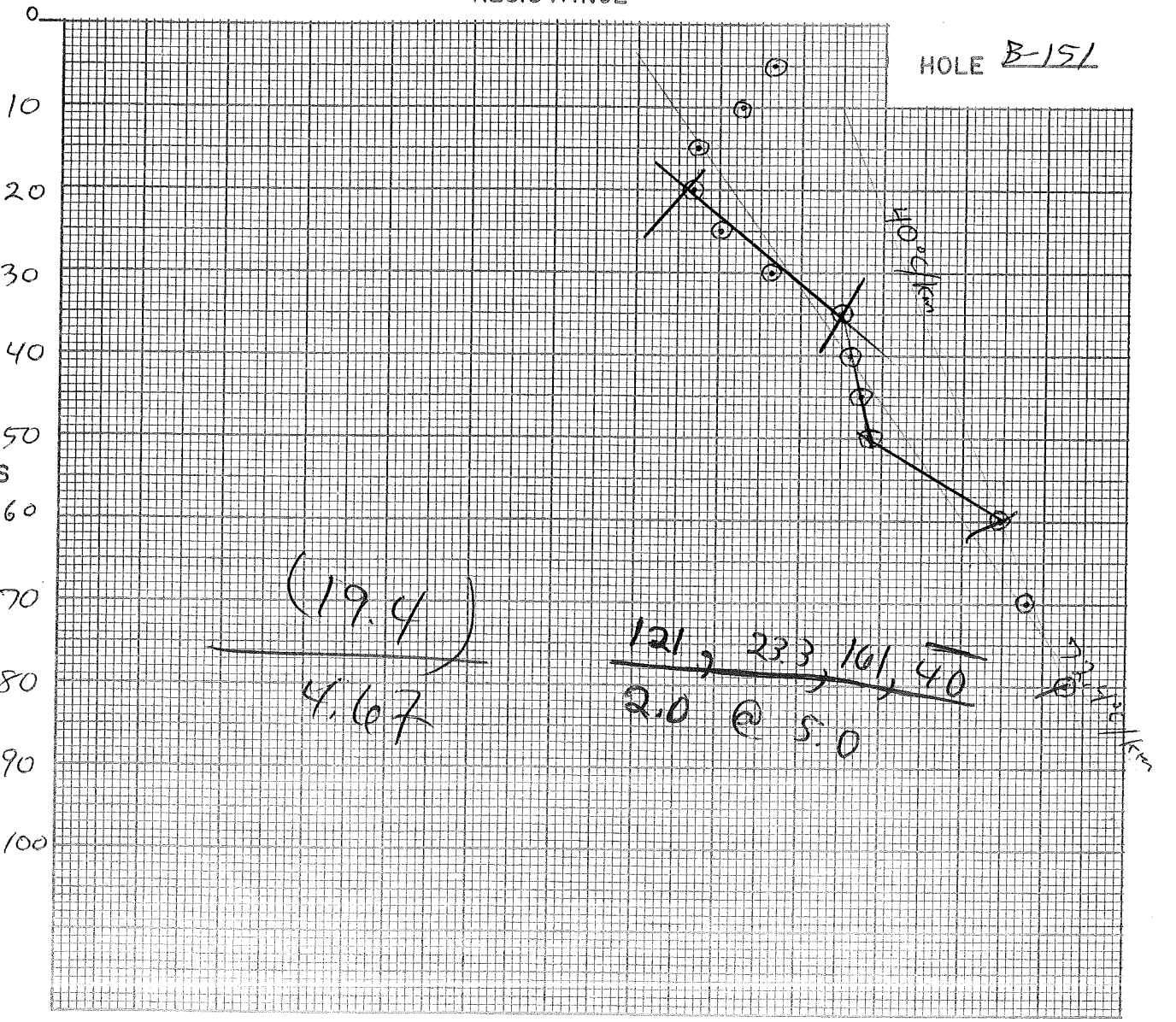
Drill Hole B-151 Date Drilled _____ Elevation 5590 ft.

Instrument _____ Operator ~~KSD~~

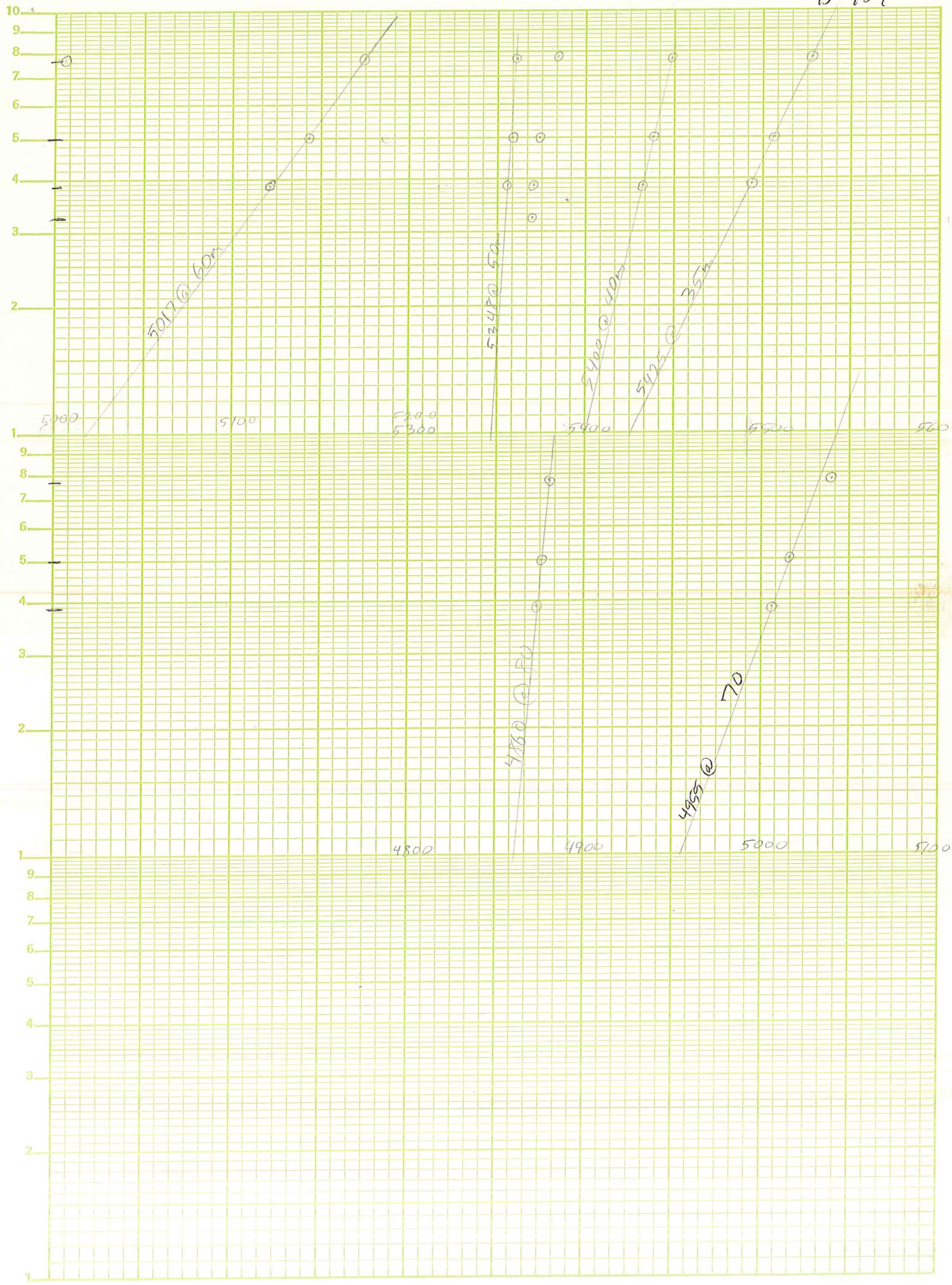
Comments 8" CASED WATER WELL. "WIND" MOVEMENT OUT OF WELL. NO ODOR, NO OTHER CONNECTING PIPES TO WELL. ~~[redacted]~~

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	3 5552 5 5567 7 5573	13.65			
10	3 5693 5 5702 7 5704	13.27			
	11 5703		-0.46		
15	3 5811 5 5819 7 5821	12.73			
	5822		-0.04		
20	3 5834 5837 5838	12.69			
25	5776 5769 5767	13.02	0.33		
30	5647 5629 5623	13.65	0.63		
~~30~~	5621				
35	5526 5506 5493	14.51	0.86		
40	5448 5437 5433	14.62	0.11		
~~36~~					
45	5383 5373 5369	14.76	0.14		
	5371				
50	5361 5358 5356	14.86	0.10		
60	5176 5143 5128	16.47	1.61		
70	5039 5016 5007	16.78			
	~~5007~~				
80	4880 4876 4874	17.27			6 72.4°C/Km


T' = T+20 / T
T'
T
RESISTANCE
5580
5690
5700
5600
5710
5720
5810
5700
5730
5820
5830
5500
5840
5750
5760
5600
5770
5780
5700


HOLE B-151
DEPTH METERS
TEMPERATURE °C
(19.4)
4.67
121, 233, 161, 40
2.0 @ 5.0

B-151



KE SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

ADDITIONAL DATA ON HOLE B-151

DRILLED : AUG-1944

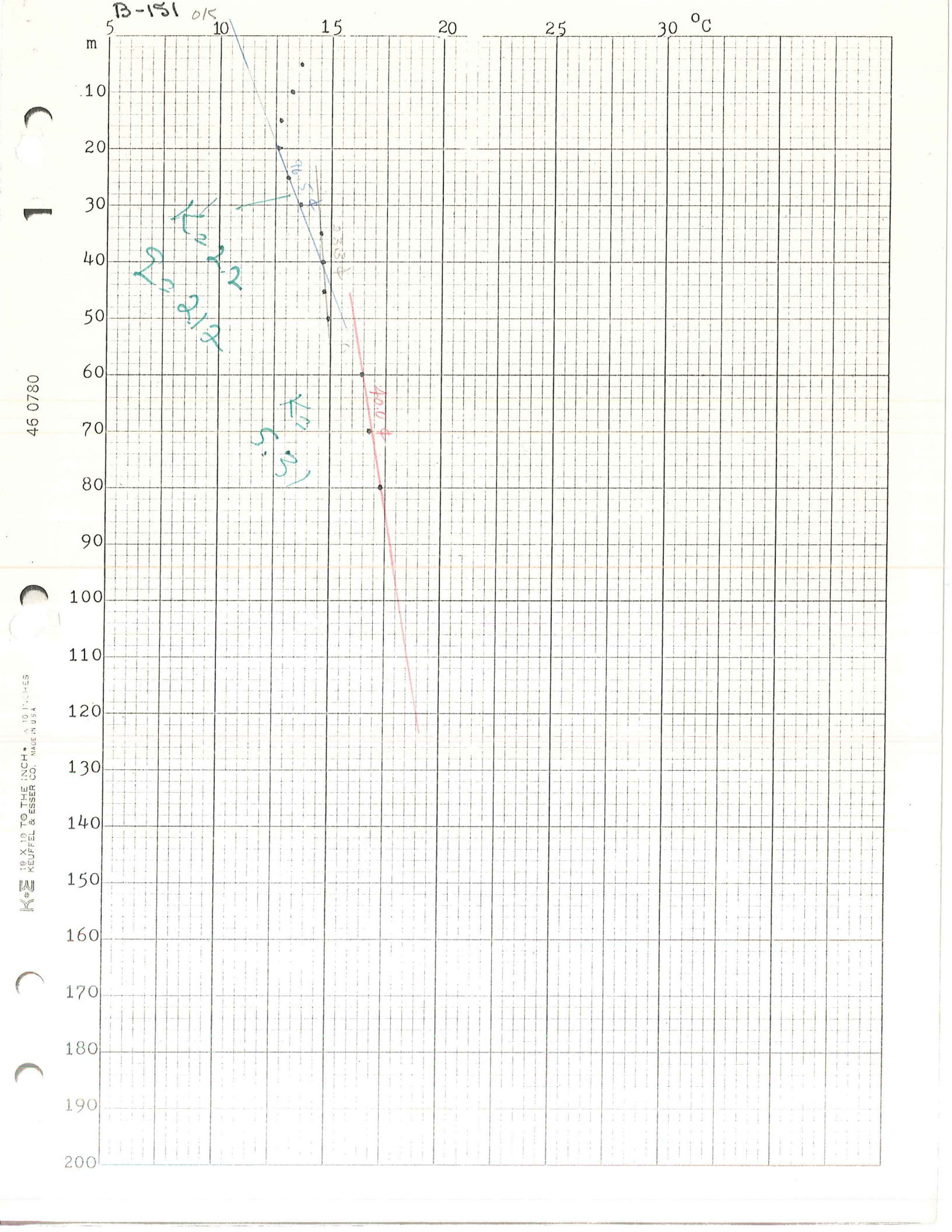
TOTAL DEPTH : 360' (PROBED TO 260')

AQUIFERS: 327-360

LOG.: 0-100 QAL

100-310 BSLT

310-360 GRANITE


B-151 015
5
10
15
20
25
30 °C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
46 0780
KE 10 X 10 TO THE INCH • 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 152

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5		1 5 2	1 2	J E	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
4.5 KM SW OF CINDER CRATER	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
-5.2	12.7	6110.	F

Write M if meters

4.85 13.

Use decimals

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	10.0	30.0		
D	50.0	59.0		-.5
E				
F				
G				

Continue each card below.

SEGMENT ~~DEPTH~~

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	30.0	50.0	-5.0	.5
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location _____ Date 12-JUNE-76

Map COVE FORT UT. 15"

Property BEST T 26S R 7W sec 20 SE¼ SE¼

Drill Hole B-152 Date Drilled _____ Elevation 6110 ft.

Instrument _____ Operator JEO

Comments ¾" STEEL PIPE. PHILLIPS GRADIENT HOLE. SCATTERED CUTTINGS OF BELT. GRADIENT SUGGESTS VARYING LITHOLOGIES,

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6566	9.83			
8	6367	10.58			
10	6257	11.00			
12	6196	11.24			
14	6147	11.43	0.19	95	
16	6090	11.66	0.23	115	
18	6035	11.88	0.22	110	
20	5981	12.10	0.22	110	
22	5926	12.33	0.21	105	
24	5871	12.56	0.23	115	
26	5820	12.77	0.21	105	
28	5760	13.03	0.26	130	
30	5705	13.26	0.23	115	
32	5655	13.48	0.22	110	
34	5616	13.65	0.17	85	
36	5586	13.78	0.13	65	
38	5557	13.91	0.13	65	
40	5527	14.05	0.14	70	
42	5497	14.18	0.13	65	
44	5463	14.33	0.15	75	
46	5415	14.55	0.22	110	

_____ of _____

TEMPERATURE - DEPTH LOG

Location ____________________ Date ________

Map ____________________

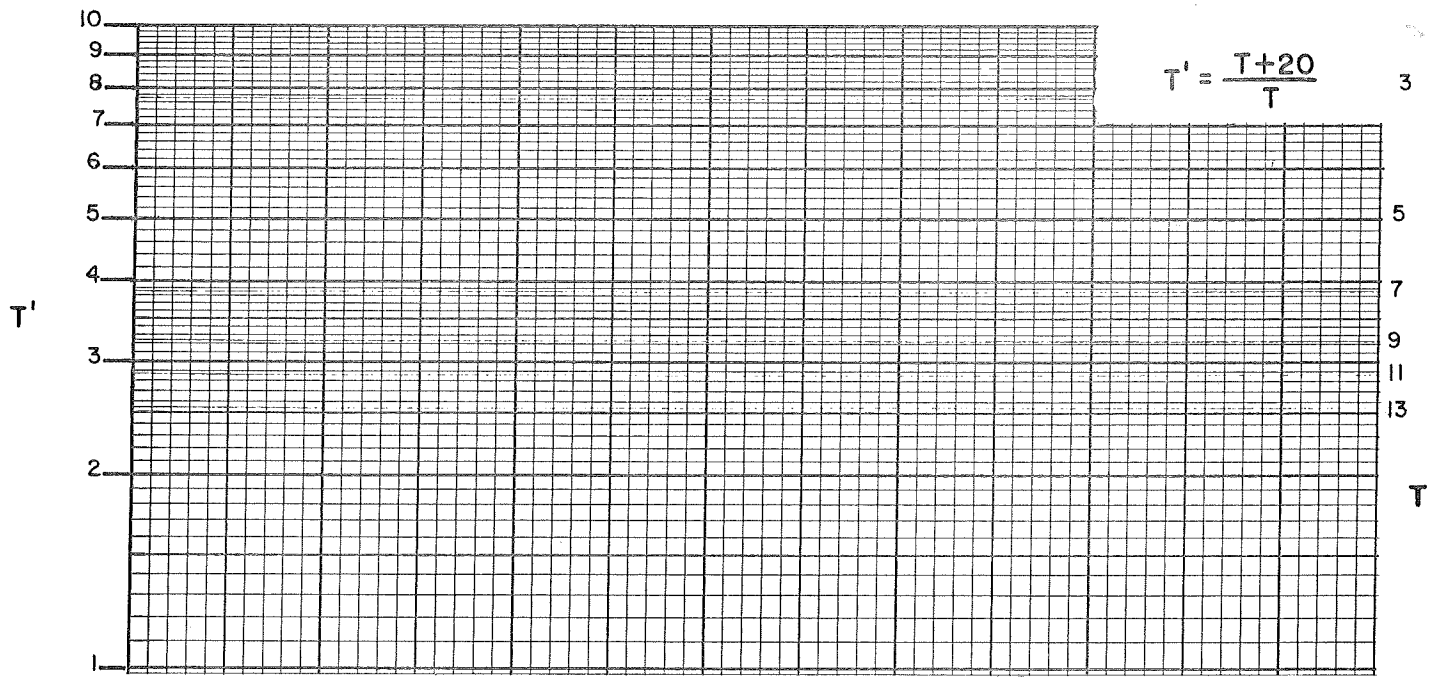
Property ____________ T ____ R ____ sec ____

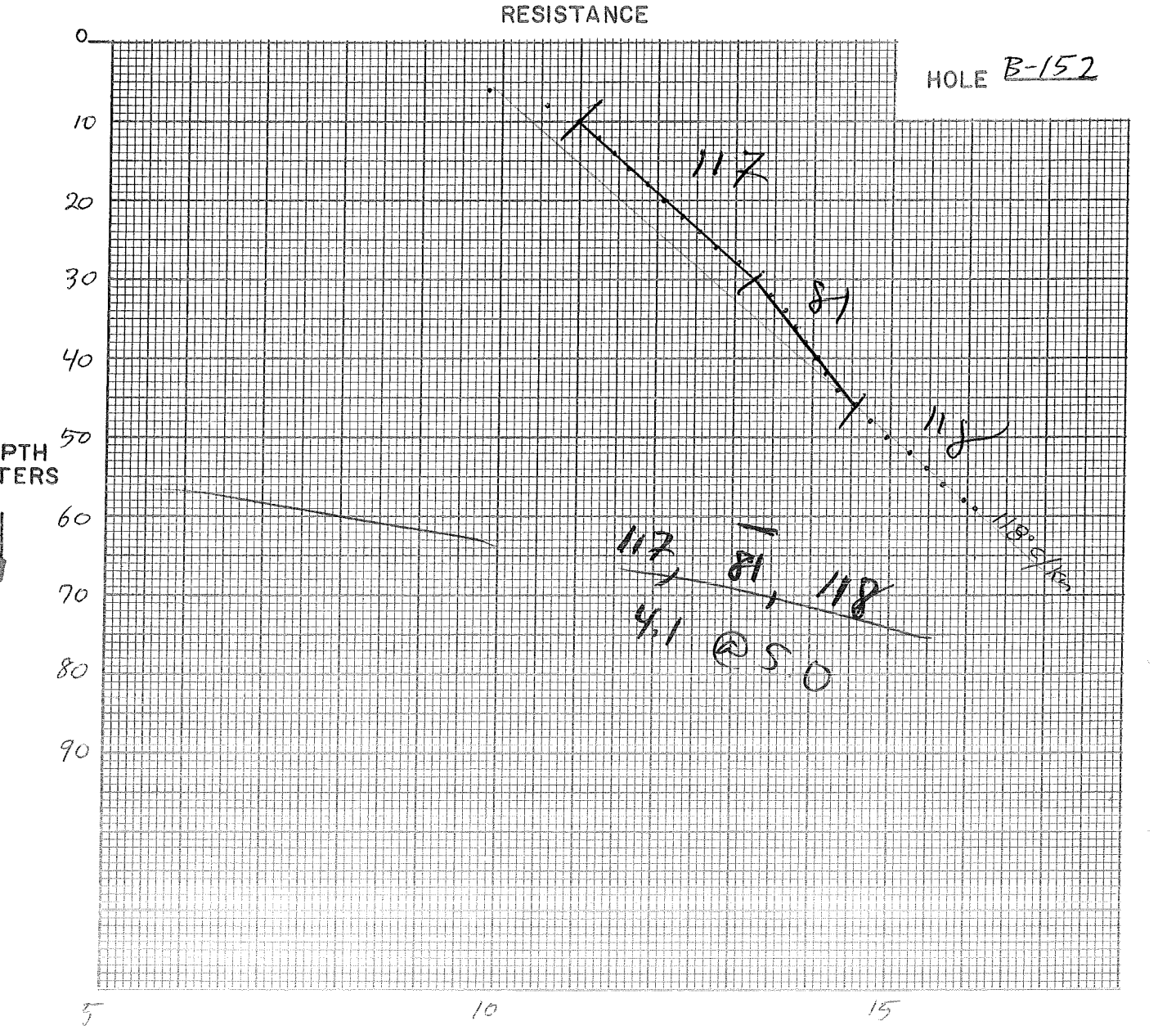
Drill Hole B-152 Date Drilled ________ Elevation ______ ft.

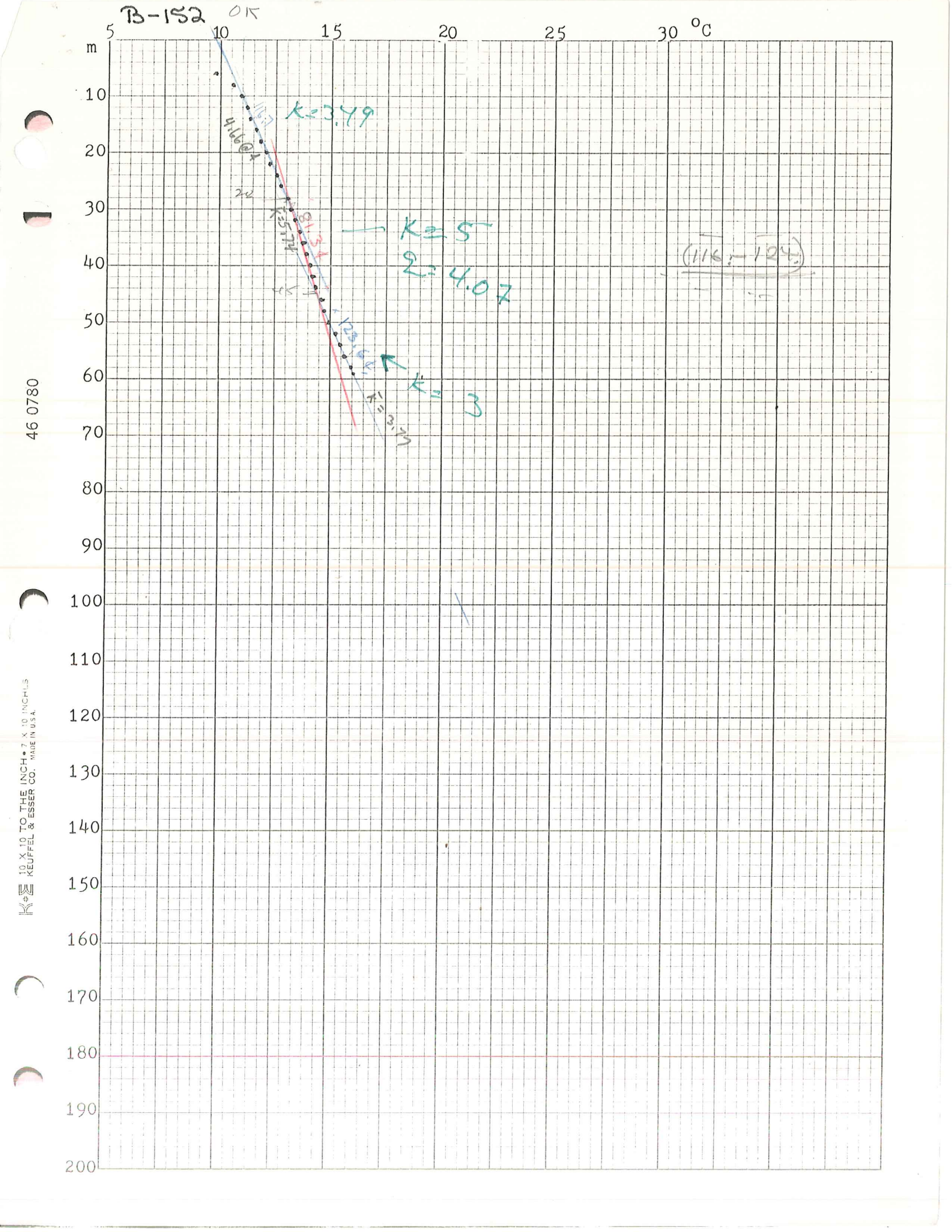
Instrument ____________ Operator ____________

Comments ____________________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
48	5374	14.74	0.19	95		
50	5326	14.97	0.13	75		
52	5269	15.24	0.27	135		
54	5220	15.47	0.23	115		
56	5174	15.69	0.22	110		
58	5118	15.96	0.27	135		
59	5091	16.10	0.14	140 ~~76~~		


T' = T+20 / T
T'
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
T


RESISTANCE
HOLE B-152
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
117
81
118
117
81
118
4.1 @ 50
5
10
15
TEMPERATURE °C


B-152
5
10
15
20
25
30
°C
m
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
k=3.49
K=5
Σ=4.07
K=3
(11.6 - 12.4)
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 153

Property-Project Best Depth Logged

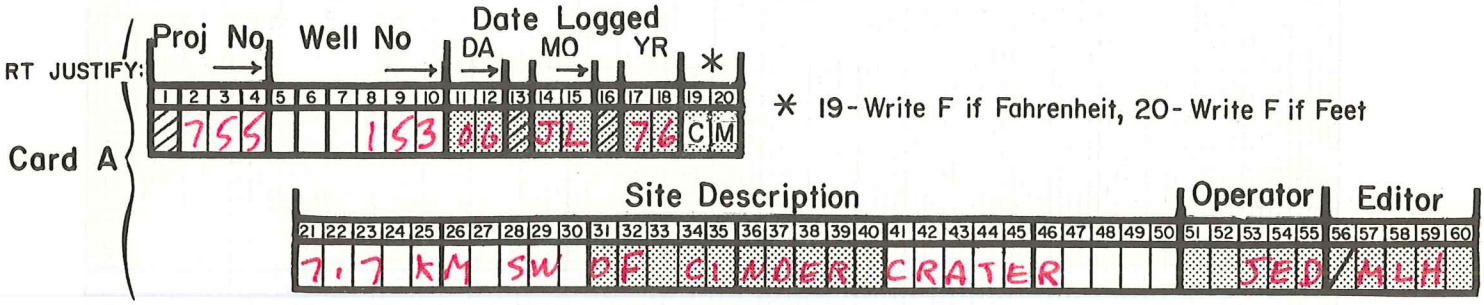
Map Scale Date: Drilled Logged

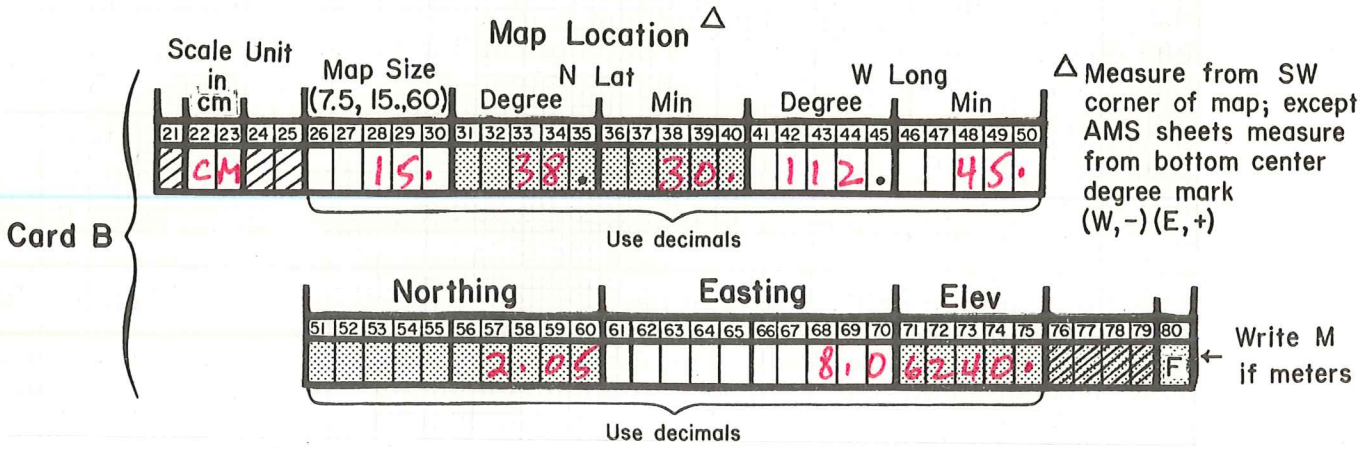
State County Section T R

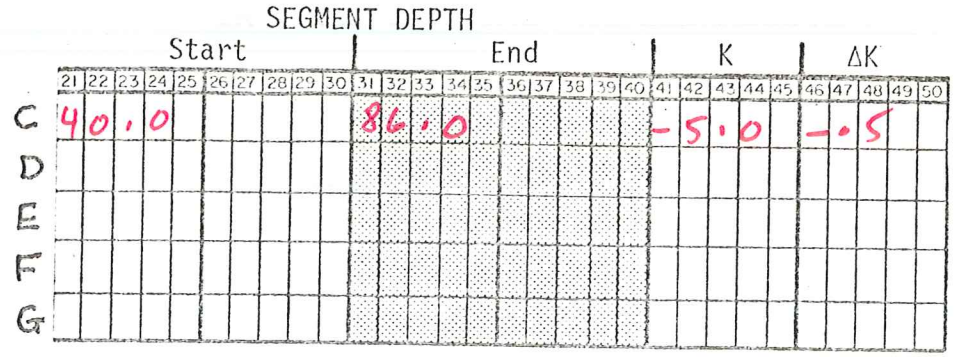
Instrument Operator Elevation ft.

Comments

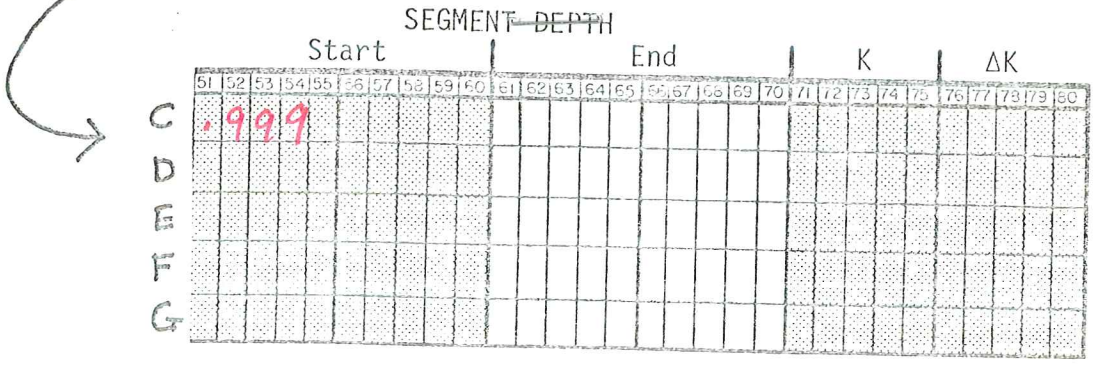
COMPUTER PROCESSING







Continue each card below.



Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~5 MILES S.W. OF CINDER CRATER Date 6-JULY-76

Map COVE FORT UT, 15"

Property BEST T 26S R 8W sec 36 NE¼ NE¼

Drill Hole B-153 Date Drilled 10-JUNE-76 Elevation 6240 ft.

Instrument _____ Operator YEO

Comments 3/4" STEEL PIPE - HUNT GRADIENT HOLE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
36	5725	13.17			NO WATER TILL 35 m
			0.05	25	
38	5714	13.22			
			0.05	25	
40	5703	13.27			
			0.04	20	
42	5694	13.31			
			0.03	15	
44	5686	13.34			
			0.05	25	
46	5676	13.39			
			0.04	20	
48	5666	13.43			
			0.05	25	
50	5655	13.48			
			0.04	20	
52	5645	13.52			
			0.04	20	
54	5636	13.56			
			0.04	20	
56	5627	13.60			
			0.03	15	
58	5620	13.63			
			0.02	10	
60	5615	13.65			
			0.03	15	
62	5608	13.68			
			0.04	20	
64	5600	13.72			
			0.03	15	
66	5593	13.75			
			0.02	10	
68	5588	13.77			
			0.03	15	
70	5582	13.80			
			0.03	15	
72	5576	13.83			
			0.02	10	
74	5570	13.85			GRADIENT 52-86m 15.6°C/Km
			0.04	20	
76	5562	13.89			

TEMPERATURE - DEPTH LOG

Location ______________________ Date ______________

Map ______________________

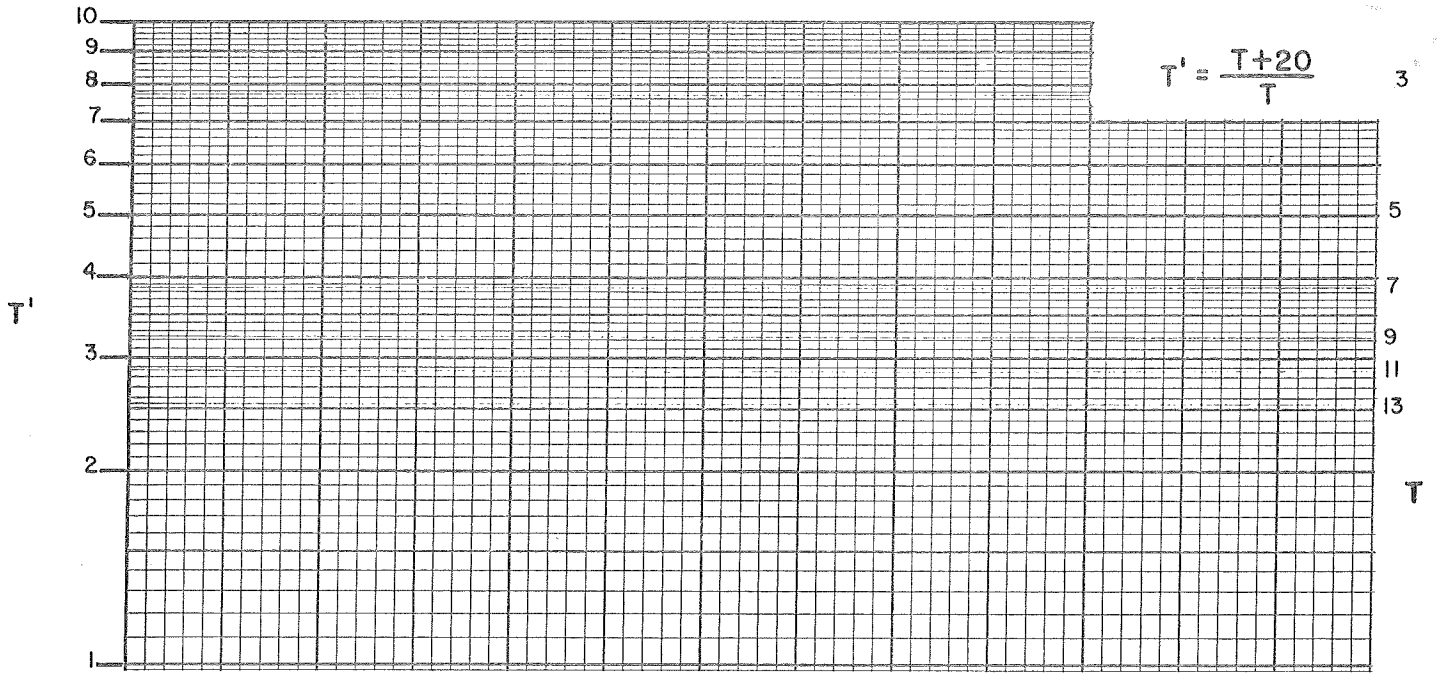
Property ______________ T ______ R ______ sec ______

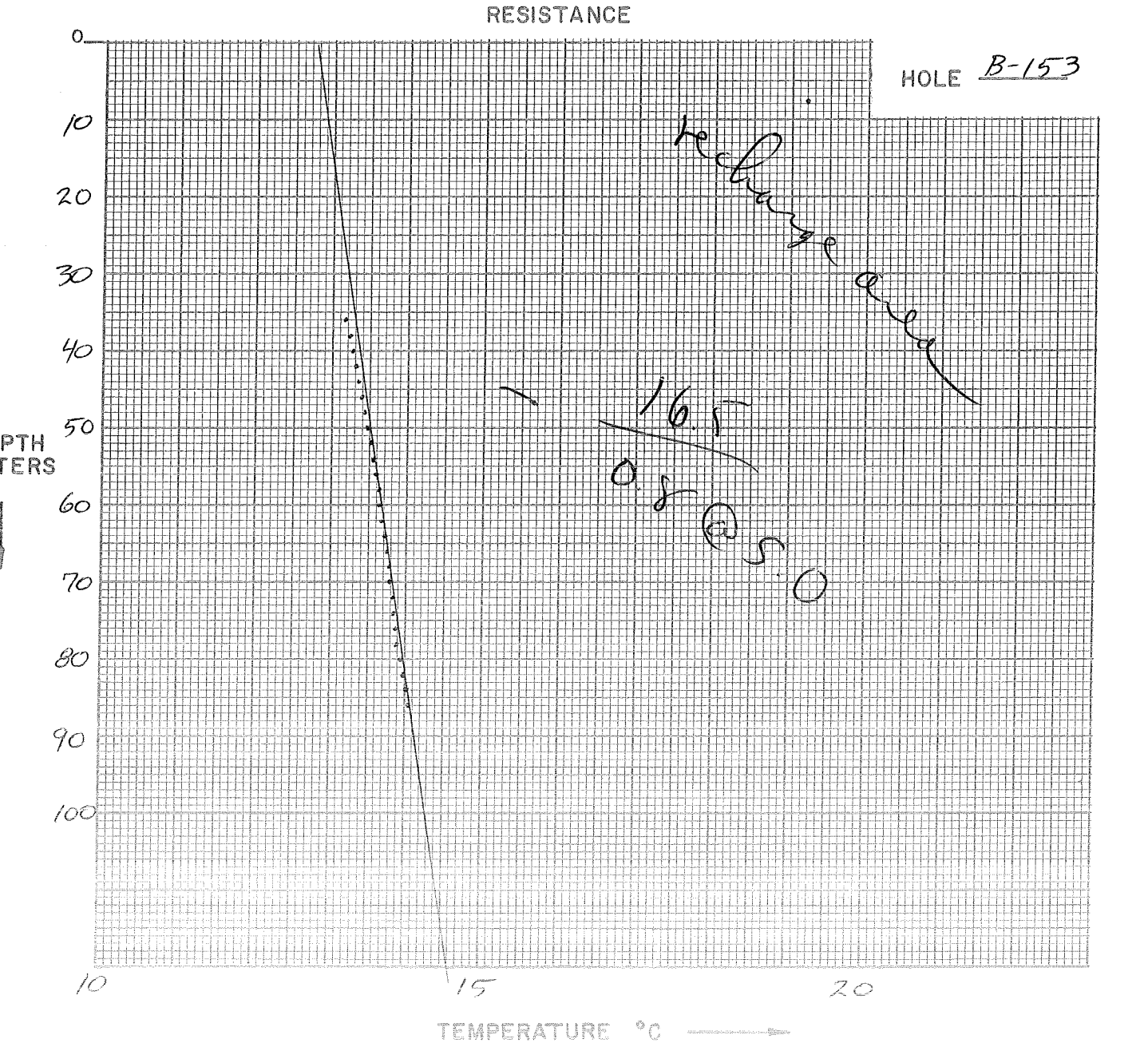
Drill Hole B-153 Date Drilled ______________ Elevation ______ ft.

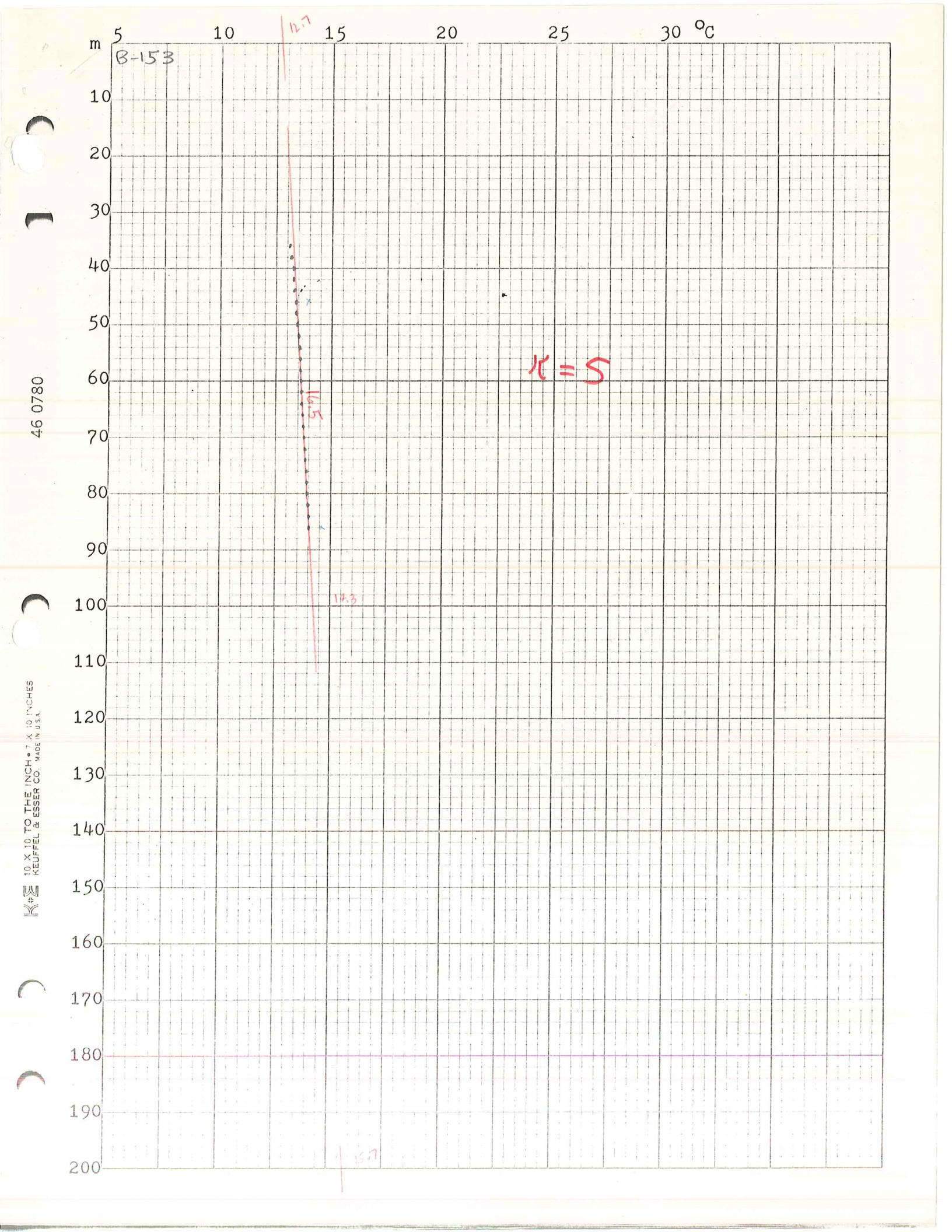
Instrument ______________ Operator ______________

Comments ______________________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
78	5554	13.92	0.03	15		
80	5547	13.96	0.04	20		
82	5540	13.99	0.03	15		
84	5533	14.02	0.03	15		
86	5526	14.05	0.03	15		


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-153
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
10
15
20
TEMPERATURE °C



46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 154

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
755	154	06	JL	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
4.2 KM SOUTH OF CINDER CRATER	JED	MLH

Card B

Map Location △

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
CM	15.	38.	30.	112.	45.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev		
5.2	15.6	6110.		F

5.25 15.35

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	34.0	146.0	-5.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~2.5 MILE S. OF CINDER CRATER Date 6-JULY-76

Map COVE FORT UT. 15"

Property BEST T 26S R 7W sec 21 SE¼ SE¼

Drill Hole B-154 Date Drilled _____ Elevation 6110 ft.

Instrument _____ Operator JED

Comments 3/4" STEEL PIPE, HUNT GRADIENT HOLE.

CUTTING OF F. GRAINED APHANITIC DK-GRAY BSLT NEAR HOLE. POSSIBLY SOME RHYOLITE NEAR SURFACE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
					DRY TO 33 m.
34	5844	12.67			
			0.13	65	
36	5812	12.80			
			0.11	55	
38	5788	12.91			
			0.02	10	
40	5783	12.93			
			0.03	15	
42	5774	12.96			
			0.06	30	
44	5761	13.02			
			0.08	40	
46	5743	13.10			
			0.07	35	
48	5725	13.17			
			0.07	35	
50	5709	13.24			
			0.06	30	
52	5695	13.30			
			0.07	35	
54	5681	13.37			
			0.05	25	
56	5668	13.42			
			0.06	30	
58	5654	13.48			
			0.06	30	
60	5640	13.54			
			0.07	35	
62	5625	13.61			
			0.07	35	
64	5610	13.68			
			0.04	20	
66	5599	13.72			
			0.06	30	
68	5587	13.78			
			0.05	25	
70	5576	13.83			GRADIENT 86-146 m 26.2°C/Km
			0.05	25	
72	5563	13.88			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-154 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
74	5550	13.94	0.06	30		
76	5537	14.00	0.06	30		
78	5526	14.05	0.05	25		
80	5514	14.10	0.05	25		
82	5502	14.16	0.06	30		
84	5490	14.21	0.05 ~~0.06~~	25		
86	5479	14.26	0.05	25		
88	5466	14.32	0.06	30		
90	5455	14.37	0.05	25		
92	5442	14.42	0.05	25		
94	5430	14.49	0.07	35		
96	5419	14.54	0.05	25		
98	5407	14.59	0.05	25		
100	5396	14.64	0.05	25		
102	5384	14.70	0.06	30		
104	5373	14.75	0.05	25		
106	5362	14.80	0.05	25		
108	5351	14.85	0.05	25		
110	5340	14.90	0.05	25		
112	5327	14.96	0.06	30		
114	5316	15.01	0.05	25		

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

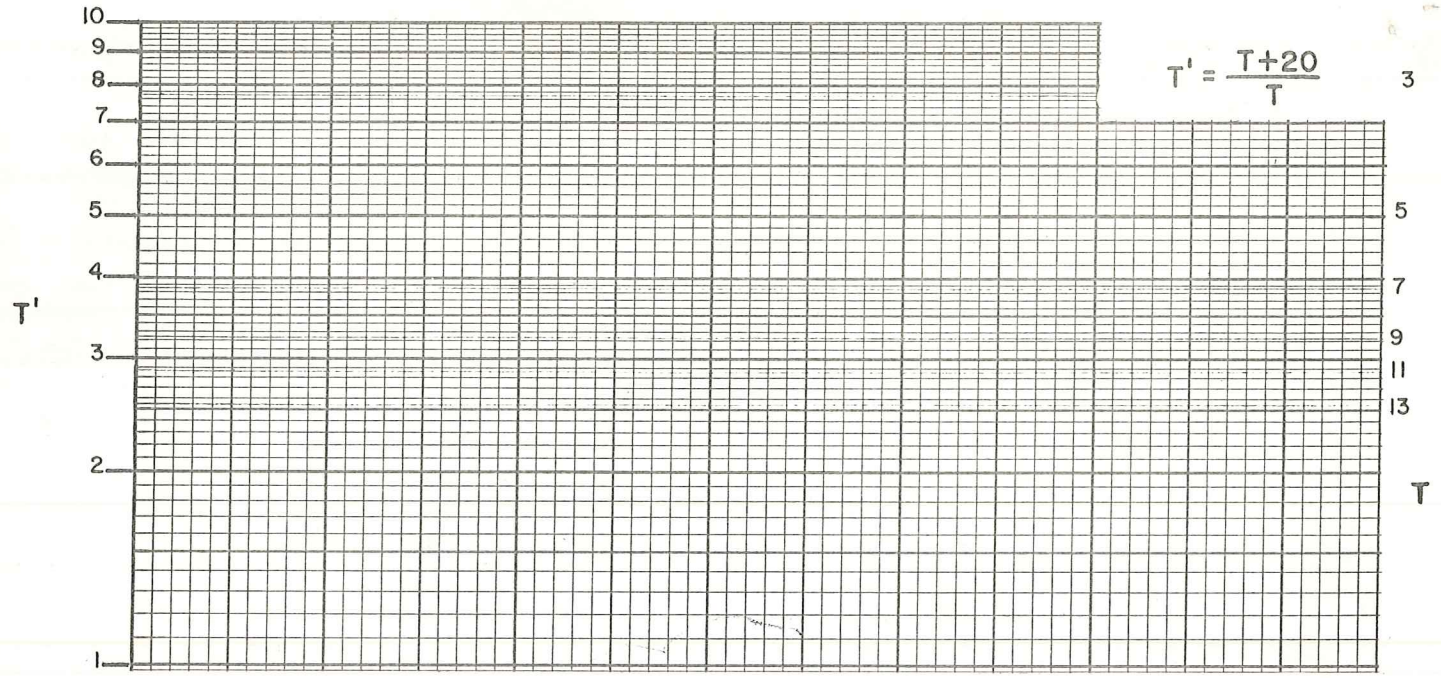
Property _____ T ____ R ____ sec ____

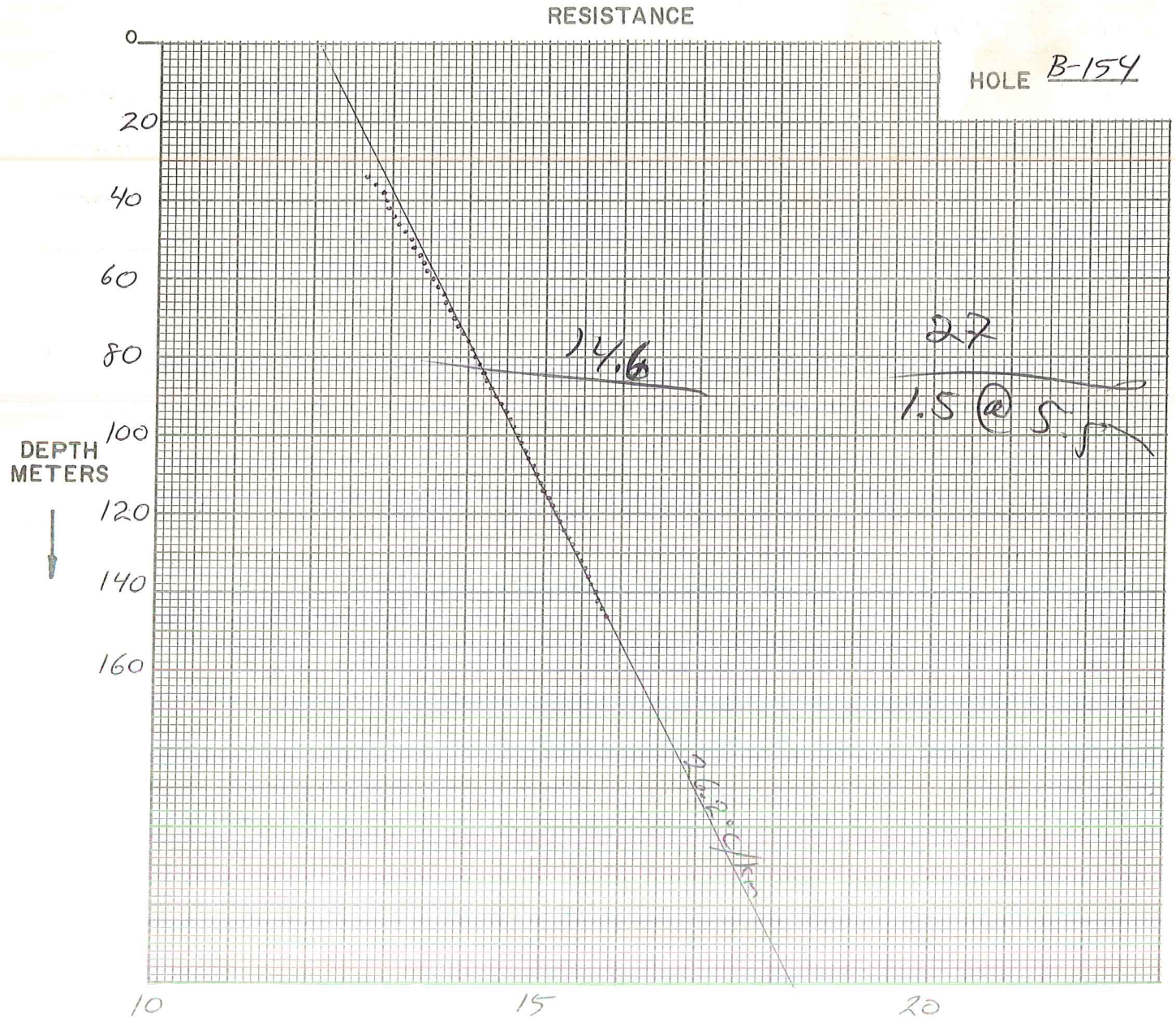
Drill Hole B-154 Date Drilled _____ Elevation ____ ft.

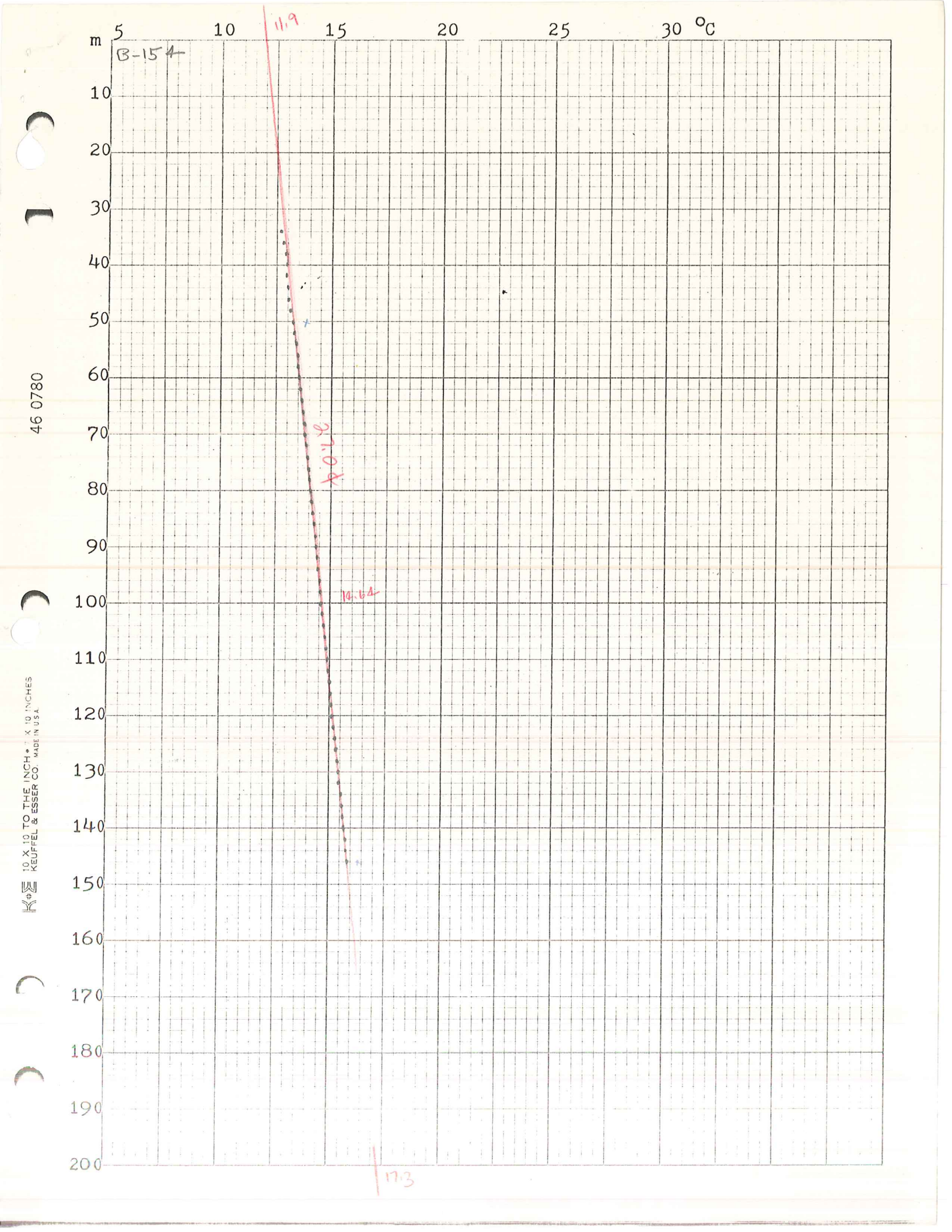
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
116	5305	15.07	0.06	30	
118	5294	15.12	0.05	25	
120	5283	15.17	0.05	25	
122	5272	15.22	0.05	25	
124	5261	15.27	0.05	25	
126	5250	15.33	0.06	30	
128	5239	15.38	0.05	25	
130	5228	15.43	0.05	25	
132	5217	15.48	0.05	25	
134	5206	15.54	0.06	30	
136	5196	15.59	0.05	25	
138	5186	15.63	0.04	20	
140	5176	15.68	0.05	25	
142	5166	15.73	0.05	25	
144	5156	15.78	0.05	25	
146	5146	15.83	0.05	25	
~~148~~					


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-154
0
20
40
60
80
100
120
140
160
DEPTH METERS
14.6
27
1.5 @ 5.5
10
15
20
TEMPERATURE °C



46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 155

Property-Project Best

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	19	20
755	155	06	JL	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
NORTH END OF FOURMILE RIDGE	JED	/ MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	80
3.65	13.46	200.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	16.0	26.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	26.0	36.0	-5.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location N. END OF FOURMILE RIDGE Date 6-JULY-76

Map COVE FORT UT, 15"

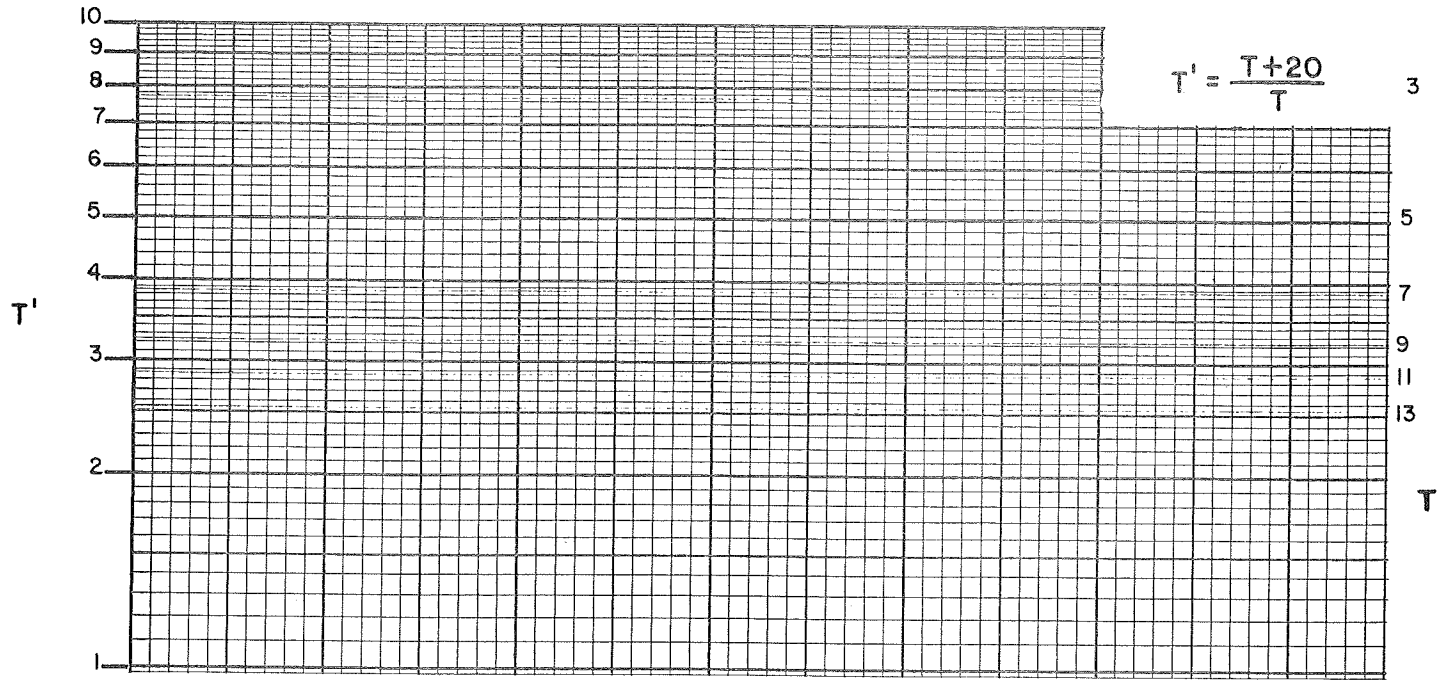
Property BEST T 26S R 7W sec 28 SW¼ NW¼

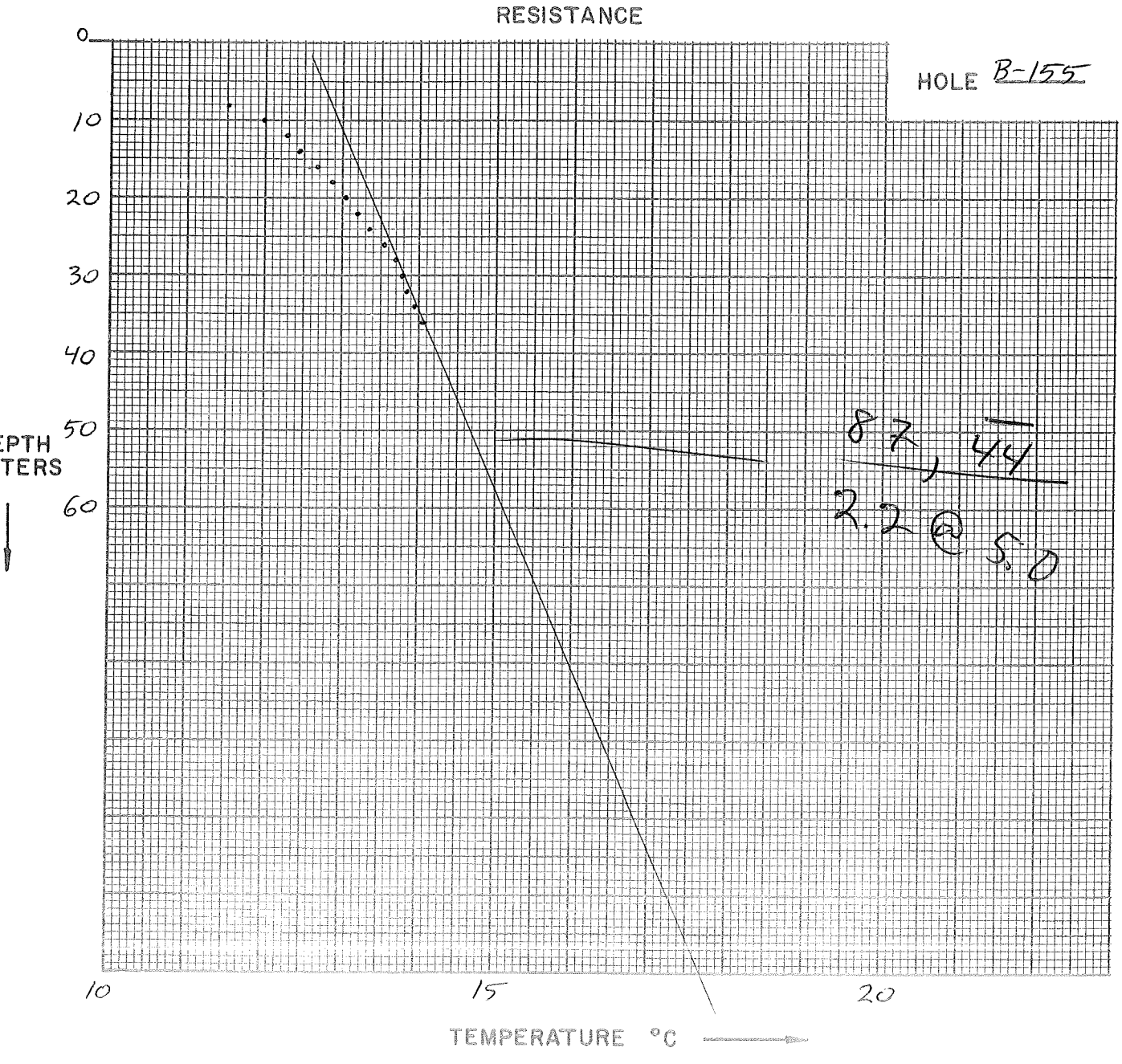
Drill Hole B-155 Date Drilled ____ Elevation 6200 ft.

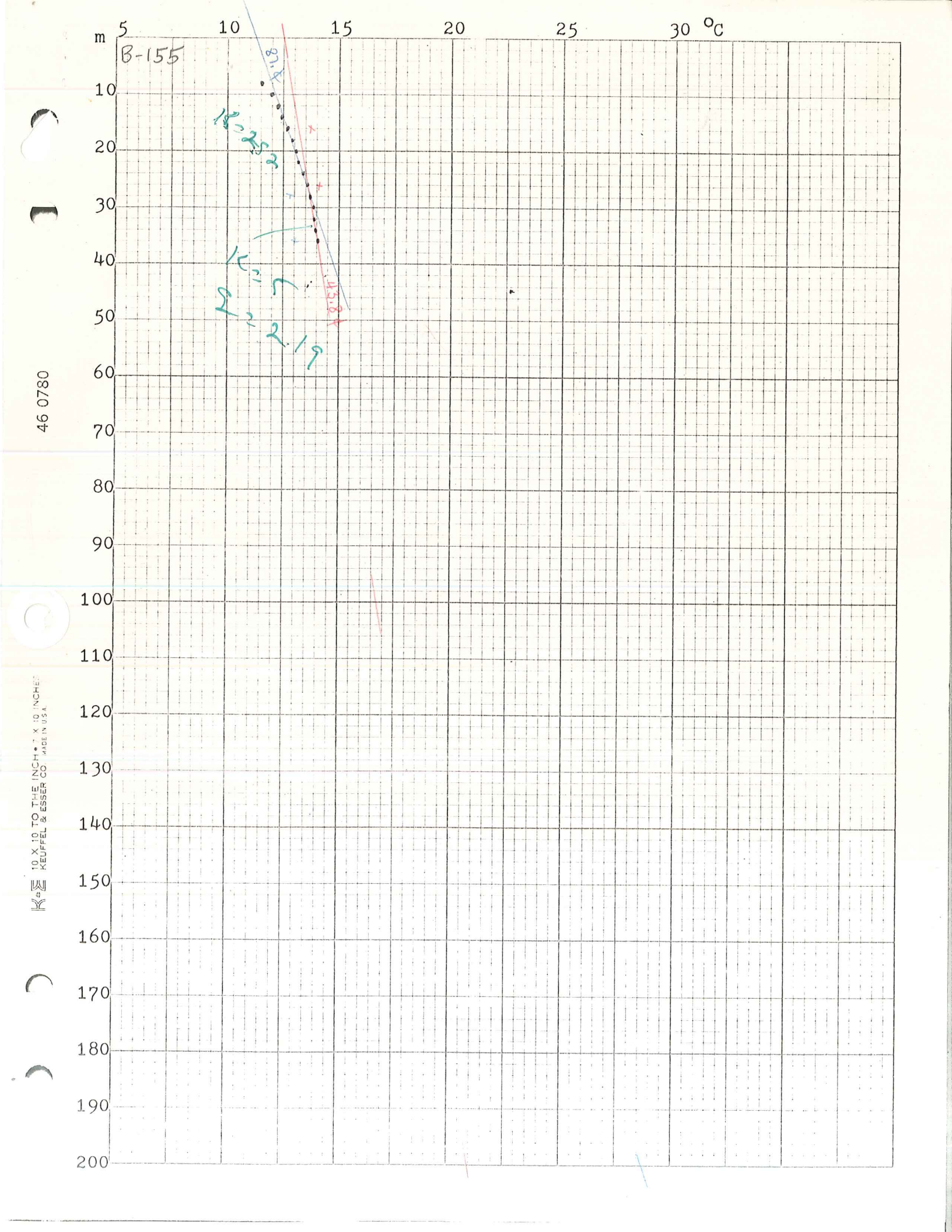
Instrument ____ Operator JCD

Comments 3/4" STEEL PIPE. HUNT GRADIENT HOLE - WELDED TUFF & MINOR CRYSTAL RICH RHYOLITE. APPARENTLY BOTTOMED IN TUFF. ADJACENT HILL XL-RHYOLITE ~50% XLS OF QTZ, K-SPAR & BIO.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
8	6125	11.52			
			0.47		
10	6009	11.99			
			0.29	145	
12	5938	12.28			
			0.17	85	
14	5897	12.45			
			0.23	115	
16	5842	12.68			
			0.19	95	
18	5796	12.87			
			0.17	85	
20	5757	13.04			
			0.16	80	
22	5718	13.20			
			0.17	85	
24	5679	13.37			
			0.18	90	
26	5639	13.55			
			0.15	75	
28	5604	13.70			
			0.10	50	
30	5581	13.80			
			0.04	20	
32	5573	13.84			
			0.12	60	
34	5547	13.96			
			0.09	45	
36	5527	14.05			GRADIENT 28-36m 43.8°C/Km


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-155
DEPTH METERS
0
10
20
30
40
50
60
10
15
20
TEMPERATURE °C
87, 44
2.2 @ 5.0



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TEMPERATURE DEPTH LOG

ΔT Well No. 156

Property-Project ~~Best~~ Thermex   Depth Logged ______

Map ______ Scale ______ Date: Drilled ______ Logged ______

State ______ County ______ Section ______ T ______ R ______

Instrument ______ Operator ______ Elevation ______ ft.

Comments ______

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
~~755~~ 77	156	11	0C	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
7.0 KM NNW OF COVE FORT, UTAH	DP	/KLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	30.	112.	45.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
28.1	19.0 (18.75)	6140.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	~~35.0~~ 30.0	150.0		
D	260.0	370.0		
E	390.0	430.0		
F	490.0	550.0		−.5
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	150.0	260.0	−7.0	.5
D	370.0	390.0		
E	440.0	490.0		
F	.999			
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1 Mile SW of Dog Valley Date Oct. 11, 1976

Map Cove Fort Utah 15' Quad

Property T 24 S R 7W sec SWSWSW 2

Drill Hole B-156 Date Drilled Elevation ft.

Instrument Probe # 44 Operator RP

Comments 2" iron pipe subtract 1 meter for ground level Phillips Obs. well Second Log

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	98.70	17.59			
10	99.50	17.36			
15	90.41	20.055	2.715	543	
20	83.10	22.370	1.915	383	
25	77.41	24.285	1.020	204	
30	74.52	25.305	.955	191	
35	71.90	26.260	.910	182	
40	69.47	27.170	.870	174	
45	67.22	28.040	.915	183	
50	64.92	28.955	.900	180	
55	62.73	29.855	.850	170	
60	60.71	30.705	.875	175	
65	58.71	31.580	.915	183	
70	56.68	32.495	.850	170	
75	54.56	33.365	.930	186	
80	52.57	34.295	.885	177	
85	51.09	35.180	.880	176	
90	49.37	36.060	.860	172	
95	47.75	36.920	.895	179	
100	46.16	37.795	.870	174	
105	44.62	38.665	.860	172	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole _____ Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
110	43.15	39.525			
115	41.67	40 425	.900	180	
120	40.39	41.285	.860	172	
125	39.04	42105	.820	164	
130	37.69	43.010	.905	181	
135	36.52	43 825	.815	163	
140	35.34	44670	.845	169	
145	34.07	45.620	.950	190	
150	32.89	46,530	.910	182	
155	31.59	47.550	.720	144	
160	30.26	48.708	.850	170	
165	28.92	49.880	1.180	236	
170	27.91	50 510	.630	126	
175	26.82	51860	1.350	270	
180	25.87	52 810	.950	190	
185	24.86	53 860	1.050	210	
190	24.00	54 800	.940	188	
195	23 11	55 810	1.010	202	
200	22.29	56.770	.960	192	
205	21.55	57,680	.910	182	
210	20.73	58730	1.050	210	
			.970	194	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole _____ Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
215	20.00	59.700			
220	19.220	60.780	1,080	218	
225	15.574	61.715	.935	187	
230	17.799	62.895	1.120	236	
235	17.168	63.890	.995	199	
240	16.499	64.995	1,105	221	
245	15.965	65.920	.925	185	
250	15.363	67.000	1.080	214	
255	14.750	68.155	1.155	231	
260	14.211	69.215	1,060	212	
265	13.753	70.160	945	169	
270	13.283	71.160	1,000	200	
275	12.907	71.995	.835	167	
280	12.653	72.575	.580	116	
285	12.265	73.490	.925	185	
290	11.984	74.175	.685	137	
295	11.587	75.170	.995	199	
300	11.300	75.915	.645	129	
305	11.016	76.680	.765	153	
310	10.716	77.515	.835	167	
315	10.410	78.395	.880	176	
			.920	184	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole _____ Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
320	10.100	79.715			
325	9791	80 270	.955	191	
330	9,522	81.130	.860	172	
335	9.254	82.020	.890	178	
340	8.977	82 965	.945	189	
345	8663	84095	1.130	226	
350	8424	84975	.890	178	
355	8218	85780	.795	159	
360	7.962	86800	1.020	204	
365	7.832	87335	.535	107	
370	7723	87790	.465	93	
375	7.636	88160	.350	70	
380	7.590	88360	.200	40	
385	7.380	89.280	.920	184	
390	7.364	89355	.075	25	
395	7.351	89410	.055	11	
400	7.351	89410	—	—	
405	7.346	89435	.025	05	
410	7.338	89470	.035	7	
415	7.306	89615	.145	29	
420	7.306	89.615	—		
			.020	4	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole _____ Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
425	7.301	89635			
			.050	10	
430	7.290	89685			
			.045	9	
435	7.281	89730			
			.110	22	
440	7.054	90.640			
			.160	32	
445	7.050	90.800			
			.010	2	
450	7.048	90.810			
			.010	2	
455	7.046	90.822			
			.010	2	
460	7.044	90830			
			.005	1	
465	7.043	90835			
470	7.043	90.835			
			.005	1	
475	7.042	90840			
			.005	1	
480	7.041	90845			
			.005	1	
485	7.040	90850			
			.015	3	
490	7.037	90865			
			.025	5	
495	7.031	90890			
			.040	8	
500	7.023	90930			
			.030	6	
505	7.017	90.960			
			.040	8	
510	7.008	91.000			
			.025	5	
515	7.003	91.025			
			.030	6	
520	6.997	91055			
			.035	7	
525	6.992	91.080			
			.010	2	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

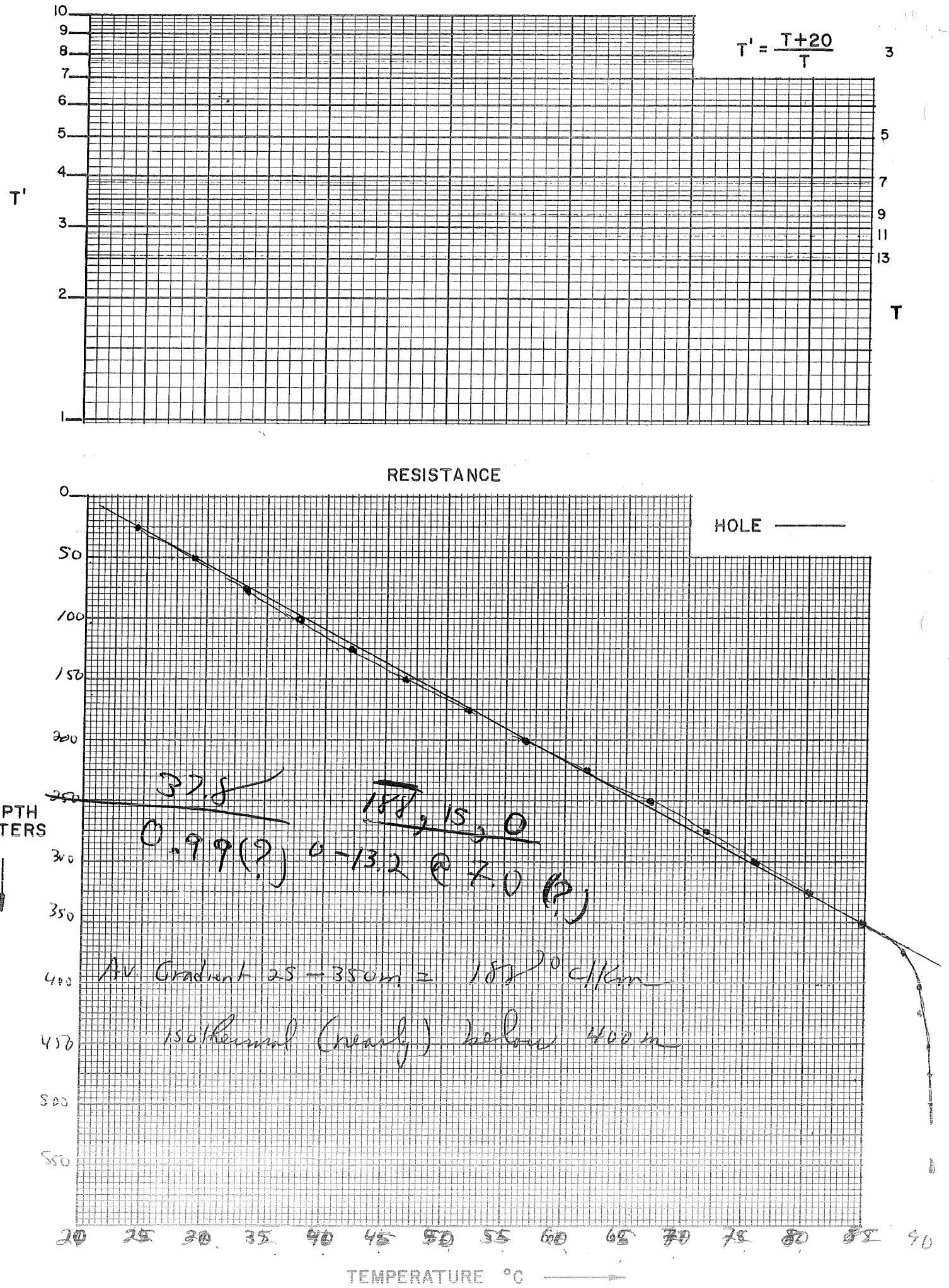
Property _____ T ____ R ____ sec ____

Drill Hole _____ Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
530	0.990	91.040			
535	0.987	91.100	.010	2	
540	0.987	91.100	—	0	
545	0.998	91.050	-.050	10	
550	0.999	91.045	-.005	1	
555					


T' = (T+20)/T
T'
T
RESISTANCE
HOLE
DEPTH METERS
TEMPERATURE °C
32.8
0.99(?) Ω -13.2 @ 7.0 (?)
18?, 15.0
Av. Gradient 25 – 350m = 18? °C/Km
Isothermal (nearly) below 400 m

K+E 10 X 10 TO THE INCH • 10 X 15 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

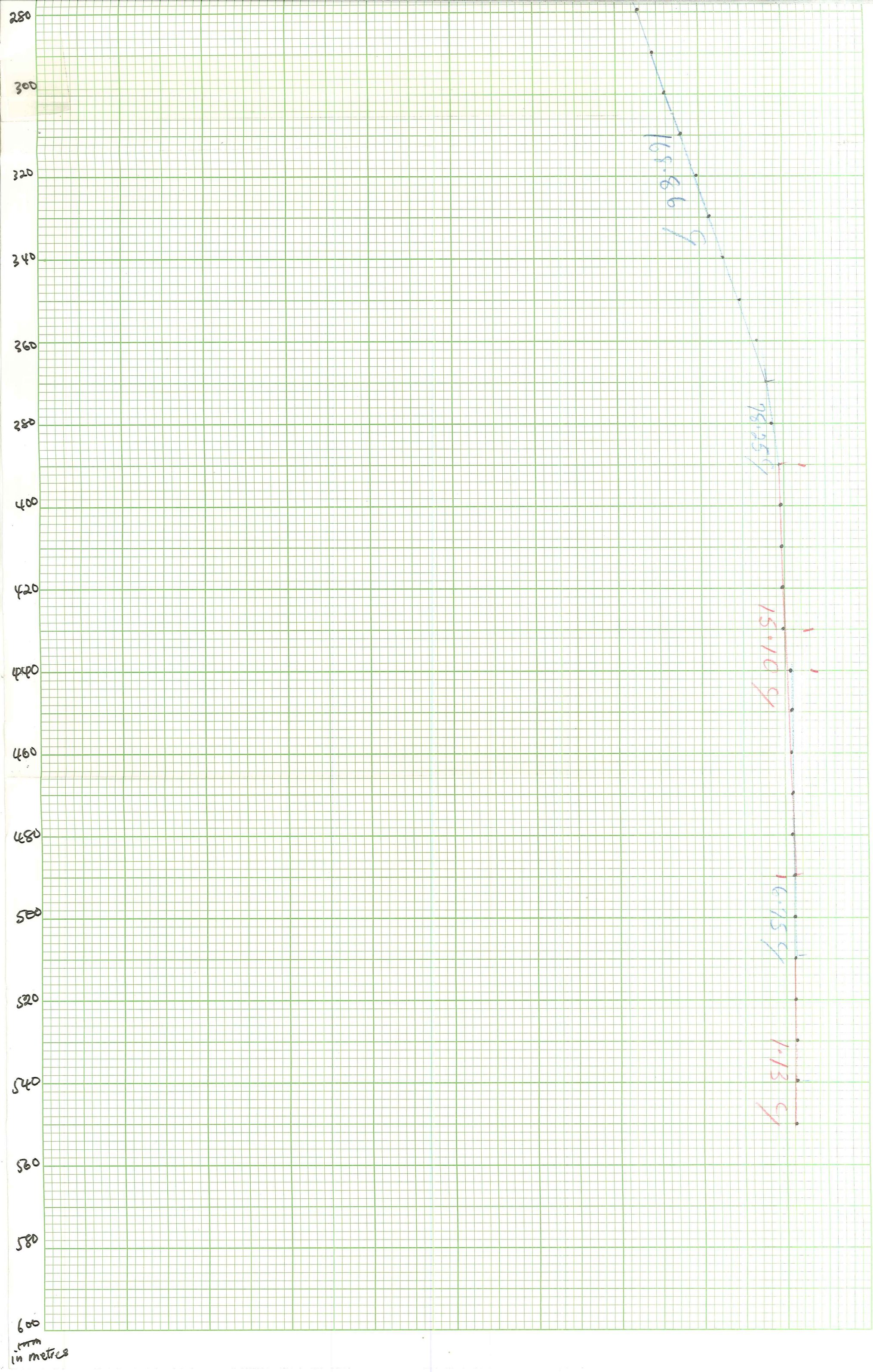
B-156 47 0780

DEPTH IN METRES

0 10 20 30 40 50 60 70 80 90 100°C

20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320

$\frac{37.8}{0.98} \quad \frac{0-397.25\ (\overline{184.})}{12.88 @ 7.0}$


280
300
320
340
360
380
400
420
440
460
480
500
520
540
560
580
600
mm
in metres
16.86 g
15.10 g
16.75 g
1.13 g

TEMPERATURE - DEPTH LOG

Location ~1 MILE W. OF DOG VALLEY Date 7-JULY-76

Map COVE FORT UT. 15"

Property BEST T 25S R 7W sec 2 SW¼ SW¼

Drill Hole B-156 Date Drilled ____ Elevation 6140 ft.

