A00084

TEC. 23

ΔT Oregon 1978
524-554 Temperature Depth Logs
Counties: Deshutes, Lake,
Harney, Jefferson.

Missing Files

527

530-531

80°c/km

AMAX EXPLORATION, INC.

Circle F AT

TEMPERATURE/DEPTH LOG K=4 Q=3.2

ΔT Well No. Δ524

Property-Project 566 Depth Logged 70m

Map CRESCENT Scale AMS Date: Drilled _____ Logged 7-25-78

State ORE County Deschutes, ____ of ____ of ____; of SW of Sec 1 T 20S R 11E

Instrument DT-101 Operator JMD Elevation 4550 (ft / m)

Comments Abandoned (wooden) windmill

Card A

RT JUSTIFY | Proj No | Well No | DA | MO | YR | *

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

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

Date Logged

Site Description | Operator | Editor | Drilled DA | MO | YR

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	61	62	63	64	65	66	67	68

(Approx. location, water well?, oil test?, etc.)

Card B

Map Location * *

Scale Unit IN CM | Map Size (7.5, 15., 60.) | 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			6	0	.			4	3	.	0	0	0	.				1	2	1	.	0	0	0	.		

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

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
					3	8	.	5							1	5	.	1			4	5	5	0	.				F	

← Write M if if meters

Use decimals

Segment 1 = Depths Start | End | Conductivity 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
				2	0	.						7	0	.						−	4	.	0		−	0	.	5	

Best cond. (-K)

Downward extrapolations (- Δ K)

Segment 2 Start → .999 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
	.	9	9	9																									

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

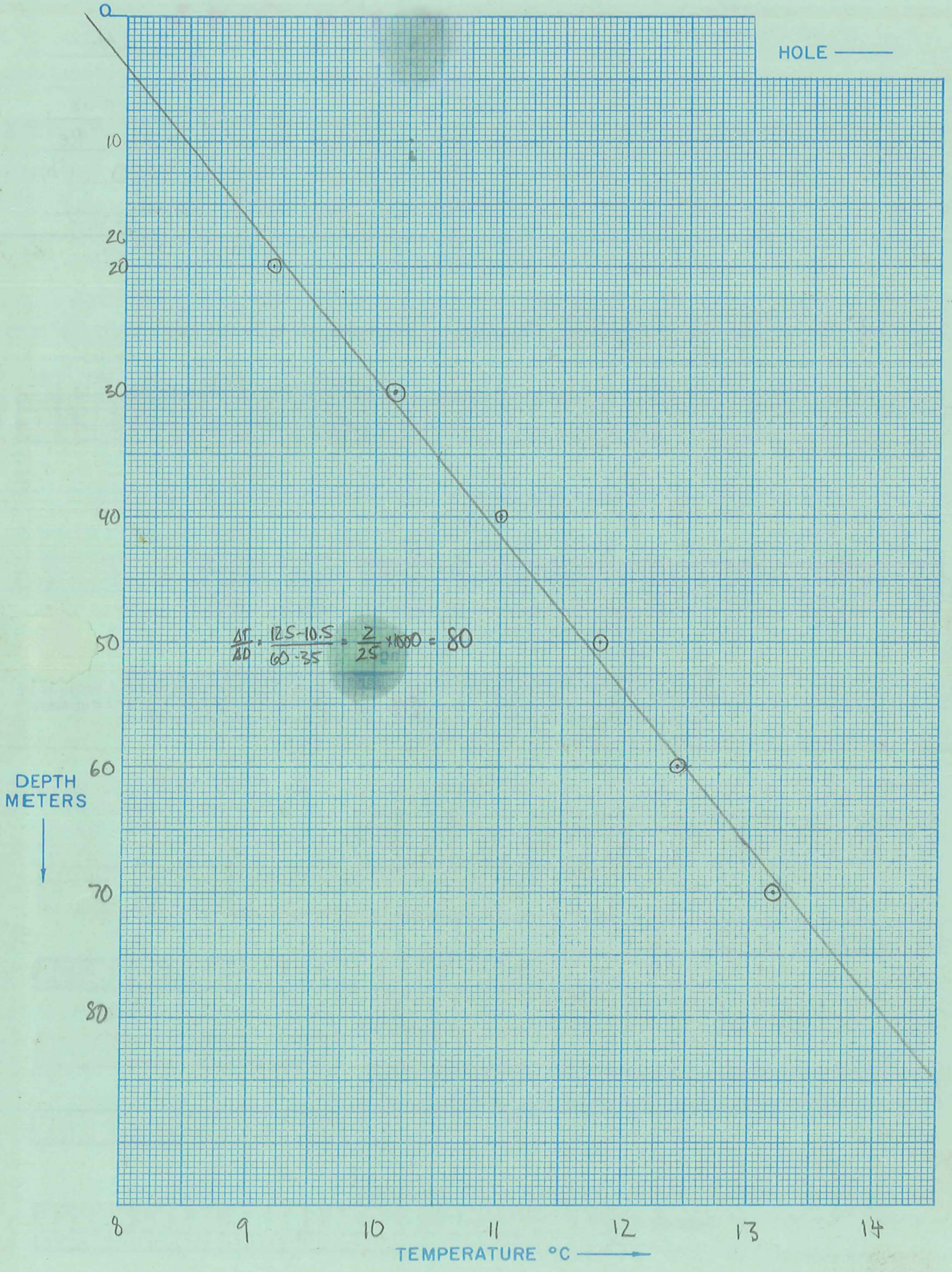
Segment 8 Start →

Segment 9

Segment 10 Start →

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

After final segment Start = .999


HOLE
0
10
20
20
30
40
50
60
70
80
DEPTH METERS
$\frac{\Delta T}{\Delta D} = \frac{12.5-10.5}{60-35} = \frac{2}{25} \times 1000 = 80$
8
9
10
11
12
13
14
TEMPERATURE °C

Circle F ΔT

Date Logged: 7-25-78

ΔT Well No. Δ524

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	Qal -
10							Surrounding hills
20		9.17					are recent basalts
			.93	93			
30		10.15					
			.85	85			
40		11.00					
			.80	80			
50		11.80					
			.62	62			
60		12.42					
			.88	88			
70		13.20				Air	

K=Conductivity

AMAX EXPLORATION, INC.

98 °C/km K3.5Q3.4 ✓

TEMPERATURE/DEPTH LOG

ΔT Well No. 525

Property-Project 566 Depth Logged 34.5 m

Map Crescent AMS Scale 1:250,000 Date: Drilled _____ Logged 1/25/78

State OR County Lake , ____ of ____ of ____ of ____ of Sec ____ T 26S R 18E

Instrument DT-101 Operator WDM Elevation 4400 (ft / m)

Comments former windmill

BUNCHGRASS

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
		5	6	6						2	5		7		7	8		C	M

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

Site Description | Operator | Editor | Drilled: DA | MO | YR

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	61	62	63	64	65	66	67	68
8		M	I	.		N		O	F		C	H	R	I	S	T	M	A	S		V	A	L	L	E	Y						W	D	M													

(Approx. location, water well?, oil test?, etc.)

Card B

Map Location * * : Scale Unit IN CM | Map Size (7.5, 15., 60.) | 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		6	0	.			4	3	.			0	.			1	2	1	.			0	.		

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	5	.	7							1	3	.	2		4	4	0	0	.					F

Use decimals

← Write M if if meters

Segment 1 = Depths: Start | End | Conductivity: 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
			2	6	.						3	2	.								−	3	.	5		−	0	.	5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → 1999 (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
1	9	9	9																										

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

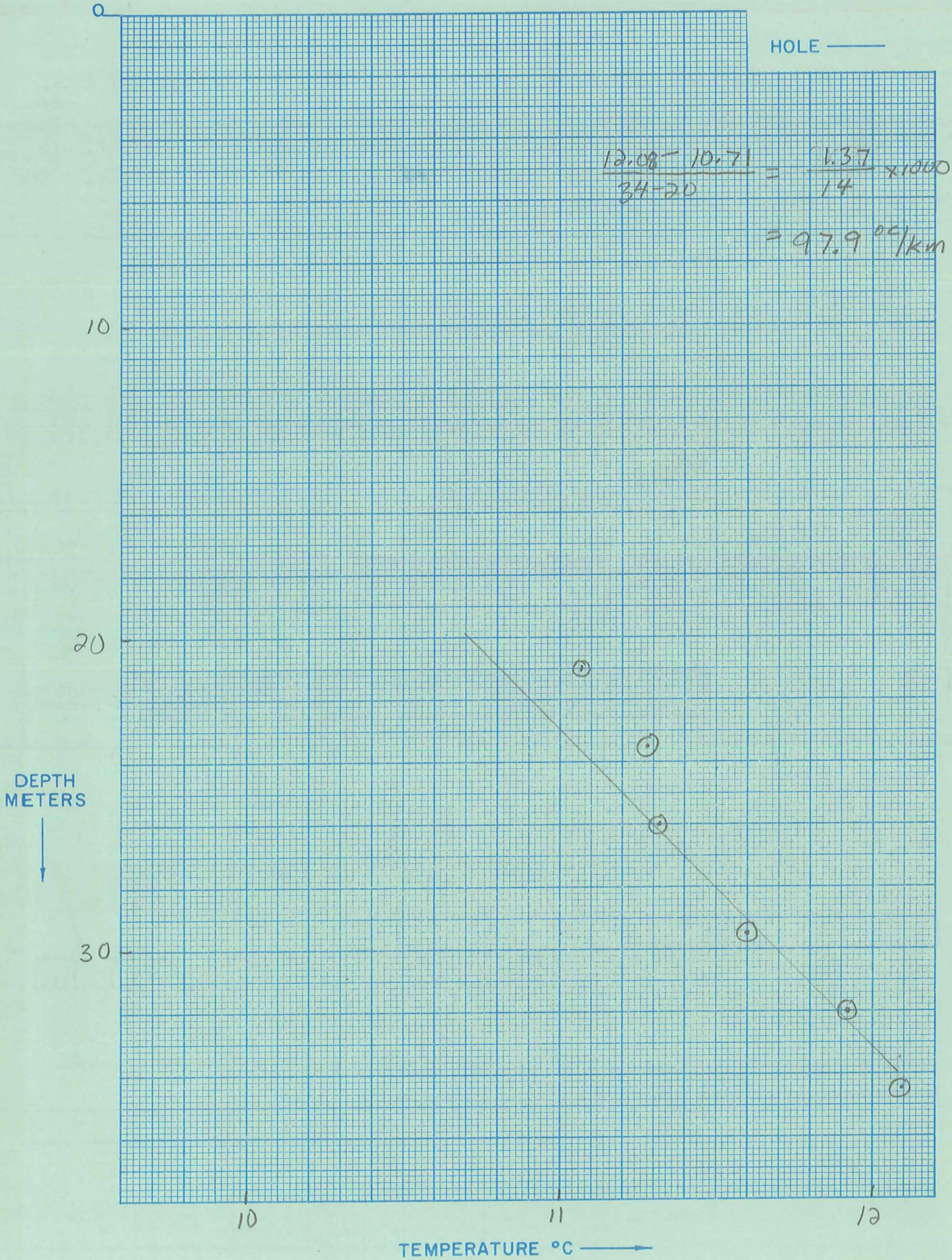
Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999

← 8.75°C


HOLE
$\frac{12.08 - 10.71}{34 - 20} = \frac{1.37}{14} \times 1000$
$= 97.9\ ^{\circ}C/km$
0
10
20
30
DEPTH METERS
10
11
12
TEMPERATURE °C

285
3,5 / 10000.
7000
3000
2800
200
175
25

28 350 3 8,40

Date Logged: _____ ΔT Well No. 525

BUNCHGRASS

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
34.5		12.09				Air	Qal
32.5		11.92	.17	68			
29.5		11.6	.32	128			
26		11.32	.28	~80			
23.5		11.18	.14	56			
21		11.07	.11	44			

K=Conductivity

AMAX EXPLORATION, INC. * NO GRADIENT

TEMPERATURE/DEPTH LOG K5 Q*

ΔT Well No. 526

Property-Project 566 Depth Logged 140 m

Map Crescent AMS Scale _____ Date: Drilled _____ Logged 7/26/78

State NV County Deschutes, ____ of ____ of SE of SE of Sec 15 T 21S R 13E

Instrument DT-101 Operator WDM Elevation 6400 (ft / m)

Comments USGS TG hole - probed in outer casing, inner pipe locked

CINDER HILL

Card A

RT JUSTIFY	Proj No	Well No	DA	MO	YR	*
1 2 3 4 5 6 7 8 9 10	11 12 13 14 15 16 17 18	19 20				
	566		26	7	78	CM

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

Site Description	Operator	Editor	Drilled DA	MO	YR
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	61 62	63 64 65	66 67 68
USGS HOLE 2 MI. NE OF EAST LK	WDM				

(Approx. location, water well?, oil test?, etc.)

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
CM	60.	43.	0.	121.	0.

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
15.6	13.2	6400.	F

Use decimals ← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
20.	90.	-5.	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999 (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)

Segment 3 (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)

Segment 4 Start → (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)

Segment 5 (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)

Segment 6 Start → (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)

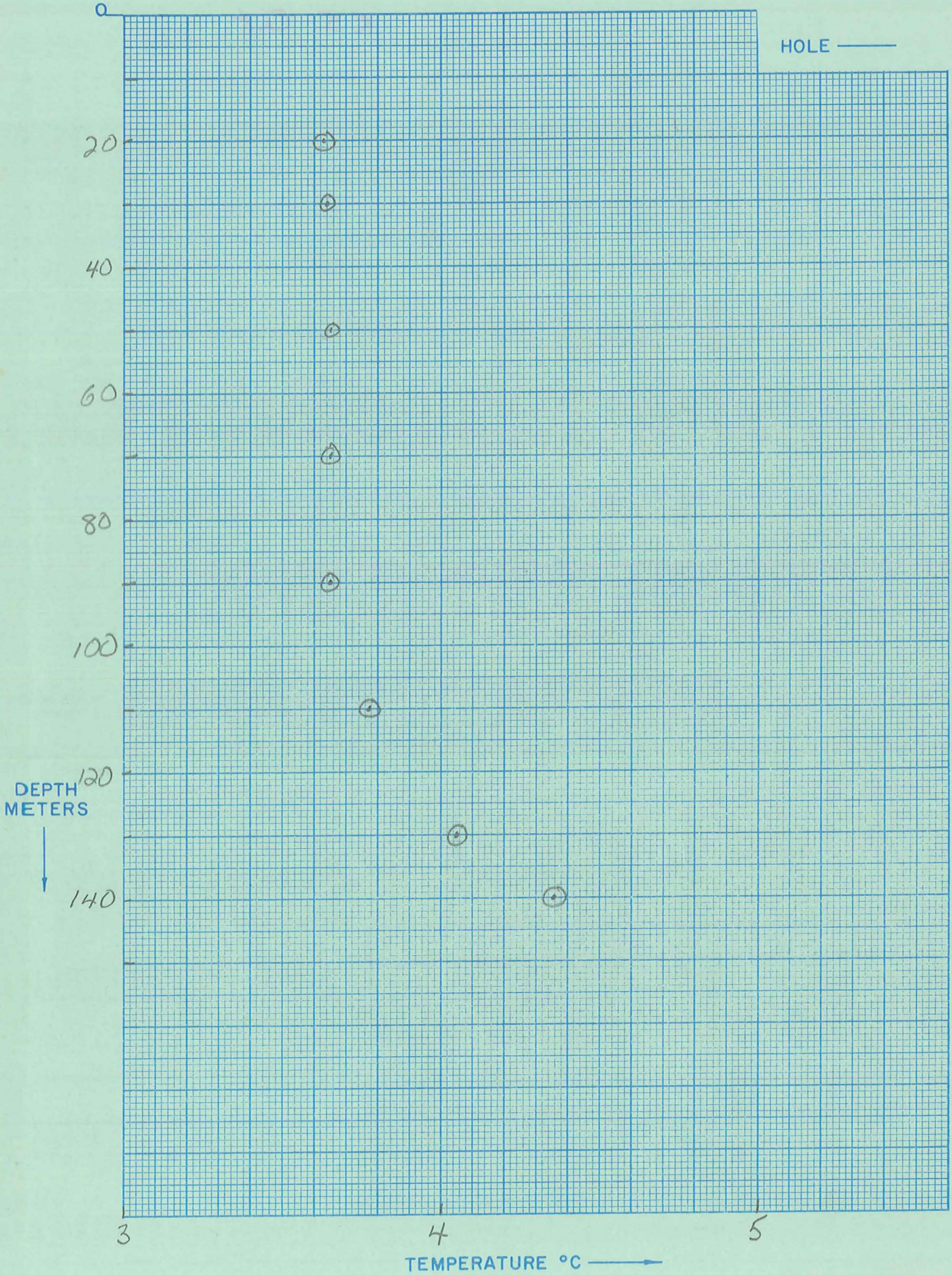
Segment 7 (21 22 23 24 25 26 27 28 29 30 | 31 32 33 34 35 36 37 38 39 40 | 41 42 43 44 45 | 46 47 48 49 50)

Segment 8 Start → (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)

Segment 9 (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)

Segment 10 Start → (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)

After final segment Start = .999


HOLE
0
20
40
60
80
100
120
140
DEPTH METERS
3
4
5
TEMPERATURE °C

Date Logged: _____

ΔT Well No. 526

CINDER HILL

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
120		3.97					rhyolitic volcanics
100		3.73	.24	12			assoc. w/ Newberry
80		3.66					Crater
140		4.35				H_2O	bottom
130		4.05	.3	30			
110		3.77	.28	14			
190		3.65	.12	6			
70		3.65	-0-	0			
50		3.65					
30		3.64					
20		3.63					

K=Conductivity

AMAX EXPLORATION, INC. K=5 Q=.4 6.5°c/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 528

Property-Project 566 Depth Logged 36 m

Map CRESCENT Scale AMS Date: Drilled ______ Logged 7/24/78

State OR County LAKE , ____ of ____ of SW of NW of Sec 1 T 24S R 14E

Instrument DT 101 Operator MJ Elevation 4450 (ft/m)

Comments

Card A

Date Logged

RT JUSTIFY	Proj No (1–5)	Well No (6–10)	DA (11–12)	MO (13–15)	YR (16–18)	* (19–20)
	566		24	7	78	CM

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

Site Description (21–50)	Operator (51–55)	Editor (56–60)	Drilled DA (61–62)	MO (63–65)	YR (66–68)
	MJ	/			

(Approx. location, water well?, oil test?, etc.)

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	60.	121.	00.0.	43.	00.0.

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
19.3	+0.4	4450.		F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start (21–30)	End (31–40)	Conductivity K (41–45)	ΔK (46–50)
16.0	36.0	-5.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

	Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
Segment 2	.999			

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

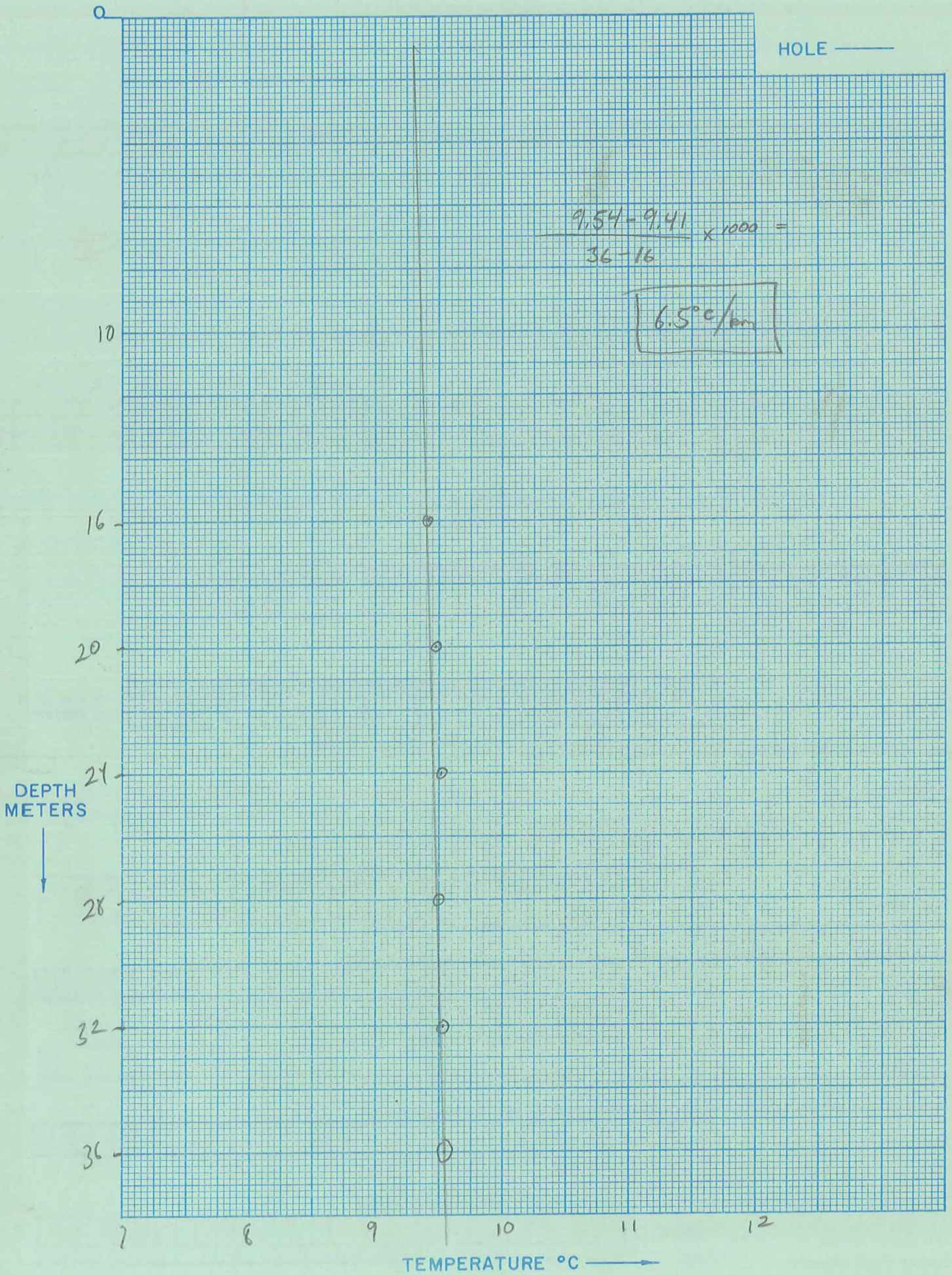
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


HOLE
$\frac{9.54 - 9.41}{36 - 16} \times 1000 =$
6.5°c/km
0
10
16
20
24
28
32
36
DEPTH METERS
7
8
9
10
11
12
TEMPERATURE °C

Date Logged: 7/24/78

ΔT Well No. 528

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
							BASALT + WIND BLOWN VOLCANIC SAND
16		9.41					
20		9.47	.06	15.0			
24		9.51	.04	10.0			
28		9.50	-.01	-2.5			
32		9.53°	.03	7.5			
36		9.54°	.01	2.5			

K=Conductivity

page ____ of ____

30.8°C/km

Δ529 ✓

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

ΔT Well No. APPALOOSA

Property-Project 566 Depth Logged 45 m

Map CRESCENT Scale AMS Date: Drilled _____ Logged 7/24/78

State OR County LAKE, ____ of ____ of SW of NW of Sec 28 T 25S R 13E

Instrument DT 101 Operator MJ Elevation 4475 (ft m)

Comments NO WINDMILL LEFT

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
5 6 6		2 4	7	7 8	C M

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

Site Description	Operator	Editor	Drilled DA	MO	YR
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	61 62	63 64 65	66 67 68
	M J				

(Approx. location, water well?, oil test?, etc.)

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	6 0 .	1 2 1 .	0 0 0 .	4 3 .	0 0 0 .

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 6 . 9	- 5 . 0	4 4 7 5 .	F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
2 0 .	4 5 .	- 4 . 5	- 0 . 5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → 9 9 9

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

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

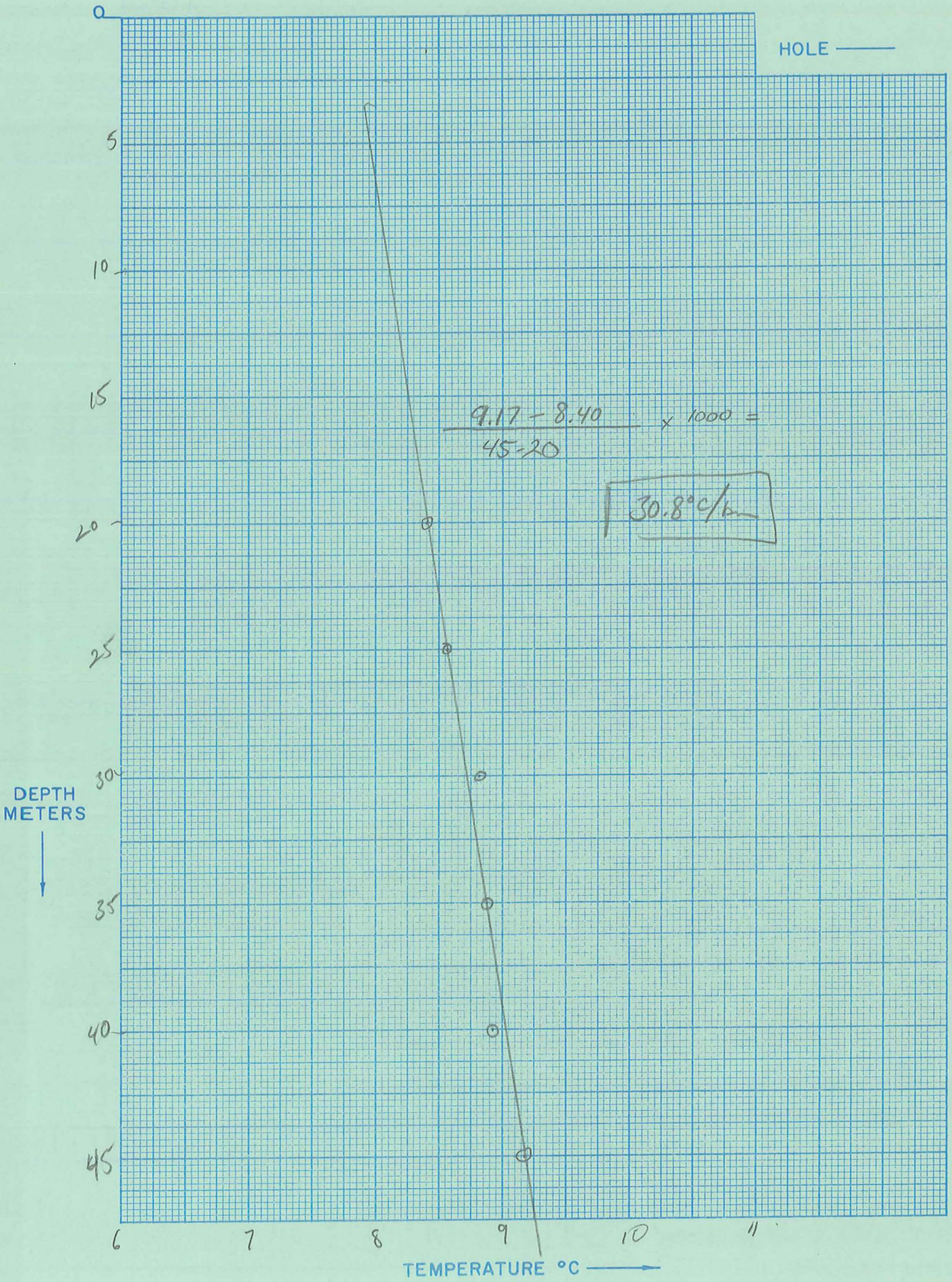
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


HOLE
0
5
10
15
20
25
30
35
40
45
DEPTH METERS
6
7
8
9
10
11
TEMPERATURE °C
9.17 − 8.40 / 45 − 20 × 1000 =
30.8°C/km

Δ529

Date Logged: 7/24/78

ΔT Well No. APPALOOSA

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
							VOLCANIC ALLUVIUM +
							AEOLIAN DEBRIS
							ON A VAGUE LINE WITH
15							TUFF RINGS, INCLUDING
20		8.40					FORT ROCK.
25		8.57	.17	34			
30		8.81	.24	48		Air	
35		8.88	.07	14			
40		8.92	.04	8			
45		9.17	.25	50			

K=Conductivity

AMAX EXPLORATION, INC. K4.5 Q.6 13.7°c/km

TEMPERATURE/DEPTH LOG Δ532

ΔT Well No. WM ★

Property-Project 566 Depth Logged 50 m

Map BURNS Scale AMS Date: Drilled _____ Logged 7/26/78

State OR County HARNEY, ____ of ____ of ____ of C of Sec 31 T 23S R 25E

Instrument DT 101 Operator MJ Elevation 4470 (ft m)

Comments _____

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				
566	26	7	78	C	M	

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

Site Description	Operator	Editor	Drilled DA	MO	YR
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	61 62	63 64 65	66 67 68
	MJ				

(Approx. location, water well?, oil test?, etc.)

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
CM	60.	45.	00N.	119.	000.

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
25.5	-24.6	4970.	F

Use decimals ← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
30.	50.	-4.5	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 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
	.999			

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

Segment 8 Start →

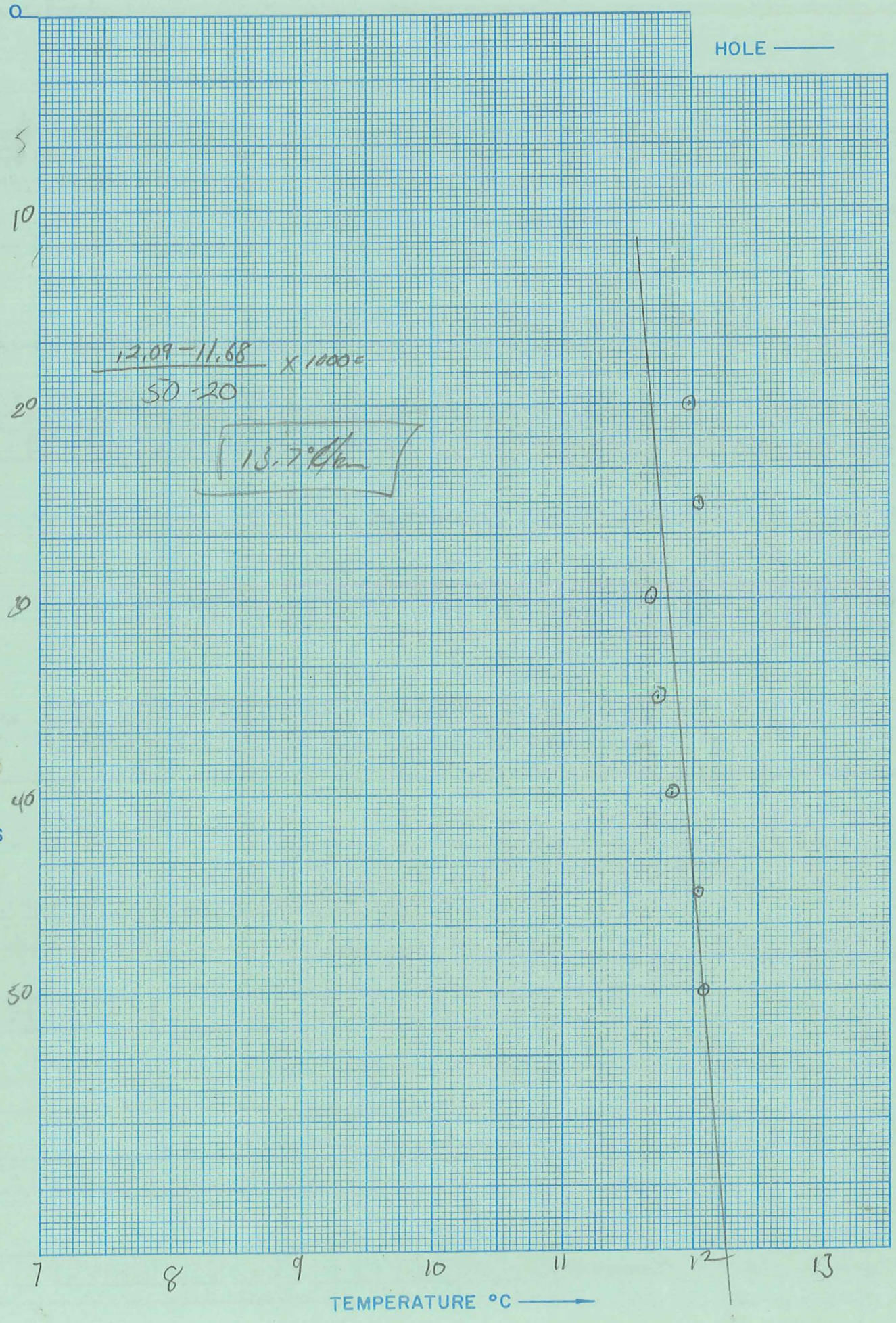
Segment 9

Segment 10 Start →

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	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80

After final segment Start = .999


HOLE
0
5
10
20
30
40
50
DEPTH METERS
7
8
9
10
11
12
13
TEMPERATURE °C
12.09 − 11.68 / 50 − 20 × 1000 =
13.7°C/km

Δ532

Date Logged: 7/26/78

ΔT Well No. WM A

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
							Qsl + BASALT NEARBY
						↑	
20		11.98					
25		12.03	.05	10		WATER	
30		11.68	-.35	-70			
35		11.73	.05	10		↓	
40		11.84	.11	22			
45		12.03	.19	38			
50		12.09	.06	12			

K=Conductivity

page _____ of _____

AMAX EXPLORATION, INC. K=5

TEMPERATURE/DEPTH LOG Q=5.3

105.7°c/km ✓

Δ533

ΔT Well No. B47 910

Property-Project 566 Depth Logged 160m

Map BURNS Scale AMS Date: Drilled _____ Logged 7/26/78

State OR County LAKE, ____ of ____ of SW of NE of Sec 27 T 23S R 23E

Instrument DT 101 Operator MJ Elevation 4715 (ft m)

Comments ON OBSIDIAN ROAD - 2.0 MILES FROM US 20

Card A

RT JUSTIFY | Proj No | Well No | DA | MO | YR | * | Date Logged

1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
566		26	7	78	CM

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

Site Description	Operator	Editor	Drilled DA	MO	YR
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	61 62	63 64 65	66 67 68
	MJ				

(Approx. location, water well?, oil test?, etc.)

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
CM	60.	43.	000	119.	000

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
24.2	-30.2	4715.	F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
20.	160.	-5.0	-0.3

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999

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

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

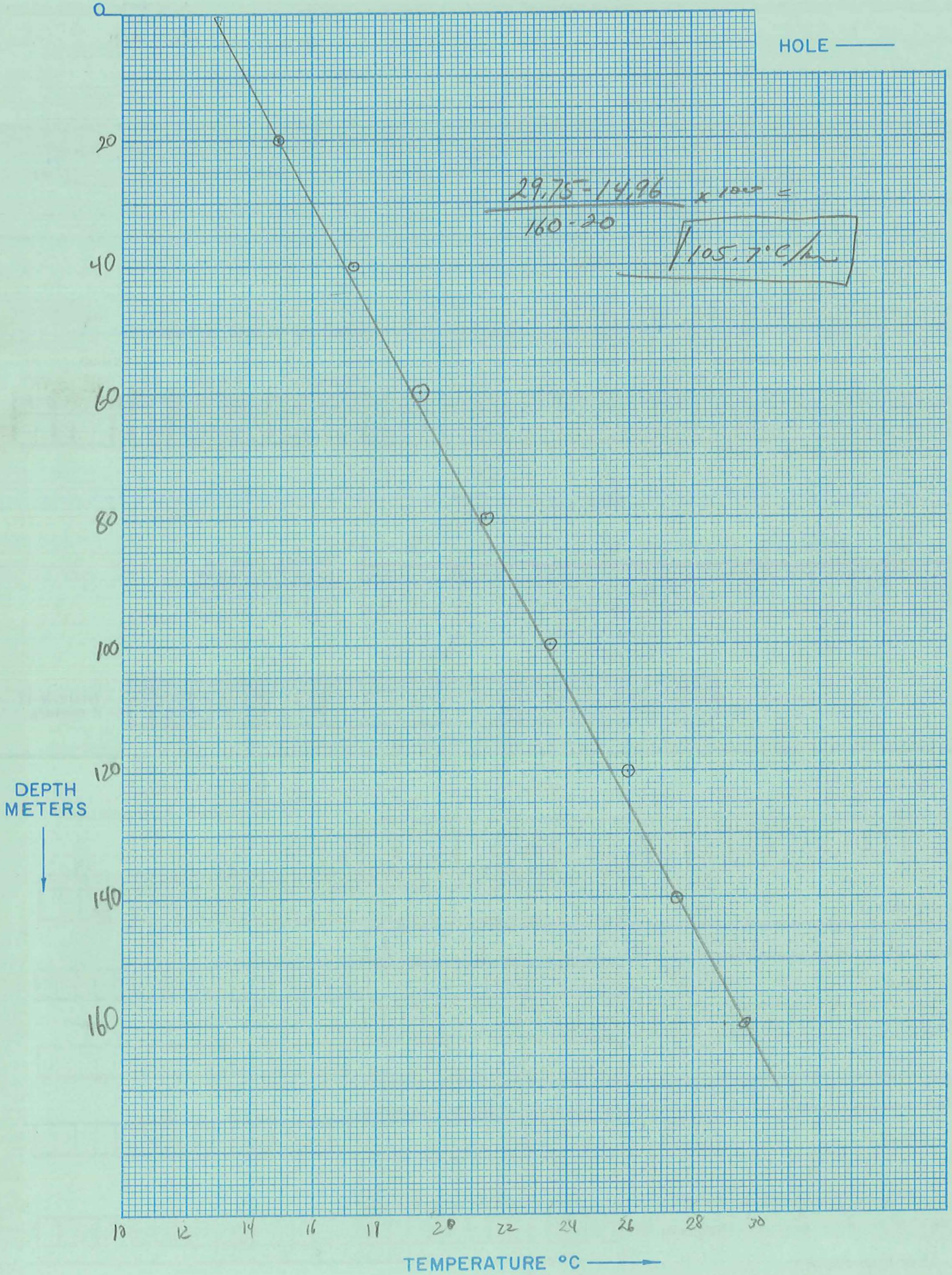
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start → 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

After final segment Start = .999


HOLE
0
20
40
60
80
100
120
140
160
DEPTH METERS
10
12
14
16
18
20
22
24
26
28
30
TEMPERATURE °C
29,75 - 14,96 / 160 - 20 × 100 =
105,7°C/km

R8F13

Δ533

Date Logged: 7/26/78

ΔT Well No. BLM 910

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
							Qal
20		14.96					
			2.33	116.5			
40		17.29					
			2.11	105.5			
60		19.40					
			2.01	100.5			
80		21.41					
			2.02	101.0			
100		23.43					
			2.52	126.0			
120		25.95					
			1.53	76.5			
140		27.48					
			2.27	112.5			
160		29.75					

K=Conductivity

AMAX EXPLORATION, INC. K3

TEMPERATURE/DEPTH LOG Q6.9

198°C/km * ✓

Δ534

ΔT Well No. NEAR US 20

Property-Project 566 Depth Logged 30 m

Map CRESCENT Scale AMS Date: Drilled ______ Logged 7/26/78

State OR County LAKE, ____ of ____ of ____ of SE of Sec 13 T 23 S R 21 E

Instrument DT 101 Operator MJ Elevation 4550 (ft/m)

Comments WELL 10 m NORTH OF OLD WM

Card A

Date Logged

RT JUSTIFY	Proj No (1–5)	Well No (6–10)	DA (11–12)	MO (13–14)	YR (15–18)	19	20
	566		26	7	78	C	M

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

Site Description (21–50)	Operator (51–55)	Editor (56–60)	Drilled DA (61–62)	MO (64–65)	YR (67–68)
	MJ				

(Approx. location, water well?, oil test?, etc.)