Instrument ____ Operator JED

Comments 2" STEEL PIPE SET INSIDE 10" STEEL CASING. PHILLIPS OBSERVATION WELL. DK-GRAY LIMESTONE AT SURFACE AS FLOAT. NEAR BY HILLS OF WHITE TO PINK QUARTZITE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
15	4491	19.29			
			2.54	508	
20	4071	21.83			HOLE REPORTEDLY 673m DEEP
			1.94	388	
25	3782	23.77			
			0.95	190	
30	3649	24.72			
			0.95	190	
35	3522	25.67			
			0.88	176	
40	3409	26.55			
			0.89	178	
45	3299	27.44			
			0.90	180	
50	3192	28.34			
			0.91	182	
55	3087	29.25			
			0.88	176	
60	2991	30.13			
			0.87	174	
65	2898	31.00			
			0.89	178	
70	2807	31.89			
			0.92	184	
75	2717	32.81			
			0.91	182	
80	2631	33.72			
			0.92	184	
85	2548	34.64			
			0.85	170	
90	2473	35.49			
			0.89	178	
95	2398	36.38			
			0.90	180	
100	2325	37.28			
			0.87	174	
105	2257	38.15			GRADIENT 55-155m 176.5 °C/Km
			0.88	176	GRADIENT PICKS UP ON LAST
110	2190	39.03			TWO STATIONS.
			0.92	184	
115	2123	39.95			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

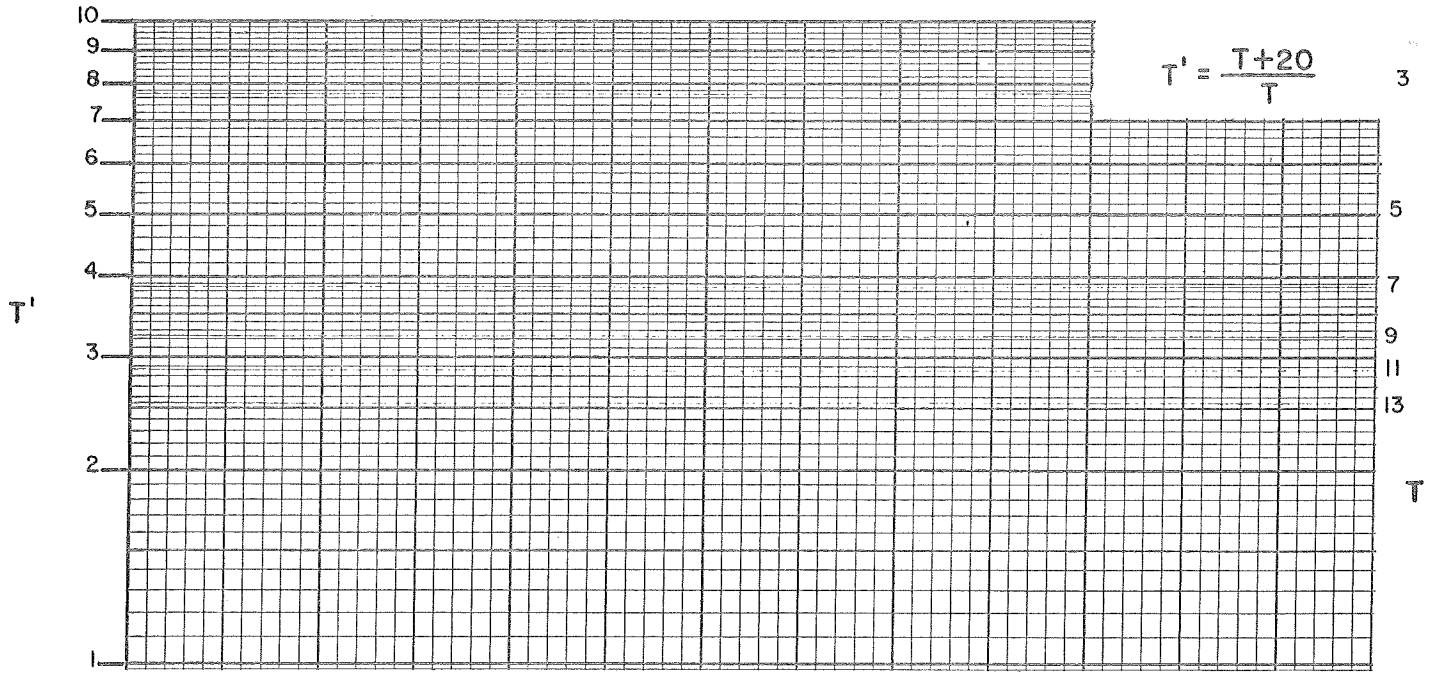
Property _____ T _____ R _____ sec _____

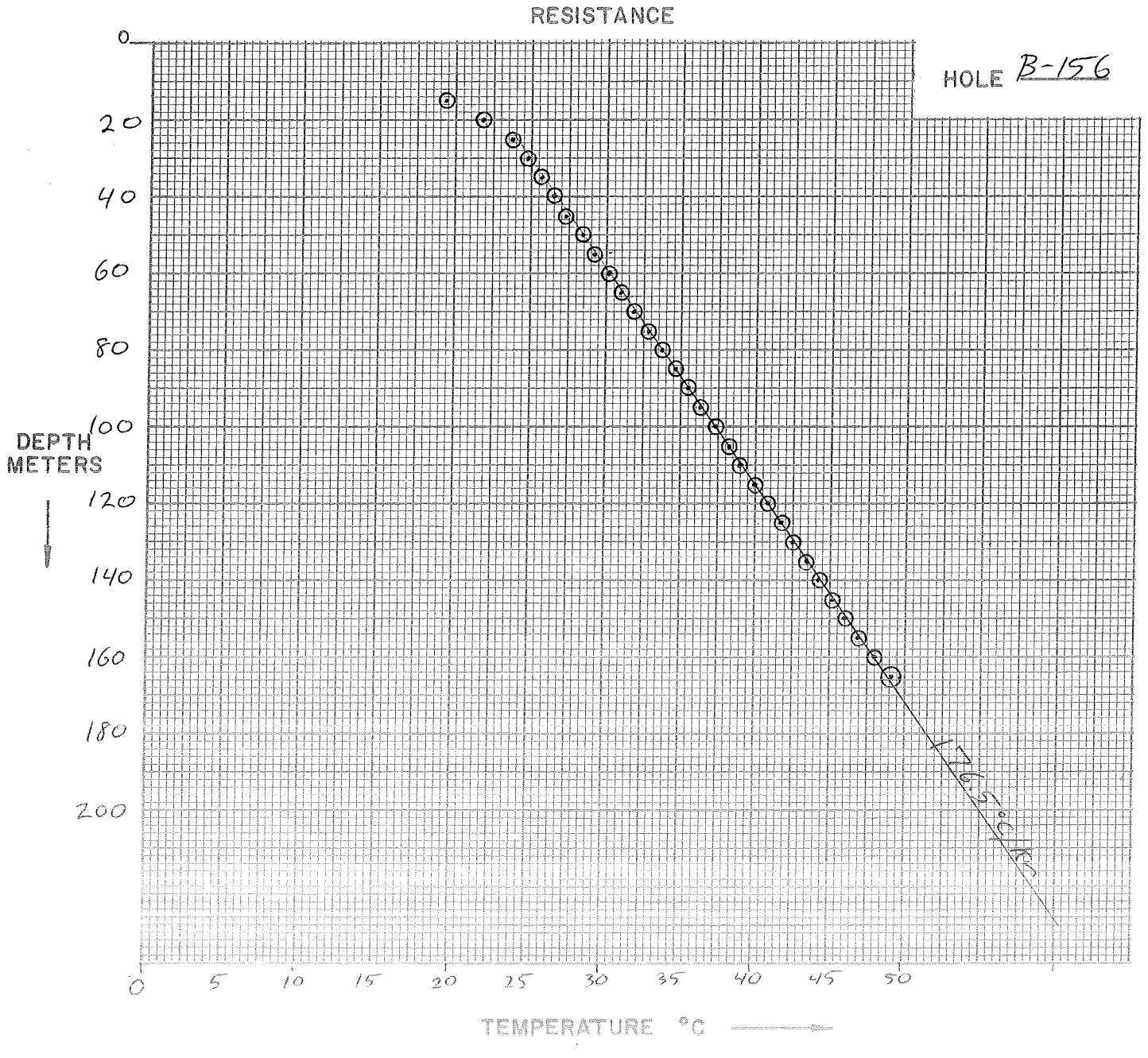
Drill Hole B-156 Date Drilled _____ Elevation _____ ft.

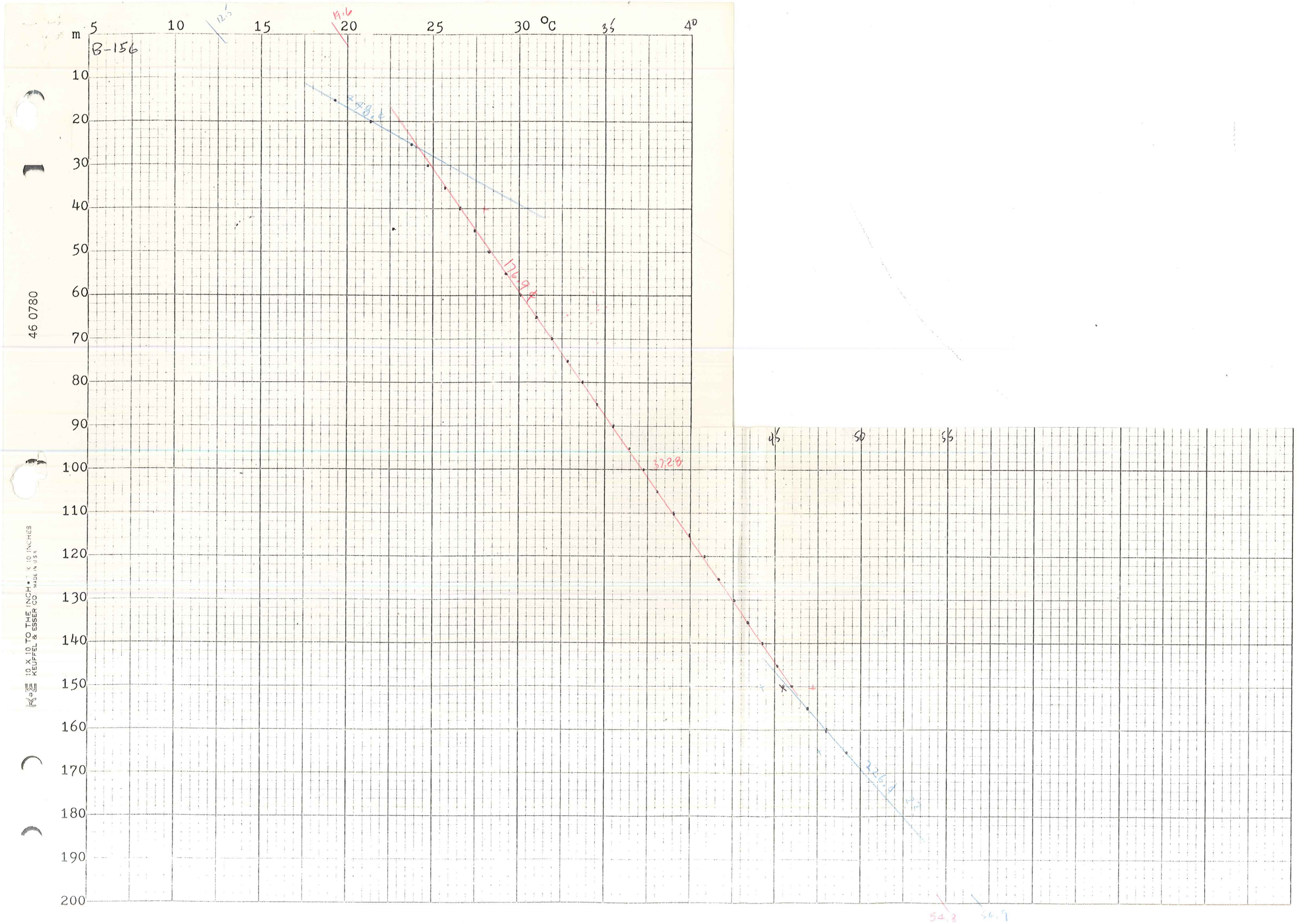
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
120	2062	40.82	0.87	174	
125	2003	41.69	0.87	174	
130	1946	42.56	0.87	174	
135	1891	43.43	0.87	174	
140	1840	44.27	0.84	168	
145	1788	45.15	0.88	176	
150	1739	46.01	0.86	172	
155	1690	46.90	0.89	178	
160	1631	48.01	1.11	222	
165 ~~170~~	1573	49.16	1.15	230	
170	1521				TOO WARM FOR PROBE


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-156
DEPTH METERS
0
20
40
60
80
100
120
140
160
180
200
0
5
10
15
20
25
30
35
40
45
50
TEMPERATURE °C



m
5
10
15
20
25
30
°C
35
40
B-156
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
45
50
55
12.5
19.6
48.4
176.9
37.28
226.4
54.8
56.9
46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
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TEMPERATURE DEPTH LOG

ΔT Well No. 157

Property-Project Rest Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No	Well No	Date Logged DA	MO	YR	*
755	157	31	JL	78	CM

* 19-Write F if Fahrenheit, 20-Write F if Feet

Site Description	Operator	Editor
4.8 KM WNW OF CINDER CRATER	JED	MLH

Card B

Map Location Δ

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
14.65	8.3	5805.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	10.0	20.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	20.0	42.0	-5.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE DEPTH LOG

ΔT Well No. 157

Property-Project Rest Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 5 7	1 1	J L	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
4 . 8 K M W N W D F C I N D E R C R A T E R	J E D	M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location △ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	3 0 .	1 1 2 .	4 5 .

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
1 4 . 6 5	8 . 3 5 8 0 5 .		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50			
C	1 0 . 0	2 0 . 0		
D	. 9 9 9			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	2 0 . 0	4 2 . 0	- 5 . 0	- . 5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ALONG BOTTOM OF HORSE FLAT, ~3 MILES W. OF CINDER CRATER Date 11-JULY-76

Map COVE FORT 15"

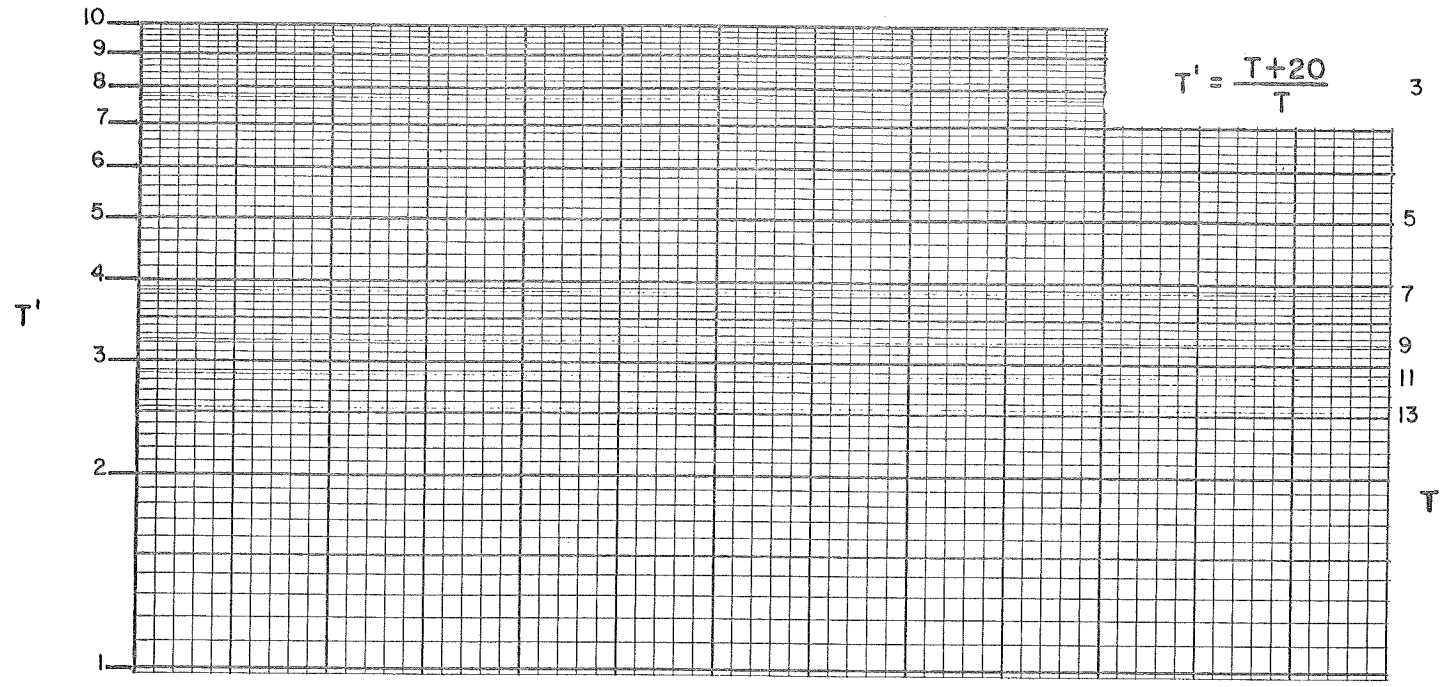
Property BEST T 26S R 7W sec 6 NW¼ NW¼

Drill Hole B-157 Date Drilled _____ Elevation 5805 ft.

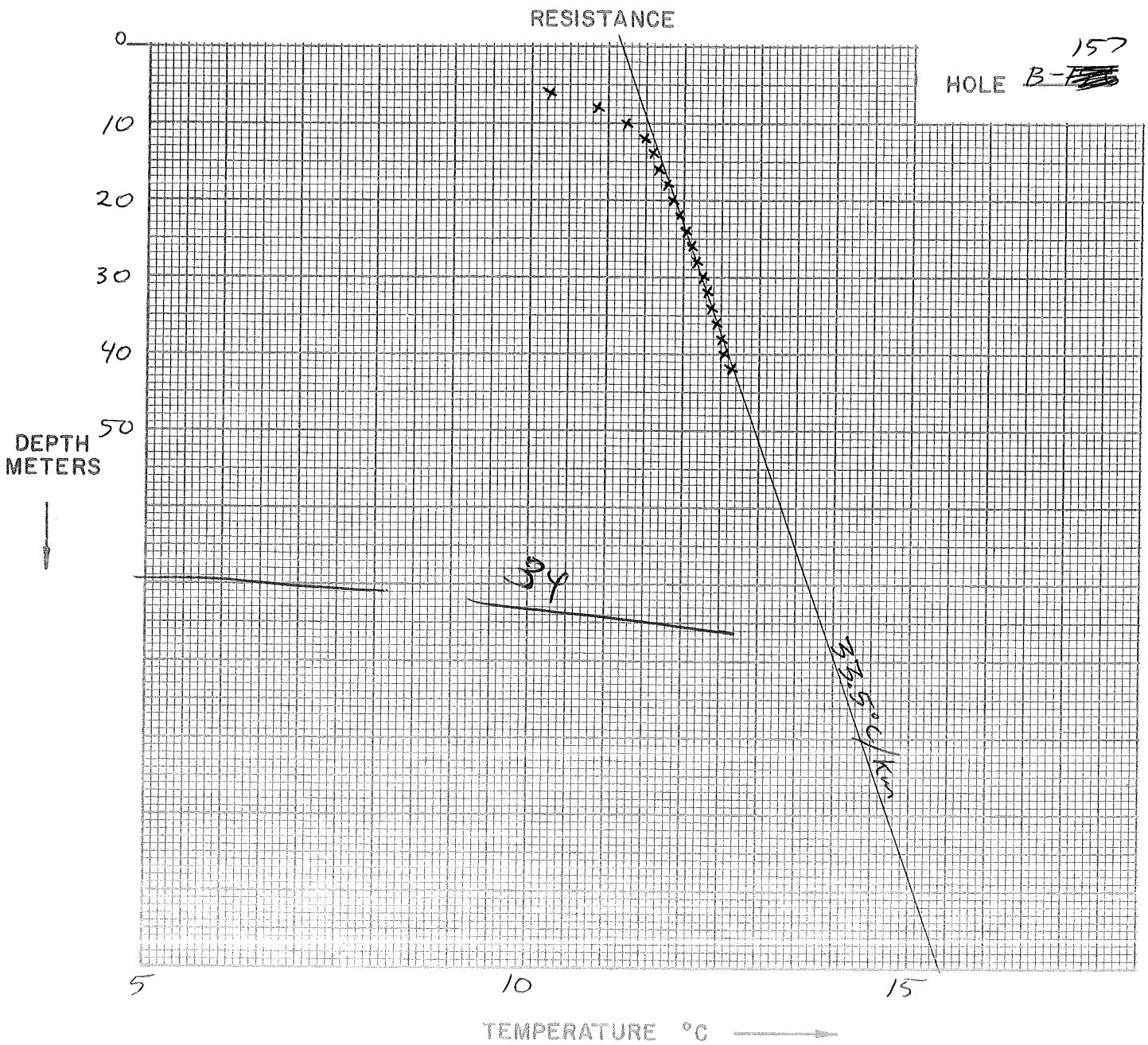
Instrument _____ Operator JED

Comments 1" PVC PIPE. CUTTINGS OF DK-GRAY BASALT & RED SCORIA. POSSIBLY BOTTOMED IN CINDER ZONE. (STAKE WITH HOLE #6)

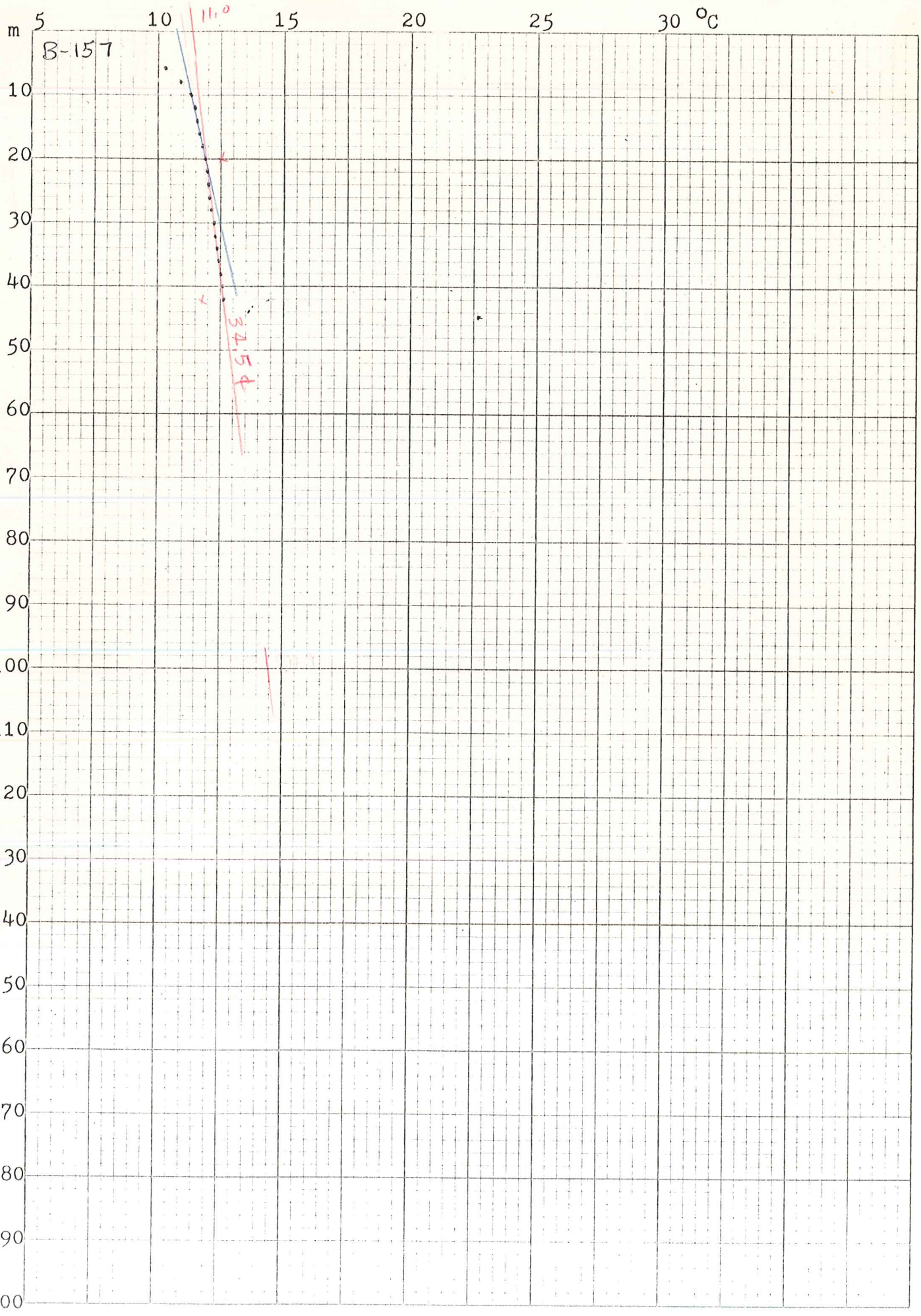
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6449	10.27			
			0.60	300	
8	6291	10.87			
			0.39	195	
10	6191	11.26			
			0.23	115	
12	6133	11.49			
			0.11	55	
14	6104	11.60			
			0.09	45	
16	6081	11.69			
			0.10	50	
18	6058	11.79			
			0.08	40	
20	6037	11.87			
			0.09	45	
22	6016	11.96			
			0.07	35	
24	5997	12.03			
			0.08	40	
26	5979	12.11			
			0.07	35	
28	5961	12.18			
			0.07	35	
30	5945	12.25			
			0.06	30	
32	5929	12.31			
			0.07	35	
34	5913	12.38			
			0.07	35	
36	5897	12.45			
			0.06	30	
38	5883	12.51			
			0.05	25	
40	5869	12.56			
			0.07	35	
42	5854	12.63			GRADIENT 22-42m 33.5°C/Km



T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13



RESISTANCE
HOLE B-157
DEPTH METERS
0
10
20
30
40
50
34
33.5°C/km
5
10
15
TEMPERATURE °C



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TEMPERATURE DEPTH LOG

ΔT Well No. 158

Property-Project Rest Thermet Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12 13 14 15	16 17 18	19 20	
7355	158	13	JL	76	CM

77

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
1.8 KM NW OF COVE FORT, UTAH	JED	HLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
19.3	20.9	5930.	F

20.55

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	10.0	30.0		
D	92.0	112.0	-4.0	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	36.0	80.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~1 MILE W.-NW OF COVE FORT. W. SIDE COVE FORT VLY. Date 13-JULY-76

Map COVE FORT, UT. 15"

Property THERMEX T 25S R 7W sec 26 SE¼ NE¼

Drill Hole B-158 Date Drilled _____ Elevation 5930 ft.

Instrument _____ Operator JED

Comments OLD PILE OF CUTTINGS WITH VARIOUS RK. TYPES LIMESTONE, RHYOLITE, VOLCANIC BRECCIA.

12" ~~10"~~ STEEL CASING. ABANDONED WATER WELL. 3/4" PVC INSIDE CASING.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
8	6042	11.85			
			0.65	325	
10	5884	12.50			
			0.37	185	
12	5796	12.87			
			0.28	140	
14	5730	13.15			
			0.27	135	
16	5669	13.42			
			0.30	150	
18	5599	13.72			
			0.26	130	
20	5542	13.98			
			0.24	120	
22	5489	14.22			
			0.23	115	
24	5437	14.45			
			0.24	120	
26	5385	14.69			
			0.33	165	
28	5314	15.02			
			0.16	80	
30	5280	15.18			
			0.03	15	
32	5275	15.21			
			0.06	30	
34	5262	15.27			
			0.12	60	
36	5237	15.39			
			0.06	30	
38	5224	15.45			
			0.03	15	
40	5218	15.48			
			0.02	10	
42	5214	15.50			
			0.01	5	
44	5212	15.51			
			-0.01	-5	
46	5213	15.50			
			0.02	10	
48	5210	15.52			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T _____ R _____ sec _____

Drill Hole B-158 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
50	5209	15.52			
			0.00	0	
52	5209	15.52			
			0.02	10	
54	5206	15.54			
			-0.01	-5	
56	5207	15.53			
			0.01	5	
58	5206	15.54			
			0.00	0	
60	5206	15.54			
			0.00	0	
62	5205	15.54			
			0.01	5	
64	5204	15.55			
			-0.01	-5	
66	5205	15.54			
			0.00	0	
68	5205	15.54			
			0.02	10	
70	5202	15.56			
			0.01	5	
72	5200	15.57			
			0.01	5	
74	5197	15.58			
			0.00	0	
76	5198	15.58			
			0.01	5	
78	5194	15.59			
			0.06	30	
80	5183	15.65			
			0.19	95	
82	5144	15.84			
			0.09	45	
84	5126	15.93			
			0.04	20	
86	5118	15.97			
			0.00	0	
88	5116	15.97			
			0.01	5	
90	5115	15.98			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

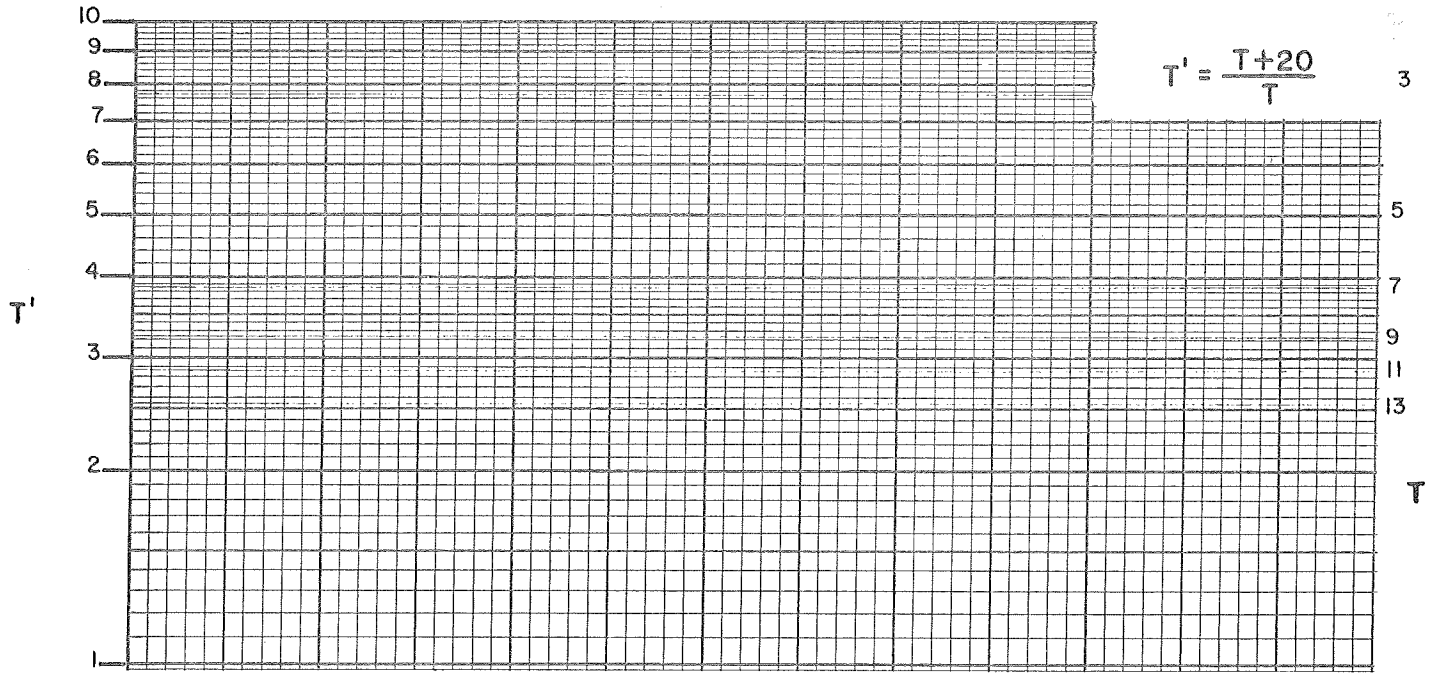
Property _____ T _____ R _____ sec _____

Drill Hole B-158 Date Drilled _____ Elevation _____ ft.

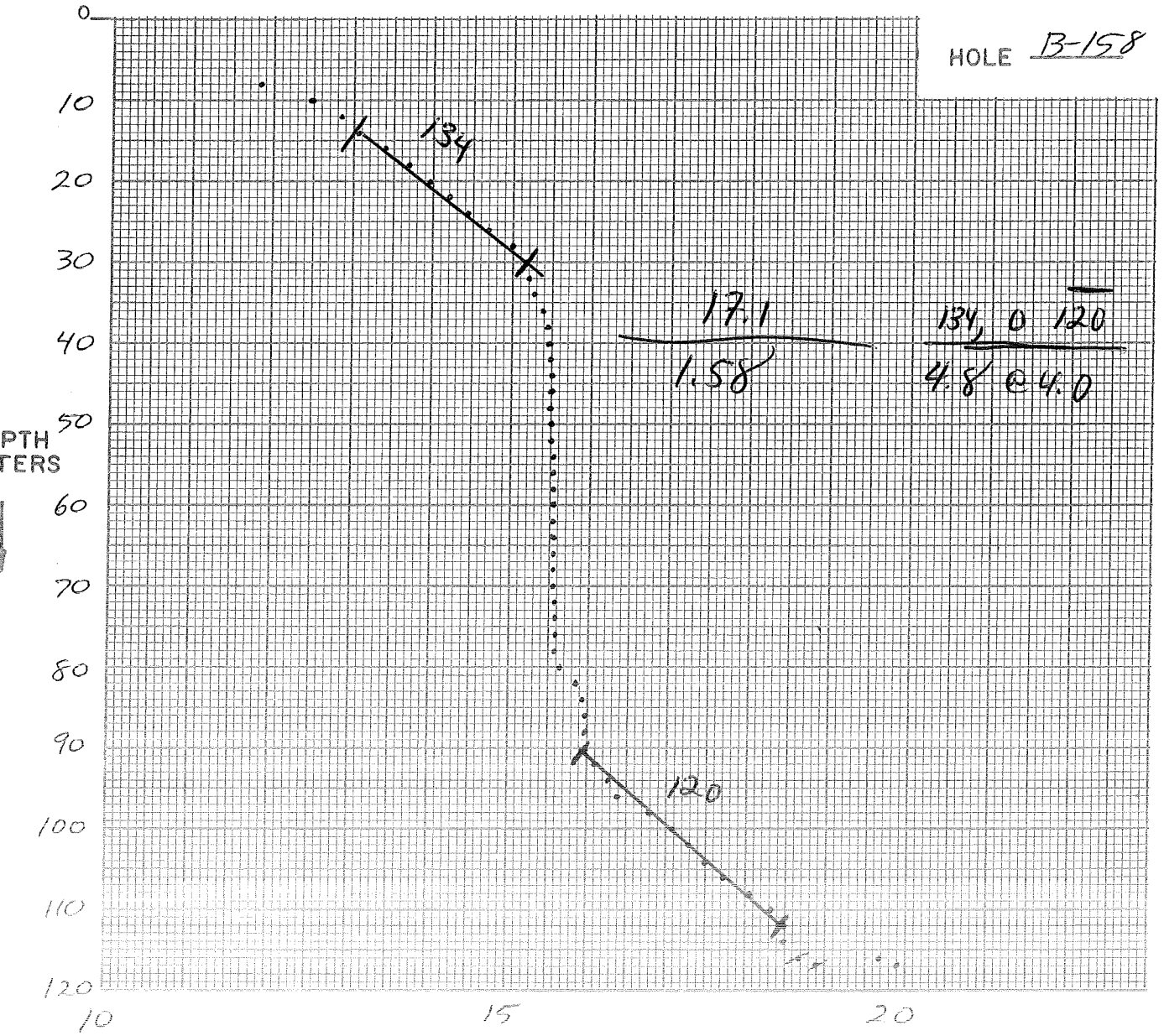
Instrument _____ Operator _____

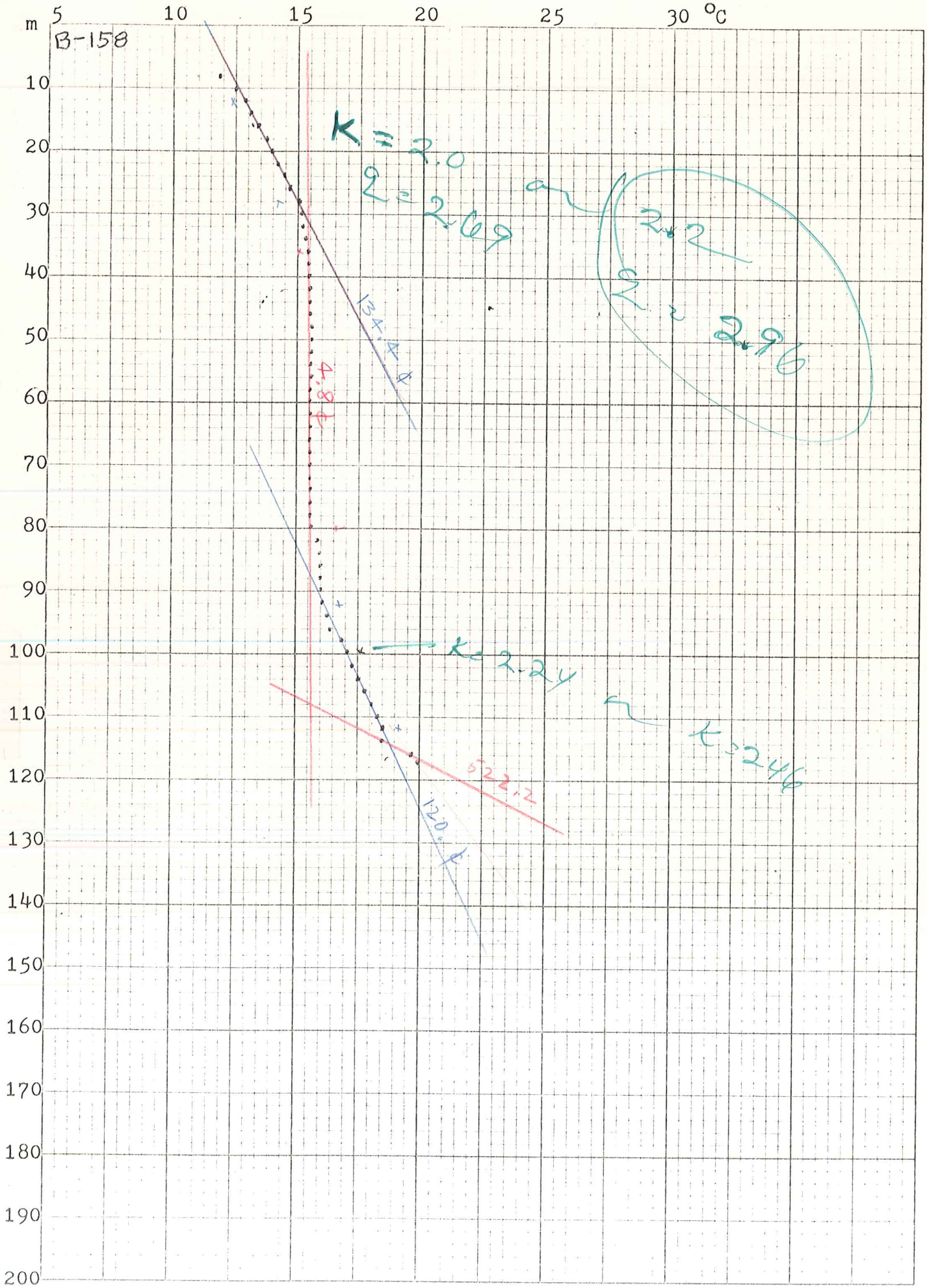
Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
92	5092	16,09	0.11	55	
94	5057	16.27	0.18	90	
96	5036	16.37	0.10	50	
98	4953	16,79	0.42	210	
100	4896	17.08	0.29	145	
102	4855	17,30	0.22	110	
104	4815	17.51	0.21	105	
106	4772	17.73	0.22	110	
108	4712	18,06	0.33	165	
110	4662	18,33	0.27	135	
112	4632	18,49	0.16	80	
114	4635	18.48	-0.01	-5	
116	4423	19.68	1.20	600	
~116.7	4387	19,89	0.23	329	ROUGH MEASUREMENT.


T' = T+20 / T
T'
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
T

RESISTANCE


HOLE B-158
0
10
20
30
40
50
60
70
80
90
100
110
120
134
17.1
1.58
134, 0 120
4.8' @ 4.0
120
DEPTH METERS
10
15
20
TEMPERATURE °C



46 0780
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KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 159

Property-Project Best OK Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 ~~5~~ 79	159	13	JL	76	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
6.6 KM EAST OF BLACK SPRING	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	7.5	38.	45.	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
6-1	43.0	5050.	F

← Write M if meters

64 42,3

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	54.0	90.0	-4.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT ~~DEPTH~~

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~1.5 MILES N.E. OF S. TWIN PK. Date 13-JULY-76

Map ~~ANTELOPE SP. 7½'~~ Clay 7½

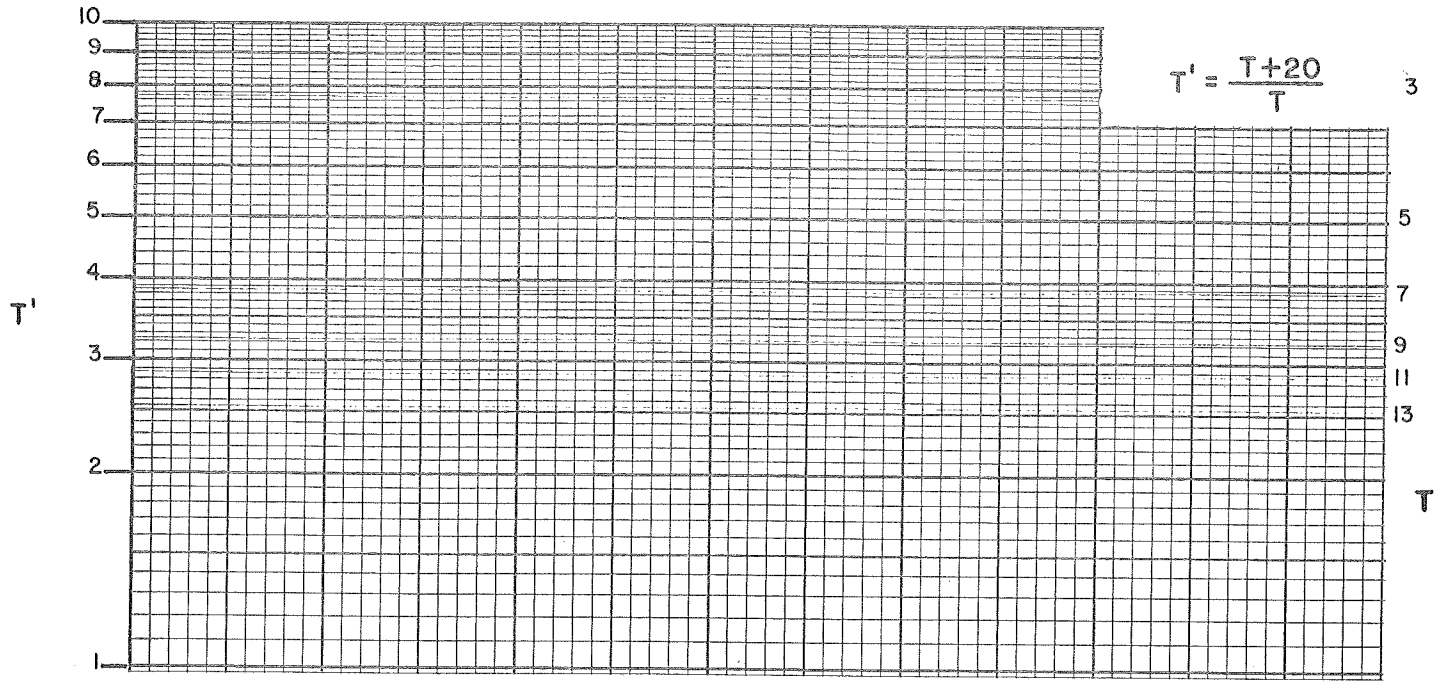
Property O.K. T 23S R 8W sec 33 SW¼ SE¼

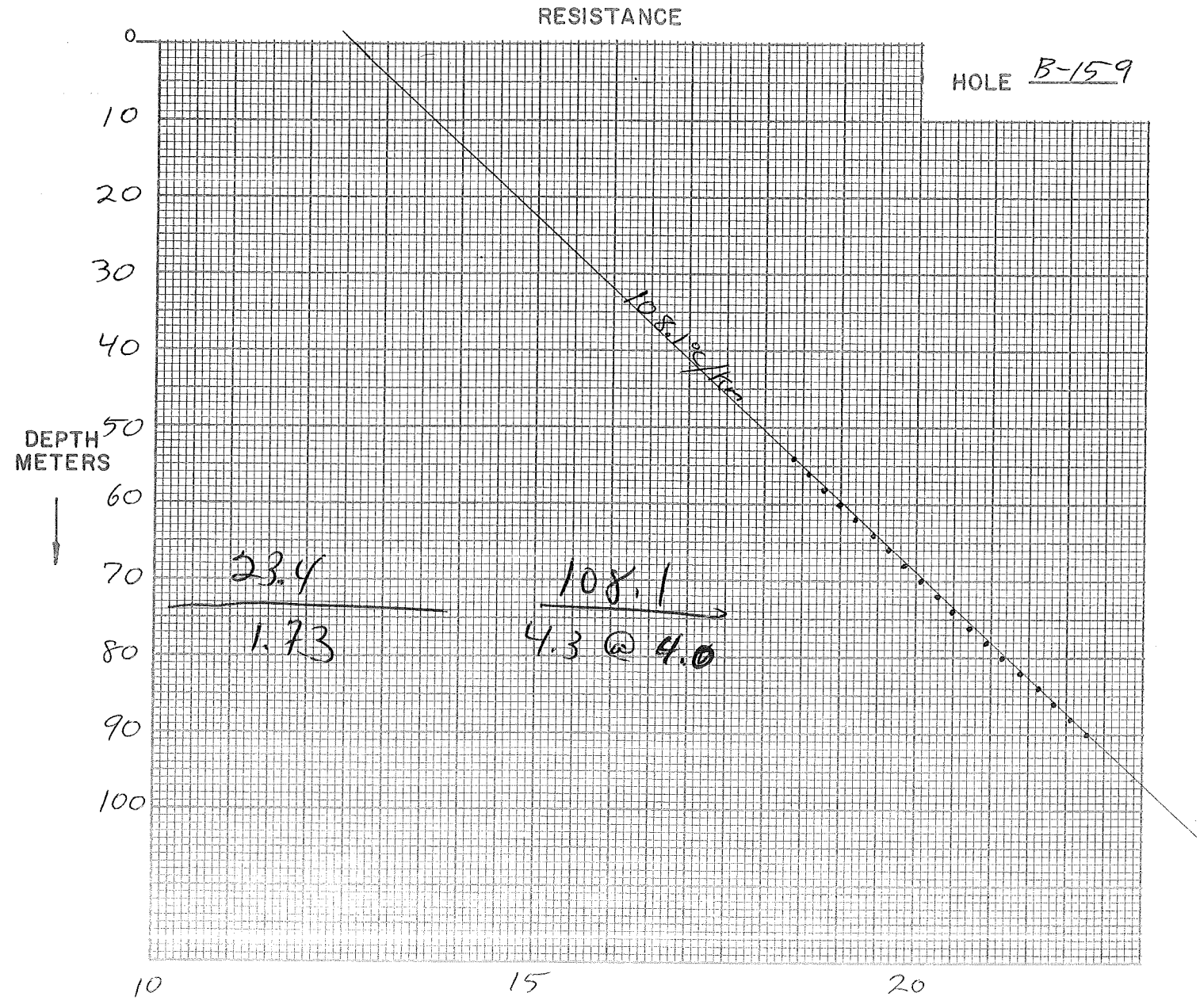
Drill Hole B-159 Date Drilled _____ Elevation 5050 ft.

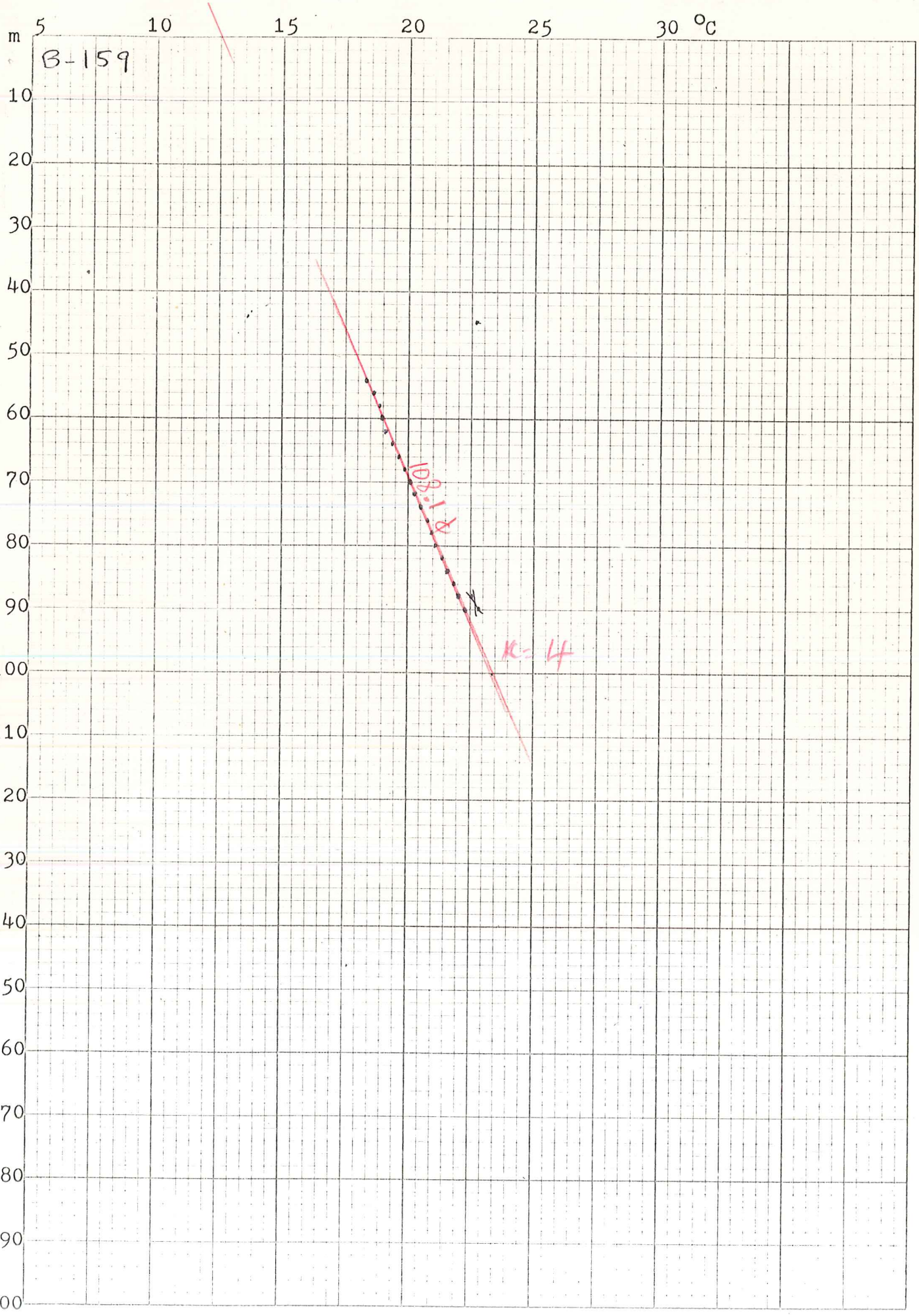
Instrument _____ Operator JEO

Comments 1" STEEL PIPE, APPARENTLY DRILLED ENTIRELY IN LT GRAY TUFF.
WILL FILL WITH H_2O & LOG ENTIRELY AT LATER DATE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
54	4652	18.38			WATER AT ~53m.
56	4617	18.58	0.20	100	
58	4578	18.79	0.21	105	
60	4541	19.00	0.21	105	
62	4504	19.21	0.21	105	
64	4464	19.44	0.23	115	
66	4428	19.65	0.21	105	
68	4393	19.85	0.20	100	
70	4357	20.07	0.22	110	
72	4319	20.29	0.22	110	
74	4284	20.50	0.21	105	
76	4248	20.72	0.22	110	
78	4212	20.94	0.22	110	
80	4177	21.16	0.22	110	
82	4140	21.39	0.23	115	
84	4103	21.63	0.24	120	
86	4071	21.83	0.20	100	
88	4037	22.05	0.22	110	
90	4004	22.27	0.22	110	GRADIENT 54-90m 108.5°C/Km


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-159
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
108.1 ohms
23.4
1.73
108.1
4.3 @ 4.0
10
15
20
TEMPERATURE °C



46 0780
10 X 10 TO THE INCH • 7 X
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 160

Property-Project Rest

Depth Logged

Map

Scale

Date: Drilled

Logged

State

County

Section

T

R

Instrument

Operator

Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No				Well No						Date Logged DA			MO			YR		*	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	7	5	5				1	6	0	1	5		J	L		7	6	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50): 1.9 KM SE OF BADGER PEAK

Operator (51–55): JED

Editor (56–60): /MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15.,60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00.	113.	15.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
17.5	16.7	5930.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0	44.0	-4.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location HOT SPS. CANYON Date 15-JULY-76

Map THERMO UT. 15'

Property T 31 R 11 W sec 19 NW¼ NE¼

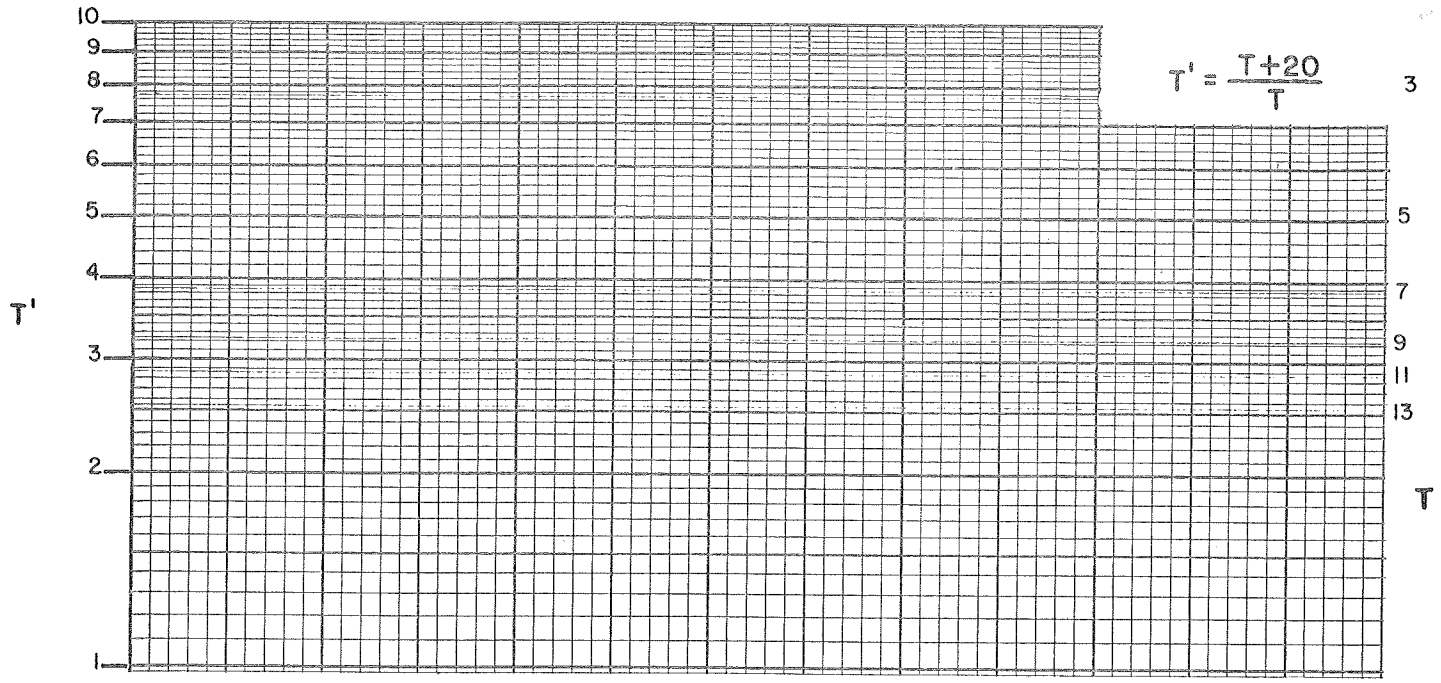
Drill Hole B-160 Date Drilled Elevation 5930 ft.

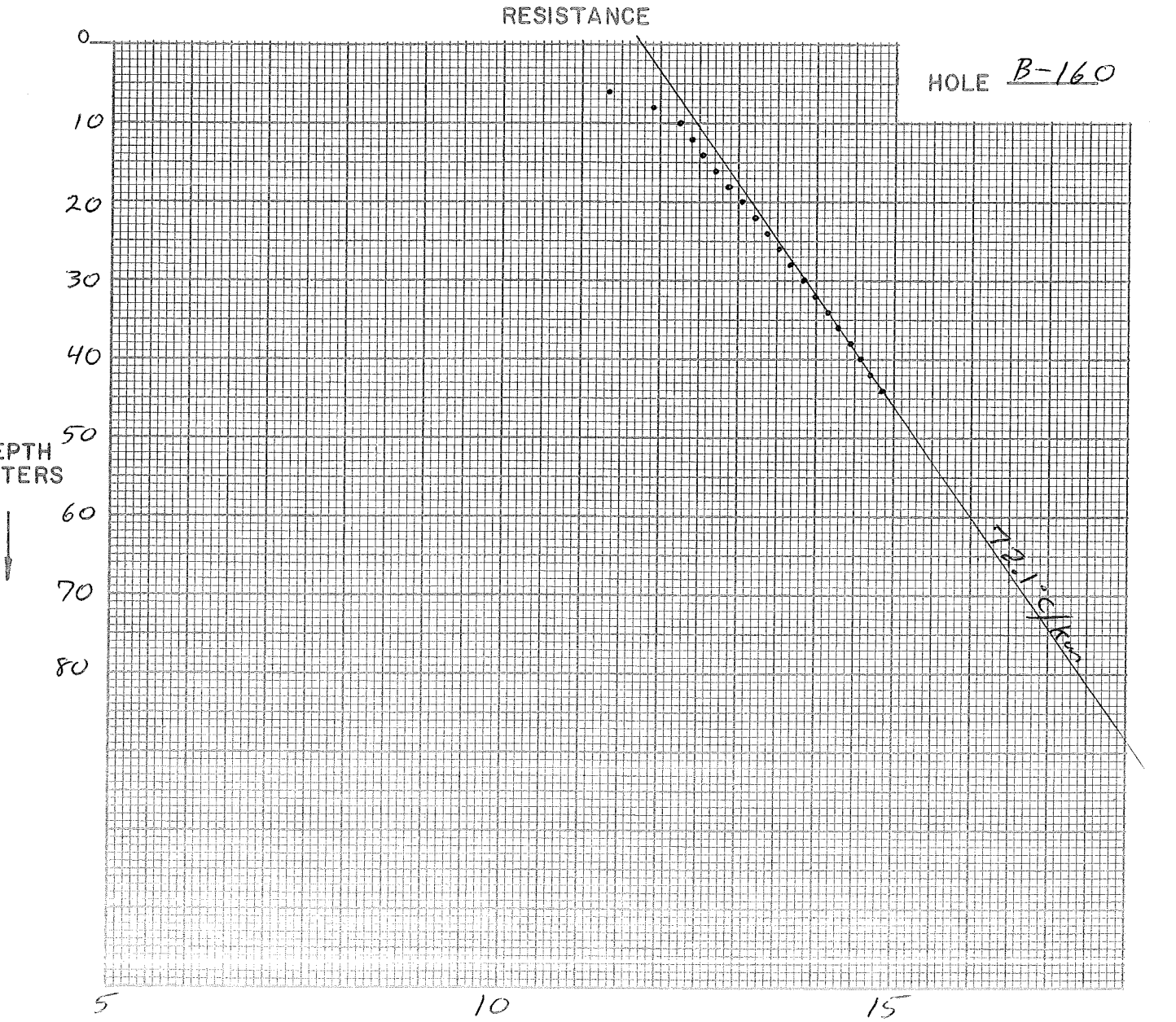
Instrument Operator JEO

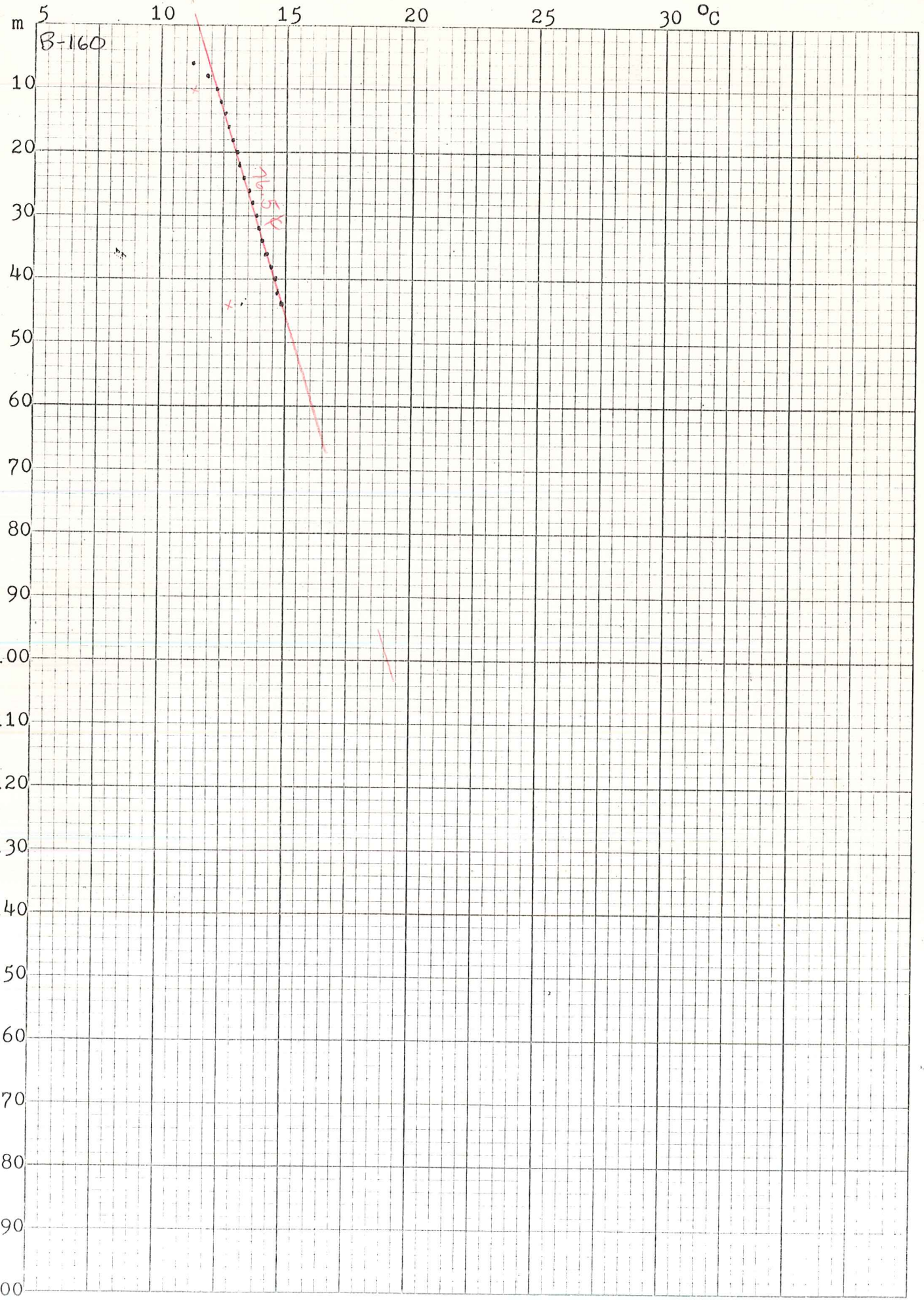
Comments 3/4 PVC ALTERED TUFFS & RHYODACITE.

PHILLIPS GRADIENT HOLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6169	11.34			
			0.58	290	
8	6024	11.92			
			0.33	165	
10	5945	12.25			
			0.16	80	
12	5905	12.41			
			0.15	75	
14	5869	12.56			
			0.16	80	
16	5831	12.72			
			0.16	80	
18	5793	12.88			
			0.17	85	
20	5754	13.05			
			0.16	80	
22	5716	13.21			
			0.16	80	
24	5679	13.37			
			0.16	80	
26	5643	13.53			
			0.15	75	
28	5608	13.68			
			0.16	80	
30	5574	13.84			
			0.14	70	
32	5541	13.98			
			0.16	80	
34	5507	14.14			
			0.14	70	
36	5474	14.28			
			0.16	80	
38	5440	14.44			
			0.14	70	
40	5410	14.58			
			0.13	65	
42	5381	14.71			GRADIENT 30-44m 72.1°C/km
			0.14	70	
44	5352	14.85			


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T


RESISTANCE
HOLE B-160
0
10
20
30
40
50
60
70
80
DEPTH METERS
72.1°C/Km
5
10
15
TEMPERATURE °C



46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 161

Property-Project Rest Thermex Depth Logged

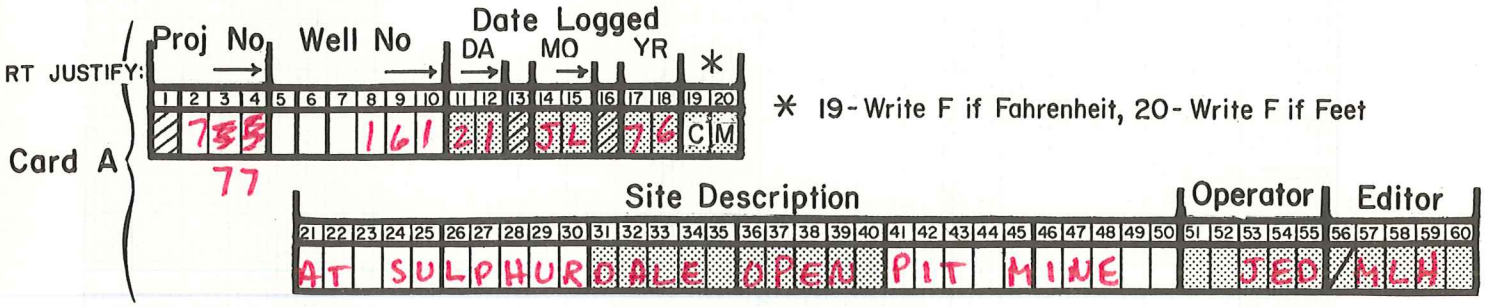
Map Scale Date: Drilled Logged

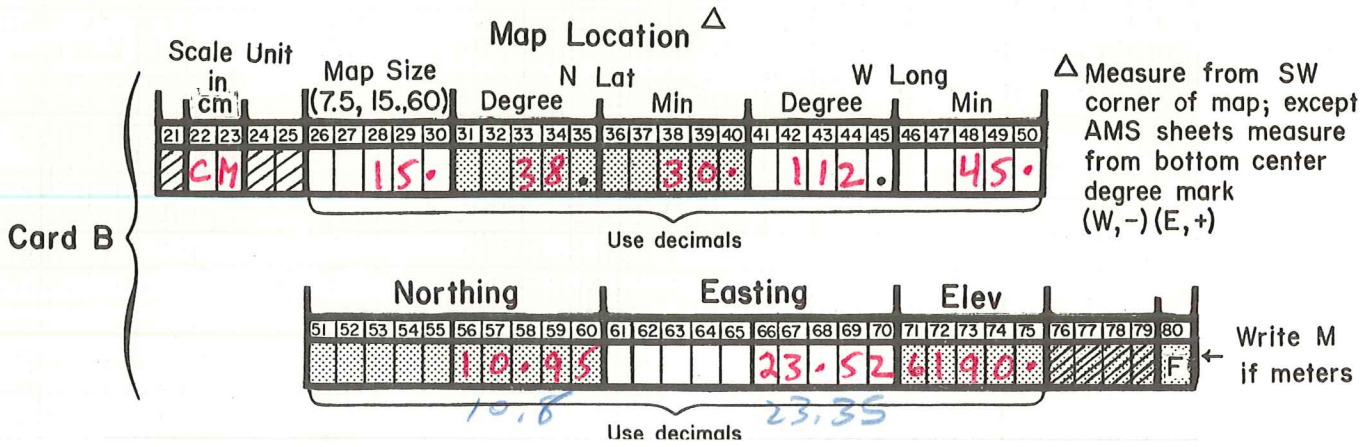
State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING





SEGMENT DEPTH

	Start	End	K	ΔK
C	10.0	35.0		
D	55.0	70.0		
E	.999			
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	35.0	55.0		
D	70.0	90.0	-4.5	-.5
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location AT SULFERDALE OPEN PIT MINE. Date 21-JULY-76

Map COVE FORT UT, 15"

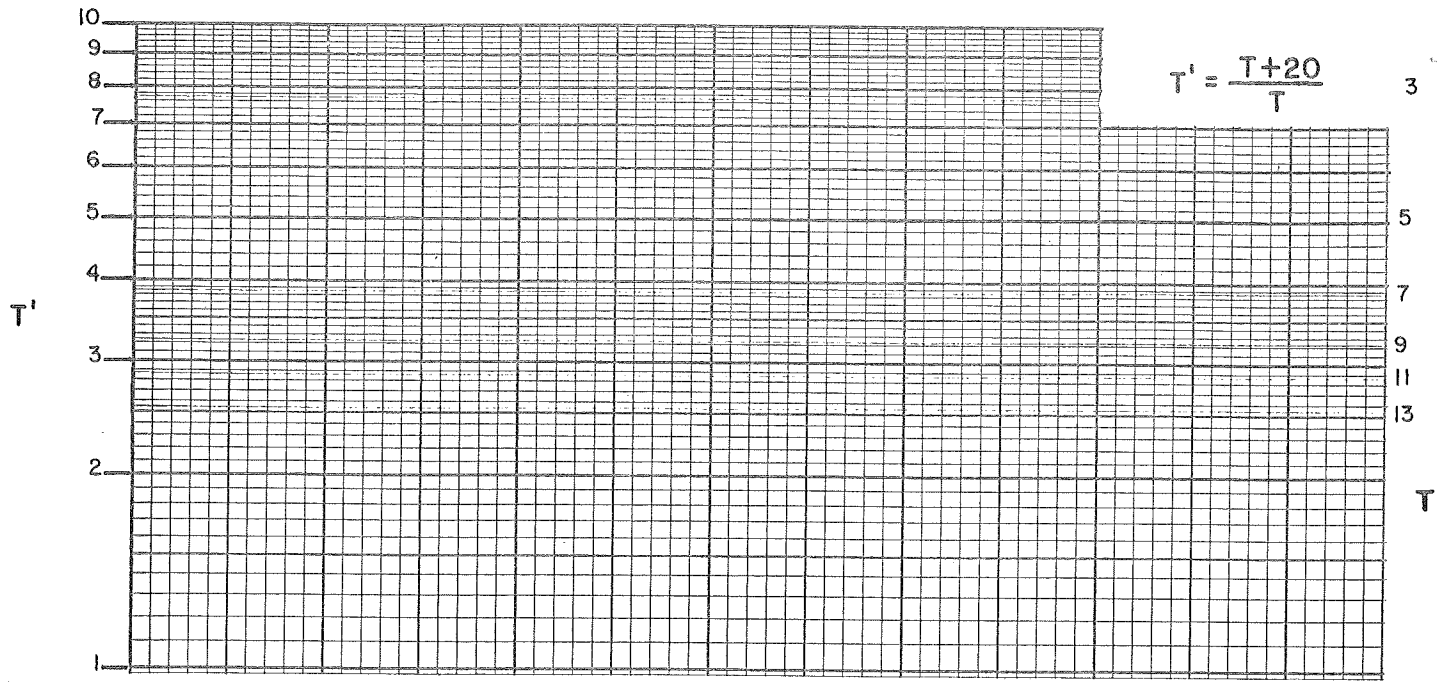
Property THERMEX. T 26S R 7W sec 12 NE¼ SE¼

Drill Hole B-161 Date Drilled MID-JUNE 76 Elevation 6190 ft.