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	60.	43.	00.	121.	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
25.7	-127.6	4550.		F

Use decimals

Write M if ← if meters

Segment 1 = Depths

Start (21–30)	End (31–40)	Conductivity K (41–45)	ΔK (46–50)
20.	25.	-3.0	-0.5

Best cond. (-K)

Downward extrapolations (- ΔK)

Segment 2 Start → (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
.999			

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

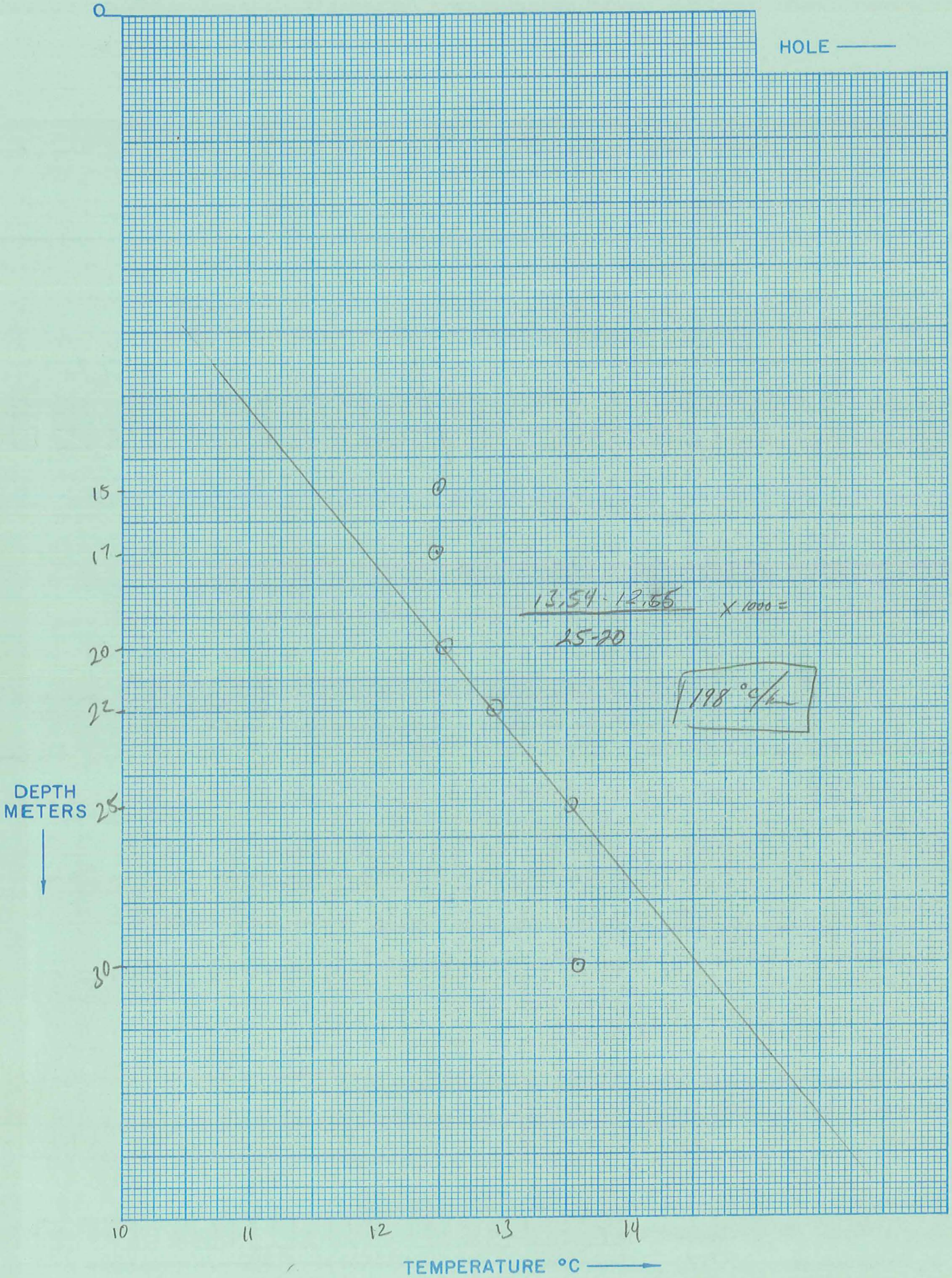
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


HOLE
0
15
17
20
22
25
30
DEPTH METERS
10
11
12
13
14
TEMPERATURE °C
13.54 - 12.65 / 25-20 x 1000 =
178 °c/km

Δ534

Date Logged: 7/26/78

ΔT Well No. NEAR US 20

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
							Qal
15		12.49					
			-.01	-5			
17		12.48					
			.07	23.3			
20		12.55					
			.37	185			
22		12.92					
			.62	206			
25		13.54					
			.05	10			
30		13.59					

K=Conductivity

page ____ of ____

32°C/Km

AMAX EXPLORATION, INC. K 3.5 Q 1.1

TEMPERATURE/DEPTH LOG

ΔT Well No. 535

Property-Project 566 Depth Logged 40M

Map BURNS AMS Scale 1:250,000 Date: Drilled _____ Logged 7-25-78

State ORE County HARNEY, ____ of ____ of ____ of NW of Sec 35 T 28S R 25E

Instrument DT 101 Operator M. GROSS Elevation 4500' (ft/m)

Comments Abnd Windmill

Card A

RT JUSTIFY	Proj No	Well No	DA	MO	YR	*
1 2 3 4	5 6 6		2 5	7	7 8	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
21 ... 50	51 52 53 54 55	56 57 58 59 60	61 62	63 64 65	66 67 68
	M G				

(Approx. location, water well?, oil test?, etc.)

Card B

Scale Unit IN CM	Map Size (7.5, 15., 60.)	Map Location ** 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	6 0 .	4 3 . 0	0 .	1 1 9 . 0	0 .

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

Use decimals

Northing	Easting	Elev	
51 ... 60	61 ... 70	71 ... 75	80
4 . 4	- 2 3 . 6	9 5 0 0 .	F

Write M if if meters

Use decimals

Segment 1 = Depths

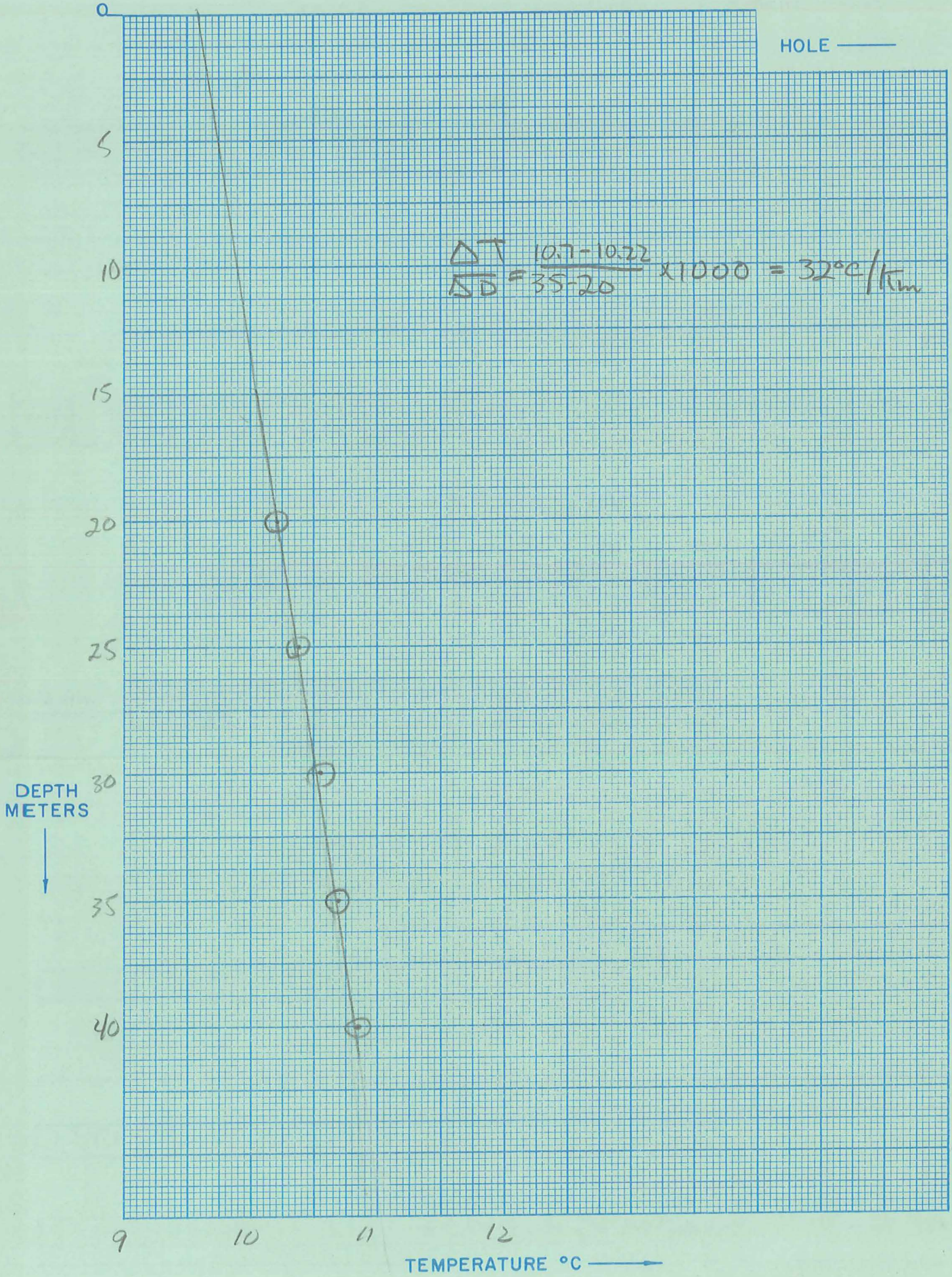
Start	End	Conductivity K	ΔK
21 ... 30	31 ... 40	41 ... 45	46 ... 50
2 0 . 0	4 0 . 0	- 3 . 5	- 0 . 5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment	Start	End	K	ΔK
Segment 2	. 9 9 9			
Segment 3				
Segment 4				
Segment 5				
Segment 6				
Segment 7				
Segment 8				
Segment 9				
Segment 10				

After final segment Start = .999


HOLE
0
5
10
15
20
25
30
35
40
DEPTH METERS
9
10
11
12
TEMPERATURE °C
$\frac{\Delta T}{\Delta D} = \frac{10.7 - 10.22}{35 - 20} \times 1000 = 32°C/km$

X

535

Date Logged: 7-25-78 ΔT Well No. ~~492~~

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						AIR	Qal
5							
10							
15							
20		10.22	.17	34			
25		10.39	.16	32			
30		10.55	.15	30			
35		10.70	.15	30			
40		10.85					

K=Conductivity

91°c/Km

AMAX EXPLORATION, INC. K5 Q46

TEMPERATURE/DEPTH LOG

X

ΔT Well No. 536

Property-Project 566 Depth Logged 60 M

Map BURNS AMS Scale 1:250,000 Date: Drilled ______ Logged 7-25-78

State ORE County HARNEY, ____ of ____ of ____ of ____ of Sec 35 T 26S R 25E

Instrument DT101 Operator M. Gross Elevation 4500 (ft/m)

Comments .5 mi S. of MP. 18, then 4.2 mi South on dirt Rd.

Card A

RT JUSTIFY

Proj No (1-5)	Well No (6-10)	Date Logged DA (11-12)	MO (13-16)	YR (17-18)	*19	20
566		25	7	78	C	M

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

Site Description (21-50)	Operator (51-55)	Editor (56-60)	Drilled DA (61-62)	MO (63-65)	YR (66-68)
	MG/				

(Approx. location, water well?, oil test?, etc.)

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	60.	43.	0.	119.	0.

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
9.4	-22.4	4500.		F

Use decimals

Write M if if meters

Segment 1 = Depths

Start (21-30)	End (31-40)	Conductivity K (41-45)	ΔK (46-50)
20.	60.	-5.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start (51-60)	End (61-70)	K (71-75)	ΔK (76-80)
.999			

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

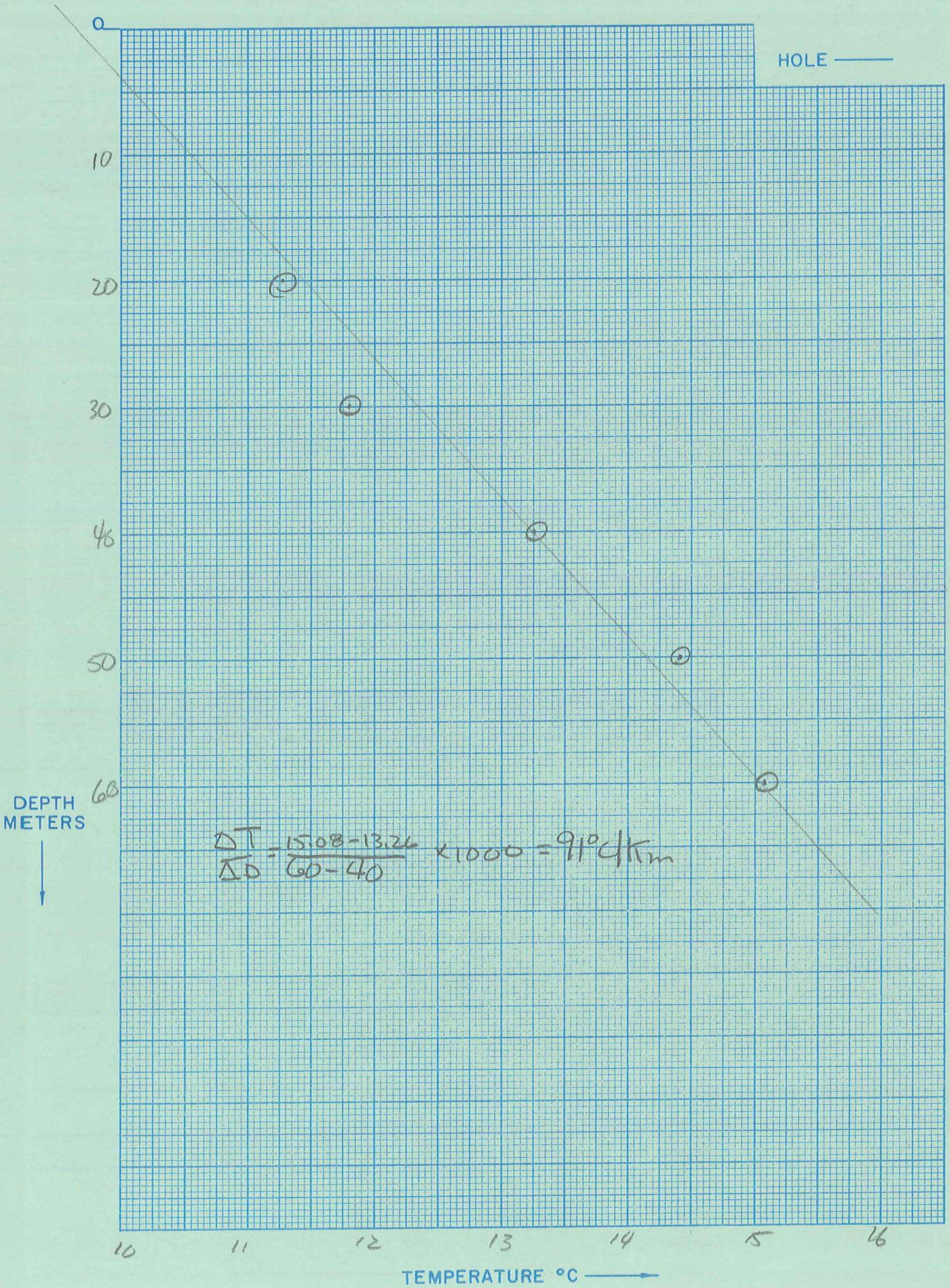
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


HOLE
0
10
20
30
40
50
60
DEPTH METERS
10
11
12
13
14
5
16
TEMPERATURE °C
$\frac{\Delta T}{\Delta D} = \frac{15.08 - 13.24}{60 - 40} \times 1000 = 91°C/km$

Date Logged: 7-25-78

ΔT Well No. 536

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						H_2O	INTERBEDS OF ASH &
10							RHYOLITIC
20		11.29					
30		11.80	.51	51			
40		13.26	1.46	146			
50		14.42	1.16	116			
60		15.08	.66	66			ΔT HOLE - 3/4" PVC

K=Conductivity

page ____ of ____

40°4Km

AMAX EXPLORATION, INC. K5Q2

TEMPERATURE/DEPTH LOG

ΔT Well No. 537

Property-Project 566 Depth Logged 42m

Map BURNS AMS Scale 1:250,000 Date: Drilled _____ Logged 7-25-78

State ORE County HARNEY, ____ of ____ of ____ of ____ of Sec 15 T26S R 25E

Instrument DT101 Operator M. GROSS Elevation 4400' (ft/m)

Comments DT GRADIENT HOLE - .5mi S of mile post 18 on 395, then .8m S on dirt Rd

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
566		25	7	78	C M

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

Site Description	Operator	Editor	Drilled: DA	MO	YR
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	61 62	63 64 65	66 67 68
	MG				

(Approx. location, water well?, oil test?, etc.)

Card B

Map Location * *

Scale Unit IN CM	Map Size (7.5, 15., 60.)	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	60.	43.	000.	119.	000.