Instrument _____ Operator JED

Comments 7" STEEL CASED WATER WELL, DRILLED MID JUNE-76 NO PUMP INSTALLED. (DISCHARGE TOO LOW) NO CUTTINGS. WELL IN OR NEAR SULFUR ORE BODY, ALONG FAULT.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5254	15.31			READINGS IN WATER.
			0.42		
15	5167	15.73			
			0.61		
20	5042	16.34			
			0.39		
25	4965	16.73			
			0.51		
30	4865	17.24			
			0.69		
35	4736	17.93			
			0.79		
40	4598	18.68			
			1.04		READINGS BELOW THIS POINT FLUCTATING INDICATING SOME CONVECTION IN WATER.
45	4415	19.72			
			0.74		
50	4292	20.46			
			0.90		
55	4145	21.36			
			1.43		
60	3924	22.79			
			1.08		
65	3768	23.87			
			1.40		
70	3575	25.27			
			2.80		
75	3223	28.07			
			4.51	900	
80	2739	32.58			
			3.20		
85	2448	35.78			
			1.03		LAST READING POSSIBLY NOT FULL 5 m.
90	2272	37.95			
	~~2179~~				
					GRADIENT 70-90m 634°C/Km



RESISTANCE

HOLE B16 1

DEPTH METERS

0
10
20
30
40
50
60
70
80
90

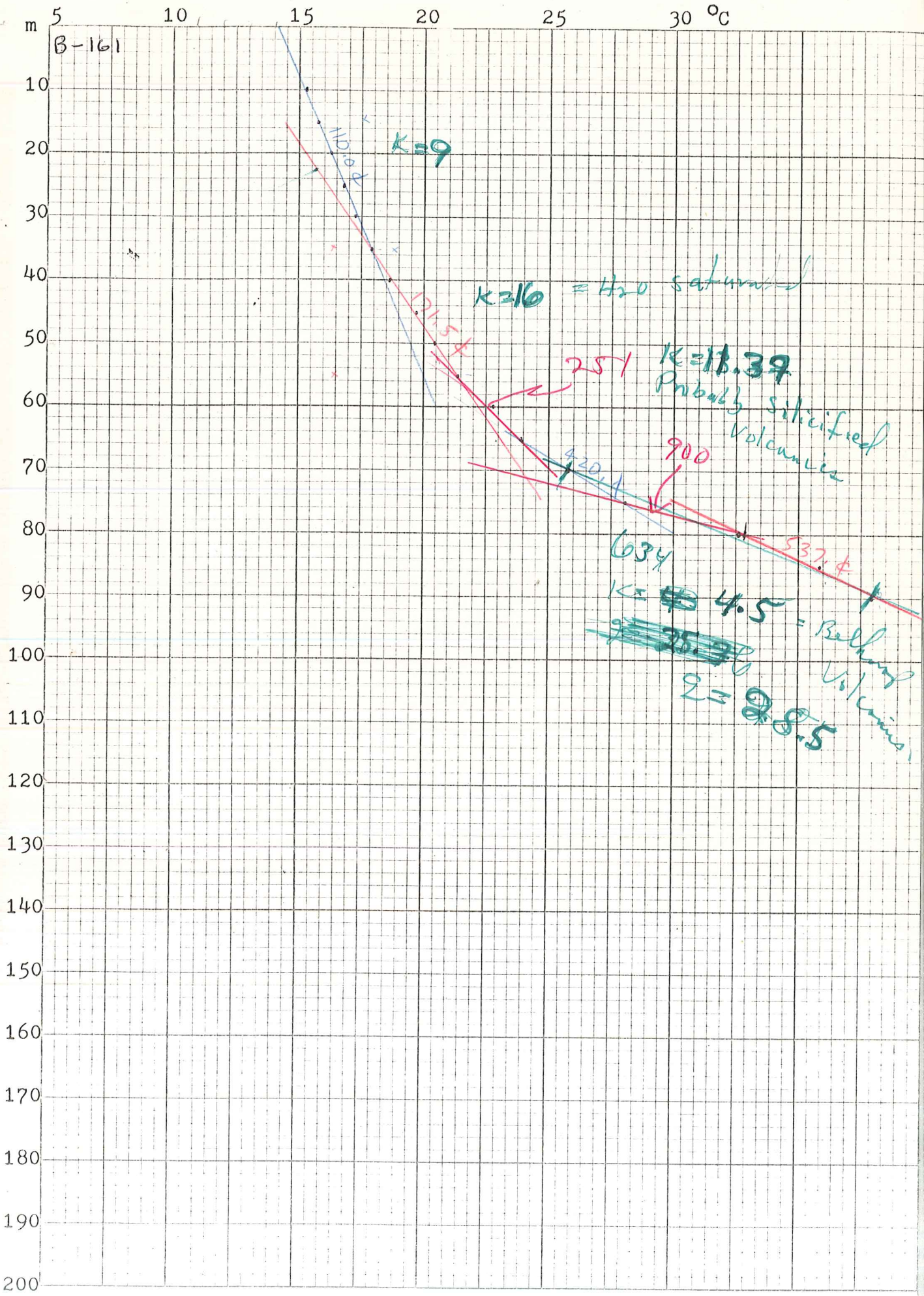
.634°C/km

.634

28.5 @ 4.5

12 14 16 18 20 22 24 26 28 30 32 34 36

TEMPERATURE °C



46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 162

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 6 2	2 9	J L	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
2 · 9 KM SOUTH OF LAMERDORF PEAK	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	7 · 5	3 8 .	1 5 ·	1 1 3 .	3 7 · 5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
2 . 1 5	1 6 · 7	8 2 0 0 .	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	20.0	75.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location TOP OF BLAWN MTN RIDGE. Date 29-JULY-76

Map LAMERDORF PK UT. 7½"

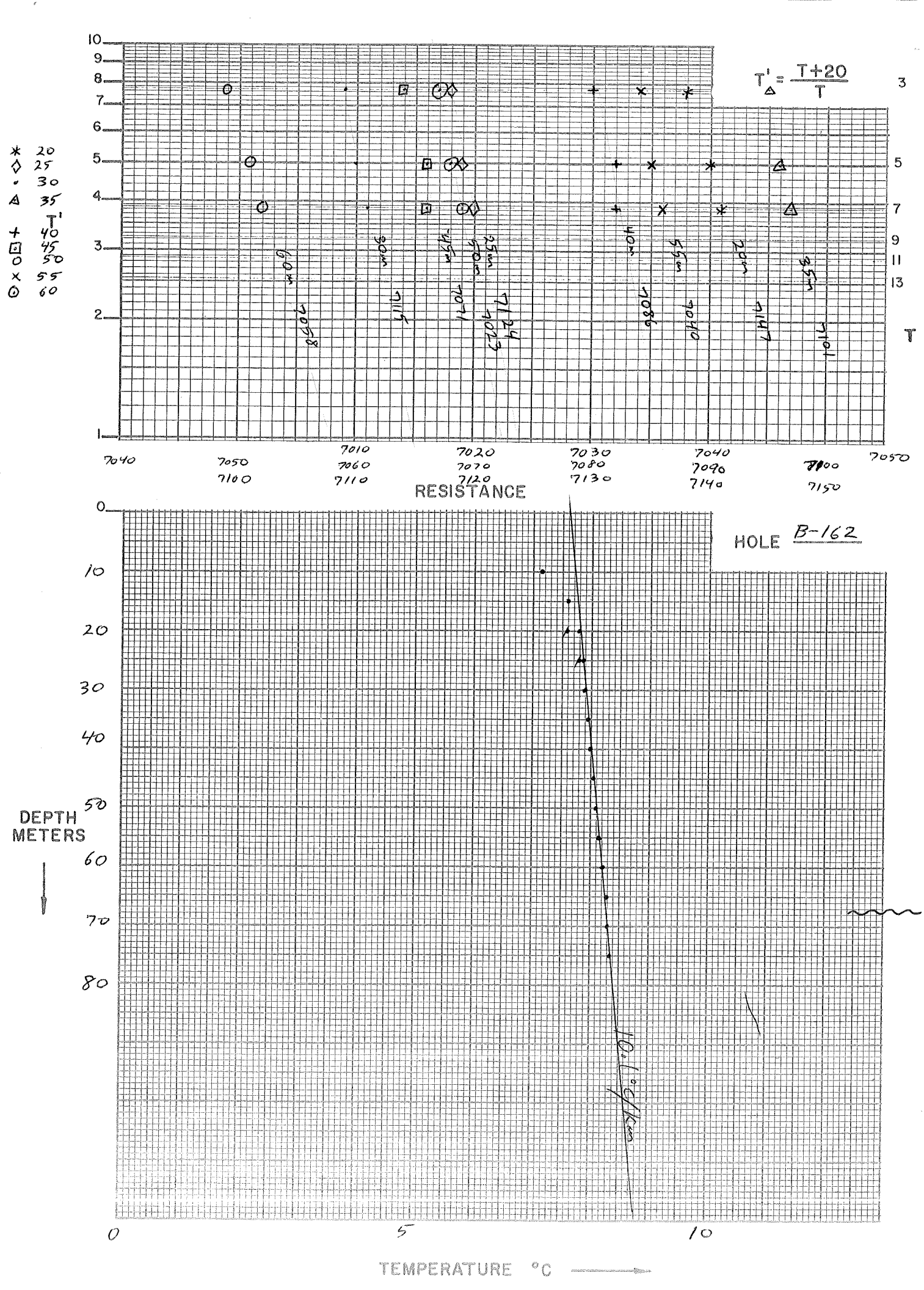
Property BEST T 29S R 15W sec 30 NW¼ SW¼

Drill Hole 13-162 Date Drilled _____ Elevation 8200 ft.

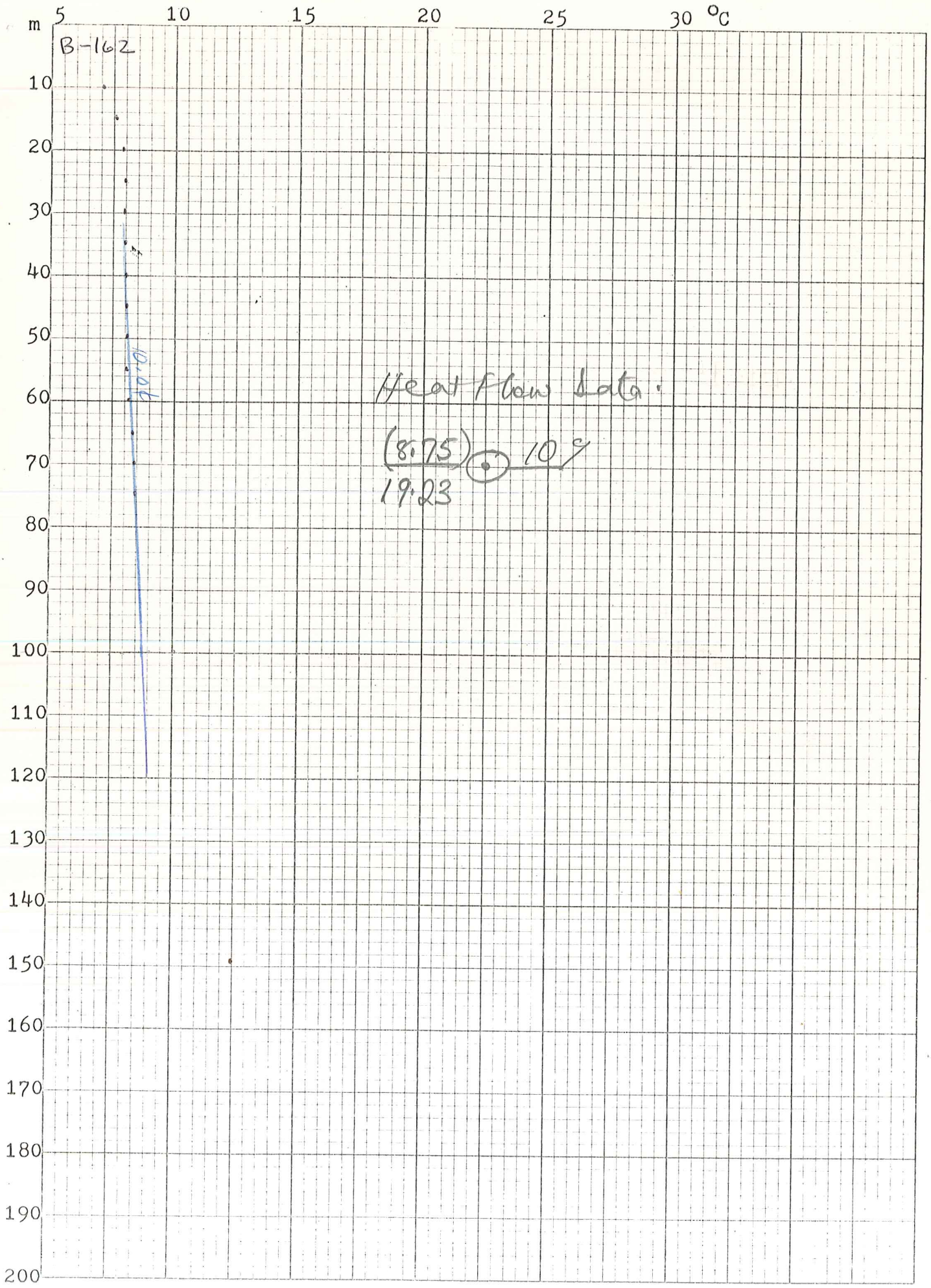
Instrument _____ Operator JED

Comments 6" UNCASED HOLE DRILLED IN RHYOLITIC (TERTIARY) TUFF ALTERED TO KAOLINITE & ALUNITE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	7307 7320 7324/7327	7.15			
15	7183 7190 7194	7.58			
20	7138 7140 7141	7.80	0.22	44	
25	7118 7119 7120	7.88	0.08 ~~0.80~~	16	
30	7109 7110 7111	7.91	0.03	6	
35	7095 7096 7097	7.95	0.04	8	
40	7080 7082 7082	8.01	0.06	12	
45	7064 7066 7066	8.05	0.04	8	
50	7049 7051 7052	8.10	0.05	10	
55	7034 7035 7036	8.16	0.06	12	
60	7017 7018 7019	8.22	0.06	12	
65	6998	8.30	0.08	16	WATER AT BOTTOM CHURNED UP BY RK FALLING IN HOLE.
70	6995	8.31	0.01	2	
75	6981	8.36	0.05	10	GRADIENT 10.1 °C/Km
~~79~~	~~6981~~				



$T'_{\Delta} = \frac{T+20}{T}$
T'
20
25
30
35
40
45
50
55
60
T
RESISTANCE
7040
7050
7100
7010
7060
7110
7020
7070
7120
7030
7080
7130
7040
7090
7140
7100
7150
7050
HOLE B-162
DEPTH METERS
TEMPERATURE °C
10.1°C/km



46 0780
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TEMPERATURE DEPTH LOG

ΔT Well No. B-163

Property-Project Best - 755 Depth Logged 62 m

Map Adamsville Scale 15' Date: Drilled _____ Logged 31 Jul 76

State Utah County _____ Section NWSE 20 T 29S R 9W

Instrument _____ Operator JED Elevation 6320' ft.

Comments 3/4" PVC water filled, placed inside 6" mineral hole

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
755	163	31	07	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
200m E ØF LINCOLN MINE	JED	RG

Card B

Map Location △

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
CM	~~15.~~ 7.5	38.	15.	113.	

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
3.73	16.2	6326.	F

Use decimals 9.9 41.5

Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	14.0	34.0		
D	40.0	62.0	-4.5	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	34.0	40.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~200 m. N.E. OF LINCOLN MINE Date 31-JULY-76

Map CAVE CANYON UT. 7½'

Property BEST T 29S R 9W sec 20 NW¼ SE¼

Drill Hole B-163 Date Drilled _____ Elevation 6320 ft.

Instrument _____ Operator JED

Comments 3/4" PVC PIPE, WATER FILLED PLACED INSIDE 6" MINERAL EXPLORATION HOLE.

CUTTINGS OF DK.-GRAY LIMESTONE, MARBLE & BLUISH GRAY DOLOMITE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6079	11.70			
8	6085	11.68			
10	6025	11.92	0.24		
12	5983	12.09	0.17		
14	5959	12.21	0.12	60	
16	5946	12.24	0.03	15	
18	5942	12.26	0.02	10	
20	5938	12.28	0.02	10	
22	5934	12.29	0.01	5	
24	5931	12.31	0.02	10	
26	5929	12.31	0.00	0	
28	5928	12.32	0.01	5	
30	5929	12.31	-0.01	-5	
32	5929	12.31	0.00	0	
34	5928	12.32	0.00	0	
36	5914	12.38	0.06	30	
38	5909	12.40	0.02	10	
40	5905	12.41	0.01	5	
42	5902	12.43	0.02	10	
44	5895	12.46	0.03	15	
46	5895	12.46	0.00	0	

TEMPERATURE - DEPTH LOG

Location ______________________ Date __________

Map ______________________

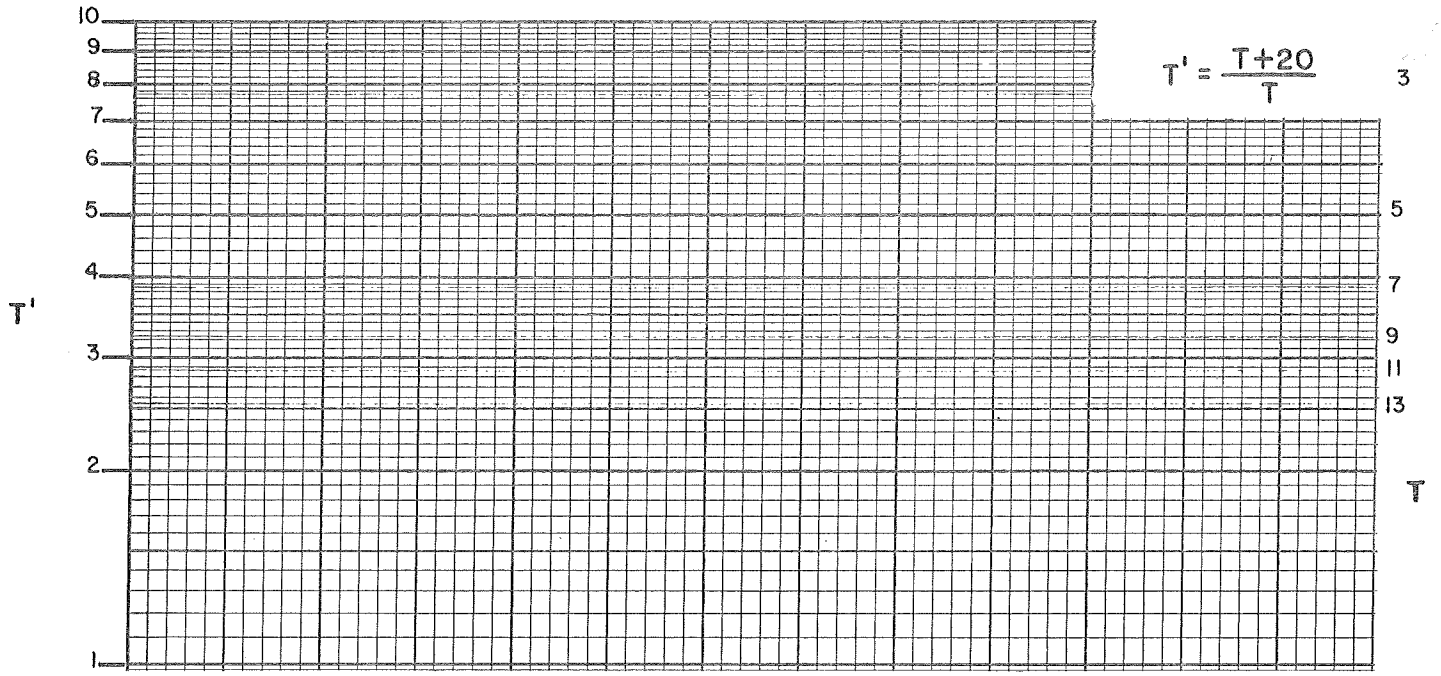
Property ______________ T _____ R _____ sec _____

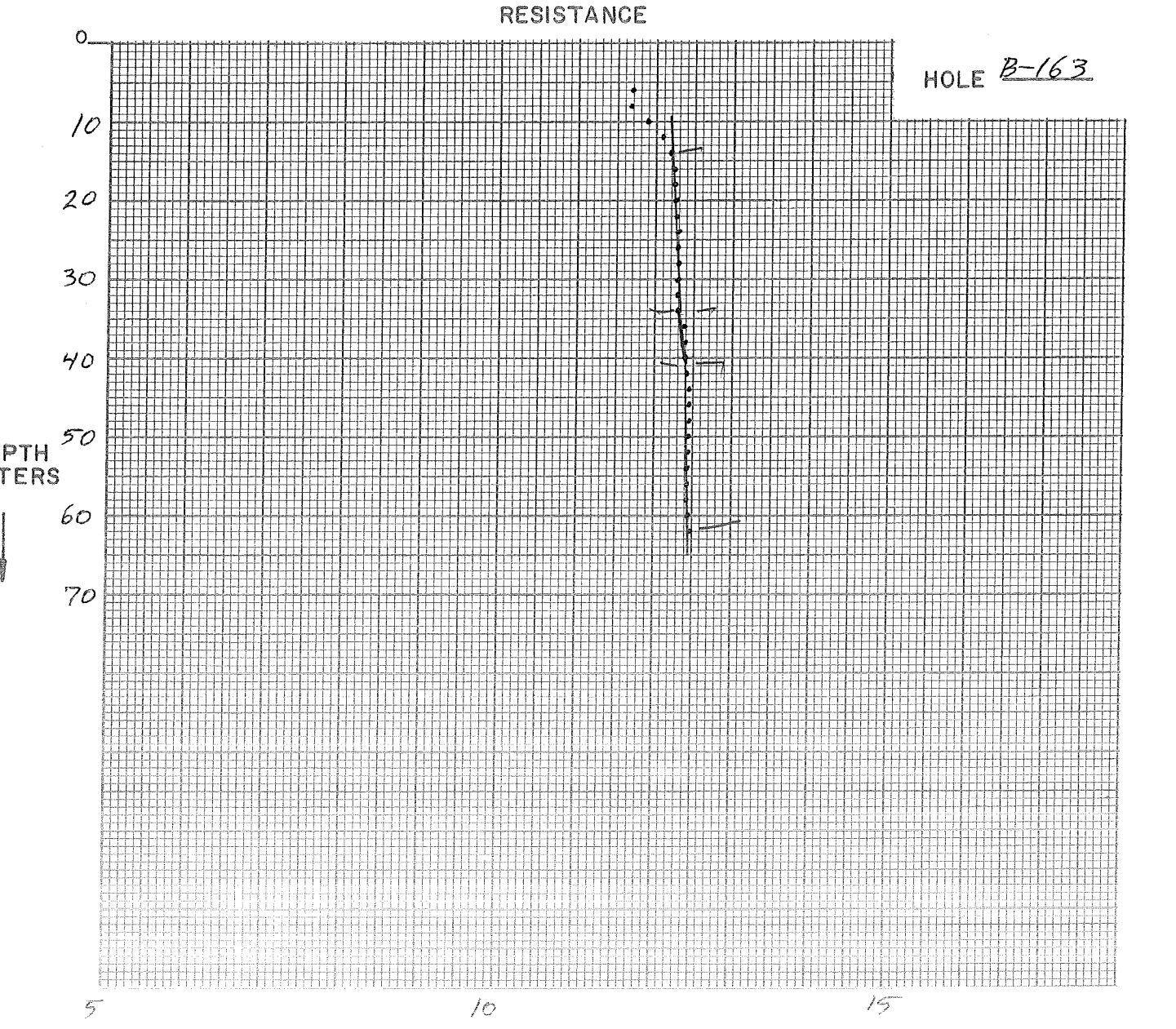
Drill Hole B-163 Date Drilled __________ Elevation ______ ft.

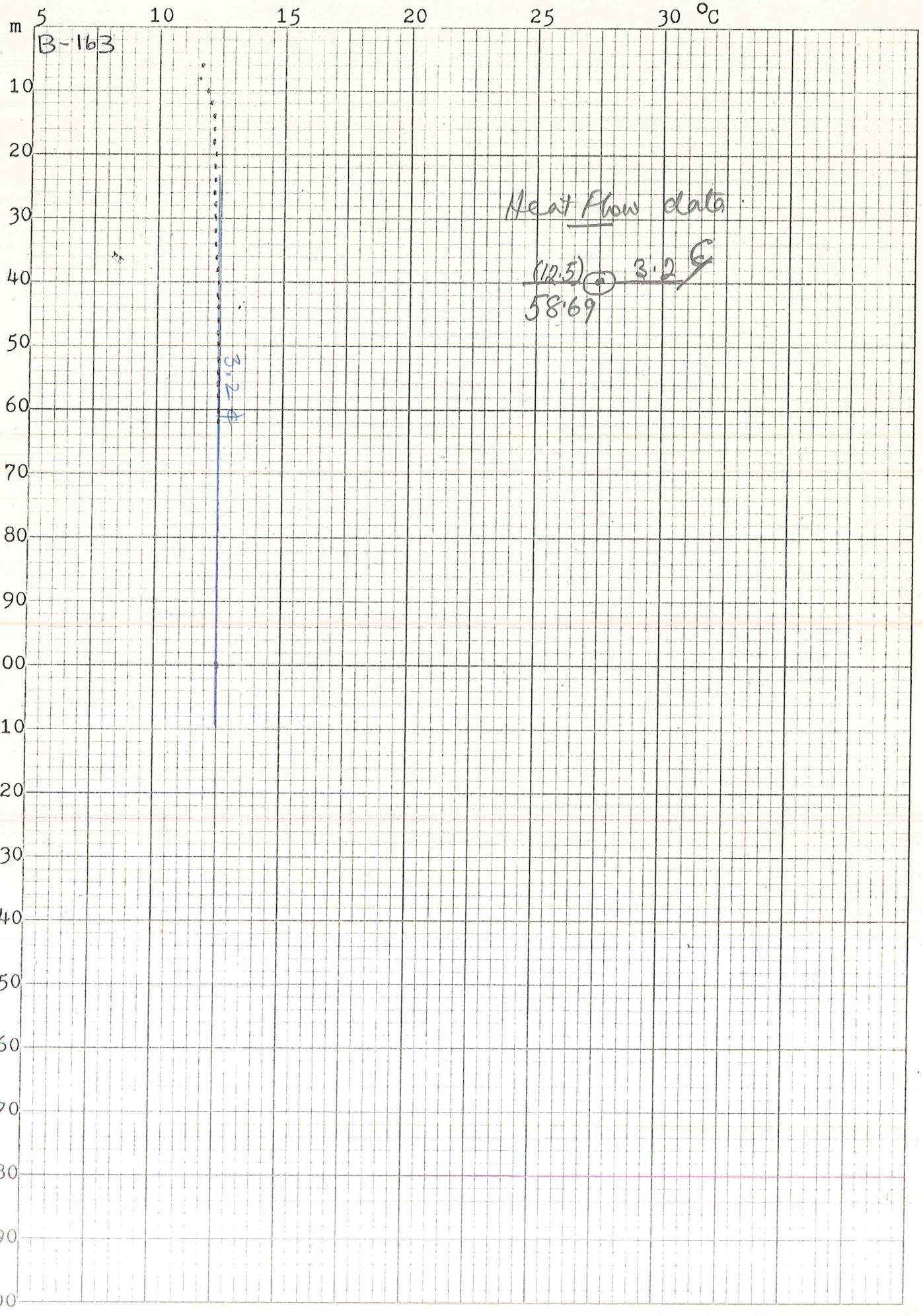
Instrument ______________ Operator ______________

Comments ______________________

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
48	5892	12.47	0.01	5		
50	5897	12.45	-0.02	-10		
52	5894	12.46	0.01	5		
54	5903	12.42	-0.04	-20		
56	5901	12.43	0.01	5		
58	5902	12.43	0.00	0		
60	5892	12.47	0.04	20		
62	5889	12.48	0.01	5		


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T


RESISTANCE
0
10
20
30
40
50
60
70
DEPTH METERS
HOLE B-163
5
10
15
TEMPERATURE °C



46 0780
KEUFFEL & ESSER CO. MADE IN U.S.A. 10 X 10 TO THE INCH • 7 X 10 INCHES

TEMPERATURE - DEPTH LOG

Location ~2 MILES N.W. OF BLACK RK. VOLCANO Date 1-AUG-76

Map TABERNACLE HILL UT. 15"

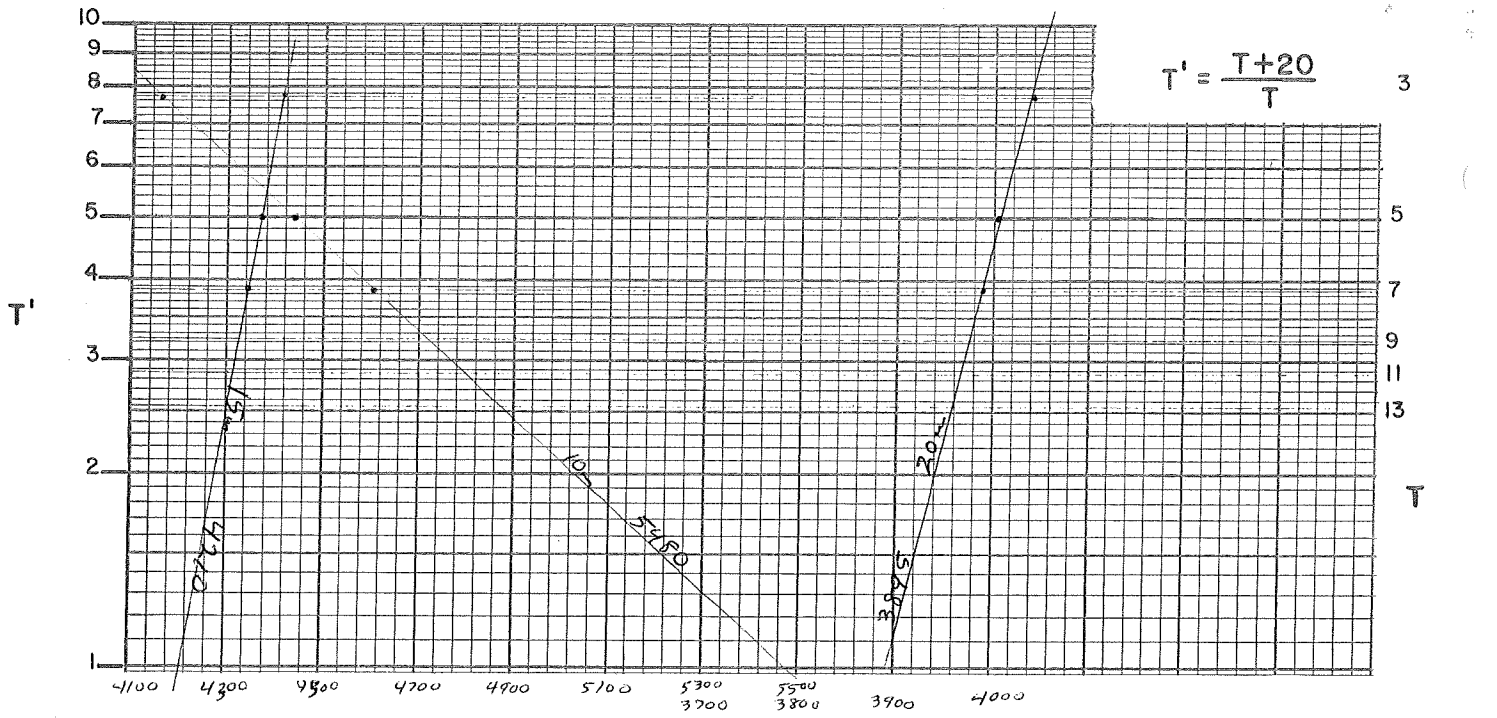
Property T 23 S R 6 W sec 3 S. 1/4 COR.

Drill Hole B-164 Date Drilled Elevation 4760 ft.

Instrument Operator JED

Comments 6" CASED WATER WELL (ABANDONED) PROBABLY DRILLED ENTIRELY IN VLY. FILL

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
~~10~~	~~4160~~				
10	4160 4440 ~~4539~~ 4615	14.26			
15	4417 4370 4354	20.96	6.70	1340	
20	4042 4005 3993	22.99	2.03	406	
25	3855 3855	23.26	0.27	54	WATER AT ~ 25m
30	3853	23.28	0.02	4	



RESISTANCE

HOLE B-164

DEPTH METERS

0
10
20
30

Av 20-30 = 29°

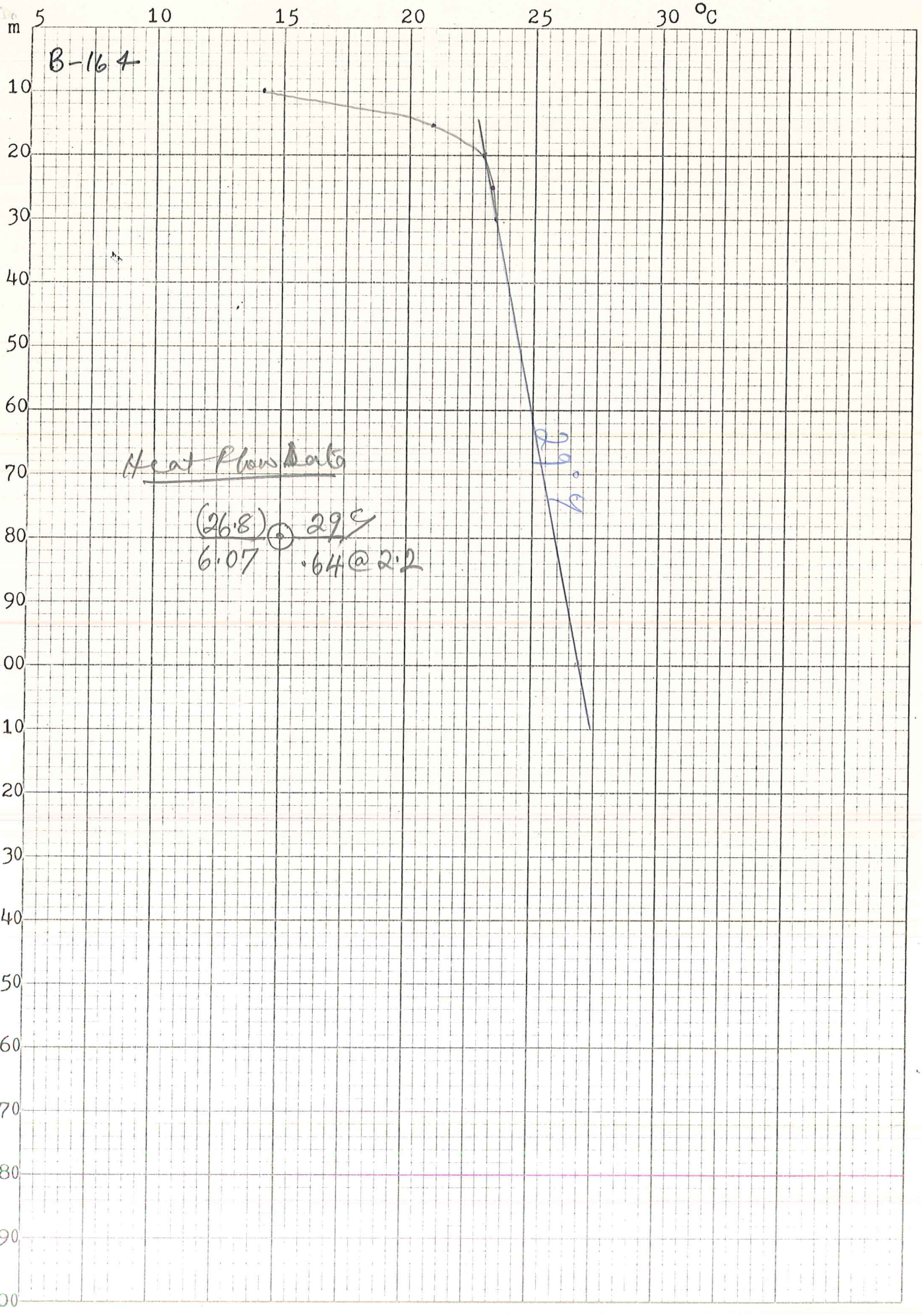
WATER

(24.7) / 6.50

29° / 1.5 @ 5.0

10 15 20 25

TEMPERATURE °C



46 0780
10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 167

Property-Project Best OK Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY: Proj No (1–4), Well No (5–10), Date Logged: DA (11–12), MO (14–15), YR (17–18), * (19–20)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	7	8	8				1	6	7	1	4		A	G		7	6	C	M

79

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50), Operator (51–55), Editor (56–60)

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
1	3	.	1		K	M		N	W		O	F		C	O	V	E		F	O	R	T	,		U	T	A	H				J	E	D	/	M	L	H	

Card B

Map Location △: Scale Unit in cm (21–25), Map Size (7.5, 15., 60) (26–30), N Lat Degree (31–35), Min (36–40), W Long Degree (41–45), Min (46–50)

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	C	M					1	5	.			3	8	.			3	0	.		1	1	2	.			4	5	.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W, −) (E, +)

Northing (51–60), Easting (61–70), Elev (71–75), (76–80)

51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
					2	8	.	4	5						5	.	6	5		5	8	6	0	.					F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0	50.0		
D	96.0	124.0		-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	50.0	90.0	-5.0	.5
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~ 7 MILES W. OF DOG VALLEY Date 14-AUG-76

Map COVE FORT UT. 15"

Property OK T 25S R 8W sec 1 SW¼ SW¼

Drill Hole B-167 Date Drilled AUG-76 Elevation 5860 ft.

Instrument _____ Operator JED

Comments 1" STEEL WATER FILLED PIPE

CUTTINGS OF LT.-GRAY TUFF-BSLT & POSSIBLY WEATHERED INTERMEDIATE VOLCANICS.

150 NW. FROM CINDER CRATER. CHEVRON GRADIENT HOLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5204	15.55			
			0.51	255	
12	5099	16.06			
			0.73	365	
14	4953	16.79			
			0.53	265	
16	4851	17.32			
			0.66	330	
18	4726	17.98			
			0.51	255	
20	4632	18.49			
			0.60	300	
22	4526	19.09			
			0.54	270	
24	4432	19.63			
			0.56	280	
26	4336	20.19			
			0.57	285	
28	4241	20.76			
			0.50	250	
30	4169	21.26			
			0.50	250	
32	4082	21.76			
			0.58	290	
34	3992	22.34			
			0.60	300	
36	3902	22.94			
			0.64	320	
38	3809	23.58			
			0.55	275	
40	3731	24.13			
			0.55	275	
42	3655	24.68			
			0.57	285	
44	3578	25.25			
			0.49	245	
46	3513	25.74			
	3445		0.52	260	
48	~~3446~~	26.26			
			0.50	250	
50	3382	26.76			GRADIENT 104-124m 205.5°C/km

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-167 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
52	3332	27.17	0.41	205	
54	3276	27.68	0.51	255	
56	3222	28.10	0.42	210	
58	3172	28.51	0.41	205	
60	3123	28.93	0.42	210	
62	3077	29.34	0.41	205	
64	3032	29.75	0.41	205	
66	2988	30.15	0.40	200	
68	2944	30.56	0.41	205	
70	2908	30.91	0.35	175	
72	2868	31.29	0.38	190	
74	2832	31.65	0.36	180	
76	2795	32.01	0.36	180	
78	2763	32.34	0.33	165	
80	2715	32.83	0.49	245	
82	2662	33.39	0.56	280	
84	2621	33.83	0.44	220	
86	2589	34.18	0.35	175	
88	2558	34.52	0.34	170	
90	2514	35.02	0.50	250	
92	2469	35.54	0.52	260	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

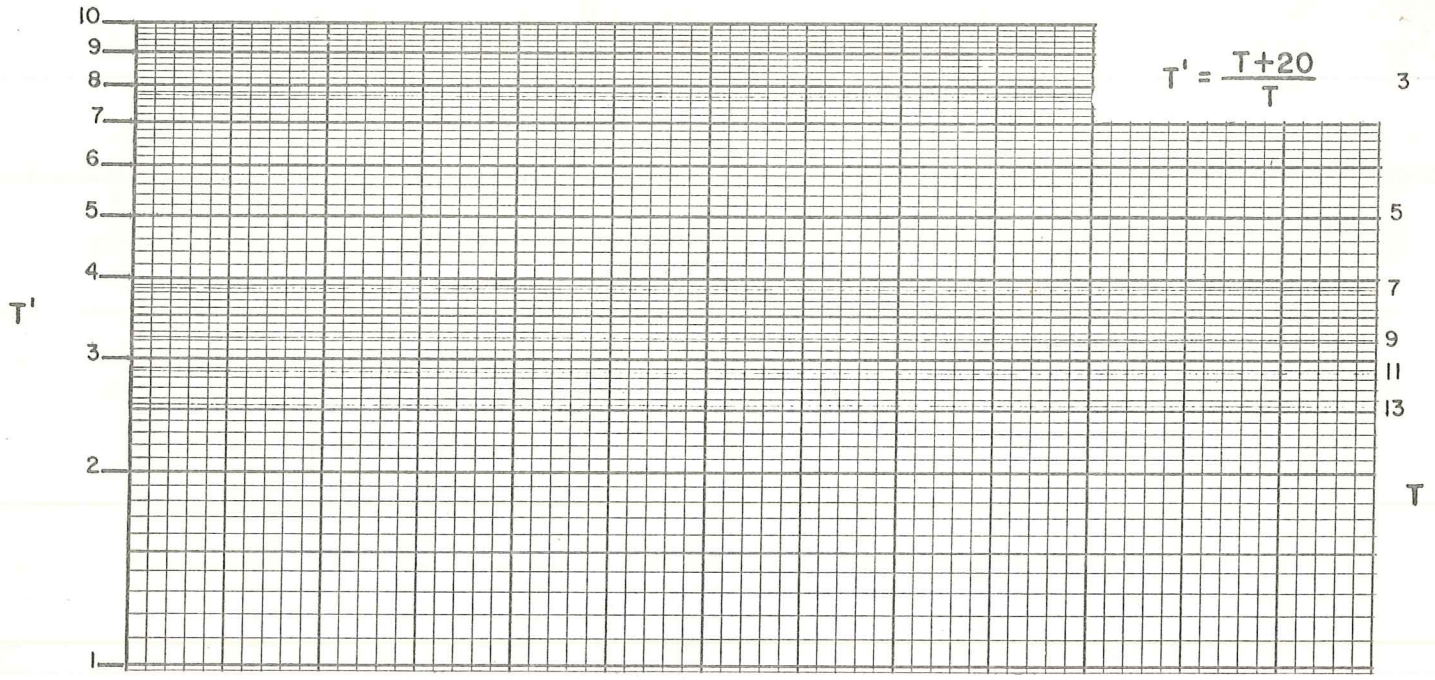
Property _____ T ____ R ____ sec ____

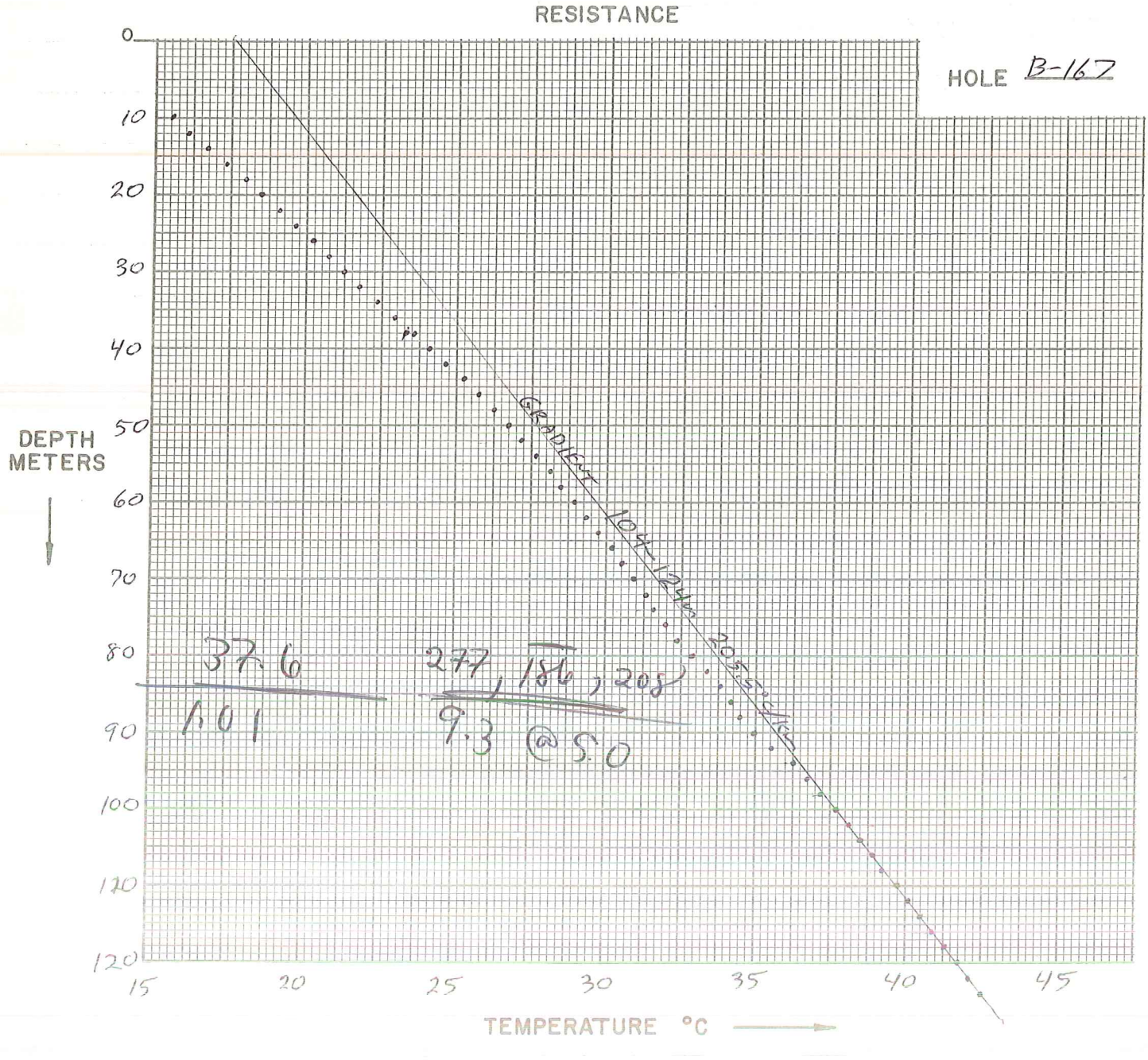
Drill Hole B-167 Date Drilled _____ Elevation ____ ft.

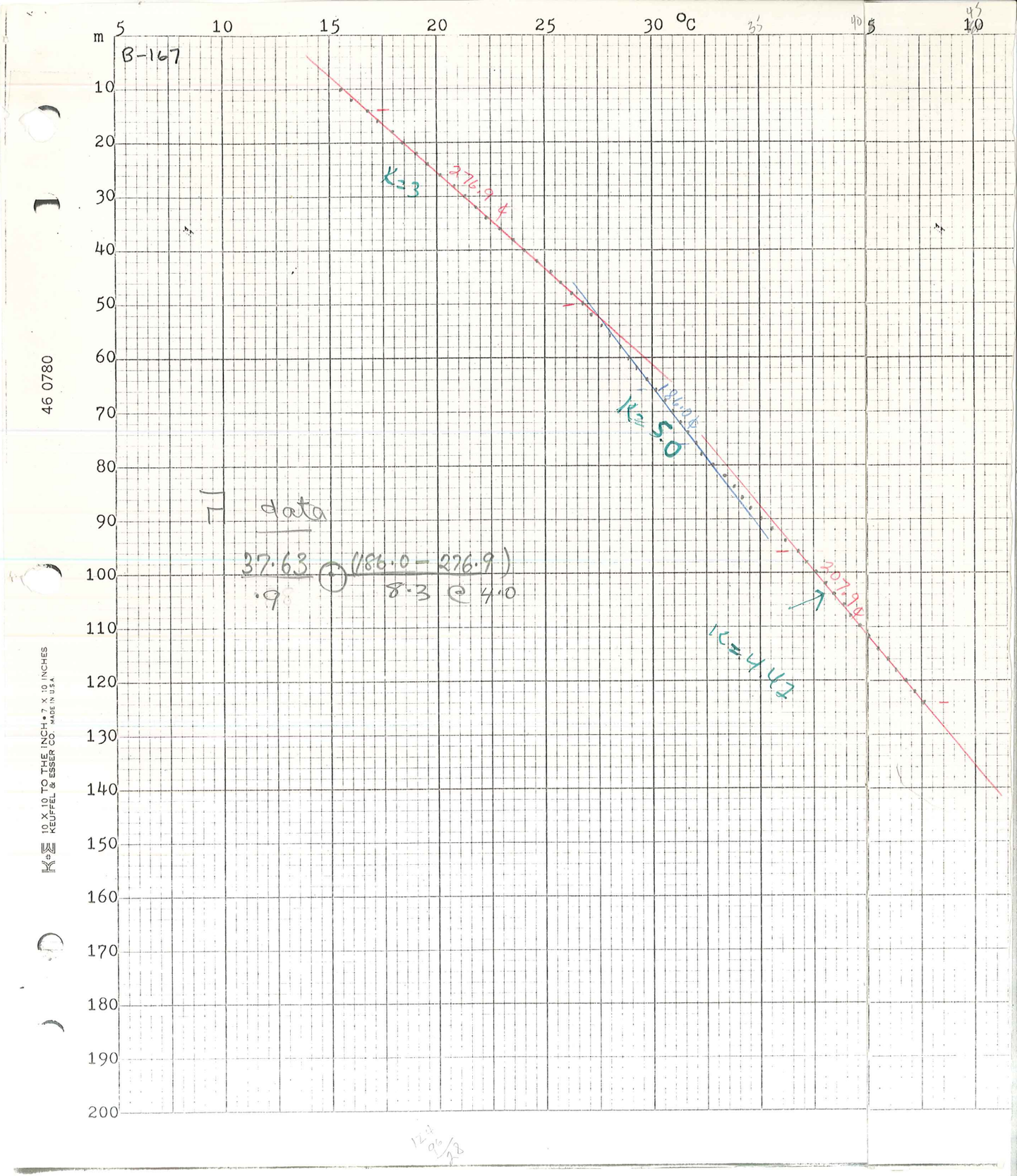
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
94	2410	36.24	0.70	350	
96	2367	36.76	0.52	260	
98	2332	37.19	0.43	215	
100	2297	37.63	0.44	220	
102	2262	38.08	0.45	225	
104	2232	38.47	0.39	195	
106	2199	38.91	0.44	220	
108	2169	39.23	0.32	160	
110	2141	39.70	0.47	235	
112	2113	40.09	0.39	195	
114	2084	40.50	0.41	205	
116	2055	40.92	0.42	210	
118	2029	41.30	0.38	190	
120	1998	41.76	0.46	230	
122	1970	42.19	0.43	215	
124	1945	42.58	0.39	195	
~~126~~					


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-167
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
120
15
20
25
30
35
40
45
TEMPERATURE °C
GRADIENT 10K 12K 20K
37.6
1.01
277, 186, 205
9.3 @ 50



B-167
m
°C
K=3
276.9 ¢
186.0 ¢
K=5.0
207.9 ¢
K=4.42
data
37.63 / .9 (186.0 − 276.9) / 8.3 @ 4.0
46 0780
K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 168

Property-Project Beat Summer Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5 77	1 6 8	16	AG	76	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
11.5 KM NW OF COVE FORT, UTAH	JEO	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	30.	112.	45.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
26.3	7.27	5740.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	16.0	34.0		
D	62.0	92.0	-5.0	.5
E	.999			
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	34.0	62.0		
D	92.0	132.0		-.5
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ~ 7 MILES W. OF DOG VALLEY Date 16-AUG-76

Map COVE FORT UT, 15"

Property _____ T 25S R 8W sec 12 SE¼ SE¼

Drill Hole B-168 Date Drilled AUG-76 Elevation _____ ft.

Instrument _____ Operator _____

Comments 1" STEEL PIPE - CHEVRON GRADIENT HOLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
8	5533	14.02			
			0.93		
10	5330	14.95			
			0.91		
12	5140	15.86			
			0.73		
14	4993	16.59			
			0.73		
16	4850	17.32			
			0.71		
18	4716	18.03			
			0.79		
20	4573	18.82			
			0.84		
22	4426	19.66			
			0.87		
24	4279	20.53			
			0.84		
26	4143	21.37			
			0.94		
28	3997	22.31			
			0.89		
30	3864	23.20			
			0.98		
32	3724	24.18			
			0.87		
34	3605	25.05			
			0.70		
36	3512	25.75			
			0.73		
38	3417	26.48			
			0.69		
40	3331	27.17			
			0.52		
42	3268	27.69			
			0.51		
44	3208	28.20			
			0.48		
46	3152	28.68			GRADIENT 114-134m 225.5°C/Km
			0.53		
48	3092	29.21			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-168 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
50	3016	29.89	0.68		
52	2946	30.55	0.67		
54	2883	31.15	0.60		
56	2822	31.74	0.39		
58	2748	32.49	0.75		
60	2686	33.13	0.64		
62	2643	33.59	0.46		
64	2596	34.10	0.51		
66	2558	34.52	0.42		
68	2518	34.97	0.45		
70	2481	35.40	0.43		
72	2446	35.81	0.41		
74	2410	36.24	0.43		
76	2378	36.62	0.38		
78	2347	37.00	0.38		
80	2312	37.44	0.44		
82	2278	37.87	0.43		
84	2245	38.30	0.43		
86	2213	38.72	0.42		
88	2183	39.13	0.41		
90	2152	39.55	0.42		

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

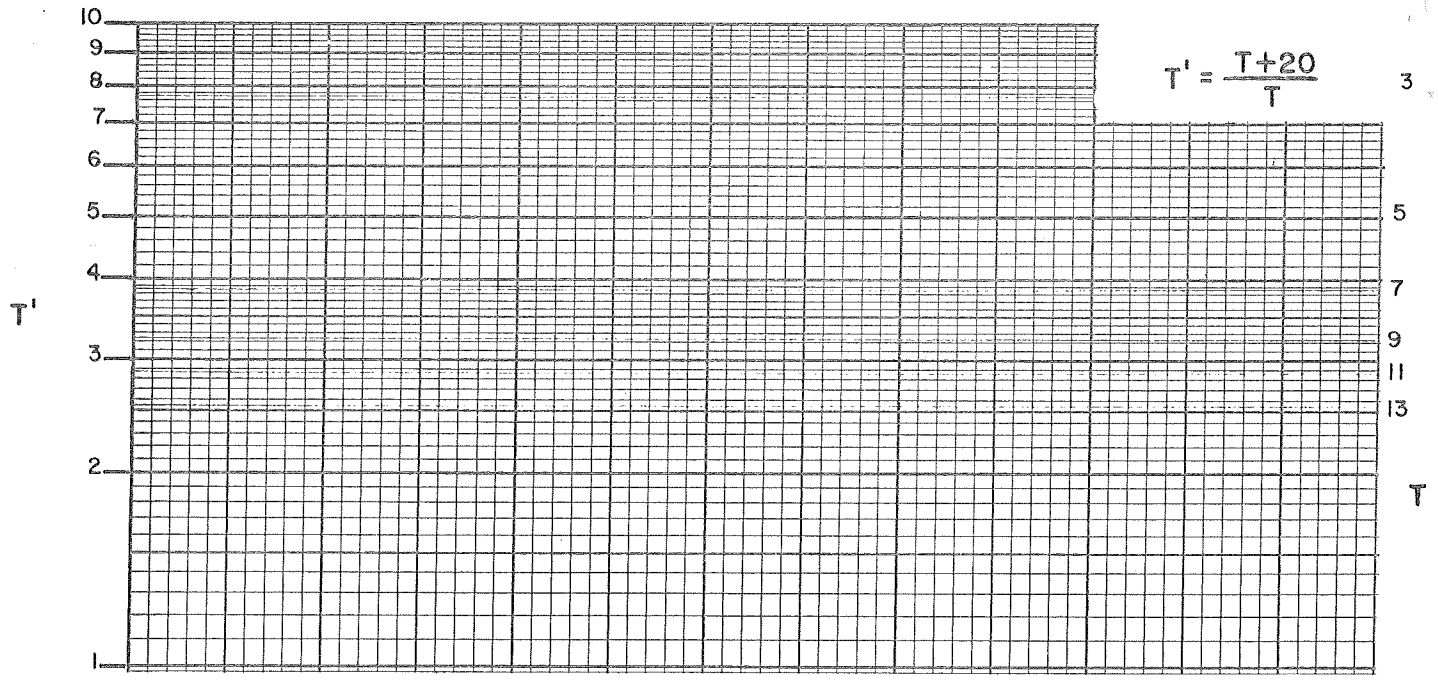
Property _____ T ____ R ____ sec ____

Drill Hole B-168 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
92	2120	39.99	0.44		
94	2090	40.42	0.43		
96	2059	40.86	0.44		
98	2031	41.27	0.41		
100	2001	41.72	0.45		
102	1971	42.17	0.45		
104	1942	42.62	0.45		
106	1917	43.02	0.40		
108	1888	43.48	0.46		
110	1862	43.90	0.42		
112	1837	44.32	0.42		
114	1811	44.75	0.43		
116	1785	45.20	0.45		
118	1756	45.70	0.50		
120	1731	46.15	0.45		
122	1704	46.64	0.49		
124	1680	47.08	0.44		
126	1656	47.53	0.45		
128	1633	47.97	0.44		
130	1611	48.40	0.43		
132	1589	48.84	0.44		
134	1568	49.26	0.42		



RESISTANCE

HOLE B-168

DEPTH METERS

0
10
20
30
40
50
60
70
80
90
100
110
120

41.7
0.89

307, 200 225
10.5 @ 5.0

10
20
30
40
50

TEMPERATURE °C

B-168

m 5 10 15 20 25 30 °C 35 40 45

10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

K = 2.0

428.8

K = 3

304.96

K = 4.42

Z = 9.26

209.47

K = 4.13

224.54

A data

41.72 / 0.80 ⊙ 209.6 − 428.8

20 25 30 °C 45 50

46 0780

K+E 10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 183

Property-Project Best Depth Logged

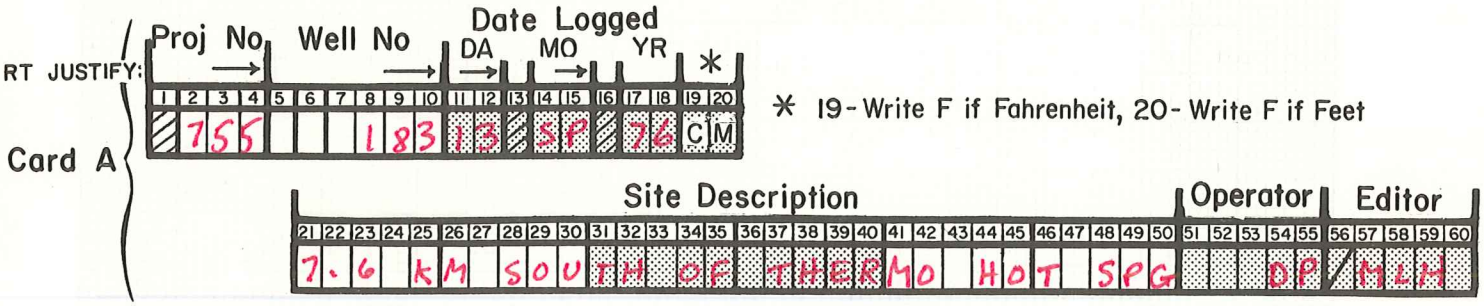
Map Scale Date: Drilled Logged

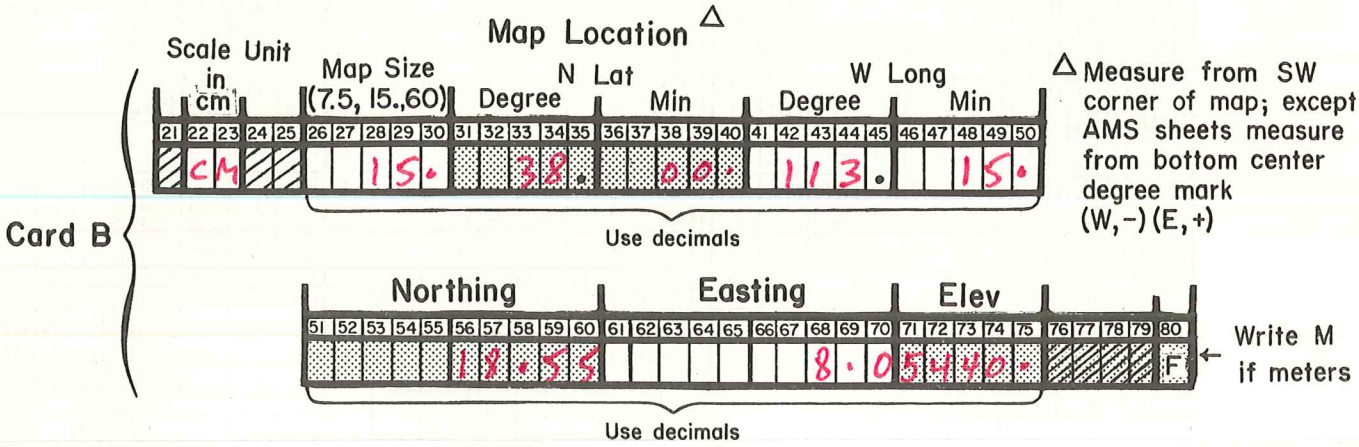
State County Section T R

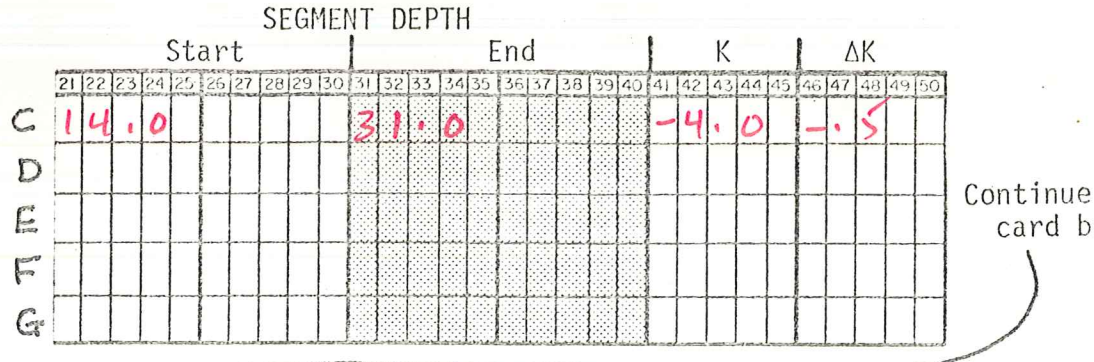
Instrument Operator Elevation ft.

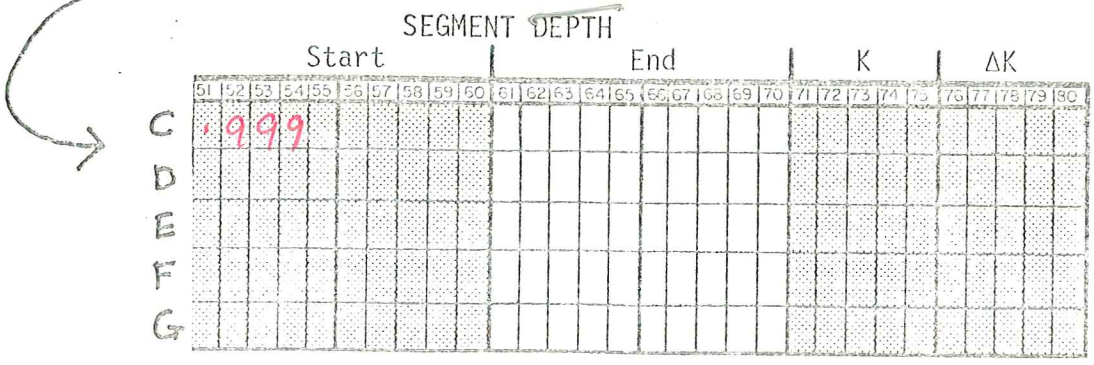
Comments

COMPUTER PROCESSING









Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 3.5 miles south of Thermo Hot Sps. Date Sept 13, 1976

Map Thermo, Utah 15' Quadrangle

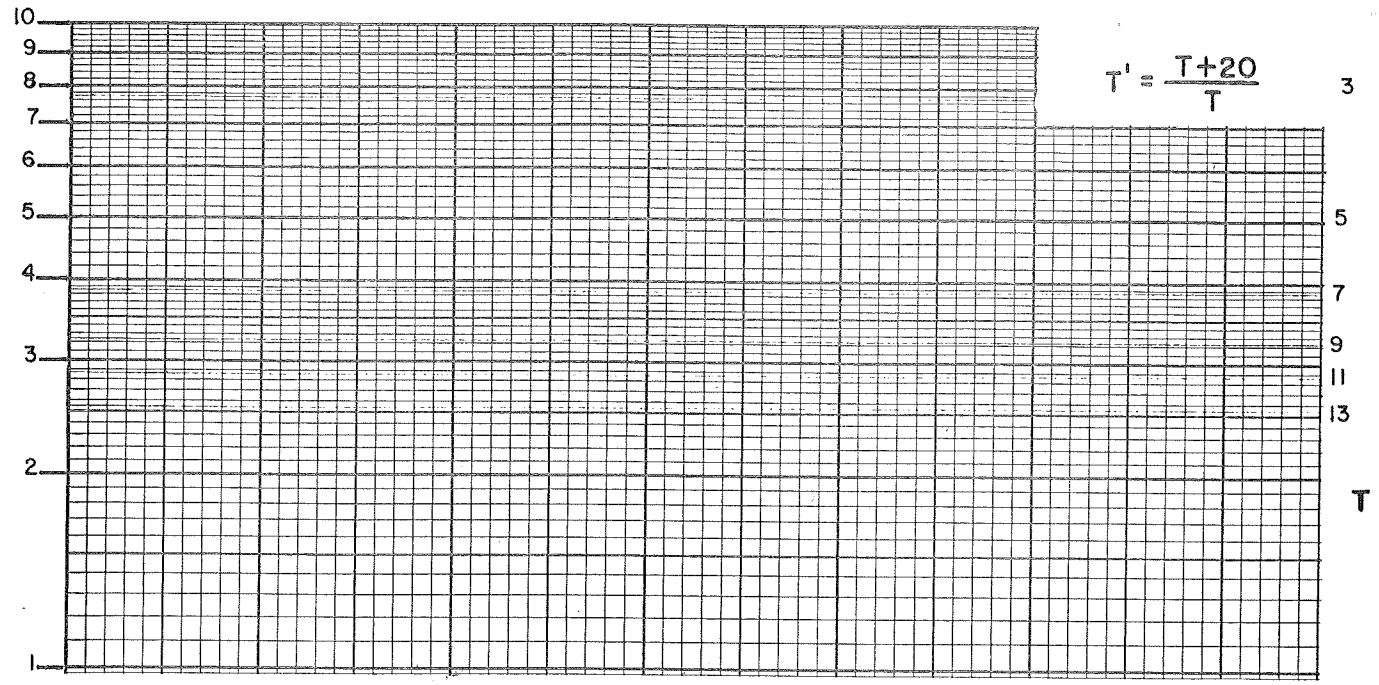
Property Best T 31S R 12W sec NW¼ SW¼ 15

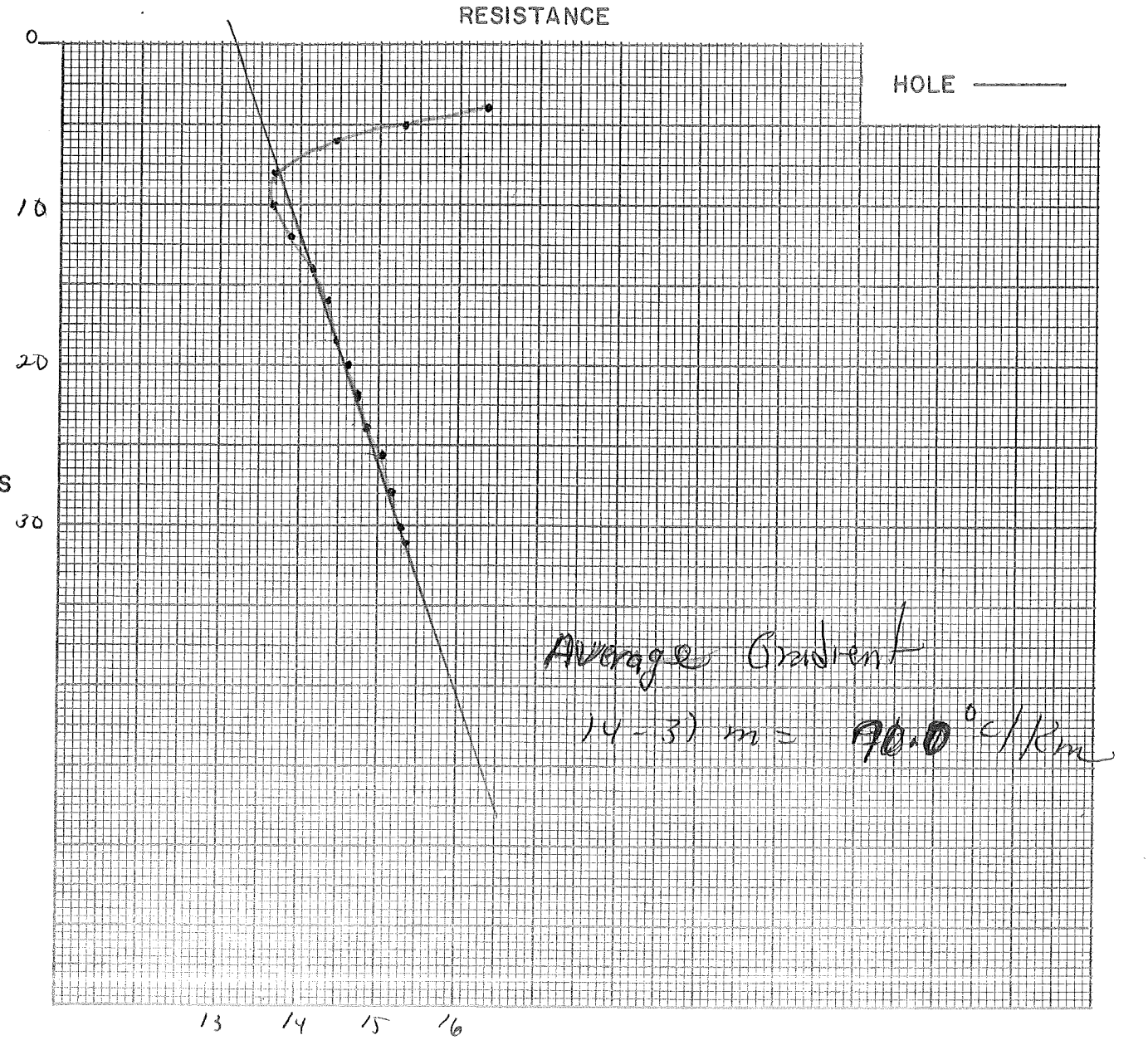
Drill Hole B-183 Date Drilled ? Elevation 5440 ft.

Instrument Old Operator DP

Comments water filled PVC - Phillips drill hole - a few feet of valley fill - rest gray fine-grained dense Rhyodacite flows.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
0-3					air
4	5034	16.380			
6	5442	14.430	1.750		
8	5609	13.680	.750		
10	5617	13.645	.035		
12	5558	13.900	.255	127.5	
14	5505	14.145	.245	122.5	
16	5433	14.470	.145	72.5	
20	5461	14.625	.155	77.5	
22	5375	14.740	.115	57.5	
24	5344	14.885	.145	72.5	
26	5314	15.025	.140	70.0	
28	5290	15.135	.110	55.0	
30	5263	15.265	.130	65.0	
31	5247	15.340	.075	75.0	

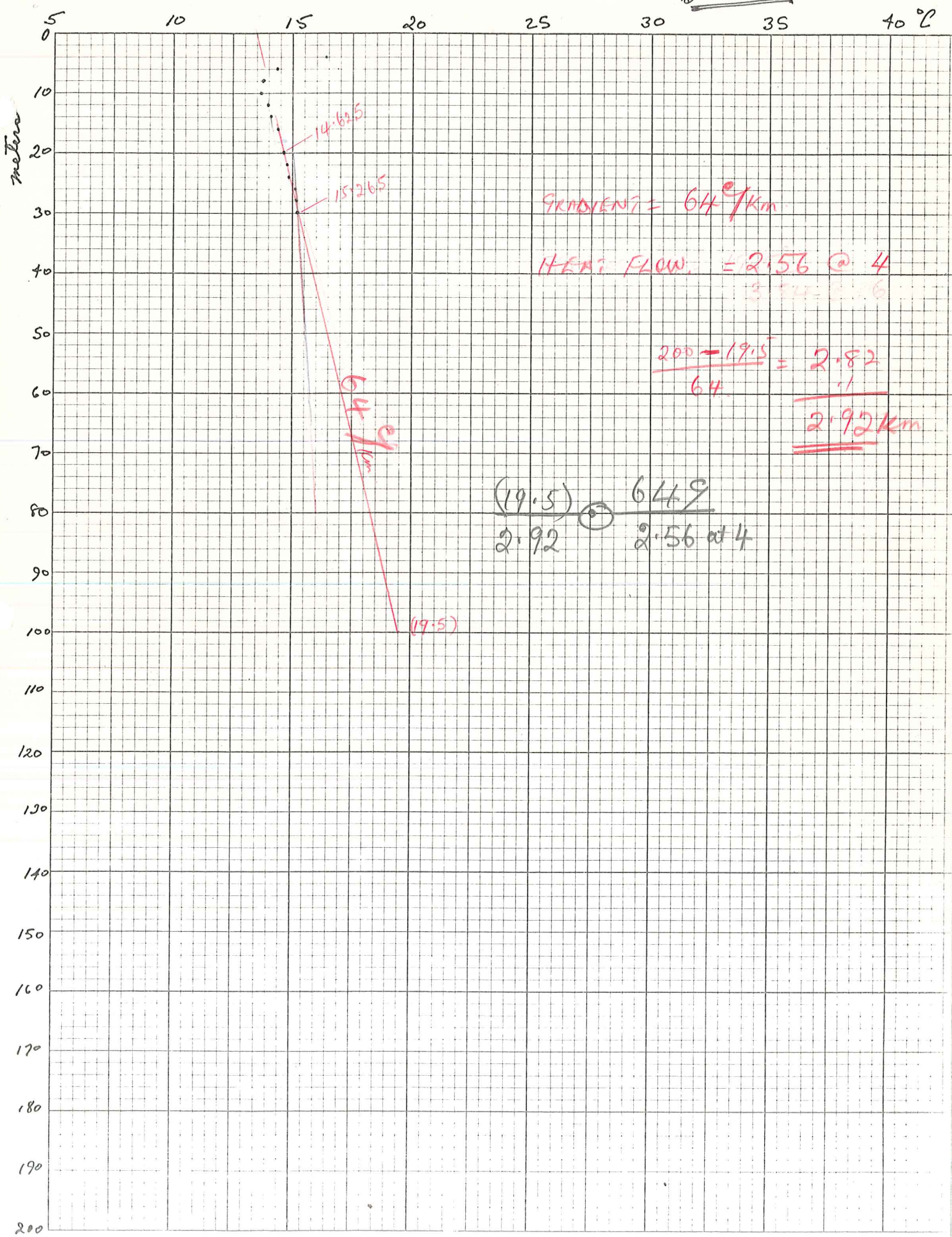




Average Gradient

(14 - 31) m = 70.0 °C/Km

B-183.