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
14.0	-22.8	4400.	F

Use decimals ← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity: K	ΔK	Best cond. (-K) Downward extrapolations (-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	
27.	42.	-5.0	-0.5	

Segment 2 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
.999			

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

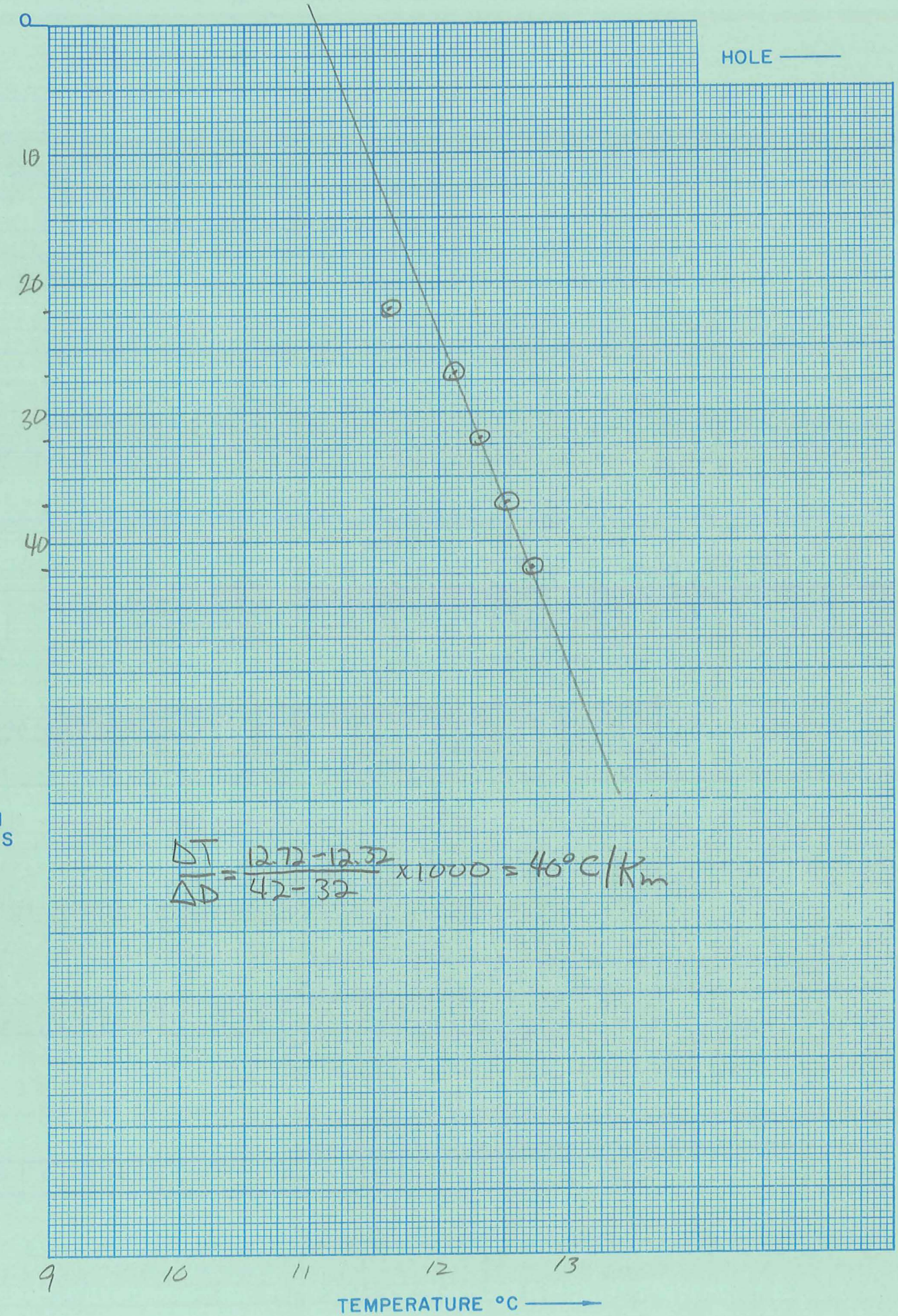
Segment 8 Start →

Segment 9

Segment 10 Start →

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

After final segment Start = .999


HOLE
0
10
20
30
40
DEPTH METERS
9
10
11
12
13
TEMPERATURE °C
$\frac{\Delta T}{\Delta D} = \frac{12.72 - 12.32}{42 - 32} \times 1000 = 46°C/Km$

Date Logged: 7-25-78 ΔT Well No. 537

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						H_2O	Ash + Pumice + Rhyolite
17							
22		11.62					
			.50	100			
27		12.12					
			.20	40			
32		12.32					
			.19	38			
37		12.51					
			.21	42			
42		12.72					
							ΔT HOLE

K=Conductivity

page ____ of ____

150°C/km

AMAX EXPLORATION, INC. K5.5Q8.5 MGRTF23

TEMPERATURE/DEPTH LOG

ΔT Well No. 538

Property-Project 566 Depth Logged 32.5m

Map BURNS AMS Scale _____ Date: Drilled _____ Logged 7-25-78

State ORE County HARNEY, ____ of ____ of ____ of ____ of Sec 26 T 27S R 26E

Instrument DT101 Operator M. GROSS Elevation 4900' (ft m)

Comments ΔT HOLE

Card A

RT JUSTIFY — Date Logged

Proj No	Well No	DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
566		25	7	78	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
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	61 62	63 64 65	66 67 68
	MG				

(Approx. location, water well?, oil test?, etc.)

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	60.	43.	0.	119.	0.

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
89	−18.5	4900.	F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity K	Conductivity 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
22.5	32.5		

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 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)

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

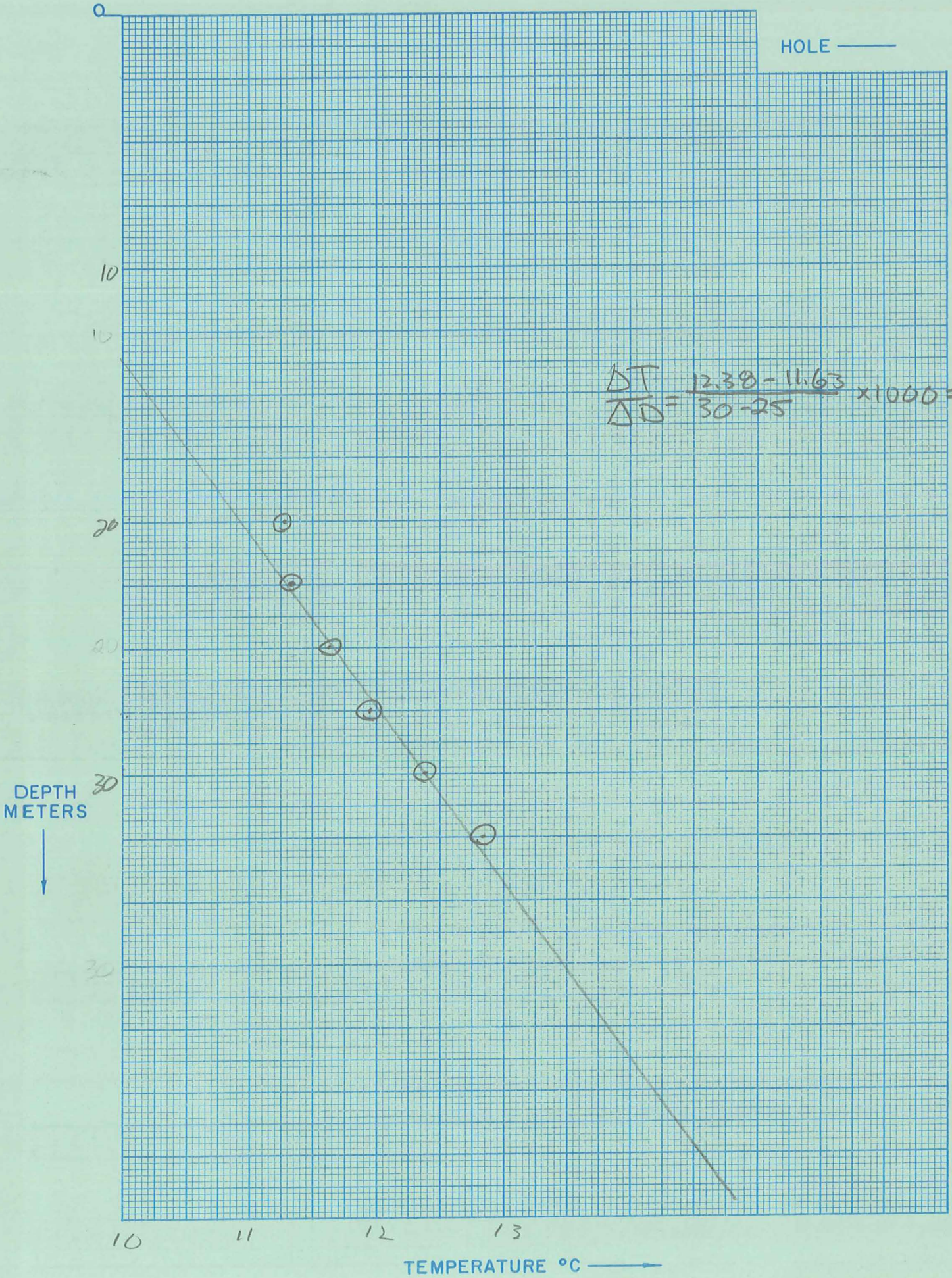
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start → (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)

After final segment Start = .999


HOLE
0
10
20
30
DEPTH METERS
10
11
12
13
TEMPERATURE °C
$\frac{\Delta T}{\Delta D} = \frac{12.38 - 11.63}{30 - 25} \times 1000 = 150\,°C/km$

MGR7F23

Date Logged: 7.25.78

ΔT Well No. 538

FLAT ΔT

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						H_2O	Rhyolite - very vesicular
17.5							
20		11.29					
22.5		11.35	.06	24			
25		11.63	.28	112			
27.5		11.96	.33	132			
30		12.38	.42	168			
32.5		12.84	.46	184			ΔT GRADIENT HOLE

K=Conductivity

86°C/km

AMAX EXPLORATION, INC. K 4Q 3,4 X

TEMPERATURE/DEPTH LOG

ΔT Well No. 539

Property-Project 566 Depth Logged 60M

Map BURNS AMS Scale _____ Date: Drilled _____ Logged 7-25-78

State ORE County HARNEY , ____ of ____ of ____ of SE. of Sec 20 T 27S R 27E

Instrument DT 107 Operator M. GROSS Elevation 4700' (ft/m)

Comments ΔT GRADIENT HOLE - Belongs to Phillips

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
566		25	7	78	C M

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

Site Description | Operator | Editor | Drilled: DA | MO | YR

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	61 62	63 64 65	66 67 68
				MG	/			

(Approx. location, water well?, oil test?, etc.)

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
cm	.	43.	0.	119.	0.

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
9.4	16.1	4700.	F

Use decimals

← Write M if if meters

Segment 1 = Depths: Start | End | Conductivity: K | ΔK

Best cond. (-K)

Downward extrapolations (-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
20.		60.		-4.0	-0.5

Segment 2 Start → .999 | 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
.999					

Segment 3 Start →

Segment 4 Start →

Segment 5

Segment 6 Start →

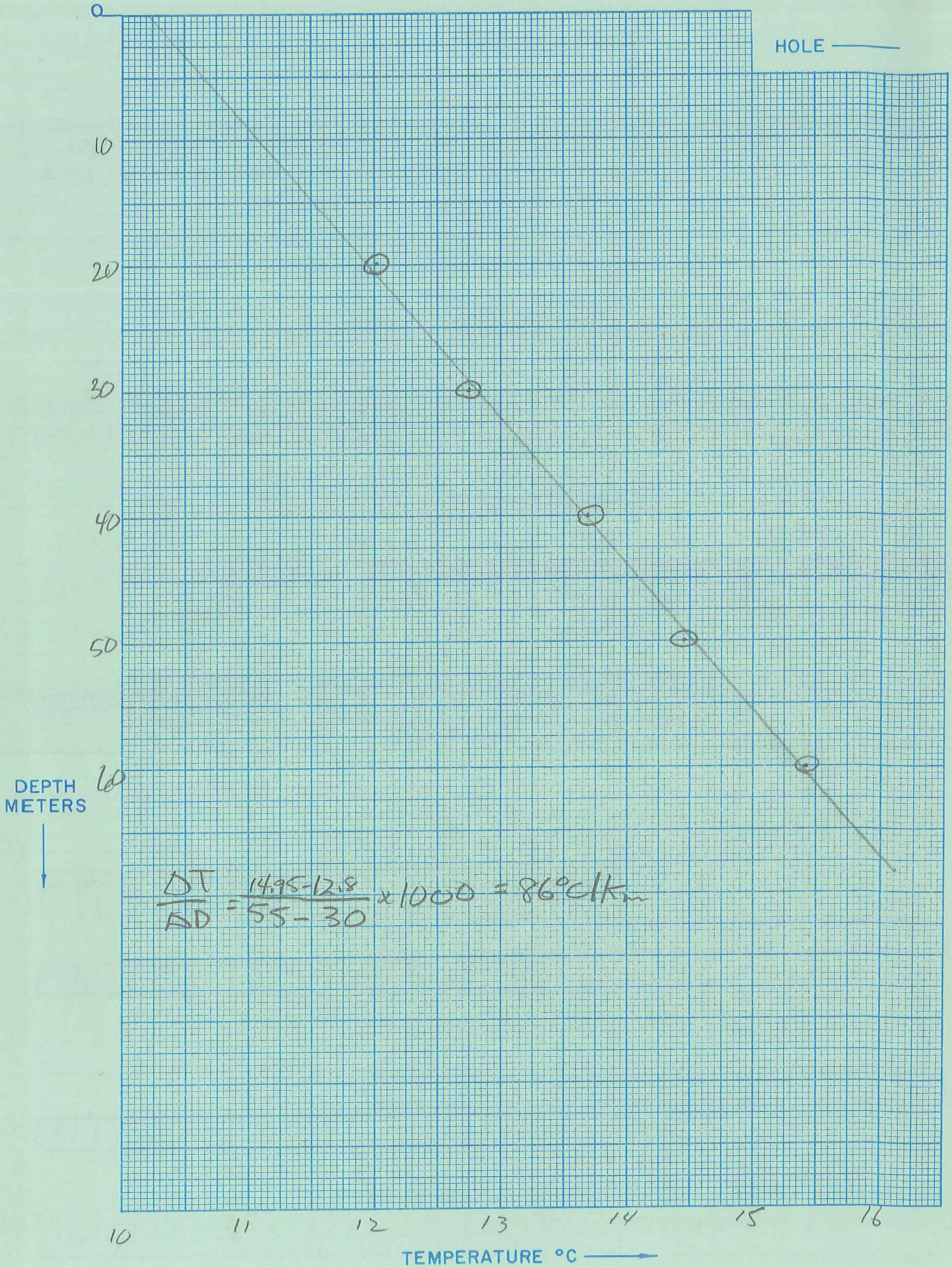
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


HOLE
0
10
20
30
40
50
60
DEPTH METERS
$\frac{\Delta T}{\Delta D} = \frac{14.95-12.8}{55-30} \times 1000 = 86°C/km$
10
11
12
13
14
15
16
TEMPERATURE °C

Date Logged: 7-25-78

ΔT Well No. 539

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						H_2O	Qal at surface
20		12.01	.74	74			Rhyolite at Depth
30		12.75	.95	95			
40		13.70	.76	76			
50		14.46	.97	97			
60		15.43					

K=Conductivity

AMAX EXPLORATION, INC. K 5.5 Q.3 5.62 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 540

Property-Project 566 Depth Logged 33 m

Map Cline Falls Scale 7.5' Date: Drilled ______ Logged 7/24/78 930

State Oregon County Deschutes, ____ of ____ of SW of NE of Sec 4 T 14S R 12E

Instrument DT 101 Operator (D) A. Malco Elevation 2865 (ft) (m)

Comments Abandoned well

Card A

RT JUSTIFY

Proj No (1–4)	Well No (5–10)	Date Logged DA (11–12)	MO (13–16)	YR (17–18)	* 19	20
566	540	24	7	78	C	M

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

Site Description (21–50)	Operator (51–55)	Editor (56–60)	Drilled DA (61–62)	MO (63–65)	YR (66–68)
	DAM				

(Approx. location, water well?, oil test?, etc.)

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	44.	15.	121.	22.5

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
22.70	26.30	2865.		F

Use decimals

80 ← Write M if if meters

Segment 1 = Depths

Start (21–30)	End (31–40)	Conductivity K (41–45)	ΔK (46–50)
23.	33.	-5.5	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start (51–60)	End (61–70)	K (71–75)	ΔK (76–80)
.999			

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

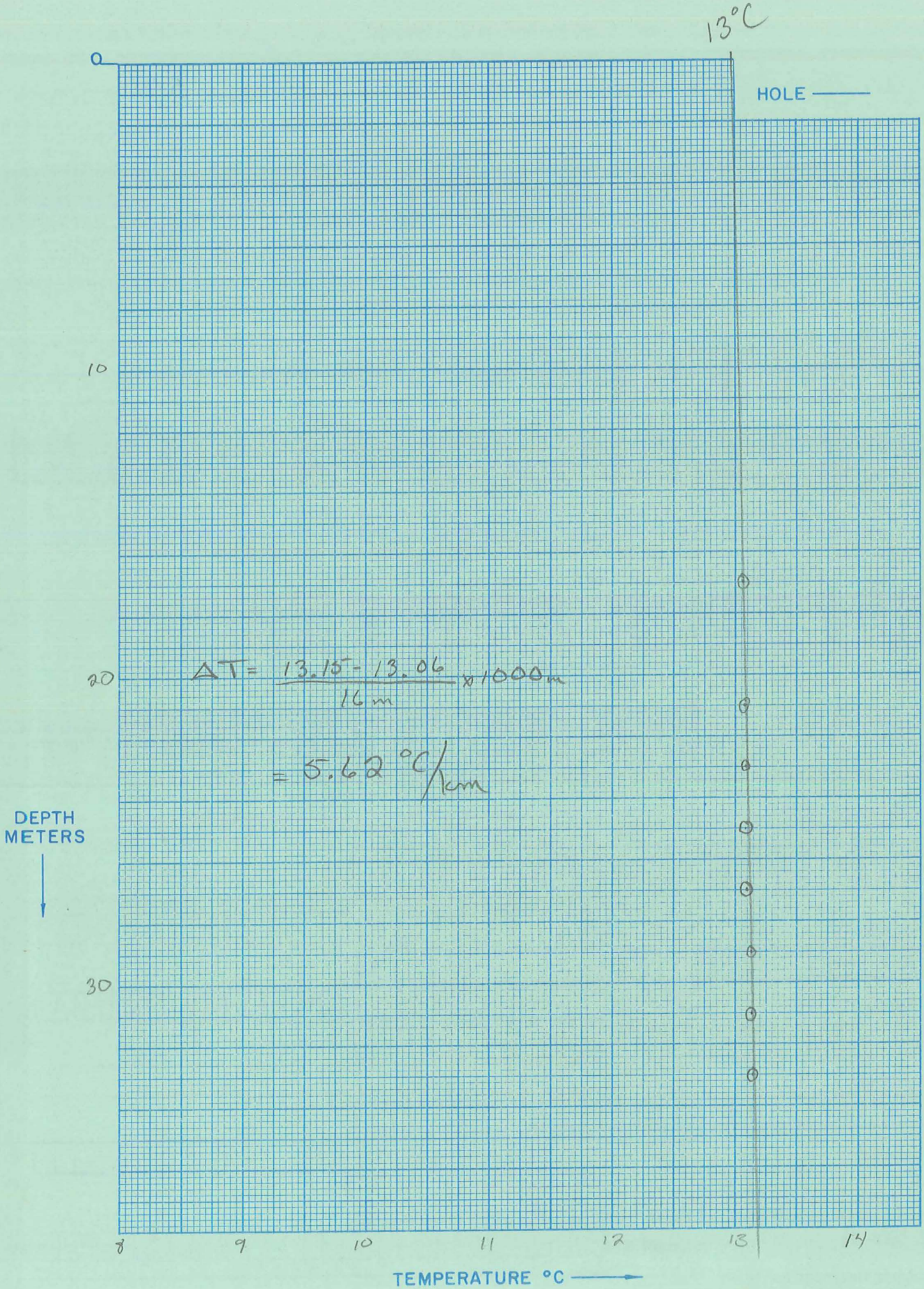
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


13°C
0
HOLE
10
20
30
$\Delta T = \frac{13.15 - 13.06}{16\,m} \times 1000\,m$
$= 5.62\ °C/km$
DEPTH METERS
8
9
10
11
12
13
14
TEMPERATURE °C

Date Logged: 7/24/78 930

ΔT Well No. 540

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
17		13.06				Air	Basalt
			0.02	5			
21		13.08					
			0.00	0			
23		13.08					
			0.00	0			
25		13.08					
			0.01	5			
27		13.09					
			0.04	20			
29		13.13					
			0.01	5			
31		13.14					
			0.01	5			
33		13.15				Air	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q1.6 26.25 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 541

Property-Project 566 Depth Logged 25 m

Map Squaw Back Ridge Scale 7.5' Date: Drilled _____ Logged 7/24/78 1400

State Oregon County Jefferson, ____ of ____ of SW of NW of Sec 17 T 13S R 11E

Instrument DT 101 Operator D.S. Mabe Elevation 3000 (ft) (m)

Comments abandoned well with Jensen Jack

Date Logged

RT JUSTIFY

Card A

Proj No	Well No	DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20
STG	541	24	7	78	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
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	61 62	63 64 65	66 67 68
	DAM				

(Approx. location, water well?, oil test?, etc.)

Map Location * *

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	7.5	44.	22.5	121.	30.	

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
32.2	16.60	3000.	F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
17.	25.	-6.	-.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 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
	.999		

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

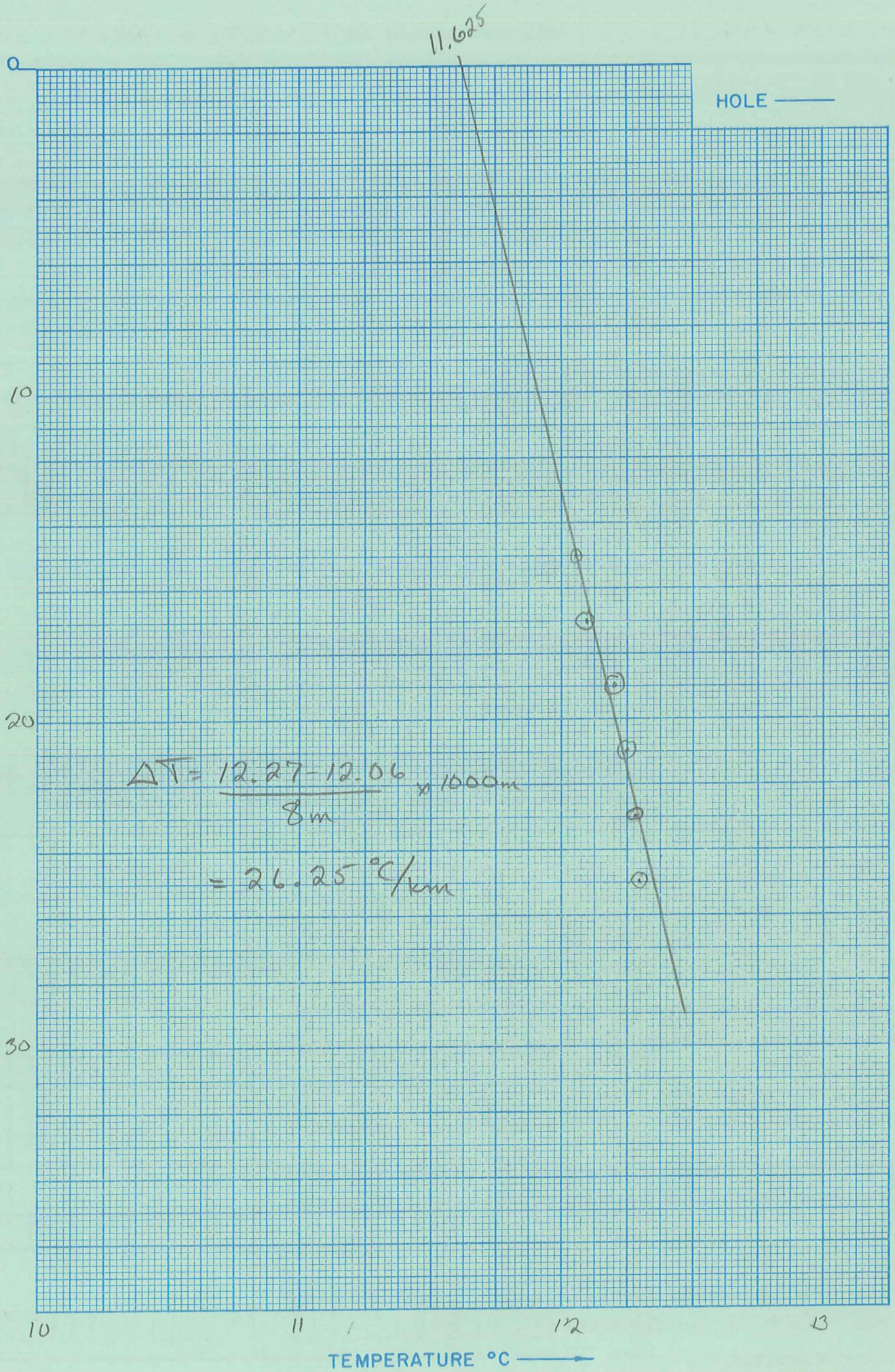
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


11.625
HOLE
0
10
20
30
DEPTH METERS
ΔT = 12.27 - 12.06 / 8m × 1000m
= 26.25 °C/km
10
11
12
13
TEMPERATURE °C

Date Logged: 7/24/78

ΔT Well No. 541

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						H_2O	vesicular basalt
15		12.06					
17		12.10	0.04	20			
19		12.20	0.10	50			
21		12.25	0.05	25			
23		12.27	0.02	10			
25		12.29	0.02	10		H_2O	

K=Conductivity

AMAX EXPLORATION, INC. K6Q28 46.67 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 542

Property-Project 566 Depth Logged 42 m

Map Opal City Scale 7.5 Date: Drilled _____ Logged 7/25/78 900

State Oregon County Jefferson, ____ of SW of SW of SW of Sec 10 T 13S R 13E

Instrument DT 101 Operator D. Mako Elevation 3040 (FT) (m)

Comments abandoned well

Card A

RT JUSTIFY | Proj No | Well No | Date Logged: DA | MO | YR | * | *19-Write F if Fahrenheit, 20-Write F if Feet

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

Site Description | Operator | Editor | Drilled: DA | MO | YR

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	61	62	63	64	65	66	67	68

(Approx. location, water well?, oil test?, etc.)

Card B

Map Location * *: Scale Unit IN CM | Map Size (7.5, 15., 60.) | 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			4	4	.		2	2	.	5		1	2	1	.		1	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	4	.	3	0						2	7	.	4	5	3	0	4	0	.					F

← Write M if if meters

Use decimals

Segment 1 = Depths: Start | End | Conductivity: K | ΔK

Best cond. (-K)

Downward extrapolations (-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
			1	8	.						4	2	.							−	6	.			−	0	.	5		

Segment 2 Start → .999 | 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
	.	9	9	9																									

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

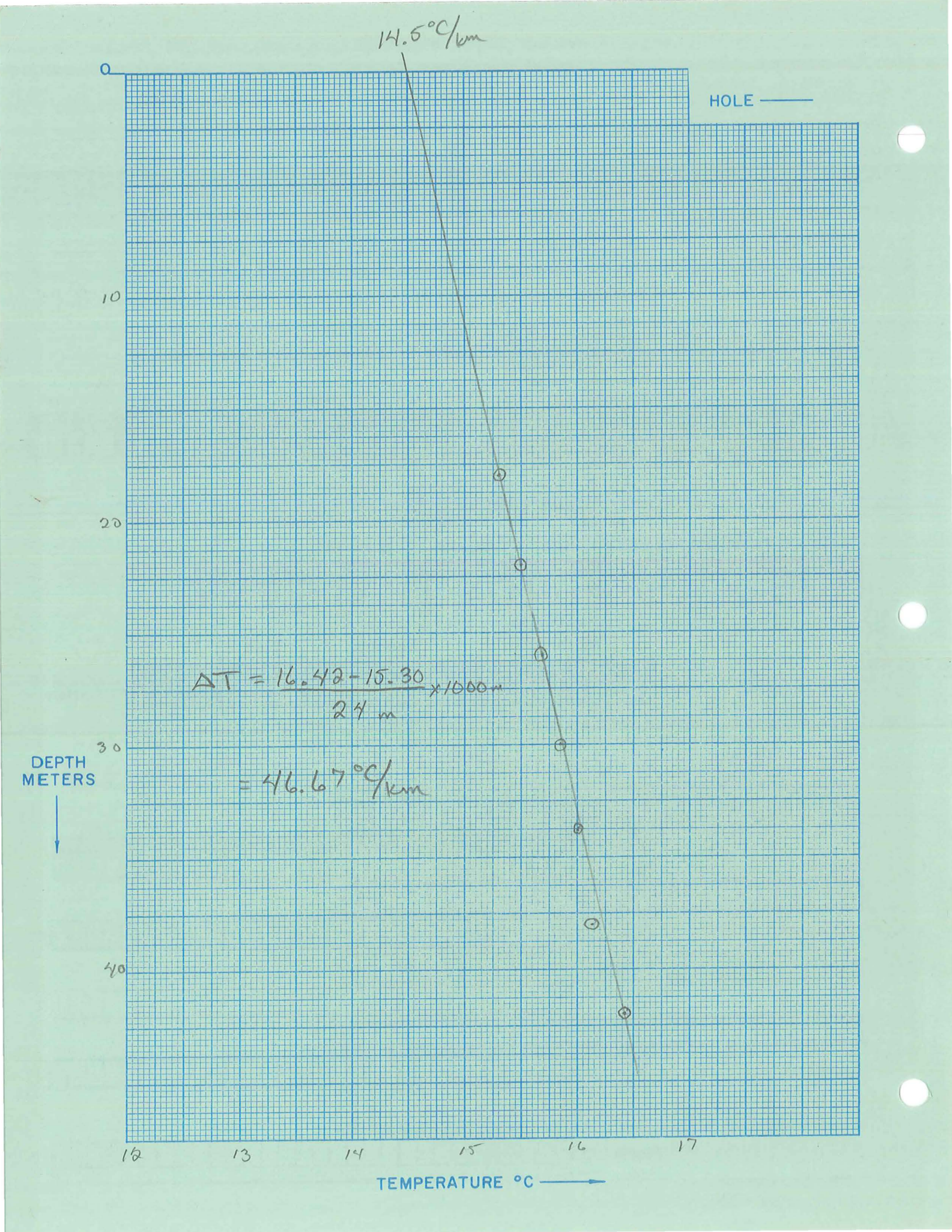
Segment 8 Start →

Segment 9

Segment 10 Start →

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

After final segment Start = .999


14.5°C/km
HOLE
0
10
20
30
40
DEPTH METERS
ΔT = 16.42 - 15.30 / 24 m x 1000 m
= 46.67 °C/km
12
13
14
15
16
17
TEMPERATURE °C

Date Logged: 7/25/78

ΔT Well No. 542

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
18		15.30				Air	basalt
			0.20	50			
22		15.50				|	
			0.19	47.5		|	
26		15.69				|	
			0.16	40		|	
30		15.85				Air	
			0.16	40		H_2O	
34		16.01					
			0.13	32.5		|	
38		16.14				|	
			0.28	70		|	
42		16.42				H_2O	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q1.1 18.33 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 543

Property-Project 566 Depth Logged 42m

Map Gray Butte Scale 7.5 Date: Drilled _____ Logged _____

State Oregon County Jefferson, ____ of ____ of NW of NE of Sec 31 T 12S R 14E

Instrument DT101 Operator D.A. Mabee Elevation 3280 (ft/m)

Comments abandoned well on flank of hill

Card A

RT JUSTIFY

Proj No	Well No	DA	MO	YR	*
566	543	25	7	78	CM

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
	DAM				

(Approx. location, water well?, oil test?, etc.)

Card B

Scale Unit IN CM	Map Size (7.5, 15., 60.)	Map Location ** N Lat Degree	N Lat Min	W Long Degree	W Long Min **
cm	7.5	44.	22.5	121.	7.5

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

Use decimals

Northing	Easting	Elev	
53.66	9.5	3280.	F

← Write M if if meters

Use decimals

Segment 1 = Depths

Start	End	Conductivity K	ΔK
18.	42.	-6.0	-.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999 (End, K, ΔK)

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

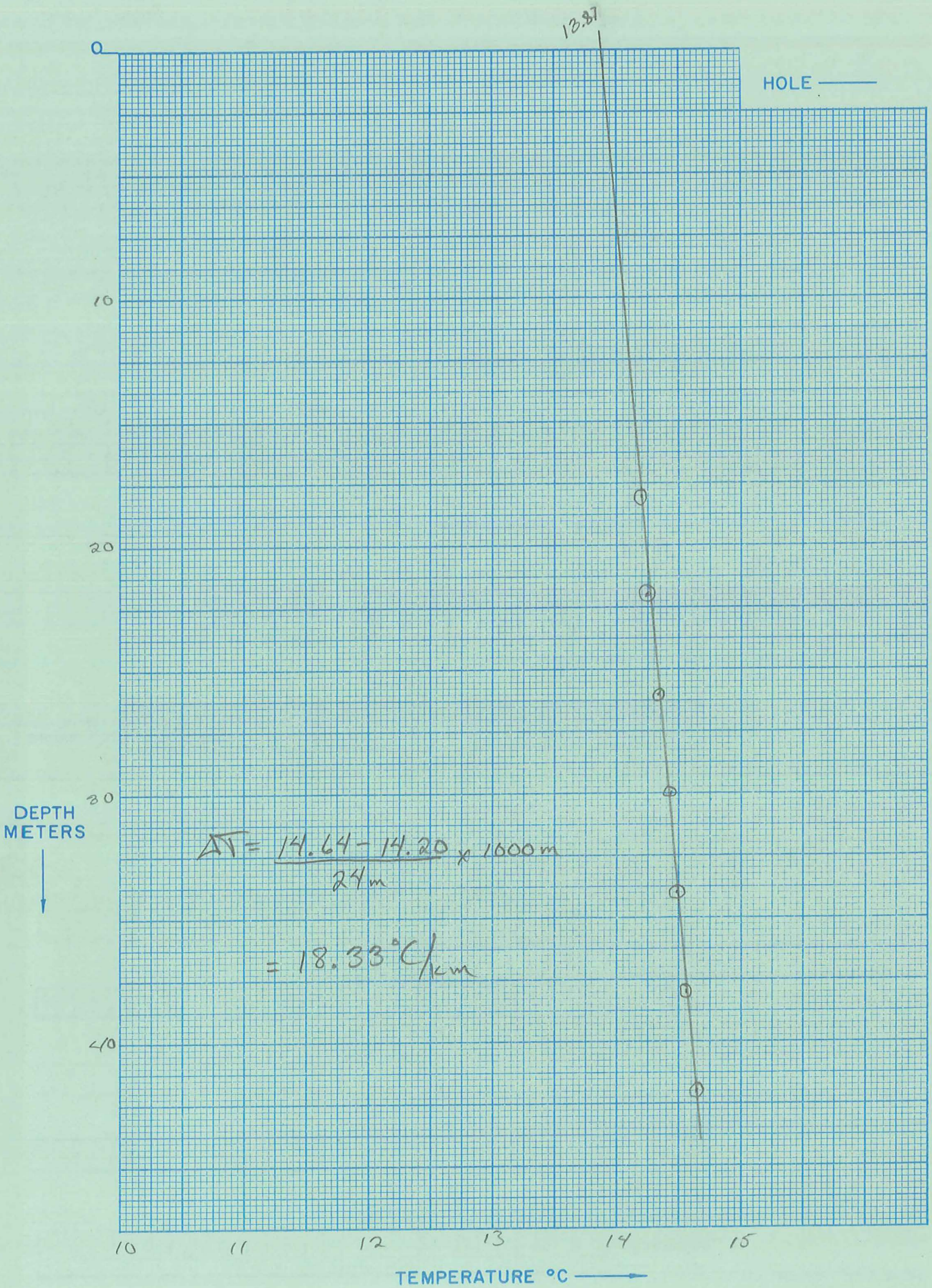
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


13.87
HOLE
0
10
20
30
40
DEPTH METERS
10
11
12
13
14
15
TEMPERATURE °C
$\Delta T = \frac{14.64 - 14.20}{24\,m} \times 1000\,m$
$= 18.33\,^{\circ}C/km$

Date Logged: 7/25/78 1030

ΔT Well No. 543

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
18		14.20				H_2O	Basalt
			0.05	12.5			
22		14.25					
			0.08	20			
26		14.33					
			0.11	27.5			
30		14.44					
			0.05	12.5			
34		14.49					
			0.07	17.5			
38		14.56					
			0.08	20			
42		14.64				H_2O	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q2.3 38.67°C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 544

Property-Project 566 Depth Logged 45 m

Map Gray Butte Scale 7.5 Date: Drilled _____ Logged 7/25/78 1100

State Oregon County Jefferson, ____ of ____ of SE of NE of Sec 15 T 13S R 14E

Instrument DT 101 Operator D A. Mako Elevation 3205 (ft) (m)

Comments abandoned well on top of low hill

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
		5	6	6			5	4	4	2	5		7			7	8	C	M

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

Site Description | Operator | Editor | Drilled: DA | MO | YR

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	61	62	63	64	65	66	67	68
																																D	H	M															

(Approx. location, water well?, oil test?, etc.)