47 0780
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TEMPERATURE DEPTH LOG

ΔT Well No. 184

Property-Project Ok Depth Logged

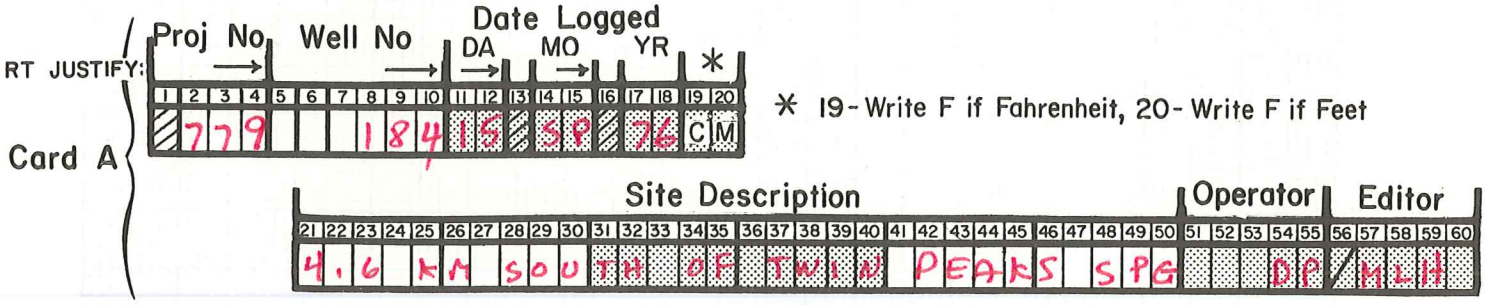
Map Scale Date: Drilled Logged

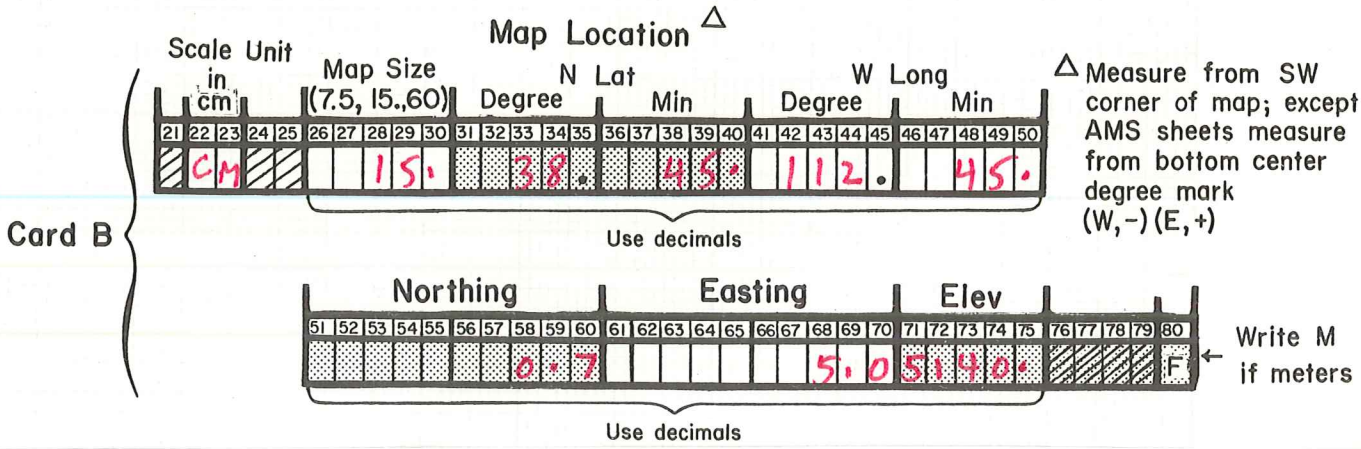
State County Section T R

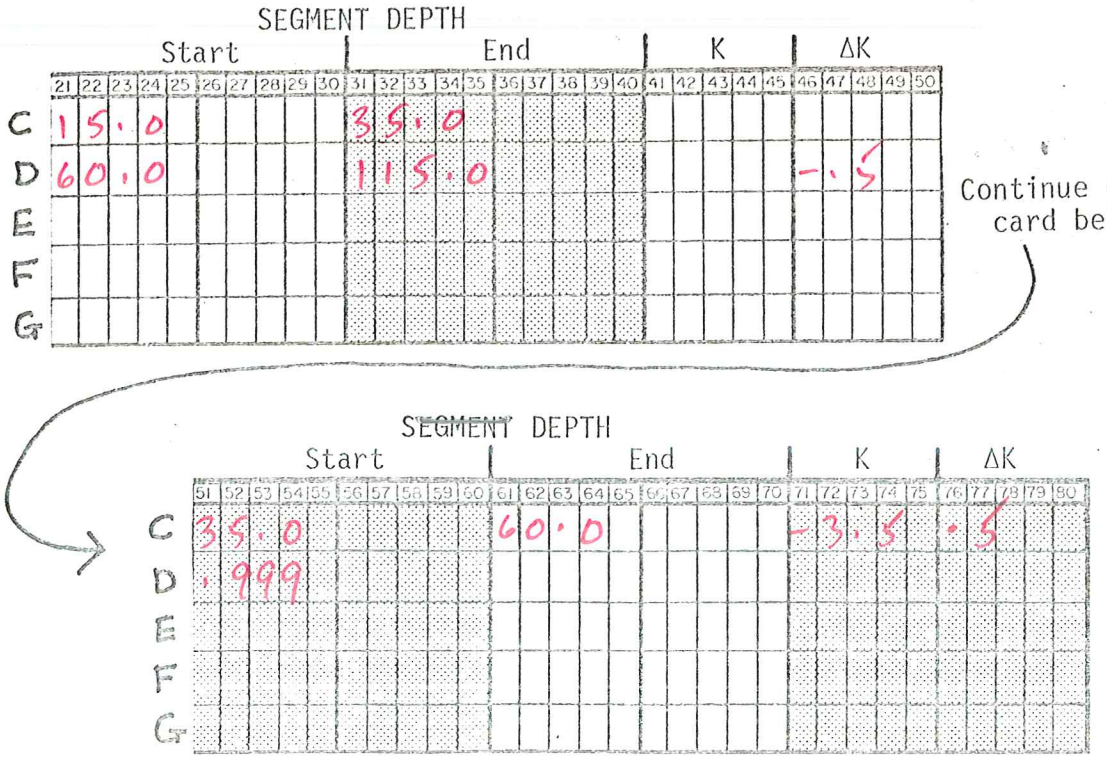
Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING







Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 3 miles ENE of South Twin Peak Date Sept 15, 1976

Map Tabernacle Hill, Utah 7½' Quad

Property OK T 24S R 8W sec SE¼ NE¼ 2

Drill Hole B-184 Date Drilled Sept 76 Elevation 5140 ft.

Instrument Old unit Operator RP

Comments Cheveron Gradient Hole - Tuffaceous lake sediments at top - break in gradient probably lithologic bottom may be dense rhyolite

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	5535	14.010			
10	5424	14.515	0.135	27	
15	5183	15.650	0.510	102	
20	5078	16.160	0.455	91	
25	4988	16615	0.555	111	
30	4879	17.170	0.465	93	
35	4790	17635	0.290	58	
40	4736	17925	0.330	66	
45	4675	18.255	0.285	57	
50	4624	18.540	0.255	51	
55	4578	18795	0.135	27	
60	4554	18930	0.120	24	
65	4532	19.050	0.135	27	
70	4509	19185	0.095	19	
75	4492	19280	0.055	11	
80	4482	19.335	0.070	14	
85	4470	19405	0.070	14	
90	4458	19475	0.060	12	
95	4448	19535	0.055	11	
100	4438	19590	0.055	11	
105	4429	19645	0.055	11	

TEMPERATURE - DEPTH LOG

Location ______ Date ______

Map ______

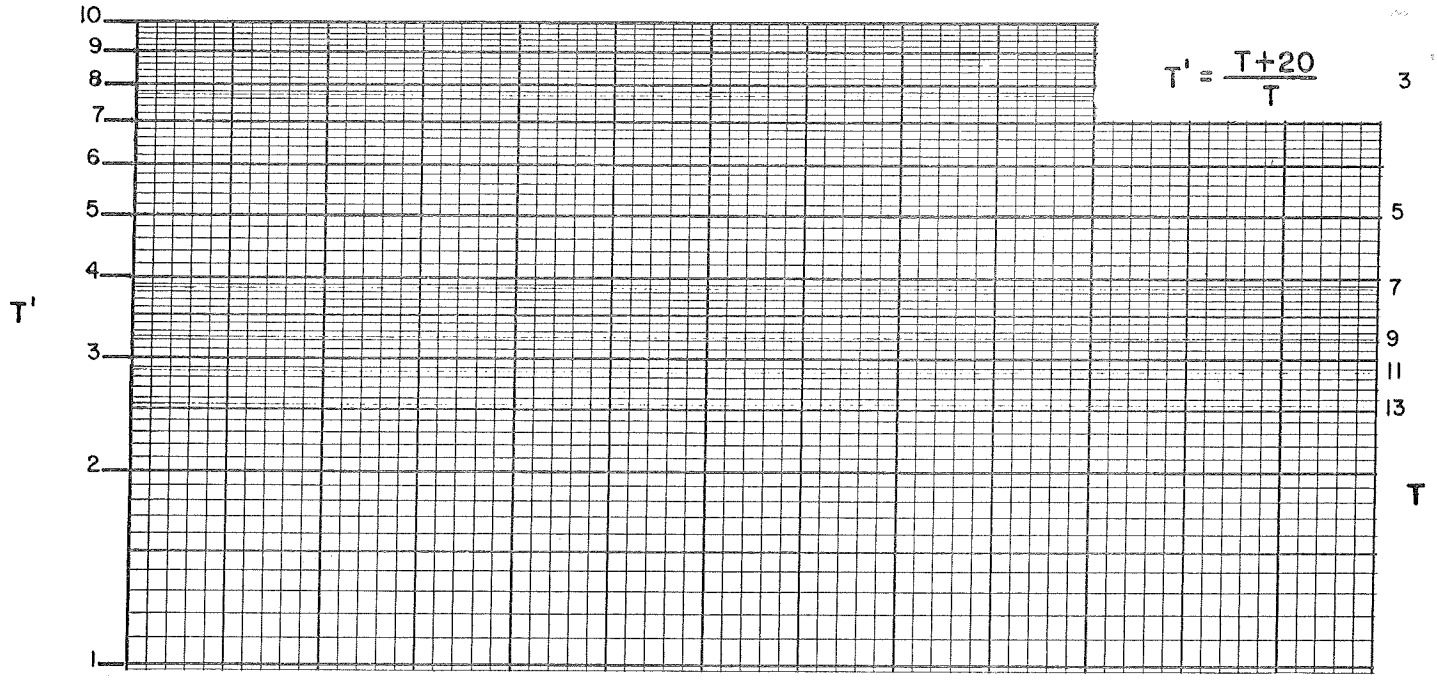
Property ______ T ____ R ____ sec ______

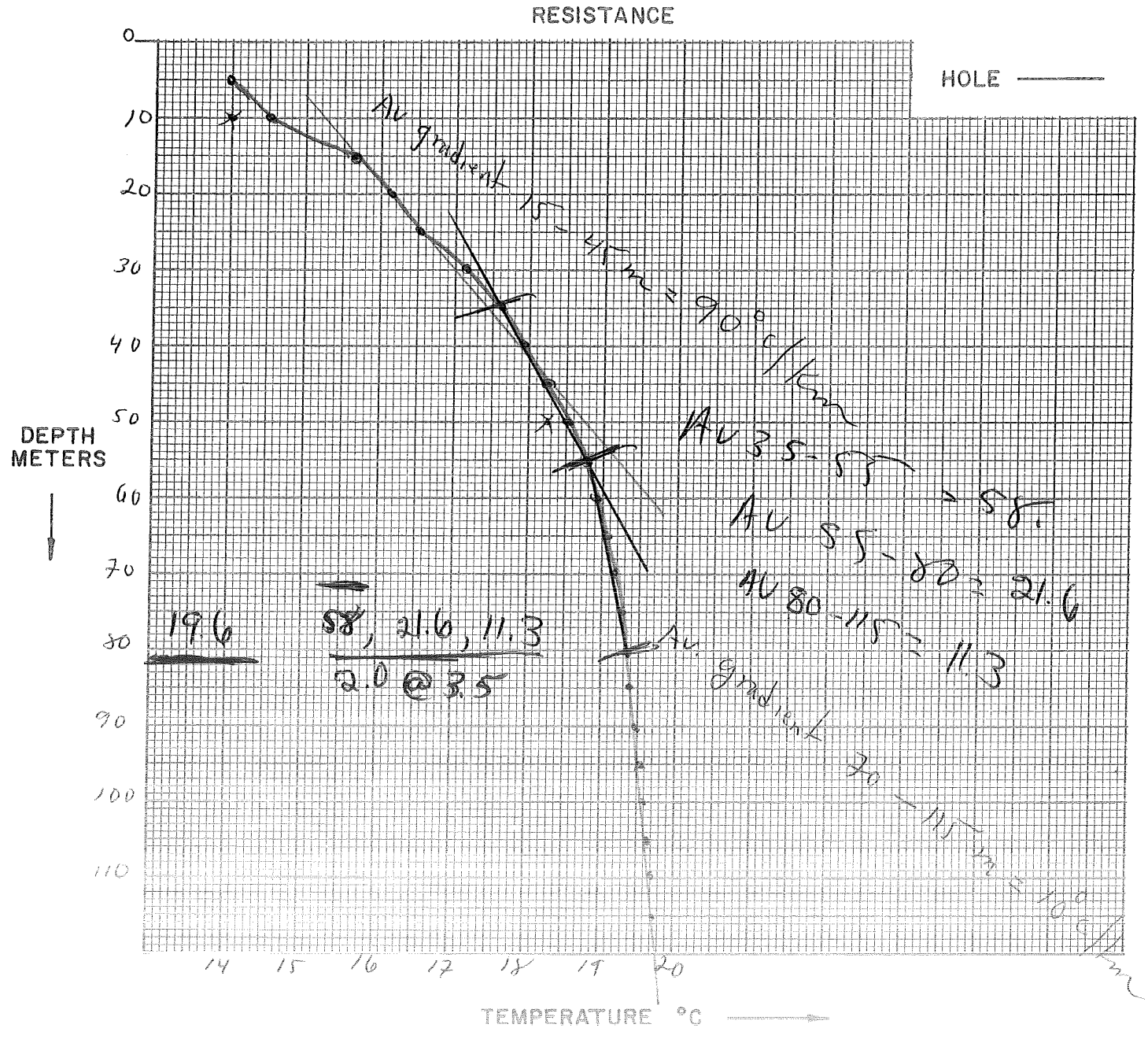
Drill Hole ______ Date Drilled ______ Elevation ______ ft.

Instrument ______ Operator ______

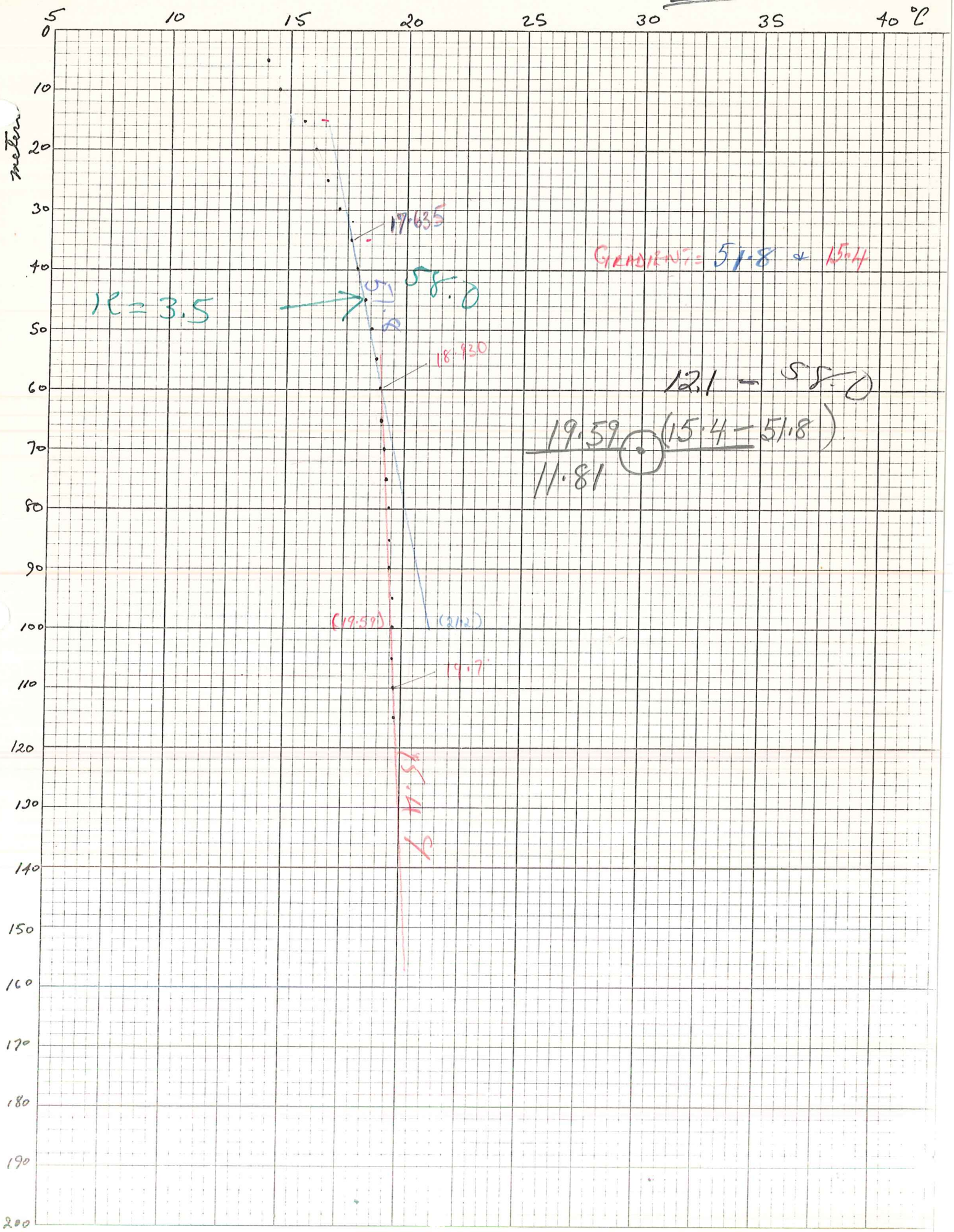
Comments ______

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
110	4419	19.700				
			.030	6		
115	4413	19730				
~~120~~						


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
DEPTH METERS
TEMPERATURE °C
0
10
20
30
40
50
60
70
80
90
100
110
14
15
16
17
18
19
20
Au gradient 15 - 41 m = 90° C/km
Au 35 - 57 = 58
Au 55 - 80 = 21.6
Au 80 - 115 = 11.3
19.6
58, 21.6, 11.3
2.0 @ 3.5
Au gradient
20 - 115 = 10°C

B-184



47 0780
10 X 10 TO THE INCH • 10 X 15 INCHES
KEUFFEL & ESSER CO MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 185

Property-Project ~~Roo~~ OK   Depth Logged

Map   Scale   Date: Drilled   Logged

State   County   Section   T   R

Instrument   Operator   Elevation   ft.

Comments

COMPUTER PROCESSING

Card A (RT JUSTIFY)

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (13–15)	YR (16–18)	* (19–20)
779	185	15	SP	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
8.2 KM SE OF CRUZ, UTAH	DP	/ MLH

Card B

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	45.	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	(80)
17.95	41.3	5000.		F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0	32.0	-3.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT ~~DEPTH~~

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location West Flank of North Twin Peak Date Sept 15, 1976

Map Cruz, Utah 1/24,000 prelim sheet

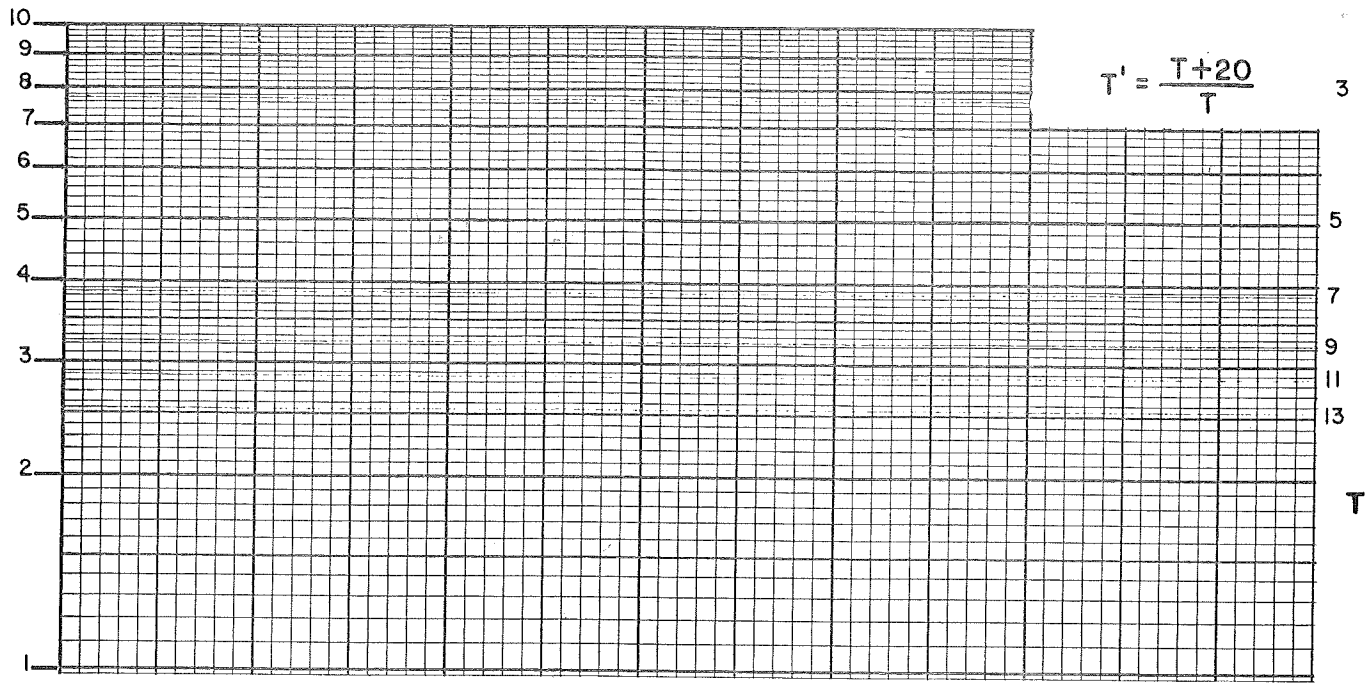
Property OK T 23 S R 8W sec NW¼NW¼ 28

Drill Hole B-185 Date Drilled Sept (?) Elevation 5000 ft.

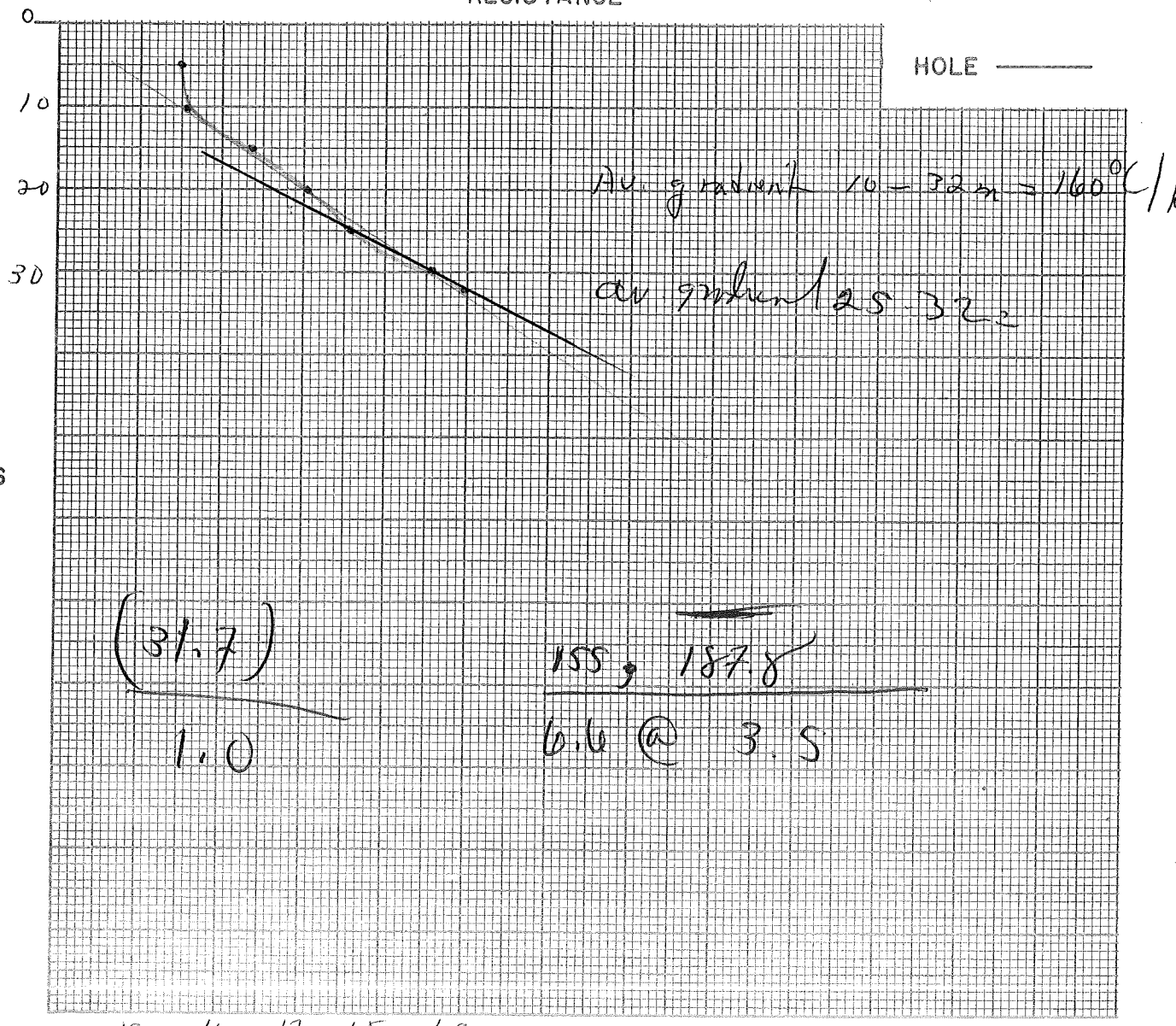
Instrument old unit Operator DP

Comments Tuffaceous Lake sediments.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	5212	15.510			
10	5201	15.560	0.830	166	
15	5032	16.390	0.645	129	
20	4905	17.035	0.635	127	
25	4784	17.670	0.910	182	
30	4616	18.580	0.405	81	
32.6	4544	18.985			

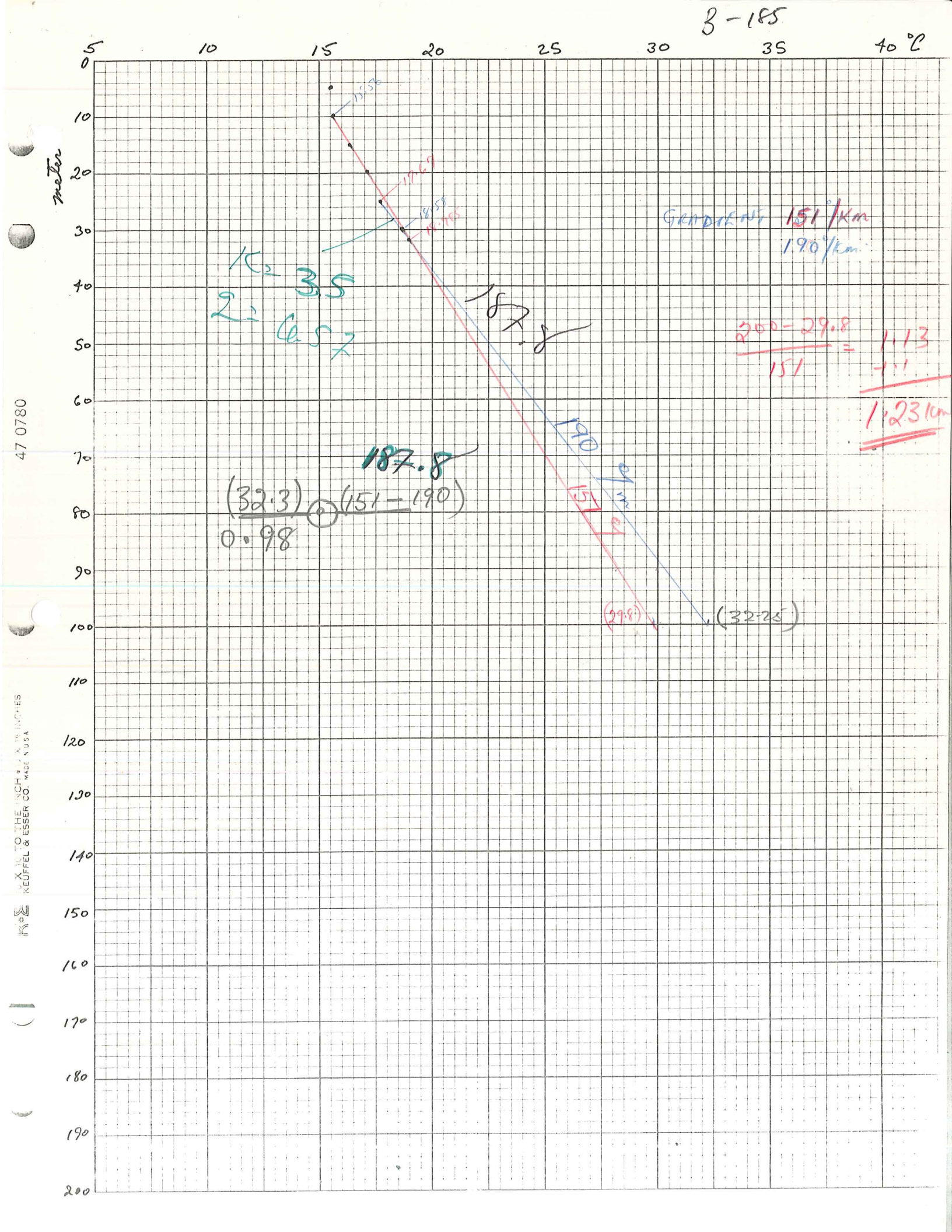


RESISTANCE



DEPTH METERS

TEMPERATURE °C



47 0780
KEUFFEL & ESSER CO. MADE IN USA

TEMPERATURE DEPTH LOG

ΔT Well No. 186

Property-Project: Best
Depth Logged: ____
Map: ____ Scale: ____ Date: Drilled ____ Logged ____
State: ____ County: ____ Section: ____ T ____ R ____
Instrument: ____ Operator: ____ Elevation: ____ ft.
Comments: ____

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* (19–20)
755	186	05	OC	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
11.7 KM SE OF THERMO, UTAH	DP	/MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	00.	113.	15.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	(80)
29.15	27.22	5200.		F

← Write M if meters

Use decimals

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	21.0	36.5	-3.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1 Mile Southeast of Nine Mile Knoll Date Oct 5, 1976

Map Thermo, Utah 15' Quad

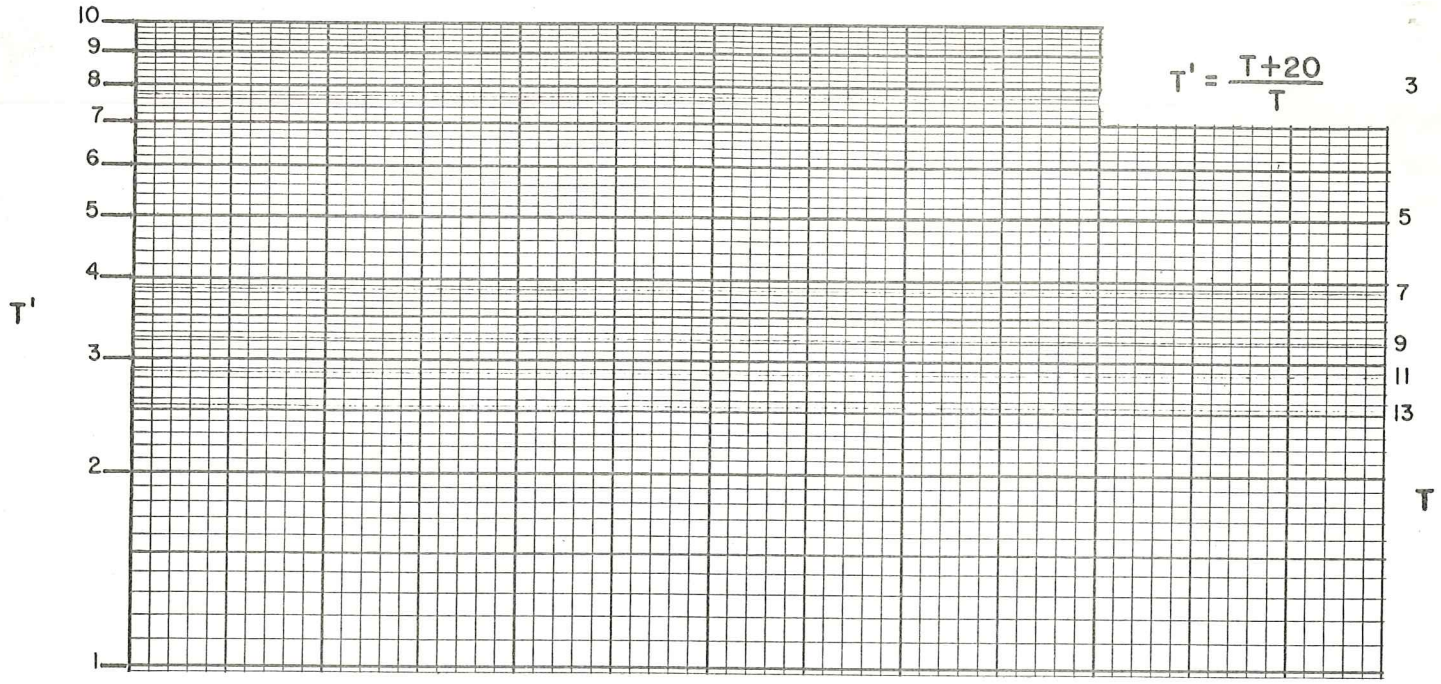
Property Best T 30 S R 11 W sec NW¼ SE¼ 26

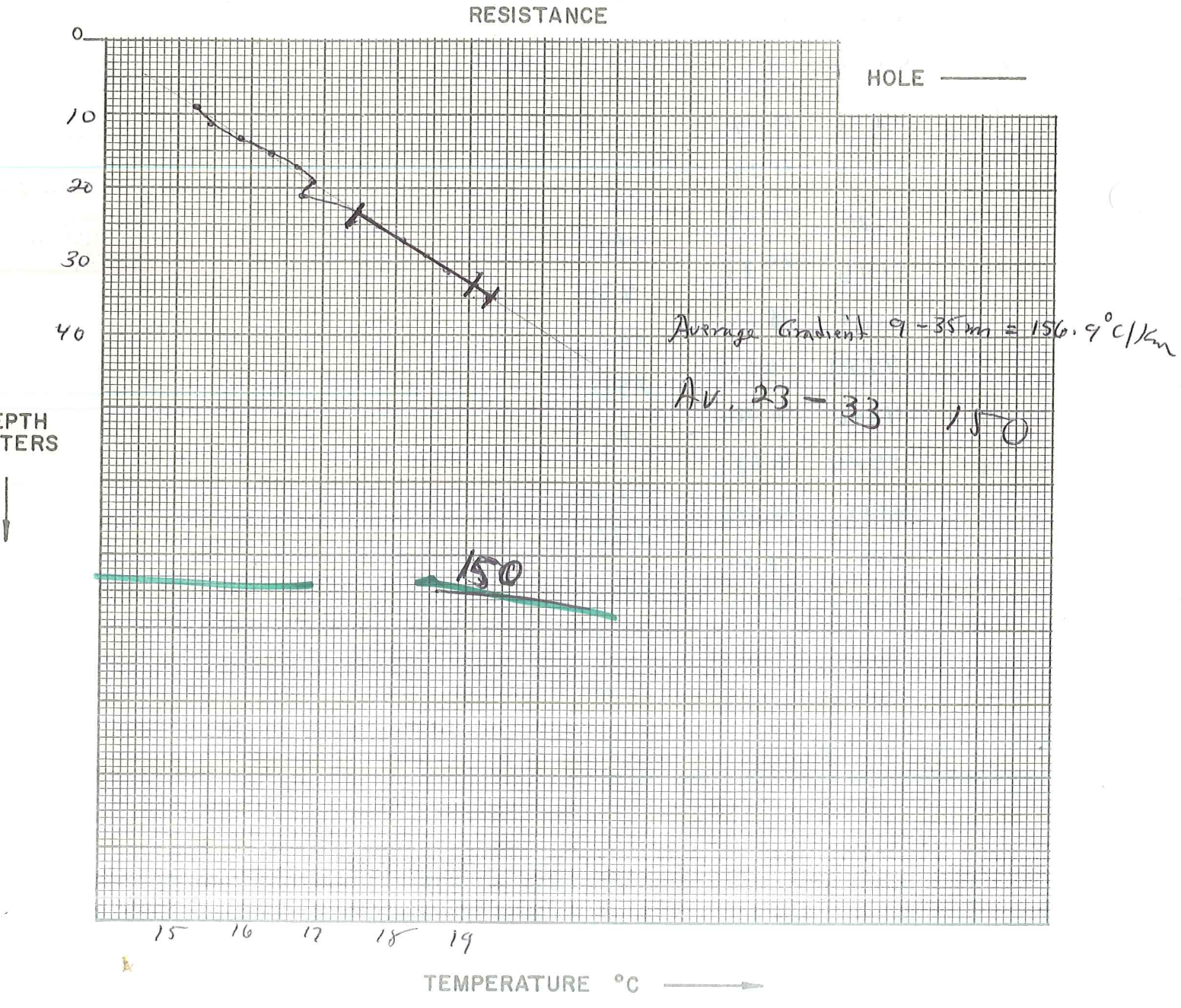
Drill Hole B-186 Date Drilled ? Elevation 5200 ft.

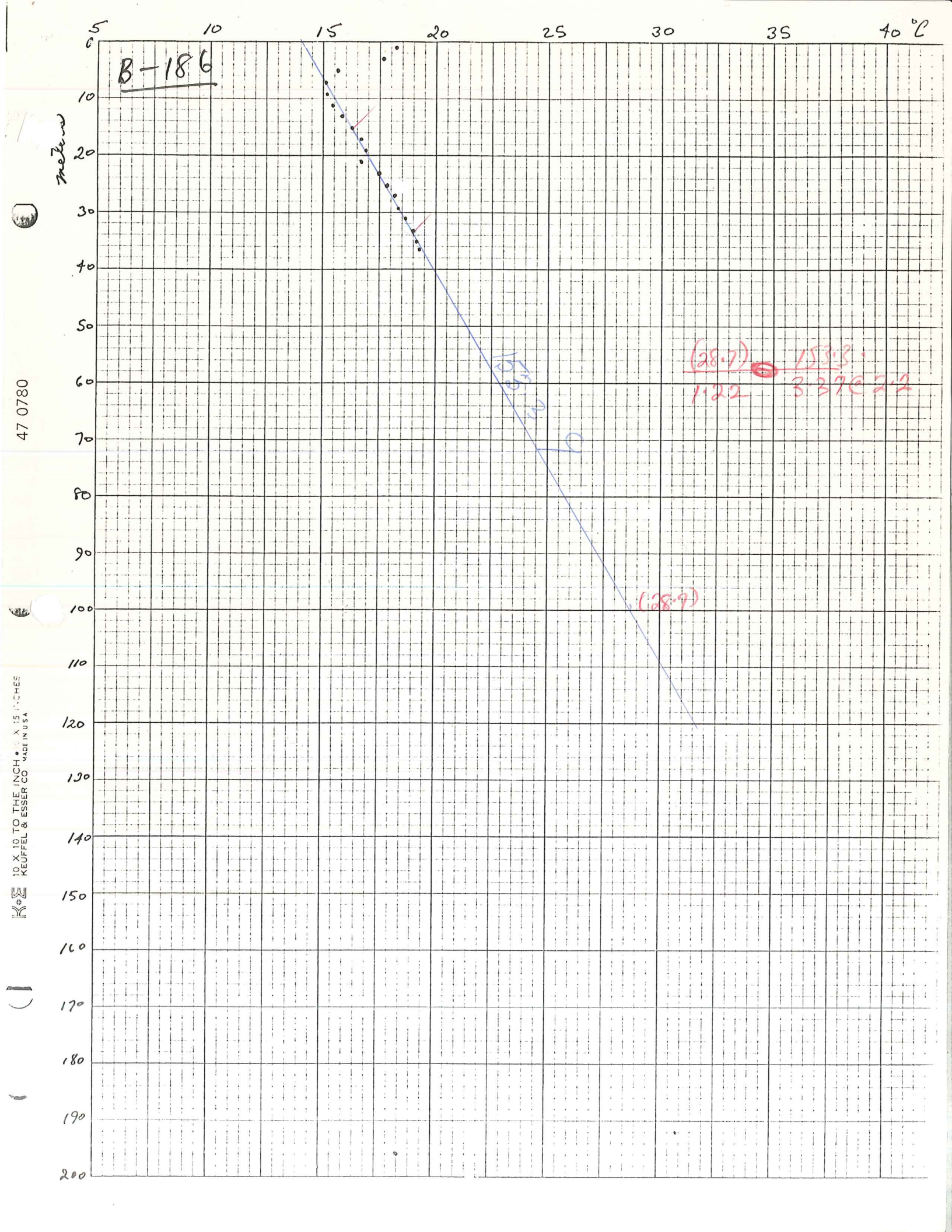
Instrument old unit Operator DP

Comments 1¼ PVC cutting all of gravel and sands

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
1.0	4694	18.15			
3.0	4800	17.59			
5.0	5200	15.57			
7.0	5299	15.09			
9.0	5268	15.24			
11.0	5229	15.47	.230		
13.0	5146	15.83	.360		
15.0	5061	16.250	.420		
17	4989	16.610	.360		
19	4940	16 860	.250		
21	4974	16.680	.180		
23	4815	17.510	.830		
25	4752	17 840	.330		
27	4703	18.100	.260		
29	4649	18,400	.300		
31	4597	18.690	.290		
33	4538	19.010	.320		
35	4509	19 180	.170		
36.5	4485	19.320	.140		


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
0
10
20
30
40
DEPTH METERS
Average Gradient 9 - 35 m = 156.9 °C/Km
Av. 23 - 33 150
150
15
16
17
18
19
TEMPERATURE °C


B-186
5
10
15
20
25
30
35
40 °C
meters
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
(28.7)
1.22
153.3
3.37 @ 2.2
(28.7)
47 0780
10 X 10 TO THE INCH • 10 X 15 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 187

Property-Project Thermex Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY: Proj No → | Well No → | Date Logged: DA → MO → YR | *

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	7	7	7				1	8	7	1	5		0	6		7	6	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description | Operator | Editor

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
3	.	6		K	M		N	W		O	F		C	O	V	E		F	O	R	T	,		U	T	A	H						D	P	/	M	L	H		

Card B

Map Location △ | Scale Unit in cm | Map Size (7.5, 15.,60) | N Lat: Degree, Min | W Long: Degree, Min

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-)(E,+)

21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
	C	M				1	5	.			3	8	.			3	0	.			1	1	2	.			4	5	.

Use decimals

Northing | Easting | Elev

51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
					2	0	.	7	5							1	7	.	8	5	9	2	0	.					F

← Write M if meters

Use decimals

SEGMENT DEPTH

	Start	End	K	ΔK
C	15.0	40.0	-3.0	.5
D	95.0	145.0		-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	50.0	95.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 2 miles WNW of Cove Fort along Black Rock Rd Date October 15, 1976

Map Cove Fort, Utah 15' Quad

Property Thermex T 25S R 7W sec SW¼ SE¼ 22

Drill Hole B-187 Date Drilled Sept 76 Elevation 5920 ft.

Instrument Probe 44 Operator DP

Comments 3/4 inch iron pipe

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	91.300	19.780			
10	94.10	18.965			
15	100.10	17.190			
20	95.51	18.526	1.330	266	
25	90.86	19.905	1.385	277	
30	86.70	21.210	1.305	261	
35	82.59	22.535	1.325	265	
40	78.90	23.775	1.240	248	
45	75.41	24.990	1.215	243	
50	73.70	25.600	.610	122	
55	73.40	25.710	.110	22	
60	73.34	25.730	.020	4	
65	73.34	25.730	000	0	
70	73.61	25.635	-.095	-19	
75	73.80	25.565	-.070	-14	
80	73.80	25.565	000	0	
85	73.80	25.565	000	0	
90	73.60	25.640	.075	15	
95	73.00	25.855	.215	43	
100	72.60	26.000	.145	29	
105	72.01	24.220	.220	44	
			.220	44	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

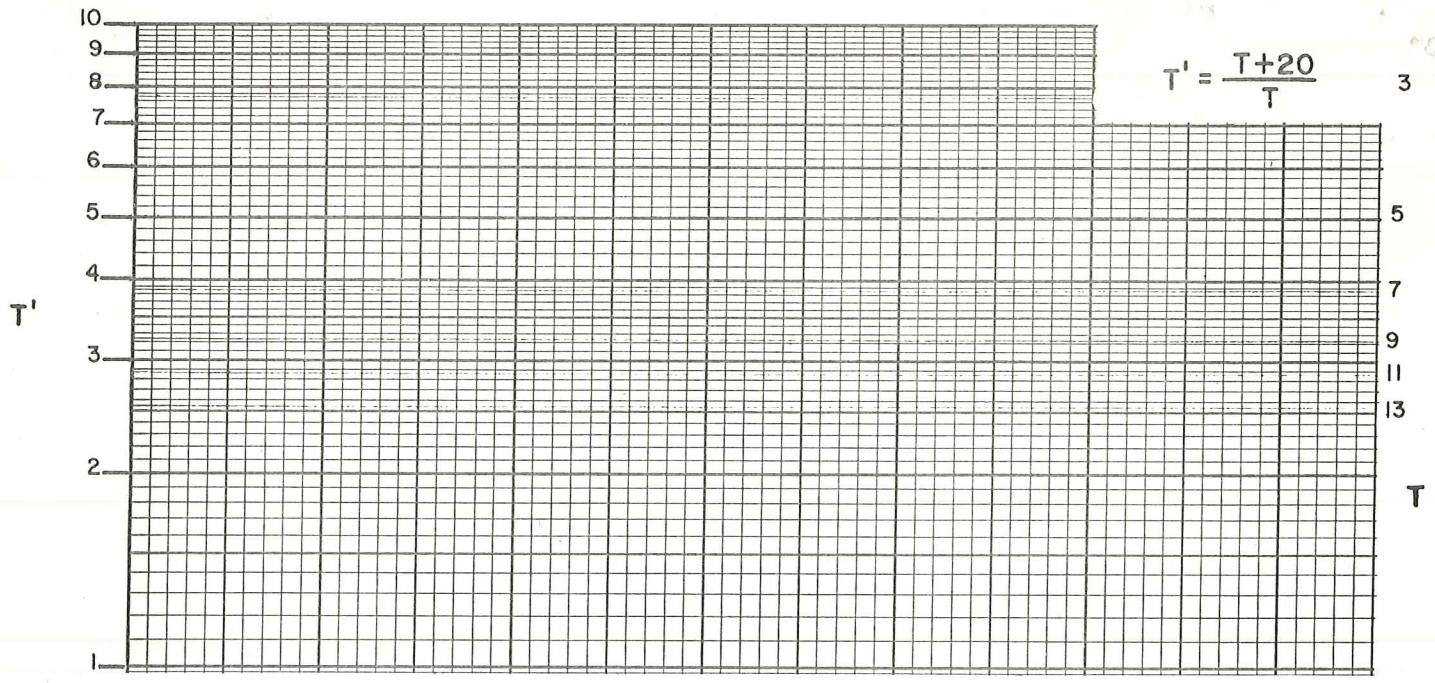
Property _____ T ____ R ____ sec ____

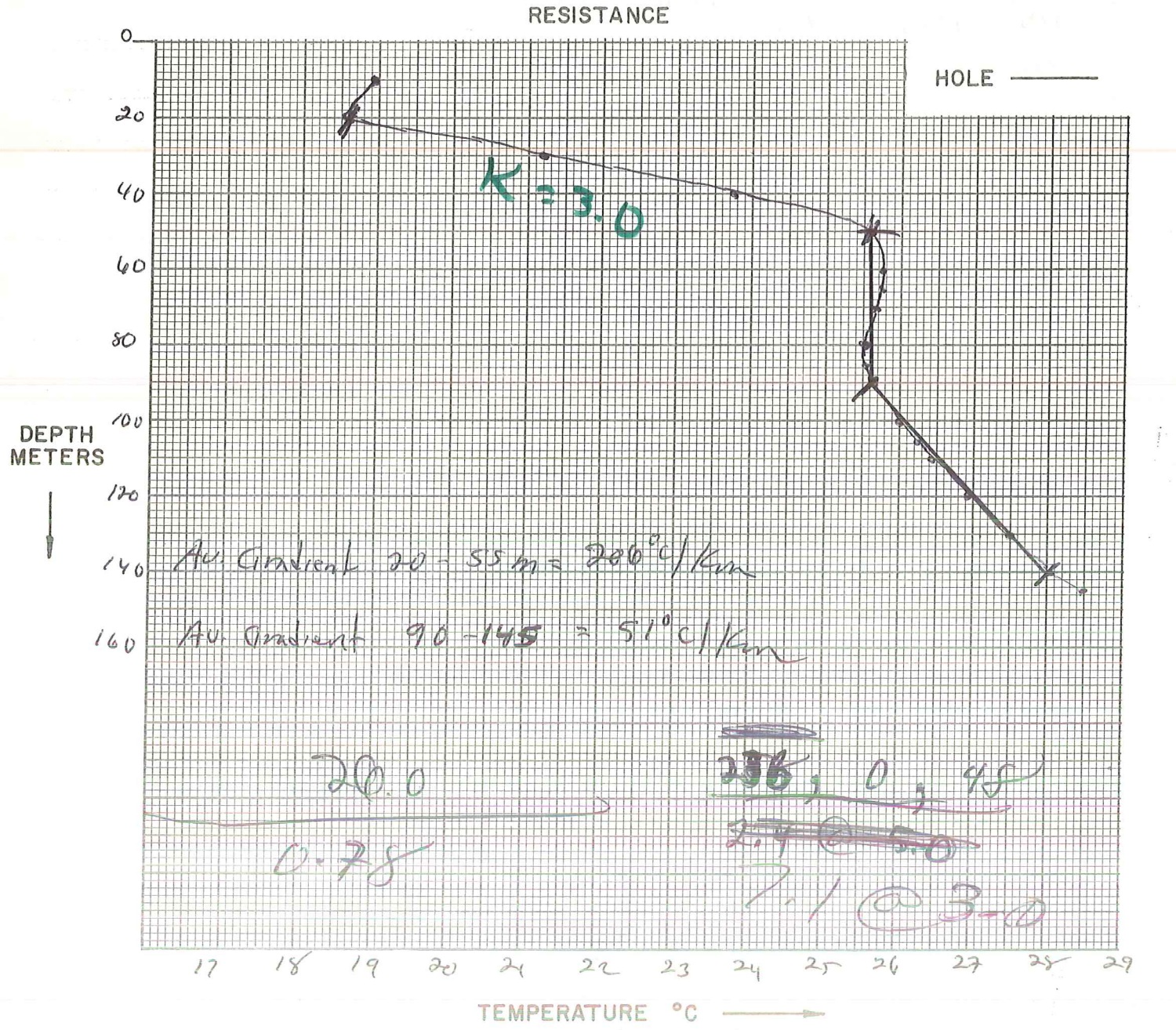
Drill Hole _____ Date Drilled _____ Elevation _____ ft.

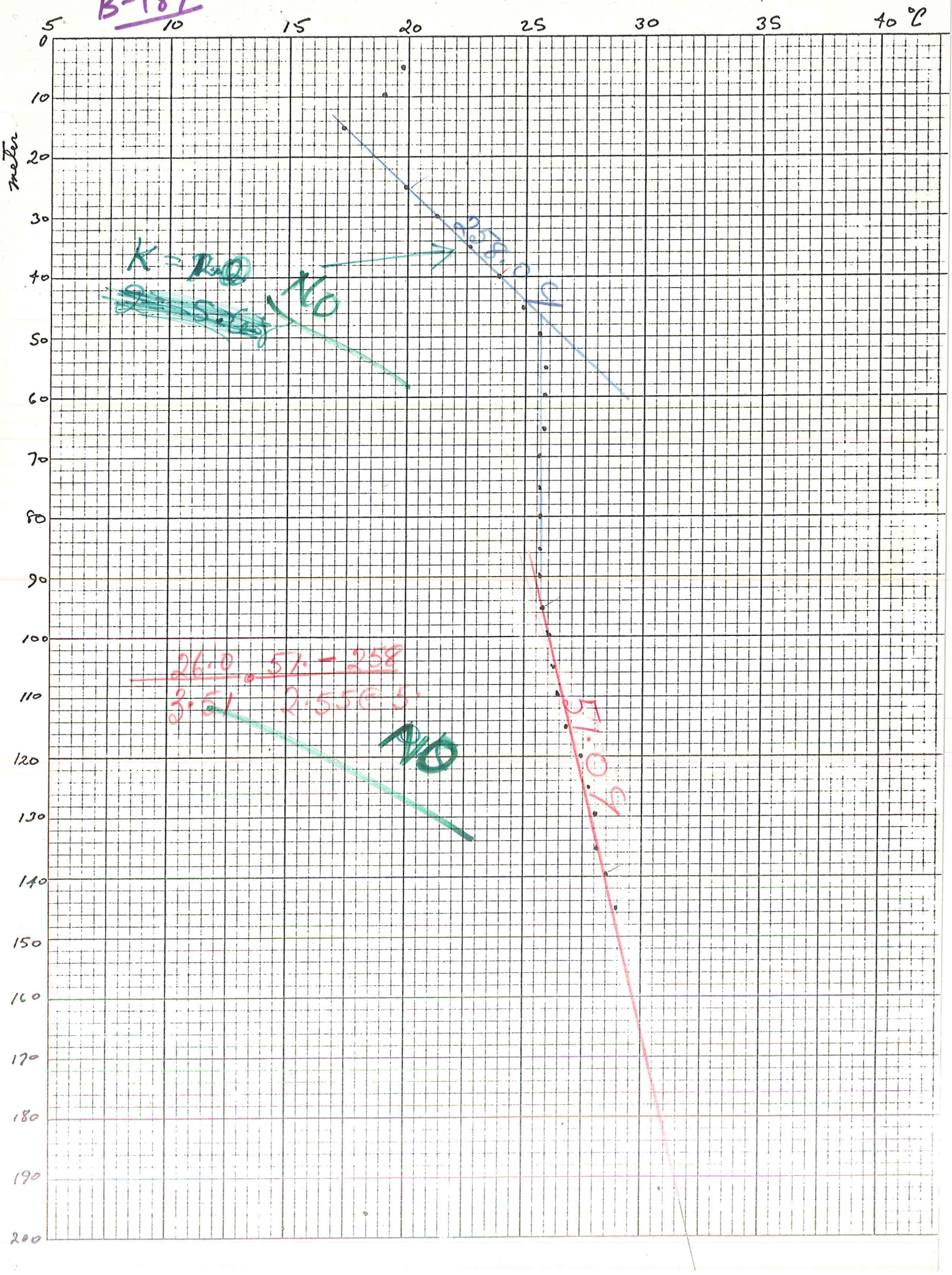
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
110	71.41	26.440			
115	70.61	26.740	.300	60	
120	70.00	26.970	.230	46	
125	69.30	27.235	.265	53	
130	68.60	27.505	.270	54	
135	68.21	27.655	.155	31	
140	67.20	28.040	.385	77	
145	66.20	28.440	.400	80	


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
K = 3.0
DEPTH METERS
0
20
40
60
80
100
120
140
160
Av. Gradient 20 - 55 m = 20.6°C/Km
Av. Gradient 90 - 145 = 5.1°C/Km
20.0
0.28
2.1 @ 3.0
17
18
19
20
21
22
23
24
25
26
27
28
29
TEMPERATURE °C


B-187
5
10
15
20
25
30
35
40 °C
meter
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
K = 1.0
No
258.0 °C
26.0 . 51. - 258
3.51 2.55 @ 5.
No
51.0 °C
47 0780
10 X 10 TO THE INCH • 10 X 15 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 107

Property-Project Best Depth Logged _____

Map _____ Scale _____ Date: Drilled _____ Logged _____

State _____ County _____ Section _____ T _____ R _____

Instrument _____ Operator _____ Elevation _____ ft.

Comments _____

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No.	Well No	Date Logged DA	MO	YR	*
755	107	29	AP	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
NORTHEAST END OF DOG VALLEY	JED	MLH

Card B

Map Location △

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
CM	15.	38.	30.	112.	45.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
30.38	25.80	5780.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	15.0	35.0		
D	70.0	110.0	-6.1	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	35.0	65.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

See log following

_____ of _____

TEMPERATURE - DEPTH LOG

Location EAST PORTION OF DOG VALLEY Date 29-APRIL-76

Map COVE FORT 15"

Property _____ T 25S R 6W sec NE 1/4 SEC 6

Drill Hole BEST 107 Date Drilled _____ Elevation 5780 ft.

Instrument _____ Operator JED

Comments 8" CASED, ABANDONED WATER WELL.

Kailer [illegible]

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
10	(3) 4169 (5) 4248 (7) 4289 (9) 4313	19.27	3.64	728		
15	3976 3931 3907 3911	22.91	2.66	5.32		READING FLUCTIATES - AIR MOVEMENT IN WELL ?
20	3616 3604 3593 3579	25.57	2.56	512		
25	3236 3216 3230 3242	28.13	2.66	532		READING FLUCTIATES.
30	2938 2937 2920 2954	30.79	2.05	410		READING DRIFTS.
35	2743 2736 2735 2730	32.84	1.13	226		
40	2608	33.97	1.17	234		STABLE READING
45	2507 2504 2504 2504	35.14	0.85	170		
50	2431	35.99	0.48	96		
55	2391	36.47	0.45	90		
60	2354	36.92	1.45	290		
65	2240	38.37	3.62	724		READING UNSTABLE DUE TO PULLING PROBE TO SURFACE
70	(3) ~~1942~~ 2016 (5) 2016 (7) 2007 (9) 2004	41.99				

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec _____

Drill Hole BEST-107 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
75 (3) (5)	1903		1.25	250	
(7) (9)	1903	43,24			
80	1822	44.57	1.33	266	
85	1753	45.76	1.19	238	
90	1698	46.75	0.99	198	
95	1644	47.76	1.01	202	
100	1593	48.76	1.00	200	
105	1544	49.75	0.99	198	
110	1494	50.80	1.05	210	
99999.					GRADIENT 80 - 110 m 207.7 °C/Km

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

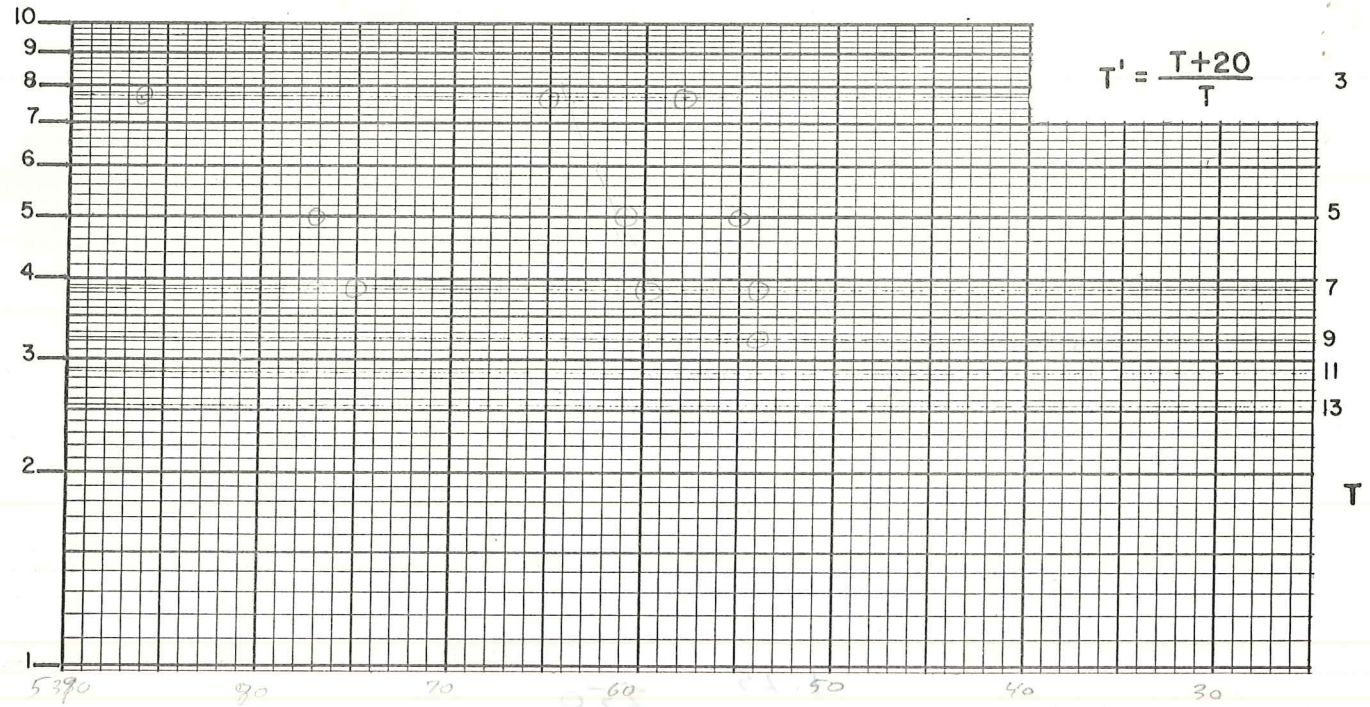
Property _____ T _____ R _____ sec _____

Drill Hole BEST -107 Date Drilled _____ Elevation _____ ft.

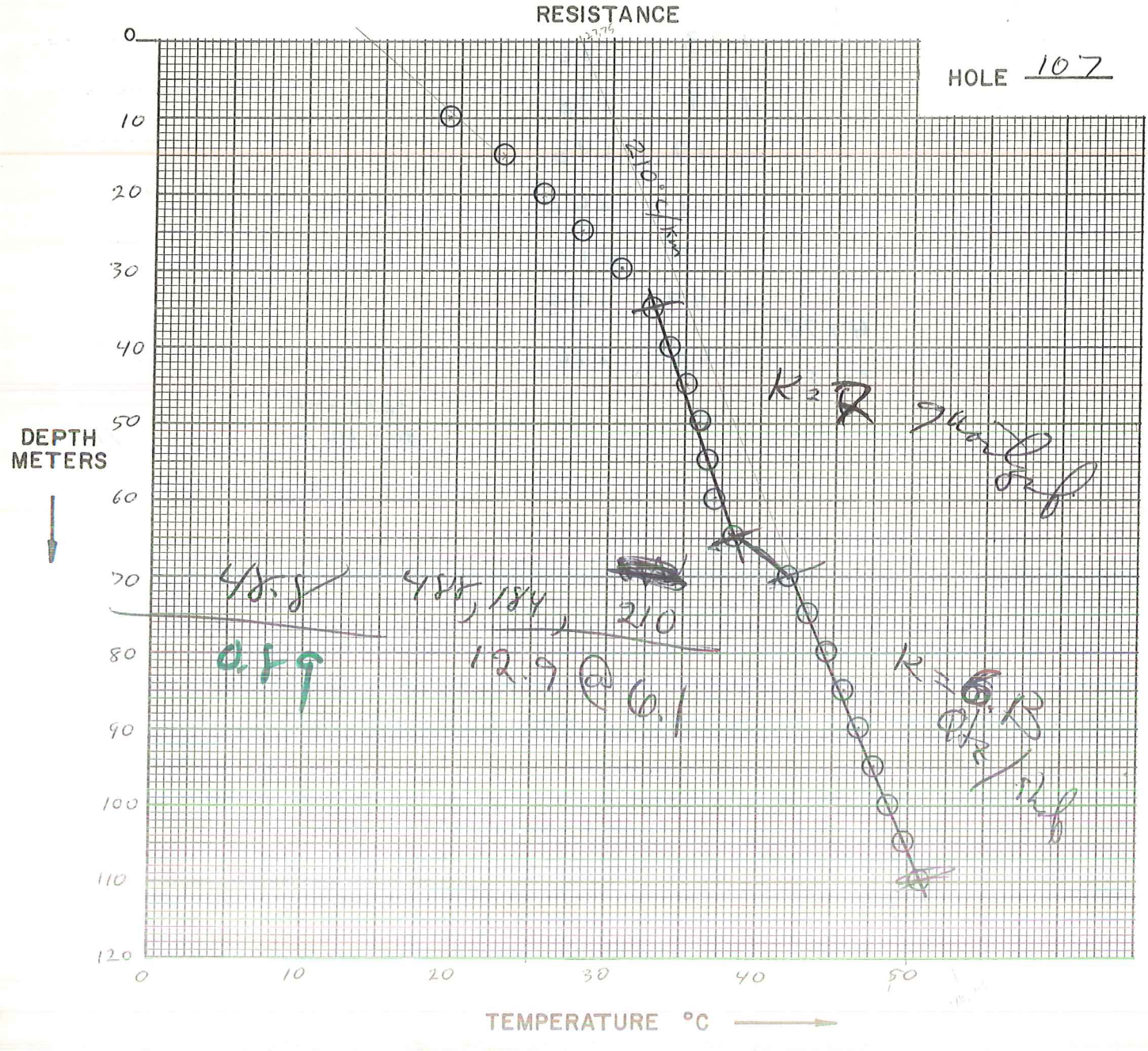
Instrument _____ Operator _____

Comments _____

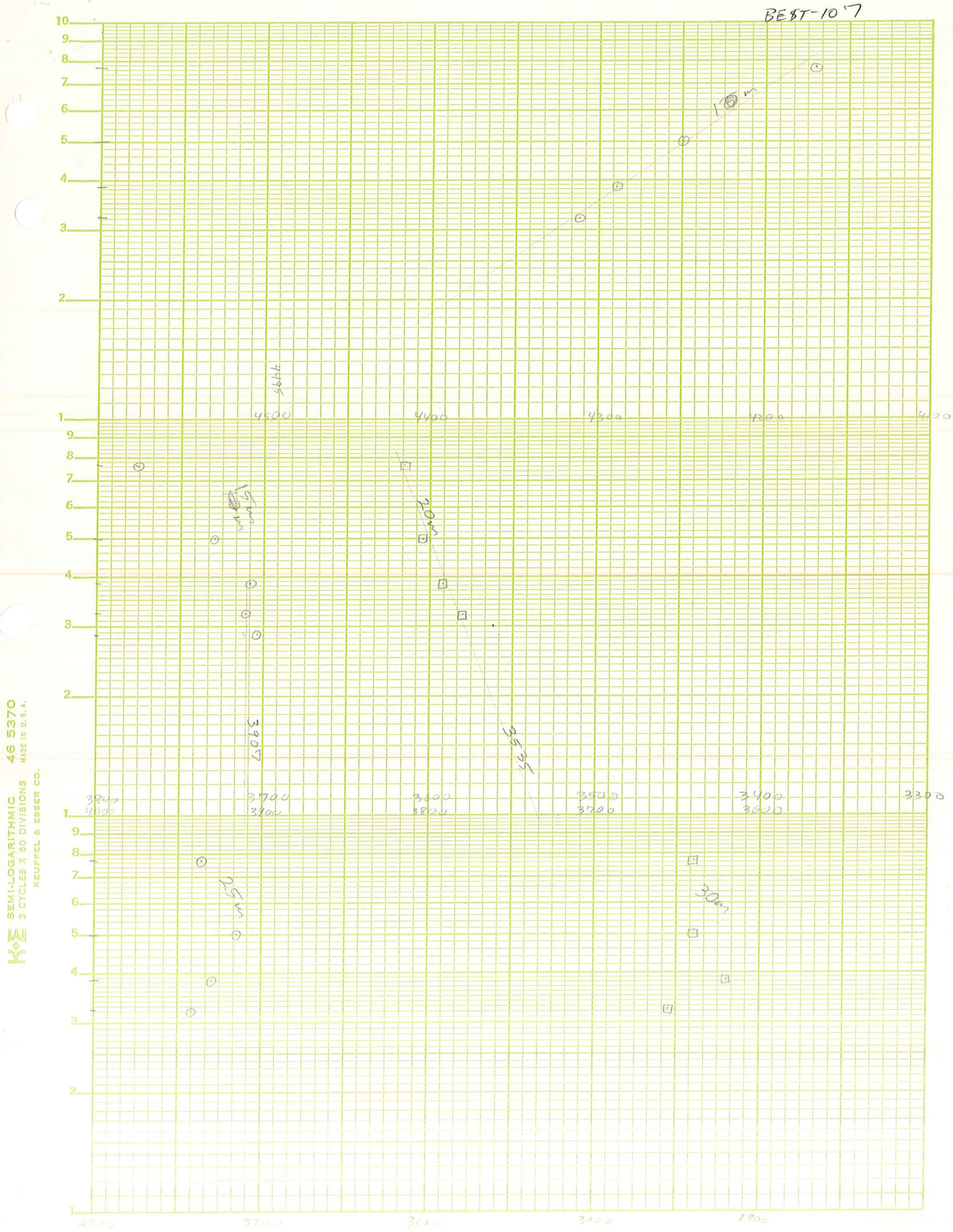
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
75 (3) (5)	1903		1.25	250	
(7) (9)	1903	43.24			
80	1822	44.57	1.33	266	
85	1753	45.76	1.19	238	
90	1698	46.75	0.99	198	
95	1644	47.76	1.01	202	
100	1593	48.76	1.00	200	
105	1544	49.75	0.99	198	
110	1494	50.80	1.05	210	
					GRADIENT 80 - 110 m 207.7 °C/km



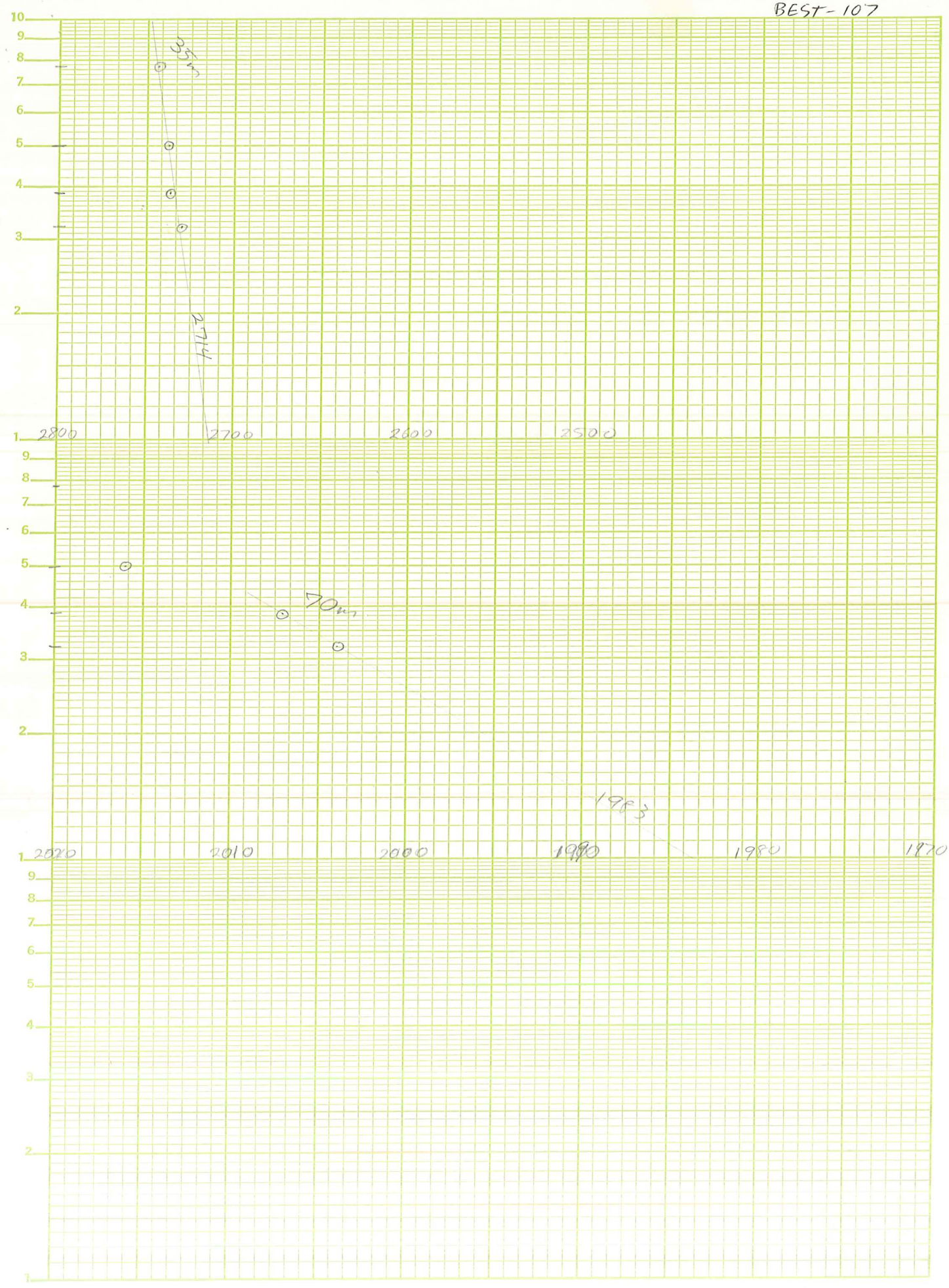
T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13



RESISTANCE
HOLE 107
DEPTH METERS
TEMPERATURE °C
0
10
20
30
40
50
60
70
80
90
100
110
120
210°C/km
K = 7
K = 6.8
48.8
0.89
48.8, 184, 210
12.9 @ 6.1


BEST-107
10m
4495
4500
4400
4300
4200
4100
15m
20m
3907
3535
3800
4000
3700
3900
3600
3800
3500
3700
3400
3600
3300
25m
30m
3300
3200
3100
3000
2900
SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

BEST-107



SEMI-LOGARITHMIC 46 5370
3 CYCLES X 60 DIVISIONS MADE IN U.S.A.
KEUFFEL & ESSER CO.

$$
\begin{array}{r}
7.66 \\
3\overline{)23} \\
21 \\
\hline
20 \\
18 \\
\hline
2
\end{array}
$$

TAKING MEASURED TEMP. AT 70m
OF 41.99°C AND REPORTED
WATER TEMP AT 910 ft (279m)
OF 180°F (82.22°C) GRADIENT
BETWEEN 70m - 279m IS 192.5°C/Km
MEASURED GRADIENT WAS 208°C/Km

n 111 8-54 3M

B-107

Copied.....
Exam. & Recorded.....
Exam. for filing.....
Final Copy checked.....
Indexed.....

PAGE..... (Leave Blank)

Report No. 13193
Filed 1-16 1958
Rec. By Mun
Ret'd .....

No. (C-25-7)24bac Test well

Report of Well and Tunnel Driller
STATE OF UTAH

(Separate report shall be filed for each well or tunnel)

GENERAL INFORMATION:

Report of well or tunnel driller is hereby made and filed with the State Engineer, in accordance with the laws of Utah. (This report shall be filed with the State Engineer within 30 days after the completion or abandonment of well or tunnel. Failure to file such reports constitutes a misdemeanor.)

1. Name and address of person, ~~company or corporation boring or~~ drilling well ~~or tunnel~~ (Strike words not needed)
Ben B. Gardner - 868 S. 14th E., Salt Lake City, Utah

2. Name and address of owner of well ~~or tunnel~~ (Strike Words not needed) Taft Paxton, Kanosh, Utah

3. Source of supply is in Millard County;
..... (Leave blank) drainage area; ..... (Leave blank) artesian basin

4. The number of approved application to appropriate water is none - Test Hole No. 1. D.S. Well (C-25-7)24bac

5. Location of well ~~or mouth of tunnel~~ is situated at a point 10 Mi. So. of Kanosh on Highway 91 & 3 Mi. East in Dog Valley
~~Approx. NW¼ Sec. 24, T25S R7W SLB&M~~ (NE¼NE¼Sec 6 T25 R6W
(Describe by rectangular co-ordinates or by one course and distance with reference to U. S. Government Survey Corner — Copy description from well owner's approved application)

6. Date on which work on well ~~or tunnel~~ was begun Jan. 15, 1957 (Strike words not needed)

7. Date on which work on well ~~or tunnel~~ was completed ~~or abandoned~~ March 15, 1957 (Strike words not needed)

8. Maximum quantity of water measured as ~~flowing~~, pumped or ..... on completion of (Strike words not needed)
well ~~or tunnel in sec. ft.~~ .....; or in gals. per minute 15 by bailer Date 3/15/57

DETAIL OF COLLECTING WORKS:

9. WELL: It is drilled, ~~dug, flowing or~~ pump well. Temperature of water 180 °F. (Strike words not needed)

(a) Total depth of well is 920 ft. below ground surface.

(b) If flowing well, give water pressure (hydrostatic head) above ground surface..... ft.

(c) If pump well, give depth from ground surface to water surface before pumping 850 ft
..... ; during pumping 850 ft.

(d) Size and kind of casing 207 ft. of 8 inch pipe (1 ft to 207') (If only partially cased, give details)

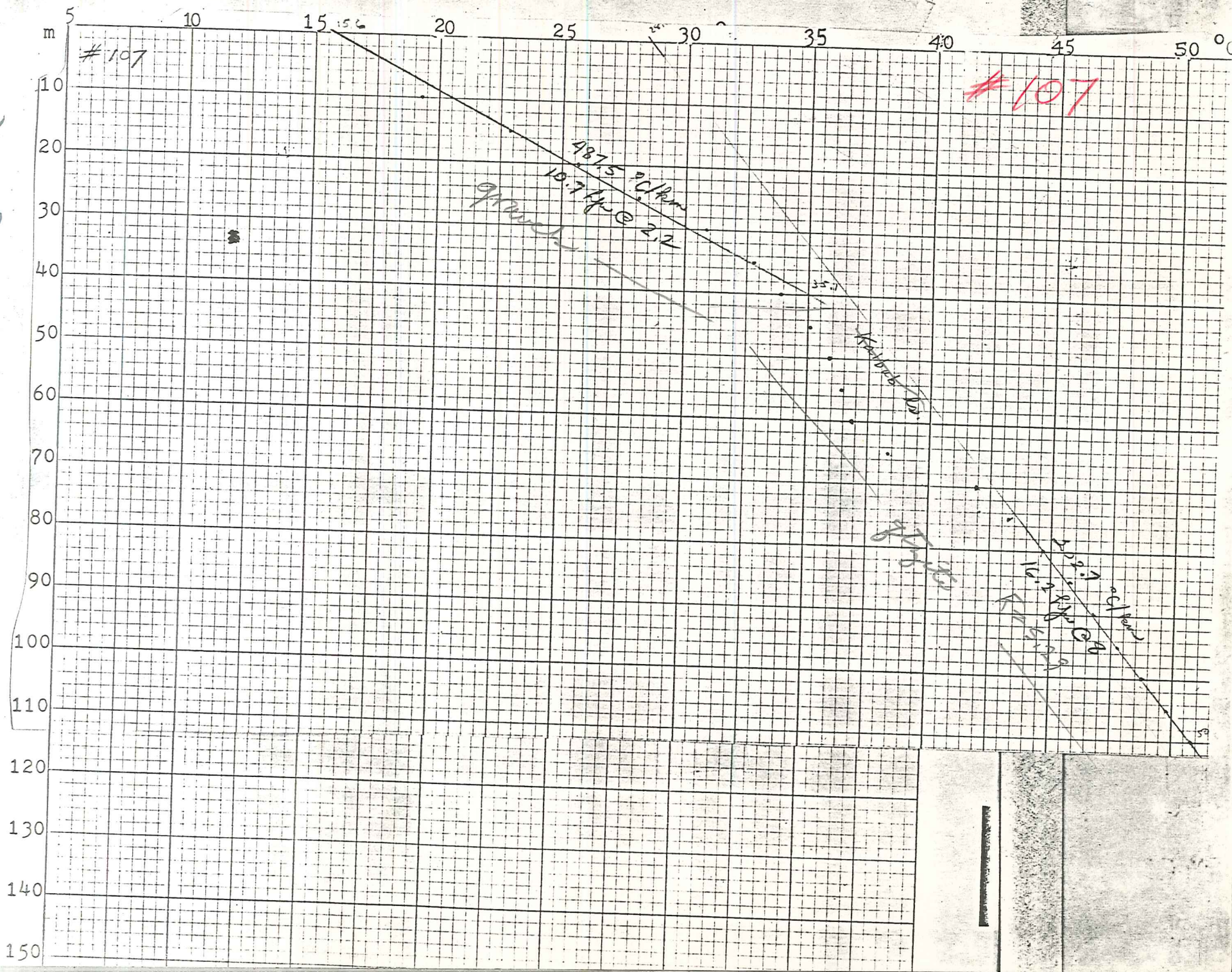
(e) Depth to water-bearing stratum 910 ft (If more than one stratum, give depth to each)

(f) If casing is perforated, give depth from ground surface to perforations cased only from 1 ft to 207 ft

(g) Log of well 1-150 bolders & gravel; 150-640 quartzsite; 640-910 limestone; 910-920 limestone & hot water.