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			4	4	.		2	2	.	5		1	2	1	.			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
					3	0	.	7	0						3	0	.	4	5	3	2	0	5	.					F

Write M if if meters

Use decimals

Segment 1 = Depths: Start | End | Conductivity: K | ΔK

Best cond. (-K)

Downward extrapolations (-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
			1	5	.	0					4	5	.	0						-	6	.	0		-	0	.	5

Segment 2 Start → .999 | 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
	.	9	9	9																									

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

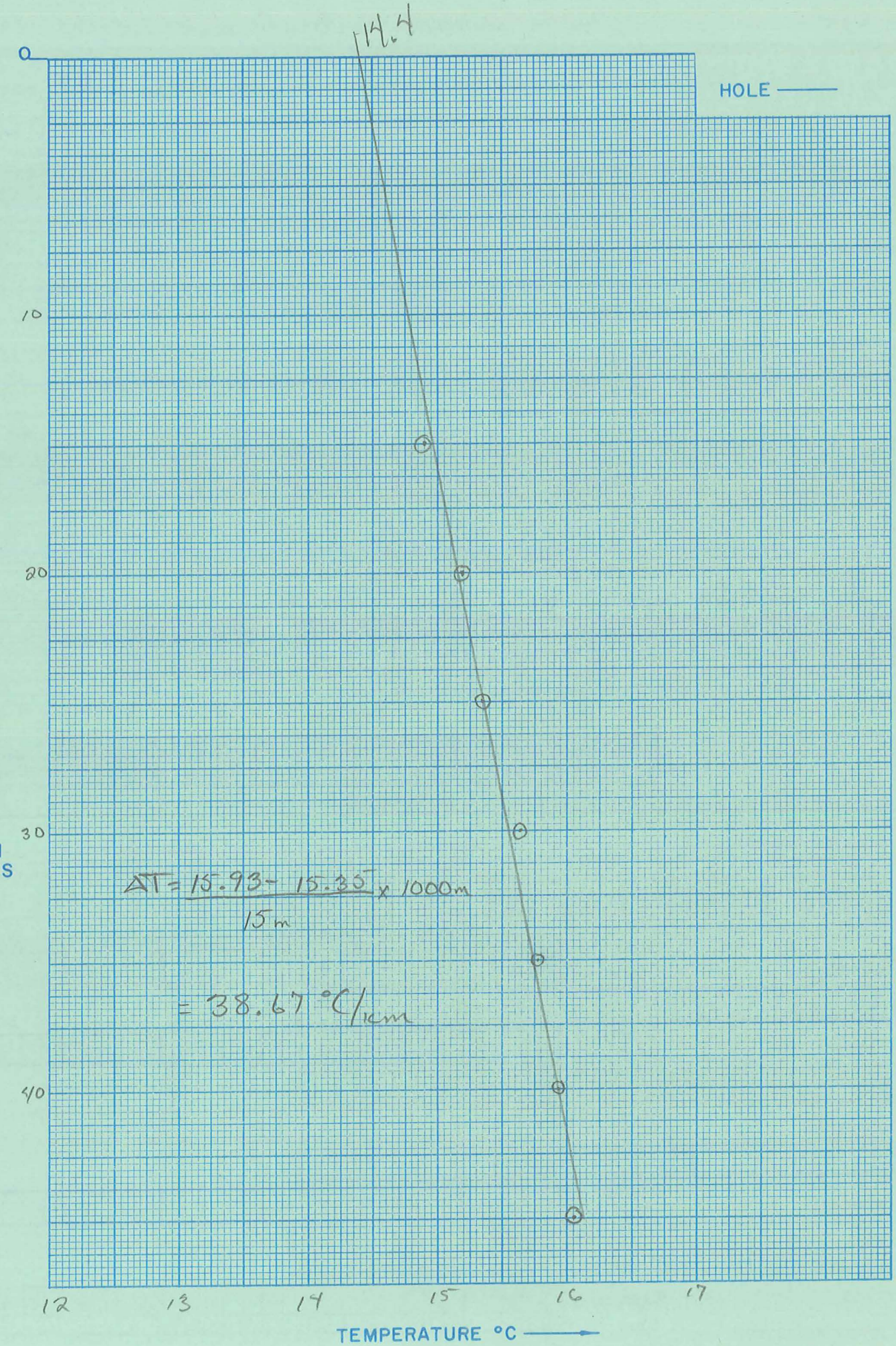
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


14.4
0
HOLE
10
20
30
40
DEPTH METERS
ΔT = 15.93 - 15.35 / 15m x 1000m
= 38.67 °C/km
12
13
14
15
16
17
TEMPERATURE °C

Date Logged: 7/25/78 1100

ΔT Well No. 544

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
15		14.90				Air	basalt
			0.28	56			
20		15.18					
			0.17	34			
25		15.35					
			0.29	58			
30		15.64				Air	
			0.14	28			
35		15.78				H_2O	
			0.15	30			
40		15.93					
			0.12	24			
45		16.05				H_2O	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q.5 9.11 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 545

Property-Project 566 Depth Logged 100 m

Map Kelsey Butte Scale 7.5' Date: Drilled _____ Logged 7/26/76 830

State Oregon County Deschutes, ___ of ___ of SE of NE of Sec 26 T 18S R 12E

Instrument DT 101 Operator D A Mueller Elevation 3908 (ft) (m)

Comments abandoned well in front yard of house on knoll
12" casing

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	
	5 6 6	5 4 5	2 6	7	7 8	C M

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

Site Description	Operator	Editor	Drilled DA	MO	YR
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	61 62	63 64 65	66 67 68
	D A M				

(Approx. location, water well?, oil test?, etc.)

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	4 3 .	5 2 . 5	1 2 1 .	1 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
5 2 . 0	1 . 0 5	3 9 0 8 .	F

Use decimals ← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity K	ΔK	Best cond. (-K) Downward extrapolations (-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	
5 5 . 0	1 0 0 .	- 6 . 0	- 0 . 5	

Segment 2 Start → .999 (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)

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

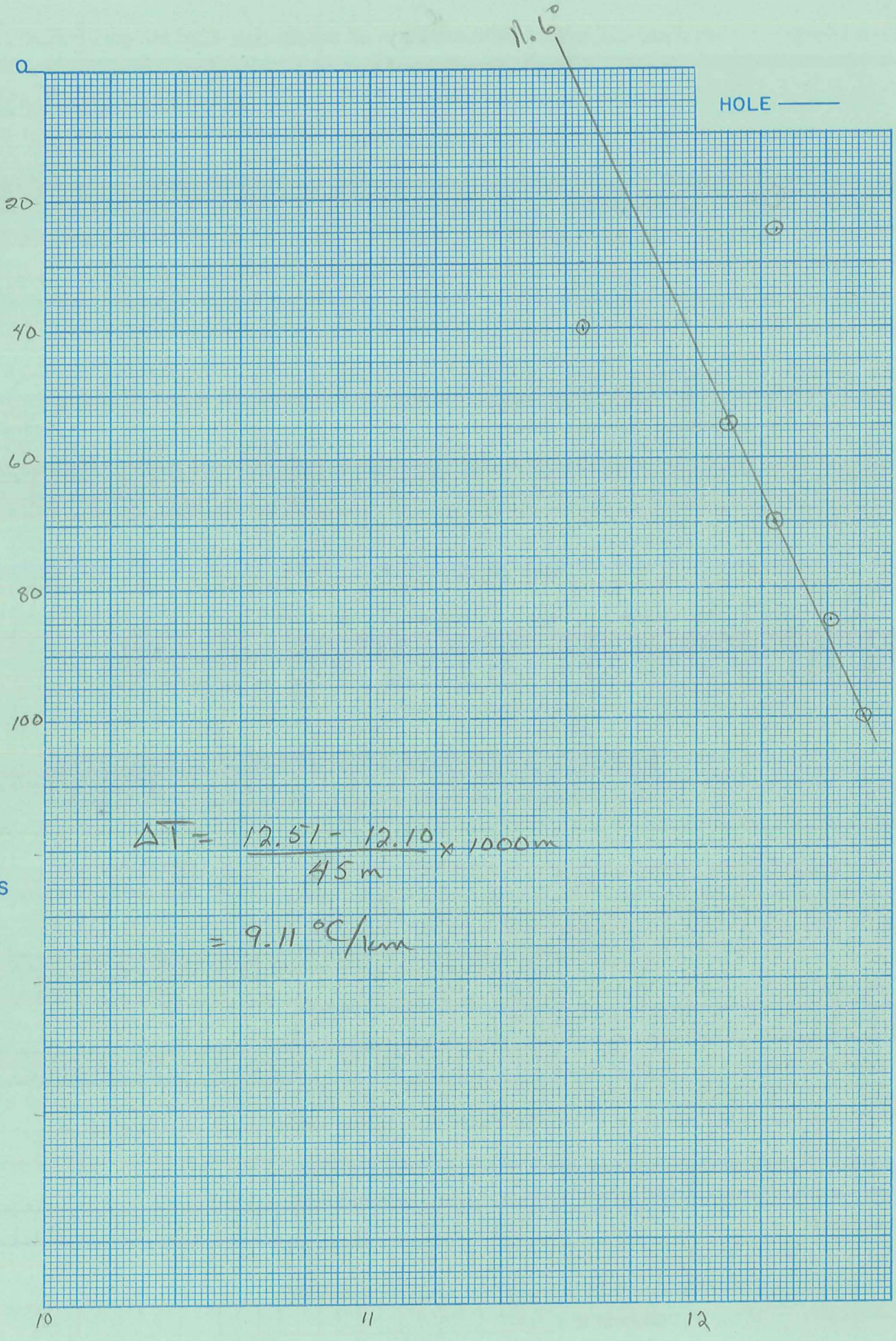
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start → 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

After final segment Start = .999



$$\Delta T = \frac{12.51 - 12.10}{45\ m} \times 1000\ m$$

$$= 9.11\ ^{\circ}C/km$$

Date Logged: 7/26/78 830

ΔT Well No. 545

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
100		12.51				Air	basalt (vesicular)
			0.10	6.67			
85		12.41					
			0.13	8.67			
70		12.24					
			0.14	9.33			
55		12.10					
			0.45	30.0			
40		11.65					
			-0.60	-40			
25		12.25				Air	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q.1 1.71°C/10m ☆

TEMPERATURE/DEPTH LOG

ΔT Well No. 546

Property-Project 566 Depth Logged 60 m

Map Evans Well Scale 7.5 Date: Drilled _____ Logged 7/26/78 1100

State Oregon County Deschutes, ___ of ___ of SE of NE of Sec 2 T 20S R 14E

Instrument DT 101 Operator D.A. Mabe Elevation 4279 (ft) (m)

Comments abandoned well - air blowing out of casing
Smith Well

Card A

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

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
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	61 62	63 64 65	66 67 68
	D A M				

(Approx. location, water well?, oil test?, etc.)

Card B

Scale Unit IN CM	Map Size (7.5, 15., 60.)	Map Location ** 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	4 3.	4 5.0	1 2 1.	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
5 9. 3 8	3 8. 3 5	4 2 7 9.	F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity K	Conductivity 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
2 5.	6 0.	-6.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999

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

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

Segment 8 Start →

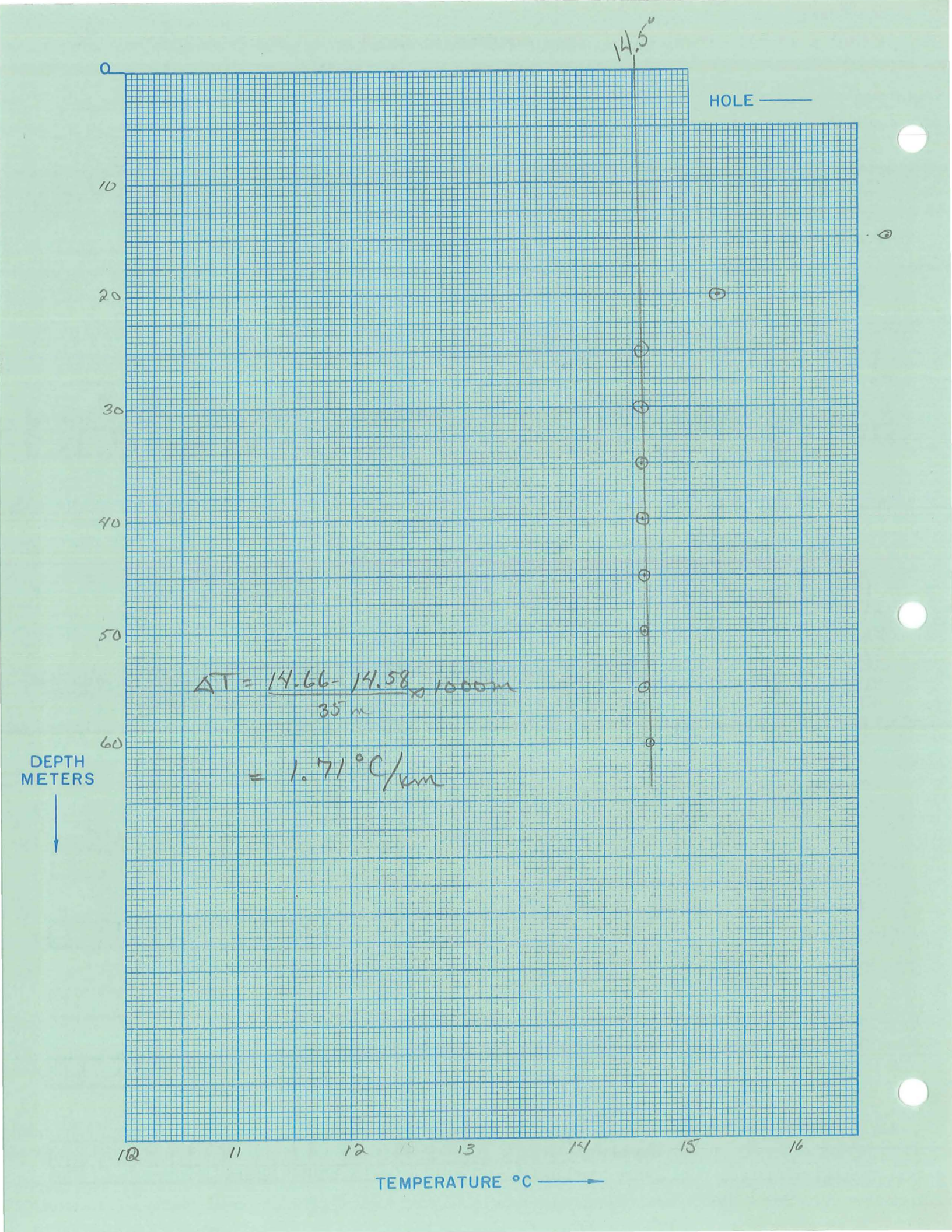
Segment 9

Segment 10 Start →

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	61 62 63 64 65 66 67 68 69 70	71 72 73 74 75	76 77 78 79 80

After final segment Start = .999


14.5°
HOLE
0
10
20
30
40
50
60
DEPTH METERS
ΔT = 14.66 - 14.58 / 35 m × 1000m
= 1.71 °C/km
10
11
12
13
14
15
16
TEMPERATURE °C

Date Logged: 7/26/78 1100 ΔT Well No. 546

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
20		15.25				Air	Basalt
			-0.64	-134			
25		14.58					
			0	0			
30		14.58					
			0	0			
35		14.58					
			0.00	0			
40		14.58					
			0.02	4			
45		14.60					
			0	0			
50		14.60					
			0.01	2			
55		14.61					
			0.05	10			
60		14.66				Air	
15		16.80					
			-1.65	-330			
20		15.25					
							NB. air blowing out of casing is most likely explanation for low gradient (aside from the area being cold)

K=Conductivity

AMAX EXPLORATION, INC. K6Q1.8 30°C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 547

Property-Project 566 Depth Logged 60 m

Map Horse Ridge Scale 7.5 Date: Drilled _____ Logged 7/26/78 1230

State Oregon County Deschutes, ____ of NW of NE of NE of Sec 27 T 19S R 14E

Instrument DT 101 Operator P.A. Mako Elevation 4223 (ft) (m)

Comments Dyer Well - abandoned

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
5 6 6	5 4 7	2 6	7	7 8	C M

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

Site Description (21–50)	Operator (51–55)	Editor (56–60)	Drilled DA (61–62)	Drilled MO (63–64)	Drilled YR (65–66)	(67–68)
	D A M					

(Approx. location, water well?, oil test?, etc.)

Card B

Scale Unit IN CM (21–22)	Map Size (7.5, 15., 60.) (23–25)	Map Location ** N Lat Degree (26–27)	N Lat Min (28–30)	W Long Degree (31–33)	W Long Min (34–35)	** (36)
C M	7.5	43.	52.5	121.	7.5	

Use decimals

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

Northing (37–42)	Easting (43–48)	Elev (49–53)	(54–78)	(79)	(80)
13.27	31.0	4223.			F

Use decimals

Write M if if meters

Segment 1 = Depths

Start (21–30)	End (31–40)	Conductivity K (41–45)	ΔK (46–50)
20.	50.	-6.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999 | End (51–65) | (66–70) | K (71–75) | ΔK (76–80)

Segment 3 Start → | (21–50)

Segment 4 Start → | (51–80)

Segment 5 | (21–50)

Segment 6 Start → | (51–80)

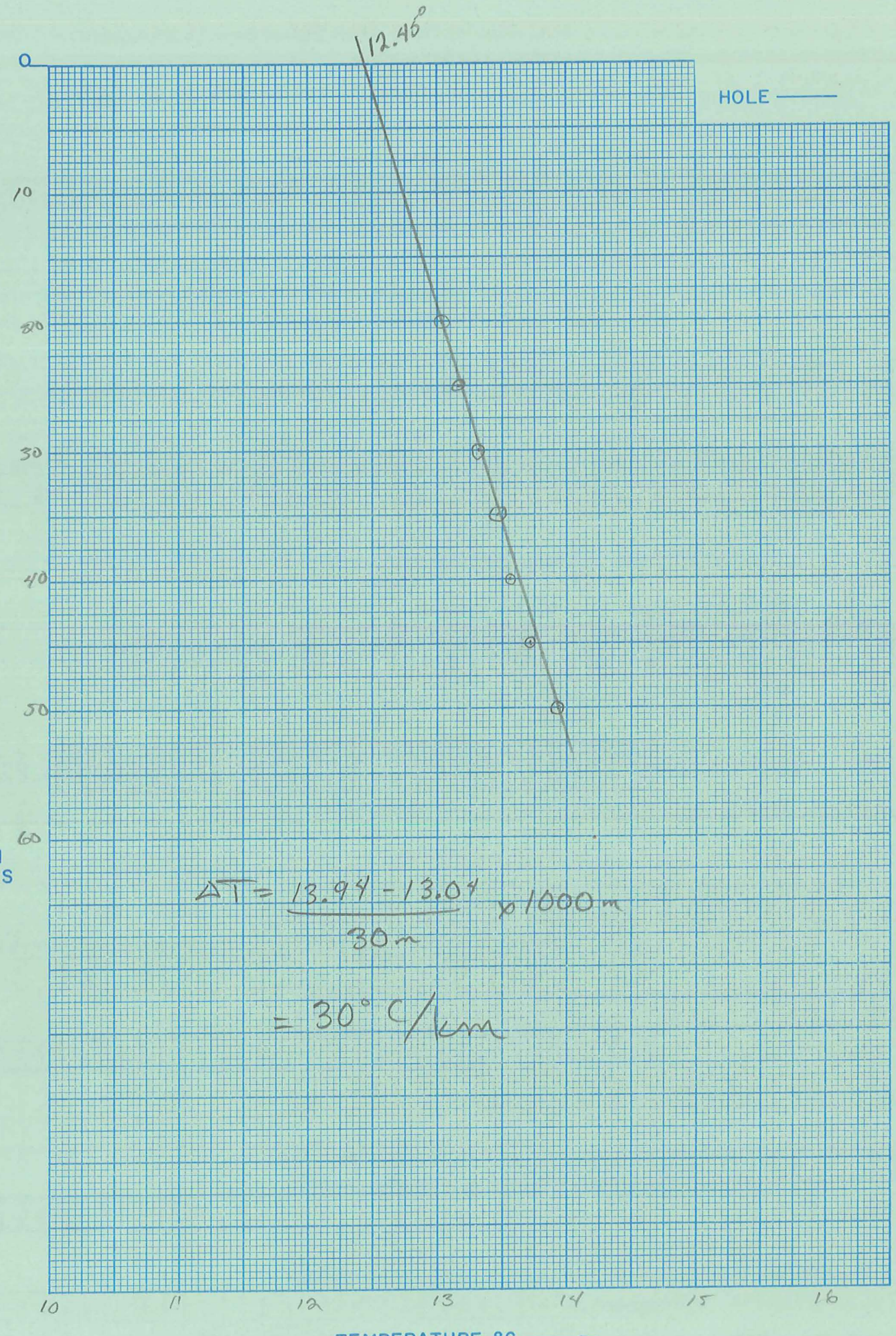
Segment 7 | (21–50)

Segment 8 Start → | (51–80)

Segment 9 | (21–50)

Segment 10 Start → | (51–80)

After final segment Start = .999


12.46°
HOLE
0
10
20
30
40
50
60
DEPTH METERS
10
11
12
13
14
15
16
TEMPERATURE °C
ΔT = 13.94 - 13.04 / 30 m × 1000 m
= 30° C/km

Date Logged: 7/26/78 1230

ΔT Well No. 547

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	Basalt
20		13.04					
			0.12	24			
25		13.16					
			0.15	30			
30		13.31					
			0.15	30			
35		13.46					
			0.10	20			
40		13.56					
			0.12	24			
45		13.72					
			0.22	44			
50		13.94				Air	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q1.2 19.75°C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 548

Property-Project 566 Depth Logged 70 m

Map Pine Mountain Scale 7.5 Date: Drilled _____ Logged 7/26/78 1300

State Oregon County Deschutes, NE of NE of NE of NE of Sec 13 T 20S R 14E

Instrument DT 101 Operator D. A. Mabee Elevation 4305 (ft) (m)

Comments abandoned hill on knoll

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
		5	6	6			5	4	8	2	6			7			7	8	C M

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

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	61	62	63	64	65	66	67	68
Site Description																														Operator					Editor					DA			MO			YR			
																														D A M																	

(Approx. location, water well?, oil test?, etc.)

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	7.5	43.	45.	121.	0.

Use decimals

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

Northing	Easting	Elev	
44.00	4.4	4305.	F

Use decimals

← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity K	ΔK
20.0	70.0	-6.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999 (End, K, ΔK)

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

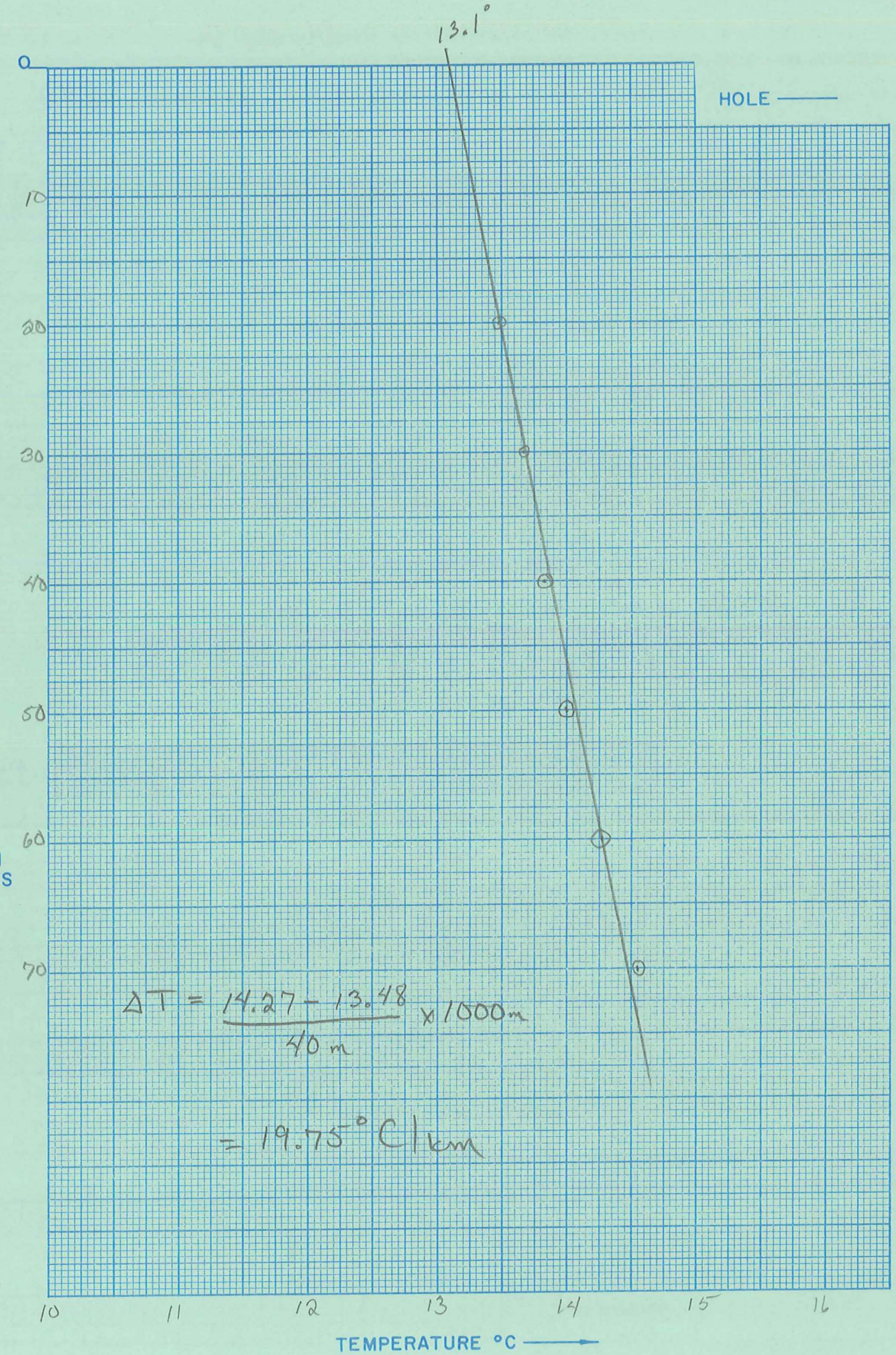
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


13.1°
HOLE
0
10
20
30
40
50
60
70
DEPTH METERS
10
11
12
13
14
15
16
TEMPERATURE °C
ΔT = 14.27 − 13.48 / 40 m × 1000 m
= 19.75° C / km

Date Logged: 7/26/78 1300 ΔT Well No. 548

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	basalt
20		13.48	0.18	18			
30		13.66	0.17	17			
40		13.83	0.17	17			
50		14.00	0.27	27			
60		14.27	0.28	28			
70		14.55				Air	

K=Conductivity

AMAX EXPLORATION, INC. K6Q3.5 57.6 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 549

Property-Project 566 Depth Logged 70 m

Map Pine Mountain Scale 7.5 Date: Drilled _____ Logged 7/26/78 1400

State Oregon County Deschutes, ___ of ___ of ___ of SW of Sec 14 T20S R15E

Instrument DT 101 Operator D. L. Mako Elevation 4780 (ft) (m)

Comments "Deep Well" - abandoned? has electric pump jack no motor

Card A

RT JUSTIFY	Proj No	Well No	DA	MO	YR	*
1 2 3 4	5 6 7 8 9 10	11 12	13 14 15	16 17 18	19 20	
	566	549	26	7	78	CM

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
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		61 62	63 64 65	66 67 68
	DLM				

(Approx. location, water well?, oil test?, etc.)

Card B

Scale Unit IN CM	Map Size (7.5, 15., 60.)	Map Location ** 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	43.	45.	121.	00.

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
40.1	32.15	4780.	F

Use decimals ← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
20.0	70.0	-6.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999

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

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

Segment 8 Start →

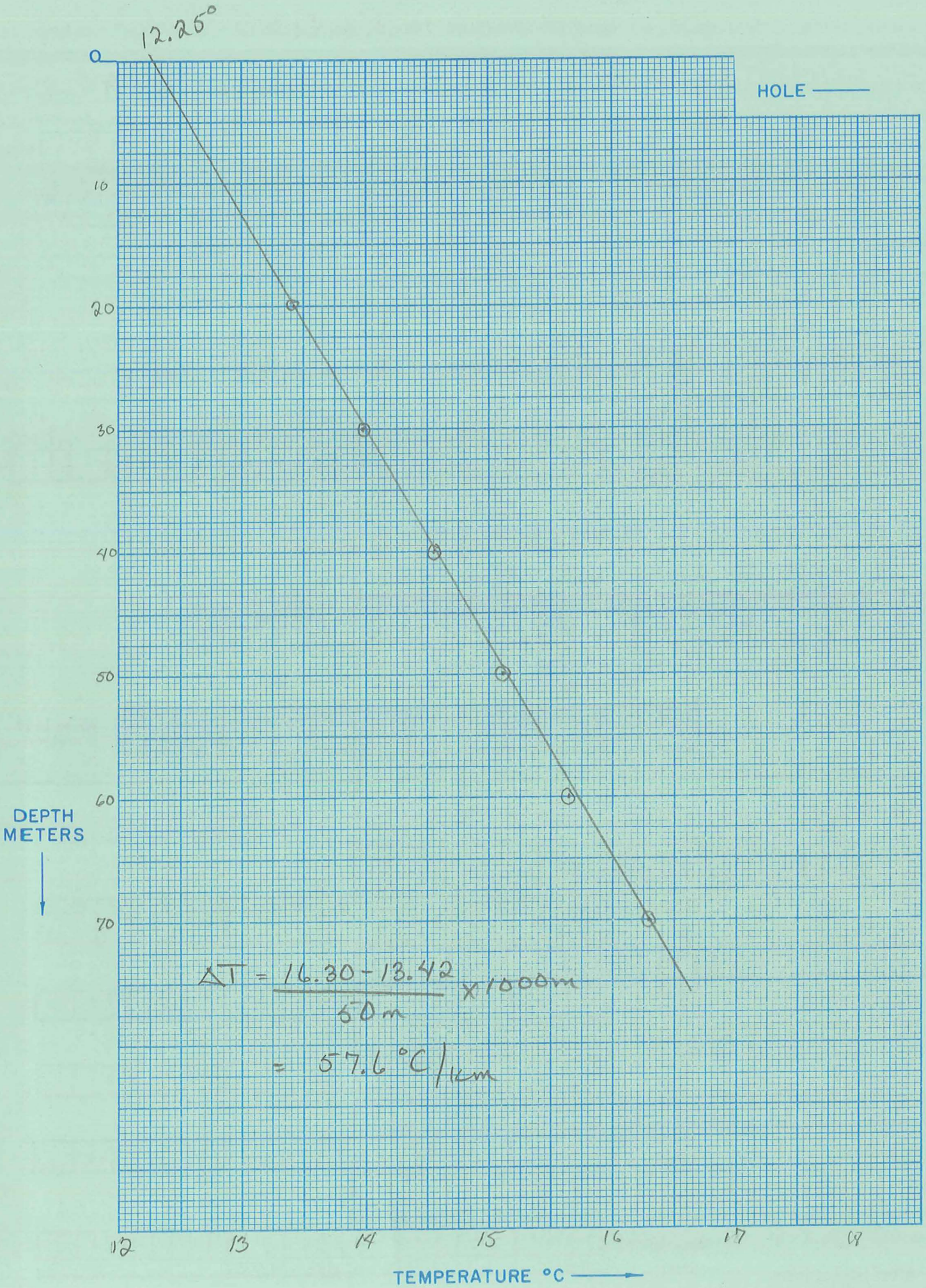
Segment 9

Segment 10 Start →

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 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

After final segment Start = .999


12.25°
HOLE
0
10
20
30
40
50
60
70
DEPTH METERS
12
13
14
15
16
17
18
TEMPERATURE °C
ΔT = 16.30 - 13.42 / 50m × 1000m
= 57.6 °C/km

Date Logged: 7/26/78 1400

ΔT Well No. 549

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	vesicular basalt
20		13.42					
			0.56	56			
30		13.98					
			0.57	57			
40		14.55					
			0.56	56			
50		15.11					
			0.54	54			
60		15.65					
			0.65	65			
70		16.30				Air	

K=Conductivity

AMAX EXPLORATION, INC. K6 Q3 49.75 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 550

Property-Project 566 Depth Logged 70 m

Map Brothers Scale 7.5 Date: Drilled _____ Logged 7/26/78 1730

State Oregon County Deschutes, ____ of ____ of NE of NE of Sec 6 T 20S R 18E

Instrument DT 101 Operator D A Mako Elevation 4545 (ft) (m)

Comments abandoned well at abandoned ranch

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
5 6 6	6 5 0	2 6	7	7 8	C M

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

Site Description	Operator	Editor	Drilled: DA	MO	YR
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	61 62	63 64 65	66 67 68
	D A M				

(Approx. location, water well?, oil test?, etc.)

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	43.	45.0	120.	37.5

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
5 6 . 2	7 . 4 8 4 5 4 5 .		F

Use decimals ← Write M if if meters

Segment 1 = Depths

Start	End	Conductivity: K	ΔK	Best cond. (-K) Downward extrapolations (-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	
2 0 . 0	7 0 . 0	- 6 . 0	- 0 . 5	

Segment 2 Start → .999 | 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
. 9 9 9				

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

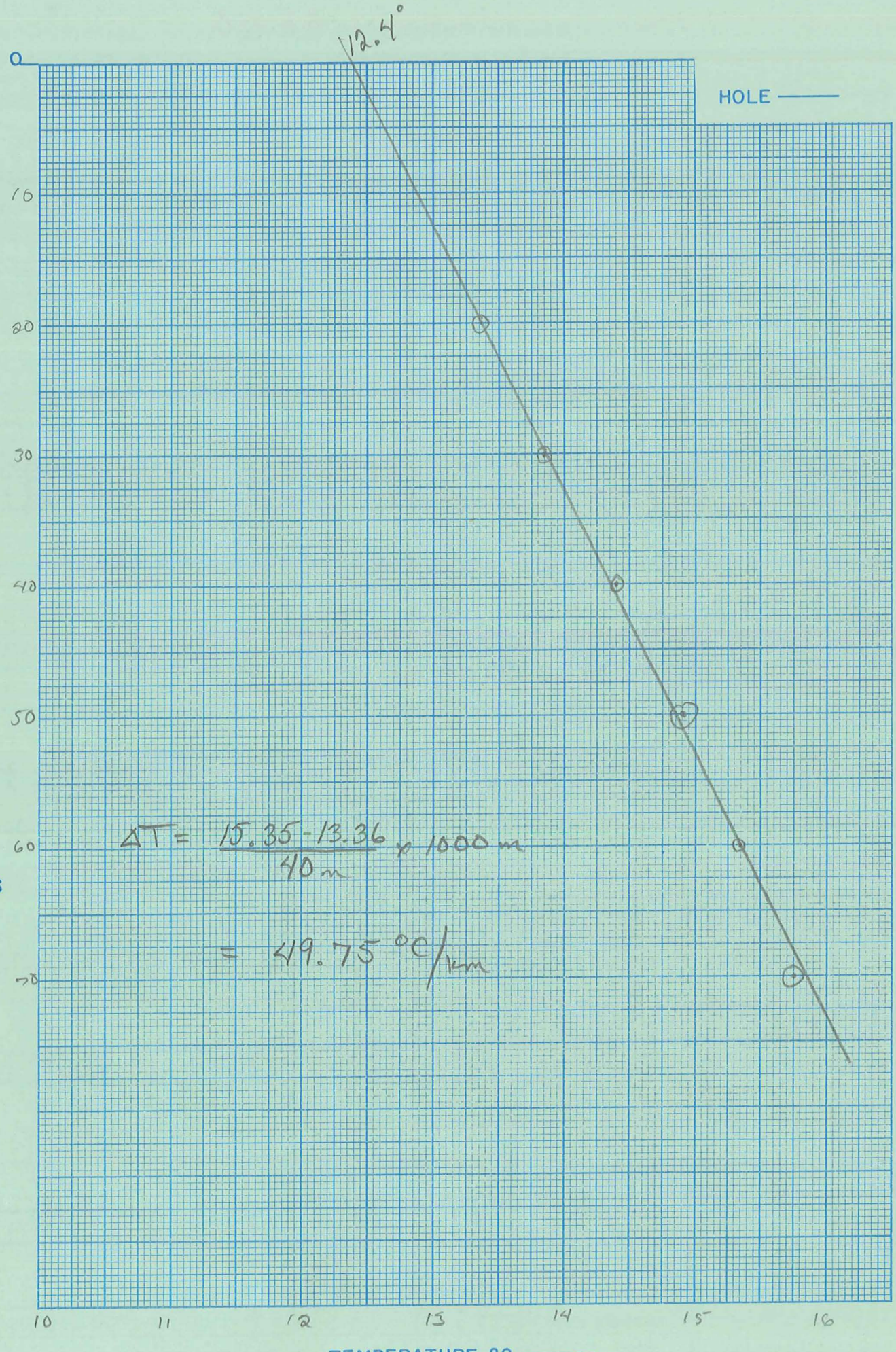
Segment 8 Start →

Segment 9

Segment 10 Start →

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

After final segment Start = .999


12.4°
HOLE
0
10
20
30
40
50
60
70
DEPTH METERS
10
11
12
13
14
15
16
TEMPERATURE °C
ΔT = 15.35 - 13.36 / 40 m × 1000 m
= 49.75 °C/km

Date Logged: 7/26/78

ΔT Well No. 550

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	Basalt
20		13.36					
			0.49	49			
30		13.85					
			0.55	55			
40		14.40					
			0.50	50			
50		14.90					
			0.45	45			
60		15.35					
			0.40	40			
70		15.75					

K=Conductivity

28.2°C/1cm

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

ΔT Well No. 551

Property-Project 566 Depth Logged 70m

Map West Butte Scale 7.5 Date: Drilled _____ Logged 7/27/78 900

State Oregon County Deschutes, ____ of SW of SW of SE of Sec 16 T 19S R 16E

Instrument DT 101 Operator D.A. Mello Elevation 4515 (ft) (m)

Comments "Bear Ridge Well"

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
5 6 6	5 5 1	2	7	7 8	C	M

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

Site Description	Operator	Editor	Drilled DA	MO	YR
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	61 62	63 64 65	66 67 68
	D A M				

(Approx. location, water well?, oil test?, etc.)