(h) Well was equipped with cap, valve, or..... to control flow. (Strike words not needed)

(Over)



#107
#107
m
5
10
15
20
25
30
35
40
45
50
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
487.5 °C/km
10.7 hfu @ 2.2
gravel
Kalbab ls
Kaibab ls
Kaibab ls
202.7 °C/km
16.2 hfu @ 8
R = 5.29
46 0780

TEMPERATURE DEPTH LOG

ΔT Well No. 169

Property-Project Best

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	169	19	AG	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
3.3 KM NE ~~OF~~ BAILEY ~~MOUNTAIN~~ MT, UU75	JED	/ MLH

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
41.65 (41.3)	30.25 (30.95)	7600.		F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	40.0	155.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

RECEIVED
AUG 27 1976
E & ME DIVISION

HARRY

HERE ARE THE CHEURON GRADIENT SITES & HOLES LOCATED THUS FAR. B- NUMBERED HOLES HAVE BEEN LOGGED, THE REST SHOULD BE FINISHED IN ABOUT 2-3 WEEKS AT THE PRESENT RATE. WITH THE GRADIENTS OBSERVED I THINK THE AREA DESERVES A CLOSE LOOK

JEC

TEMPERATURE - DEPTH LOG

Location 1.5 NE OF BAILEY MOUNTAIN Date 19-AUG

Map ~~COVE FORT UT. 15"~~ Adamsville 15'

Property BEST T 27S R 8W sec 8 SW¼ SW¼

Drill Hole B-169 Date Drilled AUG-76 Elevation 7600 ft.

Instrument _____ Operator JED

Comments 1" STEEL PIPE, DRILLED IN WEATHERED MED-GRAINED GRANITE ALONG CREST OF MINERAL RANGE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	7094	7.98			
8	7110	7.92	-0.06	-30	
10	7048	7.80	-0.12	-60	
12	6894	8.66	0.86	430	
14	6683	9.41	0.75	375	
16	6616	9.65	0.24	120	
18	6670	9.45	-0.20	-100	
20	6559	9.49	0.04	20	
22	6598	9.71	0.22	110	
24	6654	9.51	-0.20	-100	
26	6418	10.38	0.87	435	
28	6737	9.21	-1.17	-585	
30	6849	8.82	-0.39	-195	
35	6818	8.93	0.11	~~55~~ 22	
40	6840	8.85	-0.08	-40 -16	
45	6824	8.91	0.06	~~30~~ 12	
50	6795	9.01	0.10	~~50~~ 20	
55	6766	9.11	0.10	~~50~~ 20	
60	6748	9.17	0.06	30 12	
65	6730	9.24	0.07	~~35~~ 14	GRADIENT 20.5 °C/Km
70	6703	9.33	0.09	~~45~~ 18	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

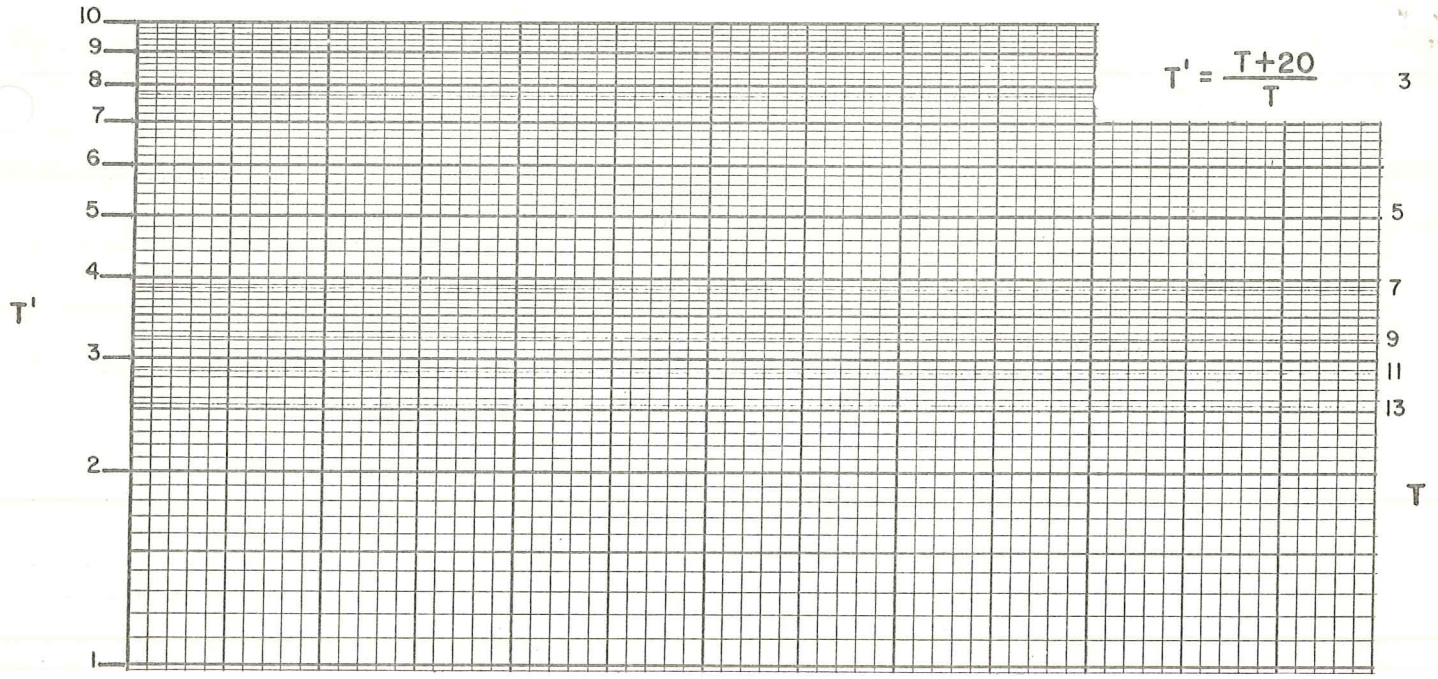
Property _____ T _____ R _____ sec _____

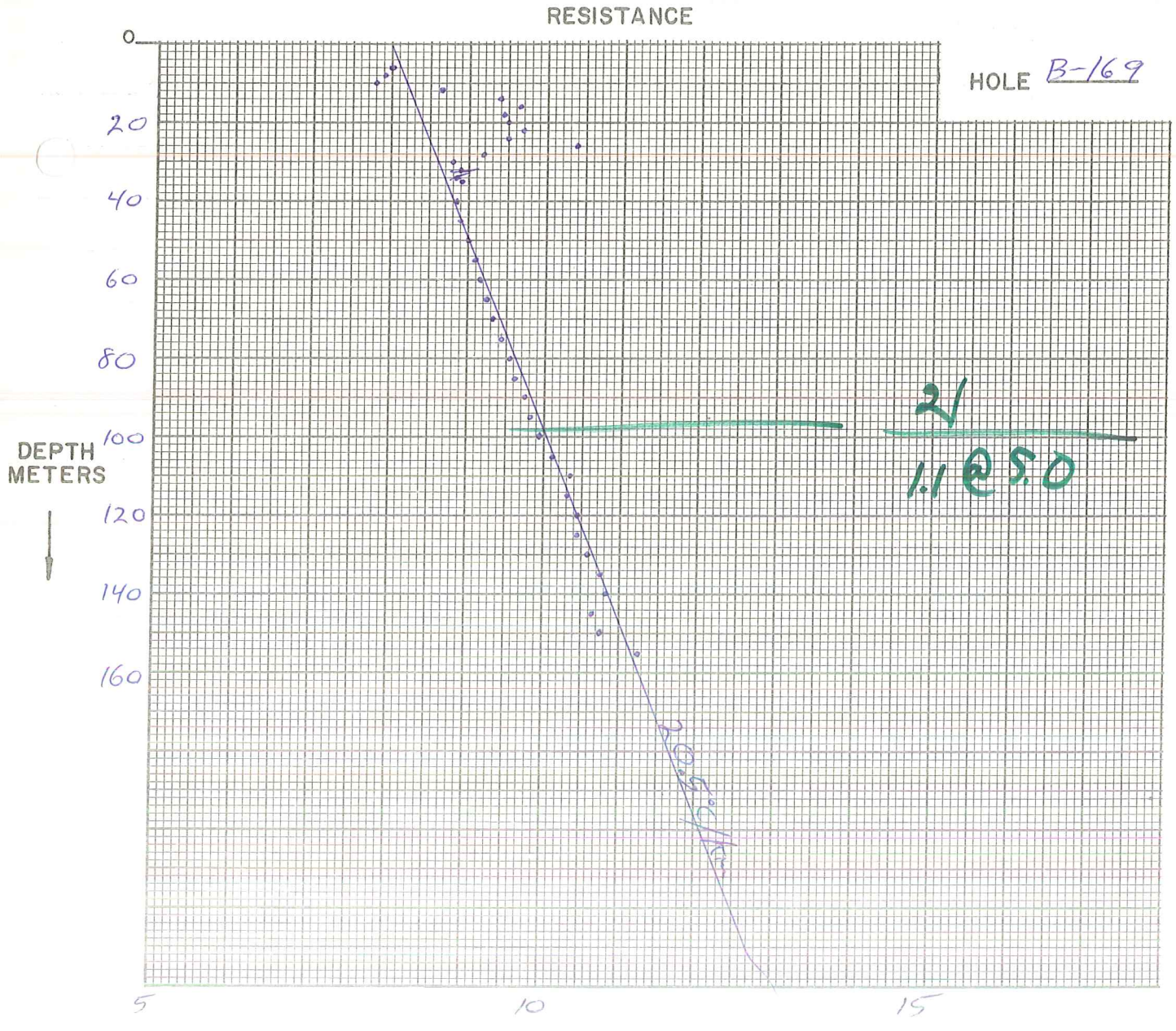
Drill Hole B-169 Date Drilled _____ Elevation _____ ft.

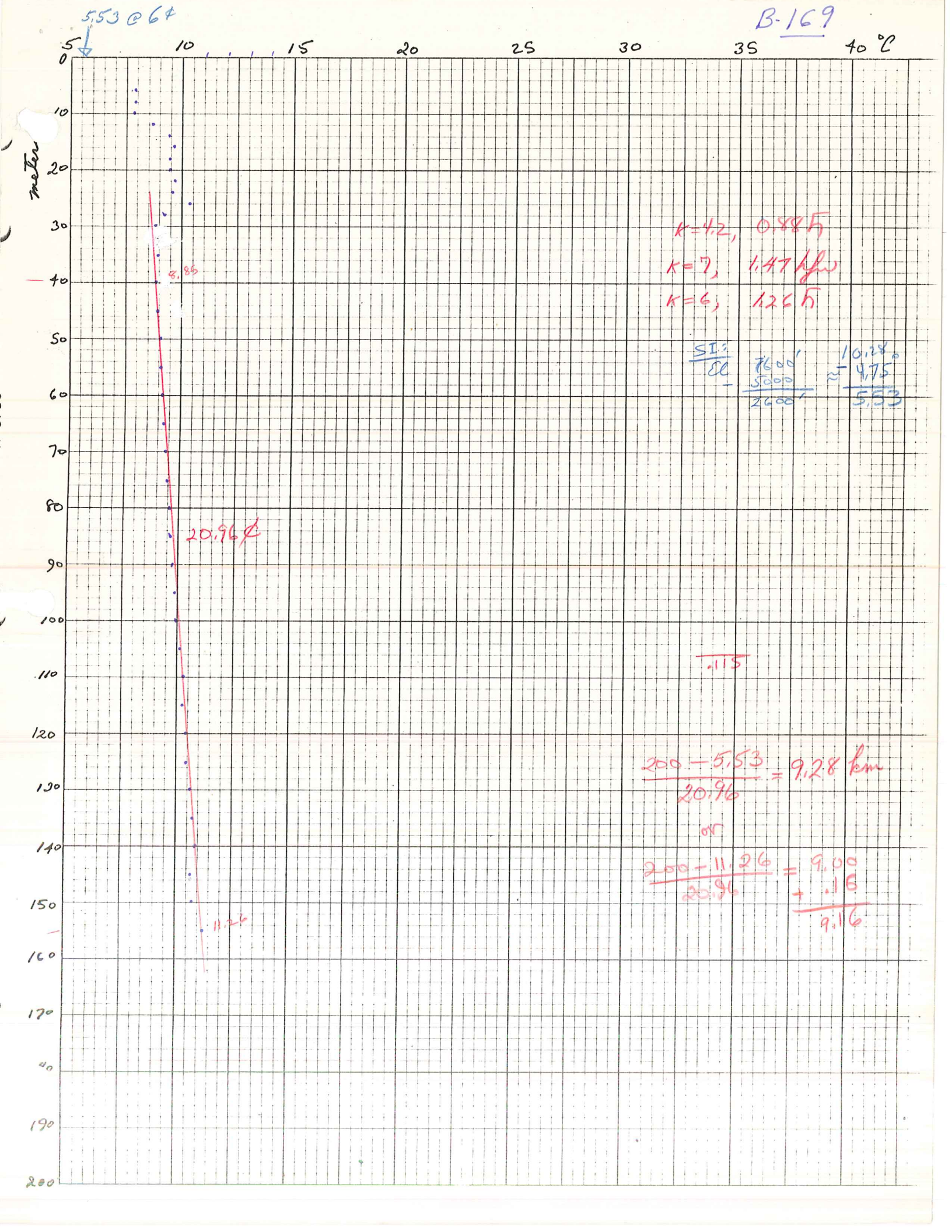
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
75	6668	9.46	0.13	26	
80	6641	9.56	0.10	20	
85	6622	9.63	0.07	14	
90	6588	9.75	0.12	24	
95	6570	9.82	0.07	14	
100	6532	9.96	0.14	28	
105	6488	10.12	0.16	32	
110	6426	10.35	0.13	26	
115	6434	10.32	-0.03	-6	
120	6399	10.45	0.13	26	
125	6399	10.45	0	0	
130	6368	10.57	0.12	24	
135	6319	10.76	0.19	38	
140	6304	10.82	0.06	12	
145	6351	10.64	-0.18	-36	
150	6325	10.74	0.10	20	
155	6189	11.26	0.52	104	


T' = T+20 / T
T'
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
T


RESISTANCE
HOLE B-169
0
20
40
60
80
100
120
140
160
DEPTH METERS
2V
1.1@5.0
5
10
15
TEMPERATURE °C

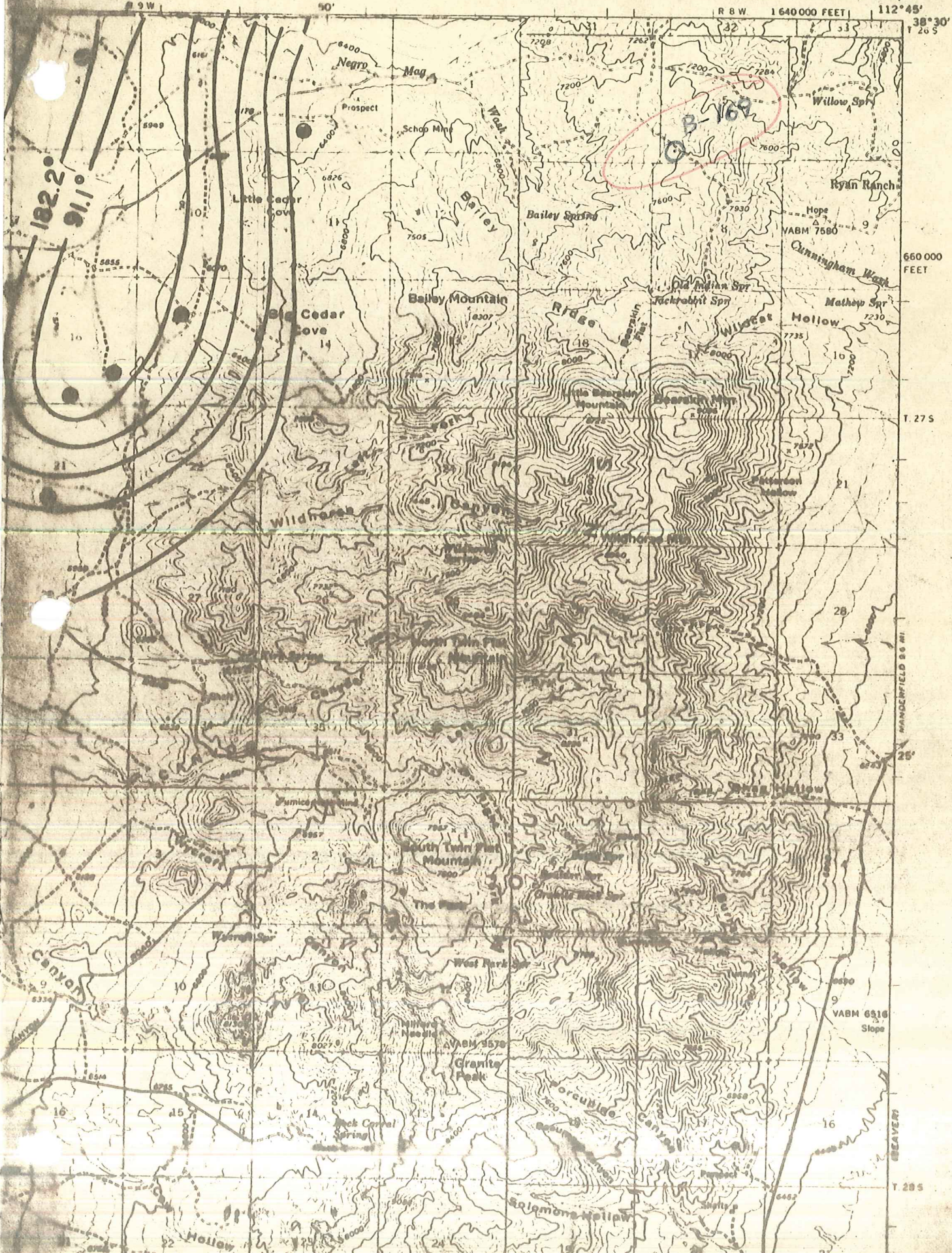


5.53 @ 6¢
B-169
5
10
15
20
25
30
35
40 °C
meter
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
8.85
20.96¢
11.26
k=4.2, 0.88 ft
k=7, 1.47 kfw
k=6, 1.26 ft
SI:
El
7600'
- 5000
2600'
10.28
- 4.75
5.53
.115
200 - 5.53 / 20.96 = 9.28 km
or
200 - 11.26 / 20.96 = 9.00
+ .16
9.16

B-169

UTAH
GOVERNOR
STATE ENGINEER

ADAMSVILLE QUADRANGLE
UTAH—BEAVER CO.
15 MINUTE SERIES (TOPOGRAPHIC)



TEMPERATURE DEPTH LOG

ΔT Well No. 170

Property-Project BEST Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 7 0	1 9	A G	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
7.9 KM EAST OF READ, UTAH	JED	MLH

7.9KM E. READ, UU7C-T'GG

Card B

Map Location Δ

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	7.5	38.	30.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W, -) (E, +)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
32.1	38.15	5100.	F

← Write M if meters

Use decimals

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45 46 47 48 49 50	
C	22.0	40.0	-2.8	.5
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	40.0	69.0		-.5
D				
E				
F				
G				

Final Segment: Start = .999

B-170

____ of ____

TEMPERATURE - DEPTH LOG

Location _____ Date 19-AUG-76

Map READ UT 7½"

Property BEST T 26S R 9W sec 8 NW¼ NW¼

Drill Hole B-170 Date Drilled 16-AUG-76 Elevation 5100 ft.

Instrument _____ Operator JEO

Comments 1" STEEL PIPE, U. OF U. GRADIENT HOLE, DRILLED IN VALLEY FILL, MUCH SAND & GRAVEL.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
2	4220	20.89			
			-4.16		
4	4964	16.73			
			-0.29		
6	5220	16.44			
			-1.08		
8	5243	15.36			
			0.23		
10	5198	15.59			
			0.30		
12	5134	15.89			
			0.31		
14	5070	16.20			
			-0.12		
16	5094	16.08			
			-0.09		
18	5112	15.99			
			0.09		
20	5095	16.08			
			0.09		
22	5076	16.17			
			0.10		
24	5056	16.27			
			0.15		
26	5027	16.42			
			0.12		
28	5002	16.54			
			0.05		
30	4992	16.59			
			0.14		
32	4965	16.73			
			0.20		
34	4925	16.93			
			0.23		
36	4881	17.16			
			0.08		
38	4865	17.24			
			0.07		
40	4853	17.31			
			0.09		
42	4835	17.40			GRADIENT 44-69m 43.2°C/Km

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

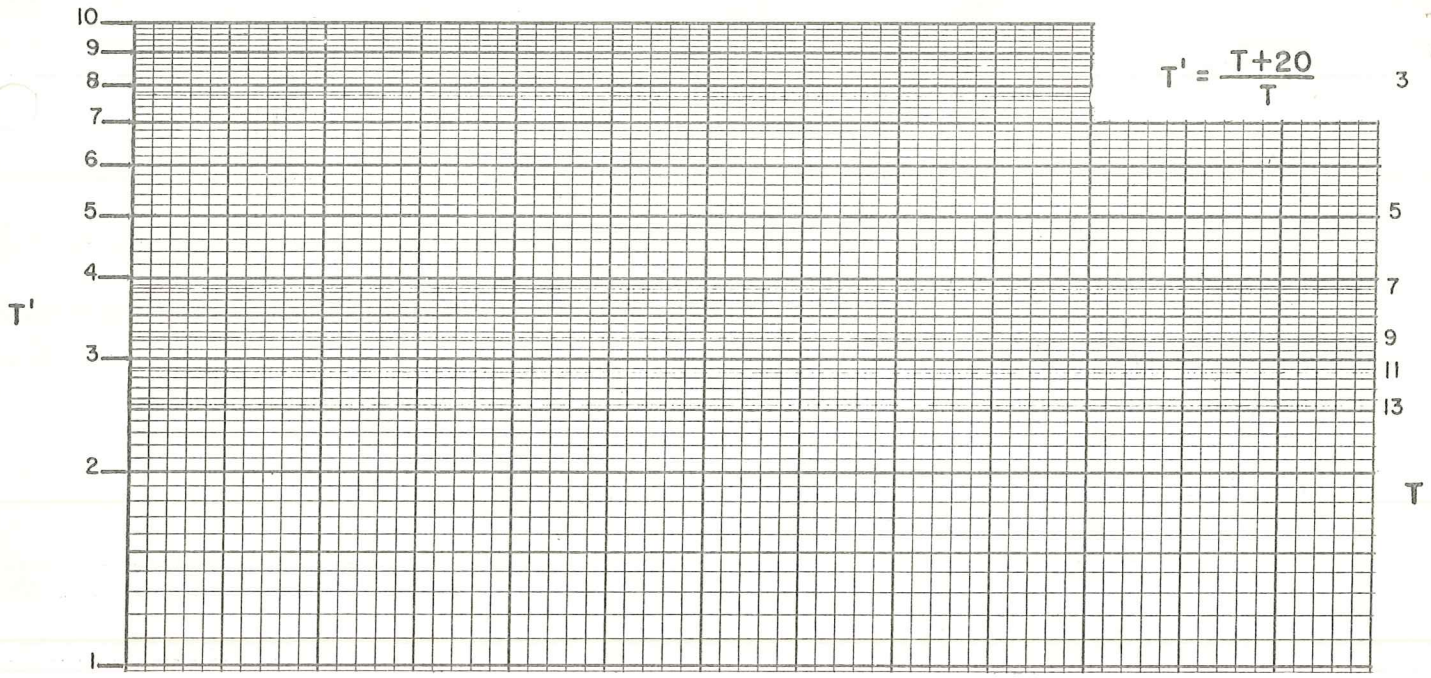
Property _____ T _____ R _____ sec _____

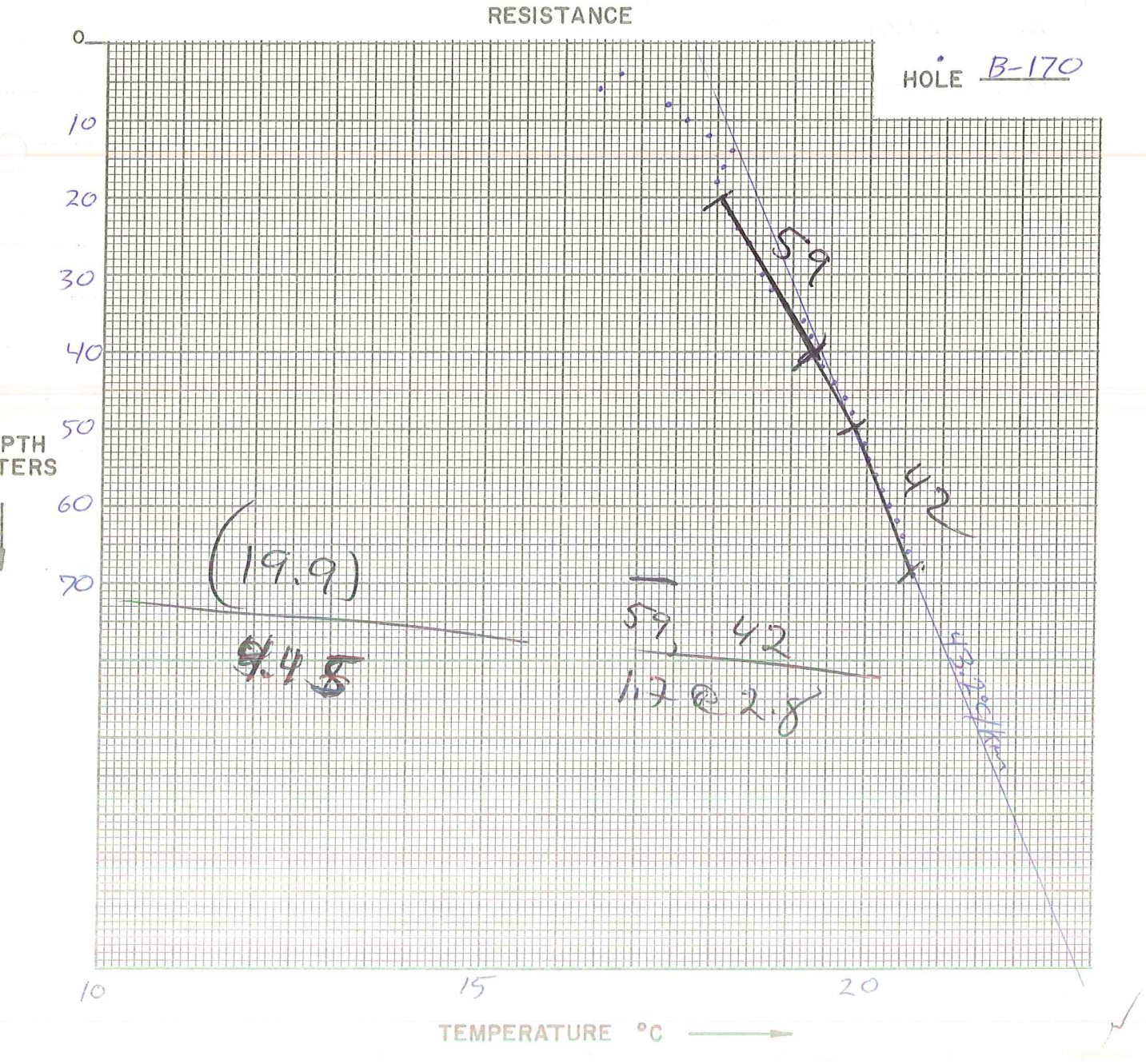
Drill Hole B-170 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

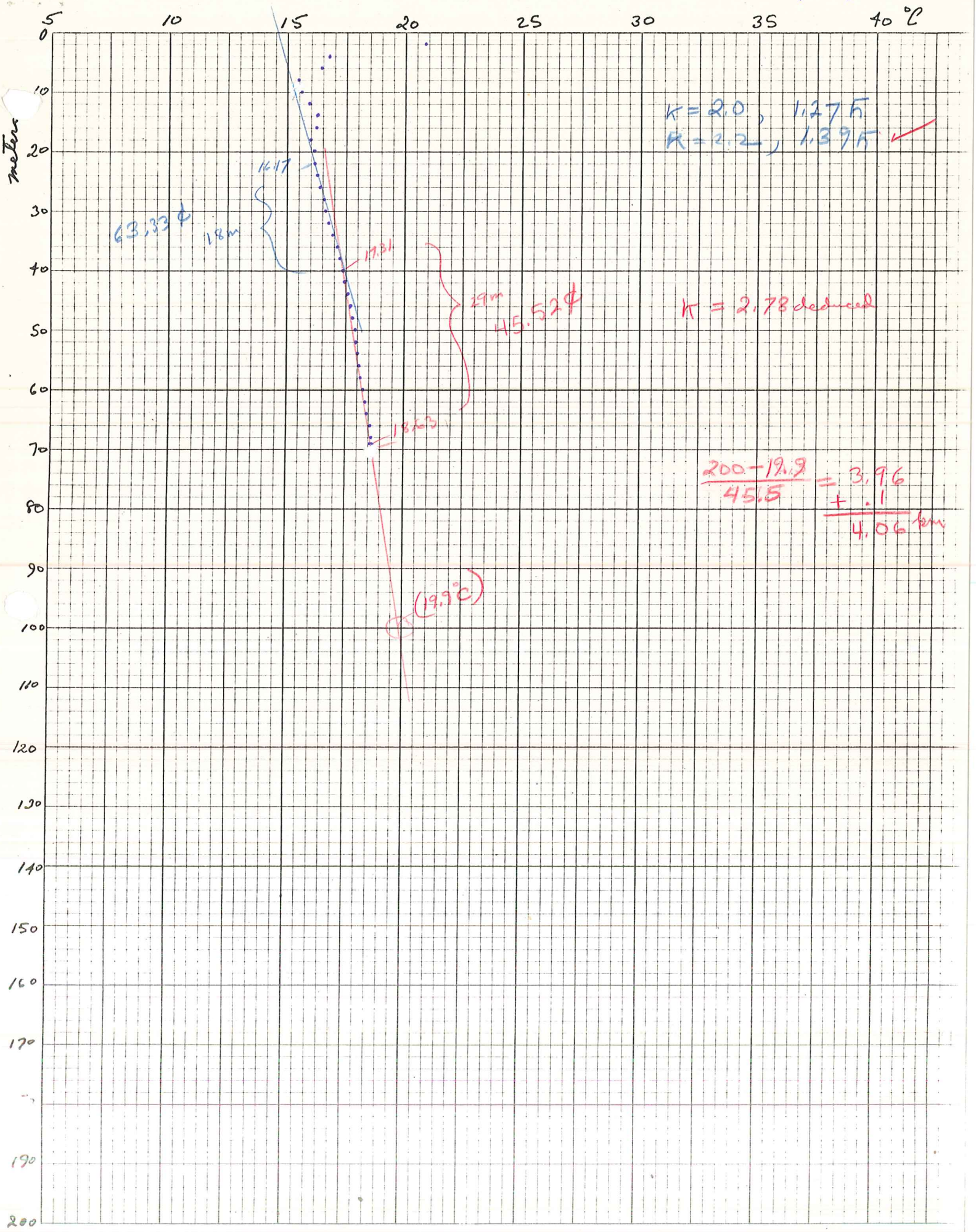
Comments _____

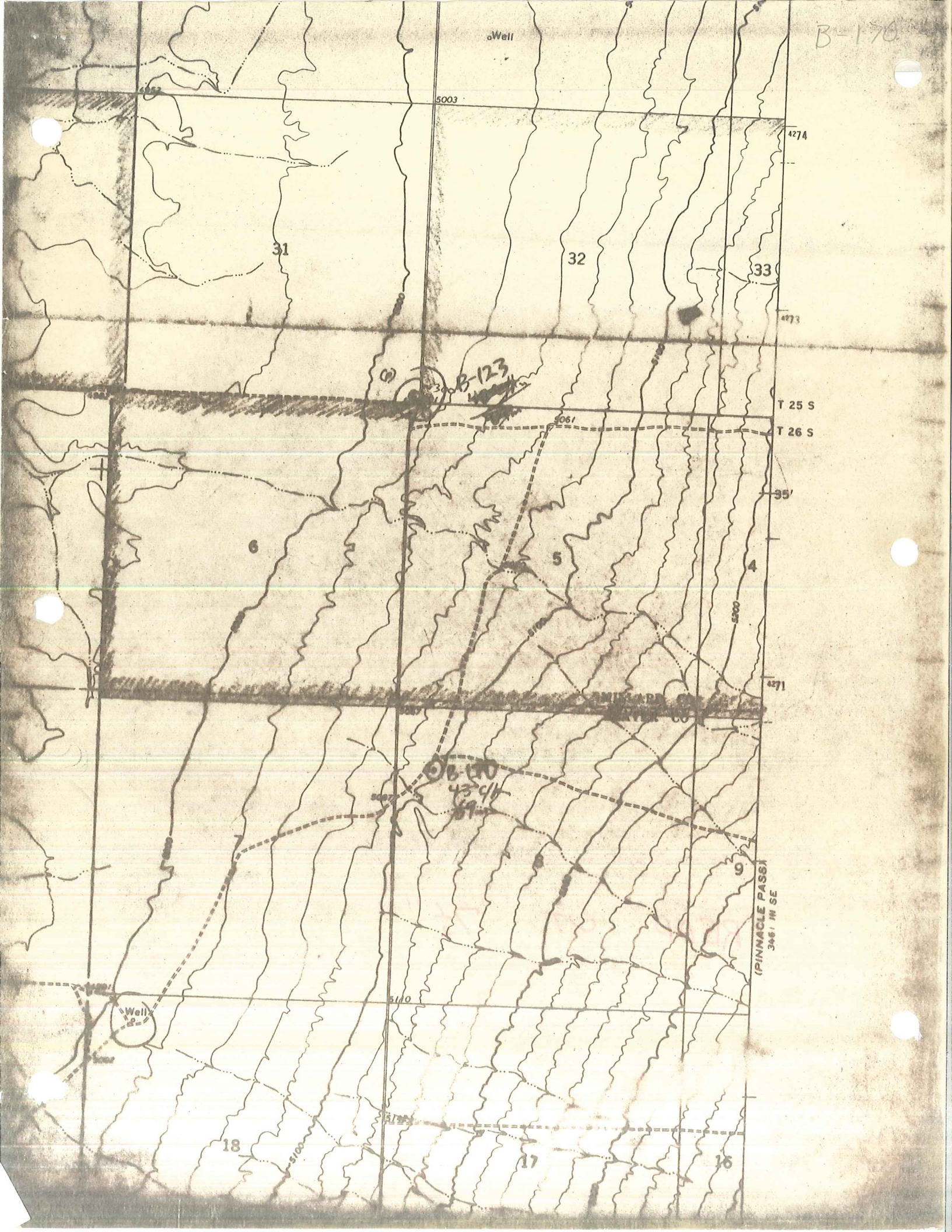
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
44	4807	17.55	0.15		
46	4778	17.70	0.15		
48	4761	17.79	0.09		
50	4750	17.85	0.06		
52	4734	17.94	0.09		
54	4718	18.02	0.08		
56	4701	18.12	0.10		
58	4686	18.20	0.08		
60	4667	18.30	0.10		
62	4653	18.38	0.08		
64	4636	18.47	0.09		
66	4621	18.55	0.08		
68	4610	1861	0.06		
69	4607	1863	0.02		


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-170
DEPTH METERS
0
10
20
30
40
50
60
70
59
42
(19.9)
9.45
59, 42
1,7 @ 2.5
10
15
20
TEMPERATURE °C

B-170


5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
meters
K = 2.0 , 1.27 ft
R = 2.2 , 1.39 ft
63.33 ft
18m
16.17
17.31
29m
45.52 ft
K = 2.78 deduced
18.63
(19.9°C)
200 − 19.9 / 45.5 = 3.96
+ .1
4.06 km


B-170
Well
5003
4274
31
32
33
4273
B-123
T 25 S
T 26 S
5061
35'
6
5
4
5200
4271
B-170
43 c/h
9
(PINNACLE PASS)
3461 IN SE
Well
5110
18
5100
17
16

READ UT 7½"

TEMPERATURE DEPTH LOG

ΔT Well No. 171

Property-Project BEST Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No	Well No	Date Logged DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 7 1	2 0	A G	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
5 . 5 K M W S W O F B A B O O N P E A K	J E D	/ H L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 9 .	0 0 .	1 1 3 .	1 5 .

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
1 4 . 3 5	2 4 . 1 5	6 1 5 0 .	F

Write M if meters

14.7 23.9

Use decimals

SEGMENT DEPTH

	Start	End	K	ΔK
C	1 6 . 0	3 0 . 0		
D	. 9 9 9			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	3 0 . 0	4 6 . 0	- 4 . 0	- . 5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location W. SIDE OF HORSE VALLEY Date 20-AUG-76

Map THERMO UT 15"

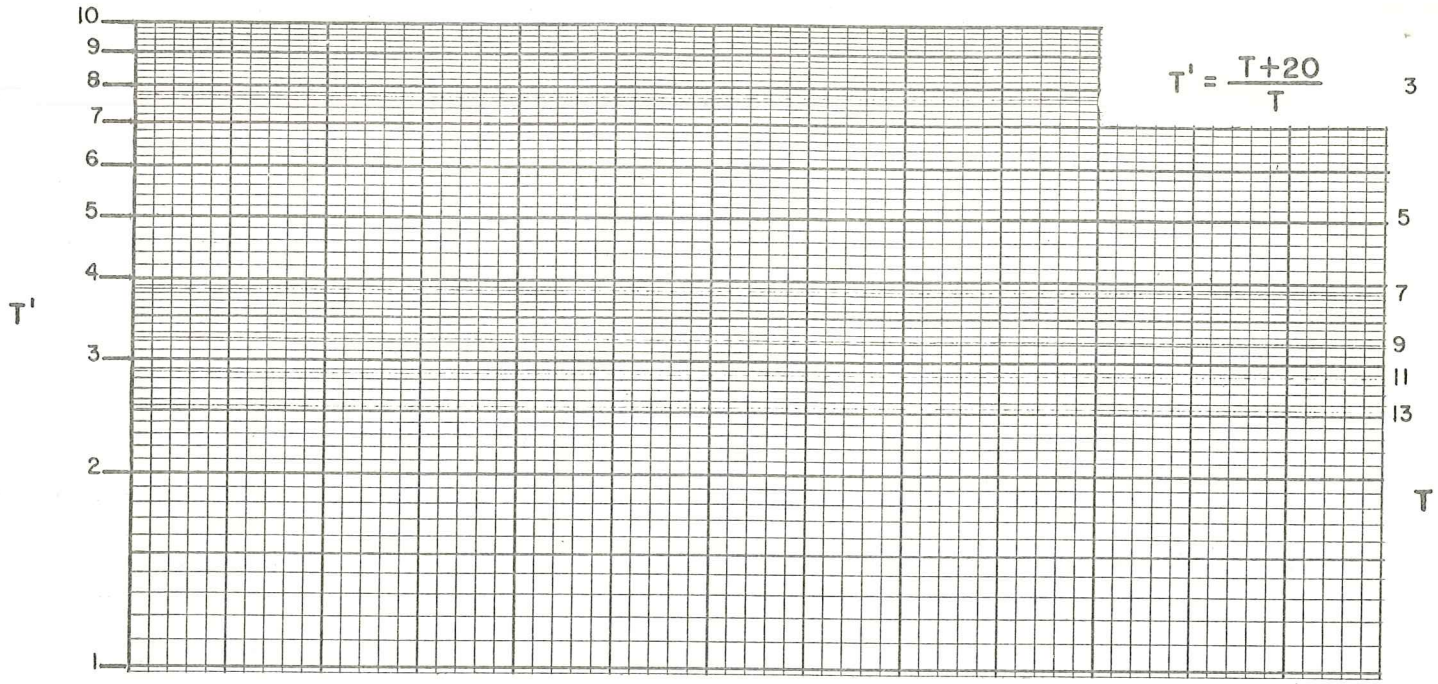
Property _____ T 31S R 11W sec 27 SE¼ NW¼

Drill Hole B-171 Date Drilled _____ Elevation 6150 ft.

Instrument _____ Operator JED

Comments 1¼" PVC PIPE. APPARENTLY DRILLED IN TUFFACEOUS SEDS ~~INTRU~~ & RHYOLITE & LATITE AT DEPTH.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
6	6209	11.19			
			0.10	50	
8	6182	11.29			
			0.12	60	
10	6153	11.41			
			0.25	125	
12	6089	11.66			
			0.20	100	
14	6041	11.86			
			0.17	85	
16	5999	12.03			
			0.09	45	
18	5977	12.12			
			0.09	45	
20	5954	12.21			
			0.12	60	
22	5925	12.33			
			0.08	40	
24	5906	12.41			
			0.08	40	
26	5887	12.49			
			0.09	45	
28	5866	12.58			
			0.08	40	
30	5845	12.66			
			0.08	40	
32	5827	12.74			
			0.08	40	
34	5809	12.82			
			0.06	30	
36	5793	12.88			
			0.08	40	
38	5776	12.96			
			0.06	30	
40	5760	13.02			
			0.07	35	
42	5744	13.09			
			0.06	30	
44	5731	13.15			
			0.05	25	
46	5720	13.20			GRADIENT 36-46m 32°C/Km



RESISTANCE

HOLE B-171

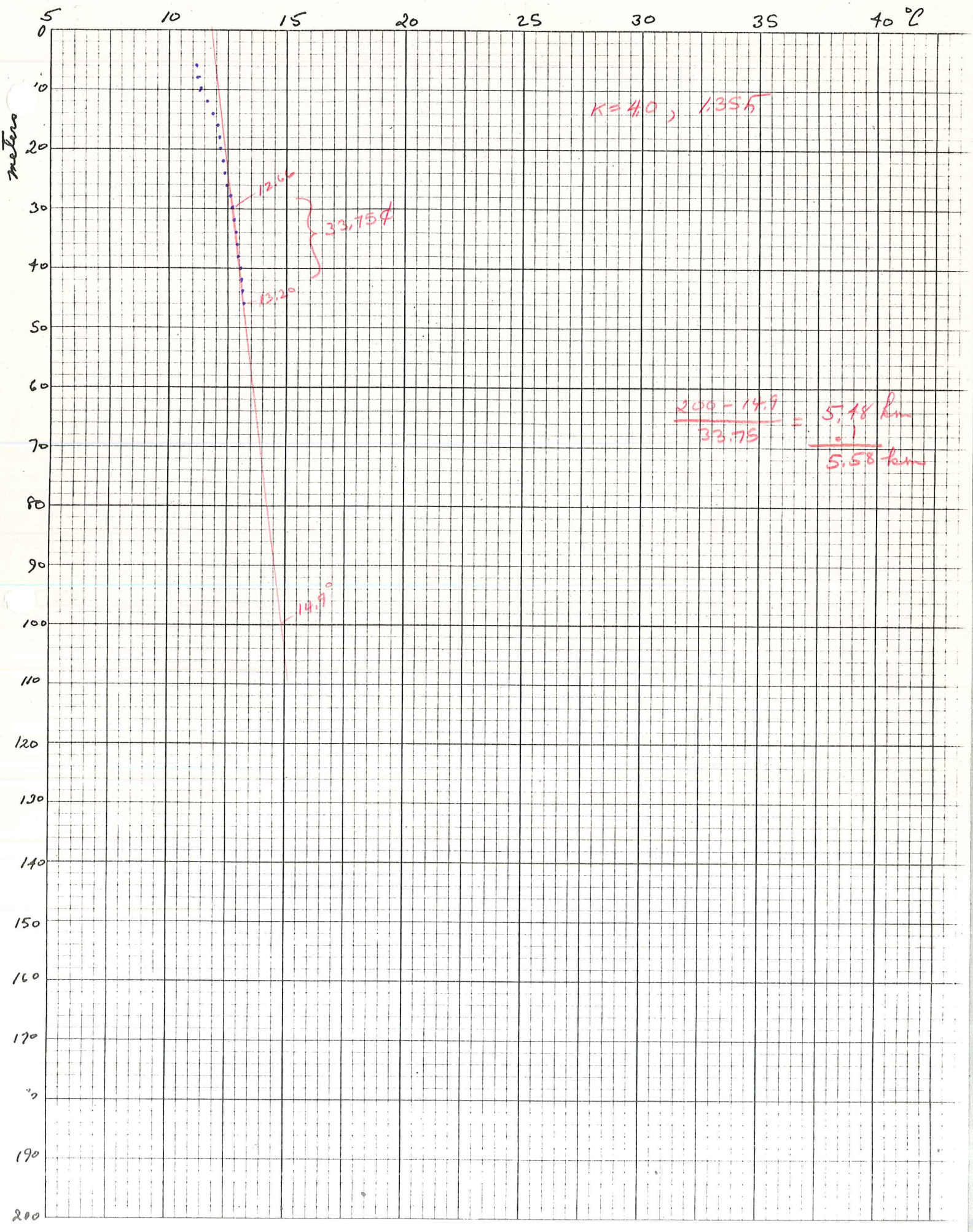
0
10
20
30
40
50

DEPTH METERS

10
15
20

TEMPERATURE °C

B-171



5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
meters
K = 4.0 , 1.35 h
12.66
33.75 ¢
13.20
14.9°
200 - 14.9 / 33.75 = 5.48 km
.1
5.58 km

TEMPERATURE DEPTH LOG

ΔT Well No. 172

Property-Project Best Depth Logged

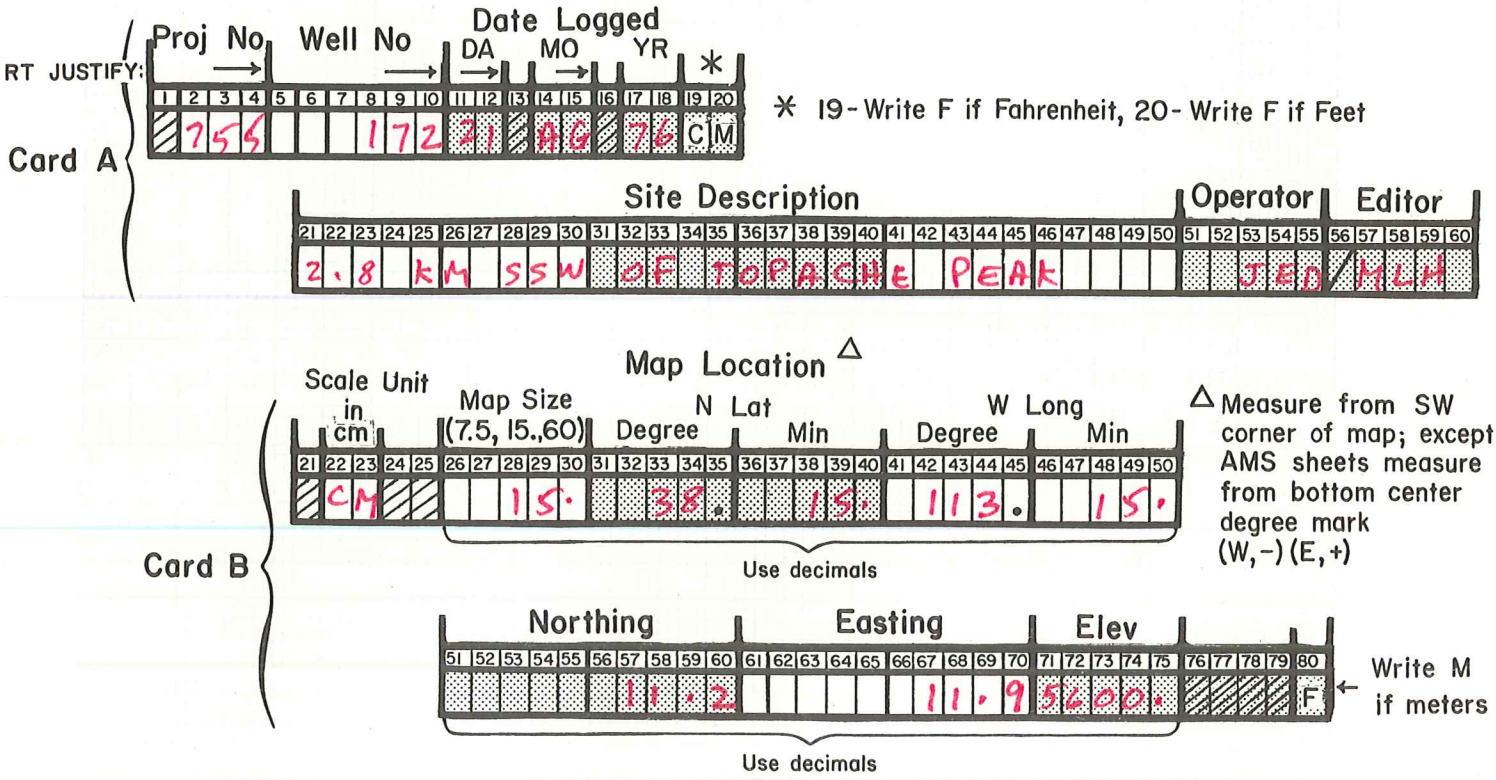
Map Scale Date: Drilled Logged

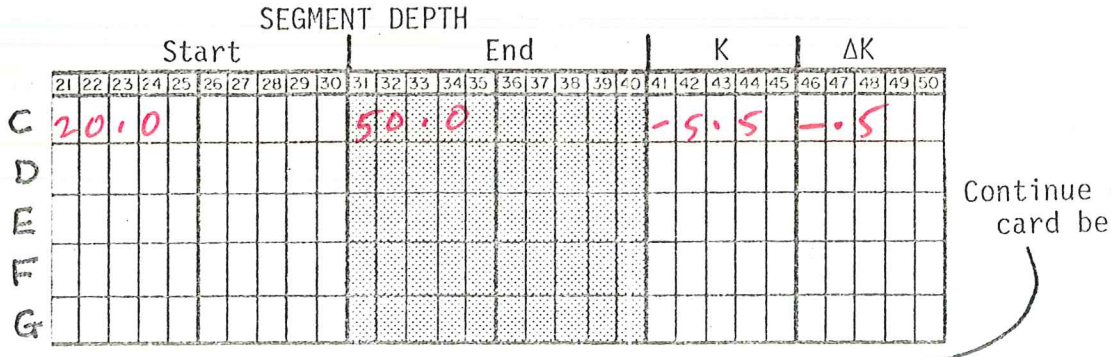
State County Section T R

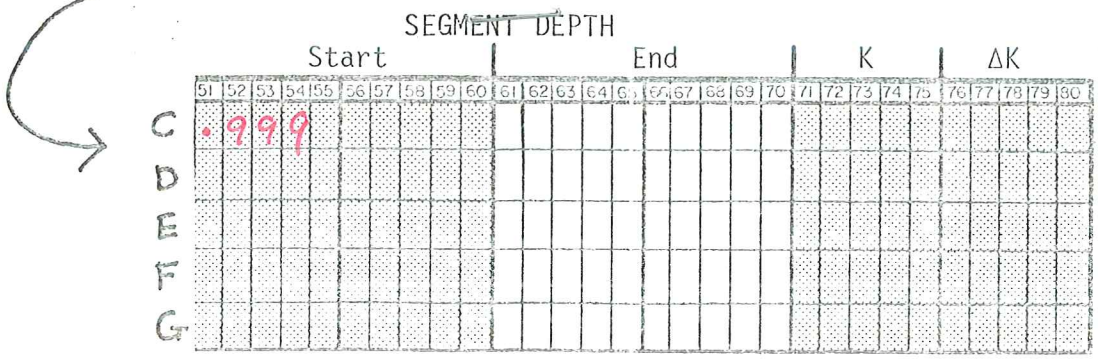
Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING







Final Segment: Start = .999

_____ of _____

TEMPERATURE - DEPTH LOG

Location ~ 2 MILES S.W. OF COMMONWEALTH MINE Date 21-AUG-76 (0930)

Map MILFORD UT 15"

Property BEST T 29 S R 12 W sec 2 SW¼ SE¼

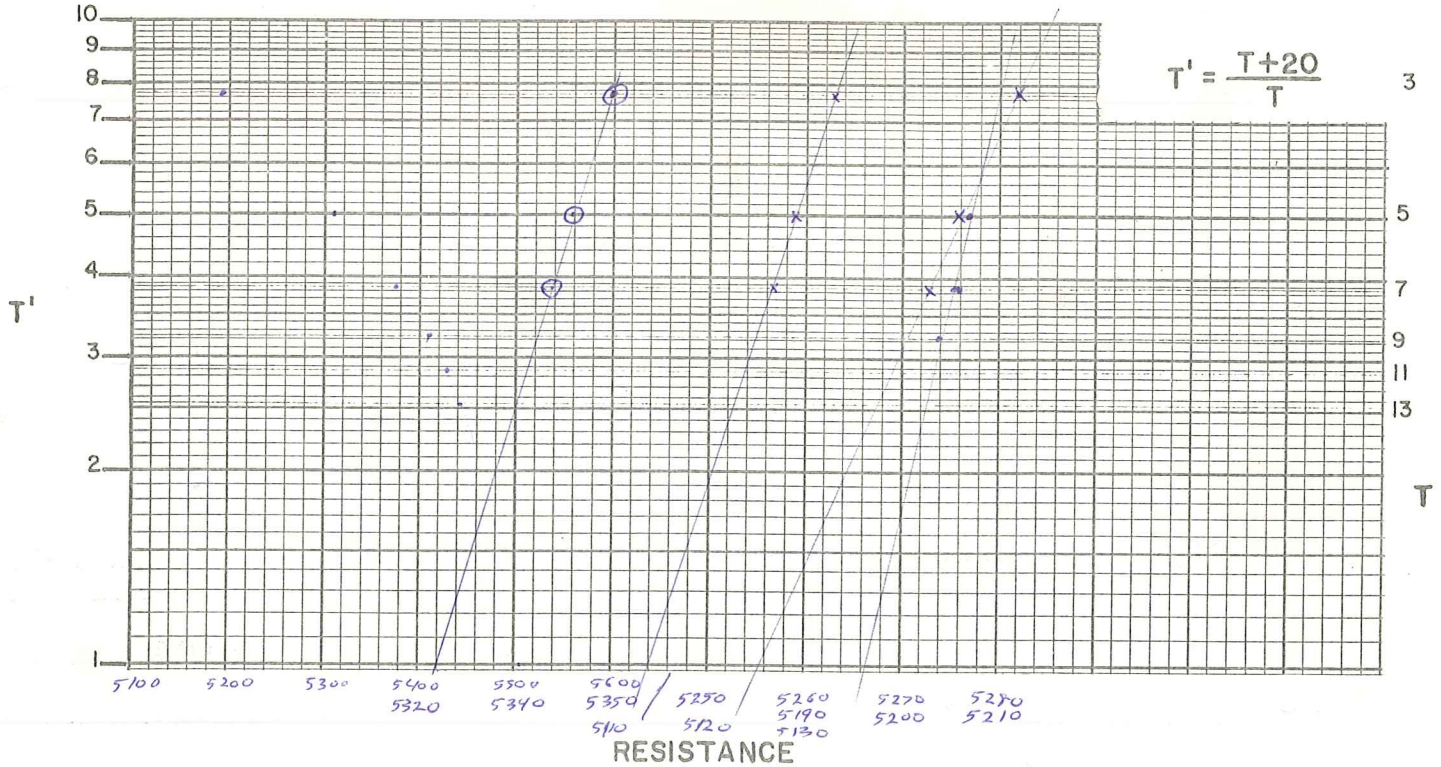
Drill Hole B-172 Date Drilled _____ Elevation 5600 ft.

Instrument _____ Operator JEW

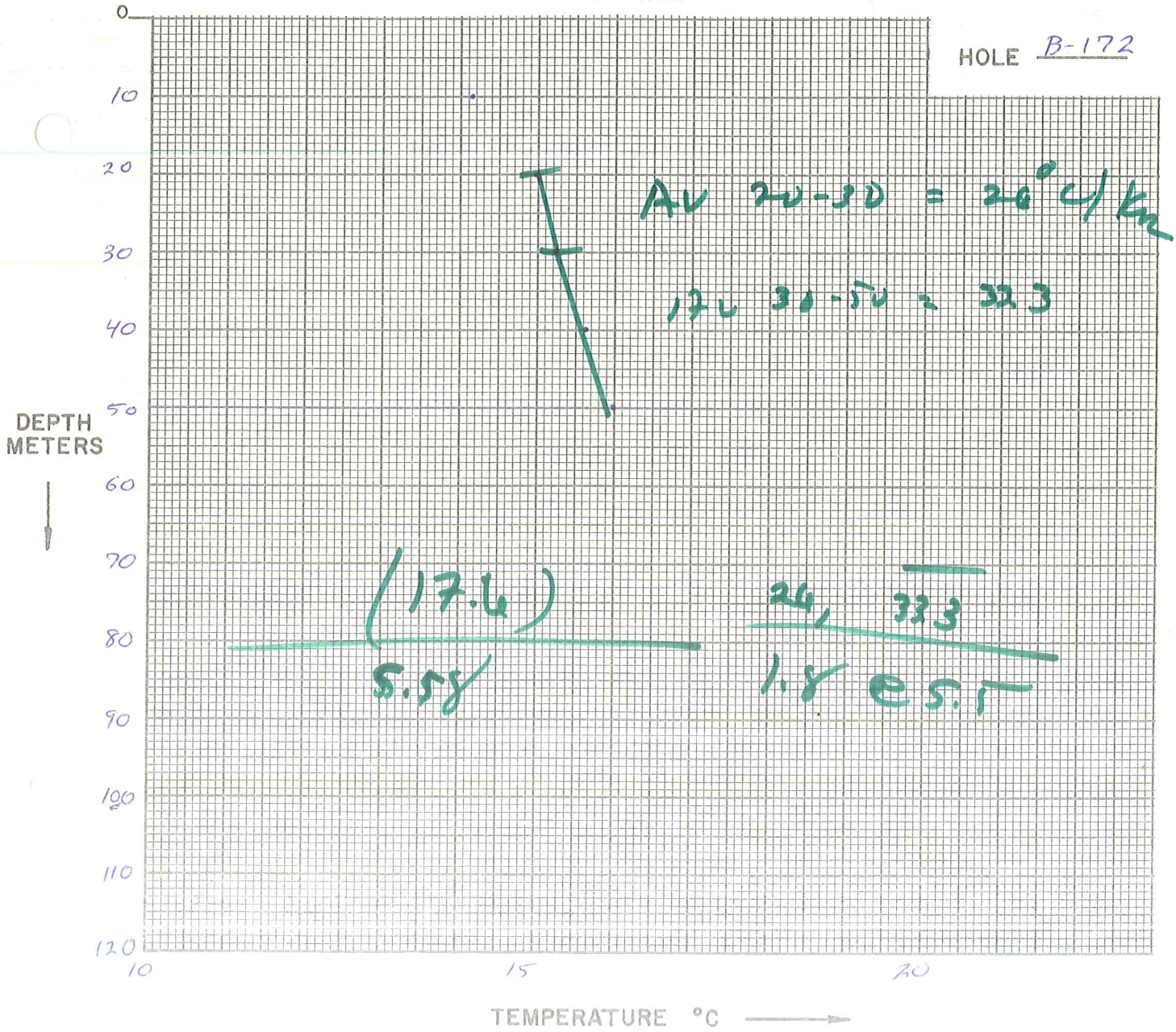
Comments 3" MINERAL EXPLORATION HOLE. BEGINS IN RECRYSTALIZED LIMESTONE, REPORTEDLY BOTTOMS IN GRANITIC RK.

HOLE ~150m will try to force UC in & relog

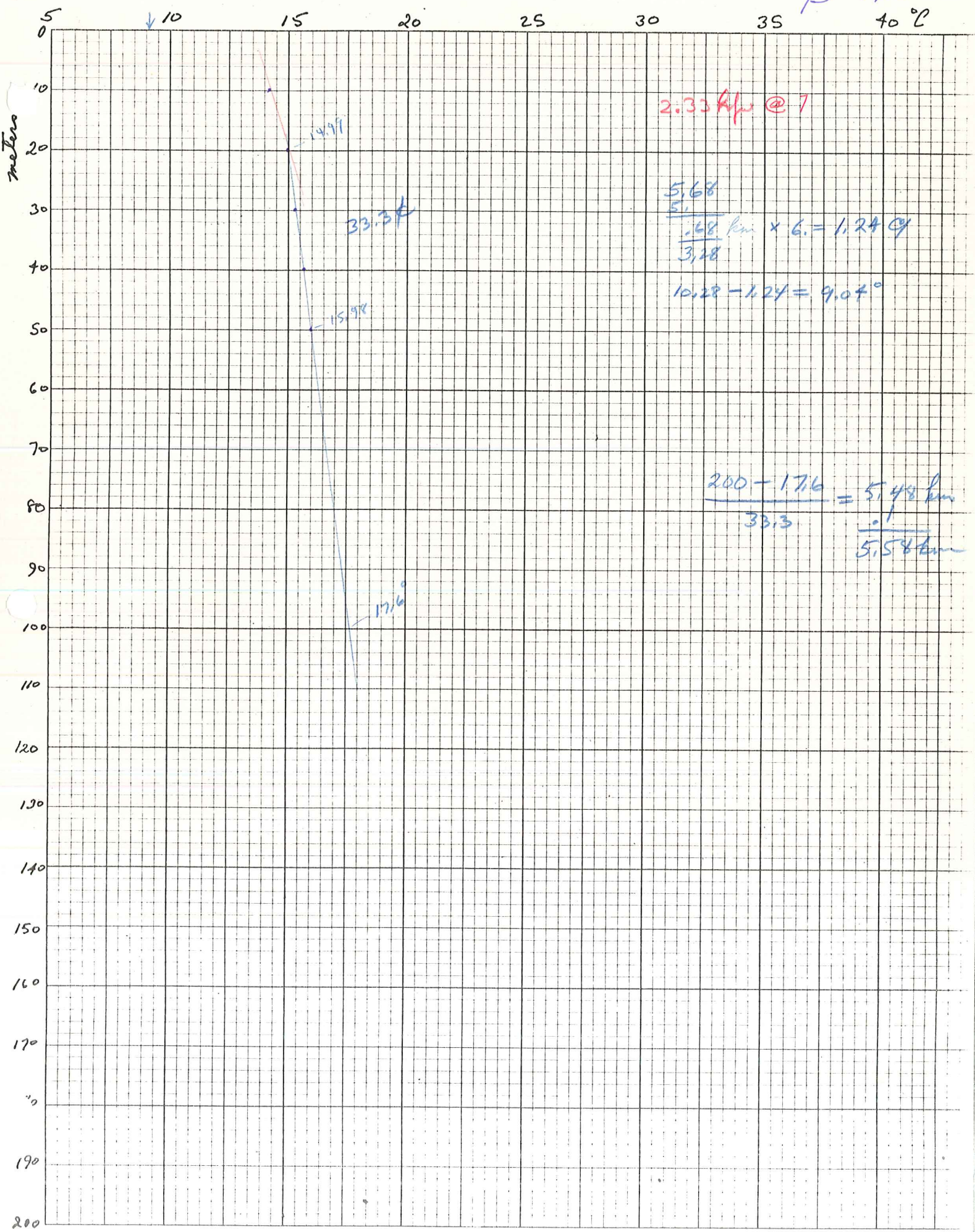
Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
10	5195 5312 5375	14.14				
	5410 5430 5442	1L				
20	5350 5346 5344	14.99	0.85	85		
30	5282 5277 5276	15.25	0.26	26		
	5274					
40	5212 5206 5203	15.63	0.38	38		
50	5133 5129 5127	15.98	0.35	35		

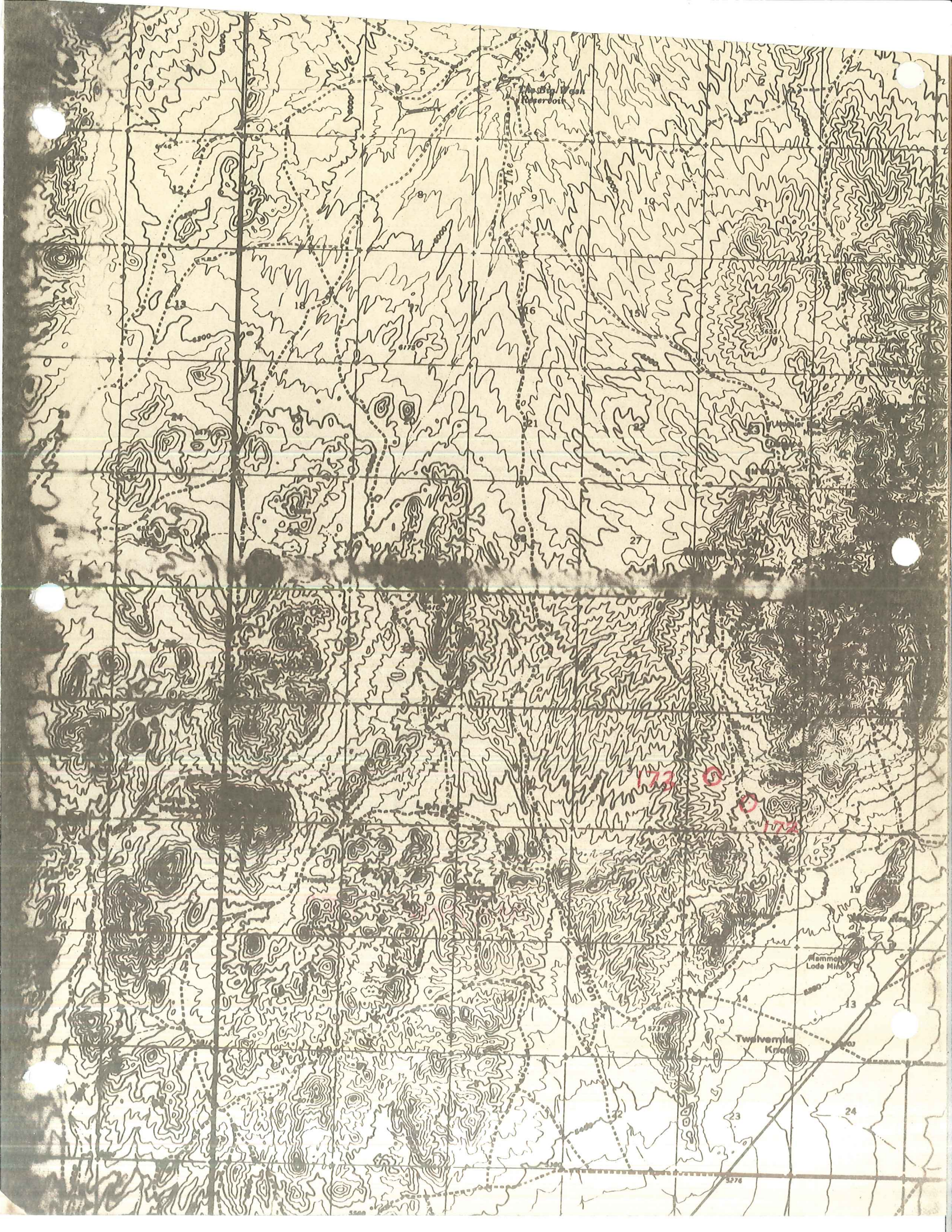


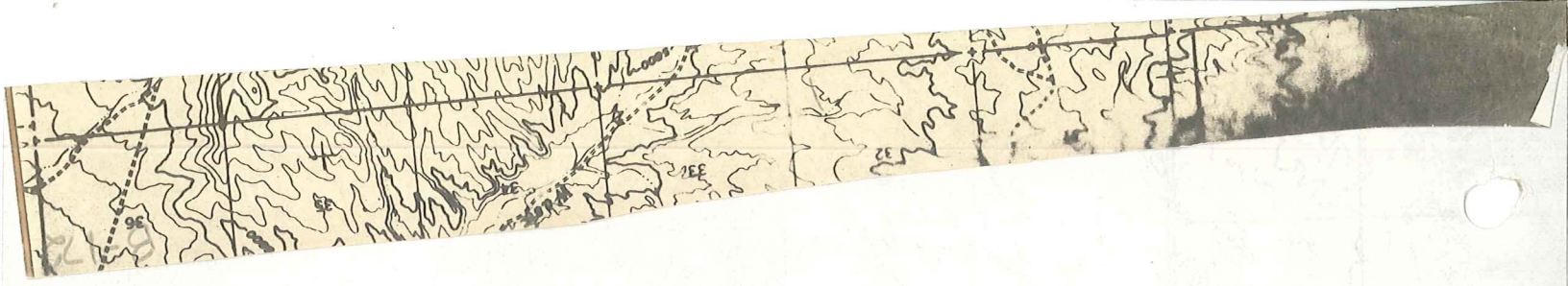
T' = (T+20)/T
T'
T
RESISTANCE
5100 5200 5300 5400 5320 5500 5340 5600 5350 5110 5250 5120 5260 5190 5130 5270 5200 5280 5210



HOLE B-172
DEPTH METERS
TEMPERATURE °C
Av 20-30 = 26°C/km
17u 30-50 = 32.3
(17.6)
5.58
26, 33.3
1.8 e 5.5


β-172
5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
meters
14.99
33.3 ¢
15.98
17.6°
2.33 kfw @ 7
5.68
5.
.68 km × 6. = 1.24 ¢
3.28
10.28 − 1.24 = 9.04°
200 − 17.6 / 33.3 = 5.48 km
.1
5.58 km


The Big Wash Reservoir
The
Big
Canyon
Mammoth Lode Mine
Twelvemile Knoll
173
174



MILFORD 15"

B173

____ of ____

TEMPERATURE - DEPTH LOG

Location ~ 1.5 MILES S.W. OF COMMONWEALTH MINE Date 21-AUG-76

Map MILFORD UT 15"

Property BEST T 29S R 12W sec 2 NW¼ SW¼

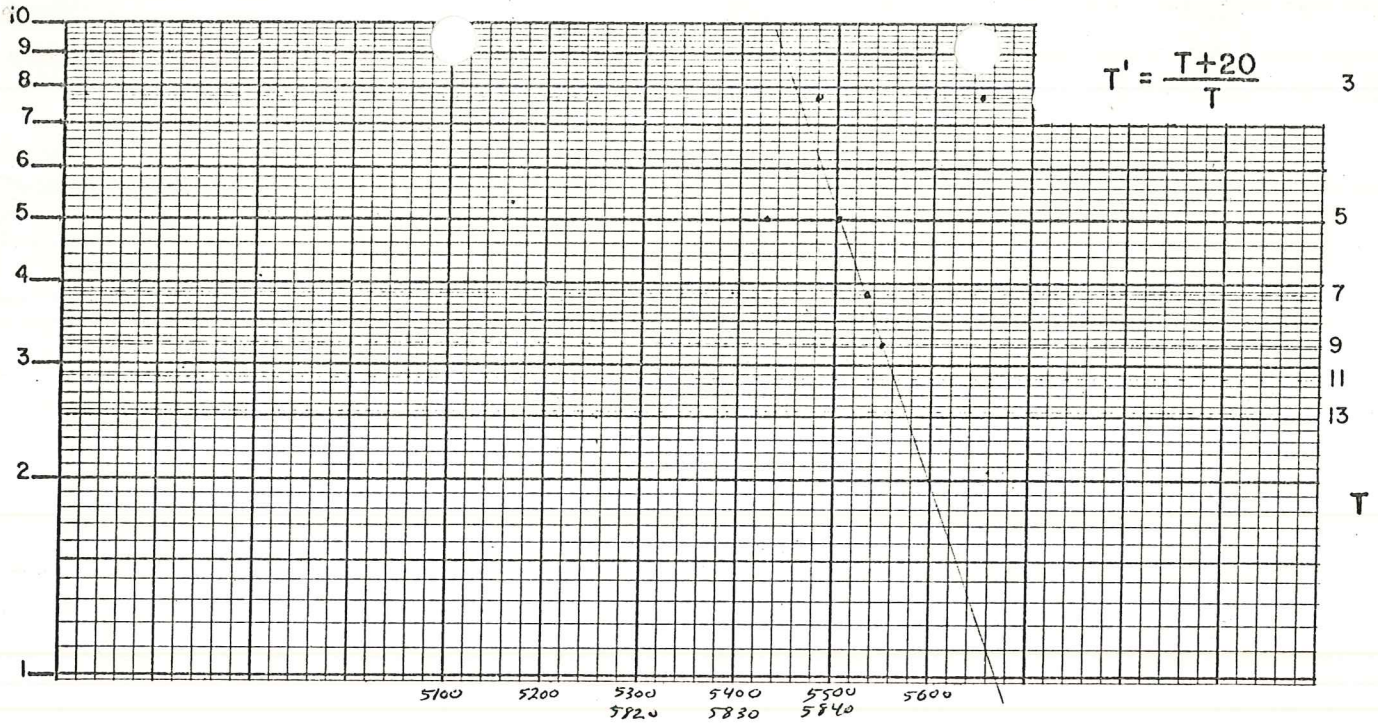
Drill Hole B-173 Date Drilled JULY-76 Elevation 5680 ft.

Instrument ____ Operator JEP

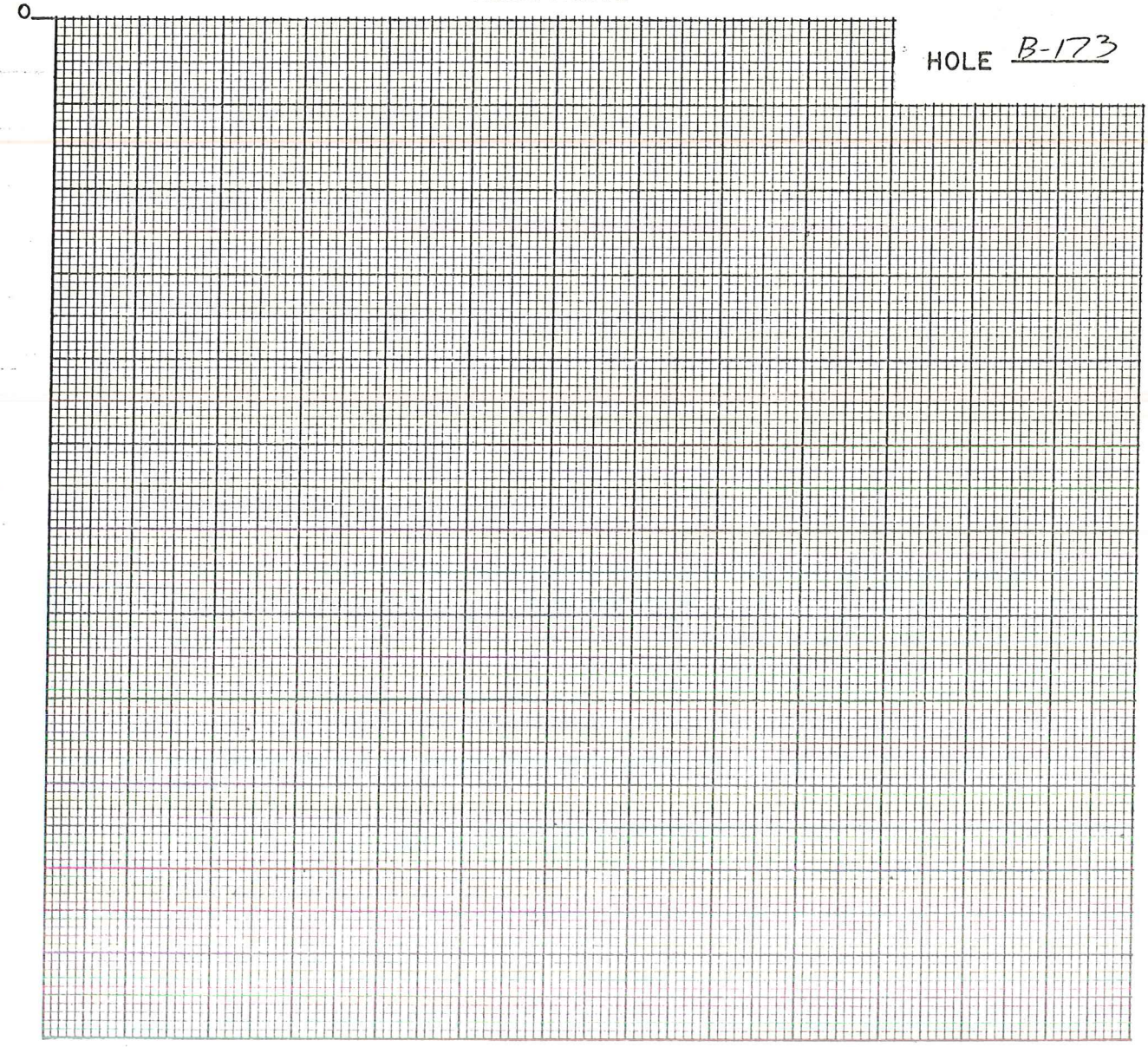
Comments 4" MINERAL EXPLORATION HOLE. CORE OF STRONGLY ALTERED GRANITE. HIGHLY FRACTURED, SHEAR ZONES, EPIDOTE MINERALIZATION & CALCITE. UPPER PORTION OF HOLE IN ALLUVIUM & VOLCANIC RUBBLE

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5647 5504 5534	13.41			
	5549				
20	5438 5433 5429				

HOLE ~125m
6" Try To force PVC in & relog



RESISTANCE



DEPTH
ETERS

TEMPERATURE °C

TEMPERATURE DEPTH LOG

ΔT Well No. 175

Property-Project O.K Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 79	175	23	AG	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
3.0 KM NE OF ANTELOPE MOUNTAIN	JEO	HLH

Card B

Map Location Δ: Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	7.5	38.	37.5	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
9.1	25.35	5382.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	25.0	45.0	-5.0	.5
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	50.0	64.0		-.5
D				
E				
F				
G				

Final Segment: Start = .999

B-175

____ of ____

TEMPERATURE - DEPTH LOG

Location ~ 3½ MILES E. OF ANTELOPE SP. Date 23-AUG-76

Map ANTELOPE SP. UT 7½"

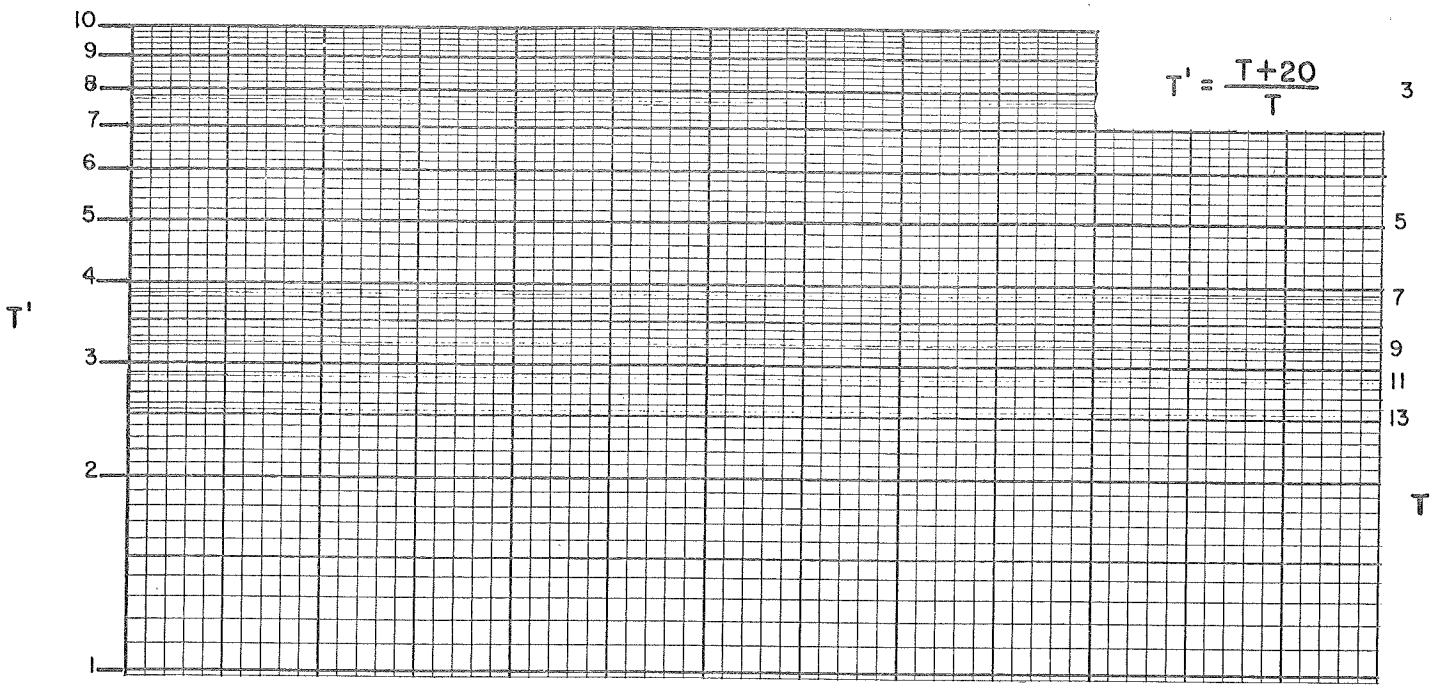
Property O.K T 25S R 8W sec 7 SW CORNER

Drill Hole B-175 Date Drilled AUG-76 Elevation 5382 ft.