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	4 3 .	5 2 . 5	1 2 0 .	5 2 . 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 8 . 3 5	1 9 . 1	4 5 1 5 .	F

Use decimals

Write M if if meters

Segment 1 = Depths

Start	End	Conductivity 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
2 0 . 0	7 0 . 0	- 6 . 0	- 0 . 5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999 | End | K | ΔK

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

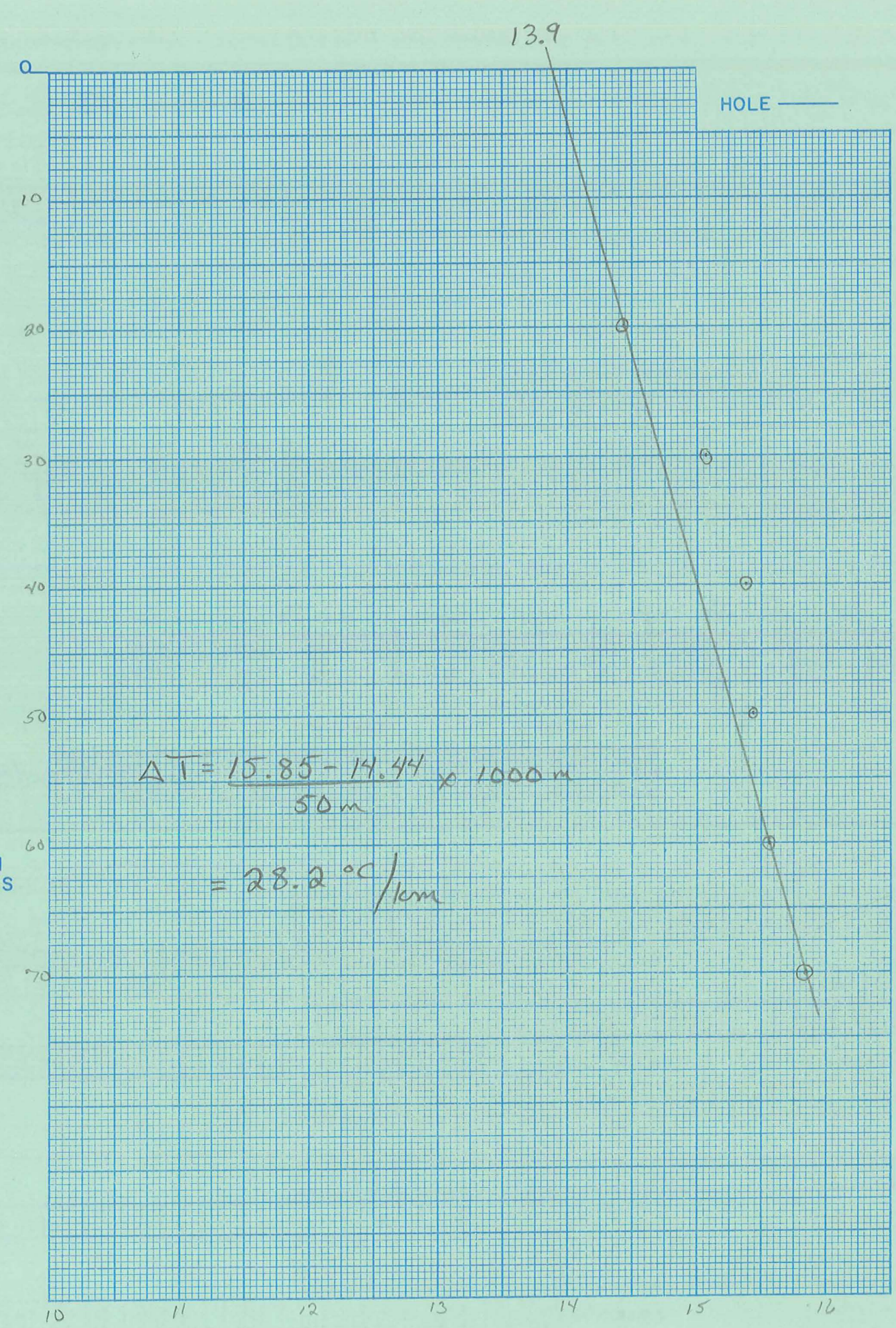
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


13.9
HOLE
0
10
20
30
40
50
60
70
DEPTH METERS
ΔT = 15.85 - 14.44 / 50 m × 1000 m
= 28.2 °C/km
10
11
12
13
14
15
16
TEMPERATURE °C

Date Logged: 7/27/78 900

ΔT Well No. 551

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	vesicular basalt
20		14.44					found as float
			0.62	62			
30		15.06					material on valley
			0.32	32			
40		15.38					floor. Assumed to
			0.06	6			
50		15.44					be in subsurface
			0.12	12			
60		15.56					also.
			0.29	29			
70		15.85				Air	

K=Conductivity

AMAX EXPLORATION, INC. K6Q1.9 31.6 °C/km

TEMPERATURE/DEPTH LOG

ΔT Well No. 552

Property-Project 566 Depth Logged 55 m

Map Crescent Scale 60' Date: Drilled _____ Logged 7/27/78 1300

State Oregon County Deschutes, ____ of ____ of ____ of ____ of Sec ____ T21S R19E

Instrument DT 101 Operator D.A. Mabe Elevation 4450 (ft) (m)

Comments Windmill w. electric pump on top of knoll

Card A

RT JUSTIFY | Proj No | Well No | DA | MO | YR | Date Logged

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

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

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	61	62	63	64	65	66	67	68
Site Description																														Operator					Editor					DA			MO			YR			
																														D	A	M															

(Approx. location, water well?, oil test?, etc.)

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	60.0	43.	00 0.	121.	00 0.

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

Use decimals

Northing	Easting	Elev	
33.7	18.08	4450.	F

← Write M if if meters

Use decimals

Segment 1 = Depths

Start	End	Conductivity K	ΔK
25.0	50.0	-6.0	-0.5

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2 Start → .999 (End / K / ΔK)

Segment 3

Segment 4 Start →

Segment 5

Segment 6 Start →

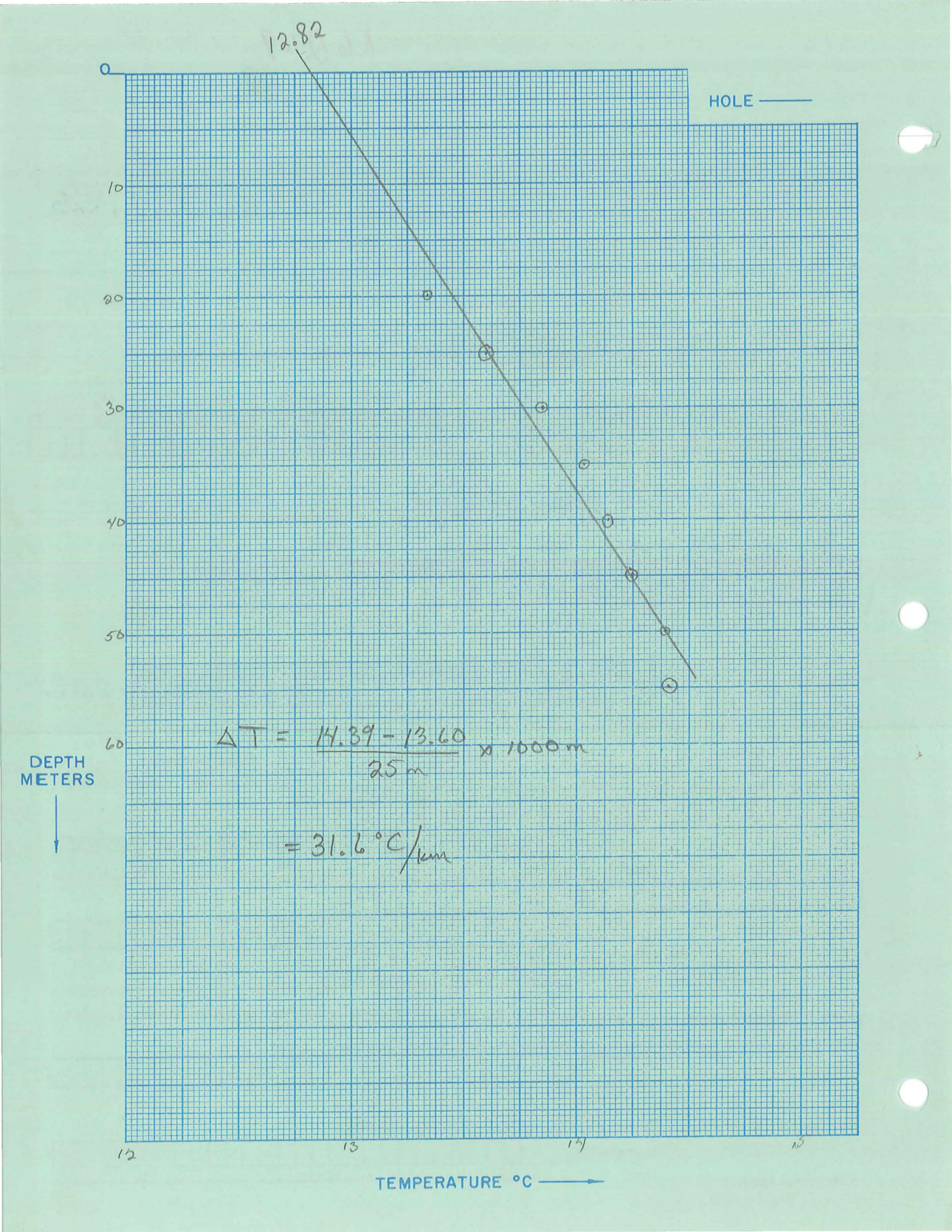
Segment 7

Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999


12.82
0
10
20
30
40
50
60
HOLE
DEPTH METERS
ΔT = 14.39 - 13.60 / 25 m × 1000 m
= 31.6 °C/km
12
13
14
15
TEMPERATURE °C

Date Logged: 7/27/78 1300

ΔT Well No. 552

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
0						Air	vesicular basalt
20		13.34					
			0.26	52			
25		13.60					
			0.25	50			
30		13.85					
			0.18	36			
35		14.03					
			0.11	22			
40		14.14					
			0.11	22			
46		14.25					
			0.14	28			
50		14.39					
			0.03	6			
55		14.42				Air	

K=Conductivity

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

compound gradient 8°C/km / 39°C/km

ΔT Well No. 553

Property-Project 566 Depth Logged 45 m

Map Crescent Scale 60' Date: Drilled _____ Logged 7/27/78 1430

State Oregon County Deschutes, ____ of ____ of ____ of ____ of Sec ____ T 22S R 22E

Instrument DT 101 Operator D.A. Mabee Elevation 4300 (FT) (m)

Comments abandoned well

Card A

RT JUSTIFY | Proj No | Well No | DA | MO | YR | Date Logged | *

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

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

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	61	62	63	64	65	66	67	68
Site Description																														Operator					Editor					DA			MO			YR		
																														D	A	M															

(Approx. location, water well?, oil test?, etc.)

Card B

Map Location ** | Scale Unit IN CM | Map Size (7.5, 15., 60.) | 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			4	3	.	0	0	0	.			1	2	1	.	0	0	0	.		

Use decimals

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

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
Northing										Easting										Elev									
					3	0	.	8	0						3	0	.	3	5	4	3	0	0	.				F	

Use decimals

← Write M if if meters

Segment 1 = Depths

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
Start										End										Conductivity K					ΔK				
			1	5	.	0						3	5	.	0														

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2

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
Start →															End						K				ΔK				
															4	5	.	0			-	6	.	0	-	0	.	5	

Segment 3

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
.	9	9	9																										

Segment 4 Start →

Segment 5

Segment 6 Start →

Segment 7

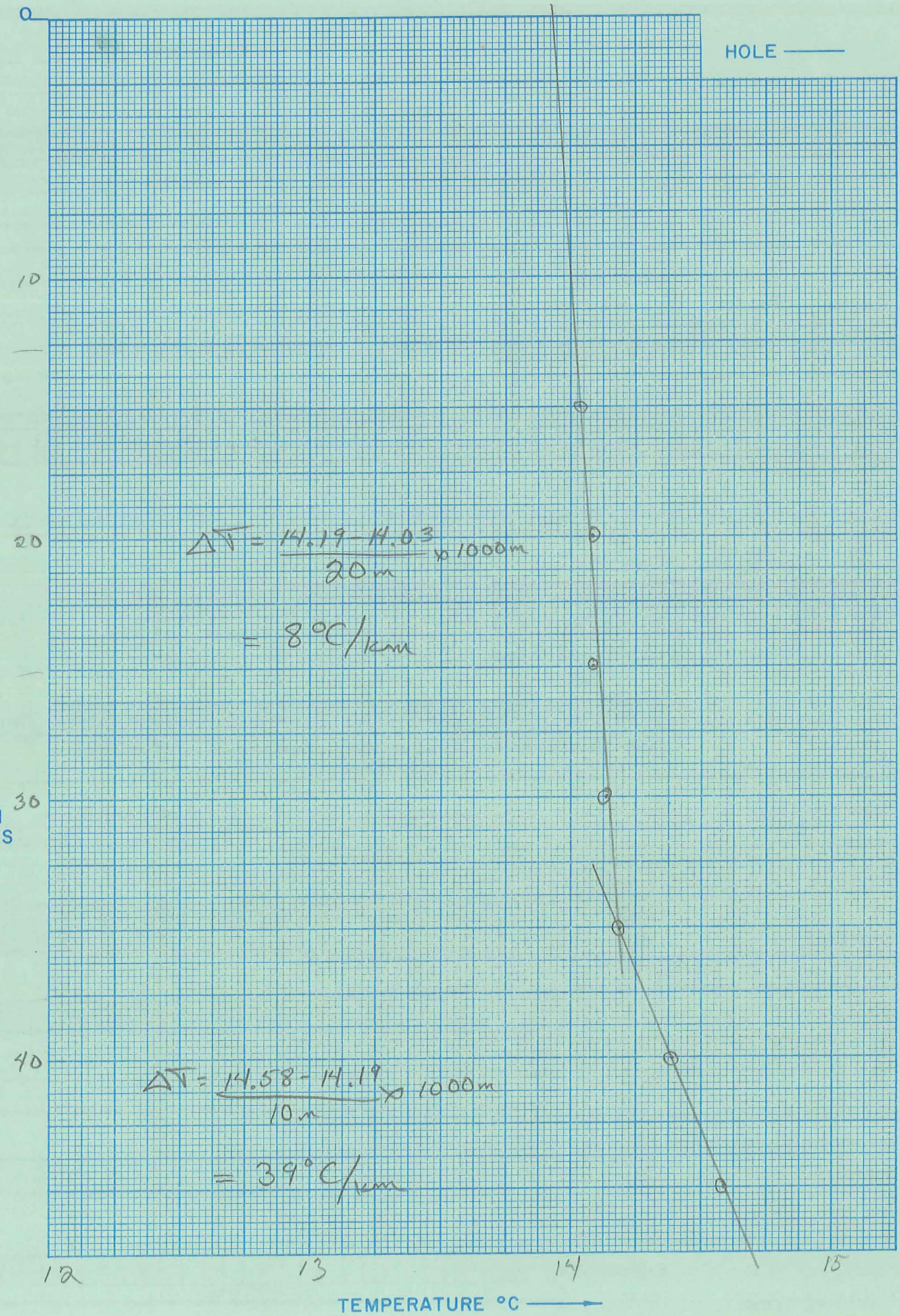
Segment 8 Start →

Segment 9

Segment 10 Start →

After final segment Start = .999

13.92°


HOLE
0
10
20
30
40
12
13
14
15
DEPTH METERS
TEMPERATURE °C
$\Delta T = \frac{14.19 - 14.03}{20\,m} \times 1000\,m$
$= 8°C/km$
$\Delta T = \frac{14.58 - 14.19}{10\,m} \times 1000\,m$
$= 39°C/km$

Date Logged: 7/27/78

ΔT Well No. 553

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
15		14.03				~~H2O~~	Basalt ?
			0.05	10			
20		14.08				H_2O	
			0.00	0			
25		14.08					
			0.05	10			
30		14.13					
			0.06	12			
35		14.19					
			0.18	36			
40		14.38					
			0.20	40			
45		14.58				H_2O	

K=Conductivity

AMAX EXPLORATION, INC.

TEMPERATURE/DEPTH LOG

Compound? 1.5°C/km 42°C/km

ΔT Well No. 554

Property-Project 566 Depth Logged 45m

Map Crescent Scale 60' Date: Drilled _____ Logged 7/27/78 1700

State Oregon County _____, ____ of ____ of ____ of ____ of Sec ____ T 22S R 17E

Instrument DT101 Operator D. A. Mabe Elevation 4900 (ft) (m)

Comments Jaynes Well - abandoned

Card A

RT JUSTIFY	Proj No	Well No	DA	MO	YR	*
1 2 3 4	5 6 6	5 5 4	2 5	7	7 8	C M

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

Site Description	Operator	Editor	Drilled DA	Drilled MO	Drilled YR
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	61 62	63 64 65	66 67 68
	D A M				

(Approx. location, water well?, oil test?, etc.)

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	6 0 . 0	4 3 . 6 0 0		1 2 1 . 0 0 0	

Map Location * *

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

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 7 . 6 5	9 . 2	4 9 0 0 .	F

Write M if if meters

Use decimals

Segment 1 = Depths

Start	End	Conductivity 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
1 5 . 0	4 0 . 0		

Best cond. (-K)

Downward extrapolations (-ΔK)

Segment 2

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
4 0 . 0	4 5 . 0	- 6 . 0	- 0 . 5

Segment 3

Start
. 9 9 9

Segment 4

Segment 5

Segment 6

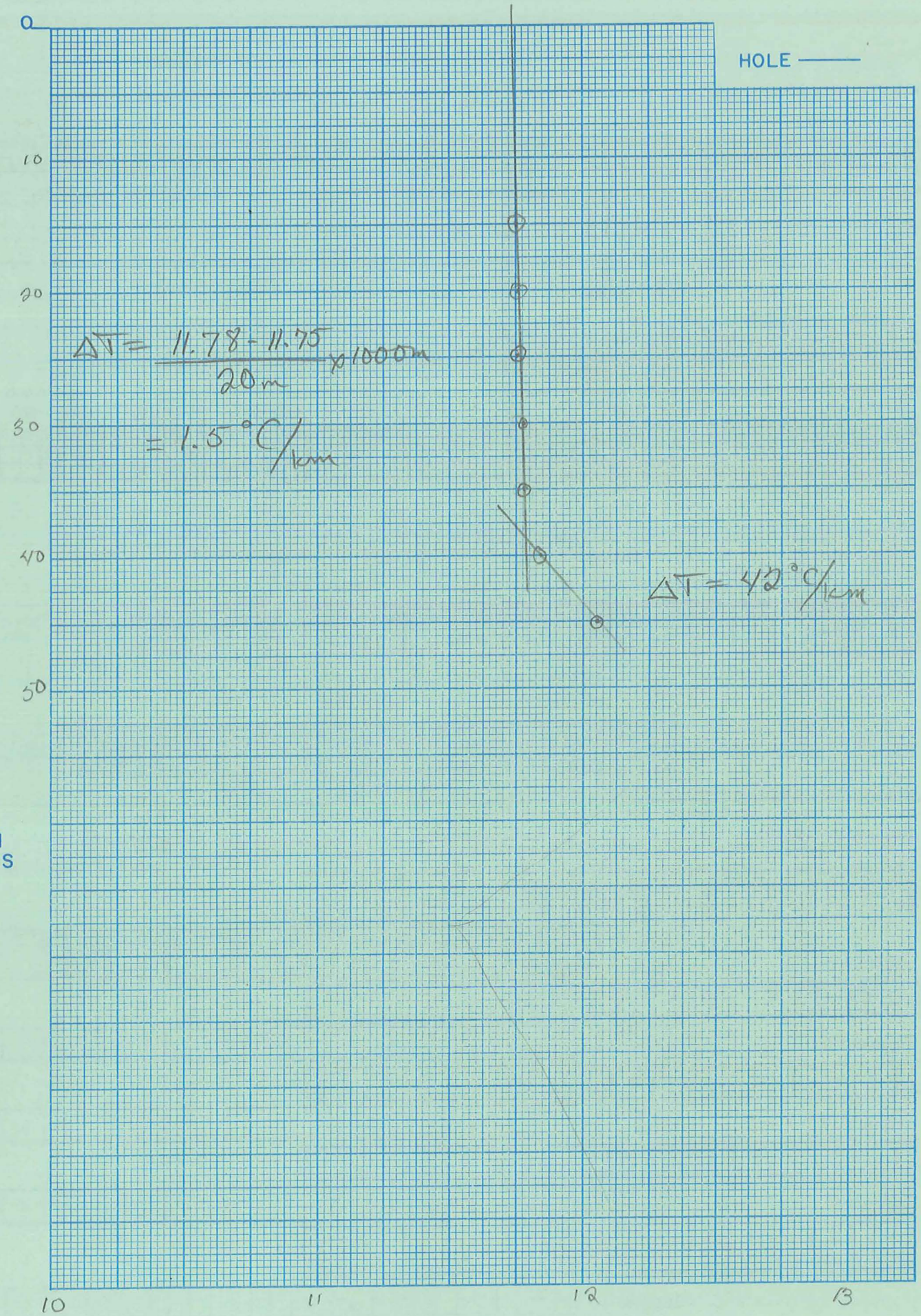
Segment 7

Segment 8

Segment 9

Segment 10

After final segment Start = .999


HOLE
0
10
20
30
40
50
$\Delta T = \frac{11.78 - 11.75}{20\,m} \times 1000\,m$
$= 1.5\,^{\circ}C/km$
$\Delta T = 42\,^{\circ}C/km$
DEPTH METERS
10
11
12
13
TEMPERATURE °C

Date Logged: 7/27/78 1500

ΔT Well No. 554

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H_2O Air	Lithology, etc.
~~15~~		11.75				Air	vesicular Basalt
			0.01	2			
20		11.76					
			0	0			
25		11.76					
			0.02	4			
30		11.78					
			0	0			
35		11.78					
			0.06	12			
40		11.84					
			0.21	42			
45		12.05				Air	

K=Conductivity