Instrument ____ Operator JED

Comments 1" STEEL PIPE - CHEVRON GRADIENT HOLE HOLE BEGINES IN TUFFACEOUS SEDS & APPARENTLY BOTTOMS IN DK-GRAY BSLT.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	5465	14.33			
			0.52		
10	5352	14.85			
			0.87		
15	5169	15.72			
			0.75		
20	5017	16.47			
			-0.16		
25	5049	16.31			
			0.30		
30	4988	16.61			
			0.23		
35	4944	16.84			
			0.60		
40	4828	17.44			
			0.29		
45	4772	17.73			
			0.11		
50	4752	17.84			
			0.01		NEARBY WATER WELL LOGS INDICATE BASALT FLOW AT APPROX. THIS DEPTH. POSSIBLE C.W. AQUIFER
55	4751	17.85			
			0.00		
60	4750	17.85			
			0.01		
64	4749	17.86			



RESISTANCE

HOLE B-175

DEPTH METERS

0
10
20
30
40
50
60
70

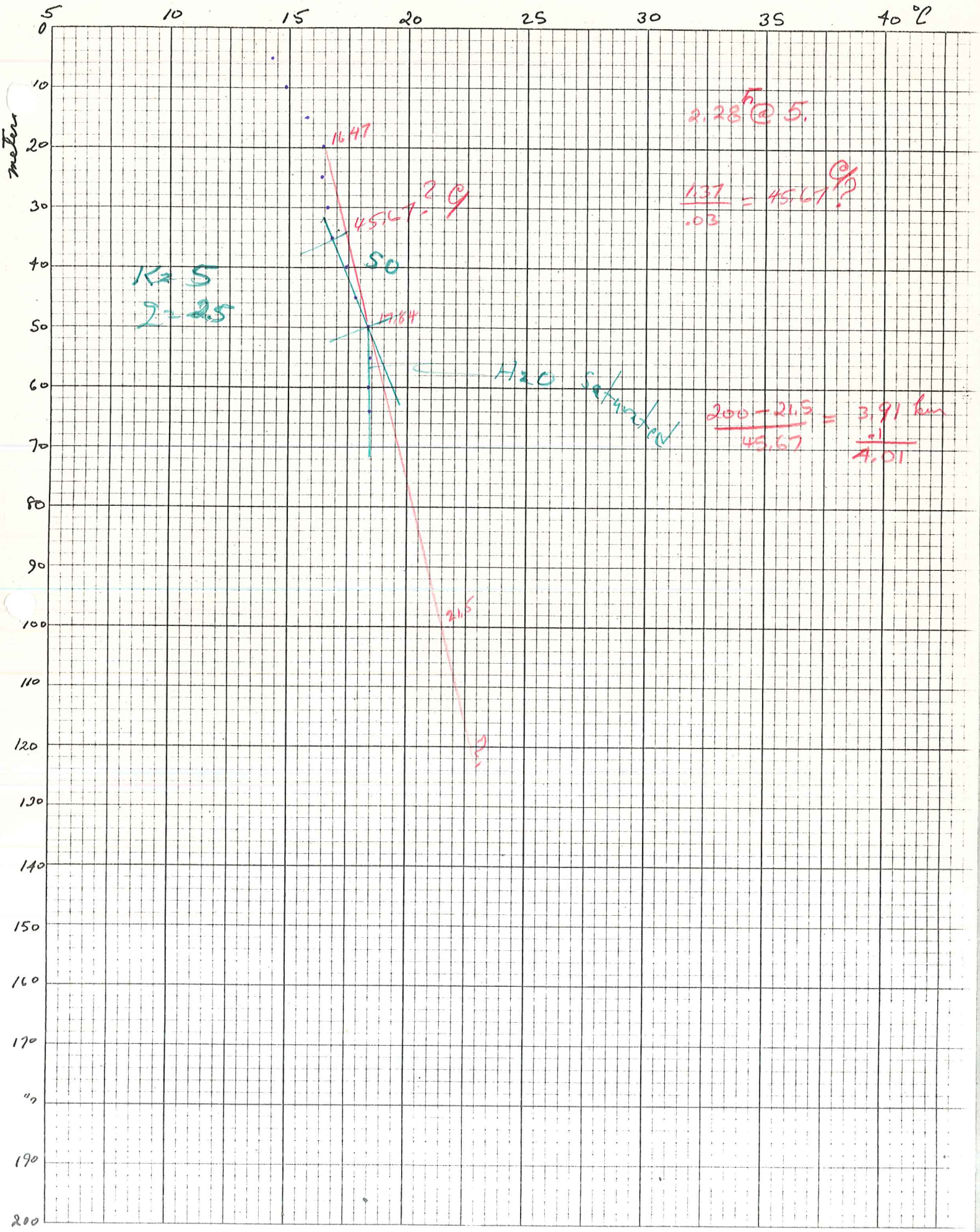
(2e3) / 3.73

50, 0 / 0-2.5 @ 5.0

10
15
20

TEMPERATURE °C

B-175



5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
meters
2.28 h @ 5.
1.37 / .03 = 45.67 ?
16.47
45.67 ? C/
50
17.84
K = 5
I = 2.5
H2O saturated
200 − 21.5 / 45.67 = 3.91 km
.1 / 4.01
21.5
?

B-175
B-175
382
5380
5400
5409
5500
5440
5560
5580
5600
5540
8
16
17
18
19
20
21
TRAIL
JEEP
BLACK ROCK
ROAD
4279
4278000m.N.
2 MI. TO U.S. 91
38°37'30"
112°45'
47'30"
R 9 W R 8 W
(COVE FORT 1:62 500)
3461 II
(...LE PASS)
III SE
1:24 000
4000 5000 6000 7000 FEET
1 MILE
1 KILOMETRE
...RVAL 20 FEET
...RTICAL DATUM OF 1929
...L MAP ACCURACY STANDARDS
...COLORADO 80225, OR RESTON, VIRGINIA 22092
...D SYMBOLS IS AVAILABLE ON REQUEST
ROAD CLASSIFICATION
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route
ANTELOPE SPRING, UTAH
N3837.5—W11245/7.5
1973
AMS 3461 III NE—SERIES V897
FD D-6
AD (D)
CHIEF

TEMPERATURE DEPTH LOG

ΔT Well No. 176

Property-Project Thermex Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No	Well No	Date Logged DA	MO	YR	*
7~~55~~ 77	176	01	SP	76	CM

* 19-Write F if Fahrenheit, 20-Write F if Feet

Site Description	Operator	Editor
3.4 KM SW OF COVE FORT, UTAH	JED	MLH

Card B

Map Location △

Scale Unit in cm	Map Size (7.5, 15., 60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
CM	15. 5	38.	30.	112.	45.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
15.55	18.7	6050.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
C	20.0	32.0	-5.0	.5
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	32.0	38.0		-.5
D				
E				
F				
G				

Final Segment: Start = .999

B-176

____ of ____

TEMPERATURE - DEPTH LOG

Location 2 MILES N.E. OF CINDER CRATER Date 1-SEPT-76

Map COVE FORT UT, 15"

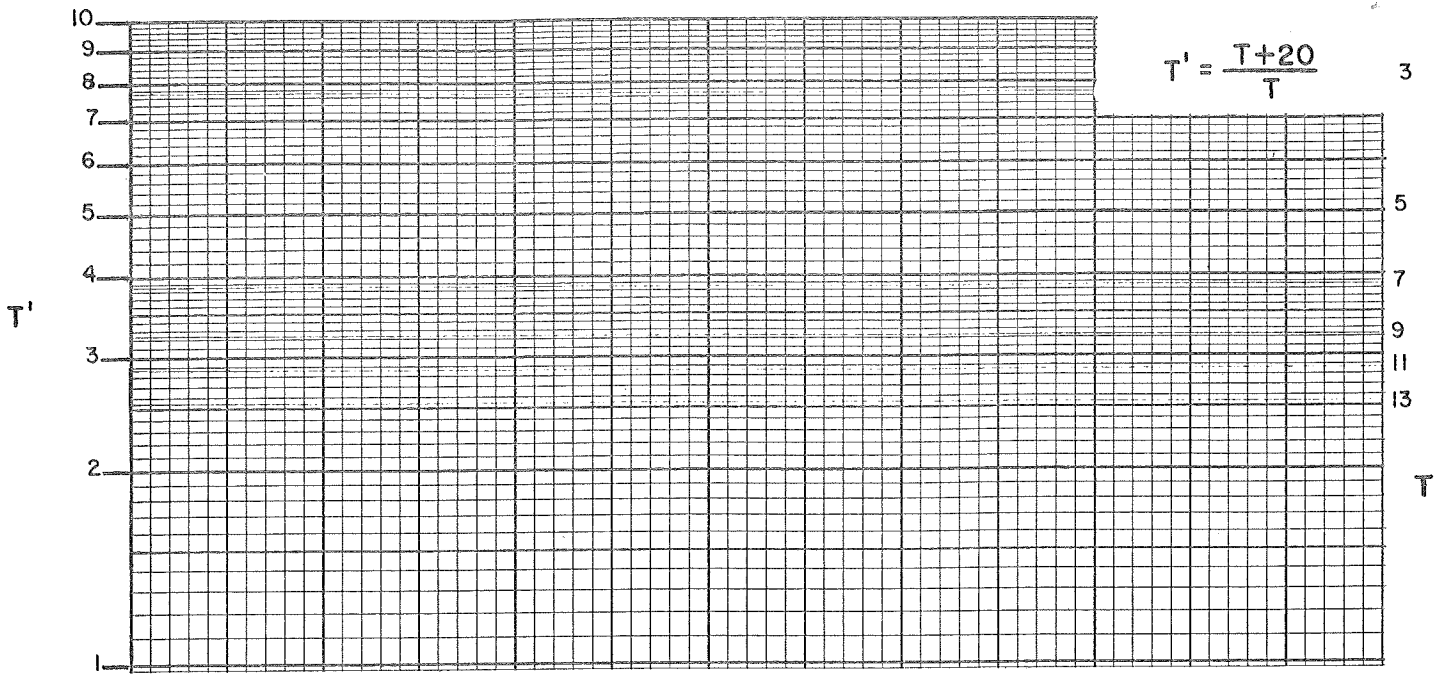
Property THERMEX T 25 S R 7 W sec 35 SW¼ SW¼

Drill Hole B-176 Date Drilled ____ Elevation 6050 ft.

Instrument ____ Operator JEO

Comments 3/4" STEEL PIPE, HUNT GRADIENT HOLE. CUTTINGS OF MED TO DK GRAY APHANITIC BASALT. APPARENTLY HAD LOST CIRCULATION PROBLEMS.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
18	5790	12.90			
			0.29	145	
20	5721	13.19			
			0.24	120	
22	5665	13.43			
			0.19	95	
24	5623	13.62			
			0.16	80	
26	5587	13.78			
			0.17	85	
~~30~~ 28	5548	13.95			
			0.18	90	
30	5509	14.13			
			0.25	125	
32	5454	14.38			
			0.68	320	
34	5307	15.06			
			0.79	345	
36	5142	15.85			
			0.15	75	
38	5111	16.00			



RESISTANCE

HOLE B-176

DEPTH METERS

0
10
20
30
40
50

99

270

(22.1)

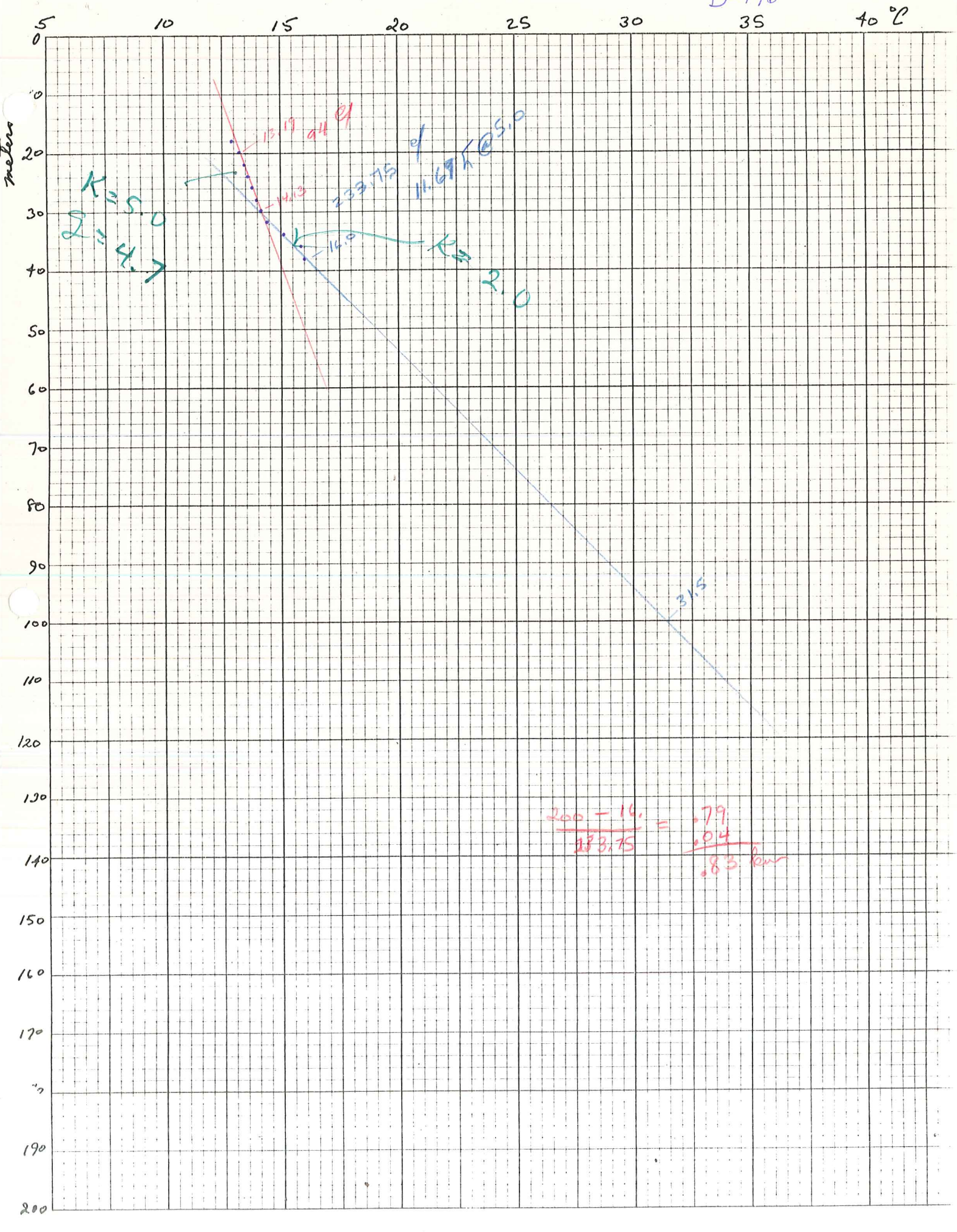
1.90

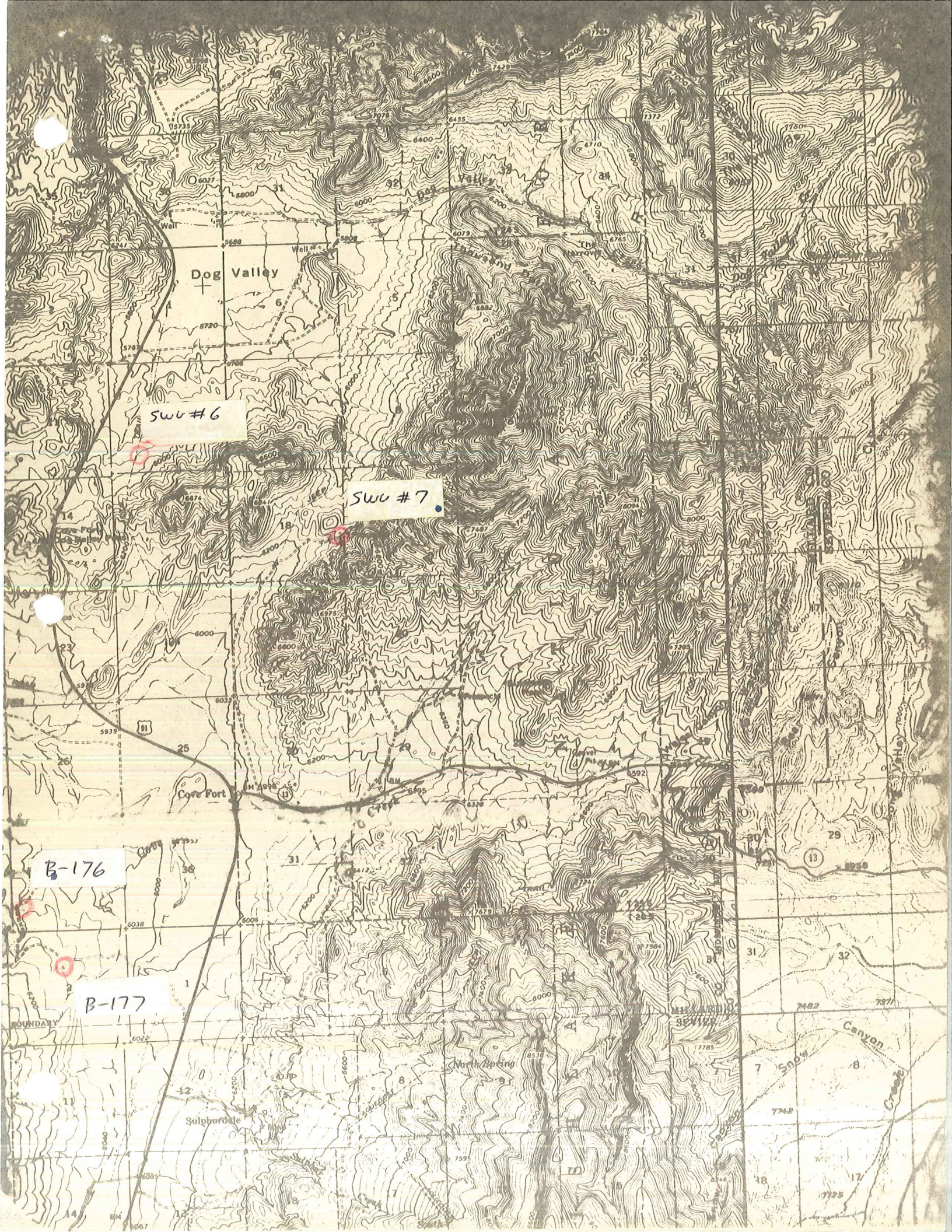
99 = 270

5.0 @ 5.0

10
15
20

TEMPERATURE °C


B-176
5
10
15
20
25
30
35
40 °C
meters
0
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
13.19
94 cf
14.13
233.75 cf
11.69 h @ 5.0
16.0
K = 5.0
Q = 4.7
K = 2.0
31.5
200 − 16.
233.75
= .79
.04
.83 kw



Dog Valley
SWU #6
SWU #7
B-176
B-177
Cove Fort
Sulphurdale
North Spring
Snow Canyon

COVE FORT 15"

B-177 of

TEMPERATURE - DEPTH LOG

Location ~1.5 MILES N.E. OF CINDER CRATER Date 1-SEPT-'76

Map COVE FORT UT, 15"

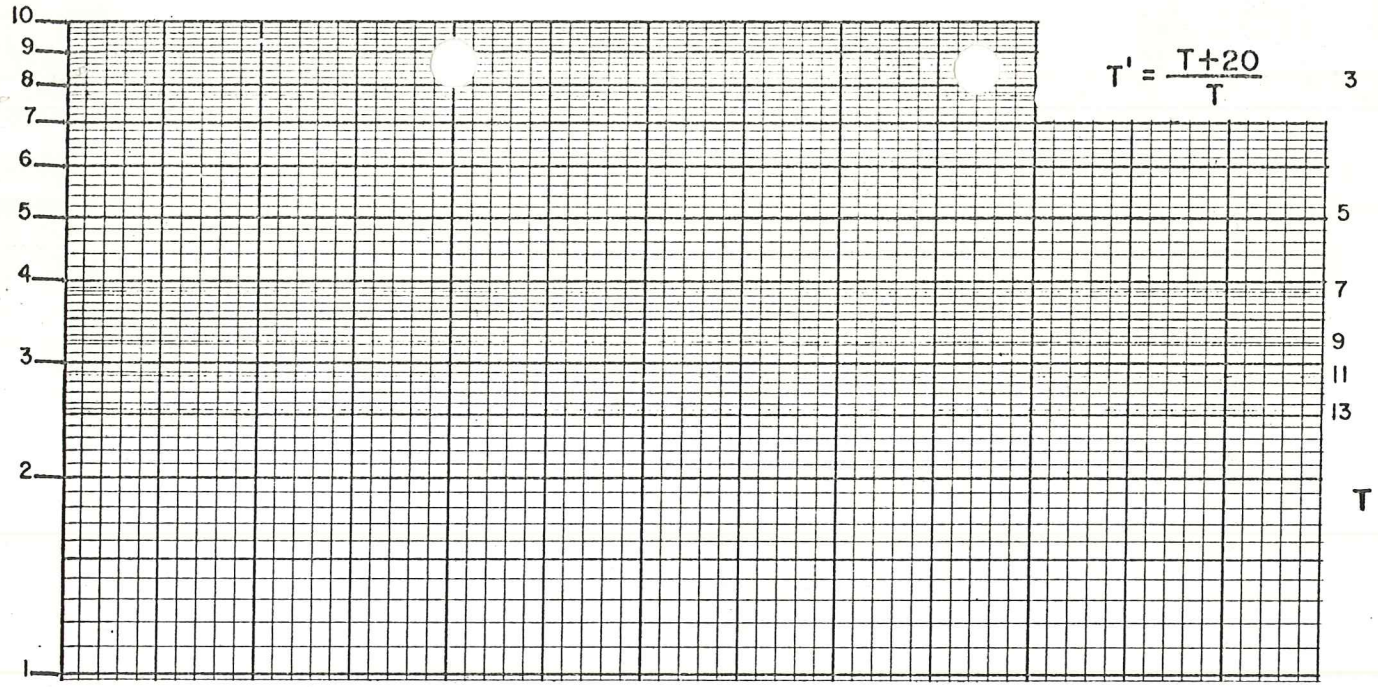
Property THERMEX T 26S R 7W sec 2 SE¼ NW¼

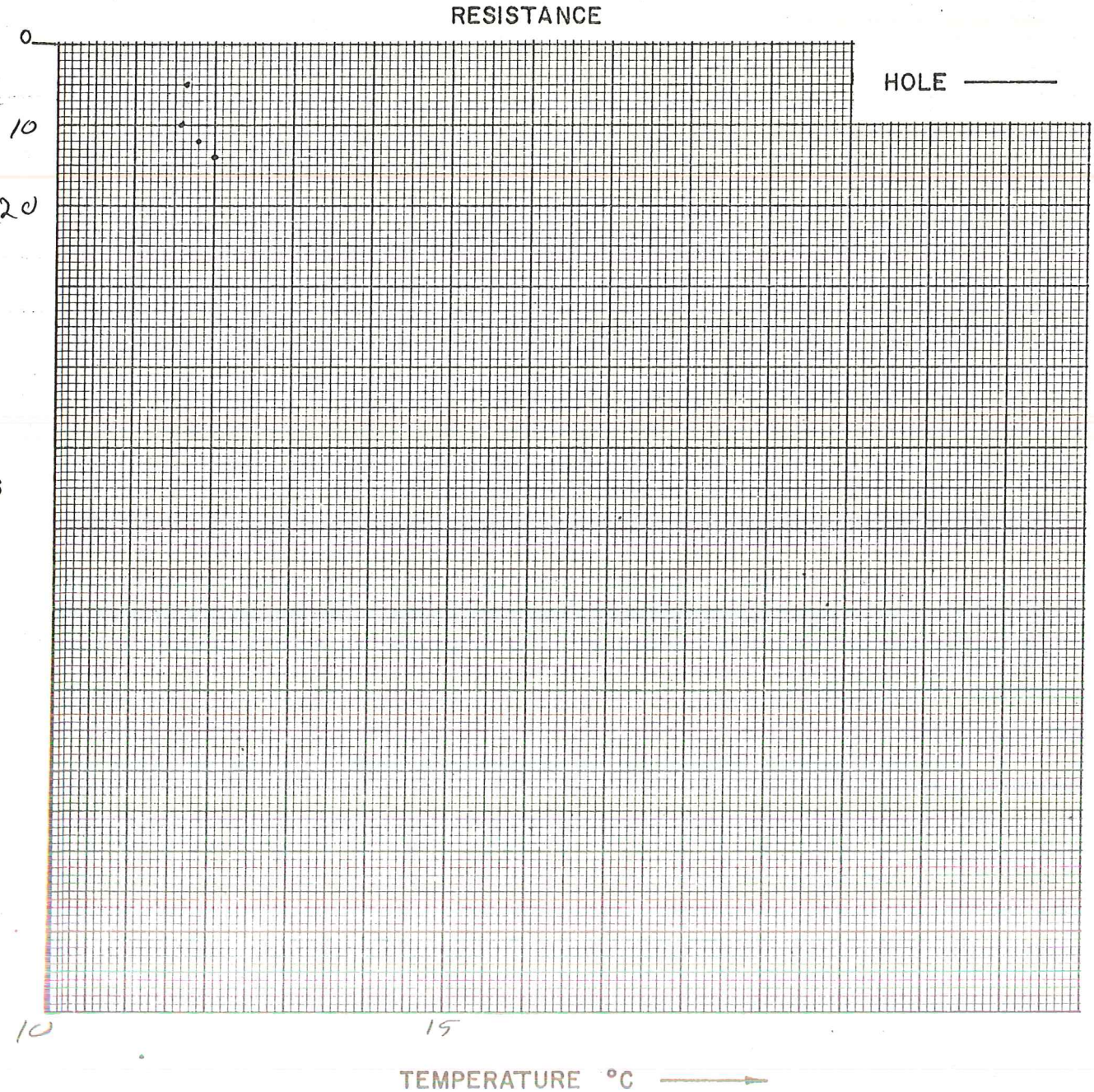
Drill Hole 177 Date Drilled _____ Elevation 6120 ft.

Instrument _____ Operator JEO

Comments 1" STEEL PIPE - HUNT GRADIENT HOLE. CUTTINGS OF DK-GRAY APHANITIC BASALT. LOOKS LIKE THEY HAD PROBLEMS WITH LOST CIRCULATION.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	6092	11.65			
10	6110	11.58	0.24	120	
12	6050	11.82	0.18	90	
14	6006	12.00			


10
9
8
7
6
5
4
3
2
1
T'
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T


RESISTANCE
0
10
20
HOLE
DEPTH
METERS
10
15
TEMPERATURE °C

TEMPERATURE DEPTH LOG

ΔT Well No. 178

Property-Project Best OK Depth Logged ____

Map ____ Scale ____ Date: Drilled ____ Logged ____

State ____ County ____ Section ____ T ____ R ____

Instrument ____ Operator ____ Elevation ____ ft.

Comments ____

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
7 58 (79)	178	02	SP	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
11.1 KM NORTH OF DANISH RES	JED	/MLH

Card B

Map Location △

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	15.	38.	30.	112.	45.

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
38.7	~~7.4~~ 7.3	5550.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	20.0	30.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	30.0	54.0	-3.5	-.5
D				
E				
F				
G				

Final Segment: Start = .999

B-178 Transient

TEMPERATURE - DEPTH LOG

TEMP: 18°C
TIME: 1800

Location ~ 7 MILES N-W. OF DOG VLY Date 2-SEPT-76

Map COVE FORT UT, 15"

Property O.K. T 24S R 8W sec 24 NW¼ NE¼

Drill Hole B-178 Date Drilled _____ Elevation 5550 ft.

Instrument _____ Operator JEW

Comments 3/4" WATER FILLED PVC PIPE. BEGINS ON TOP OF BLOCKY FINE GRAINED BASALT FLOW. MANY SMALL VESICLES. SAMPLE COLLECTED

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
1.0	4348	20.12			
1.5	4555	18.92			
2.0	4807	17.55			
2.5	5013	16.49			
3.0	5242	15.36			
3.5	5392	14.66			
4.0	5526	14.05			
4.5	5593	13.75	-0.30		
5.0	5639	13.55	-0.20		
5.5	5658	13.47	-0.08		
6.0	5667	13.43	-0.04		
6.5	5661	13.45	0.02		
7.0	5641	13.54	0.09		
7.5	5618	13.64	0.10		
8.0	5586	13.78	0.14		
8.5	5567	13.87	0.09		
9.0	5540	13.99	0.12		
9.5	5519	14.08	0.09		
10.0	5492	14.20	0.12		GRADIENT 36-52m 97.5°C/Km
10.5	5473	14.29	0.09		
11.0	5450	14.39	0.10		

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

Property _____ T ____ R ____ sec ____

Drill Hole B-178 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
11.5	5431	14.48	0.09		
12.0	5405	14.60	0.12		
12.5	5375	14.74	0.14		
13.0	5310	15.04	0.30		
13.5	5294	15.12	0.08		
14.0	5261	15.27	0.15		
14.5	5223	15.46	0.19		
15.0	5182	15.65	0.19		
15.5	5131	15.90	0.25		
16.0	5074	16.18	0.28		
16.5	5029	16.41	0.23		
17.0	5013	16.49	0.08		
17.5	5027	16.42	-0.07		
18.0	5062	16.24	-0.18		
18.5	5058	16.26	0.02		
19.0	5054	16.28	0.02		
19.5	5106	16.02	-0.26		
20.0	5146	15.83	-0.19		
22	5182	15.65	-0.18		
24	5155	15.78	0.13		
26	5098	16.06	0.28		

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

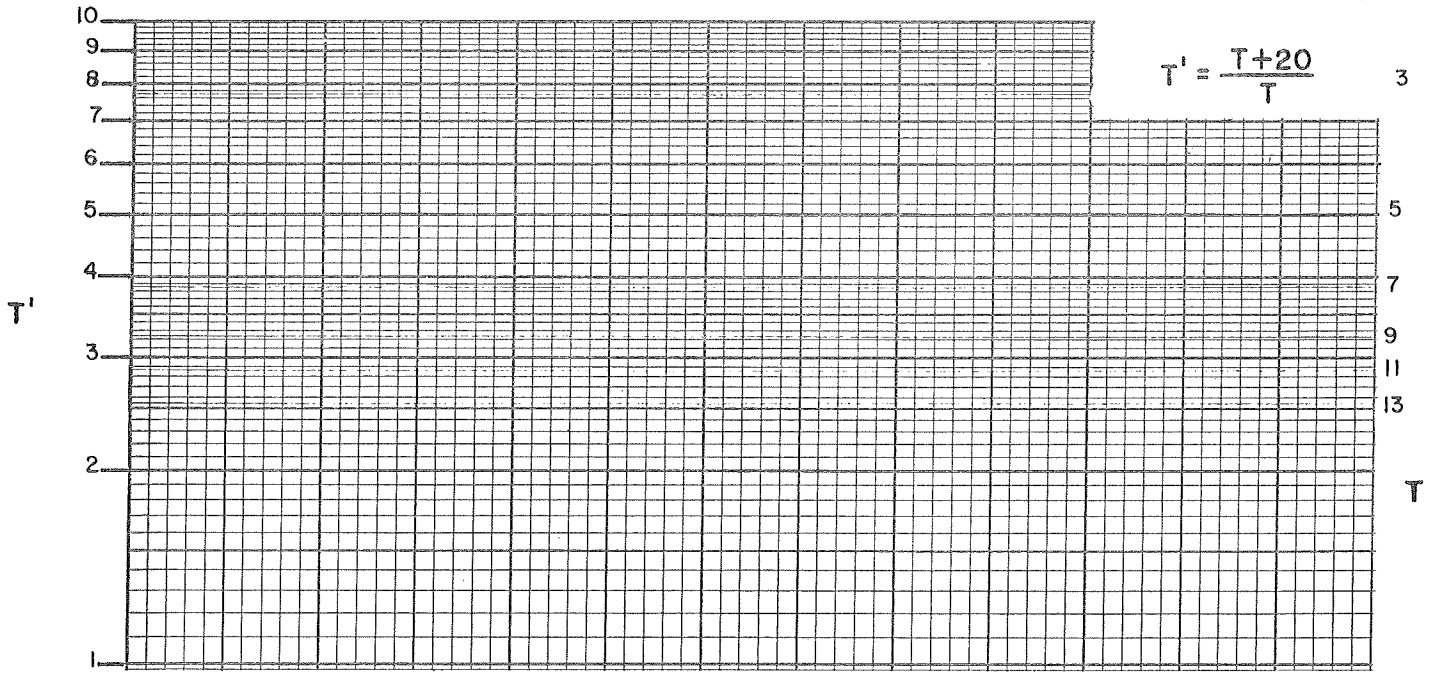
Property _____ T ____ R ____ sec ____

Drill Hole B-178 Date Drilled _____ Elevation ____ ft.

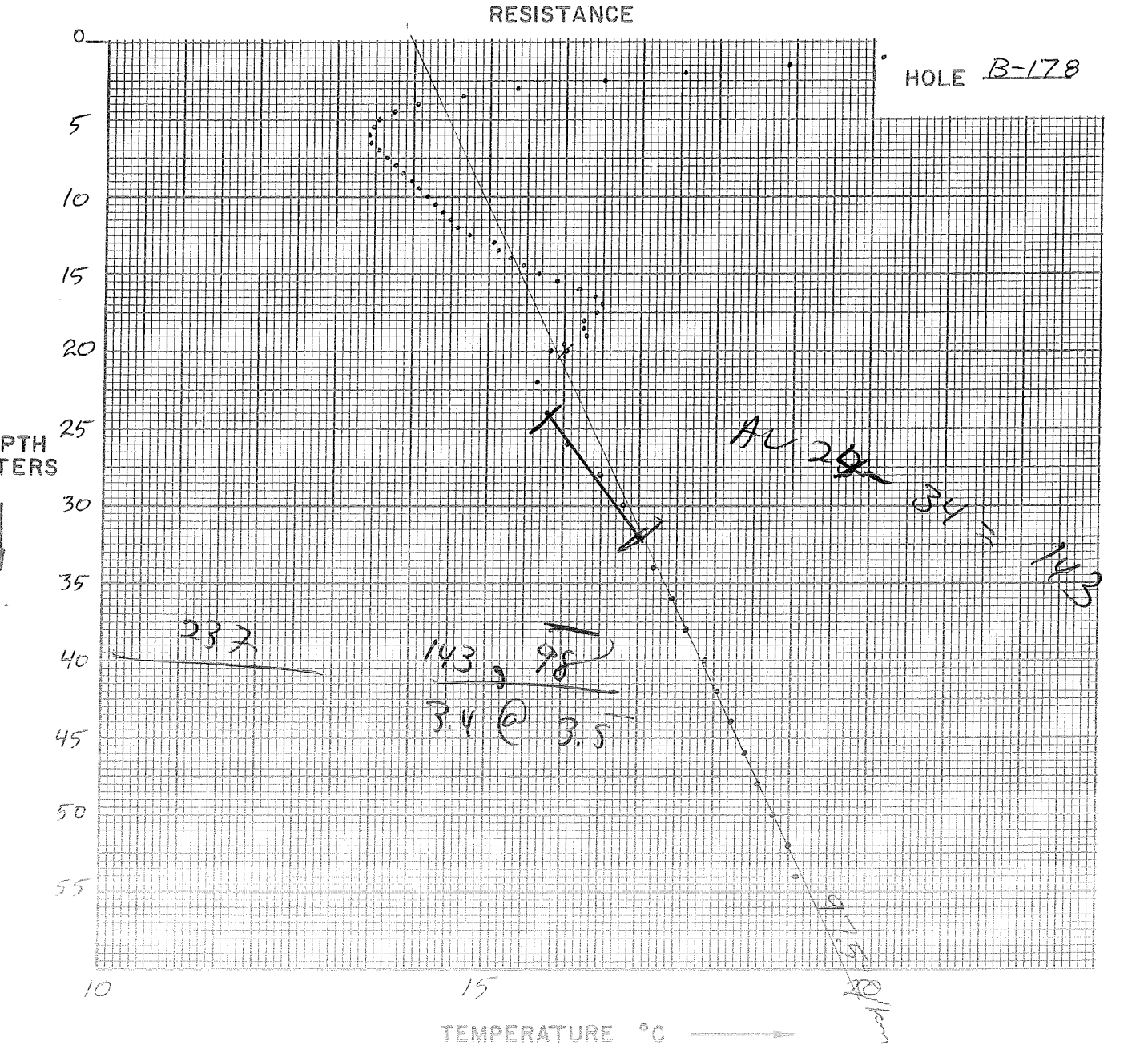
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
28	5015	16.48	0.42		
30	4953	16.79	0.31		
32	4913	17.00	0.21		
34	4872	17.21	0.21		
36	4827	17.44	0.23		
38	4786	17.66	0.22		
40	4746	17.87	0.21		
42	4714	18.05	0.18		
44	4680	18.23	0.18		
46	4645	18.42	0.19		
48	4613	18.60	0.18		
50	4578	18.79	0.19		
52	4542	19.00	0.21		
54	4508	19.19	0.19		



T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13



RESISTANCE
HOLE B-178
DEPTH METERS
0
5
10
15
20
25
30
35
40
45
50
55
10
15
20
TEMPERATURE °C
AL 24 34 = 143
237
143, 98
3.4 @ 3.5

TRANSIENT PLOT

TEMP °C. →

B-178

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

13.43°C

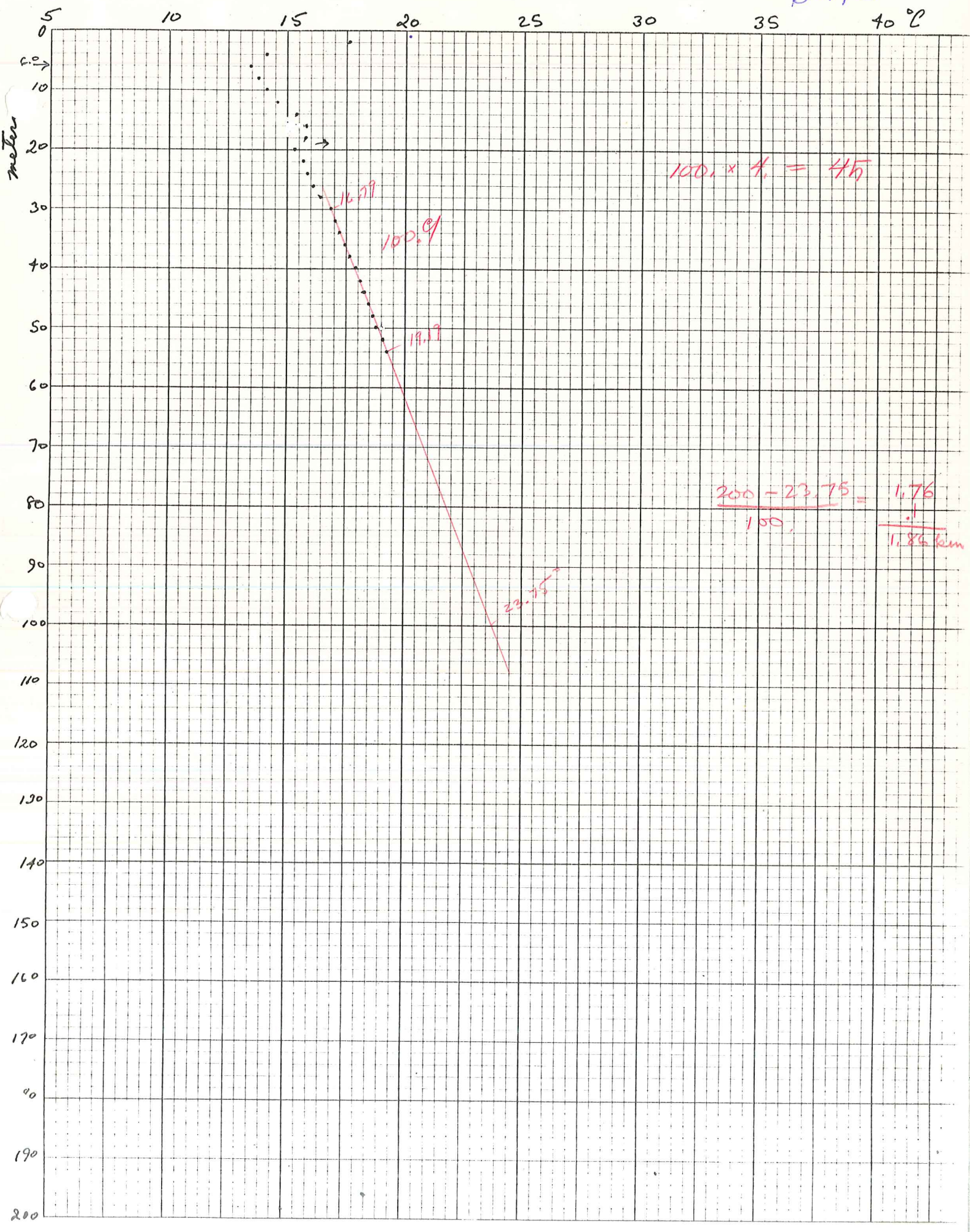
16.5° Summer '75

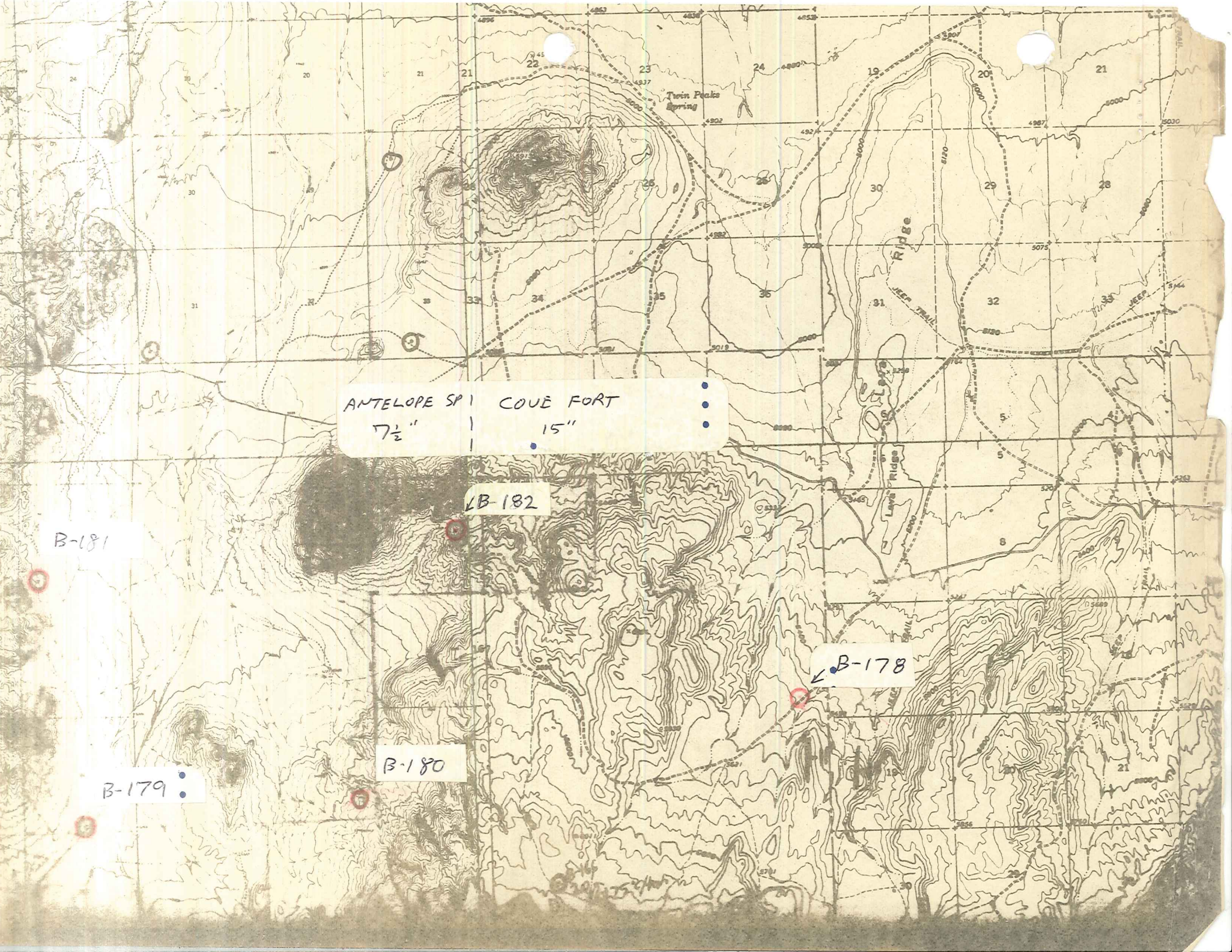
DEPTH IN METERS

10 20 30 40 50

47 0780
10 X 10 TO THE INCH • 10 X 15 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

B-178


5
10
15
20
25
30
35
40 °C
0
c.o
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
meter
14.79
100.0
19.79
23.75
100. x 4. = 45
200 - 23.75 = 1.76
100.
1.86 km


ANTELOPE SP
7½"
COVE FORT
15"
LB-182
B-181
B-178
B-180
B-179
Twin Peaks Spring
Ridge
JEEP TRAIL
Lava Ridge

TEMPERATURE DEPTH LOG

ΔT Well No. 179

Property-Project Best O.K. Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 3 3 79	1 7 9	0 6	S P	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
5.7 KM SW OF SOUTH TWIN PEAK	JED	MLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	7.5	38.	37.5	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
36.4	22.3	5250.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	15.0	50.0	-5.0	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

B-179

____ of ____

TEMPERATURE - DEPTH LOG

TIME: 1100
TEMP: 17.5°C

Location 3 MILES S.W. OF S. TWIN PK. Date 6-SEPT-76

Map ANTELOPE SPRING UT. 7½"

Property O.K. T 24S R 9W sec 24 SW¼ SE¼

Drill Hole B-179 Date Drilled AUG-76 Elevation 5250 ft.

Instrument ____ Operator JEW

Comments 1" STEEL PIPE, CUTTINGS MAINLY OF CALCAREOUS TUFFACEOUS LAKE BEDS & APPARENTLY BOTTOMED IN DK GRAY RHYOLITIC RK. POSSIBLE RHYOLITIC GRAVELS.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
3.0	5343	14.89			
3.5	5537	14.00			
4.0	5700 ~~56~~	13.28			
4.5	5794	12.88			
5.0	5874	12.66			
5.5	5918	12.36			
6.0	5951	12.22			
6.5	5964	12.17			
7.0	5964	12.17			
7.5	5956	12.20			
8.0	5944	12.25			
8.5	5927	12.32			
9.0	5900	12.43			
9.5	5885	12.50			
10.0	5868	12.57			
10.5	5861	12.60			
11.0	5857	12.61			
11.5	5853	12.63			
12.0	5845	12.66			GRADIENT 40-50m 18°C/Km
12.5	5841	12.68			
13.0	5835	12.71			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

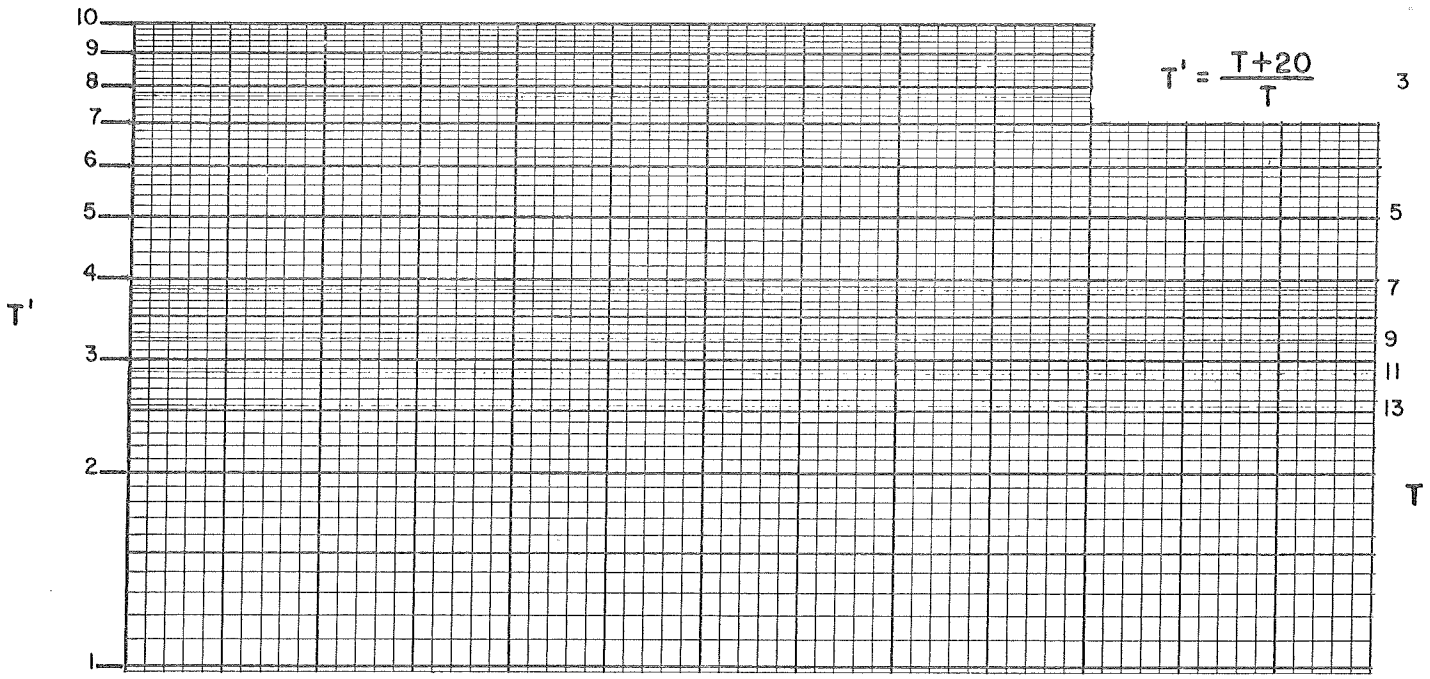
Property _____ T _____ R _____ sec _____

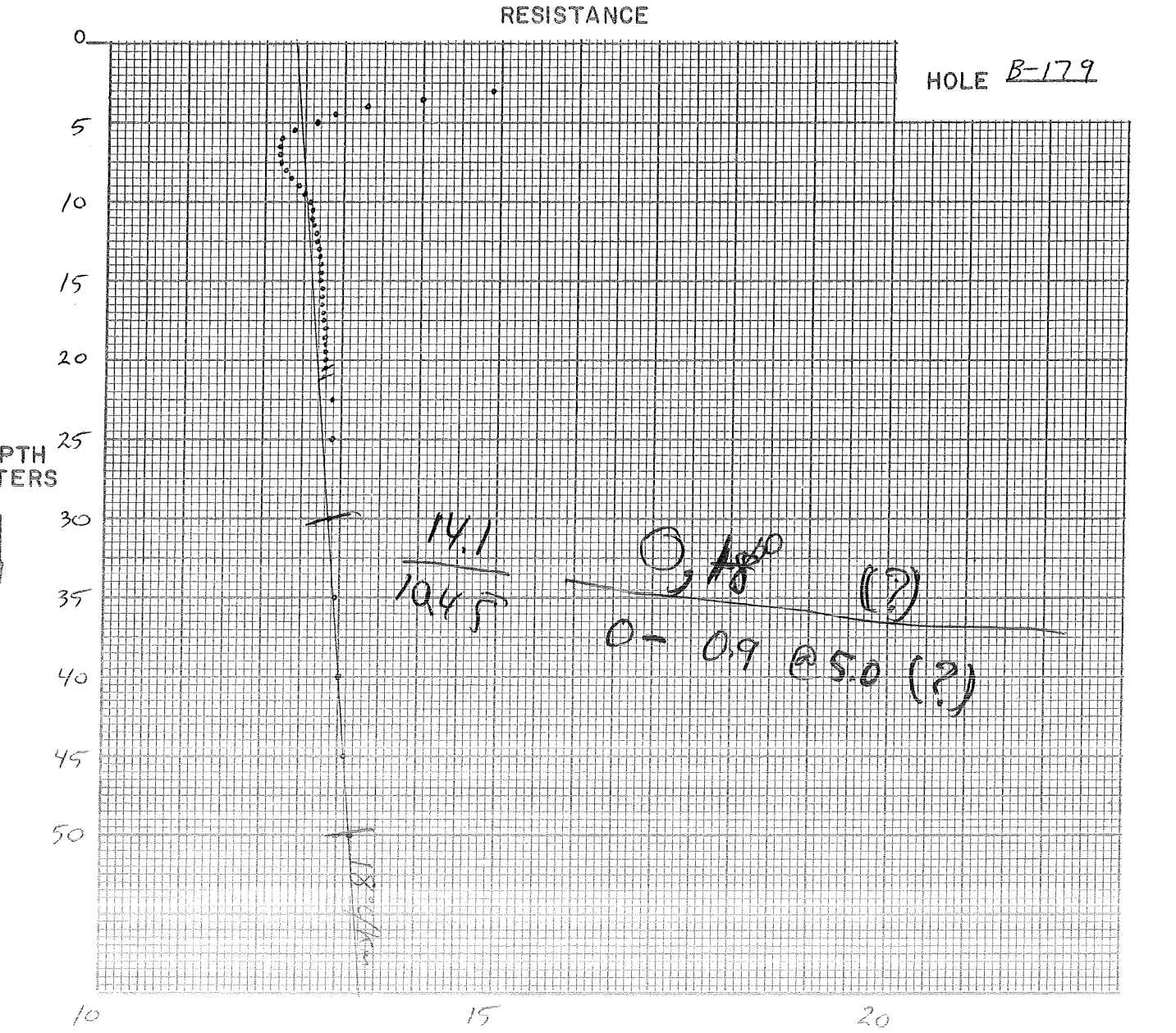
Drill Hole B-179 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
13.5	5834	12.71			
14.0	5830	12.73			
14.5	5831	12.72			
15.0	5831	12.72			
15.5	5828	12.74			
16.0	5826	12.74			
16.5	5826	12.74			
17.0	5822	12.76			
17.5	5819	12.77			
18.0	5814	12.79			
18.5	5814	12.79			
19.0	5817	12.78			
19.5	5816	12.79			
20.0	5814	12.79			
25	5786	12.91	0.12		
30	5796	12.87	-0.04		
35	5776	12.96	0.09		
40	5767	12.99	0.03		
45	5745	13.09	0.10		
50	5725	13.17	0.08		


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE B-179
DEPTH METERS
0
5
10
15
20
25
30
35
40
45
50
14.1
194 Ω
0, 48Ω (?)
0 - 0.9 @ 5.0 (?)
10
15
20
TEMPERATURE °C

TEMP IN °C →

TRANSIENT B-179.

10 11 12 13 14 15 °C

← 12·17°

DEPTH IN METRES ↓

10

20

30

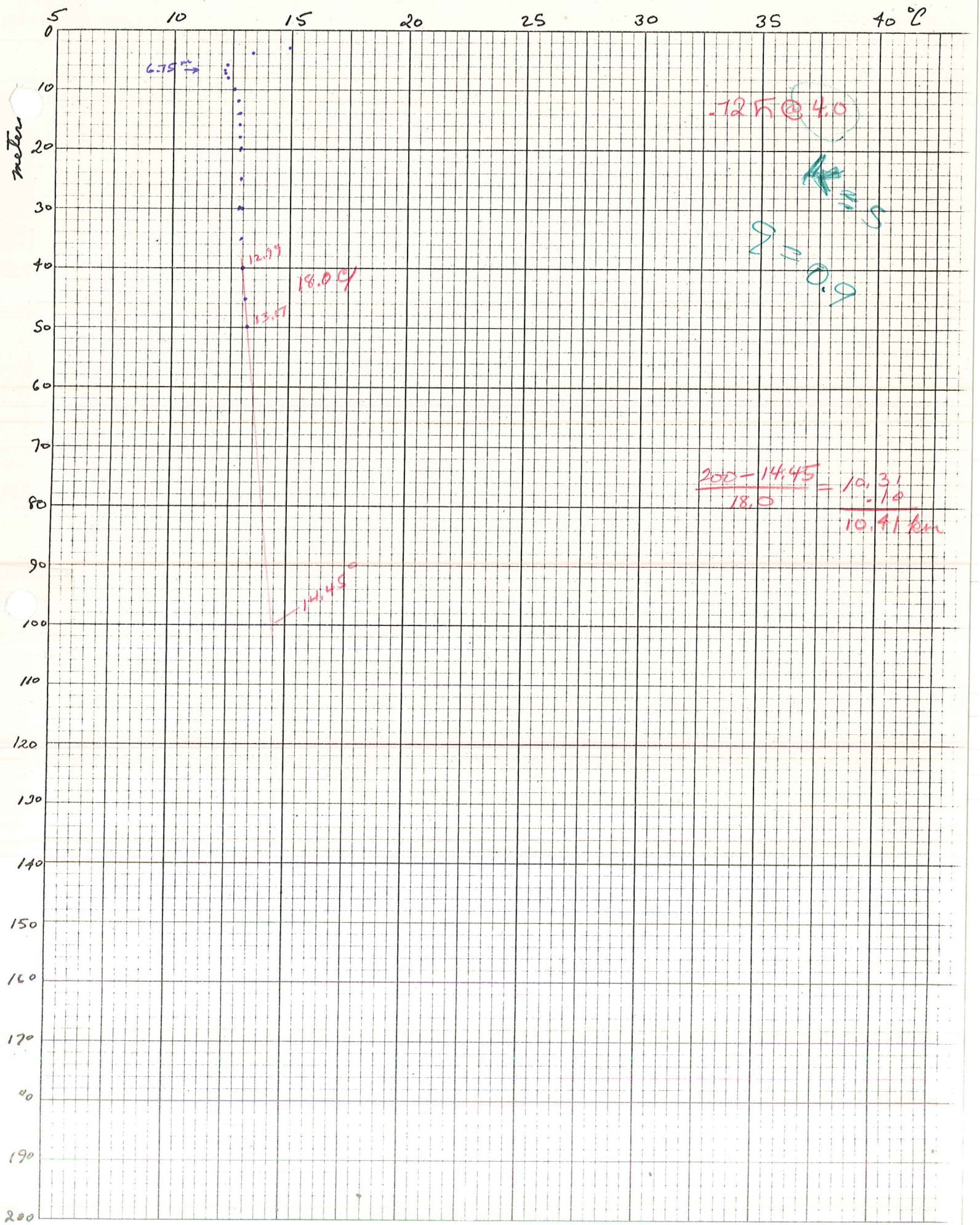
40

550

46 0780

10 X 10 TO THE INCH • 7 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

B-179



5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
meter
6.75 m
12.99
13.17
18.0 °C
14.45°
.125 @ 4.0
k = 5
q = 0.9
200 − 14.45 / 18.0 = 10.31
.10
10.41 km

TEMPERATURE DEPTH LOG

ΔT Well No. 180

Property-Project Best

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No	Well No	Date Logged DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7SE	180				CM

79

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
H.I kM S O	IN PEAK	/

Card B

Scale Unit in cm	Map Size (7.5, 15., 60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30 31 32 33 34 35	36 37 38 39 40		41 42 43 44 45	46 47 48 49 50
CM	7.5		112.		52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
	39.25		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	20.0	80.0	-5.0	-.5
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT ~~DEPTH~~

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	80.0	130.0	-.5	
D				
E				
F				
G				

Final Segment: Start = 999

TEMPERATURE DEPTH LOG

ΔT Well No. 180

Property-Project Best OK Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 8 79	1 8 0	0 6	S P	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
4.1 KM S OF SOUTH TWIN PEAK	JEO	HLH

Card B

Scale Unit in cm	Map Size (7.5, 15., 60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	7.5	38.	37.5	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W, -) (E, +)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
37.45	39.25	5440.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	20.0	80.0	-5.0	.5
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	80.0	130.0	-.5	
D				
E				
F				
G				

Final Segment: Start = .999

B 180 _____ of _____

TEMPERATURE - DEPTH LOG

Location 2 MILES S. OF S. TWIN PK. Date 6-SEPT-76

Map ANTELOPE SP. UT. 7½"

Property O.K. T 24S R 8W sec 20 SE¼ SE¼

Drill Hole B-180 Date Drilled SEPT-76 Elevation 5440 ft.

Instrument _____ Operator JEW

Comments 1" STEEL PIPE. CHEURON GRADIENT HOLE. SURFACE IS DK-GRAY APHANITIC VESICULAR BSLT. CUTTINGS OF DENSE APHANITIC DK-GRAY BSLT.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
~~10~~	5464	14.33			
			−0.12		
~~15~~	5490	14.21			
			0.37	74	
20	5409	14.58			
			0.43	86	
25	5317	15.01			
			0.15	30	
30	5284	15.16			
			0.23	46	
35	5237	15.39			
			0.20	40	
40	5195	15.59			
			0.22	44	
45	5150	15.81			
			0.21	42	
50	5106	16.02			
			0.23	46	
55	5060	16.25			
			0.21	42	
60	5018	16.46			
			0.17	34	
65	4984	16.63			
			0.33	66	
70	4920	16.96			
			0.22	44	
75	4878	17.18			
			0.27	54	
80	4825	17.45			
			0.29	58	
85	4770	17.74			
			0.31	62	
90	4713	18.05			
			0.29	58	
95	4659	18.34			GRADIENT 85-125 m 69 °C/km
			0.43	86	
100	4583	18.77			
			0.40	80	
105	4512	19.17			
			0.23	46	
110	4471	19.40			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

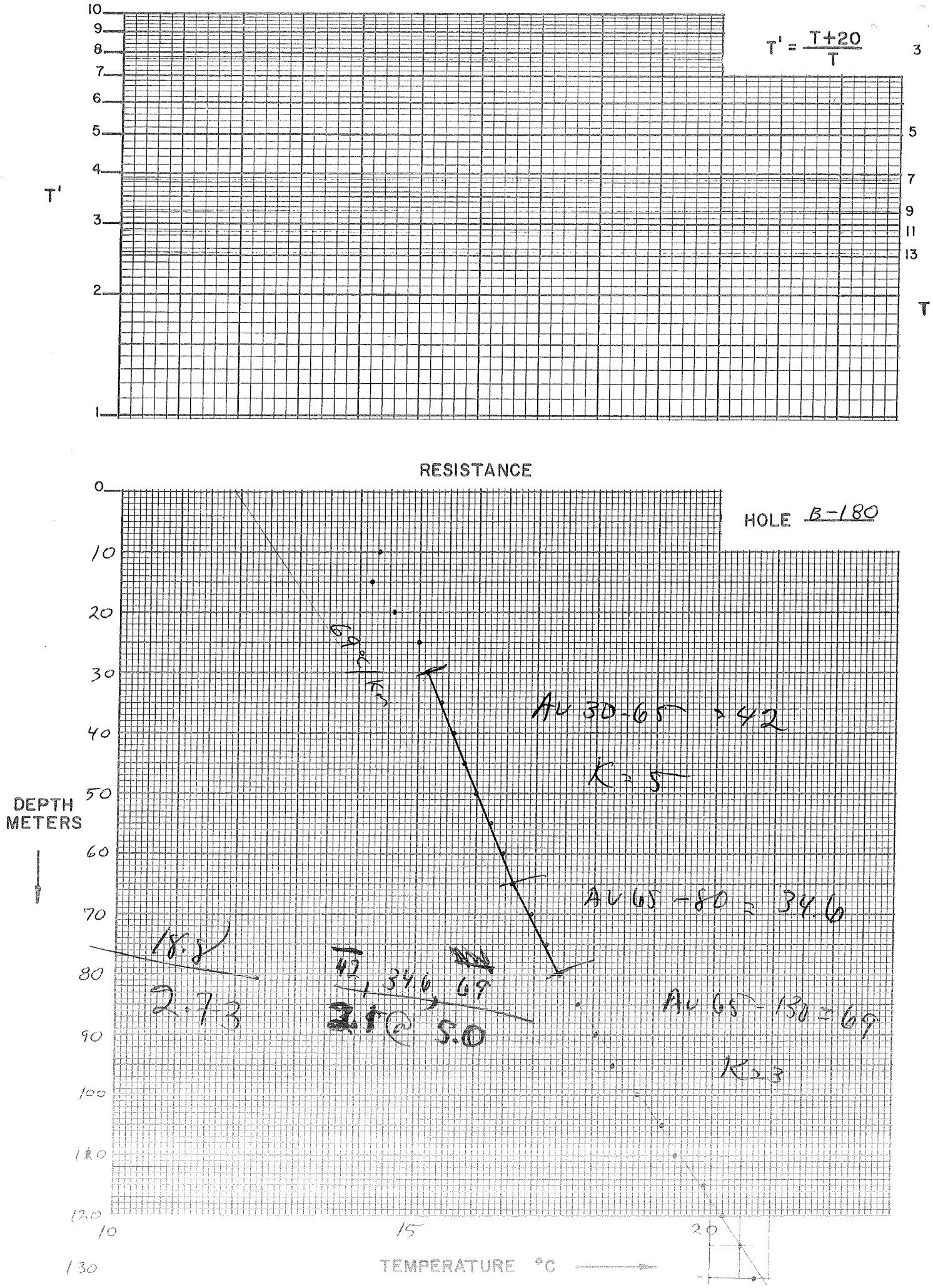
Property _____ T ____ R ____ sec ____

Drill Hole B-180 Date Drilled _____ Elevation ____ ft.

Instrument _____ Operator _____

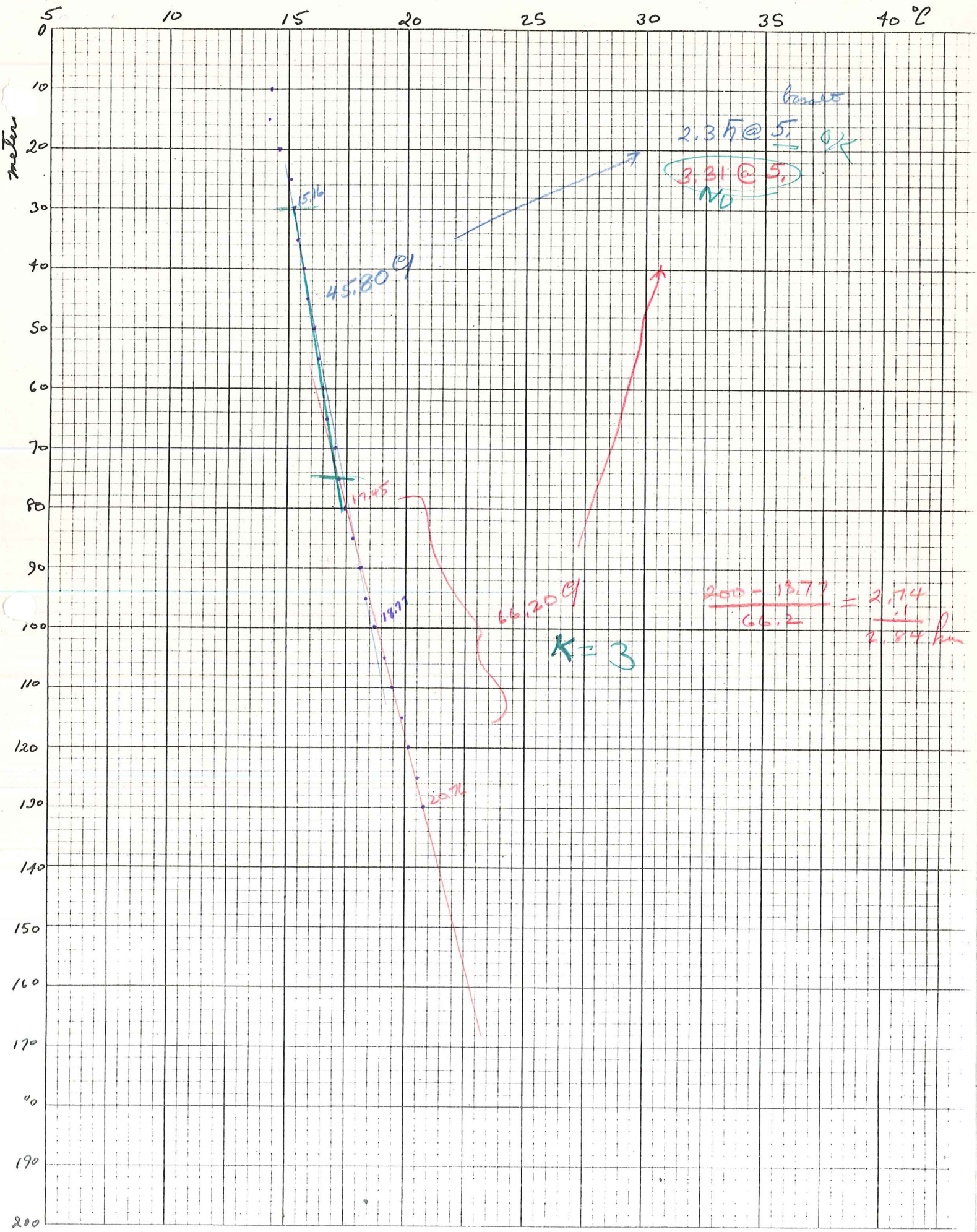
Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
115	4390	19.87	0.47	94	
120	4336	20.19	0.32	64	
125	4285	20.50	0.31	62	
130	4242	20.76	0.26	52	



T' = (T+20)/T
T'
T
RESISTANCE
HOLE B-180
DEPTH METERS
TEMPERATURE °C
69°C/Km
AV 30-65 = 42
K = 5
AV 65-80 = 34.6
AV 65-130 = 69
K = 3
18.8
2.73
42, 34.6, 69
2.1 @ 5.0

B-180


5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
meter
transit
2.35 @ 5.
OK
3.31 @ 5.
NO
15.16
45.80 cy
17.45
18.77
66.20 cy
K = 3
20%
200 - 18.77 / 66.2 = 2.74 / 2.64 ft

TEMPERATURE DEPTH LOG

ΔT Well No. 181

Property-Project Best OK

Depth Logged ______

Map ______ Scale ______ Date: Drilled ______ Logged ______

State ______ County ______ Section ______ T ______ R ______

Instrument ______ Operator ______ Elevation ______ ft.

Comments ______

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* (19)	* (20)
788 (corrected: 79)	181	06	SP	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
4.4 KM WSW OF SOUTH TWIN PEAK	JED	/MLH

Card B

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	37.5	112.	52.5

Map Location △ — Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
50.35	20.25	290.		F

Use decimals

Write M if meters ←

SEGMENT DEPTH

Card	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	30.0	45.0		
D	60.0	100.0		
E	.999			
F				
G				

Continue each card below.

SEGMENT DEPTH

Card	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	45.0	60.0		
D	100.0	150.0	-5.0	-.5
E				
F				
G				

Final Segment: Start = .999

B-181

_____ of _____

TEMPERATURE - DEPTH LOG

Location 2 MILES W. OF S. TWIN PR. Date 6-SEPT-76

Map ANTELOPE SP UT 7½"

Property O.K. T 24S R 9W sec 12 SW¼ SW¼

Drill Hole B-181 Date Drilled AUG.-76 Elevation 5290 ft.

Instrument _____ Operator JEP

Comments 1" STEEL PIPE, CHEVRON GRADIENT HOLE. CUTTINGS OF LT-GRAY & PINKISH RHYOLITE, APHANITIC TO PORPHYRITIC, ZONES OF OBSIDIAN, OR OBSIDIAN FLOW BANDED IN THE RHYOLITE.

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5186	15.63			
			0.25	50	
15	5135	15.88			
			0.10	20	
20	5115	15.98			
			0.15	30	
25	5084	16.13			
			0.20	40	
30	5044	16.33			
			0.10	20	
35	5024	16.43			
			0.04	8	
40	5016	16.47			
			0.05	10	
45	5007	16.52			
			0.15	30	
50	4976	16.67			
			0.17	34	
55	4941	16.85			
			0.17	34	
60	4908	17.02			
			0.19	38	
65	4872	17.21			
			0.19	38	
70	4835	17.40			
			0.19	38	
75	4799	17.59			GRADIENT 100-150m 46.2°C/Km
			0.20	40	
80	4762	17.79			
			0.20	40	
85	4724	17.99			
			0.20	40	
90	4688	18.19			
			0.20	40	
95	4651	18.39			
			0.22	44	
100	4611	18.61			
			0.23	46	
105	4569	18.84			
			0.23	46	
110	4529	19.07			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

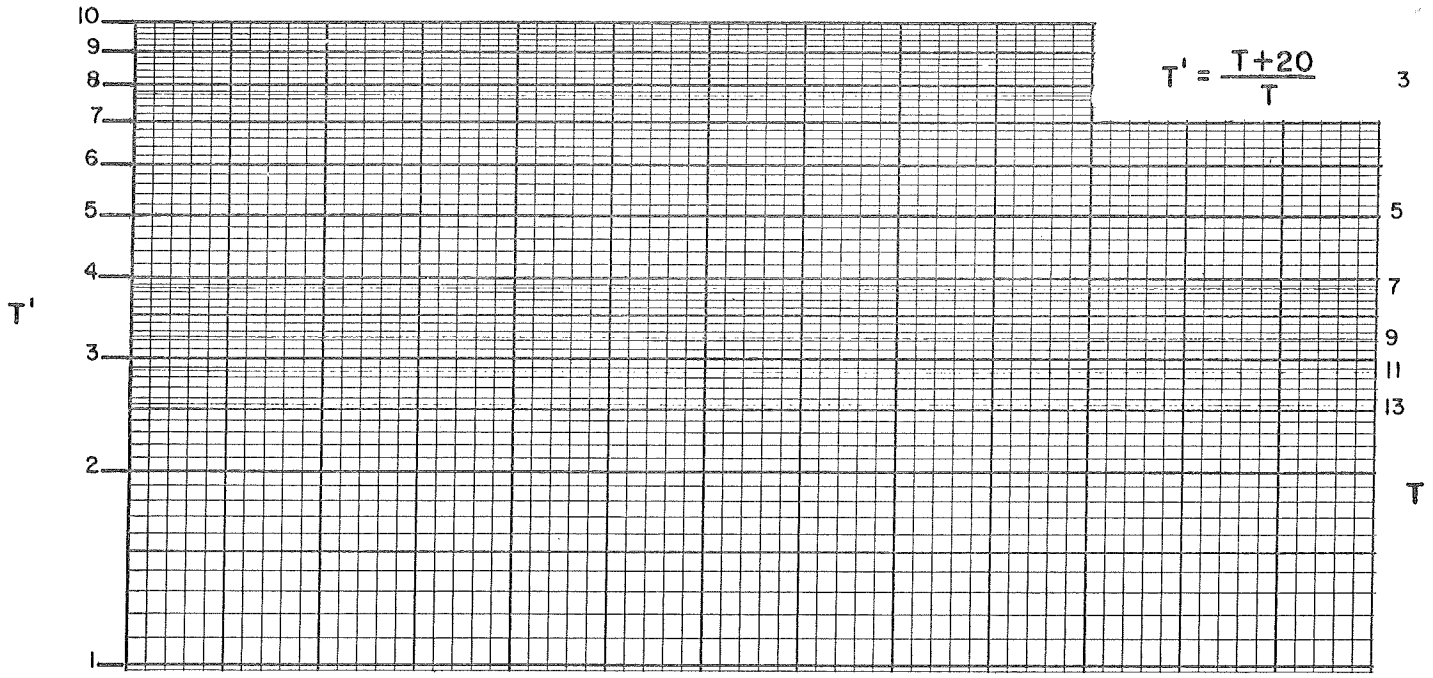
Property _____ T _____ R _____ sec _____

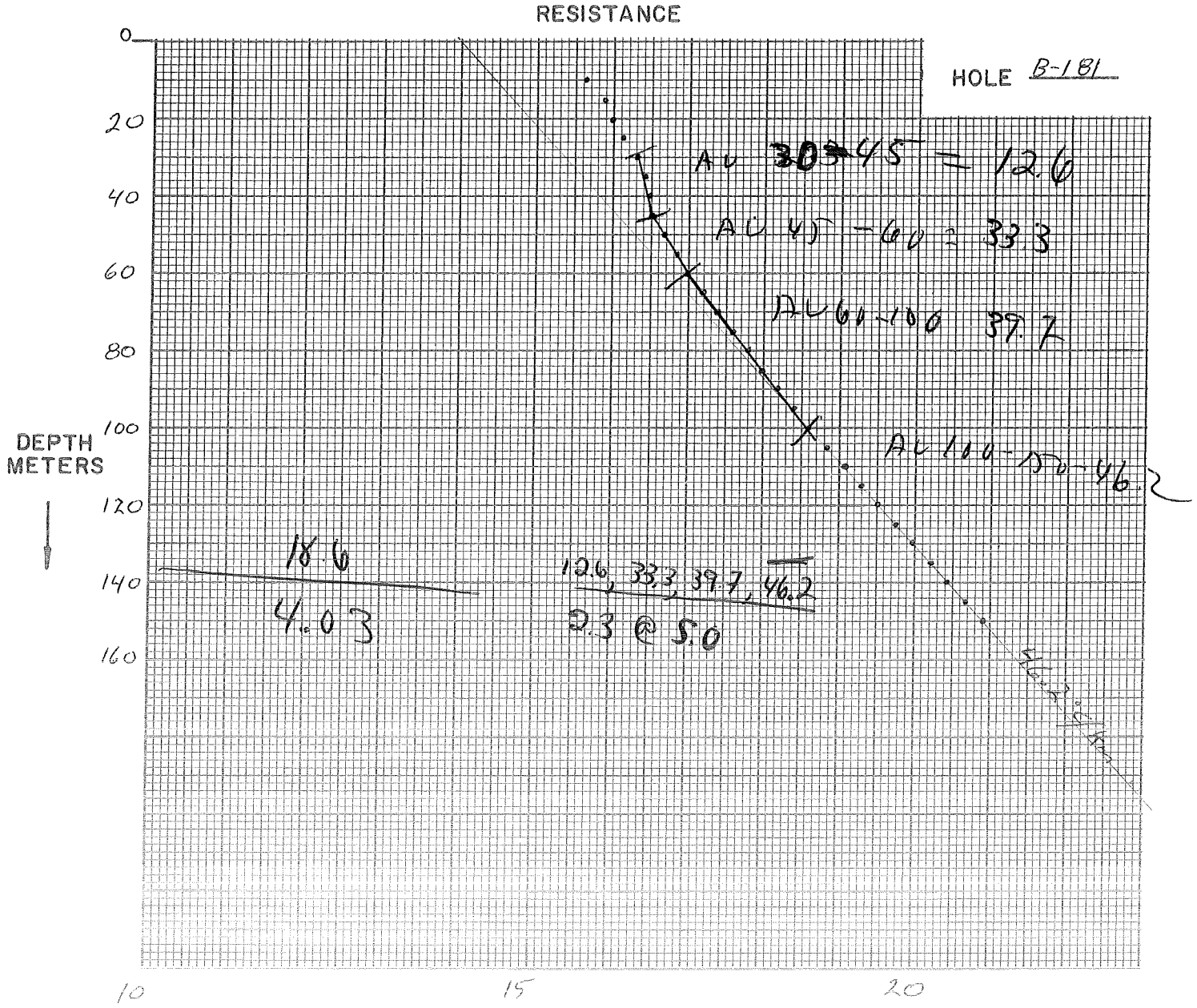
Drill Hole B-181 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

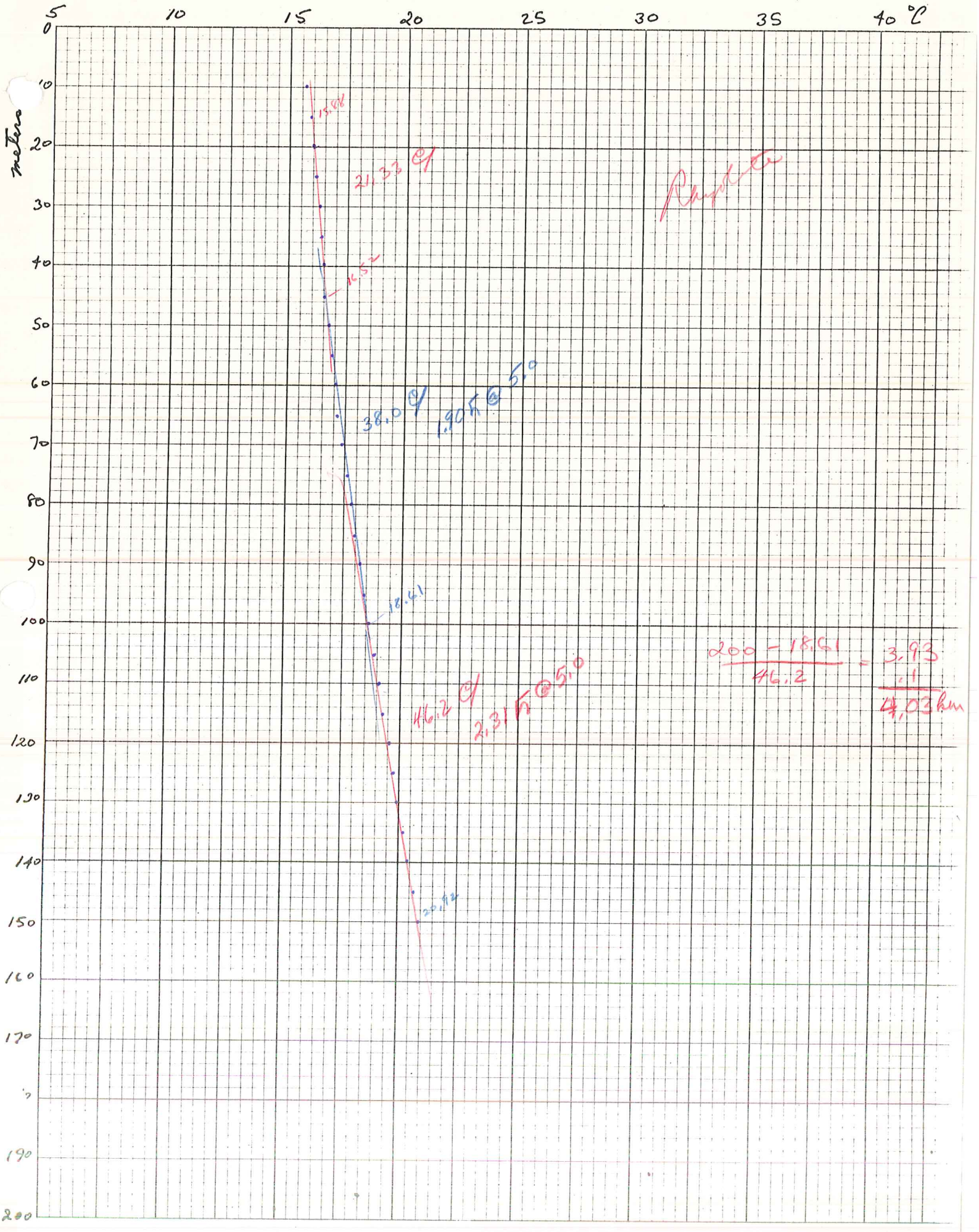
Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
115	4490	19.29	0.22	44	
120	4450	19.52	0.23	46	
125	4410	19.75	0.23	46	
130	4373	19.97	0.22	44	
135	4332	20.21	0.24	48	
140	4296	20.43	0.22	44	
145	4255	20.68	0.25	50	
150	4215	20.92	0.24	48	


T' = T+20 / T
T'
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
T


RESISTANCE
HOLE B-181
0
20
40
60
80
100
120
140
160
DEPTH METERS
Au 30-45 = 12.6
Au 45-60 = 33.3
Au 60-100 39.7
Au 100-150-46.2
18.6
4.03
12.6, 33.3, 39.7, 46.2
9.3 @ 5.0
10
15
20
TEMPERATURE °C

B-181



5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
190
200
meters
15.88
21.33 c/
16.52
38.0 c/
1.90 h @ 5.0
18.61
46.2 c/
2.31 h @ 5.0
20.92
Rhyolite
200 − 18.61 / 46.2 = 3.93
.1
4.03 km

TEMPERATURE DEPTH LOG

ΔT Well No. 182

Property-Project Best OK Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
779	182	06	SP	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
1.6 KM EAST OF SOUTH TWIN PEAK	JED	/HLH

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	~~15.~~ 7.5	38.	37.5	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
~~53.15~~ 53.3	~~44.7~~ 44.3	5500.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	15.0	50.0		
D	.999			
E				
F				
G				

Continue each card below.

~~SEGMENT~~ DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	50.0	150.0	-5.0	-.5
D				
E				
F				
G				

Final Segment: Start = .999

B-182

____ of ____

TEMPERATURE - DEPTH LOG

Location 1 MILE EAST OF S. TWIN PK. Date 6-SEPT-76

Map ANTELOPE SPRING UT 7½"

Property OK T 24S R 8W sec 9 NE¼SE¼

Drill Hole B-182 Date Drilled SEPT-76 Elevation 5500 ft.

Instrument ____ Operator JED

Comments 1" STEEL PIPE. CHEVRON GRADIENT HOLE.

CUTTINGS OF GRAY & REDDISH APHANITIC TO PORPHYRITIC RHYOLITE. MUCH FLOW BANDING & MINOR PUMICE. FRAGS

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	5476	14.28			
			0.24	48	
15	5423	14.52			
			0.15	30	
20	5390	14.67			
			0.15	30	
25	5345	14.88			
			0.20	40	
30	5303	15.08			
			0.38	76	
35	5222	15.46			
			-0.02		
40	5226	15.44			
			0.16	32	
45	5194	15.60			
			0.21	42	
50	5150	15.81			
			0.20	40	
55	5108	16.01			
			0.21	42	
60	5067	16.22			
			0.22	44	
65	5023	16.44			
			0.20	40	
70	4983	16.64			
			0.20	40	
75	4943	16.84			
			0.23	46	
80	4899	17.07			
			0.20	40	
85	4860	17.27			
			0.23	46	
90	4817	17.50			
			0.24	48	
95	4770	17.74			
			0.22	44	
100	4729	17.96			GRADIENT 80-150m 45.9°C/Km
			0.25	50	
105	4683	18.21			
			0.24	48	
110	4640	18.45			

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

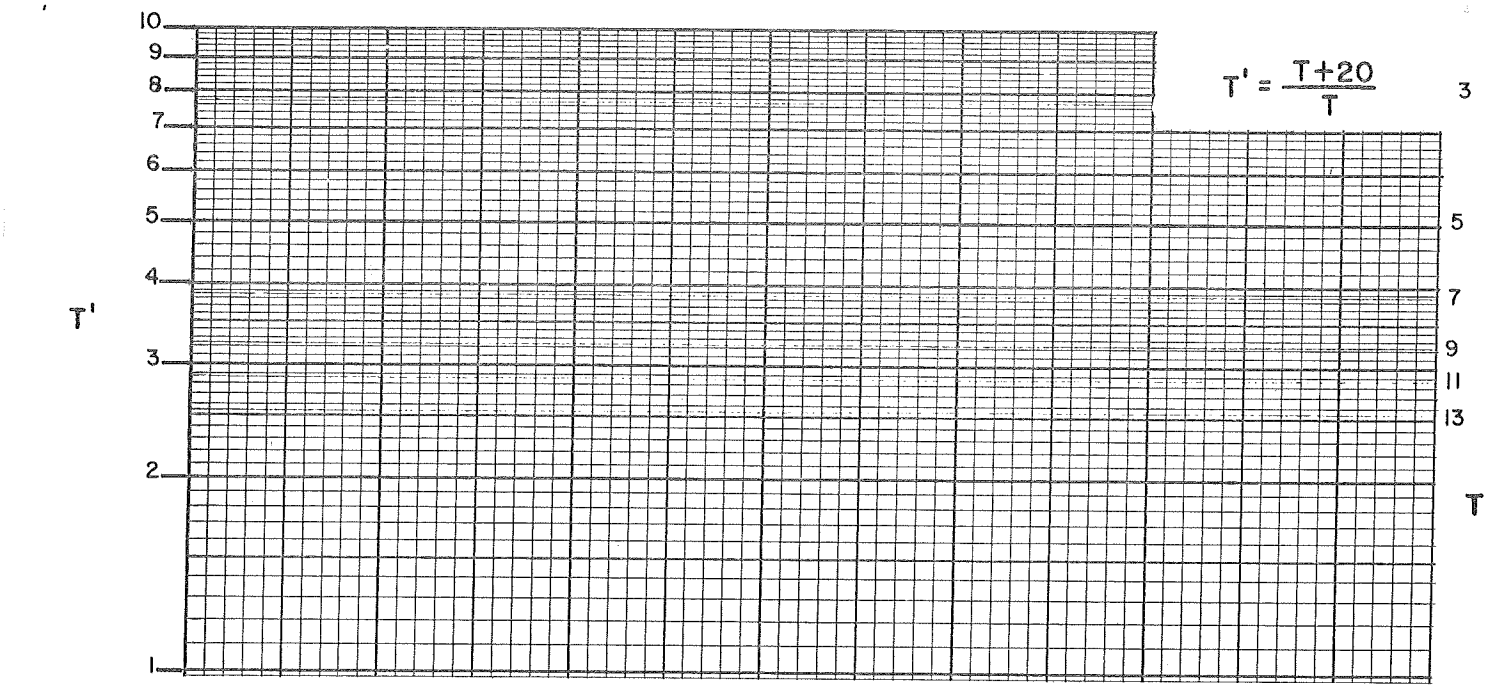
Property _____ T _____ R _____ sec _____

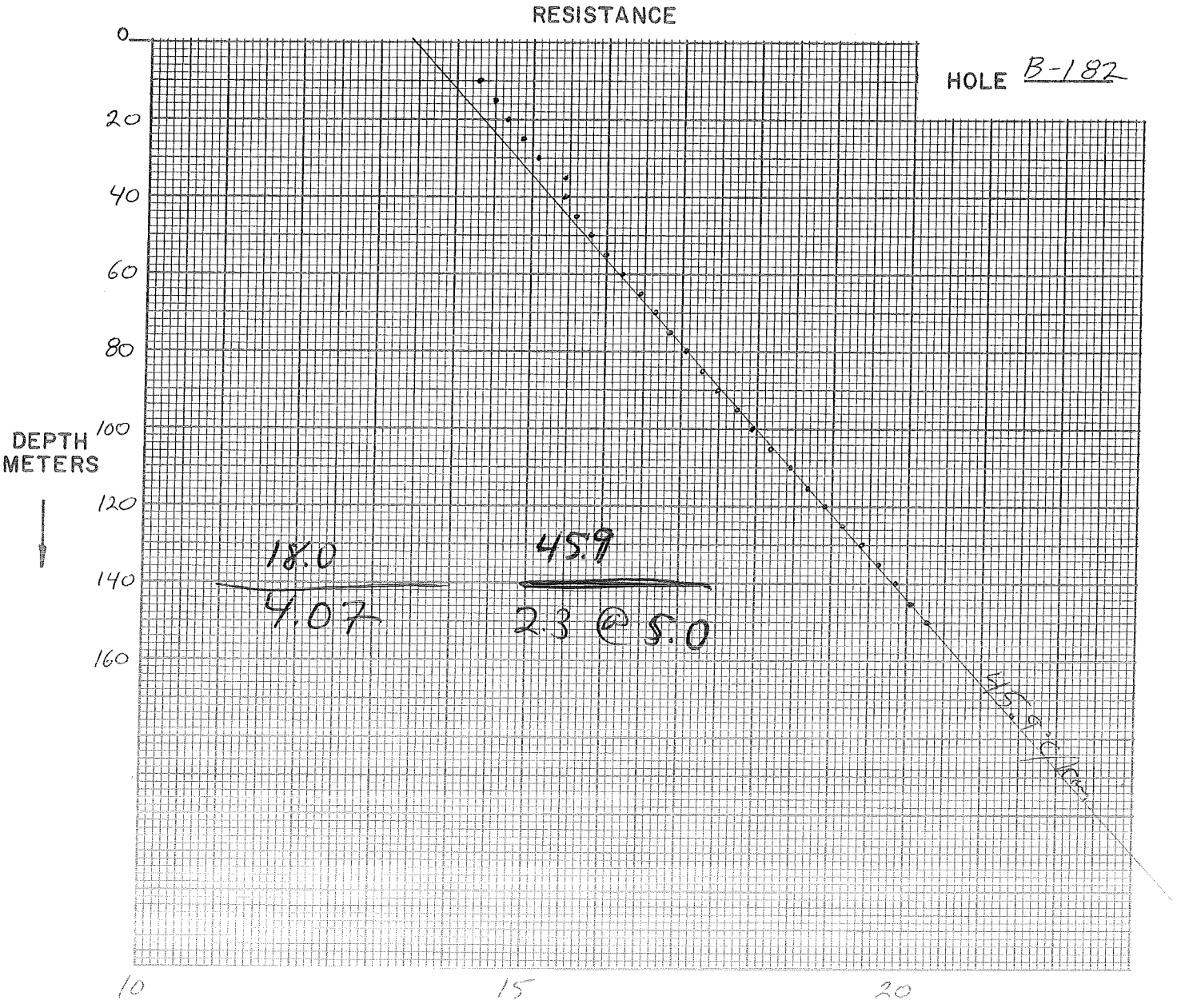
Drill Hole B-182 Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

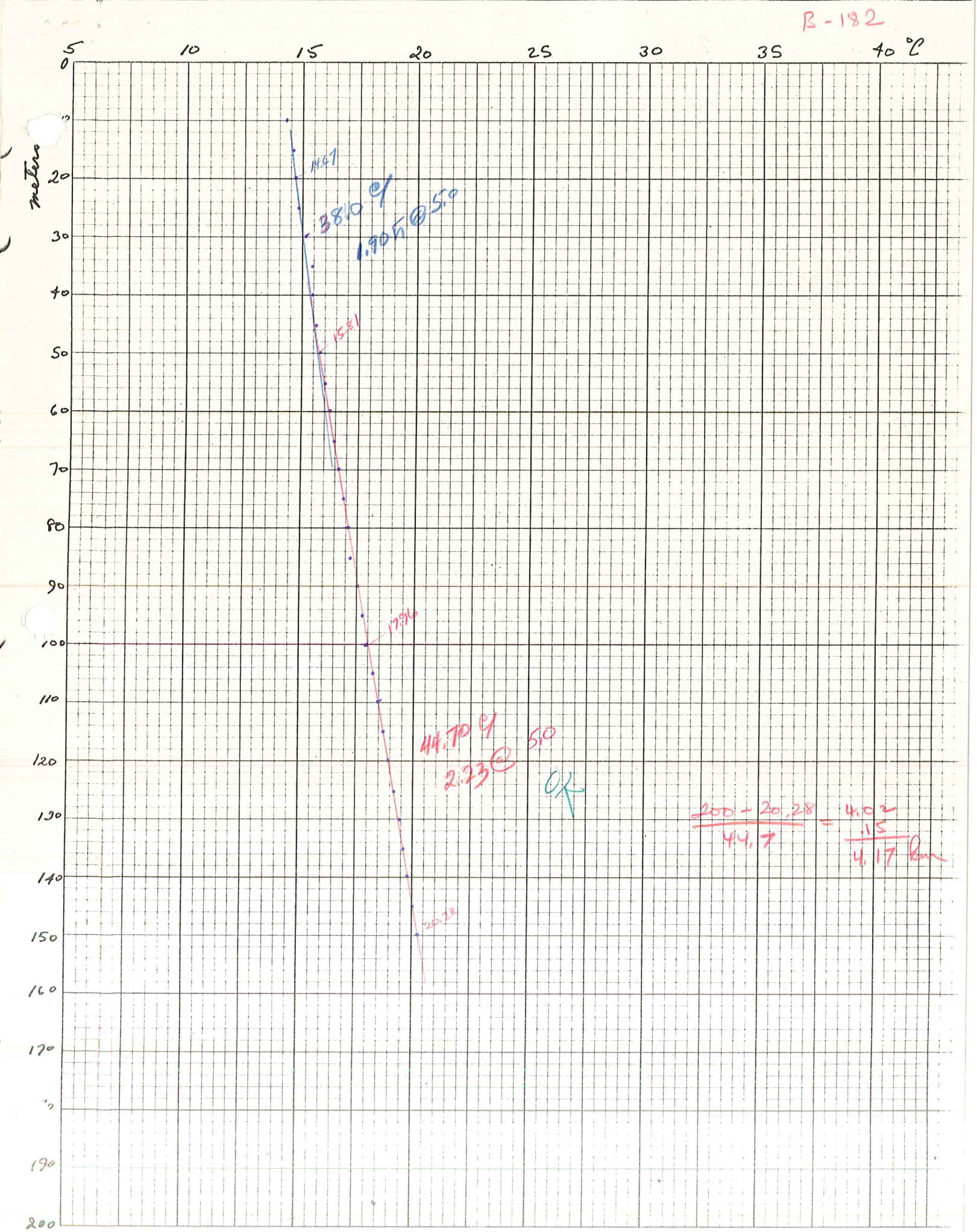
Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
115	4597	18.69	0.24	48	
120	4556	18.92	0.23	46	
125	4517	19.14	0.22	44	
130	4470	19.41	0.27	54	
135	4433	19.62	0.21	42	
140	4395	19.84	0.22	44	
145	4360	20.05	0.21	42	
150	4321	20.28	0.23	46	


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13

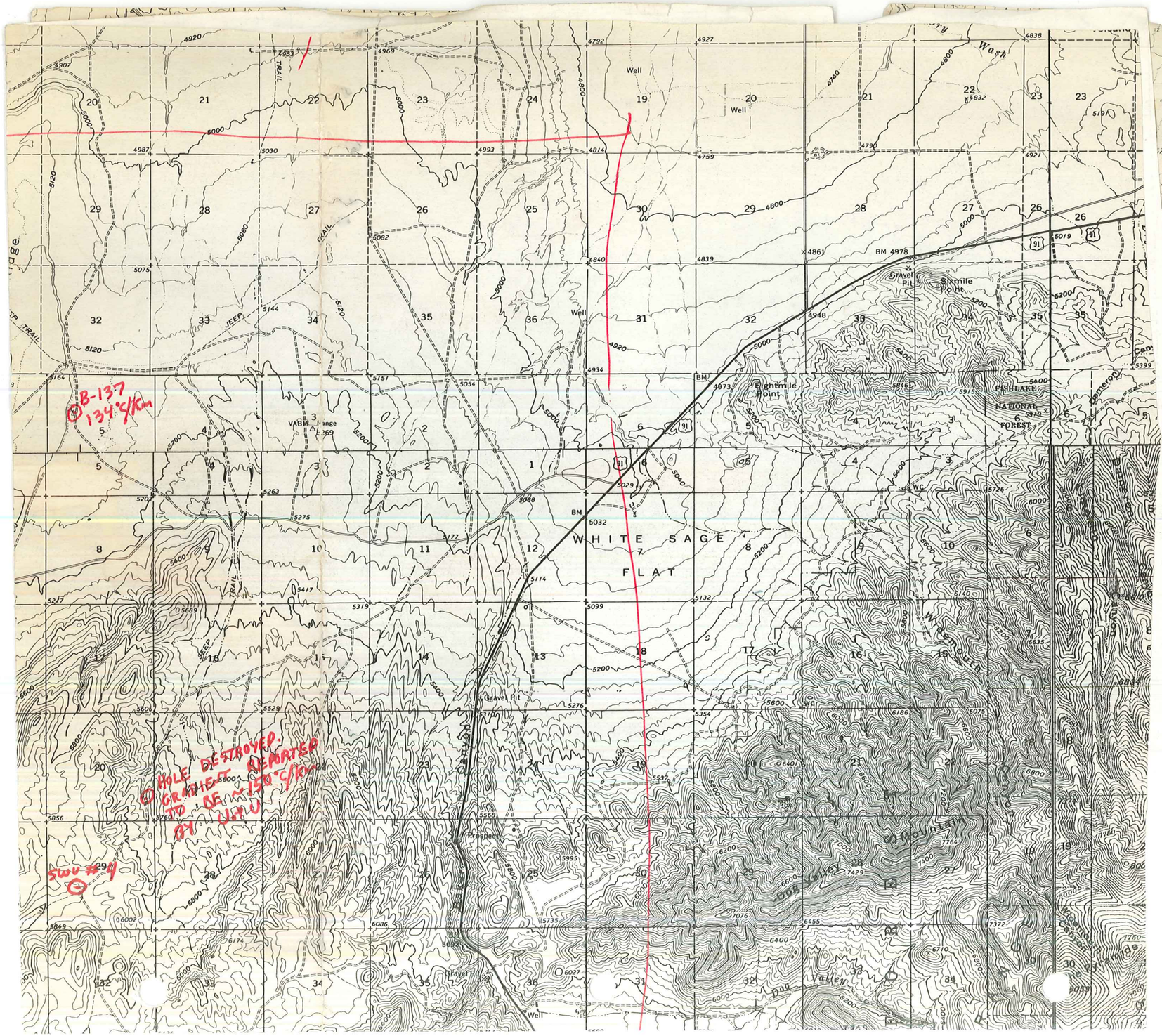

RESISTANCE
HOLE B-182
DEPTH METERS
0
20
40
60
80
100
120
140
160
18.0
4.07
45.9
2.3 @ 5.0
10
15
20
TEMPERATURE °C

B-182

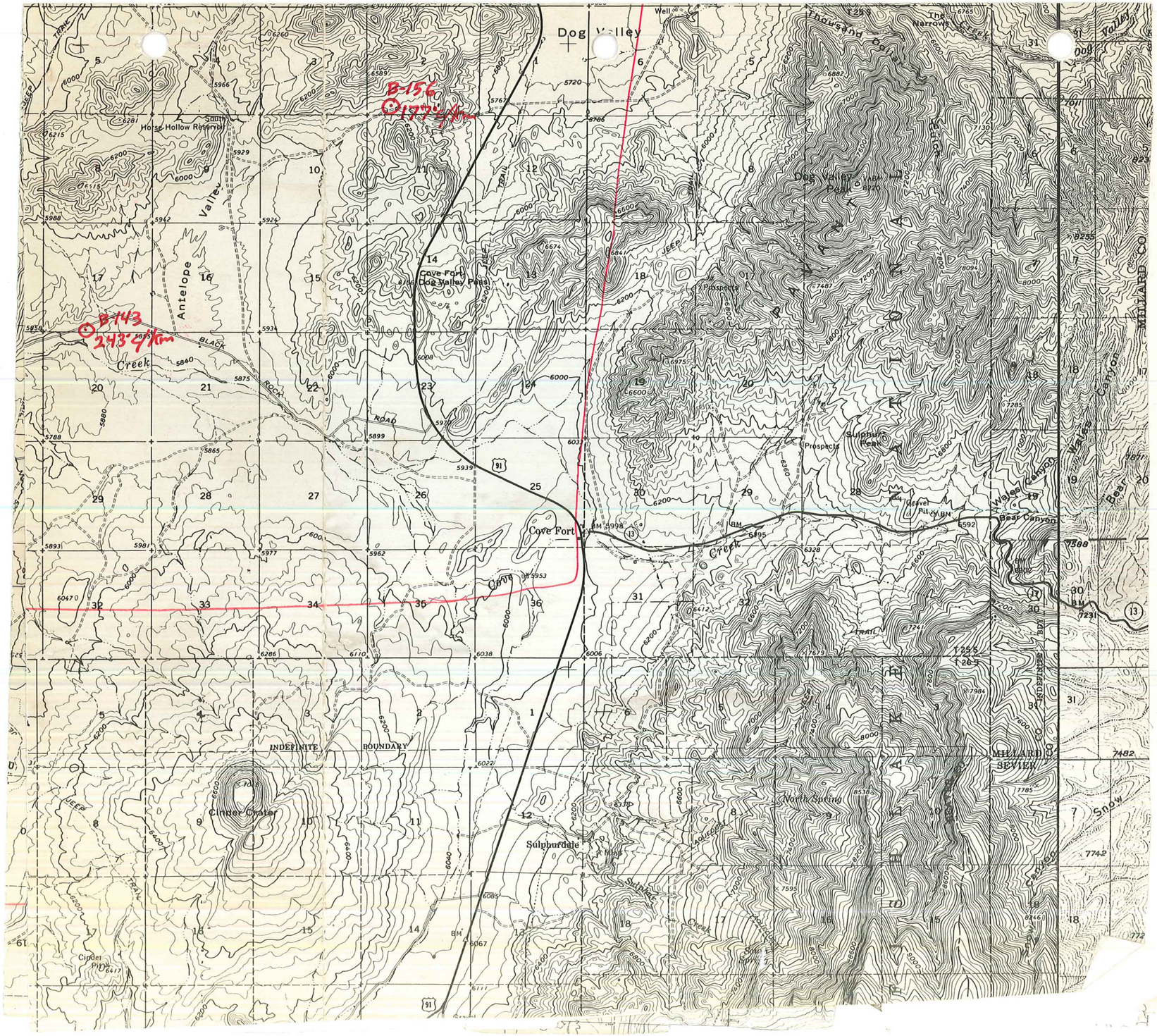


$$\frac{200 - 20.28}{44.7} = \frac{4.02}{.15}$$

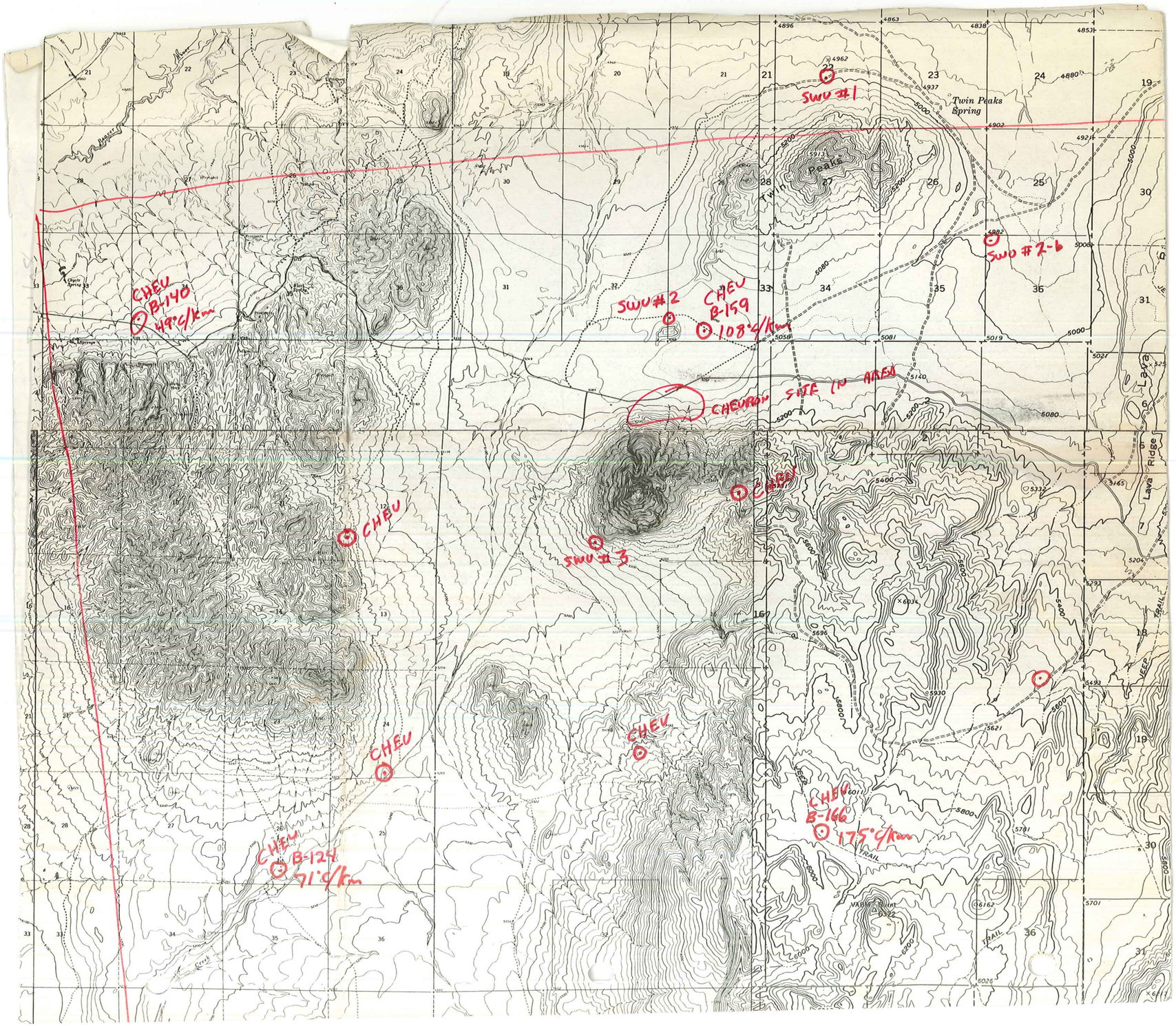
4.17 km

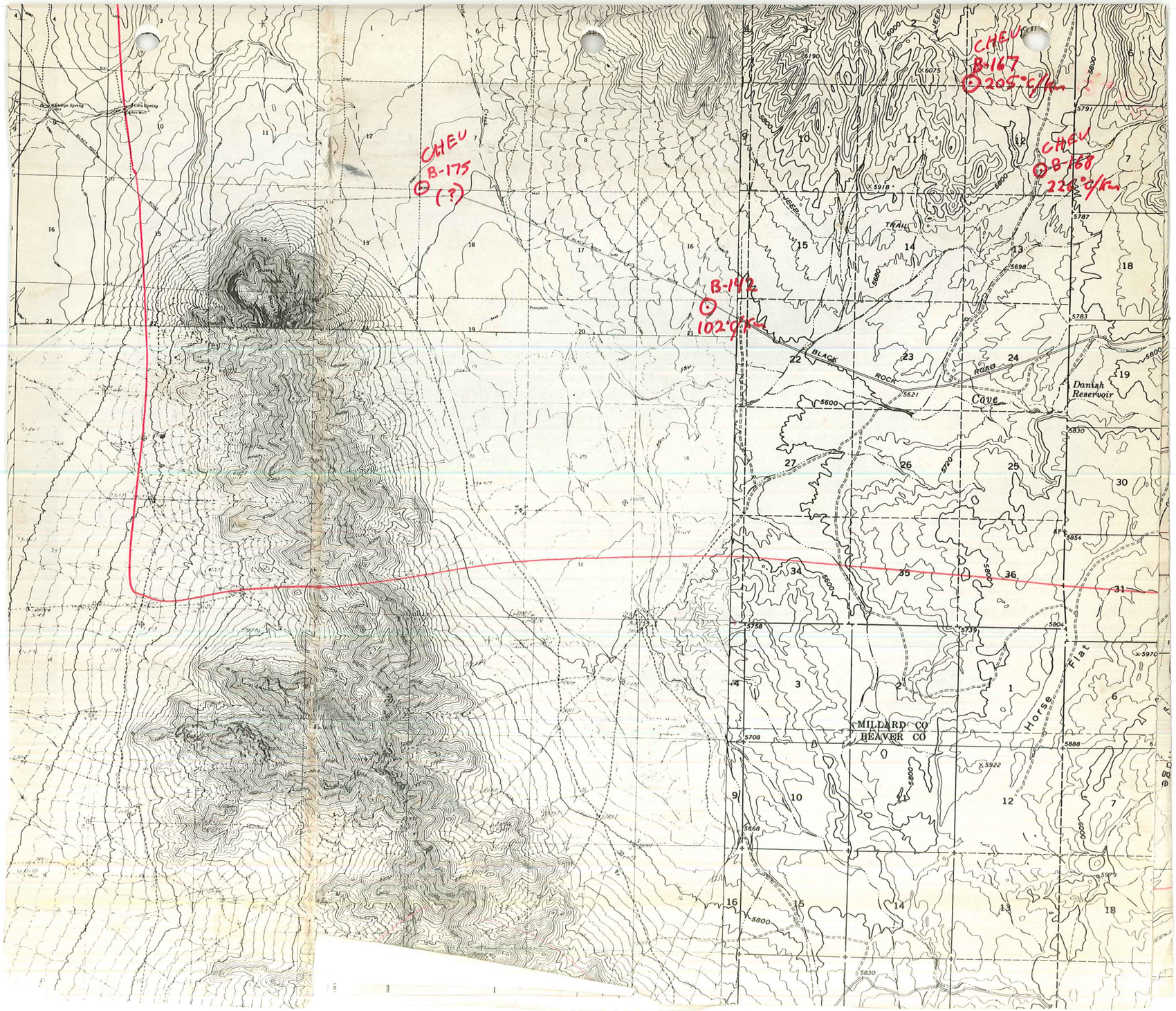


B-137
134°C/Km
HOLE DESTROYED.
GRADIENT REPORTED
TO BE ~150°C/Km
BY USGS
SWU #4
WHITE SAGE
FLAT
Eightmile Point
Sixmile Point
Gravel Pit
Well
Prospect
Dog Valley
Mountain
Wash


B-156
177.4 Km
B-143
243.4 Km
Dog Valley
Horse Hollow Reservoir
South
Antelope
Valley
Cove Fort
Dog Valley Peak
Cove Fort
Dog Valley Peak
Prospects
Sulphur Peak
Prospects
Gravel Pit
Wales Canyon
Bear Canyon
Cove Creek
INDEFINITE
BOUNDARY
Cinder Crater
Sulphurdale
North Spring
Sulphur Creek
MILLARD CO
SEVIER
Snow
Canyon
Cinder Pit
Thousand Dollar
The Narrows
Creek
Black Rock Road
Jeep Trail
Trail
Well
91
13

B-168


SWU #1
Twin Peaks Spring
Twin Peaks
SWU #2-b
SWU #2
CHEU B-159 108°C/km
CHEU B-140 49°C/km
CHEVRON SITE IN AREA
CHEU
SWU #3
CHEU
CHEU
CHEU B-166 175°C/km
CHEU B-124 71°C/km
Lava Ridge
TRAIL
JEEP


CHEV
B-167
205°C/km
CHEV
B-168
226°C/km
CHEV
B-175
(?)
B-142
102°C/km
BLACK ROCK ROAD
Cove
Danish Reservoir
Horse Flat
MILLARD CO
BEAVER CO

TEMPERATURE DEPTH LOG

ΔT Well No. 188

Property-Project Best   Depth Logged

Map   Scale   Date: Drilled   Logged

State   County   Section   T   R

Instrument   Operator   Elevation   ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (14–15)	YR (17–18)	* 19	* 20
755	188	28	OC	76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
0.9 KM EAST OF SALT SPRING	DP	/HLH

Card B

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	30.	112.	52.5

Map Location Δ

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	76–79	80
4.0	11.7	6120.		F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	20.0	30.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	35.0	55.0	-5.5	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location Salt Cove Date Oct 78

Map Pinnacle Pass, Utah 7½' Prelim

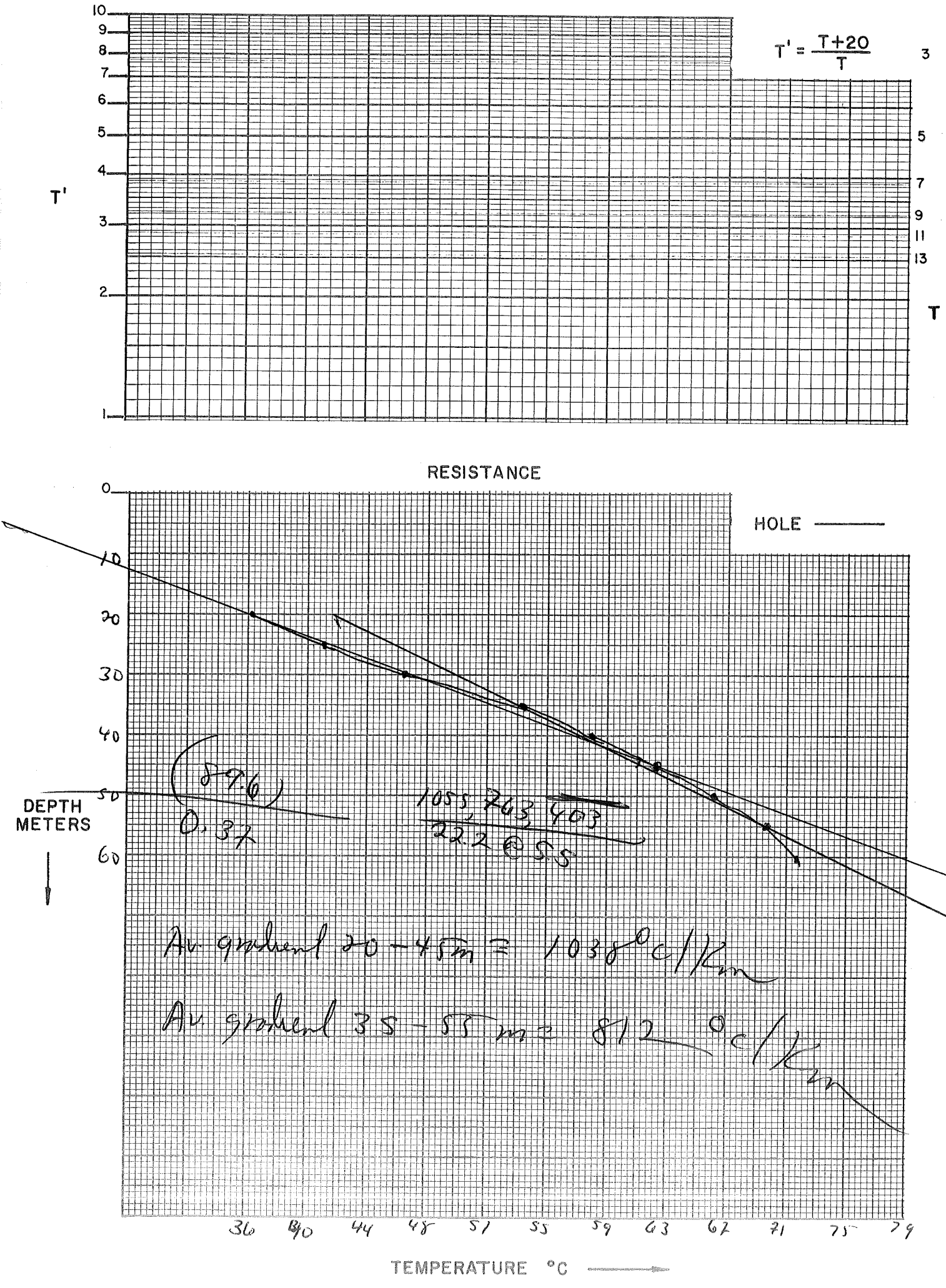
Property Best T 26S R 9W sec SE¼NE¼ 34

Drill Hole B-188 Date Drilled _____ Elevation 6120 ft.

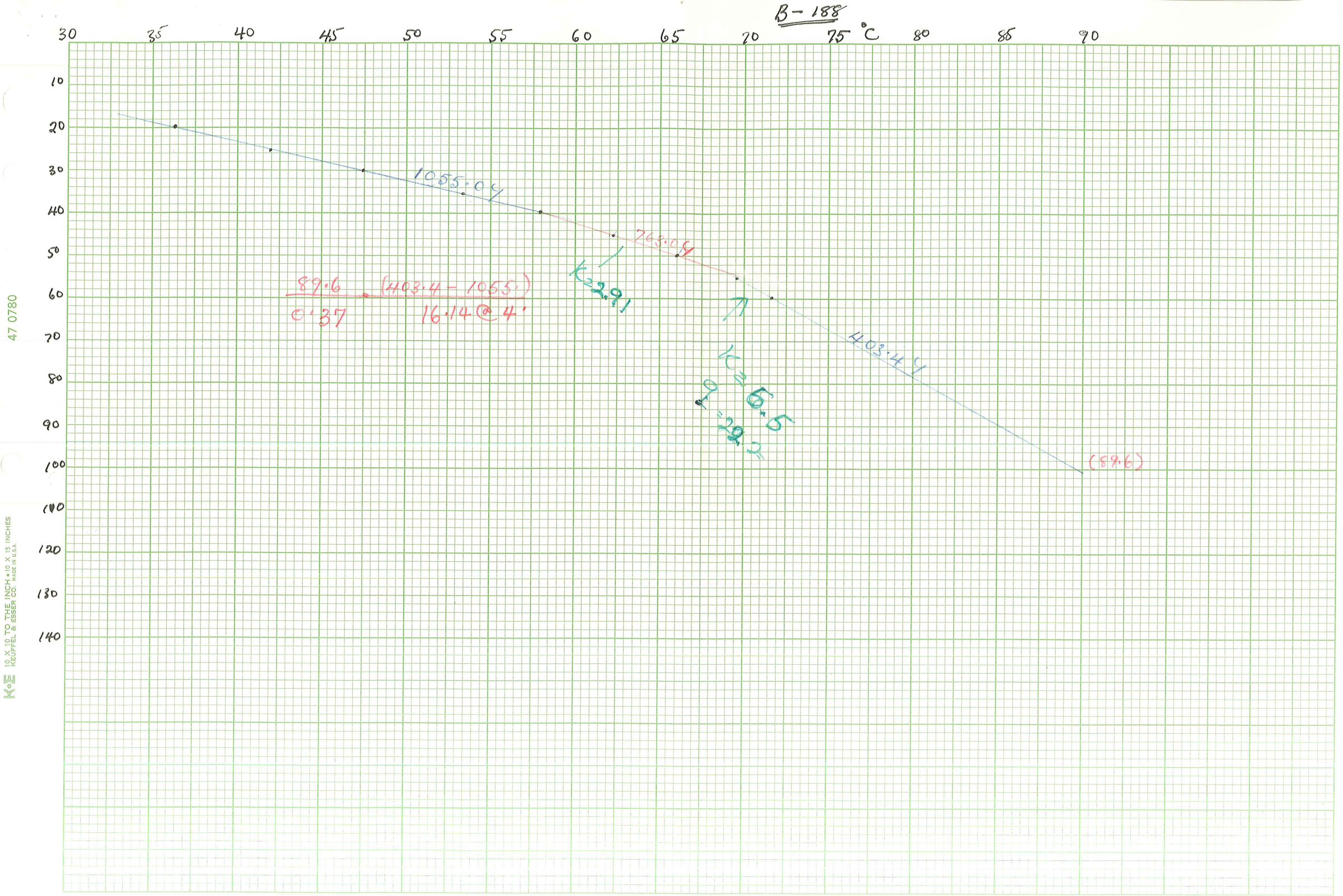
Instrument Probe 39 Operator DS

Comments GTS-18 University of Utah 1976
0-20 air

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
20	47.50	76.265			
			4685	937	
25	38.80	41.950			
			5.490	1098	
30	31.12	47.440			
			5.890	1178	
35	2500	53.330			
			4.660	932	
40	21.08	57.990			
			4.220	844	
45	18.10	62.210			
			3.815	763	
50	15.802	66.025			
			3.550	710	
55	13.952	69.575			
			2.015	403	
60	13.011	71.590			



T' = (T+20)/T
T'
T
RESISTANCE
HOLE
DEPTH METERS
TEMPERATURE °C
(89.6)
0.37
1055, 763, 403
22.2 @ 55
Av. gradient 20 - 45 m = 1038 °C/Km
Av. gradient 35 - 55 m = 812 °C/Km


B-188
30
35
40
45
50
55
60
65
70
75 °C
80
85
90
10
20
30
40
50
60
70
80
90
100
110
120
130
140
1055.0 y
763.0 y
403.4 y
(89.6)
89.6 (403.4 - 1055.)
0.37 16.14 @ 4'
K = 2.91
K = 6.5
q = 22.2
47 0780
K+E 10 X 10 TO THE INCH • 10 X 15 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 189

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 8 9	2 8	0 C	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
1 . 8 k M W N W O F S A L T C O V E R E S	D P	M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	7 . 5	3 8 .	3 0 .	1 1 2 .	5 2 . 5

Map Location △

Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
1 0 . 8	1 5 . 7	6 4 4 0 .	F

Write M if meters

Use decimals

SEGMENT DEPTH

	Start	End	K	ΔK
C	15.0	35.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	40.0	89.0	-5.5	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1.5 mi. bs WNW Salt Cove Reservoir Date Oct 28, 1976

Map Pinnacle Pass Utah 7½' Prelim Quad

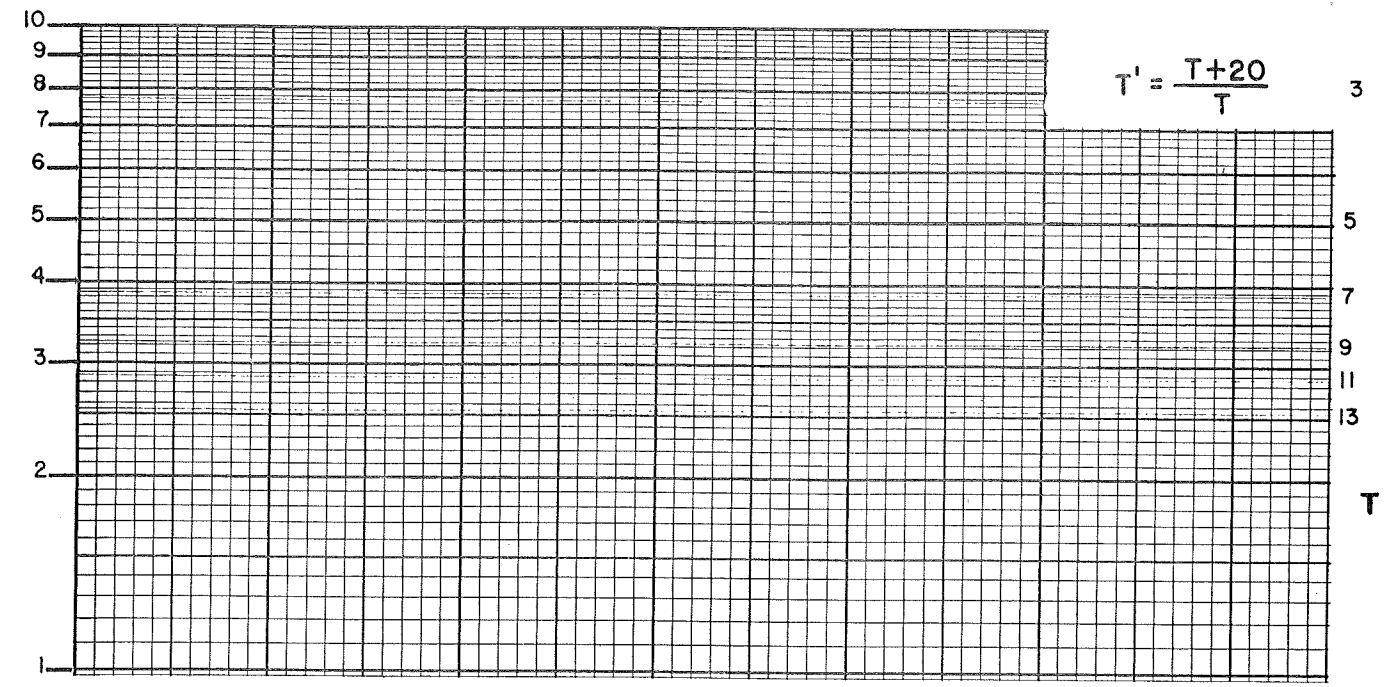
Property Best T 26S R 9W sec SE¼ NW¼ 26

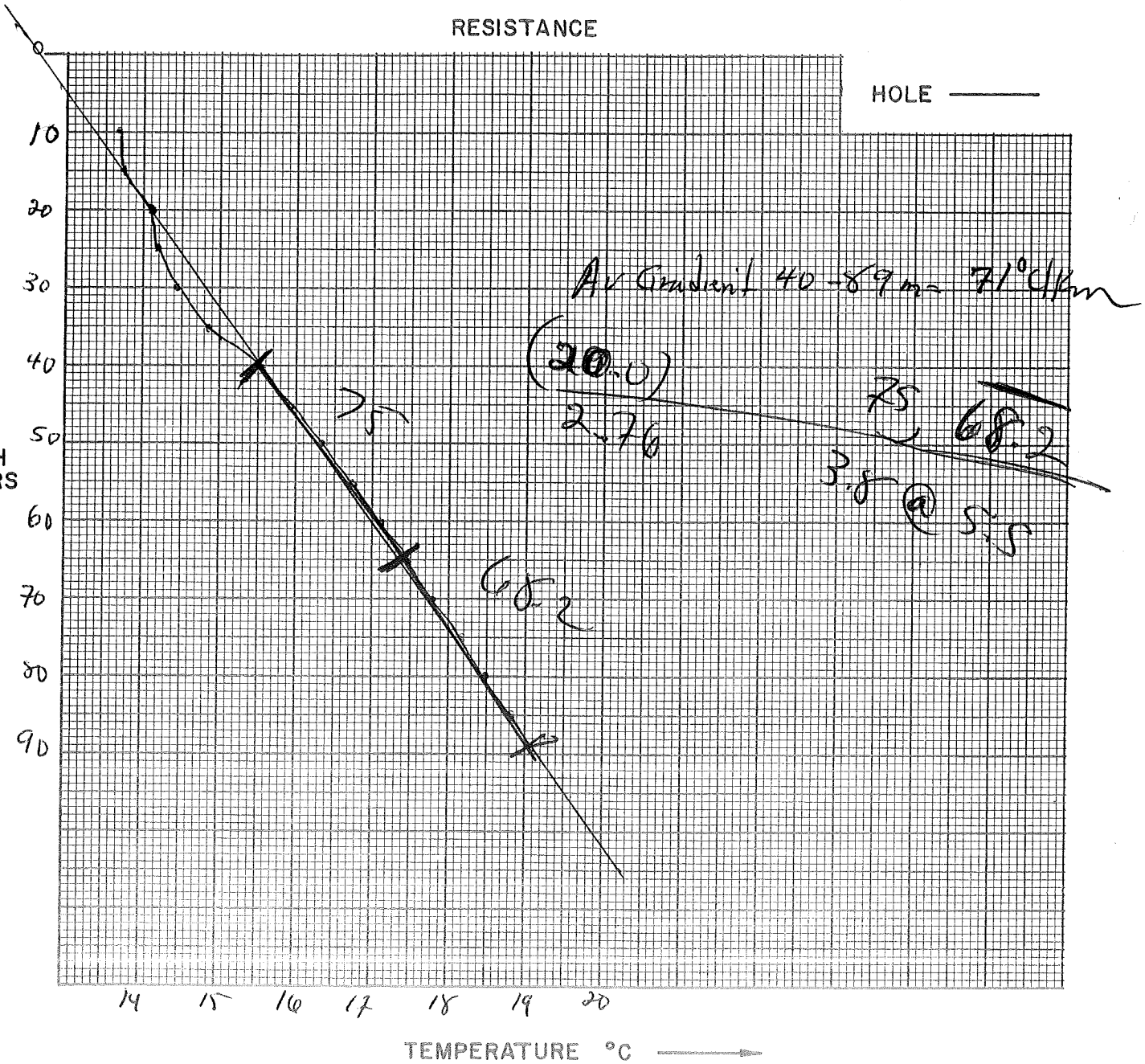
Drill Hole B-189 Date Drilled ? Elevation 6440 ft.

Instrument Probe 39 Operator DS

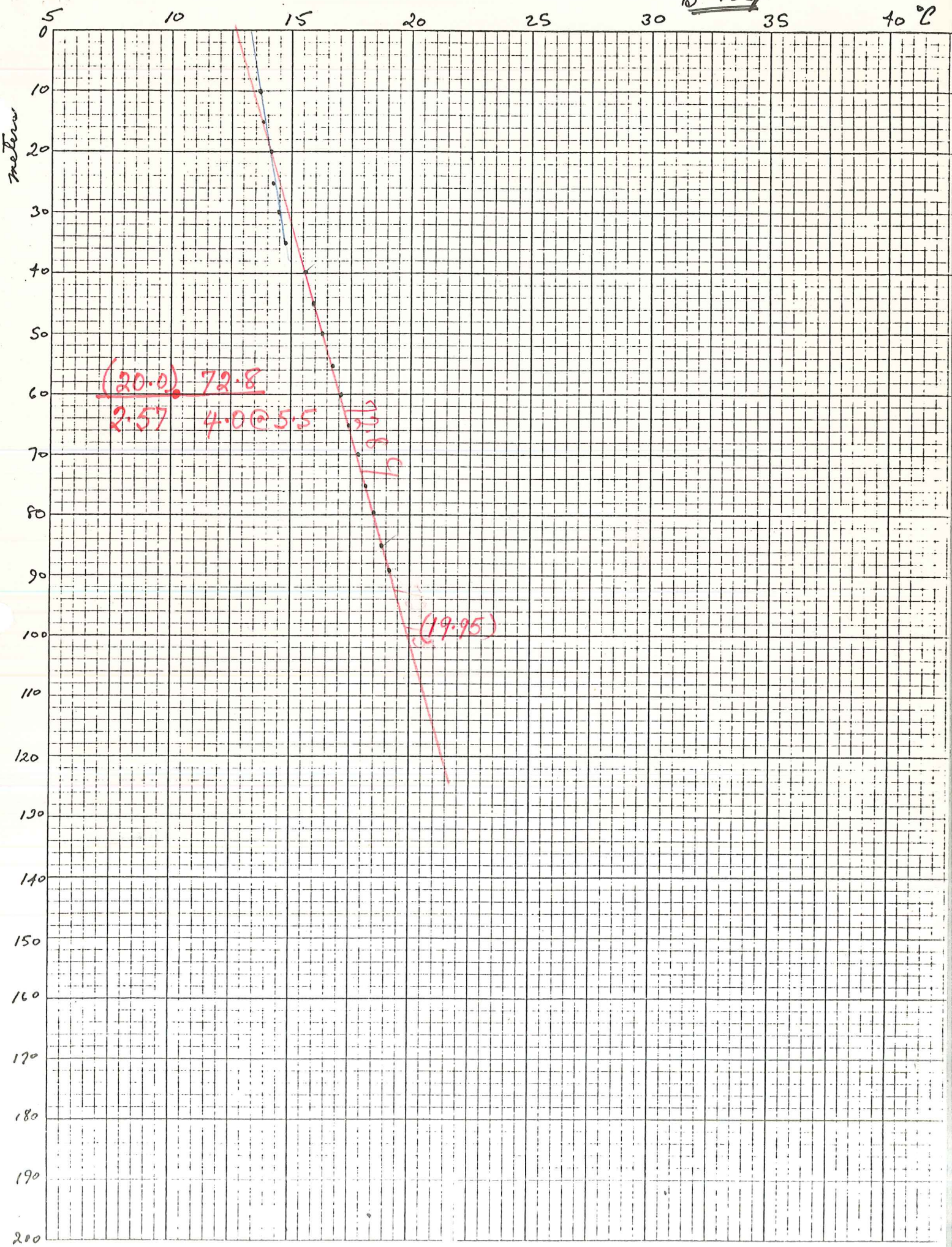
Comments 1" iron Pipe - drilled in granite phillipsite (?)

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
10	110.50	13.675			air
15	110.30	13720			air
20	108.75	14120			air
25	108.50	14190	070		air
30	107.45	14.460	250		water
35	105.80	14890	.430	86	
40	103.19	15585	.695	139	
45	101.78	15965	.360	72	
50	100.39	16345	.380	76	
55	99.02	16725	.380	76	
60	97.70	17090	.365	73	
65	96.46	17.450	.360	72	
70	9522	17 800	.350	70	
75	9398	18155	.355	71	
80	92.83	18495	.340	68	
85	91.73	18815	.320	64	
89	90.88	19071	.260	65	


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
14
15
16
17
18
19
20
TEMPERATURE °C
Av Gradient 40-87 m = 71°C/km
(20.0)
2.76
75
68.2
3.8 @ 5.5
75
68.2

B-188



47 0780

10 X 10 TO THE INCH
KEUFFEL & ESSER CO MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 190

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY: →

Card A

Proj No	Well No	Date Logged DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 9 0	2 8	0 C	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
0 . 4 KM SOUTH OF SALT COVE RES	DP	HLH

0.4KM S. SALT COVE RES, UU76 (TG7?)

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	7 . 5	3 8 .	3 0 .	1 1 2 .	5 2 . 5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
7 . 2	2 2 . 7 5	7 0 8 0 .	F

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25	31 32 33 34 35	41 42 43 44 45	46 47 48 49 50
C	1 5 . 0	5 0 . 0		
D	. 9 9 9			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	5 0 . 0	1 4 7 . 0	- 6 . 0	- . 5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ½ mile South Salt Cove Reservoir Date Oct 25 1976

Map Pinnacle Pass, Utah 7½' Prelim Quad

Property Best T 26 S R 9W sec SW¼ SE¼ 25

Drill Hole B-190 Date Drilled 1976 Elevation 7080 ft.

Instrument Probe 39 Operator RP

Comments 1" iron pipe University of Utah 1976

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	113.70	12.870			
10	122.91	10.645	.220		
15	121.99	10.865	.300	60	
20	120.70	11.165	.320	64	
25	119.37	11.485	.230	46	
30	118.42	11.715	.225	45	
35	117.53	11.930	.220	44	
40	116.62	12.150	.240	48	
45	115.64	12.390	.225	55	
50	114.93	12.565	.115	23	
55	114.47	12.680	.195	39	
60	113.68	12.875	.115	23	
65	113.22	12.990	.045	9	
70	113.04	13.035	.110	22	
75	112.60	13.145	.140	28	
80	112.03	13.285	.145	29	
85	111.47	13.430	.140	28	
90	110.92	13.570	.140	28	
95	110.36	13.710	.145	29	
100	109.79	13.855	.145	29	
105	109.23	14.000	.145	29	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

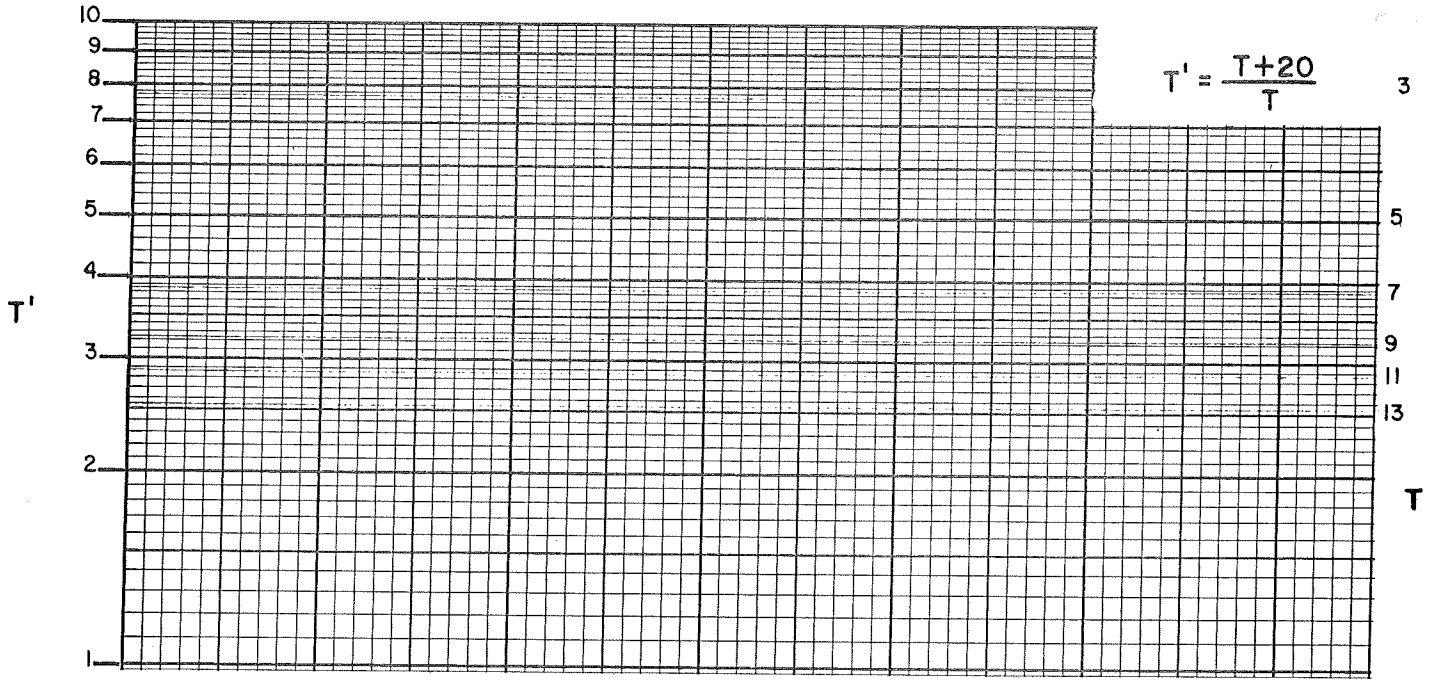
Property _____ T _____ R _____ sec _____

Drill Hole _____ Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
110	108.66	14145			
115	108.08	14295	.150	30	
120	107.56	14445	.150	30	
125	106.89	14605	.160	32	
130	106.27	14765	.160	32	
135	105.68	14925	.160	32	
140	105.12	15070	.145	29	
145	104.51	15235	.165	35	
147	104.27	15295	.060	30	



RESISTANCE

HOLE ——

DEPTH METERS

10
20
30
40
50
60
70
80
90
100
110
120
130

11 12 13 14 15 16 17 18 19 20 21 22 23

TEMPERATURE °C

Av Gradient 20-50m = 47° C/Km

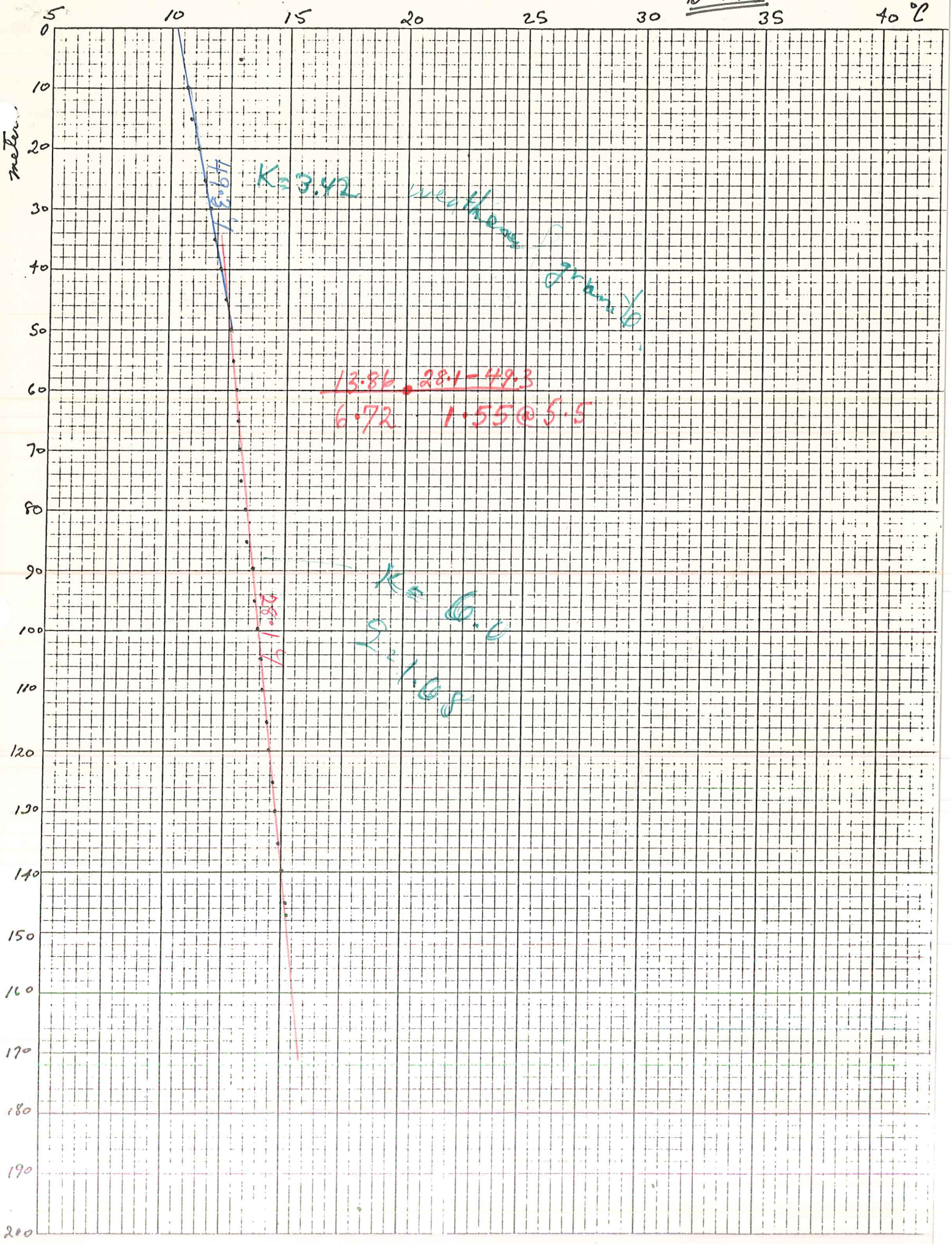
Av Gradient 75 — 147m = 30° C/Km

13.9

623

47, 30

1.8 @ 60


B-190
5
10
15
20
25
30
35
40 °C
meters
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
49.3
K=3.42
weathered granite
13.86
28.1-49.3
6.72
1.55@5.5
28.1
K=6.0
Σ=1.68
47 0780
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 191

Property-Project Best   Depth Logged

Map   Scale   Date: Drilled   Logged

State   County   Section   T   R

Instrument   Operator   Elevation   ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	(13)	MO (14–15)	(16)	YR (17–18)	* 19	* 20
755	191	28		OC		76	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50)	Operator (51–55)	Editor (56–60)
~~2.0 KM WSW OF PINNACLE PASS~~	DP	MLH

2 KM WSW PINNACLE PASS, UU76-TGS

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	30.	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
23.0	18.4	6150.		F

Use decimals

Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	15.0	50.0	-5.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 1 miles WSW of Pinnacle Pass Date Oct 28, 1976

Map Pinnacle Pass, Utah 7½' Preliminary

Property Best T 26S R 9W sec NE¼ SE¼ 14

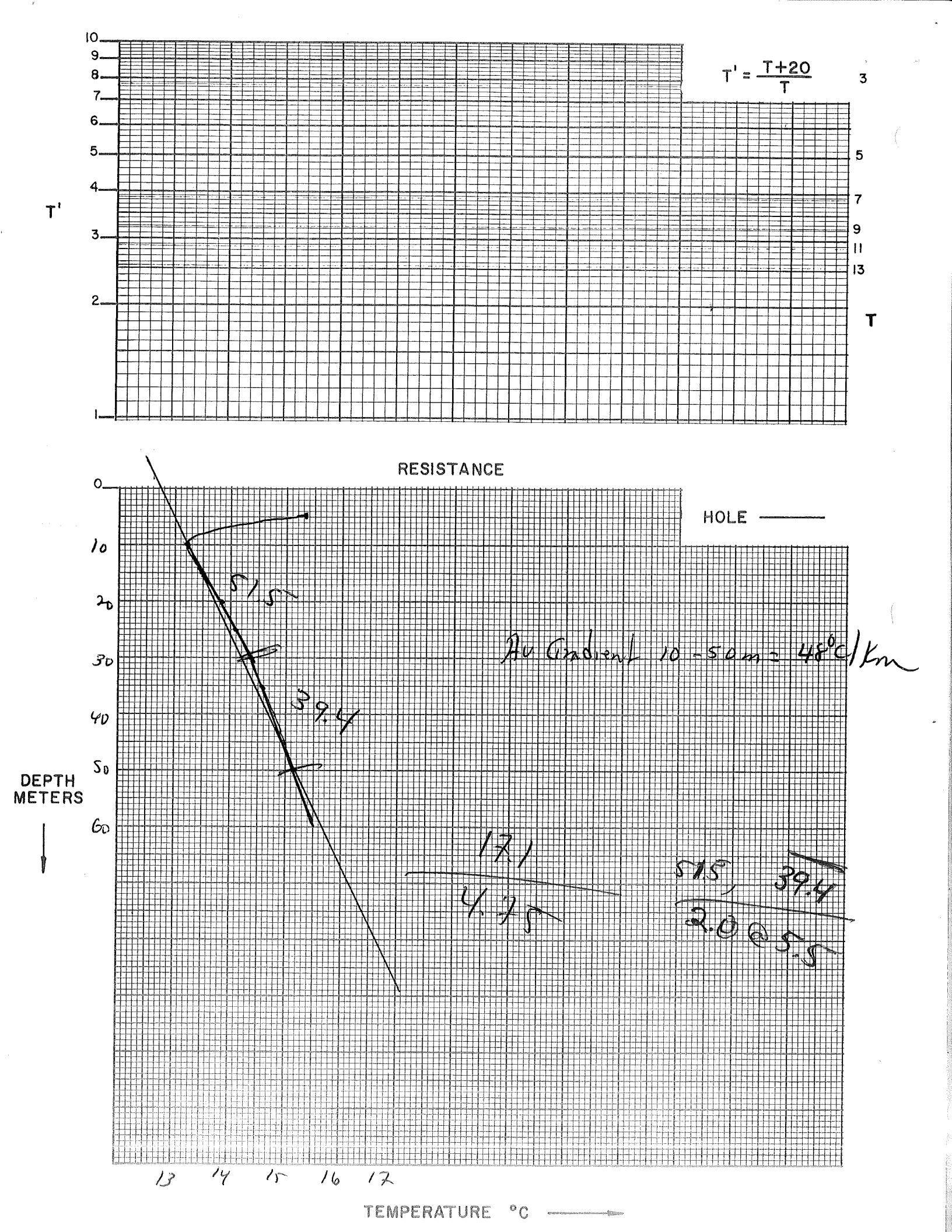
Drill Hole B-191 Date Drilled _____ Elevation 6150 ft.

Instrument Probe 39 Operator DS

Comments 1" iron pipe cemented inside 3½ PVC

granite rocks. University of Utah 1976

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	104.20	13.315			
10	112.35	13.205	.290	58	
15	111.20	13.495	.395	67	
20	109.90	13.830	.265	53	
25	108.86	14.095	.250	50	
30	107.90	14.345	.225	45	
35	107.06	14.560	.185	37	
40	106.35	14.745	.220	44	
45	105.53	14.965	.165	33	
50	104.90	15.130			
55					


T' = (T+20)/T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
RESISTANCE
HOLE
0
10
20
30
40
50
60
DEPTH METERS
51.5Ω
39.4
Av Gradient 10 - 50m = 48°C/Km
17.1
4.7Ω
51.5°
39.4
2.0 @ 5.5Ω
13
14
15
16
17
TEMPERATURE °C

B-191

5 10 15 20 25 30 35 40 °C

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200

meter

$K = 5.5$

$\frac{17.5 \cdot 45.4}{4.12}$

(17.5)

47 0780

10 X 10 TO THE INCH
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TEMPERATURE DEPTH LOG

ΔT Well No. 192

Property-Project Best

Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No				Well No						Date Logged DA			MO			YR		*	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	7	5	5				1	9	2	2	8		0	6		7	6	C	M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description (21–50): 4.8 KM WSW OF PINNACLE PASS

Operator (51–55): DP

Editor (56–60): /MLH

4.8 KM WSW PINNACLE PASS, UU 76-T61

Card B

Map Location Δ

Scale Unit in cm (21–25)	Map Size (7.5, 15., 60) (26–30)	N Lat Degree (31–35)	N Lat Min (36–40)	W Long Degree (41–45)	W Long Min (46–50)
CM	7.5	38.	30.	112.	52.5

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,−) (E,+)

Northing (51–60)	Easting (61–70)	Elev (71–75)	(76–79)	80
23.2	6.75	5800.		F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start (21–30)	End (31–40)	K (41–45)	ΔK (46–50)
C	10.0	25.0	-2.2	.5
D	50.0	60.0		-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
C	30.0	50.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 2 miles west of Pinnacle Pass Date Oct 28, 1976

Map Pinnacle Pass, Utah 7½' Prelim Quad

Property Best T 26S R 9W sec NW¼ SW¼ 15

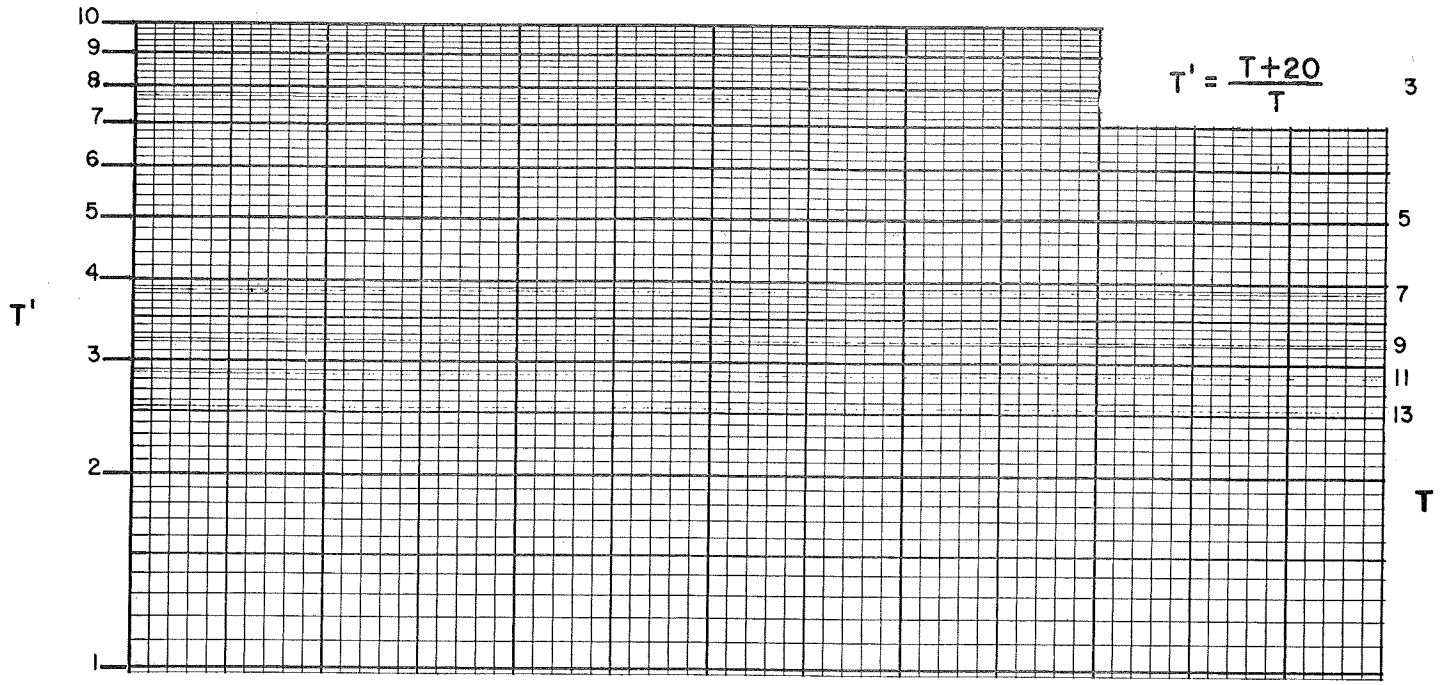
Drill Hole B-192 Date Drilled 1976 Elevation 5800 ft.

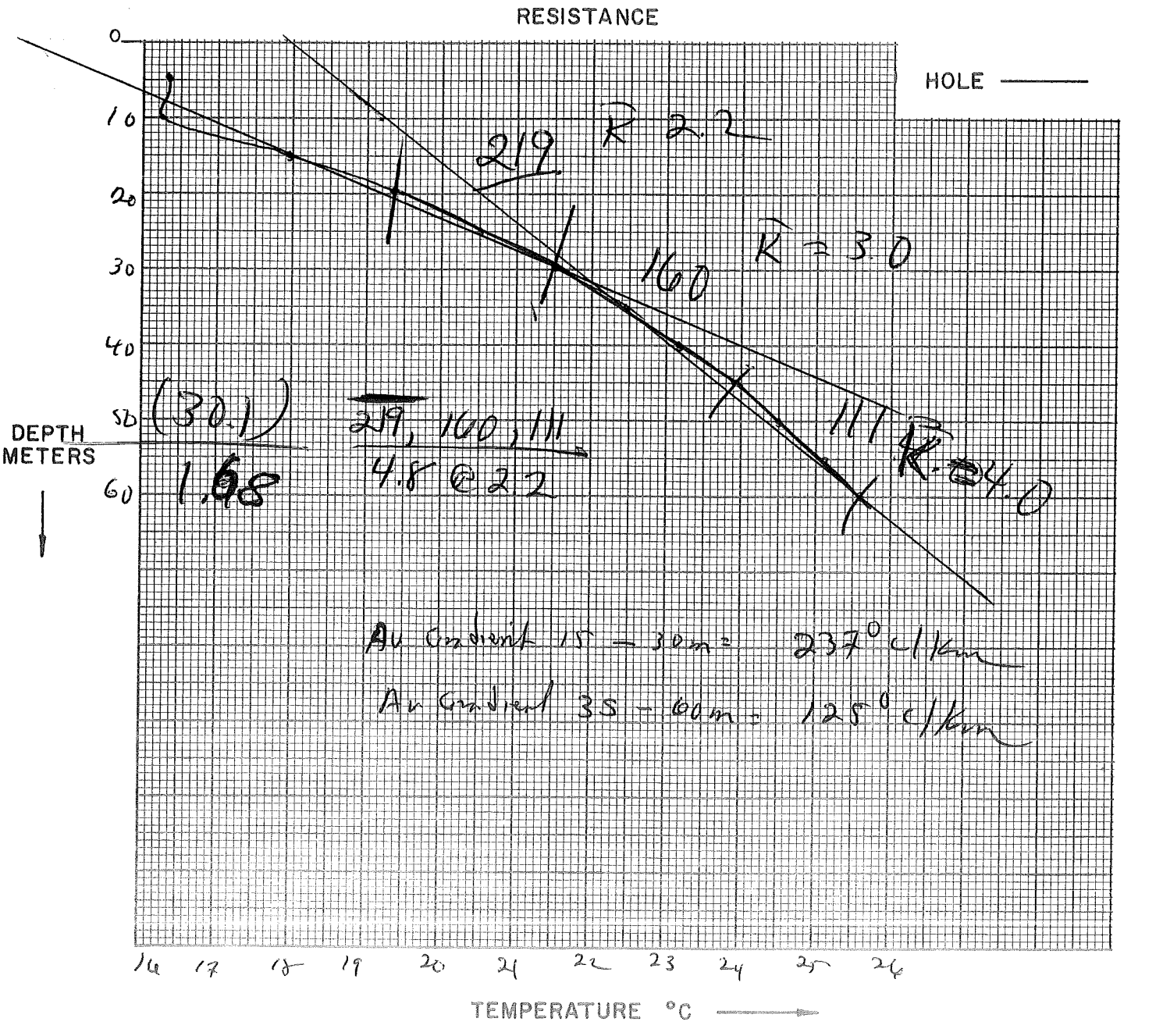
Instrument Probe 39 Operator DS

Comments 1" Iron pipe cemented into 3½ PVC

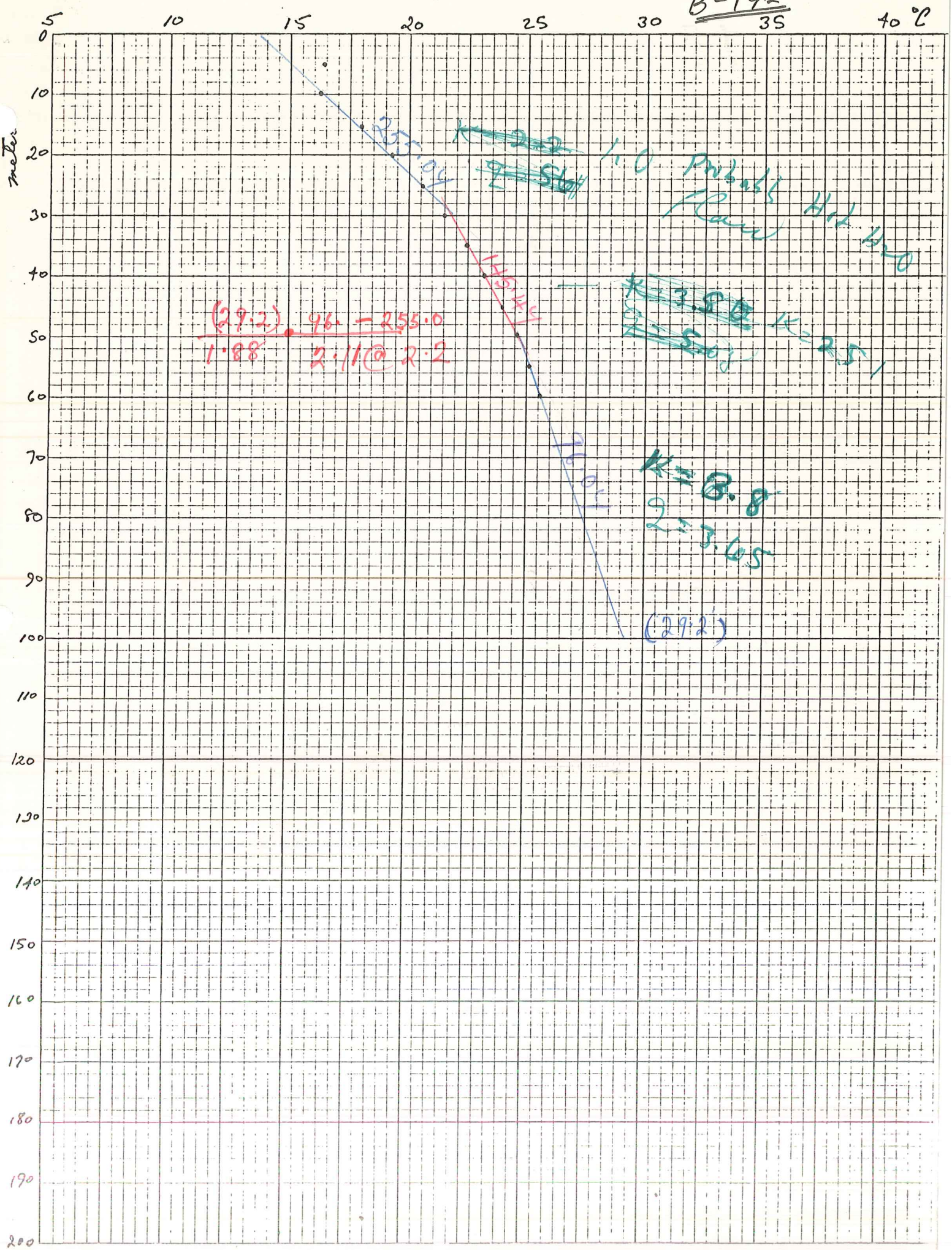
Univ of Utah 1976

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	100.34	16.360			
10	100.75	16 250			
15	94.67	17.955	1.705	341	
20	90.11	19.310	1.355	271	
25	86.18	20.505	1.195	239	
30	83.06	21 500	.995	199	
35	80.17	22450	.950	190	
40	77.96	23 195	.745	149	
45	75.94	23 895	.700	140	
50	74.14	24 535	.940	198	
55	72.62	25 085	.550	110	
60	71.30	25565	.480	96	
65					


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
DEPTH METERS
0
10
20
30
40
50
60
219
K = 2.2
160
K = 3.0
111
K = 4.0
(30.1)
219, 160, 111
4.8 @ 22
1.68
Au Gradient 15 – 30m = 237° c/km
Au Gradient 35 – 60m = 125° c/km
16
17
18
19
20
21
22
23
24
25
26
TEMPERATURE °C

B-192



47 0780

10 X 10 TO THE INCH
KEUFFEL & ESSER CO MADE IN USA

TEMPERATURE DEPTH LOG

ΔT Well No. 193

Property-Project Bast Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 9 3	2 8	0 6	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
8.7 KM SE OF READ, UTAH	D P	M L H

8.7KM SE READ, UU76-TG3

Card B

Map Location Δ

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	7.5	38.	30.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-)(E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
15.2	35.555	1800.	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50	
C	15.0	45.0		
D	65.0	99.0	-5.5	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	45.0	65.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 3/4 Mile North Negro Mag Wash Date Oct. 28, 1976

Map Read, Utah 7½' Prelim

Property Best T 26S R 94W sec NE¼ SE¼ 19

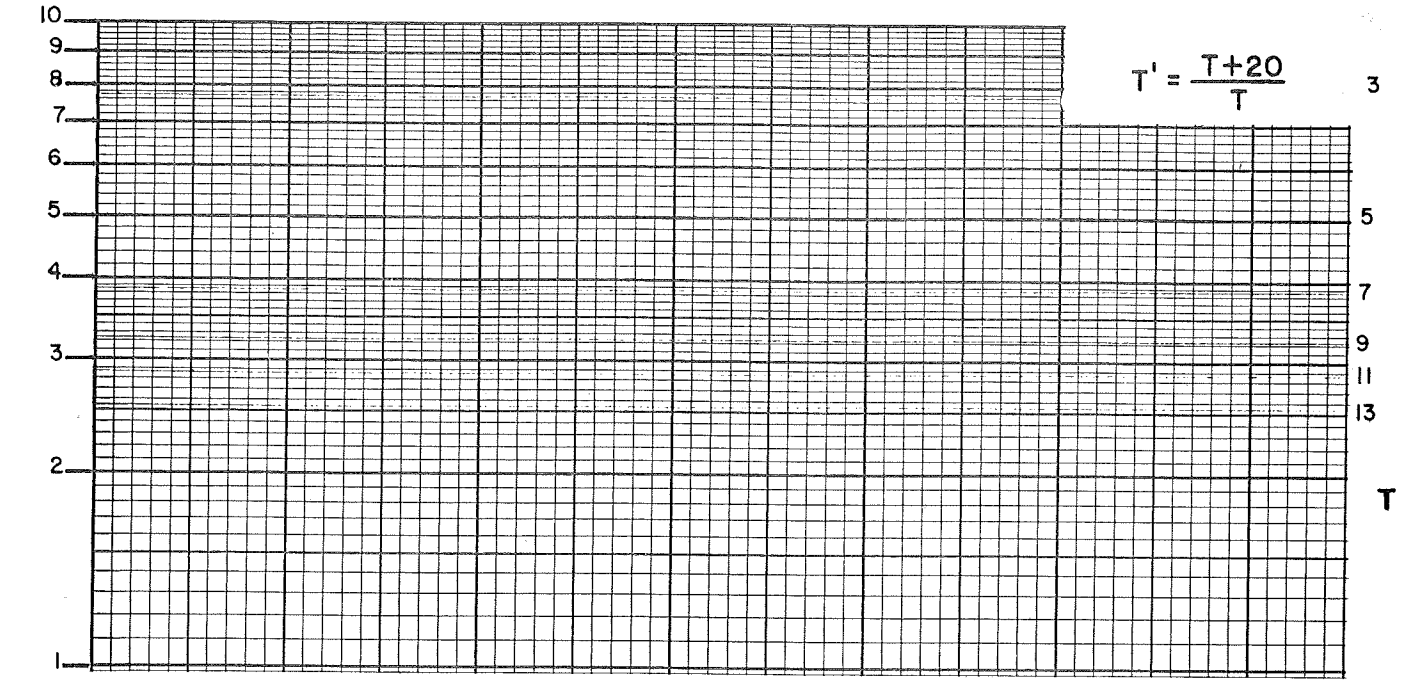
Drill Hole B-193 Date Drilled 1976 Elevation 5180 ft.

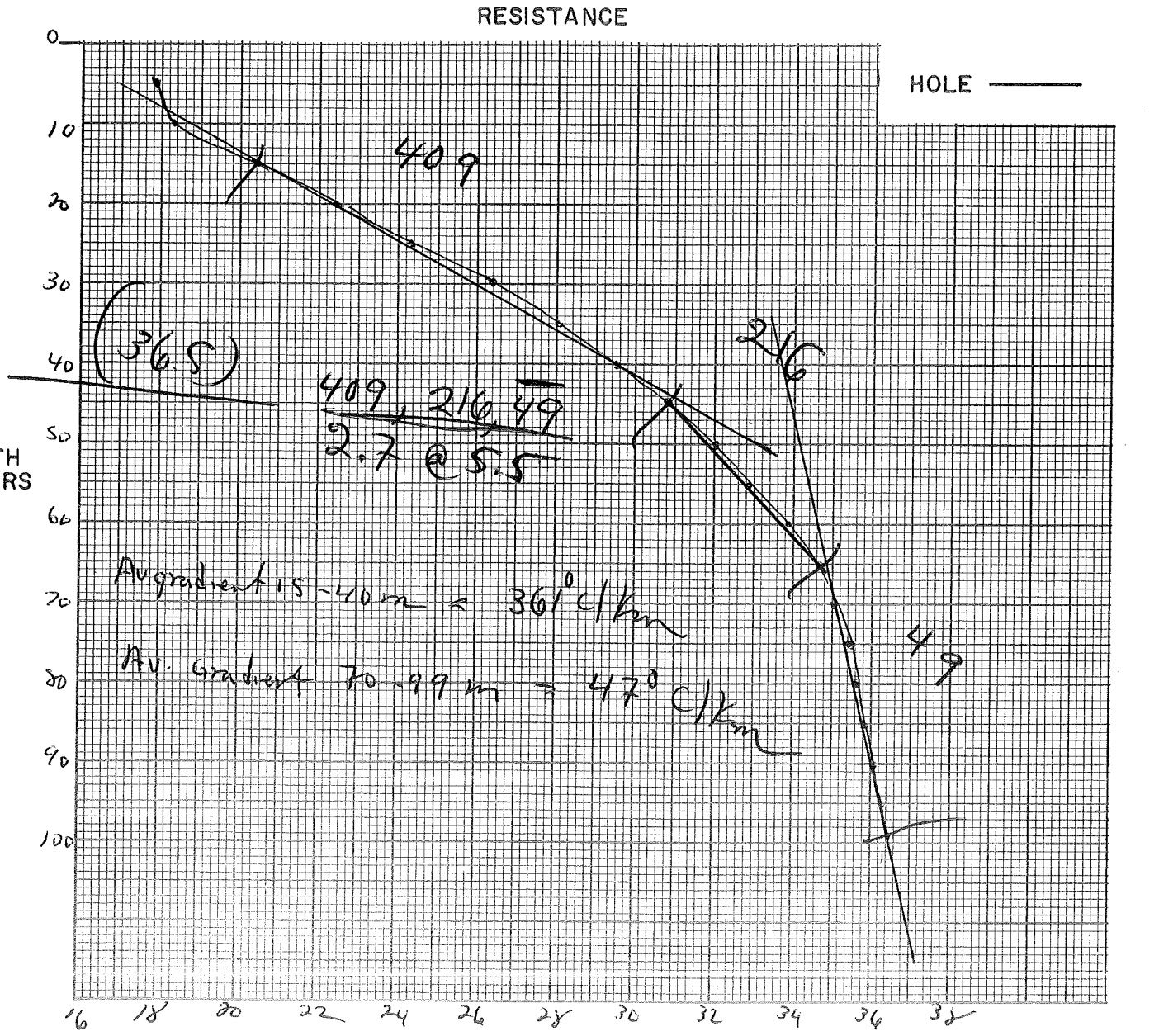
Instrument Probe 39 Operator DP

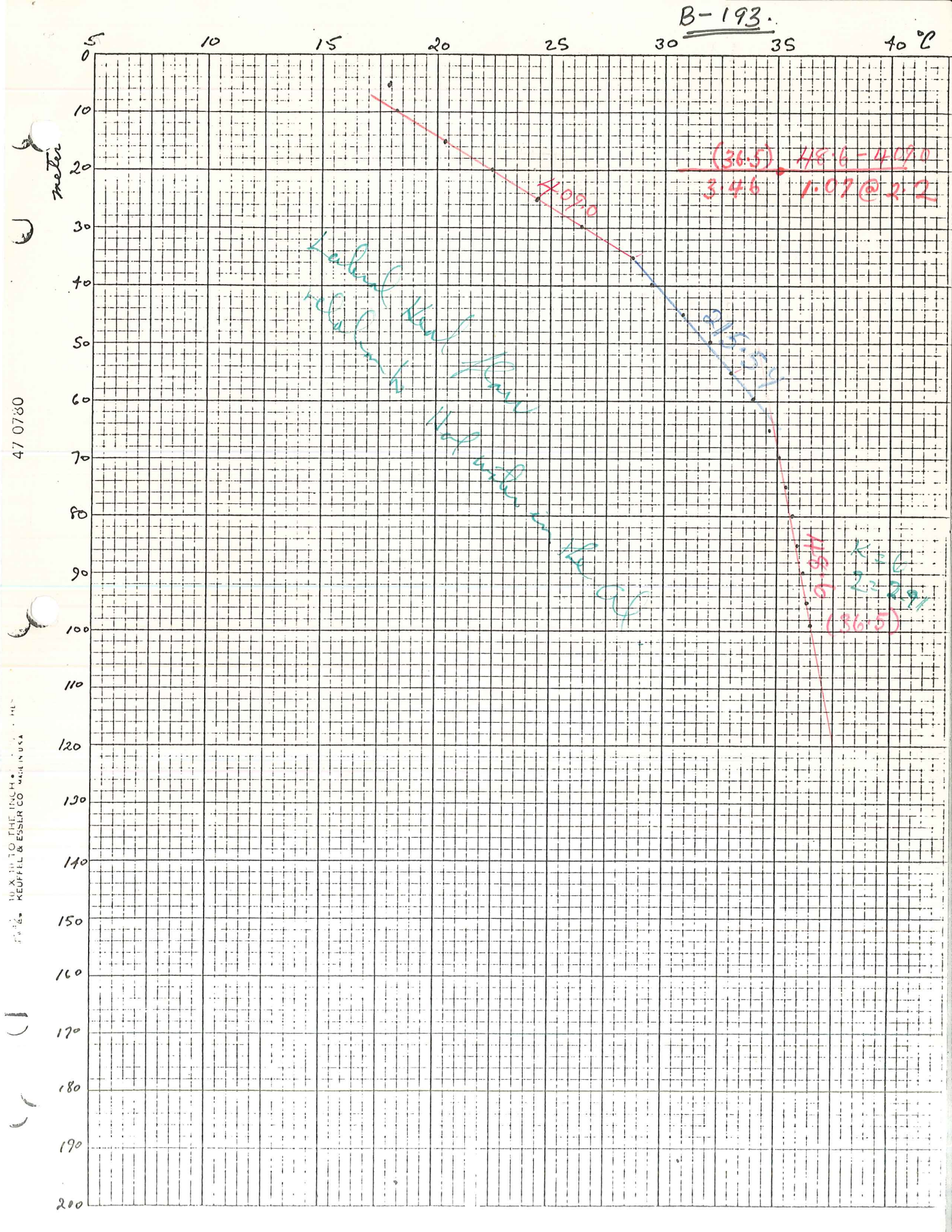
Comments 1" Iron pipe cemented in 3½" PVC

University of Utah 1976

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	94.73	17.940			
			.340	68	
10	93.55	18.280			
			2.145	429	
15	86.43	20.425			
			2.020	404	
20	80.18	22.445			
			1.895	379	
25	74.69	24.340			
			2.030	406	
30	69.18	26.370			
			1.635	327	
35	65.04	28.005			
			1.455	291	
40	61.54	29.460			
			1.295	259	
45	58.58	30.755			
			1.295	259	
50	55.77	32.050			
			.865	173	
55	53.96	32.915			
			.960	192	
60	52.02	33.875			
			.795	159	
65	50.47	34.670			
			.420	84	
70	49.67	35.090			
			.255	51	
75	49.15	35.345			
			.255	51	
80	48.68	35.620			
			.255	51	
85	48.21	35.875			
			.230	46	
90	47.79	36.105			
			.200	40	
95	47.42	36.305			
			.150	37	
99	47.15	36.455			


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
16
18
20
22
24
26
28
30
32
34
36
38
TEMPERATURE °C
409
216
49
(36.5)
409 + 216 + 49 / 2.7 @ 5.5
Av gradient is ~40 m ≈ 36° C/km
Av. Gradient 70-99 m ≈ 47° C/km


B-193.
5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
meter
(36.5)
3.46
48.6 - 409.0
1.07 @ 2.2
409.0
215.54
48.6
K = 6
Z = 2.91
(36.5)
Lateral Heat Flow
relative to Heat water in the Cal
47 0780
10 X 10 TO THE INCH
KEUFFEL & ESSER CO. MADE IN U.S.A.

TEMPERATURE DEPTH LOG

ΔT Well No. 194

Property-Project Bast Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 9 4	2 9	0 C	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
5 . 2 K M W E S T O F G R A N I T E P E A K	D P	M L H

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	1 5 .	3 8 .	1 5 .	1 1 3 .	0 0 .

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
2 2 . 7 5	1 7 . 6 5	6 4 0 0 .	F

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	1 0 . 0	2 5 . 0	- 5 . 5	- . 5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	. 9 9 9			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location 2 1/2 miles West Rock Corral Date Oct 29, 1976

Map Adamsville Utah 15' Quad

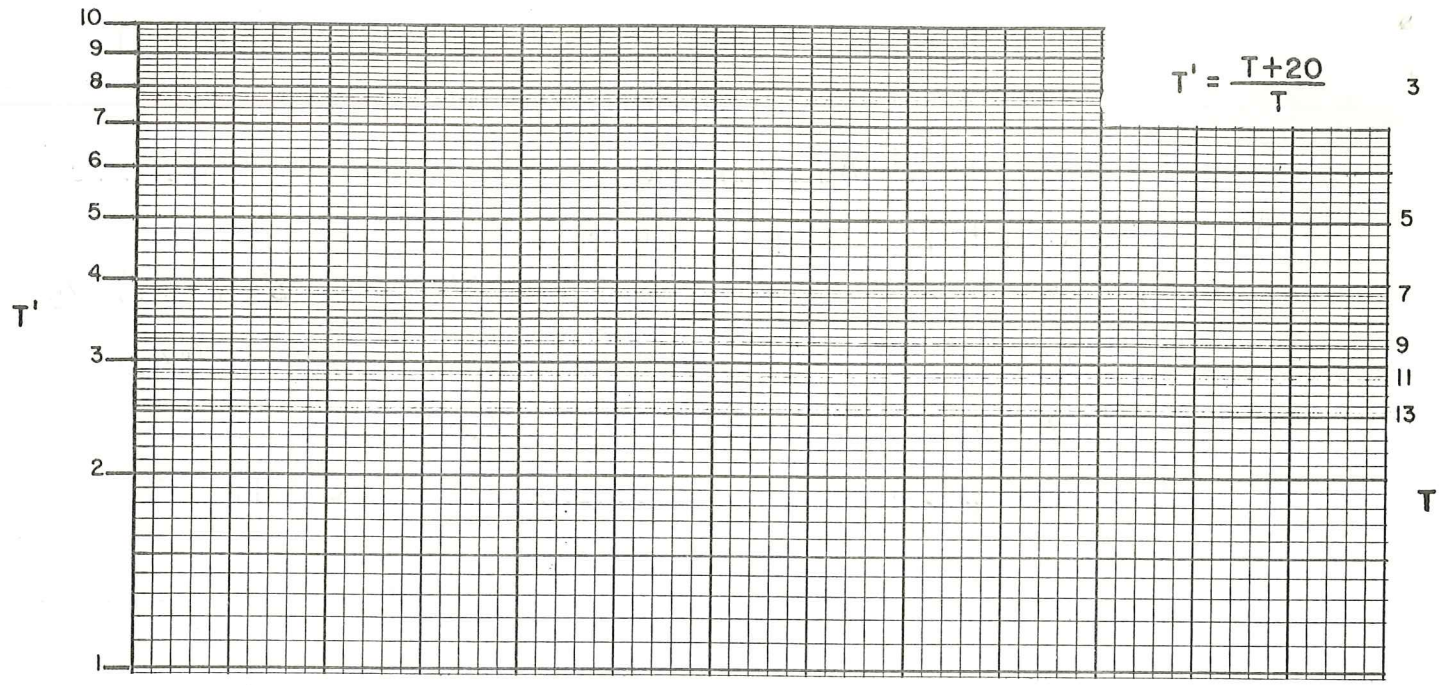
Property Best T 28S R 9W sec SE1/4 NW1/4 16

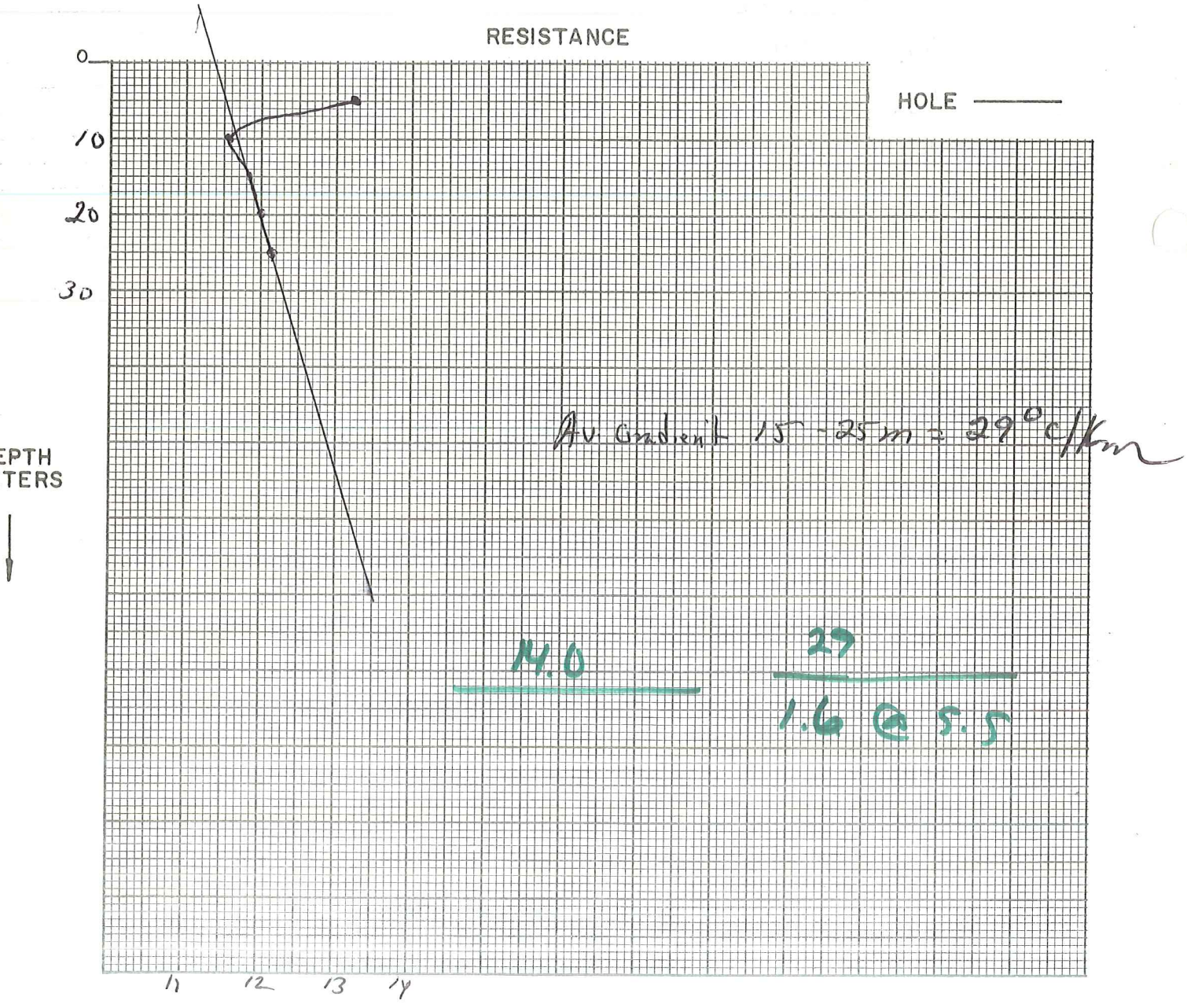
Drill Hole B-194 Date Drilled _____ Elevation 6400 ft.

Instrument Probe 39 Operator [illegible]

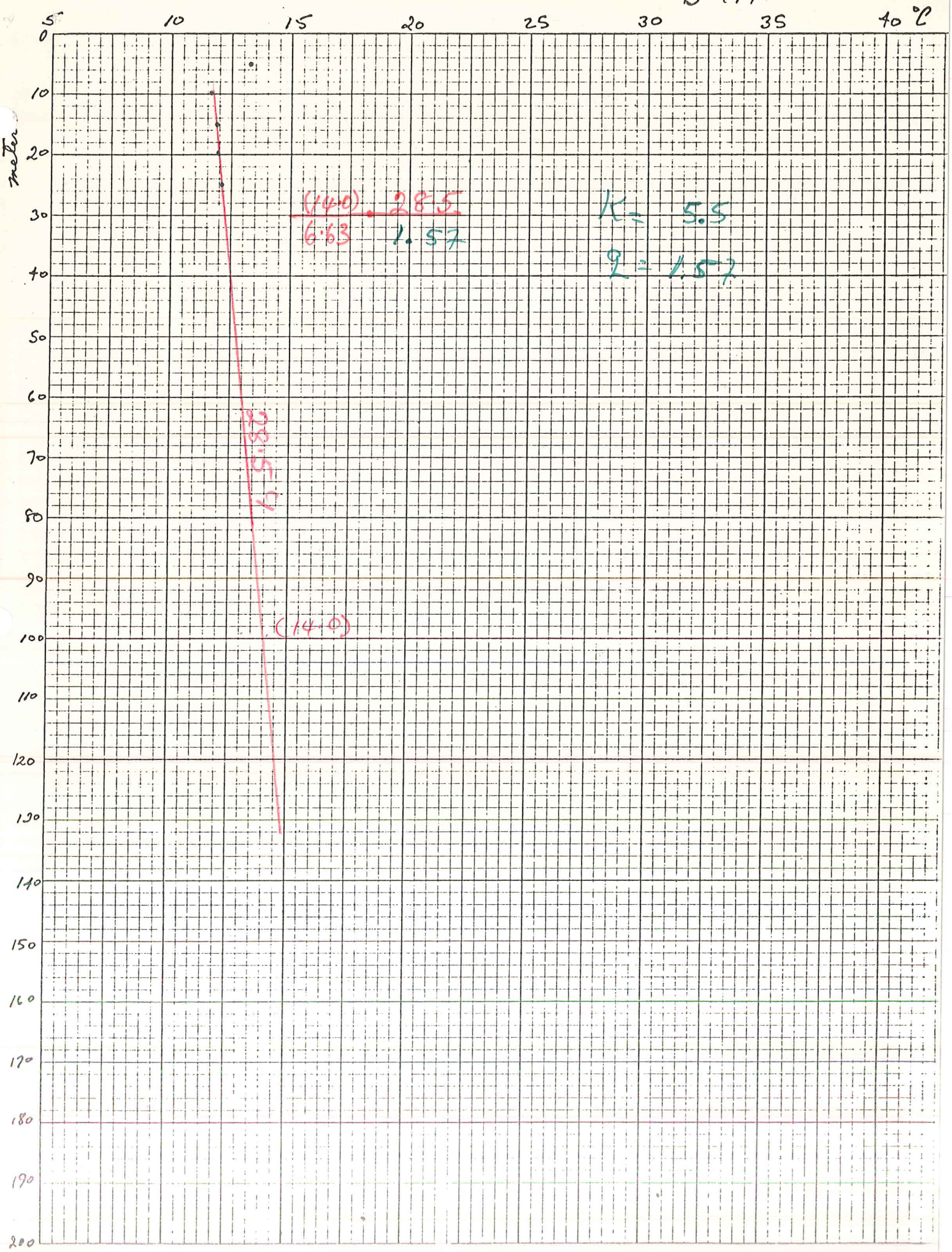
Comments 1" iron pipe - granite JVH (?)

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km	Avg.	Comments
5	112.17	13.255				
10	119.05	11.565				
			.245	49		
15	118.02	11.810				
			.180	36		
20	117.28	11.990				
			.105	21		
25	116.85	12.095				
30						


10
9
8
7
6
5
4
T'
3
2
1
$T' = \frac{T+20}{T}$
3
5
7
9
11
13
T


RESISTANCE
HOLE
0
10
20
30
DEPTH METERS
Av Gradient 15 - 25 m = 29° c/km
14.0
27
1.6 @ 5.5
11
12
13
14
TEMPERATURE °C

B-194:



47 0780

10 X 10 TO THE INCH
KEUFFEL & ESSER CO MADE IN USA

TEMPERATURE DEPTH LOG

ΔT Well No. 195

Property-Project Bast Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

Card A

RT JUSTIFY:

Proj No →	Well No →	Date Logged DA	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
755	195	29	0C	76	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
2.0 KM NW OF S TWIN FLAT MTN	DP	MLH

2. KM NW S. TWIN FLAT MTN UU: EV 4115

Map Location Δ

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	15.	38.	15.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
29.55	23.3	6560.	F

29.45

Use decimals

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	20.0	35.0	-5.5	-.5
D				
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	.999			
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location ½ Mile North Pumice Hole Mine Date Oct 29 1976

Map Adamsville, Utah 15' Quad

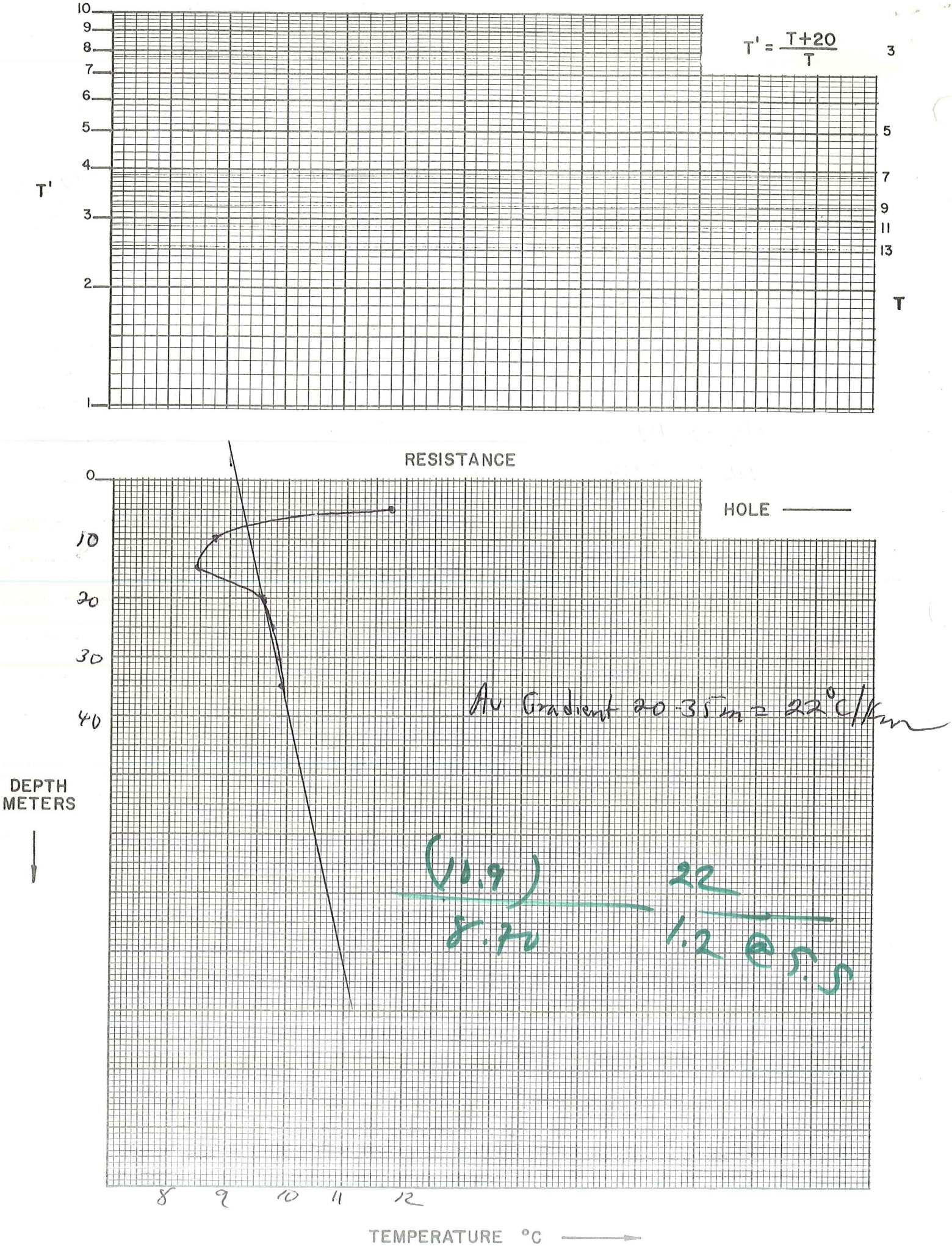
Property Best T 27S R 9W sec NW¼ SE¼ 35

Drill Hole B-195 Date Drilled _____ Elevation 6560 ft.

Instrument Probe 39 Operator RO

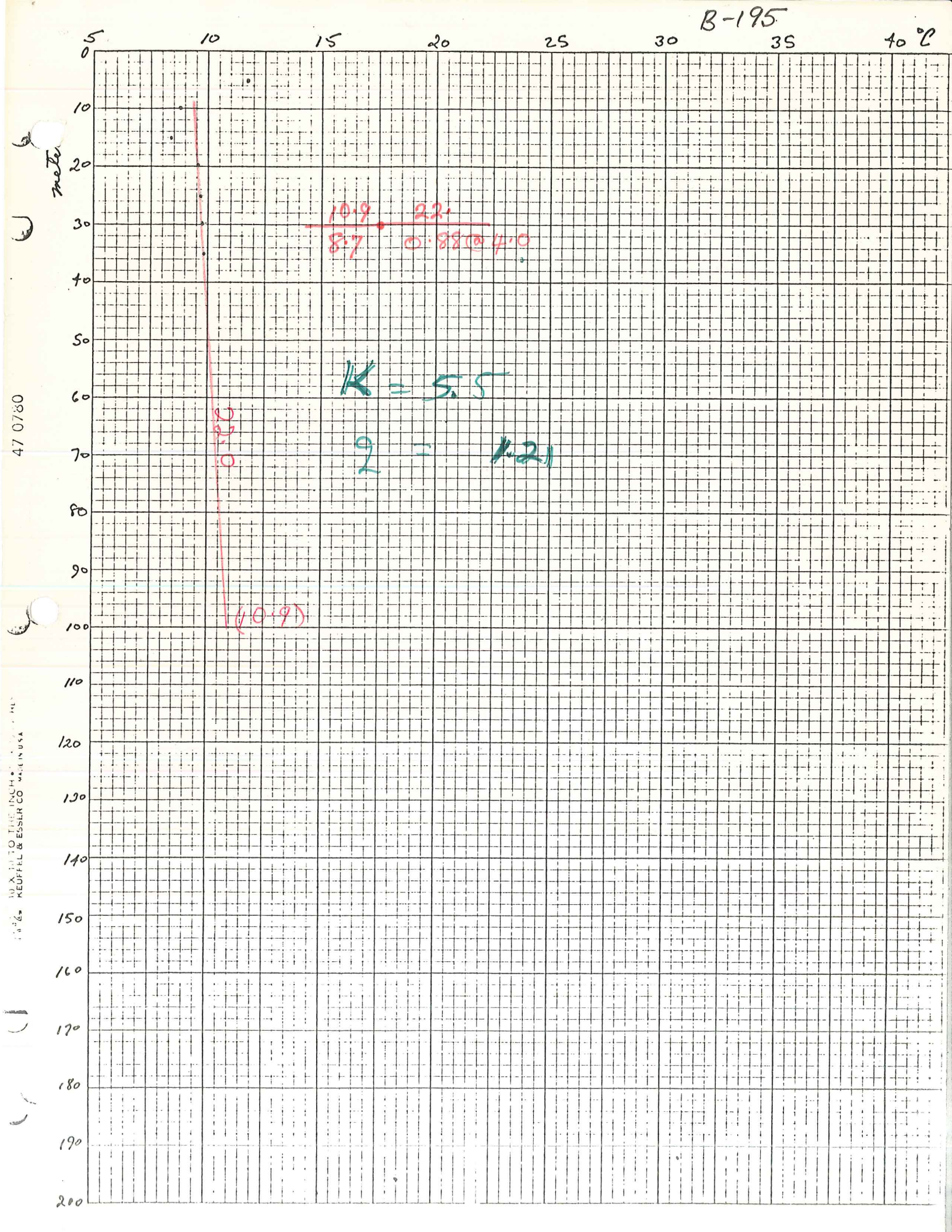
Comments ¾" PVC

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	118.37	11730			
10	131.35	8710			
15	132.52	8455			
20	127.62	9555	1,100	220	
25	126.87	9730	.175	35	
30	126.54	9805	.075	15	
35	126.18	9885	.080	16	
40					



T' = (T+20)/T
T'
T
RESISTANCE
HOLE
DEPTH METERS
TEMPERATURE °C
Av Gradient 20-35 m = 22°C/km
(10.9)/8.70
22/1.2 @ 5.5

B-195



47 0780

KEUFFEL & ESSER CO MADE IN USA

TEMPERATURE - DEPTH LOG

Location Lower Ranch Canyon Rd Date October 29, 1976

Map Adamsville Utah 15' Quad.

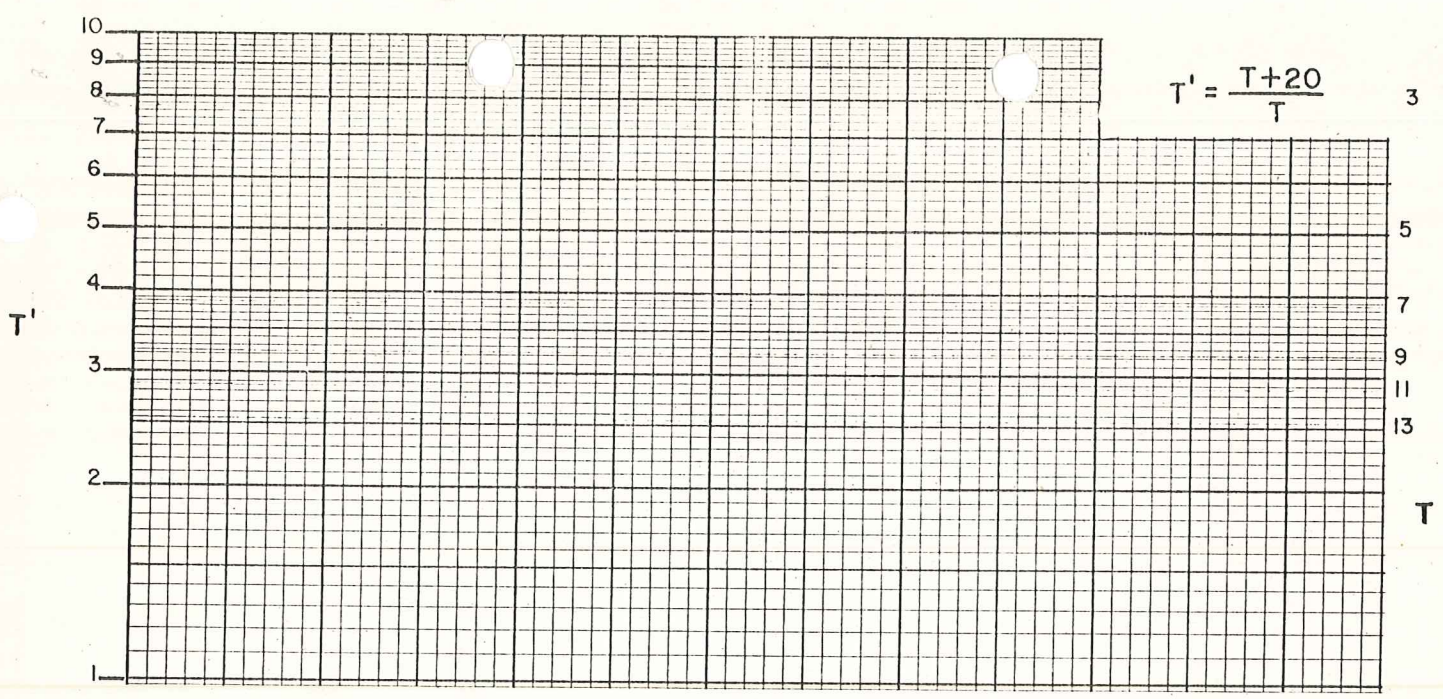
Property Best T 27 S R 9W sec SW¼ NE¼ 29

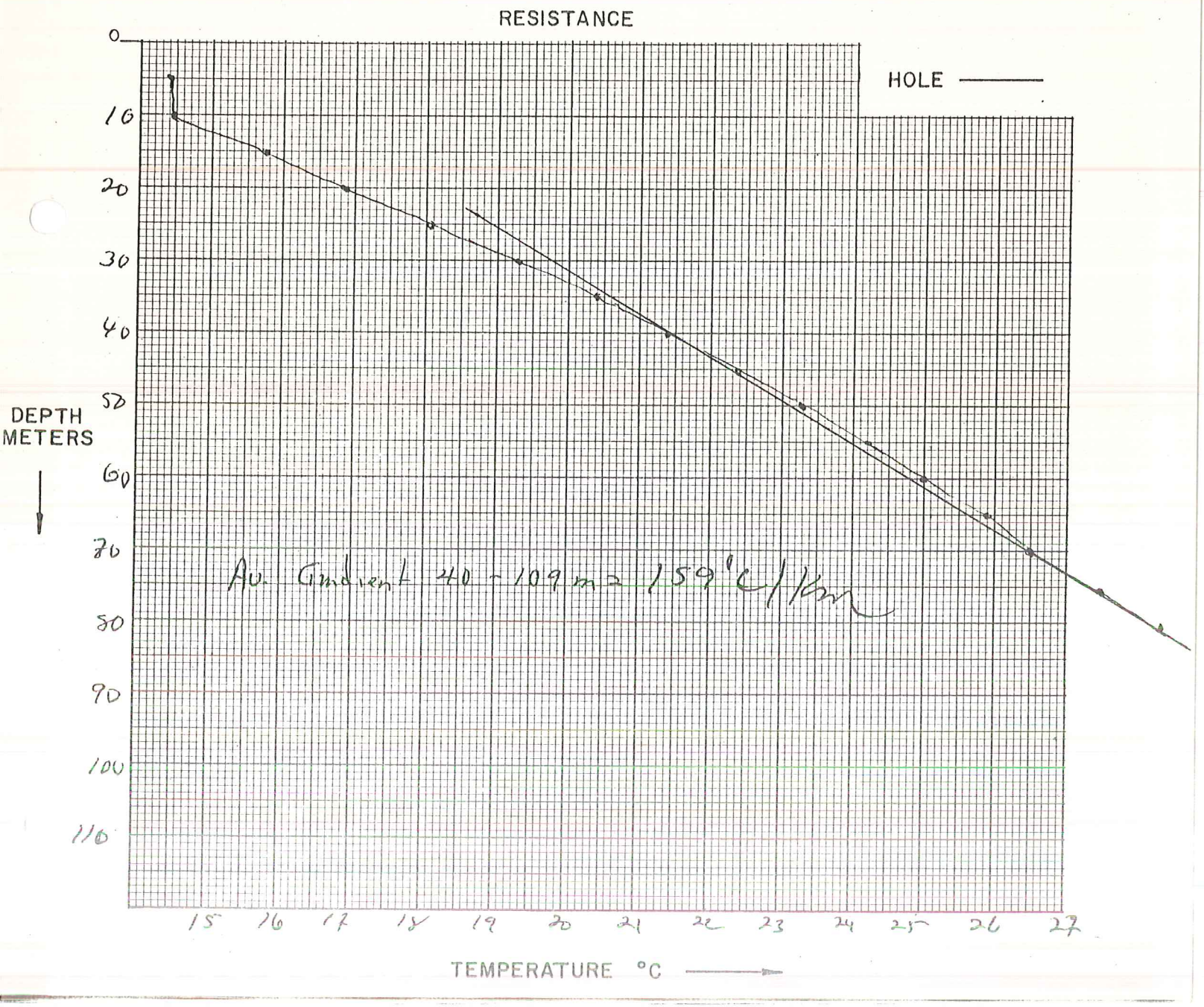
Drill Hole B-196 Date Drilled _____ Elevation _____ ft.

Instrument Probe 39 Operator DS

Comments ¾" PVC Probably Same as B-121

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5	107.60	14.420			
10	107.40	14.675	1.290	258	
15	102.53	15.765	1.175	235	
20	98.25	16.940	1.140	228	
25	94.24	18.080	1.220	244	
30	90.12	19.300	1.125	225	
35	86.44	20.425	.950	190	
40	83.44	21.375	.995	199	
45	80.41	22.370	.880	176	
50	77.81	23.250	.915	183	
55	75.18	24.165	.875	175	
60	72.74	25.040	.890	178	
65	70.34	25.930	.590	118	
70	68.08	26.520	.945	189	
75	66.37	27.465	.840	168	
80	64.30	28.305	.695	139	
85	62.63	29.000	.685	137	
90	61.02	29.685	.645	129	
95	59.54	30.330	.695	139	
100	57.99	31.025	.760	152	
105	56.33	31.785	.595	148	
109	55.07	32.380			


T' = T+20 / T
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13


RESISTANCE
HOLE
DEPTH METERS
0
10
20
30
40
50
60
70
80
90
100
110
15
16
17
18
19
20
21
22
23
24
25
26
27
TEMPERATURE °C
Av. Gradient 40 - 109 m = 1.59 °C/100m

TEMPERATURE DEPTH LOG

ΔT Well No. 197

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA →	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
755	197	OH	NV	76	CM

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
8.1 KM EAST OF READ, UTAH	DP	HLH

8.1 KM E. OF READ, UU76-TG2

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location Δ N Lat Degree	Min	W Long Degree	Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
CM	7.5	38.	30.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
36.2	39.3	5070.	F

← Write M if meters

SEGMENT DEPTH

	Start	End	K	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	16.0	55.0		
D	.999			
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	55.0	68.0	-3.5	-.5
D				
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location _____ Date Nov. 4, 1976

Map Read Utah 7½' Prelim

Property Best T 26S R 9W sec NE¼ SW¼ 5

Drill Hole B-197 Date Drilled _____ Elevation 5070 ft.

Instrument Probe 39 Operator DB

Comments 1" ID pipe cemented in 3" PVC University of Utah gradient hole Valley fill

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
5.0	101.86	15.990			
6	104.82	15.145			
7	106.40	14.730			
8	107.11	14.545			
9	107.22	14.515			
10	106.94	14.585			
11	106.49	14.705			
12	105.95	14.845			
13	105.52	14.960			
14	105.11	15.070			
15	104.75	15.165			
16	104.41	15.255			
17	104.12	15.335			
18	103.83	15.410			
19	103.57	15.486			
20	103.28	15.555			
25	101.96	15.915	.360	72	
30	100.66	16.265	.350	70	
35	99.10	16.695	.430	86	
40	97.83	17.055	.360	72	
45	96.59	17.405	.350	70	
			.290	58	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

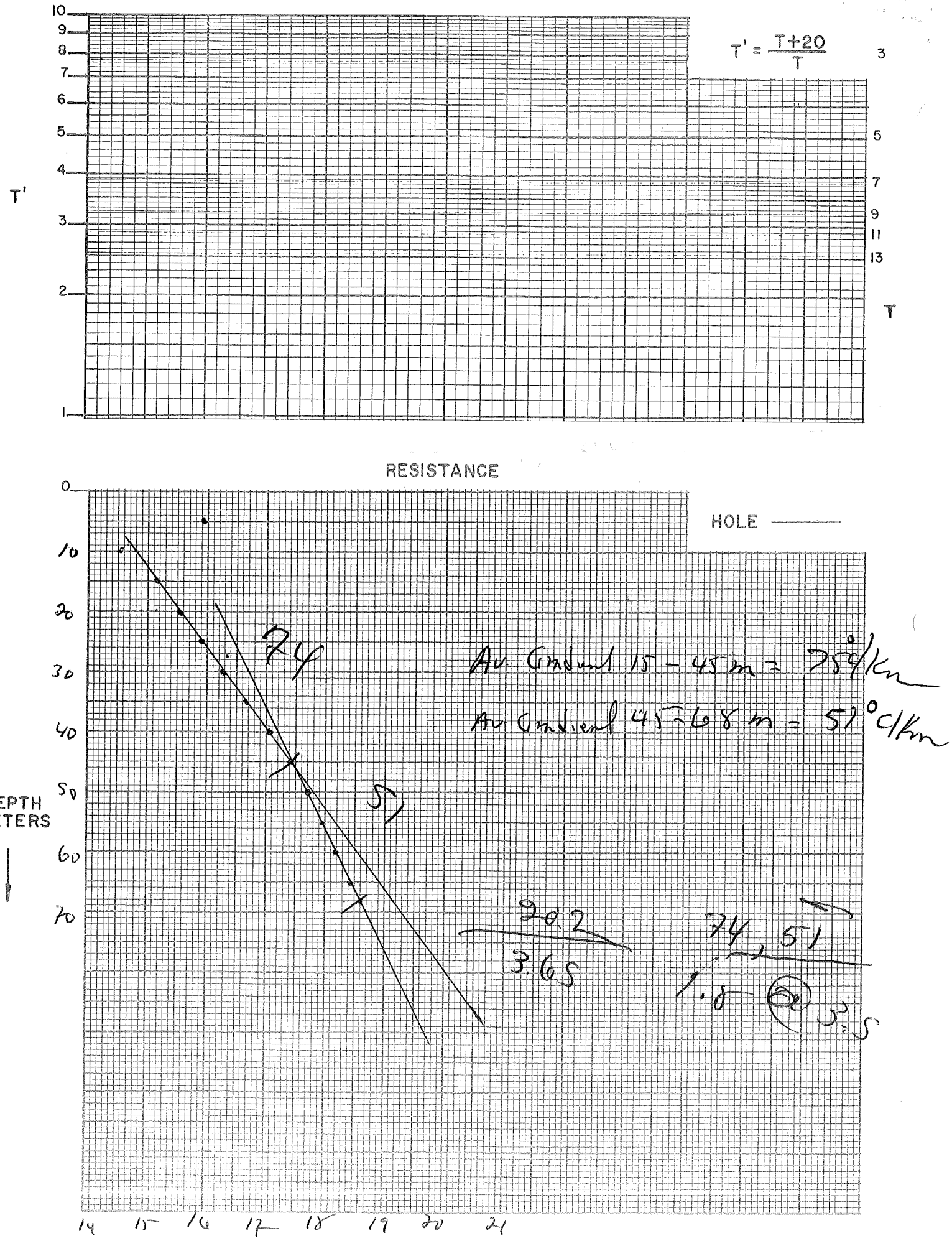
Property _____ T ____ R ____ sec ____

Drill Hole _____ Date Drilled _____ Elevation ____ ft.

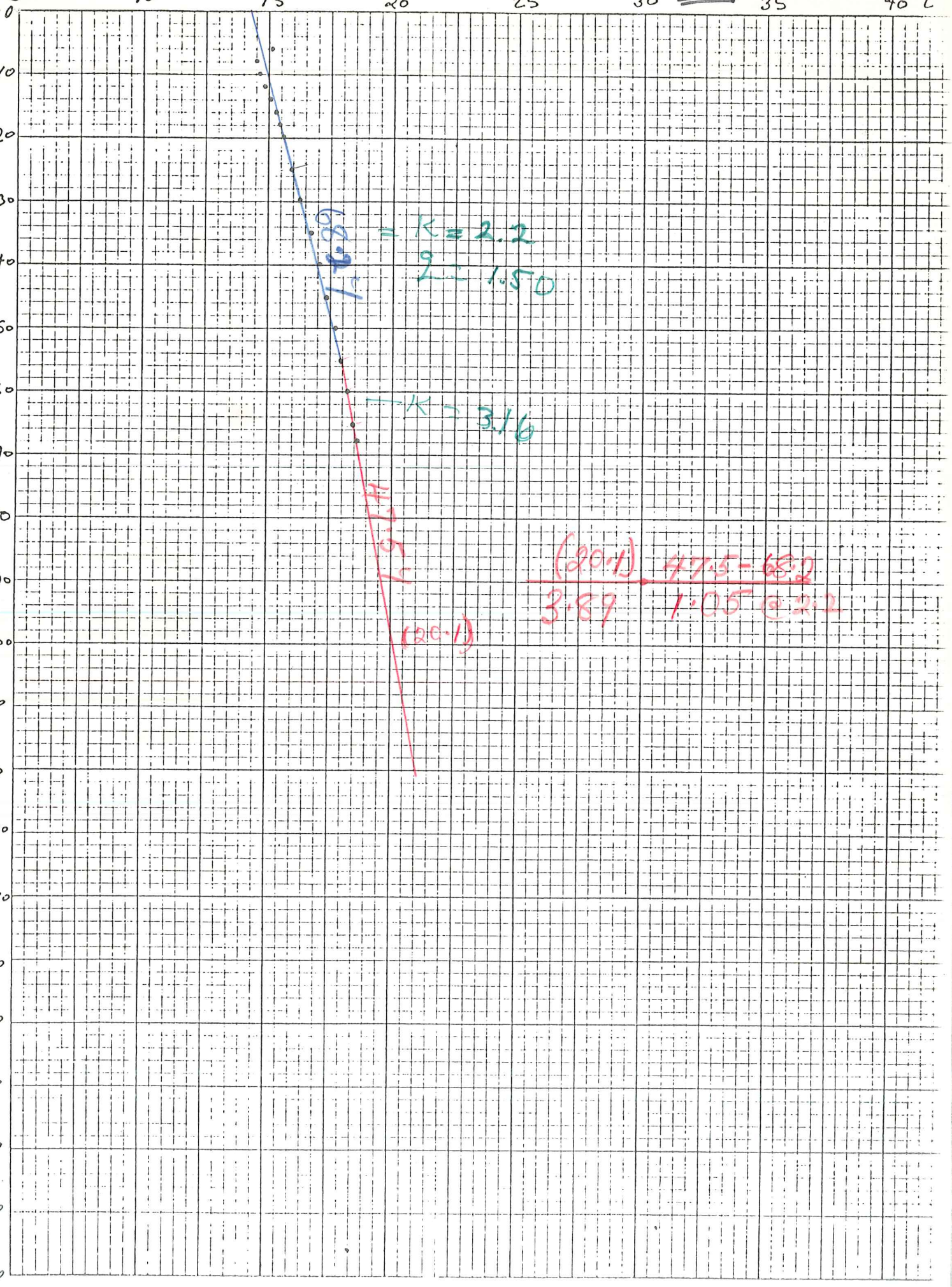
Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
50	95.57	17.695			
			.275	55	
55	94.64	17.960			
			.240	48	
60	93.81	18.200			
			.235	47	
65	93.00	18435			
			.140	46.6	
68	92.53	18575			


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
RESISTANCE
HOLE
DEPTH METERS
0
10
20
30
40
50
60
70
74
51
Av. Gradient 15 - 45 m = 75°C/km
Av. Gradient 45 - 68 m = 51°C/km
202
365
74, 51
1.8 @ 5.5
14
15
16
17
18
19
20
21
TEMPERATURE °C

B-197


5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
K = 2.2
K = 1.50
K = 3.16
(20-1)
(20-1) 47.5 - 65.2
3.89 1.05 @ 2.2

TEMPERATURE DEPTH LOG

ΔT Well No. 198

Property-Project Best Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No	Well No	Date Logged DA	MO	YR	*
755	198	04	NV	76	CM

* 19-Write F if Fahrenheit, 20-Write F if Feet

Site Description	Operator	Editor
6.2 KM NE OF MURDOCK, UTAH	DP	MLH

6.2KM NE MURDOCK, UU: PHIL, WW 3

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	Map Location N Lat Degree	Min	W Long Degree	Min
CM	7.5	38.	30.	113.	00.

Use decimals

Δ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
10.95	29.65	5115.	F

10.6 29.45

Use decimals

← Write M if meters

	Start	End	K	ΔK
C	40.0	50.0		
D	65.0	80.0	-3.5	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
C	50.0	65.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location _____ Date Nov 4 1976

Map Read Utah 7½' Prelim

Property Best T 26S R 10W sec SE¼ NE¼ 25

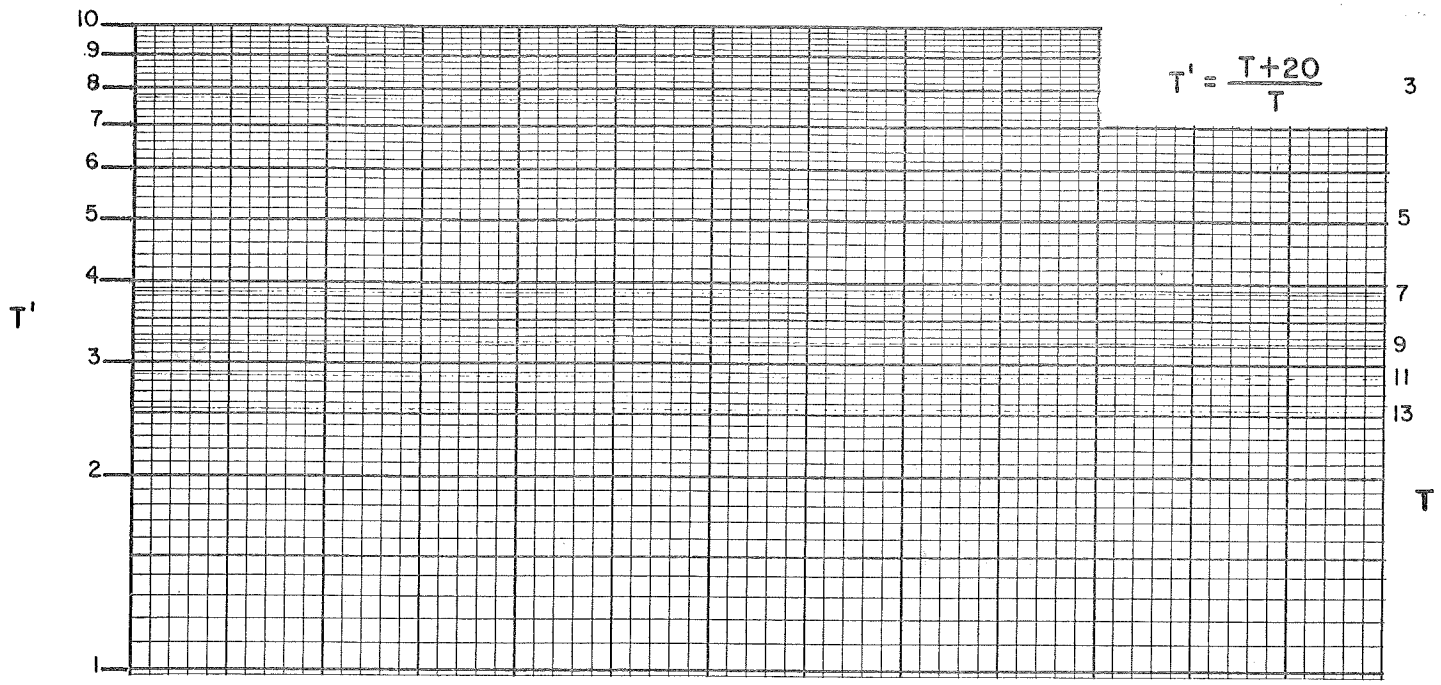
Drill Hole B-19S Date Drilled _____ Elevation 5115 ft.

Instrument Probe 39 Operator DS

Comments 2½ iron Pipe phillips gradient hole.

P-25 Valley fill

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
40	78.10	23.140			
45	72.99	24.945	1.805	361	
50	69.47	26.255	1.310	262	
55	66.88	27.260	1.005	201	
60	64.78	28.105	.845	169	
65	62.46	29.065	.960	192	
70	61.26	29.575	.510	102	
75	59.93	30.155	.580	116	
80	58.84	30.635	.480	96	
85					



RESISTANCE

HOLE

Av Gradient 50-65 m = 187 °c/k

Av Gradient 65-80 m = 105 °c/km

312, 187, 105

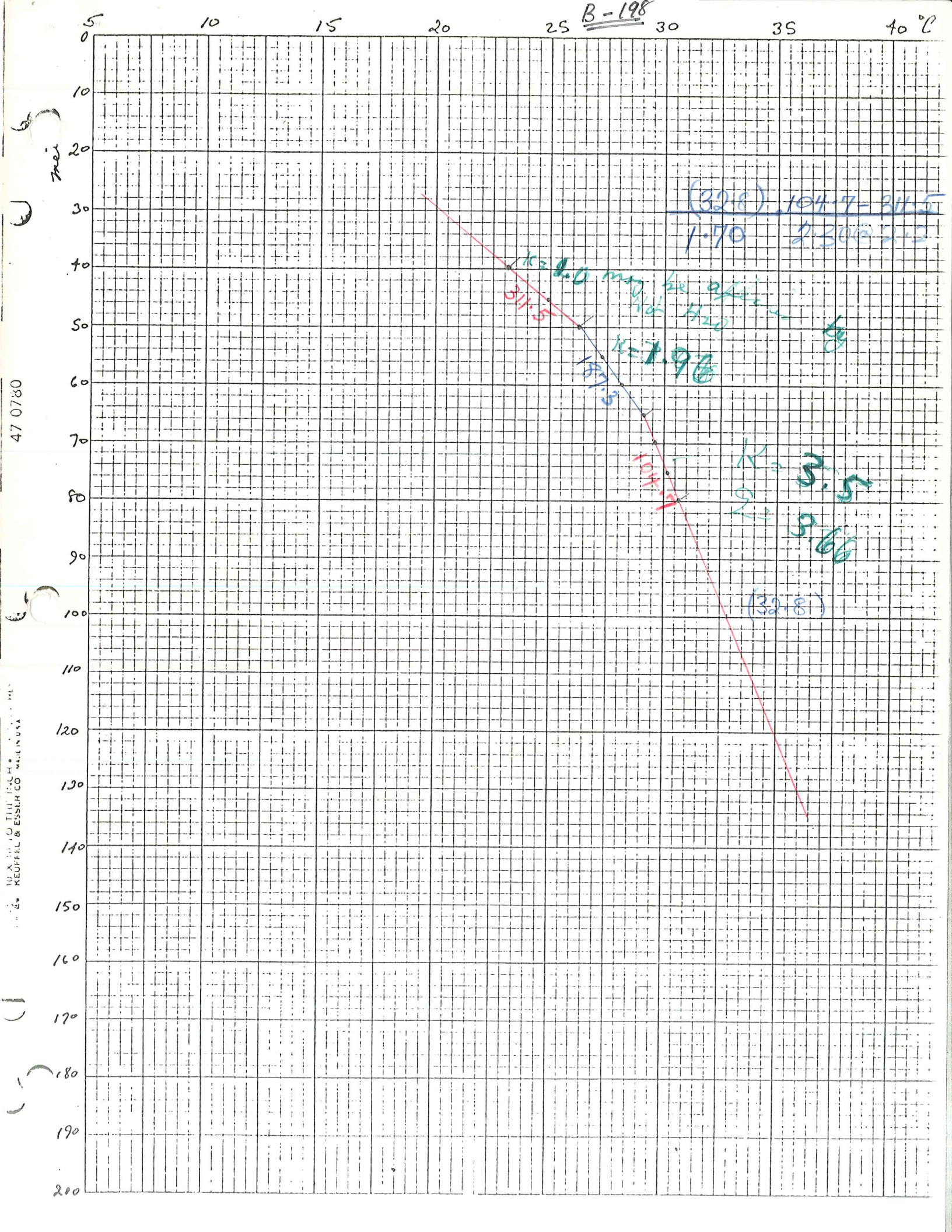
3.1 @ 3.5

DEPTH METERS

0
10
20
30
40
50
60
70
80
90

23 24 25 26 27 28 29 30 31

TEMPERATURE °C


B-198
5
10
15
20
25
30
35
40 °C
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
200
mei
(32.8) .104.7 - 311.5
1.70 2.30 @ 2.2
K = 2.0 may be affected by
Not H2O
311.5
K = 1.96
187.3
104.7
K = 3.5
Q = 3.66
(32.8)
47 0780
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TEMPERATURE DEPTH LOG

ΔT Well No. 199

Property-Project Bast Depth Logged

Map Scale Date: Drilled Logged

State County Section T R

Instrument Operator Elevation ft.

Comments

COMPUTER PROCESSING

RT JUSTIFY:

Card A

Proj No →	Well No →	Date Logged DA	MO →	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
7 5 5	1 9 9	0 4	N V	7 6	C M

* 19 - Write F if Fahrenheit, 20 - Write F if Feet

Site Description	Operator	Editor
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	51 52 53 54 55	56 57 58 59 60
10.0 KM SE OF MURDOCK, UTAH	D P	H L H

10KM SE MURDOCK, UU 7, JVH-5

Card B

Scale Unit in cm	Map Size (7.5, 15.,60)	N Lat Degree	N Lat Min	W Long Degree	W Long Min
21 22 23 24 25	26 27 28 29 30	31 32 33 34 35	36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C M	7.5	38.	22.5	113.	00.

Map Location △ — Use decimals

△ Measure from SW corner of map; except AMS sheets measure from bottom center degree mark (W,-) (E,+)

Northing	Easting	Elev	
51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
42.7	45.25	7400.	F

← Write M if meters

SEGMENT DEPTH

	Start	End	K (-3.5)	ΔK
	21 22 23 24 25 26 27 28 29 30	31 32 33 34 35 36 37 38 39 40	41 42 43 44 45	46 47 48 49 50
C	25.0	55.0		
D	100.0	140.0	~~-3.0~~	-.5
E				
F				
G				

Continue each card below.

SEGMENT DEPTH

	Start	End	K	ΔK
	51 52 53 54 55 56 57 58 59 60	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80
C	55.0	100.0		
D	.999			
E				
F				
G				

Final Segment: Start = .999

TEMPERATURE - DEPTH LOG

Location _____ Date Nov 4, 1976

Map Ranch Canyon Utah 7½' Quad

Property Best T 27 S R 9W sec NW¼ NW¼ 16

Drill Hole B-199 Date Drilled _____ Elevation 5740 ft.

Instrument Probe 39 Operator DP

Comments 3¼" iron Pipe Probably DVH Hole

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
~~25~~	73.50	24.760			
			2.255	451	
30	67.50	27.015			
			2.465	493	
35	61.48	29.480			
			2.890	578	
40	55.08	32.370			
			2.540	508	
45	50.01	34.910			
			2.640	528	
50	45.23	37.550			
			2.510	502	
55	41.11	40.060			
			1.550	310	
60	38.04	42.110			
			2.030	406	
65	35.23	44.140			
			2.205	441	
70	32.43	46.345			
			2.155	431	
75	~~29~~.92	48.500			
			2.150	430	
80	27.61	50.650			
			2.160	432	
85	25.49	~~52.810~~			
			2.110	422	
90	23.59	54.920			
			1.580	376	
95	22.02	56.800			
			2.020	404	
100	20.46	58.820			
			1.910	382	
105	19.099	60.730			
			1.985	397	
110	17.787	62.715			
			1.945	389	
115	16.597	64.660			
			1.890	378	
120	15.525	66.550			
			1.720	344	
125	14.615	68.270			
			1.790	358	

TEMPERATURE - DEPTH LOG

Location _____ Date _____

Map _____

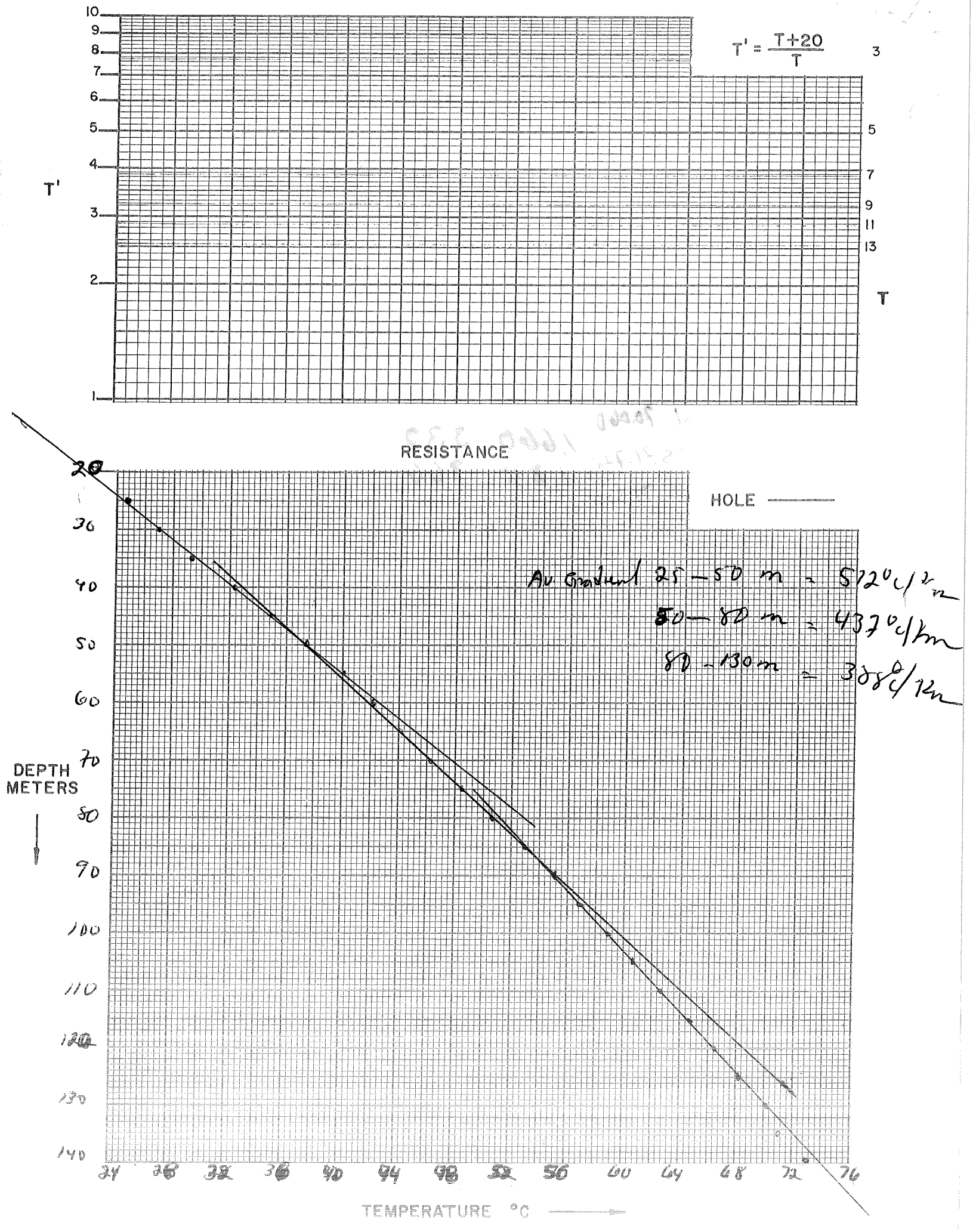
Property _____ T _____ R _____ sec _____

Drill Hole _____ Date Drilled _____ Elevation _____ ft.

Instrument _____ Operator _____

Comments _____

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Gradient °C/Km Avg.	Comments
130	13.731	70.060			
			1.660	332	
135	12.965	71.720			
			1.830	366	
140	12.175	73.550			


$T' = \frac{T+20}{T}$
T'
T
10
9
8
7
6
5
4
3
2
1
3
5
7
9
11
13
RESISTANCE
HOLE
Av. Gradient 25 – 50 m = 572°C/km
50 – 80 m = 437°C/km
80 – 130 m = 388°C/km
DEPTH METERS
20
30
40
50
60
70
80
90
100
110
120
130
140
24
28
32
36
40
44
48
52
56
60
64
68
72
76
TEMPERATURE °C

B-189

20 25 30 35 40 45 50 55 60 65 70 75 80 °C

10 20 30 40 50 60 70 80 90 100 120 120 130 140 150 160 170 180 190 200

K= 2.2

2 11.47

521.8

K= 2.73

420.0 C

58.82 366.3 - 521.8

0.49 10.99 @ 3.0

K= 3

366.3

47 0780

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